# EXHIBIT E STANDARD SPECIFICATIONS

The Standard Specifications comprise Divisions I, II and III as noted below:

- 1. Division I General Requirements and Covenants, Sections 1-9 as included herein.
- 2. Division II-Construction Details and Division III-Materials refer to the FY 20XX-XX edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, available at the following link:

http://www.fdot.gov/programmanagement/Implemented/SpecBooks/

[NOTE: Attach the latest version of Lee County DOT's Division I General Requirements and Covenants]

# EXHIBIT I SUPPLEMENTAL SPECIFICATIONS

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I hereby certify that these Supplemental Specifications have been properly prepared by me, or under my responsible charge:

Supplemental Specification Section(s): 8-3.2, 102, 200 and 430				
Signature:				
Date:				
Engineer of Record:				
Florida License No.:				
Firm Name:				
Firm Address:				
City, State, Zip Code:				
Cert. of Authorization No:				

### **DIVISION I-GENERAL REQUIREMENTS AND COVENANTS**

PROSECUTION AND PROGRESS - PROSECUTION OF WORK - GENERAL (SUBMISSION OF WORKING SCHEDULE). (REV 5-20-21) (FA 7-7-21) (FY 2023-24)

SUBARTICLE 8-3.2 is deleted and the following substituted:

**8-3.2** General: For this Contract, submit the following schedules and reports.

**8-3.2.1 Contract Schedule:** Submit to the Engineer for acceptance a Critical Path Method (CPM) Contract Schedule for the project within 30 calendar days after execution of the Contract or at the preconstruction conference, whichever is earlier.

The Contract Schedule shall include detailed schedule diagrams and schedule data as described below that shows how the Contractor intends to complete the work within the Contract Time. Any weather days that affect the Critical Path will be added as they occur. When the project includes a Maintenance of Traffic plan, the work breakdown structure (WBS) or project activity codes for the Contract Schedule shall be consistent with the Contract Maintenance of Traffic plan, showing activities for each discrete Contract activity to be accomplished within each Maintenance of Traffic phase. When the project does not include a Maintenance of Traffic plan, the WBS or project activity codes shall be consistent with the phasing shown in the Contract Documents. Include activities for deliverables and reviews in the schedule. Sufficient liaison shall be conducted and information provided to indicate coordination with utility owners having facilities within the project limits. The schedule must incorporate the utility work schedules included in the Contract Documents, unless changed by mutual agreement of the utility company, the Contractor and the Department. Show the interdependence (logic) of the utility work schedule activities with other schedule activities in the Contract Schedule for acceptance by the Department, unless otherwise approved by the Engineer.

Failure to include any element of work or any activity relating to utility work will not relieve the Contractor from completing all work within the Contract Time at no additional time or cost to the Department, notwithstanding the acceptance of the schedule by the Department.

The Contract Schedule may indicate a completion date in advance of the expiration of Contract Time. However, the Department will not be liable in any way for the Contractor's failure to complete the project prior to expiration of Contract Time. Any additional costs, including extended overhead incurred between the Contractor's scheduled completion date and the expiration of Contract Time, shall be the responsibility of the Contractor. The Contractor shall not be entitled to claim or recover any such costs from the Department.

Acceptance by the Engineer of the Contract Schedule or any updates shall not be construed as approval of any particular construction methods or sequence of construction or to relieve the Contractor of its responsibility to provide sufficient materials, equipment and labor to guarantee the completion of the contract in accordance with the Contract Documents.

**8-3.2.2 Schedule Submissions:** Develop the schedule in Precedence Diagram Method (PDM) format.

Each schedule submission and monthly update shall include a minimum of the following six items:

1. Submit the files electronically in the current Department version of Oracle Primavera P6 format by exporting the full schedule to an .xer file format.

