### **General Notes**

This construction project may or may not include all items covered by these notes and specifications, i.e. paving, grading, drainage lines, water lines, or sanitary sewer lines. See plans for detailed project scope. Notes and specifications on this sheet refer to paving, grading, drainage, water, and sanitary sewer, and are intended for this projects scope of work and for reference purposes for other work items that may be required due to unforeseen existing conditions or required remedial work.

#### 1. Specific Site Notes

- 1.1. County and "City" in these notes refers to County and 3.12. The topographic survey included with this set of plans City in which project resides.
- 1.2. State in these notes refers to the State of Florida.
- 1.3. Existing topographic information in the plans is based on survey data and best available information. See project survey and notes on plan sheets regarding the source of the topographic information.

#### 2. Applicable Codes

- 2.1. All construction and materials shall conform to the standards and specifications of the city, county, and all other jurisdictional, State and national codes where applicable.
- 2.2. In the event of a conflict between the general notes and construction specifications in these plans, and the contract documents and specifications in the specification booklet, the contractor shall submit written request for clarification.
- 2.3. All construction shall be done in a safe manner and in strict compliance with all the requirements of the Federal occupational safety and health act of 1970, and all State and jurisdictional safety and health regulations.
- The contractor shall be required to comply with Federal, State, County, and City laws, codes, and regulations
- 2.5. All handicap accessible areas to conform to the requirements of the Americans with Disabilities Act (ADA), State ADA codes, and Florida Building Code ADA codes latest edition.
- 2.6. Trench safety act
- 2.6.1. All trench excavation shall be performed in accordance with chapter 90-96 of the laws of Florida (the trench safety act).
- 2.6.2. All trench excavation in excess of 5 feet in depth shall be undertaken in accordance with O.S.H.A. standard 29 cfr. Section 1926.650 subpart p.
- 2.6.3. The contractor shall submit with his contract a completed, signed, and notarized copy of the trench safety act compliance statement. The identifying the cost of compliance with the applicable trench safety codes.
- 2.6.4. A trench safety system, if required, shall be designed by the excavation contractor utilizing a specialty engineer as required.

## 3. Construction Notes:

- Contractor shall tie to existing grade by evenly sloping from closest proposed grade provided to existing grade at limits of construction, unless otherwise noted on the plans. If no limit of work line is indicated. slope to adjacent property line or right-of-way line, as applicable.
- 3.2. Unless otherwise indicated on the plans, all existing manholes, catch basins, meters and other structures, whether indicated on the plans or not shall be 3.17. Any known or suspected hazardous material found on adjusted to match the new grade, by the contractor.
- 3.3. The curb shall be sloped to accommodate the new pavement, catch basin and grate, and the surface flow
- 3.4. The contractor shall use care when cutting the existing asphalt pavement and during excavations, so that the existing catch basins and grates that are to remain will not be damaged.
- 3.5. The contractor shall maintain the roadway slope when resurfacing the roadway. The edge of pavement shall match the new gutter lip per FDOT index 300.
- 3.6. The new sidewalk shall be constructed in accordance with the given elevations and at the proper slopes depicted in the specifications, details and standards. Existing driveways and other features shall be matched when possible as directed by the engineer.
- Radii shown are to the edge of pavement
- 3.8. All bench mark monuments within the limits of 4.1. construction shall be protected and referenced by the contractor in the same way as public land corners.
- 3.9. All excess material is to be disposed by the contractor within 24 hours.
- 3.10. In areas where the base is exposed by the milling operation, the contractor shall restore the base to its 4.3. original thickness and structural capacity before paving over such areas. This includes but is not limited

- to restoring original degree of compaction, moisture 4.4. content, composition, stability, and intended slope. If paving will not take place the same day the base is exposed and reworked, the base shall be sealed according to the governing standards and 4.5. Prior to the start of construction, the owner shall 6.5. The contractor shall maintain access to adjacent specifications. Any additional work resulting from the contractor's failure to protect the exposed base as stated above in order to restore the original structural capacity shall be the contractor's cost.
- 3.11. The contractor is to maintain existing signage during construction operations, in order to facilitate emergency vehicle traffic
- reflects pre-demolition conditions and does not reflect the site conditions after demolition. The contractor is fully and solely responsible in determining the required earthwork for the proposed development of the site. This includes, but is not limited to, any excavation/dredge and fill activities required at any phase of the project. The contractor shall use the final approved (released for construction) plans, surveys, geotechnical reports, and any other available information for determining the amount of excavation/dredging and filling required. Any quantities included in the approved 4.6. permits were estimated by the engineer for purposes of obtaining the permit and under no circumstances shall be used by the contractor in lieu of performing their own earthwork calculations required for cost estimating and bidding the project
- 3.13. The contractor shall be responsible for reading and familiarizing themselves with any and all available geotechnical reports prepared by others and/or any recommendations written or implied by the geotechnical engineer for this project. The 4.6.1. Catalogue literature shall be submitted for drainage, geotechnical conditions and recommendations outlined in these reports are in force and in full effect as part of the proposed improvements. The contractor is responsible for ensuring that all the work associated with this project is in compliance with the geotechnical engineer's recommendations. Keith and Associates, Inc. is not responsible for the suitability or unsuitability of the soils encountered. It is the contractor's responsibility to ensure that the means and methods of construction used can and will allow for the successful completion of the required 4.7. site improvements.
- 3.14. The contractor shall ensure that the available geotechnical information is sufficient for his complete understanding of the soil conditions for the site. If 5. Inspections / Testing: additional geotechnical investigation is required by 5.1. the contractor, this additional work shall be considered incidental to the contract and no additional compensation shall be allowed.
- contractor shall also submit a separate cost item 3.15. The contractor shall be responsible for the repair and restoration of existing pavement, pipes, conduits, sprinkler heads, cables, etc., and landscaped areas damaged as a result of the contractor's operations and/or those of his subcontractors and shall restore at no additional cost.
  - 3.16. The contractor shall not bring any hazardous materials onto the project. Should the contractor require such for performing the contracted work, the contractor shall request, in writing, permission from the owner, city and engineer. The contractor shall provide the owner, city and engineer with a copy of the material safety data sheet (MSDS) for each hazardous material proposed for use. The project engineer shall coordinate with the owner and city prior to issuing written approval to the contractor.
  - the project by the contractor shall be immediately reported to the city and/or engineer, who shall direct the contractor to protect the area of known or suspected contamination from further access. The city and/or engineer are to notify the owner/engineer of the discovery. The owner/engineer will arrange for investigation, identification, and remediation of the 5.1. hazardous material. The contractor shall not return to the area of contamination until approval is provided by the engineer.
  - 3.18. The contractor shall contact the appropriate city engineering inspector and engineer 48 hours in advance of the event to notify the city of construction start up, or to schedule all required tests and inspections including final walk-throughs.

## 4. Preconstruction Responsibilities

- All utility / access easements to be secured prior to construction.
- No construction may commence until the appropriate permits have been obtained from all municipal, State, County, and Federal agencies and a pre-construction 6.2 meeting has been conducted.
- All required governmental agency building permits to be obtained by the contractor prior to any 6.3. construction activity.

- Contractor to coordinate construction scheduling for 6.4. connection to the existing water and sewer lines with the utility department that owns and/or maintains the water and sewer lines.
- submit an NPDES construction general permit (CGP) "notice of intent (N.O.I.) to use Generic Permit for 7. Project Progress and Closeout storm water discharge from construction activities center. The contractor will be responsible for (1) implementation of the storm water pollution prevention plan (SWPPP) that was required to be developed prior to NOI submittal, and (2) retention of records required by the permit, including retention of 7 a copy of the SWPPP at the construction site from the date of project initiation to the date of final site stabilization. A "notice of termination (N.O.T.) of generic permit coverage" form (DEP form 62-621.300(6)) must be submitted to FDEP to discontinue permit coverage, subsequent to completion of construction. For additional 7.3. Material or debris shall be hauled in accordance with 8.9. FDEP website: information http://www.dep.state.fl.us/water/ water/npdes.
- Prior to construction or installation, 5 sets of shop drawings shall be submitted for review as required for the following items listed below, but not limited to:
- Drainage: Catch basins, manholes, headwalls, 75 grates/tops, yard drains.
- Water: Fire hydrants, valves, backflow preventer, DDCV, meter box.
- valves, pump data, electrical panel)
- water and sewer pipes, fittings, and appurtenances. 4.0.2. Prior to submitting shop drawings to the engineer, the contractor shall review and approve the
- drawings, and shall note in red any deviations 8.2. from the engineer's plans or specifications. 4.0.3. Individual shop drawings for all precast structures

are required. Catalogue literature will not be

accepted for precast structures. Contractor to submit maintenance of traffic plan(s) in accordance with FDOT and Broward county requirements, and submit for approval prior to beginning construction.

- The contractor shall notify in writing the owner, City, County, engineer of record, and any other governmental agencies having jurisdiction at least 48 hours prior to beginning construction and prior to required inspections of the following items, where 84 applicable:
- Clearing and earthwork
- Storm drainage systems
- Sanitary sewer systems
- Water distribution systems
- Subgrade
- Limerock base
- Asphalt or concrete pavement
- Sidewalks, concrete flatwork/curbing
- Pavement marking and signage
- Site lighting

Landscaping

Signalization

- Electrical and communication lines Utility conduits
- Irrigation

Final

- The owner, engineer, and jurisdictional permitting agencies may make inspections of the work at any time. The contractor shall cooperate fully with all inspections.
- Testing all testing required by the plans and specifications shall be performed by a licensed / FDOT qualified testing company. Required test for asphalt 8.7. and limerock shall be taken at the direction of the engineer or the jurisdictional governmental agency in accordance with the plans and specifications.

#### 6. Temporary Facilities

- 6.1. It shall be the contractor's responsibility to arrange for or supply temporary water service, sanitary facilities, communications, and electricity, for his operations and works, cost included under mobilization.
- Contractor shall construct temporary fencing to secure construction areas at all times, cost included in mobilization.
- Contractor to obtain a secure staging area and obtain all necessary approvals from the owner.

- Contractor shall construct and maintain temporary lighting as required to light the construction project limits at all times, to at least the same lighting intensity levels as the existing conditions.
- properties at all times.

- form (DEP form 62-621.300(4)(b)) to FDEP notices 7.1. During construction, the project site and all adjacent areas shall be maintained in a neat and clean manner, and upon final dean-up, the project site shall be left dear of all surplus material or trash. The paved areas shall be broom swept clean.
  - The contractor shall restore or replace any public or 8.8. private property (such as highway, driveway, walkway, and landscaping), damaged by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of construction. Suitable materials and methods shall be used for such restoration.
  - NPDES permit and jurisdictional laws.
  - All land survey property monuments or permanent reference markers, removed or destroyed by the contractor during construction shall be restored by a State of Florida registered land surveyor at the 9. Utility Notes contractor's expense.
  - All unpaved surfaces disturbed as a result construction activities shall be graded, sodded, & restored to a condition equal to or better than that 9.2. The contractor is advised that properties adjacent to which existed before the construction.

#### Sewer: Manholes, lift stations (wetwell, hatches, 8. Project record documents:

- 8.1. During the daily progress of the job, the contractor shall record on his set of construction drawings the 93 location, length, material and elevation of any facility not built according to plans. This copy of the "as-built" shall be submitted to engineer for project
- Upon completion of drainage improvements and 9.4 limerock base construction (at least 48 hours before placing asphalt pavement) the contractor shall furnish the engineer of record "as-built" plans for these improvements, showing the locations and pertinent grades of all drainage installations and the finished rock grades of the road crown and edges of pavement at 50 foot intervals, including locations and elevations of all high and low points.
- Upon completion of construction, and prior to final acceptance, the contractor shall submit to the engineer of record one complete set of all "as-built" contract drawings. These drawings shall be marked to show "as-built" construction changes, dimensions, 9.1. locations, and elevations of all improvements.
- "As-built" drawings of water lines and force mains shall include the following information:
- 8.4.1. Top of pipe elevations every 100 LF.
- 8.4.2. Locations and elevations of all fittings including bends, tees, gate valves, double detector check valves, fire hydrants, and appurtenances.
- 8.4.3. All connections to existing lines.
- 8.4.4. Ends of all water services at the buildings where 9.1. the water service terminates.
- 8.5. "As-built" drawings of gravity sanitary sewer lines shall include the following information:
- 8.5.1. Rim elevations, invert elevations every 100 feet, length of piping between structures, and slopes.
- 8.5.2. The stub ends and deanouts of all sewer laterals  $^{9.2}$ . shall be located horizontally and vertically.
- 8.6. "As-built" drawings of all drainage lines shall include the following information:
- 8.6.1. Rim elevation, invert elevation, length of piping between structures, and control structure elevations if applicable.
- 8.6.2. The size of the lines.
- 8.6.3. Drainage well structure shall include, but not be limited to, top of casing elevation, top and bottom elevations of the structure and baffle walls, rim elevations and pipe inverts.
- "As-built" drawings of construction areas shall include
- 8.7.1. Rock elevations at all high, and low points, and at enough intermediate points to confirm slope consistency.
- 8.7.2. Rock elevations and concrete base elevations shall be taken at all locations where there is a finish 10. Signing and Pavement Markings grade elevation shown on the design plans.
- 8.7.3. All catch basin and manhole rim elevations.
- 8.7.4. Finish grade elevations in island areas.
- 8.7.5. "As-built" elevations shall be taken on all paved and unpaved swales, at enough intermediate points to confirm slope consistency and conformance to the plan details.
- 8.7.6. Lake and canal bank "as-built" drawings shall

- cross sections. Lake and canal bank cross sections shall be plotted at a minimum of every 100 lf, unless otherwise specified. "as-built" drawings 10.4. Incorrectly placed paint or thermoplastic pavement shall consist of the location and elevation of the top of bank, edge of water, and the deep cut line, with the distance between each shown on the drawing.
- .7. Retention area "as-built" elevations shall be taken at the bottom of the retention area and at the top of bank. If there are contours indicated on the 10.5. Place all retro-reflective pavement markers in design plans, then they shall be included in "as-built" drawings as well
- Upon completion of the work, the contractor shall 10.6. Caution should be exercised while relocating existing prepare "as-built" drawings on full size, 24" x 36" sheets. All "as-built" information shall be put on the latest engineering drawings. Eight (8) sets of blue or black line drawings shall be submitted. These drawings shall be signed and sealed by a Florida registered professional engineer or land surveyor.
- An electronic copy of these "as-built" drawings shall be submitted to the engineer of record in AutoCAD, version 2008 or later and shall follow the City of Hollywood's "Survey/As-Built CAD Drawing Standards" 10.8. Relocated sign support system must meet the current as per City Detail G-00.3.

- 9.1. Contractor is responsible for utility verification prior to fabrication.
  - and/or sewer service laterals which may not be shown in plans. The contractor must request the location of these lateral services from the utility companies.
- The contractor shall use hand digging when 10.12. All signs shall meet all of the following: excavating near existing utilities. Extreme caution shall be exercised by the contractor while excavating, installing, backfilling or compacting around the
- The contractor shall notify and obtain an underground dearance from all utility companies and governmental agencies at least 48 hours prior to beginning any construction. The contractor shall obtain a Sunshine811.com Certification clearance number and field markings at least 48 hours prior to beginning any excavation.
- Prior to commencement of any excavation, the contractor shall comply with Florida statute 553.851 for the protection of underground gas pipelines.
- For street excavation or dosing or for alteration of access to public or private property, the contractor shall notify:
- Roadway jurisdictional engineering / public works
- authority.
- County transit authority School board transportation authority
- Jurisdictional fire department dispatch

Jurisdictional police department(s)

The contractor shall use extreme caution working under, over, and around existing electric lines. The 10.15.Layout permanent final striping that leaves no visible contractor shall contact the electric provider company to verify locations, voltage, and required clearances, onsite, in right-of-ways, and in easements, prior to

any construction in the vicinity of existing lines.

- Location and size of all existing utilities and topography (facilities) as shown on construction drawings are drawn from available records. The engineer assumes no responsibility for the accuracy of the facilities shown or for any facility not shown. It is the contractor's responsibility to determine the exact location (vertical & horizontal) of any existing utilities and topography prior to construction. The contractor shall verify the elevations and locations of all existing facilities, in coordination with all utility companies, prior to beginning any construction operations. If an existing facility is found to conflict with the proposed construction, the contractor shall immediately notify the engineer so that appropriate measures can be taken to resolve the conflict.
- 9.3. The contractor shall coordinate the work with other contractors in the area and any other underground utility companies required. The contractor shall coordinate relocation of all existing utilities with applicable utility companies.

- 10.1. All signing and pavement markings installed as part of these plans shall conform to the Federal highway administration (FHWA) "manual on uniform traffic control devices" (MUTCD), County Traffic Design Standards and FDOT design standards as a minimum
- 10.2. Match existing pavement markings at the limits of construction.

- include a key sheet of the lake for the location of 10.3. Removal of the existing pavement markings shall be accomplished by water blasting or other approved methods determined by the engineer.
  - markings over friction course will be removed by milling and replacing the friction course a minimum width of 18 in at the contractor's expense. The engineer may approve an alternative method if it can be demonstrated to completely remove the markings without damaging the asphalt.
  - accordance with standard index 17352 and / or as shown in the plans.
  - signs to prevent unnecessary damage to signs. If the sign is damaged beyond use, as determined by the engineer, signs shall be replaced by the contractor at his expense.
  - All existing signs that conflict with construction operations shall be removed, and relocated by the contractor. Sign removal shall be directed by the engineer.
  - design standard.
  - 10.9. The contractor shall provide an inventory of existing signs to remain or to be relocated prior to starting the job and forward this list to the engineer. Contractor shall notify if there are any missing or damage signs that the plans show to remain or to be relocated.
- the project have electric, telephone, gas, water 10.10. All roadway pavement markings shall be thermoplastic in accordance with FDOT specifications section 711.
  - 10.11. Hand dig the first four feet of sign foundation.
  - Meet the criteria outlined in Section 2A.08 of the
  - 2009 MUTCD Meet the specifications outlined in Section 700 and 994 of the latest FDOT Standard Specifications.
  - Consist of materials certified to meet the retroreflective sheeting requirements outlined in the current version of ASTM D4956 for type-XI retroreflective sheeting materials made with prisims, except for school zone and pedestrian signs which shall be comprised of retroreflective fluorescent yellow-green sheeting certified to meet ASTM D4956 Type IV retroreflective sheeting materials.
  - Consist of retroreflective sheeting materials that have a valid FDOT Approved Product List (APL) certification for specification 700 Highway Signing for FDOT sheeting Type XI (or type IV for school and pedestrian signs).
  - 10.13.Patch attachment hardware, such as countersunk screws or rivet heads, with retro reflective buttons that match the color and sheeting material of the finished sign panel including the background, legend
  - 10.14.Ensure the outside corner of sign is concentric with border. Ensure white borders are mounted parallel to the edge of the sign. Ensure black borders are recessed from the edge of the sign.

marks at time of final acceptance.

 $^{r}EITH$ & ASSOCIATES, INC

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consulting engineers

2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

Florida Certificate of Authorization # - 7928

PH: (954) 788-3400

SID / CONTRACT NO.

**REVISIONS DESCRIPTION** 

DATE

## PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS. RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY

UPON THE USER.



ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE: AS NOTED FEBRUARY 2018 DATE ISSUED: **DRAWN BY:** DESIGNED BY SB **CHECKED BY** 

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

PDB SUBMITTAL

GI-001

20.General

- 20.1. It is the intent of these specifications to describe the minimum acceptable technical requirements for the materials and workmanship for construction of site improvements for this project. Such improvements may generally include, but not to be limited to, clearing, grading, paving, removal of existing pavement, storm drainage, water lines and sanitary sewers.
- 20.2. It is the intent that the Florida Department of Transportation (FDOT) "Standard Specifications for Road and Bridge Construction: (current edition) together with "Supplemental Specifications to the Standard Specifications for Road and Bridge Construction" (current edition), and the FDOT Roadway and Traffic Design Standards (current edition) be used where applicable for the various work, and that where such wording therein refers to the State of Florida and its Department of Transportation and personnel, such wording is intended to be replaced with the wording which would provide proper terminology; thereby making such "Standard Specifications for Road and Bridge Construction" together with the "FDOT Roadway and Traffic Design Standards" as the "Standard Specifications" for this project. If within a particular section, another section, article or paragraph is referred to, it shall be part of the Standard Specifications also. The Contractor shall abide by all local and State laws, regulations and building codes which have jurisdiction in the area.
- with these specifications and the construction drawings. The material 22.4. Location of drainage structures shall govern, and pipe length may and equipment shown or specified shall not be taken to exclude any other incidentals necessary to complete the work.
- 20.4. All labor, materials, and methods of construction shall be in strict 22.5. Distance and lengths shown on plans and profile drawings are accordance with the plans and construction specifications and the minimum engineering and construction standards adopted by the unit of government which has jurisdiction and responsibility for the construction. Where conflicts or omissions exist, the jurisdictional government Engineering Department's standards shall govern 23 Asphalt Paving Substitutions and deviations from plans and specifications shall be 23.1. Where new asphalt meets existing asphalt, the existing asphalt shall permitted only when written approval has been issued by the Engineer.
- 20.5. Guarantee all materials and equipment to be furnished and/or installed by the Contractor under this contract, shall be guaranteed for a period of (I) one year from the date of final acceptance thereof, against 23.2. Internal asphalt paving constructed on existing sandy soils shall be defective materials, design and workmanship. Upon receipt of notice from the owner of failure of any part of the guaranteed equipment or materials, during the guarantee period, the affected part or materials shall be replaced promptly with new parts or materials by the contractor, at no expense to the owner. In the event the Contractor fails to make necessary replacement or repairs within (7) seven days after notification by the owner, the owner may accomplish the work at the expense of the contractor.

#### 21.Earthwork

- to construction. This shall consist of the complete removal and disposal of all trees, brush, stumps, roots, grass, weeds, rubbish and all other obstructions resting on or protruding through the surface of the existing ground to a depth of 1'. All work shall be in accordance with section 110 of the Standard Specifications.
- 21.2. None of the existing limerock material from demolished pavement is to be incorporated in the new limerock base, unless noted in plans. The existing limerock material from demolished pavement may be incorporated into the stabilized subgrade / subbase, or stabilized shoulder.
- 21.3. Fill material shall be classified as A-I, A-3, or A-2-4 in accordance with AASHTO N--145 and shall be free from vegetation and organic 23.5. Limerock base material shall be placed in maximum 6" lifts. Bases material. Not more than 12% by weight of fill material shall pass the no.
- 21.4. All fill material in areas not to be paved shall be compacted to 95% of the maximum density as determined by AASHTO T-99.
- 21.5. All material of construction shall be subject to inspection and testing to establish conformance with the specifications and suitably for the uses intended. The Contractor shall notify the Engineer at least 24 hours prior to the time he will be ready for an inspection or test. The 24.Concrete Construction Contractor shall follow City and County inspection procedures. The 24.1. Concrete sidewalk shall be in accordance with section 522 of the Contractor shall not proceed with any phase of work dependent on an inspection or test of an earlier phase of work, prior to that test or inspection passing. The Contractor shall be responsible for providing certified material test results to the Engineer of record prior to the release of final certification by the Engineer. Test results must include, but may not be limited to, densities for subgrade and limerock, utilities, excavation, asphalt gradation reports, concrete cylinders, etc.
- 21.6. When encountered, muck shall be completely removed from the 24.2. Sidewalk Curb ramps hall be in accordance with F.D.O.T. Roadway center line (10) ten feet beyond the edge of pavement each side. All such material shall be replaced by approved granular fill.
- 21.7. When encountered within drainage swales, hardpan shall be removed to full depth for a width of (5) five feet at the invert and replaced with granular materials.
- 21.8. All underground utilities and drainage installations shall be in place prior to subgrade compaction and pavement construction.
- 21.9. Ground adjacent to roadway/pavement having runoff shall be graded Section 30 Water distribution and sanitary sewer force mains. (2) two inches lower than the edge of pavement to allow for the placement of sod.
- 21.10. Site grading elevations shall be within 0.1' of the required elevation for non paved areas and all areas shall be graded to drain without ponding.
- 21.11. The Contractor shall perform all excavation, fill, embankment and grading to achieve the proposed plan grades including typical road sections, side slopes and canal sections. All work shall be in accordance with section 120 of the Standard Specifications. If fill material is required in excess of that generated by the excavation, the Contractor shall supply this material as required from off-site.
- 21.12. A 2" blanket of top soil shall be placed over all areas to be sodded or seeded and mulched within the project limits unless otherwise indicated

on the plans.

21.13. Sod shall be St. Augustine unless otherwise indicated on the plans, and shall be placed on the graded top soil and watered to insure satisfactory condition upon final acceptance of the project.

#### 22.Drainage

- 22.1. Inlets all inlets shall be the type designated on the plans, and shall Specifications. All inlets and pipe shall be protected during construction to prevent siltation in the drainage systems by way of temporary plugs and plywood or plastic covers over the inlets. The entire drainage system shall be cleaned of all debris prior to final acceptance.
- 22.2. Pipe specifications: the material type is shown on the drawings by one of the following designations:
- RCP = reinforced concrete pipe. ASTM designation C--76. section 941 of the Standard Specifications.
- CMP = corrugated metal (aluminum) pipe, ASTM designation M-196.
- CMP (smooth lined) = corrugated metal aluminum pipe, (smooth lined) ASTM designation M-196.
- SCP = slotted concrete pipe, sections 941 and 942, of the Standard Specifications.
- PVC = polyvinyl chloride pipe.
- PCMP = perforated cmp, section 945, of the Standard Specifications
- Corrugated High Density Polyethylene Pipe (HDPE) (12 Inches to 60 Inches), shall meet the requirements of FDOT Specification

20.3. The Contractor shall furnish all labor, materials and equipment and 22.3. Pipe backfill - requirements for pipe backfill crossing roads or parking perform all operations required to complete the construction of a paving areas shall be as defined in the section 125-8, of the Standard and drainage system as shown on the plans, specified herein, or both. It Specifications. Pipeline backfill shall be placed in 6 inch lifts and is the intent to provide a complete and operating facility in accordance compacted to 100% of the standard proctor (AASHTO T--99 specifications) 30.5. PVC pressure pipe for sizes 4" through 12" and shall conform to 30.21. Swing check valves for water, sewage, sludge, and general service

- have to be adjusted to accomplish construction as shown on these
- referenced to the inner walls of structures.
- 22.6. Filter fabric shall be Mirafi, Typar or equal conforming to section 985 of the Standard Specifications.

- be saw cut to provide a straight even line. Prior to removing curb or autter. the adjacent asphalt shall be saw cut to provide a straight even
- constructed with a 12" subgrade, compacted to a minimum density of 100% maximum density as determined by AASHTO T-99. The compacted subgrade shall be constructed in the limits shown on the plans. All subgrade shall have an LBR of 40 unless otherwise noted.
- 23.3. Asphaltic concrete surface course shall be constructed to the limits shown on the plans. The surface course shall consist of the thickness and type asphaltic concrete as specified in the plans. All asphaltic concrete shall be in accordance with sections 320, 327, 330, 334, 336, 337, 337, 338, 339 and 341 of the Standard Specifications.
- 21.1. All areas within the project limits shall be cleared and grubbed prior 23.4. Limerock base shall be prepared, compacted and graded and shall be in accordance with section 200 of the Standard Specifications. All 30.10 Water distribution system restraint: all fittings and specific pipe joints limerock shall be compacted to 98% per AASHTO T-180 and have not less than 70% of carbonates of calcium and magnesium unless otherwise designated. The Engineer shall inspect the completed base course and the Contractor shall correct any deficiencies and clean the base course prior to the placement of the prime coat. A tack coat will also be required if the Engineer finds that the primed base has become excessively dirty or the prime coat has cured to the extent of losing bounding effect prior to placement of the asphaltic concrete surface course. The prime and tack coats shall be in accordance with section 300 of the Standard Specifications.
  - greater than 6" shall be placed in two equal lifts. If, through field tests, the Contractor can demonstrate that the compaction equipment can achieve density for the full depth of a thicker lift, and if approved by the joints shall be restrained as outlined below engineer, the base may be constructed in successive courses of not more than 8 inches (200 mm) compacted thickness.
  - 23.6. Asphalt edges that are not curbed shall be saw cut to provide a straight even line to the dimensions shown on plans.

- Standard Specifications and in accordance with F.D.O.T. Roadway and Traffic Design Standards, index no. 310. Concrete sidewalk shall be 4" thick, unless otherwise not and constructed on compacted subgrade, with 1/2" expansion joints placed at a maximum of 75', unless otherwise noted on plans. Crack control joints shall be 5' on center. All concrete 30.12. Water distribution valves shall be gate valves, iron body, fully sidewalks that cross driveways shall be 6" thick, unless otherwise noted on plans.
- and Traffic Design Standards, index no. 304.
- 24.3. Concrete curb shall be constructed to the limits shown on the plans. The concrete shall have a minimum compressive strength of 2500 PSI at 28 days and shall be in accordance with section 520 of the Standard Specifications. Concrete curbing shall be in accordance with F.D.O.T. Roadway and Traffic Design Standards, index no. 300.

Note: If materials list here on are in conflict with utility owner, material owner requirements shall govern

30.1. All water main pipe, including fittings, shall be color coded or marked using blue as a predominant color to differentiate drinking water from reclaimed or other water. Underground plastic pipe shall be solid-wall or black pipe with blue stripes incorporated into, or applied to, the pipe 30.16.Dresser couplings shall be regular black couplings with plain gaskets blue pipe, shall have a co-extruded blue external skin, or shall be white wall; and underground metal or concrete pipe shall have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe that are located at no greater than 90-degree intervals around the pipe,

and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top

- be constructed in accordance with section 425 of the Standard 30.2. Ductile iron pipe for water distribution mains shall conform to 30.18. Sewage force main valves shall be plug valves which shall be of the ANSI/AWWA standard C151/A21.51 latest revision, "ductile iron pipe centrifugally cast in metal molds or sand-lined molds" with a minimum wall thickness of class 52 unless otherwise noted in the plans. Ductile iron pipe shall be cement lined and seal coated in accordance with ANSI/AWWA standard C104/A21.4 latest revision. The pipe shall be adapted for use with class 250 fittings for all sizes. Water main shall be colored blue in accordance with Florida State Statutes.
  - 30.3. Ductile iron pipe for sewage force mains shall conform to ANSI/AWWA standard C151/A21.51 latest revision, "ductile iron pipe centrifugally cast in metal molds or sand- lined molds" with a minimum wall thickness of class 52 unless otherwise noted in the plans. Ductile iron pipe shall be interior ceramic epoxy lined and exterior coated with the manufacturer's coating system (Protecto 401 ceramic epoxy with a minimum dry film thickness of 40 mils and an outside coating of either
  - 30.4. All pipe & fittings on the lift station sites shall be ductile iron conforming to the same specifications as above for sewage force mains except that flanged ductile iron pipe & fittings shall be used inside valve pits and wet wells. Flanged pipe and fittings shall conform to ANSI/AWWA C115/a21.15 latest revision and ANSI/AWWA adhered to: all sizes - class 52.
  - ANSI/AWWA standard C900 latest revision. PVC pressure pipe shall be made from class 12454-a or class 12454-b virgin material and conform with the outside diameter of cast iron pipe with a minimum wall thickness of dr series 18. Ultra violet degradation or sun bleached pipe will be cause for rejection. Water main shall be colored blue in accordance with Florida State Statutes. Force main shall be impregnated with green pigment. Reuse main shall be impregnated with 30.22. High density polyethylene pipe (HDPE) for water distribution mains purple pigment
  - 30.6. Ductile iron fittings for water distribution mains shall conform to ANSI/AWWA standard C110/A21.10 latest revision. Fittings 4" and 31.Service connection: larger shall be cement lined and seal coated in accordance with shall be colored blue in accordance with Florida state statutes.
  - 30.7. Cast iron and ductile iron fittings for sewage force mains shall conform to ANSI/AWWA standard C110/A21.10 latest revision. Fittings 4" and larger shall be coated in accordance with the requirements of ductile iron pipe for sewage force mains.
  - to ANSI/AWWA standard C111/A21.11 latest revision. Mechanical joint or push-on joint to be rubber gasket compression-type. Special fittings approval of the engineer.
  - gasket type only. No solvent weld or threaded joints will be permitted.
  - shall be restrained as outlined below
  - - Push-on P.V.C. EBAA iron series 1600
  - Push-on DIP EBAA iron series 1700
  - tr-flex by U.S. Pipe or flex ring by American
  - Fittings w/ DIP EBAA iron series 1100 megalug
  - Fittings w/ P.V.C. EBAA iron series 2000 megalug
  - Length of restrained pipe shall be as indicated on restrained joint pipe detail. (see water & sewer detail sheet)
  - 30.11. Sewage force main system restraint: all fittings and specific pipe
  - Joint restraint
  - Push-on P.V.C. EBAA iron series 1600
  - Push-on DIP EBAA iron series 1700
  - tr-flex by U.S. Pipe or
  - flex ring by American
  - Fittings w/ DIP EBAA iron series 1100 megalug
  - Fittings w/ P.V.C. EBAA iron series 2000 megalug
  - Length of restrained pipe shall be as indicated on restrained joint pipe detail. (see water & sewer detail sheet)
  - resilient seat bronzed mounted non-rising stem, rated at 200 PSI and conforming to ANSI/AWWA C509 latest revision, and shall have
  - mechanical joints. 30.12.1. Gate valves 4" and larger shall be Mueller A-2360, American 33.Testing: latest revision or approved equal.
  - 30.12.2. Tapping valves shall be Mueller T-2360 or approved equal.
  - 30.12.3. Gate valves 3" or less shall be Nibco T-133 or T-136 with malleable hand wheels or approved equal. 30.13. Tapping sleeves shall be Mueller H615, Clow F- 2505 or approved
  - 30.14. Valve boxes shall be U.S. foundry 7500 or approved equal painted blue with the designation "water"
  - 30.15. Retainer glands for DIP shall conform to ANSI/AWWA C111/A21.11 latest revision. All glands shall be manufactured from ductile iron as listed by underwriters laboratories for 250 psi minimum water pressure rating. Clow corporation model f-1058, standard fire protection
  - equipment company or approved equal. for galvanized steel pipe. They shall be dresser style 90. No substitutions allowed.
  - internal valve opening or approved equal.. Pumper nozzle to be 18"

Retainer glands are preferred for restraining. Fire hydrant shall comply with ANSI/AWWA C502 latest revision. Fire hydrants shall be painted in 33.4. For water distribution pipes, disinfection and bacteriological testing accordance with NFPA #291 or per agency standards having iurisdiction. Blue raised reflective pavement marker (rpm) shall be used to identify fire hydrant location. The placement of the rpm to be at the centerline of the outside roadway lane.

