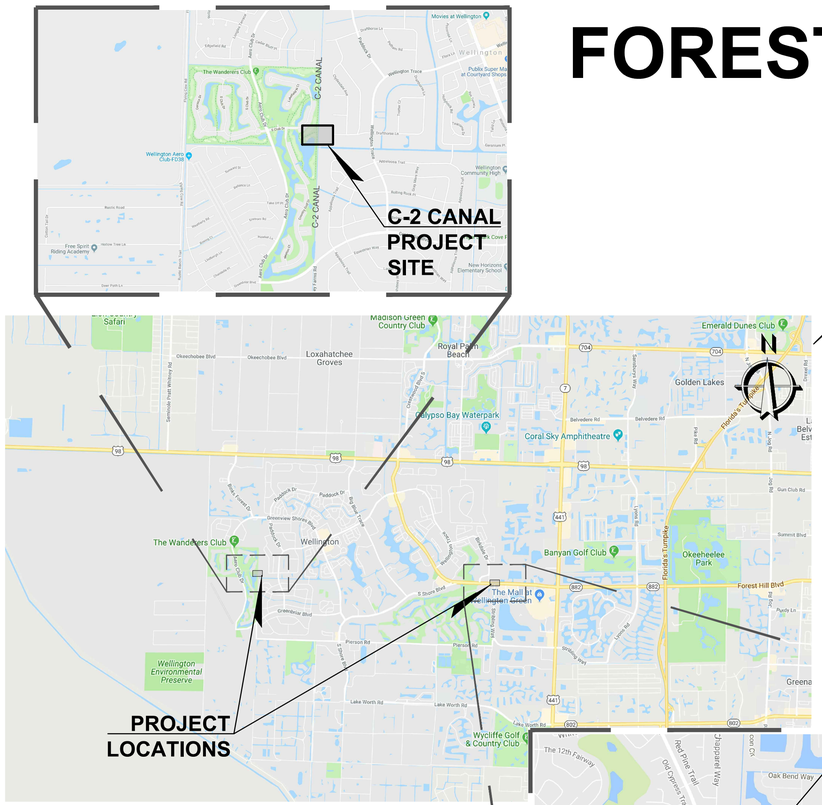
FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING

PREPARED FOR

THE VILLAGE OF WELLINGTON

PALM BEACH COUNTY, FLORIDA

JANUARY 2019



VICINITY MAP

N.T.S.

SECTION 7, TOWNSHIP 44 SOUTH, RANGE 41 EAST

SECTION 11, TOWNSHIP 44 SOUTH, RANGE 41 EAST

VILLAGE COUNCIL

ANNE GERWIG, MAYOR

MICHAEL DRAHOS, VICE MAYOR

JOHN T. MCGOVERN, COUNCILMAN

MICHAEL J. NAPOLEONE, COUNCILMAN

TANYA SISKIND, COUNCILWOMAN

VILLAGE MANAGER

PAUL SCHOFIELD

UTILITIES DIRECTOR

SHANNON LAROCQUE, PE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C0-1	COVER
C0-2	LOCATION AND KEY SHEET MAPS
C0-3	GENERAL NOTES, SURVEY NOTES, AND LEGEND
C0-4	C-8 CANAL SITE STORMWATER POLLUTION PREVENTION PLAN
C0-5	C-2 CANAL SITE STORMWATER POLLUTION PREVENTION PLAN
C1-1	EXISTING FOREST HILL BLVD SITE - PLAN VIEW
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C3-1	PROPOSED FOREST HILL BLVD 16 INCH FM HDD - PLAN AND PROFILE
C3-2	PROPOSED C-2 CANAL 6 INCH FM HDD - PLAN AND PROFILE
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C5-2	VILLAGE OF WELLINGTON STANDARD DETAILS
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C5-4	VILLAGE OF WELLINGTON STANDARD DETAILS
C5-5	VILLAGE OF WELLINGTON STANDARD DETAILS
C5-6	DETAILS

TOTAL NUMBER OF SHEETS: 15

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ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

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	1	3/12/2019	TET	REVISIONS PER VOW

SEAL

SPENCER M. SCHROEDER
FLORIDA P.E. NO. 65693

DATE

FLORIDA E.B. NO. 48 — MOCK•ROOS — FLORIDA L.B. NO. 48

CONSULTING ENGINEERS

5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113, www.MockRoos.com

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APPR: GGG	
SCALE: AS SHOWN	

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FOREST HILL BOULEVARD CROSSING AND
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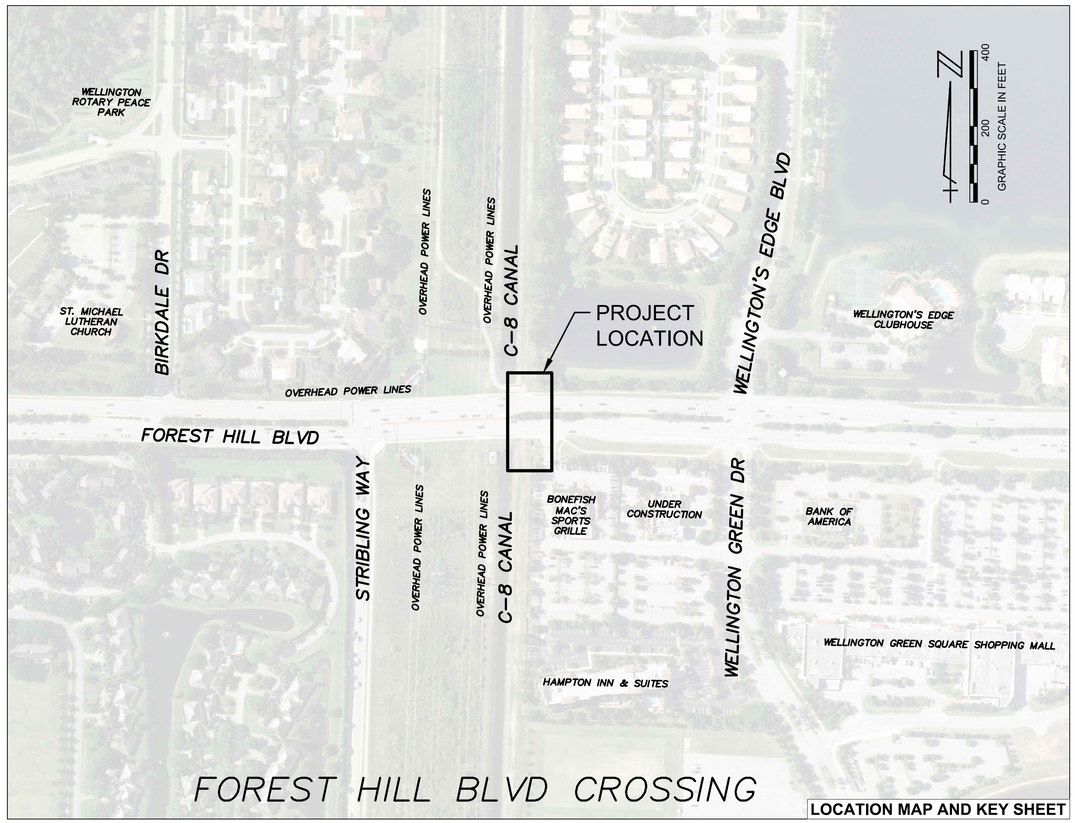
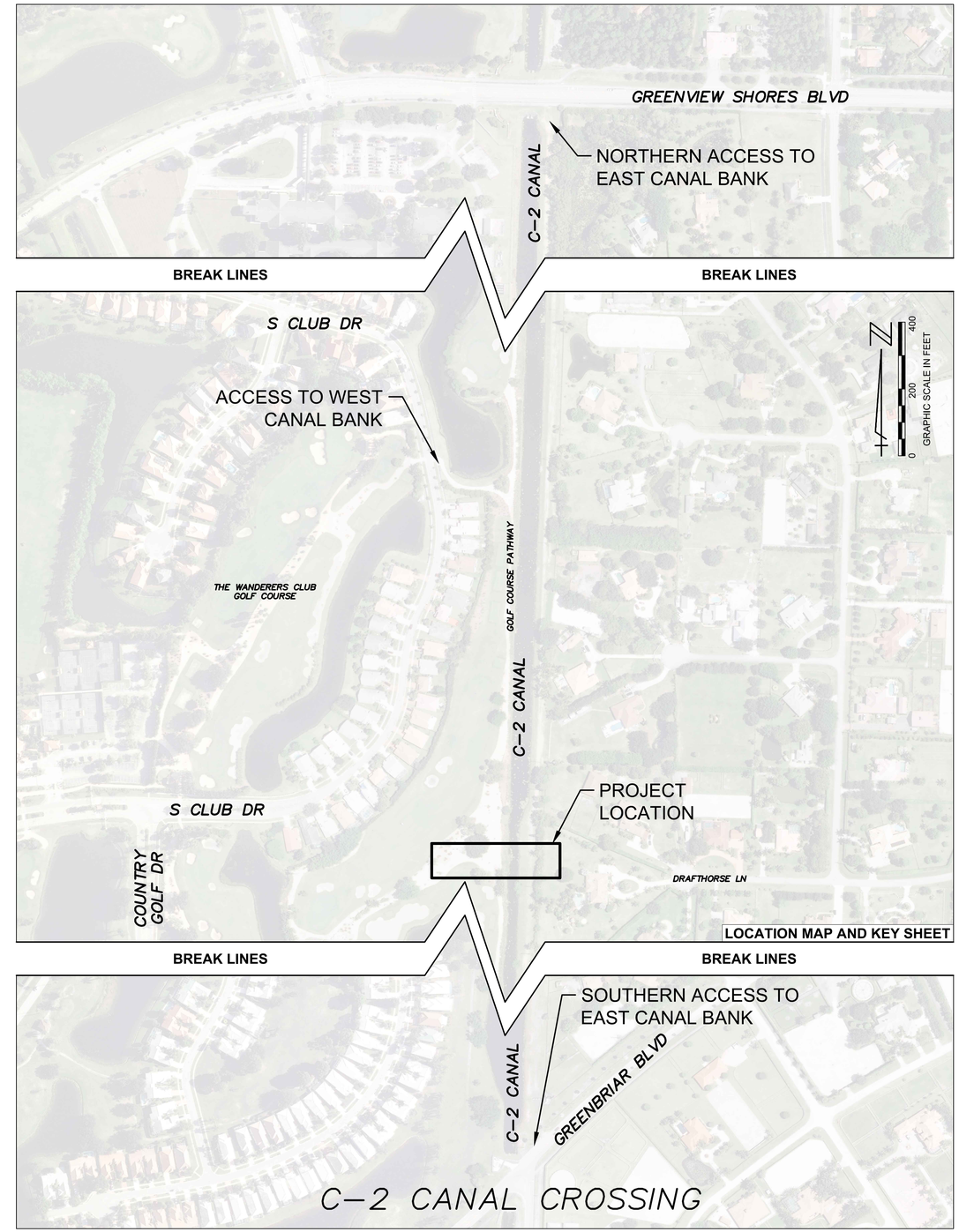
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
SHEET:	C0-1





LOCATION AND KEY SHEET MAPS

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

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FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE: JANUARY 2019
P.A. NO. B8705.00
DWG. NO. 44-41-11-16
SHEET: C0-2

GENERAL NOTES:

1. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH FDOT SPECIFICATIONS, LATEST ADDITION AND THE VILLAGE OF WELLINGTON STANDARD SPECIFICATIONS. ALL MATERIALS SHALL CONFORM TO THE CURRENT APPROVED PRODUCTS LIST FOR THE VILLAGE OF WELLINGTON.
3. ALL PROPOSED GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL SLOPE FINISHED GRADES UNIFORMLY BETWEEN OTHER FINISHED AND EXISTING GRADES AND IN SUCH A MANNER TO PREVENT STORMWATER PONDING.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVAL, DISPOSAL, ABANDONMENT, AND RELOCATIONS NECESSARY TO COMPLETE THE WORK WHETHER SHOWN ON THE DRAWINGS OR NOT. CONTRACTOR SHALL COORDINATE RELOCATIONS WITH THE NECESSARY UTILITY COMPANIES.
5. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY THE CONTRACTOR'S ACTIVITIES INVOLVING CONSTRUCTION, STAGING AREAS, AND ACCESS ROADS IN KIND. ALL DISTURBED NON-PAVED AREAS SHALL BE PLANTED WITH "IN-KIND" VEGETATION.
6. CONTRACTOR SHALL SUBMIT AN M.O.T. PLAN CONFORMING TO FDOT INDEX NO. 102-600 AND AS REQUIRED IN THE PROJECT SPECIFICATIONS. THE PLAN SHALL PROVIDE FOR TWO-WAY TRAFFIC FLOW AT ALL TIMES. CONTRACTOR SHALL FOLLOW THE APPROVED PLAN THROUGHOUT PROJECT DURATION. ACCESS TO PRIVATE PROPERTIES AND PUBLIC SIDE STREETS SHALL BE PROVIDED AT ALL TIMES.
7. CONTRACTOR SHALL SUBMIT A PROPOSED PHASING PLAN SHOWING BOTH CONSTRUCTION AND MAINTENANCE OF TRAFFIC PHASING.
8. CONTRACTOR SHALL COORDINATE WITH THE NECESSARY UTILITY COMPANIES AND SUNSHINE 811 (811 OR 1-800-432-4770) FOR ALL UTILITY LOCATES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH CHAPTER 556 OF THE FLORIDA STATUTES: THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT.
10. CONTRACTOR SHALL MAINTAIN A NEAT, ORDERLY, AND SAFE SITE AT ALL TIMES.
11. ALL SURVEY MONUMENTS WITHIN LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. IF IN DANGER OF DAMAGE THE CONTRACTOR SHALL NOTIFY: NATIONAL GEODETIC INFORMATION SERVICES CENTER NOAA NATIONAL GEODETIC SURVEY, N/CG 17 SSMC 3, STATION 09202 SILVER SPRING, MARYLAND 20910 TELEPHONE NO. (301) 713-3242.
12. CONTRACTOR SHALL APPLY FOR AND COMPLY WITH THE REQUIREMENTS OF THE FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION SITES.
13. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES SUCH AS SILT FENCES AND INLET PROTECTION WHERE NECESSARY IN ORDER TO COMPLY WITH THE STATE AND LOCAL WATER QUALITY STANDARDS AND NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) REQUIREMENTS. CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER FOR REVIEW A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
14. ALL WORK SHALL BE OPEN AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE VILLAGE OF WELLINGTON, ALL INVOLVED UTILITY COMPANIES, THE PROJECT ENGINEER AND ALL REGULATORY AGENCIES.
15. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID:
    A. REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
    B. WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT.
16. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTTIME HOURS.
17. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE DEPICTING EACH PHASE OF THE WORK. THE SCHEDULE SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
18. CONTRACTOR SHALL PROMPTLY REMOVE ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING PUBLIC ROADS AND FACILITIES DUE TO CONSTRUCTION.
19. ALL EXCESS FILL AND DEBRIS FROM THE SITE SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.
20. ALL UTILITIES (MANHOLE, VALVE, ELECTRIC RINGS AND TOPS) SHALL BE ADJUSTED TO NEW FINISH GRADES AND PROPERLY SET TO PAVEMENT CROSS SLOPE AS REQUIRED.
21. CONTRACTOR SHALL COORDINATE WITH THE VILLAGE OF WELLINGTON FOR THE SELECTION OF PROPOSED CONSTRUCTION STAGING AREAS AND/OR STOCKPILING OF MATERIALS.
22. CONTRACTOR SHALL COORDINATE ALL SITE WORK FOR PEDESTRIAN AND TRAFFIC CONTROL WITH THE VILLAGE OF WELLINGTON ENGINEERING DEPARTMENT: JONATHAN REINSVOLD, P.E. OFFICE: 561-791-4052.
23. CONTRACTOR SHALL LIMIT ACCESS AND CONSTRUCTION OPERATIONS TO WITHIN LIMITS OF THE PUBLIC ROAD AND CANAL RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES OUTSIDE THE LIMITS OF THE ROAD AND CANAL RIGHTS-OF-WAY.
24. AREAS FOR THE STORAGE OF EXCAVATED MATERIAL ARE LIMITED. SUCH MATERIAL MAY BE REMOVED AND STORED OFFSITE AND RETURNED FOR BACKFILLING.
25. CONTRACTOR SHALL HAVE NO TRENCHES OPEN AT THE END OF EACH WORK DAY. IF NECESSARY, TRENCHES SHALL BE TEMPORARILY BACKFILLED AND BARRICADED.
26. THE AERIAL PHOTOGRAPH USED FOR THIS PROJECT WAS PREPARED FROM THE PALM BEACH COUNTY DATA BASE AND AS SUCH SHOULD BE USED ONLY AS SCHEMATICS.
27. SOURCE AND DATE OF AERIAL PHOTOGRAPHY: PBC GIS DATED 2017.
28. CONTRACTOR SHALL USE CAUTION AND TAKE THE NECESSARY SAFETY PRECAUTIONS WHILE WORKING ADJACENT TO OVERHEAD AND UNDERGROUND ELECTRIC.
29. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE AND DOCUMENT THE LOCATIONS OF THE EXISTING IRRIGATION SYSTEM WITHIN THE PROJECT BOUNDARIES. THE CONTRACTOR WILL BE RESPONSIBLE AS PART OF THIS CONTRACT TO RESTORE THE EXISTING IRRIGATION SYSTEM TO ORIGINAL OR BETTER CONDITIONS. PLEASE COORDINATE YOUR EFFORTS WITH CHRIS CUMSTON @ 561-791-4117 OR BRIAN HOPPER @ 561-791-4126.
30. CONTRACTOR MUST PREPARE AND SUBMIT A FRAC-OUT CONTINGENCY AND RESPONSE PLAN FOR THE HORIZONTAL DIRECTIONAL DRILL UNDERNEATH THE C-2 CANAL. THE PLAN SHALL BE PREPARED BY A QUALIFIED INDIVIDUAL AND IS SUBJECT TO REVIEW AND APPROVAL BY THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF ANY HORIZONTAL DIRECTIONAL DRILLING ACTIVITIES.
31. CONTRACTOR SHALL COORDINATE ALL RESTORATION REQUIREMENTS FOR THE WASTE BUNKER AND ANY OTHER DISTURBED AREAS ON THE WEST SIDE OF THE C-2 CANAL WITH GOLF COURSE REPRESENTATIVES. CONTRACTOR SHALL MAKE EVERY EFFORT TO CONTAIN CONSTRUCTION ACTIVITIES WITHIN THE EXISTING EASEMENT.
32. VEGETATION WITHIN THE RIGHT-OF-WAY ON THE EAST SIDE OF THE C-2 CANAL SHALL BE REMOVED AS NECESSARY FOR CONSTRUCTION. THE CONTRACTOR SHALL PROTECT AND PRESERVE ANY SPECIMEN PALMS IN THE AREA IF POSSIBLE.
33. ACCESS TO THE EAST SIDE OF THE C-2 CANAL SHALL BE THROUGH THE VEHICLE GATE AT THE C-2 CANAL AND GREENBRIAR BLVD. ACCESS TO THE WEST SIDE OF THE C-2 CANAL SHALL BE FROM THE CART PATH CROSSING ON S. CLUB DR. CONTRACTOR SHALL KEEP VEHICLE AND CONSTRUCTION TRAFFIC LIMITED TO CART PATH AREA. CONTRACTOR IS SOLELY RESPONSIBLE FOR RESTORATION OF ALL AREAS DISTURBED DURING CONSTRUCTION.

SURVEY NOTES - FOREST HILL BLVD CROSSING (PREPARED BY DENNIS J. LEARY & ASSOCIATIONS):

1. The survey depicted hereon has been classified as a Topographic Survey, as defined in Rule 5J-17.050 (10)(K) of the Florida Administrative Code, pursuant to Chapter 472.027, Florida Statutes as amended.
2. This survey has been prepared in the office of Dennis J. Leavy & Associates, Inc. located at: 460 Business Park Way, Suite B, Royal Palm Beach, Florida, whose certificate of authorization number is LB6599, and the certifying surveyor's (David A. Bower) license number is LS5888.
3. This survey does not address environmental matters, jurisdictional boundaries or hazardous waste concerns should any of the foregoing exist.
4. THIS IS NOT A BOUNDARY SURVEY
5. The elevations shown hereon are for the purpose of indicating the ground elevation only at the position shown and in no way indicate elevations at any other point than shown hereon and do not determine sub surface conditions.
6. Coordinates shown hereon are based on the North American Datum of 1983, on the 1990 adjustment for the Florida Transverse Mercator Projection-East Zone.
7. Date of field survey: December 27th, 2016, as recorded in Field Book 440, Pages 07-09, 11, 13-17.
8. This survey lies within Section 11, 12, 13 & 14, Township 44 South, Range 41 East, Palm Beach County, Florida.
9. Measurements shown hereon are expressed in feet and decimal parts thereof unless otherwise noted.
10. Benchmark of Origin: Palm Beach County Benchmark "CHALLAH" and "BRIOCHE" whose published elevations are 16.816' and 16.835' respectively, based on the North American Vertical Datum of 1988. Elevations referenced hereon are based on the North American Vertical Datum of 1988 (NAVD 88).
11. The elevations referred to on the Flood insurance Rate Map reference the National Geodetic Vertical Datum of 1929 (NGVD 29), this survey has been prepared with reference to the North American Vertical datum of 1988 (NAVD 88), see below for conversion factor at this site.

SURVEY NOTES - C-2 CANAL CROSSING (PREPARED BY DENNIS J. LEARY & ASSOCIATIONS):

1. The survey depicted hereon has been classified as a Topographic Survey, as defined in Rule 5J-17.050 (12) of the Florida Administrative Code, pursuant to Chapter 472.027, Florida Statutes as amended.
2. This survey has been prepared in the office of Dennis J. Leavy & Associates, Inc. located at: 460 Business Park Way, Suite B, Royal Palm Beach, Florida, whose certificate of authorization number is LB6599, and the certifying surveyor's (David A. Bower) license number is LS5888.
3. This survey does not address environmental matters, jurisdictional boundaries or hazardous waste concerns should any of the foregoing exist.
4. THIS IS NOT A BOUNDARY SURVEY
5. The elevations shown hereon are for the purpose of indicating the ground elevation only at the position shown and in no way indicate elevations at any other point than shown hereon and do not determine sub surface conditions.
6. Coordinates shown hereon are based on the North American Datum of 1983, on the 1990 adjustment for the Florida Transverse Mercator Projection-East Zone.
7. Date of field survey: October 31st, 2018, as recorded in Field Book 471, pages 45 through 47.
8. This survey lies within Section 7 & 8, Township 44 South, Range 41 East, Palm Beach County, Florida.
9. Measurements shown hereon are expressed in feet and decimal parts thereof unless otherwise noted.
10. Benchmark of Origin: Palm Beach County Benchmark "KELLER" and "MARLIN" whose published elevations are 16.012' and 12.574' respectively, based on the North American Vertical Datum of 1988.
11. Elevations referenced hereon are based on the North American Vertical Datum of 1988 (NAVD 88).

ENGINEERING LEGEND:

AASHTO	ASSOCIATION OF AMERICAN STATE HIGHWAY TRANSPORTATION OFFICIALS
℄	BASELINE
BTM	BOTTOM
— — bE — —	BURIED ELECTRIC (EXISTING UTILITY LOCATION)
— — BFO — —	BURIED FIBER OPTIC CABLE (EXISTING UTILITY LOCATION)
℄	CENTERLINE
CIP	CAST IRON PIPE
CONC	CONCRETE
CONST.	CONSTRUCTION
STA:59+75.16 OFF:28.50'R EL: 16.46	CONTROL POINT
CMP	CORRUGATED METAL PIPE
DBC	DIRECT BURIED CABLE
DIA.	DIAMETER
DIP	DUCTILE IRON PIPE
E	EAST
E:	EASTING
EL	ELEVATION
EXIST	EXISTING
FLG	FLANGE
FM	FORCEMAIN
INV	INVERT
L.F.	LINEAR FEET
MH	MANHOLE
NGVD	NATIONAL GEODETIC VERTICAL DATUM
N	NORTH
N:	NORTHING
NO.	NUMBER
PVC	POLYVINYL CHLORIDE PIPE
PI	POINT OF INTERSECTION
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RJ	RESTRAIN JOINT
SS	SANITARY SEWER
	SIGN
STA	STATION
— — sd — —	STORM DRAIN (EXISTING UTILITY LOCATION)
ST	STORM SEWER
STR	STRUCTURE
S	SOUTH
TH	TEST HOLE
T.O.P.	TOP OF PIPE
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE
WM	WATERMAIN
— — W — —	WATERMAIN (EXISTING UTILITY LOCATION)
W	WIDTH; WEST

CIVIL DETAIL, CALL OUT SYMBOLS

DETAIL SECTION NUMBER — 1 / C5-1 — SHEET WHERE SECTION IS LOCATED

SUBSURFACE UTILITY EXPLORATION

Vvh #25

NOTE:
VERIFIED VERTICAL AND HORIZONTAL LOCATIONS (Vvh) ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND IS BASED ON TEST HOLE REPORT DATED JUNE 2017 PROVIDED BY INFRAMAP CORP.

C-2 CANAL CROSSING
NOTE: TO CONVERT FROM NAVD 88 TO NGVD 29 DATUM ADD 1.42 FEET TO THE NAVD 88 ELEVATION. EXAMPLE: EL.= 10.00' (NAVD 88) EL.= 11.42' (NGVD 29)

FOREST HILL BLVD CROSSING
NOTE: TO CONVERT FROM NAVD 88 TO NGVD 29 DATUM ADD 1.41 FEET TO THE NAVD 88 ELEVATION. EXAMPLE: EL.= 10.00' (NAVD 88) EL.= 11.41' (NGVD 29)

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
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PLOT DATE: Mar 14, 2019 - 12:51pm XREFS: IMAGES: \..\.._REF_DATA\PBCO\Aerials\2015\Area-E.sid

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GENERAL NOTES, SURVEY NOTES, AND LEGEND

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
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PALM BEACH COUNTY, FLORIDA

DATE: JANUARY 2019
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SHEET: C0-3

STORMWATER POLLUTION PREVENTION NOTES:

1. THIS PLAN SHOULD BE USED AS A GUIDE, A COMPLETE STORMWATER POLLUTION PREVENTION PLAN SHOULD BE DEVELOPED TO MEET OR EXCEED FDEP REQUIREMENTS.

2. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO DIRT BE TRACKED OFF-SITE OR LEAVES THE SITE BY WIND, RUNOFF, OR OTHER MEANS.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NPDES REQUIREMENTS INCLUDING FILING OF NOTICE OF INTENT, MONITORING REPORTS, AND NOTICE OF TERMINATION.

4. WHERE APPROPRIATE, POLLUTION PREVENTION MEASURES SHALL CONSIST OF, BUT NOT LIMITED TO, THE FOLLOWING:

   4.1. CONSTRUCT WASHROCK PAD AT ALL POINTS OF EGRESS FOR WASHDOWN OF TRUCK TIRES.

   4.2. CONSTRUCT EROSION CONTROL FENCE AND/OR TURBIDITY SCREENS ALONG PROPERTY LINES AS NEEDED.

   4.3. NO AREA SHALL BE LEFT BARREN OR SUBJECT TO EROSION DURING CONSTRUCTION. SEEDING AND MULCHING IS REQUIRED FOR ANY AREAS ANTICIPATED TO BE BARREN DURING CONSTRUCTION FOR MORE THAN 15 DAYS.

   4.4. TURBIDITY BARRIERS TO BE UTILIZED AT PROJECT OUTFALL AND C-11 AND C15 CANALS (AS SHOWN).

   4.5. OTHER MEASURES AS DIRECTED BY THE ENGINEER OR VILLAGE OF WELLINGTON.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL POLLUTION PREVENTION REQUIREMENTS. FOR AFFECTED AREAS GREATER THAN 1 ACRE, COMPLIANCE SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

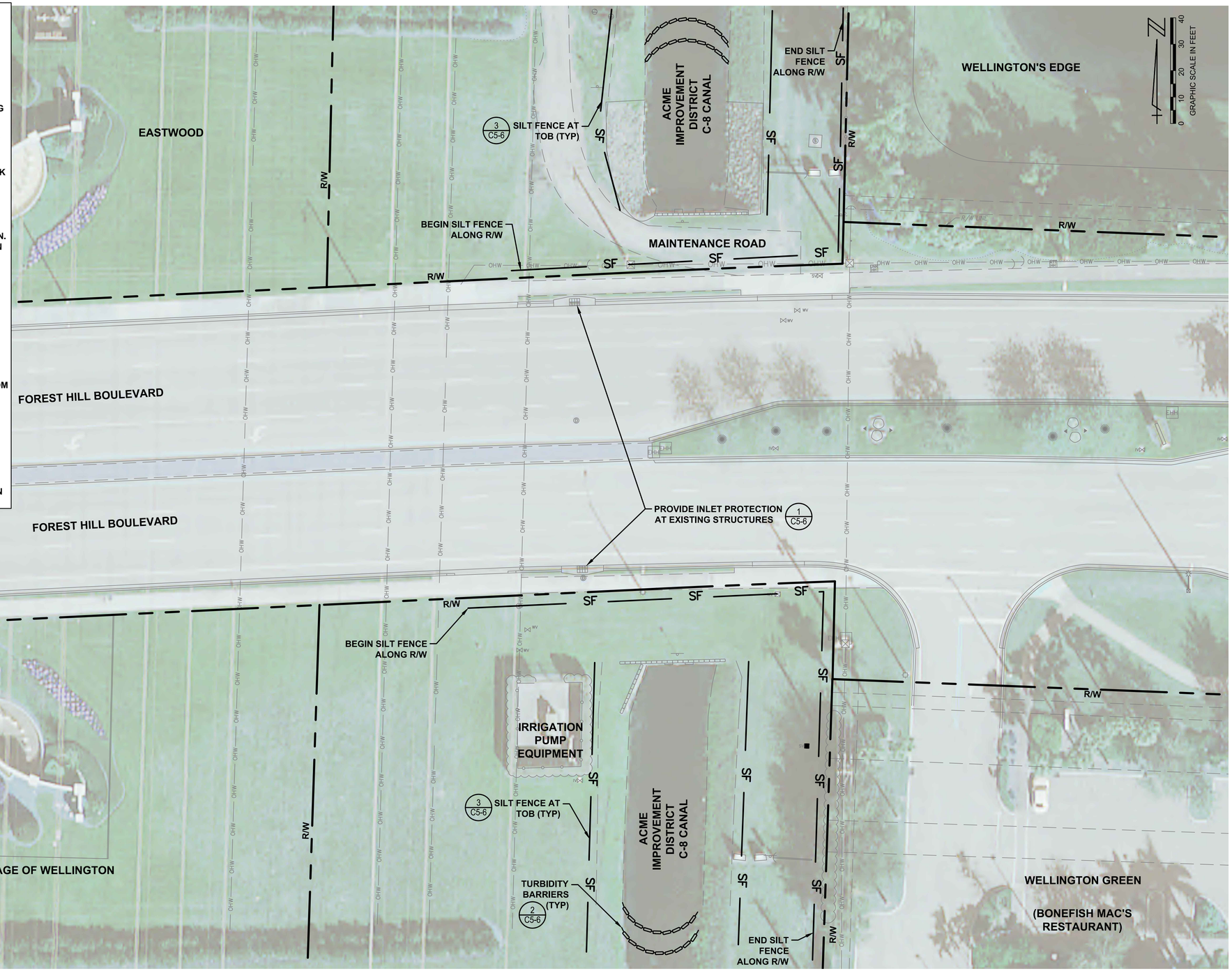
   5.1. PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE DEP "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (DEP DOCUMENT NO. 62-621.300 (4)(A))

   5.2. SUBMITTAL OF THE NOTICE OF INTENT TO THE DEP.

   5.3. MAINTENANCE AND INSPECTION OF THE ELEMENTS OF THE SWPPP.

   5.4. MAINTENANCE OF RECORDS (INSPECTION REPORTS, NOI, SWPPP, ETC.).

   5.5. SUBMITTAL OF THE NOTICE OF TERMINATION (NOT) TO THE DEP AT THE CONCLUSION OF THE PROJECT.



BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING

ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

C-8 CANAL SITE STORMWATER POLLUTION PREVENTION PLAN

PLOT DATE: Mar 14, 2019 - 12:52pm XREFS: K:\well\wellfmdd\Civil\WELLCS03_M001.dwg IC3D\FMDDCS01_M001.dwg IC3D\FMDDCS01_BM01.dwg IC3D\FMDDCS01_BM01_ROTATED.dwg IMAGES: F:_REF_DATA\PBCO\Aerials\2017\Area Center\East.sid				SEAL SPENCER M. SCHROEDER FLORIDA P.E. NO. 65693 DATE	FLORIDA E.B. NO. 48 MOCK•ROOS FLORIDA L.B. NO. 48 CONSULTING ENGINEERS 5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113, www.MockRoos.com	FIELD: -- DRAWN: TET DESIGN: SMS/TET APPR: GGG SCALE: AS SHOWN
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PALM BEACH COUNTY, FLORIDA

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DWG. NO.	44-41-11-16
SHEET:	C0-4

STORMWATER POLLUTION PREVENTION NOTES:

1. THIS PLAN SHOULD BE USED AS A GUIDE, A COMPLETE STORMWATER POLLUTION PREVENTION PLAN SHOULD BE DEVELOPED TO MEET OR EXCEED FDEP REQUIREMENTS.

2. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO DIRT BE TRACKED OFF-SITE OR LEAVES THE SITE BY WIND, RUNOFF, OR OTHER MEANS.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NPDES REQUIREMENTS INCLUDING FILING OF NOTICE OF INTENT, MONITORING REPORTS, AND NOTICE OF TERMINATION.

4. WHERE APPROPRIATE, POLLUTION PREVENTION MEASURES SHALL CONSIST OF, BUT NOT LIMITED TO, THE FOLLOWING:

   4.1. CONSTRUCT WASHROCK PAD AT ALL POINTS OF EGRESS FOR WASHDOWN OF TRUCK TIRES.

   4.2. CONSTRUCT EROSION CONTROL FENCE AND/OR TURBIDITY SCREENS ALONG PROPERTY LINES AS NEEDED.

   4.3. NO AREA SHALL BE LEFT BARREN OR SUBJECT TO EROSION DURING CONSTRUCTION. SEEDING AND MULCHING IS REQUIRED FOR ANY AREAS ANTICIPATED TO BE BARREN DURING CONSTRUCTION FOR MORE THAN 15 DAYS.

   4.4. TURBIDITY BARRIERS TO BE UTILIZED AT PROJECT OUTFALL AND C-11 AND C15 CANALS (AS SHOWN).

   4.5. OTHER MEASURES AS DIRECTED BY THE ENGINEER OR VILLAGE OF WELLINGTON.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL POLLUTION PREVENTION REQUIREMENTS. FOR AFFECTED AREAS GREATER THAN 1 ACRE, COMPLIANCE SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

   5.1. PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE DEP "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (DEP DOCUMENT NO. 62-621.300 (4)(A))

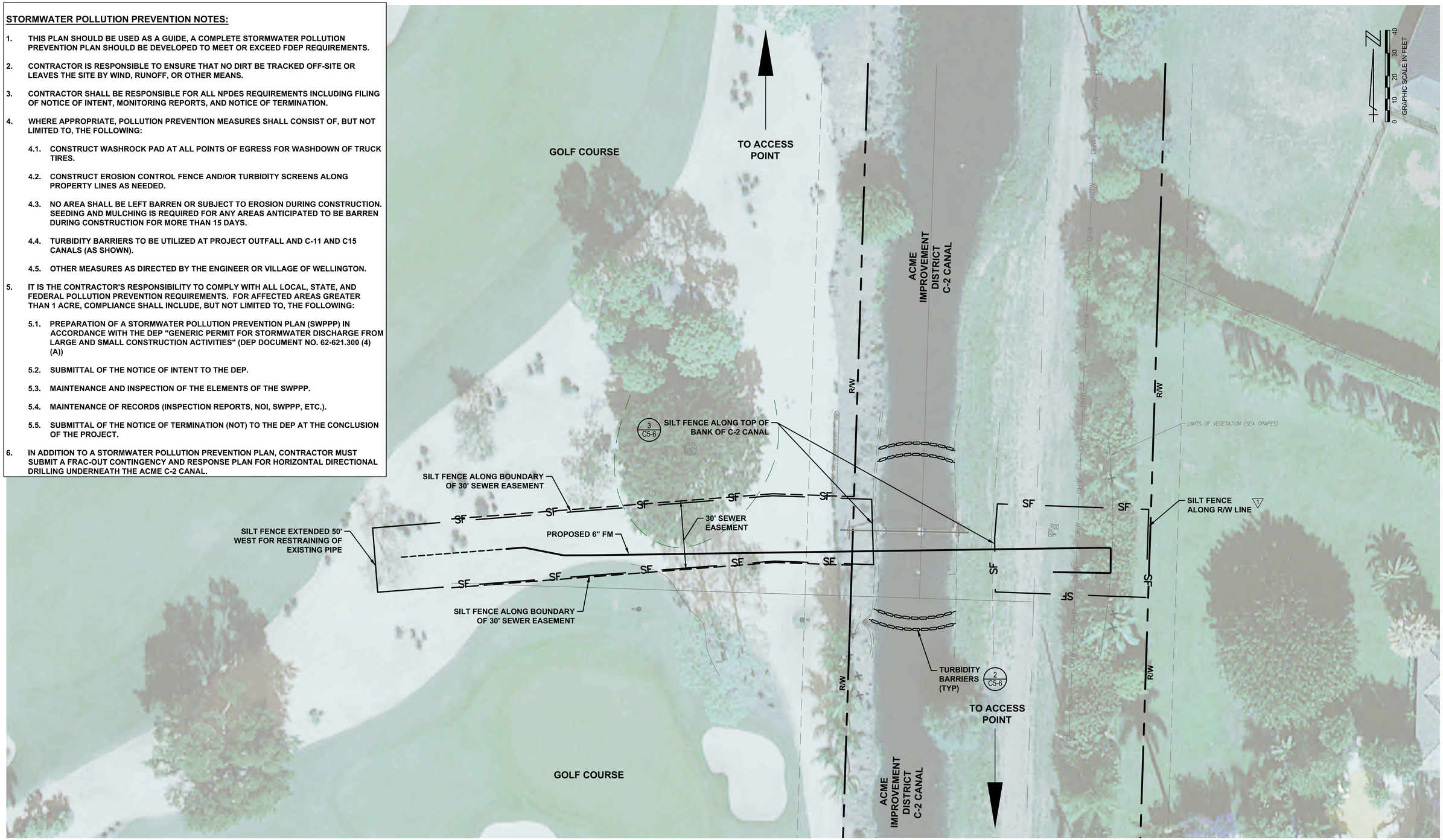
   5.2. SUBMITTAL OF THE NOTICE OF INTENT TO THE DEP.

