

May 11, 2018

BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA

ADDENDUM NO. 4 / IFB NO. Y18-758-TA

SOUTH SERVICE AREA/EAST SERVICE AREA (SSA/ESA) 36-INCH POTABLE
WATER MAIN, 24-INCH RECLAIMED WATER MAIN AND J. LAWSON BLVD
POTABLE WATER RE-PUMP FACILITY

BID OPENING DATE: ~~MAY 15, 2018~~ May 22, 2018

This addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining, deletions are indicated by ~~strikethrough~~.

A. Bid Opening Date is changed from ~~May 15, 2018~~ to May 22, 2018.

B. CLARIFICATIONS

1. Q: Section 16725 has this being furnished by the I&C subcontractor. The last time we pursued a project with this equipment included in the bid, I was unsuccessful in reaching a local supplier even after having reached out to the manufacturer who then provided me with a list of local distributors. None of the local distributors were able to provide a proposal for inclusion with the I&C scope.

Please provide a fixed cost for section 16725 that both system suppliers (in division 13) would need to carry or have it provided by others.

A: Bidders shall bid in accordance with the plans and specifications.

2. Q: Does the reciprocal local preference outlined on page C-13 of the bid documents apply to this project?

A: Yes, the Reciprocal Local Preference Provision, outlined on page C-13, applies to this project.

3. Q: Referencing Bid Item 10 – Roadway Base, is 8” of high early strength concrete to be furnished and paid for under this bid item? Details of asphalt trench restoration shown on D-100 and D-104 indicate concrete is to be used in lieu of limerock road base.

A: Contractor to bid the 8” high early concrete roadway base in Bid Item #10.

4. **Q:** The measurement and payment description of asphalt roadway replacement does not specify a thickness to base pricing on, nor do the asphalt restoration details provide this information. Please clarify the thickness of asphalt to base pricing on.
- A: The Contractor is to install the same thickness of asphalt as the existing roadway. The Geotechnical Report in the Technical Specifications Appendix A displays the associated asphalt cores.
5. **Q:** Please confirm the Builders Risk insurance requirements apply to the entire project, or is this for the re-pump facility only?
- A: Builders Risk Insurance is to cover any above ground work specified in the contract.
6. **Q:** Please confirm if the County will be providing and paying for construction water?
- A: The Contractor will be responsible for providing all water necessary for project construction.
7. **Q:** Specification Section 02660 and 02662 indicate 2" tape is to be provided for identification of the pipe service. Specification Section 15062 indicates a 3" wide paint stripe is required for identification. Please clarify is 2" adhesive tape or paint stripes to be used for properly identifying pipe service.
- A: The Contractor is to provide the 2-inch identification tape per Technical Specification Sections 02660 and 02662 3.02 A-2.
8. **Q:** The preliminary ecological assessment indicates the presence of gopher tortoise burrows within or adjacent to the project site. The specifications also indicate the County will apply and pay for the FFWCC Conservation permit for relocation of gopher tortoises. Who will be responsible for compliance with this permit, such as a tortoise survey and actual relocation and/or removal of tortoises during construction of the project?
- A: The tortoise survey and relocation will be conducted by Engineer's Environmental Services Team contracted by the County prior to on-site construction activities.
9. **Q:** The specifications call for a 600 KW Generator and the Drawings have callouts for both a 600KW on the single lines and a 500 KW on mechanical. Should a 600 KW or 500 KW generator be included in the bid?
- A: Generator sizing shall be as per the electrical drawings and as per specification 16216; 600 kW.

10. Q: The construction drawings depict a significant amount of fittings for minor deflections of the pipe alignment. A number of these deflections can be achieved by using no more than 75% of the maximum joint deflection of the pipe in lieu of using fittings. Is it acceptable to utilize joint deflection to eliminate these fittings?

A: It is acceptable to utilize joint deflection as long as the Contractor installs the transmission mains per Technical Specification Section 02660 3.02 B-2a.

11. Q: We respectfully request a minimum of 2 weeks of the bid date.

A: The scheduled bid date has changed from ~~May 15~~ to May 22, 2018.

12. Q: There are several areas in which the pipe line dives down for period of time for no apparent reason, is this for future growth?

A: As discussed at the pre-bid meeting, the identified areas where the pipe maintains a depth of approximately 10 LF is located within the easements obtained from the Lake Nona Land Company. In order to obtain the easements, the County agreed to install the transmission mains at the depth shown on the plan pages in three designated areas to accommodate future development and roadways.

13. Q: Please clarify the min cover requirement for the 24" RWM and 36" WM? Specification Section 02660 and 02662 call for 48" min cover for pipe greater than 16" diameter and for 30" min cover within local roadways. The profile of the WM and RWM appear to vary throughout the project without any notations as the min cover requirement and appears to vary from approx. 48" to as much as 78".

A: Specification Sections 02660 and 02662 reference the minimum cover for each type of pipe. The plans were designed based upon working around known obstructions and complying with OCU design standards.

14. Q: Between STA 918 and STA 928 there are notes to indicate a berm which is not reflected on the plan or profile as to the elevations of the berm and soils of the berm. Upon visiting the site this berm appears to be 12'-15' tall and built of cleared debris and unsuitable soils/materials from previous development activities. How are the bidding contractors to account for the removal of this berm prior to installation of two pressure pipes? Is the berm to be rebuilt when complete? Will the existing materials inside the berm be reused to put the berm back in place or will import till be required?

A: The berm is to be removed/reset. The berm materials should be set aside, away from the wetlands, and reset following the pipeline being pressure tested.

15. Q: Will the Contractor be able to start work on the RWM and WM along Moss Park Road independent of the Narcoossee Rd Central project schedule?

A: This project is independent of the Narcoossee Road Central project and needs to be completed according to the timeframe and schedule as listed in the Specifications.

16. Q: Please confirm that Specification 07540 is to be used in lieu of 07220 and 07500 for the roofing on the re-pump station.

A: The project shall be bid as a built-up roof system as shown on the plans utilizing the appropriate Specification Sections.

17. Q: Subgrade of Re-Pump Station is not addressed in the Geotech Report. Please confirm if 95% of Standard Proctor per Utility Trench recommendation is sufficient for footings and slabs on grade.

A: See the attached Report of Subsurface Exploration and Geotechnical Engineering Evaluation, dated August 4, 2011, as prepared by Nodarse & Associates. The report lists the required minimum compaction for the site.

18. Q: On P-101 the AC pad detail is called out to reference detail on sheet 183. There is no detail but the pad shown on H-04 shows 4" fiber mesh thick pad. Please confirm 4" fiber mesh pad is correct.

A: The reference on sheet P-101 should be referencing plan sheet H-04 and the "Typical Conc Pad Mounted CU Detail" on sheet H-04.

19. Q: Pay items 16-18 Storm Pipe Removal & Replacement indicate in the measure and payment Section 01025 page #10 that payment will be made for actual number of locations the storm pipe is satisfactorily removed and replaced regardless of size. Two questions, is this pay item applied to each size DIP pipe that is installed under a storm pipe crossing or is the quantities to reflect the successful crossing of both (24" and 36") pipe crossings? And section, will the county pay this bid item for the "satisfactory crossing of the new pipe with the existing pipe" so that the contractor, with the inspector's approval, has the option to determine the appropriate means and method (i.e. tunnel under the existing pipe) or must the existing pipe be removed and replace before payment will be made?

A: The referenced Pay Items 16 – 18 are for varying sizes of RCP storm pipe. If the two mains are adjacent to each other, such as along Lake Nona Boulevard and J Lawson Boulevard, the removal and replacement of the storm is referencing a quantity of one location. For locations where the water main and reclaimed water main are not adjacent to each other, such as Moss Park Road, the removal and replacement of the storm is referencing a quantity of one for the water main and a separate quantity of one for the reclaimed water main.

20. Q: At STA 1083 the RWM fittings for the crossing are called out at 36", please confirm these fittings are to be 24".

A: On plan sheet C-153, the reclaimed fittings at approximate Station 1083+00 are to be 24-inch as correctly referenced in the profile view, not as referenced in the plan view.

21. Q: There appear to be notes provided in the MOT plan sheets which are contradicting. For Example MOT-104 requires the installation of temporary concrete barrier wall.

a. **Note 2 States: "This MOT phase calls for the use of low profile barrier. If low profile barriers are not used, the contractor shall restore any and all drop off conditions which are caused by work activity during the same work period in which those drop off conditions were created, pursuant to drop off condition note 8 of FDOT Standard Index No. 600". This note implies that if low profile barriers are used, then the Contractor can leave the drop off condition and not open the road to traffic.**

A: The MOT plans included in the bid set are only one example of how the work could be accomplished. All bidders will need to review and develop an MOT plan that corresponds to the actual work schedule and activities that will be implemented by that bidder.

If a permanent lane closure is allowed by the appropriate jurisdictional authority, the contractor may leave the drop off condition and not restore it on a daily basis if the low profile barriers are used.

b. **Note 4 provides hours in which the lanes must be opened to traffic. A MOT of this type cannot be setup and removed daily, this needs to be left in place until work within the MOT is complete.**

A: The MOT shown is only one way to accomplish the work. It implies a permanent lane closure; however, if a temporary lane closure is used instead, these would be the acceptable hours of operation.

c. **Note 5 states that all work within this section shall be conducted at night, but if the road is to remain closed, can the contractor work within the barrier wall at any time, day or night?**

A: If the jurisdiction requires a certain portion of the work be conducted as night work, that work shall be conducted at night regardless of the use of barriers.

22. Q: MOT-134 states #13 "Contractor shall be responsible for the immediate removal of storm water from roadways utilized for maintaining traffic in a manner approved by the engineer"

a. **What does that mean?**

A: This means that the Contractor is responsible for ensuring that their MOT devices do not impede the flow of stormwater into the flow of existing stormwater system, or, if the MOT plan should impact the road in such a way as to render the existing stormwater system ineffective, the contractor must provide an approved alternate means of removing the water from the road.

23. Q: MOT-134 states #14 states “plan as shown must be divided into phases” what is the limitation to the length of the phases?

A: The only restrictions to the lengths of the phases are that no more than one entrance to the Lake Nona private development may be closed at any one time (i.e., if the work is occurring at the James Bay Drive entrance, then both the Nautica Drive and the Inagua Drive entrances should remain fully open to traffic).

24. Q: MOT-134 #17 What are considered acceptable temporary separators? Cones, barrels, barrier walls?

A: For temporary separators, make use of any FDOT approved asphalt or portable temporary lane separators, as described in Index 600, Sheet 10 of 12.