- non-lubricated, eccentric type with resilient faced plugs, port areas for valves 20 inches and smaller shall be at least 80% of full pipe area. Port area of valves 24 inches and larger shall be at least 70% of full pipe area. The body shall be of semi-steel (ASTM A-126 C1.b) and shall have bolted bonnet which gives access to the internals of the valve. Seats shall be welded overlay of high nickel content or a stainless steel plate locked in the body cavity. If a plate is used, it shall be replaceable 40.General through the bonnet access. Bearings shall be permanently lubricated of 40.1. Manhole, valve box, meter box and other structure rim elevations stainless steel, bronze or Teflon lined, fiber glass backed Duralon. Bearing areas shall be isolated from the flow with grit seals. Valves shall have packing bonnets where the shaft protrudes from the valve and the packing shall be self-adjusting chevron type which can be replaced without removing the bonnet. All nuts, bolts, springs and washers shall
- coal tar epoxy or asphalt). Cement mortared linings are not appropriate 30.19. Plug valves shall be designed for a working pressure of 150 PSI the valve and actuator shall be capable of satisfactory operation in either direction of flow against pressure drops up to and including 100 PSI (for directions at 100 psi differential. Plug valves over 12" in diameter shall have worm gear operators. The operating mechanism shall be for buried service with a 2 inch square operating nut.
- C110/A21.10 latest revision. The following thickness classes shall be 30.20.Plug valves are to be installed with the seat pointed towards the upstream flow, when specified
  - shall be of the outside lever and spring or weight type, in accordance with ANSI/AWWA C 508 latest revision swing-check valves for waterworks service, 2" through 24" NPS, unless otherwise indicated, with full-opening passages, designed for a water-working pressure of 150 PSI they shall have a flanged cover piece to provide access to the
  - shall conform to AWWA C906 standard, latest revision. Pipes shall be color-coded blue, minimum 40 feet standard lengths.
- ANSI/AWWA standard C104/A21.4 latest revision. Water Main fitting 31.1. Service saddles shall be fusion bonded plastic coated ductile iron
  - 31.2. Service lines shall be polyethylene (PE 3408), 200 p.s.i rated, DR9. 41.6. Pipe joints shall be of the compression type totally confined grip seal
- 30.8. Joints for bell and spigot ductile iron pipe and fittings shall conform 31.3. Corporation stops shall be manufactured of brass alloy in 41.7. PVC clean-outs to have screw type access plug. Long radius wye accordance with ASTM B-62 with threaded ends, as manufactured by Ford ballcorp, catalog # 1100 or approved equal.
- 30.9. Joints for PVC pressure pipe shall be bell and spigot push-on rubber 31.5. Meter stops shall be 90 degree lockwing type and shall be of bronze
  - construction in accordance FV63-777W" latest revision with ASTM B-62. Meter stops shall be closed bottom design and resilient "0" ring sealed against external leakage at the top. Stops shall be equipped with a meter coupling nut on the outlet sides, as manufactured by Ford or 42. Installation: approved equal.
  - 32. Installation:
  - 32.1. Where restrained pipe joints are required due to fittings appurtenances, etc., pipe material shall be DIP
  - 32.2. All PVC pipe shall be installed in accordance with the uni-bell plastic pipe association "guide for installation of PVC pressure pipe for 42.3. Pipe to manhole connection to be Fernco neoprene boot couplings municipal water distribution system," and ANSI/AWWA C605-xx latest
  - 32.3. All DIP shall be installed in accordance with ANSI/ C600-xx latest providing uniform bearing under the base.
  - 32.4. All water mains shall typically be laid with a minimum 36" cover for 42.6. Two coats of Koppers 300-m, first red, second one black, shall be PVC and 30" cover for DIP
  - 32.5. Detector tape shall be laid 18 inches above all water and sewer lines. A 14 gauge multi-strand wire shall be attached to all nonconductive water mains to facilitate location. An extra 4 feet of wire shall be provided at all valves, blow-offs, hydrants, etc. The wire shall be tested for continuity at the pressure test.
  - 32.6. Pipe deflection shall not exceed 50% of the maximum deflection recommended by the manufacturer.
  - 32.7. A continuous and uniform bedding shall be provided. Backfill material shall be placed in accordance with the plans and specifications.
  - 32.8. All valves shall be installed with adjustable cast iron valve boxes with the word "water" or "sewer", as applicable, cast in the cover. U.S. foundry or approved equal.

  - 250 line or Clow F-6100, conforming to ANSI/AWWA C500 33.1. Before any physical connections and acceptance for operation to the existing water mains are made, the complete water system shall be flushed, pressure tested and disinfected. Copies of passing bacteriological results and pressure test results must be submitted to, and approved by, the engineer, utility owner, and health department. 43.4. The installed sewers may require video inspections. Hydrostatic testing of new mains shall be performed at a minimum starting pressure of 150 PSI for two hours in accordance with ANSI/AWWA C600-05 (hydrostatic test). The pressure test shall not vary more than 5 PSI during the test. The allowable leakage during the pressure test shall be less than the number of gallons per hour as determined by the formula:
    - L = (sd(p)1/2)/148,000.

In which L equals the allowable leakage in gallons per hour. S equals length of pipe (linear feet), d equals nominal diameter of pipe (inches) and p equals the average test pressure (pounds per square inch gauge). Maximum length of test pipe section should be 2000 feet. The water system shall be disinfected in accordance with the ANSI/AWWA C651-05 (water main bacteriological tests).

shall have continuous stripes that run parallel to the axis of the pipe, 30.17. Fire hydrants shall be Mueller centurion traffic type A-423 with 5 1/4" 33.2. The pressure test shall be witnessed by a representative of the utility owner and the engineer of record.

from finished grade. All hydrants to be installed with control valve. 33.3. For water distribution pipes, sampling points shall be provided by the contractor at the locations shown on the plans.

> shall be in accordance with ANSI/AWWA C651-14 (water main bacteriological tests). Maximum distance between sampling points shall be as follows:

- Transmission mains: every 1200 feet
- Branch mains: every 1000 feet
- Isolated mains < 1000 feet: 2 sample points
- Isolated mains > 1000 feet: 3 sample points

#### Section 40 - Gravity Sanitary Sewer Collection System

- within the limits of construction are to be adjusted to conform to plan grades proposed in these plans. If no other individual cost item is included in the contract schedule for a particular structure adjustment.
- 40.2. Distance and lengths shown on plans and profile drawings are referenced to the center of structures.

Note: If materials list here on are in conflict with utility owner, material owner requirements shall govern.

- plug valves over 12" in diameter). Valves shall be bubble tight in both 41.1. All PVC sewer pipe and fittings shall be non-pressure polyvinyl chloride (PVC) pipe conforming to ASTM D 3034, SDR 26, with push-on rubber gasket joints.
  - ¥1.2. Ductile iron pipe shall conform to ANSI/AWWA C151/A21.51-*y*a latest revision, "ductile iron pipe centrifugally cast in metal molds or sand lined molds" with wall thickness class 51 for 8" and above, class 52 for 4 and 6", unless otherwise directed by the engineer Ductile iron pipe shall be epoxy lined or coated with the manufacturer's coating system as approved by the engineer of record and the local municipality or utility owner. In either case, the engineer's review and approval is required for either alternative prior to construction. Cement mortared linings are not appropriate for this application.
  - 41.3. All ductile iron fittings shall conform to ANSI/AWWA standard C110/A21.10-xx latest revision. I fittings and accessories shall be epoxy lined and as manufactured or supplied by the pipe manufacturer or approved equal.
- (ASTM A536) with stainless steel straps, saddles shall be double strap 41.5. Manholes are to be sealed with type II sulphate resistant cement or approved equal - no molding plaster.

41.4. Manholes shall be precast per ASTM C 478 and in accordance with

- Joints for bell and spigot ductile iron pipe and fittings shall conform to ANSI/AWWA standard C111/A21.11-xx latest revision. Mechanical ✓joint or push-on joint to be rubber gasket compression- type.
- connections and fittings shall be used in order to access clean-out and joints shall be considered for specific installation subject to the 31.4. Curb stops shall be Ford v63-44w-x" latest revision or approved 41.8. Cleanouts shall be installed at all sewer services exceeding 75' in length (every 75') with a clean out at the property line, easement line, or 5' from a building. The contractor shall coordinate the location of the building cleanout (5' from the building) and elevation of the end of the

sewer service with the building plumbing contractor. Cleanouts shall be

- the same size as the service lateral in which they are installed.
- 42.1. PVC sewer pipe shall be laid in accordance with ASTM D 2321 and the Uni-Bell plastic pipe association's "recommended practice for the installation of PVC sewer pipe."
- 42.2. DIP shall be installed in accordance with ANSI/AWWA C-600-xx
- with stainless steel accessories or approved equal. 42.4. Manboles shall be set plumb to line and grade on firm subgrade
- All openings and joints shall be sealed watertight.
  - applied to the inside of all manholes and shall be applied in accordance with the manufacturer's specifications (16 mils per coat). Coating as required by utility owner or engineer shall be applied to the outside of the manhole. The interior coats shall be applied after sewer lamping of lines. After the application of each coat, the utility owner and engineer shall inspect the manholes. The inspection shall be scheduled a minimum of 48 hours prior to inspection.
- 43.Testing: Testing of gravity sewer mains and laterals shall be in accordance with the utility owner's minimum design and construction standards latest revision.
- 43.1. After construction of the sewer system, the engineer may require a visual infiltration and/or exfiltration test to be performed on the entire
- 43.2. An air test may be substituted for the water exfiltration test, upon approval of the engineer. 43.3. The allowable limits of sewer pipe leakage for gravity sewer mains
- shall not exceed 100 gallons per inch of inside pipe diameter per mile per day for any section tested. No visible leakage shall be allowed.



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SID / CONTRACT NO.

REVISIONS

DESCRIPTION DATE

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE: AS NOTED DATE ISSUED: FEBRUARY 2018 DRAWN BY: MC DESIGNED BY: SB CHECKED BY

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

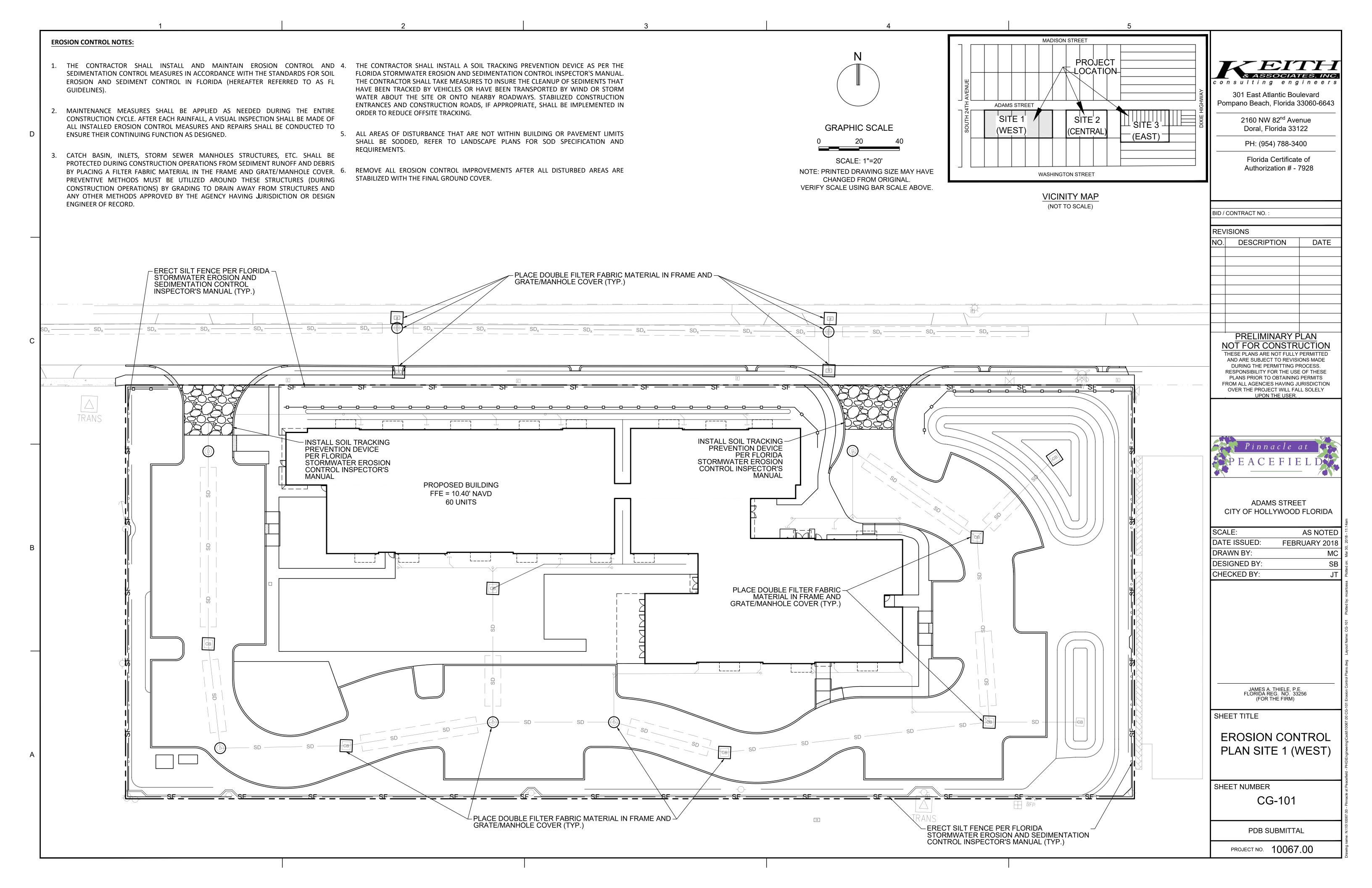
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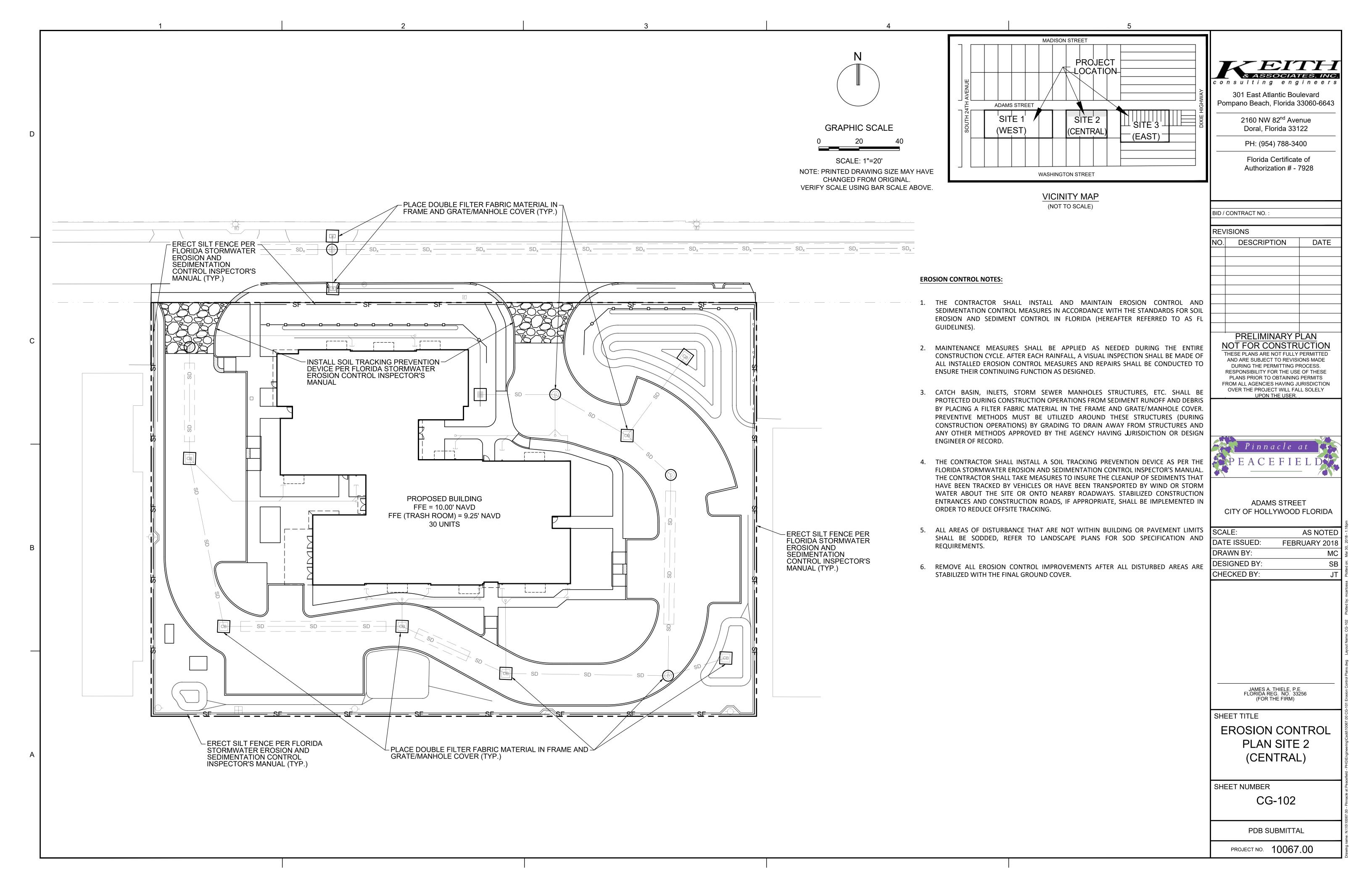
CONSTRUCTION **SPECIFICATIONS** 

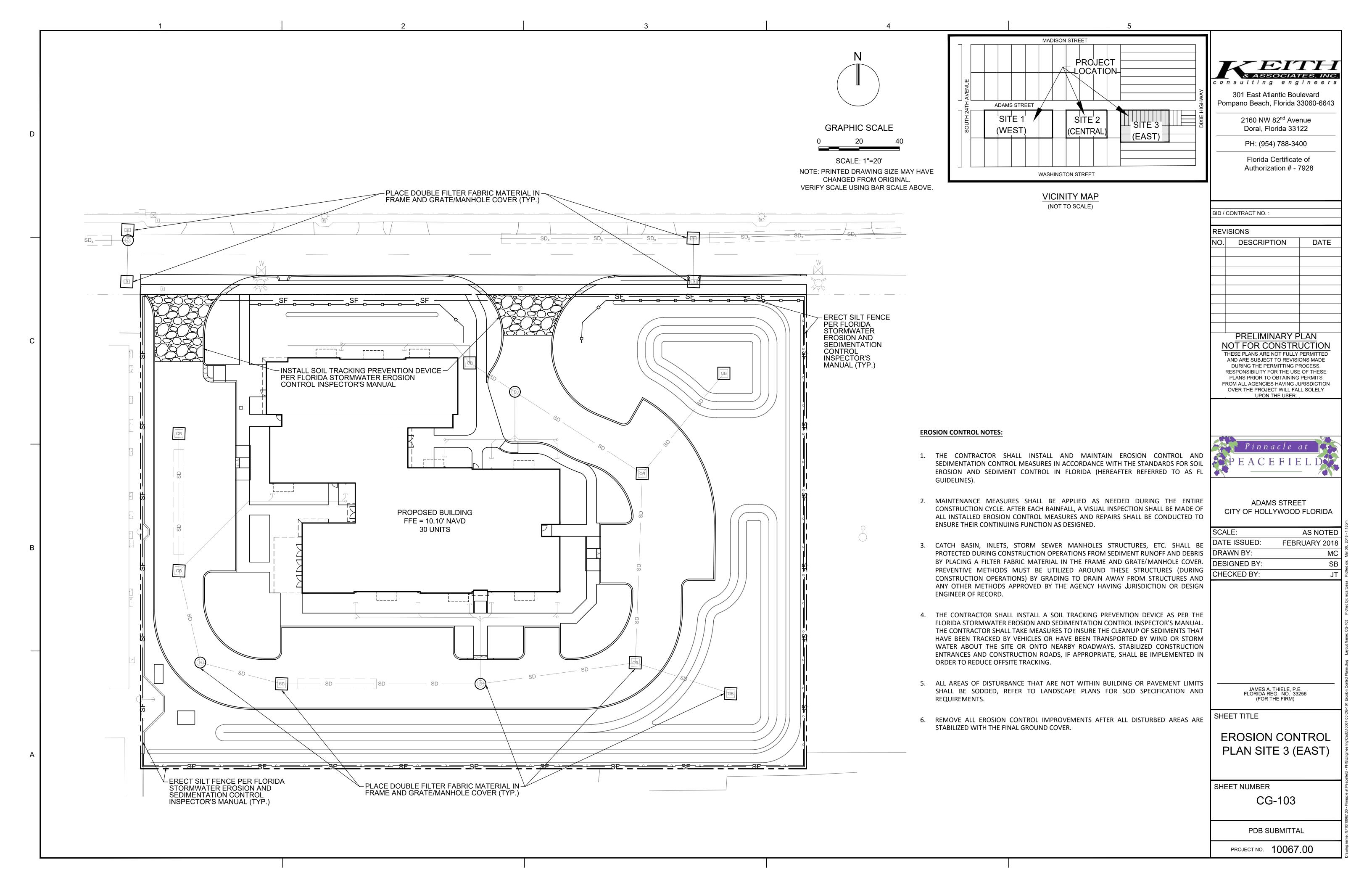
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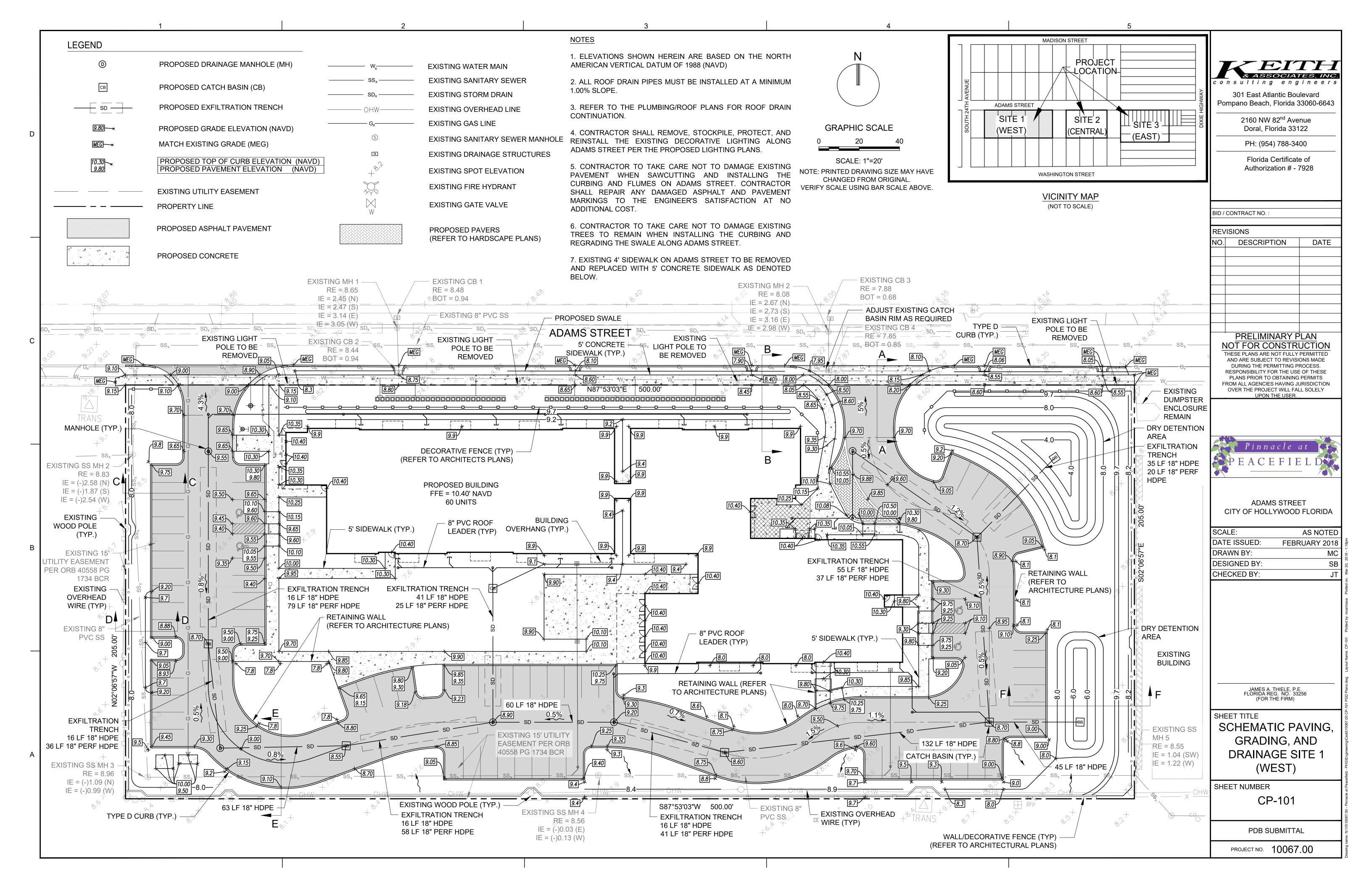
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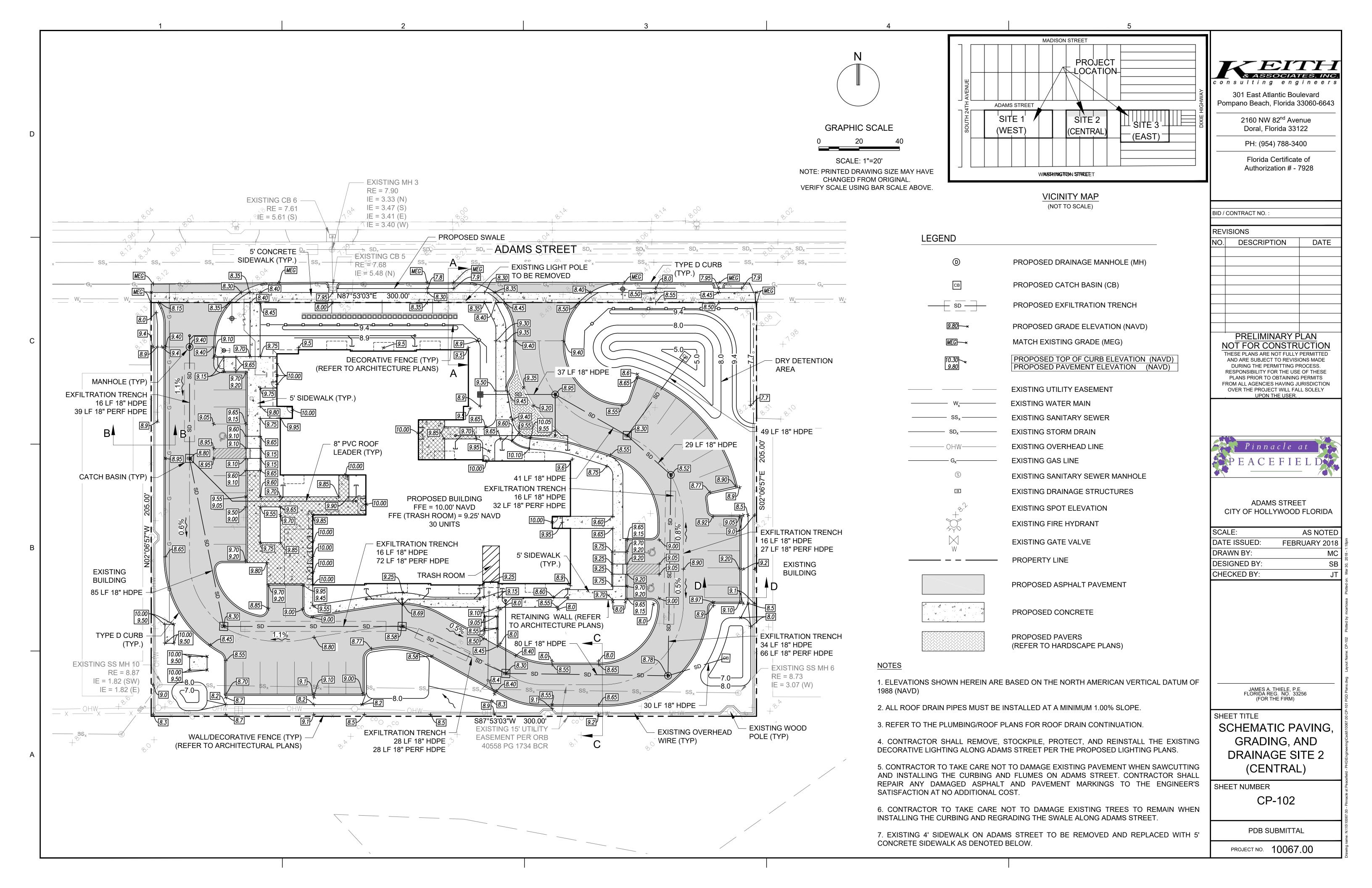
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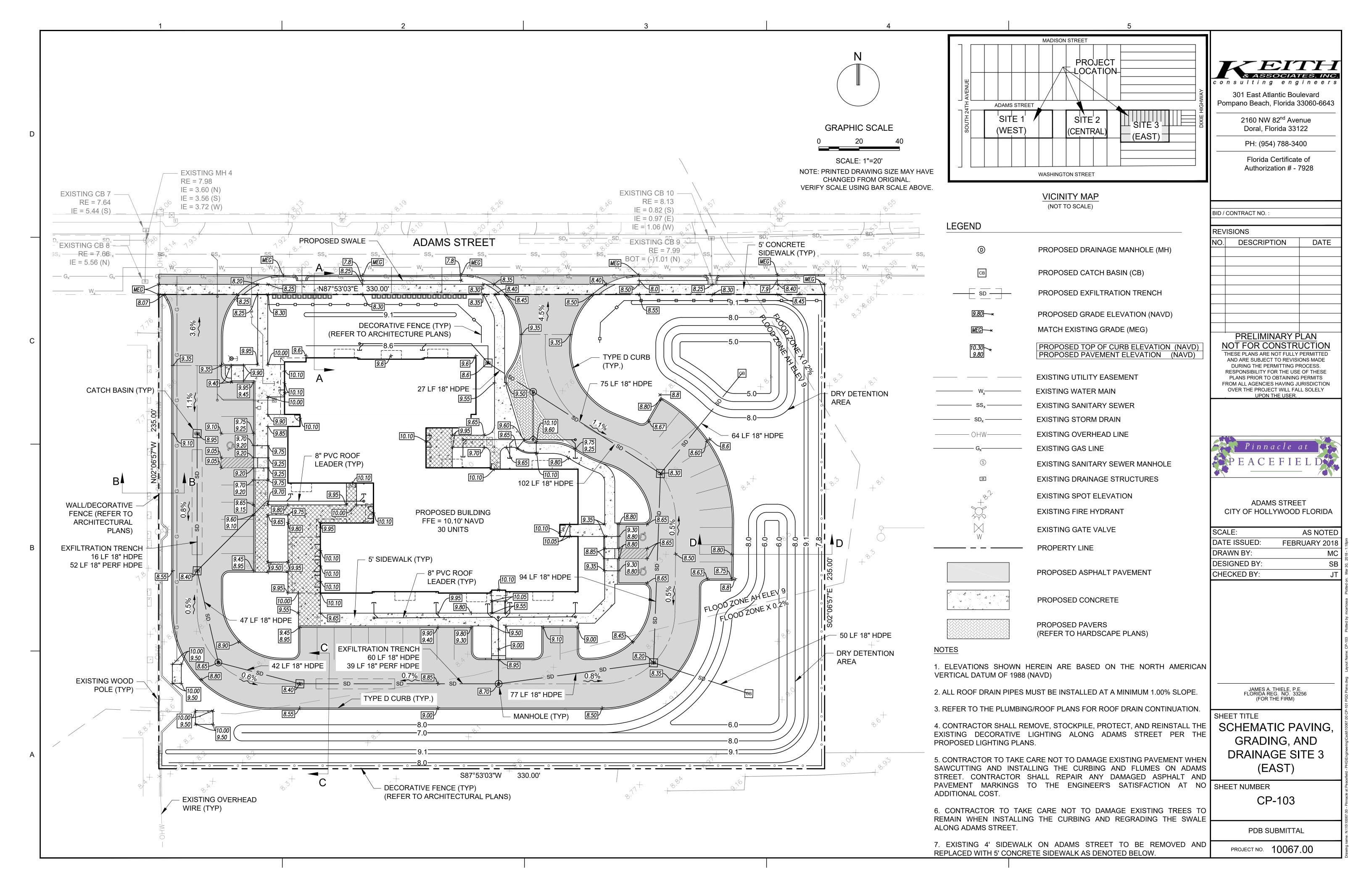








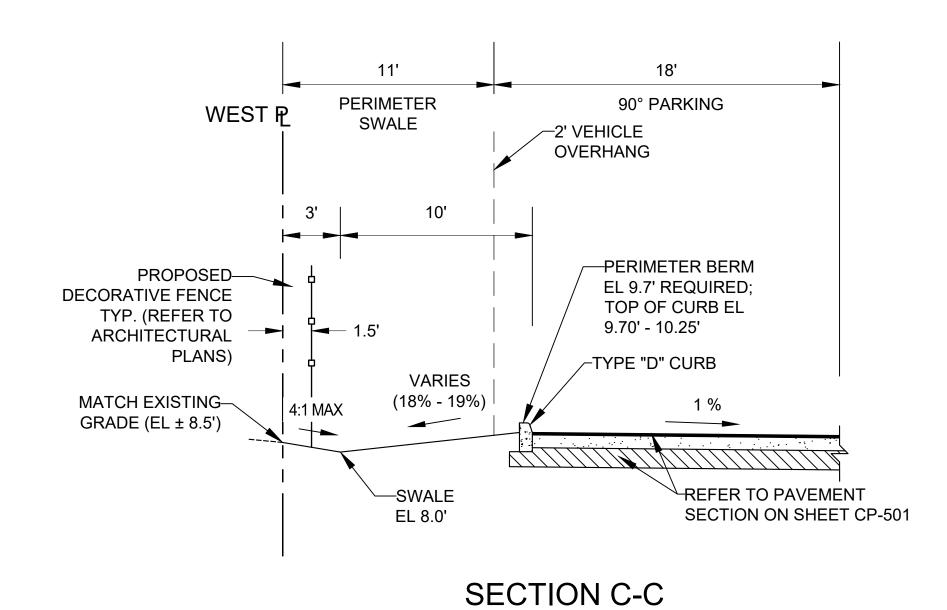




26' 4.6' NORTH P MATCH EXISTING GRADE-(EL ± 7.87' - 8.27') 2% MAX REFER TO PAVEMENT SECTION ON SHEET CP-501

TYPICAL SECTION A-A

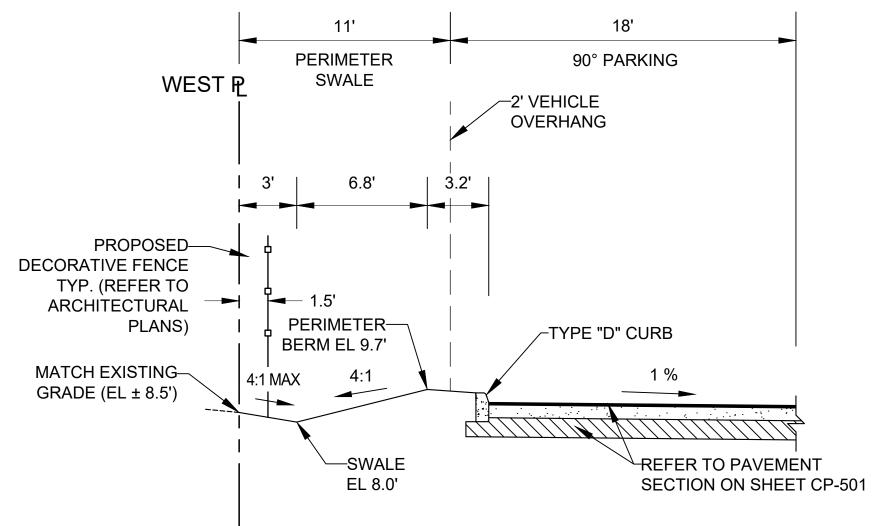
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SCALE: N.T.S.

#### **VARIES VARIES** PLACEMENT OF SOD 3.6' 2' 3' (4.4' - 5.1') |(4.' - 4.2')| SWALE CONCRETE SIDEWALK NORTH P -PROPOSED DECORATIVE FENCE TYP. (REFER TO ARCHITECTURAL **IMETER BANK(S)-**TYPE "D" CURB-PLANS) PROPOSED BUILDING (SEE CU-101) FFE = 10.40' NAVD MATCH EXISTING GRADE-(9.8% -(EL ± 8.20' - 8.55') 2% MAX -SWALE PERIMETER BERM-CONTRACTOR TO GRADE BOTTOM-EL 9.2' EL 9.7' OF SWALE 8" BELOW TOP OF PROPOSED CURB AS AVAILABLE TYPICAL SECTION B-B

SCALE: N.T.S.



# SECTION D-D

SCALE: N.T.S.

