

TOWN OF FORT MYERS BEACH NORTH ESTERO BLVD. - PHASE II CARLOS CIRCLE WATER MAIN AND STORM IMPROVEMENTS

10600 CHEVROLET WAY, SUITE 300
ESTERO, FL 33928
PHONE: (239) 390-1467 FAX: (407) 839-3790



TETRA TECH

www.tetrattech.com

PROJECT LOCATION:

FORT MYERS BEACH, FL

CLIENT INFORMATION:

TOWN OF FORT MYERS BEACH

Tt PROJECT No.:

200-74765-16002

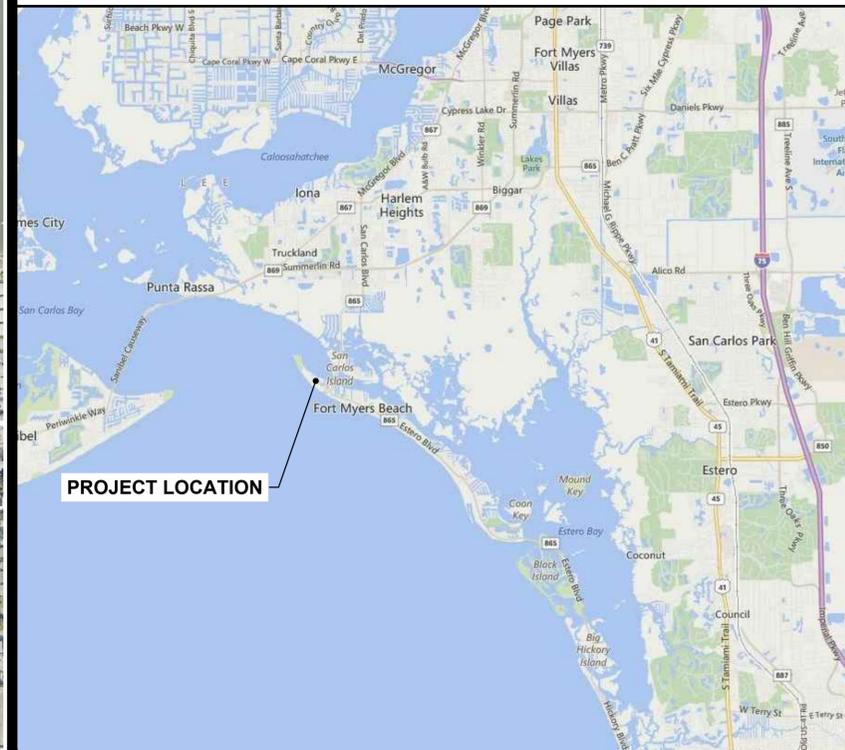
CLIENT PROJECT No.:

PROJECT DESCRIPTION / NOTES:

ISSUED:

MAY 2016 - PERMIT SUBMITTAL

VICINITY MAP:



INDEX OF DRAWINGS	
SHEET NO.	SHEET TITLE
G-000	COVER SHEET, VICINITY MAP AND LOCATION MAP
G-001	GENERAL NOTES
G-002	LEGEND AND ABBREVIATIONS
C-101	OVERALL KEY PLAN
C-102	CARLOS CIRCLE - PLAN AND PROFILE
C-103	CARLOS CIRCLE - PLAN AND PROFILE
C-501	CIVIL DETAILS
C-502	CIVIL DETAILS
C-503	CIVIL DETAILS
C-504	CIVIL DETAILS

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LIST OF STANDARD ABBREVIATIONS

Table with multiple columns listing abbreviations and their corresponding full names, such as AAP ALARM ANNUNCIATOR PANEL, EFF EFFLUENT, LVR LOUVER, etc.

PIPING LEGEND

Table showing piping symbols for various fittings and joints, categorized by Flanged, Mechanical Joint, Groove Joint, and Solvent Weld, with sub-columns for Existing and Proposed.

CIVIL LEGEND

Table of civil engineering symbols including property lines, easements, construction limits, and various types of fences and barriers.

REFERENCE SYMBOLS

Table explaining reference symbols for sections and details, showing how drawing numbers and section letters are used to identify specific parts of the project.

HATCHING LEGEND

Table of hatching patterns used in the drawings to represent different materials and surfaces like asphalt, gravel, earth, and steel.

