

# Stonebridge Country Club Maintenance Yard

10343 Stonebridge Blvd, Boca Raton, FL 33498

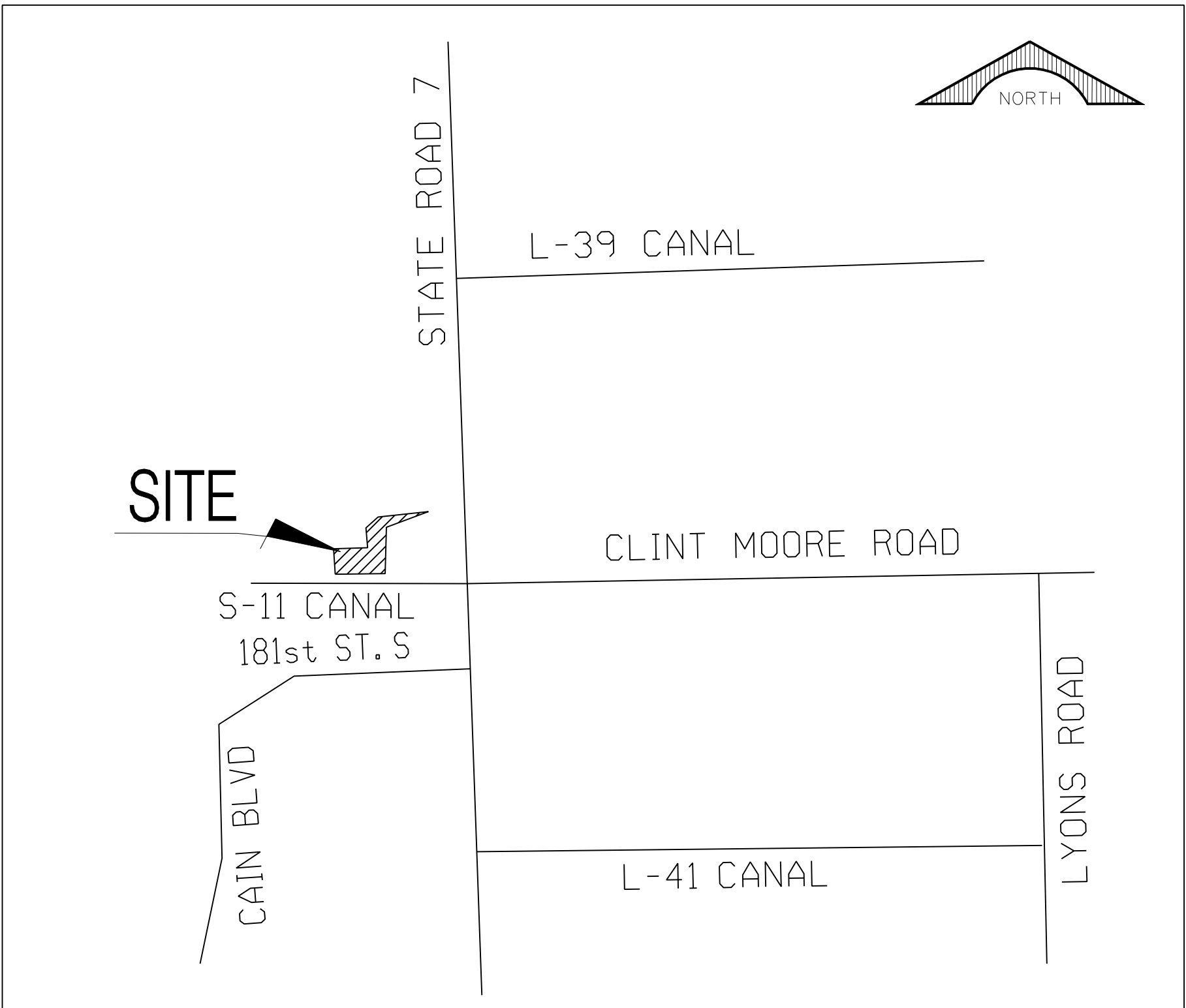
## CIVIL ENGINEERING PLANS

APPROVALS		
AGENCY	APPROVAL DATE	PERMIT NUMBER

LEGAL DESCRIPTION:

TRACT A, STONEBRIDGE TRACT "N" REPLAT, ACCORDING TO PLAT THEREOF AS RECORDED IN PLAT BOOK 89, PAGES 86 AND 87, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

SAID LANDS SITUATE IN SECTION 36, TOWNSHIP 46 SOUTH, RANGE 41 EAST, PALM BEACH COUNTY, FLORIDA AND CONTAINING 159,437 SQUARE FEET OR 3.6602 ACRES, MORE OR LESS.

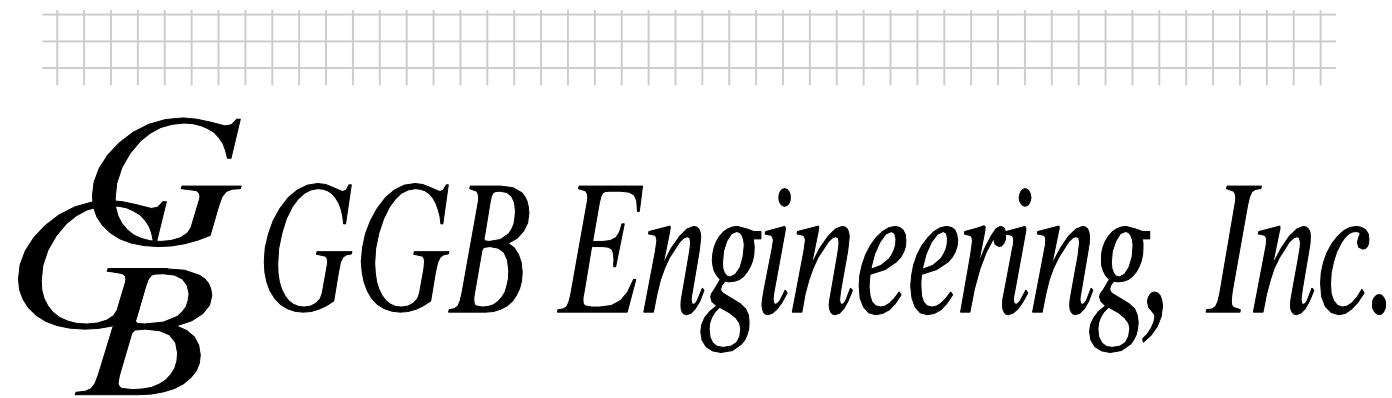


LOCATION MAP

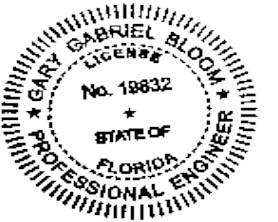
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SECTION 36, TOWNSHIP 46 SOUTH, RANGE 41 EAST

SHEET NO.	TITLE
1	COVER SHEET
GN	GENERAL NOTES
DEMO	DEMOLITION PLAN
WS	WATER AND SEWER PLAN
PGD	PAVING, GRADING AND DRAINAGE PLAN
DT1	CONSTRUCTION DETAILS
CD1-CD5	POTABLE WATER STANDARD DETAILS
SW1 - SW3	STORMWATER POLLUTION PREVENTION PLANS



CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS  
• CONSTRUCTION MANAGERS  
TEL. 954-986-9899 • FAX. 954-986-6655



PROJECT No. 21-0817  
DESIGN DATE: OCTOBER 2021

DRAWINGS MAY BE OUT OF SCALE DUE TO XEROX REPRODUCTION ERROR.

1. ALL EXISTING SIGNS WITHIN THE DEMOLITION LIMITS ARE TO BE REMOVED.
2. ALL EXISTING POWER POLES WITHIN THE DEMOLITION LIMITS ARE TO BE RELOCATED.
3. ALL EXISTING WATER SERVICES WITHIN THE DEMOLITION LIMITS ARE TO BE CUT AND PLUGGED.
4. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS/APPROVALS FOR ON-SITE DEMOLITION ALONG WITH ANY MOT.
5. ALL EXISTING LIGHT POLES, CURB AND GUTTERS ARE TO BE REMOVED AS PER ORIGINAL CIVIL DWGS. YOUR DEMO SITE PLAN MUST FOLLOW THE DESIGN INTENT FROM THE ORIGINAL PROVIDED CIVIL DWGS.

 PROPERTY LINE  
 EXISTING TO BE REMOVED  
 REMOVE EXISTING ASPHALT & SCARIFY ROCK  
 REMOVE ALL BUILDINGS, CONCRETE WALKS & SLABS ASPHALT RESURFACING, & ALL STRUCTURES, APPURTENANCES ETC. & SCARIFY EXISTING LIMESTONE BASE

REVISIONS:

2. 3. 4. 5. 6. 7. 8.

**New York Design  
Collaborative Inc.  
11090 Clover Leaf Circle  
Boca Raton, Florida 33428**

**Maintenance Yard**  
**PALM BEACH**      **FLORIDA, 33140**

## DEMOLITION PLAN

# \$

**CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS**  
• CONSTRUCTION MANAGERS  
FLORIDA REGISTRATION No. 8118

2699 Stirling Road, Suite C-202  
Fort Lauderdale, Florida 33312

Phone: (954) 986-9899  
Fax: (954) 986-6655

DATE:

Sept. 2021

SIGNED BY:	
------------	--

G G B

PROJECT NO.

21-0817

SHEET

**DEMO**

## DEMO

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GABRIEL B

LICENSE 001

No. 19832

★ STATE OF ILL.

STATE OF

FLORIDA  
SSC ENG



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Gary G. Bloom, P.E. On  
the seal. Printed copies  
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NOTES:

1. FOR SITE DIMENSIONS AND BUILDING LAYOUT REFER TO SITE PLAN.
2. FOR PAVEMENT MARKINGS AND SIGNAGE REFER TO SITE PLAN.
3. FOR RWL CONTINUATION REFER TO PLUMBING PLANS.
4. EXISTING AND PROPOSED ELEVATIONS REFER TO N.A.V.D. 1988 DATUM.
5. CONTROL WATER ELEVATION = 12.50' NAVD.

| LAND USE   | AREA | MIN. ELEV. | MAX. ELEV. |
|------------|------|------------|------------|
| BUILDING   | 0.34 | 17.93      | 18.50      |
| IMPERVIOUS | 1.60 | 16.75      | 18.00      |
| PERVIOUS   | 1.46 | 15.00      | 18.00      |
| LAKE       | 0.26 | 12.50      | 12.50      |

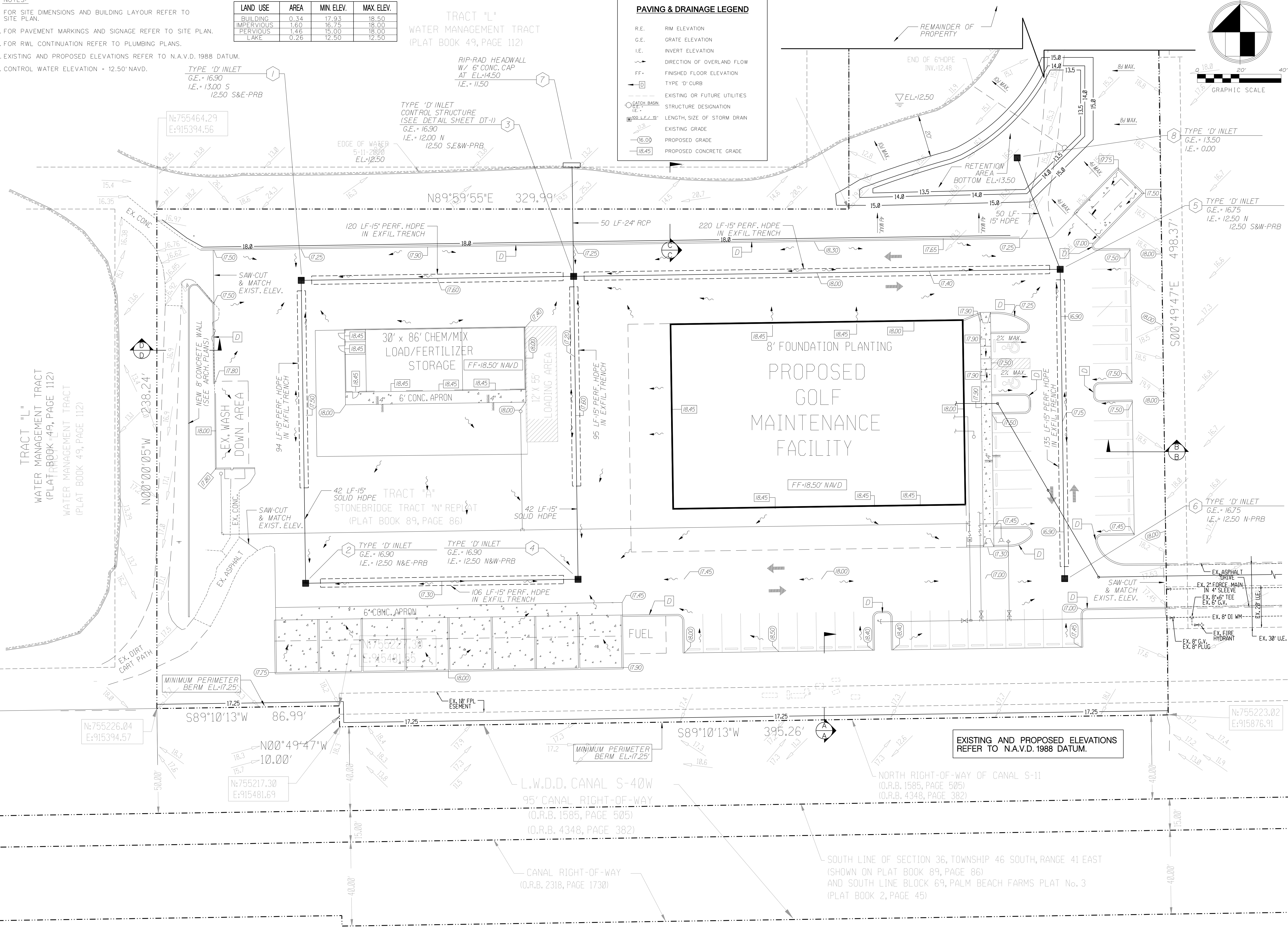
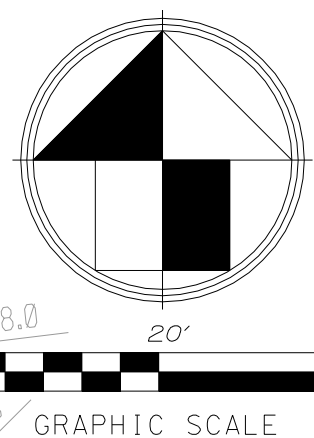
TRACT "L"  
WATER MANAGEMENT TRACT  
(PLAT BOOK 49, PAGE 112)

RIP-RAD HEADWALL  
W/ 6" CONC. CAP  
AT EL.=14.50  
I.E.= 11.50

TYPE 'D' INLET  
CONTROL STRUCTURE  
(SEE DETAIL SHEET DT-1)  
G.E.= 16.90  
I.E.= 12.00 N  
12.50 S&E-W-PRB

PAVING & DRAINAGE LEGEND

- R.E. RIM ELEVATION
- G.E. GRATE ELEVATION
- I.E. INVERT ELEVATION
- ~> DIRECTION OF OVERLAND FLOW
- FF= FINISHED FLOOR ELEVATION
- D TYPE 'D' CURB
- EXISTING OR FUTURE UTILITIES
- CATCH BASIN, I.E.=
- 100 L.F. / 18" LENGTH, SIZE OF STORM DRAIN
- EXISTING GRADE
- PROPOSED GRADE
- PROPOSED CONCRETE GRADE



REVISIONS:

1. 2. 3. 4. 5. 6. 7. 8.

CLIENT:

PROJECT: Stonebridge Country Club  
Maintenance Yard  
Palm Beach  
FLORIDA, 33140

TASK: PAVING, GRADING AND  
DRAINAGE PLAN

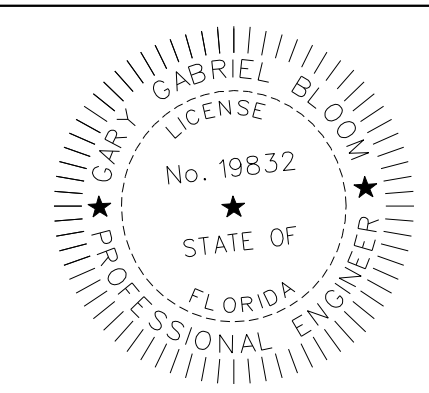
PROJECT:

GGB Engineering, Inc.  
CIVIL AND FORENSIC ENGINEERS - LAND PLANNERS  
CONSTRUCTION MANAGERS  
FLORIDA REGISTRATION No. 818  
2899 Stirling Road, Suite C-202  
Fort Lauderdale, Florida 33312

DATE: Sept. 2021  
DESIGNED BY: G.C.B.  
SCALE: 1"=20'  
DRAWN BY: M.M.

PROJECT NO.  
21-0817

SHEET  
PGD



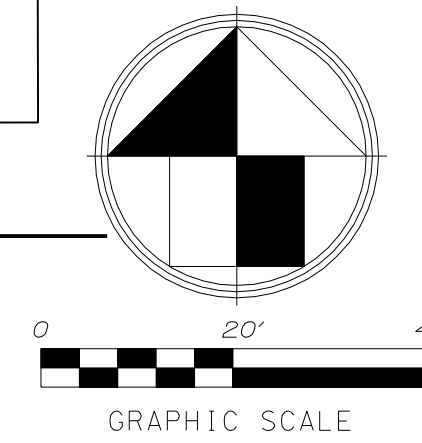
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3. FOR RWL CONTINUATION REFER TO PLUMBING PLANS.
4. EXISTING AND PROPOSED ELEVATIONS REFER TO N.A.V.D. 1988 DATUM.

NOTE:  
ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NATIONAL GEODETIC  
VERTICAL DATUM OF 1929 AND ARE BASED ON PALM BEACH COUNTY  
ENGINEERING DEPARTMENT BENCHMARK "CARPENTER" WITH PUBLISHED  
ELEVATION OF 1929.

PBCUE RECORDED IN:

ORB \_\_\_\_\_



RECORD DRAWING NOTES:

1. RECORD DRAWINGS SHALL BE PREPARED IN THE STATE PLAN COORDINATE SYSTEM.
2. ALL UTILITY FEATURES SHALL BE SHOWN IN THEIR AS-BUILT LOCATION.
3. STATE PLANE COORDINATES SHALL BE DISPLAYED ON RECORD DRAWINGS FOR ALL FEATURES SPECIFIED IN PCBWUD STANDARDS.
4. STATE PLANE COORDINATES SHALL BE SHOWN ON PROPERTY CORNERS AS REQUIRED BY PCBWUD.

HYDRANT & HYDRANT SECURITY EQUIPMENT NOTES:

1. THE EXISTING FIRE HYDRANT CAN BE RELOCATED PROVIDED IT IS IN ACCEPTABLE WORKING ORDER BASED ON THE PROJECTS MDW INSPECTORS INSPECTION IF NOT IN PROPER WORKING CONDITION A NEW FIRE HYDRANT WILL BE REQUIRED IN EITHER CASE CAPTIVATOR COPS ARE REQUIRED PER SET 2 BELOW.
2. FIRE HYDRANT SHALL BE EQUIPPED WITH A SET OF 4" CAPTIVATOR SECURITY COPS. THE COPS SHALL BE CHARGED TO THE HYDRANT BODY AND INSTALLED PRIOR TO ASSURANCE OF CONSTRUCTION WATER DELIVERY CERTIFICATION A REVIEW OF THE CAPS BY PM/DMO IS REQUIRED TO VERIFY THE INSTALLATION AND OPERATION OF THE CAPS.
3. PLEASE NOTE THAT THE SECURITY COPS CAN ONLY BE REMOVED USING SPECIAL WRENCHES. THE CONTRACTOR SHALL CONTACT THE PM/DMO INSPECTOR FOR ASSISTANCE IF ACCESS TO THE HYDRANT IS REQUIRED FOR FLUSHING OR TESTING PURPOSES.
4. ALL NEW FIRE HYDRANTS ARE TO BE INSTALLED SO THE PLUMBER NOZZLE IS 6.0 MIN WITH 12.0 CM OR 6.0 MIN WITHOUT PASS CURB AND 12.0 MAX FROM THE EDGE OF PAYMENT.

GENERAL WATER NOTES:

1. ALL WATER MAIN DUCTILE IRON PIPE AND PIPE FITTINGS SHALL BE PAINTED WITH:  
A. A 4" WIDE CONTINUOUS BLUE LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND IS LOCATED ALONG THE TOP OF THE PIPE.
2. ALL WATER MAINS SHALL BE MARKED WITH ONE CONTINUOUS STRIP OF 6" WIDE MAGNETIC BLUE COLORED TAPE IMPRINTED WITH (1.5) INCH HIGH LETTERING READING "CAUTION - WATER LINE BURIED BELOW" AND LOCATED APPROXIMATELY TWELVE (12) INCHES ABOVE THE CROWN OF THE PIPE. THE WORKING SHALL OCCUR EVERY THREE (3) FEET.
3. ALL WATER SERVICE BRASS FITTINGS ARE REQUIRED TO BE LEAD FREE.
4. ALL EXISTING PLOWM FACILITIES (E VALVES) TO BE OPERATED BY PLOWM PERSONNEL ONLY.

GENERAL SEWER NOTE:

1. SEWER CLEANOUT MINI-MANHOLES ARE REQUIRED ON ALL CLEANOUTS WITHIN PAVEMENT AREAS.

GENERAL LANDSCAPE NOTE:

IF ANY NEW LANDSCAPE MATERIALS ARE INSTALLED AS PART OF THIS PROJECT THEN SOD ONLY WITH NO SHRUBS AND/OR TREES ARE TO BE INSTALLED WITHIN 5' OF ANY WATER METER AND WITHIN 7.5' OF ANY FIRE HYDRANT. TREES CANNOT BE INSTALLED WITHIN 10' OF A WUD WATER OR FORCE MAIN WITHOUT PRIOR PERCWD APPROVAL AND THE INSTALLATION OF A ROOT BARRIER ALSO IF ANY EXISTING TREES ARE LESS THAN 10" MINIMUM OF ANY NEW WATER OR FORCE MAIN A ROOT BARRIER IS REQUIRED TO BE INSTALLED OR TREE RELOCATED/REMOVED.

REVISIONS:

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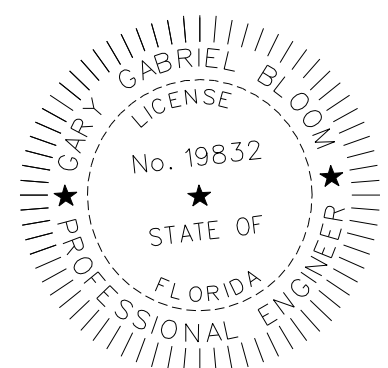
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**Stonebridge Country Club  
Maintenance Yard  
PALM BEACH FLORIDA, 33140**

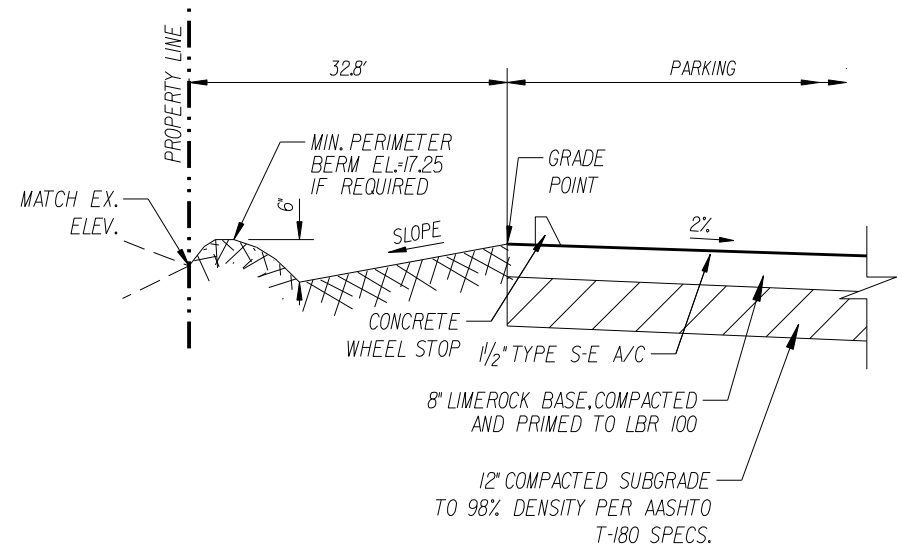
**GGB Engineering, Inc.**

|            |  |
|------------|--|
| DATE:      |  |
| Sept. 2021 |  |
| SIGNED BY: |  |
| G.G.B.     |  |

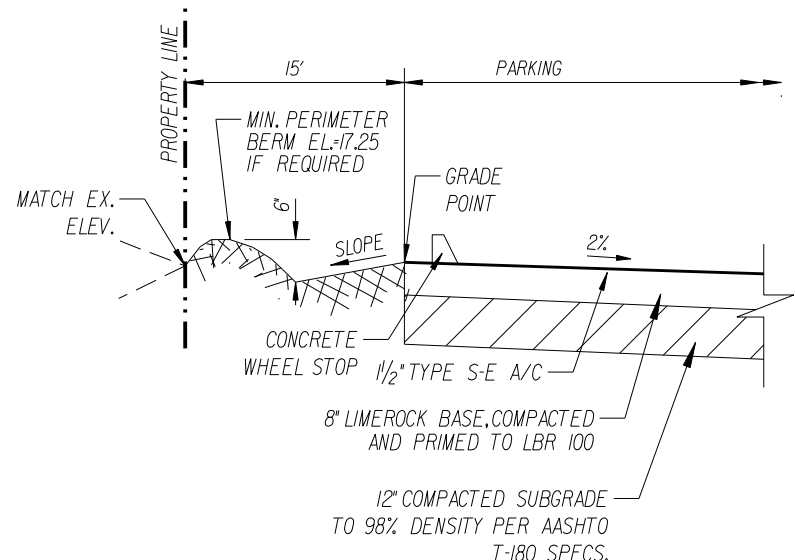
PROJECT  
21-08

SHEET  
WS

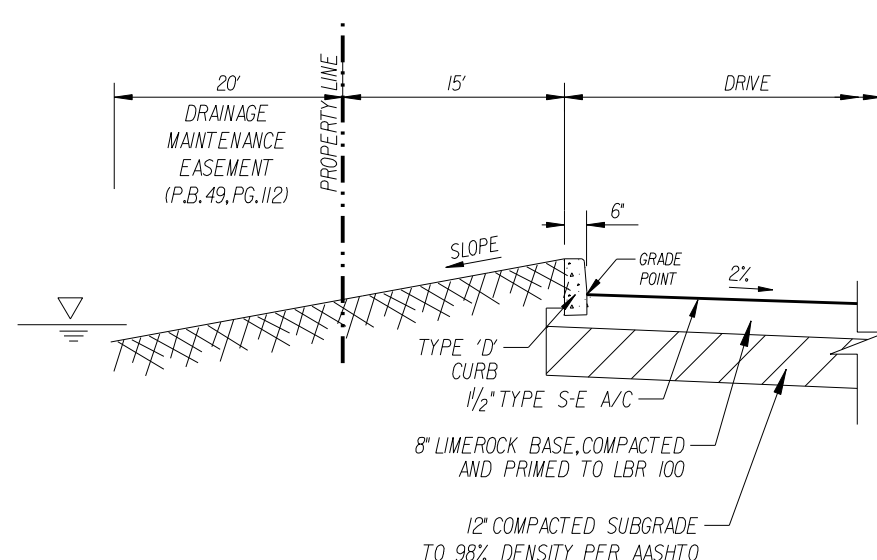
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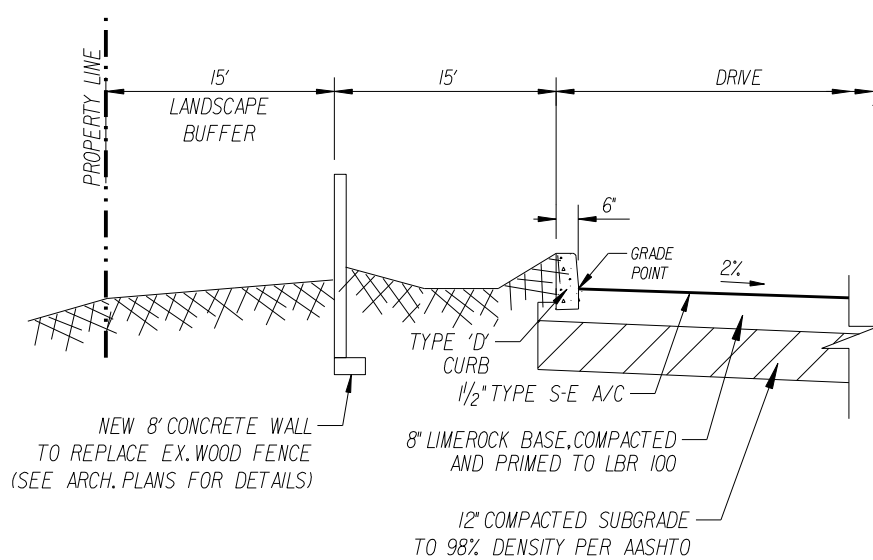
SECTION "A-A"



