

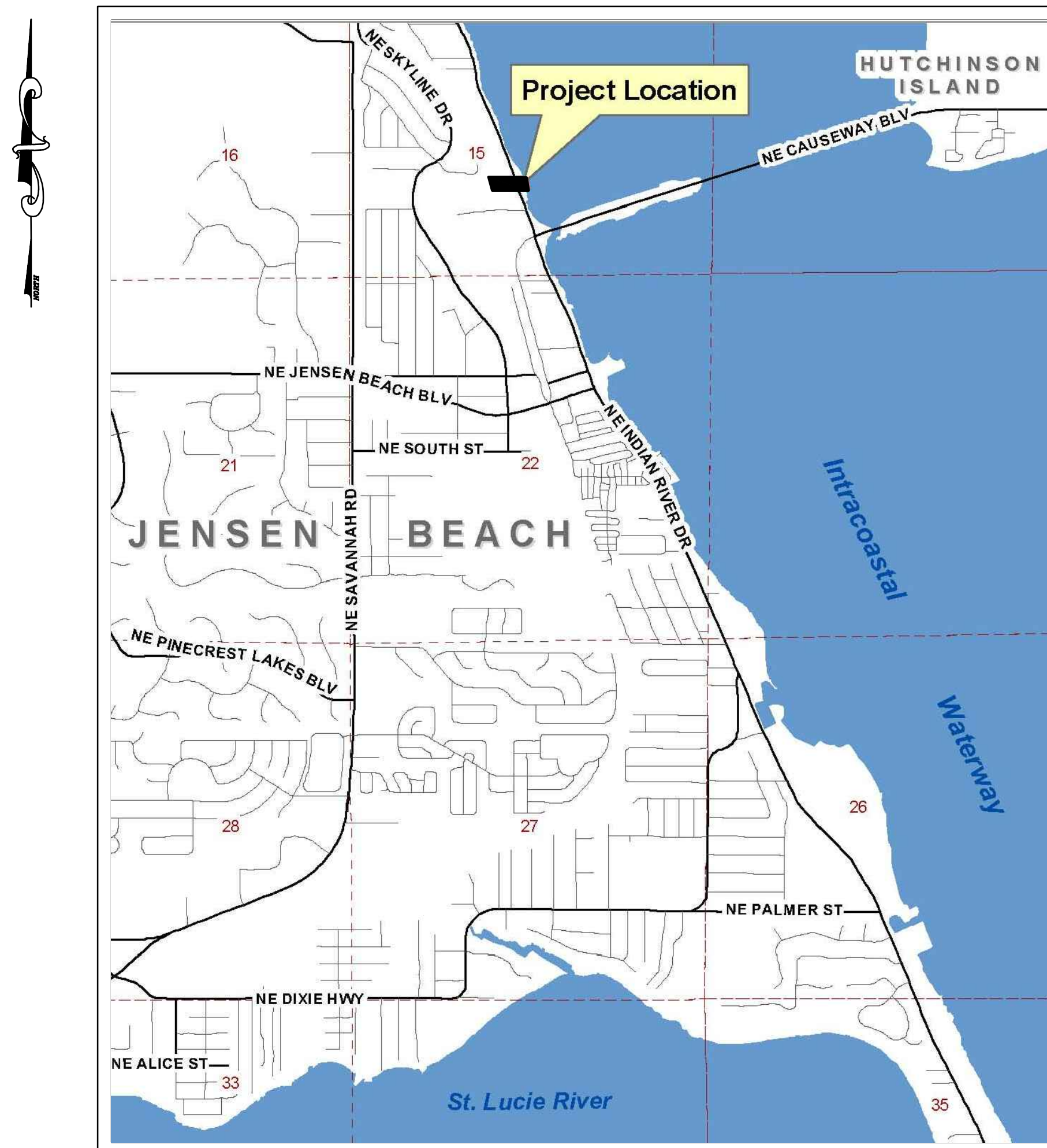
ENGINEERING PLANS AND SPECIFICATIONS

FOR

CONCHY JOE'S

SECTION 15, TOWNSHIP 37 SOUTH, RANGE 41 EAST, JENSEN BEACH, FLORIDA

NO.	DATE	REVISION	BY
△	8-20-19	PER MARTIN COUNTY COMMENTS	AT
△	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHWL)	AT
△	12-10-19	PER MARTIN COUNTY COMMENTS	FM
△	1-8-20	REVISED PER MARTIN COUNTY	FM
△	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM



LOCATION MAP

SHEET INDEX

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4-5	PAVING, GRADING, & DRAINAGE PLAN
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10-11	EASEMENT DEDICATION, SIGNAGE, & STRIPING PLAN
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14	GENERAL NOTES
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17	INDIAN RIVER DR SECTIONS
18	INDIAN RIVER DR DETAILS
19-20	INDIAN RIVER DR SIGNAGE & STRIPING PLAN
21	RETAINING WALL DESIGN

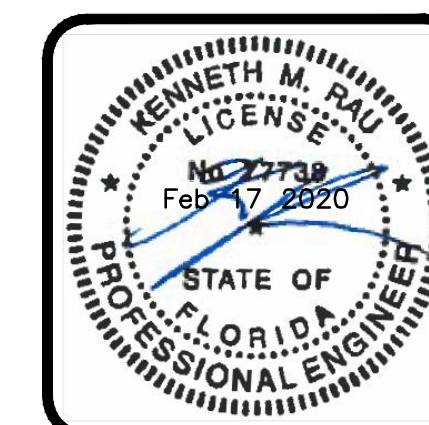


THE MILCOR
GROUP, INC.