MECHANICAL/DRAFTING LEGEND

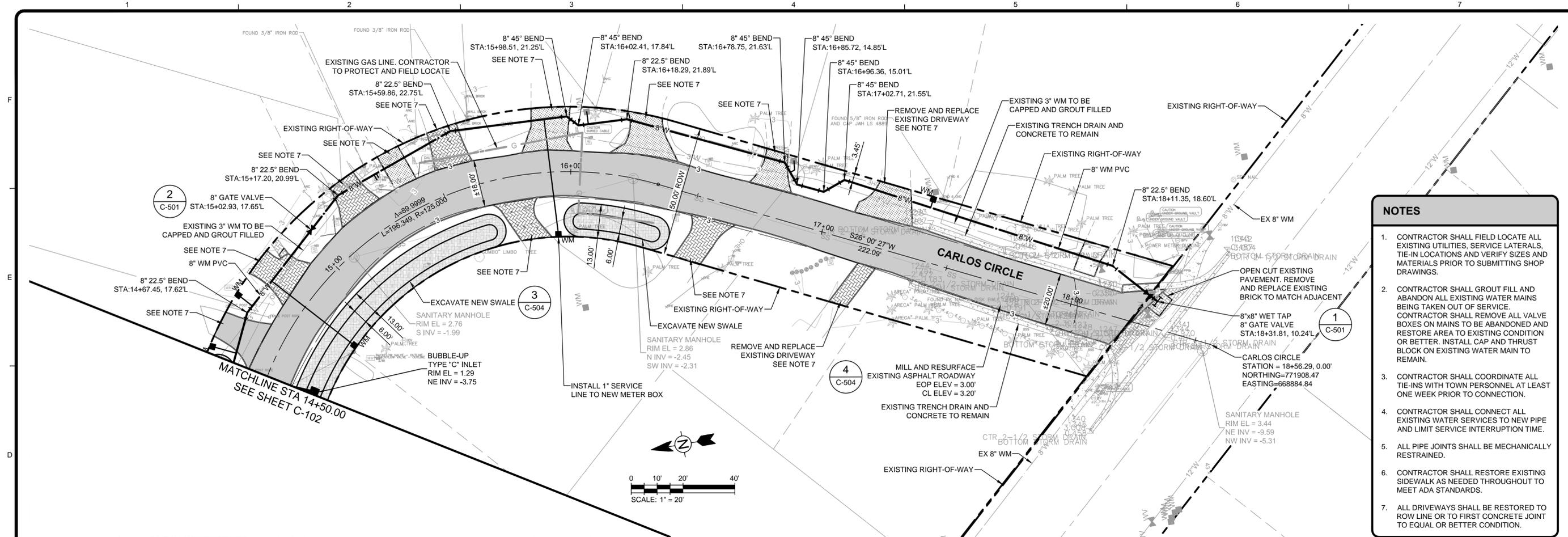
Table of mechanical and drafting symbols, including lines for visible, hidden, and center lines, as well as dimension lines and leaders.

Project information block containing the Tetra Tech logo, company name, address (10600 CHEVROLET WAY, SUITE 300, ESTERO, FL 33928), contact details, and project title (TOWN OF FORT MYERS BEACH NORTH ESTERO BLVD. - PHASE II CARLOS CIRCLE W/M AND STORM IMPROVEMENTS).