2. A Gantt chart grouped by WBS, then phase, sorted by early start then total float. The chart shall include the following columns:

- a. Activity ID
- b. Activity Name
- c. Calendar
- d. Activity Type
- e. Original Duration
- f. Remaining Duration
- g. Duration % Complete
- h. Early Start
- i. Early Finish
- j. Late Start
- k. Late Finish
- 1. Total Float

The chart shall also include activity bars using the Oracle Primavera P6 default color coding for the bars. The chart shall be submitted as a Portable Document Format (.pdf) file and formatted on 11 inch by 17 inch landscape oriented sheets, with the activity table and bars.

3. A Gantt chart with the same columns and bars listed in 8-3.2.2(2), but filtered for the longest path, not grouped but sorted by early start, then early finish. The chart shall be submitted as a.pdf file and formatted on 11 inch by 17 inch landscape oriented sheets, with the activity table and bars.

4. The Schedule log for the calculated schedule, submitted as a.pdf file and formatted on 8-1/2 inch by 11 inch portrait oriented sheets.

- 5. A schedule narrative report with the following information:
  - a. Current project schedule status and identify potential

delays

b. A description of the progress made since the previous

schedule submission

- c. Objectives for the upcoming 30 calendar days
- d. Indicate if the project is on schedule, ahead of schedule or

behind schedule.

1. If ahead or behind schedule, indicate the specific

number of calendar days.

2. If behind schedule, include a detailed recovery plan that will put the schedule back on track or identify the alleged delay event for which a preliminary request for an extension of Contract Time has been submitted, which if granted by the Department, will account for the amount of time the project is behind schedule, or provide a fully supported request for a Contract Time extension, which if granted by the Department, will account for the amount of time the project is behind schedule.

e. Description of the current critical path and indicate if the critical path has changed in the last 30 calendar days.

f. Discussion of current successes or problems that have affected either the critical path's length or have caused a shift in the critical path within the last 30 calendar days.

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g. Identify specific activities, progress, or events that may reasonably be anticipated to impact the critical path within the next 30 calendar days, either to affect its length or to shift it to an alternate path.

h. List all changes to schedule logic, calendars, calendar assignments, activity types, activity names, changes to constraints, added activities or duration changes (original and remaining) that have been made to the schedule since the previous submission.

For each change, describe the basis for the change and specifically identify the affected activities by activity ID.

i. Identify any and all activities, either in progress or scheduled to occur within the following 30 days that require Department participation, review, approval, etc.

6. A detailed logic report that provides a list of activities in the schedule sorted by activity ID, no grouping and submitted as a .pdf file and formatted on 8-1/2 inch by 11inch portrait oriented sheets. For each activity listed, the report shall include the activity's predecessors and successors, including the relationship type and lag.

For each submission of the Contract Schedule and monthly update, the Engineer will have 21 days to accept the Contract Schedule or monthly update or to schedule a meeting, if needed, within that time, with the Contractor to resolve any problems that prevent acceptance of the schedule. Attend the meeting scheduled by the Engineer, and submit a corrected schedule to the Engineer within seven days after the meeting. The process will be continued until a Contract Schedule or monthly update is accepted or accepted as noted by the Engineer.

Upon the Engineer's acceptance of the Contract Schedule, submit monthly updates of the Contract Schedule, including all months prior to the start of construction, reflecting progress through the monthly estimate cut-off date within 8 calendar days after the monthly estimate cut-off date.

The Engineer may withhold monthly payments due for failure of the Contractor to submit an acceptable schedule or monthly updates within the time frame described herein.

**8-3.2.3 Schedule Content:** All schedule submissions shall comply with the following content guidelines as appropriate to the specific submission:

The schedules shall include the sequence, order, and interdependence of major construction milestones and activities. Include procurement of project specific materials and equipment that require submittals and are not readily available, long-lead time items, and key milestones identified by the Contract.

Show the sequence, order, and interdependence of activities in which the work is to be accomplished. Include allowance for Department review, acceptance and return of submittals, samples and shop drawings where Department acceptance is specifically required (in accordance with 5-1.4.6 of the standard specifications). In addition to construction activities, schedule activities shall include the submittals, procurement, and Department or Utility activities:

1. Submittal activities shall include submittal preparation, Department review, and acceptance of submittals. If the Department's action on any submittal is "Not Accepted" or "Revise and Resubmit", a new series of submittal preparation activities shall be inserted into the schedule. Predecessor for the new submittal preparation activity will be the

original acceptance activity and the successor of the new acceptance activity will be the fabrication/delivery activity for the equipment or material.