#### **GENERAL NOTES:**

- 1. REFER TO SHEETS CP-101 THROUGH CP-103 FOR **GRADES**
- 2. GROUND ADJACENT TO PAVEMENT HAVING RUNOFF SHALL BE GRADED TWO TO THREE INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE



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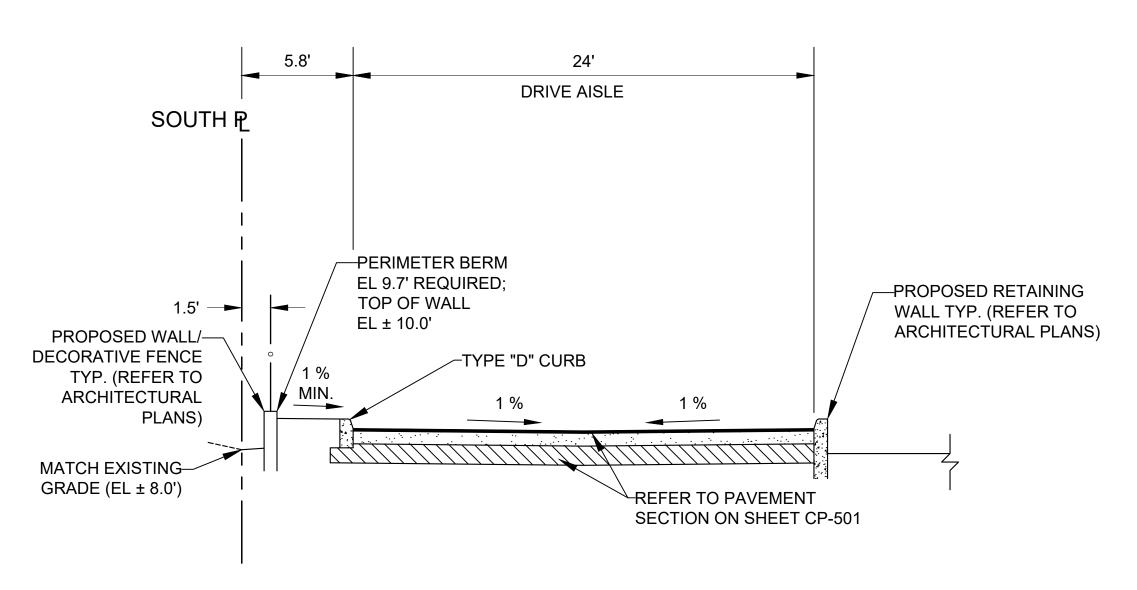
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SCHEMATIC PAVING AND GRADING **SECTIONS SITE 1** (WEST)

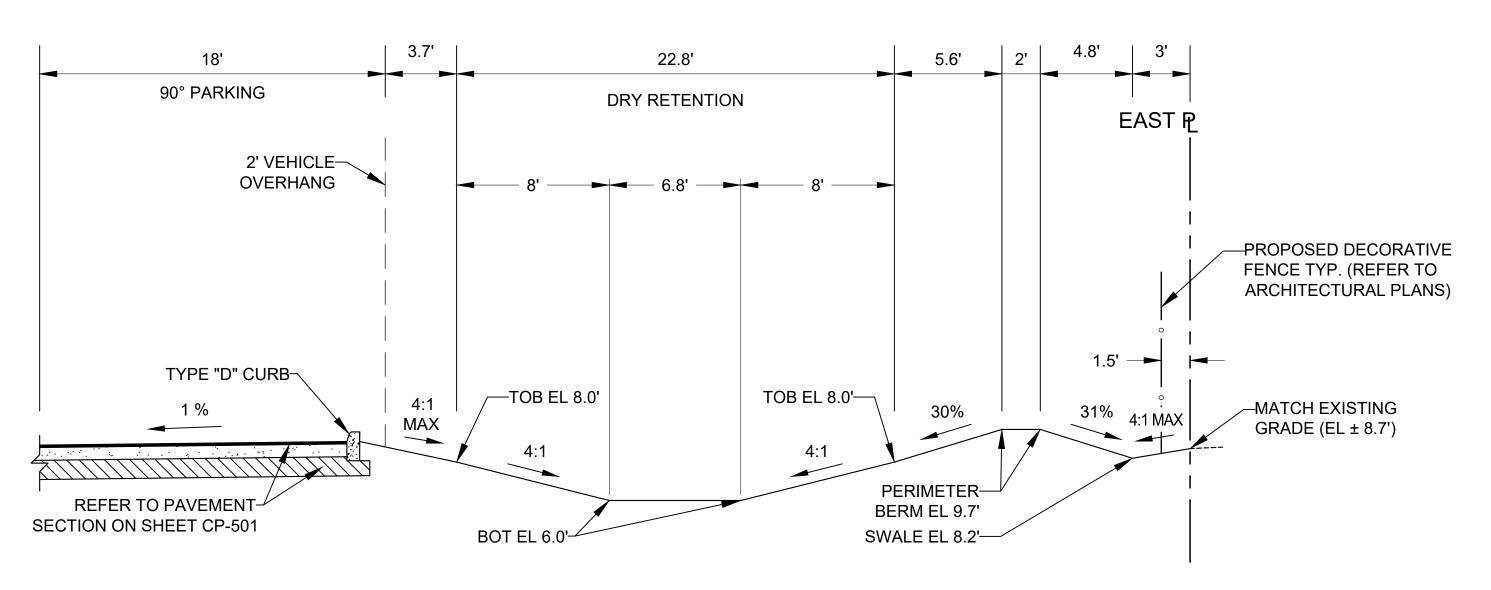
SHEET NUMBER

CP-301

PDB SUBMITTAL



# SECTION E-E SCALE: N.T.S.



SECTION F-F
SCALE: N.T.S.

#### GENERAL NOTES:

- REFER TO SHEETS CP-101 THROUGH CP-103 FOR GRADES
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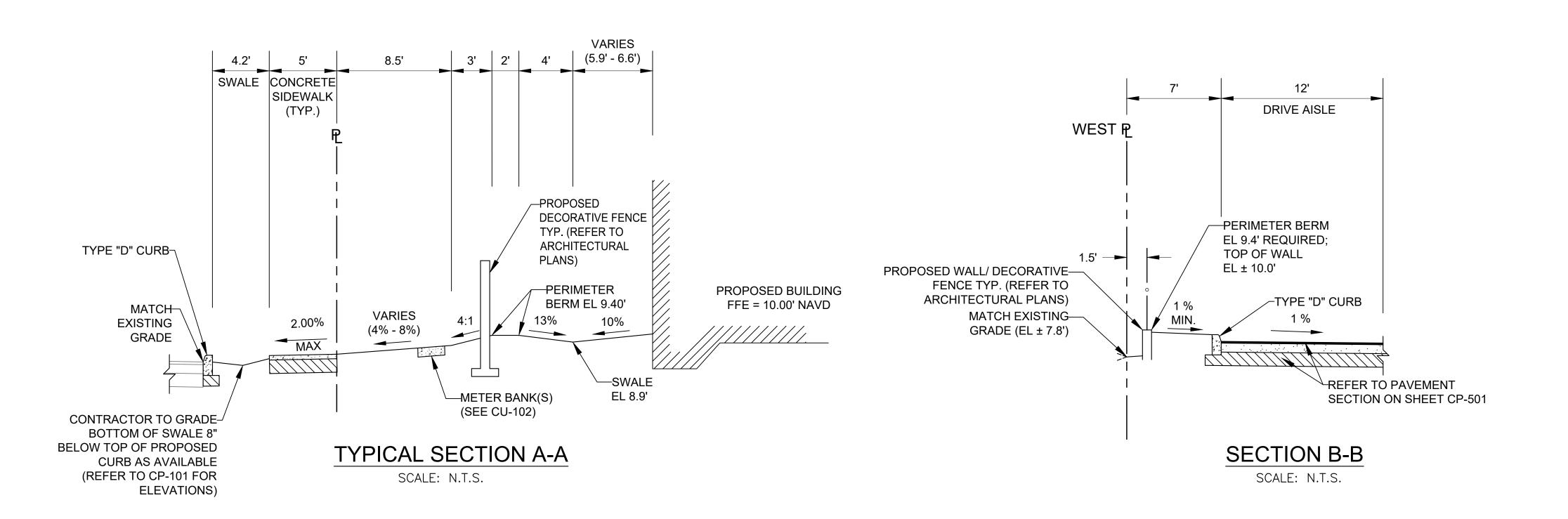
SHEET TITLE

SCHEMATIC PAVING AND GRADING SECTIONS SITE 1 (WEST)

SHEET NUMBER

CP-302

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#### GENERAL NOTES:

- REFER TO SHEETS CP-101 THROUGH CP-103 FOR GRADES
- GROUND ADJACENT TO PAVEMENT HAVING RUNOFF SHALL BE GRADED TWO TO THREE INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD

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SHEET TITLE

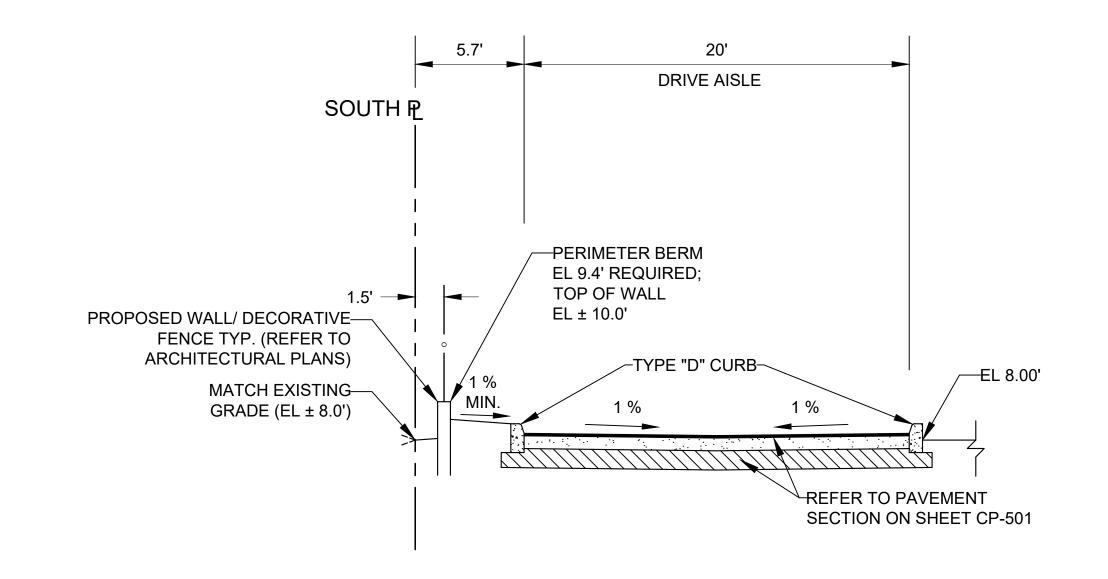
SCHEMATIC PAVING AND GRADING SECTIONS SITE 2 (CENTRAL)

SHEET NUMBER

CP-303

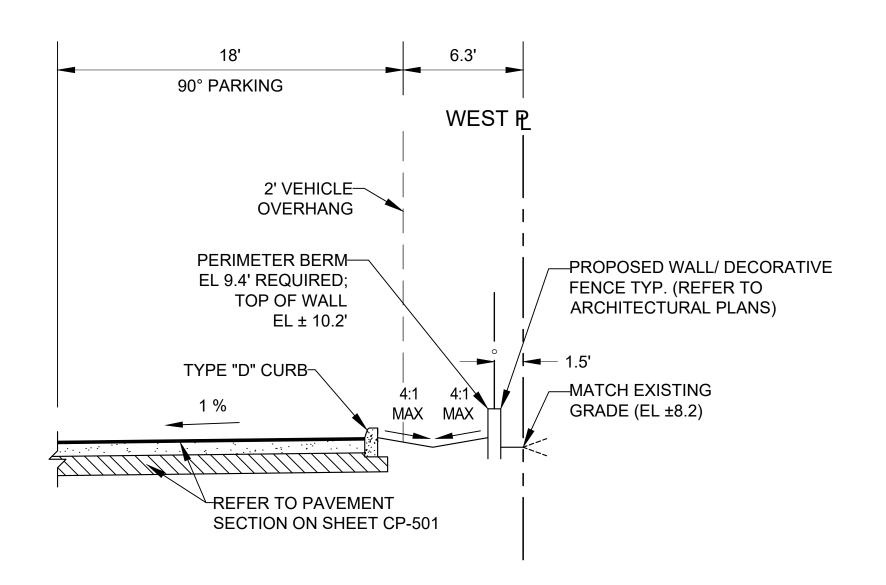
PROJECT NO. 10067.00

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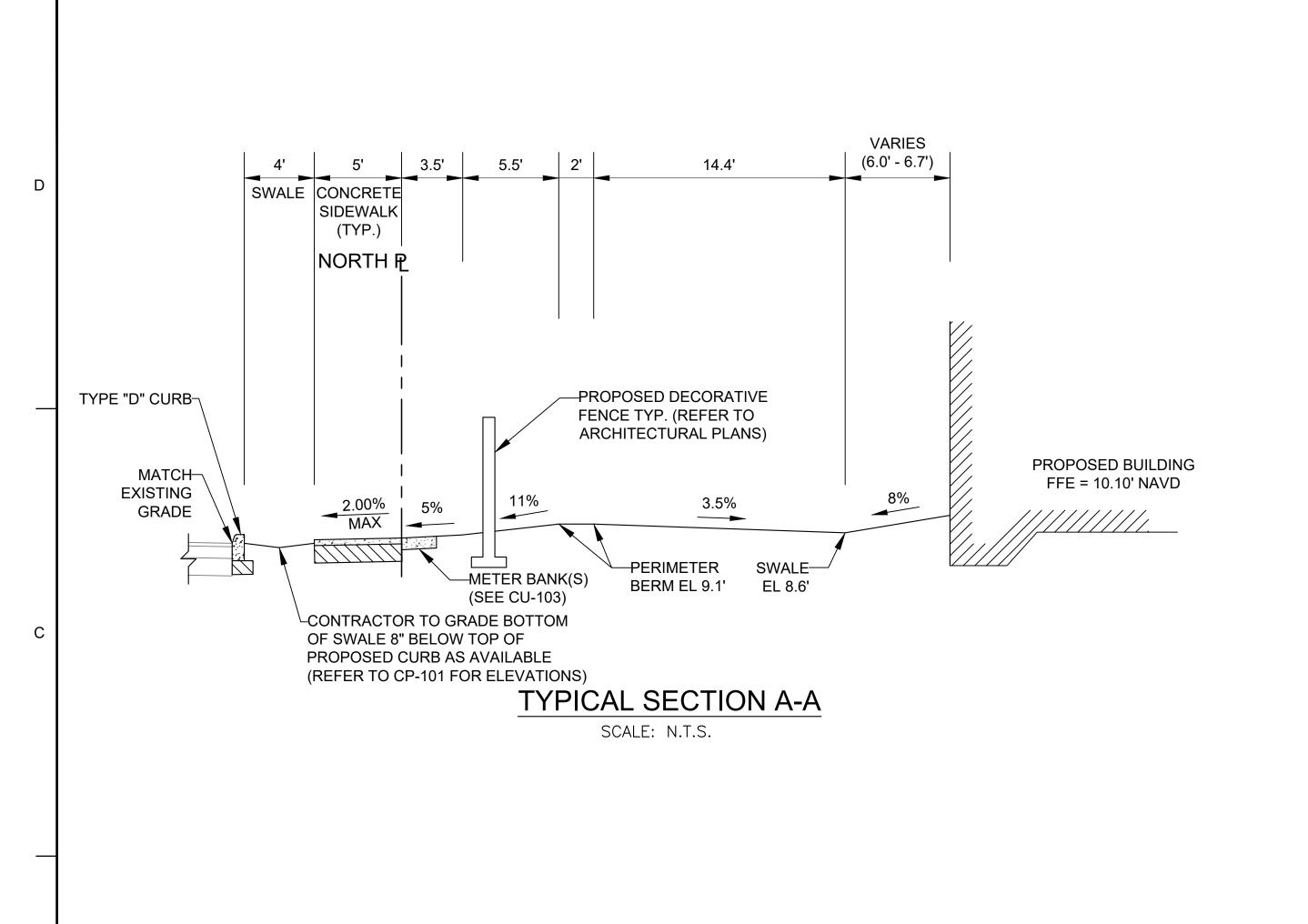
SECTION C-C

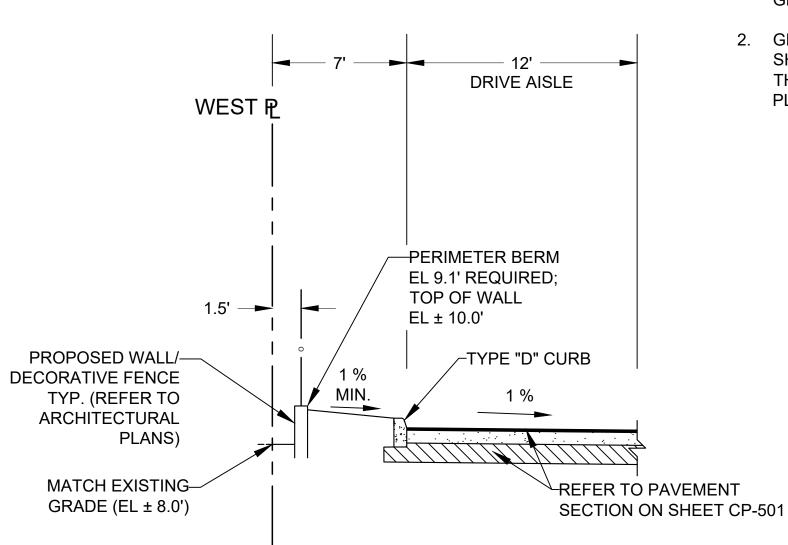
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SECTION D-D

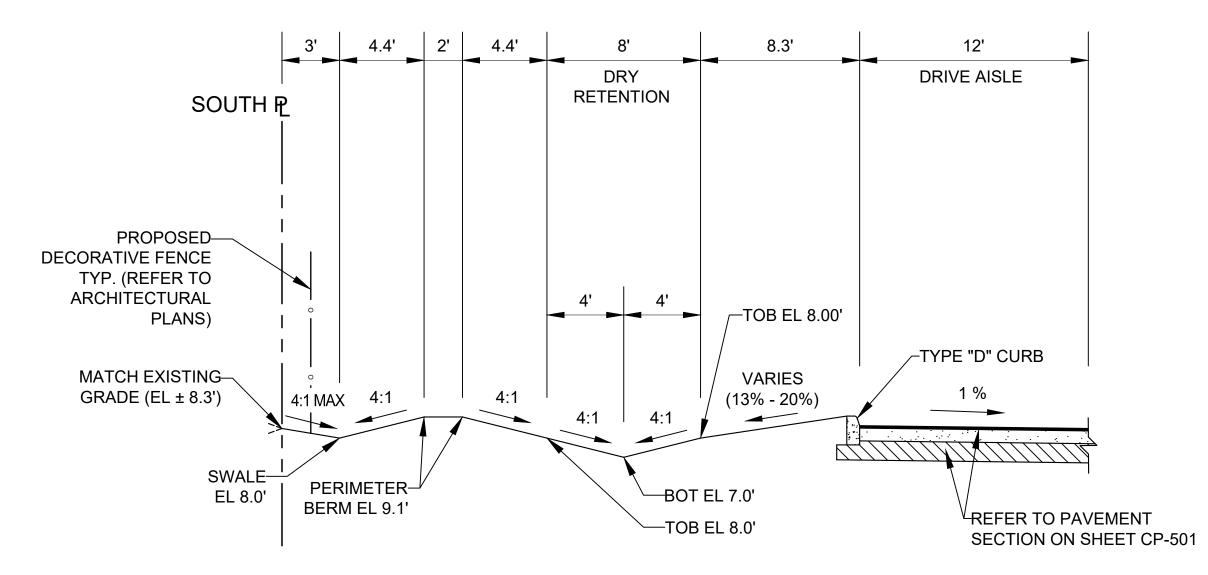
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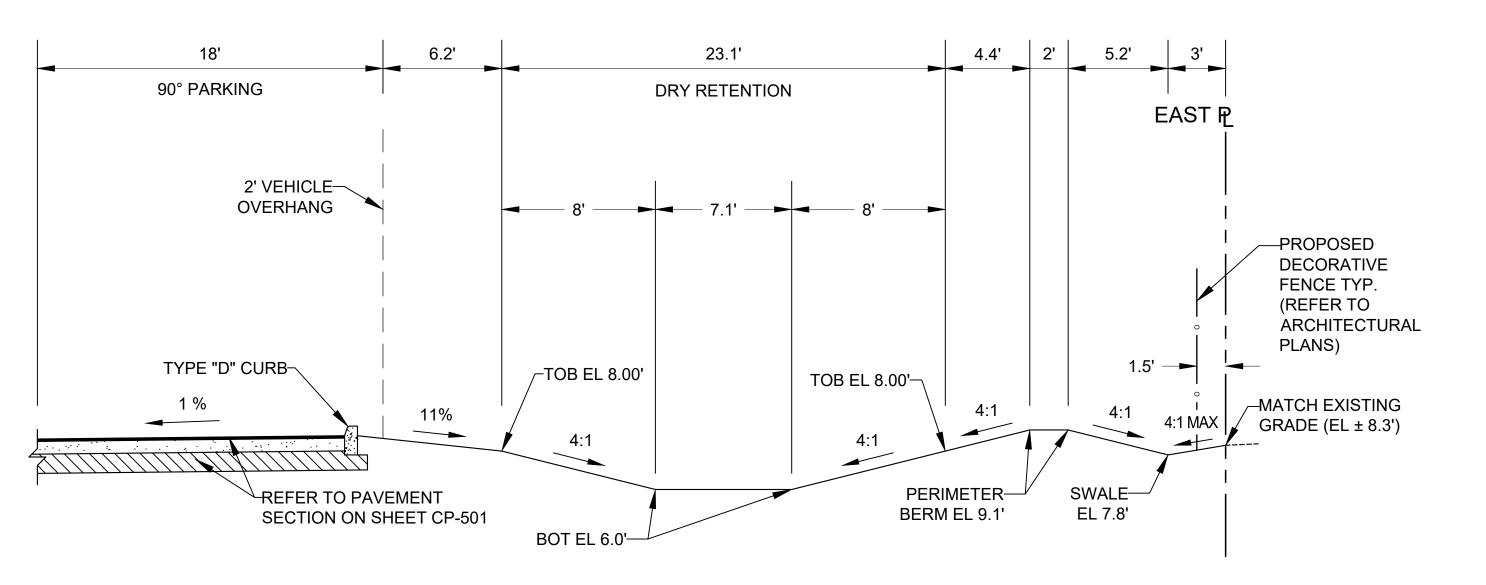


# TYPICAL SECTION B-B

SCALE: N.T.S.







## SECTION D-D SCALE: N.T.S.

**GENERAL NOTES:** 

1. REFER TO SHEETS CP-101 THROUGH CP-103 FOR **GRADES** 

2. GROUND ADJACENT TO PAVEMENT HAVING RUNOFF SHALL BE GRADED TWO TO THREE INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD

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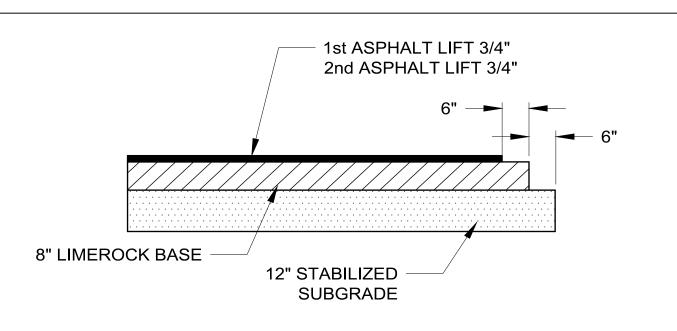
# SHEET TITLE

SCHEMATIC PAVING AND GRADING SECTIONS SITE 3 (EAST)

SHEET NUMBER

CP-304

PDB SUBMITTAL



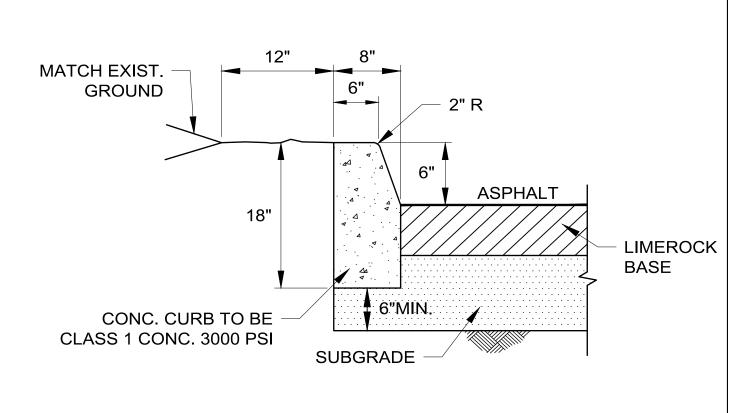
ASPHALTIC CONCRETE VEHICULAR:
FIRST LIFT - 3/4" FDOT - S-III OR APPROVED EQUAL
SECOND (FINAL) LIFT - 3/4" FDOT - S-III OR APPROVED EQUAL
ASPHALT SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS
OF FDOT STANDARDS SPECIFICATIONS SECTION 331.
SECOND LIFT OF ASPHALT SHALL NOT BE PLACED UNTIL FINAL
LANDSCAPE/HARDSCAPE HAS BEEN INSTALLED.

PRIME AND TACK COAT:
LIMEROCK BASE COURSE SHALL CONFORM TO THE REQUIREMENTS
OF FDOT STANDARDS SPECIFICATIONS SECTION 300.
APPLICATION RATES:

PRIME COAT - 0.10 GALLONS PER SQ. YD. TACK COAT - 0.08 GALLONS PER SQ. YD.

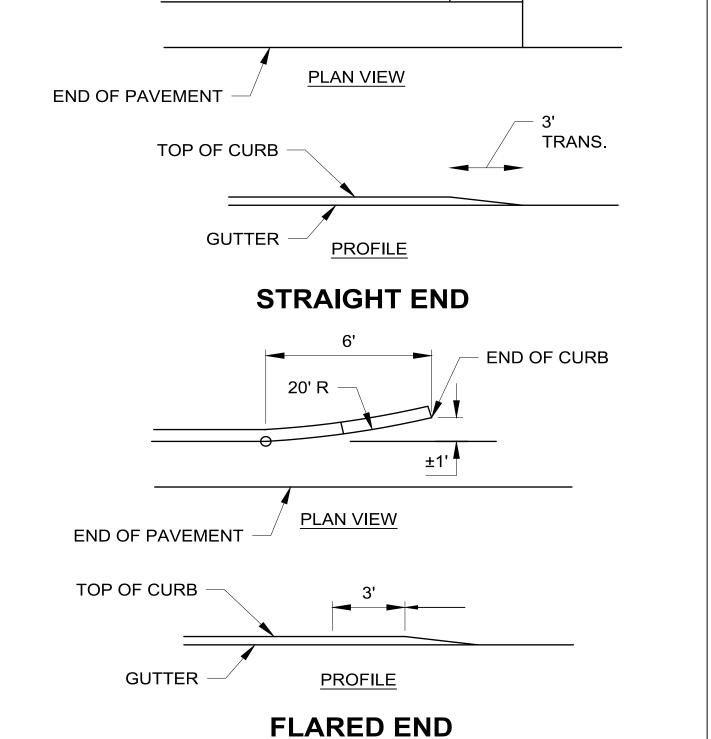
BASE:
8" LIMEROCK BASE COMPACTED TO 98% OF MAXIMUM DENSITY
(AASHTO T-180), LIMEROCK BASE TO CONFORM WITH THE
REQUIREMENTS OF FDOT SPECIFICATIONS SECTIONS 200 AND 911.

SUBGRADE: 12" STABILIZED SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180); MINIMUM LBR = 40.



ALL TYPE "D" CURB SHALL BE IN ACCORDANCE WITH

THE STANDARD REQUIREMENTS OF FDOT INDEX 300.



ASPHALT PAVEMENT DETAIL

SCALE: NOT TO SCALE

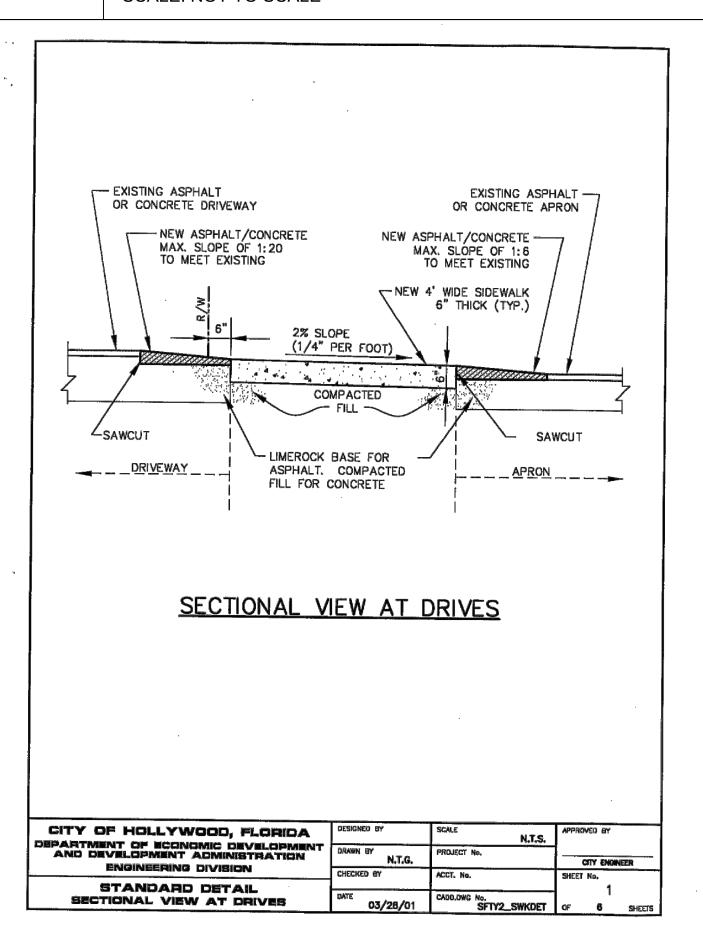
TYPE 'D' CURB DETAIL

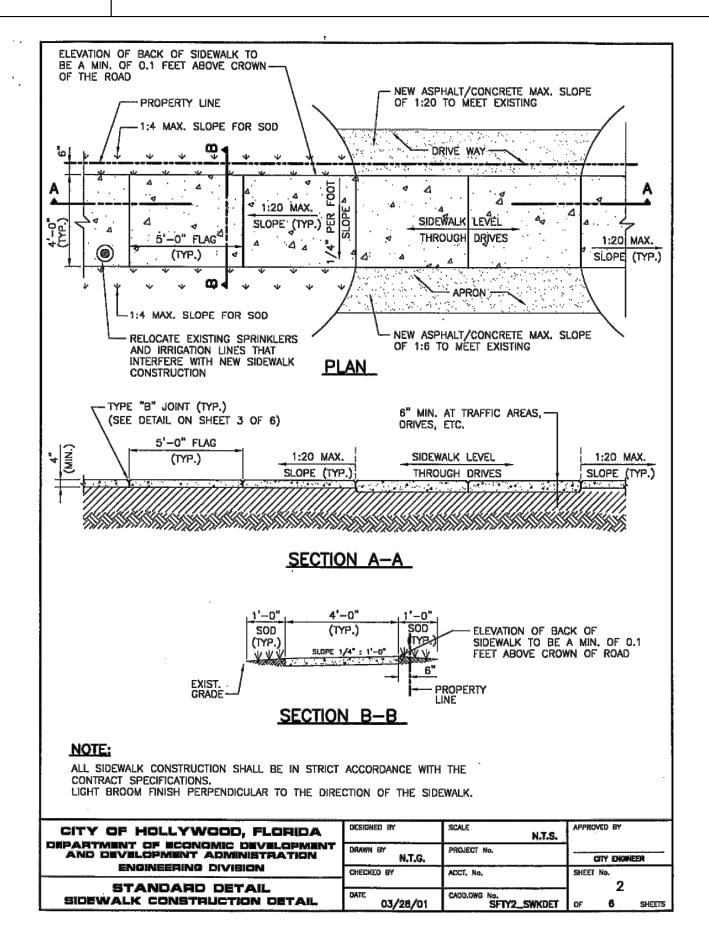
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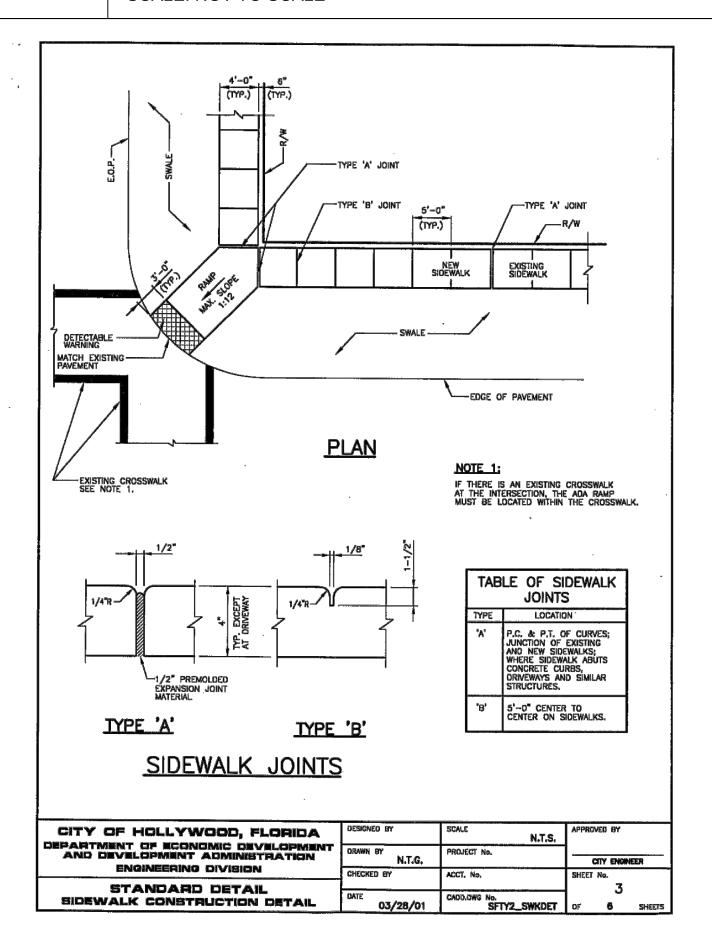
3

CURB & GUTTER FLARED AND STRAIGHT ENDS

SCALE: NOT TO SCALE









301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

> 2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

PH: (954) 788-3400

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO. DESCRIPTION DATE

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS.
RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.