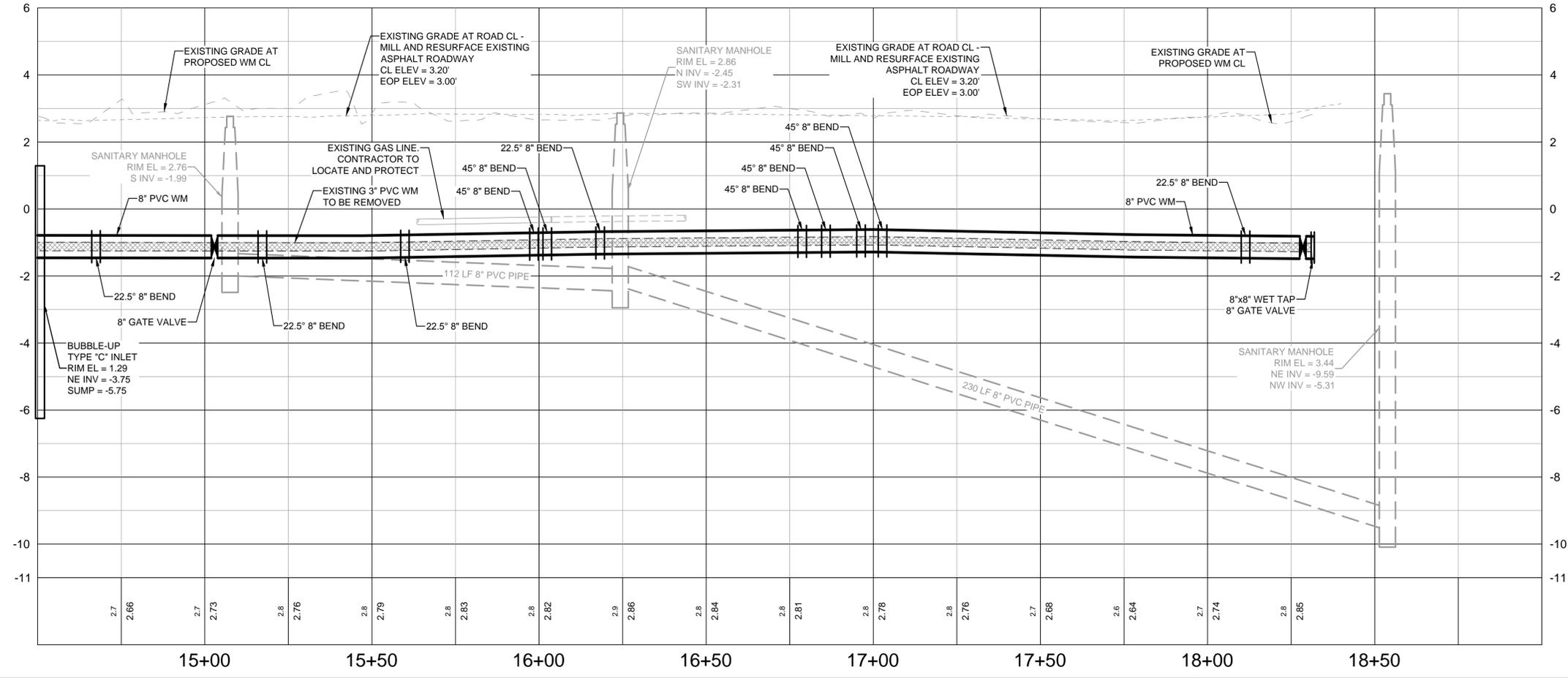
G-002

Bar Measures 1 inch

3/19/2007 C-102_CARLOS_CIRCLE.dwg
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- NOTES**
- CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES, SERVICE LATERALS, TIE-IN LOCATIONS AND VERIFY SIZES AND MATERIALS PRIOR TO SUBMITTING SHOP DRAWINGS.
 - CONTRACTOR SHALL GROUT FILL AND ABANDON ALL EXISTING WATER MAINS BEING TAKEN OUT OF SERVICE. CONTRACTOR SHALL REMOVE ALL VALVE BOXES ON MAINS TO BE ABANDONED AND RESTORE AREA TO EXISTING CONDITION OR BETTER. INSTALL CAP AND THRUST BLOCK ON EXISTING WATER MAIN TO REMAIN.
 - CONTRACTOR SHALL COORDINATE ALL TIE-INS WITH TOWN PERSONNEL AT LEAST ONE WEEK PRIOR TO CONNECTION.
 - CONTRACTOR SHALL CONNECT ALL EXISTING WATER SERVICES TO NEW PIPE AND LIMIT SERVICE INTERRUPTION TIME.
 - ALL PIPE JOINTS SHALL BE MECHANICALLY RESTRAINED.
 - CONTRACTOR SHALL RESTORE EXISTING SIDEWALK AS NEEDED THROUGHOUT TO MEET ADA STANDARDS.
 - ALL DRIVEWAYS SHALL BE RESTORED TO ROW LINE OR TO FIRST CONCRETE JOINT TO EQUAL OR BETTER CONDITION.



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Brett T. Messner, P.E.
 P.E. No. 77093, FL
 Tetra Tech Inc.
 201 E Pine Street, Suite 1000
 Orlando, FL 32801
 Engineering Business No. 2429

DATE _____

BY	DATE	DESCRIPTION

TOWN OF FORT MYERS BEACH
 NORTH ESTERO BLVD. - PHASE II
 CARLOS CIRCLE WM AND STORM IMPROVEMENTS

**CARLOS CIRCLE
 PLAN AND PROFILE**
 STA: 14+50 - 18+56.29

Project No.: 200-74765-16002
 Designed By:
 Drawn By:
 Checked By:

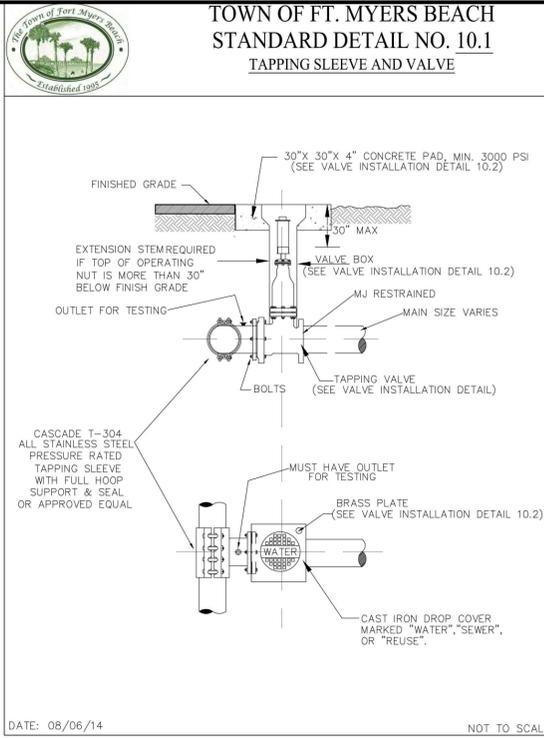
C-103
 Sheet
 Bar Measures 1 inch

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TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.1 TAPPING SLEEVE AND VALVE

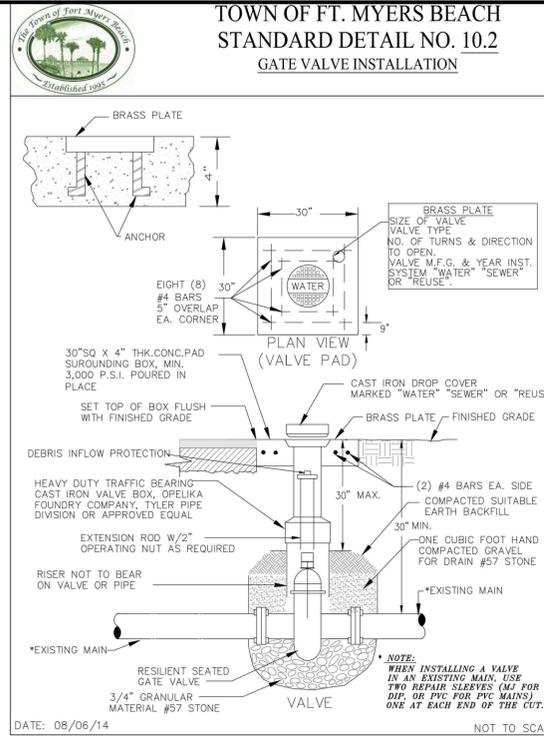


DATE: 08/06/14 NOT TO SCALE

1 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.2 GATE VALVE INSTALLATION

