

# TECHNICAL SPECIFICATIONS

## **DIVISION 01**

# **GENERAL REQUIREMENTS**

**SECTION 01 11 00****SUMMARY OF WORK****PART 1 THE WORK AND ITS PERFORMANCE****1.01 CHARACTER OF THE WORK**

Unless otherwise expressly provided in the Contract Documents, the Work must be performed in accordance with best modern practice, with materials and workmanship of the highest quality to the satisfaction of the County.

**1.02 DESCRIPTION OF THE PROJECT**

- A. The project title is: **Andrews Road Resurfacing Project (CR121 to US1)**  
**Bid Number NC17-011**  
**Nassau County, Florida**
- B. This project consists of leveling and overlay of pavement on Andrews Road from CR121 to US1 in Nassau County, Florida. The work to be performed is generally described as resurfacing of a two lane rural road and includes (no work is to be performed in the RR right of way):
- Performing embankment work on shoulders to match pavement profile.
  - Milling pavement at joints with existing pavement.
  - Leveling the existing asphalt.
  - Overlay of existing asphalt pavement.
  - Traffic maintenance and protection.
  - Pavement markings and signage.
  - Placing Performance Turf (Sod and Hydroseed).

All work shall be in accordance with the construction drawings, specifications, and contract documents.

**BIDDERS MUST BE FDOT PRE-QUALIFIED FOR ALL WORK REQUIRED FOR THIS PROJECT.**

- C. The specification divisions and drawings are an integrated part of the contract documents and, as such, will not stand alone if used independently as individual sections, divisions, or drawings sheets. The drawings and specifications establish minimum standards of quality for this project. They do not purport to cover all details entering into the design and construction of materials and equipment.

## PART 2 WORKING HOURS

### 2.01 GENERAL

Work under this contract shall not be performed on County, State and/or national holidays or during such events as the Fernandina Beach Shrimp Festival, Nassau County School System FCAT (as identified at the pre-bid conference), except in time of emergency, and then only under written permission from the County who shall be the sole judge as to the urgency of that situation. Available workdays to perform work will not include night time work, weekend work, or work before 8:00 am or after 5:00 pm (40 hours per work week).

Should the Contractor deem it necessary to work on weekends (Saturday or Sunday), holidays, or beyond the previously defined working hours in order to comply with his construction schedule or because of an emergency, the Contractor shall request permission of the County. If, in the opinion of the County, the need is bona fide, the County may authorize the Contractor to work such hours as may be necessary. If the County grants the contractor the right to work beyond the normal working hours, the charges shall be those as described in Section 2.04 or as invoiced to Nassau County by CEI and Testing or other professionals required to monitor construction activities as determined by the Owner. A subsequent reduction in pavement to the Contractor will be applied by a corresponding Change Order.

### 2.02 LANE CLOSURES

Lane closures are restricted to the hours of 9:00 am to 4:00 pm. Any changes to these lane closures restrictions must be approved by Nassau County. See the Traffic Control Plans in the construction plans set for additional work restrictions.

### 2.03 ROAD CLOSURE

Not anticipated, but if necessary for some reason the Contractor must follow Road Closure Policy in Appendix B.

### 2.04 REIMBURSEMENT FEES

Should the County approve work time beyond regular hours, the following hourly rates shall be applied as the County's reimbursement of Engineer of Record's fee to be paid by Contractor for expenses defined in Supplemental Conditions SC-6.02.C, SC-6.05.A.2.f, SC-6.17.E., SC-9.05.B and SC-13.03.A. However, the County may allow the contractor to pay the "actual" overtime charges the County incurs, whichever is lowest. The additional charges will not be paid directly to the CEI or Engineering firm but shall be executed in a deductive change order to the contract.

A. Engineer	\$250.00
B. Project Manager	\$200.00

C. Construction Administrator	\$175.00
D. Inspector	\$150.00
E. Administrative Assistant	\$100.00
F. Consultant Construction Engineering Inspector (CEI)	\$150.00

### **PART 3 ABBREVIATIONS**

#### **3.01 ORDINANCES, REGULATIONS, STANDARDS, AND CODES**

Reference in the specifications to known standards, codes, specifications, etc., promulgated by professional or technical associations, institutions, and societies, is intended to mean the latest edition of each such standard adopted and published as of the date of the Invitation to Bid on this project except where otherwise specifically indicated. Each such standard referred to shall be considered a part of the specifications to the same extent as if reproduced herein in full. The following is a list of applicable documents that apply to this contract.

American Association of State Highway and Transportation Officials (AASHTO) formerly (AASHO)

American Concrete Institute (ACI)

American Institute of Steel Construction (AISC)

American Iron and Steel Institute (AISI)

American National Standards Institute (ANSI)

American Standards Association (ASA)

American Society of Mechanical Engineers (ASME)

American Society of Testing and Materials (ASTM)

American Water Works Association (AWWA)

American Welding Society (AWS)

Anti-Friction Bearing Manufacturer's Association (AFBMA)

Building Officials and Code Administrators International, Inc. (BOCA)

Construction Specifications Institute (CSI)

Federal Specifications (FS)

Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, Latest Edition

Florida Department of Traffic Design Standards (FDOT Index), Latest Edition

National Bureau of Standards (NBS)

National Electrical Manufacturer's Association (NEMA)

National Fire Protection Association (NFPA)

Portland Cement Association (PCA)

Occupational Safety and Health Act (Public Law 91-596), U.S. Department of Labor (OSHA)

Steel Structures Painting Council (SSPC)

Southern Standards Building Code (SSBC)

Underwriters' Laboratories, Inc. (UL)

United States of America Standards Institute (USASI)

Regulations of Florida Industrial Commission Regarding Safety

All local, state, county, or municipal building codes requirements of the Owner's Insurance

**SECTION 01 22 50****MEASUREMENT AND PAYMENT****PART 1 GENERAL**

Work under this Contract shall be paid as designated below under the appropriate items associated with the Bid Schedule. Payment shall be in accordance with Lump Sum or Unit Price bid by the Contractor in his proposal.

When Lump Sum prices are contained in the Bid Schedule, the Contractor shall provide a detailed schedule of values for Lump Sum cost acceptable to the Engineer of Record and the County, which will be used for estimating partial payment requests.

Contractual costs for work not specifically mentioned under a payment item and which are incidental to the overall conduct of the work shall be included in the individual items at the Contractor's option. No additional charges shall be made to the County for items not specifically mentioned under individual payment items. Examples of these types of costs include, but are not limited to, the following: bonds, insurance, permits, licenses, traffic control, dust control, clean-up, temporary access, temporary facilities, soil erosion control, temporary drainage, temporary offices, restoration of disturbed areas, temporary utilities, test pits locating existing utilities, temporary water and sewer, surveying, layout, and other items similar to above.

Measurement and payment for all items shall be in accordance with the FDOT Standard Specifications for Road & Bridge Construction, Latest Edition with the exception that reduction in the FDOT acceptance criteria based on payment factors will not be allowed.

**PART 2 BID SCHEDULE ITEMS****Item 1. Mobilization**

- A. Measurement and Payment for Mobilization shall be in accordance with Section 101 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
- B. Payment will be made under Item No. 101-1R Mobilization, on a lump sum basis.

**Item 2. Maintenance of Traffic**

- A. Measurement and Payment for Maintenance of Traffic shall be in accordance with Section 102 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.