2. Procurement activities shall include all project specific materials and equipment that require submittals and are not readily available, fabrication of special material and equipment, and their installation and testing.

3. Show activities of the Department or Utilities that affect progress and contract-required dates for completion of all or parts of the work.

Detailed schedule data: shall conform to the following:

1. All activities shall be assigned to a specific project calendar within the software. Specific project calendars will be defined within the software to include planned work days and planned non-work days. These project calendars will include both Contractor and Contract defined holidays and suspension days as non-workdays. The use of global calendars is not permitted. Project calendars shall not inherit holidays from global calendars. Work shifts identified for each project calendar shall be consistent with the Contractor's planned workdays. Actual start and finish date times shall be consistent with the work shift hours on the calendar assigned to the activities.

2. A cost account drawdown schedule depicting amount earned by month through project completion. The sum total of the cost accounts shall be equal to the current contract value.

3. At a minimum, each schedule activity shall contain codes by:

a. Responsibility: for items of work that are not in control of the Contractor including, but not be limited to, Department, Utility, etc.

b. Phasing: identify the appropriate Maintenance of Traffic

phase or subphase.

The required coding can be accomplished by WBS codes or project

activity codes.

4. Key milestones as identified by Contract. At a minimum, the start and finish of each Maintenance of Traffic phase or subphase shall be represented by a milestone activity. Milestone activities shall be start or finish milestone type activities, as appropriate.

5. All non-procurement activities must be less than or equal to 20 workdays unless approved by the Engineer. Sufficient explanation for activities over 20 days shall be provided for the Engineers review and approval.

6. All activities must include adequate detailed activity descriptions to describe the work that is included. In each activity, provide sufficient detail so that the amount of work the activity involves is clearly communicated.

7. Only two open-ended activities (the first and the last) are allowed.

8. Constraints shall only be used for "project start," and "project completion." Constraints shall not override logic. The project start constraint shall be the Contract execution date. The project completion date shall be the Contract completion date plus any Contract defined holidays and suspension days included on the longest path. The use of any other imposed constraints is not allowed without specific approval by the Engineer. Any other desired constraints must be submitted to the Engineer with the rationale for the use of each desired additional constraint. If allowed by the Engineer, the rationale should be recorded in the activity's notebook field. Mandatory constraints (start and finish) violate network logic and shall not be used.

9. Out of sequence progress shall be corrected on each monthly update by modifying the schedule logic so that the logic accurately depicts the actual sequence of the work. The Retained Logic setting shall be used when calculating the schedule.

10. All changes to activities shall be recorded with a note in the activity notebook field. The notebook entry shall include, as a minimum, the date and reason for the change, as well as reference to a document wherein the Engineer acknowledges and accepts the change.

11. The use of resource leveling, either manual or automatic, is

prohibited.

Contractor.

12. Activities shall not be deleted from the schedule. If an activity is not required, then upon approval from the Engineer, the Contractor shall provide actual start and finish dates equal to the date of the Engineer's approval, shall add the word "Removed" to the activity name and shall make a notebook entry explaining the reason for removing the activity from the planned work.

13. Activities shall be added to the schedule upon notifying the Engineer when it is determined that a Contract work element was omitted from the previous accepted Contract schedule or update or if work is added to the Contract, or to reflect a time extension in accordance with 8-7.3.2.

14. Activity names shall only be changed to reflect changes to the scope of the work element represented by the activity, not as a way to remove and replace activities. Changes to activity names shall be approved by the Engineer.

15. Unless otherwise approved by the Engineer, activity types shall be defined as milestones, level-of-effort, WBS summary or task dependent. Resource dependent type shall not be used. All activities shall have percent complete type set to duration and duration type set to either fixed duration and unit/time or fixed duration and units.

