



Specifications

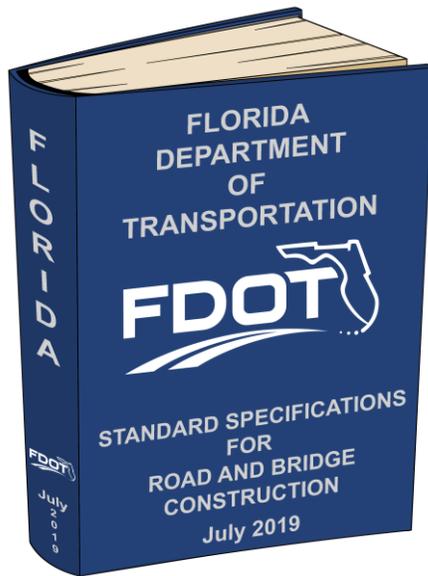
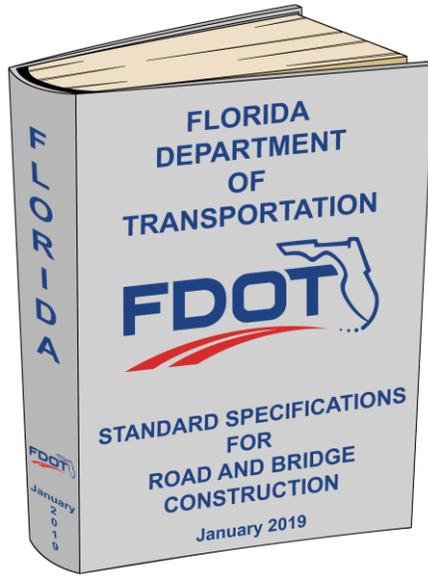
Rebecca Frimmel – Specification Development Coordinator

State Program Management Office



What are we going to talk
about?

- Specification Lingo
- Specification Process
- AASHTO Format
- Voice and Mood
- Contract Authority
- End Result
- Biddability
- Governing Order of Documents
- Do and Don't
- Guidance



Standard Specifications for Road and Bridge Construction

- Latest Versions:
- January 2019
- July 2019

Divisions

Division I – General
Requirements and Covenants

Division II – Construction
Details

Division III- Materials

Workbook

Collection of pre-approved additions or modifications to the Standard Specifications.

Implemented Modifications to the 2019 Standard Specifications

July 2019 Workbook

for Lettings Effective July - December 2019

Special Provisions - Specific clauses adding to or revising the Standard Specifications, setting forth conditions varying from or additional to the Standard Specifications for a specific project.

Supplemental Specifications - Additions or revisions to the Standard Specifications.

History of Revisions - To review the History of revisions for this Workbook.

Mandatory Revisions - Critical modifications implemented for the Workbook.

Note: These files are in Adobe Acrobat (PDF) format.

File size ranges from 9 kb to 200 kb.

SPECIAL PROVISIONS	SP0000001	Usage Note
PROPOSAL REQUIREMENTS AND CONDITIONS (BUSINESS DEVELOPMENT INITIATIVE). (REV 4-21-16) (FA 4-21-16) (7-19) Changes to: 2-1, 2-7.	SP0020100BDI	Use with the approval of the District Program Management Office. Use with SP0030201BDI, SP0071302BDI and SP0080100BDI.
PROPOSAL REQUIREMENTS AND CONDITIONS -	SP0020400	All Jobs (add a phone number or email address)

Special Provisions (SP)

Special Provisions -
Approved additions and revisions to the Standard Specifications applicable to individual projects based on a set of conditions.

SPECIAL PROVISIONS	SP0000001	Usage Note
PROPOSAL REQUIREMENTS AND CONDITIONS (BUSINESS DEVELOPMENT INITIATIVE). (REV 4-21-16) (FA 4-21-16) (7-19) Changes to: 2-1, 2-7.	SP0020100BDI	Use with the approval of the District Program Management Office. Use with SP0030201BDI, SP0071302BDI and SP0080100BDI.
PROPOSAL REQUIREMENTS AND CONDITIONS - EXAMINATION OF PLANS, SPECIFICAITONS, SPECIAL PROVISIONS, AND SITE OF WORK. (REV 11-3-15) (FA 1-27-16) (7-19) Insert Information Required. Changes to: 2-4.	SP0020400	All Jobs (add a phone number or email address) Do not use withSP0020400-60day
PROPOSAL REQUIREMENTS AND CONDITIONS - EXAMINATION OF PLANS, SPECIFICAITONS, SPECIAL PROVISIONS, AND SITE OF WORK (60 DAY AD). (REV 4-11-16) (FA 7-1-16) (7-19) Insert Information Required. Changes to: 2-4.	SP0020400-60day	Jobs with 60-day Ads. (add a phone number or email address) Do not use withSP0020400
PROPOSAL REQUIREMENTS AND CONDITIONS - PREPARATION OF PROPOSALS (A+B BIDDING). (REV 6-22-04) (FA 7-13-04) (7-19) Changes to: 2-5.1.	SP0020501AB	A+B Bidding. Use with the approval of the District Construction Engineer. Use with SP0030100AB, SP0030203AB,SP0080701AB and SP0081300AB.
PROPOSAL REQUIREMENTS AND CONDITIONS -	SP0020501LR	Lane Rental. Use with the approval of the District

Supplemental Specifications (SS)

Supplemental Specifications – Additions and revisions to the Standard Specifications. Supplemental Specifications are included in the next implementation of the Standard Specifications eBook.

Mandatory Revisions

Mandatory Revisions Change to the Specifications, occurring outside the normal semi-annual revision cycle

- Critical in nature,
- Must be implemented in a short timeframe,
- Usually involve an item of legal, safety, or financial significance.
- Incorporated in the Workbook and added to Specification Packages, effective for a specific letting date and usage conditions.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

MIKE DEW
SECRETARY

MEMORANDUM

DATE: March 23, 2018

TO: District Specifications Engineers

FROM: Dan Hurtado, State Specifications Engineer

CC: State Program Management Office
Tim Lattner, Director, Office of Design
David Sadler, Director, Office of Construction
Amy Tootle, State Construction Engineer
Rudy Powell, Director, Office of Maintenance
Stefanie Maxwell, Manager, Program Management Office

SUBJECT: MANDATORY SPECIFICATIONS REVISIONS
January 2018 Workbook and eBook: Mandatory Revision No. 3

Mandatory No. 3 is issued to expand the requirements for the use of traffic control officers for maintenance of traffic (MOT).

Revise specification packages as described below for the effective letting date as noted:

Specification Number	Heading	Revision Date	Effective Letting Date	Remarks
SS1020700	Maintenance of Traffic.	3-13-18	4-18	New SS. Usage Note: All Jobs (1)

(1) This Mandatory is to be included ONLY for projects with roadways having a speed limit of 55 mph or more.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

MIKE DEW
SECRETARY

MEMORANDUM

DATE: March 23, 2018

TO: Courtney Drummond, Chief Engineer

FROM: Tim Lattner, Director, Office of Design
David Sadler, Director, Office of Construction
Rudy Powell, Director, Office of Maintenance

COPIES: Dan Hurtado, State Specifications Engineer

SUBJECT: Mandatory Specification Revision No. 3
January 2018 Workbook and eBook

I approve the implementation plan of the subject Specification.

Tim Lattner Signature on file 3-23-18
Director, Office of Design Date

David Sadler Signature on file 3-23-18
Director, Office of Construction Date

Rudy Powell Signature on file 3-23-18
Director, Office of Maintenance Date

Modified Special Provisions (MSP)

Modified Special Provisions

Project-specific modification to an existing Specification, used to meet the needs of an individual project.