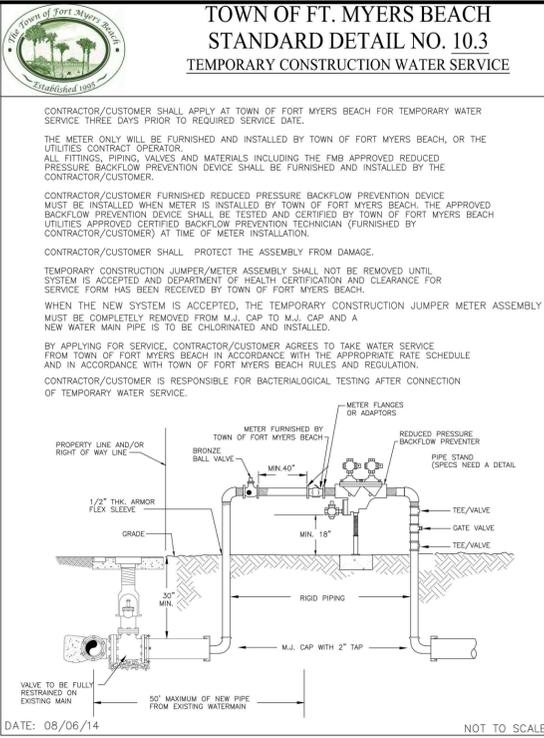


DATE: 08/06/14 NOT TO SCALE

2 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.3 TEMPORARY CONSTRUCTION WATER SERVICE

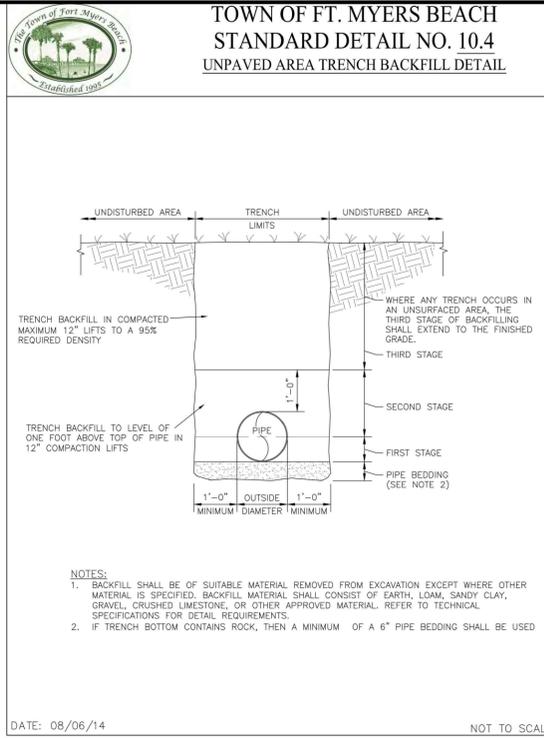


DATE: 08/06/14 NOT TO SCALE

3 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.4 UNPAVED AREA TRENCH BACKFILL DETAIL

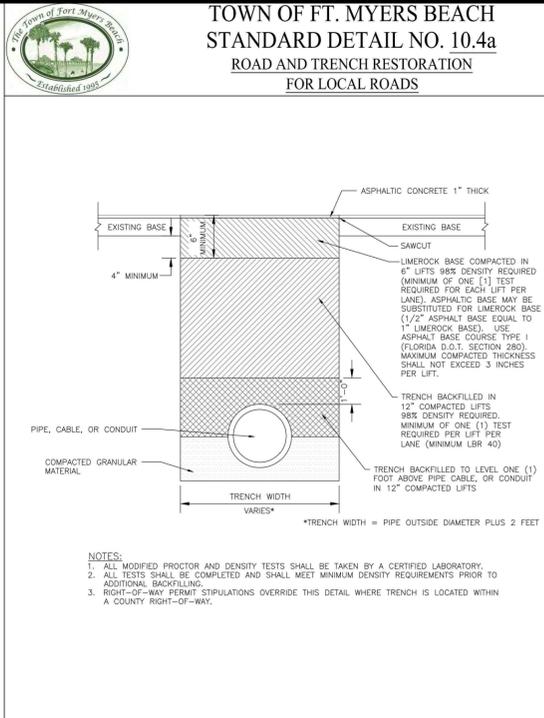


DATE: 08/06/14 NOT TO SCALE

4 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.4a ROAD AND TRENCH RESTORATION FOR LOCAL ROADS

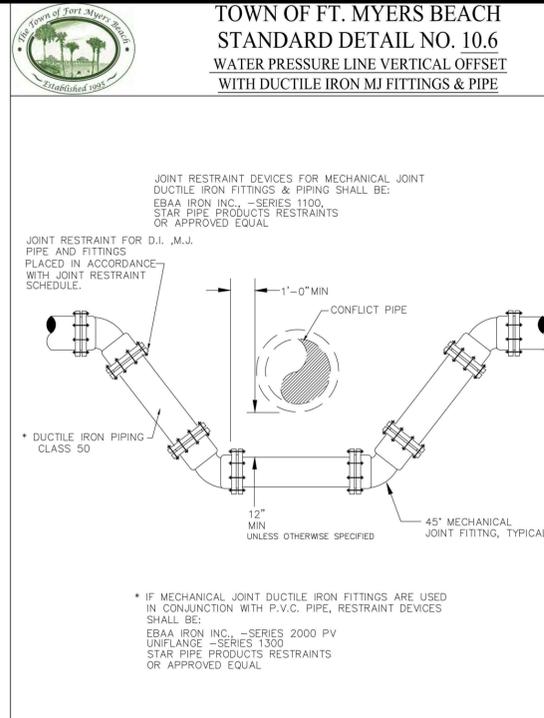


DATE: 08/06/14 NOT TO SCALE

5 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.6 WATER PRESSURE LINE VERTICAL OFFSET WITH DUCTILE IRON MJ FITTINGS & PIPE

