I-595 Corridor Roadway Improvements Project

Final Version for Execution

VOLUME 1
(Binder 2 of 2)

INTERSTATE 595 Express

Moving Forward Together

2-D

APPENDIX 2-D

PRELIMINARY CORRIDOR MASTER PLAN

See the eleven (11) binders from the Proposal titled:

1. Preliminary Corridor Master Plan Submittal
   Book 1 of 11

2. Preliminary Corridor Master Plan Submittal
   Book 2 of 11 Typical Section Package - I-595

3. Preliminary Corridor Master Plan Submittal
   Book 3 of 11 Typical Section Package – Florida's Turnpike

4. Preliminary Corridor Master Plan Submittal
   Book 4 of 11 Pavement Design Package – I-595

5. Preliminary Corridor Master Plan Submittal
   Book 5 of 11 Pavement Design Package – Florida's Turnpike

6. Preliminary Corridor Master Plan Submittal
   Book 6 of 11 Design Exceptions / Design Variations Package – I-595

7. Preliminary Corridor Master Plan Submittal
   Book 7 of 11 Design Exceptions / Design Variations Package – Florida's Turnpike

8. Preliminary Corridor Master Plan Submittal
   Book 8 of 11

9. Preliminary Corridor Master Plan Submittal
   Book 9 of 11

10. Preliminary Corridor Master Plan Submittal
    Book 10 of 11

11. Preliminary Corridor Master Plan Submittal
    Book 11 of 11 Drainage Calculations

APPENDIX 2-E

MANAGEMENT / ADMINISTRATION

[See Following Page]

Technical Proposal Check List

Proposal Component	Form (if any)	ITP Cross-Reference
	Management / Administration	
Project Management Plan	No forms provided	Appendix B, Section 1.1
Preliminary Quality Plan	No forms provided	Appendix B, Section 1.2
Project Schedule and Construction Phasing/Sequencing Plan	No forms provided	Appendix B, Section 1.3
Major Construction Activities Completion Chart	Form H	Appendix B, Section 1.3
Environmental Compliance Plan	No forms provided	Appendix B, Section 1.4
	Preliminary Corridor Master Plan	
Preliminary Corridor Master Plan Submittal	No forms provided	Appendix B, Section 2
Preliminary Corridor Master Plan Submittal Overview	Form I	Appendix B, Section 2
Design Exceptions / Design Variations Table	Form P	Appendix B, Section 2
	Operations and Maintenance	
Operations and Maintenance Plan (O&M Plan)	No forms provided	Appendix B, Section 3
System Integration Plan	No forms provided	Appendix B, Section 3

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1 Management / Administration

1.1 PROJECT MANAGEMENT PLAN

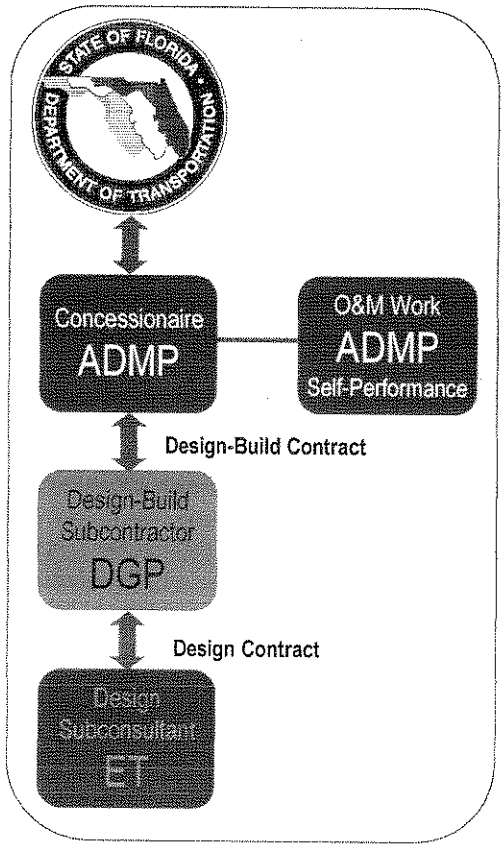
The I-595 Corridor Improvements Project (Project) organization consists of a team of renowned international and local companies assembled specifically for the design, construction, financing, operations, and maintenance of the Project in response to the Contract Documents (Contract), which includes the Concession Agreement, Technical Requirements, and other documents referenced in the Request for Proposals (RFP). Our partnership is synonymous with world-class development of infrastructure projects and brings significant financial capabilities and considerable experience in availability payment transactions, combined with expertise in facility design, construction, operations, and maintenance, all focused on bringing the best value to FDOT.

Key Features

- Integrated Team of DBOM Professionals Organized for Efficiency and Success
- Clear Lines of Responsibility and Communication
- Task Force Approach to Issue Resolution
- O&M Involvement at Project Inception
- Safety First – No Compromises
- Experience and Commitment

The Project Team organization consists of the Proposer, or Concessionaire, formed by ACS-Dragados Macquarie Partnership (ADMP); the Construction Joint Venture, or Design-Build Contractor, formed by Dragados USA, Inc. and GLF Construction Corporation (DGP); and, the Engineer, or Designer, Earth Tech Consulting, Inc. (ET). Collectively, the Project Team will be referenced as the ADMP Team throughout this Proposal. Graphically, the contractual relationship between each of the primary Project participants is summarized in Figure 1.1-1.

Figure 1.1-1 Contractual Organization



Management of the ADMP Team will be guided by the Project Management Plan (PMP). This preliminary PMP has been developed by ADMP and describes the strategies and approach to manage the development, design, construction, operation, and maintenance of the Project and meet the requirements of the Contract. The PMP provides the basic structure of the ADMP Team's organization and a description of the roles, responsibilities, and work to be accomplished by each member of the ADMP Team and each sub-organization, including identified subcontractors and suppliers. The PMP is intended to provide the ADMP Team with a summary of the practices and procedures to be used in the day-to-day management of the Project's delivery. Its purpose is to enhance the quality of the ADMP Team's services and to facilitate good operational communication across the aggregate organization regardless of discipline, responsibility, or location.

The PMP objectives are as follows:

- Reinforce commitment to safety as a primary goal
- Integrate design, construction, and O&M into a cohesive team
- Minimize duplication of effort and create efficiency
- Simplify coordination efforts between various functions
- Establish interface procedures and protocols
- Establish an atmosphere of partnership with FDOT
- Achieve quality and value
- Encourage stakeholder participation

1.1.1 Team Organization

The ADMP Team was formed to bring together an outstanding international team of companies who have the relevant expertise, knowledge and experience to make the Project a success. Led by the equity members forming ADMP, the Concessionaire is supported by an exceptional group of designers and builders. This depth of experience goes beyond the named participants. For example, the DGP joint venture partners will be further supported during construction by other talented local builders including Hubbard Construction Company, Redland, H&J Contracting, and Bergeron Land Development, Inc. Each builder in their own right is an experienced and successful construction firm that combined brings considerable local and international experience on large-scale transportation projects in highly congested urban environments. Similarly during design, ET will be supported by firms such as MACTEC Engineering and Consulting, Inc.; Greenhorne & O'Mara, Inc.; Kimley-Horn and Associates, Inc.; F.R. Aleman & Associate, C3TS, PA; Curtis + Rogers Design Studio Inc. and R. J. Behar & Company. Each of these firms brings unique local project familiarity, innovative design experience on similar major projects, and extensive resources and staff expertise. As for the Operations and Maintenance (O&M) component of the Project, these responsibilities will be undertaken by ADMP, which brings extensive and proven experience in highway O&M through both the ACS and Macquarie organizations.

One final, but important member of the ADMP Team are those companies, firms, suppliers, and vendors that will comprise ADMP's commitment to the Disadvantaged Business Enterprise (DBE) goal set forth in the Contract. ADMP recognizes and supports the need to engage the DBE community in the design, construction, and operations markets and commits to meeting the 8.1% goal requirement.

The organizational charts of ADMP, DGP, and ET are illustrated in Appendices 1.1a-1, 1.1a-2, 1.1b and 1.1c respectively. All key personnel resumes are presented in Appendix 1.1d.

1.1.1.1 CONCESSIONAIRE ORGANIZATION

ADMP's organization charts are presented in Appendix 1.1a-1 and 1.1a-2 and illustrate the organizational evolution from construction phase to O&M period. The resumes of the key personnel are presented in Appendix 1.1d. The key personnel committed to work on this Project will fill the following roles:

Project Executive: Ricardo Urien

The Project Executive is responsible for the performance of the entire ADMP Team. He will act as a single point of contact on all matters on behalf of the Concessionaire. He is responsible for overseeing and directing the functions necessary to achieve efficient management of project resources and successfully guide project focus with an emphasis on safety, reliability, and availability. The Project Executive will develop and implement project policies and procedure consistent with FDOT requirements, as well as plan, direct, and coordinate

operational activities. Responsibilities will include project planning, financial planning, budgeting/cost controls, project accounting, scheduling, records/reporting, and communication.

Operations Manager: Antonio De La Llama

The Operations Manager is responsible for providing direction and oversight for the design-build performance of the contract for the Concessionaire during the construction period. During the O&M period, he is responsible for all operations and maintenance functions overseeing all periodic and routine maintenance work activities required during the concession period. The Operations Manager will develop a detailed annual maintenance work program for budgeting, planning, and resource procurement. He will be responsible for the sub-contracting of maintenance that cannot be completed by in house project staff. The Operations Manager will also be responsible for procuring all necessary equipment, spare parts, and inventory for the Project. He is also responsible for supplying proper training to his staff. He will also create a dedicated maintenance management system for all maintenance needs, as well as specified documents and reporting system for top management, FDOT, and others.

Quality Manager: Robert Correia

The Quality Manager is responsible for the development and implementation of the Quality Management System (QMS). Reports will be generated as a means to gauge performance against FDOT requirements. The Quality Manager will also be responsible for identifying actions necessary to prevent nonconformities and will track Non-compliance Points. He will be responsible for overseeing auditing of Project processes and for the nonconforming service control, data analysis, and improvement. Additional responsibilities include analysis and recommendation of appropriate changes of policies and procedures, auditing of existing and new ISO Procedures, coordinating and administering quality audits, maintaining the corrective/preventive action program, providing monthly reports to the Project Executive, improving processes, and reviewing engineering support process and quality functions. The Quality Manager will also manage the efforts of the independent CEI firm.

The functions of other principal participants, which also appear in the organization chart, are presented below:

- The **Customer Relations Manager** is responsible for developing and implementing the procedures for coordination and communications between the Concessionaire and other stakeholders. He is the primary Project contact for public media personnel and disseminates information as required to public and private organizations and the general public. The Customer Relations Manager is responsible for developing and maintaining the Project website. He will meet with citizens and private groups to assist in resolving issues and concerns. He is also responsible for developing communication and information dissemination procedures to implement policies issued by the Project Executive.
- The **Legal Advisor** will be a locally hired attorney who is knowledgeable in construction, maintenance, and transportation issues. He/she will be responsible for all legal matters associated with the Project and will advise the Concessionaire concerning preparation and execution of the Contract, preparation of subcontractor agreements, utility dispute resolution, any public claims against the Concessionaire, and human resource/disability claims. Outside legal support will be managed by the Legal Advisor.
- The **Safety Officer** will perform dual functions of overseeing overall project safety and traffic safety. He/she will be involved with traffic and incident management activities and will ensure that proper procedures are followed for Maintenance of Traffic (MOT) set-ups; traffic control during emergencies, and hurricane evacuation programs. The Safety Officer will coordinate the annual mock hurricane evacuation drill in coordination with FDOT personnel. The Safety Officer will also perform routine safety inspections, keep required OSHA records, review Industrial hygiene requirements, conduct employee Safety Training/Hazard Communication training, purchase/maintain personal protective equipment (PPE), analyse workplace safety problems, prepare safety contingency plans, and review and monitor local fire, pollution, and

insurance industry requirements. Additionally, the Safety Officer will develop the overall project Safety Plan; conduct work site safety training, drug testing, OSHA and State safety compliance, and testing of staff for MOT certification.

- The **Financial and Human Resources Director** is responsible for planning, directing, and coordinating all project financial and human resource activities. This Finance/HR Director is responsible for creating a project financial management and accounting system, as well as monthly statements and making adjustments based on performance ratings. Responsibilities also include the annual Financial Plan, contact with all financial entities, preparing money movements, improving profitability, updating the Project Executive, general accounting, recording and controlling all funds, controlling budget allocations, and the secure placing of investments. Other responsibilities include reviewing and evaluating compliance issues/concerns. The Finance/HR Director will also be the designated liaison for the Project's DBE Program. Finally, this position will also have responsibility for human resources functions, such as decisions related to personnel hiring, position assignment, training, benefits, and compensation.
- The **Engineering/Scheduling Manager** is responsible for securing technical advice and engineering support to O&M operations, renewal work, and the quality assurance function. The Engineering Manager researches technical topics and provides assistance directly or identifies contract and other outside assistance, establishes qualifications, writes specifications and contract terms, and contracts with firms or individuals who can provide the appropriate technical assistance. This role will require developing procedures to implement technical-related policies issued by the Operations Manager, supervising in-house staff assigned from the engineering group, and overseeing contracts for O&M technical services and consulting.
- The **TMC and ITS Manager** is responsible for the operations and maintenance of the Intelligent Transportation System (ITS) equipment and for providing services to support information technology functions throughout the Project. This person will work with the engineering group to provide technology enhancements as needed to fulfil ITS requirements. Responsibilities include also developing procedures to implement information technology policies issued by the Project Executive, supervising the ITS operations, IT staff, and TMC control room staff.
- The **Associate Engineers** will provide support in technical areas that require engineering judgment and background. Specialty engineers that may be needed from time to time would also be classified as associate engineers. Associate engineers would be involved in the organization and conduct Maintenance Rating Program (MRP) and of FDOT mandated inspections. One of the associate engineers will be designated as Permit Coordinator and will be responsible for coordinating all information between the Concessionaire, the permit requestor, and FDOT. The Permit Coordinator will make available the most recent Project design information and/or as-built records as applicable to applicants and shall assist each applicant with information regarding the location of other proposed and existing utilities. The Permit Coordinator will also develop and initiate a follow-up procedure for each permitted action. Associate Engineers will also support the quality program.
- The **Field Superintendent** will oversee field operations and field maintenance. The Field Superintendent will coordinate the operations of the in-house maintenance crews and subcontractors. The position will assist the Operations Manager with the selection and coordination of all maintenance activities that will be subcontracted. The Field Superintendent will also ensure that the annual work plans and periodic work schedules of the crews and subcontractors are focused in the proper areas to ensure achievement of the target MRP values and perform efficient incident management. Specific responsibilities and tasks include implementing the daily/bi-weekly/monthly plans, responding to major incident and emergency situations, inspecting work sites for safety compliance and work quality, ensuring the quality, quantity and responsiveness of the subcontractor's work efforts, and coordinating with other functional managers.

- The **Construction Coordinator** will be responsible for the day-to-day coordination between the design-build team and the Concessionaire including acting as the liaison for the operations and maintenance needs. The Construction Coordinator will be the recipient of all design and construction related information, submittals, and required reports and is responsible for their review for contract conformity prior to releasing them to the Operations Manager for distribution to FDOT or other required recipients. The Construction Coordinator will also be responsible for the maintenance and oversight of the design-build contract and preparation of any necessary modifications or amendments to the scope of services performed by the contractor. In addition, the coordinator will also develop procedures to implement policies issued by the Operations Manager, will be the primary facilitator of any meetings between FDOT and the design-build team, reviewer of the construction schedule for conformity with milestone dates, and provide recommendations to the Operations Manager on any non-compliance issues.
- The **Maintenance Supervisor** is a working highway maintenance technician that supervises multiple or individual maintenance field crews. Responsibilities will include the mustering and organization of field crews to specific locations along the roadway for the purpose of performing one or more assigned maintenance activities. The Maintenance Supervisor will ensure that the crew is carrying out the maintenance work in a safe and efficient manner and that all FDOT procedures for safety, environment, and workmanship are being followed. The Maintenance Supervisor will be responsible for interfacing with any citizen or other agency representative that might inquire about the work being performed.

1.1.1.2 CONSTRUCTION TEAM ORGANIZATION

DGP's organization chart is presented in Appendix 1.1b and the resumes of the key personnel are presented in Appendix 1.1d. The key personnel committed to work on this Project will fill the following roles:

Project Manager: José Luis Conesa
The Project Manager is responsible for the overall planning, administration, and execution of the design-build project within the DGP organization. He is accountable to ADMP for the satisfaction of all the functional and technical requirements of the construction of the Project in conformance with the Contract. The Project Manager will meet regularly with ADMP and the DGP Executive Board to review progress and report on forecasted performance. All DGP policies and procedures are issued at his direction. He is also responsible for staff development of his management team.

Construction Quality Control Manager: Caridad Murphy
The Construction Quality Control Manager is DGP's management representative responsible for developing, implementing, updating, and maintaining the Construction QMP. A detailed discussion of the Construction Quality Control Manager's responsibilities is included in Section 1.2.2.2.3.

General Superintendent: Fernando Arroyo
The General Superintendent is responsible for on-site production. He will manage and control job-site progress, documentation and the implementation of quality control. The General Superintendent will manage several Field Superintendents and be responsible for mobilizing DGP's workforce and subcontractors at the job-site, controlling daily production of bridges, right-of-way and roadway, maintaining and ensuring job-site safety, ensuring that QC testing and inspections take place, meeting all schedule milestones, and successfully closing out the Project. During the design phase, the General Superintendent will participate in design reviews.

Design Coordinator: Jhon Beltran
The Design Coordinator is responsible for communication of information, needs, and requests from the construction staff to the design staff, and vice versa. The Design Coordinator works with ET's Design Manager to ensure that design efforts are focused and tailored specifically to the construction needs in the field, identifies and resolves design

scheduling conflicts, and works with the technical staff in the resolution of any field changes that may impact the design of the Project. Responsibilities also include monitoring and auditing the work of ET to ensure compliance with the Contract requirements, checking all design documents prior to submittal, and ensuring that they are on schedule.

The functions of other principal participants, which also appear in the organization chart, are presented below.

- The **Engineering Manager** will report to the Project Manager. The Engineering Manager is responsible for technical support of DGP's field production staff. He will provide overall direction and management of the various groups responsible for field engineering, cost control, scheduling, utilities coordination, survey, and document controls. The Engineering Manager is the technical liaison between design and construction and ensures that all required design documentation is in place before construction efforts commence, or initiates the requirement for additional documentation to be prepared if required.
- The **Environmental Engineer** is responsible for ensuring that the ADMP Team complies with FDOT and other environmental regulations as specified in the Contract. The Environmental Engineer will monitor all construction activities with respect to conformance with the design, permits, and previous commitments, report on non-compliance issues, and make recommendations for corrective action to protect natural resources located adjacent to the Project's construction.
- The **Health and Safety Officer** is responsible for the overall safety of the site, the ADMP Team and the public. In this role, the Health and Safety Officer will develop the project-wide Health and Safety Plan focused on minimizing injuries and illnesses among workers and third parties to the Project work site. The Health and Safety Officer will supervise a trained inspection staff that will be charged with implementing and enforcing the Safety Plan. Responsibilities will also include conducting mandatory safety training and preparing reports documenting the effectiveness of the Health and Safety Program and making modifications, as necessary to improve its effectiveness.
- The **Cost Engineer** is responsible for DGP's cost and budget records and the establishment of the computer systems used to accept and track daily input of labor costs and periodic entry of general purchases, equipment costs, and subcontractor payments. The Cost Engineer will track the major work items by both dollars budgeted and percent completed and provide the Engineering Manager with frequent updates and weekly reviews of schedule and cost used to evaluate progress, make near-term allocations of personnel, equipment and other resources, and to forecast the timing and magnitude of future resource requirements.
- The **Scheduler** is responsible for the development and maintenance of a cost and resource loaded schedule to track work as it progresses. In this role, the scheduler will use critical-path scheduling principles based on the original schedule of values, applying cost and man-hours to each major work item and allocating them on the schedule timelines. The Scheduler will work closely with the Cost Engineer and report to the Engineering Manager on a daily basis relative to ongoing field activities to enable the accurate tracking and forecasting of construction activities as they proceed, as well as apportioning of time and resources in the most effective manner.
- The **Document Comptroller** is responsible for development of the document control processes and establish the infrastructure necessary to allow receipt, routing, sorting, saving and retrieval of all hard copy and electronic data from every functional group within DGP using an Internet-enabled system for security as well as speed and ease of access.
- The **Utility Coordinator** will meet regularly with utility companies and municipal utility officials and serve as a liaison between these entities, ADMP design and construction personnel and FDOT. He/she will coordinate the activities of the utilities and ADMP designers, and is responsible for anticipating potential issues that may affect the Project schedule and quality, and plan contingency actions to avoid or minimize their impacts. The Utility Coordinator will have authority to facilitate the resolution of those issues.

1.1.1.3 DESIGN TEAM ORGANIZATION

ET's organization chart is presented in Appendix 1.1c and the resumes of the key personnel are presented in Appendix 1.1d. The key personnel committed to work on this Project will fill the following roles:

Design Manager: Rey Rivas, PE
The Design Manager assures that the specifications, standards, design criteria, and other technical requirements established within the Contract are followed. He is also responsible for creating the definition of each design package, including scope, schedule and deliverables. The Design Manager will coordinate work of all packages to meet the total Project design requirements, approve all design deliverables prior to releasing them for construction in accordance with the Design Quality Management Plan (DQMP), and develop technological innovations for the design of the Project. The Design Manager reports to the DGP Engineering Manager through the DGP Design Coordinator.

Design Quality Manager: John Morrison, Jr., PE
The Design Quality Manager is responsible for ensuring that all design is performed in accordance with the DQMP. He will perform various audits to assess the completeness of all Design Quality Control Reviews and issue Certificates of Conformance. He has the authority to stop any and all design work that does not meet the standards, specifications, or criteria established for the Project. In addition, the Design Quality Manager will provide any necessary updates and revisions to the DQMP, provide quality training, and maintain all necessary quality documentation. (Resume is presented in Appendix 1.2d.)

Lead Engineer: John Wallace Jordan, Jr., PE
The Lead Engineer is responsible for understanding the Project's technical requirements and providing overall technical leadership and integration of the roads and bridge teams. He is the primary point of contact and communication link for the technical work performed by the various production centers. The Lead Engineer will assist the Design Manager in the establishment of the design scope and the monitoring of progress as it relates to the deliverable requirements. In addition, he is primarily responsible for defining the content of the specific roadway and bridge design deliverable packages and any appropriate subsets as it relates to the technical requirements.

The functions of other principal participants, which also appear in the organization chart, are presented below:

- The **Deputy Design Manager** is expected to provide support to the Design Manager in the oversight of the design team's activities. In particular, the Deputy Design Manager will perform as the primary backup on the management of the design team's technical performance requirements and provide primary responsibility for the administration of the design contract including project management, invoicing, and subcontracting. The Deputy Design Manager will also be primarily responsible for working with the Design Manager and Lead Engineer to identify and allocate the resources necessary for the design team to achieve quality work, on time, and within budget.
- The **Utility Coordination Manager** will meet regularly with utility companies and municipal utility officials and serve as a liaison. Responsibilities include coordinating with the Construction Coordinator and utility entities.
- The **Design Services Manager** is responsible for supervision and management of all non-discipline related technical support functions including scheduling, document control, and drawing production. He will also provide support to the Design Quality Manager in the implementation of the quality assurance functions and will supervise and coordinate with the Discipline Leaders in the performance of all construction support services such as shop drawing review, requests for information, and as-built drawing preparation.

- The **Design Discipline Leads** report directly to the Lead Engineer and are responsible for providing technical direction to the production staff of their respective discipline. They will provide leadership and management of the production staff and are responsible for the direction and success of the group(s) providing design services. The Design Discipline Leads are also responsible for understanding the integrated nature of the design process and will assess the effect of their discipline's design on the Project as a whole and communicate and coordinate any required modifications or revisions.
  - Given the size of the Project and resources required, the design team organization reflects not only a structure based on technical discipline, but also a structure that breaks the Project into manageable sizes through the definition of specific zones. These nine zones are described in Section 1.3.
  - This segregation provides individual sub-teams to focus on a finite portion of the Project within logical limits, allowing a number of design activities to run in parallel and minimize schedule durations. Coordination of the designs between zones will be seamless through oversight provided by the Discipline Leads and frequent coordination meetings, among other strategies explained elsewhere in this Proposal.

Other professional engineering firms assisting ET in the design of the Project include the following:

- **MACTEC Engineering and Consulting, Inc.** is a leading engineering infrastructure, construction management, geotechnical engineering design, and environmental, consulting services firm and has been providing geotechnical and materials testing services to the FDOT and Florida's Turnpike Enterprise for more than 20 years. MACTEC will be providing geotechnical design, drilling and testing for design, and testing and field inspection for structures and roadway during construction.
- **Greenhorne & O'Mara, Inc. (G&O)**, founded in 1950, has a large and diversified staff of over 650 professionals with extensive expertise in civil, structural, environmental, transportation, and water resources engineering; surveying and mapping; environmental services, including hazardous materials assessments; landscape architecture; and other related disciplines. For more than 20 years G&O has been providing design, drainage, survey and right-of-way services for FDOT District 4. G&O will be providing roadway design, survey, and subsurface utility exploration.
- **Kimley-Horn and Associates, Inc. (Kimley-Horn)** was founded 41 years ago as a traffic and transportation firm, has grown to a full-service engineering consulting firm that offers a range of services including roadway design, drainage design, bridge design, landscape architecture, and environmental science. Kimley-Horn has nearly 700 professional and support staff in Florida in 21 offices statewide. Kimley-Horn will be providing bridge, roadway, and lighting design.
- **F.R. Aleman & Associates, Inc. (FRA)** has been providing FDOT and municipalities throughout Florida with professional services for design and analysis of ITS systems, systems management, traffic engineering studies, signal timing, construction engineering inspection, surveying, and subsurface utility engineering for more than 20 years. FRA is comprised of approximately 100 professionals located in five offices throughout the Florida. FRA will be providing traffic information for signals and MOT and ITS infrastructure, lighting design, survey and subsurface utility exploration.
- **C3TS, P.A.** is a full-service, multi-disciplined architectural, engineering, planning and public relations firm with headquarters in Coral Gables, Florida. C3TS has more than 135-employees located in South and Central Florida and has been providing engineering services on FDOT related projects throughout Florida (All Districts) since its inception. C3TS will be providing bridge, roadway, utility, and pavement design.
- **Curtis + Rogers Design Studio Inc.**, founded in 1991, provides landscape architectural design and construction phase services throughout south Florida for public and private clients, including extensive work in the transportation sector for DFOT, Florida's Turnpike, MDX, MIA, and Miami-Dade County.

- **R. J. Behar & Company, Inc. (RJ Behar)** has been providing engineering, planning, and construction management engineering inspection to public and private clients throughout Florida since 1999. RJ Behar is a minority owned firm and is DBE certified by FDOT. RJ Behar will be providing drainage design and traffic signal design.

1.1.2 Design Management Concept

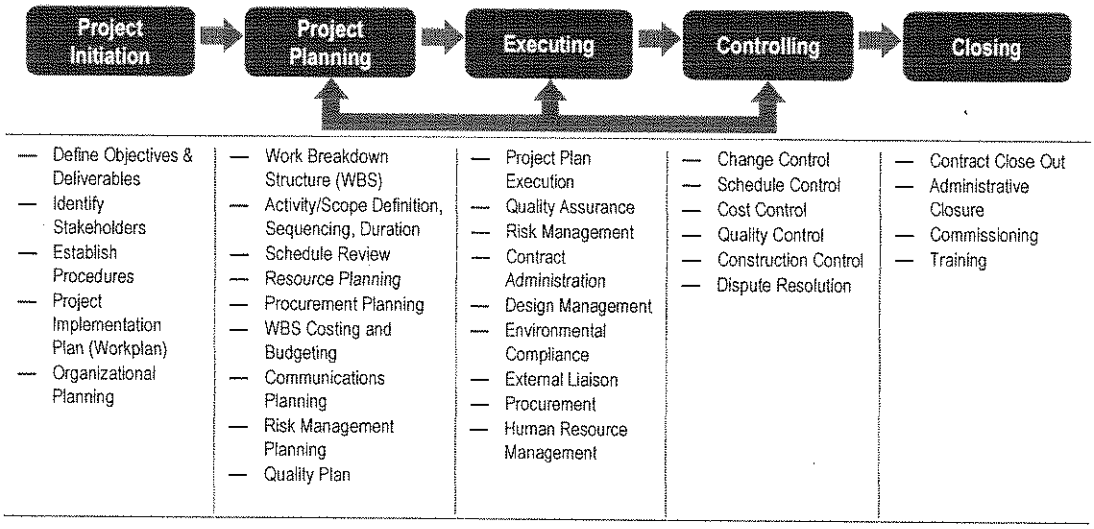
ITP 1.1.a - Design Management Concept Including Interface of Design Personnel with the Construction and O&M Organization to Enhance and Expedite the Design Process in accordance with the Preliminary Quality Plan

Successful management of the design elements of the Project begins with the establishment of the most suitable organizational structure for efficient and economical delivery of the work. The design team specifically engaged for this Project is experienced in large-scale projects delivered using design-build methodologies. Qualified personnel are the foundation upon which the design management concept is built.

Design Management

ET's support of the overall PMP will include planning, executing, and controlling the Project's design activities to meet Contract requirements. The framework of the design management process is shown in Figure 1.1-2.

Figure 1.1-2 Design Management Process



The design processes and supporting systems and procedures are intended to provide effective management and coordination of the Project's design team and provide essential coordination with other ADMP Team members including DGP and ADMP's O&M staff.

Furthermore, ET is committed to working within contractual milestone dates. ET recognizes that to achieve this objective, ET must adhere to a comprehensive work plan and schedule. ET will take a proactive approach to minimize deviations from its work and will continually endeavor to limit the impact of any unforeseen changes on the construction efforts performed by DGP.

To achieve this, ET will develop a Project Work Plan that outlines its approach to effectively deliver the design for the Project. Inputs/outputs to each phase, milestone and key decision points will be identified to develop a complete understanding of the work elements and their inter-relationships. This Project Work Plan will be detailed and tied to the Work Breakdown Structure (WBS), schedule, and cost. In addition, the Project Work

Plan forms the basis of the communication plan to ensure that all ADMP Team members are clear on the design objectives and work processes at the outset.

Design Interface with QA/QC

Relative to quality, ET will provide a formal Design Quality Management Plan (DQMP) that will be completed shortly after commencement of the Project. It will be a subset of the overall Quality Management System (QMS) for the Project and provides interfaces with the entire ADMP Team. The DQMP will describe the design team's strategic plan for accomplishing its goals and objectives and be used as a formal communication piece to clarify processes, procedures, interfaces, and accountability.

DGP will review the DQMP to provide input, concurrence, and gain familiarity with the design process. This will form the basis of understanding throughout the organization of the design team's responsibilities and expectations and help achieve the PMP's previously stated objectives relative to quality and coordination.

Within the DQMP, specific QA/QC interface points between design personnel and the construction and O&M organizations are detailed. This includes a number of reviews performed by senior project staff at designated stages of the Project to address constructability, integration, compatibility, legibility of the plans, the effectiveness of communication between the engineering and other ADMP Team members that are recipients of the design, and a host of other quality issues related to the built facility. The purpose of these meetings is to enhance and expedite the design process by ensuring that communication between design and build partners is frequent and focused.

More information regarding the DQMP and the ADMP Team's Quality Management Systems is described in Section 1.2.

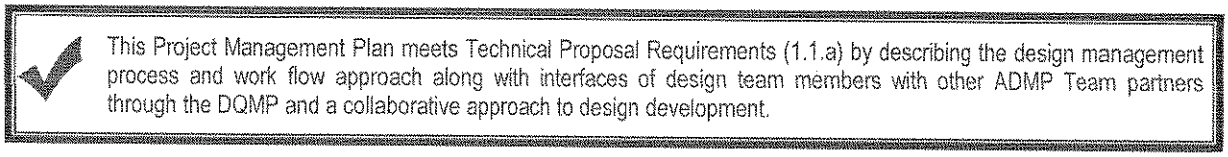
Design Interface with the Construction and O&M organizations

Developing a DQMP that is integrated with the associative construction and O&M plans under the umbrella Quality Management Plan is only one example of interface between the design, build, and O&M functions. Another example is the collaborative approach between the designers work and other members of the ADMP Team during preparation of this proposal to define those factors that will influence the Project's design. These included aspects such as:

- Worker and public safety
- Maintenance of traffic
- Construction access
- Construction staging
- Available construction resources
- Available construction materials
- Material selection for maintainability
- Targeted access or completion for operation phase

This type of collaboration will continue throughout final design during regularly scheduled coordination meetings that serve as the organizational and technical interface between the parties involved in the design and construction process. Design progress and specific construction related issues will be addressed and documented in formal meeting minutes and action items will be created and tracked for each issue needing further analysis, discussion and resolution. The direct benefit of this interface will include the following:

- Constructability and safety is incorporated into designs. The construction team has been and will continue to work with the design team to ensure that a well-conceived construction methodology is included in the design.
- A design that will be in strict compliance with the Contract. The design is not simply a product of applicable codes, but a product that takes into account the builder's knowledge of material specifications and the operator's knowledge of the facility's performance.
- A design schedule that enables early construction starts. The design team has a fully integrated phased design schedule that complements the proposed construction phasing and completion schedule.
- Provide Innovation. A collaborative approach that has already resulted in a number of Alternative Technical Concepts (ATC) being developed during proposal preparation and conditionally accepted by FDOT.
- Integrated and staged traffic flow analysis to ensure minimum impact from construction.
- Fewer post-design field changes. Constructability issues addressed during the design will reduce or eliminate the need for changes after construction begins.
- Reduced future maintenance. The design team, with ADMP's O&M specialists, will consider and incorporate their vast O&M experience and concerns into the design to reduce long-term O&M costs.
- Value engineering enhancements in design. Interaction between designers and construction professionals, all dedicated to improving the value and utility of the Project, provides a constant value engineering process.



1.1.3 Construction Management Concept and Interface with QA/QC Organization

ITP1.1.b – Construction Management Concept to be Used, Including Interface with the QA/QC Organization

The overall construction management concept and philosophy is based on three primary elements: partnering, trust, and communication. Foremost, there is a need to foster a cooperative teamwork attitude that encompasses the entire ADMP Team including designers, builders, subcontractors, O&M personnel, FDOT, and all major stakeholders. This approach encourages and facilitates clear and open communication that is essential to any major undertaking. It also helps by reaching a large and diverse audience at one time, so that multiple viewpoints and concerns can be discussed early and openly.

Optimal Allocation of Construction Resources

Another distinct attribute of the construction management approach is to be flexible and innovative enough to apply resources as required to complete the Project within a tight schedule. Organizational flexibility will allow support resources to be applied to job elements on the critical path, and hence keep the Project on schedule. Part of this flexibility will be to maintain the ability, if need be, to self-perform essentially any of the work on the Project; from earthworks, to pipe laying, to paving, to structures. This provides the assurance that DGP not only maintains competitive pricing from subcontractors, but that ADMP can make a stronger commitment to achieve the Interim Milestones Deadlines.

Physical Organization for Construction Management

Another critical aspect of DGP's construction management approach is to organize and operate as a segment level organization. This means the Project will be broken into independent geographic segments, with their own independent management structures. These segment management teams will report to the overall General Superintendent. The separate segment management team's responsibilities will cover all aspects of design and construction, including coordination with the design team, project scheduling, cost management, and safety. While the General Superintendent and Project Manager provide a project-wide consistency of approach, segment organization allows the segment managers and segment staff to bring detailed insight and knowledge of specific segments of the Project, and bring greater efficiency by allowing them to focus on the details, and be responsible for successful operations of their particular segment.

Construction Management Interface with QA/QC

Quality is an integral part of the construction management approach. To this end, a Construction Quality Control Management Plan (CQCMP) will be developed as a working document within the overall QMS with interfaces to the DQMP. The CQCMP defines the quality control organizations along with processes needed to assure that the specified materials are used and that the installation is acceptable to produce the required end product. The procedures will be distributed to all employees according to their duties and its affect will not be compromised.

QA/QC interface occurs during the pre-construction meetings that will be held for each new major work element so that all staff understands the requirements, and the materials meeting those requirements are available. Toolbox meetings are then held with the crews to explain requirements and to assure the necessary skills are available within the crews to do the work right the first time. Work will begin only when training of a core group of workers is accomplished.

Construction supervision and crews will discuss issues with the QA/QC organization before or as the work is accomplished. The QA/QC organization's first responsibility is to ensure the work gets done right through helping construction crews understand the requirements. The quality staff must also be aware that the work is being done correctly or see that it is corrected. Additionally, the QA/QC organization staff will interact with the construction and design staff in order to follow up on construction and constructability issues affecting design and construction. The construction staff, led by the relevant segment managers and with concurrence from the Engineering Manager and Design Manager, will develop a proposed disposition and suggested actions to improve performance. (Note: More detailed information on the QMS is contained in Section 1.2, including organization charts for both the design and construction teams.)

As the Project enters the operating period, ADMP will provide a seamless transition of quality management responsibilities in large part facilitated by the ADMP Team's involvement during the implementation phase and due to ADMP's initi7ual input and ongoing involvement from the procurement phase through handback.

✔ This Project Management Plan meets Technical Proposal Requirements (1.1.b) by describing a construction management approach based on partnering, trust, communication and the interface with the QA/QC organization through the policies and procedures set forth in the CQCMP.

Through this process the ADMP Team will be able to determine and deliver the most economical and feasible construction management approach to provide FDOT with a high quality product on opening day and maintain a quality facility throughout the term of the Contract.

1.1.4 Interrelationship between Design and Construction Activities

ITP 1.1c – Interrelationship between Design and Construction Activities and Allocation of Design and Construction Staff to Implement Construction Phasing/ Sequencing Plan

In order to achieve the optimum quality project by the prescribed deadlines, it is imperative to provide meaningful interface between the design and construction staff starting from the proposal phase and throughout design, construction, and operations and maintenance. The long-term relationship between initial design, construction, and operations and maintenance phases is imperative to provide best value with lowest risk and in consideration of the whole life of the asset.

During the proposal phase of the Project, the ADMP Team focused on elements of the Project and identified potential areas where efficiencies and optimizations within the Project design and the Project schedule can be realized. Working in a collaborative team fashion, not only were the Project's design elements defined, but also the delivery of design packages necessary to support the construction and O&M functions. Examples include the following:

- Sequencing the construction in phases to allow for minimal impact to traffic operations and safety, without creating unnecessary and costly temporary facilities or difficult accessibility issues
- Dividing the Project into the optimum number of parts (work packages) for construction planning
- Planning the number of design packages to match the construction packages so design/construction coordination and management oversight is facilitated and enhanced
- Establishment of advance design packages for such things as excavation, grading, major drainage structures, bridge foundations, and long-lead bridge girder fabrication
- Structuring the packages for direct implementation, with respect to specific subcontracts to other companies
- Determining the approximate design and construction staffing, and equipment and material resources that would be required to keep packages within the practical limits of the marketplace
- Scheduling the approximate time frame for design and construction so that target dates could be accurately planned
- Developing the most suitable organizational structure for efficient project management and delivery of new works

Based on the Construction Phasing/Sequencing Plan developed during the proposal phase and described in detail in Section 1.3, all design and construction activities will be identified in the master schedule for the Project and resource loaded to ensure timely project delivery and appropriate allocation of staff. As shown in the design and construction organization charts provided in Appendices 1.1b and 1.1c in this section, the project staffing is built around dividing the work into eight specific zones. This is to ensure that the Project is broken down into logical and manageable sections for a majority of the work including roadway and bridge related items. It allows parallel activities to facilitate delivery of the Project in the least time possible.

Both on an individual segment and system-wide basis, design and construction staff will interface continuously. Examples of this interface during the design phase include: project controls; constructability review; construction packaging; construction phasing and sequencing; and over the shoulder (OTS) design reviews. In addition, weekly technical coordination meetings will be held with construction and design management staff in attendance. The purpose of these meetings is to discuss technical issues and approaches to be used in the design, construction package scope, and schedule.

During the construction phase, the design team will provide construction support services, interfacing with the construction team by responding to Requests for Information (RFI), conducting shop drawing reviews, preparing revised designs to respond to changed conditions or issuing design revisions, and providing design assistance for resolving non-conformance issues. The design staff will also be available for field reviews to clarify the plans and specifications and answer other questions regarding the construction documents. The field staff provided by the design team will review construction activities and QC reports to confirm that the Project is constructed in general conformance with the plans and specifications. Additionally, the design team will prepare record drawings upon construction completion.

Project success will not only require an interrelationship between design and construction, but O&M staff as well. This "whole team" approach has been used from the onset of the initial proposal development. A lifecycle cost, asset management approach, integrating the design team, construction team and ADMP's O&M technical team will continue through design, with each team bringing their unique perspective to the Project and gaining an appreciation for initial cost, maintenance cost and long-term implications on finance and traffic management.

Sections 1.2.3.2.1.1 and 1.2.3.2.1.2 provide further details on the interface between ADMP, DGP, and ET during the design and construction phases in the framework of the QC. This interface will focus on reducing future maintenance requirements and increasing the life cycle of key components.

✔ This Project Management Plan meets Technical Proposal Requirements (1.1.c) by describing examples of not only the interrelationship between the design and construction staff, but the O&M staff as well, with respect to the allocation of staff to implement our Construction Phasing/Sequencing Plan.

1.1.5 Approach to Addressing Life Cycle and Environmental Compliance

ITP 1.1.d - Approach to Addressing Constructability, Durability, Maintainability and Environmental Compliance in the Design and Construction Processes

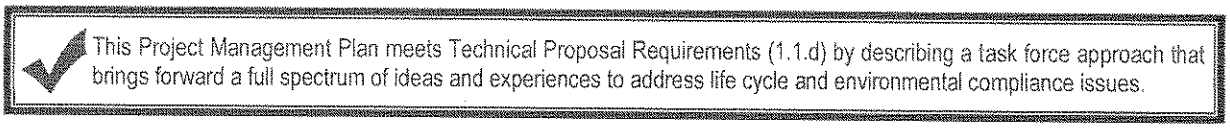
The collaborative team formed for this Project has a successful background on several projects that require design, build, finance, operate and maintain requirements. With the proven success of this ADMP Team, the Team will be able to incorporate experiences learned from previous projects, modifying them for the Project's specific attributes, and improving them to strive for technical excellence. One of these successful lessons learned is the implementation of multiple Task Forces, set up during project kick-off. The Task Forces are then kept together as an important collaborative team through the design and construction portions of the Project.

Each Task Force is formed by amalgamating key design representatives with construction team leaders and O&M managers. Each Task Force will then oversee specialized aspects of the Project, including construction means and methods, material and product selection for durability, ease of maintenance, and permit compliance as examples. These Task Force teams are then assigned milestones and budgets to manage and operate each aspect of the design and construction. This approach provides a detailed look into the design and construction process as it pertains to each phase of work, and allows us to ensure that the Project is delivered in accordance with the commitments set forth in this proposal.

As each Task Force contains a team of individuals specialized in certain design, construction, and O&M issues, it allows ADMP, DGP, and ET to work together to address these important constructability, durability, maintainability, and environmental compliance issues. The Task Force also conducts regular quality control reviews and design optimizations through weekly meetings with FDOT and other stakeholders and provides

directions to both the designer and contractor to ensure all aspects of the Project are considered and technical excellence is achieved.

Collectively, the Task Force teams conduct OTS reviews of the designs throughout the design period. Teams working with the designers and the contractors allow the final product to have virtually all the constructability issues designed into the product, as opposed to them being identified at a later stage in the design or construction process, causing both schedule and cost impact to the Project. Additionally, this allows DGP to tailor the construction to suit the rigid schedule, budgetary requirements, and ensure public safety.



1.1.6 Approach to Safety

ITP 1.1.e - Approach to Safety for the ADMP Team and Public Employees Including Designation of a Full Time Safety Officer

The personal safety and health of the general public and each employee of the ADMP Team is of primary importance. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal safety and health of the general public and each employee. DGP will comply with all applicable Federal, State, and local laws, and provisions and policies governing safety and health, including 29 CFR 1926, and all subsequent revisions and updates.

The ADMP Team's ultimate goal is "zero accidents". The objective of the Team's Health and Safety Program is to reduce the number of disabling injuries and illnesses to a minimum. A designated full-time Health and Safety Officer will be assigned to the Project by DGP ensuring that safety requirements are met throughout the term of the Project. ADMP will also assign a Safety Officer at the Concessionaire level to provide oversight of the ADMP Team's safety elements, plus provide longer term safety procedures for the O&M portion of the Project.

Corporate Management, supervisors and employees will embody the proper attitudes toward injury and illness prevention. It will also require cooperation in all health and safety matters, not only between corporate management, supervisors and employees, but also between each employee and his/her fellow workers. Only through such a cooperative effort can a safety record, in the best interest of all, be established and maintained. The Health and Safety Program will therefore include the following components:

1.1.6.1 JOB SPECIFIC TASK ANALYSIS AND CONTROLS

Prior to commencing the Project, the ADMP and DGP management and the Health and Safety Officer will meet and develop a Site Safety Specific Health and Safety Program outlining the scope of work for the job. Once this is complete, operations and exposures that will require Job Specific Task Analyses (JSTA) will be identified.

The General Superintendent or designate will prepare a JSTA for submittal outlining all hazards and controls. Controls will include the following abatement steps, if possible: elimination, isolation, engineered controls, and administrative controls. The DGP Health and Safety Officer and ADMP Safety Officer will review the JSTA. A review with affected workers and sign-off will be required prior to commence of work.

1.1.6.2 SAFETY SURVEYS

ADMP and DGP will conduct a program of health and safety surveys to identify and eliminate or control unsafe working conditions or practices, to control health hazards, and to comply fully with the health and safety practices. This will include daily site safety surveys by the DGP's Health and Safety Officer and periodic site safety surveys with ADMP's Safety Officer.

1.1.6.3 TRAINING OF PROJECT MANAGEMENT TEAM

ADMP and DGP will conduct in-house training sessions. These training sessions have created a forum that has developed and enhanced the skills of its employees while promoting a "teamwork" approach to constructing its projects. The specific goals of the training sessions include the following:

- Improve communications among employees
- Educate employees in all areas of construction
- Promote lateral sharing of knowledge between project teams
- Adapt project management functions to corporate standards

1.1.6.4 TRAINING THE WORKERS

Training all employees in good health and safety practices is important. To accomplish this, DGP will perform weekly safety meetings conducted by jobsite superintendents and competent persons. All meetings will be conducted on-site, documented and tailored to the jobsite.

1.1.6.5 SUBCONTRACTOR HEALTH AND SAFETY PROGRAM

All ADMP and DGP subcontractors are required to submit a Site Specific Health and Safety Program prior to commencing work. All operations and exposures associated with their work and controls that will be implemented will be included in their JSTA's. All subcontractors are required to attend the weekly safety meetings and disseminate this information to their employees. Subcontractors found to be working unsafely will be informed, first verbally, secondly in writing and if still uncorrected possible termination of the contract may result. In addition, if there is an imminent danger to life and health situation observed, an operation will be stopped and immediate termination of the contract may result.

1.1.6.6 ACCIDENT INVESTIGATION

Should they occur, DGP will investigate every accident promptly and thoroughly to find the root cause and correct the problem in order to take measures to avoid its reoccurrence. Therefore, each superintendent must utilize the Supervisor's Accident Investigation Report to determine the cause and means of preventing recurrences.

1.1.6.7 EXPOSURE ASSESSMENT

Exposures Assessment will be developed for the Project in accordance with the major operations to be performed. Table 1.1-1 on next page shows an example of the Exposure Assessment.

1.1.6.8 PUBLIC SAFETY PLAN

Public safety during construction is considered to be the highest priority on every project. The Project's construction phasing/sequencing has been established to ensure all public safety is maintained to today's standards or better. The Public Safety Plan will cover all facets of construction issues with recommendations on mitigation. The plan will be regularly updated to suit the local issues and technological advancement, with provision made for community events as they arise during the construction period.

The Public Safety Plan also provides for the O&M activities. ADMP's Safety Officer will ensure that the Plan is followed using the following minimum principles:

- Public and motorist information is conveyed on a regular basis through signage and media
- Work zone maintenance and rehabilitation is appropriately strategized
- Travel demand and incident management is correctly managed
- Detailed plans are in place for potential utility failures and dangerous spills

By effectively implementing all of the above items, ADMP and DGP will be successful in reducing the number of accidents.

Table 1.1-1 Exposure Assessment

Operations	Exposures	JSTA's and Controls
Maintenance and Protection of Traffic Plans	Traffic Accidents	> Set out traffic patterns in accordance with plan specs and FDOT requirements
	Struck by Vehicles	> Follow JSTA developed for laying out patterns > Employees will wear proper PPE
	Temporary Signs and Striping	> Will be preformed by Subcontractors > JSTA's will be required before work begins
	Vehicle Operations	> JSTA will be developed for this operation and reviewed by workers > All workers required to wear PPE
Construction of Temporary Roadways	Struck By Vehicles	> Drivers and Operators trained on Traffic Patterns
	Silica Dust	> JSTA's will be required before work begins
	Noise	> Follow JSTA developed for laying out patterns
Bridge Demolition	Falls	> There will be a meeting with the subcontractor to discuss operation(s) in depth
	Equipment Operation	> Subcontractor to obtain all necessary permits
	Lead Exposure	> Subcontractor to obtain all necessary permits
Bridge Construction/ Reconstruction Rehabilitation	Equipment Operations	> JSTA will be developed for this operation and reviewed with workers > All workers required to wear PPE
	Concrete/ Silica	> Drivers and Operators trained on Traffic patterns
	Falls	> Back up Alarm vehicles and equipment that operate within a highway jobsite
Drilling Piles and Caissons	Equipment Operations	> JSTA's will be developed for this operation and reviewed with workers
	Noise and Eye Protection	> All workers required to wear PPE
	Collapse/ Cave-in/ Engulfment	> JSTA's will be developed for this operation and reviewed with workers > All workers required to wear PPE
Trench Excavations	Equipment Operations	> Drivers and Operators trained on Traffic Patterns
	Falls	> Back -up Alarm vehicles and equipment that operate within a highway jobsite

✔ This Project Management Plan meets Technical Proposal Requirements (1.1.e) by describing the designation of dedicated safety officers at both the design-build and concessionaire levels and the implementation of a formal Health and Safety Plan and a formal Public Safety Plan.

1.1.7 Interface with FDOT District 4 and Others during Construction

ITP 1.1.f - Proposer's Interface with FDOT District 4, FTE, Broward County, Cities, Regulatory Agencies, Utility Owners, Other Stakeholders and the Public During the Construction Period, Including, but not Limited to these Activities: Plans and Permits Review; Progress, Workshop, Permitting, and Utility Coordinating Meetings; Construction Engineering and Inspection; and Public Involvement and Community Input.

On-going communication activities with key agencies will be critical to the success of the Project as they have the ability to influence the design, schedule of activities and acceptance of the Project. It has been ADMP's experience that exchanging information early and throughout the process allows these agencies to provide input into the design to readily address any adverse effects anticipated. The intent will be to establish a reciprocal flow of information and open dialogue so that all issues are identified, discussed and resolved together during the design process in the early stages where they can be more easily accommodated. This will facilitate a more rapid issuance of authorization for the Project to proceed.

As part of the Project Schedule and Construction Sequencing Plan, another key component is the interface between the ADMP and FDOT. During the initial stages of the project start-up, the ADMP, in coordination with DGP and ET, will work very closely with FDOT in refining the construction staging plan to further reduce the overall impact to the public, emergency services, and the environment. This refinement process provides FDOT further insight into the project controls, design innovations and construction delivery.

In addition, a number of Task Forces will be established to enhance communications with FDOT and the stakeholders within the corridor. Task Force meetings will include, as a minimum, these specific work elements:

- Maintenance of Traffic
- Drainage
- Bridges
- Roadway
- Utilities
- ITS

The Task Force groups will hold regular weekly minuted coordination meetings with all parties associated with the Project to discuss issues such as: schedule slippage, design issues and resolution of unknown technical/design issues not presented at the time of the proposal. (Note: these Task Forces are similar to the ones established during the design as mentioned in Section 1.1.5, and may be a continuation thereof during the construction period, thereby providing essential continuity for the participants.)

The Task Forces will include not only FDOT but other stakeholders, if necessary, such as:

- Florida Turnpike Enterprise
- Broward County
- City of Davie, Sunrise, and Plantation
- US Army Corps of Engineers (USACE)
- United States Coast Guard (USCG)
- South Florida Water Management District (SFWMD)
- Other Regulatory and Stakeholder agencies
- The Public and Private industry throughout the corridor



This Project Management Plan meets Technical Proposal Requirements (1.1.f) by describing a particular forum where FDOT and other stakeholders may participate in the construction process through formal Task Force meetings on a varied number of subjects of interest.

1.1.8 Interface between Construction and O&M during Commissioning

ITP 1.1.g – Construction Personnel Interface with the O&M Organization in the Commissioning of the Project

Each active zone of construction will contain a superintendent and site foreman to oversee the construction progress. It is anticipated that there will be two project superintendents, one from I-75 to Davie Road (Zones 1 to 6) and a second for the I-595/Turnpike and SR-7 Interchanges and Mainline Turnpike (Zones 7 and 8). In addition to these, the ADMP Team anticipates that several stakeholder construction managers and subconsultant managers will be on-site at the time of their respective works to ensure all designs and technical standards are met.

DGP's construction superintendent's primary responsibility is to communicate to the entire ADMP Team, FDOT and other stakeholders the on-going status of the Project and to keep them abreast of any raising issues in whatever capacity necessary. Using procedural meetings and formal communication documents, O&M staff will be briefed well before commissioning to allow their input into the final constructed product. These pre-commission efforts are intended to facilitate a quick and problem-free handoff from construction to O&M, building consensus on acceptability of completed work.

During the formal commissioning process, it is anticipated that the Project will undergo several stages of completion. Prior to initiation, each item for commissioning will be tested to the standards as set forth in the Contract. These stages can be summarized as follows (at a minimum):

- Sub-surface completion (activated new and relocated utilities, electrical and ITS)
- Phase completion (opening of completed lanes, ramps and bridges)
- Zone completion (opening of the completed zone)
- Toll completion (opening of Toll gantries and facilities)

In addition, and as part of the ADMP's Quality Control on DGP, ADMP will monitor specific elements of the infrastructure to avoid built-in Maintenance Rating Program (MRP) failures. The details of these pre-commissioning inspections are provided at section 1.2.3.2.1.2.



This Project Management Plan meets Technical Proposal Requirements (1.1.g) by describing the pre-commissioning and formal commissioning approach that includes the interface between construction and O&M personnel.

1.1.9 Appendices 1.1

Appendix 1.1a-1 ADMP Organization Chart (During Construction)

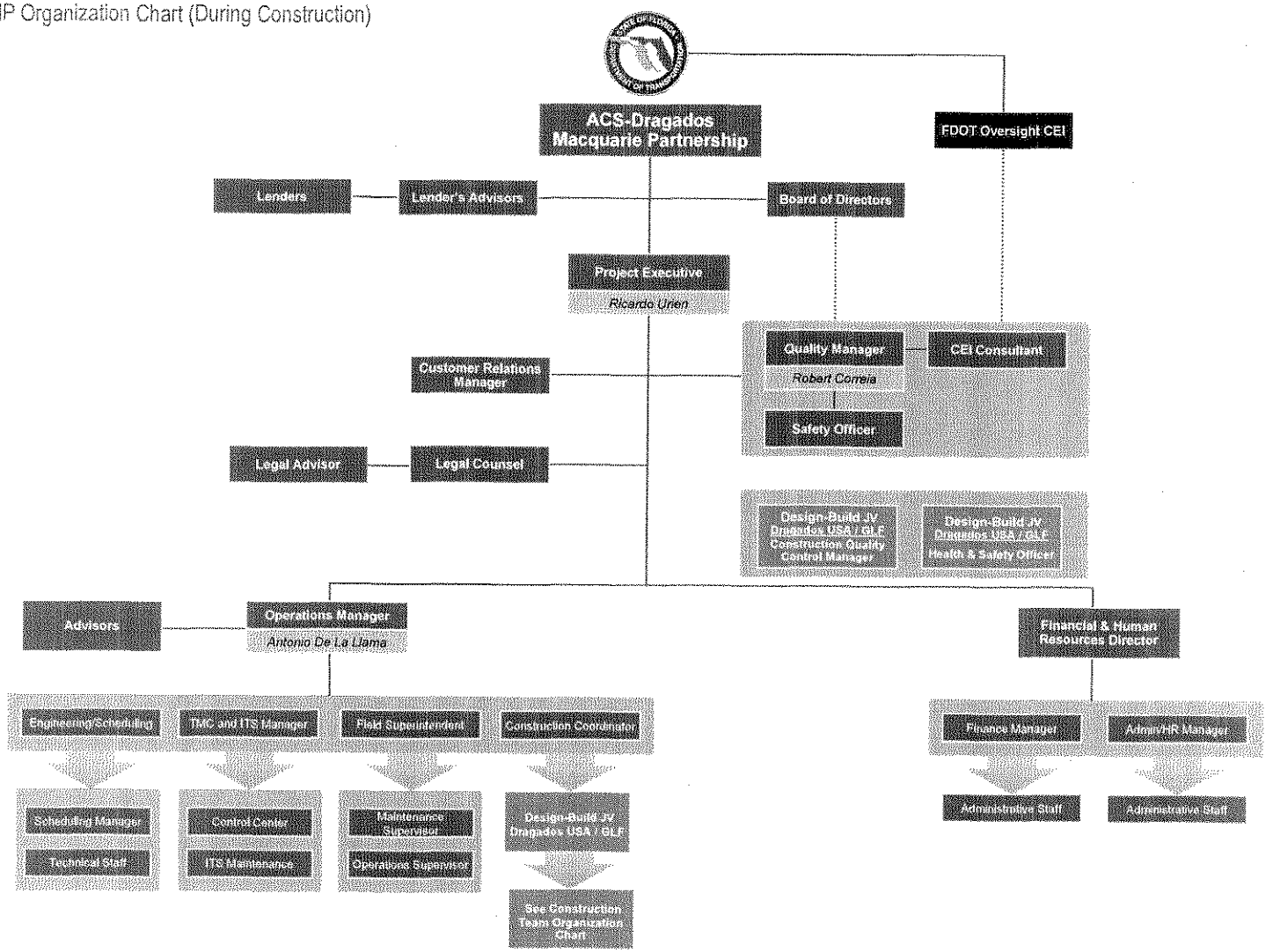
Appendix 1.1a-2 ADMP Organization Chart (During O&M)

Appendix 1.1b DGP Organization Chart

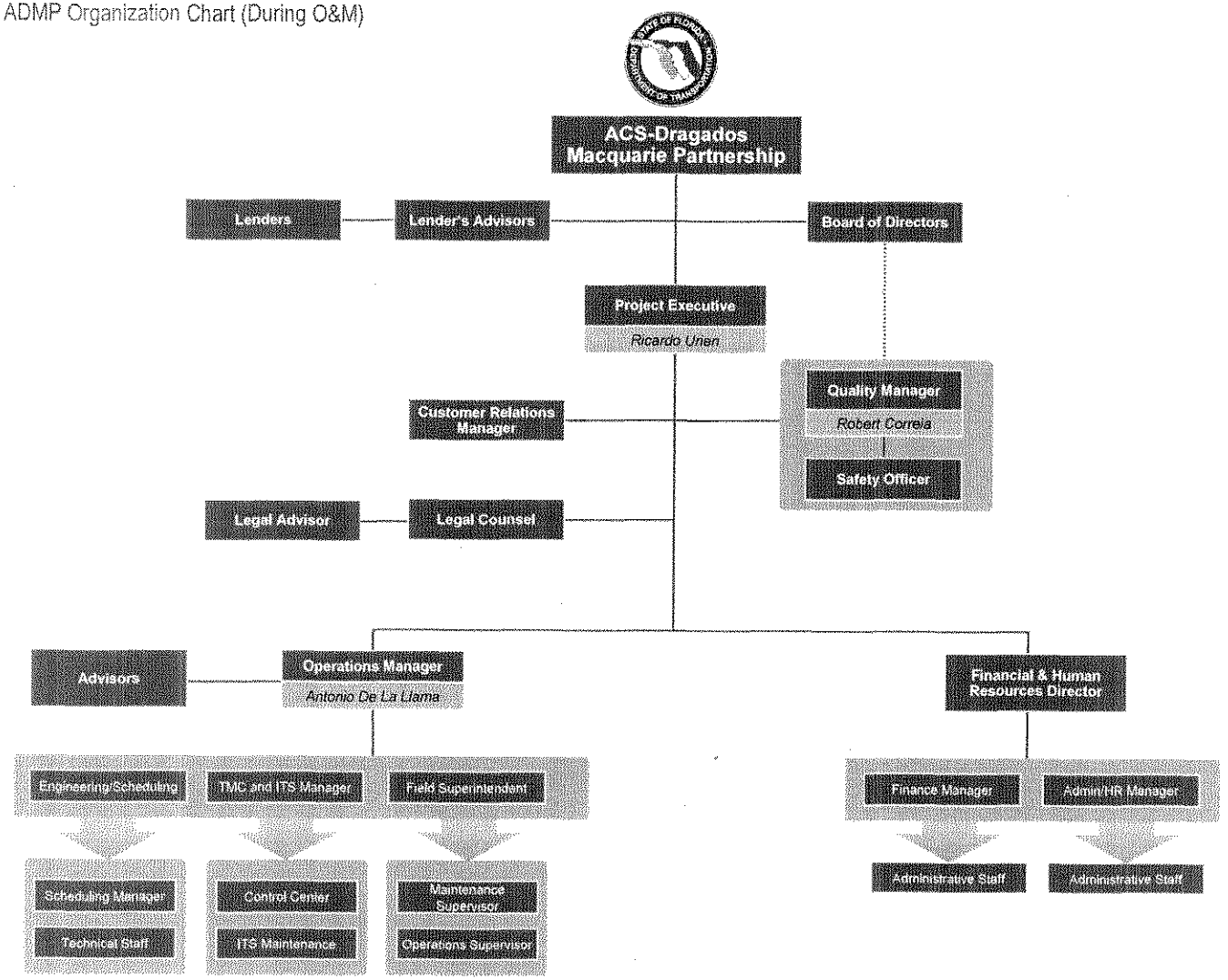
Appendix 1.1c ET Organization Chart

Appendix 1.1d Resumes

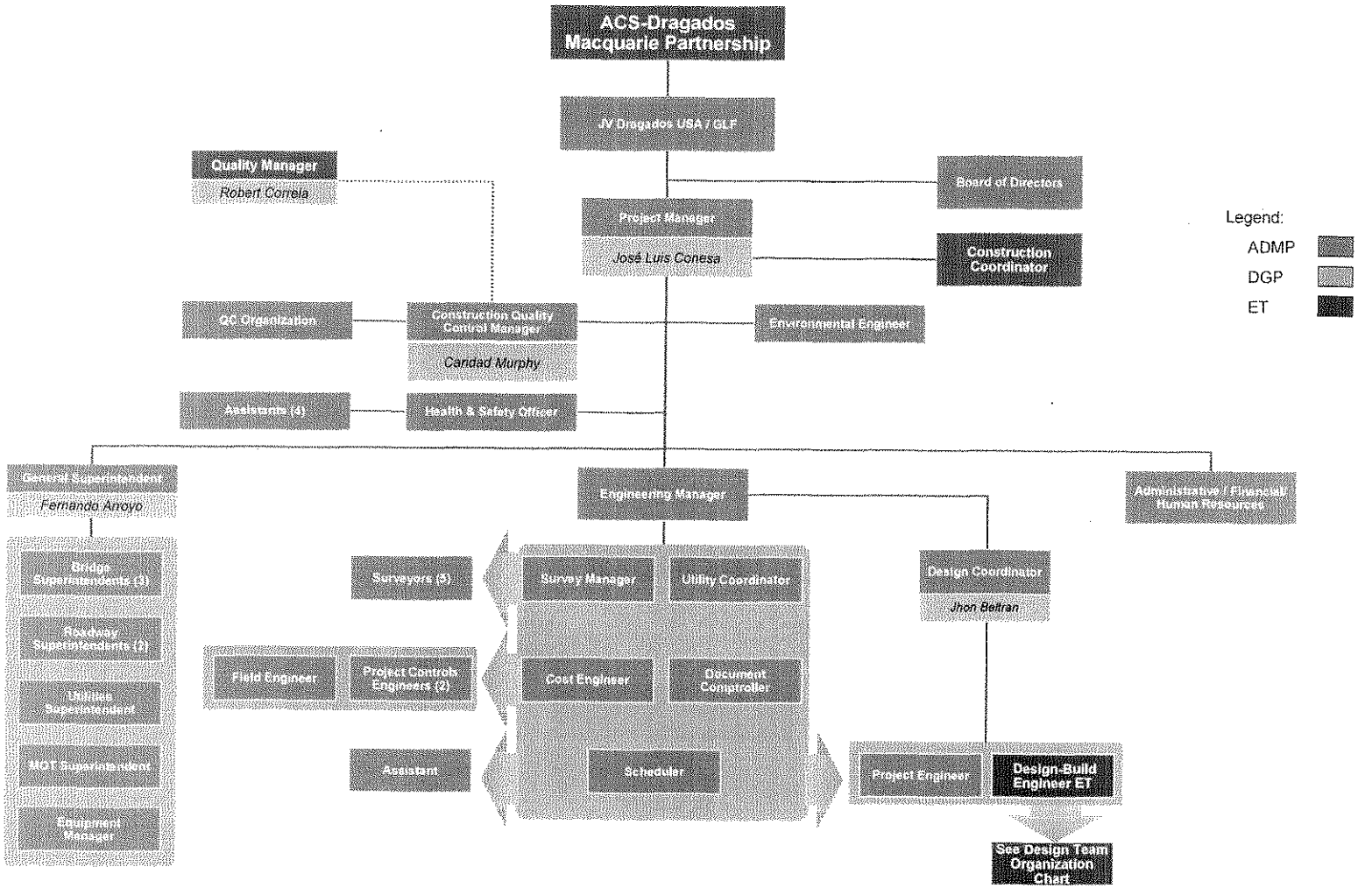
Appendix 1.1a-1 ADMP Organization Chart (During Construction)



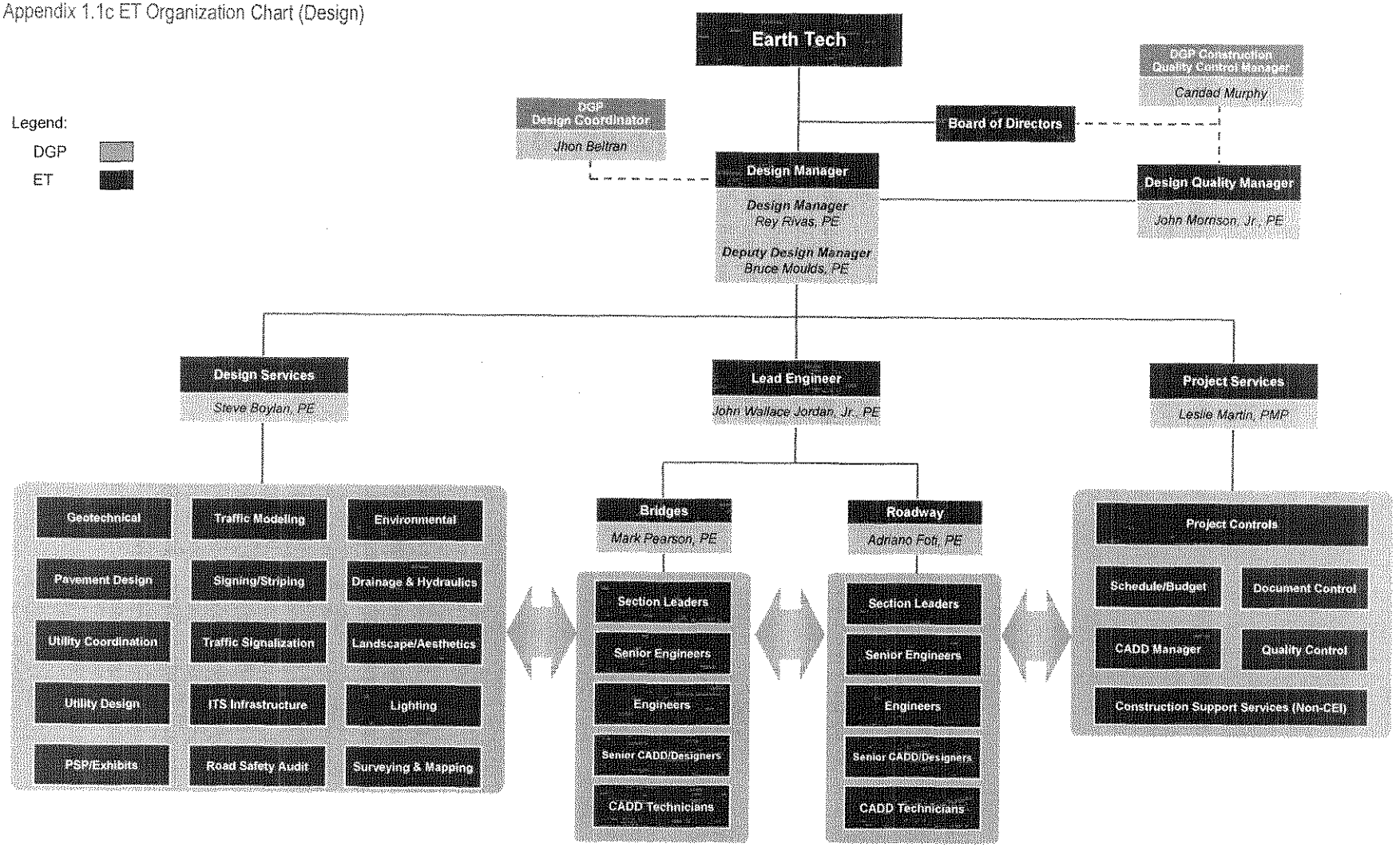
Appendix 1.1a-2 ADMP Organization Chart (During O&M)



Appendix 1.1b DGP Organization Chart (Construction)



Appendix 1.1c ET Organization Chart (Design)



Antonio De La Llama

OPERATIONS MANAGER

Years of Experience

20

Areas of Expertise

Extensive experience in Concession Project Management., Project Financing for DBFO projects , Construction of major civil works, Operation and Maintenance of Transport Infrastructure, Electronic and "free flow" tolling operation systems, and "availability" and "congestion" based payment systems.

Education

Civil Engineer, Spain

MBA, Madrid Politechnical University, Spain

Languages

English

Spanish

Experience Profile

Mr. De La Llama is a civil engineer with broad building experience and concession management. He has served as Technical Manager and Project Manager on various projects. In 1995 he started his involvement as concessionaire in projects comprising major civil works. He has participated in more than 15 concessions of transport infrastructure worldwide, covering the financing, legal and technical aspects of concessions. He lived in Colombia and Ecuador and served as General Manager for three concessions in these countries. Antonio has taken focused courses on finance at the IESE. He currently manages IRIDIUM's concessions' portfolio in UK, Ireland, Chile and South Africa.

Project Experience

Road Management Services A13, London U.K. (Transport for London). Director for this $520 million DBFO contract signed in April 2000, called The Thames Gateway. This project consists of a 13-mile section of the A13 motorway between Butchers Road and Wennington. The concessionaire is responsible for the operation and maintenance duties on the Docklands Road, which includes the Limehouse and East India Dock Tunnels. This project has a highly technological component in its "availability" and "long vehicle usage" based payment mechanisms. Construction completion was achieved in 2006.

Sociedad Concesionaria Autopista Central S.A., Santiago de Chile (Ministry of Public Works of Chile). Director for the most important project of the six high – standard highways of the First Urban Concession Projects created in 1995. This project comprises a $977 million investment on a pre-existing 37-mile urban road that crosses Santiago from the north to the south. The operating system is based on the "Free Flow" toll technology. The concession started the operation of the first segments of the project in 2004.

Bakwena Platinum Corridor Concessionaire (BPCC), South Africa (National Roads Agency, South Africa). Director and Chairman of BPCC Board for this $470 million toll highway that stretches for 242 miles from Pretoria northward and 186 miles to the west to the South Africa, Bostwana border. Currently more than 140.000 vehicles use the highway every day and it is the first highway in South Africa with an electronic toll system. The concession started the operation of the first segments of the project in 2003.

Autopista Vespucio Norte Express, Santiago de Chile (Client: Ministry of Public Works of Chile). Director for this $1 billion investment that comprises the upgrade and expansion of a 19-mile portion of the Américo Vespucio ring road around Santiago. The operating system is based on the "Free Flow" toll technology.

Construction completion was achieved in 2005. This project also forms part of the high – standard highways of the First Urban Concession Projects Program and started in 2001.

Road Management Services A1 Darrigton, Dishford (Highways Agency, U.K.). Director for this $506 million DBFO contract on a 34-mile portion of the A1 highway in Leeds area. The concession is for 33 years and it is based on a "congestion" payment mechanism. This project is under operation since 2006. The highway is divided in 50 segments of approximately 1.2 miles each. Payments are referred to the traffic conditions registered each hour in each segment.

Autopista Santiago, Valparaiso, Chile (Ministry of Public Works of Chile). Director for this $506 million, 68-mile highway that links Santiago de Chile with Valparaiso in the Pacific Coast. Since 2004, the Concessionaire (Rutas del Pacífico) has been responsible for the operation and maintenance duties on four tunnels along the highway.

Dundalk By-Pass, Ireland (National Roads Agency, Ireland). Director for this $145 million DBFO contract between Belfast and Dublin. The project comprises a 7.5 mile new highway bypassing Dundalk and the operation of a pre-existing highway of 27 miles between Dunleer and Dundalk. The project reached construction completion in 2005.

Túnel San Cristobal, Santiago de Chile (Ministry of Public Works of Chile). Director for this 24 mile highway linking Providencia with the municipalities of Recoleta and Huechuraba in the northern area of Santiago. Key parts of the project include 1-mile long two parallels tunnels. This PPP project forms part of the group of urban concessions. It is $130 million investment, and is currently in its late stage of construction. Operation will start in mid 2008 using "free flow" technology. TSC is the concessionaire.

Waterford By Pass, Ireland (National Roads Agency, Ireland). Director for the N25 Waterford Bypass PPP scheme currently being constructed will operate a tolled road between Kilmeaden and Slieverue. It includes tie-ins to the N24, N9 and N29, and the major cable-stayed bridge crossing of the river Suir.

Bogotá – Villavicencio Toll road, Colombia (Ministry of Public Works of Colombia). Chief Operating Officer for this 53-mile toll road project started in late 1996 and reached construction completion in 1999. COVIANDES undertook the construction of a portion of 15.5 miles that includes a 2.5 mile tunnel. The total investment amounted to $246 million.

Second runway of Eldorado airport, Bogotá, Colombia (Aeronáutica Civil de Colombia). Chief Executive Officer for this 20-year BOT scheme undertook by CODAD as Concessionaire consists of the construction and operation of the second runway of the Eldorado airport in Bogotá. The total investment amounted to $149 million.

Roads of the Coast of Ecuador (Ministry of Public Works of Ecuador). Chief Executive Officer for this project that consisted of a 176 mile upgrade of pre-existing roads linking Guayaquil with Santo Domingo de los Colorados in the north of the Country and the port of Machala in the southern region.

Ricardo Urien

PROJECT EXECUTIVE

Years of Experience

13

Areas of Expertise

Extensive experience with large infrastructure projects including design and construction of large bridge projects. Expertise includes the use ISO 9000, AUTOCAD, HEC-RAS and other design software.

Education

B.S, Civil Engineer, Universidad de Cantabria, Spain, 1994

Professional Memberships

British Institution of Civil Engineers since 1997

Languages

English
Spanish
Mandarin

Experience Profile

Mr. Urien has 13 years of design and construction experience of large infrastructure transportation projects with a focus on bridges. He has played an instrumental role on numerous large-scale construction projects throughout the globe, similar to the I-595 Corridor. Currently, he serves as General Manager for Public Private Partnerships at ACS for major transportation projects. Mr. Urien is proficient in the use of ISO 9000, AUTOCAD, HEC-RAS, Presto/TCQ, Ansys, Strap, Vettones, Tri2A, CLIP and other design software.

Suspension Bridge over Yangtze River, Jiangsu, China, (Jiangsu Provincial Communications Department). Manager of Production and Engineering in charge of the design team for construction processes and temporary elements for the construction of the bridge. This is the longest bridge in China and ranks as the 4th largest in the world (4,520 feet). It was successfully constructed under an extremely tight and fast-tracked schedule and within budget.

A69 Variant of Haltwhistle, (U.T.E A 69). Project Manager for the construction of a highway along a railway (1,500 tons) and two bridges crossing over Tees River with a construction cost of $3.2 million.

M-65 Varian South of Blackburn, (Tarmac Construction Ltd.) Project Manager for the construction of 14 bridges for the new M-65 highway, two of which were 2,500 tons of steel each. Construction cost was $13 million.

Castlemill Highway, Variant South of Bedford, (UTE WIMPEY – AMY). Project Manager in charge of the construction of a 2,000 ton of steel highway. Construction cost was $4.2 million.

Tsing-Ma Bridge, Hong Kong, China. Performed geometric calculations in the geometry of the cable as well as the design of auxiliary elements for this 1.4 mile-long suspension bridge for Hong Kong's airport.

Broadgate Raft Phase 2, London, England, (Broadgate Plaza Development). Project Manager in charge of this highly technical and specialized construction Project. The Project included the construction of a platform over a railway that would serve as the base of a building for the Liverpool St. train station. The greatest challenge was to construct the platform without disrupting railway traffic at one of the stations with highest traffic volume in the country.

Additional Project Experience

International Gate Widening (Phase II) International and Domestic Claims Room (Phase II), and Domestic Arrivals Room Project. $1.39 million in construction cost.

Parking Areas P1 and P3 Widening. $1.15 million in construction cost.

New T-4 Terminal Construction T-4 and Remodeling of Terminal T-3. $5.2 million in construction cost.

Construction of Satellite Building Terminal. $2.8 million in construction cost.

Robert Correia

QUALITY MANAGER

Years of Experience

17

Areas of Expertise

Strong project management, contract administration, quality management and technical skills

Education

Business Management Diploma (Graduate Institute of Management Technology), South Africa

Graduate Diploma, Civil Engineering, University of the Witwatersrand, South Africa

B.S. Civil Engineering, University of the Witwatersrand, South Africa

Languages

English

Afrikaans

Portuguese

Experience Profile

Mr. Correia is a high-performing operations-management executive with expertise in designing/optimizing organizational processes, measurement systems, and infrastructure to maximize business results in service operations, particularly toll road infrastructure projects. He is a skilled strategist who transforms strategic plans into workable solutions and benchmarks performance against key operational targets/goals. His practical application of engineering background ensures efficient solutions and use of resources in long-term management of infrastructure assets. Mr Correia has strong project management, contract administration, quality management and technical skills to contribute towards timely project/company mobilization and procurement of operational equipment. He is a team leader experienced in discovering and utilizing strengths of individual contributors. His extensive scope of responsibility, proven success, and record of accomplishment of delivering exceptional results in operational environments through initiatives that exceed operational performance targets and yield measurable outcomes

Project Experience

Pt. Operational Services, Pretoria, South Africa (Pty Ltd). Chief Executive Officer recruited by company shareholders, Iridium and Abertis to oversee 430 personnel, drive process improvements throughout the operation (toll operations and asset management) and company. Duties included overseeing regulatory compliance, and build training capability, specification of enhancements to operational equipment to ensure adequate functional support to toll operations, implementation of controls to ensure quality of operational output and early fraud detection, and procurement and administration of subcontractor services. Responsible for managing the company and reporting to Board of Directors.

Toll Infrastructure and Operations, New Delhi, India, (Intertoll-ICS). Project Director, deployed by Intertoll (Pty) Ltd, South Africa, to coordinate the design of the Delhi-Noida toll bridge highway in New Delhi, India in accordance with client's requirements. Successfully implemented infrastructure design and tolling strategy, established local operating company, recruited all senior level personnel, training and eventual handover to appointed managing director. Also, successfully aligned business planning and financial/operational processes with performance targets and business risk-management activities.

Toll Infrastructure and Operations, Rio de Janeiro, Brazil (LAMSA) Project Director–seconded by Intertoll (Pty) Ltd to LAMSA (Linha Amarela SA)–to manage the toll equipment installation subcontract and mobilize the tolling operations. Responsibilities included design of tolling operational processes, recruitment of related staff and overseeing of training activities, contract administration of equipment procurement and installation, planning and implementation of route emergency services, and strategic design of electronic toll payment marketing.

Route Management, M5 Highway, Budapest, Hungary. Operations Project Manager responsible for the design of highway routine maintenance requirements and activities, specification of plant and other equipment required for the mechanized maintenance of the route, including winter maintenance, drafting of all operational and maintenance procedures, and coordination with local authorities and design of emergency services action plan.

Pavement Management, Johannesburg, South Africa, (Jeffares & Green). Design Engineer responsible for geometric and mechanistic design of various road infrastructure according to South African design standards that included the development and application of bespoke pavement management system, pavement assessment and related design solution, pavement deterioration modeling and pavement lifecycle planning for various roads, design of rehabilitation of concrete highway, and supervision of concrete highway rehabilitation contract.

DRAGADOS

Years of Experience
24

Areas of Expertise
Extensive project management experience for road civil works projects, major highways, bridges, dams

Education
B.S. Civil Engineer, Polytechnic University of Madrid, Spain, 1983

Languages
English
Spanish

José Luis Conesa

PROJECT MANAGER

Experience Profile

Mr. Conesa is a Professional Civil Engineer with 24 years of experience in project management; design and construction of major bridges, roadways, highways and dams using both PPP and design-build project procurement approaches.

Project Experience

Waterford Highway Construction PPP Project, Ireland. Project Manager for this $191.6 million construction project. The main features included the construction of a 14.48 mile long road, with 7.27 miles of accesses, 27 structures with a total deck area of 179,340 square feet and the construction of a bridge over the Suir River with a deck surface of 50,490 square feet.

CM-400 Highway Construction PPP Project, Toledo, Spain. Senior Project Manager for this $178.3 million construction project. Scope of work included the construction, maintenance and operation of the CM-400 Highway (Highway of the Vineyards). Section: Toledo-Consuegra. The works included the construction of 32.31 miles in two carriageways that were separated by a 33 foot median. Each carriageway has two lanes measuring 11.5 feet, an inside shoulder of 3 feet, and an outside shoulder of 8 feet. The total width of the carriageway reaches 102 feet. The project also included the construction of 40 structures, 27 overpasses, 10 underpasses, and three viaducts. One of the main features was the construction of the viaduct over the Algodor River.

The New M-45 Road PPP Concession Project, Madrid, Spain. Senior Project Manager in charge of this $111.3 million project, which consisted of the construction of one section of the M-45 Road from the N-II highway to the O'Donnell Junction. This PPP Project included the design, construction, maintenance and management for the construction of 8.82 miles of roadway and a branch road of 1.37 miles. The road has two separated carriageways with 3 or 4 lanes each, outside shoulders of 8 feet and inside shoulders of 3 ft. The main feature of the project included the construction of a 2,625 foot long viaduct encompassing over 1.0 million square feet of deck surface.

Two Roads Construction Project, Addis Abeba, Ethiopia. Senior Project Manager for the construction of two roads with a cost of $44.94 million and $36.3 million respectively. The works included the construction of 170.88 miles of roadway. Significant measurements of work included 3.4 million cubic yards of excavation, 720,000 cubic yards of backfill, 535,000 cubic yards of concrete base, 281,000 cubic yards of concrete sub-base, and 281,000 cubic yards of bituminous mix.

Construction of the Hydroelectric Caruachi Project, Venezuela. Senior Project Manager of this $270 million project, which included the construction of a workhouse, a concrete gravity dam, a spillway and the assembly of the auxiliary electromechanical equipment. The main units executed were 2.2 million cubic yards of concrete; 90,000 tons of reinforced steel; 5.1 tons of structural steel, and one hydraulic plant.

Construction Mérida-Badajoz Highway, Bádajoz, Spain. Project Manager in charge of the Construction of this $147 million project, which included 37 miles of highway. Some of the most important units executed were nearly 400,000 square yards of clearing and grubbing; 130,000 cubic yards of topsoil excavation; 3.5 million cubic yards of excavation during dismantling; 270,000 cubic yards of excavation for ditches and foundations; 4.2 million cubic yards of embankment; 530,000 cubic yards of embankment produced from spoil; 1.4 million cubic yards of selected soil for platform formation; 270,000 cubic yards of foundation fill; the 53,000 square foot Guadiana Bridge; 44,000 square feet of structures with pre-cast beam deck; 168,000 square feet of structures with decks in-situ, 122,000 cubic yards of reinforced and prestressed concrete; 7,400 tons of passive steel reinforcement; 940 tons of active steel reinforcement; 3,900 linear feet of frames in various sizes; 8,200 linear feet of reinforced concrete pipes; 83,000 cubic yards of natural small ballast sub-base; 90,000 cubic yards of artificial small ballast base; 350,000 cubic yards of cement stabilized sub-base; 670,000 tons of hot bituminous mix; and 29,000 linear feet of ditches in various sizes.

Enlargement of the Service Tunnel for Barajas Airport, Madrid, Spain. Senior Project Manager for $32.4 million project.

Cigudosa-Valdeprado RCC Dam, Soria, Spain. Senior Project Manager for the Construction of the $56 million Cigudosa-Valdeprado RCC Dam.

Beni Haroun Dam Construction, Algeria. Project Manager for the construction of this $158 million concrete gravity dam. The most important units executed were 2.1 million cubic yards of RCC; 523,000 cubic yards of conventional concrete; two diversion tunnels; and 41 million tons of injected cement.

DRAGADOS

Years of Experience

10 Years

Areas of Expertise

Extensive experience in major bridge and roadway design, roadway construction, project management and major design-build projects

Education

B.S. Civil Engineering, University of Quindio, Colombia, 1995

Languages

English

Spanish

Jhon J. Beltran

DESIGN COORDINATOR

Experience Profile

Mr. Beltran has successfully performed for 10 years on projects throughout South Florida with proven performance related to major bridge design, construction, project management and design-build projects, including large-scale transportation projects involving multiple engineering disciplines as well as technical design and production staff. His extensive experience in bridges and roadway includes work with the FDOT and FTE. His experience on design build projects has been further demonstrated on projects such the US 27 Okeechobee Road and the SunPass Challenge Sawgrass Expressway Ramp Toll Plazas Improvements among others.

As a Design-Build Project Manager, responsible for managing multiple designs and construction teams to deliver an improved and constructible design within schedule and budget by establishing monitoring systems, plan review process, payment processing, coordinating design changes and monitoring permits.

Project Experience

Design-Build US 27 Okeechobee Rd. (FTBA Best in Construction - Design Build of the Year 2007 Award, FICE Grand Award for Design Build 2008) Miami-Dade County, (FDOT). This $35 million project consisted of the design, construction and permitting to eliminate an existing at-grate Florida East Coast railroad crossing by constructing a six-lane depressed roadway and associated drainage systems, pump station, lighting, ITS System, assembly erection and installation of a double track single-span railroad bridge substructure spanning the depressed roadway, eight drilled shafts 5-ft. x 82-ft.; 18,000 cubic yard of concrete tremie; 16,000 cubic yard of concrete; SOE - 405 ground anchors, 245 soil anchors, 2,800 feet. sheet pile and 792,000 kilograms of rebar.

Design-Build Sawgrass Toll Plazas, Broward County, (FTE). This $5 million project included the addition of new equipment rooms; renovation and modification of 5 existing tollbooths located on US441/Lyons Rd and SR869. The project also included the addition of dedicated SunPass lanes, overhead signs, support structures, toll equipment installation, plaza concrete islands, milling, resurfacing and paving existing ramps along with new roadway construction.

Design-Build Proposals Preparation, D/B Sunrise Main-Line Toll Plaza Modifications and the Toll Plazas Sawgrass Expressway by the Florida Turnpike, (FDOT). The Main-Line proposal ($31 million) involved the construction of a double-span SunPass Gantry with equipment building to the south of the plaza, modification of the plaza to permit express SunPass traffic to pass through the middle of the plaza without stopping. The Sawgrass Expressway ($16 million) involved the modification of existing un-staffed single lane toll plazas on ramps at five interchanges with the Sawgrass Expressway.

Design-Build Manuals Preparation - Participated in a national Design-Build Manual reformation and improvement along with a team of 25 D/B Managers from around the country.

Brickell Bridge, Miami, Florida, (FDOT). Project Manager responsible for the overall project management for this FDOT project (Contract Administration, change orders, submittals, procurement, operations, scheduling, Cost, MOT supervision, Quality and Safety). The project included widening the north roadway approach, bridge deck and approach slab from 2 to 3 lanes; in addition to a 6-ft. cantilever sidewalk along the new lane. The main construction items were 6EA-100LF 18-in. concrete piles, a mass concrete foundation, setting a 125-ft. Class VI modified AASTHO beam, 1300 SF of MSE wall, more than 500cy of concrete, drainage, asphalt pavement, milling, resurfacing and signalization. This project was completed 3 months ahead of schedule.

Sawgrass Toll Plazas, Broward County, Florida, (FTE). Project Engineer/Assistant Project Manager for this $4.8 million FTE project. Project included the design management and construction of improvements and modifications to five existing Ramp Toll Plazas on the Sawgrass Expressway for the Florida Turnpike Enterprises. Responsibilities included design management, Contract Administration, change orders, submittals, contract negotiations, MOT coordination, job cost management, supervision of 12 subcontractors, shop-drawings, project documentation, materials procurement/fabrication, supervision and training of new engineers.

2nd Avenue Bridge, Miami, Florida, (FDOT – 2004 Major Bridges - Florida's Best in Construction). Project Engineer for this $47.5 million FDOT project. The scope of work consisted of a new single span, double leaf bascule bridge with a 303 linear feet span and a width of 72 linear ft. This bridge is the fifth longest/widest bascule bridge in the world. Responsibilities included supporting and assisting project manager, Contract Administration, change orders, submittals, procurement, job cost management, managing 19 subcontractors including electrical, landscaping, flat work, concrete, miscellaneous metals, painters and asphalt assuring contracts, schedules, submittals, payments and materials were as per the job specs and requirements. Also, supervised a self perform grading and drainage crew for the installation of 2500 linear feet of 18-in. to 90-in. RCP pipe along with drainage structures, coordination with local entities such as FPL, City of Miami, DERM, MDWS and BellSouth. A major achievement in this project was redesigning the TCP (Traffic Control Plans) and sequence of construction proposed by the owner improving project schedule and traffic impact in Downtown Miami.

Level 3 Fiber Optic Cable, (Private). Project Engineer in charge of scheduling, cost control and overall office management for this $200 million private project consisting of installing 360 miles of fiber optic cable and duct bank between Miami-Tampa and Miami-Orlando. Responsibilities included working closely with Designers and field personnel to identify/resolve utility conflicts or such, tracking quantities and field productions, assuring restoration activities were in compliance with local regulations, responsible for scheduling, cost control, As-Built drawings, supervising a 25-inspector team, the training of new engineers and Project Managers.

Miami-Dade Water and Sewer Department (MDWASD) Wells, Miami, Florida, (MDWASD). Engineer for this $6.1M project. Responsibilities included, owner submittals, Scheduling (P3/SureTrak), Safety/Quality implementation, responsible for subcontractors and Material suppliers (quantities and payments), Owner relations including correspondence and payments.

Estimator, (Private). Responsible for all aspects of estimating work from quantity take-offs to analyzing and pricing items such as storm drainage, utilities relocation, pump stations, earthwork, bascule bridges, cast-in-place and/or pre-cast bridges, field investigations and related highway and/or roadway items.

DRAGADOS

Years of Experience
19

Areas of Expertise
Extensive road civil works construction experience as superintendent of large scale transportation, road and hydraulic projects.

Education
B.S. Civil Engineer, Polytechnic University of Madrid, 1988

Languages
English
Spanish

Fernando Arroyo

GENERAL SUPERINTENDENT

Experience Profile

Mr. Arroyo has been a Professional Civil Engineer for 19 years and has ample experience in the design and construction of bridges, highways, roads, railways lines, and dams. Presently, he works as Director of the Technical Office in the Galicia Branch where he is the superintendent for the Atlantic High Speed Railway Line in La Coruña, Spain.

Project Experience

Atlantic High Speed Railway Line, La Coruña Spain. While serving as Director of the Technical Office in La Coruña, Spain he was in charge of the Atlantic High Speed Railway Line. Section: Uxes-Pocomaco. The works included the execution of platforms and tracks with a project budget of $58 million.

High Speed Train North-Northwest Corridor Project, La Coruña Spain. While serving as Director of the Technical Office in La Coruña, Spain, he was responsible for the design and execution of the platforms for the $144 million High Speed Train North-Northwest corridor. Axis: Ourense-Santiago. Section: Lalin-Santiago. Sub-sections: Silleda (Dornelas)-Vedra and Vedra-Boqueixon.

Beira Interior Highway Project, Portugal. Superintendent for this $735 million project, which included the design and the construction of the Highway as a Concession Project. The project consisted of a roadway of 81 miles, 24 viaducts with a total length of 22,905 feet, a total deck surface of 240,000 square yards, and 22.8 million cubic yards of earthworks. It also entailed 5.8 million cubic yards of excavation through rock; 3.2 million cubic yards of excavation and transport to dump; 1.8 million tons of aggregates; 9,500 linear feet of tunnels, 59 overhead crossings, 25 underpasses, and 60 agricultural crossings.

Moreda Bypass Road Project, Asturias, Spain. Charged as Site Manager for the construction of the Moreda Bypass road that is part of the As-112 Road, section: Cabañaquinta-Santullano.

Arch Dam Project, Portugal. While serving as Manager of the Technical Office and General Services in Portugal, he was in charge of leading this $70 million Arch Dam project. The construction included a height of 325 feet from foundations; a crest length of 1,503 feet; 1.3 million cubic yards of concrete; and nearly 1.0 million cubic yards of excavation.

Bajo Llobregat Highway Project, Barcelona, Spain. Superintendent for this $142 million project, which included the construction of 12 miles of roadway, a 840 foot- long and 348 foot wide tunnel; a second 2,109 foot long and 207 foot wide tunnel; and 7 viaducts with a total surface of 340,000 square feet. Section: Martorell-Cinturón Litoral. Bypass road of the A-2, Barcelona, Spain. Other main components included 20,000 linear feet of concrete pile; 23,000 square feet of concrete walls; 26,000 linear feet of precast beam; 950,000 cubic yards of concrete; 99,000 linear feet of drainage; 282,000 cubic yards of cement stabilizer; 574,000 tons of

bituminous mixture; 790,000 cubic yards of excavated rock; 8.7 million cubic yards of embankment; 6.7 million cubic yards of excavation; 3,200 linear feet of 47.25 in. diameter pile; and 84 linear feet of 79.75 in. diameter pile.

Irurtzun-Altsasu/Alsasura Highway Project, Navarra, Spain. While serving as Manager of the Technical Office for the Irurtzun-Altsasu/Alsasua Highway, he was charge with leading this $19.8 million project, which consisted in the construction of the section III – Irañeta-Lakuntza of the Irurtzun-Altsasu/Alsasura Highway.

North Highway Project, Madrid, Spain. Superintendent for the construction of the North Highway. This $123.7 million project included the construction of 17 miles of roadway, 12 structures with maximum spans of 120 feet, 4 viaducts, and a false tunnel through 1,935 linear feet of excavated rock. The main units of the works were 2.1 million cubic yards of excavation; 2.0 million cubic yards of rock blasting excavation; 4.2 million cubic yards of embankments; 23,000 cubic yards of H-200 concrete in tunnel; 43,000 cubic yards of H-250 concrete for the tunnel; 270,000 tons of hot asphalt mixtures; and 1,570 tons of asphalt emulsion. The project spanned A-1 from Madrid to Irún from the chainage 76.5 to 105.0. Section: Buitrago Norte – CN-110 Junction.

Aragon Highway Project, Spain. Superintendent for this $44 million project. The project consisted in converting the road into a double carriageway from chainage 243.0 to 259.2. Section: Calatayud (West) – Morata de Jalon Link, Zaragoza. Scope of work included 10.1 miles of roadway, a 820 foot long double viaduct with a maximum pier height of 150 feet, a 950 foot long tunnel with 1.2 million cubic yards of rock excavation, 3.2 million cubic yards of total excavation, 3.8 million cubic yards of embankment, and 111,000 cubic yards of concrete. The project spanned from Madrid to Zaragoza and on A-2 from Madrid to France, crossing Barcelona.

EarthTech

Years of Experience

24

Areas of Expertise

Extensive experience in major bridge design, project management for major design-build projects, as well as construction and inspection.

Education

M.S.C.E., Civil Engineering, Auburn University, 1984

B.S., Civil Engineering, Auburn University, 1982

Registrations

Professional Engineer (Civil), Florida, # 50894, 1996

Professional Engineer (Civil), North Carolina, #030676, 2005

Professional Engineer (Civil), Virginia, #032590, 1998

Professional Engineer (Civil), South Carolina, #20162, 2000

Languages

English

John Wallace Jordan, Jr., PE

LEAD ENGINEER

Experience Profile

Mr. Jordan has 24 years of experience in major bridge design, construction, project management and design-build projects, including large-scale transportation projects involving multiple engineering disciplines and supervision of technical design and production staff. His extensive experience in bridges includes working directly with the Federal Highway Administration, state DOTs, and contractors. He has expertise in precast segmental and cable-stayed design, construction, and inspection and in structural engineering of retaining walls, box culverts, MSE walls, sheetpiling, and minor, major and complex bridges, as well as minor roadway engineering.

Project Experience

US 17 Washington Bypass, Washington, North Carolina (NCDOT). Structural Design Manager for preparation of design documents for the design-build of the US 17 Washington Bypass (the largest ever awarded by the NCDOT) expanding US 17 from two to four lanes and providing a bypass around the city of Washington, about 125 miles northeast of Raleigh project. US 17 is the only major continuous north-south route east of I-95. Earth Tech's scope of work includes roadway and structures design for 6.8 miles of US 17 on new location freeway; providing stream and wetland mitigation design; and two-dimensional tidal flow modeling. Structures include two interchanges and four bridges, including a challenging 2.8-mile-long crossing of the Tar River built top-down using a customized overhead gantry system capable of driving piles, erecting bent caps and girders, and pouring the finished deck. The multipurpose equipment will minimize environmental impact on adjacent wetlands and streamline the construction process.

Miami Intermodal Center Terminal Access Roadways (Ramp C Bridge), Miami, Florida (FDOT - District VI). Provided technical oversight and quality control checking for the design of a 306-ft. three-span continuous curved bridge along with approach retaining walls, which interfaces with the MIC Rental Car Facility. The bridge consists of a multi-cell concrete box-girder, constructed cast-in-place on falsework, supported on wall piers with 18-in. prestressed concrete piles. The radius at the bridge centerline is 187 feet; the width of the superstructure varies from 39 to 49 feet. The bridge serves as the exit ramp for the Consolidated Rental Car Facility of the Miami Intermodal Center.

Wacker Drive Viaduct Inspection and Maintenance Manual, Chicago, Illinois (Chicago DOT). Project Manager for the development of the inspection and maintenance manual for the two-level viaduct, a biaxially post-tensioned, high-performance concrete slab structure located in the heart of downtown Chicago.

Tren Urbano, Mass Transit Guideway, Bayamon to Santurce, Puerto Rico (Puerto Rico DOT). Project Engineer responsible for detailed structure design production for 3.7 km of elevated mass-transit guideway. Typically, the superstructure consists of two continuous spans with monolithic connection for the middle pier. The guideway, with typical spans of 36 m, is also used to carry the platforms for the stations.

Vancouver Skytrain Millennium Line Guideway Design, Vancouver, Canada. Technical Project Manager for a portion of the Vancouver Sky Train. Project included completing the structural design of foundations, piers, superstructure, and stations; integrating superstructure shop drawings; and providing technical on-site assistance for the Vancouver Skytrain Millennium Line.

Bang Na - Bang Pli - Bang Pakong Expressway, Bangkok, Thailand (Expressway and Transit Authority of Thailand). Project Engineer for design of ramp structures for the 54-km elevated highway constructed directly over an existing highway without interrupting service. The expressway is the longest viaduct structure ever built, as well as a worldwide landmark of double-decking existing urban highways. The structure includes 14 pairs of on/off ramps and toll plazas, comprising 1.9 million square meters of deck area. The main line typical section is supported by 27-m-wide, precast-concrete, box girders spanning cast-in-place, H-shaped piers on pile foundations. The typical span length is 44.4 m.

Sunshine Skyway Bridge, Tampa Bay, Florida (FDOT). Participated in miscellaneous design office support and technical assistance during construction of the 8,860-ft. center portion of the 21,878-ft.-long bridge, which features a 1200-ft.-long cable-stayed, precast concrete box girder main span. Inspection team leader for 10-year inspection (1998) and project manager for biennial inspection.

Bangkok Mass Transit System, Bangkok, Thailand (Italian-Thai Development). Participated in the design-build of more than 30 km of single and dual track light rail elevated guideway superstructure. Construction is precast segmental using the span-x-span method. Prepared final design of dapped pier segments, single track typical segments, dual and single track deviation segments, a continuous unit pier segment, typical piers, post-tensioned cantilever piers, superstructure longitudinal post-tensioning and regions with two or three interconnected box girders.

Cooper River Bridge Demolition and Street Reconnection, Charleston, South Carolina (SCDOT). Project Manager for the Raleigh office's scope of work, which included design and support services for the reconnect, realignment and upgrade of eight streets and improvements to the I-26/US 17 interchange required as a result of demolishing the bridge on-ramps. Managed the roadway design, storm drainage, utility coordination, signal and lighting design, and traffic control design for street/lane closures. Drainage design presented special challenges, not only because of the low elevations, but also accommodating the myriad of stakeholders with future drainage plans outside the area.

EarthTech

Rey Rivas, PE

DESIGN MANAGER

Years of Experience

25

Areas of Expertise

Extensive experience in large scale transportation projects, including contract administration, project scheduling, supervision of design, preparation of bridge development reports, preliminary and final engineering reports and construction documents

Education

B.S., Civil Engineering, University of Miami, 1983

FDOT Advanced Traffic Control Certified

Registrations

Professional Engineer (Civil), Florida, #41174, 1989

Professional Engineer (Civil), Virginia, #26430, 1995

Professional Engineer (Civil), Alabama, #19722, 1993

Languages

English

Spanish

Experience Profile

Mr. Rivas is a Senior Project Manager with experience involving major transportation projects in the South Florida area. His responsibilities have included the scope/fee negotiations, contract administration, project scheduling, supervision of multi-discipline design teams including subconsultants, preparation of bridge development reports, preliminary and final engineering reports and the preparation of construction documents. As Project Manager, Mr. Rivas has been responsible for coordination of all project activities, schedules, budgets, contract administration and maintaining communications with the client Project Manager. Mr. Rivas has 24 years of experience in transportation design and construction.

Project Experience

SR 202 (J. Turner Butler Boulevard), Duval County, Florida (FDOT - District 2). Engineer of record for widening five bridges along the four-mile corridor limits. The bridge sites have dual bridges that are designed to be widened towards the median. The first bridge site is a 180-ft. overpass at Kernan Boulevard and consists of two spans with AASHTO Type IV prestressed beam supported on concrete end bent caps and center pier with 18-inch prestressed concrete piles. The second bridge site is a 150-ft., three-span creek crossing with a 30-degree skew. The superstructure is carried on AASHTO Type II prestressed beams supported on concrete bent caps with 18-inch prestressed concrete piles. The third bridge site is a 35-ft., single span crossing an equipment pass. The superstructure is a cast-in-place flat slab supported on concrete abutments founded on 18-inch prestressed concrete piles. The fourth bridge site is a 253-ft., five-span creek crossing. The superstructure is carried on AASHTO Type IV prestressed beams supported on concrete bent caps with 18-inch prestressed concrete piles. The fifth bridge site is a 163-ft. overpass at Hodges Boulevard and consists of three spans with AASHTO Type IV prestressed beams supported on concrete end bent caps and center pier with 18-inch prestressed concrete piles.

SR 50 over Lake Lotta, Orange County, Florida (FDOT - District 5). Engineer of record for design of a 760-ft., 16-span bridge with approach retaining walls. The bridge consists of AASHTO Type II prestressed beams supported on concrete bent caps with 18-inch prestressed concrete piles. A bridge load rating report was performed for this bridge.

Metrorail North Corridor Extension, Miami-Dade County, Florida (Miami-Dade Transit). Lead Design structural engineer for preliminary design of five aerial stations, including of two stations with mezzanine levels.

I-595 Corridor Improvements, Fort Lauderdale, Florida (FDOT - District 4). Project Manager for preliminary design for 14 miles of corridor improvements.

SR 50 over Lake Bennett, Orange County, Florida (FDOT - District 5). Engineer of record for design of a 251-ft., 10-span continuous, cast-in-place flat slab bridge, supported on concrete bent caps with 18-in. prestressed concrete piles. A bridge load rating report was performed.

Miami Intermodal Center Terminal Access Roadways Miami, Florida (FDOT - District 6). Engineer of record for the design of Ramp C and Ramp R Bridges for the Terminal Access Roadways. Ramp C Bridge, a 575-ft. six-span bridge along with approach retaining walls and interface with a parking structure, consists of prestressed concrete Florida U-beams supported on wall piers with 18-in. prestressed concrete piles. The bridge serves as the exit ramp for the Consolidated Rental Car Facility at the Miami International Airport. Ramp R Bridge, a 230-ft. 2-span bridge and approach retaining walls consists of prestressed concrete AASHTO Type IV beams supported on concrete bent caps and a center pier with 18-in. prestressed concrete piles.

Miami Intermodal Center – MIC/MIA Automated People Mover Guideway Foundations, Miami, Florida (FDOT - District 6). Engineer of record for the advanced design of the APM foundations that would be constructed with the adjacent roadway reconstruction improvement projects. Twenty pier foundations were designed and construction documents developed. The foundation systems that were designed consisted of 6-ft.-diameter drilled shafts in clusters of four with a pile cap and single 12-ft.-diameter shafts. Additionally all corresponding critical sheet pile walls were designed and detailed, which consisted of anchored and cantilever wall systems. Coffer cells were laid out and identified. Technical special provisions were developed for statnamic load testing, cross-hole sonic testing, and core drilling.

Venetian Causeway Historical Bridge Rehabilitation/Replacement, Miami, Florida (FDOT - District 6). Project manager and project engineer for a bridge development report, preliminary design and final design and the preparation of construction plans, specifications and extensive assistance during construction. The scope included the major rehabilitation of the east bascule and approach spans, the rehabilitation of two fixed concrete arch bridges and the complete replacement of the west bascule and approach spans (total bridge replacement 1,780 feet).

Miami Intermodal Center – MIC/MIA APM Preliminary Engineering Report, Miami, Florida (FDOT - District 6). Project Manager for the development of the engineering report for the MIC/MIA APM between the eastern limits of the Miami International Airport right of way and the Miami Intermodal Center – APM Terminal Station. The report evaluated the various structure alternatives and foundation systems for the APM.

Metrorail Reconstruction at Okeechobee Road (US 27), Miami, Florida (FDOT - District 6). Engineer of record for the replacement of three spans of the existing Metrorail passenger service line crossing over Okeechobee Road. The project required the replacement of a center pier and relocation of an approach pier. Three spans along the inbound and outbound aerial structure were replaced. Each structure was replaced with a 40-ft. approach span and a 190-ft. span over Okeechobee Road. The bridge design consists of steel box girders supported on concrete piers and 48-in. drilled shafts.

MACTEC

Years of Experience
16

Areas of Expertise
Extensive experience with construction management, contract administration, and quality assurance/quality control of complex transportation projects.

Education
B.S. Civil Engineering, Central University of Las Villas, Villa Clara, Cuba, 1992

Languages
English
Spanish

Caridad Murphy

CONSTRUCTION QUALITY CONTROL MANAGER

Experience Profile

Ms. Murphy is a Project Manager with experience in the construction management, contract administration, and quality assurance/quality control of complex transportation projects that include the Florida Department of Transportation and Florida Turnpike Enterprises.

Ms. Murphy also oversees MACTEC's Miami Lakes Construction Materials Testing Laboratory and her duties include supervision of the laboratory in planning daily tests and inspection activities. Ms. Murphy is experienced in performing all field and laboratory tests required for quality control testing and inspection of soils, asphalt, and concrete. Ms. Murphy is also responsible for quality control testing and inspection services for all transportation projects for the Miami Lakes performance evaluation of soils, concrete, and asphalt testing.

Project Experience

Multiple Projects, Florida, (Florida Turnpike Enterprise). Project Manager for roadway improvements and construction on the Florida Turnpike including coordination of all field and plant technicians, preparing project proposals, billing, client correspondence and financial management of a complex $ 3,000,000 contract with multiple projects.

Multiple Projects, Florida (FDOT, Districts 4 and 6). Ms. Murphy supervises laboratory verification testing on concrete and soils construction materials according to the applicable Florida Sampling and Testing Methods, AASHTO Methods, and ASTM Standards. Ms. Murphy also coordinates all project proposals, billing, client correspondence, deliverables, and data entry. Ms. Murphy has performed these services on the following FDOT projects:

- SR 80 (Palm Beach County)
- SR 5 (Monroe County)
- Providing Asphalt Plant VT to District 4 & 6
- SR 817 (Broward County)
- Biscayne Boulevard
- SR 5 (Martin County)
- Powerline Road

Miami-Dade Expressway—836-14, 836-15, and 836-19, Florida (Miami-Dade Expressway Authority). Ms. Murphy supervises material testing, inspection, environmental and certification services as well as revises and approves Concrete and Asphalt Quality Control Plans for MDX.

Sawgrass Expressway Toll Plaza, Broward County, Florida. Performed laboratory soils and concrete testing in support of Contractor Quality Control (QC) testing for this Florida Turnpike Enterprise project.

S.R. 944 Improvements, Miami-Dade County, Florida. Performed laboratory soils and concrete testing in support of Contractor Quality Control (QC) testing for this Florida Department of Transportation project.

N.W. 103rd Street Improvements, Miami-Dade County, Florida. Performed laboratory soils and concrete testing in support of Contractor Quality Control (QC) testing for this Florida Department of Transportation project.

Consolidated Rental Car Facility at Ft. Lauderdale/Hollywood International Airport, Broward County, Florida. Performed comprehensive soils testing for geotechnical evaluations.

Palm Beach International Airport Runway 9L-27R Partial Taxiway, West Palm Beach, Florida. Performed comprehensive soil testing for geotechnical evaluation.

I-95 HOV Lane Expansion from Congress Avenue to north of Blue Heron Blvd., Palm Beach County, Florida. Performed comprehensive soil testing for geotechnical evaluation.

I-95 HOV Lane Expansion from 45th Street to Blue Heron Blvd., Palm Beach County, Florida. Performed comprehensive soil testing for geotechnical evaluation.

N.E. 40th Street between Miami Avenue and N.E. 2nd Avenue and N.E. 2nd Avenue between N.E. 36th Street to N.E. 43rd Street, Miami, Florida. Performed comprehensive soil testing for geotechnical evaluation.

Yamato Road Widening from Military Trail to I-95, Palm Beach County, Florida. Performed comprehensive soil testing for geotechnical evaluation.

North Andrews Gardens Neighborhood Improvements, Broward County, Florida. Performed soils and concrete lab testing for this large-scale paving and drainage project.

Palmetto Expressway (S.R. 826) at S.W. 56th street, S.R. 874 and S.W. 40th Street Exits, Miami-Dade County, Florida. Performed comprehensive soils testing for geotechnical evaluation.

South Florida Water Management District Professional Engineering and Testing Services Contracts, Florida. Ms. Murphy performed geotechnical and construction materials lab testing for more than 60 projects ranging from the construction of access roads and bridges, water control structure upgrades and replacements and the construction of earthen levees and dams.

1.2 PRELIMINARY QUALITY PLAN

The ADMP Team recognizes that Project objectives can be achieved only through excellence in defining, planning, and integrating the work performed by the various team members. The guarantors of each of the organizations comprising ADMP have ISO-9001:2000 certified quality processes and are committed to the principles defined therein. Each will work under the umbrella of their parent organizations quality management processes to develop an integrated project quality plan that meets the requirements of:

Key Features

- ISO 9001:2000 Certified Team Members
- Commitment at the Highest Levels
- QA Independent of Operations Proactive Quality Approach Strive for Continual Improvement
- Collaboration with FDOT Oversight CEI

- BS EN ISO 9001:2000
- Contract Documents
- Section 105 of the FDOT Standard Specifications for Road and Bridge Construction (2007)

This section describes ADMP's Preliminary Quality Plan (PQP) as requested in the ITP. This PQP, including policies, procedures, and work instructions, will be applied through the development of the various sub-organization plans and through the execution of design, construction and operations activities. The organization charts described in this document are gathered in Appendices 1.2a through 1.2c and the resumes of key QA/QC Personnel in Appendix 1.2d.

Elements of ADMP's total Quality Management System (QMS) are represented in this proposal beginning with the Preliminary Quality Plan described herein. This preliminary plan will form the basis for the ultimate Quality Manual and ISO conformed plans, which will be used to formally document the philosophy and policies behind ADMP's management approach to the Project. These policies, issued by senior management of ADMP, will set forth the primary objectives of quality management and also establish the independence of quality management from the organization charged with the execution of the work. It also establishes the authority of the Quality Manager, Construction Quality Control Manager and Design Quality Manager to perform necessary quality management activities and to stop work when quality considerations warrant it.

Drafts of the ISO conformed Quality Management Plans have been provided for reference in Appendices. At the design-build level, ET has provided a draft Preliminary Design Quality Management Plan (DQMP) in Appendix 1.2e, and DGP has provided a draft Preliminary Construction Quality Control Management Plan (CQCMP) in Appendix 1.2f. At the Operations and Maintenance level, ADMP has provided a draft Preliminary O&M Quality Management Plan (O&M QMP) in Appendix 1.2g. Each is based upon processes used on a number of successful major design-build and concession projects worldwide. As such, the ADMP Team's member firms are able to bring a functioning ISO-9001:2000 compliant Quality Management Plans with only updates necessary for Project specific requirements and roles. The ADMP Team's quality commitments include the following:

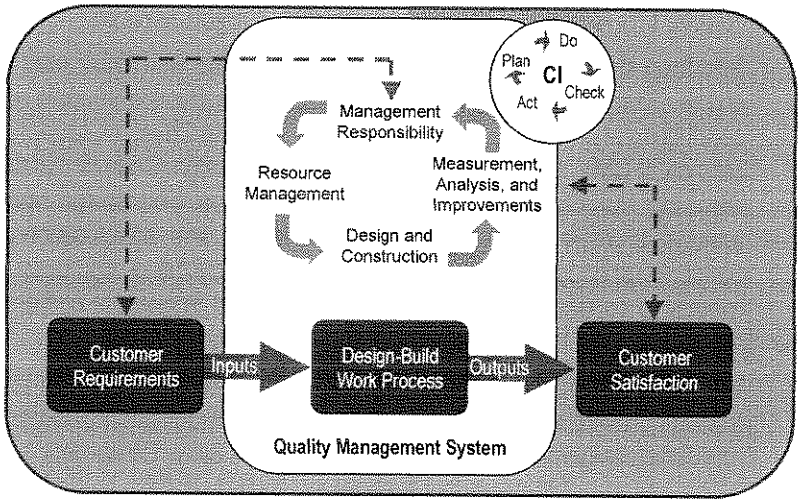
- Compliance with ISO 9001:2000 for design, construction and O&M activities based upon mature processes that are certified and proven on multiple projects
- Written responses to any FDOT audit of ADMP's QMS will be promptly provided by the organization best able to reply subject to review by the Quality Manager for completeness of the response. The Quality Manager will ensure that any process changes in response to an audit issue are fully implemented
- Sufficient staff will be provided to ensure timely response to quality issues such that project priorities and obligations are fully met

- Continual improvement of the process in accordance with ISO 9001:2000

The QMS is based on policies, processes, and procedures that ensure customer requirements are fully satisfied. They are designed to proactively build quality into each phase of the Project. The ADMP Team will refine detailed QMS procedures for the Project during mobilization, and will work closely with FDOT to document Project objectives, define responsibilities of each party, and determine how best to integrate our documents and records with those of FDOT. The final QMS will be developed by ADMP's Quality Manager and formally issued to the ADMP Team after approval by FDOT.

Management's commitments and responsibilities are the foundation for a successful project. It is management's responsibility to provide the resources and infrastructure needed for the designers, builders, and operators to successfully complete the work, and provide independent inspection, measurements and assessments that are crucial elements of a successful public-private-partnership project. This concept is shown graphically in Figure 1.2-1. By working with FDOT daily during the project execution and focusing on client interests, the Team will be able to clarify and resolve problems that arise. The Team will then draw on this experience to continually improve the QMS.

*Figure 1.2-1 Quality Management Plan-**Quality Management System***



1.2.1 Quality Organization

1.2.1.1 ADMP QUALITY ORGANIZATION CHARTS

As described in Section 1.1, ADMP will contract with the DGP Team for the delivery of the design-build portion of the Project. The DGP will in turn contract with ET for the design scope within its design-build responsibilities.

The ADMP Team's Quality organization charts are presented at Appendices 1.2a, 1.2b and 1.3c for ADMP, DGP, and ET respectively. The ADMP Team has a strong commitment towards making QA independent of the operational activities, therefore the quality managers of each organization will report directly to the project leadership of their individual teams, and indirectly to the boards or officers that govern the team's legal entity.

1.2.1.2 INTERRELATIONSHIPS WITHIN ADMP

1.2.1.2.1 Between Design and Construction

One advantage of design-build is the ability for DGP and ET designer to partner in developing construction plans that address the DGP's specific means and methods, while adhering to all FDOT requirements. This sense of partnership has already been fostered through the development of this proposal and will be renewed on a continuous basis, starting with the commencement of design. These designer-builder interrelationships will be both formal and informal. Examples of formal venues are as follows:

- **Interface during Design.** DGP and ET staff will interface during the design phase in several areas including project controls, constructability reviews, construction packaging, construction phasing and

sequencing; and OTS design reviews. ET's design management team will work closely with the DGP's project controls staff to provide schedules for the engineering and design activities. Coordination will be on a monthly basis, or more frequently if necessary, to establish earned value percentages of completion, and provide information for updating the status of activities. The construction staff will provide constructability reviews of the designs for each of the construction packages.

- **Weekly Task Force Meetings.** Technical coordination meetings (Task Force Meetings) will be held on a weekly basis with DGP's construction managers and ET's design staff. Design discipline leaders (roadway, bridge, utility, drainage) will chair these meetings and invite managers from other disciplines as deemed appropriate. The purpose of these meetings will be to discuss technical issues and approaches to be used in the design, construction package scope, and schedule, as well as other time-critical technical issues. Additional Task Forces will be constituted as necessary to deal with emergent issues, such as document control, ITS, environmental, or construction support services.
- **Interface during Construction.** ET will interface with DGP staff in several ways during the construction phase. This interface is referred to as design construction support services, and includes responding to RFIs, conducting shop drawing reviews, preparing revised designs to respond to changed conditions, Field Change Memos (FCM), or issuing design revisions (Design Change Notice), and providing design assistance for resolving Non-Conformance Report (NCR) issues. The design staff will be allocated at the facility for field reviews to review progress, clarify the plans and specifications, and answer questions regarding the construction documents. The field staff provided by the design team will review construction activities and QC reports to confirm that the project is constructed in general conformance with the plans and specifications. Additionally, the design team will prepare the record drawings.
- **Web Based Collaboration.** Both DGP and ET will utilize a web-based collaboration software (SharePoint) that will provide the connection of, and the communication between, the entire design-build team through a real-time assignment of functions and responsibility. Designers, constructors, checkers, and reviewers will all be integrated through this technology based process to ensure that submitted plans and specifications reflect the consensus of the aggregate design-build team.

1.2.1.2.2 Between Concessionaire and Design-Builder

In accordance with Division II, Section 3, Attachment 3 of the RFP (Concessionaire Construction Engineering & Inspection Requirements) ADMP will contract CEI services with HNTB Corporation together with Calvin Giordano & Associates, which has national resources that are well known to FDOT and thoroughly versed in the FDOT's processes and procedures. The CEI team will work closely with ADMP to develop the necessary processes, protocols and reporting structure necessary to fulfill the requirements of the Contract, including the training, certifications, and staffing needed to handle the anticipated roadway and bridge construction. The CEI will work directly for ADMP and report to the Quality Manager. Working independently of the design-builder and monitoring and inspecting the performance of their work, there will be no formal relationship between the two teams, other than necessary to communicate the timing of various construction activities for CEI scheduling purposes.

1.2.1.2.3 FDOT and Oversight CEI

As stated in the Technical Requirements, FDOT will be responsible for the following quality management functions:

- QA compliance reviews of all work associated with the development and preparation of the contract plans and construction of the improvements – including recommendations based on undesirable, contaminated and/or hazardous materials

> Oversight CEI Services

The ADMP Team will collaborate with FDOT's quality management personnel during mobilization while preparing the final QMS for FDOT approval. This will ensure a mutual understanding of quality requirements, clear identification of roles and responsibilities, and inclusion of appropriate procedures and work instructions in the QMS that describes how FDOT and the ADMP Team will interface to achieve the Project's quality goals. The preliminary approach with respect to FDOT's role is as follows:

Design QC Oversight

FDOT will participate in design reviews and will approve final documents. The DQMP will include a series of checks to ensure that all design criteria have been met, drawings conform to drafting and specification standards, designs have been developed in accordance with applicable codes and standards, and are consistent between disciplines. It also includes checks to ensure that the design element of quality is addressed. All design issues will be resolved interactively between the design-build team, FDOT and appropriate third party stakeholders prior to finalization of the design effort.

The DQMP will also include a series of document format checks, appropriate procedures for submittal revision and coordination among disciplines, and audits for verification that the design is in compliance with the design criteria, codes and standards. The ADMP Team is committed to the timely review and resolution of comments so that the design is not delayed. QC will also include review of the design by a group of senior engineering staff representing the appropriate disciplines, under the direction of the Design QC Managers. This senior review will focus on critical issues, help identify and resolve problems, and promote constructability.

This process will give FDOT a high level of comfort that the contract drawings and special provisions are complete and accurate when they are submitted for FDOT's review. FDOT will not feel compelled to perform design QC on ET's work. This assurance will help streamline FDOT's process and efforts.

Construction QC Oversight

FDOT will verify that the QA/QC programs are in place and being followed, and that the QA personnel maintain the requisite independence called for by the QMS. This will apply to third party activities both on- and off-site as well as the DGP's on-site work.

Audits of the CQCMP will be conducted with FDOT's oversight representatives to ensure that QC inspections as well as material sampling and testing operations are performed as required. FDOT's Sampling, Testing and Reporting Guide (STRG) and Laboratory Information Management Systems (LIMS) database will be used to plan the various inspections and material testing. Work-Item/Activity Plans will be used to facilitate coordination and communication with FDOT's Oversight CEI Team. The Construction Quality Control Manager and Quality Control staff will assess the appropriate testing and inspection criteria required for each work item or activity. Our evaluation will include the required tests, appropriate inspection checklists, and communications protocol with FDOT's oversight. These plans will become part of the CQCMP.

The Quality Control Inspectors will work directly with FDOT oversight personnel at the various project sites. The Design Manager and Utilities Design Coordinator will be available to answer FDOT's questions concerning drawing interpretations, alignment, etc., which relate to QC. It has been the Team's experience, openly discussing questions at the project site helps avoid QC problems later on. The inspectors can address a perceived QC problem promptly, and they will have the authority to stop work if the situation requires.

DGP will furnish a weekly construction schedule that will detail specific construction activities (including location and planned quantities) so that FDOT's oversight representatives can schedule site inspections and attend tests. The Team will also develop a rolling, three-week inspection schedule that will include fabrication activities

so FDOT can schedule fabrication inspections. DGP will supply FDOT with inspection and testing records, process control material sampling and testing data, and daily QC inspection logs. The Team will provide hard copies and electronic versions to FDOT within the time frame required for each report.

Administrative QC Oversight

FDOT will initially approve the full QMS. The QMS and associated plans will address QA and QC for design and construction as well as document control and related activity plans such as safety, environmental compliance, public information, visual quality, utility work, traffic control, and others. FDOT will verify that the QMS and its various elements are complete and adequate and, as the work progresses, oversee the Team's QA audits to verify that they are being carried out with due diligence.



This Preliminary Quality Plan meets Technical Proposal Requirements (1.2) by describing the structure, concept and interrelationships for the design, construction and O&M QA/QC organizations.

1.2.2 QA/QC for the Design Work and Construction Work

ITP 1.2a – Describes the QA/QC Program for the Design Work, the QA/QC Program for the Construction Work, and How Design and Construction Activities Performed by Different Firms Will Be Coordinated to Ensure Consistency of Quality

1.2.2.1 ORGANIZATION OF THE DESIGN WORK

1.2.2.1.1 Organization Chart

ET's Quality Organization Chart appears in Appendix 1.2a and defines the QA/QC staff reporting structure within the design organization.

1.2.2.1.2 Staff Reporting

The Design Quality Manager reports to ET's Design Manager and has an indirect reporting relationship with DGP's Construction Quality Control Manager for coordination within the framework of the overall QMS. In addition, the Design Quality Manager has a functional relationship with ET's Executive Management to assure leadership's commitment to the quality process. The Design Quality Manager has the authority to prohibit submittal of any design work to DGP if he believes that it is not in conformance with the DQMP.

The Discipline Leaders, representing each of the individual design requirements for the Project are the primary QC representatives. They report directly to the Lead Engineer. The Discipline Leaders have the authority to prohibit any submittal of a component design to the Design Manager if they believe that it is not in conformance with the DQMP. The Task Leaders coordinate the QC requirements with the Designers, who perform the fundamental check and review process. The Designers report to the Task Leaders who inturn report to the Discipline Leaders.

1.2.2.1.3 Roles and Responsibilities

- The Design Quality Manager is ET's quality management representative on the Project for directing and implementing the design QA responsibilities, functions, and policies. The Design Quality Manager is an experienced engineer and responsible for the success of the Design QMS and is dedicated to implementing the DQMP. He does not have any design production responsibilities. However, the Design Quality Manager works with the Design Manager in ensuring design team compliance with design

directives, standards, codes, contract and stakeholders' requirements. The Design Quality Manager's responsibilities include the following:

- Establishing, implementing and updating the DQMP
- Providing direction to design staff and subconsultants on the design QA program
- Providing training of personnel to ensure awareness of quality procedures and specific responsibilities in the QC process, including the interface and response to audits such as those conducted by DGP, ADMP, the Independent Engineer, or FDOT
- Representing the design team on quality issues at meetings with DGP, ADMP, the Independent Engineer, or FDOT
- Auditing the design QC activities of staff and subconsultants at scheduled intervals to assess conformance with the QC procedures
- Certifying through a written statement accompanying all final design submittal packages that the design documents have been audited for compliance with the DQMP
- Coordinate design reviews performed by others and be available to assist FDOT staff with required reviews

> The Discipline Leaders are responsible for all design functions, including QC. The disciplines are grouped under roadway, structures, traffic engineering, utilities, environmental compliance, drainage, electrical, geotechnical, pavement design, surveying and mapping, and landscaping. Each respective Discipline Leaders will assure that the assigned personnel on their discipline team is capable of performing the analysis or calculations required. The Discipline Leaders responsibilities include the following:

- Engaging a staff that is fully knowledgeable of the requirements of the Design Process Procedures
- Is fully responsible for the completion of all QC functions within the discipline and performs day to day supervision of project activities
- Providing orientation and explaining the design team personnel their responsibilities in fulfilling the DQMP requirements
- Resolving conflicting opinions between the checker and reviewer
- Maintaining a current status listing of the design discipline's work, expected audit dates, outstanding audit findings, and current document checking/review status
- Providing status reports (written or oral) on the above to the Design Quality Manager, when required

> The Task Leaders are those engineers responsible for the design of a specific component within a given discipline. These individuals may be responsible for the design of a specific bridge or a specific section of roadway. The Task Leaders are an integral part of the QC process and are responsible for:

- Meeting design schedule
- QC at the team level prior to submission of deliverables to the Discipline Leader
- Signing and sealing of final drawings and or reports
- Assembling and maintaining the original calculations, checking calculations, drawings and checking prints for their discipline in an orderly fashion until audited and turned over to Document Control for storage

- The Designers are the primary individuals within the QC process. Designers used in the QC process are Professional Engineers with experiences similar to those called for by the Project. The Designers are responsible for autonomously checking each other's work in conformance with the DQMP procedures.

1.2.2.2 ORGANIZATION OF THE CONSTRUCTION WORK

1.2.2.2.1 Organization Chart

DGP's Quality Organization Chart appears in Appendix 1.2b and defines to whom the QA/QC staff reports to within the construction organization.

1.2.2.2.2 Staff Reporting

The Construction Quality Control Manager reports to DGP's Project Manager and has an indirect reporting relationship with ADMP's Quality Manager for coordination within the framework of the overall QMS. In addition, the Construction Quality Control Manager has a functional relationship with DGP's Executive Management to assure leadership's commitment to the quality process. The CQCM has the authority to stop work if the situation warrants.

Execution of the Construction QC will be through several full time Level 2 Quality Control Technicians (earthworks, asphalt paving, asphalt plant and concrete) who report to the Construction Quality Control Manager. In addition, an FDOT certified laboratory will be provided for in process and acceptance testing. This laboratory will be a different and independent firm than ADMP's verification laboratory. The DGP laboratory will be staffed with a Laboratory Manager and several Level 1 Quality Control Technicians to perform the testing. The Laboratory Manager will report to the CQCM.

1.2.2.2.3 Roles and Responsibility

- The Construction Quality Control Manager's responsibilities include the following:
  - Coordination and integration of the Design Quality process into the CQCMP
  - Communication with ADMP on all issues regarding DGP and ET's quality management
  - Issuing a Stop Work Order if the situation warrants
  - Monitor and verify that testing/inspections are conducted at the frequencies identified in the onsite and off-site Inspection & Test Plans (ITP)
  - Administering, tracking and monitoring non-conformance
  - Identifying adverse trends and addressing it with DGP management
  - Identify, implement, implement and maintain CQCMP activities
  - Prepare the on-site and off-site ITP and associated quality control inspection check sheets
  - Test all areas of work and ensure all materials delivered to Project meet the required tests, inspections and documentation prior to incorporation in the Project works
  - Ensure QC is applied in all areas of work activities through properly qualified personnel or testing firms available at site while activities are being conducted on-site.
  - Ensure that adequate quality control is achieved for offsite fabrication either through designated qualified individuals or qualified testing firms
- The Level 2 Quality Control Technicians' responsibilities include the following:
  - Perform all the inspections as per FDOT standard specification complying with the functions outlined in Section 105

- Proactively and verbally communicate the results to the superintendent(s) or other construction supervisors during the same shift
- Complete, record and monitor the results of their inspections on the QC inspection sheets or the Site Daily Records which shall be submitted to the Construction Quality Control Manager on a daily basis
- Conduct re-inspections for any out of specification areas that do not meet the specified requirements
- Notify Construction Quality Control Manager of any deficiencies and of outstanding deficiencies so that they can be responded to and retested
- Follow up and close out of NCR's raised as a result of non-compliant work
- Notify Construction Quality Control Manager of observed trends as it relates to QC activities

1.2.2.3 QA/QC PROGRAM FOR DESIGN WORK AND CONSTRUCTION WORK

The ADMP Team members have earned reputations for the highest quality workmanship on projects of similar size and with similar characteristics, including design-build delivery.

Quality is the result of the consistent application of good practices and processes implemented at the appropriate time, and monitored and assessed against appropriate criteria to ensure proper execution and effective control of those practices and processes.

The preliminary QMS identifies and details those processes and practices as well as the criteria and methods for their monitoring and control. The final QMS, to be completed for FDOT's approval during project mobilization, will define the correct sequencing and process interactions.

The following sections describe selected DQMP and CQCMP practices and processes. DGP is responsible for the following summarized key points:

- All elements of design-build quality including providing qualified quality management personnel for design and construction, and independent quality assurance in accordance with ISO 9001:2000 principles
- Ensuring that quality is elevated to the highest level of its own organization and its subconsultant (ET)
- Creating a functional separation between quality management and production budget and schedule, and that the separation is sustained
- Establishing OTS reviews with FDOT, which are an essential feature of the ADMP Team's approach to the informal and formal design, constructability and approval process
- Providing training to all team members in project quality processes and for making sure that individual responsibilities and appropriate practices are understood
- Implementing a formal phased inspection and testing plan during the construction process
- Establishing and enforcing strict document controls for both design and construction with controlled Internet-based access for timely submittals reviews, updates and approvals
- Retaining independent testing laboratories under the direction of the Construction Quality Control Manager to provide certified facilities and appropriately trained technicians
- DGP is responsible for integrating all subcontractors into the QMS. All subcontracts will specify QC requirements, and subcontractors will be required to provide qualified QC inspectors for their specialties to do the required inspections and testing. Their work will be subject to QC direction by the Construction QC Manager, and QA oversight by the Construction Quality Control Manager

1.2.2.3.1 Quality Management

ADMP will prepare the Quality Manual for the entire team that will establish the scope of the QMS and will form the framework for the final QMPs, which in turn will establish the framework for the quality procedures to be used. FDOT's own quality procedures will be incorporated into our final QMPs as applicable. The QMPs will be based on the following Quality Objectives (Table 1.2-1) as established by ADMP.

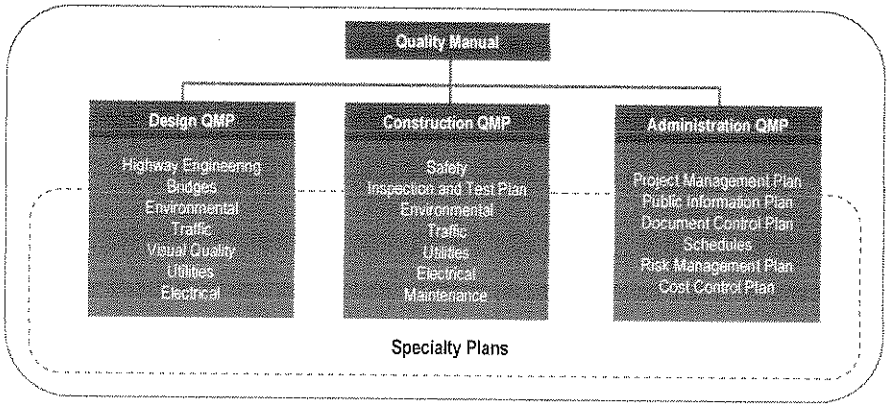
Table 1.2-1 Quality Objectives

Objective	Goal
Meet or exceed the Contract requirements	Reduce the number of non-conformities by 10% each year.
Meet or exceed the Quality Requirements	
> Specify and control quality	> Produce, review and issue Work Method Statements (WMS) before each work activity commences. If required, revision and improvement to WMS shall be done as part of an on-going improvement to reflect how work actually is done on site.
> Continuous Improvement	> Revise the QMS and their faults and weaknesses through internal and external audits, construction meetings and management meetings.
Qualified Staff to perform the work	Increase the expertise of staff through appropriate training and development.
Ensure all personnel understand the QMS	All employees are to be given an introduction to the QMS within one week of starting work.

Draft QMPs have been prepared for the Project during the preparation of this Proposal. The DQMP is included in Appendix 1.2e, and the CQCMP is included in Appendix 1.2f. During mobilization, these preliminary QMPs and subsequent Quality Procedures will be further developed to:

- Identify the processes needed to implement the quality procedures and apply them throughout the organization
- Define and document the sequence and interactions of these key processes
- Further define and document the criteria and methods to ensure effective operation and control of the processes
- Define the information needed to support the effective operation and monitoring of these processes
- Define methods of measurement, monitoring, and analysis needed in order to implement those actions that will achieve planned results and continual improvement
- Define methods to ensure the availability of resources and information necessary to support the operation and monitoring of these processes
- Define actions necessary to achieve planned results and continual improvement of these processes

Figure 1.2-4 Quality Management Plans



These QMPs will include specific reference to a number of Specialty Plans that will cover the entire scope of the Project. Figure 1.2-4 identifies

these Specialty Plans. In addition, a third QMP will be developed to address administrative issues used by the design-build team in the management of the work. Following review and approval by FDOT, the QMPs, Specialty Plans, and other reference quality documents will be implemented and remain in effect until all contract requirements have been fulfilled and the project is accepted.

Control of the QMP

The QMP documents will be controlled. As such, a documented procedure will define the controls needed to:

- Approve documents for adequacy prior to issue
- Review and update as necessary and re-approve documents
- Ensure controlled distribution
- Ensure that changes and the current revision status of documents are identified
- Ensure that relevant versions of applicable documents are available at points of use
- Ensure that documents remain legible and readily identifiable
- Ensure that documents of external origin are identified and their distribution controlled
- Prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose

The types of quality records will be specified and each maintained as evidence of conformity to the requirements and the effective operation of the QMS. Records will be legible, readily identifiable and retrievable. A documented procedure will define the controls for identification, storage, protection, retrieval, retention time and disposition of records.

Ensuring Sufficient Sampling, Testing, and Observation

DGP's approach to sampling, testing and observation will be described in the CQCMP. The sampling and testing requirements will meet or exceed FDOT and industry standards. Checklists, guidelines and work instructions will be further developed as appropriate.

The Construction Quality Control Manager will oversee performance of all preparatory, progress and final inspections, and ensure that the correct checklists and forms are used to record inspections and tests. The Construction Quality Control Manager will also ensure that sufficient advance notice is given so FDOT representatives can attend inspections and tests as desired. The Construction Quality Control Manager will audit implementation of inspection and testing procedures and work instructions.

The Level 2 Quality Control Technicians will follow a QC Inspection Guide for the entire project, which will be included in the CQCMP. The guide will reference contract documents, specifications, special provisions, instruction manuals and other information provided by project team members.

Ensuring Subcontractors and Suppliers Meet the Quality Management Requirements

Each individual on the DGP team is responsible for contributing to the quality of our design-build services. The Construction Quality Control Manager and DQM will establish and implement a program to train all personnel including subcontractors and suppliers on contract quality requirements.

All design subconsultants and construction subcontractors will be integrated into the QMS. In addition, any subcontractor or supplier responsible for off-site fabrication or assembly will be required to submit a QC plan for approval by the Construction Quality Control Manager and agree to the appropriate inspections and tests as part of the subcontract or purchase order. Subcontractor quality control programs are discussed below:

- **Design Subconsultants.** All work performed by design subconsultants will be reviewed by the DQM to ensure that their work conforms to the DQMP. Design subconsultants will report to ET for the products to be delivered, whether it is design or design-related work such as surveying or geotechnical services. Subconsultants will be required to review and professionally seal all work that they produce in accordance with all applicable laws and regulations. All design subconsultant submittals will be reviewed and certified by the subconsultant as meeting the requirements of the DQMP and Project specifications.

  All agreements for design or design-related services will include provisions for subconsultants to prepare and submit a QC Plan for their work that complies with the DQMP. To this end, the DQM will collaborate with the subconsultants as they prepare their plans to ensure that they meet the basic requirements; qualified QC staff independent of the lead professionals, defined project reviews, design verification, a clear approval process, and effective document controls. All activities will be subject to audit by the DQM.

- **Construction Subcontractors.** Construction subcontractors will work within the DQMP Team and will be responsible for contractually defined scopes of work. Subcontractor principals and/or superintendents will participate in pre-construction conferences and progress meetings as required, follow DGP's safety and quality management programs, and coordinate with the General Superintendent or designated Field Superintendents at the job-sites.

  Subcontractors and suppliers will submit their QC plans to the CQCM for approval and inclusion in the CQCMP, which will be reviewed and approved by FDOT. Subcontractors will be required to designate a QC Representative who will be on-site during performance of their respective portions of work. The project schedule will show when the various subcontractors' and suppliers' QC representatives are required on-site. QC representatives will also be required to prepare a daily report that documents their on-site inspections and other QC activities, and submit the report to the Construction Quality Control Manager or designated Level 2 Quality Control Technician for inclusion in DGP's daily QC Report. All construction subcontractor submittals will be reviewed and certified by the subcontractor as meeting the requirements of the CQCMP and Project specifications.

- **Off-site Subcontractors.** Subcontractors fabricating or assembling components at locations off-site, i.e., at their shops or yards, will be required to submit QC plans to DGP. Once accepted by the Construction Quality Control Manager and FDOT, these plans will be included in the subcontract documents. The CQCM or L2QCT, and FDOT's oversight representative will be extended the opportunity to attend all tests and inspections before the product is accepted, and moved to the job site, and before payment is authorized. All activities will be subject to audit by the Construction Quality Control Manager.

1.2.2.3.2 Quality Control

DGP will provide Quality Control based upon the CQCMP. ET will provide QC based upon the DQMP. A summary of the QC procedures is as follows:

1.2.2.3.2.1 Design Quality Control

Design is a critical aspect of the Project and proven tools will be used as the first line of QC. All designers will use the ET's standard checking process, described in the DQMP. Training in its use will be provided for all involved. The DQM will audit the process for consistency in application and coverage of all intended design elements.

In keeping with ET's policy and sound engineering practice, all design analyses, drawings, specification cost estimates, other contract documents, and reports produced by the design team are to be checked prior to submission. All appointed checkers are expected to perform their checking independent of the engineers who

prepared the design and the checker will have experience equal to or greater than that of the designer. This independence between designer and checker will ensure objectivity throughout the design process.

Proper documentation and communication are essential to continuous and complete control and verification of design elements. A set of check prints will be formalized to document the checking process and all design data and instructions will be transmitted between disciplines in formal, sequentially numbered memoranda to assure that they are taken into consideration during completion of design.

Peer Reviews

Peer Reviews will be performed on specific Contract documents at the request of the Design Manager. These are generally elements of design that contain greater risk, unique complications, or complex analysis. The Peer Review Team will be comprised of senior technical staff with specific experience in the problem area. These will be higher level QC checks to make sure that design methodologies, assumptions, and recommendations are consistent with state of the art practice and are applicable to the design issue under consideration. This will not replace the formal detailed QC review.

Constructability Review

Constructability reviews will be performed at all stages of design. The reviews will be performed by DGP who will review and check plans and specifications for conformance with planned construction methods and construction quality control procedures. Checking procedures will follow the color coding system and flows utilized by the design quality control process.

Category 2 Independent Bridge Peer Reviews

As required by FDOT, an independent engineering firm will be engaged by ADMP to review all Category 2 bridge designs prepared by ET or one of its subconsultants. The independent engineering firm, prequalified by FDOT for this effort, is Finley Engineering Group, Inc. Jerry M. Pfuntner, PE, will lead their efforts. His resume and qualifications are included in Appendix 1.2d.

1.2.2.3.2.2 Construction Quality Control

In accordance with the approved CQCMP, the Construction Quality Control Manager will manage QC issues for DGP and will direct the QC staff. All Level 2 Quality Control Technician inspectors will have all required certifications and experience to address the types of work in progress at any given time. Original design engineers will visit the site during construction on a regular and as-needed basis to ensure compliance with intent of design. Environmental professionals will monitor environmental regulations and permitting and will provide instruction to Level 2 Quality Control Technician inspectors regarding monitoring tasks. They will continuously overview monitoring of site conditions and respond to identified issues. The certified testing laboratory will support testing needs for concrete cylinders, soils analysis, water quality and other required testing.

All tests and inspections will be done in accordance with referenced standards. Shop inspectors will be available for fabrication inspection primarily for structural steel, precast concrete, or to qualify shop quality processes prior to fabrication. Full documentation and notice will be provided for required inspections. FDOT will be advised on all such inspections should assurance inspection be required.

Each level of the quality organization will use checklists for each element of the work based upon the Contract requirements and standards. Daily reports will be provided by each QC inspector for activities and will be supplemented with the checklists completed. The Construction Quality Control Manager will audit the daily reports and require clarifications as necessary. Monthly summary reports will be provided of all activities and disposition of any non-conformance reports issued or resolved in the period.

Commissioning will rely on information generated through the quality processes. Project close-out and the end of the construction phase will be transitioned as per the approved plan and all QC records will be transferred to ADMP's Quality Manager for reference and archiving.

Geotechnical Monitoring

All geotechnical monitoring and foundation inspection data will be included in the quality process documentation. All monitoring of structure foundation installation whether piling or drilled shafts will be performed by qualified QC inspectors or laboratory firm personnel.

✔ This Preliminary Quality Plan meets Technical Proposal Requirements (1.2.a.) by describing in detail the roles and responsibilities of the quality management team, including subcontractors, and the QA and QC processes for design and construction.

1.2.3 QA/QC for the Operating Period

ITP 1.2b – Describes the Concessionaire's Conceptual QA/QC Plan for the Operating Period and its Approach to Developing a QMS for Self-Monitoring of Quality During the Operating Period.

Both ACS and Macquarie have extensive and proven experience in major road development projects and significant highway operations and maintenance. ADMP will approach the QA/QC plan in a systematic manner, creating a high-level project organization led by the Quality Manager (the details of which are provided in Section 1.2.3.1) that will be independent of O&M activities and support functions. The four objectives of the QMS are as follows:

- Establish ADMP's self-monitoring process
- Provide means to evaluate ADMP's level of performance relative to the requirements
- Assemble the information needed to determine Non-compliance Points
- Make sure that all work is performed in accordance with the quality plans and procedures

The concepts of the QMS, to be fully developed after award of the Contract, are presented in Section 1.2.3.2. ADMP will also implement a QMS for self-monitoring of quality (Section 1.2.3.3) to ensure compliance of the activities with both the Contract Documents and ADMP's own plans and procedures.

1.2.3.1 ADMP QUALITY ORGANIZATION

1.2.3.1.1 ADMP's Quality Organization Chart

ADMP's QM will report directly to the ADMP's Project Executive, thus making quality management independent of O&M operations and support functions. An administrative clerk will assist the Quality Manager on the administrative aspect of the quality management. Associate Engineers will be allocated to the Quality Manager when needed from the Engineering/Planning & Scheduling department to provide technical support on quality issues (for example for the MRP evaluation). Finally, quality technicians will be required during field inspections on Maintenance and Renewal Work. The organization's staffing will change from time to time as the resources needed for quality management activities vary because of changing project conditions.

ADMP's Quality Organization Chart is presented in Appendix 1.2a. Note that the dashed line indicates that these jobs are normally allocated to other departments but will bring a periodic support to the quality organization.

1.2.3.1.2 Staff reporting

ADMP's Quality Manager reports to the Project Executive and has functional coordination with the Construction Quality Control Manager during the construction period. The ADMP Quality Manager has direct access to the Board of Directors and has the authority to stop work if the situation warrants. The Quality Control Technicians will report to the QM and have functional coordination with the inspectors from the CEI.

The functional connection between all quality staff, at the concession, construction, and design levels will ensure smooth processing and coordination of quality matters, while preserving the hierarchical administrative and management processes.

Periodic (every six months) internal QA audits of the QC processes will be provided. Staff responsible for the auditing of specific processes will not need to be involved in those processes.

1.2.3.1.3 Roles and Responsibilities

- The **Project Manager** will issue a policy committing ADMP's organization to quality management. The policy will set forth the primary objectives of quality management. The policy will also establish the independence of quality management from O&M operations and establish the authority of the Quality Manager to perform the necessary quality management activities and to stop work when quality considerations warrant it
- The **Quality Manager** will be responsible for the development and implementation of the QMS and will have the authority to perform all quality management activities (see Section 1.2.3.3). Reports will be generated as a means to gauge performance against FDOT requirements. She will also be responsible for tracking Non-compliance Points and identifying actions necessary to prevent non-compliance. She will be responsible for overseeing the auditing of project processes, non-compliance control, data analysis and improvement. Additional responsibilities include, analysis and recommendation of appropriate changes of policies and procedures, audit existing and new ISO Procedures, coordinate and administer quality audits, maintain the corrective/preventive action program, provide monthly reports to the Project Executive, improve processes, and review engineering support process / quality functions. The Quality Manager will also manage the efforts of the independent CEI firm during the construction period
- The **Associate Engineers** will be involved in the organization and execution of the Maintenance Rating Program (MRP) and attend FDOT mandated inspections. They will be present on-site along with the independent consultant carrying out the MRP evaluation in order to supervise the process and to ensure that proper methods are used
- A **Quality Clerk** will assist the Quality Manager in managing the organization, focusing on communications, records management, document preparation and assembly, and activity coordination
- **Quality Technicians** will perform the majority of the quality management work, such as the supervision of MRP field evaluations (along with one Associate Engineer) and quality management for most of the requirements related to violations
- **Consultants** will be used primarily to perform pavement surveys and quality assurance for MRP evaluations and pavement surveys

1.2.3.2 ADMP CONCEPTUAL QA/QC PLAN

1.2.3.2.1 ADMP Quality Control

1.2.3.2.1.1 ADMP Quality Control on Design

The QA/QC procedures during design activities address ease of maintenance, asset and material durability, and life cycle cost considerations. Quality components will be built into the design of the corridor in order to reduce future maintenance requirements and increase the life cycle of key components. The Construction Coordinator will be responsible for coordinating this effort with the design team during this period. Crucial components are listed below:

- Flexible Pavement – use rut resistant mix for durability
- Rigid Pavement – minimize number of joints and use long-life sealant
- Slope Pavement – minimize concrete pavement joints or use rip rap instead
- Guardrail – provide openings for incident response and provide distance for conventional mower
- Barrier walls – avoid forming enclosed areas where debris can accumulate
- Attenuators – standardize type and select models for reuse after moderate impact
- Overhead signs and toll gantries – provide ladders and catwalks for maintenance and avoid lane closures
- Signals – place controllers for easy access
- Bridges – minimize the number of joints and bearings

1.2.3.2.1.2 ADMP Quality Control on Construction

The CEI firm will carry out the monitoring and verification of construction activities and QC/QA on behalf of ADMP. The primary responsibility of the CEI will be as follows:

- Monitor DGP's on-site construction activities and inspect materials entering into the work zone
- Keep detailed accurate records of DGP's daily operations and of significant events that affect the work
- Monitor and inspect the Work Zone Traffic Control Plan
- Perform verification sampling and testing of component materials and completed work
- Monitor, inspect and document utility construction conformance
- Verify that DGP is conducting inspections, preparing reports and monitoring all storm water pollution prevention measures associated with the Project
- Monitor DGP and its subcontractors' compliance in regard to payment of predetermined wage rates
- Provide a Resident Compliance Specialist for surveillance of DGP's compliance with Contract requirements

In addition to these processes, ADMP's Quality Manager will carry out periodic inspections during the construction period, along with the Associate Engineers and Quality Technicians, to monitor specific elements of the infrastructure to avoid built-in MRP failures. The typical items related to this process are:

- Low or high unpaved shoulder
- Eroded slopes
- Missing or non-reflective raised pavement markers
- Guardrail set at incorrect heights

- Guardrail end treatments offset incorrectly or constructed incorrectly
- Incorrect spacing on guardrail/barrier reflectors
- Signs with incorrectly sized supports
- Sign breakaways set too high
- Multi-post sign panels incorrectly set relative to fuse cuts
- Signs set at incorrect offsets or heights
- Damaged pull boxes
- Asphalt mix or debris in drainage
- Incorrect grates used on inlets
- Plants set within the clear zone
- Debris in the clear zone

1.2.3.2.1.3 ADMP Quality Control on Operations and Maintenance Activities

Regarding the O&M activities, the structure of the QMS during the construction period will be essentially the same as for the operating period because the scope, although probably reduced, will require similar processes to that during the operating period. Thus, the approach to quality management during the operating period will be to establish the structure of the function before construction begins. The O&M QMP will be written before NTP2 and will include general and specific procedures enabling the QA/QC program to be implemented from the commencement of the O&M Work.

- **Operations.** Quality Control on Operations activities will consist of the monitoring and the verification of the procedures. The TMC Manager and the Operations Supervisors will conduct operational observations to detect non-compliant procedures and deviations. They will also review the operator records to verify that all work is in compliance with procedures. In addition, the Quality Manager will measure parameters such as the incident response time and the reopening time and will perform random audits of the verification method and review operational procedures as well as operator activity records. To ensure compliance, observation frequencies will be determined by the number of reports using statistical quality control techniques
- **Routine Maintenance.** The Maintenance Manager will monitor and verify the procedures followed by the different crews allocated to routine maintenance, for each activity. This task will consist of two aspects: periodic on-site monitoring and review of the reports. Additionally, the Quality Manager will implement measurement processes, whether physical (riding quality, surface friction, lighting levels, visual inspections of the infrastructure, etc) or non-physical using observation or examination techniques (allocation of personnel to the crews, adequate and efficient use of equipment, vehicles and materials, etc)
- **Renewal Work.** Given the nature of the renewal work, the QC that will be carried out on such work will be similar to that performed by the CEI and ADMP on DGP construction efforts (detailed in section 1.2.3.2.1.2 on the previous page)

1.2.3.2.2 ADMP Quality Assurance

1.2.3.2.2.1 Internal Quality Assurance

Internal QA consists of two aspects: comparing the QC results provided by the Quality Technicians or the Manager/Supervisors in charge of the original activity to those obtained by the QM, thus ensuring the work performed is correct, and confirming the quality processes are being developed in accordance to the documented procedures.

The QM will verify the results of QC work. Typically, the verification will consist of repeating some of the work performed under the QC activities and comparing the results with the results of the activities. For example, if five guardrail runs were inspected by the Quality Technicians under Q0301 Guardrail Maintenance QC to test whether the runs complied with the specifications and design standards, the QM may inspect two of these installations and compare the results with those obtained by the Quality Technicians. Or for instance, when Quality Technicians perform QC on SIRV response reports under Q0934 Reporting Record Accuracy, the Quality Manager must compare field and reported results, so must be present when the work is occurring. In verifying the results, the Quality Manager will repeat the work but, for other incidents.

Table 1.2-2 O&M QMP Activities

Activity Number	Name	Activity Number	Name
Q0101	Flexible Pavement Distress Survey QA	Q0353	Highway Lighting Annual Inspection QM
10102	Flexible Pavement Ride Quality Survey QA	Q0355	Mast Arm Structure Inspection QM
Q0111	Damage Survey for Flexible Pavement QM	Q0357	Overhead Sign Structure Inspection QM
Q0121	Rigid Pavement Distress Survey QA	Q0359	High Mast Light Pole Inspection QM
Q0122	Rigid Pavement Ride Quality Survey QA	Q0402	Drainage System Inspection QM
Q0202	Sidewalk Inspection QM	Q0411	NPDES Permit Monitoring QM
Q0302	Guardrail Inspection QM	Q0603	Bridge Inspection Field Work QM
Q0312	Attenuator Inspection QM	Q0604	Bridge Inspection QAR QM
Q0322	Barrier Wall Inspection QM	Q0606	Bridge Inspection Administrative Work QM
Q0332	Sign Inspection QM	Q0606	Bridge Painting QM
Q0342	Toll Gantry Inspection QM	Q0612	Sound Barrier Inspection QM
Q0352	Highway Lighting Monthly Inspection QM	Q0901	MRP Field Evaluations QA

Typically, verification samples will be selected to provide the Quality Manager confidence that the results of the work performed under the QC activities are correct. If verification requires more intense consideration, the Quality Manager may use conventional statistical means to determine whether differences between paired results are significant.

In addition, periodic (six months) internal QA audits of the QC processes will be provided. Staff responsible for the auditing of specific processes will not have to be involved in those processes.

1.2.3.2.2.2 External Quality Assurance

The external QA will consist of external audits and FDOT's inspections, all of which are reflected in O&M QMP activities as shown in Table 1.2-1. Most of the inspections, such as the guardrail inspection, are stated explicitly. Some activities are not related to acknowledged inspections, but will require inspections for successful completion. For example, the QC process related to Q0411 NPDES Permit Monitoring requires inspection of permitted areas and the QC process associated with Q0606 Bridge Painting requires inspection

of paint condition for all bridges with painted surfaces. The general approach to QA for QC inspection processes is to sample, re-inspect, and compare the results with those of the original inspection.

1.2.3.3 QUALITY MANAGEMENT SYSTEM FOR SELF-MONITORING

The members of ADMP believe that the management system is the means by which quality will be achieved and therefore ADMP's Board of Directors and the Project Executive will be committed to the development and implementation of the QMS and continually improve its effectiveness.

1.2.3.3.1 Approach to developing a QMS for Self-monitoring

The Team's QMS – ADMP's self-monitoring program – will include the organization, responsibilities, procedures, processes and resources (as much human as material) that will be delivered to manage the Contract with the required quality and thus achieve customers' satisfaction as well as the objectives of ADMP's Quality Policy. The QMS will consist of the policy and general criteria defined by the Board of Directors and all the activities performed to achieve and verify the required quality to prevent and eliminate causes of deficiencies, and to correct those that may appear. The QMS will be comprehensive, addressing all items for which Non-compliance Points can be assessed. Appendix 5 to the Concessionaire Agreement and Section 4 of Division II of Volume II set the minimum requirements under which ADMP will operate and maintain the Project. These requirements will be the foundation of the self-monitoring processes.

Both internal and external audits will be conducted periodically and results promptly reported. Any required corrective actions, identified as a result of an audit, will be documented and processes and procedures updated, as required, to avoid re-occurrence. The Preliminary ADMP O&M QMP appended to this section (Appendix 1.2g) details the quality processes required for the O&M activities.

1.2.3.3.2 Self-monitoring processes

The self-monitoring processes will be capable of the following:

- Monitoring performance for each category, making comparison to the minimum requirements
- Producing an alarm and creating an event in case of a fault
- Creating an event when the fault is repaired, comparing the duration of the fault with the given Cure Period, taking into account the Fast Cure Period if applicable
- Classifying the fault according to Appendix 5 to the Concessionaire Agreement (CA) and Tables 4.1A, 4.1B, 4.2, 4.3 of Section 4 of Division II of Volume II
- Creating a log of any closure, including the location and length of the closed stretch (including identifying which segment it belongs to), the number of lanes affected, initial time, time of restoration of normal traffic conditions and causes of the closure
- Assessing Non-compliance Points
- Calculating Payment Adjustments according to Table 1.2-2 below.

Table 1.2-3 Payment Adjustments Calculations

Event	Location of the Requirements	Assessment of Noncompliance points	Adjustment to the first Final Acceptance Payment	Adjustment to the Maximum Availability Payments
Delay in the achievement of the Interim Milestones Works	Appendix 3A to the CA	-	Final Acceptance Late Milestone Payment Adjustment	-
Construction Violation	Table 4.1A,Section 4, Div II, Vol II	Appendix 5 to the CA	Construction Violation Adjustment	-
Construction Availability Fault	Table 4.1B,Section 4, Div II, Vol II	Appendix 5 to the CA	Construction Availability Fault Adjustment	-
Construction Closure	Table C, Appendix 3B to the CA	-	Construction Closure Adjustment	-
O&M Violation	Table 4.2,Section 4, Div II, Vol II	Appendix 5 to the CA	-	O&M Violation Adjustment
O&M Availability Fault	Table 4.3,Section 4, Div II, Vol II	Appendix 5 to the CA	-	-
O&M Closure	Tables B and C, Appendix 6 to the CA	-	-	Unavailability Adjustment
Any other Noncompliance	Appendix 5 to the CA	Appendix 5 to the CA	-	-

1.2.3.3.3 Self-monitoring procedures

The self-monitoring processes, as shown on Table 1.2-2 above, will provide detailed, orderly, systematic and integrated information about ADMP's level of performance according to the minimum requirements. It will contain extensive procedures that clearly define goals, objectives, methods, responsibilities and generated information. These concise and comprehensive procedures will enable MAP adjustments calculations and regular system upgrades, resulting in continual quality and efficiency. For each of the monitoring requirements, a procedure will be written that contains the following:

- Requirements to be monitored
- Means and staff necessary for its execution
- Inspections points program
- Control of non-compliances and corrective actions
- Applying standards
- Specific and correct monitoring method
- Controls, inspections, and/or testing to be completed
- Minimum requirements
- List of applicable technical solutions
- Responsibilities
- Reporting and records

Based on the general devices and resources control procedure to be included in the O&M QMP, a Work Instruction will be developed for each monitoring or testing devices, which will include:

- Identification and codification
- Calibration and verification
- Corrective maintenance
- Preventive maintenance
- Characteristics
- Maintenance history
- Supervision
- Responsibilities

Procedures will be used by those performing the QA/QC work — mainly the Quality Manager, Quality Technicians and consultants but also each manager and supervisor — to help ensure uniformity and the production of objective results on which to base decisions.

1.2.3.3.4 QMS Planning

Quality planning is the part of quality management focused on setting objectives and specifying necessary operational processes and related resources to fulfill the quality objectives and making sure that the identified processes are managed in accordance with the requirements of ISO 9001. In planning the processes of the O&M QMP, ADMP will put in place provisions to measure, monitor and analyze processes, determine their sequence and interaction and determine criteria and methods to ensure effective operation and control. In addition ADMP will provide the resources and information necessary to support the operation and monitoring of these processes.

1.2.3.3.5 QMS Reporting

The reporting is used for providing information to manage the quality management function, rather than to provide reports on quality management or assurance information. Daily activity reports of quality management activities will include the O&M QMP activity; a description of the specific work performed; locations of the work; personnel, equipment, material, and tools used; and accomplishment in terms of the O&M QMP activity list work units. This data will be summarized and compared with data from the O&M QMP work plan as a basis for work control.

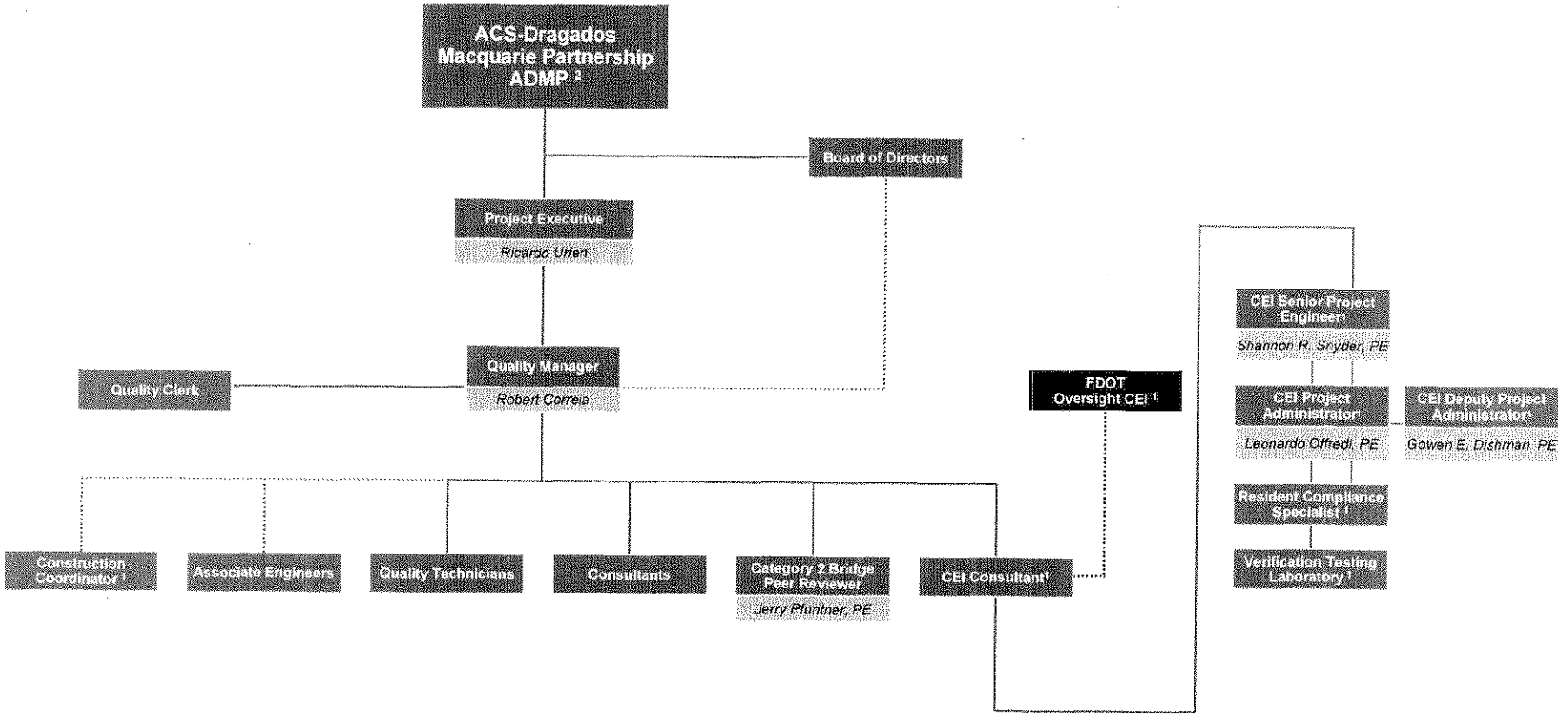


This Preliminary Quality Plan meets Technical Proposal Requirements (1.2.b.) by describing the Concessionaire's conceptual QA/QC plan for the operating period and its approach to developing a QMS for self-monitoring by the Concessionaire during the O&M period.

1.2.4 Appendices 1.2

Appendix 1.2a ADMP Quality Organization Chart
Appendix 1.2b DGP Quality Organization Chart
Appendix 1.2c ET Quality Organization Chart
Appendix 1.2d Quality Organization Resumes
Appendix 1.2e Preliminary Design Quality Management Plan
Appendix 1.2f Preliminary Construction Quality Control Management Plan
Appendix 1.2g Preliminary Operations & Maintenance Quality Management Plan

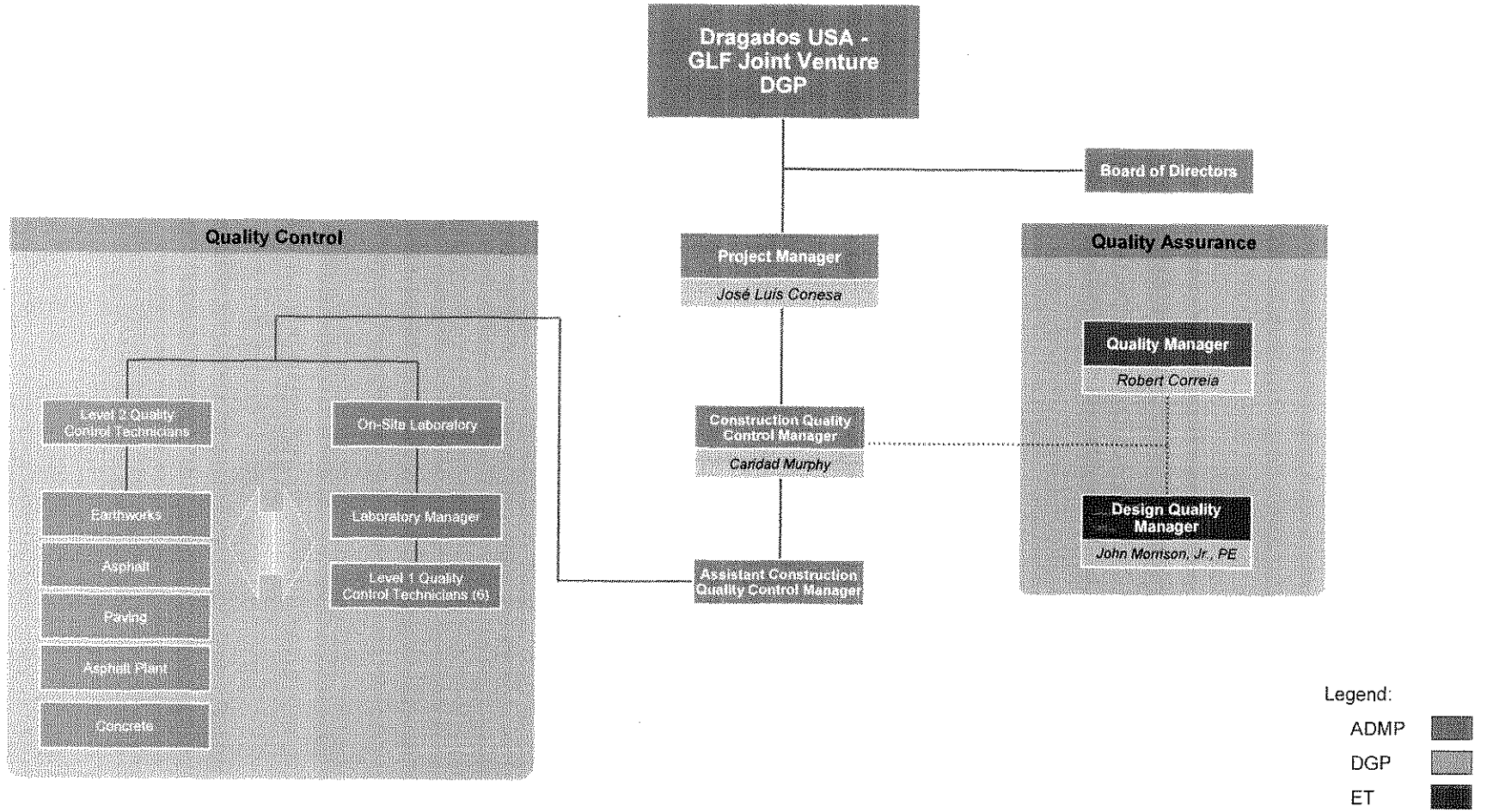
Appendix 1.2a ADMP Quality Organization Chart (O&M)



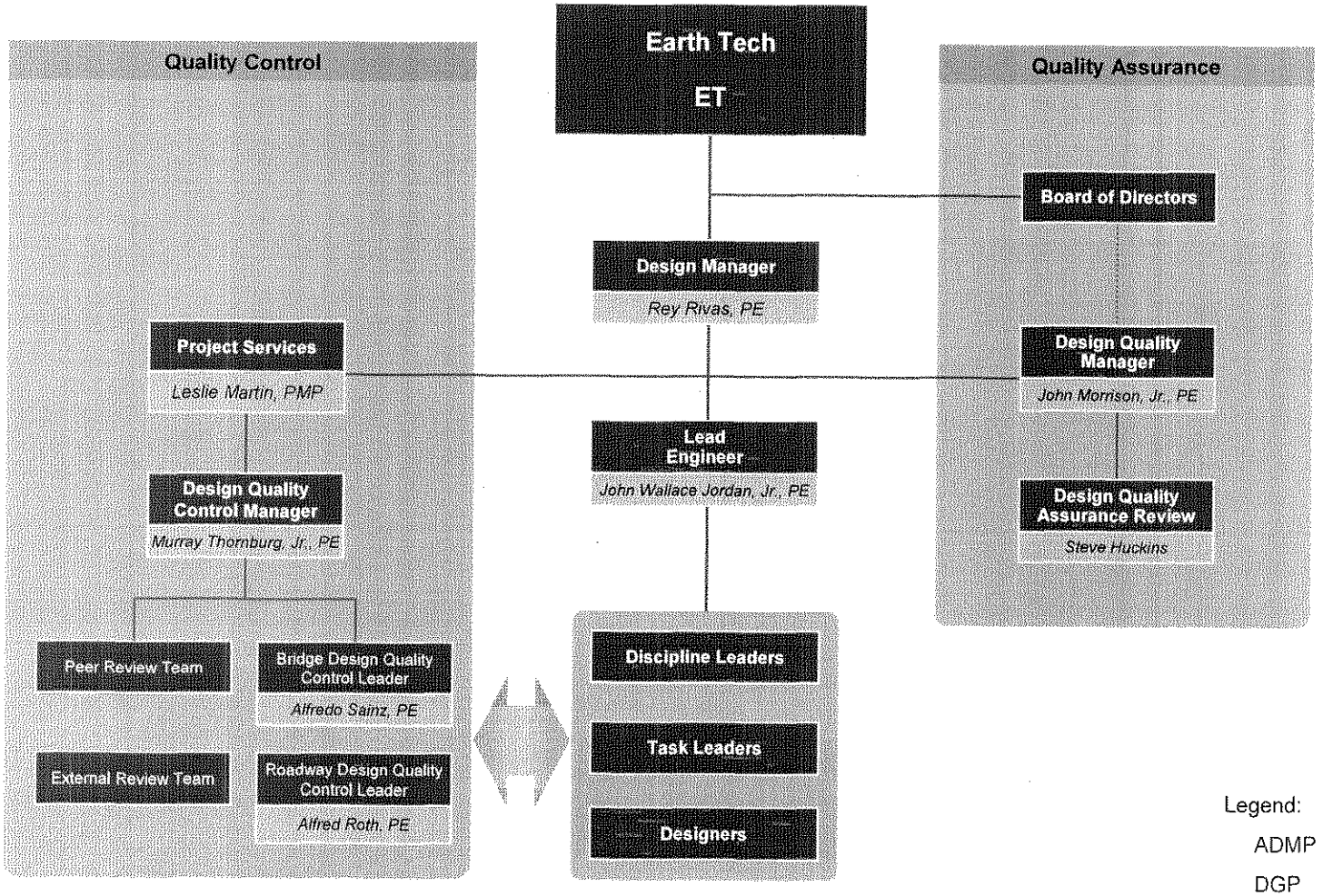
Note: 1. Position applicable during construction period only.

2. ADMP organization reflects Concessionaire role and O&M responsibility.

Appendix 1.2b DGP Quality Organization Chart (Construction)



Appendix 1.2c ET Quality Organization Chart (Design)



EarthTech

Years of Experience

30

Areas of Expertise

Extensive experience in large-scale transportation projects, urban and rural highway design, including horizontal alignment, pavement and drainage design, utility relocations and project controls.

Education

BS, Civil Engineering, Virginia Polytechnic Institute and State University, 2000

Registrations

Professional Engineer, Florida, #24812, 1981

Professional Engineer, Texas, #86737, 2000

Languages

English

John Morrison, Jr. PE

DESIGN QUALITY MANAGER

Experience Profile

Mr. Morrison has more than 30 years of experience in civil engineering including urban and rural highway design (vertical and horizontal alignment, pavement design, drainage system design, stormwater management system design, utility relocations) and water and wastewater design. Experience includes extensive hydrology and hydraulics for rivers, bridges, and large watersheds. For more than 18 years, Mr. Morrison has served at a department head level or above with responsibility for budget, quality control, client management and scheduling for various engineering programs including 13 years of program management experience.

Project Experience

General Engineering Consulting Contract, Florida (FDOT - District 2). Program Manager for as-needed engineering, architectural, survey/mapping, management, and administrative services to assist in completion of projects within the work program for District 2 and support operation, maintenance, and construction of the state highway system.

Florida's Turnpike Enterprise, Florida (FDOT). District drainage engineer and assistant district design engineer on the General Engineering Consultant staff. Managed the district design staff of roadway, drainage, structures, geotechnical, and architectural design engineers, and plans review. Also managed the project management staff. Total work program for Florida's Turnpike was approximately $400 million annually for this period.

Suncoast Parkway, Central Florida (FDOT - Florida's Turnpike District). Prepared the drainage concepts and coordinated with the environmental agencies (SWFWMD, USACOE, FG&FC, USF&WS) for the Suncoast Parkway, a new 44-mile-long 6-lane tollway in west Central Florida. The project crossed three rivers and several wetlands, all of which were highly environmentally sensitive. Developed a design for flood plain compensation that saved more than 700 acres of wetlands.

SH 45 Section 4B, Austin, Texas, (Texas Tollway Authority). Project Principal for a section of a $76 million elevated tollway for which the construction plans were completed in six months, requiring coordination of the efforts of 12 offices and 132 personnel.

Osceola Parkway, Central Florida, (Osceola County). Chief Drainage Engineer for the general engineering consultant for the design of a new 13-mile-long 6-lane tollway, which crossed two major flow ways and several wetlands, all of which were highly environmentally sensitive. The work included the coordination with and preparation of all environmental permits for the project. Also established the project alignment for the portions of the project affecting wetlands.

Fuller Warren Bridge (I-95), Jacksonville, Florida (FDOT- District 2). Chief Drainage Engineer responsible for managing the preparation of the bridge hydraulics report for the I-95 bridge over the St. Johns River. This report analyzed the tidal and hurricane effects to establish design flows, velocities, and flood stages for a major shipping resource.

SR 20 Reconstruction and Widening, Florida, (FDOT - District 3). Chief Drainage Engineer for the design of the reconstruction and widening of SR 20 over the Apalachicola River, which has a 100-year flow of 245,000 cubic ft. per second. The work included the preparation of the bridge hydraulics report that established stages and velocities for this waterway and designing the roadway geometry.

I-95/SR 528 Interchange, Florida, (FDOT - District 5). Chief Drainage Engineer for the design of the reconstruction of the interchange.

University Boulevard Widening, Orange County, Florida (Orange County). Project Manager and Project Engineer for design of the widening of 12 miles of 2-lane rural collector to a 6-lane urban arterial from SR 436 to Alafaya Trail. This project included the innovative use of wetlands for direct stormwater treatment.

Kimley-Horn and Associates, Inc.

Murray Thornburg, Jr., PE

DESIGN QUALITY CONTROL MANAGER

Years of Experience

30

Areas of Expertise

Extensive planning and design experience; Supervision of transportation engineers in the design of roadway projects, traffic, highway location design reports, and bridge design and interstate improvements; Project Management expert.

Education

B.S., Civil Engineering, North Carolina State University, 1970

FDOT Advanced Traffic Control Certification

Registrations

Professional Engineer, Civil, Florida, #15819, 1975

Professional Engineer, Civil, North Carolina, #8873, 1979

Professional Engineer, Civil, South Carolina, #7555, 1979

Languages

English

Experience Profile

Mr. Thornburg has over 30 years of planning and design experience. He supervises transportation engineers in the design of urban and rural roadway projects, traffic, highway location design reports, and bridge design and interstate improvements. He has extensive experience in project management, including budgeting, scheduling, and quality control/quality assurance. Mr. Thornburg served as a Design Engineer for FDOT's District 4 for six years.

Project Experience

I-595/US 1 Interchange, Broward County, Florida, (FDOT District 4). Project Manager and chief designer for northern portion of this directional interchange located in Broward County. This interchange is the eastern terminus of I-595 and was completed under three separate construction contracts. This design effort included the relocation of US 1 and the FEC Railroad in order to make room for the runway extension at the Fort Lauderdale/Hollywood Airport.

Royal Park Bridge, Palm Beach County, Florida, (FDOT - District 4). Performed QC/QA on the roadway and approaches for the bascule bridge replacement over the intracoastal waterway. Services included roadway plans, traffic operation plans, and landscaping plans.

Skypass Bridge, Port of Palm Beach, Florida (FDOT District - 4). Performed QC/QA for a 1,900 ft. long concrete bridge and approaches that elevates SR 5/US 1 over the Port of Palm Beach. The contract plans were prepared in eight months.

SR 710/Northlake Boulevard Interchange PD&E Study, Palm Beach County, (FDOT Turnpike District). Served as QC/QA advisor in the preliminary roadway and bridge design, wetland and plant identification, and threatened and endangered species studies for a study to develop interchange alternatives and to evaluate the social, economic, and environmental effects of a new Turnpike interchange in Palm Beach County. A toll plaza is also proposed on a connector road between the new interchange ramps and the future Jog Road extension.

I-4 Widening from South of Kirkman Road to South of Orange Blossom Trail, Orange County, Florida, (FDOT - District 5). Served as Project Manager for the reconstruction of approximately 5.3 miles of the existing six-lane expressway to six general use lanes plus 2 special use lanes. In addition, existing structures, interchange ramps, and side roads will be modified to accommodate the proposed section. Services include 60% roadway plans, BDR's, and traffic operations plans. Project will go to design-build. The project also includes the design of two interchanges.

I-95 HOV Lanes from Gateway Boulevard to 6th Avenue South, Palm Beach County, Florida, (FDOT - District 4). Project Manager for a three-mile interstate widening project on I-95. Services included survey, bridge structure plans, retaining wall plans, roadway plans, traffic operations plans, landscaping plans, and all permitting.

I-95 HOV Lanes Design from South Northlake Boulevard to PGA Boulevard, Florida, (FDOT District 4). Project Manager for interstate widening project on I-95. Services include survey, bridge structure plans, retaining walls plans, roadway plans, traffic operation plans, and landscaping plans. Project went to design build at 90% completion.

Gateway Boulevard/I-95 Interchange, Palm Beach County, Florida, (FDOT - District 4). Project Manager and chief designer of this diamond interchange. Project was designed so that right-of-way acquisition was not necessary. All ramps have double reinforced earth retaining walls and are designed to accommodate future I-95 lanes. This $14 million project included a full PD&E study and emphasized traffic management on I-95.

I-75/Palmetto Expressway Interchange, Miami-Dade County, Florida, (FDOT - District 6). Project Manager and Chief Designer for this directional interchange in Dade County. This interchange is the southern terminus of I-75 and includes nine bridges with several reinforced earth retaining walls. Since alternates (each requiring different construction methods) were designed for several bridges, alternate traffic control plans were also prepared to accommodate traffic management on SR 826.

I-295 Widening and Improvements, Jacksonville, Florida, (FDOT - District 2). Provided quality control/quality assurance for this project that involves widening 19 miles of roadway. We have completed the design of triple left-turn lanes from the westbound I-295/Blanding exit ramp onto southbound Blanding, one of the first such installations in the state. On the eastbound I-295/Blanding exit ramp, we've designed quadruple right-turn lanes (with a separator) onto southbound Blanding to accommodate the projected traffic onto the roadway. Due to the extensive pavement replacement on the mainline I-295 and exit ramps, drainage will be an issue that needs to be carefully managed during construction.

SR 80 Design West, West Palm Beach, Florida, (FDOT - District Four). Project Manager for team providing the complex engineering design services for SR 80 from west of Haverhill Road to East of Kirk Road. The project was designed with eight lanes and a grade-separated interchange at Military Trail and Haverhill Road. Program included five bridges with retaining walls and a 2,500-ft. bulkhead along the C-51 Canal.

SR 80 Design East, West Palm Beach, Florida, (FDOT - District 4). Project Manager for interchange at I-95. Project included the bridge replacements over the Stub Canal/ESX Railroad and I-95. Project also included retaining walls and 4,000 ft. of HOV lanes on I-95.

Florida's Turnpike 12-Bridge Replacement, Palm Beach and Broward Counties, FDOT Turnpike District. Project Manager in charge of the development of two sets of plans. The first project, located in Palm Beach County, consisted of the removal and replacement of 8 existing bridges with pipe culverts at three locations and design of a new bridge at one location. The second project, located in Martin County, consisted of the removal and replacement of four existing bridges with pipe culverts. The scope of work included roadway surveys, geotechnical surveys, roadway plans, traffic operations plans, and traffic control plans.

CORZO CASTELLA CARBALLO THOMPSON SALMAN

Years of Experience

45

Areas of Expertise

Extensive experience in large scale transportation projects entailing design and construction of steel and longitudinally post-tensioned concrete bridge projects.

Education

M.S., Structural Engineering, University of Havana, 1959

B.S., Civil Engineering, University of Havana, 1956

Registrations

Professional Engineer, Florida, # 13877

Professional Engineer, Virginia, # 4437

Professional Engineer, Maryland, # 10408

Languages

English, Spanish

Alfredo Sainz, PE

BRIDGE DESIGN QUALITY CONTROL MANAGER

Experience Profile

With over 45 years of experience, Mr. Sainz has a long and illustrious career as a Senior Bridge Engineer. He has participated and/or directed the design of numerous major and/or complex steel and longitudinally post-tensioned concrete bridge projects.

Project Experience

95 Express (I-95 Managed Lanes), Miami-Dade County, Florida from SR-112 to Golden Glades (Design-Build-Finance) (FDOT - District 6). Quality Control Engineer for the review of several bridge widening along I-95 to accommodate the new managed lanes and the partial reconstruction of SR 112 Directional Flyover Ramps consisting of the replacement of four concrete spans along each ramp with a two span continuous steel plate girder system and the jacking of the ramp approach spans to accommodate the necessary vertical clearance (over I-95) and required I-95 mainline bridge widening below. These modifications also included phased construction along the ramps and modification of various piers to convert them to either single span or cantilevered post-tensioned structures.

Congress Avenue (SR-807), Palm Beach County, Florida. Project Director, Chief Structural Engineer and Engineer of Record for the design of 0.64 miles of six-lane divided urban road. The project included 700 ft. Twin pre-stressed bridges over the access road to the Port of Palm Beach's property, double tracks of the CSXT railroad, and 6,500 ft. of MSE walls.

SR-78 over Lemkin Creek, Okeechobee County, Florida (FDOT - District 1). Chief Bridge Engineer and Engineer of Record for the Bridge Development Report (B.D.R.) and final design of the two lanes, seven span continuous superstructure, 285 ft. long, cast-in-place concrete slab supported on pre-stressed pile bents.

Blue Heron Blvd. from I-95 to Avenue "S", Palm Beach County, Florida. Project Director, Chief Bridge Engineer and Engineer of Record for widening 0.75 miles of divided highway from four to six lanes. The project included the design of three lanes, 165 ft. long, twin bridges of the pre-stressed solid slabs (transversely post-tensioned) type, and the preparation of permit sketches for SFWMD.

45th Street Crossing, Palm Beach County, Florida, (FDOT). Engineer of Record in charge of developing preliminaries, BDR, and final design for the 45th Street crossing the Ronald Reagan Turnpike. The structure consists of four skewed (>30deg) spans, 134'- 130 ft. – 126 ft. – 126 ft. for an overall length of 486 ft. and total square footage of 62,000 sf, with seven Bulb-T's 72 carrying each of the eastbound and westbound superstructure, supported by framed piers on 18 in. sq. pre-stressed concrete piles.

Donald Ross Road Bridge, Palm Beach County, Florida. Project Manager for the design of the Donald Ross Road Bridge over the Inter-coastal Waterway. The $34 million project included 2 miles of six lane divided roadway, 1,500 ft. of fixed approach bridges (AASHTO Type VI pre-stressed girders 136ft. spans), and a single leaf movable bridge. The fixed approaches, supported on hammer-head piers founded on 24 in. prestressed piles, have a deck surface areas of 132,000 square feet. Mr. Sainz was responsible for the design and is also the Engineer of Record for the fixed approaches.

I-95 Highway Sign Inspection, Broward and Palm Beach Counties, (FDOT). Project Director, Chief Structural Engineer and Engineer of Record for the biannual inspection of all overhead and cantilever sign support structures located on I-95 and intersecting roads throughout Broward and Palm Beach Counties.

Hood Road over I-95, Palm Beach County, Florida. Retained by the Construction Contractor to determine the post-tensioning requirements for the utilization of stay-in-place forms in the structure constructed for FDOT District 4. The structure consists of two 140 ft. continuous spans for an overall length of 280 ft. The bridge is built in two phases. Phase I – Places temporary supports centered between the three permanent piers and two segmental AASHTO Type V girders are erected on each 140 ft. span, the superstructure is completed. Phase II – Introduces the post-tensioning supporting all service loads. Wet joints are closed and the temporary shoring is removed. The investigation concluded to increase the number of ½ inch diameter S.R. 270K strands from 65 to 72 to compensate for the additional weight introduced by the utilization of the S.I.P. forms. Alfredo Sainz also served as Engineer of Record and was responsible for the overall design of the bridge. Additionally, he designed the girders and deck and performed QA on the remaining structural components.

Complex Bridges Load Rating, Florida, (FDOT - District 6). Project Manager and Engineer of Record responsible for the load rating of concrete segmental box girder bridges throughout FDOT District 6. Bridges included: US –1 over Long Key and Niles channel in Monroe County; Turnpike Flyover to I-75 north (Ramp 1), and Ramps A, B.C,D and E at the SR-826/I-75 Interchange in Miami-Dade County.

I-395, Miami-Dade County, Florida, (FDOT - District 6). Schematic design and cost estimate of two alternatives for the proposed construction of a signature bridge. The alternatives consisted of twin bridges carrying three lanes of traffic and 12 ft. shoulders each. One alternative proposes a two towers cable-stayed bridge, connected by pre-stressed floor beams, with a central span of 1,000ft. and flanking spans of 500ft. for an overall length of 2,000'. The other alternative considered two cable-stayed, pre-cast segmental or tubular steel arches, each bridge with 832ft. central span and 124ft. flanking spans for an overall length of 1080'.

Preservation of Historic Bridges, Miami-Dade County, (FDOT - District 6). Project Director and Chief Bridge Engineer for the rehabilitation and preservation of two historic bridges located over the Miami River Canal connecting the Cities of Miami Springs and Hialeah. The swing span (70'- 35') Warren pony truss built in 1924, located in N.W. 54th Street; and the 133 ft. simple span (vertical lift) Parker truss built in 1928, located in East 1st Avenue included public information meetings with the Historic Boards of Miami Springs, Hialeah, and Miami-Dade County, and studies for a new independent pedestrian bridge to be constructed in the vicinity of the historic bridges. Both structures refurbished steel decks and other key elements and a new pedestrian bridge over the Miami River Canal was constructed in the vicinity.

GREENHORNE & O'MARA
CONSULTING ENGINEERS

Years of Experience

38

Areas of Expertise

Extensive experience in large scale transportation projects entailing design and construction; Project Management expert, quality assurance, and preparation of various reporting documents including manuals

Education

AA in Engineering, Miami-Dade Community College, 1978

Civil Engineering, Florida International University

Registrations

Professional Engineer, Civil, Florida, #40224

Languages

English

Alfred Roth, PE

ROADWAY DESIGN QUALITY CONTROL MANAGER

Experience Profile

Mr. Roth has more than 38 years of experience in transportation design and construction and has provided engineering services for a multitude of projects for the FDOT and various agencies in the engineering industry. He has a plethora of knowledge in project management, quality assurance and offers designs and practical solutions to problems in accordance with the latest standards, memos, and plans preparation manual.

Al was instrumental in building the design & CE&I capabilities of Greenhorne & O'Mara (G&O) in Florida and is currently the Senior Vice President and Market Leader for G&O's Southeast Transportation region. He is also a member of G&O's Executive Council. Mr. Roth will be giving up his Market Leader and Executive Council positions in order to become part of this important I-595 P3 project. Mr. Roth's leadership role with G&O gives him access to whatever resources that will be necessary to accomplish this project successfully for District Four.

Mr. Roth spent 15 years with the FDOT where he worked in both design and construction. He worked both as a Project Manager and Project Director on numerous key projects for the FDOT and other public sector clients in design, construction, bridge inspection and has managed major PD&E Studies in Florida.

Project Experience

I-95 from South of Donald Ross Road to south of Indian Town Road, (FDOT - District 4). Principal In Charge/ Chief Engineer/Project Director on the 4.4-mile stretch of I-95 that includes roadway geometrics, field survey, drainage, permitting, maintenance of traffic, signing and pavement markings, signalization, lighting, utility relocation, landscaping and irrigation. The roadway is being widened from 6 lanes to 10 lanes and the cross slope will be corrected on the existing roadway. This involved variable depth milling, overbuild and generating a profile grade to insure readability. Four ramps will also be widened to become dual lane ramps at the SR706 Interchange.

I-95 HOV Design from north of Palm Beach Lakes Boulevard to north of Blue Heron Boulevard, Palm Beach County, Florida, (FDOT - District 4). Principal In Charge/Chief Engineer & Quality Assurance Leader for a 4.6 mile I-95 HOV project including the reconstruction of two interchanges, extension of three box culverts, design of multiple structures at two interchanges and widening of the bridge over the railroad, widening and resurfacing of mainline, drainage, signing and pavement markings, signalization, lighting, landscaping and Public Involvement.

I-95 HOV Design from Congress Avenue to north of Palm Beach Lakes Boulevard, Palm Beach County, Florida, (FDOT, District 4). Principal In Charge/Chief Engineer & Quality Assurance Leader for a 1.6 mile I-95 HOV project including the reconstruction of one interchange, design of multiple structures at Palm Bch Lakes Blvd interchange, widening and resurfacing of mainline, drainage, signing and pavement markings, signalization, lighting, landscaping and public involvement.

I-95 Interchange Modifications, Palm Beach County, Florida, (FDOT, District 4). Project Director for modifications to ramps and cross streets including roadway, bridge, approach slabs, signalization, lighting and signing & pavement markings at multiple following locations.

I-95 Cross Streets (Stirling Road and Sheridan Street), Broward County, Florida, (FDOT). Principal-In-Charge & Project Director for alignment revisions, vertical grade modifications, drainage modifications, striping modifications, and signing.

I-95 Signing from Broward/Dade County Line to Broward/Palm Beach County Line, (FDOT). Project Director for local signing required for all of Broward County. Also included sign spacing calculation, support calculations and sign placement for corridor.

Port St. Lucie Interchange, St. Lucie County, Florida. Principal-in-Charge for the design of roadway improvements to the Port St. Lucie Boulevard interchange with Florida's Turnpike. Work included the realignment of ramps and entrance road to provide better traffic flow into the service plaza, drainage improvements, lighting, signalization and maintenance of traffic.

Sunrise Boulevard (SR838) Grade Separation, Broward County, Florida, (FDOT). Principal-in-Charge for the design and preparation of construction plans for the Sunrise Boulevard Grade Separation at SR 7 and Sunrise Boulevard. This project included the design of three bridges and the roadway at Sunrise Boulevard and on US 441. Also included signing and pavement marking, signalization maintenance of traffic and landscaping plans.

Lake Worth Interchange at Florida's Turnpike, Lake Worth, Florida (FDOT - Turnpike). Project Director/Principal In Charge for the $7.5 million reconstruction of the Lake Worth Interchange, upgraded Turnpike from two-lane divided to three-lane divided with barrier down the median. Work included removal and construction of bridge on Lake Worth Road as well as the removal of one bridge over the Lake Worth Canal, which was replaced with 84-in. concrete pipe culvert. Another bridge on Lake Worth Road was removed and replaced with a single-span, pour-in-place concrete bridge. Lake Worth Road was reconstructed from two-lane divided with median divided to three-lane concrete median divided.

S.R.61 (Thomasville Rd. Fly-Over)/S.R.8 (I-10), Tallahassee, Florida (FDOT). Project Director/Principal In Charge responsible for complete reconstruction of urban, residential and rural roadway facilities including drainage, maintenance of traffic, sidewalk, curb and gutter, signing, lighting, signalization, and permanent markings. Also includes new construction of a fly-over bridge.

Polk County Parkway - Toll Plazas. Polk County, Florida. Principal-in-Charge/Project Director responsible for this project, which included the complete construction of 13 toll plaza facilities on the Polk Parkway. The project also included all aspects of construction of building construction and tunnels along with the approach roadways.

FINLEY Engineering Group, Inc.

Years of Experience

14

Areas of Expertise

Extensive experience in large-scale transportation projects.

Education

B.S. Civil Engineering, University of Florida, 1992

Masters of Engineering, University of Florida, 1993

Registrations

NCEES Certification

Professional Engineer, Civil, Florida, #52063

Languages

English

Jerry Pfuntner, PE

CAT 2 BRIDGE PEER REVIEWER

Experience Profile

Uniquely diverse background in the field of bridge engineering, have performed design, construction engineering, field engineering, bridge inspection and general consultant roles. Bridge structure types designed include flat slab, prestressed I-girder, steel girder, precast segmental balanced cantilever, cast-in-place segmental, precast span-x-span and cable stayed bridges. Notable design experience includes ship impact analysis, finite element analysis, seismic analysis, strut-and-tie modeling and time dependent analysis.

Project Experience

Ringling Causeway, Sarasota, Florida (FDOT). Bridge Engineer responsible for performing longitudinal construction analysis of the 11-span, 940m long (300ft typical span) precast segmental bridge deck. Temporary steel tower design, designed retrofit external post-tensioning system, performed independent peer review design calculations for the retrofit system. On-site resident engineer for the retrofit system installation.

I-4 Pedestrian Overpass, Seminole County, Florida (FDOT). Lead Analysis Engineer/Design Engineer for performing the structural analysis for the structural steel, cable stayed pedestrian bridge alternate. Provided design assistance with development of stay anchorage and structural steel details. Performed peer review of structural steel superstructure design.

25th Street, Miami, Florida (FDOT). As Area Structures Engineer, performed Design Review of the curved steel plate girder superstructure and steel box girder bent caps. Performed independent design verification of the superstructure design using MDX software. Performed independent design calculations verifying the adequacy of the steel box girder bent cap designs. Produced conceptual detailing and design modifications for the EOR to modify the steel box cap designs.

MIC/MTAR, Miami, Florida (FDOT). Design Engineer for performing calculations for this curved steel box girder bridge alternative design (approx. 140ft span) with a rolled section sub-girder system. Performed construction stage calculations to include stability during erection of the steel tub sections. Designed structural box section, cross bracing, lateral, end diaphragms and stiffeners in accordance with the AASHTO curved girder guide specifications. Designed a drilled shaft and column substructure system.

Paradise Island Bridge, Bahamas (Ministry of the Bahamas). Bridge Engineer responsible for general consultant services for this design-build project. As part of those services, performed an independent design review calculations for all structural elements including column and footing designs (with ship impact), typical span beam designs (modified Type VI) and the haunched, drop-in main span spliced I-girders.

Tren Urbano, San Juan, Puerto Rico (Puerto Rico DOT). Project Engineer for the design of a cast-in-place continuous concrete box girder design alternate for this light rail guideway project. Spans were two and three span continuous with span lengths from 75 to 140 ft.

Jewfish Creek, Florida (FDOT). Area Structures Engineer responsible for performing design review of the continuous, spliced, post-tensioned FBT 78 main span girders for this D/B project (approx. 200 ft main span). Reviewed splice details, post-tensioning layouts and overall design review for the project.

Bangkok Skytrain, Bangkok, Thailand (Italian-Thai Development,). Bridge Designer for performing typical segment and pier segment design, longitudinal post-tensioning design as well as post-tensioned substructure design of cantilever piers and straddle bents. Project consisted of precast segmental span-x-span design with span lengths varying from 100 to 120 ft.

Bang Na-Bang Pli-Bang Pakong Expressway, Bangkok, Thailand (Expressway and Transit Authority of Thailand). As Bridge Engineer performed the final design of all of the typical pier segments for the mainline superstructure for this design-build mega-project which includes over 50k of a six lane elevated, precast segmental superstructure, toll facilities and complex interchanges. Performed the finite element analysis for the typical segments of the mainline superstructure segments consisting of a single cell box girder 27.2m wide with interior struts. Designed a portal frame substructure on drilled shaft foundations for an elevated U-turn.

Woodrow Wilson Replacement Bridge, Maryland (Maryland State Highway Administration). Design Engineer for the substructure of this monumental project. The substructure consists of a precast segmental tied-arch design. Determined post-tensioning requirements for construction and final load conditions, designed typical segments and performed the strut-and-tie design for the 'knuckle' region. This design incorporates segmental bridge technology into the substructure for the structural steel deck. Substructure design also included seismic analysis and ship impact design.

Clearwater Cable Stay Pedestrian Bridge, Clearwater, Florida (FDOT). Area Structures Engineer responsible for performing design review of this concrete cable stayed pedestrian bridge. Performed independent design calculations verifying constructibility of the structure, confirmed stay forces, developed conceptual design details modifying post-tensioning details, entirely modifying the connection from superstructure to abutment design/details, stay stressing resequencing to allow for constructability.

Intercounty Connector Bridge over Rock Creek, Maryland (Maryland State Highway Administration). As Lead Engineer, designed a precast concrete segmental arch substructure with precast I-girder superstructure for this design-build project proposal. This 300 ft long bridge was the "signature" structure for this project and featured four arches as the substructure system over an environmentally sensitive creekbed. Performed the precast segment design, post-tensioning layout/design, designed the construction sequence and analysis calculations, design the precast bulb-tee girders and concrete deck slab.

Sunshine Skyway Approach Structures, Florida (FDOT). As leader of a bridge inspection team, directed the visual inspection of precast I-girder approach bridge structures super and substructures. Produced the work plans for accomplishing the inspection, ensured proper safety equipment and procedures are being used. Assisted with completion of the inspection documentation and report.