MODIFIED SPECIAL PROVISION APPROVAL REQUEST (REV 8-26-09)

Date: 4/28/2017 → District: TP → Type: Project Specific

Letting Month: 8/8/2017 →

FPID Number: 435169-1-52-01 & 435169-3-52-01

Requested by: Tiffany Crosby → Office/Phone: 407-264-3828

Specification being modified: LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC - COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND OTHER WILDLIFE REGULATIONS. 7-1.4.1 Additional Requirements for Gopher Tortoises.

Affected Pay Items: 101-1

Expected Cost Impact to this project: \$11,000

* Give an estimate of dollar impact (added cost or cost savings) to the project if this Modified Special Provision is used in lieu of the corresponding statewide implemented specification.

Project Description: Resurface Turnpike Mainline and Safety Upgrades from MP 207.000 to MP 216.951

Background Data: It is standard procedure for FTE to require the Contractor to perform and complete certain activities required by a FWC Gopher Tortoise Conservation permit if one is obtained for a project, and address the costs associated with those activities. The web link within our standard specification does not identify the Contractor's responsibility to provide specific, qualified personnel to conduct and complete State agency and gopher tortoise recipient site coordination, gopher tortoise survey(s), relocation activities and reporting required by the FWC: Gopher Tortoise Conservation permit obtained by FTE for this project. This MSP is proposed to prevent using plan notes to inform the Contractor of these responsibilities.

Name and PE Number of Professional Engineer signing and sealing the Modified Special Provision:

P.E. Name: Gordon M. Greene, PE → P.E. Number: 68368

I hereby certify that this Specification was prepared under my responsible charge, and that it has been reviewed in accordance with procedures adopted and implemented by the Florida Department of Transportation.

Page Break

INSERT REDLINE/STRIKE-THROUGH HERE

LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC - COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND OTHER WILDLIFE REGULATIONS.
(REV 1-31-17)

SUBARTICLE 7-1.4 is expanded by the following new Subarticle.

7-1.4.1 Additional Requirements for Gopher Tortoises: Certain gopher tortoise burrows are to remain within the project area, as shown on the plans, and must be protected. Avoid ground disturbing impacts within a 25-foot radius of each burrow. Install silt fence or bermside fence as a means of burrow avoidance, ensuring that it opens towards the off-site project limits and that burrows are not fully encircled. Install fence prior to any other construction activity. Maintain fence throughout the duration of the construction. Replace fence as soon as it is no longer functioning for burrow avoidance or as directed by the Engineer. Replace fence in the same location as the original fence. Remove fence upon construction completion.
Silt fence intended for burrow avoidance may also double as silt fence for erosion control but shall not be considered as the only silt fence needed for erosion control purposes within the project limits.
Follow the gopher tortoise species requirements posted in the URL address in 7-1.4 when gopher tortoises are observed or previously unidentified burrows are discovered.

PROPOSED REPLACEMENT MSP:

LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC - COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND OTHER WILDLIFE REGULATIONS.
(REV 10-21-16 1-31-17)

SUBARTICLE 7-1.4 is expanded by the following:

7-1.4.1 Additional Requirements for Gopher Tortoises: Provide an Authorized Gopher Tortoise Agent (AA) with a valid Florida Fish and Wildlife Conservation Commission (FWC) Permit allowing the AA to perform at least all of the following activities as defined by the current FWC Gopher Tortoise Permitting Guidelines:
Gopher Tortoise Surveys; Capture Gopher Tortoises by Bucket Trap, Hand Shovel, and Backhoe Excavation;
Prior to any gopher tortoise relocation, coordinate with the Engineer and FTE/EMO to modify the issued FWC Gopher Tortoise Conservation Permit to reflect the Contractor's AA as the one to carry out the permitted activities.
Capture and coordinate the transport of recovered gopher tortoises from the project site to the designated recipient site as required by the FWC Gopher Tortoise Conservation Permit. The Contractor shall provide a minimum of 48 hours notification to the designated recipient site for the designated recipient site to pick-up and transport the

MODIFIED SPECIAL PROVISION APPROVAL REQUEST

(REV 3-8-16)

Date: March 22, 2018 → District: 2 → Type: Project Specific

Letting Month: 12/2018 → FPID Number: 422938-5-52-01

Requested by: Greg Dever → Office/Phone: 407-287-3287

Specification being modified: 120 Excavation and Embankment

Affected Pay Items: 120-1-1

*Expected Cost Impact to this project: No cost impact anticipated.

*Give an estimate of dollar impact (added cost or cost savings) to the project if this Modified Special Provision is used in lieu of the corresponding statewide implemented specification.

Project Description: SR23/FCE SOUTH PROJECT FROM EAST OF CR209 TO NORTH OF SR16

Background Data: The alignment of SR 23 includes sections through the former Lee Field NAS. A previously remediated small arms range impact berm is located within the limits of Stations 686+00 and 688+00. The CAR Contractor inspector will observe excavation activities of the impact berm to confirm that small arms range debris is not encountered or if it is encountered direct the separation of the small arms range materials from other excavation materials.

*Name and PE Number of PE signing and sealing the Modified Special Provision:

*Project Specific Modifications to the Standard Specifications or Workbook Specifications must be signed and sealed by the Professional Engineer responsible for this Special Provision under the following statement and kept in the Project Files maintained in the District.

PE Name: Gregory A. Dever, P.E. → PE Number: 41884

I hereby certify that this Specification was prepared under my responsible charge, and that it has been reviewed in accordance with procedures adopted and implemented by the Florida Department of Transportation.

The official record of this Special Provision has been electronically signed and sealed using a Digital Signature as required by 61G15-23.004, F.A.C. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Professional Engineer: Gregory A. Dever → → → →
Date: 03/22/2018 → → → →
Fla. License No.: 41884 → → → →
Firm Name: Aptim Environmental & Infrastructure
Firm Address: 1228 Winter Garden Vineland Road
City, State, Zipcode: Winter Garden, FL 34787 → → →
Certificate of Authorization: 9317 → → → →
Pages: 1-3 → → → →

EXCAVATION AND EMBANKMENT IDENTIFIED AREAS OF CONTAMINATION

(REV 03-22-2018)

ARTICLE 120-1 is expanded by the following new Subarticle:

120-1.3 Identified Areas of Contamination: Certain area(s) within the limits of this project have been identified as contaminated and are delineated in the Plans. The contamination type and levels, when known, are in the specifications or in a contamination assessment report posted on the Department's website at the following URL address:

https://ftp.fdot.gov/public/folder/HkSWIK59G0qRNnAJUh3xXg/permitsandorutilityworkschedules

The Department will have a Contractor qualified to perform contamination assessment and remediation and special construction inspection working in the designated contamination areas under separate Contract (Contamination Assessment/Remediation Contractor - CAR Contractor) whose activities may include but not be limited to the following types of work:

- 1. Special construction inspection of Prime Contractor's earthwork activities.
2. Soil sampling.
3. Earth work.
4. Operating scientific field testing equipment.
5. Installation and operation of equipment for dewatering.
6. Disposal of small arms range related debris installing sheet pile for cofferdams.

67. Treatment of water to remove any contaminants.
A staging area may be required to facilitate the CAR Contractor's operations and will be designated.