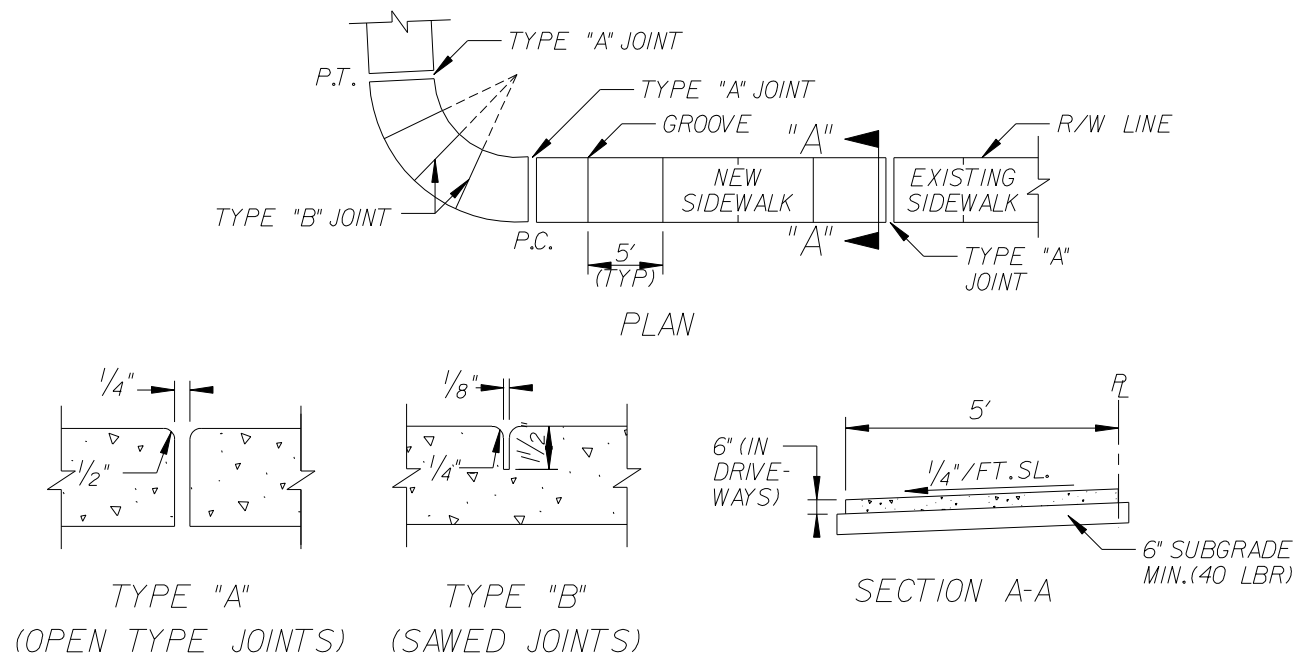
SECTION "B-B"



SECTION "C-C"



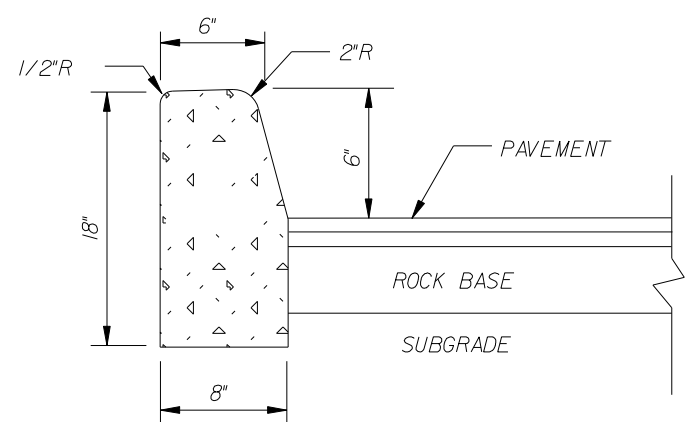
SECTION "D-D"



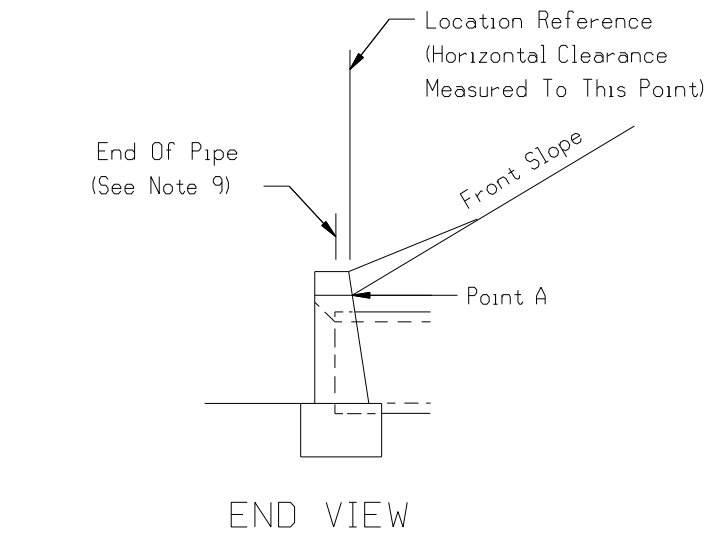
NOTES

1. ALL CONCRETE SHALL BE 3000 PSI, 6" THICK.
2. TYPE "A" JOINT TO BE USED AT P.C. AND P.T. OF CURVES AND JUNCTION OF EXISTING AND NEW SIDEWALK.
3. TYPE "B" JOINT TO BE USED AT 5'-0" CENTER TO CENTER ON SIDEWALKS.
4. TYPE "C" JOINT TO BE USED WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES.
5. SIDEWALK SLOPES SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA).
6. SIDEWALK SHALL BE CONSTRUCTED TO MEET THE ELEVATION OF THE ULTIMATE SECTION.
7. ALL MUCK AND / OR UNSUITABLE MATERIAL MUST BE REMOVED IN ITS ENTIRETY TO 3 FEET BEYOND LIMITS OF SIDEWALK AND REPLACED WITH CLEAN FILL.
8. NO EXPANSION JOINTS SHALL BE PROVIDED IN SW. 40TH AVENUE'S R/W EXCEPT AT P.C. & P.T. OF CURVES.

CONCRETE SIDEWALK DETAIL

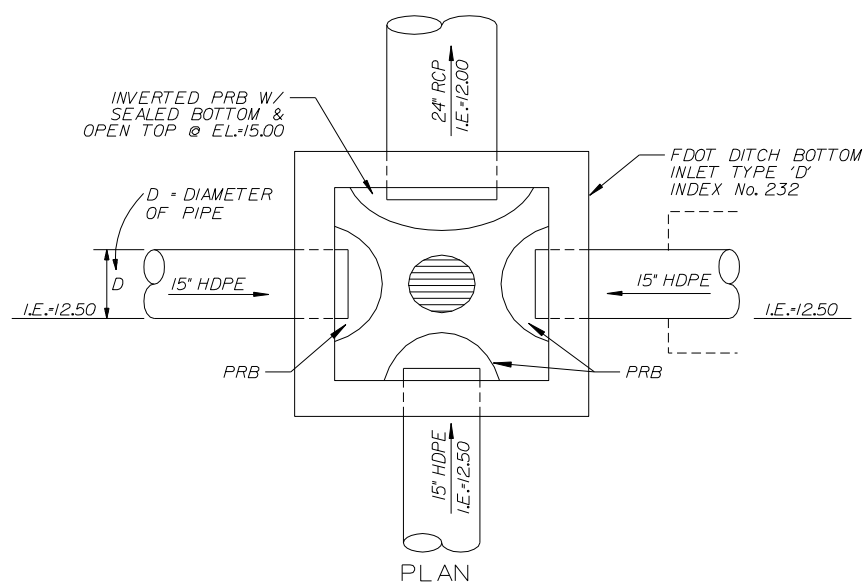


TYPE "D" CURB



1. Position is set by the intersection of the front slope and Point A where this intersection falls outside the clear zone.
2. Where the front slope and Point A intersects inside the clear zone, the endwall is positioned so the location reference point is at the clear zone limit. The front slope is transitioned to the endwall as shown in Index No. 280.

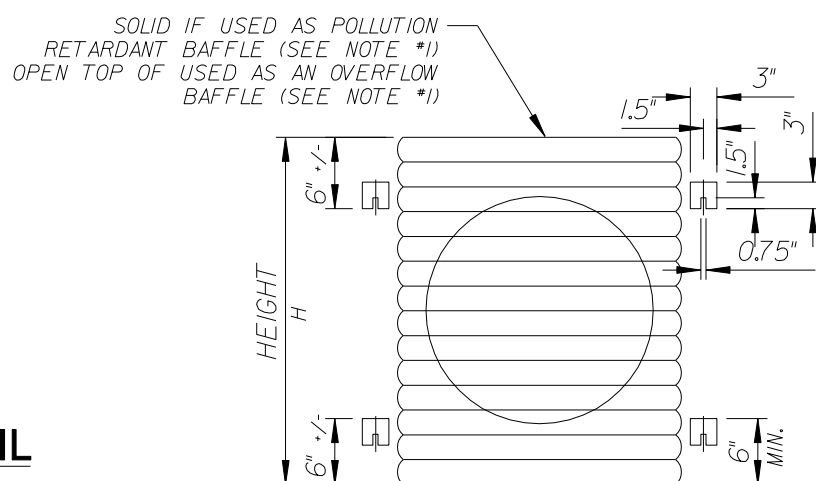
STANDARD LOCATION CONTROL



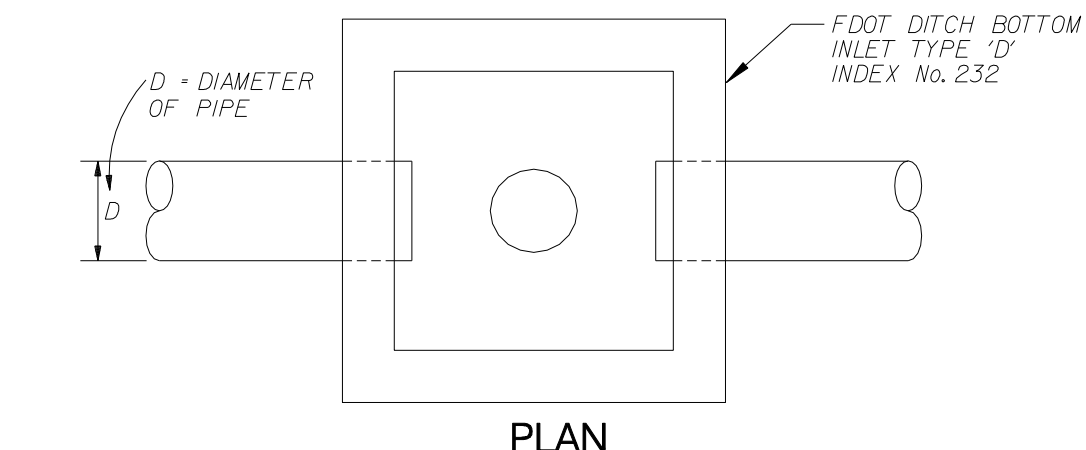
PIPE INSTALLATION AND BEDDING DETAIL

| TABLE "A" |                                                          |                      |
|-----------|----------------------------------------------------------|----------------------|
| PIPE SIZE | DEPTH OF BACKFILL AT WHICH TRENCH WIDTH IS TO BE LIMITED | MAXIMUM TRENCH WIDTH |
| 6"        | 15"                                                      | 2'-6"                |
| 8"        | 15"                                                      | 3'-0"                |
| 10"       | 12"                                                      | 3'-0"                |
| 12"       | 12"                                                      | 3'-3"                |
| 15"       | 12"                                                      | 3'-6"                |
| 18"       | 12"                                                      | 3'-9"                |
| 24"       | 12"                                                      | 4'-3"                |
| 30"       | 12"                                                      | 4'-9"                |

DIMENSIONS SHOWN APPLY TO ALL FOUNDATIONS



POLLUTION RETARDANT BAFFLE

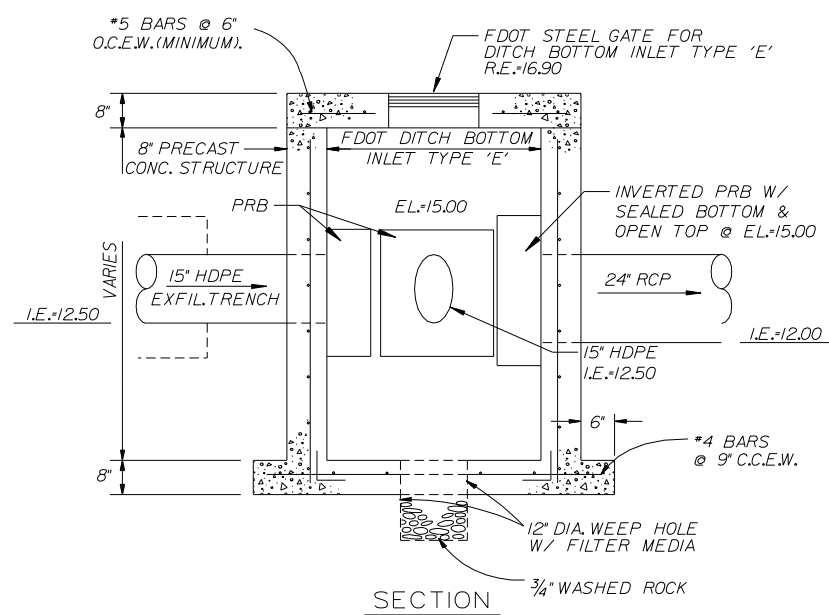


NOTES

1. CAST TOP SLAB TO FIT WALL USED.
2. PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4'.
3. MAXIMUM OPENING FOR PIPE SHALL BE MAX. REQUIRED O.D. - 6'.
4. USE 4000 PSI CONCRETE (MINIMUM)

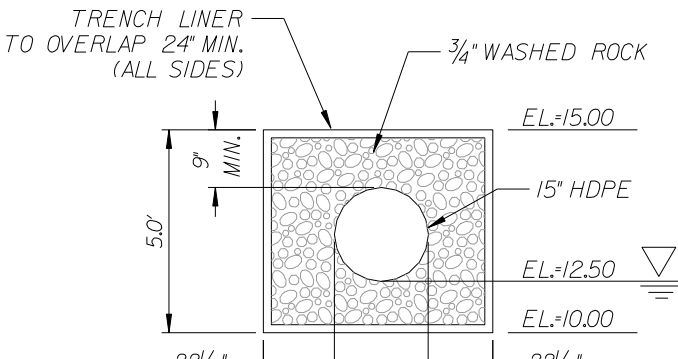
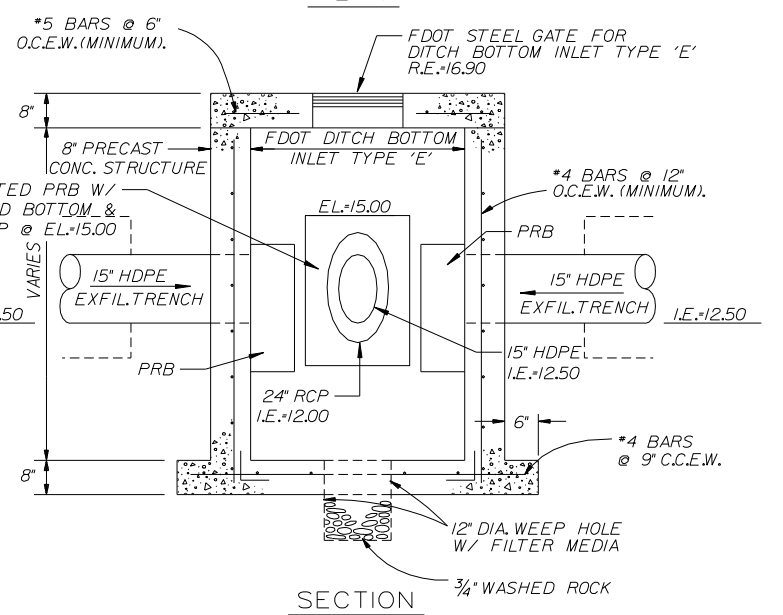
FDOT DITCH BOTTOM INLET TYPE 'D'

FDOT INDEX No. 232

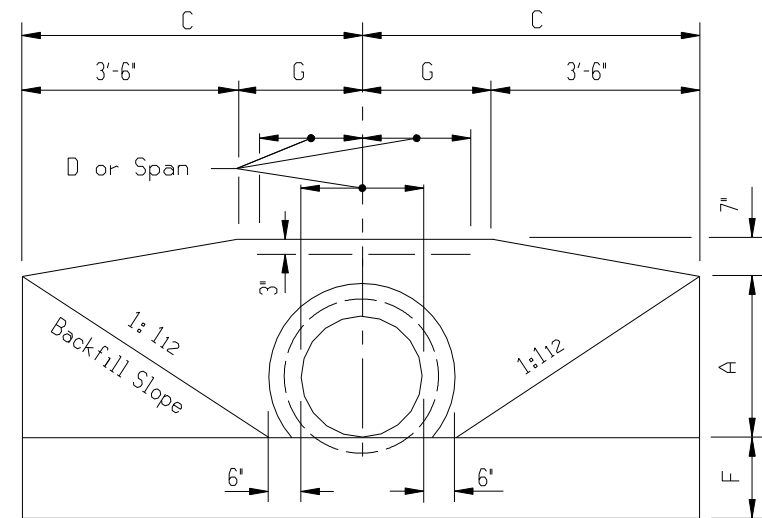


FDOT DITCH BOTTOM INLET TYPE 'D' CONTROL STRUCTURE No. 3

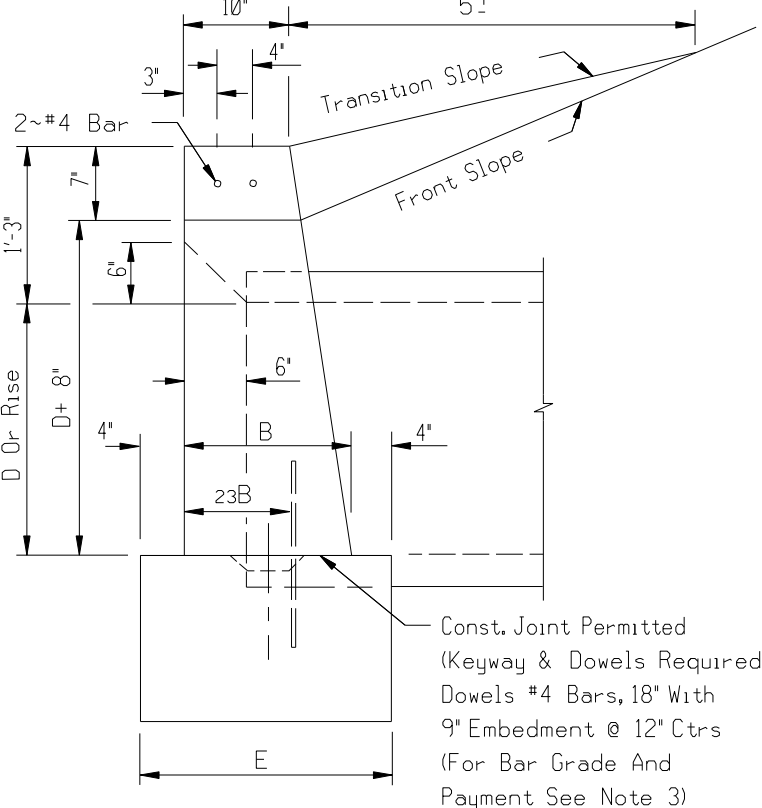
FDOT INDEX No. 232



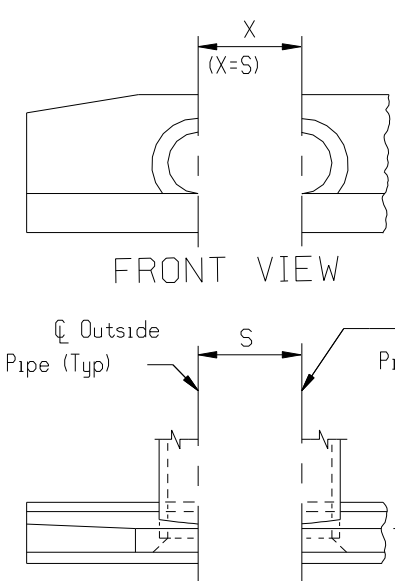
EXFILTRATION TRENCH DETAIL



TOP VIEW



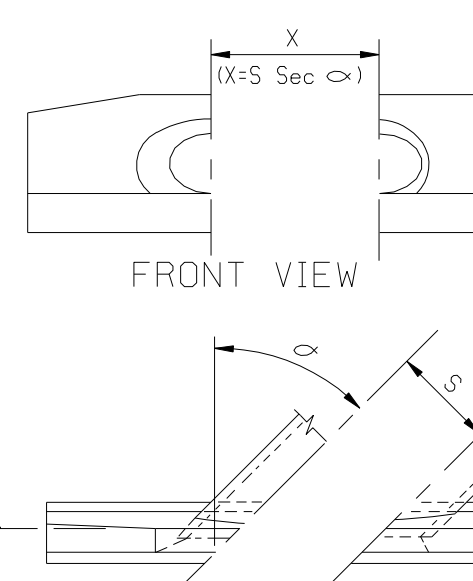
END VIEW (ENLARGED)



FRONT VIEW

TOP VIEW

NORMAL PIPE



FRONT VIEW

TOP VIEW

SKewed PIPE

LEGEND

- O Pipe Skew
- S Center To Center Pipe Spacing
- X Centerline To Centerline Dimension At Face Of Headwall

PIPE AND SPACING FOR MULTIPLE PIPE  
ENDWALL POSITIONS FOR SINGLE AND MULTIPLE

STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE DETAIL

FDOT INDEX No. 250

| REVISIONS: |  |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|
| 1.         |  |  |  |  |  |  |  |
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New York Design  
Collaborative Inc.  
11090 Clover Leaf Circle  
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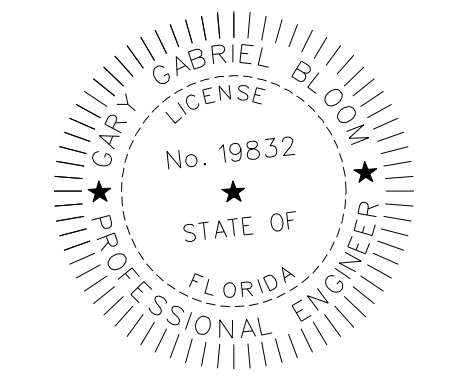
Stonebridge Country Club  
Maintenance Yard  
Palm Beach  
FLORIDA, 33140

CONSTRUCTION DETAILS

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CONSTRUCTION MANAGERS  
FLORIDA REGISTRATION No. 818  
2899 Stirling Road, Suite C-202  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8855

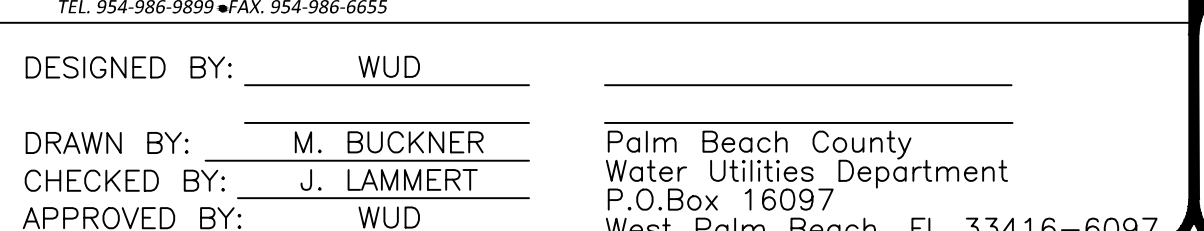
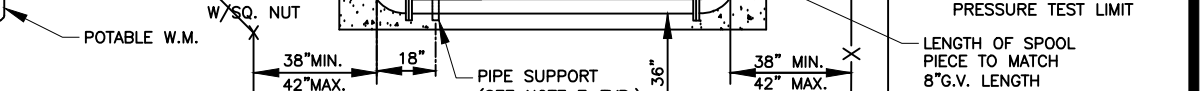
DATE: Sept. 2021  
DESIGNED BY: G.C.B.  
SCALE: N.T.S.  
DRAWN BY: M.M.