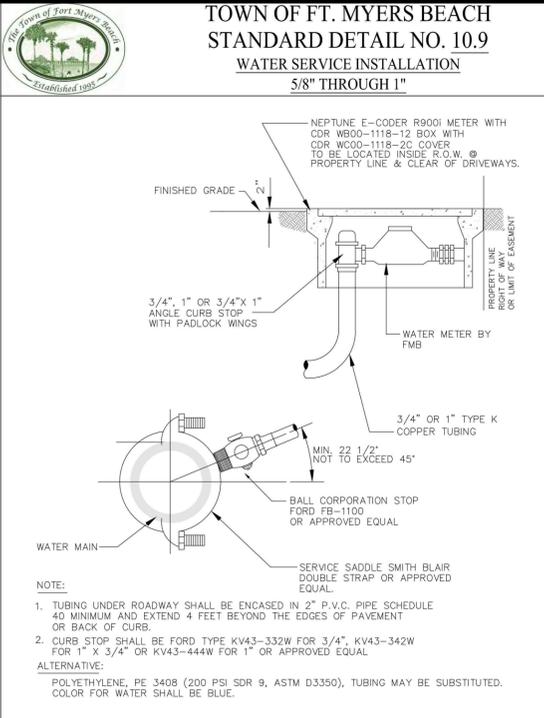


DATE: 08/06/14 NOT TO SCALE

6 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.9 WATER SERVICE INSTALLATION 5/8\"/>

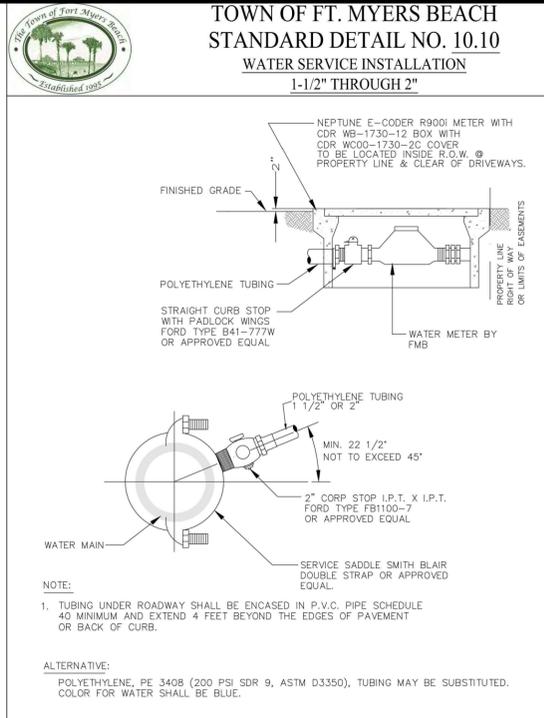


DATE: 08/06/14 NOT TO SCALE

7 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.10 WATER SERVICE INSTALLATION 1-1/2\"/>



DATE: 08/06/14 NOT TO SCALE

8 DETAIL SCALE: NTS

TETRA TECH logo and contact information: Brett T. Messner, P.E., P.E. No. 77093, FL, Tetra Tech Inc., 201 E. Fort Street, Suite 1000, Orlando, FL 32801, Engineering Business No. 2429, www.tetra.tech.com, 10600 CHEVROLET WAY, SUITE 300, ESTERO, FL 33928, PHONE: (239) 390-1467 FAX: (407) 839-3790

Table with columns: BY, MARK, DATE, DESCRIPTION. Includes project name: TOWN OF FORT MYERS BEACH NORTH ESTERO BLVD. - PHASE II CARLOS CIRCULO W/M AND STORM IMPROVEMENTS CIVIL DETAILS

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Project No.: 200-74765-16002
Designed By:
Drawn By:
Checked By:

C-501

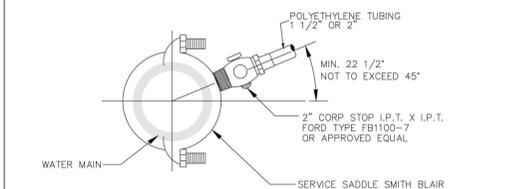
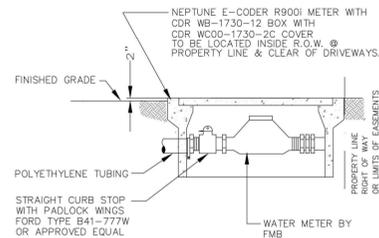
Bar Measures 1 inch

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5/18/2016 9:02:34 AM - P:\PIER7\74765200-74765-16002\CAD\SHETS\CARLOS\CIRCLE501_CARLOS CIRCLE.DWG - REYES, HECTOR