CIVIL ENGINEERS
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HOBE SOUND, FL 33455-5006

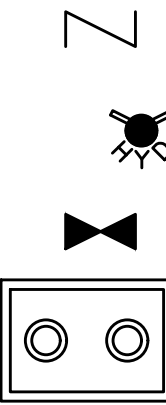
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CERTIFICATE OF AUTHORIZATION:
28246

CONCHY JOE'S
JENSEN BEACH, FLORIDA



UTILITY LEGEND

— FL —	— FM —	— FUEL —	— GAS —	— IRR —	— IQ —	— OHE —	— PVC —	— RWM —	— SAN —	— — — — —	— UGC —	— UGE —	— UGFO —	— UGT —	— WM —	— WS —
FIRE LINE	FORCE MAIN	FUEL LINE	GAS MAIN	IRRIGATION LINE	IRRIGATION QUALITY	OVERHEAD ELECTRIC	POLY VINYL CHLORIDE	RAW WATER MAIN	SANITARY SEWER	SLEEVING	UNDER-GROUND CABLE	UNDER-GROUND ELECTRIC	UNDER-GROUND FIBER OPTICS	UNDER-GROUND TELEPHONE	WATER MAIN	WATER MAIN



CHECK VALVE

FIRE HYDRANT

GATE VALVE

GREASE TRAP

LIGHT POLE

POWER POLE

SANITARY MANHOLE

SANITARY SEWER LATERAL (SINGLE SERVICE)

SANITARY SEWER LATERAL (DOUBLE SERVICE)






















TERMINAL CLEAN OUT

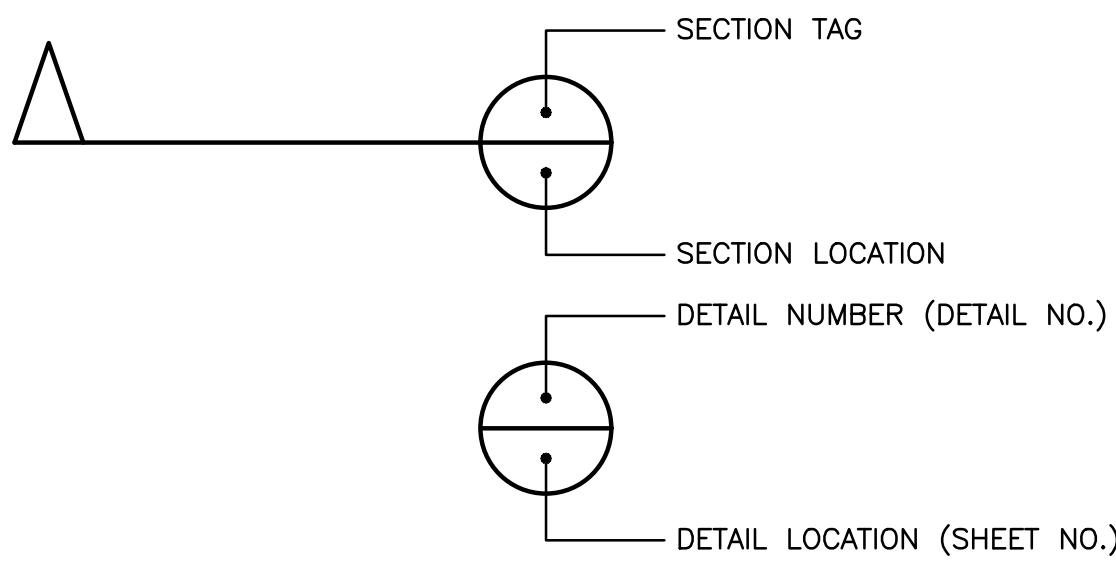
WATER METER (SINGLE SERVICE)






WATER METER (DOUBLE SERVICE)

WELL

PLANS LEGEND

	BUILDING
	CENTER LINE
	CURB & GUTTER
	EASEMENT
	EDGE OF WATER
	EDGE OF PAVEMENT
	FENCE
	GUARD RAIL
	IMPERMIABLE BARRIER
	LOT LINE
	MATCH LINE
	PRESERVE BARRICADE
	PROJECT PHASE LINE
	PROPERTY LINE
	SETBACK LINE
	SILT FENCE
	TOP OF BANK
	TOP OF SLOPE
	TURBIDITY BARRIER
	RIGHT-OF-WAY
	SIGN

DRAINAGE LEGEND

	— CMP ———— CMP ————	DRAINAGE FLOW ARROW
	— DIP ———— DIP ————	MITERED END SECTION
	— HDPE ———— HDPE ————	DRAINAGE INLET
	— RCP ———— RCP ————	DRAINAGE MANHOLE
		YARD DRAIN
		CORRUGATED METAL PIPE (CMP)
		DUCTILE IRON PIPE (DIP)
		HIGH DENSITY POLYETHYLENE PIPE (HDPE)
		REINFORCED CONCRETE PIPE (RCP)