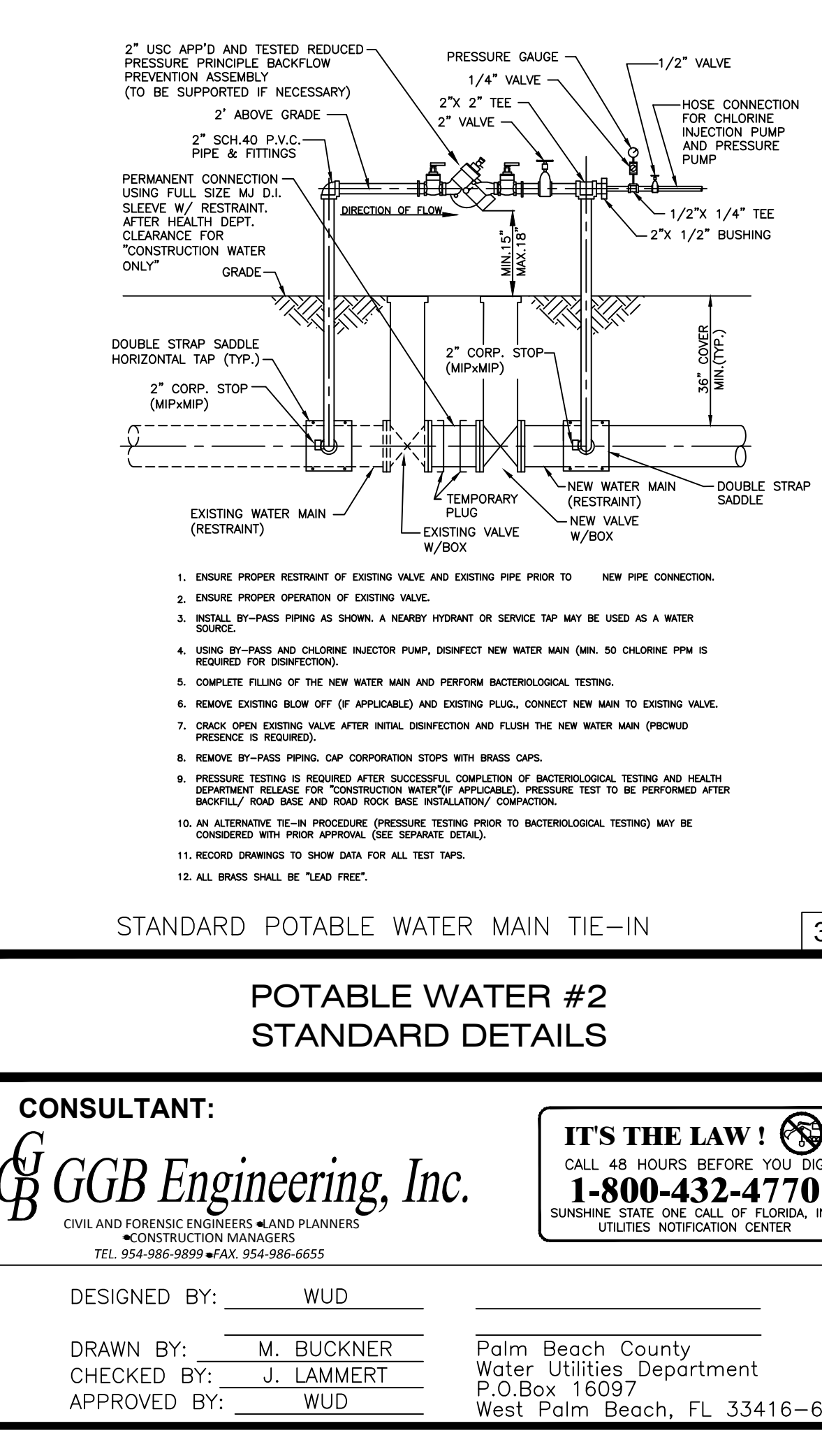
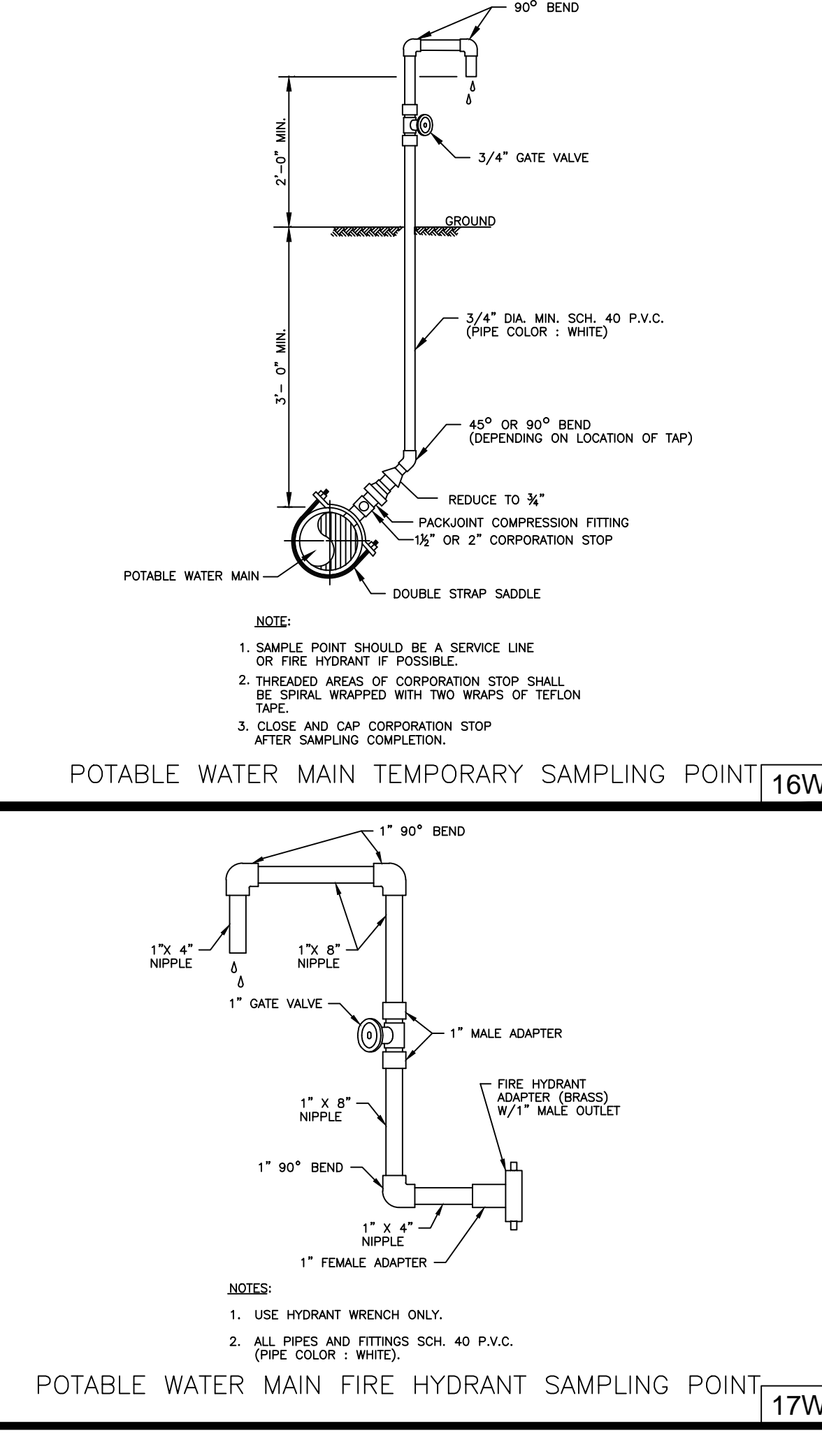
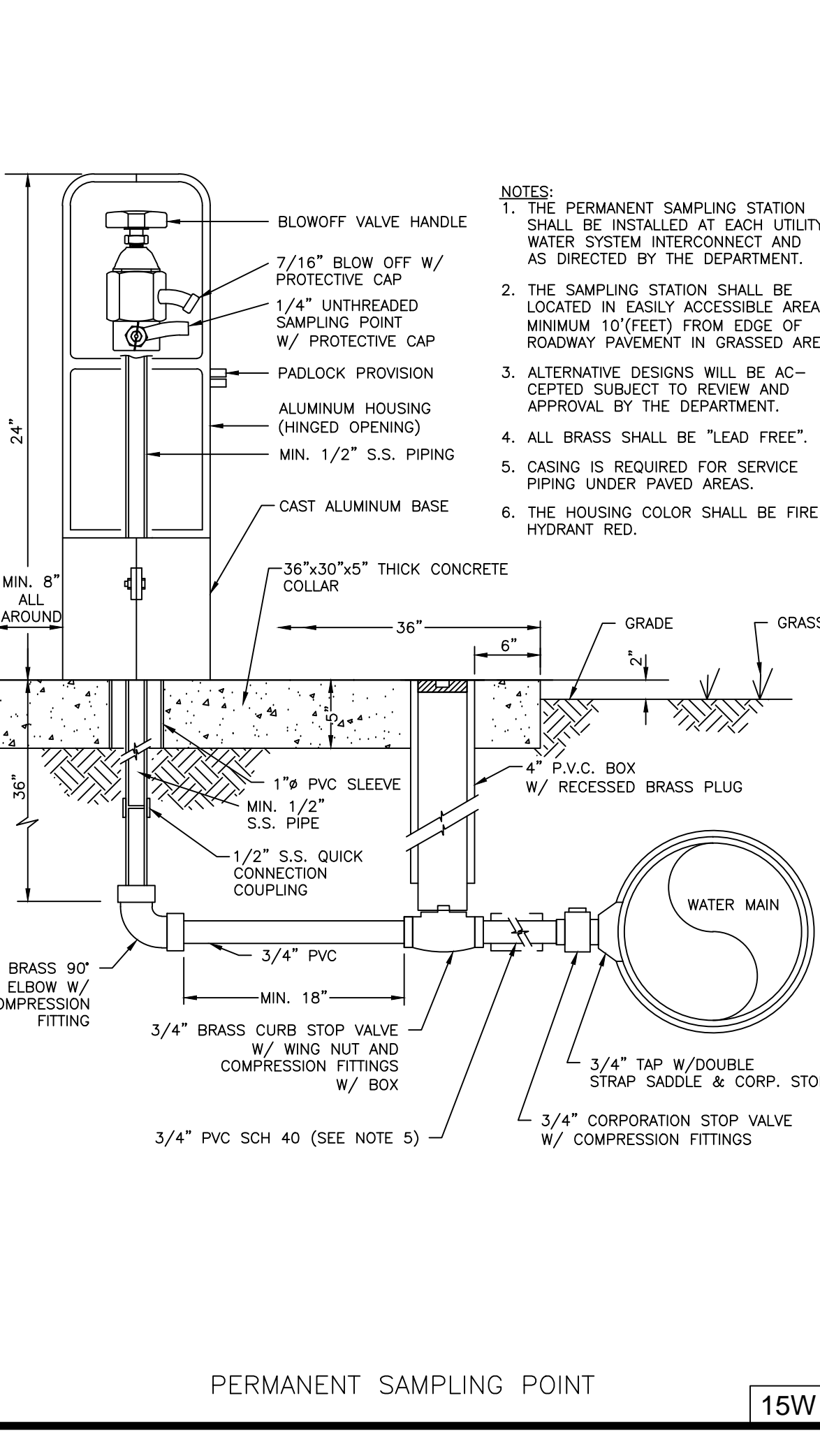
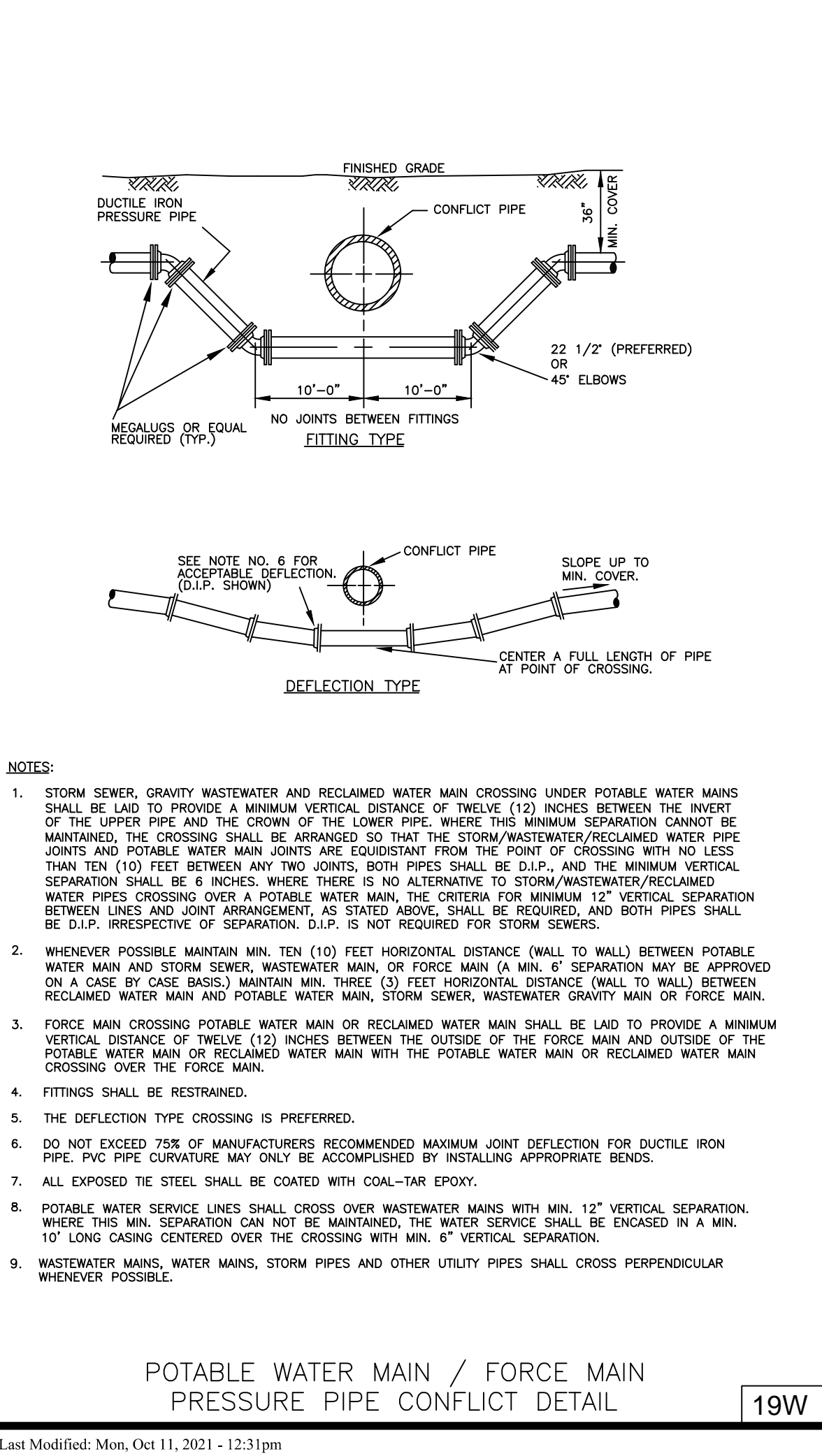
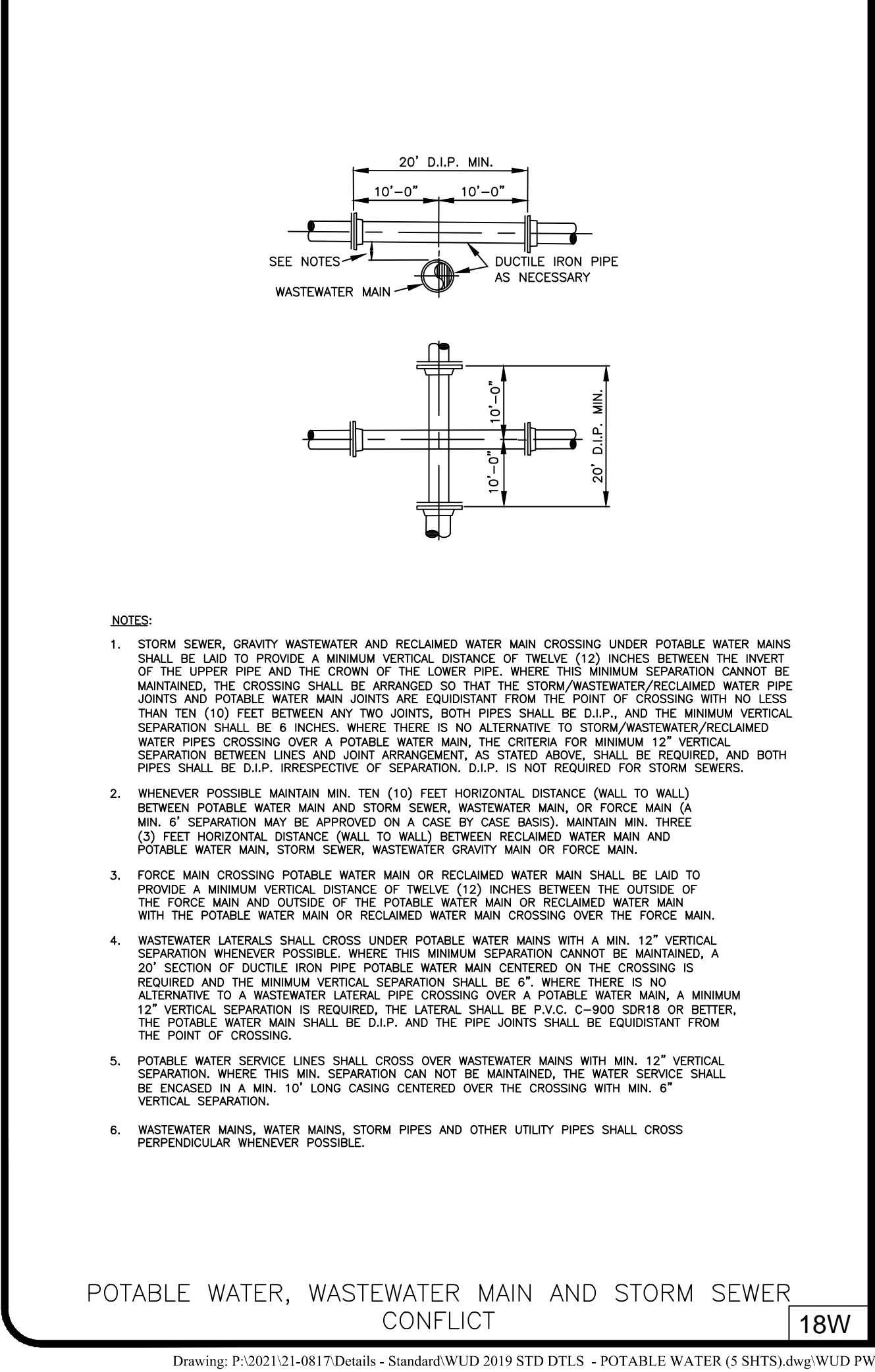
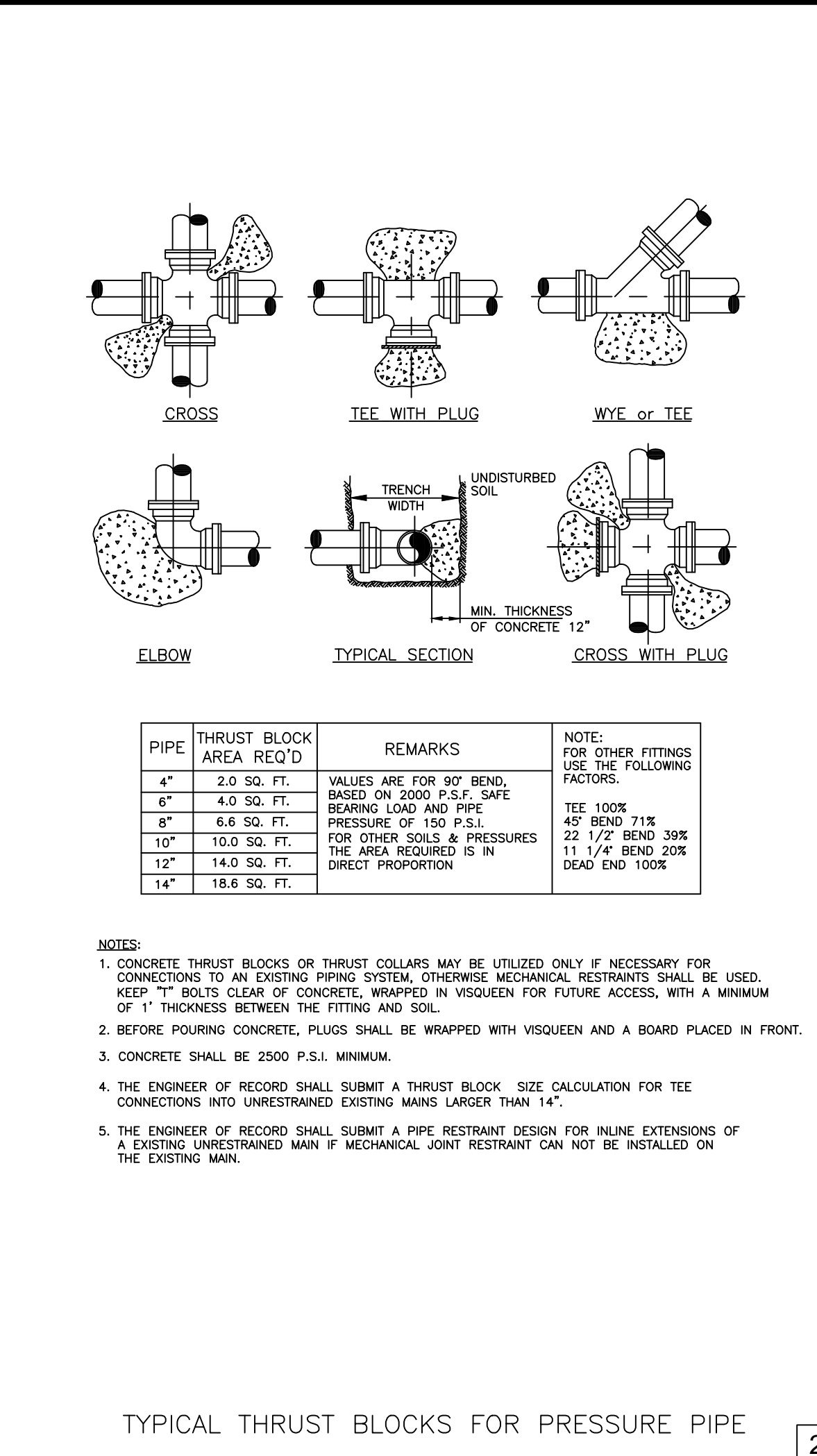
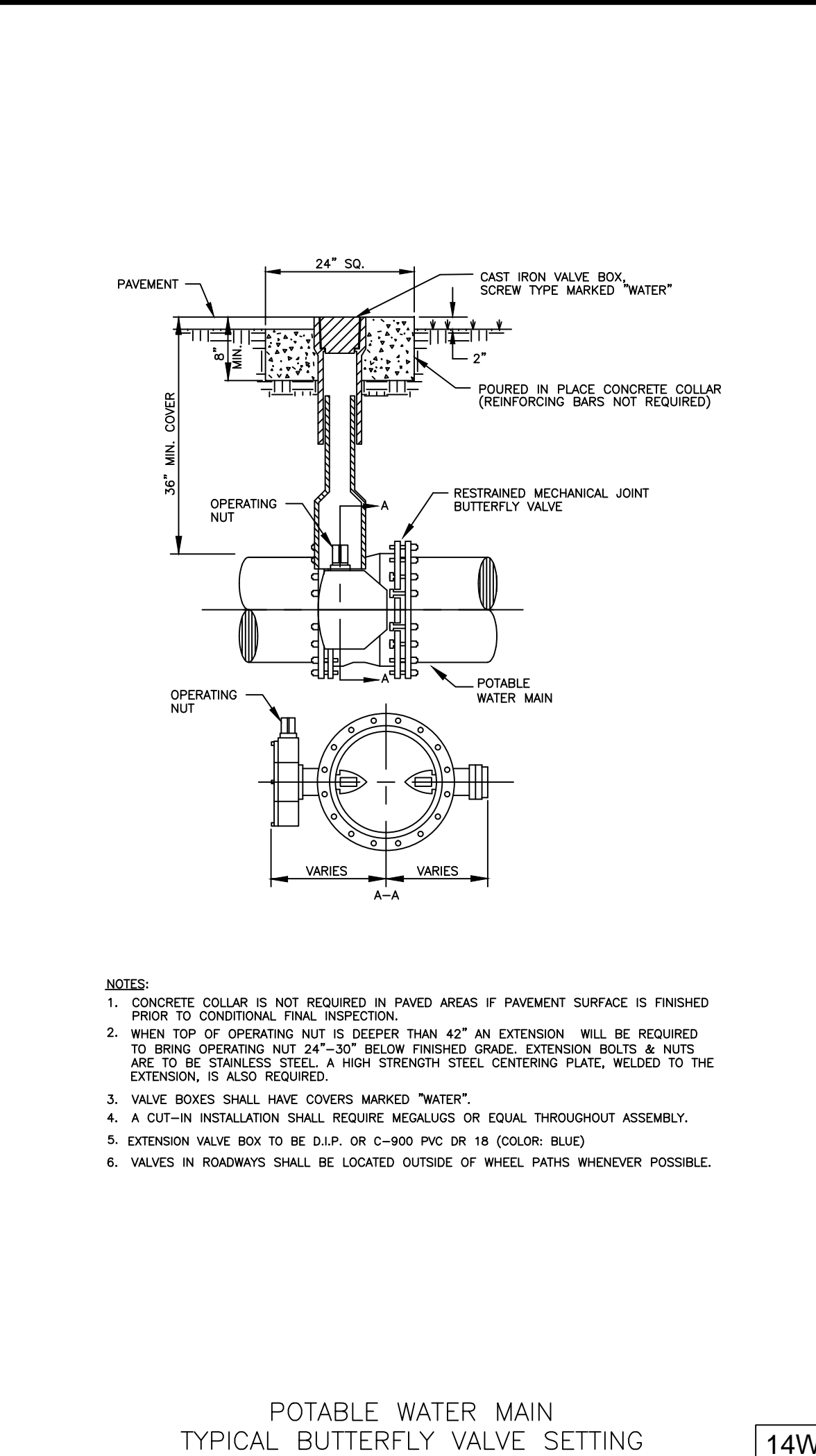
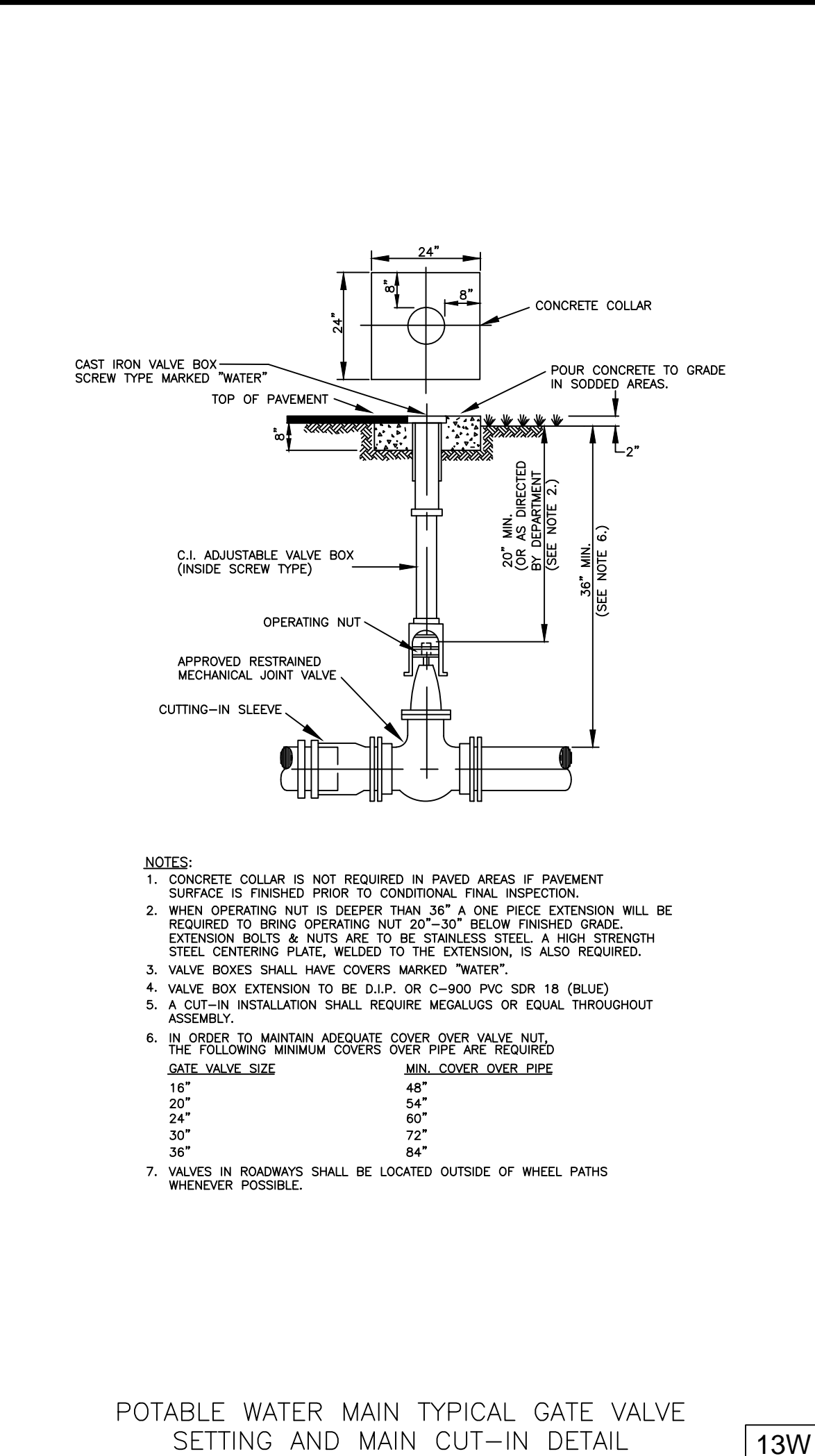
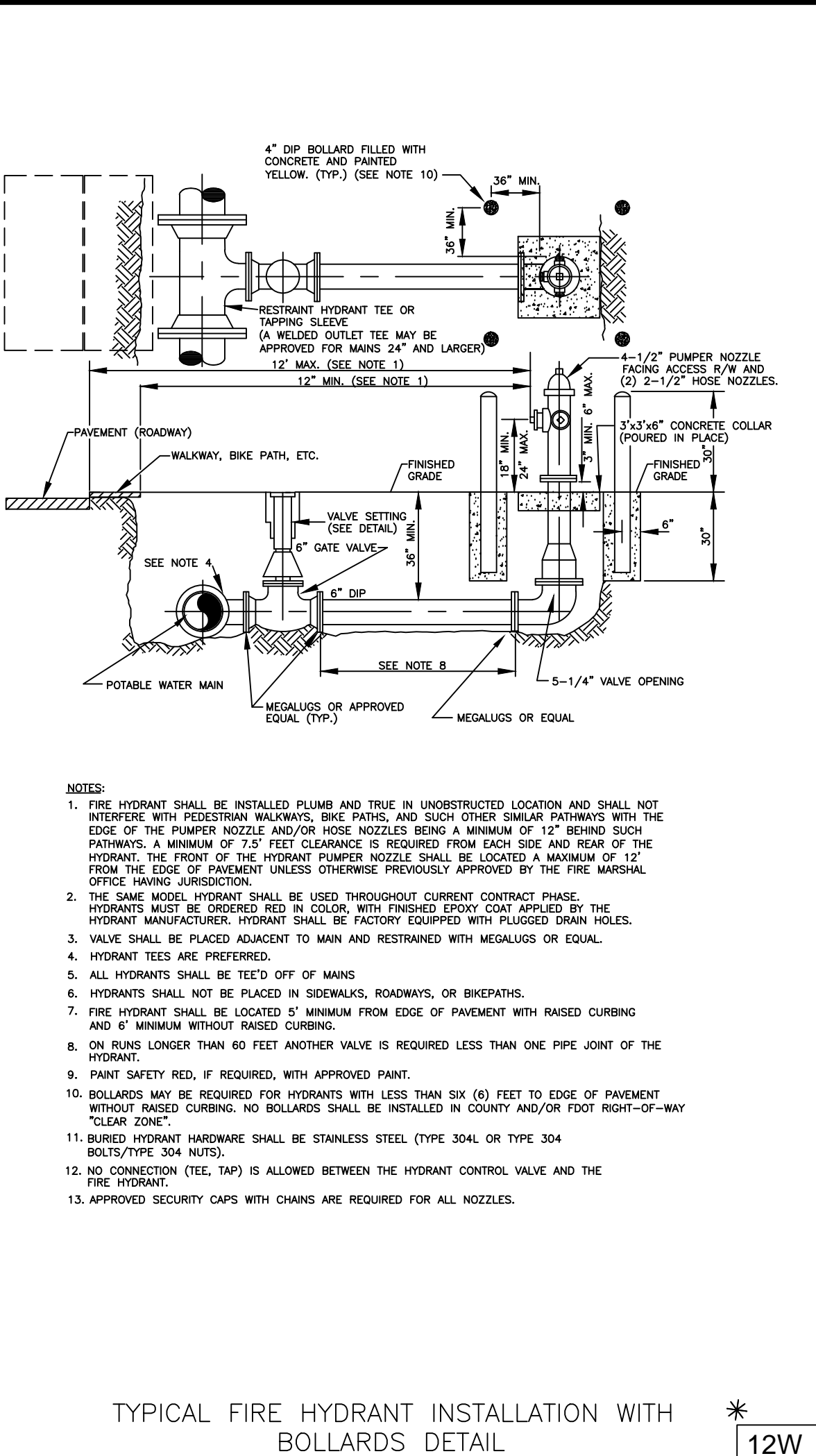
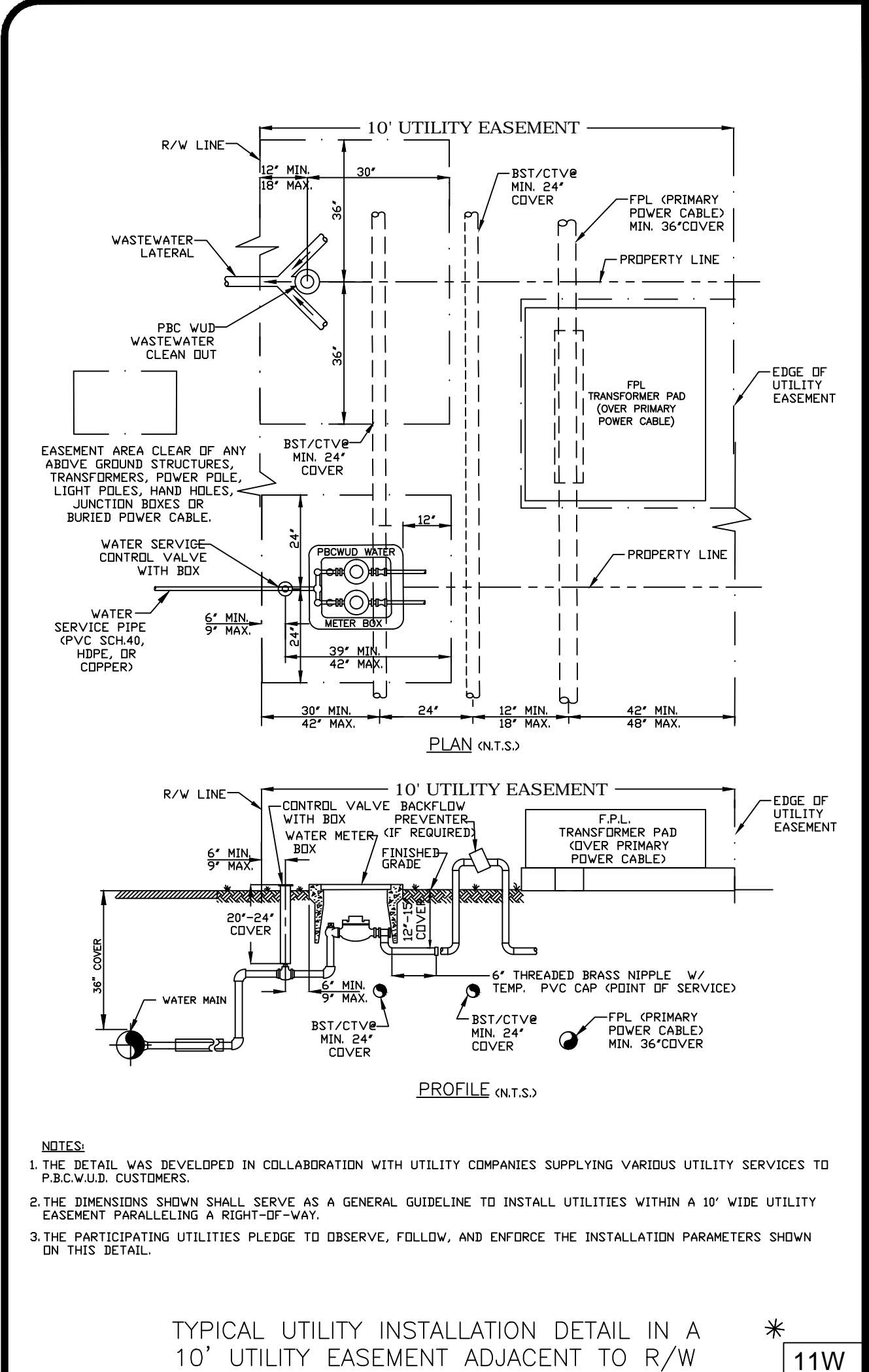
PROJECT NO. 21-0817  
SHEET DT1



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01/28/2016





CONSULTANT:

**GGB Engineering, Inc.**

CIVIL AND FORENSIC ENGINEERS AND PLANNERS  
CONSTRUCTION MANAGERS  
TEL 561-986-9897 FAX 561-986-6655

DESIGNED BY: WUD

DRAWN BY: M. BUCKNER  
CHECKED BY: J. LAMMERT  
APPROVED BY: WUD

Palm Beach County  
Water Utilities Department  
P.O. Box 16097  
West Palm Beach, FL 33416-6097

Oct 11, 2021

PROJECT NO. XX-XXX

STONEBRIDGE COUNTRY CLUB  
MAINTENANCE YARD

PALM BEACH COUNTY  
FLORIDA

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
P.O. BOX 16097  
WEST PALM BEACH, FL 33416  
(561)463-6000

BY: J.L.L.