- B. Payment will be made under Item No. 102-1R Maintenance of Traffic, on a lump sum basis.

**Item 3 & 4. Embankment**

- A. Measurement and Payment for Embankment shall be in accordance with Section 120 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
- B. Payment will be made under Item 120-6 Embankment and Item 120-6M Millings, on a cubic yard basis.

**Item 5. Milling of Existing Asphalt Pavement**

- A. Measurement and Payment for Milling of Existing Asphalt Pavement shall be in accordance with Section 327 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
- B. Payment will be made under Item 327-70-5 Milling Existing Asphalt Pavement, 1" Avg. Depth, on a per square yard basis.

**Item 6 & 7. Superpave Asphaltic Concrete**

- A. Measurement and Payment for Superpave Asphaltic Concrete shall be in accordance with Section 334 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. Note the County does not entertain pay factors for asphalt. Acceptance and payment will be based on normal acceptance criteria.
- B. Payment will be made under Section 334 as follows:
  - 1) Item No. 334-1-22 Superpave Asphaltic Concrete (SP 9.5), 1.25" Lift, on a per ton basis. Contractor must meet all pavement testing requirements.
  - 2) Item No. 334-1-22L Superpave Asphaltic Concrete (SP-9.5) 50 lb/sy leveling course, on a per ton basis. Contractor must meet all pavement testing requirements.

**Item 8 & 9. Performance Turf**

- A. Measurement and Payment for Performance Turf shall be in accordance with Section 570 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.



- B. Payment will be made under Item No. 570-1-1 Performance Turf (Hydroseed), on a per square yard basis.
- C. Payment will be made under Item No. 570-1-2 Performance Turf (Sod), on a per square yard basis.

**Item 10. Retro Reflective Pavement Markers**

- A. Measurement and Payment for Retro Reflective Pavement Markers (RPM) shall be in accordance with Section 706 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
- B. Payment will be made under Item No. 706-3, Raised Retro Reflective Pavement Markers (RPM) (Bi-Directional Yellow), on a per each basis.

**Item 11-15. Thermoplastic Pavement Markings**

- A. Measurement and Payment for Thermoplastic Pavement Markings shall be in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.
- B. Payment will be made under Item No. 711 Thermoplastic Traffic Stripes as follows:
  - 1) Item No. 711-15-101 Thermoplastic, Standard, White, Solid, 6", on a per net mile basis.
  - 2) Item No. 711-15-201 Thermoplastic, Standard, Yellow, Solid, 6", on a per net mile basis.
  - 3) Item No. 711-14-125 Thermoplastic, Preformed, White, Solid, 24", on a per linear foot basis.
  - 4) Item No. 711-16-231 Thermoplastic, Standard, Yellow, Skip, 6" on a per gross mile basis.
  - 5) Item No. 711-14-160 Thermoplastic Preformed, White, Message on a per each basis.

**SECTION 01 31 19****PROJECT MEETINGS****1.01 PRECONSTRUCTION CONFERENCE**

- A. A preconstruction conference will be scheduled after award of contract and prior to beginning work. This meeting shall be attended by Engineer of Record, the County, and an authorized representative of Contractor.
- B. Meeting will consider matters of contract administration and initial construction operations.
- C. Contractor shall submit proposed construction schedule prior to or at preconstruction conference; see Section 01 33 00.

**1.02 PROGRESS MEETINGS**

- A. Periodic progress meetings will be held at a time and place mutually agreed upon at preconstruction conference. A responsible representative of Contractor who can bind Contractor/subcontractor to decisions shall attend. A responsible representative of other subcontractors working on site shall also attend.
- B. Meetings will be held to coordinate and expedite progress of work and shall be conducted by Contractor. Contractor and each subcontractor on site shall submit a written report at each meeting indicating:
  - 1. Work progress since last meeting.
  - 2. Upcoming work sequences and schedules.
  - 3. Requests for information.
- C. Contractor shall record meeting minutes and shall distribute a written summary of items discussed to all parties involved in the project within 48 hours of each meeting. The written summary shall document all issues discussed and decisions reached at the progress meeting.

**SECTION 01 33 00****SUBMITTAL PROCEDURES****1.01 SUMMARY**

- A. Submit items to Engineer of Record for review as listed below and as required by the other Contract Documents. Refer to individual specification sections, General Conditions, Supplementary Conditions, and sections of Division 01 - General Requirements for submittal requirements.

**1.02 CONSTRUCTION SCHEDULE**

- A. Prior to or at preconstruction conference, submit two copies of a proposed schedule of operations. Coordinate activities of the various trades for orderly completion of the work. Coordinate activities with those of the County to schedule a minimum of temporary disruptions to continuing operations. Allow ample time for the County to alter operations as required.
- B. After acceptance of construction schedule, distribute copies to subcontractors and other parties required to comply with scheduled dates.
- C. When revisions to schedule are made, notify all parties of changes in writing.

**1.03 SCHEDULE OF SUBMITTALS**

- A. Within 10 days of acceptance of construction schedule, submit two copies of a schedule of submittals. Schedule shall list anticipated date for each required submittal and shall allow A/E reasonable time for reviews. Submit all submittals requiring Engineer of Record review within 30 days of acceptance of construction schedule.
- B. After acceptance of schedule of submittals, distribute copies to subcontractors and other parties required to comply with submittal dates.

**1.04 SHOP DRAWINGS**

- A. Required shop drawings are designated under the various specification sections. Submit shop drawings for review prior to fabrication, delivery, or installation. Submit a minimum of five copies; two copies will be retained and the remainder returned to Contractor who shall keep one copy at project site.

- B. Fabrication and erection drawings may consist of a reproducible and two sets of prints; the reproducible copy will be returned to Contractor.
- C. Each brochure of shop drawings shall contain an index of contents and shall consist of layout details, schedules, setting instructions, manufacturer's literature, and other data specifically prepared for the work. Shop drawings shall be identified with project name, numbered consecutively, and bear the stamp of approval of Contractor as evidence of accuracy, compatibility, and conformance with contract requirements. Drawings not so stamped will be returned without being examined.
- D. Specific written notice shall be given of each variation that shop drawings may have from requirements of the Contract Documents.
- E. Partial submittals will not be considered; each portion of work shall be complete in one submittal.
- F. Shop drawings shall not be used in the work unless they have been reviewed and bear the stamp and signature of Engineer of Record. Shop drawings will only be reviewed for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Contractor shall be responsible for confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction, coordinating his or her work with that of all other trades, and performing all work in a safe and satisfactory manner. Corrections or comments made on shop drawings shall not relieve Contractor from compliance with requirements of Drawings and Specifications and shall not be considered an order for extra work.
- G. If information on previously reviewed shop drawings is altered, submit changes for review.

#### **1.05 PRODUCT DATA**

- A. Required product data submittals are designated under the various specification sections. Submit product data for review in accordance with procedures for shop drawings.
- B. Product data shall consist of manufacturer's literature, illustrations, and brochures of catalog cuts; instructions for handling, storage, and installation; and specifications and design data. Where multiple options are indicated, identify specific options as required for this project.

- C. Products subject to product data review shall not be used in the work until they have been reviewed and bear the stamp and signature of Engineer of Record.