Evans Crary Sr. Bridge, Stuart, Florida (FDOT). Lead Bridge Engineer responsible for performing the load rating for this precast segmental bridge constructed using the span-x-span erection method. Assembled the final segment casting data, post-tensioning records and erection data for input into a time dependent structural analysis model to produce the final as-constructed load rating of the bridge structure.

Shannon Snyder, PE

CEI SENIOR PROJECT ENGINEER:

Experience Profile

Ms. Snyder is the Director of Construction Engineering and Inspection (CEI) Division at CGA. She has over 19 years of experience in the South Florida CEI industry on FDOT District 4, District 6 and Turnpike Enterprise projects. She has an excellent reputation and relationship with clients, and is well known throughout the industry as a knowledgeable, hard-working, ethical, and experienced Engineer. Her current responsibilities include constructability review of plan sets, business development, and scope of services/contract negotiations

Years of Experience

19

Areas of Expertise

Extensive local experience in construction engineering, inspections and quality control for large-scale transportation projects.

Education

B.S., Civil Engineering, University of Miami, 1996

M.S., Construction Management, Florida International University, Attending

Registrations

Professional Engineer, Civil, Florida, #57019

Languages

English

Project Experience

Tri-Rail New River, Design-build Bridge, Broward County, Florida (Joint Project Agreement with South Florida Rail Transit Authority). Senior Program Manager, served as an FDOT representative for this $70 million project that included the construction of a high level railroad bridge with 10-foot diameter non-redundant drilled shaft foundations. The foundation design was highly disputed between the Design-Build Team's Geotechnical Engineer and the State Structures Design Office. FDOT requested Shannon's presence in an attempt to resolve numerous claim issues, re-establish the relationship with the Design-Build Team, manage SFRTA CEI staff and review/negotiate Claim Notices.

Emergency Contract for the Existing New River Bascule Bridge, Broward County, Florida (FDOT D4). Senior Project Engineer for this $3.5 million project. During the construction of the above New River Bridge, FDOT inspectors discovered major deterioration of the existing bascule bridge timber piling. An emergency contract was let to install a crutch bent system utilizing 10-inch minipiles, in order to stabilize the existing bridge and ensure its integrity during the installation of the 10-foot diameter drilled shafts for the new bridge. Shannon was responsible for the invitation to bid and final selection of the contractor, as well as the contract negotiation, project administration during construction and final close out documentation.

Westbound 836 Design-Build, Miami-Dade County, Florida, (Miami-Dade Expressway Authority). Quality Control Engineer on this $37 million project that included construction of four bridges with spread footing foundations, Florida U Beams and curved structural steel box girders with post tensioned diaphragm superstructures spanning the Florida Turnpike. Shannon was responsible for the creation and implementation of the Quality Control Program working as the CEI under the Design-Build Team.

SL 15 Mitigation Island Design-Build Project, St. Lucie County, Florida (FDOT D4). Senior Project Engineer for this $3.5 million project that included the removal of exotic vegetation, excavation and transfer of 86,000 CY of fill, planting of native mangroves and creation of a sea grass habitat on a 10.5 acre island in the Indian River, north of Fort Pierce. This project fulfills the mitigation requirements for impacts associated with the

construction of two major bridges. Shannon was responsible for the CEI Scope of Services working under the Contractor, Misener Marine Construction. Implemented of the Quality Control Program and submitted a Final Estimate to FDOT with zero procedural errors.

Thomas B. Manuel Design-Build High Level Bridge, Martin County, Florida, (FDOT Turnpike Enterprise). Senior Project Engineer for this $35 million project that included construction of a high level fixed span bridge with Florida Bulb Tee beams over the St. Lucie Canal. As the Turnpike's first major Design-Build project, this contract included numerous innovative administration features such as the Pilot Program for Contractor Quality Control material testing specifications, the implementation of the Materials Model and the use of the Site Manager Program for daily reports and monthly estimates. Due to the success of the first year of construction and the open relationship between the Contractor, CEI and Owner, able to negotiate and executed an $8.4M Supplemental Agreement for additional design-build services including the completion of a Feasibility Study and subsequent scope of work for the removal and replacement of the superstructure on the existing structural steel bridge.

Marathon Construction Office, Monroe County, Florida, (FDOT D6). Project Office Engineer for this project that included eight miles of bike path construction traversing six historic bridges on Big Coppitt Key and Marathon Key as well as the Knight's Key beautification project.

Biscayne VII Grade Separation Project, Miami-Dade County, Florida, (FDOT D6). Project Office Engineer for this $22 million project that included drilled shaft foundation, structural steel superstructure bridge construction, box culvert extension, lighting, signing, signalization, and pavement markings.

I-95 Pavement Rehab and Bridge Widening Project, Miami-Dade County, Florida, (FDOT D6). Project Office Engineer for this $23 million project that included widening of four bridges, removal and replacement of concrete pavement, joint cleaning and resealing, pavement grinding with profilograph acceptance, lighting and pavement markings for 13 miles of urban 10-lane expressway.

Pavement Rehab and Bridge Widening, Miami-Dade County, Florida, (FDOT D4). Project Office Engineer for this $6 million project that included the rehabilitation of an existing bascule bridge including exothermic deck installation, trunnion assembly, counterweight construction, and control house reconstruction including structural, electrical, mechanical, and architectural elements.

Biscayne IV Reconstruction of Biscayne Boulevard from N.E. 163rd Street to N.E. 187th Street, Miami-Dade County, Florida, (FDOT D6). Office Engineer for this $15 million project that included reconstruction of 2 miles of 8 lane urban highway, construction of two AASHTO beam bridges, channel excavation, retaining wall, lighting, signalization, signing and pavement markings.

MacArthur Causeway Bridge, Miami-Dade County, Florida (FDOT D6). Senior Bridge Inspector for this $31 million project that included construction of a high level, fixed span bridge for I-395 over the Intracoastal Waterway including 18 spans of post-tensioned Florida Bulb T precast concrete girders on hammerhead piers resting on 136 drilled shaft foundations ranging in size from 42" to 84" in diameter.

Seminole County Expressway Aloma Avenue Interchange, Seminole County, Florida, (FDOT Turnpike Enterprise). Senior Bridge Inspector/Office Engineer for this $12 million project that included construction of five AASHTO girder bridges, installation of 18" precast concrete piles, reinforced earthwalls, and 2 miles of four lane divided highway, lighting, striping and signage. Inspected pile installations, sub and superstructure.

Port of Miami Bridge, Miami-Dade County, Florida, (FDOT D6). Bridge Inspector for this $36 million project that included construction of a high level, fixed span concrete segmental bridge. Performed all underwater bridge inspection.

Leonardo Offredi, PE

CEI PROJECT ADMINISTRATOR

Years of Experience

8

Areas of Expertise

Extensive experience in large-scale construction transportation projects including project management and inspection.

Education

MBA, Nova Southeastern University, 2003

B.S., Civil Engineering, Florida International University, 2001

Registrations

Professional Engineer, Civil, Florida, #64042

Languages

English

Experience Profile

Mr. Offredi has over 8 years of experience in the South Florida Construction Engineering and Inspection industry. He has proven himself to be an extremely resourceful and capable Engineer with the ability to successfully manage multiple projects and assignments, including roadway and bridge construction, high speed corridor improvements and urban reconstruction projects. Project Experience

SR I-595/SR-84 Slip Ramp Construction / I-75 Milling and Resurfacing / Sawgrass Interchange Lighting Project, Broward County, Florida, (FDOT). Project Engineer for this complex $33M contract combines three different projects which include the construction of two bridges, the milling and resurfacing of over 90 lane miles on I-75 and the installation of lighting in the I-75/I-595/Sawgrass interchange. This project featured complicated MOT installations along a heavily traveled high-speed corridor that included ten lanes of traffic with eleven ramps connecting to I-595 and SR-84. Reviewed and negotiated a Value Engineering Change Proposal for this project which saved the Department and the contractor $240,000.

The SR-84 Slip Ramp Construction features the construction of a 19 bent slip ramp bridge over water with 76 driven precast concrete piles, as well as a single span bridge superstructure of a one span bridge will serve as a pilot project in order to evaluate a new steel fiber reinforced concrete mix. The I-75 project includes milling and resurfacing I-75 between Sheridan Street and the I-75/I-595 interchange. Additional construction activities include roadway lighting, guardrail, cantilever and truss sign installations and TMS installations. The interchange lighting project includes the installation of two hundred fifty eight new light poles in the vicinity of the I-75/Sawgrass interchange.

I-95 Milling and Resurfacing between Dania Cutoff Canal and South Fork North New River Bridge, Broward County, Florida (FDOT). Project Engineer for the reconstruction of I-95 from Dania Cutoff Canal to south end of South Fork North River Bridge. This high speed corridor consisted of two main sections: one south of the I-95/I-595 interchange which has ten lanes and one section north of the interchange has eight lanes. In addition to milling and resurfacing, this project included guardrail replacement, minor reworking of ditches, desilting of drainage structures, new cantilever sign structure and landscaping. Responsibilities included assisting senior project engineer in all administrative duties involved in managing the project, review and approve contractor CPM schedules; track all shop drawings; process Field Supplemental Agreements and Supplemental Agreements; summarize inspector's daily reports for the engineer's weekly summaries; execute monthly payment estimates for the contractor and monthly progress reports; and maintain constant communication with the contractor and the department to ensure quality work is performed in the field.

SR 858/Hallandale Beach Blvd Reconstruction between Dixie Hwy and SR-5 (US-1), Broward County, (FDOT). Contract Support Specialist/ Project Engineer, for this Urban Reconstruction Project. His superior multi-tasking capabilities were evident in the submittal of a final estimate package to District 4 with zero procedural errors and a $0 Post Audit Review (PAR).

I-95 Milling and Resurfacing between Dania Cut-off Canal and Miami-Dade County Line, Broward County (FDOT). Senior Inspector on this project that included asphalt milling and resurfacing on a high-speed corridor including 6.2 miles of I-95 from the Miami-Dade County Line to the Dania Beach Cut-Off Canal. The roadway consisted of 10-lane divided highway and single-lane on and off ramps at six interchanges within the project corridor. These improvements included resurfacing of the mainline pavement, ramps, and crossroads at the following interchanges: Hallandale Beach Boulevard, Pembroke Road, Hollywood Boulevard, Stirling Road, Sheridan Street, and Griffin Road. These improvements also included signalization, reworking shoulders, guardrail replacement, desilting of drainage structures, and landscaping on I-95 as well as new sidewalks and landscaping at the interchanges and high mast lighting, sign and signalization installation utilizing drilled shaft foundations and directional bore installation methods and pavement marking placement, as well as construction of pile jackets in order to repair/strengthen the existing bridge foundation piling.

Various Projects, City of Sunny Isles Beach, Miami-Dade County. Senior Inspector for the following projects:

- Seawall Restoration Project – Project features included a seawall cap replacement including installation of deadmen. Verified project features were constructed in compliance with contract documents and drawings.
- Resident Parking Only Project – Project features included clearing & grubbing, earthwork and asphalt placement as well as sidewalk construction for new resident parking areas.
- Entrance Signs Project – Project features included the construction of two City entrance beautification areas, which included signs, landscaping and lighting installation.
- Atlantic Isles Drainage Project – Project features included the installation of a new Stormwater drainage system including structure and pipe installation, backfill operations and outfall construction for the Atlantic Isles Community.

Hallandale Bridge Repair/Fast Response Project, Broward County, (FDOT). Inspector for this project that includes the installation of plumbing within the existing bascule bridge, and landscaping and irrigation installation within the medians of SR-AIA north of Hallandale Beach Boulevard. In addition, over 3,000 lf of plumbing and three pumps were installed for this project. This project incorporated the installation of over 2,000 plants and 30 palm trees with associated irrigation in the medians of SR-AIA north of Hallandale Beach Boulevard.

Various Projects, Miami-Dade County (Nutting Engineers of Florida). Project Engineer responsible for the plan, schedule, and supervise geotechnical subsurface explorations and construction materials testing. Conduct field inspection projects and geotechnical exploration programs consisting of site location and preparation, foundation and piling installations, test pile loads, and classification of field/laboratory soil samples. Collect field data and maintain constant communication with clients to ensure quality work was performed in the field.

HNTB

Years of Experience

29

Areas of Expertise

Extensive civil and structural engineering experience in large-scale transportation projects. His expertise includes inspections and quality control aspects for cable-stayed and precast post tensioned bridges, and segmental construction.

Education

B.S., Civil Engineering, Tennessee Technological Institute, 1979

Registrations

Professional Engineer, Civil, Florida, # 34816

Languages

English

Gowen Dishman, PE

CEI DEPUTY PROJECT ADMINISTRATOR

Experience Profile

Mr. Dishman has over 29 years of experience in civil and structural engineering, 24 of which have been in the construction of complex, long-span bridges. For seven of the past ten years he has also been responsible of either the Construction Engineering and Inspection or Quality Control Aspects of cable-stayed and precast, post tensioned bridges. He is a founding member of the American Segmental Bridge Institute and serves on the Construction Practices Committee. This committee has just completed, edited and published the "Construction Practices Handbook for Segmental Concrete Bridges"; the first construction specific guideline for the segmental construction industry. He has served as a private consultant for contractor's such as Austin Bridge and Eby Construction, and for engineering firms such as Parsons Brinckerhoff Quade and Douglas, DMJM, and Tren Urbano. He is recognized as an authority on the construction of all types of segmental construction, including cast-in-place and precast balanced cantilever, and precast span by span.

Project Experience

Audubon Bridge, St. Francisville, Louisiana, (A joint Venture of Flatiron Construction and Granite Construction). Construction Quality Control Manager for this large design-build roadway and bridge project. The program consisted of constructing several conventional steel and concrete bridges and 7 miles of new roadway. The bridge across the Mississippi River consisted of a 1500 foot steel girder, cable stayed main span. The main span foundation is comprised of 21 – 8 foot diameter drilled shafts extending to a depth of -185 feet. As the CQCM for Audubon Bridge Constructors, he was responsible for developing the Construction Quality Control Plan and Quality System Procedures, QSP, which outline the verification of sampling and testing and documenting Quality Control of various construction processes. This included both steel and concrete structures, roadway and embankment operations and casting yard inspection.

US 82 over the Mississippi, Washington Co., MS/Chicot Co., Arkansas (Mississippi DOT). Provided both technical and administrative functions on this $245 million, 2,560-foot steel cable-stayed structure features a 1,378-foot main span. The structure's foundation consists of the first major open caissons to be installed on the Mississippi River in the past 20 years. HNTB provided the design for this cable-stayed structure and is currently providing construction engineering and inspection services, with anticipated completion in 2008.

17th Street Causeway, Fort Lauderdale, Florida (FDOT). Resident Engineer for this $70-million project consisting of a 210-foot bascule main span, 3,937 feet of precast concrete segmental box girders erected by the balance cantilever method, as well as roadway and waterway improvements. The project was constructed in phases that allowed traffic flow through the construction area in lieu of detours.

Tren Urbano, Carolina Extension, Puerto Rico Special Training Consultant in segmental construction techniques for Tren Urbano personnel. The training consisted of segmental precast and CIP, post-tensioning construction techniques and geometry control procedures. It also included the development and review of a quality assurance program for the segmental portions of this multi-billion dollar project.

Baytown Bridge, Houston, Texas, (TXDOT). Project Engineer/Project Manager for this $100-million project, consisting of twin cable-stayed, steel superstructures with concrete diamond-shaped pylons. The superstructure consists of steel girders, floor beams and precast concrete panels. The structure is 2,450 feet with a main span of 1,250 feet and a navigational clearance of 175 feet. The cable-stayed system is a fan configuration comprised of 192 stays in four planes. The stayed cables range in size from 20 to 61, 0.60-inch diameter strands. Mr. Dishman was hired by the contractor, Williams Brothers Construction, specifically to develop erection methods, design erection and access equipment and to develop and track the scheduling of the project. The interaction of the twin bridges due to various loading conditions during construction necessitated unique solutions to the engineering and construction of this signature structure.

Choctowhatchee Bay Bridge, Destin, Florida (Mid Bay Bridge Authority). Resident Engineer for this 42-foot-wide structure crossing the Choctowhatchee Bay and connecting Niceville to Destin, Florida. Four miles of segmental, precast box girders were built using the span-by-span method; the main span was erected using the progressive cantilever method. The project was financed with private funds and was completed in 25 months (five months ahead of schedule).

Jamestown Bridge, Rhode Island (Rhode Island Bridge and Turnpike Authority). Performed constructability review and assisted with the contractor's pre-qualifications for the re-bid. This structure carries Route 138 across the west passage of Narragansett Bay. Featured a 640-foot variable-depth main span with a 135-foot vertical clearance, constructed using cast-in-place, balanced cantilever method. The approach spans consist of 3,558 feet of precast, monolithic box girder and were lifted into place using strand and six post-tensioning jacks. After the contract was awarded to Atkinson-Kiewit Joint Venture, served as Assistant Project Manager for Perini Construction/Figg Engineers. Responsibilities included training Perini Personnel, developing inspection procedures, and reviewing construction methods.

Keys Bridges Improvement Projects, Florida Keys, Florida (FDOT). Provided construction engineering and inspection services for this project, which primarily involved expansion joint replacement and resetting bearings of the Long Key and Seven Mile bridges.

Sunshine Skyway Bridge, St. Petersburg, Florida (FDOT). Site Representative/Technical Supervisor at the precast yard in Port Manatee, FL during the construction of the new Sunshine Skyway Bridge across Tampa Bay. The design of this 8,860-ft bridge features a 1,200-ft cable-stayed main span with 550-ft side spans. The low level approaches consisted of 135-ft spans of precast, matched cast box girders erected with the span-by-span method. Duties included assisting FDOT with geometry control, review of contractor's shop drawings and casting procedures. After the start-up of the casting operation, assisted in the erection of the approach and main spans.

Red River Bridge, Boyce, Louisiana (LADODT). As the Design Engineer's Site Representative of this 1500' cast in place, variable depth, box girder. He was responsible for shop drawing reviews, geometry control of the cantilevers, and post-tensioning quality control. The bridge was erected by the balance cantilever method using form travelers. The longest span was 380'. Five cantilevers of this bridge were completed in 14 months.

1.3 PROJECT SCHEDULE AND CONSTRUCTION PHASING/SEQUENCING PLAN

The ADMP Team's philosophy is to plan the work, then work the plan. This is a simple concept that always works. The Project requires many different types of work, some very complex and some fairly straightforward, accomplished according to FDOT standards. The fast-tracked schedule for this significant construction project combined with the constrained urban environment and high traffic volumes, introduces several challenges. These challenges will be addressed within the Construction Phasing/Sequencing Plan.

Key Features

- Plan the Work – Work the Plan
- Collaborative Approach to Scheduling and Phasing
- Achieve Schedule Objectives: Accuracy and Reliability
- Team Organized for Fast Start
- Phasing Optimized for High Efficiency and Low User Inconvenience
- Sequencing of Work from Periphery to Center

The ADMP Team's critical path method (CPM) approach to the Project schedule is the result of months of planning. Value engineering-type workshops and discipline-specific task forces were conducted to develop the most effective design integrated with construction means and methods to define the design-build execution of the Project. The results of these efforts have been incorporated into the Schedule and the Construction Phasing/Sequencing Plan.

1.3.1 Project Schedule

ITP 1.3 – CPM Project Schedule Including a Narrative Description of All Assumptions, Restraints, Critical Path Activities, and Other Issues Used to Develop the Preliminary Project Schedule.

The Major Construction Activities Completion Chart (ITP Appendix D, Form H) is included in the tab that follows this Section. The ADMP Team's Project Schedule in Primavera format is also included in 8 ½ by 11 inches reduced format after this section and included separately in a tube as a 24-in. by 36-in. plot as requested by the ITP. As shown in both of these documents, the dates identified for all major milestone activities meet FDOT's requirements.

Project Award: October 24, 2008

Effective Date: January 22, 2009

NTP#1: February 21, 2009

NTP#2: June 21, 2009

Early Completion Date: Later than July 1, 2012

Substantial Completion: February 14, 2014

Final Acceptance: May 14, 2014

1.3.1.1 SCHEDULE DEVELOPMENT

The dates included in the Project Schedule are the result of a close collaboration between DGP and ET. This will be a continuous process throughout the life of the Project to make certain that all activities are coordinated, performed in the most efficient manner, and without delay to other dependent efforts. This continuous assessment and refinement will provide the ADMP Team and FDOT with an accurate and dependable reference for the delivery of the work. This can then be used as an effective communications tool with other stakeholders within the corridor.

1.3.1.2 SCHEDULING TOOLS

The ADMP Team used Primavera Project Planner (P3) to develop the conceptual Project Schedule. The ADMP Team plans to continue the use of PPP and new releases, during the project design and construction to take advantage of the improved and robust scheduling features.

1.3.1.3 PROJECT CONTROL

Schedule control is approached as a subset of the overall project control process. The computerized system that tracks project activities and milestones is integrated with other project control tools and activities to manage all the work collaboratively. The approach is founded on an overarching philosophy that combines effective communication, proactive management, and proven leadership to achieve our mutual goal of on-time project completion.

Successful use of the project controls system depends upon submittal of accurate, timely, and complete information by the design and construction managers. The continuous flow of information ensures that work efforts are coordinated; schedules remain up-to-date; and potential problems are identified, discussed, and resolved early, minimizing or avoiding impacts to the Project Schedule.

1.3.1.4 ACTIVITY CODES

PPM uses activity codes to organize and/or filter work activities. These are used for presentation and analysis. Each code is assigned a series of values, correlated to work activities, based on the code objective.

Examples of activity codes and associated values as established in our schedule include:

- **Area** - This activity code allows us to organize and filter specified areas of work. Examples of the values that have been assigned to our work breakdown for Areas are Construction Milestones, Design and Permitting. Each of these short names is descriptive for the work area they represent
- **Location –** This activity code represents the different major locations where the work is being performed as follows: Direct Connect to FTE, Express Lanes, I-595 General Purpose and Auxiliary lanes, Ramps, NNCR Canal, SR84, FTE Interchange, University Drive Interchange and miscellaneous activities
- **Work** - This activity code represents those work type activities to be organized and filtered within a given location of work such as: roadway, drainage, ITS, sound barriers, retaining walls, bulkheads, bridges among others

This initial coding is incorporated into our preliminary Critical Path Schedule (CPM). Additional codes will be added for managing the project as the design progresses and detailed work activities are defined.

1.3.1.5 SCHEDULE ASSUMPTIONS

1.3.1.5.1 Effective Date, NTP #1 and NTP #2

The Project start milestone used in the schedule is based on information included in the ITP received from FDOT released on August 15, 2008.The expected selection/award date for the Project is October 24, 2008.

The Effective Date is based on RFP Section 6.2, which stipulates that the selected team must deliver the executed agreement (and all other documents referenced) within 60 days of selection. Following receipt of the documents from the ADMP Team, FDOT will have up to 30 days to fully execute the agreement, at which time the agreement will become effective. The Effective Date should take place no later than 90 days after selection. The assumption is that this will occur on January 22nd, 2009 (1+90).

Per the Contract documents, the Commencement of Design Work, NTP#1, shall not occur until all requirements of Section 4.6 of the Concession Agreement are fulfilled. Based on the conditions of this section, it is anticipated that the date of NTP#1 will be issued within 30 days after the Effective date but not later than February 21st, 2009.

Per the Contract Documents, the Commencement of the Works, NTP#2, shall not occur until all requirements of Section 4.7 of the Concession Agreement are fulfilled. Construction must also begin prior to 150 days from the effective date. Based on the conditions of this section, it is anticipated that the date of NTP#2 will be June 21st, 2009.

1.3.1.5.2 Fast Start

Upon selection of Best Value Proposer, but prior to NTP#1, our schedule assumes that the ADMP Team will proceed at its own risk on certain elements of the work. These efforts will be predominantly focused on data collection (topographic surveys and geotechnical investigations) and initial design (finalization of geometrics). It will also include initial discussions with various stakeholders associated with the Project. These will consist of "go" meetings to begin formulating action plans for permitting and early works packages.

An early focus on permitting and design in certain areas will provide the ADMP Team the ability to resolve a majority of the pedestrian and public interface issues prior to mainline construction. This includes areas such as the Broward County Greenways, installing sound barrier walls, and performing utility relocations (as permits allow). This will also allow the ADMP Team to prepare work zone layouts and provide time for crew initiation and familiarization of the Project.

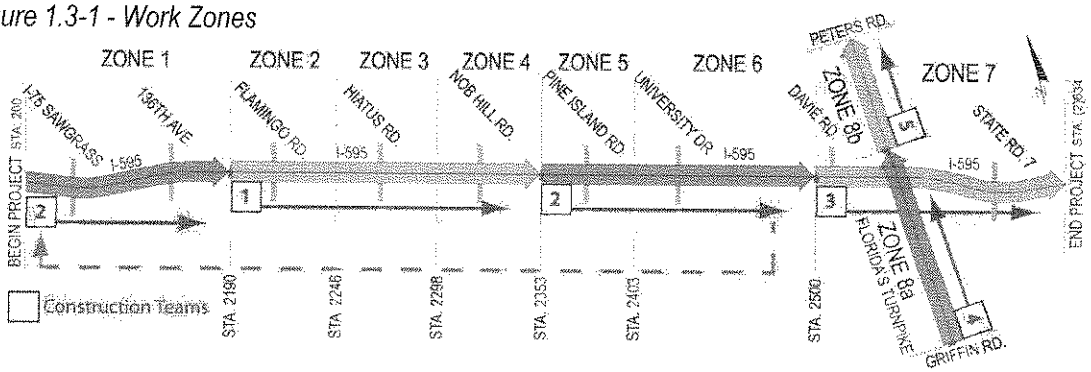
1.3.1.5.3 Work Week

The ADMP Team will be utilizing a typical five day work calendar with normal shifts. This schedule allows DGP the flexibility to increase production, if necessary, for critical activities that arise which may have potential impacts to the schedule.

1.3.1.5.4 Progression of Work

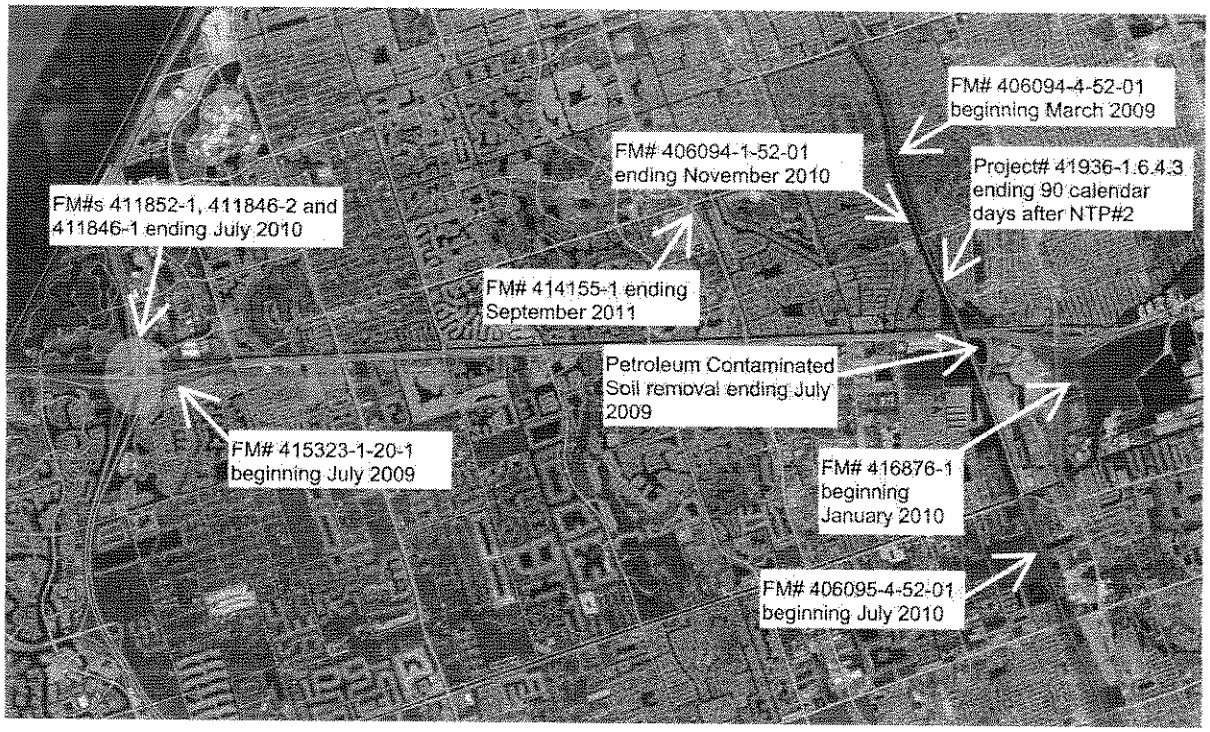
The corridor has been divided into nine work areas called "Zones" (1, 2, 3, 4, 5, 6, 7, 8a, 8b), east to west with a crossroad as its principal element including the Florida Turnpike (See Figure 1.3-1). Construction will start in five different zones, simultaneously. Each Zone is further divided into generally three phases of work (from the outside to inside), where works are performed, sometimes combining them to allow finishing one area in two phases instead of three. Construction teams working in one particular Zone will move to the adjacent Zone on the east side or north when working on Florida's Turnpike. The Greenway is scheduled ahead of all work on a continuous manner, so it is estimated to be completed early in the project. Utility relocation, bulkhead and soundwalls are also priorities. This progression of work allows the ADMP Team to meet the FDOT milestones required in the Contract Documents (More detailed information is provided in Section 1.3.2).

Figure 1.3-1 - Work Zones



Schedule Restraints

The ADMP Team recognizes that there are a number of external activities and local ordinances that will impact the Project's duration. These include several construction projects adjacent to the I-595 Project, which were used to prioritize schedule activities. ADMP's efforts will not restrict the construction and traffic control activities for these projects:



The following identifies the additional restraints built into the CPM schedule as required in the contract documents:

Other constraints were considered in the schedule, such as the time necessary to acquire a strip of right-of-way along ramp T-4. This triangular parcel is part of the Everglades Lakes Mobile Home Community and lies south of I-595 just west of Florida's Turnpike. It is also adjacent to a portion of the mobile home park that was recently acquired by FDOT's Florida Turnpike Enterprise office for an interchange improvement project. Our schedule allowed adequate time for ideal and normal conditions to acquire this parcel for the I-595 project.

Item	Description	Reference Document
1	1.3 Project Schedule and Construction Phasing / Sequencing plan	RFP/ ITP Appendix B Page3-1.3
2	L. Roadway (6-a.Traffic Control Analysis / 6.D.6 Ramp Closures)	Vol II Div II Sect 3
3	R. Work Restrictions	Vol II Div II Sect 3
4	Form H	RFP / ITP App D
5	Sections 4.6 and 4.7	Concession Agreement
6	C. Right of Way Acquisition	Vol II Div II Sect 2
7	Appendix 19 -Major Permits	Concession Agreement

1.3.1.6 CRITICAL PATH ACTIVITIES

The sequence and timing of the critical path work identifies how the ADMP Team will complete the project within the time shown on the preliminary CPM project schedule. Some of the most important critical path activities associated with the Project are as follows:

- Greenway construction – Zone 5
- Sheet Piling Bulkhead – Zone 5
- MSE Walls 210/216 – Zone 5
- Bridge 860165 – Pine Island – Zone 5
- Bridge 000112 Ramp L-1 – Zone 5
- Bridge 000113 WB I-595 – Zone 5
- Bridge 000123 Ramp Q3 – Zone 6
- Bridge 000116 Ramp Q1 – Zone 6
- Bridge 860391 – Zone 6
- Bridge 000383 – Zone 1

In addition, the final design and permitting required for each of these activities are also on the critical path.

1.3.1.7 ACTIVITIES REQUIRING NIGHT WORK

It is anticipated that approximately 30% to 40% of the construction will occur at night in order to meet the milestone requirements. This will include such work as structures, drainage, utilities relocation, paving, electrical and some barrier wall concrete work.

In addition, there are a number of activities that require lane closures that can only be performed during off-peak traffic hours (9:00 PM to 5:00 AM). These include:

- Demolition and removal of any overhead structural elements
- Erection and placement of bridge beams and girders
- Placement and/or removal of bridge deck forms
- Bridge girder painting

As with any night time work, extra precautions will be taken to protect both the workers and the public.

1.3.1.8 PLAN REVIEW ACTIVITIES

The ADMP Team will be producing multiple design packages (estimated 20 to 25) issued to FDOT for review, comment, and approval. Each package will be reviewed internally for QC prior to its issuance. Upon receiving the comments and discussing the appropriate resolution, the designs will be refined and submitted as Issued for Construction (IFC). It is the ADMP Team's understanding that FDOT will approve and stamp the drawings as IFC and return to the Team for execution.

The Critical Path Project Schedule includes a 28-day period for FDOT review, comment, approval, or disapproval of required submittals, in accordance with the Contract. Our Project Schedule also incorporates the time periods required for processing of these submittals.

In addition to the design and construction coordination and interface activities with FDOT, the ADMP Team will coordinate and interface with a number of permitting agencies. In the event that receipt of a permit delays

the progress of design or construction, the ADMP Team will perform an analysis of the CPM in order to mitigate the impact and move resources elsewhere, if necessary. Upon receipt of the permit, FDOT, the stakeholder and the ADMP Team will review the permit requirements and will then proceed once all parties are satisfied.

A comprehensive table of anticipated permits, including the relevant regulatory agency, current status, and approximate approval timeframe used in the Project Schedule is included in Section 1.4.2.

1.3.1.9 WORKSHOP AND PARTNERING ACTIVITIES

As with any relationship on large, long-term contracts, there is the potential for conflict and disagreement. The manner in which these issues reach resolution may have a dramatic impact on the Project Schedule. To this end, the ADMP Team proposes a formal partnering process with FDOT and other Project stakeholders. The Team's belief is that partnering always works when all parties make the required commitment toward cooperation, communication, and a common goal.

The ADMP Team will host a "partnering" workshop during contract mobilization facilitated by an experienced professional. At the workshop, all parties will be introduced to their roles in the Project's success, develop a charter with goals everyone agrees on, define an on-site dispute resolution ladder that promotes decision-making at the lowest possible level well before formal intervention is necessary, and establish a framework for the working relationships.

As mentioned, partnering will be extended to other participants beyond FDOT. The ADMP Team will encourage the utilities and environmental groups to join in partnering, which, through communication and common goals, will help expedite the permitting process and prevent delays.

An effective partnership requires vertical reporting, with our Project Manager working directly with FDOT's Project Manager on contractual and management issues. For horizontal interfaces, the Team's designers, constructors, and QA/QC personnel will work directly with FDOT engineers, reviewers and inspectors. The organization is structured to make these working interfaces easy.

The frequency of the partnering meetings will be dictated by the Project and the number of issues that arise.

1.3.1.10 CONTINGENCIES, HOLIDAYS AND OTHER NON-WORK DAYS

The Project Schedule calendar includes all holidays defined in Section 1 of the FDOT Standard Specifications as non-working days. With regard to weather, the duration of the activities prone to be affected by weather were considered. The activity durations that may be affected by weather have been adjusted based on the type of work and average historic weather conditions (according to official records) for the South Florida area.

1.3.1.11 POTENTIAL PROBLEM AREAS

As with any large complex construction project, there are a number of activities that present more risk than others as it relates to the overall schedule. With respect to the Project, the ADMP Team has identified three particular potential areas of concern:

- The timely approval of permits and relocation of utilities
- Installation of bulkhead sheetpiles along the New North River Canal into the hard limestone layer
- Erection of the long-span steel girders over mainline roadways under FDOT maintenance of traffic limitations.

- Right-of-way acquisitions
- Maintenance of Traffic and road and ramps shut downs without affecting the public

The project schedule allows a period of time for these activities; however, DGP's experience has shown that considerable variation can occur in the duration of efforts. The first two are particularly important as they are predecessors to all of the major component construction activities that follow. Should the actual durations exceed planned expectations for these efforts, the CPM will be reanalysed and adjusted accordingly.

1.3.1.12 PERMITS

Securing approvals for the environmental and construction permits are the first and primary challenge to meeting timely commencement of every construction work activity. The processes for obtaining the necessary permits will be rigorously tracked using the interface section of the Project Schedule. The permitting processes required for the various types of work, including permit preparation and agency review and approval, are incorporated into the interface schedule.

As previously mentioned, a comprehensive table of anticipated permits is included in Section 1.4.2.1 of this Proposal. The ADMP Team understands that it will be responsible for any modifications to the permits, if required.

1.3.1.13 UTILITY RELOCATIONS AND COORDINATION

The utilities will be reviewed with the various stakeholders during the "go" meetings (preliminary utility meeting). It will most likely be at this time that the stakeholders will define their requirements in detail of what is expected to be completed by ADMP. To ensure that the utility requirements are a "Fast Start", the ADMP Team has already initiated several successful meetings with many of the stakeholders to ensure a smooth transition into the permitting, design and construction process.

To further facilitate the utility coordination process, the ADMP Team will establish a Utility Work Plan that addresses various issues and procedures as follows:

- Identification and location of existing and proposed utilities along the corridor
- Communication and coordination requirements with Utility Agency Owners (UAO's) to address project issues as well as the interaction with FDOT's District Utility Office
- Action Plan to address required utility accommodations
- Action Plan to address unknown or newly discovered utilities as well as proposed utility betterments and/or future installations
- Scheduling of utility adjustment work
- Documentation of utilities along the corridor, utility coordination process and final disposition

As in all projects, every effort will be made to accommodate existing utilities with minimal relocations and/or disruption of service. When utilities must be relocated, utility work sequencing will be reviewed and compared to project construction staging and milestones to minimize costs, disruption of service and the need for multiple relocations of the facilities. The ADMP Team has already identified several locations where advanced utility relocations can be performed. These include:

- Sta. 3198+60 to Sta. 3206+60 along EB SR-84 where the relocation of an existing 16-inch force-main belonging to the City of Sunrise is required for the construction of the King's Manor Estates Community Noise Wall.

- Sta. 3411+40 to Sta. 3416+80 along EB SR-84 where the relocation of an existing 8-inch water-main belonging to the City of Sunrise is required for the construction of the Arrow Head Golf and Tennis Club Noise Wall.
- Along EB SR-84 where the existing aerial utility pole line carrying FP&L, Comcast, AT&T and Level 3 will need to be shifted to the north to minimize the utility impacts on the roadway improvements. Discussions with all four stakeholders have been held to review the proposed sequencing of the movement of this line.

Additionally, as referenced in the MOT Plan, utility relocation and/or adjustment requirements have been considered in the sequencing of the work. This not only evaluates and properly ties the construction sequencing, but assures that areas are not disturbed twice.

Coordination and sequencing for utility accommodations will be controlled through the development of a Master Utility Schedule tied to the CPM schedule. This utility schedule will be reviewed at the Monthly Utility Coordination Meetings planned from the commencement of the design phase through construction. Additionally, coordination will be enhanced through utility documentation, correspondence, plans, and schedules.

✔ This Preliminary Project Schedule meets Technical Proposal Requirements (1.3) by providing a CPM Project Schedule and including a narrative description of all assumptions, restraints, critical path activities, and other issues used to develop the preliminary project schedule.

1.3.2 Construction Phasing/Sequencing Plan

ITP 1.3 – Description of Consistency with the Proposed Preliminary Corridor Master Plan, Definition of the Project's Segmentation, and Identification of the Issues Used as the Basis for the Development of the Plan.

The primary objectives of the Construction Phasing/Sequencing Plan is to maximize the movement of people, goods and services during construction while minimizing any inconvenience to residents, commuters and businesses; ensuring the safety of workers; performing quality work; and, executing work in the most efficient manner. The ADMP Team has developed a comprehensive, multi-faceted Construction Phasing/Sequencing Plan for the duration of the Project's construction that clearly meets these objectives. The plan will incorporate all of FDOT's requirements as set forth in the Contract.

The strategies used by the ADMP Team to meet these objectives include the following:

- Execute work within self-contained work zones
- Limit work to navigable waters
- Sustainability – maximize re-use of materials
- Integrate bridge and roadway construction activities
- Minimize temporary work
- Implement progressive construction from the periphery to the center of the corridor
- Proactively address environmental concerns
- Minimize construction stages and lane shifts for traffic movements
- Accommodate access to crossroads to minimize out-of-way travel

- Provide adequate work zone access for efficient material delivery
- Access lay down area locations with respect to individual work zones
- Develop a clear and concise motorist advisory and information strategy
- Assist FDOT in public information and outreach strategy
- Assist FDOT in incident management strategy

1.3.2.1 CONSISTENCY WITH CORRIDOR MASTER PLAN

The Construction Phasing/Sequencing Plan for the Project has been designed and optimized to provide the highest level of public and construction safety, while maintaining technical excellence and quality workmanship with traffic disruptions kept as minimal as possible. It uses as its basis, the Corridor Master Plan and the required construction components and milestone elements.

The Corridor Master Plan acknowledges that various construction/contractual milestones must be achieved as part of the Contract. To achieve these milestones, an overall strategy for Construction Phasing/Sequencing has been established by linking numerical construction zones and subsequent phases in each zone to the milestone activities. These zones and phases allow work to progress in self-contained areas, such that public interference is minimized.

Resulting from this construction zone concept, the ADMP Team is able to minimize the construction stages or phases required, which mitigates traffic shifts and the requirement for temporary works. There are two zones where temporary mainline pavement is required to accommodate ramp and mainline grade re-construction. In addition, there are several ramps throughout the corridor where temporary pavement will be used to divert traffic around proposed ramp bridge abutments.

The construction zones have been developed to achieve the following as a minimum:

- Utilize progressive construction techniques, working from the periphery (Broward County Greenways/SR-84 WB & EB) to the center of the corridor (reversible lanes). All areas of work are kept self-contained, whereby construction traffic is not interfering with the public and where work is near the travel lanes. In other words, the construction activities and traffic are kept as far apart as possible.
- Bridge and roadway construction integration, not only using periphery-to-center construction, but using linear (west to east) construction to allow the existing corridor operations to function with minimal impact to traffic, and maximized public safety. The use of this construction approach provides accommodation for public and emergency traffic to cross roads and to minimize public out-of-way travel.
- While there is no reference to sustainability being mandated in the ITP; the ADMP Team will utilize LEED (Leadership in Energy and Environmental Design) principles during the design and construction of the Project. These include: optimized storm water detention, silt nets and trapping facilities; re-use of existing materials wherever possible; and minimized temporary pavement requirements for traffic diversions.
- The ADMP Team has a proven success record and is fluent with working in environmentally sensitive areas, and this corridor is no exception. As the North New River Canal (NNRC) parallels 95% of the project length, provision for navigable waters design and permitting will be adhered to. In addition to this, extensive environmental control measures will be utilized to ensure the amphibian canal habitat is maintained at its current standard. Such measures could include as a minimum, temporary filtering of storm water; silt nets; routine sweeping activities; and use of straw bales and filter fabric at the inlets and outlets of existing and new storm water structures.

- Working lay down areas and material delivery will take place within each work zone, and as far from the public as possible. The Team anticipates using local parking lots at the cross streets, the areas near the Sawgrass (I-75) on the west end, and areas within the Turnpike on the east end in addition to some areas around where US 27 meets I-595 for lay down. Material delivery will take place whenever possible in the off-peak traffic hours to mitigate the overall impacts.

During the construction, operations and maintenance portions of the Project, the ADMP Team will continue to refine and modify the phasing and sequencing to minimize public inconvenience and ensure that the previously stated strategies are employed.

1.3.2.2 PROPOSED SEGMENTATION

The terms construction zone and construction phases are being used throughout this document and will be carried through the design and construction of the Project. The zones are primarily defined by the acceptable disrupted roadway length as specified in the Contract. Primarily, bridge structures have been identified as the focal location by which zones are centered, as well as the requirement to establish a meeting point between zones in order to facilitate traffic detours. The purpose of the zones is to allow DGP to efficiently work in self-contained areas and in several locations throughout the corridor. Each zone contains several consecutive phases of work, where a shift in traffic would represent the end of one phase and the beginning of the next.

The Project has been segmented into eight zones of construction with subsequent phases for each zone. Each zone has been selected such that it provides the least amount of traffic interruption by allowing DGP to open and close existing ramps within the work zone and still be able to maintain eastbound and westbound movements for all modes.

For the purpose of the phasing/sequencing of the activities, two types of activity milestones have been identified, contractual and construction. Each zone and phase of work is established to accomplish a portion of a contractual milestone as defined in the Contract, and each phase of work constitutes a portion of a construction milestone used to sequence the construction activities.

1.3.2.2.1 Construction Zones

The construction zones are numbered beginning at Zone 1 located on the west end of the Project and progresses to Zone 7 terminating at the viaduct on the east end of the Project. Zone 8 is defined as the Turnpike (Griffin Road to Peters Road) broken up into two separate sub-zones 8a and 8b. Each zone is generally one-mile in length, with the exception of Zones 1, 7 and 8.

The specific limits of the zones are defined as follows:

Zone	Description	Zone	Description
1	Sta. 200 (West end of the Project - Saw grass/I-75) to Sta. 2190, East of 136th Ave.	5	Sta. 2353 to Sta. 2403, East of Pine Island
2	Sta. 2190 to Sta. 2246, East of Flamingo Road	6	Sta. 2403 to Sta. 2500, East of University to Davie Road
3	Sta. 2246 to Sta. 2298, East of Hiatus Road	7	Sta. 2500 to Sta. 2634, Viaduct, East end of the Project
4	Sta. 2298 to Sta. 2353, East of Nob Hill Road	8a 8b	NB and SB Turnpike from Griffin Road (South) to Peters Road (North)

1.3.2.2.2 Construction Phases

Each of the nine construction zones is broken down into phases, where each construction zone on average consists of 3 phases of construction. The phases have also been established to allow construction activities to occur concurrently in every second zone with adjoining zones to reduce road closures, night work and mitigate public access issues to cross roads. Each phase of construction within a zone represents a traffic shift to accommodate the construction activities. Further daily "adjustments" to traffic may be required depending on the localized specialty of the work, such as new storm drains or existing utility tie-in requirements. Figure 1.3-1 represents the overall construction phasing/sequencing relative to Zone vs. Phase construction with no attention given to time, but rather achieving construction and contractual milestones.

1.3.2.3 TIMING AND PHASING OF DRAINAGE FACILITIES

The timing and phasing of the drainage facilities will be concurrent, where feasible, with the earthwork efforts and after clearing and grubbing in each zone/phase of work. It will also be contingent upon utility relocations. Temporary drainage will be accomplished between phases. Specific durations and activities are detailed in the CPM Schedule.

1.3.2.4 TIMING AND DURATION OF UNIVERSITY DRIVE TEMPORARY CLOSURES

The ADMP Team recognizes the importance of maintaining current traffic patterns to the greatest extent possible during construction. DGP's schedule indicates that the duration of the temporary closures for the University Drive will be less than the 90-day period allowed.

1.3.2.5 PROPERTIES FOR STAGING AND LAYDOWN

DGP will be utilizing the median area at the westernmost end of the Project near the I-75/I-595 interchange for staging and laydown areas. In addition, DGP is also looking at several empty lots around US-27 for a large amount of stockpiling of material such as soil, milling, structural components, etc.

1.3.2.6 CONSTRUCTION SEQUENCE

The construction sequence for the Project is predicated on the performance of work activities in such a manner as to minimize the impact to the current operational characteristics of the I-595 Corridor resulting in additional and unacceptable user delay. Given the congested urban environment, developing and implementing an effective construction sequence is one of the Project's greatest challenges.

1.3.2.6.1 Sequencing Considerations

The NNRC is located along the north side of the corridor with an existing greenway located between the canal and the traffic. Per the Technical Requirements, the greenway is to remain accessible to the public at all times. As a result, initial work will include relocating this pedestrian path from the south side to the north side of the canal prior to any major construction in order to be able to work along the south side of the NNRC without any interruptions.

Once the greenway has been relocated to the north side of the canal, work will begin in several areas. In order to follow the FDOT traffic restrictions, construction work will commence simultaneously using five separate construction teams. As shown in previous Figure 1.3-1, the order of work along the zones is scheduled as follows:

- Construction Team 1: From Zone 2 to Zone 3 to Zone 4
- Construction Team 2: From Zone 5 to Zone 6 to Zone 1

- Construction Team 3: Zone 7
- Construction Team 4: Zone 8a
- Construction Team 5: Zone 8b

These five starting points, generally named as Flamingo, Pine Island, West of Davie Road, Turnpike South, and Turnpike North, were established based on several factors including earthwork, utility relocation, sound walls, bulkheads, and FDOT requirements and priorities.

Sound walls are an important priority during construction. The ADMP Team concurs with FDOT that these barriers would provide a means to mitigate the construction noise levels within the neighboring community. The barriers will be constructed as soon as possible in their respective areas before work on SR-84 work begins.

Note: The schedule and construction sequence has been developed as per the concept plans included in this proposal. A final schedule and construction sequence will be determined upon final design

1.3.2.6.2 General Progression of Work

In general, reconstruction of the corridor will proceed from the outside to the inside. With respect to a typical section, work will begin at the outside of the mainline along both directions of SR-84, where utility relocation (eastbound) and bulkhead (westbound) are the major issues. When the SR-84 work is completed in the first zone, crews will move to the next.

As the SR-84 crew moves on, it will be replaced by another crew that will begin construction along the outside of I-595 in both directions. This work will include a large quantity of MSE walls and bridge structures and will be completed by crews experienced in bridge and MSE wall construction techniques.

Utilizing several crews within each construction team, work can be performed in multiple locations in parallel and in the same direction, on both the eastbound and westbound sides. However, work in both directions must be completed in most cases before moving to the next zone. As can be expected, various unique situations and exceptions will be required.

1.3.2.7 SUMMARY OF CONSTRUCTION ZONES AND PHASES

The following describes a summary of the work included in each of the construction zones and phases. A more detailed description of the work is included in the Master Traffic Control Plan, Section 2.1.2.

1.3.2.7.1 Zone 1 – Station 200 (West end of the Project - Sawgrass/I-75) to Station 2190, East of 136th Avenue (Construction Team 2)

Greenway

- Construct the greenway on north side of NNRC to SW 125th Avenue including two new Bridges 000205 and 000207 with rehabilitation to existing Bridge 000206 to Station 2246

Roadway

Phase 1

- Construct WB I-595 on the south side and EB I-595 on the north side
- Construct ramps R-1, R-2, R-3 and R-4
- Complete the Express Lanes to 2160 with new structure 000101 and 860384 construction
- Construct Commodore Rd. and 136th St. canal bridge upgrades as required, with temporary signals and permanent drainage

- Construct temporary pavement for EB and WB SR-84 (2165 to 2190)
- Construct EB SR-84 South side construction and WB SR-84 North side construction

Phase 2

- Construct WB I-595 on the north side and WB SR-84 on the south side; construct EB SR84 on the north side and EB I-595 on the south side
- Construct WB north side widening for bridge 860383 and EB south side widening for bridge 860384
- Complete Sawgrass ramp connections; ramps A, B, and D

Phase 3

- Complete Express Lanes from Station 2160 to 2190. WB I-595 and WB SR-84 existing ramp is closed and rehabilitated\

1.3.2.7.2 Zone 2 – Station 2190 to 2246, East of Flamingo Road (Construction Team 1)

Greenway

- Construct the greenway from Commodore Rd. to (finger canal bridges 000206 and 000207) Flamingo Rd., prior to starting phase 2 WB SR-84, then to Hiatus Rd. including the new finger canal bridge 000201 before starting Zone 2, phase 1
- Continue greenway construction through to Nob Hill, constructing bridge 000202

Roadway

Phase 1

- Construct temporary pavement for both EB and WB SR-84
- Construct WB SR-84, north side; construct EB SR-84 south side
- Complete SW 125th St. and Flamingo Rd. connection. Install temporary signals
- Construct express lanes with existing bridge construction (2208 to 2224) – use as traffic diversion
- Construct the express lanes to final grade from 2190 to 2208 and 2224 to 2246 – use as traffic diversion

Phase 2

- Construct WB I-595, north side and WB SR-84, south side; construct EB I-595, south side and EB SR-84, north side
- Construct ramps C, D, E-1, E-2, F, and G

Phase 3

- Remove temporary median pavement
- Construct express lanes to final grade with remaining services (2208 to 2224)

1.3.2.7.3 Zone 3 – Station 2246 to 2298, East of Hiatus Road (Construction Team 1)

Greenway

- Construct Pine Island Rd. new greenway structure
- Continue the greenway construction from Hiatus Rd. to Nob Hill Rd. (Zone 4) with connection to Nob Hill Rd. prior to starting Phase 2 works. Continued work through Pine Island Rd. with new finger canal bridges 000202 and 000203, prior to zone 3 phase 2 passing Nob Hill Rd

Roadway

Phase 1

- Construct WB SR-84 temporary pavement
- Construct WB SR-84, north side and EB SR-84, south side
- Install temporary signals
- Complete Hiatus Rd. canal bridge upgrades and local cross street improvements

Phase 2

- Construct WB I-595, north side and WB SR-84, south side; construct EB I-595, south side and EB SR-84, north side
- Construct temporary EB SR-84 to EB I-595 ramp east of 000107 prior to closing ramp at 2287
- Construct ramp I and J; complete ramps E-1, E-2, G and H – bridges 000105, 000106 and 000107

Phase 3

- Close both existing ramps (2247 and 2292)
- Construct the express lanes with bridges 860370 and 860371 interior construction

1.3.2.7.4 Zone 4 – Station 2298 to 2353, East of Nob Hill Road (Construction Team 1)

Greenway

- Greenway is constructed to Nob Hill Road, continue bridge connection to Pine Island Road prior to starting zone 3, phase 3 works. Greenway bridges 000202 and 000203 over the finger canals to Pine Island Road are now constructed

Roadway

Phase 1

- Construct WB SR-84 and EB SR-84 temporary pavement (2310 to 2330)
- Construct WB SR-84, north side and EB SR-84, south side
- Construct express lanes (2298 to 2323) – used as traffic diversion
- Construct express lanes, no permanent barriers – used as traffic diversion (2323 to 2353)
- Construct south side local cross street improvements and temporary signal installation at Nob Hill Rd.

Phase 2

- Construct WB I-595, north side and WB SR-84, south side; construct L-1 and L-2 and complete ramp J, ramp 9 remains open until end of phase
- Construct EB I-595, south side and EB SR-84, north side; complete ramps K-1, K-2, and M

Phase 3

- EB and WB I-595 final regarding and surfacing as required
- Construct express lanes to final grade and barriers (2323 to 2353)

1.3.2.7.5 Zone 5 – Station 2353 to 2403, East of Pine Island Road (Construction Team 2)

Greenway

- Greenway is constructed to University Drive with connections made to Broward County's greenway network

Roadway

Phase 1

- Construct L-1 structure (000112) and Pine Island Road canal bridge upgrades as required
- Install temporary signals at Pine Island Rd. and complete local cross street improvements
- Construct WB SR-84 and EB SR-84 temporary pavement (2358 to 2391)
- Construct WB SR-84, north side and EB SR-84, south side
- Construct temporary pavement in the express lanes (2353 to 2395) – used as traffic diversion
- Construct express lanes bridge 000114 and widen 860358 to north – used as traffic diversion
- Construct express lanes (2395 to 2403) – used as traffic diversion

Phase 2

- Construct WB I-595, north side and WB SR-84, south side; construct L-1
- Construct WB I-595 and ramp L-1 structure 000113 (Demo bridge 860357)
- Construct EB I-595, south side and EB SR-84, north side
- Construct ramps K-2, M and bridge 000115

Phase 3

- Remove the temporary pavement placed in phase 1 and complete the express lanes construction (2353 to 2395)
- Construct final barrier wall tie to express lane bridge

1.3.2.7.6 Zone 6 – Station 2403 to 2500, Pine Island Road to University Drive, to West of Davie Road (Construction Team 2)

Greenway

- Broward County greenway is constructed to University Dr.

Roadway

Phase 1

- Construct WB SR-84 temporary pavement (2436 to 2448)
- Construct WB SR-84, north side and EB SR-84, south side
- Complete local cross street improvements and signal installation at University Dr.
- Construct the express lanes (2403 to 2414) – used as traffic diversion
- Construct EB, north side express lanes and WB, south side express lanes interior widening (2414 to 2450), including south and north widening of bridges 860391 and 860392– used for traffic diversion
- Construct the express lanes (2450 to 2473) – used as traffic diversion

Phase 2

- Construct WB I-595 on the north side and WB SR-84 on the south side; construct EB I-595 on the south side and EB SR-84 on the north side
- Construct ramps Q-1, Q-2, Q-3, P-2,P-3, N and O; with bridges 000122, 000116, 000123, and modifications to 860391/392

Phase 3

- Close and rehabilitate existing ramps at 2443 and 2490
- Close ramp N and reconstruct with first span of bridge 860390, closed for Max. 45 days
- Complete express lane construction (2473 to 2500)

Phase 4

- Complete EB I-595 reconstruction and barrier wall as required

1.3.2.7.7 Zone 7 - Davie Road, Through Turnpike, to SR-7 and the Viaduct (Construction Team 3)

Greenway

- Construct greenway on north and south sides of the NNRC, from Davie Rd. to SR-7. Complete bridges (000204 and 000205) at Davie Rd. and SW 25th Ave. with final connection at east end of SW 25th

Roadway

Phase 1

- Widen WB, north side and EB SR-84 south side
- Construct ramps U-1, partial U-2, U-3, U-4, U-9, U-10, U-11, T-1, T-2, T-3, T-5, T-11, T-15, partial T-16 partial R-7 and R-9 direct connects including all related structures to the viaduct.
- Construct WB SR-84 temporary pavement (various locations)
- Construct temporary pavement (express lanes – various locations)
- Construct EB SR-84 temporary pavement (various locations)
- Construct ramps T-10 and T-16, utilizing interim temporary pavement for T-10 to WB I-595 traffic flow
- Construct temporary pavement in the median of SR-7 to accommodate night closures for bridge construction
- Open T-10 and T-16 to traffic
- Construct express lanes (2550 to 2552)

Phase 2

- Construct WB I-595, north side and WB SR-84, south side
- Construct EB I-595, south side and EB SR-84, north side
- Complete ramps R-11, R-12, S, T-1, T-9, T-10, T-11, T-13, U-2, partial U-3 and U-4, U-5, U-6, U-9 and V-1
- Complete the express lanes connection to the viaduct (2591 to 634)

Phase 3

- Complete construction of R-7 and R-9 direct connect structures and MSE walls
- Remove temporary pavement express lane and construct to final (2510 to 2530)
- Divert WB I-595 into express lanes to complete final bridge 000033 spans
- Complete U-3 and U-4. Complete final EB and WB I-595 exterior widening and T-5
- Complete the express lanes

1.3.2.7.8 Zone 8a – NB and SB South of I-595 to Griffin Road (Construction Team 4)

Roadway

Phase 1

- Construct NB and SB turnpike exterior widening with T-1, T-4, T-5, T-7, T-9, T-10, and T-17 with all associated structures utilizing temporary pavement as needed to keep all ramps open to traffic
- Divert Turnpike traffic to 3 lanes each direction and move to center of roadway
- Construct temporary pavement traffic diversion to NB Turnpike for final R-7 and R-9 spans

Phase 2

- Complete all interior NB and SB turnpike work complete the phase 1 ramps
- Complete ramps T-1, T-5, T-9 and T-10 with associated structures

Phase 3

- Complete R-7 and R-9 final connections with T-1 and Turnpike

Phase 4

- Complete existing ramp rehabilitation for T-1, T-4, T-5, T-7 and T-10

1.3.2.7.9 Zone 8b – NB and SB Turnpike, North of I-595 to Peters Road (Construction Team 5)

Roadway

Phase 1

- Complete R-7 final span from the north side of NNRC to the SB Turnpike shoulder
- Complete all exterior East and West side Turnpike widening and all sound barriers.

Phase 2

- Complete the internal express lane construction and final direct connects with operational toll facilities

✔ This Preliminary Construction Phasing/Sequencing Plan meets Technical Proposal Requirements (1.3) by describing the consistency with the proposed Preliminary Corridor Master Plan, defining the Project's segmentation, and identifying the issues used as the basis for the development of the plan.

1.4 ENVIRONMENTAL COMPLIANCE PLAN

The Project will require extensive permitting and compliance with numerous environmental regulations. This Environmental Compliance Plan (ECP) includes a discussion of the applicable permits potentially required through local, state, and federal agencies and identifies applicable National Environmental Policy Act (NEPA) commitments and other permit-required commitments to be adhered to during the design, construction, and O&M phases of the Project. The environmental compliance program, when implemented, will provide a high level of environmental management during all stages of the Contract. Maintaining consistency with environmental policies and legislation of all applicable jurisdictions will ensure a smooth transition at the end of the concession period, when control of the infrastructure is transferred back to FDOT.

Key Features

- High Level Environmental Management Approach
- Comprehensive Understanding of Commitments and Requirements
- Focus on Consistency with Policies and Legislation
- Use Proven Tracking Methods to Assure Timely Approvals
- Coordinate, Facilitate, Mitigate and Protect
- Meet or Exceed Prior Commitments

The requirements and commitments that will be fulfilled during the course of the Project were identified from the following documents:

- I-595 Request For Proposal (RFP) Volume II – Technical Requirements
  - Division II, Section 1 – Project Description, Addendum No. 4 (August 8, 2008)
  - Division II, Section 2 – Project Requirements and Provisions for Work, Addendum No. 4 (August 8, 2008)
  - Division II, Section 3 – Design and Construction Criteria, Addendum No. 4 (August 8, 2008)
  - Division II, Section 4 – Operation & Maintenance Requirements, Addendum No. 2 (July 3, 2008)
- FDOT Scope of Services for Financial Project ID(S). 999999-1-52-01 (September 11, 2007)
- Remedial Design (RD)/Remedial Action (RA) Consent Decree – Florida Petroleum Reprocessors (FPR) Superfund Site, Davie, Florida (May 17, 2005)
- Type II, Categorical Exclusion (CE), Design Change Re-evaluation (November 14, 2007)
- Type II, CE, Construction Advertisement Re-evaluation (April 8, 2008)

1.4.1 Key Personnel

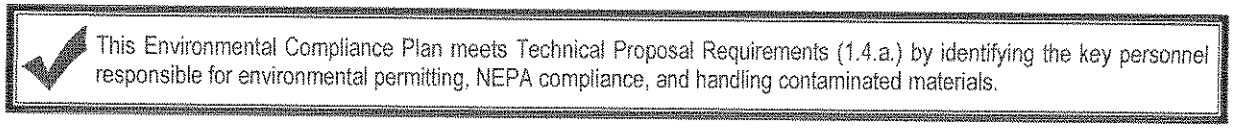
ITP 1.4a – Identify the key personnel to be responsible for environmental permitting, NEPA compliance and the handling of contaminated materials.

All environmental aspects of the proposed work, including the design, construction, and operations and maintenance phases will be overseen by ET. Mr. Stephen Duda, a Senior Scientist with over 25 years of environmental compliance experience, will manage this task. Within this task, there are three primary areas of support: NEPA compliance, environmental permitting, and contaminated materials. Ms. Susan Provenzano, AICP of ET, a Certified Planner, will manage the NEPA compliance subtasks. Mr. Juan H. Vazquez, PE, PH, BCEE of R.J. Behar & Company will manage all permitting related to stormwater. Ms. Leslie Howard of ET will manage the remaining environmental permitting aspects of the Project, and Ms. Suzanne Schomer, PE of ET, will manage all issues related to contaminated materials. These four subtask Managers will report to Mr. Duda on this Project. Mr. Duda will serve as the primary liaison for the ADMP Team with FDOT on all environmental issues. A summary of these key personnel and their roles and responsibilities is presented in Table 1.4-1.

The Subtask Managers will obtain support as required from other personnel within the Team. Additionally, it is anticipated that several subcontractors may be utilized to assist with the environmental compliance efforts during the design, construction, and O&M stages. These support areas include: permitting support; wetland delineation and mitigation; biological resources/threatened and endangered species; noise assessment; environmental response; and cultural resources.

Table 1.4-1 Key Personnel

Responsibility	Name	Affiliation	Background
Environmental Compliance Coordinator	Stephen Duda	Earth Tech	MS Biology
Environmental Permitting	Leslie Howard	Earth Tech	BS Environmental Management
NEPA Compliance	Susan Provenzano, AICP	Earth Tech	MS Marine Environmental Science; Certified Planner
Contaminated Materials	Suzanne Schomer, PE	Earth Tech	MS Chemical Engineering
Stormwater Permitting	Juan Vasquez, PE, PH, BCEE	RJ Behar & Co.	BS Civil Engineering


This Environmental Compliance Plan meets Technical Proposal Requirements (1.4.a.) by identifying the key personnel responsible for environmental permitting, NEPA compliance, and handling contaminated materials.

1.4.2 Permit Requirements and Commitments

ITP 1.4b – Delineate How Requirements and Commitments Described in the Various Technical Volumes (as Well as Any Additional Requirements and Commitments that May Arise During the Construction and Operating Periods) Will be Identified and Tracked, and How the Proposer Intends to Verify that these Requirements and Commitments Have been Met.

The section of I-595 that will be impacted by the proposed project is located in Broward County, Florida within portions of the municipalities of Plantation, Davie, and Ft. Lauderdale. The Project will entail improvements of existing roadways, construction of new roadways, bridge construction, construction of adjacent greenways, inclusion of a future transit line along the corridor, and other improvements. The NNRC is located north of the SR-84 WB lanes. Several miles of additional bulkhead are recommended for construction along the canal as part of the project.

The complexity of the Project will therefore require coordination with several local, state, and federal agencies. To expedite the permitting process, FDOT submitted several permit applications in December 2007. Subsequent to submitting these permit applications, FDOT provided additional information in response to requests from several agencies. The ADMP Team will be responsible for completing any modifications required for permit approval and fulfilling all conditions specified in the permits. Furthermore, any permits not obtained by the time the Contract is reached will be ADMP's full responsibility.

1.4.2.1 ANTICIPATED PERMIT REQUIREMENTS

A summary table of anticipated permits, including the relevant regulatory agency, current status, submittal date, approximate approval timeframe, expected fees, and phase of the Project for which the permit will be required is presented in Table 1.4-2. This table will be used to track and document the status of all permits to ensure that permit-related requirements are being met. These durations have been included in the Project

Schedule for work activities associated with each of the major permits. Please refer to the Project Schedule in Section 1.3.1.

Table 1.4-2 Anticipated Permit Requirements

Permit	Permitting Agency	Status	Application Submittal Date	Approval Time Frame	Fee	Project Phase
Broward County (Local)						
Environmental General Resource License	BCEPD	submitted	12/10/07	120 days	$100 (paid)	Design
Surface Water Management License	BCEPD	issued 7/9/2008	12/10/07	90 days	$5,530 (paid)	Design
Surface Water Management License	BCEPD	tbd		90 days	$3,650-$5,530	Construction
Surface Water Management Master Plan Permit	CBWCD	submitted	12/10/07	90 days	paid	Design
Surface Water Management Master Plan Permit	CBWCD	tbd		90 days	tbd	Construction
Surface Water Management Permit	OPWCD	submitted	12/10/07	90 days	$400 (paid)	Design
Surface Water Management Permit	OPWCD	tbd		90 days	$400	Construction
Surface Water Management and ROW Permit	THISCD	issued 7/21/2008	12/10/07	90 days	$1,500 (paid)	Design
Dewatering Plan	BCEPD	tbd		10 days	No fee	Construction
Application for Broward County Air License to Construct/Operate Air Pollution Source	BCEPD	tbd		30 days	$180	Construction
Hazardous Materials Facility License	BCEPD	tbd		5 days	$460	Construction
Tree Removal License	BCEPD	tbd		10 days	$55,425	Design
Toll Building Permit	BCEPD	tbd		10 days	$111 + 1.6% of building value	Construction
Statement of Responsibilities Regarding Asbestos	BCEPD	tbd		10 days	No fee	Construction
Application for Permit for Construction in the Public Right-Of-Way	BCHCED	tbd		30-60 days	No fee	Design
Application for Initial Plan Review	BCHCED	tbd		14 days	(2)	Design
Environmental Review Approval	BCDMD	tbd		30 days	No fee	Design
Town of Davie (Local)						
Stormwater Pollution Prevention Plan	ED	tbd		30-60 days	No fee	Design
Engineering Site Development Permit	ED	tbd		30-60 days	$2,500	Design
Site Plan Application	Planning and Zoning Division	tbd		100 days	$2,500	Design
Engineering Fill Permit	ED	tbd		30-60 days	$2,500	Design
Engineering Drainage Permit	ED	tbd		30-60 days	$2,500	Design
Engineering Paving and Grading Permit	ED	tbd		30-60 days	$2,500	Design
Clearing and Grubbing Permit	ED	tbd		30-60 days	$2,500	Design
Traffic Flow Modifications/Street Closure Permit	ED	tbd		30-60 days	$250	Construction
Seal Coat and Stripping Permit	ED	tbd		30-60 days	No fee	Construction
Building Permit Application	Building Division	tbd		10 days	$1,400	Construction

Permit	Permitting Agency	Status	Application Submittal Date	Approval Time Frame	Fee	Project Phase
Tree Removal/Relocation Permit	Planning and Zoning Division	tbd		10 days	$4,000	Design
City of Plantation (Local)						
Building Permit Application	Building Department	tbd		10 days	$105+ approx. 1% RSM, 3% est. cost, and $3/$1000 of est. cost	Construction
Land Clearing Permit	Building Department	tbd		10 days	$20 plus 1% of est. cost plus tax	Design
City of Fort Lauderdale (Local)						
Building Permit Application	Building Division	tbd		15 days	Approx. $1,000	Construction
Engineering Permit	ED	tbd		60-90 days	$500+ 5% of the value of work in excess of $5,000	Design
Landscape Permit	ED	tbd		15 days	$0.0175/sq. ft.; minimum fee $145.12	Design
SFWMD (State)						
Joint Application for Environmental Resource Permit/Authorization to Use State Owned Submerged Lands/ Federal Dredge and Fill Permit	SFWMD/FDEP/ USACE	submitted	12/10/07	180 days	$7,500 - $10,000 (paid)	Design
Joint Application for Environmental Resource Permit/Authorization to Use State Owned Submerged Lands/ Federal Dredge and Fill Permit	SFWMD/FDEP/ USACE	tbd		180 days	$7,500 - $10,000	Construction
Right-of-Way Occupancy Permit	SFWMD	submitted	12/10/07	180 days	$1,750 (paid)	Design
Water Use Permit	SFWMD	tbd		210 days	$1,000 - $3,500	Design
Mining/Dewatering Permit	SFWMD	tbd		210 days	$3,250 - $4,000	Design
State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well	SFWMD	tbd		(3)	$100	Construction
FDEP (State)						
Comprehensive Everglades Restoration Plan Regulation Act Permit	FDEP Southeast District	tbd		6 months	No fee	Design
Generic Permit for Stormwater Discharge from Large and Small Construction Activities	FDEP	tbd		60-90 days	$400	Design
Stormwater Pollution Prevention Plan	FDEP	tbd		60-90 days	No fee	Design
Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities	FDEP	tbd		2 days	No fee	Design
Generic Produced Groundwater discharge	FDEP	tbd		No approval required	No fee	Design
Heating Units and General Purpose Internal Combustion Engines Air General Permit Notification Form	FDEP Southeast District	tbd		30 days	No fee (assuming emission units are exempt)	Construction

Permit	Permitting Agency	Status	Application Submittal Date	Approval Time Frame	Fee	Project Phase
Application for a General Permit for Construction or Other Activities Seaward of the Coastal Construction Control Line (CCCL)	FDEP	tbd		120 days	$300	Design
Notice of Asbestos Renovation or Demolition	FDEP	tbd		10 days	$200-$300	Construction
FDOT/FTE (State)						
Driveway/Connection Application for All Categories	FDOT FLO	tbd		30 days	Based on traffic vol. ($50-$5,000) [4]	Construction, O&M
Drainage Connection Permit Application	FDOT FLO / FTEPBO	tbd		30 days	No fee	Construction, O&M
Utility Permit	FDOT FLO / FTEPBO	tbd		30 days	No fee	Construction, O&M
Airspace Obstruction Permit Application	FDOT Aviation Office	tbd		45 days	No fee	Design
Request for Temporary Closing/Special Use of State Road	FDOT FLO	tbd		60 days	No fee	Construction, O&M
Lane Closure Permit Form	FTEPBE	tbd		60 days	No fee	Construction
Permit for Landscaping on State Road ROW	FTEPBE	tbd		60 days	No fee	Construction, O&M
Dewatering Permit Application	FTEPBE	tbd		60 days	No fee	Construction
General Use Permit	FTEPBE	tbd		60 days	No fee	Construction, O&M
Permit Applicant Statement of Certification of Completed Permit Work	FTEPBE	tbd		60 days	No fee	Construction
Florida Administrative Code (State)						
Rule 14-20-Private Use of ROW (Placement of Bus Stops, Benches, and Shelters)	FDOT	regulation	--	--	--	O&M
Rule 14-43-Regulation of Signs, Canopies Over Streets and Sidewalks	FDOT	regulation	--	--	--	O&M
Rule 14-63-Building Moving Permit Regulations	FDOT	regulation	--	--	--	O&M
USCG (Federal)						
Bridge Permit Application	USCG	submitted	12/21/07	(5)	No fee	Design
FAA (Federal)						
Notice of Proposed Construction or Alteration	FAA Southern Regional Office	tbd		30 days	No fee	Design
Supplemental Notice of Actual Construction or Alteration	FAA Southern Regional Office	tbd		2 days	No fee	Construction

Permit	Permitting Agency	Status	Application Submittal Date	Approval Time Frame	Fee	Project Phase

Notes:

(1) Updated 7/16/08

(2) If the application package is acceptable, the BCHCED Paving & Drainage Section will calculate the application fee amount, if applicable, and notify the owner/agent.

(3) Well permits can often be issued within a few days, if the water use permit has already been issued, or the project is exempt from water use permits. Permit is valid for 90 days from date of issue.

(4) District office will calculate rate based on traffic volume: Category A $50, Category B $250, Category C $1,000, Category D $2,000, Category E $3,000, Category F $4,000, and Category G $5,000.

(5) Normally, the public comment period is 30 days. However, if a written request for a time extension is submitted at least 30 days before the expiration date of the permit, the existing permit will remain in effect during processing. Within 30 days of receipt of the application, District sends letter to applicant requesting any additional information, if required.

(6) Abbreviations:

tbd	to be developed
BCDMD	Broward County Development Management Division
BCEPD	Broward County Environmental Protection Department
BCHCED	Broward County Highway Construction & Engineering Division
CBWCD	Central Broward Water Control District
ED	Engineering Division
FAA	Federal Aviation Administration
FDEP	Florida Department of Environmental Protection
FLO	Ft. Lauderdale Operations
FTEPBO	Florida Turnpike Enterprise Pompano Beach Office
OPWCD	Old Plantation Water Control District
SFWMD	South Florida Water Management District
THISCD	Tindall Hammock Irrigation and Soil Conservation District
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard

1.4.2.1.1 Local Permits

The Project will be located entirely in Broward County, Florida. Therefore, several permits from Broward County will be required during design and construction phases. Coordination with Broward County Environmental Protection Department (BCEPD), Broward County Highway Construction and Engineering Division (BCHCED), and Broward County Development Management Division (BCDMD) will be necessary.

Surface water management and right-of-way permits will be required through Central Broward Water Control District (CBWCD), Old Plantation Water Control District (OPWCD), and Tindall Hammock Irrigation and Soil Conservation District (THISCD).

An Environmental General Resource License application and a Surface Water Management License application were submitted to BCEPD by FDOT on December 10, 2007. Also submitted on that date were a Permit for Work within District Right-of-Way to CBWCD, a Surface Water Management Permit to OPWCD, and a Surface Water Management and Right-of-Way Permit to THISCD. To date, two conceptual permits have been issued to FDOT: the BCEPD Surface Water Management License granted on July 9, 2008 and the THISCD permit issued on July 21, 2008.

Applications for the surface water management permits were submitted based on the current proposed design, which includes the construction of culvert/outfall connections to the CBWCD N-4 canal and discharge into four golf course systems. The ADMP Team proposed design includes discharge to the Pine Island Ridge Golf Course and the Arrowhead Golf Course, which are located within the jurisdiction of CBWCD, and discharge into the Jacaranda Golf Course pond system, which is located within OPWCD. These surface water management permit applications were submitted as conceptual permits only; therefore, construction phase permits will be submitted at a later date. The proposed design will also include discharge into Lago Mar Golf Course, which will not require any additional surface water management permits.

A THISCD Surface Water Management Permit will be required to complete the construction of a culvert/outfall connection into Forman Rock Pit, which is located within the jurisdictional boundaries of THISCD. THISCD operates its surface water management systems under the guidelines established in the SFWMD Permit Volume IV. The FDOT was granted a perpetual drainage easement consisting of 7.206 acres of flowage area within Forman Rock Pit, for the purpose of facilitating drainage inflows from the state highway system. The FDOT will be exercising its right to discharge no more than 32.427 acre-ft. of runoff volume to Forman Rock Pit for the 25-year, 3-day design storm event. The Team will complete the construction-phase permit application with the proposed design.

For Project improvements lying outside a special drainage district jurisdiction in Broward County, the BCEPD has local planning and permitting authority and generally adheres to the water quantity and flood protection requirements imposed by SFWMD. The proposed improvements include the construction of new drainage facilities within the jurisdictional boundaries of BCEPD. These activities will require a construction-phase BCPED Surface Water Management License. The ADMP Team will complete this license application with our proposed design.

Additional permits anticipated to be required from BCEPD include: a Dewatering Plan; a Broward County Air License to Construct/Operate Air Pollution Source for the use of diesel engines associated with heavy construction equipment, pumps, generators, and other machinery; a Hazardous Materials Facility License for storage of 100 to 200 gallons of diesel fuel on-site; and a toll building permit. BCEPD also will require submittal of a Statement of Responsibilities Regarding Asbestos form prior to performing any demolition or renovation of materials containing asbestos.

A tree removal license will not be required from BCEPD for areas within the FDOT right-of-way. Through collaboration with BCEPD and other local agencies, FDOT has agreed to relocate several trees within the I-595 corridor. However, for areas within the SFWMD right-of-way, a BCEPD tree removal license will be required.

Required permits anticipated from the Highway Construction and Engineering Division are Construction in the Public Right-Of-Way Permit and an Application for Initial Plan Review. In addition, an Environmental Review Approval from the Broward County Development Management Division is anticipated to be required.

Because portions of the I-595 project will be located within the city limits of Davie, Plantation, and Fort Lauderdale, municipal permits also will be required. The Town of Davie requires approval of the site plan by the Planning and Zoning Division; several permits from the Engineering Division, including site development, fill, drainage, paving and grading, clearing and grubbing, traffic flow modifications/street closure, and seal coat and stripping permits; submission of a stormwater pollution prevention plan to the Engineering Division; a toll building permit from the Building Division; and a tree removal/relocation permit from the Planning and Zoning Division. The City of Plantation and the City of Fort Lauderdale require contractors to obtain building permits and land clearing/landscape permits. Fort Lauderdale also requires an engineering permit through the Engineering Division. Tree removal permits are not anticipated to be required from the municipalities of Plantation and Ft. Lauderdale.

1.4.2.1.2 State Permits

The primary State of Florida permitting agencies are the Florida Department of Environmental Protection (FDEP), SFWMD, FDOT, and the FTE.

Two permit applications to State agencies were submitted on December 10, 2007: a Standard Right-of-Way Occupancy Permit to SFWMD and a Joint Application for Environmental Resource Permit/Authorization to

Use State Owned Submerged Lands/Federal Dredge and Fill Permit to SFWMD, FDEP, and the USACE. The joint environmental resource/use of state-owned lands/dredge and fill application was submitted as a conceptual design only; therefore, a construction phase permit will be required at a later date.

The SFWMD Individual Environmental Resource Permit is required to complete major reconstruction of I-595 and SR-84, construct several bridges over the NNRC, install new stormwater management systems, and perform dredge and fill activities within the NNRC. The SFWMD has agreed to limit the water quality treatment requirements for the Project to the current level of water quality treatment being provided plus 2.5 inches of water quality treatment over the new, additional impervious area. They have also agreed to a total basin post development discharge equal to or less than the predevelopment discharge evaluation to meet water quantity requirements. The preliminary water quality and quantity calculations indicate that the proposed stormwater management facilities provide the required water quality treatment volume and meet the pre vs. post criteria. Other commitments include the use of turbidity barriers during construction activities per FDOT Design Standard Index 103 and FDOT Standard Specification 104, the installation of concrete sheet piles to prevent erosion during construction activities per FDOT Design Standard Indices 20400 – 20440, and provisions for manatee protection at all outfalls through the use of manatee grates per FDOT Standard Index 280. These Best Management Practices will be included as part of the Team's plans. In addition, the dredge and fill activities within the NNRC east of Sewell Lock will require Authorization to Use State Owned Submerged Lands through USACE. The FDOT has received comments from the SFWMD on the initial permit application in a letter dated January 10, 2008. The ADMP Team will complete the permit application and modify it based on the proposed design.

The SFWMD Right-of-Way Occupancy Permit will be required to complete aspects of the project including the construction of new outfall pipe connections into the NNRC, new bridges over the NNRC, sound barriers within the NNRC right-of-way, and installation of sea wall/liners along the NNRC. The FDOT has received comments from the SFWMD on the initial permit application. The ADMP Team will complete the permit application and modify it based on the proposed design.

Additional permits required by SFWMD during design and construction phases include a Water Use Permit to draw water from wells or existing canals; a Mining/Dewatering Permit; and a State of Florida Permit to Construct, Repair, Modify, or Abandon a Well in the event that a monitoring well is discovered in the project area.

Anticipated permits required by FDEP during design and construction phases include a Comprehensive Everglades Restoration Plan Regulation Act Permit; a Generic Permit for Stormwater Discharge from Large and Small Construction Activities, which will require a Stormwater Pollution Prevention Plan and a Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities; a Generic Produced Groundwater Discharge Permit; a Notice of Asbestos Renovation or Demolition; and a Heating Units and General Purpose Internal Combustion Engines Air General Permit, assuming that the total annual diesel fuel usage will be greater than 32,000 gallons and less than 250,000 gallons.

Several permits also will be required through FDOT and/or FTE during the construction and O&M phases, including Connection permits, Drainage Connection permits, Utility permits, Road/Lane Closure permits, Landscaping on State Road Right-of-Way permits, Dewatering permits, and General Use permits. FTE also requests that a Permit Applicant Statement of Certification of Completed Permit Work be submitted upon completion of work.

Because the Project is located within a 10-nautical-mile radius of the Ft. Lauderdale-Hollywood International Airport, an Airspace Obstruction Permit Application may be required by the FDOT Aviation Office.

1.4.2.1.3 Federal Permits

The USACE is the primary federal agency that will be involved in the permitting process for the I-595 process. A Dredge and Fill permit, as part of the Joint Environmental Resource Permit mentioned above, was submitted on December 10, 2007. A United States Coast Guard (USCG) Bridge Permit was submitted on December 21, 2007 for the proposed bridge work over navigable sections of the North New River Canal. The ADMP Team will complete these permit applications and modify them based on our proposed design.

Additional coordination with the Federal Aviation Administration (FAA) and the Ft. Lauderdale-Hollywood International Airport will be required regarding construction and/or roadway lighting requirements during the design phase. As part of this coordination, a Notice of Proposed Construction or Alteration will be submitted to the FAA Southern Regional Office during the design phase and, if necessary, a Supplemental Notice of Actual Construction or Alteration will be submitted prior to initiation of construction.

1.4.2.2 NEPA REQUIREMENTS

The ADMP Team will be responsible for multiple NEPA-related and other environmental requirements and commitments during all phases of the Project. This includes all current requirements and commitments developed by FDOT and other regulatory agencies, as well as any additional requirements or commitments that arise as the project progresses. The ADMP Team will be responsible for coordinating changes to existing requirements and commitments with FDOT and other appropriate regulatory agencies as necessary. The status of all commitments and requirements will be tracked to document the process. An example of the requirements and commitments tracking matrix that will be maintained during all phases of the project is presented in Table 1.4-3.

Table 1.4-3 - Example Requirements and Commitments Tracking Matrix

R/C #	Subject Area	Source [1]	Requirement/Commitment	Applicable Phase			Responsibility	Change		Target Completion Date	Documentation of Completion	
				Design	Const.	O&M		Date	Notes		Source	Actual Comp. Date
GP.1	General Permitting	(D), Part F.3	Comply with all permit conditions, environmental mitigation and other permitting requirements, and be responsible for penalties/mitigation resulting from Concessionaire's actions that are not in compliance with permit conditions.	✓	✓	✓						
N.1	Noise	(B), Part E.4; (D), Part F.6	Be responsible for abatement of construction noise and vibration to acceptable levels as measured within the Project ROW, along the approach, and at nearby sites, including residential and commercial properties.		✓							

R/C #	Subject Area	Source [1]	Requirement/Commitment	Applicable Phase			Responsibility	Change		Target Completion Date	Documentation of Completion	
				Design	Const.	O&M		Date	Notes		Source	Actual Comp. Date
ET.1	Endangered and Threatened Species	(D), Part F.8; (F), Part VI	Follow USFWS Standard Protection Measures for the Florida manatee during project implementation.		✓	✓						
CM.1	Contaminated Materials	(H), Attach. A.3	No drainage structures should be installed, nor should dewatering be permitted in the areas of elevated groundwater concentrations.	✓	✓							

Notes:

[1] Requirements and Commitments were taken from the following sources:

(A) FDOT. 2007. Appendix A - Scope of Services for Financial Project ID(S). 999999-1-52-01. District Three, Leon County. September 11, 2007.

(B) FDOT. 2008. I-595 RFP Volume II - Technical Requirements, Division II, Section 1 - Project Description. Addendum No. 4 – Released August 8, 2008.

(C) FDOT. 2008. I-595 RFP Volume II - Technical Requirements, Division II, Section 2 - Project Requirements and Provisions for Work. Addendum No. 4 – Released August 8, 2008.

(D) FDOT. 2008. I-595 RFP Volume II - Technical Requirements, Division II, Section 3 - Design and Construction Criteria. Addendum No. 4 – Released August 8, 2008.

(E) FDOT. 2008. I-595 RFP Volume II - Technical Requirements, Division II, Section 4 - Operations & Maintenance Requirements. Addendum No. 2 – Released July 3, 2008.

(F) FDOT. 2007. Design Change Reevaluation for I-595. November 14, 2007.

(G) Metcalf & Eddy, Inc. 2008. RD/RA Consent Decree, FPR Superfund Site (EPA ID#FLD984184127), Preliminary Constructability Review, State Road 862/Interstate 595 Project. February 14, 2008.

(H) FDOT. 2008. Project Reevaluation, Construction Advertisement Phase. April 2008

In accordance with FDOT guidance, a Project Development and Environment Study (PD&E) was completed for the Project in March 2006, and was submitted to the Federal Highway Administration (FHWA) for approval. The FHWA granted the FDOT a Type II CE for the I-595 project in June 2006, indicating that an Environmental Impact Statement or Environmental Assessment would not be required as part of the NEPA process.

Subsequent to the Type II CE determination, a Design Change was proposed for the Project due to objections raised by several communities regarding the proposed elevated express lanes within the median of the roadway. In November 2007, a Design Change Re-evaluation was conducted in accordance with FDOT guidance to determine the impacts of the proposed Design Change on the environment, cultural resources, socioeconomics, and other resources. A Construction Advertisement Re-evaluation was subsequently performed in April 2008 to provide an update to the November 2007 re-evaluation. No significant impacts were identified as a result of these re-evaluations, and the FHWA concurred with the determinations.

All work associated with the Project will be performed in accordance with the NEPA process. Any additional re-evaluations needed as a result of future design changes will be coordinated with the FDOT District 4 Planning and Environmental Management Office. Approval by the FHWA will be required before any of the design changes are implemented.

1.4.2.3 GENERAL PERMITTING REQUIREMENTS

1.4.2.3.1 Design Phase

The ADMP Team will conduct preliminary research to determine permitting requirements, coordinate with appropriate regulatory agencies, and incorporate these requirements into the Project design.

During the permitting process, it is anticipated that the ADMP Team will meet with regulatory agencies to ensure compliance with all requirements and to obtain approval for the necessary permits. The FDOT project manager, environmental permit coordinator and other FDOT personnel will be notified in advance of all scheduled meetings so that a FDOT representative may attend. In addition, FDOT personnel will be recipients of all permit-related correspondence, including documentation of preliminary research conducted, meeting minutes, and other information.

The ADMP Team will be responsible for the completion of all permits initiated by FDOT and all additional permits and associated fees required during the Project. Permit modifications necessary based on design changes also will be the responsibility of the ADMP Team. In addition, if a permit application is rejected, the ADMP Team will be responsible to meet all conditions required to obtain approval. The ADMP Team will complete all permitting requirements within the allowable timeframe given by FDOT. All conditions and requirements specified in the permits issued will be met.

The ADMP Team also will assist the FDOT Permit Office in reviewing permit applications (such as access management, drainage connections, utilities, and general use) submitted by other entities in conjunction with the Project. The ADMP Team will review and provide comments on permit applications within a 21-day period and will coordinate with the permittee to allow the permitted work to commence within a reasonable amount of time.

1.4.2.3.2 Construction/O&M Phase

The ADMP Team will be responsible for conducting inspections of all construction activities that result from approved FDOT permits. A Monthly Maintenance Report will be submitted to FDOT documenting all work performed related to the inspections. In addition, the ADMP Team will maintain permit inspection records and track the close-out of permits through the internet via FDOT's Permit Information Tracking System.

Permit inspections will be conducted, at a minimum, for all General Use Permits and in accordance with the following FDEP rules:

- Chapter 14-20, FAC – Private Use of Right-of-Way
- Chapter 14-40, FAC – Highway Beautification and Landscape Management
- Chapter 14-43, FAC – Regulation of Signs, Canopies Over Streets and Sidewalks
- Chapter 14-46, FAC – Utilities Installation or Adjustment
- Chapter 14-63, FAC – Building Moving Permit Regulations
- Chapter 14-65, FAC – Temporary Closing and Special Use of State Roads
- Chapter 14-86, FAC – Drainage Connections

- Chapter 14-96, FAC – State Highway System Connection Permits
- Chapter 14-97, FAC – State Highway System Access Management Classification System and Standards

1.4.2.4 WATER QUALITY

1.4.2.4.1 Design Phase

During the design phase, commitments and requirements applicable to the protection of water quality will involve the design of stormwater management facilities, coordination with regulatory agencies, fulfillment of permitting requirements, and, if necessary, performance of wetland mitigation measures.

All conditions and requirements specified in permits related to stormwater drainage, rights-of-way, and dewatering will be incorporated into the design of project stormwater management facilities, including collection, storage, treatment, conveyance, outfall, and other related systems. Coordination with BCEPD, local water control districts, SFWMD, and other agencies will be performed to obtain approval of all necessary permits. The ADMP Team will provide all required information as efficiently and as quickly as possible to avoid delays in the permitting process.

As required by the National Pollutant Discharge Elimination System (NPDES) process, an Erosion Control Plan will accompany the Stormwater Pollution Prevention Plan submitted as part of the stormwater discharge permit. During plan development, the use of box culverts or other drainage structures will be considered to reduce or eliminate stormwater runoff from the right-of-way into the Pond Apple Slough Natural Area.

1.4.2.4.2 Construction Phase

During construction, all necessary erosion control methods and other Best Management Practices will be implemented to protect the water quality of all waterbodies present in the vicinity of the Project in order to maintain compliance with Chapter 62-25, FAC (stormwater discharge regulations). These methods may include placement of silt fences, hay bales, and berms in locations with the potential for soil erosion to occur; stabilization of exposed soils; protection of stormwater collection points and the NNRC from sedimentation controlling stormwater flow within the construction zone; dust control; and other practices. Specifically, Best Management Practices will include (but not be limited to) the use of turbidity barriers during construction activities per FDOT Design Standard Index 103 and FDOT Standard Specification 104, the installation of concrete sheet piles to prevent erosion during construction activities per FDOT Design Standard Indices 20400 – 20440, and provisions for manatee protection at all outfalls through the use of manatee grates per FDOT Standard Index 280. Details of the erosion control methods recommended for the Project will be defined in the Stormwater Pollution Prevention Plan. Any corrective action due to high turbidity or other conditions caused by construction during the Project will be performed as required in the applicable permits.

Staging areas will be located in upland areas, if possible, and will be coordinated with FDOT's Office of Environmental Management prior to construction. During dewatering activities, the ADMP Team will adhere to all relevant laws and standards to protect area groundwater including Chapter 62-500.400, FAC (minimum groundwater criteria) and Chapter 62-520.430, FAC (Class III Groundwater Standards). If any groundwater wells are discovered within the boundaries of the project, the wells will be abandoned in accordance with Chapter 62-532.500(4), FAC (Water Well Construction Standards – Plugging Requirements) and SFWMD Rule 40E-3.531(3) (Abandoned Well Plugging).

1.4.2.4.3 O&M Phase

After completion of the Project, all components of the corridor stormwater drainage system will be maintained to ensure functionality and compliance with stormwater regulations and permits. This will include frequent

removal of trash and other debris from the roadways, ditches, and stormwater system and routine maintenance of vegetation in ditches and adjacent areas to prevent soil erosion.

1.4.2.5 NOISE AND VIBRATION

Sound barriers are an important component of the I-595 corridor design due to the potential impacts to residential and commercial areas from excessive noise levels during the construction and operational phases of the project. Abatement of noise to acceptable levels will be required along the corridor and its vicinity. Sound barriers at 13 locations have been proposed in the current design. The ADMP Team will consider the recommended design as a starting point. Any changes to the horizontal limits of sound barriers specified in the current design will require FDOT approval. Height of the sound barriers will be determined by FDOT in conjunction with community input. In addition, the ADMP Team will adhere to all noise restrictions in FDOT road and bridge construction guidance, follow applicable Best Management Practices, coordinate with SFWMD and the State Historic Preservation Officer (SHPO) as required, and consider public concerns.

Prior to construction of the sound barrier walls, an engineering review will be coordinated with FDOT to identify any engineering concerns or conflicts that may affect the final design. The review will consist, at a minimum, of the following considerations: access rights and other right-of-way needs, adequate easement for maintenance purposes, structural and landscaping restrictions within the easement, utility conflicts, drainage issues, safety, and other considerations.

Vibration is another factor of road construction projects that must be considered during the design and construction phases. Vibration levels will be monitored and controlled during construction to prevent damage to adjacent structures and disturbance of nearby residents. A Vibration Monitoring Plan (VMP) will be submitted to FDOT for review and concurrence prior to commencement of construction. The VMP will document existing adjacent property conditions, monitoring, reporting, and abatement as necessary to protect all properties and structures in the vicinity of the project ROW. In addition, a process for addressing, settling, or disposing of any vibration damage concerns, disputes, or claims will be developed.

1.4.2.6 ENDANGERED AND THREATENED SPECIES

During the PD&E study, an Endangered Species Biological Assessment (ESBA) was performed to evaluate the potential impacts of the Project to federally-listed species. In October 2007, a second evaluation was conducted at the golf courses that, as part of FDOT's design, would accept stormwater runoff from the corridor to determine potential impacts to federally-listed species. Results of these evaluations indicated that the American alligator (*Alligator mississippiens*), eastern indigo snake (*Drymarchon corais couperi*), Florida manatee (*Trichechus manatus latirostris*), and wood stork (*Mycteria americana*) are the only federally-listed species that have the potential to appear in the project corridor and/or the golf courses.

To protect any endangered or threatened species that may potentially occur in the vicinity of the Project, coordination will be maintained with the United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the FDOT District Planning and Environmental Management Office. In addition, all conditions stipulated in permits regarding the protection of listed species will be followed.

If any design changes result in permit modifications or inclusion of land outside of the current Project boundaries, USFWS will require a re-evaluation of the potential impacts to wood stork foraging areas to avoid impacts to this species. The USFWS will also require that the ADMP Team follow the Standard Protection Measures for the eastern indigo snake and the Standard Construction Conditions for the Florida manatee to protect these two species from any adverse impacts during construction and operation phases. Coordination with the USFWS regarding impacts to threatened or endangered species will continue throughout the Project.

USACE, SFWMD, and BCEPD will require the ADMP Team to submit Technical Special Provisions describing what measures will be taken to protect the eastern indigo snake, manatee, American crocodile (*Crocodylus acutus*), Audubon's crested caracara (*Caracara cheriway*), bald eagle (*Haliaeetus leucocephalus*), wood stork (*Mycteria americana*), snail kite (*Rostrhamus sociabilis plumbeus*), Florida panther (*Felis concolor coryi*), smalltooth sawfish (*Pristis pectinata*), and any other listed species that potentially may be impacted during project implementation. The provisions will be based on the USFWS standard measures discussed above and will include items such as floating turbidity barriers and grates covering outfall pipes within the North New River Canal approved for use around manatees and the smalltooth sawfish. These provisions must be submitted to USACE, SFWMD, and BCEPD during construction phase permitting.

Correspondence from NMFS indicated that additional information would need to be provided to adequately evaluate potential impacts to listed species, including: habitat characterization of the wetlands within the Project limits, construction details, a description of the Best Management Practices that will be followed during the construction phase to protect water quality, the proposed design for any new bridges spanning tidal waters, and a stormwater management plan. The ADMP Team will provide all information required and will coordinate with NMFS throughout the process.

1.4.2.7 CONTAMINATED AND HAZARDOUS MATERIALS

The I-595 corridor is situated over a plume of contaminated groundwater that originated from the FPR Superfund Site. Through coordination with the United States Environmental Protection Agency (USEPA), a Consent Decree was developed to establish requirements regarding the design and construction of any roadway projects within the area of contamination. Section IX, Access and Institutional Controls of the Consent Decree includes several provisions that are summarized below:

- 26.(b)(i) If any phase of the project adversely impacts the remedial action performed at the FPR Superfund Site, the project must adhere to the design plans approved by USEPA on March 31, 2004
- 26.(b)(ii) Any other project proposed "within the area from Peters Road to the north, U.S. Route 441 to the east, Orange Drive to the south, and the Florida Turnpike to the west" must be coordinated with USEPA. Approval to proceed with the project will be given only after USEPA determines that the project would not adversely affect the remedial actions performed at the FPR site
- 26.(b)(iii) In the event that FDOT responds to an emergency, which is defined in Chapter 252.34(3) of the Florida Statutes as "any occurrence, or threat thereof, whether natural, technological, or manmade, in war or in peace, which results or may result in substantial injury or harm to the population or substantial damage to or loss of property," within the site boundaries described above, FDOT will notify USEPA within one working day. If USEPA finds that the emergency response may potentially have a negative impact on the remedial action at the FPR site, FDOT will be required to submit proof of the emergency and that every attempt was made to avoid impacts to the remedial measures at the site
- 26.(b)(iv) Any resulting cost of remediation at the FPR site from implementation of an FDOT project will require reimbursement of these costs to USEPA and the Settling Defendants specified in the Consent Decree

The above requirements will be followed during all phases of the I-595 Project. Technical support will be provided to FDOT as necessary to ensure compliance with the Consent Decree. In the event that additional design changes are proposed, coordination with USEPA will take place to obtain approval on the revised construction plans.

1.4.2.8 LIGHTING/VISUAL

1.4.2.8.1 Design Phase

During the design phase, coordination will be initiated with the FAA and Ft. Lauderdale-Hollywood International Airport due to the proximity of the airport to the Project. Coordination is necessary to identify any lighting requirements or restrictions applicable to ensure aircraft safety.

Temporary lighting utilized to illuminate construction work zones during night time hours may adversely affect nearby residences. The design and installation of such lighting will be completed in such a way to minimize impacts to residences in the area, and will comply with all applicable guidelines and manuals.

1.4.2.8.2 Construction Phase

Continued operation of all roadways lighting at existing illumination levels during all phases of the Project is a necessary requirement to ensure the safety of construction workers on-site and motorists traveling along the corridor. The ADMP Team will also be responsible for the construction, maintenance, removal, and disposal of all temporary lights installed during the construction phase. Temporary high mast structures may require an Airspace Obstruction Permit through FDOT. These structures will be constructed in accordance with all applicable standards.

1.4.2.9 RIGHTS-OF-WAY AND UTILITIES

The current proposed design will require acquisition by FDOT of property for right-of-way within the Project limits. FDOT anticipates that all acquisitions will be complete by October 2010. Construction activities within the areas subject to acquisition may not begin until a project right-of-way clear letter is obtained from the FDOT District Right-of-Way Manager.

The ADMP Team will be responsible for modifying the SFWMD Right-of-Way Occupancy Permit in the event that additional design changes are proposed. Because the right-of-way included in the SFWMD permit may not be used for staging or stockpiling activities, the ADMP Team will obtain temporary rights (upon written approval by FDOT) to additional areas for staging or stockpiling, if needed. FDOT approval is necessary to ensure that construction activities will not permanently impact the temporary sites. Any documentation required such as permits or leases will be acquired by the ADMP Team.

Landscaping at temporary use areas utilized during the construction phase of the Project will be restored to pre-existing conditions. The ADMP Team will coordinate landscaping design and installation with the FDOT District Planning and Environmental Management Office, local municipalities, and adjacent property owners. Removal of any native vegetation within the Project right-of-way also will require coordination with Broward County or the appropriate municipality.

Any additional rights-of-way proposed by the ADMP Team, including easements necessary for utility construction, must be approved by FDOT. The ADMP Team would be responsible for all costs associated with the acquisition of property for this Project, but would hold no rights to the property. A relocation program for affected property owners will be implemented in accordance with Section 339.09 of the Florida Statutes and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970.

The ADMP Team will also be responsible for all activities related to utility design and construction, including obtaining all permits and ensuring that any utility subcontractor obtains all necessary permits.

1.4.2.10 GREENWAYS

A Section 4(f) Greenways project is also being implemented along the I-595 corridor within the limits of the Project. This multi-use pathway would be connected to a Greenways system stretching across Broward County from the Everglades to the Atlantic Ocean. The ADMP Team will be responsible for the design and construction of a multi-use pathway along the north bank of the NNRC and several pedestrian bridges spanning the canal. The ADMP Team will also be responsible for performing any Section 4(f) activities related to the Greenways project, if necessary. The new Greenways section would be completed before demolishing the existing section located along the south bank of the canal, to allow utilization of the pathway during the construction phase of the I-595 project.

Coordination will be maintained with Broward County and SFWMD throughout the design and construction phases regarding the pathway, bridges, and drainage. Any proposed design changes will require approval from the FDOT District Planning and Environmental Management Office.

1.4.2.11 PUBLIC INVOLVEMENT

Given the scope and magnitude of the Project, public awareness and involvement are important components that will be considered throughout the design, construction, and O&M phases of the Project. Local officials and agency administrators will be updated on project specifics as the Project progresses through the final design phase. A Community Awareness Plan will be developed by FDOT to encourage public participation throughout the duration of the Project. The ADMP Team will be responsible for reviewing and commenting on the Community Awareness Plan, and will update the plan regarding project issues, impacts, schedule, and activities. FDOT approval on the updates will be obtained before the plan is released to the public.

Prior to beginning construction, a public information meeting will be held by FDOT. The ADMP Team will provide support for this and all subsequent meetings by providing and preparing display boards and information for printed materials, providing technical assistance to FDOT, supplying an adequate number of personnel to attend the meetings, and responding to RFIs. The ADMP Team also will be responsible for coordinating with the FDOT Public Information Consultant and assisting this individual on an as-needed basis.

Public access to local businesses and residences within the limits of the Project will be made available as much as possible during the construction. Also, every effort will be made to minimize traffic delays.

✔ This Environmental Compliance Plan meets Technical Proposal Requirements (1.4b) by delineating the commitments and requirements, and how these approvals will be identified and tracked.

1.4.3 Mitigation Measures

ITP 1.4c – Identify Mitigation Plans to be Developed for Environmentally Sensitive Aspects of the Work, Addressing Potential Work Activities Related to the Natural Environment, Cultural and Historic Resources, and the Physical Environment, Including the Handling, Transportation and Disposal of Undesirable, Contaminated and/or Hazardous Materials Encountered Throughout the Term.

1.4.3.1 ENVIRONMENTAL RISK

Throughout the scope of the Project, trained environmental professionals will identify and manage environmental risk and will perform work in accordance with all applicable permits, laws, and regulations.

Environmental risks will be identified through early identification of environmental and permitting issues. This ECP is the first step in this process. Upon Project award, the ADMP Team will immediately initiate coordination meetings with regulatory agencies and the major stakeholders. This coordination will continue throughout the design and construction phases of the Project and will minimize the possibility of any permitting or other technical issues that may impact this Project.

Planning will involve the development of stormwater and hazardous waste management plans, reuse and recycling plans for construction materials and debris, and other necessary mitigation plans. Best Management Practices and engineering controls consistent with environmental sustainability will be implemented throughout all phases of the Project. Unavoidable environmental impacts will be adequately addressed through planning and the use of appropriate mitigation measures.

1.4.3.2 MITIGATION DESIGN

Should impacts to the natural environment, cultural or historic resources, or the physical environment be identified based on additional design changes to the Project, the ADMP Team will coordinate with FDOT and prepare a mitigation plan. The plan will be completed in accordance with FDOT guidelines and policies. Once the mitigation plan has been approved, the ADMP Team will coordinate with regulatory agencies and submit the plan as part of the permitting process.

1.4.3.2.1 Environmental Clearance

In the event that additional impacts to environmental resources requiring mitigation are identified, the ADMP Team will prepare environmental clearances consistent with the PD&E study process. The following documents will be provided as part of this process:

- Cultural Resource Assessment Request Package, which will provide a comprehensive analysis of impacts to all cultural and historic resources in the vicinity of the mitigation sites
- Wetlands Evaluation Report, which will analyze impacts to all wetlands in the vicinity
- Endangered Species Biological Assessment; which will identify impacts to protected species and their associated habitat that may be present nearby
- Contamination Screening Evaluation Report, which will analyze any potential contamination issues in the vicinity

1.4.3.2.2 Natural Environment

All mitigation due to wetland impacts associated with the Indicative Design is the responsibility of FDOT. However, in the event that impacts to the Pond Apple Slough Natural Area or other wetland areas are identified in conjunction with additional investigations and/or design changes, these impacts will be eliminated or minimized through the development of appropriate mitigation measures required by USFWS, SFWMD, Broward County Biological Resources Division, or other regulatory agencies. Any additional wetland delineation or investigation needed as a result of design changes will be the responsibility of the ADMP Team. Jurisdictional wetland delineation will require two main activities: determination of the landward extent of State waters as defined in Chapter 62-340, FAC, Delineation of the Landward Extent of Wetlands and Surface Waters; and preparation of an assessment of the current condition and value of the functions provided by the wetlands and/or surface waters.

Determination of the landward extent of waters would require following all applicable rules and regulations regarding jurisdictional boundaries that are defined by the various permitting agencies; preparing aerial figures presenting the wetland and/or surface water boundaries; and obtaining written approval of the

proposed jurisdictional boundaries by the applicable regulatory agencies. The written assessment discussing the waters' condition and value would provide information including the sizes of wetlands impacted, types of potential impacts, and a list of any other wetlands that exist in the area that would not be impacted.

Mitigation options considered in the event of additional impacts to wetland areas due to design changes to the Indicative Preliminary Design would include rehydration of the Pond Apple Slough Natural Area, acquisition and restoration of a wetland area adjacent to Pond Apple Slough, purchase of credits from a wetland mitigation bank, offering a financial contribution to off-site regional mitigation plans, or providing compensation to SFWMD at a rate of $75,000 per acre of impacted wetlands as specified in Chapter 373.4137 of the Florida Statutes, Mitigation Requirements for Specified Transportation Projects. (The cost per acre in the legislation is in 1997 dollars; therefore, the actual amount must be adjusted for inflation).

If creation or restoration of additional wetlands is the only practical alternatives determined to adequately address impacts to wetlands, the ADMP Team will research and complete alternative mitigation plans for sites proposed for wetland creation or restoration. The alternative plans will provide a preliminary jurisdictional determination for the sites (through coordination with FDOT and other agencies) and a summary of the justifications for recommending or rejecting sites. Once approved by FDOT, the ADMP Team will submit the mitigation plan(s) as part of the Environmental Resource Permit.

No wood stork core foraging areas are currently located within the limits of the Project area. However, any design changes that result in permit modifications or inclusion of land outside of the current Project boundaries will be coordinated with USFWS to re-evaluate potential impacts to wood stork foraging areas. If potential impacts are identified to wetland areas that support wood stork colonies, mitigation measures will be implemented. Ideally, wetlands would be replaced within the same core foraging area. If this option is not practicable, then other mitigation measures such as the purchase of wetland credits from a mitigation bank would be coordinated with USFWS.

1.4.3.2.3 Cultural and Historic Resources

Several sites listed (or eligible for listing) on the National Register of Historic Places (NRHP) have been identified in the area of the project: Cherry Camp, Sewell Lock, and the NNRC. The SHPO has indicated that the Project will not adversely affect any of these historic resources. This determination has received concurrence from the Architectural Historian from the Florida Division of Historical Resources. However, coordination with the SHPO will be provided throughout the Project regarding the placement of and construction materials for bulkheads and sound barriers, and modifications to bridges over the NNRC.

Permanent impacts to historical resources will be avoided during the construction and operation phases of the Project. Cherry Camp will not be used for staging or stockpiling activities. A perimeter fence will be installed around Cherry Camp during the construction phase to prevent access to the area. In addition, no staging or construction activities will be conducted in Sewell Lock Park without prior approval from the FDOT District Planning and Environmental Management Office. Two potential staging areas along the Project's corridor have been identified that would not impact historical or cultural resources: adjacent to the SW 136th Avenue bridge and adjacent to the Florida's Turnpike bridge.

During construction activities, all necessary precautions will be taken to protect any architectural resources that may potentially be found. The ADMP Team will comply with all applicable requirements and guidelines throughout the project. For example, if human remains are encountered during the project, any activities that may disturb the remains will cease and the State Medical Examiner or the State Archaeologist will be contacted in accordance with Chapter 872.05 of the Florida Statutes.

1.4.3.2.4 Materials Management

1.4.3.2.4.1 Construction Debris

Construction materials and debris generated during the demolition of existing bridges and roadways will be reused or recycled as much as possible. In accordance with Section 13.5.2.3 of the FDOT Plans Preparation Manual, materials will be made available to government agencies for beneficial uses such as erosion control and stabilization, the restoration of ecosystems, and the rebuilding of marine habitats.

The FDOT Standard Specifications for Road and Bridge Construction allows portland cement concrete free of muck, roots, stumps, and other plant matter, trash, reinforcement bar, and other foreign materials to be crushed and used for construction of roadway embankments. Reclaimed asphalt pavement may be milled or crushed and reused as a base for roadway shoulders, bike paths, and other non-traffic areas. If the reclaimed asphalt composition is not known, extraction gradation analyses to determine the average asphalt cement content and a visual inspection of the stockpiled material must be performed before the reclaimed asphalt is approved for reuse.

1.4.3.2.4.2 Contaminated and Hazardous Materials

Site investigations previously conducted at the FPR Superfund Site indicated the presence of surficial soil and groundwater contamination in isolated areas overlying the deep groundwater plume. Additional investigation including soil and groundwater sampling may be required in proposed construction areas prior to initiation of any work. The ADMP Team will coordinate with the Department's Contamination Impact Coordinator in the event that additional investigation of site contamination is required.

If present, concentrations of contaminants in site soil and groundwater must be evaluated to determine what safeguards should be implemented during construction to ensure the safety of all workers and the public. If possible, construction in areas with surficial soil or groundwater contamination would be avoided. If work must be performed in these areas, all necessary safeguards will be implemented, such as personal protective equipment (PPE) for workers; air monitoring; engineering controls; and proper storage, transport, and disposal of any contaminated or hazardous wastes.

If remediation of contaminated soil and/or groundwater is necessary, the remedial actions would be performed before construction begins, unless circumstances prevent this from occurring. Completing all remediation prior to the construction phase would likely be much more feasible and cost-effective. Construction of the Project over known contaminated soil and/or groundwater would create potential liability for FDOT and would make it more difficult to remediate in the future.

Potential contamination also has been identified in sediment of the NNRC. Sediment sampling performed in the canal by FDOT has identified elevated concentrations of arsenic and lead. The canal will be dredged as part of the bridge and bulkhead work during the proposed Project, and the ADMP Team will be responsible for the disposal of all contaminated dredged material. Sediment stockpiling and dewatering activities will be coordinated with FDOT and SFWMD. Disposal of contaminated sediment will be performed in accordance with all applicable laws and regulations.

The proposed design recommends relocation of various utilities within the Project's corridor including one known water main containing asbestos. All necessary precautions will be taken while performing work associated with this water main or any other object containing hazardous materials, including wearing appropriate PPE, implementing engineering controls, and handling and disposing of the materials in accordance with all applicable federal, state, and local laws and regulations.

The Concessionaire will be responsible for responding to and addressing the removal, handling, transportation, and disposal of all contaminated materials during the construction and operational phases of the Project. If, during the construction phase, additional contaminated or hazardous materials are encountered or a release occurs from traffic accidents or illegal dumping, work will stop immediately and FDOT will be notified. The Department's Contamination Impact Coordinator will coordinate with the designated contaminated/hazardous waste handler to remove the contamination off-site and dispose of the materials in accordance with all applicable laws and regulations.



This Environmental Compliance Plan meets Technical Proposal Requirements (1.4.c.) by identifying mitigation plans to be developed for environmentally sensitive aspects of the work, addressing potential work activities related to the natural environment, cultural and historic resources, and the physical environment, including the handling of contaminated and/or hazardous materials.

APPENDIX 2-F

RENEWAL WORK RESERVE

All amounts in year-of-expenditure '000 United States Dollars

Fiscal Year	Beginning Balance	Deposits to Reserve	Draws on Reserve	Ending Balance	Interest Earnings
2014	–	1,511	–	1,511	–
2015	1,511	523	(43)	1,991	85
2016	1,991	39	(243)	1,788	92
2017	1,788	157	(162)	1,782	85
2018	1,782	1,504	–	3,286	95
2019	3,286	6,311	–	9,597	244
2020	9,597	12,614	–	22,212	698
2021	22,212	16,797	–	39,009	1,381
2022	39,009	12,738	–	51,747	2,247
2023	51,747	1,370	(4,475)	48,642	2,618
2024	48,642	874	(15,758)	33,757	2,111
2025	33,757	901	(14,996)	19,662	1,313
2026	19,662	228	(6,746)	13,143	850
2027	13,143	477	(5,235)	8,385	515
2028	8,385	2,589	–	10,975	440
2029	10,975	8,279	–	19,254	630
2030	19,254	14,689	–	33,942	1,141
2031	33,942	19,706	–	53,649	1,939
2032	53,649	15,177	(342)	68,483	2,915
2033	68,483	3,217	(8,256)	63,444	3,262
2034	63,444	2,340	(21,572)	44,212	2,645
2035	44,212	329	(14,874)	29,667	1,687
2036	29,667	825	(1,135)	29,357	1,403
2037	29,357	1,218	(2,863)	27,712	1,321
2038	27,712	2,463	(6,110)	24,065	1,299
2039	24,065	–	(14,845)	9,219	889
2040	9,219	–	(9,219)	–	161
2041	–	–	–	–	–
2042	–	–	–	–	–
2043	–	–	–	–	–
2044	–	–	–	–	–

APPENDIX 2-G

OPERATIONS AND MAINTENANCE

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3 Operations and Maintenance

3.1 OPERATIONS AND MAINTENANCE PLAN ("O&M PLAN")

3.1.1 Overview Narrative

ITP 3.1.a – An Overview Narrative Describing the Scope of the O&M Work and the Parameters that the Proposer Will Develop and Employ in Relation to Operating and Maintaining the Facility During Both the Construction Period and the Operating Period.

This overview provides a summary of the significant Project goals, a description of ADMP's preliminary O&M Plan and the significant parameters considered during the Construction Period and Operating Period.

Key Features

- > ADMP's Extensive O & M Expertise Applied to I-595 Express Project
- > Quantifiable goals to ensure safety, availability, and reliability of Operations and Maintenance.
- > Comprehensive Self-Monitoring Processes
- > Preventative Maintenance and Major Maintenance Activities that ensure a safe and reliable operation.



ADMP has extensive experience in operations and maintenance internationally with several successful ongoing concessions and has experienced personnel available to commit to this Project.

Maximizing safety, reliability and availability are the objectives of our Operations and Maintenance Plans.

3.1.1.1 GOALS OF THE O&M PLAN

The primary O&M goal is to provide a high level of service to the traveling public while maximizing safety, availability and reliability. ADMP will accomplish this by developing and implementing a cost effective O&M Plan that is in compliance with the FDOT regulations, topics, specifications and other terms of the Contract Documents.

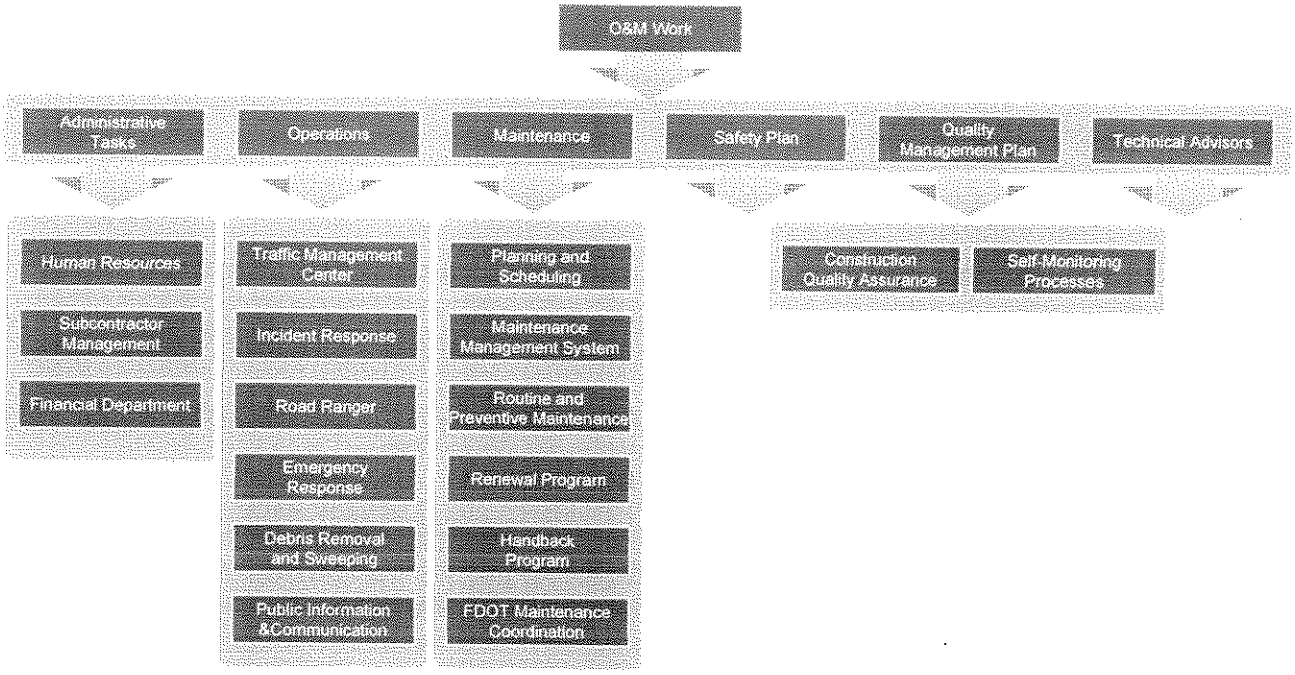
During the design stage ADMP will have a strong interface with the Designer so that infrastructure asset designs are durable and maintainable. During the Construction Period ADMP will implement a QC program to monitor the construction methods. ADMP will also implement an O&M Program that preserves and protects the corridor assets while ensuring the traveling public has a safe, smooth and reliable roadway.

The key for successful execution of the O&M Program is to assemble a strong, experienced O&M team committed to the Project. AMDP has extensive experience in operations and maintenance internationally with several successful ongoing concessions and has experienced personnel available to commit to this Project. Additionally, to further strengthen the Team, ADMP has utilized the assistance of Roy Jorgensen Associates. Jorgensen is known throughout the highway industry as the pioneer in developing and implementing innovative O&M programs. Jorgensen also brings its 30 years experience with O&M activities on asset management and maintenance contracts for FDOT.

3.1.1.2 SCOPE OF THE O&M WORK

The following Scope of Work has been organized according to the activity list derived from the contract documents and other FDOT standards and specifications.

Figure 3.1-1 Overall Scope of Work



3.1.1.3 APPROACH TO PRELIMINARY O&M PLAN

The RFP requirements for O&M Plan are specifically defined in Volume II, Division II, Section 4. ADMP's general obligations in meeting the O&M requirements are specified in this section and include:

- Providing for the maintenance and operations of all the existing assets and ITS devices within the O&M Limits during the Construction Period
- Providing for the maintenance and operations of the Project's assets and ITS devices within the O&M Limits during the Operating Period
- Providing for the Renewal Work of the Project's assets and ITS devices
- Providing for the Handback of the Project assets
- Providing first responder incident/emergency response

A detailed O&M Plan has been prepared by ADMP, The table of contents of which is presented in Section 3.1.2, The technical proposal highlights key features of this O & M plan.

3.1.1.4 PARAMETERS CONSIDERED DURING CONSTRUCTION PERIOD

The initiation of ADMP's O&M field activities is to begin after receiving NTP2, which occurs when a section goes under construction. This will require the mobilization of field staff and equipment prior to receiving the notice for NTP2. The activities to be performed during construction are defined in Section 4. 0, Table 4.1A in the Contract Documents and include:

- **Maintenance Activities.** Mowing, litter removal, reworking shoulders, slopes and roadside ditches, RPM replacement, pavement and symbol markings, guardrail and attenuator repair and maintenance,

sign maintenance, drainage system maintenance, NPDES requirements, lighting maintenance, bridge inspection and maintenance, mast arm and over-lane structures inspection and maintenance, high mast light maintenance, fence maintenance, concrete sidewalk inspection and repairs, graffiti removal, flexible pavement inspection and repair after major damage, and ITS maintenance.

- **Operational Activities.** Incident response, fuel spills containment, road and bridge sweeping, road ranger, and Traffic Management Center (TMC) operations
- **Administrative Activities.** Monthly maintenance reports, and customer satisfaction survey for road patrol
- **CEI Activities.** All the activities associated with CEI as outlined in Section 3, Attachment 3 to RFP

During the design period the O&M management and supervisory organization will be put in place prior to NTP2, including all key management positions.

A program for office and yard facilities is described in Section 3.1.11 of this document and includes provisions for the TMC, a central office, maintenance and CEI facilities.

The preliminary O&M Plan prepared for the bidding phase will be revised, expanded in accordance with RFP, and submitted to FDOT 90 days prior to NTP2, and a final plan submitted 30 days prior to NTP2. The plan for the Operating Period is to be submitted 120 days prior to the anticipated Date of Final Completion. This comprehensive plan is to contain maintenance and operations manuals along with other data and information as defined in Section 1.4 of Section 4.

Coordination activities between ADMP and DGP that started during the bidding process will continue into the design phase and then into the Construction Period. Some of the keys considerations in these coordination activities include the following:

- Identifying the appropriate long term maintenance strategy to match with the pavement design
- Determining applicable deterioration curves to match the structure construction/reconstruction strategy
- Determining the number and types of other assets to be installed



This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3) by listing the key activities that will form the basis of the operations and maintenance program and describing ADMP's overall approach during the construction period.

3.1.1.5 PARAMETERS CONSIDERED DURING THE OPERATING PERIOD

The parameter considered during the Operating Period will be essentially the same activities as the one considered during the Construction Period and detailed above, which will be adapted to answer the requirements of Table 4.2 and 4.3 of Section 4, Volume II, Division II. The most significant changes regarding the parameters will come from the inclusion of the full ITS and of the managed lanes operations.

3.1.2 Documents Forming the Basis of the O&M Plan

ITP 3.1.b – A list of key documents that will form the basis of the operations and maintenance program (including the table of contents of each).

The O&M Plan during both the construction phase and the O&M phase covers a broad scope of activities as specified by FDOT in its ITP. Many documents will be required to provide clarity and guidance as well as specific policies and procedures for project staff as well as other stakeholders involved in the operations

and maintenance program. Some have been explicitly identified by FDOT while others are required as part of the overall project management process. The description of each document is presented below and the tables of contents for each immediately follow in Figures 3.1-2 through 3.1-8.

Document	Description
Operations Manual	This manual includes detailed procedures for operations during both construction and O&M phases. This includes operating protocols for the TMC, agreements and interactions with other entities, and directives and guidelines for operating requirements of equipment.
Maintenance Manual	This manual includes detailed documentation of all functions and activities necessary to form a detailed Asset Management Plan that includes preventative and routine maintenance services for roadway and ITS (including corrective for this one), MMIS description and operation, SunGuide Maintenance and Inventory Management Systems of ITS devices, maintenance, configuration and version records, condition assessments, staffing plans, procedures and schedules.
Quality Management Systems Plan	This document details ADMP's approach to the self-monitoring process of the O&M work. This will include policies, procedures and guidelines for conducting Quality Control and Quality Assurance activities on a routine or periodic basis; analyzing the data; reporting results; and coordinating with FDOT.
Transition Plan	This document details how ADMP will work with current maintenance contractors and ITS service providers to ensure a smooth transfer of maintenance services and system operation. The plan will include identification of each current contractor, equipment deployed (including configurations, installed versions, compatibility issues, stock levels -if any), actual coordination procedures to both FDOT and FTE when handling alarms and other maintenance activities (including response times) and a detailed check list and schedule for making the hand-off.
Disaster Recovery Plan	This document provides information and detail on how various organizational units within ADMP will carry out their duties and responsibilities in the event of a disaster. It will identify each organization and detail procedures to be followed to address various types of possible disasters, specially the coordination within FDOT's TMC between ADMP and the FDOT Team.
Emergency Response Plan	This document will address the requirement for both Governor Declared Emergencies and other emergencies. For Governor Declared Emergencies a summary of State policies and procedures will be included along with other local directives and procedures necessary to carry out pre-event preparation and initial post-event response. For other emergencies, directions and procedures for pre-event, post-event initial response and post-event clean up and repair will be documented.
Safety Plan	This document will address ADMP's approach to safety and safety management, for both internal issues and external public safety requirements. The ADMP Team realizes that safety is of highest importance and should be pervasive throughout the entire organization. As such a separate section has been included within the proposal specifically addressing Project safety requirements and procedures.

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2.3.1 Work Locations
2.3.2 Work Hours
2.3.3 Special Requirements

3.0 Agency Coordination
3.1 State and Local Agencies
3.2 Contact List
3.3 Operating Procedures, Protocols, and Agreements
3.4 External Communications

4.0 Operating Procedures
4.1 Basic Reference Requirements and Guidelines
4.1.1 From FDOT
4.1.2 Other
4.2 Procedures
4.2.1 Schedule
4.2.2 Other requirements
4.2.3 Operations Forms, Checklists and Logs
4.2.4 Documentation on system failures

5.0 Safety Plan (See separate outline)

6.0 Quality Management System (See separate outline)

7.0 Express Lanes Operation
7.1 Opening and Closing Express Lanes
7.2 Maintaining Express Lanes System

8.0 TMC Management
8.1 TMC Staff
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8.4 Coordination with other agencies

9.0 Road Ranger Services
9.1 General Requirements
9.2 Staffing
9.2.1 Schedule
9.3 Equipment
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9.4 Policy and Procedures
9.5 Customer Service Response Cards

Figure 3.1-4 Table of Contents Maintenance Manual

1.0 Introduction and Overview
1.1 Description of Roadway and ITS Assets, Facilities Systems and Equipment to be Maintained
1.2 Goals and Objectives of Operations
1.3 General Description of Compliance Requirements

2.0 Scope of Maintenance Requirements
2.1 Roadway, Bridge, and ITS Systems to be maintained (Reference to Tables 4.1A and 4.2 of Volume II, Division II, Section 4 of RFP)
2.2 Required Levels of Maintenance

3.0 Resource Requirements
3.1 Staffing
3.1.1 Operations Organization Chart
3.1.2 Position Descriptions and Responsibilities
3.1.2.1 Staff Qualifications
3.1.2.2 Required Training and Certification
3.1.3 Logistics
3.1.3.1 Work Locations
3.1.3.2 Work Hours
3.1.3.3 Special Requirements
3.2 Facilities
3.2.1 Offices, Workshops and Storage Yards
3.3 Equipment

4.0 Project Major Systems
4.1 Identification of Major Systems
4.1.1 System/Equipment Identification
4.1.2 Contact Information

5.0 Subcontractor Documentation
5.1 List of Major Subcontractors
5.2 Subcontract development checklist
5.3 Example Subcontract

6.0 Routine and Preventative Maintenance Procedures
6.1 (Performance Standards for each work activity to be prepared)
6.1.1 Frequency schedule for maintenance items
6.2 List of maintenance tasks by roadway assets and ITS devices by system/discipline

7.0 Unplanned Maintenance Procedures
7.1 General maintenance procedures
7.1.1 Authority and Approval Requirements
7.2 Assignments for performing unplanned maintenance

8.0 Performance of Diagnostic Procedures for Equipment and Systems
8.1 Responsibility for Performing diagnostics
8.2 Frequency Schedule
8.3 Check-lists
9.0 Spare Parts for Roadway and ITS Assets
9.1 Inventory Items and Stocking Levels
9.2 Location of Spare Parts
9.3 Authorization to Remove Items

10.0 Reference Manuals and other Documents
10.1 Manufacturers' Operations and Maintenance Manuals
10.2 Systems Manuals
10.3 Wiring Diagrams, Schematic Drawings, etc
10.4 Assembly and disassembly drawings
10.5 Component and systems inspection forms and check-lists

Figure 3.1-5 Table of Contents Quality Management Systems Plan

1.0 Goals, Objectives and Scope
1.1 Establish self monitoring process independent From O&M operations
1.2 Systematic means of evaluating concessions level of performance as outlined in Table 4.1A and Table 4.2 of Division II section 4
1.3 Gather applicable documentation for FDOT to determine non-compliance points
1.3.1 Reference Documents
1.3.2 Terms and Definitions

2.0 Functions of Quality Management
2.1 Quality Manual
2.2 Management related to violations from Table 4.1A and 4.2 and reporting and tracking of non-compliance points
2.3 Quality Assurance of quality management regarding violations
2.4 Quality Assurance for documentation determining non-compliance points requirements in appendix 5
2.5 Gathering of documentation specific to violations, availability faults, excessive closures, and other documentation needed to determine non-compliance point allocation

3.0 Management Responsibilities
3.1 Quality Policy
3.1.1 Commitment
3.1.2 Requirements
3.2 Responsibility, Authority and Communication
3.2.1 Project Executive
3.2.1.1 Oversee Quality Manger and Team, and perform quality assurance reviews
3.2.2 Quality Manger
3.2.2.1 Manage and validate quality management results
3.2.3 Administrations Clerk
3.2.3.1 Assist Quality Manger in controlling paperwork, documentation and activity coordination
3.2.4 Engineer Support Group-Provide technically capable personnel
3.2.4.1 Quality Technicians
3.2.4.1.1 Perform Quality Field Work
3.2.4.1.1.1 MRP
3.2.4.1.1.2 Quality Management for Violation
3.2.4.1.1.3 FDOT Mandated Inspections
3.2.5 Quality Committee and Management Representative
3.2.6 Management Review

4.0 Quality Management Process
4.1 Planning
4.1.1 Quality Objectives
4.1.2 Quality Management Systems Planning
4.1.3 Process Inventory
4.1.4 Activity List
4.1.5 Procedures
4.1.6 Quantity Standard
4.1.7 Work quantity
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4.1.8.2 Resources
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4.1.9.1 Operations and Maintenance Provision
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4.3.1 General Requirements
4.3.2 Measurement and Analysis
4.3.3 Internal Audits
4.3.4 Customer Satisfaction Surveys
4.3.5 Special Services Control
4.3.6 Data Analysis
4.4 Reporting
4.4.1 Provide information on the quality management function
4.5 Control
4.5.1 Evaluate the quality management by comparing actual work performed work with the desire work requirements
4.5.2 Improvement Recommendations
4.5.2.1 Continual Improvement
4.5.2.2 Corrective Actions
4.5.2.3 Preventive Action
4.6 Quality Management Reviews
4.6.1 To be performed by Project Executive personnel
4.6.2 Provide quality assurance of the quality management
4.6.2.1 Procedure

Figure 3.1-6 Table of Contents Transition Plan

1.0 Introduction and Overview
1.1 Description of Assets, Facilities and Equipment In Place
1.2 Goals and Objectives of Transition
1.3 General Description of Take-over Requirements

2.0 Current Infrastructure and Systems
2.1 Short description of each item
2.1.1 Current Owner and Operator
2.1.2 Summary of current operating procedures and responsibilities
2.1.2.1 Performance Requirements
2.1.3 Status of each item (continued operation, rehabilitation, removal from project)

3.0 Transition Plans
3.1 Agreements, Protocols, and Procedures for Take-over
3.2 For each Item
3.2.1 Take-over Responsibilities
3.2.2 Liability and Insurance Requirements
3.2.3 Schedule and overlap period
3.2.4 Communications protocols
3.2.5 Take-over checklists
3.2.6 Transfer of equipment and spare parts
3.2.7 Sign-offs and releases
3.2.8 Notifications to other interested parties
3.3 Follow-up with Previous Owner/Operator

4.0 Documentation of Transition
4.1 Ownership, Leases and other Legal Documents
4.2 Documentation received from Previous Owner/Operator
4.3 Documented Condition of Asset or System at time of take-over
4.4 Operational Reporting during overlap period

Figure 3.1-7 Table of Contents Disaster Recovery Plan

1.0 Introduction and Overview
1.1 General Requirements
1.2 Scope and Objectives
1.3 Revision and Update Requirements

2.0 Preparation
2.1 Standard Operating Guidelines
2.2 Open Roads Requirements
2.3 Establishment of Spare Parts Inventory
2.4 GPS and GIS Inventory of System
2.5 Disaster Reporting
2.5.1 Responsibility for Investigation
2.5.2 Responsibility for Reporting

3.0 TMC
3.1 Organizational Responsibilities
3.1.1 Damage Assessment
3.1.2 Staffing of TMC
3.1.3 Repairs to Electrical and Electronics
3.1.4 Repairs to Facility
3.2 Emergency Response Requirements
3.2.1 Subcontractor Standby
3.2.2 Recalibration
3.2.3 Emergency Generator
3.3 Relocation of TMC in Case of Building Damage
3.3.1 Secondary Location
3.3.2 Set-up and Operation
3.3.3 Re-establishment of Communication Link
3.3.3.1 State Agencies
3.3.3.2 Local Agencies
3.3.3.3 Radio Stations
3.4 Post Event Check List
3.5 Long-Term Recovery Efforts

4.0 ITS
4.1 Sun Guide Requirements
4.2 Device Monitoring and Recovery
4.2.1 Fiber Optic Management Software
4.2.2 Emergency Power to ITS Devices
4.3 Repair of Devices In The Field
4.3.1 Electronic Repairs
4.3.2 Electrical Repairs
4.3.3 Structural Repairs
4.3.4 Standby Subcontractors
4.4 Long-Term Recovery Efforts

Figure 3.1-8 Table of Contents Emergency Response Plan

1.0 Introduction
1.1 Overview and General Requirements
1.2 Scope and Objectives
1.3 Structure and Focus of Plan

2.0 Incident Preparation
2.1 Overview
2.2 Types of Emergencies
2.2.1 Governor Declared Emergencies
2.2.2 Other Emergencies
2.3 Pre-Event Documentation
2.4 Photographic Documentation
2.5 Video Logging
2.6 Agency Directives
2.6.1 Federal
2.6.2 State
2.6.3 Local
2.7 Alternate Resources
2.8 Communications
2.8.1 Satellite Phones
2.8.2 Rosters and Pre-Assigned Meeting Times and Places
2.9 Subcontractor Readiness
2.10 Securing the Roads
2.11 Employee Safety
2.12 Contra-Flow Procedures
2.13 Hurricane Preparedness
2.13.1 Seventy-two to Forty-eight Hours
2.13.2 Forty-eight to Twenty-four Hours
2.13.3 Twenty-four Hours
2.13.4 General Pre-storm Checklist
2.14 Other Emergency Preparedness
2.14.1 Natural Disasters/events/storms
2.14.2 Bio-hazard
2.14.3 Traffic crashes
2.14.4 Marine Collisions

3.0 Immediate Recovery
3.1 Overview
3.2 Other Emergencies
3.2.1 Open Roads Policy
3.2.2 ADMP Response Requirements
3.2.2.1 Time Requirements
3.2.2.2 RISC Program
3.2.2.3 MOT
3.2.2.4 Resource Requirements
3.2.2.5 SIRV
3.2.3 Communications with other Agencies
3.2.3.1 State
3.2.3.2 Local
3.3 Hurricane and Storm Operations
3.3.1 First Push
3.3.2 Post-event Check-In
3.3.3 Employee Safety
3.3.4 Alternate Resources
3.3.5 Communications with other agencies
3.4 Administration
3.4.1 Documenting Resource Usage
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3.5 General Immediate Recovery Checklist

4.0 Long-Term Recovery Efforts
4.1 Overview
4.2 Organization Roles and Responsibilities
4.3 Agency Roles and Responsibilities
4.3.1 Federal
4.3.2 State
4.3.3 Local
4.4 Permanent Restoration and Repair Authorization
4.4.1 Supplemental Agreements
4.4.2 DDIRs
4.4.3 Damage Estimates
4.4.4 Debris Removal
4.5 Work and Administrative Management
4.5.1 Management of DDIRs and Work Progress
4.5.2 Concessionaire Business Management
Attachment A Hurricane Supplies
Attachment C Pricing for Recovery Estimate
Attachment B Hurricane Preparation and Recovery Task Codes

This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3b) by demonstrating ADMP's thorough understanding of the operations and maintenance scope of work and an understanding of the operations and maintenance procedures that will need to be developed and implemented in the operation of the O & M segments.

3.1.3 Self-Monitoring for Payment Adjustments

3.1.c – Description of the Self-Monitoring Processes, Including a List of Procedures That Will be Used to Monitor Compliance with Minimum Performance Criteria and Report Adherence to or Deviations From the Performance Criteria for Purposes of Calculating Adjustments to the Monthly Disbursement.

The self-monitoring process will document the information needed to calculate quarterly payment adjustments. The approach will be to track the information needed to determine the variables required by the quarterly payment adjustment equations in Appendix 6, Concession Agreement.

3.1.3.1 PAYMENT ADJUSTMENT VARIABLES AND REQUIRED INFORMATION

Variables included in the quarterly payment adjustment equation, Appendix 6, Concessionaire Agreement, include the following:

- **For unavailability faults.** Occurrence, duration, hourly unavailability factor, segment weighting factor, and time weighting factor
- **For O&M violations.** Occurrence and duration

The information required for each of these variables is as follows:

- **Unavailability fault occurrence**. The description of an unavailability fault as defined in Table 4.3 of Volume II, Division II, Section 4, O&M Requirements.
- **Unavailability fault duration**. The duration of the availability fault and the status relative to cure, as defined in Section 2.2, Appendix 6, Concession Agreement, cure periods and intervals of reoccurrence listed in Table 4.3 of Section 4, O&M Requirements.
- **Hourly unavailability factor**. The hourly unavailability factor as defined in Table A, Appendix 6, Concession Agreement. The hourly unavailability factor depends upon on the availability classification for an unavailability fault. For availability faults other than closures that are not permitted, the availability classification is a function of the type of availability fault, as defined in Table 4.3, Volume II, Division II, Section 4, O&M Requirements. For closures that are not permitted, as described in Section 4.2, Appendix 6, Concession Agreement, the availability classifications are from Tables B and C, Appendix 6, Concession Agreement, and depend upon the time of day (high, mid, or low priority hours as defined in Table E, Appendix 6, Concession Agreement), the road (I-595. SR 84, express lanes, crossroads, high-impact ramps, and number of lanes at the location, and the number of lanes closed.
- **Segment weighting factor**. The weighting factor for a segment as defined in Section 2.3, Appendix 6, Concession Agreement, and listed in Table D, Appendix 6, for five road segments covering the project and, thus, dependent on location of the unavailability fault. Currently, all segment weighting factors are 0.2.
- **Time weighting factor**. The time weighting factor defined in Section 2.4, Appendix 6, Concession Agreement, and listed in Table E, Appendix 6. The time weighting factors vary by low, mid, or high priority hours for weekdays and weekends, for Segments 1 though 4 and Segment 5.

- **O&M violation occurrence**. The description of an O&M violation as defined in Table 4.2 of Volume II, Division II, Section 4, O&M Requirements.

- **O&M violation duration**. The duration of the O&M violation and the status relative to cure, as defined in Section 3, Appendix 6, Concession Agreement, with cure periods and intervals of reoccurrence listed in Table 4.2 of Section 4, O&M Requirements.

3.1.3.2 REPORTING REQUIREMENTS

Section 1.5, Appendix 6, Concession Agreement, includes the requirements in regard to reporting unavailability events and O&M violations. This section requires ADMP to accurately describe the occurrence and extent of either type of event and to submit an operations report or maintenance report verifying an event. Section 1.6, Volume II, Division II, Section 4, O&M Requirements includes details of monthly report contents.

3.1.3.3 GENERAL SELF-MONITORING AND NOTIFICATION PROCESS FOR PAYMENT ADJUSTMENTS

The office of the QM will be the focus of the general process for tracking and collecting information in regard to noncompliance related to payment adjustments. The general process will be as follows:

1. Subjects associated with noncompliance, such as incidents, lane closures, completed work, and inspections, will be documented on source reports
2. Noncompliance events will be identified by the personnel performing the work, by supervisors inspecting reports and field work as part of their work control management function, by O&M personnel identifying maintenance needs during inspections for work scheduling, by inspectors performing mandatory inspections, by TMC staff for lane closures and incidents, by FDOT, and through quality management system activities
3. When noncompliance events are identified, internal noncompliance notices will be transmitted either orally or in writing to the office of the QM. These notices will include the applicable information for either the availability fault or O&M violation as described in Section 3.1.3.1 above
4. The internal notices will be documented in the Noncompliance Event Log by the Quality Clerk
5. The Quality Clerk will notify the O&M office of the possible noncompliance
6. As needed or feasible, the QM will investigate the noncompliance notices and confirm or deny noncompliance. The QM will inform the Quality Clerk and O&M office of the findings. FDOT will be notified if noncompliance is confirmed
7. If a noncompliance event has occurred, the O&M office will take the appropriate action to cure the noncompliance
8. When the noncompliance has been cured, the O&M office will notify the Quality Clerk. The Quality Clerk will note the time, date, and description of the cure in the Noncompliance Event Log
9. As needed or feasible, the QM will investigate the cure, confirm or deny it, and notify the Quality Clerk and O&M office of the findings. FDOT will be notified if the cure is confirmed. The Quality Clerk will log the findings
10. Steps 7 through 9 will be repeated until the noncompliance event is cured

For noncompliance events that have short cure periods, such as most unavailability faults, it usually will not be feasible for the QM to confirm noncompliance or cures. In these instances, the QM's investigations will be after the fact and will rely in part on reviewing reports concerning the events. The completeness and accuracy of the reports will be verified through quality management activities.

3.1.3.4 SOURCE REPORTS

Source reports for noncompliance events will serve as backup to the Noncompliance Event Log maintained by the quality management function to confirm the information needed for calculating quarterly payment adjustments. Source Reports for O&M violations and for Unavailability Faults are listed in Table 3.1-1 below.

Lane closure documentation will be kept in the form of a Lane Closure Log by the TMC staff. Information will be transmitted to the TMC through the schedule of planned maintenance and by O&M supervisors responsible for activities requiring lane closures, including lane closures that are not permitted.

Table 3.1-1 Source Reports for O&M violations

Report	Type of Documentation
Maintenance needed reports and logs	Maintenance needs, including identification date and time
Maintenance work reports	Activity, resources used, date and time of completion
Availability reports/log	Dates and times for activities subject to time standards that are not reported on work reports
Bridge work order summary reports	FDOT report showing work order issue and completion dates
Customer service log	Contacts with customers, including date and time
Incident log	Location, dates, times of incidents
Submittal log	Date and time of reports and plan submittals
Miscellaneous event log	Dates and times of events not recorded on specilized logs
Inspection reports	Inspection results; date and time of inspection completion
Closure reports	Location, type of closure, date, time, duration
Road Ranger logs/reports	Dates, times of Road Ranger activities
SIRV reports	Dates, times of SIRV activities
Payment adjustment report	Details for violations, availability faults, and non-permitted closures and payment calculations

3.1.3.5 PROCEDURES FOR IDENTIFYING NONCOMPLIANCE

The general self-monitoring procedure is identified in the previous Section 3.1.3.3. The key step in the procedure is identifying noncompliance. Non-complying events are identified during the following tasks:

- Performing the activities (O&M personnel and supervisors and TMC staff)
- Performing inspections (O&M personnel and specialist inspectors)
- Audits (Quality management personnel and upper management)

In all cases, the personnel involved will identify non-complying events by comparing the actual work or reports of the work with descriptions of acceptable work documented in procedures.

Maintenance work activity procedures will be documented in activity performance standards. For each activity, the performance standard will based on the non-compliance tables.

Maintenance needed inspection procedures will be developed to guide O&M patrol personnel and supervisors in identifying maintenance to be performed. The procedures will be based on MRP inspection guidelines, procedures for mandatory inspections, FDOT specifications, and FDOT standard indexes.

Maintenance management work control will be an essential responsibility of O&M crew leaders, supervisors, and managers. The maintenance management system will take the classic approach to work control. The Work results will be known through reports and field inspections and will be compared with plans and standards. The significant deviations will then be identified and investigated so that corrections can be brought to plans, standards and practices.

Mandatory inspection procedures will either be adopted from the FDOT procedures governing the inspections or, if there are no applicable FDOT procedures such as in the case of drainage and barrier wall inspections, developed to comply with contract requirements. These procedures will include guidelines for identifying, measuring, and reporting defects.
Noncompliance identification procedures for incidents and lane closures will be developed. The procedures will be based on the Project's incident management plan and lane closure requirements.

The O&M QMS will include a **quality management activity procedure** for each of its activities. Each procedure will include the following:

- Description of the activity and associated processes
- Labor, equipment, material, and tools typically needed to perform the quality management work
- A typical work method for quality management, including procedures for reporting items subject to payment adjustments and assessment of noncompliance points
- Expected accomplishment
- Sampling guidelines
- Supplemental QMS material, such as surveys or checklists to be used in the work and instructions regarding summary, analysis, evaluation, and the issuance of conformance or nonconformance notices
- Supplemental O&M material, such as applicable standards and contract requirements

O&M management will facilitate the use of these procedures in the following ways:

- Distributing procedures to those who need them to fulfill their self monitoring responsibilities
- Providing relevant training

The objective of this management effort will be to incorporate the procedures into the work culture of the organization to ensure accurate, reliable, and efficient self monitoring.

3.1.3.6 MONTHLY REPORT

The QM will be responsible for verifying the information relative to quarterly payment adjustment calculation, gathering documentation to supplement it in the Noncompliance Event Log, and calculating the quarterly payment adjustment. The work will be performed in accordance with Section 12.2.2.2, Concession Agreement, and Section 1.6, Volume II, Division II, Section 4, O&M Requirements.

This Operations and Maintenance Plan meets Technical Proposal Requirements (3.1c) by describing the self-monitoring processes, including a list of procedures that will be used to monitor compliance with minimum performance criteria and report adherence to or deviations from the performance criteria for purposes of calculating adjustments to the Monthly Disbursement.

3.1.4 Tracking and Reporting Noncompliance Points

ITP 3.1.d – A description of the method of tracking and reporting Noncompliance Points (as defined in Appendix 1 to the Agreement) accumulated during the Operating Period.

Article 7 and Appendix 5, Concession Agreement, are the primary references for noncompliance points. The table in Appendix 5 specifies Noncompliance Points for violations, availability faults, and eleven other O&M-related items. In all cases, the table in Appendix 5 assigns Noncompliance Points based on instances of noncompliance. The approach to tracking and reporting Noncompliance Points will be to identify and track these instances.

3.1.4.1 TRACKING AND REPORTING VIOLATIONS AND AVAILABILITY FAULTS

Previous Section 3.1.3 describes the tracking and reporting of O&M violations and availability faults for quarterly payment adjustments. The same approach will be used to track and report instances of noncompliance for these two types of events.

3.1.4.2 TRACKING AND REPORTING OTHER EVENTS RELATED TO NONCOMPLIANCE POINTS

The other items in Appendix 5 that are related to O&M are listed in Table 3.1-2 below. This table includes the item, description from Appendix 5, the source report, and the report responsibility.

Table 3.1-2 Noncompliance Points Activities

Noncompliance Item	Act No.	Activity Name
Excessive Closures	Q0933	Closure Documentation QM
Reporting Records Accuracy	Q0934	Reporting Record Accuracy QM
O&M Plan Submission	Q0941	Plan and Manual Submittals QM
O&M Manual Submission	Q0941	Plan and Manual Submittals QM
Handback Evaluation Plan	Q0941	Plan and Manual Submittals QM
Handback Renewal Work Plan	Q0941	Plan and Manual Submittals QM
Monthly O&M Report	Q0941	Plan and Manual Submittals QM
O&M Annual Reports	Q0941	Plan and Manual Submittals QM
Availability Payment Documentation	Q0951	Availability Payment Documentation QM
O&M Work Records	Q0961	O&M Work Records QM
Interagency Participation	Q0971	Interagency Participation QM

Excessive Closures. Excessive closures will be tracked using the Lane Closure Log, also employed to track lane closures for quarterly payment adjustment purposes.

Reporting Records Accuracy. As indicated in Section 3.1.3, the QM will be responsible for preparing information related to quarterly payment adjustments for the monthly report. The QM's responsibilities will be similar in regard to noncompliance points, as described below. The Project Manager will review the work

of the QM and write a letter to file describing the findings. The letter will be documented in the Project's Correspondence Log.

O&M Plan and Manual Submittal. The next four items in Table 3.1-2 concern the submittal of the O&M Plan and Manual and Handback evaluation and Renewal Work Plans. These will be complex documents prepared by O&M operations and engineering support personnel. The QM will review these documents to ensure all required components are prepared and will document the findings in a letter to file that will be recorded in the Project's Correspondence Log. Submittal of the documents will be recorded in the project's Submittal Log.

Monthly and Annual Report submittal. The Project Manager and QM are jointly responsible for this these reports. Each will review the other's work and write letters to file documenting the findings. The letters will be recorded in the project's Correspondence Log. Submittal of the reports will be recorded in the project's Submittal Log.

Availability payment documentation. Source documentation will be handled in a similar manner to that for "reporting records accuracy". The Project Manager will review the material assembled and prepared by the QM and will write a letter to file documenting the findings.

O&M work records. Documentation of the availability of work records for inspection or audit will be filed in the Correspondence Log. If the Project does not receive written requests for inspection or audit or the results are not documented by FDOT in material received by the Project, the Project Manager will write letters to file or to FDOT, whichever is appropriate, to document the request for inspection or audit and the inspection or audit itself.

Interagency participation. The Quality Manager will investigate the degree of participation in meetings held by interagency organizations by inspecting the Correspondence Log for invitations to these meetings, discussing the project's participation with the interagency organizations, examining meeting records and minutes, and attending a sample of the meetings as appropriate. The Quality Manager will document the findings in a letter to file that will be recorded in the Correspondence Log.

3.1.4.3 GENERAL PROCESS FOR TRACKING AND RECORDING INSTANCES OF NONCOMPLIANCE

The general process for tracking instances of noncompliance follows the same steps as for tracking information needed for quarterly payment adjustments, described in section 3.1.3.3 above.

3.1.4.4 PROCEDURES FOR IDENTIFYING NONCOMPLIANCE

Project procedures associated with quarterly payment adjustments are also associated with the assessment of noncompliance points. These procedures are listed below and were discussed in Section 3.1.3.5.

- Mandatory inspection procedures
- Noncompliance identification procedures for incidents and lane closures
- Quality management activity procedures
- Maintenance activity work procedures
- Maintenance needed inspection procedures
- Maintenance management work control

The additional noncompliance items listed in Table 3.1-2, will relate to general management practices within the O&M organization directed toward hiring and retaining qualified and committed individuals for key O&M positions and fostering a work environment conducive to quality work. To fulfill this need, the O&M organization will follow the principles of ISO 9001:2000 as follows:

- **Leadership**. Management personnel will strive to establish a unity of purpose and direction and create and maintain an environment in which workers can meet O&M objectives in a reasonable manner
- **Involvement of People**. Management will help workers understand their contributions to the organization, accept ownership of their assigned work, share their knowledge, and help identify quality problems and solutions
- **Process and System Definition**. Management will be approached in an orderly manner with the definition of processes and systems to deepen the understanding of the work to be accomplished
- **Continual Improvement**. The organization will provide the opportunities for workers and managers to increase maintenance service levels, decrease maintenance costs, and improve self-monitoring
- **Factual Approach to Decision Making**. Decisions will be based on analysis of data and information through the use of quantitative measures
- **Mutually Beneficial Contractor Relationships**. Management will foster contractor relationships to enhance the sharing of expertise, sharing of resources, knowledge in regard to project standards and other requirements, and understanding self-monitoring functions

An essential procedure related to these additional items will be the work control performed as part of the general management of the organization. This procedure will follow the same steps as maintenance management work control used for field operations. The key will be to compare actual work with plans and standards and take corrective measures to bring plans, standards, and practice into alignment.

3.1.4.5 REPORTING NONCOMPLIANCE INSTANCES AND POINTS

The QM will maintain a ledger of noncompliance instances from the information gathered for and recorded on the Noncompliance Event Log. The ledger will include a separate record for each instance of noncompliance, documenting the date, time, and description of each associated event, such as the assessment of noncompliance points and notices concerning cures.

FDOT will assess noncompliance points. Several contract provisions can affect the assessment. Appendix 5, Concession Agreement, lists the maximum noncompliance points assigned for an instance of noncompliance for various items and categories. Section 7.3.1.2, Concession Agreement, provides for FDOT to assess less than this maximum, and Section 7.3.1.3, Concession Agreement restricts the assessment of noncompliance points relative to the expiration of the associated cure period, depending upon whether ADMP or FDOT provided notification of the instance of noncompliance. Section 7.3.1.5 provides for fast cures that, if available as shown in Appendix 5, will result in assessment of 50 percent of the maximum number of noncompliance points. Section 7.5, Concession Agreement addresses disputes arising from the assessment of noncompliance points.

Section 7.3.3, Concession Agreement, requires ADMP to provide FDOT current records of the number of noncompliance points assessed and the dates of assessment and cure. Section 1.6, Volume II, Division II, Section 4, O&M Requirements, requires details of noncompliance points assessed to be provided in the monthly report. The Quality Manager will provide this information from the ledger mentioned in Section 3.1.4.6, above.

3.1.4.6 CORRECTIVE ACTIONS ASSOCIATED WITH THE ASSESSMENT OF NONCOMPLIANCE POINTS

As appropriate, the Project Manager, QM and others involved will formulate and implement corrective actions directed toward avoiding the assessment of Noncompliance Points in the future. The corrections may involve revisions to project plans, standards, procedures, processes, or practices.

3.1.5 Verifying Operator Compliance with Procedures

ITP 3.1.e – A listing of the methods of monitoring and verifying operator compliance with procedures.

3.1.5.1 REQUIREMENTS NOT ASSOCIATED WITH THE NONCOMPLIANCE TABLE

The contract documents include requirements, or procedures, that are not associated with the Noncompliance Points table in Appendix 5, Concession Agreement. These requirements include contract and labor practices, Concessionaire change proposals, the landscape agreements, the experience requirements for SIRV operators, etc.

These procedures may relate to administrative or operational activities and to any of the units within the O&M organization.

The Concession Agreement uses a management-by-exception approach to obligations not associated with the noncompliance table. Sections 7.1.2 and 7.1.3, Concession Agreement provide for adding items to the Noncompliance Points Table but limit additions to those requirements with which ADMP has failed to comply.

As with the requirements associated with the Noncompliance Points Table, procedures will be written to document acceptable work performance and monitoring; implementation of these requirements, processes, and systems will be planned, scheduled, and controlled. As needed, some of these requirements will be added to the scope of the QMS.

Requirements not considered significant or difficult to control will be managed by exception. If noncompliance is identified, these requirements may be treated more fully as explained above.

3.1.5.2 WORK MANAGEMENT METHODOLOGY AND STYLE

Management approach has a significant bearing on procedural compliance. Systematic, participatory management increases the probability of compliance.

The methodology for managing work will be patterned after traditional management system methodology and include a quality management function as required by the contract documents. Essentially, all significant work and procedures will be identified, planned, scheduled, and controlled, and the quality management function will verify the management system is operating correctly and results comply with contract procedures. This methodology will be employed for general administrative management, management of O&M field work, and quality management. For quality management, verification of proper system operation will be made through senior management reviews.

Management will follow the principles of ISO 9001:2000 to manage monitoring, work control, and quality management efforts by facilitating retention of qualified and committed personnel. This management style will help ensure contract requirements are met for work that is difficult to control directly, improve effectiveness by allowing management to focus on problem areas, improve employee and subcontractor knowledge of contract requirements, and encourage employees and subcontractors to identify instances of

noncompliance. Formulation of preventive and corrective action plans will be enhanced through the participation of employees and subcontractors directly involved with the work. The ISO 9001:2000 principles were listed and briefly explained in previous Section 3.1.4.7.

3.1.5.3 GENERAL METHOD FOR MONITORING AND VERIFYING COMPLIANCE WITH PROCEDURES

The general method for monitoring compliance with procedures is similar to the processes used for monitoring events in regard to quarterly payment adjustments. (See Sections 3.1.3.3)

The QM will periodically review the Noncompliance Event Log to identify procedures for which preventive or corrective action plans are warranted and for which inclusion within the scope of the QMS are advisable.

If the procedure is within the scope of the QMS, verification of compliance will be performed under the appropriate quality management activity. QA will be performed for the quality management activity and, as mentioned above, the QMS operation will be verified by senior management. If the procedure is not within the scope of the QMS, verification of compliance will be considered as the absence of noncompliance.

Noncompliance is identified by comparing work or work reports with procedures documented acceptable work practices and results. The general method discussed in Section 3.1.5.4 lists the following three means for identifying noncompliance:

- Personnel performing the work
- Supervisors performing work control
- Quality management personnel performing quality management activities

The method of identifying non-complying events is to compare the work or reports of the work with a procedure documenting acceptable work methods and results.

Maintenance Activity Work Procedures. Maintenance activity performance standards are described in Section 3.1.3.5.

Administrative Work Procedures. Administrative work procedures may be written for individual requirements or requirements grouped into processes. Each contains the following:

- Description of the requirement or process
- Process flowchart, if applicable
- Typical work method
- Typical resource complement
- References to contract provision and applicable standards

Work Control Procedure. The general work control procedure is the same as the maintenance management work control procedure described in previous Section 3.1.3.5.

Quality Management Activity Procedures are also described in Section 3.1.3.5.

- ADMP has many years of experience in the development and implementation of MMIS for transportation agencies world-wide.
- This system allows the O&M team to provide better overall management of the work by knowing the type of work, location and level of resources being expended at any given time.

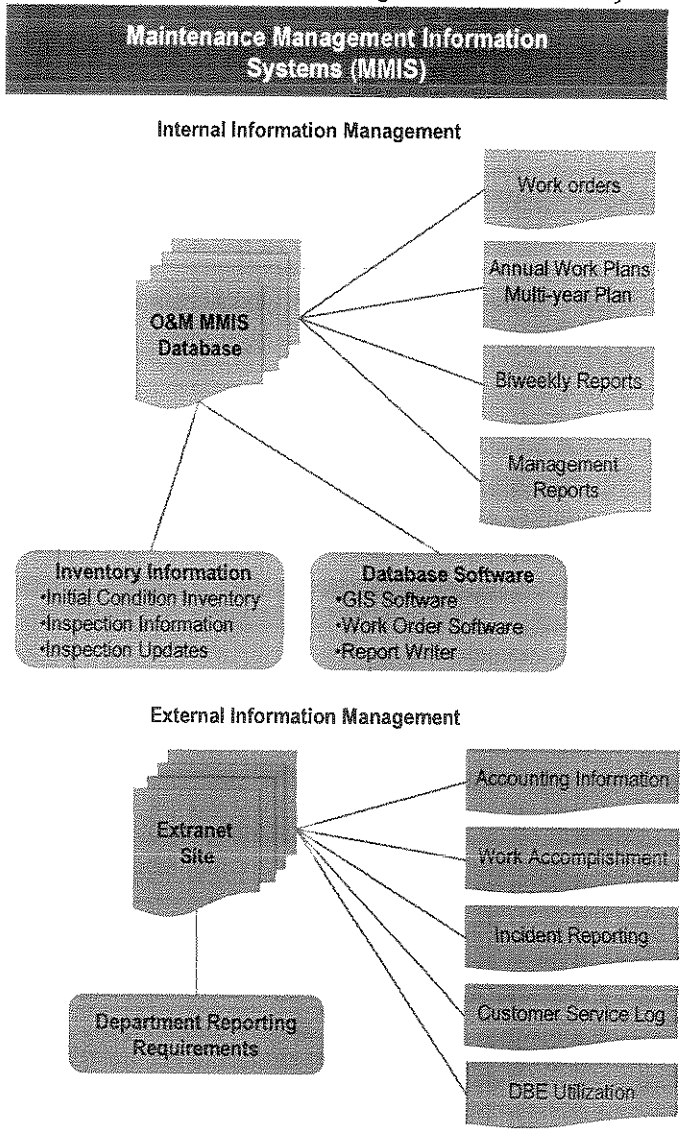
3.1.6 Maintenance Management Information System (MMIS)

ITP 3.1.f – A description of the proposed Maintenance Management Information System (MMIS).

The approach to collecting, storing and disseminating management information is based on the principles of maintenance management that have been developed, enhanced and improved over the years. ADMP has many years of experience in the development and implementation of MMIS for transportation agencies world-wide. There are currently at least six commercial software vendors that offer MMIS systems that could easily be adapted and implemented on the Project. All of the systems contain the basic functionality that allows highway and facility maintenance managers to perform their work more efficiently and effectively. The key operations supported by these systems include the following:

- Storing of asset inventory data by type, condition and location
- Generation of work orders, tracking of work in progress and collection of data relative to completion of work
- Preparation of periodic work programs and budgets for overall management of the program as well as short term scheduling of routine maintenance work
- Tracking of resources (labor, equipment and materials) to determine and adjust appropriate levels needed versus work requirements
- Conduction of operational analysis and preparation of information and reports used to manage the project

Figure 3.1-9 Maintenance Management Information System



The O&M data generated by field and office sources will be stored on a central server utilizing appropriate relational database technology and software applications so that it can be managed and manipulated to provide management and reporting information to assist Project personnel in performing their respective assignments.

The types of data that will be collected and stored will be identified as that needed to prepare reports, inspection survey results, schedules, annual O&M work plans and budgets, updated asset inventory information, and FDOT requirements for incident reporting, work accomplishment, DBE utilization, customer service requests, accounting and financial reporting.

The use of a database allows Project staff and authorized FDOT personnel to track

information dealing with a specific location or type of work. This allows the O&M team to provide better overall management of the work by knowing the type of work, location and level of resources being expended at any given time. In the short term it provides the ability to quickly move or reassign resources to cover unexpected requirements. Over the long term it provides baseline data for analyzing overall work performance and developing new work programs.

Manipulation of the data will be performed using different software packages depending on the function and nature of the information needed. Several specific examples of the software used for the different maintenance management functions is discussed below.

Figure 3.1-9 graphically portrays how maintenance information will be managed internally and externally within the O&M organization and externally with FDOT and other agencies.

O&M Planning and Scheduling. To assist with planning and scheduling maintenance work activities the O&M team will use a maintenance management approach with an off-the-shelf application that provides the following functionality:

- Work Activity Definition and Revision
- Interactive Work Program and Budget Development
- Resource Requirements Identification (labor, equipment, and material)
- Annual Work Calendars for Scheduling Work
- Work Accomplishment Reporting
- Cost, Resource Usage, and Accomplishment Monitoring
- Executive-level Plan vs. Actual Reports

This approach permits the user to customize the work activities and work elements that allows revision and updating of labor, equipment, and materials resources; and allows for managers to conduct "what-if" planning analyses, using labor, equipment, material, and budget as constraints. The Work Program and Budget helps managers establish maintenance objectives for the coming year, in terms of the kinds and amounts of work that the staff wants to accomplish and the cost of the work. The work program and budget report serves two purposes: (1) it is an annual work plan for the staff, and (2) it provides an effective way to communicate funding requirements to top management. Also, it can be used as a modeling tool, to help evaluate the impacts of various maintenance strategies and funding levels, by creating different versions of the work program using different work activities and different work quantities.

With these tools, the O&M Team can provide ADMP and FDOT with a management decision support system that offers an effective measure of specific maintenance investment alternatives.

Work Execution. In the short-term, maintenance work activities will be defined and scheduled using a combination of work calendar information supplemented with Excel spreadsheet applications. These two-week schedules will assist field managers in organizing and directing their resources. Additionally, a work order system will compliment the planning and scheduling approach.

This software will provide the functionality to keep track of all work performed by both in-house maintenance crews as well as subcontractors, from initial request for work to the scheduling of routine maintenance through the completion of a particular Project task.

Work Reporting. This will be accomplished via work order documents. Accomplishment data will be transferred from the hardcopy work order to the MMIS database for storage and retrieval by managers and others who require information on specific maintenance work activities and/or overall progress toward accomplishment of the maintenance work plan. Standard and well as ad-hoc reporting capability will be available. Source reports will include the actual accomplishment for both in-house crews and subcontractors and will include specific work information so that maintenance backlogs can be mitigated. Summary reports will provide planned versus actual information and will be prepared on a monthly basis.



This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3b) by describing ADMP's experience, effective use, and approach to using an MMIS system in order to meet routine maintenance requirements.

3.1.7 Approach to Routine and Preventive Maintenance

ITP 3.1.g – A description of the approach to routine maintenance.

The overall approach used to develop the routine and preventive maintenance program was to identify a detailed activity list of work activities required to meet the requirements of the performance measurements contained in FDOT's Maintenance Rating Program (MRP) and the O&M requirements and Availability Faults contained in Tables 4.1A, 4.1B, 4.2 and 4.3 in Division II, Section II, section 4 of the Technical Requirements. For each of the activities an estimate of annual work quantities is determined based on the number of assets, the desired level of service, projected crew production rates and assumed asset deterioration rates and known event cycles.

The program includes over 54 activities grouped into eight asset categories. The detailed list of activities and a discussion of the key planning values used in estimating work quantities is provided in the summary discussions and tables that follows. A summary discussion of the planning assumptions used for calculating the annual work quantities is provided in the following sections.

3.1.7.1 ROADWAY

Table 3.1-3 Summary Discussion for Roadways

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
01 Roadway					
411-1	Flexible Pavement	Repair Asphalt Potholes	Start in Year 12 at 0.5% Going to 1.% of total asphalt surface	✓	
411-5	Flexible Pavement	Repair Asphalt Shoving	Plan 10 crew days/year starting year 8	✓	

Table 3.1-3 shows two activities planned for the work required to ensure that the condition of elements of the Roadway Asset category meet or exceed the requirements of the MRP. These activities are all for routine maintenance of the asphalt pavement surfaces and are planned in conjunction with the three milling and overlay interventions planned as part of the renewal program.

3.1.7.2 ROADSIDE

Table 3.1-4 Summary Discussion for Roadside

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
02 Roadside					
432-2	Front Slope	Repair Slope Failures	Plan 2% Starting Year Six Going to 7%	✓	
459	Sidewalk	Repair Sidewalk Failures	Plan .05% Starting Year Six Going to 5%	✓	
527	Right of Way Fence	Repair Fence	Plan 1% starting Year One Going to 10%	✓	

Table 3.1-4 shows three activities planned for the work required to ensure that the condition of elements of the Roadside Asset category meet or exceed the requirements of the MRP. These activities are for front slopes, sidewalks and right of way fence and are planned based on experience with Florida deterioration rates with increasing quantities as the assets age.

3.1.7.3 TRAFFIC SERVICES

Table 3.1-5 Summary discussion for Traffic Services

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
03 Traffic Services					
537	RPM's	Replace Markers	Replace on Two Year Cycle with 10% Annual Spot Replacement		✓
532	Long Line Striping	Renew Long Line Striping	Replace on Three Year Cycle		✓
543	Pavement Symbols	Renew Pavement Symbols	Replace on Five Year Cycle		✓
526	Guardrail	Repair/Maintain Guardrail & End Treatments	Plan 1% Starting Year 8 to 5%	✓	
531	Attenuator	Repair/Maintain Attenuator	Plan Quarterly Maintenance Cycle	✓	
457	Barrier Wall	Barrier Wall Repair	Plan .1% Going to 4%	✓	
520	Small Signs Panels& Poles	Small Sign Maintenance	Plan 100% Maintenance Annually	✓	
521-1	Large Signs	Large Sign Maintenance	Plan 100% Maintenance Annually	✓	
521-2	Overlane/ Cantilever Sign	Maintain Overhead/Antilever Sign Structure	Plan 100% Maintenance Annually		✓
519	Dels/Object Markers	Replace Object Markers/Delineator & Posts	Plan Five Year Cycle	✓	
787-2	Highway Lighting	Replace Highway Lighting Luminars	Plan Three Year Cycle		✓
787-3	Highmast Lighting	Replace Highmast Lighting Luminars	Plan Three Year Cycle		✓
787-4	Sign Lighting	Replace Sign Lighting Luminars	Plan Three Year Cycle		✓
787-5	Navigational Lighting	Replace Navigational Luminars	Plan Two Year Cycle		✓
787-6	Traffic Signals	Repair/Maintain Traffic Signals	Plan 100% Maintenance Annually		✓

Table 3.1-5 shows fifteen activities planned for the work required to ensure that the condition of elements affected by traffic service requirements are met or exceeded. The activities planned for replacing and

renewing pavement markings are based on the typical replacement cycles required to ensure reflectivity requirements are met. Guardrail, attenuator, and barrier maintenance are planned based on experience with Florida deterioration rates with increasing quantities as the assets age. The three sign activities for small, large and overlane signs are based on a planned program of 100% minor maintenance to be performed annually. Object markers and delineators are planned on a five year cycle based on past experience with Florida assets. Luminar replacement for all lights is planned on a three year cycle except for any navigation lights (currently zero inventory) which are planned on a two year cycle.

3.1.7.4 DRAINAGE

Table 3.1-6 shows eight activities planned for the work required to ensure that the condition of elements of the Drainage Asset category meet or exceed the requirements of the MRP. Side drains, which are subject to rigid MRP requirements are planned for 100% annual maintenance supplemented by periodic cleanings by the litter crew. Cross drains are planned for cleaning on an eight year cycle based on past experience material accumulation rates. French drains are planned for 100% annual maintenance because of their potential for failure.

Table 3.1-6 Summary Discussion for Drainage

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
04 Drainage					
451-1	Side Drain	Side Drain Cleaning	Plan 100% Annually	✓	
451-2	Cross Drain	Cross Drain Cleaning	Plan on Eight year cycle	✓	
451-3	French Drains	Maintain French Drains	Maintain 100% Annually	✓	
461	Unpaved Ditch	Unpaved Ditch Cleaning and Reshaping	Plan on Eight Yr Cycle Starting Yr Seven		✓
464	Outfall	Cleaning and Reshaping Outfalls	Plan On Four Yr Cycle Starting Yr Ten		✓
451-4	Inlets	Repair and Cleaning of Inlets	Plan on Two Year Cycle	✓	
451-5	Paved Ditch	Cleaning /Repair Paved Ditch	Plan on Three Cycle	✓	
451-6	Misc. Drainage- Pipe Slope	Cleaning/ Repair Pipe Slope Structures	Plan 100% Annually	✓	

Unpaved ditches and outfalls are planned for five and four year cycles respectively based on the rate from past experience at which material collects in these ditches. Inlets and paved ditches are planned on two and three year cycles respectively, and miscellaneous drainage such as piped slopes will be maintained annually.

3.1.7.5 VEGETATION/AESTHETICS

Table 3.1-7 Summary Discussion for Vegetation/Aesthetics

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
05 Vegetation/Aesthetics					
471	Grass Areas	Full Cycle Mowing Large	Plan 10 Cycles Per Year During Construction and 14 in Out Years		✓
485	Grass Areas	Full Cycle small machine/hand mow	Plan 10 Cycles Per Year During Construction and 14 in Out Years		✓
482	Grass Areas	Full Cycle Slope Mowing	Plan 10 Cycles Per Year During		✓

			Construction and 14 in Out Years		
490	Landscaping	Landscape Area Maintenance	Plan 2X Annually	✓	
492	Tree Trimming	Tree and Brush Removal	Plan Three Year Cycle	✓	
545-2	Curb/Sidewalk Edging	Herbicide Spray	Plan 100% Twice Annually		✓
541-1	Litter Removal	Full Cycle Litter Removal	Plan 26 Cycles Per Year		✓

Table 3.1-7 shows seven activities planned for the work required to ensure that the condition of elements of the Vegetation/Aesthetics Asset category meet or exceed the requirements of the MRP.

The grassed areas are planned for 10 full cycle mowings per year during the construction period and 14 thereafter. Landscape maintenance is planned for two trimmings, mulch replacement and general maintenance is planned twice per year.

Herbicide applications for curb/sidewalk edging are planned for two applications per year. Litter removal is planned for 26 complete cycles per year.

3.1.7.6 STRUCTURES

Table 3.1-8 Summary Discussion for Structures

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
06 Structures					
805-1	Bridge Sealed Joints	Clean and Seal Joints	Plan on 7 Year Cycle Starting Year 9		✓
805-2	Bridge Mechanical Joints	Maintain Mechanical Joints	Plan 10% in Years 18 to 35		✓
806	Bridge Decks	Deck Spall Repair	Plan .5% starting Year 18 to 2%		✓
888	Structures	Misc. Structure Maintenance	Plan 100% Per Year	✓	
	Steel Members	Spot Painting Steel Members	Plan 1% starting Year 15 to 5%		✓
	Concrete Structures	Pressure Wash Concrete Structures	Plan Three Year Cycle	✓	
540	Graffiti Removal	Removing Graffiti	Plan 2X per month	✓	
457	Sound/Retain. Walls	Maintain Walls	Plan 100% Per Year	✓	

Table 3.1-8 shows eight activities planned for the work required to ensure that the condition of elements of the Structures Asset category meet or exceed the requirements of the MRP.

Cleaning and sealing joints is planned on a 7 year cycle starting in year 9. There are few mechanical joints and the planning cycle starts in year 18 with 10% of the total joints inventory per year planned for repairs.

Deck spalls are planned on a deterioration basis with gradually increasing quantities as the decks age. Miscellaneous structure maintenance will be performed annually based on the work orders issued as part of the NBIS inspections.

Spot painting of steel members are planned starting in year 15 with increasing quantities as the members age. Pressure washing of the concrete structure surfaces is planned on a three year cycle to reduce caustic material

buildups and prolong surface life. An annual estimate of graffiti removal has been made based on prior Florida experience. Minor maintenance of sound and MSE walls has been planned based on prior experience.

3.1.7.7 BUILDINGS

Table 3.1-9 Summary Discussion for Buildings

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
07 Buildings and Enclosed Facilities					
	Central/ Mnt Offices	Custodial Services	Monthly Contract		✓
	Central/ Mnt Offices	HVAC/Mechanical Maintenance	Annual Contract		✓
	Central/ Mnt Offices	Electrical Maintenance	Annual Contract		✓
	Central/ Mnt Offices	General Maintenance	Annual Contract		✓
	Central/ Mnt Offices	Subcontracts: Fire, Security, Elev. Misc	Annual Contract		✓

Monthly and annual subcontracts will be used to perform all the maintenance performed on the leased facilities for the central office and maintenance facilities. The cost estimate is based on known subcontract costs per square foot of leased space.

3.1.7.8 ITS

Monthly and quarter maintenance activities will be executed in order to keep all ITS devices and infrastructure functioning. The cost estimate is based on current experience.

Table 3.1-10 Summary Discussion for ITS

FDOT Activity #	Element/MRP Characteristic	Activity name	Planning Considerations	In-House	Sub
ITS					
	CCTV	Clean	Once Per Quarter	✓	
	DMS	Revise LED luminosity and change if necessary	Monthly	✓	
	Communications	Review and Clean Manholes and Ground Boxes	Once Per Quarter	✓	
	Generator	Review and refuel	Monthly	✓	



This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3b) by describing ADMP's overall approach to routine maintenance, and overall commitment to meeting contract requirements.

3.1.8 Incident Management and Response

ITP 3.1h – Describe the Approach to Handling the Response to Accidents and Roadway Incidents During Both the Construction Period and Operating Period, Including Contaminated and Potentially Hazardous Materials and Traffic Incident Responses of Varying Severity.



It is ADMP's goal to keep the roadways clear of hazards and reduce lane closure times by implementing a thorough plan to respond to incidents and mitigate there risk.

The key actions that ADMP has focused on its incident response program are incident detection and response.

A description of the approach to handling the response to accidents and roadway incidents during both the Construction Period and Operating Period includes those activities performed by the TMC for incident detection and response, the RISC program, major traffic control with SIRV program, and Road Ranger Program. A summary of these programs is provided below.

3.1.8.1 TRAFFIC MANAGEMENT CENTER (TMC) CONTROL ROOM

The traffic incident management program will be controlled from the Traffic Management Center (TMC) and will be staffed 24 hours a day - 7 days a week – 365 days a year. There will normally be two control room operators with a third operator during peak traffic hours as well as during Express Lane directional switching operations. The TMC will be in the Florida Turnpike Enterprises' facilities located in Ft. Lauderdale utilizing the space allocations identified in the ITP. The TMC staff will be hired locally from local law enforcement agencies, fire rescue and emergency medical services, state and federal emergency management agencies and high level security companies located in south Florida.

These staff will also execute alarm management for the ITS Subsystem. A protocol and associated procedures will be in place in order to instruct them how to operate different alarm levels with appropriate reporting measures available around the clock.

3.1.8.1.1 Incident Detection

To ensure immediate detection of an incident on the corridor, ADMP has provided for complete camera coverage of the corridor, an extensive Road Ranger program with aggressive cycle times, enhanced police coverage, and extensive training programs for its in-house crews in incident detection. Incident detection and response time requirements are shown in Table 3.1-11.

Table 3.1-11 Protocol for Incident Detection and Response

Event	Action Taken	Total Time Elapsed (min)
Detection	TMC detects or is notified of an incident	Immediately
Notification	First responders (typically Road Ranger or FHP) notified	10
Verification	Assess incident scene and develop action plan and request additional resources as necessary	15
Traffic Management	Setup MOT, detours, and relieve law enforcement of traffic control	30
Motorist Information	Provide updates on VMS boards or other mobile message boards	45
Scene Clean-Up	Coordinate with subcontractors and/or maintenance crews to repair and clean up all debris or spills	90
Open Road	Meet FDOT "Open Roads Policy"	90

3.1.8.1.2 Incident Response

The first responders to an incident will typically be the Road Rangers because of their extensive presence on the corridor especially during peak traffic periods. Additionally, ADMP maintenance supervisors will also be readily available as first responders. Incidents will be classified at the scene as minor or severe with several sub-classifications of each. Once the incident scene has been classified, the Operations Supervisor will dispatch the appropriate resources to clear the scene in compliance with Florida's Open Road Policy. The appropriate agencies and roles in responding to incidents is shown in Table 3.1-12.

Table 3.1-12 Agencies Involved in Incidents and their Roles

Agency	Role
FDOT	Provides overall coordination between agencies and monitors actions
Law Enforcement	Enforcement and investigation to secure scene and document the incident
Fire and Rescue	Preserve lives and property and rescuing trapped motorists
Emergency Medical Services	Preserve lives on scene and transport injured motorist to medical centers
Hazardous Material Contractors	FDOT District 4 Hazardous Material Contractors Contacted for Hazardous Spills
Towing and Recovery Providers	Clearance of scene under direction of FHP or Concessionaire supervisor
Traffic Information Media	Distribute information to traveling public
Emergency Management	FDOT Coordinates Activities from Emergency Operations Center

3.1.8.2 RAPID INCIDENT SCENE CLEARANCE (RISC) PROGRAM

The Florida "Open Roads Policy" requires that state and local agencies and responders have the roadway opened to traffic within 90 minutes of the notification of a major incident. The RISC program is designed to ensure that the resources for vehicle recovery and clearance are available to handle major accidents and incidents.

ADMP's RISC program has provided for an extensive commitment of resources including the following:

- TMC technicians to monitor the corridor cameras 24/7
- A Road Ranger Program 24/7 including up to four Road Rangers during peak traffic periods
- Designated and trained SIRV supervisors and SIRV vehicle
- MOT trained maintenance supervisors and maintenance technicians
- Subcontractors with wrecker services to provide on-call ready to respond vehicles when needed including heavy tow vehicles capable of removing tractor trailers and large commercial vehicles
- Subcontract with a large mobile crane service available to assist with severe or unusual accidents

3.1.8.3 SEVERE INCIDENT RESPONSE VEHICLE (SIRV) PROGRAM

As a complement to the RISC program ADMP will implement the SIRV program. The SIRV coordinator will be the lead responder to all major incidents on the roadway and this responsibility will be assigned to ADMP field operation supervisor. Primary responsibilities will be to assess all incidents and be the primary contact coordinating with the local emergency responders. Other responsibilities include the following:

- Review of MOT setup by Road Rangers
- QC on securing the incident scene
- Document performance of the responders
- Attend all TIM meeting's as the senior representative for ADMP
- Participate and manage emergency training drills for the developer's staff
- Conduct Road Ranger vehicle inspections and quality of service audits

- Serve as primary contact for coordinating with the Broward SMART Sunguide Transportation Management Center

ADMP will designate one vehicle as a SIRV vehicle equipped in accordance with FDOT's SIRV Standard Scope.

3.1.8.4 ROAD RANGER PROGRAM

Road Rangers are required to patrol on a 30-minute cycle. To meet this cycle requirement, four patrols will be required in peak periods, two patrols in off-peak, and one patrol on weekends.

The Road Rangers will drive routes in a loop during the day only stopping to clear debris/litter from the roadway, assist with incidents, and inspect the roadway on demand. The Road Rangers will communicate with each other to make sure they are spread out across the project limits and not in the same area. This will allow for faster response to incidents.

The Road Ranger vehicles will be equipped with the necessary traffic control equipment, basic hand tools and materials needed for minor clean-ups. The services to be provided includes: tire changing, replenishing fluids, jump starting vehicles, making minor repairs, clearing disabled vehicles from travel lanes, clearing debris from travel lanes, supplying emergency gasoline and water, monitoring abandoned vehicles and notifying FHP and providing MOT services. The goal is to get the stranded motorist off the system to eliminate any traffic congestion.

The Road Rangers will be MOT certified and trained in proper safety procedures including CPR and basis medical procedures. The intention is not to train them to replace the medical personnel, only assist until the local medical teams arrive. The Road Ranger vehicles will be outfitted according to FDOT specifications and designated graphic design. The Road Ranger staff will be dressed in similar uniforms as specified by the FDOT Road Ranger Program. This includes white shirts with dark blue slacks or shirts depending on the time of year. All drivers will wear photo identification. Standard equipment on Road Ranger vehicles will include the following:

- Roof mounted light bar and functioning cab lighting
- Trailer hitch
- Trash cans, bags, funnels, wood blocks, cones, and jack
- Automatic Vehicle Location devices (GPS)
- Standard tools
- Standard expendables such as gas, fire extinguishers, flares, comment cards and water



This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3b) by providing a general overview of ADMP's commitment to quick incident response and the management and operation of Express Lanes.

3.1.9 Renewal Work Program

ITP 3.1i – A Description of the Approach and Assumptions For the Major Maintenance Items and Capital Equipment Replacement, Including Asset Life Cycles, Which Must be Consistent With the Renewal Work Reserve Proposed and Described in the Original Financial Model.



ADMP has developed an extensive Renewal Work Program that can predict usable life of assets and provide for complete coverage of capital equipment replacement.

As in Section 2.1.3.3, Section 4, O&M Requirements, renewal work is "maintenance, repair, reconstruction, rehabilitation, restoration, renewal, or replacement of any Element of a type, which is not normally included as an annually recurring cost in highway maintenance and repair budgets, that require significant amount of time to accomplish and therefore must be coordinated, scheduled, and planned well in advance of the work effort." The approach and assumptions regarding the renewal program are discussed as follows:

3.1.9.1 APPROACH

The major components of the renewal program include work needed because of deterioration, upgrades, and handback. The handback portion of the renewal program is addressed in Section 3.2 of this proposal.

3.1.9.1.1 Renewal Work Plans

There are two types of renewal work plans. The first is the plan prepared for the project bid. It covers the 35-year term of the concession and is based on programmed and deterioration-based estimates, as reviewed below. The second type includes the five-year plans prepared prior to the start of each concession year. These plans will improve upon the bid plan as asset performance information is collected and analyzed during the course of the Project.

Bid Plan Activity List. The activities in the renewal program help organize the program and define its scope. The first-draft activity list is in Table 3.1-13 on next page. In addition to activities covering the elements addressed by the MRP, the renewal activity list includes activities covering renewal work or major maintenance for the following items:

Table 3.1-13 Activity List

Asset	Activity Name
C01 — Roadway	
Asphalt pavement	Mill Asphalt Pavement for Skid
Asphalt pavement	Mill and Resurface Asphalt Pavement
Asphalt pavement	Repair Asphalt Pavement Base
C02 — Roadside	
Unpaved shoulders	Periodic Edge Drop-off Repair
Slopes	Repair Major Slope Failures
Slope pavement	Major Resealing of Slope Pavements
Slope pavement	Major Slope Pavement Repairs
Curb	Curb Replacement
Sidewalk	Sidewalk Replacement
Fence	Renew Fence
C03 — Traffic Services	
Guardrail	Renew Guardrail
Concrete barrier	Renew Concrete Barrier
Attenuators	Renew Attenuators
Single-post signs	Replace Single-post Sign Panels
Single-post signs	Replace Single-post Sign Installations
Multi-post signs	Replace Multi-post Sign Panels
Multi-post signs	Renew Mulit-post Sign Installations
Overhead signs	Replace Overhead Sign Panels
Overhead signs	Repair Overhead Sign Structures
Overhead signs	Renew Overhead Sign Installations
High mast lights	Replace High Mast Heads
High mast lights	Replace High Mast Cables and Gear Boxes
High mast lights	Replace High Mast Poles and Heads
Shldr-mount lights	Replace Shoulder-mounted Light Poles& Heads
Misc lights	Renew Other Light Installations
Signals	Major Signal Repairs
Signals	Replace Signal Poles
Signals	Renew Signal Installations
Toll gantries	Repair Toll Gantries
Toll gantries	Renew Toll Gantry Installations
C04 — Drainage	
Cross/side drains	Replace Cross or Side Drains
Underground pipe	Underground Pipe Repairs
Storm drains	Replace Storm Drain Pumps & Control Systems
Culverts	Major Repair of Non-bridge Culverts
Misc drain strs	Major Repairs to Misc. Drainage Structures
Paved ditch	Major Paved Ditch Repairs
Unpaved ditch	Major Unpaved Ditch Cleaning and Reshaping
Retention ponds	Rework Retention Pond Systems

Asset	Activity Name
C05 — Vegetation	
Turf	Renew Turf
Landscaped areas	Renew Landscaped Areas
Mitigation areas	Renew Mitigation Areas
C06 — Bridges and Walls	
Bridge deck	Replace Deck Joints
Bridge deck	Reseal Deck Joints
Bridge deck	Major Deck Repairs
Bridge sub/super	Major Super- and Substructure Repairs
Bridge paint	Repainting Steel Members
Bridge channel	Major Channel Repairs
Retaining walls	Major Retaining Wall Repairs
Sound walls	Major Sound Wall Repairs
C07 — Other	
Various	Incident-Related Permanent Remedies (Not Reimbursed)
Various	Major Emergency Repairs (Not Reimbursed)

Methodology. The renewal work program uses the same approach for estimating work quantities as used by the routine maintenance program, indicated by the equation and example below.

This calculation is performed for each renewal activity for each year of the analysis period. The resulting quantities are multiplied by unit costs to produce the total costs for the program. The renewal program model allows estimates of the quantity standards either directly, termed "programmed estimates," or through the use of deterioration curves. The two programs are then combined.

$$\text{Work Quantity} = \text{Inventory Quantity} \times \text{Quantity Standard}$$
$$= 50 \text{ fence mi in inventory} \times \frac{0.03 \text{ fence mi of work}}{\text{fence mi in inventory}}$$
$$= 1.5 \text{ fence mi of work}$$

Programmed Estimates. Programmed estimates will be used for the following types of work:

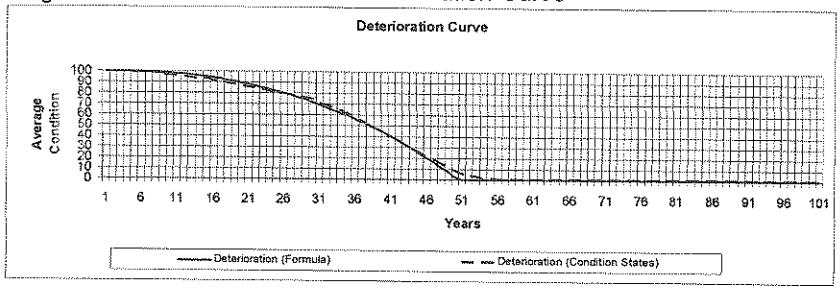
- Work planned on a cyclical basis (useful life), such as guardrail or light upgrades
- Work on assets for which condition assessments do not result in a condition assessment score, such as for curb and concrete barrier that are not a part of the MRP or bridge ratings
- Work that occurs randomly or almost randomly, such as major repairs related to incidents or unusual weather conditions that affect vegetation

A quantity standard estimate for each activity and year will be based on a variety of factors depending on the activity for which the estimate is made.

Deterioration-based Estimates. Renewal quantities for activities related to assets with regularly determined condition scores, such as the assets included in the MRP and bridge inspections, are estimated with quantity standards derived from deterioration curves. For each renewal activity estimated in this manner, the quantity standards are estimated in a three-step process:

- A base deterioration curve is estimated for the useful life of the asset
- The effects of renewal and, if applicable, capital improvement projects on the deterioration curves are estimated

Figure 3.1-14 Condition State Deterioration Curve



> The renewal program is adjusted so that the resulting condition of the asset complies with project requirements

After this process is completed, the quantity standards for the renewal activity are the percentages of the asset requiring renewal during each year of the project period.

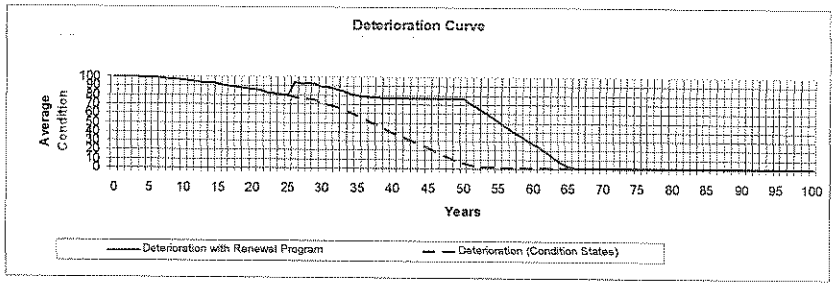
Base Deterioration Curves. Base deterioration curves are developed for the likely deterioration scenarios for the Project. The initial renewal program model will include curves based on the MRP scale of 0 to 100, and on the NBIS scale of 1 to 9. The curves used in the planning process are based on condition states, or ratings, that are modeled to change by a percentage each year. For example, 5 percent of the asset may go from condition 100 to 90 in a year, 10 percent from condition 90 to 80, and so forth. These changes in condition state determine the shape of the deterioration curve.

The shape of the curve follows the shape of the curve governed by the equation for average condition rating: $[R = R_i - at^n - bt]$ where R is the average condition rating at some time t, R_i is the initial average rating, t is the time (year), and a, b, and n are constants derived from historical data from previous projects.

Deterioration-Based Program and Adjustment. A base deterioration curve represents the deterioration of an asset under an adequate routine maintenance program but without any capital improvement projects or interventions from the renewal program. The next step in the process estimates the effects of renewal and capital improvement projects on the deterioration curve by providing facilities for modeling improved condition through these two programs.

The third step in the process is adjustment of the renewal program to comply with project conditions. In Figure 3.1-15, the renewal program has been adjusted so that the average asset condition score is 80 at Year 35, with no renewal performed during the first 24 years of the project.

Figure 3.1-15 Base Deterioration Curve



Annual Plans. As the concession progresses, the MRPs and general and mandatory inspections will collect performance data for the assets maintained. This data will be analyzed and used to update deterioration curves and other planning values, such as useful and residual element lives, used for the renewal program. Additionally, the inspection will identify specific locations and limits for the renewal projects. The annual plans will follow conventional project planning methods. Section 3.2, Handback Renewal Work Plan Process, outlines the approach for the annual Handback Renewal Work Plan. The method for the annual renewal plans will be similar. The resulting five-year plans will include estimates of useful and residual lives by element, costs for renewal, and project schedules including specifics concerning closures.

3.1.9.1.2 Renewal Work Schedules

The deterioration curves and other planning values used for projecting basic renewal work will be used for projecting handback work as required for the renewal work schedules. The estimates will include the type of work, extent, and cost. Additional information on estimating residual life at handback is discussed in Section 3.1.15 of the Handback Plan.

3.1.9.2 INITIAL USEFUL LIFE ESTIMATES

Deterioration curve parameters are shown in Table 3.1-14 for those activities estimated using deterioration curves. The parameters include the useful life, resulting condition rating for renewal interventions, and the capital improvement programs assumed in place.

Table 3.1-14 Deterioration curve parameters

		Deterioration Curve Parameters	
Activity No.	Activity Name	Description	Condition after Intervention
C01 — Roadway			
C0111	Mill Asphalt Pavement for Skid	100 to 80 in 10 yrs	90
C0112A	Mill & Resurface Asphalt Pavement-Express Lanes	Mill and resurface at years 12,22 and 30	
C0112B	Mill & Resurface Asphalt Pavement-Gen Pur. Lanes	Mill and resurface at years 10,20 and 28	
C0112C	Mill & Resurface Asphalt Pavement-Frontage Roads	Mill and resurface at years 11,21 and 29	
C0113	Repair Asphalt Pavement Base	100 to 80 in 10 yrs	90
C02 — Roadside			
C0201	Periodic Edge Drop-off Repair	100 to 80 in 10 yrs	100
C0211	Repair Major Slope Failures	every 3 years	
C0221	Major Resealing of Slope Pavements	100 to 80 in 5 yrs	100
C0222	Major Slope Pavement Repairs	100 to 80 in 10 yrs	100
C0231	Curb Replacement	100 to 80 in 20 yrs	100
C0232	Sidewalk Replacement	100 to 80 in 15 yrs	100
C0241	Renew Fence	100 to 80 in 20 yrs	100
C03 — Traffic Services			
C0301	Renew Guardrail	partial replacement at years 16 and 29 (100% in total)	
C0302	Renew Concrete Barrier	100 to 80 in 25 yrs	100
C0303	Renew Attenuators	partial replacement every 5 years (100% in total)	
C0311	Replace Single-post Sign Panels	100 to 80 in 10 yrs	100
C0312	Replace Single-post Sign Installations	100 to 80 in 15 yrs	100
C0321	Replace Multi-post Sign Panels	100 to 80 in 10 yrs	100
C0322	Renew Mulit-post Sign Installations	100 to 80 in 20 yrs	100
C0331	Replace Overhead Sign Panels	100 to 80 in 10 yrs	100
C0332	Repair Overhead Sign Structures	100 to 80 in 25 yrs	100
C0333	Renew Overhead Sign Installations	100 to 80 in 25 yrs	100
C0341	Replace High Mast Heads	100 to 80 in 15 yrs	100
C0342	Replace High Mast Cables and Gear Boxes	100 to 80 in 20 yrs	100
C0343	Replace High Mast Poles and Heads	100 to 80 in 25 yrs	100
C0351	Replace Shoulder-mounted Light Poles & Heads	100 to 80 in 15 yrs	100

		Deterioration Curve Parameters	
Activity No.	Activity Name	Description	Condition after Intervention
C0361	Renew Other Light Installations	100 to 80 in 15 yrs	100
C0371	Major Signal Repairs	100 to 80 in 10 yrs	100
C0372	Replace Signal Poles	100 to 80 in 15 yrs	100
C0373	Renew Signal Installations	100 to 80 in 20 yrs	100
C0381	Repair Toll Gantries	annual repair after year 5	
C0382	Renew Toll Gantry Installations	at year 28	
C04 — Drainage			
C0401	Replace Cross or Side Drains	100 to 80 in 10 yrs	100
C0411	Underground Pipe Repairs	100 to 80 in 25 yrs	100
C0412	Replace Storm Drain Pumps & Control Systems	100 to 80 in 20 yrs	100
C0421	Major Repair of Non-bridge Culverts	100 to 80 in 20 yrs	100
C0431	Major Repairs to Misc. Drainage Structures	100 to 80 in 20 yrs	100
C0441	Major Paved Ditch Repairs	100 to 80 in 15 yrs	100
C0451	Major Unpaved Ditch Cleaning and Reshaping	100 to 80 in 10 yrs	100
C0461	Rework Retention Pond Systems	100 to 80 in 20 yrs	100
C05 — Vegetation			
C0501	Renew Turf	100 to 80 in 15 yrs	100
C0511	Renew Landscaped Areas	100 to 80 in 10 yrs	100
C0521	Renew Mitigation Areas	100 to 80 in 20 yrs	100
C06 — Bridges and Walls			
C0601	Replace Deck Joints	100 to 80 in 10 yrs	100
C0602	Reseal Deck Joints	100 to 80 in 5 yrs	100
C0603	Major Deck Repairs	9 to 6.4 in 40 yrs	8
C0611	Major Super- and Substructure Repairs	9 to 6.8 in 40 yrs	8
C0621	Repainting Steel Members	100 to 80 in 15 yrs	100
C0631	Major Channel Repairs	100 to 80 in 15 yrs	100
C0641	Major Retaining Wall Repairs	100 to 80 in 20 yrs	100
C0642	Major Sound Wall Repairs	100 to 80 in 15 yrs	100
C07 — Other			
C0701	Incident-Related Permanent Remedies (Not Reimbursed)	Included in OpEx program	
C0702	Major Emergency Repairs (Not Reimbursed)	Included in OpEx program	

Note: Year 1 is the first year after construction



This Operations and Maintenance Plan meets Technical Proposal Requirements (3.1i) by describing the approach and assumptions for the major maintenance items and capital equipment replacement, including asset life cycles, which must be consistent with the Renewal Work Reserve proposed and described in the Original Financial Model.

3.1.10 Schedule for Planned Maintenance

ITP 3.1.j – A schedule for planned maintenance activities.

Section 2.1.3.2 of Volume II, Division II, Section 4, O&M Requirements, is the primary reference for planned maintenance: "ADMP shall prepare a Planned Maintenance Schedule on a monthly and annual basis in accordance with the requirements set forth in Section 4 of Division II and in accordance with Appendix 3 and Appendix 6 of the Concession Agreement. The monthly Planned Maintenance Schedules are for O&M Work that is planned for the upcoming month. The monthly Planned Maintenance Schedules shall describe, for each section within the O&M Limits, all of the scheduled maintenance tasks or activities for the given period. These schedules shall include the dates, times and durations of each task."

Appendix 3-B of the Concession Agreement, Section 3.5 addresses planned maintenance during construction. Section 4 of Appendix 6 addresses planned maintenance during the operating period. The key requirements are similar:

- Lane closures must be included on the maintenance schedule, specifying the segments and lanes
- Reasonable efforts will be made to schedule compliance work concurrently with previously scheduled work
- All routine maintenance, renewal work, and compliance work should be included on the maintenance schedule
- During the operating period, a renewal work schedule is required

3.1.10.1 ANNUAL SCHEDULES

A routine maintenance work program and an update to the five-year renewal work schedule will be made each year. The routine maintenance work program will include a monthly workload distribution, indicating crew day or work quantities for the months during which each routine maintenance activity is likely to occur. As required, the annual schedule will include work windows for the renewal projects scheduled for the year. Information from these two sources will constitute the annual schedule for planned maintenance. Please refer to Table 3.1-17 for further details.