25. Q: MOT-134 #18 Letters of concurrence from each private development to be provided prior to MOT plan approval.

a. I’m assuming this is if you plan on using their roads for a detour or are closing their roads?

A: These letters are only needed for the portions of the MOT plan on the roadways within the private development. Currently all detours within the private development at Lake Nona Blvd. are purely for the re-routing of internal traffic flow away from each entrance while work is going on those entrances. NO traffic is being detoured from the public streets onto private property at ANY time.

b. This is not for actual approval on the MOT?

A: The letters of concurrence would only be needed for the portions of the MOT on private property. The remainder of the MOT, which is within public right-of-way, should be approved by the appropriate jurisdictional authority.

26. Q: MOT-137 #15. Please clarify/further elaborate on this note. It does not make sense.

a. Is the Contractor restricted from working on Lake Nona Blvd and Moss Park Rd at the same time?

A: The Contractor may work on Moss Park Road and on Lake Nona Boulevard if separate crews are on each roadway. Also, the contractor will be limited to having a maximum of 1000 lineal feet of disturbed work area for each

roadway segment. Also, it should be noted that Lake Nona Boulevard has a specific date of completion that will be required to be met as defined in the bid documents.

27. Q: MOT-138 The restoration detail shown here contradicts the detail shown on D-104. Please clarify which detail will be used to reconstruct the roadway. Also, please clarify where the contractor is to use Detail A702 and A703 on sheet D-100.

A: For Lake Nona Blvd. only, make use of the roadway restoration detail shown on sheet MOT-138. This is per the request of the City of Orlando, who is the owner of Lake Nona Blvd.

28. Q: Confirm Bid Item #11 Milling and Resurfacing is intended to pay for the area to be milled outside the limits of Bid Item #12 and for the areas to be paved with SP 9.5 above Bid Item #12 as well as the areas milled.

A: Yes, Pay Item #11 is to include milling outside of the limits of Pay Item #12 to the limits shown on the plans. Resurfacing includes both the milled area as well as the area of Pay Item #12.

29. Q: Is the curb labeled “remove and replace existing curb” required to be replaced, or is it intended to be replaced if damaged?

A: The amount of curb that is labeled as “Remove and Replace Existing Curb: is included in the quantities in the Bid Schedule and the Contractor should bid accordingly. If the Contractor is able to protect and save some curb this would be determined in the field and agreed to be the appropriate inspector. If the curb is not removed it would not need to be replaced and thus the pay item quantity would be reduced accordingly.

30. Q: Sheet C157 shows removal of existing 16” RWM under a large box culvert which is being jack and bored.

A: Approximately +45 LF of 16-inch pipe under the box culvert will be grouted with flowable fill and abandoned in place. Pay Item #67 has been added for flowable fill grout.

31. Q: Is the Carrier pipe footage included in the Jack & Bore Pay Item?

A: Yes. The text for the pay item descriptions for the Jack & Bores have been modified below.

32. Q: STA 1086+17 shows a “call out” for a 36” gate valve shown 86 LF towards the East on the same line. Does the County want a valve at each one of these STA’s or just one valve? Please specify which STA will require a valve.

A: Only one gate valve is required and it should be located at Station 107+06.

33. Q: Will the County have the existing RWM on Moss Park Road shut down during the installation of the new main? If so, will the existing customers being fed from this line be left without service?

A: It is intended that the County will shut down the existing RWM in segments between existing valves to minimize the number of customers affected at any given time.

34. Q: Please designate which areas will be restored with Seed and Mulch and which will take Sod per bid items #20 and #21.

A: The areas requiring seed and mulch and those requiring sod are delineated on the Summary of Pay Items plan sheets. From sheet C-101 through C-127, inclusive, is where seed and mulch is required. All other areas require sod.

35. Q: If the Contractor does not intend to make changes to the Traffic Control Plan as designed, please confirm that it can be used by the contractor and submitted to Orange County Traffic for approval without being signed and sealed by the contractor.

A: If the Contractor does not intend to make ANY changes, then that statement is true.

36. Q: For recent Orange County projects it has been specified that the pumps are to be NSF 61 certified as required by FDEP for potable water. Please verify if NSF 61 certification is required for the pumps being supplied for this project.

A: Appendix B contains the FDEP permits issued for this project. Under the Specific Conditions in each permit are Construction Standards. Paragraph 1 under those Construction Standards is shown below:

“All products, including paints, which shall come in contact with potable water, either directly or indirectly, shall conform with National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.”

37. Q: For Specification 11210, Paragraph 1.02.C.1 – NPSH testing is not typically included as part of a standard factory performance test. Is historical NPSH data acceptable in lieu of an actual NPSH test? Please note that paragraph 1.03.B, “factory performance test data”, does not require NPSH testing.

A: The factory historical NPSH test results will be acceptable.

38. Q: For Specification 11210, Paragraph 1.03.A.1.i – Please confirm if hydrostatic testing of the pump casing is required.

A: Section 1.03.A.1. can be deleted in its entirety. Hydrostatic testing of the pump casing is not required.

39. Q: For Specification 11210, Paragraph 2.02.C.1 – The Peerless pump we are proposing can provide an efficiency at the design point of approx. 81-82%. We respectfully ask for your consideration in approving this deviation.

A: The stated requirement for “Efficiency at Design Point %” as listed in 2.02.C.1 is 85.5%. The minimum allowable efficiency should read a minimum of 85%

40. Q: Paragraph 2.02 G
○ **Are shaft grounding rings or insulated bearing required?**

A: We do not have a requirement for shaft grounding rings or insulated bearings in paragraph 2.02 G.

41. Q: As there are restoration details for Lake Nona Rd on MOT-138 regarding the entire NB(EB) lanes, do the requirements of the Permanent Asphalt Pavement Restoration per D-100 apply? For example the requirement for 8” High Early concrete base over the pipe excavation.

A: Lake Nona Boulevard is owned and maintained by the City of Orlando and has separate construction requirements. The details on D-100 apply to “County” roadways and not “City of Orlando” roadways.

42. Q: MOT-137 shows temporary Barrier Wall per index # 415 during and after the transition. However, MOT-139 shows a traffic separator for the transition and double yellow lines after it per index # 620. Please clarify what is required.

A: The contractor can use either the asphalt or portable FDOT approved temporary lane separators as described in Index 600, Sheet 10 of 12 and to place them in accordance with the Temporary Diversion Connection, Scheme 2, as shown on Sheet 2 of 2 of Index 620. At the contractor’s option, they may use the temporary concrete barrier wall per Index 415; however, the barriers shall be placed in accordance with Scheme 1 of the same index.

43. Q MOT-137 refers to the works lanes as EB (east bound), however on MT-138 the work lanes are referenced as NB (north bound). Please clarify if these are the same.

A: Both pages are intended to be for Lake Nona Boulevard and are intended to reference the same road/travel lanes.

44. Q Sheet C-100 indicates grouting and abandoning a section of 24" WM in place, but the footage is not indicated. Please advise on the footage to be grouted and abandoned in place.

A: Contractor is to grout and abandon approximately ± 20 LF of 24-inch WM.

45 Q We are unable to find any buried 12" gate valves at the pump station to align with Bid Item 35, however the plans do show twelve 12" flanged gate valves, all above grade. We suggest removing Bid Item 35 and including those valves with Bid Item 66 similar to how the remainder of the above grade piping is being handled.

A We are in agreement with this suggestion. Bid item 35 will be deleted. We will reissue sheet P-102 to clarify the limits of work included with lump sum pay item 66.

46 Q Bid Item 41 is for 12" check valves. Similar to the previous question, since all check valves are above grade, please consider removing this bid item and allowing these to be incorporated with all other above grade piping into Bid Item 66.

A We are in agreement with this suggestion. Bid item 41 will be deleted. We will reissue sheet P-102 to clarify the limits of work included with lump sum pay item 66.

47. Q Regarding the Concrete Drive Detail on Sheet D-100, the 4th note mentions using tie bars to hold adjacent slabs in vertical alignment. Please clarify the tie bar spacing required.

A: The Tie Bars or the keyed joints will not be required for this project.

B. PROJECT SPECIFICATIONS

1. In Technical Specification Section 01025, 1.05, add the words "carrier pipe," following the words "casing Pipe" for pay items 51 and 52 paragraph B.
2. In Technical Specification Section 01025, 1.05, delete pay item descriptions for Pay Items 28, 35 and 41.
3. In Technical Specification Section 01025, 1.05, insert the following description and pay item number for Grout & Abandon-in-Place Pipe:

	<u>11.5 - Abandon or Remove Pipe/Structure</u>
<u>67</u>	<u>Reference ID 11.510.110 Grout and Abandon-in-Place Pipe</u>
	<p><u>a. Measurement: Grout and Abandon-in-Place Pipe, regardless of size and material, shall be measured in actual linear feet satisfactorily grout and abandoned-in-place in accordance with the County requirements and specifications (Section 02080). Pipe abandonment shall be measured along the centerline without deduction for valves and fittings.</u></p> <p><u>b. Payment: Payment will be made at the contract unit price bid per linear feet as stated in the proposal for Abandon-in-Place Pipe and shall include all labor, materials, and equipment to excavate, backfill and compact; sheet, shore, and brace; dewater; completely drain and properly dispose of pipe contents; grout fill, and plug or cap existing pipes of all services and sizes designated "to be abandoned" on the Drawings. Also included in this item is the removal of existing valve boxes located on valves connected to piping designated to be retired. Valve boxes shall be removed, backfilled and compacted with suitable material. This item also includes grout and abandon of service laterals.</u></p>

4. In Technical Specification Section 11210 2.02.C.1, delete 85.5% and replace with 85% in the efficiency at design point table.
5. In Technical Specification Section 11210, delete paragraph 1.03 A.1.
6. In Technical Specification Section 16370 Delete paragraph 3.02 and replace it with the following:

Contractor to include:

 1. One (1) spare VFD – Complete
 2. Two (2) Spare Key Pads
7. In Technical Specification Section 16725 revise Section 2.01 to read:

2.01 CARD ACCESS SYSTEM

 - A. Gate Card Access System:
 1. The system shall be furnished as a complete package consisting of a dual card key pad/proximity readers, card access controller, system controller, control panel, and all wiring, configuration, and unspecified components necessary

for a complete and functional system as described in the specifications and drawings.