ADAMS STREET
CITY OF HOLLYWOOD FLORIDA

S	CALE:	AS NOTED
	ATE ISSUED:	FEBRUARY 2018
	RAWN BY:	MC
	ESIGNED BY:	SB
С	CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

PAVING, GRADING, AND DRAINAGE DETAILS

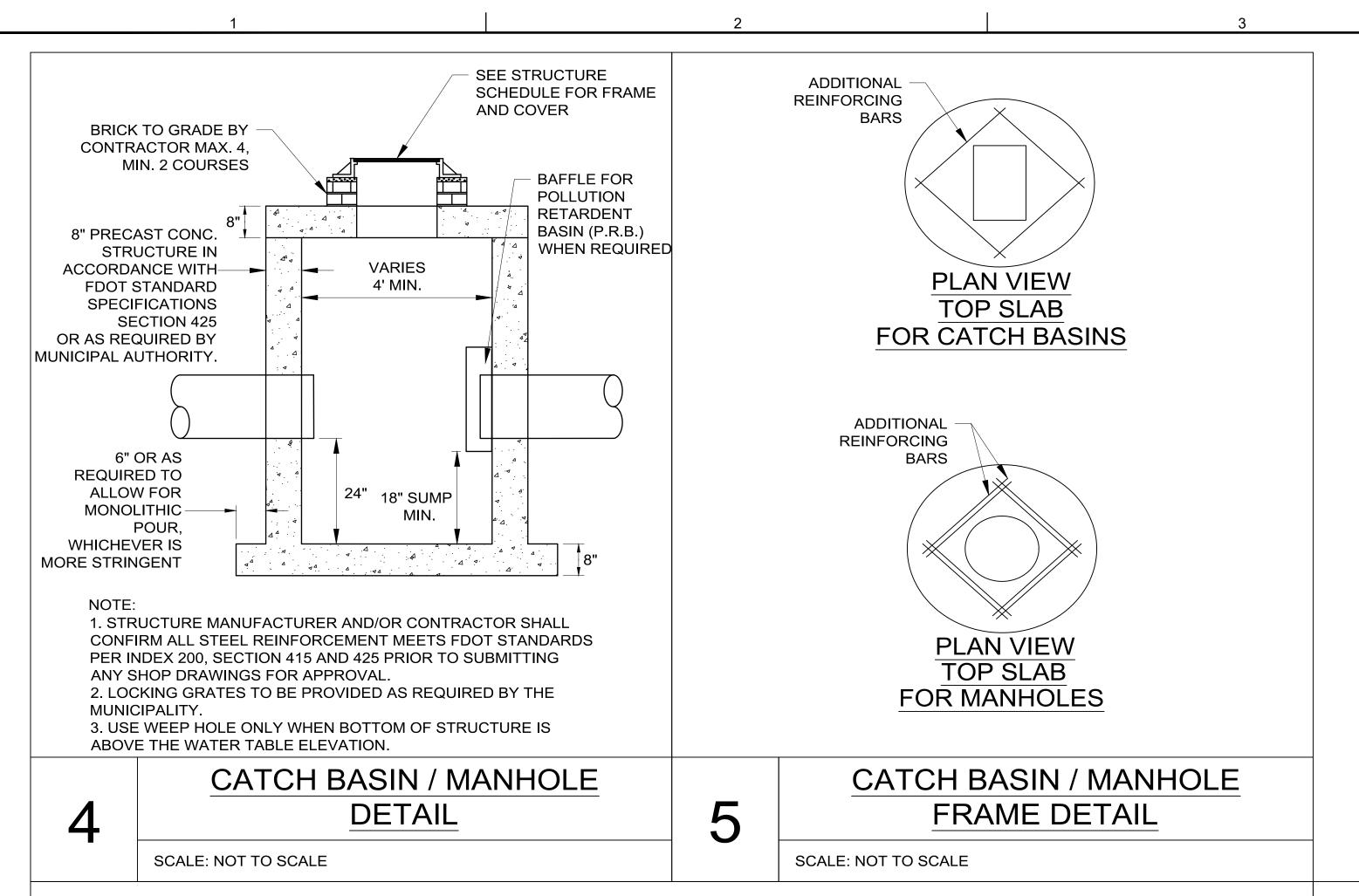
SHEET NUMBER

CP-501

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PROJECT NO. 10067.00

PDB SUBMITTAL



SEE STRUCTURE SCHEDULE FOR FRAME AND COVER SEE PAVEMENT BRICK TO GRADE BY -**SECTION FOR DETAILS** CONTRACTOR MAX. 4, BAFFLE FOR POLLUTION RETARDENT MIN. 2 COURSES BASIN (P.R.B.) WHEN REQUIRED SELECT FILL -MIRAFI 140 N 8" PRECAST—► FILTER FABRIC CONC. STRUCTURE IN ACCORDANCE W/ FDOT INDEX No.425 **VARIES** OR AS REQUIRED 4' MIN. BY MUNICIPAL 3/4" WASHED AUTHORITY. ROCK PERFORATED DRAINAGE 5' MIN. OF NON-PERFORATED PIPE <sup>⊆</sup>12" MIN. MIRAFI 140 N FILTER FABRIC 18" SUMP MIN. - 6" OR AS REQUIRED CONNECTING BAND (TYP.) TO ALLOW FOR MONOLITHIC POUR,

WHICHEVER IS

MORE STRINGENT

- UNDISTURBED SOIL

MIN. FINISHED GRADE ELEV. = VARIES NAVD (SEE PLAN) MIRAFI 140N 12" MIN. FILTER FABRIC OVERLAP 3/4" WASHED TOP OF TRENCH ROCK ELEV. = VARIES NAVD (5.00' - 6.00') 18" PERF. HDPE INV. EL.= 1.50 NAVD W.T. EL. 1.50 NAVD **BOTTOM OF** EXFILT. TRENCH ELEV.= 0.50 NAVD **VARIES** (5' - 8')

CATCH BASIN W/ P.R.B. AND EXFILTRATION TRENCH

SCALE: NOT TO SCALE

6

EXFILTRATION TRENCH DETAIL

SCALE: NOT TO SCALE

EITH & ASSOCIATES, INC

301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

PH: (954) 788-3400

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

## REVISIONS

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OVER THE PROJECT WILL FALL SOLELY



ADAMS STREET
CITY OF HOLLYWOOD FLORIDA

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SHEET TITLE

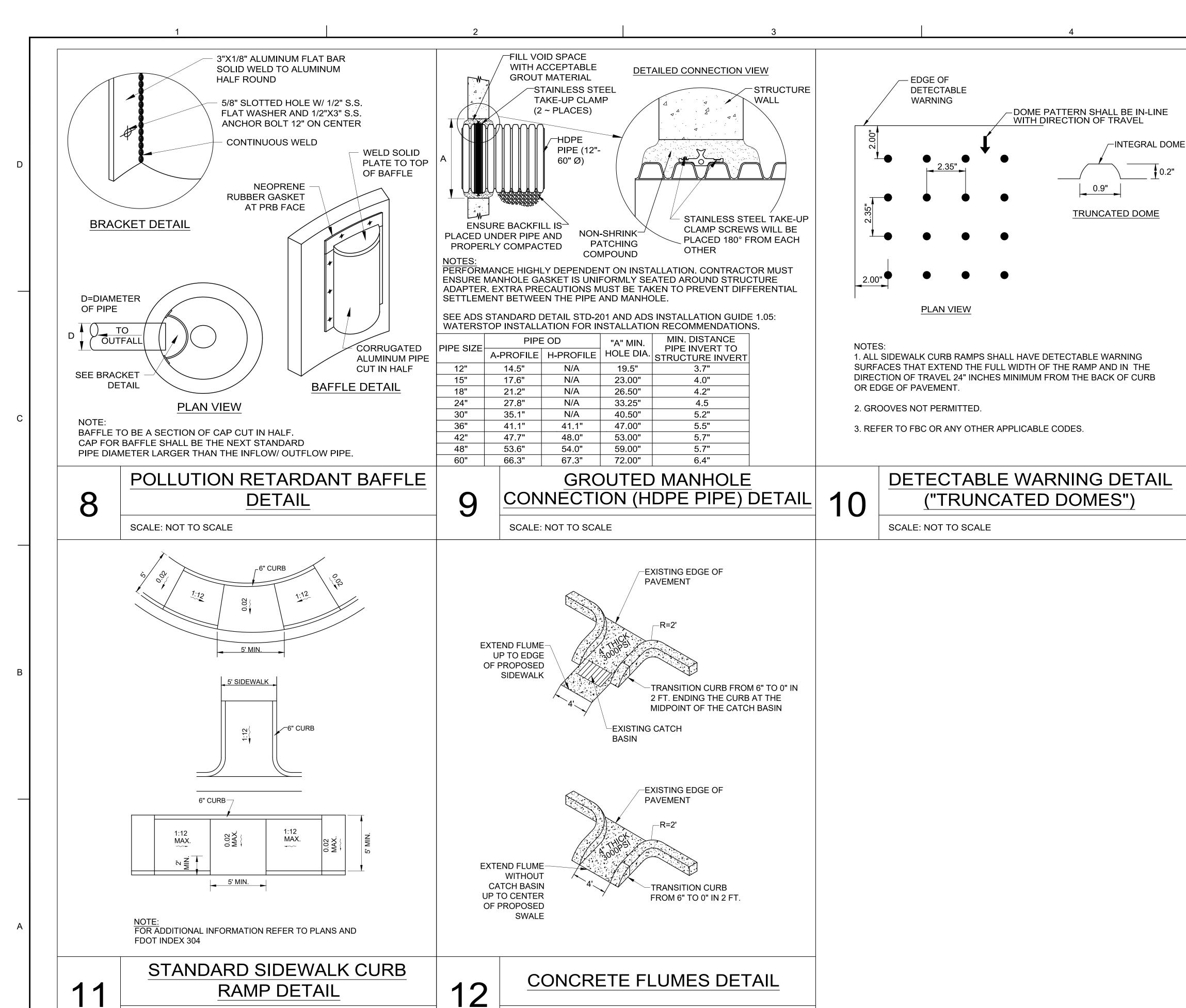
PAVING, GRADING, AND DRAINAGE DETAILS

SHEET NUMBER

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PDB SUBMITTAL

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301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

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	ATE ISSUED:	FEBRUARY 2018
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	ESIGNED BY:	SB
С	CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

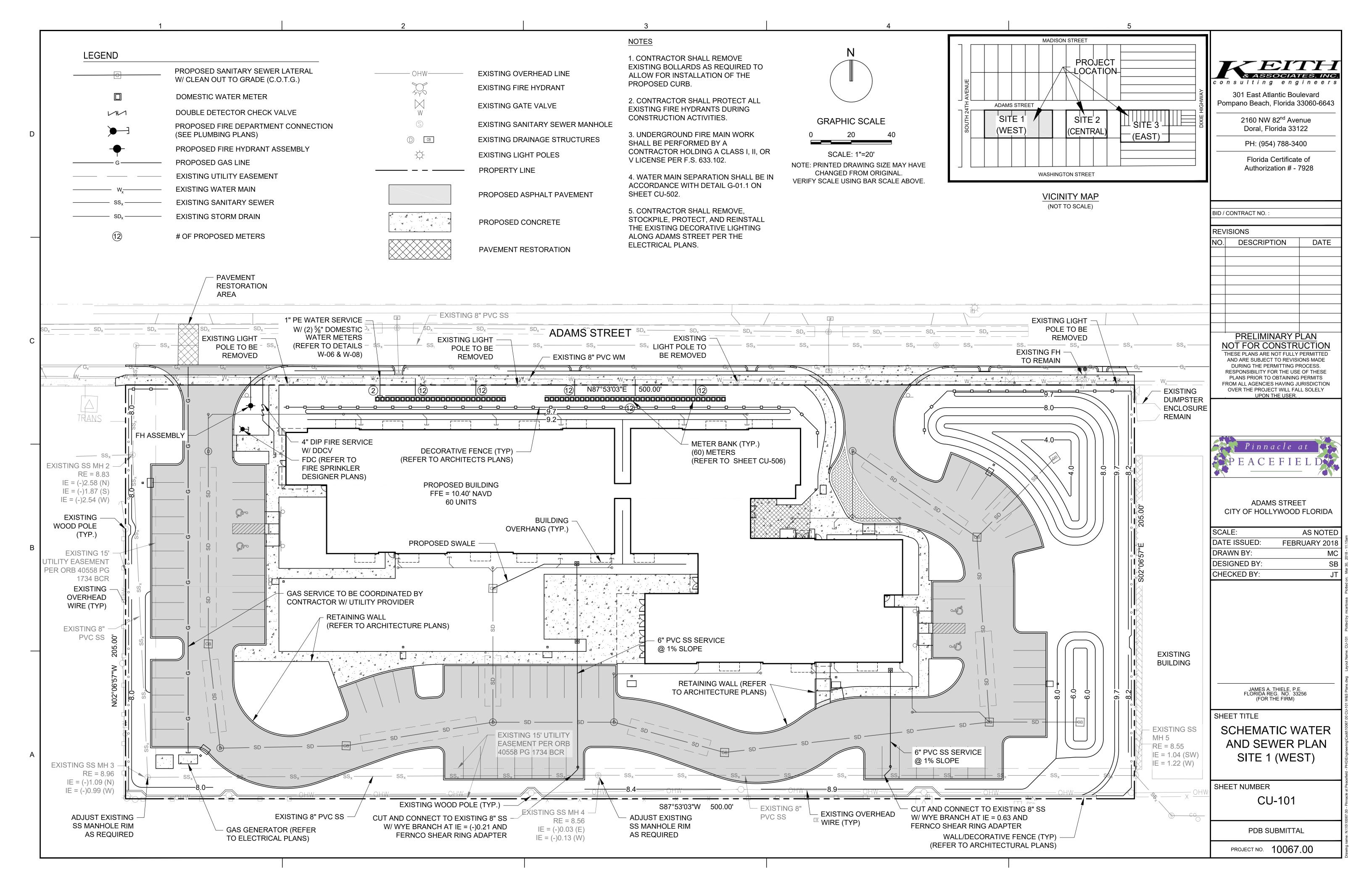
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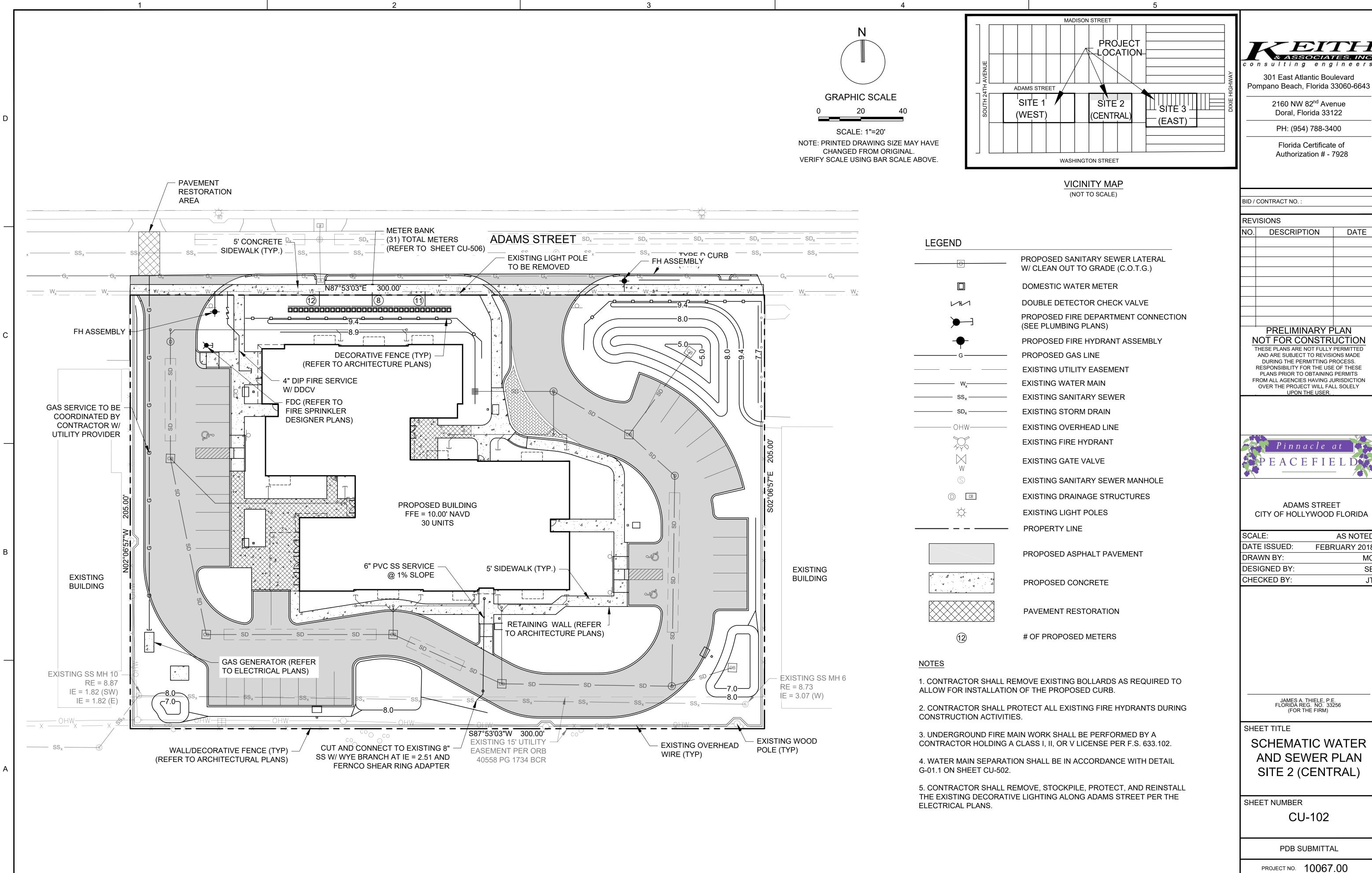
PAVING, GRADING, AND DRAINAGE **DETAILS** 

SHEET NUMBER

CP-503

PDB SUBMITTAL





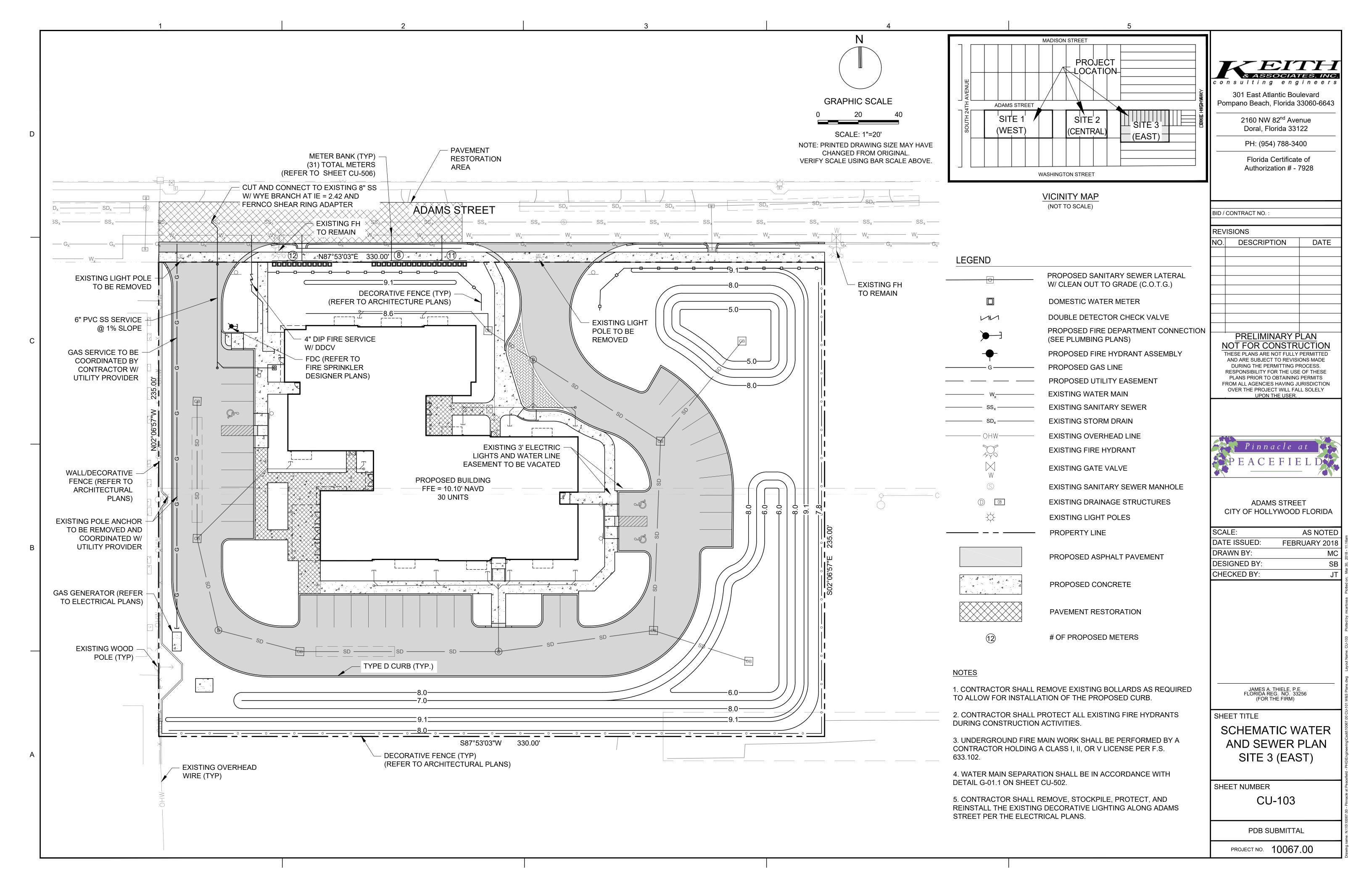
ZEITH

DATE

FROM ALL AGENCIES HAVING JURISDICTION



SCALE:	AS NOTED	
DATE ISSUED:	FEBRUARY 2018	11.16am
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#### **GENERAL NOTES:**

- 1. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.
- 2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES, ENGINEERING AND CONSTRUCTION SERVICES DIVISION (ECSD), AND ALL OTHER LOCAL, STATE AND NATIONAL CODES, WHERE APPLICABLE.
- 3. LOCATIONS, ELEVATIONS, SIZES, MATERIALS, ALIGNMENTS, AND DIMENSIONS OF EXISTING FACILITIES, UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS; AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. ALSO, THERE MAY HAVE BEEN OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS AND/OR THE ORIGINAL SITE SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY FACILITIES SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE RESPECTIVE UTILITY OWNER.
- 4. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES TO ARRANGE FOR THE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT, AND TO ENSURE THAT EXISTING UTILITIES ARE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS APPROVED OTHERWISE BY THE UTILITY OWNER.
- 6. CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY CASTINGS INCLUDING VALVE BOXES, MANHOLES, HAND-HOLES, PULL-BOXES, STORMWATER INLETS, AND SIMILAR STRUCTURES IN CONSTRUCTION AREA TO BE OVERLAID WITH ASPHALT PAVEMENT.
- 7. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION AND ENVIRONMENTAL PERMITS PRIOR TO THE START OF CONSTRUCTION.
- 8. THE CONTRACTOR SHALL NOTIFY ECSD AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 9. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, SHOP DRAWINGS SHALL BE SUBMITTED TO ECSD IN ACCORDANCE WITH THE CONTRACT DOCUMENT'S REQUIREMENTS, FOR APPROVAL. IN ADDITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY OTHER AGENCY SHOP DRAWING APPROVAL, IF REQUIRED.
- 10. THE CONTRACTOR SHALL NOTIFY ECSD IMMEDIATELY FOR ANY CONFLICT ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 11. ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

OF HOLLY WOOD ATO	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DIAMOND GETTER	DRAWN:	EAM	GENERAL NOTES	DRAWING NO.
GOLD COAST	APPROVED	: XXX	GENERAL NOTES	G-00

#### **GENERAL NOTES (CONTINUED):**

- 12. CITY OF HOLLYWOOD SHALL NOT PROVIDE STAGING / STORAGE AREA. CONTRACTOR SHALL SECURE STAGING / STORAGE AREA AS NECESSARY FOR CONSTRUCTION WORK.
- 13. CONTRACTOR SHALL HAUL AWAY EXCESSIVE STOCKPILE OF SOIL FOR DISPOSAL EVERY DAY. NO STOCKPILE SOIL IS ALLOWED TO BE LEFT ON THE CONSTRUCTION SITE OVER NIGHT.
- 14. CONTRACTOR SHALL CLEAN / SWEEP THE ROAD AT LEAST ONCE DAY OR AS REQUIRED BY THE ENGINEER.
- 15. CONTRACTOR SHALL PROTECT CATCH BASINS WITHIN / ADJACENT TO THE CONSTRUCTION SITE AS REQUIRED BY NPDES REGULATIONS.
- 16. THE CITY OF HOLLYWOOD HAS A NOISE ORDINANCE (CHAPTER 100) WHICH PROHIBITS EXCAVATION AND CONSTRUCTION BEFORE 8:00 A.M. AND AFTER 6:00 P.M., MONDAY THROUGH SATURDAY AND ALL DAY
- 17. SUITABLE EXCAVATED MATERIAL SHALL BE USED IN FILL AREAS. NO SEPARATE PAY ITEM FOR THIS WORK, INCLUDE COST IN OTHER ITEMS.
- 18. ALL ROAD CROSSINGS ARE OPEN CUT AS PER THE REQUIREMENTS OF THE ECSD UNLESS OTHERWISE
- 19. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, PARKING LOTS, SIDEWALKS, ETC. TO SATISFY THE INSTALLATION OF THE PROPOSED IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY ECSD FIELD
- 20. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT. IN CASE WORK ON PRIVATE PROPERTY IS NEEDED, A CITY OF HOLLYWOOD "RIGHT OF ENTRY" FORM MUST BE SIGNED BY PROPERTY OWNER AND THE DIRECTOR OF PUBLIC UTILITIES. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ACCESS AT ALL TIMES TO PRIVATE HOMES/BUSINESSES.
- 21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, CAUSED TO ANY IRRIGATION SYSTEM (PRIVATE OR PUBLIC) ACCIDENTALLY OR PURPOSELY. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES TO MATCH OR EXCEED EXISTING CONDITIONS AT NO ADDITIONAL COST TO
- 22. MAIL BOXES, FENCES OR OTHER PRIVATE PROPERTY DAMAGED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLACED TO MATCH OR EXCEED EXISTING CONDITION.
- 23. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT STANDARDS AND CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES STANDARDS.
- 24. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE ECSD FIELD
- 25. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY TREE REMOVAL OR RELOCATION PERMITS FROM THE CITY OF HOLLYWOOD BUILDING DEPARTMENT FOR TREES LOCATED IN THE PUBLIC
- 26. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE REGULATORY STANDARDS / REQUIREMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF ECSD.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/201
DRAWN: EAM	GENERAL NOTES	DRAWING NO.
APPROVED: XXX	(CONTINUED)	G-00.1

#### **GENERAL NOTES (CONTINUED):**

- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS TO EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY AREA.
- 28. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH EXISTING PAVEMENT TO MATCH EXISTING CONDITIONS.
- 29. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PARTS OF, EXPOSED OR OPENED AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES, WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DIRECTED. ALL TRENCHES SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN / VEHICULAR TRAFFIC.
- 30. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF OFF THE PROPERTY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 31. ALL DUCTILE IRON PRODUCTS SHALL BE DOMESTIC MADE HEAVY DUTY CLASSIFICATION SUITABLE FOR HIGHWAY TRAFFIC LOADS, OR 20,000 LB.
- 32. ALL GRASSED AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED.
- 33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH SPECIFICATIONS OF THE LATEST REVISION OF FDOT DESIGN STANDARDS. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC CONTROL AND INFORMATION SIGNAGE REMOVED DURING THE CONSTRUCTION PERIOD.
- 34. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.
- 35. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE CITY'S INSPECTOR WILL SHUT THE JOB DOWN.
- 36. CONTRACTOR MUST PROVIDE FLASHER ARROW SIGNAL FOR ANY LANE THAT IS CLOSED OR DIVERTED.
- 37. CONTRACTOR SHALL NOTIFY LAW ENFORCEMENT AND FIRE PROTECTION SERVICES TWENTY-FOUR (24) HOURS IN ADVANCE OF TRAFFIC DETOUR IN ACCORDANCE WITH SECTION 336.07 OF FLORIDA STATUTES.
- 38. CONTRACTOR TO RESTORE PAVEMENT TO ORIGINAL CONDITION AS REQUIRED.
- 39. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DEWATERING PER SPECIFICATION SECTION 02140 DEWATERING.

TO BUILD WOOD AND THE STREET	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
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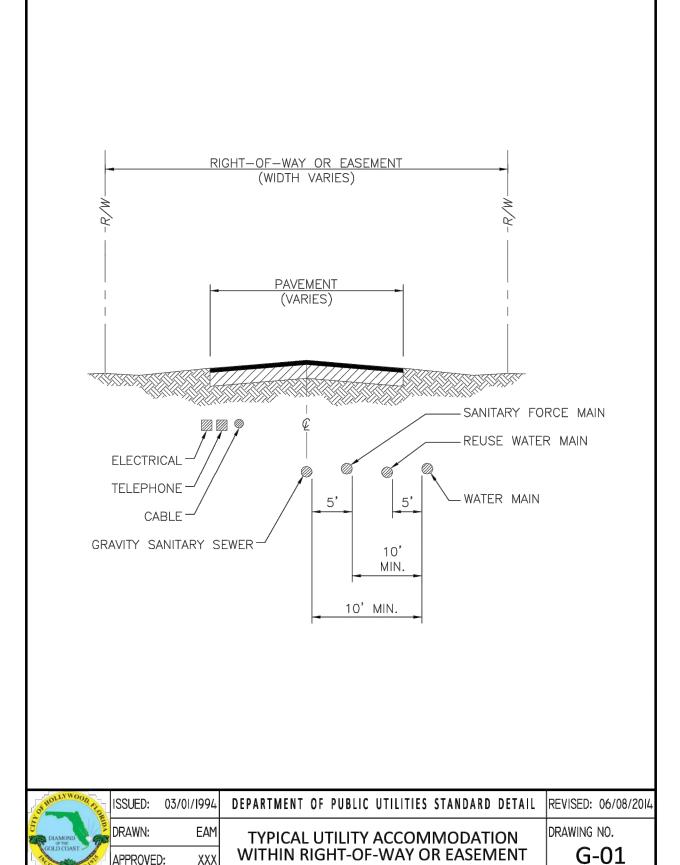
# **GENERAL NOTES (CONTINUED):**

40. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 811 OR 1-800-432-4770 (SUNSHINE ONE-CALL OF FLORIDA).



- 41. WHEN PVC PIPE IS USED, A METALLIZED MARKER TAPE SHALL BE INSTALLED CONTINUOUSLY 18" ABOVE THE PIPE. THE MARKER TAPE SHOULD BE IMPRINTED WITH A WARNING THAT THERE IS BURIED PIPE BELOW. THE TAPE SHALL BE MAGNA TEC, AS MANUFACTURED BY THOR ENTERPRISES INC. OR APPROVED EQUAL.
- 42. ALL CONNECTIONS TO EXISTING MAINS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WATER CONNECTIONS SHALL BE METERED, AND THE COST OF WATER AND TEMPORARY METER SHALL BE BORNE BY THE CONTRACTOR.
- 43. A COMPLETE AS-BUILT SURVEY SHALL BE ACCURATELY RECORDED OF THE UTILITY SYSTEM DURING CONSTRUCTION. AS-BUILT SURVEY SHALL BE SUBMITTED TO ECSD SIGNED AND SEALED BY A FLORIDA REGISTERED SURVEYOR PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF PROJECT. THE COST OF SIGNED AND SEALED AS-BUILTS SHALL BE COVERED IN OVERALL BID. THE AS-BUILT SURVEY SHALL
  - a. PLAN VIEW SHOWING THE HORIZONTAL LOCATIONS OF EACH MANHOLE, INLET, VALVE, FITTING, BEND AND HORIZONTAL PIPE DEFLECTIONS WITH COORDINATES AND IN REFERENCE TO A SURVEY BASELINE OR RIGHT-OF-WAY CENTERLINE.
  - THE PLAN VIEW SHALL ALSO SHOW SPOT ELEVATIONS OF THE TOP OF THE MAIN (WATER MAIN AND FORCE MAIN) OR PIPE INVERTS (GRAVITY MAINS) AT INTERVALS NOT TO EXCEED 100 FEET AS MEASURED ALONG MAIN. THE PLAN VIEW SHALL ALSO INCLUDE SPOT ELEVATIONS AT EACH MANHOLE, INLET, VALVE, FITTING, BEND AND VERTICAL PIPE
  - THE PLAN VIEW SHALL ALSO SHOW THE HORIZONTAL SEPARATION FROM UNDERGROUND UTILITIES IMMEDIATELY ADJACENT OR PARALLEL TO THE NEW MAIN.
  - d. PROFILE VIEW WITH SPOT ELEVATIONS OF THE TOP OF THE MAIN (WATER MAIN AND FORCE MAIN) OR PIPE INVERT (GRAVITY MAIN) AND OF THE FINISHED GRADE OR MANHOLE RIM DIRECTLY ABOVE THE MAIN AT INTERVALS NOT TO EXCEED 100 FEET AS MEASURED ALONG THE MAIN. THE PROFILE VIEW SHALL ALSO INCLUDE SPOT ELEVATIONS AT EACH MANHOLE, INLET, VALVE, FITTING, BEND AND VERTICAL PIPE DEFLECTION.
  - THE PROFILE VIEW SHALL SHOW ALL UNDERGROUND UTILITIES CROSSING THE NEW MAIN AND THE VERTICAL SEPARATION PROVIDED BETWEEN THAT UNDERGROUND UTILITY AND THE
  - ALL CADD FILES MUST BE CREATED FOLLOWING THE CITY OF HOLLYWOOD "SURVEY / AS-BUILT CAD DRAWING STANDARDS"

OF HOLLYWOOD PE	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED:	11/06/2017
DIAMOND	DRAWN:	EAM	GENERAL NOTES	DRAWING 1	NO.
GOLD COAST	APPROVED	): XXX	(CONTINUED)	G-C	0.3



APPROVED:

#### WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSING (1), (4)	JOINT SPACING @ CROSSING (FULL JOINT CENTERED) (8)
STORM SEWER, STORM WATER FORCE MAIN, RECLAIMED WATER (2)	3 ft minimum	WATER MAIN 12 inches is the minimum except for storm sewer, then 6 inches is the minimum and 12 inched is preferred	Alternate 3 ft minimum
GRAVITY SANITARY SEWER, (3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER	10 ft prefered 6 ft minimum	WATER MAIN 12 inches is the minimum except for gravity sewer, then 6 inches is the minimum and 12 inched is preferred	Alternate 6 ft minimum  WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft minimum		

- WATER MAIN SHOULD CROSS ABOVE OTHER PIPE, WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
- RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE
- TOP OF THE GRAVITY SANITARY SEWER. 18" VERTICAL MINIMUM SEPARATION REQUIRED BY CITY OF HOLLYWOOD, UNLESS OTHERWISE APPROVED.
- A MINIMUM 6 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
- IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT
- SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN A PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER, JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED
- ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALY RESTRAINED.