Where contamination assessment or remediation work is done simultaneously with the highway construction Contract, the assessment/remediation work period may or may not begin on the day highway construction begins and may or may not be consecutive working days. A schedule to accomplish the assessment/remediation work expeditiously will be established at the preconstruction conference. The Prime Contractor and the CAR Contractor will use this schedule as a basis for planning both work efforts. The Engineer must approve any deviation from this schedule before it occurs. Coordinate schedule changes with the CAR Contractor before approval by the Engineer. The Engineer may grant Contract Time extensions according to the provisions of 8-7.3.2.

Schedule operations to avoid intrusion into the areas designated in the Plans or in specified contaminated areas or staging areas reserved for the CAR Contractor until the established schedule dictate, unless agreed to by the CAR Contractor beforehand. Provide access to the aforementioned sites at all times during the assessment/remediation work phase. Resume normal operations in the designated area once the contamination is removed and notice to proceed is issued by the Engineer.

Pay particular attention to the provisions of 8-4.4 dealing with Coordination with other Contractors.

Developmental Specification

Developmental Specification – Specification developed around a new process, procedure, or material approved for limited use by the State Program Management Office, signed and sealed by the Professional Engineer responsible for authorizing their use and monitoring their performance in the field.

Technical Special Provision (TSP)

Technical Special Provision – Project-specific specification of a technical nature addressing an item of work not covered the by the Standard Specifications. Signed and sealed by an engineer registered in Florida.

Specification Package Preparation Specs on the Web



SPECS ON THE WEB

SPECIFICATIONS PACKAGE
FLORIDA DEPARTMENT OF TRANSPORTATION

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Please proceed to log in if you already have an FDOT Internet Subscriber Account (ISA)

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- When Choosing a new Password...

Sign Up

If you have never been here before and not a FDOT Employee, please [Register](#) to use Specs on the Web.





SPECIFICATIONS PACKAGE
Contract Number: T3646
FINANCIAL PROJECT ID(S): 220495-8-52-01 & 220495-8-56-01
FEDERAL FUNDS
DISTRICT THREE
WAKULLA COUNTY

The January 2018 Edition of the Florida Department of Transportation Standard Specifications is revised as follows:

I hereby certify that this specifications package has been properly prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.

The official record of this package has been electronically signed and sealed using a Digital Signature as required by 61G15-23.004 F.A.C. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

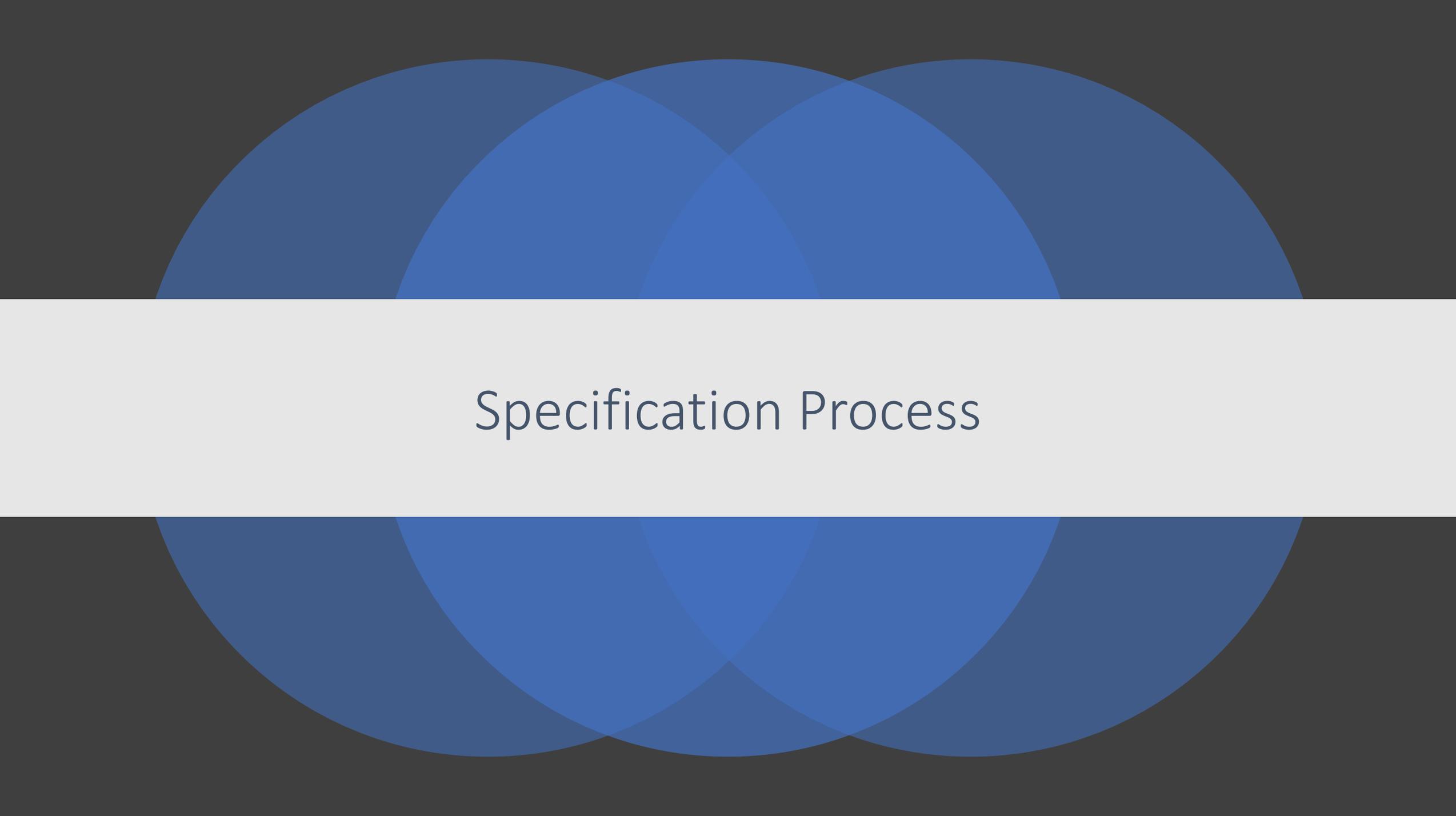
Prepared by: David J. Gilbert, P.E.
Date: December 21, 2017
Fla. License No.: 66563
Firm Name: AECOM Technical Services Inc.
Firm Address: 1625 Summit Lake Drive, Suite 200
City, State, Zipcode: Tallahassee, FL, 32317
Certificate of Authorization Number: 8115
Page(s): 1-71



David J Gilbert
2017.12.21
16:33:16 -05'00'

Specifications Package

- A signed and sealed document prepared for inclusion in the contract, comprised of the following components as applicable:
 - Supplemental Specifications
 - Special Provisions
 - Developmental Specifications
 - Mandatory Revisions
 - Modified Special Provisions
 - Technical Special Provisions
- Supplemental Specifications Package

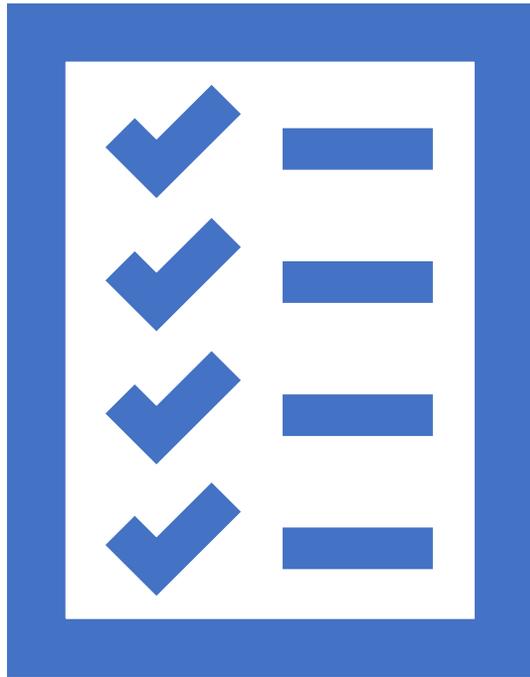


Specification Process

There are two
core
Specification
Processes:

1. Specification
Development (Procedure
630-010-001)

2. Specification Package
Preparation (Procedure
630-010-005)



Core Process #1: Specification Development

Process used to modify existing Specifications and adopt new Specifications

- Procedure No. 630-010-001

Process includes several levels of review by FDOT and Industry

The current process can be outlined in Four Basic Steps



Step 1: Draft Revision

- Originator drafts proposed specification modification
- Revision maybe sponsored by anyone within the Department.
- For Division II, submittal should be drafted in active voice.
- Submit to the State Specifications Engineer with origination form

ORIGINATION FORM

Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date: Office:
Originator: Specification Section:
Telephone: Article/Subarticle:
email:

Will the proposed revision require changes to:

Publication	Yes	No	Office Staff Contacted
Standard Plans Index	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Traffic Engineering Manual	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
FDOT Design Manual	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Construction Project Administration Manual	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Basis of Estimate/Pay Items	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Structures Design Guidelines	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Approved Product List	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Materials Manual	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

Will this revision necessitate any of the following:

Design Bulletin Construction Bulletin Estimates Bulletin Materials Bulletin

Are all references to external publications current? Yes No

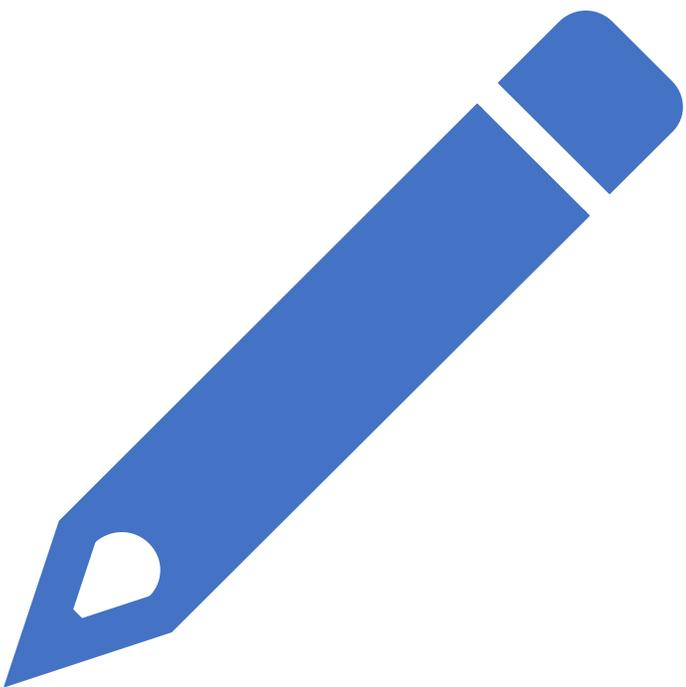
If not, what references need to be updated? (Please include changes in the redline document.)

Why does the existing language need to be changed?

Summary of the changes:

Are these changes applicable to all Department jobs? Yes No

If not, what are the restrictions?



Step 2: Specification Review & Formatting

- State Specification Engineer reviews draft with affected offices and decided whether to proceed
- Forward the proposed revisions to staff for formatting

Step 2: Specification Review and Formatting

4501105
All Jobs

PRECAST PRESTRESSED CONCRETE CONSTRUCTION. (REV ~~5-23~~6-3-14)

SUBARTICLE 450-11.5 is deleted and the following substituted:

450-11.5 ~~Trimming~~ Cutting Strands and Bars: Upon completion of the detensioning operation, cut ~~the exposed~~ strands to required length, using an oxygen flame or mechanical cutting device. ~~On piles and other products requiring flush cutting of strands and bars, use only mechanical cutting, unless specifications require strand to be burned or ground below the pile surface.~~ Do not use electric arc welders *to cut bars or strands.*

450-11.5.1 Beams: ~~Unless otherwise specified, allow~~ *For beam ends that will be permanently encased in concrete diaphragms, cut* all strands to ~~protrude~~ 2.5 inches plus or minus 0.5 inch beyond the end of the product, ~~except cut strands for piling back to be flush with or below the concrete surface or as specified in the Plans.~~ For beams with ends *that will not to be* encased in permanent concrete diaphragms, *mechanically* cut strands a minimum of 1/8 inch below the concrete surface.

450-11.5.2 Piles: *Mechanically cut strands flush with the concrete surface. ~~except~~ For fender piles, ~~then~~ mechanically cut the top strands at least 1 inch below the concrete surface.*

450-11.5.3 Poles: *Mechanically cut strands to a minimum of 1/8 inch below the concrete surface.*

SUBARTICLE 450-11.6 is deleted and the following substituted:

450-11.6 Protecting Ends of Strands: *Prepare the concrete surfaces and apply Type F-1 epoxy in accordance with the manufacturer's recommendations.*

450-11.6.1 Beams: For beams ~~with~~ ends *that will not to be permanently* encased in ~~permanent~~ concrete diaphragms, *apply two layers of epoxy* ~~coat to~~ the exposed beam ends, ~~(including clipped and chamfered surfaces) with two layers of Type F-1 epoxy compound~~ within

Step 3: Internal, Industry, Expert and FDOT Review



Step 3: Industry Review

Industry Review

[Specification Development Procedure](#) regulates the development and implementation of new or modified specifications and related pay items. The following files are in the developmental process and are posted for Industry Review. If you have comments, please select the DESIRED REVISION using the drop-down menu below and then type in your comments.

To track the History of proposed revisions go to: [Track the Status of Proposed Revisions](#)

Note:Files on this page are in Adobe Acrobat (PDF) format.
File Sizes ranges from 23 to 30 kb.

Specification	Description	Origination	Review End
1020901	Maintenance of Traffic	1020901	6-20-19
3000301	Prime and Tack Coat	3000301	6-20-19
3300302	Hot Mix Asphalt – General Construction Requirements	3300302	6-20-19
3340202	Superpave Asphalt Concrete	3340202	6-20-19
3370302	Asphalt Concrete Friction Courses	3370302	6-20-19
4150503	Reinforcing for Concrete	4150503	6-20-19
5600501	Coating New Structural Steel	5600501	6-20-19
6330100	Communication Cable	6330100	6-20-19
6350202	Pull, Splice, and Junction Boxes	6350202	6-20-19
6390303	Electrical Power Service Assemblies	6390303	6-20-19
6770201	Equipment Shelter	6770201	6-20-19

Step 3: Comments & Responses

SP0070104-9 LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC-LAWS
TO BE OBSERVED COMPLIANCE WITH FEDERAL ENDANGERED SPECIES ACT AND
OTHER WILDLIFE REGULATIONS (SEAGRASS BEDS)
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

.....
Dan Hurtado
(850) 414-4130
Dan.Hurtado@dot.state.fl.us

Comments: (10-26-18, Industry)

Strike the words, "to prevent shading and scour impacts." You just need to tell the Contractor what to do, not why.