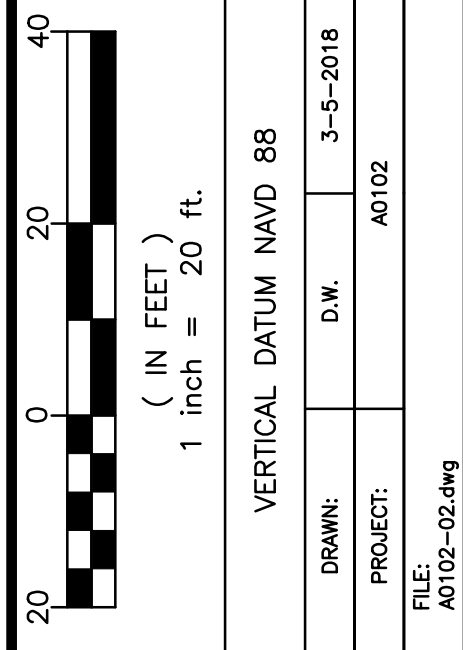
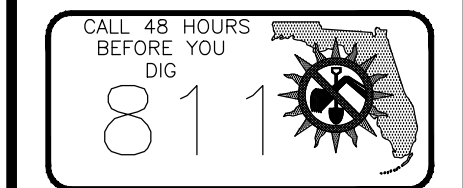
PROFILE LEGEND

———— PROPOSED SECTION

- - - - - EXISTING AREA SECTION

ABBREVIATIONS

BFP	BACK FLOW PREVENTER
CB	CATCH BASIN
CM	CONCRETE MONUMENT
DE	DRAINAGE EASEMENT
DM	DRAINAGE MANHOLE
DIP	DUCTILE IRON PIPE
ELEC	ELECTRICAL
EL	ELEVATION
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
FFE	FINISH FLOOR ELEVATIONS
FH	FIRE HYDRANT
FL	FIRE LINE
FM	FORCE MAIN
GM	GAS MAIN
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH POINT
INV	INVERT
IQ	IRRIGATION QUALITY
IRC	IRON ROD & CAP
IRR	IRRIGATION LINE
LF	LINEAR FEET
LME	LAKE MAINTENANCE EASEMENT
ME	MATCH EXISTING
MES	MITERED END SECTION
MIN	MINIMUM
MH	MANHOLE
OC	ON CENTER
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PT	POINT OF TANGENT
PVC	POLY VINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
RWM	RAW WATER MAIN
SAN	SANITARY SEWER
SW	SIDEWALK
TOB	TOP OF BANK
TOE	TOE OF SLOPE
TOW	TOP OF WALL
UGE	UNDER-GROUND ELECTRIC
UE	UTILITY EASEMENT
UGFO	UNDER-GROUND FIBER OPTICS
UGT	UNDER-GROUND TELEPHONE
WM	WATER MAIN

[illegible]