   5.3. MAINTENANCE AND INSPECTION OF THE ELEMENTS OF THE SWPPP.

   5.4. MAINTENANCE OF RECORDS (INSPECTION REPORTS, NOI, SWPPP, ETC.).

   5.5. SUBMITTAL OF THE NOTICE OF TERMINATION (NOT) TO THE DEP AT THE CONCLUSION OF THE PROJECT.

6. IN ADDITION TO A STORMWATER POLLUTION PREVENTION PLAN, CONTRACTOR MUST SUBMIT A FRAC-OUT CONTINGENCY AND RESPONSE PLAN FOR HORIZONTAL DIRECTIONAL DRILLING UNDERNEATH THE ACME C-2 CANAL.



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ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

C-2 CANAL SITE STORMWATER POLLUTION PREVENTION PLAN

NO.	DATE	BY	REVISION
1	3/12/2019	TET	REVISIONS PER VOW

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SEAL
SPENCER M. SCHROEDER
FLORIDA P.E. NO. 65693
DATE

FLORIDA E.B. NO. 48 — MOCK • ROOS — FLORIDA L.B. NO. 48
CONSULTING ENGINEERS
5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113, www.MockRoos.com

FIELD: --
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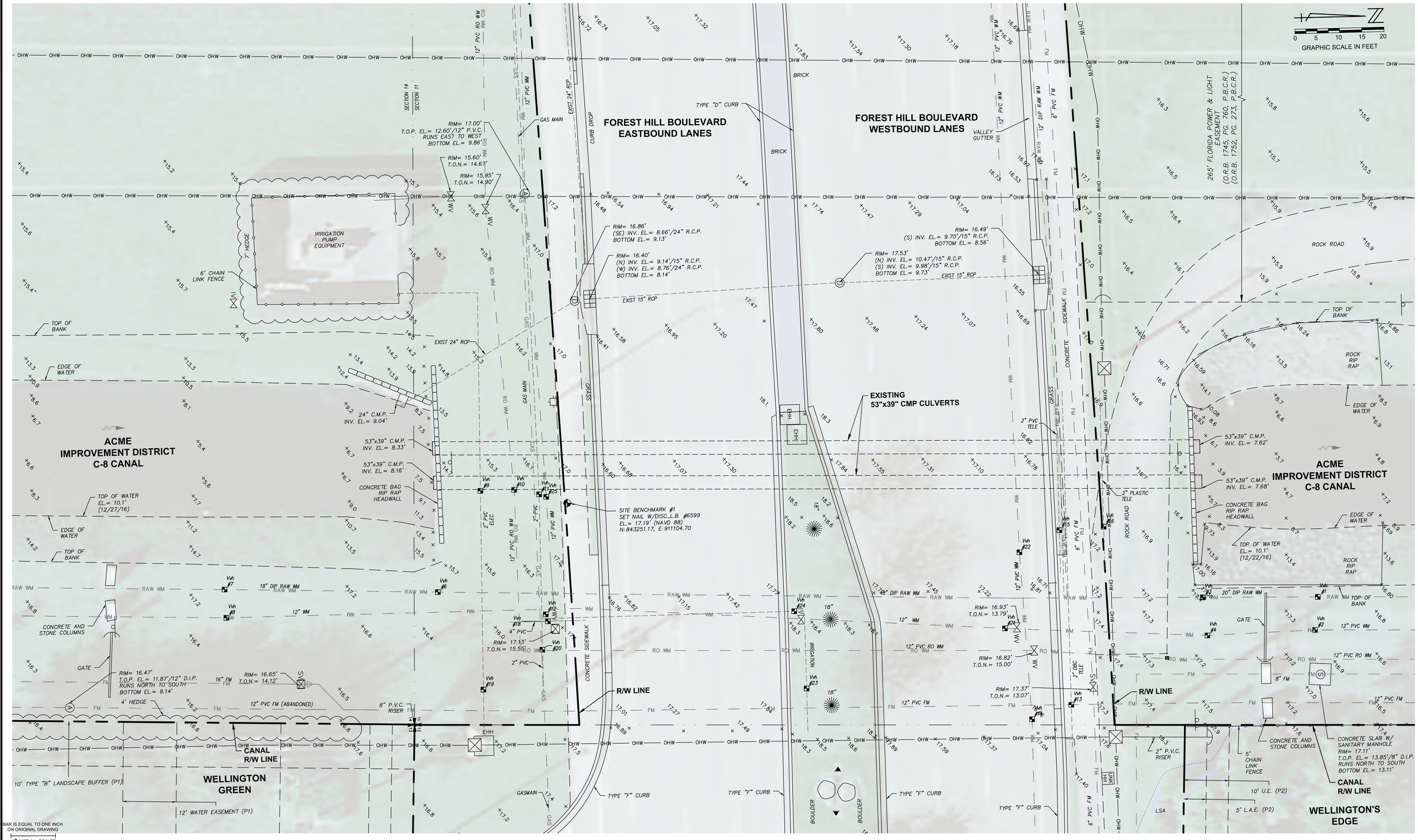
DESIGN: SMS/TET
APPR: GGG
SCALE: AS SHOWN

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE: JANUARY 2019
P.A. NO. B8705.00
DWG. NO. 44-41-11-16
SHEET: C0-5

PLOT DATE: Mar 14, 2019 - 12:52pm XREFS: K:\well\well-fbm\dwg\CSD\WELLCS03_MD01.dwg ICSD\FMDDCS01_MG01.dwg ICSD\FMDDCS01_BM01.dwg ICSD\FMDDCS01_BM01_ROTATED.dwg IMAGES: FL_REF_DATA\PBCO\Aerials\2017\Area Center\East.sid



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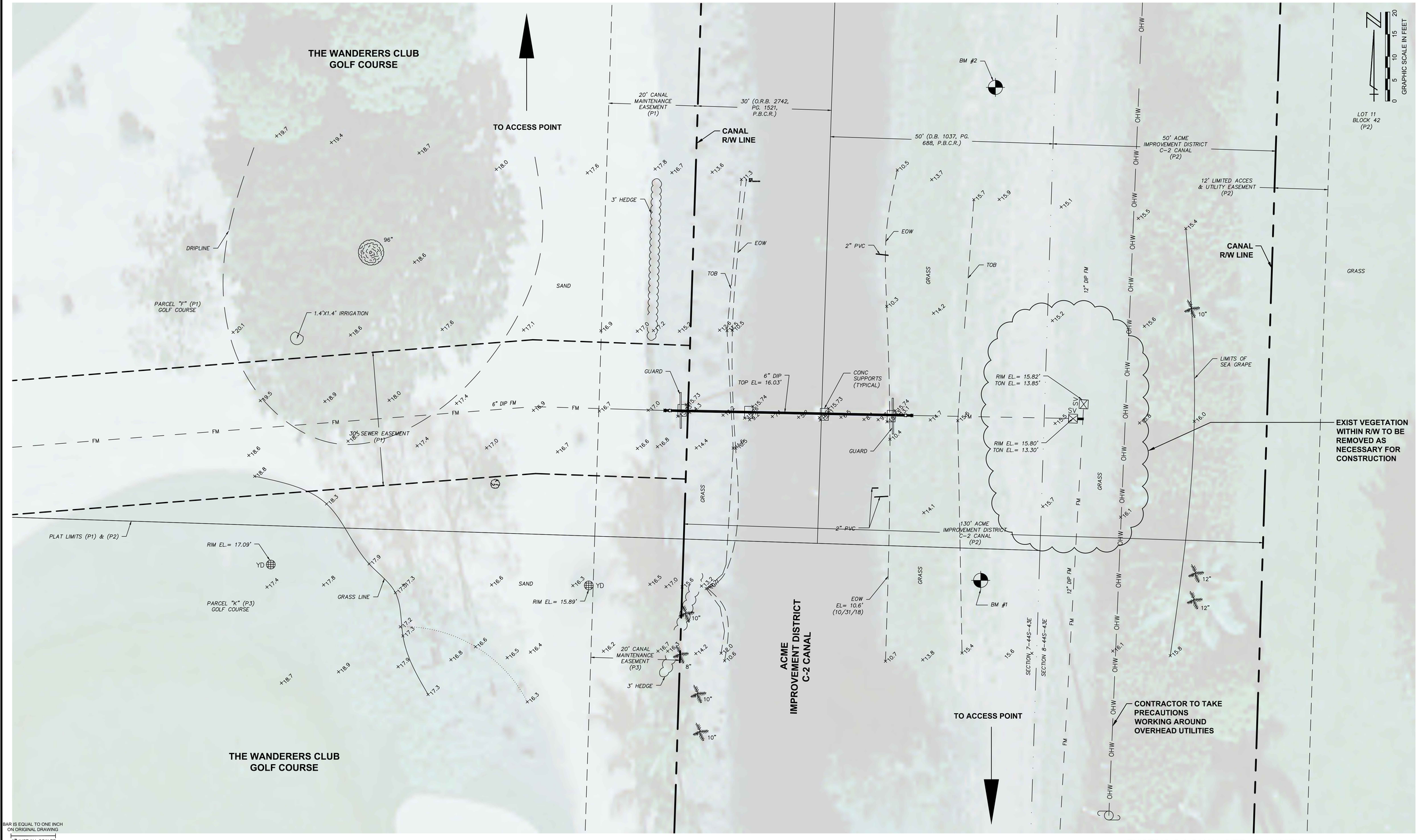
EXISTING FOREST HILL BLVD SITE - PLAN VIEW

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
SHEET:	C1-1



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EXISTING C-2 CANAL SITE - PLAN VIEW

PLOT DATE: Mar 14, 2019 - 12:52pm XREFS: IC3D:\FMDDCS01_UT01.dwg IC3D:\FMDDCS01_MG01.dwg IC3D:\FMDDCS01_BM01_ROTATED.dwg IMAGES: F:_REF_DATA\PBCO\Aerials\2017 Aerial\

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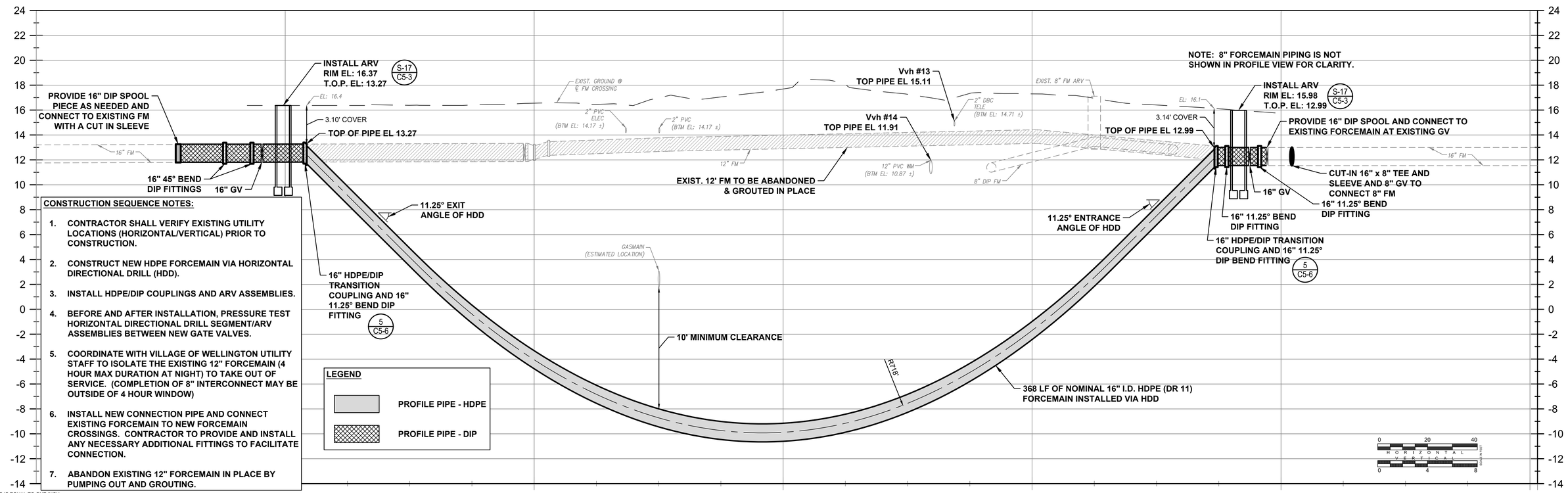
FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
SHEET:	C1-2

NOTES:

1. ALL FITTINGS TO BE RESTRAINED.
2. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, TRANSITIONS, COUPLINGS, SPECIALS, ADAPTORS, ETC. REQUIRED TO COMPLETE THE WORK, WHETHER SHOWN ON THESE DRAWINGS OR NOT.



CONSTRUCTION SEQUENCE NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS (HORIZONTAL/VERTICAL) PRIOR TO CONSTRUCTION.
2. CONSTRUCT NEW HDPE FORCEMAIN VIA HORIZONTAL DIRECTIONAL DRILL (HDD).
3. INSTALL HDPE/DIP COUPLINGS AND ARV ASSEMBLIES.
4. BEFORE AND AFTER INSTALLATION, PRESSURE TEST HORIZONTAL DIRECTIONAL DRILL SEGMENT/ARV ASSEMBLIES BETWEEN NEW GATE VALVES.
5. COORDINATE WITH VILLAGE OF WELLINGTON UTILITY STAFF TO ISOLATE THE EXISTING 12" FORCEMAIN (4 HOUR MAX DURATION AT NIGHT) TO TAKE OUT OF SERVICE. (COMPLETION OF 8" INTERCONNECT MAY BE OUTSIDE OF 4 HOUR WINDOW)
6. INSTALL NEW CONNECTION PIPE AND CONNECT EXISTING FORCEMAIN TO NEW FORCEMAIN CROSSINGS. CONTRACTOR TO PROVIDE AND INSTALL ANY NECESSARY ADDITIONAL FITTINGS TO FACILITATE CONNECTION.
7. ABANDON EXISTING 12" FORCEMAIN IN PLACE BY PUMPING OUT AND GROUTING.