B. Gate Card Access System Components:

1. Required components are listed below:

- a. Security Panel. Lenel 2220 security control panel and controller. The controller shall have Ethernet capability. The enclosure shall be a Lenel LNL CTX or approved equal. The security control panel shall include power supplies, fiber optic transceivers, and fiber optic patch panels as required. Fiber optic transceivers shall be model IFS D1300. Power supplies shall be model AL300ULX. The controller shall be battery backed-up and shall be no less than 10 minutes. Panel shall be capable of supporting the number of inputs and outputs required for the card readers indicated on the drawings. The panel shall have ample room for wiring and circuit boards, be capable of storing up to 32,000 cards per site, retain last 6000 transactions, monitor forced entry and held open conditions, heavy duty 10 amp relays monitored by the plant control system, fiber optic patch panel, fiber optic transceiver, Lenel card reader(s) and Lenel Intelligent System Controller. The control panel shall operate from a 120 volt AC, 60 Hz power supply. Control panel shall be manufactured by Lenel, Inc. and no other. The System Supplier shall be responsible to connect and fully integrate the System Controller Panel to COUNTY existing card access system used at other COUNTY facilities.
- b. Remote Card Reader Control Panel. Lenel 1320 card reader interface and control panel located at gate. Enclosure shall be NEMA TYPE 4X aluminum or 316 stainless steel, painted white. Panel shall provide interface for the gate proximity card reader. The panel shall have ample room for wiring and circuit boards, monitor forced entry and held open conditions, contain fiber optic patch panel, fiber optic transceiver and Lenel card reader.
- c. Proximity Card Reader. Microprocessor based magnetic type card reader terminals shall be located as shown on the drawings, one mounted at automobile height shall be located at the entrance gate. Card Readers shall have an operating temperature of -22 to 150 degrees Fahrenheit, and shall have an operating

humidity of 0-95% non-condensing. Card Readers shall have a typical read range of up to 9 inches. Card Readers shall read encoded data from access card and transmit the data back to the Card Reader Control Panel. Card Reader shall give an audible and visual indication of a properly read card. Card Readers shall be operated from a 10-28 volt DC power supply. Card Readers shall be furnished with transient voltage surge suppression devices. Card Readers for the operations building shall be the HID RPK40.

- d. Gate Operator Pedestal. Double goose necked aluminum pedestal mount for high (truck) and low (automobile) mounted card readers.
- e. HID RPK40, 125 kHz, Wiegand protocol, proximity card readers with keypad option. The reader shall be sealed in an indoor/outdoor, polycarbonate enclosure suitable for harsh environments. Readers shall be vandal resistant, an operating temperature of -22 to 150 degrees Fahrenheit, and a read range of up to seven (7) inches. Card readers shall read encoded data from access card and transmit the date back to the card reader interface panel. The card readers shall give an audible and visual indication of a properly read card. The readers shall be furnished with transient voltage surge suppression devices.

2. Component Certifications:

- a. Where required by NEC or local codes, all security equipment and materials, devices, and assemblies shall be listed and/or labeled by UL or another accepted testing laboratory for the intended purpose. The equipment shall not be installed, altered, or modified in any way that would void the label or listing.
- b. All control equipment shall have transient voltage protection devices in compliance with UL 864.

3. Spare Parts and Special Tools:

- a. Spare parts and special tools as recommended by the equipment supplier and as may be listed below shall be furnished. These will include three sets of any disposable parts which would normally be changed during routine equipment maintenance and any special tools required for disassembly of the equipment.

- b. The following minimum spare parts shall be supplied with the security equipment;
 - 1) one (1) each of each type of power supply and fiber optic transceiver,
 - 2) Spare batteries as recommended by the manufacturer.
 - 3) Lenel LNL-1320 Dual Reader Interface Module (Series 2 Supports OSDP Readers) 12/24 VDC, 2 Reader interface, W/M, 8 inputs, 6 (5A) form C relays, RoHS, CE, C-Tick and UL294 .
 - c. Spare parts shall be suitably packaged for shipment.
4. Warranty:
- a. The System Suppliers warranty shall be one (1) year on all parts and labor.

C. PROJECT DRAWINGS

DRAWING G-500-G-502

Amend: Delete drawing G-500-G502 and replace with the revised drawings G-500-G-502. The revised sheets have added and removed pay items.

DRAWING D-100 – CONCRET DRIVEWAY DETAIL

Amend: Delete the fourth note regarding longitudinal construction joints

DRAWING P-102

Amend: Delete drawing P-102 and replace with the revised drawing P-102. The revised drawing displays the separation of the lump sum and unit price items for the Re-Pump Station.

FOR INFORMATIONAL PURPOSES ONLY

NOTE: The EOR for Sheets H-01 through H-06 has moved from Milan Engineering to RTM Engineering Consultants.

D. REVISED BID SCHEDULE:

Delete: Delete the ~~IFB-Y18-758-TA Revised Bid Schedule~~ in its entirety.

Add: Add in its place IFB-Y18-758-TA Revised Bid Schedule, attached and labelled this Addendum No. 4.

IMPORTANT: Failure to submit your bid with the “Revised Bid Schedule” per this Addendum No. 4 shall be cause for your bid to be rejected as non-responsive.

E ACKNOWLEDGEMENT OF ADDENDA

The Bidder shall acknowledge receipt of this addendum by completing the applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned not later than the date and time for receipt of proposal.

All other terms, conditions and specifications remain the same.

Receipt acknowledged by:

Authorized Signature

Date Signed

Title

Name of Firm

**IFB Y18-758-TA REVISED BID SCHEDULE
Addendum 4**

BID ITEM	REFERENCE ID	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	UNIT PRICE	EXTENDED PRICE
1	10.110.110	Mobilization, Demobilization, Bonds, and Permits (not to exceed 5% of the total of all bid items 6-67)	1	LS		
2	10.130.110	Indemnification	1	LS	\$100.00	\$100.00
3	10.120.110	Preconstruction Audio-Video Documentation	1	LS		
4	10.140.110	Project Record Documents	1	LS		
5	10.150.110	Maintenance of Traffic	1	LS		
Site Work						
6	11.110.110	Erosion and Sediment Control	1	LS		
7	11.120.110	Unsuitable Materials	100	CY		
8	11.130.110	Fill Dirt	100	CY		
9	11.140.111	Clearing & Grubbing	1	AC		
Roadway						
10	11.213.110	Roadway Base	51,315	SY		
11	11.230.110	Milling and Resurfacing	56,355	SY		
12	11.241.110	Open Cut and Restore Asphalt Roadway	51,288	SY		
13	11.250.110	Concrete Driveways and Sidewalk Removal and Replacement - 4" Thick Sidewalk	47	SY		
14	11.250.110	Concrete Driveways and Sidewalk Removal and Replacement - 6" Thick Sidewalk	6,740	SY		
15	11.251.112	Construct Public Sidewalk ADA Ramp	7	EA		
16	11.260.110	Storm Pipe Removal and Replacement (15" and 18" diameter)	53	EA		
17	11.260.110	Storm Pipe Removal and Replacement (24" and 30" diameter)	8	EA		
18	11.260.110	Storm Pipe Removal and Replacement (36" and 48" diameter)	6	EA		
19	11.280.110	Remove and Replace Curbing	20,025	LF		
20	11.290.110	Sod Replacement - Bahia	11,805	SY		

21	11.291.110	Seed and Mulch	10	AC		
22	11.292.110	Tree Removal/Replacement within in ROW - Trmyr, Tree, Crepe Mrytle	29	EA		
23	11.530.110	Remove 16" Reclaimed Water Main	6,217	LF		
Driving Range Improvements						
24	11.150.111	Remove and Replace Concrete Slab and Driving Range Building	1	LS		
25	11.150.112	Removal and Replacement of Synthetic Driving Range Mat	1	LS		
26	11.150.113	Removal and Replacement or Relocation of Ancillary Equipment at Driving Range	1	LS		
27	11.150.114	Regrading and Resodding the Driving Range and Putting Green Areas	1	LS		
Water Main & Reclaimed Water Main						
29	12.110.115	Furnish & Install DIP Water Main w/fittings & RJs (20" diameter)	46	LF		
30	12.110.116	Furnish & Install DIP Water Main w/fittings & RJs (24" diameter)	330	LF		
31	12.110.118	Furnish & Install DIP Water Main w/fittings & RJs (36" diameter)	33,564	LF		
32	12.120.115	Furnish & Install DIP Reclaimed Water Main w/fittings & RJs (20" diameter)	200	LF		
33	12.120.116	Furnish & Install DIP Reclaimed Water Main w/fittings & RJs (24" diameter)	33,213	LF		
34	12.210.111	Furnish & Install Gate Valve with Box (6" diameter)	5	EA		
36	12.210.115	Furnish & Install Gate Valve with Box (16" diameter)	4	EA		
37	12.210.117	Furnish & Install Gate Valve with Box (24" diameter)	31	EA		
38	12.210.119	Furnish & Install Gate Valve with Box (36" diameter)	24	EA		
39	12.210.120	Furnish & Install Gate Valve with Motor Actuator and Box (24" diameter)	4	EA		
40	12.210.130	Furnish & Install In-Line Gate Valve with Motor Actuator (24" diameter)	1	EA		
42	12.310.117	Furnish & Install Tapping Sleeve and Valve Assembly (20" diameter)	1	EA		
43	12.310.118	Furnish & Install Tapping Sleeve and Valve Assembly (24" diameter)	2	EA		