THOLLY WOOD TO	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED:	11/06/2017
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GOLD COAST	APPROVEI	D: XXX	F.D.E.P.	G-C	)1.1



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> 2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE: AS NOTED DATE ISSUED: FEBRUARY 2018 DRAWN BY: **DESIGNED BY:** SB CHECKED BY:

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

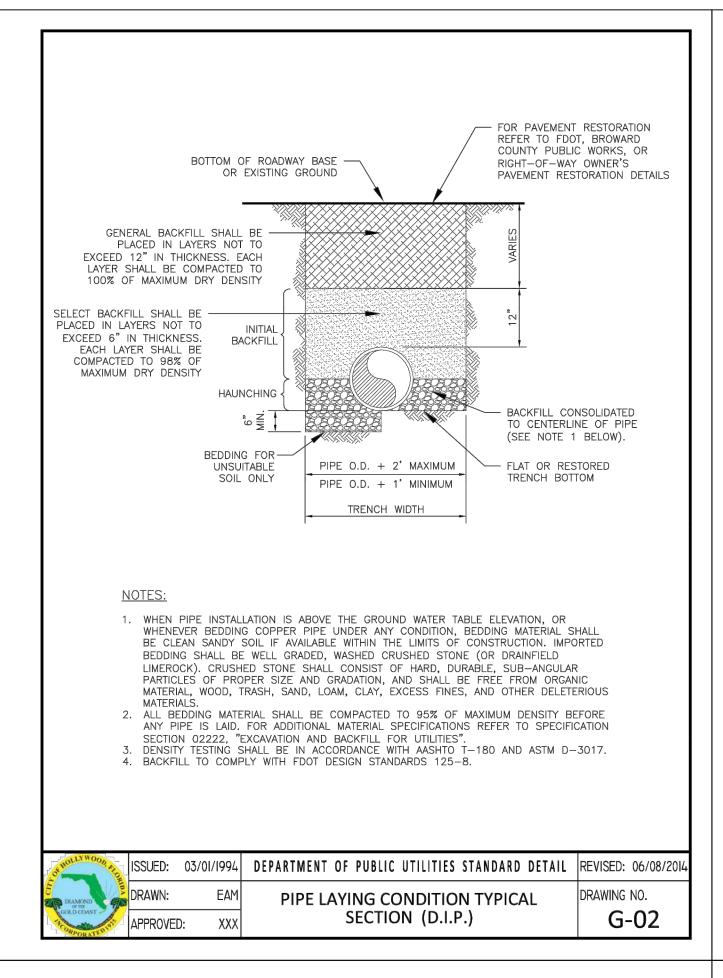
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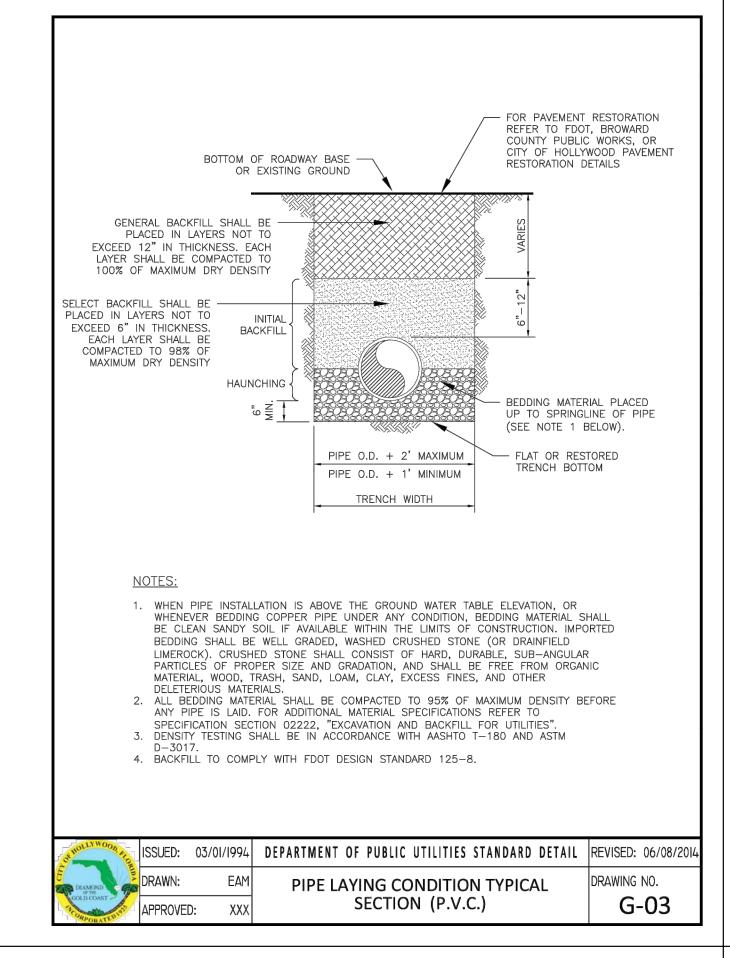
WATER AND SEWER **DETAILS** 

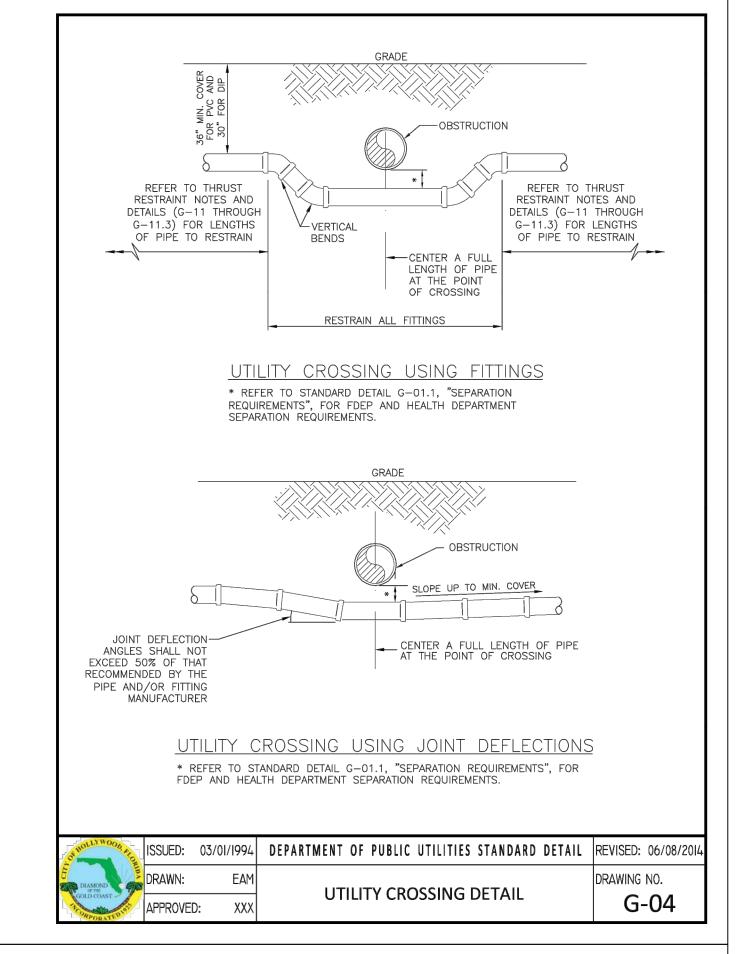
SHEET NUMBER

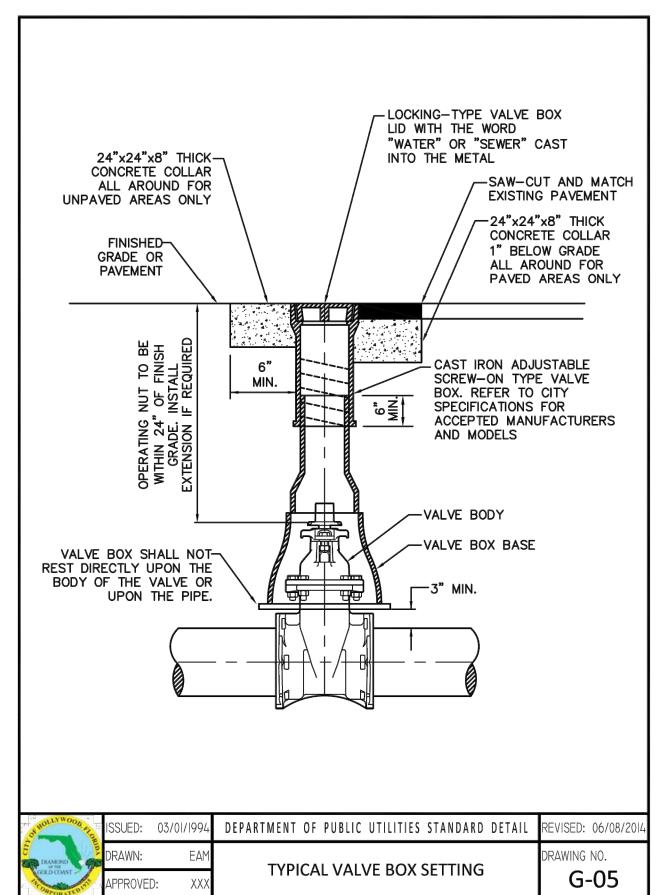
CU-501

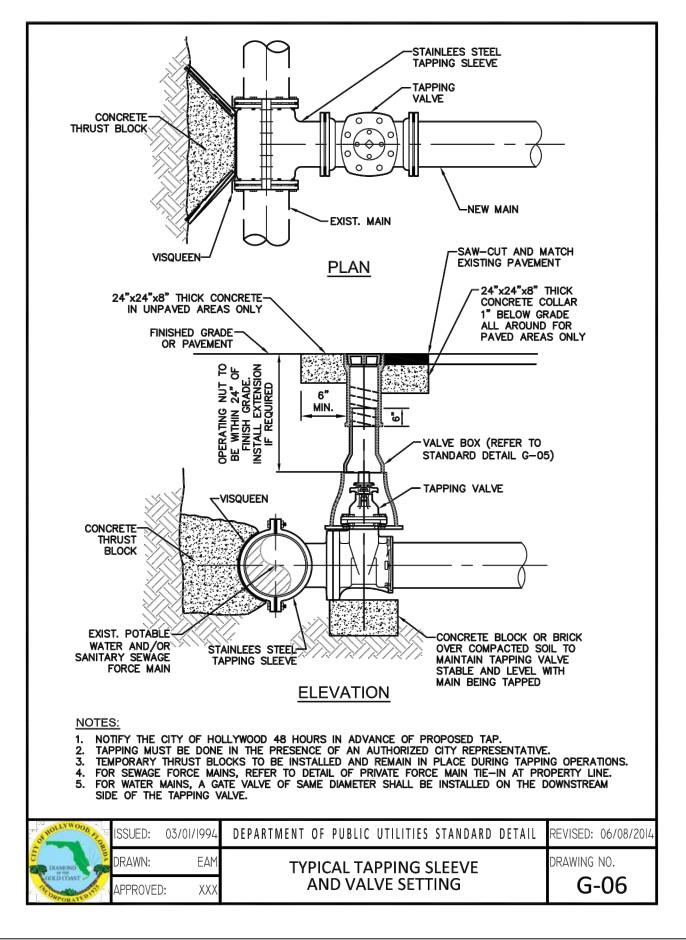
PDB SUBMITTAL

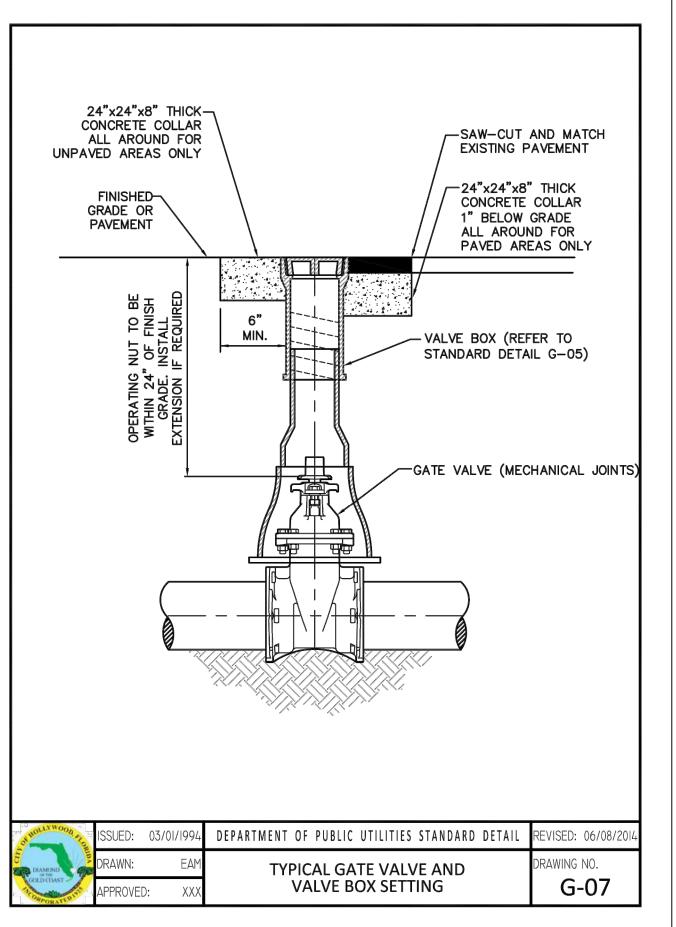














301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

2160 NW 82<sup>nd</sup> Avenue

Doral, Florida 33122 PH: (954) 788-3400

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO. DESCRIPTION DATE

PRELIMINARY PLAN
NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED
AND ARE SUBJECT TO REVISIONS MADE
DURING THE PERMITTING PROCESS.
RESPONSIBILITY FOR THE USE OF THESE
PLANS PRIOR TO OBTAINING PERMITS
FROM ALL AGENCIES HAVING JURISDICTION
OVER THE PROJECT WILL FALL SOLELY
UPON THE USER.



ADAMS STREET
CITY OF HOLLYWOOD FLORIDA

SCALE:	AS NOTED
DATE ISSUED:	FEBRUARY 2018
DRAWN BY:	MC
DESIGNED BY:	SB
CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

WATER AND SEWER DETAILS

SHEET NUMBER

CU-502

PROJECT NO. 10067.00

PDB SUBMITTAL

#### RESILIENT SEATED GATE VALVE SPECIFICATIONS:

#### 4" THROUGH 12" SIZE (WATER AND FORCE MAIN)

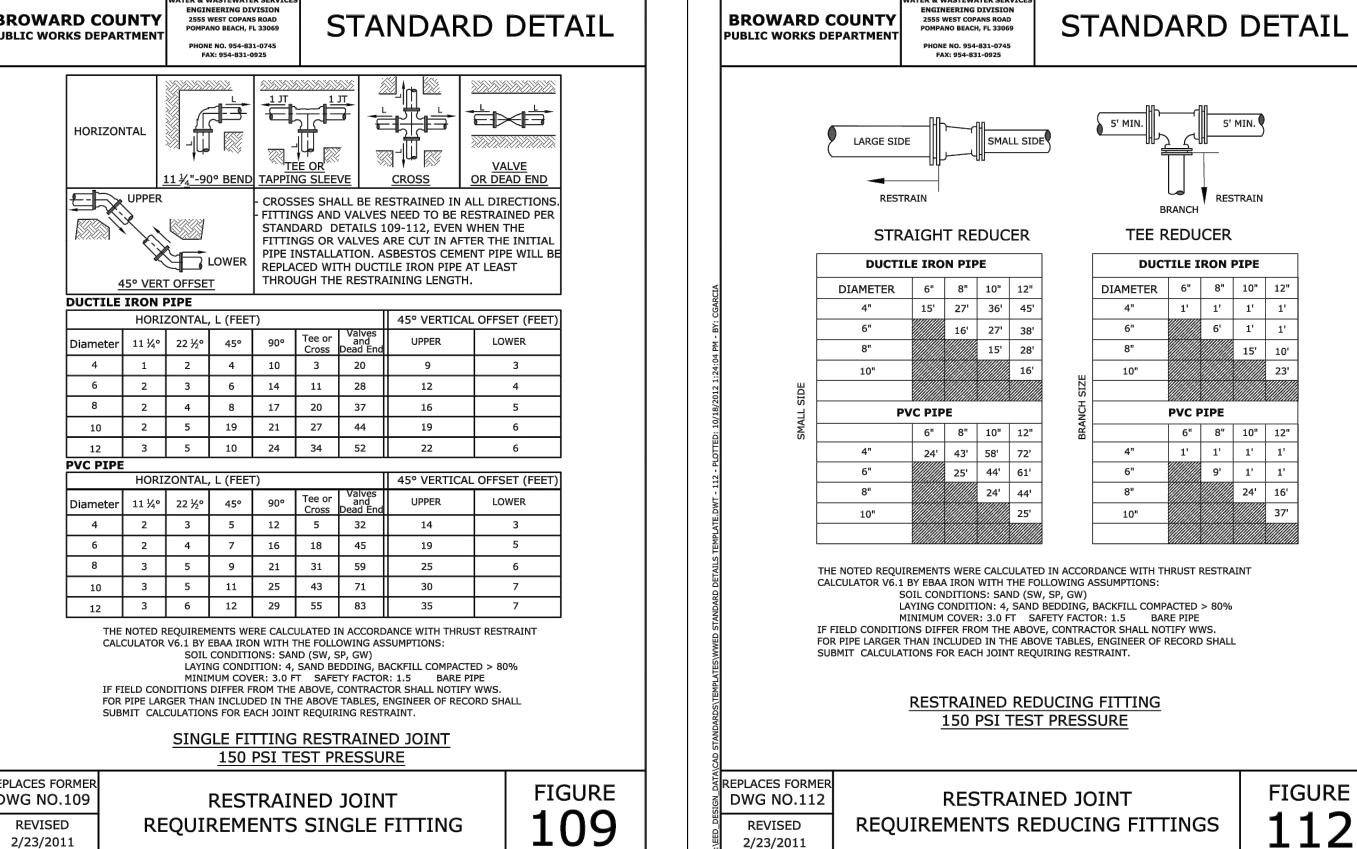
- 1. GATE VALVES SHALL BE RESILIENT SEATED, MANUFACTURED TO MEET OR EXCEED THE REQUIREMENTS OF AWWA C509 (LATEST REVISION) AND IN ACCORDANCE WITH THE FOLLOWING
- 1.1. VALVES SHALL HAVE AN UNOBSTRUCTED WATERWAY EQUAL TO OR GREATER THAN THE FULL NOMINAL DIAMETER OF THE VALVE.
- 1.2. THE VALVES ARE TO BE NON-RISING STEM WITH THE STEM MADE OF CAST, FORGED OR ROLLED BRONZE SHOWN IN AWWA C509, TWO STEM SEALS SHALL BE PROVIDED AND SHALL BE OF THE O-RING TYPE, ONE ABOVE AND ONE BELOW THE THRUST COLLAR WITH LUBRICANT BETWEEN
- 1.3. THE STEM NUT, ALSO MADE OF BRONZE, MAY BE INDEPENDENT OF THE GATE OR CAST INTEGRALLY WITH THE GATE. IF THE STEM NUT IS CAST INTEGRALLY, THE THREADS SHALL BE STRAIGHT AND TRUE WITH THE AXIS OF THE STEM TO AVOID BINDING DURING THE OPENING OR CLOSING CYCLE.
- 1.4. THE SEALING MECHANISM SHALL CONSISTS OF A CAST IRON GATE HAVING A VULCANIZED SYNTHETIC RUBBER COATING OR A RUBBER SEAT MECHANICALLY RETAINED ON THE GATE, THE RESILIENT SEALING MECHANISM SHALL PROVIDE ZERO LEAKAGE AT THE WATER WORKING PRESSURE WHEN INSTALLED WITH THE LINE FLOW IN EITHER DIRECTION.
- 1.5. A 2-INCH SQUARE WRENCH NUT SHALL BE PROVIDED FOR OPERATING THE VALVE.
- ALL VALVES ARE TO BE SUPPLIED COMPLETE AND READY FOR INSTALLATION INCLUDING, BUT NOT LIMITED TO ALL NUTS, BOLTS RINGS AND RUBBERS.
- 1.7. ALL VALVES ARE TO BE TESTED IN STRICT ACCORDANCE WITH AWWA C509 LATEST REVISION).

BROWAI PUBLIC WOR			ENGIP 2555 POMPA PHON	WASTEWATE NEERING DI WEST COPAN ANO BEACH, F IE NO. 954-83 AX: 954-831-0	VISION S ROAD L 33069		STA	NDAR	D DET	ΊΑΙ
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	DUCTILE									- -
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	Diameter	11 ¼°	22 ½°	45°	90°	Tee or Cross	and Dead End	UPPER	LOWER	]
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	Diameter	11 1/4°	22 1/3°	45°	90°	Tee or	Valves and	UPPER	LOWER	1
	4	2	3	5	12	Cross 5	Dead End 32	14	3	┨
	6	2	4	7	16	18	45	19	5	1
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					(CAD STANDARDS)TEMPLATES)(WWED STAI		THE N
HOLLY WOOD ATE	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014		REPLACES FORMER DWG NO.109	
DIAMOND GETTER	DRAWN:	EAM	RESILIENT SEATED GATE VALVE	DRAWING NO.	LEED DE	REVISED 2/23/2011	

SPECIFICATIONS

G-07.1



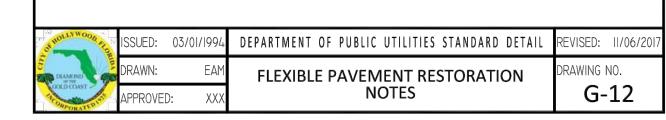
#### FLEXIBLE PAVEMENT RESTORATION NOTES:

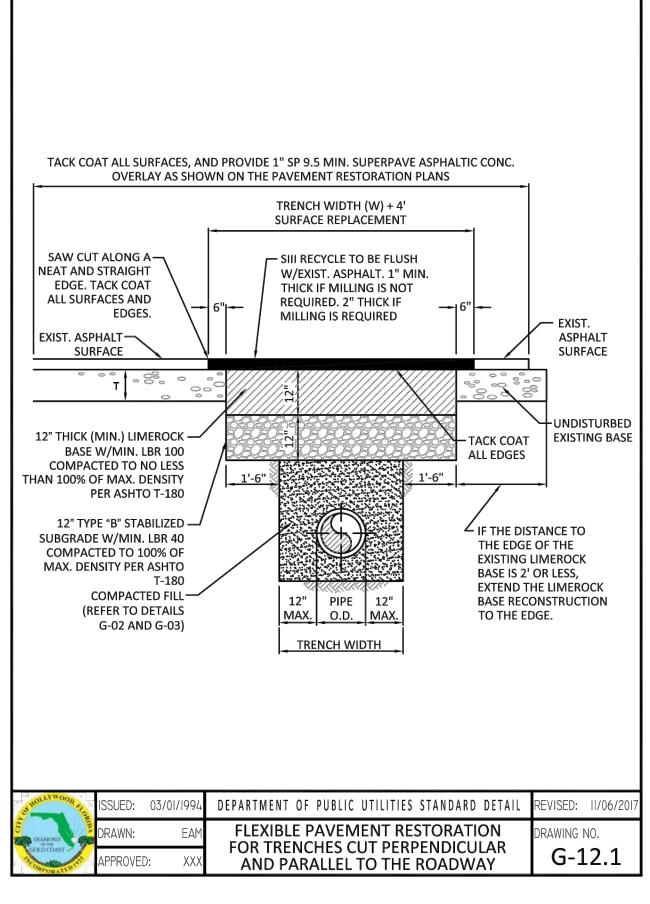
APPROVED:

- THE ABOVE DETAILS APPLY ONLY TO ASPHALT PAVEMENT RESTORATION OVER UTILITY TRENCHES CUT WITHIN CITY OF HOLLYWOOD RIGHTS-OF-WAY. FOR PAVEMENT RESTORATION WITHIN BROWARD COUNTY OR FDOT RIGHTS-OF-WAY REFER TO THE CORRESPONDING DETAILS FOR THOSE AGENCIES.
- 2. LIMEROCK BASE MATERIAL SHALL HAVE A MINIMUM L.B.R. OF 100 AND A MINIMUM CARBONATE CONTENT OF 70%. REPLACED BASE MATERIAL OVER TRENCH SHALL BE A MINIMUM OF 12" THICK".
- LIMEROCK BASE MATERIAL SHALL BE PLACED IN 12" MAXIMUM (LOOSE MEASUREMENT) THICKNESS LAYERS WITH EACH LAYER THOROUGHLY ROLLED OR TAMPED AND COMPACTED TO 100% OF MAXIMUM DENSITY, PER AASHTO T-180, PRIOR TO THE PLACEMENT OF THE SUCCEEDING LAYERS.
- 4. STABILIZED SUBGRADE MATERIAL SHALL BE GRANULAR AND SHALL HAVE A MINIMUM L.B.R. OF 40.
- 5. BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PIPE LAYING CONDITION TYPICAL SECTIONS IN DETAILS G-02 AND G-03, AND THE SPECIFICATIONS, BUT TESTING WILL BEGIN 12" ABOVE THE INSTALLED FACILITY.
- PARALLEL TO OR PERPENDICULAR TO THE ROADWAY, PRIOR TO THE RESURFACING.

6. ALL EDGES AND JOINTS OF EXISTING ASPHALT PAVEMENT SHALL BE SAW CUT TO STRAIGHT LINES,

- 7. RESURFACING MATERIAL SHALL BE FDOT SUPERPAVE, AND SHALL BE APPLIED A MINIMUM OF TWO INCH IN THICKNESS.
- 8. MILL AND BUTT JOINT TO EXISTING PAVEMENT.
- 9. IF THE TRENCH IS FILLED TEMPORARILY, IT SHALL BE COVERED WITH A 2" ASPHALTIC CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING UNTIL REPLACED WITH A PERMANENT PATCH.
- 10. REFER TO SPECIFICATIONS FOR DETAILED PROCEDURES.
- 11. WHERE THE UTILITY TRENCH CROSSES EXISTING ASPHALT DRIVEWAYS, THE LIMEROCK BASE THICKNESS MAY BE A MINIMUM OF 6 INCHES THICK. REGARDLESS OF THE EXTENT OF IMPACT, THE ENTIRE DRIVEWAY SURFACE BETWEEN THE EDGE OF THE ROADWAY PAVEMENT AND PROPERTY LINE OR FRONT OF SIDEWALK SHALL BE OVERLAID USING 2-INCH THICK MINIMUM ASPHALTIC CONCRETE SURFACE COURSE WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE CITY/ENGINEER.





#### 2. ALL CONNECTIONS TO EXISTING MAINS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 3. LEAKAGE TESTS AND ALIGNMENT (LAMPING) TESTS SHALL BE PERFORMED ON ALL NEW SEWER LINES UP TO THE CONNECTION POINT WITH THE EXISTING SEWER SYSTEM. THESE TESTS SHALL BE REQUESTED AND PAID FOR BY THE 4. LAMPING TESTS SHALL BE PERFORMED ON GRAVITY SEWERS FROM MANHOLE TO MANHOLE UP TO AND INCLUDING THE POINT OF CONNECTION TO THE EXISTING SEWER SYSTEM. 5. LEAKAGE TESTS SHALL BE PERFORMED ON ALL SEGMENTS OF A GRAVITY SEWER SYSTEM, INCLUDING SERVICE LATERALS AND MANHOLES, FOR A CONTINUOUS PERIOD OF NO LESS THAN 2 HOURS. AT THE END OF THE TEST, THE TOTAL MEASURED LEAKAGE SHALL NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM, WITH ZERO ALLOWABLE LEAKAGE FOR LATERALS AND MANHOLES. AN EXFILTRATION OR INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET ON THE SECTION BEING 6. FORCE MAINS SHALL BE PRESSURE-TESTED IN ACCORDANCE WITH RULE 62-555.330 (FAC). THE PRESSURE TEST SHALL CONSIST OF HOLDING A TEST PRESSURE OF 150 PSI ON THE PIPELINE FOR A CONTINUOUS PERIOD OF 2 HOURS THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE DETERMINED BY THE FOLLOWING FORMULA: $L = S \times D \times \sqrt{P}$ L = ALLOWABLE LEAKAGE FOR SYSTEM IN GALLONS PER HOUR D = PIPE DIAMETER IN INCHES S = LENGTH OF LINES IN LINEAL FEET P = AVERAGE TEST PRESSURE IN PSI 7. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTYFYING CONFLICTS WITH FORCE MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, FORCE MAIN SHALL BE LOWERED TO PASS UNDER CONFLICTS WITH 12" MINIMUM SEPARATION FROM WATER MAINS AND 6" MINIMUM SEPARATION FROM OTHER UTILITIES. NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON. 8. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS.

**SEWER NOTES:** 

1. THE MINIMUM DEPTH OF COVER OVER D.I.P. SANITARY SEWER GRAVITY OR FORCE MAINS IS 30". THE MINIMUM

SSUED: 03/01/1994 DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL REVISED: 06/08/201

SANITARY SEWER MAIN

CONSTRUCTION NOTES

DRAWING NO.

S-01

DEPTH OF COVER OVER PVC SANITARY SEWER OR FORCE MAINS IS 36".

# consulting engineers

301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

> 2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

Florida Certificate of

Authorization # - 7928

PH: (954) 788-3400

BID / CONTRACT NO.

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE:	AS NOTED
DATE ISSUED:	FEBRUARY 2018
DRAWN BY:	MC
DESIGNED BY:	SE
CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

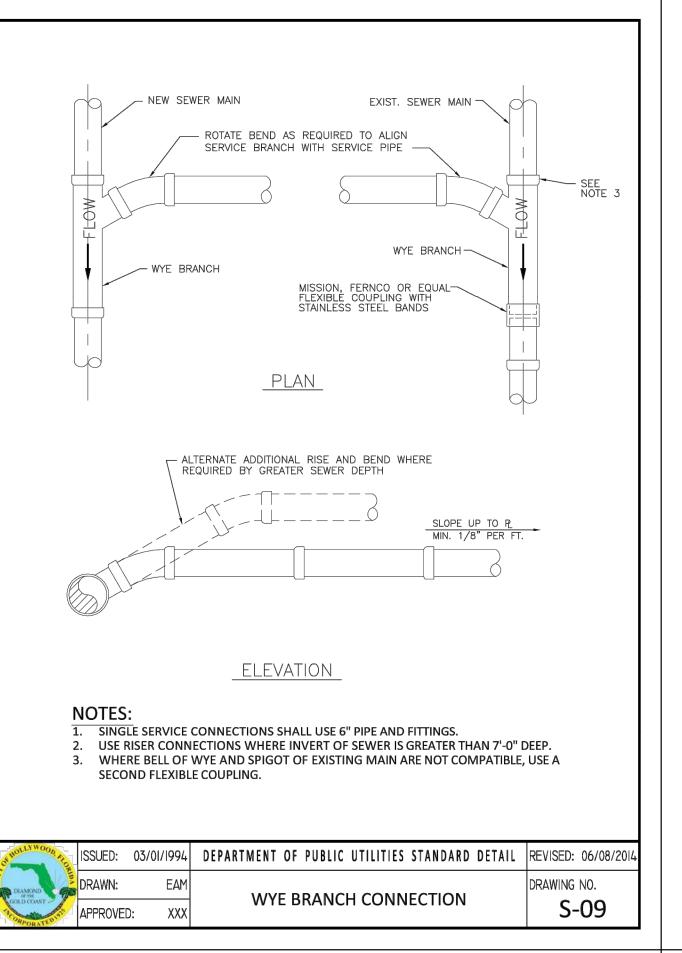
SHEET TITLE

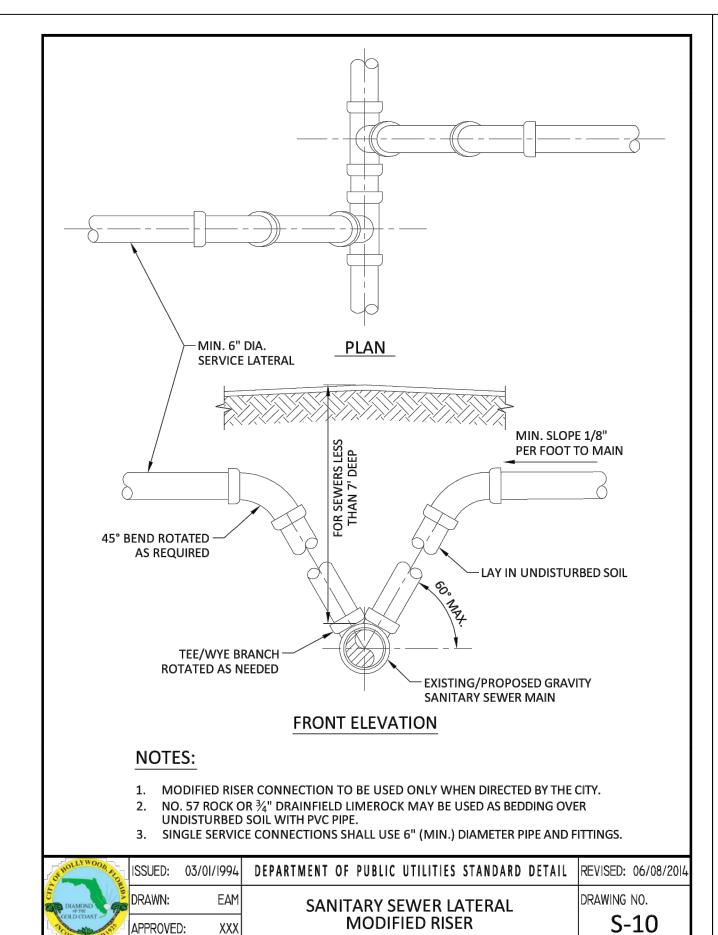
WATER AND SEWER **DETAILS** 

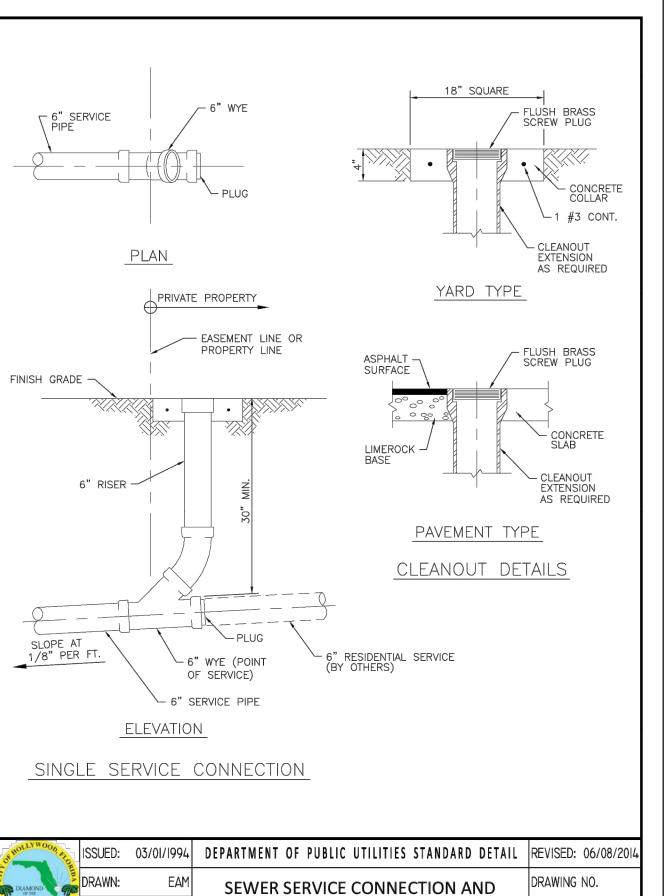
SHEET NUMBER

CU-503

PDB SUBMITTAL





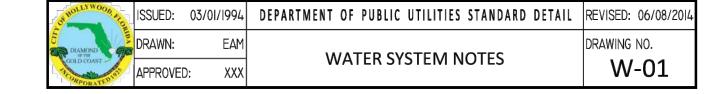


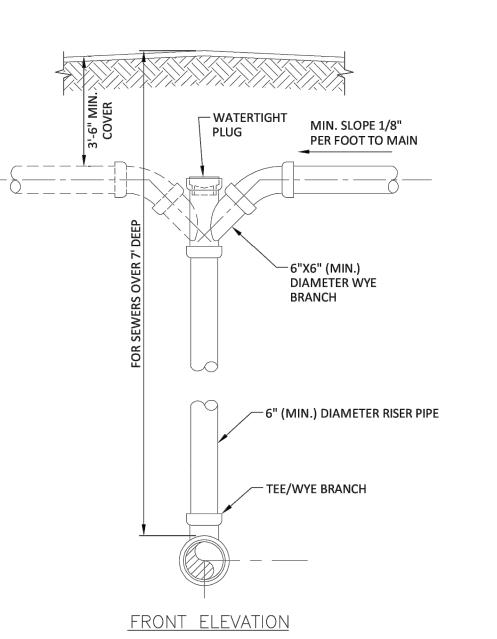
CLEANOUT AT PROPERTY LINE

S-12

#### WATER SYSTEM NOTES:

- NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY
  EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO
  THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12
  INCHES BELOW THE OTHER PIPELINE.
- NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)].
- 3. AT ALL UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE, OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)].
- 4. NEW UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT TO BE DUCTILE IRON PIPE (D.I.P.) WHEN CROSSING BELOW SANITARY SEWER MAINS.
- 5. POLYETHYLENE ENCASEMENT MATERIAL SHALL BE USED TO ENCASE ALL BURIED DUCTILE IRON PIPE, FITTINGS, VALVES, RODS, AND APPURTENANCES IN ACCORDANCE WITH AWWA C105, METHOD A. THE POLYETHYLENE TUBING SHALL BE CUT TWO FEET LONGER THAN THE PIPE SECTION AND SHALL OVERLAP THE ENDS OF THE PIPE BY ONE FOOT. THE POLYETHYLENE TUBING SHALL BE GATHERED AND LAPPED TO PROVIDE A SNUG FIT AND SHALL BE SECURED AT QUARTER POINTS WITH POLYETHYLENE TAPE. EACH END OF THE POLYETHYLENE TUBING SHALL BE SECURED WITH A WRAP OF POLYETHYLENE TAPE.
- 6. THE POLYETHYLENE TUBING SHALL PREVENT CONTACT BETWEEN THE PIPE AND BEDDING MATERIAL, BUT IS NOT INTENDED TO BE A COMPLETELY AIRTIGHT AND WATERTIGHT ENCLOSURE. DAMAGED POLYETHYLENE TUBING SHALL BE REPAIRED IN A WORKMANLIKE MANNER USING POLYETHYLENE TAPE, OR THE DAMAGED SECTION SHALL BE REPLACED. POLY WRAP WILL NOT BE PAID FOR AS A SEPARATE BID ITEM. IT SHALL BE CONSIDERED TO BE A PART OF THE PRICE BID FOR WATER MAINS.
- 7. FIRE HYDRANT BARRELS SHALL BE ENCASED IN POLY WRAP UP TO THE GROUND SURFACE AND THE WEEP HOLES SHALL NOT BE COVERED BY THE POLY WRAP.
- 8. GATE VALVES FOR USE WITH PIPE LESS THAN THREE INCHES (3") IN DIAMETER SHALL BE RATED FOR TWO HUNDRED (200) PSI WORKING PRESSURE, NON-SHOCK, BLOCK PATTERN, SCREWED BONNET, NON-RISING STEM, BRASS BODY, AND SOLID WEDGE. THEY SHALL BE STANDARD THREADED FOR PVC PIPE AND HAVE A MALLEABLE IRON HANDWHEEL. GATE VALVES 3" THROUGH 16" IN DIAMETER SHALL BE RESILIENT SEAT AND BIDIRECTIONAL FLOW ONLY. VALVES FOR SPECIAL APPLICATIONS WILL REQUIRE CITY UTILITY APPROVAL.
- 9. VALVE BOXES AND COVERS FOR ALL SIZE VALVES SHALL BE OF CAST IRON CONSTRUCTION AND ADJUSTABLE SCREW-ON TYPE. THE LID SHALL HAVE CAST IN THE METAL THE WORD "WATER" FOR THE WATER LINES. ALL VALVE BOXES SHALL BE SIX INCH (6") NOMINAL DIAMETER AND SHALL BE SUITABLE FOR DEPTHS OF THE PARTICULAR VALVE. THE STEM OF THE BURIED VALVE SHALL BE WITHIN TWENTY-FOUR INCHES (24") OF THE FINISHED GRADE UNLESS OTHERWISE APPROVED BY THE CITY.
- 10. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER





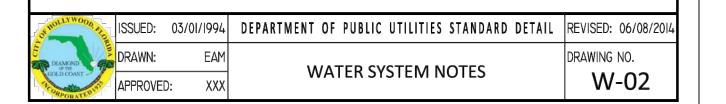
## NOTES:

- 1. RISER CONNECTION TO BE USED ONLY WHEN SANITARY SEWER IS MORE THAN 7'-0"
- DEEP OR WHEN DIRECTED BY THE CITY.
- 2. NO. 57 ROCK OR 3/4" DRAINFIELD LIMEROCK MAY BE USED AS BEDDING OVER UNDISTURBED SOIL WITH PVC PIPE.
- 3. SINGLE SERVICE CONNECTIONS SHALL USE 6" (MIN.) DIAMETER PIPE AND FITTINGS.