Table 3.1-17 Annual Planned Maintenance for Routine and Preventive Maintenance Program (RPMP)

FDOT Activity #	Element/MRP Characteristic	Activity name	In-h	Sub	Unit	Yr1 to Yr5	Yr6	Yr10	Yr20	Yr30	Yr35
Routine and Preventive Maintenance Program (RPMP)											
01 Roadway											
411-1	Flexible Pavement	Repair Asphalt Potholes	✓		Square Yrds				9059	13588	18118
411-2	Flexible Pavement	Repair Asphalt Cracking		✓	Lane Miles				53		
411-5	Flexible Pavement	Repair Asphalt Shoving	✓		Linear Miles			49	49	49	49
02 Roadside											
432-2	Front Slope	Repair Slope Failures	✓		Square Yrds		7174	7174	14348	21522	25109
459	Sidewalk	Repair Sidewalk Failures	✓		Linear Ft		292	585	1462	2632	2924
527	ROW Fence	Repair Fence	✓		Linear Ft	2456	7367	9822	17189	20873	23328
03 Traffic Services											
537	RPM's	Replace markers		✓	Each	16859	16859	16859	16859	16859	16859
532	Long Line Striping	Renew Long Line Striping		✓	Stripe Miles	64	64	64	64	64	64
543	Pavement Symbols	Renew Pavement Symbols		✓	Square Ft	21839	21839	21839	21839	21839	21839

FDOT Activity #	Element/MRP Characteristic	Activity name	In-h	Sub	Unit	Yr1 to Yr5	Yr6	Yr10	Yr20	Yr30	Yr35
526	Guardrail	Repair/Maintain Guardrail & End Treatments	✓		Linear Ft			796	2389	3185	3981
531	Attenuator	Repair/Maintain Attenuator	✓		Each	88	88	88	88	88	88
457	Barrier Wall	Barrier Wall Repair	✓		Linear Ft	327	654	654	3269	6538	13077
520	Sm Signs Panels& Poles	Small Sign Maintenance	✓		Each	1877	1877	1877	1877	1877	1877
521-1	Large Signs	Large Sign Maintenance	✓		Each	539	539	539	539	539	539
521-2	Overlane/ Cantilever Sign	Maintain Overhead/ Cantilever Sign Struc.		✓	Each	126	126	126	126	100.8	
519	Dels/Object Markers	Replace Object Markers/Delineator & Posts	✓		Each	473	473	473	473	473	473
787-2	Highway Lighting	Replace Highway Lighting Luminars		✓	Each	51	51	51	51	40.8	
787-3	Highmast Lighting	Replace Highmast Lighting Luminars		✓	Each	66	66	66	66	66	66
787-4	Sign Lighting	Replace Sign Lighting Luminars		✓	Each	151	151	151	151	151	151
787-5	Navigational Lighting	Replace Navigational Luminars		✓	Each						
787-6	Traffic Signals	Repair/Maintain Traffic Signals		✓	Each	174	174	174	174	174	174
04 Drainage											
451-1	Side Drain	Side Drain Cleaning	✓		Each	51	51	51	51	51	51
451-2	Cross Drain	Cross Drain Cleaning	✓		Linear Ft	775	775	775	775	775	775
451-3	French Drains	Maintain French Drains	✓		Linear Ft	44710	44710	44710	44710	44710	44710
461	Unpaved Ditch	Unpaved Ditch Cleaning & Reshaping		✓	Linear Ft			19754	19754	19754	19754
464	Outfall	Cleaning and Reshaping Outfalls		✓	Linear Ft			2429	2429	2429	2429
451-4	Inlets	Repair and Cleaning of Inlets	✓		Each	419	419	419	419	419	419
451-5	Paved Ditch	Cleaning /Repair Paved Ditch	✓		Linear Ft	5227	5227	5227	5227	5227	5227
451-6	Misc. Drnge- Pipe Slope	Cleaning/ Repair Pipe Slope Structures	✓		Each X 4	1140	380	380	380	380	380
05 Vegetation/ Aesthetics											
471	Grass Areas	Full Cycle Mowing Large		✓	Acres	1497	2095	2095	2095	2095	2095
485	Grass Areas	Full Cycle small machine/hand mow		✓	Acres	341	477	477	477	477	477
482	Grass Areas	Full Cycle Slope Mowing		✓	Acres	764	1070	1070	1070	1070	1070
490	Landscaping	Landscape Area Maintenance	✓		Acres	6	6	6	6	6	6
492	Tree Trimming	Tree and Brush Removal	✓		FR Miles						
545-2	Curb/Sidewalk Edging	Herbicide Spray		✓	FR Miles	59	59	59	59	59	59
541-1	Litter Removal	Full Cycle Litter Removal		✓	Acres	6764	6764	6764	6764	6764	6764
06 Structures											

FDOT Activity #	Element/MRP Characteristic	Activity name	In-h	Sub	Unit	Yr1 to Yr5	Yr6	Yr10	Yr20	Yr30	Yr35
805-1	Bridge Sealed Joints	Clean and Seal Joints		✓	Linear Ft			8435	8435	8435	8435
805-2	Bridge Mech. Joints	Maintain Mechanical Joints		✓	Linear Ft				22	22	22
806	Bridge Decks	Deck Spall Repair		✓	Square Yrds				566	1698	2264
888	Structures	Misc. Structure Maintenance	✓		Each	63	63	63	63	63	63
	Steel Members	Spot Painting Steel Members		✓	Square Ft				5600	11200	14000
	Concrete Structures	Pressure Wash Concrete Structures	✓		Each	21	21	21	21	21	21
540	Graffiti Removal	Removing Graffiti	✓		Each	24	24	24	24	24	24
457	Sound/Retain. Walls	Maintain Walls	✓		Linear Ft	29697	29697	29697	29697	29697	29697
07 Buildings and Enclosed Facilities											
	Central/ Mnt Offices	Custodial Services		✓	Months	12	12	12	12	12	12
	Central/ Mnt Offices	HVAC/Mechanical Maintenance		✓	Year	1	1	1	1	1	1
	Central/ Mnt Offices	Electrical Maintenance		✓	Year	1	1	1	1	1	1
	Central/ Mnt Offices	General Maintenance		✓	Year	1	1	1	1	1	1
	Central/ Mnt Offices	Subcontracts: fire, security, elev. Misc		✓	Year	1	1	1	1	1	1
Debris Removal and Sweeping											
	Pavement and shoulders	Full-cycle Mechanical Sweeping		✓	Miles	4160	2080	2080	2080	2080	2080
	Pavement and shoulders	Spot Mechanical Sweeping		✓	Miles	960	960	960	960	960	960
	Pavement and shoulders	Hand Sweeping	✓		Center Miles	122	49	49	49	49	49
541-2	Clear Zone	Clean/Remove Debris in Clear Zone	✓		Center Miles	3802	2535	2535	2535	2535	2535

3.1.10.2 MONTHLY SCHEDULES

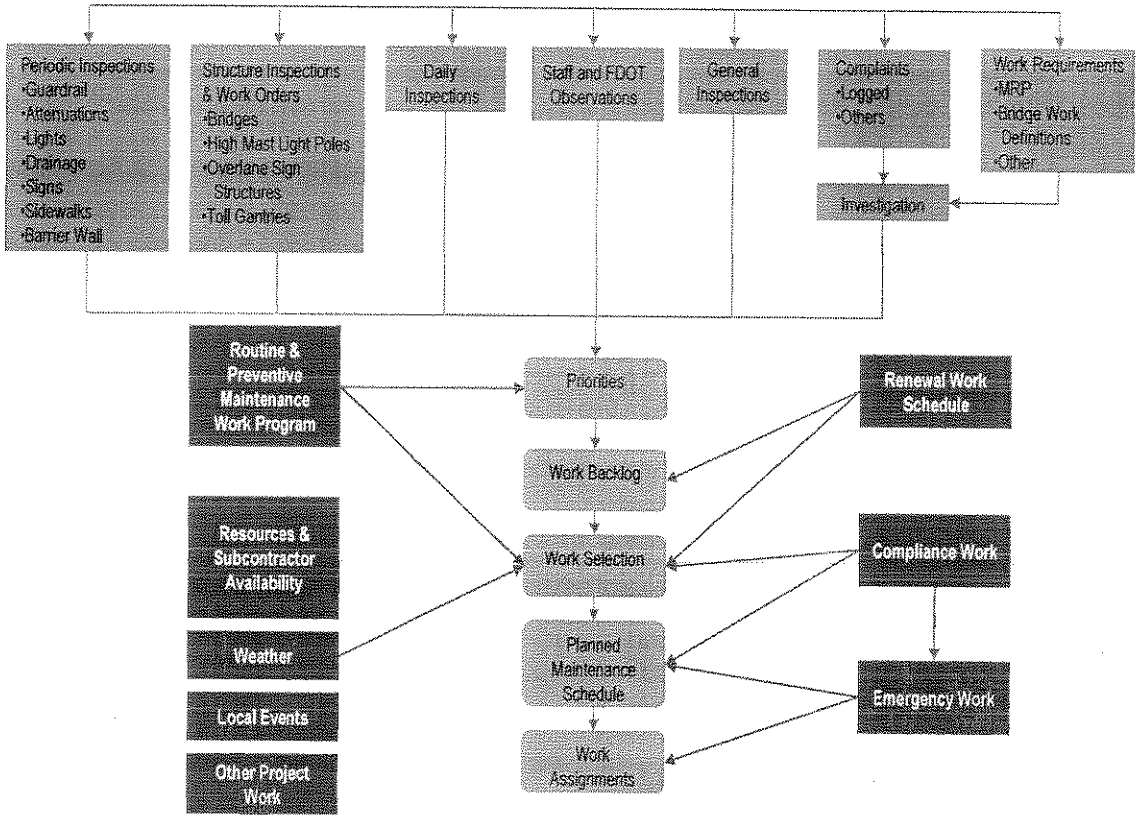
The routine maintenance portion of the monthly schedule will be dependent on work needs identified through various inspections but will consider the overall guidance from the annual routine maintenance work program to help ensure efficient use of resources. The renewal portion of the monthly schedule will follow the renewal work schedule. The process for the monthly schedule for planned maintenance is shown in Figure 3.1-12 below.

Routine Maintenance. Work needs for routine maintenance will be identified by the mandatory periodic inspections for guardrail, attenuators, and so forth; the bridge inspection; daily inspections by maintenance personnel; observations made by management and FDOT, such as the bridge QAR inspections; the required general inspections; and complaints.

The prioritized work will be compiled in the MMIS work backlog database by work activity, location, projected due dates, and other variables. Each month the backlogged work will be examined, and work will be selected for inclusion on the schedule of planned maintenance. The selection process will consider the overall objectives from the routine maintenance work program and short-term variables, such as in-house resource and subcontractor availability, weather, local events, and coordination with other project work, and will include detailed planning such as for lane closures and resource assignment. The selected work will be entered on the schedule of planned maintenance and assigned for completion.

Renewal Work. The work from the renewal work schedule will be entered into the MMIS work backlog each year and updated as conditions require during the year. Each month the backlogged work will be examined to ensure it is feasible to make final scheduling arrangements and, if so, the detailed planning from the renewal work plan will be examined and confirmed or modified for existing conditions. The selected work will be entered on the schedule of planned maintenance and assigned for completion.

Figure 3.1-12 Monthly Schedule Process for Planned Maintenance



Compliance Work. If there is a need for compliance work, it will be scheduled to be performed concurrently with the other scheduled work, if feasible. Depending on circumstances, the compliance work may have characteristics associated with emergency work, as addressed below.

Emergency Work. Emergency work that is not compliance work, such as emergency bridge work orders, will be scheduled if feasible. Timing considerations, however, may not allow the scheduling of emergency work. If the emergency work requires in-house or subcontractor resources scheduled for use during the month, the emergency work needs will take precedence, causing disruption in the planned maintenance.



This Operations and Maintenance Plan meets Evaluation Criteria (5.2.1.3b) by demonstrating ADMP's commitment, extensive planning, and approach to renewal work throughout the life of the project.

3.1.11 O&M Facilities

ITP 3.1.k – A list of proposed major facilities. (Including any off-site storage or maintenance facilities)

Facilities will be required for management and supervisory staff, CEI personnel, and operations and maintenance staff. The facilities planned to be put in place will include the following:

- Traffic Management Center (TMC) Space in the FDOT Smart Sunguide TMC
- Leased Space for a Central Office Facility
- New Facilities for Maintenance Office, Warehouse and Yard
- Temporary Trailer (Or Leased Office) Facilities for Oversight CEI and assigned FDOT personnel

3.1.11.1 TRAFFIC MANAGEMENT CENTER

The Traffic Management Center will be in the FDOT SMART SunGuide TMC facility located at 2300 W Commercial Blvd in Fort Lauderdale. This facility is approximately 10 miles north of the I-595 corridor. ADMP will use space that the Department will make available in this facility as specified in Volume II, Division II, Section 3, Attachment 1, Paragraph 1.4.1.

ADMP will evaluate and modify the spaces as necessary and design, furnish, install, and integrate the infrastructure, hardware, and software elements for the TMC that will be essential for successful operations.

3.1.11.2 CENTRAL OFFICE FACILITY

The Central Office Facility will be located in leased space in the immediate vicinity of the I-595 Corridor. The proposed general specifications for the facility include the following:

- Approximately 10,000 square feet
- Offices/space for 25 to 30 people
- Large and small conference rooms
- Medium size room for computers and ITS equipment
- Located within 1/2 mile of I-595 Corridor

3.1.11.3 MAINTENANCE OFFICE, WAREHOUSE AND YARD

These facilities will be designed to accommodate offices for the field supervisors, and administrative staff and; space for locker room and restrooms for maintenance technicians and laborers. It will have adequate outside, warehouse and yard space to support the operations and maintenance activities. Table 3.1-19 provides more detail on the layout and size of the facility.

Table 3.1-19 Maintenance Office, Warehouse, and Yard

Room / Location	Purpose	Quantity	Notes
Offices	Field Superintendent and Supervisors	3	100 sq. ft/each
Project Offices	Day to Day Work	4	Office cubicles
Conference Room	Meetings, Training, Presentations	1	Sized to hold up to 15 people
Break Room	Lunch room for staff	1	Vending machines, sink, refrigerator and microwave
Rest Rooms	Rest room	2	Men and Women
Warehouse	Store materials, small tools, work area	1	2000 sq. ft

Room / Location	Purpose	Quantity	Notes
ITS Lab	ITS Maintenance	1	300 sq. ft
Gated Outside Yard	Material storage, vehicle and equipment storage	1	2 to 3 acres with perimeter landscaping

It is important that the maintenance facilities have an aesthetically pleasing footprint in the area. The local community takes great pride in keeping all landscaping and building's well maintained. This facility will be designed with adequate landscaping and exterior finish materials that meet or exceed the general look of the adjacent area.

ADMP will ensure that the day-to-day operations at this facility are conducted with the highest level of professionalism and social responsibility to blend into the daily atmosphere. ADMP will provide proper training of the staff on speed limits, volume control on truck radios, and loitering on-site after hours. Policies and procedures should be in place to respond to any complaints immediately and swift action will be taken to rectify the problem.

3.1.11.4 FACILITIES FOR ASSIGNED FDOT PERSONNEL AND OVERSIGHT CEI PERSONNEL

Leased trailer facilities placed within the corridor right-of-way will be the preferred location for the CEI offices. As an alternative, office space close to the corridor will be leased. The space requirements are specified in the Technical requirements, Division II, Section 3, Attachment 3.

3.1.12 Vehicle and Equipment Resources

ITP 3.1.i – A list of vehicles and major equipment proposed to support O & M work.

ADMP will ensure that the appropriate vehicles and equipment are available from the very beginning of the O&M activities during the Construction Period. The procurement of this equipment will be primarily through three sources; direct purchase, lease, and rental. The specific acquisition will depend on several factors, such as usage level, cost, and

Table 3.1-17 Planned Initial Fleet

Equipment	MOT Crew	Roadway Roadside Crew	Traffic Services Crew	4Wh Litter P/U	Roadway Patrols	Mechanical Sweeping	General Labor Crew	SIRV Crew	Total Vehicles
Pickups									
Regular Cab							1		1
Regular Cab- Rdwy Patrol					4				4
Crew Cab		1	1						2
Heavy Duty Trucks									
350 Reg Cab Flat Bed	2	1	1						4
450 Dump Truck		1							1
650 Reg Cab	1								1
Heavy Equipment									
SIRV								1	1
Utility Equipment									
Heavy Trailer		1							1
Light Trailer			1						1
Compressor		1							1
Water Tank		1							1
Bobcat		1							1
4 Wheelers				2					2
RPM Equipment			1						1
Message Boards		2	2						4
Pressure Washer		1							1
Rental Equipment									Days
Gradall									15
Grader									5
Loader									25
Roller									25
Tanker Truck									20
Concrete Saw									30

performance requirements. A table summarizing the planned initial fleet is provided in Table 3.1-17 on the next page (does not include equipment or vehicles used by specialty subcontractors who may work on the project periodically or as required).

ADMP utilizes a centralized fleet management program that provides economy of scale for purchasing and leasing trucks and heavy equipment; detailed tracking and follow-up on fleet maintenance.

Specifications for specialized equipment, such as the SIRV, are closely followed when the vehicle is procured. During preparation for service, each vehicle is outfitted with the required safety equipment if not already supplied by the manufactures. This would include light bars, strobes, arrow boards, and decals/markings. All vehicles are checked by the Safety Officer before being put into service for the first time and are also periodically checked thereafter. Tires and POL are monitored through the fleet maintenance program that follows manufacturer's recommendations regarding maintenance and replacement of these items. When it is necessary to rent vehicles, heavy equipment; and machinery, this will be done through commercial vendors such as Hertz or United Rentals. Using vendors who have a reputation for providing safe and well maintained equipment ensures that there will be no lost time due to breakdowns safety violations.

ADMP will put in place policies and procedures to ensure that O&M personnel take care of their vehicles and equipment so as to keep safety and cost efficiency in mind. Maintenance personnel are trained to take care of their equipment and perform the necessary daily checks to make sure the machine is operating in a safe and efficient manner. Any equipment found to be unsafe or not road worthy will be immediately taken out of service for repair or replacement.

3.1.13 Inventory of Spare Parts and Equipment

ITP 3.1m – A list of major spare equipment proposed.

Parts and Inventory Levels. In order to provide the expected level of maintenance service and meet the required performance standards of the Project, ADMP must have on hand sufficient stock of spare parts and materials to support the maintenance work.

Based on our experience with similar projects in Florida and other states, the detailed listing of spare parts including stock level and turnover rates has been estimated for budgeting and planning purposes. Using the estimates, a list of major spare parts has been provided in Figure 3.1-18 below.

Inventory Information. The MMIS, detailed in Section 3.1.6 of this Technical Proposal, includes an inventory module for tracking and reporting spare parts inventory levels. Using the MMIS will enable ADMP to manage the spare parts inventory in an efficient and cost effective manner. This will include defining parts in detail; accounting for increases and decreases in stock levels, setting reorder levels, and tracking order time. ADMP will periodically inventory stock to verify or adjust quantities in order to keep sufficient supplies available.

Table 3.1-18 Major Spare Equipment proposed

Item Category/ Item Description	Unit	Est. Inventory Level	Inventory Turnover Rate	Est. Annual Consumption
Guardrail Parts				
Panels - various types and lengths		202	3	606
Heads, Cables, Guards, Sleeves, Struts ends Plates		93	3	279
Posts - Wood and Steel		240	3	720
Blocks - wood, poly, steel		375	3	1125
Attenuator Parts				
Crash Cushions		29	2	58
Cones, barrels, lids, Inserts		57	2	114
Bolts and Washers		3610	2	7220
Reflectors		80	2	160
Reflectorized Pavement Markers (RPMs)				
White reflectors white adhesive--3331 G	ea	20	4	80
RPM: Class B Clear/Red 3M	ea	1000	4	4000
RPM: Class B Amber/Red 3M	ea	400	4	1600
RPM Bituminious Adhesive- EVERGRIP	ea	7	4	28
Liquid Propane Tank 60gal	ea	1	4	4
Highway and Highmast Lamps				
Lamps		112	2	224
480 volt Surge Arrestor	ea	20	2	40
FEB-11-11-BA: Fuse Holder	ea	20	2	40
Ballast		57	2	114
Breakers		8	2	16
Miscellaneous Highway Lighting Parts		2262	2	4524
Fixture Parts		1006	2	2012
400 watt Bubble head cobra head light fixture	ea	5	2	10
Transformer Base	ea	4	2	8
Light Pole Arm		9	1	9
Light Pole - standard, bridge mount, double arm		15	1	15
Fencing Materials				
2" Fence Parts		94	2	188
2 1/2" Fence Parts		140	2	280
Misc Fence Parts		115	2	230
Posts - Wood and Steel		5	2	10
Barbed Wire	ea	25	2	50
Bulk Materials				
Fill Dirt	cu yd	10	5	50
Limerock	cu yd	10	5	50
Building Sand	cu yd	5	5	25
Milling Material	cu yd	10	5	50
Cold Mix Asphalt	ton	1	5	5
Cold Mix Asphalt 50 lb bag	ea	10	5	50
3/4" Aggregate	cu yd	1	5	5
Cement 50lb bag	ea	5	5	25
Grass Seed 50 lb bag	ea	1	5	5
Oil Absorbant Material	bag	2	5	10
Sign Materials				
Slip Base Assemblies		3	2	6
Z-bar, 3" x 2 11/16" x 25'	lf	1	2	2
Aluminum Tube - different sizes		10	2	20
7ft Steel Post, U-channel	ea	25	2	50
W 6" X 12lb/ft 12ft Lenth Structural Steel	ea	1	2	2
W 8" X 18lb/ft 16ft Lenth Structural Steel	ea	1	2	2
Delineators and Delineator Bases		71	2	142
Reflectors		17	2	34
Sign Bolts, Washers, U Channel Break-way		423	2	846

3.1.14 Approach to Safety During Operating Period

ITP 3.1.n – A description of the approach to safety during the Operating Period, including life safety response issues.

ADMP has developed numerous safety programs over the course of many years of involvement in constructing, operating and maintaining highways around the world.

Safety is of primary concern for those who perform highway construction and maintenance. This should not only be for themselves but also for the traveling public which they must interact with on a daily basis. Safety is the responsibility of each and every employee who must maintain a personal commitment to the prevention of incidents and injuries during project operations. ADMP has established the three following objectives

- Provide a safe and healthy workplace for operations and maintenance staff
- Ensure safety of the traveling public by removing and eliminating road hazards
- Provide fast and proficient assistance to motorists, employees and others who are involved in incidents within the limits of the project

The team members have developed numerous safety programs over the course of many years of involvement in constructing, operating and maintaining highways around the world. The previous engagements have provided an opportunity to observe and analyze various situations and conditions. Based on this past experience and the philosophy that safety is always the first priority ADMP has develop an effective approach to safety for this project that incorporates the following requirements:

Information. Having sufficient data and information to make good decisions is very important. In life-threatening cases where time is the primary factor, the decision-maker must have sufficient information to make decisions about the course of action. In other situations, such as traffic control and lane closures, sufficient information and data are needed to effectively plan and execute activities that will avoid potential hazards and unsafe conditions.

Training. Extensive training of employees will be carried out on a periodic basis. Annual training program include the following topics:

- Hazard Communication
- Chemical Safety
- Work zone safety and traffic control
- Driver Safety
- Electrical hazard warning
- Environmental safety
- Equipment operations and safe use
- OSHA Requirements

ADMP has qualified instructors on staff to provide training in the above topics. Additionally these trainers can work with project management to craft specific safety training programs for staff that need additional direction.

Authority and responsibility to make corrections. In order to recognize and correct unsafe conditions in an effective and timely manner, project management must be able direct and control the situation to mitigate problem or condition. This involves delegation of sufficient authority and responsibility down the organizational ladder to enable those who need to make something happen to make it happen.

Random safety inspections and drug tests. It is a policy of ADMP to perform random safety inspections of worksites, equipment and facilities several times per year or whenever there is indication that possible unsafe conditions exist. Random on site drug tests of selected work groups or whole project staff are also

conducted. Severe safety violations or positive drug tests are basis for immediate removal from the work site and possible termination.

Correct materials, tools, and equipment. Project staff, particularly those working on the highway, will be provided with proper and adequate equipment to carry out their assigned tasks.

Communication and coordination. Protocols will be established, both within the project organization as well as with the other external organizations that define communication and coordination requirements and minimize response times.

Background check of perspective employees. In order to determine if there are prior existing conditions, personnel that apply for a job are thoroughly reviewed during the application period.

The following positions will be the main focus for organizing and directing formal safety efforts:

- **Board of Directors.** Sets overall policy on all safety and wellness programs and initiatives. Provides guidance and support to project Safety Officer through communication of new safety laws and requirements.
- **Project Safety Officer.** Manages project safety program. Develops policies and procedures dealing with safety issues on the project. Provides liaison with other local organizations and government agencies with regard to site inspections, incident management, and emergency preparedness.
- **Project Management and other Supervisors.** Will maintain ADMP's safety objectives and set a good example of compliance and safety rules and seek every opportunity to support safe operations and instill positive thinking about safety throughout the workforce.

For the supervision of emergencies, ADMP will provide a designated responsible English speaking person on a 24-hour basis located at, or close to the Project, who will be the point of contact for emergencies, and for cases that require immediate action, safe-up the area and maintain traffic. Additional information regarding safety consideration during incident management can be found in Section 3.1.8.

Manage Lane Directional Changes: The single most important consideration in operating reversible lanes is the threat of traffic entering the lanes in the wrong direction and having a severe high speed head-on collision with oncoming traffic. The Reversible Lane Control System (RLCS) will operate the Express Lanes to ensure that at no time will motorists be granted access to enter the Express Lanes in the wrong direction of travel. This fully integrated system will be controlled by the Control Room Operator and will allow for the opening and closing of the Express Lanes gates and ensures safe traveling conditions. Before any Open or Close sequence is started, two control room operators will be responsible for coordinating with a field technician on the road to verify the lanes are clear and all gates are in operating condition with no damage. A contingency plan will be in place in the event of software malfunction, power loss or equipment failure. ADMP intends to utilize maintenance technicians to inspect the condition of all direction changing components daily and perform routine maintenance weekly or as needed.

Through development of a Safety Plan that details the policies, programs, and procedures that will be implemented to protect the safety of the public and Concessionaire's employees when performing O&M activities. The Table of Contents of the draft Safety Plan is provided in Figure 3.1.12.

ADMP will respond to any Safety Compliance Order issued by FDOT that deals with a specific safety condition or risk involving the project. Work to remove the unsafe condition will be performed without delay and continue until completion.

Figure 3.1-12 Table of Contents Safety Plan

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1.02 Safety Awareness
1.03 Miscellaneous Vehicle Safety
1.04 Foreman Responsibilities
1.05 Lifting and Back Injuries
1.06 In House Safety
- 1.06.1 Electrical Safety
- 1.06.2 Use of Cleaning Solvents
- 1.06.3 Fire Prevention
- 1.06.4 First Aid

1.07 Use of Ladders
1.08 Use of Fire Hydrants
1.09 Office Safety
1.10 Equipment Safety
- 1.10.1 Suction Pumps
- 1.10.2 Back Pack Sprayers
- 1.10.3 Chainsaws
- 1.10.4 Weed Wackers
- 1.10.5 Lawn Mowers
- 1.10.6 General Cutting Equipment
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1.11 Hazard Communication Program
- 1.11.1 Introduction
- 1.11.2 General Company Policy
- 1.11.3List of Hazardous Chemicals
- 1.11.4 Material Safety Data Sheets
- 1.11.5 Labels & Other Warnings
- 1.11.6 Non-Routine Tasks
- 1.11.7 Training
- 1.11.8 Contractor Employers
- 1.11.9 Additional Information

1.12 Respiratory Protection Program
- 1.12.1 Written Operating Procedures
- 1.12.2 Proper Selection
- 1.12.3 Training
- 1.12.4 Fit Testing
- 1.12.5 Cleaning/Inspection/Storage
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- 1.12.8 Program Evaluation

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2.03 Signaling
2.04 Shifting
2.05 Braking
2.06 Liquid Surging
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2.10 Fueling
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3.01 Storage Transportation and Handling of Pesticides
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3.04 Signs of Pesticide Poisoning
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4.01 Required Equipment
4.02 Spill Handling Procedures
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- 6.03.1 Rising and Lowering Rail Gear
- 6.03.2 Following Distance
- 6.03.3 Frogs and Switches
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7.02 Substation Work
- 7.02.1 Driving in Substations
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8.0 Bridge Cleaning Safety
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9.01 Protective Clothing
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10.01 Protective Clothing
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10.03 Street Sweeping Equipment
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11.02 Principles
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11.04 Common Problems
11.05 Project Specific Work Zone Diagrams

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12.01 General Safety Rules
12.02 Grounding
12.03 Portable Power Tools
- 12.03.1 Saws
- 12.03.2 Portable Drills
- 12.03.3 Grinding Wheels
- 12.03.4 Portable Sanders
- 12.03.5 Impact Wrenches
- 12.03.6 Soldering Irons or "Guns"
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12.05 Hazardous Energy Source and Electrical Hazards (Lockout/Tagout)
- 12.05.1 Purpose
- 12.05.2 General Information
- 12.05.3 Exclusions
- 12.05.4 Lockout/Tagout Procedures
- 12.05.5 Responsibility

12.06 Preparation for Lockout or Tagout
- 12.06.1 Lockout or Tagout System Procedure
- 12.06.2 Testing or Positioning of Machines, Equipment or Components
- 12.06.3 Restoring Machines or Equipment to Normal Production Operations
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12.16 Removal of Lockout/Tagout Devices by Other than the Authorized Employee
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12.18 Shift or Personnel Changes
12.19 Periodic Inspections
12.20 Training
12.21 Electrical Lockout/Tagout – 29 CFR 1910.333 (b)
12.22 Electrical Test Verification of De-energized Circuits 29CFR 1910.333 (b) (iv) (B)
12.23 Work on Energized Circuits
12.14 Accidents Concerning/Lockout/Tagout
12.25 Control of Hazardous Energy Sources (Lockout/Tagout) Program Overview
- 12.25.1 Scope
- 12.25.2 General Requirements
- 12.25.3 Exclusions
- 12.25.4 Benefits
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13.0 Chemical Graffiti Removal
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13.02 Conduct on the Jobsite
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13.04 Traffic Control Equipment and Procedures

14.0 Traffic Control Safety

3.1.15 Handback Plan

ITP 3.1 Handback Plan (sections a to d) – Proposer shall include a Handback Plan as part of the O&M Plan, which shall consist of a description of the approach to fulfill the Handback requirements including at least the facility and asset inspections processes; the method of documentation; the method of determining the asset residual life; a description of the Renewal Work Plan and a detailed listing of the requirements the Proposer's lenders will impose in relation to the Renewal Work Reserve.

The overall requirements at handback are in Section 1 of Volume II, Division II, Section 5, Handback Requirements: "ADMP will guarantee that the facility will be handed back to the Department in a good and operable condition and all elements of the facility within the right-of-way will comply with the handback requirements and in the desired maintenance condition." The two major considerations are to meet the handback requirements in Table 5.1, Handback Requirements, and the desired maintenance conditions as defined in Tables 4.2 (of Volume II, Division II, Section 4, O&M Requirements). Meeting desired maintenance condition is the focus of the RPMP and ROP program and renewal work program. These programs were summarized in Section 3.1.7 of the Technical Proposal.

3.1.15.1 APPROACH TO HANDBACK PLAN

The major concerns for handback are the following:

Equipment, facilities, and material. An inventory will be made for the equipment, facilities, and material relative to the O&M scope with indication of whether the items were purchased or leased. Ownership of the items purchased in regard to the O&M scope will then be transferred to FDOT.

Training. Training will be provided for maintenance program, plans, reports, and activities. Small-group and on-the-job training techniques will be employed since they are the most effective for conveying operational procedures and interpretation and use of documents.

Renewal Work. Requirements for inspection and testing and for residual life are summarized in the Table 3.1-19.

Table 3.1-19 Life at Handback

Asset	Testing and Inspection	Life at Handback
Flexible pavement	No inspection or testing Mill and Overlay	n/a
Rigid pavement	Rigid distress rating and Rigid ride rating	n/a
Guardrail	Handback Evaluation Plan	8
Attenuators	Handback Evaluation Plan	7
Sign structure	Handback Evaluation Plan	7
Sign reflectivity	MUTCD	7
Highway lighting	No inspection or testing - Replacement of Luminaires and Ballasts	5
High mast light poles	Handback Evaluation Plan or National Bridge Inspection	15
Overlane sign structures	Handback Evaluation Plan or	15
Toll gantries	National Bridge Inspection	
Bridges	Handback Evaluation Plan or National Bridge Inspection	N/A

Other handback work will be determined by the results of inspection and testing and residual life estimates, as addressed below. Table 5.1 does not specify residual life for bridges. Bridge work for handback will be that needed to bring a bridge to an NBIS and FDOT 850-010-030 rating of 6 or better, as in the handback evaluation criteria for bridges.

For six of the nine O&M-related assets in Table 5.1, work will be determined both by the results of inspection and testing and the need to meet the table's residual life requirements. Work needs identified through inspection and testing will be addressed by performing the associated work. For high mast light poles, overlane sign structures, and toll gantries, the work performed must bring the NBIS and FDOT 850-010-030 rating to a six or better. For highway lighting, repairs must result in operational light installations. For sign reflectivity, repairs must meet MUTCD standards, which are presumed to be in place by the time of the handback period.

The data collected during field inspections, both prior to and during the handback period, will provide the information needed to track these assets. During the handback period, the condition curve can be projected to the year corresponding to the required residual life in order to estimate whether the asset condition will be sufficient at that time to meet the residual life requirement. To estimate residual life, the following are essential:

- Inventories of the assets must be made to ensure positive identification of individual assets
- A condition scale and evaluation method must be devised or adopted for each type of asset

- The data collected must provide sufficient bases for projecting individual asset condition past the end of the concession
- Material testing and structural analysis must be considered during the evaluation method, if visual inspections indicate a need or if it is prudent to perform them.

3.1.15.2 INSPECTION PROCESS FOR PROJECT ASSETS

As feasible, the data collected during the mandatory inspections will be expanded to include that needed for estimating residual lives at the end of the concession. Table 3.1-20 indicates the relevant mandatory inspections and the expected modifications. The contract also calls for general inspections. These will be used to determine the locations and limits of basic renewal and handback renewal projects. These inspections and tests and their scheduled performance will be included in the handback evaluation plan.

Table 3.1-20 Relevant Inspections for project assets

Name	Reference	Freq	Years 6–30	Years 31–35
Guardrail	850-050-003	1x/2 yr	Condition rating	Condition rating + strength and fatigue tests if warranted
Attenuators	850-055-003	2x/yr	Condition rating (1x/r)	Condition rating (1x/yr) + strength and fatigue tests if warranted
Signs	850-055-025	1x/2 yr	Condition rating	Condition rating + strength and fatigue tests if warranted
Highway lighting	Original design criteria	1x/yr	Condition rating	Condition rating
High mast light poles	850-010-030	1x/2 yr	None	Structural analysis if warranted
Overlane signs	850-010-030	1x/2 yr	None	Structural analysis if warranted
Toll gantries	850-010-030	1x/2 yr	None	Structural analysis if warranted
Bridges	850-010-030	1x/2 yr	NBIS Inspection	NBIS Inspection

3.1.15.3 HANDBACK PLAN DOCUMENTATION

Section 5, Handback Requirements, requires certain documents to be produced and submitted relative to handback. Additionally, other documentation will be produced, primarily in conjunction with the residual life estimates and the mandatory training.

Required documentation. The handback evaluation plan, handback work plan, and renewal work schedule are documents required to be prepared and submitted. Their content is prescribed in the contract documents, and these contract provisions will be fulfilled.Other mandatory information relating to handback includes the inventory of equipment, facilities, and material purchased or leased for the O&M scope. As indicated above, the inventory will document the items and whether they are purchased or leased.

Additional documentation. Additional information will be provided as part of the handback plan documentation, as summarized below.

- **Asset inventory.** As indicated in the introduction to this section, an inventory of individual assets will be assembled for those assets that have residual lives specified in Table 5.1. The completed inventories will be simple, indicating only those items needed for handback analysis, such as asset type, description, size, and location.

- **Condition checklists.** Condition evaluations will be performed for the types of assets with residual life requirements. These evaluations will be documented on checklists designed for each type of asset.
- **Reports on material testing and structural analysis.** Material testing and structural analysis if needed, will be documented using conventional methods, such as reports on field data collection and calculation sheets indicating methods and assumptions..
- **Asset condition files.** Summary documentation related to asset condition generally will be kept in electronic files. Original field documentation, such as the condition evaluation checklists and material sampling identification documents, will be kept in paper files.
- **Training documentation.** Documentation will be provided concerning the mandatory training in connection with the maintenance program, plans, reports, and activities. Because the training will be on-the-job and small-group training, guidelines will be used to ensure relevant material is covered, and documentation of trainee attendance will be maintained.

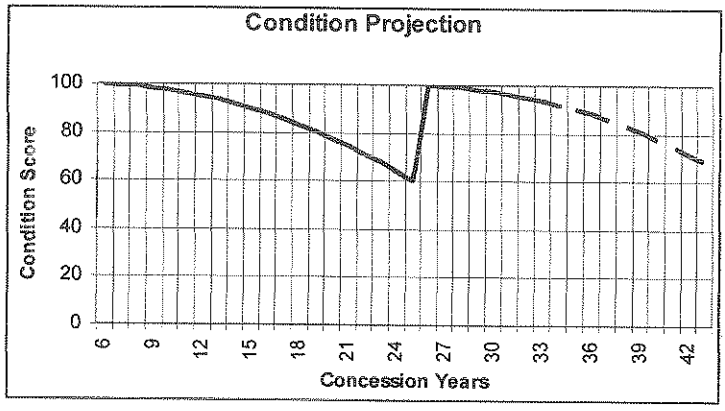
3.1.15.4 METHODOLOGY FOR DETERMINING ASSET RESIDUAL LIFE

The overall approach to estimating residual life will be to track the condition of individual assets, by creating or adopting a condition evaluation method for each type of asset; the methods will result in condition ratings appropriate for handback purposes.

Condition evaluation and rating. The NBIS and FDOT 850-010-030 procedures will be used for high mast light poles, overlane sign structures, toll gantries, and bridges. Condition evaluation procedures will be designed for guardrail runs, attenuators, single-post and multi-post sign structures, and highway lighting.

- **NBIS and FDOT 850-010-030 ratings.** Assets rated using NBIS and FDOT 850-010-030 procedures — high mast light poles, overlane sign structures, toll gantries, and bridges — will be rated on the 0-to-9 scale used in those procedures. Structural analyses for these assets, with the exception of bridges, will be performed during the handback period unless the condition evaluations and visual inspections indicate otherwise. Structural analyses for bridges will not be performed solely for handback purposes because there is no residual life requirement for bridges.
- **Ratings for guardrail, attenuators, signs, and highway lighting.** Checklists for rating individual assets will be developed for the condition evaluation of guardrail, attenuators, signs, and highway lighting. The items in the checklist will be determined from contract requirements, such as the characteristics rated under the MRP, FDOT procedures, specifications, and standard drawings. The items critical to handback condition and residual life will be included in the checklists.These evaluations will use a 0-to-100 scale. Checklist instructions will provide for material testing and structural analysis, triggered from the results of the condition evaluations and visual inspections.

Figure 3.1-13 Idealized Condition Plot



Evaluation items will be rated pass, fail, or absent. Condition scores will be weighted averages of the ratings and

maximum scores assigned to each of the rated items. A threshold value will be established for each type of asset rated in this manner. The threshold will be the value at which the useful life terminates and, thus, the value at which renewal work should be performed.

Condition projection. A plot of condition by inspection year will be made for each individual asset that has a specified residual life. These plots will be analyzed by drawing smooth curves with least-squares or other applicable techniques and projecting the curves to the year corresponding to the specified residual life. If the projected rating in that year is greater than the threshold value, the asset will pass the residual life test. An idealized condition plot is shown in Figure 3.1-13. The solid lines represent the part of the curve calculated from data collected during inspections; the dashed part of the curve is the projection.

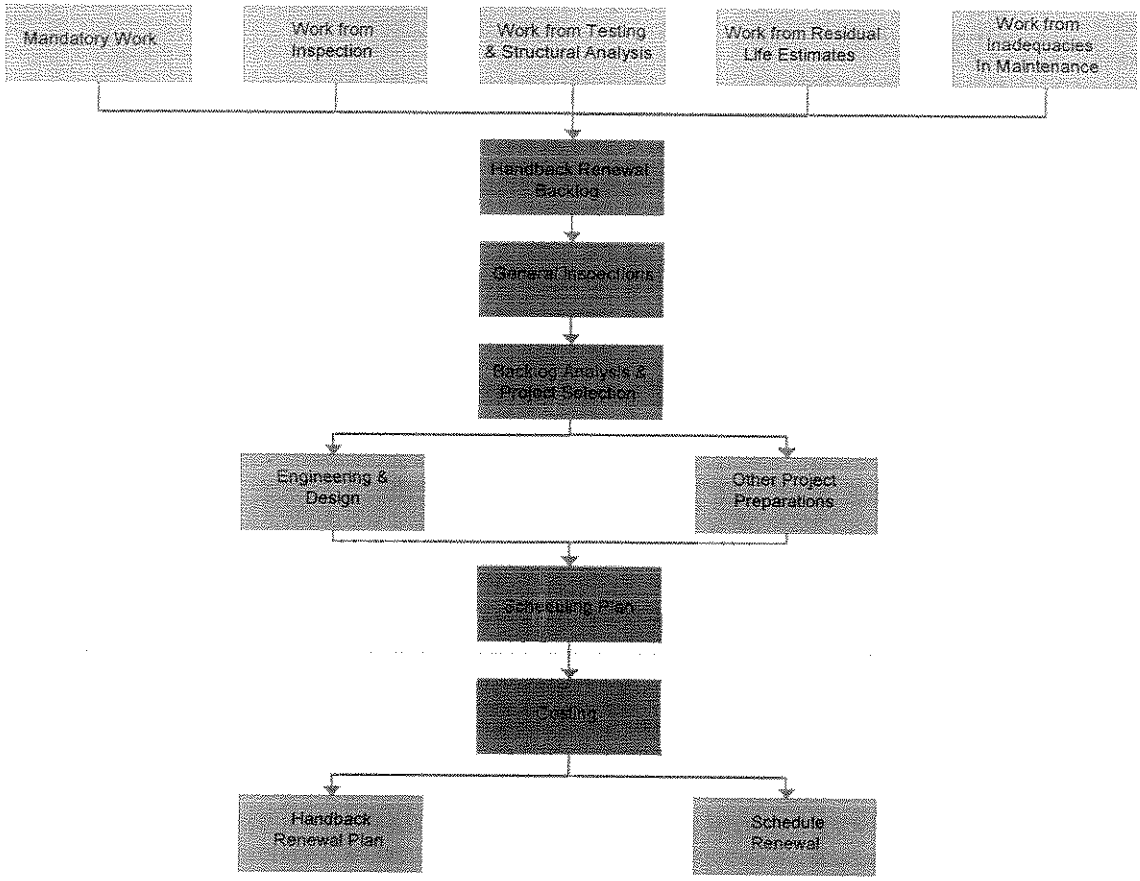
3.1.15.5 HANDBACK RENEWAL WORK PLAN PROCESS

The handback renewal work plan process includes planning, scheduling, work execution, and reporting. These components of the process are described below and summarized in Figure 3.1-14 on the next page.

- **Planning**. The Annual Handback Renewal Plan will be formulated using conventional project planning methods.
- **Work identification and backlog**. Work is identified from the various Handback sources including mandatory work, work identified during inspections, work as a result of testing or structural analysis, work indicated by residual life estimates. The work needs from all sources are compiled in a Handback renewal backlog.
- **Backlog confirmation and analysis**. General inspections are performed to confirm the compiled work needs and gather additional information for project planning. Information from the general inspections, backlog, contract documents, and other project activities is analyzed and evaluated to formulate project descriptions, including types of work, locations, and limits.
- **Engineering and design.** Planning for individual projects is performed; this includes any engineering and design work.
- **Other project preparations.** Estimates of closure needs and coordination with other project-related activities.
- **Scheduling plan.** A scheduling plan is developed that identifies the work windows for performing a project, and the project costs are estimated.
- **Costing.** Depending on the need for subcontractors and the existing subcontractor agreements, the costing phase of plan development may include preparing contract specifications and documents and researching, qualifying, and obtaining prices from subcontractors.
- **Handback renewal plan and renewal work schedule**. The planning information for the individual projects are compiled into the handback renewal plan. This process also provides information for the renewal work schedule, such as useful and residual life estimates. As required, the plan will be reviewed with FDOT and modified as needed prior to scheduling the projects for execution.
- **Scheduling.** Short-term scheduling factors will be considered prior to beginning in-house work or issuing notices to proceed to subcontractors. These considerations include coordination with other project-related activities, weather, special events, inspector availability, and, in the case of in-house work, availability of labor, equipment, and material.

- **Reporting.** Conventional construction-oriented work reports will be used for the handback renewal projects. These reports will be summarized to produce the annual reports required for the renewal program.

Figure 3.1-14 Summary of the Handback Renewal Plan Process



3.1.15.6 LENDERS REQUIREMENTS FOR RENEWAL WORK RESERVE

ADMP's lenders technical requirements for the Renewal Work Reserve consist of the following:

- Identification and description of the works to be fulfilled in relation to a life cycle assessment and FDOT's handback requirements included in Division II, Volume II, Section 5, and updated to account for changes in configuration;
- Submission of ADMP's capital budget (the "Annual Capital Budget") setting forth in reasonable detail ADMP's projected Renewal Works for such calendar year and the nature and amount of all funding available or expected to be available for purposes of funding such Renewal Works
- Lender's Technical Advisor review, approval and validation of the Annual Capital Budget
- ADMP will fund a renewal reserve in a reserve account pledged to the Secured Parties as security (the "RRA").

> The Renewal Reserve will be based on a look forward of expected renewal work expenditure such that, from and after Final Acceptance, at the start of the year "N", the maximum cash reserve standing on the account will be the sum of:

Year	Percentage
N	100.00%
N + 1	75.00%
N + 2	50.00%
N + 3	25.00%

The RRA will be funded initially on the Final Acceptance Date in a required amount as set forth on a schedule to be attached to the Financing Documents and based on the formulation set forth above, and thereafter, to the extent funds are available therefore after application of funds as set forth in the Financing Documents, up to the amount set forth on the schedule described above.

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Glossary of Terms

AES	Advanced Encryption Standard	LED	Light Emitting Diodes
ACS	Access Control Subsystem	MAC	Media Access Control
ACU	Access Control Unit	MBPS	Million Bits Per Second
APL	Approved Product List	MFES	Managed Field-Hardened Ethernet Switch
ATMS	Advanced Traffic Management System	MOT	Maintenance Of Traffic
ASCII	American Standard Computer Information Interface	MUTCD	Manual on Uniform Traffic Control Devices
BPS	Bits Per Second	MVDS	Microwave Vehicle Detection System
CCTV	Closed Circuit Television	NEMA	National Electrical Manufacturers Association
CDPD	Cellular Digital Packet Data	NFPA	National Fire Protection Association
CMS	Changeable Message Sign	NITSA	National ITS Architecture
CODE	Coder/Decoder	NTCIP	National Transportation Communications for ITS Protocol
COMM	Abbreviation of "communication(s)"	NTP	Notice To Proceed
COTS	Commercial Off-The-Shelf	PLC	Programmable Logic Circuit
DBDD	Database Design Document	PSEMP	Project Systems Engineering Management Plan
DMS	Dynamic Message Sign	PTZ	Pan-Tilt-Zoom
ETC	Electronic Toll Collection	PWS	Portable Work Zone System
EAG	Emergency Access Gate	PoE	Power-over-Ethernet supply
FCC	(US) Federal Communications Commission	QPL	Qualified Product List
FDOT	Florida Department of Transportation	RFP	Request For Proposal
FHP	Florida Highway Patrol	RITSA	Regional ITS Architecture
FTE	Florida's Turnpike Enterprise	RS232	232C Standard Serial interface
GUI	Graphical User Interface	RSTP	Rapid Spanning Tree Protocol
GPS	Global Positioning System	SIRV	Severe Incident Response Vehicle
HAR	Highway Advisory Radio	SOG	Standard Operation Guidelines
HOV	High Occupancy Vehicle	SQL	Structured Query Language
ICD	Interface Control Document	TCP/IP	Transmission Control Protocol/ Internet Protocol
IEEE	Institute of Electrical and Electronics Engineers	TIM	Traffic Incident Management
IP	Internet Protocol	TMC	Traffic Management Center
ITMS	Interim Traffic Management System	TSS	Transportation Sensor System
ITS	Intelligent Transportation System	TVSS	Transient Voltage Surge Suppressor
JPEG	Joint Photographic Experts Group (image file format)	UPS	Uninterrupted Power Supply
KBPS	Thousand Bits Per Second	VLAN	Virtual Local Area Network
LAN	Local Area Network	WGU	Wire Grounding Units
LCS	Lane Control Signal	XML	Extensible Markup Language
LDP	Label Distribution Protocol		

3 Operations and Maintenance

Key Features

- I-595 TMC will use standard SunGuide™ software
- Additional implementation of the Express Lanes Access Control subsystem (ACS) software by SwRI to control Access Control Units (ACU) installed in reversible lanes
- Interchange of data with other TMCs
- Interchange of data with FTE Toll Operations Center

3.2 SYSTEM INTEGRATION PLAN

3.2.1 Overview

The System Integration Plan is intended to demonstrate ADMP's understanding of the requirements for the I-595 Corridor Roadway Improvements Project (I-595 Project) and describe the approach and philosophy for fulfilling the integration requirements.

All activities associated with the integration of the I-595 Project shall comply with the systems engineering and ITS Architecture requirements of Title 23, Part 940, of the US Code of Federal Regulations (Rule 940). As such, the System Integration Plan will be executed in harmony with the Project Systems Engineering Management Plan (PSEMP) to be developed specifically for the I-595 Project and within the context of the National ITS Architecture (NITSA) and the Districts 4 and 6 (Southeast Florida) Regional ITS Architecture (RITSA).

The Traffic Surveillance and Control of the I-595 Project comprises Express Lanes and General Purpose Lanes (eastbound and westbound lanes) in a unique set of functionalities and capabilities. Field devices consist of various permanent subsystems, including Dynamic Messages Signs (DMS), Closed Circuit Televisions (CCTV), Microwave Vehicle Detection Stations (MVDS), Highway Advisory Radios (HAR), and Access Control Units (ACU).

In addition to the permanent subsystems, an interim subsystem using Portable Work Zone System (PWS) devices which control DMS, CCTV, and MVDS during construction will be deployed. The PWS subsystem is not described in this document.

Three permanent traffic monitoring sites and one telemetered traffic monitoring site will also be deployed. These traffic monitoring sites will not be physically integrated with the permanent subsystems and thus are not described in this document.

All permanent subsystems will be controlled from the I-595 Traffic Management Center (I-595 TMC). The I-595 TMC will interchange data with two other systems: the District 4 SMART SunGuide™ TMC, located at 2300 W. Commercial Boulevard, Fort Lauderdale, FL 33309; and the Florida's Turnpike Enterprise (FTE) Toll Operations Center, located at 7941 Glades Road, Boca Raton, FL 33434.

Our approach is based on a proven solution which is supported by standard SunGuide™ Advanced Traffic Management System (ATMS) software and includes NTCIP Center-to-Field interfaces to connect with field devices, and NTCIP Center-to-Center interfaces to connect with District 4's SMART SunGuide™ TMC and FTE's Toll Operations Center. ADMP's approach provides complete integration in a single hardware/software solution which provides a more efficient and effective operation.

As indicated in this document, standard SunGuide™ ATMS software will be used to develop the Express Lanes Access Control Subsystem (ACS).

Standard SunGuide™ ATMS software will be used in this integration process, and a special software module for the Express Lanes Access Control will be developed and integrated to the standard SunGuide™ ATMS software.

This System Integration Plan will be described as required in the Instructions to Proposers, Appendix B – Technical Proposal Submittal Requirements, subsection 3.2, as follows:

- Description of how ADMP plans to integrate the subsystems into a single unified interface
- Description of how this interface supports the operation of the General Purpose Lanes and Express Lanes facilities and self monitoring/payment mechanism process
- Description of ITS software and hardware

3.2.2 ADMP's Plan to Integrate Subsystems into a Single Unified Interface

ITP 3.2a – Specifics on how the Proposer plans to integrate the fiber optic communication network subsystem, the Express Lanes Access Control subsystem, the CCTV camera traffic monitoring subsystem, the DMS subsystem, the CMS subsystem, a HAR subsystem, the MVDS subsystem, a power backup subsystem, and the FTE ETC subsystem into a single unified interface.

This section describes how ADMP plans to integrate the various subsystems into a single unified interface. The subsystems are:

- Fiber Optic Communication Network
- Closed Circuit Television (CCTV)
- Dynamic Message Sing (DMS) subsystem
- Changeable Message Sign (CMS) subsystem
- Warning Gates and Barrier Gates
- Highway Advisory Radio (HAR) subsystem
- Microwave vehicle detection Station (MDVS) subsystem
- Power backup subsystem
- Emergency Access Gate (EAG) Subsystem
- Access Control Unit
- FTE Electronic Toll Collection (ETC) subsystem

This document presents a general description for the System Integration Plan. Device details are also presented where necessary.

3.2.2.1 GENERAL DESCRIPTION

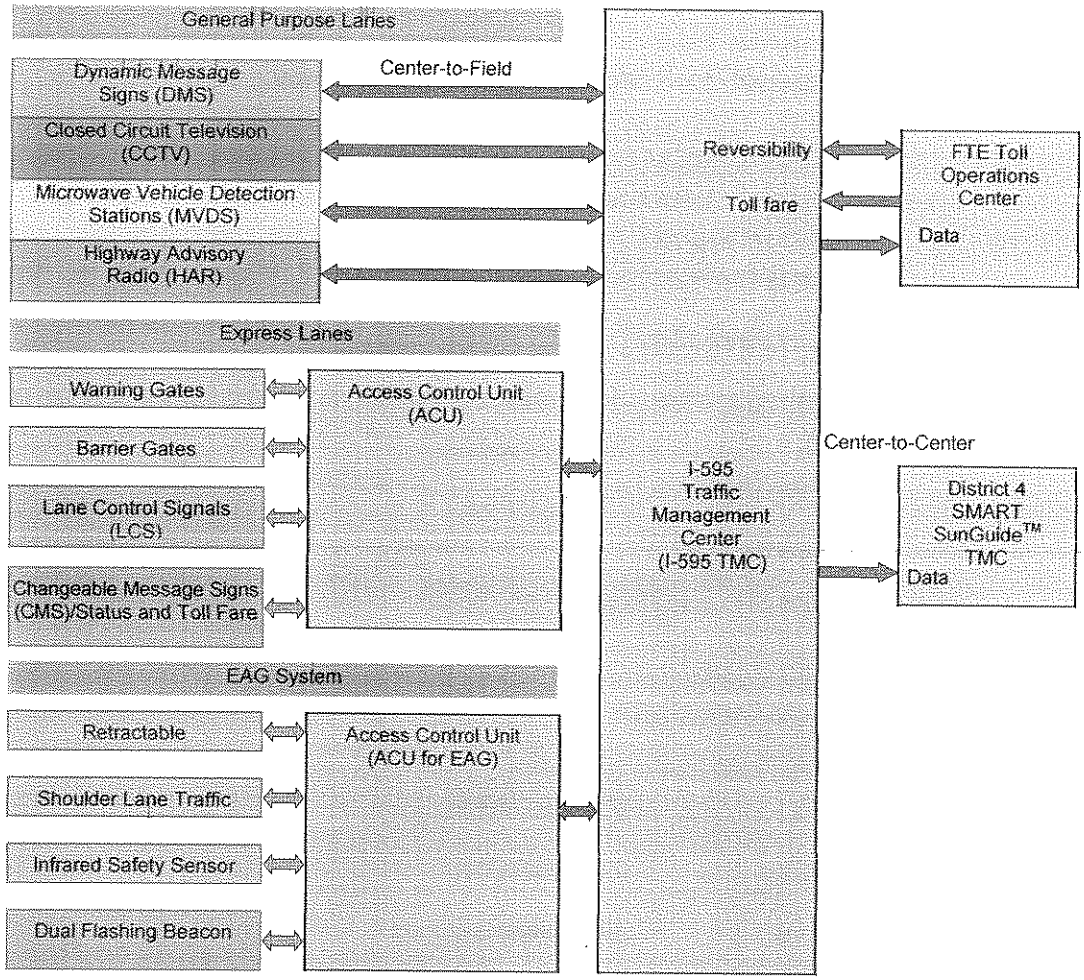
All of the devices installed in the field will be integrated into the I-595 TMC. The field devices are integrated to the I-595 TMC:

- Directly: CCTV, DMS, MVDS

- Through ACU
- Through EAG control

Integration of the field devices complies with the NTCIP Center-to-Field standard protocols according to the following block diagram:

Figure 3.2-1 Integration Block Diagram



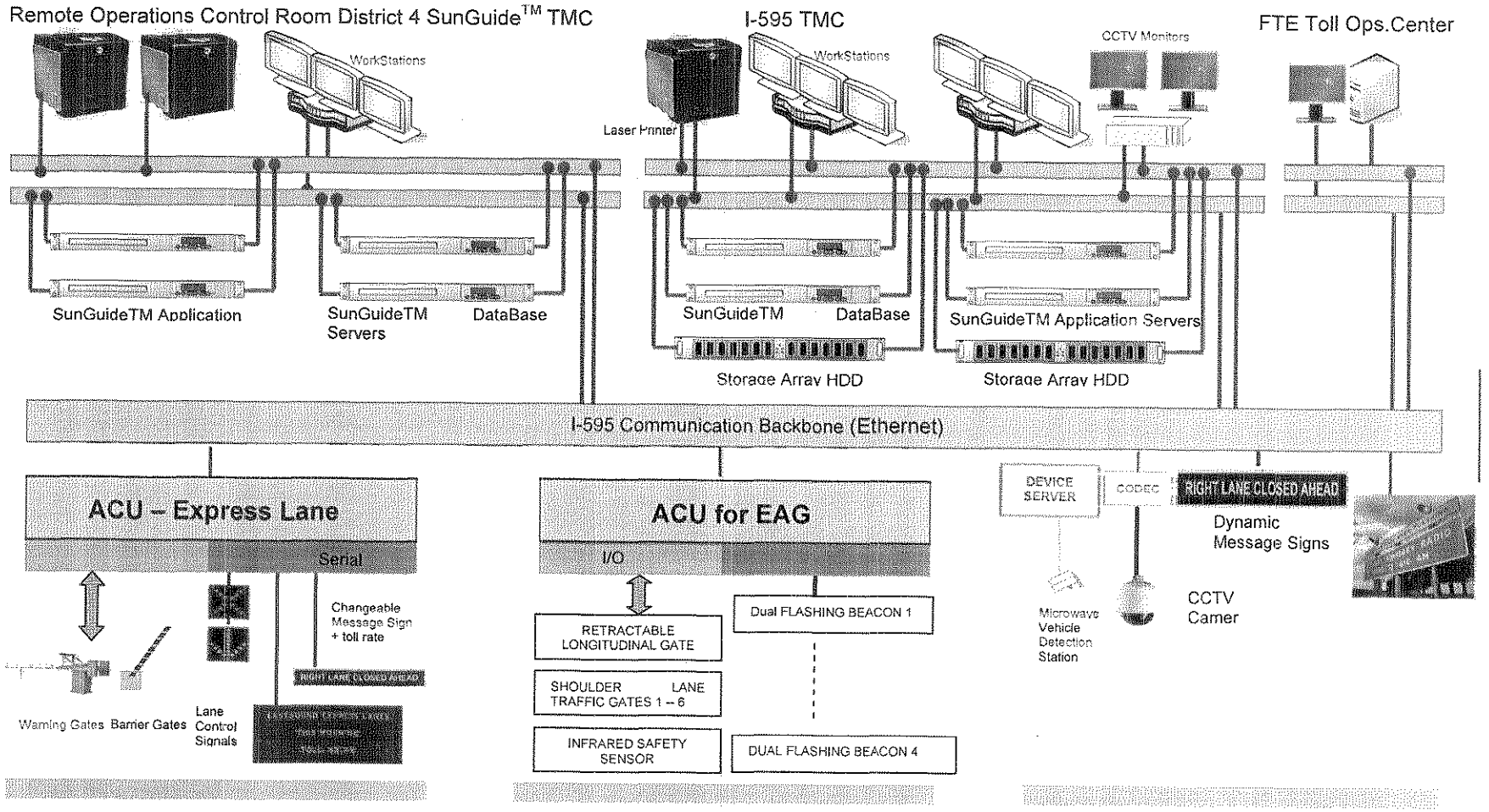
Data exchange between District 4's SMART SunGuide™ TMC and the I-595 TMC will be necessary to interchange the toll fare and traffic data. The NTCIP Center-to-Center standard protocols will apply to the interface between the SunGuide™ system at District 4 and the I-595 TMC.

The I-595 TMC needs to know the required toll fare to announce the toll rate to the motorists who use the Express Lanes.

The I-595 TMC and FTE Toll Operations Center interchange the command and the status of the lane reversibility.

The next block diagram shows the general architecture of the I-595 Express Lanes Control System, including the main control elements and logical connections.

Figure 3.2-2 General Architecture of the I-595 Express Lanes Control System



3.2.2.2 FIBER OPTIC COMMUNICATION NETWORK

Every communications device will be accessible through a browser in order to configure them accordingly, check alarms, status, etc. The communication system will be provided with a network management system, which allows managing all devices that support SNMP protocol in a centralized way.

3.2.2.3 CLOSED CIRCUIT TELEVISION (CCTV) CAMERAS TRAFFIC MONITORING SUBSYSTEM

CCTV will be connected directly to the nearest managed field-hardened Ethernet switch (MFES), and will be accessed directly by the SunGuide™ ATMS software installed in the I-595 TMC. Using the operator workstations, an operator will be able to select any CCTV camera in the system, switch the video to any monitor or display device, and perform pan, tilt, and zoom functions (for cameras equipped with appropriate hardware).

3.2.2.4 DYNAMIC MESSAGE SIGNS (DMS) SUBSYSTEM

DMS will be connected directly to the nearest MFES, and can be accessed directly by the SunGuide™ ATMS software installed in the I-595 TMC. From the point of view of the operators, the SunGuide™ ATMS software provides an interface between the operators and the DMS. This full-featured interface will provide operators the ability to monitor the status of each sign and also provide the ability to control the current message displayed in the field from the I-595 TMC.

Sign equipment status and faults will be reported to the ACS User Interface system and dynamically displayed on the graphical user interface (GUI) and, when appropriate, alarmed to the operators.

3.2.2.5 CHANGEABLE MESSAGE SIGNS (CMS) SUBSYSTEM

CMS will be physically connected to the ACU. CMS can be accessed by the SunGuide™ ATMS software installed in the I-595 TMC using the ACU as an intermediate element using the NTCIP standard protocols. Since the ACU controls the commands to its devices, a command addressed to a CMS could not be accomplished if the logic in the ACU does not permit the action demanded. The ACS server in the I-595 TMC will be capable of detecting requested commands that do not result in proper changes in CMS state, receiving error codes from the ACU.

For more details dedicated to the ACU, see subsection 4.1 ITS software, "Access Control Subsystem Server".

3.2.2.6 WARNING GATES AND BARRIER GATES SUBSYSTEM

Warning Gates and Barrier Gates will be physically connected to the ACU and will be accessed by the SunGuide™ ATMS software installed in the I-595 TMC using the ACU as an intermediate element using the NTCIP standard protocols. For these gates, the same explanation presented for the CMS is valid. For more details dedicated to the ACU, see subsection4.1 ITS software, "Access Control Subsystem.

3.2.2.7 HIGHWAY ADVISORY RADIOS (HAR) SUBSYSTEM

HAR will be implemented in compliance with FDOT's *HAR Users Manual* and FCC regulations in CFR Title 47, Part 90.242, pertaining to operation of Travelers' Information Stations. Two HAR operating frequencies are available to serve the I-595 corridor: 530 KHz and 1610 KHz on the AM band. There are no AM broadcast stations on these two frequencies in the state of Florida. District 4 may license HAR at the 530 KHz frequency anywhere along the I-595 corridor. District 4 may license HAR at the 1610 KHz frequency along the I-595 corridor, however, only west of mile post 7.

ADMP recommends that District 4 license the two HAR for the I-595 Project at the 530 KHz frequency on the AM band. This broadcast frequency will provide for good continuity and driver expectancy as other HAR in the District are also operating at this frequency.

The integration of the HAR field assemblies will generally be accomplished using CAT 5e or CAT 6 UTP cables connected to RJ-45 Ethernet ports on the nearest MFES. The two HAR transmitters will also be fully integrated with six highway signs with flashing lights (beacons) through a flashing beacon Ethernet controller.

Real-time audio messages or compressed digitized audio files will be downloaded from the I-595 TMC to the HAR transmitters. Both HAR transmitters will be capable of broadcasting identical messages simultaneously by synchronizing both the RF and audio with the precise signals derived from the Global Positioning System (GPS).

HAR transmitters deployed for the I-595 Project will have up to 80 minutes of message recording capacity, 999 messages with indefinite memory retention, 25 playlists with up to 100 messages each, 200 scheduled events up to one year in advance, and scheduling by day, date, month, hour, and minute.

3.2.2.8 MICROWAVE VEHICLE DETECTION STATIONS (MVDS) SUBSYSTEM

The integration of MVDS will be similar to the DMS. They will be connected to the nearest MFES through a device server, and can be accessed directly by the SunGuide™ ATMS software installed in the I-595 TMC.

From the point of view of the operators, the SunGuide™ ATMS software provides an interface between operators and the MVDS. This interface will provide operators with the ability to monitor status and values of each MVDS.

MVDS equipment status and errors will be reported to the ACS User Interface System and dynamically displayed on the GUI and, when necessary, the alarm messages will be sent to the operators.

3.2.2.9 POWER BACKUP SUBSYSTEM

As required by the RFP, ADMP will design, install and integrate a full backup power subsystem comprising, Diesel Generators, UPS and transfer switches.

All of the equipments will be monitored from the TMC, and will be sized in order to power the ITS network as follows:

- Diesel Generators: 49/72 hours of runtime at half/full capacity
- UPS: 4 hours of runtime at full capacity for the cabinet to which each UPS unit is attached

3.2.2.10 EMERGENCY ACCESS GATE (EAG) SUBSYSTEM

ADMP will provide five Emergency Access Gates (EAGs) to provide emergency responders with strategic accessibility to the Express Lanes from the I-595 General Purpose Lanes. The EAG subsystem includes four necessary emergency access control components required to safely operate the EAG:

- Retractable Longitudinal Gates
- Dual Flashing Beacon Assemblies
- Infrared Safety Sensor
- Shoulder Lane Traffic Gates

These components shall be integrated with the EAG's NEMA 4-rated electrical control system and the EAG control software to form a cohesive system that controls strategic accessibility to the Express Lanes from the I-595 General Purpose Lanes for emergency responders.

Each EAG is managed by an electrical control system. ACU for EAG control, from the I-595 TMC will be accomplished via the new I-595 communication network. Each EAG will communicate with the I-595 TMC using TCP/IP via an MFES located in a nearby ITS field cabinet.

The EAG electrical control system will communicate with associated field components connected via:

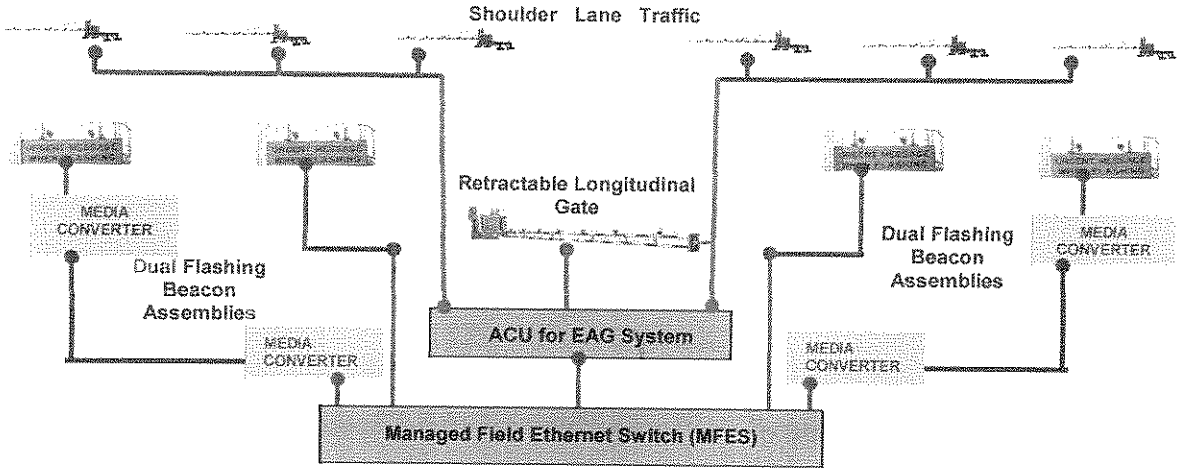
- Ethernet
- Digital Input/ Output signals
- Series communications through device servers

This EAG will provide a continual crashworthy longitudinal barrier between the Express Lane and the I-595 General Purpose Lanes.

Upon the opening of an EAG, three dual flashing beacons assemblies will operate per direction of travel and will service the Express Lanes traffic and General Purpose Lanes.

Additional traffic gates will be used to close Express Lanes shoulder in advance of the EAG to prohibit unauthorized use of the EAG.

Figure 3.2-3 Emergency Access Gate Subsystem



It will be provided EAG control software that allows an operator to be able to manage electrically this EAG from the SMART SunGuide™ TMC. This software includes a fully integrated Graphical User Interface that will display the current status of each EAG. The EAG software will be fully integrated with SunGuide™ Software, making it possible to be launched from SunGuide™ software. This software will provide the GUI for Express Lanes operators to request and authorize changes to emergency access gate operations. The software will include checklists that are completed with each operation and it will provide error logs as well as graphics depicting real-time EAG operations and the functional status of the communication segments.

ADMP will be responsible for any upgrade and maintenance of EAG control software and compatibility with SunGuide™ during the term.

3.2.2.11 GROUNDING, LIGHTNING AND SURGE PROTECTION SUBSYSTEM

Florida's reputation as the worst state in the U.S. for air-to-ground lightning strikes poses particular challenges in deploying ITS and tolling equipment. Therefore, the integration of the I-595 Project will involve a significant number of surge protection devices to mitigate against the catastrophic damages that can be caused by lightning strikes, transient voltage surges, and induced current. Every ITS field device, ACU component, cabinet, shelter, cable and conductor will be covered by a surge protection device.

ADMP will employ a combination of three primary techniques to achieve an effective grounding and surge suppression strategy for the I-595 Project:

- Proper Bonding and Installation of Grounding Rods
- Installation of Air Terminal
- Application of Transient Voltage Surge Suppressor (TVSS) Devices

We will install a grounding, lightning and surge protection subsystem that meets the specific needs of the I-595 corridor. Existing geological and physical characteristics (i.e., soil types and resistivity, presence of groundwater, gravel deposits, etc.) of the I-595 corridor will influence the design and layout of grounding systems.

Integration of the grounding, lightning and surge protection subsystem will employ these best practices:

- Follow the Requirements Defined in the NFPA 780 Standard for the Installation of Lightning Protection Systems
- Install TVSS Devices with Grounding Connections as Short and Straight as Possible
- Route Cabling to Avoid Excessive Bending and Provide Physical Separation Between Low-Voltage and High-Voltage Signal Paths
- Avoid Routing Unprotected or Grounding Wires Parallel or Adjacent to Protected Wiring

3.2.2.12 ACCESS CONTROL UNIT (ACU) SUBSYSTEM

The ACU subsystem includes five necessary access control components required to safely operate the Express Lanes system:

- Changeable Message Signs (CMS)
- Lane Control Signals (LCS)
- Warning Gates
- Barrier Gates

These components shall be integrated with the ACU controller and the Express Lanes TMC System Control Software to form a cohesive system that controls access to, and traffic flow on, the Express Lanes.

Each ACU is managed by an ACU controller. Remote ACU control from the I-595 TMC and the transmission of data collected by the ACU controller to the I-595 TMC will be accomplished via the new I-595 communication network. Each ACU controller will communicate with the I-595 TMC using Transmission Control Protocol/Internet Protocol (TCP/IP) via the MFES located in the ACU enclosure.

The ACU will control associated field components connected via:

- Ethernet
- Digital Input / Output signals
- Series communications through device servers

The device servers shall convert serial data (EIA-232/422/485) to Ethernet and support local and remote configuration and management, which includes access to all user-programmable features, device monitoring, diagnostic utilities, and security functions.

3.2.2.13 TOLL FARE INTEGRATION

The toll rate announced to the motorists using the Express Lanes will be obtained through the interconnection with the FTE Toll Operations Center. The FTE Toll Operations Center will send toll rate information whenever:

- It is requested by the I-595 TMC
- It is changed by the FTE Toll Operations Center

On the other hand, the FTE Toll Operations Center needs to get the following data to calculate the toll rate. These data will be sent by the I-595 TMC periodically to the FTE Toll Operations Center:

- Current Traffic Data
- Express Lanes Traffic Direction
- Data from the FTE devices, which will be provisionally reinstalled (these data will be sent only during I-595 works)

With current traffic data and Express Lanes traffic direction, the FTE Toll Operations Center shall calculate and send to the I-595 TMC the new toll rate, which will be announced to motorists via the CMS connected to the ACU.

3.2.2.14 FTE ELECTRONIC TOLL COLLECTION (ETC) SUBSYSTEM

The I-595 TMC will send information about Express Lanes traffic direction (reversibility) to the FTE Toll Operations Center:

- Each time it changes
- Each time the FTE Toll Operations Center requests it

✔ This System Integration Plan meets Technical Proposal Requirements (3.2a) by describing specifics on how the Proposer plans to integrate the fiber optic communication network subsystem, the Express Lanes Access Control subsystem, the CCTV camera traffic monitoring subsystem, the DMS subsystem, the CMS subsystem, a HAR subsystem, the MVDS subsystem, a power backup subsystem, and the FTE ETC subsystem into a single unified interface.

3.2.3 How This Interface Supports the Operation

ITP 3.2b – A description of how this unified interface will support the operation of the general purpose and Express Lanes facilities and the self-monitoring/payment mechanism process.

The unified interface incorporated into the design of this integration plan will support the day to day operations of the General Purpose and Express Lane facilities within the boundaries of the project. Using

all the components and subsystems previously addressed in this plan, ADMP will facilitate the operations and availability of these lanes.

The TMC will primarily utilize the CCTV system, DMS subsystem, CMS subsystem, Warning gates and barrier gates, and the MDVS subsystem to monitor the conditions and traffic patterns of the corridor, alert drivers to incidents/changes, and control traffic during certain situations. The interface of these subsystems will support the required incident response times, and availability requirements throughout operation of the project, and observe visible maintenance issues. The TMC will have the ability to monitor key areas of the General Purpose and Express Lanes in order to improve standards and reliability of the system. This system will also support the direction change of the express lanes. All components will be utilized to support a fast and safe lane direction switch. The I-595 TMC operation will be accomplished as follows:

- DMS, MVDS, CCTV cameras, and HAR connected directly to the I-595 communication backbone will be seamlessly managed with the SunGuide™ ATMS software. All field devices connected to the ACU will be managed with a particular logic implemented in the SunGuide™ TMC server to accomplish the operator's requested changes in the operation of the Express Lanes. This logic ensures that sequences and interlocking rules are followed before processing requests. Error events and alerts will be sent to the ACS User Interface. For more detail on this logic, see subsection 3.2.4.1 I-595 TMC Software.

3.2.3.1 SELF MONITORING/PAYMENT MECHANISM PROCESS

The system will also assist ADMP in monitoring the availability of lanes, response time to incidents, roadway conditions, visible maintenance issues, and associated issues to assist in the self monitoring/payment mechanism process. The self-monitoring process which will document the information needed to calculate quarterly payment adjustments will primarily be monitored from within the TMC. The TMC will have the greatest view of the entire system and thus will utilize the unified interface to observe such incidents. The approach will be to track the information needed to determine the variables required by the quarterly payment adjustment equations in Appendix 6, Concession Agreement.

3.2.3.2 DATA INTERCHANGE WITH OTHER TMCS

The I-595 TMC controlling the Express Lanes will be connected to other TMCs using Center-to-Center-type connections to interchange information.

As stated previously, we will provide an NTCIP-compliant Center-to-Center interface between the SunGuide™ system at FDOT District 4 and the I-595 TMS system. The interface will serve to exchange data between the two systems. The NTCIP Center-to-Center standard protocols provide a means for traffic management centers to uniquely name entities for which data are exchanged with other centers. Such entities can include centers, field devices, and incidents. Unique names are important to avoid ambiguity and confusion when information is exchanged between centers about these entities.



This System Integration Plan meets Technical Proposal Requirements (3.2b) by describing how this unified interface will support the operation of the general purpose and Express Lanes facilities and the self-monitoring/payment mechanism process

3.2.4 Description of ITS Software and Hardware

ITP 3.2c – A description of the ITS software and hardware, including integration and compatibility with the existing SunGuide™ system.

3.2.4.1 I-595 TMC SOFTWARE

The I-595 TMC software will be based on the FDOT SunGuide™ ATMS software product. The FDOT SunGuide™ ATMS software will be utilized as the baseline software system for management and operations of the I-595 Express Lanes project.

Southwest Research Institute (SwRI) is the principal developer of the SunGuide™ ATMS software, and ADMP considers that SwRI is the best positioned entity to develop and integrate the new Express Lanes Access Control Subsystem (ACS) and EAG software modules. For this reason, SwRI will be responsible for the development of the I-595 Express Lanes ACS and EAG Subsystem. SwRI's participation thus guarantees *total integration of new functionalities.*

The software provided under license from FDOT for modification and deployment will remain the property of the FDOT.

The existing SunGuide™ CCTV subsystem, DMS subsystem, HAR subsystem, and Transportation Sensor System (TSS) subsystem will be used to interface with ITS field equipment for device management and control.

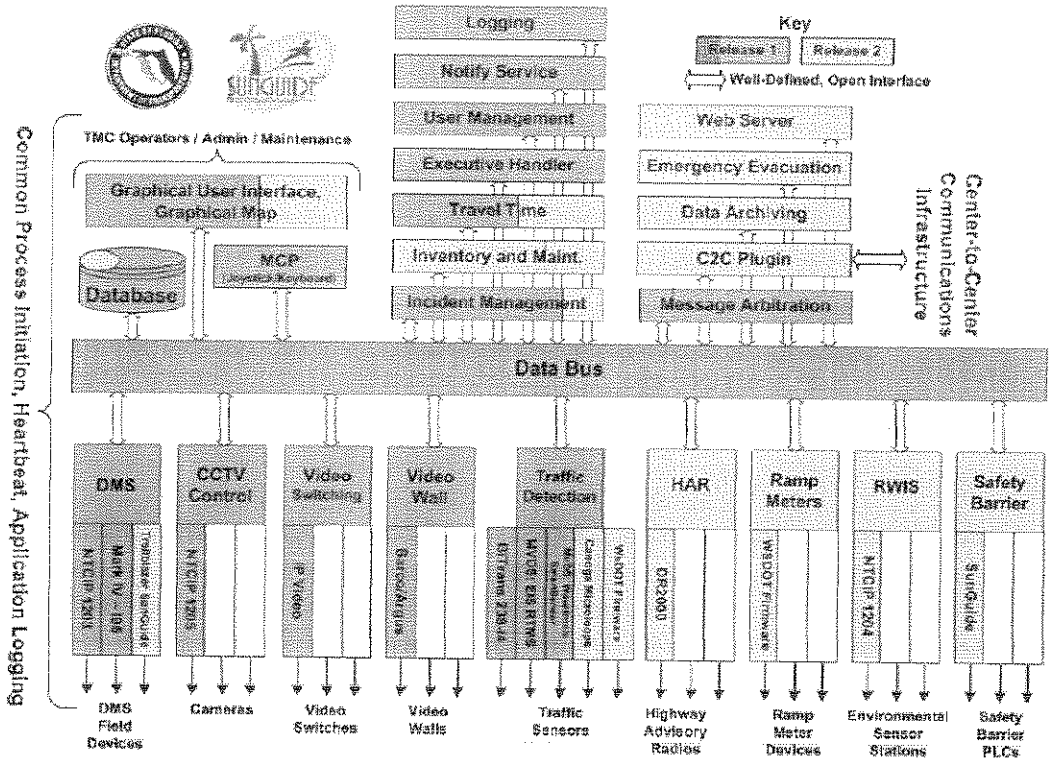
The new Express Lanes ACS and EAG software modules and modifications to other SunGuide™ ATMS software modules will be performed using the waterfall software engineering lifecycle that includes the following high-level phases:

- Requirements Analysis
- Design
- Development
- Testing
- Maintenance

SwRI will utilize a proven systems engineering process, including software development, system engineering, and program management to maximize the probability that system requirements are met and the project meets schedule. SwRI has a long history of on-time software development efforts, and much of its success is attributed to its rigorous software development process which has been independently evaluated at CMMI® Level 5, the highest level of process maturity.

SunGuide™ ATMS software is a suite of software applications running on servers and clients computers. Servers run on the Windows server operating system and client applications run on Windows workstations. See the figure below for a diagram showing the basic architecture of the SunGuide™ ATMS software.

Figure 3.2-4 Basic Architecture of the SunGuide™ ATMS software (High-Level Architectural Concept)



Functionalities and integration:
SunGuide™ ATMS software will provide ITS standard functionalities that will also be completed with Express Lanes(ACS and EAG Subsystem functionalities.

- This product provides all the required functions in a unified interface to control the General Purpose Lanes and Express Lanes
- To guarantee a proper integration, ADMP will prepare complete and revised Design documents and an outstanding implementation of the design. The Express Lanes ACS and EAG Subsystem design functionalities, implementation and integration are now described
- **ACS and EAG Design Functionalities**
  - **Interface Control Document.** SwRI will develop an Interface Control Document (ICD) to document the interface between the Access Control Unit (ACU) and the Express Lanes ACS and EAG Subsystem. The ICD will contain a brief overview of the ACU, ACS and EAG and will document the data communication process, data protocol (XML schemas, file formats, etc.), and other pertinent information required to understand the interface between these systems. The ICD will be a "stand-alone" document that can be distributed to third parties to describe the interface. SwRI will develop the draft ICD and perform a peer review prior to delivery to ADMP and FDOT. SwRI will revise the ICD based on the comments received from ADMP and FDOT to finalize the document.
  - **Database Design Document.** SwRI will update the existing SunGuide™ Database Design Document (DBDD). The document will include the databases designed by ACS and EAG and will

be updated to reflect required changes to the SunGuide™ database design. The DBDD will contain a conceptual model, logical design and model, and a physical model. This will include table definitions, constraints, triggers, an entity relationship diagram, and business rules.

- **ACS and EAG Implementation** The newly developed SunGuide™ Express Lanes Access Control Subsystem (ACS) and EAG Subsystem will consist of two main components:

  - **Access Control Subsystem Server** - The ACS Server will be responsible for managing the Express Lanes and EAG control and logic within the SunGuide™ system. The ACS Server will contain the following functionality:

    - When operators request changes to the operations of the Express Lanes or EAG, the ACS Server will be responsible for communicating command requests to the ACUs. Requests will include the state change of individual Barrier Gates, Warning Gates, LCS, and CMS, Retractable Longitudinal Gates, Dual Flashing Beacon Ass., Shoulder Lane Traffic Gates, etc.

    - The ACS Server will be able to detect and receive error codes from the ACU whenever errors occur, such as failed commands of requested device state. It is also capable of identifying other wrong conditions that could possibly indicate an issue with the current operation. The ACS server will also include the logic to ensure that sequences and interlocking rules are followed before processing Express Lanes or EAG change state requests. Any request that could induce unsafe operations of the Express Lanes or EAG will not be allowed and will result in an operator alert. Error events and alerts will be sent to the ACS User Interface for resolution by operations staff.

    - The ACS Server will be integrated with the SunGuide™ data bus to obtain the device information and make command requests to other components in the system.

    - The status of the Express Lanes and EAG will be published through Center-to-Center communication to be made available to other TMCs in the region. The SunGuide™ Web Server Subsystem will be updated to display the status (closed or open with the corresponding direction of operation) of the Express Lanes and provide current travel time and toll pricing information.

  - **Access Control Subsystem User Interface**. The ACS User Interface will be responsible for displaying Express Lanes and EAG status information to the operations staff and receiving command requests from the operations staff. The ACS User Interface will contain the following functionality:

    - Allows operators to request and authorize changes to the Express Lanes and EAG operations.

    - Presents a checklist for the entire Express Lanes and EAG systems that will provide operators with a sequence of real-time events for changing the state of the entire Express Lanes and EAG systems.

    - Presents a graphical roadway network of the Express Lanes and EAG systems displaying a color-coded status of access points and lane conditions. The view will allow the user to obtain detailed traffic conditions data. The view will additionally include the toll pricing information.

- Presents a checklist for each Express Lanes and EAG access point that displays the status of Barrier Gates, Warning Gates, LCS, and CMS, Retractable Longitudinal Gates, Dual Flashing Beacon Ass., Shoulder Lane Traffic Gates, etc. The view will display errors reported from equipment associated with the ACU. The checklist will require the operator to confirm that the Express Lanes access point is in the proper state. The GUI will provide information to guide the operator through the proper control sequence, display the status of devices to check that they are in the correct state, and inform the operator if proper interlocking has occurred. The interface will allow the operator to override individual steps in the event equipment is manually commanded from the ACU.
- Presents a detailed graphical view of an individual Express Lanes and EAG access point. This view will allow the operator to select individual equipment, including CCTV, LCS, CMS, Warning Gates, Barrier Gates, Retractable Longitudinal Gates, Dual Flashing Beacon Ass., Shoulder Lane Traffic Gates, etc. to view equipment status, errors, and command user interfaces.

> **ACS and EAG Integration**

— The key component of the integration process will be software and system testing, including validation and verification of the system software, to ensure that all requirements are met and that the software works with all system functions and assets with high reliability. Prior to on-site integration, a test environment will be set up in SwRI labs to simulate the Express Lanes and EAG systems. A software simulator of the ACU will be developed to simulate reversible lane and EAG operations and to simulate error conditions. Test plans will be developed to simulate exhaustive operational conditions and errors to test that proper operations and safety are ensured at all times.

3.2.4.2 I-595 TMC HARDWARE

ADMP will provide redundant servers, as well as workstations with full-time operability, at the I-595 TMC. The following major hardware components are listed bellow:

> One (1) I-595 TMC Server in cluster architecture for SunGuide™ processes.

— Rack format
— 17" Monitor
— 2.0 GHz processor, Intel Quad Core Xeon
— 4 GB memory
— 2 x 73 GB HDD @ 15k
— Microsoft Windows Server 2003 Enterprise Edition
— External storage for cluster: 5 x 300 GB SAS 15k HDD in RAID Architecture

> One (1) I-595 TMC Server in cluster architecture for SunGuide™ Database.

— Rack format
— 17" Monitor

- 2.0 GHz processor, Intel Quad Core Xeon
- 4 GB memory
- 2 x 73 GB HDD @ 15k
- Microsoft Windows Server 2003 Enterprise Edition
- External storage for cluster: 5 x 300 GB SAS 15k HDD in RAID Architecture

> Two (2) operator workstations, each with three (3) TFT Monitors

- 20" TFT Monitors
- 2.33 GHz processor, Intel Dual Core
- 2 GB memory
- 160 GB HDD
- Microsoft Windows XP

> One (1) Color Laser Printer

3.2.4.3 SYSTEM AVAILABILITY

The FDOT District 4 I-595 Project requires a tested, integrated solution that meets the demands of a 24-hours-per-day, 7-days-per-week, and 365-days-per-year mission critical operation.

Basically, the hardware availability of the system is obtained by:

> Redundant servers in the control center

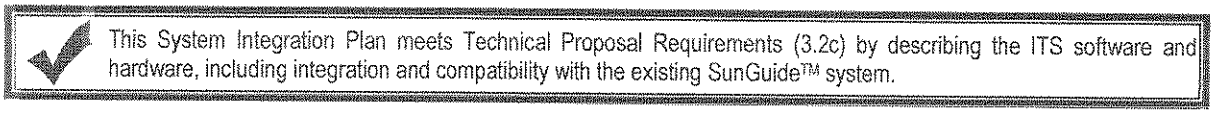
> Hard disks connected in RAID mode

> Redundant power supply in each serve

> Servers with double network connections

> Full-time workstation operability

This type of architecture increases overall system availability. However, the system will only be as strong as its weakest link. Redundant servers can only provide limited availability if the software is not mature, proven, robust and designed specifically for use in 24/7/365 mission critical applications like the I-595 Project.



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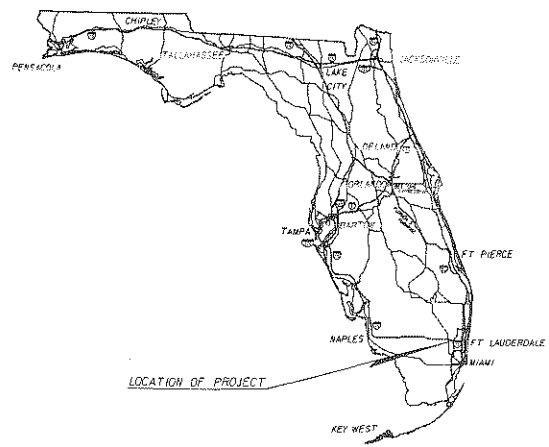
CONTRACT PLANS

FINANCIAL PROJECT ID 420809-3-52-01

BROWARD COUNTY (87270)

STATE ROAD NO. 862 / I-595

INTELLIGENT TRANSPORTATION SYSTEMS



INDEX OF ITS PLANS

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IT-5 TO IT-63	ITS PLAN
IT-64 TO IT-66	BRIDGE CONDUIT DETAILS
IT-67	ITS CONDUIT DETAILS
IT-68 TO IT-69	POWER SERVICE ELECTRICAL DETAIL
INDEX NO. 18100	CCTV POLE PLACEMENT
INDEX NO. 18111	STEEL CCTV POLE
INDEX NO. 18113	CONCRETE CCTV POLE

PLANS PREPARED BY:

ACS-DRAGADOS-MACQUARIE PARTNERSHIP

EarthTech

R. ALEMAN & Associates, Inc. CONSULTING ENGINEERS & SURVEYORS

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED 2008,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED 2007,
AS AMENDED BY CONTRACT DOCUMENTS.

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ITS PLANS
ENGINEER OF RECORD: _____

P.E. NO.: _____

FISCAL YEAR	SHEET NO.
09	IT-1

FDOT PROJECT MANAGER: JOSEPH BORELLO

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

GENERAL NOTES:

1) THE CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE CALL OF FLORIDA AT 1-800-432-4770 AND/OR THE APPROPRIATE UTILITY COMPANIES AT LEAST TWO WORKING DAYS IN ADVANCE AND REQUEST UTILITY LOCATIONS BEFORE WORKING NEAR THEIR FACILITIES. NO UNDERGROUND EXCAVATION SHALL BEGIN UNTIL EXISTING UTILITIES HAVE BEEN PROPERLY LOCATED. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE ONLY APPROXIMATE. THE EXACT LOCATION SHALL BE DETERMINED ON SITE, BY THE CONTRACTOR AND REPRESENTATIVES OF THE UTILITY OWNER DURING CONSTRUCTION.

2) THE PROBABLE PERMITTING AGENCIES WITHIN THE PROJECT LIMITS ARE:
I) TYPICALLY FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A HANDLES WETLAND/DRAINAGE RELATED PERMITTING ASSOCIATED WITH LINEAR UTILITIES.
II) THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) WILL PERMIT SFWMD RIGHT-OF-WAY OCCUPANCY PERMITS FOR INVOLVEMENT WITH SFWMD CANAL ROW.
III) USCG COORDINATION WILL ONLY BE REQUIRED FOR NAVIGABLE CONNECTED TO THE OCEAN DOWNSTREAM OF CONTROL STRUCTURES WATERS.
IV) LOCAL SPECIAL IMPROVEMENT DISTRICTS MAY OWN OR HAVE CONTROL OVER CANALS/ROW WITHIN I-595 MAINLINE PROJECT FOOTPRINT. IF THIS IS THE CASE THEN PERMITS MAY BE REQUIRED FROM THOSE DISTRICTS.
V) IF DE WATERING PERMITS ARE REQUIRED TO CONSTRUCT, THEN FDEP WILL MOST LIKELY ISSUE THAT PERMIT. THE FDEP WILL ALSO ISSUE A NPDES PERMIT FOR CONSTRUCTION PROJECTS FROM 1 TO 5 ACRES OR GREATER THAN 5 ACRES.

3) WHERE POSSIBLE KEEP TRENCHING OPERATIONS OUTSIDE DRIP LINE OF DESIRABLE TREES TO AVOID ROOT SYSTEM DAMAGE.

5) ALL AREAS AFFECTED BY THE INSTALLATION OF CONDUITS, SPLICE VAULTS AND PULL BOXES ARE TO BE RESTORED IN A TIMELY MANNER.

5) WHEN THE INSTALLATION OF CONDUITS, SPLICE VAULTS AND PULL BOXES IS COMPLETED, THE AREA SHALL BE CLEANED OF ANY LARGE DEBRIS (LARGE ROCKS OR BOULDERS) BEFORE PROCEEDING TO THE NEXT LOCATION.

6) MAINTENANCE IS TO BE NOTIFIED WHENEVER ANY DAMAGE IS DONE TO THE EXISTING LIGHTING SYSTEM. ALL NECESSARY REPAIRS ARE TO BE MADE AS SOON AS POSSIBLE TO BRING THE SYSTEM BACK TO NORMAL. THESE REPAIRS SHALL BE COMPLETED BEFORE PROCEEDING TO THEIR NEXT LOCATION. MAINTENANCE IS TO BE NOTIFIED ONCE THE REPAIRS HAVE BEEN COMPLETED AND IS READY FOR INSPECTION.

7) NOTIFY ALL CONCERNED UTILITY COMPANIES (2 BUSINESS DAYS) IN ADVANCE BEFORE WORKING NEAR THEIR EXISTING FACILITIES. NO UNDERGROUND EXCAVATION SHALL COMMENCE UNTIL EXISTING UTILITIES HAVE BEEN PROPERLY MARKED. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.

8) THE CONDUIT , FIBER OPTIC LAYOUT, AND PULL BOX LAYOUT SHOWN ON THESE PLANS IS APPROXIMATE. THIS LAYOUT MAY BE ADJUSTED TO CLEAR EXISTING TREES, SIGNS, LIGHTING, UTILITIES AND DRAINAGE STRUCTURES. THE LAYOUT SHALL BE APPROVED BY THE ENGINEER PRIOR TO START OF CONSTRUCTION. NO PULL BOXES, CONTROLLER CABINETS AND OTHER ABOVE GROUND STRUCTURES SHALL BE LOCATED IN WETLANDS, DITCH BOTTOMS, OR PAVED SHOULDERS. THE ADJUSTED FIBER OPTIC CABLE AND CONDUIT ROUTES SHALL BE SHOWN IN THE AS-BUILTS.

9) CONTACT FDOT MAINTENANCE BEFORE ANY GUARDRAIL ASSEMBLIES ARE TEMPORARILY REMOVED FOR EQUIPMENT ACCESSING THE WORK AREA. ALL REMOVED GUARDRAIL SHALL BE PROPERLY IDENTIFIED.

10) THE STATIONING SHOWN IN THE PLANS ARE APPROXIMATE AND FOR DESIGN INFORMATION PURPOSES ONLY.

11) ALL ELECTRICAL WORK SHALL MEET ALL REQUIREMENTS OF THE EDITIONS OF THE NATIONAL ELECTRICAL CODE, THE NATIONAL ELECTRICAL SAFETY CODE, PROJECT SPECIFICATIONS AND THE STATE OF FLORIDA D.O.T STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL COMPONENTS SHALL BE PROPERLY GROUNDED PER N.E.C. REQUIREMENTS.

12) TAKE RESPONSIBILITY FOR NOTIFYING SUNSHINE STATE ONE CALL OF FLORIDA, INC AT 1-800-432-4770 AS REQUIRED BY CHAPTER 553 & 556 OF THE FLORIDA STATUTES.

-AT&T PERSONNEL ARE TO BE CONTACTED 2 BUSINESS DAYS PRIOR TO UNDERGROUND WORK ADJACENT AT&T FACILITIES

-FGT PERSONNEL ARE TO BE CONTACTED 2 BUSINESS DAYS PRIOR TO UNDERGROUND WORK ADJACENT TO FGT FACILITIES.

13) MILEPOSTS AND ROADWAY LIGHTING SHOWN IN PLANS ARE APPROXIMATE LOCATIONS. THEY ARE TO BE USED FOR REFERENCE ONLY.

14) CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH ALL OTHER CONTRACTORS OPERATING IN THE PROJECT AREA.

15) REFER TO THE TECHNICAL SPECIAL PROVISIONS FOR THE SPACING OF THE FIBER OPTIC MARKERS.

16) WETLAND LINES DELINEATED IN THE PLANS HEREIN ARE APPROXIMATED AND HAVE NOT BEEN VERIFIED BY REGULATORY AGENCIES.

17) OFFSETS TO OBSTACLES ALONG THE I-595 MAINLINE SHALL BE A MINIMUM OF 36' TO THE NEAR FACE OR PROTECTION WILL BE PROVIDED BY GUARD RAIL OR BARRIER BAR.

18) EACH POLE AND DMS STRUCTURE INSTALLATION LOCATION SHALL BE HAND DUG THE FIRST 5' AND WHERE TO CLEAR UTILITIES. BACKFILLINFG AROUND POLE SHALL CONFIRM TO SECTION 125 OF THE STANDARD SPECIFICATIONS.

LEGEND:

FIBER OPTIC SPLICE VAULT	FOV
ELECTRIC PULLBOX	E
FIBER OPTIC PULLBOX	F
ITS CABINET	
DYNAMIC/CHANGEABEL MESSAGE SIGN (DMS/CMS)	
MICROWAVE VEHICLE DETECTION SYSTEM (MVDS)	MVDS
CLOSED CIRCUIT TELEVISION (CCTV)	CCTV
ITS POLE	
ELECTRIC SERVICEPOINT	
HIGHWAY ADVISORY RADIO (HAR)	HAR
EMERGENCY ACCESS GATE BEACON	EXIT
ACCESS CONTROL UNIT	ACU
LANE USE SIGNAL (LSU)	
TRENCH LINE	
BRIDGE MOUNTED CONDUIT	
DIRECTIONAL BORE	

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

GENERAL NOTES

SHEET NO.
IT-2

MASTER TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	GRAND TOTAL PLAN	GRAND TOTAL FINAL	COMMENTS
555-1-1	DIRECTIONAL BORE, LESS THAN 6"	LF			
555-1-2	DIRECTIONAL BORE, (6" to < 12")	LF			
649-11-001	TOLL GANTRY MONOTUBE STRUCTURE	EA			
641-2-12	PRESTRESSED CONCRETE POLES	EA			
650-51-113	LANE USE TRAFFIC SIGNAL	EA			
700-90-11	SIGN, FLASHING BEACON, F&I, GRND. MOUNT	AS			
680-117	SYSTEM CONTROL EQUIPMENT SPECIAL	EA			
780-1-11	ITS ELECTRICAL POWER, F&I, SERVICE	AS			
780-1-12	ITS ELECTRICAL POWER, F&I, SERVICE WIRE	LF			
780-1-13	ITS ELECTRICAL POWER, F&I, SERVICE DISC	EA			
781-11-221	ITS DYNAMIC MESSAGE SIGN (40" TO 60")	EA			
781-11-231A	ITS DYNAMIC MESSAGE SIGN (10' TO 40'), CANTILE	EA			
781-11-231B	ITS DYNAMIC/CHANGEABLE MESSAGE SIGN (0' TO 40	EA			
781-2-12	ITS HIGHWAY ADVISORY RADIO	EA			
782-1-11	ITS CCTV CAMERA (F&I) (DOME ENCLOSURE, PRES.)	EA			
783-1-121	ITS F.O. CABLE (UNDERGRND) (2-12 FIBERS)	LF			
783-1-122	ITS F.O. CABLE (UNDERGRND) (13-48 FIBERS)	LF			
783-1-123	ITS F.O. CABLE (UNDERGRND) (49-96 FIBERS)	LF			
783-2-31	ITS F.O. CONN. (INSTALL) (SPLICE)	EA			
783-3-11	ITS F.O. CONNECTION (SPLICE ENCLOSURE)	EA			
783-3-12	ITS F.O. CONNECTION (SPLICE TRAY)	EA			
783-3-15	ITS F.O CONN. HARDW. (PATCH PANEL, PRETERM.)	EA			
783-3-19	ITS F.O. CONN. HARDWARE (PATCH CORD)	EA			
783-4-12	ITS UNDERGROUND CONDUIT	LF			
783-4-19	ITS CONDUIT (F&I) (SPECIAL) (BRIDGE MOUNT)	LF			
783-6-1	ITS SPLICE BOX FOR FIBER OPTIC	EA			
783-7-1	ITS PULL BOX	EA			
784-1-1	ITS ETHERNET SWITCH (FIELD MANAGED)	EA			
784-2-1	ITS DEVICE SERVER	EA			
784-3-11	ITS DIGITAL VIDEO ENCO W/ SOFTWARE DEC., (F&I	EA			
785-1-13	ITS POLE (F&I) (CONCRETE POLE W/O LOW. DEVIC	EA			
784-7-1	ITS TOLL MISCELLANIES EQUIPMENT	LS			
785-2-111	ITS CABINET POLE MOUNTED	EA			
785-2-192A	ITS CABINET GROUND MOUNTED, LARGE (SPECIAL)	EA			
785-2-192B	ITS CABINET GROUND MOUNTED, SMALL (SPECIAL)	EA			
785-3-19	ITS HUB SHELTER	EA			
786-1-11	ITS VEHICLE DETECTION SYSTEM	EA			
787-1-1	ITS BARRIER/WARNING GATES (SPECIAL)	EA			

PRELIMINARY CONCEPTS
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PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

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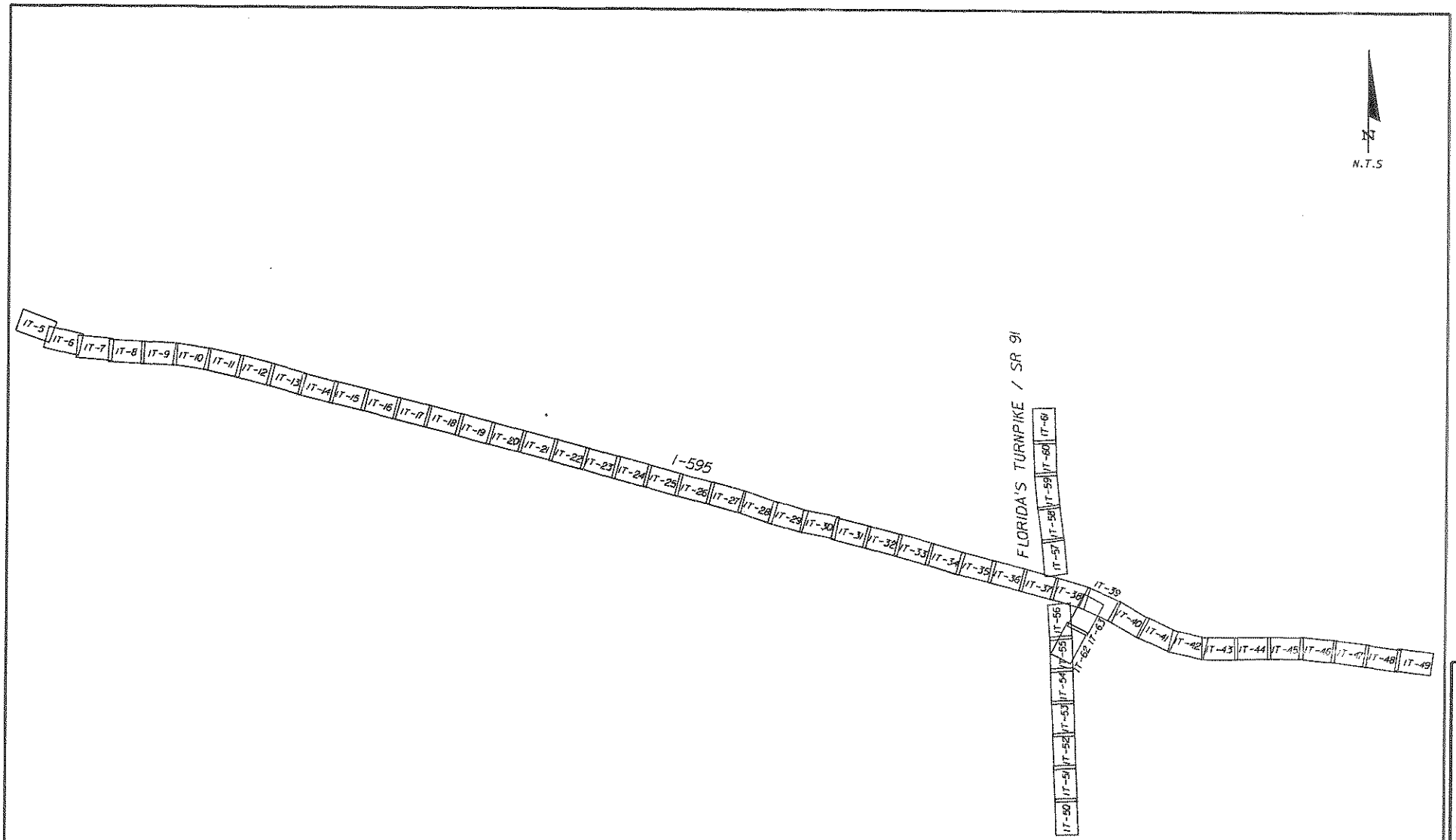
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DEPARTMENT OF TRANSPORTATION

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SR 862	BROWARD	420809-3-52-01

MASTER TABULATION OF QUANTITIES

SHEET NO. IT-3



PRELIMINARY CORRIDOR MASTER PLAN
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PROJECT LAYOUT

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PRELIMINARY CORRIDOR MASTER PLAN
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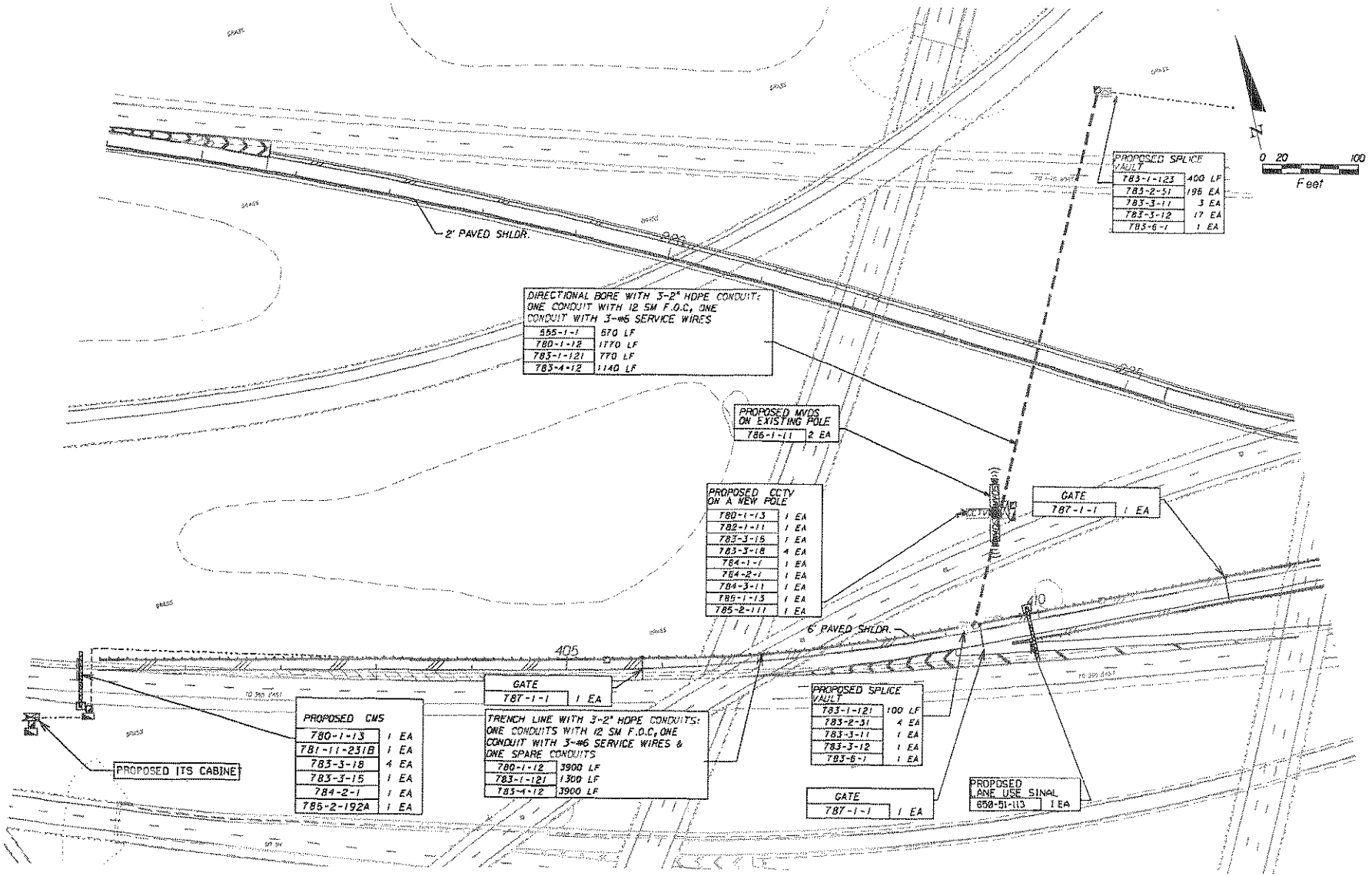
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ITS PLAN

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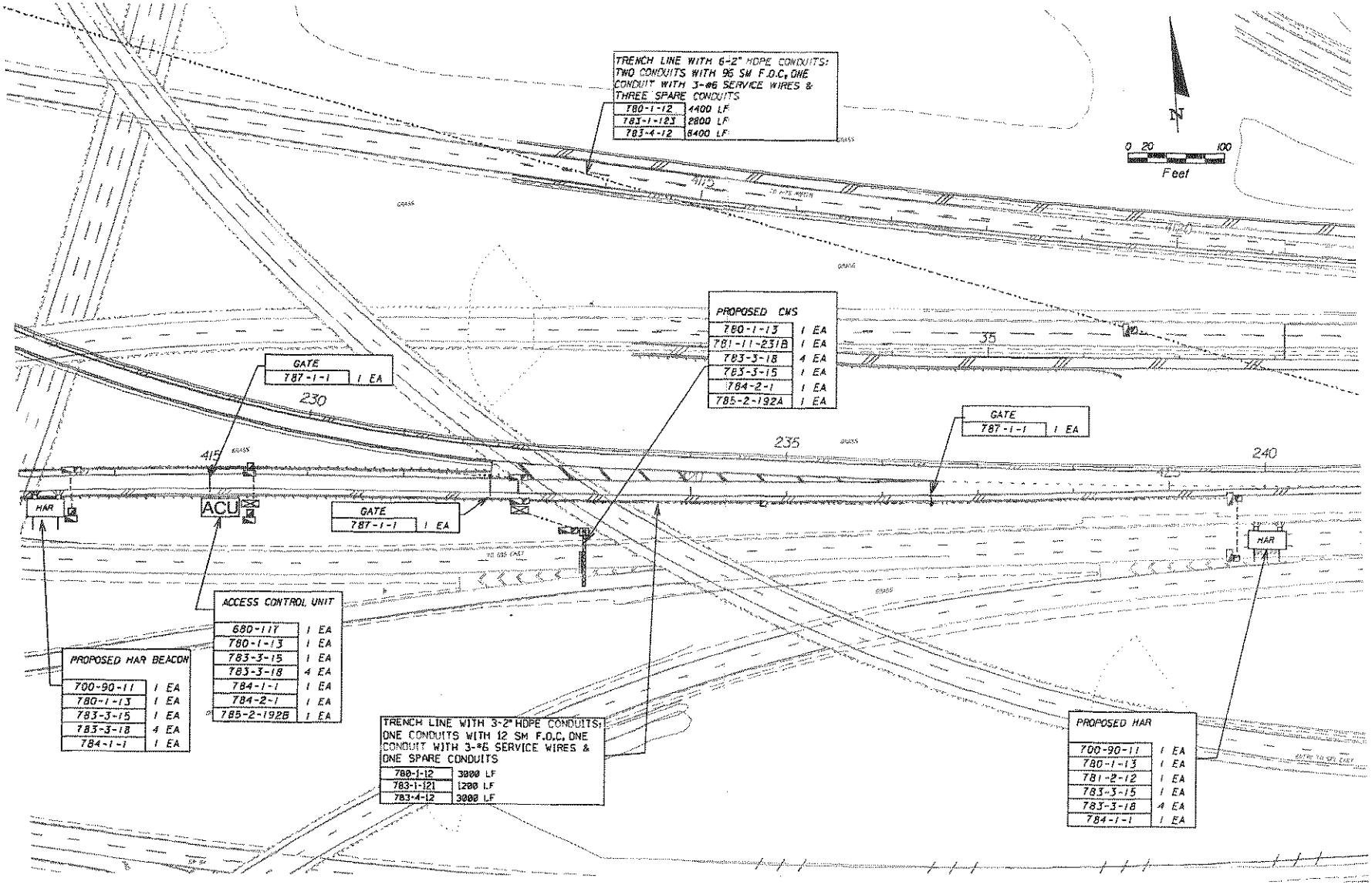
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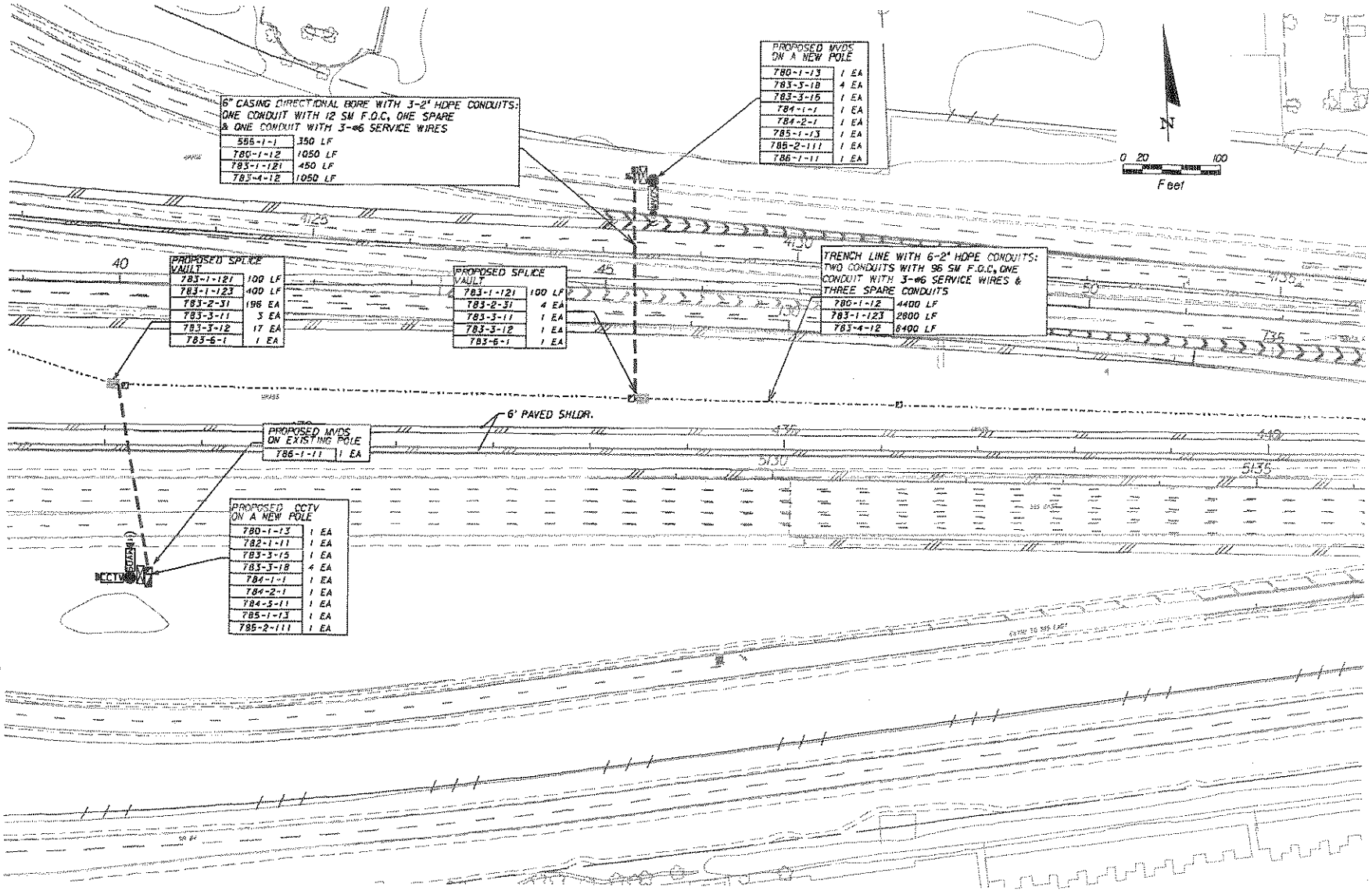
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PRELIMINARY CORRIDOR MASTER PLAN
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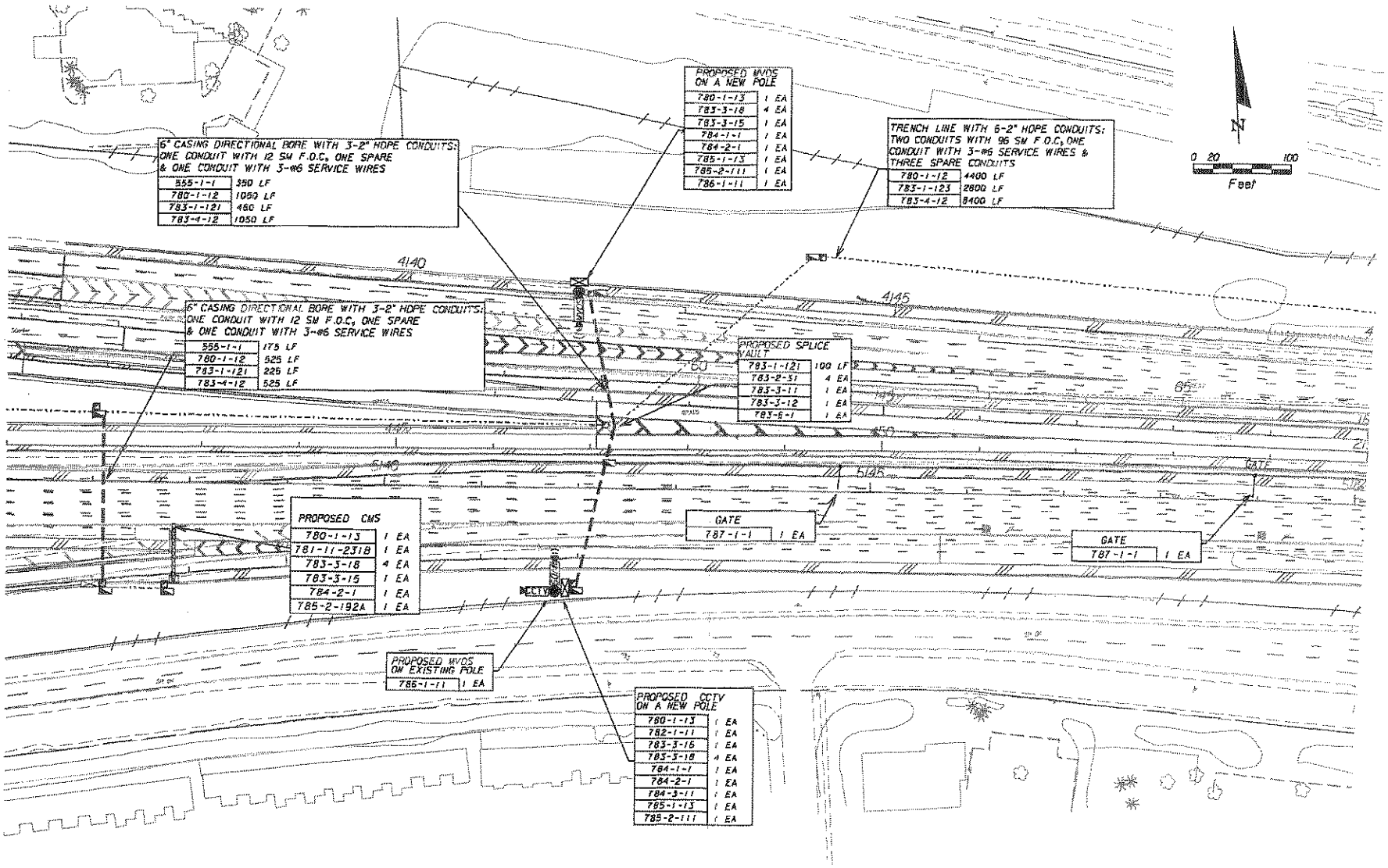
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PRELIMINARY CORRIDOR MASTER PLAN
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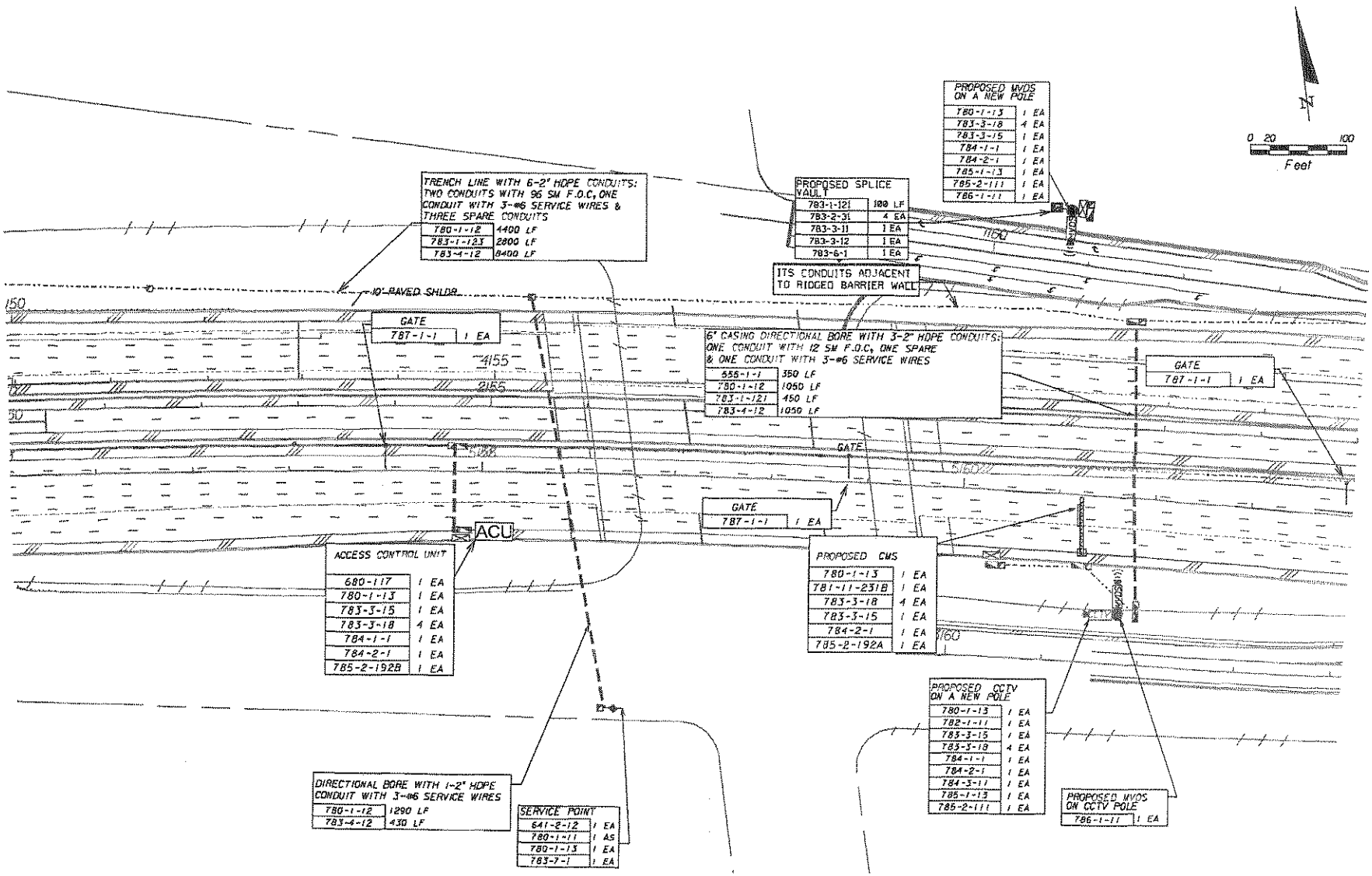
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PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2006

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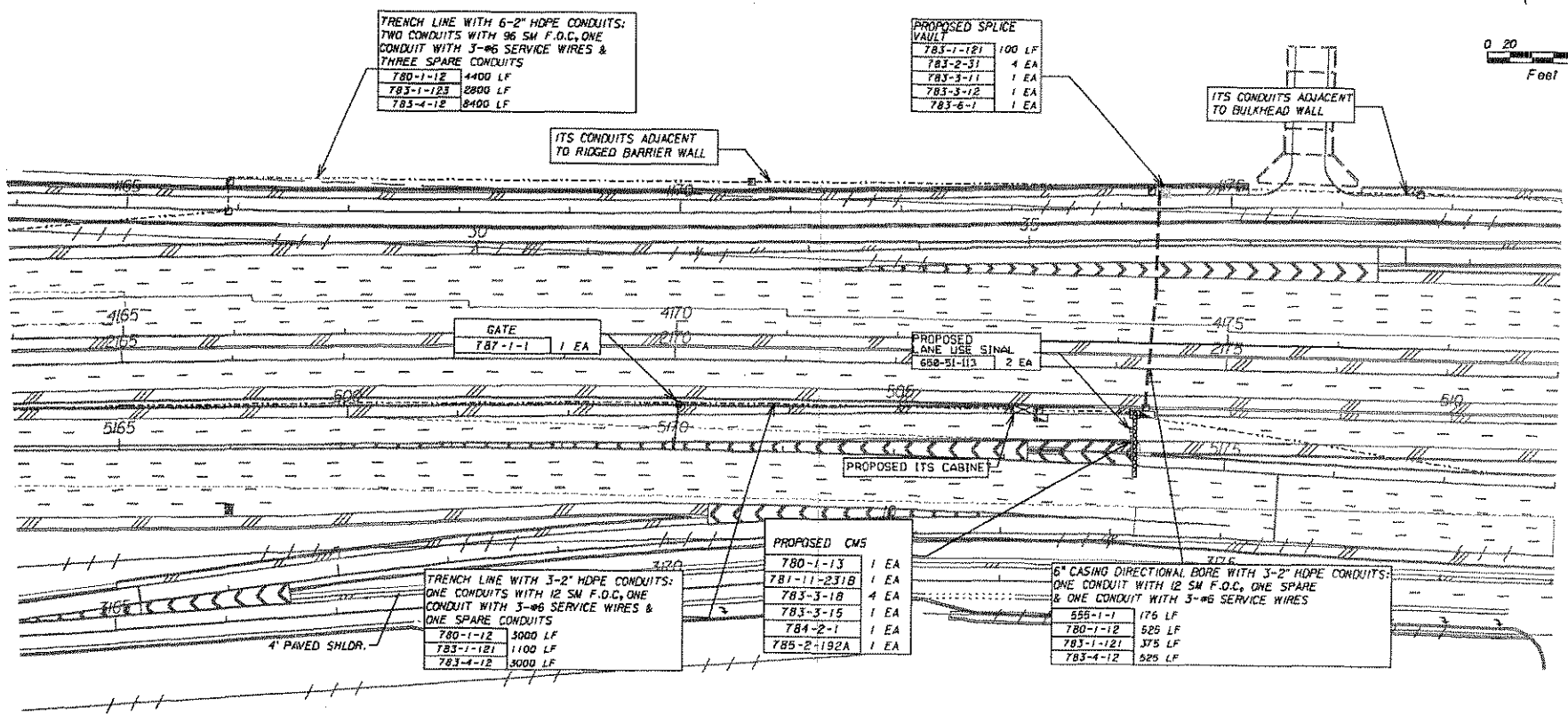
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DEPARTMENT OF TRANSPORTATION

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ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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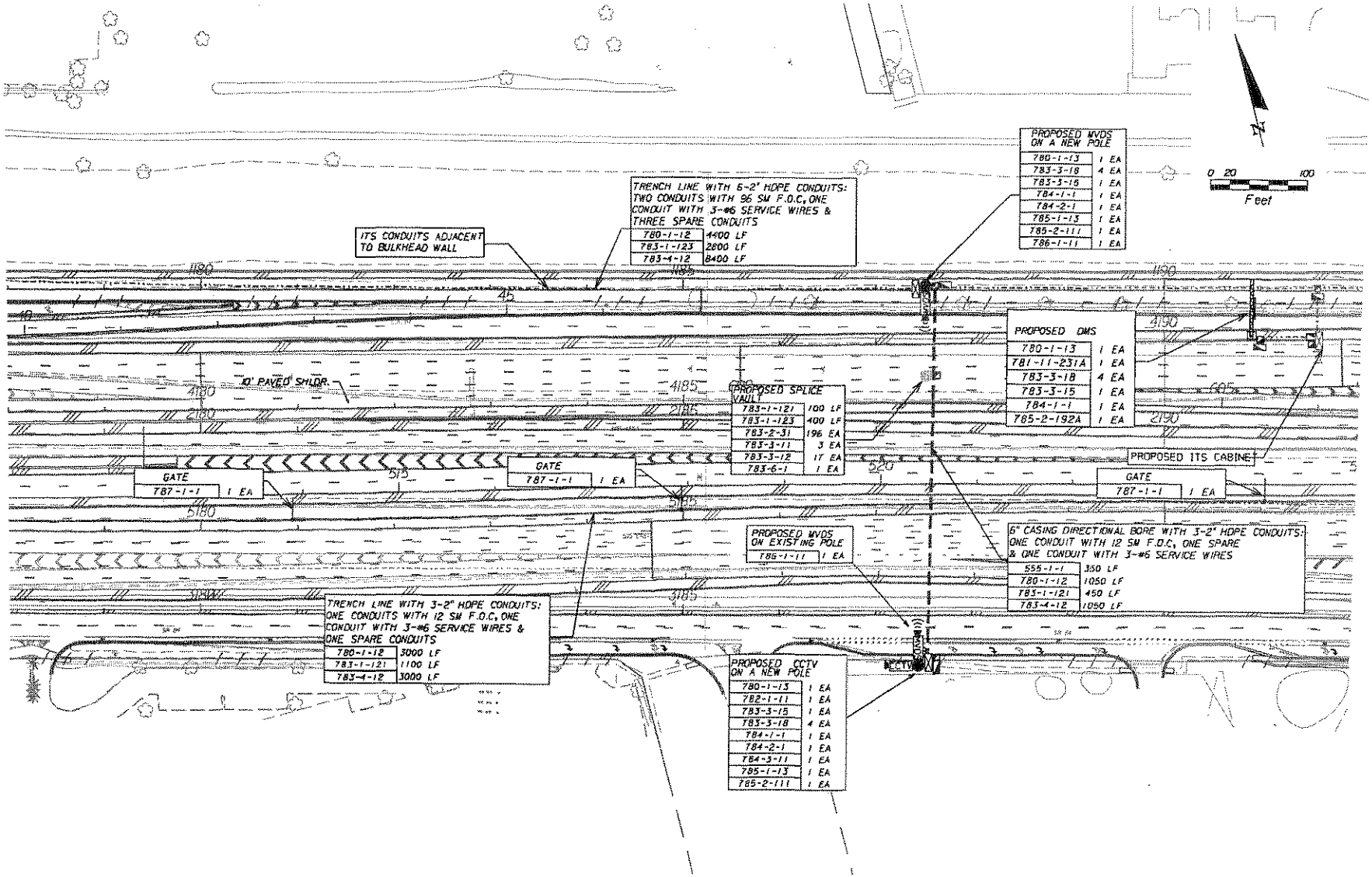
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STATE OF FLORIDA
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ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2008

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ACS-DRAGADOS MACQUARIE PARTNERSHIP

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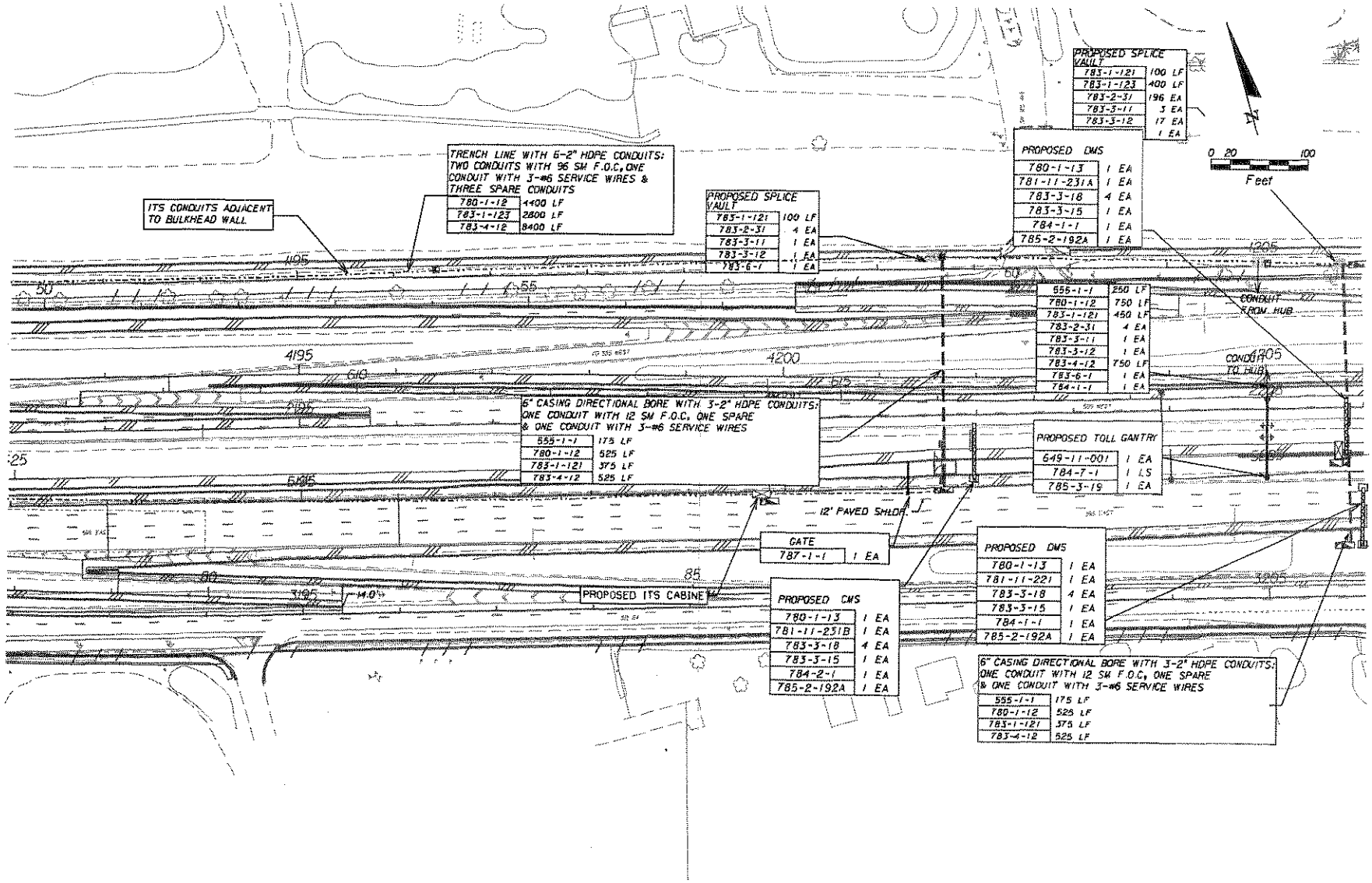
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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ITS PLAN

SHEET NO. IT-12



PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

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ACS-DRAGADOS MACQUARIE PARTNERSHIP

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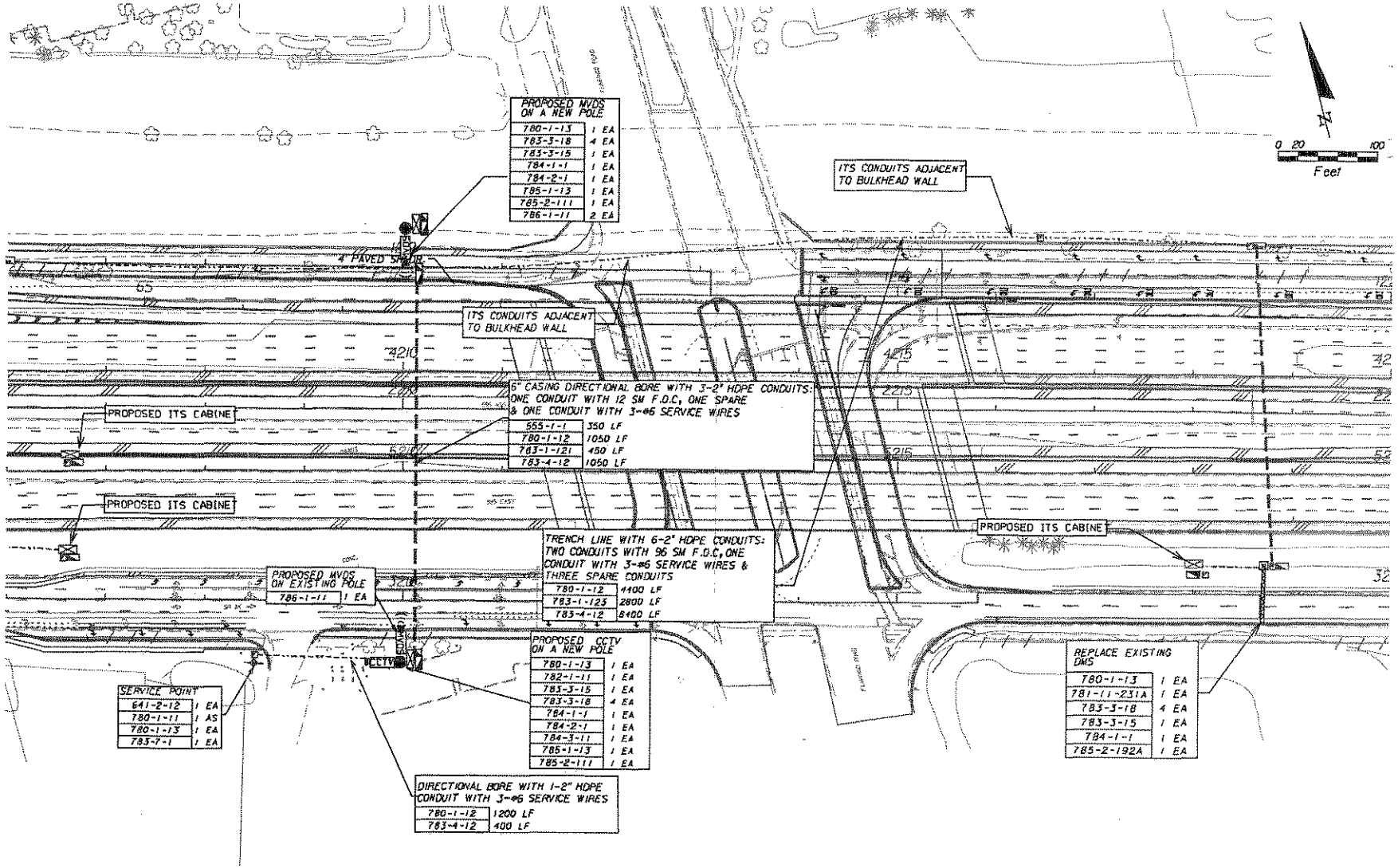
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ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2008

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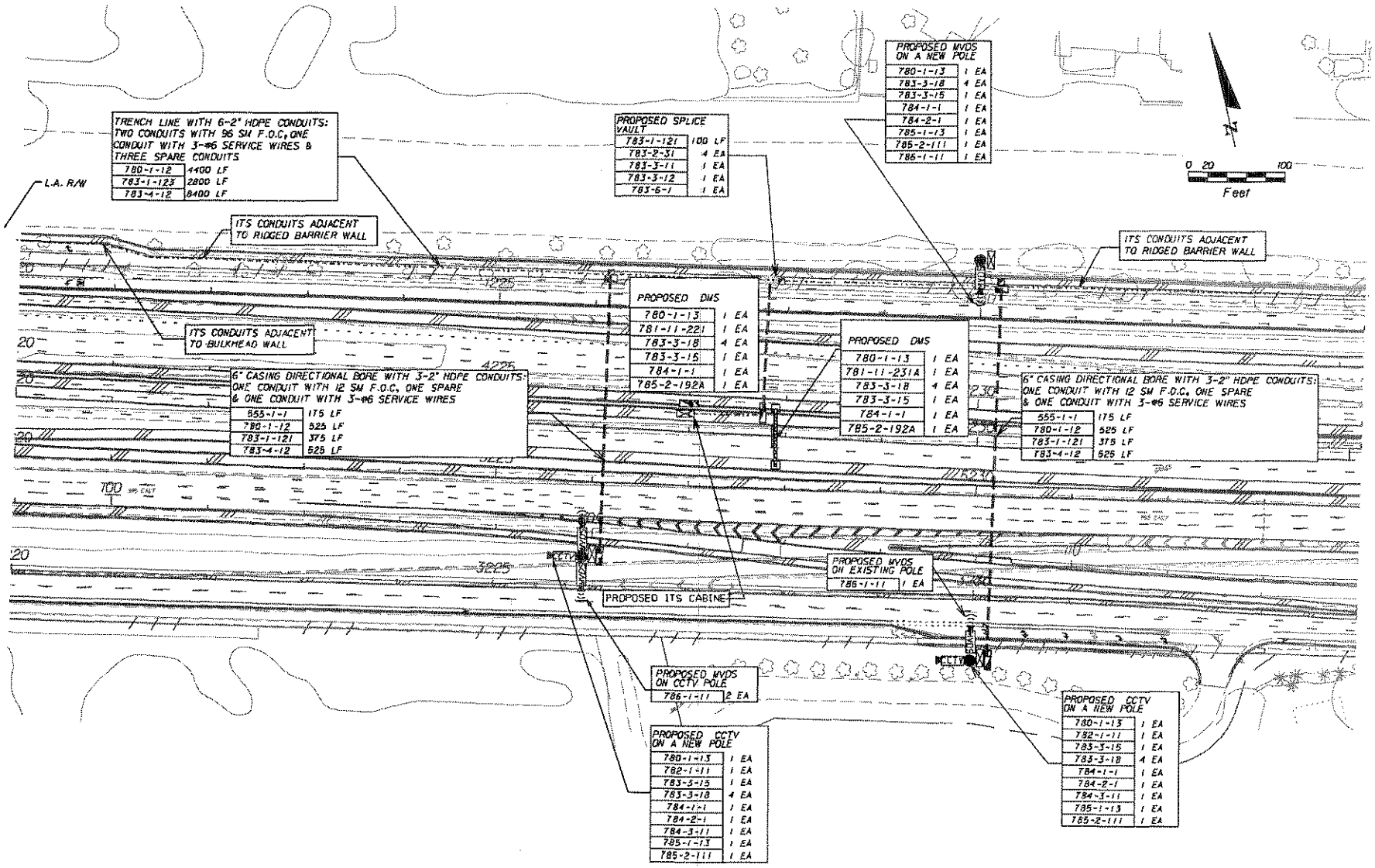
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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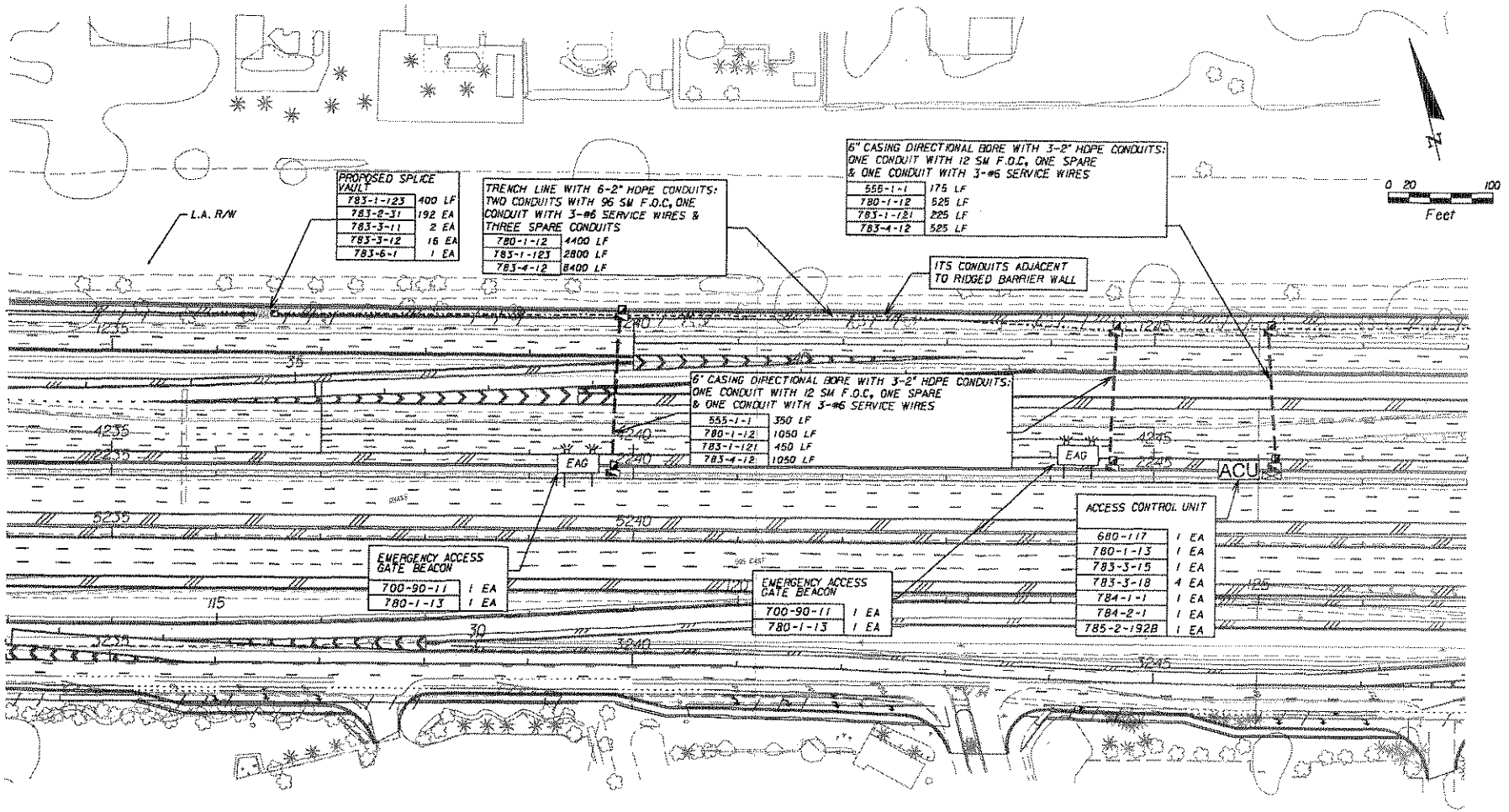
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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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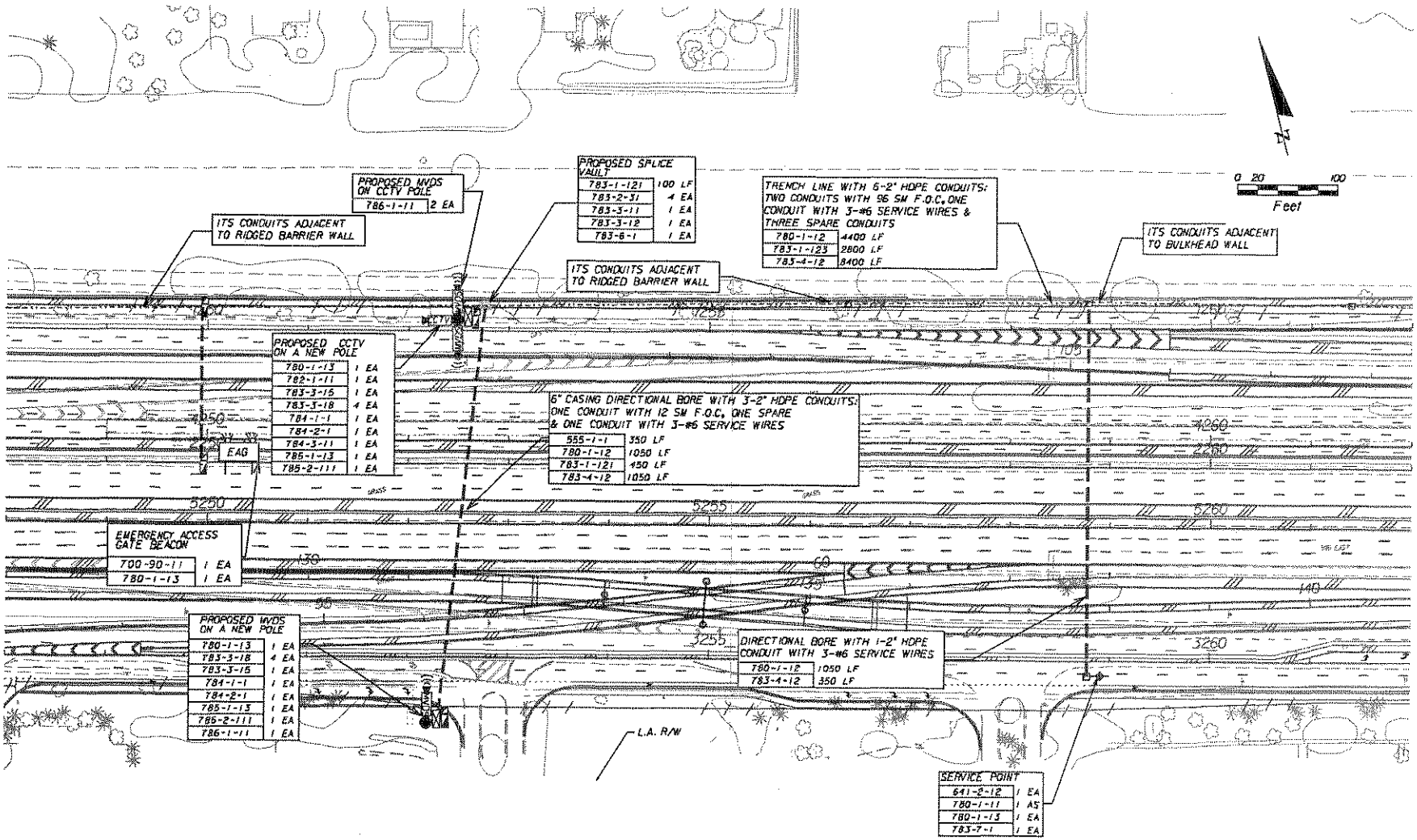
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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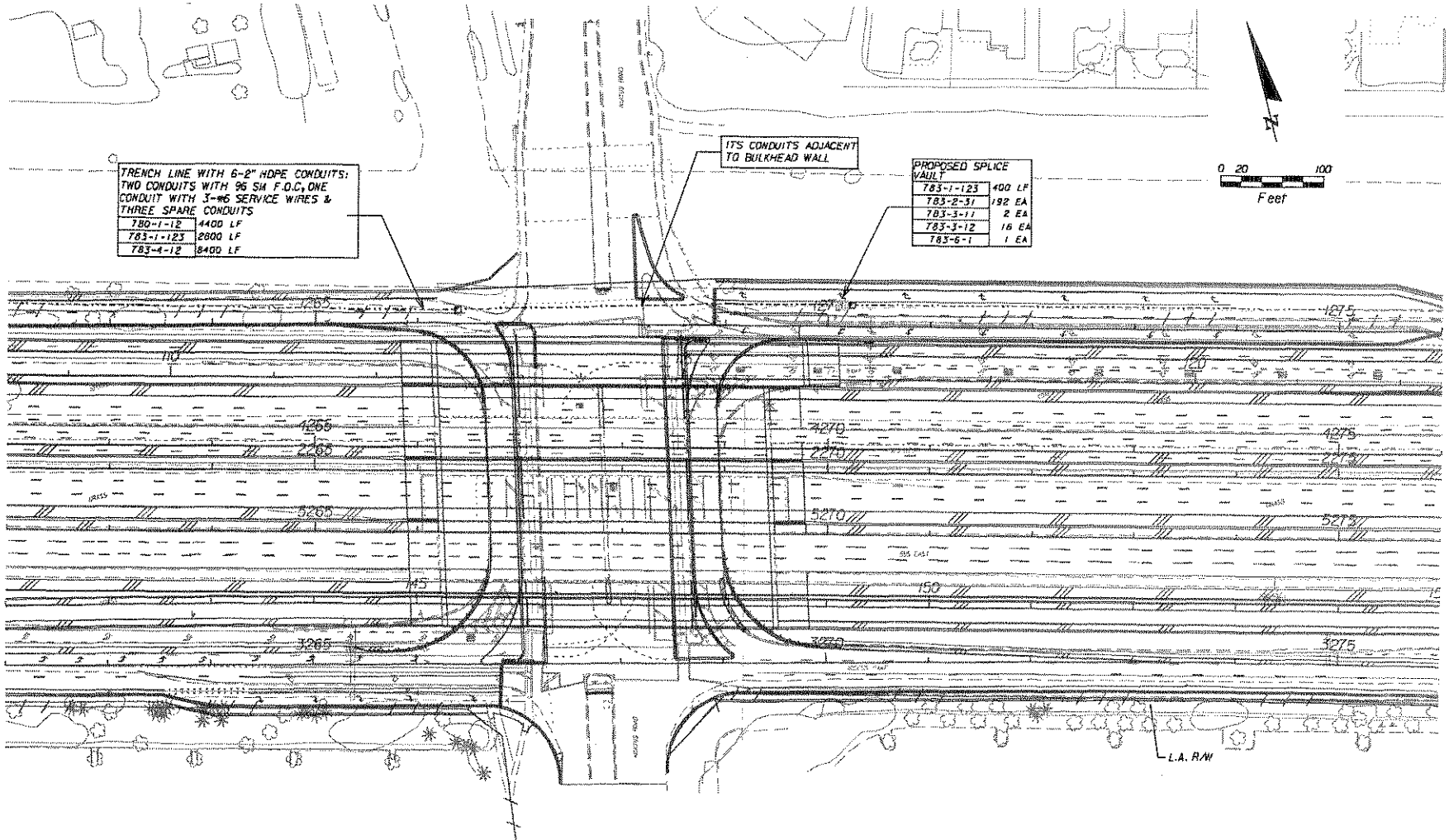
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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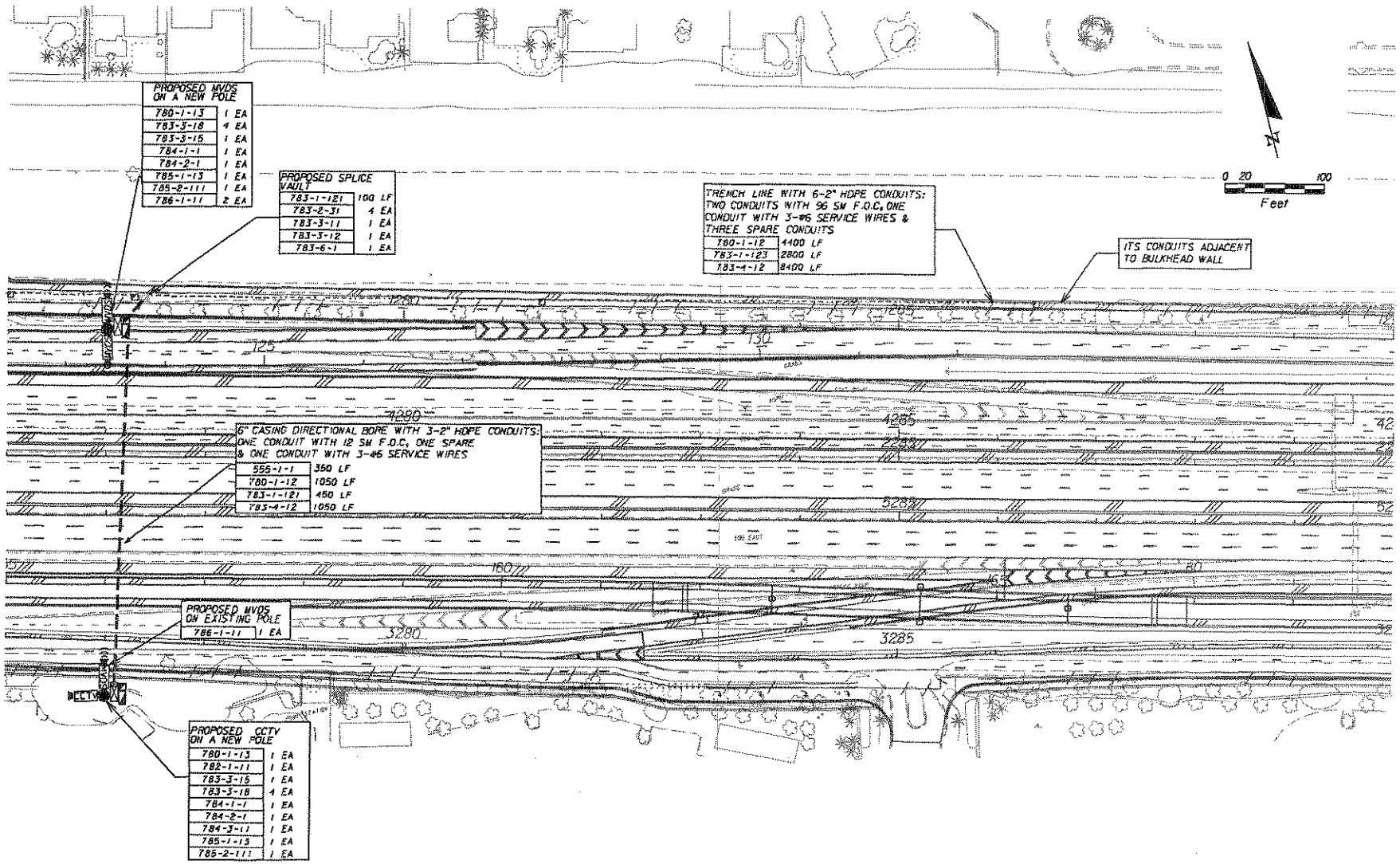
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ITS PLAN

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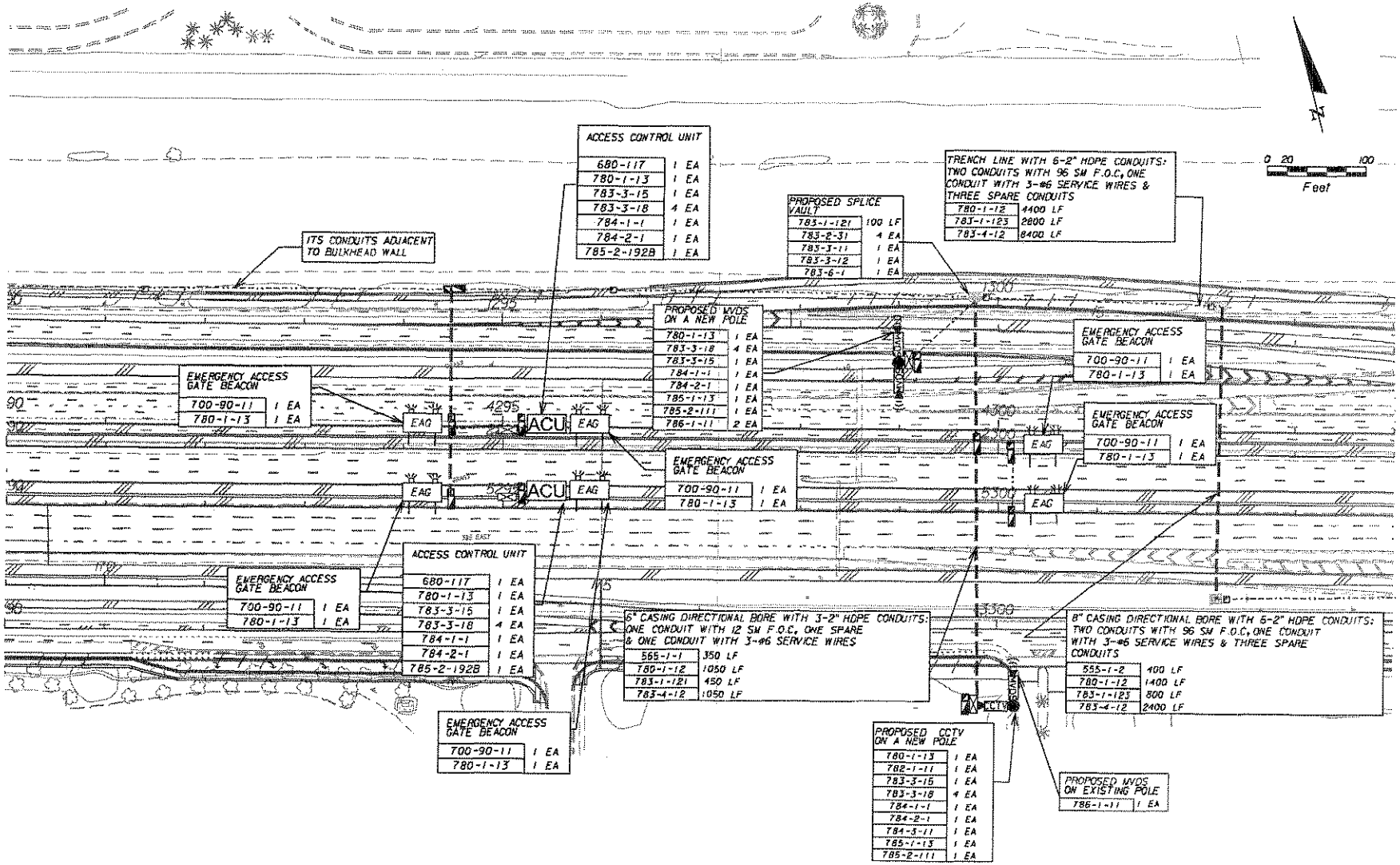
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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ITS PLAN

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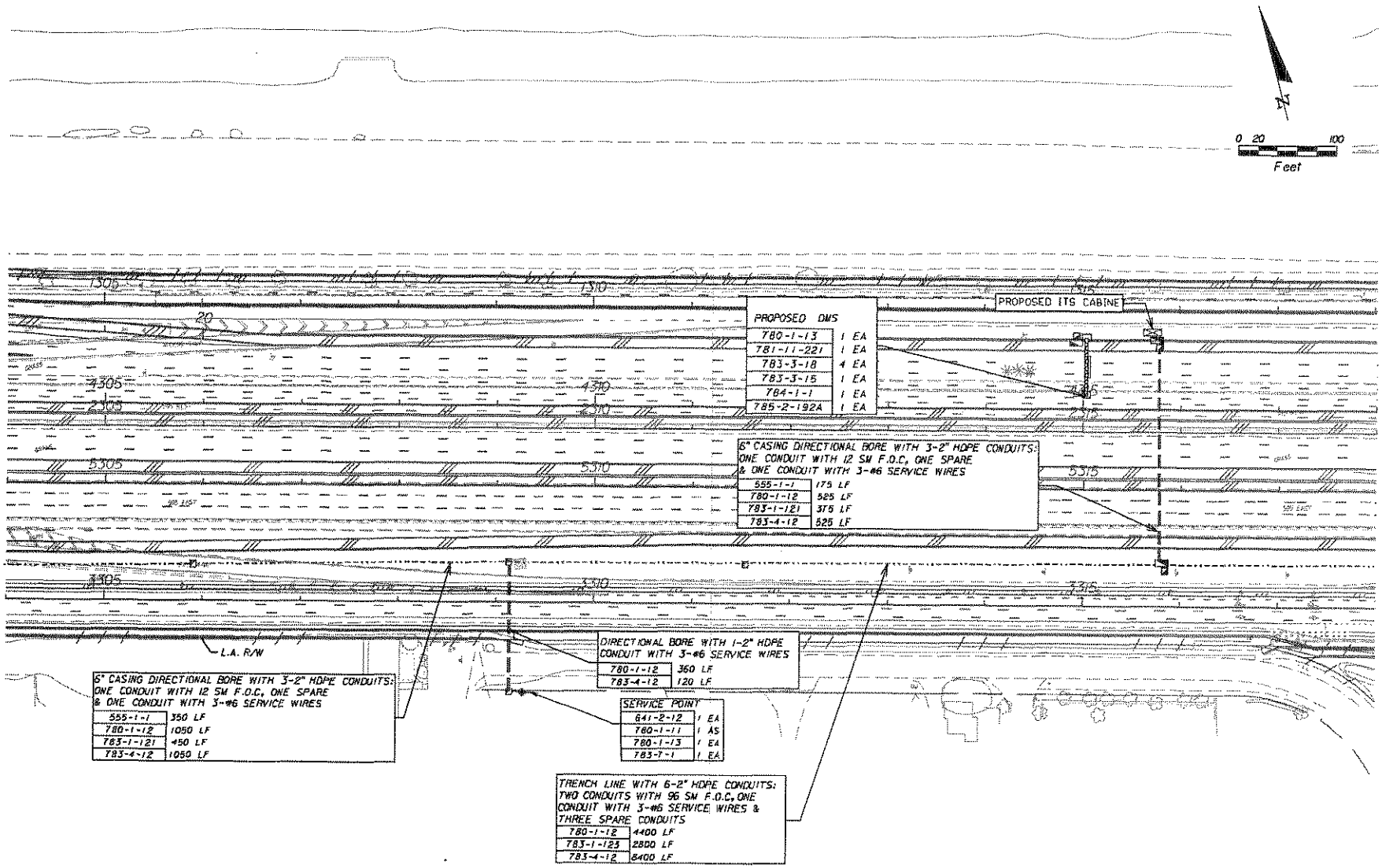
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ITS PLAN

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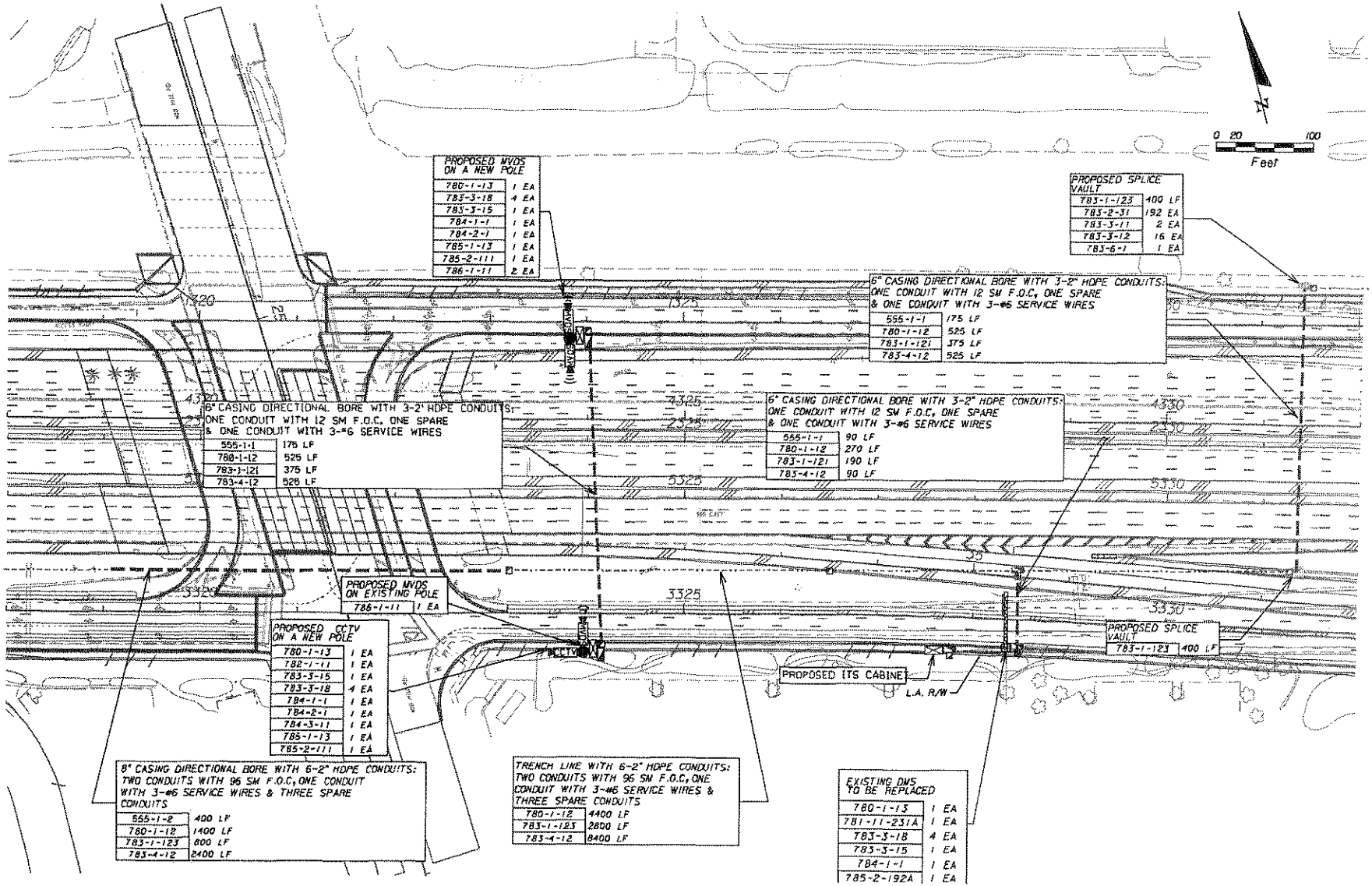
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ITS PLAN

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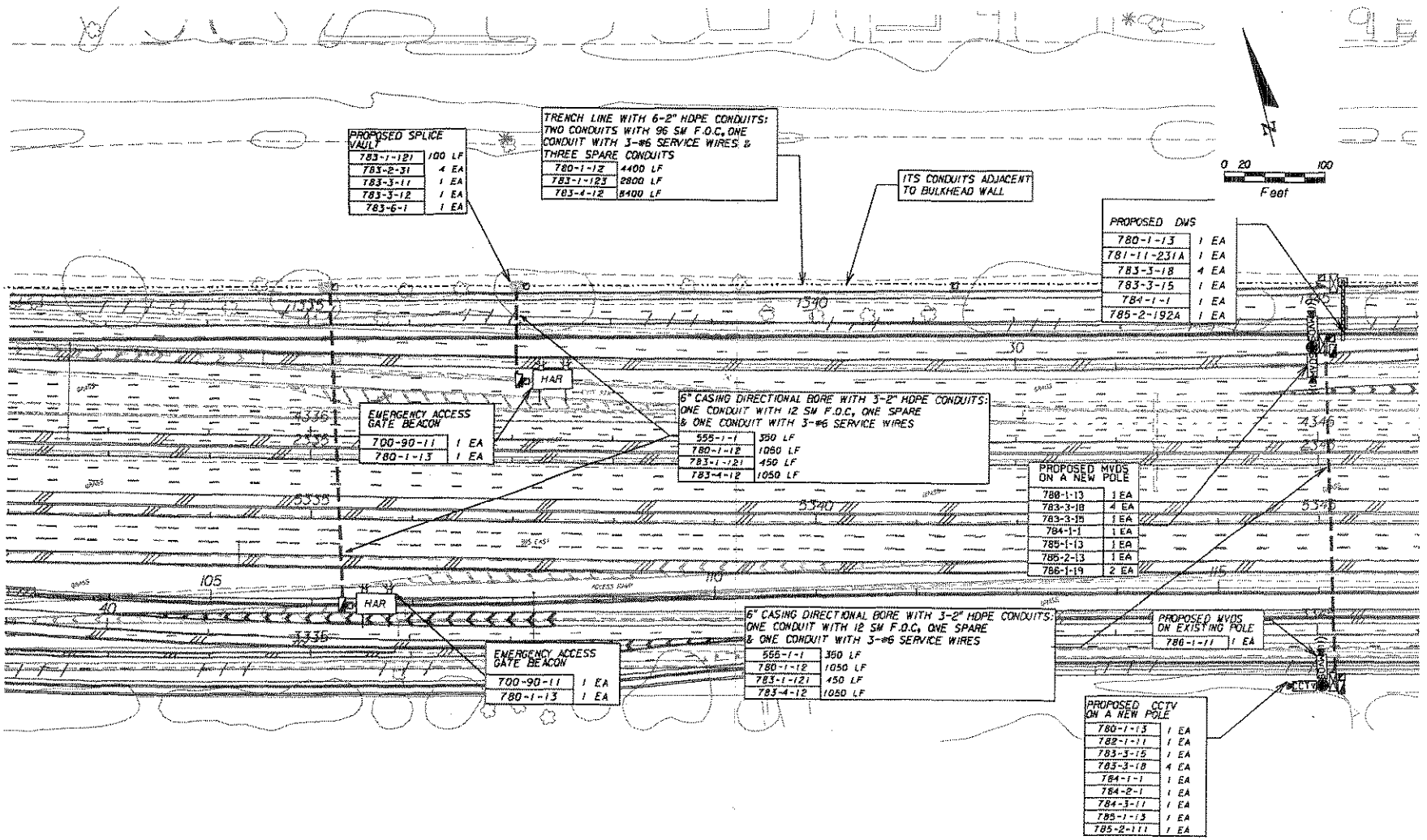
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ITS PLAN

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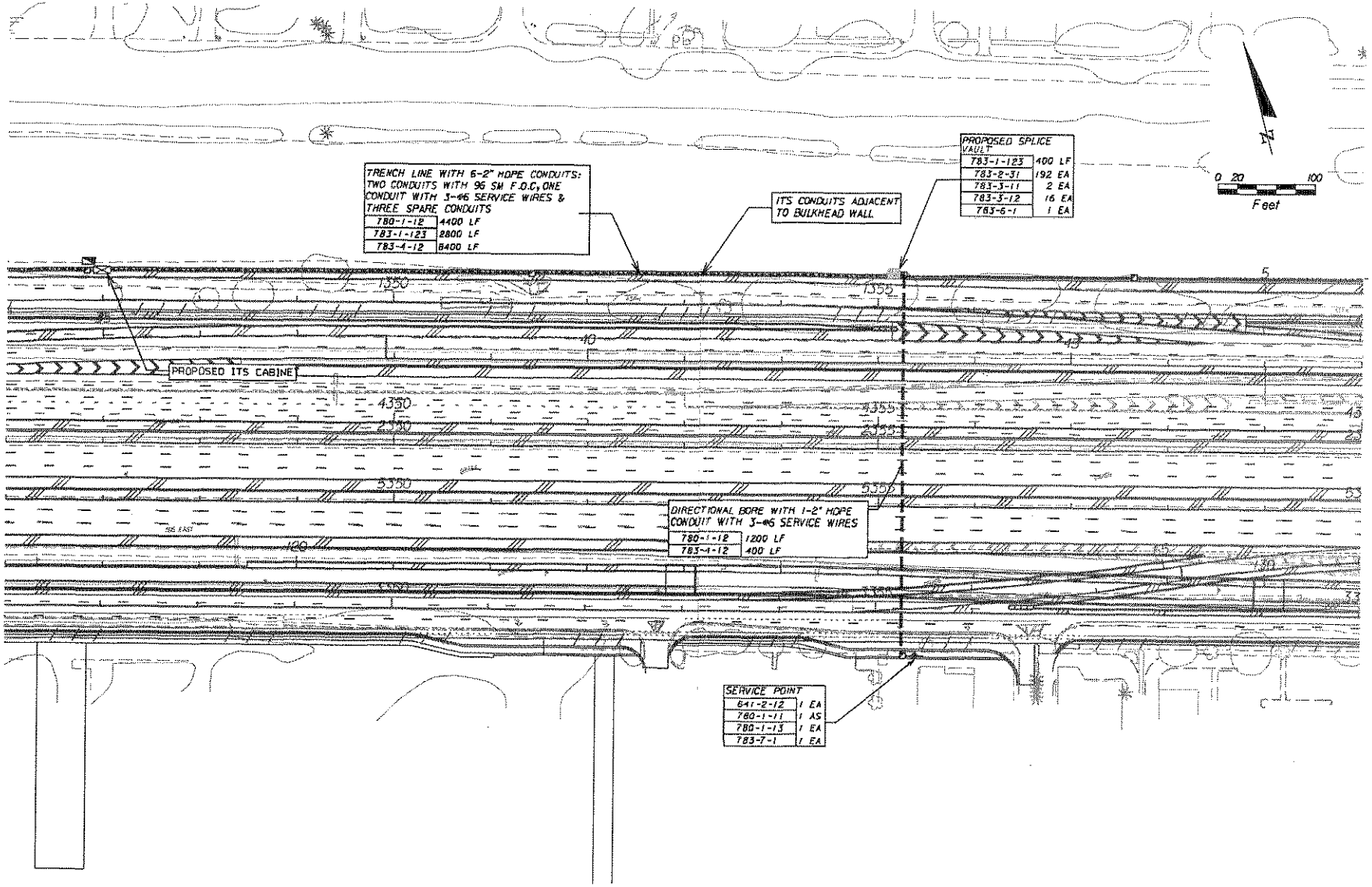
STATE OF FLORIDA
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ITS PLAN

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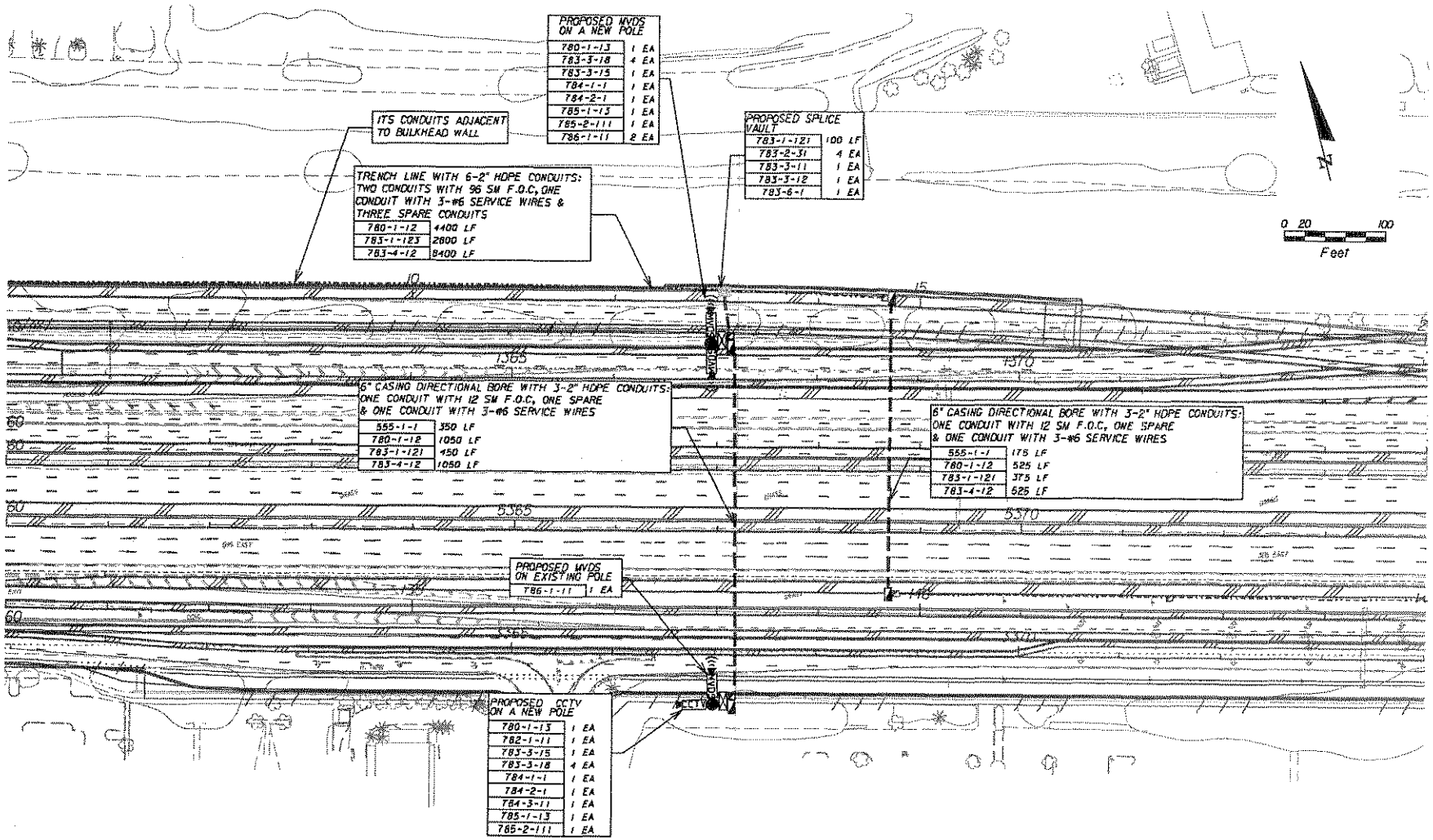
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ITS PLAN

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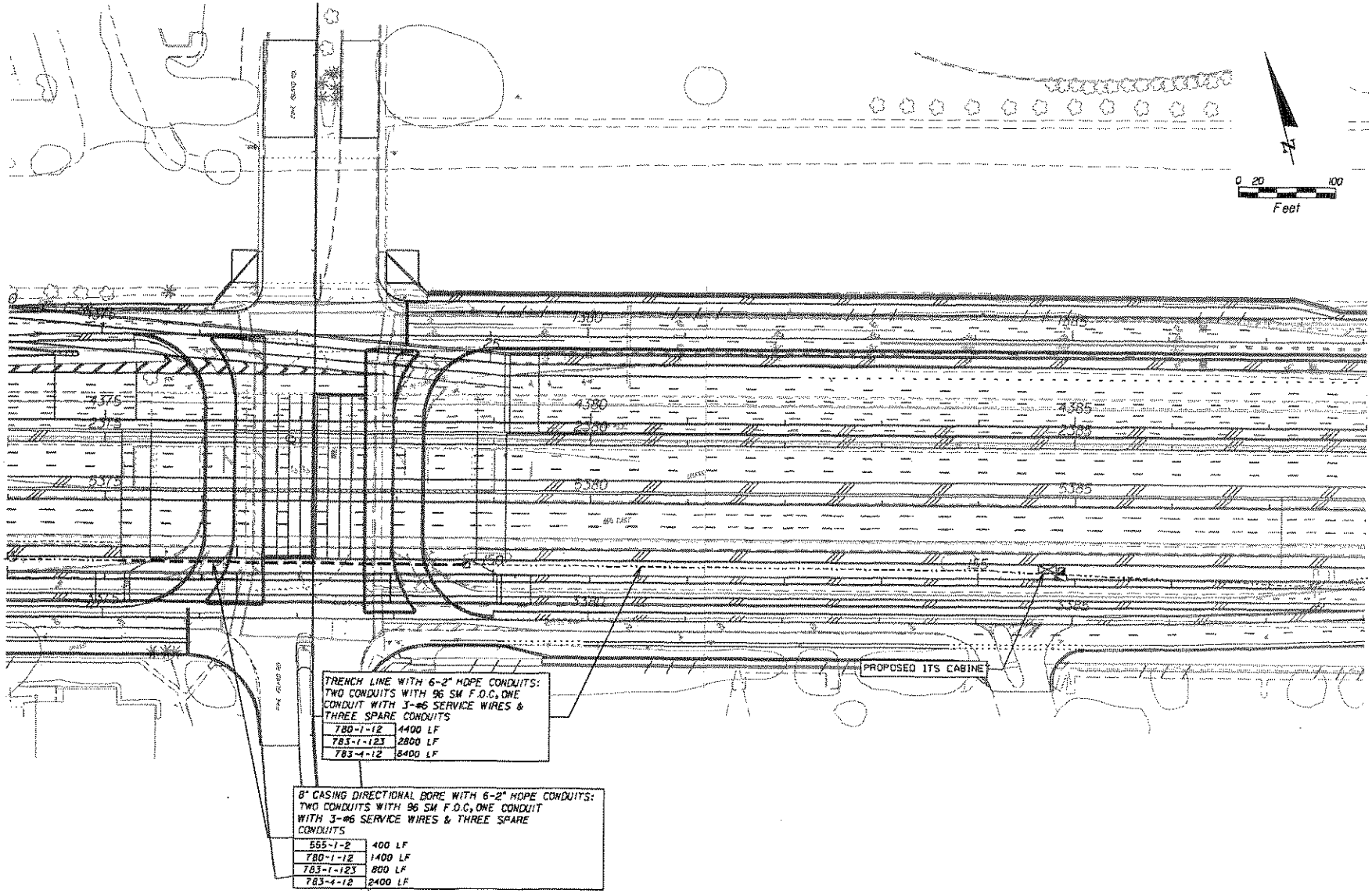
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ITS PLAN

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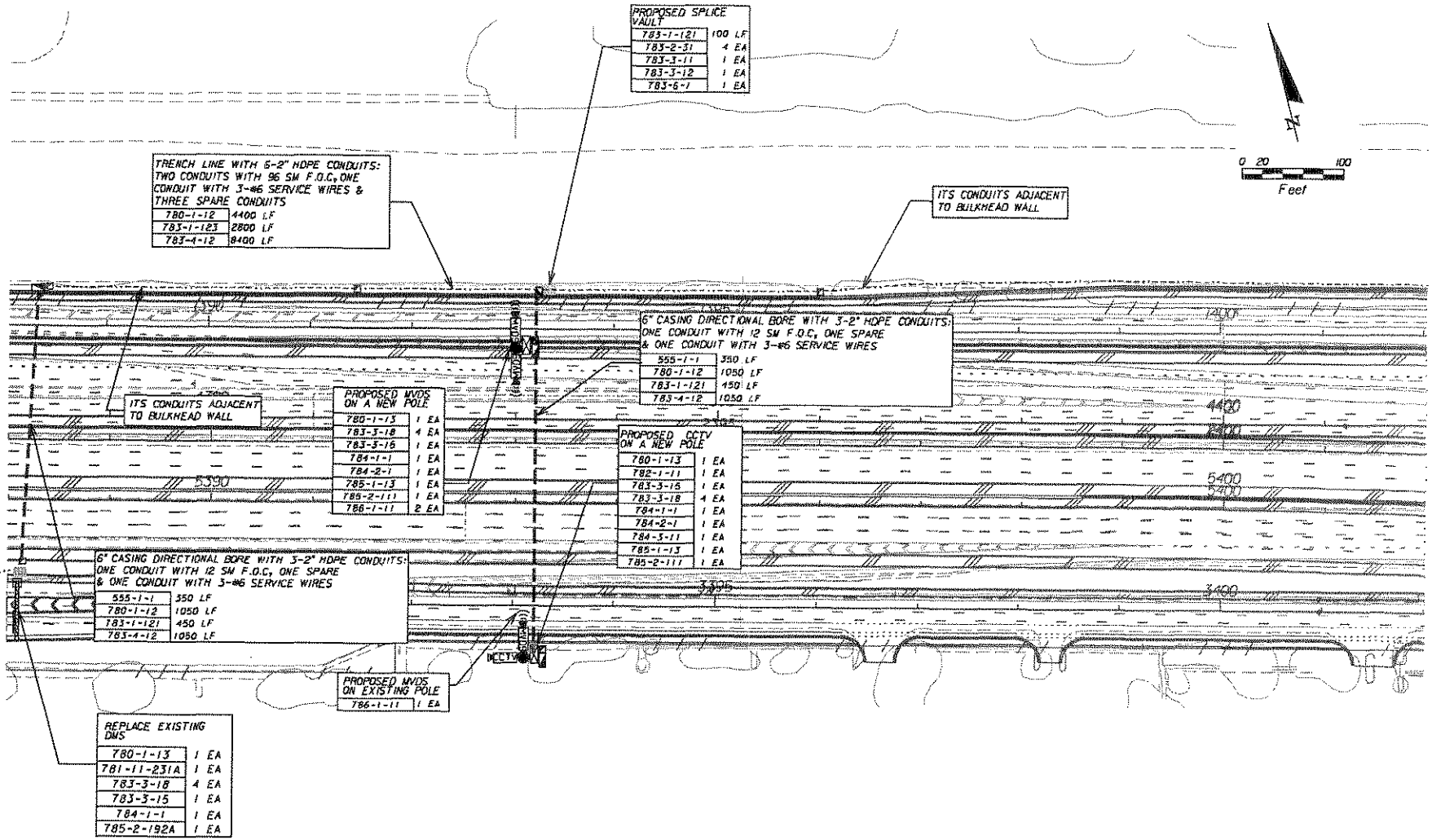
STATE OF FLORIDA
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SR 862	BROWARD	420809-3-52-01

ITS PLAN

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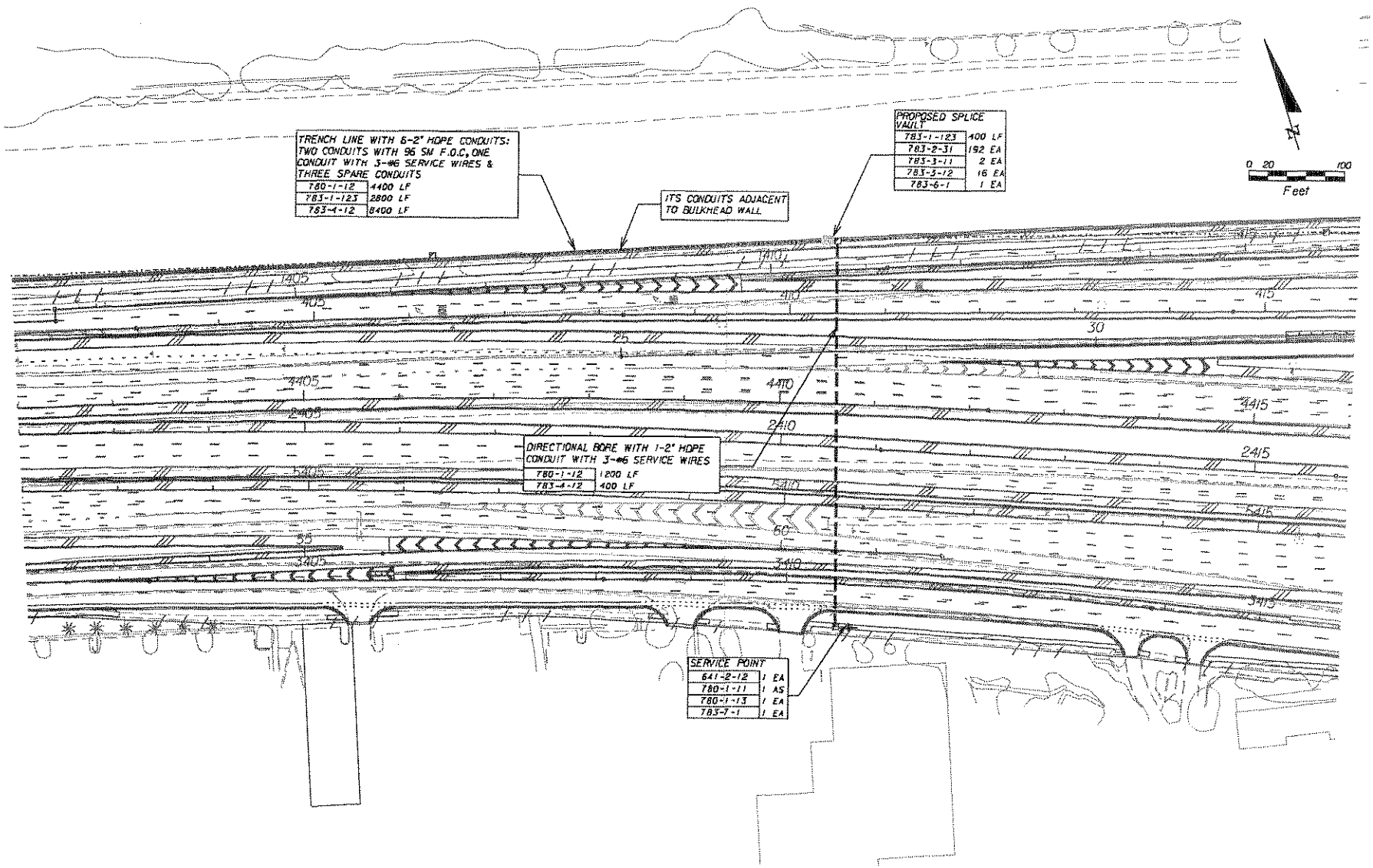
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ITS PLAN

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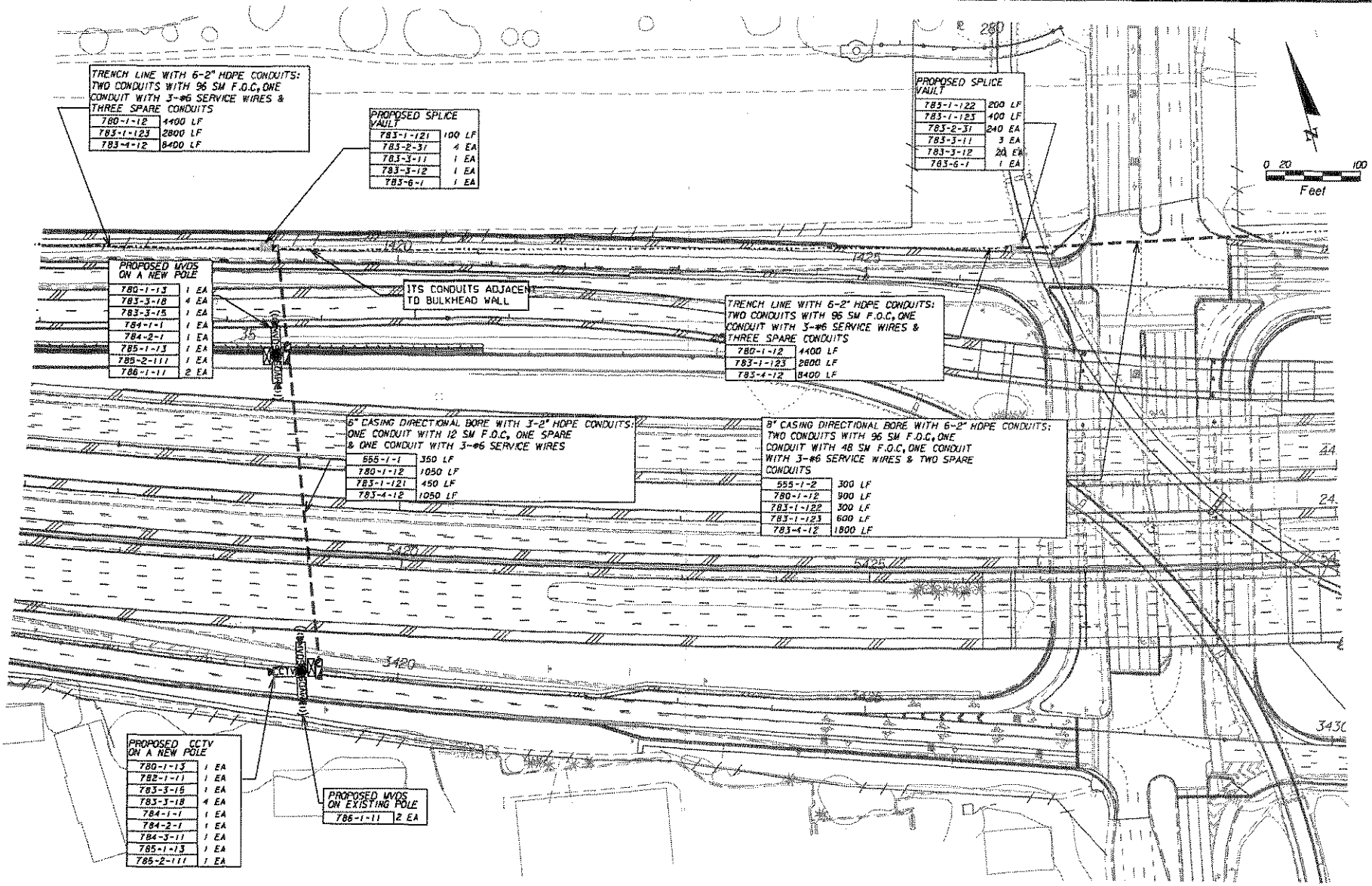
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ITS PLAN

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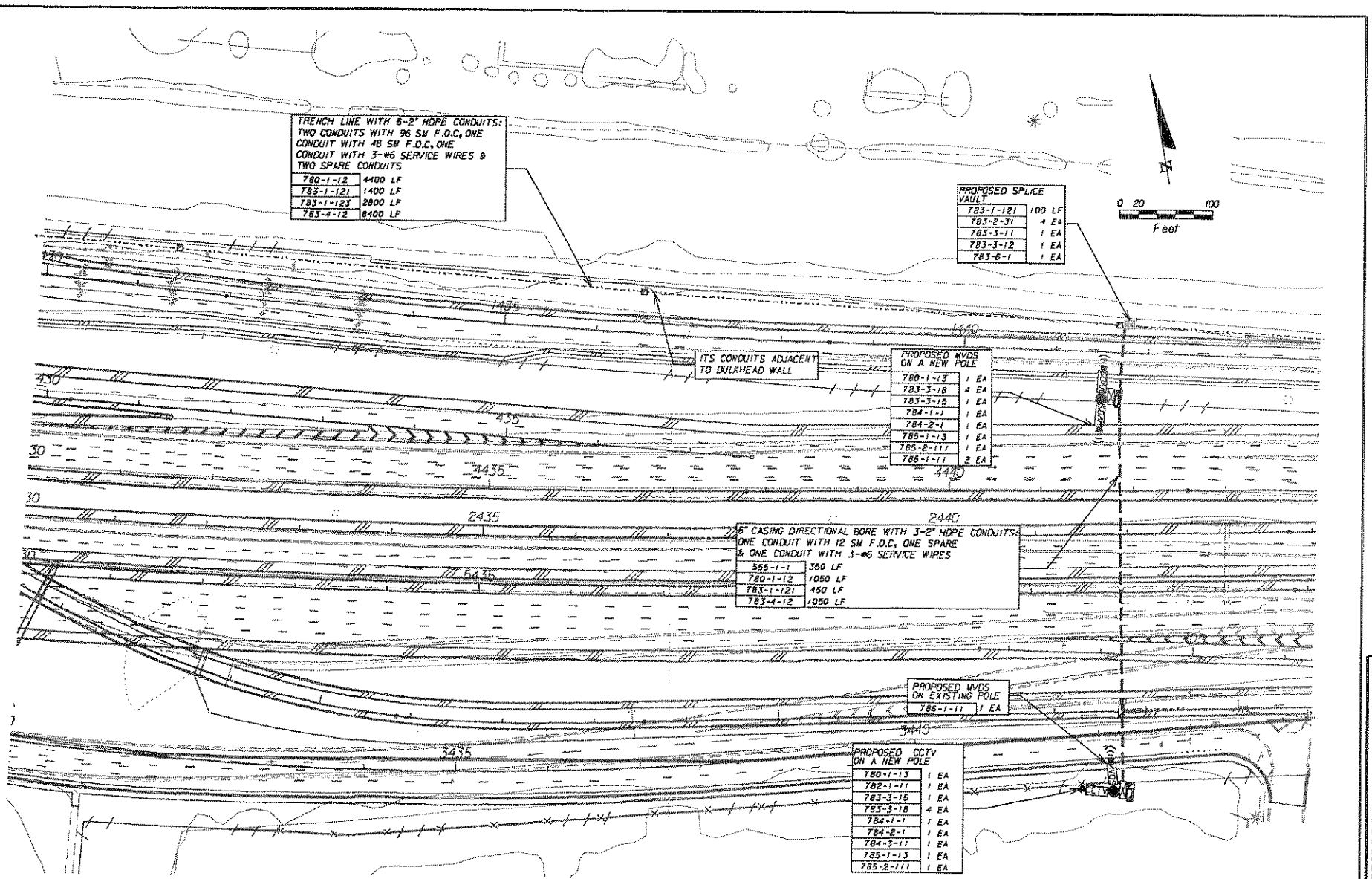
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