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

PROPOSED FOREST HILL BLVD 16 INCH FM HDD - PLAN AND PROFILE

CADD FILE: F:\wellfield\dd\CAD\DWG\FMDDCS01_C3-1.dwg	NO. DATE BY REVISION	SEAL SPENCER M. SCHROEDER FLORIDA P.E. NO. 65693 DATE	FLORIDA E.B. NO. 48 MOCK•ROOS CONSULTING ENGINEERS FLORIDA L.B. NO. 48 5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113, www.MockRoos.com	FIELD: -- DRAWN: TET DESIGN: SMS/TET APPR: GGG SCALE: AS SHOWN	FORCEMAIN REPLACEMENT PROJECT FOREST HILL BOULEVARD CROSSING AND C-2 CANAL CROSSING THE VILLAGE OF WELLINGTON PALM BEACH COUNTY, FLORIDA	DATE: JANUARY 2019 P.A. NO. B8705.00 DWG. NO. 44-41-11-16 SHEET: C3-1

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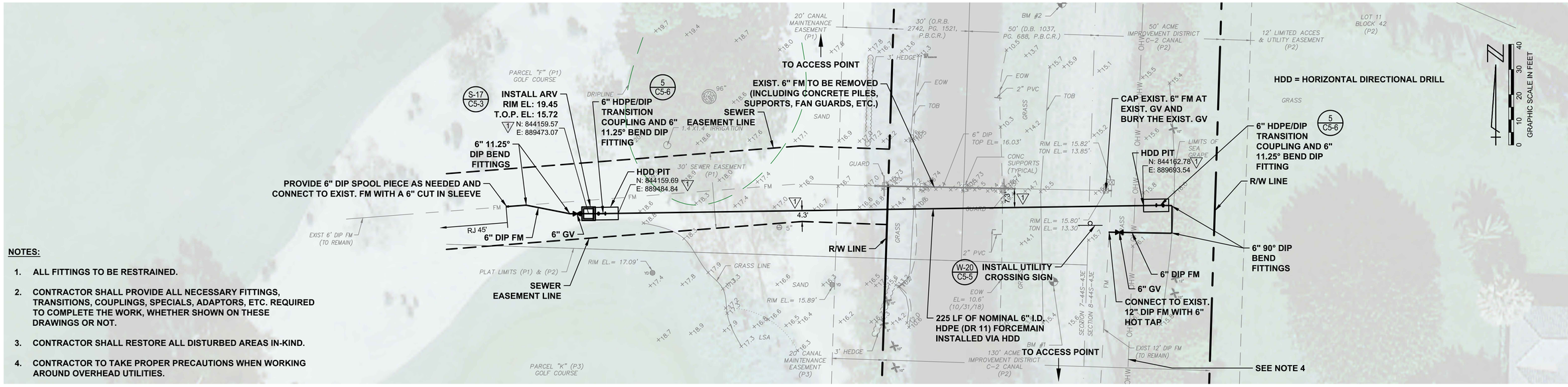
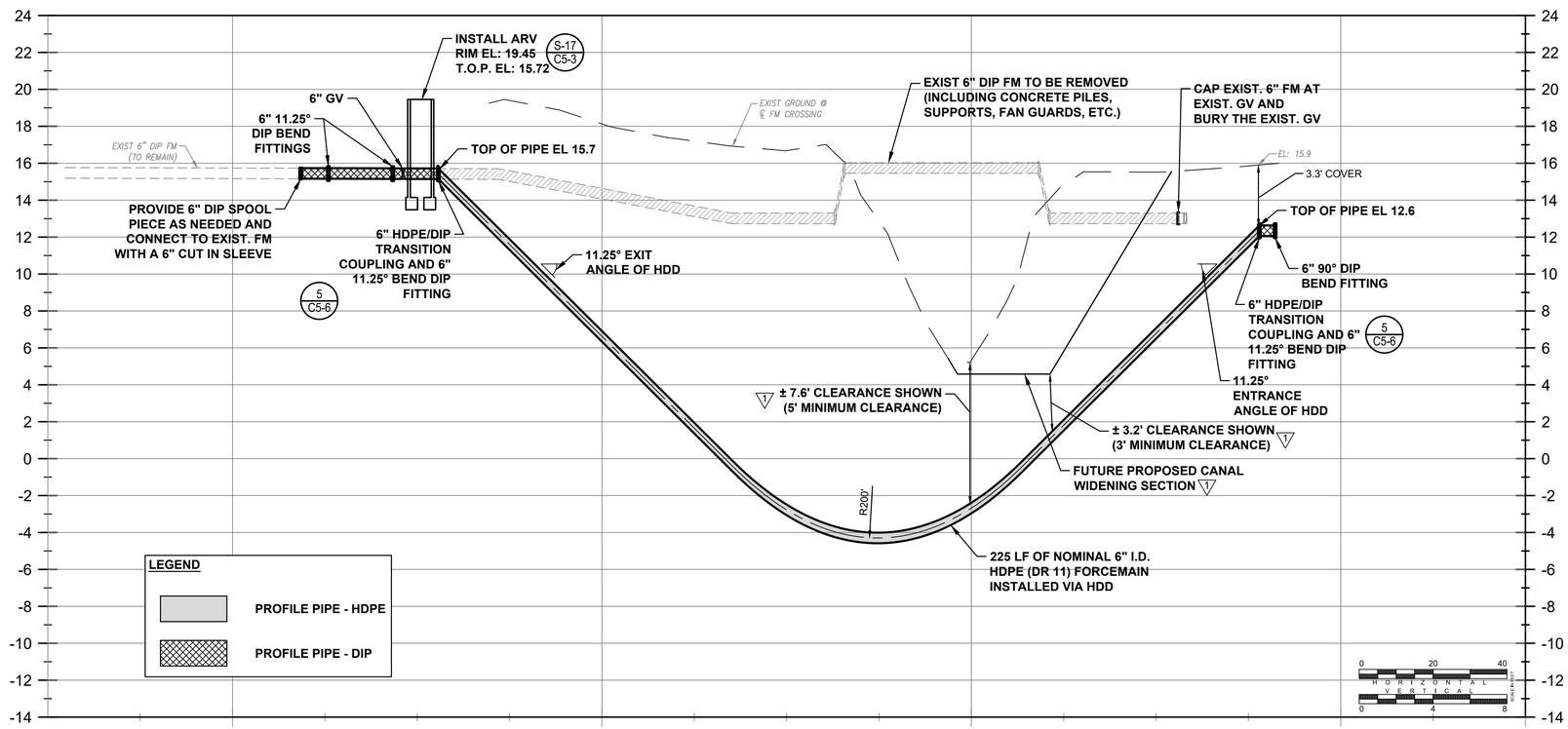


NOTES:

1. ALL FITTINGS TO BE RESTRAINED.
2. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, TRANSITIONS, COUPLINGS, SPECIALS, ADAPTORS, ETC. REQUIRED TO COMPLETE THE WORK, WHETHER SHOWN ON THESE DRAWINGS OR NOT.
3. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS IN-KIND.
4. CONTRACTOR TO TAKE PROPER PRECAUTIONS WHEN WORKING AROUND OVERHEAD UTILITIES.

CONSTRUCTION SEQUENCE NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS (HORIZONTAL/VERTICAL) PRIOR TO CONSTRUCTION.
2. CONSTRUCT NEW HDPE FORCEMAIN VIA HORIZONTAL DIRECTIONAL DRILL (HDD).
3. INSTALL HDPE/DIP COUPLINGS AND ARV ASSEMBLY.
4. COMPLETE HOT TAP OF EXISTING 12" FM.
5. BEFORE AND AFTER INSTALLATION, PRESSURE TEST HORIZONTAL DIRECTIONAL DRILL SEGMENT/ARV ASSEMBLY BETWEEN NEW GATE VALVES.
6. COORDINATE WITH VILLAGE OF WELLINGTON UTILITY STAFF TO ISOLATE THE EXISTING 6" FORCEMAIN (4 HOUR MAX DURATION AT NIGHT) TO TAKE OUT OF SERVICE. (COMPLETION OF INTERCONNECT MAY BE OUTSIDE OF 4 HOUR WINDOW)
7. INSTALL NEW CONNECTION PIPE AND CONNECT EXISTING FORCEMAIN TO NEW FORCEMAIN CROSSINGS. CONTRACTOR TO PROVIDE AND INSTALL ALL NECESSARY FITTINGS TO FACILITATE CONNECTION.
8. REMOVE EXISTING 6" FORCEMAIN, INCLUDING FAN GUARD, CONCRETE PILES, SUPPORTS, AND ANY OTHER ELEMENTS OF THE EXISTING AERIAL CROSSING.



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ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

PROPOSED C-2 CANAL 6 INCH FM HDD - PLAN AND PROFILE

NO.	DATE	BY	REVISION
1	3/12/2019	TET	REVISIONS PER VOW

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SEAL
SPENCER M. SCHROEDER
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DATE

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FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE: JANUARY 2019
P.A. NO. B8705.00
DWG. NO. 44-41-11-16
SHEET: C3-2

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1. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE (1) COPY OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, SPECIFICATIONS AND COPIES OF ALL REQUIRED CONSTRUCTION PERMITS.

2. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.

3. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHOD AND BY HAND EXCAVATION IN COORDINATION WITH ALL UTILITY COMPANIES PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. ANY AND ALL CONFLICTS OF EXISTING UTILITIES WITH PROPOSED IMPROVEMENTS SHALL BE RESOLVED BY THE ENGINEER AND THE VILLAGE PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND ITS COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.

5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION AND RESTORATION (IF DAMAGED) OF ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT, INCLUDING BUT NOT LIMITED TO; WALLS, FENCES, POWER POLES, MAIL BOXES, DRAINAGE STRUCTURES, LANDSCAPING, ETC.

6. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING 48 HOURS BEFORE DIGGING:
   1. VILLAGE OF WELLINGTON
   2. FLORIDA POWER & LIGHT
   3. ATT
   4. COMCAST CABLE TV
   5. SUNSHINE STATE ONE CALL OF FLORIDA INC.

7. VILLAGE OF WELLINGTON (VOW) WRITTEN SPECIFICATIONS AND STANDARD DETAILS (LATEST EDITION) ARE TO BE CONSIDERED PART OF THIS PROJECT AND CONSTRUCTION SHALL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.

8. ALL MATERIAL MUST CONFORM TO APPROVED SHOP DRAWINGS. ANY CHANGES MUST BE APPROVED BY ENGINEER AND VOW PRIOR TO INSTALLATION. FAILURE OF THE INSPECTOR TO CALL TO THE ATTENTION OF THE CONTRACTOR ANY ITEM NOT IN CONFORMANCE WITH PLANS AND SPECS SHALL NOT CONSTITUTE ACCEPTANCE OF THE ITEM.

9. VOW REPRESENTATIVES SHALL BE PRESENT DURING ALL OPERATIONS INVOLVING EXISTING UTILITIES.

10. NO CONCRETE THRUST BLOCKS WILL BE ALLOWED. ALL JOINTS SHALL BE MECHANICALLY RESTRAINED AS REQUIRED BY THE APPROVED PLANS.

11. SERVICE INTERRUPTIONS REQUIRE MINIMUM OF TWO (2) WEEKS PRIOR NOTIFICATION.

12. ALL PIPING MUST BE INSTALLED DRY.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	GENERAL CONSTRUCTION NOTES (WASTEWATER)	S-1

13. FORCE MAINS:
   A. MINIMUM COVER SHALL BE 36 INCHES FROM FINISH GRADE.
   B. MINIMUM COVER UNDER DITCH SHALL BE 2' AND CANAL BOTTOMS SHALL BE 5' BELOW THE TYPICAL DESIGN SECTION.
   C. MAXIMUM COVER SHALL BE 42 INCHES FROM FINISHED GRADE.

14. C-900 PVC DR 18 MIN. SHALL BE REQUIRED IN THE FOLLOWING CIRCUMSTANCES (GRAVITY SEWER):
   A. WHEN A SEWER LINE PASSES OVER OR UNDER ANY OTHER PIPE OR CABLE WITH LESS THAN 12 INCHES CLEARANCE (A MINIMUM OF 6 INCHES OF CLEARANCE MUST BE MAINTAINED).
   B. WITHIN EASEMENTS.
   C. WHEN MAKING CONNECTION FOLLOWING CORE DRILLING A MANHOLE.
   D. INSIDE DROP MANHOLE PIPING.
   E. WHEN GRAVITY SEWER IS LESS THAN 4.5' COVER TO THE INVERT OF THE PIPE. 4.5' OF COVER IS MINIMUM STANDARD COVER, LESS THAN 4.5' WILL NOT BE ACCEPTED UNLESS APPROVED BY THE UTILITY DIRECTOR.
   F. WHEN IN WELLFIELDS AS PER VILLAGE STANDARDS.