#### **1.06 SAMPLES**

- A. Prior to fabrication, delivery, or installation, submit samples as designated in the various specification sections; allow reasonable time for review and testing.
- B. Submit samples in sufficient quantity and of adequate size to show quality, type, and extremes of color range, finish, and texture. Submit a minimum of two sets of appearance and color samples. Label each sample stating material, description, project name, and Contractor's name. Expedite submittal of appearance and color samples following Notice to Proceed.
- C. Submit samples with transmittal letter requesting review; prepay transportation charges. Samples shall become the County's property, unless otherwise designated.
- D. Samples will be reviewed for acceptability or selection of color, pattern, and texture only. Compliance with specifications is the responsibility of Contractor.
- E. Order no materials subject to sample review until receipt of written notice of completion of review. Installed materials shall match reviewed samples. No review of samples shall be taken in itself to change contract requirements.

#### **1.07 CERTIFICATES OF COMPLIANCE**

- A. Submit two copies of certificates of compliance as designated in the various specification sections.
- B. Certificates shall be furnished by manufacturer, producer, or supplier of material or product and shall indicate that material or product conforms to or exceeds specified requirements. Include supporting reference data as appropriate. Certificates may be recent or previous test results on material or product, but must be acceptable to Engineer of Record.

#### **1.08 PERMITS AND APPROVALS**

- A. Submit one copy of permits, code inspections, and agency approval documents, as designated in the various specification sections.

**1.09 TEST REPORTS**

- A. Submit two copies of test reports as designated in the various technical specifications.

**1.10 PROJECT RECORD DOCUMENTS**

- A. Keep a current set of documents at job site that are marked to show all changes made during construction. Dimension underground and concealed work and utilities from permanent reference points; record vertical distances. Submit project record documents upon completion of Work.

**SECTION 01 41 23****PERMITS AND FEES****PART 1 - GENERAL****1.01 DESCRIPTION**

- A. County Responsibilities: The County has obtained the following permits: N/A
- B. Contractor responsibilities: Obtain and pay for all other permits and licenses required by authorities having jurisdiction, including but not limited to: land clearing permit, NPDES Notice of Intent and dewatering permit.
- C. Contractor shall be responsible to adhere to all provisions, requirements, and cost contained in all permits applicable to this project.

**PART 2 - PRODUCTS (NOT USED)****PART 3 - EXECUTION (NOT USED)**

**SECTION 01 45 00****QUALITY CONTROL****PART 1 GENERAL****1.01 CONTRACTOR QUALITY CONTROL PLAN**

The Contractor is responsible for his own quality control and must comply with FDOT Specifications Section 105 Contractor Quality Control General Requirements. Nassau County will act as the Department in all issues relating to Quality Control.

**1.02 SECTION INCLUDES**

Certification and testing, examination by the County, quality assurance testing, and final approval or work.

**1.03 CERTIFICATION AND TESTING**

The materials and equipment used in the construction of the project shall be subject to adequate certification and testing in accordance with generally accepted standards, as required and defined in the Contract Documents.

**1.04 CONTRACTOR TO PROVIDE**

The Contractor shall provide all tools, testing apparatus, materials to be tested, and labor as necessary to provide certification required by the Contract Documents.

**1.05 OUTSIDE AGENCY**

If the Contract Documents, laws, ordinances, rules, regulation or orders of any public authority having jurisdiction require any work to be certified, tested, or approved by someone other than the County, the Contractor will give the Engineer of Record timely notice of readiness. The Contractor will then furnish the County the required certification and/or testing certificates for approval.

**1.06 LIMIT OF APPROVALS**

Certifications, tests, or approvals by the County, Engineer of Record, or others shall not relieve the Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.



**1.07 ACCESS TO WORK SITE**

The County and his representative will at all times have access to the work. In addition, authorized representatives and agents of any participating federal or state agency shall be permitted access to all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work.

**PART 2 EXAMINATION BY THE COUNTY****2.01 ACCESS**

The County contemplates and the Contractor agrees to thorough examination of the work at all times by the County and the Engineer of Record, including all labor performed and materials furnished, delivered, or intended to be used in the work, including manufacture, preparation, and testing. The Contractor shall not use any material which has not been tested and accepted. The Contractor shall keep the Engineer of Record advised of the progress of the work away from the site requiring certification of witnessing of tests to ensure that scheduling conflicts or delays do no develop.

**2.02 ACCEPTANCE TESTS**

Tests, or acceptance of any materials prior to shipment, shall not be deemed as a final acceptance of the materials. The County may require tests or analysis of any portion of the materials at any time. Any material which is found to be defective or which does not otherwise conform to the requirements of the specifications shall be rejected and removed forthwith from the site, as provided in the contract.

**2.03 RIGHT TO EXAMINE WORK**

The County and the Engineer of Record shall have the right to examine all materials and work done during any phase of construction, fabrication, or manufacture. The Contractor shall furnish all reasonable facilities and aid to the Engineer of Record and safe and convenient means for the examination of any part of the work. No work shall be closed or covered until it has been duly examined and approved.

**PART 3 QUALITY ASSURANCE TESTING****3.01 DESCRIPTION**

The Contractor is required to provide all testing as described in these specifications. Testing shall be completed by an independent testing laboratory retained by the Contractor and approved by the Engineer of Record. The Contractor is required to submit independent testing laboratory qualifications. Certifications, tests, or approvals by the County, Engineer of Record, or others shall not relieve the Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

**3.02 CODES AND REGULATIONS TESTING**

Testing will be in accordance with all pertinent codes and regulations and with selected standards of the American Society of Testing and Materials. The Engineer of Record shall process and distribute all required copies of test reports and related instruction to ensure all necessary retesting and/or replacement of materials with the least possible delay in progress of work.

**3.03 RETESTING**

When initial quality assurance tests indicate noncompliance with the Contract Documents, all subsequent retesting occasioned by the noncompliance shall be performed by the same testing laboratory and the costs thereof shall be borne by the Contractor.

**3.04 COOPERATION WITH THE COUNTY'S TESTING LABORATORY**

The County may perform any additional tests that they may deem necessary at its own expense. Representatives of the County's testing laboratory shall have access to the work at all times. The Contractor shall provide facilities for such access in order that the laboratory may properly perform its functions.

**3.05 ADDITIONAL TESTING**

If the County orders sampling, analysis, or tests of materials which are specified to be accepted on certification by the manufacturer, but which appear defective or not conforming to the requirements of the specifications, the Contractor shall bear all the costs of sampling, transportation, tests, and analyses if the material is in fact found defective or does not conform to the specifications. If the material is found to be sound and conforming to the specifications, the County will pay for the testing.

**PART 4 FINAL APPROVAL****4.01 FINAL APPROVAL**

Final approval of the Work shall be made by the County and the Engineer of Record shall be contingent upon the findings of a thorough examination of the Work. Such examination shall be made within ten (10) working days after receipt of the Contractor's written request. The Work will be accepted and deemed completed as of the date of such examination if, upon such examination, the Engineer of Record and the County find that no further Work remains to be done at the site. If the examination reveals items of Work still to be performed, the Contractor shall promptly perform them and request a re-examination. If upon any re-inspection the Engineer of Record and the County determine that the Work is complete, the date of completion shall be deemed to be the actual date of such re-examination.

**SECTION 01 50 00****TEMPORARY FACILITIES AND CONTROLS****1.01 TEMPORARY ELECTRICITY**

- A. Contractor shall provide temporary electric service and distribution facilities as required for its own construction purposes. Provide portable power supply or make arrangements with local utility company for temporary service including service poles, driven ground, main service switch, transformer, and metering facilities. Pay for electrical energy consumed.