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IT-29



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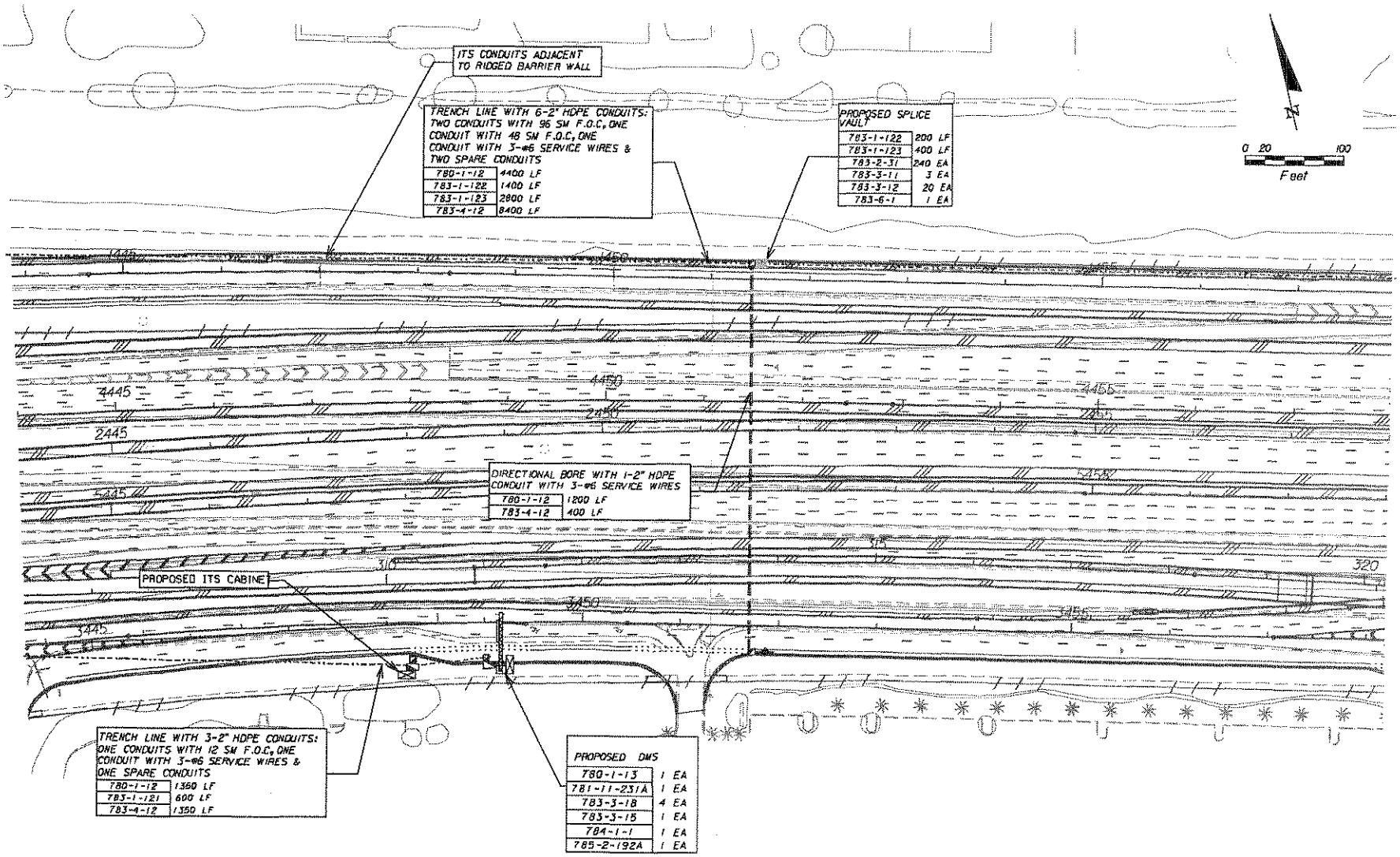
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PRELIMINARY CORRIDOR MASTER PLAN
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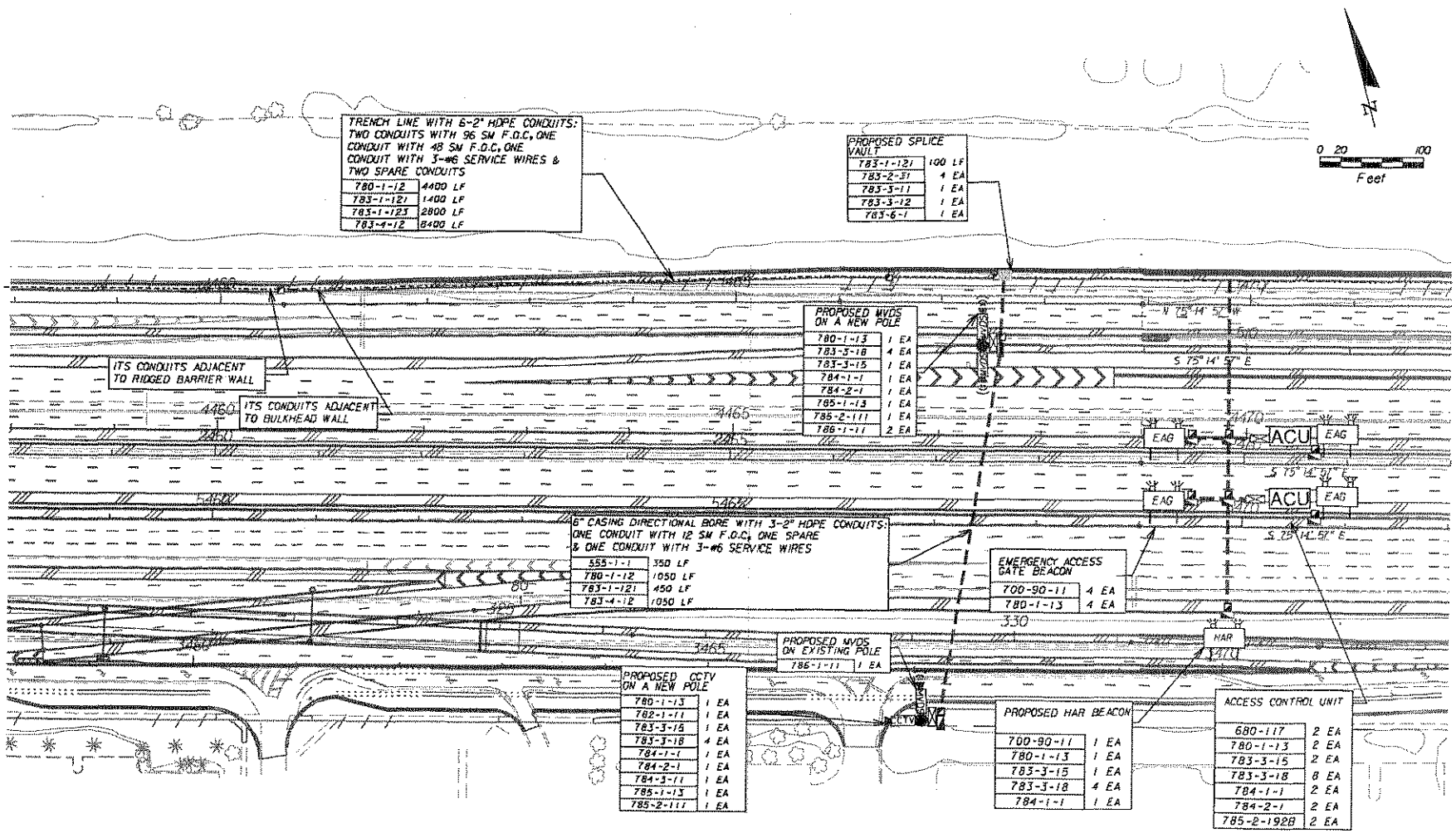
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

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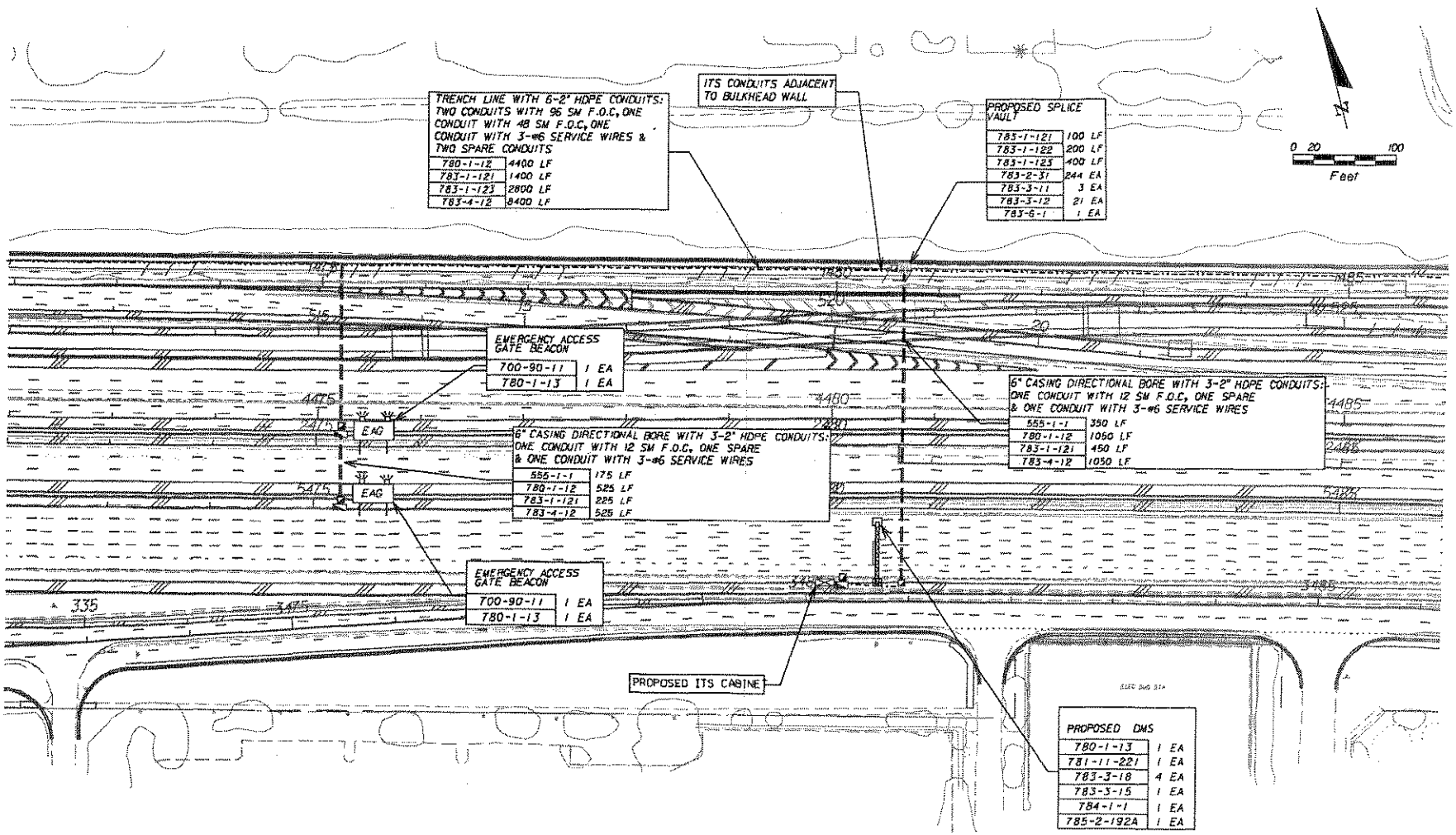
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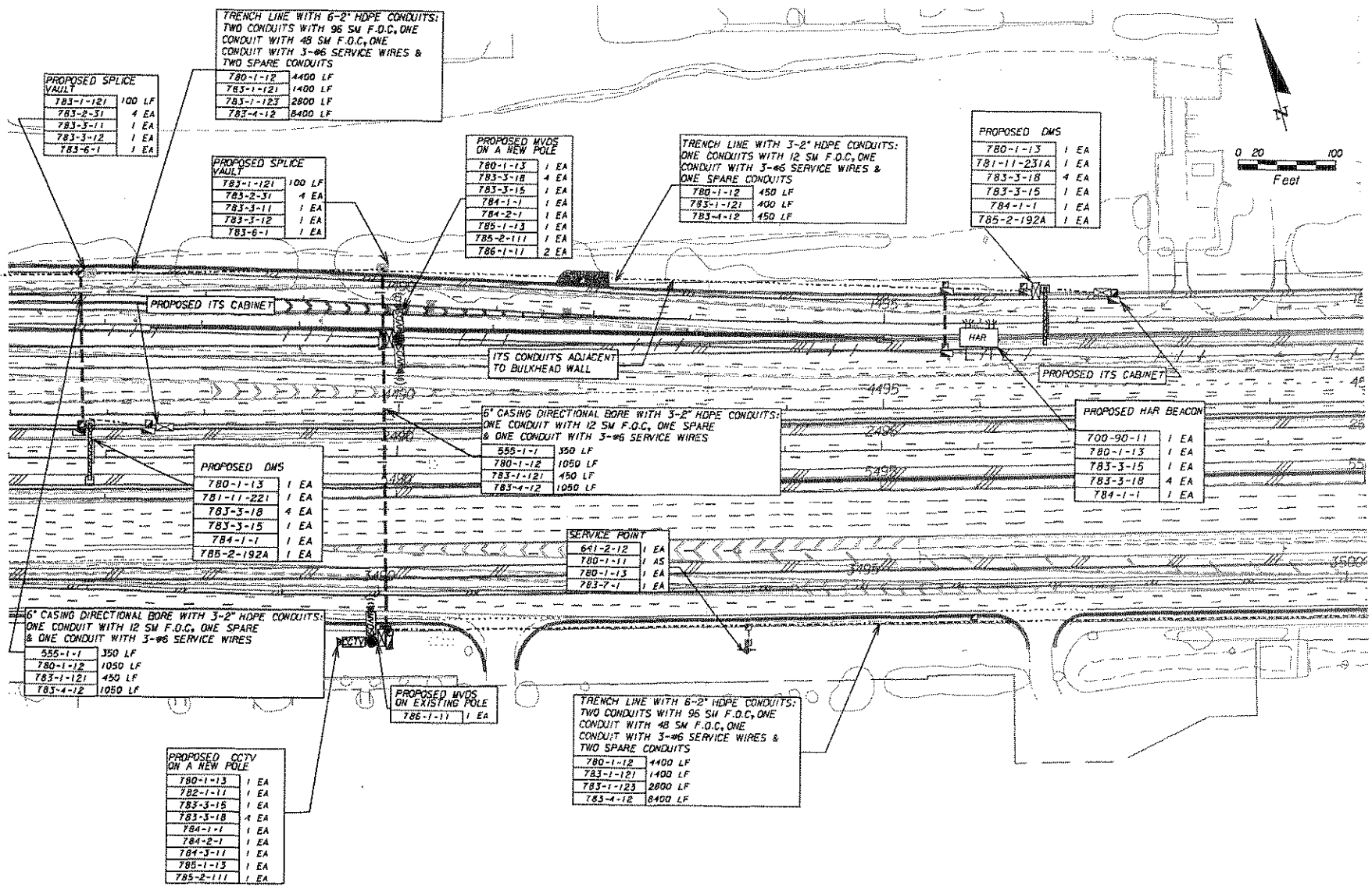
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ITS PLAN

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IT-33

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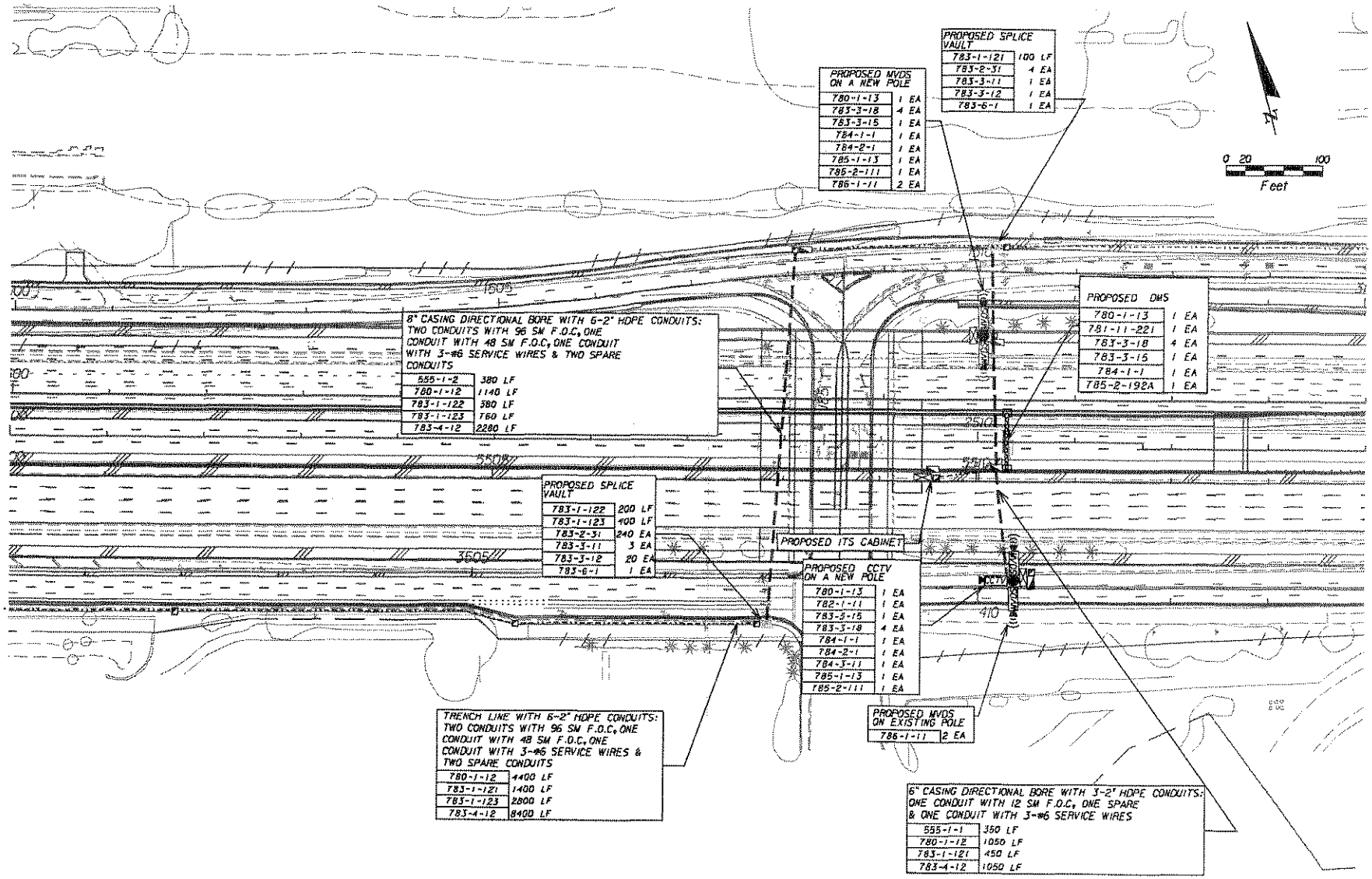
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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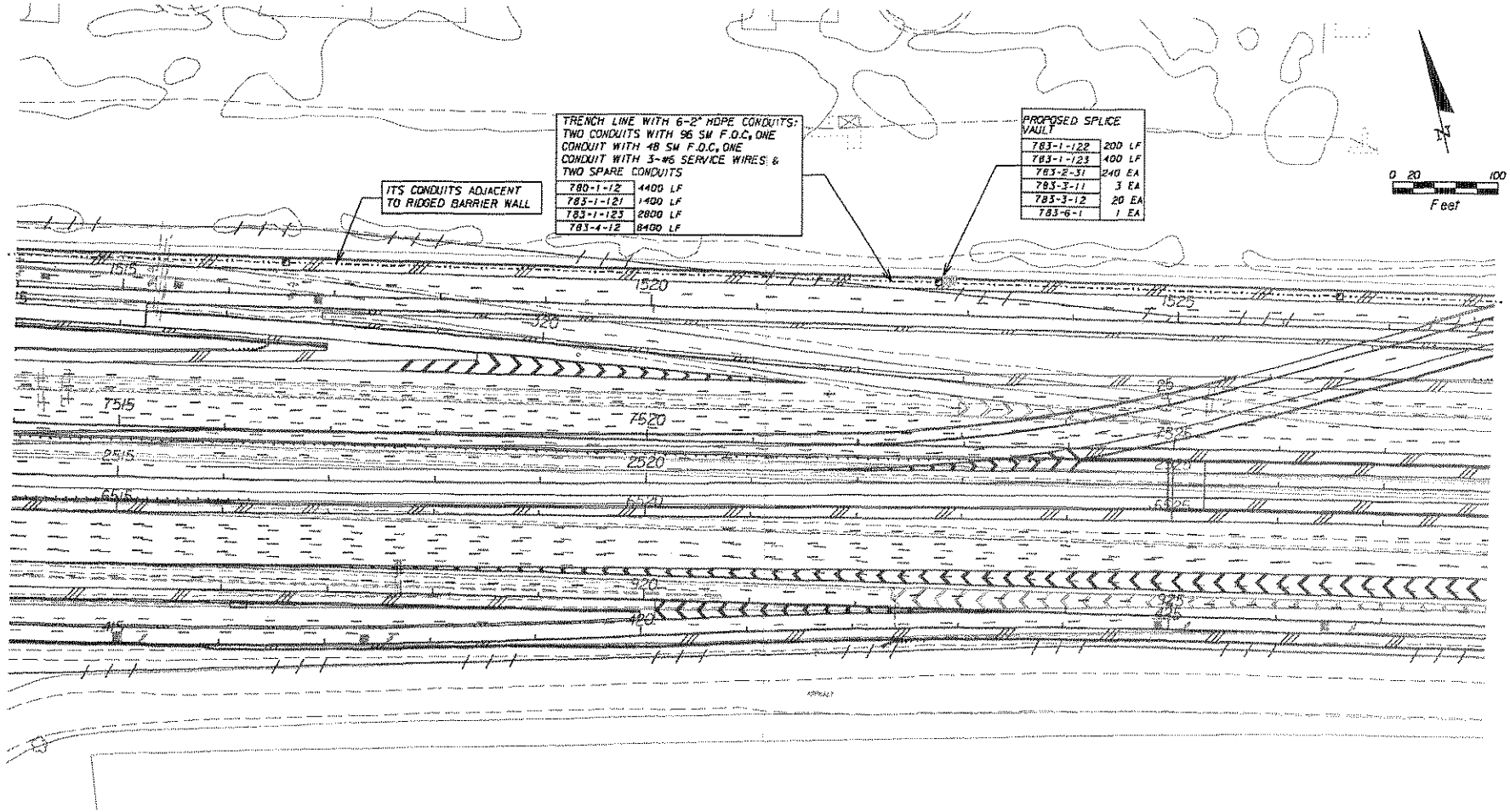
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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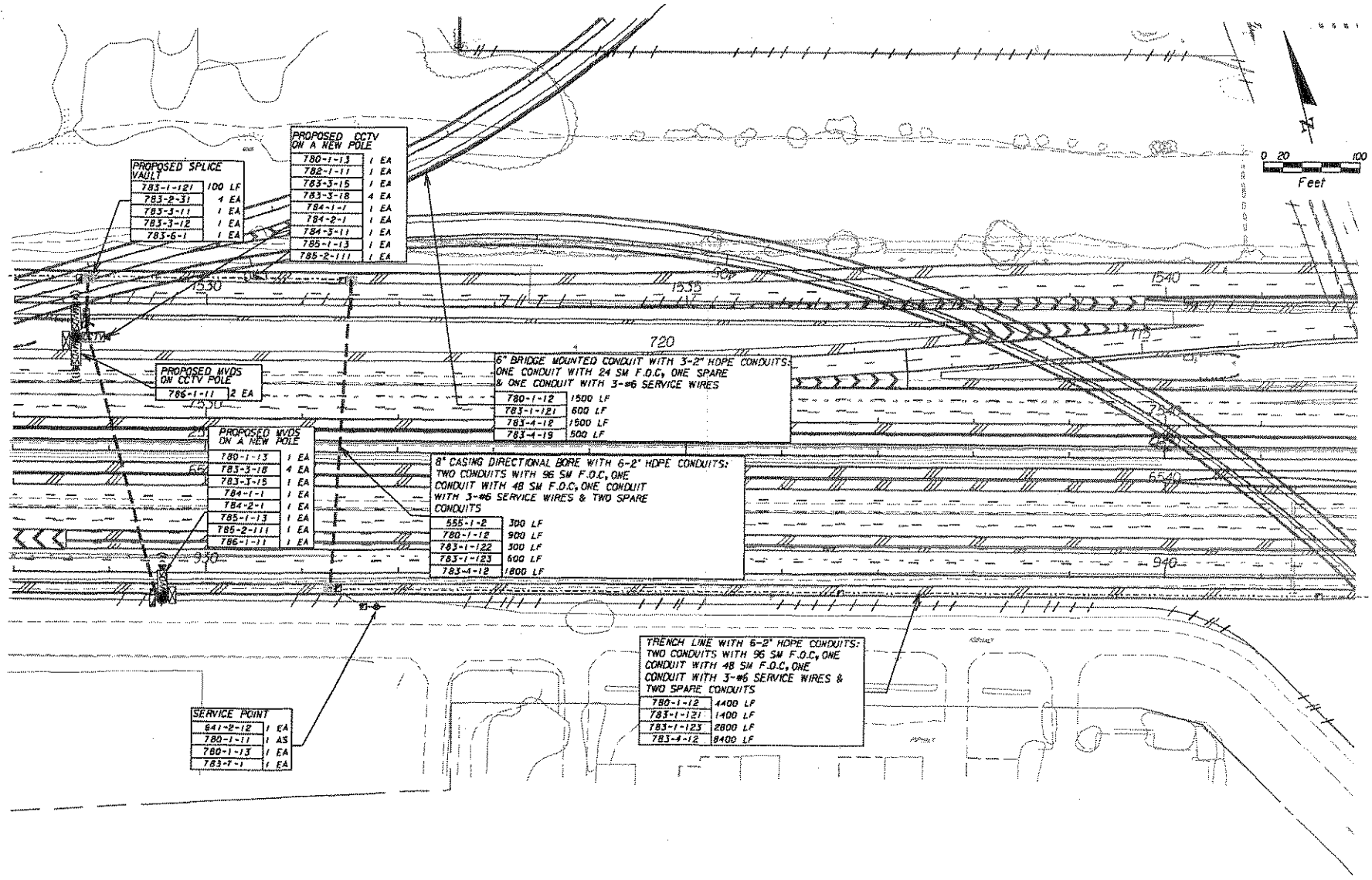
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ITS PLAN

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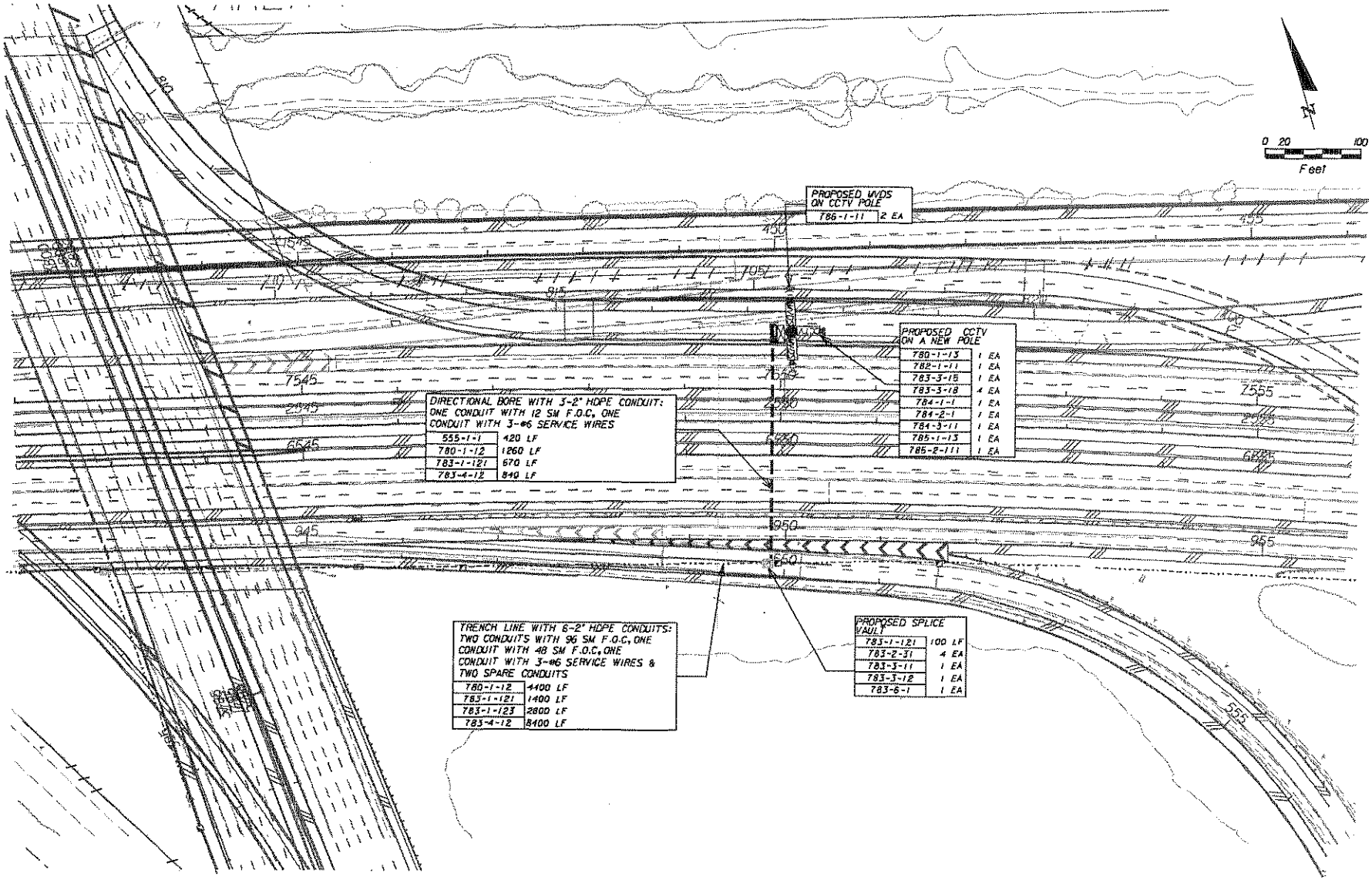
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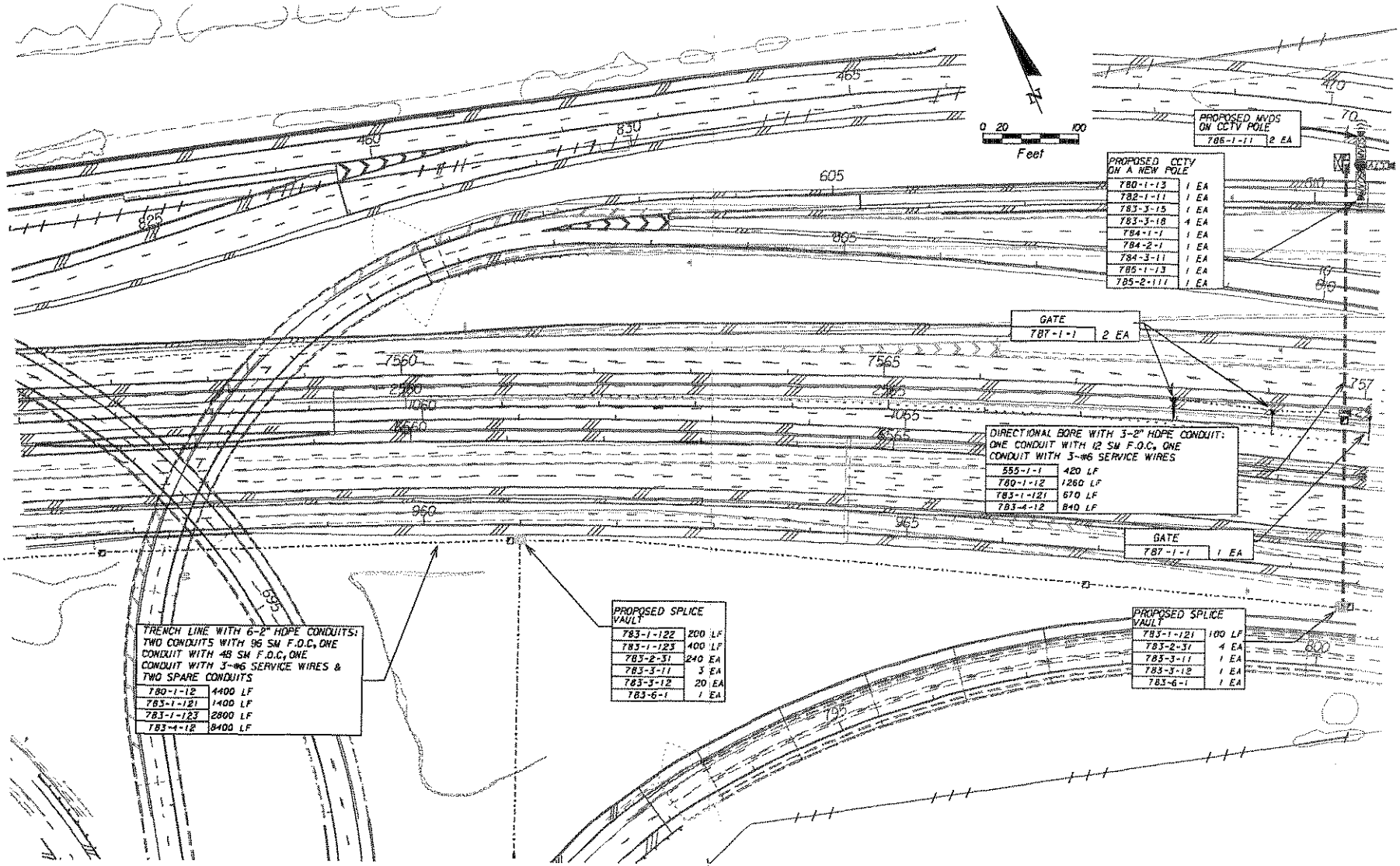
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO. IT-38



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PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2006

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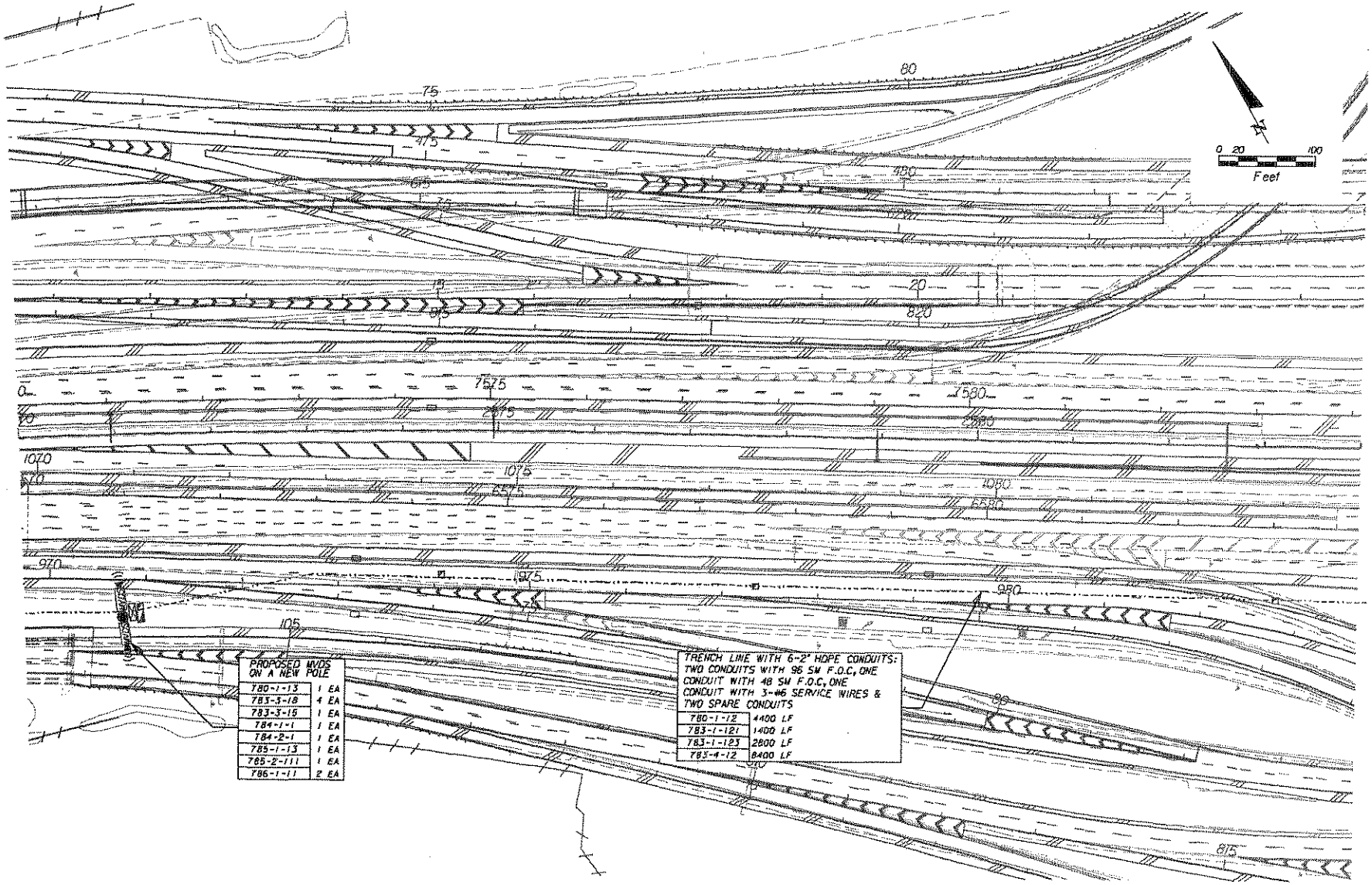
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO. IT-39



PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

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ACS-DRAGADOS MACQUARIE PARTNERSHIP

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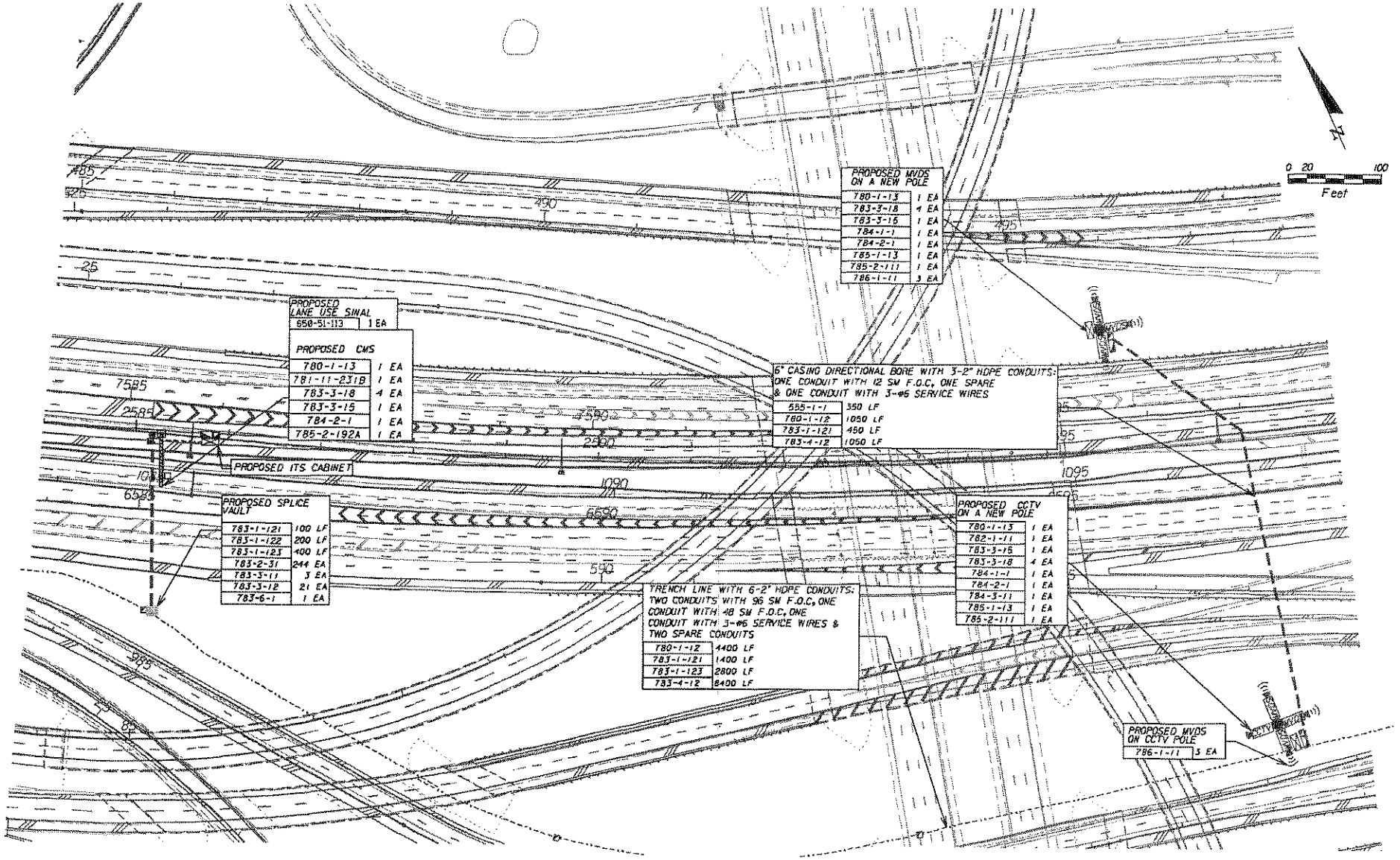
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO.
IT-40



PRELIMINARY CORRIDOR MASTER PLAN
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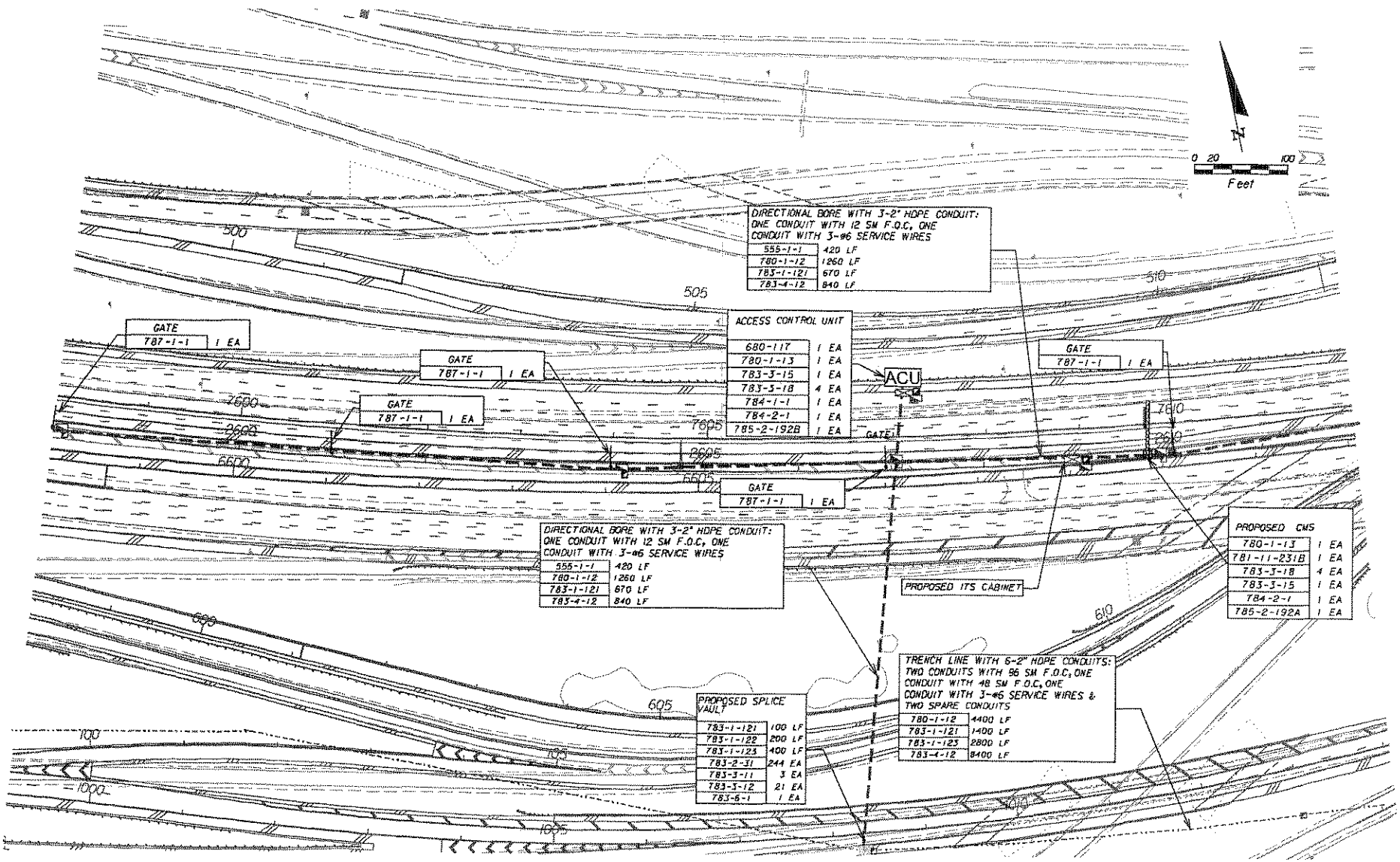
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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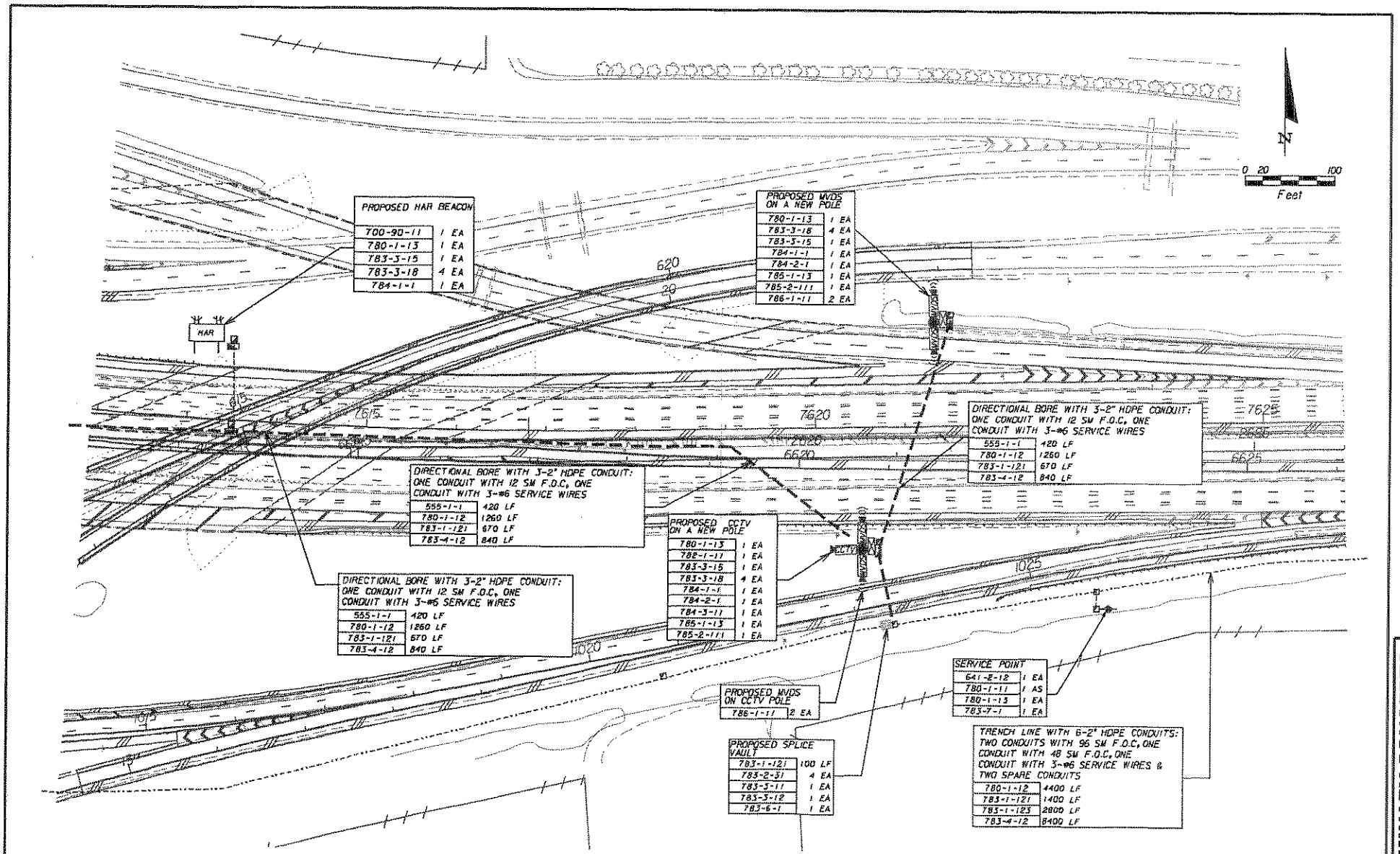
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO. IT-42

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PRELIMINARY CORRIDOR MASTER PLAN
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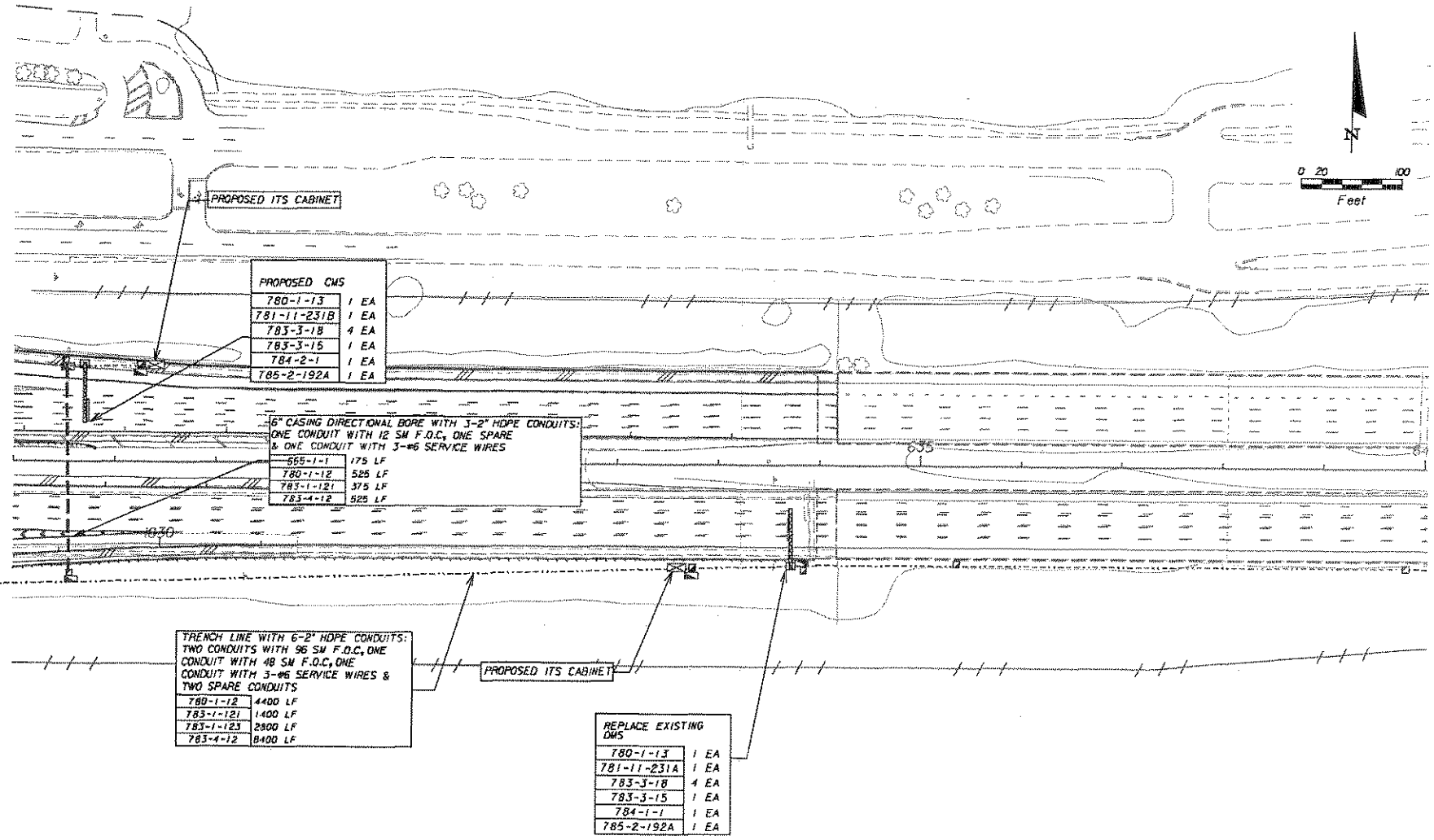
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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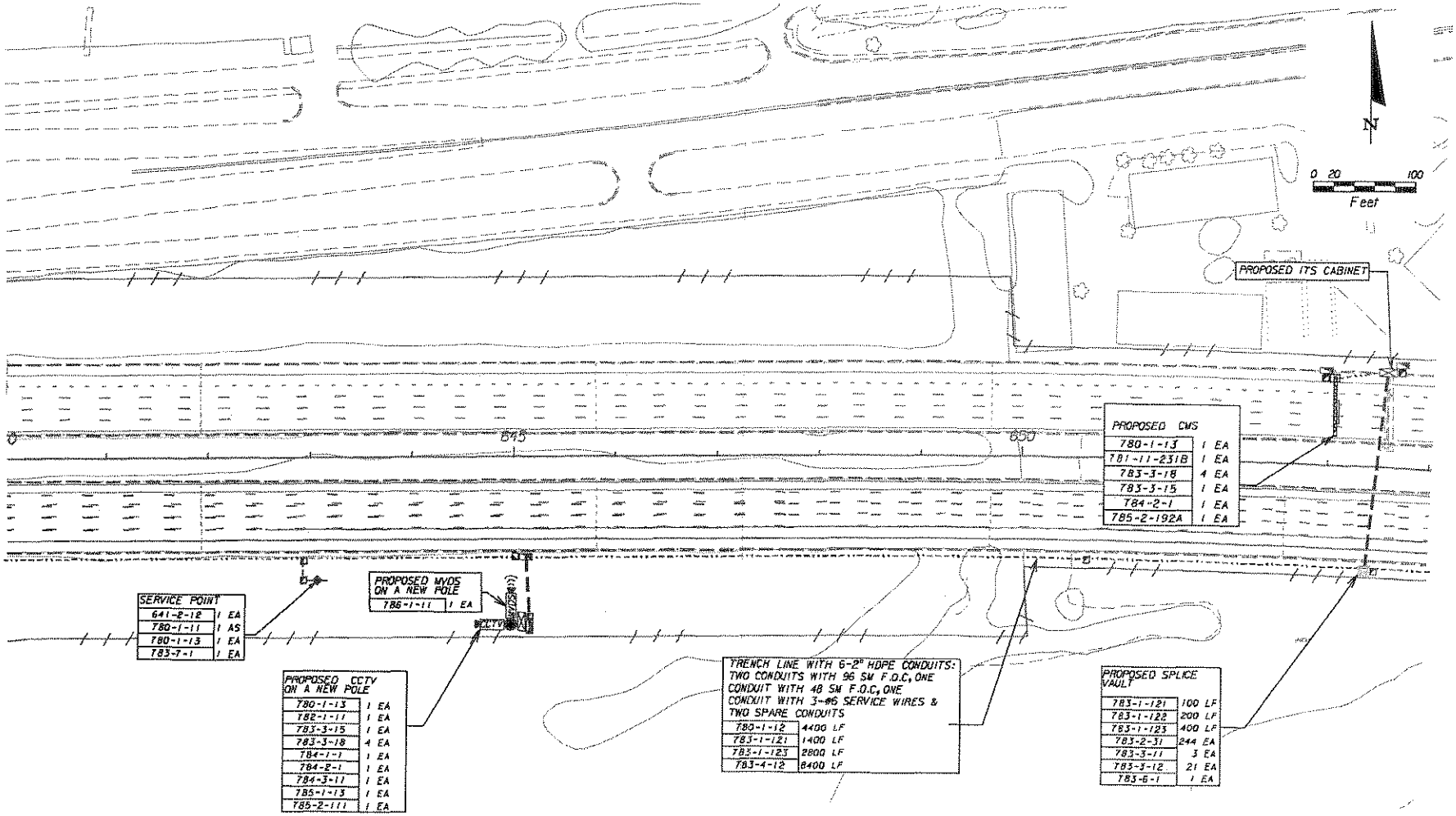
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO.
IT-44

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06 SEPTEMBER 2006

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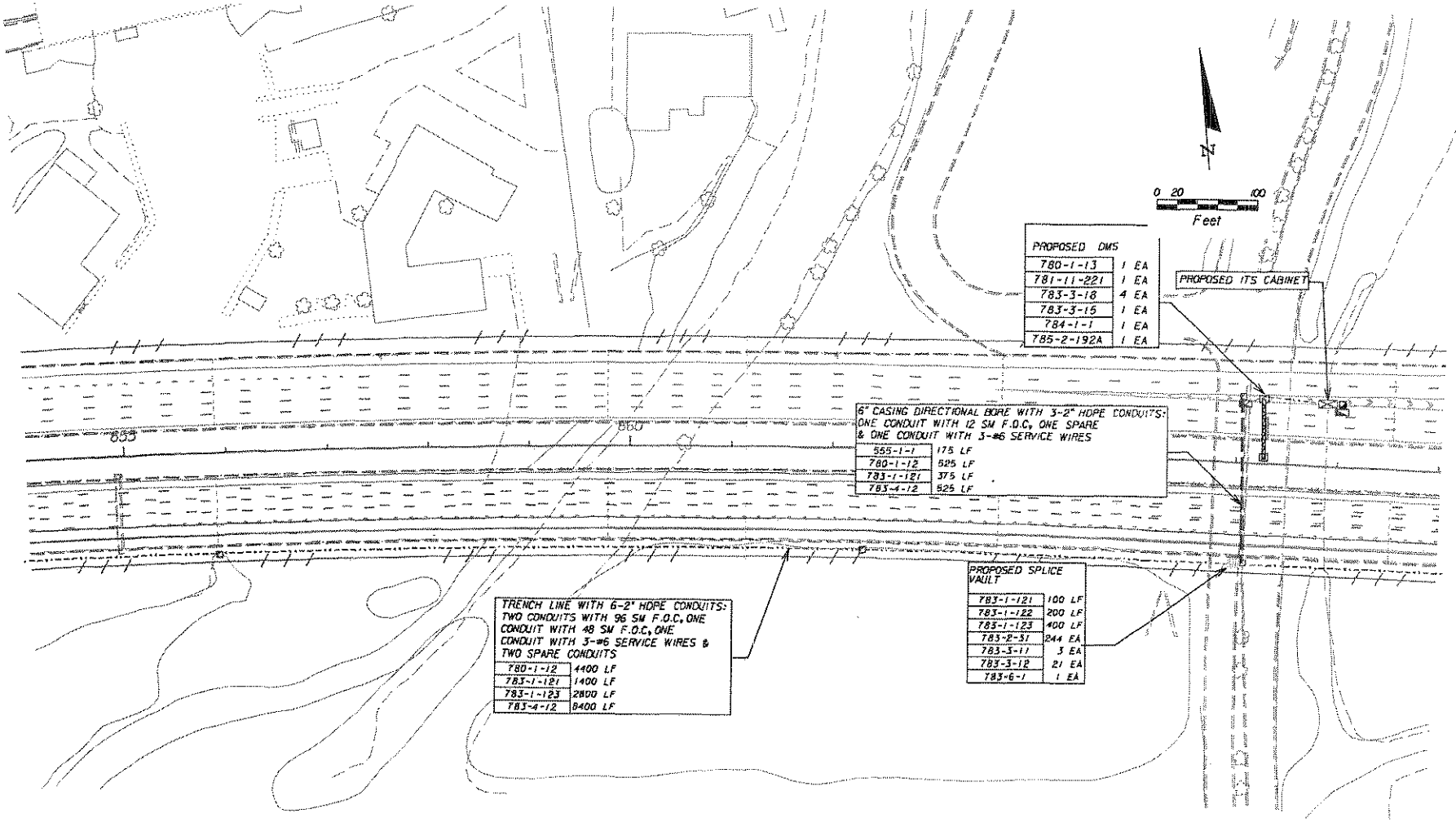
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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IT-45



PRELIMINARY CORRIDOR MASTER PLAN
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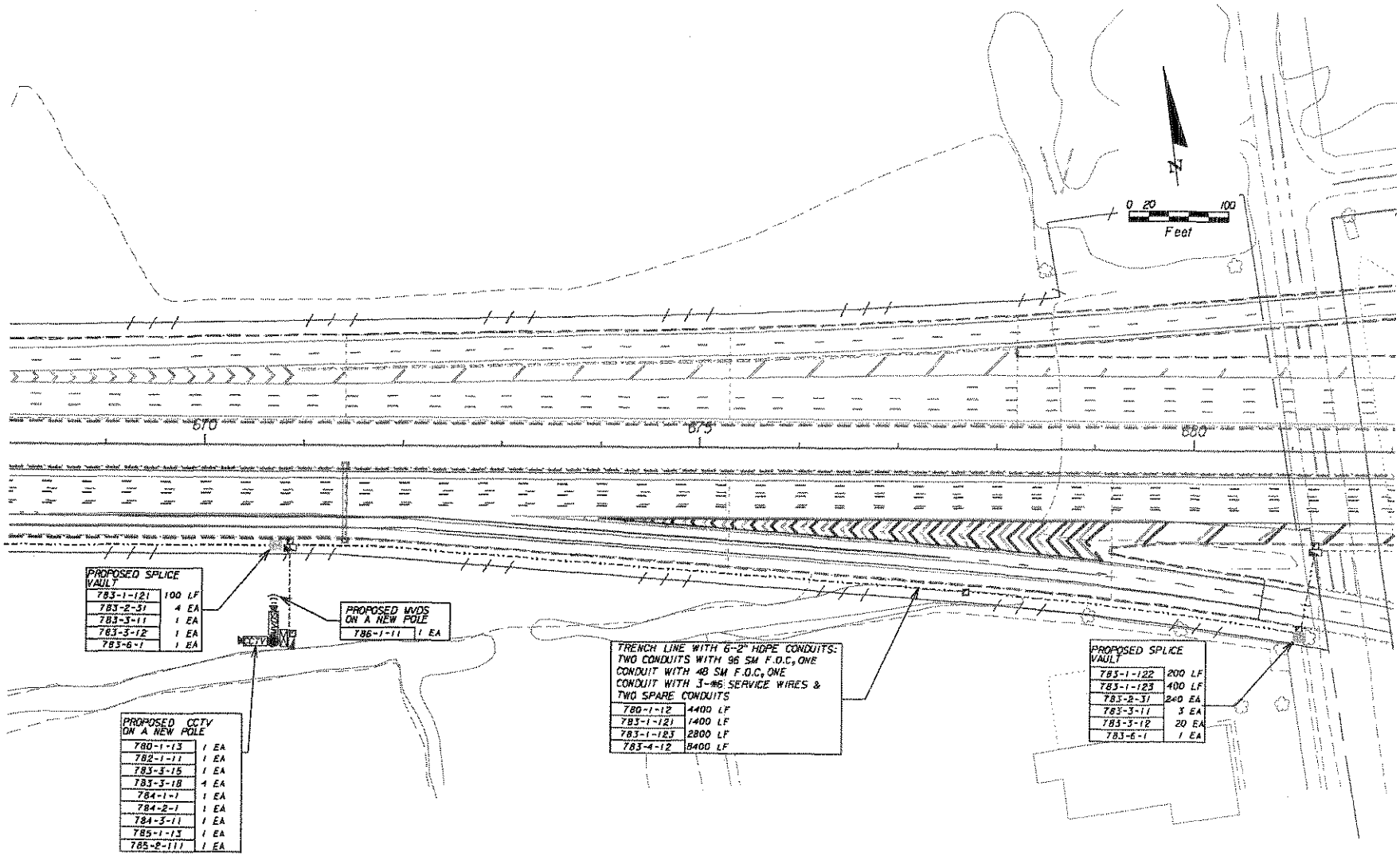
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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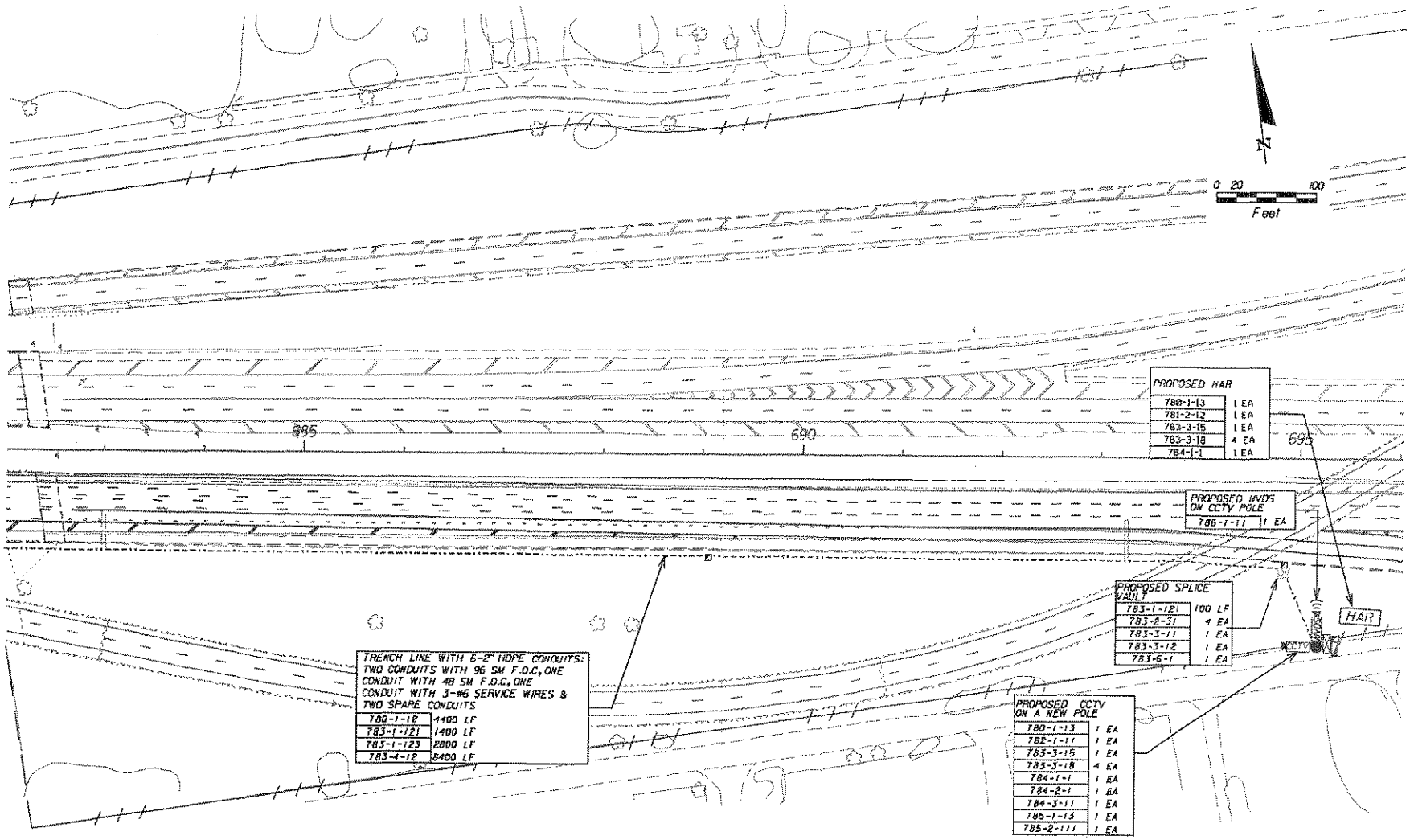
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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ACS-DRAGADOS MACQUARIE PARTNERSHIP

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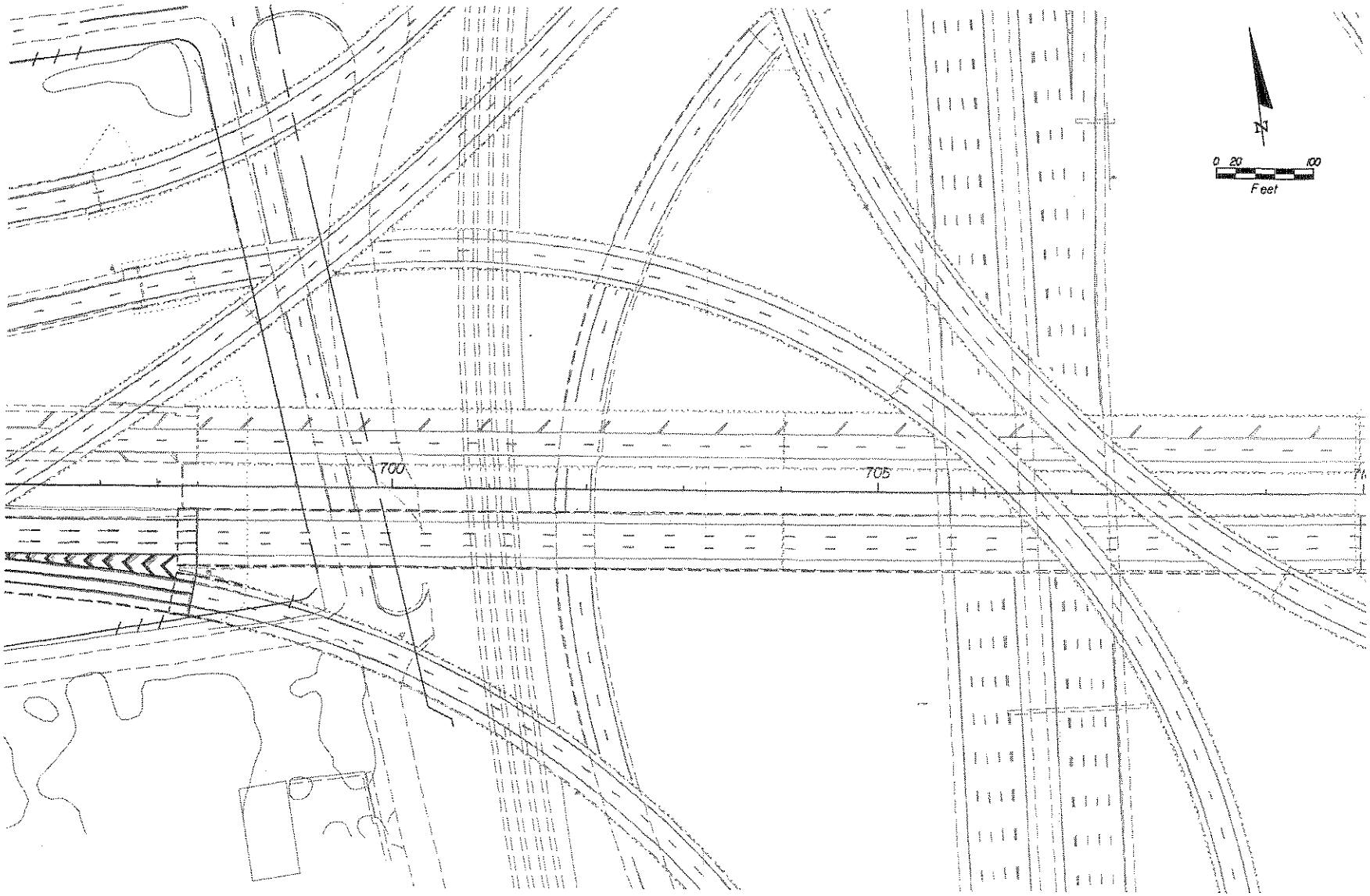
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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IT-48



PRELIMINARY CORRIDOR MASTER PLAN
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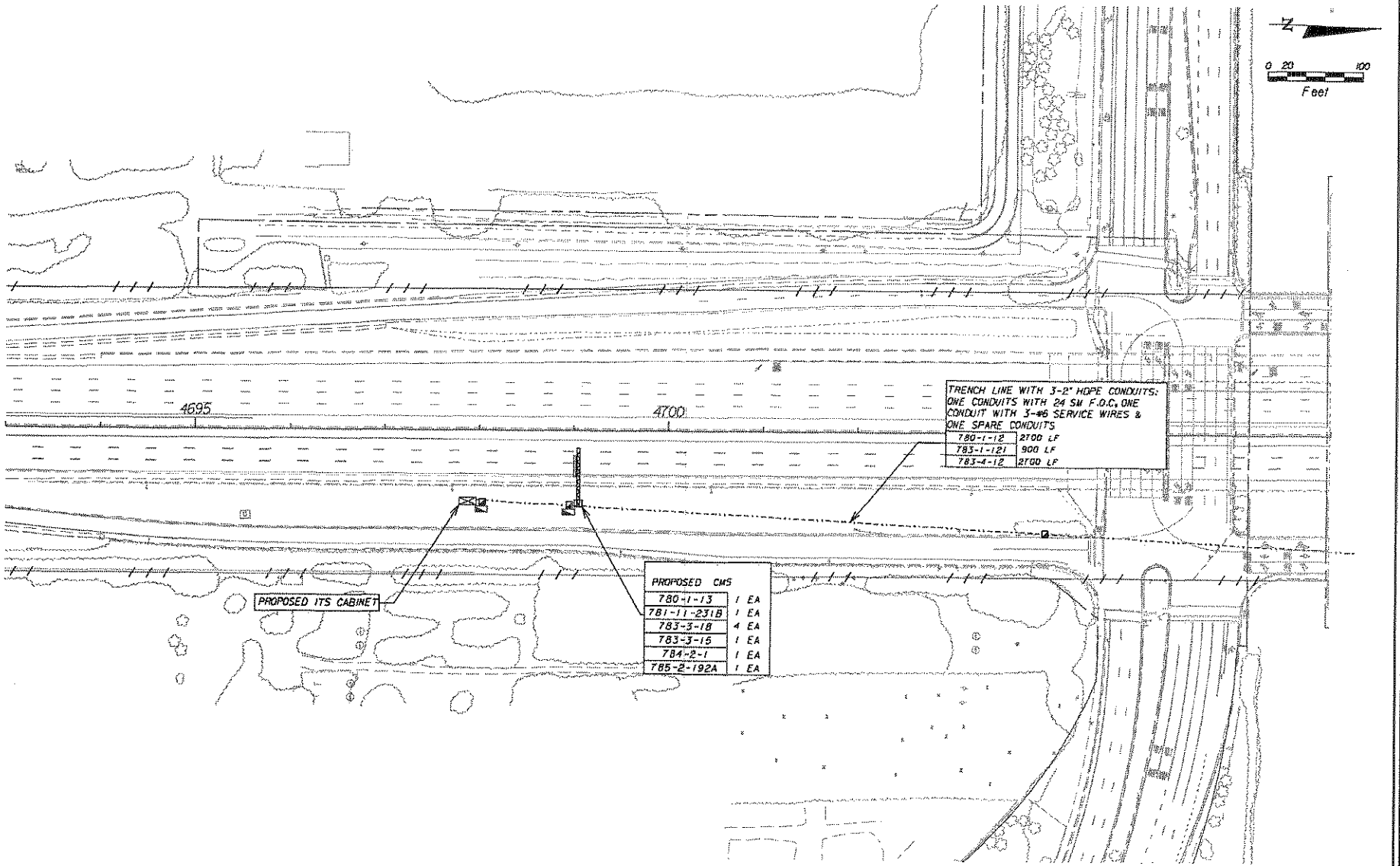
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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IT-49



PRELIMINARY CORRIDOR MASTER PLAN
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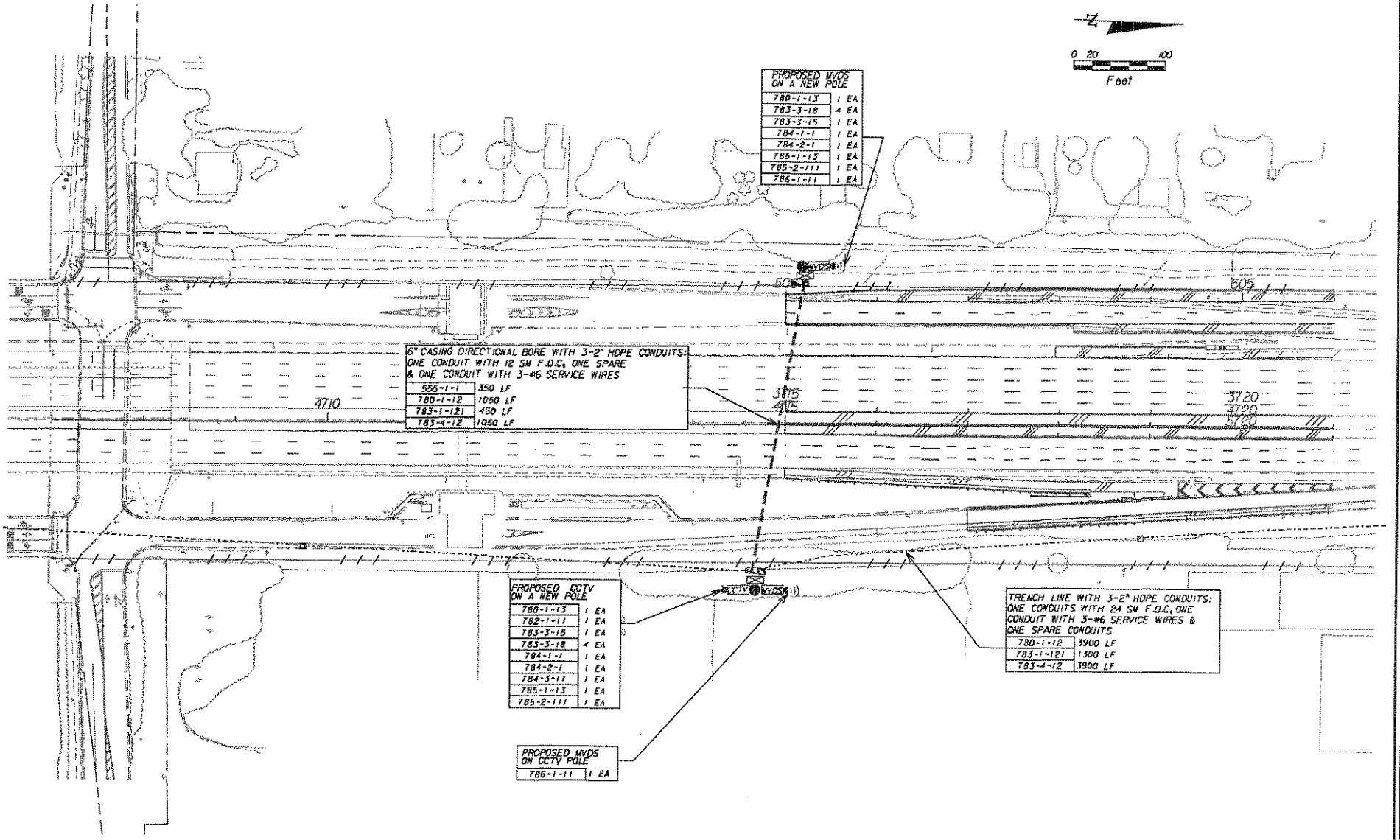
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO. IT-50

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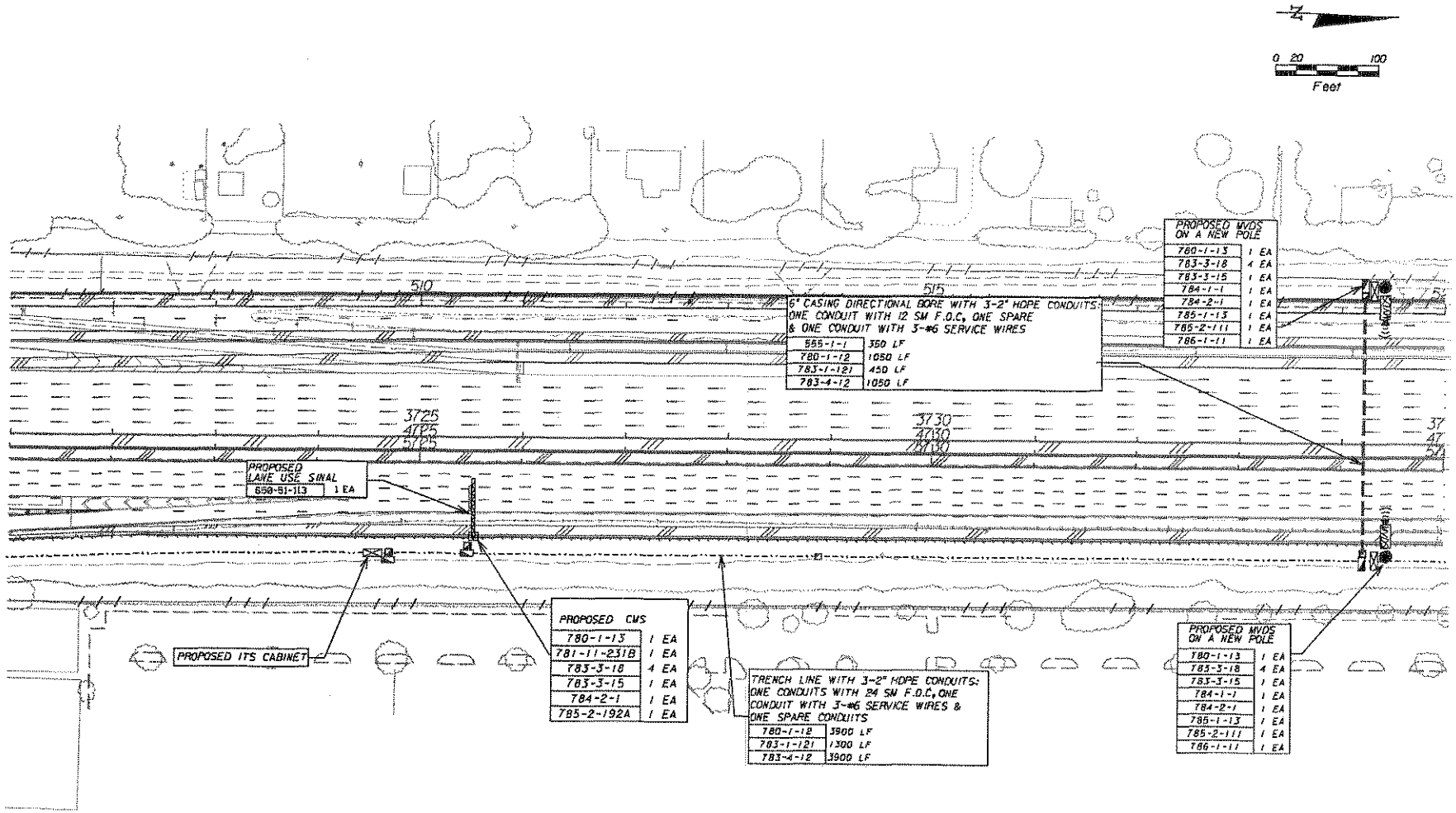
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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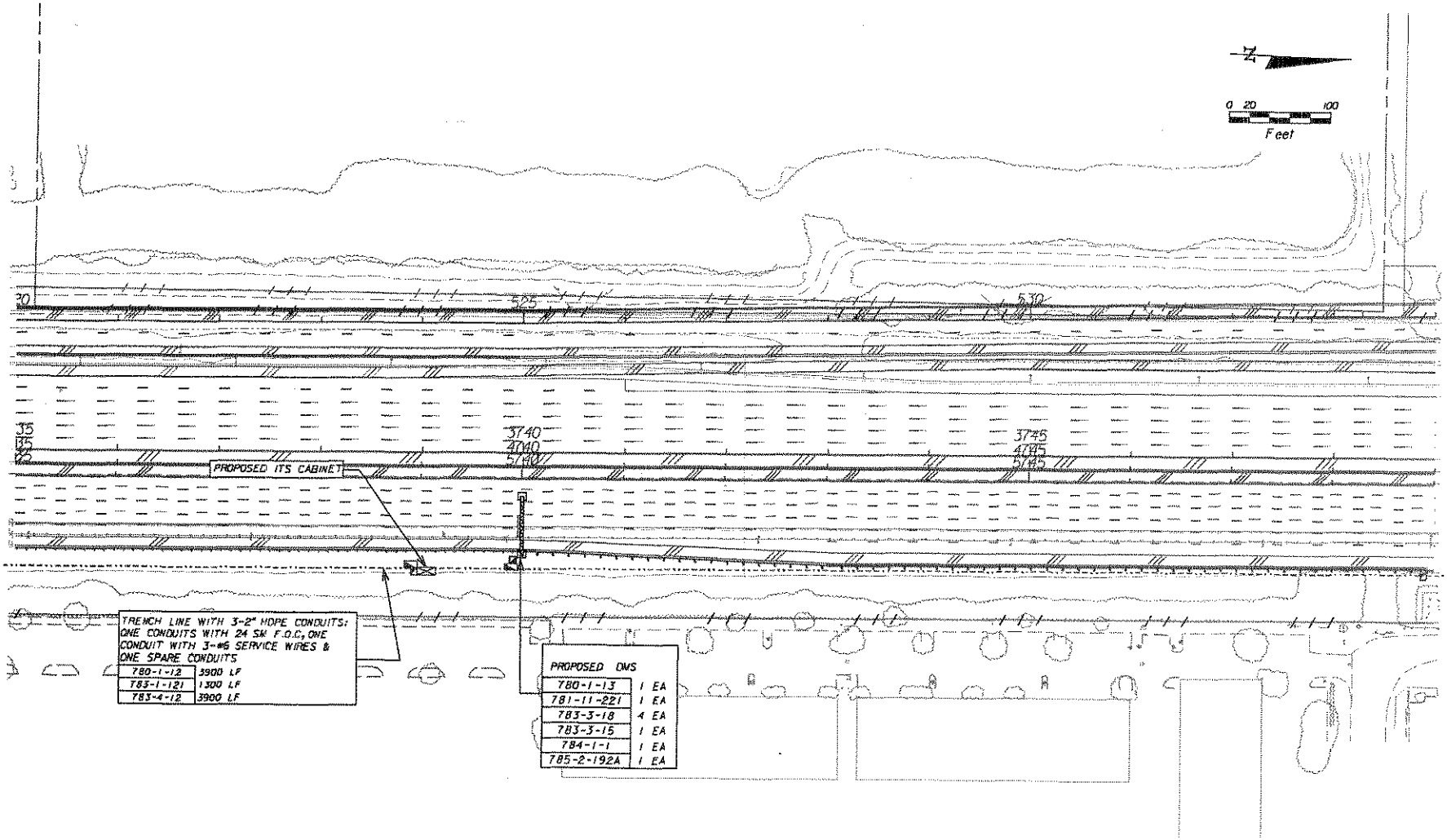
STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO. IT-52

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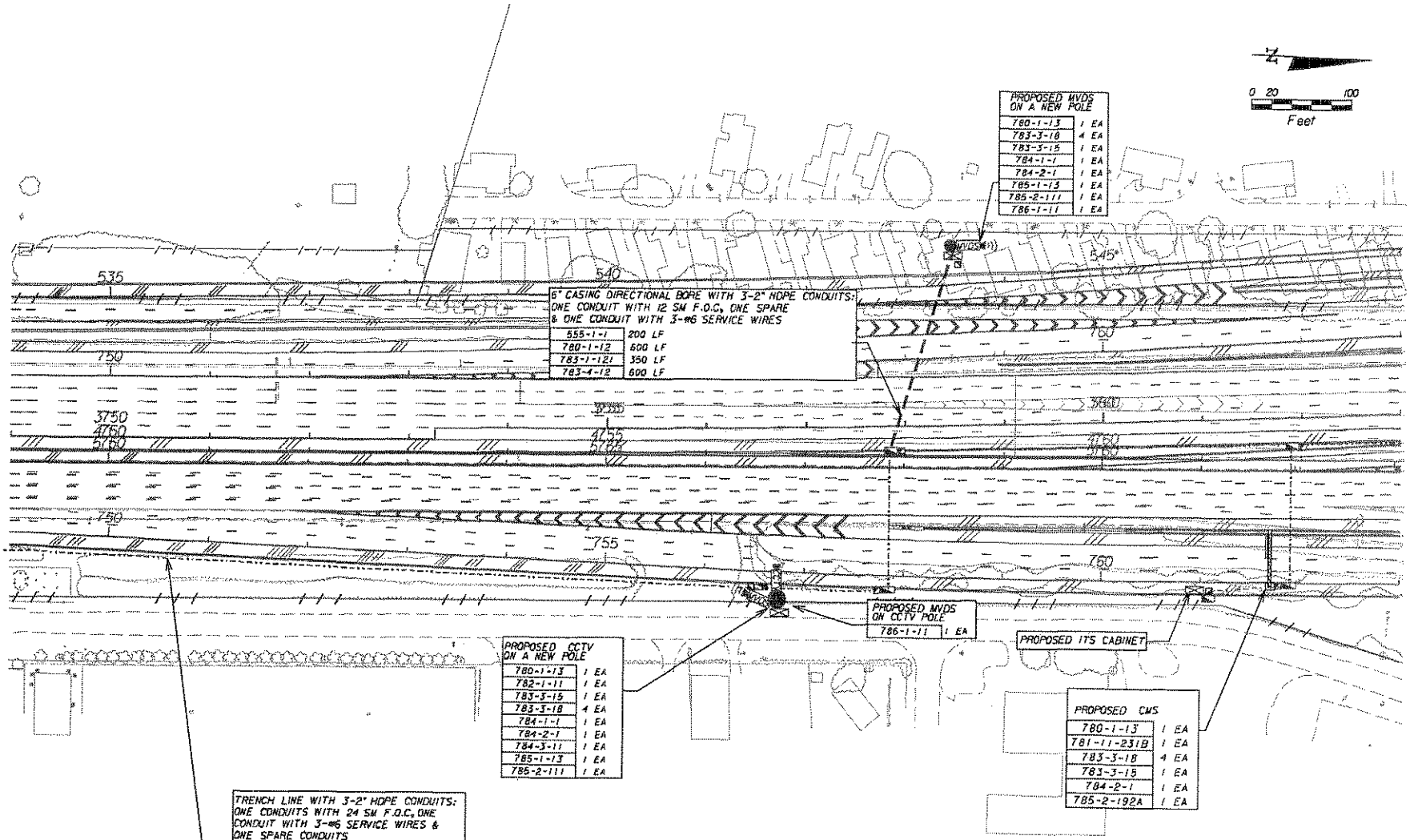
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

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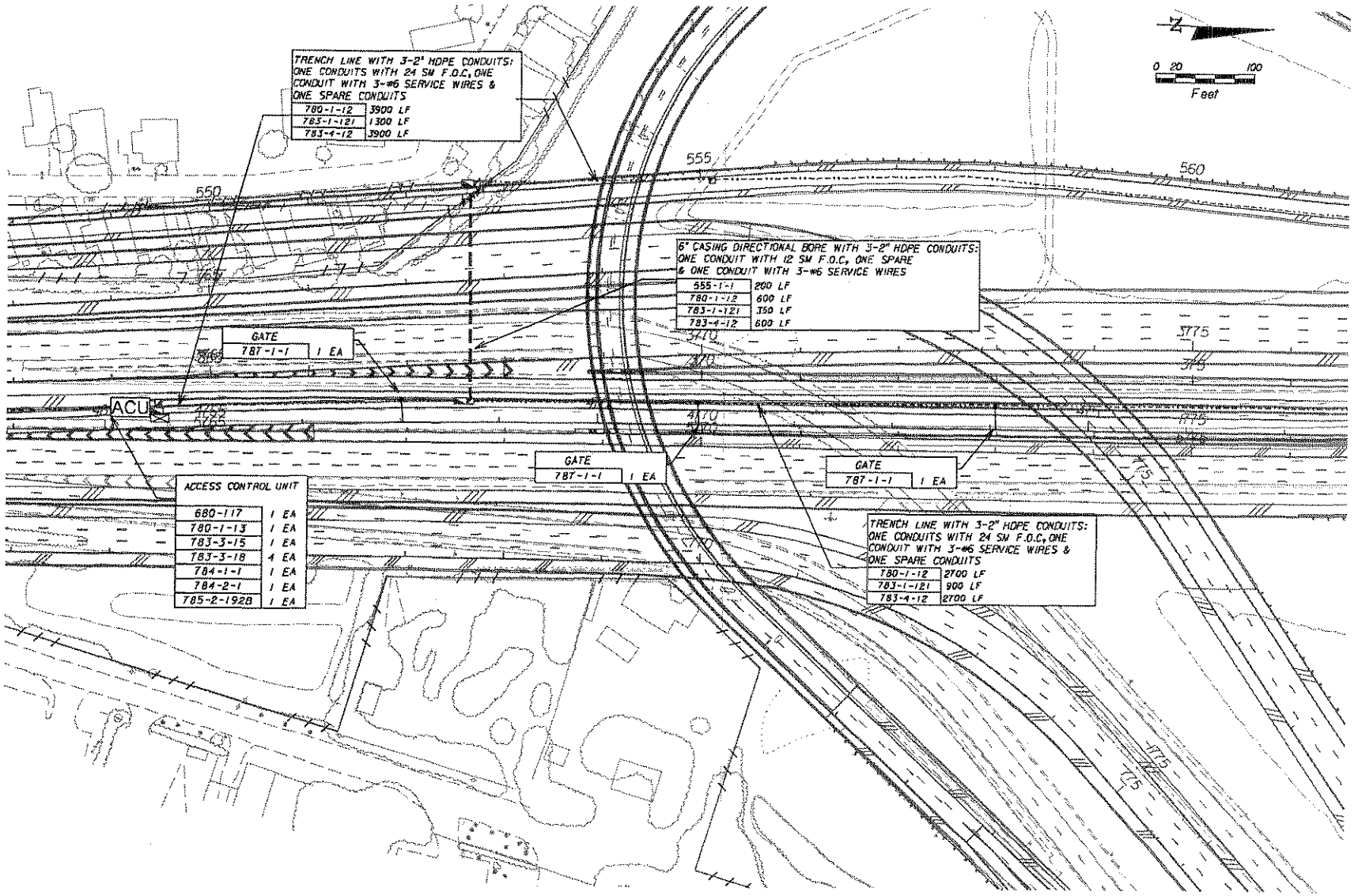
STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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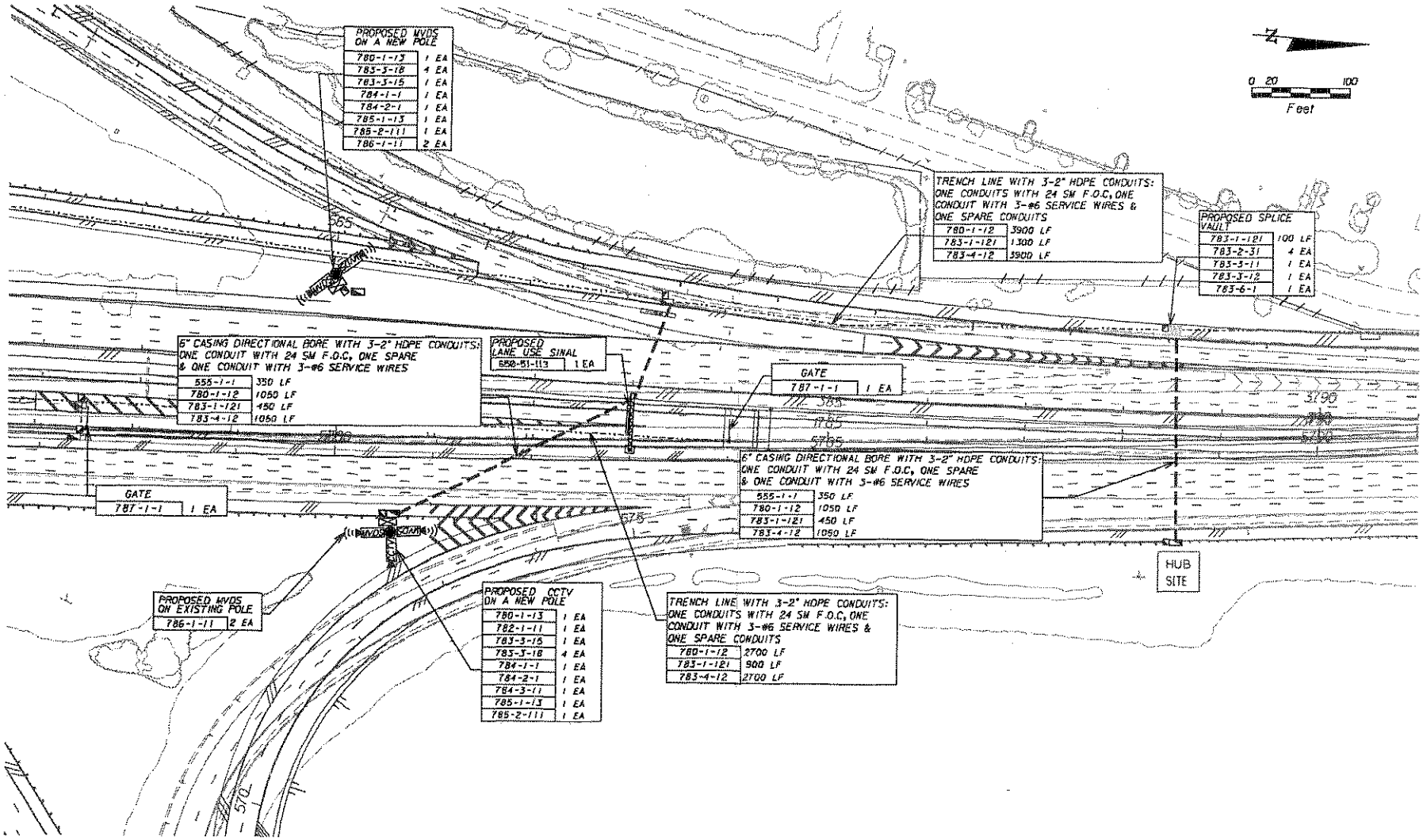
STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO.
IT-55

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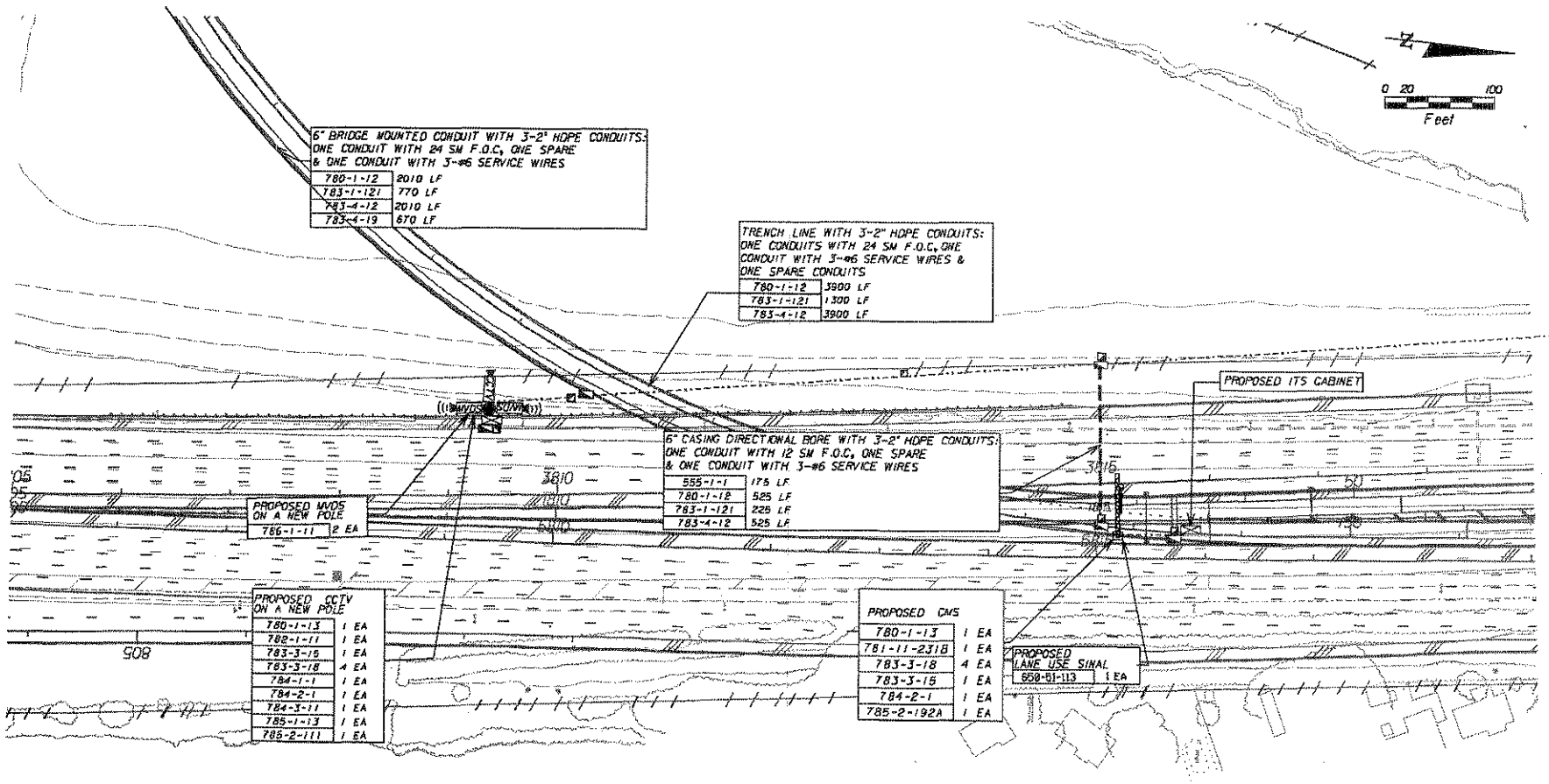
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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

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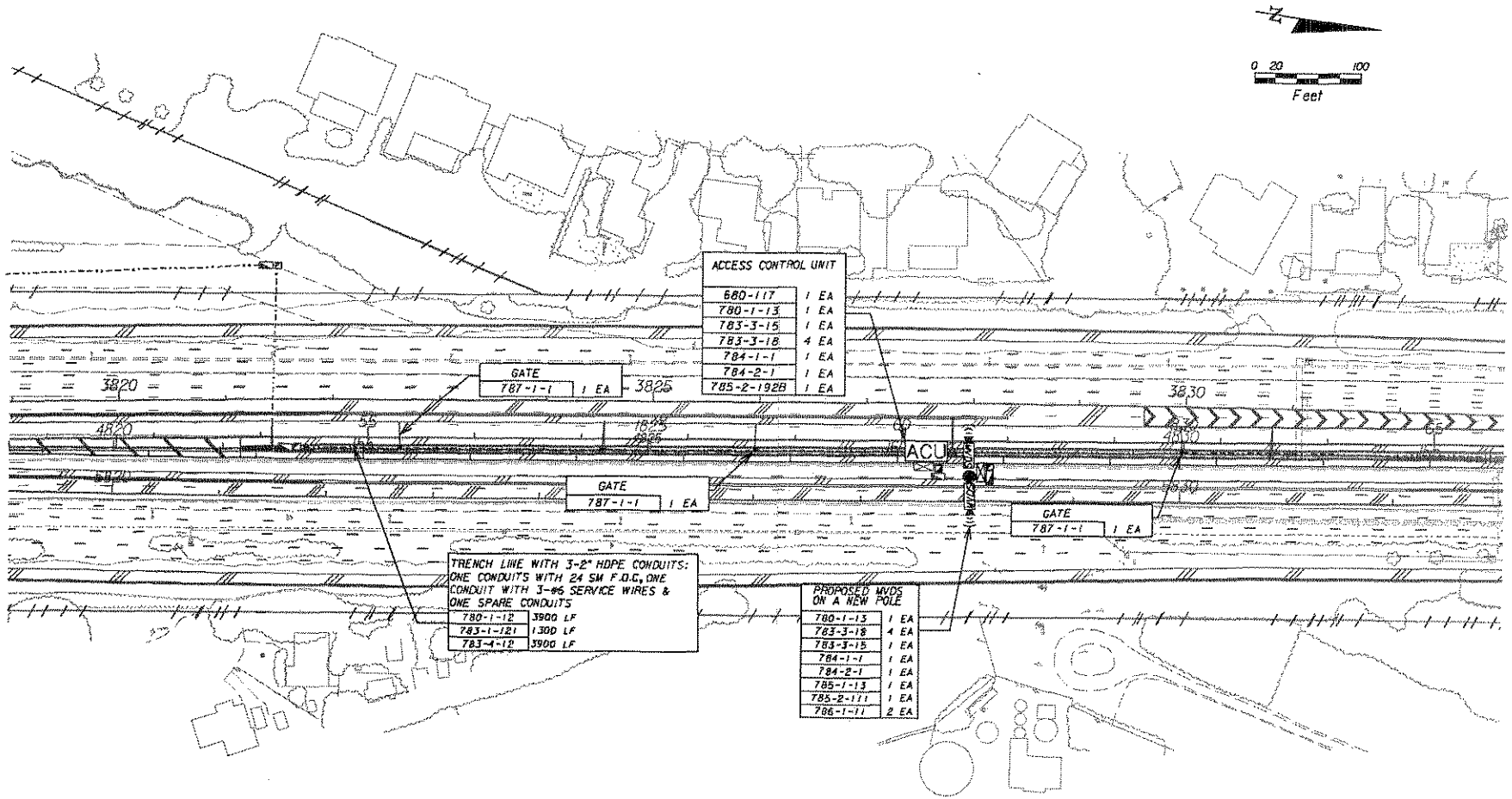
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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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PRELIMINARY CORRIDOR MASTER PLAN
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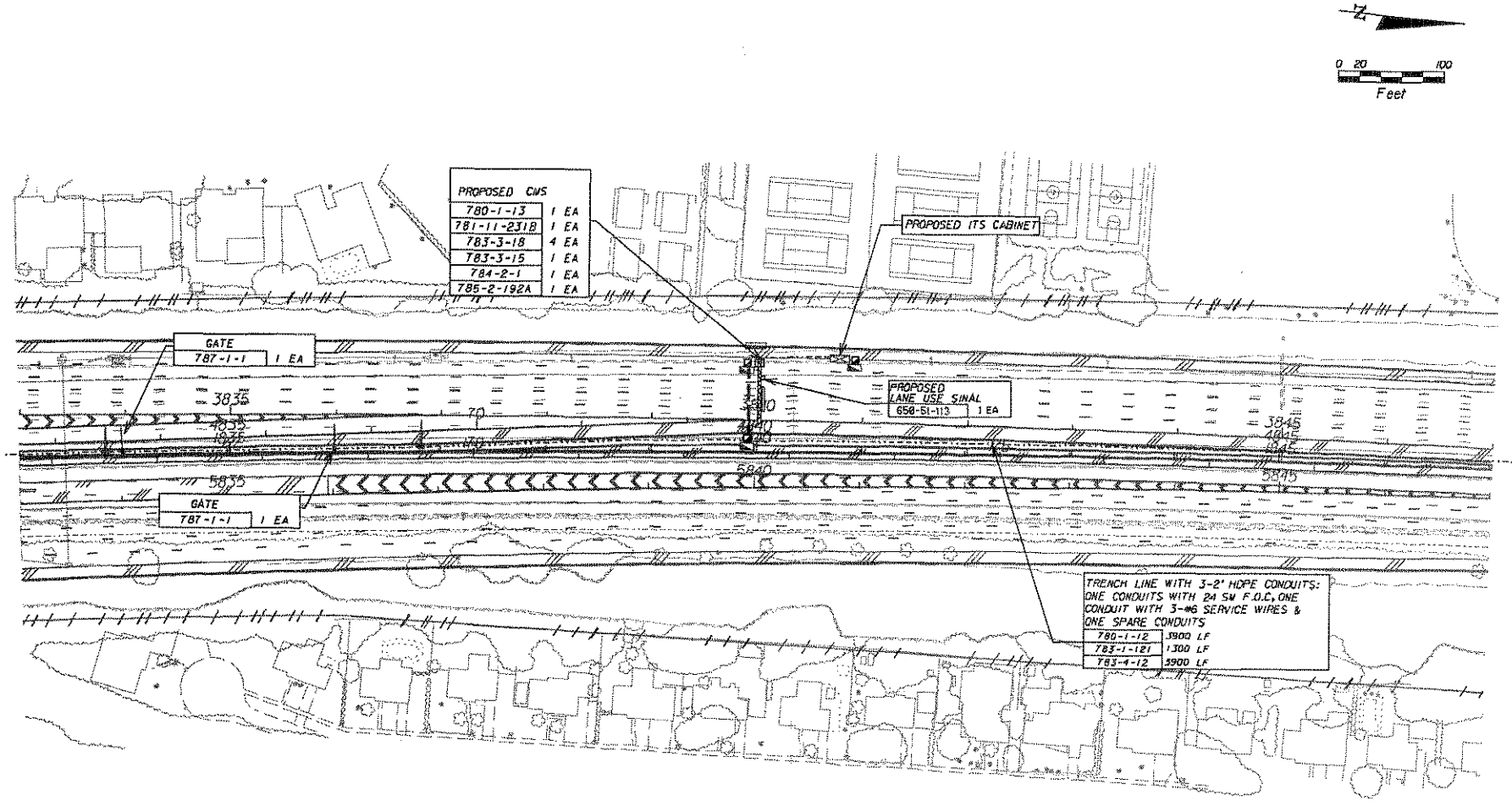
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SR 862	BROWARD	420809-3-52-01

ITS PLAN

SHEET NO.
IT-58

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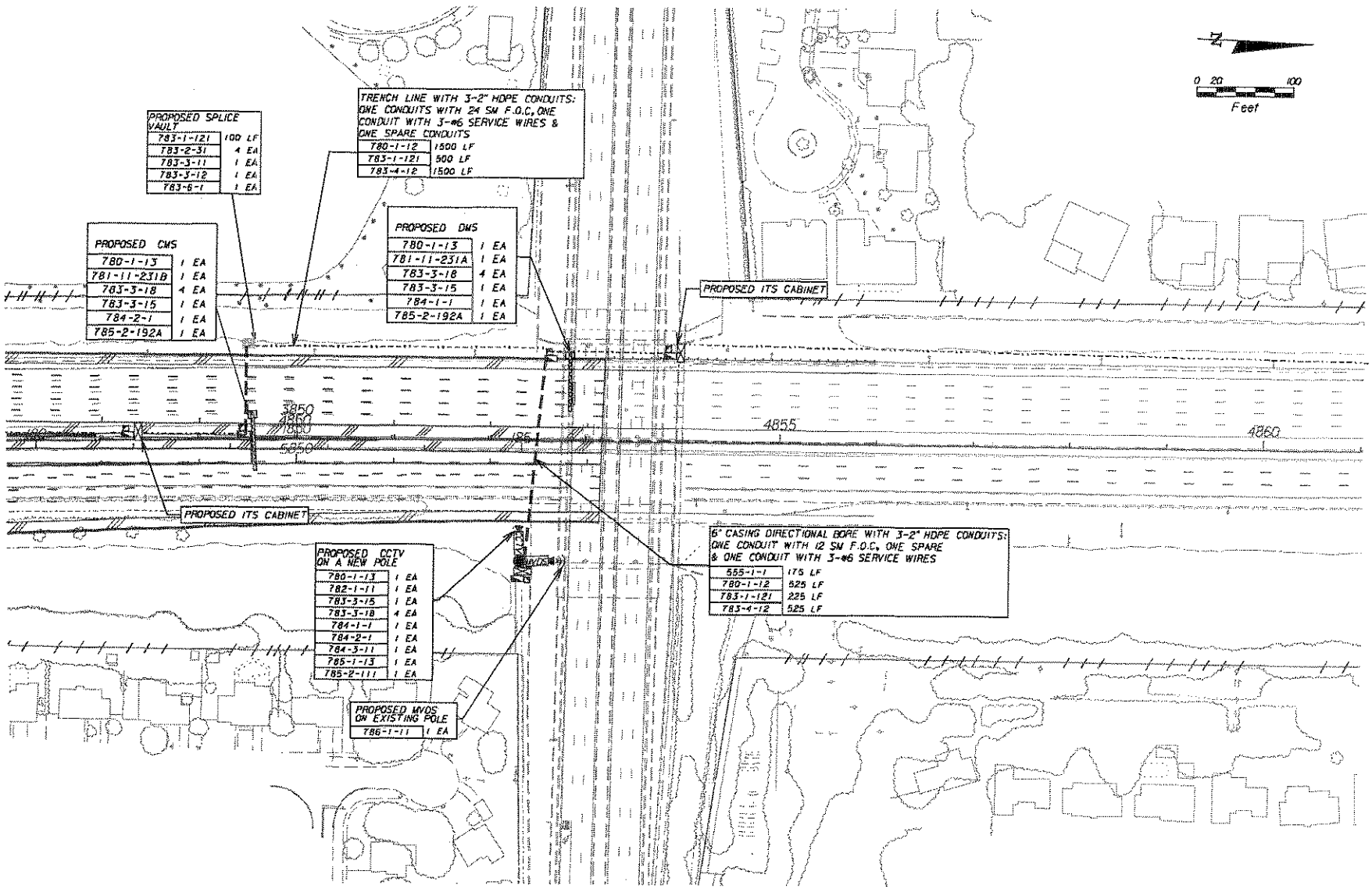
STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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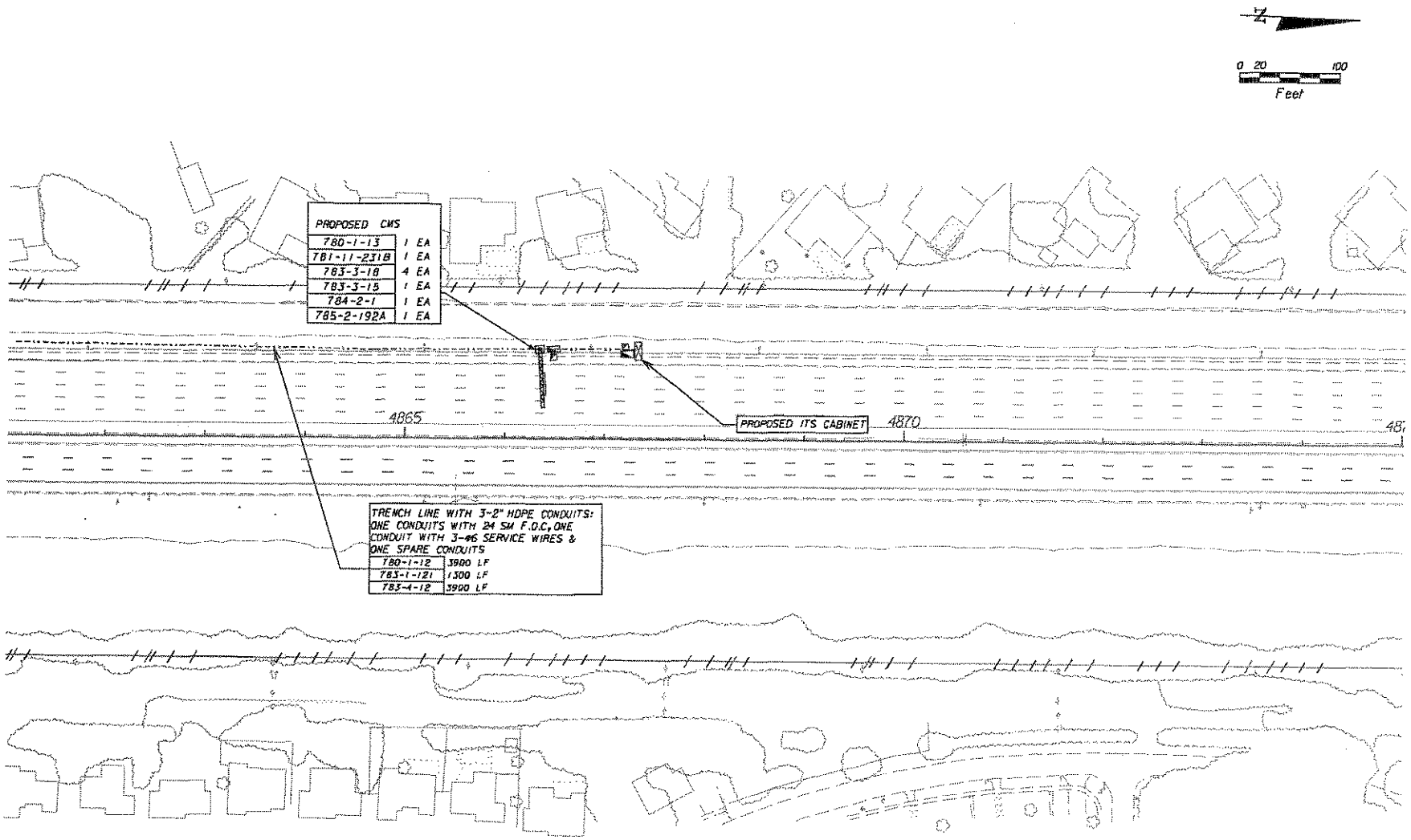
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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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IT-60



PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2006

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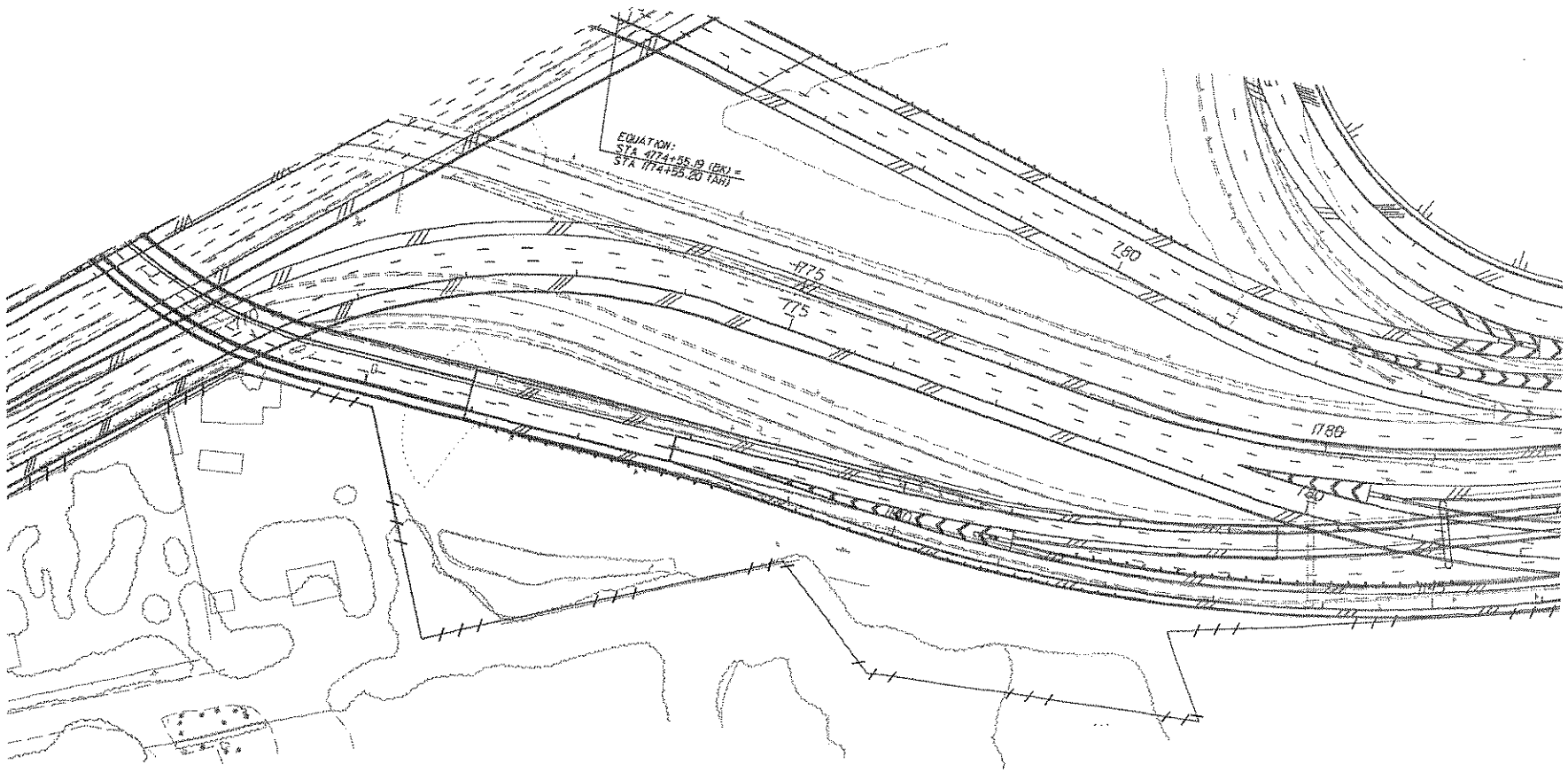
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

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06 SEPTEMBER 2006

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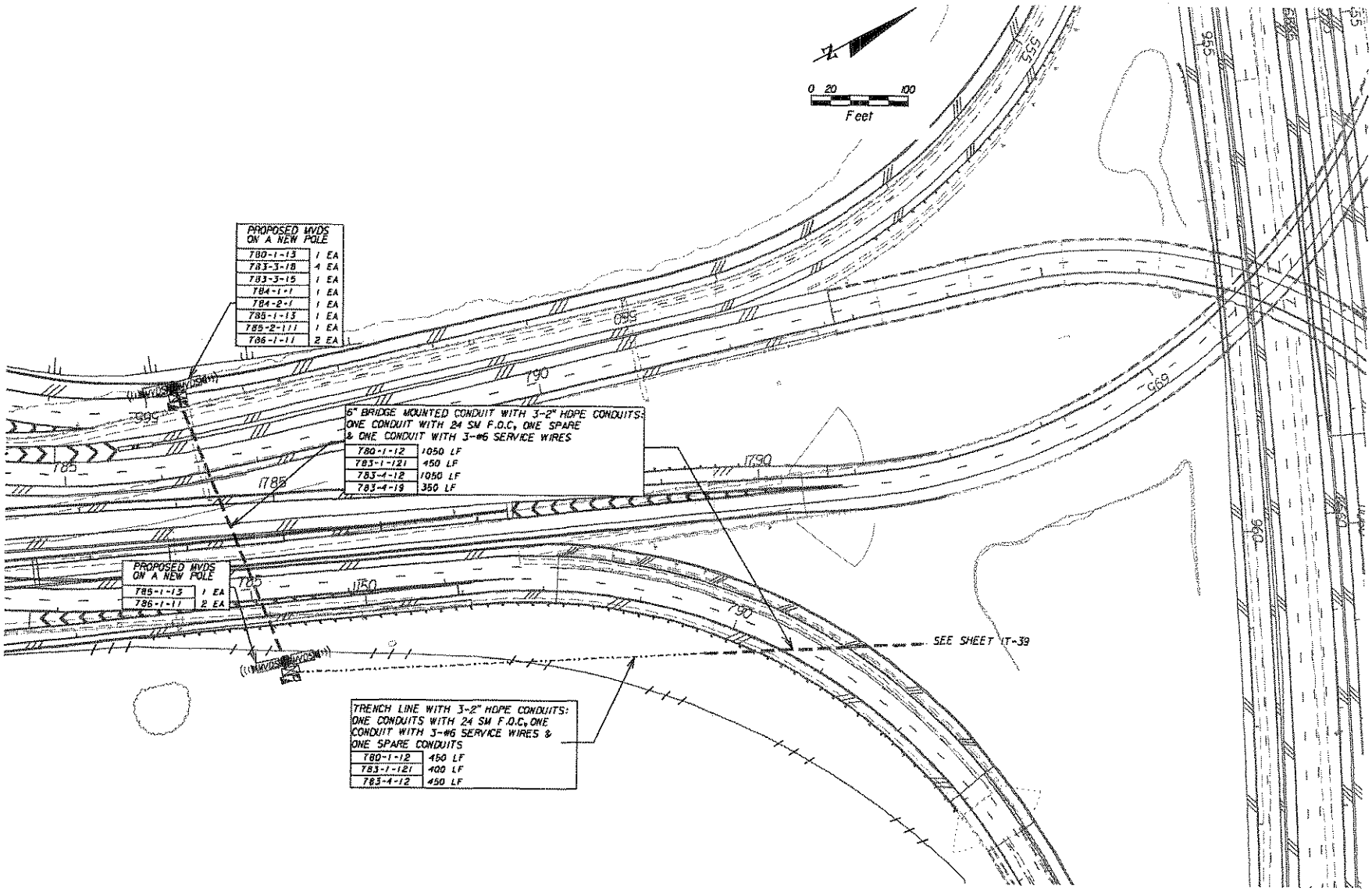
STATE OF FLORIDA
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ITS PLAN

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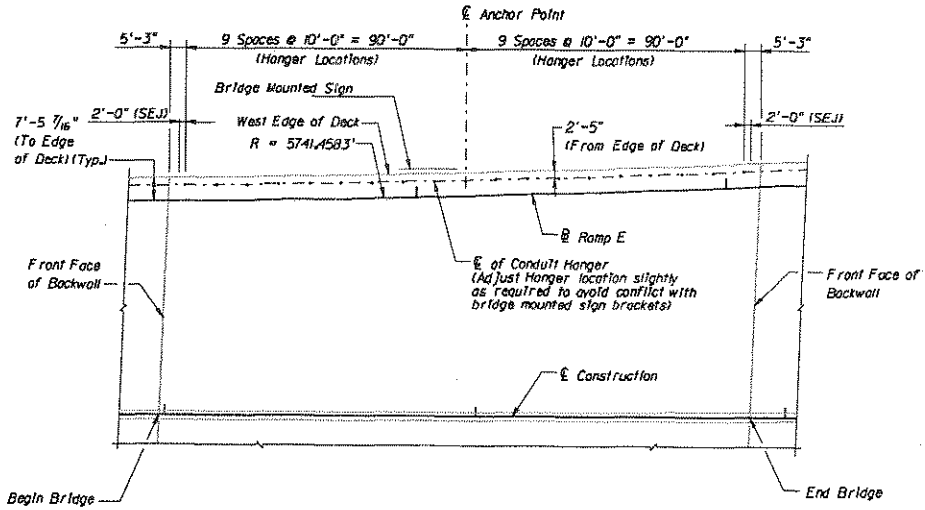
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ITS PLAN

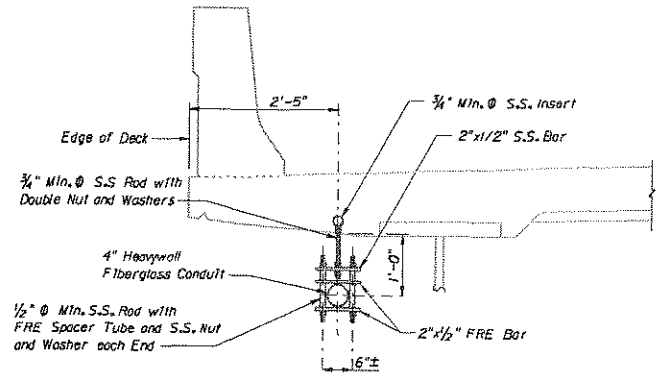
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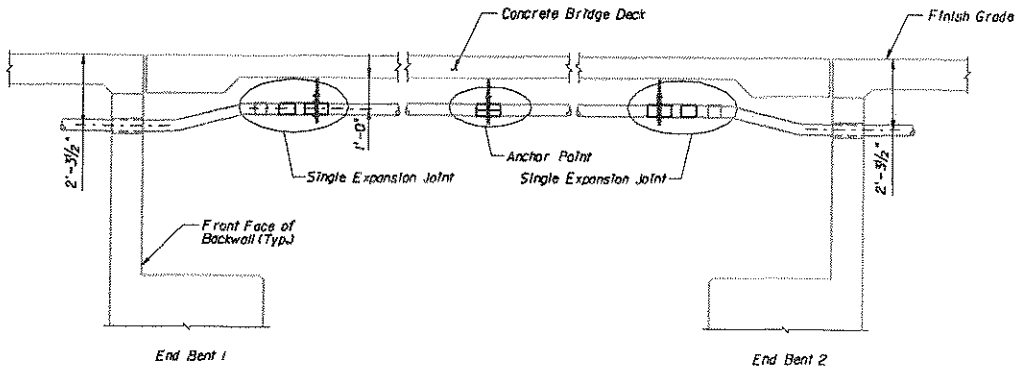


CONDUIT SUPPORT LAYOUT

(See Bridge Mounted Sign Details for location of sign supports)



CONDUIT HANGER DETAIL



SCHEMATIC CONDUIT ELEVATION

Conduit Notes:

1. Fiberglass Conduit and Fittings to be Fiber Reinforced Epoxy (FRE).
2. Cementing of Conduits shall be in Accordance with Manufacturers Instructions. When Joining Conduits and Fittings, Avoid the use of Excessive Epoxy Adhesive which can Build up, and when Hardened Reduces the Internal Diameter.
3. Select Conduit Lengths so that Couplings will not Coincide with Hanger Locations.
4. Cement Split Stop Rings on Conduit and Butt to both Sides of Hanger at Anchor Point.
5. Furnish and Install Approved Conduits and Fittings in Accordance with the Specifications, this Drawing, the National Electric Code (NEC) and as Directed by the Engineer.

PRELIMINARY CORRIDOR MASTER PLAN
06 SEPTEMBER 2006

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

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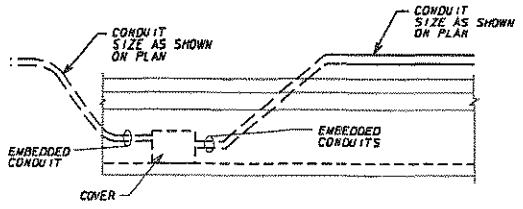
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SR 862	BROWARD	420809-3-52-01

ITS CONDUIT DETAILS

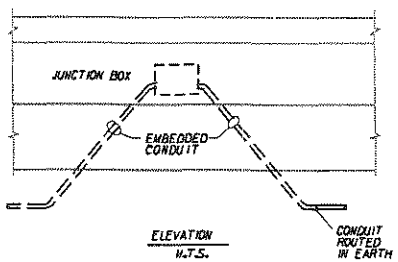
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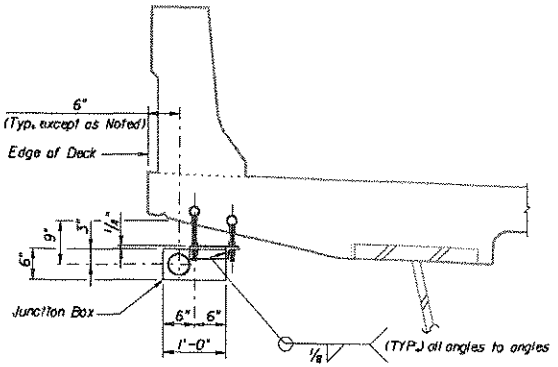
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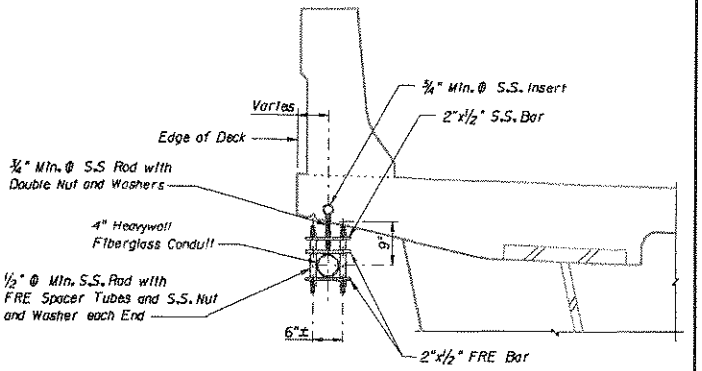
PLAN



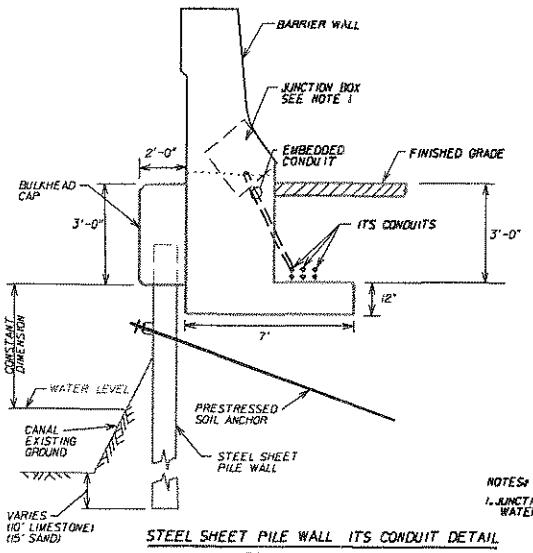
ELEVATION
N.T.S.



JUNCTION BOX DETAIL

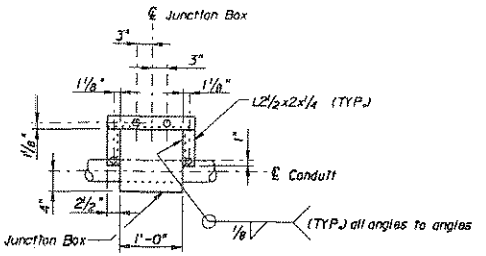


CONDUIT HANGER DETAIL



STEEL SHEET PILE WALL ITS CONDUIT DETAIL
N.T.S.

NOTES:
1. JUNCTION BOX TO BE FLUSH MOUNTED, WATERPROOF W/S.S. SCREWS COVER.



JUNCTION BOX PLAN VIEW

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2006

PRELIMINARY CONCEPTS
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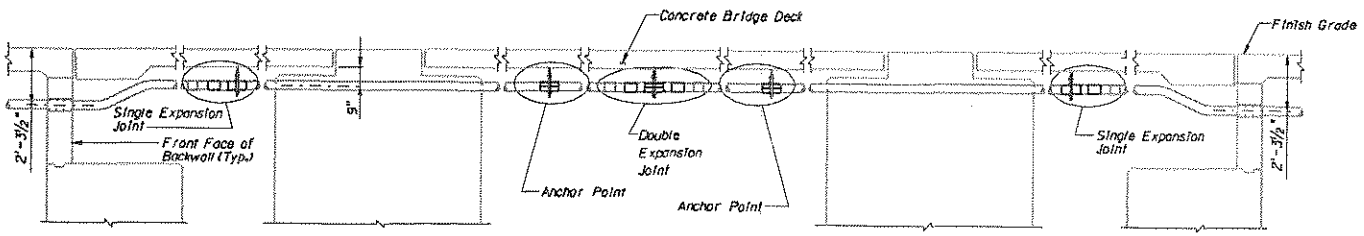
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID.
SR 862	BROWARD	420809-3-52-01

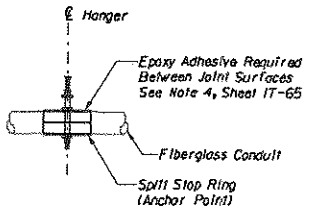
ITS CONDUIT DETAILS

SHEET NO. IT-65

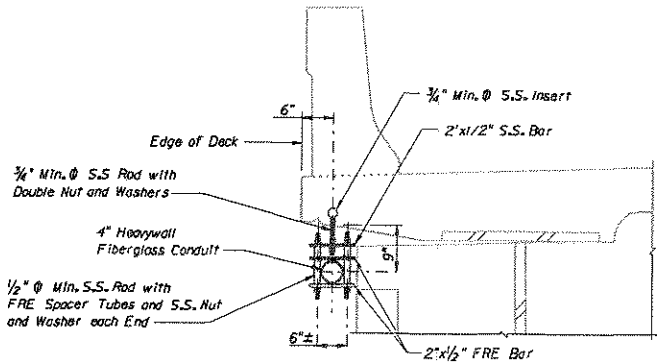
SEJ = Single Expansion Joint



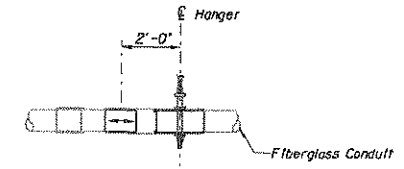
SCHEMATIC CONDUIT ELEVATION



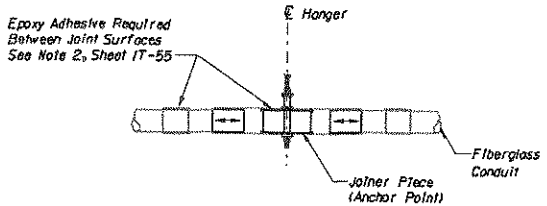
ANCHOR POINT DETAIL



CONDUIT HANGER DETAIL



SINGLE EXPANSION JOINT DETAIL



DOUBLE EXPANSION JOINT DETAIL (DEJ)

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

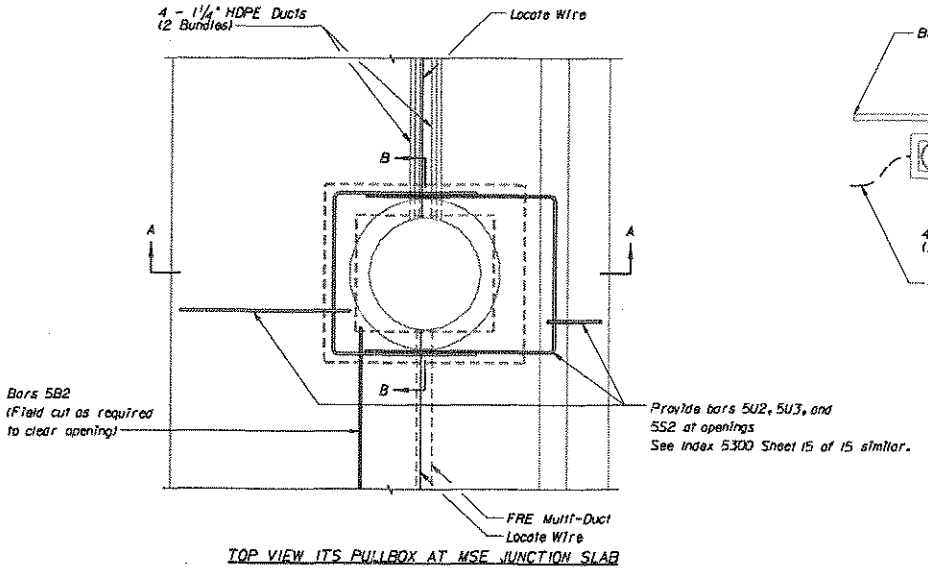
ITS CONDUIT DETAILS

SHEET NO. IT-66

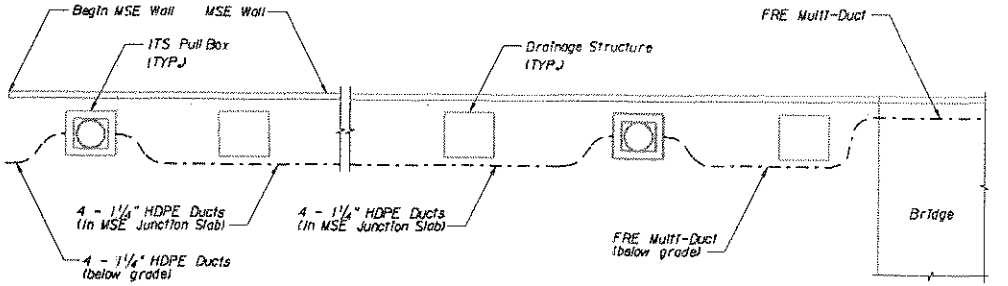
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PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

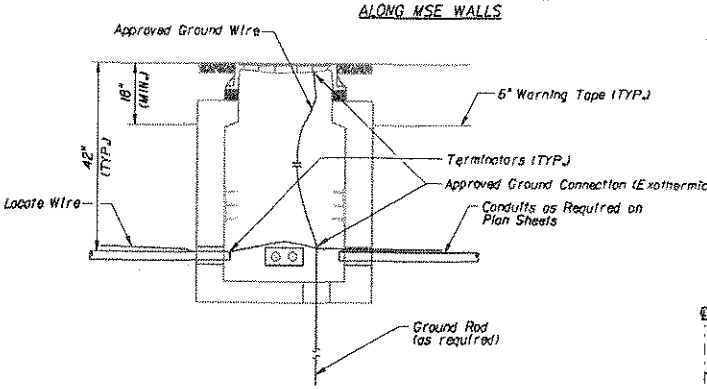
PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION



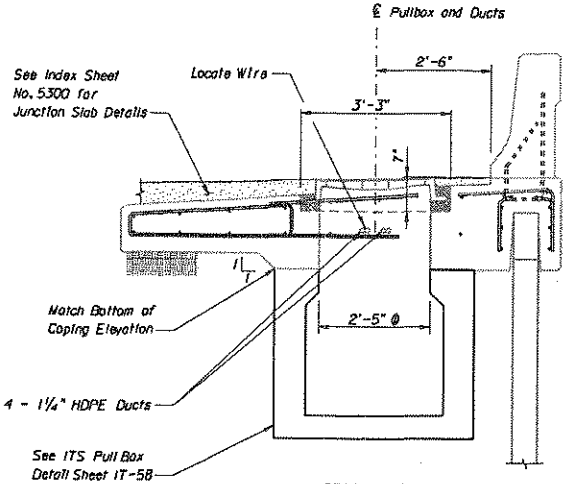
TOP VIEW ITS PULLBOX AT MSE JUNCTION SLAB



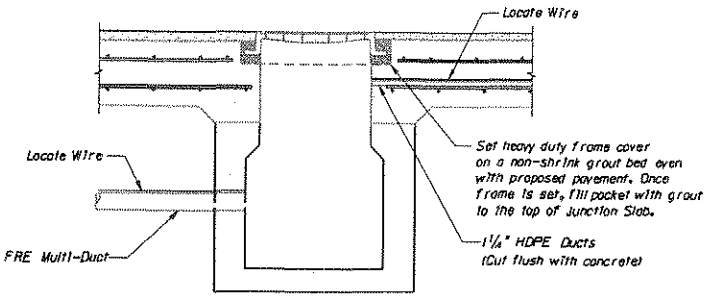
TYPICAL ITS CONDUIT INSTALLATION
ALONG MSE WALLS



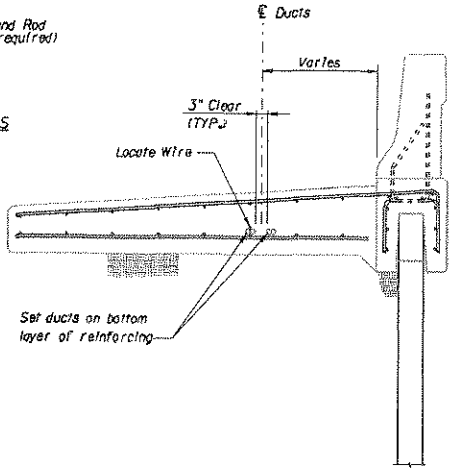
TYPICAL CONDUIT INSTALLATION
ITS PULL BOXES AND SPLICE BOXES



SECTION A-A



SECTION B-B



TYPICAL SECTION
1¼" HDPE DUCTS IN JUNCTION SLAB

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

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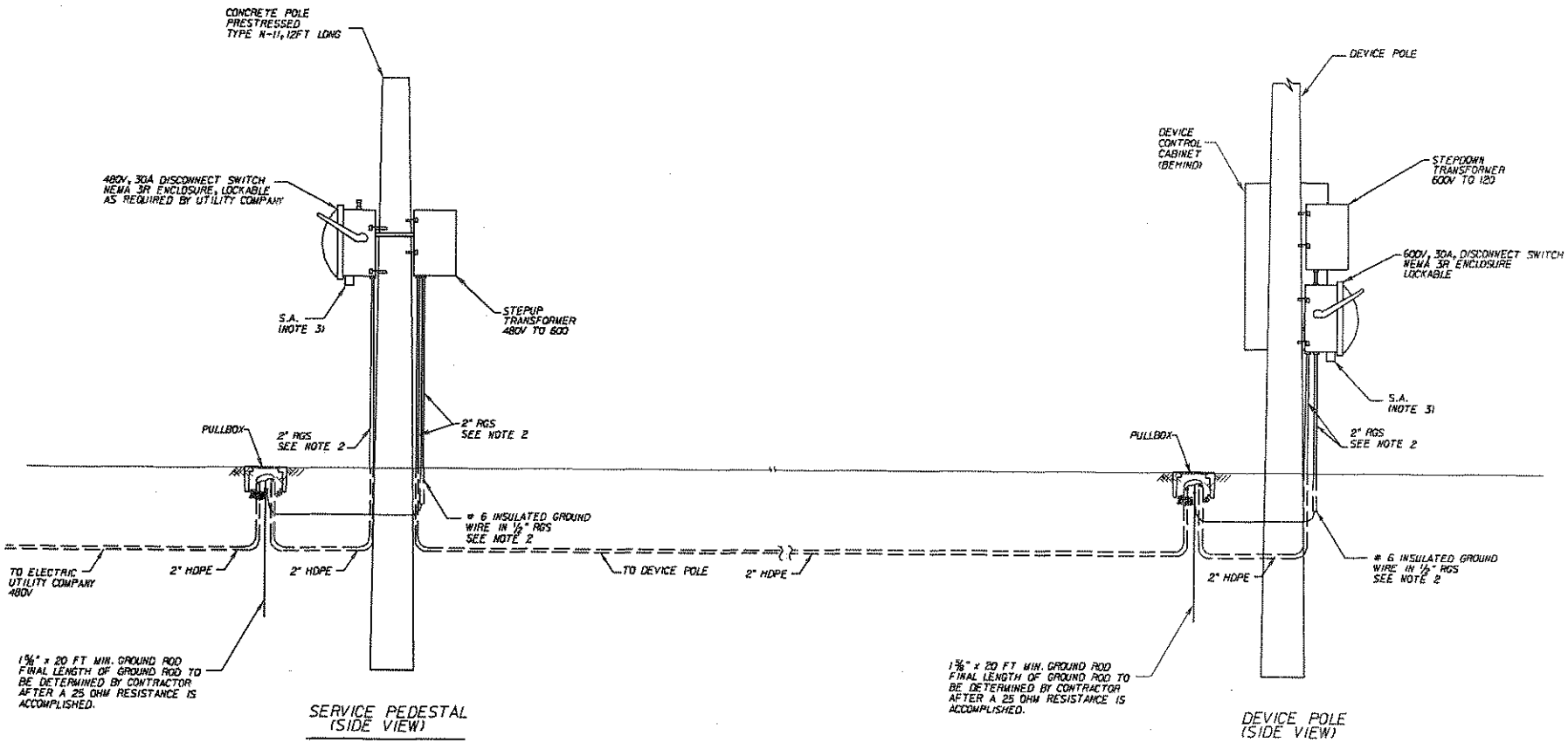
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DEPARTMENT OF TRANSPORTATION

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SR 862	BROWARD	420809-3-52-01

ITS CONDUIT DETAILS

SHEET NO. IT-67



NOTES:

1. COORDINATE WITH ELECTRIC UTILITY COMPANY FOR THE INSTALLATION OF THE ELECTRIC SERVICE. SEE PLANS FOR LOCATION OF ELECTRIC UTILITY FACILITY.
2. RIGID METAL CONDUIT SIZE PER NEC ARTICLE 344.
3. INSTALL SURGE ARRESTER PER NEC ARTICLE 280.
4. ALL WIRES IN CONDUIT SHALL CARRY THE GROUND CONDUCTOR INSIDE THE CONDUIT.
5. USE HEAVY DUTY FUSIBLE SAFTY SWITCH.
6. EQUIPMENT ARRANGEMENT MAY VARY.

REVISIONS				
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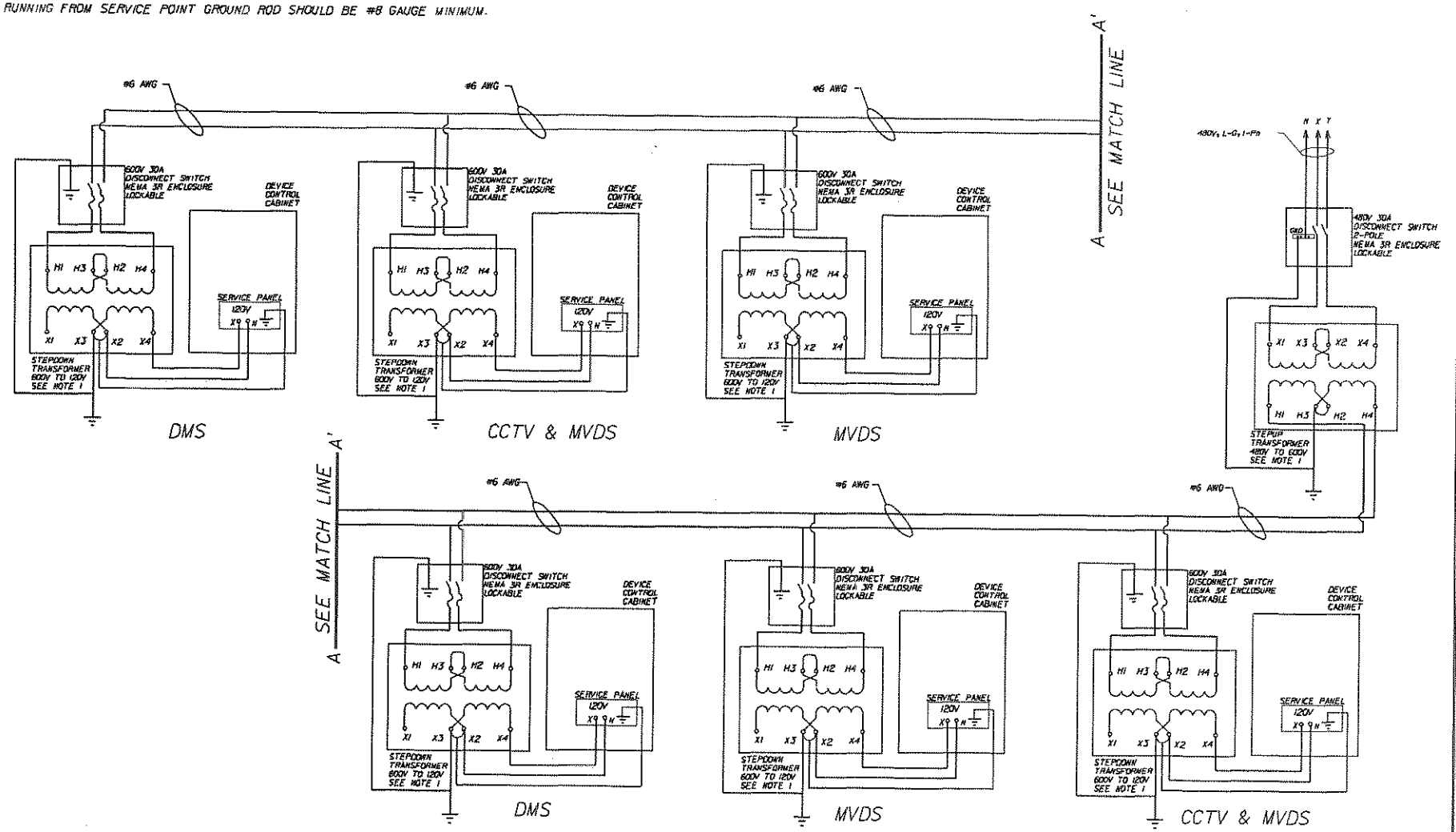
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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POWER SERVICE ELECTRICAL DETAIL

SHEET NO. IT-68

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

NOTE:
1. WIRE RUNNING FROM SERVICE POINT GROUND ROD SHOULD BE #8 GAUGE MINIMUM.



SERVICE POINT @ WEST OF HIATUS ROAD
SEE SHEET NO. IT-17

WIRING SCHEMATICS
N.T.S.

REVISIONS					
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

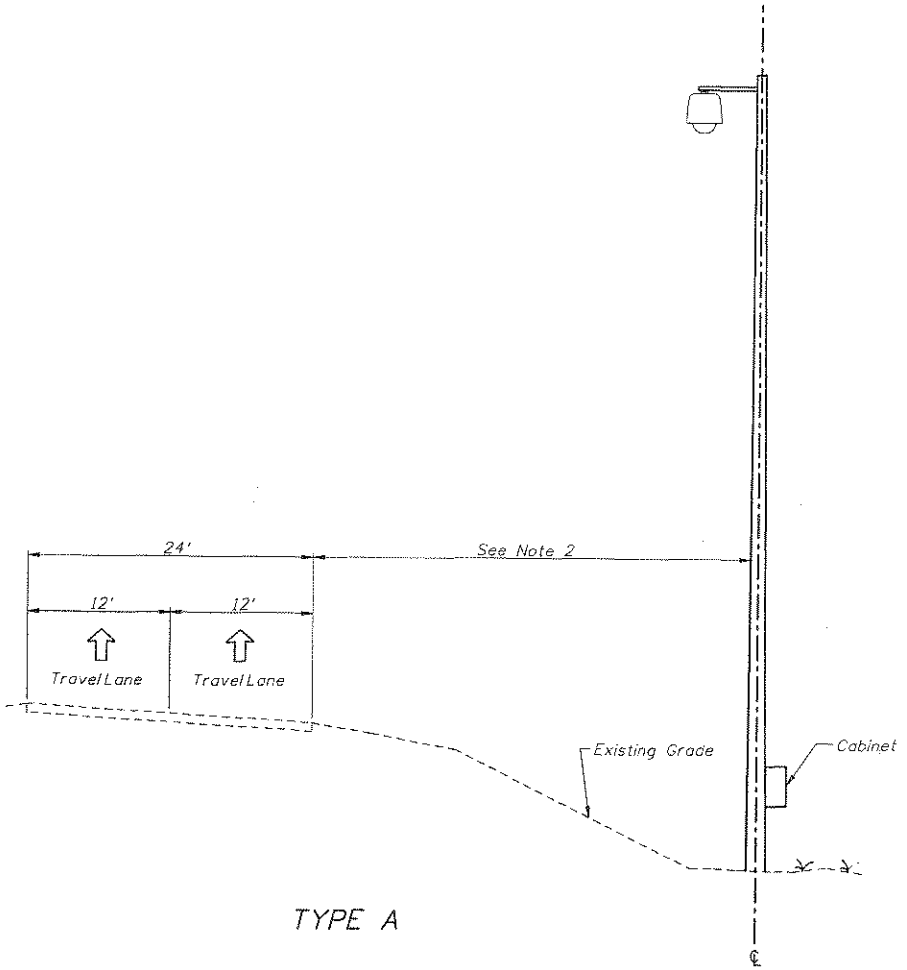
POWER SERVICE ELECTRICAL DETAIL

SHEET NO. IT-69

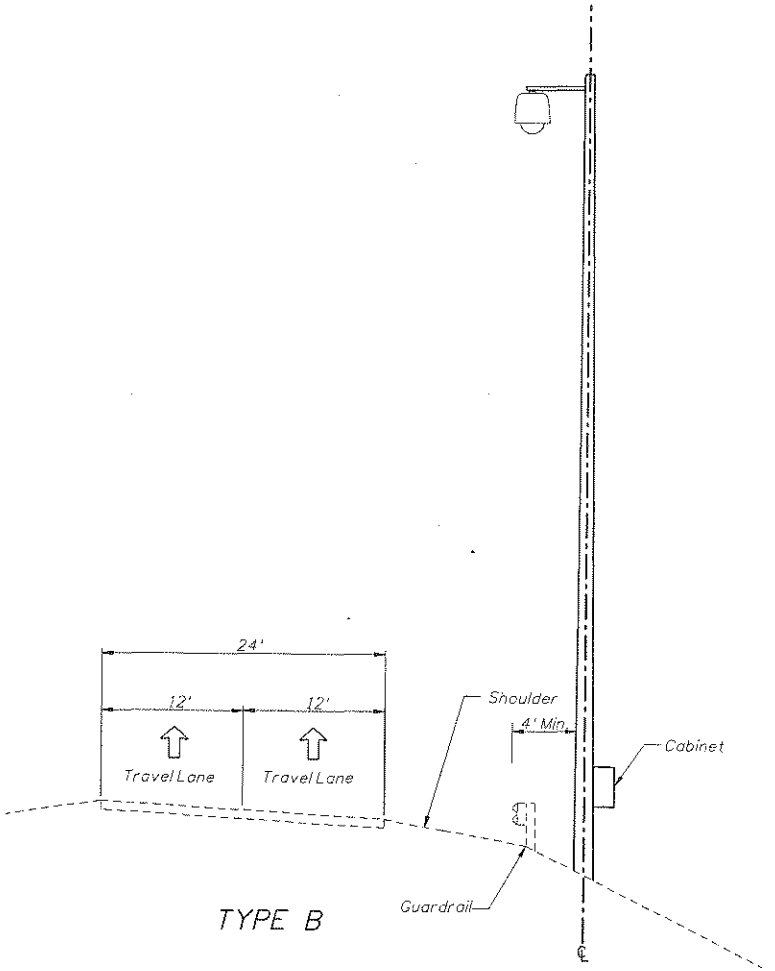
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PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2006



TYPE A



TYPE B

GENERAL NOTES:

1. For location where pole foundation is lower than roadway, mount CCTV cabinet on pole. Clear zone shall be measured to the edge of drilled shaft if drilled shaft is more than 4" above adjacent grade.

2. Distance must be in accordance with project design documents and greater than or equal to minimum clear zone requirements.

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CCTV POLE PLACEMENT	07/01/07	1 of 1
	Index No.	18100

GENERAL NOTES:

1. Design Criteria: Poles shall be designed in accordance with the 2001 AASHTO Standard Specifications For Structural Supports For Highway Signs, Luminaires And Traffic Signals.

   The structure shall not exceed 1" deflection in a 30 mph (nongust) wind.

   All footings and foundation designs shall be based on site soil boring data, and submitted to the Engineer for review and approval. All designs, drawings, and calculations submitted must be signed and sealed by a Professional Engineer licensed in the State of Florida.

2. Pole Shaft: The pole shaft shall be round or 16 sided with a 4" corner radius, have a constant linear taper of 0.14 in./ft. and contain only one longitudinal seam weld for the poles. Circumferential welded tube butt splices and laminated tubes are not permitted. Longitudinal seam welds within 6" of complete penetration pole to base plate welds shall be complete penetration welds.

3. Handholes: See Detail 1.

4. Cable Supports: Electrical Cable Guides and Eyebolts: Top and bottom electrical cable guides shall be located within the pole aligned with each other. One cable guide shall be positioned 2" below the handhole and the other shall be positioned 1" directly below the top of the tenon. An eyebolt shall be positioned 2¾" below the top of the handhole.

5. CCTV Structure shall be as follows:

Poles	-> ASTM A595 Grade A
Steel Plates & Pole Cap	-> ASTM A709 Grade 36
Weld Metal	-> E70XX
Bolts (Except Anchor Bolts)	-> ASTM A325, Type 1
Anchor Bolts	-> ASTM F1554 Grade 55 (6 Min.)
Nuts For Anchor Bolts	-> ASTM A563 Grade A Heavy Hex
Washers For Anchor Bolts	-> ASTM F436 Type 1
Handhole Frame	-> ASTM A709 Grade 36
Handhole Cover	-> ASTM A607 Grade 50, 55, or 60
Stainless Steel Screws	-> ANSI Type 316

6. All Nuts, Bolts and Washers -> ASTM A153 Class C or D Depending on Size
   All Other Steel Items -> ASTM A123

7. Reinforcing steel shall be ASTM A615-96, Grade 60.

8. Concrete foundations shall be Class IV (drilled shaft) with a minimum 28-day compressive strength of 4 ksi for all environmental classifications.

9. Grout shall have a minimum 28-day compressive strength of 5 ksi and shall meet the requirements of Section 934 of the Standard Specifications. Grout after pole is set and properly plumbed. Grout pad is optional.

10. All welding shall conform to American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (Current Edition).

11. Shop drawings must be submitted to the Engineer for review and approval. Fabrication shall not begin until shop drawings are approved.

12. The foundation for the CCTV structure shall be constructed in accordance with Section 455 of the Specifications. Payment for the foundation and any other incidental items to furnish and install a complete CCTV structure shall be included in the pay item for the complete CCTV structure.

13. Except for anchor bolts, all bolt hole diameters shall be equal to the bolt diameter plus 1/16", prior to galvanizing. Hole diameters for anchor bolts shall not exceed the bolt diameter plus ½".

14. When the structure is fully loaded it shall be plumb.

15. The structure shall not be erected until the foundation concrete has been allowed to cure for a minimum of seven days.

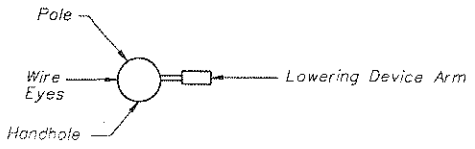
LOWERING DEVICE NOTES:

1. Pole Top Tenon: A tenon shall be bolted to the pole top with mounting holes and slot as required for the mounting of the lowering device. The tenon shall be of dimensions necessary to facilitate lowering device component installation. Each slot shall be parallel to the pole centerline for mounting the lowering device.

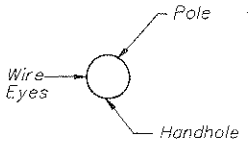
2. All cables shall be secured in a manner that prevents them from interfering with or being damaged by the lowering cable that moves within the pole.

3. Lowering arm shall be mounted perpendicular to the roadway or as directed by the Engineer. The CCTV pole shall be positioned so that the camera can be safely lowered without requiring lane closures.

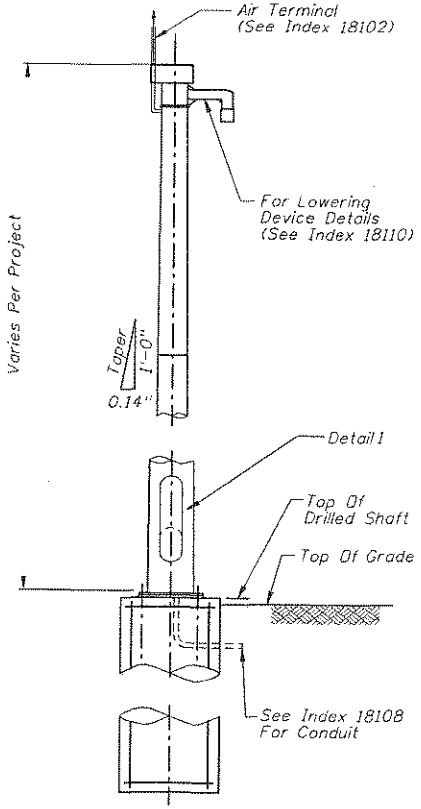
4. Pole shall include lowering device which includes top J-box, mounting hardware, lowering cable, contact block, waterproof electrical connectors, camera J-box, housing and steel pole.



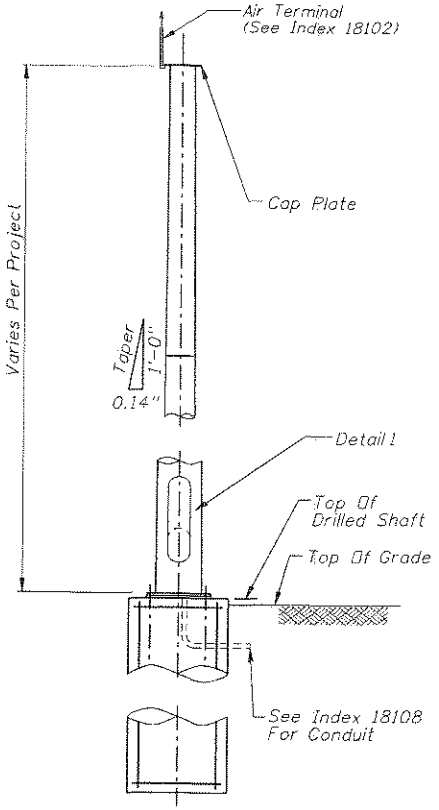
ORIENTATION VIEW



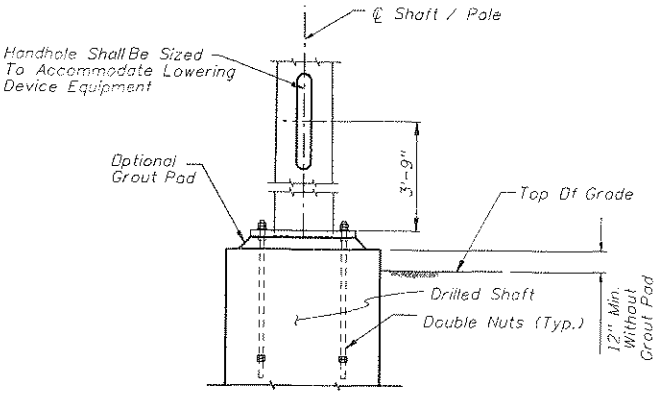
ORIENTATION VIEW



WITH LOWERING DEVICE ELEVATION



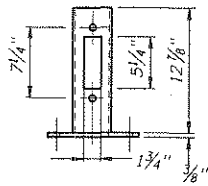
WITHOUT LOWERING DEVICE ELEVATION



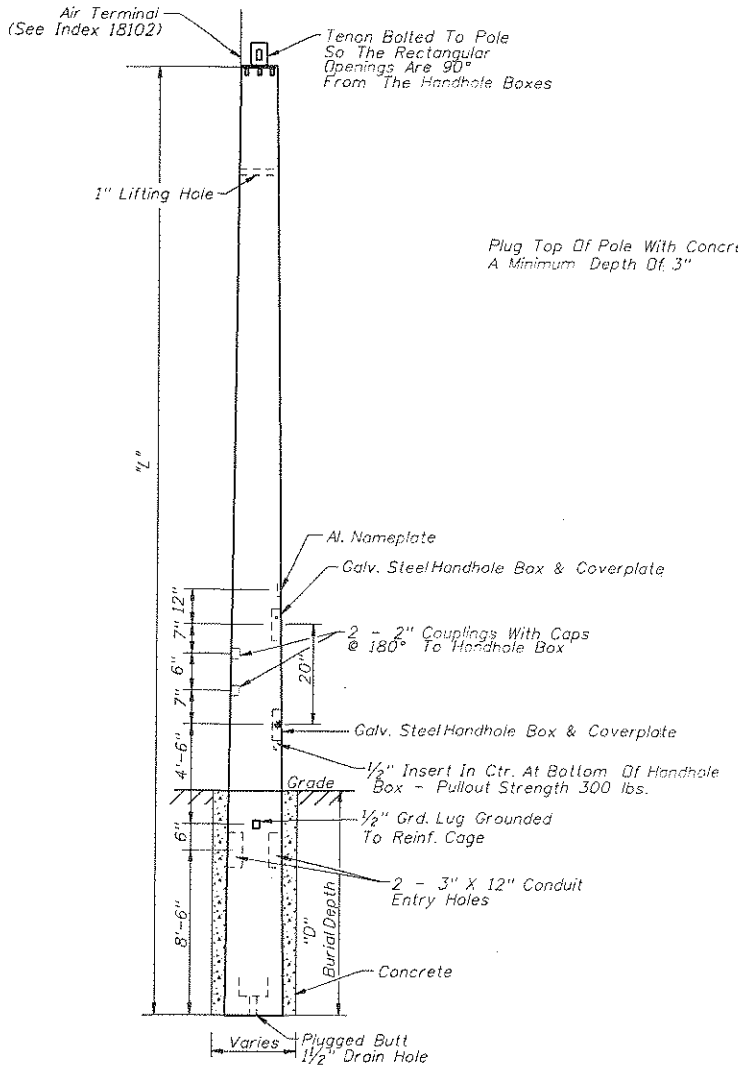
DETAIL 1

Not To Scale

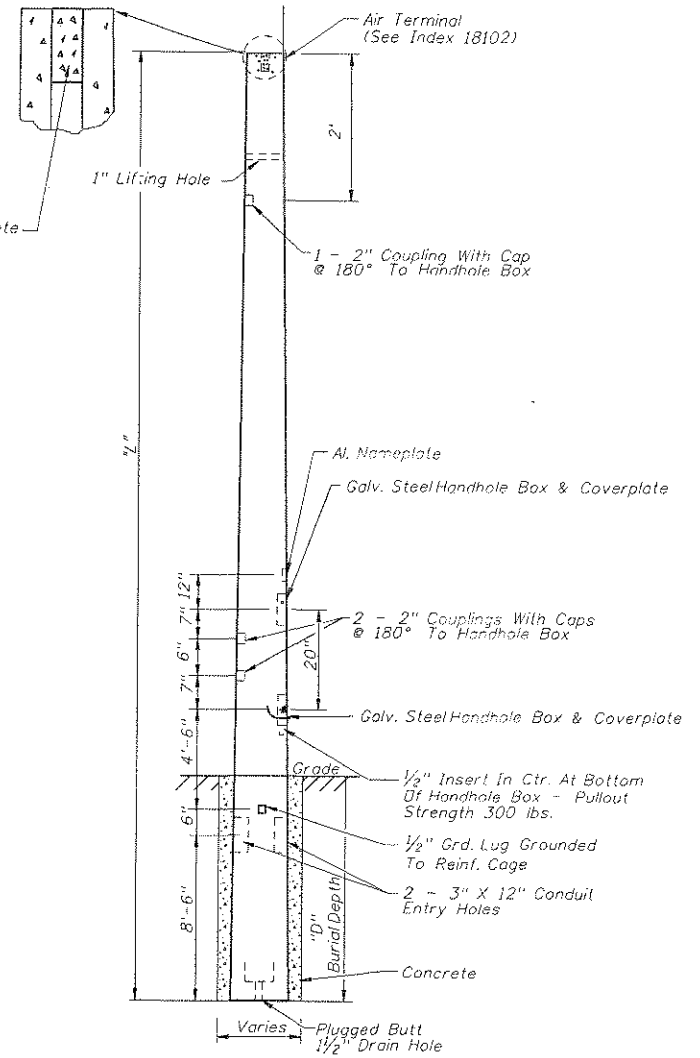
	2008 FDOT Design Standards	Last Revision 07/01/07	Sheet No. 2 of 2
	STEEL CCTV POLE	Index No. 18111	



TENON DETAIL



WITH LOWERING DEVICE



WITHOUT LOWERING DEVICE

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2008 FDOT Design Standards

CONCRETE CCTV POLE

Last Revision	Sheet No.
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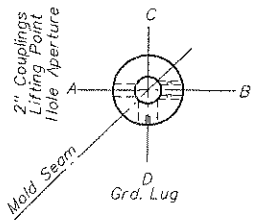
SPECIFICATIONS:

Pole Top:	8¼" Dia.
Pole Butt:	(0.18 X L) + 8 ¼"
Pole Taper:	0.18 in./ft.
Pole Length:	"L" See Chart
Pole Weight:	"W" See Chart
Defl Spec:	1" Max. In 30 mph (Nongust)
Max. Camera EPA:	5.60 Sq. Ft. Total
Max. Camera Wgt:	240 lbs. Total

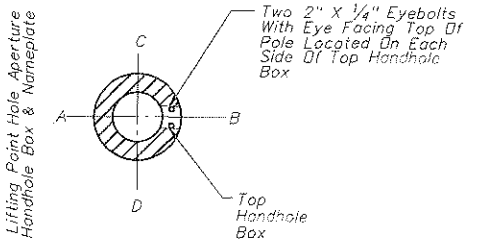
"L"	Pole Class	"W"
25'	G	2,016 lbs.
30'	G	2,571 lbs.
35'	G	3,179 lbs.
41'	G	3,978 lbs.
46'	G	4,691 lbs.
52'	G	5,630 lbs.
57'	G	6,444 lbs.
63'	G	7,494 lbs.
70'	G	8,750 lbs.
75'	G	9,739 lbs.
80'	J	11,000 lbs.
85'	J	12,113 lbs.
90'	J	13,278 lbs.

GENERAL NOTES:

1. All cables shall be run in conduit to prevent them from interfering with or being damaged by the lowering cable that moves within the pole.
2. Lowering arm shall be mounted perpendicular to the roadway or as directed by the Engineer. The CCTV pole shall be positioned so that the dome enclosure can be safely lowered without requiring lane closures.
3. Pole shall include lowering device which includes top J-box, mounting hardware, lowering cable, contact block, waterproof electrical connectors, camera J-box, housing and concrete pole.
4. Design Criteria: Designed in accordance with the 2001 AASHTO Standard Specifications For Structural Supports For Highway Signs, Luminaires and Traffic Signals.
5. The contractor shall submit shop drawings and capacity calculations for the design of proposed poles, signed and sealed by a Professional Engineer licensed in the State of Florida, to the Engineer for review and approval.
6. Burial depth "D" and concrete foundation by engineering design. All designs, drawings, and calculations submitted must be signed and sealed by a Professional Engineer licensed in the State of Florida.



TOP VIEW



SECTIONAL VIEW
THROUGH TOP
HAND HOLE BOX

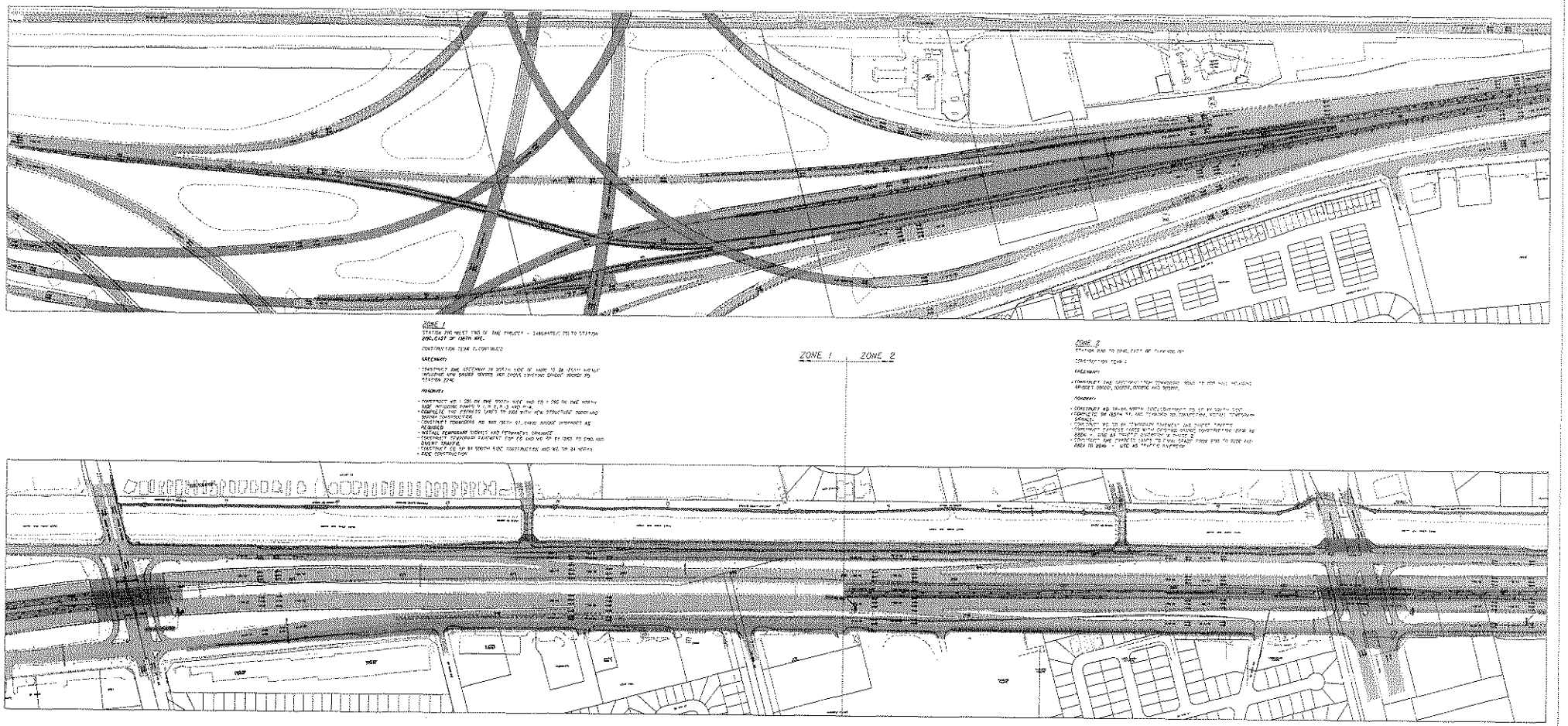
Not To Scale

2008 FDOT Design Standards

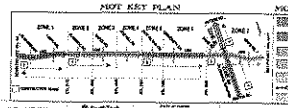
CONCRETE CCTV POLE

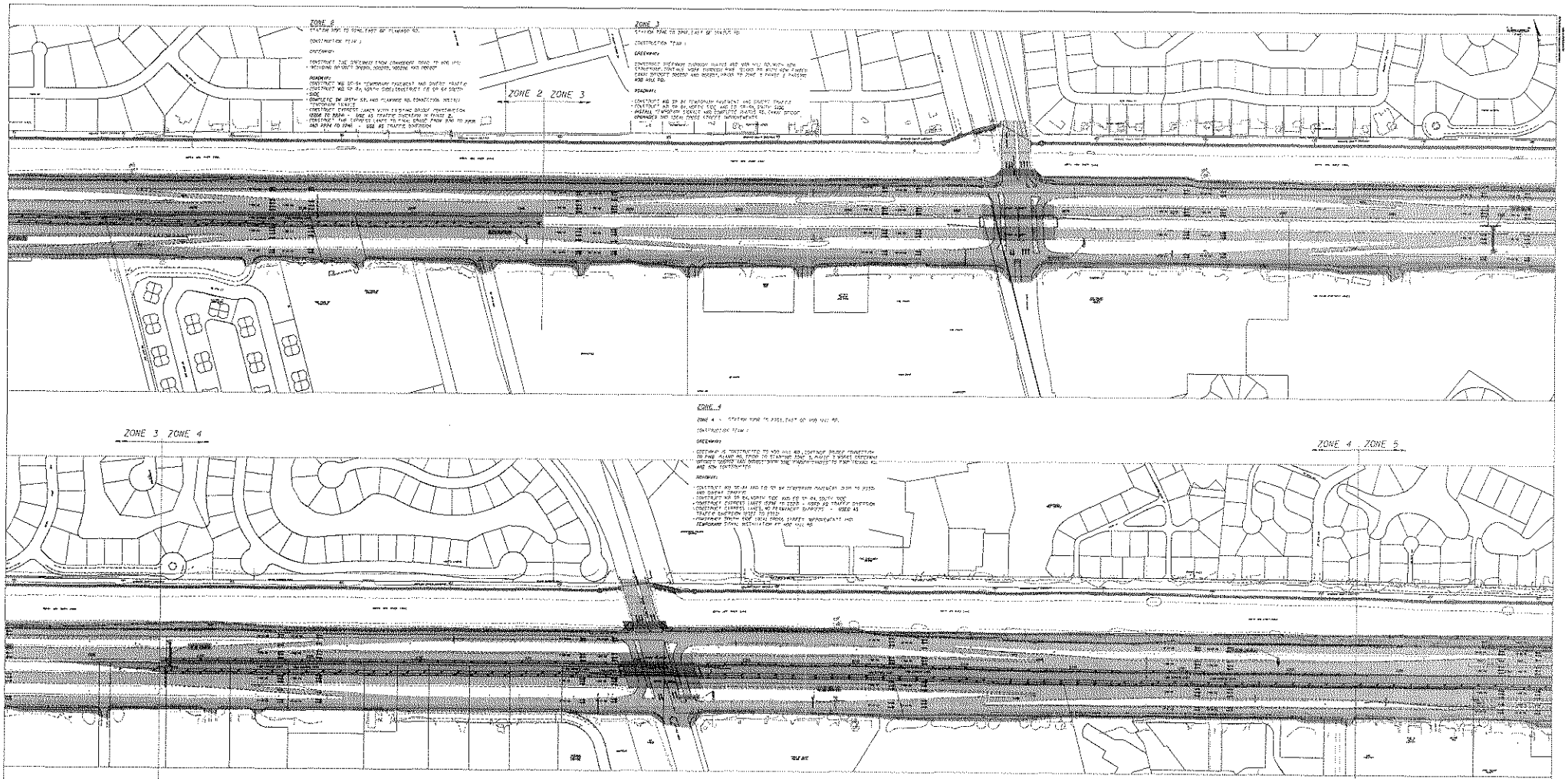
Last Revision	Sheet No.
07/01/07	2 of 2

Index No. 18113



ITMS
PHASE 1 - CONSTRUCTION



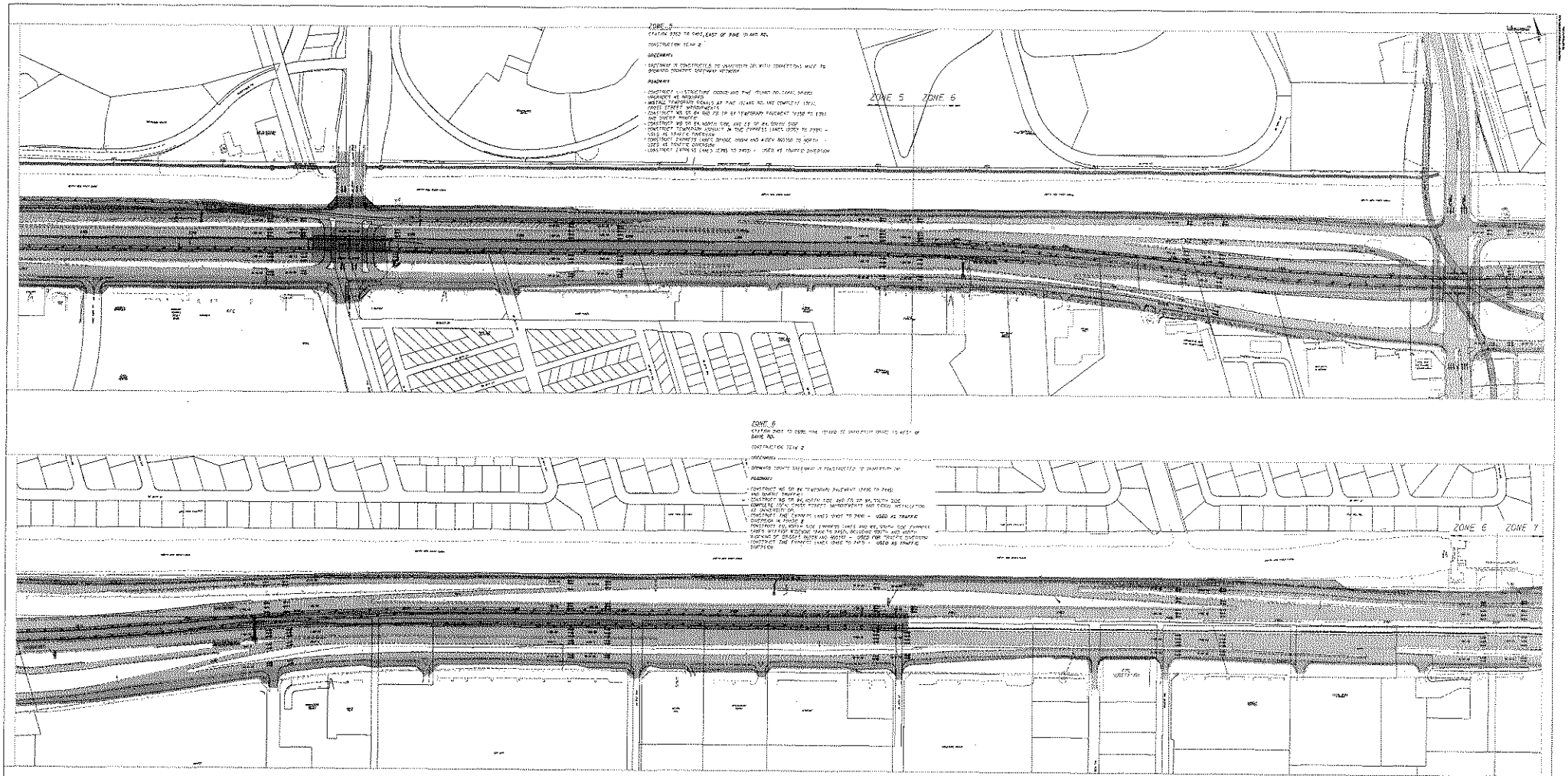


ITMS
PHASE 1 - CONSTRUCTION

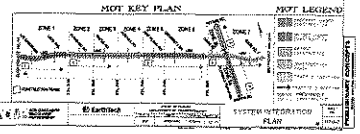
MOT KEY PLAN

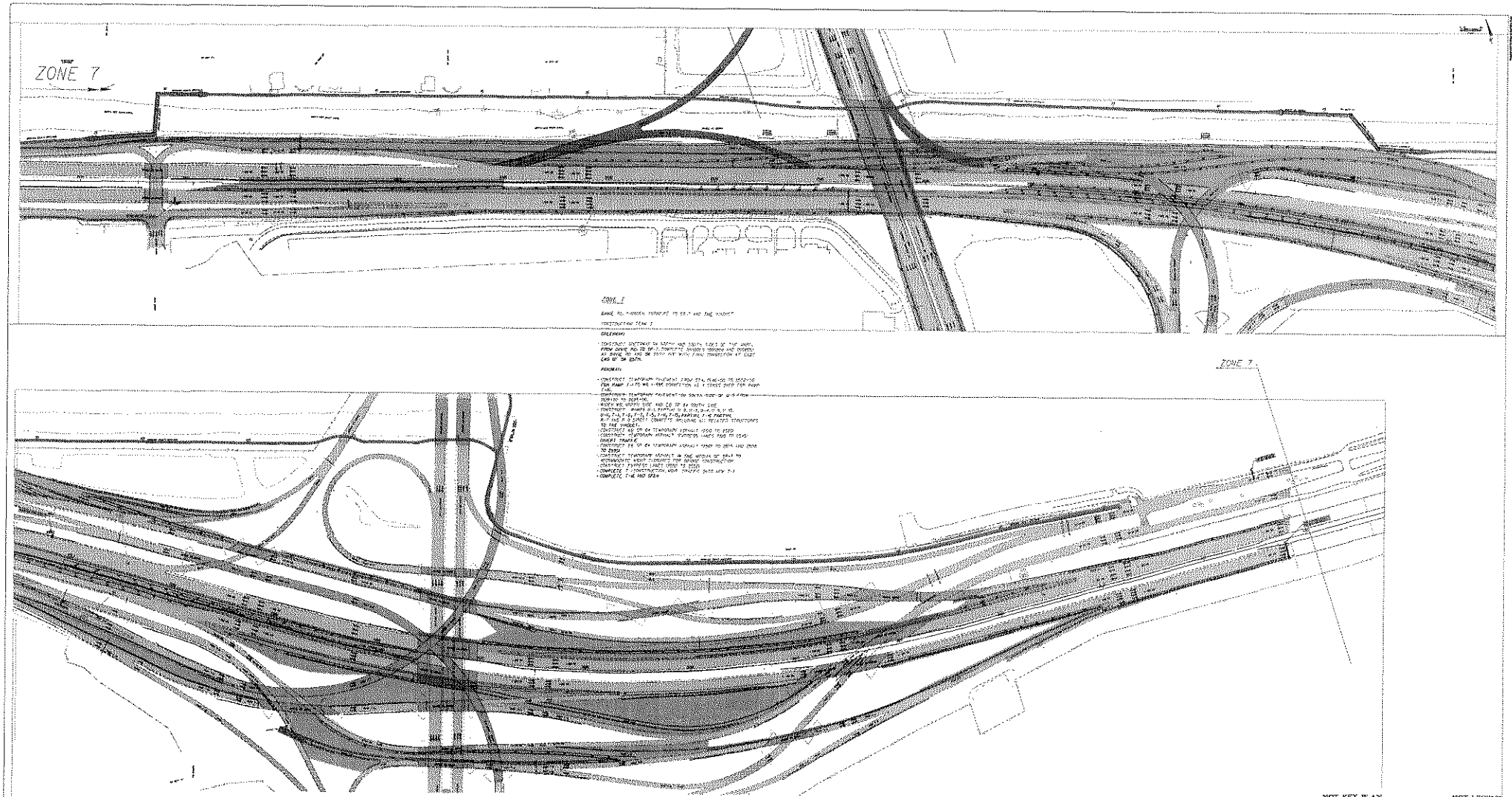
MOT LEGEND

SYSTEM INFRASTRUCTURE PLAN



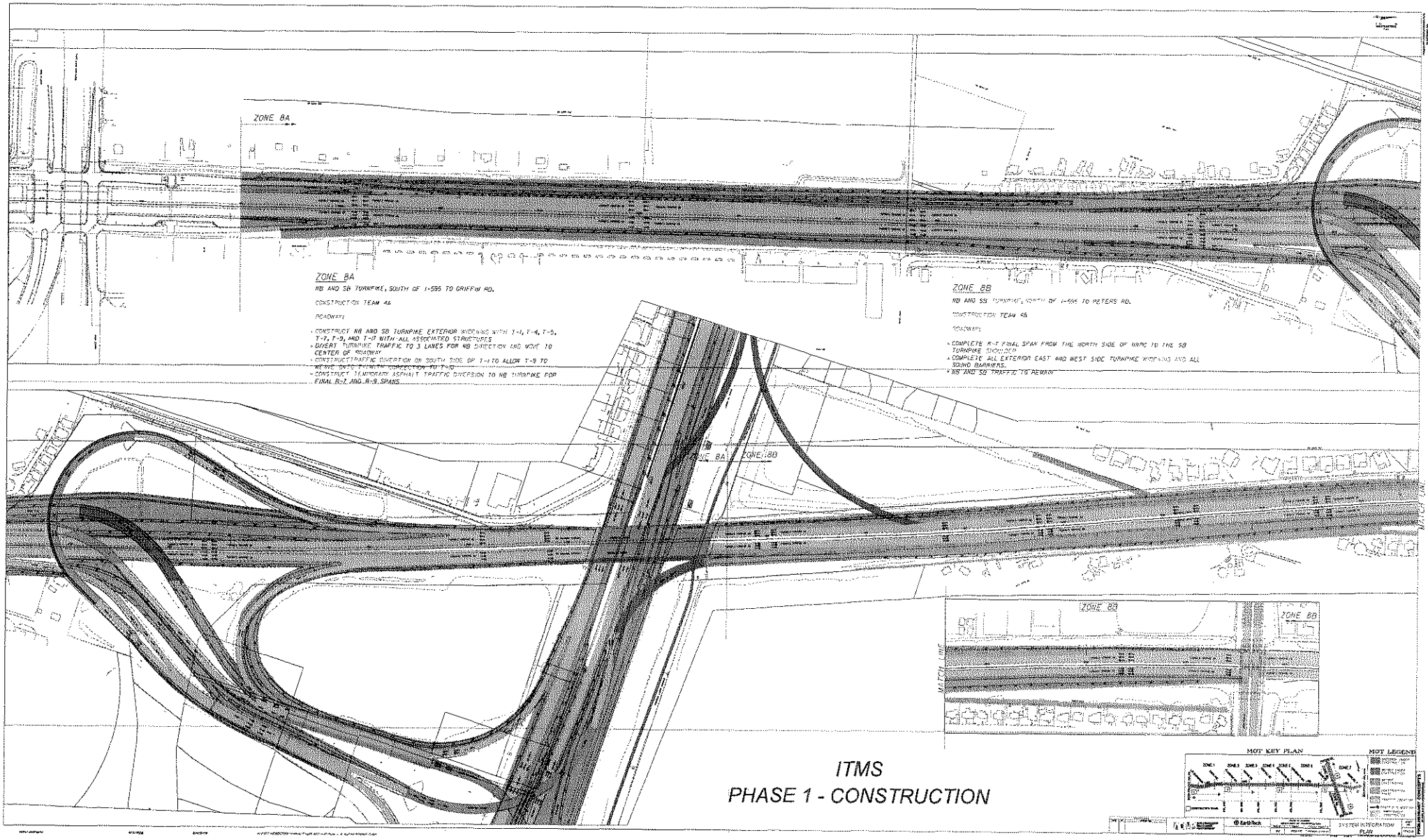
ITMS
PHASE 1 - CONSTRUCTION

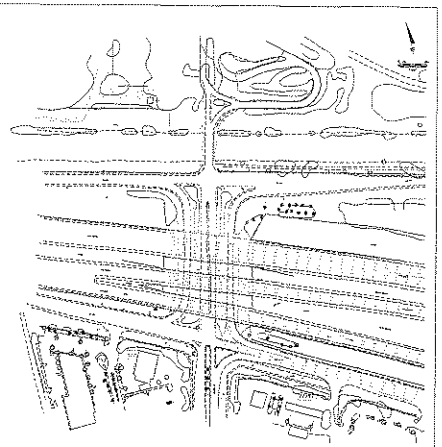


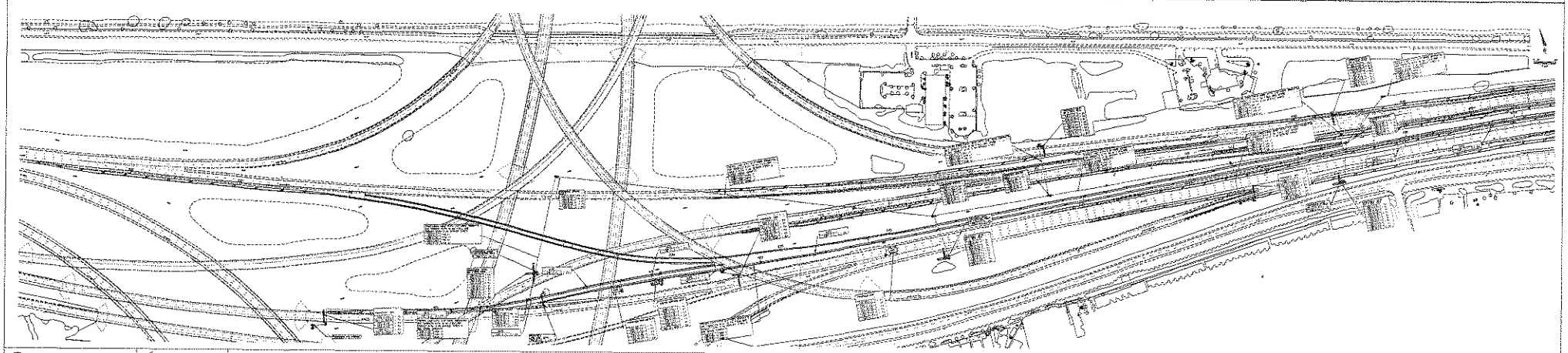


ITMS

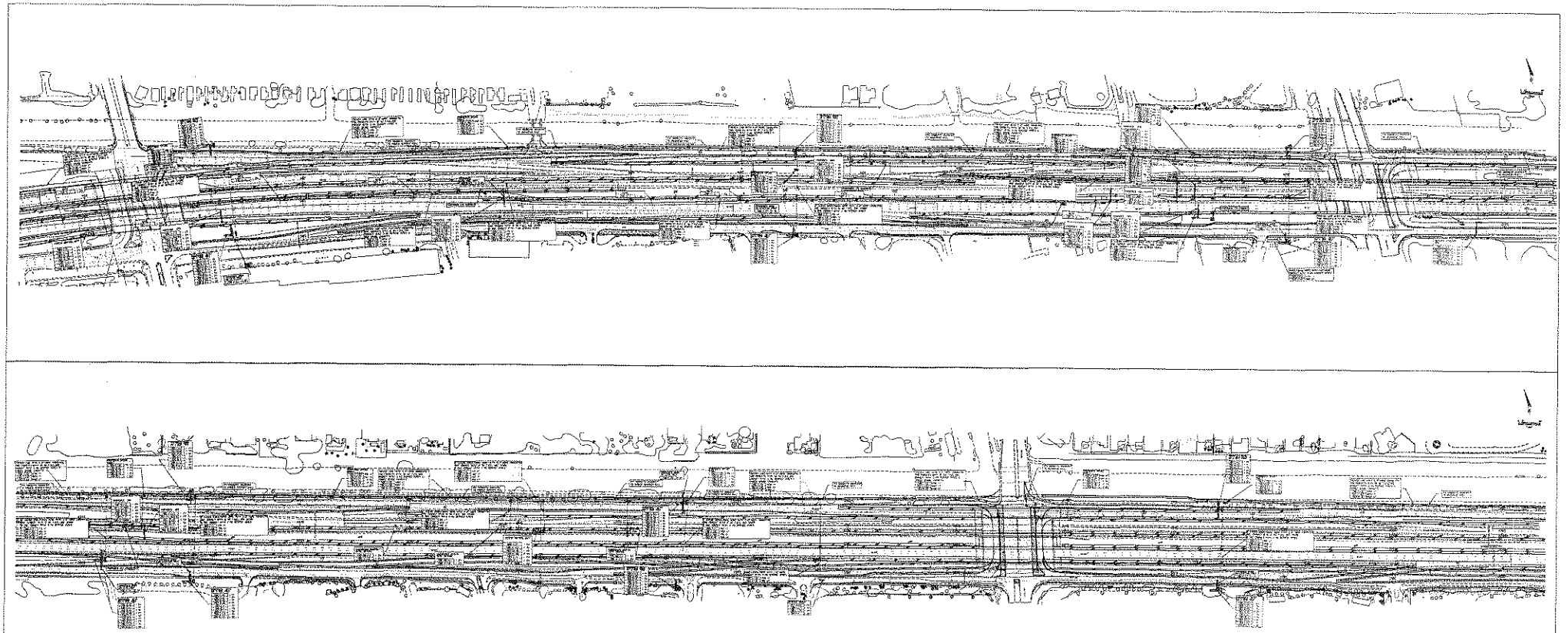
PHASE 1 - CONSTRUCTION


ZONE 8A
ZONE 8A
NB AND SB TURNPIKE, SOUTH OF I-595 TO GRIFFIN RD.
CONSTRUCTION TEAM 4A
ROADWAY:
• CONSTRUCT NB AND SB TURNPIKE EXTERIOR WIDENING WITH T-1, T-4, T-5, T-7, T-9, AND T-17 WITH ALL ASSOCIATED STRUCTURES
• DIVERT TURNPIKE TRAFFIC TO 3 LANES FOR NB DIRECTION AND MOVE TO CENTER OF ROADWAY
• CONSTRUCT TRAFFIC DIVERTION ON SOUTH SIDE OF T-4 TO ALLOW T-9 TO BE SAVE ONTO T-4 WITH CONNECTION TO T-5
• CONSTRUCT TEMPORARY ASPHALT TRAFFIC DIVERSION TO NB TURNPIKE FOR FINAL B-1 AND B-9 SPANS
ZONE 8B
NB AND SB TURNPIKE NORTH OF I-595 TO PETERS RD.
CONSTRUCTION TEAM 4B
ROADWAY:
• COMPLETE B-1 FINAL SPAN FROM THE NORTH SIDE OF WMC TO THE SB TURNPIKE SHOULDER
• COMPLETE ALL EXTERIOR EAST AND WEST SIDE TURNPIKE WIDENING AND ALL SOUND BARRIERS.
• NB AND SB TRAFFIC TO REMAIN
ZONE 8A
ZONE 8B
ZONE 8B
ZONE 8B
MATCH LINE
MOT KEY PLAN
MOT LEGEND
ITMS
PHASE 1 - CONSTRUCTION

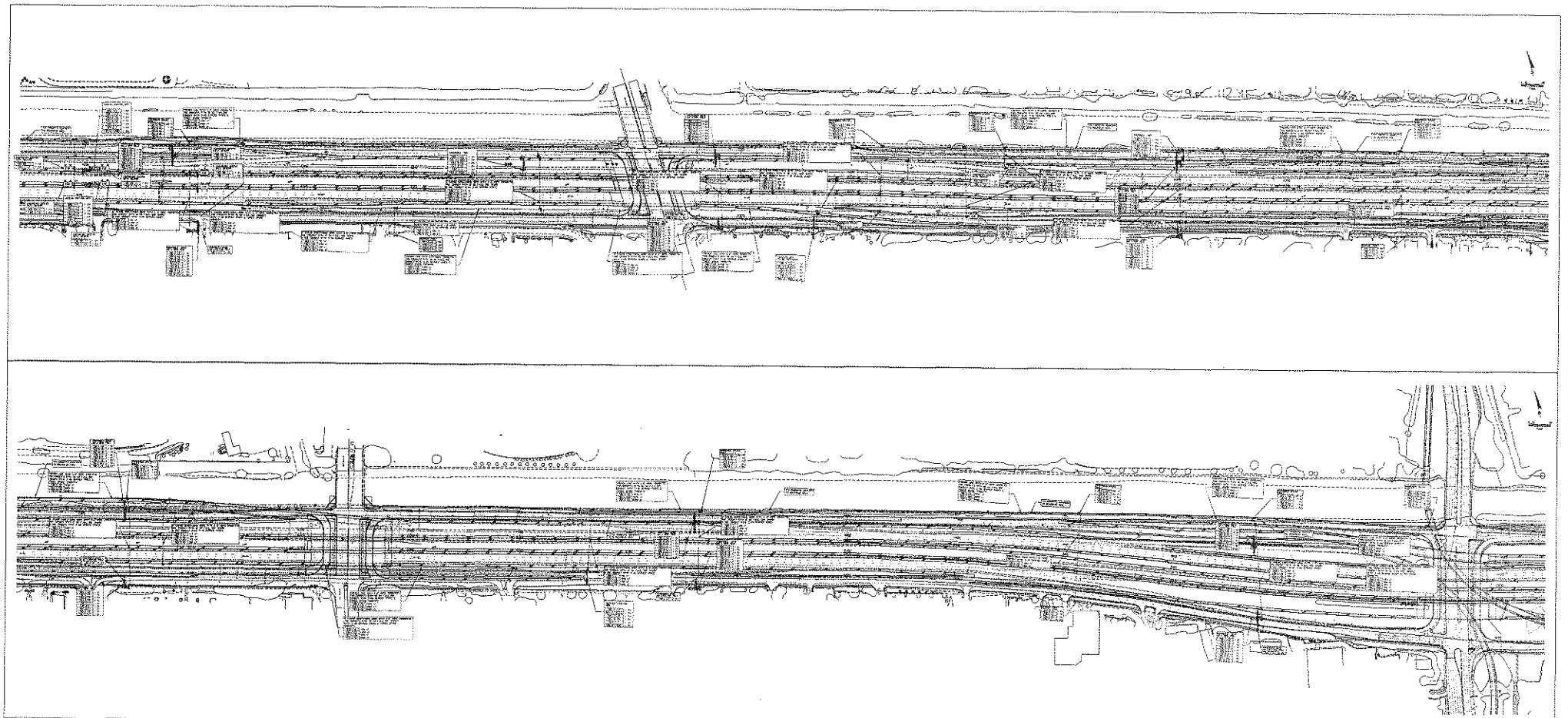




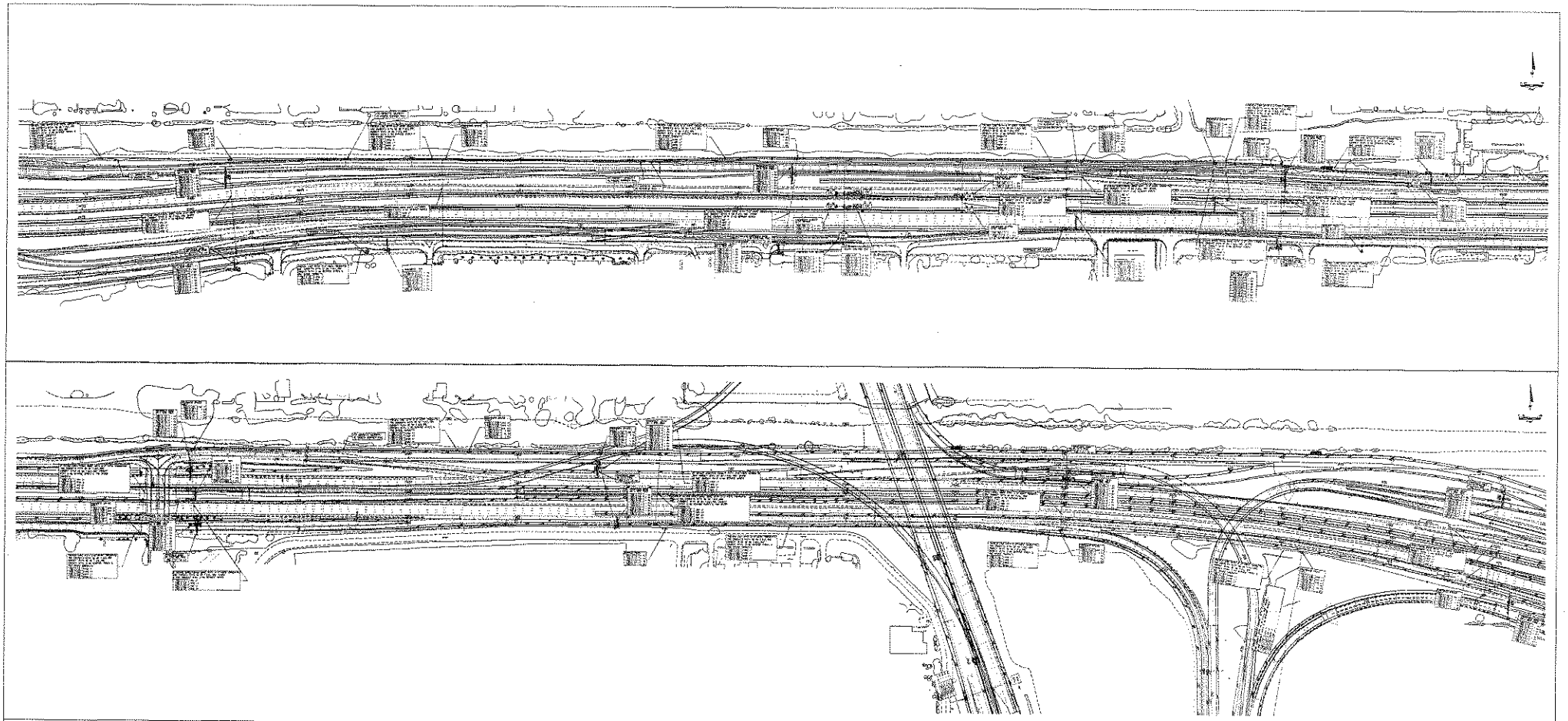
EarthTech | R. ALEMAN | RAMP TO I-595 EAST TO STATION 2152+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP



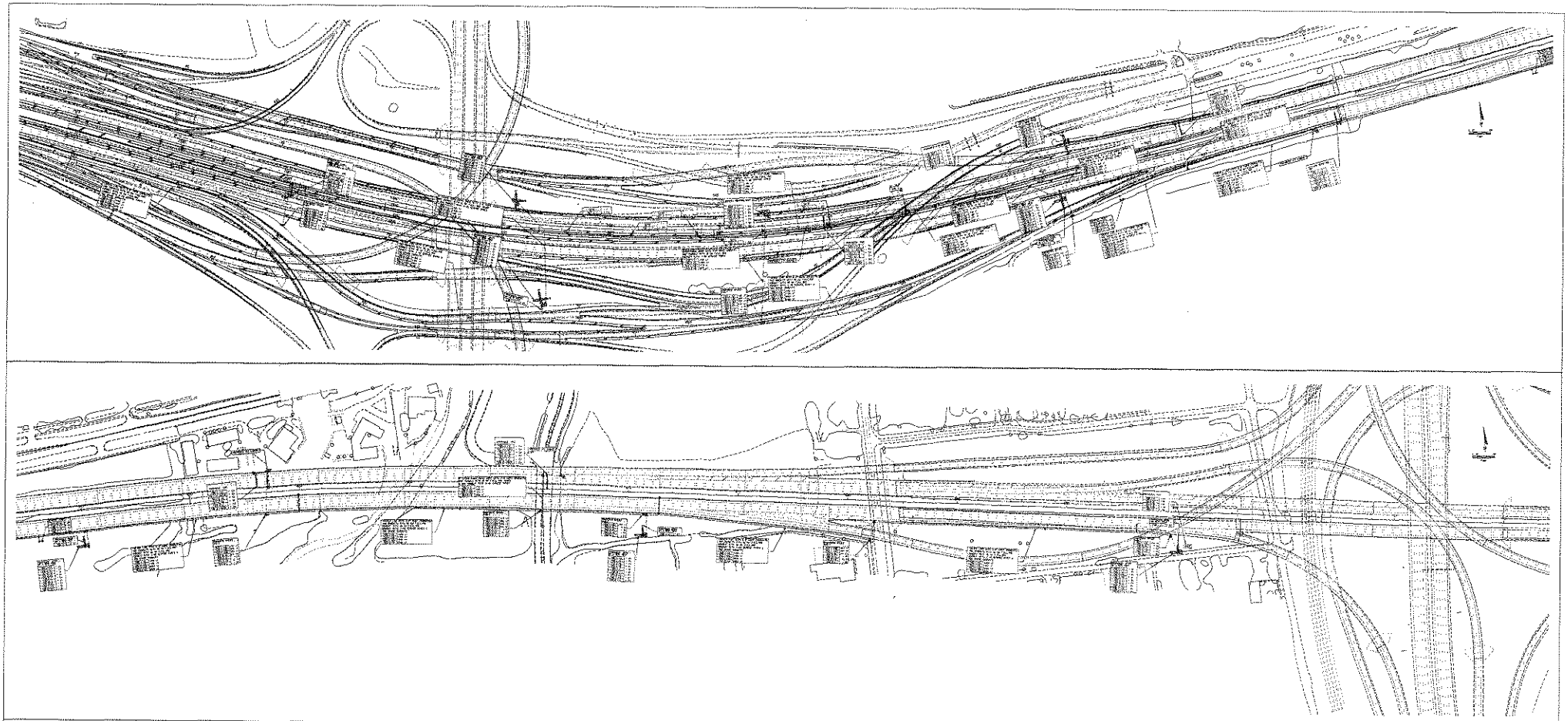
EarthTech | R.ALEMAN | STATION 2152+00 TO STATION 2292+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP | DRAWING NO. ITP - 2



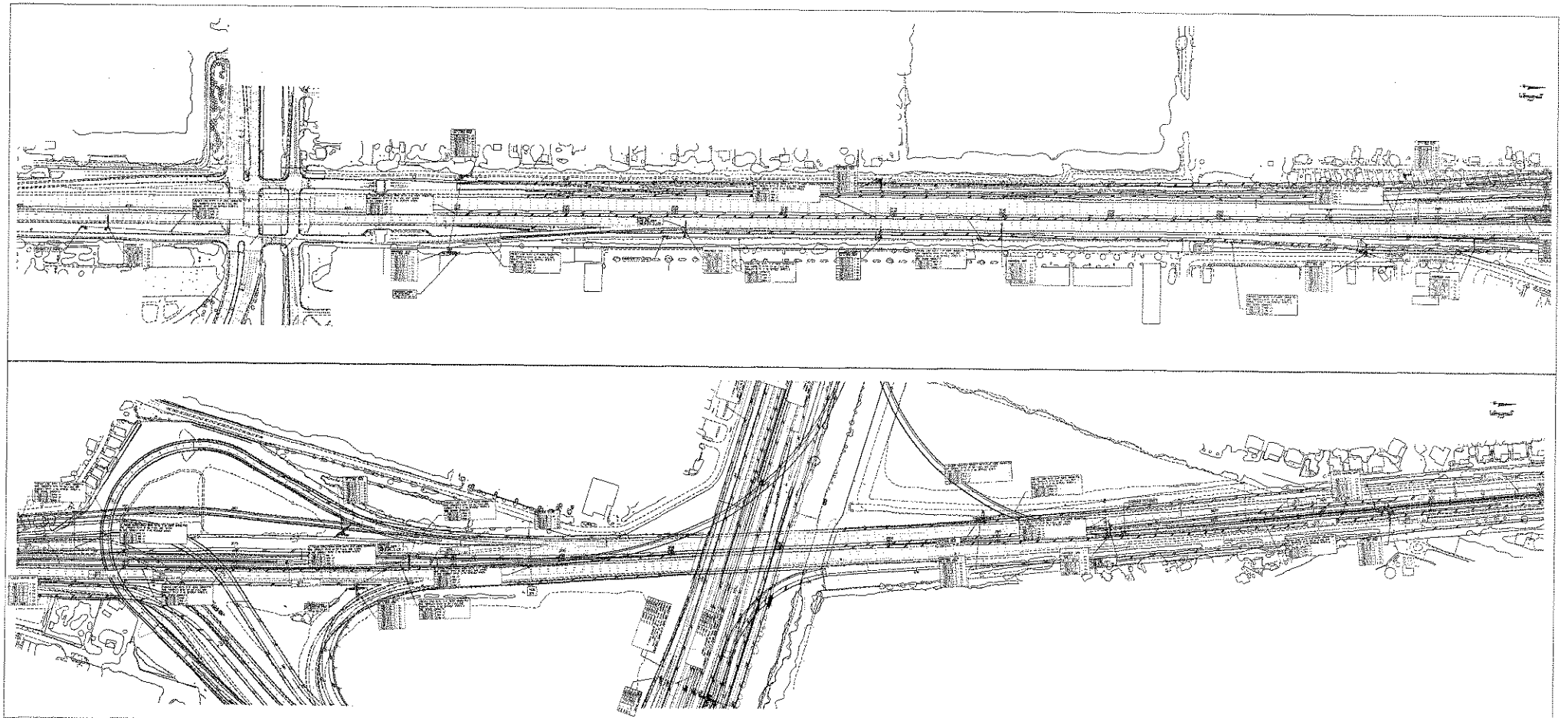
EarthTech | R. ALEMAN | STATION 2292+00 TO STATION 2432+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP | SHEET NO. ITP 1 - 3



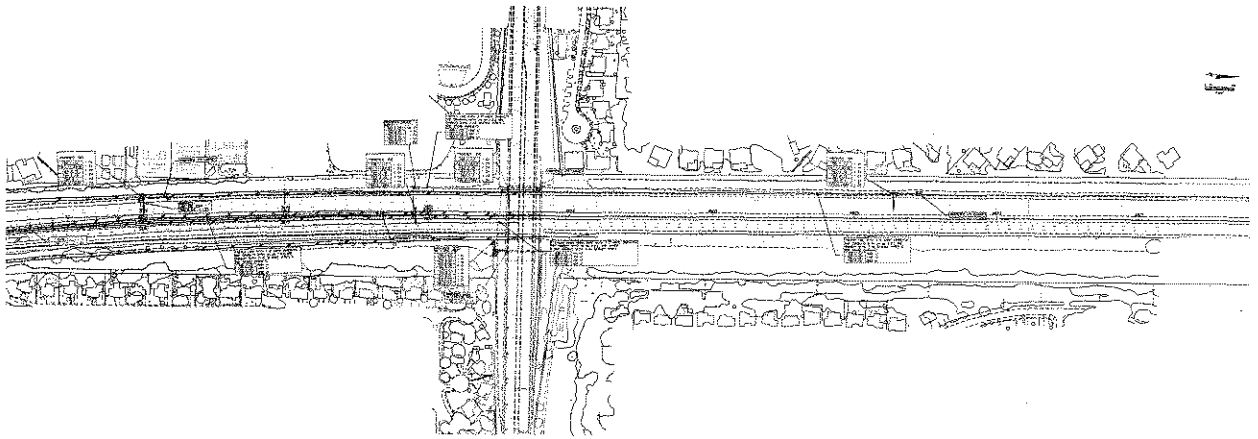
EarthTech | R. ALEMAN & ASSOCIATES, INC. | STATION 2432+00 TO STATION 2573+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP



EarthTech | ALEMAN | STATION 2573+00 TO STATION 2710+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP | ITP1 - 5



EarthTech | R. ALEMAN & ASSOCIATES, INC. | STATION 3748+00 TO STATION 3835+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP



EarthTech | R. ALEMAN | STATION 5835+00 TO STATION 5875+00 (EXPRESS LANES) | INTELLIGENT TRANSPORTATION PLANS | ACS-DRAGADOS MACQUARIE PARTNERSHIP

APPENDIX 2-H

EQUITY MEMBERS, CONTRACTORS AND KEY PERSONNEL COMMITMENT

[See Following Page]

Form G

Form of Equity Members, Contractors and Key Personnel Commitment

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP ("Proposer")

Proposer hereby commits that, if awarded the I-595 Corridor Roadway Improvements Project ("Project"), the Proposer will use the entities and individuals listed below for their stated positions and that, to the extent within the Proposer's control, such entities and individuals will be available on a full time basis for the periods necessary to fulfill their Project-related responsibilities.