44	12.410.118	Cut-in Connection to Existing Water Main Ends at E/W on 36"	1	EA		
45	12.510.115	Line Stop Assembly (16" diameter)	1	EA		
46	12.520.110	Air Release Valve Assembly (2" diameter)	28	EA		
47	12.530.110	Off Set Air Release Valve Assembly (2" diameter)	22	EA		
48	12.540.110	Fire Hydrant Assembly	1	EA		
49	12.610.118	Directional Drill HDPE 36" Water Main	2,046	LF		
50	12.620.116	Directional Drill HDPE 24" Reclaimed Water Main	2,043	LF		
51	12.810.110	Jack and Bore 54" Steel Casing DIP Carrier Pipe - Potable Water Main	175	LF		
52	12.820.110	Jack and Bore 42" Steel Casing DIP Carrier Pipe - Reclaimed Water Main	175	LF		
53	12.920.110	Relocation of Existing Reclaimed Water Mains (3/4" to 2")	2	EA		
54	12.920.110	Relocation of Existing Reclaimed Water Mains (4" to 12")	2	EA		
55	12.920.110	Relocation of Existing Reclaimed Water Mains (16" and greater)	3	EA		
56	12.930.110	Relocation of Existing Force Mains (4" to 12")	2	EA		
57	12.910.110	Reconnection of 4" Reclaimed Service at station 1134+40	1	EA		
58	12.910.110	Reconnection of 16" Reclaimed Service at station 1141+55	1	EA		
59	12.910.110	Reconnection of 4" Reclaimed Service at station 1138+11	1	EA		
60	12.910.110	Reconnection of 16 " Reclaimed Service at station 1143+13	2	EA		
61	12.910.110	Reconnection of 16 " Reclaimed Service at station 1160+06	1	EA		
62	12.910.110	Reconnection of 16" Reclaimed Service at station 1167+65	1	EA		
63	12.910.110	Reconnection of 4" Reclaimed Service at station 1179+98	1	EA		
64	12.910.110	Reconnection of 16" Reclaimed Service at station 1184+90	1	EA		
65	12.910.110	Reconnection of 6" Reclaimed Service at station 1191+54	1	EA		
PIPIING SUBTOTAL						
66	14.410.110	J.Lawson Blvd Potable Water Re-pump Facility	1	LS		
67	11.510.110	Grout Fill & Abandon Existing Pipe	65	LF		

TOTAL ESTIMATED BID (ITEMS 1 THROUGH 67) \$ _____

PIPE, FITTINGS AND EQUIPMENT LEGEND

- ① 24" DIP. (M.J.)
- ② 24" DI. TEE (M.J.)
- ③ 24" DIP. SPOOL PIECE, LENGTH AS REQUIRED (M.J.)
- ④ 24" x 12" DI. TEE (M.J.)
- ⑤ 24" DI. 90° BEND (M.J.)
- ⑥ 12" DIP. SPOOL PIECE, LENGTH AS REQUIRED (FLG. x PE.)
- ⑦ 12" GATE VALVE (FLG.)
- ⑧ 12" DIP. SPOOL PIECE, LENGTH AS REQUIRED (FLG.)
- ⑨ 12" DI. 90° BEND (FLG.)
- ⑩ 12" DI. BLIND FLANGE
- ⑪ 12" x 10" DI. REDUCER (FLG.)
- ⑫ 8" EXPANSION JOINT / COUPLING
- ⑬ 12" x 8" DI. REDUCER (FLG.)
- ⑭ 12" CHECK VALVE (CUSHIONED)
- ⑮ 12" DI. 45° BEND (FLG.)
- ⑯ 12" DI. 90° BEND (M.J.)
- ⑰ 12" DIP. SPOOL PIECE, LENGTH AS REQUIRED (M.J.)
- ⑱ 24" x 12" DI. REDUCER (M.J.)
- ⑲ FLOW METER (FLG.)
- ⑳ 24" GATE VALVE (M.J.)
- ㉑ 24" x 20" DI. REDUCER (M.J.)
- ㉒ 20" DIP. SPOOL PIECE, LENGTH AS REQUIRED (FLG. x PE.)
- ㉓ PUMP
- ㉔ 20" DI. 45° BEND (FLG.)
- ㉕ 20" DI. 45° BEND (M.J.)
- ㉖ 20" DIP. SPOOL PIECE, LENGTH AS REQUIRED (FLG.)
- ㉗ 20" DIP. SPOOL PIECE, LENGTH AS REQUIRED (M.J.)
- ㉘ 24" x 6" DI. REDUCER (M.J.)
- ㉙ 6" DIP. SPOOL PIECE, LENGTH AS REQUIRED (M.J.)
- ㉚ FIRE HYDRANT ASSEMBLY
- ㉛ 12" EXPANSION JOINT / COUPLING
- Ⓐ 24" GATE VALVE W/ MOTOR OPERATOR
- Ⓑ 24" GATE VALVE W/ MOTOR OPERATOR
- Ⓒ 24" GATE VALVE W/ MOTOR OPERATOR
- Ⓓ 24" GATE VALVE W/ MOTOR OPERATOR
- Ⓔ 24" GATE VALVE W/ MOTOR OPERATOR

CONTROL VALVE SEQUENCE

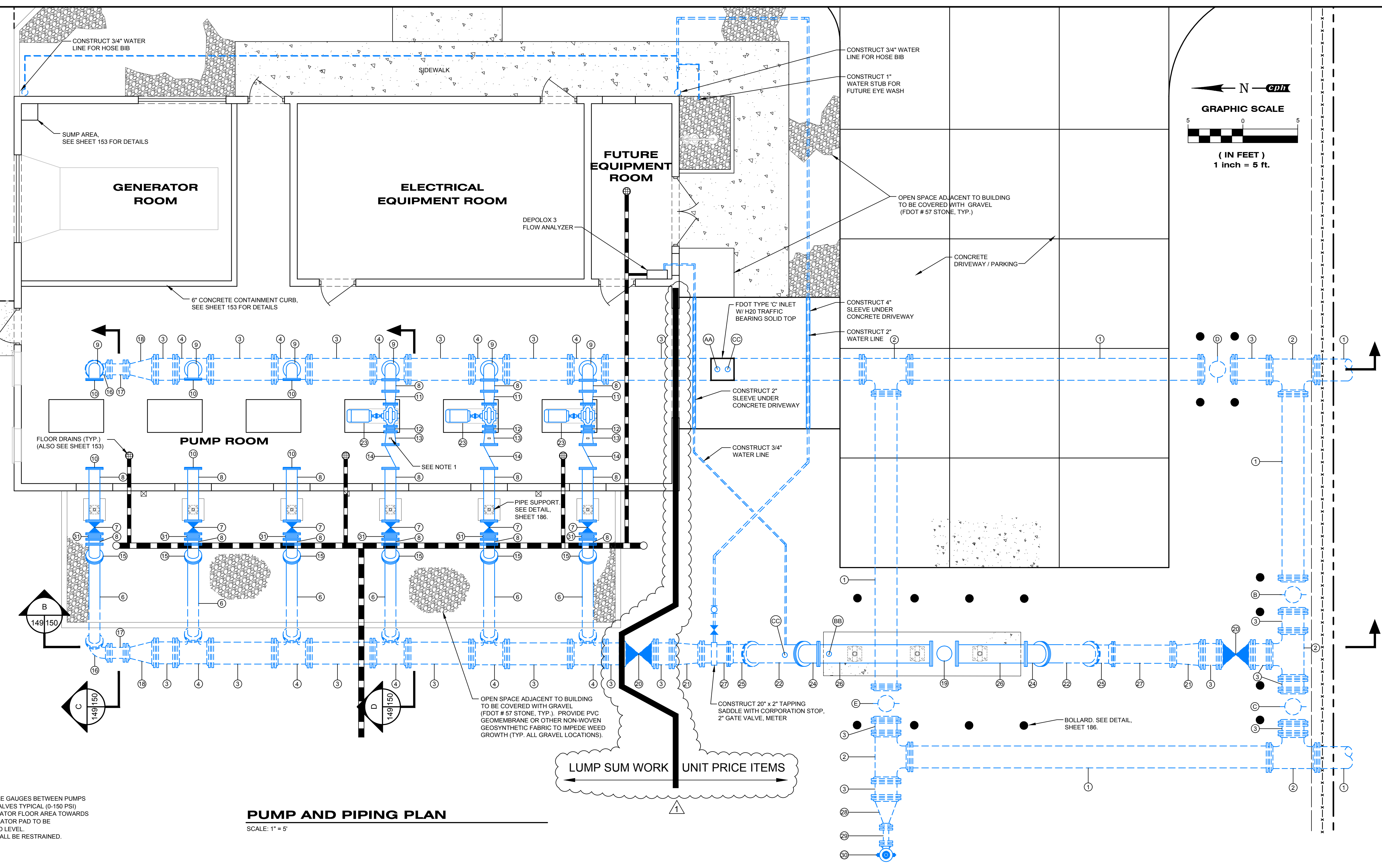
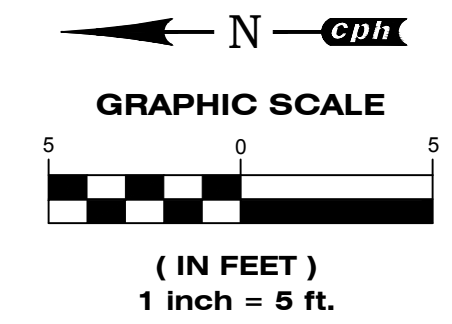
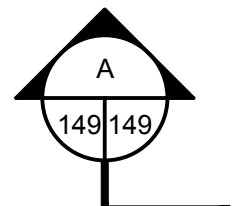
FLOW: SOUTHERN SYSTEM TO EASTERN SYSTEM

VALVE	STATUS
Ⓐ	CLOSED
Ⓑ	OPEN
Ⓒ	CLOSED
Ⓓ	CLOSED
Ⓔ	OPEN

FLOW: EASTERN SYSTEM TO SOUTHERN SYSTEM

VALVE	STATUS
Ⓐ	CLOSED
Ⓑ	CLOSED
Ⓒ	OPEN
Ⓓ	OPEN
Ⓔ	CLOSED

- Ⓐ CHLORINE INJECTION POINT (SEE DETAIL, SHEET 11)
- Ⓑ CHLORINE SAMPLE POINT (SEE DETAIL, SHEET 11)
- Ⓒ FLOW PRESSURE SENSOR (SEE DETAIL, SHEET 11)

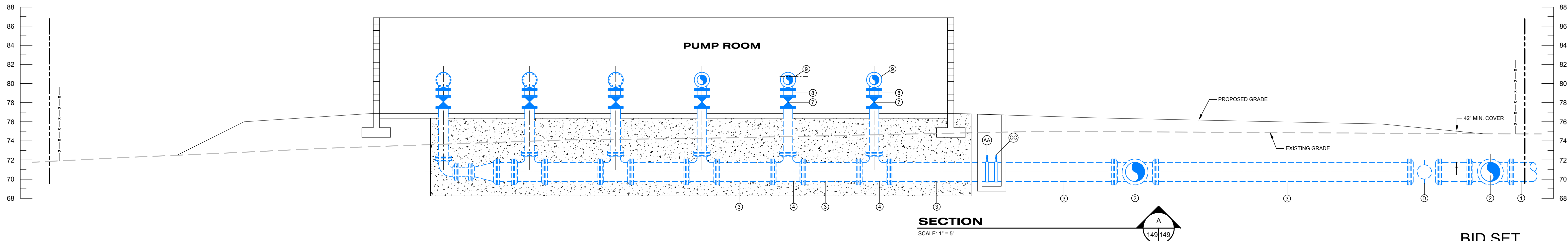


- NOTE:**
1. ADD PRESSURE GAUGES BETWEEN PUMPS AND CHECK VALVES TYPICAL (0-150 PSI)
 2. SLOPE GENERATOR FLOOR AREA TOWARDS SUMP. GENERATOR PAD TO BE CONSTRUCTED LEVEL.
 3. ALL PIPING SHALL BE RESTRAINED.