**1.02 TEMPORARY LIGHTING**

- A. Contractor shall provide temporary lighting sufficient to enable its workers to complete work and to enable inspectors to check work, as required.

**1.03 TEMPORARY WATER**

- A. Contractor shall be responsible for obtaining water for its needs. Pay cost of water used and meter rental, if applicable.

**1.04 TEMPORARY SANITARY FACILITIES**

- A. Contractor shall provide temporary outside toilets sufficient for its own workers.

**1.05 TEMPORARY FIRE PROTECTION**

- A. Contractor shall provide fire extinguishers and other fire protection equipment for all possible classes and types of fire.

**1.06 PROTECTION OF WORK AND PROPERTY**

- A. Observe safety provisions of applicable laws and regulations.
- B. Erect and maintain all required planking, barricades, guardrails, fences, safety lanterns, and temporary walkways of sufficient size, strength, and type necessary for protection of material storage, adjacent property, and new construction, as well as to prevent accidents to public and workers at job site.
- C. Notify the County if existing property interferes with work so that arrangements for proper protection can be made.

- D. Protect all work, materials, apparatus, and fixtures incorporated in work or stored on site against damage. At end of day, cover all new work likely to be damaged.
- E. Protect all finished construction until acceptance by the County. Repair damage to finished work to satisfaction of the County.

#### **1.07 ENVIRONMENTAL CONTROLS**

- A. Maintain erosion control measures to protect the project site and prevent sediment pollution of adjacent water courses and properties.
  - 1. Install erosion control measures prior to start of construction and maintain them until final completion of work. Unless otherwise instructed, remove temporary erosion control measures prior to final application for payment.
  - 2. Strive to limit stripping of sod and vegetation to a period that will expose bare soil to the least possibility of erosion that construction requirements allow.
  - 3. Construct and maintain silt fence barriers, erosion bale barriers, or temporary diversions to receive runoff leaving site.
  - 4. Protect storm drain inlets by using silt fence barriers, erosion bale barriers, or equivalent.
  - 5. Remove at the end of each work day soils and sediment reaching public or private streets not part of the construction site.
  - 6. Unless otherwise shown or specified, erosion control measures shall comply with the planning, design, and maintenance provisions of Section 104 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 2010 Edition and Index Nos. 102 and 103 in the 2010 Roadway and Traffic Design Standards Manual.
- B. Provide controls to confine dust and dirt within project area. Thoroughly soak masonry and debris during demolition and loading operations. Water exposed soils or aggregates as required to prevent windblown dust.
- C. Provide noise control measures to limit the amount of noise and prevent nuisance. Properly equip all equipment with mufflers. Limit construction activities generating significant noise to normal working hours.

**1.08 TRAFFIC CONTROL**

- A. Conduct operations to ensure minimum interference with streets, driveways, walks, and adjacent facilities not part of construction project.
- B. Do not close or obstruct streets, walks, or other occupied or used facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

**1.09 CONSTRUCTION CLEANING**

- A. Remove rubbish and debris from work area promptly upon its accumulation. Perform a broom cleaning of all appropriate surfaces weekly.
- B. Immediately clean-up spillages of oil, grease, or other liquids which could cause a slippery or otherwise hazardous situation or stain a finished surface.
- C. Form or scrap lumber shall have all nails withdrawn or bent over and shall be stacked, placed in trash bins, or removed from site.
- D. At completion of project, thoroughly clean, sweep, and wash work to remove foreign matter, spots, and soil from work and equipment under this contract. Remove temporary guards and protective coatings.

**1.10 DISPOSAL**

- A. Provide industrial type waste containers in number and size required or provide other acceptable methods of disposing of debris. Place containers at adequate locations to handle debris and have them emptied as required.
- B. No burning of rubbish or debris will be allowed at site.
- C. Store combustible waste in fire-resistive containers. Store hazardous wastes, such as caustics, acids, and harmful dusts, in appropriate covered containers. Dispose of wastes regularly.
- D. If a contractor does not remove rubbish or clean work as specified above, the County reserves right to have work done by others at Contractor's expense.

**SECTION 01 55 26****TRAFFIC CONTROL****PART 1 - GENERAL****1.01 DESCRIPTION**

- A. This Section covers procedures for developing and implementing traffic control and regulation measures and maintenance of traffic in and around the construction area to provide for safe and efficient protection and movement of vehicular and pedestrian traffic/through and adjacent to the construction site areas.

**1.02 REFERENCE STANDARDS**

- A. General
  - 1. Codes, specifications, and standards referred to by number or title shall form a part of this Specification to the extent required by the reference thereto. Latest revisions shall apply, unless otherwise shown or specified.
- B. Florida Department of Transportation (FDOT) Standards:
  - 1. USDOT Manual on Uniform Traffic Control Devices.
  - 2. FDOT Manual of Traffic Control and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations.
  - 3. FDOT Standard Specifications for Road and Bridge Construction, Latest Edition.

**1.03 SUBMITTALS**

- A. Before closing or restricting traffic flow through any thoroughfare, the Contractor shall give written notice to and, if necessary, obtain a permit or permits from the duly constituted public authority having jurisdiction over the thoroughfare. Contractor shall also notify the applicable law enforcement, fire, and emergency services having jurisdiction in the area. Notice shall be given no less than seventy-two (72) hours in advance of the time when it may be

necessary in the process of construction to close or restrict traffic to such thoroughfare, or as may be otherwise required by the governing authority.

- B. For any road or lane closures on this project, Contractor shall refer to the Nassau County Road Closure Policy and contact Nassau County Engineering Services Department at (904) 530-6225.

#### **1.04 SITE CONDITIONS**

- A. The Contractor shall plan construction operations such that existing local traffic access can be maintained and shall be maintained during the construction using such barricades, lights, flagmen, and other protective devices as appropriate, whether specified for the project or required by the local governing authority. Traffic control devices and implementation used for maintenance of traffic shall comply with the FDOT Manuals.
- B. The Contractor shall conduct his work in such manner as not to unduly or unnecessarily restrict or impede normal traffic through the streets of the community. Insofar as it is practicable, excavated material and spoil banks shall not be located in such manner as to obstruct traffic. The traveled way of all roads shall be kept clear and unobstructed insofar as is possible and shall not be used for the storage of construction materials, equipment, supplies, or excavated earth, except when and where necessary. If required by duly constituted public authority, the Contractor shall, at his own expense, construct bridges or other temporary crossing structures over trenches so as not to unduly restrict traffic. Such structures shall be of adequate strength and proper construction and shall be maintained by the Contractor in such manner as not to constitute an undue traffic hazard. Private driveways shall not be closed except when and where necessary, and then only upon due advance notice to the County, property owner and applicable jurisdictional authority, and shall be for the shortest practicable period of time consistent with efficient and expeditious construction. The Contractor shall be liable for any damages to persons or property resulting from his work.
- C. The Contractor shall make provisions at cross streets for the free passage of vehicles and foot passengers, either by bridging or otherwise, and shall not obstruct the swales nor prevent in any manner the flow of water in the swales, but shall use all proper and necessary means to permit the free passage of surface water in the swales. The Contractor shall immediately cart away all offensive matter, exercising such precaution as may be directed by the County or applicable jurisdictional authority. All material excavated shall be so disposed of as to inconvenience the public and adjacent tenants as little as possible and



to prevent injury to trees, sidewalks, fences, and adjacent property of all kinds. The Contractor may be required to erect suitable barriers to prevent such inconvenience or injury.