Equity Member: ACS Infrastructure Development, Inc.

Equity Member: I-595 BidCo, LLC

Lead Contractor: JV Between Dragados USA, Inc. and GLF

- **Project Manager**: Jose Luis Conesa
- **Superintendent**: Fernando Arroyo

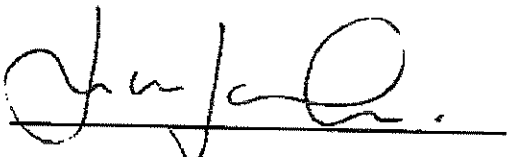
Lead Engineering Firm: EarthTech, Inc. DBA /EarthTech Consulting, Inc.

- **Lead Design Engineer**: John Wallace Jordan Jr., P.E.

Lead Operations and Maintenance Firm: ACS Infrastructure Development, Inc.

- **Operations Manager**: Antonio de la Llama

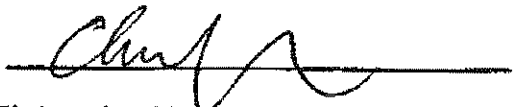
[Signature page follows]

Signed: 

Printed Name: Juan Santamaria

Title: Chief Operating Officer, ACS ID

Date: September 5th, 2008

Signed: 

Printed Name: Christopher Voyce

Title: President, I-595 BIDCO LLC.

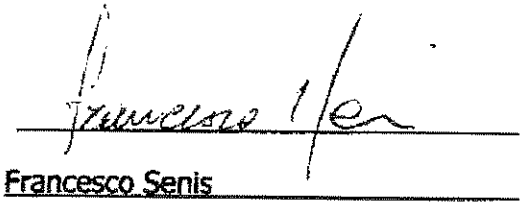
Date: September 5th, 2008

Signed: 

Printed Name: Kathleen Hahn

Title: Treasurer, I-595 BIDCO LLC.

Date: September 5th, 2008

Signed: 

Printed Name: Francesco Senis

Title: Chief Executive Officer, GLF

Date: September 5th, 2008

APPENDIX 2-I

SCHEDULE OF VALUES

[See Following Page]

SCHEDULE OF VALUES
Form of Schedule of Values

DESIGN &CONSTRUCTION SCHEDULE OF VALUES*

Financial Project No._____ Date Submitted_____
FA No._____ Proposer Name _____
Contract No._____

Section	Item Description	% of Design & Construction	Amount* ($)
I	Engineering Services		
	a. Design/Miscellaneous Services		$86,428,433.95
	b. CEI		$28,511,233.00
	c. Miscellaneous**		$8,446,938.94
	Subtotal for section I		$123,386,605.89
II	Utility Relocations		
	a. Utility Relocations		$37,331,345.48
	b. Miscellaneous**		
	Subtotal for section II		$37,331,345.48
III	Mobilization		$117,811,147.44
IV	Maintenance Of Traffic (includes temporary		$40,491,224.58
V	Clearing & Grubbing		$2,827,636.69
VI	Roadway		
	a. Flexible Pavement (Milling, Stabilization, Optional Base, Structural Course, Friction Course, Miscellaneous Asphalt, Miscellaneous)		$133,884,672.90

	b. Rigid Pavement (Stabilization, Structural Course, Permeable Base, Cement Concrete Pavement, Edgedrain, Miscellaneous)	$0.00
	c. Earthwork (Embankment, Excavation, Subsoil Excavation, Miscellaneous)	$64,832,694.34
	d. Canal Excavation	$461,898.75
	e. Concrete (Curb & Gutter, Sidewalk, Miscellaneous)	$3,924,714.88
	f. Barriers (Barrier Wall, Guardrail, Miscellaneous)	$69,088,824.11
	g. Miscellaneous**	$13,775,247.71
	Subtotal for section VI	$285,968,052.70
VII	Drainage	
	a. Drainage	$55,428,911.42
	b. Miscellaneous**	$14,479,865.00
	Subtotal for section VII	$69,908,776.42
VIII	Walls	
	a. Permanent MSE Wall	$55,970,004.56
	b. Other Permanent Wall	$21,494,834.22
	c. Bulkhead (Includes Cap)	$24,286,350.00
	d. Noise Wall (Ground Mount)	$15,033,568.83
	e. Noise Wall (Barrier Mount)	$13,522,170.58
	f. Temp Sheet Pile (Inc. Soil Anchors)	
	g. Temp MSE Wall	
	h. Miscellaneous**	

	Subtotal for section VIII	$130,306,928.19
IX	Bridge	
	a. Bridge Demolition	$2,765,327.35
	b. Substructure	$67,750,520.17
	c. Superstructure	$211,893,208.48
	d. Miscellaneous**	$11,476,108.52
	Fender System	$1,800,000.00
	Subtotal for section IX	$295,685,164.52
X	Signing and Pavement Marking	$37,246,100.19
XI	Signalization	$5,037,992.28
XII	Lighting	$19,388,436.25
XIII	ITS System/ Rev. Lane Gantry & Gates	$45,108,827.35
XIV	Landscaping(Minimum $10,000,000)	$10,000,000.00
XV	Miscellaneous**	$5,012,995.02
(SECTIONS I,II,III,IV,V,VI,VII,VII I,IX,X,XI,XII,XIII,XI V, XV)		$1,225,511,233.00

*Proposers are required to fill in costs associated with design and construction only. Other costs including, but not limited to, financing, operation, and maintenance shall not be included on this form. Each line item shall reflect the fully inflated cost for that item.

**Proposers are required to fill in additional items that are classified as "Miscellaneous." Use the additional space provided within each section.

D.5 ELECTRONIC COPY OF ORIGINAL FINANCIAL MODEL

A print-out of the Financial Model is attached in Volume 3.

Electronic copies of the Financial Model are provided in both PDF and MS Excel 2007 (English US)-compatible formats on CD-Rom inserted in the front cover of the Section C folder.

APPENDIX 2-J

TERMINATION FOR CONVENIENCE CALCULATION METHOD

[See Following Page]

D.2 TERMINATION FOR CONVENIENCE CALCULATION

Form J

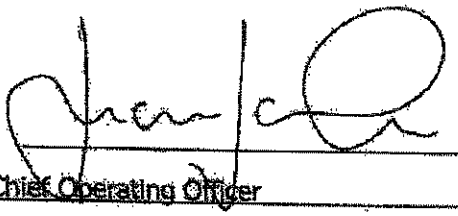
Termination for Convenience Calculation Method

Should FDOT terminate the Agreement according to Section 20.1 of the Agreement, the undersigned Proposer hereby chooses to be paid a compensation amount equal to the Backward Looking Termination for Convenience Amount, and renounces and waives any right to claim the Forward Looking Termination for Convenience Amount.

[Signature pages follow]

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Chief Operating Officer

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature:

Title: President, I-595 BidCo LLC

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature:

Title: Treasurer, I-595 BidCo LLC

APPENDIX 2-K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[See Following Page]

FORM K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Non-Equity Members and proposed Subcontractors]

The undersigned certifies on behalf of ACS Infrastructure Development, Inc., that:
(Name of entity making certification)

[check one of the following boxes]

☐ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).

☒ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☒ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☐ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Signature: _____

Title: Chief Operating Officer, ACS ID

Date: September 5th, 2008

If not Proposer, relationship to Proposer: Equity Member

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Subcontractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

FORM K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Non-Equity Members and proposed Subcontractors]

The undersigned certifies on behalf of I-595 BIDCO LLC., that:
(Name of entity making certification)

[check one of the following boxes]

☐ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).

☒ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☒ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☐ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

[Signature Page Follows]

Signature: _____

Title: President , I-595 BidCo LLC

Date: September 5th, 2008

If not Proposer, relationship to Proposer: Equity Member

Signature: _____

Title: Treasurer, I-595 BidCo LLC

Date: September 5th, 2008

If not Proposer, relationship to Proposer: Equity Member

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Subcontractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

FORM K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Non-Equity Members and proposed Subcontractors]

The undersigned certifies on behalf of **DRAGADOS USA, Inc.**, that:
(Name of entity making certification)

[check one of the following boxes]

☒ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs). Please see attachment.

☐ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☐ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☒ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Signature: _____

Title: **EXECUTIVE VICE PRESIDENT**

Date: **AUGUST 19, 2008**

If not Proposer, relationship to Proposer: **PART OF THE LEAD CONTRACTOR**

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Subcontractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

ATTACHMENT TO FORM K

In accordance with the requirements of Miami Dade County, Ordinance 82-37 and/or Ordinance 98-30; DRAGADOS USA Inc, has an approved Affirmative Action Program for year 2008 – 2009. The AAP was developed as per Miami Dade Guidelines and its approval is effective until February 28, 2009.

Currently the company is developing the Affirmative Action Program pursuant to 41 CFR Part 60-2.

FORM K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Non-Equity Members and proposed Subcontractors]

The undersigned certifies on behalf of GLF Construction Corporation , that:
(Name of entity making certification)

[check one of the following boxes]

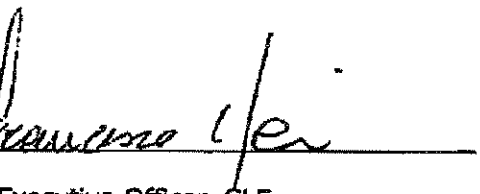
☒ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).

☐ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☐ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☒ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Signature: 

Title: Chief Executive Officer, GLF

Date: September 5th, 2008

If not Proposer, relationship to Proposer: Part of the Lead Contractor Joint Venture

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Subcontractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

FORM K

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

[To be executed by the Proposer, Equity Members, Major Non-Equity Members and proposed Subcontractors]

The undersigned certifies on behalf of Earth Tech Consulting, Inc., that:
(Name of entity making certification)

[check one of the following boxes]

☒ It has developed and has on file at each establishment affirmative action programs pursuant to 41 CFR Part 60-2 (Affirmative Action Programs).

☐ It is not subject to the requirements to develop an affirmative action program under 41 CFR Part 60-2 (Affirmative Action Programs).

[check one of the following boxes]

☐ It has not participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246.

☒ It has participated in a previous contract or subcontract subject to the equal opportunity clause described in Executive Orders 10925, 11114 or 11246 and, where required, it has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Signature: _____

Title: Vice President

Date: August 26, 2008

If not Proposer, relationship to Proposer: Lead Engineer

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)), and must be submitted by Proposers only in connection with contracts which are subject to the equal opportunity clause. Contracts that are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by Executive Orders or their implementing regulations.

Proposers, Equity Members, Major Non-Equity Members or proposed Subcontractors who have participated in a previous contract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b)(1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

APPENDIX 2-L

DBE CERTIFICATION

[See Following Page]

Form L

DBE CERTIFICATION

DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS

The following overall statewide goal for participation by DBEs is established for professional services and construction work:

DBE

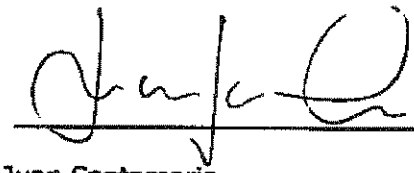
8.1% of the funding associated with highway contracts

DBE Certification

By signing below, the Proposer certifies that (1) the Concessionaire will provide a good faith effort to meet the goal; and (2) if final award of the Agreement is achieved, the Concessionaire will submit a DBE Affirmative Action Program Plan meeting the requirements set forth in Section 7-24 of Division I (General Requirements).

Failure to submit the DBE Affirmative Action Program Plan will be considered a breach of the requirements of the RFP. As a result, the Proposal Security provided by the Proposer will become property of FDOT and the Proposer will be precluded from participating in any reprocurement of the Agreement for the Project.

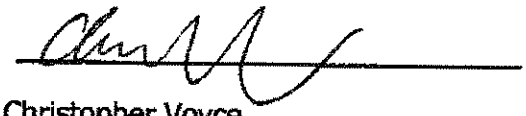
[*Signature page follows*]

Signed: 

Printed Name: Juan Santamaria

Title: Chief Operating Officer, ACS ID

Date: September 5th, 2008

Signed: 

Printed Name: Christopher Voyce

Title: President, I-595 BIDCO LLC.

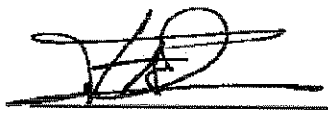
Date: September 5th, 2008

Signed: 

Printed Name: Kathleen Hahn

Title: Treasurer, I-595 BIDCO LLC.

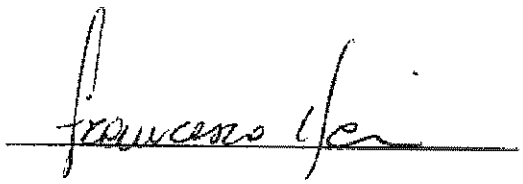
Date: September 5th, 2008

Signed: 

Printed Name: Fernando Arranz

Title: Executive Vice President, Dragados USA, Inc.

Date: September 5th, 2008

Signed: 

Printed Name: Francesco Senis

Title: Chief Executive Officer, GLF

Date: September 5th, 2008

APPENDIX 2-M

BUY AMERICA CERTIFICATION

[See Following Page]

Form M

BUY AMERICA CERTIFICATION

The undersigned Proposer hereby certifies on behalf of itself and all contractors (at all tiers) the following:

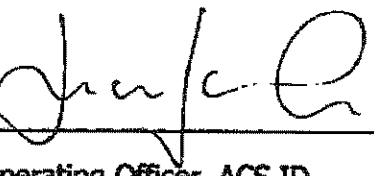
a. Proposer shall comply with the Federal Highway Administration ("FHWA") Buy America Requirements of 23 CFR 635.410, which permits FHWA participation in the Agreement only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the design-build contract price.

b. A false certification is a criminal act in violation of 18 U.S.C. 1001. Should this Agreement be investigated, Proposer has the burden of proof to establish that it is in compliance.

c. At Proposer's request, FDOT may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist. However, Proposer certifies that it will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by FDOT.

[*signature page follows*]

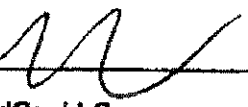
Date: September 5th, 2008

Signature: 

Title: Chief Operating Officer, ACS ID

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

Signature: 

Title: President, I-595 BidCo LLC.

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

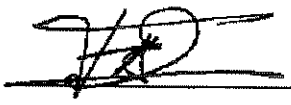
Date: September 5th, 2008

Signature: 

Title: Treasurer, I-595 BidCo LLC.

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

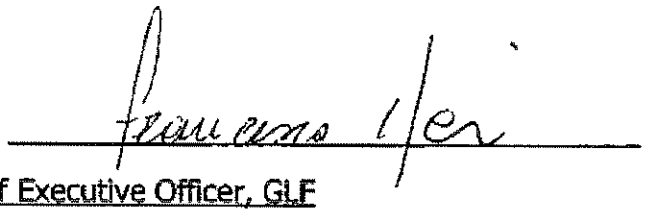
Date: September 5th, 2008

Signature: 

Title: Executive Vice President, Dragados USA, Inc.

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

Signature: 

Title: Chief Executive Officer, GLF

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

APPENDIX 2-N

USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

[See Following Page]

FORM N

USE OF CONTRACT FUNDS FOR LOBBYING CERTIFICATION

The undersigned Proposer certifies on behalf of itself and all contractors (at all tiers) the following:

1. The Proposer certifies, to the best of its knowledge and belief, that:

   a. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

   b. If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions, and shall include a copy of said form in its proposal or bid, or submit it with the executed Agreement or Subcontract.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. Proposer shall require that the language of this certification be included in all lower tier subcontracts which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

4. The undersigned certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the undersigned understands and agrees that the provisions of 31 U.S.C.

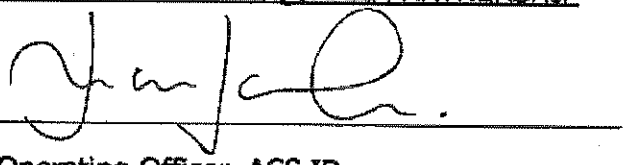
§3801, et seq., apply to this certification and disclosure, if any.

[Note: Pursuant to 31 U.S.C. §1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each expenditure or failure.]

[*signature page follows*]

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Chief Operating Officer, ACS ID

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP



Title: President, I-595 BidCo

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

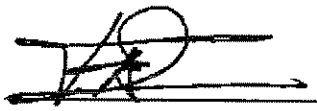


Title: Treasurer, I-595 BidCo

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Executive Vice President, Dragados USA, Inc.

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: [signature]

Title: Chief Executive Officer, GLF

APPENDIX 2-O

DEBARMENT AND SUSPENSION CERTIFICATION

[See Following Page]

Form O

DEBARMENT AND SUSPENSION CERTIFICATION

The undersigned Proposer certifies on behalf of itself and all Equity Members, Major Non-Equity Members and Subcontractors the following:

The undersigned certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, State or local) transaction or contract under a public transaction; violation of federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

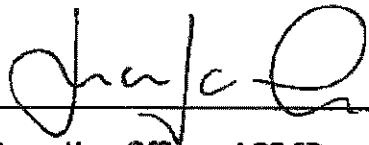
d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (federal, State or local) terminated for cause or default.

Where the Proposer is unable to certify to any of the statements in this certification, it shall attach a certification to its proposal or bid stating that it is unable to provide the certification and explaining the reasons for such inability.

[*signature page follows*]

Date: September 5th, 2008

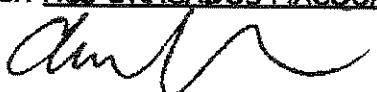
Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Chief Operating Officer, ACS ID

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP



Title: President, I-595 BidCo

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

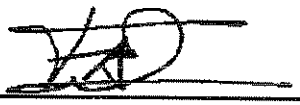


Title: Treasurer, I-595 BidCo

Proposer's Name: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Date: September 5th, 2008

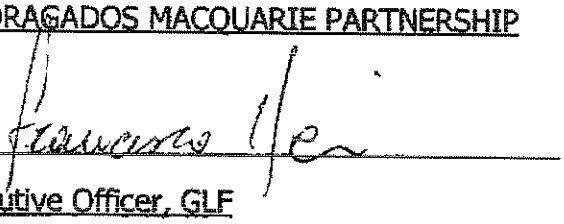
Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Executive Vice President, Dragados USA, Inc.

Date: September 5th, 2008

Proposer: ACS-DRAGADOS MACQUARIE PARTNERSHIP

Signature: 

Title: Chief Executive Officer, GLF

Date: August 26, 2008

Major Non Equity Member: Earth Tech Consulting, Inc.

Signature: [signature]

Title: Vice President

Earth Tech's disclosure to Item D of Form O:

In early June, 2006, the City of Glens Falls' City Council voted to terminate the contract of Earth Tech, Inc. for the operation and maintenance of the City's wastewater treatment plant. This results from a dispute involving the payment of prevailing wages to employees who, in part, are involved in installing replacement sewer lines under the Earth Tech contract. Neither the City nor Earth Tech contemplated payment of prevailing wages with respect to the project but a recent Department of Labor order imposes that obligation and such payment significantly increases the cost of performance. Earth Tech, Inc. and the City continue to discuss the issues.

APPENDIX 2-P

SCHEDULE OF TECHNICAL PROPOSAL ADJUSTMENTS*

App. 2-P.1 Roadway

- Comments Matrix
- Attachments

App. 2-P.2 Structures

- Comments Matrix
- Attachments

App. 2-P.3 Drainage

- Comments Matrix

App. 2-P.4 Management and Administration

- Comments Matrix

App. 2-P.5 Operations and Maintenance

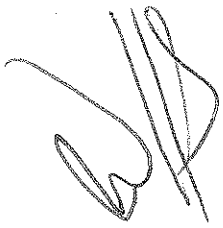
- Comments Matrix

*The solutions described in the "Action Taken" column of this Appendix 2-P represent conceptual solutions and will be the subject of further design development. Concessionaire shall be entitled to submit alternative solutions that are compliant with the Contract Documents provided such alternative solutions provide equal or better quality. The alternative solutions will be subject to FDOT's approval, which approval shall not be unreasonably withheld.

APPENDIX 2-P.1

ROADWAY – COMMENTS MATRIX

[See Following Page]



ACSID Technical Proposal Review Comments - Roadway

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	PRIMARY CLASSIFICATION	COMMENT	ACTION TAKEN
1	3.L.2.d	The geometric design developed by the Concessionaire shall be an engineering solution that is not merely an adherence to the minimum FDOT standards but meets acceptable industry practice.	Mainline	The Concessionaire designed the Express Lanes over SW 136th Avenue utilizing a substandard vertical curve length of 1600' (Sheet PR-53). PPM requires a minimum vertical curve length of 1800' within interchanges.	The vertical curve was partitioned into two curves due to a shift in the horizontal alignment. The vertical curve will be re configured to obtain the length of 1800'.
2	3.L.2.d	Express Lanes Ramps Configuration Ramp R-7 (1-lane) - southbound Turnpike to express lanes	Ramp R-7	The crash cushion at the gore of Ramps R-7 and R-9 shall be located behind the physical 19' gore.	Final location of crash cushion will be resolved during final design in accordance with the PPM. See attached preliminary graphic grade calculations supporting feasibility of the gore grading in compliance with PPM and the Design Variance issued for the crossover line. See attached exhibit for technical solution. See Attachment.
3	3.L.2.b	...the Concessionaire shall not increase the Turnpike mainline sideslopes shown in the Typical Section Package	Mainline	Pages 2 & 3 (TPK TSP): The typical sections show a 1:4 side slope as specified in the Indicative Design. However, the cross sections depict 1:2 side slopes.	ACSID will flatten side slopes wherever possible, in particular, ACSID commits to the slopes indicated on the attached table. See Attachment.
4	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: design speed	Ramp T-1	ACSID designed Ramp T-1 for 35MPH at the exit point from Florida's Turnpike. RFP requires Ramp T-1 to be designed for 50 MPH at the exit point from Florida's Turnpike. (Refer to Design and Construction Criteria, Section 3.L.2.d - Geometrics)	ACSID will provide a Ramp T-1 design with 50 mph at the gore, 80/20 superelevation transition splits throughout, and as noted in the attachment. See Attachment.
5	3.L.2.d	The geometric design developed by the Concessionaire shall be an engineering solution that is not merely an adherence to the minimum FDOT standards but meets acceptable industry practice.	Ramp T-1	ASCID Typical Section Package for the Turnpike indicates Ramp T-1 design speed=35 mph. Horizontal SSD for 35 mph on a downgrade > 2% is not met for approximately 260' to 265' along the ramp.	The proposed bridge geometry provides a sight distance as required per PPM Vol1 Table 2.7.1. See Attachment.
6	3.L.2.d	The Indicative Preliminary Design has been developed with consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics and ADA requirements.	Ramp T-1	Combination of Ramp T-1 and Ramp T-4 to a single exit ramp from FTE SB did not address capacity concerns.	ACSID will provide two separate exits for T1 and T4.
7	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: design speed	Ramp T-10	Page 9 ACSID (TPK TSP) and plan sheet G-102 shows Ramp T-10 design speed = 35mph. RFP requires 40 mph (TPK TSP Page 12)	The ramp T-10 geometry will comply with a 40 mph design speed.

ACSID Technical Proposal Review Comments - Roadway

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	PRIMARY CLASSIFICATION	COMMENT	ACTION TAKEN
8	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: lane widths	Ramp T-10	Part of Ramp T-10, with one lane, is less than 15' wide, as required for a one lane ramp (as shown in plan view roll plots and CADD files). PPM requires a 15' minimum lane width for one lane ramps.	We have revised our ramp geometry to provide the 15' lane.
9	3.L.2.d	The geometric design developed by the Concessionaire shall be an engineering solution that is not merely an adherence to the minimum FDOT standards but meets acceptable industry practice.	Ramp T-16	ACSID proposed inside shoulder width is up to 15'-9"	The radius of the horizontal curve will be modified and will result in a maximum shoulder width of 13.4'. See Attachment.
10	3.L.2.d	Turnpike Ramps Configuration Ramp T-17 (1-lane) - Griffin Road to northbound Turnpike	Ramp T-17	The Concessionaire designed the profile for Ramp T-17 utilizing a sag vertical curve with K=48 and a crest vertical curve with K=35 (Sheet PR-228). PPM requires a minimum K=49 and K=47 for 35 MPH crest and sag vertical curves.	The vertical curves will be updated during final design to reflect the K values as per PPM.
11	3.N	N. Sound Barriers. See pp. 74-75 of Section 3.	Ramp T-4	The realignment of Ramp T-4 to the west appears to preclude a portion of ground mount sound barrier (SB-11). Provide sound barrier analysis for FDOT review.	ACSID will make the proposed modifications to sound barriers as depicted in the attached table. See Attachment.
12	3.L.2.d	The geometric design developed by the Concessionaire shall be an engineering solution that is not merely an adherence to the minimum FDOT standards but meets acceptable industry practice.	Ramp T-5	ACSID proposed inside shoulder width is up to 16'-6"	The radius of the horizontal curve will be modified and will result in a maximum bridge shoulder width of 13.5' and meet a design speed = 40 mph (for bridge 000023).
13	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: design speed	Ramp T-7	The Concessionaire designed Ramp T-7 for 35 MPH. RFP requires Ramp T-7 to be designed for 40 MPH (Refer to the Turnpike Typical Sections Package, Page 20 provided on 03-07-2008 under Revision 1, Design Change No. 3)	Ramp T-7 will be provided with a design speed = 40 mph.
14	3.L.2.d	The geometric design developed by the Concessionaire shall be an engineering solution that is not merely an adherence to the minimum FDOT standards but meets acceptable industry practice.	Ramp T-9	Ramp T-9, curve T9-99 does not meet SSD for 40mph design speed.	ACSID will provide a Ramp T-9 roadway with a design speed = 40 mph, with appropriate superelevation transitions and splits, as limited the approach slab and deck of bridge 860560.
15	3.K	All Greenways pedestrian bridges west of the Sewell Lock are required to have a minimum vertical clearance of six (6) feet above the optimum water elevation or two (2) feet above the design water surface elevation, whichever produces the higher low member elevation, and a horizontal clearance of 25 feet	N/A	Bridge No. 000202 (Nob Hill Road) provides a 4' minimum vertical clearance on the profile sheets (PR-254). RFP requires a minimum vertical clearance of 6'.	Will be resolved during final design by providing the vertical clearance per RFP Volume II, Division II, Section 3.
16	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: shoulder widths	Ramp B	Ramp B was found to have a substandard shoulder inside shoulder (PL-06 & PL-07). PPM requires a minimum shoulder width of 6' for a one lane ramp.	Ramp B shoulders will have standard shoulder widths as required by the PPM and FDOT Design Standards.

ACSID Technical Proposal Review Comments - Roadway

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	PRIMARY CLASSIFICATION	COMMENT	ACTION TAKEN
17	3.L.2.d	PPM profile design criteria	Ramp E-2	The Concessionaire designed the profile for Ramp E-2 utilizing VPIs spaced at 100' (Sheets PR-122 & PR-123). PPM Requires a minimum 250' between VPIs.	Will be resolved during final design by providing a minimum VPI spacing of 250' for Ramp E-2 profile.
18	3.L.2.d	I-595 Ramps Configuration Ramp N (1-lane) - eastbound access to I-595 from University Drive	Ramp N	The proposed design has a 6.3% upward grade at the beginning of this ramp (Sheets PR-144 & PR-145). PPM allows a maximum grade of 6% for this conditions.	Will be resolved during final design by providing a maximum of 6% upward grade for Ramp N.
19	3.L.2.d	Braided Ramps Ramp Q-3 over Ramp Q-2	Ramp Q-3	The Concessionaire designed the profile for Ramp Q-3 utilizing a sag vertical curve with K=76 (Sheets PR-161 & PR-162). PPM requires a minimum K=79 for 45 MPH sag vertical curves.	Will be resolved during final design by providing a minimum sag K value of 79 for Ramp Q-3 profile.
20	3.L.2.e	Davie Road and University Dr. (Westbound Access) - Service Ramp Q-3	Ramp Q-3	EAG is not accessible from Ramp Q-3. (Sheet IT-32 and IT-33)	Required number of EAG locations will be provided per the RFP. Precise locations to be coordinated with City of Sunrise and Town of Davie. Access requirements and minimum distances to access Ramps will be provided and will comply with the RFP.
21	3.L.2.d	I-595 Ramps Configuration Ramp S (1-lane) - westbound access to Davie Road	Ramp S	Substandard horizontal curve length for BLRAMP S-3, CL = 315' <400' (Sheet G-100 and PL-33). Physical gore 7' wide < 10' shown in IPD (PL- 33) .	The curve length in question is actually 740' long. However, since a baseline shift is partitioning the curve into two (S-3 and S-5), the table on sheet G-100 presents two curves at lengths 424.57' + 315.08' = 739.65' > 400'. Gores will be designed per the FDOT Design Standards.
22	3.L.2.d	I-595 Ramps Configuration Ramp U-2 (1-lane) - southbound SR 7 to Ramp T-5	Ramp U-2	The Concessionaire designed the profile for Ramp U-2 utilizing a sag vertical curve with K=60 (Sheet PR-232). PPM requires a minimum K=64 for 40 MPH sag vertical curves.	Will be resolved during final design by providing a minimum sag K value of 64 for Ramp U-2 profile.
23	3.H	Indicates qualifications of Utility Coordination Manager/Consultant	N/A	At this time there is no list of qualifications or resumes provided. Provide staffing plan for utility coordination efforts and résumés for dedicated personnel.	Resume and Qualifications of the Utility Coordination Manager reflecting experience requirements was included in Volume I - Additional Entity Proposal Requirements. The certified Utility Coordination Manager for the ADMP Team is Pedro Ugas with C3TS.

ACSID Technical Proposal Review Comments - Roadway

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	PRIMARY CLASSIFICATION	COMMENT	ACTION TAKEN
24	3.L.2.c	I-595 mainline, Express Lanes, SR-84, and Ramps: Use a Modified Binder of PG 76-22 on the top 2 structural layers and friction course.	N/A	This criteria was followed only for the I-595 Mainline and Express Lanes. Pavement designs for SR-84 and several Ramps did not specify the modified binder on the top 2 structural layers and in the friction course. In addition, there was no mention of any modifications to this requirement in Form I.	Per FDOT Flexible Pavement Design Manual (FPDM) the use of Modified Binder (PG 76-22) on SR 84 (mainline and on-ramps) is not warranted since the estimated traffic level per the ESAL projection was Traffic Level C. Also, on-ramps from SR 84 onto mainline I-595 and Express Lanes and cross streets will not need Modified Binder (PG 76-22). However, Modified Binder (PG 76-22) shall be specified for all mainlines and exit ramps (I-595, Express Lanes and the Turnpike). This will be incorporated into the revised pavement design and submitted for approval.
25	3.L.2.c	Milling and resurfacing not adjacent to widening and/or outside the Operating Period O&M Limits, the design shall be based on the following parameters: The Concessionaire shall adhere to the minimum applicable pavement design standards for milling and resurfacing.	N/A	It appears that the intent is to follow the minimum guidelines for milling and resurfacing as required by the FDOT Flexible Pavement Design Manual (FPDM). However, there was one pavement design that will need to be modified because it does not meet the FPDM requirements. The pavement design for I-595 (Mainline) between M.P. 6.65 and M.P. 8.60 recommends milling 1.75" of the existing pavement and replacing with 0.75" of FC-5 and 1.00" of superpave for Traffic Level D. Section 5.5.6 of the FPDM states that SP-9.5 cannot be used for Traffic Levels D and E which means that the smallest thickness that can be placed is 1.5" of SP-12.5 for these Traffic Levels.	The pavement design for the I-595 mainline segment between M.P. 6.65 and M.P. 8.60 will be reviewed in the field and modified to meet the minimum applicable standards established by the RFP and FDOT's Flexible Pavement Design Manual (FPDM). Revisions to the pavement design will be incorporated into the final pavement design package submittal.
26	3.L.6.b	Traffic Control Plans	N/A	Traffic control transitions/detours indicated in the ACSID proposal were found to be substandard. Refer to the requirements of the RFP and Index 600.	All lane traffic control transitions/detours will be revised during final design and will be in accordance with RFP VII, DII, Section 3.L.6 Traffic Control, and the FDOT PPM and FDOT Design Standards 600 Series Indices.
27	3.L.6.d	Traffic Control Restrictions	N/A	ACSID proposal section 2.1.2.8.1 outlines the use of 10' lanes on the mainline and ramps. Required shoulder widths are not indicated in the ACSID proposal. Refer to the Traffic Control Restrictions in the RFP as well as the FDOT PPM, Volume 1, Chapter 10 for additional requirements for lanes widths and shoulder widths.	All lane traffic control lane widths and shoulder widths will be revised during final design and will be in accordance with RFP VII, DII, Section 3.L.6 Traffic Control, and the FDOT PPM and FDOT Design Standards 600 Series Indices.
28	3.L.6.d	Traffic Control Restrictions	N/A	Lane closures are restricted as shown in the RFP. ACSID proposal indicated lanes closures that are not permitted.	All lane traffic control lane closures will be revised during final design and will be in accordance with RFP VII, DII, Section 3.L.6 Traffic Control, and the FDOT PPM and FDOT Design Standards 600 Series Indices.

ACSID Technical Proposal Review Comments - Roadway

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	PRIMARY CLASSIFICATION	COMMENT	ACTION TAKEN
29	3.N	N. Sound Barriers. See pp. 74-75 of Section 3.	N/A	According to the requirements of the RFP, any changes to the sound barrier tables shall be addressed. Provide sound barrier analyses for FDOT review.	Action to be the same as No. 11.
30	3.N	N. Sound Barriers. See pp. 74-75 of Section 3.	N/A	Dimensions of three noise barriers (SB8, SB9, and SB11,) do not match the requirements of Addendum #1.	Action to be the same as No. 11.
31	3.L.2.f	I-595 Corridor Design Variations - Restriction Level 1 Shoulder Width (1-Lane Ramp)		The Proposer's design is consistent with the Indicative design. However, the Proposer's design includes substandard full inside and outside shoulder widths along Ramp B from Sta. 38+17 to Sta. 42+18 which need to be addressed.	Action to be the same as No. 16.
32	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: lane widths	EB	The bike lanes on EB SR 84 are only 4' wide. CRITERIA Requires a 5' wide bike lanes when adjacent to turn lanes.	All bike lanes with separate right turn lane will be 5' per Index 17346 except where a 4' bike lane would eliminate a bulkhead, utility conflicts, or a need for additional R/W take.
33	3.L.2.d	The Indicative Preliminary Design has been developed with consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics and ADA requirements. The Concessionaire shall be solely responsible for development of a design that meets all applicable standards and criteria.	EB	Signal poles proposed in medians at Flamingo and Hiatus Rd. This is prohibited by PPM.	Will be resolved during final design. Will consider mounting at the exterior or interior back of sidewalks with shielding as required. Signal design will meet FDOT standards.
34	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: lane widths	Mainline	The CADD files include substandard lane widths and bike lane widths between Hiatus Rd. and Pine Island Rd. RFP and the Typical Section Package require a minimum of 12' lanes and 4' bike lanes.	ACSID and FDOT will work closely to develop a suitable solution. Both parties agree that this can be achieved during final design.
35	3.L.2.b	The Concessionaire shall not propose to reduce any of the following criteria: shoulder widths	Mainline	No inside shoulder provided along SR 84 westbound between 1515+10 to 1545+00 and 1539+77 to 457+40 (PL-34 thru PL-36). Plans show curb and gutter without shoulder. (see typical section on G-59).	Provided that the existing columns for bridges 860532 and 860533 were constructed generally as shown design plans for 406094-1-52-01 and provide the expected opening under the bridges, the SR 84 shoulder will be provided as required by the contract documents.
36	3.L	The Indicative Preliminary Design has been developed with consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics and ADA requirements.	Mainline WB	The proposed consecutive on ramps, Ramps U-1 and U-3 is less than 800'. AASHTO requires a minimum of 800' for consecutive on ramps.	Successive on ramps will be constructed with a minimum separation of 800' between ramp U-1 and U-3 ramp terminals (painted gore) along SR 84 WB.

APPENDIX 2-P.1

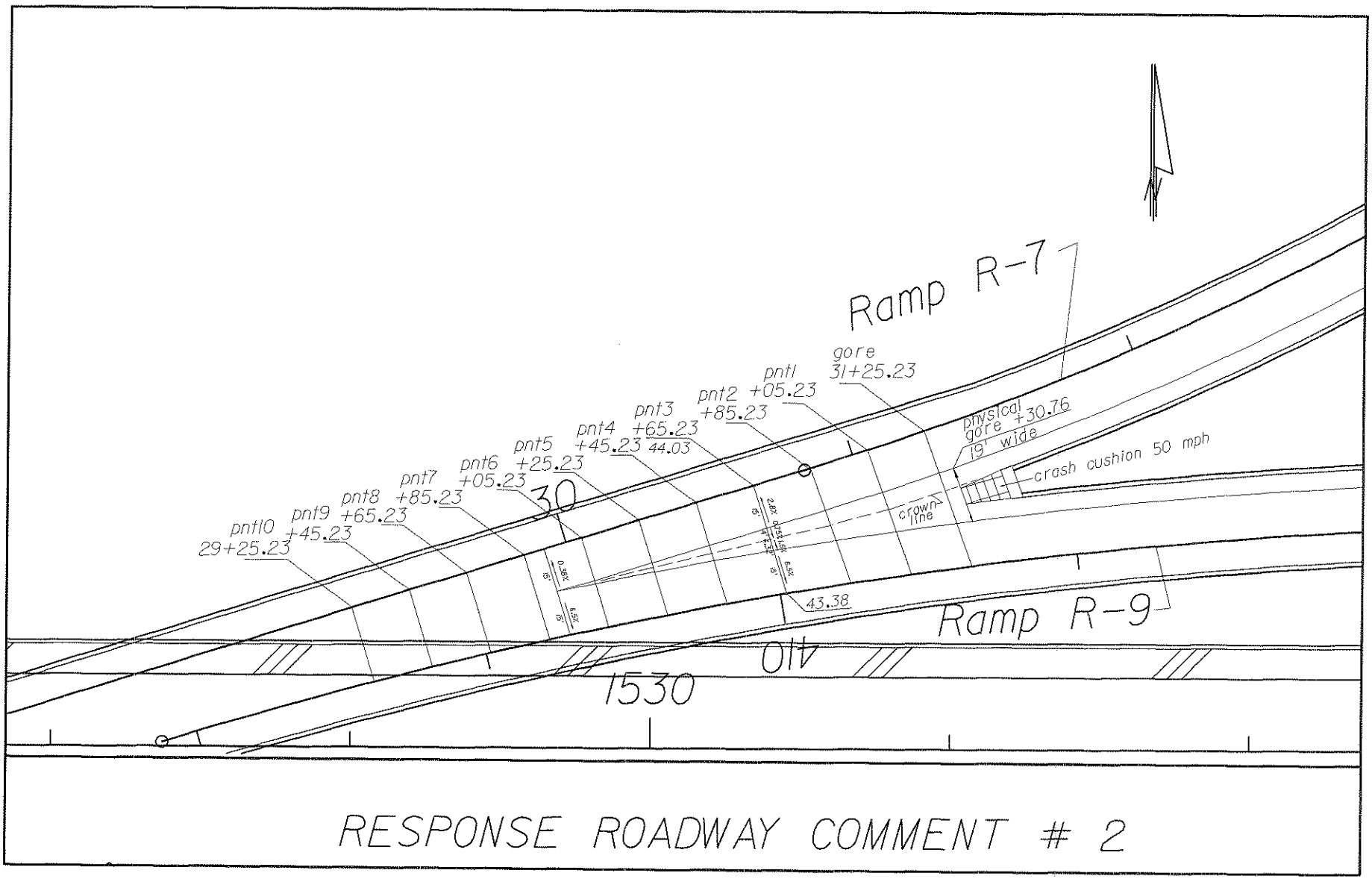
ROADWAY – ATTACHMENTS

[See Following Page]

APPENDIX 2-P.1

ROADWAY – ATTACHMENTS

Attachment for Comment No. 2



RESPONSE ROADWAY COMMENT # 2

PRELIMINARY GRAPHIC GRADE FOR RAMP R-7 AND R-9

Increment = -20	Gore	pnt1	pnt2	pnt3	pnt4	pnt5	pnt6	pnt7	pnt8	pnt9	pnt10
20											
PGL STA Ramp R-7	31+25.23	31+05.23	30+85.23	30+65.23	30+45.23	30+25.23	30+05.23	29+85.23	29+65.23	29+45.23	29+25.23
PGL Elevation Ramp R-7	44.96	44.68	44.37	44.03	43.66	43.27	42.85	42.4	41.92	41.42	40.92
Pavement width main	15	15	15	15	15	15	15	15	15	15	15
Cross Slope PGL	4.8017	4.1350	3.4683	2.8017	2.1350	1.4683	0.8017	0.1350	-0.5317	-1.1983	-1.8650
Chevron width 1	6.23	6.2	5.03	4	3	1.6	0.6	0	0	0	0
Cross slope chevron 1	-0.2000	-0.3000	-0.4000	-0.7500	-0.9000	-1.1000	-1.2000	-1.5000	-1.5000	-1.5000	0.4000
Chevron width 2	12.2	8.21	6	4.32	2.6	1.69	0.64	0	0	0	0
Cross slope chevron 2	-1.5000	-1.5000	-1.5000	-1.5000	-1.5000	-1.5000	-1.5000	-1.5000	-1.5000		
STA graphic grade Ramp R-9	409+32.53	409+52.53	409+72.53	409+92.53	410+12.53	410+32.53	410+52.53	410+72.53	410+92.53	411+12.53	411+32.53
Pavement width graphic grade Ramp R-9	15	15	15	15	15	15	15	15	15	15	15
Cross slope graphic grade Ramp R-9	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000
Elevation graphic grade Ramp R-9	44.5098	44.1835	43.8051	43.3805	42.9393	42.4723	41.9785	41.4453	40.8653	40.2653	39.6653
Desired elevation graphic grade Ramp R-9	44.53							41.44	40.86		
Long Slope graphic grade Ramp R-9	-1.6000	-1.6315	-1.8918	-2.1234	-2.2060	-2.3347	-2.4692	-2.6660	-2.9000	-3.0000	-3.0000
Desired Long Slope graphic grade Ramp R-9	-1.6000								-2.9000		

Linear Interpolation Super Elevation (SE) Cross Slope

PGL cross slope points	STA	SE
PGL SE 1	3245.18	8.8
PGL SE 2	2921.18	-2
PGL SE 3	334500	8.8

			4.8017	4.1350	3.4683	2.8017	2.1350	1.4683	0.8017	0.1350	-0.5317	-1.1983	-1.8650

Ramp cross slope points	STA	SE	SE Gore	SE pnt									
PGL SE 1	40852.53	-6.5	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000
PGL SE 2	41052.53	-6.5	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000	-6.5000
PGL SE 3	41152.53	-6.5											

APPENDIX 2-P.1

ROADWAY – ATTACHMENTS

Attachment(s) for Comment No. 3

ROADWAY COMMENT # 3 RESPONSE						
STA		STA	SIDE	ACSID FRONT SLOPE		REMARKS
	4710	4720	RT	1	2	A flatter slope would impact ramp T-17
	4720	4750	RT	1	2	The slope will be upgraded to 1:4
	4765	4770	RT	1	2	The slope will be upgraded to 1:4 (Not aplicable to ramps)
	1775	1785	RT	1	2	The slope will be upgraded to 1:4
	1775	1780	LT	1	2	The slope will be upgraded to 1:4
	1785	1789	RT	1	2	A flatter slope would fill in existing drainage ditch, indicative xs are 1:2
	1789	1800	RT	1	2	A flatter slope would fill in existing drainage pond 50' deep, in ramp t-7 not mainline,

EXHIBIT 1-3

APPENDIX 2-P.1

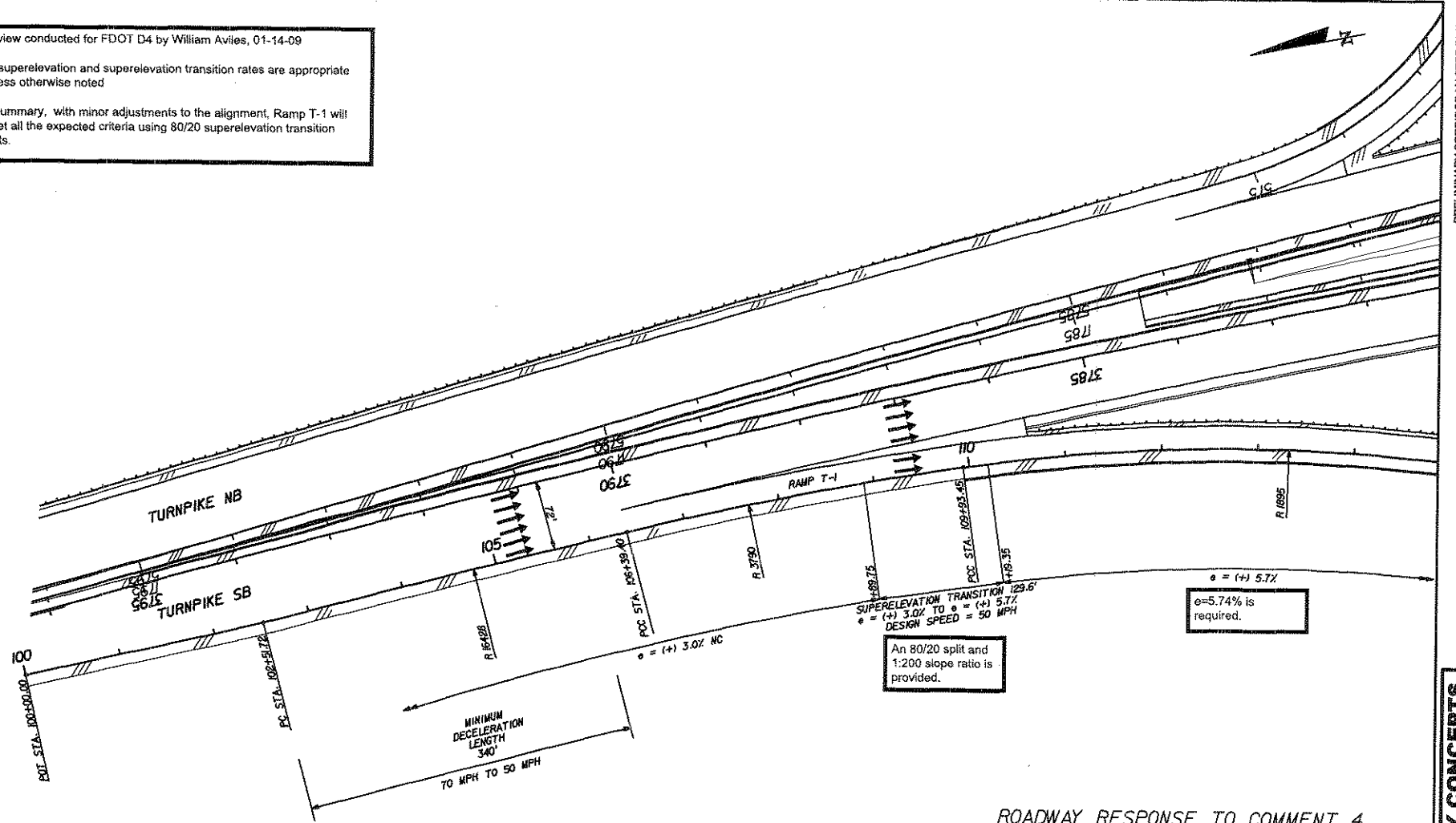
ROADWAY – ATTACHMENTS

Attachment(s) for Comment No. 4

Review conducted for FDOT D4 by William Aviles, 01-14-09

All superelevation and superelevation transition rates are appropriate unless otherwise noted

In summary, with minor adjustments to the alignment, Ramp T-1 will meet all the expected criteria using 80/20 superelevation transition splits.



e=5.74% is required.

An 80/20 split and 1:200 slope ratio is provided.

The deceleration length from STA 102+51.72 (PC) to STA 106+39.40 (PCC) is adequate to achieve 70 mph to 50 mph

ROADWAY RESPONSE TO COMMENT 4

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2008

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

EarthTech

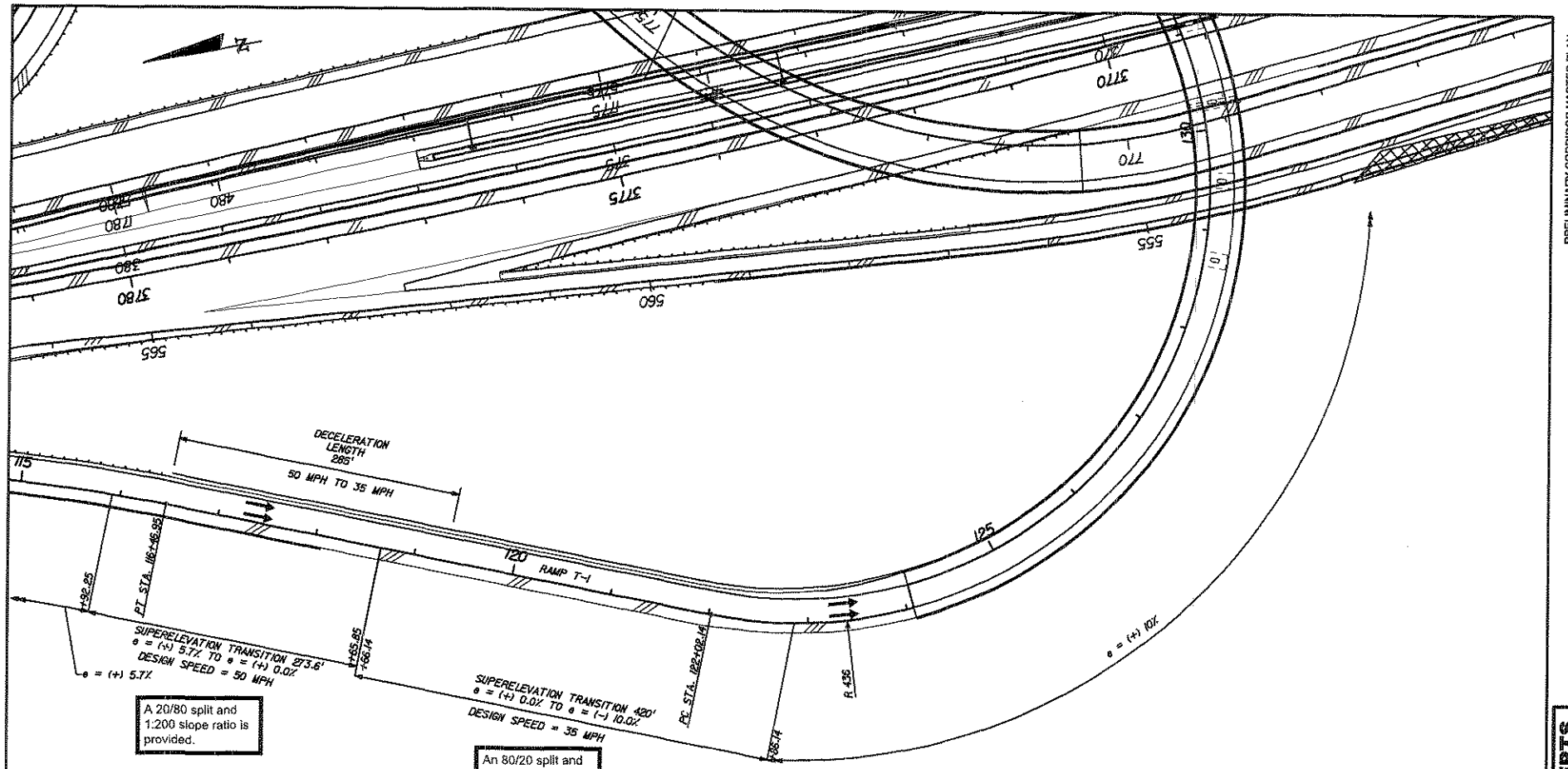
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BROWARD	420809-3-52-01

ROADWAY PLAN

SHEET NO. 1

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ROADWAY RESPONSE TO COMMENT 4

PRELIMINARY CORRIDOR MASTER PLAN
05 SEPTEMBER 2006

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

ACS-DRAGADOS MACQUARIE PARTNERSHIP

EarthTech

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
	BROWARD	420809-3-52-01

ROADWAY PLAN

SHEET NO. 2

APPENDIX 2-P.1

ROADWAY – ATTACHMENTS

Attachment(s) for Comment No. 5

595 Express
Moving Forward Together

EarthTech

PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION

I-595 PRELIMINARY CORRIDOR MASTER PLAN
RESPONSE TO ROADWAY COMMENTS

COMMENT #5 -STOPPING SIGHT DISTANCE ANALYSIS FOR RAMP T-1

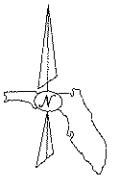
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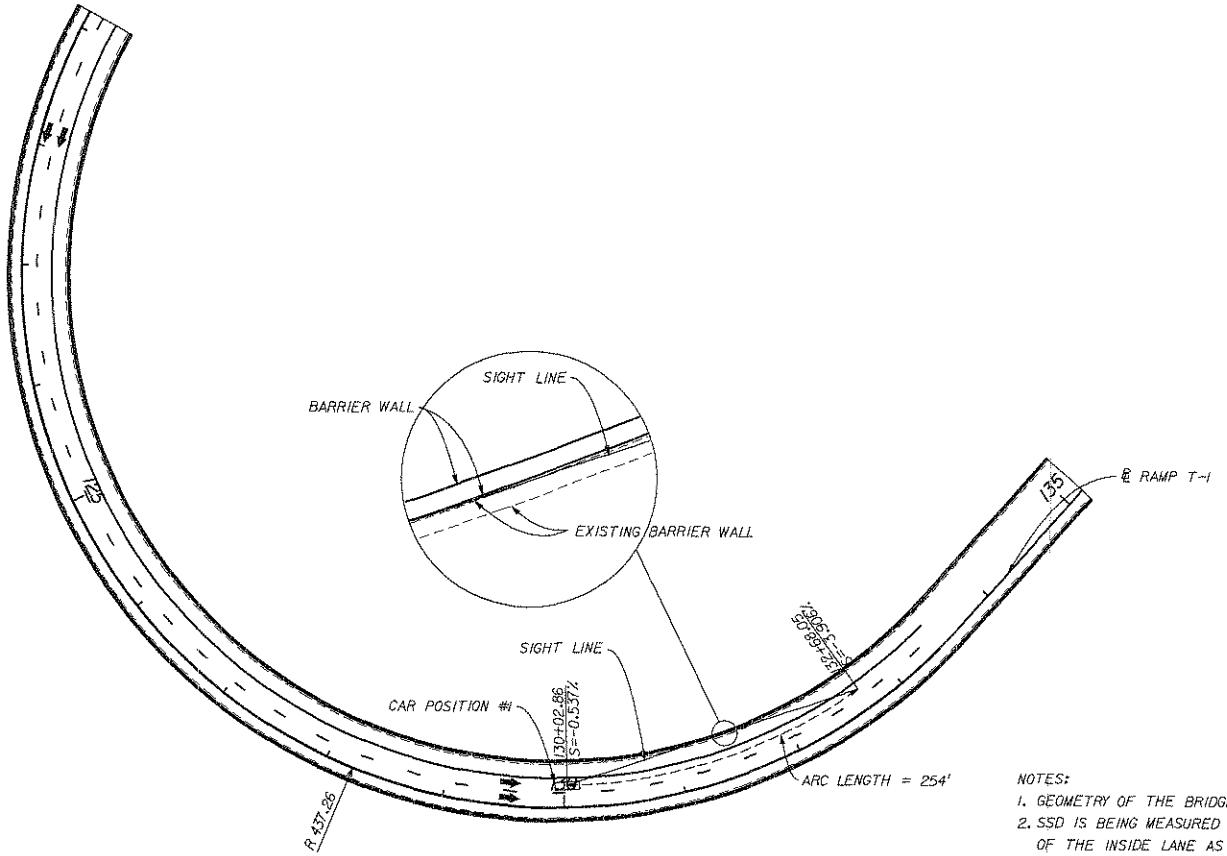
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SSD-2	CAR POSITION #2 PLAN VIEW
SSD-3	CAR POSITION #2 PROFILE VIEW
SSD-4	CAR POSITION #3 PLAN VIEW
SSD-5	CAR POSITION #3 PROFILE VIEW
SSD-6	CAR POSITION #4 PLAN VIEW

PROPOSED BRIDGE TYPICAL SECTION

SUBMITTED 30 DEC 2008

PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION





NOTES:
1. GEOMETRY OF THE BRIDGE IS PER EXISTING PLANS
2. SSD IS BEING MEASURED ALONG THE CENTER PATH OF THE INSIDE LANE AS AN ARC LENGTH (AASHTO 2004, CHAPTER 3 , PAGE 224, EXHIBIT 3-54)

CAR POSITION #1

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

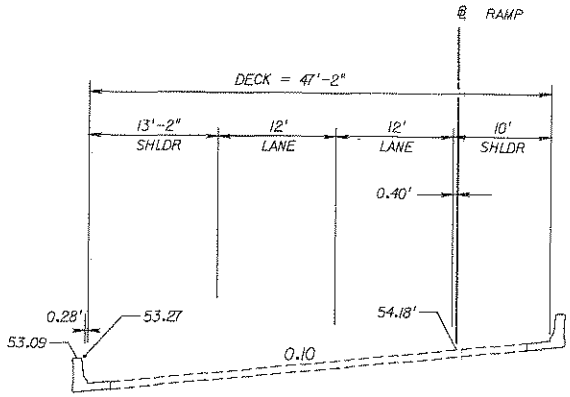
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	BROWARD	420809-3-52-01

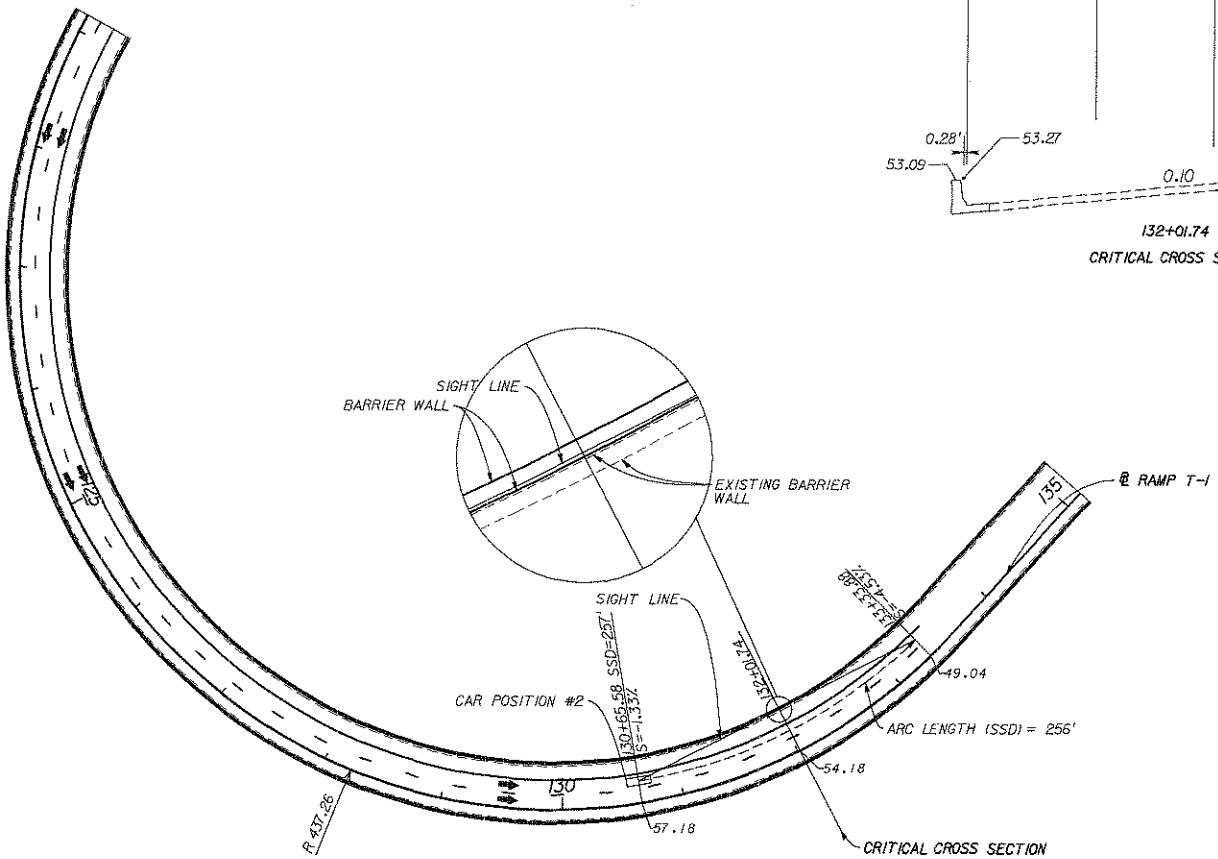
RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

SHEET NO. SSD-1

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132+01.74
CRITICAL CROSS SECTION



NOTES:
1. GEOMETRY OF THE BRIDGE IS PER EXISTING PLANS
2. SSD IS BEING MEASURED ALONG THE CENTER PATH OF THE INSIDE LANE AS AN ARC LENGTH (AASHTO 2004, CHAPTER 3 , PAGE 224, EXHIBIT 3-54)

CAR POSITION #2

PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION

N.T.S.

REVISIONS				
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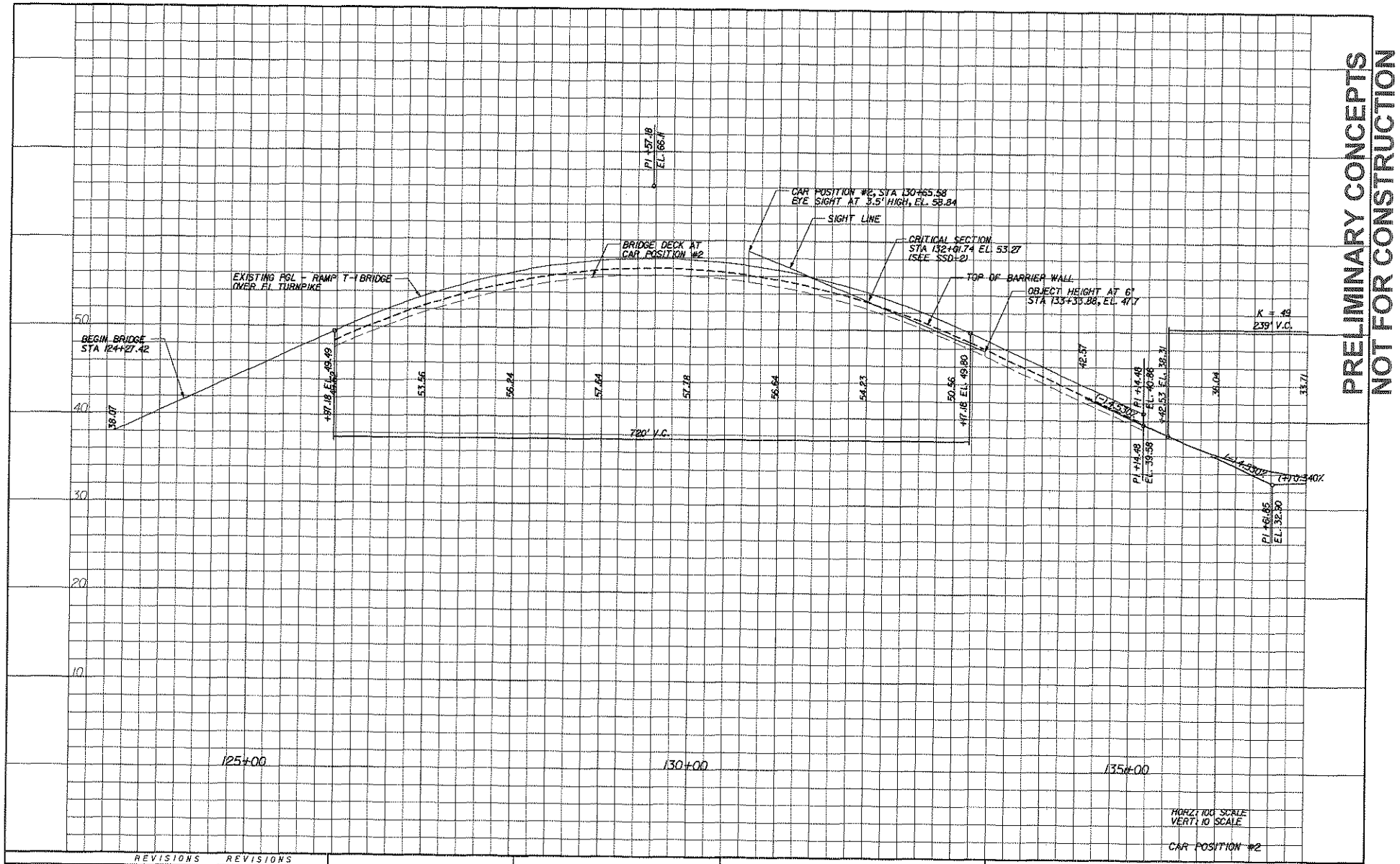
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	BROWARD	420809-3-52-01

RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

SHEET NO. SSD-2

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

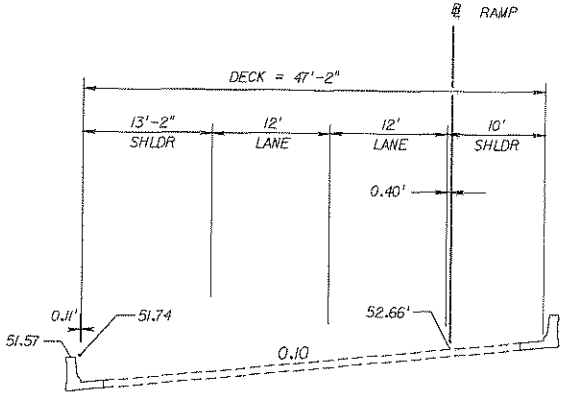
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91	BROWARD	420809-3-52-01

RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

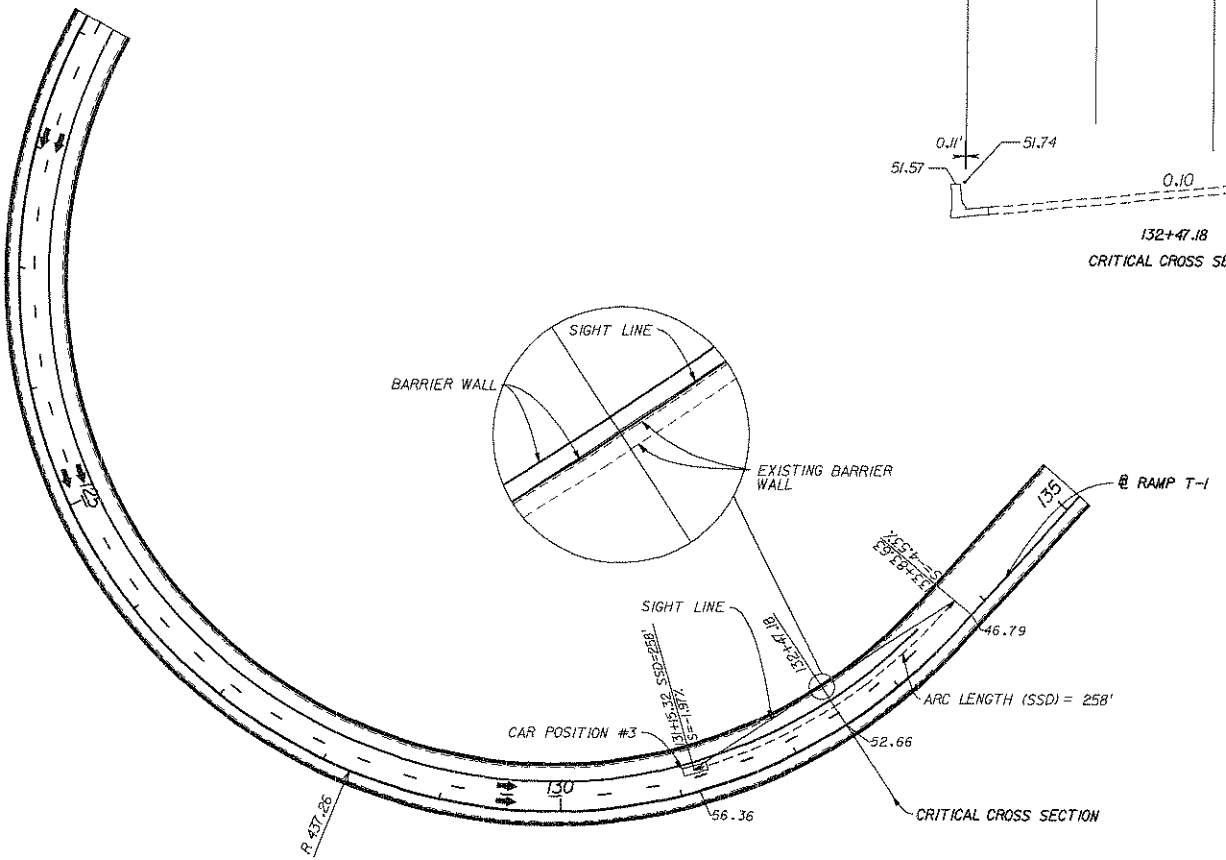
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PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION



132+47.18
CRITICAL CROSS SECTION



N.T.S.

NOTES:
1. GEOMETRY OF THE BRIDGE IS PER EXISTING PLANS
2. SSD IS BEING MEASURED ALONG THE CENTER PATH OF THE INSIDE LANE AS AN ARC LENGTH (AASHTO 2004, CHAPTER 3 , PAGE 224, EXHIBIT 3-54)

CAR POSITION #3

REVISIONS				
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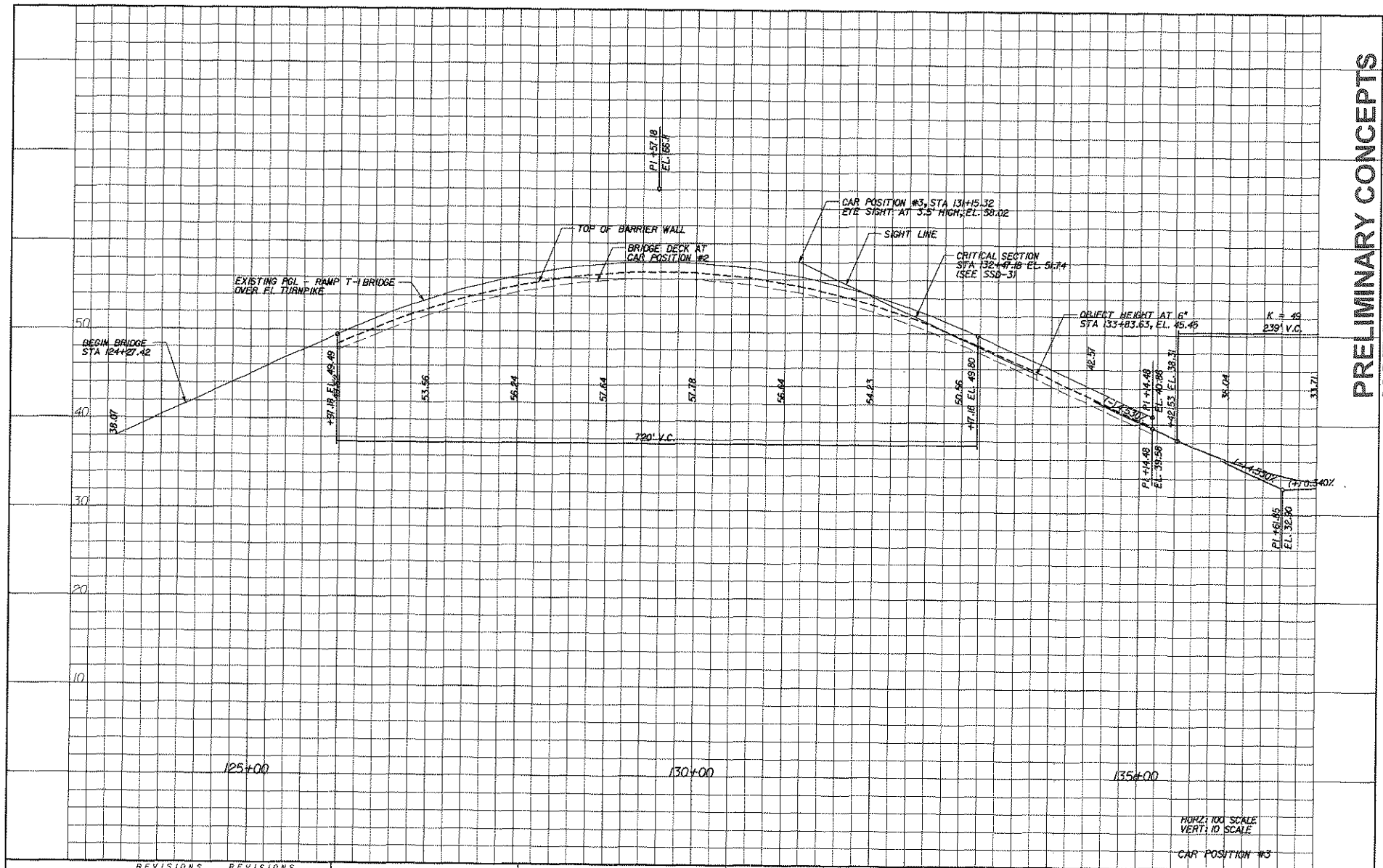
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	BROWARD	420809-3-52-01

RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

SHEET NO. SSD-4

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REVISIONS DATE	BY	DESCRIPTION	REVISIONS DATE	BY	DESCRIPTION

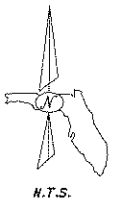
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

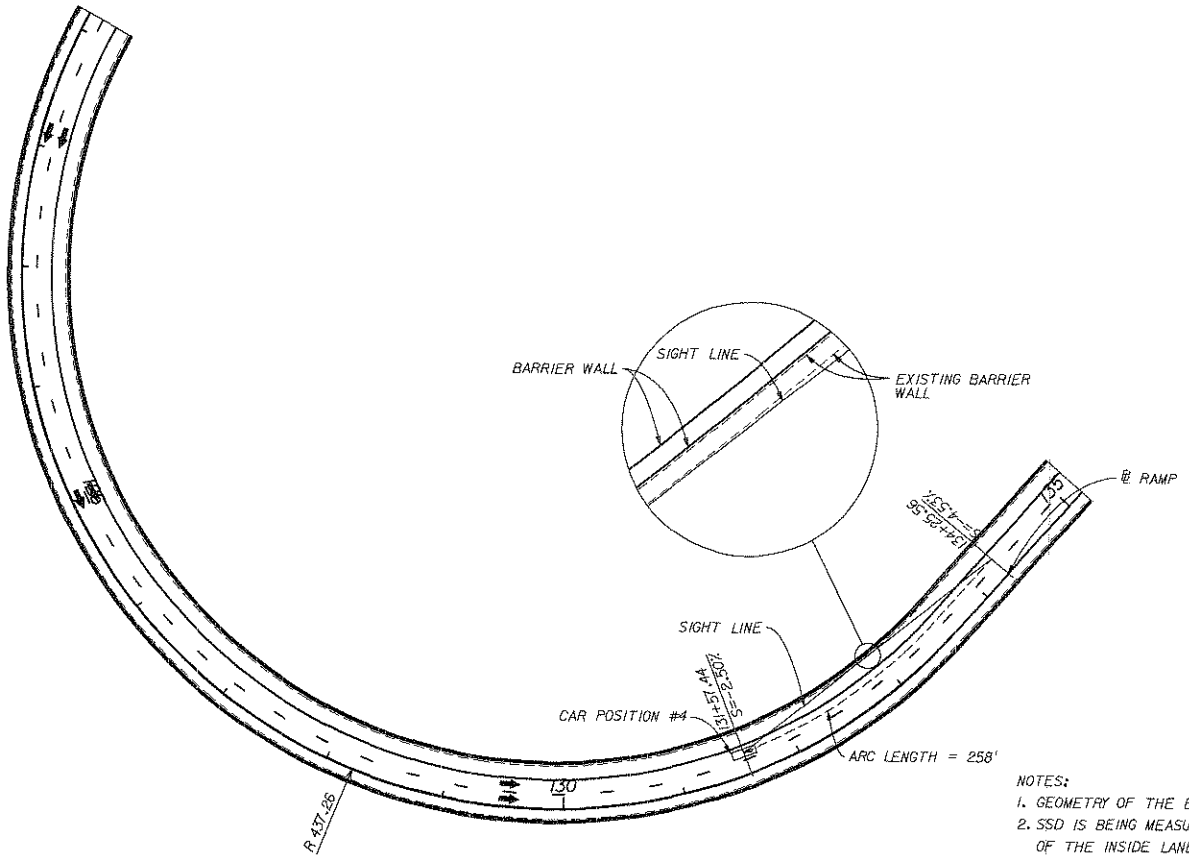
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	BROWARD	420809-3-52-01

RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

SHEET NO. SSD-5

PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION





NOTES:
1. GEOMETRY OF THE BRIDGE IS PER EXISTING PLANS
2. SSD IS BEING MEASURED ALONG THE CENTER PATH OF THE INSIDE LANE AS AN ARC LENGTH (AASHTO 2004, CHAPTER 3 , PAGE 224, EXHIBIT 3-54)

CAR POSITION #4

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
91	BROWARD	420809-3-52-01

RAMP T-1 STOPPING SIGHT DISTANCE ANALYSIS

SHEET NO.
SSD-6

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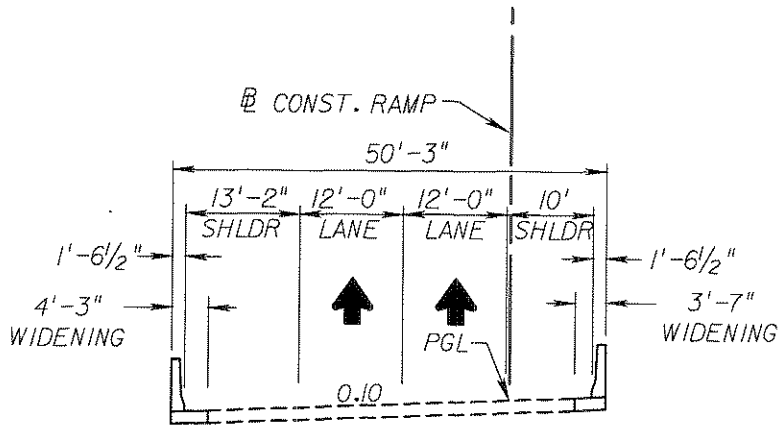
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 419336-1, 419337-1, 419338-1 FEDERAL AID PROJECT NO. N/A COUNTY NAME BROWARD

SECTION NO. 86095 ROAD DESIGNATION SR 91 LIMITS/MILEPOST 54.162 TO 55.710

PROJECT DESCRIPTION IMPROVEMENTS TO THE TURNPIKE MAINLINE (SR 91) INTERCHANGE WITH I-595

PROPOSED BRIDGE TYPICAL SECTION



DESIGN SPEED = 35 MPH
RAMP T-1 BRIDGE (BR. NO. 860559)

PRELIMINARY CONCEPTS
NOT FOR CONSTRUCTION

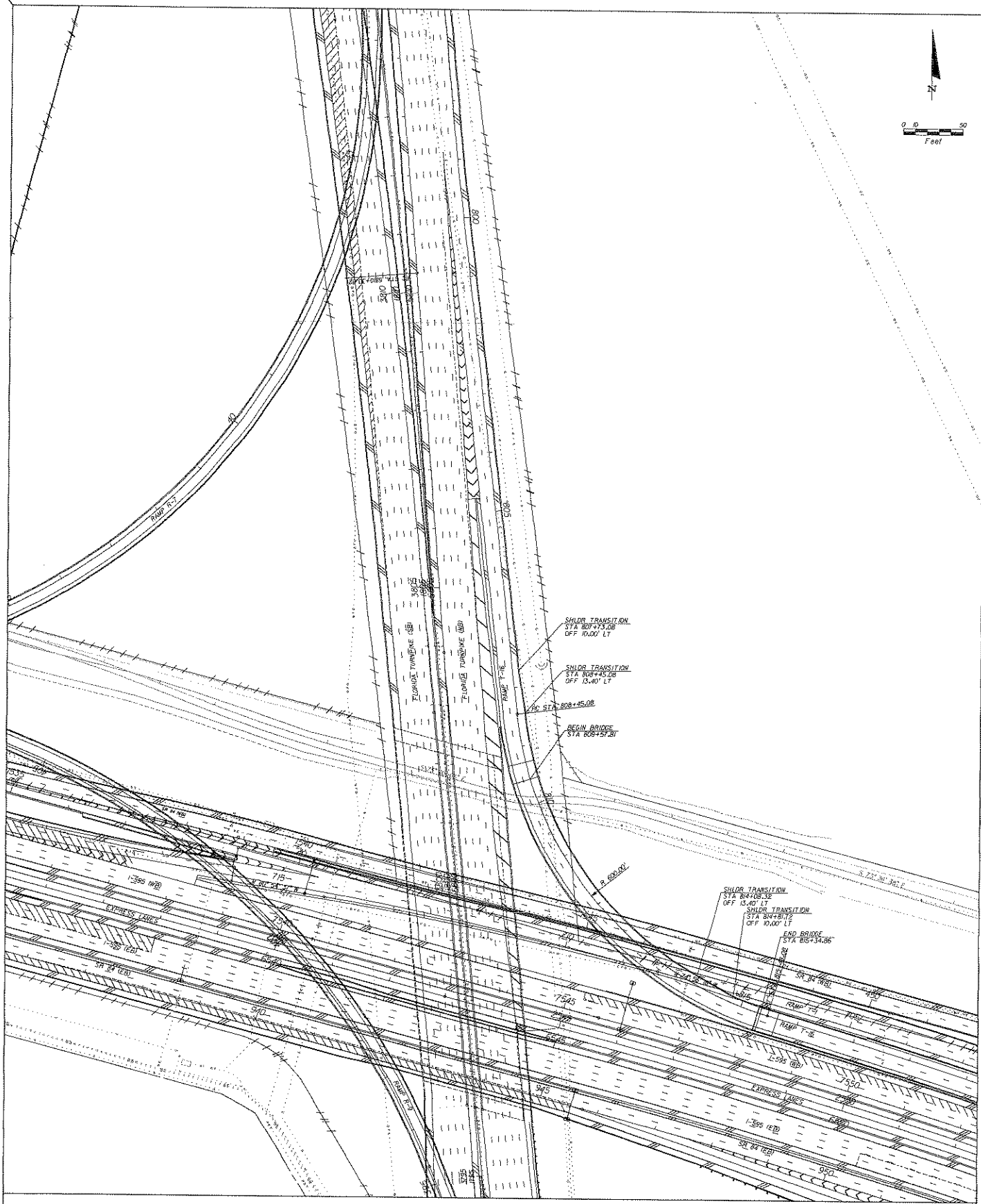
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Engineer Of Record: Phil Schwab, P.E. No. 47555 3125 W. Commercial Blvd. - Suite 130 Fort Lauderdale, Florida 33309-3446 Date	Turnpike Enterprise Design Engineer Date	N/A FHWA Transportation Engineer Date

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APPENDIX 2-P.1

ROADWAY – ATTACHMENTS

Attachment(s) for Comment No. 9



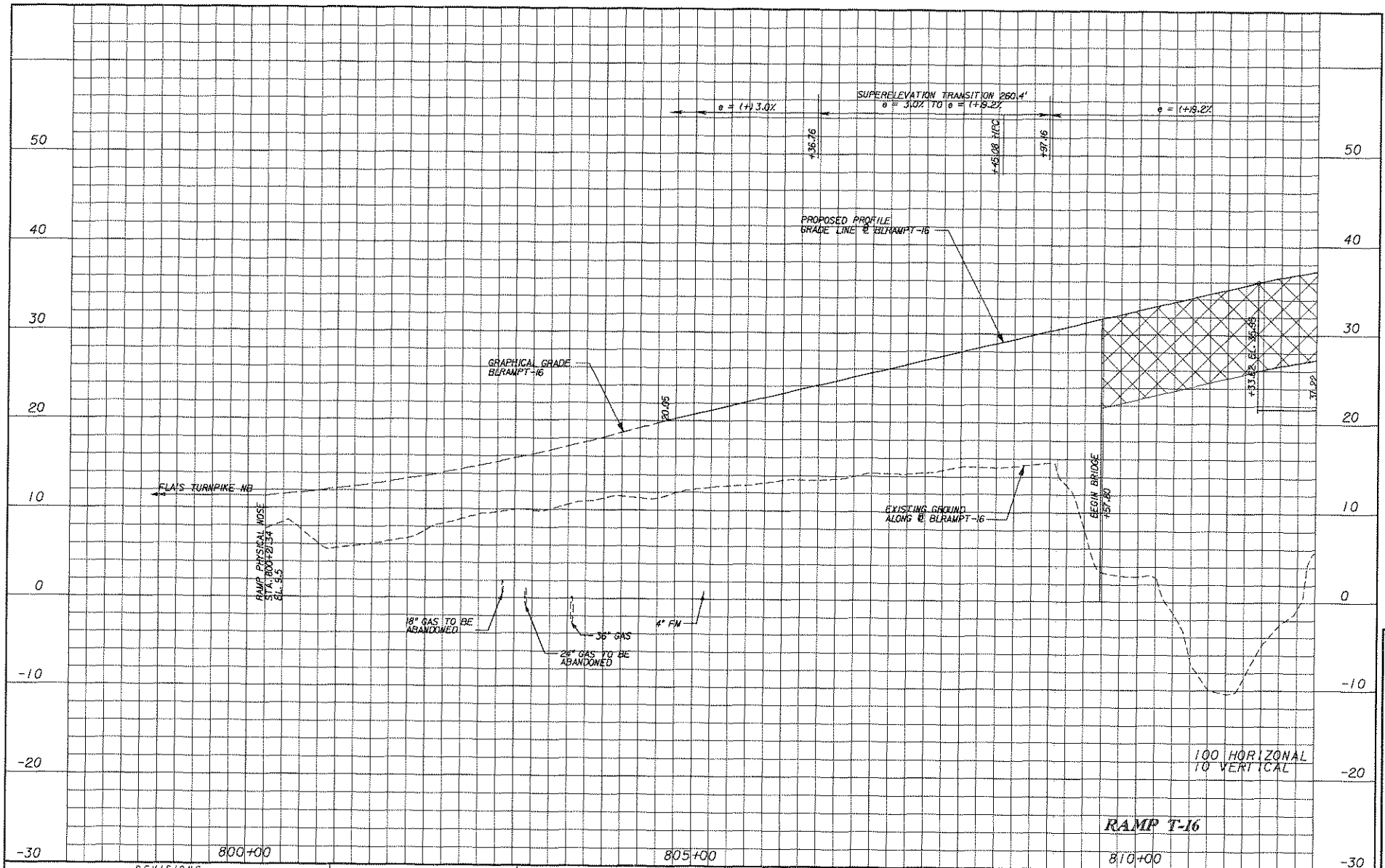
I-595 CORRIDOR ROADWAY IMPROVEMENTS PROJECT

ACS-DRAGADOS MACQUARIE PARTNERSHIP

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ROADWAY PROPOSAL COMMENT NO. 9 RESPONSE

DECEMBER 31, 2008



PRELIMINARY CORRIDOR MASTER PLAN
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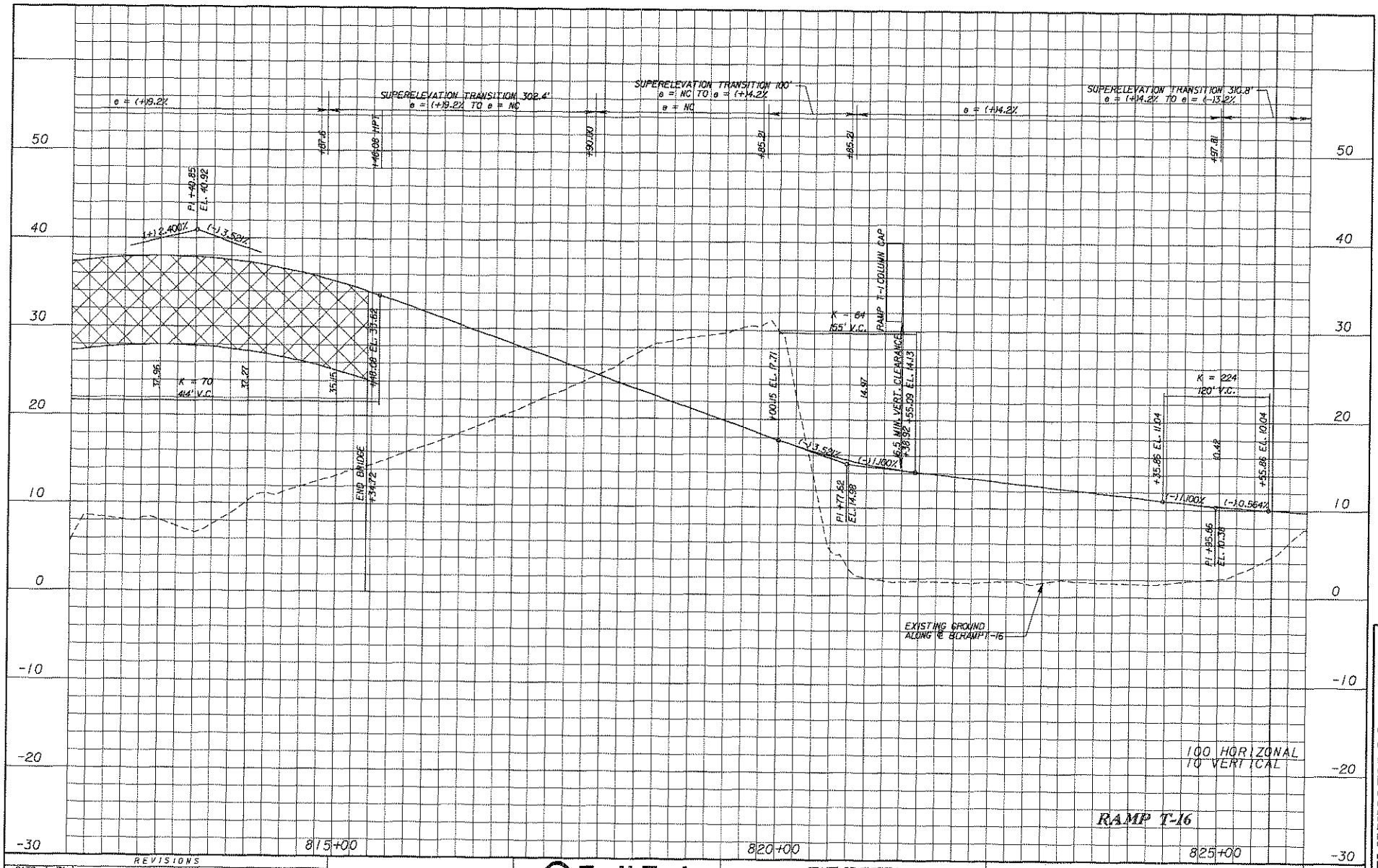
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

ROADWAY PROFILES

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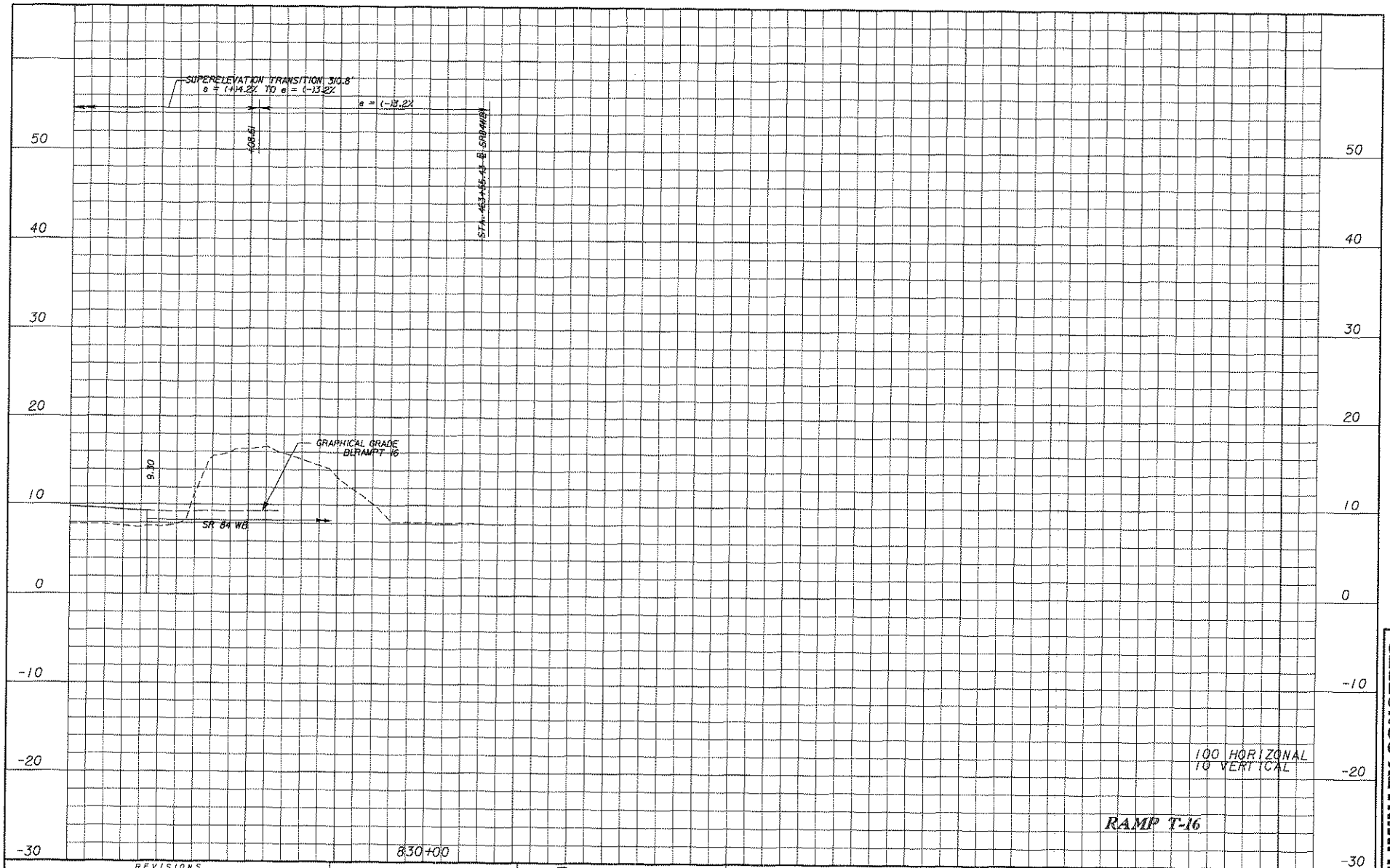
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 862	BROWARD	420809-3-52-01

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PRELIMINARY CORRIDOR MASTER PLAN
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SR 862	BROWARD	420809-3-52-01

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APPENDIX 2-P.1

ROADWAY – ATTACHMENTS

Attachment(s) for Comment Nos. 11,29,30

Table 7-4. I-595 Sound Barrier Differences Between the Preliminary Indicative Design and ACSID's Design (As of 1/16/2009).

Sound Barrier Number	Community Name	General Location	Barrier Type	Begin Station	End Station	Deviation by Barrier Type and Height (feet)					Comments
						8	14	16	18	22	
SB-2	Plantation Acres and Acres South Park	Between Flamingo Road and Hiatus Road - North of I-595	Shoulder Mounted (SR 84 - Includes Construction on Bulkhead)	Reduce from 1214+13.34 to 1217+06.5	Extend from 1266+22.10 to 1266+91.5						Revised Begin Barrier; End Barrier Extended to Match Indicative Design
			Deviation (feet)	-294.6	69.4	---	-225.2	---	---	---	
SB7/SB-8	Lake View Estates and Isla del Sol	Between University Drive and Florida's Turnpike - North of I-595	Shoulder Mounted (SR 84 - Includes Construction on Bulkhead)	---	Extend from 2492+00 to 2494+00						SB-7 End Barrier Extended to Address Gap Noted in Table 7-1 Between SB7 and SB8
			Deviation (feet)	---	200.0	---	200.0	---	---	---	
			Shoulder Mounted (SR 84 - Includes Construction on Bulkhead)	---	Extend from 2494+00 to 2497+41.5						SB-8 End Barrier Extended to Match Indicative Design
			Deviation (feet)	---	341.5	---	341.5	---	---	---	
SB-9	New River Cove (Formerly Archstone) Apartments	Between SR 7 and I-95 - North of I-595	Shoulder Mounted (Includes Construction on Bridges and/or MSE Walls)	Extend from 7623+53.58 to 7622+46.58	Extend from 4509+89.29 to 4510+99.29						Barrier Limits Extended to Match Indicative Design
			Deviation (feet)	107.0	100.0	207.0	---	---	---	---	
			Ground Mounted (North of Westbound SR 84)	---	Reduce from 150+79.65 to 149+79.65						End Barrier Reduced to Match Indicative Design
			Deviation (feet)	---	-100.0	---	---	---	---	-100.0	
SB-10	Lauderdale Little Ranches	Between Griffin Road and I-595 - West of Florida's Turnpike	Ground Mounted - Relocation of an Existing Barrier (West of Florida's Turnpike)	Reduce from 502+96.41 to 503+96.41	---						Begin Barrier Reduced to Match Indicative Design; Confirm Barrier to be Placed Along Right of Way Line Versus Shoulder and Maintains Top Wall Elevation of Existing Sound Barrier
			Deviation (feet)	-100.0	---	---	---	-100.0	---	---	
SB-12	Plantation Harbor	Between I-595 and Peters Road - West of Florida's Turnpike	Ground Mounted (West of Florida's Turnpike)	---	Extend from 3818+73.66 to 3818+63						Confirm Barrier to be Placed Along Right of Way Line versus Shoulder with a Minimum Top Wall Elevation of 24 feet
			Deviation (feet)	---	10.7	---	---	---	10.7	---	
					Totals	207.0	316.3	-100.0	10.7	-100.0	Net Changes

Other Sound Barrier Clarifications:

Sound Barrier Number	Community Name	General Location	Barrier Type	Begin Station	End Station	Comments
SB-4	The Trellises Condos; Davide Isles, Jacaranda Villas	Between Nob Hill Road and Pine Island Road - North of I-595	Shoulder Mounted (SR 84 - Includes Construction on Bulkhead)	1321+38.14	1362+41	Confirm Sound Barrier is 14 foot Tall
SB-11	Everglades Lakes	Between Griffin Road and I-595 - West of Florida's Turnpike	Ground Mounted (West of Florida's Turnpike)	537+07.59	548+45.60	Sound Barrier Needs to be Shifted to Right of Way Line
			Shoulder Mounted (Includes Construction on MSE Wall)	548+45.60	553+06.16	Confirm Sound Barrier Height is up to 14 foot Tall with a Top Wall Elevation of 23 feet to Match the Elevation of the Ground Mounted Barrier
SB-13	Plantation Point and Broadview Park	Between I-595 and Peters Road - East of Florida's Turnpike	Shoulder Mounted (Includes Construction on MSE Wall)	5825+10.50	5832+00.70	Confirm Sound Barrier is an 8 foot Tall Shoulder Mounted Barrier versus 22 foot tall Ground Mountnd Barrier

APPENDIX 2-P.2

STRUCTURES – COMMENTS MATRIX

[See Following Page]

ACSID Technical Proposal Review Comments - Structures

Comment #	Design Construction Criteria Number	Roadway	Direction	Bridge ID	LEVEL	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	ACTION TAKEN
1	RFP VII DII S3 J.3.d, Second Bullet	I-595	EB	I-595 EB/University Dr.	1	Proposed bridge does not match structure type of existing bridges to remain.	I-595 / University Drive Interchange currently consists of a mix of steel box girder system and AASHTO Type Girders. Given the utilizations of mixed materials, our concept provides a consistent look to the northbound traffic that is consistent with the interchange itself. The same happen for the southbound traffic that will face Ramp Q which is also steel plate girders, thus setting an uniform look to the interchange as the traveling public approaches the interchange. The use of outside steel bridge structure allows for continuity in the look of the approaches to the interchange. Through the use of consistent color and texture the approaches to this interchange will comply with the Level 3 Aesthetics Scheme without the need to replace the interior structures. (See Attachment)
2	RFP VII DII S3 M.2.f	I-595	EB	I-595 EB/University Dr.	1	Dapped steel girders are proposed. This is a violation of the RFP and may present a maintenance (fatigue) issue.	In lieu of dapped end, tapered ends will be used for the two new girders, thus complying with the RFP.
3	SDG 4.5.7	I-595	WB	I-595 WB/Flamingo Rd.	1	Sheet B4-1: Pier 3 is shown with integral concrete cap with continuous plate girders and transverse post tensioning of the cap. The design shows 12 tendons stressed against the web. There appears to be no provision to cover the tendon anchors which would be fully exposed on the exterior of the web. This does not satisfy FDOT requirements for protection of tendon anchors and is not consistent with the Level 3 aesthetic criteria as specified in the RFP.	The post-tensioning system consists of PT bars. End product will comply with the Post Tensioning Guidelines for post tensioning protection as well as an end treatment that will at least meet Level 3 Aesthetic Treatment. A concrete pour back protection will be provided over the anchors.
4	SDG 4.6.1	I-595	WB	I-595 WB/Pine Island Rd.	1	Steel box integral pier caps do not meet the FDOT requirements for inspection access (< 72" deep etc.).	Integral caps will be built out of concrete with post-tensioning system where needed. (See Attachment)
5	RFP VII DII S3 J.3.c, Second Bullet	I-595	WB	Ramp Q3/Ramp Q2	1	Specific aesthetic details are not shown however, tapered steel plate girders are proposed for exterior beams in violation of specific RFP aesthetic requirements.	The girders will be constant depth, however, the bridge configuration will be modified to provide the minimum vertical clearance.
6	General Design	I-595	WB	Ramp Q3/Ramp Q2	1	Sheet B29-3, Pier 4: Integral "C" piers consisting of embedding a steel box into a concrete column where the post-tensioning is located outside the footprint of the box member is a non-traditional design approach. The mechanism of connecting the box to the column element and transmitting the necessary couple for the cantilevered box integral cap is unclear based on the details provided.	Our team will adopt FDOT's Tallahassee office suggestion of providing a posttensioned concrete integral cap.
7	PPM 26.9.4	I-595 & SR84	EB/WB	Ramp K2/Ramp M EB & Ramp L1/SR84 WB	1	Sheet B14-1, B15-1: The piers as shown are very broad, plain, and visually dull and as such do not appear to satisfy level 3 aesthetics. It is customary where a very stocky section is required to mitigate the visual massiveness of the pier by rounding the cross section or varying the column dimensions or providing architectural relief to break up the monotony of the column face. It does not appear that any of these were considered in the design.	Vertical curvature will be provided by varying the column dimensions and a horizontal cross sectional roundness will mitigate the visual massiveness of the piers. Aesthetic concept will consider this pier as an opportunity to incorporate the aesthetic theme. (See Attachment)
8	PPM 26.9.4	NNRC	N/A	Commodore Drive/NNRC	1	Sheet B2-1: The design shows a flat slab widening of the bridge to extend the sidewalk area. This is not consistent with Level 3 aesthetics.	The proposed frame will be modified to have the bridge coping line follow the barrier wall and not have a platform beyond the back of barrier.
9	SDG 3.5.3	Turnpike Interchange	N/A	Bulkhead along NNRC in TPK R/W	1	The permanent bulkhead uses an exposed steel waler which is a detail not allowed on FDOT projects. This is a detail susceptible to ongoing and long-term maintenance. This detail must be eliminated.	A king pile system will be used, which avoids the use of soil anchors and minimizes the impacts to MOT.

ACSID Technical Proposal Review Comments - Structures

Comment #	Design Construction Criteria Number	Roadway	Direction	Bridge ID	LEVEL	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	ACTION TAKEN
10	SDG 3.5.3	Turnpike Interchange	N/A	Bulkhead along NNRC in TPK R/W	1	The permanent bulkhead uses an unprotected steel tie-back exposed to soil and atmosphere which is a detail not allowed on FDOT projects. The tie-backs must be protected from the environment. A different detail must be provided.	A king pile system will be used, which avoids the use of soil anchors and minimizes the impacts to MOT.
11	General Design	Turnpike Interchange	N/A	Ramp R7 (Direct Connect to Turnpike)	1	Sheet B30-6: Locating an integral fixed pier at the end of a long steel unit is an unconventional structural solution. Fixing the end-unit rotation introduces complex structural behavior especially given the 226' end span. The pier has to be modeled along with the beams to properly evaluate the structural system. It also requires all thermal movements to occur in one direction (+/- 906').	FDOT - Tallahassee Office suggested modifications to the structural framing system that our team anticipates adopting. Pier 6 will be shifted westbound and remain as an integral pier. Span 5 and 6 will become a single unit, fixed at Pier 6. The superstructure may be revised, as suggested, to two steel boxes with and intermediate steel I-Girder, between boxes along the I-595 Express lanes. (See Attachment)
12	TPPPH 26.18.1	Turnpike Interchange	N/A	Ramp R7 (Direct Connect to Turnpike)	1	The girder spacing creates an excessive span length for the 8 ½" bridge deck. The girder/flange spacing must be reduced to meet the traditional bridge deck design as is customary on Turnpike designs.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work, or the slab thickness may be increased to meet design criteria.
13	TPPPH 26.18.1	Turnpike Interchange	N/A	Ramp R7 (Direct Connect to Turnpike)	1	The bridge deck span will not likely meet the traditional bridge deck design as is customary on Turnpike projects.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work., or the slab thickness may be increased to meet design criteria.
14	AASHTO LRFD Bridge Design Specifications Article 6.11.2.3	Turnpike Interchange	N/A	Ramp R7 (Direct Connect to Turnpike)	1	The bridge deck span to box girder top width is outside of the specification ratios for box girder bridges. Additional box girders must be added to the typical section to bring the structure within the specification ratios.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work., or the slab thickness may be increased to meet design criteria. In addition, the box spacing will be adjusted to comply with LRFD 6.11.2.3
15	Turnpike Preference	Turnpike Interchange	N/A	Ramp R7 (Direct Connect to Turnpike)	1	The bridge has fracture critical members. Additional members must be added to eliminate the fracture critical nature of the structure over the Turnpike.	We recognize that Fracture Critical members have more requirements that must be met to address their critical nature, however, it is not necessary to add additional members to a fracture critical member merely to render them as non-fracture critical members, unless the criteria states otherwise. Our design will design fracture critical members as such.
16	TPPPH 26.18.1	Turnpike Interchange	N/A	Ramp R9 (Direct Connect to Turnpike)	1	The girder spacing creates an excessive span length for the 8 ½" bridge deck. The girder/flange spacing must be reduced to meet the traditional bridge deck design as is customary on Turnpike designs.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work., or the slab thickness may be increased to meet design criteria.
17	TPPPH 26.18.1	Turnpike Interchange	N/A	Ramp R9 (Direct Connect to Turnpike)	1	The bridge deck span will not likely meet the traditional bridge deck design as is customary on Turnpike projects.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work., or the slab thickness may be increased to meet design criteria.
18	AASHTO LRFD Bridge Design Specifications Article 6.11.2.3	Turnpike Interchange	N/A	Ramp R9 (Direct Connect to Turnpike)	1	The bridge deck span to box girder top width is outside of the specification ratios for typical box girder bridges. Additional box girders must be added to the typical section to bring the structure within the specification ratios.	The proposal drawings do not catch all condition of the concept. Lateral cross beams may be used wherever the 8 1/2" thick slab does not work., or the slab thickness may be increased to meet design criteria. In addition, the box spacing will be adjusted to comply with LRFD 6.11.2.3
19	Turnpike Preference	Turnpike Interchange	N/A	Ramp R9 (Direct Connect to Turnpike)	1	The bridge has fracture critical members. Additional members must be added to eliminate the fracture critical nature of the structure over the Turnpike.	We recognize that Fracture Critical members have more requirements that must be met to address the their critical nature, however, it is not necessary to add additional members to a fracture critical member merely to render them as non-fracture critical members, unless the criteria states otherwise. Our design will design fracture critical members as such.
20	SDG 4.2.4 & 4.2.5	Turnpike Interchange	N/A	Ramp T1/TPK	1	The overhang widening was not supported by information indicating the proposed overhang meets the SDG Sections 4.2.4 and 4.2.5. Compliance with these SDG sections must be substantiated.	We (ACS) will provide accurate structural calculations and a structural modification plan in accordance with the contract documents.

ACSID Technical Proposal Review Comments - Structures

Comment #	Design Construction Criteria Number	Roadway	Direction	Bridge ID	LEVEL	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	ACTION TAKEN
21	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	Ramp T1/TPK	1	Constructability of the pier protection for the existing columns as discussed in Volume 2 book 1 of 11 Section 2.1.1.11.8.5 has not been demonstrated. This construction could require temporary supports that will have long-duration impacts on the Turnpike traffic. Replacement of the T1 bridge should be considered.	The proposed pier protection does not require temporary supports and Volume 2 book 1 of 11 Section 2.1.1.11.8.5 illustrates the proposed solution as being all at grade. An additional isometric view of the barrier wall transition to the column is provided. (See Attachment)
22	Temporary Design Bulletin C06-06 dated August 29, 2006	Turnpike Interchange	N/A	Ramp T1/TPK	1	Pier protection for existing Piers 10 & 11 in relation to meeting TDB C06-06 must be complied with.	Concur. The design will incorporate pier protection for the mentioned piers. (See Attachment)
23	Topic No. 8950-010-035-b, Bridge Load Rating, Permitting and Posting, Section 2.1.A	Turnpike Interchange	N/A	Ramp T1/TPK	1	Widening the T1 bridge on the existing framework is a special detail. Although bridge ratings for typical bridge widening are not part of the proposal requirements, because of the specialized nature of this proposed structure rehabilitation the bridge capacity with respect to the load rating vehicles must be substantiated. It is highly unlikely that the existing structure will be able to support the additional dead and live load, therefore replacing the Ramp T1 Bridge must be considered as the proper structural solution.	We (ACS) will provide accurate structural calculations and a structural modification plan in accordance with the contract documents.
24	3.M.2.c	Turnpike Interchange	N/A	Ramp T1/TPK	1	Since the T1 bridge is widened on the existing framework and substructure, which is a specialized detail, the capacity of the substructure (pier cap, column, footings and piles) to support the additional dead load and live load configuration must be substantiated. It is highly unlikely that the existing structure will be able to support the additional dead and live load, therefore replacing the Ramp T1 Bridge must be considered as the proper structural solution.	We (ACS) will provide accurate structural calculations and a structural modification plan in accordance with the contract documents.
25	General Design	Turnpike Interchange	N/A	Ramp T16/SR84	1	The pier configuration as detailed appears unbalanced and inadequate. The columns are placed in a constant unbalanced moment that may lead to creep deflections.	The alignment of Ramp T-16 has been modified to remove the eccentric columns and tension developed in the foundations. (See Attachment)
26	General Design	Turnpike Interchange	N/A	Ramp T16/SR84	1	The provided plan must substantiate that the piles are not in tension.	Previous utility constraints required the some drilled shafts be designed in tension for the offset piers. However, current information is that the gasline utilities will be out of service, so the footings can move to place all of the piles in compression.
27	General Design	Turnpike Interchange	N/A	Ramp T16/SR84	1	The details provided are inadequate to demonstrate the column tensile capacity and column-to-cap connection in relation to the 60-1 ¾" diameter PT bars in the cap. The substantial amount of post-tensioning bars is not support by an equivalently substantial quantity of column reinforcement/post-tensioning bars and similar column-to-footing connection.	The alignment of Ramp T-16 has been modified to remove the eccentric columns and tension developed in the foundations. (See attachment)
28	General Design	Turnpike Interchange	N/A	Ramp T16/SR84	1	Recommend reconfiguring the bridge alignment or pier locations to eliminate any potential long-term deleterious effects from the constant unbalanced tension on the columns, footings and piles.	The alignment of Ramp T-16 has been modified to remove the eccentric columns and tension developed in the foundations. See Attachment.
29	General Design and SDG 3.5.3	Turnpike Interchange	N/A	Ramp T9 Cellular Bridge	1	The curtain wall is placed on known poor surficial soils and then attached to the bent cap with an unprotected anchor bar. Soil will settle and the curtain wall will hang from the unprotected anchor bar attachment.	The detail sketch illustrating the curtain wall will be implemented. (See Attachment)
30	SDG 3.5.3	Turnpike Interchange	N/A	Ramp T9 Cellular Bridge	1	No corrosion protection specified for the anchor bar.	Anchor bars will be protected per FDOT specs.

ACSID Technical Proposal Review Comments - Structures

Comment #	Design Construction Criteria Number	Roadway	Direction	Bridge ID	LEVEL	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	ACTION TAKEN
31	General Constructability	Turnpike Interchange	N/A	Ramp T9 Cellular Bridge	1	The ability to construction under two major electric transmission lines, especially the installation of the precast piles, is not addressed in the proposal. See sheet UA-35. A different bridge configuration using spliceable piles (steel H or Steel pipe) that does not expose the steel pipe to the atmosphere must be considered.	In the final design, shielding and different pile configurations, possibly using spliceable piles (steel H or Steel pipe), will be considered to address the power line clearances.
32	General Design and SDG 3.5.3	Turnpike Interchange	N/A	Ramp T9 Cellular Bridge	1	The structural solution for the cellular bridge is a poor concept. The concept shown will be subject to long-term maintenance concerns (anchor bars) from corrosion and settlement (curtain wall). The proposed solution also depends on the bridge deck splice details for structural stability. Any defects in this construction joint could lead to structural instability. A different bridge widening must be considered	In the final design two options will be considered to add more redundancy to the widened bridge: (1) Use of batter piles similar to existing, (2) Offset the pile spacing of alternate piles transversely so the new piles will be ziz-zaged in plan view.
33	General Design	Turnpike Interchange	N/A	Retaining Walls	1	Numerous perched MSE walls atop an existing 2:1 roadway fill (see sheet XS-229 Sta 1605+00) are used within the project. The perched condition has in the past proven to be a maintenance concern and has resulted in slope failures. Perched walls are discouraged by the Turnpike as they have had problems with them in the past.	The final geotechnical analysis of the MSE walls will meet the required factors of safety for external stability. This will be evaluated further to finalize the wall type and location.
34	Index 5300	Turnpike Interchange	N/A	Retaining Walls	1	2'-0" berms are used adjacent to the retaining walls. The minimum berm width adjacent to retaining walls of 4'-0" (see Index 5300) must be adhered to.	4'-0" wide berm will be provided.
35	General Constructability	Turnpike Interchange	N/A	SB Ramp/TPK	1	Time durations for segment removal not provided.	The attached exhibits illustrates the plan information for the demolition and construction at this location. See Attachment.
36	General Constructability	Turnpike Interchange	N/A	SB Ramp/TPK	1	The demolition of this structure in relation to maintaining Turnpike traffic at all times must be substantiated.	See Attachment.
37	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	SB Ramp/TPK	1	The location of the temporary tower is not adequately detailed to determine the feasibility of the location and demolition process with respect to maintaining Turnpike traffic flow.	See Attachment.
38	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The ability to maintain northbound and southbound Turnpike traffic during the Ramp T1 widening must be substantiated for all phases of construction	See Attachment.
39	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The ability to maintain Ramp T1 traffic without affecting the safety of the Ramp T1 traffic must be substantiated for all phases of construction	See Attachment.
40	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The ability to maintain northbound and southbound Turnpike traffic during the Ramp T1 and T5 median pier construction and superstructure construction must be substantiated for all phases of construction	See Attachment.
41	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The Direct Connect Bridges R-7 and R-9 phases do not address construction of straddle piers over the southbound Turnpike traffic. As shown in the proposed MOT, constructing this straddle pier will require SB Turnpike traffic closures. The traffic closure duration will be substantial due to the size of the straddle pier cap forms, reinforcement cage and concrete pours. Typically straddle piers are not constructed over traffic due to the material size and duration of construction. Maintaining Turnpike traffic must be substantiated for all phases of construction.	See Attachment.

ACSID Technical Proposal Review Comments - Structures

Comment #	Design Construction Criteria Number	Roadway	Direction	Bridge ID	LEVEL	DESIGN CONSTRUCTION CRITERIA PRIMARY DESCRIPTION	ACTION TAKEN
42	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The traffic shifts for maintaining southbound Turnpike traffic while erecting R-7 superstructure must be detailed to maintain full traffic flow.	See Attachment.
43	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The traffic shifts for SB Ramp over Turnpike are not addressed for the demolition of the existing SB ramp. Maintaining Turnpike traffic for all phases of construction must be substantiated.	See Attachment.
44	RFP VII DII S3 L.6.b	Turnpike Interchange	N/A	TCP plan	1	The submitted maintenance of traffic details do not provide enough information to indicate that Turnpike traffic will be maintained during all phases of construction.	See Attachment.
45	General Constructability	Turnpike Interchange	N/A	TPK Mainline/I-595	1	The width modified Type IV beam with respect to the height vs. length and width vs. length ratios is a detail not normally used on a FDOT project. The beam stability during transportation and stability during construction must be substantiated. We suspect the beam stability and constructability cannot be substantiated, therefore we recommend that an alternate widening procedure maintaining vertical clearance over I-595 be used.	Type IV beams will be used in spans 1, 3,4, & 5. Span 2 will be designed with Type V AASHTO girders.
46	General Design	Turnpike Interchange	N/A	Zone 8b MSE Walls	1	Perched MSE walls (see sheet XS-233 Sta 1840+00) used on east and west sides for roadway widening (see Sta 1805+00 & 1815+00). Perched walls (walls founded partially up the slope), especially on 2:1 slopes are generally discouraged due to on-going maintenance concerns.	The final geotechnical analysis of the MSE walls will meet the required factors of safety for external stability. This will be evaluated further to finalize the wall type and location.
47	General Design	Turnpike Interchange	N/A	Zone 8b MSE Walls	1	The overall stability of the perched wall must meet the factors of safety for the retaining wall and the 2:1 side slope. These factors of safety must be substantiated if a perched wall is allowed to be constructed.	The final geotechnical analysis of the MSE walls will meet the required factors of safety for external stability. This will be evaluated further to finalize the wall type and location.
48	Index 5300	Turnpike Interchange	N/A	Zone 8b MSE Walls	1	2'-0" berms are used adjacent to the retaining walls. The minimum allowable berm width adjacent to retaining walls is 4'-0" (see Index 5300). The minimum 4'-0" berm changes the required wall height. The 4'-0" minimum berm must be adhered to.	4'-0" wide berm will be provided.
49	General Design	University Interchange	N/A	Ramp N/I-595	1	Sheet B27-4: Reconfiguring the Ramp N University Dr. to I-595 connection ramp requires complex modeling of the structure to account for the flexible support condition at Pier 5 (95' long straddle pier) and the rigid support condition at Pier 4 (fixed pier table).	We (ACS) will provide accurate structural calculations and a structural modification plan in accordance with the contract documents.
50	PPM 2.10	University Interchange	N/A	Ramp Q1/University Dr.	1	It appears that vertical clearances on u-turn ramps may be less than 16.5'.	The vertical clearance is 16.5'.
51	RFP VII DII S3 J.3.d, Second Bullet	University Interchange	N/A	Ramp Q1/University Dr.	1	No specific aesthetic details provided. Proposed bridge type does not match existing to remain/widened bridges in violation of RFP requirement.	Through the use of consistent color and texture the approaches to this interchange will comply with the Level 3 Aesthetics Scheme without the need to replace the interior structures. (See Attachment)

APPENDIX 2-P.2

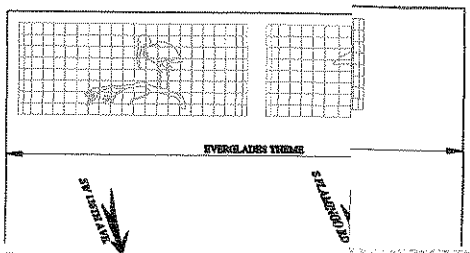
STRUCTURES – ATTACHMENTS

[See Following Page]

APPENDIX 2-P.2

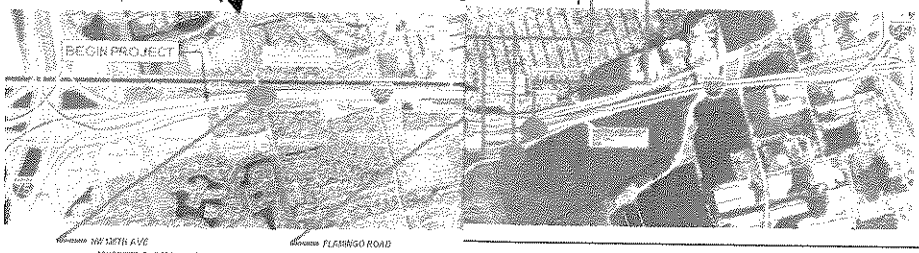
STRUCTURES – ATTACHMENTS

Attachment(s) for Comment Nos. 1, 7, 51



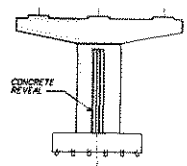
SR-94 WB OVER RAMP U-2, I-595 BRIDGES OVER SR-7, SR-84 EB AND RAMP I-8 OVER SR-7 AND RAMP U-9 OVER U-3
- CONCRETE SUPERSTRUCTURES (EXIS/PROP)
- CONCRETE SUBSTRUCTURES (EXIS/PROP)
- ROUND COLUMNS (EXIS/PROP)
- OBLONG COLUMNS SOUTH APPROACH AT U-9 OVER U-3 (PROP)
- COLORED CLASS V FINISH

I-595 OVER SR-84 EB AND RAMP U-11
- STEEL SUPERSTRUCTURE I-595 WEST BOUND (EXIS/PROP)
- CONCRETE SUPERSTRUCTURE EAST BOUND (EXIS/PROP)
- CONCRETE SUBSTRUCTURE (EXIS/PROP)
- ROUND COLUMNS (EXIS/PROP)
- COLORED CLASS V FINISH



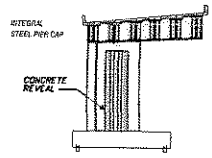
NW 136TH AVE
- CONCRETE SUPERSTRUCTURE (EXIS/PROP)
- CONCRETE SUBSTRUCTURE (EXIS/PROP)
- ROUND COLUMNS (EXIS/PROP)
- OBLONG COLUMNS SOUTH APPROACH (PROP)
- COLORED CLASS V FINISH
- NO EXISTING WALLS: MSE WALL NORTH APPROACH (PROP)

FLAMINGO ROAD
- CONCRETE SUPERSTRUCTURE (
- STEEL SUPERSTRUCTURE NORT
- CONCRETE SUBSTRUCTURE (EX
- CONCRETE FILLED STEEL BOX B
NORTH APPROACH (PROP)
- ROUND COLUMNS (EXIS/PROP)
- COLORED CLASS V FINISH
- MSE WALLS: EXISTING WALL PA
CONTINUED ON BALANCE OF NEW

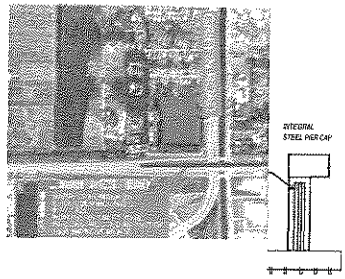


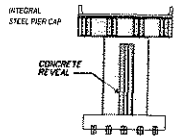
BRIDGE No. 000833
RAMP R-7





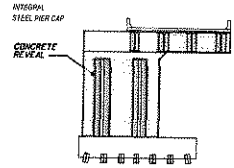
BRIDGE No. 000821
RAMP T-16
OVER SR-84 WB





BRIDGE No. 0000123
RAMP Q-3 OVER RAMP Q-2 WB

FL



BRIDGE No. 0000123
RAMP Q-3 OVER RAMP Q-2 WB

RECIEVE A CLASS V COLORED
TCH THE SEGMENT COLOR THEME

REVISIONS			
DATE	BY	DESCRIPTION	DATE

CORRIDOR AESTHETIC CONCEPT

SHEET NO.

Project Corridor Aesthetic Theme

General Overview

The overall aesthetic plan for the corridor is based on an ecosystem unique to Southeast Florida. This theme focuses on the natural water resources and fauna in the area (ecological systems), specifically, the variety of birds native to the different areas of South Florida. The color scheme transitions from east to west with colors, as follows:

Blue – representing the Atlantic Ocean on the east coast of South Florida.
Green – represents the Everglades
Brown – represents the land mass separating the two main water resources surrounding it.

In addition to the color scheme, each component will be associated to a bird form that resides in each of the areas described above. To achieve this theme the birds have been grouped as follows:

Atlantic Ocean Theme – sailboat and the Brown Pelican
Land Theme – Flamingo and Laughing Gull
Everglades Theme – White Ibis and Snowy Egret

The graphic representation of the bird life form will be incorporated into the ground mounted sound walls at a spacing of 200 feet on center, where possible.

The color scheme will be delineated as shown on the Aesthetic Corridor Concept for the sound walls, as well as the exposed steel superstructures at the bridge crossings within the limits of the sound wall color concept. Each section of the color scheme includes different types of bridges as to shape, form and proportion.

Class 5 finish will be applied to all concrete surfaces, on existing and proposed concrete structures, as stipulated in FDOT's manuals, existing and widened portion of the structures.

Integral pier caps have been reviewed and a determination of the use of steel boxes, for 72" high and deeper structures, would render a more uniform view of the superstructure. Application of the superstructure color should be continuous and incorporated into the integral caps, where the girder and caps are built out of steel. This would not only improve the constructability of the structures, with minimal impact on the traffic control plan, but also allow the integral

caps and superstructure girders to flow smoothly into the supporting columns. The "Request For Proposal" document requires the integral caps to be of the same height as the framing girder being supported by the caps themselves. This requirement would impact the aesthetics of a steel girder (either steel box or I-Girders) framing into a concrete cap, in that the bottom flange would be at the same level of the concrete cap, thus creating a non-pleasing stripe effect along the bottom surface of the integral cap. Where the heights of these components are less than 72" in height, the integral caps will be built out of concrete.

Given that the supporting columns at the piers will be either round or oblong in shape, chamfered corners are not applicable for these components of the structures. However, the pier cap corners will be chamfered ¾", similar to the existing structures, to maintain uniformity in the structures.

Below is a more detailed description of the crossings and the corresponding aesthetic treatments.

a. I-595 Bridges over SW 136th Avenue

The existing bridge structures at this crossing consist of AASHTO type concrete girders supported on concrete framed piers with round concrete columns.
In order to maintain consistency in the proportions, shapes and forms on the existing structures, it is our intent to widen the bridges and provide extensions of the same type of piers for such widening. This includes the provision of round columns at each pier, except for the widening along the south side of the crossing, where a hammerhead pier with similar concrete cap and an oblong shape column would support the superstructure. All the structures will receive a Class 5 surface finish on the concrete surfaces as seen in elevation view.

b. Commodore Drive over NNRC / SW 125th Avenue over NNRC / Flamingo Rd. over NNRC / Hiatus Road over NNCR / Nob Hill Road over NNCR / Pine Island Road over NNRC

The rework of the sidewalk and the turning radius at the end of the bridge will require the addition of a pile frame bent that will follow the contour of the traffic railing barrier. This structure will be mostly out of plain view, thus not impacting the aesthetics at the crossing.

c. I-595 over Flamingo Road

The existing bridge structures at this crossing consist of AASHTO type concrete girders supported on concrete framed piers with round concrete columns.
The widening of the bridge structure towards the middle of the corridor will match the existing structures by providing framed pier with similar columns and pier caps.

The I-595 westbound bridge structure will also have framed concrete pier similar to the existing structures. The superstructure consists of steel I-girder which, although a different material from the existing girders, will be consistent along the length of the entire bridge. This will provide the southbound traveling public a full view of a steel bridge structure. This view will not alter the aesthetics, since the driver will be approaching a bridge structure and experience a single structure type, whether they approach the bridges from the south or the north side of the overpass.

d. Ramp E-2 over Ramp G (EB) Braid

The bridge will consist of steel I-Girders supported by integral straddle bents. The bents will be supported on single columns, either on each end, or at the center of the structure. To be consistent with the adjacent crossings, the supporting columns will be either round or oval in shape. In this case, the steel structure will receive a color that compliments the theme in such location. The oblong shaped columns, due to their width, will contain a fractured surface finish panel that will accentuate the shadow lines.

e. I-595 Bridges over Hiatus Road/ Ramp K-2 over Ramp M (EB)

The existing bridge structures at this crossing consist of Steel I-girders supported on concrete framed piers with round concrete columns.
In order to maintain consistency in the proportions, shapes and forms on the existing structures, it is our intent to widen the bridges and provide extensions of the same type of piers for such widenings. This includes the provision of round columns at each pier. In one location, a hammerhead pier with a single concrete column will be provided. This structure will be adjacent to the existing substructure with the same design shape, proportion and form as the existing substructure.

f. Ramp E-2 over Ramp H (EB)

The bridge will consist of steel I-Girders supported by integral straddle bents. The bents will be supported on single columns, either on each end, or at the center of the structure. To be consistent with the adjacent crossings, the supporting columns will be either round or oblong in shape. In this case, the steel structure will receive a color that compliments the theme in such location. The oblong shaped columns, due to their width, will contain a fractured surface finish panel that will accentuate the shadow lines as well as the color scheme for the section in the corridor.

g. I-595 Bridges over Nob Hill Road

The existing bridge structures at this crossing consist of Steel I-girders supported on concrete framed piers with round concrete columns.
In order to maintain consistency in the proportions, shapes and forms on the existing structures, it is our intent to widened the bridges and provide extensions of the same type of piers for such widening. This includes the provision of round column at each pier. In one location, a hammerhead pier with a single concrete column will be provided. This structure will be adjacent to the existing substructure with the same design shape, proportion and form as the existing substructure.

h. Ramp L-1 over SR-84 WB

The bridge will consist of steel I-Girders supported by integral straddle bents. The bents will be supported on single columns, either on each end, or at the center of the structure. To be consistent with the adjacent crossings, the supporting columns will be either round or oblong in shape. In this case, the steel structure will receive a color that compliments the theme in such location. The oblong shaped columns, due to their width, will contain a fracture surface panel that will accentuate the shadow lines.

i. I-595 Bridges over Pine Island Road

The existing bridge structures at this crossing consist of Steel I-girders supported on concrete framed piers with round concrete columns.
In order to maintain consistency in the proportions, shapes and forms on the existing structures, it is our intent to widen the bridges and provide extensions of the same types of piers for such widening. This includes the provision of round columns at each pier.

The I-595 westbound bridge will have integral concrete piers supported over round column that will match the existing columns. This will maintain the theme in structure type, form and proportion.

In one location, a hammerhead pier with a single concrete column will be provided. This structure will be adjacent to the existing substructure with the same design shape, proportion and form as the existing substructure.

j. University Drive Interchange

This interchange compiles different types of bridge superstructures that include the use of steel box girders, and different types of AASHTO Type girders. In view of this, the approach to the aesthetic theme is to uniformly treat each material, steel and/or concrete with corresponding color schemes for each material type.

In addition, the incorporation of Steel I-Girders is being proposed along the full length of each side of the crossing to provide a uniform view to the traveling public. For example, the driver traveling south on University Drive will encounter Ramp Q-1, which will consist of a steel I-Girder that provides an aesthetically pleasing view, especially when the steel portion is painted with color contrasting the concrete supporting substructure.

The same occurs for the drivers traveling north on University Drive, that will encounter the I-595 EB Bridge over University Drive. This bridge will also consist of steel I-Girders painted in the same fashion as the rest of the steel girders in the interchange.

Therefore, drivers approaching the University Drive Interchange will have a view of steel superstructures for the east-west bridge structures crossing overhead, as well as the steel box girders located at higher levels.

The existing bridge structure along I-595 will be located between Ramp Q-1 and I-595 EB. These bridges will be hidden from view of the drivers, except for the underside of the superstructures as the drivers travel underneath the structures. This would not adversely impact the aesthetics of the interchange.

The substructure components being incorporated into the interchange match the existing substructures, thus maintaining the form, shapes and proportions of the structures already in this major interchange.

k. Ramp P-2 over Ramp P-3

This bridge structure consists of steel I-Girders built integrally straddle bents or into cantilevered straddle bents. All the integral bents will be designed to maintain a uniform material for the superstructure.

The supporting columns will either be round or oblong in shape, to maintain uniformity. The cantilevered caps due to their width, will contain a fractured architectural surface finish panel that will accentuate the shadow lines.

l. Ramp Q-3 over Ramp Q-2

This bridge structure consists of Steel I-Girders built integrally with straddle bents or into cantilevered integral straddle bents.

The supporting columns will either be round or oblong in shape, to maintain uniformity. The cantilevered caps will be supported on oblong shaped columns that offer opportunity for the fractured surface finish panel that will enhance and take advantage of the shadow lines created.

m. Ramp R-7 Direct Connect and R-9 Direct Connect

These ramps will consist of continuous steel box girders supported on concrete hammerhead piers or integral straddle bents. Being at higher levels, these structures need provide an aesthetically pleasing structure. The enclosed painted steel box will complement the rest of the steel structures in the interchange.

The supporting substructure will consist of hammerhead piers or integral straddle bents with oblong shaped columns. These columns will have fractured surface finish panel in proportion to their size, to provide an area accentuating its shadow lines.

n. I-595 Bridges over Davie Road

The existing I-595 bridges (EB and WB) will be widened towards the exterior sides, while the I-595 Express lanes will be accommodated between these two bridges. The existing bridges will be widened with AASHTO Type III concrete girders and the new I-595 Express lanes will be built with AASHTO Type IV concrete girders.

The superstructure for all the bridges in this crossing will consist of the same type, material, and shape thus maintaining a uniform look for the structures.

o. Ramp T-16 over SR-84 WB and NNRC

This ramp will consist of steel I-girders integral with the pier caps. The substructure columns will consist of oblong shaped concrete columns with fractured surface finish panel that will receive Class 5 Finish to accentuate the shadow lines. All the piers will be similar in shape to maintain uniformity in the bridge structure as well as the interchange in general.

p. Ramp T-9 Cellular Bridge Widening

This bridge is being widened with the same type of structure as the existing bridge. In order to maintain uniformity, panels similar to the existing panels will be curtained along the exterior side of the widening. The concrete panels will receive a fractured concrete surface in sections to provide a uniform aesthetic finish and pattern along the bridge length. The panels will be attached to the pile cap with recessed anchor bolts covered with grout to not expose the connection to open view. Class 5 surface finish will be provided along the length of the bridge.

q. Ramp U-4 over Ramp U-3

This ramp will consist of steel I-girders integral with the pier caps. The substructure columns will consist of oblong shaped concrete columns with fractured surface finish panel that will accentuate the shadow lines. All the piers will be similar in shape to maintain uniformity in the bridge structure as well as the interchange in general.

r. SR-84 WB over Ramp U-2

The existing bridge in this crossing consists of AASHTO Type Concrete girders supported on concrete frame piers. The proposed widening of these bridges continues the same type of girder system supported on concrete frame piers and/or hammerhead piers. The proposed solution expands the existing structure type, to maintain the same level of aesthetics.

s. Ramp T-9 over Ramp T-15

This bridge will consist of a single span bridge with AASHTO Type V concrete girders. The exterior girder, coping and barrier walls will receive Class 5 Surface Finish.

t. Ramp T-9/SR84 over SR-7 (US-441)

The existing bridge structure, consisting of AASHTO Type concrete girders, will be widened utilizing the same type of AASHTO girders (Types II and IV) thus maintaining continuity in the type of structure and not impacting the existing aesthetics.

The substructure widening, like the superstructure, will match the existing structure by providing hammerhead piers adjacent to the existing piers with the same size, type and material. Round columns will support the hammerhead caps.

u. I-595 Bridges over SR-7 (US-441)

The existing bridge structure, consisting of AASHTO Type concrete girders, will be widened utilizing the same type of AASHTO girders (Types III and IV) to maintain continuity in the type of structure and not adversely impacting the existing aesthetics.

The substructure widening, like the superstructure, will match the existing structure by providing hammerhead piers adjacent to the existing piers with the same size, shape, type and material. Round columns will support the hammerhead caps.

v. Ramp U-9 over Ramp U-7

The existing bridge structure, consisting of AASHTO Type concrete girders, will be widened utilizing the same type of AASHTO girders (Types III, IV and V) thus maintaining continuity in the type of structure and not impacting the existing aesthetics.

The substructure widening, like the superstructure, will match the existing structure by providing hammerhead piers adjacent to the existing piers with the same size, shape, type and material. Round columns will support the hammerhead caps.

Ramp T-9, adjacent to this bridge, will provide an oblong shaped column for the hammerhead pier, to maintain a similar aesthetic look.

The column will receive a fractured surface finish panel that will accentuate the shadow lines.

w. I-595 over SR-84EB & Ramp U-11 Bridge Widening

I-595 WB Bridge over SR-84EB consists of a steel I-girder bridge supported on concrete frame piers with round concrete columns. The widening to the north of the bridge extends the same type of Steel I-girders with a similar concrete frame pier supported with round concrete columns. This maintains the existing bridge type, form and shape.

I-595 EB Bridge over SR-84 EB consists of AASHTO Type concrete girder supported on concrete frame piers with round columns. In order to maintain uniformity, although the adjacent bridge consists of steel I-girders, the proposed bridge widening maintains the existing bridge type in size, type, form, and material.

x. Ramp T-5 over Turnpike

Ramp T-5 is being proposed as a steel box girders supported on concrete frame piers and steel box straddle bents. The steel box girders will provide an aesthetically pleasing superstructure, complying with the requirements of the RFP.

The concrete frame piers will incorporate a rectangular shape concrete cap integrally supported by round concrete columns. The integral straddle bents, being of the same height as the steel box girders, will have oblong shape columns at each end. An oval shape column cross section complements the round columns on the frame piers, thus maintaining a uniform concept along the bridge length.

y. Ramp T-1 over Turnpike

This is an existing bridge which consists of AASHTO Type Concrete girders supported on hammerhead concrete piers, with oblong shaped columns, in varying heights. The proposed modification to the bridge merely widens the deck approximately 1'-9" on each side and replaces the 32" F Shape Traffic Railing Barrier.

No modifications are being proposed to the existing piers, therefore the existing shape, form, material, and proportions will remain.

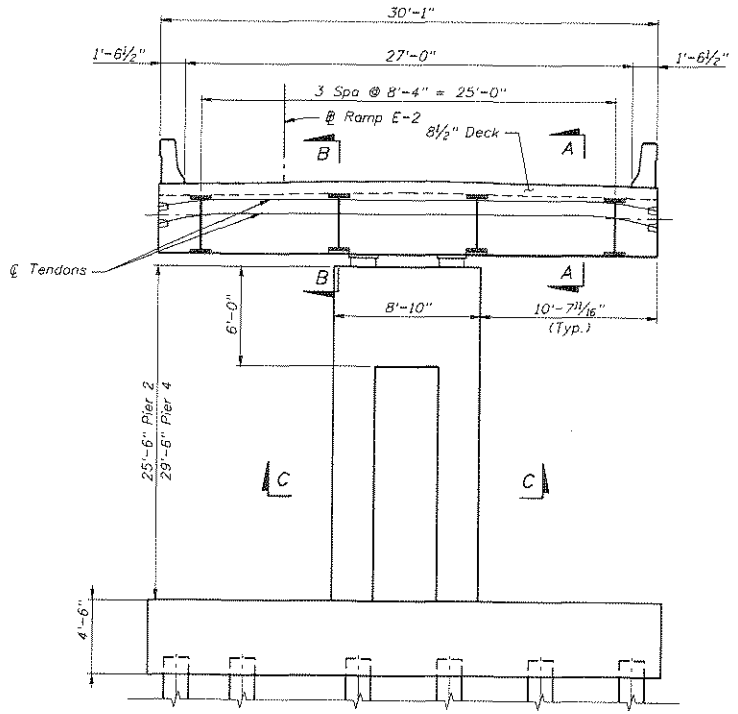
z. MSE Retaining Walls

Throughout the length of the project corridor, the existing approaches to the bridges are mostly built on two types of MSE retaining walls, Tensar and Reinforced Earth Company types of walls. Given that the patterns for each of these walls vary between the two types. Our proposal is to maintain the same type of wall at each location. This will ease the extension of the walls being in kind. In order to maintain aesthetic uniformity at each crossing, the walls shall receive the same finished as the existing walls.

APPENDIX 2-P.2

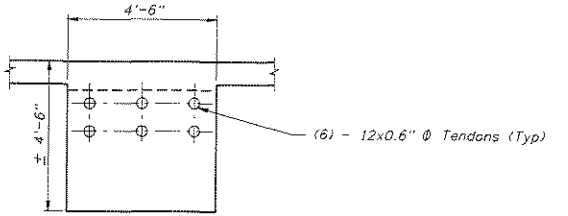
STRUCTURES – ATTACHMENTS

Attachment(s) for Comment No. 4

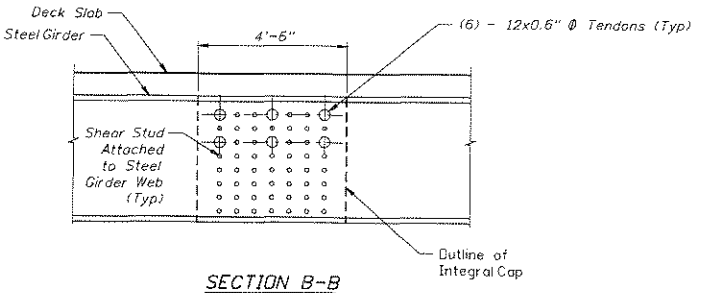


TYPICAL SECTION

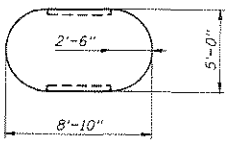
Pier No. 2 Shown, Pier No. 4 Opposite



SECTION A-A



SECTION B-B



SECTION C-C

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000105

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

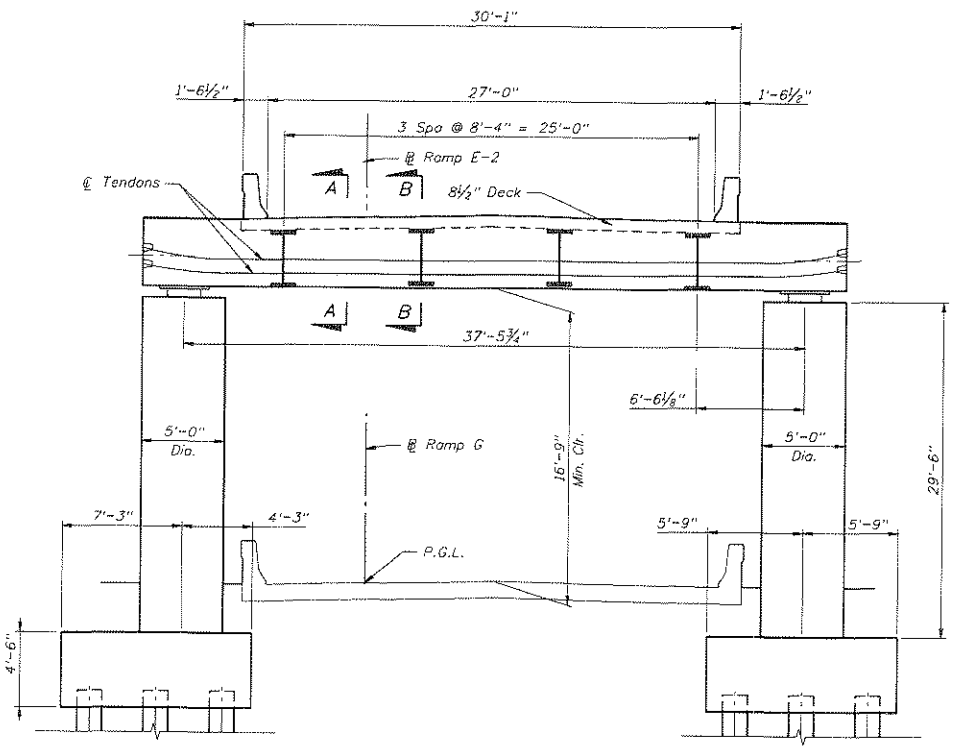
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: BRIDGE DATA

PROJECT NAME: RAMP E-2 OVER RAMP G (EB) - BRAID

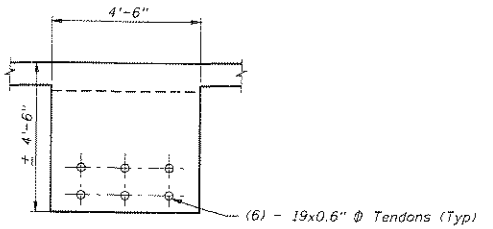
SHEET NO. IP-1

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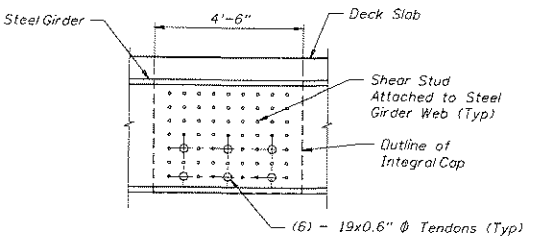


TYPICAL SECTION

Pier No. 3



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000105

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

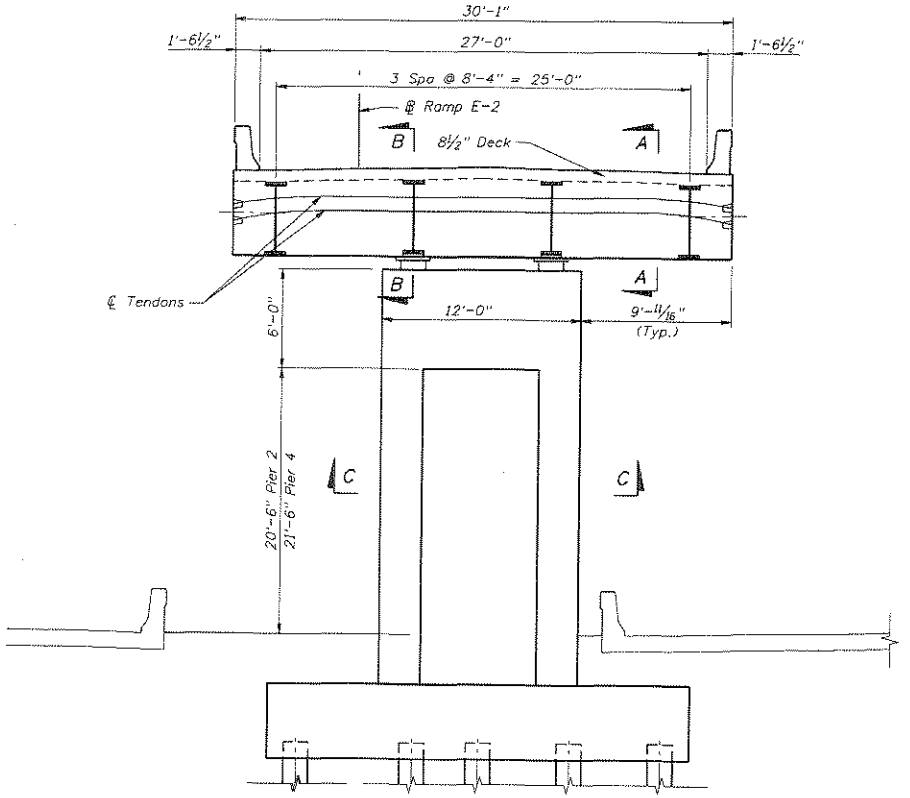
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: BRIDGE DATA

PROJECT NAME: RAMP E-2 OVER RAMP G (EB) - BRAID

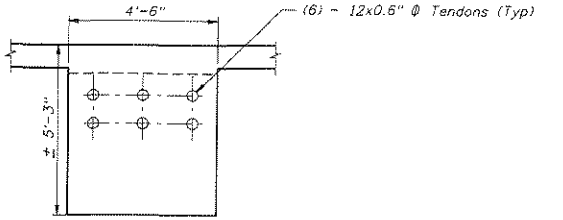
SHEET NO. 1P-2

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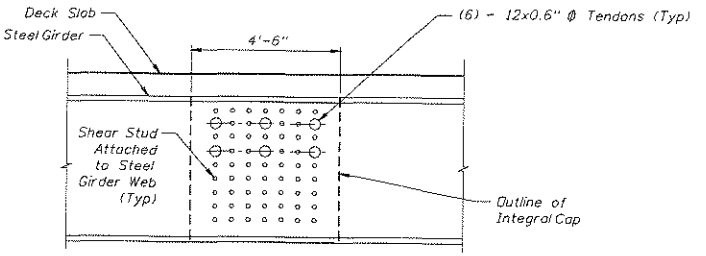


TYPICAL SECTION

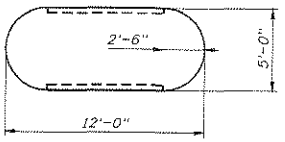
Pier No. 2 Shown, Pier No. 4 Opposite



SECTION A-A



SECTION B-B



SECTION C-C

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000107

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA

FLORIDA DEPARTMENT OF TRANSPORTATION

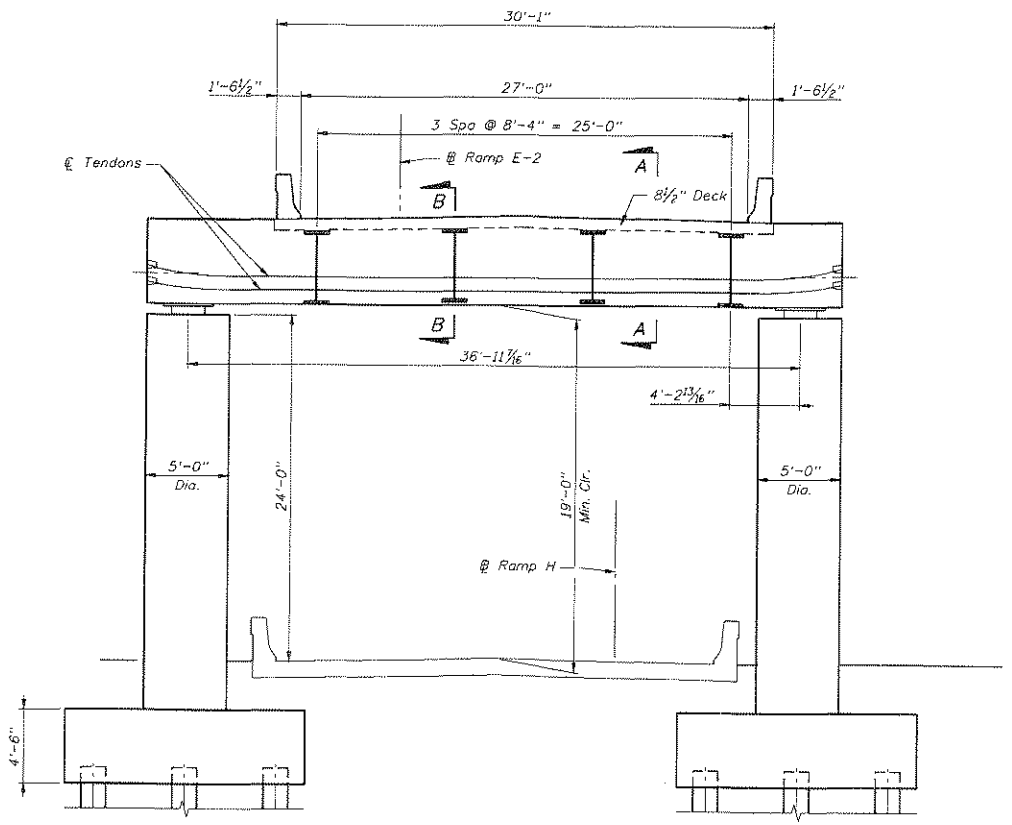
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: BRIDGE DATA

PROJECT NAME: RAMP E-2 OVER RAMP H (EB) - BRAID

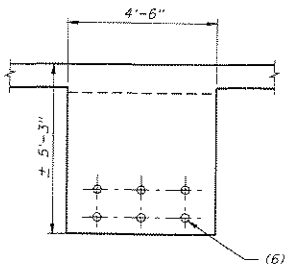
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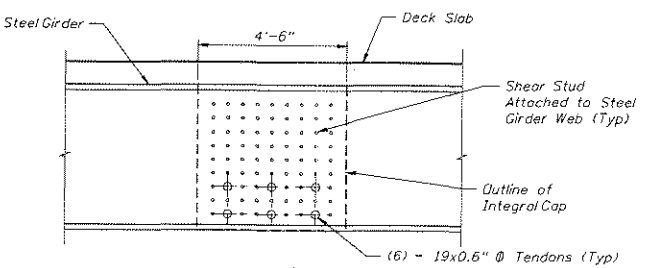


TYPICAL SECTION

Pier No. 3



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000107

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

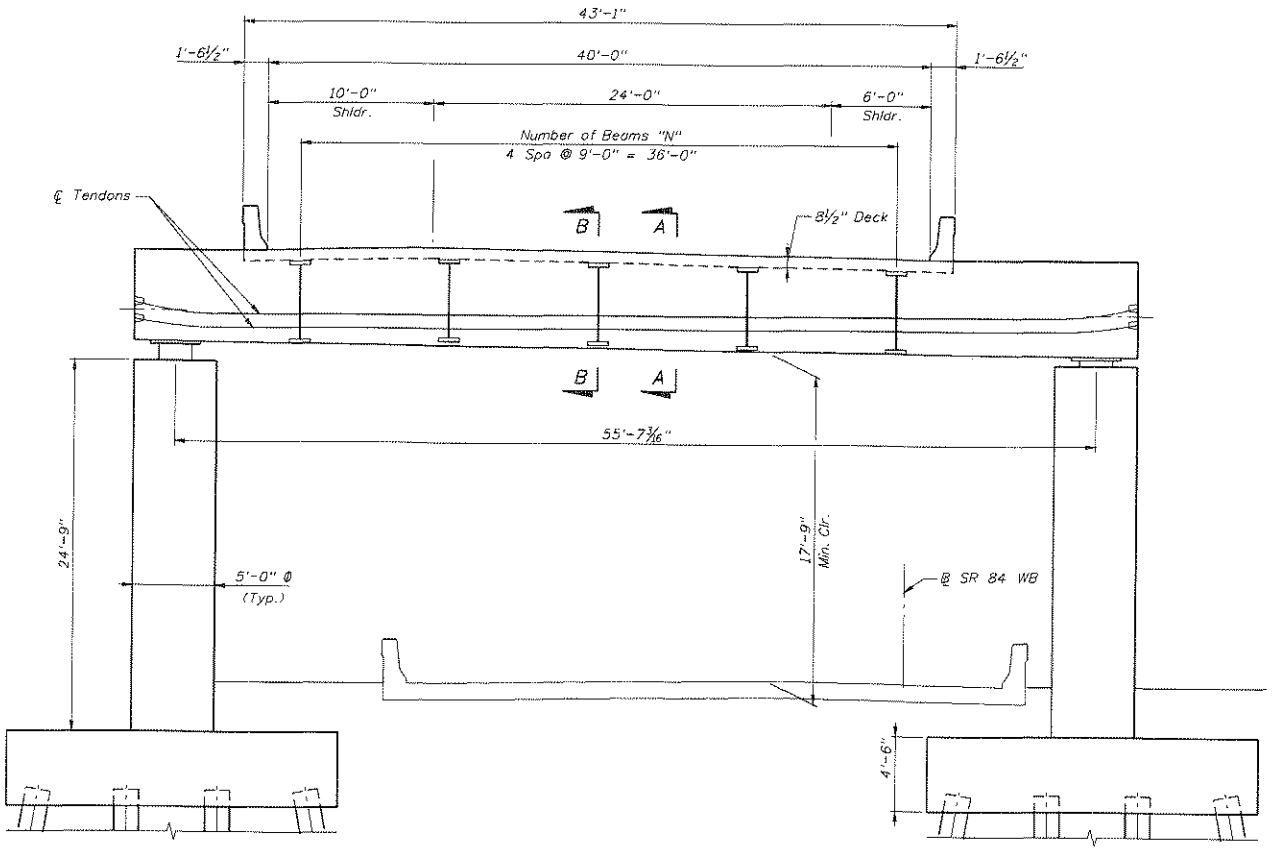
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: BRIDGE DATA

PROJECT NAME: RAMP E-2 OVER RAMP H (EB) - BRAID

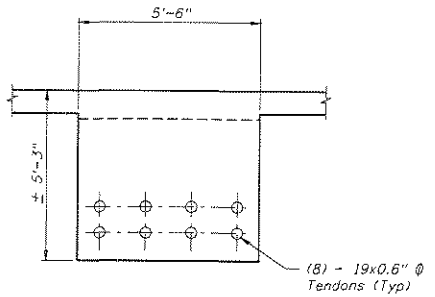
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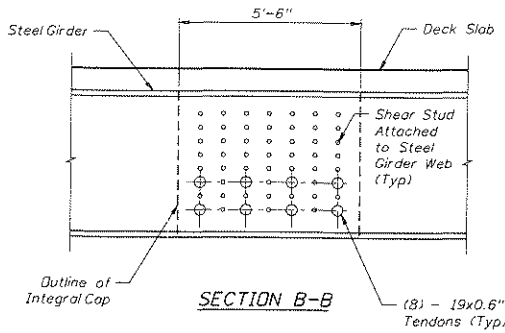


TYPICAL SECTION

Pier No. 4



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000112

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

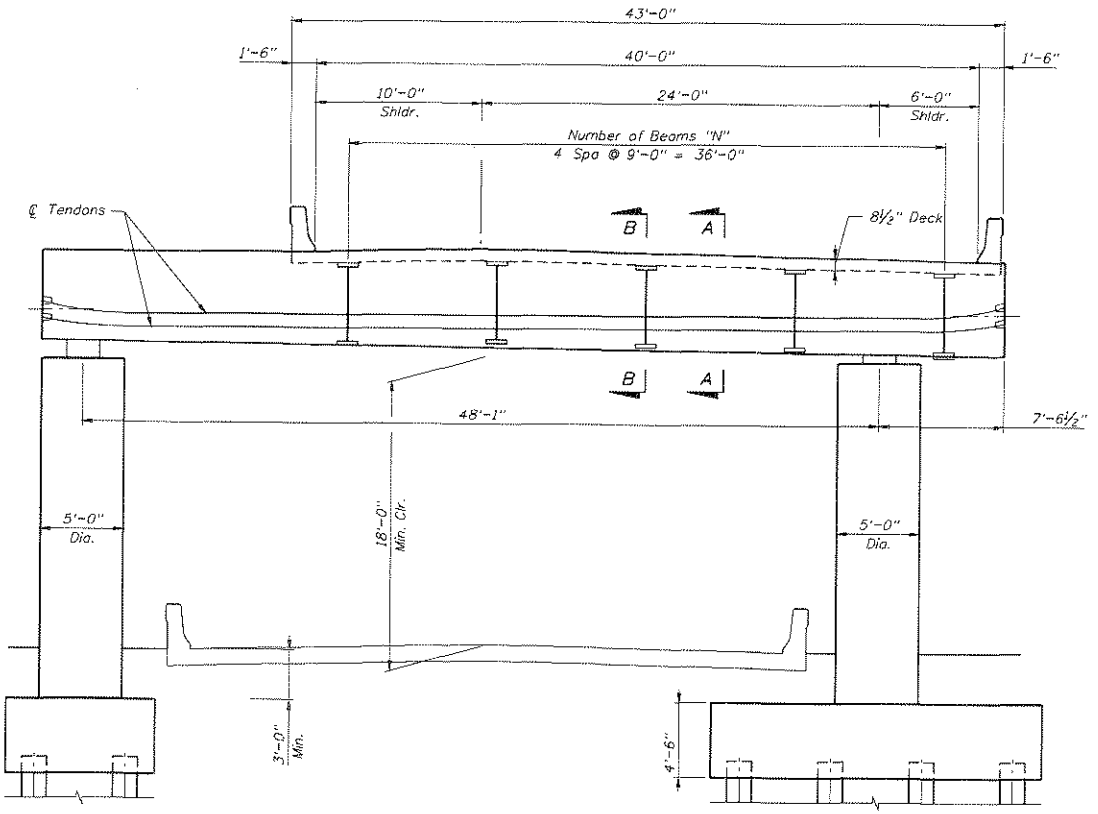
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

PROJECT NAME: RAMP L-1 OVER SR 84 WB (WB) - BRAID

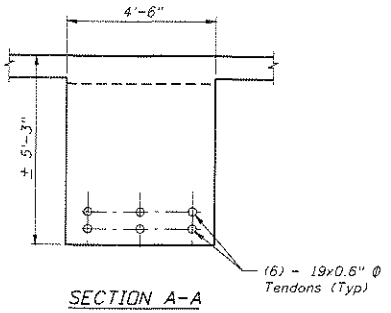
SHEET NO. IP-5

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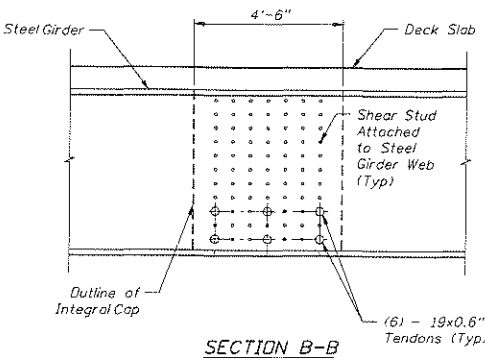


TYPICAL SECTION

Pier No. 5



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000112

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

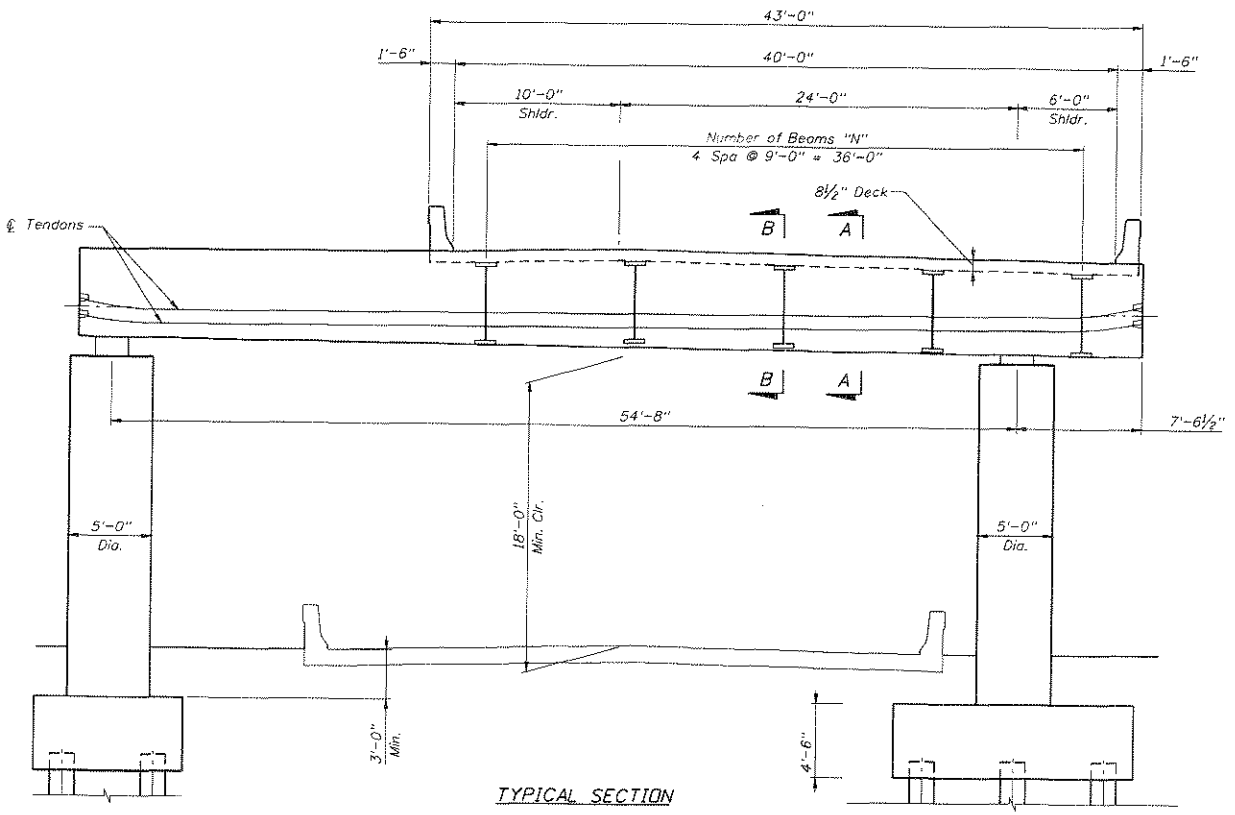
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

PROJECT NAME: RAMP L-1 OVER SR 84 WB (WB) - BRAID

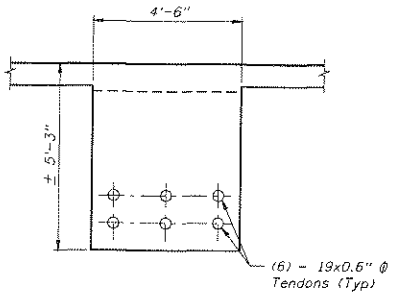
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JayFord 12/15/2008 5:55:06 PM \\MEDFS\JOBS\FLORIDA\420809529_EARTH_TECH\DISTRICT-GR_000112_MID_BR_000112-DOT\PICA

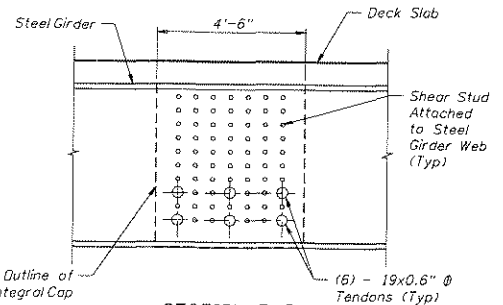


TYPICAL SECTION

Pier No. 6



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000112

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

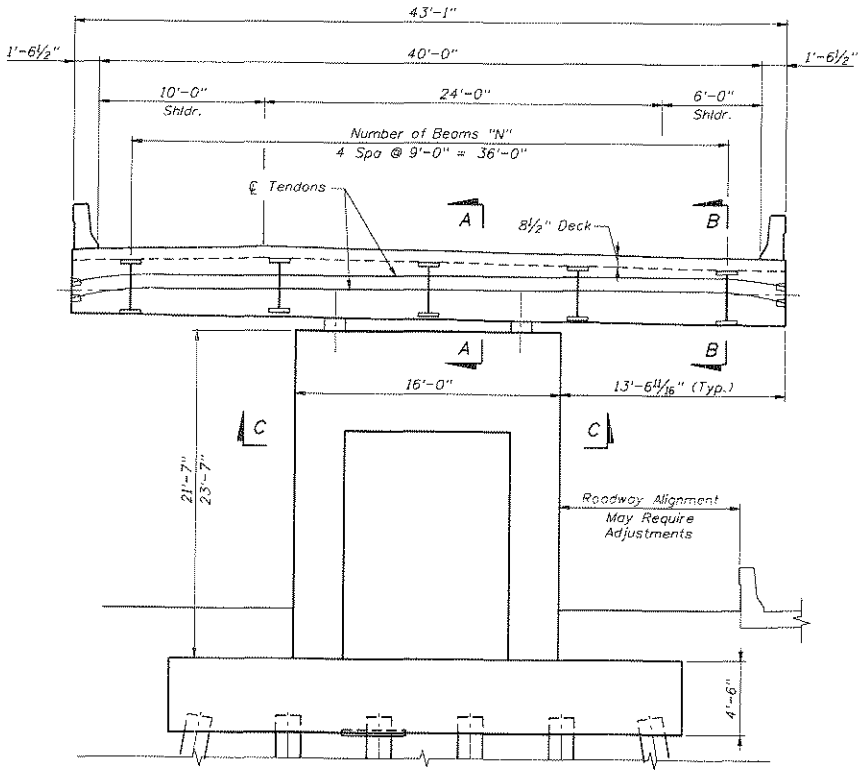
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

PROJECT NAME: RAMP L-1 OVER SR 84 WB (WB) - BRAID

SHEET NO. TP-7

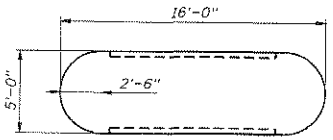
jwyland 12/11/2008 5:56:06 PM \\WEDFS\Jobs\Florida\420809.3.52.01_Earth_Tech\struct\BR 000112 and BR 860015\DOT\plots\Section



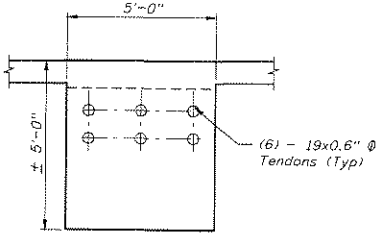
TYPICAL SECTION

(Battered Piles Pier No. 3 Only)

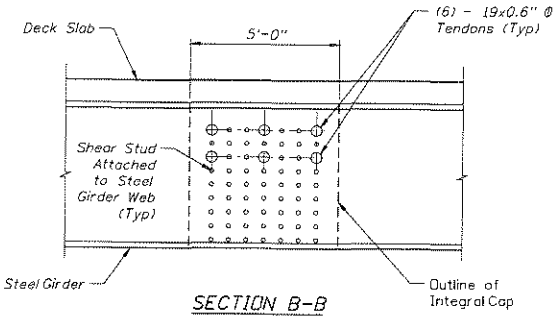
Pier Nos. 2 and 3



SECTION C-C



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000112

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA

FLORIDA DEPARTMENT OF TRANSPORTATION

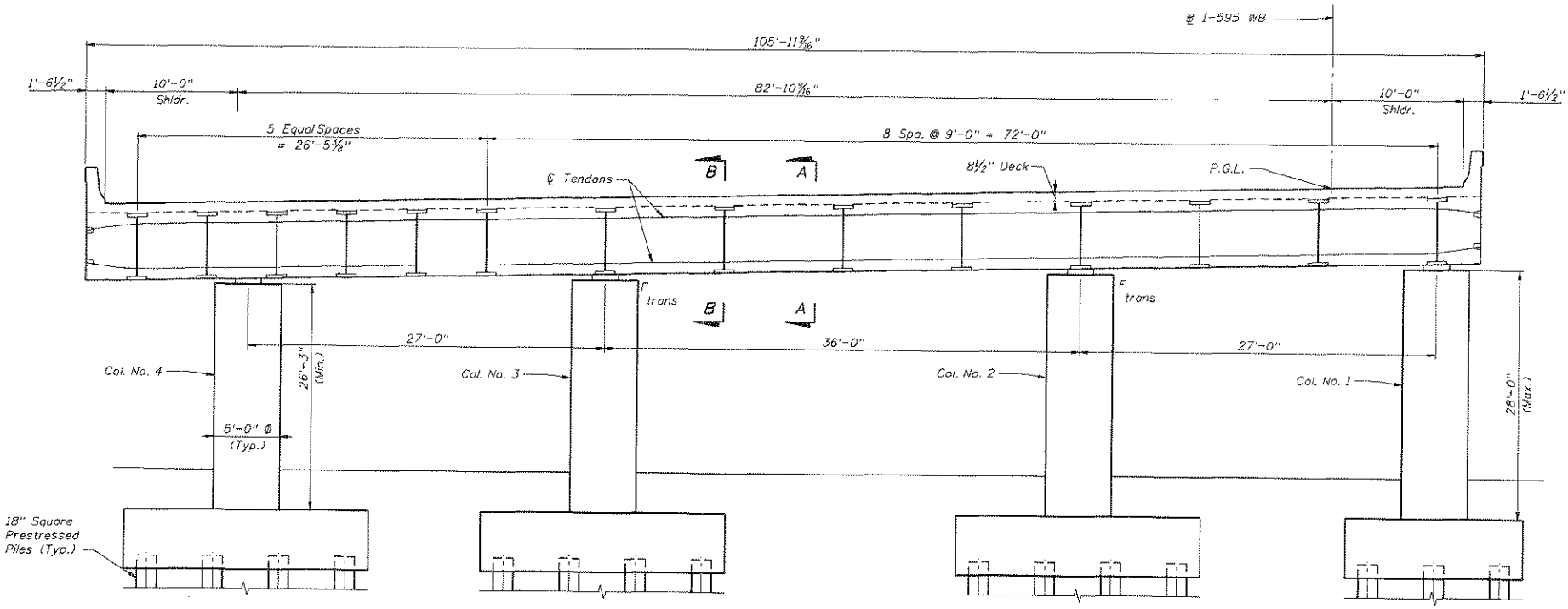
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

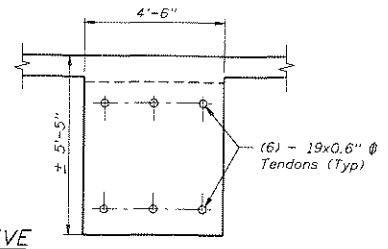
PROJECT NAME: RAMP L-1 OVER SR 84 WB (WB) - BRAID

SHEET NO. IP-8

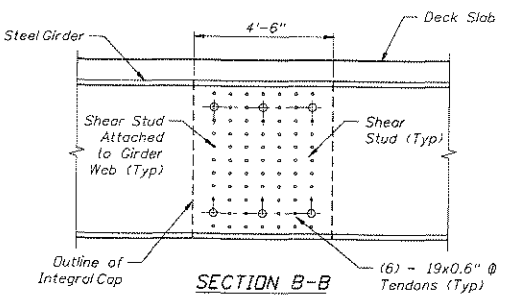
Jwyland 12/15/2008 5:48:06 PM \\MEDFS\Jobs\Florida\420809352801_Earth_Tech\struct\SB_000112 and SB_000113\Typical Section



TYPICAL SECTION @ PIER No. 2



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000113

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

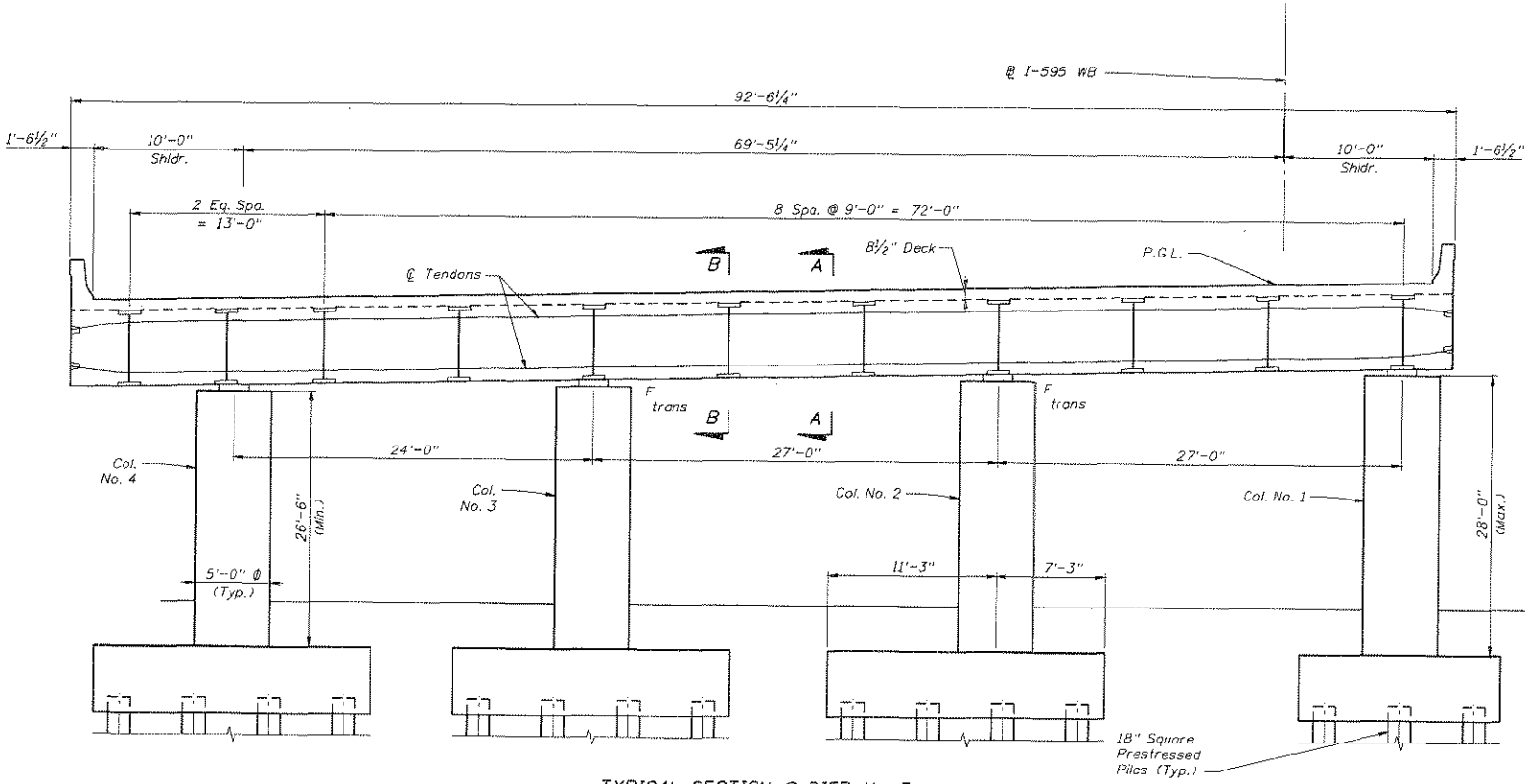
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

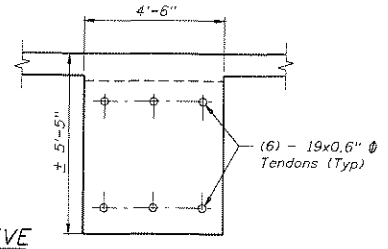
PROJECT NAME: I-595 WB OVER PINE ISLAND RD

SHEET NO. TP-9

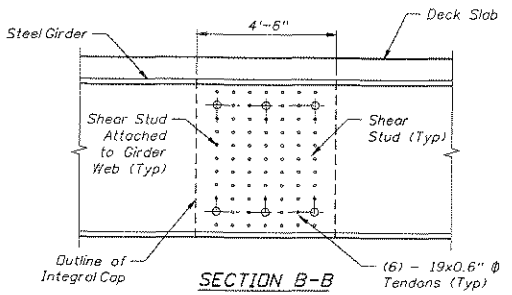
sbriffa 11/15/2008 5:56:54 PM J:\Projects\420809\525 Earth_Tech\struct\BR 000113 and BR 000115\DWG\TypicalSection02_2.dgn



TYPICAL SECTION @ PIER No. 3



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000113

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

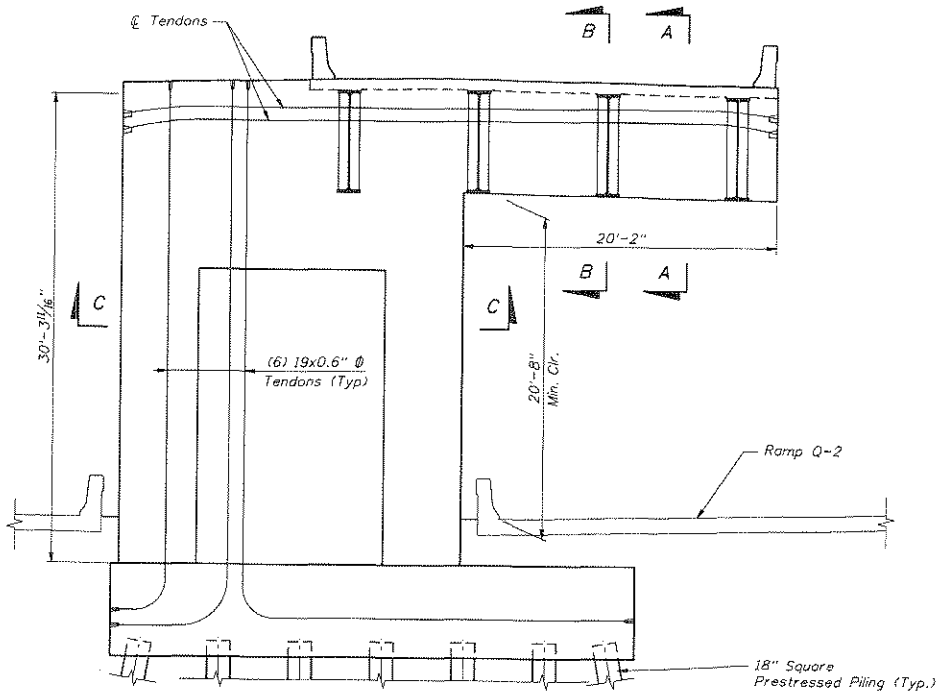
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: TYPICAL SECTION

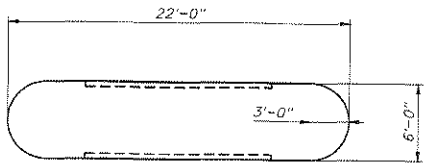
PROJECT NAME: I-595 WB OVER PINE ISLAND RD

SHEET NO. TP-10

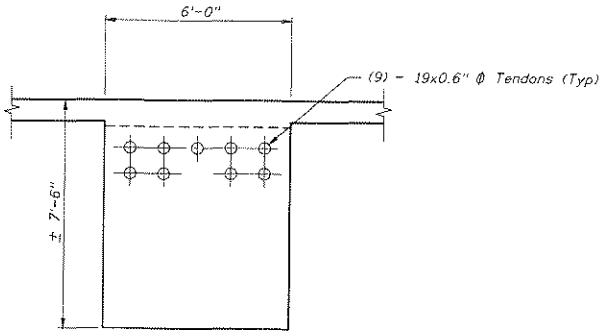
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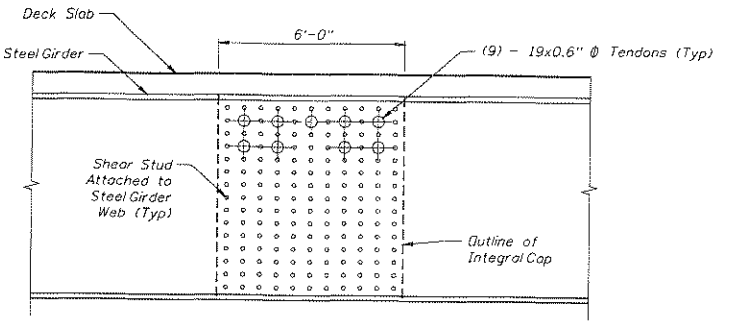
TYPICAL SECTION AT PIER No. 4