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LEGEND & ABBREVIATIONS

CONCHY JOE'S

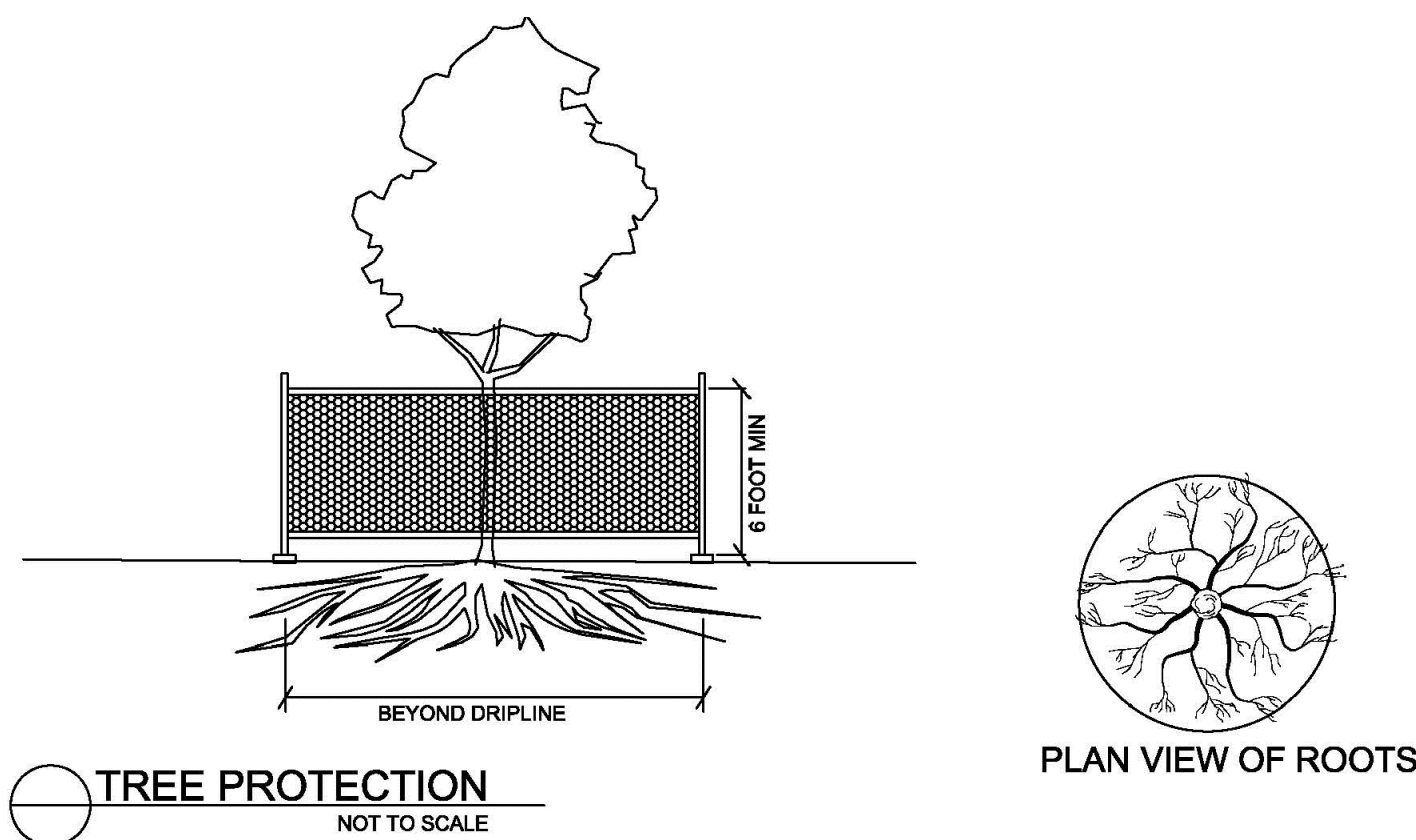
JENSEN BEACH FLORIDA



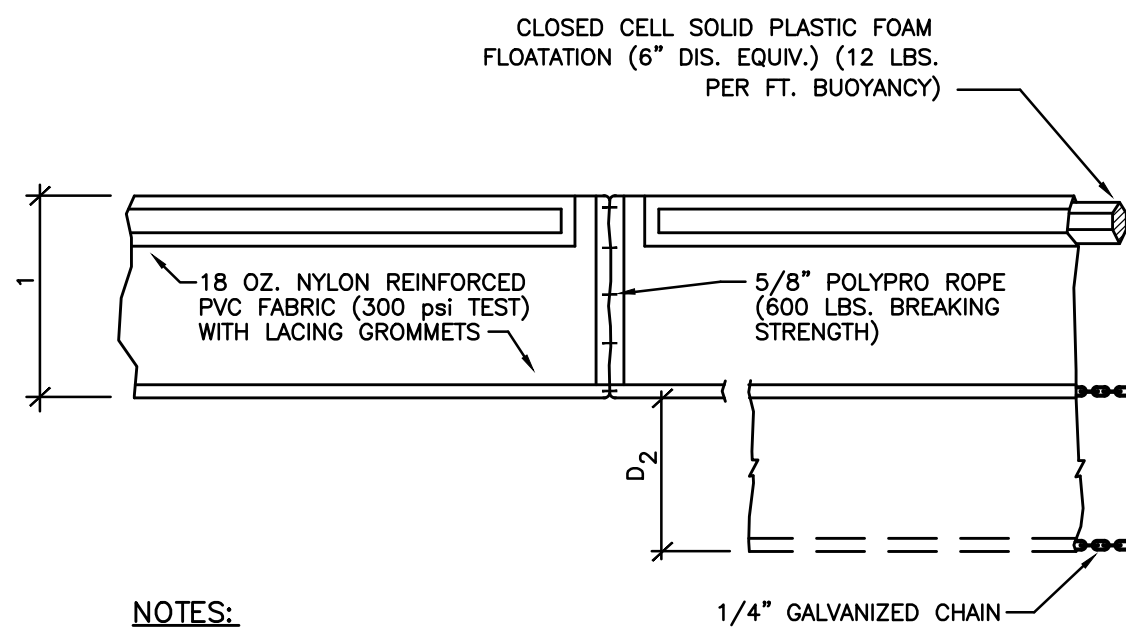
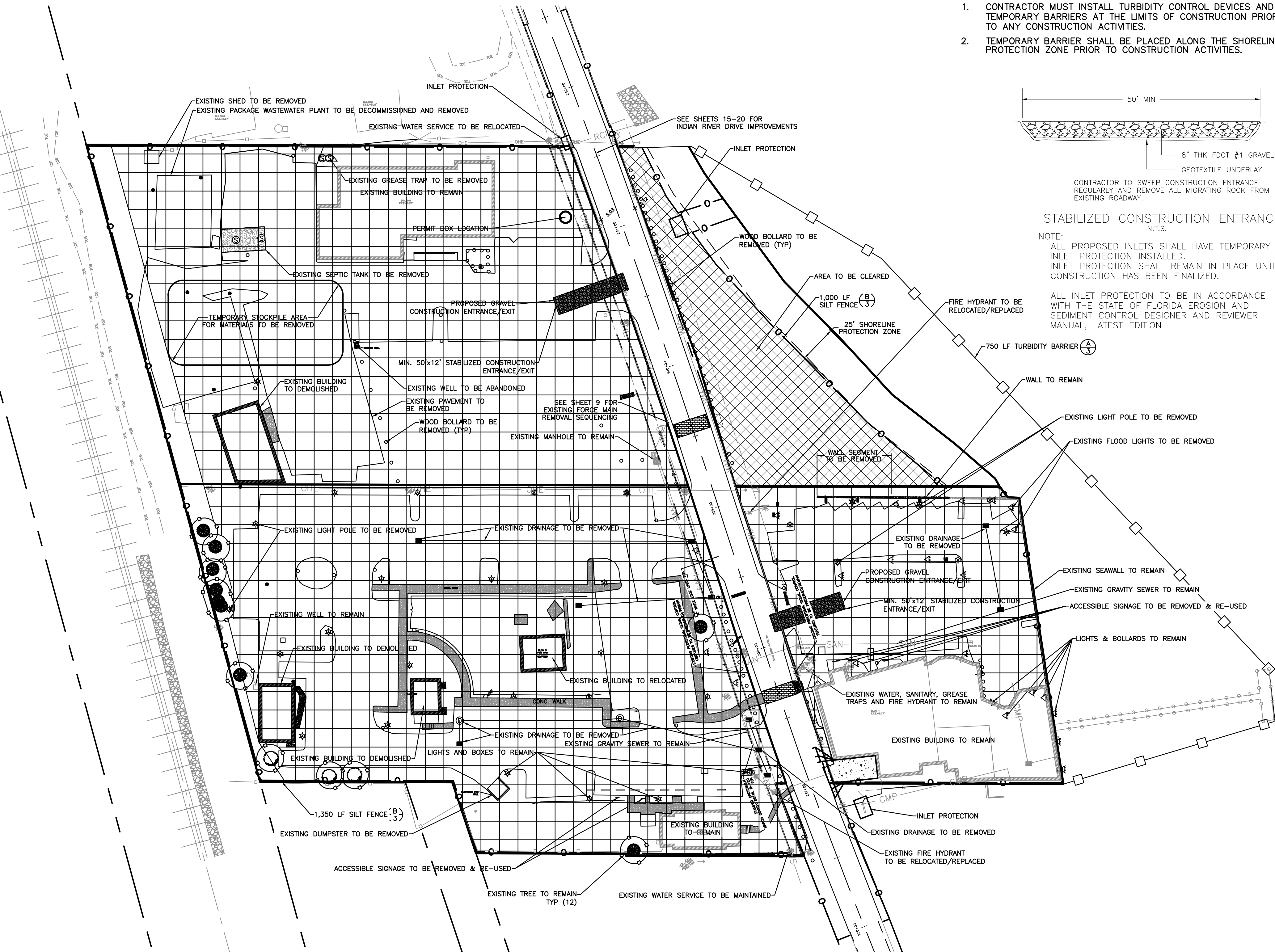
SHEET NO.