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.10 WATER SERVICE INSTALLATION 1-1/2" THROUGH 2"



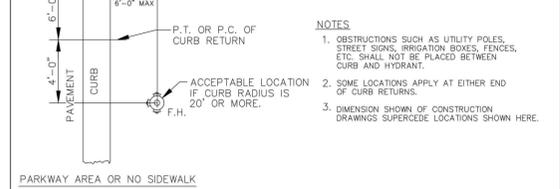
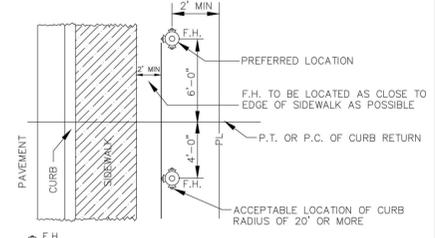
NEPTUNE E-CODER R9001 METER WITH CDR WB-1730-12 BOX WITH CDR W000-1730-2C COVER TO BE LOCATED INSIDE R.O.W. @ PROPERTY LINE & CLEAR OF DRIVEWAYS.

DATE: 08/06/14 NOT TO SCALE

1 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.17 FIRE HYDRANT LOCATIONS/CLEARANCE



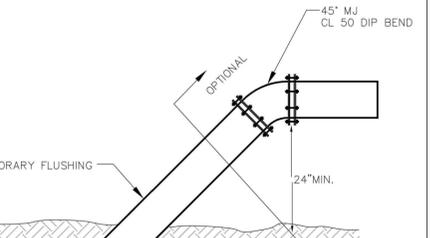
NOTES: 1. OBSTRUCTIONS SUCH AS UTILITY POLES, STREET SIGNS, IRRIGATION BOXES, FENCES, ETC. SHALL NOT BE PLACED BETWEEN CURB AND HYDRANT.

DATE: 08/06/14 NOT TO SCALE

2 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.19 WATER MAIN FLUSHING DETAIL



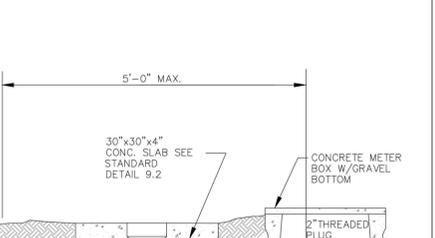
NOTES: 1. FLUSHING DETAIL TO BE USED ON WATER LINES > 8" DIAMETER. 2. FLUSHING PIPE SHALL BE THE SAME DIAMETER AS WATER MAIN.

DATE: 08/06/14 NOT TO SCALE

3 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.20 BLOW OFF DETAIL



30" MIN. RESTRAINED JOINTS PER SCHEDULE. 2" CAST IRON GATE VALVE. 2" P.V.C. (SCH 80) THREADED FITTINGS OR SOLVENT WELDED FITTINGS.

DATE: 08/06/14 NOT TO SCALE

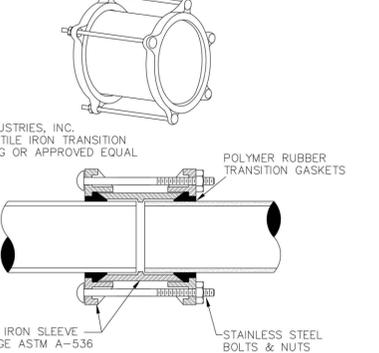
4 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.21 DUCTILE IRON TRANSITION COUPLING



JOINS CAST IRON, DUCTILE IRON, ASBESTOS-CEMENT, C-900 AWWA C-900 & C-905 BY MECHANICAL JOINT COMPRESSION COUPLING



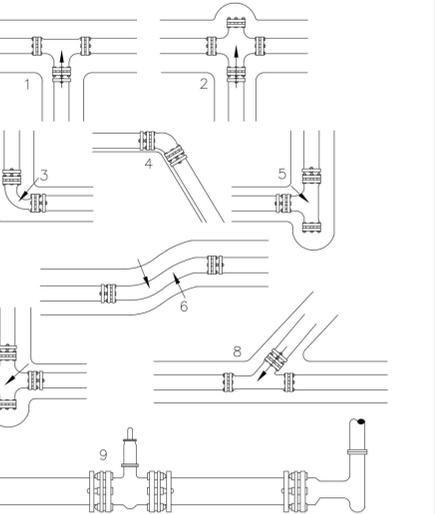
JCM INDUSTRIES, INC. 212 DUCTILE IRON TRANSITION COUPLING OR APPROVED EQUAL.

DATE: 08/06/14 NOT TO SCALE

5 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.22 THRUST RESTRAINING



NOTE: 1. THRU LINE CONNECTION. 2. THRU LINE CONNECTION, CROSS USED AS ELBOW.

DATE: 08/06/14 NOT TO SCALE

6 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.24 MAIN SEPARATION TABLE



Table with columns: OTHER PIPE, HORIZONTAL SEPERATION, CROSSING, JOINT SPACING @ CROSSINGS. Rows include Storm Sewer, Gravity or Low Pressure Sanitary Sewer, and Water Main.

NOTE: 1. 3 FEET FOR GRAVITY TYPE SANITARY SEWERS WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY TYPE SANITARY SEWER.