**8-3.2.4 Weekly Meetings:** Attend weekly meetings scheduled by the Engineer to discuss Contract progress, near term scheduled activities, including utility relocations, problems and their proposed solutions. Submit a Three-Week Planning Schedule at each weekly meeting, showing the Contract schedule activities completed in the previous week and planned for the next two weeks. Develop the Three-Week Planning Schedule in Gantt chart format from the updated Contract schedule, identifying completed, current and planned activities. Designate all activities that are controlling work items as determined by the currently accepted Contract Schedule

**8-3.2.5 Float:** Float is defined as the amount of time the finish of an activity can be delayed. Two kinds of float are possible: Total float is how much an activity can be delayed without affecting the finish date of the project or an intermediate deadline (constraint); it is the difference between the late finish date and the early finish date. Free float is how much an activity can be delayed without affecting its earliest successor.

Float is not for the exclusive use or benefit of either the Department or the

Use of float suppression techniques, such as preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), special lead/lag logic restraints, zero total or free float constraints, extended activity times, positive relationship lags, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates. The use of finish-to-start lags greater than zero days, start-to-start lags that exceed the duration of the predecessors, or finish-to-finish lags that exceed the duration of the successor, shall not be used without the expressed approval of the

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Engineer. The use of Resource Leveling, or similar software features, for the purpose of artificially adjusting activity durations to consume float and influence the critical path is expressly prohibited.

Negative float shall not be a basis for requesting time extensions. Any extension of time shall be addressed in accordance with 8-3.2. 7. Scheduled completion dates that extend beyond the Contract completion date, evidenced by negative float, may be used in computations for assessment of payment withholdings. The use of this computation is not to be construed as a means of acceleration.

**8-3.2.6** Critical Path: The critical path shall be defined as the longest path and is represented by the longest logical path through the remaining activities, resulting in the earliest calculated completion date. There may be more than one longest path in the schedule. However, the use of float suppression techniques as described in 8-3.2.5 shall not be used to force the schedule to have more than one longest path.

**8-3.2.7 Time Extensions:** The Contractor is responsible for submitting a request for Contract Time extension in accordance with 8-7.3.2. An extension of time shall be considered only to the extent that an event impacts the completion date of the schedule such that the impacted completion date is later than the Contract completion date as adjusted previously. The Pre-event Schedule is defined as the latest accepted update of the Contract schedule, statused (actual start dates added, actual finish dates added, remaining durations adjusted) to the end of the day before the start of the event. The Post-event Schedule is defined as the accepted update of the Contract Schedule just after the end of the event and destatused (actual start dates removed, actual finish dates removed, remaining durations adjusted) to the end of the last day of the event.

As a minimum, time extension requests shall contain:

- 1. A descriptive summary of the event
- 2. A written analysis supported by a:
  - a. Pre-event Schedule
  - b. Post-event Schedule
- 3. Schedule submittal items 1, 2, 3 and 4 required in 8-3.2.2 shall be provided for the Pre-event and Post-event schedules

Time extensions shall not be considered for proposals that do not include full documentation described above. Once a time extension has been approved by the Engineer, the Contract completion date shall be changed accordingly.

**8-3.2.7 Performance of Work:** By submitting a schedule, the Contractor is making a positive assertion that the project has been and will be constructed in the order indicated in the schedule. Prosecute the work in accordance with the latest accepted Contract Schedule or update. Any costs associated with meeting milestones and completing the project within the authorized Contract Time will be borne solely by the Contractor.

**8-3.2.8 As-Built Schedule:** Submit an as-built schedule along with the Qualified Acceptance Letter if the Contactor elects the use of the Qualified Acceptance Letter as described in 9-8.1. The as-built schedule shall describe the actual order and start and stop times for all activities by the Contractor.