DATE: JUNE 2019

NO. 1

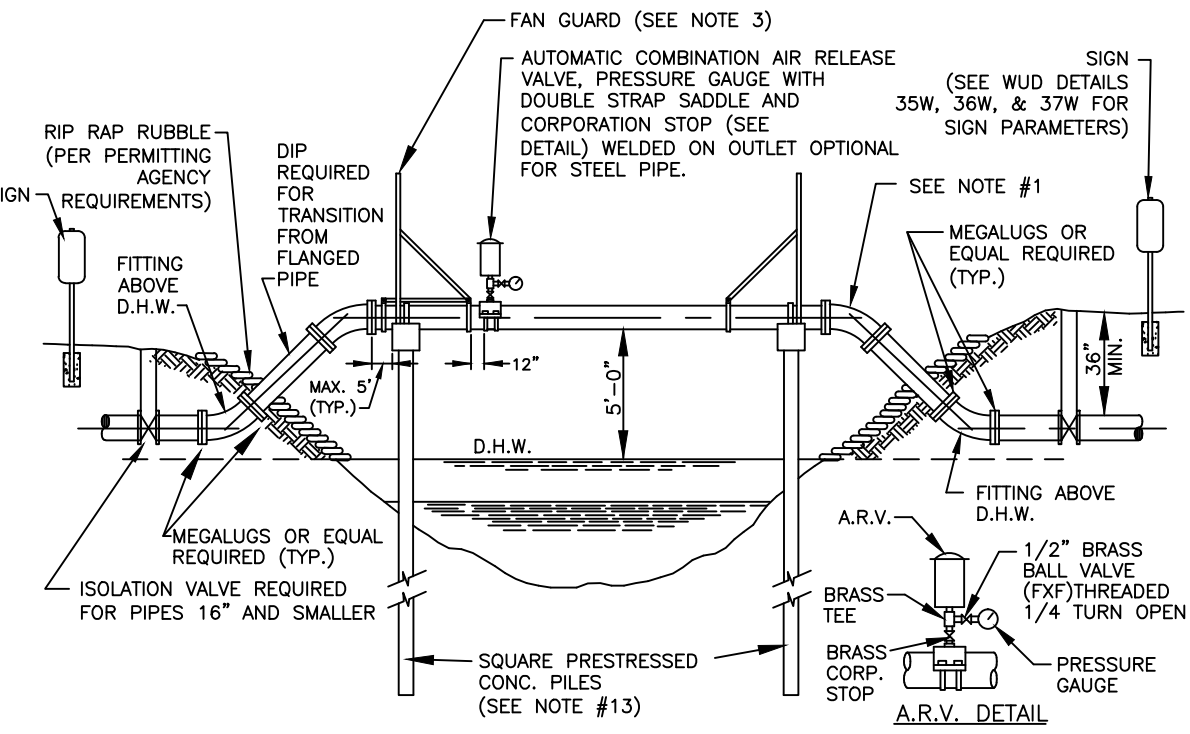
REVISION / REMARKS

GENERAL REVISION

STD DETAILS

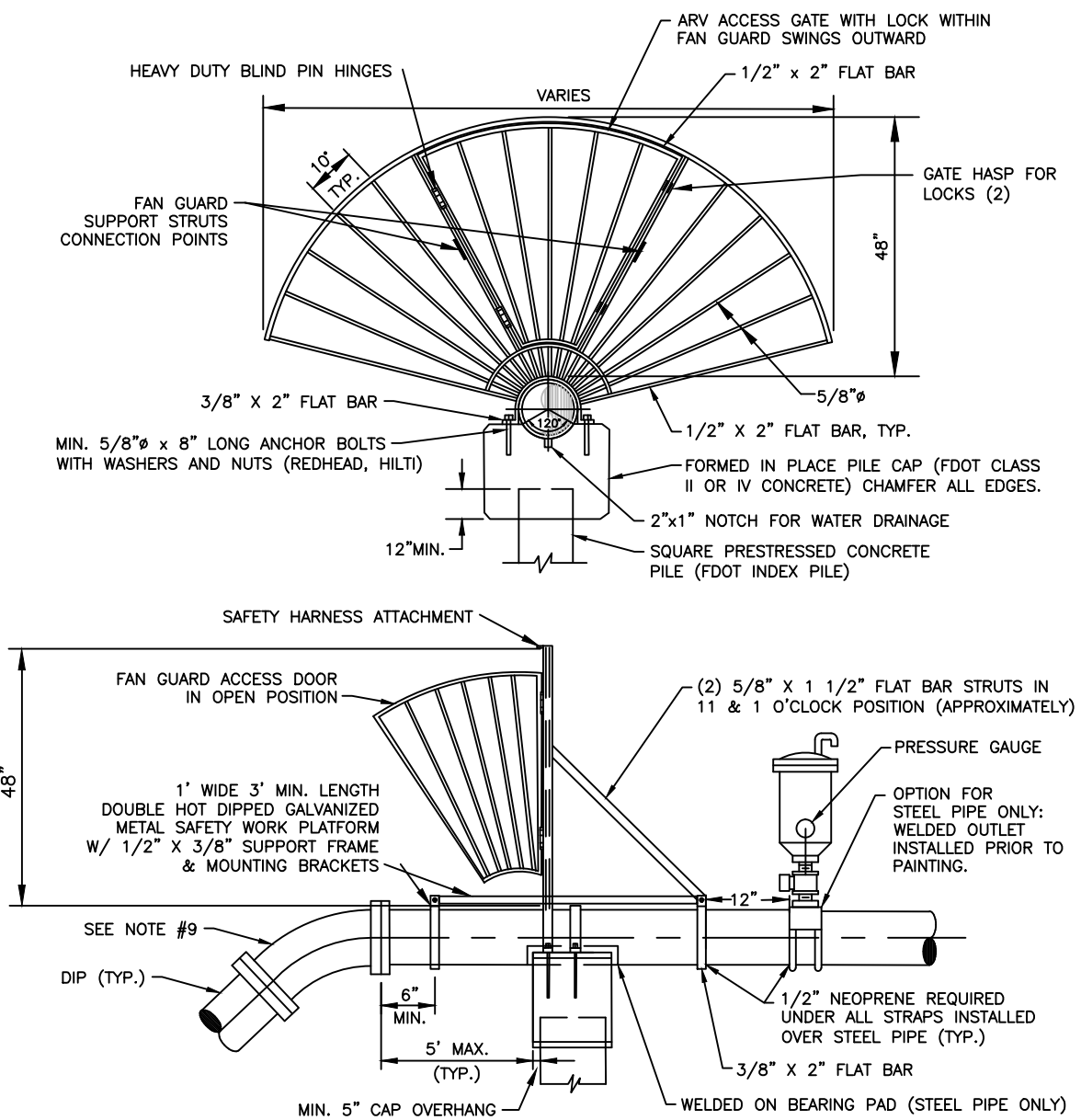
SHEET NUMBER CD2 OF CD5

SEAL



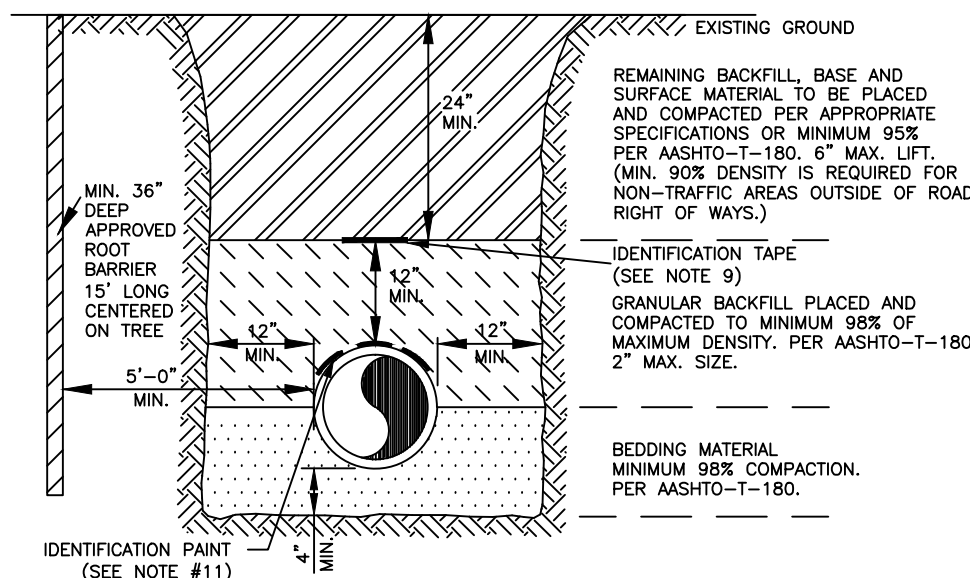
- NOTES:**
- ALL EXPOSED PIPE SHALL BE DUCTILE IRON OR PREFABRICATED STEEL WITH FLANGED FITTINGS AND PROFILED GASKETS. RETAINER GLANDS AND UNFLANGE TYPE FITTINGS ARE NOT TO BE SUBSTITUTED FOR FLANGED FITTINGS. PREFABRICATED STEEL PIPE MAY INCORPORATE WELDED ON LONG RADIUS UPPER BENDS. PREFABRICATED FLANGED PIPE SHALL BE FACTORY TESTED.
  - SPAN LENGTHS AS REQUIRED BY PERMITTING AGENCY
  - FAN GUARDS ARE REQUIRED. SEE FAN GUARD/PILE CAP DESIGN DETAILS FOR ADDITIONAL REQUIREMENTS. ACCESS PLATFORM AND GATE REQUIRED ON ARV SIDE ONLY.
  - ALL EXPOSED PIPING SHALL BE PAINTED AS SPECIFIED IN THE APPROVED MATERIAL LIST.
  - ALL HARDWARE SHALL BE PAINTED WITH COAL-TAR EPOXY.
  - PIPE SHALL BE CRADLED ON 1/2\"/>
  - PIE CRADLE IN CAP SHALL CONTACT 1/2\"/>
  - SHOW EXISTING CANAL CROSS SECTION ULTIMATE CANAL SECTION AND RELEVANT ELEVATIONS AND DISTANCES ON A TO SCALE DETAIL DRAWING.
  - PILE LIFT CABLE SHALL BE REMOVED BELOW SURFACE; HOLE SHALL BE FILLED WITH EPOXY CEMENT.
  - THREADED AREAS OF BRASS FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO WRAPS OF TEFLON TAPE.
  - THE PRESSURE GAUGE SHALL FACE THE CLOSEST FAN GUARD.
  - THE PRESSURE GAUGE SHALL BE \"ASHCROFT NO. 45-1009A\" OR APPROVED EQUIV.
  - THE PILES AND CAP DESIGN SHALL BE SHOWN ON TO SCALE SIGNED AND SEALED DETAIL DRAWINGS. (MIN. 12\"/>
  - STEEL PIPE SHALL HAVE WELDED ON BEARING PADS EXTENDING MIN. 1\"/>

POTABLE WATER MAIN TYPICAL AERIAL CANAL CROSSING - SINGLE PIPE (SINGLE PILES) \* 26W



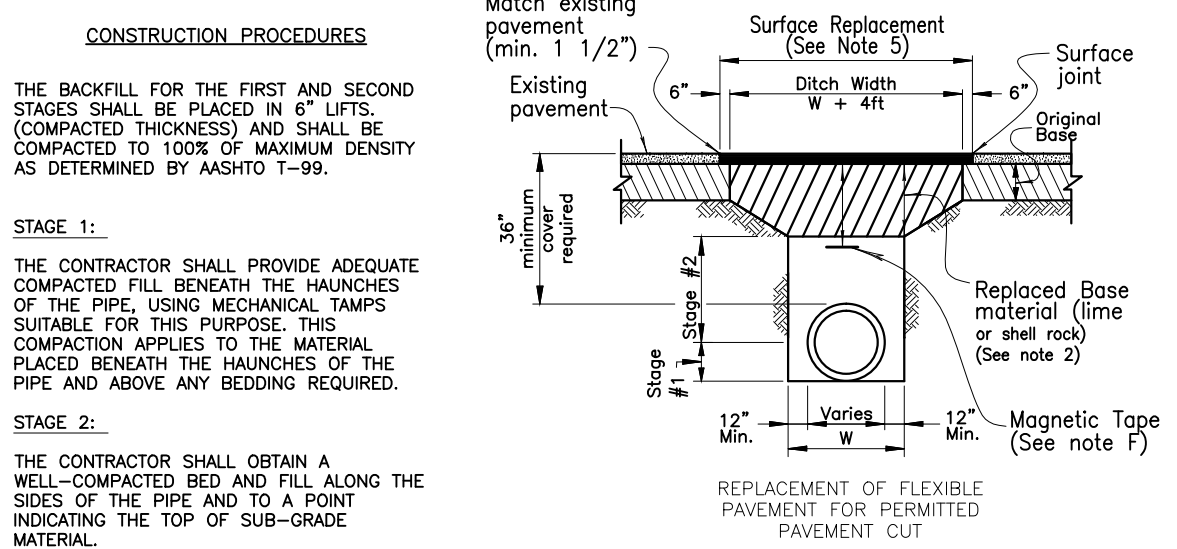
- NOTES:**
- FAN GUARDS SHALL BE PLACED AT EACH END OF CANAL CROSSING.
  - HARDWARE SHALL BE PAINTED WITH COAL TAR EPOXY.
  - FAN GUARD WITH HARDWARE SHALL BE FABRICATED FROM DOUBLE HOT DIPPED GALVANIZED STEEL.
  - SHOP DRAWINGS FOR FANGUARDS, CAPS, AND PILES MUST BE SUBMITTED TO PROGRAM FOR REVIEW AND APPROVAL PRIOR TO PRE-CONSTRUCTION MEETING.
  - REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60. MIN. 2\"/>
  - SEE \"TYPICAL CANAL CROSSING DETAIL\" FOR ADDITIONAL REQUIREMENTS.
  - NO WELDING OF REBAR TO REBAR OR REBAR TO PILE STRANDS SHALL BE ALLOWED.
  - DESIGN DRAWINGS ARE REQUIRED.
  - LONG RADIUS WELDED ON UPPER BENDS ARE ACCEPTABLE FOR STEEL PIPE.
  - IF A PILE/CAP/STEEL CONNECTION IS REQUIRED BY DESIGNING ENGINEER, MIN. (4) #8 REINFORCEMENT BARS SHALL BE DRILLED AND DOWELED (EPOXYED) MIN. 18\"/>
  - ACCESS PLATFORM AND GATE REQUIRED ON ARV SIDE ONLY.

FAN GUARD/ PILE CAP DESIGN SINGLE PIPE (SINGLE PILES) 27W



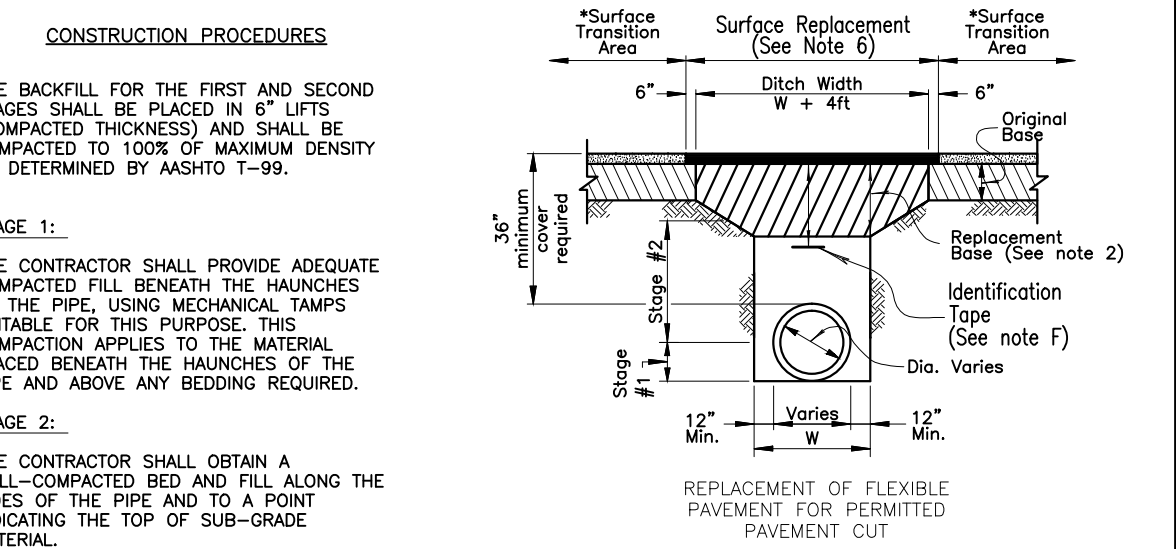
- NOTES:**
- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIME/ROCK 3/8\"/>
  - THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
  - THE PIPE SHALL BE PLACED IN A DRY TRENCH.
  - BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK AND DEBRIS.
  - DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400\"/>
  - THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ALL TRENCH SAFETY LAWS AND REGULATIONS.
  - SEE SEPARATE DETAILS FOR \"PIPE INSTALLATION UNDER EXISTING PAVEMENT - OPEN CUT\".
  - THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT/CONTRACT DOCUMENTS.
  - APPROVED MAGNETIC TAPE IS REQUIRED FOR: ALL POTABLE WATER MAINS, FORCE MAINS AND RECLAIMED WATER. THE TAPE SHALL BE INSTALLED MAX. 24\"/>
  - ROOT BARRIER IS REQUIRED FOR APPROVED TRENCH INSTALLATION CLOSER THAN 10 FEET FROM UTILITY FACILITIES.
  - CONTINUOUS 4\"/>
  - PERMANENT ABOVE GROUND UTILITY MARKER SHALL BE INSTALLED IF REQUIRED BY PROPERTY OWNER GRATING THE PIPE INSTALLATION PERMIT.
  - FOR PIPE INSTALLATIONS IN ROAD RIGHTS-OF-WAY, ROAD OWNER'S PERMIT SPECIFICATIONS SHALL APPLY.

TYPICAL TRENCH DETAIL/ ROOT BARRIER INSTALLATION DETAIL 23W



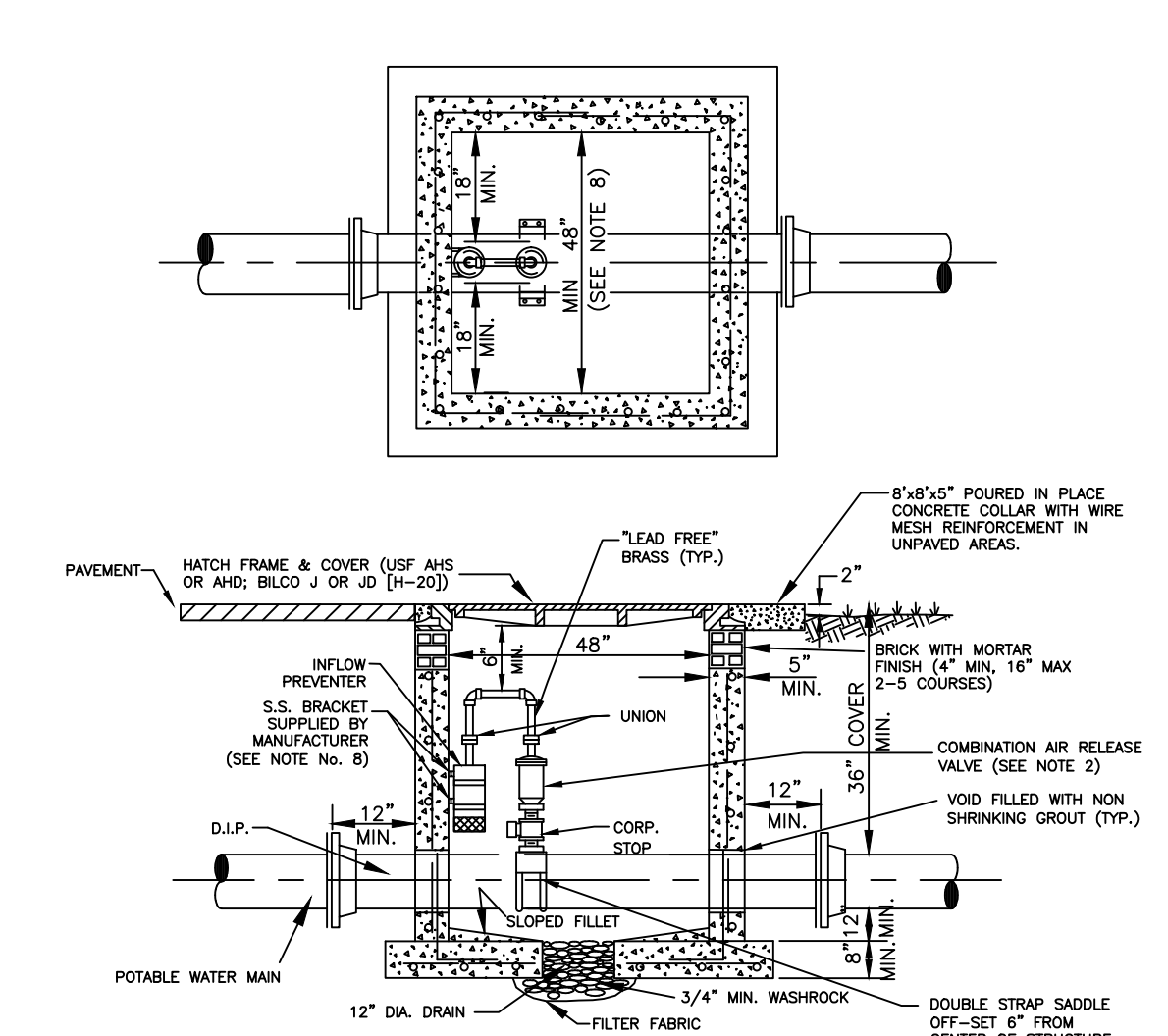
- CONSTRUCTION PROCEDURES**
- THE BACKFILL FOR THE FIRST AND SECOND STAGES SHALL BE PLACED IN 6\"/>
- STAGE 1:**
- THE CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED.
- STAGE 2:**
- THE CONTRACTOR SHALL OBTAIN A WELL-COMPACTED BED AND FILL ALONG THE SIDES OF THE PIPE AND TO A POINT INDICATING THE TOP OF SUB-GRADE MATERIAL.
- CONSTRUCTION NOTES**
- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIME/ROCK 3/8\"/>
  - REPLACED BASE MATERIAL OVER DITCH SHALL BE 16\"/>
  - ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED AND BUTT-JOINTED.
  - BASE MATERIAL SHALL BE PLACED IN TWO OR THREE LAYERS (6\"/>
  - SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE OR 1 1/2\"/>
  - PIPE SHALL BE PLACED IN A DRY TRENCH.
- GENERAL NOTES**
- ALL ROADWAY REPAIR WORK SHALL BE PERFORMED IN CONFORMANCE WITH APPLICABLE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND COUNTY PMM EL-0-3606.
  - DENSITY TESTS SHALL BE TAKEN IN 1 FT LIFTS ABOVE THE PIPE AT INTERVALS OF 400 FT MAXIMUM (1 SET MINIMUM) OR AS DIRECTED BY THE CONSTRUCTION COORDINATION DIVISION. RESULTS SHALL BE SUBMITTED TO CONSTRUCTION COORDINATION DIVISION AS PART OF THEIR FIELD REVIEW.
  - ENGINEER-OF-RECORD SHALL PROVIDE FULL-TIME INSPECTION DURING THE ENTIRETY OF THE OPEN-CUT OPERATION, BEGINNING WITH THE EXCAVATION AND CONTINUING THROUGH THE COMPLETION OF THE PAVING.
  - IF THE PAVEMENT IS NOT COMPLETELY RESTORED IMMEDIATELY FOLLOWING THE OPEN CUT, A SMOOTH TEMPORARY PATCH (MINIMUM 125\"/>
  - FOR THE FINAL RESTORATION, THE ROAD SHALL BE MILLED AND RESURFACED WITH 1-1/2\"/>
  - APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAIN PRESSURE PIPES AND CONDUIT IN THE COUNTY'S RIGHT-OF-WAY. INSTALL TAPE 24\"/>
  - CONTINUOUS 4\"/>

OPEN CUT PIPE INSTALLATION NON-THOROUGHFARE ROAD 24W



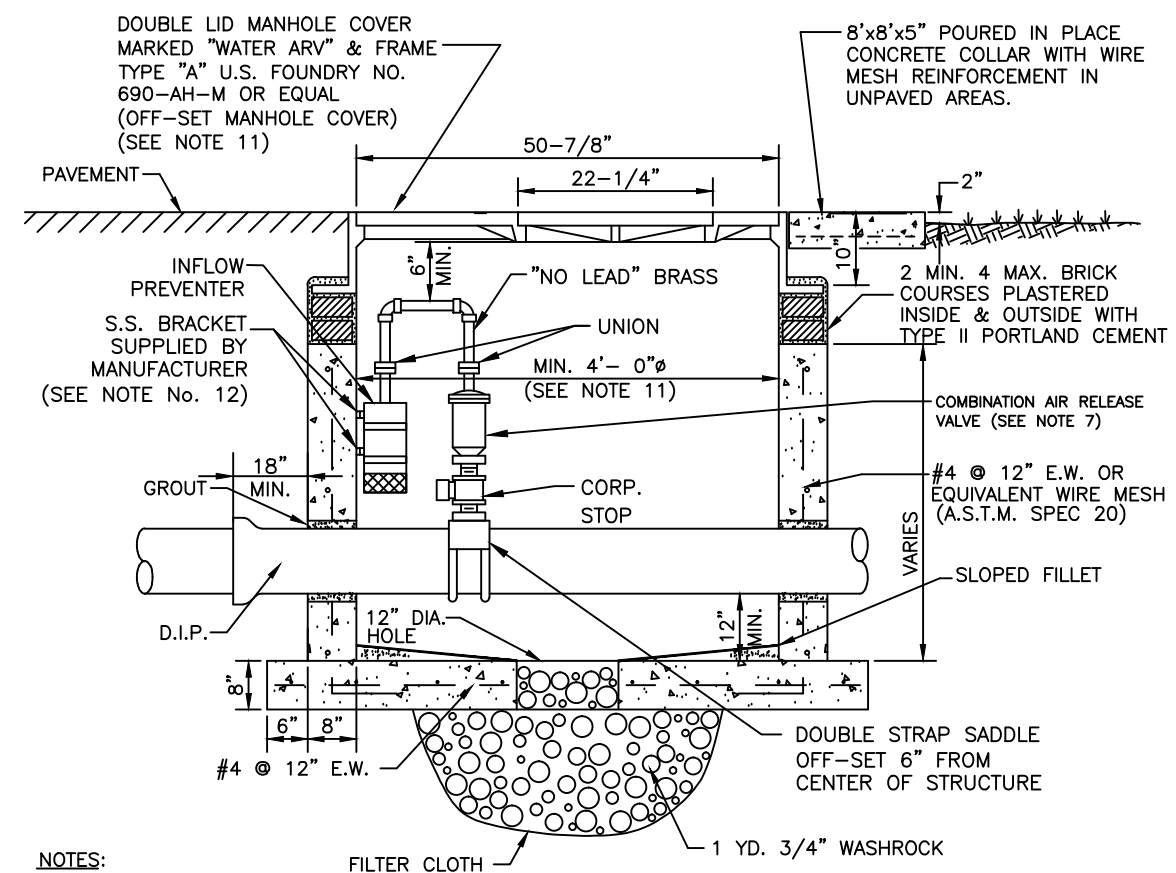
- CONSTRUCTION PROCEDURES**
- THE BACKFILL FOR THE FIRST AND SECOND STAGES SHALL BE PLACED IN 6\"/>
- STAGE 1:**
- THE CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTED FILL BENEATH THE HAUNCHES OF THE PIPE, USING MECHANICAL TAMPS SUITABLE FOR THIS PURPOSE. THIS COMPACTION APPLIES TO THE MATERIAL PLACED BENEATH THE HAUNCHES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED.
- STAGE 2:**
- THE CONTRACTOR SHALL OBTAIN A WELL-COMPACTED BED AND FILL ALONG THE SIDES OF THE PIPE AND TO A POINT INDICATING THE TOP OF SUB-GRADE MATERIAL.
- CONSTRUCTION NOTES**
- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIME/ROCK 3/8\"/>
  - REPLACED BASE MATERIAL OVER DITCH SHALL BE 16\"/>
  - ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED AND BUTT-JOINTED.
  - BASE MATERIAL (PER ROADWAY PRODUCTION DESIGN STANDARDS) SHALL BE PLACED IN TWO OR THREE LAYERS (6\"/>
  - SURFACE TRANSITION AREA (SEE PLANS FOR LOCATION). OVERLAY OR MILL/RESURFACE FOR A DISTANCE OF 500\"/>
  - 1\"/>
  - PIPE SHALL BE PLACED IN A DRY TRENCH.
- GENERAL NOTES**
- ALL ROADWAY REPAIR WORK SHALL BE PERFORMED IN CONFORMANCE WITH APPLICABLE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND COUNTY PMM EL-0-3606.
  - DENSITY TESTS SHALL BE TAKEN IN 1 FT LIFTS ABOVE THE PIPE AT INTERVALS OF 400 FT MAXIMUM (1 SET MINIMUM) OR AS DIRECTED BY THE CONSTRUCTION COORDINATION DIVISION. RESULTS SHALL BE SUBMITTED TO CONSTRUCTION COORDINATION DIVISION AS PART OF THEIR FIELD REVIEW.
  - ENGINEER-OF-RECORD WILL PROVIDE FULL-TIME INSPECTION DURING THE ENTIRETY OF THE OPEN-CUT OPERATION, BEGINNING WITH THE EXCAVATION AND CONTINUING THROUGH THE COMPLETION OF THE PAVING.
  - IF THE PAVEMENT IS NOT COMPLETELY RESTORED IMMEDIATELY FOLLOWING THE OPEN CUT, A SMOOTH TEMPORARY PATCH (MINIMUM 125\"/>
  - THE FINAL RESTORATION, THE ROAD SHALL BE MILLED/RESURFACED FOR A FULL LANE WIDTH OF THE TRAVEL LANES ENCOMPASSED BY THE TRENCH AREA, INCLUDING A TRANSITION AREA OF 50 FT ON EACH SIDE OF THE TRENCH. THE PAVEMENT SHALL BE MILLED AND RESURFACED PER CONSTRUCTION NOTE 6.
  - APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAIN PRESSURE PIPES AND CONDUIT IN THE COUNTY'S RIGHT-OF-WAY. INSTALL TAPE 24\"/>
  - CONTINUOUS 4\"/>