15. DIP SHALL BE REQUIRED IN THE FOLLOWING CIRCUMSTANCES (FORCE MAIN OR GRAVITY MAIN):
   A. WHEN PIPE RUNS THROUGH A STRUCTURE FOR AN ARV INSTALLATION.
   B. THE LAST RUN OF GRAVITY SEWER FROM THE TERMINAL MANHOLE TO THE LIFT STATION WET WELL. THIS SECTION OF PIPE IS ALSO REQUIRED TO BE LINED PER THE APL.

16. MANHOLES SHALL BE COATED INSIDE AND OUTSIDE. OUTSIDE COATINGS SHALL INCLUDE SEAMS AND MASONRY WORK ON TOPS AND PIPING ENTERING / EXITING MANHOLE.

17. ALL GRAVITY SEWER LINES WILL BE INSPECTED AND TESTED IN ACCORDANCE WITH VOW STANDARDS.

18. PAVEMENT REPLACEMENT, INCLUDING CURB, GUTTERS AND STRIPING SHALL OCCUR WITHIN SEVEN (7) WORKING DAYS FOLLOWING COMPLETION OF OPEN CUT WORK.

19. TAPPING SLEEVES SHALL BE A MINIMUM OF THREE (3) FEET FROM A PIPE JOINT.

20. ALL EXPOSED (ABOVE GRADE) DUCTILE IRON FORCE MAIN SHALL BE COLOR CODED TNEMEC SAFETY GREEN.

21. ALL OPENINGS AND PIPING ENTERING / EXITING MANHOLE SHALL BE SEALED WITH WATERPROOF NON SHRINKING GROUT OR APPROVED EQUAL.

22. RUBBER BOOT CONNECTIONS MUST BE SECURED USING TWO (2) STAINLESS STEEL STRAPS.

23. ELECTRONIC SERVICE LOCATORS MUST BE SEWER (GREEN).

24. USE OF REPAIR SLEEVES AND OR REPAIR COUPLINGS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE VILLAGE UTILITY DIRECTOR.

25. MAXIMUM DEPTH FROM FINISH GRADE TO INVERT OF SERVICE LATERAL WYE IS THREE (3) FEET UNLESS APPROVED BY VILLAGE UTILITY DIRECTOR.

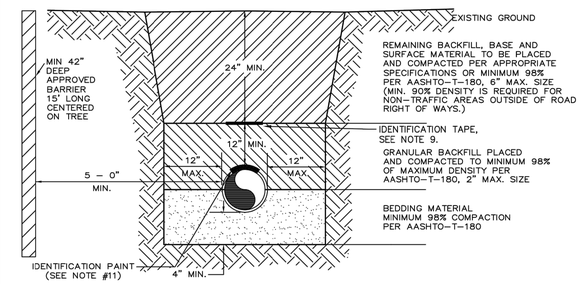
26. LIFT STATION START UP WILL BE ACCOMPLISHED USING BOTH F.P.L. POWER AND EMERGENCY GENERATOR PROVIDED FOR PROJECT.

27. DROP MANHOLE INTERIOR RECIEVES THE SAME COATING REQUIREMENTS AS LIFT STATION INTERIORS.

28. MECHANICAL PLUG REQUIRED IN EXISTING MANHOLE TO PROTECT SYSTEM FROM CONTAMINATION. PLUG IS NOT TO BE REMOVED UNTIL PROJECT ACCEPTANCE. VIOLATION OF THIS COULD IN TURN REQUIRE INSPECTION AND CLEANING OF EXISTING SYSTEM BACK TO LIFT STATIONS.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	GENERAL CONSTRUCTION NOTES (WASTEWATER)	S-2



NOTES:

1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" TO 3/4" SIZING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK DEBRIS AND LARGER ROCKS SHALL BE REMOVED.

2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.

3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.

4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, ROOTS AND DEBRIS.

5. DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 400' MAXIMUM. MINIMUM 1 SET SET OF TESTS FOR EACH GRAVITY MAIN RUN BETWEEN MANHOLES OR AS DIRECTED BY THE VILLAGE.

6. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH ALL TRENCH SAFETY LAWS AND REGULATIONS.

7. SEE SEPERATE DETAIL FOR "PIPE INSTALLATION UNDER EXISTING PAVEMENT – OPEN CUT."

8. THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT/CONTRACT DOCUMENTS.

9. APPROVED MAGNETIC TAPE IS REQUIRED FOR ALL MAINS. THE TAPE SHALL BE INSTALLED 12" ABOVE PIPE.

10. ROOT BARRIER IS REQUIRED FOR APPROVED TREE INSTALLATION 10' OR CLOSER FROM UTILITY FACILITIES AS APPROVED BY THE DEPARTMENT.

11. CONTINUOUS 4" WIDE PAINT STRIPING IS REQUIRED FOR DIP SEWER MAINS (GREEN) AND DIP RECLAIMED WATER MAINS (PURPLE).

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	TYPICAL TRENCH DETAIL	S-3

PLOT DATE: Mar 14, 2019 - 12:53pm XREFS: IMAGES:

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
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NO.	DATE	BY	REVISION

SEAL
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FIELD: --
DRAWN: TET
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APPR: GGG
SCALE: N/A

VILLAGE OF WELLINGTON STANDARD DETAILS

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
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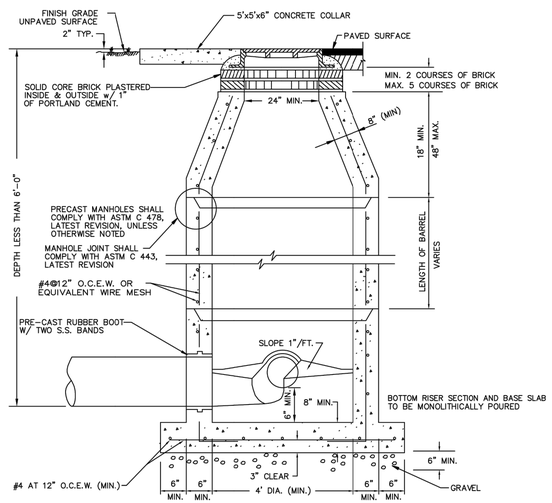
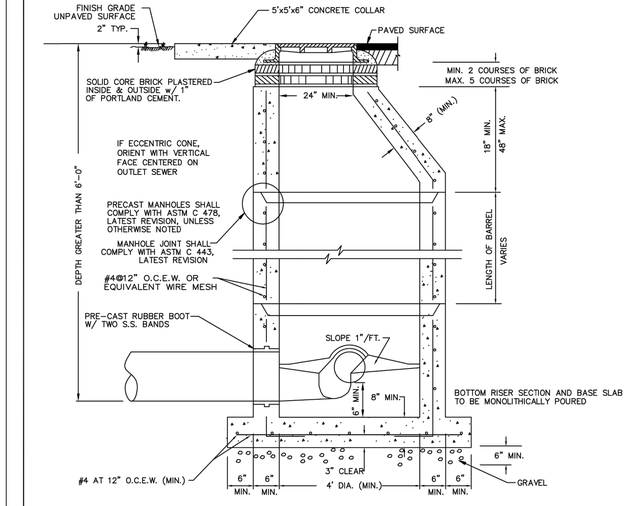


NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT INSIDE AND OUTSIDE.
3. ALL OPENINGS AND PIPING ENTERING OR EXITING MANHOLE SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT OR APPROVED EQUAL.
4. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM (SEE DETAIL).
5. LIFT HOLES ARE PERMITTED AND SHALL BE SEALED AFTER PLACEMENT OF RISER.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
7. APPROVED PRECAST RUBBER BOOTS MUST BE USED WITH PVC PIPE.
8. COAT INTERIOR & EXTERIOR PER APL
9. 5'x5'x6" CONCRETE COLLAR AND RAIN GUARD IS REQUIRED WHEN MANHOLE IS OUT OF PAVEMENT
10. WHEN MANHOLE IS CORE DRILLED, ALL PIPING SHALL BE C-900 PVC W/SANDED PVC COUPLING.
11. MINIMUM DEPTH OF MANHOLE TO BE 4.5' FROM RIM ELEVATION TO INVERT.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	STANDARD MANHOLE (CONCENTRIC CONE)	S-7

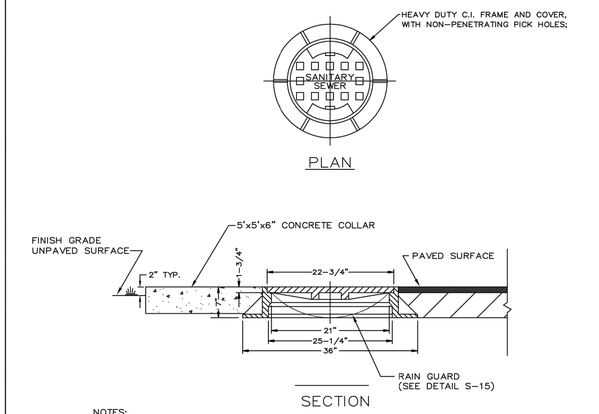


NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT INSIDE AND OUTSIDE.
3. ALL OPENINGS AND PIPING ENTERING OR EXITING MANHOLE SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT OR APPROVED EQUAL.
4. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM (SEE DETAIL).
5. LIFT HOLES ARE PERMITTED AND SHALL BE SEALED AFTER PLACEMENT OF RISER.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
7. APPROVED PRECAST RUBBER BOOTS MUST BE USED WITH PVC PIPE.
8. COAT INTERIOR & EXTERIOR PER APL.
9. 5'x5'x6" CONCRETE COLLAR AND RAIN GUARD IS REQUIRED WHEN MANHOLE IS OUT OF PAVEMENT
10. WHEN MANHOLE IS CORE DRILLED, ALL PIPING SHALL BE C-900 PVC W/SANDED PVC COUPLING.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	STANDARD MANHOLE (ECCENTRIC CONE)	S-8



NOTES:

1. A WATER-TIGHT MANHOLE SELF SEALING LID SHALL BE INSTALLED IN ALL MANHOLES.
2. DETAIL TYPICAL TO SANITARY MANHOLES. SEE APPROPRIATE DETAIL FOR OTHER STRUCTURES

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	STANDARD MANHOLE FRAME AND COVER	S-14

PLOT DATE: Mar 14, 2019 - 12:53pm XREFS: IMAGES:

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING

ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

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SPENCER M. SCHROEDER
FLORIDA P.E. NO. 65693

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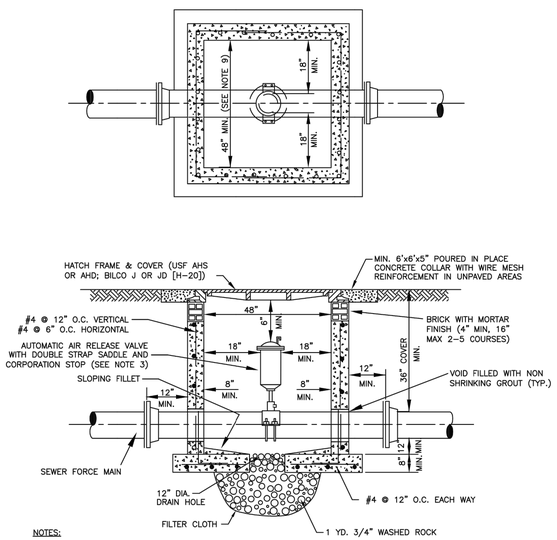
VILLAGE OF WELLINGTON STANDARD DETAILS

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
SHEET:	C5-2



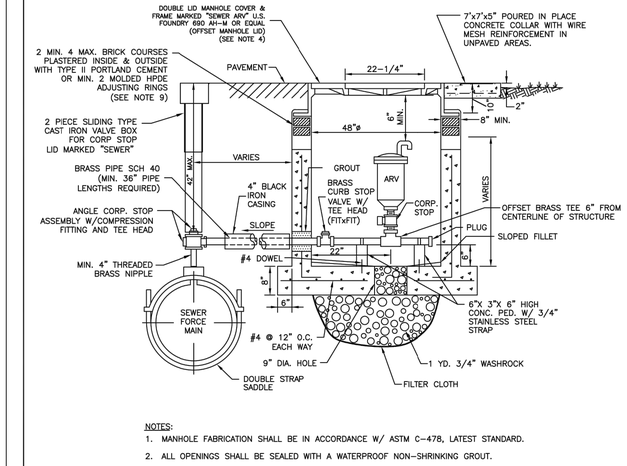
NOTES:

1. 4000 P.S.I. TYPE II CONCRETE
2. VAULT SHALL BE PRECAST WITH STEEL REINFORCING. SHOP DRAWING IS REQUIRED.
3. AIR RELEASE VALVE SHALL BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED. FORCE MAINS REQUIRE 2" MIN.
4. ALL OPENINGS SHALL BE SEALED WITH WATERPROOF NON-SHRINKING GROUT.
5. OTHER VAULT AND COVER DESIGNS MAY BE USED UPON SUBMITTAL AND APPROVAL OF SHOP DRAWINGS.
6. COAT INSIDE AND OUTSIDE WITH AN APPROVED CORROSION BARRIER SYSTEM.
7. DUCTILE IRON PIPE IS REQUIRED THROUGH THE VAULT. NO PIPE JOINTS WITHIN THE VAULT.
8. THREADED AREAS OF CORPORATION STOP SHALL BE SPIRAL WRAPPED WITH TWO WRAPS OF TEFLON TAPE.
9. LARGER VAULTS WILL BE REQUIRED FOR PIPES LARGER THAN 12"

PIPE SIZE	MIN. VAULT SIZE
16"-24"	4'W x 5'L
30"-42"	4'W x 6'L

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	FORCE MAIN AIR RELEASE VALVE AND VAULT OUTSIDE OF R/W AND NON-TRAFFIC AREAS OUTSIDE OF R/W	S-17

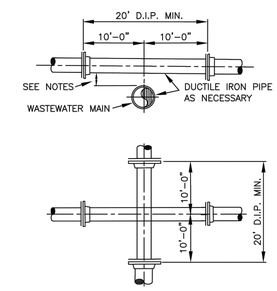


NOTES:

1. MANHOLE FABRICATION SHALL BE IN ACCORDANCE W/ ASTM C-478, LATEST STANDARD.
2. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
3. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
4. ALTERNATIVE DESIGN WILL BE CONSIDERED USING APPROVED 32" DIAMETER HINGED MANHOLE COVER
5. ARV, TAP AND PIPING TO BE TYPE AND SIZE APPROPRIATE FOR SERVICE INTENDED. I.E. ONE (1) INCH FOR WATER OR TWO (2) INCH FOR SEWER.
6. CONCRETE COLLAR REQUIRED IN UNPAVED AREAS.
7. SHOP DRAWING IS REQUIRED FOR REVIEW AND APPROVAL.
8. THREADED AREAS OF BRASS FITTINGS AND OTHER FITTINGS SHALL BE SPIRAL WRAPPED WITH TWO WRAPS OF TEFLON TAPE.
9. IN LIEU OF BRICK WORK, APPROVED PRECAST CONCRETE ADJUSTING RINGS MAY BE USED. INSTALLATION SHALL FOLLOW MANUFACTURERS RECOMMENDATIONS.
10. SHOP DRAWINGS ARE REQUIRED FOR CUSTOM MADE BRACKETS
11. PIPE AND FITTINGS SHALL BE NO LEAD BRASS.
12. 2" CHECK VALVE IS REQUIRED BETWEEN CORPORATION AND ARV ASSEMBLY (SEWER ONLY).
13. ALL MATERIAL FOR BOTH APPLICATIONS MUST BE STAINLESS STEEL (316) EXCEPT FOR ARV ASSEMBLY, SADDLE, CORP. STOP AND CURB STOP.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
OCT. 2018	FORCE MAIN OFF-SET UNDERGROUND AIR RELEASE VALVE	S-19



NOTES:

1. STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS, BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
2. WHENEVER POSSIBLE MAINTAIN MIN. TEN (10) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN (A MIN. 6' SEPARATION MAY BE APPROVED ON A CASE BY CASE BASIS). MAINTAIN MIN. THREE (3) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN RECLAIMED WATER MAIN AND POTABLE WATER MAIN, STORM SEWER, WASTEWATER GRAVITY MAIN OR FORCE MAIN.
3. FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
4. WASTEWATER LATERALS SHALL CROSS UNDER POTABLE WATER MAINS WITH A MIN. 12" VERTICAL SEPARATION WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, A 20' SECTION OF DUCTILE IRON PIPE POTABLE WATER MAIN CENTERED ON THE CROSSING IS REQUIRED AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6". WHERE THERE IS NO ALTERNATIVE TO A WASTEWATER LATERAL PIPE CROSSING OVER A POTABLE WATER MAIN, A MINIMUM 12" VERTICAL SEPARATION IS REQUIRED, THE LATERAL SHALL BE P.V.C. C-900 SDR18 OR BETTER, THE POTABLE WATER MAIN SHALL BE D.I.P. AND THE PIPE JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING.
5. POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CAN NOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10' LONG CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.
6. WASTEWATER MAINS, WATER MAINS, STORM PIPES AND OTHER UTILITY PIPES SHALL CROSS PERPENDICULAR WHENEVER POSSIBLE.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
SEPT 2018	POTABLE WATER MAIN, WASTEWATER MAIN AND STORM SEWER CROSSING CRITERIA	W-3

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VILLAGE OF WELLINGTON STANDARD DETAILS

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

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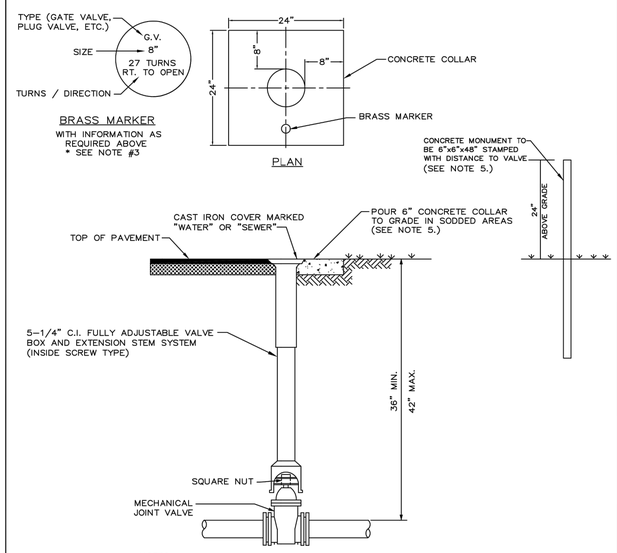
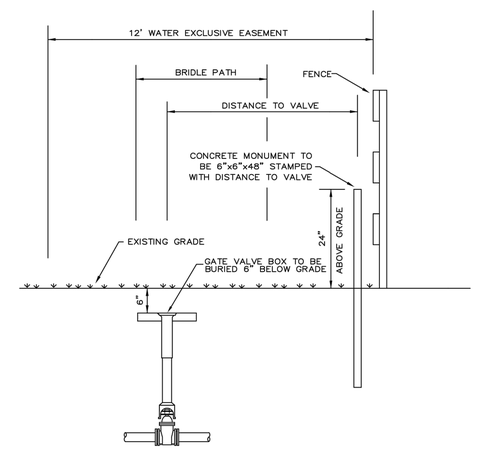


NOTES:

1. AS NOTED, ALL VALVE BOXES AND STEMS SHALL BE FULLY ADJUSTABLE. THE VALVE BOX SHALL BE AS MANUFACTURED BY AN APPROVED PRODUCT PER THE APL.
2. NO VALVES SHALL BE DESIGNED OR CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.
3. BRASS MARKERS ARE NOT REQUIRED IN PAVEMENT. CONTRACTOR SHALL COORDINATE WITH THE VILLAGE TO ADD GIS TAG NUMBER TO MARKERS AT THE VILLAGE'S OPTION.
4. VALVE NUT EXTENSION STEM REQUIRED WHEN TOP OF UNIT ELEVATION EXCEEDS 3.5' FROM FINISH GRADE. EXTENSION STEM TO COME WITHIN 12"-18" OF FINISH GRADE.
5. WHEN VALVE BOX FALLS WITHIN LIMITS OF BRIDLE TRAIL, CONCRETE COLLAR TO BE BURIED 6" BELOW GRADE AND IDENTIFIED WITH CONCRETE MONUMENT POST. (SEE DETAIL W-7)

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
SEPT 2018	TYPICAL VALVE SETTING	W-6

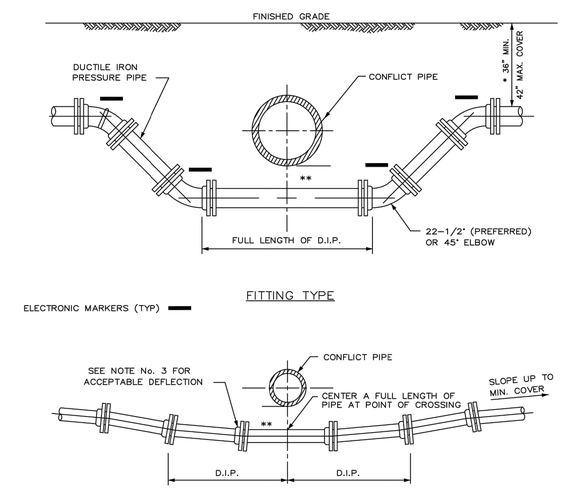


NOTES:

1. SEE DETAIL W-6 FOR TYPICAL VALVE SETTING INFORMATION.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
SEPT 2018	BURIED GATE VALVE BOX & CONCRETE MONUMENT AT BRIDLE TRAIL	W-7



FITTING TYPE

ELECTRONIC MARKERS (TYP)

DEFLECTION TYPE

NOTES:

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6" VERTICAL SEPARATION AND MAINTAIN 30" COVER TO FINISHED GRADE AND MEET CURRENT FDEP SEPARATION STANDARDS.
2. THE DEFLECTION TYPE CROSSING IS PREFERRED.
3. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
4. MECHANICALLY RESTRAIN ALL FITTINGS, AS PER MANUFACTURERS RECOMMENDATION. AND APPROVED CONSTRUCTION PLANS.
5. LOCATOR DISCS MUST BE PLACED ON ALL FITTING TYPE DEFLECTIONS.

* 36" MIN IN STATE ROAD R/W AND UNDER ASPHALT

** SEPARATION TO CONFORM WITH LATEST FDEP SEPERATION REQUIREMENTS.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
SEPT 2018	PRESSURE PIPE CONFLICT DETAIL	W-8

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VILLAGE OF WELLINGTON STANDARD DETAILS

FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE:	JANUARY 2019
P.A. NO.	B8705.00
DWG. NO.	44-41-11-16
SHEET:	C5-4

MIN. LENGTH OF PIPE (FEET) TO BE RESTRAINED

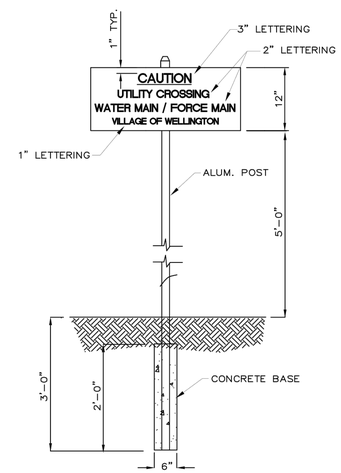
(SOURCES: EBAA IRON RESTRAINT LENGTH CALCULATION PROGRAM FOR PVC PIPE, RELEASE 3.1, AND DIPRA THRUST RESTRAINT FOR DUCTILE IRON PIPE, RELEASE 3.2)

FITTING TYPE		PIPE SIZE								200psi			
		4"	6"	8"	10"	12"	16"	20"	24"	30"	36"	42"	48"
90° HORIZ. BEND		14	20	25	30	35	45	54	62	98	112	124	135
45° HORIZ. BEND		6	8	11	13	15	19	22	26	41	46	51	56
22.5° HORIZ. BEND		3	4	5	6	7	9	11	12	19	22	25	27
11.25° HORIZ. BEND		1	2	3	3	4	4	5	6	10	11	12	13
90° VERT. OFFSET	UPPER BEND	29	41	53	64	74	95	115	134	214	246	276	304
	LOWER BEND	7	10	13	16	19	25	30	35	57	66	74	83
45° VERT. OFFSET	UPPER BEND	12	19	24	29	34	39	48	56	89	102	114	126
	LOWER BEND	3	4	6	7	8	10	12	15	23	27	31	34
22.5° VERT. OFFSET	UPPER BEND	6	9	12	14	17	19	23	27	43	49	55	60
	LOWER BEND	1	2	4	4	4	5	6	7	11	13	15	16
11.25° VERT. OFFSET	UPPER BEND	3	4	6	7	8	9	11	13	21	24	27	30
	LOWER BEND	1	1	1	2	2	2	3	3	6	6	7	8
PLUG (DEAD END)		32	45	59	70	83	107	129	151	214	246	276	304
IN-LINE VALVE		32	45	45	45	45	55	65	80	110	125	140	155
TEE (BRANCH RESTRAINT)	4"X ø	23	–	–	–	–	–	–	–	–	–	–	–
	6"X ø	21	35	–	–	–	–	–	–	–	–	–	–
	8"X ø	18	34	47	–	–	–	–	–	–	–	–	–
	10"X ø	16	32	46	58	–	–	–	–	–	–	–	–
	12"X ø	13	30	44	57	69	–	–	–	–	–	–	–
	16"X ø	7	26	41	55	67	90	–	–	–	–	–	–
	20"X ø	1	21	38	52	65	88	109	–	–	–	–	–
	24"X ø	1	16	34	49	62	86	108	129	–	–	–	–
	30"X ø	1	8	28	44	58	83	106	127	208	–	–	–
	36"X ø	1	1	22	39	54	80	103	124	206	240	–	–
	42"X ø	1	1	15	33	49	77	100	122	205	239	270	–
	48"X ø	1	1	7	27	44	73	97	120	203	238	269	298
REDUCER (LARGER PIPE RESTRAINT)	6"X ø	23	–	–	–	–	–	–	–	–	–	–	–
	8"X ø	38	25	–	–	–	–	–	–	–	–	–	–
	10"X ø	57	43	24	–	–	–	–	–	–	–	–	–
	12"X ø	72	60	44	41	–	–	–	–	–	–	–	–
	16"X ø	99	90	78	75	45	–	–	–	–	–	–	–
	20"X ø	123	116	107	105	81	45	–	–	–	–	–	–
	24"X ø	146	140	132	131	111	82	45	–	–	–	–	–
	30"X ø	209	204	197	188	177	153	116	75	–	–	–	–
200psi	36"X ø	243	236	233	226	217	196	168	135	74	–	–	–
	42"X ø	273	270	285	259	252	234	211	183	133	72	–	–
	48"X ø	301	298	294	289	283	268	249	226	183	131	71	–