### **DIVISION II-CONSTRUCTION DETAILS**

## SECTION 102 – MAINTENANCE OF TRAFFIC (LCDOT 09/15/2023)

Article 102-4: Delete Article 102-4 in its entirety and substitute the following:

The Contractor shall submit a complete Traffic Control Plan (TCP) to the Engineer for review and approval at the preconstruction meeting. Prepare the TCP in conformance with and in the form prescribed in the current version of the FDOT Design Manual, FDOT Standard Plans – Index 102 series and the MUTCD. Indicate in the plan a TCP for each phase of activities. Take responsibility for identifying and assessing any potential impacts to a utility that may be caused by the TCP, and notify the County in writing of any such potential impacts to utilities. The TCP shall be signed and sealed by a professional engineer duly registered in the State of Florida.

Engineer's approval of the TCP does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those depicted in the original Contract Documents, and which effect a change in utility work different from that shown in the utility plans, joint project agreements, interlocal agreements or utility relocation schedules.

The County reserves the right to reject any Traffic Control Plan. Obtain the Engineer's written approval before beginning work using a TCP. The Engineer's written approval is required for all modifications to the TCP. The Engineer will only allow changes to the TCP without proper documentation on an emergency basis.

Pedestrian and/or bicycle traffic must be safely and continuously maintained through, or around, work zones on highway or streets where pedestrian and bicyclists were permitted at the start of the project. The Contractor shall submit a plan for approval signed and sealed by a professional engineer duly licensed in the State of Florida for the safe passage of pedestrian and bicycle traffic prior to closure of any existing pedestrian facility. Facilities constructed to specifically provide access for pedestrians in or around work zones must be consistent with the current United States Access Board-PROWAG. The plan shall detail the rerouting of users, duration of closure and proposed construction methods for any temporary facility.

All costs for maintenance of traffic including preparation of Traffic Control Plan shall be in included in the price bids for Pay Item 102-1 – Maintenance of Traffic, except as expressly provided for in other pay items in the contract.

<u>Subarticle 102-9.15</u>: Delete Subarticle 102-9.15 in its entirety and substitute the following:

Temporary Traffic Detection Technology – Maintain all existing actuated or traffic responsive mode signal operations for main and side street movements for the duration of the contract and restore any loss of detection within 12 hours. Video detection shall be

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installed at the beginning of the project before any loss of detection has occurred. The contractor shall furnish, install and operate video detection using technology approved by Lee DOT Traffic Division and as listed in Lee County DOT Traffic Plan Specifications posted on the county website at <a href="https://www.leegov.com/dot/traffic/trafficstandard">https://www.leegov.com/dot/traffic/trafficstandard</a>

## **SECTION 200 - PRIMING AND MAINTAINING**

Article 200-8.1: The following Article shall be added in its entirety:

The Contractor shall select the particular type of base material and prime coat material that are compatible and adhere together. If the prime coat is damaged by subsequent construction equipment, including the paving machine, construction shall be stopped, and the base/prime shall be removed and replaced.

## SECTION 430 – PIPE CULVERTS AND STORM SEWERS (LCDOT 10/27/2017)

Article 430-3: Articles 430-3.1 is modified as follows:

Pipe material for storm sewer or cross drain installations under pavement shall consist of steel reinforced concrete pipe in accordance with Section 449 and shall be a minimum of Class III or HE-III.

## **DIVISION III-MATERIALS**

Reserved

# EXHIBIT J SPECIAL PROVISIONS

[NOTE: Special Provisions are additions and revisions to the standard and supplemental specifications applicable only to this individual project, and generally deal with unique or specific commercial and/or general administrative issues. Special Provisions should NOT address technical subjects. Technical Subjects should be addressed in Technical Special Provisions]

### 1. CONTRACT TIME

Contractor shall perform the contracted work fully, entirely, and in accordance with the Contract Documents within the Contract Time specified herein. If the Contractor fails to complete the work within the time stipulated, liquidated damages will apply in accordance with Standard Specification Article 8-10 Liquidated Damages for Failure to Complete the Work.

Contract Time: XXX Calendar Days Commencement Date to Final Acceptance

### 2. PERMITS

In accordance with Article 7-2 of Division I, permits and licenses procured by the County are listed below and attached hereto.