J:\A01 Ayers\A0102 - Conchy Joe's Expansion\DWG\DESIGN\BASE.dwg, PRINTED BY: Franciscom ON Mon, Feb 17 2020

1. A MINIMUM OF ONE-FOURTH-INCH DIAMETER ROPE WHICH IS YELLOW OR ORANGE IN COLOR AND MADE OF NYLON OR POLY SHALL BE USED FOR PRESERVATION. THE ROPE IS TO BE ATTACHED TO A MINIMUM OF 2 x 2 WOODEN POLES, IRON REBAR, TWO INCHES OR GREATER PVC PIPE OR OTHER MATERIAL WITH PRIOR APPROVAL OF THE GROWTH MANAGEMENT DEPARTMENT. THE ROPE MUST BE A MINIMUM OF FOUR FEET OFF THE GROUND AND MAY NOT BE ATTACHED TO ANY VEGETATION.
2. DIAMETER OF PROTECTION ZONE SHOULD BE ONE FOOT FOR EACH INCH OF TRUNK DIAMETER BREAST HEIGHT OR 1/2 HEIGHT OF TREE, WHICHEVER IS GREATER. FOR 2-INCH CALIPER TREES OR SMALLER, THE PROTECTION ZONE SHALL BE 6 FOOT MINIMUM DIAMETER.
3. TEMPORARY FENCING (6 FT HIGH) SHALL BE PLACED AT THE DRIP LINE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). TO INSTALL FENCE POSTS, AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
4. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRAD. THERE WILL BE NO SOIL DISTURBANCE UNDER THE DRIP LINE OF THE TREES TO BE PRESERVED.
5. PLACE 6 INCHES OF BARK MULCH AT AREAS NOT PROTECTED BY BARRIER.
6. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER 1 INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH DAMP BURLAP AND COVERED WITH SOIL OR MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
7. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTION FENCE. WORK WITHIN THE PROTECTION ZONE SHALL BE DONE MANUALLY.
8. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMITS OF THE FENCING.
9. NO USE OF CONCRETE, PAINT, CHEMICALS, OR OTHER FOREIGN SUBSTANCES WITHIN TREE PROTECTION AREAS.
10. ALL BARRICADES MUST REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION.