OPEN CUT PIPE INSTALLATION THOROUGHFARE ROAD 25W



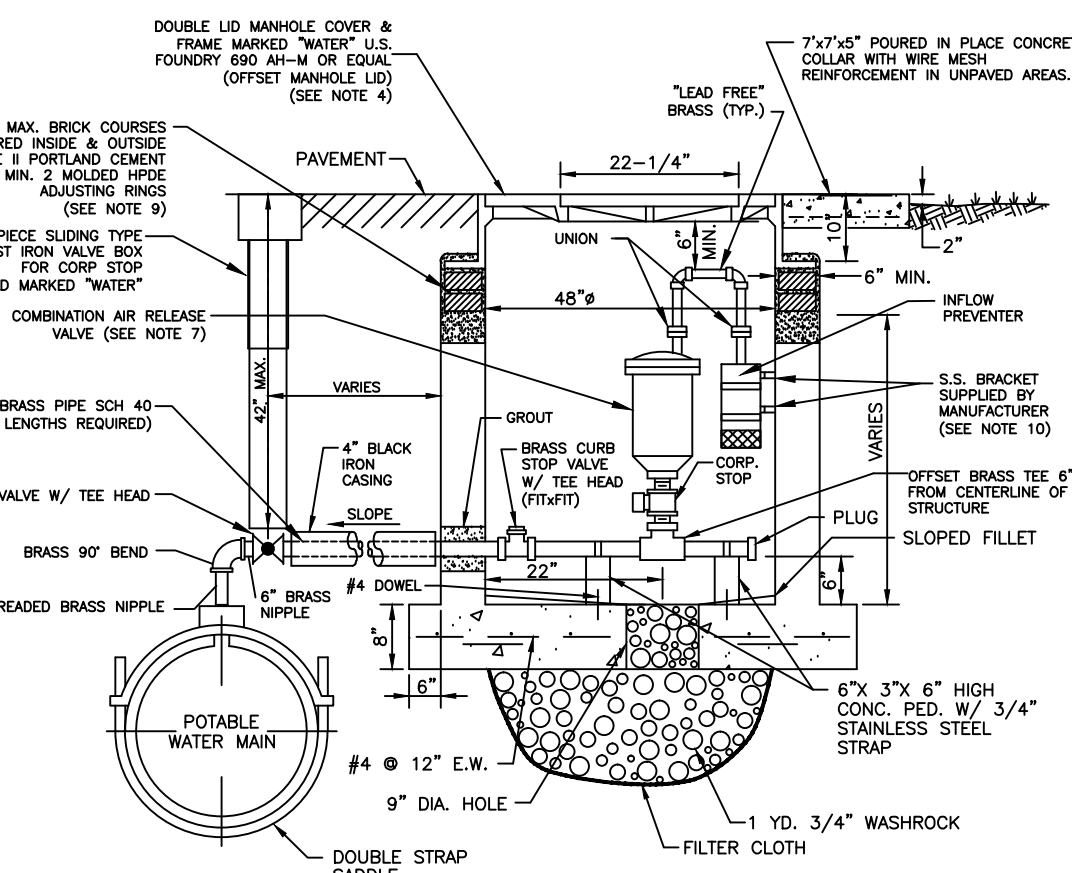
- NOTES:**
- PRECAST 4000 P.S.I. TYPE II CONCRETE STRUCTURE. SHOP DRAWING IS REQUIRED TO BE APPROVED BY THE DEPARTMENT PRIOR TO VAULT CONSTRUCTION AND/OR INSTALLATION.
  - COMBINATION AIR RELEASE VALVE (ARV) SHALL BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED ALTHOUGH A 1\"/>
  - ALL OPENINGS SHALL BE SEALED WITH WATERPROOF NON-SHRINKING GROUT.
  - ALTERNATE VAULT AND COVER DESIGN MAY BE USED PROVIDED ALTERNATE VAULT AND/OR COVER SHOP DRAWINGS WERE SUBMITTED AND APPROVED BY THE DEPARTMENT PRIOR TO THE VAULT AND/OR COVER BEING INSTALLED.
  - DUCTILE IRON PIPE IS REQUIRED THROUGH THE VAULT. NO PIPE JOINTS INSIDE OR WITHIN 12\"/>
  - THREADED AREAS OF BRASS FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO WRAPS OF TEFLON TAPE.
  - LARGER VAULTS WILL BE REQUIRED FOR PIPES LARGER THAN 12\"/>
  - SHOP DRAWINGS ARE REQUIRED FOR CUSTOM MADE BRACKETS

POTABLE WATER MAIN UNDERGROUND AIR RELEASE VALVE AND VAULT IN NON-TRAFFIC AREAS OUTSIDE OF ROAD R/W \* 28W



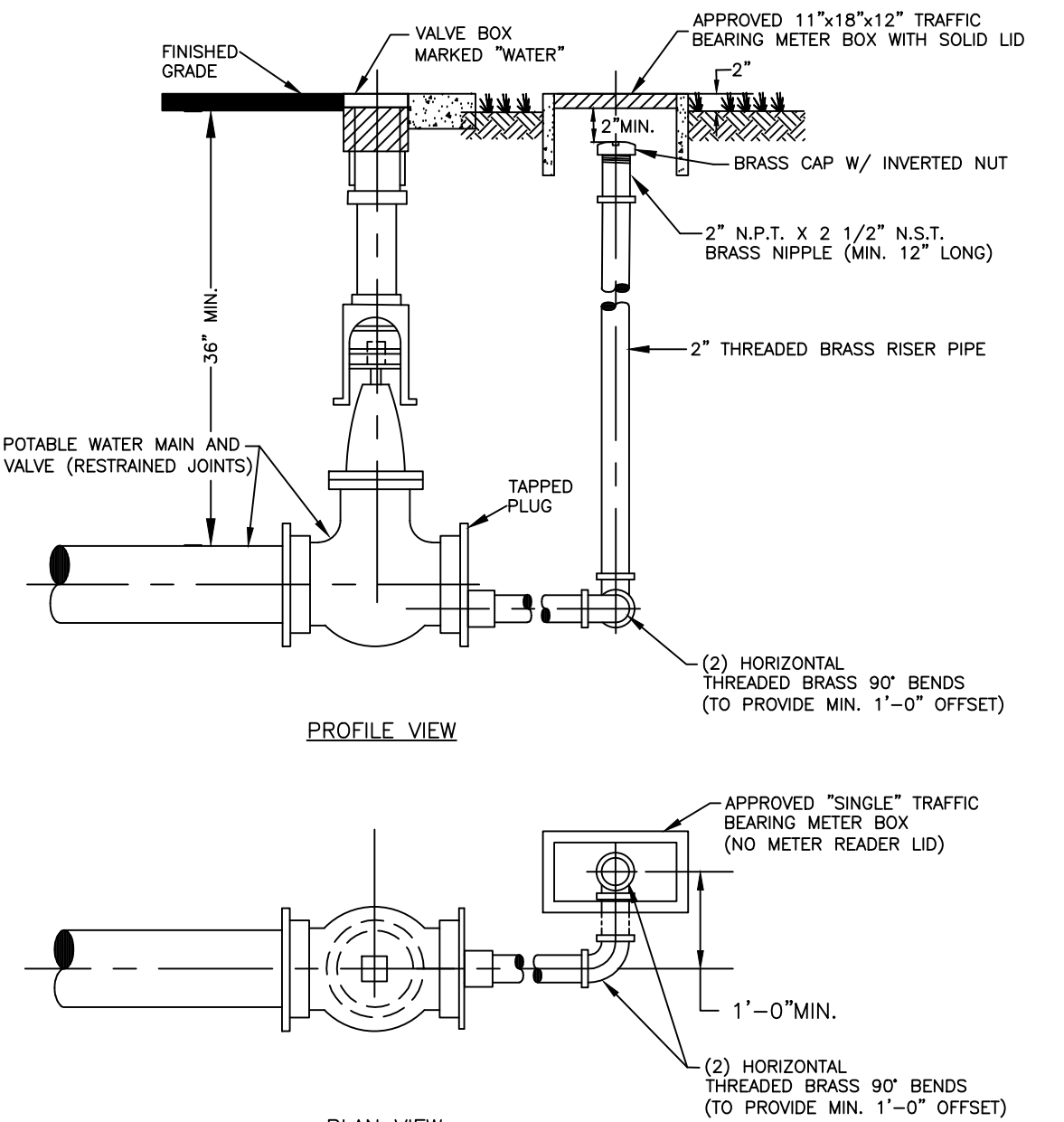
- NOTES:**
- PRECAST 4000 P.S.I. TYPE II CONCRETE STRUCTURE. SHOP DRAWING IS REQUIRED TO BE APPROVED BY THE DEPARTMENT PRIOR TO VAULT CONSTRUCTION AND/OR INSTALLATION.
  - ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
  - LIFT HOLES ARE PERMITTED.
  - ALL PIPE HOLES SHALL BE PRECAST.
  - MANHOLE FABRICATION SHALL BE IN ACCORDANCE WITH A.S.T.M. C-478 LATEST STANDARD.
  - CONCRETE COLLAR REQUIRED WHEN MANHOLE IS OUTSIDE OF PAVEMENT. SEE DETAIL.
  - COMBINATION AIR RELEASE VALVE (ARV) SHALL BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED ALTHOUGH A 1\"/>
  - DUCTILE IRON PIPE IS REQUIRED THROUGH THE VAULT. NO PIPE JOINTS INSIDE OR WITHIN 18\"/>
  - THREADED AREAS OF BRASS FITTINGS SHALL BE SPIRAL WRAP WITH TWO WRAPS OF TEFLON TAPE.
  - POTABLE WATER MAINS 12\"/>
  - LARGER MANHOLES WILL BE REQUIRED FOR PIPES LARGER THAN 12\"/>
  - SHOP DRAWINGS ARE REQUIRED FOR CUSTOM MADE BRACKETS
  - MANHOLES IN ROADWAYS SHALL BE LOCATED OUTSIDE OF WHEEL PATHS.

POTABLE WATER MAIN AIR RELEASE MANHOLE IN PAVED AREAS AND ROAD R/W \* 29W



- NOTES:**
- PRECAST MONOLITHIC POURED 4000 P.S.I. TYPE II CONCRETE STRUCTURE. SHOP DRAWING IS REQUIRED TO BE APPROVED BY THE DEPARTMENT PRIOR TO VAULT CONSTRUCTION AND/OR INSTALLATION.
  - ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
  - ALL PIPE HOLES SHALL BE PRECAST.
  - ALTERNATE VAULT DESIGN MAY BE USED WITH AN APPROVED 32\"/>
  - ARV, TAP AND PIPING TO BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED.
  - COMBINATION AIR RELEASE VALVE (ARV) SHALL BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED ALTHOUGH A 1\"/>
  - SHOP DRAWING IS REQUIRED FOR REVIEW AND APPROVAL.
  - THREADED AREAS OF BRASS FITTINGS AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO WRAPS OF TEFLON TAPE.
  - IN LIEU OF BRICK WORK, APPROVED PRECAST CONCRETE ADJUSTING RINGS MAY BE USED. INSTALLATION SHALL FOLLOW MANUFACTURERS' RECOMMENDATIONS.
  - SHOP DRAWINGS ARE REQUIRED FOR CUSTOM MADE BRACKETS
  - PIPE AND FITTINGS SHALL BE NO LEAD BRASS.
  - MANHOLES SHALL BE INSTALLED OUTSIDE TRAFFIC AREAS.

POTABLE WATER MAIN OFF-SET UNDERGROUND AIR RELEASE VALVE \* 30W



- NOTES:**
- TEMPORARY DEAD END BLOWOFF ONLY ALLOWED WITH PRIOR DEPARTMENT APPROVAL.
  - BLOWOFF BOX TO BE LOCATED IN GRASS AREA, MIN. 2\"/>
  - PERMANENT DEAD ENDS REQUIRE THE INSTALLATION OF AN APPROVED AUTOMATIC FLUSHING ASSEMBLY.
  - ALL BRASS SHALL BE \"LEAD FREE\".

TYPICAL 2\"/>

| CARRIER PIPE SIZE | STEEL CASING INSIDE DIAMETER (MIN) | WALL THICKNESS (SEE NOTE 2) |
|-------------------|------------------------------------|-----------------------------|
| 4"                | 12"                                | 188                         |
| 6"                | 14"                                | 250                         |
| 8"                | 20"                                | 250                         |
| 10"               | 20"                                | 250                         |
| 12"               | 24"                                | 250                         |
| 14"               | 24"                                | 250                         |
| 16"               | 30"                                | 312                         |
| 18"               | 30"                                | 312                         |
| 20"               | 36"                                | 372                         |
| 24"               | 42"                                | 500                         |
| 30"               | 48"                                | 500                         |
| 36"               | 54"                                | 625                         |
| 42"               | 60"                                | 625                         |
| 48"               | 72"                                | 625                         |

- NOTES:**
- A PROFILE DRAWING TO SCALE FOR EACH JACK AND BORE, DIRECTIONAL DRILL, OR DIRECT BURIED INSTALLATION IS REQUIRED TO BE APPROVED BY THE DEPARTMENT PRIOR TO INSTALLATION. IF A SPLIT CASING IS REQUIRED THEN SHOP DRAWINGS ARE REQUIRED TO BE SUBMITTED AND APPROVED BY THE DEPARTMENT PRIOR TO CONSTRUCTION AND/OR INSTALLATION.
  - THICKER WALL CASINGS AND LARGER COVER OVER CASING MAY BE REQUIRED BY THE RIGHT-OF-WAY OWNER.
  - STEEL CASING SHALL BE COATED OUTSIDE WITH COAL TAR EPOXY (MIN. 16 MILS DFT) AND BE PAINTED WITH A 4\"/>
  - PIPE IN CASING SHALL BE PULLED TO FULLY ENGAGE RESTRAINT.
  - STEEL CASING IS REQUIRED FOR ALL WATER MAIN INSTALLATIONS UTILIZING JACK AND BORE CONSTRUCTION AND WHEN MAINS ARE INSTALLED UNDER CARS, RAILROADS, OR LANDSCAPE BERMS. WHEN THE CASING IS INSTALLED UNDER FENCES, WALLS, OR LANDSCAPE BERMS IT SHALL BE CENTERED ON THE PREVIOUS BARRIER AND IS REQUIRED TO EXTEND 10\"/>

POTABLE WATER MAIN CASING INSTALLATION DETAILS \* 22W

**CONSULTANT:**

**GGB Engineering, Inc.**

CIVIL AND FORENSIC ENGINEERS AND PLANNERS  
 \*CONSTRUCTION MANAGERS  
 TEL: 561-985-9857 FAX: 561-986-6655

**IT'S THE LAW!**  
 CALL 48 HOURS BEFORE YOU DIG  
**1-800-432-4770**  
 SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
 UTILITIES NOTIFICATION CENTER

DESIGNED BY: WUD

DRAWN BY: M. BUCKNER  
 CHECKED BY: J. LAMMERT  
 APPROVED BY: WUD

Palm Beach County  
 Water Utilities Department  
 P.O. Box 16097  
 West Palm Beach, FL 33416-6097