DATE: 08/06/14 NOT TO SCALE

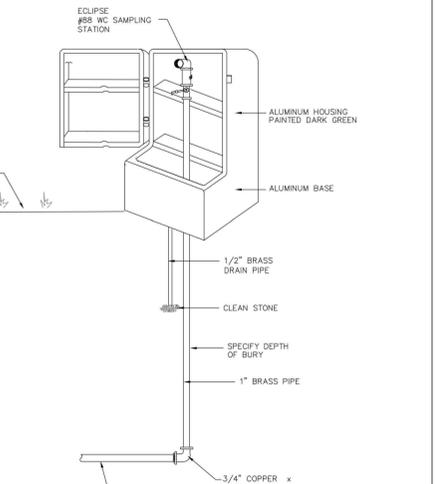
7 DETAIL SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL

TOWN OF FT. MYERS BEACH STANDARD DETAIL NO. 10.29 BACTERIA SAMPLE VALVE



NOTE: LINE EXTENSIONS OF BETWEEN 500 AND 3,000 FEET REQUIRE THE INSTALLATION OF A SAMPLING STATION AT THE RIGHT-OF-WAY LINE ON A METER SERVICE OR AS DIRECTED BY FMB.



ECLIPSE NO. 88WC SAMPLING STATION OR EQUAL

DATE: 08/06/14 NOT TO SCALE

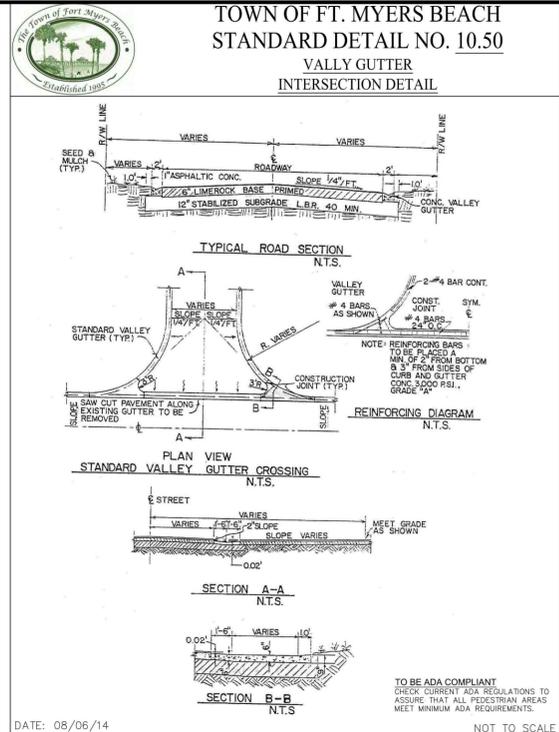
8 DETAIL SCALE: NTS

TETRA TECH logo and contact information: Brett T. Messner, P.E., No. 77093, FL, Tetra Tech Inc., 201 E Pine Street, Suite 1000, Orlando, FL 32801.

Table with columns: BY, DATE, DESCRIPTION, MARK. Includes project name: TOWN OF FORT MYERS BEACH NORTH ESTERO BLVD. - PHASE II CARLOS CIRCLE WM AND STORM IMPROVEMENTS CIVIL DETAILS.

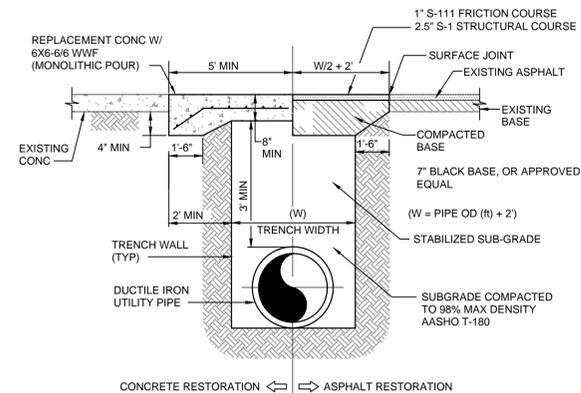
Project No.: 200-74765-16002. Designed By: Drawn By: Checked By: C-502. Copyright: Tetra Tech. Bar Measures 1 inch.