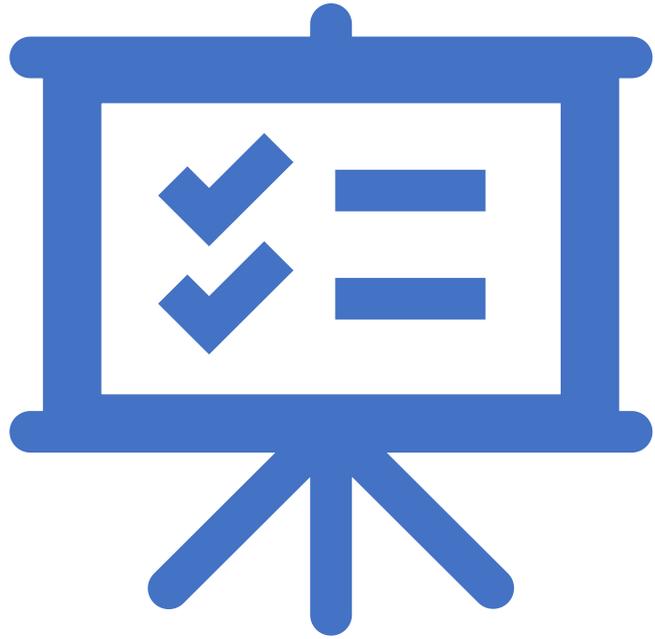
Response: Considered, but kept at is. Depending on depth/shadows, a barge could be near seagrass beds (but not technically over them) and still cause shading impacts.

Nicole Cribbs
(813) 546-0736
Ncribbs@fallerdavis.com

Comments: (11-12-2018, Industry)

It is very common that seagrass beds will occur near or within the project, but the bridge sheets often do not provide enough coverage to map the seagrass beds. This is especially true for bridge rehab projects that are not part of a larger roadway project. My comment is to delete the sentence that reads "The approximate location of the seagrass beds is provided in the Plans."

Response: Considered, but no change made. For areas outside of where the plan sheets typically provide, we suggest providing an additional plan sheet depicting a "zoomed out" area that could encompass all areas of potential barging/traversing and show the seagrasses mapped out.



Step 4: FDOT Implementation or Rejection

- FDOT makes the decision on implementation/rejection of final draft
- Proposals with issues are returned to the Originator for further evaluation.
- Accepted proposals are sent to FHWA for approval
- Approved specifications are scheduled for statewide implementation – incorporation into the next eBook or as a Special Provision.



AASHTO FORMAT

SECTION 435
STRUCTURAL PLATE PIPE AND PIPE ARCH CULVERTS

435-1 Description.

Construct structural plate pipe and pipe arch culverts.

435-2 Materials.

Meet the requirements of Section 944 for steel and Section 945 for aluminum.

When the Plans call for bituminous coated pipe or pipe arch, meet the coating requirements of 944-4.

When other types of coating material are shown in the Plans, use a coating that consists of at least two coats of the specified material, applied at the job site. Apply the coating by brush or by spray.

435-3 Trench, Foundation, Laying, and Backfill.

Perform this work as specified in Section 430, and as follows.

Provide a foundation for the bottom plates that is of uniform density and carefully shaped to fit the lower plate of the pipe or pipe arch. Thoroughly tamp the backfill material against the remaining plates.

435-4 Assembly.

Assemble the plates to form the pipe or pipe arch structure in accordance with the diagram furnished by the manufacturer. Connect the plates by bolting tightly in all bolt holes provided.

435-5 Method of Measurement.

The quantities to be paid for will be the plan quantity, in feet, of pipe or pipe arch, installed in place, completed and accepted. The quantity will be measured along the centerline of the structure from end to end of metal for full section structures, from average end to end at top and bottom for beveled-end structures.

435-6 Basis of Payment.

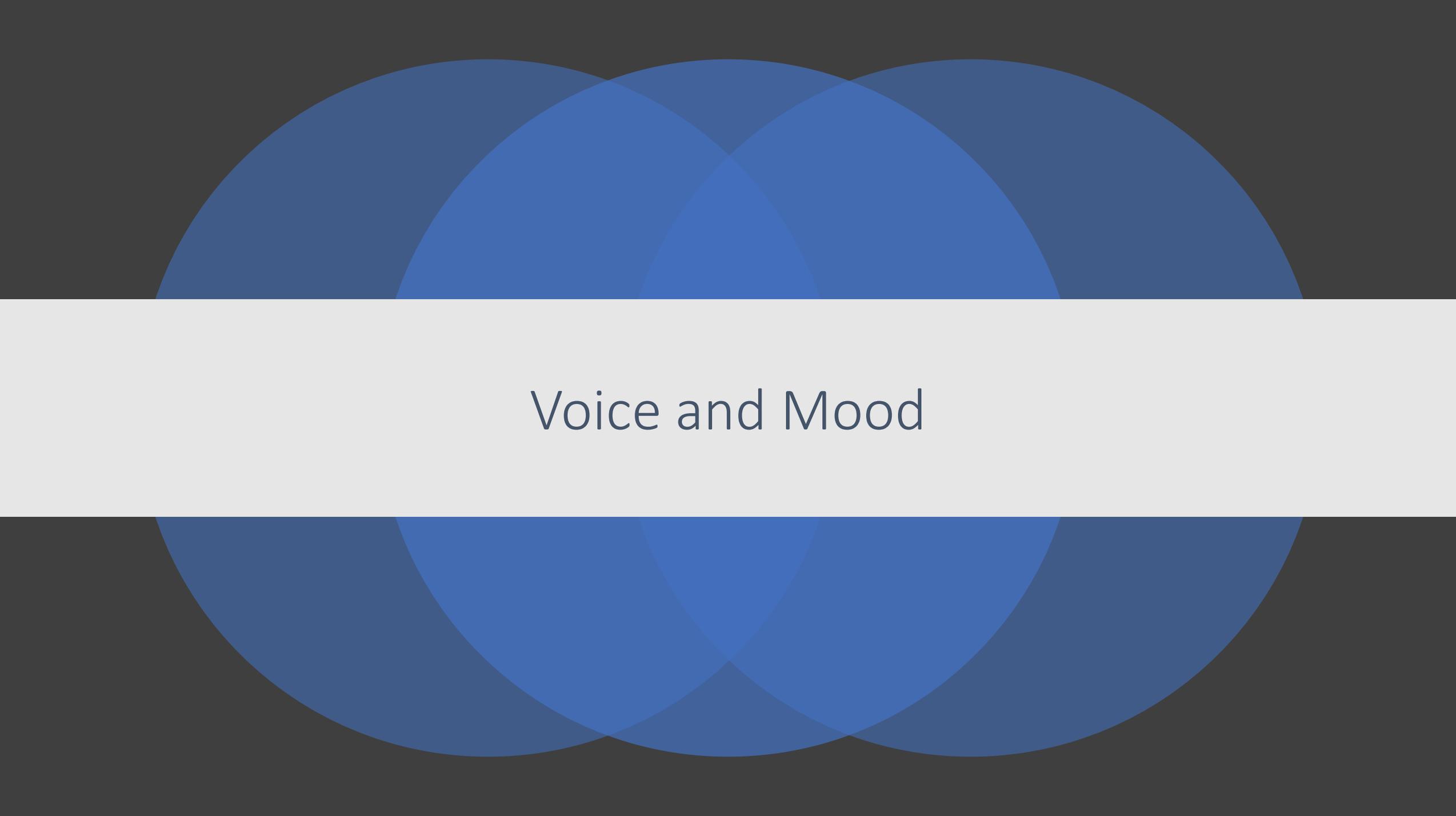
Prices and payments will be full compensation for all work specified in this Section, including all materials, backfilling, and disposal of surplus material and all excavation except the volume included in the items for grading work and for other items specified for payment in Section 125.