Oct 11, 2021

PROJECT NO. XX-XXX

STONEBRIDGE COUNTRY CLUB MAINTENANCE YARD

PALM BEACH COUNTY FLORIDA

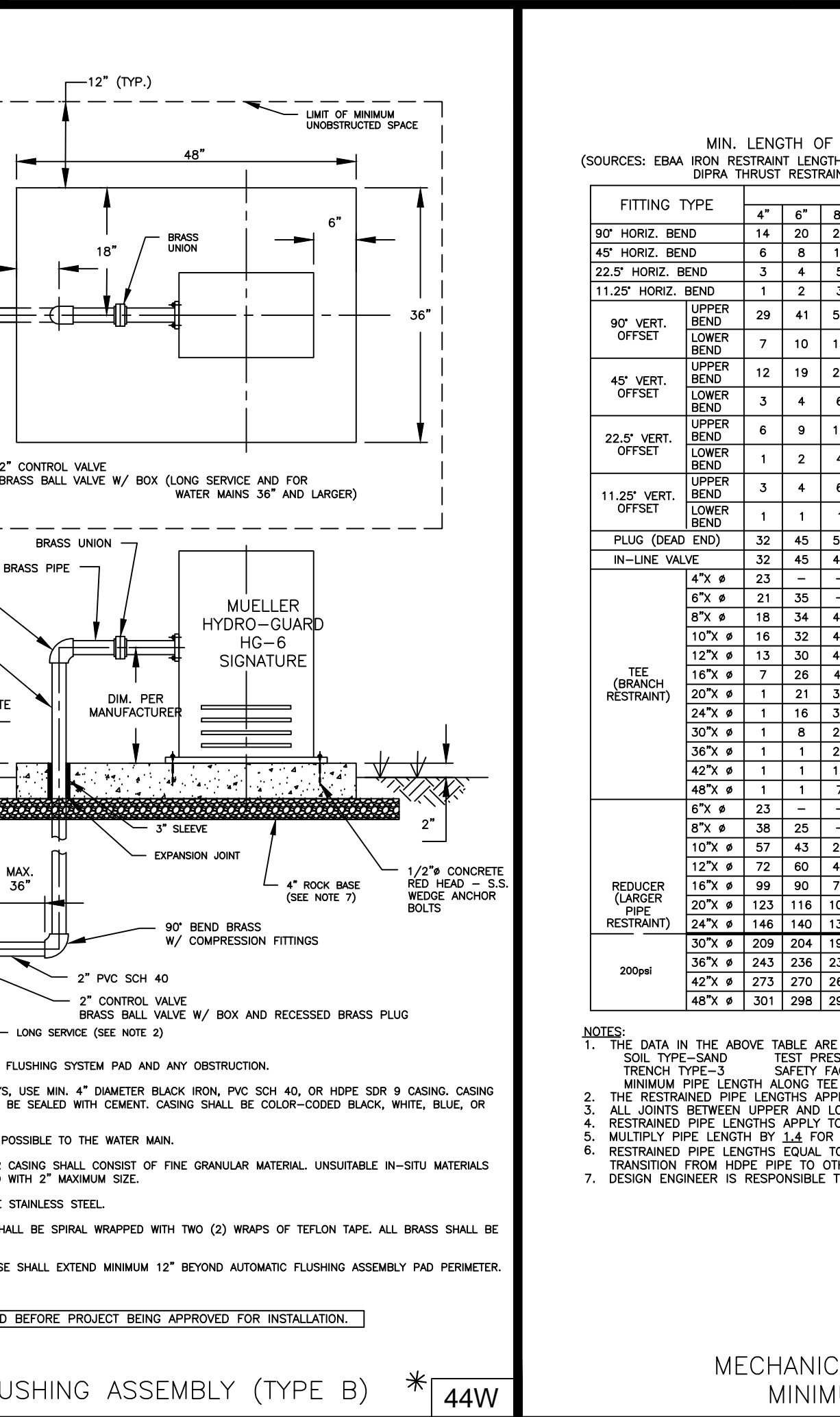
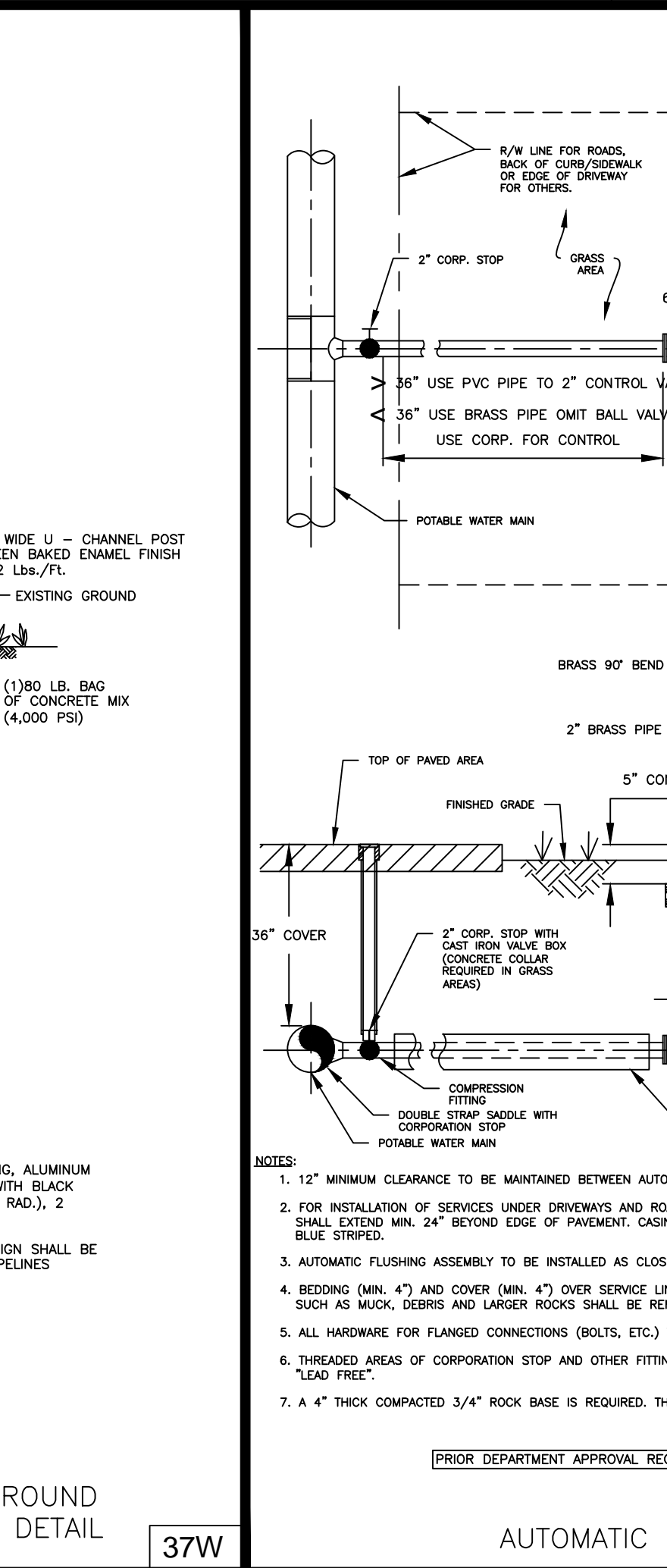
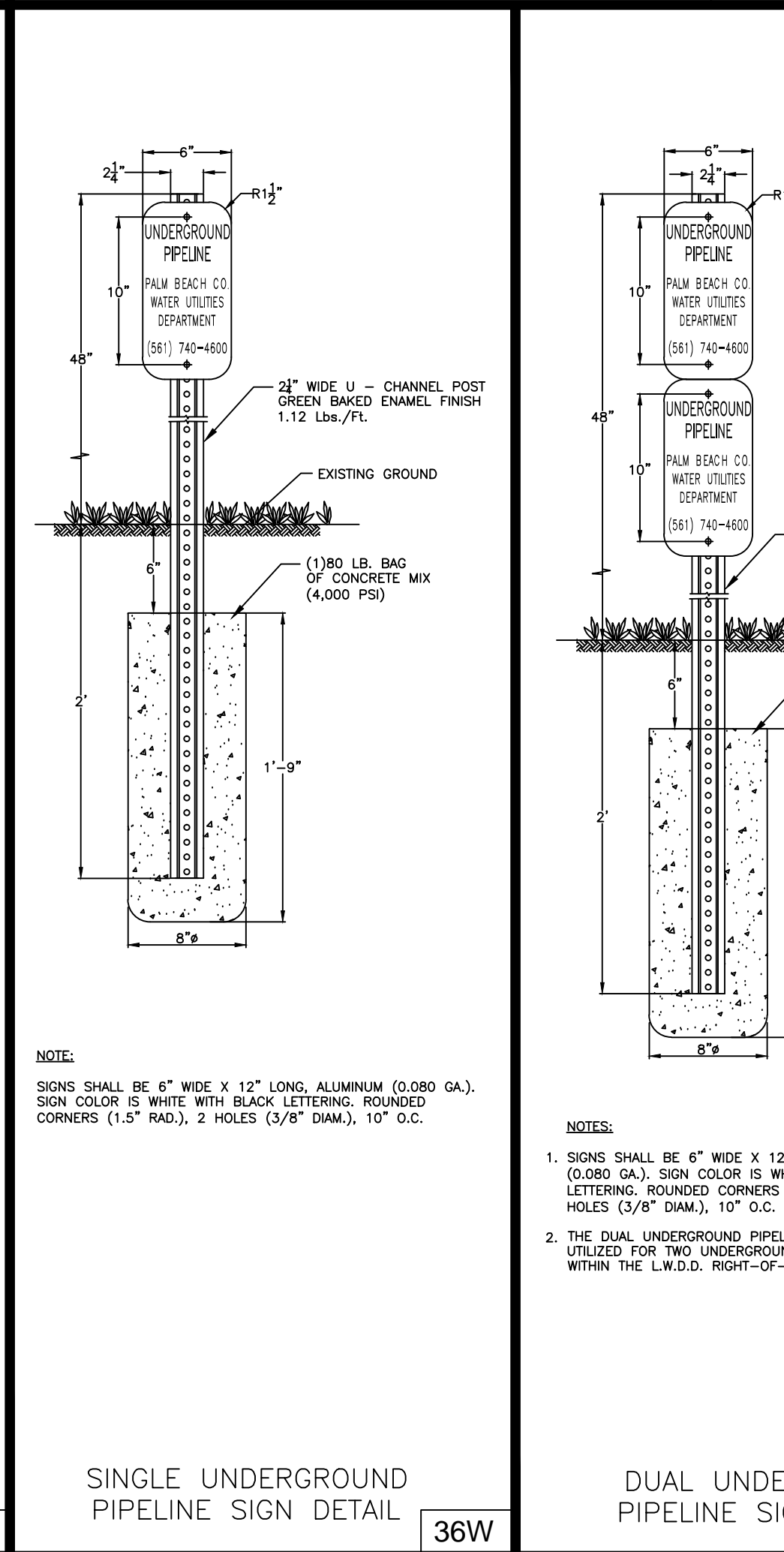
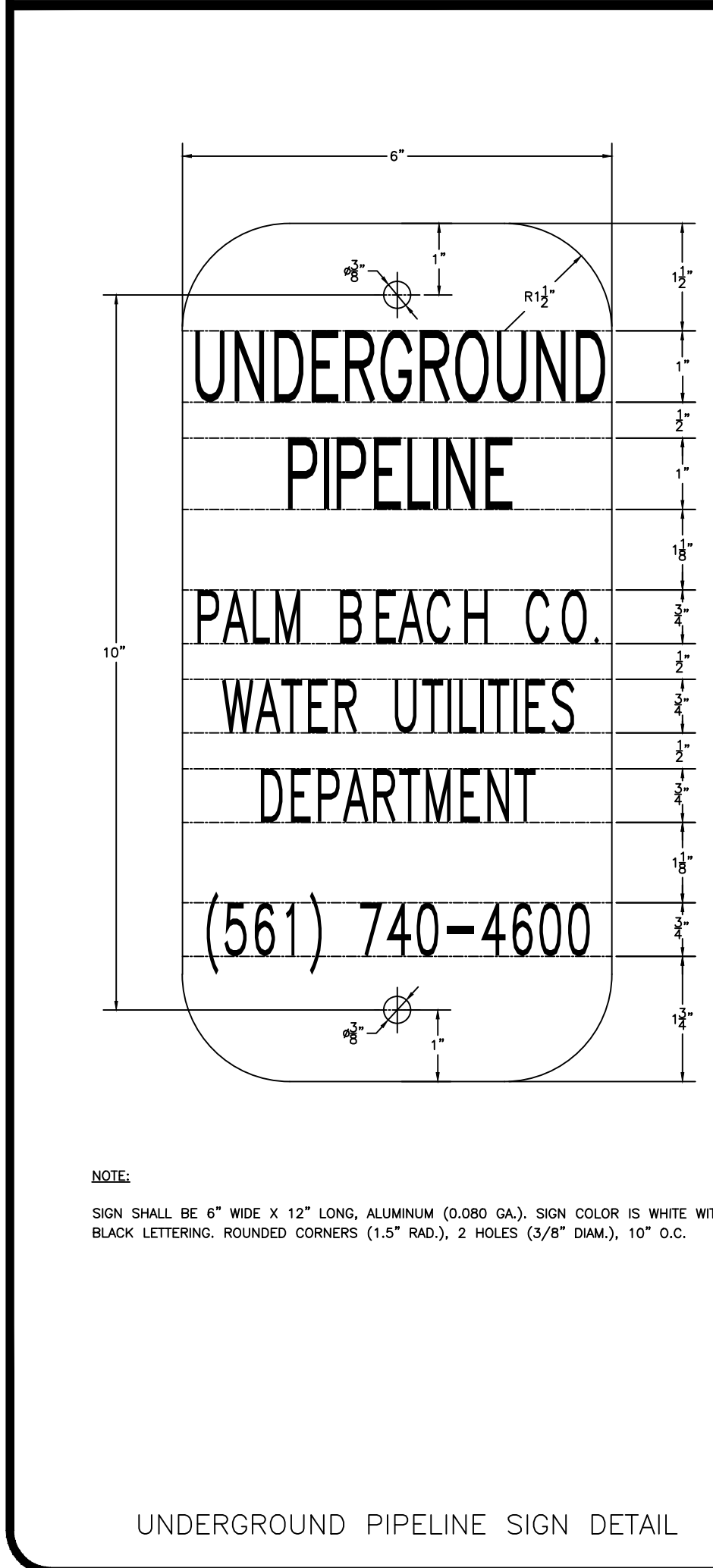
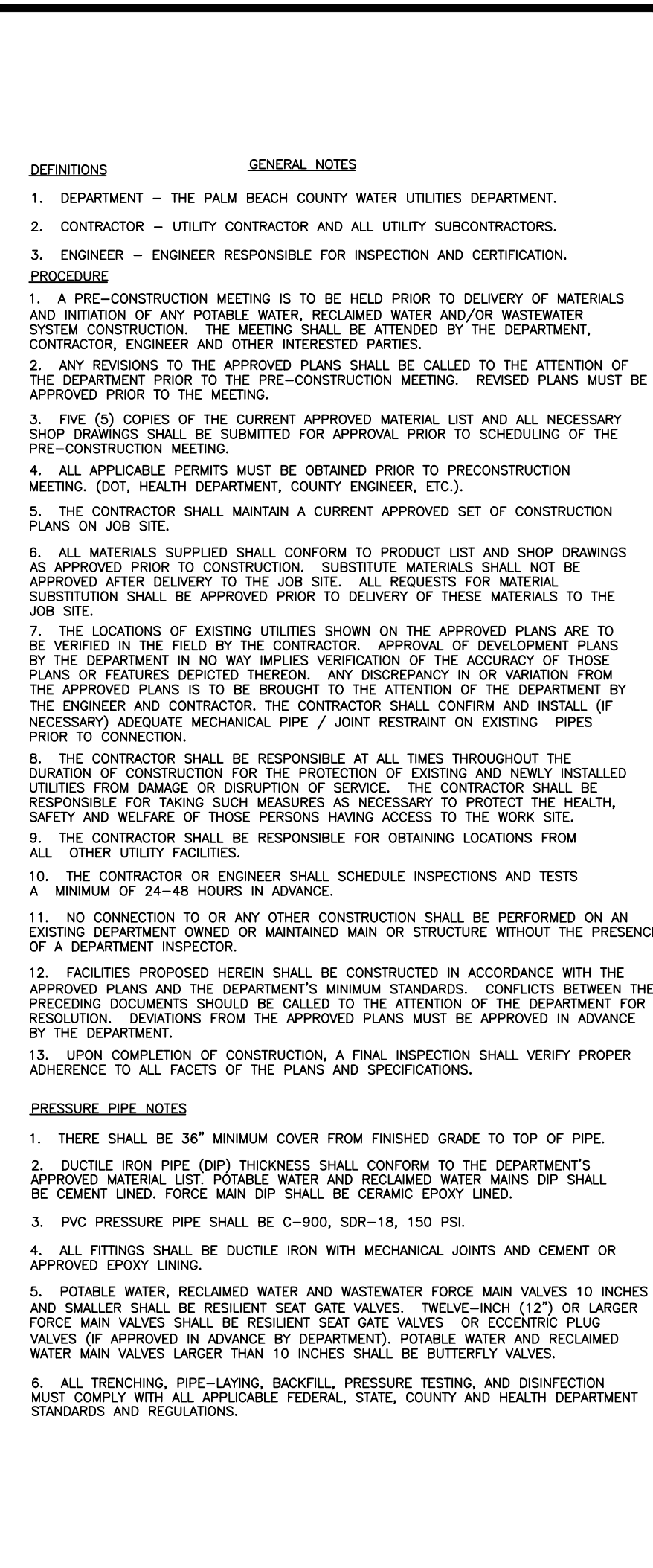
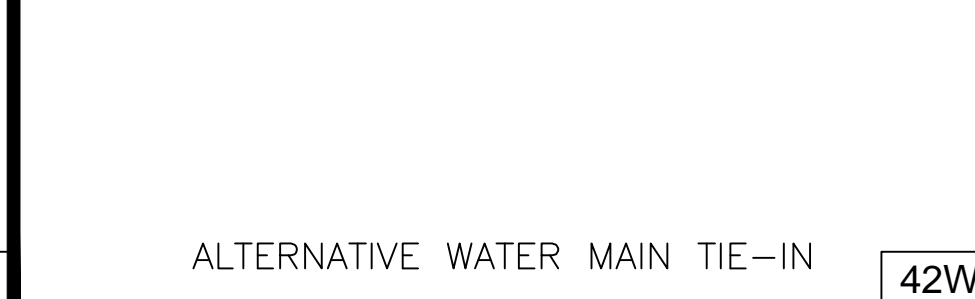
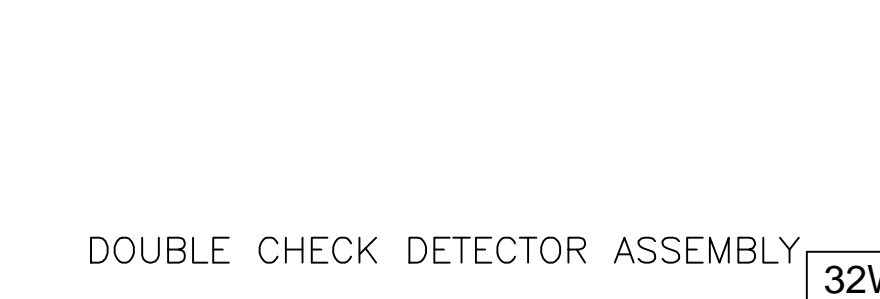
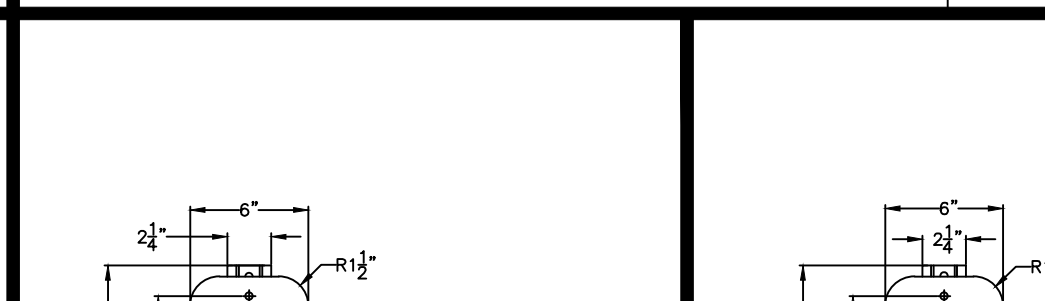
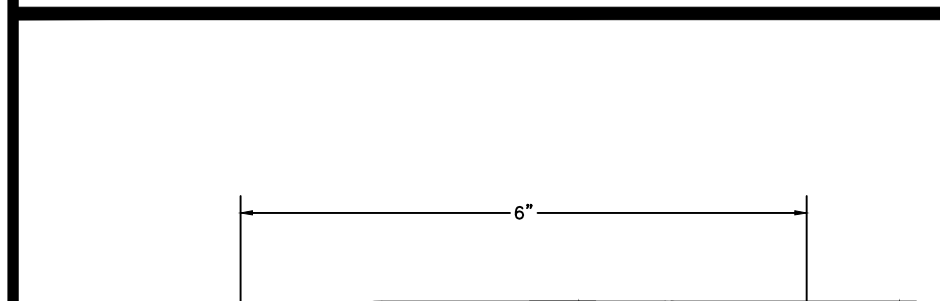
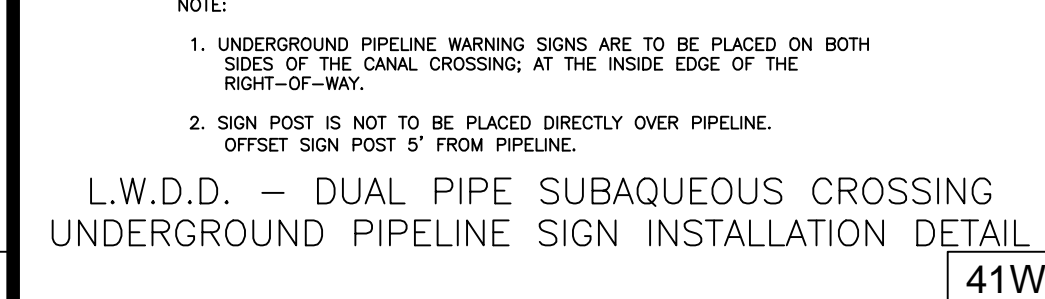
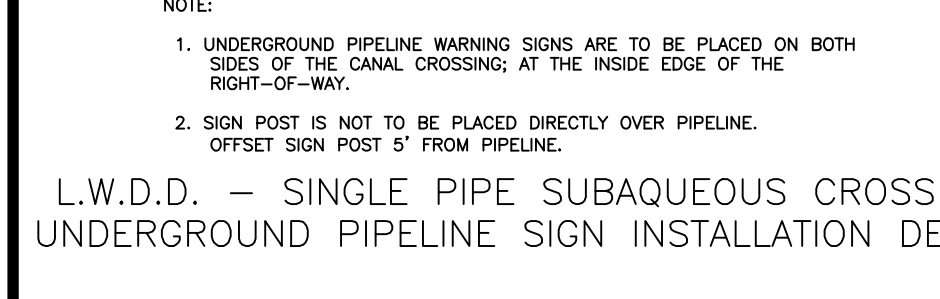
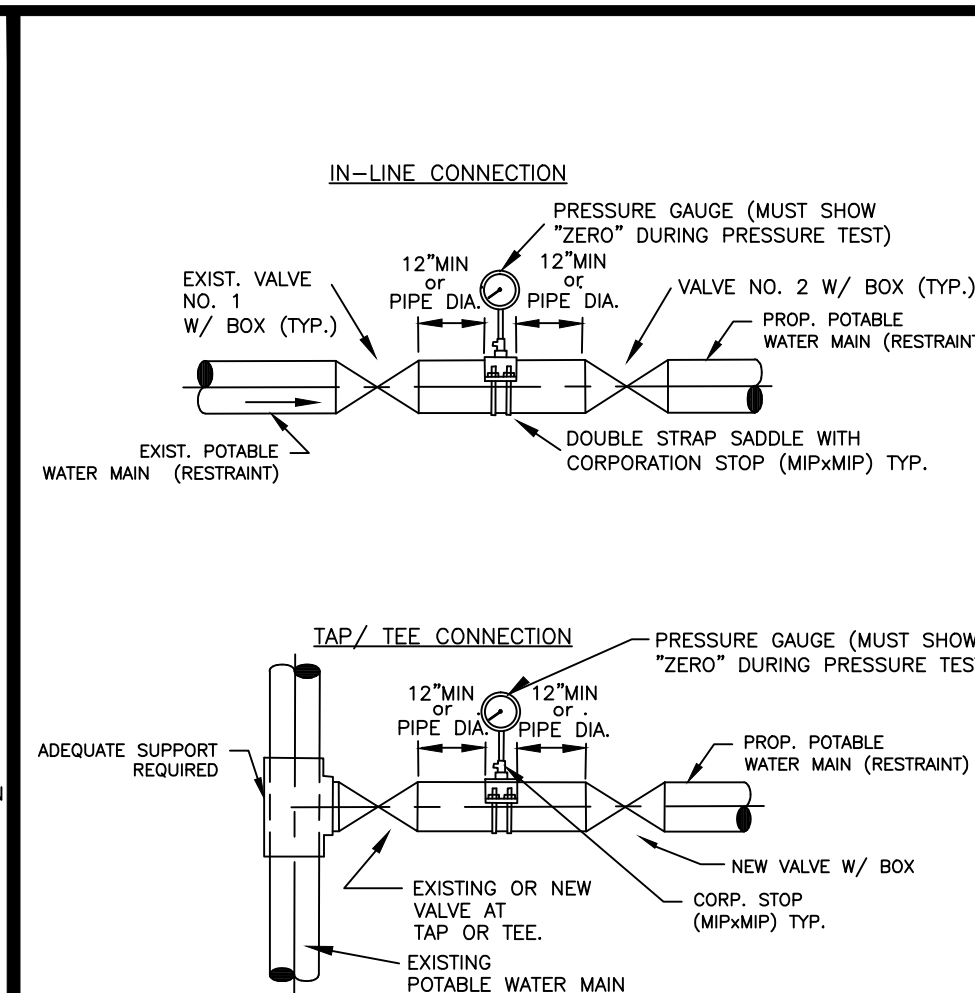
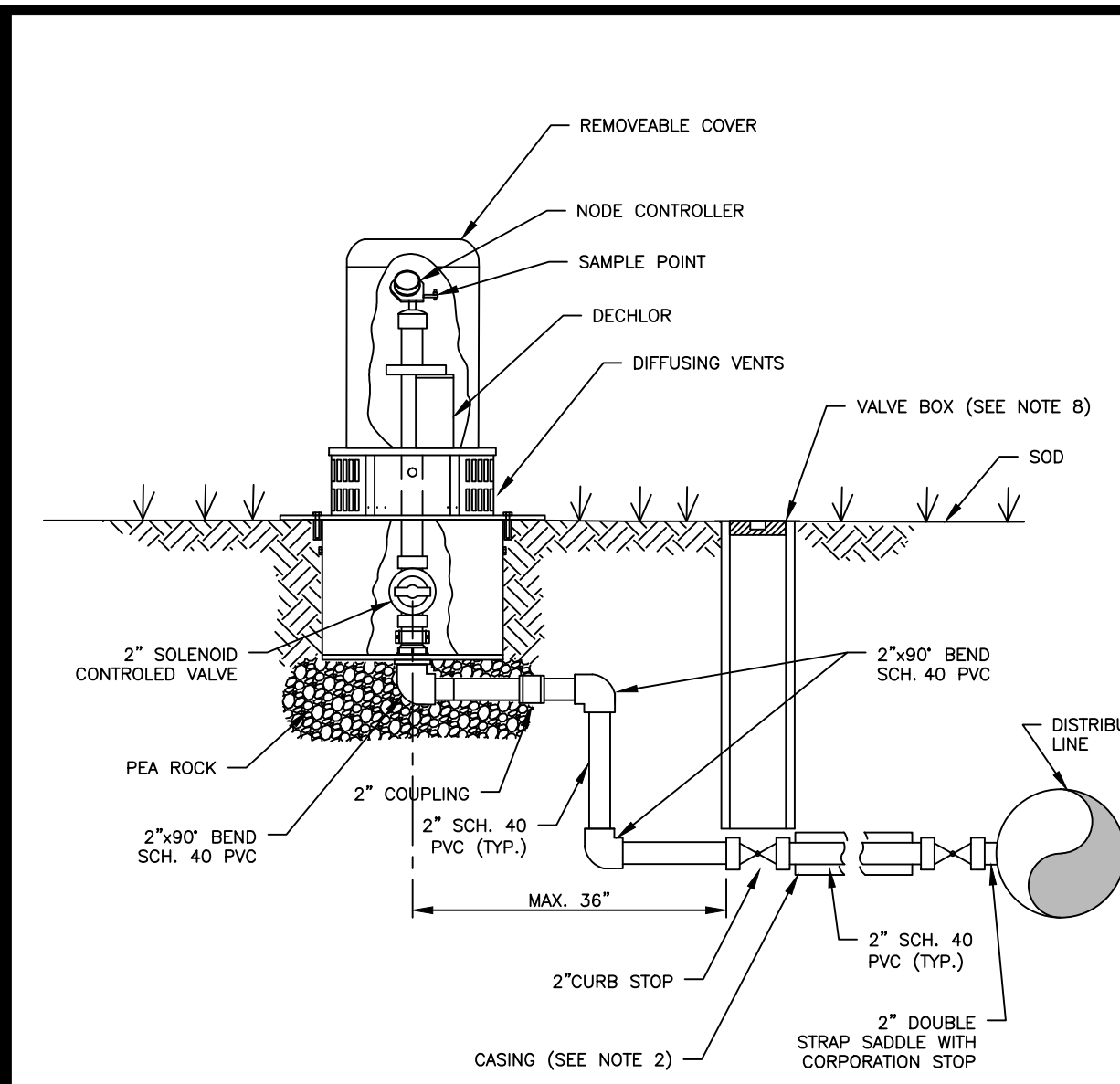
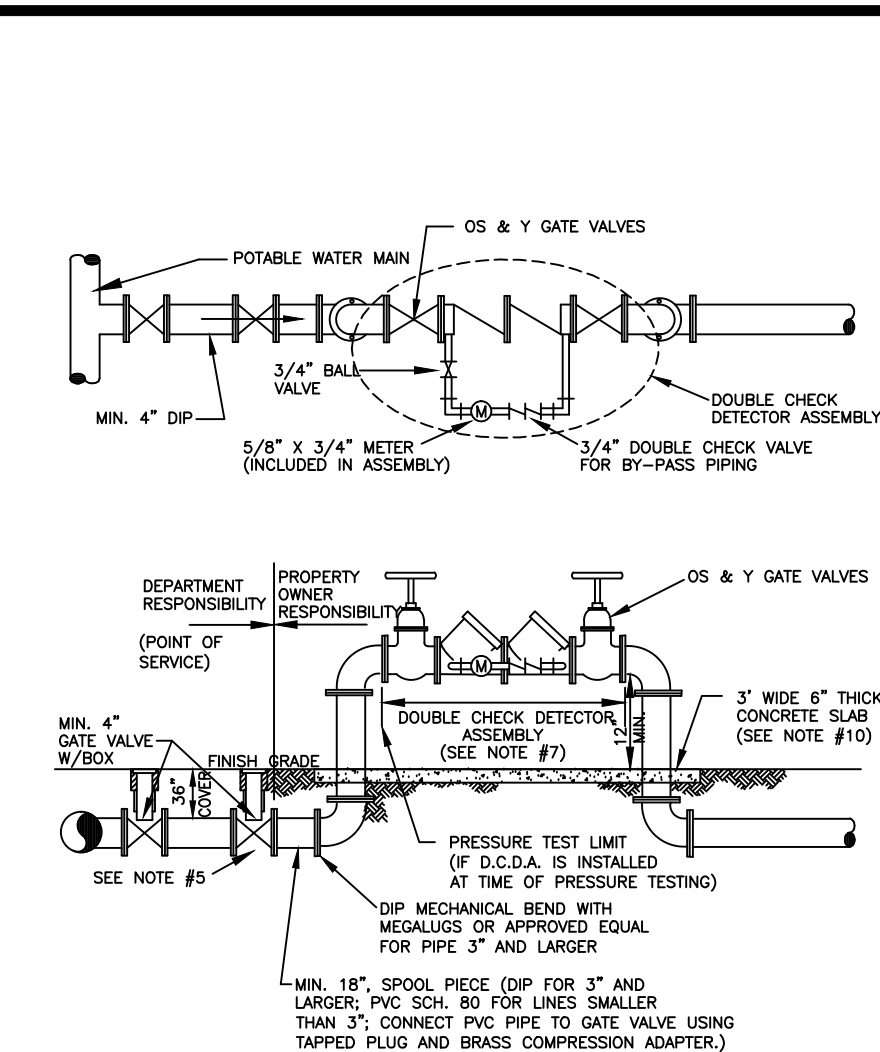
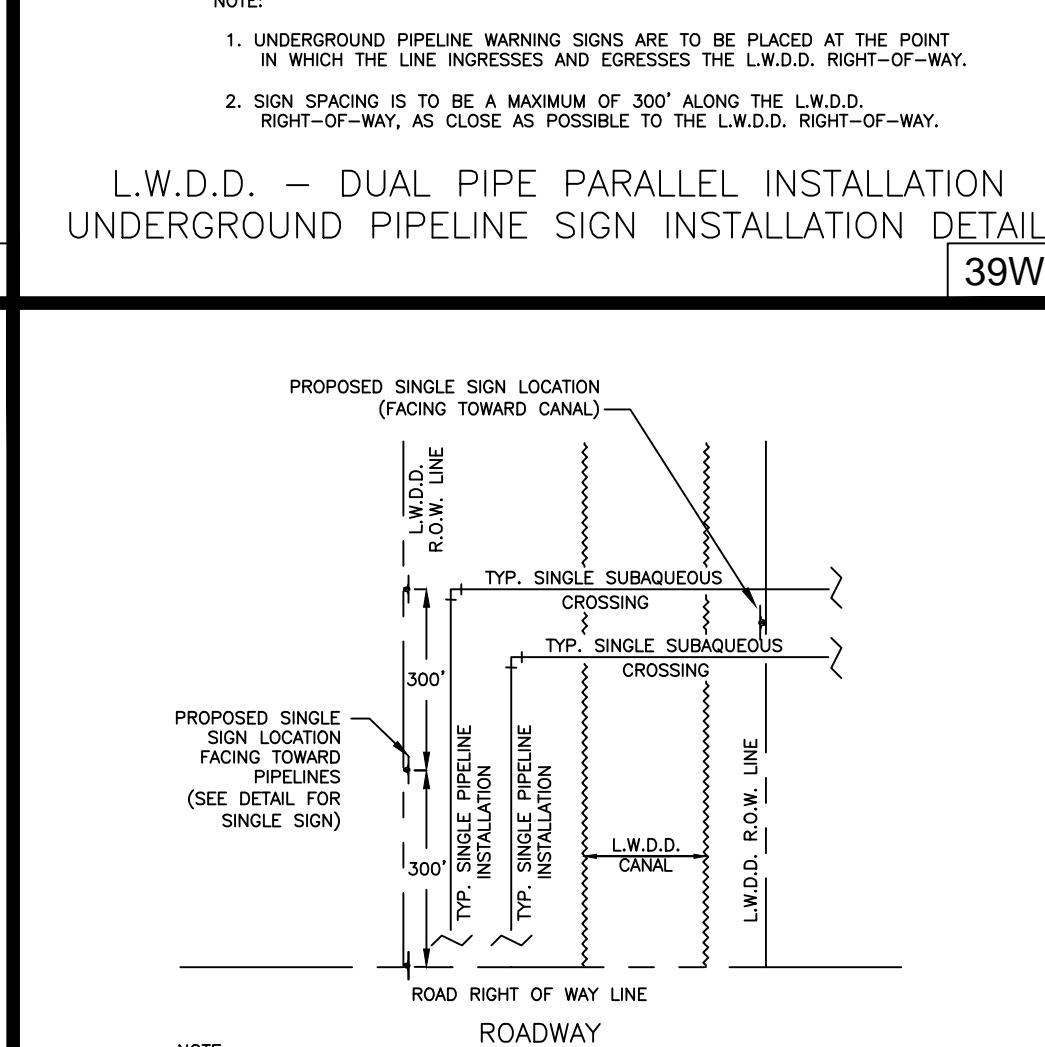
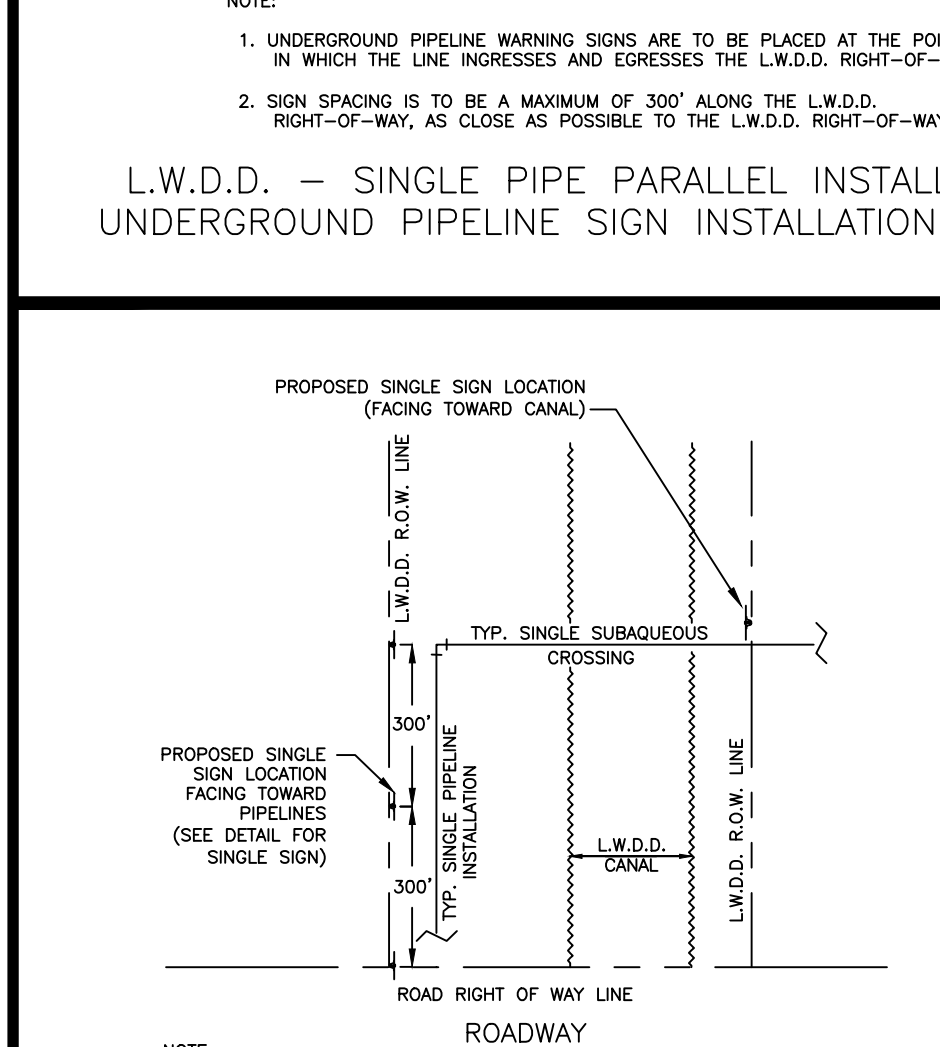
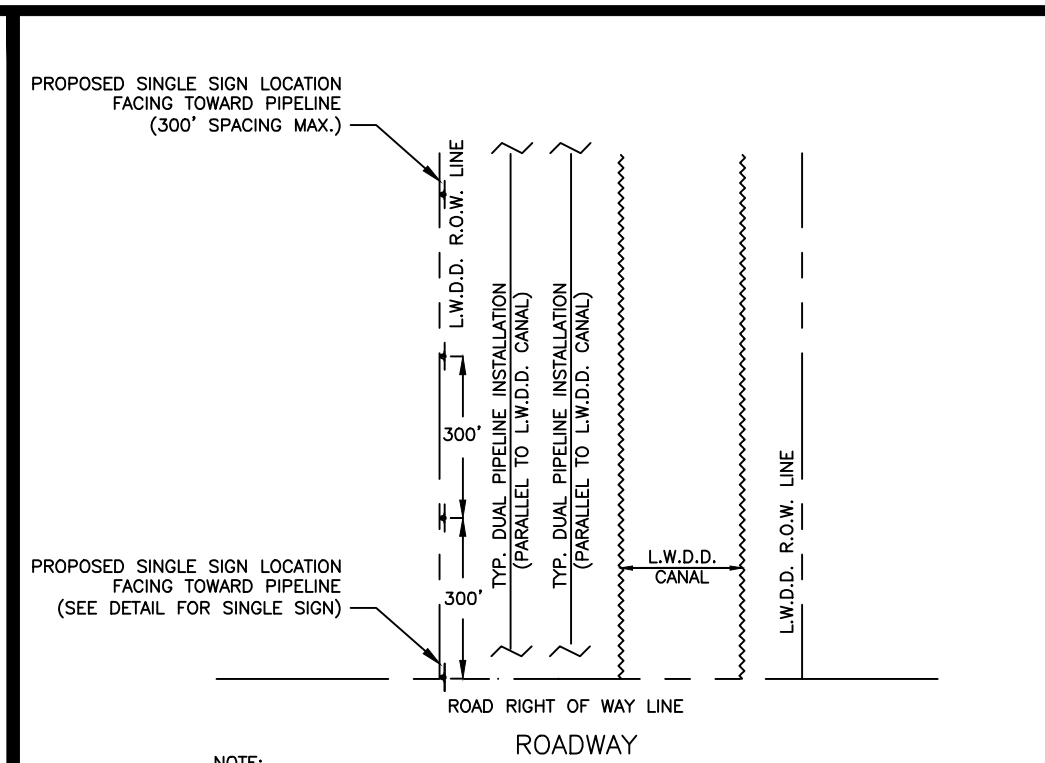
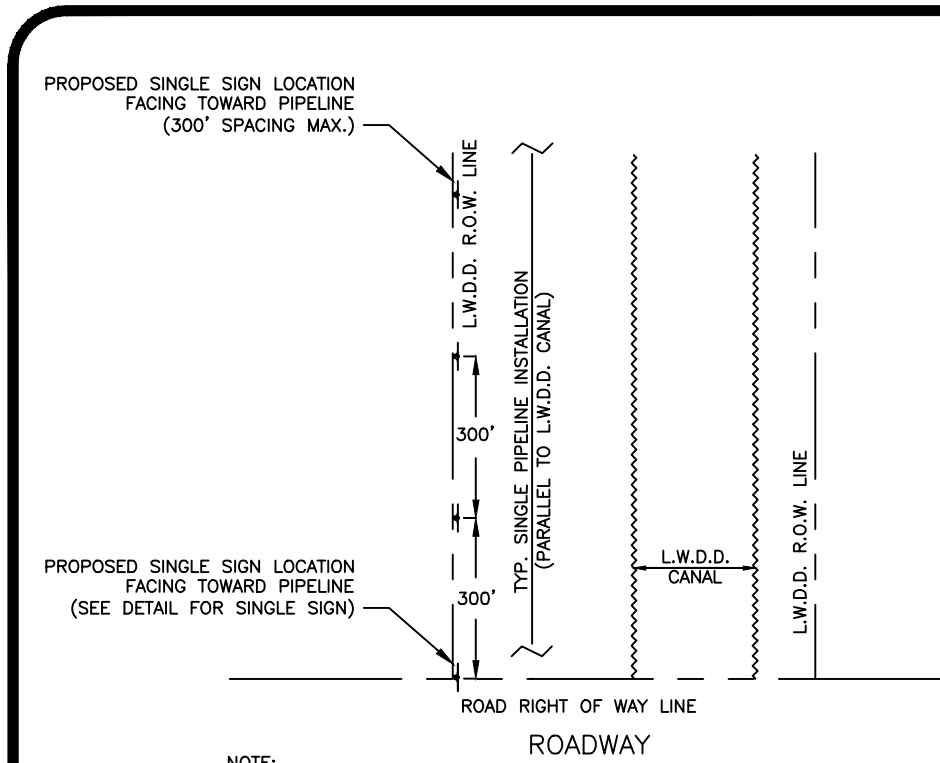
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT  
 P.O. BOX 16097  
 WEST PALM BEACH, FL 33416  
 (561)463-6000

| NO. | DATE      | REVISION / REMARKS |
|-----|-----------|--------------------|
| 1   | JUNE 2019 | GENERAL REVISION   |