OF HOLLY WOOD AT 2	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DIAMOND S	DRAWN:	EAM	SANITARY SEWER LATERAL	DRAWING NO.
GOLD COAST	APPROVED	: XXX	VERTICAL RISER	S-11

#### WATER SYSTEM NOTES (CONTINUED):

- 11. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 F.A.C.
- 12. ALL PVC PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C900 LATEST REVISION AND CLASS DR 18. ALL DIP WATER MAINS SHALL BE DUCTILE IRON PRESSURE CLASS 350, WITH WALL THICKNESS COMPLYING WITH CLASS 52. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C151/A21.51-02 AND BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-03.
- 13. FITTINGS SHALL BE DUCTILE IRON, MEETING ANSI/AWWA C153/A21.53-00 SPECIFICATIONS, WITH 350 PSI MINIMUM WORKING PRESSURE. FITTINGS MUST BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-03. ALL DUCTILE IRON PIPE AND FITTINGS MUST BE MANUFACTURED IN THE UNITED STATES OF
- 14. ALL DUCTILE IRON PIPE TO BE MECHANICAL JOINTS, WRAPPED IN POLY. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY DESIGN.
- 15. PAVEMENT RESTORATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.
- 16. ALL TRENCHING, PIPE LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTING MUST COMPLY WITH THE CITY OF HOLLYWOOD SPECIFICATIONS.
- 17. THE MINIMUM DEPTH OF COVER OVER WATER MAINS IS 30" (DIP) OR 36" (PVC).
- 18. MINIMUM HORIZONTAL SEPARATION BETWEEN STORM STRUCTURES AND WATER MAINS SHALL BE 3'.
- 19. MAXIMUM DEFLECTION PER EACH JOINT SHALL BE 50% OF MANUFACTURES RECOMMENDATION (MAXIMUM) WHERE DEFLECTION IS REQUIRED.
- 20. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CONFLICTS WITH WATER MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, WATER MAIN SHALL BE LOWERED TO PASS UNDER CONFLICTS WITH 18" MINIMUM VERTICAL SEPARATION. NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON.
- 21. PIPE JOINT RESTRAINT SHALL BE PROVIDED BY THE USE OF DUCTILE IRON FOLLOWER GLANDS MANUFACTURED TO ASTM A 536-80. TWIST-OFF NUTS SHALL BE USED TO ENSURE PROPER ACTUATING OF THE RESTRAINING DEVICES. THE MECHANICAL JOINT RESTRAINING DEVICES SHALL HAVE A WORKING PRESSURE OF 250 PSI MINIMUM, WITH A MINIMUM SAFETY FACTOR OF 2:1, AND SHALL BE EBAA IRON INC., MEGALUG OR APPROVED EQUAL. JOINT RESTRAINTS SHALL BE PROVIDED AT A MINIMUM OF THREE JOINTS (60 FEET) FROM ANY FITTING.
- 22. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS.





301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

> 2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

Florida Certificate of Authorization # - 7928

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BID / CONTRACT NO.:

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ADAMS STREET
CITY OF HOLLYWOOD FLORIDA

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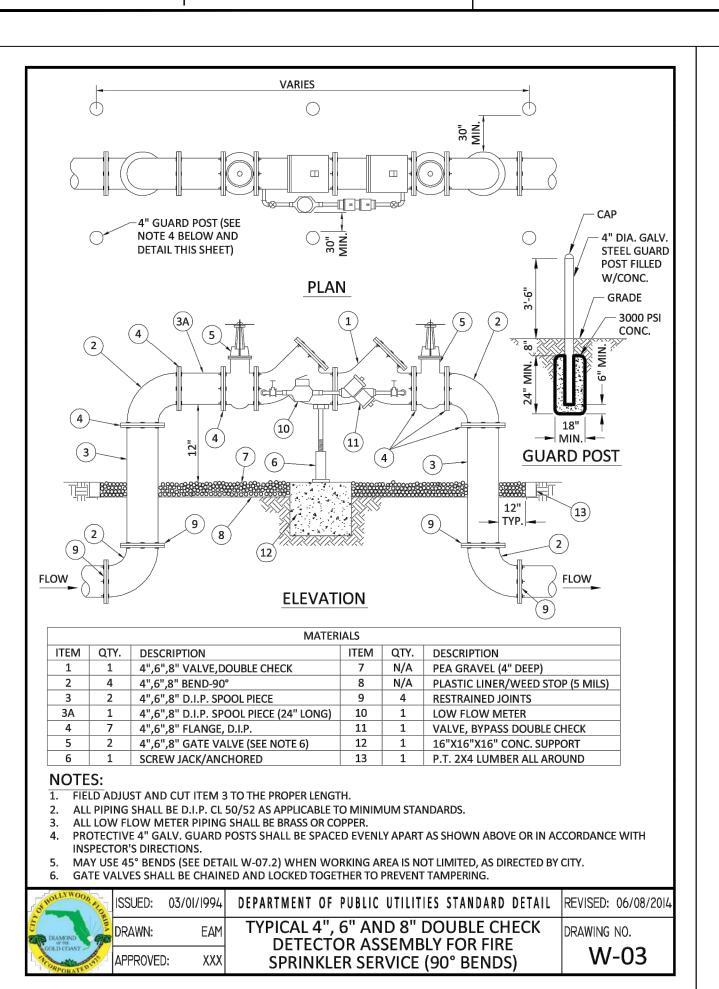
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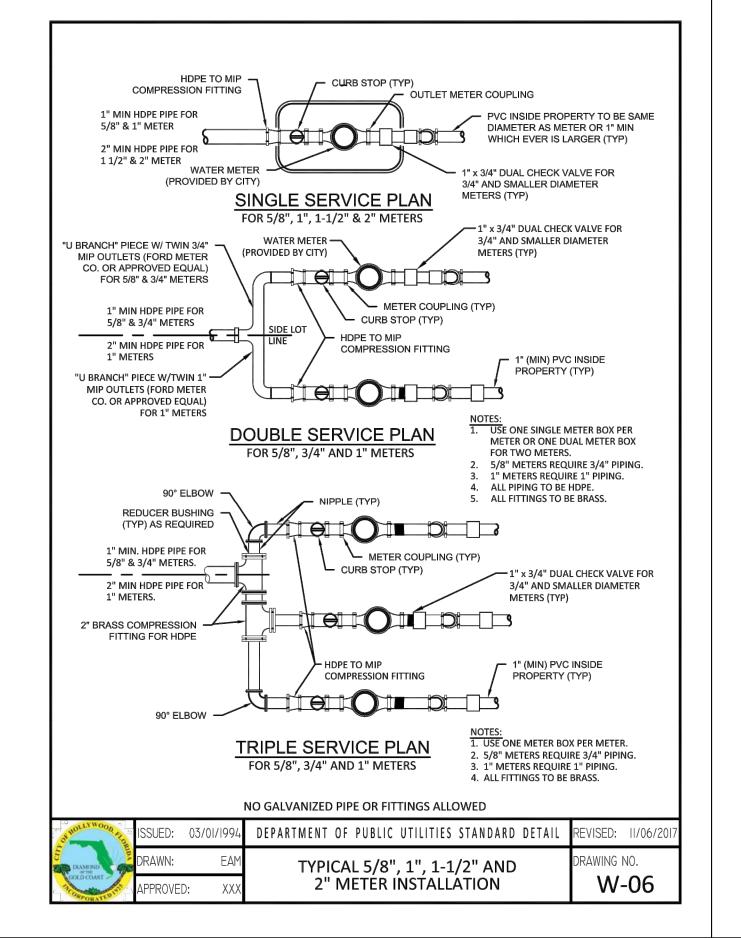
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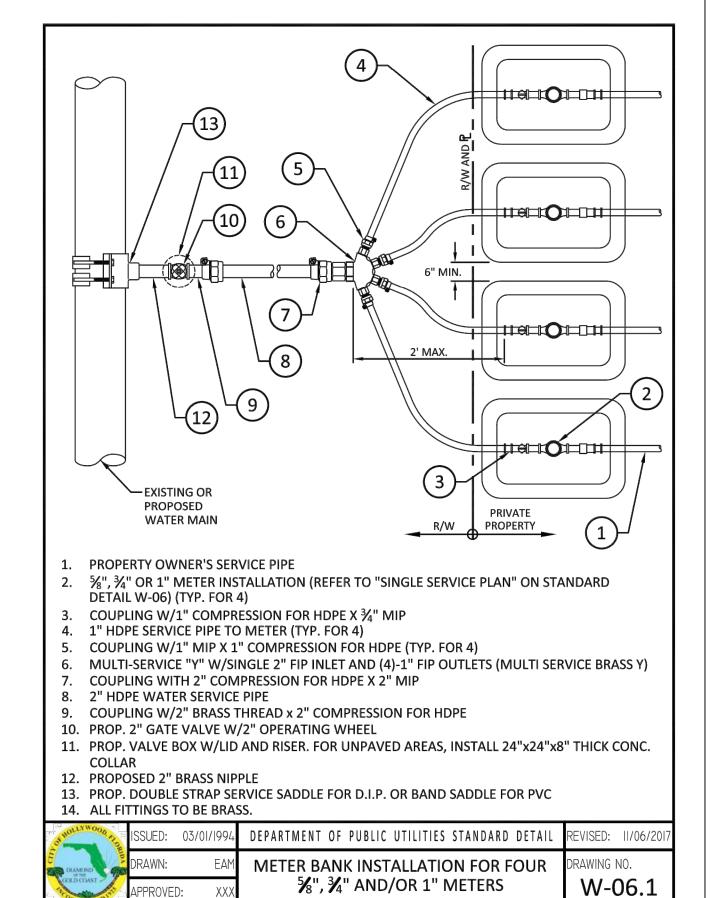
CU-504

PROJECT NO. 10067.00

PDB SUBMITTAL







#### WATER METER SERVICE NOTES:

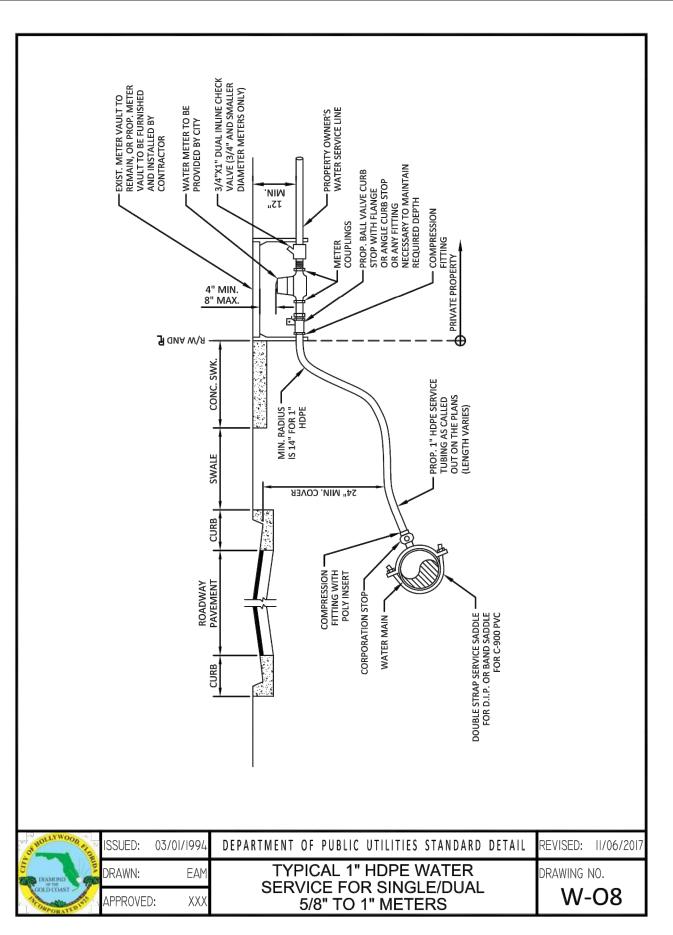
SIDEWALK, WHENEVER PRACTICAL.

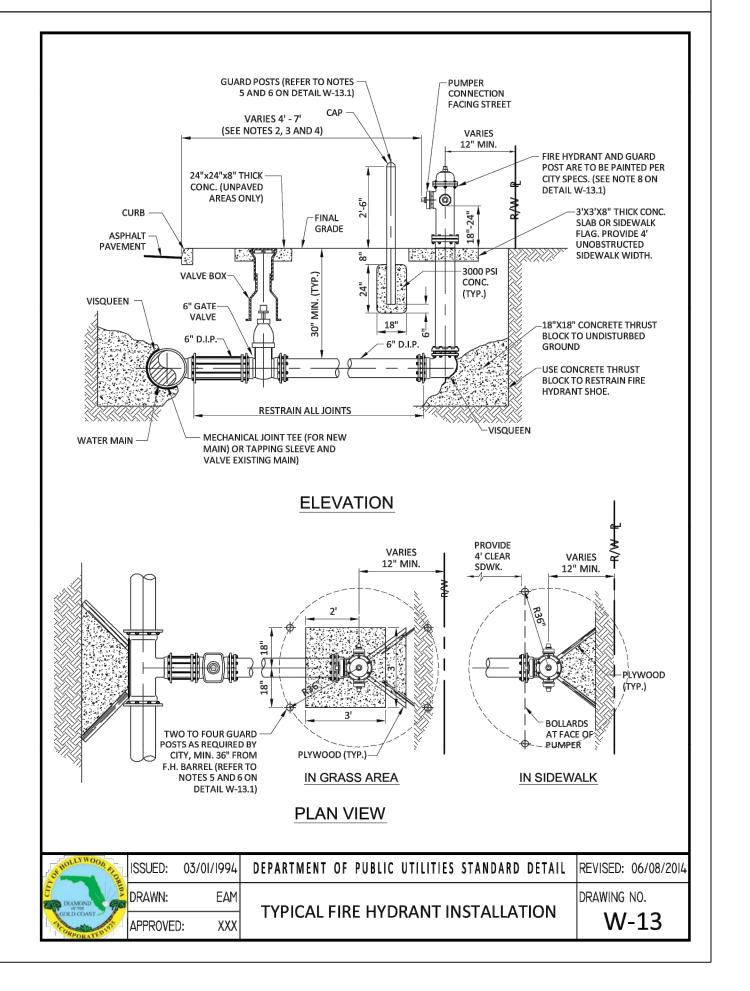
- 1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER.
- 2. P.E. TUBING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C901, "POLYETHYLENE (PE) PRESSURE PIPE AND TUBING, 1/2 IN. (13mm) THROUGH 3 IN. (76 mm), FOR WATER SERVICE".
- 3. MINIMUM SERVICE PIPE DIAMETER SHALL BE 1" FOR SINGLE OR DUAL %" OR SINGLE 1" DIAMETER METERS.
- 4. MINIMUM SERVICE PIPE DIAMETER SHALL BE 2" FOR SINGLE OR DUAL 1-½" OR SINGLE 2" DIAMETER METERS.
- 5. FOR METER DIAMETERS LARGER THAN 2", THE MINIMUM SERVICE PIPE DIAMETER SHALL BE THE SAME AS THE METER DIAMETER.
- 6. APPROVED COPPER TUBING MAY BE USED AT THE CITY'S DISCRETION.
- 7. FOR NEW METER INSTALLATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS, CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METERS WILL BE PROVIDED AND INSTALLED BY THE CITY OF HOLLYWOOD (NEW ACCOUNTS).
- 8. FOR METER RELOCATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS, CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE EXISTING WATER METER TO BE RELOCATED AND INSTALLED BY CONTRACTOR.
- 9. FOR EXISTING METERS ABUTTING THE RIGHT-OF-WAY THAT ARE BEING DISCONNECTED FROM EXISTING MAINS AND RECONNECTED TO NEW MAINS, THE CONTRACTOR SHALL:
  - a. CUT AND PLUG THE EXISTING SERVICE LINE AT THE MAIN AND AT THE METER, AND REMOVE THE EXISTING BALL VALVE CURB STOP.
  - b. FURNISH AND INSTALL SERVICE SADDLE, CORPORATION STOP OR SERVICE VALVE AND VALVE
- BOX, PIPING AND FITTINGS UP TO AND INCLUDING THE BALL VALVE CURB STOP.

  12. THE ELEVATION AT THE TOP OF THE METER BOX SHALL MATCH THE ELEVATION OF THE BACK OF
- 13. AS PART OF THE SERVICE INSTALLATION, THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY TO MATCH EXISTING CONDITIONS, INCLUDING ROADWAY PAVEMENT, PAVEMENT MARKINGS AND RPMs, CONCRETE CURBS, SIDEWALKS, RAMPS (INCLUDING DETECTABLE WARNING SURFACE), SODDING, AND ALL OTHER IMPROVEMENTS REMOVED OR DAMAGED DURING THE
- SERVICE INSTALLATION.

  14. FOR UNPAVED AREAS, THE MINIMUM GROUND COVER ACCEPTED BY THE CITY IS SODDING.

ı						
	OF HOLLY WOOD STO	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED:	11/06/2017
E DIAMOND		DRAWN:	EAM	WATER METER SERVICE NOTES FOR	DRAWING I	NO.
	APPROVED: XXX		D: XXX	5/8" THROUGH 2" METERS	W-	-07







301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

2160 NW 82<sup>nd</sup> Avenue

Doral, Florida 33122 PH: (954) 788-3400

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS

NO. DESCRIPTION DATE

PRELIMINARY PLAN

NOT FOR CONSTRUCTION

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AND ARE SUBJECT TO REVISIONS MADE
DURING THE PERMITTING PROCESS.
RESPONSIBILITY FOR THE USE OF THESE
PLANS PRIOR TO OBTAINING PERMITS
FROM ALL AGENCIES HAVING JURISDICTION
OVER THE PROJECT WILL FALL SOLELY

UPON THE USER.



ADAMS STREET
CITY OF HOLLYWOOD FLORIDA

SCALE:	AS NOTED
DATE ISSUED:	FEBRUARY 2018
DRAWN BY:	MC
DESIGNED BY:	SB
CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

WATER AND SEWER DETAILS

SHEET NUMBER

CU-505

PDB SUBMITTAL

- 1. IN ALL CASES, PROVIDE 4' UNOBSTRUCTED SIDEWALK CLEAR OF THE FIRE HYDRANT AND BOLLARDS.
- 2. FIRE HYDRANTS SHALL BE LOCATED BETWEEN 4' AND 7' FROM THE FACE OF CURB.
- 3. FIRE HYDRANTS SHALL NOT BE LOCATED WITHIN A RADIUS OR WITHIN FDOT CLEAR DRIVING ZONE.
- 4. WITHIN FDOT R/W, WHERE SPACE IS RESTRICTED THE FIRE HYDRANT MAY BE LOCATED 2' FROM THE FACE OF THE CURB AS LONG AS THERE IS A MINIMUM 4' UNOBSTRUCTED SIDEWALK BEHIND THE HYDRANT, AND THE HYDRANT BASE IS 4" OR LESS FROM GRADE IN ACCORDANCE WITH F.D.O.T. INDEX 700.
- 5. GUARD POSTS SHALL NOT BE ALLOWED WITHIN FDOT R/W.
- 6. OTHER THAN FOOT R/W, GUARD POSTS SHALL BE INSTALLED AS REQUIRED FOR SAFETY OR AS APPROVED BY THE DEPT. OF PUBLIC UTILITIES. IN SIDEWALK, LOCATE GUARD POSTS AT THE FACE OF THE PUMPER AND 2'-6' LEFT/RIGHT OF ♀ OF THE FIRE HYDRANT.EXTRA POSTS MAY BE REQUIRED IN INDUSTRIAL AND CONGESTED TRAFFIC AREAS. (4 POSTS MAX.)
- 7. FIRE HYDRANT CONCRETE SLAB AND CONCRETE GUARD POST FOOTINGS SHALL BE DIFFERENT
- 8. THE FIRE HYDRANT BONNET, OPERATING NUT, HOLD-DOWN NUT, PUMPER CAP AND HOSE CAPS SHALL BE PAINTED GREEN, AND THE HYDRANT UPPER BARREL SHALL BE PAINTED SILVER IN ACCORDANCE WITH CITY SPECIFICATIONS.

GOLD COAST	APPROVED	: XXX	TTPICAL FIRE HYDRAINT NOTES	W-13.1
DIAMOND	DRAWN:	EAM	TYPICAL FIRE HYDRANT NOTES	DRAWING NO.
OF HOLLY WOOD AND	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/20

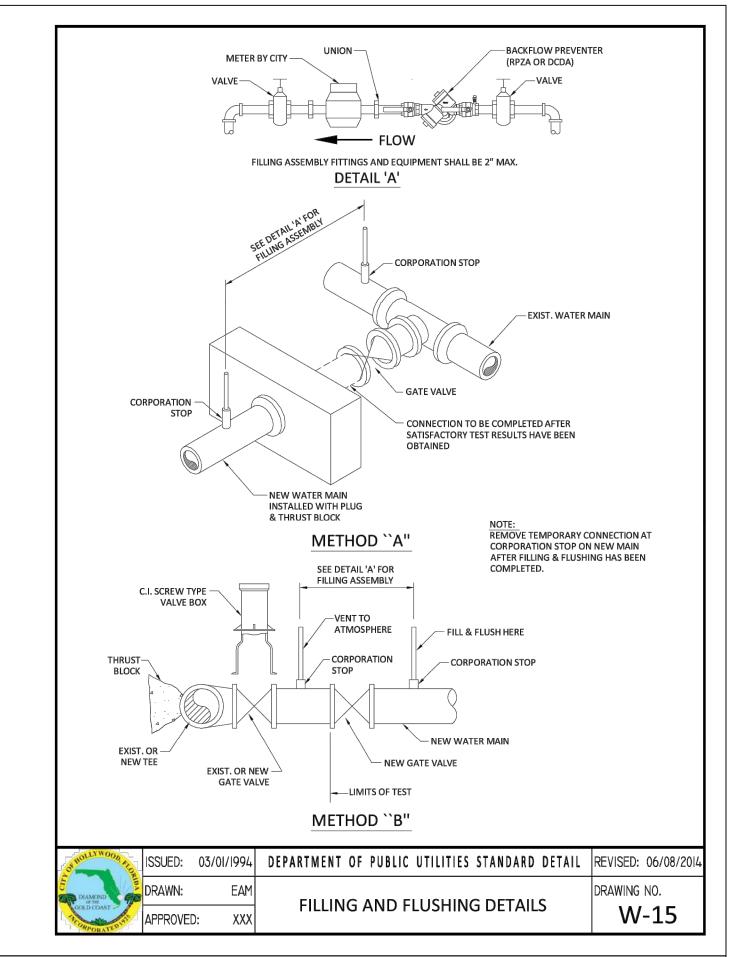
#### WATER MAIN TESTING AND DISINFECTION NOTES:

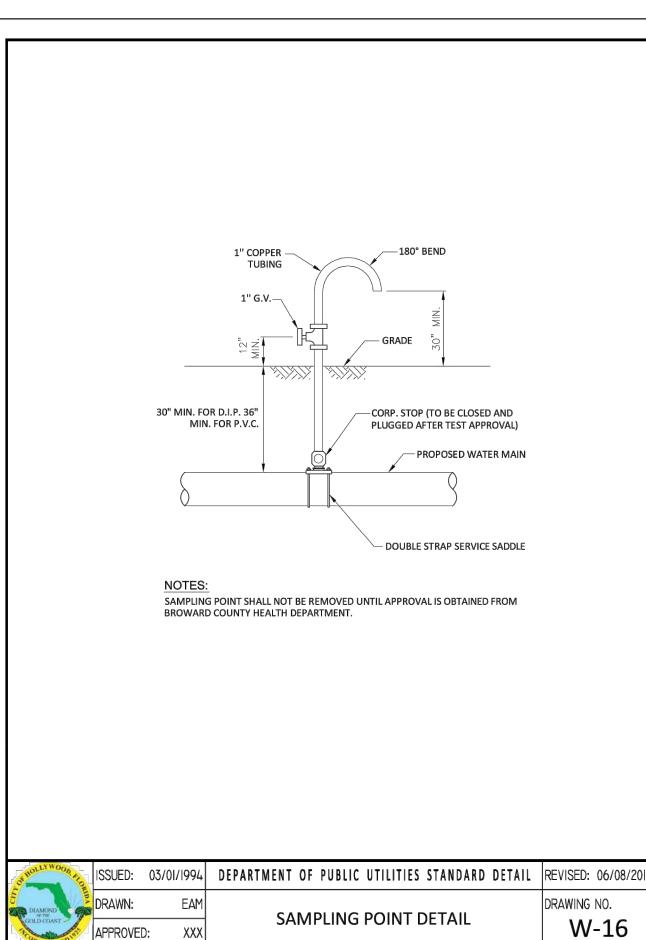
- 1. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL THE PRESSURE AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED ON THE PROPOSED WATER MAINS AND THE SYSTEM HAS BEEN APPROVED BY THE CITY OF HOLLYWOOD AND THE BROWARD COUNTY HEALTH DEPARTMENT.
- 2. THE PRESSURE TEST SHALL BE PERFORMED FOR 2 HOURS AT A CONSTANT PRESSURE OF 150 PSI AND IN ACCORDANCE WITH RULE 62-555,330 (FAC) C600 AWWA LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN AND IN SPECIFICATION SECTION 15995, "PIPELINE TESTING AND DISINFECTION". PRESSURE TEST SHALL BE WITNESSED BY THE CITY OF HOLLYWOOD. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

#### $L = S \times D \times \sqrt{P}$

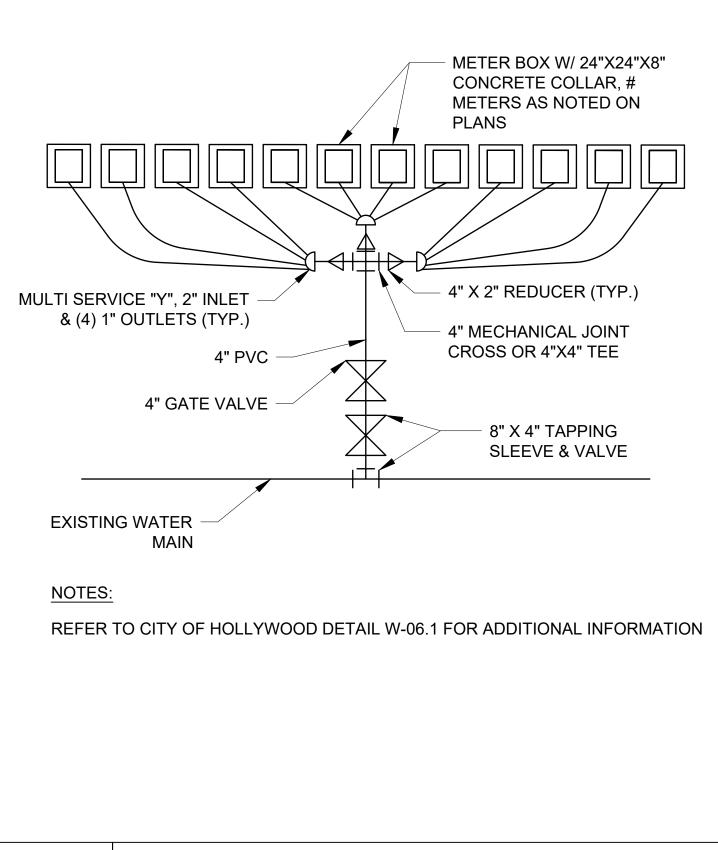
- L = THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR. S = THE LENGTH OF PIPE BEING TESTED.
- D = THE NOMINAL DIAMETER OF THE PIPE BEING TESTED.
- P = THE AVERAGE TEST PRESSURE IN POUNDS PER SQUARE INCH.
- 3. THE COMPLETE LENGTH OF THE PROPOSED WATER MAIN SHALL BE TESTED, IN LENGTHS NOT TO EXCEED 2,000 FEET PER TEST.
- 4. PROPOSED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/AWWA STANDARD C651 AND BACTERIOLOGICAL TESTED FOR TWO CONSECUTIVE DAYS IN ACCORDANCE WITH SPECIFICATION SECTION 15995, "PIPELINE TESTING AND DISINFECTION".
- 5. BACTERIOLOGICAL TESTS SHALL BE REQUESTED AND PAID FOR BY THE CONTRACTOR.
- 6. THE CONTRACTOR SHALL DIRECTLY HIRE A TESTING LABORATORY CERTIFIED BY THE FLORIDA DEPARTMENT OF HEALTH IN ORDER TO COLLECT AND TEST WATER SAMPLES FROM THE WATER DISTRIBUTION SYSTEM TO BE PLACED INTO SERVICE. SAMPLE COLLECTION AND BACTERIOLOGICAL ANALYSES SHALL BE PERFORMED IN ACCORDANCE WITH RULES 62-555.315(6), 62-555.340 AND 62-555.330 (FAC), AS WELL AS ALL REQUIREMENTS OF THE BROWARD COUNTY HEALTH DEPARTMENT PERMIT.
- 7. THE WATER DISTRIBUTION SYSTEM SHALL NOT BE CONSIDERED COMPLETE AND READY FOR FINAL INSPECTION UNTIL SUCCESSFUL TEST RESULTS ARE OBTAINED FOR ALL TESTS DESCRIBED ABOVE.

	OF HOLLINGON AND	ISSUED:	03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/201
	DIAMOND S	DRAWN:	EAM	WATER MAIN TESTING AND	DRAWING NO.
SACOR	GOLD COAST	APPROVED	: XXX	DISINFECTION NOTES	W-14





APPROVED:





2160 NW 82<sup>nd</sup> Avenue

Doral, Florida 33122

PH: (954) 788-3400

Florida Certificate of Authorization # - 7928

BID / CONTRACT NO. :

#### REVISIONS

NO.	DESCRIPTION	DATE

#### PRELIMINARY PLAN NOT FOR CONSTRUCTION

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE:	AS NOTED
DATE ISSUED:	FEBRUARY 2018
DRAWN BY:	MC
DESIGNED BY:	SB
CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

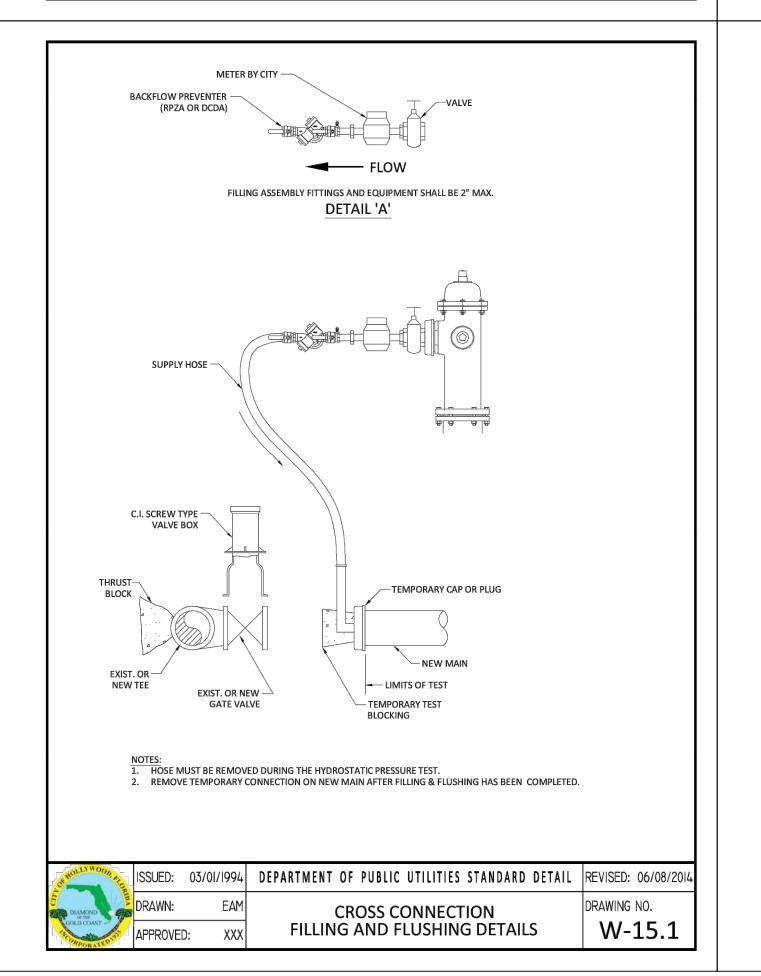
WATER AND SEWER **DETAILS** 

SHEET NUMBER

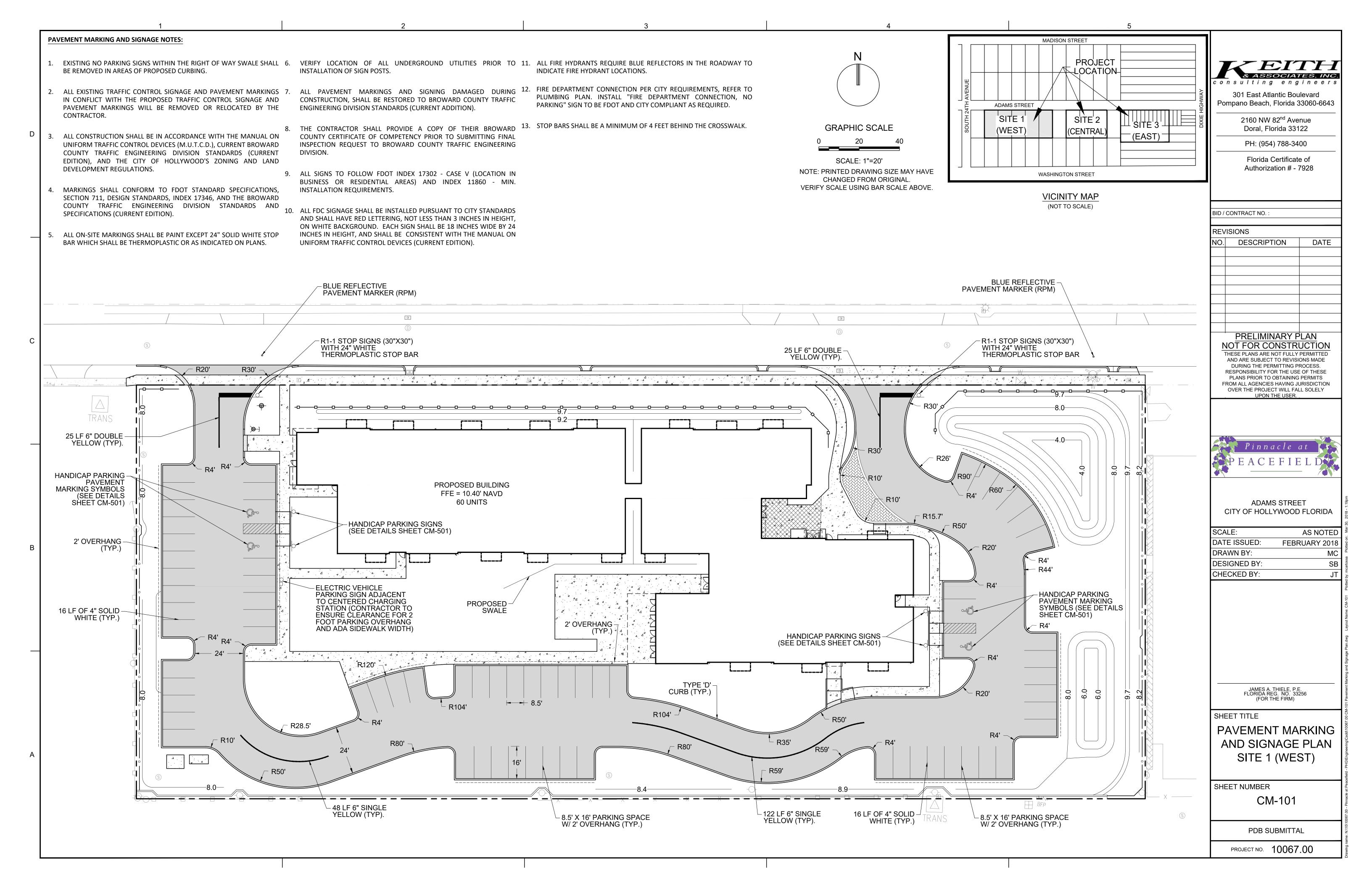
CU-506

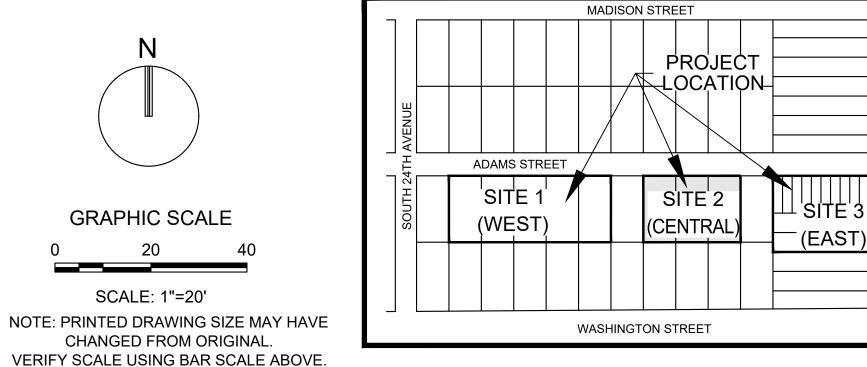
PDB SUBMITTAL

PROJECT NO. 10067.00



METER BANK DETAIL SCALE: NOT TO SCALE





**VICINITY MAP** 

(NOT TO SCALE)

#### **PAVEMENT MARKING AND SIGNAGE NOTES:**

- EXISTING NO PARKING SIGNS WITHIN THE RIGHT OF WAY SWALE SHALL BE REMOVED IN AREAS OF PROPOSED CURBING.
- 2. ALL EXISTING TRAFFIC CONTROL SIGNAGE AND PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED TRAFFIC CONTROL SIGNAGE AND PAVEMENT MARKINGS WILL BE REMOVED OR RELOCATED BY THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), CURRENT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS (CURRENT EDITION), AND THE CITY OF HOLLYWOOD'S ZONING AND LAND DEVELOPMENT REGULATIONS.
- 4. MARKINGS SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS, SECTION 711, DESIGN STANDARDS, INDEX 17346, AND THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS AND SPECIFICATIONS (CURRENT EDITION).
- ALL ON-SITE MARKINGS SHALL BE PAINT EXCEPT 24" SOLID WHITE STOP BAR WHICH SHALL BE THERMOPLASTIC OR AS INDICATED ON PLANS.
- 6. VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF SIGN POSTS.
- 7. ALL PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION, SHALL BE RESTORED TO BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS (CURRENT ADDITION).
- THE CONTRACTOR SHALL PROVIDE A COPY OF THEIR BROWARD COUNTY CERTIFICATE OF COMPETENCY PRIOR TO SUBMITTING FINAL INSPECTION REQUEST TO BROWARD COUNTY TRAFFIC ENGINEERING DIVISION.
- ALL SIGNS TO FOLLOW FDOT INDEX 17302 CASE V (LOCATION IN BUSINESS OR RESIDENTIAL AREAS) AND INDEX 11860 - MIN. INSTALLATION REQUIREMENTS.
- 10. ALL FDC SIGNAGE SHALL BE INSTALLED PURSUANT TO CITY STANDARDS AND SHALL HAVE RED LETTERING, NOT LESS THAN 3 INCHES IN HEIGHT, ON WHITE BACKGROUND. EACH SIGN SHALL BE 18 INCHES WIDE BY 24 INCHES IN HEIGHT, AND SHALL BE CONSISTENT WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).
- 11. ALL FIRE HYDRANTS REQUIRE BLUE REFLECTORS IN THE ROADWAY TO INDICATE FIRE HYDRANT LOCATIONS.
- 12. FIRE DEPARTMENT CONNECTION PER CITY REQUIREMENTS, REFER TO PLUMBING PLAN. INSTALL "FIRE DEPARTMENT CONNECTION, NO PARKING" SIGN TO BE FDOT AND CITY COMPLIANT AS REQUIRED.
- 13. STOP BARS SHALL BE A MINIMUM OF 4 FEET BEHIND THE CROSSWALK.