Payment will be made under:

Item No. 435- Structural Plate Pipe Culvert - per foot.

AASHTO FORMAT

- Description
- Materials
- Construction Requirements
- Method of Measurement
- Basis of Payment

The image features a dark gray background with a central white horizontal band. Above and below this band are three overlapping circles in shades of blue, creating a decorative, wave-like pattern. The text "Voice and Mood" is centered within the white band.

Voice and Mood

Voice and Mood

Applies to Divisions I and II

Clear – No Ambiguity

Correct – Technically Accurate

Concise – No Excess Verbiage

Precise – Easy to Enforce

Quality Must Be Measurable

Simple Words

Short Sentences and Paragraphs

DIVISION I

General Requirements and Covenants

SECTION 1

DEFINITIONS AND TERMS

1-1 General.

These Specifications are written to the bidder, prior to award of the Contract, and to the Contractor. Within Divisions I and II of the specifications, sentences that direct the Contractor to perform work are written in the active voice-imperative mood. These directions to the Contractor are written as commands. In the imperative mood, the subject “the bidder” or “the Contractor” is understood.

All other requirements to be performed by others, with the exception of the Method of Measurement and the Basis of Payment Articles, have been written in the active voice, but not in the imperative mood. Sentences written in the active voice identify the party responsible for performing the action. For example, “The Engineer will determine the density of the compacted material.” Certain requirements of the Contractor may also be written in the active voice, rather than active voice-imperative mood.

Division III of the Specifications (Materials) is written in the passive voice writing style.

Voice and Mood

- In **Passive Voice**, the subject of a sentence receives the action.
- In **Active Voice**, the subject of a sentence performs the action.
- In **Active Voice: Imperative Mood**, the subject of a sentence is implied and understood.

- Passive Voice:
“The concrete shall be placed by the contractor in accordance with the plans and drawings.”
- Active Voice:
“The contractor is to place the concrete.”
- Active Voice Imperative Mood:
“Place the concrete.”

The “Engineer”

Engineer.

The Director, Office of Construction, acting directly or through duly authorized representatives; such representatives acting within the scope of the duties and authority assigned to them.

In (1) above, the determination by the Engineer shall be conclusive. If the determination is challenged by the Contractor in any proceeding, the Contractor must establish

In (1) above, the determination by the Engineer shall be conclusive. If the determination is challenged by the Contractor in any proceeding, the Contractor must establish

6-3.2 Use of Right-of-Way for Storage: If the Engineer allows, the Contractor may use a portion of the right-of-way for storage purposes and for placing the Contractor’s plant and equipment. Use only the portion of the right-of-way that is outside the clear zone, which is the

6-3.2 Use of Right-of-Way for Storage: If the Engineer allows, the Contractor may use a portion of the right-of-way for storage purposes and for placing the Contractor’s plant and equipment. Use only the portion of the right-of-way that is outside the clear zone, which is the

Voice and Mood

- Specs are written to the Contractor or Bidder, but never to FDOT, the Designer or the CEI
- Use of “the Engineer will” or “the Engineer may” are only acceptable when the Contractor’s work or costs “will or may” be affected by a potential action by the Department.

The image features a dark gray background with three overlapping circles in shades of blue. A white horizontal band runs across the middle of the image, containing the text "Contract Authority".

Contract Authority

Contract Authority

- Contract Exists between the Contractor and the Department
- “Privity”
- Department cannot direct
 - Subcontractors
 - Utilities
 - Manufacturers
 - Local Entities

Contract Authority

Specifications direct the Contractor to obtain materials from an approved source

- Fabricator
 - Materials Manual
- Manufacturer
 - Certification
 - Independent Testing
 - FDOT Testing

Contract Authority

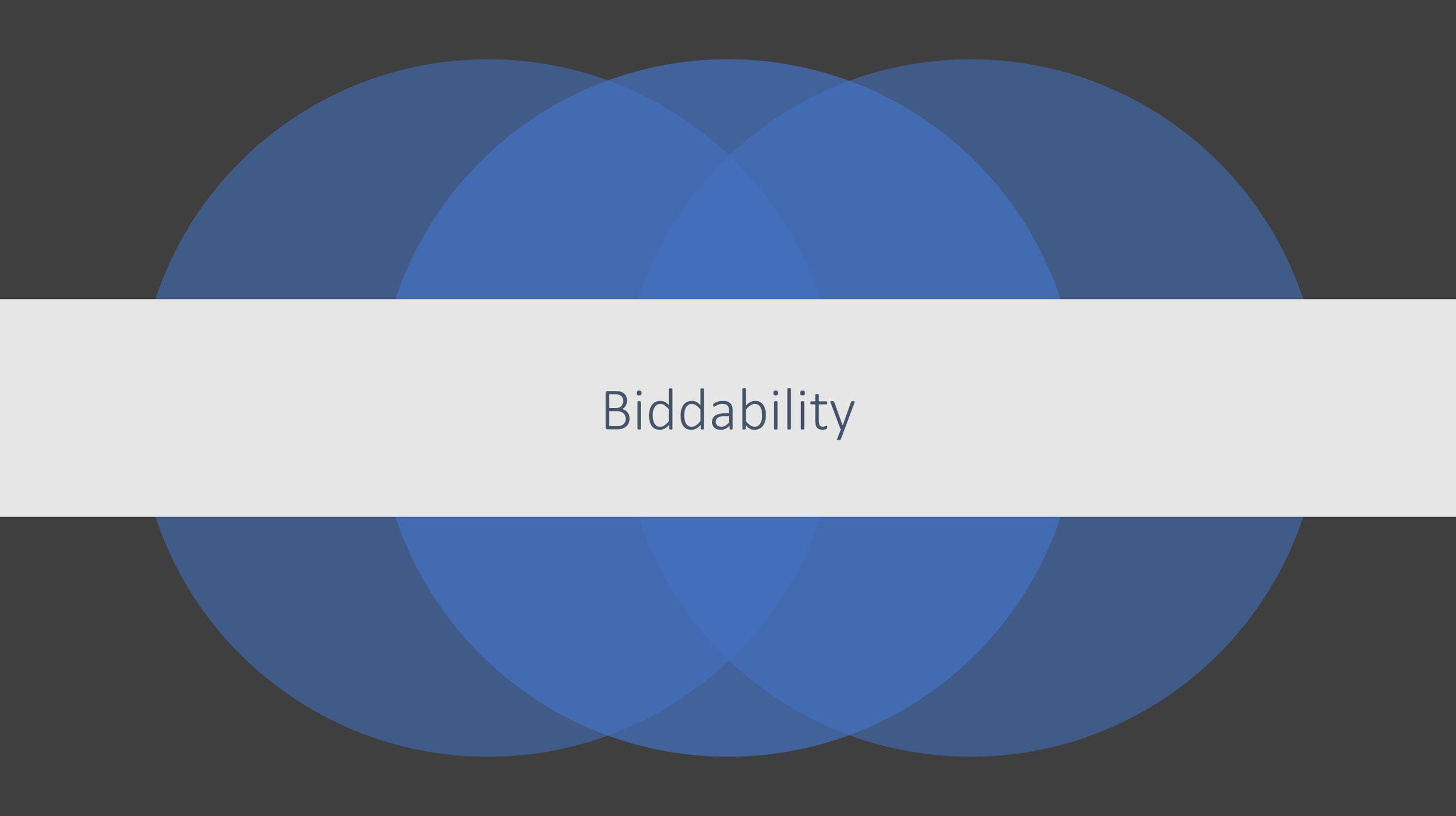
- Upon Termination, the Contract no longer exists
- Loss of Privity
- No Contractor Warranties
- No Duty to perform remedial action



End Result

End Result

- What do you want? (Say it once)
- When do you want it?
- Where do you want it?
- Who must do it?
- How or Why? (Don't do it)
 - “...to prevent intrusion of mortar...”
 - “...use the utmost care...”
 - “...in order to prevent corrosion...”
 - “...use a trowel or other tool approved by the Engineer”
 - “...to ensure a smooth surface...”