STD DETAILS



SHEET NUMBER CD3 OF CD5

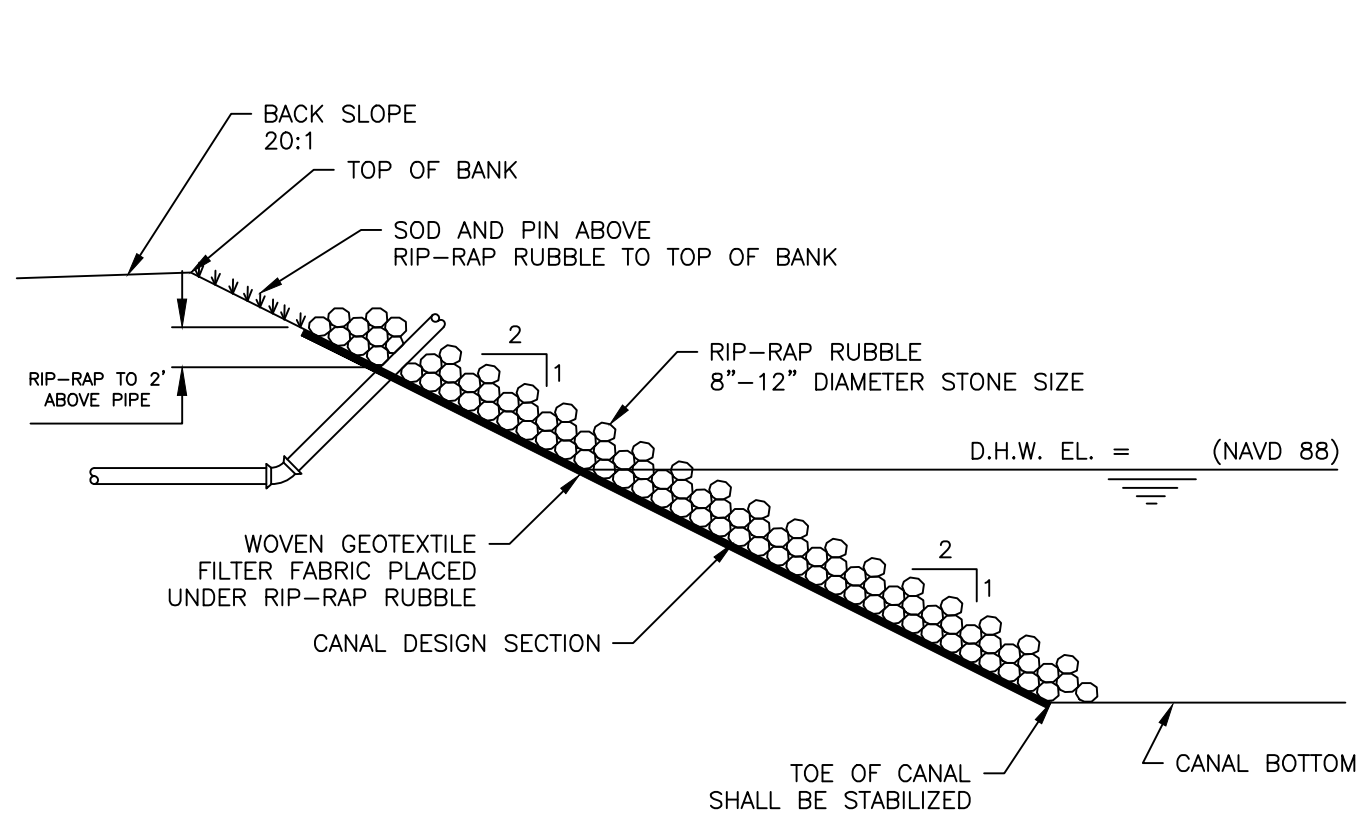
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| C (FEET) TO BE RESTRAINED<br>CIRCULATION PROGRAM FOR PVC PIPE, RELEASE 3.1, AND<br>DUCTILE IRON PIPE, RELEASE 3.2.) |     |     |     |     |     |     |     |     |                              |   | MAXIMUM<br>TO<br>(MECH |
|---------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------------------------------|---|------------------------|
| PIPE SIZE                                                                                                           |     |     |     |     |     |     |     |     |                              |   |                        |
| 200psi                                                                                                              |     |     |     |     |     |     |     |     |                              |   |                        |
| 0"                                                                                                                  | 12" | 16" | 20" | 24" | 30" | 36" | 42" | 48" | AVG. TEST<br>PRESSURE<br>PSI |   |                        |
| 30                                                                                                                  | 35  | 45  | 54  | 62  | 98  | 112 | 124 | 135 | 2                            | 3 |                        |
| 13                                                                                                                  | 15  | 19  | 22  | 26  | 41  | 46  | 51  | 56  | 150                          |   | 0.10 0.14              |
| 6                                                                                                                   | 7   | 9   | 11  | 12  | 19  | 22  | 25  | 27  | 200                          |   | 0.10 0.15              |
| 3                                                                                                                   | 4   | 4   | 5   | 6   | 10  | 11  | 12  | 13  |                              |   |                        |
| 64                                                                                                                  | 74  | 95  | 115 | 134 | 214 | 246 | 276 | 304 |                              |   |                        |
| 16                                                                                                                  | 19  | 25  | 30  | 35  | 57  | 66  | 74  | 83  |                              |   |                        |
| 29                                                                                                                  | 34  | 39  | 48  | 56  | 89  | 102 | 114 | 128 |                              |   |                        |
| 7                                                                                                                   | 8   | 10  | 12  | 15  | 23  | 27  | 31  | 34  |                              |   |                        |
| 14                                                                                                                  | 17  | 19  | 23  | 27  | 43  | 49  | 55  | 60  |                              |   |                        |
| 4                                                                                                                   | 4   | 5   | 6   | 7   | 11  | 13  | 15  | 16  |                              |   |                        |
| 7                                                                                                                   | 8   | 9   | 11  | 13  | 21  | 24  | 27  | 30  |                              |   |                        |
| 2                                                                                                                   | 2   | 2   | 3   | 3   | 6   | 6   | 7   | 8   |                              |   |                        |
| 70                                                                                                                  | 83  | 107 | 129 | 151 | 214 | 246 | 276 | 304 |                              |   |                        |
| 45                                                                                                                  | 45  | 55  | 65  | 80  | 110 | 125 | 140 | 155 |                              |   |                        |
| --                                                                                                                  | --  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| --                                                                                                                  | --  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| --                                                                                                                  | --  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 56                                                                                                                  | --  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 57                                                                                                                  | 69  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 55                                                                                                                  | 67  | 90  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 52                                                                                                                  | 65  | 88  | 109 | --  | --  | --  | --  | --  |                              |   |                        |
| 49                                                                                                                  | 62  | 86  | 108 | 129 | --  | --  | --  | --  |                              |   |                        |
| 44                                                                                                                  | 56  | 83  | 106 | 127 | 208 | --  | --  | --  |                              |   |                        |
| 39                                                                                                                  | 54  | 80  | 103 | 124 | 206 | 240 | --  | --  |                              |   |                        |
| 34                                                                                                                  | 48  | 77  | 100 | 122 | 205 | 239 | 270 | --  |                              |   |                        |
| 27                                                                                                                  | 44  | 73  | 97  | 120 | 203 | 238 | 269 | 298 |                              |   |                        |
| 41                                                                                                                  | --  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 75                                                                                                                  | 45  | --  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 05                                                                                                                  | 81  | 45  | --  | --  | --  | --  | --  | --  |                              |   |                        |
| 31                                                                                                                  | 111 | 82  | 45  | --  | --  | --  | --  | --  |                              |   |                        |
| 88                                                                                                                  | 177 | 153 | 116 | 75  | --  | --  | --  | --  |                              |   |                        |
| 126                                                                                                                 | 217 | 196 | 168 | 135 | 74  | --  | --  | --  |                              |   |                        |
| 159                                                                                                                 | 252 | 234 | 211 | 183 | 133 | 72  | --  | --  |                              |   |                        |
| 189                                                                                                                 | 283 | 266 | 249 | 226 | 183 | 131 | 71  | --  |                              |   |                        |

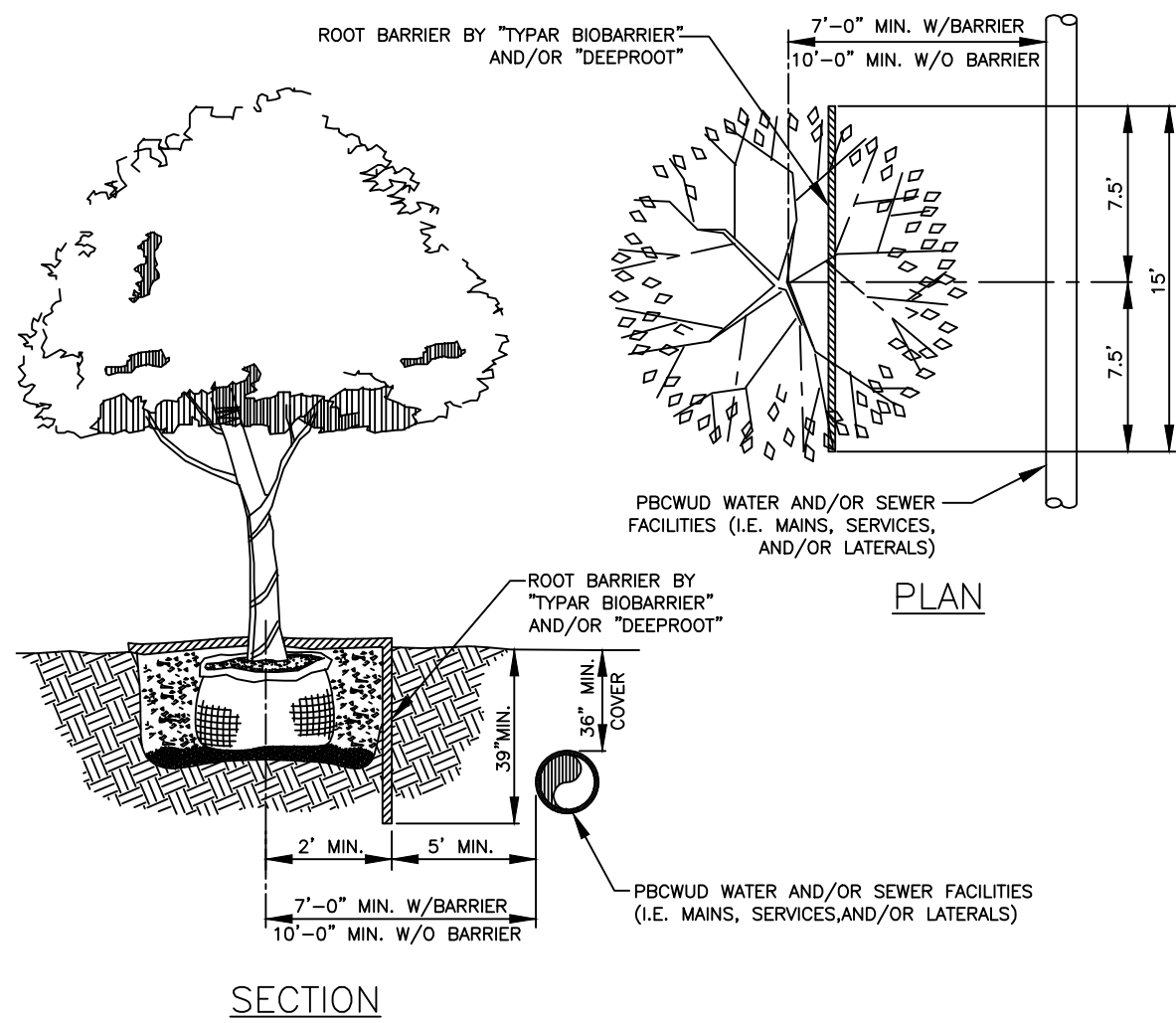
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                     |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--|----------------------------------|-------------------|------------------------------------|----------------------------|------------------------------|---------------|--|-------------------------------|
| <p><b>CONSULTANT:</b></p>  <h1 style="margin: 0;"><i>GGB Engineering, Inc.</i></h1> <p>CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS<br/> <b>*CONSTRUCTION MANAGERS*</b><br/>         TEL. 954-986-9899 • FAX. 954-986-6655</p>                                                                                                                                     | <p><b>IT'S THE LAW ! </b></p> <p>CALL 48 HOURS BEFORE YOU DIG</p> <h2 style="margin: 0;"><b>1-800-432-4770</b></h2> <p>SUNSHINE STATE ONE CALL OF FLORIDA, INC.<br/>         UTILITIES NOTIFICATION CENTER</p> |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
| <table style="width: 100%;"> <tr> <td style="width: 50%;">DESIGNED BY: _____ WUD _____</td> <td style="width: 50%;"></td> </tr> <tr> <td>DRAWN BY: _____ M. BUCKNER _____</td> <td>Palm Beach County</td> </tr> <tr> <td>CHECKED BY: _____ J. LAMMERT _____</td> <td>Water Utilities Department</td> </tr> <tr> <td>APPROVED BY: _____ WUD _____</td> <td>P.O.Box 16097</td> </tr> <tr> <td></td> <td>West Palm Beach, FL 33416-609</td> </tr> </table> |                                                                                                                                                                                                                                                                                                     | DESIGNED BY: _____ WUD _____ |  | DRAWN BY: _____ M. BUCKNER _____ | Palm Beach County | CHECKED BY: _____ J. LAMMERT _____ | Water Utilities Department | APPROVED BY: _____ WUD _____ | P.O.Box 16097 |  | West Palm Beach, FL 33416-609 |
| DESIGNED BY: _____ WUD _____                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                     |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
| DRAWN BY: _____ M. BUCKNER _____                                                                                                                                                                                                                                                                                                                                                                                                                        | Palm Beach County                                                                                                                                                                                                                                                                                   |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
| CHECKED BY: _____ J. LAMMERT _____                                                                                                                                                                                                                                                                                                                                                                                                                      | Water Utilities Department                                                                                                                                                                                                                                                                          |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
| APPROVED BY: _____ WUD _____                                                                                                                                                                                                                                                                                                                                                                                                                            | P.O.Box 16097                                                                                                                                                                                                                                                                                       |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                         | West Palm Beach, FL 33416-609                                                                                                                                                                                                                                                                       |                              |  |                                  |                   |                                    |                            |                              |               |  |                               |



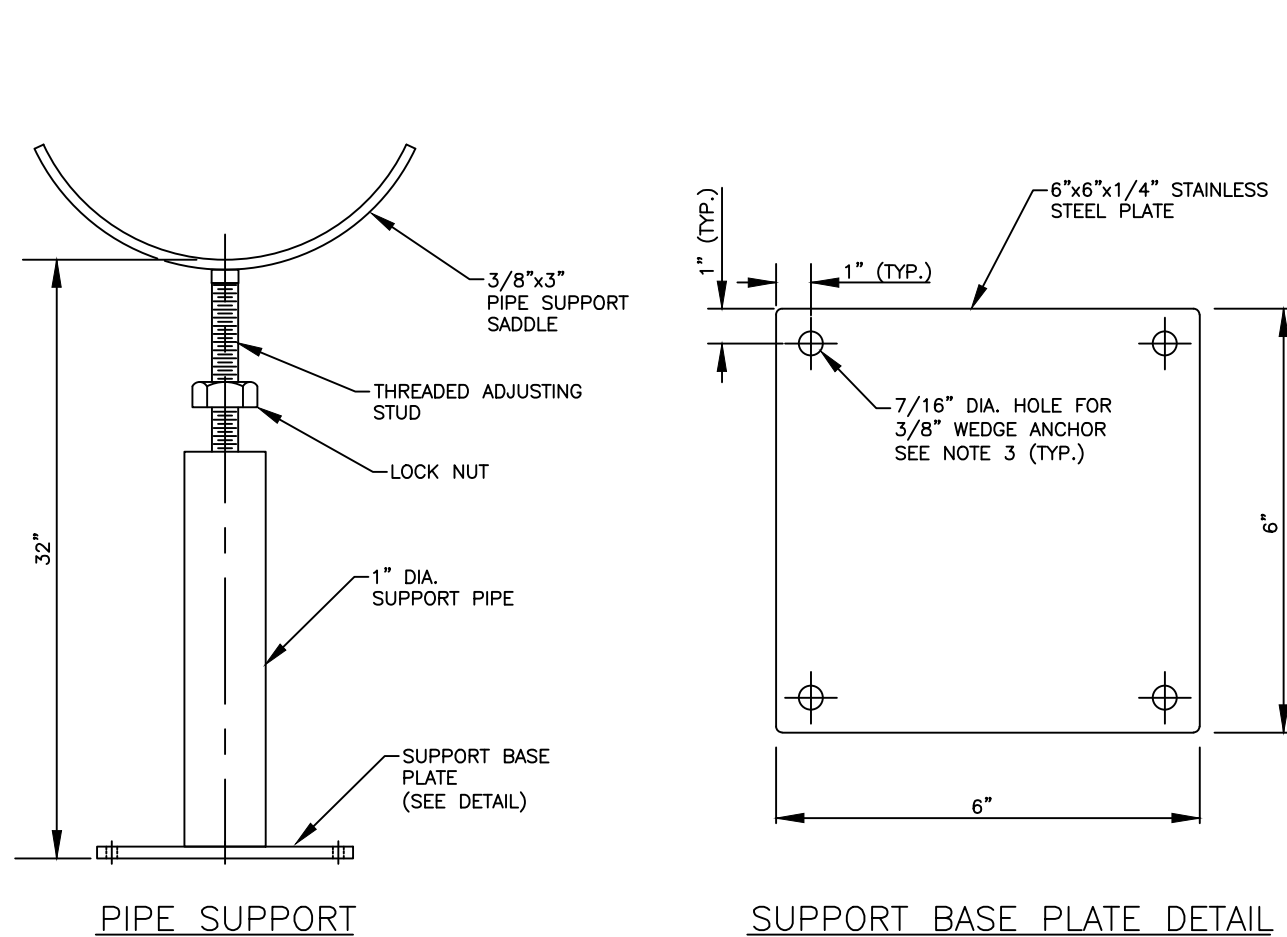
- NOTES:
1. RIP-RAP RUBBLE AND ITS INSTALLATION MUST MEET CANAL OWNERSHIP SPECIFICATIONS AND PERMITTING REQUIREMENTS.
  2. DUMP RUBBLE IN PLACE FORMING A COMPACT LAYER CONFORMING TO THE CANAL DESIGN SECTION SLOPE. ENSURE THAT RUBBLE DOES NOT SEGREGATE SO THAT SMALLER PIECES EVENLY FILL THE VOIDS BETWEEN LARGER PIECES.
  3. AN ALTERNATIVE DESIGN WILL BE CONSIDERED AND MUST RECEIVE PRIOR APPROVAL FROM THE CANAL PROPERTY OWNER.

RIP-RAP RUBBLE DETAIL \* 45W



- NOTES:
1. TREES SHOWN ON THIS PLAN ARE FOR GRAPHIC REPRESENTATION ONLY. TREE SPACING IS BASED ON DESIGN REQUIREMENTS AND THE TREES SHOWN ON THESE PLANS ATTEMPT TO ACCOMPLISH THAT SPACING WHILE MAINTAINING THE REQUIRED SETBACKS FROM UTILITIES. TREES MAY BE FIELD ADJUSTED TO AVOID CONFLICTS WITH DRIVEWAYS AND UNDERGROUND UTILITIES. IN ANY CASE THE TREES SHALL BE LOCATED IN THE FIELD IN ACCORDANCE WITH THE PLANTING DETAILS SHOWN HEREON.
  2. TREES ARE TO BE INSTALLED WITH A TEN FOOT (10') SEPARATION FROM ANY WATER OR SEWER MAIN AND/OR SERVICE, HYDRANTS, AND LIFT STATIONS. IF A TEN FOOT (10') SEPARATION CANNOT BE ACHIEVED, THE TREE CAN BE INSTALLED WITH A ROOT BARRIER SYSTEM. HOWEVER, IN NO CASE SHALL A TREE ENCRDACH INTO A PBCUE WITHOUT PRIOR DEPARTMENT APPROVAL.
  3. ONLY SOD CAN BE INSTALLED WITHIN 7.5' MINIMUM OF A FLUSHING HYDRANT UNLESS OTHERWISE APPROVED BY THE FIRE MARSHAL AND THE DEPARTMENT.
  4. SOD ONLY SHALL BE INSTALLED WITHIN 5.0' MINIMUM OF ANY DEPARTMENT RECLAIMED WATER METER.

LANDSCAPE AND ROOT BARRIER DETAIL \* 46W



- NOTES:
1. SHOP DRAWING FOR THE METER ASSEMBLY PIPE SUPPORT IS REQUIRED TO BE SUBMITTED FOR APPROVAL BY THE DEPARTMENT PRIOR TO THE PIPE SUPPORT BEING CONSTRUCTED AND/OR INSTALLED. ALL PIPE SUPPORTS FOR EACH METER ASSEMBLY INSTALLATION SHALL BE THE SAME.
  2. ALL PIPE SUPPORT MATERIALS AND MOUNTING HARDWARE ARE REQUIRED TO BE 304 STAINLESS STEEL.
  3. THE REQUIRED WEDGE ANCHORS FOR EACH SUPPORT SHALL BE 3/8" DIAMETER WITH NOMINAL EMBEDMENT OF 2-3/8". EACH ANCHOR SHALL HAVE A WASHER, LOCK WASHER, AND NUT.

ABOVE GROUND WATER METER INSTALLATION PIPE SUPPORT \* 47W

POTABLE WATER #5  
STANDARD DETAILS

CONSULTANT:  
**GGB Engineering, Inc.**  
CIVIL AND FORENSIC ENGINEERS AND PLANNERS  
CONSTRUCTION MANAGERS  
TEL. 954-986-9897 FAX. 954-986-6655

**IT'S THE LAW!**  
CALL 48 HOURS BEFORE YOU DIG  
**1-800-432-4770**  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.  
UTILITIES NOTIFICATION CENTER

DESIGNED BY: WUD  
DRAWN BY: M. BUCKNER  
CHECKED BY: J. LAMMERT  
APPROVED BY: WUD  
Palm Beach County  
Water Utilities Department  
P.O.Box 16097  
West Palm Beach, FL 33416-6097

PROJECT NO.  
XX-XXX

STONEBRIDGE COUNTRY CLUB  
MAINTENANCE YARD



PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
P.O. BOX 16097  
WEST PALM BEACH, FL 33416  
(561)463-6000

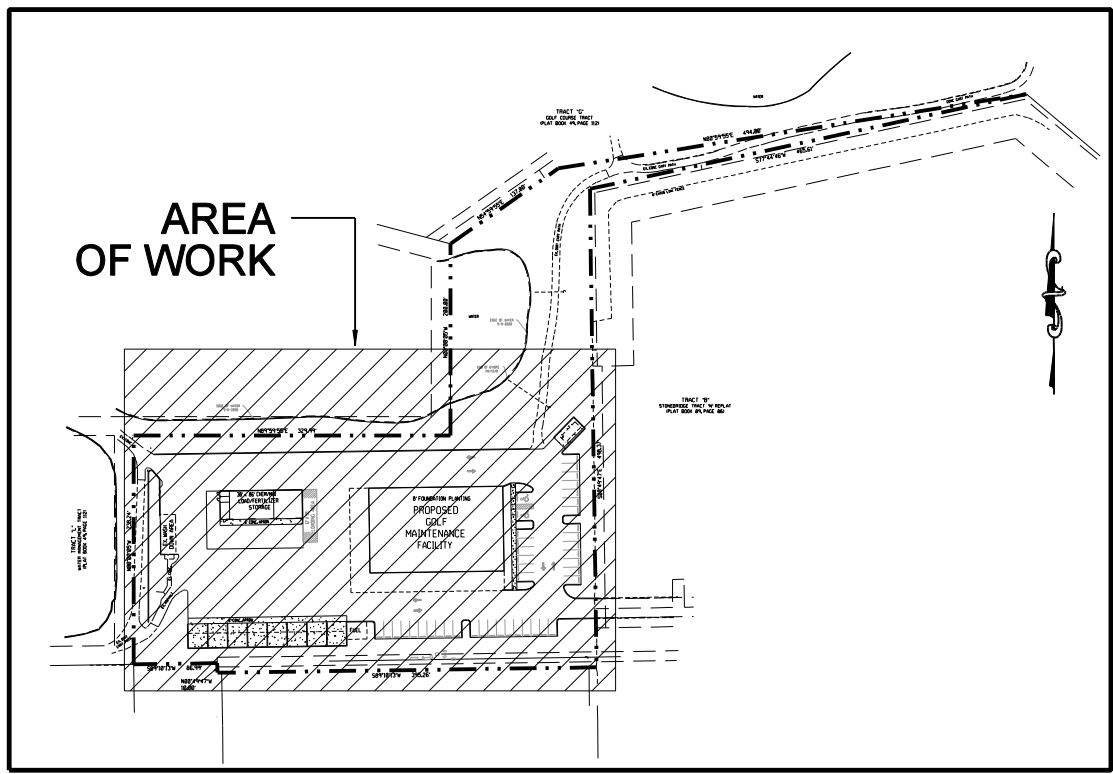
| NO. | DATE      | REVISION / REMARKS | BY   |
|-----|-----------|--------------------|------|
|     | JUNE 2019 | GENERAL            | J.L. |
|     |           |                    |      |
|     |           |                    |      |
|     |           |                    |      |
|     |           |                    |      |

STD  
DETAILS

SHEET  
NUMBER  
CD5  
OF  
CD5

SEAL

Oct 11, 2021



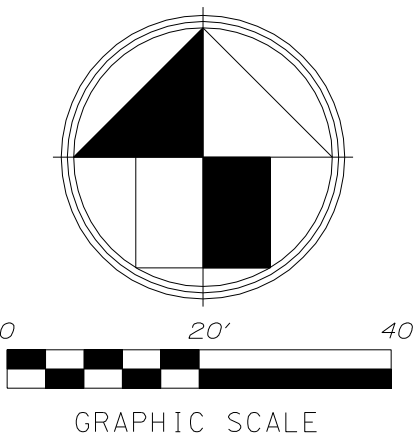
SITE MAP  
N.T.S.

LEGEND

XXXXXXXXXX  
DENOTES WINDROW AND SILT SCREEN  
ALONG PROPERTY LINE DURING  
CONSTRUCTION OF GRADING AND DRAINAGE

NOTES:

1. CONTRACTOR SHALL PROVIDE INLET PROTECTION BOTH ON AND OFF-SITE ROAD DOWNSTREAM OF SITE.
2. INLET PROTECTION ON AND OFFSITE IS REQUIRED, INLETS IN THE ROAD DOWNSTREAM OF THE SITE SHALL BE PROTECTED WITH GUTTER BUDDIES WITH BRICKS LAID ON TOP OF THEM TO SECURE THEM IN PLACE.
3. CONTRACTOR SHALL PROTECT ALL STOCKPILED SITE MATERIAL TO PREVENT SOIL EROSION AND AIR POLLUTION FROM DUST AND OTHER PARTICLE MATTER. SITE STOCKPILE PROTECTION TARP SHALL BE PINNED DOWN TO PROTECT AGAINST WIND FORCES.
4. EROSION CONTROL METHODS PER FDEP NPDES LATEST REGULATIONS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE BEST MANAGEMENT PRACTICES, AND IT IS THE CONTRACTORS RESPONSIBILITY TO ADD ADDITIONAL METHODS, AS NECESSARY. THE ROAD SHALL BE CLEAR OF ALL ROCKS, SANDS, AND SILTS AT THE END OF EACH DAY. NO LITTER SHALL BE LEFT ONSITE AT THE END OF EACH DAY.
5. CONTRACTOR SHALL CALL 811 AND UTILITIES LOCATE PRIOR TO THE INSTALLATION OF THE FENCE.



REVISIONS:

1.  
2.  
3.  
4.  
5.  
6.  
7.  
8.

New York Design  
Collaborative Inc.  
11090 Clover Leaf Circle  
Boca Raton, Florida 33428

CLIENT:

PROJECT: Stonebridge Country Club  
Maintenance Yard  
PALM BEACH  
FLORIDA, 33140

TASK: STORMWATER POLLUTION  
PREVENTION PLAN

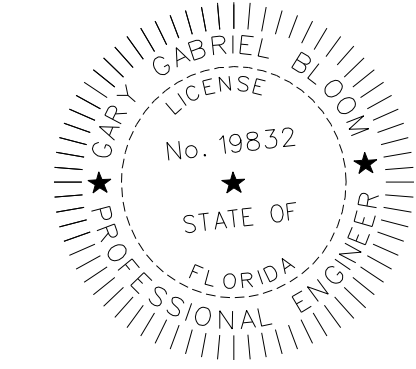
GGB Engineering, Inc.  
CIVIL AND FORENSIC ENGINEERS - LAND PLANNERS  
CONSTRUCTION MANAGERS  
FLORIDA REGISTRATION No. 818  
2899 Stirling Road, Suite C-202  
Fort Lauderdale, Florida 33312  
Phone: (954) 986-9899  
Fax: (954) 986-8655

DATE: Sept. 2021  
DESIGNED BY: C.C.B.

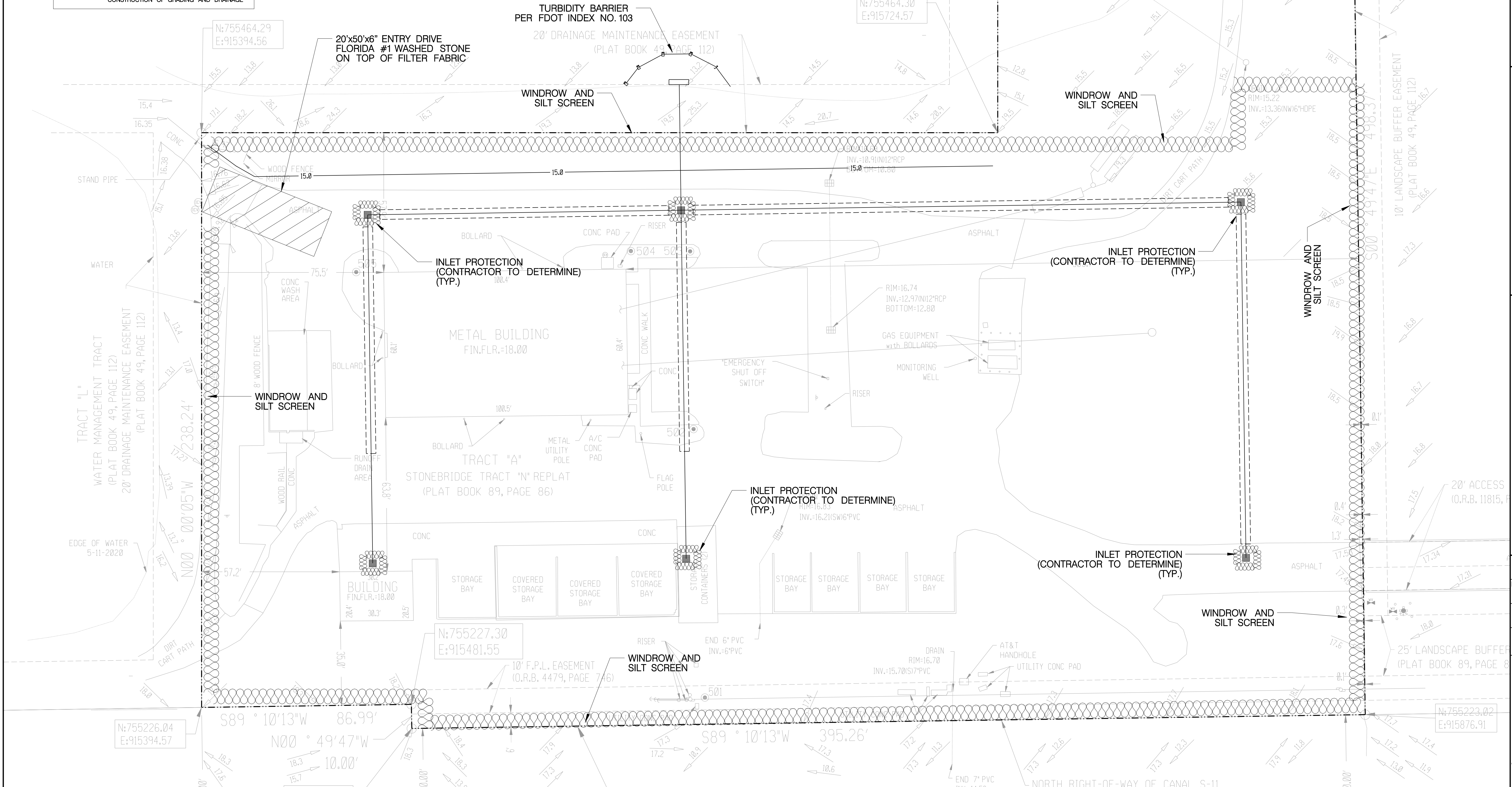
SCALE: 1"=20'  
DRAWN BY: M.M.