NOTES:
1. THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
   SOIL TYPE-SAND (SW) TEST PRESSURE-150 PSI/200 PSI DEPTH OF BURY-3'
   TRENCH TYPE-3 SAFETY FACTOR- 1.5 VERTICAL OFFSET-3'
   MINIMUM PIPE LENGTH ALONG TEE RUN-5.
2. THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON AND PVC PIPE.
3. ALL JOINTS BETWEEN UPPER AND LOWER BENDS SHALL BE RESTRAINED.
4. RESTRAINED PIPE LENGTHS APPLY TO PIPE ON BOTH SIDES OF VALVES AND FITTINGS.
5. MULTIPLY PIPE LENGTH BY 1.4 FOR POLYETHYLENE ENCASED PIPE.
6. RESTRAINED PIPE LENGTHS EQUAL TO AN "INLINE VALVE" CONDITION ARE REQUIRED AT EACH END OF A TRANSITION FROM HDPE PIPE TO OTHER PIPE MATERIALS.
7. DESIGN ENGINEER IS RESPONSIBLE TO PROPERLY SIZE THE RESTRAINT PIPE LENGTHS FOR THE PROJECT, INCLUDING SPECIFIC PROJECT SOIL CONDITIONS.

V.O.W. CONSTRUCTION STANDARDS & DETAILS

REVISION		PAGE No.
SEPT 2018	MECHANICAL JOINT RESTRAINT REQUIREMENTS	W-9



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REVISION		PAGE No.
SEPT 2018	CAUTION SIGN DETAIL	W-20

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VILLAGE OF WELLINGTON STANDARD DETAILS

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PALM BEACH COUNTY, FLORIDA

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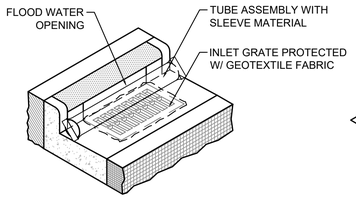
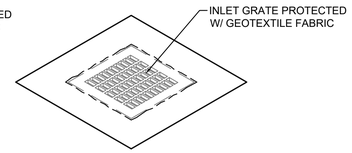
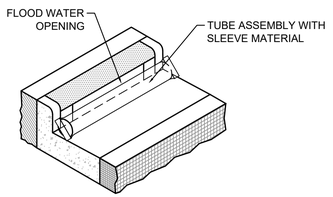


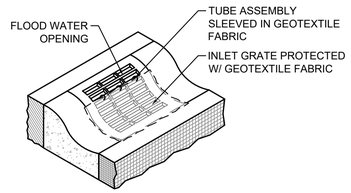
GRATE COVER & TUBE



GRATE COVER



TUBE INLET PROTECTION

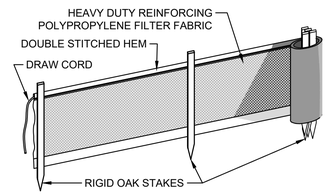


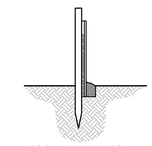
GRATE COVER

NOTES

1. SLEEVE MATERIAL AND GEOTEXTILE FABRIC SHALL BE SedCatch, OR APPROVED EQUAL.
2. INLET PROTECTION SHOULD BE INSTALLED AT THE TIME THE STRUCTURE IS SET.
3. INSPECT AFTER EACH RAIN OR AS DIRECTED BY ENGINEER OR INSPECTOR.
4. REMOVE ANY ACCUMULATED SEDIMENT AFTER EACH RAIN.
5. GRATE COVER INSTALLATION; CUT A PIECE OF GEOTEXTILE 1 FOOT LARGER THAN GRATE. PLACE GRATE UPSIDE DOWN ON GEOTEXTILE. FOLD SIDES IN TOWARD AND SECURE. REPLACE GRATE.
6. TUBE ASSEMBLY AND INSTALLATION; CUT A PIECE OF SLEEVE MATERIAL 2 FEET LONGER THAN OPENING. CUT A CORRUGATED DRAIN PIPE ONE FOOT LONGER THAN OPENING. INSERT PIPE IN SLEEVE AND CLOSE ONE END WITH HOG RINGS OR OTHER METHOD. INSERT SCHEDULE 40, CONDUIT, OR TUBING THAT WILL KEEP THE PIPE STRAIGHT. FILL WITH TWO POUNDS OF GRAVEL PER LINEAL FOOT. CLOSE END. SECURE TO GRATE OR TO STAKES IN THE GRASS TO PREVENT TUBE FROM BEOMING A TRAFFIC HAZARD.
7. AS WITH ALL INLET PROTECTION DEVICES, CHECK TO SEE HOW DEEP THE WATER COULD RISE IF THE INLET WERE TO BE BLOCKED ENTIRELY. DO NOT INSTALL IF IT COULD CASUE PROPERTY DAMAGE OR POSE A SAFETY HAZARD TO TRAFFIC.

1 / C5-6 STORM INLET SEDIMENT PROTECTION
N.T.S.



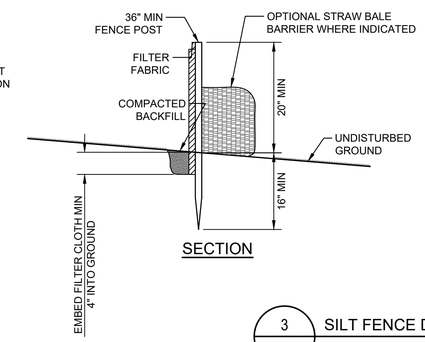


POSTS:

STEEL, EITHER "T" OR "U" TYPE OR 2" HARDWOOD

FILTER FABRIC: PER FDOT STANDARD SPECIFICATION PER FDOT INDEX 102

PREFABRICATED UNIT: GEOFAB, ENVIRO-FENCE, OR APPROVED EQUAL

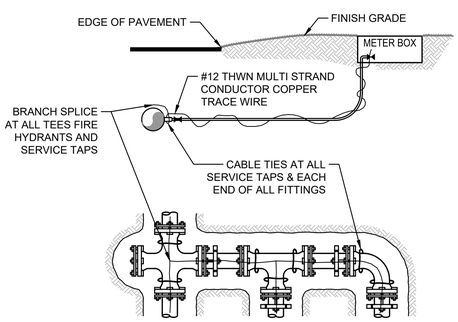


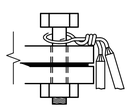
SECTION

NOTES

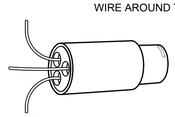
1. FILTER FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH TIES SPACED EVERY 24 INCHES AT TOP AND MID. SECTION. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6 INCHES.
4. SILT FENCE SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE.
5. THE CONTRACTOR SHALL INSPECT AND REPAIR THE SILT FENCE AFTER EACH RAIN EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
6. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFFSITE AND CAN BE PERMANENTLY STABILIZED.
7. THE SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE ITS PONDING EFFICIENCY.
8. IF DITCH LEVEL IS DEEPER THAN 30", THEN A FLOATING SILT SCREEN SHALL BE USED.

3 / C5-6 SILT FENCE DETAIL
N.T.S.

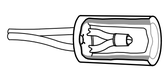




TO PUT CONTINUOUS TRACE WIRE UNDER BOLT, FIRST LOOSEN BOLT, THEN STRIP 3" MIN, WRAP ONCE AROUND BOLT, 1 TWIST, 2 WRAPS. "DO NOT CUT WIRE" TIGHTEN BOLT AFTER WRAPPING TRACE WIRE AROUND THE BOLT.



DETAIL OF A THREE WIRE SPICE

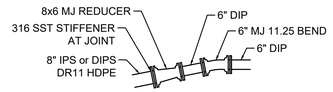


CUTAWAY DETAIL OF A TW0 WIRE SPICE

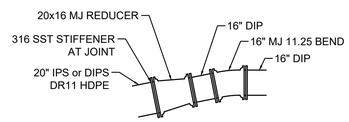
NOTES

1. TRACE WIRE IS REQUIRED ON ALL NON METALLIC PIPE.
2. INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3. CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.
4. WIRE SPLICE CONNECTORS SHALL BE DRY-CON DIRECT BURY LUG BY KING INNOVATIONS, DS-500 DRI-SPLICE BY SPEARS OR DIRECT BURY PRODUCTS BY 3M

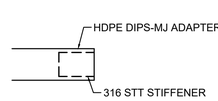
4 / C5-6 TRACE WIRE
N.T.S.



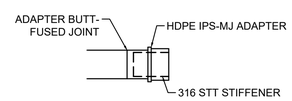
C-2 CANAL CROSSING



FOREST HILL BLVD CROSSING



DIPS HDPE

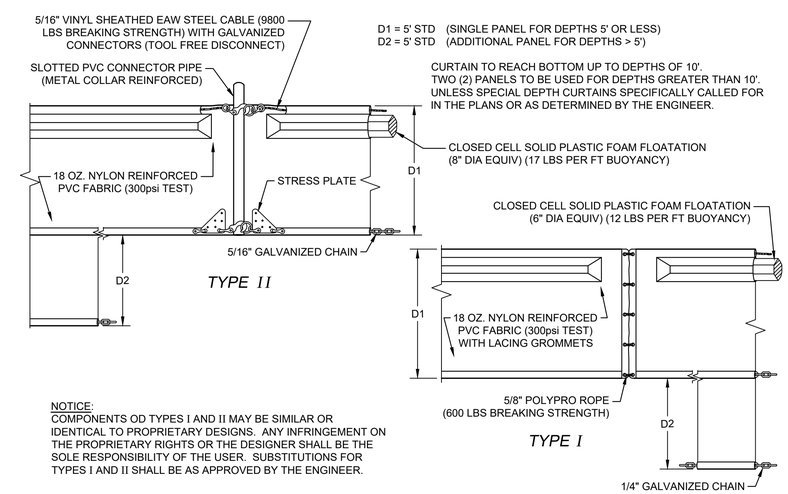


IPS HDPE

NOTES

1. HDPE MAY BE EITHER IPS OR DIPS WITH A MINIMUM ID OF 16" FOR THE FOREST HILL BLVD CROSSING AND 6" FOR THE C-2 CANAL CROSSING.
2. HDPE PIPE SIZE MUST BE ADAPTED TO THE ULTIMATE DIP SIZE AT MATERIAL TRANSITION.
3. HDPE-MJ ADAPTORS SHALL BE DR11 AND RATED TO THE SAME PRESSURE AS THE PIPELINE. ADAPTORS SHALL BE BUTT FUSION-WELDED TO THE PIPE LINE.
4. HDPE TO MJ CONNECTIONS MUST CONTAIN STAINLESS STEEL STIFFENERS OF AN APPROPRIATE LENGTH FOR THE JOINT SIZE. THE STIFFENERS SHALL BE 316 STAINLESS STEEL AS MANUFACTURED BY ROMAC INDUSTRIES, JCM INDUSTRIES, FORD METER BOX COMPANY, OR APPROVED EQUAL.

5 / C5-6 HDPE/DIP TRANSITION DETAILS 1
N.T.S.



NOTICE:
COMPONENTS OD TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OR THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

2 / C5-6 FLOATING TURBIDITY BARRIER
N.T.S.

BAR IS EQUAL TO ONE INCH ON ORIGINAL DRAWING
ADJUST ALL SCALED DIMENSIONS ACCORDINGLY

PLOT DATE: Mar 14, 2019 - 3:09pm XREFS: IMAGES:

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	1	3/12/2019	SMS	REVISIONS PER VOW

SEAL
SPENCER M. SCHROEDER
FLORIDA P.E. NO. 65693
DATE

FLORIDA E.B. NO. 48 FLORIDA L.B. NO. 48
MOCK•ROOS
CONSULTING ENGINEERS
5720 Corporate Way, West Palm Beach, Florida 33407 (561) 683-3113, www.MockRoos.com

FIELD: --
DRAWN: TET
DESIGN: SMS/TET
APPR: GGG
SCALE: N/A

DETAILS
FORCEMAIN REPLACEMENT PROJECT
FOREST HILL BOULEVARD CROSSING AND
C-2 CANAL CROSSING
THE VILLAGE OF WELLINGTON
PALM BEACH COUNTY, FLORIDA

DATE: JANUARY 2019
P.A. NO. B8705.00
DWG. NO. 44-41-11-16
SHEET: C5-6