The image features a dark gray background with a decorative pattern of overlapping circles in two shades of blue. A horizontal white band runs across the center of the image. The word "Biddability" is centered within this white band.

Biddability

Biddability

- All requirements must be provided to the Bidder in the Contract Documents
- “...or as directed by the Engineer”
- “...unless otherwise shown in the Contract Documents”
- “...upon direction from the District Materials Office”
- “...when so directed”
- “...to the satisfaction of the Engineer”



Governing Order of Documents

Governing Order of Documents

1. Special Provisions
2. Technical Special Provisions
3. Plans
4. Standard Plans
5. Developmental Specifications
6. Supplemental Specifications
7. Standard Specifications

Governing Order of Documents

Topic No. 600-000-002
Basis of Estimates

2016 Edition
as of February 1, 2016

Chapter 7 Design Tools

7.1 General Information

Detailed plan notes and/or technical special provisions must be provided by the designer for all items not covered by existing specifications. Plan notes are not acceptable as a substitute for Technical Special Provisions. Plan notes are intended to work with the specifications, and are not intended to supersede the specifications. Plan

Technical Special Provisions

- Do not include contractor warranties
 - Almost impossible to get additional work done after Final Acceptance.
- Include manufacturer warranties
 - Are acceptable when they are transferable to the Department.
 - These warranties should only be included when they are for standard industry time periods.
 - FHWA restrictions may apply.

Technical Special Provision

- Don't specify a product name or manufacturer name. This may give preferential treatment to those items listed.
- Sole source certification process



Technical Special Provisions

- Ensure system compatibility
- Remember to include a note when a proposed system must be compatible with existing equipment.





Technical Special Provisions

Utilize the AASHTO format

- Description, Materials, Construction Method, Measurement, Basis of Payment
- Section, Article, Subarticle

Include a Table of Contents if TSP is over 15 pages

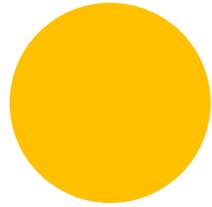
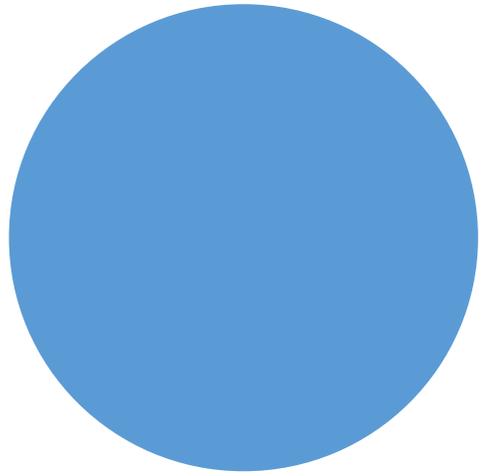
- Recommended on TSPs over 10 pages
- Always include Section and Article headings

Do

Use TSP's to address new or extraordinary processes or work
Check for conflicts
Use quantifiable and achievable performance measures
Use industry standard, manufacturer warranties, transferable to the Department
If needed, require certain personnel to have reasonable experience requirements

Don't

Use TSP's to alter existing Specifications, especially Sections 1 - 9
Use statements like, "If a conflict exists, the more stringent requirement governs"
Write a spec around a certain product (Sole-source by specification)
Require contractor experience certifications at time of bid
Provide cost estimates
List vendors or salespeople
Use pictures or drawings



Developmental Specification Approvals





What is a Developmental Specification?

Title	Monitor	Developmental Specification (** IPL)	Developmental Design Standard
BUILD FINANCE			
<p>Build-Finance These specifications apply to projects to be built and financed by the Contractor. NOTE: Must be used with Developmental Specification Dev005BF.</p>	Dan Hurtado	Dev003BF	N/A
<p>Build-Finance These specifications apply to projects to be built and financed by the Contractor. NOTE: Must be used with Developmental Specification Dev003BF.</p>	Dan Hurtado	Dev005BF	
ADMINISTRATION			
<p>Award and Execution of Contract - Contractor's Records - Escrowing of Bid Documents (New Article 3-8 dealing with Escrow agreements. For projects in excess of \$20,000,000.00), when authorized by the State Construction Engineer.</p>	Dan Hurtado	Dev003	N/A
CONSTRUCTION OPERATIONS			
<p>Prevention, Control, and Abatement of Erosion and Water Pollution Provides Lump Sum payment to the Contractor for providing measures for the prevention, control, and abatement of erosion and water pollution using Best Management Practices.</p>	Dan Hurtado	Dev104 Project List	N/A

SIGNING, PAVEMENT MARKING, AND LIGHTING

Internally Illuminated Raised Pavement Markers

Alan El-Urfali **Dev707**** N/A

Internally Illuminated Raised Pavement Markers (IIRPMs) are steadily illuminated lights installed in the roadway surface.

Project List





Specifications Development

Quick Links

- [Department Contacts](#)
- [Department Resources](#)
- [Public Notices](#)
- [Technology Resources](#)

STATE SPECIFICATIONS OFFICE

Documents

- Shared Documents
- Emergency Information

Lists

- Specifications Action Items
- Specs Consultant Trained List
- Consultant Training Main Page
- TSPs
- Specs Web News
- Developmentals

Discussions

Sites

- Maintenance

MSP Lists

- MSP Dashboard
- MSP Tracking

MSP's

Announcements

[Specification Develop Schedule](#)

by Frimmel, Rebecca

Modified: 4/17/2018 10:14 AM

[+ Add new announcement](#)

The Standing Schedule for eBook Development will be as follows:

JANUARY eBook:

Initial Submittal by Originator: SECOND FRIDAY of MAY

Distribute DRAFT Workbook: LAST FRIDAY of JULY

Final FHWA Approval Window: FIRST 2 Weeks of AUGUST

Publish Workbook: LAST FRIDAY of AUGUST

Publish FINAL eBook: Within 2 Weeks of Published Workbook

JULY eBook:

Initial Submittal by Originator: SECOND FRIDAY of NOVEMBER

Distribute DRAFT Workbook: LAST FRIDAY of JANUARY

Final FHWA Approval Window: FIRST 2 Weeks of FEBRUARY

Publish Workbook: LAST FRIDAY of FEBRUARY

Publish FINAL eBook: Within 2 Weeks of Published Workbook



Links

- [Request a Developmental Specification](#)
- [Specification Package Preparation](#)
- [Standard Specifications Library](#)
- [Industry Review](#)
- [Track the Status of Revisions](#)
- [Web Links](#)
- [Specification Development](#)
- [Specs on the Web](#)

[+ Add new link](#)

[New Item](#)
[New Folder](#)
[View Item](#)
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[Version History](#)
[Shared With](#)
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[Attach File](#)
[Alert Me](#)
[Workflows Approve/Reject](#)

[Quick Links](#)
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[Department Resources](#)
[Public Notices](#)
[Technology Resources](#)

[All Items](#)
[BDI View](#)