PUMP AND PIPING PLAN

SCALE: 1" = 5'

LUMP SUM WORK UNIT PRICE ITEMS

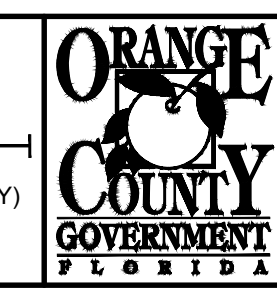


SECTION

SCALE: 1" = 5'

REV	DATE	DESCRIPTION
1	5/9/2018	ADDENDUM #4

LINE IS 2 INCHES AT FULL SIZE (IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
9150 CURRY FORD ROAD ORLANDO, FL 32825



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Licenses: Eng. C.O.A. No. 3215 Survey L.B. No. 7143 Arch. Lic. No. AA2600926 Lndscp. Lic. No. LC0000298
1117 East Robinson Street - Orlando, FL 32801 - Phone: 407.425.0452

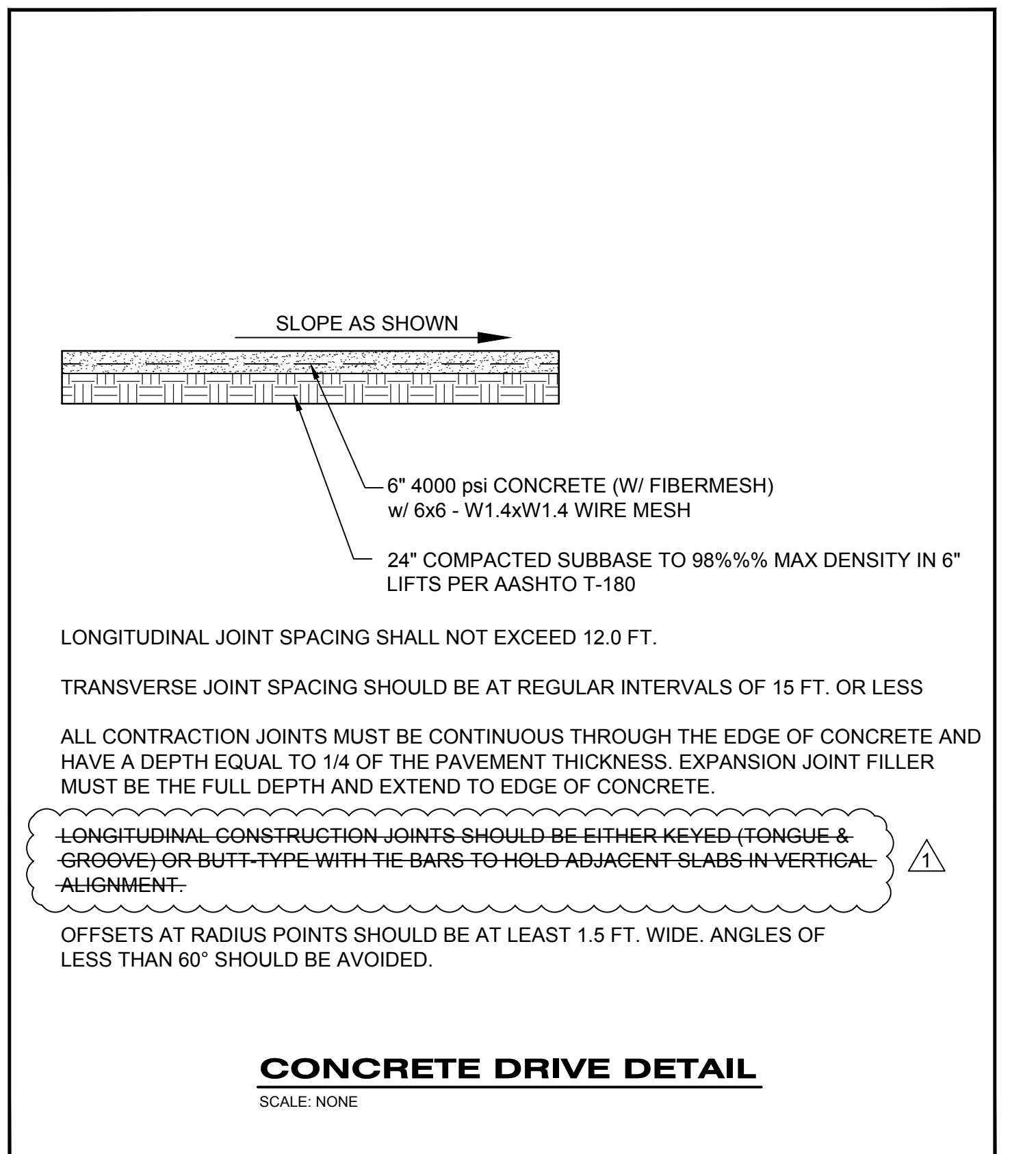
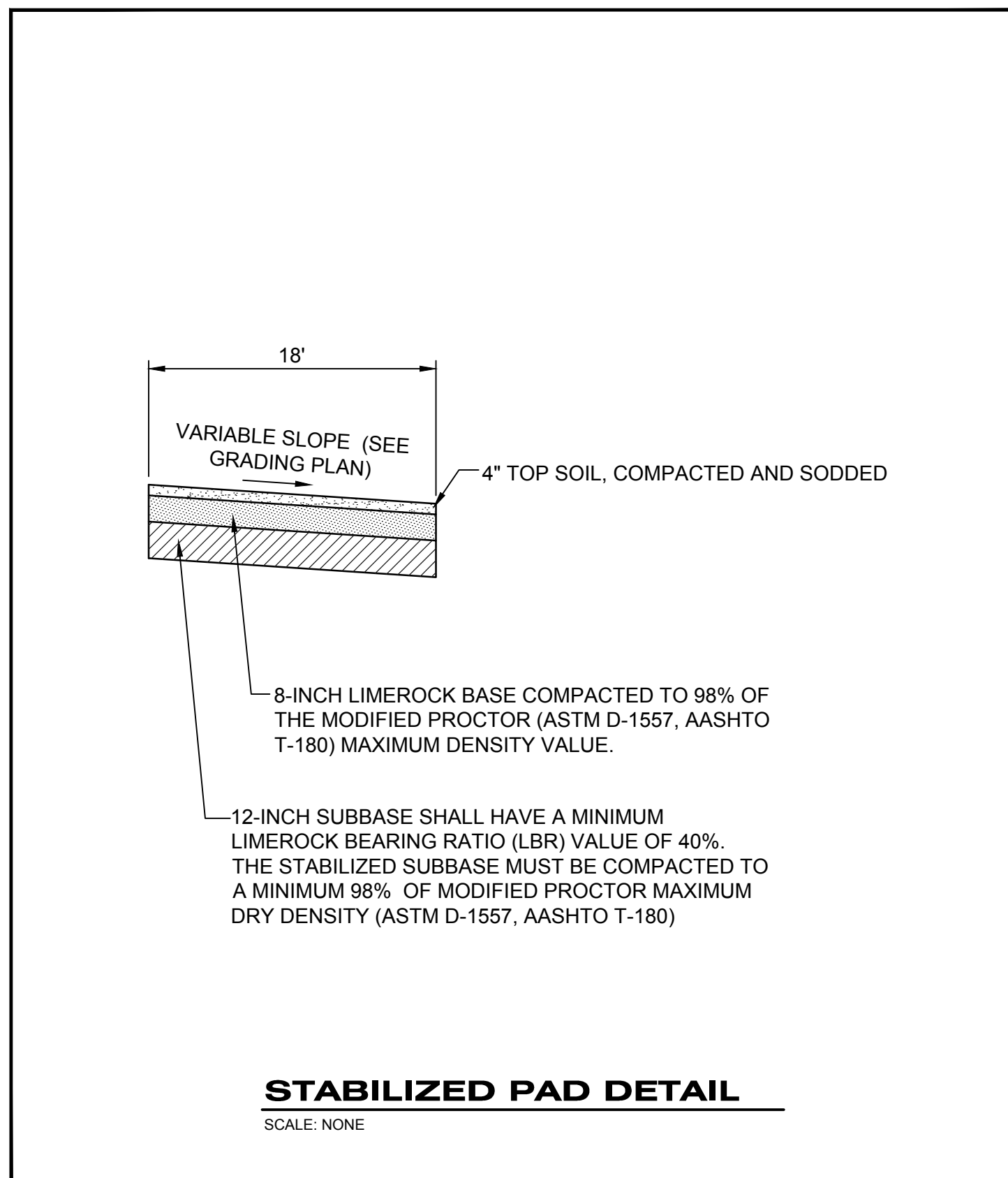
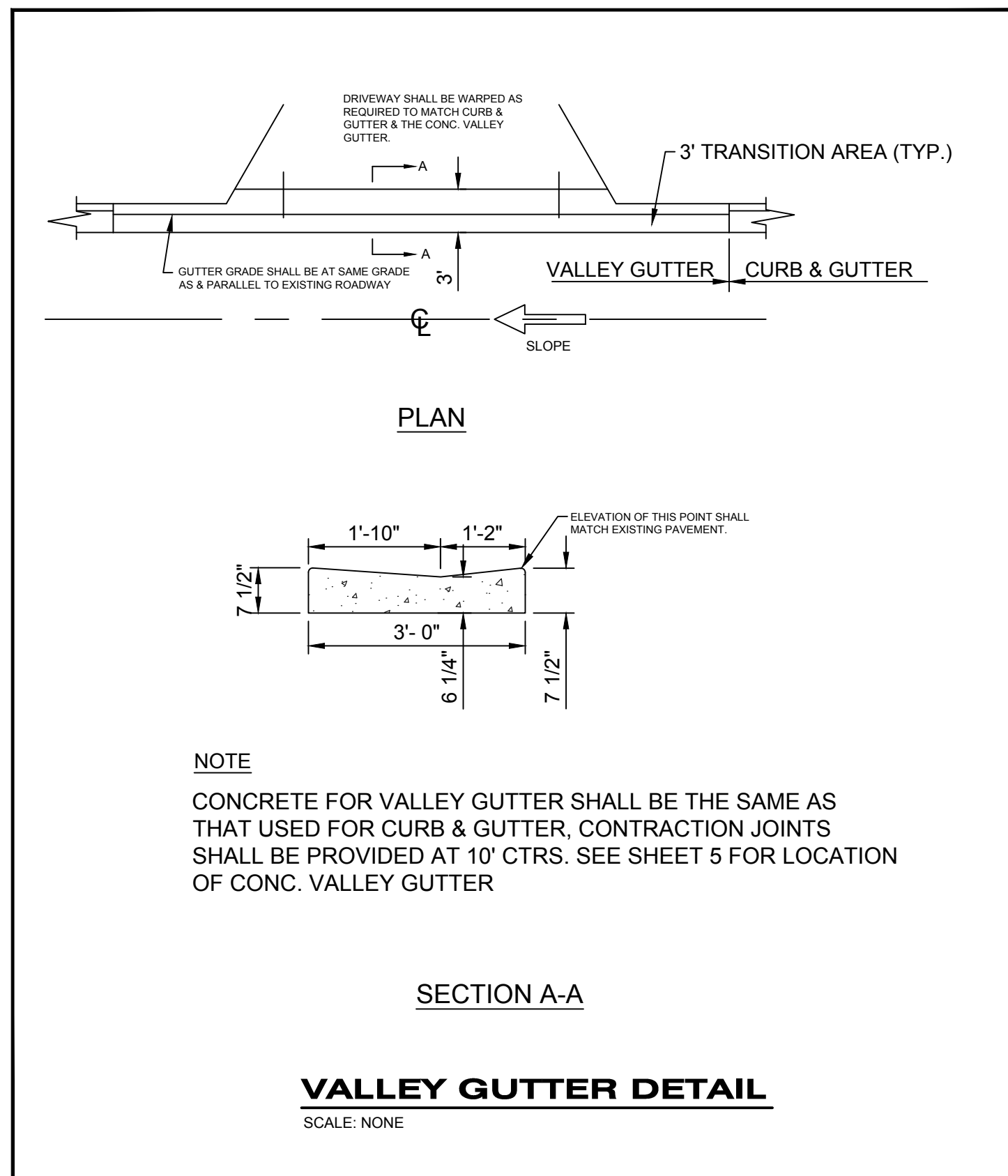