NOTES: TREE PROTECTION



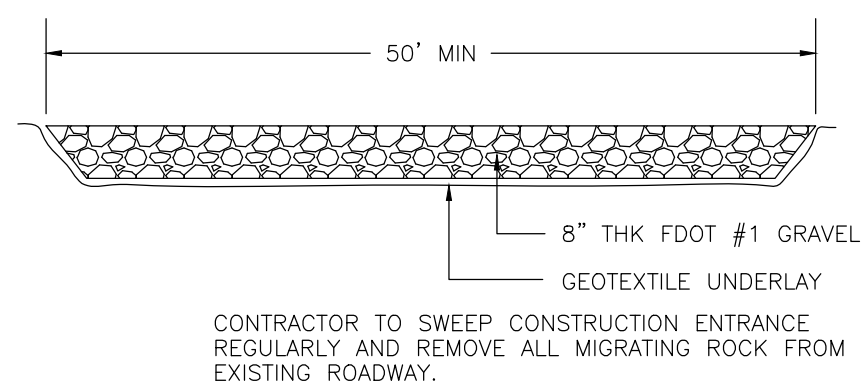
NOTES:

- D₁ = 5' STD. (SINGLE PANEL FOR DEPTHS 5' OR LESS).
D₂ = 5' STD. (ADDITIONAL PANEL FOR DEPTHS > 5')
CURTAIN TO REACH BOTTOM UP TO DEPTHS OF 10 FEET. TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DETERMINED BY THE ENGINEER.

TYPE I FLOATING TURBIDITY BARRIER (A)

GENERAL NOTES:

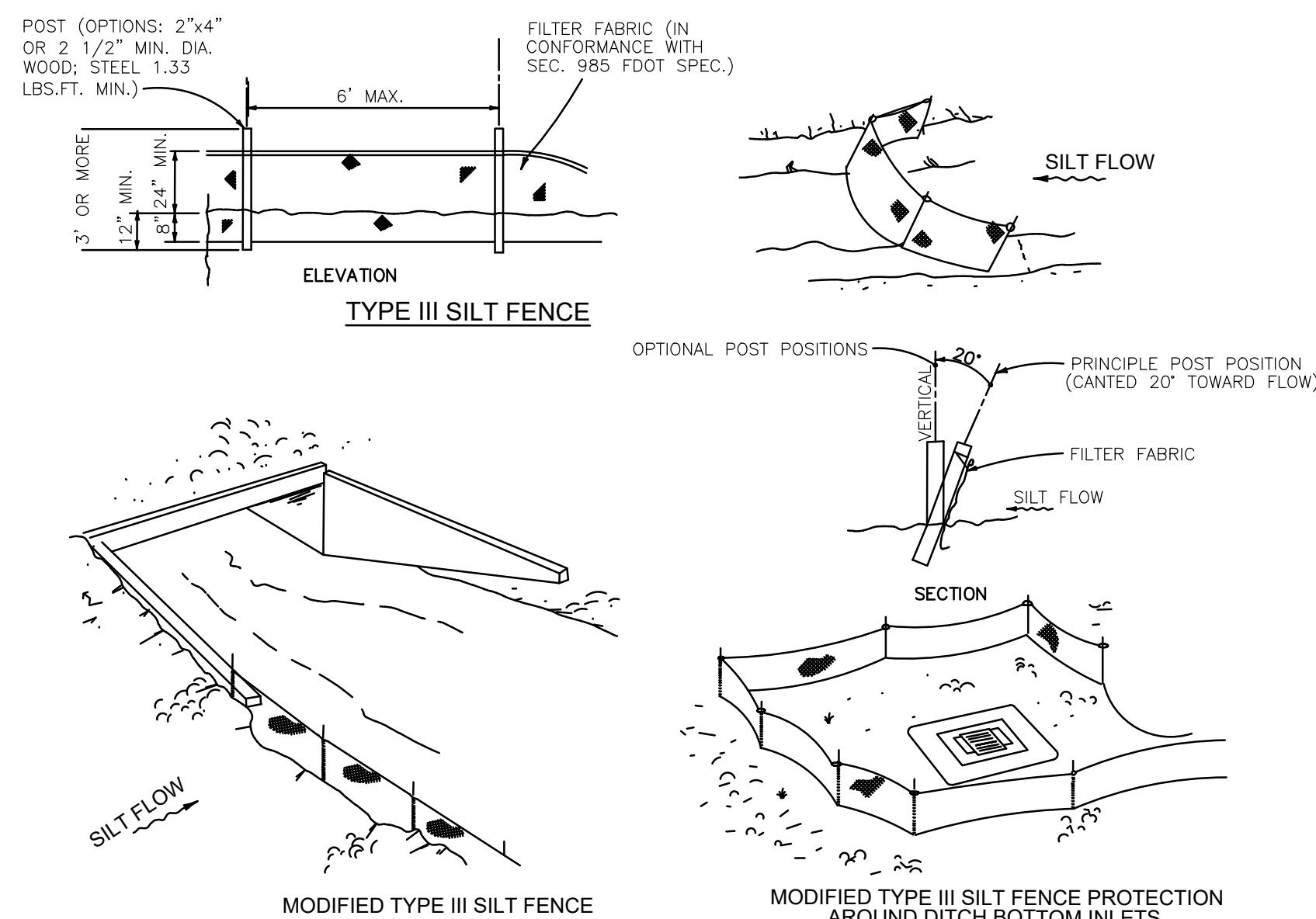
1. CONTRACTOR MUST INSTALL TURBIDITY CONTROL DEVICES AND TEMPORARY BARRIERS AT THE LIMITS OF CONSTRUCTION PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. TEMPORARY BARRIER SHALL BE PLACED ALONG THE SHORELINE PROTECTION ZONE PRIOR TO CONSTRUCTION ACTIVITIES.



STABILIZED CONSTRUCTION ENTRANCE (N.T.S.)