- D. Unless otherwise required by the governing authority, maintenance of traffic in and around the construction zone shall conform to Section 102 of the FDOT Specification, and 600 Series Roadway Design Standards drawings of the FDOT Standards, as applicable.

**PART 2 - PRODUCTS (NOT USED)**

**PART 3 - EXECUTION (NOT USED)**

**SECTION 01 60 00****PRODUCT REQUIREMENTS****1.01 PRODUCTS**

- A. Provide new, high quality products manufactured and conditioned for the particular application as recommended by manufacturer, unless otherwise noted. Transport, handle, store, and protect products as specified and in accordance with manufacturer's recommendations.

**1.02 MANUFACTURER'S DIRECTIONS**

- A. Wherever work is to be performed or products are to be installed in accordance with manufacturer's instructions, furnish copies of printed instructions before installation.

**1.03 SOURCE OF PRODUCTS**

- A. In order that ready availability of materials, parts, or components for repair, replacement, or expansion can be assured, original equipment and components shall be obtained where feasible from domestic sources which maintain a regular stock.

**1.04 ACCEPTABLE MANUFACTURERS**

- A. Products, materials, and equipment identified by reference to a manufacturer's name, catalog number, or model are identified for the purpose of establishing a standard of quality, type, and function. Products first named in specifications are depicted for general descriptive purposes only. Any other product, material, or equipment which will perform adequately the duties imposed by the general design will be considered for substitution in accordance with the provisions below.

**1.05 OPTIONS AND CHANGES**

- A. Wherever options consisting of two or more choices are permitted for any product, procedure, or method, Contractor may select any of the named alternatives.
- B. Changes and revisions to Contract Documents may be made by Change Order, Field Order, or other procedure authorized under the Contract Documents.

- C. All other revisions not defined as options or changes shall be treated as Substitutions. (Options and changes will not be treated as Substitutions.)

#### **1.06 BID PHASE SUBSTITUTIONS**

- A. Substitutions and alternatives proposed prior to the Bid Deadline shall be submitted in accordance with the Instructions to Bidders.

#### **1.07 CONSTRUCTION PHASE SUBSTITUTIONS**

- A. Substitutions proposed after Contract has been awarded shall be submitted for approval prior to their use. Consideration will be given only to proposed substitutions for those products named in the Contract Documents which are no longer available or cannot be provided within the Contract Time, or where standard products are no longer in conformance, or where the County's interests may be adversely affected.
- B. If substitutions are approved, Contractor assumes responsibility for any other changes in systems or for modifications required in other work to accommodate the substitution, regardless of approval of the substitution.
- C. Requests for substitution of alternate products shall be submitted with complete references to manufacturer's product identification and product data indicating composition, guarantee, availability, applicable standards or agency approvals met or exceeded, restrictions imposed on product, and manufacturer's recommended method of application or installation. Substitutions will be considered acceptable if the product will perform adequately the duties imposed by the general design and, in opinion of Engineer of Record, is of equal substance, quality, appearance, and function, unless the named item is necessary for interchangeability or if the named product has been demonstrated to be most cost-effective.

#### **1.08 DEFECTIVE PRODUCTS**

- A. All products which do not conform to specified requirements shall be considered defective and shall be removed from the Work. If in place, faulty materials shall be corrected or replaced to meet specified requirements.

**1.09 TRANSPORTATION AND HANDLING**

- A. Products shall be transported and handled in accordance with the Contract Documents and as defined below. Deliver in original packaging with manufacturer's brand, seals, and labels intact. Refer to individual sections of specifications for specific requirements.
- B. Arrange for product transportation as required for construction. Select means of transportation which will reasonably assure timely and safe arrival. Products shall be suitable for intended use upon arrival at project and shall be undamaged and free from defects.
- C. Select appropriate methods for handling products to preserve their integrity, quality, and function.

**1.10 MATERIAL PROTECTION**

- A. Protect materials in accordance with Section 01 50 00, specific requirements of individual sections of specifications, and according to manufacturer's recommendations.
- B. Provide and maintain watertight storage sheds with raised floors for storage of products that might be damaged by weather. Cement, lime, and other materials affected by moisture shall be stored on platforms.

**1.11 STORAGE**

- A. Confine storage of products to limits designated by the County. Do not bring products to site until needed for progress of work. Storage of products within buildings shall not exceed design capacity of structural system.
- B. The County assumes no responsibility for products stored on site. Contractor shall assume full responsibility for damage to stored products, except as covered by property insurance for the work under construction (see General and Supplementary Conditions).
- C. Contractor shall allot space to subcontractors for storage of products and erection of offices and tool sheds. Locate storage buildings, temporary sheds, and stockpiles to avoid interference with new and existing facilities; move sheds, storage platforms, and materials as necessary.
- D. Upon completion, restore areas disturbed by construction.

**SECTION 01 71 23****FIELD ENGINEERING****PART 1 - GENERAL****1.01 SECTION INCLUDES**

- A. Provide field engineering service for project as indicated on Drawings and specified in this Section.

**1.02 QUALIFICATIONS OF SURVEYOR OR ENGINEER**

- A. Florida Registered Engineer or Land Surveyor.

**1.03 SURVEY REFERENCE POINTS**

- A. Existing basic horizontal and vertical control points are designated on Drawings. All elevations are based on the benchmarks shown on the plans. Establish all vertical and horizontal controls required for construction.
- B. Locate and protect control points prior to starting site work, and preserve permanent reference points during construction.
  - 1. Make no changes or relocations of such points without prior written notice to Engineer of Record and the County.
  - 2. Report to Engineer of Record and the County when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
  - 3. Require surveyor to replace control points which may be lost or destroyed Establish replacements based on original survey control.
  - 4. Engineer of Record will identify existing control points and properly line corner stakes indicated on Drawings, as required.

**1.04 PROJECT SURVEY REQUIREMENTS**

- A. Establish a minimum of two (2) permanent bench marks on the project site, all referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrument and similar appropriate means.
  - 1. Site improvements.
  - 2. Controlling lines and levels required for mechanical and electrical trades.
- C. Verify layouts by same methods from time to time.

**1.05 RECORDS**

- A. Maintain a complete, accurate log of control and survey work as it progresses.
- B. On completion of foundations and major site improvements, prepare a certified as-built survey showing finished dimensions, locations, angles and elevations of construction.
- C. Refer to Nassau County's As-Built Checklist.

**1.06 SUBMITTALS**

- A. Submit name and address of surveyor or professional engineer to Engineer of Record and the County.
- B. On request of Engineer of Record and the County, submit documentation to verify accuracy of field survey work.
- C. Submit certificate signed and sealed by a State of Florida Registered Engineer or Land Surveyor certifying that elevations and locations of improvements are in conformance with Contract Documents.

**PART 2 - PRODUCTS (NOT USED)****PART 3 - EXECUTION (NOT USED)**

**SECTION 01 77 00****CLOSEOUT PROCEDURES****1.01 SUMMARY**

- A. Complete closeout procedures and final submissions as listed below and as required by the other Contract Documents. Refer to General Conditions regarding Substantial Completion, final completion, and final payment.