301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

> 2160 NW 82<sup>nd</sup> Avenue Doral, Florida 33122

PH: (954) 788-3400 Florida Certificate of

Authorization # - 7928

BID / CONTRACT NO. :

REVISIONS DESCRIPTION DATE

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

SCALE:	AS NOTED
DATE ISSUED:	FEBRUARY 2018
DRAWN BY:	MC
DESIGNED BY:	SB
CHECKED BY:	JT

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

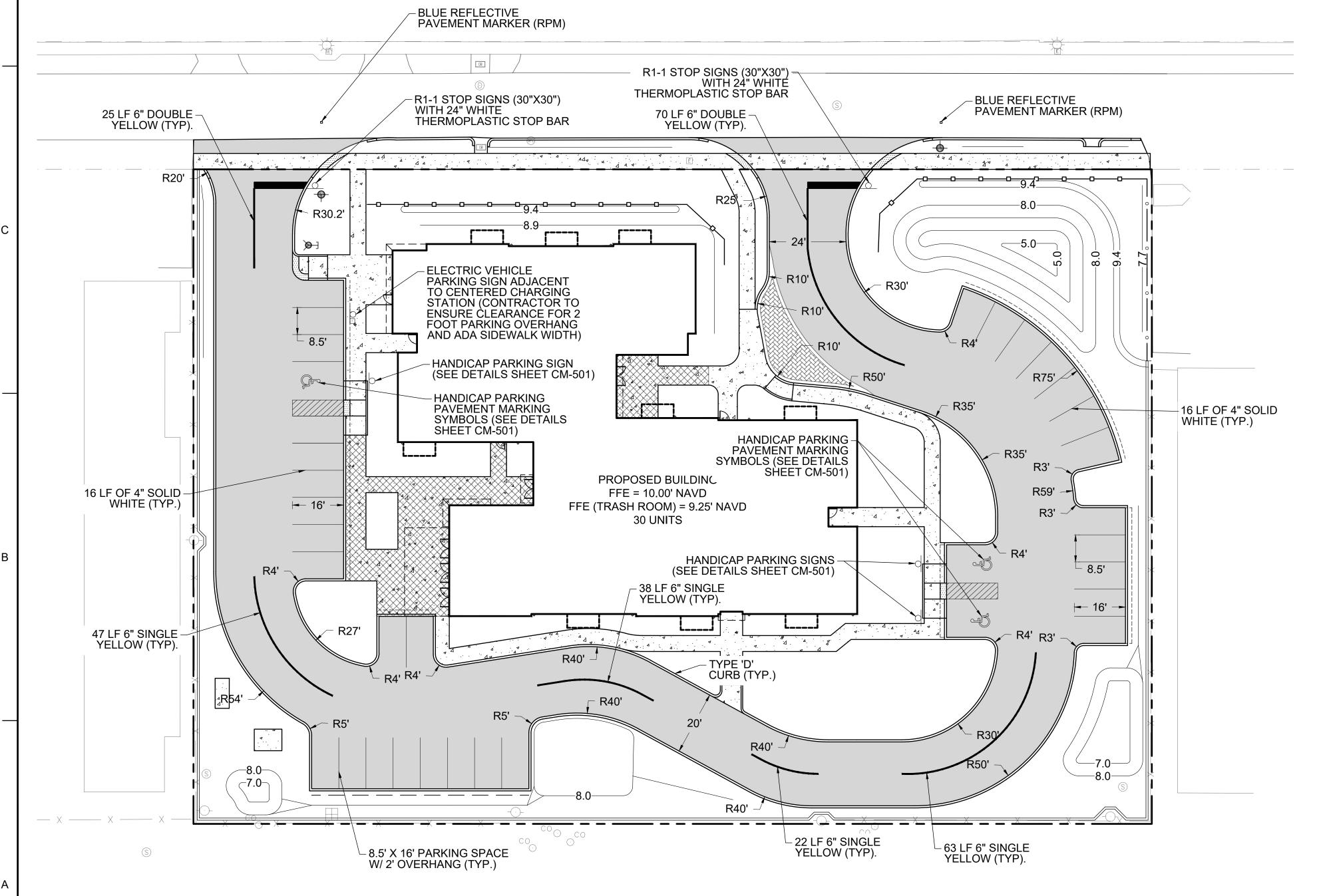
PAVEMENT MARKING AND SIGNAGE PLAN SITE 2 (CENTRAL)

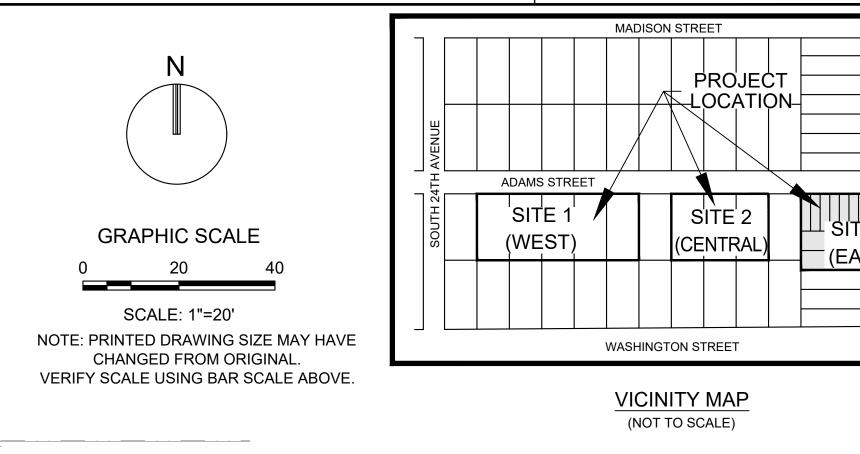
SHEET NUMBER

CM-102

PROJECT NO. 10067.00

PDB SUBMITTAL





consulting engineers 301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643 (EAST)

BID / CONTRACT NO.

REVISIONS

DESCRIPTION

2160 NW 82<sup>nd</sup> Avenue

Doral, Florida 33122

PH: (954) 788-3400

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

		'
SCALE:	AS NOTED	
DATE ISSUED:	FEBRUARY 2018	
DRAWN BY:	MC	l
DESIGNED BY:	SB	
CHECKED BY:	JT	

JAMES A. THIELE, P.E. FLORIDA REG. NO. 33256 (FOR THE FIRM)

SHEET TITLE

PAVEMENT MARKING AND SIGNAGE PLAN SITE 3 (EAST)

SHEET NUMBER

CM-103

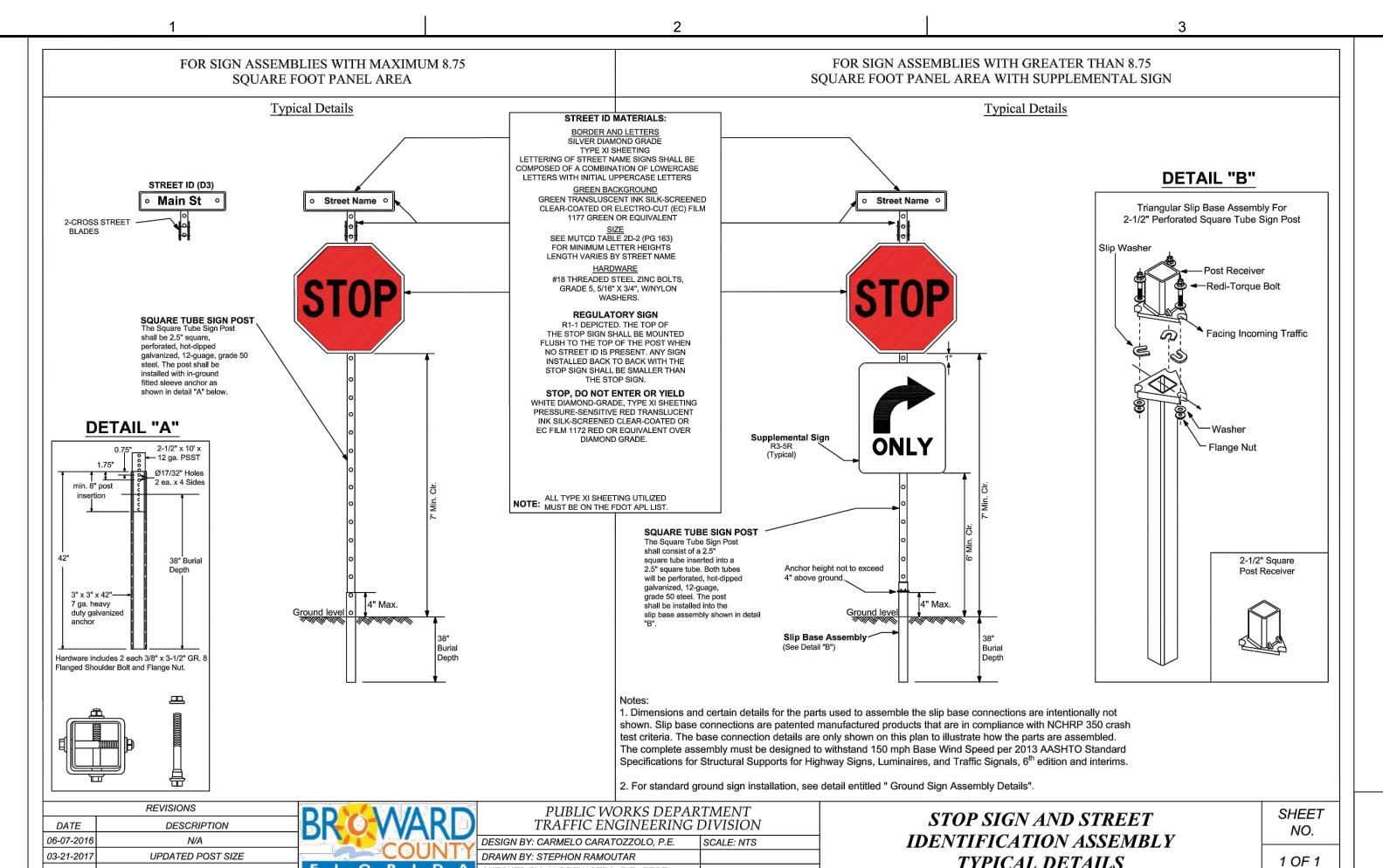
PDB SUBMITTAL

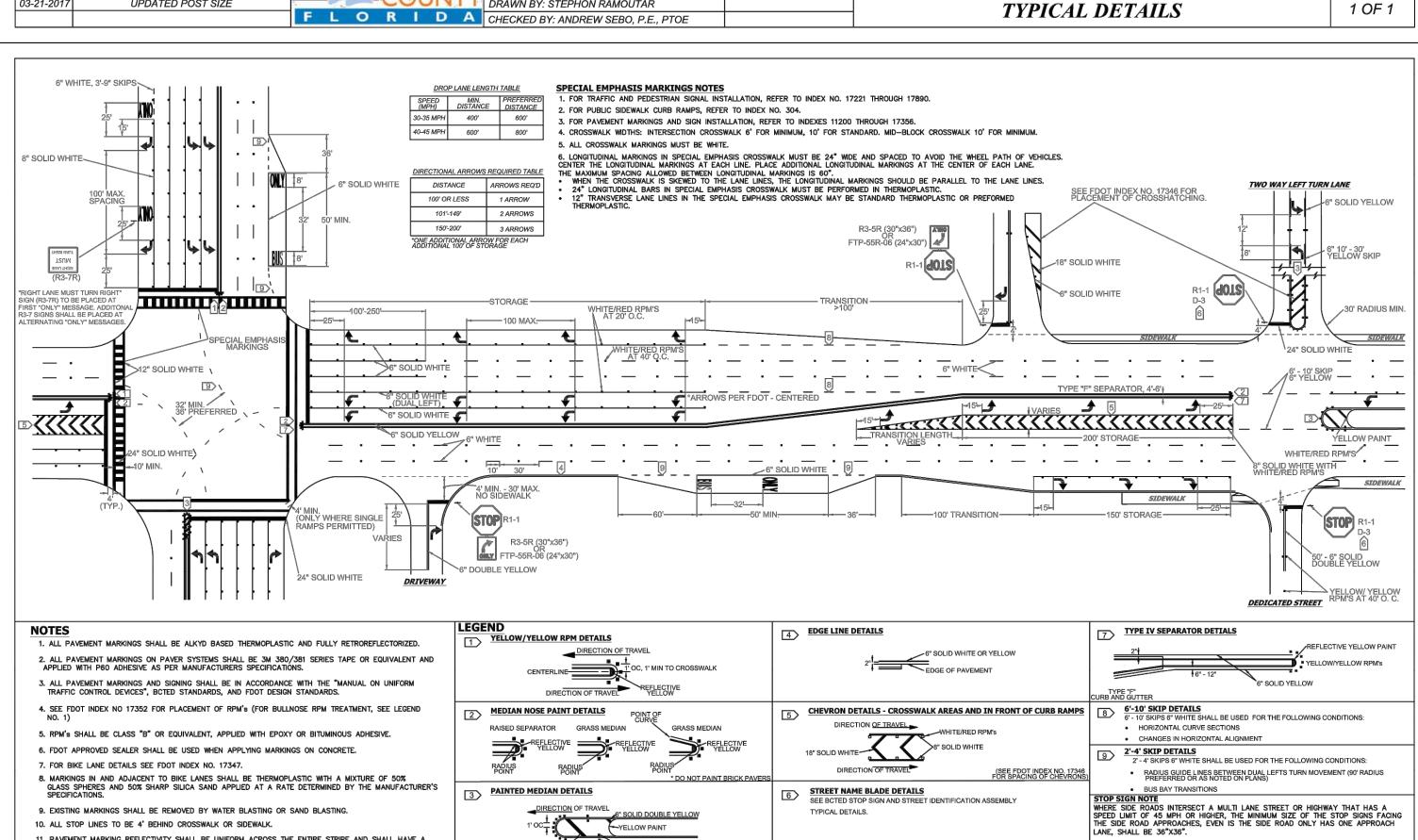
PROJECT NO. 10067.00

BLUE REFLECTIVE PAVEMENT MARKER (RPM) CB R1-1 STOP SIGNS (30"X30") R1-1 STOP SIGNS (30"X30") WITH 24" WHITE WITH 24" WHITE 25 LF 6" DOUBLE 25 LF 6" DOUBLE THERMOPLASTIC STOP BAR THERMOPLASTIC STOP BAR YELLOW (TYP). YELLOW (TYP). R30'₄-R20' R30' ELECTRIC VEHICLE 16 LF OF 4" SOLID -PARKING SIGN ADJACENT R10' WHITE (TYP.) TO CENTERED CHARGING STATION (CONTRACTOR TO **ENSURE CLEARANCE FOR 2** FOOT PARKING OVERHANG R36' AND ADA SIDEWALK WIDTH) R5' - 16 LF OF 4" SOLID WHITE (TYP.) HANDICAP PARKING SIGN - R20' (SEE DETAILS SHEET CM-501) HANDICAP PARKING PAVEMENT MARKING R70' SYMBOLS (SEE DETAILS SHEET CM-501) HANDICAP PARKING -PAVEMENT MARKING <del>-</del> 16' SYMBOLS (SEE DETAILS SHEET CM-501) PROPOSED BUILDING FFE = 10.10' NAVD 30 UNITS 0 0 0 0 7 - 8.5' HANDICAP PARKING SIGNS -(SEE DETAILS SHEET CM-501) -8.5' X 16' PARKING SPACE W/ 2' OVERHANG (TYP.) - 83 LF 6" SINGLE YELLOW (TYP). 4 4 4 4 4 4 - R30' 26.4' 26.5 - R30' - 74 LF 6" SINGLE YELLOW (TYP). R48' TYPE 'D' CURB (TYP.) -

#### **PAVEMENT MARKING AND SIGNAGE NOTES:**

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- 6. VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF SIGN POSTS.
- 7. ALL PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION, SHALL BE RESTORED TO BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS (CURRENT ADDITION).
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- 13. STOP BARS SHALL BE A MINIMUM OF 4 FEET BEHIND THE CROSSWALK.





YELLOW PAINT

DESIGN BY: CARMELO CARATOZZOLO, P.E SCALE: NTS

DRAWN BY: STEPHON RAMOUTAR

F L O R I D A CHECKED BY: ANDREW SEBO, P.E., P.T.O.E

PUBLIC WORKS DEPARTMENT

TRAFFIC ENGINEERING DIVISION

TYPICAL DETAILS.

WHERE SIDE ROADS INTERSECT A MULTI-LANE (INCLUDING TURN LANE) STREET OR HIGHWAY THAT HAS A SPEED LIMIT OF 40 MPH OR LOWER, THE MINIMUM SIZE OF THE STOP SIGN FACING THE SIDE ROAD APPROACHES SHALL BE 36"X36".

SHEET

NO.

1 OF 1

PAVEMENT MARKINGS

**AND SIGNS** 

**DETAILS** 

9. EXISTING MARKINGS SHALL BE REMOVED BY WATER BLASTING OR SAND BLASTING.

11. PAVEMENT MARKING REFLECTIVITY SHALL BE UNIFORM ACROSS THE ENTIRE STRIPE AND SHALL HAVE A MINIMUM REFLECTIVITY READING OF 250 MILLICANDELAS FOR WHITE AND 175 MILLICANDELAS FOR YELLOW.

10. ALL STOP LINES TO BE 4' BEHIND CROSSWALK OR SIDEWALK.

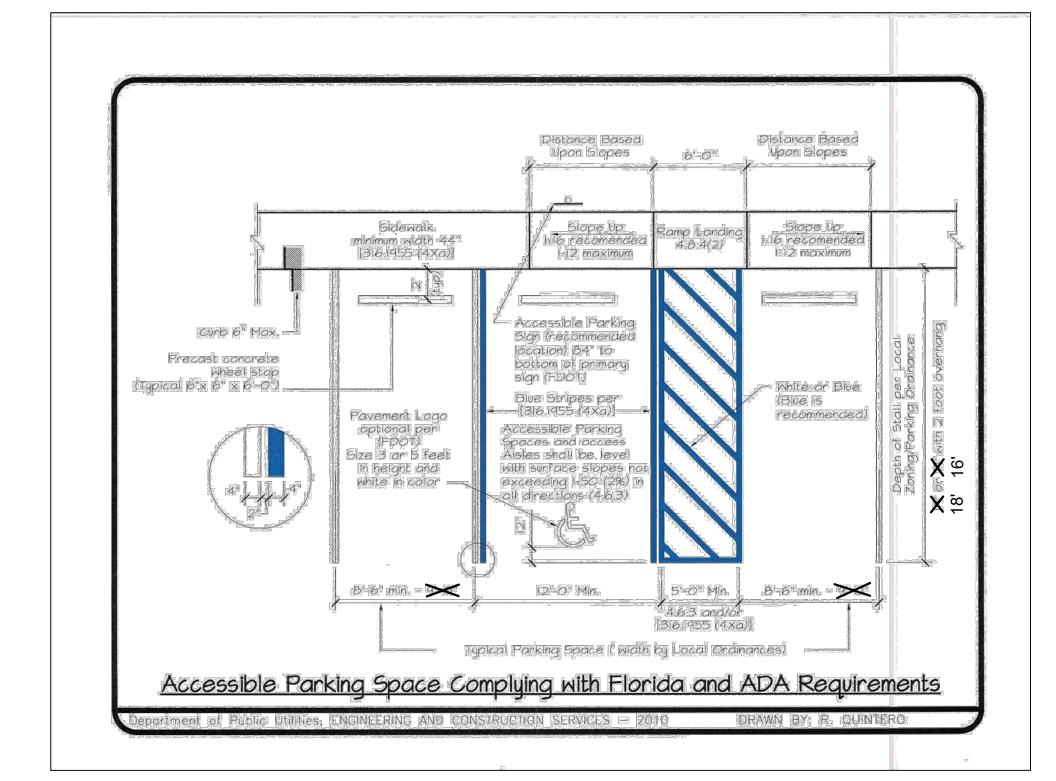
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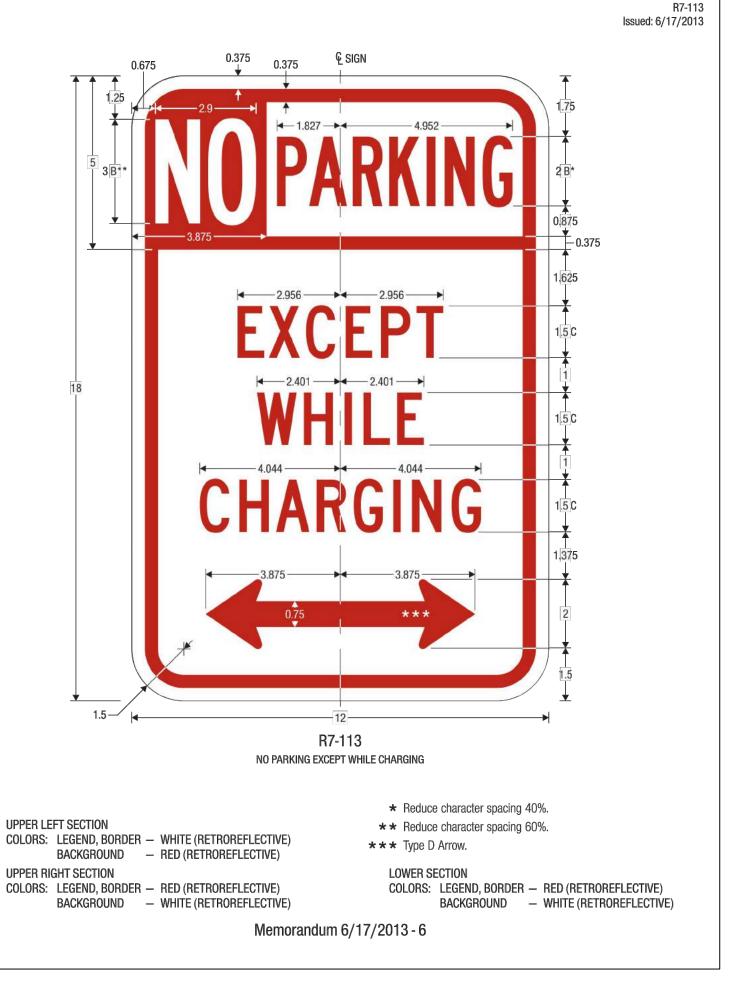
01-15-2016

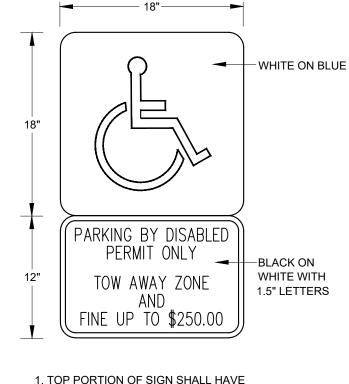
12. ALL PRODUCTS MUST BE ON FDOT'S APPROVED PRODUCTS LIST (APL). REVISIONS

DESCRIPTION

N/A





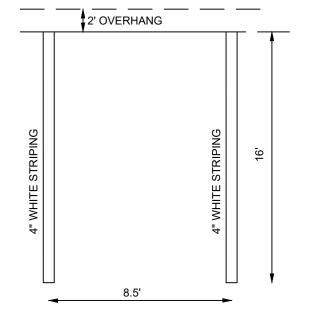


1. TOP PORTION OF SIGN SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL.

2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER. 3. SIGN MAY BE FABRICATED ON ONE

PANEL OR TWO. 4. SIGNS ARE TO BE MOUNTED AT A HEIGHT OF 5 FT. MINIMUM FROM PAVEMENT TO BOTTOM OF SIGN.

HANDICAP PARKING SIGN



PARKING STALL DETAILS N.T.S.



301 East Atlantic Boulevard Pompano Beach, Florida 33060-6643

2160 NW 82<sup>nd</sup> Avenue

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ADAMS STREET CITY OF HOLLYWOOD FLORIDA

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CHECKED BY:	JT

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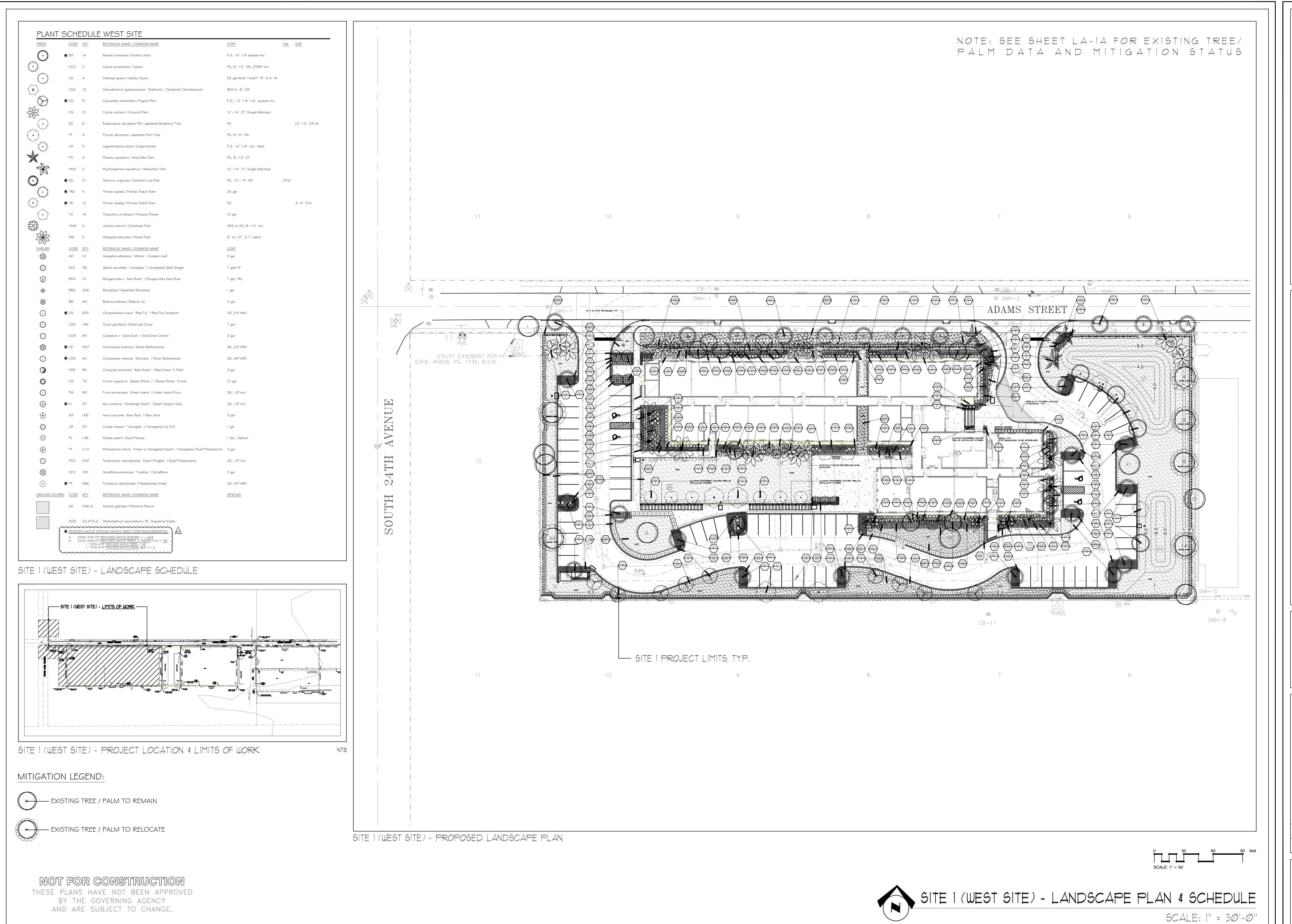
SHEET TITLE

PAVEMENT MARKING AND SIGNAGE **DETAILS** 

SHEET NUMBER

CM-501

PDB SUBMITTAL



DAVIDEONTDESIGN. COMPILE 105 B CORAL SPRING, FLORIDA 33067 PH:954.283.8839 FAX:954.773.9841 EMAIL: INFO@DAVIDFONTDESIGN. COM

PINNACLE AT PEACEFIELI A D A M S S T R E E HOLLYWOOD, FLORID



DAVID FONT, ASLA, RLA L A 6666822

REVISIONS:

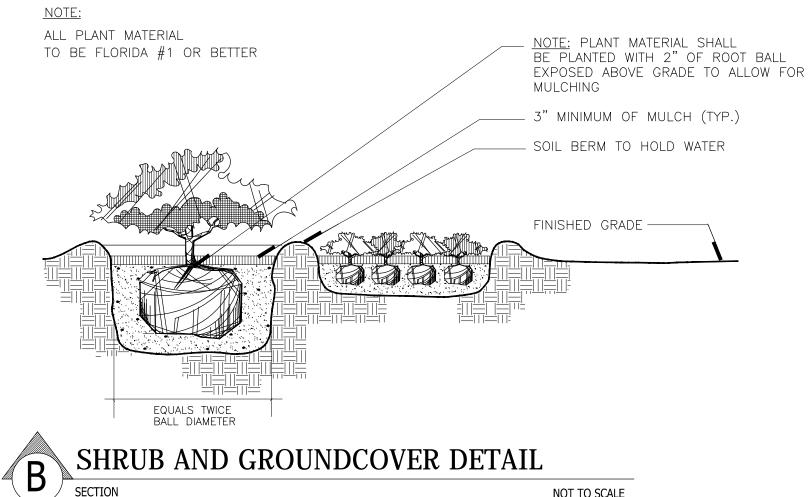
COMMENT RESPONSES 2.20.2018

COMMENT RESPONSES 4.2.2018

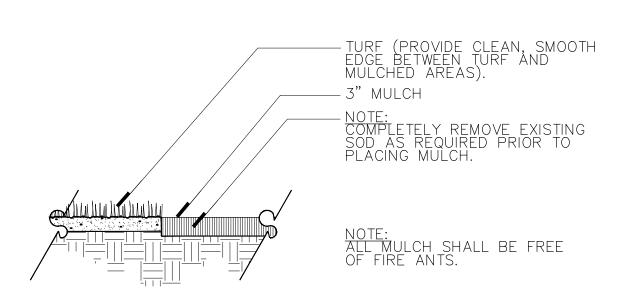
4/2/2018

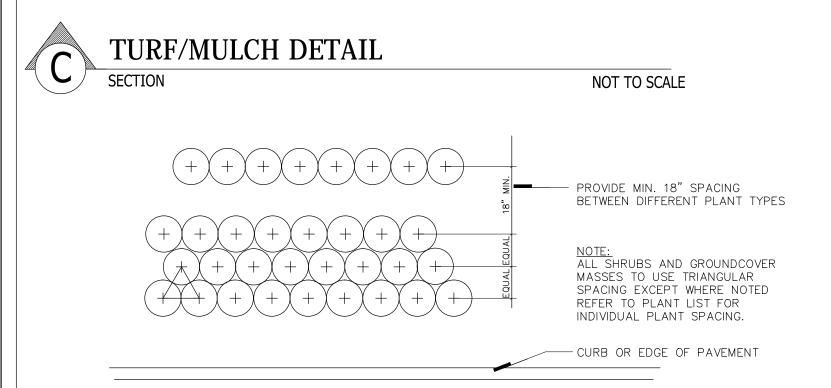
SUBMITTAL

LA-2A



NOT TO SCALE







# LANDSCAPE NOTES

- I. PLANT MATERIAL SHALL CONFORM TO THE GRADES AND STANDARDS FOR FLORIDA NO. I OR BETTER AS DESCRIBED IN "GRADES AND STANDARDS FOR NURSERY PLANTS" (LATEST EDITION) BY THE FLORIDA DEPARTMENT OF AGRICULTURE, CONSUMER SERVICES DIVISION.
- 2. TREES SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS OF THE NATIONAL ARBORIST ASSOCIATION.
- 3. ALL TREES SHALL BE INSTALLED IN ACCORDANCE WITH THE MINIMUM SIZES SHOWN.
- 4. TOPSOIL SHALL BE CLEAN AND FREE OF CONSTRUCTION DEBRIS, WEEDS, ROCKS, NOXIOUS PESTS AND DISEASES. IF NECESSARY, AMMEND TOPSOIL WITH HORTICULTURALLY ACCEPTABLE ORGANIC MATERIAL
- 5. PLANTING PITS: ALL TREES AND SHRUBS SHALL BE PLANTED IN A PLANTING SOIL CONSISTING OF A MIXTURE OF 50% MUCK AND 50% CLEAN, BROWN SAND. PLANTNG HOLES WILL BE TWICE THE SIZE OF THE ROOT BALL OF THE TREE OR SHRUB BEING PLANTED.
- 6. MULCHING: ALL EXPOSED SOIL AREAS IN PLANTING BEDS, INCLUDING HEDGE ROWS, SHALL BE KEPT WEED FREE AND MULCHED TO A MINIMUM THREE (3) INCH DEPTH, EXCEPT THAT NO MULCH SHALL BE REQUIRED IN ANNUAL BEDS. THE TYPE OF MULCH SHALL BE SHREDDED AND COMPOSTED MELALEUCA TREE, GRADE 'B'. AT A MINIMUM, PROVIDE A 24 INCH RING OF MULCH AROUND TREE TRUNKS LOCATED IN
- \*\* ONLY NON-CYPRESS MULCH IS ALLOWED AND THE MULCH BE KEPT AT LEAST 6 INCHES AWAY FROM TREE AND PALM TRUNKS. NO DYED MULCH SHALL BE USED ON THE SITE.
- 7. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE. IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWING SHALL TAKE PRECEDENCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY PLANT MATERIAL QUANTITIES, INCLUDING SOD, SOIL AND MULCH.
- 8. TREES AND PALMS SHALL BE GUYED OR STAKED AS PER THE DETAILS.
- 9. EXISTING IRRIGATION SYSTEM TO BE ADJUSTED SO THAT IT PROVIDES 110 PERCENT COVERAGE, RUST-FREE WITH 50 PERCENT MINIMUM OVERLAP AND AN AUTOMATIC RAIN SENSOR. PROVIDE USE OF BUBBLERS ON ALL TREE AND PALM INSTALLATION.
- 10. THE IRRIGATION SYSTEM SHALL INCLUDE A RAIN SENSOR DEVICE WHICH WILL LIMIT THE OPERATION OF THE SYSTEM IF SUFFICIENT RAINFALL HAS OCCURED.
- II. SOD: THE SPECIES OF GRASS FOR LAWNS SHALL BE ST. AUGUSTINE 'FLORATAM' AND SHALL BE INSTALLED AS SOLID SOD.
- 12. COORDINATE THE FINAL PLACEMENT OF TREES WITH THE PLACEMENT OF LAMP POST LIGHTING.
- 13. CONTRACTOR SHALL ENSURE THAT ADEQUATE WATER IS SUFFICIENTLY ESTABLISH PLANT MATERIAL UNTIL IRRIGATION IS 100% OPERABLE.
- 14. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN AUTHORIZATION NEWLY INSTALLED PLANTINGS TO SUPPLIED IN NECESSARY QUANTITIES TO ALL FROM THE L.A. OR CLIENT
- 15. IN AREAS WHERE PAVED SURFACES ABUT SOD OR MULCH, THE FINAL GRADE LEVEL OF BOTH SURFACES SHOULD BE EVEN.
- 16. NO STREET TREE SHALL BE PLANTED LESS THAN (25) FEET FROM ANY STREET CORNER, MEASURED FROM THE POINT OF INTERESCTING CURBS OR ROADWAY PAVEMENT EDGES
- 17. ALL MATERIAL SHALL BE FERTILIZED WITH THE APPROPRIATE FERTILIZER OR TABLETS IMMEDIATELY UPON INSTALLATION.
- 18. LANDSCAPE AREAS, INCLUDING LANDSCAPED ISLANDS, WITHIN OR ABUTTING VEHICULAR USE AREAS SHALL BE EXCAVATED TO A DEPTH OF TWO AND A HALF FEET (2 1/2 ') TO ENSURE THAT ADEQUATE PLANTING SOIL EXISITS. PARKING LOT BASE COURSE MATERIAL, LIMEROCK, ASPHALT, AND OTHER SIMILAR MATERIAL SHALL BE REMOVED TO A DEPTH OF TWO AND A HALF FEET (2 1/2')
- 19. EXISTING TREES AND PALMS REMAINING MUST BE STRUCTURALLY PRUNED BY PROFESSIONALLY LICENSED TREE COMPANY.
- 20. ALL TREES SHOULD BE PLANTED SO THAT THE TRUNK FLAIR IS VISIBLE AT THE TOP OF THE ROOT BALL. THE TOP OF THE ROOT BALL SHALL BE PLANTED SO THAT IT IS 5% TO 10% ABOVE FINISH GRADE. SOIL MUST NOT BE PLACED OVER THE ROOT BALL

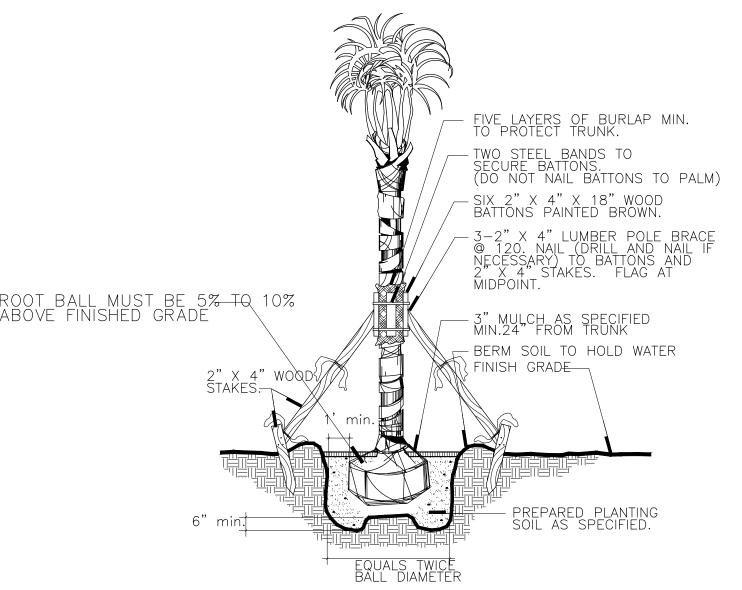
Landscape Requirements: West Site

Zoning Designation: DH-I (Dixie Highway Multi-Family District)

- Net Lot Total Area (Sq. Ft. and Acres): 102,500 SF (2.35 Acres) Net Lot Total Open Space (Sq. Ft. and Acres): 42,598 SF (0.97 Acres)
- Open Space Requirement: Total Site Pervious Area = 42,598 SF  $\overline{I}$ . Required: Minimum % of the Total Pervious Area to be Landscaped = 40% Provided =  $\frac{1}{42\%}$
- 2. Required: One Tree (Min. 12' Ht.) per 1,000 SF of Total Pervious Area = 43
- Perimeter Landscape Requirement: Total LF of Street Frontage = 423 LF Required: One Street Tree (Min. 12' Ht.) per 50 LF of Street Frontage = 8 Provided =  $\frac{1}{8}$
- Vehicular Use Requirement: I.Required: % of the VUA which shall be Landscaped = 25% Provided =  $\overline{25\%}$
- 2. Required: One Tree (Min. 12' Ht.) per Terminal Island = 18 Provided =  $\overline{18}$
- Grand Total Trees: I. Trees Required - Grand Total = 69 Provided =  $\overline{69}$
- 2. Required: Minimum Number of Tree Species Allowed = 6 Provided = 6
- 3. Max. % of Palms to count toward Tree Requirements (@ 3:1) = 50% Provided =  $\overline{50\%}$
- 4. Required: Minimum % of Native Trees / Palms Allowed = 60% Provided =  $\overline{60\%}$
- 5. Required: Minimum % of Native Shrubs = 50% Provided =  $\overline{50\%}$

NOT FOR CONSTRUCTION

THESE PLANS HAVE NOT BEEN APPROVED BY THE GOVERNING AGENCY AND ARE SUBJECT TO CHANGE.

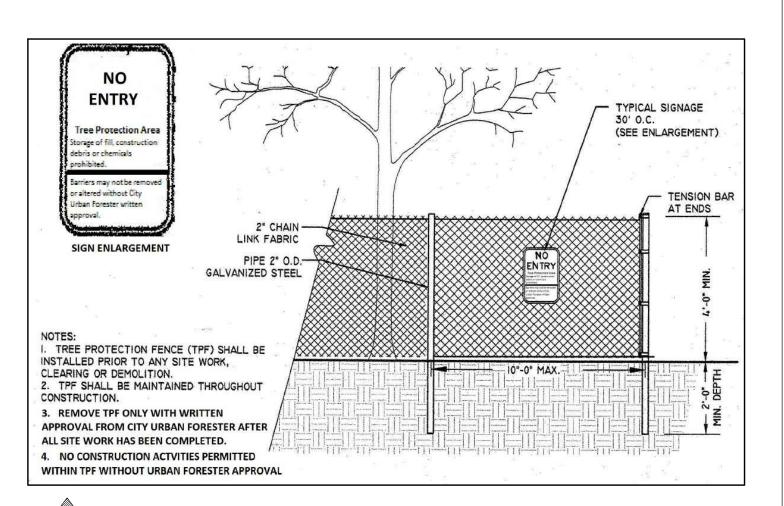




NOT TO SCALE

Always call 811 two full business days before you dig







NOT TO SCALE

SIGN



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PINN, A D L



DAVID FONT, ASLA, RLA LA 6666822

SUBMITTAL 4/2/2018

LA-3A

#### Scope of Work:

- A. The work specified by this Section of the Specifications and on the Plans consists of furnishing all labor, machinery, tools, apparatus, means of transportation, supplies, equipment, materials, services and incidentals necessary to complete the work as indicated on the Plans and in the Specifications, as well as all other related responsibilities, including all change and repairs incident thereto.
- B. The work shall include, but not be limited to, furnishing material, root pruning where required, layout, protection to the public, excavation, installation, backfilling, grading, fertilizing, mulching, staking and guying where required, watering, pruning where required, sod installation, weeding, cleanup, maintenance and guarantee.
- C. Quantities and Location: The Landscape Architect reserves the right to adjust the numbers and locations of the designated types and species to be used at any of the locations shown in order to provide for any modifications which might be necessary.
- D. Investigation of Subsurface Condition: The Contractor shall be responsible for making site subsurface investigations and examination as he or she chooses in order to become familiar with the character of the existing material and the construction conditions under which he or she will work. These subsurface investigations and examinations shall be included in the bid. The Contractor shall not receive separate, additional compensation for this.
- E. The Landscape Contractor shall be paid for only those units that are installed at the time of request for payment. The contractor's unit prices shall be the basis for said payment. The final amount of payment may or may not be the total sum of the contract depending on the number of units installed.
- F. Ten percent (10%) of the total contract price will be held as retainer for 90 days after final written acceptance.
- G. The Landscape Contractor will coordinate his work with all other trades at the job site.

#### Quality Assurance:

- A. The Landscape Architect may inspect trees, shrubs, and groundcover either at the place of growth or at the site before planting for compliance with the requirements for name, variety, size, and quality. The Landscape Architect retains the right to further inspect trees and shrubs for size and condition of balls and root system, insects, injuries, and latent defects, and try to reject unsatisfactory or defective material at any time during the progress of work. The Landscape Contractor shall remove rejected trees or shrubs within I days from the project site.
- B. Responsibility for Assuring Quality Work:
- (1) The Contractor's Superintendent shall speak English and be well versed in Florida plant material, planting operations, Plan and Specification interpretation, coordination with other contracts or service in the project area and coordination between the nursery and the project.
- (2) All employees shall be competent and highly skilled in their particular job in order to properly perform the work assigned to them. The Contractor shall be responsible for maintaining the quality of the material on the project.
- (3) The Contractor will comply with applicable Federal, State, County and local requirements governing landscape materials and work

#### C. Grade Standards:

- (1) Plant material shall be Florida #1 or better as set forth in the latest edition of the Florida Department of Agriculture's Grades and Standards for Nursery Plants.
- (2) All plant material will be subject to the approval of the Landscape Architect for quality, size and color. Plants lacking the compactness or proper proportions, plants which are weak or thin, and plants injured by close planting in nursery rows will not be accepted. Plant materials which have been cut back from larger grades to meet certain specification requirements will be rejected.
- (3) Plant material shall have normal, well developed branches and shall be vigorous plants, free from defects, decay, burns disfiguring roots, sun-scald injuries, abrasion of the bark, plant diseases, insect pest eggs, barers, and all forms of infestations or objectionable disfigurements.

## Delivery, Handling and Storage:

- A. Delivery and Handling:
- (1) Movement of nursery stock shall comply with all Federal, State, and local laws, regulations, ordinances, codes, etc.
- (2) Protect during delivery to prevent damage to root ball or desiccation of leaves. Remove unacceptable plant materials immediately from the job site. Maintain and protect while stored at the site.
- (3) Transport materials on vehicles large enough to allow plants not to be crowded and damaged. Plats shall be covered to prevent wind damage during transit.
- (1) Deliver sod on pallets with root system protected from exposure to wind and sun. Deliver sod in quantities capable of being installed within 48 hours of cutting.

#### Submittals & Approvals

- A. Written request for approval to substitute a plant species or a plants designation (B&B, WB&B, CG etc.), type, grade, quality, size, quantity, etc. due to the non-availability of the material specified. Approval must be given by the Landscape Architect before the material is delivered and installed on the project. The Contractor must provide written proof that the specified plant material is unavailable.
- B. Any request for the approval of an equal shall be in writing.

  Approval shall be given by the Landscape Architect before the material is delivered and installed on the project.

- C. Submit shop drawings for any special conditions not covered in the details indicated. This shall be for approval by the Landscape Architect before they are implemented in the project.
- D. If requested by the Owner or Landscape Architect submit a schedule of all specimen plant material and collected plant material indicating the sources or suppliers of these materials and their locations for approval by the Landscape Architect before they are delivered and installed on the project. Also, two color photographs of each different item, showing different side views of the item shall be submitted with the schedule. Additional color photographs shall be submitted, if requested.
- E. if requested by the Owner or Landscape Architect, submit a letter indicating the sources or suppliers of all sod and the grade to be supplied for approval by the Landscape Architect before it is delivered and installed on the project.
- F. If requested by the Owner or Landscape Architect, submit a sample and analysis of all planting soil types for approval by the Landscape Architect before the material is delivered and installed on the project. Submit a sample of the mulch for approval by the Landscape Architect.
- H. If requested by the Owner or Landscape Architect, submit sources of the material before the material is delivered and installed on the project.
- Submit prints of shop drawing for all staking and guying methods to be used if the ones indicated in these Specifications and on the Plans are not to be implemented. staking and guying methods before they are implemented in the The Landscape Architect will approve all shop drawings of project.
- J. Submit in writing any hindrance to the owners routine maintenance or lack of, that may affect installed plant materials growth, or survival, that would affect the guarantee of plant material.
- K. Submit in writing any hindrance to the timely completion of the installation.
- L. Submit and Certificate of inspection of plant material as may be required by, State, local or Federal Authorities.

#### Substitutions

A. When the specifies plant designation (B\$B, WB\$B, CG etc.), type, grade, quality, size, quantity, etc. of a material is not available, the Contractor shall submit a written request, to the Landscape Architect, for a substitution along with written, documented proof that the plant designation (B&B, WB&B, CG, etc.), type grade, quality, size, quantity, etc. of material is not available. The Landscape Architect shall approve all substitutions before they are delivered and installed. Do not deliver and install any material, which is anticipated to be a substitute, before it has been submitted in writing and approved as a substitute by the Landscape Architect. Also, ant changes, if any, to the contract amount because of an approved substitute, shall be established in writing between the Owner and the Contractor before the material substitute is delivered and installed on the project.

#### <u>Guarantee:</u>

- A. The guarantee shall not begin until the day final written acceptance is given.
- B. All plant material, except sod, trees and palms, shall be guaranteed for a minimum of 1 year from the time of final acceptance. All sod shall be guaranteed for a minimum of 60 days from the time of final acceptance. All trees and palms are to be guaranteed for one year from the time of final acceptance.
- C. The guarantee shall be null and void for plant material which is damaged or dies as a result of 'Acts of God' limited to hail, freeze, lightning, and winds which exceed hurricane force, providing the plant was in a healthy growing condition prior to these "Acts of God".
- D. At the option of the Owner, and inspections may be made at the end of the guarantee period, but prior to the last day of the quarantee period.

#### Replacement:

- A. The guaranteeing of a plant material shall be construes to mean the complete and immediate replacement of plant material within 3 calendar days if it is:
- (1) Not in a healthy growing condition and thus renders it below the minimum quality indicted in the Specifications.
- (2) There is a question to its ability to survive after the end of the guarantee period that would render it below the minimum quality indicated in the Specifications.

#### (3) It is dead.

B. The 3 calendar days may be extended due to seasonal conditions, availability, preparation time such as root pruning, etc., only if approved by the Landscape Architect in advance. The extended time shall be negotiated between all parties concerned, but must receive final approval by the Landscape Architect.

### C. Size, Quality, and Grade:

- (1) Replacement plant material shall be one of the same species quality and grade as that of the plant to be replaced. The size of the replacement shall not necessarily be the same size as the original specified plant at its initial planting. The replacement shall be of equal size to the plant to be replaced at the time it has been determined that it must be replaced.
- However, if for some reason, the plant to be replaced is smaller than the size originally specifies, the replacement shall be at least equal to the originally specifies size.
- (2) Replacements shall be guaranteed for a period equal to the originally specifies guarantee. This guarantee period shall begin at time of acceptable replacement.
- (3) Final payment to the Contractor shall not relieve he or she of the guarantee obligations.

NOT FOR CONSTRUCTION

BY THE GOVERNING AGENCY

AND ARE SUBJECT TO CHANGE.

THESE PLANS HAVE NOT BEEN APPROVED

Plan and Specification Interpretation:

A. On the Plans, figured dimensions shall govern over scaled dimensions. If any error or discrepancy is found in the Plans and Specifications, the Contractor shall refer the same to the Landscape Architect for an interpretation and decision. In resolving conflicts between the Plans and Specifications, THE PLANS SHALL GOVERN over the Specifications. The Landscape Architect shall have the right to correct apparent errors or omissions in the Plans and Specifications and to make such interpretations as he or she may deem necessary for the proper fulfillment of the intent of the Plans and Specifications.

#### Permits and Codes:

- A. The Contractor shall procure all necessary permits to accomplish all of the work.
- B. The Contractor is responsible for performing all work in accordance with all applicable regulations, ordinances and code requirements from the appropriate city, county, state and/or Federal jurisdiction the project is located in.

#### Changes and Additional Work:

A. The Contractor shall not start on any changes or additional work in the project until a written agreement setting forth the adjusted contract amount has been executed by the Owner and the Contractor. Any work performed on any changes or additional work prior to the execution of a written agreement may or may not be compensated for.

#### "Job Site, 'Project Site Etc.':

A. The words "job site", "project site", "job", "project" and "site" shall be synonymous with one another when used in these documents.

#### Safety On and Off the Job Site:

- A. In performing the scope of work, all safety on of off the job site shall be the sole responsibility of the Contractor. The Landscape Architect shall not be responsible for safety on or off the job site.
- B. The Landscape Architect's on site observations or inspections shall be only for the purpose of verifying that the Plans and Specifications are being implemented properly. The Landscape Architect's on site observations or inspections are not for safety on or off the job site.

#### On Site Observations and Inspections:

- A. The Contractor shall make requests for on site observations or inspections 48 hours in advance and they shall be in writing, if directed by the Landscape Architect.
- B. If an inspection is related to completion and final acceptance, the request shall be made in writing 48 hours in advance.
- C. An inspections at the growing site does not preclude the right of rejection at the project site.
- D. The fact that the Landscape Architect has not made an early on site observation or inspections to discover faulty work or work omitted, or work performed which is not in accordance with the contract requirements, shall not bar the Landscape Architect from subsequently rejecting such work at a later
- E. The Landscape Architect's on site observations or inspections shall be only for the purpose of verifying that the Plans and Specifications are being implemented properly. The Landscape Architect's on site observations or inspections are nor intended to take charge, direct, run or manage the implementation of the Plans and Specifications or take charge, organize or manage the Contractor while performing the scope of work indicated in these Specifications.

#### <u>Plant Material</u>

- A. Plant material shall be nursery grown except:
- (1) Where specified as collected material
- (2) Where approved by the Landscape Architect for such plant material which is only available as a collected item from sources such as residences.
- B. Except where another grade is specifically called for in the Plans, all plant material, including collected material if specified, shall be no less than Florida \*1, or better, at the time of installation and final acceptance. Existing plant material to remain or to be relocated shall be excluded from this requirement.
- C. Habit of Growth: All plant material shall have a habit of growth that is normal for that species and shall be sound, healthy, vigorous and free from insects, plant diseases and
- D. Measurement of Trees, Palms, Shrubs, and Groundcover:

## (1) Trees, Shrubs, and Groundcover:

a. Rootball: Requirements for the measurement of minimum rootball diameter and depth shall comply with the Florida Department of Agriculture's 'Grades and Standards for Nursery Plants, Part 1 and Part 2" as follows:

CALIPER	MIN. BALL DIA.	MIN. BALL DEPTH
1 - 1.5"	16"	75% of dia.
2 - 2.5"	20'	65% of dia.
1.75 - 2"	22"	65% of dia.
1.5 - 1.75"	24"	65% of dia.
2.5 - 3.5"	26"	65% of dia.
3.5 - 4"	28"	65% of dia.
4 - 4.5"	3 <b>Ø</b> "	60% of dia.
4,5 - 5"	32'	60% of dia.
5 - 5.5'	34"	60% of dia.
5.5" or more	Increase in	60% of dia.
	proportion	up to 48",
		then decrease in
		proportion for larger
		size diameter.

b. Height: The height of plant material shall be measured from finish grade and continue up to where the main mass of the plant uniformly ends. The height shall not include any singular or isolated parts of the plant, such as leaves, shoots, branches, limbs or fronds, which extend out beyond the main mass of the plant.

## EXECUTION

#### Inspection:

E. Die-Back and Leaf Drop: plant material showing signs of die-

Architect. Therefore, any plant material with tendencies

back of leaf-drop will not be accepted and must be removed

from the project immediately if so directed by the Landscape

to provide a sound network of hair roots prior to relocation

F. Mechanical Destruction of Foliage: Mechanical destruction of

project. Loss of foliage caused by seasonal change will be

foliage resulting from root pruning shall not effect more

than 10% of the total foliage prior to planting on the

G. Spanish Moss: If Spanish Moss (Tillandsia usneoides) exists

planting on the project

H. Palms:

damaged.

Planting Soil:

friable condition.

A. Mulch shall be:

<u>Fertilizer:</u>

(1) "Floramulch"

fertilizer laws

Staking and Guying:

A. New and existing Trees and Palms:

per manufacturer's recommendations.

rate of 1/2 lb. per 1000 SF of area.

C. Annuals: Fertilize with Osmocote - Sierra

blend 14-14-14 or approved equal.

requirement of staking or guying.

jurisdiction the project is located in.

B. New and existing Shrubs, and Groundcover:

on plant material, it shall be completely removed prior to

(1) Remove a minimum of fronds from the crown of the palms

edition of the Florida Department of Agriculture's

"Grades and Standards for Nursery Plants". tying palms

shall be at the option of the Contractor. The Landscape

Architect may direct the Landscape Contractor to untie

Palm fronds to accommodate an owners "grand opening".

The Contractor may retie the palm after the event. This

(3) To reduce head volume, Palm fronds may be taper trimmed

(4) Palms with mechanical damage, such as from cables,

1. Chlorosis: The allowable level of Chlorosis in foliage shall

be set forth in the latest edition of the Florida Department

of Agriculture's 'Grades and Standards for Nursery Plants'.

J. Plant material shall not be accepted when the ball of earth

K. Root pruning of plant material, when necessary, shall be done

A. Sod shall be solid sod and shall be standard quality grade.

inc. The sod shall be well matted with roots and of firm

broad leaf weeds. Sod shall not accepted if it contains

quality grades (premium, standard or commercial) as

Note: Quality grade shall be based on the standards of sod

tough texture having a compact top growth and heavy root

development. Sod shall be free of objectionable grassy and

when suspended vertically from a firm grasp on the upper 10%

of the section. Sod shall not be harvested or transplanted

affect its survival. Sod shall be relatively free of thatch,

up to one half inch allowable (uncompressed).

moist from the time it is cut until it is planted.

A. All plant material, unless indicated otherwise, shall be

when moisture content (excessively dry or wet) may adversely

the soil embedded in the sod shall be a clean, earth, free of

stones and debris. The sod shall have been mowed at least

three times with a lawn mower with final mowing not more than

than 12 inches by 24 inches and shall be live, fresh and

uninjured at the time of placement. It shall be planted

seven days prior to the sod being cut for placement. The sod

shall be provided in commercial pad sizes measuring not less

within 48 hours after being cut and shall be shaded and kept

installed with a planting soil composed of sandy loam (50%

sand, and 50% muck) typical of the locality. The soil must

calcium or carbonate. Soil shall be delivered in a loose

A. Potable, from municipal water supplies or other sources which

are approved by a public health department.

Fertilize with 8-2-12 palm fertilizer with micronutrients

Fertilize with 8-2-12 palm fertilizer with micronutrients at a

D. Composition and Quality: All fertilizer shall be uniform in

composition and dry. Granular fertilizer shall be free

or boxes shall be fully labeled with the manufacturer's

E. All fertilizer shall comply with the State of Florida

A. Staking and guying shall be the responsibility of the

Landscape Contractors. Staking and guying shall not be

battens used in staking and guying shall not be attached to

receive approval from the Landscape Architect prior to their

to allow the plunging, burying, or planting of trees or palms so that the top of the grade, in order to eliminate the need or

ordinances and code requirements from the appropriate local

installation. Under no circumstances will approval be given

B. The Contractor is responsible for performing all staking and

guying in accordance with all applicable regulations.

attached directly to the plant material with nails. Also,

the plant material with nails. Any method of staking and

guying other than those indicated in the details, shall

flowing and delivered in unopened bags. All bags containers

be taken from ground that has never been stripped, with a

slight acid reaction (5.5 to 6.5 ph) and without an excess of

Bermuda Grass. Sod sections shall be strong enough to support

established by the Turf grass Producers Association of Florida

Landscape Architect, prior to planting at the project.

a minimum of 4 weeks, or for a period as determined by the

surrounding its roots has been cracked, broken or otherwise

chains, equipment and nails, shall be rejected.

untying will not affect the guarantee or represent an

(2) Palm frond tying shall be as set forth in the latest

to facilitate transporting and handling

additional cost to the owner.

by not more than one-third.

toward leaf-drop or die-back must be root pruned early enough

#### A. Utilities (Above Ground and Underground):

- (1) The work area may have existing utilities, such as, but not limited to, irrigation, phone, electrical and storm sewer. The location of some of these existing utilities have been indicated on the Plans.
- However, no guarantee is implied that the Plans are accurate or complete. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc., by hand excavation or other appropriate measures before performing any work that could result in damage or injury to persons, utilities, structures or property. The Contractor shall make a thorough search of the site for utilities, structures, etc., before work is commenced in any particular location.
- (2) The Contractor shall take immediate steps to repair, replace, or restore all services to any utilities or other facilities which are disrupted due to his or her additional outside services which may be necessary to prosecute repairs on a continuous "around the clock" basis until services are restored. He or she shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in the repairs and restoring disrupted service resulting from negligence on the part of the Contractor shall be borne by the Contractor and he or she shall be fully responsible for any and all claims resulting from the damage.
- (3) Should utilities, structures, etc., be encountered which interfere with the work, the Landscape Architect shall be consulted immediately in order for a decision to be made on the relocation of the work so it will clear the obstruction, if the obstruction cannot be relocated.
- (4) The Contractor shall not purposefully disrupt or disconnect any type of utility whatsoever without first obtaining the written permission of the Landscape Architect. Requests for disconnection must be in writing and received by the Landscape Architect at least 12 hours prior to the time of the requested interruption.

#### <u>Grades:</u>

- A. Its shall be the responsibility of the Contractor to provide the final grading so the final level for planting areas conforms to surrounding grades and is at the proper elevation with relation to walks, paving, drain structures and other site conditions, unless indicated otherwise on the plans.
- B. Plant Area Next to Pavement: All planting areas next to pavement areas, such as, but not limited to, curbs, roads, drives, walks, terraces, decks and slabs shall be set so that the TOP OF THE MULCH IS I INCH BELOW THE TOP OF THE PAVEMENT AREA or as indicated otherwise on the plans.

#### Preparation:

- A. Staking Plant Locations: Stake or mark plant material locations prior to plant hole excavation, based on information from the plans.
- B. Spacing of Groundcover & Shrubs: The location of a planting bed (shrub or groundcover) next to another bed, walkway, structure, etc., shall have the plants along the perimeter spaced so that the plants can mature properly without growing into the other bed, walkway, structure, etc.
- C. The rootballs of B&B plants which cannot be planted immediately shall be covered with moist soil or mulch to insure protection from drying winds and sun. All plants shall be maintained as necessary until planting.
- D. Subsurface Conditions: Some or all work areas may be compacted and/or contain existing material such as limerock which may interfere with adequate vertical drainage and/or proper plant survival and growth and therefore removal of this material is part of the scope of work for the project. The Contractor shall be responsible for insuring adequate drainage in these areas and shall remove this existing material, as required, by such means as auguring, drilling or rototilling. If necessary, excavate to a depth beyond the required excavation depth for the plant hole, in order to insure proper vertical drainage necessary for plant survival and growth.
- E. Remove undesirable existing vegetation present on the project by use of chemicals and/or mechanical means which are acceptable to the Landscape Architect. Apply chemicals as recommended by the manufacturer. Exercise care to avoid any misuse of the chemicals which will cause detrimental residual conditions. Care shall also be used so that any final grades which have been established are not altered.

#### F. Excavation of Plant Holes:

# (1) General:

- a. Excavation of plant holes shall be roughly cylindrical in shape with the sides approximately vertical. The Landscape Architect reserves the right to adjust the size and shape of the plant hole and the location of the plant in the hole to compensate for unanticipated structures or unanticipated factors which are a conflict.
- b. The excavated material from the plant holes shall not be used to backfill around the plant material. Such material shall be disposed of either on the project site or off the site, as directed by the Landscape Architect.

#### <u>installation:</u>

- A. General: The Contractor shall lay out on the ground the locations for the plants and outlines of areas to be planted and obtain approval of the Landscape Architect before excavation is begun. The Landscape Architect may adjust the location of specifies plant materials prior to planting.
- B. Setting of Plants:
- (1) All plants shall be set at the proper level so that after settlement, a normal or natural relationship between the crown of the plant and the surrounding ground surface exists. The plants shall be set vertically. After excavation of planting pits and prior to placement of the plant material, fill the planting pits with water. The plant hole shall be backfilled with topsoil mixture placed in layers around the roots or ball. Each layer shall be carefully tapped in place. When partially backfilled and compacted, the hole shall be filled with water and the soil allowed to settle around the roots the ball ties shall be cut and at the burlap peel down 1/3 from the top of the rootball and cut or adjusted to prevent the formation of air pockets before applying the water. After the water has been absorbed the plant hole shall be filled with topsoil mixture and tapped to grade. Subsoil removed from tree pit shall not be mixed or used in any way with the topsoil mixture.

# (2) All sabal and queen palms shall be backfilled with clean thoroughly washed in during the planting operation.

- (3) Water Saucer: A 4-inch high water saucer shall be formed around the rim of each individual tree or palm pit and maintained in place.
- (4) Plant material of the shrub category and smaller must be handled by the ball only. Plant material too large for hand handling, if moved by winch or crane, must be thoroughly protected from chain, rope, or cable marks. Girdling, bark slippage, limb breakage and any other damage that might occur by improper handling or negligence.
- (5) All trees and palms shall be handled by both the trunk and rootball at the same time and not by the trunk only. Trunks shall be thoroughly protected.
- (6) Container grown plant material shall be carefully removed from the container so as not to disturb the root system.

#### C. 50d:

- (1) Soil Preparation: Within 24 hours prior to placing sod, prepare the soil in the following manner:
- a. Uniformly apply formula 8-8-8 fertilizer over the area at a rate of 25 pounds per 1,000 square feet.
- b. Remove stones and foreign matter over two inches in diameter from the top two inches of soil.

# c. Grade the sod areas so that the top of the sod will be at finished grade after rolling and tamping.

#### (2) Placing Sod:

- a. Place sod with staggered joints closely butted, tamped or rolled to an even surface to the required finished grade. Avoid continuous seams along lines of water flow in swales. Place sod in rows at right angles to slope.
- b. Water sod every day for a period of three weeks.
- c. Fertilize sod three weeks after planting with 12 pounds of 8-8-8 formula fertilizer per 1,000 square feet of lawn.
- d. No sod shall be used which is not certified as being free of the imported fire ant. Before any sod is brought to the site, furnish a written certification of clearance from pest control officials of either State or Federal Department of Agriculture.

#### (3) Maintenance of Sod:

- a. It shall be the responsibility of the Contractor to replace any areas of sod that are not in healthy growing condition.
- b. The Contractor shall completely maintain the sod until final acceptance by mowing or spraying as necessary.

#### D. Blanking Bods

- D. Planting Beds:

  (1) Spread six inches of topsoil mixture uniformly over the
- entire planting area.

  (2) Spread 50% organic fertilizer at a rate of 4 pounds per
- 1,000 square feet uniformly over the groundcover area.(3) Rotor mix, or by other approved method, to a depth of twelve inches.
- (4) Fine grade to remove all trash, rocks, and debris to depth indicated.
- (5) Regrade to finish grade before adding two inches mulch.

# (6) Thoroughly water and firm the plants into the soil mixture.

- (1) Areas to be mulched shall have existing weeds and vegetation removed, including root systems, before
- (2) Grades are to be uniform. Grade areas which are rough and uneven. Fill in voids and holes with planting soil or other approved fill material.
- (3) The mulch shall be uniformly applied to a depth of approximately 3 inches, or other depth as indicated otherwise, over all shrub and groundcover areas, around trees and palms in sod areas and any other areas as indicated on the plans.

#### F. Watering:

- (1) Initially, water the plant material to develop uniform coverage and deep water penetration to the full depth of the root zone. Avoid erosion, puddling, and washing soil away from the roots.
- (2) Provide continuous watering of plant material after planting in order to achieve optimum growth conditions to establish plants. Water shall be applied as necessary and the amount of water and frequency of watering shall be based on the specific needs of each plant type, the time of year, amount of rainfall and other environmental conditions it is exposed to. This watering shall begin after the plant is planted and continue until final acceptance. All trees and palms shall be watered, only during this period. Do not rely on the irrigation system, if there is one, to achieve this task it cannot deliver the volume of water required, without flooding areas beyond where water is needed and/or over watering other landscape material. shrubs, groundcover and sod may be watered by using the irrigation system, if there is one hand water during this period.
- (3) If there is no source for water available at the project, such as a hose bib (s) or fire hydrant (s) if approved for use, then the Contractor shall be responsible for supplying water for watering, by such

#### G. Pruning and Thinning:

means as a water truck or tank

- (1) The amount of general pruning and thinning shall be limited to the minimum necessary to remove dead or injured twigs and branches and to compensate for the loss of roots as a result of transplanting operations. Pruning and thinning shall be done in such a manner as not to change the natural habit or shape of a plant.
- (2) The Landscape Architect shall be contacted prior to performing any major pruning and thinning. The Landscape Architect may elect to be present during any pruning and thinning.

## H. Weeding:

becomes prevalent to such an extent that they threaten plant material, they shall be removed as directed by the Landscape Architect. This condition shall apply until final acceptance.

(1) In the event that weeds or other undesirable vegetation

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PEACEFIELD

DAVID FONT, ASLA, RLA

LA 6666822

REVISIONS:

COMMENT RESPONSES 2.20.2018

COMMENT RESPONSES 4.2.2018

SUBMITTAL

4/2/2018

LA-4A

LANDSCAPE NOTES