SECTION C-C



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000123

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

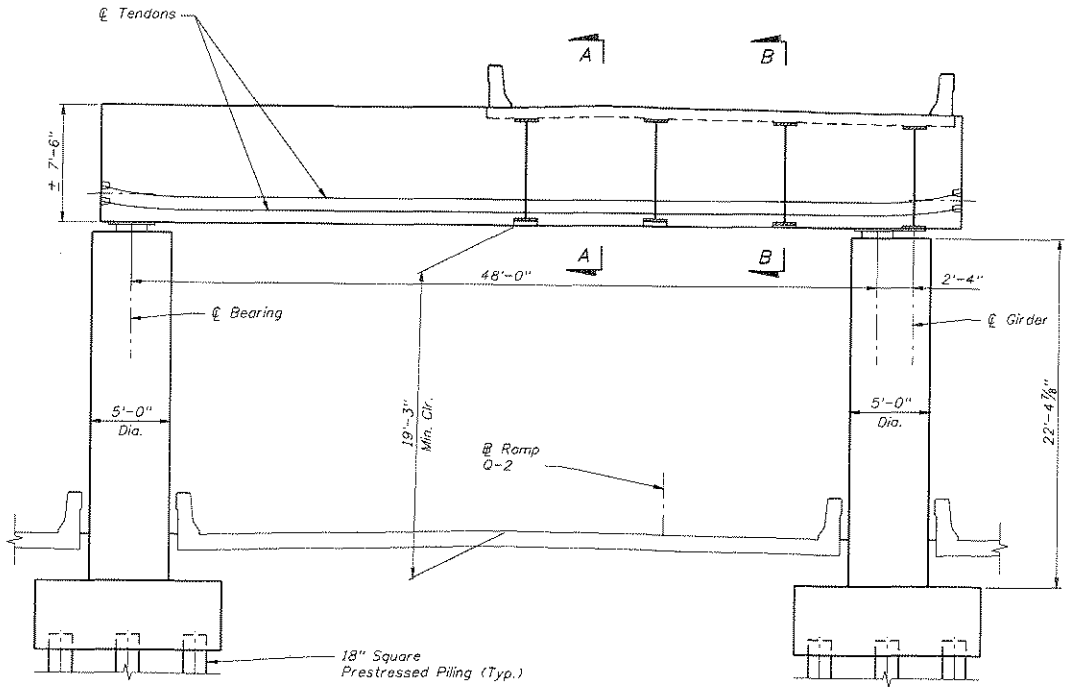
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: SECTIONS AND DETAILS

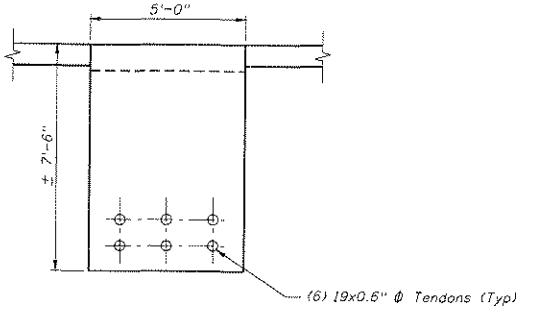
PROJECT NAME: RAMP Q-3 OVER RAMP Q-2 (WB) - BRAID

SHEET NO. 1P-11

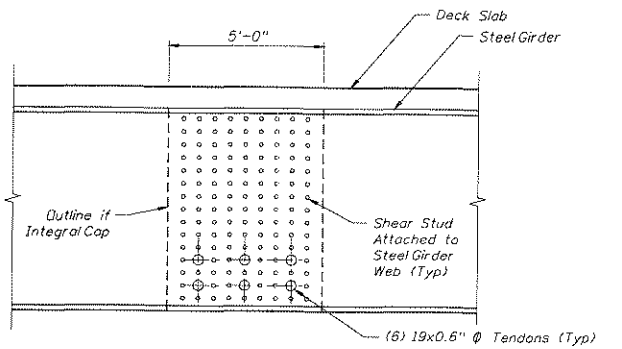
jwyland 12/15/2008 5:50:04 PM \\MEDFS\Jobs\Pln\Jobs\420809\5201_Earth_Tech\Struct\GA 000123_GBS\plotSetup02_4.dgn



TYPICAL SECTION AT PIER No. 3



SECTION A-A



SECTION B-B

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000123

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

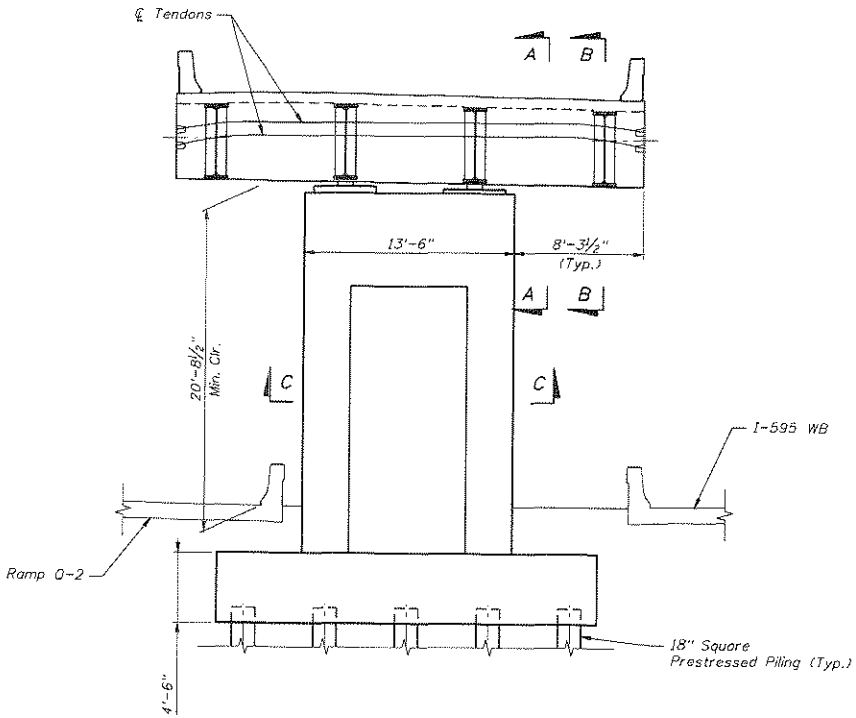
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: SECTIONS AND DETAILS

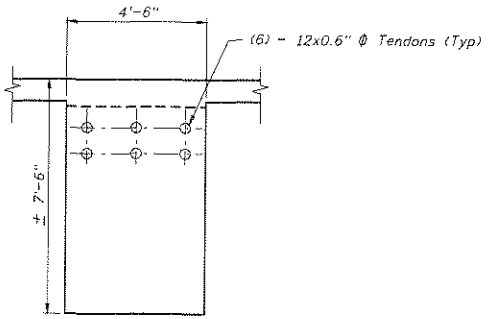
PROJECT NAME: RAMP Q-3 OVER RAMP Q-2 (WB) - BRAID

SHEET NO.: 1P-12

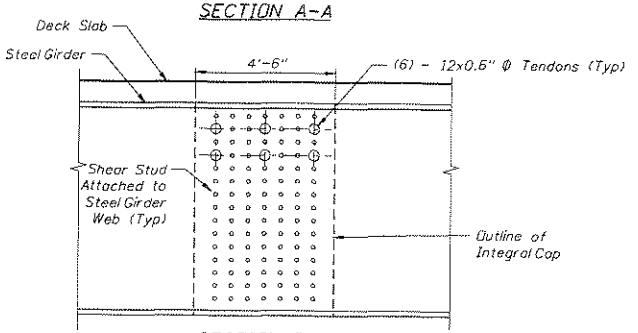
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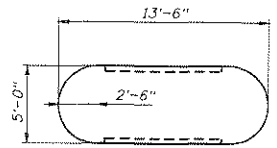
TYPICAL SECTION AT PIER No. 2



SECTION A-A



SECTION B-B



SECTION C-C

POST-TENSION CONCRETE ALTERNATIVE

BRIDGE No. 000123

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS				
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	JDW	09-08
CHECKED BY	SB	09-08
DESIGNED BY	MSS	09-08
CHECKED BY	SS	09-08
APPROVED BY	SS	

EarthTech
GREENHORNE & O'MARA CONSULTING ENGINEERS

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: SECTIONS AND DETAILS

PROJECT NAME: RAMP Q-3 OVER RAMP Q-2 (WB) - BRAID

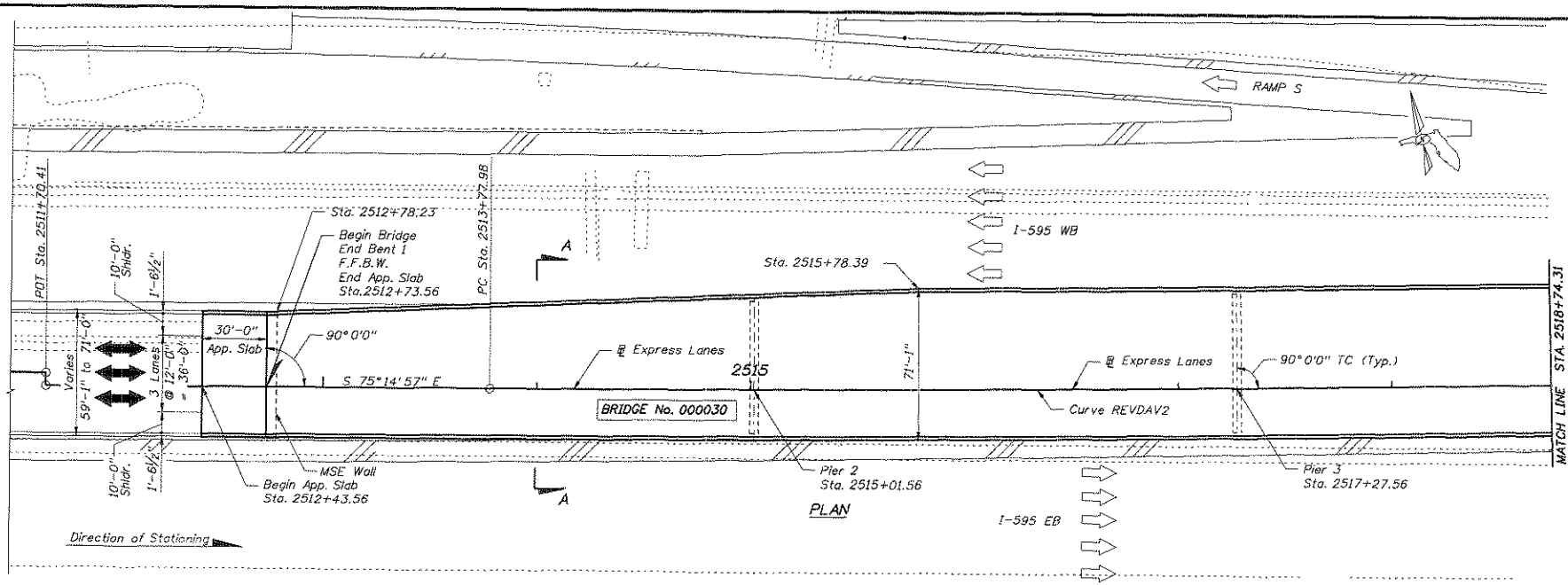
SHEET NO. IP-13

jwyland 12/15/2008 9:51:03 PM \\NECFS\Jobs\Florida\420809352301_Earth_Path\struct\GB_000123\09Typical\Sect\sc02_2.dgn

APPENDIX 2-P.2

STRUCTURES – ATTACHMENTS

Attachment(s) for Comment No. 11



BRIDGE No. 000030

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

EarthTech

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

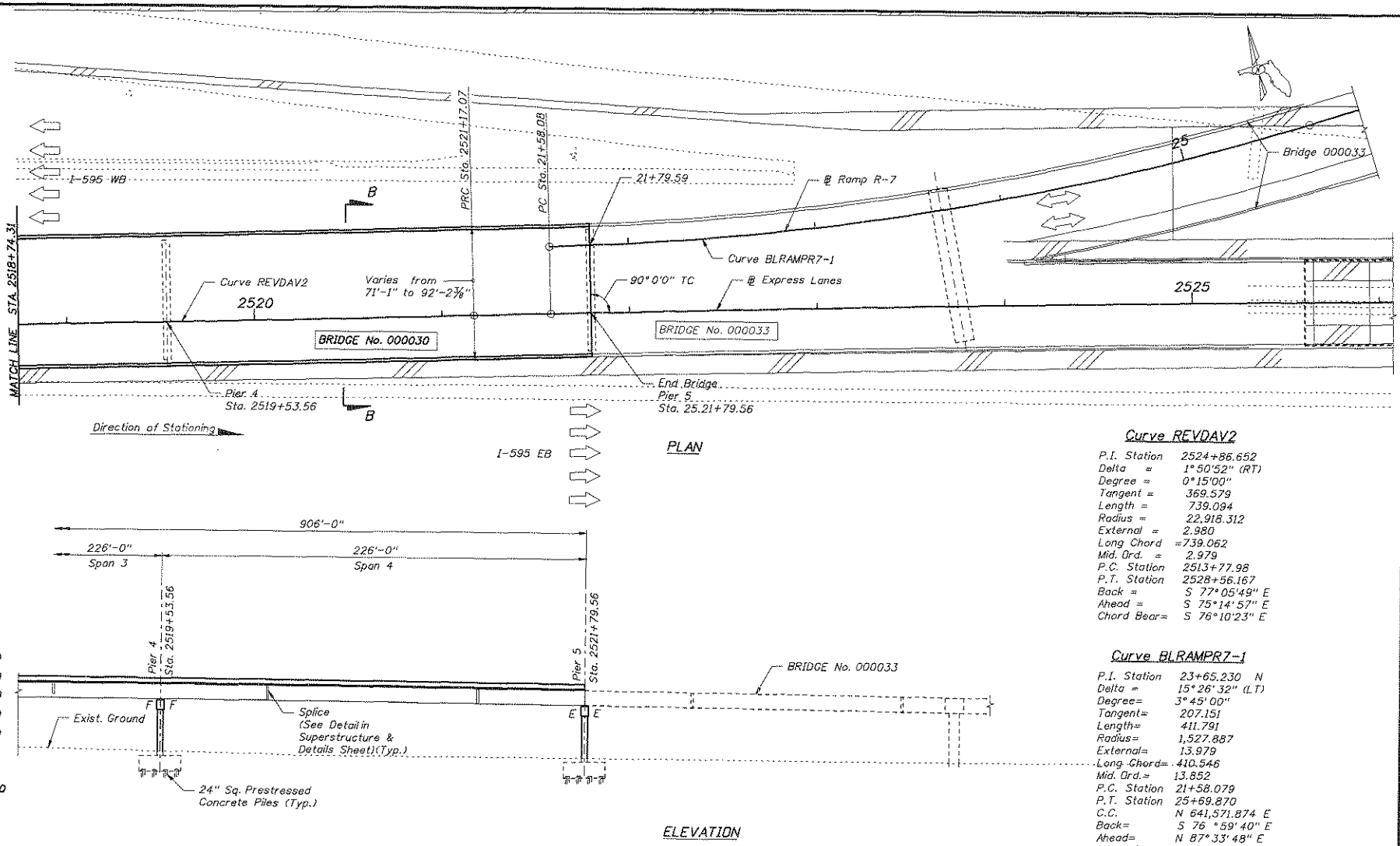
SHEET TITLE: PLAN AND ELEVATION (1 OF 2)

PROJECT NAME: RAMP R-7 DIRECT CONNECT

SHEET NO. B30-1

#USERs 1/9/2009

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION



Curve REVDAV2

P.I. Station	2524+86.652
Delta =	1°50'52" (RT)
Degree =	0°15'00"
Tangent =	369.579
Length =	739.094
Radius =	22,918.312
External =	2.980
Long Chord =	739.062
Mid. Ord. =	2.979
P.C. Station	2513+77.98
P.T. Station	2528+56.167
Back =	S 77°05'49" E
Ahead =	S 75°14'57" E
Chord Bear =	S 76°10'23" E

Curve BLRAMPR7-1

P.I. Station	23+65.230 N
Delta =	15°26'32" (LT)
Degree =	3°45'00"
Tangent =	207.151
Length =	411.791
Radius =	1,527.887
External =	13.979
Long Chord =	410.546
Mid. Ord. =	13.852
P.C. Station	21+58.079
P.T. Station	25+69.870
C.C.	N 641,571.874 E
Back =	S 76 °59'40" E
Ahead =	N 87°33'48" E
Chord Bear =	S 84°42'56" E

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

BRIDGE No. 000030

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

EarthTech

FLORIDA DEPARTMENT OF TRANSPORTATION

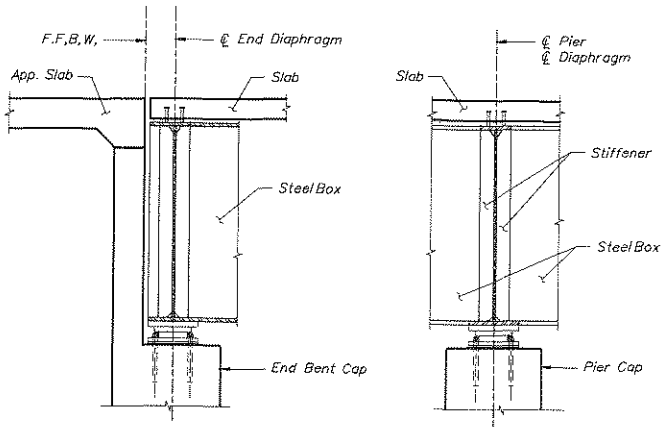
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: PLAN AND ELEVATION (2 OF 2)

PROJECT NAME: RAMP R-7 DIRECT CONNECT

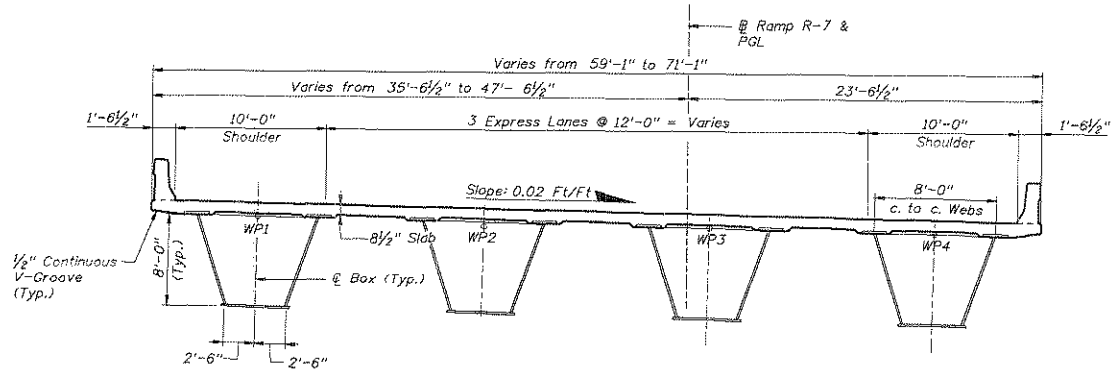
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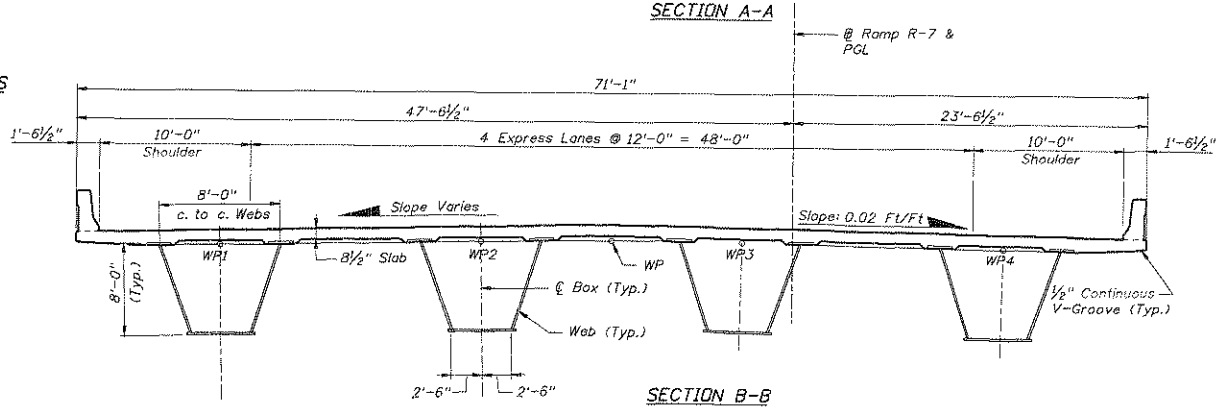


SECTION AT OPEN JOINTS

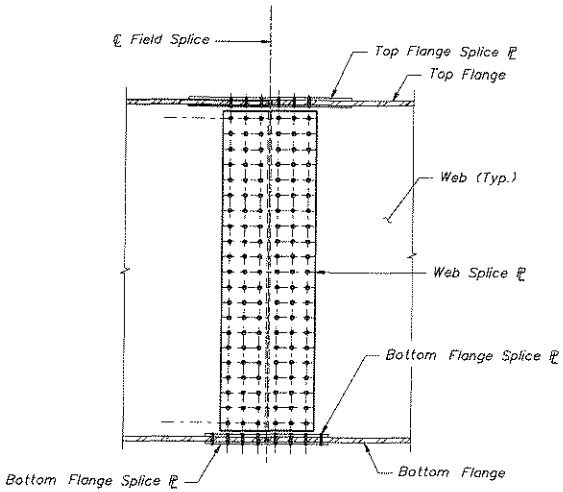
SECTION AT PIERS
CONTINUOUS SLAB



SECTION A-A



SECTION B-B



DETAIL AT FIELD SPLICE

SECTION C-C

BRIDGE No. 000030

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

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FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

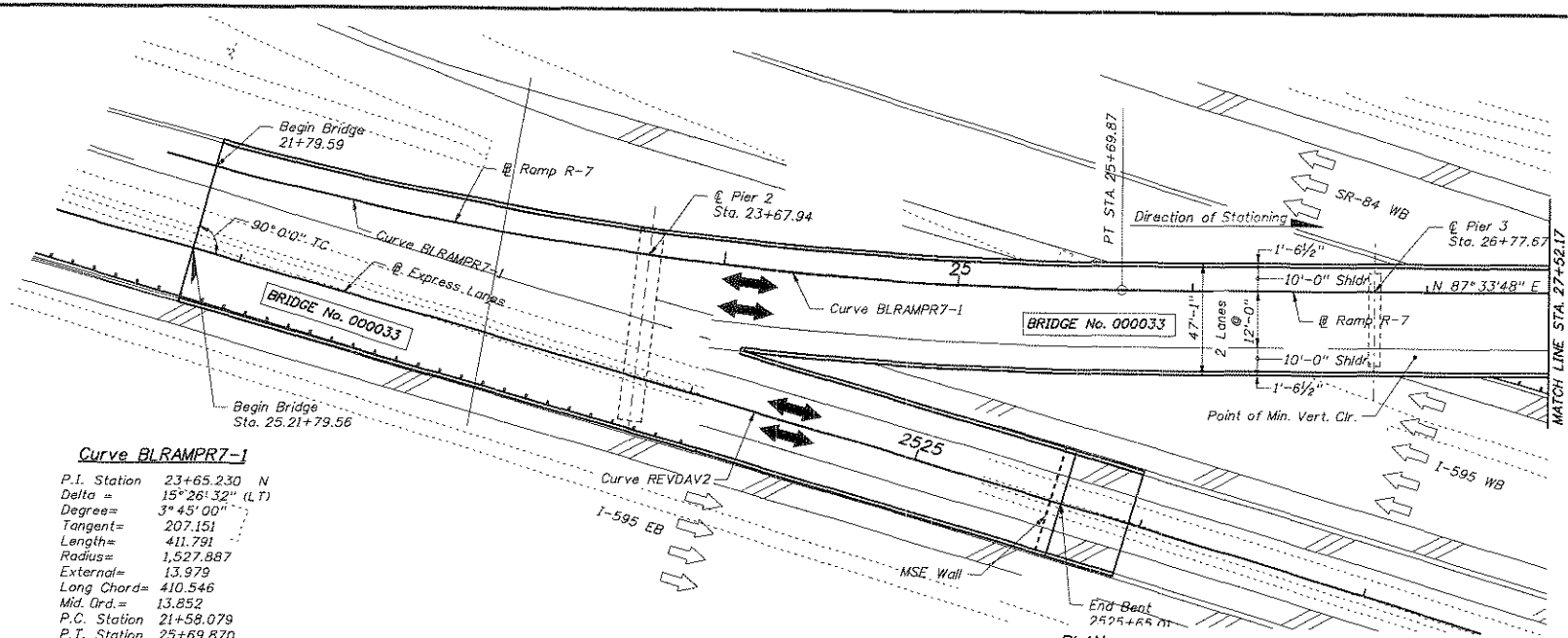
SHEET TITLE: SUPERSTRUCTURE SECTION & DETAILS

PROJECT NAME: RAMP R-7 DIRECT CONNECT

SHEET NO. 830-7

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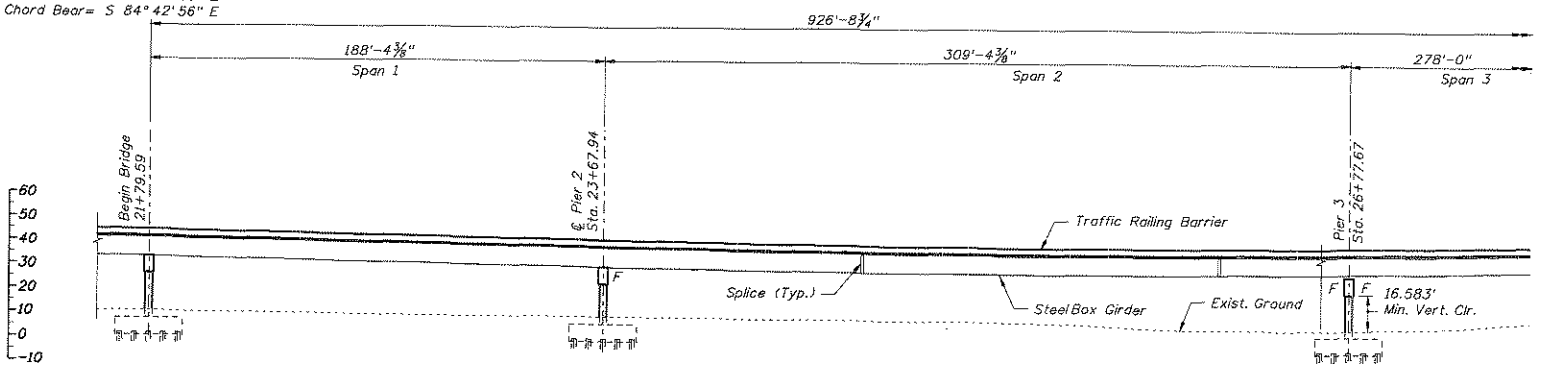
PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION



PLAN

Curve BLRAMPR7-1

P.I. Station	23+65.230 N
Delta =	15°26'32" (LT)
Degree=	3°45'00"
Tangent=	207.151
Length=	411.791
Radius=	1,527.887
External=	13.979
Long Chord=	410.546
Mid. Ord.=	13.852
P.C. Station	21+58.079
P.T. Station	25+69.870
C.C.	N 641,571.874 E
Back=	S 76°59'40" E
Ahead=	N 87°33'48" E
Chord Bear=	S 84°42'56" E



ELEVATION

BRIDGE No. 000033

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

EarthTech

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

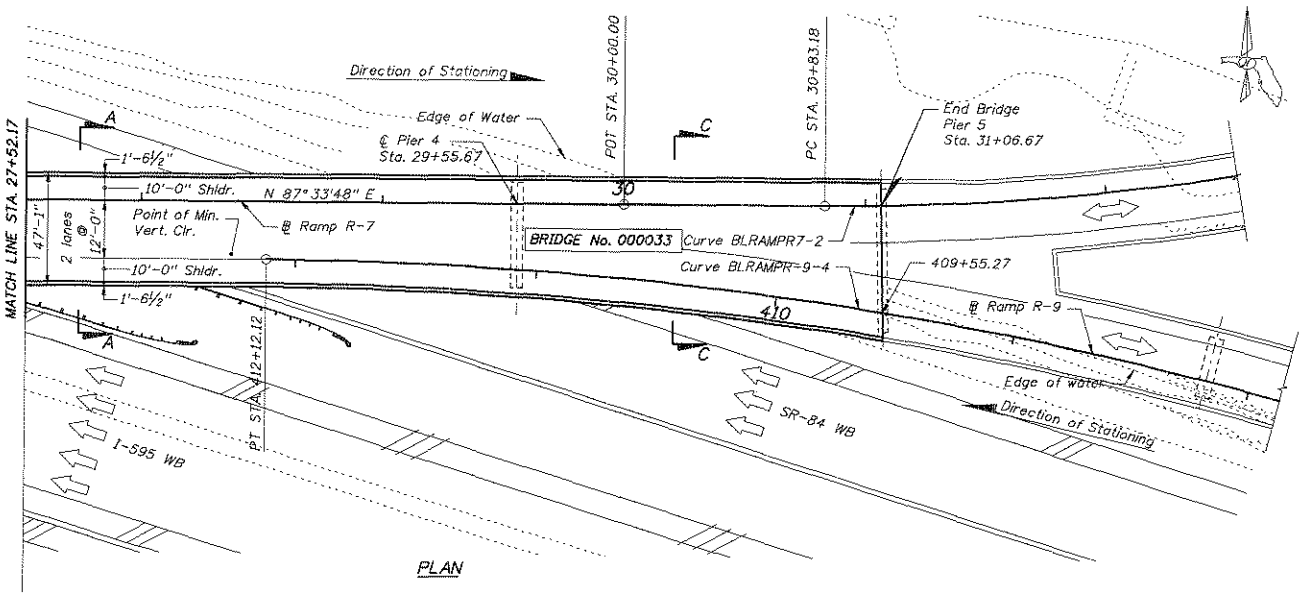
SHEET TITLE: PLAN & ELEVATION (1 OF 2)

PROJECT NAME: RAMP R-7 DIRECT CONNECT

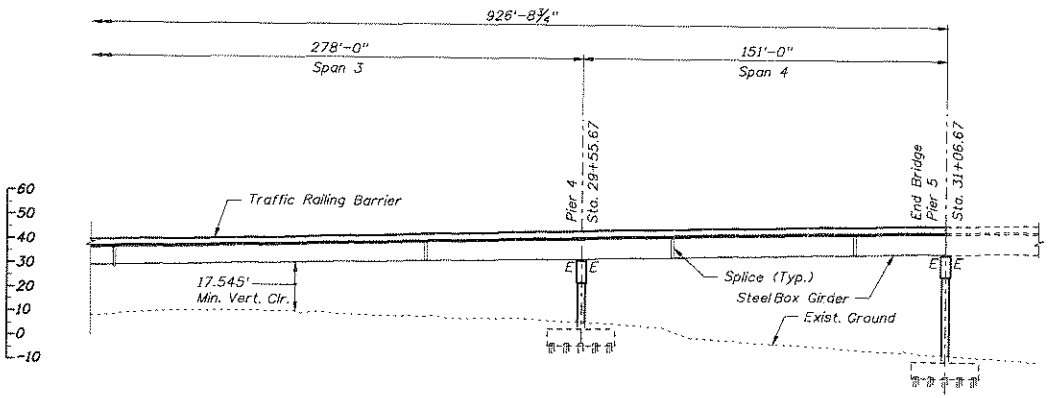
SHEET NO.: 831-1

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PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION



PLAN



ELEVATION

Curve BLRAMPR7-2

P.I. Station	42+43.542
Delta=	96°10'00" (LT)
Degree=	5°30'00"
Tangent=	1,160.361
Length=	1,748.485
Radius=	1,041.741
External=	517.637
Long Chord=	1,550.356
Mid. Ord.=	345.807
P.C. Station	30+83.182
P.T. Station	48+31.666
C.C.	N 641,107.991 E
Back=	N 87°33'48" E
Ahead=	N 8°36'12" W
Chord Bear=	N 39°28'48" E

Curve BLRAMPR-9-4

P.I. Station	409+68.007
Delta=	17°13'08" (LT)
Degree=	3°30'00"
Tangent=	247.854
Length=	491.971
Radius=	1,637.022
External=	18.657
Long Chord=	490.122
Mid. Ord.=	18.447
P.C. Station	407+20.153
P.T. Station	412+12.124
C.C.	N 638,397.837 E 911,933.609
Back=	N 75°13'04" W
Ahead=	S 87°33'48" W
Chord Bear	= N 83°49'38" W

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

BRIDGE No. 000033

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

EarthTech

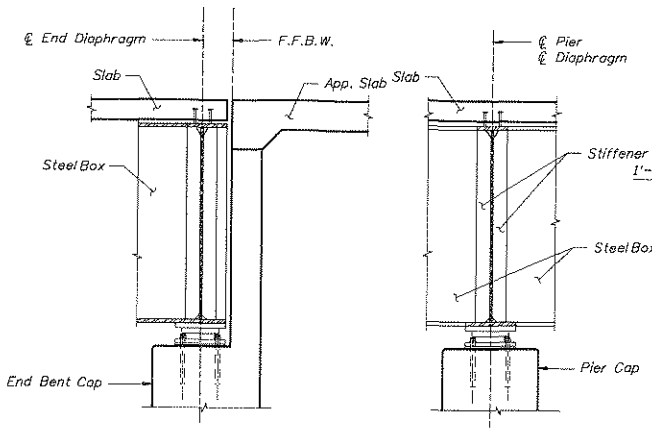
FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: PLAN & ELEVATION (2 OF 2)

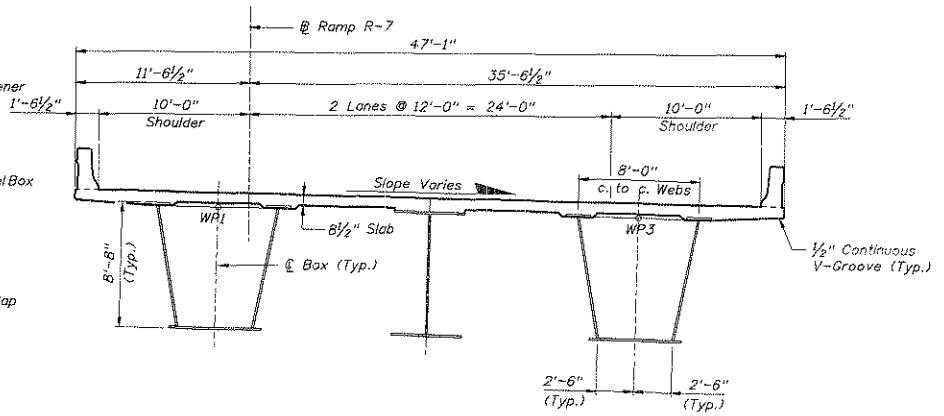
PROJECT NAME: RAMP R-7 DIRECT CONNECT

SHEET NO. B31-2

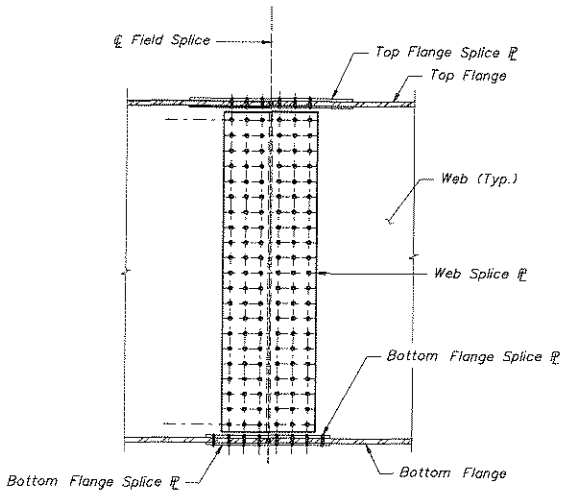


SECTION AT OPEN JOINT

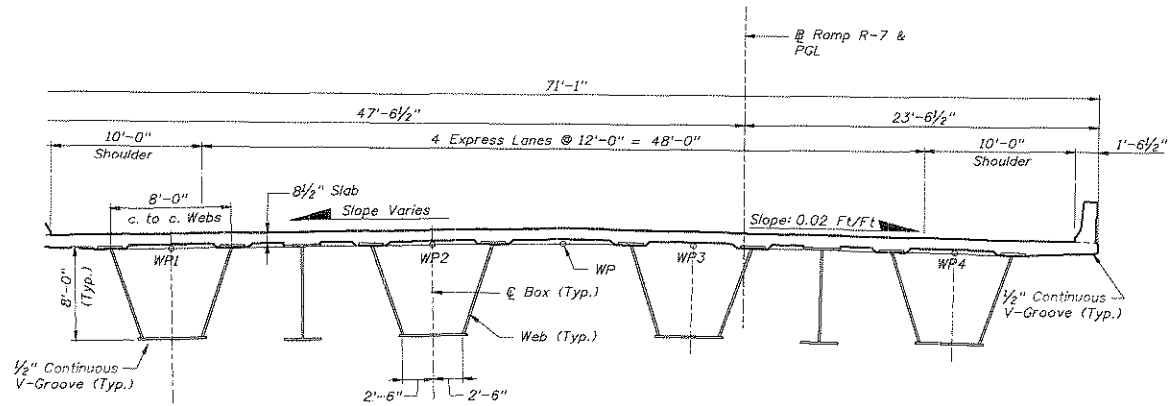
SECTION AT PIERS
CONTINUOUS SLAB



SECTION A-A



DETAIL AT FIELD SPLICE



SECTION C-C

BRIDGE No. 000033

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAMES	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	RRR	

EarthTech

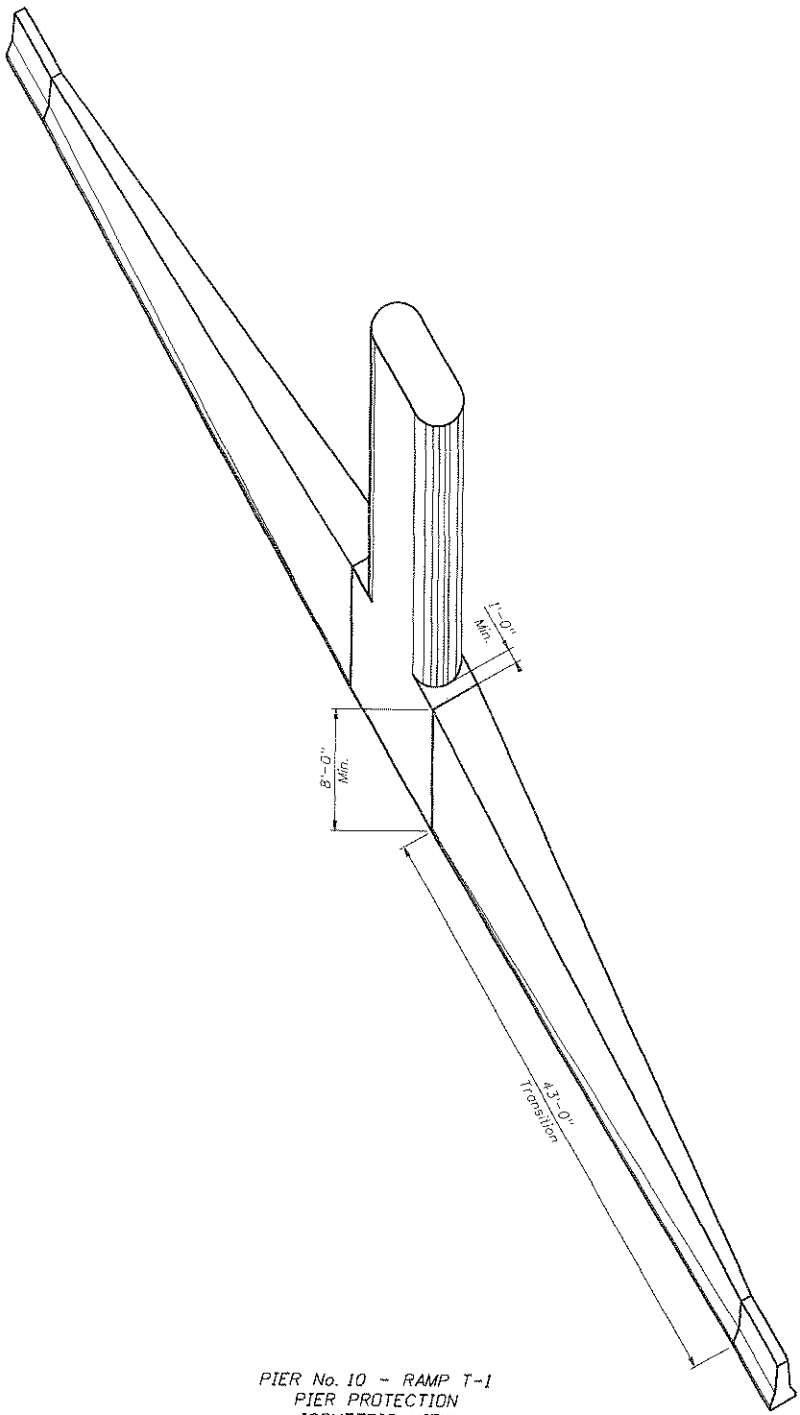
FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET TITLE: SUPERSTRUCTURE SECTION & DETAILS
ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME: RAMP R-7 DIRECT CONNECT
862	BROWARD	420809-3-52-01	SHEET NO. 831-7

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APPENDIX 2-P.2

STRUCTURES – ATTACHMENTS

Attachment(s) for Comment Nos. 21,22

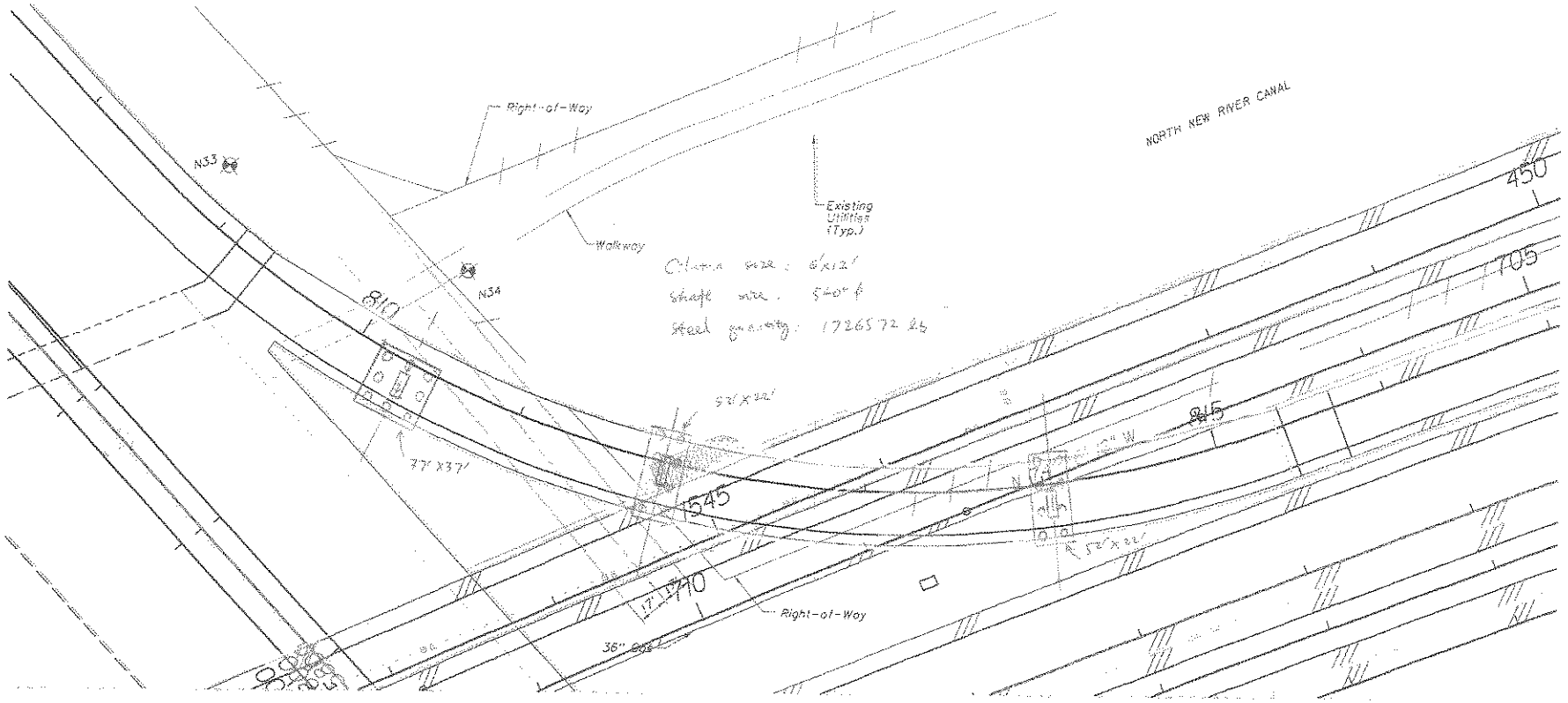


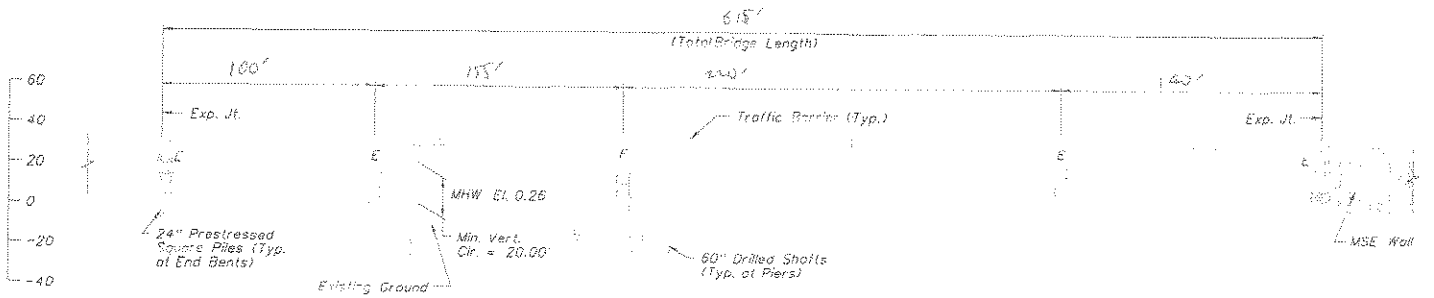
PIER No. 10 - RAMP T-1
PIER PROTECTION
ISOMETRIC VIEW

APPENDIX 2-P.2

STRUCTURES – ATTACHMENTS

Attachment(s) for Comment Nos. 25,27,28

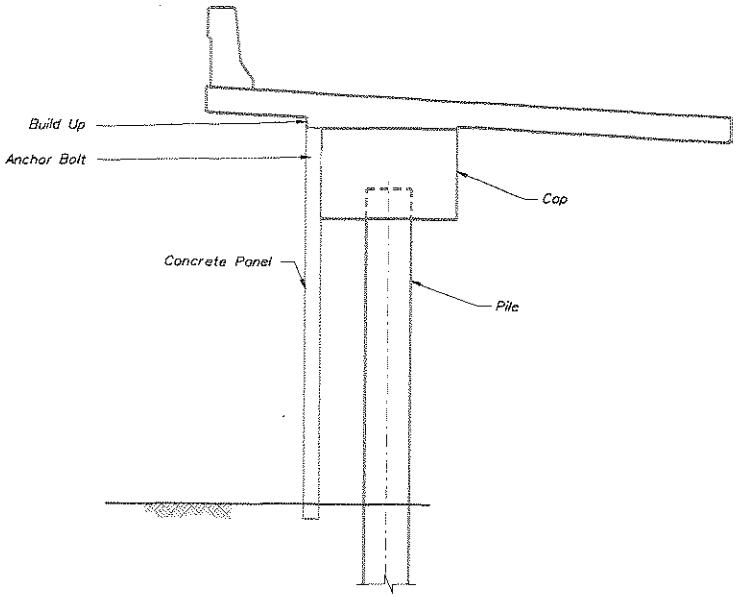

Right-of-Way
N33
N34
Walkway
Existing Utilities (Typ.)
NORTH NEW RIVER CANAL
Claim pile : 6'x12'
shaft pile : 5'-0" ϕ
Steel grade : 1726572.25
810
450
705
545
77' X37'
52'X22'
770
Right-of-Way
36" CMP
N 12° W
52'X22'


615'
(Total Bridge Length)
100'
175'
290'
40'
60
40
20
0
-20
-40
Exp. Jt.
Traffic Barrier (Typ.)
Exp. Jt.
MHW El. 0.26
24" Prestressed Square Piles (Typ. at End Bents)
Min. Vert. Clr. = 20.00'
60" Drilled Shafts (Typ. at Piers)
Existing Ground
MSE Wall

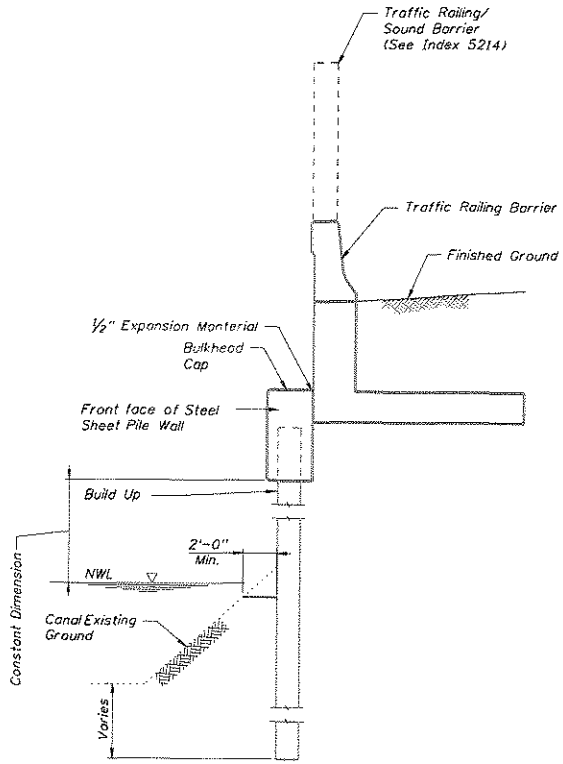
APPENDIX 2-P.2

STRUCTURES – ATTACHMENTS

Attachment(s) for Comment No. 29



T-9 WALL CONNECTION DETAIL



TYPICAL TIEBACK WALL SECTION
WITH SOUND BARRIER

PRELIMINARY CONCEPTS
DO NOT USE FOR CONSTRUCTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	

ACS-DRAGADOS MACQUARIE PARTNERSHIP

	NAME	DATES
DRAWN BY	SS	09-08
CHECKED BY	LL	09-08
DESIGNED BY	JES	09-08
CHECKED BY	PN	09-08
APPROVED BY	PRR	

EarthTech

FLORIDA DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
862	BROWARD	420809-3-52-01

SHEET TITLE: WALL TYPICAL SECTIONS (2 OF 2)

PROJECT NAME: I-595 CORRIDOR ROADWAY IMPROVEMENTS PROJECT

SHEET NO. W-2

...\i-595\soundwalls\W-2.dgn 1/13/2009 2:35:03 PM

APPENDIX 2-P.2

STRUCTURES – ATTACHMENTS

Attachment(s) for Comment Nos. 35-44

Construction of T5 ramp and demolition of existing bridge over Turnpike

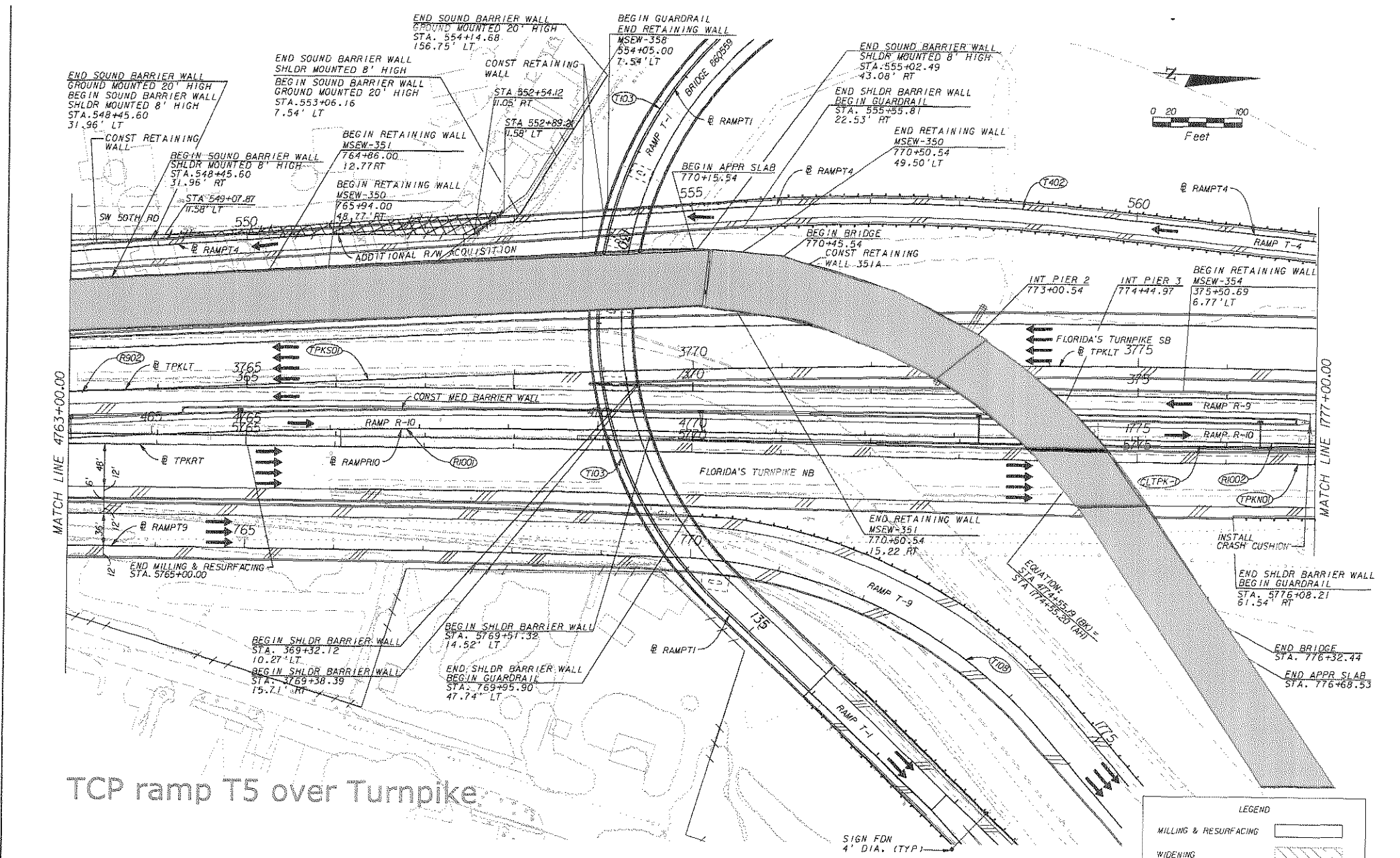
Construction of T5 ramp according with MOT drawings 53-54 and 122-123

MOT1 Phase1 construct substructure

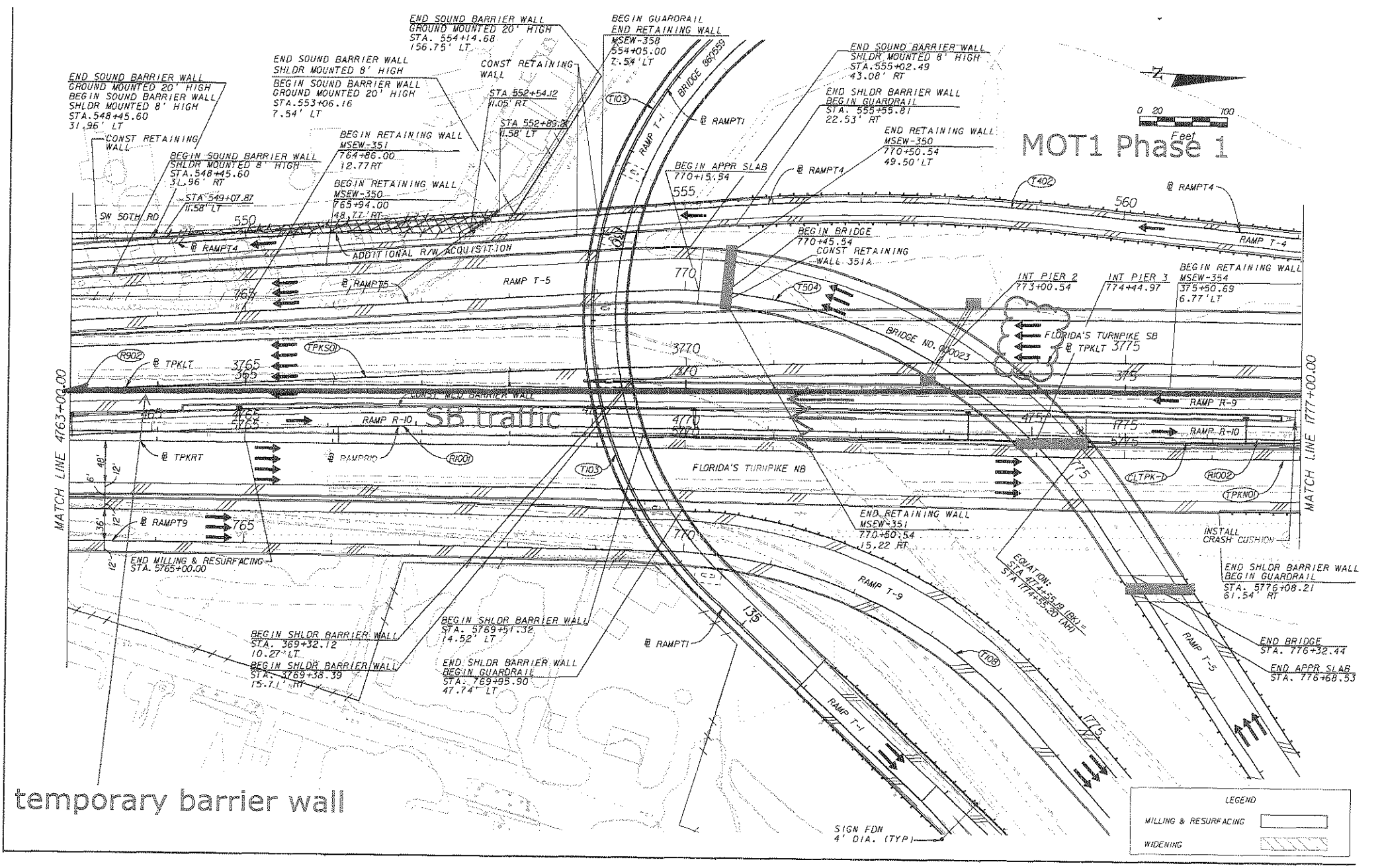
MOT1 Phase2 placing superstructure from west abutment to P2 and from east abutment to temporary support tower

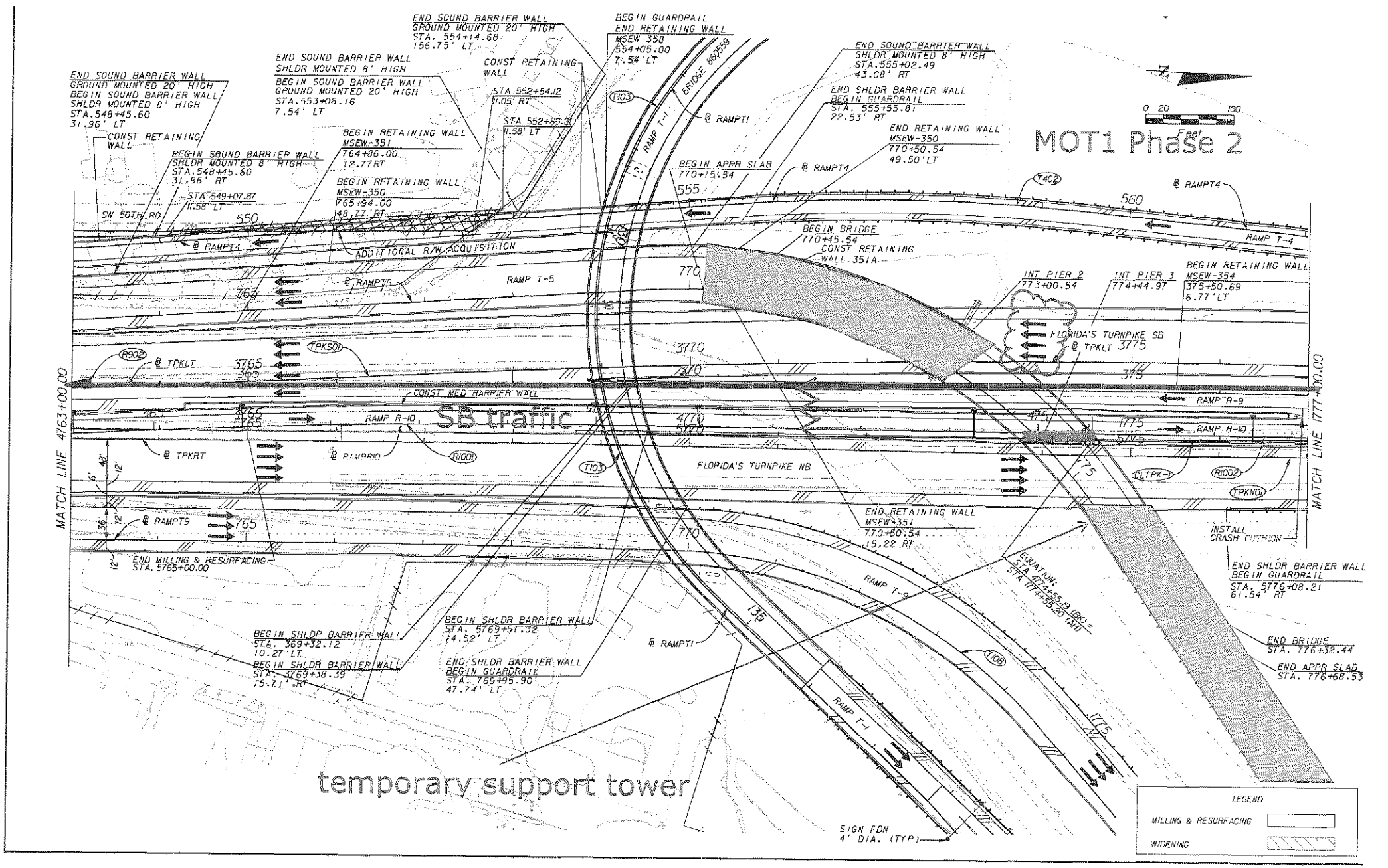
MOT2 Phase3 placing of west steel deck over SB. This phase will be done in more subphases from 9:00PM to 5:00AM. NB and SB traffic is completely available from 5:00AM to 9:00PM

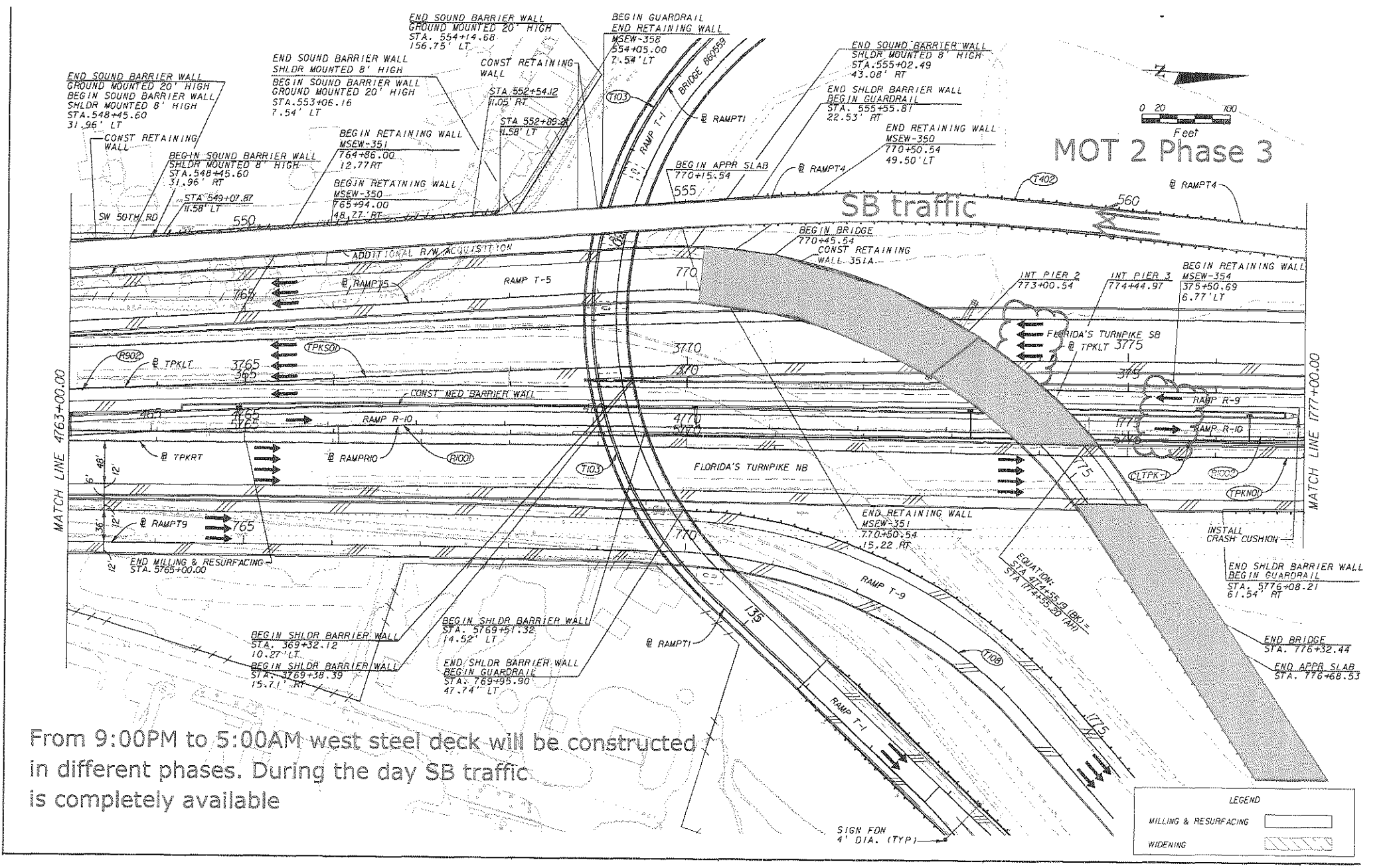
MOT2 Phase4 placing of east steel deck over NB. This phase will be done in more subphases from 9:00PM to 5:00AM. NB and SB traffic is completely available from 5:00AM to 9:00PM



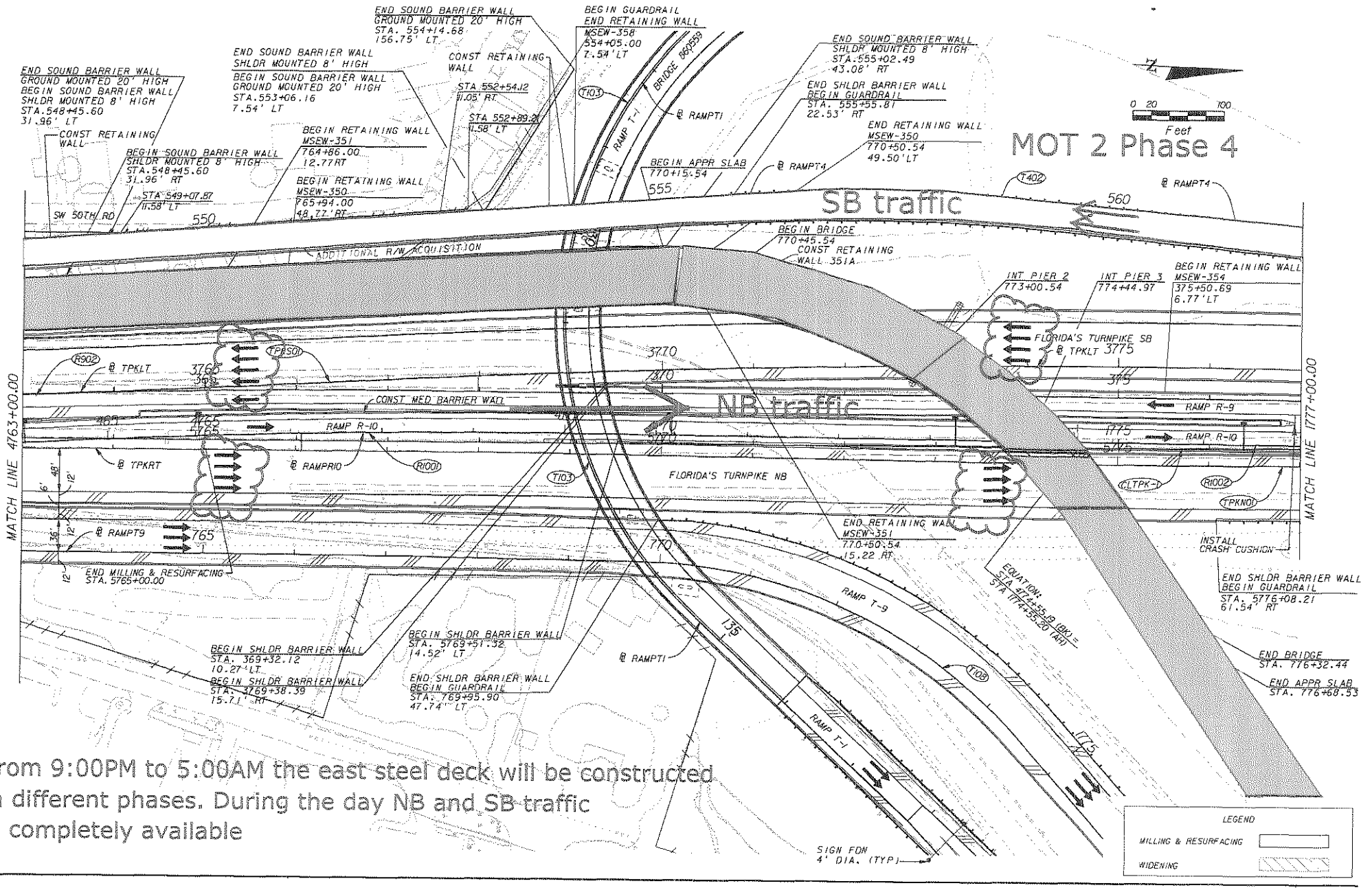
TCP ramp T5 over Turnpike


MOT1 Phase 1
0 20 100
Feet
END SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
BEGIN SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.548+45.60
31.96' LT
CONST RETAINING WALL
STA 549+07.87
11.58' LT
BEGIN SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.548+45.60
31.96' RT
SW 50TH RD
END SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
STA. 554+14.68
156.75' LT
END SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
BEGIN SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
STA.553+06.16
7.54' LT
CONST RETAINING WALL
STA 552+54.12
11.05' RT
STA 552+89.26
11.58' LT
BEGIN RETAINING WALL
MSEW-351
764+86.00
12.77 RT
BEGIN RETAINING WALL
MSEW-350
765+94.00
48.77 RT
ADDITIONAL R/W ACQUISITION
BEGIN GUARDRAIL
END RETAINING WALL
MSEW-358
554+05.00
7.54' LT
BRIDGE 860555
RAMP T-1
BEGIN APPR SLAB
770+15.54
END SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.555+02.49
43.08' RT
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 555+55.81
22.53' RT
END RETAINING WALL
MSEW-350
770+50.54
49.50'LT
BEGIN BRIDGE
770+45.54
CONST RETAINING WALL 351A
INT PIER 2
773+00.54
INT PIER 3
774+44.97
BEGIN RETAINING WALL
MSEW-354
375+50.69
6.77'LT
RAMP T-4
RAMP T-5
RAMP R-9
RAMP R-10
FLORIDA'S TURNPIKE SB
FLORIDA'S TURNPIKE NB
BRIDGE NO. 860023
CONST NCJ BARRIER WALL
SB traffic
MATCH LINE 4763+00.00
MATCH LINE 1777+00.00
END MILLING & RESURFACING
STA. 5765+00.00
END RETAINING WALL
MSEW-351
770+50.54
15.22 RT
INSTALL CRASH CUSHION
EQUATION:
STA 1774+59.18 (BK) =
STA 1774+55.30 (AH)
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 5776+08.21
61.54' RT
END BRIDGE
STA. 776+32.44
END APPR SLAB
STA. 776+68.53
BEGIN SHLDR BARRIER WALL
STA. 369+32.12
10.27' LT
BEGIN SHLDR BARRIER WALL
STA. 3769+38.39
15.71' RT
BEGIN SHLDR BARRIER WALL
STA. 5769+51.32
14.52' LT
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 769+95.90
47.74' LT
SIGN FDN
4' DIA. (TYP)
LEGEND
MILLING & RESURFACING
WIDENING
temporary barrier wall

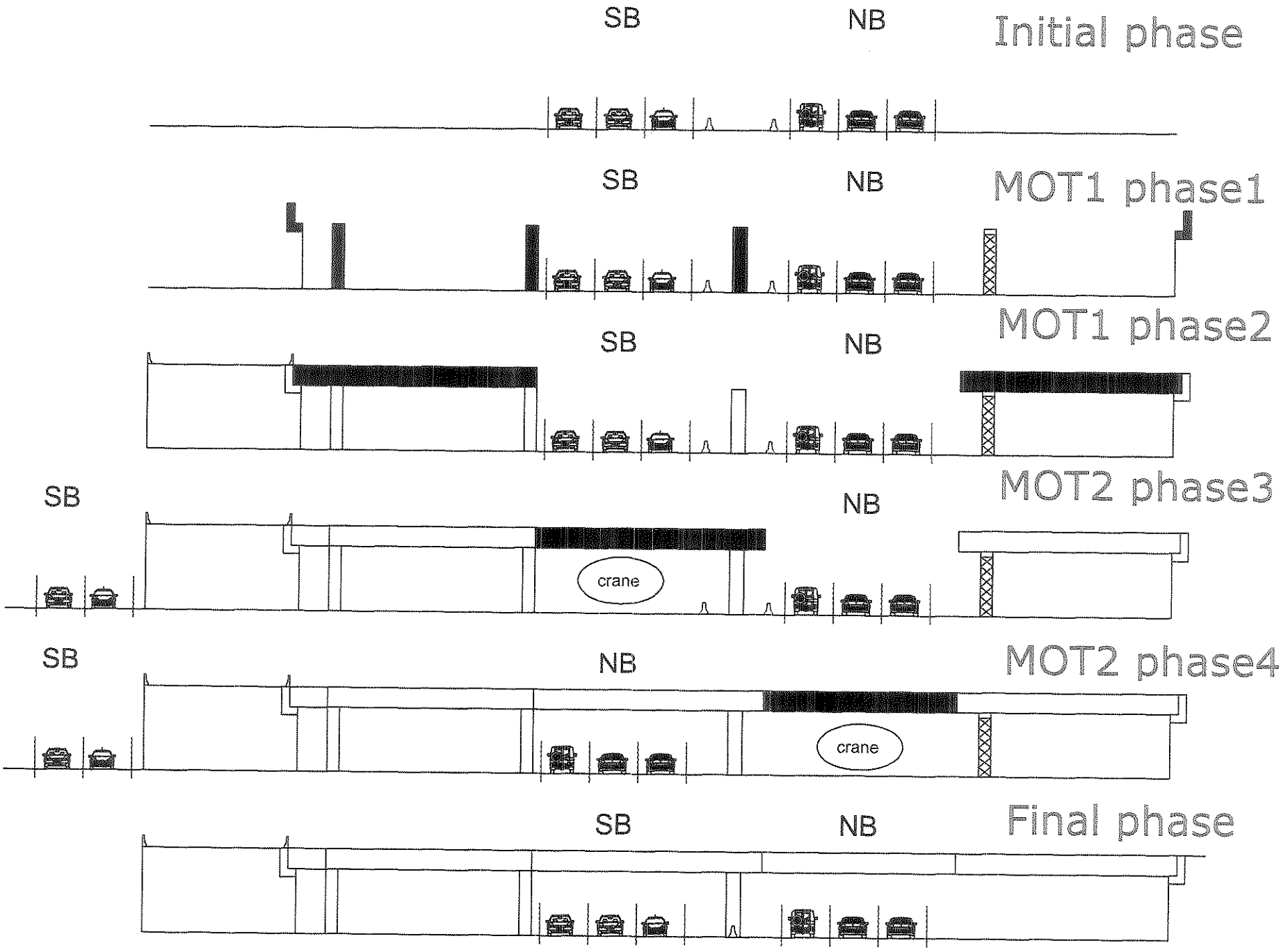

MOT1 Phase 2
0 20 100
Feet
MATCH LINE 4763+00.00
MATCH LINE 1777+00.00
SB traffic
temporary support tower
END SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
STA. 554+14.68
156.75' LT
BEGIN GUARDRAIL
END RETAINING WALL
MSEW-358
554+05.00
7.54' LT
END SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.555+02.49
43.08' RT
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 555+55.81
22.53' RT
END RETAINING WALL
MSEW-350
770+50.54
49.50' LT
END SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
BEGIN SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
STA.553+06.16
7.54' LT
CONST RETAINING WALL
STA 552+54.12
11.05' RT
STA 552+89.27
11.58' LT
BEGIN RETAINING WALL
MSEW-351
764+86.00
12.77 RT
BEGIN RETAINING WALL
MSEW-350
765+94.00
48.77' RT
END SOUND BARRIER WALL
GROUND MOUNTED 20' HIGH
BEGIN SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.548+45.60
31.96' LT
CONST RETAINING WALL
BEGIN SOUND BARRIER WALL
SHLDR MOUNTED 8' HIGH
STA.548+45.60
31.96' RT
STA 549+07.87
11.58' LT
SW 50TH RD
BEGIN APPR SLAB
770+15.54
BEGIN BRIDGE
770+45.54
CONST RETAINING WALL 351A
INT PIER 2
773+00.54
INT PIER 3
774+44.97
BEGIN RETAINING WALL
MSEW-354
375+50.69
6.77' LT
FLORIDA'S TURNPIKE SB
FLORIDA'S TURNPIKE NB
ADDITIONAL R/W ACQUISITION
CONST MED BARRIER WALL
RAMP T-1
RAMP T-4
RAMP T-5
RAMP T-9
RAMP R-9
RAMP R-10
@ RAMPT1
@ RAMPT4
@ RAMPT5
@ RAMPT9
@ RAMPR10
@ TPKLT
@ TPKRT
BRIDGE 860559
T103
T402
T108
R902
R1001
R1002
TPKS01
TPKN01
CLTPK-1
END MILLING & RESURFACING
STA. 5765+00.00
BEGIN SHLDR BARRIER WALL
STA. 369+32.12
10.27' LT
BEGIN SHLDR BARRIER WALL
STA. 3769+38.39
15.71' RT
BEGIN SHLDR BARRIER WALL
STA. 5769+51.32
14.52' LT
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 769+95.90
47.74' LT
END RETAINING WALL
MSEW-351
770+50.54
15.22' RT
EQUATION: STA 4774+55.19 (BK) = STA 1774+55.20 (AH)
INSTALL CRASH CUSHION
END SHLDR BARRIER WALL
BEGIN GUARDRAIL
STA. 5776+08.21
61.54' RT
END BRIDGE
STA. 776+32.44
END APPR SLAB
STA. 776+68.53
SIGN FDN
4' DIA. (TYP)
LEGEND
MILLING & RESURFACING
WIDENING



From 9:00PM to 5:00AM west steel deck will be constructed in different phases. During the day SB traffic is completely available



From 9:00PM to 5:00AM the east steel deck will be constructed in different phases. During the day NB and SB traffic is completely available


SB
NB
Initial phase
SB
NB
MOT1 phase1
SB
NB
MOT1 phase2
SB
NB
MOT2 phase3
crane
SB
NB
MOT2 phase4
crane
SB
NB
Final phase

Demolition of existing bridge over Turnpike according with MOT drawings 122-123

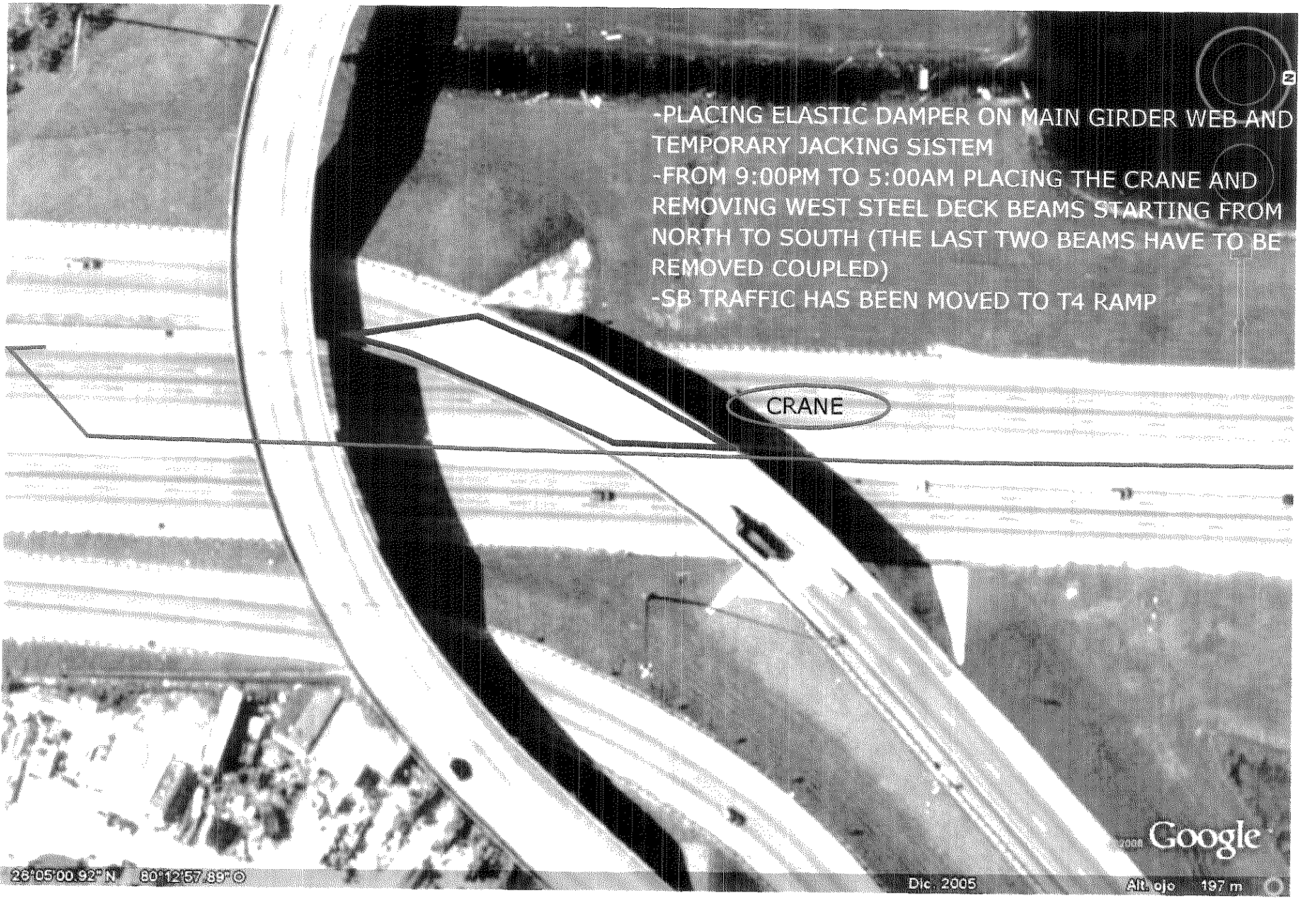
MOT2 Phase1 removing all the concrete deck slab

MOT2 Phase2 placing provisional support tower, jacking system and elastic damper

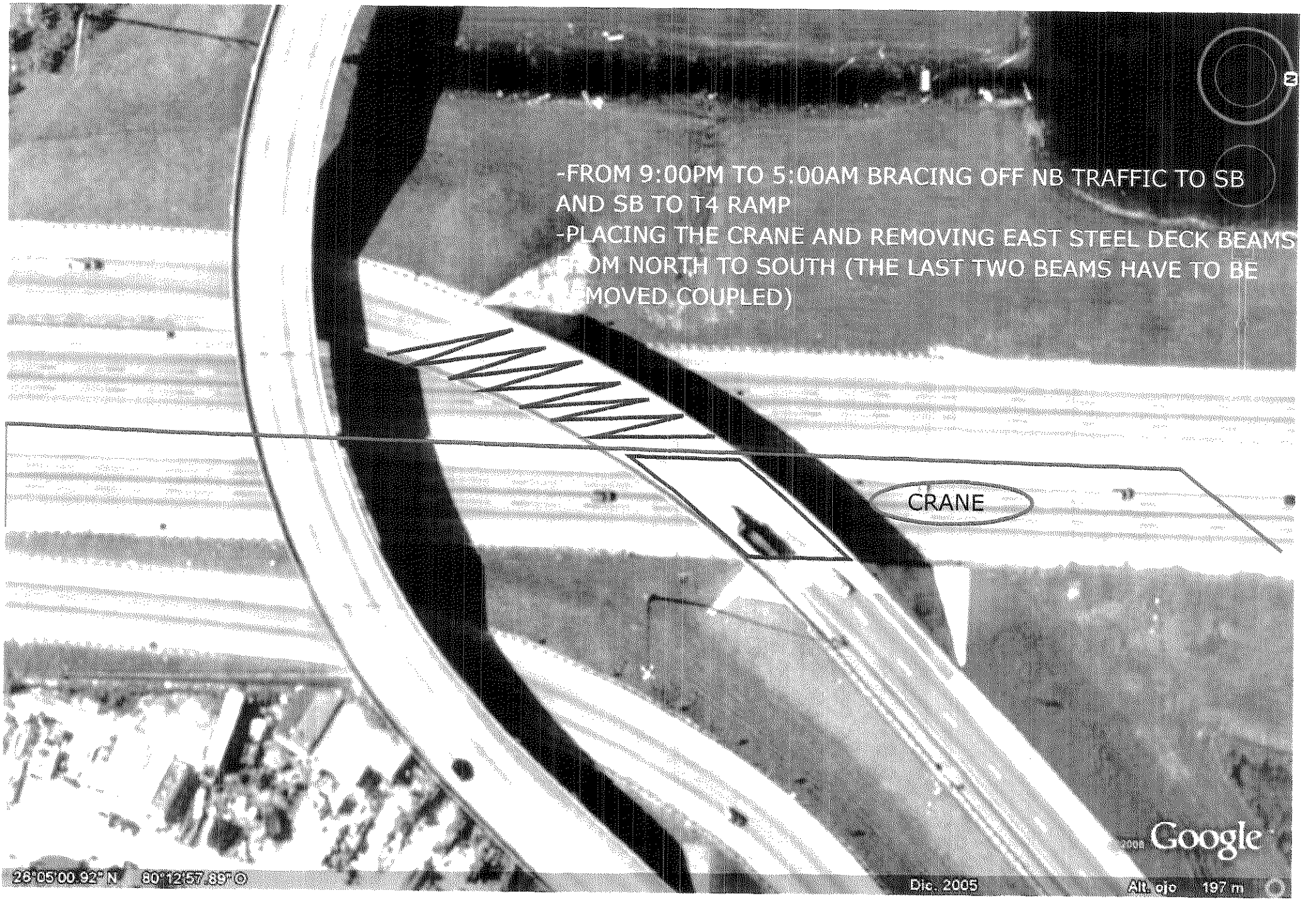
MOT2 Phase3 removing of west steel deck over SB. This phase will be done in more subphases from 9:00PM to 5:00AM. SB traffic is completely available from 5:00AM to 9:00PM

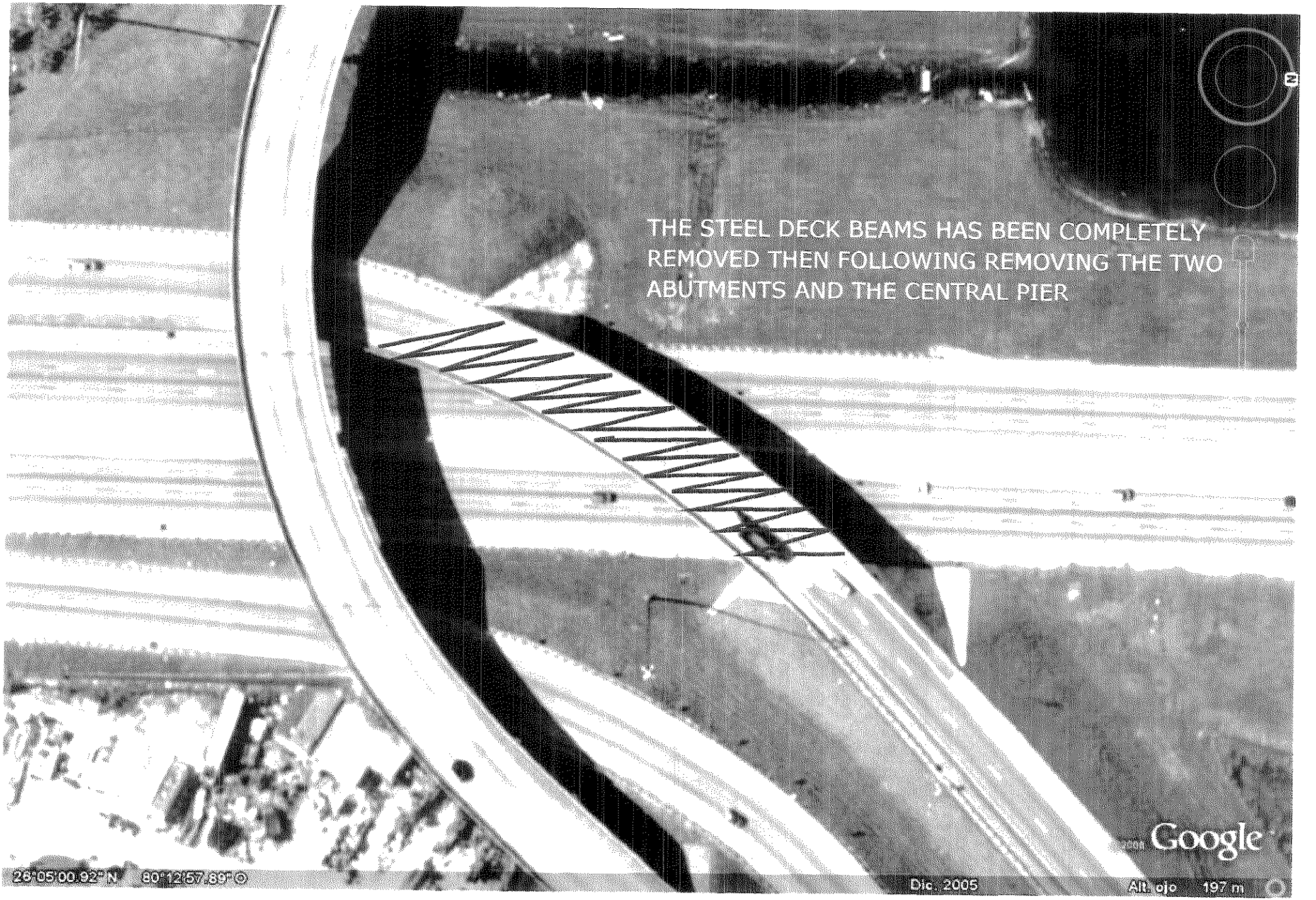
MOT2 Phase4 removing of east steel deck over NB. This phase will be done in more subphases from 9:00PM to 5:00AM. NB traffic is completely available from 5:00AM to 9:00PM

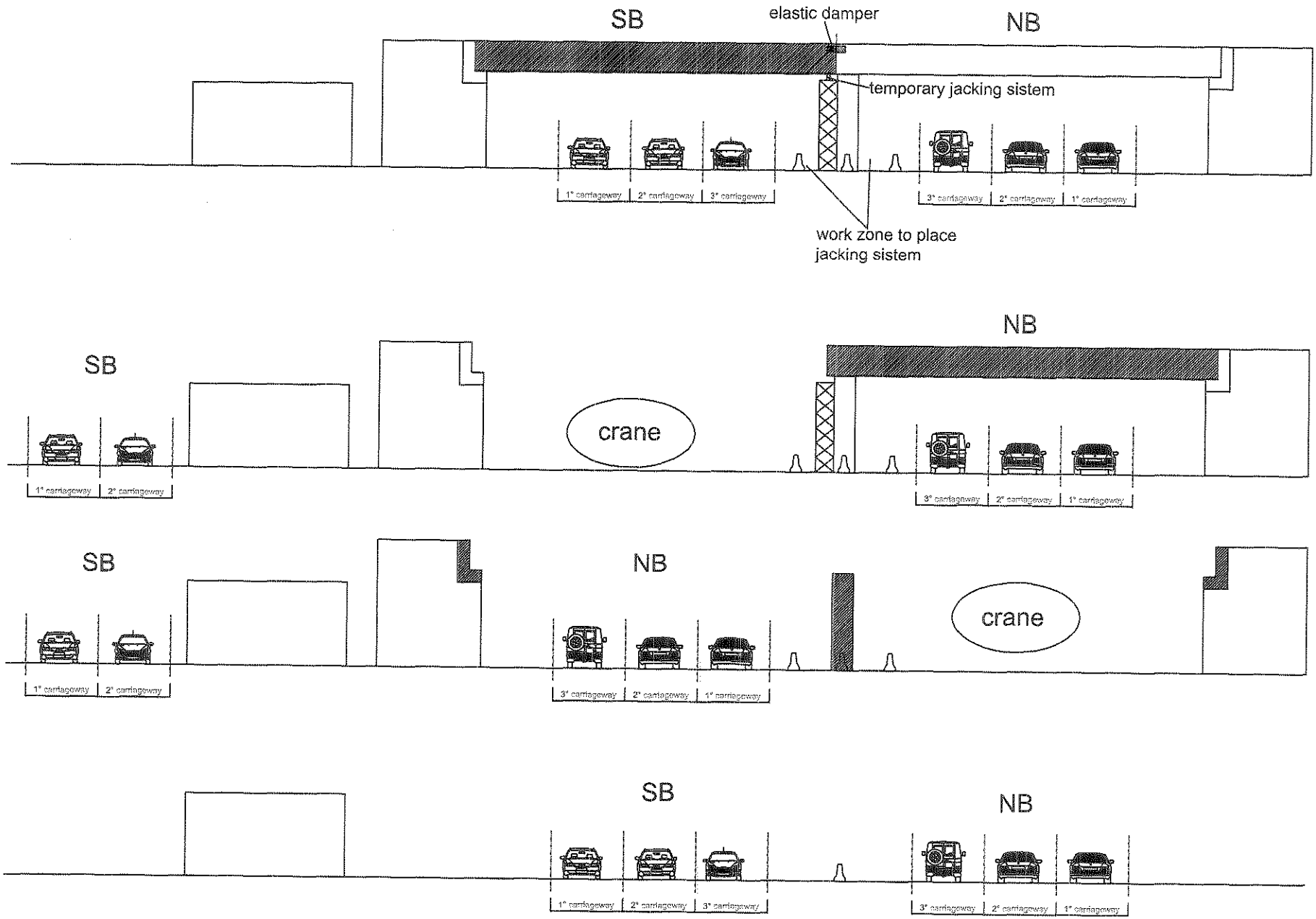

RAMP T5 HAS JUST BEEN BUILT
POSITION OF THE CRANE ON SB
BETWEEN 5:00AM TO 9:00PM
CRANE
REMOVING ALL THE CONCRETE
DECK SLAB
Google
26°05'00.92" N 80°12'57.89" W
Dic. 2005
Alt. ojo 197 m

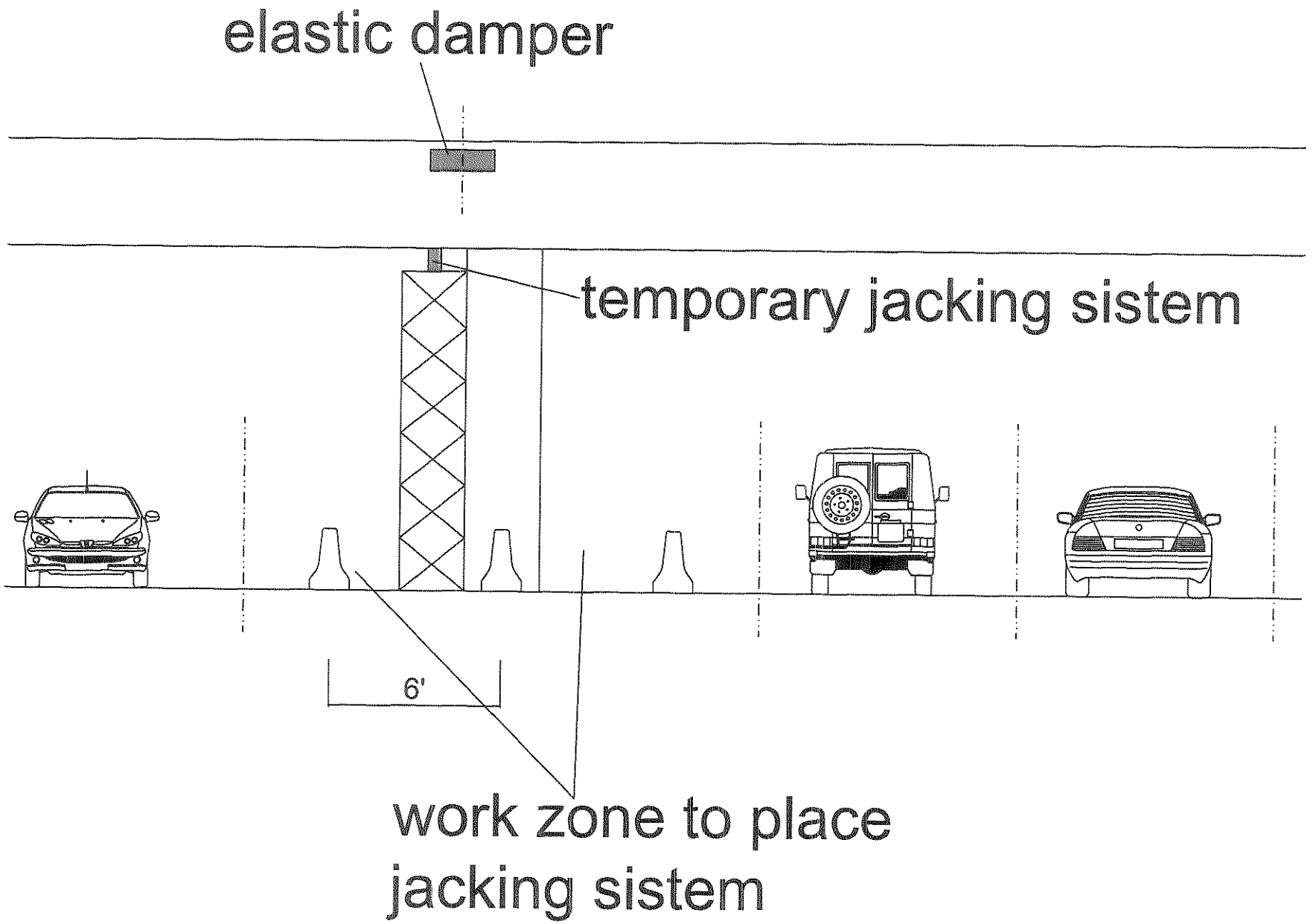

-PLACING ELASTIC DAMPER ON MAIN GIRDER WEB AND TEMPORARY JACKING SISTEM
-FROM 9:00PM TO 5:00AM PLACING THE CRANE AND REMOVING WEST STEEL DECK BEAMS STARTING FROM NORTH TO SOUTH (THE LAST TWO BEAMS HAVE TO BE REMOVED COUPLED)
-SB TRAFFIC HAS BEEN MOVED TO T4 RAMP
CRANE
Google
26°05'00.92" N 80°12'57.89" W
Dic. 2005
Alt. ojo 197 m

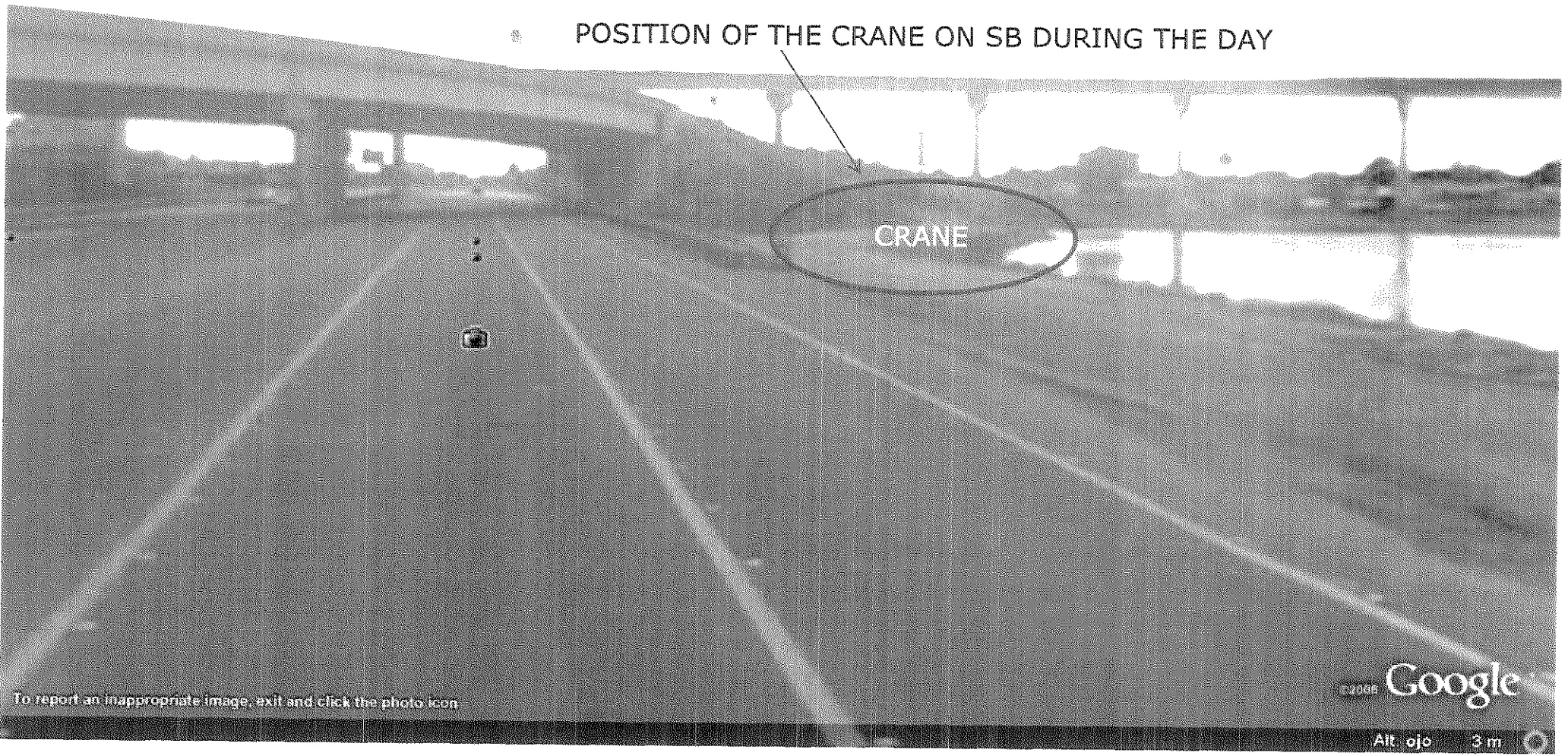

-MOVE THE CRANE ON NB
-POSITION OF THE CRANE ON NB
BETWEEN 5:00AM TO 9:00PM
CRANE
Google
26°05'00.92" N 80°12'57.89" W
Dic 2005
Alt. ojo 197 m


-FROM 9:00PM TO 5:00AM BRACING OFF NB TRAFFIC TO SB AND SB TO T4 RAMP
-PLACING THE CRANE AND REMOVING EAST STEEL DECK BEAMS FROM NORTH TO SOUTH (THE LAST TWO BEAMS HAVE TO BE REMOVED COUPLED)
CRANE
Google
26°05'00.92" N 80°12'57.89" W
Dic. 2005
Alt. ojo 197 m


THE STEEL DECK BEAMS HAS BEEN COMPLETELY REMOVED THEN FOLLOWING REMOVING THE TWO ABUTMENTS AND THE CENTRAL PIER
Google
26°05'00.92" N 80°12'57.89" O
Dic. 2005
Alt. ojo 197 m


SB
elastic damper
NB
temporary jacking sistem
1° carriageway
2° carriageway
3° carriageway
3° carriageway
2° carriageway
1° carriageway
work zone to place
jacking sistem
SB
NB
crane
1° carriageway
2° carriageway
3° carriageway
2° carriageway
1° carriageway
SB
NB
crane
1° carriageway
2° carriageway
3° carriageway
2° carriageway
1° carriageway
SB
NB
1° carriageway
2° carriageway
3° carriageway
3° carriageway
2° carriageway
1° carriageway


elastic damper
temporary jacking sistem
6'
work zone to place
jacking sistem


Florida's Turnpike
Salir de la foto
POSITION OF THE CRANE ON SB DURING THE DAY
CRANE
To report an inappropriate image, exit and click the photo icon
©2008 Google
Alt. ojo 3 m


Florida's Turnpike
Salir de la foto
POSITION OF THE CRANE ON NB DURING THE DAY
CRANE
To report an inappropriate image, exit and click the photo icon
Google
Alt. ojo 3 m

Construction of R7 over I-595

MOT1 Phase1 creation of temporary carriageways on right side of SB

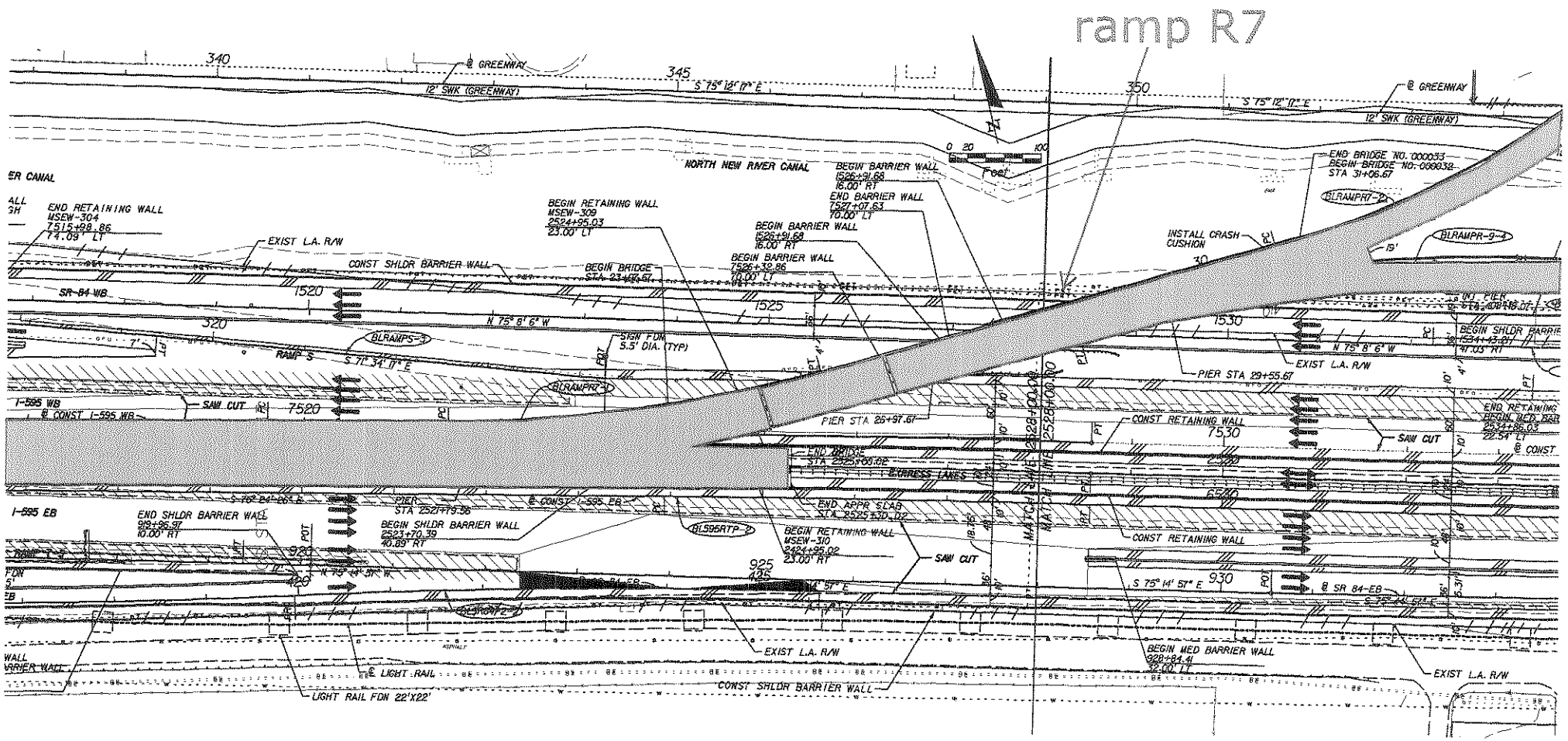
MOT1 Phase2 erecting substructure of str33

MOT1 Phase3 placing str33 steel deck leaving the last stage over SB

MOT2 Phase4 moving SB to temporary carriageways

MOT3 Phase5 erecting substructure and steel deck of str30

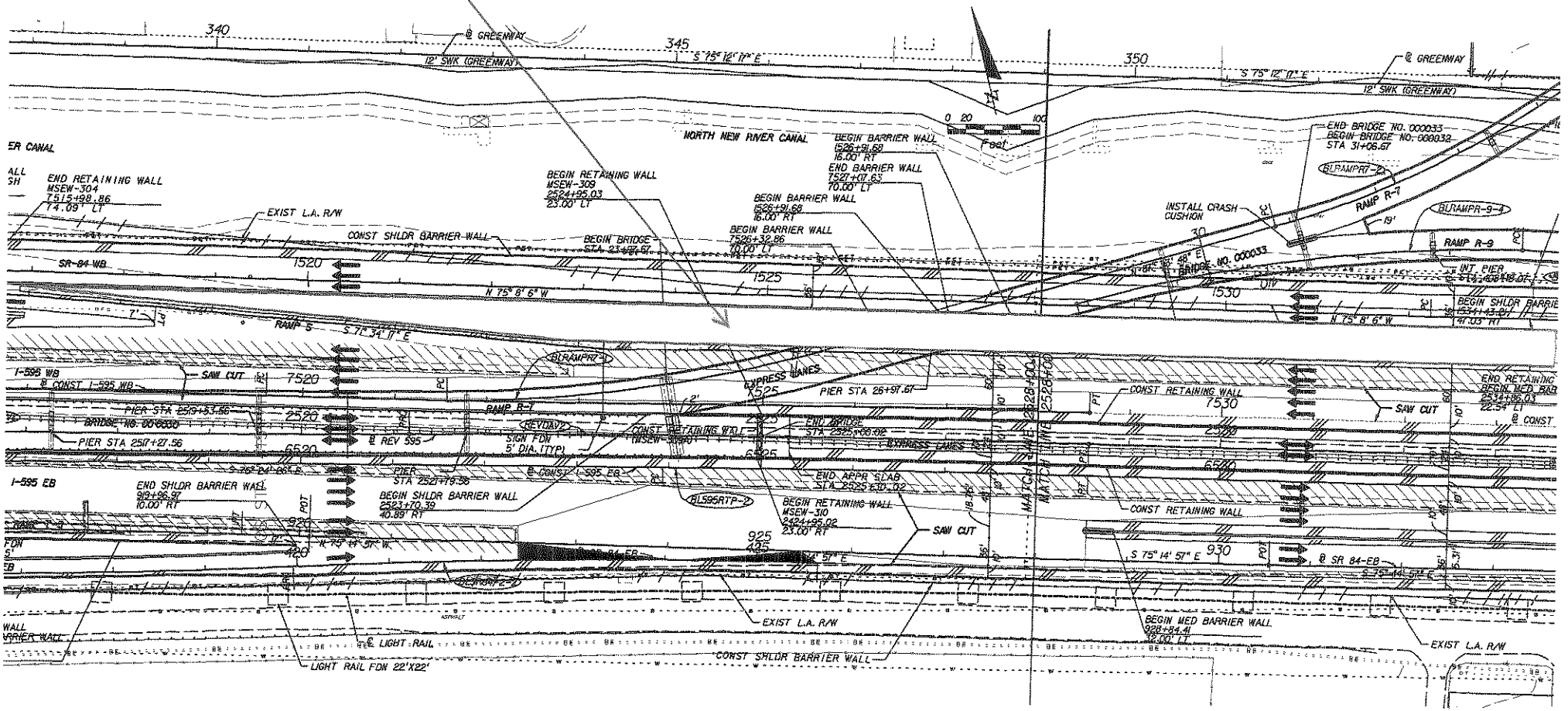
MOT3 Phase6 close str33 steel deck over SB. This phase will be done from 9:00PM to 5:00AM in different subphases moving SB to the provisional carriageways. From 5:00AM to 9:00PM SB traffic is completely available.



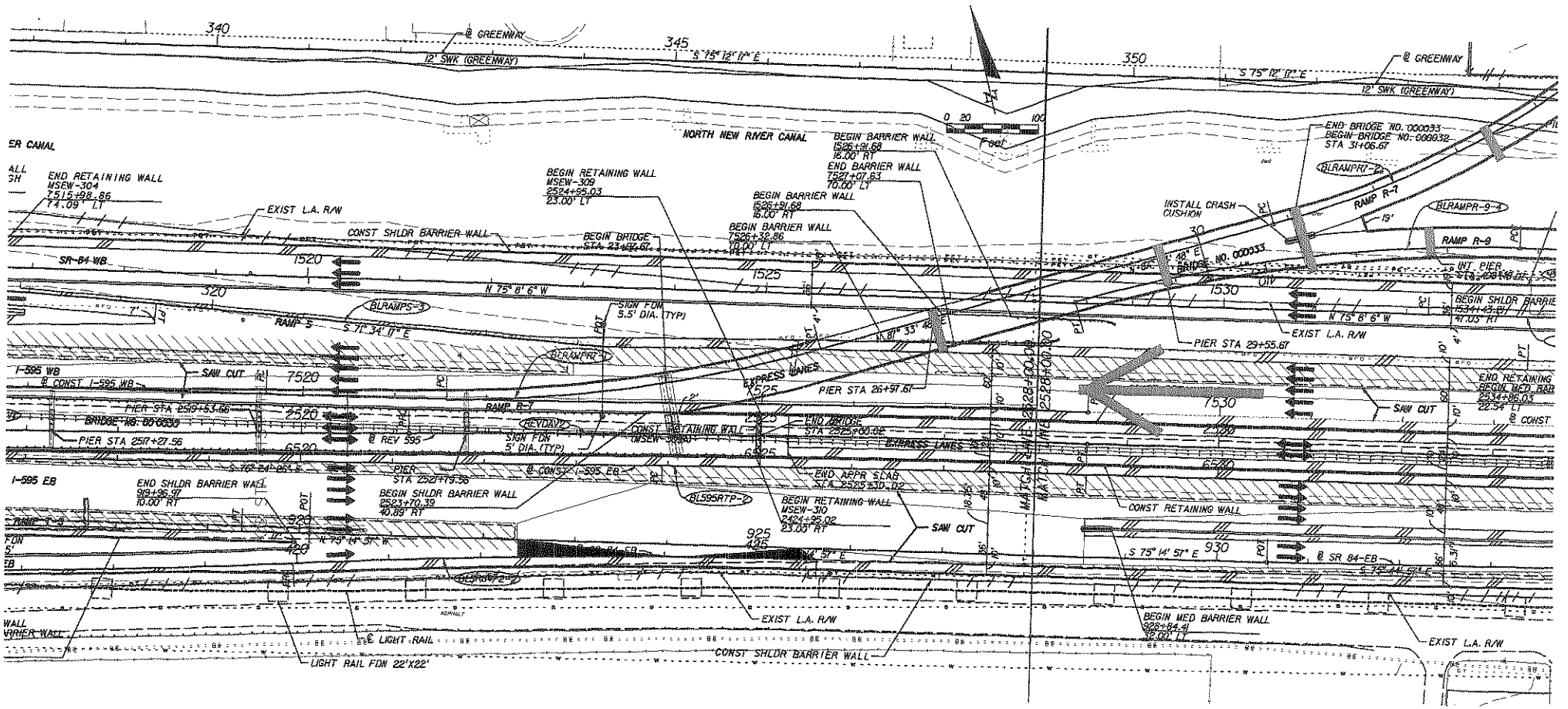
TCP ramp R7 over Turnpike

MOT 1 Phase 1

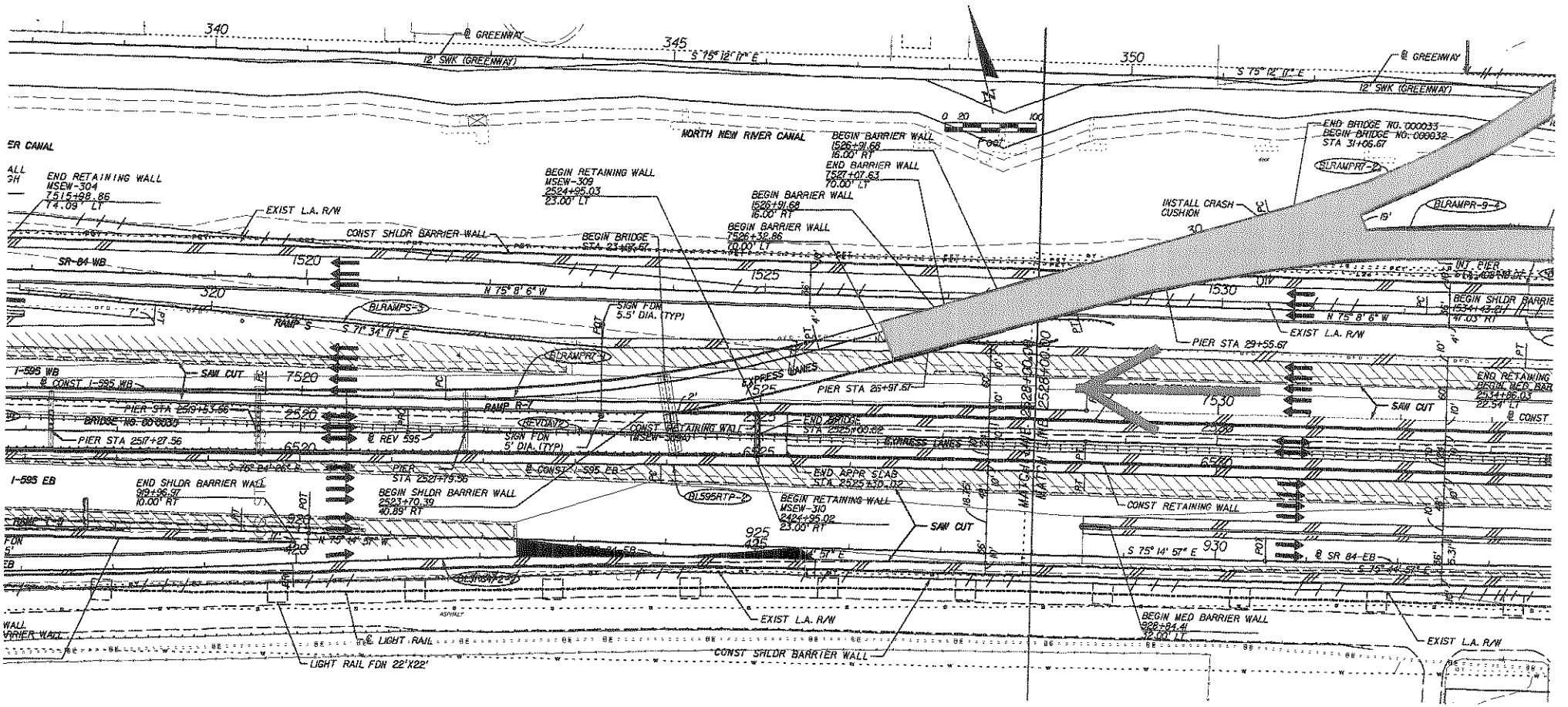
provisional carriageways



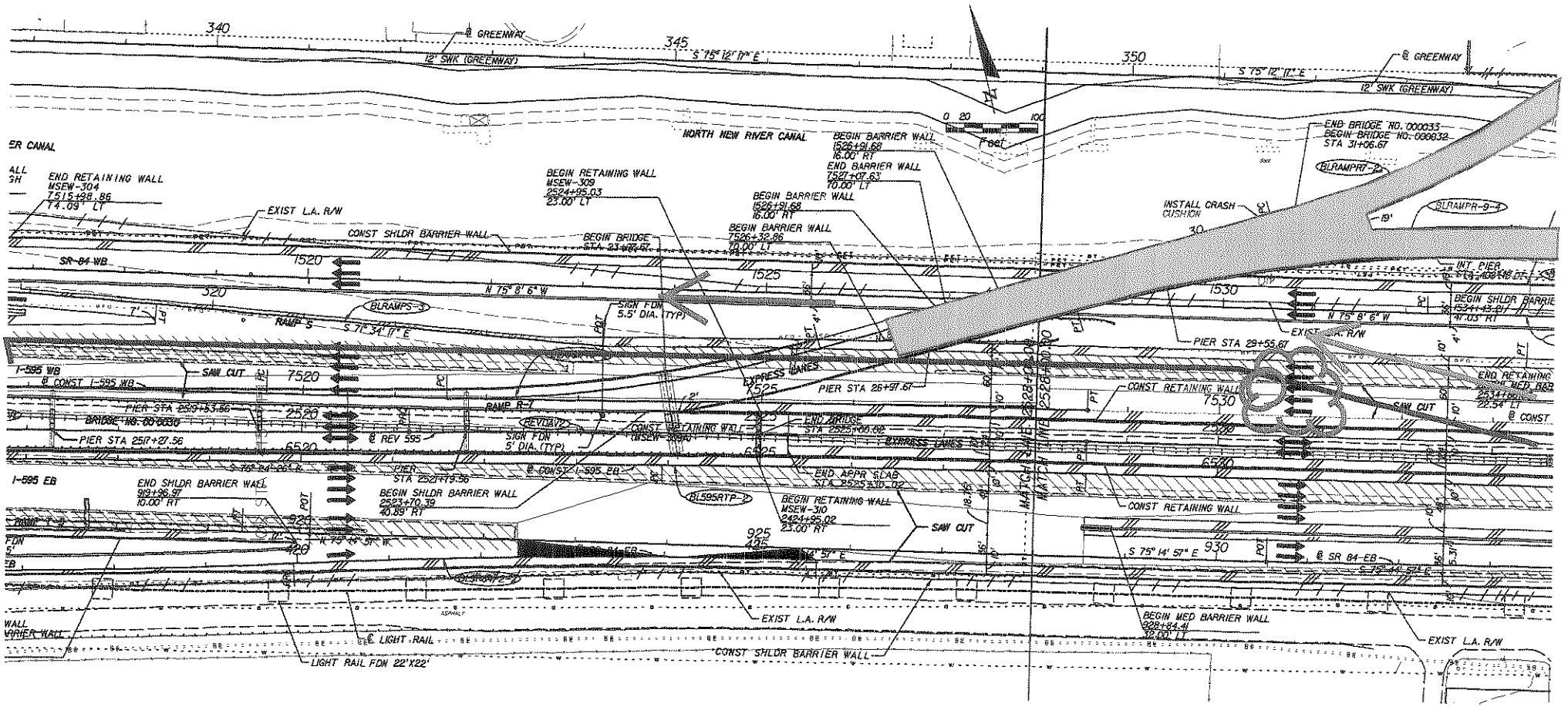
MOT 1 Phase 2


@ GREENWAY
12' SWK (GREENWAY)
S 75° 12' 17" E
NORTH NEW RIVER CANAL
END RETAINING WALL MSEW-304 7515+98.86 74.09' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN BRIDGE STA 23+97.67
SR-84 WB
N 75° 8' 6" W
RAMP S
S 71° 34' 17" E
I-595 WB
@ CONST I-595 WB
SAW CUT
PIER STA 2510+53.66
BRIDGE NO. 860039
PIER STA 2517+27.56
@ REV 595
S 76° 24' 05" E
I-595 EB
END SHLDR BARRIER WALL 919+96.97 10.00' RT
BEGIN SHLDR BARRIER WALL 2523+70.39 40.89' RT
PIER STA 2521+19.38
@ CONST I-595 EB
N 75° 14' 57" W
@ LIGHT RAIL
LIGHT RAIL FDN 22'X22'
BEGIN RETAINING WALL MSEW-309 2524+55.03 23.00' LT
BEGIN BARRIER WALL 1526+91.68 16.00' RT
END BARRIER WALL 7527+07.63 70.00' LT
BEGIN BARRIER WALL 7526+39.86 19.00' LT
SIGN FDN 5.5' DIA. (TYP)
81° 33' 40" E
EXPRESS LANES
PIER STA 26+97.67
END BRIDGE STA 2525+00.02
CONST RETAINING WALL (MSEW-308A)
SIGN FDN 5' DIA. (TYP)
END APPR SLAB STA 2525+30.02
BEGIN RETAINING WALL MSEW-310 2424+98.02 23.00' RT
SAW CUT
S 75° 14' 57" E
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN MED BARRIER WALL 928+84.41 22.00' LT
INSTALL CRASH CUSHION
END BRIDGE NO. 000033
BEGIN BRIDGE NO. 000032 STA 31+06.67
RAMP R-7
RAMP R-9
INT PIER
PIER STA 29+55.67
EXIST L.A. R/W
N 75° 8' 6" W
SAW CUT
CONST RETAINING WALL
@ SR 84-EB
S 75° 14' 57" E
EXIST L.A. R/W
MATCH LINE STA 2528+00.00
MATCH LINE STA 2528+00.00

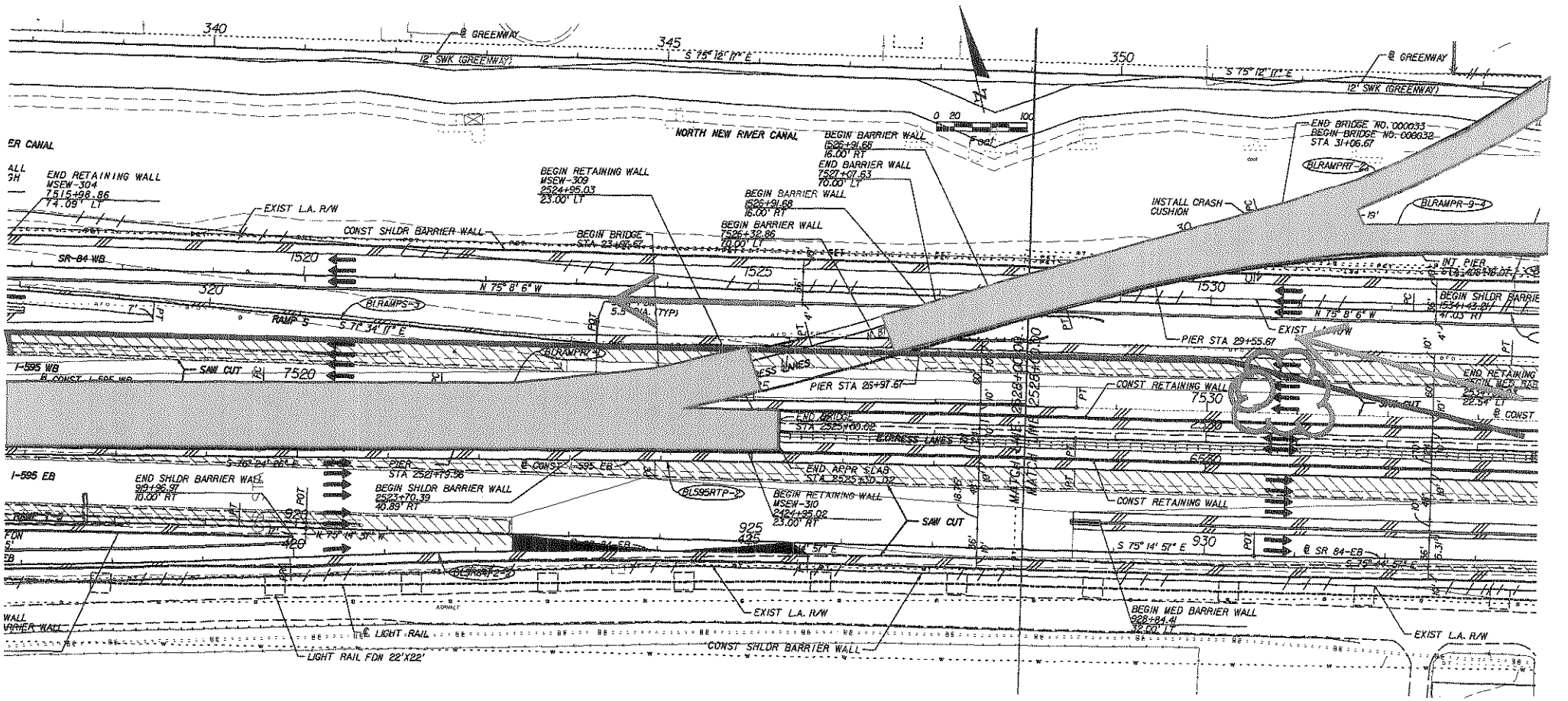
MOT 1 Phase 3


@ GREENWAY
12' SWK (GREENWAY)
S 75° 12' 17" E
NORTH NEW RIVER CANAL
END RETAINING WALL MSEW-304 7515+98.86 14.09' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN BRIDGE STA 23+97.67
BEGIN RETAINING WALL MSEW-309 2524+95.03 23.00' LT
BEGIN BARRIER WALL 1526+91.68 16.00' RT
END BARRIER WALL 7527+07.63 70.00' LT
BEGIN BARRIER WALL 7526+39.86 70.00' LT
SIGN FDN 5.5' DIA. (TYP)
SR-84 WB
N 75° 8' 6" W
S 71° 34' 11" E
BLRAMPS-3
RAMP S
BLRAMPR
I-595 WB
@ CONST I-595 WB
SAW CUT
PIER STA 25+53.56
BRIDGE NO. 060035
PIER STA 25+27.56
RAMP R-1
@ REV 595
SIGN FDN 5' DIA. (TYP)
CONST RETAINING WALL
END BRDG STA 2525+00.82
CYPRESS LAKES BLVD
PIER STA 26+97.67
END APPR SLAB STA 2525+30.32
BEGIN RETAINING WALL MSEW-310 2524+95.02 23.00' RT
BL595RTP-1
I-595 EB
@ CONST I-595 EB
END SHLDR BARRIER WALL 969+96.97 10.00' RT
BEGIN SHLDR BARRIER WALL 2523+70.39 40.89' RT
@ SR 84-EB
EXIST L.A. R/W
@ LIGHT RAIL
LIGHT RAIL FDN 22'X22'
CONST SHLDR BARRIER WALL
INSTALL CRASH CUSHION
END BRIDGE NO. 060033
BEGIN BRIDGE NO. 060032
STA 31+06.67
BLRAMPR-2
BLRAMPR-9-4
INT. PIER
PIER STA 29+55.67
EXIST L.A. R/W
BEGIN SHLDR BARRIE
1534+43.61
41.03' RT
END RETAINING
BEGIN MED BARR
25+14+86.03
22.54' LT
@ CONST
CONST RETAINING WALL
S 75° 14' 57" E
@ SR 84-EB
BEGIN MED BARRIER WALL
928+84.41
32.00' LT
EXIST L.A. R/W
MATCH LINE 2528+00.00

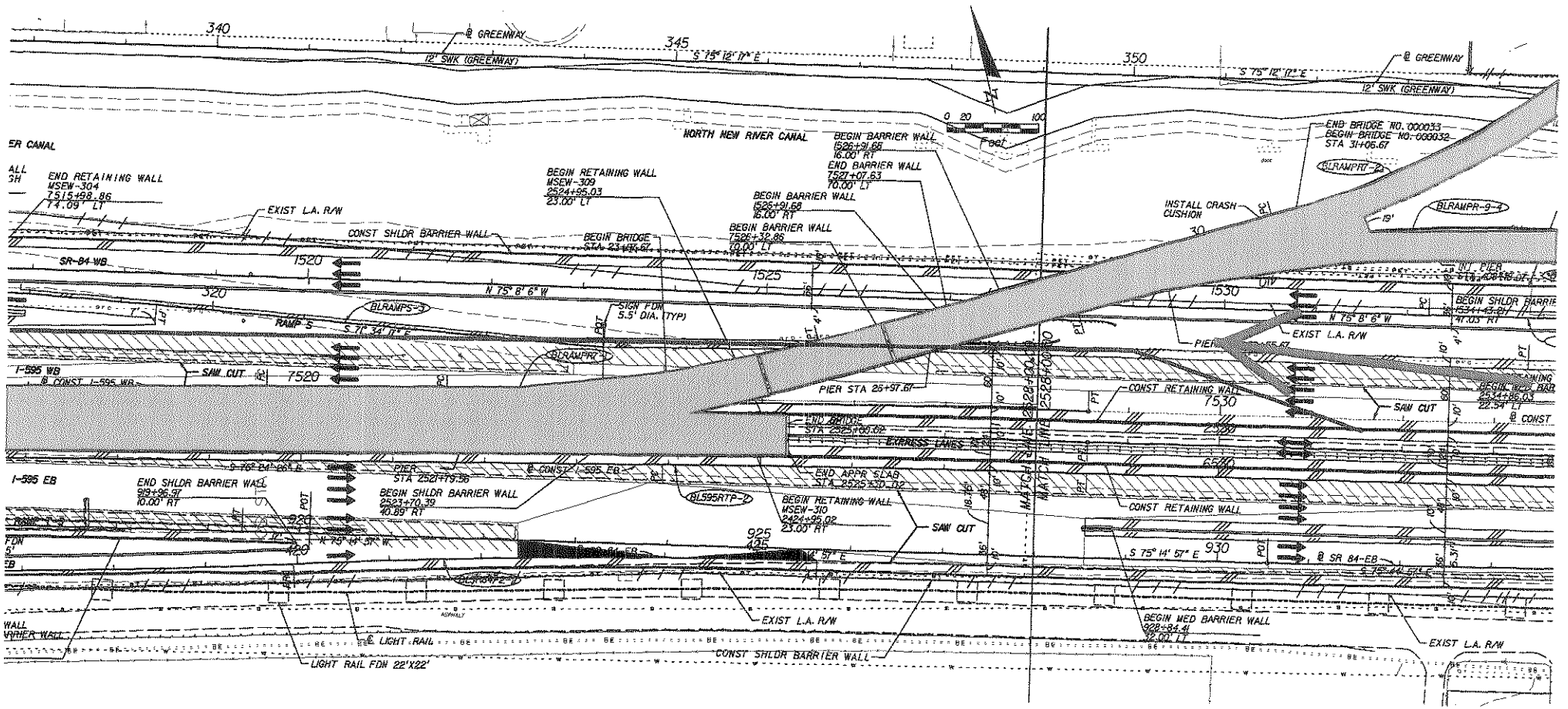
MOT 2 Phase 4


340
345
350
@ GREENWAY
12' SWK (GREENWAY)
S 75° 12' 17" E
NORTH NEW RIVER CANAL
0 20 100
Feet
END RETAINING WALL MSEW-304 7515+28.86 14.09' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN BRIDGE STA 23+87.67
SR-84 WB
N 75° 8' 6" W
BLRAMP5
RAMP 5
S 71° 34' 11" E
I-595 WB
@ CONST I-595 WB
SAW CUT
PIER STA 25+53.56
BRIDGE NO. 86-0030
PIER STA 25+27.56
@ REV 595
SIGN FDN 5' DIA. (TYP)
I-595 EB
END SHLDR BARRIER WALL 913+26.97 10.00' RT
BEGIN SHLDR BARRIER WALL 2523+70.39 40.89' RT
PIER STA 25+19.56
@ CONST I-595 EB
N 75° 14' 57" W
@ SR 84-EB
EXIST L.A. R/W
@ LIGHT RAIL
LIGHT RAIL FDN 22'X22'
CONST SHLDR BARRIER WALL
BEGIN RETAINING WALL MSEW-309 2524+95.03 23.00' LT
BEGIN BARRIER WALL 1526+91.68 16.00' RT
END BARRIER WALL 1527+07.63 70.00' LT
BEGIN BARRIER WALL 1526+91.68 16.00' RT
BEGIN BARRIER WALL 7526+32.66 70.00' LT
SIGN FDN 5.5' DIA. (TYP)
EXPRESS LANES
PIER STA 26+97.67
END BRIDGE STA 2525+00.62
BEGIN APPR SLAB STA 2525+30.02
BEGIN RETAINING WALL MSEW-310 2524+35.92 23.00' RT
SAW CUT
B(595RTP)
MATCH LINE STA 2528+00.00
END BRIDGE NO. 000033
BEGIN BRIDGE NO. 000032
STA 31+06.67
BLRAMPR-2
BLRAMPR-3-4
INSTALL CRASH CUSHION
INT. PIER
BEGIN SHLDR BARRIE
EXIST L.A. R/W
PIER STA 29+55.67
CONST RETAINING WALL
SAW CUT
END RETAINING WALL MED BAR
@ CONST
CONST RETAINING WALL
S 75° 14' 57" E
@ SR 84-EB
BEGIN MED BARRIER WALL 928+84.41 12.00' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL

MOT 3 Phase 5


NORTH NEW RIVER CANAL
END RETAINING WALL WSEW-304 7515+98.86 74.09' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN BRIDGE STA 23+93.67
SR-84 WB
RAMP S
I-595 WB
SAW CUT
I-595 EB
END SHLDR BARRIER WALL 919+36.97 10.00' RT
BEGIN SHLDR BARRIER WALL 2523+70.39 40.89' RT
PIER STA 25+19.38
BEGIN RETAINING WALL WSEW-309 2524+95.03 23.00' LT
BEGIN BARRIER WALL 1525+91.68 16.00' RT
END BARRIER WALL 7527+07.63 70.00' LT
BEGIN BARRIER WALL 7526+32.86 70.00' LT
PIER STA 25+97.67
END BRIDGE STA 2525+00.02
BYPASS LANES
END APPR SLAB STA 2525+30.02
BEGIN RETAINING WALL WSEW-310 2524+98.02 23.00' RT
SAW CUT
CONST RETAINING WALL
INSTALL CRASH CUSHION
END BRIDGE NO. 000033
BEGIN BRIDGE NO. 000032
STA 31+06.67
INT. PIER
PIER STA 29+55.67
BEGIN SHLDR BARRIE
END RETAINING
@ SR 84-EB
BEGIN MED BARRIER WALL 928+84.41 32.00' LT
EXIST L.A. R/W
@ LIGHT RAIL
LIGHT RAIL FDN 22'X22'
CONST SHLDR BARRIER WALL
@ GREENWAY
12' SWK (GREENWAY)
S 75° 12' 17" E
N 75° 8' 6" W
S 71° 34' 17" E
N 75° 19' 31" W
S 75° 14' 51" E
BLRAMPS-3
BLRAMPR-2
BLRAMPR-3
BLRAMPR-2-2
BLRAMPR-3-4
BL595RTP-2
340
345
350
520
525
530
920
925
930

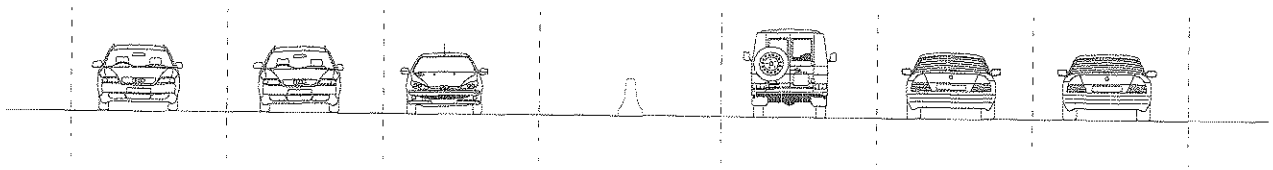
MOT 3 Phase 6


NORTH NEW RIVER CANAL
@ GREENWAY
12' SWK (GREENWAY)
S 75° 12' 17" E
END RETAINING WALL MSEW-304 7515+58.86 74.09' LT
EXIST L.A. R/W
CONST SHLDR BARRIER WALL
BEGIN BRIDGE STA 23+45.67
SR-84-WB
N 75° 8' 6" W
BLRAMPS-3
RAMP S
S 71° 34' 11" E
SIGN FDN 5.5' DIA. (TYP)
BLRAMPR
I-595 WB
@ CONST I-595 WB
SAW CUT
PIER STA 25+97.67
EXPRESS LANES
I-595 EB
@ CONST I-595 EB
END SHLDR BARRIER WALL 919+96.97 10.00' RT
PIER STA 2521+19.56
BEGIN SHLDR BARRIER WALL 2523+70.39 40.89' RT
BL595RTP-1
BEGIN RETAINING WALL MSEW-309 2524+95.03 23.00' LT
BEGIN BARRIER WALL 1526+91.66 16.00' RT
END BARRIER WALL 7527+07.63 70.00' LT
BEGIN BARRIER WALL 7526+32.86 70.00' LT
END APPR SLAB STA 2525+20.02
BEGIN RETAINING WALL MSEW-310 2424+95.02 25.00' RT
SAW CUT
N 75° 14' 51" W
S 75° 14' 51" E
@ SR 84-EB
S 75° 44' 51" E
EXIST L.A. R/W
@ LIGHT RAIL
LIGHT RAIL FDN 22'X22'
CONST SHLDR BARRIER WALL
BEGIN MED BARRIER WALL 928+84.41 22.00' LT
EXIST L.A. R/W
INSTALL CRASH CUSHION
END BRIDGE NO. 000033
BEGIN BRIDGE NO. 000032 STA 31+06.67
BLRAMPR-2
BLRAMPR-9-4
INT. PIER
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Construction of R7 and R9 over Turnpike

- During MOT phase 2 all the traffic will be diverted to North Bound where six lanes plus two hard shoulders are available (see detail below)

Existing Northbound



APPENDIX 2-P.3

DRAINAGE – COMMENTS MATRIX

[See Following Page]

ACSID Technical Proposal Review Comments - Drainage

COMMENT #	DESIGN CONSTRUCTION CRITERIA NUMBER	SECONDARY DESCRIPTION	LEVEL	COMMENT	ACTION TAKEN
1	3.E.4	Basin 1-2: The I-595 Corridor from SW 136th Ave. to Flamingo Rd. (w/ Lago Mar Golf Course)	1	No chambered sedimentation boxes, skimmers, sumps in the inlets, or outlet control devices upstream of the golf courses were called out in the plans or mentioned in the text. This was a requirement of the local drainage districts and the golf course and rock pit owners specified in the RFP.	The sedimentation boxes, skimmers, etc, were considered for our preliminary design. Structures will be identified during design and shown in the final design plans.
2	3.E.4	Basin 4: The I-595 Corridor from Nob Hill Rd. to Pine Island Rd. (w/ Pine Island Ridge & Jacaranda Golf Courses)	1	No chambered sedimentation boxes, skimmers, sumps in the inlets, or outlet control devices upstream of the golf courses were called out in the plans or mentioned in the text. This was a requirement of the local drainage districts and the golf course and rock pit owners specified in the RFP.	The sedimentation boxes, skimmers, etc, were considered for our preliminary design. Structures will be identified during design and shown in the final design plans.
3	3.E.4	Basin 5: The I-595 Corridor from Pine Island Rd. to University Dr. (w/ Arrowhead Golf Course)	1	No chambered sedimentation boxes, skimmers, sumps in the inlets, or outlet control devices upstream of the golf courses were called out in the plans or mentioned in the text. This was a requirement of the local drainage districts and the golf course and rock pit owners specified in the RFP.	The sedimentation boxes, skimmers, etc, were considered for our preliminary design. Structures will be identified during design and shown in the final design plans.
4	3.E.4	Basin 6: The I-595 Corridor from University Drive to Florida's Turnpike (w/ the Forman Rock Pit)	1	No chambered sedimentation boxes, skimmers, sumps in the inlets, or outlet control devices upstream of the Forman Rock Pit were called out in the plans or mentioned in the text. This was a requirement of the local drainage districts and the golf course and rock pit owners specified in the RFP.	The sedimentation boxes, skimmers, etc, were considered for our preliminary design. Structures will be identified during design and shown in the final design plans.
5	3.L.4.a	Basin 1-2: The I-595 Corridor from SW 136th Ave. to Flamingo Rd. (w/ Lago Mar Golf Course)	1	The Proposer is potentially showing less than the required 70% of the stormwater runoff generated within Basin 1-2 during the 25yr-3day design storm event being conveyed into the Lago Mar Golf Course Pond System. The Proposer showed the remainder of the runoff being treated and attenuated via French drain. The total area of Basin 1-2 shown by the Proposer is 55.37 Ac. (the sum of the Systems 1-2, 1-2A, and 1-2B areas shown on drainage map sheets G-5 and G-6). The system shown contributing runoff to Lago Mar is 35.31 Ac. (see drainage map sheet G-5 or G-6), which is only 64% of the 55.37 acres.	Consistent with the Drainage Report, the intent is to have 70% of the runoff volume for Basin 1-2 going to Lago Mar. The final percentage will be verified during the detailed design effort.
6	3.L.4.a	General (All Basins)	1	There are numerous locations throughout the Corridor where the Proposer's design results in HGL clearances less than the FDOT required minimum of 1'. In some cases, the HGL clearances are less than 0' (see the ASAD Storm Tabulations provided in Volume 2, Technical Proposal 2, Book 11 of 11).	During detailed design, FDOT requirements will be satisfied and a minimum HGL clearances of 1' will be maintained at all locations along the corridor.
7	3.L.4.a	General (All Basins)	1	There are some relatively flat spots along the I-595 eastbound and I-595 westbound proposed profiles, and as a result, more frequent inlets or trench drain will be required to avoid having standing water on the roadways. For example, see the I-595 eastbound profile from Sta. 5179 to Sta. 5193 (see profile sheets PR-6 and PR-7).	This will be verified during design and additional inlets will be added, if necessary.
8	3.L.4.a	General (All Basins)	1	Regarding the new bridges and the bridges the Proposer is planning on replacing, such as the University Drive Ramp Bridge and the various bridges at the I-595/Fla. Turnpike Interchange, the Proposer is not showing any proposed drainage facilities to collect, convey, and discharge the runoff generated on the bridges.	Runoff on proposed bridges will be collected and conveyed via bridge deck drains at proposed pier locations. These drains were accounted for in the submitted quantities however they were not drawn in the plans. All bridge deck drains, as well as any pipes or outfall structures necessary to convey and discharge bridge runoff, will be shown in the detailed design plans.

APPENDIX 2-P.4

MANAGEMENT AND ADMINISTRATION – COMMENTS MATRIX

[See Following Page]

ACSID Technical Proposal Review Comments - Management and Administration

COMMENT #	RFP CRITERIA SECTION #	RFP CRITERIA	COMPONENT	LEVEL	COMMENT	ACTION TAKEN
MA1	V2D2 Sect. 3.F.3	The Department has identified a number of regulatory permits that will likely be required for the Project. In the interest of expediency, the Department has commenced the process for securing the following permits until execution of the Agreement: • BCEPD Surface Water Management License • BCEPD Environmental General Resource License • CSWCD Surface Water Management Master Plan Permit • OPWCD Surface Water Management Master Plan Permit • Joint FDEP/SFWMD/USACOE Individual Environmental Resource Permit (including USACOE Dredge/Fill Permit) • SFWMD Standard Right of Way Occupancy Permit • THISCD Surface Water Management Master Plan Permit • USCG Bridge Permit In the event that the Department has secured any of these permits, the Concessionaire will be responsible for complying with all permit conditions. The Concessionaire will also be responsible for modifying these permits, if such modifications are acceptable by the applicable regulatory agency, to	ECP	1	SFWMD ROW Occupancy Permit modifications will be required by ACSID if design changes are proposed, and are approved by FDOT. Several aspects of the corridor master plan provided by the ACSID team are inconsistent with the environmental and permitting requirements made between regulatory agencies and FDOT to date, most notably several pertaining to stormwater management with FDOT, SFWMD, and THISCD; boat vessel navigation through the tidal section of the North New River Canal with USCG and the local boating community; and encroachments within the SFWMD North New River Canal right-of-way and OPWCD right-of-way.	To be evaluated in ACSID's further development of the Corridor Master Plan, which plan shall comply with the requirements of the Contract Documents.
MA2	V2D2 Sect. 3.F.3	The Concessionaire shall comply with the following Department commitments to the USCG: The minimum Proposed Navigational Limits as shown in the USCG Bridge Permit Sketches.	ECP	1	This is not addressed in the ECP. RS&H, the Corridor Design Consultant, submitted the Bridge Permit Sketches for the indicative design, including the minimum proposed navigational limits. ACSID is proposing new bridges but has not provided revised bridge permit sketches nor minimum proposed navigational limits.	To be evaluated in ACSID's further development of the Corridor Master Plan, which plan shall comply with the requirements of the Contract Documents.
MA3	V2D2 Sect. 3.F.3	The Concessionaire shall comply with the following Department commitments to the USCG: East of the Sewell Lock, the North New River Canal shall be dredged and stabilized as defined in the SFWMD Right-of-Way Occupancy Permit Sketches.	ECP	1	The ECP does not state the NNRC will be dredged and stabilized as defined in the SFWMD ROW Occupancy permit sketches. In proposal Section 1.4.2.1.2 "State Permits" the ECP states dredge and fill activities within the NNRC will be performed as required by the SFWMD Individual Environmental Resource Permit and Submerged Lands Permit. The ACSID design east of Sewell Lock significantly reduces the need for bulkheading or other impacts to the NNRC, but does not show the extent of dredging and stabilization shown in the SFWMD ROW Occupancy	To be evaluated in ACSID's further development of the Corridor Master Plan, which plan shall comply with the requirements of the Contract Documents.
MA4	V2D2 Sect. 3.K	Regarding the Broward County Greenway: The pedestrian bridge crossing the North New River Canal east of the Sewell Lock is required to have a 20-foot vertical clearance and a 30-foot horizontal clearance (15 feet each side of the centerline of the waterway for navigation), as per USCG permit requirements. The pedestrian bridge east of the Sewell Lock is also required to have navigational lights as per USCG permit requirements.	ECP	1	ACSID proposes an additional pedestrian bridge crossing between Florida's Turnpike and SR-7, not identified in the indicative design. East of Sewell Lock there has been a modification of the greenway alignment. The proposer has moved the NNRC pedestrian bridge to just east of Sewell Lock impacting the Sewell Lock historical site limits and the community of Plantation Harbor. This will require a design change re-evaluation and additional permitting and community involvement/coordination. The proposer has included an additional NNRC crossing between the Turnpike and SR 7 just east of SW 25th Street. By doing this, the proposer minimizes the impact to SE 25th Street and makes use of the existing greenway in this area, but produces an additional obstacle for a disabled person to overcome. Both pedestrian bridges over NNRC east of Sewell Lock provide a column within the canal water surface limits. This violates the navigable canal width agreement made with the USCG. The ECP does not identify and discuss the mitigation of environmental risks associated with the new Greenway design alignment which brings forth; additional Section 4(f) issues associated with Greenway construction within Sewell Lock Park right-of-way, additional work along north canal bank which will bring forth new demands by USCG and local boaters to provide additional bulkheading and dredging; and removal of existing spoil mounds (permitted through SFWMD) and serving as existing sound and visual buffers for residents in Plantation Harbour. The ECP does not identify and discuss the mitigation of environmental risks associated with the omission of significant canal improvements in the tidal section of the NNRC which will surely cause problems in obtaining permits. The ECP does not identify and discuss the mitigation of environmental risks associated with the proposed treatment of the southern canal bank along the NNRC. The Corridor Master Plan indicates 3:1 slope directly from edge of water to barrier or back of curb oftentimes on fill sections and adjacent to proposed sound barrier walls	To be evaluated in ACSID's further development of the Corridor Master Plan, which plan shall comply with the requirements of the Contract Documents.
MA5	ITP App. B Sect. 1.3	The Technical Proposal shall include a logic-based Critical Path Method (CPM) project schedule in Primavera format for the Work to be performed from the Effective Date up to and including Substantial Completion ("Project Schedule").	SCPSP	1	Greenway bridges on critical path begin before ACOE permit is issued. Provide basis for starting canal bridges before ACOE permit or adjust logic.	Schedule will be revised and submitted prior to NTP 1.
MA6	V2D2 Sect. 3.L.6.d.3	The Concessionaire shall not close either flyover ramp from the beginning of the Thanksgiving Day holiday through the end of the New Year's Day holiday.	SCPSP	1	Ramp N at University Drive has work requiring lane closures during period from Thanksgiving to New Years. Need to bring into compliance with RFP.	Schedule will be revised accordingly.

APPENDIX 2-P.5

OPERATIONS AND MAINTENANCE – COMMENTS MATRIX

[See Following Page]



ACSID Technical Proposal Review Comments - Operations and Maintenance

COMMENT #	RFP CRITERIA SECTION #	RFP CRITERIA	COMPONENT	LEVEL	COMMENT	ACTION TAKEN
OM1	3.A.1	The Concessionaire shall deploy three new Standalone Environmentally Controlled Concrete Shelter Buildings at the following locations: I-595/I-95 Interchange area, I-595 /Turnpike SR 91 interchange area and I-595/I-75/Sawgrass Expressway interchange area.	ITS	1	The ITS roll plots showed only one master communication hub will be provided while the RFP has specifically required three master communication hubs along I-595 corridor. A single hub will not provide the necessary network backbone redundancy as required in the RFP. In addition, ACS has placed the hub on the FTE's right of way, this will create accessibility and maintenance problems.	ACSID will comply with the RFP and provide the hubs as required.

APPENDIX 2-Q

SCHEDULE OF DESIGN ADJUSTMENTS

SECTION 1. General

This Appendix 2-Q contains a list of potential design adjustments to the design proposed by Concessionaire in the Proposal. FDOT agrees that with respect to these potential design adjustments only, that if Concessionaire makes one or more of these adjustments the subject of a Change Proposal, FDOT will accept that Change Proposal, provided that the final design is fully compliant with the requirements of the Contract Documents. For those design adjustments described in this Appendix 2-Q, Concessionaire shall retain 100% of any Design and Construction Cost savings as provided in Section 11.2.5 of the Concession Agreement.

SECTION 2. List of Design Adjustments

(a) Modifications to the profile of Ramp R-7, which results in a shortening of the express lane direct connect ramp bridge to the Turnpike.
(b) Elimination of the drainage outfall culvert to the Jacaranda golf course.
(c) Elimination of the two proposed greenway bridges over the NNRC requiring the realignment of Ramp T-1 under the Turnpike.
(d) Elimination of one of the two culvert connections at Pine Island golf course.
(e) Modification to Ramp L-1 bridge over Pine Island allowing for the widening vs. replacement of I-595 WB over Pine Island Road.

Appendix 3

APPENDIX 3

INTERIM MILESTONE WORKS AND

FINAL ACCEPTANCE PAYMENT ADJUSTMENT

App. 3-A Interim Milestone Works and Deadlines

App. 3-B Final Acceptance Payment Adjustment

3-A

APPENDIX 3-A

INTERIM MILESTONE WORKS AND DEADLINES

Interim Milestone Works	Interim Milestone Deadline
Sound Barriers Group A – includes ground mounted sound barriers generally parallel to Florida's Turnpike and north of I-595 and ground mounted sound barriers north of westbound SR-84 and completion of and acceptance of the Broward County Greenway ("Interim Milestone Works 1")	940 Days from Effective Date
Ramp T-16 – opening of all lanes of Ramp T-16 for continuous operational service for traffic to northbound Florida's Turnpike ("Interim Milestone Works 2")	940 Days from Effective Date
WB Braid – opening for permanent operations, including full capacity, of the westbound braid, including Ramps L-1 and L-2 and westbound SR-84 from Pine Island Road to Nob Hill Road ("Interim Milestone Works 3")	940 Days from Effective Date
EB By-pass/Braid – opening for permanent operations, including full capacity, of the eastbound braid/by-pass, including Ramps K-1, K-2, M and O ("Interim Milestone Works 4")	940 Days from Effective Date
Sound Barriers Group B – includes ground mounted sound barriers generally parallel to Florida's Turnpike and south of I-595 and ground mounted sound barriers south of eastbound SR-84 ("Interim Milestone Works 5")	1395 Days from Effective Date
SR-84 EB – opening for permanent operations, including full capacity, of continuous SR-84 eastbound, from Sewell Lock to the eastern limits of the Project ("Interim Milestone Works 6")	1395 Days from Effective Date
SR-84 WB– opening for permanent operations, including full capacity, of continuous SR-84 westbound, including complete connections to Ramp T-16, from Sewell Lock to the eastern limits of the Project ("Interim Milestone Works 7")	1395 Days from Effective Date
Express Lanes (I-595) – opening for permanent operations, including full capacity, of the Express Lanes, including revenue collection, with or without access to Florida's Turnpike ("Interim Milestone Works 8")	1850 Days from Effective Date
Substantial Completion / Final Acceptance	**Deadline**
Substantial Completion	1850 Days from Effective Date
Final Acceptance	1940 Days from Effective Date

APPENDIX 3-B

FINAL ACCEPTANCE PAYMENT ADJUSTMENT

SECTION 1. GENERAL

If (a) any of the Interim Milestone Works is not completed by the applicable Interim Milestone Deadline or (b) Construction Violations or Construction Availability Violations occur prior to the Substantial Completion Date, the First Final Acceptance Payment described in Section 4.10.4.1.1 of the Agreement shall be decreased by: (i) the Final Acceptance Late Milestone Payment Adjustment as calculated in accordance with Section 2 of this Appendix 3-B; and (ii) the Final Acceptance Construction Payment Adjustment as calculated in accordance with Section 3 of this Appendix 3-B.

SECTION 2. LATE MILESTONE PAYMENT ADJUSTMENT

The Final Acceptance Late Milestone Payment Adjustment shall be calculated as follows:

$$FALMPA = \text{Min}\left(M \ , \ \sum_{\substack{\text{Interim Milestone Works} \\ i=1}}^{n} d_i \times r_i\right)$$

Where:

There are a number "n" of Interim Milestone Works

FALMPA = The Final Acceptance Late Milestone Payment Adjustment

M = Interim Milestones Works Bonus associated with Interim Milestone Works "i"

d_i = number of days in achieving the Interim Milestone Completion Date associated with the Interim Milestone Works "i" beyond the Interim Milestone Deadline associated with the Interim Milestone Works "i"

r_i = the daily rate (expressed in inflated dollars) in relation to the Interim Milestone Works "i", as provided below:

Interim Milestone Works "i"	Daily Rate "r_i"	Interim Milestone Works Bonus
Interim Milestone Works 1	US$5,000	US$500,000
Interim Milestone Works 2	US$100,000	US$10,000,000
Interim Milestone Works 3	US$40,000	US$4,000,000
Interim Milestone Works 4	US$40,000	US$4,000,000
Interim Milestone Works 5	US$15,000	US$1,500,000
Interim Milestone Works 6	US$100,000	US$10,000,000
Interim Milestone Works 7	US$100,000	US$10,000,000
Interim Milestone Works 8	US$100,000	US$10,000,000

SECTION 3 CONSTRUCTION PAYMENT ADJUSTMENT

3.1 Construction Payment Adjustment

The Final Acceptance Construction Payment Adjustment shall be calculated as follows:

$$FACPA = \sum_{\text{CV } i=1}^{n} CVA_i + \sum_{\text{CAF } i=1}^{n} CAFA_i + \sum_{\text{CUC } i=1}^{n} CCA_i$$

Where:

FACPA = Final Acceptance Construction Payment Adjustment; and

CVA_i = Construction Violations Adjustment for each applicable Construction Violation "i" occurring prior to the Substantial Completion Date

$CAFA_i$ = Construction Availability Fault Adjustment for each applicable Construction Availability Fault "i" occurring prior to the Substantial Completion Date

CCA_i = Construction Closure Adjustment for each applicable Construction Closure "i" occurring prior to the Substantial Completion Date

3.2 Construction Violation Adjustment and Construction Violation Classifications

Construction Violation Classifications are set forth in Section 4, Table 4.1A of Division II for each Construction Violation. Each Construction Violation Classification has an associated Construction Violation Adjustment amount as shown in Table A of this Appendix 3-B.

Each Construction Violation has the cure period and Interval of Recurrence as described in Section 4, Table 4.1A of Division II. After the cure period, any Construction Violation not cured within the applicable Interval of Recurrence shall be deemed to occur anew and assessed another Construction Violation Adjustment, and such new occurrence shall have no cure period.

Table A

Construction Violation Adjustments

Construction Violation Classifications	Construction Violation Adjustment
A	US$2,500
B	US$9,000
C	US$18,000
D	US$45,000
E	US$180,000

3.3 Construction Availability Fault Adjustments and Construction Availability Fault Classifications

Construction Availability Fault Classifications are set forth in Section 4, Table 4.1B of Division II for each Construction Availability Fault. Each Construction Availability Fault Classification has an associated Construction Availability Fault Adjustment amount as shown in Table B of this Appendix 3-B for each Hour of duration of a Construction Availability Fault.

For the purposes of determining the duration of a Construction Availability Fault, a Construction Availability Fault will be deemed to have commenced from the moment such Construction Availability Fault actually began (not from the moment it was discovered or reported), and to persist during each Hour thereafter until such Construction Availability Fault is cured, provided that a Construction Availability Fault occurring at any time during an Hour shall be deemed to have occurred at the beginning of the Hour, and a Construction Availability Fault that ends at any time during an Hour shall be deemed to have ended at the end of that Hour.

For any Construction Availability Fault, if there is a cure period associated with such Construction Availability Fault and such Construction Availability Fault is not remedied within that cure period, then for purposes of determining whether a Construction Availability Fault has occurred, there shall be deemed to be no cure period.

Table B

Construction Availability Fault Adjustments

Construction Availability Fault Classifications	Construction Availability Fault Adjustment during Construction High Priority Hours (5:00AM – 9:00PM)	Construction Availability Fault Adjustment during Construction Non-Priority Hours (9:00PM – 5:00AM)
A	US$2,000	US$1,000
B	US$4,000	US$2,000
C	US$8,000	US$4,000
D	US$12,000	US$6,000
E	US$14,000	US$7,000
F	US$16,000	US$8,000
G	US$20,000	US$10,000

3.4 Construction Closure Adjustment

Each Hour of a Construction Closure has an associated Construction Closure Adjustment amount as shown in Table C of this Appendix 3-B. Notwithstanding the foregoing, there shall be no Construction Closure Adjustment for a Permitted Construction Closure.

For the purposes of determining the duration of a Construction Closure, a Construction Closure will be deemed to have commenced from the moment such Construction Closure actually began (not from the moment it was discovered or reported), and to persist during each Hour thereafter until such Construction Closure is cured, provided that a Construction Closure occurring at any time during an Hour shall be deemed to have occurred at the beginning of the Hour, and a Construction Closure that ends at any time during an Hour shall be deemed to have ended at the end of that Hour.

Table C

Construction Closure Adjustments

Construction Closures	Construction Closure Adjustment Construction Period High Priority Hours*	Construction Closure Adjustment Construction Period Low-Priority Hours**
One lane of I-595 in one direction	US$50,000	US$10,000
Two lanes of I-595 in one direction	US$200,000	US$100,000
More than two lanes of I-595	US$400,000	US$200,000
Auxiliary Lane of I-595 when associated ramp movement is open to traffic	US$50,000	US$10,000
One lane of the I-595 Express Lanes	US$50,000	N/A
Two lanes of the I-595 Express Lanes	US$200,000	N/A
More than two lanes of the I-595 Express Lanes	US$400,000	N/A
One lane of the Turnpike in one direction	US$50,000	US$10,000
Two lanes of the Turnpike in one direction	US$200,000	US$100,000
More than two lanes of the Turnpike in one direction	US$400,000	US$200,000
Auxiliary lane of the Turnpike when associated ramp movement is open to traffic	US$50,000	US$10,000
Unpermitted closure of University Drive flyover	US$1,000 for the first 7 consecutive calendar days beyond the requirements of Section 3 of Division II	US$200 for the first 7 consecutive calendar days beyond the requirements of Section 3 of Division II US$10,000 thereafter

	US$50,000 thereafter	
One lane of SR-84 in one direction	US$20,000	US$4,000
More than one lane of SR-84 in one direction	US$100,000	US$50,000
One or more lanes of a crossroad	US$20,000	US$4,000
Two or more lanes of a crossroad	US$100,000	US$50,000
Unpermitted ramp closures or u-turn ramp movements at crossroads	US$50,000	US$25,000

Notes: Unless specified otherwise, the term lanes includes both General Purpose Lanes and Auxiliary Lanes.

* High Priority Hours for purposes of this table is defined as Monday thru Thursday 5:00am to 9:00pm, Friday 5:00am to Sunday 9:00pm and Holidays and Special Event Days.

** Low Priority Hours for purposes of this table is defined as all non-High Priority Hours.

3.5 Construction Period Planned Maintenance Scheduling

3.5.1 General

As described in and subject to the requirements set forth in this Section 3.5, Concessionaire will be able to designate certain hours during which certain Construction Closures that result from Planned Maintenance during the Construction Period will be deemed to be Permitted Construction Closures.

3.5.2 Construction Period Planned Maintenance Schedules

(a) During the Construction Period, Concessionaire may schedule Planned Maintenance for specific lanes or portions of lanes on a Segment for any time between 10:00 PM and 5:00 AM on the nights of Sunday, Monday, Tuesday, Wednesday and Thursday into the mornings of Monday, Tuesday, Wednesday, Thursday and Friday each week, provided that:

(i) Concessionaire shall make reasonable efforts to close only one lane on any given portion of roadway when performing Planned Maintenance;

(ii) O&M Work, including Planned Maintenance, that results in more than 2/3 of the lanes of any portion of an I-595 Corridor Segment or Express Lanes Segment (if the Express Lanes have been opened to traffic) will not be a Permitted Construction Closure, except under extraordinary circumstances with FDOT's written prior approval; and

(iii) To the extent that Planned Maintenance involves Construction Closures, Concessionaire shall implement and execute such Construction Closures in accordance with the lane closure and maintenance of traffic requirements

and procedures as set forth in Section 3 of Division II and with the Planned Maintenance and O&M Work requirements for the Construction Period as set forth Section 4 of Division II.

(b) All Planned Maintenance for each lane of each Segment must appear on an approved Planned Maintenance Schedule.

(c) Construction Closures that result from properly scheduled and executed Construction Period Planned Maintenance in accordance with Section 3.5.2(a) above shall be deemed Permitted Construction Closures.

(d) Excessive Closures will result in the assessment of Noncompliance Points for each instance as enumerated in Appendix 5 of the Agreement.

3.5.3 Construction Period Compliance Work

If Concessionaire is required to perform Compliance Work, Concessionaire shall exercise commercially reasonable efforts to perform such work concurrently with previously scheduled Planned Maintenance. If Compliance Work cannot be performed concurrently, then Concessionaire may schedule additional Planned Maintenance for Compliance Work in consultation with FDOT and subject to the requirements for Construction Period Planned Maintenance Scheduling set forth in Section 3.5.2(a) of this Appendix 3-B.

3.5.4 Construction Period Planned Maintenance Schedules

Concessionaire shall, as required in Section 4 of Division II, prepare and submit annual and monthly Planned Maintenance Schedules to FDOT for review and approval, which approval shall not be unreasonably withheld. Concessionaire shall include all Routine Maintenance, Renewal Work and Compliance Work, if any, on the annual and monthly Planned Maintenance Schedules it submits to FDOT. In the event that Compliance Work is required, the Concessionaire shall submit a revised annual and monthly Planned Maintenance Schedule as soon as commercially practicable to FDOT for review and approval, which approval shall not be unreasonably withheld or delayed.

APPENDIX 4

RIGHT OF WAY PLANS

[See Following Page]

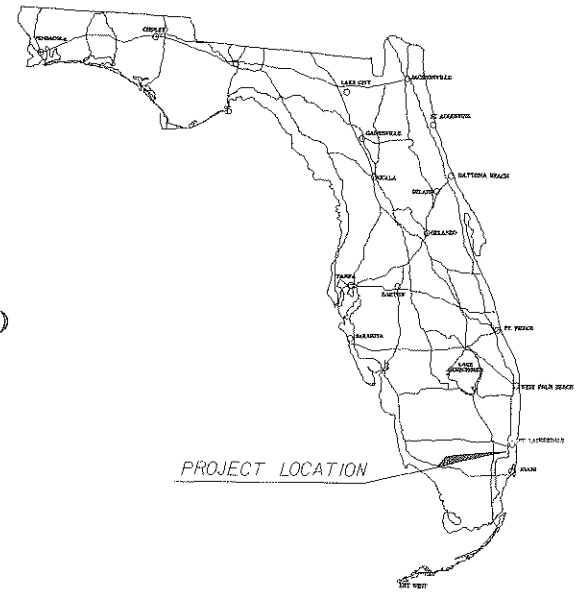
SUBJECT TO CHANGE

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

MAPS OF THE STATE HIGHWAY RIGHT-OF-WAY MAP

STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)
FINANCIAL PROJECT NO. 419336-1-32-01

TRAVERSING THRU
SECTIONS 23, 24, 25 & 26,
TOWNSHIP 50 SOUTH, RANGE 41 EAST
THE TOWN OF DAVIE,
BROWARD COUNTY, FLORIDA



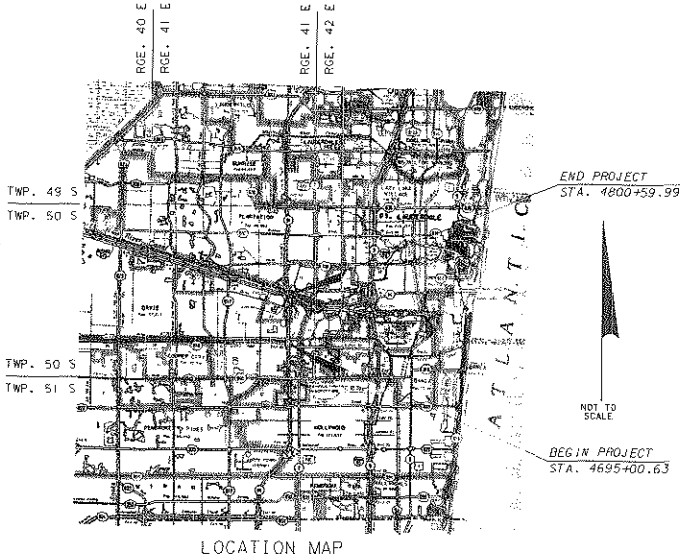
LEGEND

AC.	= ACRE	ORB	= OFFICIAL RECORD BOOK
℄	= BASELINE	PG.	= PAGE
BDIC	= BRASS DISC IN CONCRETE	PK	= PARKER KALON
BCED	= BROWARD COUNTY ENGINEERING DIVISION	(P)	= PLAT
		PB	= PLAT BOOK
CL	= CENTERLINE	PC	= POINT OF CURVATURE
CERT.	= CERTIFICATION	PI	= POINT OF INTERSECTION
CONC.	= CONCRETE	PT	= POINT OF TANGENCY
D	= DEGREE OF CURVE	POT	= POINT ON TANGENT
Δ	= DELTA (CENTRAL ANGLE)	PRELIM.	= PRELIMINARY
EXIST.	= EXISTING	PSM	= PROFESSIONAL SURVEYOR & MAPPER
FEI	= FEDERAL EMPLOYER IDENTIFICATION	PNC	= PROJECT NETWORK CONTROL
		R	= RADIUS OF CURVE
FPID	= FINANCIAL PROJECT IDENTIFICATION NUMBER	RGE.	= RANGE
		RES.	= RESIDENCE
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION	RT.	= RIGHT
		R/W	= RIGHT OF WAY
FND.	= FOUND	SEC.	= SECTION
GPS	= GLOBAL POSITIONING SYSTEM	SFWMD	= SOUTH FLORIDA WATER MANAGEMENT DISTRICT
IP	= IRON PIPE		
IRC	= IRON ROD AND CAP	SF	= SQUARE FEET
LT.	= LEFT	SR	= STATE ROAD
L	= LENGTH OF CURVE	STA.	= STATION NUMBER
LIC.	= LICENSE	T	= TANGENT OF CURVE
LB	= LICENSED BUSINESS	TEMP.	= TEMPORARY
L/A	= LIMITED ACCESS	TWP.	= TOWNSHIP
NGS	= NATIONAL GEODETIC SURVEY	W.P.I.	= WORK PROJECT NUMBER

4735

BASELINE SURVEY
EXIST. L/A R/W LINE
EXISTING EASEMENT
EXIST. R/W LINE
FENCE LINE
LIMITED ACCESS LINE
LIMITS OF CONSTRUCTION
PERPETUAL EASEMENT
PROPERTY LINE (℄)
RIGHT OF WAY LINE
SECTION LINE
1/4 SECTION LINE
TEMP. EASEMENT
LICENSE AGREEMENT
VACATED/ORIGINAL LOT LINE
SECTION CORNER FOUND
SECTION CORNER NOT FOUND
1/4 SECTION CORNER FOUND
1/4 SECTION CORNER NOT FOUND

⊙ IRON ROD AND FDOT CAP
● PK NAIL & FDOT WASHER
⊡ FDOT BRASS DISC STAMPED
(4) BLOCK



LOCATION MAP

GENERAL NOTES

1. BEARINGS PRESENTED ON THIS SURVEY ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NAD 1983, ADJUSTMENT OF 1990 AND THE TANGENT STRETCH OF STATE ROAD 91'S SURVEY BASELINE THROUGH THE WEST 1/2 OF SECTION 25, TOWNSHIP 50 SOUTH, RANGE 41 EAST, TAKEN TO BEAR N 02° 15' 01" W.
2. PROPERTY BOUNDARIES DETERMINED FROM FIELD SURVEY, RECORDED PLATS AND RECORD TITLE.
3. UNDERGROUND FOUNDATION ENCROACHMENTS NOT LOCATED.
4. ONLY FIXED IMPROVEMENTS PERTINENT TO THE PARCELS TO BE ACQUIRED ARE SHOWN. FIXED INTERIOR IMPROVEMENTS NOT LOCATED.
5. COORDINATES AND DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
6. ALL DIMENSIONS ARE CALCULATED UNLESS OTHERWISE NOTED.
7. ALL SECTIONAL DATA SHOWN HEREON ARE BASED UPON "STONER/KEITH RESURVEY NO. 111", AS RECORDED IN MISCELLANEOUS PLAT BOOK 5, PAGE 9, IN THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA AS TRANSFORMED TO NORTH AMERICAN DATUM OF 1983 WITH THE 1990 ADJUSTMENT USING THE "NADCON" PROGRAM FURNISHED BY AND AVAILABLE FROM THE NATIONAL GEODETIC SURVEY (NGS) AS PROVIDED BY BROWARD COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION AND VERIFIED BY FIELD OBSERVATION.
8. ALL PNC POINTS ARE BASED ON PROJECT NETWORK CONTROL MAP 419336 PREPARED FOR STATE ROAD 91 FLORIDA'S TURNPIKE WIDENING IMPROVEMENTS.
9. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.
10. HORIZONTAL VALUES PRESENTED ON THIS SURVEY ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NAD 1983, ADJUSTMENT OF 1990.
11. VERTICAL VALUES FOR PRIMARY CONTROL AND SECONDARY CONTROL POINTS WERE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) BY DIFFERENTIAL LEVELING TECHNIQUES MEETING THIRD ORDER, CLASS I SPECIFICATIONS.

INDEX	
SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	KEY MAP
3-8	STANDARD DETAIL SHEET
9	NETWORK CONTROL SHEET
10	TABLE OF OWNERSHIP SHEET

REFERENCES
FDOT R/W MAPS
SECTION 86095-2402

TURNPIKE ENTERPRISE
CONTRACT 1.1 SHEETS 4 - 7
CONTRACT 1.2 SHEETS 8 - 16
FPID 406094-1-32-01 R/W MAP

Wantman Group, Inc.
Engineering ❖ Surveying ❖ Mapping
2035 VISTA PARKWAY, SUITE 100
WEST PALM BEACH, FL 33411
561.687.2220 phone
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CERT No. 6091 - LB No. 7055

COVER SHEET
THIS MAP IS NOT A SURVEY

RIGHT-OF-WAY MAP | FLORIDA DEPARTMENT OF TRANSPORTATION TURNPIKE ENTERPRISE | APPROVED BY: TURNPIKE ENTERPRISE CHIEF ENGINEER

REVISION	BY	DATE	REVISION	BY	DATE

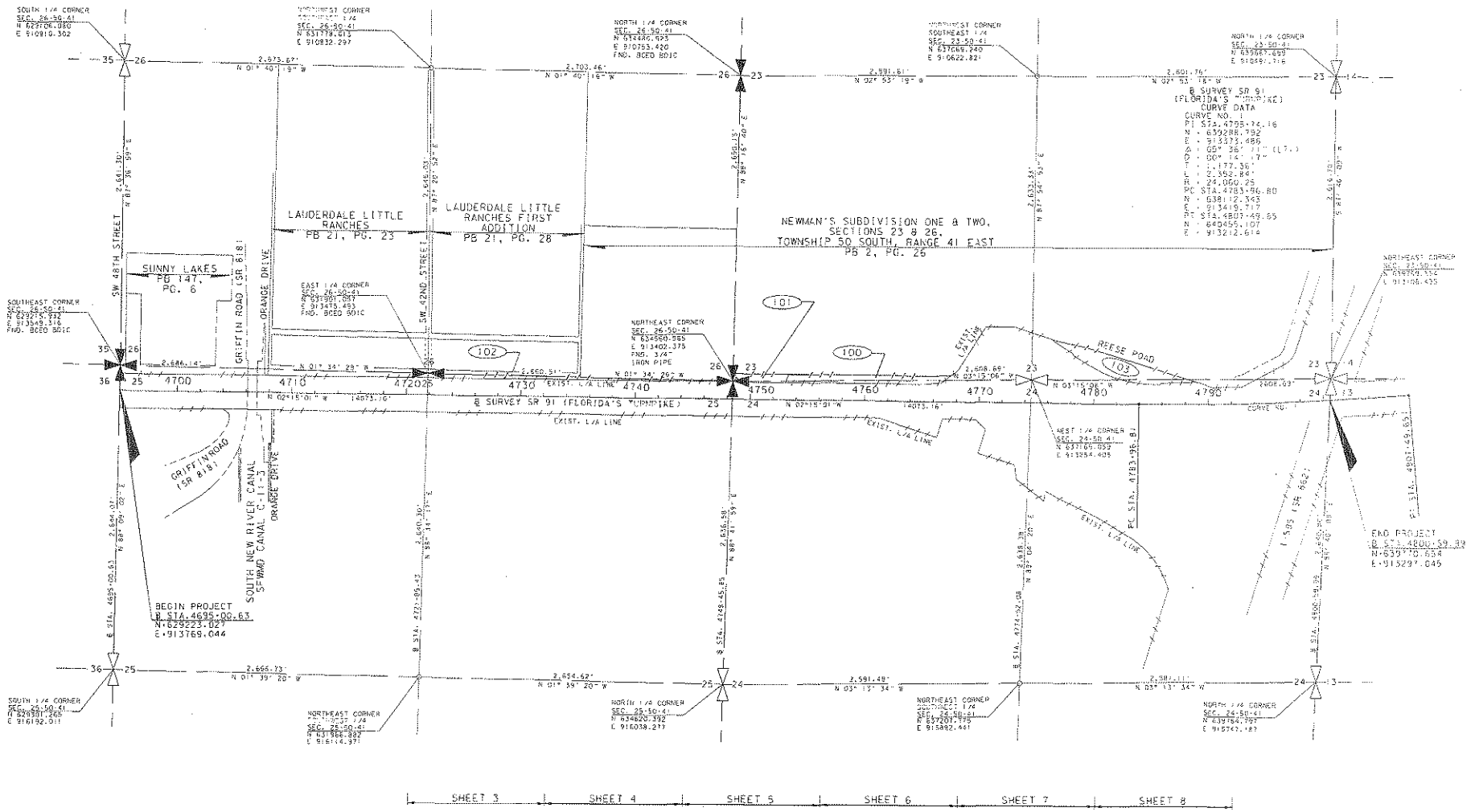
	BY	DATE
PRELIM	C. MACKENZIE	08/24/2018
FINAL	K. BANKS	08/24/2018
CHECKED	M. SHATTO	08/24/2018

F.A.P. NO. N/A | SECTION - N/A

STATE ROAD NO. 91 (FLORIDA'S TURNPIKE) BROWARD COUNTY

MAPS PREPARED BY: WANTMAN GROUP, INC.	STATE ROAD NO.'S: SR-1 406094-1 PG.: 6-79; SR-91 419336-2 PG.: 51-62
W.P.I. No. N/A	SCALE: N/A
FPID NO. 419336-1	SHEET 1 OF 10

SECTIONS 23, 24, 25 AND 26
TOWNSHIP 50 SOUTH, RANGE 41 EAST
TOWN OF DAVIE, BROWARD COUNTY



KEY SHEET
THIS MAP IS NOT A SURVEY

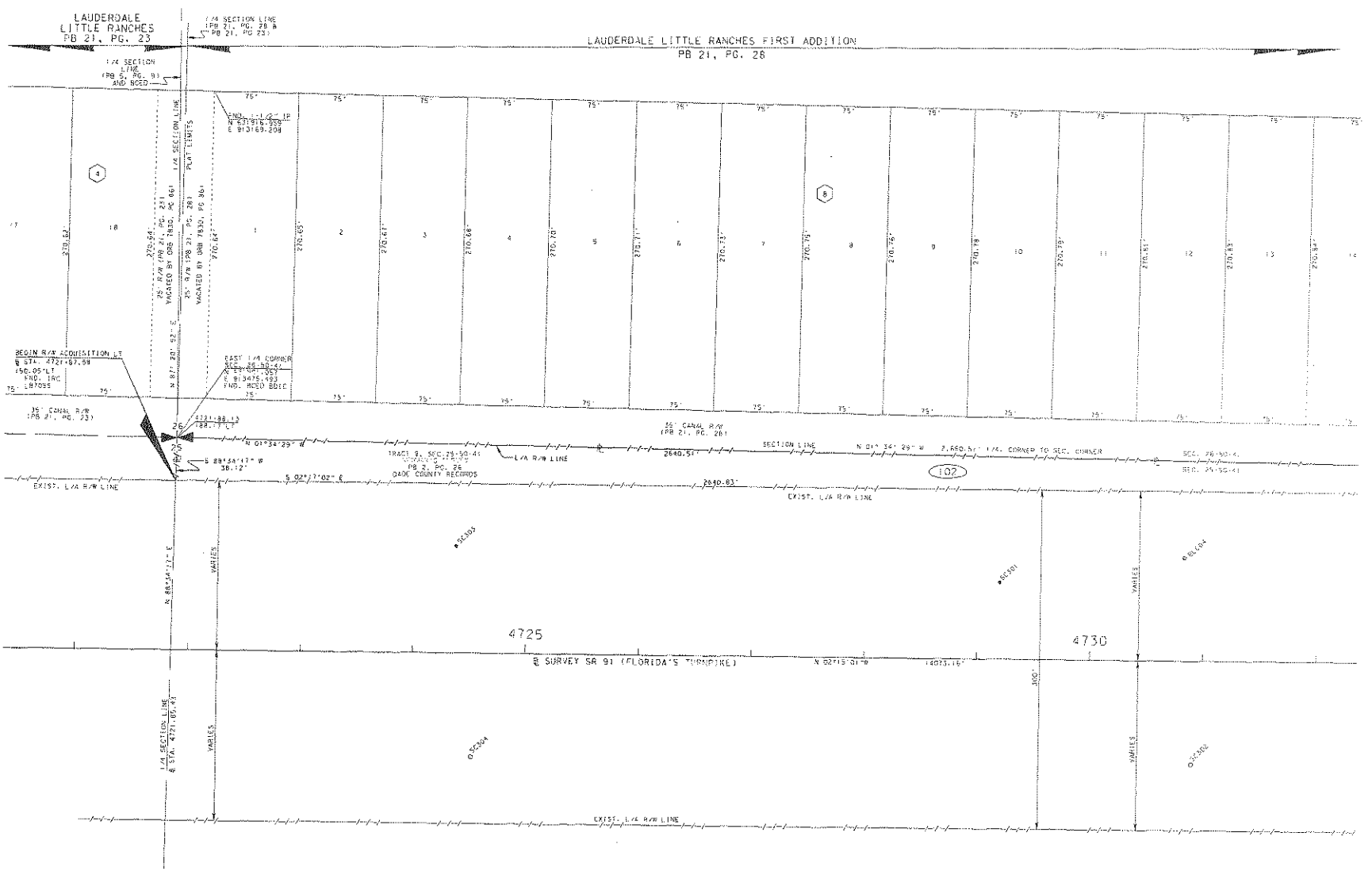
SEE SHEET 1 FOR GENERAL NOTES, LEGEND, REFERENCES, ETC.