**1.02 FACILITY START-UP**

- A. Submit test reports before requesting certification of Substantial Completion.

**1.03 SUBSTANTIAL COMPLETION**

- A. Contractor shall notify County or County's Representatives, in writing, when the Contractor considers the Work (or a portion of the Work which the County agrees to accept separately) to be substantially complete. Contractor's notice shall include a comprehensive list of items to be completed or corrected prior to final payment.
- B. Upon receipt of Contractor's list, Engineer of Record, the County, and Contractor shall make an inspection to verify that the Work is substantially complete.
  - 1. If the County considers the Work to be substantially complete, the County will issue a Certificate of Substantial Completion along with a "Construction Acceptance Checklist" of items to be completed or corrected prior to final payment. Items on punch list shall be completed within 60 days. Required submittals (see below) shall be completed prior to or when requesting final payment.
  - 2. If the County does not consider the work to be substantially complete, the County will inform Contractor of items that need to be completed or corrected before substantial completion. Contractor shall promptly complete these items and request a re-inspection by the County.

**1.04 FURNISHED PRODUCTS AND LOANED TOOLS**

- A. Prior to final payment, return all extra materials, unused parts, and equipment furnished by the County; return loaned tools and equipment.

**1.05 FINAL COMPLETION**

- A. Contractor shall notify Engineer of Record and the County when it considers all Work to be complete. Engineer of Record, the County, and Contractor shall make an inspection to verify that the Work is complete.
1. If the County considers the Work to be complete, Contractor shall submit final Application for Payment.
  2. If the County does not consider the Work to be complete, the County will inform Contractor of items that need to be completed or corrected before completion. Contractor shall promptly complete these items and request a re-inspection by the County.
- B. Prime Contractor is responsible for reviewing all Construction Acceptance Checklist items and verifying that each item is complete before requesting final inspection.

**1.06 CHARGES FOR REINSPECTIONS**

- A. The County will inspect the Work (or a portion of the Work which the County agrees to accept separately) at substantial completion and at final completion. If the Work is not complete to the required level at either substantial completion or final completion, and a re-inspection is required, Contractor shall reimburse the County for charges of the County and the County's consultants for performing the re-inspection.

**1.07 SUBMITTALS**

- A. Submittals required before Contract Closeout are listed below:
1. Contractor Lien Waiver
  2. Subcontractor Lien Waiver
  3. Consent of Surety to Final Payment
  4. Compliance with all permits and other governmental agencies
  5. Certification of Inspections "Certification Package"
  6. Warranties and Bonds
  7. As-Built Drawings
  8. Operation and Maintenance Manuals
  9. All other documents as required in the Contract Documents.



## **DIVISION 31**

## **EARTHWORK**

**SECTION 31 20 00****EARTHWORK****PART 1 GENERAL****1.01 SUMMARY**

- A. Provide earthwork as shown and as specified. Comply with applicable provisions of Div. 0 and 1.
- B. Excavation and Embankment shall be constructed in accordance with Section 120 of the Florida Department of Transportation Standard Specifications for Road and Bridge, Latest Edition, and the FDOT Design Standards, 2014 (Index 500 and 505).

**1.02 RELATED SECTIONS**

31 05 10 Site Preparation

**1.03 CLASSIFICATION**

- A. Excavation of materials encountered under this work will be unclassified without regard to type, difficulty to remove, or suitability for use in construction.

**1.04 SUBMITTALS**

- A. Test Reports: Submit certifications that all soils used for embankment (shoulder construction) meet the requirements of FDOT Design Standards, Latest Edition (Index 500 and 505)

**1.05 TESTING**

- A. Contractor shall arrange and pay for soil sampling and testing by a qualified testing agency, acceptable to the County and independent of Contractor. Test soil materials for suitability for intended purpose using standard, recognized procedures.
- B. Determine mechanical analysis, liquid and plastic limit, and moisture-density curve (ASTM D1557) for each type of soil encountered.
- C. During course of work, testing agency shall inspect and approve fill layers before further construction work is performed on each layer.

- D. If in opinion of Engineer of Record and the County, based on reports of testing agency and inspection, subgrade or fills which have been placed are below specified density, provide additional compaction and testing at no additional cost to the County.

#### **1.06 PROTECTION**

- A. Protect existing improvements, utilities, trees and shrubs, and reference marks in accordance with Section 31 05 10.

#### **1.07 BLASTING**

- A. Use of explosives is not permitted.

### **PART 2 PRODUCTS**

#### **2.01 SOIL MATERIALS, GENERAL**

- A. Soil materials shall be free of organic matter, debris and other objectionable materials. Rock particles larger than maximum size specified shall be removed prior to placement of soil.
- B. Select existing material from required excavations may be used for fill or backfill if it meets the specified product requirements. If necessary, furnish additional approved material from suitable off-site sources.

#### **2.02 GRANULAR FILL, BEDDING, AND BACKFILL**

- A. Select soils to comply with AASHTO M-145 - Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes.

#### **2.03 FILL AND BACKFILL**

- A. Previously excavated soils, free of aggregate larger than 3 in., and suitable for intended purpose.

### **PART 3 EXECUTION**

#### **3.01 PREPARATION**

- A. Prepare site for work in accordance with Section 31 05 10. Layout and stake lines and grades as required to complete the work.

**3.02 EXCAVATION**

- A. Excavate to achieve necessary dimensions, lines, grades, and cross-sections. Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10 ft.

**3.03 TRENCHING**

- A. Excavate trenches so that asphaltic base can be placed safely and accurately to required line and grade.

**3.04 UNAUTHORIZED EXCAVATION**

- A. Unauthorized excavation consists of removal of materials beyond indicated elevations or side dimensions without specific direction of Engineer of Record. Unauthorized excavation, as well as remedial work, shall be at Contractor's expense. Notify Engineer of Record and the County if unauthorized excavations are made.
- B. Backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed.

**3.05 ADDITIONAL EXCAVATION (OVER EXCAVATION)**

- A. When excavation has reached required subgrade elevation, notify Engineer of Record and the County who will make an inspection of conditions. Inform Engineer of Record and the County of unsuitable, unconsolidated subgrade soils.
- B. If unsuitable bearing materials, such as poorly compacted fill, existing foundations, rubble, debris, or organic deposits, are encountered at required subgrade elevations, carry excavations deeper and replace excavated material with properly compacted Fill as directed by Engineer of Record and the County.
- C. Removal of unsuitable material and its replacement as directed will be paid for as extra work. Do not proceed with extra work until authorized by the County.

**3.06 STABILITY OF EXCAVATIONS**

- A. Maintain sides and slopes of excavations in a safe condition per OSHA guidelines until completion of backfilling. Slope sides of excavations to angle of repose of material excavated; otherwise, shore and brace where sloping is not possible either because of space restrictions or stability of material excavated. Comply with applicable codes and ordinances.

**3.07 DEWATERING**

- A. Perform earthwork in a manner to prevent surface water and ground water from flowing into excavations. Promptly remove water from excavations using pumps, sumps, and dewatering system components necessary to convey water away from excavations. If underground springs are encountered, notify Engineer of Record and the County before proceeding.
- B. Dewatering may require a "Generic Permit for the Discharge of Produced Groundwater from Any Non-Contaminated Site Activity." Groundwater testing may be required. The cost of any dewatering permit and required testing shall be paid by the Contractor.