NOTE:
ALL PROPOSED INLETS SHALL HAVE TEMPORARY INLET PROTECTION INSTALLED.
INLET PROTECTION SHALL REMAIN IN PLACE UNTIL CONSTRUCTION HAS BEEN FINALIZED.

ALL INLET PROTECTION TO BE IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION



SILT FENCE APPLICATIONS

1. TYPE III SILT FENCE TO BE USED AT MOST LOCATIONS. WHERE USED IN DITCHES, THE SPACING FOR TYPE III SILT FENCE SHALL BE IN ACCORDANCE WITH FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL (LATEST EDITION)
2. TYPE IV SILT FENCE TO BE USED WHERE LARGE SEDIMENT LOADS ARE ANTICIPATED. SUGGESTED USE IS WHERE FILL SLOPE IS 1:2 OR STEEPER AND LENGTH OF SLOPE EXCEEDS 25 FEET. AVOID USE WHERE THE DETAINED WATER MAY BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.
3. DO NOT CONSTRUCT SILT FENCE ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.
4. WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.

SILT FENCE (B)
PER FDOT INDEX #102

NOTE:

1. SEE FPL PLAN FOR UTILITY POLE RELOCATION PLAN.
2. EXISTING INDIAN RIVER DRIVE CROSSWALK LIGHTING & SIGNAGE SYSTEM TO BE PRESERVED.
3. SEE SHEETS 4 AND 5 FOR INDIAN RIVER DRIVE IMPROVEMENTS.
4. EXISTING DRAINAGE & EXFILTRATION IN CONCHY JOE'S RESTAURANT PARKING (EAST) TO BE REMOVED AS NECESSARY. OUTFALL STRUCTURE & WEIR TO REMAIN.
5. CONTRACTOR TO FIELD VERIFY, MARK & CONFIRM LIMITS OF CLEARING WITH ENGINEER PRIOR TO COMMENCEMENTS.
6. EXISTING SIGNAGE TO BE REUSED WHERE POSSIBLE.
7. DISTURBED AREAS WILL BE STABILIZED WITHIN 30 DAYS. STABILIZATION SHALL BE BY SEEDING OR SODDING.
8. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES & PRESERVE BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE. ITS LOCATION SHOWN ELSE WHERE ON THIS PAGE.
9. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
10. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND PRESERVE BARRICADES WILL BE DEVELOPMENT REVIEW STAFF REPORT PAGE 18 OF 38 GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX, ITS LOCATION SHOWN ELSEWHERE ON THIS PAGE.
11. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
12. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY THE PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
13. PRIOR TO SCHEDULING A FINAL ENVIRONMENTAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

LEGEND



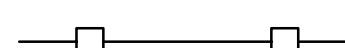
CLEARING



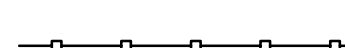
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SILT FENCE

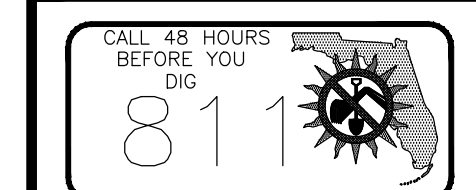


TURBIDITY BARRIER



TREE TO BE PROTECTED

NO.	DATE	REVISION	BY
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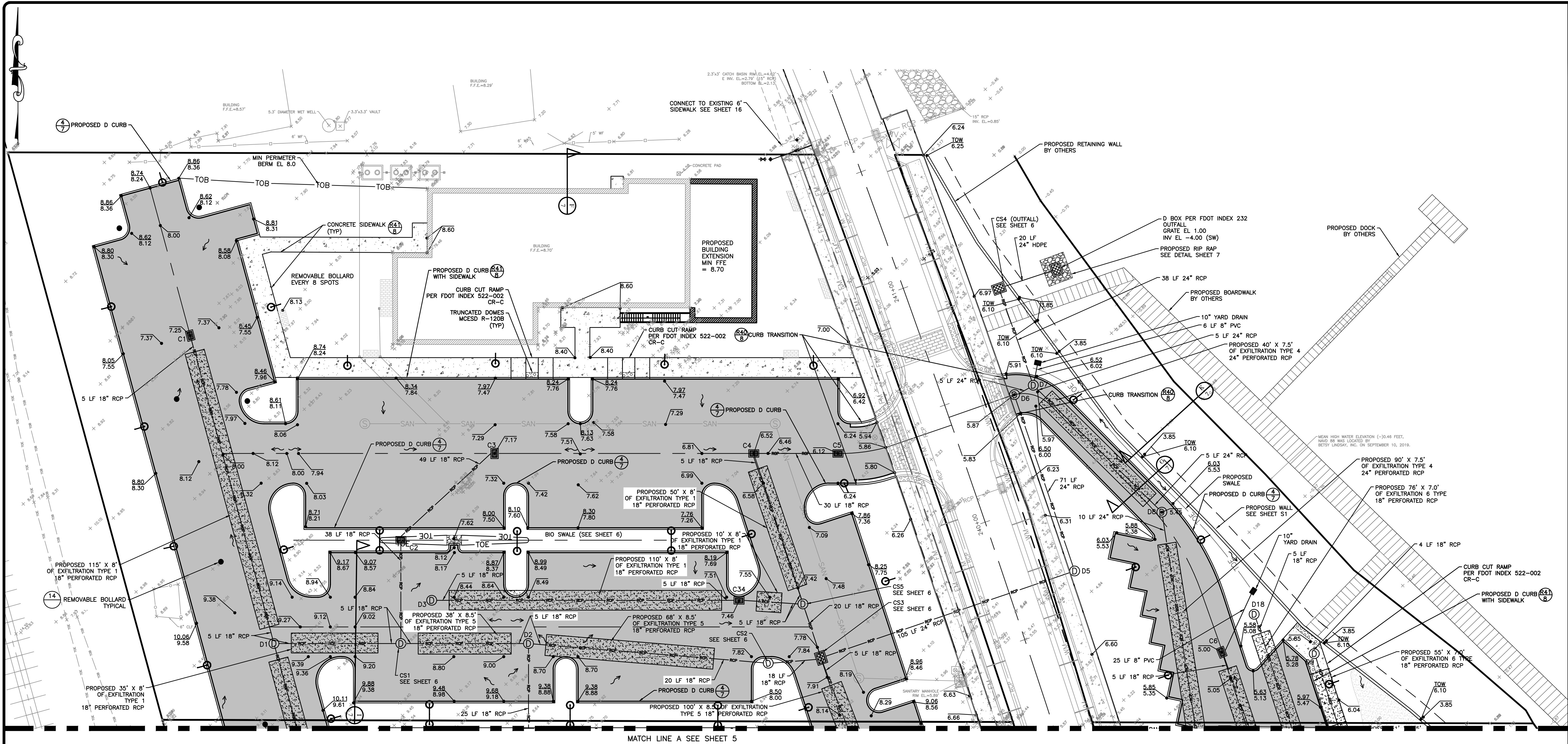
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CLEARING, DEMOLITION,
& EROSION CONTROL
PLAN
CONCHY JOE'S
JENSEN BEACH, FLORIDA