PROJECT NO.  
21-0817

SHEET  
SW1



This document has been digitally signed and sealed by Gary G. Bloom, P.E. On the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

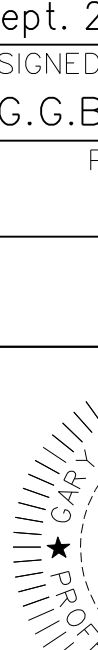


# STORM WATER POLLUTION PREVENTION PLAN

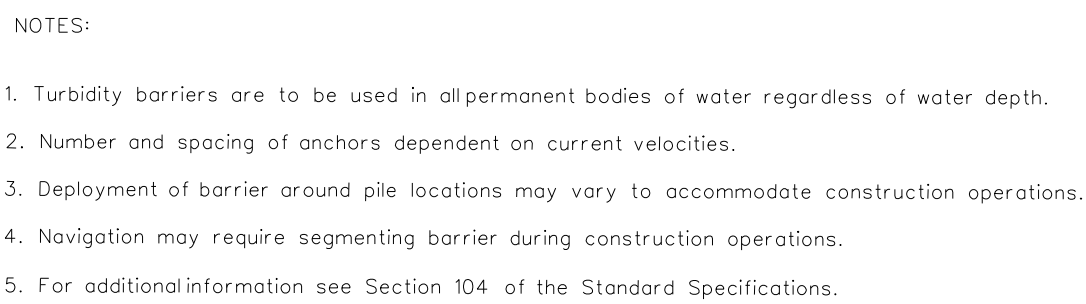
| SITE DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    | GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |                    |    |                       |    |                     |    |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|----|-----------------------|----|---------------------|----|--|--|
| PROJECT NAME AND LOCATION:<br>La Piazza II (a2),The Radius<br>Located at the NW quarter of US 1 and Youngs Circle/Tyler Street<br>In the City of Hollywood,FL<br>OWNER NAME AND ADDRESS:<br>Lone Development Corporation<br>5555 Glenridge Connector,Suite 700<br>Atlanta,GA 30342                                                                                                                                                                                                                                                                                                                                                                                                         |    | THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND TURBIDITY CONTROL PLAN.IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS.DEpending ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.                                                                                                                                                                                                                                                                                                                                                                              |    |                    |    |                       |    |                     |    |  |  |
| DESCRIPTION:<br>THE PROJECT AREA IS 2/3 ACRES AND WILL BE DEVELOPED INTO A CONDOMINIUM AND PARKING GARAGE.<br><br>THE STORMWATER SYSTEM WILL CONSIST OF CATCH BASINS AND PIPING, ROUTING ALL STORM WATER TO TWO DRAINAGE WELLS.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |    | SEQUENCE OF MAJOR ACTIVITIES:<br><br><u>SEQUENCE OF MAJOR ACTIVITIES:</u><br>1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.<br>2. DEMO AND CLEAR SITE<br>3. INSTALL UNDERGROUND UTILITIES.<br>4. COMPLETE FINAL GRADING OPERATIONS.<br>5. CONTINUE WITH E&S CONTROL MEASURES.<br>6. START BUILDING FOUNDATION.<br>7. CONTINUE WITH E&S CONTROL MEASURES.<br>8. COMPLETE BUILDING CONSTRUCTION.<br>9. CONTINUE WITH E&S CONTROL MEASURES.<br>10. COMPLETE CURB AND SIDEWALK CONSTRUCTION<br>11. REMOVE ACCUMULATED SEDIMENTS FROM STORM WATER MANAGEMENT SYSTEM.                                                                                                                                                                                                                                                                                                                              |    |                    |    |                       |    |                     |    |  |  |
| SOIL DISTURBING ACTIVITIES:<br>SOIL DISTURBING ACTIVITIES WILL INCLUDE CLEARING,GRADING, STORM SEWER,UTILITIES,AND BUILDING FOUNDATIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| RUNOFF CURVE NUMBERS:<br><table><tr><td></td><td>CN</td></tr><tr><td>1.PRE-CONSTRUCTION</td><td>90</td></tr><tr><td>2.DURING CONSTRUCTION</td><td>80</td></tr><tr><td>3.POST-CONSTRUCTION</td><td>98</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CN | 1.PRE-CONSTRUCTION | 90 | 2.DURING CONSTRUCTION | 80 | 3.POST-CONSTRUCTION | 98 |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CN |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| 1.PRE-CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| 2.DURING CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 80 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| 3.POST-CONSTRUCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 98 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| SOILS:<br>REFER TO SOIL MAP C403                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| SITE MAPS:<br>REFER TO SHEET C400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| STORMWATER POLLUTION PREVENTION PLANS:<br>REFER TO SHEETS C400,C401,C402 AND CC403                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| SITE AREA:<br>1. TOTAL AREA OWNED: 2/3 AC.<br>2. AREA TO BE DISTURBED: 2/3 AC.(PROJECT AREA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| NAME OF RECEIVING WATERS:<br><br>THE PROPOSED SYSTEM WILL CONVEY STORM WATER RUNOFF VIA CATCH BASINS AND PIPING TO TWO DRAINAGE WELLS FOR DISPOSAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    | TIMING OF CONTROLS/MEASURES<br><br>AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES,THE SILT FENCES AND HAY BALES WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY PORTIONS OF THE SITE.AS CONSTRUCTION PROCEEDS,THE CONTRACTOR MUST BE DILIGENT TO UN-INSTALL AND RE-INSTALL PORTIONS OF ALL OF THE SILT FENCE,OR HAY BAYS OR TAKE OTHER MEASURES NECESSARY TO MAINTAIN THE SYSTEM IN ACCORDANCE WITH ALL REGULATIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |                    |    |                       |    |                     |    |  |  |
| CONTROLS<br><br>THIS PLAN UTILIZES BEST MANAGEMENT PRACTICES TO CONTROL EROSION AND SEDIMENTATION OF STORM WATER RUN OFF.AN EROSION PROTECTION PLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTOR ON PLACEMENT OF THESE CONTROLS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL AND MAINTAIN THE CONTROLS PER PLAN AS WELL AS ENSURING THE PLAN IS PROVIDING THE PROPER PROTECTION AS REQUIRED BY FEDERAL,STATE AND LOCAL LAWS. REFER TO CONTRACTORS RESPONSIBILITY FOR A VERBAL DESCRIPTION OF THE CONTROLS THAT MAY BE IMPLEMENTED.                                                                                                                                                     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| STORM WATER MANAGEMENT<br><br>DURING CONSTRUCTION,STORM WATER DRAINAGE WILL BE PROVIDED BY UTILIZATION OF THE EXISTING DRAINAGE COLLECTION SYSTEM IN THE STREET RIGHT OF WAY OF POLK STREET AND NORTH 15TH AVENUE.THE EXISTING SYSTEM CONVEYS STORM WATER RUNOFF VIA DRAINAGE PIPES TO THE ATLANTIC OCEAN.AFTER STORMWATER UTILITIES ARE INSTALLED,STORM WATER DRAINAGE WILL BE PROVIDED BY CATCH BASINS,EXFILTRATION TRENCH AND DRAINAGE WELLS,DURING VARIOUS PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL UTILIZE STAGED SILT FENCE AND/OR HAY BALE S OR OTHER BEST MANAGEMENT PRACTICES AS NECESSARY TO COMPLY WITH THE REQUIREMENTS SET FORTH BY LOCAL,STATE AND FEDERAL REQUIREMENTS. |    | ENDANGERED SPECIES AND CRITICAL HABITAT<br><br>1. ARE THERE ENDANGERED SPECIES ON SITE? NO.<br>2. ARE THERE CRITICAL HABITAT ON SITE? NO.<br>IF YES TO EITHER QUESTION,PLEASE EXPLAIN.<br>_____<br>_____<br>_____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                    |    |                       |    |                     |    |  |  |
| TIMING OF CONTROLS/MEASURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    | CONTROLS<br><br>IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND TURBIDITY CONTROLS AS SHOWN ON THE GRADING,DRAINAGE & EROSION CONTROL PLAN.IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED,MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT TURBID OR POLLUTED WATER FROM LEAVING THE PROJECT SITE.THE CONTRACTOR WILL ADJUST THE EROSION AND TURBIDITY CONTROLS SHOWN ON THE GRADING,DRAINAGE & EROSION CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES,AS REQUIRED,TO ENSURE THE SITE MEETS ALL FEDERAL,STATE AND LOCAL EROSION AND TURBIDITY CONTROL REQUIREMENTS.THE FOLLOWING BEST MANAGEMENT PRACTICES WILL BE IMPLEMENTED BY THE CONTRACTOR AS REQUIRED BY THE GRADING,DRAINAGE & EROSION CONTROL PLAN AND AS REQUIRED TO MEET THE EROSION AND TURBIDITY REQUIREMENTS IMPOSED ON THE PROJECT SITE BY THE REGULATORY AGENCIES. |    |                    |    |                       |    |                     |    |  |  |
| IT IS THE CONTRACTOR IS RESPONSIBLE FOR THE TIMING OF CONTROLS AND MEASURES AS REQUIRED TO MEET REQUIREMENTS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |    | EROSION AND SEDIMENT CONTROLS<br>STABILIZATION PRACTICES (IF APPLICABLE):<br>1. HAY BALE BARRIER,HAY BALE BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:<br>A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.<br>B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.<br>C. WHERE EFFECTIVENESS IS REQUIRED FOR LESS THAN 3 MONTHS.<br>D. EVERY EFFORT SHOULD BE MADE TO LIMIT THE USE OF STRAW BALE BARRIERS CONSTRUCTED IN LIVE STREAMS OR IN SWALES WHERE THERE IS THE POSSIBILITY OF A WASHOUT.IF NECESSARY,MEASURES SHALL BE TAKEN TO PROPERLY ANCHOR BALES TO INSURE AGAINST WASHOUT.<br>REFER TO EROSION CONTROL DETAILS FOR CONSTRUCTING THE HAY BALE BARRIER.ALSO REFER TO THE GRADING,DRAINAGE & EROSION CONTROL PLAN FOR PROPER LOCATION              |    |                    |    |                       |    |                     |    |  |  |
| CERTIFICATION OF COMPLIANCE WITH FEDERAL,STATE AND LOCAL REGULATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    | 2. FILTER FABRIC BARRIER:FILTER FABRIC BARRIERS CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION WITH THE FOLLOWING LIMITATIONS:<br>A. WHERE THE MAXIMUM SLOPE BEHIND THE BARRIER IS 33 PERCENT.<br>B. IN MINOR SWALES OR DITCH LINES WHERE THE MAXIMUM CONTRIBUTING CONTRIBUTING DRAINAGE AREA IS NO GREATER THAN 2 ACRES.<br>REFER TO THE EROSION CONTROL DETAILS FOR PROPER CONSTRUCTION OF THE FILTER FABRIC BARRIER.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                    |    |                       |    |                     |    |  |  |
| IN ACCORDANCE WITH FEDERAL,STATE AND LOCAL LAWS RELATED TO STORM WATER MANAGEMENT AND EROSION AND TURBIDITY CONTROLS,THE FOLLOWING PERMITS HAVE BEEN OBTAINED.<br><br>• ERP APPLICATION _____<br><br>• BRD COUNTY DRP _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| POLLUTION PREVENTION PLAN CERTIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |
| I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED,BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM,OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION.THE INFORMATION SUBMITTED IS,TO THE BEST OF MY KNOWLEDGE AND BELIEF,TRUE,ACCURATE,AND COMPLETE.I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION,INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.                                  |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |    |                       |    |                     |    |  |  |

| HAZARDOUS PRODUCTS                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| • PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
| • ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED;THEY CONTAIN IMPORTANT PRODUCT INFORMATION.                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| • IF SURPLUS PRODUCT MUST BE DISPOSED OF,MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.                                                                                                                                                                                                                                                                                                                                             |  |  |
| PRODUCT SPECIFIC PRACTICES                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| PETROLEUM PRODUCTS                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED,ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.                                                                                                                                                          |  |  |
| FERTILIZERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER,ONCE APPLIED,FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED AREA,THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.                                                                                                                                       |  |  |
| PAINTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
| ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE,EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.                                                                                                                                                                                                                               |  |  |
| CONCRETE TRUCKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| SPILL CONTROL PRACTICES                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |
| IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN,THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:                                                                                                                                                                                                                                                                                |  |  |
| MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED ON SITE AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.                                                                                                                                                                                                                                                                            |  |  |
| MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE,EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS,DUST PANS,MOPS,RAGS, GLOVES,GOOGLES,LIQUID ABSORBENT (1&1 KITTY LITTER OR EQUAL), S&W,S&W,AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.                                                                                                                                           |  |  |
| ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.                                                                                                                                                                                                                                                                                                                   |  |  |
| SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY,REGARDLESS OF THE SIZE OF THE SPILL.                                                                                                                                                                                                                                                                                                                                   |  |  |
| THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE.A DESCRIPTION OF THE SPILL,WHAT CAUSED IT,AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.                                                                                                                                                                                                                    |  |  |
| THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS,WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE/SHE WILL DESIGNATE AT LEAST ONE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING.THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP.THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IF APPLICABLE,IN THE OFFICE TRAILER ONSITE. |  |  |
| MAINTENANCE/INSPECTION PROCEDURES                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.                                                                                                                                                                                                                                                                                            |  |  |
| NO MORE THAN 5 ACRES OF THE SITE WILL BE DENUNDED AT ONE TIME WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.                                                                                                                                                                                                                                 |  |  |
| ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER.IF A REPAIR IS NECESSARY,IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.                                                                                                                                                                                                                                                                                                                                 |  |  |
| BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.                                                                                                                                                                                                                                                                                                                                                                         |  |  |

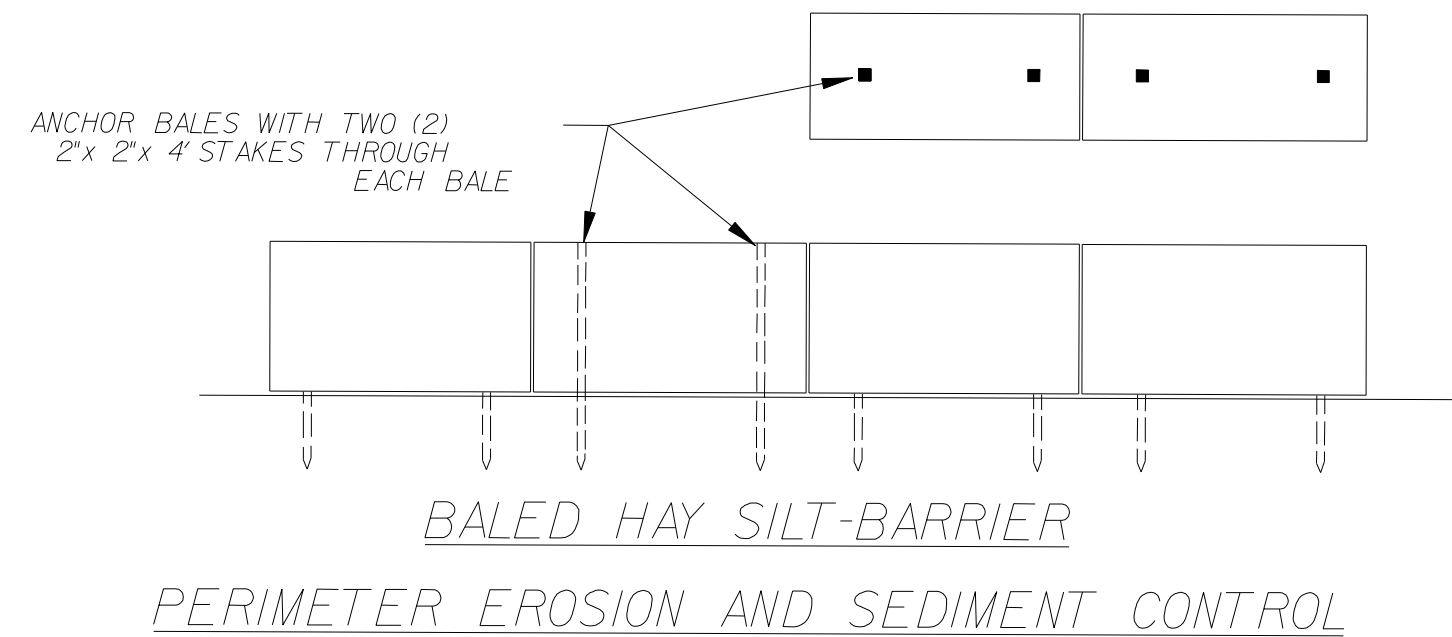
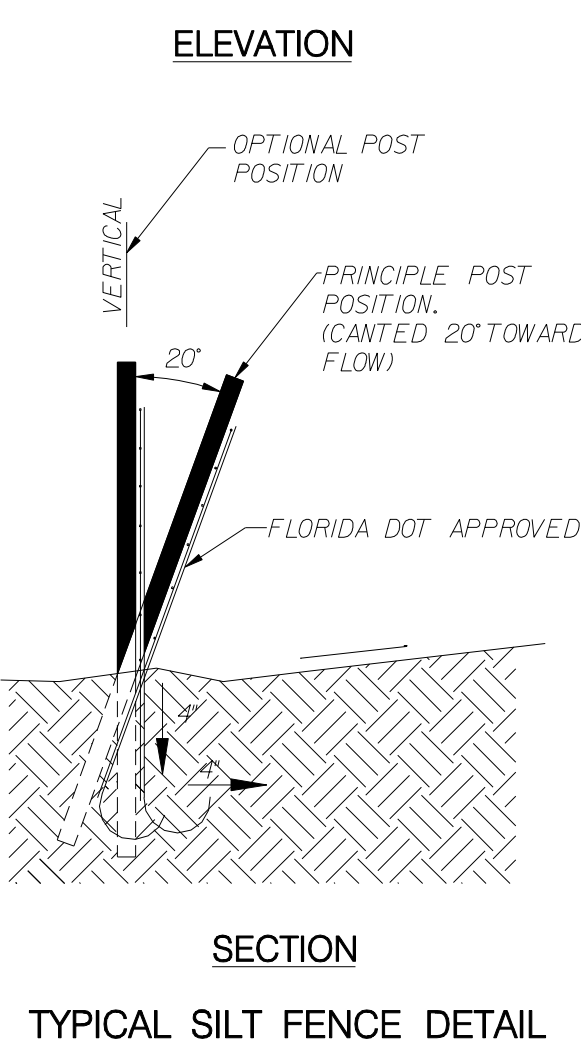
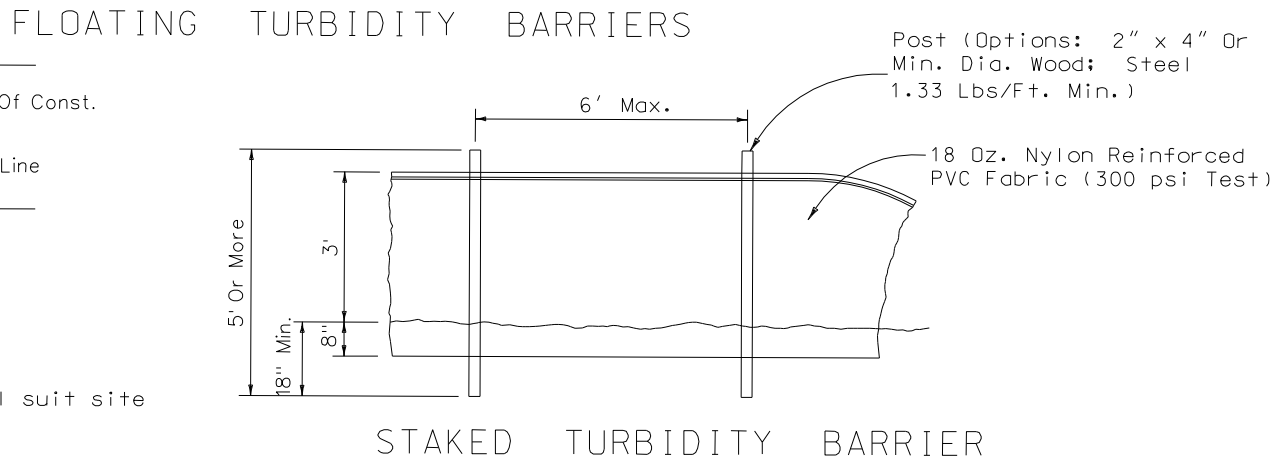
| RESPONSIBLE FOR/DUTIES |  |  |
|------------------------|--|--|
| GENERAL CONTRACTOR     |  |  |
| SUB CONTRACTOR         |  |  |
| SUB CONTRACTOR         |  |  |
| SUB CONTRACTOR         |  |  |
| SUB CONTRACTOR         |  |  |
| SUB CONTRACTOR         |  |  |
| BUS                    |  |  |

|                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |               |                     |                |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|---------------------|----------------|
| REVISIONS:<br><br>1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7.<br>8. | <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>CLIENT:</p> <p><b>New York Design Collaborative Inc.</b></p> <p><b>11090 Clover Leaf Circle</b></p> <p><b>Boca Raton, Florida 33428</b></p> </div> <div style="width: 45%;"> <p>PROJECT:</p> <p><b>Stonebridge Country Club Maintenance Yard</b></p> <p><b>PALM BEACH FLORIDA, 33140</b></p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>TASK:</p> <p><b>STORMWATER POLLUTION PREVENTION PLAN</b></p> </div> <div style="width: 45%;"> <p><b>GCB Engineering, Inc.</b></p> <p><small>CIVIL AND FORENSIC ENGINEERS • LAND PLANNERS<br/>• CONSTRUCTION MANAGERS<br/>FLORIDA REGISTRATION No. 818</small></p> <p>2699 Stirling Road, Suite C-202<br/>Fort Lauderdale, Florida 33312</p> <p>Phone: (954) 986-9899<br/>Fax: (954) 986-6655</p> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%;">DATE: Sept. 2021</td> <td style="width: 50%;">SCALE: N.T.S.</td> </tr> <tr> <td>DESIGNED BY: G.G.B.</td> <td>DRAWN BY: M.M.</td> </tr> </table> <p style="text-align: center; margin-top: 5px;">PROJECT NO. 21-0817</p> <p style="text-align: center; margin-top: 5px;">SHEET SW2</p> <div style="text-align: center; margin-top: 10px;">  </div> <p style="font-size: small; margin-top: 10px;">This document has been digitally signed and sealed by Gary G. Bloom, P.E. On the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.</p> | DATE: Sept. 2021 | SCALE: N.T.S. | DESIGNED BY: G.G.B. | DRAWN BY: M.M. |
| DATE: Sept. 2021                                               | SCALE: N.T.S.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |               |                     |                |
| DESIGNED BY: G.G.B.                                            | DRAWN BY: M.M.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |               |                     |                |

|                                                                                                                     |                                          |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF. | → Mooring Buoy w/Anchor                  |
|                                                                                                                     | → Anchor                                 |
| 2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.     | ○ Barrier Movement Due To Current Action |

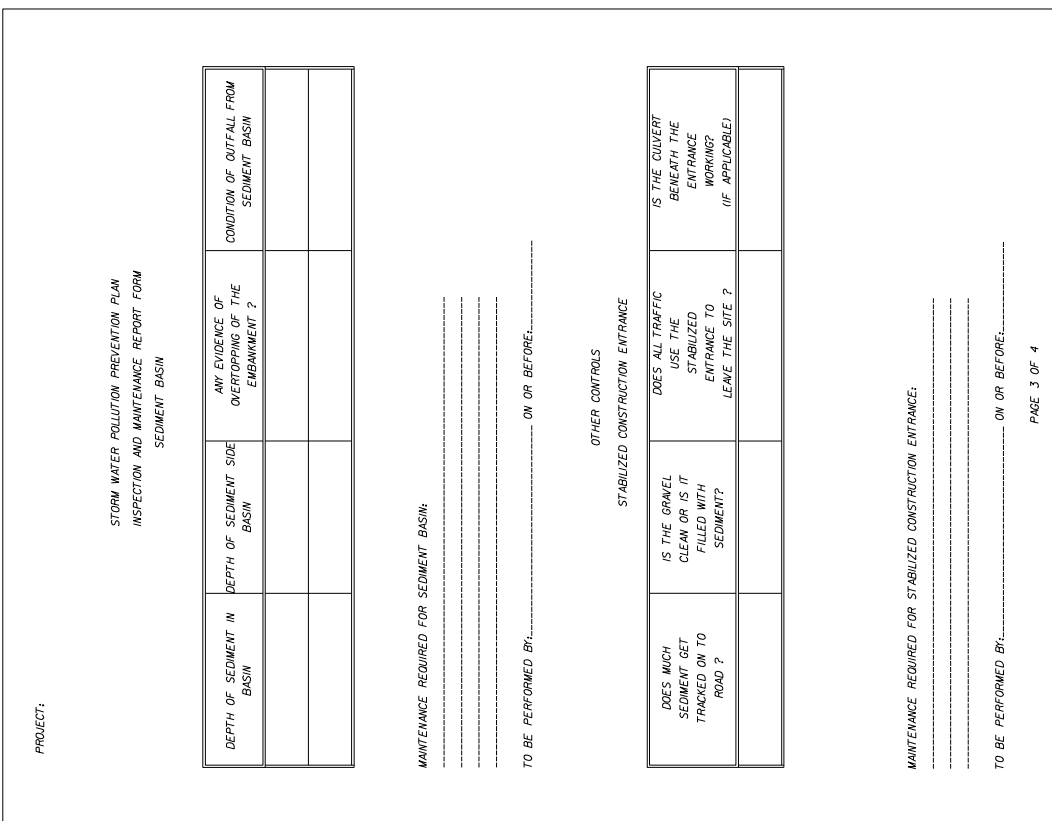
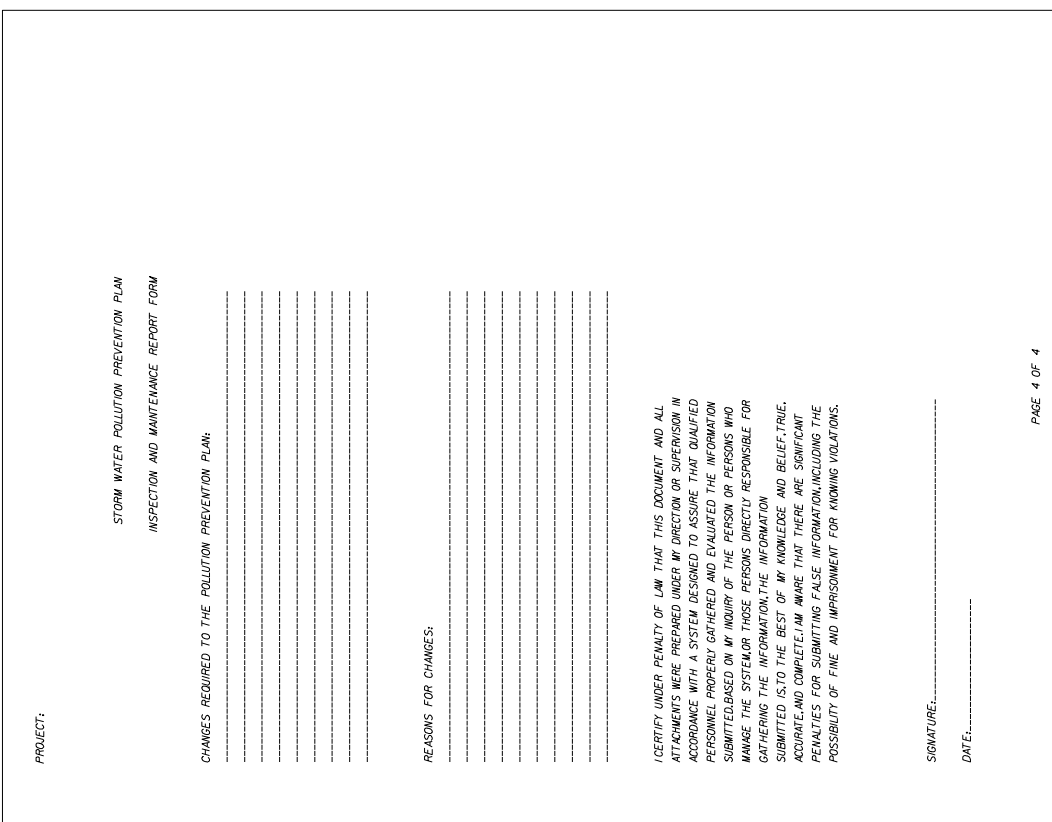


## TURBIDITY BARRIER DETAILS PER FDOT INDEX NO. 103



NOTE TO CONTRACTOR:

THIS IS THE CONTRACTORS CERTIFICATION REQUIRED BY THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES),STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SITES OVER 1 ACRES.THIS CERTIFICATION MUST BE COMPLETED WEEKLY AND AFTER EVERY RAINFALL EVENT OVER 0.25 INCHES.IT IS SUGGESTED THAT THIS SHEET BE REMOVED FROM THE PLAN SET AND DULICATED AS NEEDED BY THE CONTRACTOR

A circular professional engineer seal for Gary Gabriel Bloom. The outer ring contains the text "GARY GABRIEL BLOOM" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top, "No. 19832" is in the center, "STATE OF" is below the number, and "FLORIDA" is at the bottom, also separated by two stars. The seal is surrounded by a series of short radial lines.

This document has been digitally signed and sealed by Gary G. Bloom, P.E. On the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.