[NOTE: LIST ALL APPLICABLE PERMITS BELOW AND ATTACH TO THIS EXHIBIT J]

- a. Permit 1
- b. Permit 2
- c. Permit 3

## 3. GEOTECHNICAL INFORMATION

Certain subsurface explorations and/or testing were conducted by the County in the design of this Project. Reports summarizing this work are listed below and attached hereto. The attached information is NOT a part of the Contract Documents and is provided as a supplement for informational purposes only. The County is not responsible for the accuracy, completeness or usefulness thereof. The County makes no warranty, express or implied, for the data, interpretations or opinions contained therein. Any person or party that utilizes the attached information does so purely at its own risk, and the County disclaims any responsibility or liability for any user's reliance upon the information.

INOTE: LIST ALL DOCUMENTS BELOW AND ATTACH TO THIS EXHIBIT J

- a. Report 1
- b. Report 2
- c. Report 3

### 4. WARRANTY

If within three (3) year after Final Acceptance, any Work is found to be Defective due to base failure, Contractor shall correct it promptly after receipt of written notice from the County. Prior to Final Payment, Contractor shall provide and maintain through three (3) years after final acceptance a Warranty Bond for base failures. Contractor will repair damage caused by the failure and/or repair.

### 5. MATERIAL TESTING

For all naturally occurring excavated materials the County reserves the right to sample and test the material at the source at the County's cost and sole discretion. The intent of this testing would be to confirm the material produced at the site meets specification requirements prior to delivery and acceptance at the project site. The County shall notify the contractor and supplier as soon as discrepancies are noticed, if any. Once notified of material issues the Contractor and supplier shall submit to the County for approval a plan to immediately rectify material properties and consistency prior to delivery and acceptance at the project site.

## EXHIBIT K TECHNICAL SPECIAL PROVISIONS

[NOTE: Technical Special Provisions are specifications of a true technical nature for work that is not addressed (or cannot be effectively modified) in Divisions II or III of the Standard Specifications. Technical Special Provisions should be signed and sealed by the EOR. A signature box should be included to cover the EOR for all disciplines covered in the Technical Special Provisions].

If none, mark the section "RESERVED"

I hereby certify that these Technical Special Provisions have been properly prepared by me, or under my responsible charge:

<b>Technical Special Provisi</b>	ion Section(s):	XXX, XXX, XX	X
Signature:			
Date:			
Engineer of Record:			
Florida License No.:			
Firm Name:			
Firm Address:			
City, State, Zip Code:			
Cert. of Authorization No:			

# EXHIBIT L FDOT AND LEE COUNTY DESIGN STANDARDS

The following design standards are expressly agreed to be incorporated by reference and made a part of this Agreement:

1. Florida Department of Transportation **FY 20XX-XX** Standard Plans as published at the following link:

https://www.fdot.gov/design/standardplans/SPRBC.shtm

2. Lee County Department of Transportation Plan Specifications for Sign Installation, the latest edition as published at the following link:

http://www.leegov.com/dot/traffic/trafficsigninstallation

3. Lee County Department of Transportation Plan Specifications for Signal & Street Lighting, the latest edition as published at the following link:

http://www.leegov.com/dot/traffic/trafficstandard

4. Lee County Utilities Design Manual, the latest edition as published at the following link:

http://www.leegov.com/utilities/design-manual

In the event of discrepancies between the Lee County and FDOT Design Standards, Lee County Standards shall govern.

# EXHIBIT M <u>DEVELOPMENTAL SPECIFICATIONS</u>

[NOTE: Developmental Specifications are specifications developed around a new process, procedure, or material with the prior knowledge that subsequent adjustments might be necessary prior to adoption for standard usage. These will rarely be used by Lee County DOT, and have been included to preserve connectivity with FDOT standards. A signature box should be included to cover the EOR for all disciplines covered in the Developmental Specifications.]

If none, mark the section "RESERVED"

I hereby certify that these Developmental Specifications have been properly prepared by me, or under my responsible charge:

Developmental Specifications Section(s): XXX, XXX, XXX				
Signature:				
Date:				
Engineer of Record:				
Florida License No.:				
Firm Name:				
Firm Address:				
City, State, Zip Code:				
Cert. of Authorization No:				