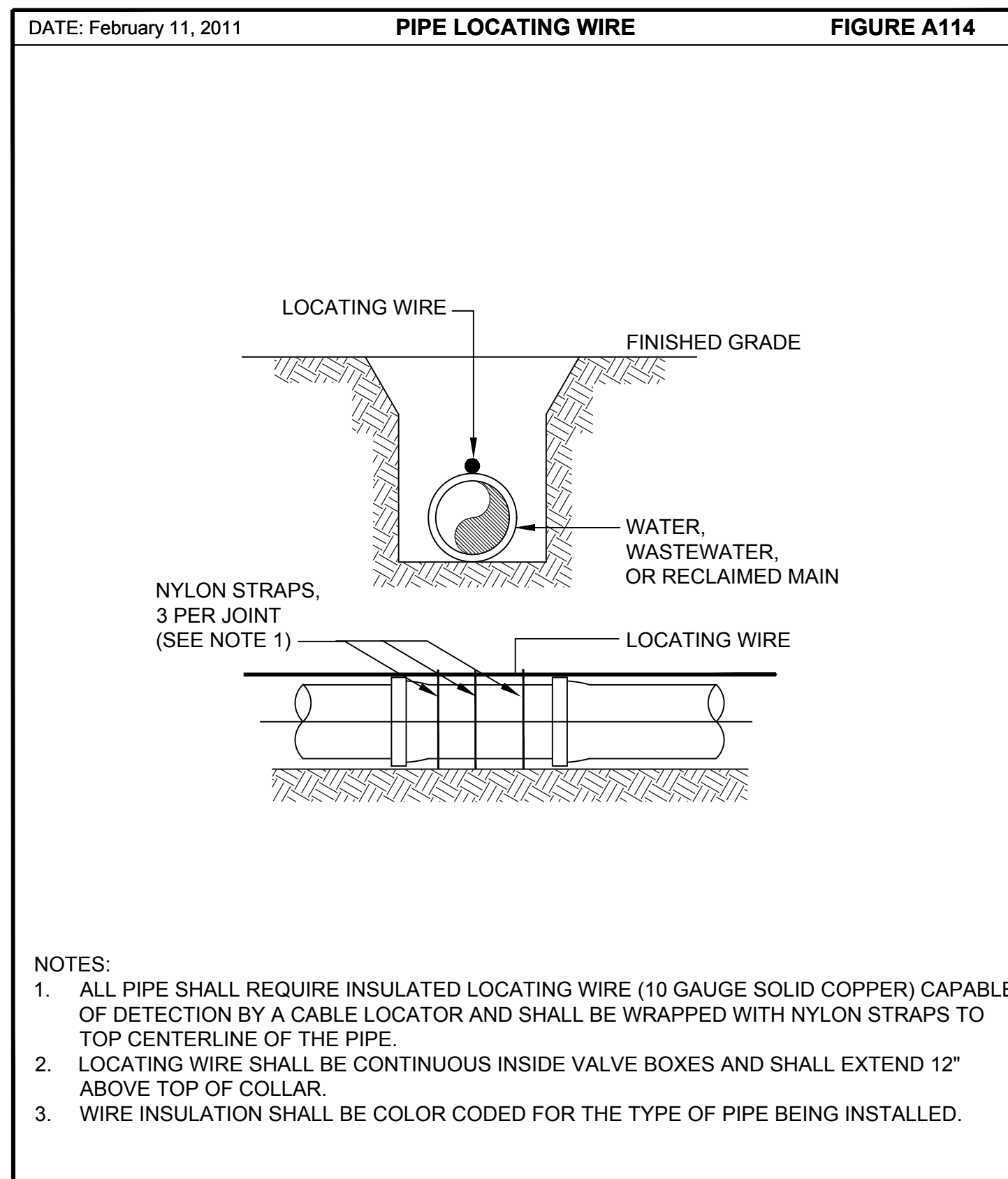
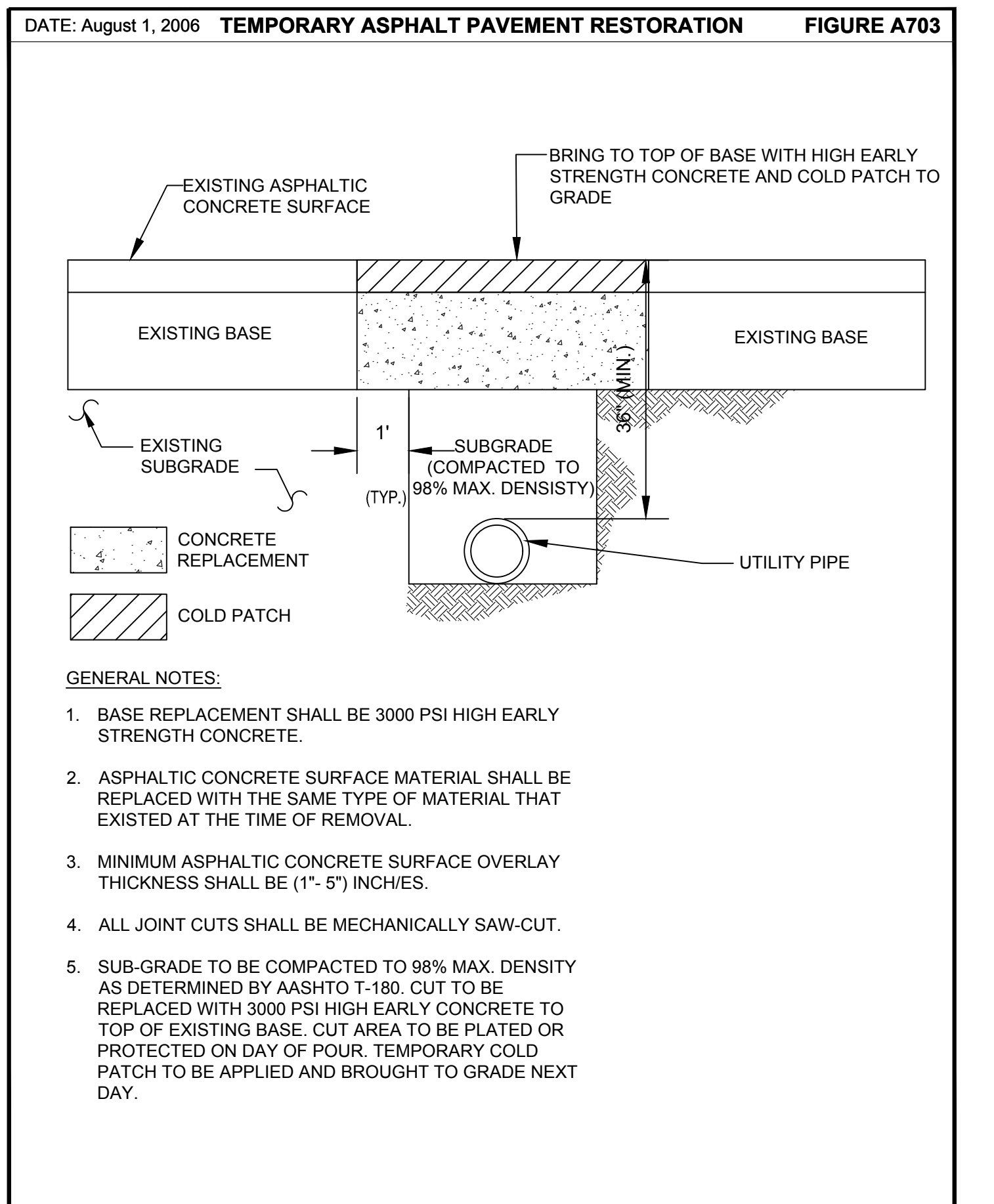
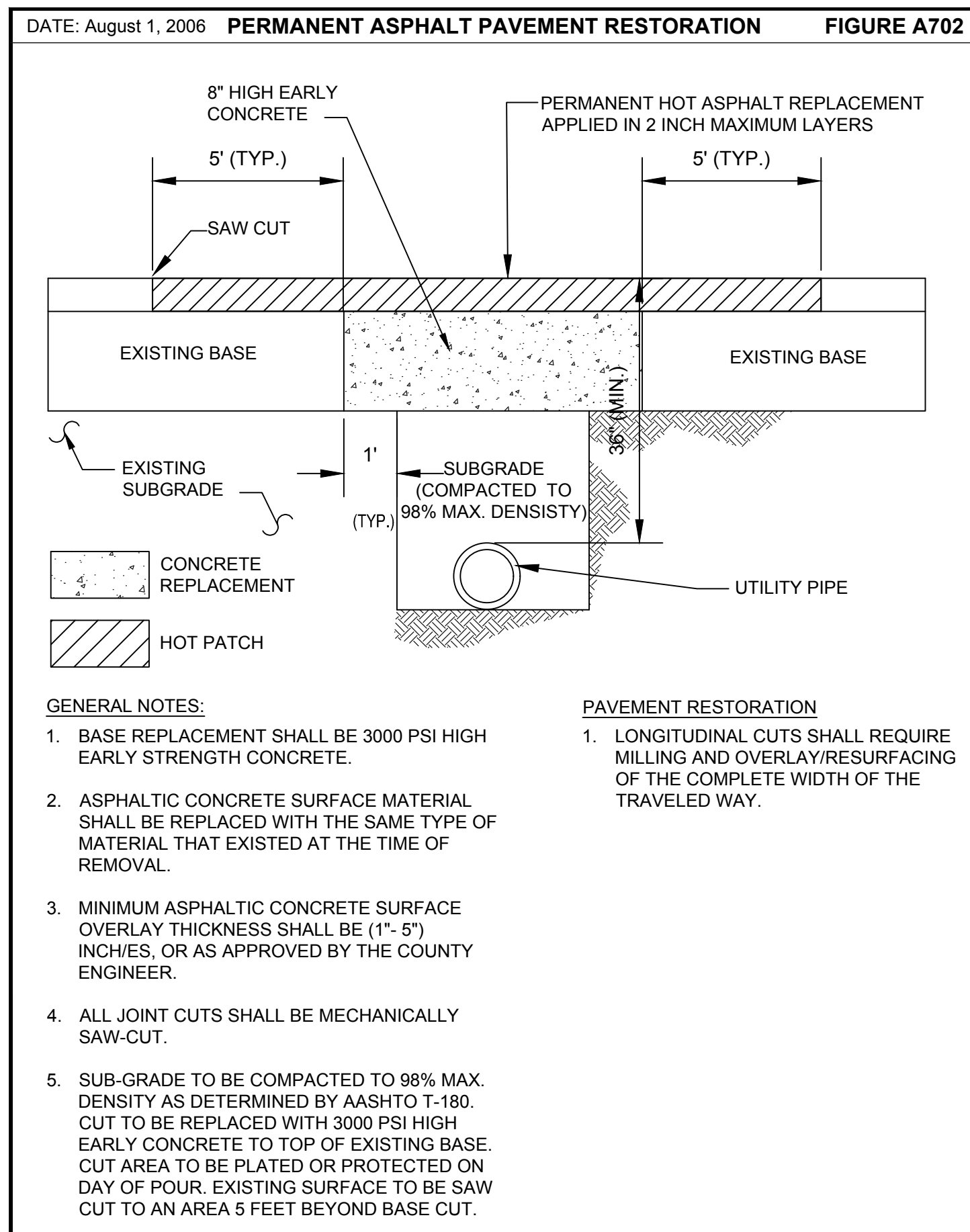
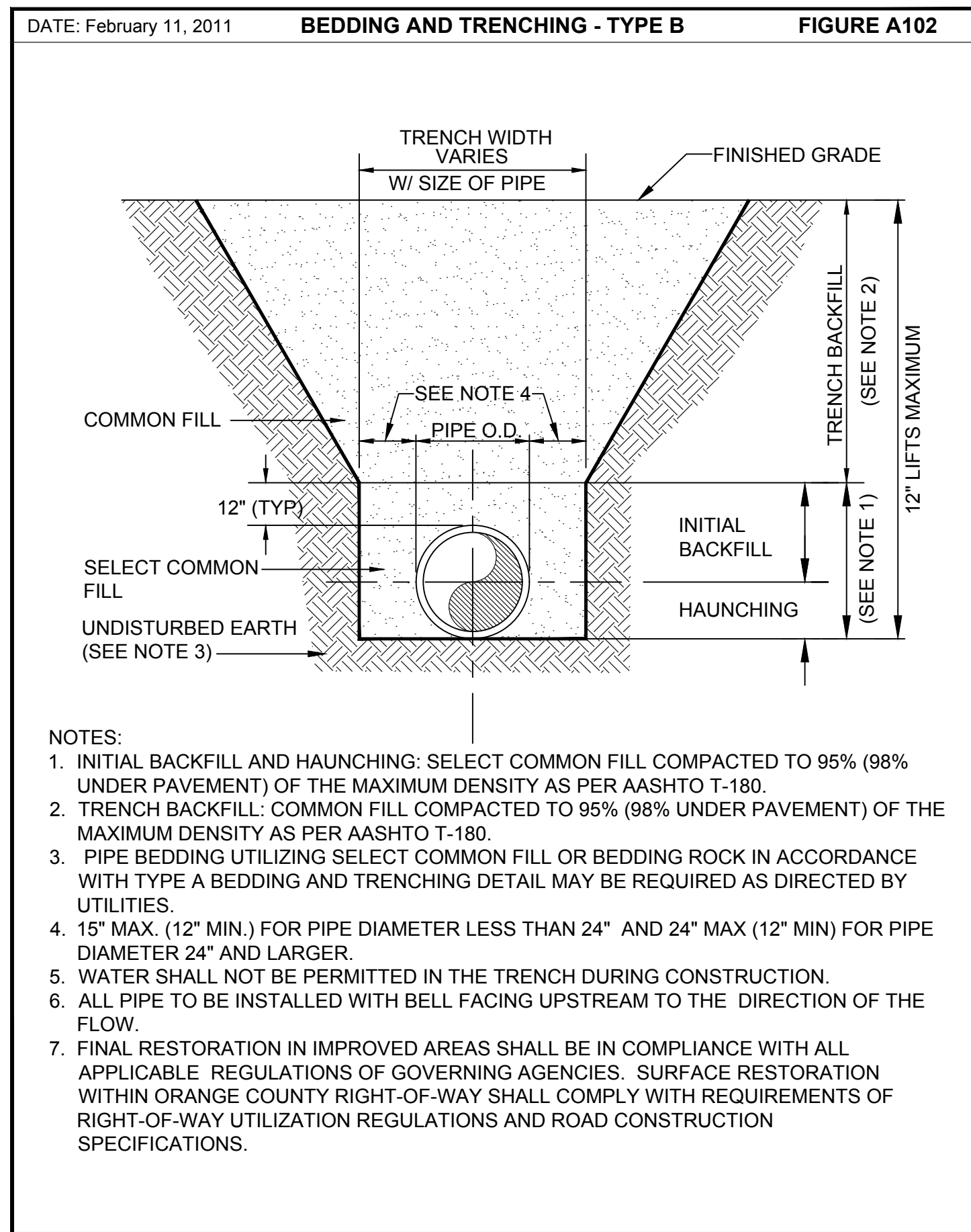
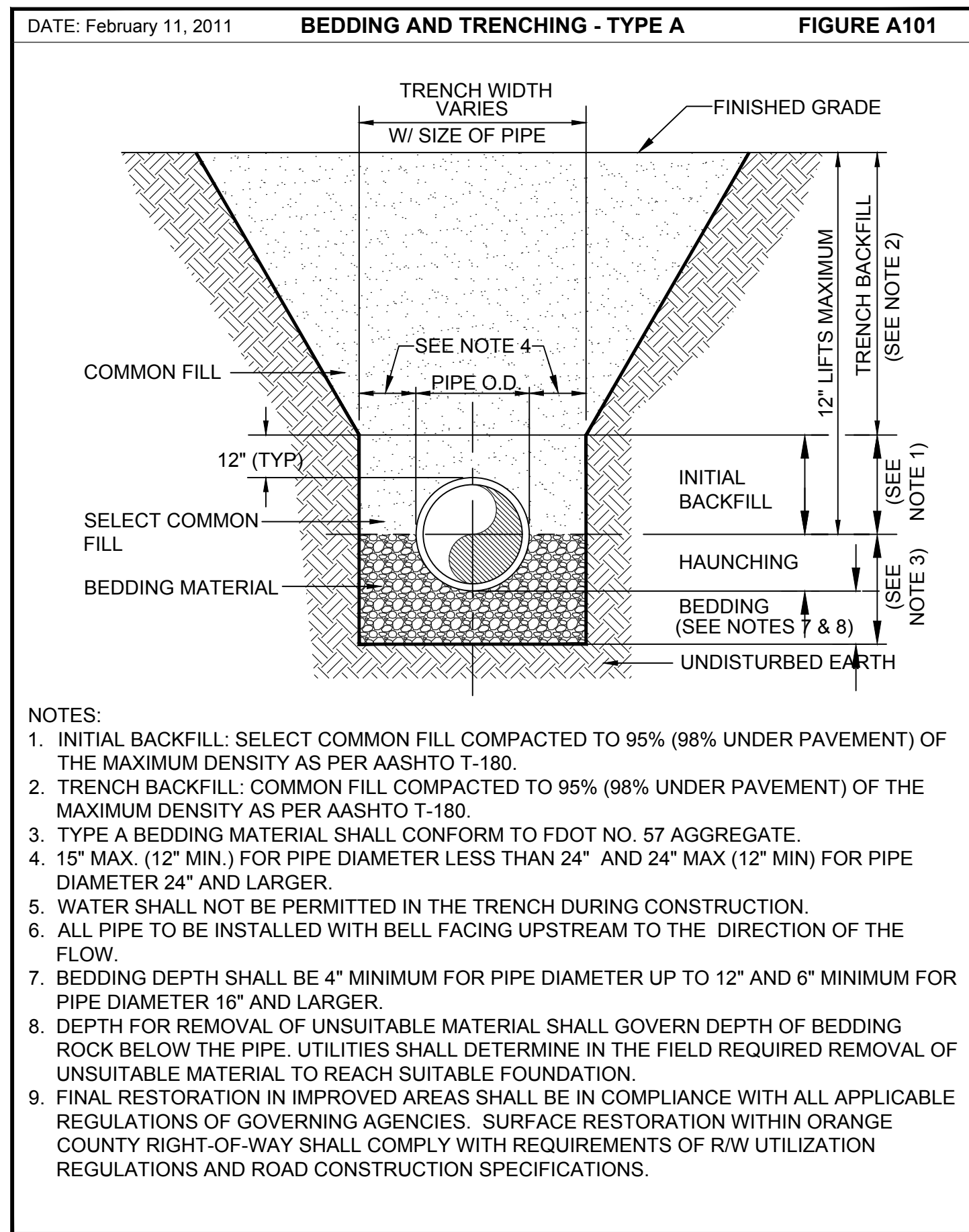
SSA-ESA
36 INCH WATER MAIN & 24 INCH RECLAIMED WATER MAIN & J. LAWSON RE-PUMP STATION
PUMP AND PIPING PLAN