RIGHT OF WAY MAP	FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA'S TURNPIKE ENTERPRISE	F.A.P. NO. N/A	SECTION - N/A
		STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)	FPID NO. 419336-1

REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY	DATE

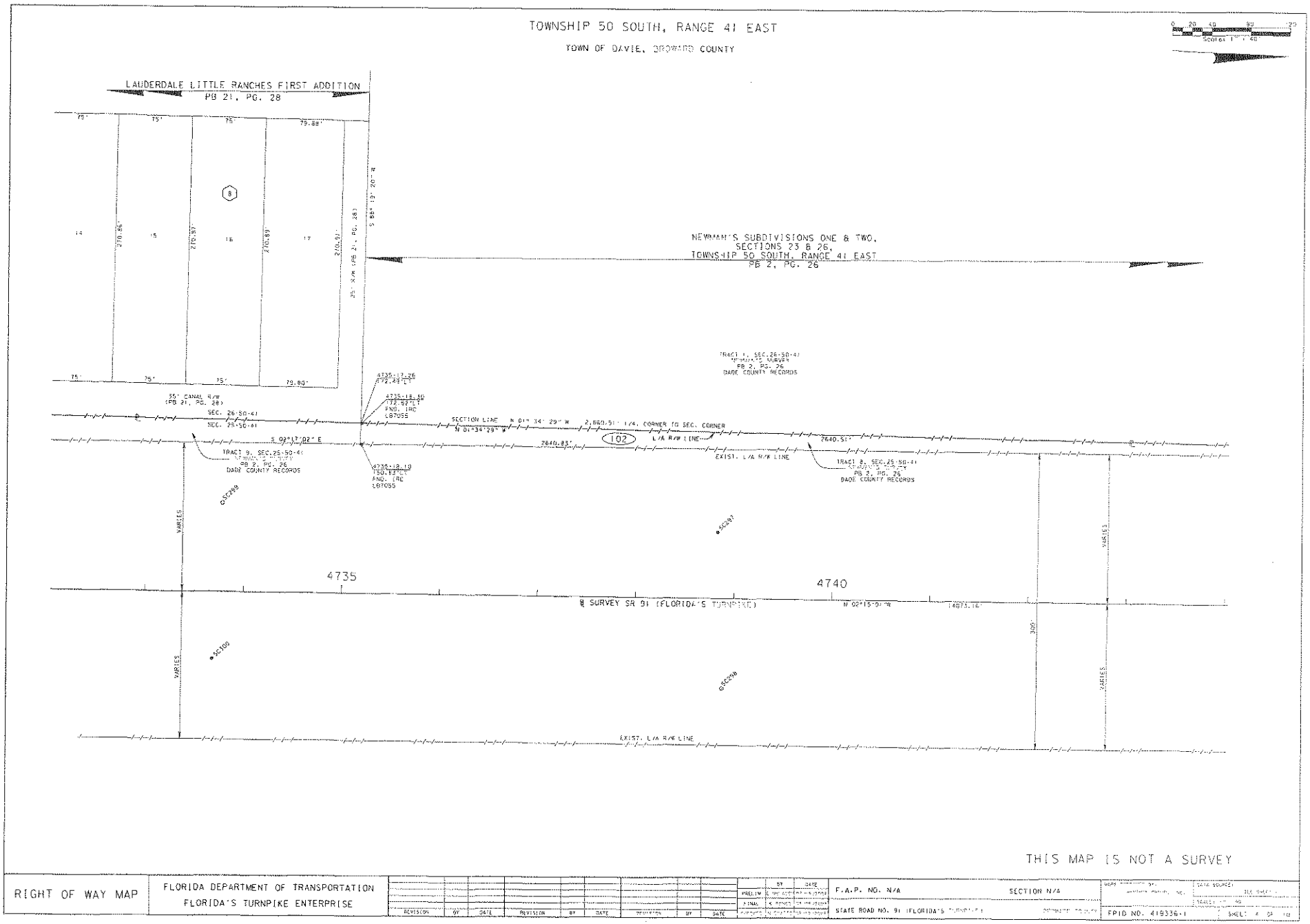
TOWNSHIP 50 SOUTH, RANGE 41 EAST

TOWN OF DAVIE, BROWARD COUNTY



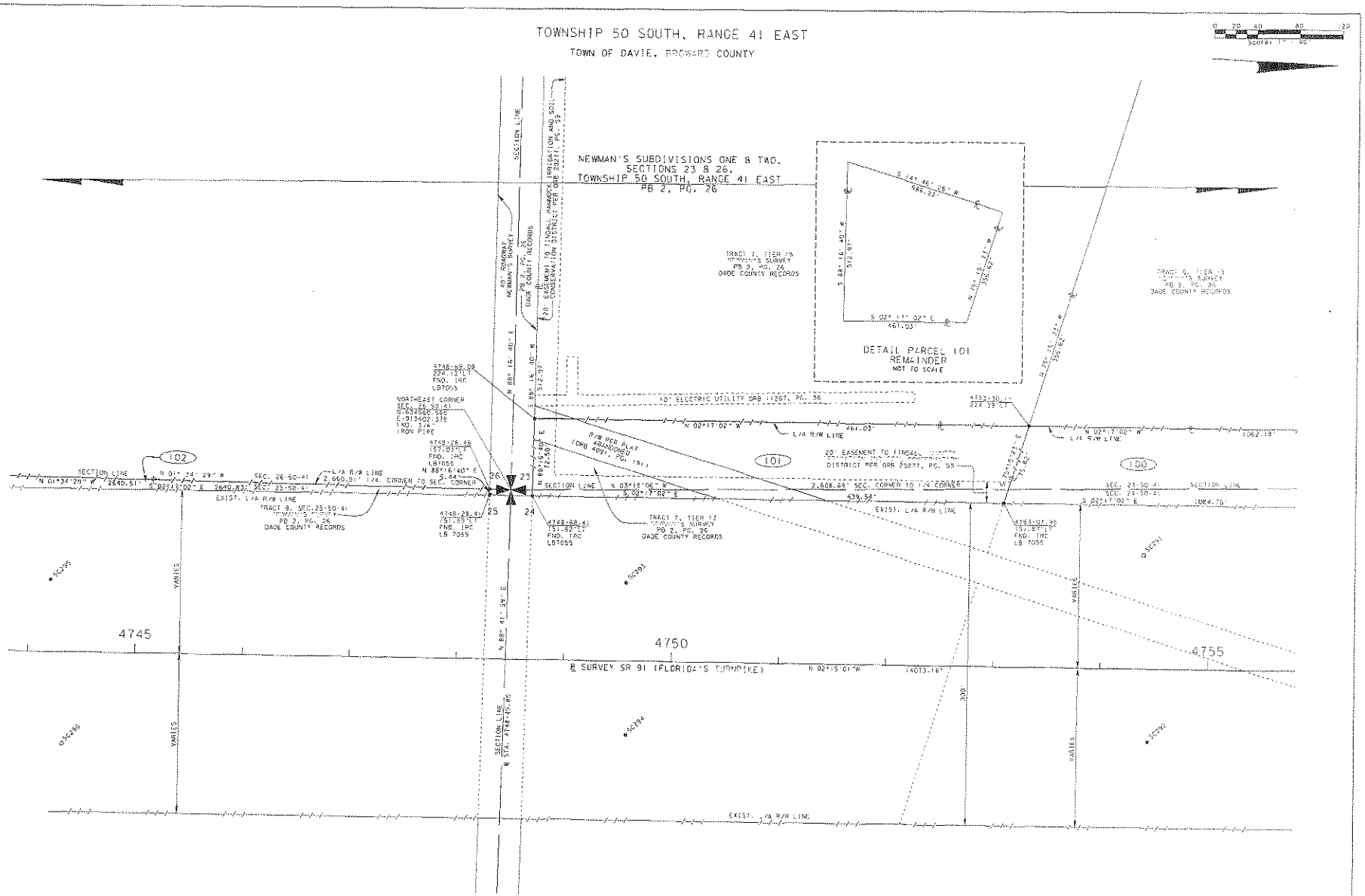
THIS MAP IS NOT A SURVEY

| | | |



THIS MAP IS NOT A SURVEY

RIGHT OF WAY MAP	FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA'S TURNPIKE ENTERPRISE	F.A.P. NO. N/A	SECTION N/A
		STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)	FPID NO. 419336-1



RIGHT OF WAY MAP

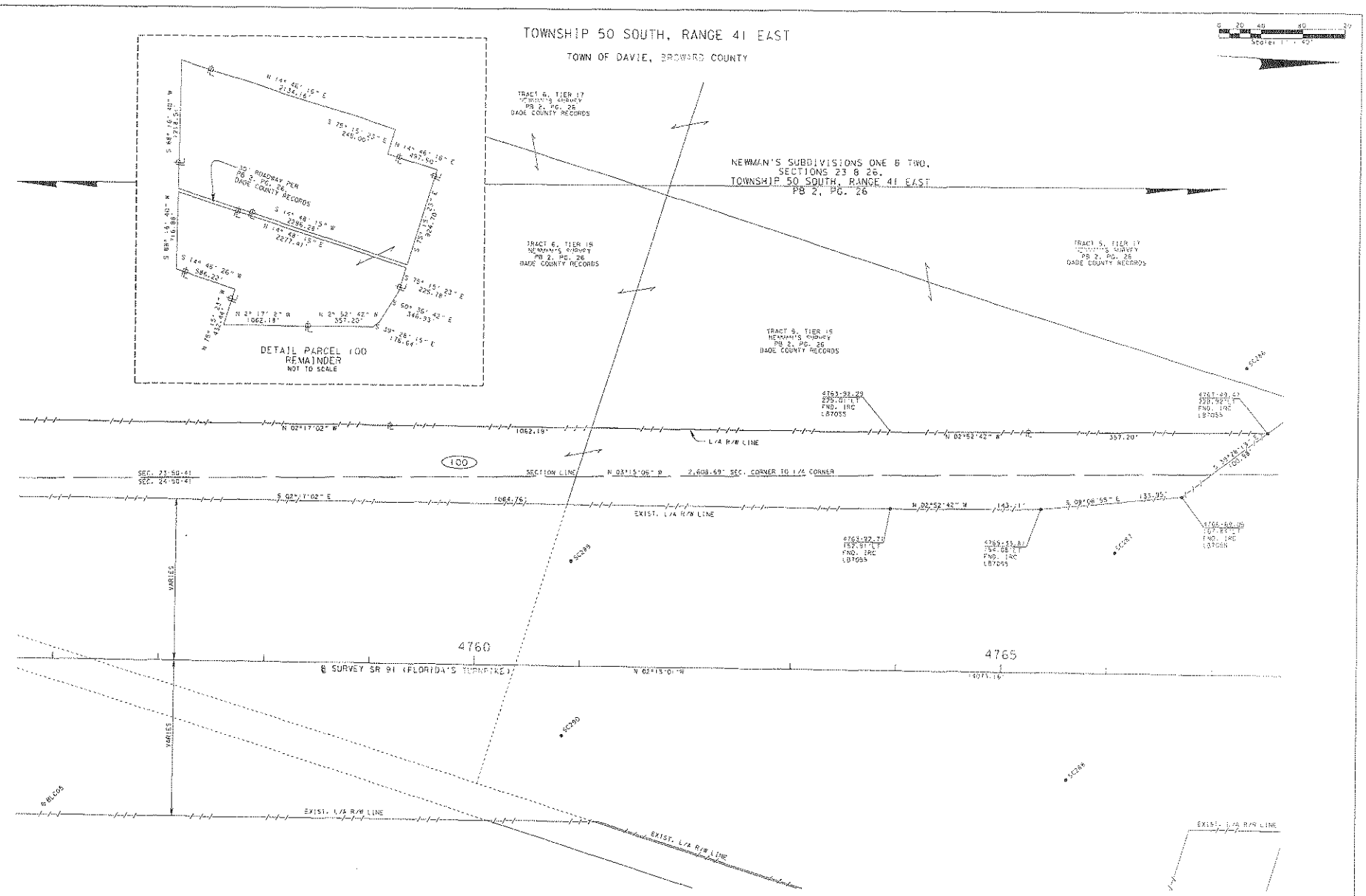
FLORIDA DEPARTMENT OF TRANSPORTATION
FLORIDA'S TURNPIKE ENTERPRISE

F.A.P. NO. N/A

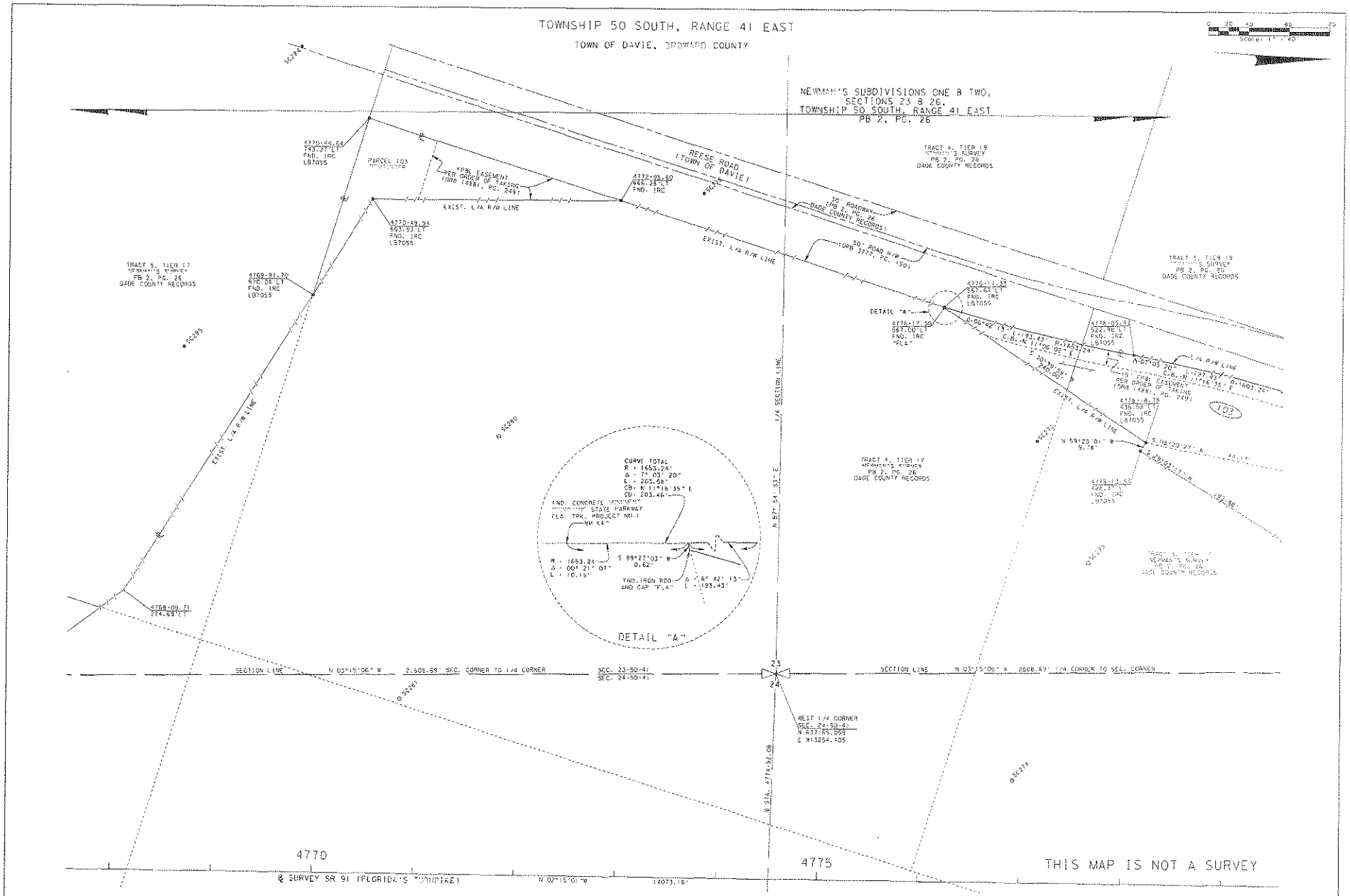
SECTION N/A

STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)

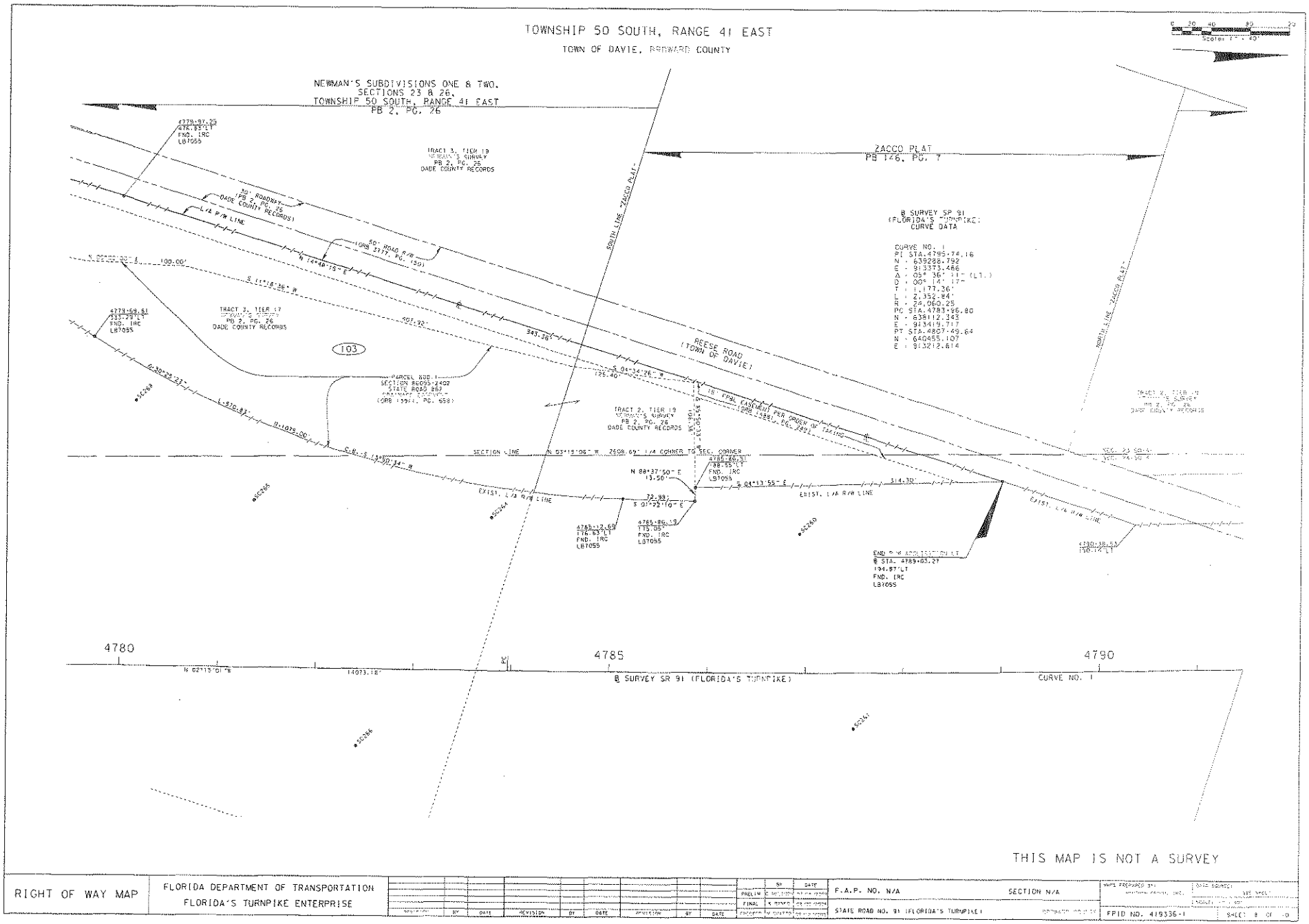
FPID NO. 419336-1


TOWNSHIP 50 SOUTH, RANGE 41 EAST
TOWN OF DAVIE, BROWARD COUNTY
DETAIL PARCEL 100
REMAINDER
NOT TO SCALE
NEWMAN'S SUBDIVISIONS ONE & TWO,
SECTIONS 23 & 26,
TOWNSHIP 50 SOUTH, RANGE 41 EAST
PB 2, PG. 26
TRACT 6, TIER 17
TRACT 6, TIER 18
TRACT 5, TIER 17
TRACT 5, TIER 18
DADE COUNTY RECORDS
100
SECTION LINE
N 03°15'06" W 2,608.69' SEC. CORNER TO 1/4 CORNER
SEC. 23-50-41
SEC. 24-50-41
N 02°17'02" W 1062.18'
S 02°17'02" E 1084.76'
N 02°52'42" W 357.20'
EXIST. L/A R/W LINE
L/A R/W LINE
VARIES
4760
4765
SURVEY SR 91 (FLORIDA'S TURNPIKE)
N 02°15'01" W 14071.16'
6 BLOCKS
THIS MAP IS NOT A SURVEY

| | | |


TOWNSHIP 50 SOUTH, RANGE 41 EAST
TOWN OF DAVIE, BROWARD COUNTY
NEWMAN'S SUBDIVISIONS ONE & TWO,
SECTIONS 23 & 26,
TOWNSHIP 50 SOUTH, RANGE 41 EAST
PB 2, PG. 26
REESE ROAD
(TOWN OF DAVIE)
EXIST. L/A R/W LINE
SECTION LINE
DETAIL "A"
CURVE TOTAL
R = 1653.24'
Δ = 7° 03' 20"
L = 203.58'
CB: N 11°18'35" E
CD: 203.46'
SECTION LINE N 03°15'06" W 2,608.68' SEC. CORNER TO 1/4 CORNER
SECTION LINE N 03°15'06" W 2608.69' 1/4 CORNER TO SEC. CORNER
REST 1/4 CORNER
SEC. 24-50-41
N 877165.059
E 913854.405
4770
4775
@ SURVEY SR 91 (FLORIDA'S TURNPIKE)
N 02°15'01" W 14073.18'
THIS MAP IS NOT A SURVEY

| | | |



RIGHT OF WAY MAP	FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA'S TURNPIKE ENTERPRISE	F.A.P. NO. N/A	SECTION N/A	FPID NO. 419336-1
		STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)		

PROJECT SURVEY CONTROL (PRIMARY CONTROL) TABULATION

POINT NAME	(X) EASTING	(Y) NORTHING	SCALE FACTOR	CONVERGENCE	LATITUDE	LONGITUDE	(Z) ELEVATION	BASELINE STATION	OFFSET	DESCRIPTION
BLC03	913845.1126	629845.1189	1.0000173	0°20'41.7"	26°03'51.56627"	80°12'54.21252"	6.8520	4701+19.25	100.44	"SET FDOT BRASS DISK "BLC3""
BLC04	913537.2914	632798.7741	1.0000173	0°20'40.7"	26°04'20.83731"	80°12'57.39315"	2.2400	4730+82.72	-91.16	"SET FDOT BRASS DISK "BLC4""
BLC05	913668.4315	635316.9029	1.0000172	0°20'41.7"	26°04'45.76877"	80°12'55.78882"	3.0030	4755+93.75	138.75	"SET FDOT BRASS DISK "BLC5""
BLC06	913554.7851	638602.3488	1.0000174	0°20'41.7"	25°05'18.31420"	80°12'56.81836"	5.0470	4788+77.98	159.05	"SET FDOT BRASS DISK "BLC6""
BLC07	912934.1426	641794.7255	1.0000167	0°20'39.2"	26°05'49.96804"	80°13'03.41508"	2.5400	4821+14.75	-92.82	"SET FDOT BRASS DISK "BLC7""
BLC5953	914863.3776	638962.1781	1.0000179	0°20'48.0"	26°05'21.79968"	80°12'42.44213"	7.7370	4791+43.25	1488.21	"END. STD. FDOT BRASS DISK "595 86 02 C3""

PROJECT NETWORK SECONDARY CONTROL POINT TABULATION

POINT NAME	(Y) NORTHING	(X) EASTING	(Z) ELEVATION	BASELINE STATION	OFFSET	DESCRIPTION
SC234	641834.2644	912934.3234	3.604	4821+53.89	-87.24	SET IRON ROD AND CAP WITH TARGET
SC235	641856.0776	913073.8278	10.707	4821+56.44	53.94	SET PK NAIL AND WASHER WITH TARGET
SC236	641349.0388	912921.5765	6.563	4816+74.96	-166.16	SET IRON ROD AND CAP WITH TARGET
SC237	641496.2428	913122.9358	10.676	4817+93.27	53.42	SET PK NAIL AND WASHER WITH TARGET
SC238	640813.8673	912989.0754	4.318	4811+35.58	-172.42	SET IRON ROD AND CAP WITH TARGET
SC239	640941.7640	913198.2743	10.537	4812+53.69	52.29	SET PK NAIL AND WASHER WITH TARGET
SC240	640448.2833	913010.8680	4.802	4807+70.45	-200.79	SET IRON ROD AND CAP WITH TARGET
SC241	640471.5436	913321.0401	2.433	4807+51.11	109.65	SET IRON ROD AND CAP WITH TARGET
SC242	639947.3780	913047.1932	3.575	4802+64.64	-228.40	SET IRON ROD AND CAP WITH TARGET
SC243	639952.5026	913309.9654	3.902	4802+29.91	112.65	SET IRON ROD AND CAP WITH TARGET
SC244	639713.6880	913057.5610	7.246	4800+28.94	-244.22	SET IRON ROD AND CAP WITH TARGET
SC245	639650.9892	913393.4286	8.536	4799+31.03	83.22	SET IRON ROD AND CAP WITH TARGET
SC246	639489.7721	914078.3765	7.938	4797+07.16	749.02	SET IRON ROD AND CAP WITH TARGET
SC247	639303.9496	914607.8962	8.057	4794+84.28	1259.51	SET IRON ROD AND CAP WITH TARGET
SC248	639215.7793	914886.8703	7.502	4793+79.55	1530.69	SET IRON ROD AND CAP WITH TARGET
SC249	639306.5850	913126.7490	1.150	4796+13.03	-219.39	SET IRON ROD AND CAP WITH TARGET
SC250	639321.4845	913434.2282	8.540	4796+00.34	92.19	SET PK NAIL AND WASHER WITH TARGET
SC251	639214.9729	913851.9593	8.762	4794+99.91	499.18	SET IRON ROD AND CAP WITH TARGET
SC252	639095.9800	914437.4660	9.094	4792+93.67	1073.28	SET PK NAIL AND WASHER WITH TARGET
SC253	638935.1727	914853.9626	9.086	4791+18.49	1476.94	SET PK NAIL AND WASHER WITH TARGET
SC254	638955.6625	914180.2461	2.533	4791+83.39	806.34	SET IRON ROD AND CAP WITH TARGET
SC255	638918.7339	913176.6499	5.830	4792+19.02	-197.28	SET PK NAIL AND WASHER WITH TARGET
SC256	639009.9837	913401.6067	28.141	4792+93.41	33.88	SET PK NAIL AND WASHER WITH TARGET
SC257	638803.3571	914545.7015	5.558	4790+13.90	1160.53	SET IRON ROD AND CAP WITH TARGET
SC258	638759.5440	914340.4560	17.789	4789+84.15	952.90	SET PK NAIL AND WASHER WITH TARGET
SC259	638637.1377	914704.6645	2.473	4788+45.31	1308.99	SET IRON ROD AND CAP WITH TARGET
SC260	638400.7685	913264.5967	11.704	4786+92.85	-141.86	SET PK NAIL AND WASHER WITH TARGET
SC261	638467.8206	913459.7199	13.767	4787+49.62	56.52	SET PK NAIL AND WASHER WITH TARGET
SC262	638196.7756	914284.1143	8.231	4784+45.48	867.10	SET PK NAIL AND WASHER WITH TARGET
SC263	638165.5061	914545.5381	25.937	4784+05.32	1127.04	SET PK NAIL AND WASHER WITH TARGET
SC264	638087.4980	913264.6103	7.625	4783+78.07	-155.96	SET PK NAIL AND WASHER WITH TARGET
SC265	637844.2660	913259.6064	11.836	4781+35.22	-170.51	SET PK NAIL AND WASHER WITH TARGET
SC266	637961.4456	913503.7403	7.091	4782+42.72	78.03	SET PK NAIL AND WASHER WITH TARGET
SC267	637721.4282	914109.1722	3.748	4779+79.12	673.57	SET IRON ROD AND CAP WITH TARGET
SC268	637719.0460	913165.4056	9.467	4780+13.80	-269.56	SET PK NAIL AND WASHER WITH TARGET
SC269	637723.1864	913727.3120	3.796	4779+95.87	292.08	SET IRON ROD AND CAP WITH TARGET
SC270	637483.6541	914034.0492	12.517	4777+44.48	589.17	SET PK NAIL AND WASHER WITH TARGET
SC271	637646.3129	914321.6335	9.172	4778+95.72	882.92	SET PK NAIL AND WASHER WITH TARGET
SC272	637410.5337	913010.7397	17.839	4777+11.60	-436.22	SET PK NAIL AND WASHER WITH TARGET
SC273	637467.5681	913127.5874	4.034	4777+64.00	-317.22	SET IRON ROD AND CAP WITH TARGET
SC274	637404.6914	913346.5386	4.919	4776+92.57	-100.91	SET IRON ROD AND CAP WITH TARGET
SC275	637391.5257	913535.1161	5.353	4776+72.01	87.01	SET IRON ROD AND CAP WITH TARGET
SC276	637360.3779	914187.5965	12.487	4776+15.27	737.76	SET PK NAIL AND WASHER WITH TARGET
SC277	637188.0321	913715.2452	24.121	4774+41.62	258.22	SET PK NAIL AND WASHER WITH TARGET

POINT NAME	(Y) NORTHING	(X) EASTING	(Z) ELEVATION	BASELINE STATION	OFFSET	DESCRIPTION
SC278	637087.3805	912705.8421	4.300	4773+27.34	-674.42	SET PK NAIL AND WASHER WITH TARGET
SC279	636981.1778	913666.2965	33.234	4772+48.98	401.82	SET PK NAIL AND WASHER WITH TARGET
SC280	636878.1021	913034.6073	1.342	4771+78.64	-433.28	SET IRON ROD AND CAP WITH TARGET
SC281	636794.4443	913299.1711	3.678	4770+84.66	-172.20	SET IRON ROD AND CAP WITH TARGET
SC282	636845.5586	913607.5858	24.638	4771+23.62	137.98	SET PK NAIL AND WASHER WITH TARGET
SC283	636634.6844	913602.4250	13.009	4769+13.11	124.54	SET PK NAIL AND WASHER WITH TARGET
SC284	636661.5154	912663.8467	4.436	4769+76.78	-812.26	SET PK NAIL AND WASHER WITH TARGET
SC285	636561.9780	912963.2254	4.417	4768+65.56	-517.02	SET PK NAIL AND WASHER WITH TARGET
SC286	636434.0151	913194.6371	4.149	4767+28.61	-290.81	SET PK NAIL AND WASHER WITH TARGET
SC287	636318.6881	913375.7956	15.637	4766+06.26	-114.32	SET PK NAIL AND WASHER WITH TARGET
SC288	636284.8952	913594.0647	6.577	4765+63.92	102.45	SET PK NAIL AND WASHER WITH TARGET
SC289	635804.0059	913410.9721	6.754	4760+90.59	-99.38	SET PK NAIL AND WASHER WITH TARGET
SC290	635804.2734	913577.6526	7.535	4760+84.31	67.18	SET PK NAIL AND WASHER WITH TARGET
SC291	635752.4261	913431.1199	3.098	4754+38.78	-104.83	SET IRON ROD AND CAP WITH TARGET
SC292	635765.6539	913602.5699	7.638	4754+45.21	67.00	SET PK NAIL AND WASHER WITH TARGET
SC293	634672.6047	913483.3233	7.486	4748+67.22	-71.51	SET PK NAIL AND WASHER WITH TARGET
SC294	634679.9372	913622.8392	7.491	4749+59.07	68.19	SET PK NAIL AND WASHER WITH TARGET
SC295	634736.8557	913509.8793	7.690	4744+20.64	-66.02	SET PK NAIL AND WASHER WITH TARGET
SC296	634755.5728	913660.0785	4.847	4744+33.65	84.81	SET IRON ROD AND CAP WITH TARGET
SC297	633599.1050	913530.0814	7.491	4738+82.71	-66.94	SET PK NAIL AND WASHER WITH TARGET
SC298	633611.5067	913687.3981	3.319	4738+88.93	90.74	SET IRON ROD AND CAP WITH TARGET
SC299	633093.4436	913527.1111	3.145	4733+27.56	-89.77	SET IRON ROD AND CAP WITH TARGET
SC300	633091.0056	913684.9217	7.720	4733+68.93	67.83	SET PK NAIL AND WASHER WITH TARGET
SC301	632636.7253	913567.3674	7.691	4729+19.61	-67.47	SET PK NAIL AND WASHER WITH TARGET
SC302	632814.2570	913718.2846	3.591	4730+91.08	90.30	SET IRON ROD AND CAP WITH TARGET
SC303	632753.6017	913559.5050	7.145	4724+37.57	-94.29	SET PK NAIL AND WASHER WITH TARGET
SC304	632776.6172	913743.7363	4.336	4724+52.93	90.69	SET IRON ROD AND CAP WITH TARGET
SC305	631586.7438	913530.4090	6.487	4718+71.89	-145.63	SET IRON ROD AND CAP WITH TARGET
SC306	631591.5010	913777.1540	7.472	4718+66.96	101.11	SET PK NAIL AND WASHER WITH TARGET
SC307	631081.4940	913544.3263	5.526	4713+66.49	-151.57	SET IRON ROD AND CAP WITH TARGET
SC308	631028.2532	913832.6527	6.844	4713+01.96	134.45	SET PK NAIL AND WASHER WITH TARGET
SC309	630520.8231	913568.6846	5.170	4708+05.29	-149.26	SET IRON ROD AND CAP WITH TARGET
SC310	630567.2133	913851.9892	5.013	4708+40.52	135.66	SET PK NAIL AND WASHER WITH TARGET
SC311	630053.8565	913602.7958	5.740	4703+37.54	-133.50	SET PK NAIL AND WASHER WITH TARGET
SC312	630095.9808	913870.0908	5.216	4703+68.94	135.25	SET PK NAIL AND WASHER WITH TARGET
SC313	629532.7921	913612.9613	4.488	4698+16.28	-143.80	SET IRON ROD AND CAP WITH TARGET
SC314	629678.5311	913878.6604	9.747	4699+49.48	127.34	SET PK NAIL AND WASHER WITH TARGET
SC315	628979.3394	913688.2534	7.703	4692+60.30	-90.30	SET PK NAIL AND WASHER WITH TARGET
SC316	628978.6224	913880.4753	6.721	4692+52.04	101.75	SET PK NAIL AND WASHER WITH TARGET
SC317	628447.0163	913726.6116	7.012	4687+26.68	-72.87	SET PK NAIL AND WASHER WITH TARGET
SC318	628464.7697	913863.4646	7.454	4687+39.95	64.57	SET PK NAIL AND WASHER WITH TARGET

FROM: PROJECT SURVEY CONTROL
STATE ROAD 91 - FLORIDA'S TURNPIKE
FPID 419336-1-32-01

RIGHT OF WAY MAP	FLORIDA DEPARTMENT OF TRANSPORTATION FLORIDA'S TURNPIKE ENTERPRISE	REVISION / BY / DATE	REVISION / BY / DATE	REVISION / BY / DATE	BY / DATE PRELIM FINAL	F.A.P. NO. N/A	SECTION N/A	SURVEY PERFORMED BY:	DATE SURVEY:
						STATE ROAD NO. 91 (FLORIDA'S TURNPIKE)		FPID NO. 419336-1	SHEET NO.

TABLE OF OWNERSHIPS

PARCEL NO.	SHEET NO.	NAME	AREA TAKEN	REMAINDERS LEFT	REMAINDERS RIGHT	COMMENTS	RECORDING DATA	REVISIONS
100	5-6	EVERGLADES LAKES MOBILE HOME [illegible] LTD	2.284 AC.	10.375 AC.	0			
101	5	PROFESSIONAL LASER CENTER INC. ALLIANCE [illegible]	0.749 AC.	9.114 AC.	0			
102	3-5	RUTGOS SYSTEMS, INC.	1.320 AC.	0	0	WHOLE TAKE		
103	7-8	HAMILTON, M & BLANCHE C.FORMAN CHRISTIAN FOUNDATION	3.373 AC.	12292 SF	0			

LEGEND

PARCEL NUMBER ID.	TYPE USE	PARCEL NUMBER ID.	TYPE USE
100-699	DEEDS OF ALL TYPES	800-899	PERPETUAL EASEMENTS
700-799	RENUNCIATION EASEMENTS	900-999	LICENSE

FLORIDA DEPARTMENT OF TRANSPORTATION
TURNPIKE ENTERPRISE

PREPARED BY DATE

PRELIMINARY NOT FOR CONSTRUCTION PURPOSES

	BY	DATE
CHK'D		
FINAL		
SURVEYOR		

F.A.P. NO. N/A SECTION - N/A

STATE ROAD NO. 91 (FLORIDA'S TURNPIKE) [illegible]

DATA SOURCES: SEE SHEET

SCALE: N/A

FPID NO. 419336-1 SHEET 10 OF 15

SUBJECT TO CHANGE

LEGEND

A.E.	ACCESS EASEMENT	MON.	MONUMENT
(AND)	AHEAD	NL	NAIL
ASSC.	ASSOCIATES	NL&D	NAIL AND DISK
(BK)	BACK	NL&TT	NAIL AND TIN TAB
℄	BASELINE	NL&W	NAIL AND WASHER
BLVD.	BOULEVARD	N.V.A.L.	NON-VEHICULAR ACCESS LINE
BD	BRASS DISC	NTS	NOT TO SCALE
BDIC	BRASS DISC IN CONCRETE	O.R.B.	OFFICIAL RECORD BOOK
BCED	BROWARD COUNTY ENGINEERING DIVISION	PG.	PAGE
CALC.	CALCULATED	PK	PARKER KALON
℄	CENTERLINE	PRM	PERMANENT REFERENCE MONUMENT
CCR	CERTIFIED CORNER RECORD	P.B.	PLAT BOOK
C.B.	CHORD BEARING	(P)	PLAT
CO.	COMPANY	PC	POINT OF CURVATURE
CONC.	CONCRETE	PCC	POINT OF COMPOUND CURVATURE
CONST.	CONSTRUCTION	PI	POINT OF INTERSECTION
COR.	CORNER	PT	POINT OF TANGENCY
Δ	CURVE DELTA ANGLE	PLS	PROFESSIONAL LAND SURVEYOR
(D)	DEED	PSM	PROFESSIONAL SURVEYOR & MAPPER
D	DEGREE OF CURVE	PROJ.	PROJECT
D.E.	DRAINAGE EASEMENT	R	RADIUS
DIA.	DIAMETER	R.R.	RAILROAD
ESMT.	EASEMENT	RGE	RANGE
ENG.	ENGINEERING	REF.	REFERENCE
EXIST.	EXISTING	RLS	REGISTERED LAND SURVEYOR
FA	FIELD ADJUSTED	RT.	RIGHT
F/K/A	FORMERLY KNOWN AS	R/W	RIGHT OF WAY
FPID	FINANCIAL PROJECT IDENTIFICATION	SEC	SECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SSK	SIDEWALK
FND	FOUND	SFWMD	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
F.P.&L.	FLORIDA POWER & LIGHT	STMP.	STAMPED
IP	IRON PIPE	S.R.	STATE ROAD
IPBC	IRON PIPE AND CAP	STA.	STATION
IR	IRON ROD	T	TANGENT
IRBC	IRON ROD AND CAP	TWP	TOWNSHIP
LT.	LEFT	UG	UNDER ASPHALT
L	LENGTH OF CURVE	U.E.	UTILITY EASEMENT
LB	LICENSED BUSINESS	W.P.I.	WORK PROJECT IDENTIFICATION
LS	LICENSED SURVEYOR		
L/A	LIMIT ACCESS		
LAE	LIMIT ACCESS EASEMENT		

- BASELINE SURVEY
- RAILROAD
- CITY LIMIT LINE
- COUNTY LINE
- TOWNSHIP LINE
- SECTION LINE
- 1/4 SECTION LINE
- 1/4-1/4 SECTION LINE
- GOVERNMENT LOT LINE
- PROPERTY LINE
- SUBDIVISION LINE
- VACATED/ORIGINAL LOT LINE
- PROPOSED R/W LINE
- EXISTING R/W LINE
- EXISTING L/A R/W LINE
- EASEMENT LINE
- EASEMENT/TRAVELED WAY
- NON-VEHICULAR ACCESS LINE

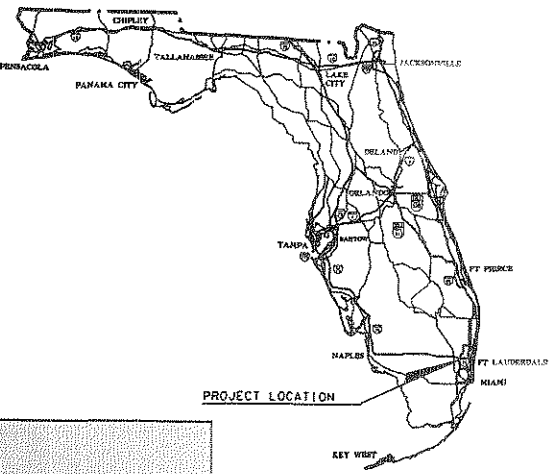
- SECTION CORNER DOUBLE FOUND
- SECTION CORNER DOUBLE NOT FOUND
- SECTION CORNER FOUND
- SECTION CORNER NOT FOUND
- SECTION 1/4 CORNER CENTER NOT FOUND
- SECTION 1/4 CORNER FOUND
- SECTION 1/4 CORNER NOT FOUND
- SECTION 1/4 DOUBLE CORNER FOUND
- SECTION 1/4 DOUBLE CORNER NOT FOUND

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

PARCEL MAP

STATE PROJECT NO. 86095-2420
ITEM/SEGMENT No. 421854-2
S.R. 862 (I-595)
BROWARD COUNTY
LENGTH: 7.10 MILES

TRAVERSING THRU TOWNSHIP 50 SOUTH, IN
SECTIONS 2, 11 & 12, RANGE 40 EAST AND
SECTIONS 7,8,9,13,14,15,16,17,18,22,23 & 24, RANGE 41 EAST
IN BROWARD COUNTY, FL.



11-12-08
notes by INB and WA

Jeff Smith and FDOT will be providing additional edits to these sheets as TBE has completed the scope of their work.

Changes are anticipated for 7xx Temporary Easements on sheet 29

INDEX

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2 - 5	KEY SHEETS
6 - 27	DETAIL SHEETS
28 - 29	TAB SHEETS

GENERAL NOTES

1. BEARINGS AND COORDINATES ARE RELATIVE TO THE STATE PLANE COORDINATES, FLORIDA EAST ZONE, NORTH AMERICAN DATUM (NAD) OF 1983, 1990 ADJUSTMENT. BEARINGS AND COORDINATES ARE REFERENCED TO GRID BEARING S 03°31'08" E FROM BLC MONUMENTS BLC2 (N: 649269.943, E: 874177.3811 AND BLC3 (N: 649044.259, E: 876164.044).

2. AS REQUESTED BY FDOT DISTRICT 4 OFFICE OF RIGHT OF WAY, MAPPING UNIT, SECTIONAL DATA WEST OF RANGE 42 EAST IS BASED ON BROWARD COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION COORDINATES OF THE WESTERN BROWARD RESURVEY DATUM, NORTH AMERICAN DATUM OF 1983 WITH THE 1990 ADJUSTMENT. FOR FIELD LOCATED MONUMENTS FOUND TO BE WITHIN A REASONABLE TOLERANCE OF THE ABOVE DATUM, THE TRANSFORMED COORDINATES WERE HELD. SECTION CORNERS LYING WITHIN RANGE 42 EAST WHERE NO MONUMENTATION WAS FOUND, THEIR COORDINATES WERE CALCULATED BASED ON RECORDED PLATS, COUNTY AND STATE RIGHT-OF-WAY MAPS.

3. IN DESCRIBING SECTION CORNERS, THE TERM "NOT FND" INDICATES AN ATTEMPT WAS MADE TO LOCATE A MONUMENT. ITS ABSENCE DENOTES EITHER NO CERTIFIED CORNER RECORD WAS LOCATED ON THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION LAND BOUNDARY INFORMATION SYSTEM (LABINS), AND/OR ITS LOCATION WAS OBLITERATED DUE TO PLATTING SUCH AS GOLF COURSES, LAKES, CANALS OR NEWMAN'S SURVEY RECORDED IN PLAT BOOK 2 AT PAGE 26 OF THE PUBLIC RECORDS OF DADE COUNTY.

4. THE PROJECT NETWORK CONTROL (PNC) HAS BEEN PREPARED FOR THIS PROJECT AND CERTIFIED COPIES OF PNC SHEETS ARE FILED WITH AND MAINTAINED BY FDOT DISTRICT 4 SURVEYING AND MAPPING DEPARTMENT IN FORT LAUDERDALE, FLORIDA.

5. DISTANCES SHOWN ARE GRID AND HAVE A PROJECT SCALE FACTOR OF 1.00001606.

6. OTHER DOCUMENTS SUCH AS PLATS SHOWN HEREON ARE RECORDED IN PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA.

7. BASELINE AND SECTIONAL DATA WAS CALCULATED FROM FIELD AND REFERENCE DATA AND ACCEPTED BY FDOT DISTRICT 4 SURVEYING AND MAPPING DEPARTMENT.

8. ALL DISTANCES AND BEARINGS ARE COMPUTED UNLESS OTHERWISE INDICATED.

9. ALL SIDE STREET CENTERLINES ARE STATIONED 50+00 AT THEIR INTERSECT WITH THE BASELINE OF SURVEY AND THE STATIONING ALONG THESE SIDE STREETS IS DECREASING (RUNNING SOUTHWEST) AND INCREASING (RUNNING NORTHEAST).

10. STATIONS AND OFFSETS ARE RELATIVE TO THE BASELINE OF SURVEY, UNLESS ALONG SIDE STREETS.

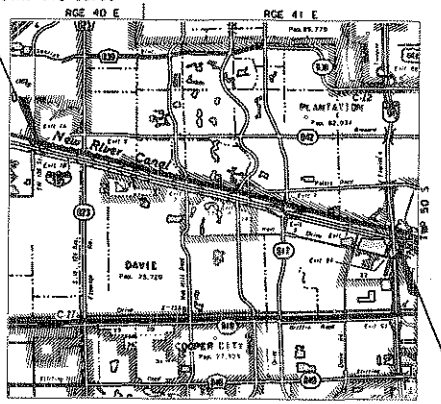
11. ATTENTION IS DIRECTED TO THE FACT THAT THESE MAPS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN SCALING DATA.

12. THIS PARCEL MAP WAS PREPARED FOR THE PURPOSE OF PREPARING LEGAL DESCRIPTIONS, ACQUISITION DOCUMENTS, MONUMENTATION, PROPERTY MANAGEMENT, AND AS AN AID IN THE APPRAISAL OF RIGHT OF WAY FOR TRANSPORTATION FACILITIES.

13. THIS PARCEL MAP IS SUPPORTED BY A RIGHT OF WAY CONTROL SURVEY DATED MAY 3, 2006, PREPARED BY MANTIUM GROUP, INC. UNDER THE RESPONSIBLE CHARGE OF PASQUALE VOLPE, PROFESSIONAL SURVEYOR AND MAPPER NUMBER 4873. CERTIFIED COPIES OF THIS SURVEY ARE FILED IN THE DISTRICT FOUR OFFICE IN FT. LAUDERDALE, FLORIDA.

14. THE OFFICE OF TBE GROUP, INC. LB# 6668, IS LOCATED AT 3427 N.W. 55th STREET, FT. LAUDERDALE, FLORIDA 33309.

BEGIN PARCEL MAP
PROJECT NO. 86095-2420
@ STA. 170+00.00



END PARCEL MAP
PROJECT NO. 86095-2420
@ STA. 545+00.00

LOCATION MAP
NTS

REFERENCES

S.R. 84 R/W MAP SECTION 86080-2513
S.R. 84 R/W MAP SECTION 86080-2529
S.R. 91 (FLORIDA'S TURNPIKE) CONTRACT NO. 1.2
R/W MAP SECTION 97660-2324
S.R. 93 (I-75) R/W MAP SECTION 86075-2420
S.R. 817 (UNIVERSITY DRIVE)
R/W MAP SECTION 86220-2507
S.R. 823 (FLAMINGO ROAD)
R/W MAP SECTION 86190-2516
S.R. 862 (I-595) R/W MAP SECTION 86095-2401
S.R. 862 (I-595) R/W MAP SECTION 86095-2402
S.R. 862 (I-595) R/W MAP SECTION 86095-2403
S.R. 862 (I-595) R/W MAP SECTION 86095-2404
S.R. 862 (I-595) R/W MAP SECTION 86095-2405
S.R. 862 (I-595) R/W MAP SECTION 86095-2407
S.R. 862 (I-595) R/W MAP SECTION 86095-2410
S.R. 862 (I-595) R/W MAP SECTION 86095-2411
S.R. 862 (I-595) R/W MAP SECTION 86095-2448
MAINT. MAP STATUS ROAD
MISC. MAP BOOK 5, PG. 31

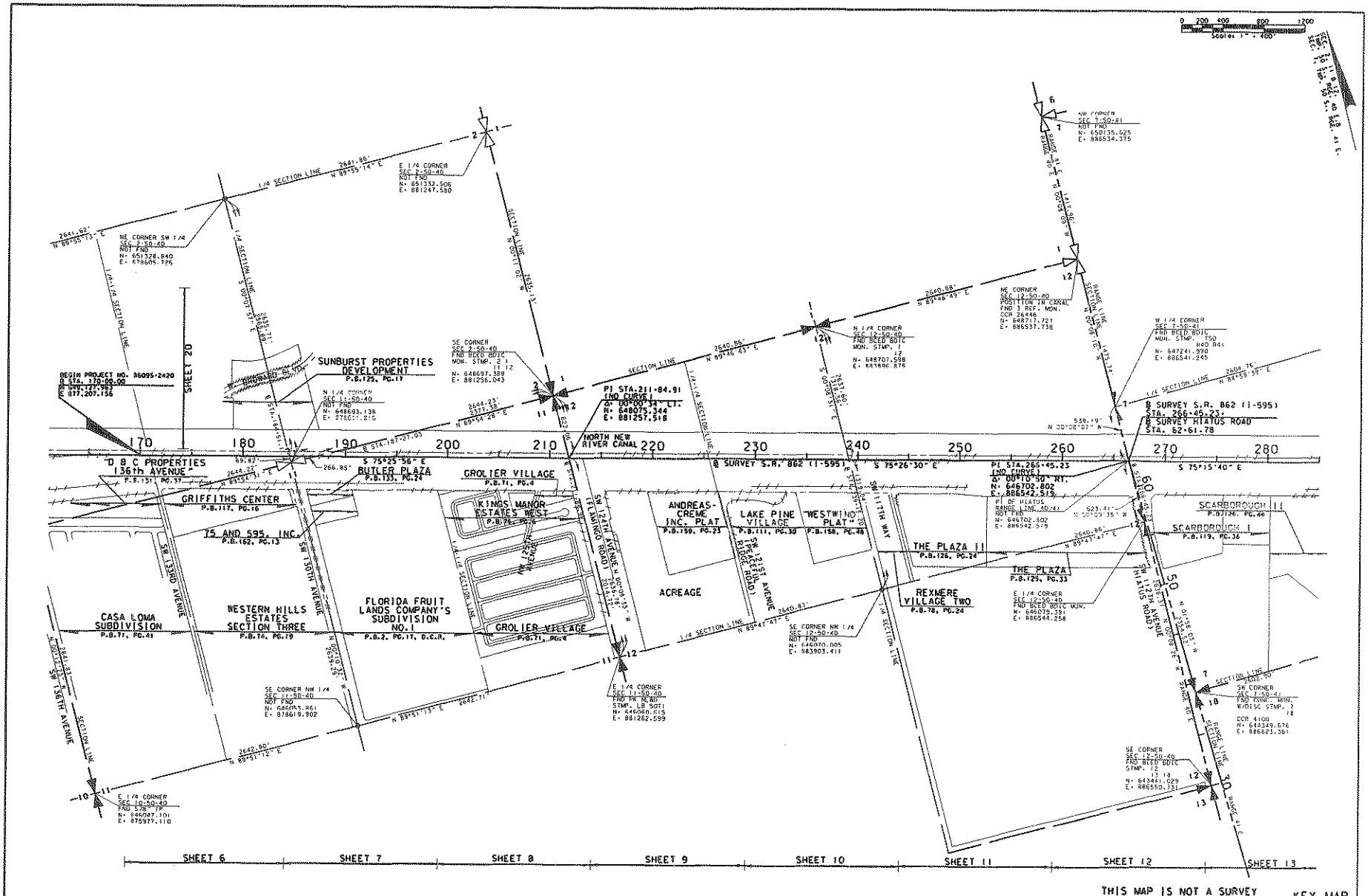
TBE GROUP, INC.
3427 N.W. 55th STREET
FT. LAUDERDALE, FL., 33309
PHONE: 954-730-9389
LB-6668

THIS MAP IS NOT A SURVEY — COVER SHEET

S.R. 862 (I-595) FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	RECOMMENDED BY: DISTRICT RIGHT OF WAY SURVEYOR — DATE								BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	DATA SOURCE: SEE ABOVE				
										PRELIM	C. MILLER 06-20-08								
										FINAL	C. MILLER				SCALE: N/A				
										CHECKED	N. SOMERS 06-24-08	STATE ROAD NO. 862	BROWARD COUNTY		ITEM/SEGMENT NO. 421854-2	SHEET 1 OF 29			
REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY	DATE								

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THIS MAP IS NOT A SURVEY

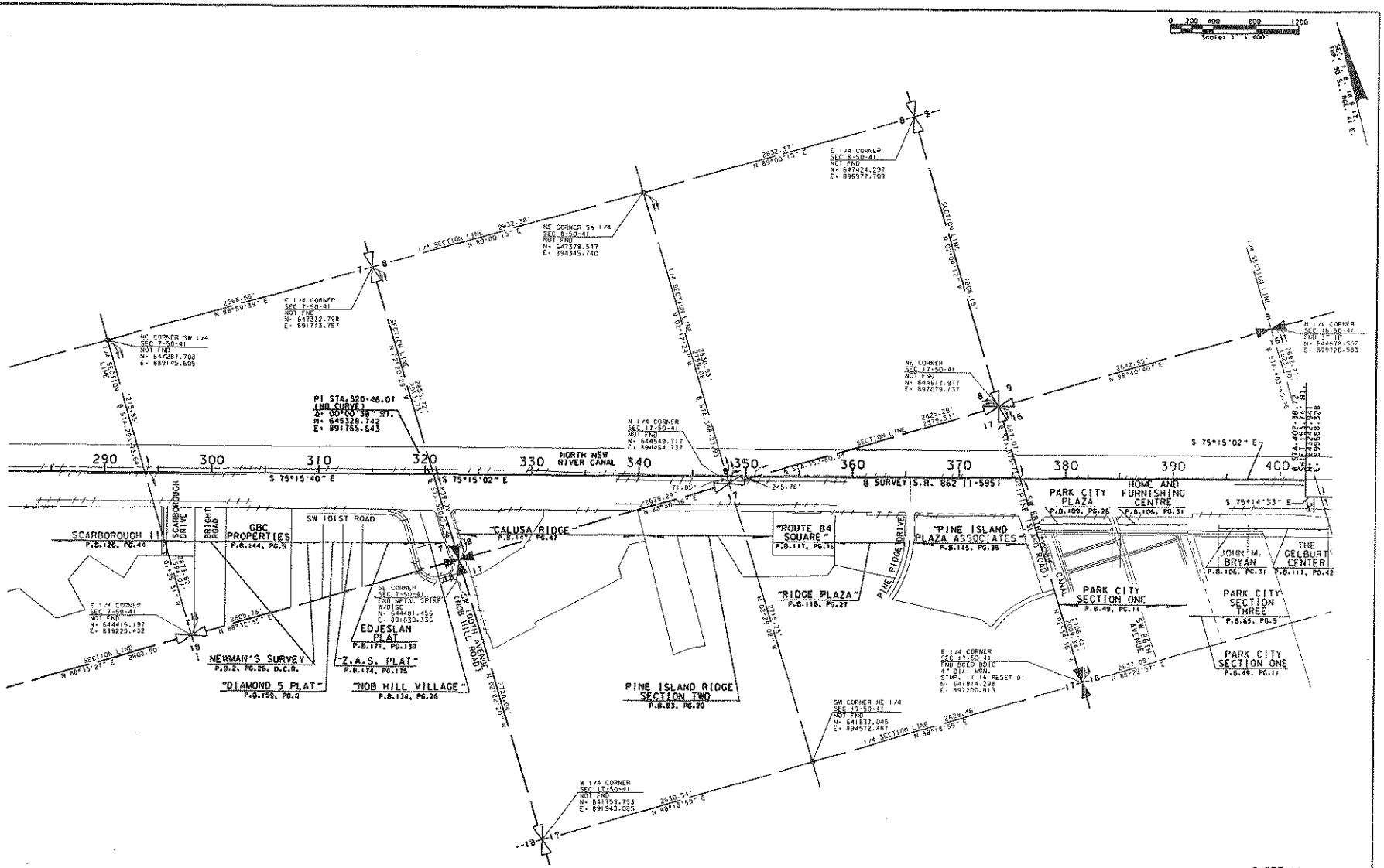
KEY MAP

S.R. 862 (I-595) FROM SW 133 AVE. TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	PREPARED BY: DISTRICT RIGHT OF WAY SURVEYOR	DATE	REVISION	BY	DATE	DESCRIPTION	BY	DATE	PROJ. MGR.	C. VILLEN	06-20-08	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBC GROUP, INC.	DATA SOURCE: SEE SHEET 1	
										FINAL	C. MILLER		STATE ROAD NO. 862	BROWARD COUNTY		SCALE: 1" = 400'	
										CHECKED	M. SIMONS	06-24-08			ITEM/SEGMENT NO. 421856-2		SHEET 2 OF 29

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THIS MAP IS NOT A SURVEY

KEY MAP

S.R. 862 11-5951 FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE

SEE SHEET 2 FOR LEGEND AND GENERAL NOTES

PARCEL MAP

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

ANNOUNCED BY _____ DATE _____
DISTRICT RIGHT OF WAY SURVEYOR

REVISION	BY	DATE	REVISION	BY	DATE

	BY	DATE
PRELIM	C MILLER	06-30-09
FINAL	C MILLER	
CHECKED	W SOMERS	06-30-09

FED. PROJ. N/A — SECTION 86095-2420

STATE ROAD NO. 862 — BROWARD COUNTY

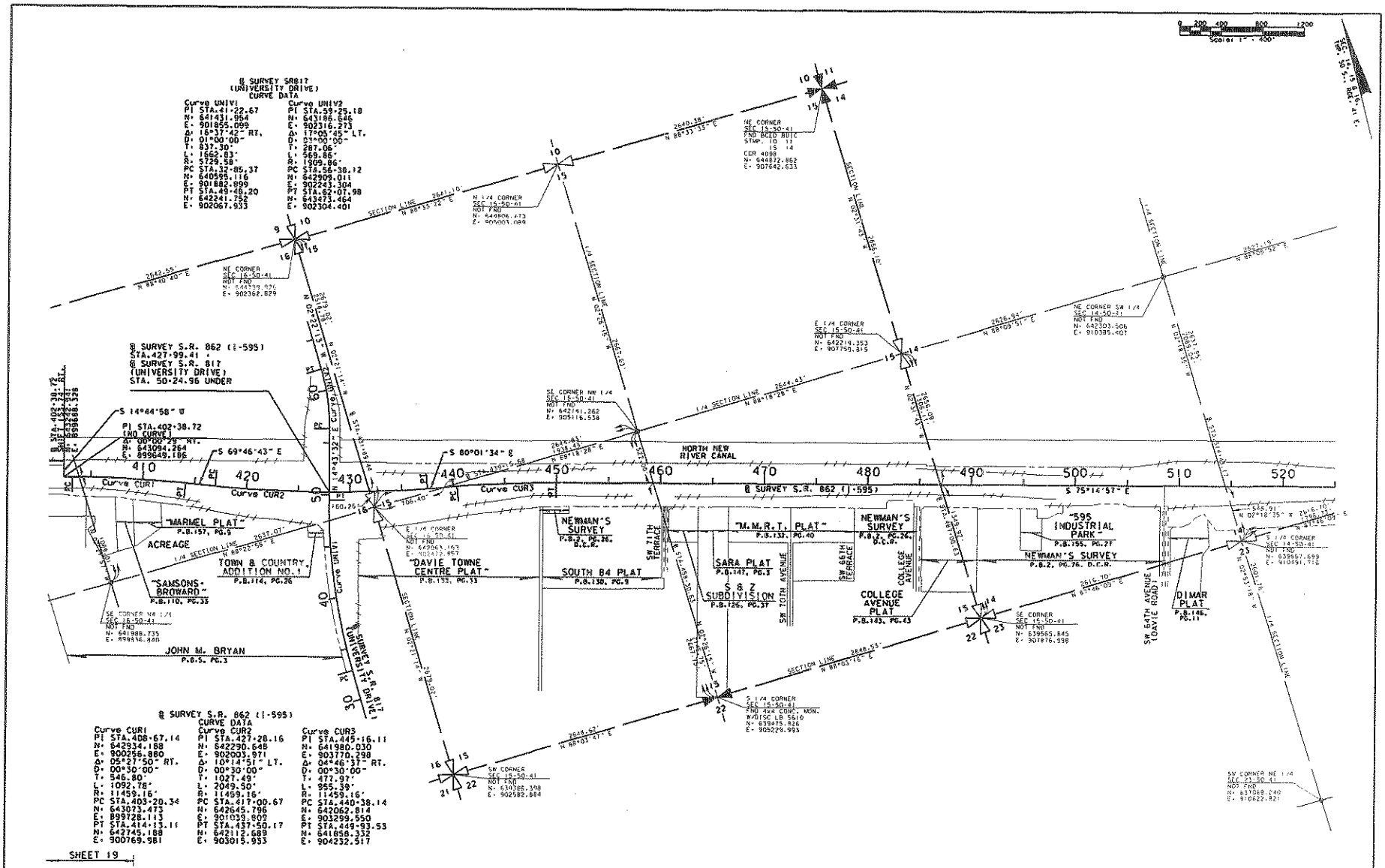
MAPS PREPARED BY: TBC CORP., INC.

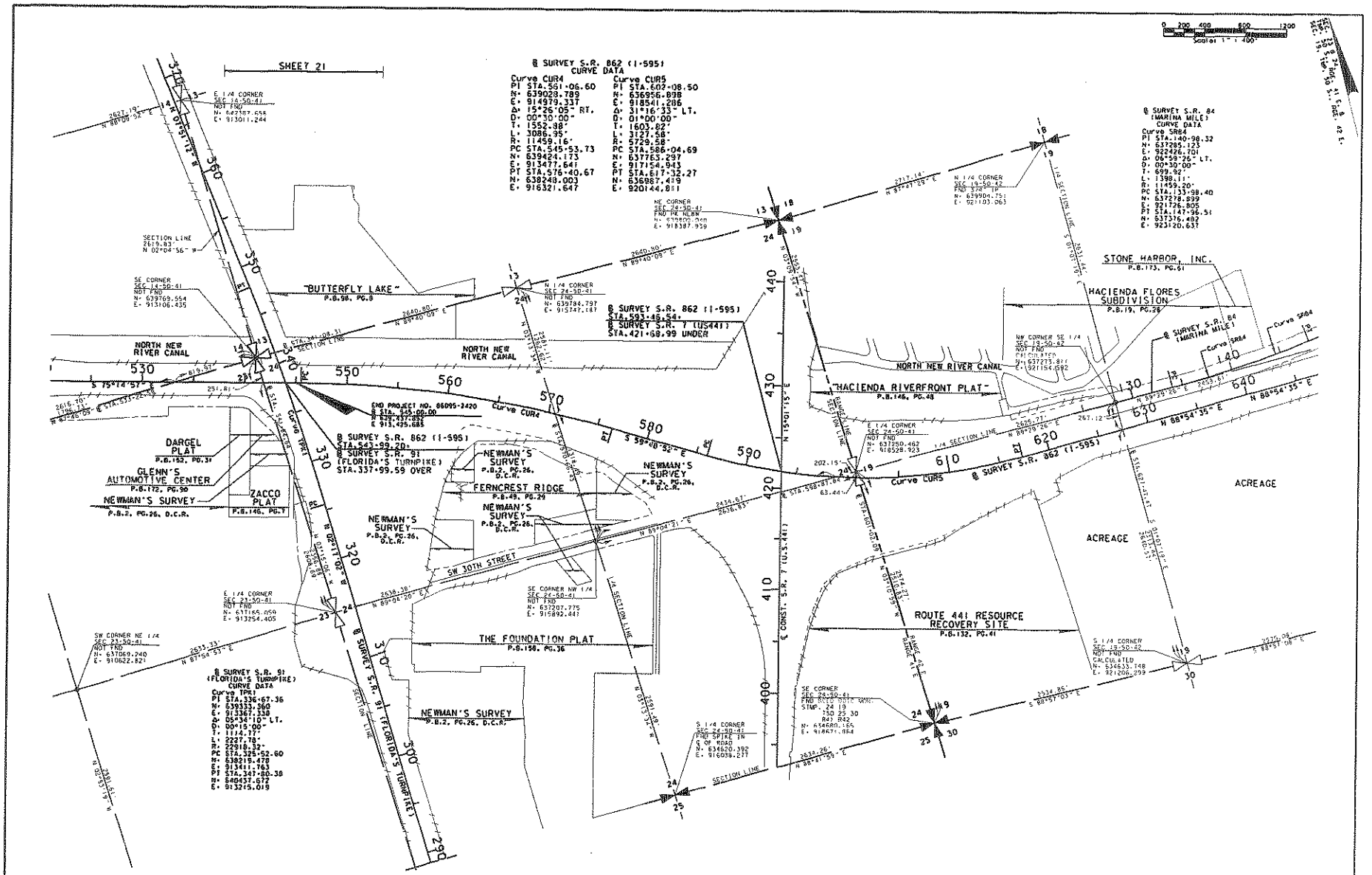
DATA SOURCE: SEE SHEET 1

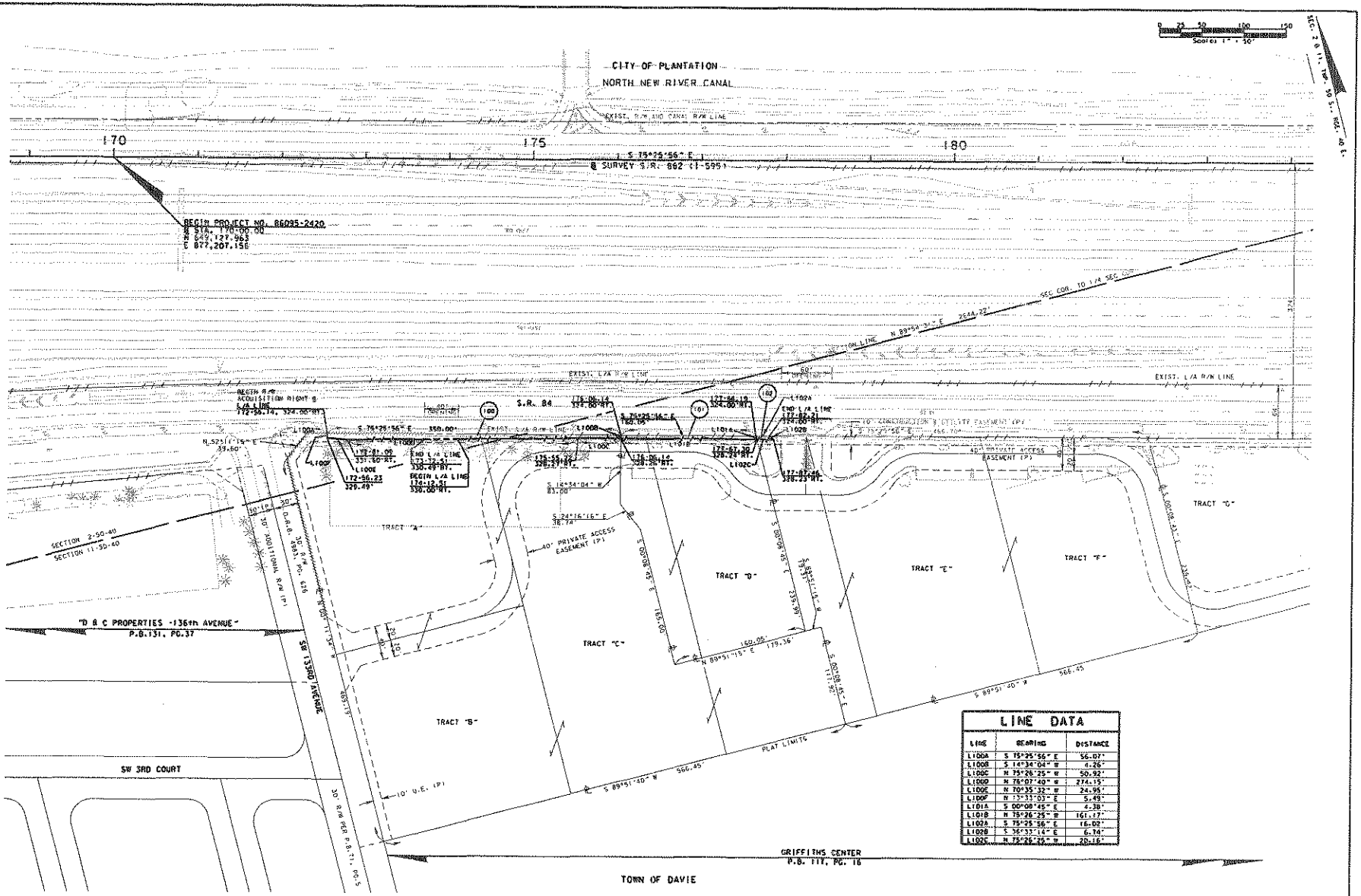
SCALE: 1" = 400'

ITEM/SEGMENT NO. 421854-2 — SHEET 3 OF 29

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℄ SURVEY SR817
(UNIVERSITY DRIVE)
CURVE DATA
Curve UNIV1
PI STA.41+22.67
N: 641431.954
E: 901855.099
Δ: 16°37'42" RT.
D: 01°00'00"
T: 837.30'
L: 1662.83'
R: 5729.58'
PC STA.32+85.37
N: 640595.116
E: 901802.899
PT STA.49+48.20
N: 642241.752
E: 902067.933
Curve UNIV2
PI STA.59+25.18
N: 643186.646
E: 902316.273
Δ: 17°05'45" LT.
D: 01°00'00"
T: 287.06'
L: 569.86'
R: 5729.86'
PC STA.56+38.12
N: 642909.011
E: 902243.304
PT STA.62+07.98
N: 643673.464
E: 902304.401
℄ SURVEY S.R. 862 (I-595)
STA.427+99.41
℄ SURVEY S.R. 817
(UNIVERSITY DRIVE)
STA. 50+24.96 UNDER
S 14°44'58" W
PI STA.402+38.72
(NO CURVE)
N: 643094.264
E: 899649.186
S 69°46'43" E
S 80°01'34" E
NORTH NEW RIVER CANAL
℄ SURVEY S.R. 862 (I-595)
S 75°14'57" E
"MARMEL PLAT"
P.B.157, PG.5
ACREAGE
"SAMSONS-BROWARD"
P.B.110, PG.35
TOWN & COUNTRY ADDITION NO. 1
P.B.114, PG.26
"DAVIE TOWNE CENTRE PLAT"
P.B.153, PG.13
NEWMAN'S SURVEY
P.B.2, PG.26, D.C.R.
SOUTH 84 PLAT
P.B.130, PG.9
"M.M.R.T. PLAT"
P.B.139, PG.40
SARA PLAT
P.B.147, PG.3
S & Z SUBDIVISION
P.B.126, PG.37
NEWMAN'S SURVEY
P.B.2, PG.26, D.C.R.
"595 INDUSTRIAL PARK"
P.B.155, PG.27
NEWMAN'S SURVEY
P.B.2, PG.26, D.C.R.
COLLEGE AVENUE PLAT
P.B.143, PG.43
DIMAR PLAT
P.B.146, PG.11
JOHN M. BRYAN
P.O.S. PG.3
SW 64TH AVENUE (DAVIE ROAD)
SW 71TH TERRACE
SW 66TH TERRACE
SW 70TH AVENUE
COLLEGE AVENUE
SURVEY S.R. 817 (UNIVERSITY DRIVE)
NE CORNER SEC 15-50-41
FND 4X4 CONC. MON. W/DISC LB 5610
N: 639475.826
E: 905229.993
SW CORNER SEC 15-50-41
NOT FND
N: 639368.398
E: 902982.884
SW CORNER NW 1/4 SEC 15-50-41
NOT FND
N: 641988.735
E: 899836.868
SE CORNER NW 1/4 SEC 15-50-41
NOT FND
N: 642061.163
E: 902672.957
N 1/4 CORNER SEC 15-50-41
NOT FND
N: 644806.673
E: 905003.088
NE CORNER SEC 15-50-41
FND 4X4 CONC. MON.
STAMP: 10 11
15 14
CCR 4088
N: 644872.862
E: 907642.633
E 1/4 CORNER SEC 15-50-41
NOT FND
N: 642219.353
E: 907750.815
SE CORNER NW 1/4 SEC 15-50-41
NOT FND
N: 642141.262
E: 905116.538
NE CORNER SW 1/4 SEC 14-50-41
NOT FND
N: 642393.506
E: 910385.407
S 1/4 CORNER SEC 14-50-41
NOT FND
N: 639567.699
E: 910951.716
SE CORNER SEC 15-50-41
NOT FND
N: 639565.845
E: 907876.598
NE CORNER SW 1/4 SEC 23-50-41
NOT FND
N: 637069.240
E: 910622.821
℄ SURVEY S.R. 862 (I-595)
CURVE DATA
Curve CUR1
PI STA.408+67.14
N: 642934.188
E: 900256.880
Δ: 05°27'50" RT.
D: 00°30'00"
T: 546.80'
L: 1092.78'
R: 11459.16'
PC STA.403+20.34
N: 643073.473
E: 899726.113
PT STA.414+13.11
N: 642745.188
E: 900769.981
Curve CUR2
PI STA.427+28.16
N: 642290.648
E: 902003.971
Δ: 10°14'51" LT.
D: 00°30'00"
T: 1027.48'
L: 2049.50'
R: 11459.16'
PC STA.417+00.67
N: 642645.796
E: 901039.909
PT STA.437+50.17
N: 642112.689
E: 903015.953
Curve CUR3
PI STA.445+16.11
N: 641980.030
E: 903170.298
Δ: 04°46'37" RT.
D: 00°30'00"
T: 477.97'
L: 955.39'
R: 11459.16'
PC STA.440+38.14
N: 642062.814
E: 903299.550
PT STA.449+93.53
N: 641858.332
E: 904232.517
SHEET 19
0 200 400 800 1200
Scale: 1" = 400'
THIS MAP IS NOT A SURVEY
KEY MAP
S.R. 862 (I-595) FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES
PARCEL MAP
FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING
APPROVED BY
DISTRICT RIGHT OF WAY SURVEYOR
DATE
REVISION
BY
DATE
PRELIM C. MILLER 06-20-08
FINAL C. MILLER
CHECKED M. SOWERS 06-24-08
FED. PROJ. N/A
SECTION 86095-2420
STATE ROAD NO. 862
BROWARD COUNTY
MAPS PREPARED BY:
TBE GROUP, INC.
DATA SOURCES:
SEE SHEET 1
SCALE: 1" = 400'
ITEM/SEGMENT NO. 421858-2
SHEET 4 OF 29
P:\MS-RWMAPPING\RW421858\RWKEY1854.dgn


SHEET 21
@ SURVEY S.R. 862 (I-595)
CURVE DATA
Curve CUR4
PI STA.561+06.60
N: 639028.789
E: 914979.317
Δ: 15°26'05" RT.
D: 00°30'00"
T: 1352.88'
L: 3086.95'
R: 11459.16'
PC STA.545+53.73
N: 639424.173
E: 913677.641
PT STA.576+40.67
N: 638248.003
E: 916321.647
Curve CUR5
PI STA.602+08.50
N: 636956.898
E: 918541.206
Δ: 31°16'33" LT.
D: 01°00'00"
T: 1603.82'
L: 3127.58'
R: 5729.58'
PC STA.586+04.69
N: 637763.297
E: 917154.943
PT STA.617+32.27
N: 636987.419
E: 920144.881
@ SURVEY S.R. 91
(FLORIDA'S TURNPIKE)
CURVE DATA
Curve TPK1
PI STA.336+67.36
N: 639333.360
E: 913367.338
Δ: 05°34'10" LT.
D: 00°15'00"
T: 1114.77'
L: 2227.78'
R: 22918.32'
PC STA.325+52.60
N: 638218.478
E: 913411.163
PT STA.347+80.38
N: 640452.672
E: 913215.019
@ SURVEY S.R. 84
(MARINA MILE)
CURVE DATA
Curve SR84
PI STA.140+98.32
N: 637295.123
E: 922426.701
Δ: 06°58'26" LT.
D: 09°30'00"
T: 699.92'
L: 1398.11'
R: 11459.20'
PC STA.133+98.40
N: 637278.899
E: 921726.805
PT STA.147+96.51
N: 637376.482
E: 923120.637
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES
THIS MAP IS NOT A SURVEY
KEY MAP
S.R. 862 (I-595) FROM SW 133 AVE. TO EAST OF FLORIDA TURNPIKE
PARCEL MAP
FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING
APPROVED BY
DATE
DISTRICT RIGHT OF WAY SURVEYOR
REVISION
BY
DATE
PRELIM C MILLER 06-20-08
FINAL C MILLER
CHECKED W SOMERS 06-24-08
FED. PROJ. N/A
SECTION 86095-2420
STATE ROAD NO. 862
BROWARD COUNTY
MAPS PREPARED BY: THE GROUP, INC.
DATE REVISED:
SEE SHEET 1
SCALE: 1" = 400'
ITEM/SEGMENT NO. 421854-2
SHEET 5 OF 29
I:\MS.R\EAPPING\421854\2\SHEET\MAP05.dgn



LINE DATA

LINE	BEARING	DISTANCE
L100A	S 75°25'56" E	56.07'
L100B	S 14°34'04" W	4.26'
L100C	N 75°26'25" W	50.92'
L100D	N 76°07'40" W	274.15'
L100E	N 70°35'32" W	24.95'
L100F	N 73°33'03" E	5.49'
L101A	S 00°08'45" E	4.38'
L101B	N 75°26'25" W	161.17'
L102A	S 75°25'56" E	16.02'
L102B	S 76°33'14" E	6.74'
L102C	N 75°26'25" W	20.16'

THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

APPROVED BY: _____ DATE: _____
DISTRICT RIGHT OF WAY SURVEYOR

REVISION	BY	DATE	REVISION	BY	DATE

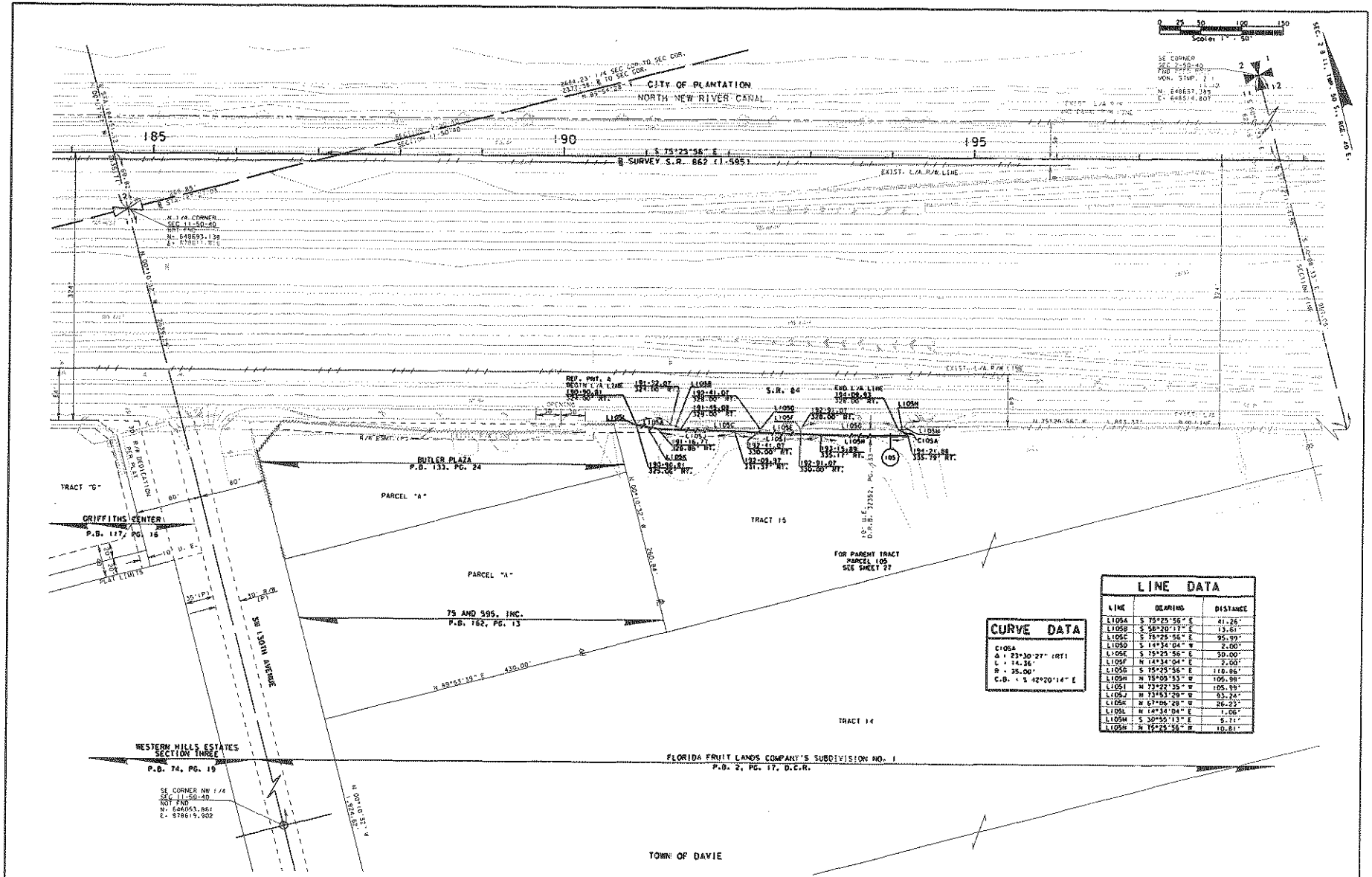
	BY	DATE
PRELIM	C MILLER PE	10-08
FINAL	C MILLER	
CHECKED	W SOMORS	06-27-08

FED. PROJ. N/A | SECTION 86095-2420
STATE ROAD NO. 862 | BROWARD COUNTY

MAPS PREPARED BY: THE GROUP, INC.
DATA SOURCE: SEE SHEET 1
SCALE: 1" = 50'

(YEAR/SEGMENT NO.) 42:8542-2 | SHEET 6 OF 28

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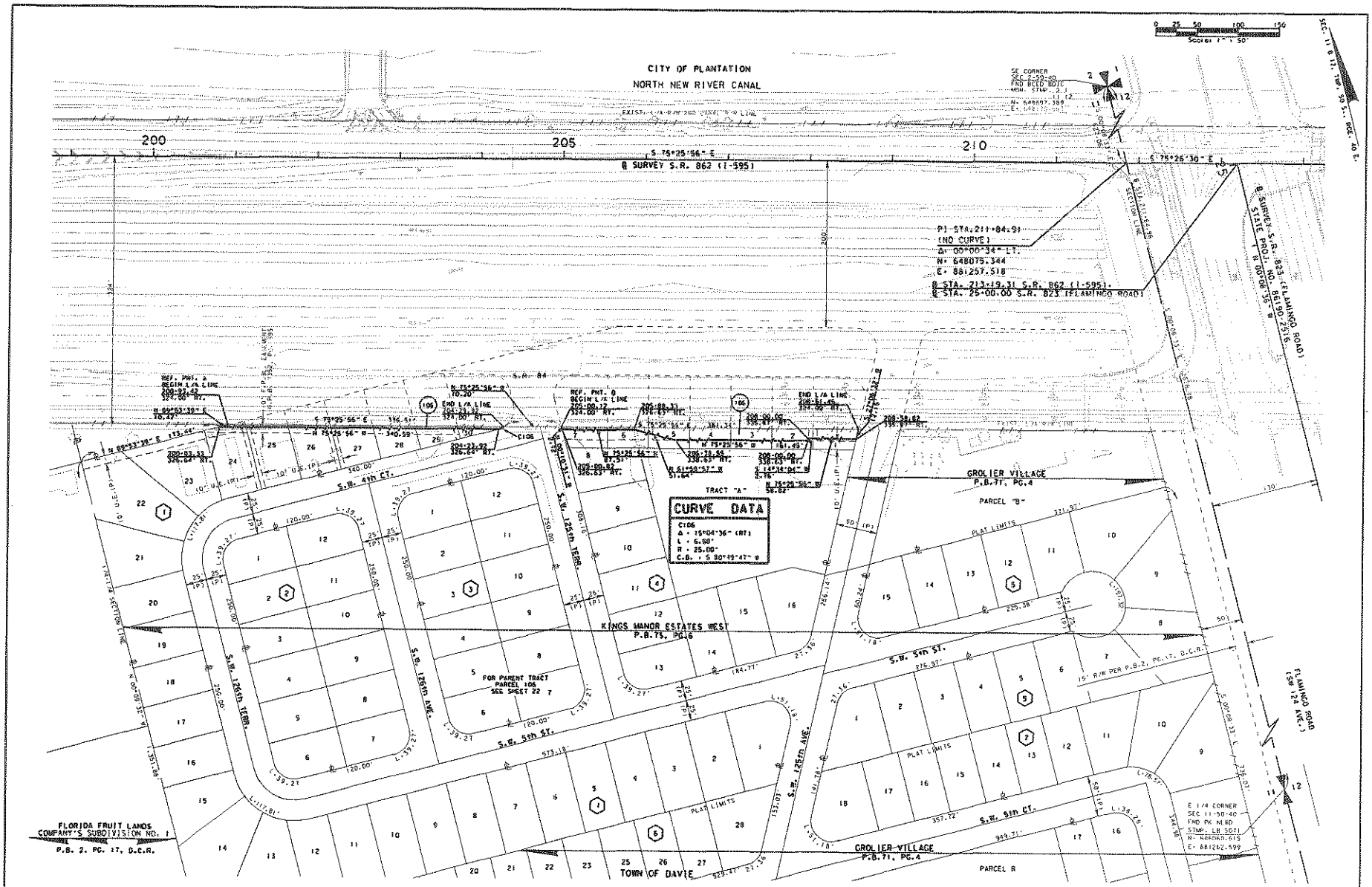
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

S.R. 862 (I-595) FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY ____ DATE ____ DISTANCE RIGHT OF WAY SURVEYOR	REVISION / BY / DATE
PRELIM C MILLER 06-20-08	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: THE GROUP, INC.
FINAL C MILLER	STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 421854-2
CHECKED M SOMERS 06-24-08			SHEET 7 OF 29

DATA SOURCE: SEE SHEET 1
SCALE: 1" = 50'

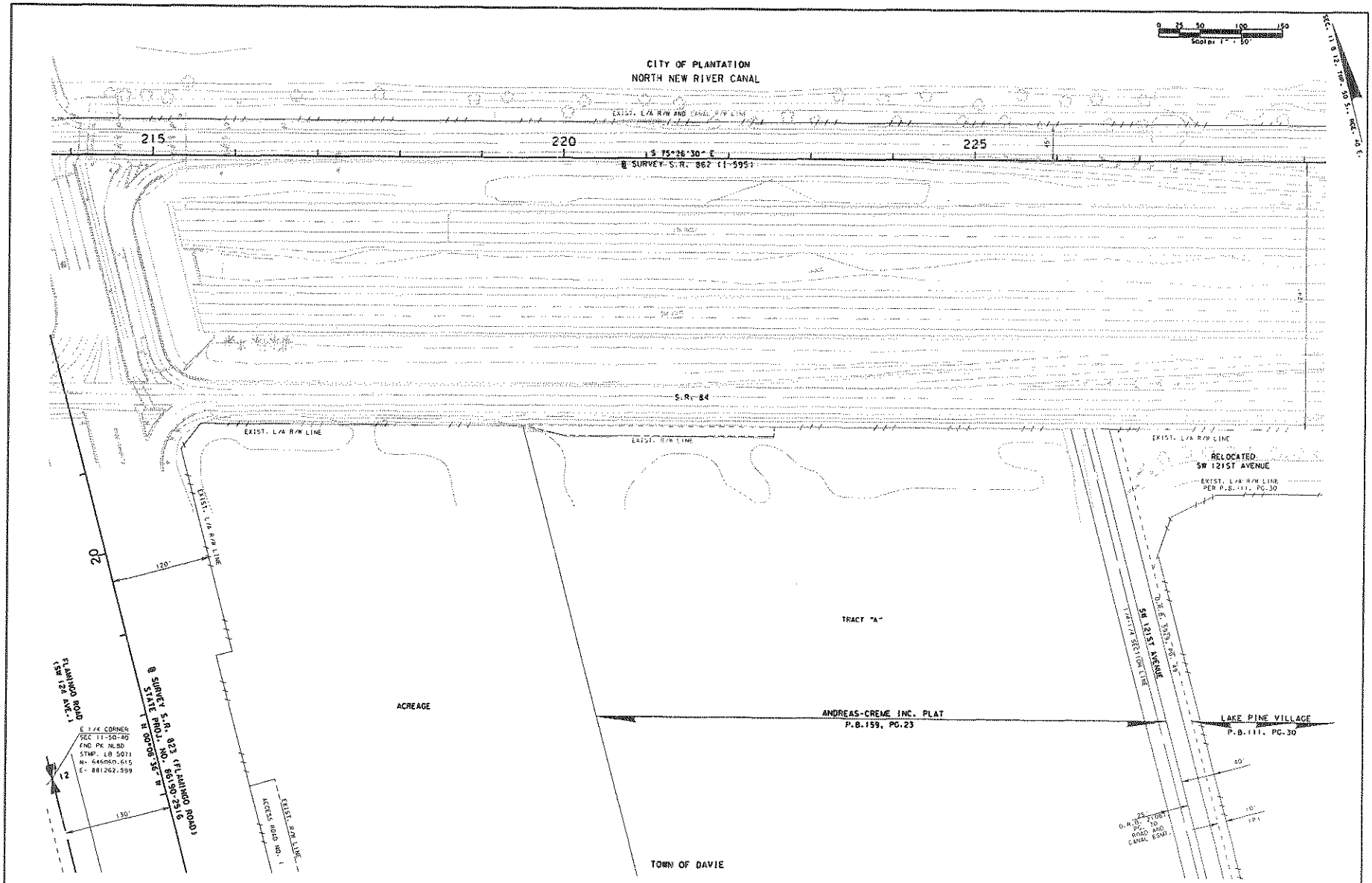
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SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY: DISTRICT RIGHT OF WAY SURVEYOR	DATE	REVISION	BY	DATE	REVISION	BY	DATE	PRELIM C MILLER 06-20-08 FINAL C MILLER CHECKED W SOMERS 06-22-08	FED. PROJ. N/A STATE ROAD NO. 862	SECTION 86095-2420 BROWARD COUNTY	MAPS PREPARED BY: TRC GROUP, INC.	DATA SOURCE: SEE SHEET 1 SCALE: 1" = 50'	ITEM/SEGMENT NO. 42+854-2	SHEET 8 OF 29

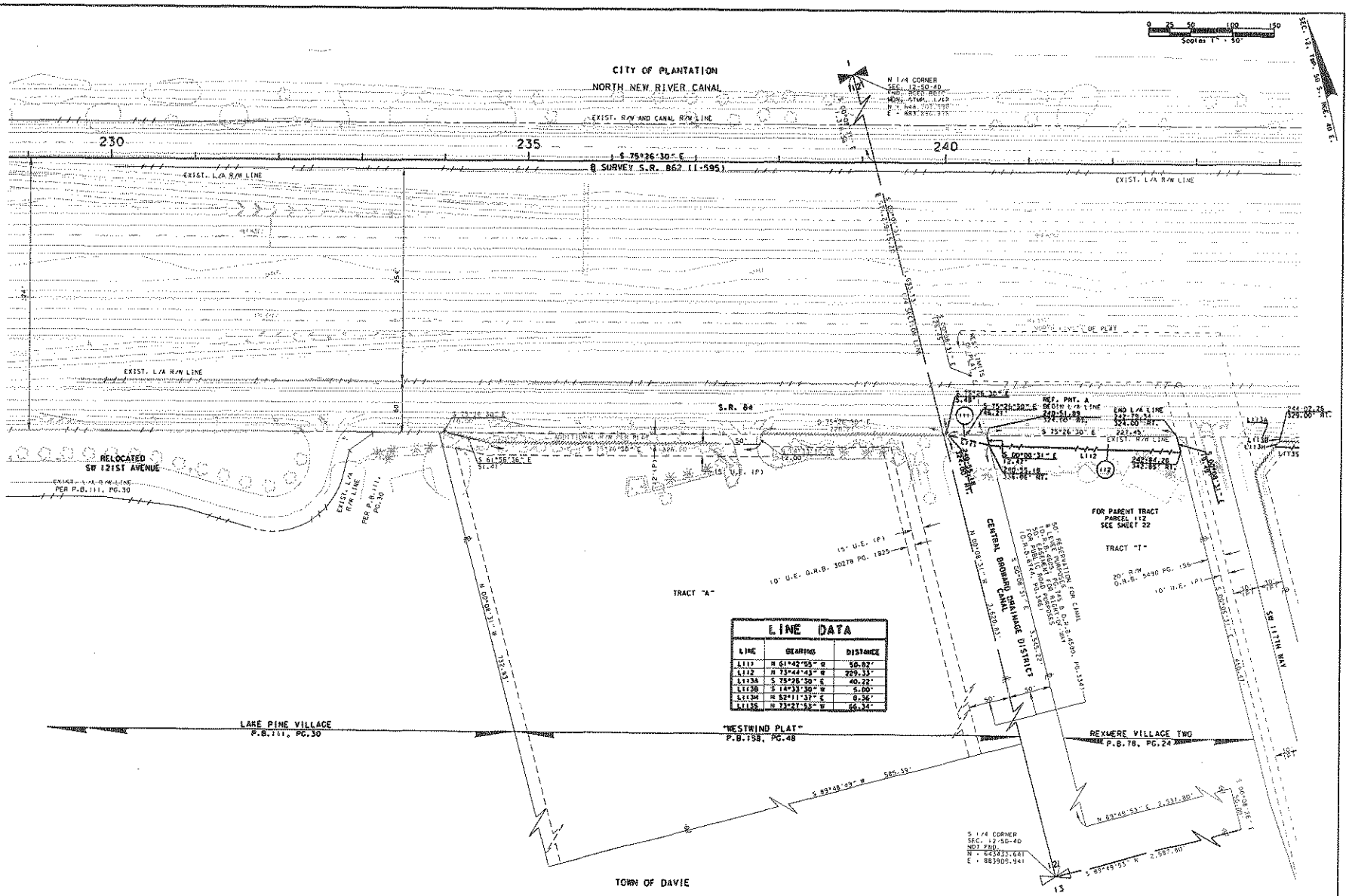
T:\DGN\MAPPING\8542\8542SEDET108.dgn



SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY	DATE	REVISION	BY	DATE	DESCRIPTION	BY	DATE		BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBC GROUP, INC.	DATA SOURCE: SEE SHEET 1
		DISTRICT RIGHT OF WAY SURVEYOR								PRELIM	C MILLER	06-20-08				
										FINAL	C MILLER		STATE ROAD NO. 862	BROWARD COUNTY		SCALE: 1" = 50'
										CHECKED	W SOMERS	06-24-08			ITEM/SEGMENT NO. 421854-2	SHEET 9 OF 29

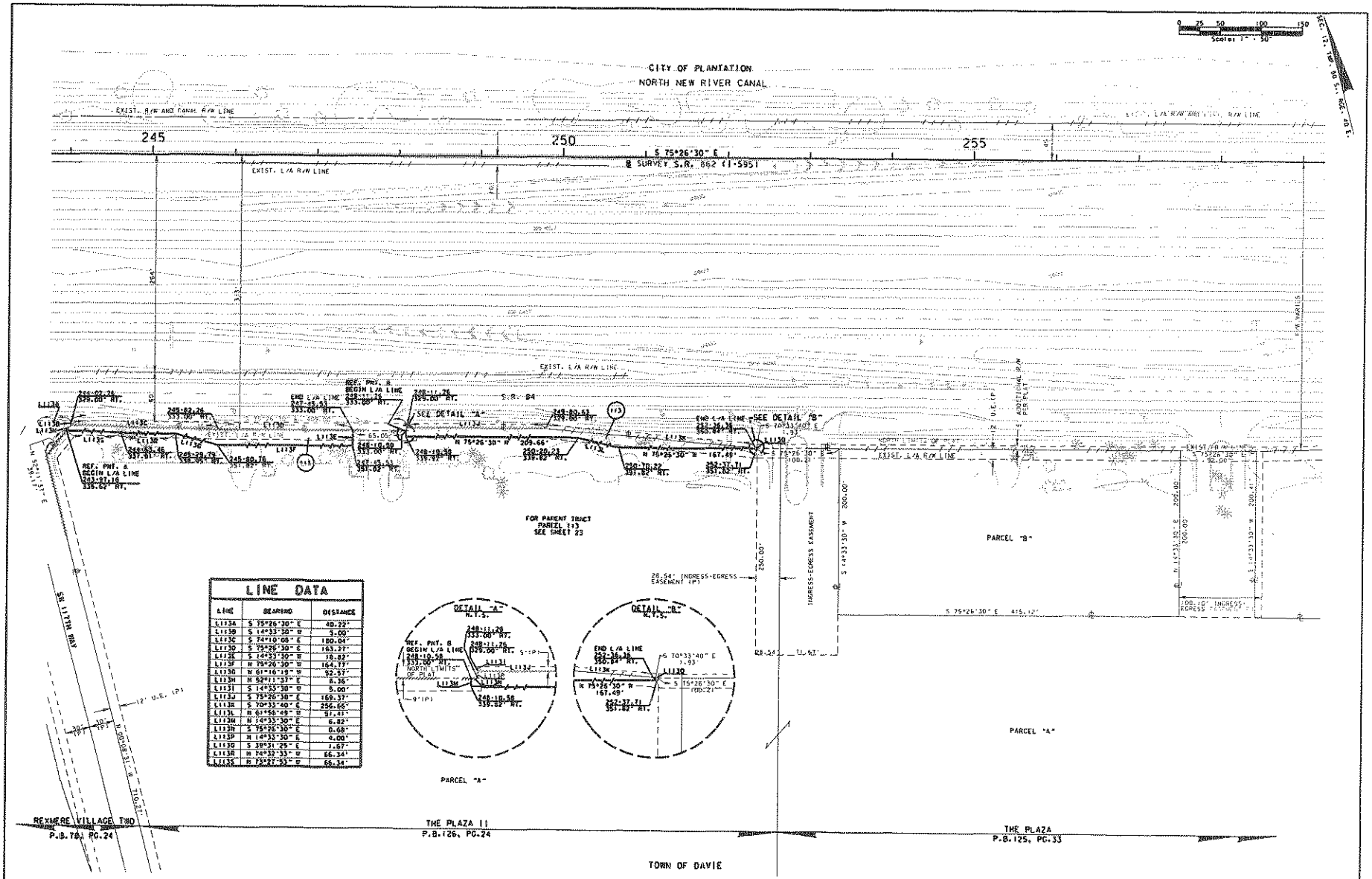
T:\MS\RWMAPPING\RW421854\2\MSDETL09.dgn



LINE DATA		
LINE	BEARINGS	DISTANCE
L113	N 61°42'55" W	50.82'
L112	N 73°44'43" W	229.33'
L1134	S 75°26'30" E	40.22'
L1138	S 14°33'30" W	5.00'
L1134	N 52°11'37" E	8.36'
L1135	N 73°21'53" W	66.34'

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

| | | |



LINE DATA

LINE	BEARING	DISTANCE
L1130	S 75°26'30" E	40.22'
L1131	S 14°33'30" W	5.00'
L1132	S 74°10'08" E	180.04'
L1133	S 75°26'30" E	165.27'
L1134	S 14°33'30" W	10.83'
L1135	N 75°26'30" W	164.17'
L1136	N 61°16'19" W	92.57'
L1137	N 82°11'37" E	8.36'
L1138	S 14°33'30" W	5.00'
L1139	S 75°26'30" E	160.37'
L1140	S 70°33'40" E	256.65'
L1141	N 61°56'48" W	97.41'
L1142	N 14°33'30" E	6.82'
L1143	S 75°26'30" E	0.68'
L1144	N 14°33'30" E	4.00'
L1145	S 39°21'25" E	1.67'
L1146	N 74°32'53" W	66.34'
L1147	N 73°27'53" W	66.34'

THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

APPROVED BY: DATE
DISTRICT RIGHT OF WAY SURVEYOR

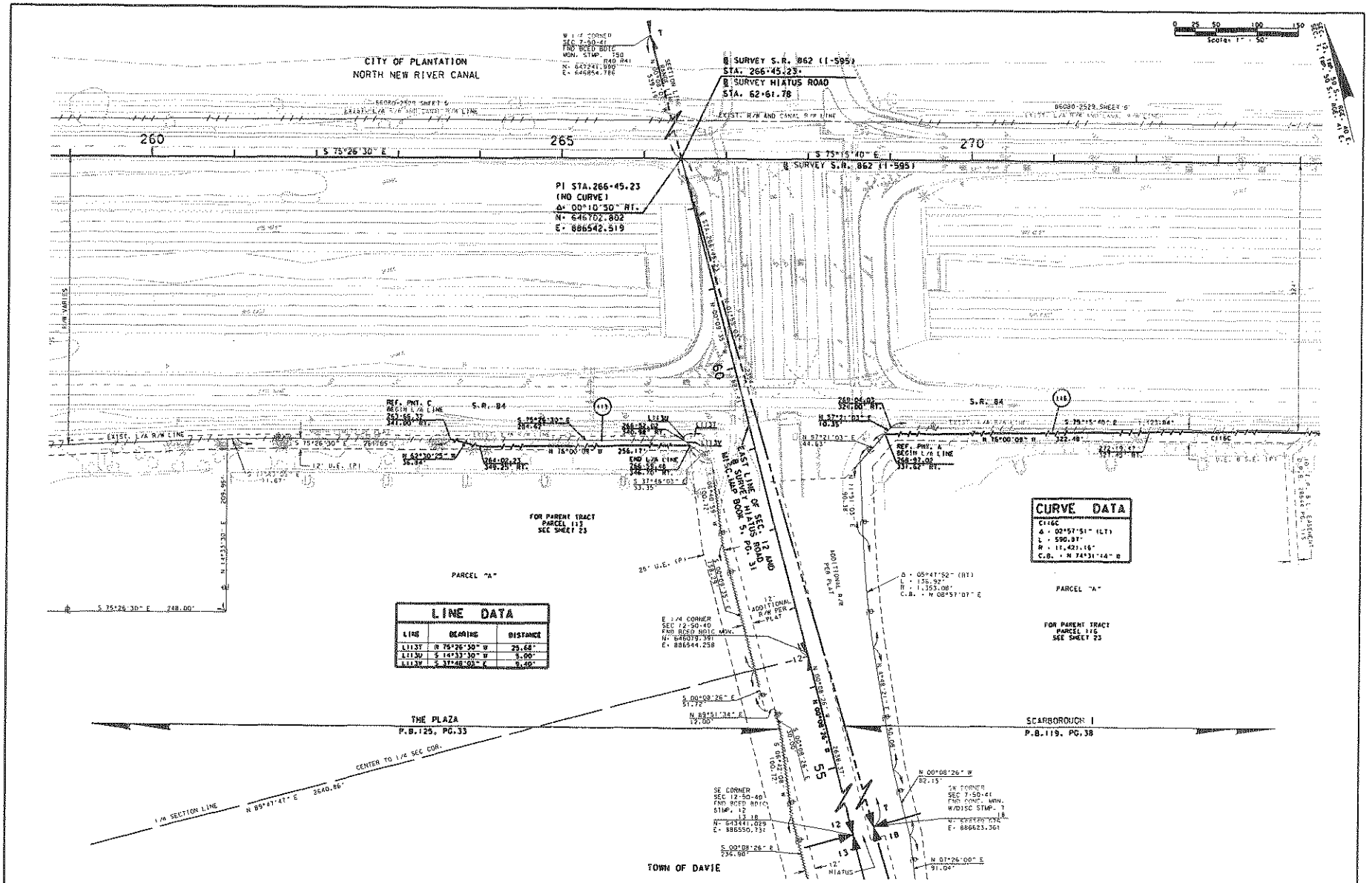
REVISION	BY	DATE	REVISION	BY	DATE

	BY	DATE
PRELIM	C MILLER	06-30-06
FINAL	C MILLER	
CHECKED BY	M SOMERS	06-30-06

FED. PROJ. NO.
SECTION 86095-2420
STATE ROAD NO. 862
BROWARD COUNTY
ITEM/SEGMENT NO. 421854-2
SHEET 11 OF 29

MAPS PREPARED BY:
THE GROUP, INC.
SEE SHEET 1
SCALE: 1" = 50'

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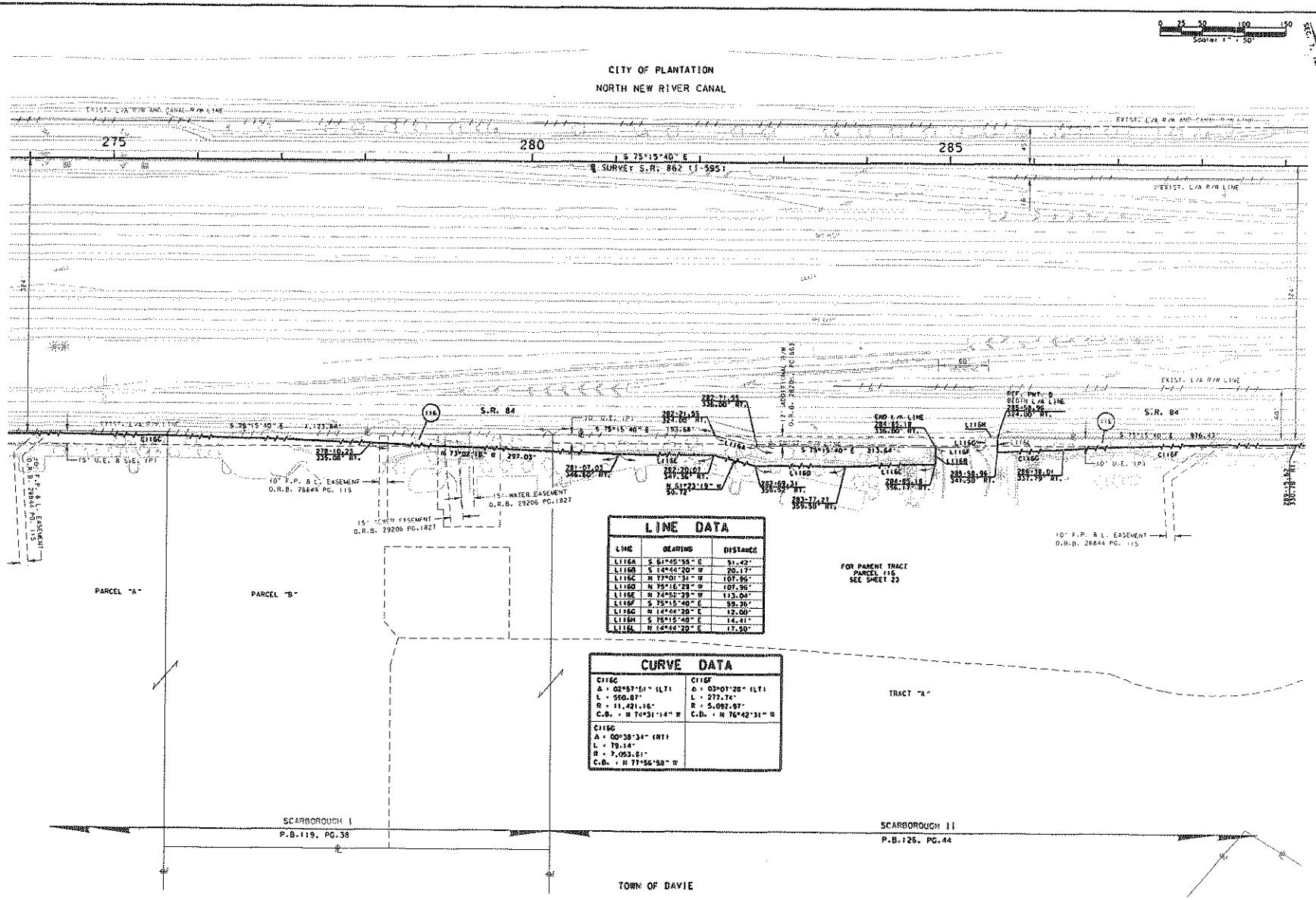
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY: DISTRICT RIGHT OF WAY SURVEYOR — DATE	REVISION	BY	DATE	REVISION	BY	DATE	PRELIM C MILLER 06-29-08 FINAL C MILLER CHECKED M SOMERS 06-29-08	FED. PROJ. N/A STATE ROAD NO. 862	SECTION 86095-2420 BROWARD COUNTY	MAPS PREPARED BY: TSC GROUP, INC.	DATA SOURCES: SEE SHEET 3 SCALE: 1" = 50'
												ITEM/SEGMENT NO. 421850-2	SHEET 12 OF 29

I:\MAPS\MAPPING\86095218542_MODEL\L12.dgn



LINE DATA

LINE	BEARING	DISTANCE
L116A	S 61°40'55" E	31.42'
L116B	S 14°46'20" W	20.17'
L116C	N 77°01'34" W	107.96'
L116D	N 75°16'29" W	107.96'
L116E	N 74°52'29" W	113.04'
L116F	S 75°15'40" E	59.36'
L116G	N 14°06'20" E	12.00'
L116H	S 75°15'40" E	14.01'
L116I	N 14°46'20" E	17.50'

CURVE DATA

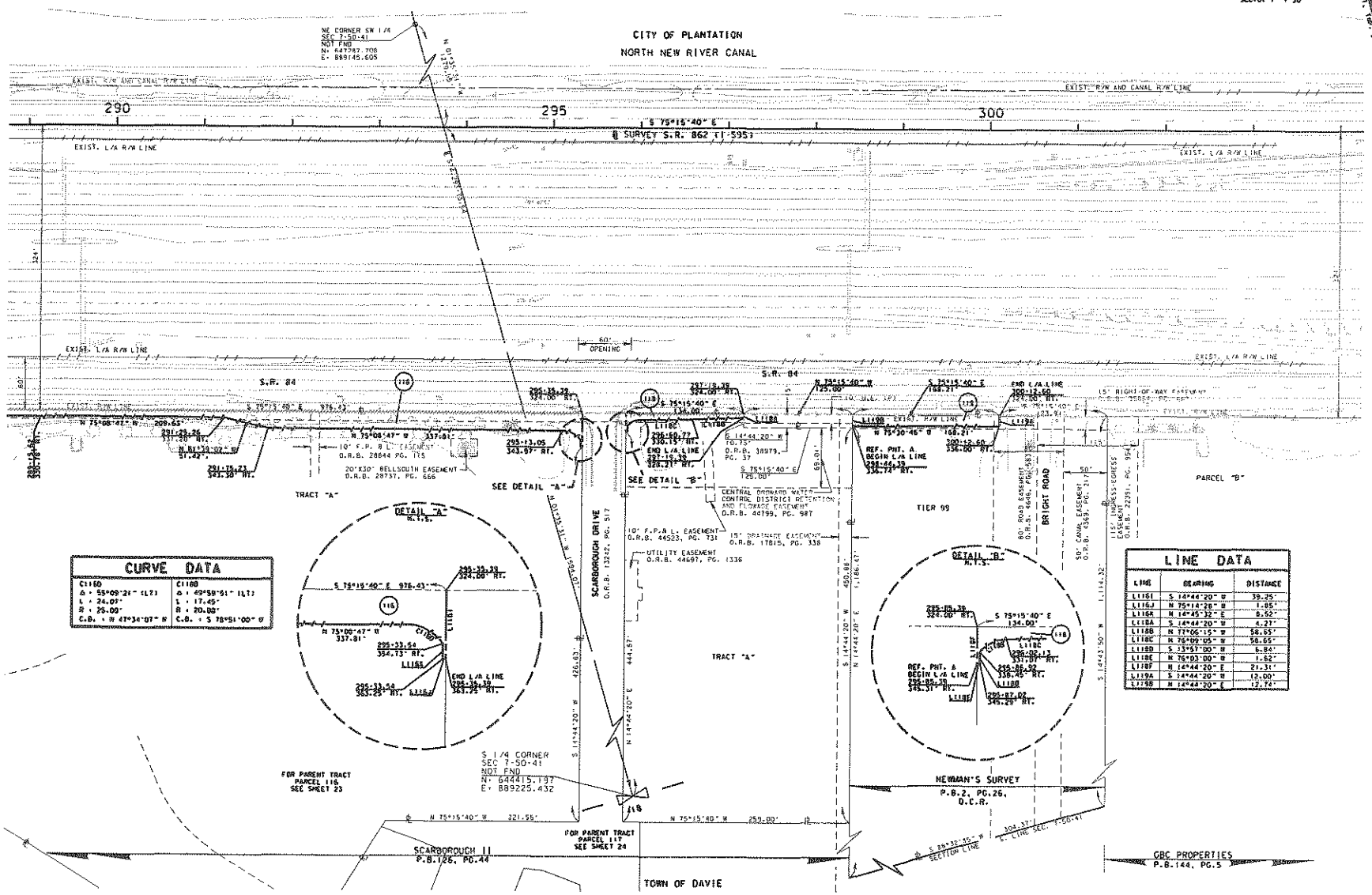
C116C Δ = 02°57'51" (LT) L = 550.87' R = 11,421.16' C.B. = N 76°31'14" W	C116E Δ = 03°07'28" (LT) L = 277.74' R = 5,092.97' C.B. = N 76°42'31" W
C116G Δ = 00°38'34" (RT) L = 79.14' R = 7,053.81' C.B. = N 77°56'58" W	

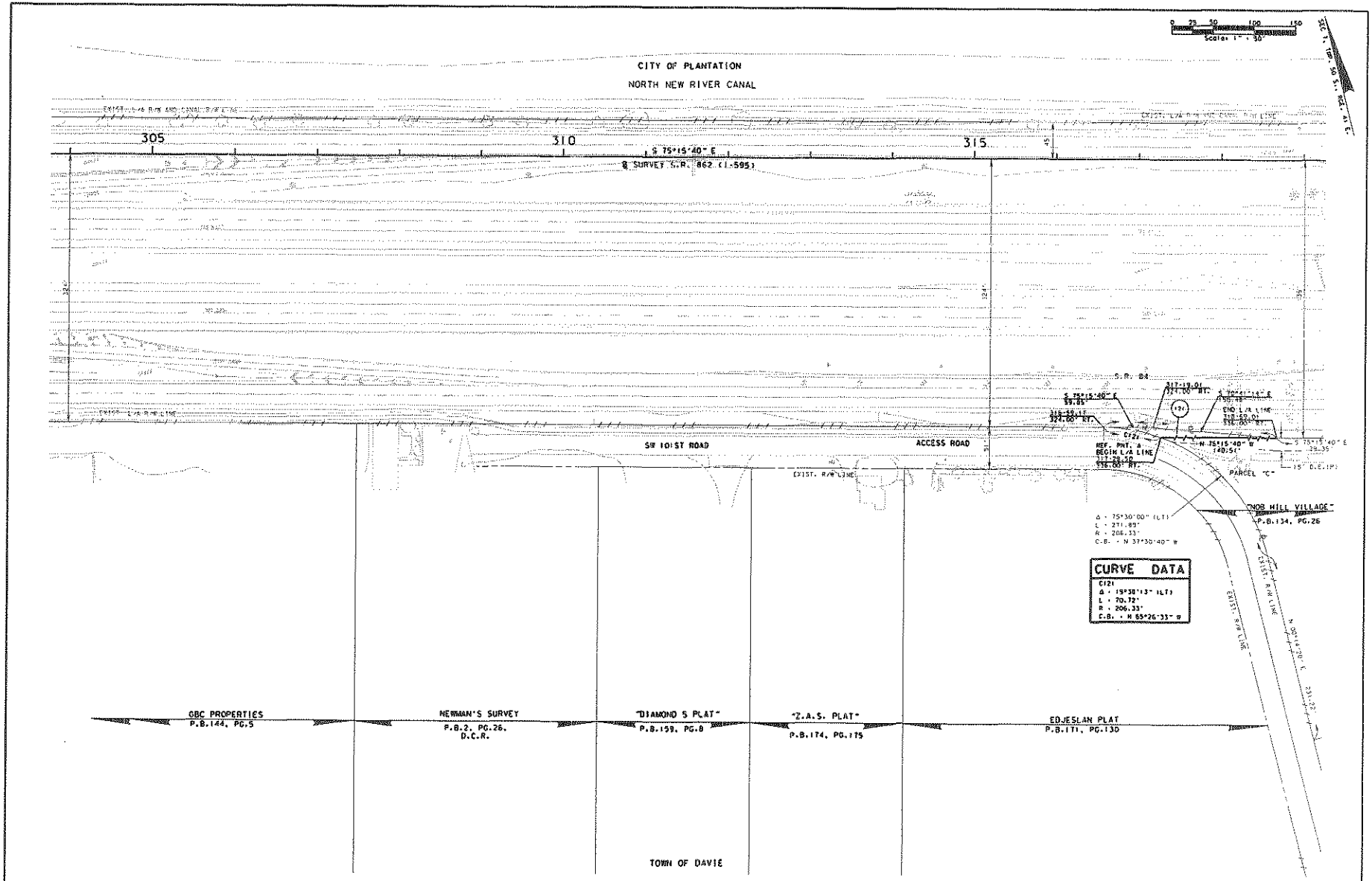
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING																		


CITY OF PLANTATION
NORTH NEW RIVER CANAL
NE CORNER SW 1/4
SEC 7-50-41
NOT FND
N: 647087.708
E: 889145.605
EXIST. R/W AND CANAL R/W LINE
290
295
300
S 75°15'40" E
@ SURVEY S.R. 862 (I-595)
EXIST. L/A R/W LINE
60' OPENING
S.R. 84
TRACT "A"
SEE DETAIL "A"
SEE DETAIL "B"
SCARBOROUGH DRIVE
O.R.B. 13242, PG. 517
10' F.P.& L. EASEMENT
O.R.B. 44523, PG. 731
15' DRAINAGE EASEMENT
O.R.B. 17815, PG. 338
UTILITY EASEMENT
O.R.B. 44697, PG. 1336
CENTRAL BROWARD WATER CONTROL DISTRICT RETENTION AND FLOWAGE EASEMENT
O.R.B. 44799, PG. 987
10' F.P.& L. EASEMENT
O.R.B. 28844 PG. 1115
20'X30' BELLSOUTH EASEMENT
O.R.B. 28737, PG. 666
TIER 99
BRIGHT ROAD
80' ROAD EASEMENT
O.R.B. 4646, PG. 583
50' CANAL EASEMENT
O.R.B. 4369, PG. 217
15' INGRESS-EGRESS EASEMENT
O.R.B. 22391, PG. 994
PARCEL "B"
REF. PNT. A
BEGIN L/A LINE
END L/A LINE
DETAIL "A"
N.T.S.
DETAIL "B"
N.T.S.
S 1/4 CORNER
SEC 7-50-41
NOT FND
N: 644415.197
E: 889225.432
FOR PARENT TRACT
PARCEL 116
SEE SHEET 23
FOR PARENT TRACT
PARCEL 117
SEE SHEET 24
NEWMAN'S SURVEY
P.B.2, PG.26,
D.C.R.
SCARBOROUGH II
P.B.126, PG.44
TOWN OF DAVIE
GBC PROPERTIES
P.B.144, PG.5
SECTION LINE
S.LINE SEC. 7-50-41
CURVE DATA
C116D
Δ = 55°09'26" (LT)
L = 24.07'
R = 25.00'
C.B. = N 47°34'07" W
C116B
Δ = 49°59'51" (LT)
L = 17.45'
R = 20.00'
C.B. = S 78°51'00" W
LINE DATA
LINE | BEARING | DISTANCE
L116I | S 14°44'20" W | 39.25'
L116J | N 75°14'28" W | 1.85'
L116K | N 14°45'32" E | 8.52'
L116A | S 14°44'20" W | 4.27'
L116B | N 77°05'15" W | 58.55'
L116C | N 75°09'05" W | 58.65'
L116D | S 13°57'00" W | 6.84'
L116E | N 76°03'00" W | 1.62'
L116F | N 14°44'20" E | 21.31'
L116A | S 14°44'20" W | 12.00'
L1155 | N 14°44'20" E | 12.74'
THIS MAP IS NOT A SURVEY
S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES
PARCEL MAP
FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING
FED. PROJ. N/A
SECTION 86095-2420
STATE ROAD NO. 862
BROWARD COUNTY
ITEM/SEGMENT NO. 421854-2
SHEET 14 OF 29



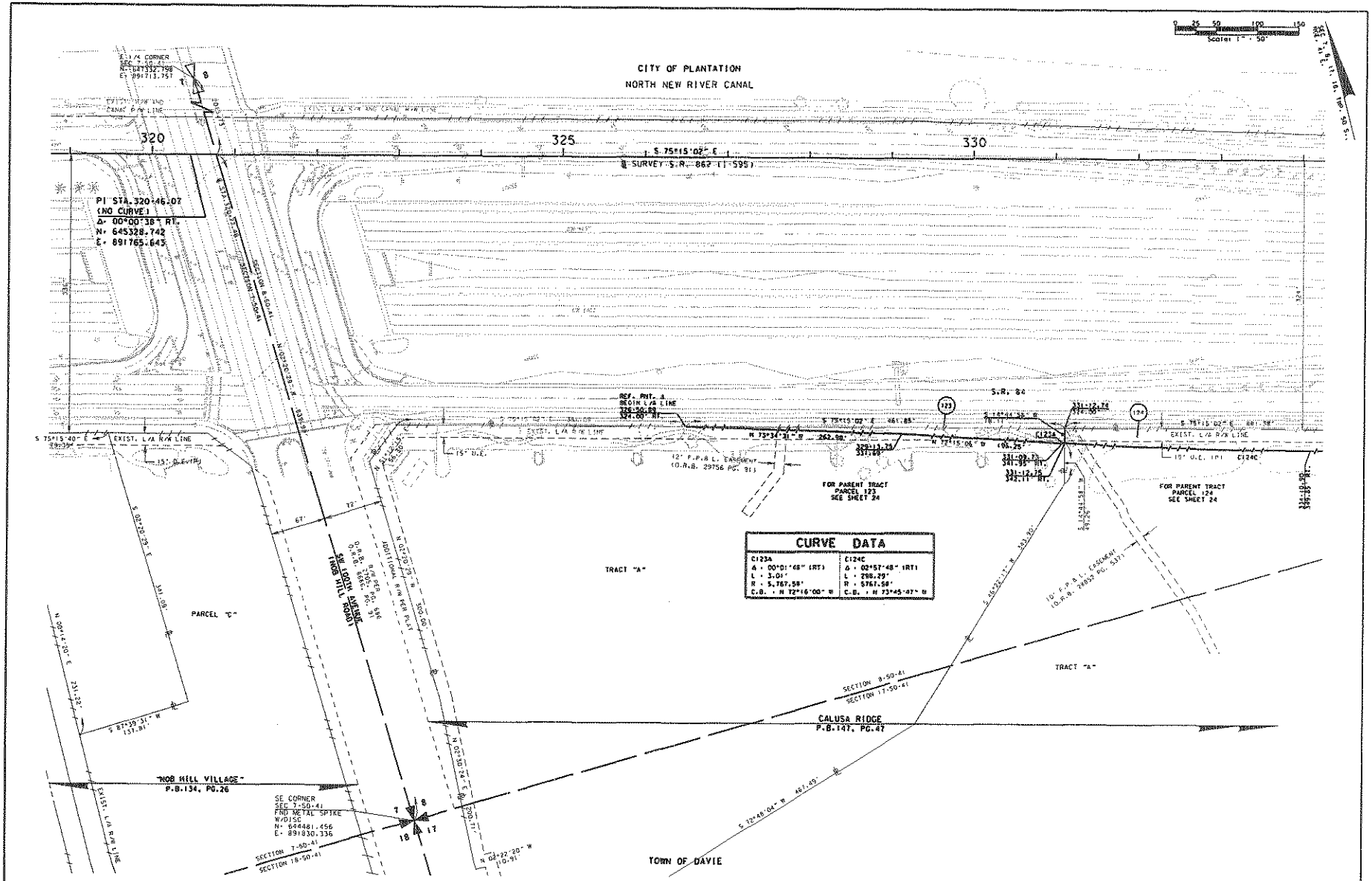
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY DISTRICT RIGHT OF WAY SURVEYOR	DATE	REVISION	BY	DATE	REVISION	BY	DATE	PRELIM C MILLER 06-20-00 FINAL C MILLER CHECKED M SOMERS 06-24-00	BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY TRI GROUP, INC.	DATE PLOTTED SEE SHEET 1 SCALE 1" = 50'
													STATE ROAD NO. 862	BROWARD COUNTY		ITEM/SEGMENT NO. 421854-2 SHEET 15 OF 29

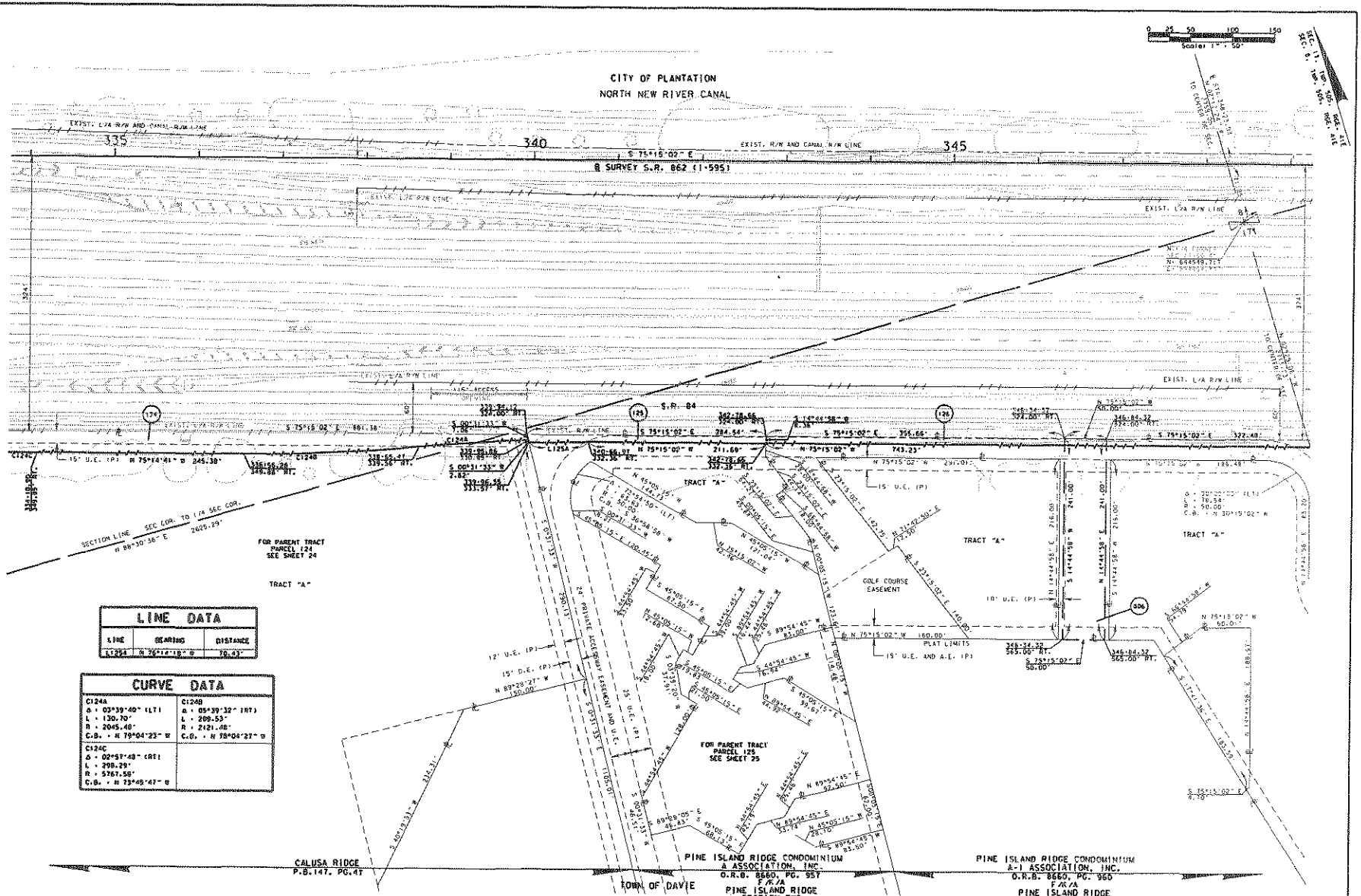
I:\GIS\RIGHTWAY\Arb421854\2\MAP\ETL15.dgn



SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY	DATE				BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	DATA SOURCE: SEE SHEET 1
		DISTRICT RIGHT OF WAY SURVEYOR				PRELIM	C MILLER	06-20-08			SCALE: 1" = 50'
						FINAL	C MILLER				
				REVISION	BY	DATE	CHECKED	M SORRYS	06-24-08	STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 421894-2	SHEET 16 OF 29

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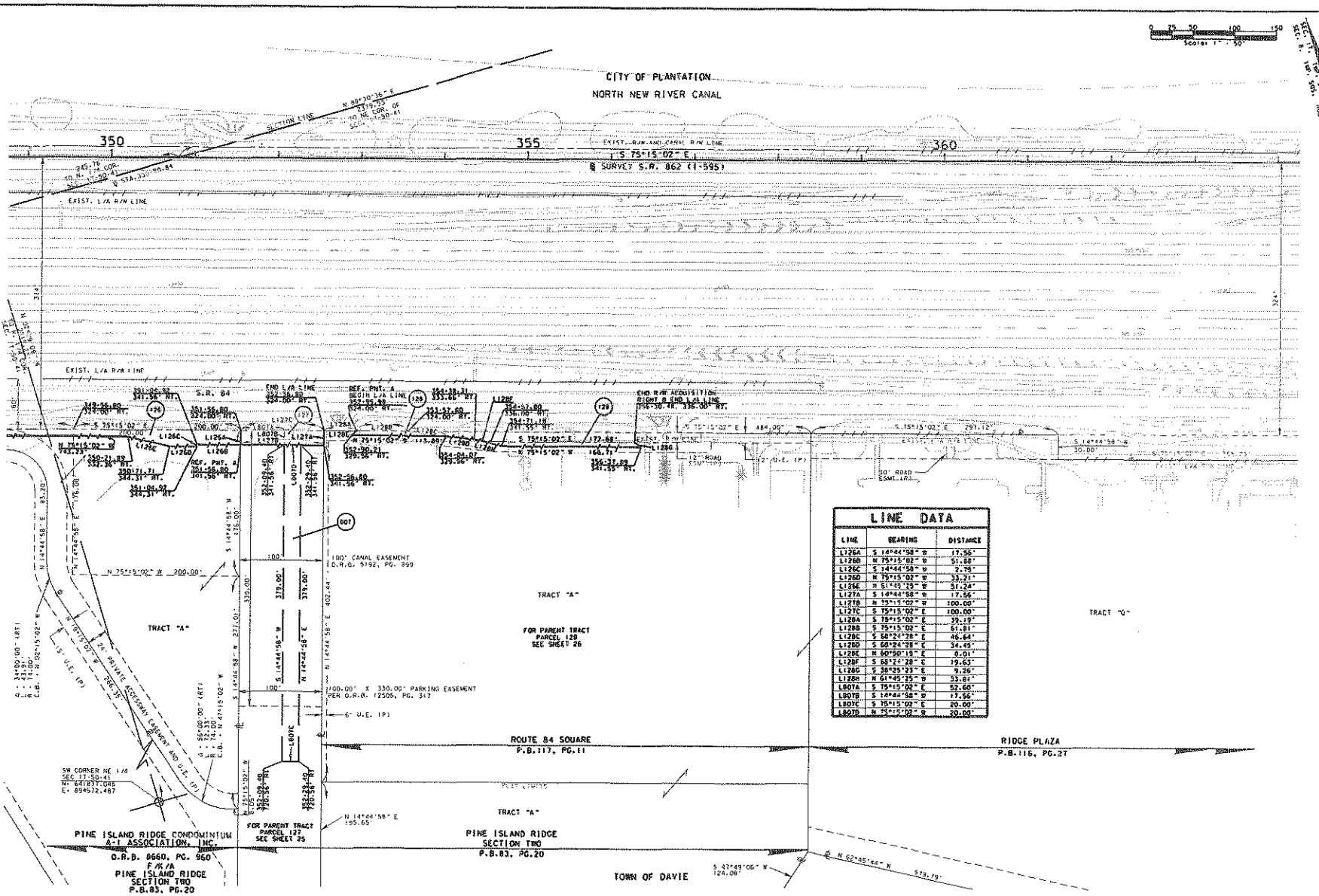
LINE DATA		
LINE	BEARING	DISTANCE
L124A	N 76°18'18" W	78.43'

CURVE DATA	
C124A Δ = 02°39'40" (LT) L = 130.70' R = 2045.40' C.B. = N 79°04'23" W	C124B Δ = 05°39'32" (RT) L = 208.53' R = 2121.48' C.B. = N 75°04'27" W
C124C Δ = 02°57'48" (RT) L = 298.29' R = 5767.58' C.B. = N 73°48'47" W	

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY / DISTRICT RIGHT OF WAY SURVEYOR — DATE	REVISION / BY / DATE	FED. PROJ. N/A	SECTION 86095-2420	DATA SOURCE: SEE SHEET 1	SCALE: 1" = 50'
		PRELIM: C. MILLER 06-20-08 FINAL: C. MILLER CHECKED: M. SOMERS 06-24-08		STATE ROAD NO. 862	BROWARD COUNTY	MAPS PREPARED BY: TDC GROUP, INC.	ITEM/SEGMENT NO. 421854-2 SHEET 17 OF 29

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LINE DATA

LINE	BEARING	DISTANCE
L126A	S 14°44'58" W	17.56'
L126B	N 75°15'02" W	51.68'
L126C	S 14°44'58" W	2.75'
L126D	N 75°15'02" W	33.21'
L126E	N 61°45'25" W	51.24'
L127A	S 14°44'58" W	17.56'
L127B	N 75°15'02" W	100.00'
L127C	S 75°15'02" E	100.00'
L128A	S 75°15'02" E	39.19'
L128B	S 75°15'02" E	61.81'
L128C	S 68°24'28" E	46.64'
L128D	S 68°24'28" E	34.49'
L128E	N 60°50'15" E	8.01'
L128F	S 68°24'28" E	19.63'
L128G	S 38°25'23" E	9.26'
L128H	N 61°45'25" W	53.81'
L807A	S 75°15'02" E	52.60'
L807B	S 14°44'58" W	17.56'
L807C	S 75°15'02" E	20.00'
L807D	N 75°15'02" W	20.00'

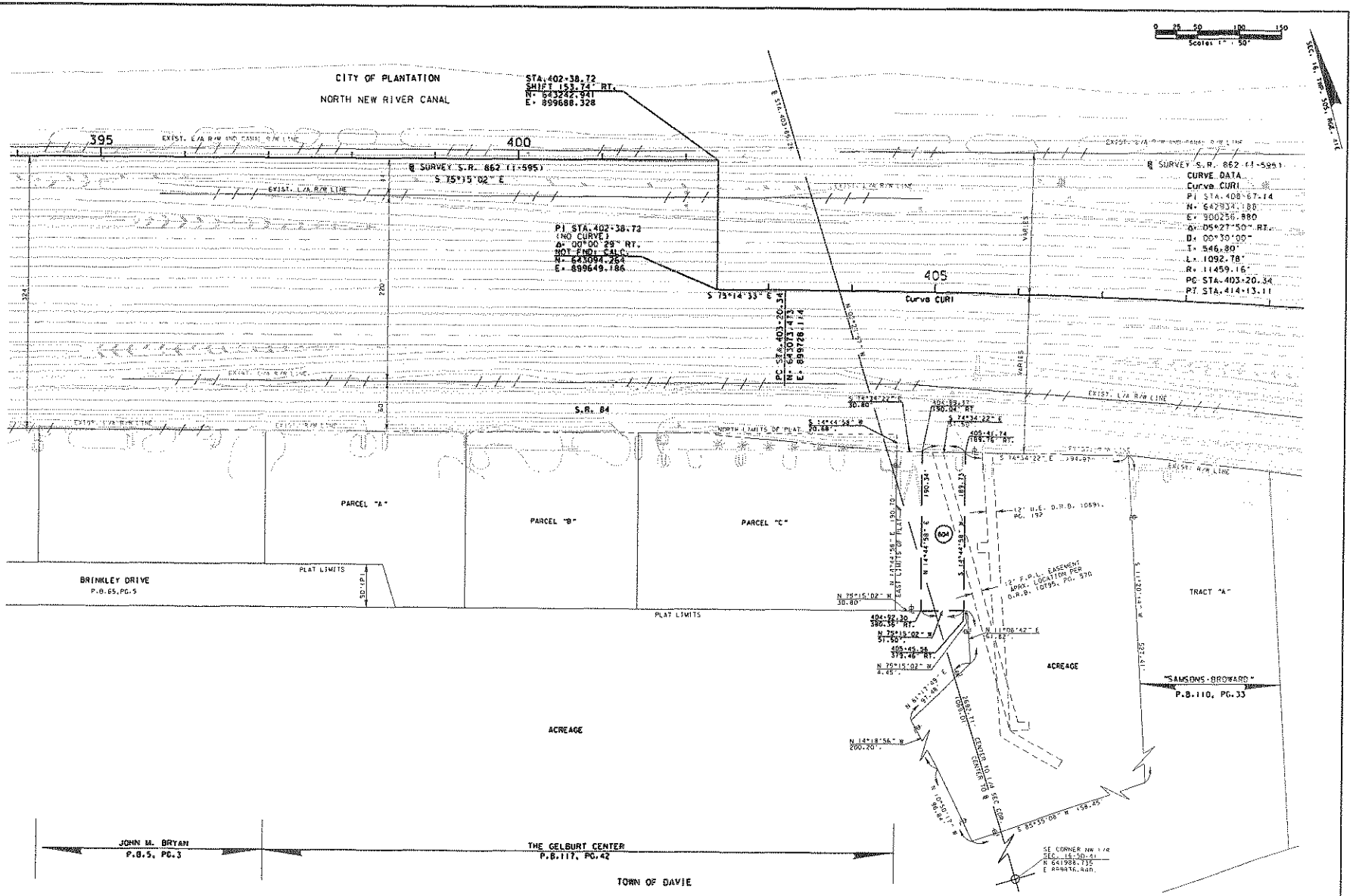
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY	DATE					BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	PATH NUMBER: SEE SHEET 1		
		DISTRICT RIGHT OF WAY SURVEYOR		REVISION	BY	DATE	REVISION	BY	DATE	PRELIM C MILLER 06-20-08			SCALE: 1" = 50'		
										FINAL C MILLER					
										CHECKED M SOMERS 06-21-08	STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 42854-2	SHEET 18 OF 29	

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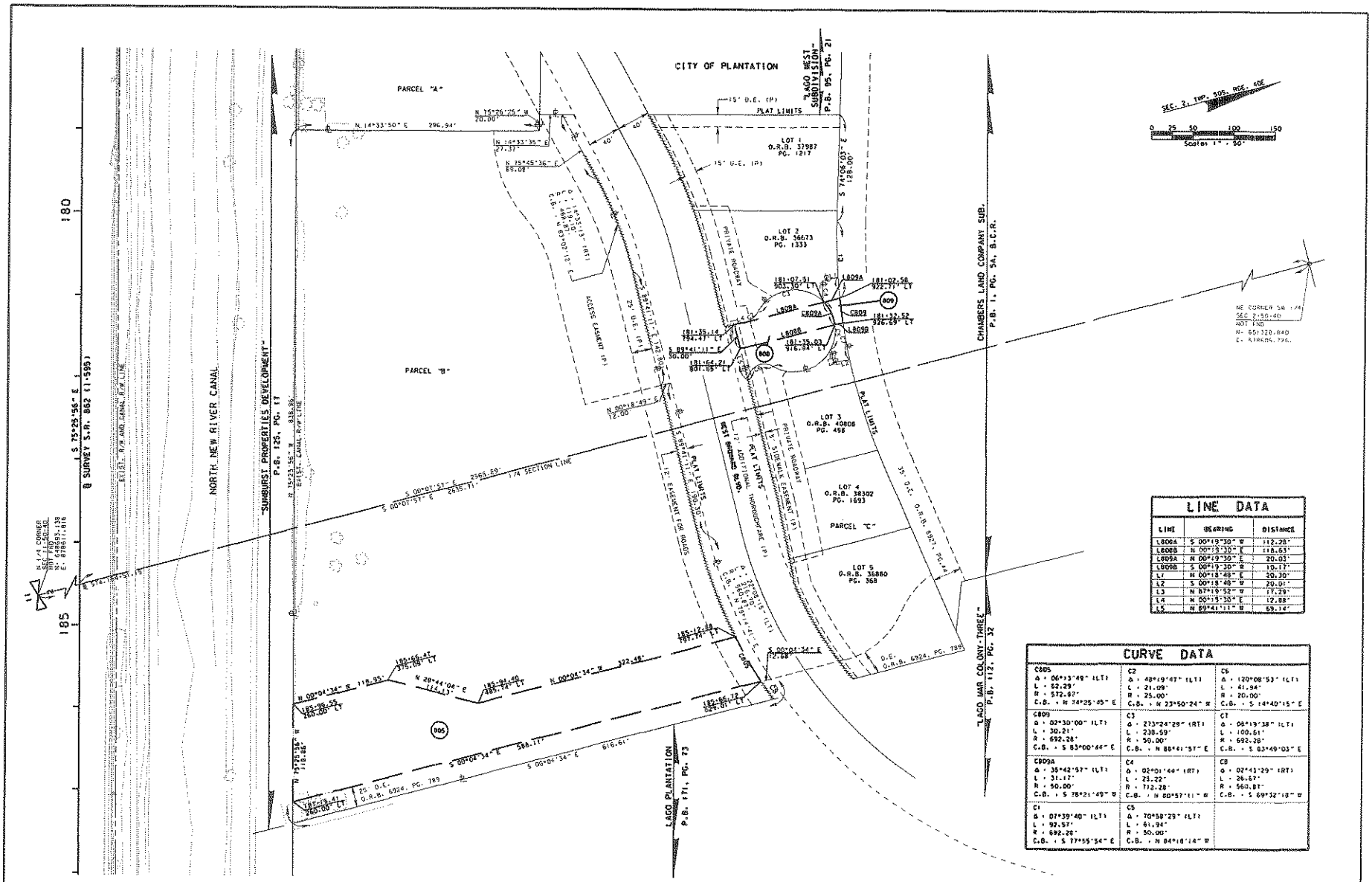


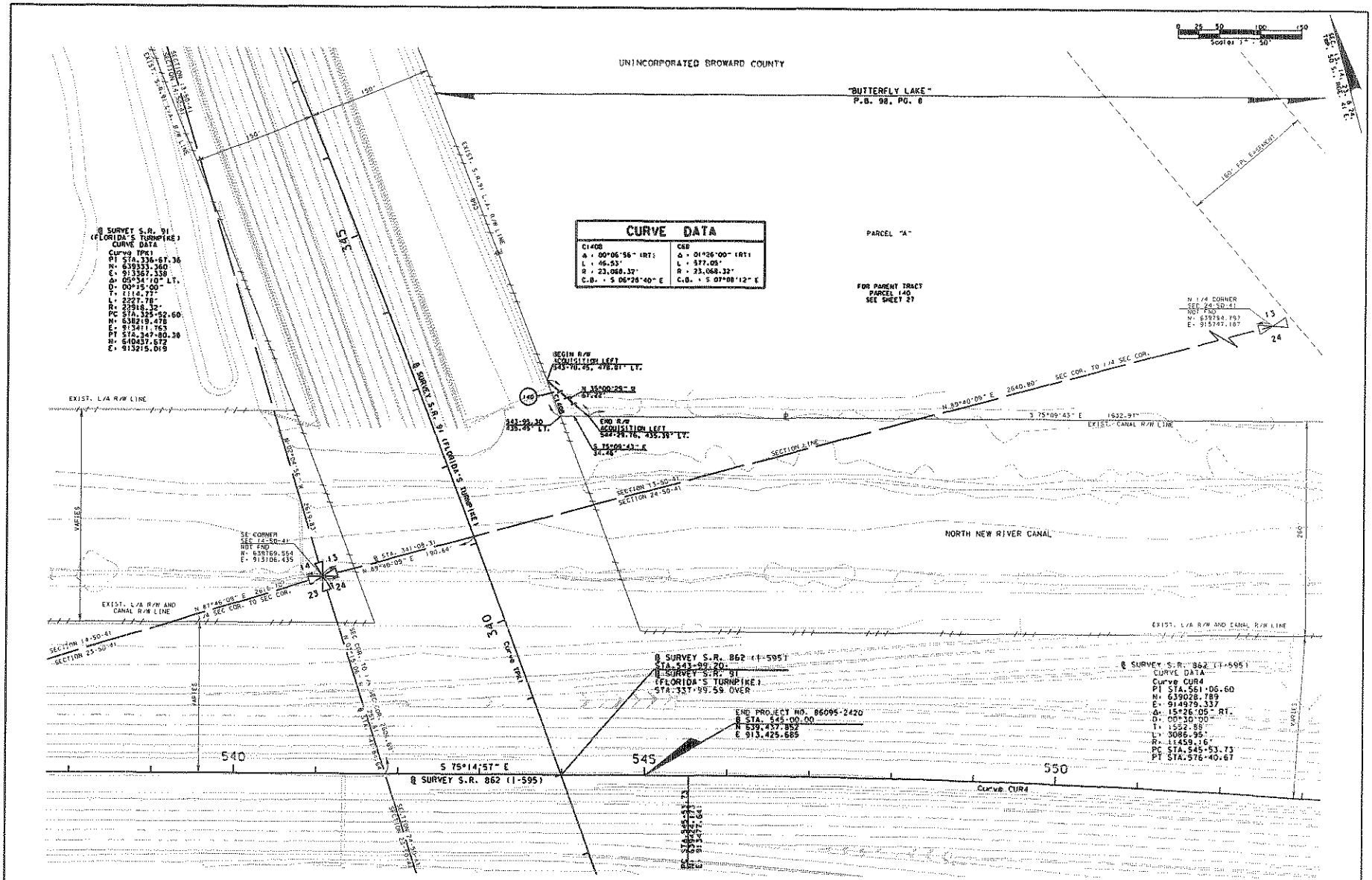
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM SW 133 AVE TO FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

| | | |


CITY OF PLANTATION
PARCEL "A"
PARCEL "B"
PARCEL "C"
"LAGO WEST SUBDIVISION" P.B. 95, PG. 21
PLAT LIMITS
LOT 1 O.R.B. 37987 PG. 1217
LOT 2 O.R.B. 36673 PG. 1333
LOT 3 O.R.B. 40808 PG. 498
LOT 4 O.R.B. 38302 PG. 1693
LOT 5 O.R.B. 36860 PG. 358
PRIVATE ROADWAY
ACCESS EASEMENT (P)
25' U.E. (P)
15' U.E. (P)
12' ADDITIONAL THOROUGHFARE (P)
15' SOUND WALL EASEMENT (P)
12' EASEMENT FOR ROOTS
NORTH NEW RIVER CANAL
"SUNBURST PROPERTIES DEVELOPMENT" P.B. 125, PG. 17
CHAMBERS LAND COMPANY SUB. P.B. 1, PG. 5A, B.C.R.
"LAGO MAR COLONY-THREE" P.B. 112, PG. 32
LAGO PLANTATION P.B. 171, PG. 73
O.R.B. 6924, PG. 789
O.R.B. 6924, PG. 784
O.R.B. 8957, PG. 44
S 75°25'56" E
@ SURVEY S.R. 862 (I-595)
N 75°25'56" W
S 00°07'57" E 2635.71' 1/4 SECTION LINE
S 00°07'57" E 2969.89'
S 00°04'34" E 616.61'
S 00°04'34" E 588.77'
N 00°04'34" W 322.48'
N 00°04'34" W 118.93'
N 14°33'50" E 296.94'
N 75°26'25" W 20.00'
N 14°33'35" E 27.37'
N 75°45'36" E 89.08'
S 74°06'03" E 120.00'
S 89°41'11" E 50.00'
N 00°18'49" E 12.00'
S 00°04'34" E 12.68'
S 89°41'11" W 50.00'
N 00°18'49" E 12.00'
S 00°18'49" W 12.00'
S 89°41'11" E 50.00'
S 00°18'49" W 12.00'
N 89°41'11" W 50.00'
N 00°18'49" E



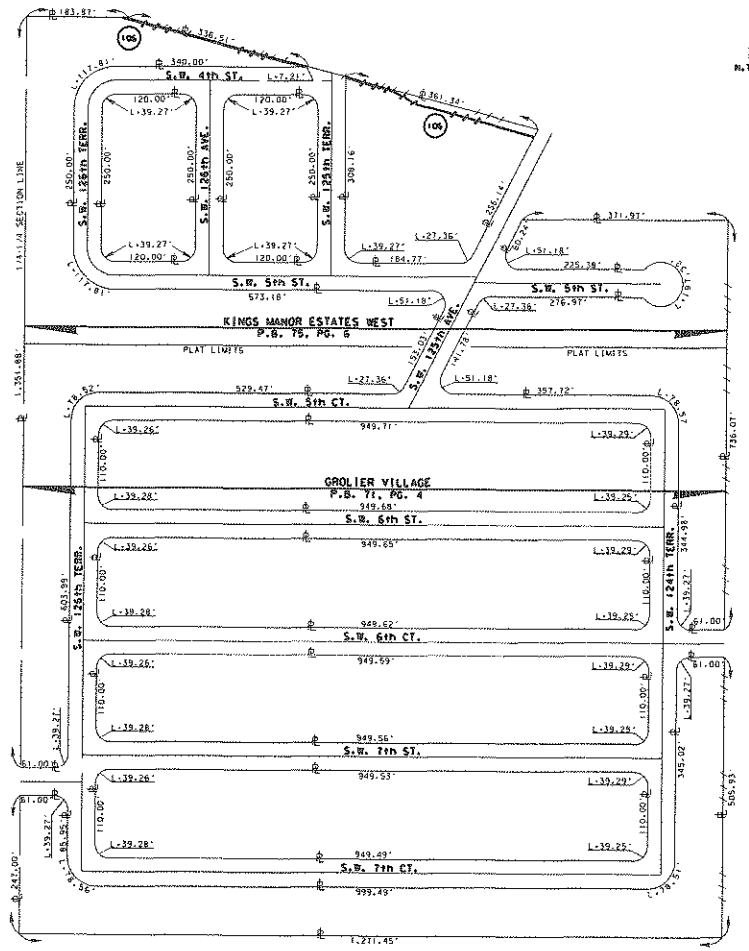
SEE SHEET 2 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY	DATE								BY	DATE	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	DATA SOURCES: SEE SHEET 1
		DISTRICT RIGHT OF WAY SURVEYOR								PRELIM	C MILLER	06-20-08				
										FINAL	C MILLER					
				REVISION	BY	DATE				CHECKED	W SOMERS	06-24-08	STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 421854-2	SHEET 21 OF 29

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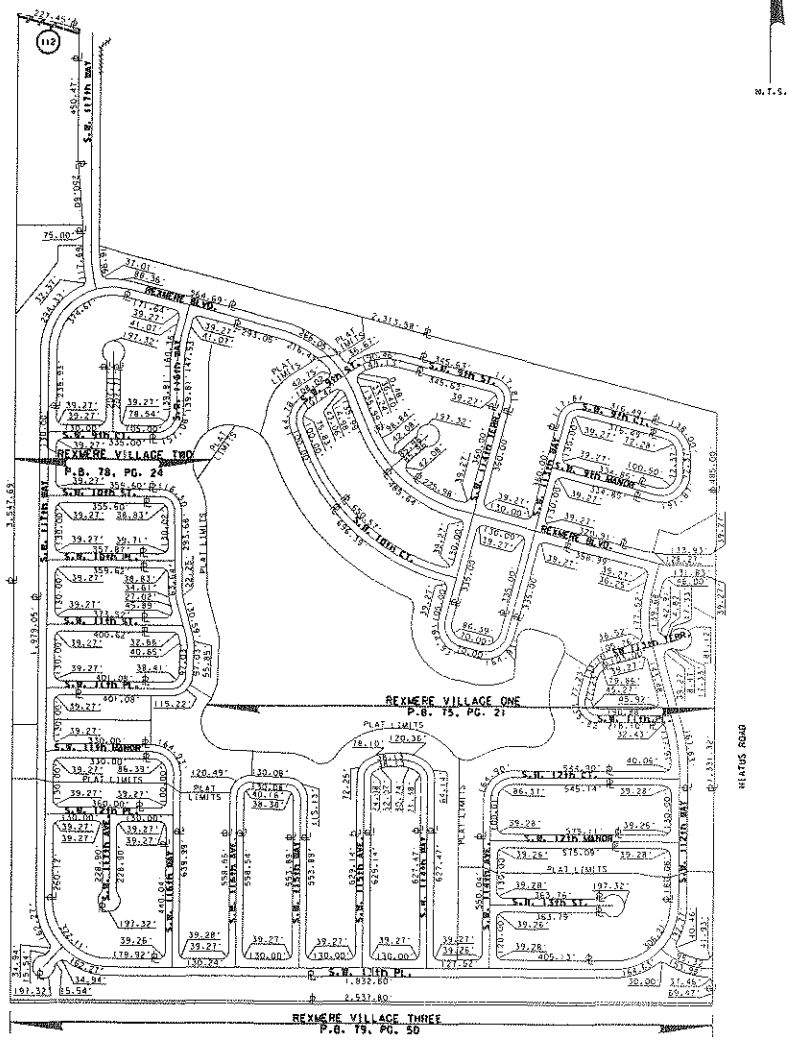
PARENT TRACT OF PARCEL 106

SEE SHEET 8



PARENT TRACT OF PARCEL 112

SEE SHEET 10

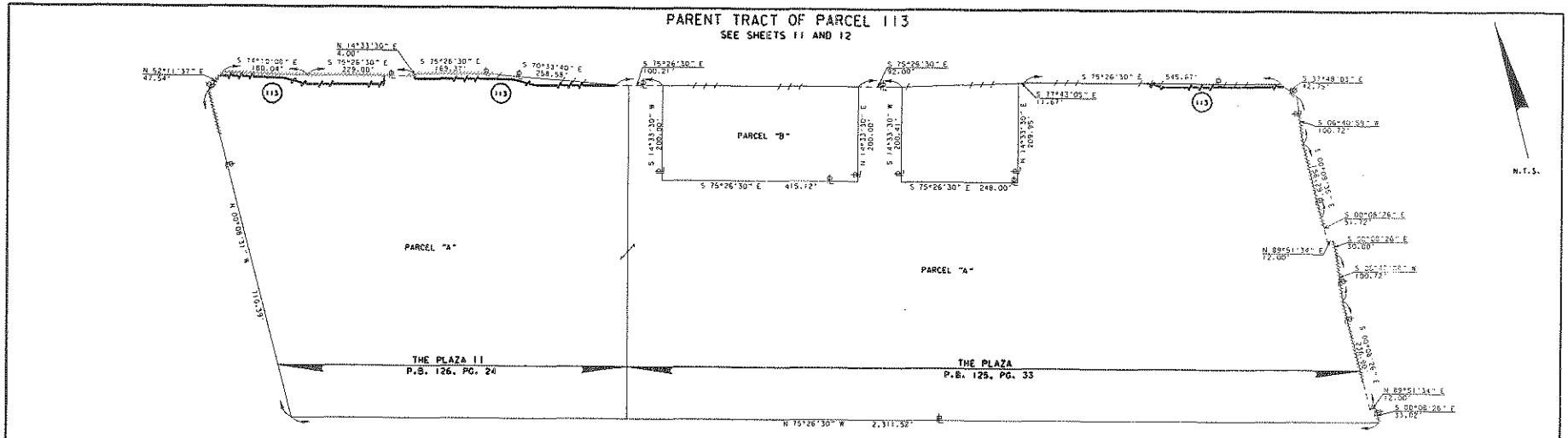


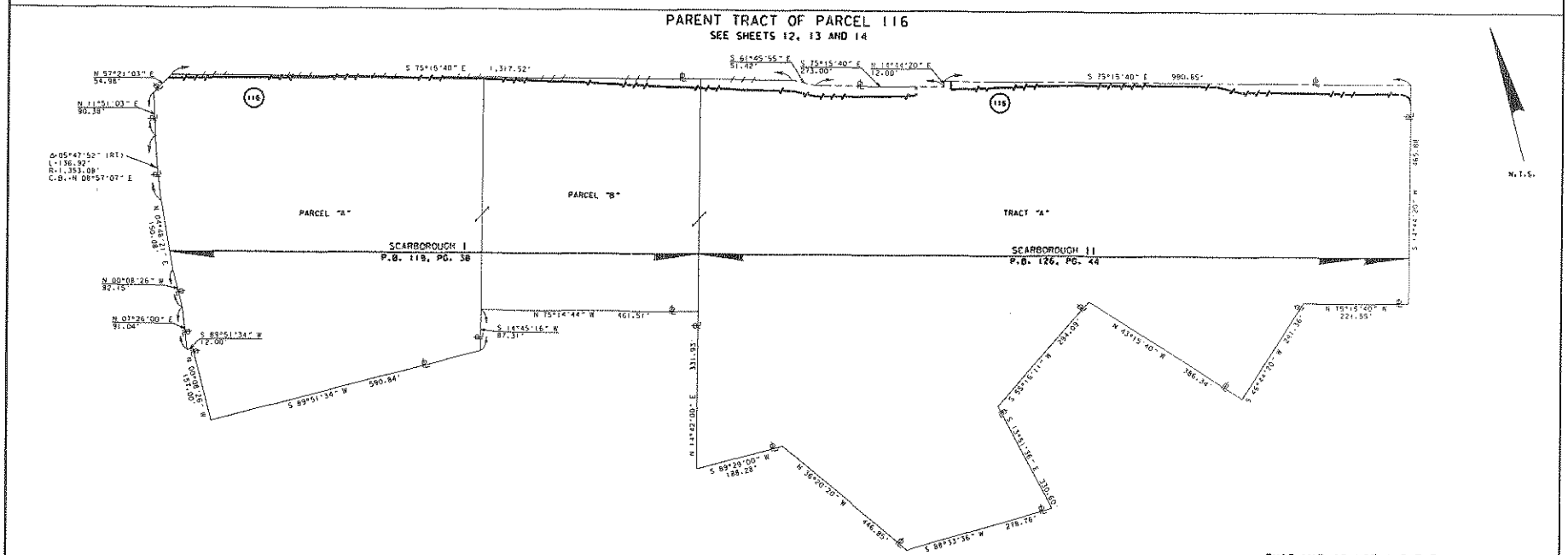
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

| | | |





THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

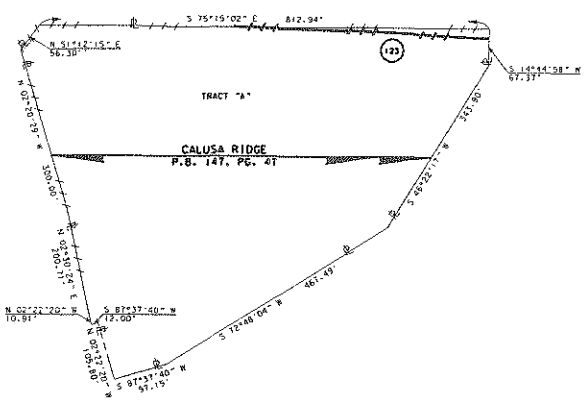
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY / DISTRICT RIGHT OF WAY SURVEYOR	DATE	REVISION	BY	DATE	REVISION	BY	DATE	PRELIM	C. MILLER	06-30-08	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	DATE SOURCE: SEE SHEET 1
										FINAL	C. MILLER		STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 421854-2	SHEET 23 OF 29		
										CHECKED	M. SCHMIDL	06-24-08				SCALE: N.T.S.		

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PARENT TRACT OF PARCEL 123

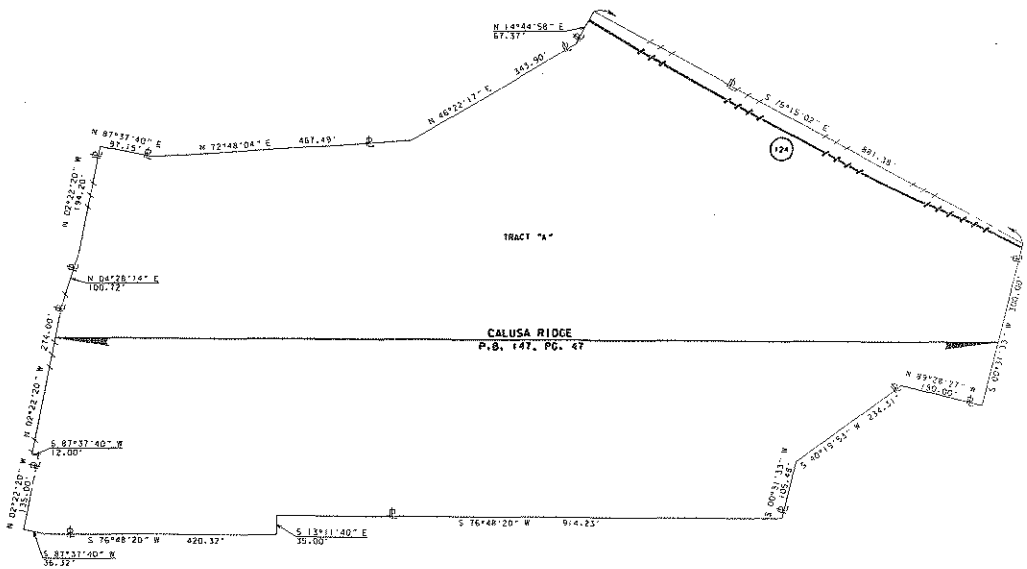
SEE SHEET 16



N.T.S.

PARENT TRACT OF PARCEL 124

SEE SHEETS 16 AND 17



N.T.S.

THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

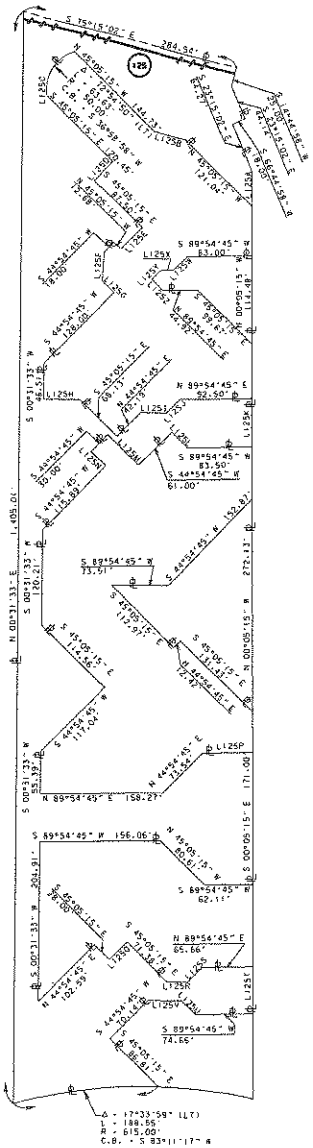
SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	PREPARED BY: DATE						BY	Date	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	DATA SOURCES: SEE SHEET 1				
		DISTRICT RIGHT OF WAY SURVEYOR					PRELIM	C MILLER	06-20-08				SCALE: N.T.S.				
							FINAL	C MILLER		STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 424654-2	SHEET 24 OF 29				
			REVISION	BY	DATE	REVISION	BY	DATE	CHECKED TM SOMERS	06-24-08							

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PARENT TRACT OF PARCEL 125

SEE SHEET 17

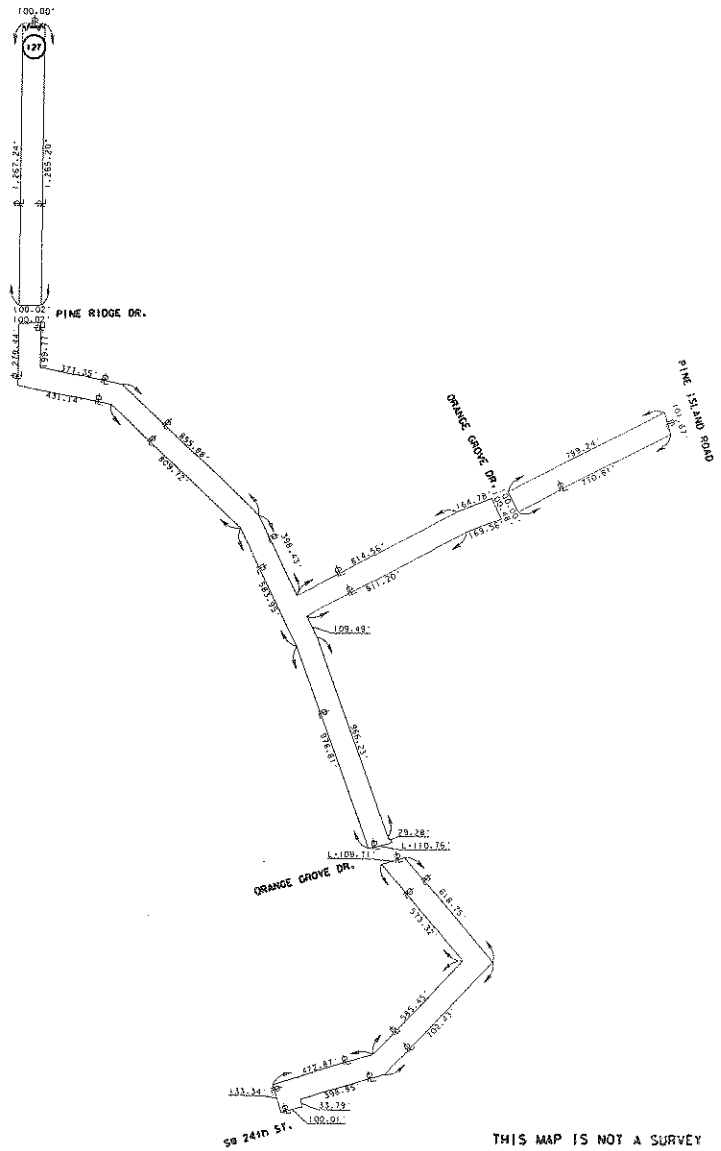


N.T.S.

LINE DATA		
LINE	BEARING	DISTANCE
L125A	S 00°05'15" E	45.84'
L125B	N 75°15'02" W	42.46'
L125C	S 00°31'33" W	8.21'
L125D	S 44°54'45" W	33.50'
L125E	S 44°54'45" W	59.00'
L125F	S 03°39'20" W	37.91'
L125G	S 45°05'15" E	21.50'
L125H	S 89°29'05" E	46.83'
L125I	N 89°54'45" E	33.76'
L125J	N 44°54'45" E	25.46'
L125K	S 00°05'15" E	62.00'
L125L	N 45°05'15" W	28.10'
L125M	N 45°05'15" W	56.50'
L125N	S 45°05'15" E	36.50'
L125P	N 89°54'45" E	64.24'
L125Q	N 44°54'45" E	32.00'
L125R	N 89°54'45" E	28.25'
L125S	N 44°54'45" E	25.46'
L125T	S 00°05'15" E	60.00'
L125U	N 45°05'15" W	25.46'
L125V	S 89°54'45" W	42.38'
L125W	S 44°54'45" W	25.46'
L125X	S 89°54'45" W	16.66'
L125Y	S 44°54'45" W	16.96'
L125Z	S 45°05'15" E	19.83'

PARENT TRACT OF PARCEL 127

SEE SHEET 18



N.T.S.

THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

APPROVED BY _____ DATE _____
DISTRICT RIGHT OF WAY SURVEYOR

REVISION	BY	DATE
REVISION	BY	DATE

	BY	DATE
PRELIM	C MILLER	06-20-08
FINAL	C MILLER	
CHECKED	M SOMERS	06-24-08

FED. PROJ. N/A | SECTION 86095-2420
STATE ROAD NO. 862 | BROWARD COUNTY
ITEM/SEGMENT NO. 421854-2 | SHEET 25 OF 29

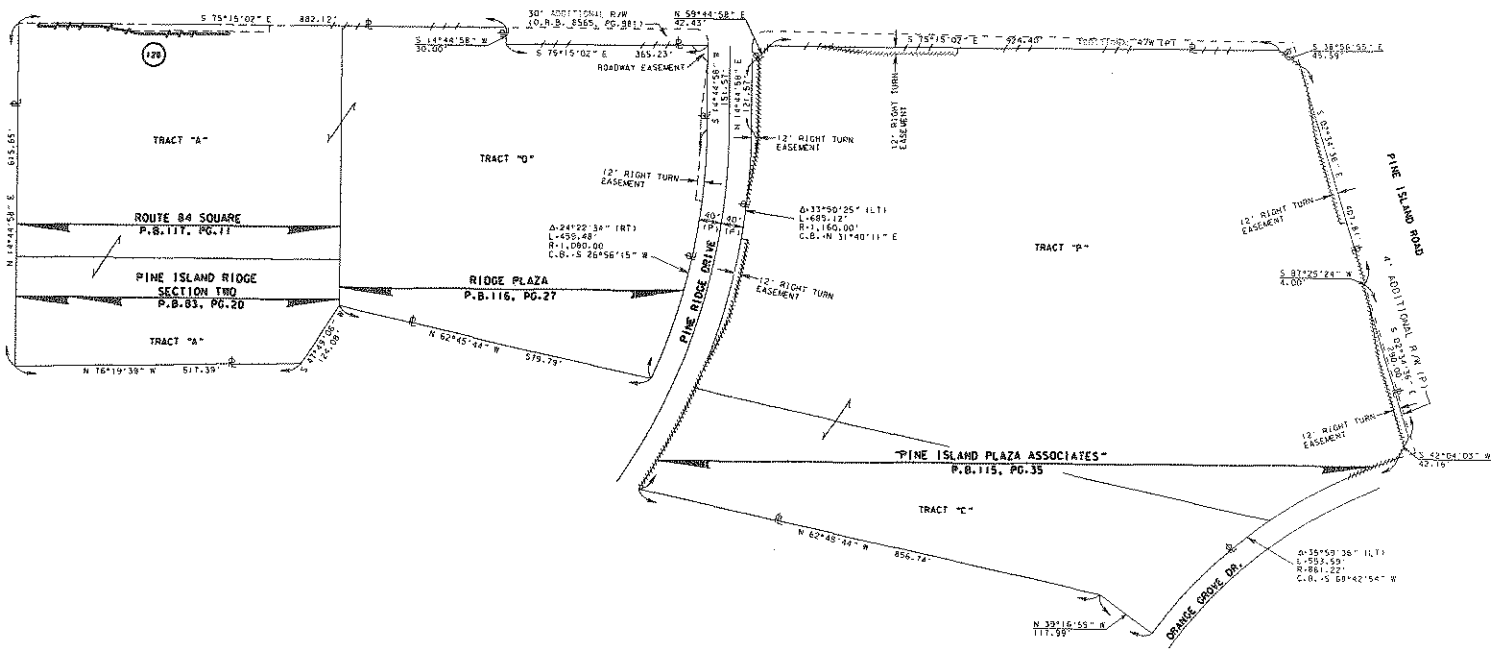
MAPS PREPARED BY: THE GROUP, INC.
TYPE SURVEY: SEE SHEET 1
SCALE: N.T.S.

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PARENT TRACT OF PARCEL 128

SEE SHEET 18

N.T.S.



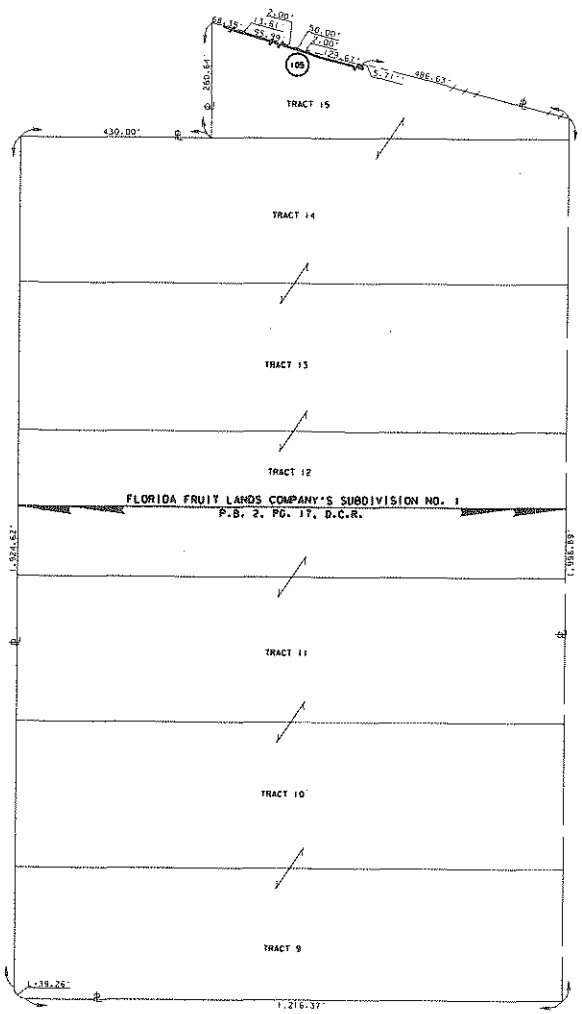
THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

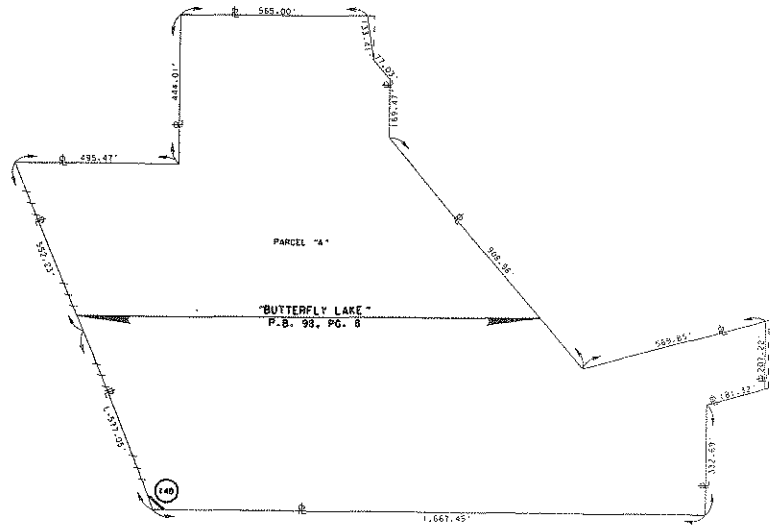
PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	ENGINEER OF RECORD DATE / DISTRICT RIGHT OF WAY SURVEYOR	REVISION	BY	DATE	REVISION	BY	DATE	PRELIM	BY / DATE C MILLER 06-20-08	FED. PROJ. N/A	SECTION 86095-2420	MAPS PREPARED BY: TBE GROUP, INC.	DATA SOURCE: SEE SHEET 1 SCALE: N.T.S.
									FINAL	C MILLER	STATE ROAD NO. 862	BROWARD COUNTY	ITEM/SEGMENT NO. 421854-2	SHEET 26 OF 29
									CHECKED	W. KOWENS 06-24-08				

PARENT TRACT OF PARCEL 105
SEE SHEET 7



N.T.S.

PARENT TRACT OF PARCEL 140
SEE SHEET 21



N.T.S.

THIS MAP IS NOT A SURVEY

S.R. 862 (I-595) FROM 133 AVE. TO EAST OF FLORIDA TURNPIKE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

PARCEL MAP	FLORIDA DEPARTMENT OF TRANSPORTATION SURVEYING AND MAPPING	APPROVED BY	DATE	REVISION	BY	DATE	REVISION	BY	DATE		BY	DATE	FED. PROJ. 30A	SECTION 86095-2420	MAPS PREPARED BY: TAC GROUP, INC.	DATE SOURCE: SEE SHEET 1	
		DISTRICT RIGHT OF WAY DIRECTOR								PRELIM	C MILLER	06-20-08					
										FINAL	C MILLER		STATE ROAD NO. 862	BROWARD COUNTY		SCALE: N.T.S.	
										CHECKED	M SOMERS	06-24-08			ITEM/SEGMENT NO. 421854-2	SHEET 27 OF 29	

I:\GIS\MAPPING\421854\2\421854242_MAP\L27.dgn

TABLE OF OWNERSHIPS

PARCEL NO.	SHEET NO.	NAME	AREA TAKEN	REMAINDERS LEFT	REMAINDERS RIGHT	COMMENTS	RECORDING DATA	REVISIONS
100	6	YSI II LLC, A DELAWARE LIMITED LIABILITY COMPANY	2,006 SF	0	4.419 AC			
101	6	MCDONALD'S CORPORATION	682 SF	0	0.959 AC			
102	6	HELBAR INVESTMENTS CORPORATION, A FLORIDA CORPORATION	77 SF	0	3.041 AC			
103		NOT USED						
104		NOT USED						
105	7	PARK, LTD., A CALIFORNIA LIMITED PARTNERSHIP	1,572 SF	0	58.372 AC			
106	8	UNIPROP MANUFACTURED HOUSING COMMUNITIES INCOME FUND,	4,635 SF	0	32.161 AC			
		A MICHIGAN LIMITED PARTNERSHIP						
107		NOT USED						
108		NOT USED						
109		NOT USED						
110		NOT USED						
111	10	CENTRAL BROWARD DRAINAGE DISTRICT	279 SF	0	7.055 AC			
112	10	JAMES M. DALE, AS TRUSTEE OF THE JAMES M. DALE LIVING	3,515 SF	0	115.403 AC			
		TRUST U/A DATED AUGUST 25, 1986 AS RESTATED ON MAY 13,						
		1997						
113	11,12	DAVIE PLAZA LIMITED PARTNERSHIP, SURVIVING ENTITY OF	10,730 SF	0	34.305 AC			
		MERGER WITH THE PLAZA AT DAVIE, INC. F/K/A						
		KONOVER & ASSOCIATES SOUTH, INC., A FLORIDA CORPORATION						
114		NOT USED						
115		NOT USED						
116	12,13,14	PALMS OWNER, LLC, A DELAWARE LIMITED LIABILITY COMPANY	0.718 AC	0	39.175 AC			
117		NOT USED						
118	14	NOB HILL OFFICE PARK CONDOMINIUM ASSOCIATION, INC.	868 SF	0	2.707 AC			
119	14	PRESTIGE DUKE JOINT VENTURE, A FLORIDA GENERAL PARTNERSHIP	2,080 SF	0	7.717 AC			
120		NOT USED						
121	15	MARTINO TIRE CO., A FLORIDA CORPORATION	1,060 SF	0	1.152 AC			
122		NOT USED						
123	16	TOWN OF DAVIE, A FLORIDA MUNICIPAL CORPORATION	3,577 SF	0	7.919 AC			
124	16,17	THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA	19,343 SF	0	25.801 AC			
125	17	PINE ISLAND RIDGE CONDOMINIUM A ASSOCIATION, INC., A	2,413 SF	0	4.465 AC			
		FLORIDA NOT FOR PROFIT CORPORATION						
126	17,18	PINE ISLAND RIDGE CONDOMINIUM A-1 ASSOCIATION, INC., A/K/A	8,513 SF	0	3.074 AC			
		PINE ISLAND RIDGE PHASE A-1 CONDOMINIUM ASSOCIATION, A						
		FLORIDA NON PROFIT CORPORATION						
127	18	JOHN AHRENHOLZ AND WINTHROP DAVIS, AS TRUSTEES, DESIGNATED	1,756 SF	0	17.971 AC			
		BY FIRST FEDERAL SAVINGS AND LOAN ASSOCIATION OF THE PALM						
		BEACHES AND ATICO SAVINGS BANK F/K/A PENINSULA FEDERAL						
		SAVINGS AND LOAN ASSOCIATION AND AS JOINT VENTURES						
		CONSTITUTING THE NEW ENTITY (PINE ISLAND RIDGE, INC.)						
128	18	EQUITY ONE (PINE ISLAND) INC., A FLORIDA CORPORATION	1,468 SF	0	40.160 AC			
129		NOT USED						
130		NOT USED						
131		NOT USED						
132		NOT USED						
133		NOT USED						
134		NOT USED						
135		TO BE ACQUIRED UNDER 421854I						
136		NOT USED						
137		NOT USED						
138		NOT USED						
139		NOT USED						
140	21	JOHN W. MCGINNIS and JOYCE H. MCGINNIS, AS JOINT TENANTS	747 SF	43.819 AC	0			
		WITH RIGHT OF SURVIVORSHIP						

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

LEGEND

PARCEL NUMBER ID.	TYPE USE	PARCEL NUMBER ID.	TYPE USE
100-699	DEEDS OF ALL TYPES	800-899	PERPETUAL EASEMENTS
700-799	TEMPORARY EASEMENTS	900-999	LICENSE

S.R. 862 (I-595) FROM SW 133 AVE TO EAST OF FLORIDA TURNPIKE

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

APPROVED BY _____ DATE
DISTRICT RIGHT OF WAY SURVEYOR

	BY	DATE
PRELIM	C MILLER	06-20-08
FINAL	C MILLER	
CHECKED	W SOARES	06-24-08

FED. PROJ. N/A | SECTION 86095-2420
STATE ROAD NO. 862 | BROWARD COUNTY
ITEM/SEGMENT NO. 421854-2 | SHEET 28 OF 29

MAPS PREPARED BY: TDE GROUP, INC.
DATA SOURCE: SEE SHEET 1
SCALE: 1" = 50'

REVISION	BY	DATE

T:\SURVEY\MAPPING\421854\2\421854_2.dgn

7xx Temporary Easements

Sxx Drainage Easements

TABLE OF OWNERSHIPS

PARCEL NO.	SHEET NO.	NAME	AREA TAKEN	REMAINDERS LEFT	REMAINDERS RIGHT	COMMENTS	RECORDING DATA
700		TO BE ACQUIRED UNDER 421854I		SEE PARCEL 800			
701		TO BE ACQUIRED UNDER 421854I		SEE PARCEL 801			
800		TO BE ACQUIRED UNDER 421854I				800 and 801 are golf courses	
801		TO BE ACQUIRED UNDER 421854I					
802		NOT USED					
803		NOT USED					
804	19	ISTAR BOWLING CENTERS I LP, A DELAWARE LIMITED PARTNERSHIP	9,787 SF	PARENT TRACT+3.068 AC			
805	20	WAY OF LIFE ASSEMBLY OF GOD, INC., A FLORIDA	1,009 AC	PARENT TRACT+8.337 AC			
		NOT-FOR-PROFIT CORPORATION					
806	17	PINE ISLAND RIDGE CONDOMINIUM A-1 ASSOCIATION, INC., A/K/A	12,050 SF	SEE PARCEL 126			
		PINE ISLAND RIDGE PHASE A-1 CONDOMINIUM ASSOCIATION, A					
		FLORIDA NON PROFIT CORPORATION					
807	18	JOHN AHRENHOLZ AND WINTHROP DAVIS, AS TRUSTEES, DESIGNATED	7,580 SF	SEE PARCEL 127			
		BY FIRST FEDERAL SAVINGS AND LOAN ASSOCIATION OF THE PALM					
		BEACHES AND ATICO SAVINGS BANK F/K/A PENINSULA FEDERAL					
		SAVINGS AND LOAN ASSOCIATION AND AS JOINT VENTURES					
		CONSTITUTING THE NEW ENTITY (PINE ISLAND RIDGE, INC.)					
808	20	LAGO PLANTATION NORTH HOMEOWNER'S ASSOCIATION, INC.	3,513 SF	PARENT TRACT+9,129 SF			
809	20	LAGO ESTATES, L.L.C., FLORIDA LIMITED LIABILITY COMPANY	400 SF	PARENT TRACT+1,622 SF			

700 will be 706
701 will be 708

REVISIONS		
REVISION	BY	DATE

SEE SHEET 1 FOR LEGEND AND GENERAL NOTES

LEGEND

PARCEL NUMBER ID.	TYPE USE	PARCEL NUMBER ID.	TYPE USE
100-699	DEEDS OF ALL TYPES	800-899	PERPETUAL EASEMENTS
700-799	TEMPORARY EASEMENTS	900-999	LICENSE

S.R. 862 (I-595) FROM SR 133 AVE TO EAST OF FLORIDA TURNPIKE

FLORIDA DEPARTMENT OF TRANSPORTATION
SURVEYING AND MAPPING

APPROVED BY _____ DATE
DISTRICT PSM'R OF SURVEYING

	BY	DATE
PRELIM	C MILLER	06-30-08
FINAL	C MILLER	
CHECKED	M SOWERS	06-24-08

FED. PROJ. N/A | SECTION 86095-2420 | BROWARD COUNTY
STATE ROAD NO. 862 | ITEM/SEGMENT NO. 421854-2 | SHEET 29 OF 29

SURV. PERFORMED BY: TBE GROUP, INC.
SHEET SIZE: 24" x 36"
SEE SHEET 1
SCALE: 1" = 50'

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APPENDIX 4-A
PARCELS ELIGIBLE FOR COST SAVINGS

Parcel #	Total Stipulated Real Property Value ($)
100	238,000
101	169,000
102	476,000
105	164,000
106	331,000
111	75,000
112	280,000
113	1,833,000
116	1,504,000
118	173,000
119	169,000
121	167,000
123	530,000
124	1,143,000
125	564,000
126	1,656,000
127	285,000
128	2,380,000
140	120,000
Total	12,257,000

Appendix 5

APPENDIX 5

NONCOMPLIANCE POINTS TABLE

Ref	Main Heading	Subheading	Failure to:	Cure Period (Fast Cure Period)[1]	Points
1	**General**				
1.1		FDOT access	Comply with any of the provisions of Sections 4.13 and 6.4 (Oversight, Meeting and Reporting), Section 8.1 (Disclosure of Contracts and Contractors), Section 15.2 (Financial Model Updates), and Article 22 (Records; Intellectual Property) of the Agreement, with respect to access for FDOT's Authorized Representative(s) to the Project, Concessionaire's Project offices and operations buildings, and Concessionaire's data.	3 days (1.5 days)	2
1.2		Compliance with Federal and State Labor Requirements	Submit documentation required under the Federal Requirements and State Law related to labor, Equal Employment Opportunity, On the Job Training and DBE compliance.	3 days (1.5 days)	2
2	**Public Information**				

[1] Noncompliance Points will be assessed in accordance with the percentages identified in Section 7.3.1.3 of the Agreement. Cure periods set forth in this column within parentheses represent the Fast Cure Period applicable to the failure per Section 7.3.1.5 of the Agreement.

Ref	Main Heading	Subheading	Failure to:	Cure Period (Fast Cure Period)[1]	Points
2.1		Community Awareness Plan	Review and comment on the Community Awareness Plan prepared by the Department as described in Section 2.M of Division II.	7 days (3.5 days)	2
2.2		Public Meetings	Provide all support necessary for the Department and its Public Information Consultant (PIC) to hold various public meetings as described in Section 2.M of Division II.	7 days (3.5 days)	1
2.3		Public Involvement Data	Collect public input data and prepare responses to public inquiries as described in Section 2.M of Division II.	1 day (1/2 day)	1
3	**Environmental Compliance**				
3.1		Notification	Promptly notify FDOT of Contaminated Materials as set forth in Section 3.F of Division II.	1 day (1/2 day)	2
3.2		Mitigation	Take reasonable steps to mitigate effects of Contaminated Materials as set forth in Section 3.F of Division II.	2 days (1 day)	5
3.3		Environmental Compliance	Perform or cause to be performed all required environmental mitigation measures as set forth in Section 4.12 of the Agreement.	28 days (14 days)	3
4	**Utility Adjustments**				
4.1		Utility Cost Records	Maintain or cause a Utility Owner to maintain cost records in accordance with Section 4.5.3.3 of the Agreement.	7 days (3.5 days)	1

Ref	Main Heading	Subheading	Failure to:	Cure Period (Fast Cure Period)[1]	Points
5	**Design and Construction**				
5.1		Design Submittals	Provide required Submittals for the Design Work to FDOT within the applicable time period prescribed in the Contract Documents.	3 days (1.5 days)	1
5.2		Construction Submittals	Provide required Submittals for the Construction Work to FDOT within the applicable time period prescribed in the Contract Documents.	3 days (1.5 days)	1
5.3		Scheduling Submittals	Provide required Submittals related to the Project Schedule within the applicable time period prescribed in the Contract Documents.	3 days (1.5 days)	1
5.4		As-Built Record Plans	Provide As-Built Record Plans within the time period prescribed in Section 2.I of Division II.	3 days (1.5 days)	1
5.5		Construction Closures	Comply with the traffic restrictions set forth in Section 3.L.6(d) of Division II.	N/A	3
5.6		Excess Vibration Levels	Comply with the noise and vibration restrictions set forth in Section 3.F.6 of Division II.	N/A	1
5.7		Permit Close Out	Close out permits with the applicable permitting agencies within 90 days after Final Acceptance.	3 days (1.5 days)	2
5.8		Final Estimate Package	Furnish the final estimate package required under Section 3, Attachment 3 of Division II within 90 days after Final Acceptance.	3 days (1.5 days)	2

Ref	Main Heading	Subheading	Failure to:		Cure Period (Fast Cure Period)[1]	Points
6	**Operations and Maintenance**					
6.1		Construction Violations	Meet or exceed the minimum performance requirements as set forth in Section 4, Table 4.1A of Division II, resulting in a Construction Violation Classification:	A	The cure period designated in Table 4.1A, Section 4 of Division II (1/2 the designated cure period)	1
				B		2
				C		3
				D		4
6.2		Construction Availability Faults	Meet or exceed the minimum performance requirements as set forth in Section 4, Table 4.1B of Division II, resulting in a Construction Availability Fault Classification:	A	The cure period designated in Table 4.1B, Section 4 of Division II (1/2 the designated cure period)	1
				B		2
				C		3
				D		4
				E		5
6.3		O&M Violations	Meet or exceed the minimum performance requirements as set forth in Section 4, Table 4.2 of Division II, except those pertaining to Maintenance Rating Performance (MRP), and resulting in an O&M Violation Classification:	A	The cure period designated in Table 4.2, Section 4 of Division II (1/2 the designated cure period)	1
				B		2
				C		3
				D		4
				E		5

Ref	Main Heading	Subheading	Failure to:		Cure Period (Fast Cure Period)[1]	Points
			Achieve a minimum quarterly overall MRP rating of at least:	80	N/A	5
				75		10
				70		25
				65		40
			Achieve a minimum quarterly MRP rating for individual elements of at least: 65			5
			Achieve a minimum quarterly MRP rating for individual characteristics of at least: 55			3
6.4		Availability Faults	Meet or exceed the minimum performance requirements as specified within Section 4, Table 4.3 of Division II and resulting in an Availability Fault of Availability Classifications as follows:	A	The cure period designated in Table 4.3, Section 4 of Division II (1/2 the designated cure period)	1
				B		2
				C		3
				D		4
				E		5
				F		6
6.5		Excessive Closures	Prevent an Excessive Closure, including Excessive Closures due to O&M Work as set forth in Section 3.5.2(a)(ii) of Appendix 3-B or Section 4.2(a)(ii) of Appendix 6 of the Agreement.		N/A	10

Ref	Main Heading	Subheading	Failure to:	Cure Period (Fast Cure Period)[1]	Points
6.6		Reporting Records Accuracy	Report Availability Faults, Construction Closures, Closures, Construction Violations, O&M Violations or Noncompliance Points in the Operations Reports and/or Maintenance Reports as required per Section 4 of Division II.	7 days (N/A)	5
6.7		O&M Plan Submission	Submit an O&M Plan for FDOT's review and approval within the time required under Section 4 of Division II.	3 days (1.5 days)	1
6.8		O&M Manual Submission	Submit an O&M Manual for FDOT's review and approval within the time required under Section 4 of Division II.	3 days (1.5 days)	1
6.9		ITS Standard Operating Guidelines ("SOG") Submission	Submit an ITS SOG for FDOT's review and approval within the time required under Section 4 of Division II.	3 days (1.5 days)	1
6.10		ITS SOG Updates	Update and submit the SOG for FDOT's review and comment within the time required under Section 4 of Division II.	10 days (5 days)	2
6.11		Handback Evaluation Plan	Submit and update a Handback Evaluation Plan when required in accordance with Section 5 of Division II.	28 days (14 days)	2
6.12		Handback Renewal Work Plan	Develop and submit a Handback Renewal Work Plan when required in accordance with Section 5 of Division II.	28 days (14 days)	2
6.13		Monthly O&M Reports	Submit the Monthly O&M Reports within the time period identified in Appendix 12 of the Agreement.	7 days (3.5 days)	2

Ref	Main Heading	Subheading	Failure to:	Cure Period (Fast Cure Period)[1]	Points
6.14		O&M Annual Reports	Submit the Annual O&M Reports within the time period identified in Appendix 12 of the Agreement.	7 days (3.5 days)	2
6.15		Availability Payment Documentation	Provide supporting documentation with the Availability Payment invoice as required by Section 12.2.2 of the Agreement.	7 days (3.5 days)	2
6.16		O&M Work Records	Make O&M Work records available for inspection or audit purposes per requirements of Section 4 of Division II.	3 days (1.5 days)	2
6.17		Interagency Participation	Participate in meetings held by interagency organizations per requirements of Section 4 of Division II.	N/A	1

Appendix 6

APPENDIX 6

PAYMENT MECHANISM

SECTION 1. Availability Payment

1.1 Annual Maximum Availability Payment

MAP_y is the Maximum Availability Payment for that Fiscal Year indexed for inflation according to the following formula:

$$MAP_y = MAP_{Base} \times k \times \frac{CPI_y}{CPI_{Base}} + MAP_{Base} \times (1-k) \times (1+FR)^{y-FY_{Base}}$$

Where:

Base = July 1, 2008

k = 30% (indicating the portion of the Maximum Availability Payment indexed to CPI);

CPI_y = the Consumer Price Index at the commencement of Fiscal Year "*y*" (CPI_y shall apply to all calculations relating to Fiscal Year "*y*" regardless of the date upon which CPI_y is officially published);

y = the Fiscal Year for which the inflation-adjusted MAP is being calculated;

FR = fixed rate of 3.00%; and

FY_{Base} = Fiscal Year beginning July 1, 2008.

The Availability Payments in any Fiscal Year will never be less than zero or greater than the MAP for that given Fiscal Year.

As of July 1, 2008, the MAP is US$62,170,000. As adjusted in accordance with Appendix 6-A, the MAP is US$ 65,905,000 after the adjustment for Benchmark Interest Rate and credit spread changes described in Appendix 6-A to the Agreement.

1.2 Adjustment for Benchmark Interest Rate and Credit Spread Changes

The above MAP (in July 1, 2008 US dollars) has been adjusted in accordance with Appendix 6-A of the Agreement.

1.3 Quarterly Payment

The Quarterly Payment shall be calculated as follows:

$$QP_{q,y} = \frac{MAP_y}{4} - QPA_{q,y}$$

Where:

QP_{qy} = the Quarterly Payment for Quarter "*q*" in year "y;" and

QPA_{qy} = the Quarterly Payment Adjustment for Quarter "*q*" in year "y."

If Substantial Completion occurs on a date which is not the first day of a Quarter, the first Quarterly payment will correspond to a fraction of a Quarter and the first element of the above formula (¼MAP_y) shall be pro-rated according to the number of days in that fraction of a Quarter.

1.4 Quarterly Payment Adjustments

Payment Adjustments shall be calculated as follows:

$$QPA_{q,\,y} = QUA_{q,\,y} + QVA_{q,\,y}$$

Where:

$QPA_{q,y}$ = Quarterly Payment Adjustment for Quarter "q" in year "y;"

$QUA_{q,y}$ = Quarterly Unavailability Adjustment for Quarter "q" in year "y;" and

$QVA_{q,y}$ = Quarterly O&M Violation Adjustment for Quarter "q" in year "y."

1.5 Failure to Properly Report and Record Unavailability Events and O&M Violations

In the event Concessionaire fails in accordance with Section 12.2.2.2 of the Agreement to describe the occurrence of or to accurately describe the extent of any O&M Violation or Unavailability Event during a given Hour(s), FDOT will retroactively recalculate the applicable O&M Violation Adjustment(s) and/or the Hourly Unavailability Adjustment for that Hour(s). FDOT will accordingly recalculate the Quarterly Payment Adjustment and the Quarterly Payment to include the previously omitted adjustment(s). FDOT will apply the difference between the originally calculated Quarterly Payment and the recalculated Quarterly Payment to the current Quarterly Settlement Amount. Such failure by Concessionaire shall also trigger the assessment of Noncompliance Points, as set forth in the Agreement.

Should Concessionaire fail to submit an Operations Report or Maintenance Report verifying any O&M Violations or Unavailability Events, then until and unless such report(s) are subsequently submitted, the Segment(s) that should have been the subject of such information shall be deemed to have been subject to full Closure for the time period that should have been described in the report. However, upon receipt of the required report(s), FDOT shall recalculate the Availability Payment earned for the affected Segment(s) during the time period described in the report(s) based on the actual, documented performance, rather than the deemed Closure of the Segment(s).

SECTION 2. Unavailability Adjustments

2.1 Quarterly Unavailability Adjustments

The Quarterly Unavailability Adjustment to the Quarterly Payment shall be calculated as follows:

$$QUA_{q,y} = \sum_{\text{hour } h=1}^{hq} HUA_h$$

Where:

$$HUA_h = \sum_{\text{segment } s=1}^{n} [HUF_{h,s} \text{ x } SWF_{h,s} \text{ x } TWF_{h,s}] \text{ X } \frac{MAP_y}{(365 \text{ x } 24)}$$

$QUA_{q,y}$ = Quarterly Unavailability Adjustment for the Quarter "q" in year "y;"

HUA_h = Hourly Unavailability Adjustment for the hour "h;"

$HUF_{h,s}$ = Hourly Unavailability Factor for Segment "s", Hour "h;"

$SWF_{h,s}$ = Segment Weighting Factor for Segment "s", Hour "h;" and

$TWF_{h,s}$ = Time Weighting Factor for Segment "s", Hour "h."

MAPy is the Maximum Availability Payment for that Fiscal Year indexed for inflation as described in Section 1.1 of this Appendix 6.

2.2 Hourly Unavailability Factors

(a) Each Unavailability Event will be deemed to have commenced from the moment such Unavailability Event actually began (not from the moment it was discovered or reported), and to persist during each Hour thereafter until such Unavailability Event is cured, provided that an Unavailability Event occurring at anytime during an Hour shall be deemed to have occurred at the beginning of the Hour, and an Unavailability Event that ends at anytime during an Hour shall be deemed to have ended at the end of that Hour.

(b) Each Unavailability Event is described by an Availability Classification and a corresponding Hourly Unavailability Factor for the given Hour with respect to the given Segment in accordance with Tables A, B and C in Section 5 of this Appendix 6.

(c) The Hourly Unavailability Factor $HUF_{h,s}$ for a given Segment during a given Hour shall be calculated by adding together the Unavailability Factors of the Unavailability Events which occur with respect to the Segment during that Hour, provided that the Hourly Unavailability Factor may never exceed 1.00. When no Unavailability Event occurs, the Hourly Unavailability Factor is 0.00.

2.3 Segment Weighting Factors

(a) The Segment Weighting Factors are shown in Table D in Section 5 of this Appendix 6.

(b) At FDOT's discretion after consultation with Concessionaire, the Segment Weighting Factors may be changed to reflect changes in the relative traffic utilization of the Segment and/or, the level of revenue generated from Express Lanes tolls. However, Segment Weighting Factors must always equal the sum of 1.00, and may not be changed more than once in any five-year interval. FDOT will provide Concessionaire with notice of any changes at least 120 days prior to the effective date of the changes.

2.4 Time Weighting Factors

(a) Time Weighting Factors will be assigned to each Segment for every Hour of the Operating Period.

(b) The current Time Weighting Factors assignments for each Segment are shown on Table E to this Appendix. At FDOT's discretion after consultation with Concessionaire, the Time Weighting Factors may be changed, provided that: (i) the annual average Time Weighting Factor for each Segment equals seven (when rounded to the nearest second decimal), as determined by adding together the Time Weighting Factors assigned to each Hour of the year for a given Segment, and then dividing the sum by the number of hours in the year; (ii) the Time Weighting Factor assigned to any category of Low Priority Hours does not exceed two; (iii) the Time Weighting Factor assigned to any category of Mid Priority Hours does not exceed 15; (iv) the Time Weighting Factor assigned to any category of High Priority Hours does not exceed 20; (v) on each day, there are at least six Low Priority Hours and a combined total of at least ten Low Priority Hours and Mid Priority Hours; (vi) during every 48 Hour period, there are at least six contiguous Low Priority Hours and a combined total of at least eight contiguous Low Priority Hours and Mid Priority Hours; (vii) changes may not be made more than once per three year period; and (viii) Concessionaire receives notice of proposed changes 120 days prior to the effective date of the proposed changes and is provided with a reasonable opportunity to comment on the proposed changes.

SECTION 3. O&M Violation Adjustments

Concessionaire will be required to operate, maintain and renew the facility in accordance with Section 4 of Division II. O&M Violations are triggered by noncompliance of certain contractual obligations set forth therein.

3.1 Quarterly O&M Violation Adjustments

The Quarterly O&M Violations Adjustment to the Quarterly Payment shall be calculated as follows:

$$QVA_{q,y} = \sum_{\text{OMV}\ i=1}^{n} VA_{i,q}$$

Where:

$QVA_{q,y}$ = Quarterly O&M Violations Adjustment for the Quarter "q" in Fiscal Year "y;" and

$VA_{i,q}$ = O&M Violations Adjustment for each applicable O&M Violation "i" in Quarter "q".

3.2 O&M Violation Adjustments and O&M Violation Classifications

O&M Violation Classifications are set forth in Section 4 of Division II for each O&M Violation. Each O&M Violation Classification has an associated O&M Violation Adjustment amount as shown in Table F in Section 5 of this Appendix 6.

Each O&M Violation has the cure period and an Interval of Recurrence as described in Section 4, Table 4.2 of Division II. After the cure period, any O&M Violation that is not cured within its respective Interval of Recurrence will be deemed to occur anew and assessed another O&M Violation Adjustment, and such new occurrence shall have no cure period.

SECTION 4. Planned Maintenance

4.1 General

As described in and subject to the requirements set forth in this section, Concessionaire will be able to designate certain hours during which certain Closures that result from Planned Maintenance will be deemed to be Permitted Closures.

4.2 Planned Maintenance Scheduling

(a) During the Operating Period, Concessionaire may schedule Planned Maintenance for specific lanes or portions of lanes on specific Segments for any time between 10:00 PM and 6:00 AM on the nights of Sunday, Monday, Tuesday, Wednesday and Thursday into the mornings of Monday, Tuesday, Wednesday and Friday each week, provided that:

(i) Concessionaire shall make reasonable efforts to close only one lane on any given portion of roadway when performing Planned Maintenance;

(ii) O&M Work, including Planned Maintenance, that results in 2/3 of the lanes of any portion of an I-595 Corridor Segment or Express Lanes Segment will not be a Permitted Closure, except under extraordinary circumstances with FDOT's written prior approval; and

(iii) To the extent that Planned Maintenance involves Closures, Concessionaire shall implement and execute such Closures in accordance with the lane closure and maintenance of traffic requirements and procedures related to

Planned Maintenance and O&M Work during the Operating Period as set forth in Section 4 of Division II.

(b) All Planned Maintenance for each lane of each Segment must appear on an approved Planned Maintenance Schedule.

(c) Closures that result from properly scheduled and executed Planned Maintenance in accordance with Section 4.2(a) above shall be deemed Permitted Closures.

(d) Notwithstanding the foregoing, in the event that any lane of a Segment is the subject of a Permitted Closure, and a Closure that is not a Permitted Closure occurs in the lane(s) remaining in service, then the lanes subject to the Permitted Closure also shall be deemed to be subject to a Closure which is not a Permitted Closure. Further, failure to abide by Section 4.2(a)(ii) above will result in the assessment of Noncompliance Points for each affected Segment as enumerated in Appendix 5 of the Agreement.

4.3 Compliance Work

If Concessionaire is required to perform Compliance Work, Concessionaire shall exercise commercially reasonable efforts to perform such work concurrently with previously scheduled Planned Maintenance. If Compliance Work cannot be performed concurrently, then Concessionaire may schedule additional Planned Maintenance for Compliance Work in consultation with FDOT and subject to the requirements for Planned Maintenance Scheduling set forth in this Appendix 6, Section 4(a).

4.4 Planned Maintenance Schedules

(a) Concessionaire shall, as required in Section 4 of Division II, prepare and submit annual and monthly Planned Maintenance Schedules to FDOT for review and approval, which approval shall not be unreasonably withheld. Concessionaire shall include all Routine Maintenance, Renewal Work and Compliance Work, if any, on the annual and monthly Planned Maintenance Schedules it submits to FDOT.

(b) In the event that Compliance Work is required, the Concessionaire shall submit a revised annual and monthly Planned Maintenance Schedule as soon as commercially practicable to FDOT for review and approval, which approval shall not be unreasonably withheld or delayed.

(c) During each year of the Operating Period, Concessionaire shall prepare a Renewal Work Schedule that identifies the Renewal Work activities, if any, planned for the year. The Renewal Work Schedule shall also identify the Renewal Work activities planned by Concessionaire for the next five-year period. Concessionaire shall submit the Renewal Work Schedule to FDOT for review and approval in accordance with the Contract Documents.

SECTION 5. Tables

Table A

Hourly Unavailability Factors

Availability Classification	Hourly Unavailability Factor
A	0.1
B	0.2
C	0.4
D	0.6
E	0.7
F	0.8
G	1.0

Table B

Classification of Closures during Mid and High-Priority Hours

I-595 Corridor Segments (Segments 1, 2, 3 and 4)	Availability Classification	Express Lanes Segment (Segment 5)
	A	
	B	
• 1 lane of a 3 lane part of SR-84 or • 1 lane of a 6 lane part of I-595 or • 1 lane of a 2 lane Ramp or • any 1 lane of a crossroad is not available at some time during the Hour	C	
• 1 lane of a 3, 4, or 5 lane part of I-595 or • 2 lanes of a 6 lane part of I-595 or • 1 lane of a 2 lane part of SR-84 or • 2 lanes of a 3 lane part of SR-84 or • 1 lane of a 2 lane High Impact Ramp or • All lanes of a Ramp or • more than 1 lane of a crossroad is not available at some time during the Hour	D	• 1 lane of a 3 lane part or 1 lane of a 4 lane part of the Express Lanes or • 1 or more lanes of an ingress Express Lanes Ramp are not available some time during the Hour
• 2 lanes of a 4 or 5 lane part of I-595 or • 3 lanes of a 6 lane part of I-595 is not available at some time during the Hour	E	
• 2 lane of a 3 lane part of I-595 or • 3 lanes of a 4 lane part or 5 lane part of I-595 or • 4 lanes of a 5 lane part or 6 lane part of I-595 or • 5 lanes of a 6 lane part of I-595 or • All lanes of SR-84 or • All lanes of a High Impact Ramp are not available at some time during the Hour	F	• 1 lane of a 2 lane part, 2 lanes of a 3 lane part, or 2 lanes of a 4 lane part of the Express Lanes or • 1 or more lanes of an egress Express Lanes Ramp are not available some time during the Hour
• All lanes of I-595 are not available at some time during the Hour	G	• All Express Lanes are not available at some time during the Hour

Note 1: Per the definition of Closure, a Closure leaving one or zero lanes open on an I-595 Corridor Segment shall be deemed to be occurring on both Segments of the given I-595 Corridor Segment direction.

Note 2: If a Closure falls within two or more Availability Classifications, the higher letter shall be considered the Availability Classification for the Closure. By way of example, if a Closure falls within Availability Classification "C" and Availability Classification "D", the Closure shall assigned Availability Classification "D".

Note 3: Lanes include General Purpose Lanes and Auxiliary Lanes.

Table C

Classification of Closures during Low-Priority Hours

I-595 Corridor Segments (Segments 1, 2, 3 and 4)	Availability Classification	Express Lanes Segment (Segment 5)
• 1 lane of a 3, 4, 5 or 6 lane part of I-595 or • 2 lanes of a 4, 5, or 6 lane part of I-595 or • 1 lane of a 3 lane part of SR-84 or • any 1 lane of a crossroad is not available at some time during the Hour	A	
• 2 lanes out of 3 lane part of I-595 or • 1 lane of a 2 lane part of SR-84 or • 1 lane of a 2 lane Ramp or • more than 1 lane of a crossroad is not available at some time during the Hour	B	
• 2 lanes of a 3 lane part of SR-84 or • 1 lane of a 2 lane High Impact Ramp or • All lanes of a Ramp are not available at some time during the Hour	C	• 1 or more lanes of an ingress Express Lanes Ramp are not available some time during the Hour
• 3 lanes of a 5 or 6 lane part of I-595 or • All lanes of a High Impact Ramp are not available at some time during the Hour	D	• 1 lane of a 3 lane part or 1 lane of a 4 lane part of the Express Lanes or • 1 or more lanes of an egress Express Lane are not available some time during the Hour
	E	
• 3 lanes of a 4 lane part of I-595 or • 4 lanes of a 5 or 6 lane part of I-595 or • 5 lanes of a 6 lane part of I-595 or • All lanes of SR-84 are not available at some time during the Hour	F	• 2 lanes of a 3 lane part or 2 lanes of a 4 lane part of the Express Lanes are not available some time during the Hour
• All lanes of I-595 are not available at some time during the Hour	G	• All Express Lanes are not available at some time during the Hour

Note 1: Per the definition of Closure, a Closure leaving one or zero lanes open on an I-595 Corridor Segment shall be deemed to be occurring on both Segments of the given I-595 Corridor Segment direction.

Note 2: If a Closure falls within two or more Availability Classifications, the higher letter shall be considered the Availability Classification for the Closure. By way of example, if a Closure falls within Availability Classification "C" and Availability Classification "D", the Closure shall assigned Availability Classification "D".

Note 3: Lanes include General Purpose Lanes and Auxiliary Lanes.