**3.08 STOCKPILING**

- A. Stockpile excavated materials meeting the requirements for fill and backfill where directed until required for the work. Place, grade, and shape stockpiles for proper drainage. Locate stockpiles a sufficient distance from edge of excavations to prevent such material from falling or sliding into excavations and to prevent cave-ins.

**3.09 COLD WEATHER PROTECTION**

- A. Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F by covering with dry insulating materials of sufficient depth to prevent frost penetration.

**3.10 EXAMINATION OF SUBGRADE**

- A. Examine subgrade prior to placement of fill or backfill. Do not place materials on frozen subgrade. Plow, strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that material will bond with subgrade. When subgrade has a density less than that specified for the particular area, breakup ground surface, pulverize, moisture-condition to optimum content, and compact top 12 in. to density specified in Part 4 Schedules.

**3.11 FILLING AND BACKFILLING, GENERAL**

- A. Do not place fill or backfill until required excavation and subgrade preparation have been inspected and approved by Engineer of Record and the County.
- B. Place fill or backfill in approximately horizontal layers; do not exceed the maximum lift thickness specified in Part 4 Schedules before compaction. Spread piles and windrows uniformly.

- C. Adjacent to structures, place fill or backfill to prevent damage and allow structures to assume loads gradually and uniformly, at approximately the same rate on all sides of structure.

### **3.12 BACKFILL**

- A. Provide Backfill material to bring excavations to natural or designated grade.

### **3.13 GRADING**

- A. Grade area within project limits by cutting and/or filling as necessary to achieve lines and grades shown. Grade areas adjacent to structure lines to drain away from structure to prevent ponding. Finish surface to be reasonably smooth and free from irregular surface changes. Tolerance for areas to receive topsoil shall be 0.3 ft above or below established grade, less allowance for topsoil. Tolerance for areas to be paved shall be 0.1 ft above or below established pavement subgrade.

### **3.14 COMPACTION**

- A. Compact each layer of soil material to not less than the percentage of maximum density specified in Part 4 Schedules.
- B. Provide compaction equipment required to obtain specified compaction. Compaction by travel of grading equipment is not considered adequate for uniform compaction. Small vibratory compactors are required wherever fill is placed adjacent to foundation walls, footings, and piers. Pipe bedding and initial backfill shall be hand or mechanically tamped.
- C. During placement and compaction, maintain moisture content of materials within optimum range.

### **3.15 DISPOSAL OF EXCESS AND WASTE MATERIALS**

- A. Remove excess excavated material, trash, debris, and other waste materials and legally dispose of them off-site.

**PART 4 SCHEDULES****4.01 COMPACTION SCHEDULE**

<u>Location</u>	<u>Lift Thickness</u> <sup>1</sup>	<u>Compaction</u> <sup>2</sup>
Below foundations, slabs, pavements, walks, and other designated areas.	12"	98%
Bedding and initial backfill around pipe and conduit.	6"	98%
Unpaved areas 10 ft. or less outside structure line.	12"	98%
Unpaved areas more than 10 ft. outside pavement area.	12"	95%

<sup>1</sup>Place manually compacted materials in maximum 6-in. layers.

<sup>2</sup>Percent of maximum density determined in accordance with AASHTO Modified Proctor T 188.

## **DIVISION 32**

# **EXTERIOR IMPROVEMENTS**



**SECTION 32 12 02****MILLING EXISTING ASPHALT PAVEMENT****PART 1 GENERAL****1.01 SUMMARY**

- A. Milling Existing Asphalt Pavement (1") shall be constructed in accordance with Section 327 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, including Supplemental Specifications.

**SECTION 32 12 04****SUPERPAVE ASPHALT CONCRETE****PART 1 GENERAL****1.01 SUMMARY**

- A. Superpave Asphalt Concrete shall be constructed in accordance with Section 334 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.
- B. All Quality Control testing of Superpave Asphalt Concrete for plant and roadway sampling, shall be in accordance with Sections 334-5.1.4.2 and 334-5.1.4.3 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition.
- C. Acceptance of Superpave Asphalt Concrete will be based solely on results obtained from Quality Control Testing. No reduction in pay or consideration of pay factors will be accepted by Nassau County.

**SECTION 32 12 13****PERFORMANCE TURF (Sod & Hydroseed)****PART 1 GENERAL****1.01 SUMMARY**

- A. Performance Turf, (Sod and Hydroseed) shall be in accordance with Section 570 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition and constructed to the lines, grades, and dimensions shown on the plans.

**SECTION 32 12 29****RETRO-REFLECTIVE PAVEMENT MARKERS****PART 1 GENERAL****1.01 SUMMARY**

- A. Retro-Reflective Pavement Markers shall be constructed in accordance with Section 706 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, including Supplemental Specifications.

**SECTION 32 12 30****THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS****PART 1 GENERAL****1.01 SUMMARY**

- A. Thermoplastic, Standard, White, Solid, 6", shall be constructed in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.
- B. Thermoplastic, Standard, Yellow, Skip, 6", shall be constructed in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.
- C. Thermoplastic, Standard, Yellow, Solid, 6", shall be constructed in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.
- D. Thermoplastic, Preformed, White, Solid, 24", shall be constructed in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.
- E. Thermoplastic, Preformed, White, Message, shall be constructed in accordance with Section 711 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition, including Supplemental Specifications.

**APPENDIX A**

**GEOTECHNICAL REPORT**  
**(NOT USED)**

# **APPENDIX B**

## **ROAD CLOSURE POLICY**



**Nassau County Engineering Services Department**  
**96161 Nassau Place**  
**Yulee, Florida 32097**

*J. Scott Herring, P.E.*  
*Public Works Director*

### **Road Closure Policy**

1. Submit a written request to the Public Works Director for the road closure. In the request you must explain the following:

- a) Why the road needs to be closed and the duration of the closure?
- b) What are the benefits to public for closing the road?
- c) Include a draft detour plan.

After the road closure request and draft detour plan have been approved, the following information shall be submitted to the Nassau County Engineering Services Department for review and approval.

2. Submit to Nassau County Engineering Services Department: A Maintenance of Traffic (MOT) Plan that was prepared by or approved by Florida Advanced Maintenance of Traffic (AMOT) certified personnel referencing the latest editions of the Florida Department of Transportation (FDOT) Design Standards Section 600 and the Manual on Uniform Traffic Control Devices (MUTCD). These plans shall include the Worksite Traffic Supervisor as per the latest edition of the FDOT Standard Specifications for Road & Bridge Construction Section 105-8.3. Variable Message Boards (VMB) will be required and shall be installed 7 days prior to the detour taking place and remain throughout. Any signed detour that will be within FDOT Right-of-Way (or on portions thereof) shall have prior FDOT approval.

A Maintenance of Traffic Plan proposing a change to any approved documents, including contract documents and approved construction plans must be signed and sealed.