TOWN OF FORT MYERS BEACH STANDARD DETAIL



1 DETAIL
SCALE: NTS

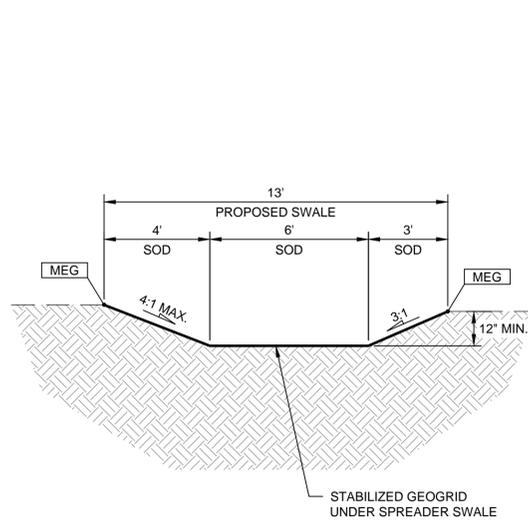
UTILITY CROSSING, OPEN CUT



- NOTES:
- CONTRACTOR SHALL FILL OPEN CUT TO ALLOW TRAFFIC TO PASS FREELY AND SAFELY PROMPTLY AFTER INSTALLATION. IF PERMANENT RESTORATION IS TO BE DEFERRED, THE CONTRACTOR SHALL MAINTAIN THE TEMPORARY CONDITION TO THE RESIDENT INSPECTOR'S SATISFACTION.
 - EXISTING SURFACE AND BASE CUTS SHALL BE MECHANICALLY SAWN.
 - LONGITUDINAL CUTS REQUIRED OVERLAY/RESURFACING TO THE COMPLETE WIDTH OF THE ROAD ON COUNTY AND EXPRESSWAY AUTHORITY OWNED ROADWAYS.
 - CUTS AT INTERSECTIONS REQUIRE COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN RADII AND/OR 10FT BEYOND CUT, WHICHEVER IS GREATER FOR AND COUNTY AND EXPRESSWAY AUTHORITY OWNED ROADWAY INTERSECTIONS.
 - CUTS THROUGH TURNOUTS AND CUL-DE-SACS REQUIRE COMPLETE OVERLAY/RESURFACING ON COUNTY AND EXPRESSWAY AUTHORITY OWNED ROADWAYS.
 - ALL UTILITY PIPE INSTALLED UNDERNEATH ASPHALT OR CONCRETE ROADWAY SHALL BE DUCTILE IRON.

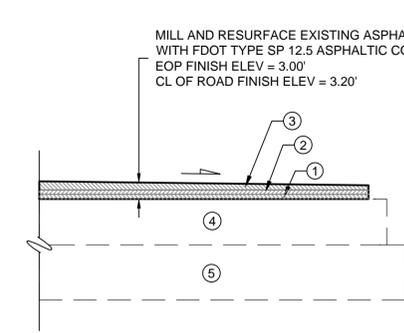
2 DETAIL
SCALE: NTS

TYPICAL SWALE



3 DETAIL
SCALE: NTS

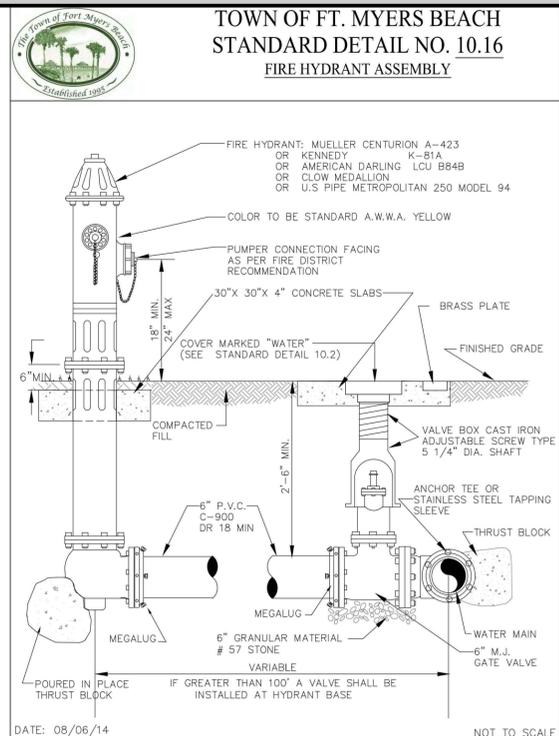
MILL & RESURFACE EXISTING ASPHALT PAVEMENT



- 3/4" FIRST COURSE FDOT TYPE SP 12.5 ASPHALTIC CONCRETE
- 3/4" SECOND COURSE FDOT TYPE SP 12.5 ASPHALTIC CONCRETE
- 3/4" THIRD COURSE FDOT TYPE SP 12.5 ASPHALTIC CONCRETE
- EXISTING SUBBASE TO BE REMAIN UNCHANGED.
- EXISTING SUBGRADE TO REMAIN UNCHANGED

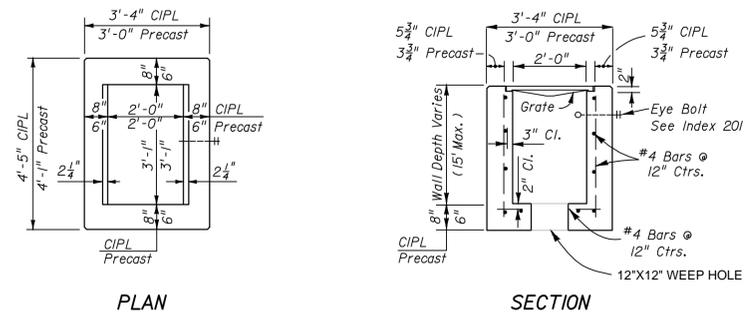
4 DETAIL
SCALE: NTS

TOWN OF FORT MYERS BEACH STANDARD DETAIL



5 DETAIL
SCALE: NTS

TYPE "C" INLET



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in ² /ft)	MAX. SPACING BARS	WWF
0'-15"	A12	0.20	12"	8"

6 DETAIL
SCALE: NTS

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Brett T. Messner, P.E.
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Tetra Tech Inc.
201 E Pine Street, Suite 1000
Orlando, FL 32801
Engineering Business No. 2429

DATE

MARK	DATE	DESCRIPTION
BY	CIS	

TOWN OF FORT MYERS BEACH
NORTH ESTERO BLVD. - PHASE II
CARLOS CIRCLE W/ AND STORM IMPROVEMENTS
CIVIL DETAILS

Project No.: 200-74765-16002
Designed By:
Drawn By:
Checked By:

C-504

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