Table D

Segment Weighting Factors

Segment Number*	Segment	Segment Weighting Factor
1	I-595 eastbound and SR-84 eastbound west of Sewell Lock, including crossroads, High Impact Ramps and Ramps	0.2
2	I-595 eastbound and SR-84 eastbound east of Sewell Lock Road, including crossroads, High Impact Ramps and Ramps	0.2
3	I-595 westbound and SR-84 westbound west of Sewell Lock, including crossroads, High Impact Ramps and Ramps	0.2
4	I-595 westbound and SR-84 westbound east of Sewell Lock, including crossroads, High Impact Ramps and Ramps	0.2
5	Express Lanes and Express Lanes Ramps.	0.2

* See Figure 1 for map of Segments

Figure 1

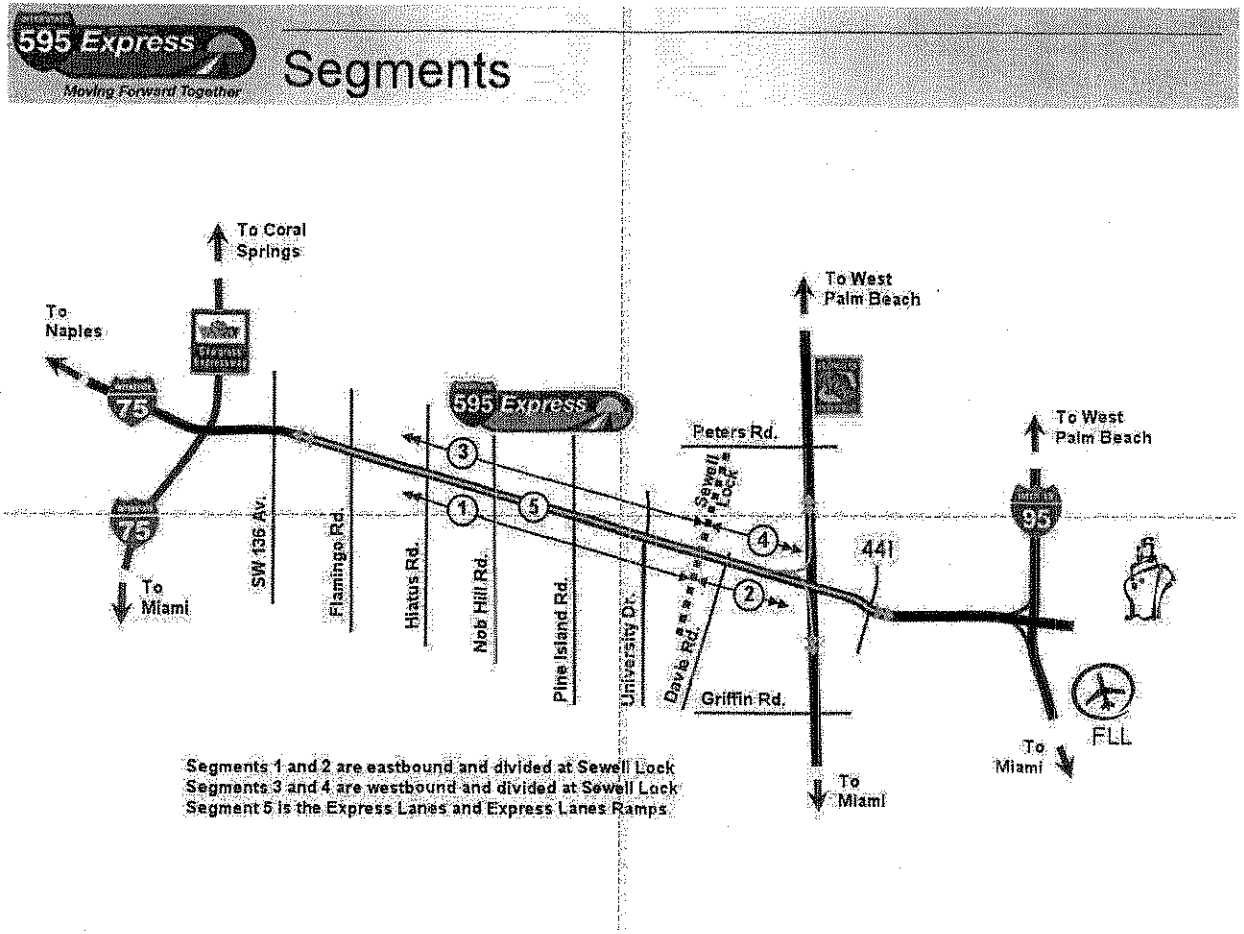

595 Express
Moving Forward Together
Segments
To Coral Springs
To Naples
To Miami
595 Express
SW 136 Av.
Flamingo Rd.
Hiatus Rd.
Nob Hill Rd.
Pine Island Rd.
University Dr.
Dave Rd.
Sewell Lock
Peters Rd.
Griffin Rd.
To West Palm Beach
To Miami
441
To West Palm Beach
To Miami
FLL
Segments 1 and 2 are eastbound and divided at Sewell Lock
Segments 3 and 4 are westbound and divided at Sewell Lock
Segment 5 is the Express Lanes and Express Lanes Ramps

Table E

Time Weighting Factors

I-595 Corridor Segments

(Segment 1, 2, 3 and 4)

Category of Hours	TWF	Definition
Peak Days		Monday at 0:00 through Friday at 19:00
High Priority Hours	12.00	06:00 – 09:00 and 16:00 – 19:00
Mid Priority Hours	6.00	09:00 – 16:00 and 19:00 – 22:00
Low Priority Hours	2.00	22:00 – 6:00
Weekends		Friday at 19:00 through Sunday at 24:00
High Priority Hours	12.00	12:00 – 02:00 (except Sunday 21:00 – 24:00)
Mid Priority Hours	6.00	08:00 – 12:00
Low Priority Hours	2.00	02:00 – 08:00 and Sunday 21:00 – 24:00

Express Lanes Segment

(Segment 5)

Category of Hours	TWF	Definition
Peak Days		Monday through Friday
High Priority Hours	20.00	06:00 – 09:00 and 16:00 – 19:00
Mid Priority Hours	6.00	09:00 – 16:00 and 19:00 – 22:00
Low Priority Hours	1.00	22:00 – 6:00
Weekends		Saturday through Sunday
High Priority Hours		None
Mid Priority Hours	6.00	06:00 – 23:00
Low Priority Hours	1.00	23:00 – 6:00

Table F

O&M Violation Adjustments

O&M Violation Classifications	O&M Violation Adjustment
A	MAP_y / (40,000)
B	MAP_y / (8,000)
C	MAP_y / (4,000)
D	MAP_y / (1,600)
E	MAP_y / (360)

Note: MAP_y has the meaning set forth in Section 1.1 of this Appendix 6

APPENDIX 6-A

ADJUSTMENT FOR BENCHMARK INTEREST RATE AND CREDIT SPREAD CHANGES

The MAP (in July, 2008 US dollars) shall be adjusted using the Benchmark Interest Rates, Base Interest Rates, Base Credit Spreads, Maximum Adjusted MAP, Maximum Credit Spread Upward Adjustment and Maximum Credit Spread Downward Adjustment (which may be updated to take into account the use of Reserve Funds), subject to FDOT's rights to: (a) adjust such Benchmark Interest Rates, Base Interest Rates, Base Credit Spreads, Maximum Adjusted MAP and Maximum Credit Spread Upward Adjustment or (b) not provide or provide a reduced MAP adjustment for credit spreads, loan establishment fees and LIBOR swap margin fluctuations in accordance with Sections 1 and/or 4.2 of this Appendix 6-A, as applicable.

Notwithstanding the above, if Financial Close occurred before or occurs simultaneously with the Effective Date or the MAP (in July, 2008 US Dollars) has already been adjusted for interest rates and/or credit spread, loan establishment fees and LIBOR swap margin fluctuations pursuant to the Instructions to Proposers, then the MAP shall not be adjusted again pursuant to the provisions of this Appendix 6-A.

SECTION 1. FDOT'S RIGHT TO MODIFY

1.1 Benchmark Interest Rates and Base Interest Rates

If FDOT reasonably determines that Concessionaire's selection of indices, debt terms and derived Base Interest Rates do not best match Concessionaire's Proposal debt structure(s), then FDOT shall have the right to select indices, interest rates or debt terms, as applicable, from the Benchmark Interest Rates that more accurately reflect the Proposal's debt-financing solution and revise the Base Interest Rates and Base Credit Spreads accordingly for purposes of determining adjustments to the MAP under this Appendix 6-A.

1.2 NOT USED

SECTION 2. INTEREST RATE FLUCTUATION RISK

2.1 Subject to the limitations described in this Section 2 and in Section 4 of this Appendix 6-A, the MAP shall be adjusted (upward or downward) to offset the financial impact (positive or negative) to Concessionaire's financial plan of the actual interest rate change, if any, in all applicable Benchmark Interest Rates between

December 2, 2008 and the earlier of (a) six months after the Effective Date or (b) the date of Financial Close, such that the lowest possible MAP is achieved, while the Original Equity IRR is maintained and the minimum prevailing debt covenants established in the Funding Agreements are not violated. The adjustment shall be calculated and made in accordance with Section 4 of this Appendix 6-A.

2.2 Notwithstanding Section 2.1 of this Appendix 6-A, the MAP shall not be adjusted to be higher than the Maximum Adjusted MAP. FDOT reserves the right to increase the value of the Maximum Adjusted MAP in its sole and absolute discretion.

SECTION 3. CREDIT SPREAD FLUCTUATION RISK

3.1 In addition to the MAP adjustment mechanism described in Section 2 of this Appendix 6-A, and subject to the limitations described in this Section 3 and in Section 4 of this Appendix 6-A, the MAP shall be adjusted (upward or downward) by 75% of the amount that would be required to offset the financial impact (positive or negative) to Concessionaire's financial plan of credit spreads, loan establishment fees and LIBOR swap margin fluctuations between December 2, 2008 and the earlier of (a) six months after the Effective Date or (b) the date of Financial Close, such that the lowest possible MAP is achieved, while the Original Equity IRR is maintained and the minimum prevailing debt covenants established in the Funding Agreements are not violated. The adjustment shall be calculated and made in accordance with Section 4 of this Appendix 6-A.

3.2 Notwithstanding Section 3.1 of this Appendix 6-A, the MAP shall not be adjusted to be higher than the Maximum Adjusted MAP, and any MAP upward adjustment made to offset for 75% of the combined impact of credit spread, loan establishment fees and LIBOR swap margin fluctuations shall not exceed the Maximum Credit Spread Upward Adjustment. In addition to its right to increase the Maximum Adjusted MAP described Section 3.2 of this Appendix 6-A, FDOT also reserves the right to increase the value of the Maximum Credit Spread Upward Adjustment in its sole and absolute discretion, in which case the excess movement shall be shared at the same 75%/25% ratio described in this Section 3 of Appendix 6-A.

If the credit spread, loan establishment fees and LIBOR swap margin fluctuations altogether result in a MAP downward adjustment, and if 75% of the combined impact of credit spread, loan establishment fees and LIBOR swap margin fluctuations exceeds the Maximum Credit Spread Downward Adjustment then FDOT shall be entitled to 100% of the benefit of the excess downward movement beyond the Maximum Credit Spread Downward Adjustment.

SECTION 4. FINANCIAL CLOSE AND FINAL DETERMINATION OF MAP

4.1 Funding Arrangements and Timing

Concessionaire will use its best efforts to achieve Financial Close under terms and with timing that will be most advantageous to FDOT (i.e., that will produce the highest decrease or lowest increase of the MAP). FDOT will have the right to approve the terms of the Funding Agreements (i.e., the date of expected Financial Close, the credit spread, loan establishment fees and LIBOR swap margin estimates, etc.), which approval will not be unreasonably withheld. Concessionaire shall submit, as soon as practicable and from time-to-time prior to the scheduled Financial Close all the relevant information related to the Funding Agreement(s), including (if available) credit spread, loan establishment fees and LIBOR swap margin data for comparable transactions closed in the past 60 days, as well as updated current Base Interest Rates, Base Credit Spreads and detailed estimates of the calculations described in Sections 4.3.1, 4.3.2 and 4.3.3 of this Appendix 6-A. FDOT shall have a reasonable period to: (a) give its approval or disapproval of the terms and provisions of the Funding Agreements as to whether a Funding Agreement complies with the requirements of Section 16 of the Agreement, or (b) notify Concessionaire that FDOT wishes to use Reserve Funds in accordance with Section 4.4 of this Appendix 6-A. FDOT's failure to either approve or disapprove of the terms and provisions of the Funding Agreements within the agreed period shall be deemed an approval.

4.2 Interest Rates, Credit Spreads and Optimal Debt Structure

FDOT will use its own sources of research to establish the actual movement in interest rates, by means of an update in the respective Benchmark Interest Rates. In the case where the movement of the Benchmark Interest Rates selected by Concessionaire are more favorable for FDOT, this calculation will prevail. FDOT reserves the right in its reasonable discretion to request and/or approve an adjustment in the date of Financial Close, a change in the Benchmark Interest Rates selected by Concessionaire, or the debt strategy (e.g., fixed or variable rate, the use of synthetics, TIFIA, bank debt or capital market debt) prior to Financial Close if the resulting impact of the change results in a more favorable MAP and/or a lower required amount of Reserve Funds. In exercising this right, FDOT will consult with Concessionaire in order to avoid unduly delaying Financial Close or negatively affecting the economic position of the Concessionaire with regard to its Original Equity IRR or the covenants of its Funding Agreements.

4.3 Adjusting the MAP

If, at the earlier of (a) six months after the Effective Date or (b) the date of Financial Close, the value(s) of the Benchmark Interest Rate(s) and credit spread(s) have changed since December 2, 2008, then Concessionaire will determine the adjusted MAP by making the following calculations:

4.3.1 Calculation of Adjusted MAP

The value of the MAP as adjusted for Benchmark Interest Rate and credit spread, loan establishment fees and LIBOR swap margin fluctuations (which risk sharing is

described in Sections 2 and 3 of this Appendix 6-A) is determined in accordance with the following calculations:

If **X** > **W** or **X** = **W**, then let "**Y**" = Minimum [(75% * (**X** – **W**)), "Maximum Credit Spread Upward Adjustment (as it may be increased by FDOT in its sole and absolute discretion)"]

If **X** < **W** and 75% * (**W** - **X**) < "Maximum Credit Spread Downward Adjustment", then let "**Y**" = 75% * (**X** – **W**), which shall be a negative number

If **X** < **W** and 75% * (**W** - **X**) > "Maximum Credit Spread Downward Adjustment", then let "**Y**" = (**X** – **W**) + (25%/75% * "Maximum Credit Spread Downward Adjustment") = (**X** – **W** + "Maximum Credit Spread Downward Adjustment"/3), which shall be a negative number

Let "**Z**" = **W** + **Y**

Therefore the adjusted MAP = Minimum [**Z**, "Maximum Adjusted MAP (as it may be increased by FDOT in its sole and absolute discretion)"]

FDOT will audit and verify the calculations of "**W**" and "**X**" (described in Sections 4.3.2 and 4.3.3 of this Appendix 6-A) and determine the value of the MAP as adjusted per the formula above.

4.3.2 Benchmark Interest Rates Changes

The value "**W**" will be determined as the lowest possible MAP that results from solving the Original Financial Model in accordance with Section 2.1 of this Appendix 6-A, after updating all Base Interest Rates to the actual market value(s) of the Benchmark Interest Rate(s) and while leaving Base Credit Spread(s) unchanged.

4.3.3 Benchmark Interest Rates Changes and Credit Spreads Change

The value "**X**" will be determined as the lowest possible MAP that results from solving the Original Financial Model (while the Original Equity IRR is maintained and the minimum prevailing debt covenants established in the Funding Agreements are not violated) after updating all Base Credit Spread(s) to the actual market value(s) of the loan establishment fees, LIBOR swap margin and credit spread(s) on the Benchmark Interest Rate(s) and also updating Base Interest Rate(s) to the actual market value(s) of the Benchmark Interest Rates. For this calculation, the Original Financial Model should be solved to demonstrate the impact of 100% of the upward change in Base Credit Spreads on the MAP.

4.3.4 Exceptions

Notwithstanding the foregoing, the calculations described in this Section 4.3 may be modified as applicable if: (a) FDOT elects to allow an increase in the Maximum Adjusted MAP to further offset the impact of Benchmark Interest Rate fluctuations in accordance with Section 2.2 of this Appendix 6-A; (b) FDOT elects to allow an increase in the Maximum Adjusted MAP and/or the Maximum Credit Spread Upward Adjustment to further offset the impact of 75% of the impact of credit spreads, loan estalibshment fees and LIBOR swap margin fluctuation in accordance with Section 3.2 of this Appendix 6-A, in which case the excess movement shall be shared at the same 75%/25% ratio described in Section 3 of this Appendix 6-A; or (c) FDOT elects to use Reserve Funds in accordance with Section 4.4 of this Appendix 6-A.

4.4 Use of Reserve Funds

If the application of the calculation in Section 4.3.1 of this Appendix 6-A results in an amount Z=W+Y in excess of the MAP Threshold (in July 1, 2008 US Dollars), then FDOT reserves the right, in its sole discretion, to (a) increase the Maximum Adjusted MAP and accept the resulting adjusted MAP or (b) reduce the MAP to an amount acceptable to FDOT by using Reserve Funds to supplement the Final Acceptance Payments listed in Section 4.10.4.1 of the Agreement. The amount of Reserve Funds necessary to offset the reduction in the MAP will be determined by solving the Original Financial Model for the lowest possible amount of Reserve Funds necessary to achieve the reduced MAP amount acceptable to FDOT, while maintaining the Original Equity IRR and not violating the minimum prevailing debt covenants established in the Funding Agreements, provided that FDOT will indicate the amounts and the relevant Fiscal Year(s) for the Reserve Funds it plans to use. The amount of Reserve Funds needed to offset changes in the MAP may be adjusted in accordance with Section 4.2 of this Appendix 6-A. In exercising this right, FDOT will consult with Concessionaire in order to avoid unduly delaying Financial Close.

APPENDIX 6-B

BENCHMARK INTEREST RATES – DECEMBER 2, 2008

Maturity	LIBOR Swap Yield
1 DY	0.40625
2 DY	1.00000
1 WK	1.19875
2 WK	1.62500
3 WK	1.87500
1 MO	1.89875
2 MO	2.05875
3 MO	2.21000
4 MO	2.33875
5 MO	2.45500
6 MO	2.56875
7 MO	2.59125
8 MO	2.61375
9 MO	2.63250
10 MO	2.66000
11 MO	2.68750
1 YR	1.89575
2 YR	1.93457
3 YR	2.11222
4 YR	2.33528
5 YR	2.49457
6 YR	2.65303
7 YR	2.74967
8 YR	2.83289
9 YR	2.88750
10 YR	2.91250
12 YR	2.92649
15 YR	2.90588
20 YR	2.83137
30 YR	2.74412

SLGS (TIFIA)					
From (Year-Month)	Through (Year-Month)	Rate	From (Year-Month)	Through (Year-Month)	Rate
00 - 01	ONLY	0.03%	06 - 09	06 - 11	2.10%
00 - 02	ONLY	0.03%	07 - 00	07 - 02	2.15%
00 - 03	ONLY	0.06%	07 - 03	07 - 05	2.20%
00 - 04	ONLY	0.15%	07 - 06	07 - 08	2.25%
00 - 05	ONLY	0.30%	07 - 09	07 - 11	2.30%
00 - 06	ONLY	0.43%	08 - 00	08 - 02	2.35%
00 - 07	ONLY	0.52%	08 - 03	08 - 05	2.40%
00 - 08	ONLY	0.60%	08 - 06	08 - 08	2.45%
00 - 09	ONLY	0.68%	08 - 09	08 - 11	2.51%
00 - 10	ONLY	0.74%	09 - 00	09 - 02	2.56%
00 - 11	ONLY	0.78%	09 - 03	09 - 05	2.61%
01 - 00	01 - 02	0.80%	09 - 06	09 - 08	2.66%
01 - 03	01 - 05	0.83%	09 - 09	09 - 11	2.71%
01 - 06	01 - 08	0.85%	10 - 00	10 - 11	2.77%
01 - 09	01 - 11	0.87%	11 - 00	11 - 11	3.03%
02 - 00	02 - 02	0.91%	12 - 00	12 - 11	3.31%
02 - 03	02 - 05	0.96%	13 - 00	13 - 11	3.52%
02 - 06	02 - 08	1.02%	14 - 00	14 - 11	3.57%
02 - 09	02 - 11	1.07%	15 - 00	15 - 11	3.57%
03 - 00	03 - 02	1.14%	16 - 00	16 - 11	3.57%
03 - 03	03 - 05	1.21%	17 - 00	17 - 11	3.57%
03 - 06	03 - 08	1.28%	18 - 00	18 - 11	3.56%
03 - 09	03 - 11	1.36%	19 - 00	19 - 11	3.56%
04 - 00	04 - 02	1.44%	20 - 00	20 - 11	3.55%
04 - 03	04 - 05	1.52%	21 - 00	21 - 11	3.54%
04 - 06	04 - 08	1.59%	22 - 00	22 - 11	3.52%
04 - 09	04 - 11	1.66%	23 - 00	23 - 11	3.49%
05 - 00	05 - 02	1.72%	24 - 00	24 - 11	3.46%
05 - 03	05 - 05	1.78%	25 - 00	25 - 11	3.43%
05 - 06	05 - 08	1.83%	26 - 00	26 - 11	3.40%
05 - 09	05 - 11	1.89%	27 - 00	27 - 11	3.36%
06 - 00	06 - 02	1.94%	28 - 00	28 - 11	3.31%
06 - 03	06 - 05	1.99%	29 - 00	29 - 11	3.28%
06 - 06	06 - 08	2.04%	30 - 00	40 - 00	3.26%

Appendix 7

APPENDIX 7

LIST OF INITIAL FUNDING AGREEMENTS AND INITIAL SECURITY DOCUMENTS

Capitalized terms used and not otherwise defined herein shall have the meaning set forth in that certain Credit Agreement, dated as of March 3, 2009 (the "Credit Agreement"), among I 595 Express, LLC, each Lender party thereto and Dexia Crédit Local, New York Branch, as administrative agent.

Funding Agreements

Document	Party 1	Party 2
Credit Agreement	I 595 Express, LLC	Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A. • Banco Santander, S.A., New York Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch Administrative Agent • Dexia Crédit Local, New York Branch
Notes	I 595 Express, LLC	N/A
TIFIA Loan Agreement	I 595 Express, LLC	TIFIA Lender • USDOT, acting by and through FHWA
TIFIA Note	I 595 Express, LLC	N/A
Intercreditor Agreement	N/A	Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch TIFIA Lender • USDOT, acting by and through FHWA

		Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Equity Contribution Agreement	I 595 Express, LLC	Sponsor • ACS Infrastructure Development, Inc. Collateral Agent • Bank of New York Mellon
Hedging Agreements	I 595 Express, LLC	Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Fee Letter	I 595 Express, LLC	Administrative Agent • Dexia Crédit Local, New York Branch
Fee Letter	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Fee Letter	I 595 Express, LLC	Initial Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A.

		• Banco Santander, S.A., New York Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch
Fee Letter	I 595 Express, LLC	Depositary • Bank of New York Mellon

Security Documents

Document	Party 1	Party 2
Borrower Membership Interest Pledge Agreement	Sponsor • ACS Infrastructure Development, Inc.	Collateral Agent • Bank of New York Mellon
Security Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Control Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Account Bank • Banco de Sabadell, S.A., Miami Branch
Direct Agreements	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Project Participants • I 595 Express, LLC, • Dragados USA, Inc., • FDOT, and • Each Person that is a party to Material Project Agreements
Depositary Agreement	I 595 Express, LLC	Depositary • Bank of New York Mellon Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch
Equity Investor LC	N/A	Issuing Bank • Banco Santander, S.A., New York Branch Beneficiary • The Bank of New York Mellon

Appendix 8

APPENDIX 8

INSURANCE REQUIREMENTS

COVERAGE	BUILDERS RISK
	Required when performing Construction Work
Form:	Builders All Risk (BAR) Completed Value Form
Named Insured:	FDOT and Concessionaire and/or their Contractors and subcontractors of every tier as their interest may appear
Additional Insured:	USDOT as their interest may appear
Policy Term:	60 months with 12 month annual extensions to 72 months or until Final Acceptance
Policy Limit:	US$100 million per occurrence
Sub Limits:	▪ Inland transit/ocean cargo US$10 million (separate policy acceptable) ▪ Offsite storage US$10 million ▪ Expediting expenses/extra expense US$10 million ▪ Demolition, increased cost of construction including undamaged property US$25 million ▪ Debris Removal US$25 million ▪ Professional fees US$5 million
Coverage Extensions / Conditions:	▪ 72-hour occurrence period ▪ Civil authority or ingress/egress clauses ▪ Blanket waiver of subrogation as required by contract ▪ Insurance company cancellation not permitted (except for non-payment of premium) ▪ Design error/faulty workmanship exclusion, except ensuing loss not otherwise excluded is covered (LEG 2/96) ▪ Testing included
Insured Perils:	All risk of direct physical loss or damage including but not limited to fire, lightning, explosion, collapse, flood, earthquake, sinkhole, boiler & machinery, etc.

FDOT Self-Insurance	FDOT will accept the risk of tangible property damage to the Work attributed to Named Windstorm and Terrorism in accordance with and subject to the deductibles identified in Section 17.1.6 of the Agreement.
Insured Property:	All real and personal property in the course of construction (including materials to be incorporated therein) including footings, foundations, and excavations costs, installation, testing and/or commissioning related to the Project.
Deductibles:	Physical damage: Not less than US$250,000 per occurrence FDOT self-insured perils: Per Section 17.1.6 of the Agreement.
Coinsurance:	Waived
Valuation:	Replacement cost for property damage
Insurer:	Approved in the State of Florida; AM Best rating AX or better. Surplus lines insurers are acceptable, provided that that they meet the foregoing requirements.

COVERAGE	**PROPERTY INSURANCE FOR O&M**
	All property, except Construction Work
Form:	All Risk
Named Insured:	FDOT and/or Concessionaire and/or Lead Operations and Maintenance Firm
Additional Insured:	USDOT as their interest may appear
Policy Term:	Annual/Renewable
Policy Limit:	US$100 million per occurrence
Sub Limits:	▪ Offsite storage US$10 million ▪ Expediting expenses/extra expense US$10 million ▪ Demolition, increased cost of construction including undamaged property US$25 million ▪ Debris removal US$25 million ▪ Professional fees US$5 million
Coverage Extensions / Conditions:	▪ 72-hour occurrence period ▪ Civil authority or ingress/egress clauses

	▪ 60 days notice of cancellation (except 10 days for non-payment of premium) ▪ Design error/faulty workmanship exclusion, except ensuing loss not otherwise excluded is covered (LEG 2/96)
Insured Perils:	All risk of direct physical loss or damage including but not limited to fire, lightning, explosion, collapse, flood, earthquake, sinkhole, boiler & machinery, etc.
FDOT Self-Insurance:	FDOT will accept the risk of tangible property damage to the Work attributed to Named Windstorm and Terrorism in accordance with and subject to the deductibles identified in Section 17.1.6 of the Agreement.
Insured Property:	All real and personal property of every description
Deductibles:	Physical damage: Not less than US$250,000 per occurrence FDOT self-insured perils: Per Section 17.1.6 of the Agreement.
Coinsurance:	Waived
Valuation:	Replacement cost for property damage
Insurer:	Approved in the State of Florida; AM Best rating AX or better. Surplus lines insurers are acceptable, provided that that they meet the foregoing requirements.
COVERAGE	**WORKERS' COMPENSATION / EMPLOYERS' LIABILITY COMPLIANT WITH FLORIDA STATUTE** Required during the Term of the Agreement
Named Insured:	Policies required of Concessionaire and Contractors of every tier
Limits:	Workers' Compensation: Statutory Employers' Liability: US$1 million per occurrence US$1 million disease per employee US$1 million disease policy limit
Policy Retention:	Concessionaire/Lead Contractor/Lead Operations and Maintenance Firm: Not to exceed US$1 million per occurrence Other Contractors: Not to exceed US$250,000 per occurrence (does not apply to CCIP)

Additional Terms:	Voluntary compensation endorsement Waiver of subrogation as required by the Agreement Where applicable, endorsed to cover US Longshore and Harbor Workers Act, and Jones Act 60 days notice of cancellation (except 10 days for non-payment of premium)
Insurer:	Admitted in the State of Florida, AM Best rating of AX or better
COVERAGE	**COMMERCIAL GENERAL LIABILITY, ISO FORM CG 00 01 04 OR EQUIVALENT** Required during the Term of the Agreement
Named Insured:	Concessionaire, Lead Contractor, Lead Operations and Maintenance Firm
Additional Named Insured:	FDOT, but only with respect to liability arising out of the Project
Additional Insured	USDOT
Policy Limits:	US$2 million per occurrence US$5 million general aggregate US$5 million completed operations aggregate Policy limits may be met through a combination of primary and excess liability coverage, provided that no gap in coverage exists
Policy Retention:	Not to exceed US$1 million per occurrence
Additional Terms:	• Primary to any insurance or self-insurance otherwise available to insured parties • All limits dedicated to the Project • No exclusions for explosion, collapse, or underground (XCU) • Removal exclusion for work within 50 feet of a railroad • Each of the indemnified parties as additional insureds under contractors liability insurance policies • Additional insureds covered for completed operations • Waivers of subrogation provided in favor of additional insureds

	• Additional insureds endorsements states interests and protections of each additional insured shall not be affected by an misrepresentation, act or omission of a named insured or any breach by a named insured of policy provisions • Liability covers acts or omissions of Concessionaire's employees engaged in the work and employees of Contractors • 60 days notice of cancellation (except 10 days for non-payment of premium)
Insurer:	Admitted in the State of Florida, AM Best rating of AX or better
COVERAGE	**MARINE LIABILITY INSURANCE** Required when vessels are used in connection with the Work
Named Insured:	Operators of barges and other vessels
Policy Limits:	Broad form protection & indemnity – US$5 million Jones Act coverage – US$10 million Marine Bumbershoot – US$100 million (may be included in Excess Liability Policy) Policy limits may be met through a combination of primary and excess liability coverage, provided that no gap in coverage exists and Excess Liability coverage applies to non-owned watercraft so that no operated vessel has less than US$5 million P&I and US$10 million Jones Act coverage.
Policy Retention:	Not to exceed US$500,000 per occurrence
Additional Terms	Include coverage for FDOT as an additional insured
Insurer:	Approved in the State of Florida; AM Best rating of AX or better
COVERAGE	**AIRCRAFT LIABILITY** Required when aircraft are used in connection with the Work
Named Insured:	Operators of aircraft
Policy Limits:	US$10 million
Policy Retention:	Not to exceed US$250,000 per occurrence
Additional Terms:	• Include coverage for FDOT as an additional

	insured • Applies to owned, non-owned, and hired aircraft
Insurer:	Approved in the State of Florida, AM Best rating of AX or better
COVERAGE	**COMMERCIAL AUTOMOBILE LIABILITY**
	Required during the Term of the Agreement
Form:	ISO Business Automobile Policy or equivalent
Named Insured:	Individual policies provided by Concessionaire and/or Contractors of every tier
Policy Limits:	US$10 million combined single limit Policy limits may be met through a combination of primary and excess liability coverage, provided that no gap in coverage exists and Excess Liability coverage applies to non-owned auto so that no operated auto has less than US$10 million
Policy Retention:	Concessionaire/Lead Contractor/Lead Operations and Maintenance Firm: Not to exceed US$1 million per occurrence Other Contractors: Not to exceed US$250,000 per occurrence
Additional Terms:	• 60 days notice of cancellation (except 10 days for non-payment of premium) • Indemnified parties as additional insureds • Waivers of subrogation where required by the Agreement • Interests and protections of each additional insured will not be affected by any misrepresentation, act or omission of a named insured or any breach by a named insured • Endorsement – Motor Carrier Act Endorsement-Hazardous materials clean up (MCS-90) for any Contractor who will at any time transport Contaminated Materials
Insurer:	Admitted in the State of Florida, AM Best rating of AX or better

COVERAGE	**EXCESS LIABILITY**
	Required during the Term of the Agreement
Named Insured:	Concessionaire, Lead Contractor, Lead Operations and Maintenance Firm
Policy Limits:	US$100 million per occurrence and in the aggregate
Policy Retention:	Not to exceed US$1 million per occurrence SIR
Additional Terms:	• Occurrence form • Annual reinstatement of limit • 60 days notice of cancellation (except 10 days for non-payment of premium) • Waiver of subrogation as required by the Agreement
Insurer:	Approved in the State of Florida; AM Best rating of AX or better

COVERAGE	**PROJECT SPECIFIC PROFESSIONAL LIABILITY COVERAGE**
	Required when performing Design Work
Form	Claims-made
Named Insured:	The Lead Engineering Firm, the geotechnical consultant and any Contractor performing Design Work
Retroactive Date:	Date of the first Contract for Design Work
Policy Term:	Construction Period
Extended Reported Period:	Five years
Policy Limits:	US$25 million each claim/policy aggregate for the Lead Engineering Firm and any Contractor performing Design Work that is not a subcontractor to the Lead Engineering Firm
Key Coverages:	• Includes the Owner's Indemnification Endorsement • No exclusions or limitations for consequential or delay damages or exceeded cost estimate
Policy Retention:	Not to exceed US$1 million per occurrence
Insurer:	Approved in the State of Florida; AM Best rating of AX or better

COVERAGE	CONTRACTORS POLLUTION LIABILITY *
	Required when performing Construction Work
Form:	Occurrence form preferred / claims-made acceptable
Named Insured:	Concessionaire and Contractors of every tier
Policy Term:	6 years with 4 year extended reporting period (ERP) or term of construction plus ERP to equal a total of 10 years
Project Policy Limits:	US$20,000,000 minimum specific to the Project only
Policy Retention:	Not to exceed US$1 million per occurrence
Specific Terms and Conditions:	▪ 60 days notice of cancellation (except 10 days for non-payment of premium) ▪ Coverage must be primary ▪ Natural resource damages must be covered ▪ No exclusion for work in or adjacent to State or Federal Superfund Sites ▪ Waiver of subrogation in favor of FDOT ▪ Covered Operations – all those performed by or on behalf of the Named Insured ▪ Covered Operations – all those performed by or on behalf of the Named Insured ▪ Bodily Injury definition – deemed to include mental anguish, shock, mental injury or illness whether or not accompanied by physical injury or illness by any person or persons ▪ Property Damage definition – deemed to include diminution in value of third party property whether or not accompanied by physical damage ▪ Blanket Contractual – for all written contracts (including third party action over claims) ▪ Named Insured interest in joint ventures to be included/delete joint venture exclusion ▪ Coverage for transportation (in transit, loading and unloading exposure) to or from a jobsite ▪ Non-owned disposal site coverage – for treatment, storage or disposal facilities which receive hazardous materials from the insured project ▪ No exclusions for radioactive matter/naturally

* Please see attached Waiver letter Re: Insurance issues

	occurring radioactive materials ▪ No exclusions for asbestos and lead/lead paint ▪ Coverage for punitive/exemplary damages, civil fines and penalties, where insurable by law
Insurer:	Approved in the State of Florida; AM Best rating of AX or better
COVERAGE	**POLLUTION LEGAL LIABILITY FOR O&M WORK**
	Required when performing O&M Work
Form:	Claims-made
Named Insured:	Concessionaire and FDOT
Additional Insured:	USDOT
Policy Term:	3 years, to be renewed until expiration of the Term
Policy Limit:	US$20 million per claim
Policy Retention:	Not to exceed US$1 million per occurrence
Insurer:	Approved in the State of Florida; AM Best rating of AX or better
Specific Terms and Conditions:	• 60 days notice of cancellation (except 10 days for non-payment of premium) ▪ Coverage must be primary ▪ Must cover third-party claims for bodily injury, property damage and cleanup of unknown pre-existing and new pollution conditions ▪ Coverage must extend to protect the Concessionaire and FDOT as the result of pollution conditions arising from third party transportation while in the course of utilizing the covered location. Coverage cannot be limited to only accidental upset/overturn or loading/ unloading. ▪ Coverage must also be extended to protect the Concessionaire and FDOT as the result of pollution conditions resulting from normal maintenance activities associated with operating the Express Lanes. ▪ Natural resource damages must be covered ▪ No exclusion for work in or adjacent to State or

Federal Superfund Sites

- Waiver of subrogation on behalf of FDOT
- Covered site – all parcels within the Project ROW as of the Effective Date; new parcels must be added to the policy at the time of acquisition
- Bodily Injury definition – deemed to include mental anguish, shock, mental injury or illness whether or not accompanied by physical injury or illness by any person or persons
- Property Damage definition – deemed to include diminution in value of third party property whether or not accompanied by physical damage
- Coverage for transportation (in transit, loading and unloading exposure) to or from a jobsite
- Non-owned disposal site coverage – for treatment, storage or disposal facilities which receive hazardous materials from the insured as a result of O&M Work
- No exclusions for radioactive matter/naturally occurring radioactive materials
- No exclusions for third-party claims for bodily injury, defense costs or cleanup of soil or groundwater arising from asbestos and/or lead paint
- Coverage for punitive/exemplary damages, civil fines and penalties, where insurable by law

APPENDIX 9
DISPUTES

App. 9-A Form of Disputes Review Board Agreement

App. 9-B Disputes Review Board Procedures

App. 9-C Regional Disputes Review Board Procedures

APPENDIX 9-A

FORM OF DISPUTES REVIEW BOARD AGREEMENT

This Disputes Review Board Agreement ("DRB Agreement") is made and entered into this ___ day of _____, 200__, among the Florida Department of Transportation ("FDOT"), _____ ("Concessionaire"), and _____ (collectively, the "Board Members"), with reference to the following facts:

A. FDOT and Concessionaire have entered into that certain Concession Agreement dated _____ (the "Agreement"). Pursuant to the Agreement, Concessionaire has agreed to develop, design, construct, finance, operate and maintain the I-595 Corridor Roadway Improvements Project ("Project") through a public-private partnership.

B. Article 25 of the Agreement provides for the establishment and operation of a Disputes Review Board ("Board") to assist in resolving disputes and claims among FDOT, Concessionaire and others in respect to the Project.

NOW, THEREFORE, in consideration of the terms, conditions, covenants and agreements contained herein, the parties hereto agree as follows:

SECTION 1. ESTABLISHMENT OF BOARD

1.1 The Board shall begin operation upon execution of this DRB Agreement by FDOT, Concessionaire and all three Board Members, and shall terminate upon completion of all work required to be performed by the Board hereunder unless sooner terminated in accordance with this DRB Agreement or applicable law.

1.2 Each member of the Board represents, warrants and covenants on his/her behalf that he/she complies with the criteria and limitations for membership described in Appendix 9-B to the Agreement.

1.3 All three Board Members must have submitted and received approval of disclosure statements according to the requirements of Section 1.5 of Appendix 9-B to the Agreement.

1.4 If during the term of this DRB Agreement, a Board Member has a discussion regarding employment or enters into any agreement for employment with FDOT, Concessionaire or a Concessionaire-Related Entity, the Board Member shall immediately disclose such discussion or agreement to both FDOT and Concessionaire and the Board Member shall be disqualified from serving on the Board.

SECTION 2. BOARD RESPONSIBILITIES

2.1 The Board shall fairly and impartially consider and provide written decisions for resolution of disputes in accordance with Article 25 of the Agreement. The Board

Members shall perform the services necessary to participate in the Board's actions in accordance with this DRB Agreement.

2.2 Board Members will be kept informed of Project-related activities and other developments by means of regular progress reports, minutes of progress meetings, and other relevant information prepared by FDOT and Concessionaire.

2.3 The Board shall visit the Project site and meet with representatives of both FDOT and Concessionaire in accordance with Section 3 of Appendix 9-B to the Agreement.

2.4 All Board Members are to act independently in the consideration of facts and conditions surrounding any Dispute. Seeking the Board Members' advice or consultation, ex parte, is expressly prohibited; provided, however, that either FDOT or Concessionaire may seek such advice or consultation from the entire Board, at a Board meeting, after first giving notice to all interested parties. A Board Member who has ex parte contact with FDOT or Concessionaire or a representative of either party shall be subject to removal from the Board for cause.

2.5 Board Members may withdraw from the Board upon delivery of written notice of withdrawal to FDOT, Concessionaire and the other Board Members, which notice shall specify a withdrawal date at least 30 days following the date of delivery of the notice. In addition, a Board Member may be terminated by FDOT or Concessionaire if at any time that Board Member fails to meet the relevant qualifications set forth in Sections 1.2 through 1.4 of Appendix 9-B to the Agreement. Should the need arise to appoint a replacement Board Member, the replacement member shall be appointed in the same manner as provided by the Agreement for appointment of the original member. The selection of a replacement Board Member shall begin promptly upon notification of the necessity for a replacement and shall be completed within 30 days thereafter. The change in Board membership shall be evidenced by the new member's signature on this DRB Agreement.

2.6 The personal services of the Board Member are a condition to receiving payment hereunder. No Board Member shall assign any of his or her work pursuant to this DRB Agreement without the prior written consent of both FDOT and Concessionaire.

2.7 Each Board Member, in the performance of his or her duties on the Board, is acting as an independent contractor and not as an employee of either FDOT or Concessionaire. No Board Member will be entitled to any employee benefits.

SECTION 3. HEARINGS AND DECISIONS

3.1 Each Dispute under the Agreement shall be heard and decided by the Board in accordance with the procedures and timelines established in Section 25.2 of the Agreement.

3.2 Within the limits set by Section 25.2 of the Agreement, the Board shall have the right to establish its own procedures and time limits, including the right to establish or to waive evidentiary rules and procedures. Each party involved in the Dispute shall retain the right to discovery, within the parameters set by the Board.

SECTION 4. PROVISION OF DOCUMENTS TO BOARD

4.1 FDOT shall furnish each Board Member one copy of Project-related documents in accordance with Section 2.2 of Appendix 9-B to the Agreement.

4.2 Concessionaire shall furnish to each Board Member one copy of all Project-related documents it might have, other than those furnished by FDOT, in accordance with Section 2.1 of Appendix 9-B to the Agreement.

SECTION 5. PAYMENT

5.1 FDOT and Concessionaire shall each pay its portion of the costs related to the services rendered by each Board Member in accordance with Section 4 of Appendix 9-B to the Agreement.

5.2 Invoices for payment for Board Member work completed under this DRB Agreement shall be submitted no more often than once per month. Such invoices shall be in a format approved by FDOT and Concessionaire and accompanied by a general description of activities performed during the relevant period. The value of work accomplished for payment shall be established from the billing rate and hours expended by the Board Member together with direct, non-salary expenses. Billings for expenses shall include an itemized listing supported by copies of the original bills, invoices, expense accounts and miscellaneous supporting data. Bills for travel expenses specifically authorized under this DRB Agreement shall be submitted on the FDOT's Travel Form No. 300-000-01 and will be paid in accordance with Section 112.061, Florida Statutes.

5.3 Each Board Member shall keep available for inspection, for a period of five years after final payment, the cost records and accounts pertaining to this DRB Agreement.

SECTION 6. MISCELLANEOUS

6.1 This DRB Agreement shall commence upon execution hereof by Concessionaire, FDOT and the first two Board Members. The foregoing is subject to the right of FDOT and Concessionaire to terminate the services of Board Members as specified herein.

6.2 Capitalized terms used but not defined herein shall have the meanings set forth in the Agreement.

6.3 The parties to this DRB Agreement intend for Article 25 and Appendix 9-B to the Agreement and the other terms of this DRB Agreement to be complementary. Except as otherwise specifically provided herein, in the event of any conflict between this DRB Agreement and said Article 25 and Appendix 9-B to the Agreement, Article 25 and Appendix 9-B to the Agreement shall control.

6.4 Notices hereunder shall be sent as provided in Section 26.9 of the Agreement. The addresses for the Board Members are set forth on the signature pages hereof.

6.5 This DRB Agreement shall be governed by and construed in accordance with the laws of the State of Florida.

IN WITNESS WHEREOF, the parties hereto have executed this DRB Agreement as of the day and year first above written.

BOARD MEMBERS

Member #1

_____

Signature

Name/Address:

_____
_____
_____

Member #2

_____

Signature

Name/Address:

_____

_____

_____

Member #3

_____

Signature

Name/Address:

_____

_____

_____

CONCESSIONAIRE

APPROVED AS TO FORM

By_____

_____

By:_____

Name:_____

Title:_____

FDOT

ATTEST:

By_____

Name:_____

Title:_____

APPROVED AS TO FORM

By:_____

FLORIDA DEPARTMENT OF TRANSPORTATION

By:_____

Name:_____

Title:_____

APPENDIX 9-B
DISPUTES REVIEW BOARD PROCEDURES

SECTION 1. Establishment of Disputes Review Board

1.1 Purpose

The Parties shall establish the DRB to provide special expertise and assist in and facilitate the timely and equitable resolution of Disputes between FDOT and Concessionaire as set forth under Section 25.2 of the Agreement and the DRB Agreement.

1.2 Board Membership

The DRB will consist of one member selected by FDOT, one member selected by Concessionaire, and a third member selected by the first two members from a jointly developed list of five (5) potential members approved by both FDOT and Concessionaire. The third member will act as chairman. Once established, the DRB will remain active and in full force and effect until all Disputes submitted to the DRB have been decided by the DRB.

1.3 Neutral and Impartial

It is imperative that the DRB members be neutral, act impartially, and not have any conflict of interest.

1.4 Criteria for Membership

For purposes of determining conflicts of interests and disqualification, the term "member" also includes the member's current primary or full-time employer, and "involved" means having a contractual relationship with FDOT or Concessionaire at any tier.

1.4.1 Experience Criteria for DRB Members

DRB members must have attended the Dispute Resolution Board Foundation's Administrative and Practices Workshop and must be on FDOT's Lists of Candidate Members as provided on FDOT's website.

1.4.2 Additional Criteria Applicable to DRB Members

In addition to the criteria set forth in Sections 1.4.1, the criteria for membership for all members of the DRB includes the following:

(a) No member shall have an ownership interest in any party involved in the Agreement, or a financial interest in the Agreement, except for payment for services on the DRB.

(b) Except for fee-based consulting services on other projects, no member shall have been previously employed by, or have had financial ties to, any party involved in the Agreement within a period of eight (8) years prior to award of the Agreement.

(c) No member shall have provided to either Party fee based consulting services within the two (2) years prior to award of the Agreement, where the consulting fees paid by that Party have exceeded 20% of that member's total consulting revenue in either year.

(d) No member shall have had a close professional or personal relationship with any key member of any party involved in the Agreement which, in the judgment of either Party, could suggest partiality, or give an appearance of impropriety.

(e) No member shall have had prior involvement in the Project, of a nature which could compromise his or her ability to participate impartially in the activities of either board.

(f) Each member shall have completed the DRB training course provided by FDOT for the Project.

(g) During his or her tenure as a member of the DRB, no member shall be employed, including fee-based consulting services, by any party involved in this Agreement except with express approval of both Parties.

(h) During his or her tenure as a member of the DRB, no member shall engage in a discussion or make an agreement, with any party involved in this Agreement, regarding employment after this Agreement is completed.

1.5 Disclosure Statement

Before their appointments are final, the first two prospective members of the DRB shall submit complete disclosure statements for the approval of both FDOT and Concessionaire. Each statement shall include a resume of experience, together with a declaration describing all past, present and anticipated or planned future relationships, including indirect relationships through the prospective member's primary or full-time employer, to this Project and with all parties involved in this Agreement. This disclosure shall also include any financial relationship relative to the criteria in Section 1.4 of this Appendix, and disclosure of close relationships, either professional or personal, with all key members of all parties to this Agreement. The third member of the DRB shall supply such a statement to the first two members and to FDOT and Concessionaire before his or her appointment is final.

1.6 Selection of First Two Members

FDOT and Concessionaire shall each select a proposed member for the DRB and convey the selected member's name and reference information to the other Party within four weeks after execution of the Agreement. If either Party believes that the

member appointed by the other Party does not meet the criteria for membership as set forth in this Appendix 9-B, that Party may notify the other Party of such failure and the reason therefore. If either Party's member fails to meet the criteria, the other Party may require substitution for that member.

1.7 Nomination and Approval of Third Member

Immediately after FDOT and Concessionaire selections for the DRB are final, FDOT will provide a list of five (5) proposed members acceptable to both Parties and will notify the first two members of the DRB to begin the process of selecting the third member from this list. The first two members shall select the third member from the list provided by FDOT and shall ensure that the third member meets all of the relevant criteria listed above. The first two members shall select the third member within four weeks after they receive the notice from FDOT to begin the selection process.

If the first two members of the DRB do not select a third member within these four weeks after their selections are final, FDOT and Concessionaire shall select the third member by mutual agreement. In so doing, the Parties may, but are not required to, consider other nominees offered by the first two members of the DRB.

1.8 Execution of Three Party Agreement

FDOT, Concessionaire and all three members of the DRB shall execute the Disputes Review Board Agreement in the form attached as Appendix 9-A within four weeks after the selection of the third member.

1.9 Disqualification and Replacement of Board Members

If (a) any member of the DRB has a discussion regarding employment or enters into any employment agreement with Concessionaire, FDOT or any Contractor on the Project during his or her tenure on the DRB or (b) any member of the DRB is discovered to not meet the relevant qualifications set forth in this Appendix 9-B, that member shall be disqualified from serving on the DRB. In the event of such a disqualification, a replacement member meeting the qualifications in this Appendix 9-B will be selected by FDOT if the disqualified member was originally selected by FDOT, by Concessionaire if the disqualified member was originally selected by Concessionaire or by both FDOT and Concessionaire-selected DRB member if the disqualified member was the third member.

SECTION 2. FDOT and Concessionaire Responsibilities

2.1 Concessionaire Responsibilities

Concessionaire shall furnish to each DRB member a set of all pertinent documents which are or may become necessary for the DRB to perform their function, except documents furnished by FDOT. Pertinent documents are any drawings or sketches, calculations, procedures, schedules, estimates, or other documents used in the performance of the Work or in justifying or substantiating Concessionaire's position

regarding a particular Dispute. Concessionaire shall furnish a copy of such documents to FDOT.

Except for its participation in the DRB's activities as provided in the Disputes Review Board Agreement, Concessionaire will not solicit advice or consultation from the DRB or any member on matters dealing in any way with the Project, the conduct of the Work or resolution of problems.

2.2 FDOT Responsibilities

Except for its participation in the DRB's activities as provided in the Disputes Review Board Agreement, FDOT will not solicit advice or consultation from the DRB or any members on matters dealing in any way with the Project, the conduct of the Work or resolution of problems.

FDOT shall furnish the following services and items:

(a) Contract Related Documents: FDOT shall furnish each DRB member a copy of all Contract Documents, Supplemental Agreements, written instructions issued by FDOT to Concessionaire, or other documents pertinent to the performance of the Agreement and necessary for either board to perform its function. FDOT shall furnish a copy of such documents to Concessionaire.

(b) Coordination and Services: FDOT, in cooperation with Concessionaire, shall coordinate the operations of the DRB. FDOT shall arrange or provide conference facilities at or near the Site, provide a DRB training course for the Project, and provide secretarial and copying services for the DRB.

2.3 Reports to the DRB

FDOT and Concessionaire shall provide the DRB members with regular progress reports, minutes of progress meetings, and other relevant information they each prepare in order to keep the DRB informed of Project-related activity and other developments.

2.4 Continuance of Work During Dispute

During the course of the dispute resolution process, Concessionaire will continue with the Work as directed by FDOT in a diligent manner and without delay or otherwise conform to FDOT's decision or order, and will be governed by all applicable provisions of the Agreement. Throughout any disputed Work, Concessionaire will keep complete records of extra costs and time incurred. Concessionaire will permit FDOT and DRB members access to these and any other records needed for evaluating the Dispute.

SECTION 3. Regular Meetings and Site Visits By DRB

The DRB shall visit the Site and meet with representatives of both FDOT and Concessionaire once a month for the first six (6) months after NTP 2, and subsequently once every two (2) months until all Disputes submitted to the DRB pursuant to Section 25.2 of the Agreement have been decided by the DRB, or as otherwise needed. FDOT, Concessionaire and the DRB shall collectively determine the frequency and scheduling of these visits, depending on the progress of the Work. In case of failure to agree, FDOT and Concessionaire shall schedule the visits.

The regular meetings shall occur at the Site. Each meeting shall consist of an informal round table discussion followed by field observation of the Work. Selected personnel from FDOT and Concessionaire shall attend the round table discussion. The agenda shall generally include the following:

(a) Meeting convened by the Chairman of the DRB.

(b) Opening remarks by FDOT's representative.

(c) A description by Concessionaire of:

  i. Work accomplished since the last meeting,

  ii. Current status of the Work schedule,

  iii. Schedule for future Work,

  iv. Potential or anticipated problems and proposed solutions, and

  v. Current and potential Disputes and other controversies.

(d) Discussion by FDOT's representative of:

  i. The Work schedule as he views it,

  ii. Potential Disputes and other controversies, and

  iii. Status of past Disputes.

(e) Such other items as the Parties may wish to discuss with the DRB.

(f) Set tentative date for next meeting(s).

FDOT shall prepare minutes of regular meetings and circulate them for comments, revisions and/or approval of Concessionaire and the DRB.

The field observations shall cover all active segments of the Work. Representatives of both FDOT and Concessionaire shall accompany the DRB during these observations.

SECTION 4. Basis of Payment

FDOT and Concessionaire are each responsible to pay the fees and expenses of the DRB member it selected without recourse to the other Party. Concessionaire shall also pay the fees and expenses invoiced by the third member of the DRB, after approval by both Parties, and Concessionaire will then invoice FDOT for 50% of the payment it made to the third member of the DRB. FDOT will review and process payment of the invoice upon receipt.

FDOT will prepare and mail minutes and progress reports, will provide administrative services, such as conference facilities and secretarial services for meetings with the DRB for any Dispute hearing, and will bear the cost of these services. If the DRB desires special services, such as, but not limited to, legal consultation, accounting, and data research, both Parties must agree, and the costs will be shared by them as mutually agreed.

APPENDIX 9-C
REGIONAL DISPUTES REVIEW BOARD PROCEDURES

SECTION 1. Establishment of Regional Disputes Review Board

1.1 Purpose

The Regional Disputes Review Board ("Regional DRB") will provide special expertise to assist in and facilitate the timely and equitable resolution of Disputes between the FDOT and Concessionaire as set forth in Section 25.3 of the Agreement.

It is not intended that FDOT or Concessionaire default on their normal responsibility to cooperatively and fairly settle their differences by indiscriminately assigning them to the Regional DRB. It is intended that the Regional DRB encourage FDOT and Concessionaire to resolve potential Disputes without resorting to this alternative resolution procedure.

The Regional DRB will be used when normal FDOT-Concessionaire dispute resolution is unsuccessful. Either FDOT or Concessionaire may refer a Dispute to the Regional DRB. Referral to the Regional DRB should be initiated as soon as it appears that the normal dispute resolution effort is not succeeding. FDOT and Concessionaire agree that the submission of any unresolved Dispute to the Regional DRB is a condition precedent to FDOT or Concessionaire having the right to proceed to arbitration or litigation of such unresolved Dispute. FDOT's Claim Review Committee will not entertain any issues on the Project.

The recommendations of the Regional DRB will not be binding on either FDOT or Concessionaire.

The Regional DRB will fairly and impartially and without regard to how or by whom they may have been appointed, consider Disputes referred to it and will provide written recommendations to FDOT and Concessionaire to assist in the resolution of these Disputes.

1.2 Membership

The Regional DRB will consist of members pre-selected by FDOT and the President of the Florida Transportation Builders' Association ("FTBA"), and posted on FDOT's website.

If during the Term of the Agreement, a Regional DRB member has a discussion regarding employment or entered into any agreement for employment after completion of the Agreement with FDOT, Concessionaire or any Contractor on the Project, he/she shall immediately disclose this to Concessionaire and FDOT and shall be disqualified from serving on the Regional DRB.

Once established, the Regional DRB will remain active and in full force and effect. If, after the Termination Date, there are unresolved Disputes remaining, the Regional DRB shall remain active and in full force and effect until the Project is otherwise administratively closed by FDOT so that the Regional DRB may continue in operation until all unresolved Disputes are resolved.

SECTION 2. Procedures and Schedules for Disputes Resolution

Disputes will be considered as quickly as possible, taking into consideration the particular circumstances and the time required to prepare detailed documentation. Steps may be omitted as agreed by FDOT and Concessionaire and the time periods stated below may be shortened in order to hasten resolution.

(a) If Concessionaire objects to any decision, action or order of FDOT, Concessionaire may file a written protest with FDOT, stating clearly and in detail the basis for the objection, within 15 days after the event.

(b) FDOT will consider the written protest and make its decision on the basis of the pertinent Contract Documents, together with the facts and circumstances involved in the Dispute. FDOT's decision will be furnished in writing to Concessionaire within 15 days after receipt of Concessionaire's written protest.

(c) This decision will be final and conclusive on the subject, unless a written appeal to FDOT is filed by Concessionaire within 15 days of receiving the decision. Should Concessionaire preserve its protest of FDOT's decision, the matter can be referred to the Regional DRB by either FDOT or Concessionaire.

(d) Upon receipt by the Regional DRB of a written duly preserved protest of a Dispute, either from FDOT or Concessionaire, it will first be decided when to conduct the hearing.

(e) Either Party furnishing any written evidence or documentation to the Regional DRB will furnish copies of such information to the other Party a minimum of 15 days prior to the date the Regional DRB sets to convene the hearing for the Dispute. If the Regional DRB requests any additional documentation or evidence prior to, during, or after the hearing, FDOT and/or Concessionaire will provide the requested information to the Regional DRB and to the other Party.

(f) Concessionaire and FDOT will each be afforded an opportunity to be heard by the Regional DRB and to offer evidence. Neither FDOT nor Concessionaire may present information at the hearing that was not previously distributed to both the Regional DRB and the other Party.

(g) The Regional DRB's recommendations for resolution of the Dispute will be given in writing to both FDOT and Concessionaire, within 15 days of completion of the hearings. In cases of extreme complexity, both Parties may agree to allow additional time for the Regional DRB to

formulate its recommendations. The Regional DRB will focus its attention in the written report to matters of entitlement and allow the Parties to determine the monetary damages. If both Parties' request and sufficient documentation is available, the Regional DRB may make a recommendation of monetary damages.

(h) Within 15 days of receiving the Regional DRB's recommendations, both FDOT and Concessionaire will respond to the other and to the Regional DRB in writing, signifying either acceptance or rejection of the Regional DRB's recommendations. The failure of either Party to respond within the 15 day period will be deemed an acceptance of the Regional DRB's recommendations by that Party. If FDOT and Concessionaire are able to resolve the Dispute with or without the aid of the Regional DRB's recommendations, FDOT will promptly process any required changes to the Contract Documents.

(i) Should the Dispute remain unresolved, either Party may seek reconsideration of the decision by the Regional DRB only when there is new evidence to present. No provisions in this Appendix 9-C will abrogate Concessionaire's responsibility for preserving a claim filed in accordance with Section 5-12 of Division I.

Although both FDOT and Concessionaire should place great weight on the Regional DRB's recommendation, it is not binding. If the Regional DRB's recommendations do not resolve the Dispute, all records and written recommendations of the Regional DRB will be admissible as evidence in any subsequent dispute resolution procedures.

SECTION 3. FDOT and Concessionaire's Responsibilities

3.1 Concessionaire's Responsibilities

Concessionaire shall furnish to each Regional DRB member a set of all pertinent documents which are or may become necessary for the Regional DRB, except documents furnished by FDOT, to perform their function. Pertinent documents are any drawings or sketches, calculations, procedures, schedules, estimates, or other documents which are used in the performance of the Work or in justifying or substantiating the Concessionaire's position. A copy of such pertinent documents must also be furnished to FDOT.

Except for its participation in the Regional DRB's activities as provided in the Agreement, the Concessionaire will not solicit advice or consultation from the Regional DRB or any of its members on matters dealing in any way with the Project, the conduct of the Work or resolution of problems.

3.2 FDOT's Responsibilities

Except for its participation in the Regional DRB's activities as provided in the Agreement, FDOT will not solicit advice or consultation from the Regional DRB or any of its members on matters dealing in any way with the Project, the conduct of the Work or resolution of problems.

FDOT shall furnish the following services and items:

(a) Contract-Related Documents: FDOT shall furnish each Regional DRB member a copy of all Contract Documents, Supplemental Agreements, written instructions issued by FDOT to Concessionaire, or other documents pertinent to the performance of the Agreement and necessary for the Regional DRB to perform their function. A copy of such pertinent documents must also be furnished to Concessionaire.

(b) Coordination and Services: FDOT, in cooperation with Concessionaire, will coordinate the operations of the Regional DRB. FDOT will arrange or provide conference facilities at or near the Site and provide secretarial and copying services.

3.3 Continuance of Work During Dispute

During the course of the dispute resolution process, Concessionaire will continue with the Work as directed by FDOT in a diligent manner and without delay or otherwise conform to FDOT's decision or order, and will be governed by all applicable provisions of the Agreement. Throughout any disputed Work, Concessionaire will keep complete records of extra costs and time incurred. Concessionaire will permit FDOT and Regional DRB members access to these and any other records needed for evaluating the Dispute.

SECTION 4. Basis of Payment

A per day cost of US$3,300.00 has been established by FDOT to provide compensation to the three members of the Regional DRB. For each day, Concessionaire shall compensate each Regional DRB member a sum of US$1,100.00. These per day costs will be adjusted during the Term whenever FDOT adjusts the standard per day costs for Regional DRB compensation on a statewide basis.

Such payment will be full compensation to the Regional DRB member for salary and all travel expenses (air fare, rental or personal automobile, motel room, meals, etc.) related to membership on the Regional DRB. If an issue or set of issues requires additional time in meeting or in analyzing the issues, additional compensation on a per day basis can be made, if authorized in advance by FDOT. FDOT will reimburse Concessionaire for Regional DRB expenses incurred if the findings of the Regional DRB are in favor of Concessionaire. If the findings are in favor of FDOT, FDOT will not reimburse Concessionaire for Regional DRB expenses incurred. If the Regional DRB rules on multiple issues during a single hearing, FDOT reimbursement to Concessionaire is based on ratio of findings (e.g., if the Regional DRB hears four

issues, regardless of importance or value, and rules favorably for Concessionaire on three of them, FDOT reimburses Concessionaire for 75% of Regional DRB costs).

FDOT will pay all other non-salary and non-travel expenses related to operation of the Regional DRB. FDOT will prepare and mail minutes and progress reports, will provide administrative services, such as conference facilities and secretarial services, and will bear the cost of these services. If the Regional DRB desires special services, such as legal consultation, accounting, data research, and the like, both Parties must agree, and the costs will be shared by them as mutually agreed. Payment for non-salary and non-travel expenses and FDOT's share of special services shall be made by FDOT in accordance with FDOT policy outside of the Agreement.

Appendix 10

APPENDIX 10

INITIAL DESIGNATION OF AUTHORIZED REPRESENTATIVES

Florida Department of Transportation:

- Joseph Borello, P.E., Project Manager

Concessionaire:

- Juan Santamaria
- Angel Muriel
- Francisco Fernandez Lafuente

Appendix 11

APPENDIX 11

CALCULATION AND PAYMENT OF REFINANCING GAINS

SECTION 1. Data and Projections Required for the Calculation of the Refinancing Gain

Concessionaire must notify FDOT as soon as practicable of its interest in proceeding with a Refinancing and the proposed schedule for documenting and closing the proposed Refinancing other than an Exempt Refinancing.

Concessionaire shall provide the following information at least 35 days in advance to the scheduled Refinancing date:

(a) The Financial Model with the original projections duly adjusted for any changes in the project structure (e.g. FDOT Changes);

(b) Details of the actual timing and amounts of Committed Investment from the Effective Date to the scheduled Refinancing date;

(c) Details of the actual timing and amounts of Distributions to Equity Members or any of their Affiliates from the Effective Date to the scheduled Refinancing date ;

(d) Information on the actual cash flow of Concessionaire from the Effective Date to the scheduled Refinancing date, set out under the same headings as the Financial Model;

(e) Term sheet and other relevant information on the terms of the Refinancing;

(f) A pre-Refinancing Financial Model, which does not take into account the effects of the Refinancing, as updated by Concessionaire (i) for any changes in the Project and based on the actual performance of the Project to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of Concessionaire from the estimated Refinancing date to the end of the Term, including projected Distributions ("**Pre-Refinancing Financial Model**");

(g) A post-Refinancing Financial Model which fully takes into account the effects of the Refinancing as projected on the basis of the term sheet and new Funding Agreements, as updated by Concessionaire (i) for any changes in the Project and based on the actual performance of the Project to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of Concessionaire from the scheduled Refinancing date to the end of the Term, including projected Distributions and all costs incurred in connection with the Refinancing ("**Post-Refinancing Financial Model**");

(h) A calculation of the Refinancing Gain based on the above and following the provisions described below; and

(i) Information on the assumptions for the projections in the Pre-Refinancing Model and Post-Refinancing Financial Model.

For the purposes of this Appendix, "Pre-Refinancing Equity IRR" means the Equity IRR calculated in the Pre-Refinancing Financial Model and "Post-Refinancing Equity IRR" means the Equity IRR calculated in the Post-Refinancing Financial Model.

The Pre-Refinancing Equity IRR and Post-Refinancing Equity IRR shall be calculated for the entire Term taking into account:

(a) Timing and amounts of the investment by Equity Members;

(b) Distributions received by Equity Members up to the estimated Refinancing date; and

(c) Projected Distributions as shown in the Financial Model immediately prior to the Refinancing or immediately after the Refinancing, as applicable.

SECTION 2. Calculation of the Refinancing Gain

The Refinancing Gain for any Refinancing other than an Exempt Refinancing will be equal to the greater of zero and [(A-B)-C] where:

A = the Net Present Value of the Distributions to be made from the estimated Refinancing date to the end of the Term as projected in the Post-Refinancing Financial Model, discounted using the Pre-Refinancing Equity IRR ;

B = the Net Present Value of the Distributions to be made from the estimated Refinancing date to the end of the Term as projected in the Pre-Refinancing Financial Model, discounted using the Pre-Refinancing Equity IRR; and

C = any adjustment required to raise the Pre-Refinancing Equity IRR to the Equity IRR as described below in Section 3 of this Appendix 11.

For the avoidance of doubt, "Refinancing Gain" excludes the portion of gain, if any, (calculated as provided above) from the first Refinancing that is less than or equal to that shown in the Financial Model and incorporated into the Financial Model. Any gain from the first Refinancing (calculated as provided above) in excess of the gain therefrom as shown in the Financial Model shall constitute Refinancing Gain.

SECTION 3. Adjustment to Raise the Pre-Financing Equity IRR to the Equity IRR

If the Pre-Financing Equity IRR is lower than the Equity IRR, FDOT will only be entitled to receive the portion (if any) of the Refinancing Gain related to the positive difference between the Post-Refinancing Equity IRR and the Equity IRR.

If the Pre-Refinancing Equity IRR is lower than the Equity IRR, a calculation will be done to determine the amount which, if received by Equity Members at the estimated Refinancing date, would increase the Pre-Refinancing Equity IRR to the Equity IRR (while the MAP is maintained and the minimum prevailing debt covenants established in the Funding Agreements are not violated). This amount will be deducted from the Refinancing Gain and FDOT will only be entitled to receive 50% of the remaining balance of the Refinancing Gain.

SECTION 4. Payment of FDOT's Portion of Refinancing Gain

FDOT will receive payment of its portion of the Refinancing Gain as a reduction in the Availability Payments over all or a portion of the Term, subject to the following provisions:

(a) FDOT will, subject to the adjustment described above (should the Pre-Refinancing Equity IRR be lower than the Equity IRR), receive a maximum of 50% of the Refinancing Gain;

(b) FDOT will not receive its portion of the Refinancing Gain faster than the Equity Members of Concessionaire; and

(c) If the Refinancing involves raising new debt or otherwise increasing the amount of outstanding Project Debt anticipated in any Fiscal Year of the Financial Model, FDOT may elect to receive its portion out of the first Distribution made at the moment of the Refinancing by means of a lump sum.

SECTION 5. Final Calculation and Payment

Concessionaire will perform a final calculation of the Refinancing Gains and deliver the results to FDOT within 15 days after the close of the Refinancing.

Appendix 12

APPENDIX 12

O&M PERIODIC REPORTS AND RECORDS

In general, all periodic reports and records relating to the O&M Work will be drafted or maintained by Concessionaire, or, if applicable, its Contractors. These reports and records will adhere to the approved O&M Plan and the requirements set forth in Section 4 of Division II.

1. Monthly O&M Reports

Within ten days of each month starting the month after the O&M Work commences, Concessionaire shall deliver the O&M Reports to FDOT. The O&M Reports shall include:

1.1. Operations Report;

1.2. Maintenance Report; and

1.3. Maintenance Rating Program Monthly Reports.

2. O&M Annual Reports

Within 30 days of the beginning of each Calendar Year starting in January of the Calendar Year after the O&M Work commences, Concessionaire will deliver to FDOT an O&M Annual Report that will contain the following information:

2.1. Statement of all adjustments to the monthly Operation Reports and Maintenance Reports from the preceding year (if any);

2.2. A summary of the information requested by FDOT (corrected if necessary), by month during the preceding year (if any); and

2.3. The O&M Work budget for the next 12 months, showing the amounts allocated to each month.

3. Renewal Work

3.1. Within 45 days of the beginning of each Calendar Year starting in January of the Calendar Year after the O&M Work commences, Concessionaire shall submit its five-year Renewal Work Plan.

3.2. No later than 90 days after the end of each Calendar Year starting in December of the Calendar Year after the O&M Work commences, Concessionaire shall deliver a written report of the Renewal Work performed in the preceding Calendar Year.

3.3. Within 45 days of the beginning of starting in January of the Calendar Year after the O&M Work commences, Concessionaire shall submit for FDOT's review and comment Concessionaire's five-year Renewal Work Schedule.

4. Handback

Starting 48 months prior to the expected expiration of the Term, Concessionaire shall submit annually for FDOT's review and comment Concessionaire's Handback Renewal Work Plan.

Appendix 13

APPENDIX 13

FORM OF DIRECT AGREEMENT

THIS DIRECT AGREEMENT dated as of [___], 2009 (this "**Direct Agreement**"), among: The Florida Department of Transportation ("**FDOT**"); I 595 Express, LLC, a limited liability company organized under the law of Delaware ("**Concessionaire**"); and The Bank of New York Mellon, as Agent (in such capacity, together with its successors in such capacity, the "**Agent**") for the Lenders (as defined in the Concession Agreement).

WHEREAS

(A) FDOT has determined that the I-595 Corridor Roadway Improvements Project be designed, constructed, financed, operated and maintained by a private sector party (the "**Project**"). In connection with the Project, FDOT and Concessionaire have entered into a concession agreement dated as of [___], 2009 (the "**Concession Agreement**").

(B) In order to enable Concessionaire to finance certain activities and certain obligations in respect of the Project, the Lenders have agreed to make available debt facilities, on the terms set out in the Financing Documents, for the purpose of financing the Project.

(C) In order to provide collateral security to the Lenders for Concessionaire's obligations under the Financing Documents, (1) Concessionaire and the Agent have entered into a Security Agreement dated as of the date hereof (the "**Security Agreement**"), pursuant to which Concessionaire has assigned to the Agent for the benefit of the Lenders, among other things, all of Concessionaire's right, title and interest under the Concession Agreement, and (2) the shareholders of Concessionaire as of the date of the execution of the Concession Agreement (the "**Initial Shareholders**") and the Agent have entered into a Borrower Membership Interest Pledge Agreement dated as of the date hereof (the "**Pledge Agreement**"), pursuant to which each of the Initial Shareholders has granted a security interest to the Agent for the benefit of the Lenders in, among other things, the equity interests held by such Initial Shareholder in Concessionaire.

(D) The execution of this Direct Agreement by FDOT in favor of the Agent is a condition precedent to the debt facilities being made available to Concessionaire by the Lenders.

NOW, THEREFORE, in consideration of the foregoing and the mutual terms and covenants contained herein, the parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

Capitalized terms used and not otherwise defined and references used but not construed in this Direct Agreement have the respective meanings and constructions assigned to such terms in the Concession Agreement. In addition, the following terms have the meanings specified below:

Administrative Agent means Dexia Crédit Local, New York Branch.

Concession Agreement has the meaning given to it in the Recitals.

Cure Period means the period starting on the date of the receipt of the FDOT Notice and ending on the earlier of the date of the receipt of the Step-in Notice or 90 days after the expiration of any cure periods provided to Concessionaire under the Concession Agreement; provided, however, if the Agent is prohibited from curing any non-monetary default or from substituting Concessionaire with the Substituted Entity by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Concessionaire, then the time period specified herein for curing a default shall be extended for the period of such prohibition.

Default means an Event of Default as defined in the Senior Credit Agreement or any event or circumstance specified in the Senior Credit Agreement which would (with the expiration of a grace period, the giving of notice, the lapse of time, the making of any determination under the Financing Documents or any combination of any of the foregoing) be an Event of Default.

Discharge Date means the date on which all of the obligations of Concessionaire under the Financing Documents have been irrevocably discharged in full to the satisfaction of the Agent.

Event of Default means an Event of Default as defined in the Senior Credit Agreement.

FDOT Notice has the meaning given to it in Section 4.

Instructing Controlling Party has the meaning given to it in the Intercreditor Agreement and Collateral Agency Agreement, dated as of the date hereof, among the Agent, as collateral agent for the Secured Parties, United States Department of Transportation, acting by and through the Federal Highway Administrator, the Administrative Agent, Banco Bilbao Vizcaya Argentaria, S.A., Banco de Sabadell, S.A., Banco Santander, S.A., New York Branch, Caja de Ahorros y Monte de Piedad de Madrid S.A., Caja de Ahorros y Pensiones de Barcelona, Calyon New York Branch, Dexia Crédit Local, New York Branch, National Australia Bank Limited and Societe Generale, each as an Interest Rate Hedge Provider.

Lender Notice has the meaning given to it in Section 5.1.

Lenders has the meaning given to it in the Security Agreement.

Pledge Agreement has the meaning given to it in the Recitals.

Project has the meaning given to it in the Recitals.

Property means any right or interest in or to property of any kind whatsoever, whether real, personal or mixed and whether tangible or intangible.

Revival Date has the meaning given to it in Section 12.1.

Secured Obligations has the meaning given to it in the Security Agreement.

Secured Parties has the meaning given to it in the Senior Credit Agreement.

Security Agreement has the meaning given to it in the Recitals.

Security Document means each of (a) the Security Agreement, (b) the Pledge Agreement and (c) any other document, agreement or other contract that constitutes, perfects or evidences any security, or grants any guarantee, indemnity or other assurance against loss, in each case in favor of the Agent as security for all or any part of the Secured Obligations.

Senior Credit Agreement means the Credit Agreement among I 595 Express, LLC, as Borrower, the several lenders from time to time party thereto, and the Administrative Agent.

Step-in Date has the meaning given to it in Section 8.

Step-in Notice has the meaning given to it in Section 7.1.

Step-in Party has the meaning given to it in Section 7.2.

Step-in Period means the period from and including the Step-in Date until the earlier of:

(a) The Substitution Effective Date;

(b) The Step-out Date;

(c) The date of termination of the Concession Agreement by FDOT in accordance with this Direct Agreement and the Concession Agreement;

(d) The date of the expiration or early termination of the Term under the Concession Agreement; and

(e) If the Step-in Date occurs (i) prior to the Substantial Completion Date, 6 months after the Long Stop Date, or (ii) after the Substantial Completion Date, 12 months after the Step-in Date, with each of the dates commencing after the expiration of any cure periods provided to Concessionaire under the Concession Agreement,

provided, however, that if the Agent is prohibited from curing any nonmonetary default after the Step-in Date or from substituting Concessionaire with the Substituted

Entity by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Concessionaire, then the time periods specified herein for curing a default shall be extended for the period of such prohibition.

Step-out Date means the date upon which any Step-out Notice is served by the Step-in Party pursuant to Section 9.

Step-out Notice has the meaning given to it in Section 9.

Substituted Entity has the meaning given to it in the Concession Agreement.

Substitute Accession Agreement means the agreement to be entered into by a Substituted Entity pursuant to Section 11.1.

Substitution Effective Date has the meaning given to it in Section 11.1.

Substitution Notice has the meaning given to it in Section 10.1.

1.1. Interpretation

Unless the context otherwise clearly requires:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined;

(b) Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;

(c) The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation";

(d) The word "will" shall be construed to have the same meaning and effect as the word "shall";

(e) Any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein);

(f) Any reference herein to any Person, or to any Person in a specified capacity, shall be construed to include such Person's successors and assigns or such Person's successors in such capacity, as the case may be;

(g) The words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Direct Agreement in its entirety and not to any particular provision hereof;

(h) All references herein to Sections and Schedules shall be construed to refer to Sections of and Schedules to this Direct Agreement. Any Schedules to this Direct Agreement are an integral part hereof. The provisions of this Direct Agreement shall prevail over the provisions of any Schedules to the extent of any inconsistency;

(i) The headings used in this Direct Agreement are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Direct Agreement;

(j) References to this Direct Agreement or to any other agreement or document relating to the Project includes a reference to this Direct Agreement, or, as the case may be, such other agreement or document as amended from time to time; and

(k) "Winding-up", "liquidation", "dissolution", "insolvency", "adjustment" or "reorganization" of a Person and references to the "liquidator", "assignee", "administrator", "receiver", "custodian", "conservator" "sequestrator" or "trustee" of a Person shall be construed so as to include any equivalent or analogous proceedings or, as the case may be, insolvency representatives or officers under the law of the jurisdiction in which such Person is incorporated, organized or constituted or any jurisdiction in which such Person or, as the case may be, insolvency representative or officer carries on business including the seeking of winding up, liquidation, dissolution, reorganization, administration, arrangement, adjustment or relief of debtors.

2. REPRESENTATIONS AND WARRANTIES

2.1. FDOT Represents and Warrants to the Agent That:

(a) ***Organization; Power and Authority.*** FDOT is a public agency, duly formed and validly existing under the laws of the State of Florida and has the power and authority to transact the business it transacts and proposes to transact, to execute this Direct Agreement and the Concession Agreement and to perform the provisions hereof and thereof.

(b) ***Authorizations, Enforceability.*** This Direct Agreement and the Concession Agreement have been duly authorized by FDOT, and this Direct Agreement constitutes a legal, valid and binding obligation of

FDOT enforceable against FDOT in accordance with its terms, except as such enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) ***No Default***. There is no Concessionaire Default or FDOT Default, there exists no event or condition that would, with the giving of notice or passage of time or both, constitute such a Concessionaire Default or FDOT Default, and no such Concessionaire Default or FDOT Default has occurred prior to the date hereof.

(d) **Initial Financing Documents**. FDOT acknowledges and agrees that the documents referred to in Schedule B attached hereto are deemed to constitute Initial Financing Documents for purposes of the Concession Agreement.

(e) **Letter of Credit Beneficiary**. FDOT acknowledges and agrees that the letter of credit issued for purposes of the requirements set forth in clause (b) of the definition of Committed Investment under the Concession Agreement shall be deemed to satisfy such requirements even though the Agent, and not Concessionaire, is named as beneficiary thereunder.

3. AGREEMENTS AND CONSENT TO SECURITY

3.1. FDOT acknowledges notice and receipt of, and, notwithstanding anything in the Concession Agreement to the contrary, consents to the assignment by Concessionaire to the Agent of all of Concessionaire's right, title and interest in, and under the Concession Agreement pursuant to the terms and provisions of, the Security Agreement and the other Security Documents.

3.2. FDOT acknowledges notice and receipt of, and, notwithstanding anything in the Concession Agreement to the contrary, consents to the granting by each of the Initial Shareholders to the Agent of a security interest in such Initial Shareholder's equity interests in Concessionaire pursuant to the terms and provisions of, the Pledge Agreement.

3.3. Notwithstanding anything in the Concession Agreement to the contrary, FDOT agrees that the assignment of, and the grant of the security interest in and first lien over, all of Concessionaire's right, title and interest in, to and under the Concession Agreement and the other Contract Documents to which Concessionaire is a party pursuant to the Security Agreement and the other Security Documents, the grant of the security interest by each Initial Shareholder in its equity interests in Concessionaire pursuant to the Pledge Agreement and the execution by Concessionaire and FDOT of this Direct Agreement and the performance of their

respective obligations hereunder, in each case, shall neither constitute a Concessionaire Default, Default Termination Event or any other breach by the Concessionaire of the Concession Agreement nor would, with the giving of notice or lapse of time or both, constitute a Concessionaire Default, Default Termination Event or any other breach by the Concessionaire of the Concession Agreement, nor require the consent of FDOT, other than as provided herein.

3.4. Agent shall deliver to FDOT together with delivery to the Borrower or any other Person, every notice of election to sell, notice of sale or other notice under any requirement of law or by any Collateral Document (as defined in the Credit Agreement) in connection with the exercise of remedies under this Agreement or any other Collateral Document (as defined in the Credit Agreement). The Agent agrees to be bound by the provisions of Sections 16.3 and 16.5 of the Concession Agreement entered into between FDOT and the Borrower.

4. FDOT NOTICE OF TERMINATION AND EXERCISE OF REMEDIES

FDOT shall give the Agent written notice (an "**FDOT Notice**") promptly upon becoming aware of the occurrence of any event giving rise to:

(a) A Concessionaire Default or FDOT's right to terminate or give notice terminating the Concession Agreement, or exercise any rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement; or

(b) FDOT's right to suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement.

4.1. An FDOT notice shall specify:

(a) The unperformed obligations of Concessionaire under the Concession Agreement and grounds for termination of, or suspension of performance or the other rights all as referred to in Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 under the Concession Agreement in detail sufficient to enable the Agent to assess the scope and amount of any liability of Concessionaire resulting therefrom;

(b) Any other unperformed obligations of Concessionaire of which FDOT is aware as of the date of such FDOT Notice;

(c) All amounts due and payable by Concessionaire to FDOT under the Concession Agreement on or before the date of such FDOT

Notice and which remain unpaid at such date and the nature of Concessionaire's obligation to pay such amounts; and

(d) The amount of Concessionaire's payment obligation to FDOT that FDOT reasonably foresees will arise during the applicable Cure Period.

4.2. FDOT shall update its FDOT Notice to reflect unperformed obligations of Concessionaire under the Concession Agreement that have been identified or that have arisen and amounts payable by Concessionaire to FDOT that become due, in each case, after the date of FDOT Notice but prior to the proposed Step-in Date.

5. LENDER NOTICE

5.1. The Agent shall give FDOT and FDOT's Comptroller written notice (a "**Lender Notice**"), with a copy to Concessionaire, promptly upon the occurrence of any Default or Event of Default (whether or not an FDOT Notice has been served relating to the same event). The Lender Notice shall be sent to FDOT and FDOT's Comptroller via certified or registered mail, return receipt requested.

5.2. The Agent shall specify in any Lender Notice the circumstances and nature of the Default or Event of Default to which Lender Notice relates.

5.3. FDOT shall, following receipt of a Lender Notice and until further notice from the Agent, make any payments required to be made by FDOT to Concessionaire under the Concession Agreement to an account designated by the Agent. The Agent shall provide to FDOT the following information: (a) the individual responsible for administering the account, including his or her position; (b) the mailing address of such individual; and (c) the telephone, fax and e-mail address of such individual. Concessionaire agrees that any payment made in accordance with this Section 5.3 shall constitute a complete discharge of FDOT's relevant payment obligations to Concessionaire.

5.4. FDOT shall, following receipt of a Lender Notice and until further notice from the Agent, make any payment of any termination sum calculated in accordance with Article 20 of the Concession Agreement required to be made to Concessionaire under the Concession Agreement to an account designated by the Agent.

5.5. All sums paid as provided in Sections 5.3 and 5.4 shall be deemed paid to Concessionaire under the Concession Agreement. FDOT shall have no liability, whatsoever, for any delay in processing any payment request pursuant to Sections 5.3 or 5.4, provided that such delay does not extend 14 Business Days beyond the date of FDOT's certified, return-receipt or registered mail receipt of the Lender Notice.

5.6. The Agent shall notify FDOT of any decision to accelerate amounts outstanding under the Financing Documents or to exercise any enforcement remedies under the Financing Documents.

5.7. Neither the Agent nor the Lender shall exercise any right it may have pursuant to the Security Agreement and the other Security Documents to assign, transfer or otherwise dispose of any right, title or interest it may have in, or obligations it may have pursuant to, the Security Agreement and the other Security Documents to the extent the exercise of such rights would constitute a Refinancing and Concessionaire

has failed to comply with the requirements of Section 16.4 of the Concession Agreement.

5.8. Following receipt of a Lender Notice, the Agent shall have the right to deliver to FDOT a Step-in Notice as provided in Section 7.

6. NO TERMINATION DURING CURE PERIOD

6.1. FDOT agrees not to take any of the following actions prior to the expiration of any applicable Cure Period:

(a) Terminate or give notice terminating the Concession Agreement or exercise any rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement;

(b) Suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement; or

(c) Take or support any action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Concessionaire or for the composition or readjustment of Concessionaire's debts, or any similar insolvency procedure in relation to Concessionaire, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Concessionaire or for any part of Concessionaire's Property;

provided that such agreement of FDOT shall not prevent FDOT from taking actions which are permitted under this Direct Agreement on a Revival Date in respect of any other prior Concessionaire Default, Termination Event or other breach by the Concessionaire of the Concession Agreement which has occurred and has not been remedied or waived.

6.2. During any Cure Period, without giving a Step-in Notice, the Agent shall have the right (but shall have no obligation), at its sole option and discretion, to perform or arrange for the performance of any act, duty, or obligation required of Concessionaire under the Concession Agreement, or to cure any default of Concessionaire thereunder at any time (whether or not a Default Termination Event has occurred or been declared), which performance by the Agent shall be accepted by FDOT in lieu of performance by Concessionaire and in satisfaction of Concessionaire's obligations under the Concession Agreement. To the extent that any default of Concessionaire under the Concession Agreement is cured and/or any payment liabilities or performance obligations of Concessionaire are performed by the Agent during the Cure Period, such action shall discharge the relevant liabilities or obligations of Concessionaire to FDOT. The Agent's right to cure any default of Concessionaire as provided in this Section 6.2 may be exercised after the expiration of relevant cure period granted to Concessionaire in Section 19.1.2 of the Concession Agreement.

7. STEP-IN NOTICE

7.1. Upon the issuance of a FDOT Notice or a Lender Notice, the Agent may give a written notice (a "**Step-in Notice**") under this Section 7 to FDOT at any time during the Cure Period in the case of the issuance of a FDOT Notice or at any time following the receipt by FDOT of a Lender Notice.

7.2. The Agent shall nominate, in the Step-in Notice, (a) the Agent, a Lender or any of their respective Affiliates; or (b) any Person approved by FDOT in accordance with Section 13.5.2 of the Concession Agreement, and the person so nominated being referred to as the "Step-in Party".

8. RIGHTS AND OBLIGATIONS ON STEP-IN

On and from the date of the receipt of the Step-in Notice and the approval of FDOT to the appointment of the Step-in Party if required by Section 7.2 ("**Step-in Date**") and during the Step-in Period, the Step-in Party shall be:

(a) Entitled to exercise and enjoy the rights and powers expressed to be assumed by or granted to Concessionaire under the Concession Agreement and this Direct Agreement;

(b) Entitled to exercise and enjoy the rights and powers expressed to be assumed by or granted to a Step-in Party under this Direct Agreement; and

(c) Liable for the performance of all of Concessionaire's obligations under the Concession Agreement arising on or after the Step-in Date that the Step-in Party seeks to perform.

8.1. Without prejudice to Section 12 (Revival of Remedies), during the Step-in Period, FDOT shall:

(a) Not terminate or give notice terminating the Concession Agreement, or exercise any of its rights under Section 20.3.1 (Termination for Concessionaire Default) of the Concession Agreement or otherwise exercise its rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement, unless the grounds for termination or giving notice of termination or otherwise exercising its rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement are failure by the Step-in Party to perform Concessionaire's obligations under the Concession Agreement;

(b) Not suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement, unless the grounds for suspension of performance are failure by the Step-in Party to perform Concessionaire's obligations under the Concession Agreement;

(c) Not take or support any action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Concessionaire or for the composition or readjustment of Concessionaire's debts, or any similar insolvency procedure in relation to Concessionaire, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Concessionaire or for any part of Concessionaire's Property;

(d) Continue to make payments required to be made to Concessionaire under the Concession Agreement to an account designated by the Agent; and

(e) Endorse over as directed by the Agent any checks received by FDOT with respect to the Performance Security or the O&M Security if, in each case, such security is in the form of a surety bond; provided that the Agent reimburse FDOT for any Losses incurred by FDOT in attempting to cure the Concessionaire Default as and to the extent: (i) FDOT is entitled to such reimbursement pursuant to the Concession Agreement; (ii) FDOT has promptly notified the Agent of such Losses at or prior to the time of endorsement and (iii) the Agent's obligation to reimburse FDOT for such Losses do not exceed the proceeds from any such security.

8.2. FDOT shall owe its obligations under the Concession Agreement and this Direct Agreement to Concessionaire and the Step-in Party jointly; provided that:

(a) The receipt of, or performance by FDOT in favor of, either such Step-in Party or Concessionaire shall be a good and effective discharge of

FDOT's obligations under this Direct Agreement and the Concession Agreement;

(b) The Agent shall be entitled at any time by notice in writing to FDOT to direct (such direction being binding on the Agent, FDOT and Concessionaire) that, at all times during the Step-in Period, the Step-in Party shall be solely entitled to make any decisions, to give any directions, approvals or consents, to receive any payments or otherwise to deal with FDOT under the Concession Agreement and this Direct Agreement; and

(c) Any amount due from Concessionaire to FDOT under the Concession Agreement or this Direct Agreement as of the Step-in Date and notified to such Step-in Party prior to the Step-in Date shall be paid to FDOT on the Step-in Date, failing which FDOT shall be entitled to exercise its rights under the Concession Agreement in respect of the amount so due and unpaid.

8.3. Concessionaire shall not be relieved from any of its obligations under the Concession Agreement, whether arising before or after the Step-in Date, by reason of the Step-in Party exercising the rights provided herein, except to the extent provided in Section 6.2 and Section 9.

9. STEP-OUT

A Step-in Party may, at any time, by giving not less than 30 days' prior written notice ("**Step-out Notice**") to FDOT terminate its obligations to FDOT under this Direct Agreement, in which event such Step-in Party shall be released from all obligations under this Direct Agreement, except for any obligation or liability of the Step-in Party arising on or before the expiration of such Step-out Notice. The obligations of FDOT to the Step-in Party under this Direct Agreement shall also terminate upon the expiration of the period set forth in the Step-out Notice; provided that this Direct Agreement shall continue to remain effective according to its terms after the expiration of the period contained in the Step-out Notice if the Step-in Party is the Agent or a Lender.

10. SUBSTITUTION PROPOSAL BY THE LENDERS

10.1. The Agent may give a notice ("**Substitution Notice**") under this Section 10 in writing to FDOT at any time:

(a) During any Cure Period;

(b) During any Step-in Period; or

(c) After delivery of a Lender Notice.

10.2. In any Substitution Notice, the Agent shall notify FDOT that it intends to designate a Substituted Entity.

10.3. The Agent shall, as soon as practicable, provide to FDOT the information regarding the proposed Substituted Entity and any third party entering into a material subcontract with such Substituted Entity as required by Section 13.5 of the Concession Agreement, including:

(a) The name and address of the proposed Substituted Entity;

(b) The names of the proposed Substituted Entity's shareholders or members and the share capital or partnership or membership interests, as the case may be, held by each of them;

(c) The manner in which it is proposed to finance the proposed Substituted Entity and the extent to which such financing is committed;

(d) Copies of the proposed Substituted Entity's most recent financial statements (and if available such financial statements shall be for the last three financial years) or in the case of a newly-formed special purpose company its opening balance sheet;

(e) A copy of the proposed Substituted Entity's formation documents;

(f) Details of the resources available to the proposed Substituted Entity and the proposed Substituted Entity's appropriate qualifications, experience and technical competence available to the proposed Substituted Entity to enable it to perform the obligations of Concessionaire under the Concession Agreement; and

(g) The names of the proposed Substituted Entity's directors and any key personnel who will have responsibility for the day-to-day management of its participation in the Project.

10.4. FDOT shall not be required to give its approval to the proposed Substituted Entity if:

(a) There are unremedied breaches under the Concession Agreement and there is no rectification plan reasonably acceptable to FDOT with respect to the breaches which are capable of being rectified by the Substituted Entity; or

(b) Any proposed security interests to be granted by the proposed Substituted Entity to the Agent and/or the Lender in addition to (or substantially different from) the security interests granted to the Agent and/or the Lender under the Initial Funding Agreements or Initial Security Documents materially and adversely affect the ability of the Substituted Entity to perform Concessionaire's obligations under the

Contract Documents or have the effect of increasing any liability of FDOT, whether actual or potential (unless a Rescue Refinancing is concurrently proposed, in which case the Project Debt Termination Amount may increase by up to 10%).

10.5. If FDOT fails to give its approval within 60 days of the date on which FDOT has confirmed it has received the information specified in Section 10.3 in respect of any proposed Substituted Entity, the approval of FDOT shall be deemed to have been given.

11. SUBSTITUTION

11.1. If FDOT approves (or is deemed to have approved) a Substitution Notice pursuant to Section 10, the Substituted Entity named therein shall execute a duly completed Substitute Accession Agreement substantially in the form attached hereto as Schedule A and submit it to FDOT (with a copy thereof to the other parties to this Direct Agreement) and such assignment shall become effective on and from the date on which FDOT countersigns the Substitute Accession Agreement (the "**Substitution Effective Date**") or the date that is 10 days after the date FDOT receives the completed Substitute Accession Agreement if FDOT fails to sign the Substitute Accession Agreement.

11.2. As of the Substitution Effective Date:

(a) Such Substituted Entity shall become a party to the Concession Agreement and this Direct Agreement in place of Concessionaire who shall be immediately released from its obligations arising under, and cease to be a party to, the Concession Agreement and this Direct Agreement from and after Substitution Effective Date;

(b) All of Concessionaire's obligations and liabilities under the Concession Agreement and under this Direct Agreement arising from and after the Substitution Effective Date shall be immediately and automatically transferred to the Substituted Entity;

(c) Such Substituted Entity shall exercise and enjoy the rights and perform the obligations of Concessionaire under the Concession Agreement and this Direct Agreement, and

(d) FDOT shall owe its obligations (including any undischarged liability with respect to any loss or damage suffered or incurred by Concessionaire prior to the Substitution Effective Date) under the Concession Agreement and this Direct Agreement to such Substituted Entity in place of Concessionaire, subject to FDOT's right to offset any losses or damages suffered or incurred by FDOT as provided under the Concession Agreement.

11.3. FDOT shall use its reasonable efforts to facilitate the transfer to the Substituted Entity of Concessionaire's obligations under the Concession Agreement and this Direct Agreement.

11.4. The Substituted Entity shall pay to FDOT on the Substitution Effective Date any amount due to FDOT under the Concession Agreement and this Direct Agreement, including FDOT's reasonable costs and expenses incurred in connection with (a) Concessionaire's default and termination, (b) FDOT's activities with respect to the Project during any period FDOT was in possession of the Project, and (c) the approval of the Substituted Entity, all as of the Substitution Effective Date and notified to such Substituted Entity prior to the Substitution Effective Date. FDOT's receipt of the payment pursuant to this Section 11.4 shall be a condition precedent to the Substitution Effective Date.

11.5. As of the Substitution Effective Date:

(a) Any right of termination suspended by virtue of Section 6.1 shall be of no further effect and FDOT shall not be entitled to terminate or suspend performance of the Concession Agreement and this Direct Agreement by virtue of any act, omission or circumstance that occurred prior to such Substitution Effective Date; and

(b) FDOT shall enter into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Concessionaire shall be replaced as a party by the Substituted Entity.

12. REVIVAL OF REMEDIES

12.1. If an FDOT Notice has been given, the grounds for that notice are continuing and have not been remedied or waived and:

(a) As of the end of the Cure Period, no Step-in Notice has been given and no Substituted Entity becomes a party to the Concession Agreement and this Direct Agreement; or

(b) The Step-in Period ends without a Substituted Entity becoming a party thereto,

Then, from and after the date such Cure Period or such Step-in Period, as the case may be, expires (the "**Revival Date**"), FDOT shall be entitled to:

(i) Act upon any and all grounds for termination or suspension available to it in relation to the Concession Agreement in respect of defaults under the Concession Agreement not remedied or waived;

(ii) Pursue any and all claims and exercise any and all remedies against Concessionaire; and

(iii) If and to the extent that it is then entitled to do so under the Concession Agreement, take or support any action of the type referred to in Section 19.2 of the Concession Agreement.

13. GENERAL

13.1. If

(a) the Concession Agreement is rejected by a trustee or debtor-in-possession in, or terminated as a result of, any bankruptcy or insolvency proceeding involving Concessionaire, or

(b) a Concessionaire Default under Sections 19.1.1.13 or 19.1.1.14 of the Concession Agreement occurs with respect to any Guarantor of material Concessionaire obligations owed to FDOT under the Contract Documents or any Equity Member with a material financial obligation owing to Concessionaire for Committed Investment, and such Guarantor's or Equity Members' obligations relating to Concessionaire or the Project are rejected by a trustee or debtor-in-possession in, or terminated as a result of any bankruptcy or insolvency proceeding involving such Guarantor or Equity Member and, within 90 days after such rejection or termination, the Agent shall so request and shall certify in writing to FDOT that it intends to perform the obligations of Concessionaire as and to the extent required under the Concession Agreement,

FDOT will execute and deliver to the Agent (or any Substituted Entity satisfying the requirements of this Direct Agreement if directed to do so by the Agent) a new concession agreement. Such new concession agreement shall contain conditions, agreements, terms, provisions and limitations which are the same as those of the Concession Agreement, except for any obligations that have been fulfilled by Concessionaire, any party acting on behalf of or stepping-in for Concessionaire or FDOT prior to such rejection or termination. References in this Direct Agreement to the "Concession Agreement" shall be deemed also to refer to any such new concession agreement.

13.2. Neither the Lender nor the Agent shall have any obligation hereunder to extend credit to FDOT or any contractor to FDOT at any time, for any purpose.

13.3. For so long as any amount under the Financing Documents is outstanding, FDOT shall not, without the prior written consent of the Agent, consent to any assignment, transfer, pledge or hypothecation of the Concession Agreement or any interest therein by Concessionaire, other than as specified in the Concession Agreement or this Direct Agreement.

13.4. Notwithstanding anything to the contrary contained herein, the Agent is acting hereunder, not in its individual capacity but solely as collateral agent, on behalf of the Secured Parties. The Agent shall not be required to take any action whatsoever hereunder unless and until it is specifically directed to do so in writing by either the

Administrative Agent or the Instructing Controlling Party. The Agent shall not be liable for acting in accordance with such directions or for failing to act if it does receive any such written directions from either the Administrative Agent or the Instructing Controlling Party. Under no circumstances (other than in respect of gross negligence or willful misconduct of the Agent) shall the Agent be liable for any and all claims, liabilities, obligations, losses, damages, penalties, costs and expenses that may be imposed on, incurred by, or asserted against the Agent at any time or in any way relating to or arising out of the execution, delivery and performance of this Direct Agreement by the Agent. Under no circumstances shall the Agent be liable for any indirect, special, consequential or punitive damages for any action it takes at the direction of the Administrative Agent or the Instructing Controlling Party. For the avoidance of doubt, under no circumstances shall the Agent be required to perform any activity related to the construction of the Project including, without limitation, directing or supervising any portion of the construction of the Project. Nothing contained herein shall require the Agent to advance or risk its own funds.

14. TERMINATION

This Direct Agreement shall remain in effect until the earlier to occur of (a) the Discharge Date; (b) the time at which all of FDOT's obligations and liabilities have expired or have been satisfied in accordance with the terms of the Concession Agreement and this Direct Agreement; and (c) any assignment to a Substituted Entity has occurred under Section 11 and FDOT shall have entered into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Concessionaire has been replaced as a party by the Substituted Entity.

15. EFFECT OF BREACH

Without prejudice to any rights a party may otherwise have, a breach of this Direct Agreement shall not of itself give rise to a right to terminate the Concession Agreement.

16. NO PARTNERSHIP

Nothing contained in this Direct Agreement shall be deemed to constitute a partnership between the parties hereto. None of the parties shall hold itself out contrary to the terms of this Section 16.

17. REMEDIES CUMULATIVE; NO WAIVER

No failure or delay by FDOT, the Lenders or the Agent (or their designee) in exercising any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The remedies provided herein are cumulative and not exclusive of any remedies provided by law and may be exercised by the Lenders, the Agent or any designee, transferee or

assignee thereof from time to time. In no event shall any provision of this Direct Agreement or any consent to any departure by any party therefrom be effective unless such waiver is permitted by Section 18, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given.

18. AMENDMENT

No amendment, modification or waiver of any provision of this Direct Agreement, or consent to any departure herefrom by any party hereto, shall be effective against any party hereto unless the same shall be in writing and signed by the party against whom enforcement is sought, and then such amendment or waiver shall be effective only in the specific instance and for the specific purpose for which it was given.

19. SUCCESSORS AND ASSIGNS

19.1. No party to this Direct Agreement may assign or transfer any part of its rights or obligations hereunder without the consent of the other parties, save that the Agent may assign or transfer its rights and obligations hereunder to a successor Agent in accordance with the Financing Documents. In connection with any such assignment or transfer, FDOT agrees to enter into a new Direct Agreement with the successor Agent on terms that are substantially the same as those of this Direct Agreement.

19.2. This Direct Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

20. COUNTERPARTS

This Direct Agreement may be executed in any number of counterparts, each of which shall be identical and all of which, taken together, shall constitute one and the same instrument, and the parties may execute this Direct Agreement by signing any such counterpart. Transmission by facsimile of an executed counterpart of this Direct Agreement shall be deemed to constitute due and sufficient delivery of such counterpart, to be followed thereafter by an original of such counterpart.

21. SEVERABILITY

If, at any time, any provision of this Direct Agreement is or becomes illegal, invalid or unenforceable in any respect under any law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions nor the legality, validity or enforceability of such provision under the law of any other jurisdiction will in any way be affected or impaired. The illegal, invalid or unenforceable provision shall be deemed replaced by such provisions as shall be legal, valid and enforceable in the relevant jurisdiction.

22. NOTICES

22.1. Any notice, approval, election, demand, direction, consent, designation, request, agreement, instrument, certificate, report or other communication required or

permitted to be given or made under this Direct Agreement (each, a notice) to a party must be given in writing (including by fax or electronic mail). All notices will be validly given if on a Business Day to each party at the following address:

To FDOT:

Leon Corbett
Manager, Project Finance
Florida Department of Transportation
605 Suwannee Street
Tallahassee, FL 32399-0450
Telephone. (850) 414-4421
Fax: (850) 414-4943

With copy to:

E. Clay McGonagill, Jr.
Special Counsel
Office of the General Counsel
Florida Department of Transportation
605 Suwannee Street, MS 58
Tallahassee, FL 32399-0458

To Concessionaire:

I 595 Express, LLC
One Alhambra Plaza, Suite 710
Coral Gables, FL 33134
Attention: Juan Santamaria
Telephone: (305) 423-7606
Fax: (305) 424-5401
E-Mail: jsantamaria@acsinfra.com

To the Agent:

The Bank of New York Mellon
Corporate Trust Administration
101 Barclay Street
New York, NY 10286
Attention: Corporate Finance Unit
Telephone: (212) 815-6907
Fax: (212) 815-5704

22.2. A notice shall be deemed to have been given:

(a) Upon receipt, if delivered in person;

(b) Upon receipt (confirmed by automatic answer back or equivalent evidence of receipt), if validly transmitted electronically before 3:00 p.m. (local time at the place of receipt) on a Business Day;

(c) One Business Day after delivery to the courier properly addressed, if delivered by overnight courier; or

(d) Four Business Days after deposit with postage prepaid and properly addressed, if delivered by United States certified or registered mail.

22.3. Each of the parties will notify each other in writing of any change of address, such notification to become effective 15 days after notification.

23. GOVERNING LAW AND JURISDICTION

23.1. This Direct Agreement shall be governed by, and construed in accordance with, the law of the State of Florida. The Parties consent to jurisdiction in the State courts of Broward and Leon Counties, Florida.

23.2. Each of Concessionaire, FDOT and the Agent irrevocably consents to service of process by personal delivery, certified mail, postage prepaid or overnight courier. Nothing in this Direct Agreement will affect the right of any party to serve process in any other manner permitted by law.

23.3. Each of FDOT, Concessionaire and the Agent hereby (a) certifies that no representative, agent or attorney of another party other has represented, expressly or otherwise, that the other would not, in the event of a proceeding, seek to enforce the foregoing waiver and (b) acknowledges that it has been induced to sign, or change its position in reliance upon the benefits of, this Direct Agreement by, among other things, the mutual waivers and certifications in this Section 23 (Governing Law and Jurisdiction).

24. CONFLICT WITH CONCESSION AGREEMENT

In the event of any conflict or inconsistency between the provisions of this Direct Agreement and the Concession Agreement, the provisions of this Direct Agreement shall prevail.

IN WITNESS WHEREOF, each of the parties hereto has caused this Direct Agreement to be duly executed by its duly authorized officer as of the date first written above.

FLORIDA DEPARTMENT OF TRANSPORTATION

By:_____

Name:_____
Title:_____

THE BANK OF NEW YORK MELLON, as Agent

By:_____

Name:_____
Title:_____

I 595 EXPRESS, LLC, as Concessionaire

By:_____

Name:_____
Title:_____

ACKNOWLEDGED AND AGREED THIS ___ DAY OF FEBRUARY 2009:

DEXIA CRÉDIT LOCAL, NEW YORK BRANCH, as Administrative Agent

By:_____

Name:_____
Title:_____

SCHEDULE A
Form of Substitute Accession Agreement

[Date]

To: Florida Department of Transportation
For the attention of: [_____]
[Lenders and other parties to Financing Documents to be listed]
[insert address]
For the attention of: [•]

From: *[Substituted Entity]*

I-595 CORRIDOR ROADWAY IMPROVEMENTS PROJECT: SUBSTITUTE ACCESSION AGREEMENT

Ladies and Gentlemen:

Reference is made to the Concession Agreement, dated as of [_____, _____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the ***Concession Agreement***) between the Florida Department of Transportation (FDOT) and I 595 Express, LLC (Concessionaire) and the Lenders' Direct Agreement, dated as of [_____, _____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the ***Direct Agreement***) among FDOT, Concessionaire and The Bank of New York Mellon, as Agent. Terms defined in the Direct Agreement and not otherwise defined herein are used herein as defined in the Direct Agreement.

1. We hereby confirm that we are a Substituted Entity pursuant to Section 10 of the Direct Agreement.

2. We acknowledge and agree that, upon and by reason of our execution of this Substitute Accession Agreement, we will become a party to the Concession Agreement and the Direct Agreement as a Substituted Entity and, accordingly, shall have the rights, powers and obligations of Concessionaire under the Concession Agreement and the Direct Agreement.

3. Our address, fax and telephone number and address for electronic mail for the purpose of receiving notices are as follows:

[contact details of Substituted Entity]

4. This Substitute Accession Agreement shall be governed by, and construed in accordance with, the law of the State of [___].

The terms set forth herein are hereby agreed to:

[Substituted Entity]

By:_____
Name: _____
Title:_____

Agreed for and on behalf of:
FLORIDA DEPARTMENT OF TRANSPORTATION

By:_____
Name: _____
Title:

SCHEDULE B
Financing Documents

Funding Agreements

Document	Party 1	Party 2
Credit Agreement	I 595 Express, LLC	Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A. • Banco Santander, S.A., New York Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch Administrative Agent • Dexia Crédit Local, New York Branch
Notes	I 595 Express, LLC	N/A
TIFIA Loan Agreement	I 595 Express, LLC	TIFIA Lender • USDOT, acting by and through FHWA
TIFIA Note	I 595 Express, LLC	N/A
Intercreditor Agreement	N/A	Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch TIFIA Lender • USDOT, acting by and through FHWA Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami

		Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Equity Contribution Agreement	I 595 Express, LLC	Sponsor • ACS Infrastructure Development, Inc. Collateral Agent • Bank of New York Mellon
Hedging Agreements	I 595 Express, LLC	Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Fee Letter	I 595 Express, LLC	Administrative Agent • Dexia Crédit Local, New York Branch
Fee Letter	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Fee Letter	I 595 Express, LLC	Initial Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A. • Banco Santander, S.A., New York

		Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch
Fee Letter	I 595 Express, LLC	Depositary • Bank of New York Mellon

Security Documents

Document	Party 1	Party 2
Borrower Membership Interest Pledge Agreement	Sponsor • ACS Infrastructure Development, Inc.	Collateral Agent • Bank of New York Mellon
Security Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Control Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Account Bank • Banco de Sabadell, S. A., Miami Branch
Direct Agreements	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Project Participants • I 595 Express, LLC, • Dragados USA, Inc., • FDOT, and • Each Person that is a party to Material Project Agreements
Depositary Agreement	I 595 Express, LLC	Depositary • Bank of New York Mellon Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch
Equity Investor LC	N/A	Issuing Bank • Banco Santander, S.A., New York Branch Beneficiary • The Bank of New York Mellon

APPENDIX 13

FORM OF DIRECT AGREEMENT

THIS DIRECT AGREEMENT dated as of [___], 2009 (this "**Direct Agreement**"), among: The Florida Department of Transportation ("**FDOT**"); I 595 Express, LLC, a limited liability company organized under the law of Delaware ("**Concessionaire**"); and The Bank of New York Mellon, as Agent (in such capacity, together with its successors in such capacity, the "**Agent**") for the Lenders (as defined in the Concession Agreement).

WHEREAS

(A) FDOT has determined that the I-595 Corridor Roadway Improvements Project be designed, constructed, financed, operated and maintained by a private sector party (the "**Project**"). In connection with the Project, FDOT and Concessionaire have entered into a concession agreement dated as of [___], 2009 (the "**Concession Agreement**").

(B) In order to enable Concessionaire to finance certain activities and certain obligations in respect of the Project, the Lenders have agreed to make available debt facilities, on the terms set out in the Financing Documents, for the purpose of financing the Project.

(C) In order to provide collateral security to the Lenders for Concessionaire's obligations under the Financing Documents, (1) Concessionaire and the Agent have entered into a Security Agreement dated as of the date hereof (the "**Security Agreement**"), pursuant to which Concessionaire has assigned to the Agent for the benefit of the Lenders, among other things, all of Concessionaire's right, title and interest under the Concession Agreement, and (2) the shareholders of Concessionaire as of the date of the execution of the Concession Agreement (the "**Initial Shareholders**") and the Agent have entered into a Borrower Membership Interest Pledge Agreement dated as of the date hereof (the "**Pledge Agreement**"), pursuant to which each of the Initial Shareholders has granted a security interest to the Agent for the benefit of the Lenders in, among other things, the equity interests held by such Initial Shareholder in Concessionaire.

(D) The execution of this Direct Agreement by FDOT in favor of the Agent is a condition precedent to the debt facilities being made available to Concessionaire by the Lenders.

NOW, THEREFORE, in consideration of the foregoing and the mutual terms and covenants contained herein, the parties hereto agree as follows:

1. DEFINITIONS AND INTERPRETATION

Capitalized terms used and not otherwise defined and references used but not construed in this Direct Agreement have the respective meanings and constructions assigned to such terms in the Concession Agreement. In addition, the following terms have the meanings specified below:

Administrative Agent means Dexia Crédit Local, New York Branch.

Concession Agreement has the meaning given to it in the Recitals.

Cure Period means the period starting on the date of the receipt of the FDOT Notice and ending on the earlier of the date of the receipt of the Step-in Notice or 90 days after the expiration of any cure periods provided to Concessionaire under the Concession Agreement; provided, however, if the Agent is prohibited from curing any non-monetary default or from substituting Concessionaire with the Substituted Entity by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Concessionaire, then the time period specified herein for curing a default shall be extended for the period of such prohibition.

Default means an Event of Default as defined in the Senior Credit Agreement or any event or circumstance specified in the Senior Credit Agreement which would (with the expiration of a grace period, the giving of notice, the lapse of time, the making of any determination under the Financing Documents or any combination of any of the foregoing) be an Event of Default.

Discharge Date means the date on which all of the obligations of Concessionaire under the Financing Documents have been irrevocably discharged in full to the satisfaction of the Agent.

Event of Default means an Event of Default as defined in the Senior Credit Agreement.

FDOT Notice has the meaning given to it in Section 4.

Instructing Controlling Party has the meaning given to it in the Intercreditor Agreement and Collateral Agency Agreement, dated as of the date hereof, among the Agent, as collateral agent for the Secured Parties, United States Department of Transportation, acting by and through the Federal Highway Administrator, the Administrative Agent, Banco Bilbao Vizcaya Argentaria, S.A., Banco de Sabadell, S.A., Banco Santander, S.A., New York Branch, Caja de Ahorros y Monte de Piedad de Madrid S.A., Caja de Ahorros y Pensiones de Barcelona, Calyon New York Branch, Dexia Crédit Local, New York Branch, National Australia Bank Limited and Societe Generale, each as an Interest Rate Hedge Provider.

Lender Notice has the meaning given to it in Section 5.1.

Lenders has the meaning given to it in the Security Agreement.

Pledge Agreement has the meaning given to it in the Recitals.

Project has the meaning given to it in the Recitals.

Property means any right or interest in or to property of any kind whatsoever, whether real, personal or mixed and whether tangible or intangible.

Revival Date has the meaning given to it in Section 12.1.

Secured Obligations has the meaning given to it in the Security Agreement.

Secured Parties has the meaning given to it in the Senior Credit Agreement.

Security Agreement has the meaning given to it in the Recitals.

Security Document means each of (a) the Security Agreement, (b) the Pledge Agreement and (c) any other document, agreement or other contract that constitutes, perfects or evidences any security, or grants any guarantee, indemnity or other assurance against loss, in each case in favor of the Agent as security for all or any part of the Secured Obligations.

Senior Credit Agreement means the Credit Agreement among I 595 Express, LLC, as Borrower, the several lenders from time to time party thereto, and the Administrative Agent.

Step-in Date has the meaning given to it in Section 8.

Step-in Notice has the meaning given to it in Section 7.1.

Step-in Party has the meaning given to it in Section 7.2.

Step-in Period means the period from and including the Step-in Date until the earlier of:

(a) The Substitution Effective Date;

(b) The Step-out Date;

(c) The date of termination of the Concession Agreement by FDOT in accordance with this Direct Agreement and the Concession Agreement;

(d) The date of the expiration or early termination of the Term under the Concession Agreement; and

(e) If the Step-in Date occurs (i) prior to the Substantial Completion Date, 6 months after the Long Stop Date, or (ii) after the Substantial Completion Date, 12 months after the Step-in Date, with each of the dates commencing after the expiration of any cure periods provided to Concessionaire under the Concession Agreement,

provided, however, that if the Agent is prohibited from curing any nonmonetary default after the Step-in Date or from substituting Concessionaire with the Substituted

Entity by any process, stay or injunction issued by any governmental authority or pursuant to any bankruptcy or insolvency proceeding or other similar proceeding involving Concessionaire, then the time periods specified herein for curing a default shall be extended for the period of such prohibition.

Step-out Date means the date upon which any Step-out Notice is served by the Step-in Party pursuant to Section 9.

Step-out Notice has the meaning given to it in Section 9.

Substituted Entity has the meaning given to it in the Concession Agreement.

Substitute Accession Agreement means the agreement to be entered into by a Substituted Entity pursuant to Section 11.1.

Substitution Effective Date has the meaning given to it in Section 11.1.

Substitution Notice has the meaning given to it in Section 10.1.

1.1. Interpretation

Unless the context otherwise clearly requires:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined;

(b) Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms;

(c) The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation";

(d) The word "will" shall be construed to have the same meaning and effect as the word "shall";

(e) Any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein);

(f) Any reference herein to any Person, or to any Person in a specified capacity, shall be construed to include such Person's successors and assigns or such Person's successors in such capacity, as the case may be;

(g) The words "herein", "hereof" and "hereunder", and words of similar import, shall be construed to refer to this Direct Agreement in its entirety and not to any particular provision hereof;

(h) All references herein to Sections and Schedules shall be construed to refer to Sections of and Schedules to this Direct Agreement. Any Schedules to this Direct Agreement are an integral part hereof. The provisions of this Direct Agreement shall prevail over the provisions of any Schedules to the extent of any inconsistency;

(i) The headings used in this Direct Agreement are for convenience of reference only and are not to affect the construction of or to be taken into consideration in interpreting this Direct Agreement;

(j) References to this Direct Agreement or to any other agreement or document relating to the Project includes a reference to this Direct Agreement, or, as the case may be, such other agreement or document as amended from time to time; and

(k) "Winding-up", "liquidation", "dissolution", "insolvency", "adjustment" or "reorganization" of a Person and references to the "liquidator", "assignee", "administrator", "receiver", "custodian", "conservator" "sequestrator" or "trustee" of a Person shall be construed so as to include any equivalent or analogous proceedings or, as the case may be, insolvency representatives or officers under the law of the jurisdiction in which such Person is incorporated, organized or constituted or any jurisdiction in which such Person or, as the case may be, insolvency representative or officer carries on business including the seeking of winding up, liquidation, dissolution, reorganization, administration, arrangement, adjustment or relief of debtors.

2. REPRESENTATIONS AND WARRANTIES

2.1. FDOT Represents and Warrants to the Agent That:

(a) ***Organization; Power and Authority***. FDOT is a public agency, duly formed and validly existing under the laws of the State of Florida and has the power and authority to transact the business it transacts and proposes to transact, to execute this Direct Agreement and the Concession Agreement and to perform the provisions hereof and thereof.

(b) ***Authorizations, Enforceability***. This Direct Agreement and the Concession Agreement have been duly authorized by FDOT, and this Direct Agreement constitutes a legal, valid and binding obligation of

FDOT enforceable against FDOT in accordance with its terms, except as such enforceability may be limited by (i) applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and (ii) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) ***No Default.*** There is no Concessionaire Default or FDOT Default, there exists no event or condition that would, with the giving of notice or passage of time or both, constitute such a Concessionaire Default or FDOT Default, and no such Concessionaire Default or FDOT Default has occurred prior to the date hereof.

(d) **Initial Financing Documents**. FDOT acknowledges and agrees that the documents referred to in Schedule B attached hereto are deemed to constitute Initial Financing Documents for purposes of the Concession Agreement.

(e) **Letter of Credit Beneficiary**. FDOT acknowledges and agrees that the letter of credit issued for purposes of the requirements set forth in clause (b) of the definition of Committed Investment under the Concession Agreement shall be deemed to satisfy such requirements even though the Agent, and not Concessionaire, is named as beneficiary thereunder.

3. AGREEMENTS AND CONSENT TO SECURITY

3.1. FDOT acknowledges notice and receipt of, and, notwithstanding anything in the Concession Agreement to the contrary, consents to the assignment by Concessionaire to the Agent of all of Concessionaire's right, title and interest in, and under the Concession Agreement pursuant to the terms and provisions of, the Security Agreement and the other Security Documents.

3.2. FDOT acknowledges notice and receipt of, and, notwithstanding anything in the Concession Agreement to the contrary, consents to the granting by each of the Initial Shareholders to the Agent of a security interest in such Initial Shareholder's equity interests in Concessionaire pursuant to the terms and provisions of, the Pledge Agreement.

3.3. Notwithstanding anything in the Concession Agreement to the contrary, FDOT agrees that the assignment of, and the grant of the security interest in and first lien over, all of Concessionaire's right, title and interest in, to and under the Concession Agreement and the other Contract Documents to which Concessionaire is a party pursuant to the Security Agreement and the other Security Documents, the grant of the security interest by each Initial Shareholder in its equity interests in Concessionaire pursuant to the Pledge Agreement and the execution by Concessionaire and FDOT of this Direct Agreement and the performance of their

respective obligations hereunder, in each case, shall neither constitute a Concessionaire Default, Default Termination Event or any other breach by the Concessionaire of the Concession Agreement nor would, with the giving of notice or lapse of time or both, constitute a Concessionaire Default, Default Termination Event or any other breach by the Concessionaire of the Concession Agreement, nor require the consent of FDOT, other than as provided herein.

3.4. Agent shall deliver to FDOT together with delivery to the Borrower or any other Person, every notice of election to sell, notice of sale or other notice under any requirement of law or by any Collateral Document (as defined in the Credit Agreement) in connection with the exercise of remedies under this Agreement or any other Collateral Document (as defined in the Credit Agreement). The Agent agrees to be bound by the provisions of Sections 16.3 and 16.5 of the Concession Agreement entered into between FDOT and the Borrower.

4. FDOT NOTICE OF TERMINATION AND EXERCISE OF REMEDIES

FDOT shall give the Agent written notice (an "**FDOT Notice**") promptly upon becoming aware of the occurrence of any event giving rise to:

(a) A Concessionaire Default or FDOT's right to terminate or give notice terminating the Concession Agreement, or exercise any rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement; or

(b) FDOT's right to suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement.

4.1. An FDOT notice shall specify:

(a) The unperformed obligations of Concessionaire under the Concession Agreement and grounds for termination of, or suspension of performance or the other rights all as referred to in Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 under the Concession Agreement in detail sufficient to enable the Agent to assess the scope and amount of any liability of Concessionaire resulting therefrom;

(b) Any other unperformed obligations of Concessionaire of which FDOT is aware as of the date of such FDOT Notice;

(c) All amounts due and payable by Concessionaire to FDOT under the Concession Agreement on or before the date of such FDOT

Notice and which remain unpaid at such date and the nature of Concessionaire's obligation to pay such amounts; and

(d) The amount of Concessionaire's payment obligation to FDOT that FDOT reasonably foresees will arise during the applicable Cure Period.

4.2. FDOT shall update its FDOT Notice to reflect unperformed obligations of Concessionaire under the Concession Agreement that have been identified or that have arisen and amounts payable by Concessionaire to FDOT that become due, in each case, after the date of FDOT Notice but prior to the proposed Step-in Date.

5. LENDER NOTICE

5.1. The Agent shall give FDOT and FDOT's Comptroller written notice (a "**Lender Notice**"), with a copy to Concessionaire, promptly upon the occurrence of any Default or Event of Default (whether or not an FDOT Notice has been served relating to the same event). The Lender Notice shall be sent to FDOT and FDOT's Comptroller via certified or registered mail, return receipt requested.

5.2. The Agent shall specify in any Lender Notice the circumstances and nature of the Default or Event of Default to which Lender Notice relates.

5.3. FDOT shall, following receipt of a Lender Notice and until further notice from the Agent, make any payments required to be made by FDOT to Concessionaire under the Concession Agreement to an account designated by the Agent. The Agent shall provide to FDOT the following information: (a) the individual responsible for administering the account, including his or her position; (b) the mailing address of such individual; and (c) the telephone, fax and e-mail address of such individual. Concessionaire agrees that any payment made in accordance with this Section 5.3 shall constitute a complete discharge of FDOT's relevant payment obligations to Concessionaire.

5.4. FDOT shall, following receipt of a Lender Notice and until further notice from the Agent, make any payment of any termination sum calculated in accordance with Article 20 of the Concession Agreement required to be made to Concessionaire under the Concession Agreement to an account designated by the Agent.

5.5. All sums paid as provided in Sections 5.3 and 5.4 shall be deemed paid to Concessionaire under the Concession Agreement. FDOT shall have no liability, whatsoever, for any delay in processing any payment request pursuant to Sections 5.3 or 5.4, provided that such delay does not extend 14 Business Days beyond the date of FDOT's certified, return-receipt or registered mail receipt of the Lender Notice.

5.6. The Agent shall notify FDOT of any decision to accelerate amounts outstanding under the Financing Documents or to exercise any enforcement remedies under the Financing Documents.

5.7. Neither the Agent nor the Lender shall exercise any right it may have pursuant to the Security Agreement and the other Security Documents to assign, transfer or otherwise dispose of any right, title or interest it may have in, or obligations it may have pursuant to, the Security Agreement and the other Security Documents to the extent the exercise of such rights would constitute a Refinancing and Concessionaire

has failed to comply with the requirements of Section 16.4 of the Concession Agreement.

5.8. Following receipt of a Lender Notice, the Agent shall have the right to deliver to FDOT a Step-in Notice as provided in Section 7.

6. NO TERMINATION DURING CURE PERIOD

6.1. FDOT agrees not to take any of the following actions prior to the expiration of any applicable Cure Period:

(a) Terminate or give notice terminating the Concession Agreement or exercise any rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement;

(b) Suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement; or

(c) Take or support any action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Concessionaire or for the composition or readjustment of Concessionaire's debts, or any similar insolvency procedure in relation to Concessionaire, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Concessionaire or for any part of Concessionaire's Property;

provided that such agreement of FDOT shall not prevent FDOT from taking actions which are permitted under this Direct Agreement on a Revival Date in respect of any other prior Concessionaire Default, Termination Event or other breach by the Concessionaire of the Concession Agreement which has occurred and has not been remedied or waived.

6.2. During any Cure Period, without giving a Step-in Notice, the Agent shall have the right (but shall have no obligation), at its sole option and discretion, to perform or arrange for the performance of any act, duty, or obligation required of Concessionaire under the Concession Agreement, or to cure any default of Concessionaire thereunder at any time (whether or not a Default Termination Event has occurred or been declared), which performance by the Agent shall be accepted by FDOT in lieu of performance by Concessionaire and in satisfaction of Concessionaire's obligations under the Concession Agreement. To the extent that any default of Concessionaire under the Concession Agreement is cured and/or any payment liabilities or performance obligations of Concessionaire are performed by the Agent during the Cure Period, such action shall discharge the relevant liabilities or obligations of Concessionaire to FDOT. The Agent's right to cure any default of Concessionaire as provided in this Section 6.2 may be exercised after the expiration of relevant cure period granted to Concessionaire in Section 19.1.2 of the Concession Agreement.

7. STEP-IN NOTICE

7.1. Upon the issuance of a FDOT Notice or a Lender Notice, the Agent may give a written notice (a "**Step-in Notice**") under this Section 7 to FDOT at any time during the Cure Period in the case of the issuance of a FDOT Notice or at any time following the receipt by FDOT of a Lender Notice.

7.2. The Agent shall nominate, in the Step-in Notice, (a) the Agent, a Lender or any of their respective Affiliates; or (b) any Person approved by FDOT in accordance with Section 13.5.2 of the Concession Agreement, and the person so nominated being referred to as the "Step-in Party".

8. RIGHTS AND OBLIGATIONS ON STEP-IN

On and from the date of the receipt of the Step-in Notice and the approval of FDOT to the appointment of the Step-in Party if required by Section 7.2 ("**Step-in Date**") and during the Step-in Period, the Step-in Party shall be:

(a) Entitled to exercise and enjoy the rights and powers expressed to be assumed by or granted to Concessionaire under the Concession Agreement and this Direct Agreement;

(b) Entitled to exercise and enjoy the rights and powers expressed to be assumed by or granted to a Step-in Party under this Direct Agreement; and

(c) Liable for the performance of all of Concessionaire's obligations under the Concession Agreement arising on or after the Step-in Date that the Step-in Party seeks to perform.

8.1. Without prejudice to Section 12 (Revival of Remedies), during the Step-in Period, FDOT shall:

(a) Not terminate or give notice terminating the Concession Agreement, or exercise any of its rights under Section 20.3.1 (Termination for Concessionaire Default) of the Concession Agreement or otherwise exercise its rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement, unless the grounds for termination or giving notice of termination or otherwise exercising its rights under Sections 20.3, 19.2.3, 19.2.4 or 19.2.7.1 of the Concession Agreement are failure by the Step-in Party to perform Concessionaire's obligations under the Concession Agreement;

(b) Not suspend its performance (including in connection with any insolvency or bankruptcy proceeding in relation to Concessionaire) under the Concession Agreement, unless the grounds for suspension of performance are failure by the Step-in Party to perform Concessionaire's obligations under the Concession Agreement;

(c) Not take or support any action for the liquidation, bankruptcy, administration, receivership, reorganization, dissolution or winding up of Concessionaire or for the composition or readjustment of Concessionaire's debts, or any similar insolvency procedure in relation to Concessionaire, or for the appointment of a receiver, trustee, custodian, sequestrator, conservator, liquidator, administrator or similar official for Concessionaire or for any part of Concessionaire's Property;

(d) Continue to make payments required to be made to Concessionaire under the Concession Agreement to an account designated by the Agent; and

(e) Endorse over as directed by the Agent any checks received by FDOT with respect to the Performance Security or the O&M Security if, in each case, such security is in the form of a surety bond; provided that the Agent reimburse FDOT for any Losses incurred by FDOT in attempting to cure the Concessionaire Default as and to the extent: (i) FDOT is entitled to such reimbursement pursuant to the Concession Agreement; (ii) FDOT has promptly notified the Agent of such Losses at or prior to the time of endorsement and (iii) the Agent's obligation to reimburse FDOT for such Losses do not exceed the proceeds from any such security.

8.2. FDOT shall owe its obligations under the Concession Agreement and this Direct Agreement to Concessionaire and the Step-in Party jointly; provided that:

(a) The receipt of, or performance by FDOT in favor of, either such Step-in Party or Concessionaire shall be a good and effective discharge of

FDOT's obligations under this Direct Agreement and the Concession Agreement;

(b) The Agent shall be entitled at any time by notice in writing to FDOT to direct (such direction being binding on the Agent, FDOT and Concessionaire) that, at all times during the Step-in Period, the Step-in Party shall be solely entitled to make any decisions, to give any directions, approvals or consents, to receive any payments or otherwise to deal with FDOT under the Concession Agreement and this Direct Agreement; and

(c) Any amount due from Concessionaire to FDOT under the Concession Agreement or this Direct Agreement as of the Step-in Date and notified to such Step-in Party prior to the Step-in Date shall be paid to FDOT on the Step-in Date, failing which FDOT shall be entitled to exercise its rights under the Concession Agreement in respect of the amount so due and unpaid.

8.3. Concessionaire shall not be relieved from any of its obligations under the Concession Agreement, whether arising before or after the Step-in Date, by reason of the Step-in Party exercising the rights provided herein, except to the extent provided in Section 6.2 and Section 9.

9. STEP-OUT

A Step-in Party may, at any time, by giving not less than 30 days' prior written notice ("**Step-out Notice**") to FDOT terminate its obligations to FDOT under this Direct Agreement, in which event such Step-in Party shall be released from all obligations under this Direct Agreement, except for any obligation or liability of the Step-in Party arising on or before the expiration of such Step-out Notice. The obligations of FDOT to the Step-in Party under this Direct Agreement shall also terminate upon the expiration of the period set forth in the Step-out Notice; provided that this Direct Agreement shall continue to remain effective according to its terms after the expiration of the period contained in the Step-out Notice if the Step-in Party is the Agent or a Lender.

10. SUBSTITUTION PROPOSAL BY THE LENDERS

10.1. The Agent may give a notice ("**Substitution Notice**") under this Section 10 in writing to FDOT at any time:

(a) During any Cure Period;

(b) During any Step-in Period; or

(c) After delivery of a Lender Notice.

10.2. In any Substitution Notice, the Agent shall notify FDOT that it intends to designate a Substituted Entity.

10.3. The Agent shall, as soon as practicable, provide to FDOT the information regarding the proposed Substituted Entity and any third party entering into a material subcontract with such Substituted Entity as required by Section 13.5 of the Concession Agreement, including:

(a) The name and address of the proposed Substituted Entity;

(b) The names of the proposed Substituted Entity's shareholders or members and the share capital or partnership or membership interests, as the case may be, held by each of them;

(c) The manner in which it is proposed to finance the proposed Substituted Entity and the extent to which such financing is committed;

(d) Copies of the proposed Substituted Entity's most recent financial statements (and if available such financial statements shall be for the last three financial years) or in the case of a newly-formed special purpose company its opening balance sheet;

(e) A copy of the proposed Substituted Entity's formation documents;

(f) Details of the resources available to the proposed Substituted Entity and the proposed Substituted Entity's appropriate qualifications, experience and technical competence available to the proposed Substituted Entity to enable it to perform the obligations of Concessionaire under the Concession Agreement; and

(g) The names of the proposed Substituted Entity's directors and any key personnel who will have responsibility for the day-to-day management of its participation in the Project.

10.4. FDOT shall not be required to give its approval to the proposed Substituted Entity if:

(a) There are unremedied breaches under the Concession Agreement and there is no rectification plan reasonably acceptable to FDOT with respect to the breaches which are capable of being rectified by the Substituted Entity; or

(b) Any proposed security interests to be granted by the proposed Substituted Entity to the Agent and/or the Lender in addition to (or substantially different from) the security interests granted to the Agent and/or the Lender under the Initial Funding Agreements or Initial Security Documents materially and adversely affect the ability of the Substituted Entity to perform Concessionaire's obligations under the

Contract Documents or have the effect of increasing any liability of FDOT, whether actual or potential (unless a Rescue Refinancing is concurrently proposed, in which case the Project Debt Termination Amount may increase by up to 10%).

10.5. If FDOT fails to give its approval within 60 days of the date on which FDOT has confirmed it has received the information specified in Section 10.3 in respect of any proposed Substituted Entity, the approval of FDOT shall be deemed to have been given.

11. SUBSTITUTION

11.1. If FDOT approves (or is deemed to have approved) a Substitution Notice pursuant to Section 10, the Substituted Entity named therein shall execute a duly completed Substitute Accession Agreement substantially in the form attached hereto as Schedule A and submit it to FDOT (with a copy thereof to the other parties to this Direct Agreement) and such assignment shall become effective on and from the date on which FDOT countersigns the Substitute Accession Agreement (the "**Substitution Effective Date**") or the date that is 10 days after the date FDOT receives the completed Substitute Accession Agreement if FDOT fails to sign the Substitute Accession Agreement.

11.2. As of the Substitution Effective Date:

(a) Such Substituted Entity shall become a party to the Concession Agreement and this Direct Agreement in place of Concessionaire who shall be immediately released from its obligations arising under, and cease to be a party to, the Concession Agreement and this Direct Agreement from and after Substitution Effective Date;

(b) All of Concessionaire's obligations and liabilities under the Concession Agreement and under this Direct Agreement arising from and after the Substitution Effective Date shall be immediately and automatically transferred to the Substituted Entity;

(c) Such Substituted Entity shall exercise and enjoy the rights and perform the obligations of Concessionaire under the Concession Agreement and this Direct Agreement, and

(d) FDOT shall owe its obligations (including any undischarged liability with respect to any loss or damage suffered or incurred by Concessionaire prior to the Substitution Effective Date) under the Concession Agreement and this Direct Agreement to such Substituted Entity in place of Concessionaire, subject to FDOT's right to offset any losses or damages suffered or incurred by FDOT as provided under the Concession Agreement.

11.3. FDOT shall use its reasonable efforts to facilitate the transfer to the Substituted Entity of Concessionaire's obligations under the Concession Agreement and this Direct Agreement.

11.4. The Substituted Entity shall pay to FDOT on the Substitution Effective Date any amount due to FDOT under the Concession Agreement and this Direct Agreement, including FDOT's reasonable costs and expenses incurred in connection with (a) Concessionaire's default and termination, (b) FDOT's activities with respect to the Project during any period FDOT was in possession of the Project, and (c) the approval of the Substituted Entity, all as of the Substitution Effective Date and notified to such Substituted Entity prior to the Substitution Effective Date. FDOT's receipt of the payment pursuant to this Section 11.4 shall be a condition precedent to the Substitution Effective Date.

11.5. As of the Substitution Effective Date:

(a) Any right of termination suspended by virtue of Section 6.1 shall be of no further effect and FDOT shall not be entitled to terminate or suspend performance of the Concession Agreement and this Direct Agreement by virtue of any act, omission or circumstance that occurred prior to such Substitution Effective Date; and

(b) FDOT shall enter into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Concessionaire shall be replaced as a party by the Substituted Entity.

12. REVIVAL OF REMEDIES

12.1. If an FDOT Notice has been given, the grounds for that notice are continuing and have not been remedied or waived and:

(a) As of the end of the Cure Period, no Step-in Notice has been given and no Substituted Entity becomes a party to the Concession Agreement and this Direct Agreement; or

(b) The Step-in Period ends without a Substituted Entity becoming a party thereto,

Then, from and after the date such Cure Period or such Step-in Period, as the case may be, expires (the "**Revival Date**"), FDOT shall be entitled to:

(i) Act upon any and all grounds for termination or suspension available to it in relation to the Concession Agreement in respect of defaults under the Concession Agreement not remedied or waived;

(ii) Pursue any and all claims and exercise any and all remedies against Concessionaire; and

(iii) If and to the extent that it is then entitled to do so under the Concession Agreement, take or support any action of the type referred to in Section 19.2 of the Concession Agreement.

13. GENERAL

13.1. If

(a) the Concession Agreement is rejected by a trustee or debtor-in-possession in, or terminated as a result of, any bankruptcy or insolvency proceeding involving Concessionaire, or

(b) a Concessionaire Default under Sections 19.1.1.13 or 19.1.1.14 of the Concession Agreement occurs with respect to any Guarantor of material Concessionaire obligations owed to FDOT under the Contract Documents or any Equity Member with a material financial obligation owing to Concessionaire for Committed Investment, and such Guarantor's or Equity Members' obligations relating to Concessionaire or the Project are rejected by a trustee or debtor-in-possession in, or terminated as a result of any bankruptcy or insolvency proceeding involving such Guarantor or Equity Member and, within 90 days after such rejection or termination, the Agent shall so request and shall certify in writing to FDOT that it intends to perform the obligations of Concessionaire as and to the extent required under the Concession Agreement,

FDOT will execute and deliver to the Agent (or any Substituted Entity satisfying the requirements of this Direct Agreement if directed to do so by the Agent) a new concession agreement. Such new concession agreement shall contain conditions, agreements, terms, provisions and limitations which are the same as those of the Concession Agreement, except for any obligations that have been fulfilled by Concessionaire, any party acting on behalf of or stepping-in for Concessionaire or FDOT prior to such rejection or termination. References in this Direct Agreement to the "Concession Agreement" shall be deemed also to refer to any such new concession agreement.

13.2. Neither the Lender nor the Agent shall have any obligation hereunder to extend credit to FDOT or any contractor to FDOT at any time, for any purpose.

13.3. For so long as any amount under the Financing Documents is outstanding, FDOT shall not, without the prior written consent of the Agent, consent to any assignment, transfer, pledge or hypothecation of the Concession Agreement or any interest therein by Concessionaire, other than as specified in the Concession Agreement or this Direct Agreement.

13.4. Notwithstanding anything to the contrary contained herein, the Agent is acting hereunder, not in its individual capacity but solely as collateral agent, on behalf of the Secured Parties. The Agent shall not be required to take any action whatsoever hereunder unless and until it is specifically directed to do so in writing by either the

Administrative Agent or the Instructing Controlling Party. The Agent shall not be liable for acting in accordance with such directions or for failing to act if it does receive any such written directions from either the Administrative Agent or the Instructing Controlling Party. Under no circumstances (other than in respect of gross negligence or willful misconduct of the Agent) shall the Agent be liable for any and all claims, liabilities, obligations, losses, damages, penalties, costs and expenses that may be imposed on, incurred by, or asserted against the Agent at any time or in any way relating to or arising out of the execution, delivery and performance of this Direct Agreement by the Agent. Under no circumstances shall the Agent be liable for any indirect, special, consequential or punitive damages for any action it takes at the direction of the Administrative Agent or the Instructing Controlling Party. For the avoidance of doubt, under no circumstances shall the Agent be required to perform any activity related to the construction of the Project including, without limitation, directing or supervising any portion of the construction of the Project. Nothing contained herein shall require the Agent to advance or risk its own funds.

14. TERMINATION

This Direct Agreement shall remain in effect until the earlier to occur of (a) the Discharge Date; (b) the time at which all of FDOT's obligations and liabilities have expired or have been satisfied in accordance with the terms of the Concession Agreement and this Direct Agreement; and (c) any assignment to a Substituted Entity has occurred under Section 11 and FDOT shall have entered into an equivalent direct agreement on substantially the same terms as this Direct Agreement, save that Concessionaire has been replaced as a party by the Substituted Entity.

15. EFFECT OF BREACH

Without prejudice to any rights a party may otherwise have, a breach of this Direct Agreement shall not of itself give rise to a right to terminate the Concession Agreement.

16. NO PARTNERSHIP

Nothing contained in this Direct Agreement shall be deemed to constitute a partnership between the parties hereto. None of the parties shall hold itself out contrary to the terms of this Section 16.

17. REMEDIES CUMULATIVE; NO WAIVER

No failure or delay by FDOT, the Lenders or the Agent (or their designee) in exercising any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The remedies provided herein are cumulative and not exclusive of any remedies provided by law and may be exercised by the Lenders, the Agent or any designee, transferee or

assignee thereof from time to time. In no event shall any provision of this Direct Agreement or any consent to any departure by any party therefrom be effective unless such waiver is permitted by Section 18, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given.

18. AMENDMENT

No amendment, modification or waiver of any provision of this Direct Agreement, or consent to any departure herefrom by any party hereto, shall be effective against any party hereto unless the same shall be in writing and signed by the party against whom enforcement is sought, and then such amendment or waiver shall be effective only in the specific instance and for the specific purpose for which it was given.

19. SUCCESSORS AND ASSIGNS

19.1. No party to this Direct Agreement may assign or transfer any part of its rights or obligations hereunder without the consent of the other parties, save that the Agent may assign or transfer its rights and obligations hereunder to a successor Agent in accordance with the Financing Documents. In connection with any such assignment or transfer, FDOT agrees to enter into a new Direct Agreement with the successor Agent on terms that are substantially the same as those of this Direct Agreement.

19.2. This Direct Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

20. COUNTERPARTS

This Direct Agreement may be executed in any number of counterparts, each of which shall be identical and all of which, taken together, shall constitute one and the same instrument, and the parties may execute this Direct Agreement by signing any such counterpart. Transmission by facsimile of an executed counterpart of this Direct Agreement shall be deemed to constitute due and sufficient delivery of such counterpart, to be followed thereafter by an original of such counterpart.

21. SEVERABILITY

If, at any time, any provision of this Direct Agreement is or becomes illegal, invalid or unenforceable in any respect under any law of any jurisdiction, neither the legality, validity or enforceability of the remaining provisions nor the legality, validity or enforceability of such provision under the law of any other jurisdiction will in any way be affected or impaired. The illegal, invalid or unenforceable provision shall be deemed replaced by such provisions as shall be legal, valid and enforceable in the relevant jurisdiction.

22. NOTICES

22.1. Any notice, approval, election, demand, direction, consent, designation, request, agreement, instrument, certificate, report or other communication required or

permitted to be given or made under this Direct Agreement (each, a notice) to a party must be given in writing (including by fax or electronic mail). All notices will be validly given if on a Business Day to each party at the following address:

To FDOT:

Leon Corbett
Manager, Project Finance
Florida Department of Transportation
605 Suwannee Street
Tallahassee, FL 32399-0450
Telephone. (850) 414-4421
Fax: (850) 414-4943

With copy to:

E. Clay McGonagill, Jr.
Special Counsel
Office of the General Counsel
Florida Department of Transportation
605 Suwannee Street, MS 58
Tallahassee, FL 32399-0458

To Concessionaire:

I 595 Express, LLC
One Alhambra Plaza, Suite 710
Coral Gables, FL 33134
Attention: Juan Santamaria
Telephone: (305) 423-7606
Fax: (305) 424-5401
E-Mail: jsantamaria@acsinfra.com

To the Agent:

The Bank of New York Mellon
Corporate Trust Administration
101 Barclay Street
New York, NY 10286
Attention: Corporate Finance Unit
Telephone: (212) 815-6907
Fax: (212) 815-5704

22.2. A notice shall be deemed to have been given:

(a) Upon receipt, if delivered in person;

(b) Upon receipt (confirmed by automatic answer back or equivalent evidence of receipt), if validly transmitted electronically before 3:00 p.m. (local time at the place of receipt) on a Business Day;

(c) One Business Day after delivery to the courier properly addressed, if delivered by overnight courier; or

(d) Four Business Days after deposit with postage prepaid and properly addressed, if delivered by United States certified or registered mail.

22.3. Each of the parties will notify each other in writing of any change of address, such notification to become effective 15 days after notification.

23. GOVERNING LAW AND JURISDICTION

23.1. This Direct Agreement shall be governed by, and construed in accordance with, the law of the State of Florida. The Parties consent to jurisdiction in the State courts of Broward and Leon Counties, Florida.

23.2. Each of Concessionaire, FDOT and the Agent irrevocably consents to service of process by personal delivery, certified mail, postage prepaid or overnight courier. Nothing in this Direct Agreement will affect the right of any party to serve process in any other manner permitted by law.

23.3. Each of FDOT, Concessionaire and the Agent hereby (a) certifies that no representative, agent or attorney of another party other has represented, expressly or otherwise, that the other would not, in the event of a proceeding, seek to enforce the foregoing waiver and (b) acknowledges that it has been induced to sign, or change its position in reliance upon the benefits of, this Direct Agreement by, among other things, the mutual waivers and certifications in this Section 23 (Governing Law and Jurisdiction).

24. CONFLICT WITH CONCESSION AGREEMENT

In the event of any conflict or inconsistency between the provisions of this Direct Agreement and the Concession Agreement, the provisions of this Direct Agreement shall prevail.

IN WITNESS WHEREOF, each of the parties hereto has caused this Direct Agreement to be duly executed by its duly authorized officer as of the date first written above.

FLORIDA DEPARTMENT OF TRANSPORTATION

By:_____

Name:_____
Title:_____

THE BANK OF NEW YORK MELLON, as Agent

By:_____

Name:_____
Title:_____

I 595 EXPRESS, LLC, as Concessionaire

By:_____

Name:_____
Title:_____

ACKNOWLEDGED AND AGREED THIS ___ DAY OF FEBRUARY 2009:

DEXIA CRÉDIT LOCAL, NEW YORK BRANCH, as Administrative Agent

By:_____

Name:_____
Title:_____

SCHEDULE A
Form of Substitute Accession Agreement

[Date]

To: Florida Department of Transportation
For the attention of: [_____]
[Lenders and other parties to Financing Documents to be listed]
[insert address]
For the attention of: [•]

From: *[Substituted Entity]*

I-595 CORRIDOR ROADWAY IMPROVEMENTS PROJECT: SUBSTITUTE ACCESSION AGREEMENT

Ladies and Gentlemen:

Reference is made to the Concession Agreement, dated as of [_____, _____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the ***Concession Agreement***) between the Florida Department of Transportation (FDOT) and I 595 Express, LLC (Concessionaire) and the Lenders' Direct Agreement, dated as of [_____, _____] (as amended, amended and restated, supplemented or otherwise modified from time to time, the ***Direct Agreement***) among FDOT, Concessionaire and The Bank of New York Mellon, as Agent. Terms defined in the Direct Agreement and not otherwise defined herein are used herein as defined in the Direct Agreement.

1. We hereby confirm that we are a Substituted Entity pursuant to Section 10 of the Direct Agreement.

2. We acknowledge and agree that, upon and by reason of our execution of this Substitute Accession Agreement, we will become a party to the Concession Agreement and the Direct Agreement as a Substituted Entity and, accordingly, shall have the rights, powers and obligations of Concessionaire under the Concession Agreement and the Direct Agreement.

3. Our address, fax and telephone number and address for electronic mail for the purpose of receiving notices are as follows:

[contact details of Substituted Entity]

4. This Substitute Accession Agreement shall be governed by, and construed in accordance with, the law of the State of [___].

The terms set forth herein are hereby agreed to:

[Substituted Entity]

By:_____
Name: _____
Title:_____

Agreed for and on behalf of:
FLORIDA DEPARTMENT OF TRANSPORTATION

By:_____
Name: _____
Title:

SCHEDULE B
Financing Documents

Funding Agreements

Document	Party 1	Party 2
Credit Agreement	I 595 Express, LLC	Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A. • Banco Santander, S.A., New York Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch Administrative Agent • Dexia Crédit Local, New York Branch
Notes	I 595 Express, LLC	N/A
TIFIA Loan Agreement	I 595 Express, LLC	TIFIA Lender • USDOT, acting by and through FHWA
TIFIA Note	I 595 Express, LLC	N/A
Intercreditor Agreement	N/A	Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch TIFIA Lender • USDOT, acting by and through FHWA Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami

		Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Equity Contribution Agreement	I 595 Express, LLC	Sponsor • ACS Infrastructure Development, Inc. Collateral Agent • Bank of New York Mellon
Hedging Agreements	I 595 Express, LLC	Interest Rate Hedge Providers • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Santander, S.A., New York Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale
Fee Letter	I 595 Express, LLC	Administrative Agent • Dexia Crédit Local, New York Branch
Fee Letter	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Fee Letter	I 595 Express, LLC	Initial Lenders • Banco Bilbao Vizcaya Argentaria, S.A. • Banco de Sabadell, S.A., Miami Branch • Banco Popular Español, S.A. • Banco Santander, S.A., New York

		Branch • Caixa de Aforros de Vigo, Ourense e Pontevedra, Caixanova Miami Branch • Caja de Ahorros y Monte de Piedad de Madrid S.A. • Caja de Ahorros y Pensiones de Barcelona, "la Caixa" • Calyon New York Branch • Dexia Crédit Local, New York Branch • National Australia Bank Limited • Societe Generale • WestLB AG, New York Branch
Fee Letter	I 595 Express, LLC	Depositary • Bank of New York Mellon

Security Documents

Document	Party 1	Party 2
Borrower Membership Interest Pledge Agreement	Sponsor • ACS Infrastructure Development, Inc.	Collateral Agent • Bank of New York Mellon
Security Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon
Control Agreement	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Account Bank • Banco de Sabadell, S. A., Miami Branch
Direct Agreements	I 595 Express, LLC	Collateral Agent • Bank of New York Mellon Project Participants • I 595 Express, LLC, • Dragados USA, Inc., • FDOT, and • Each Person that is a party to Material Project Agreements
Depositary Agreement	I 595 Express, LLC	Depositary • Bank of New York Mellon Collateral Agent • Bank of New York Mellon Administrative Agent • Dexia Crédit Local, New York Branch
Equity Investor LC	N/A	Issuing Bank • Banco Santander, S.A., New York Branch Beneficiary • The Bank of New York Mellon

APPENDIX 14

FORM OF LETTER OF CREDIT

App. 14-A.1 Form of Letter of Credit (Design – NTP 1)

App. 14-A.2 Form of Letter of Credit (D&C Work and O&M Work – NTP 2)

App. 14-B Form of Letter of Credit (Operations & Maintenance – Operating Period)

APPENDIX 14-A.1

FORM OF LETTER OF CREDIT (DESIGN – NTP 1)

IRREVOCABLE STANDBY LETTER OF CREDIT

ISSUER:

PLACE FOR PRESENTATION OF DRAFT: (Name and Address of Bank/Branch - - MUST be FLORIDA Bank/Branch)

APPLICANT:

BENEFICIARY: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION
OFFICE OF COMPTROLLER
MS 42B, 605 SUWANNEE STREET
TALLAHASSEE, FLORIDA 32399

LETTER OF CREDIT NUMBER:

PLACE AND DATE OF ISSUE:

AMOUNT: Ten Million United States Dollars (US$10,000,000)

EXPIRATION DATE:

The Issuer hereby issues this Irrevocable Standby Letter of Credit in favor of the State of Florida, Department of Transportation, for any sum or sums up to the aggregate amount of **Ten Million United States Dollars (US$10,000,000)**, available by draft at sight drawn on the Issuer. Any draft under this Letter of Credit shall:

1. Identify this Irrevocable Standby Letter of Credit by the name of the Issuer, and the Letter of Credit number, amount, and place and date of issue; and

2. State one of the following:

   "This drawing is due to _____(Concessionaire's name)_____ failure to perform certain obligations under an agreement _____(include Permit #, Project # or Contract # as applicable)_____ between _____ (Concessionaire's name)_____ and the State of Florida, Department of Transportation."

or

   "This drawing is being made because the Issuer of the Letter of Credit upon which draft is made has failed to maintain the financial or organizational requirements established in Rule 14-116, Florida

Administrative Code and the time period for providing a substitute letter of credit as required by Florida Administrative Code Chapter 14-116.002(2)(b) has expired without a substitute letter of credit meeting the requirements of Florida Administrative Code Chapter 14-116.002 having been provided."

or

"This drawing is being made because we have been notified that the Letter of Credit will not be extended beyond the current expiration date and a satisfactory replacement has not been provided as of 14 days prior to the current expiration date."

All drafts will be honored if presented to _____(FLORIDA Bank/Branch - Name & Address)_____ on or before _____(Expiration Date)_____ or any extended expiration date.

Drawings by facsimile to facsimile number ( ) _____ are acceptable (each such drawing, a "Fax Drawing") provided, however, that a Fax Drawing will not be effectively presented until Beneficiary confirms, by telephone, Issuer's receipt of such Fax Drawing by calling Issuer at telephone number ( ) _____. Issuer will acknowledge Beneficiary's presentment by e-mail to the e-mail address provided to Issuer in the Fax Drawing.

This Letter of Credit shall be automatically extended for successive periods of one year, without amendment, from the stated expiration date and each extended expiration date unless we send the State of Florida, Department of Transportation written notice of our intent not to extend the credit; which notice must be sent at least 30 days prior to the expiration date of the original term hereof or any extended one year term, by registered or certified mail or overnight courier, to the Comptroller of the Florida Department of Transportation at the Office of Comptroller, Mail Station 42B, 605 Suwannee Street, Tallahassee, Florida 32399, or any other address specified in writing to the Issuer at the above address by the Comptroller, Florida Department of Transportation. Notice to the State of Florida, Department of Transportation that this Letter of Credit will not be extended, shall be deemed a default.

This Letter of Credit is subject to the rules of the "International Standby Practices" ISP98. If a conflict between ISP98 and Florida law should arise, Florida law shall prevail.

Issuer:

By: _____(Authorized signature of Issuer)

APPENDIX 14-A.2

FORM OF LETTER OF CREDIT (D&C WORK AND O&M WORK - NTP 2)

IRREVOCABLE STANDBY LETTER OF CREDIT

ISSUER:

PLACE FOR PRESENTATION OF DRAFT: (Name and Address of Bank/Branch - - MUST be FLORIDA Bank/Branch)

APPLICANT:

BENEFICIARY: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION
OFFICE OF COMPTROLLER
MS 42B, 605 SUWANNEE STREET
TALLAHASSEE, FLORIDA 32399

LETTER OF CREDIT NUMBER:

PLACE AND DATE OF ISSUE:

AMOUNT: US$

EXPIRATION DATE:

The Issuer hereby issues this Irrevocable Standby Letter of Credit in favor of the State of Florida, Department of Transportation, for any sum or sums up to the aggregate amount of _____ United States Dollars (US$_____), available by draft at sight drawn on the Issuer. Any draft under this Letter of Credit shall:

1. Identify this Irrevocable Standby Letter of Credit by the name of the Issuer, and the Letter of Credit number, amount, and place and date of issue; and

2. State one of the following:

   "This drawing is due to _____(Concessionaire's name)_____ failure to perform certain obligations under the agreement _____(include Permit #, Project # or Contract # as applicable)_____ between _____ (Concessionaire's name)_____ and the State of Florida, Department of Transportation."

or

"This drawing is being made because the Issuer of the Letter of Credit upon which draft is made has failed to maintain the financial or organization requirements established in Rule 14-116, Florida Administrative Code and the time period for providing a substitute letter of credit as required by Florida Administrative Code Chapter 14-116.002(2)(b) has expired without a substitute letter of credit meeting the requirements of Florida Administrative Code Chapter 14-116.002 having been provided."

or

"This drawing is being made because we have been notified that the Letter of Credit will not be extended beyond the current expiration date and a satisfactory replacement has not been provided as of 14 days prior to the current expiration date."

All drafts will be honored if presented to _____(FLORIDA Bank/Branch – Name & Address on or before (Expiration Date) or any extended expiration date.

Drawings by facsimile to facsimile number ( ) _____ are acceptable (each such drawing, a "Fax Drawing") provided, however, that a Fax Drawing will not be effectively presented until Beneficiary confirms, by telephone, Issuer's receipt of such Fax Drawing by calling Issuer at telephone number ( ) _____. Issuer will acknowledge Beneficiary's presentment by e-mail to the e-mail address provided to Issuer in the Fax Drawing.

This Letter of Credit shall be automatically extended for successive period of one year, without amendment, from the stated expiration date and each extended expiration date unless we send the State of Florida, Department of Transportation written notice of our intent not to extend the credit; which notice must be sent at least 30 days prior to the expiration date of the original term hereof or any extended one year term, by registered or certified mail or overnight courier, to the Comptroller of the Florida Department of transportation at the Office of Comptroller, Mail Station 42B, 605 Suwannee Street, Tallahassee, Florida 32399, or any other address specified in writing to Issuer at the above address by the Comptroller, Florida Department of Transportation. Notice to the State of Florida, Department of Transportation that this Letter of Credit will not be extended, shall be deemed a default.

This Letter of Credit is subject to the rules of the "International Standby Practices" ISP98. If a conflict between ISP98 and Florida law should arise, Florida law shall prevail.

Issuer:

By:_____(Authorized signature of Issuer)_____

APPENDIX 14-B

FORM OF LETTER OF CREDIT (OPERATIONS & MAINTENANCE – OPERATING PERIOD)

IRREVOCABLE STANDBY LETTER OF CREDIT

ISSUER:

PLACE FOR PRESENTATION OF DRAFT: (Name and Address of Bank/Branch - - MUST be FLORIDA Bank/Branch)

APPLICANT:

BENEFICIARY: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION
OFFICE OF COMPTROLLER
MS 42B, 605 SUWANNEE STREET
TALLAHASSEE, FLORIDA 32399

LETTER OF CREDIT NUMBER:

PLACE AND DATE OF ISSUE:

AMOUNT: US$

EXPIRATION DATE:

The Issuer hereby issues this Irrevocable Standby Letter of Credit in favor of the State of Florida, Department of Transportation, for any sum or sums up to the aggregate amount of _____ United States Dollars (US$ _____), available by draft at sight drawn on the Issuer. Any draft under this Letter of Credit shall:

1. Identify this Irrevocable Standby Letter of Credit by the name of the Issuer, and the Letter of Credit number, amount, and place and date of issue; and

2. State one of the following:

   "This drawing is due to _____(Concessionaire's name)_____ failure to perform certain obligations under the agreement _____(include Permit #, Project # or Contract # as applicable)_____ between _____ (Concessionaire's name)_____ and the State of Florida, Department of Transportation."

or

   "This drawing is being made because the Issuer of the Letter of Credit upon which draft is made has failed to maintain the financial or organizational requirements established in Rule 14-116, Florida

Administrative Code and the time period for providing a substitute letter of credit as required by Florida Administrative Code Chapter 14-116.002(2)(b) has expired without a substitute letter of credit meeting the requirements of Florida Administrative Code Chapter 14-116.002 having been provided."

or

"This drawing is being made because we have been notified that the Letter of Credit will not be extended beyond the current expiration date and a satisfactory replacement has not been provided as of 14 days prior to the current expiration date."

All drafts will be honored if presented to _____(FLORIDA Bank/Branch - Name & Address)_____ on or before _____(Expiration Date)_____ or any extended expiration date.

Drawings by facsimile to facsimile number ( ) _____ are acceptable (each such drawing, a "Fax Drawing") provided, however, that a Fax Drawing will not be effectively presented until Beneficiary confirms, by telephone, Issuer's receipt of such Fax Drawing by calling Issuer at telephone number ( ) _____. Issuer will acknowledge Beneficiary's presentment by e-mail to the e-mail address provided to Issuer in the Fax Drawing.

This Letter of Credit shall be automatically extended for successive periods of one year, without amendment, from the stated expiration date and each extended expiration date unless we send the State of Florida, Department of Transportation written notice of our intent not to extend the credit; which notice must be sent at least 30 days prior to the expiration date of the original term hereof or any extended one year term, by registered or certified mail or overnight courier, to the Comptroller of the Florida Department of Transportation at the Office of Comptroller, Mail Station 42B, 605 Suwannee Street, Tallahassee, Florida 32399, or any other address specified in writing to the Issuer at the above address by the Comptroller, Florida Department of Transportation. Notice to the State of Florida, Department of Transportation that this Letter of Credit will not be extended, shall be deemed a default.

This Letter of Credit is subject to the rules of the "International Standby Practices" ISP98. If a conflict between ISP98 and Florida law should arise, Florida law shall prevail.

Issuer:

By: _____(Authorized signature of Issuer)

Appendix 15

APPENDIX 15

FORM OF PERFORMANCE SECURITY, PAYMENT BOND AND O&M SECURITY

App. 15-A.1 Form of Performance Bond (Design – NTP 1)

App. 15-A.2 Form of Performance Bond (D&C Work and O&M Work – NTP 2)

App. 15-B.1 Form of Payment Bond (Design – NTP 1)

App. 15-B.2 Form of Payment Bond (D&C Work and O&M Work – NTP 2)

App. 15-C Form of Operations & Maintenance Security (Operating Period)

App. 15-D Form of Multiple Obligee Rider

APPENDIX 15-A.1

FORM OF PERFORMANCE BOND (DESIGN – NTP 1)

KNOW ALL MEN BY THESE PRESENTS:

That _____(the "Concessionaire") has entered into a contract with the Florida Department of Transportation (the "Department") bearing the date of _____, for developing, designing, financing, operating and maintaining the I-595 Corridor Roadway Improvements Project (the "Project") in Broward County, bearing Financial Management # _____ (the "Concession Agreement"); and

That we _____ (Design-Build Contractor Name) an entity duly authorized to do business in the State of Florida (the "State") and having its principal place of business at _____ ([Street Address, City, State, Zip and Phone #)] (the "Principal" or "Contractor") has entered into a contract (the "Contract") with the Concessionaire bearing the date of _____, related to the performance of design and engineering services necessary to enable the Concessionaire to obtain NTP 2 under the Concession Agreement; and

That the Principal and _____ (the "Surety"), duly authorized to do business in the State, having its principal place of business at _____ (Home Office Address) are held and firmly bound unto _____(the "Concessionaire"), in the full and just sum of **TEN MILLION DOLLARS** lawful money of the United States of America **(US$10,000,000)**, to whom payment well and truly will be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these presents;

WHEREAS, it was one of the conditions of the Contract and the Concession Agreement that these presents shall be executed;

NOW, THEREFORE, the conditions of this obligation are such that if Principal shall faithfully perform the design and engineering services necessary to enable the Concessionaire to obtain NTP 2 (as described in the Concession Agreement) in accordance with the obligations of the Contract and shall indemnify and save harmless the Concessionaire from all cost and damage by reason of Principal's failure to do so, and further if the Principal shall promptly pay all State Workers' Compensation and Unemployment Compensation taxes incurred in the performance of the Contract obligations and shall be liable to the Department in a civil action instituted by the Department or any officer of the Department authorized in such cases for double any amount in money or property the Department may lose or be overcharged or otherwise defrauded of, by reason of any wrongful or criminal act, if any, of the Principal, its agents, and employees, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Should the Principal be declared to be in default of its obligations under the Contract, the Surety shall pay the Concessionaire all costs assessed against the Principal because of the default(s) which were not withheld from Contract proceeds, and upon the Concessionaire's demand, the Surety shall take over the Project; provided, however, that in the event the Concessionaire elects to have the Surety take over the Project, the Surety may not select the Principal or any affiliate of the Principal to perform the Contract obligations for and on behalf of the Surety without the Concessionaire's express written consent.

The Surety shall be fully liable under this bond up to the full penal sum hereof, regardless of any modifications (of whatever amount) to the Contract amount.

WITNESS the signature of the Principal and the signature of the Surety by _____ its _____ (Agent or Attorney-in-Fact) with the seals of said Principal and Surety hereunto affixed this _____ day of _____, _____.

Complete the following as appropriate

_____
Principal (Entity Name)*

Authorized Signature: _____

*Signature: _____

Printed Name: _____

* _____

Title: _____

(Seal)

*Include the signature and printed name of each partner required to be affixed per partnership agreement.

Principal shall record this bond in the official records of the Clerk of Court of the county where the improvement is located prior to commencing the work.

Organized and existing under the laws of the State of _____ and authorized to do business in the State of Florida, pursuant to the laws of the State of Florida.

Countersigned:

_____
Florida Licensed Insurance Agent

Print information below (Florida Licensed Insurance Agent; whether in Attorney-in-Fact or Countersignature role):

Name:

_____

Business Address:

_____

Telephone:

_____

_____
Surety Company Name (Print) (Seal)

By:

_____
Florida Licensed Insurance Agent or Attorney-in-Fact (Surety)

☐ Above Signatory is also a Florida Licensed Insurance Agent (check if applicable and complete business name, address and telephone number block; if not, have such an agent countersign and complete block). NOTE: Power of Attorney showing authority of Surety's Agent or Attorney-in-Fact is to be attached.

Send "Notices to Owner" to:

APPENDIX 15-A.2

FORM OF PERFORMANCE BOND (D&C Work and O&M Work – NTP 2)

KNOW ALL MEN BY THESE PRESENTS:

That _____(the "Concessionaire") has entered into a contract with the Florida Department of Transportation (the "Department") bearing the date of _____, for developing, designing, financing, operating and maintaining the I-595 Corridor Roadway Improvements Project (the "Project") in Broward County, bearing Financial Management # _____ (the "Concession Agreement"); and

That we _____ (Design-Build Contractor Name) an entity duly authorized to do business in the State of Florida (the "State") and having its principal place of business at _____ ([Street Address, City, State, Zip and Phone #)] (the "Principal" or "Contractor") has entered into a contract (the "Contract") with the Concessionaire bearing the date of _____, related to the Project; and

That the Principal and _____ (the "Surety"), duly authorized to do business in the State, having its principal place of business at _____ (*Home Office Address*) are held and firmly bound unto _____(the "Concessionaire"), in the full and just sum of **TWO HUNDRED FIFTY MILLION DOLLARS** lawful money of the United States of America **(US$250,000,000)**, to whom payment well and truly will be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these presents;

WHEREAS, it was one of the conditions of the Contract and the Concession Agreement that these presents shall be executed;

NOW, THEREFORE, the conditions of this obligation are such that if Principal shall faithfully, promptly, efficiently and fully perform in accordance with the obligations of the Contract and shall indemnify and save harmless the Concessionaire from all cost and damage by reason of Principal's failure to do so, and further if the Principal shall promptly pay all State Workers' Compensation and Unemployment Compensation taxes incurred in the performance of the Contract obligations and shall be liable to the Department in a civil action instituted by the Department or any officer of the Department authorized in such cases for double any amount in money or property the Department may lose or be overcharged or otherwise defrauded of, by reason of any wrongful or criminal act, if any, of the Principal, its agents, and employees, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Should the Principal be declared to be in default of its obligations under the Contract, the Surety shall pay the Concessionaire all costs assessed against the Principal because of the default(s) which were not withheld from Contract proceeds, and upon

the Concessionaire's demand, the Surety shall take over the Project; provided, however, that in the event the Concessionaire elects to have the Surety take over the Project, the Surety may not select the Principal or any affiliate of the Principal to perform the Contract obligations for and on behalf of the Surety without the Concessionaire's express written consent.

The Surety shall be fully liable under this bond up to the full penal sum hereof, regardless of any modifications (of whatever amount) to the Contract amount.

WITNESS the signature of the Principal and the signature of the Surety by _____ its _____ (Agent or Attorney-in-Fact) with the seals of said Principal and Surety hereunto affixed this _____ day of _____, _____.

Complete the following as appropriate

_____
Principal (Entity Name)*

Authorized Signature: _____

*Signature: _____

Printed Name: _____

* _____

Title: _____

(Seal)

*Include the signature and printed name of each partner required to be affixed per partnership agreement.

Principal shall record this bond in the official records of the Clerk of Court of the county where the improvement is located prior to commencing the work.

Organized and existing under the laws of the State of _____ and authorized to do business in the State of Florida, pursuant to the laws of the State of Florida.

Countersigned:

_____
Florida Licensed Insurance Agent

Print information below (Florida Licensed Insurance Agent; whether in Attorney-in-Fact or Countersignature role):

Name:

_____

Business Address:

_____

Telephone:

_____

_____
Surety Company Name (Print) (Seal)

By:

_____
Florida Licensed Insurance Agent or Attorney-in-Fact (Surety)

☐ Above Signatory is also a Florida Licensed Insurance Agent (check if applicable and complete business name, address and telephone number block; if not, have such an agent countersign and complete block). NOTE: Power of Attorney showing authority of Surety's Agent or Attorney-in-Fact is to be attached.

Send "Notices to Owner" to:

APPENDIX 15-B.1

FORM OF PAYMENT BOND (DESIGN - NTP 1)
(Bond No. _____)

KNOW ALL MEN BY THESE PRESENTS:

That _____(the "Concessionaire") has entered into a contract with the Florida Department of Transportation (the "Department") bearing the date of _____, for developing, designing, financing, operating and maintaining the I-595 Corridor Roadway Improvements Project (the "Project") in Broward County, bearing Financial Management # _____ (the "Concession Agreement"); and

That we _____ (Design-Build Contractor Name) an entity duly authorized to do business in the State of Florida (the "State") and having its principal place of business at _____ ([Street Address, City, State, Zip and Phone #)] (the "Principal" or "Contractor") has entered into a contract (the "Contract") with the Concessionaire bearing the date of _____, related to the performance of design and engineering services necessary to enable the Concessionaire to obtain NTP 2 under the Concession Agreement; and

That the Principal and _____ (the "Surety"), duly authorized to do business in the State, having its principal place of business at _____ (Home Office Address) are held and firmly bound unto _____(the "Concessionaire"), in the full and just sum of **TWENTY MILLION DOLLARS** lawful money of the United States of America **(US$20,000,000)**, to whom payment well and truly will be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally;

CONDITIONS OF THIS BOND ARE AS FOLLOWS:

A. Principal shall promptly make all payments owing when due to all persons who furnish labor, services, or materials for the prosecution of the design and engineering services as provided for in the Contract to enable the Concessionaire to obtain NTP 2 under the Concession Agreement.

B. Each said claimant shall have a right of action against the Principal and Surety for the amount due him or her, including unpaid finance charges due under the claimant's contract. No such action shall subject the Concessionaire to any cost, expense, loss, or damage.

C. A claimant, except a laborer, who is not in privity with the Principal shall, before commencing or not later than 90 days after commencing to furnish labor, materials, or supplies for the prosecution of the work, furnish the Principal with a notice that he or she intends to look to this Bond for protection. A claimant who is not in privity with the Principal and who has not received

payment for his or her labor, materials, or supplies shall deliver to the Principal and to the Surety written notice of the performance of the labor or delivery of the materials, or supplies and of the nonpayment. The notice of nonpayment may be served at any time during the progress of the work or thereafter but not before 45 days after the first furnishing of labor, services, or materials, and not later than 90 days after the final furnishing of the labor, services, or materials by the claimant or, with respect to rental equipment, not later than 90 days after the date that the rental equipment was last on the job site available for use. No action for the labor, materials, or supplies may be instituted against the Principal or the Surety unless both notices have been given. Notices required or permitted may be served in accordance with Section 713.18, Florida Statutes. An action, except for an action exclusively for recovery of retainage, must be instituted against the Principal or the Surety on this Bond within 1 year after the performance of the labor or completion of delivery of the materials or supplies, or within 90 days after receipt of final payment (or the payment estimate containing the Concessionaire's final reconciliation of quantities if no further payment is earned and due as a result of deductive adjustments) by the Principal or Surety, whichever comes last. The time periods for service of a notice of nonpayment or for bringing an action against a Principal or a Surety shall be measured from the last day of furnishing labor, services, or materials by the claimant.

D. An action must be instituted by a claimant, whether in privity with the Principal or not, against the Principal or the Surety on this Bond within 365 days after the final acceptance of the Contract work by the Department (pursuant to the Concession Agreement). A claimant may not waive in advance his or her right to bring an action under this Bond against the Surety. In any action brought to enforce a claim against this Bond under this section, the prevailing party is entitled to recover a reasonable fee for the services of his or her attorney for trial and appeal or for arbitration, in an amount to be determined by the court, which fee must be taxed as part of the prevailing party's costs, as allowed in equitable actions.

E. The amount of this Bond is a fixed amount and shall not be changed.

F. Neither any change in or under the Contract, nor any compliance or noncompliance with any formalities provided in the Contract nor the change shall relieve the Surety of its obligations under this Bond.

IN WITNESS WHEREOF, Principal and Surety have executed these presents and the Surety has affixed its seal, this _____ day of _____, 20__.

PRINCIPAL: _____Date: _____

Authorized Signature: _____

Print Name & Title: _____

NAME OF SURETY: _____Date:

_____

Signature (Attorney-in-Fact): _____

(Affix Seal)

Print Full Name, Address and Telephone No.:

_____

NOTES CONCERNING SURETY AND EXECUTION:

A. SURETY COMPANY REQUIREMENTS

To be acceptable to the Department, the Surety shall meet all of the requirements of the Concession Agreement, the laws of Florida and the regulations of the Department, and has the Department's approval.

B. EXECUTION OF BOND

1. Enter the Surety's name and address on each copy of this Bond in the space provided.

2. Have each copy of this Bond signed by the same person that signed the Contract on behalf of the Principal (affix Corporate Seal, if appropriate).

3. Have each copy of this Bond signed by the person authorized to sign on behalf of the Surety. Put the date the signature was affixed in the space provided. Print that person's name in the place provided on each copy of this Bond. Also, have the Surety's Corporate Seal affixed to each copy of this Bond beside that person's signature (no facsimiles are acceptable).

4. Each copy of this Bond must have a Power of Attorney attached indicating that the person in item B.3 above is authorized to sign on behalf of the Surety.

5. Each copy of the Power of Attorney must have the Surety's Corporate Seal manually affixed unless facsimile seal is authorized.

6. The date of execution of the Power of Attorney is the same as the date shown on the signature line for the Surety Attorney-In-Fact.

APPENDIX 15-B.2

FORM OF PAYMENT BOND (D&C Work and O&M Work – NTP 2)
(Bond No. _____)

KNOW ALL MEN BY THESE PRESENTS:

That _____(the "Concessionaire") has entered into a contract with the Florida Department of Transportation (the "Department") bearing the date of _____, for developing, designing, financing, operating and maintaining the I-595 Corridor Roadway Improvements Project (the "Project") in Broward County, bearing Financial Management # _____ (the "Concession Agreement"); and

That _____ (Design-Build Contractor Name) an entity duly authorized to do business in the State of Florida (the "State") and having its principal place of business at _____ [Street Address, City, State, Zip and Phone #] (the "Principal" or "Contractor") has entered into a contract (the "Contract") with the Concessionaire bearing the date of _____, related to the Project; and

That the Principal and _____ (the "Surety"), duly authorized to do business in the State, having its principal place of business at _____ (Home Office Address) are held and firmly bound unto the Concessionaire, in the full and just sum of **TWO HUNDRED FIFTY MILLION DOLLARS** lawful money of the United States of America **(US$250,000,000)**, to whom payment well and truly will be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally;

CONDITIONS OF THIS BOND ARE AS FOLLOWS:

A. Principal shall promptly make all payments owing when due to all persons who furnish labor, services, or materials for the prosecution of the work provided for in the Contract.

B. Each said claimant shall have a right of action against the Principal and Surety for the amount due him or her, including unpaid finance charges due under the claimant's contract.

C. A claimant, except a laborer, who is not in privity with the Principal shall, before commencing or not later than 90 days after commencing to furnish labor, materials, or supplies for the prosecution of the work, furnish the Principal with a notice that he or she intends to look to this Bond for protection. A claimant who is not in privity with the Principal and who has not received payment for his or her labor, materials, or supplies shall deliver to the Principal and to the Surety written notice of the performance of the labor or delivery of the materials, or supplies and of the nonpayment. The notice of nonpayment

may be served at any time during the progress of the work or thereafter but not before 45 days after the first furnishing of labor, services, or materials, and not later than 90 days after the final furnishing of the labor, services, or materials by the claimant or, with respect to rental equipment, not later than 90 days after the date that the rental equipment was last on the job site available for use. No action for the labor, materials, or supplies may be instituted against the Principal or the Surety unless both notices have been given. Notices required or permitted may be served in accordance with Section 713.18, Florida Statutes. An action, except for an action exclusively for recovery of retainage, must be instituted against the Principal or the Surety on this Bond within 1 year after the performance of the labor or completion of delivery of the materials or supplies, or within 90 days after receipt of final payment (or the payment estimate containing the Concessionaire's final reconciliation of quantities if no further payment is earned and due as a result of deductive adjustments) by the Principal or Surety, whichever comes last. The time periods for service of a notice of nonpayment or for bringing an action against a Principal or a Surety shall be measured from the last day of furnishing labor, services, or materials by the claimant.

D. An action must be instituted by a claimant, whether in privity with the Principal or not, against the Principal or the Surety on this Bond within 365 days after the final acceptance of the Contract work by the Department (pursuant to the Concession Agreement). A claimant may not waive in advance his or her right to bring an action under this Bond against the Surety. In any action brought to enforce a claim against this Bond under this section, the prevailing party is entitled to recover a reasonable fee for the services of his or her attorney for trial and appeal or for arbitration, in an amount to be determined by the court, which fee must be taxed as part of the prevailing party's costs, as allowed in equitable actions.

E. The amount of this Bond is a fixed amount and shall not be changed.

F. Neither any change in or under the Contract, nor any compliance or noncompliance with any formalities provided in the Contract nor the change shall relieve the Surety of its obligations under this Bond.

IN WITNESS WHEREOF, Principal and Surety have executed these presents and the Surety has affixed its seal, this _____ day of _____, 20__.

PRINCIPAL: _____Date: _____

Authorized Signature: _____

Print Name & Title: _____

NAME OF SURETY: _____Date:

_____

Signature (Attorney-in-Fact): _____

(Affix Seal)

Print Full Name, Address and Telephone No.

_____

NOTES CONCERNING SURETY AND EXECUTION:

A. SURETY COMPANY REQUIREMENTS

To be acceptable to the Department, the Surety shall meet all of the requirements of the Concession Agreement, laws of Florida and the regulations of the Department, and has the Department's approval.

B. EXECUTION OF BOND

1. Enter the Surety's name and address on each copy of this Bond in the space provided.

2. Have each copy of this Bond signed by the same person that signed the Contract on behalf of the Principal (affix Corporate Seal, if appropriate).

3. Have each copy of this Bond signed by the person authorized to sign on behalf of the Surety. Put the date the signature was affixed in the space provided. Print that person's name in the place provided on each copy of this Bond. Also, have the Surety's Corporate Seal affixed to each copy of this Bond beside that person's signature (no facsimiles are acceptable).

4. Each copy of this Bond must have a Power of Attorney attached indicating that the person in item B.3 above is authorized to sign on behalf of the Surety.

5. Each copy of the Power of Attorney must have the Surety's Corporate Seal manually affixed unless facsimile seal is authorized.

6. The date of execution of the Power of Attorney is the same as the date shown on the signature line for the Surety Attorney-In-Fact.

APPENDIX 15-C

FORM OF OPERATIONS & MAINTENANCE SECURITY (OPERATING PERIOD)

KNOW ALL MEN BY THESE PRESENTS:

That _____(the "Concessionaire") has entered into a contract with the Florida Department of Transportation (the "Department") bearing the date of _____, for developing, designing, financing, operating and maintaining the I-595 Corridor Roadway Improvements Project (the "Project") in Broward County, bearing Financial Management # _____ (the "Concession Agreement"); and

That _____ (Operations and Maintenance Contractor Name) an entity duly authorized to do business in the State of Florida (the "State") and having its principal place of business at _____ [Street Address, City, State, Zip and Phone #] (the "Principal") has entered into a contract (the "Contract") with the Concessionaire bearing the date of _____, related to the Project; and

That the Principal and _____ (the "Surety"), duly authorized to do business in the State, having its principal place of business at _____ (Home Office Address) are held and firmly bound unto the Concessionaire, in the full and just sum of _____ lawful money of the United States of America **(US$_____)** ***[Note: insert amount as required under Section 17.2.3 of the Concession Agreement]*** , to whom payment well and truly will be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these presents;

WHEREAS, it was one of the conditions of the Contract and the Concession Agreement that these presents shall be executed;

NOW, THEREFORE, the conditions of this obligation are such that if, during the term of this bond, Principal shall faithfully, promptly, efficiently and fully perform in accordance with the obligations of the Contract and shall indemnify and save harmless the Concessionaire from all cost and damage by reason of Principal's failure to do so, and further if the Principal shall promptly pay all State Workers' Compensation and Unemployment Compensation taxes incurred in the performance of the Contract obligations and shall be liable to the Department in a civil action instituted by the Department or any officer of the Department authorized in such cases for double any amount in money or property the Department may lose or be overcharged or otherwise defrauded of, by reason of any wrongful or criminal act, if any, of the Principal, its agents, and employees, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Should the Principal be declared to be in default of its obligations under the Contract, the Surety shall pay the Concessionaire all costs assessed against the Principal

because of the default(s) which were not withheld from Contract proceeds, and upon the Concessionaire's demand, the Surety shall take over the Project; provided, however, that in the event the Concessionaire elects to have the Surety take over the Project, the Surety may not select the Principal or any affiliate of the Principal to perform the Contract obligations for and on behalf of the Surety without the Concessionaire's express written consent.

The Surety shall be fully liable under this bond up to the full penal sum hereof, regardless of any modifications (of whatever amount) to the Contract amount.

This bond shall remain in full force and effect through _____, after which it shall expire.

WITNESS the signature of the Principal and the signature of the Surety by _____ its _____ (Agent or Attorney-in-Fact) with the seals of said Principal and Surety hereunto affixed this _____day of _____, _____.

Complete the following as appropriate

_____
Principal (Entity Name)*

Authorized Signature: _____

*Signature: _____

Printed Name: _____

* _____

Title: _____

(Seal)

*Include the signature and printed name of each partner required to be affixed per partnership agreement.

Principal shall record this bond in the official records of the Clerk of Court of the county where the improvement is located prior to commencing the work.

Organized and existing under the laws of the State of _____ and authorized to do business in the State of Florida, pursuant to the laws of the State of Florida.

Countersigned:

_____
Florida Licensed Insurance Agent

Print information below (Florida Licensed Insurance Agent; whether in Attorney-in-Fact or Countersignature role):

Name:

_____

Business Address:

_____

Telephone:

_____

_____
Surety Company Name (Print) (Seal)

By:

_____
Florida Licensed Insurance Agent or Attorney-in-Fact (Surety)

☐ Above Signatory is also a Florida Licensed Insurance Agent (check if applicable and complete business name, address and telephone number block; if not, have such an agent countersign and complete block). NOTE: Power of Attorney showing authority of Surety's Agent or Attorney-in-Fact is to be attached.

Send "Notices to Owner" to:

APPENDIX 15-D

FORM OF MULTIPLE OBLIGEE RIDER

MULTIPLE OBLIGEE

RIDER

This Rider is executed concurrently with and shall be attached to and form a part of Performance Bond No. _.

WHEREAS, on or about the _____ day of _____, 20____, _____, (hereinafter called the "Principal"), entered into a written agreement (hereinafter called the "Contract") with _____, (hereinafter called the "Primary Obligee") for _____ _____ _____ (hereinafter called the "Project"); and

WHEREAS, the Primary Obligee requires that Principal provide performance and payment bonds and that _____, _____ and _____ be named as additional obligees under the Performance Bond; and

WHEREAS, Principal and the Surety have agreed to execute and deliver this Rider currently with the execution of Performance Bond No. _____ (hereinafter referred to as "Performance Bond") upon the conditions herein stated.

NOW, THEREFORE, the undersigned hereby agree and stipulate that _____ _____, and _____ _____, and _____ _____ shall be added to the Performance Bond as named obligees (hereinafter referred to as "Additional Obligees").

PROVIDED, HOWEVER, that the Surety shall not be liable under the Performance Bond to the Primary Obligee, the Additional Obligees, or any of them, unless the Primary Obligee, the Additional Obligees, or any of them, shall make payments to the Principal (or in the case the Surety arranges for completion of the Contract, to the Surety) strictly in accordance with the terms of said Contract as to payments and shall perform all other obligations to be performed under said Contract in all material respects at the time and in the manner therein set forth; and

PROVIDED, FURTHER that the aggregate liability of the Surety under this Performance Bond, to any or all of the obligees, as their interests may appear, is limited to the penal sum of said Performance Bond, that the Additional Obligees' rights hereunder are subject to the same defenses Principal and/or Surety have against the Primary Obligee, and that the total liability of the Surety shall in no event exceed the amount recoverable from the Principal by the Primary Obligee under the Contract; and

PROVIDED, FURTHER that the Surety may, at its option, make any payments under said Performance Bond by check issued jointly to all of the obligees.

Except as herein modified, said Performance Bond No. _____ shall be and remains in full force and effect.

Signed, sealed and dated this __ day of _____, 20____.

_____

(Principal) (Seal)

By: _____

(Title)

_____

(Surety) (Seal)

By: _____

, Attorney-in-Fact



Appendix 16

APPENDIX 16

INTELLECTUAL PROPERTY LICENSE

1.1. SOFTWARE LICENSES

FDOT and Concessionaire acknowledge that Concessionaire or its Contractors will obtain licenses in respect of Software (as defined below) from third party providers to ensure that the Work is performed in accordance with the terms of this Agreement (the "Third Party Licenses").

To the extent that Concessionaire or a Contractor is able, without breaching any terms and conditions of the Third Party Licenses, Concessionaire hereby grants (or shall cause its Contractor to grant) to FDOT a perpetual, non-exclusive, irrevocable, royalty-free license to access, use, and modify any and all software in both source and object code form, required for the integration and operation and maintenance of the hardware and software systems installed in relation to the Project (the "Software"), as described in the Contract Documents and Concessionaire's Proposal Commitments (including all extensions, modifications or replacements to these systems), by Concessionaire or its Contractors in performing the Work (the "Concessionaire License").

To the extent that the Concessionaire License does not entitle FDOT to use the necessary Software due to provisions of the Third Party Licenses, Concessionaire will either directly or through its Contractor secure direct licenses in respect of the remaining necessary Software from the relevant third party for the benefit of FDOT, at Concessionaire's cost.

Concessionaire and its Contractors shall execute and deliver all necessary documents requested by FDOT to effect the license of these rights to FDOT.

FDOT's and Concessionaire's rights and obligations with respect to the Software pursuant to the Concessionaire License include the following but in relation to each, the rights only extend to the extent Concessionaire or its Contractors are able to grant rights without breaching any terms and conditions of the Third Party Licenses:

(a) All modifications, improvements and enhancements made to the Software by Concessionaire or its Contractors in performing the Work shall be licensed to FDOT without any additional charge to FDOT;

(b) Sixty (60) days prior to the commencement of the Operating Period, Concessionaire shall deposit in escrow, without cost to FDOT and under terms agreed between FDOT and Concessionaire, all source code and related documentation, together with the source code and related documentation for all modifications, improvements and enhancements made by Concessionaire or its Contractors to the Software in performing the Work;

(c) FDOT shall be entitled to make its own modifications, improvements and enhancements to the Software or to contract with others to make such modifications and improvements (subject to the confidentiality rights of Concessionaire or its Contractors) except where said modifications, improvements and enhancements will void the warranty if not executed by Concessionaire;

(d) FDOT has the right to make copies of the Software for back-up and archival purposes;

(e) FDOT has the right to use documentation relating to the Software in connection with its integration, operation, maintenance and improvements; FDOT will protect Concessionaire's and its Contractors' proprietary information embodied in the Software to the same standard as required under Section 22.4.5 of the Agreement;

(f) Concessionaire shall supply FDOT with any new software products that may be useful in the operation of the Software or Project-related hardware systems installed under the Agreement on a most favored customer basis;

(g) Concessionaire shall provide a warranty that the Software complies with the Contract Documents, and Concessionaire's Proposal Commitments; and

(h) Consistent with the requirements of this Appendix 16, Concessionaire shall provide to FDOT, on a pass-through basis, those Software licenses provided by a third party.

1.2. PROPRIETARY INFORMATION AND PROPRIETARY RIGHTS

(a) FDOT retains all right, title and interest in and to all proprietary data, documentation and copies thereof furnished by it to Concessionaire hereunder, including all copyright and other proprietary rights therein. Concessionaire and its employees or Contractors shall hold all such information confidential and shall not, without the prior written consent of FDOT, use any of FDOT's proprietary information or disclose any FDOT proprietary information. Notwithstanding the foregoing, Concessionaire may disclose FDOT proprietary information in response to any proper governmental or court demand or as may otherwise be required to comply with applicable Law.

(b) FDOT shall grant to Concessionaire a perpetual, irrevocable, nonexclusive, royalty-free license to manufacture and sublicense FDOT-owned Intellectual Property in relation to the Project or the Work upon license terms to be reasonably and mutually agreed upon.

(c) All documentation supplied to FDOT by Concessionaire or its Contractors that is marked "Confidential Material" and that contains a signed statement by Concessionaire or a Contractor, as applicable, setting forth the specific Florida Statute that authorizes exemption from the Public Records Law shall be provisionally deemed to be proprietary information of Concessionaire or the Contractor, as the case may be. If it wishes to protect the materials from disclosure, Concessionaire or a Contractor, as applicable, as is necessary to protect the information from disclosure, shall seek court protection immediately on an emergency basis. In the event that such protective order or other remedy is not timely sought or obtained by Concessionaire, FDOT will release the Original Financial Model, Financial Model and any Financial Model Update(s) if FDOT concludes that such disclosure is required by the Public Records Law.

(d) FDOT and Concessionaire shall advise their respective employees, subcontractors, consultants, agents and suppliers of the other's proprietary information and shall

treat such proprietary information in the same manner as it treats its own proprietary and confidential information.

(e) Upon the completion of the Term, Concessionaire shall promptly return to FDOT all the FDOT proprietary information.

(f) Upon request of FDOT, Concessionaire shall promptly execute and shall cause its employees and Contractors to execute a transfer of rights to FDOT of any FDOT-owned inventions or any other proprietary information owned by FDOT in a form that is mutually agreeable.

(g) Concessionaire shall include the provisions of this Appendix 16 in all of its Contracts under the Agreement.

(h) Sections 22.4 and 22.5 shall govern with respect to each of the Proprietary Intellectual Property and Background Intellectual Property of Concessionaire, its Affiliates and Contractors.

Appendix 17

FEIN: 264139252

DBE AFFIRMATIVE ACTION PLAN

POLICY STATEMENT

It is the policy of I 595 Express, LLC that disadvantaged businesses, as defined by 49 CFR Part 26, Subpart D and implemented under Rule Chapter 14-78, F.A.C., shall have the opportunity to participate as subcontractors and suppliers on the Concession Agreement awarded by the Florida Department of Transportation.

The requirements of Rule Chapter 14-78, F.A.C., shall apply to the Concession Agreement entered into between the Florida Department of Transportation and I 595 Express, LLC. Subcontractors and/or suppliers to I 595 Express, LLC will also be bound by the requirements of Rule Chapter 14-78 F.A.C.

I 595 Express, LLC and its subcontractors shall take all necessary and reasonable steps in accordance with Chapter 14-78, F.A.C. to ensure that disadvantaged businesses have the opportunity to compete and perform work contracted with the Florida Department of Transportation.

I 595 Express, LLC and its subcontractors shall not discriminate on the basis of race, color, religion, national origin, disability, sex, or age in the administration of its Concession Agreement with the Department of Transportation.

I 595 Express, LLC has designated and appointed a Liaison Officer to develop, maintain, and monitor implementation of the DBE Affirmative Action Plan. The Liaison Officer will be responsible for disseminating this policy statement throughout I 595 Express, LLC and to disadvantaged businesses, and to post this statement on I 595 Express, LLC notice boards.

X _____
Chief Operating Officer

X 26/2/09
Date

FEIN: 264139252

DBE AFFIRMATIVE ACTION PLAN

POLICY STATEMENT

It is the policy of I 595 Express, LLC that disadvantaged businesses, as defined by 49 CFR Part 26, Subpart D and implemented under Rule Chapter 14-78, F.A.C., shall have the opportunity to participate as subcontractors and suppliers on the Concession Agreement awarded by the Florida Department of Transportation.

The requirements of Rule Chapter 14-78, F.A.C., shall apply to the Concession Agreement entered into between the Florida Department of Transportation and I 595 Express, LLC. Subcontractors and/or suppliers to I 595 Express, LLC will also be bound by the requirements of Rule Chapter 14-78 F.A.C.

I 595 Express, LLC and its subcontractors shall take all necessary and reasonable steps in accordance with Chapter 14-78, F.A.C. to ensure that disadvantaged businesses have the opportunity to compete and perform work contracted with the Florida Department of Transportation.

I 595 Express, LLC and its subcontractors shall not discriminate on the basis of race, color, religion, national origin, disability, sex, or age in the administration of its Concession Agreement with the Department of Transportation.

I 595 Express, LLC has designated and appointed a Liaison Officer to develop, maintain, and monitor implementation of the DBE Affirmative Action Plan. The Liaison Officer will be responsible for disseminating this policy statement throughout I 595 Express, LLC and to disadvantaged businesses, and to post this statement on I 595 Express, LLC notice boards.

X _____
Chief Operating Officer

X 26/2/09
Date

I. DESIGNATION OF LIAISON OFFICER

I 595 Express, LLC will aggressively recruit disadvantaged businesses as subcontractors and suppliers for its Concession Agreement with the Florida Department of Transportation, I 595 Express, LLC has appointed a Liaison Officer to develop and maintain this Affirmative Action Plan in accordance with the requirements of Rule Chapter 14-78 F.A.C.

The Liaison Officer will have primary responsibility for developing, maintaining, and monitoring I 595 Express, LLC's utilization of disadvantaged businesses in addition to the following specific duties:

(1) The Liaison Officer shall aggressively solicit bids from disadvantaged businesses for all subcontracts for the Concession Agreement with the Florida Department of Transportation.

(2) The Liaison Officer will submit all records, reports, and documents required by the Florida Department of Transportation, and shall maintain such records for a period of not less than three years or as directed by any specific contractual requirements of the Florida Department of Transportation.

Ramon Villaamil has been designated Liaison Officer with responsibility for implementing I 595 Express, LLC's affirmative action program in accordance with the requirements of the Florida Department of Transportation.

II. AFFIRMATIVE ACTION METHODS

In order to formulate a realistic Affirmative Action Plan, I 595 Express, LLC has identified the following known barriers to participation by disadvantaged business subcontractors:

1. Lack of qualified disadvantaged business subcontractors in our specific geographical areas of work;
2. Lack of certified disadvantaged business subcontractors who seek to perform Florida Department of Transportation work;
3. Lack of interest in performing on Florida Department of Transportation contracts;
4. Lack of response when requested to bid;
5. Limited knowledge of Florida Department of Transportation plans and specifications to prepare a responsive bid.

In view of the barriers to disadvantaged businesses stated above, it shall be the policy of I 595 Express, LLC to utilize the following affirmative action methods to ensure that disadvantaged businesses participate on the Concession Agreement with the Florida Department of Transportation. I 595 Express, LLC will:

1. Provide written notice to all certified DBE subcontractors in the geographical area where the work is to be subcontracted by I 595 Express, LLC;
2. Advertise in minority focused media concerning subcontract opportunities with I 595 Express, LLC;
3. Select portions of the work to be performed by DBEs in order to increase the likelihood of meeting contract goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate DBE participation);
4. Provide adequate information about the plans, specifications, and requirements of the contract, not rejecting subcontractors without sound reasons that are based on a thorough investigation of the subcontractor's capabilities;
5. Waive requirements of performance bonds where it is practical to do so;
6. Attend pre-bid meetings held by the Florida Department of Transportation to apprise disadvantaged business subcontractors of opportunities with I 595 Express, LLC;
7. Follow up on initial solicitations of interest to DBE subcontractors to determine with certainty whether the DBE company is interested in the subcontract opportunity.

I 595 Express, LLC understands that this list of affirmative action methods is not exhaustive and that I 595 Express, LLC will utilize additional approaches after having established familiarity with the disadvantaged subcontracting community and/or determined the stated approaches to be ineffective.

III. IMPLEMENTATION

On this Concession Agreement which has specific DBE goals, I 595 Express, LLC will make every effort to meet contract goals as stated by utilizing its affirmative action methods.

IV. REPORTING

I 595 Express, LLC shall keep and maintain such records as are necessary to determine I 595 Express, LLC's compliance with its DBE Affirmative Action Plan.

I 595 Expres, LLC will design its record keeping system to indicate:

1. The number of DBE subcontractors and suppliers used by I 595 Express, LLC, identifying the items of work, materials and services provided;
2. The efforts and progress being made in obtaining DBE subcontractors through local and community sources;
3. Documentation of all contracts, to include correspondence, telephone calls, newspaper advertisements, etc., to obtain DBE participation on all Florida Department of Transportation projects;
4. I 595 Express, LLC shall comply with Florida Department of Transportation's requirements regarding payments to subcontractors, including DBEs, for each month in which the companies work.

V. DBE DIRECTORY

FEIN: 264139252

I 595 Express, LLC will utilize the DBE Directory published by the Florida Department of Transportation in its outreach efforts to disadvantaged businesses.

I 595 Express, LLC will distribute Form Number 275-030-01, Schedule A Certification Form Number 1, to potential DBE contractors and assist in their completion.

Appendix 18

APPENDIX 18

ADDITIONAL FEDERAL REQUIREMENTS

App. 18-A Federal Provisions

App. 18-B FHWA Form 1273

App. 18-C Equal Employment Opportunity

Appendix 18-A

FEDERAL PROVISIONS

GENERAL. — The Work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, Form FHWA 1273," are included in Appendix 18-B. Whenever in said required contract provisions references are made to:

(a) "SHA contracting officer", "SHA resident engineer", or "authorized representative of the SHA", such references shall be construed to mean FDOT or its Authorized Representative;

(b) "contractor", "prime contractor", "bidder" or "prospective primary participant", such references shall be construed to mean Concessionaire or its Authorized Representative;

(c) "contract" or "prime contract", such references shall be construed to mean the Concession Agreement between Concessionaire and FDOT for the Project;

(d) "subcontractor", "supplier", "vendor", "prospective lower tier participant" or "lower tier subcontractor", such references shall be construed to mean any Contractor or Supplier; and

(e) "department", "agency" or "department or agency entering into this transaction", such references shall be construed to mean FDOT, except where a different department or agency is specified.

PERFORMANCE OF PREVIOUS CONTRACT. — In addition to the provisions in Section II, "Nondiscrimination," and Section VII, "Subletting or Assigning the Contract," of the Form 1273 required contract provisions, Concessionaire shall cause the Contractor to comply with the following:

> The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of $10,000 will be considered under the provisions of Section VII of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION. — The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary Projects. Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise

taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28 U.S.C., Sec. 1746, is included in the Proposal.

FHWA FORM 1273 SECTIONS VII.1 AND VII.2 INAPPLICABLE – Pursuant to 23 CFR 635.116(d), the requirements of Sections VII.1 and VII.2 of FHWA Form 1273 (Appendix 18-B to the Agreement) are inapplicable to the Agreement.

ACCESS TO RECORDS

a. As required by 49 CFR 18.36(i)(10), Concessionaire and its Contractors shall allow FHWA and the Comptroller General of the United States, or their duly authorized representatives, access to all books, documents, papers, and records of Concessionaire and subcontractors which are directly pertinent to any grantee or subgrantee contract, for the purpose of making audit, examination, excerpts, and transcriptions thereof.

b. Concessionaire agrees to include this section in each Contract at each tier, without modification except as appropriate to identify the Contractor who will be subject to its provisions.

EQUAL EMPLOYMENT OPPORTUNITY AND NONDISCRIMINATION PROVISIONS. – In addition to the provisions in Section II, "Nondiscrimination," of the Form 1273 required contract provisions, Concessionaire shall comply with the following:

During the performance of the Agreement, Concessionaire agrees as follows:

(1) Concessionaire will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Concessionaire agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by FDOT setting forth the provisions of this nondiscrimination clause.

(2) Concessionaire will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) Concessionaire will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by FDOT, advising the labor union or workers' representative of Concessionaire's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) Concessionaire will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) Concessionaire will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by FDOT and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of Concessionaire's noncompliance with the nondiscrimination clauses of the Agreement or with any of such rules, regulations, or orders, the Agreement may be cancelled, terminated, or suspended in whole or in part and Concessionaire may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) Concessionaire will include the provisions of paragraphs (1) through (7) in every Contract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Contractor or vendor. Concessionaire will take such action with respect to any Contract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event Concessionaire becomes involved in, or is threatened with, litigation with a Contractor or vendor as a result of such direction, Concessionaire may request the United States to enter into such litigation to protect the interests of the United States.

Pursuant to 49 CFR 26.13(b) Concessionaire shall comply with, and include in all Contracts, the following provision:

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

APPENDIX 18-B

FHWA FORM 1273

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I GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

   Section I, paragraph 2;

   Section IV, paragraphs 1, 2, 3, 4, and 7;

   Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

   a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

   b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

   a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

   b. The contractor will accept as his operating policy the following statement:

      "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer**: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

   a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than

once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type,

including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

   a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

   b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

   c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

   d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

   a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

   b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts

which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

i. The number of minority and non-minority group members and women employed in each work classification on the project;

ii. The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

iii. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

iv. The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform

their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

2. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

3. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular

contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. **Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

i. the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

ii. the additional classification is utilized in the area by the construction industry;

iii. the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

iv. with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an

authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

i. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and

Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

ii. The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

iii. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

iv. In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

i. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

ii. The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

iii. Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

iv In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

d. Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. **Apprentices and Trainees (Programs of the U.S. DOT):**

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. **Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. **Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. **Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in

violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3)

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is

enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

i. that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

ii. that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

iii that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than $1,000,000 (23 CFR 635) the contractor shall:

   a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

   b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

   c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any

specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the Project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

- *"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or*

- *Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or*

- *Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to*

provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

- *Shall be fined not more than $10,000 or imprisoned not more than 5 years or both."*

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the

covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

   a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

   b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

   c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

3. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier

covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

APPENDIX 18-C

EQUAL EMPLOYMENT OPPORTUNITY

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;

   c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

   d. "Minority" includes:

      i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

      ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

      iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

      iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North American and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Hometown Plan area (including goals and timetables) shall be in accordance with that plan for those trades which have unions participating in the Hometown Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved

Hometown Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Hometown Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Hometown Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Hometown Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing contracts in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the contract is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or any Federal procurement contracting officer. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

   a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

   b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to

community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral Process has impeded the contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the contractor's EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the contractor's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to

minority and female community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the contractor's EEO policy and the contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment

opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

16. In addition to the reporting requirements set forth elsewhere in this contract, the contractor and the subcontractors holding subcontracts, not including material suppliers, of $10,000 or more, shall submit for every month of July during which work is performed, employment data as contained under Form PR 1391 (Appendix C to 23 CFR, Part 230), and in accordance with the instructions included thereon.

APPENDIX 19

LIST OF MAJOR PERMITS

Major Permits	Major Permits Deadline
USACE Section 404 Permit	260 days from submission of a complete application in accordance with the Contract Documents
SFWMD Environmental Resource Permit	215 days from submission of a complete application in accordance with the Contract Documents
USCG Bridge Permit	185 days from submission of a complete application in accordance with the Contract Documents