3. Provide a public notification advertisement to an approved local newspaper. To appear no less than fourteen (14) days prior to the scheduled closure. Submit the draft notification to Nassau County Engineering Services for review and approval prior to advertising. This notification will clearly describe the name of the project and contractor, scope of the detour, scope of construction, the name of all roads that will be affected, official detour routes, duration of closure and the Worksite Traffic Supervisor's telephone number. Attach a diagram showing the surrounding area and detour routes. Diagram must be clear and depict road names and route direction. The size of advertisement in newspaper shall be a minimum of 2 columns wide by 12 inches long (tall) or one fifth (1/5) of a page with a minimum of 24 point font for the heading and 10 point font for the body and detour plan. Flyers with the same information may be required. With the Engineering Services Department's written approval, local roads may not require publishing of the advertisement in the paper; however, all other criteria must be adhered to.
4. Submit notification to the following departments and agencies prior to the road closure. A confirmation of notification to the Engineering Services Department must be provided prior to road closure.

**Phone (904) 530-6225**

**Fax (904) 491-3611**

Initials: \_\_\_\_\_





**Road Closure Policy**  
**Page 2 of 2**

- Nassau County Sheriff's Office:  
Contact: Ricky A Rowell, TAC  
Phone – (904) 548-4000  
Fax – (904) 225-5737  
Email – [rickyr@nassauso.com](mailto:rickyr@nassauso.com)
- Nassau County Emergency Management  
Contact: Laura Scott  
Phone – (904) 548-4094  
Fax – (904) 548-4194  
Email – [lscott@nassauso.com](mailto:lscott@nassauso.com)
- Nassau County Fire Department  
Contact: Jerry Marrison  
Phone – (904) 491-7525  
Fax – (904) 321-5748  
Email – [jmarrison@nassaucountyfl.com](mailto:jmarrison@nassaucountyfl.com)
- Nassau County School Bus Transportation  
Contact: Amy Bell  
Phone – (904) 225-0127  
Fax – (904) 225-9404  
Email – [amy.bell@nassau.k12.fl.us](mailto:amy.bell@nassau.k12.fl.us)
- Nassau County Road & Bridge Department  
Contact: Jennifer Beaver  
Phone – (904) 530-6175  
Fax – (904) 530-6901  
Email – [jbeaver@nassaucountyfl.com](mailto:jbeaver@nassaucountyfl.com)
- Nassau County Manager  
Contact: Ted Selby  
Phone – (904) 530-6010  
Fax – (904) 321-5784  
Email – [tselby@nassaucountyfl.com](mailto:tselby@nassaucountyfl.com)
- United Postal Service (Yulee)  
Contact: Post Master  
Phone – (904) 225-5331  
Fax – (904) 225-9733  
Email – [cprince@usps.gov](mailto:cprince@usps.gov)
- United Postal Service (Fernandina)  
Contact: Victor Blackwell  
Phone – (904) 491-8102  
Fax – (904) 277-7947  
Email – [victor.a.blackwell@usps.gov](mailto:victor.a.blackwell@usps.gov)
- United Postal Service (Callahan)  
Contact: Kim Bojtech  
Phone – (904) 879-2131  
Fax – (904) 879-6737  
Email – [kim.k.Bojtech@usps.gov](mailto:kim.k.Bojtech@usps.gov)
- United Postal Service (Hilliard)  
Contact: Kim Bojtech  
Phone – (904) 845-2151  
Fax – (904) 845-7738  
Email – [kim.k.Bojtech@usps.gov](mailto:kim.k.Bojtech@usps.gov)

Depending on the location of the project/detour, notification to other agencies may be required.

5. Signage will be in place prior to road closure. They will be bagged/covered until needed. VMBs, will be installed and operating a minimum of seven (7) calendar days prior to any closure/detour.
6. Visual inspection of the VMB by the Engineering Services Department is required at installation or relocation. Visual inspection of all road/detour signage shall be accomplished prior to road closure. Contact Engineering Services 48 hours prior to installation for inspection.

# **APPENDIX C**

## **AS-BUILTS REQUIREMENTS**



**Nassau County Engineering Services Department**  
**96161 Nassau Place**  
**Yulee, Florida 32097**

*J. Scott Herring, P.E.*  
*Public Works Director*

## **AS-BUILT REQUIREMENT CHECKLIST:**

The following list is intended to highlight the majority of the as-built requirements for Construction projects in Nassau County. This list should not be considered to be all-inclusive as each project is unique in nature and may require additional information that can only be determined during the course of the project's completion. Generally, however, the AS-BUILT information shall contain the following:

1. AS-BUILTS should be based on the design plans as approved through the DRC process. The submitted as-builts should be at the same scale and have the same orientation as the design files.
2. AS-BUILTS should have the same page numbering as the design plans, and the cover of the AS-BUILT plans should have all sheets from the design plans listed with sheets not "AS-BUILT" stricken through.
3. AS-BUILTS should display the original design information as displayed on the plan sheets with the design information stricken through and the as-built information displayed in bold adjacent to the design information.
4. AS-BUILTS shall be accompanied by an "Engineer's Certification" form from the Engineer of Record. (Exhibits 3 & 4)
5. Three (3) sets of fully signed and sealed AS-BUILTS should be submitted along with CD containing the PDF file(s) and CADD file(s) of the AS-BUILT information. CADD files should be in State Plane coordinates (NAD 83) with a vertical datum of NAVD88 or NGVD 1929 (with the datum shift noted). Furthermore, CADD files should only be submitted in ACAD version 2013 or later.
6. Northing and Easting of all drainage structures should be included.
7. The plans should be clearly legible and all structure notes, distances, angles and elevations should be clearly readable.
8. If the plan represents a phase of a development, then that phase should be clearly identified for clarity and avoid confusion with future phases.
9. There should be a north arrow and scale on each sheet.
10. A legend should be included explaining the symbols used in the plans.
11. ALL sheets must be signed and sealed by a surveyor licensed in the State of Florida.



12. There should be sufficient "plan" and "as-built" elevations shown to verify that the streets were constructed substantially in accordance with the approved construction plans. Generally, the County will review all low points and high points in the street and verify that the minimum grade exists for each street. On straight sections between high and low points elevations should be taken every 200 feet.
13. All street curve radii should be shown on the plans or in a table.
14. Street widths and curb type should be identified for each street on each sheet.
15. Whenever there are islands within the streets the as-builts should include dimensions for these islands.
16. The paved radii of all Cul-de-Sacs should be listed and Cul-De-Sac center and edge of pavement or gutter elevations at quarter points shall be shown.
17. All underdrains should be shown with size, lengths, inverts and cleanouts all shown.
18. Where swales are utilized there should be sufficient flow line elevations and ditch cross sections to verify capacity of the channel.
19. There should be a comparison table of design and as-built pipe sizes, lengths, invert elevations, and pipe slopes.
20. The as-built surface area of the pond(s) at Normal Water Level (design) and Top of Bank (as-built) should be included.
21. The bottom elevation and area should be shown (2 locations min. per pond).
22. The surveyor shall certify by note (for each pond) that no slope is greater than 1:4 above the design NWL, unless the pond is fenced.
23. All structures in the pond (overflow weirs, etc.) should be included.
24. All water main and sewer main locations, size, lengths, inverts, etc.
25. All easements required (or on a plat) should be shown on the "As- BUILTS" and improvement located so as to verify improvements are within the easement. Easement not recorded as part of the recorded plat including drainage and right-of-way easements shall also be identified as "as-built". For these easements the book and page of their record, property to whom easement is dedicated and date of filing should be shown on as the "as-built". All improvements intended to be within these easements shall be shown as the "as-builts" to verify the improvements are within the easement. Wetlands are not reviewed by Nassau County and need not be shown.