Stop editing this list

Project Number	Spec Name	Letting Date	Additional Information	Status	Monitor	Monitor Comments	Needs Additional Information?	District	Reminder Date	DateOnly	Developmental Monitor Approval Workf
433375-1-52-01	Dev992 Highway Lighting Materials - LED	6/1/2015	SR: 35 Lighting Polk County Lump Sum Let Date: 6/15 Federal Funds Estimate: \$740,000 FM System: FDOT - Work Program Administration 02-16-2015 Item/Segment Definition 15:48:09 Item: 433375 Segment: 1 Item Managing District: 01 Box Item: N (y/N) Geo District: 01 County: 16 POLK Project Mgr: CES-AEB-MAD Trans System: 03 INTRASTATE STATE HIGHWAY Contract Type: 1 Work Mix . : 0777 LIGHTING Measure Type : E Status . . : 010 PRE-CONST.UNDERWAY As of: 07-01-2013 Box Code . : _ EMRG: _ Related Items: N Old Item Number: _____ Description : (Version: Displayed - AD ADOPTED Requested - G1) US 17 (SR 35) FROM S OF 9TH ST SE TO N OF 9TH ST NE Work Length: 1.600 Project Length: 1.600 MI Item Segment Comments Type (1=xdesc, 2=misc) SAFETY: UPGRADE LIGHTING TO COVER VULNERABLE ROAD USERS FROM 2 ELEMENTARY SCHOOL AND PARK (SFA 2) (B/C = 1.79) 2 PH 32 SEQ 01 = SURVEY SEQ 02 = DESIGN 2	Approved			No	CO	4/4/2015	4/1/2015	

- Documents
 - Shared Documents
 - Emergency Information
- Lists
 - Specifications Action Items
 - Specs Consultant Trained List
 - Consultant Training Main Page
 - TSPs
 - Specs Web News
 - Developmentals
- Discussions
- Sites
 - Maintenance
- MSP Lists
 - MSP Dashboard
 - MSP Tracking
- MSP's
- Recent

Project Number *

Provide the Financial Project Number (ex. 123456-1-52-01)



Spec Name *



Specify your own value:

Letting Date *

Provide the Letting Date for the Project.



Additional Information



Provide Additional Information (if applicable) - Attach Project Information (type of work & contract amount), AADT, Safety Reports, etc. as necessary.

NOTE: To open attached files in this field while in "Edit" mode, hold CTRL key and click on the attachment.

Status *

For CO Specs Office and Monitor Use Only

Monitor *



Monitor Comments

For Monitor Use Only

Monitors: Enter Your Comments Here.

Needs Additional Information?

Monitors: Check to Request Additional Information from the Originator. Enter the Specific Information Requested in Monitor Comments.

Needs Additional Informa

No

Project Number *

Provide the Financial Project Number (ex. 123456-1-52-01)

Spec Name *

Specify your own value:

Letting Date *

Provide the Letting Date for the Project.

Additional Information

Provide Additional Information (if applicable) - Attach Project Information (type of work & contract amount), AADT, Safety Reports, etc. as necessary.

NOTE: To open attached files in this field while in "Edit" mode, hold CTRL key and click on the attachment.

Status *

For CO Specs Office and Monitor Use Only

Monitor *

Monitor Comments

A **A1** | **B** *I* U |

For Monitor Use Only

Monitors: Enter Your Comments Here.

Needs Additional Information?

Monitors: Check to Request Additional Information from the Originator. Enter the Specific Information Requested in Monitor Comments.

Needs Additional Informa

No

Microsoft Office 365 ribbon menu showing various actions: Delete, Respond (Reply, Reply All, Forward), Quick Steps (Develop, To Manager, Team Email), Move, Assign Policy, Tags (Mark Unread, Categorize, Follow Up), Editing (Translate), and Zoom.

Fri 6/9/2017 9:23 AM

Specifications Development <sharepoint.administrator@dot.state.fl.us>

Monitor for Project Number 000000-0-00-03 Needs Additional Information

To Frimmel, Rebecca

Cc Toole, Deborah; Thomas, Frances

The monitor (Frimmel, Rebecca) for project number **000000-0-00-03** - Dev105EDLB, Dev120EDLB, Dev125EDLB, Dev160EDLB, Dev200EDLB, Dev200EDLB, Dev548EDLB Electronic Density Log Book needs additional information to complete the developmental specification request you submitted on 6/9/2017.

Please attach the requested information to your sharepoint request and uncheck the "Needs Additional Information?" radio button to notify the monitor that you have uploaded the requested information.

Your request may be accessed [HERE](#).



See the monitor comments below for further instructions:

BROWSE EDIT

Save
 Cancel
 Paste
 Copy
 Delete Item
 Attach File
 Spelling

Documents

- Shared Documents
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Lists

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- Dev/IPL Approvals

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Recent

- Employee of the Quarter Nominations

Tasks

EDIT LINKS

Dev105EDLB, Dev120EDLB, Dev125EDLB, Dev160EDLB, Dev200EDLB, Dev200EDLB, Dev548EDLB Electronic Density Log Book

Specify your own value:

Letting Date *

6/20/2017

Provide the Letting Date for the Project.

Additional Information

Provide Additional Information (if applicable) - Attach Project Information (type of work & contract amount), AADT, Safety Reports, etc. as necessary.

NOTE: To open attached files in this field while in "Edit" mode, hold CTRL key and click on the attachment.

Status *

New

For CO Specs Office and Monitor Use Only

Monitor *

Frimmel, Rebecca x

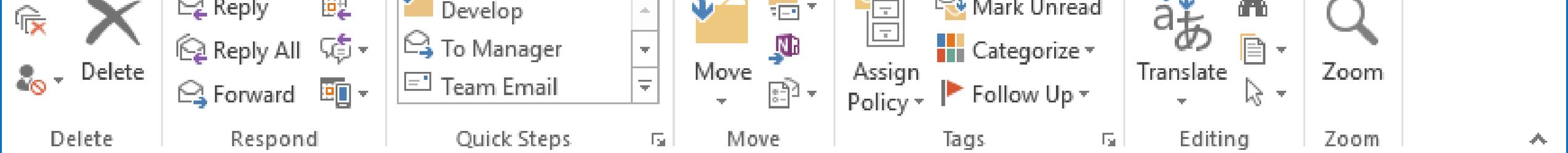
Monitor Comments

For Monitor Use Only

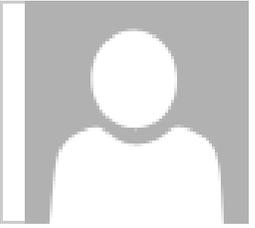
Monitors: Enter Your Comments Here.

Needs Additional Information?

Monitors: Check to Request Additional Information from the Originator. Enter the Specific Information Requested in Monitor Comments.



Fri 6/9/2017 10:19 AM



Specifications Development <sharepoint.administrator@dot.state.fl.us>

Developmental Specification Request for 000000-0-00-03 has been approved.

To Frimmel, Rebecca; Thomas, Frances; Toole, Deborah

Your request for 000000-0-00-03 - Dev105EDLB, Dev120EDLB, Dev125EDLB, Dev160EDLB, Dev200EDLB, Dev200EDLB, Dev548EDLB Electronic Density Log Book is approved.

You will receive the word file via separate email from the CO Specifications Office.

Please see the monitor comments (if applicable) below:

[CLICK HERE](#) to access your request.

Questions?

State Specification Office

Rebecca Frimmel (850) 414-4155

Rebecca.Frimmel@dot.state.fl.us

Deborah Toole (850) 414-4114

Deborah.Toole@dot.state.fl.us

Stefanie Maxwell (850) 414-4140

Stefanie.Maxwell@dot.state.fl.us