DAVID E. MAHLER, P.E.
PROFESSIONAL ENGINEER
FLORIDA LICENSE # 50041

OCU FILE NO.:
DESIGNED BY: DEM
DRAWN BY: CKJ
CHECKED BY: DEM
CADD FILE: J.Lawson Site Plan.dwg

SCALE: AS SHOWN
DRAWING NO.:
P-102
SHEET: 149 OF 292

BID SET



REV	DATE	DESCRIPTION
1	5/9/2018	ADDENDUM #4

LINE IS 2 INCHES
AT FULL SIZE
(IF NOT SCALE ACCORDINGLY)

ORANGE COUNTY UTILITIES DEPARTMENT ENGINEERING DIVISION
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SSA-ESA
36 INCH WATER MAIN & 24 INCH RECLAIMED WATER MAIN & J. LAWSON RE-PUMP STATION CONSTRUCTION DETAILS

OCU FILE NO.:
DESIGNED BY: DEM
DRAWN BY: GNP
CHECKED BY: DEM
CADD FILE: Details.dwg

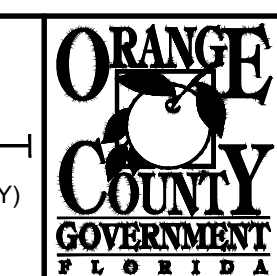
SCALE:
DRAWING NO.:
D-100
SHEET: 183 OF 292

BID SET

BID ITEM	REFERENCE ID	DESCRIPTION	ESTIMATED QUANTITIES	UNIT	C-154	C-155	C-156	C-157	C-158	C-159	C-160	C-161	C-162	C-163	C-164	C-165	C-166	P-102	
1	10.110.110	Mobilization, Demobilization, Bonds, and Permits (not to exceed 5% of the total of all bid items except bid items under section 10.1 General)	1	LS															
2	10.130.110	Indemnification	1	LS															
3	10.120.110	Preconstruction Audio-Video Documentation	1	LS															
4	10.140.110	Project Record Documents	1	LS															
5	10.150.110	Maintenance of Traffic	1	LS															
Site Work																			
6	11.110.110	Erosion and Sediment Control	1	LS															
7	11.120.110	Unsuitable Materials	100	CY															
8	11.130.110	Fill Dirt	100	CY															
9	11.140.111	Clearing & Grubbing	1	AC															
Roadway																			
10	11.213.110	Roadway Base	51,315	SY	914	571	478			540	541	354	481	1183	642	82			
11	11.230.110	Milling and Resurfacing	56,355	SY		495	505	160		303	483	1519	1219	872	380	404			
12	11.241.110	Open Cut and Restore Asphalt Roadway	51,288	SY	914	571	478			540	514	354	481	1183	642	82			
13	11.250.110	Concrete Driveways and Sidewalk Removal and Replacement - 4" Thick Sidewalk	47	SY															
14	11.250.110	Concrete Driveways and Sidewalk Removal and Replacement - 6" Thick Sidewalk	6,740	SY		295	824	752	800	800	746	777	276	23	726	634	87		
15	11.261.112	Construct Public Sidewalk ADA Ramp	7	EA															
16	11.260.110	Storm Pipe Removal and Replacement (15" and 18" diameter)	53	EA		1	1	2	2	1	1	1	1	4	2	2			
17	11.260.110	Storm Pipe Removal and Replacement (24" and 30" diameter)	8	EA										1					
18	11.260.110	Storm Pipe Removal and Replacement (36" and 48" diameter)	6	EA	1				1										
19	11.280.110	Remove and Replace Curbing	20,025	LF	285	339	719	731	600	569	655	766	23	444	516	396			
20	11.290.110	Sod Replacement - Bahia	11,805	SY		576	1163	1132	1182	1196	1085	1085	275	68	1017	989	380		
21	11.291.110	Seed and Mutch	10	AC															
22	11.292.110	Tree Removal/Replacement within in ROW - Timmy, Tree, Crepe Myrtle	29	EA									5						
23	11.530.110	Remove 16" Reclaimed Water Main	6,211	LF		367	600	600	12	600	3	600	600	5	600	600	444		
Driving Range Improvements																			
24	11.150.111	Remove and Replace Concrete Slab and Driving Range Building	1	LS															
25	11.150.112	Removal and Replacement of Synthetic Driving Range Mat	1	LS															
26	11.150.113	Removal and Replacement or Relocation of Ancillary Equipment at Driving Range	1	LS															
27	11.150.114	Regrading and Resodding the Driving Range and Putting Green Areas	1	LS															
Water Main & Reclaimed Water Main																			
28	12.110.115	Furnish & Install DIP Water Main w/fitings & RJs (12" diameter)	90	LF															
29	12.110.115	Furnish & Install DIP Water Main w/fitings & RJs (20" diameter)	46	LF															
30	12.110.116	Furnish & Install DIP Water Main w/fitings & RJs (30" diameter)	330	LF															
31	12.110.118	Furnish & Install DIP Water Main w/fitings & RJs (36" diameter)	33,964	LF	307	373	600	557	600	600	600	600	616	610	600	600	123		
32	12.120.115	Furnish & Install DIP Reclaimed Water Main w/fitings & RJs (20" diameter)	200	LF															
33	12.120.116	Furnish & Install DIP Reclaimed Water Main w/fitings & RJs (24" diameter)	33,213	LF	307	373	600	557	600	600	600	600	600	600	600	560			
34	12.210.111	Furnish & Install Gate Valve (12" diameter)	5	EA		1	1	1						1					
35	12.210.114	Furnish & Install Gate Valve with Box (12" diameter)	6	EA															
36	12.210.115	Furnish & Install Gate Valve with Box (18" diameter)	4	EA			1			1				1					
37	12.210.117	Furnish & Install Gate Valve with Box (24" diameter)	31	EA	1	1	1			1			1	1	1			2	
38	12.210.119	Furnish & Install Gate Valve with Box (36" diameter)	24	EA	1	1		1				1		1		1			
39	12.210.120	Furnish & Install Gate Valve with Motor Actuator and Box (24" diameter)	4	EA														4	
40	12.210.130	Furnish & Install In-Line Gate Valve with Motor Actuator (24" diameter)	1	EA														1	
41	12.240.114	Furnish & Install Check Valve (12" diameter)	3	EA														3	
42	12.310.117	Furnish & Install Tapping Sleeve and Valve Assembly (20" diameter)	1	EA															
43	12.310.118	Furnish & Install Tapping Sleeve and Valve Assembly (24" diameter)	2	EA														2	
44	12.410.118	Cut-in Connection to Existing Water Main Ends at E/W on 36"	1	EA															
45	12.510.115	Line Stop Assembly (18" diameter)	1	EA												1			
46	12.520.110	Air Release Valve Assembly (2" diameter)	28	EA				1	3	1	2			1					
47	12.530.110	Off Set Air Release Valve Assembly (2" diameter)	22	EA															
48	12.540.110	Fire Hydrant Assembly	1	EA														1	
49	12.610.118	Directional Drill HDPE 36" Water Main	2,046	LF															
50	12.620.116	Directional Drill HDPE 24" Reclaimed Water Main	2,043	LF															
51	12.810.110	Jack and Bore 54" Steel Casing DIP Carrier Pipe - Potable Water Main	175	LF				43											
52	12.820.110	Jack and Bore 42" Steel Casing DIP Carrier Pipe - Reclaimed Water Main	175	LF				43											
53	12.920.110	Relocation of Existing Reclaimed Water Mains (34" to 2")	2	EA			1												
54	12.920.110	Relocation of Existing Reclaimed Water Mains (4" to 12")	2	EA		1													
55	12.920.110	Relocation of Existing Reclaimed Water Mains (16" and greater)	3	EA			1			1									
56	12.930.110	Relocation of Existing Force Mains (4" to 12")	2	EA										1		1			
57	12.910.110	Reconnection of 4" Reclaimed Service at station 1134+10	1	EA		1													
58	12.910.110	Reconnection of 16" Reclaimed Service at station 1141+55	1	EA			1												
59	12.910.110	Reconnection of 4" Reclaimed Service at station 1139+11	1	EA			1												
60	12.910.110	Reconnection of 16" Reclaimed Service at station 1143+13	2	EA				2											
61	12.910.110	Reconnection of 16" Reclaimed Service at station 1160+05	1	EA						1									
62	12.910.110	Reconnection of 16" Reclaimed Service at station 1167+65	1	EA								1							
63	12.910.110	Reconnection of 4" Reclaimed Service at station 1179+98	1	EA										1					
64	12.910.110	Reconnection of 16" Reclaimed Service at station 1184+90	1	EA										1					
65	12.910.110	Reconnection of 6" Reclaimed Service at station 1191+54	1	EA													1		
PIPING SUBTOTAL																			
66	14.410.110	J Lawson Blvd Potable Water Re-pump	1	LS															
67	11.510.110	Great Fill & Abandon Existing Pipe	65	LF				45											

REV	DATE	DESCRIPTION
1	5/1/2018	ADDENDUM #3
2	5/9/2018	ADDENDUM #4

LINE IS 2 INCHES
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(IF NOT SCALE ACCORDINGLY)



ORANGE COUNTY UTILITIES DEPARTMENT
ENGINEERING DIVISION
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Survey L.B. No. 7143
Arch. Lic. No. AA2600926
Landscape Lic. No. LC0000298

SSA-ESA
36 INCH WATER MAIN & 24 INCH RECLAIMED WATER MAIN & J. LAWSON RE-PUMP STATION
SUMMARY OF PAY ITEMS

OCU FILE NO.: 32965
DESIGNED BY: DEM
DRAWN BY: GNP
CHECKED BY: DEM
CADD FILE: Summary of Pay Items.dwg

SCALE:
DRAWING NO.:
G-502
SHEET: 9 OF 292

DAVID E. MAHLER, P.E.
PROFESSIONAL ENGINEER
FLORIDA LICENSE # 50041

BID SET