SHEET NO.

J:\A01 Ayers\A0102 - Conchy Joe's Expansion\DWG\DESIGN\BASE.dwg, PRINTED BY: Franciscom ON Mon, Feb 17 2020



NOTE:

1. CATCH BASINS ADJACENT TO EXFILTRATION TO HAVE MIN 3' SUMP.
2. ALL CATCH BASINS TO HAVE MIN 18" SUMP.
3. ANY CHANGES TO THE FINISHED FLOOR ELEVATION MUST BE APPROVED BY THE ENGINEER.
4. RETAINING WALL ADJACENT TO SHORELINE PROTECTION ZONE SHALL BE CONSTRUCTED PRIOR TO FILLING OR GRADING EAST OF INDIAN RIVER DRIVE.

TYPE C INLET	DRAINAGE MANHOLE
C1-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 7.25 INV EL 1.50 (SE)	D1-DRAINAGE MANHOLE RIM EL 9.43 INV EL 1.50 (N) INV EL 1.50 (E) INV EL 1.50 (S)
C2-TYPE C BOTTOM (REINFORCED CONCRETE) RIM EL 7.95 INV EL 2.50 (NE) INV EL 1.50 (S)	D2-DRAINAGE MANHOLE RIM EL 8.45 INV EL 1.50 (W) INV EL 1.50 (E) INV EL 1.50 (S)
C3-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 8.54 INV EL 2.50 (SW) INV EL 1.50 (E)	D3-DRAINAGE MANHOLE RIM EL 7.17 INV EL 1.50 (E) INV EL 1.50 (S)
C4-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 6.52 INV EL 1.50 (S) INV EL -0.75 (E)	D5-DRAINAGE MANHOLE RIM EL 6.42 INV EL 1.00 (N) INV EL -2.25 (W)
C5-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 6.12 INV EL -0.75 (W)	D6-DRAINAGE MANHOLE RIM EL 5.87 INV EL 1.00 (S) INV EL 1.00 (NW)
C6-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 5.00 INV EL 0.00 (S)	D7-DRAINAGE MANHOLE RIM EL 5.97 INV EL 0.00 (N) INV EL 1.00 (SW) INV EL 0.00 (SE)
C34-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 5.45 INV EL 1.50 (E) INV EL 1.50 (W)	D8-DRAINAGE MANHOLE RIM EL 7.46 INV EL 0.00 (S) INV EL 0.00 (NW)
	D9-DRAINAGE MANHOLE RIM EL 5.85 INV EL 0.00 (S)
	D18-DRAINAGE MANHOLE RIM EL 5.50 INV EL 0.00 (S)

PAVING, GRADING, & DRAINAGE PLAN

CONCHY JOE'S

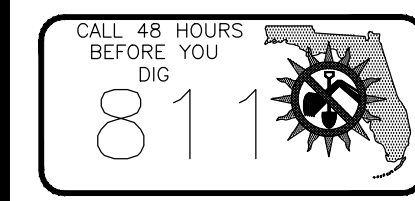
JENSEN BEACH, FLORIDA



SHEET NO.

4

NO.	DATE	REVISION	BY
1	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM
2	2-17-20	REVISIONS PER MARTIN COUNTY	FM
3	1-8-20	PER MARTIN COUNTY COMMENTS	FM
4	12-10-19	PER MARTIN COUNTY COMMENTS	AT
5	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHW)	AT
6	8-20-19	PER MARTIN COUNTY COMMENTS	AT



VERTICAL DATUM NAVD 88	D.W.	3-5-2018
PROJECT:	FILE:	BASE.dwg



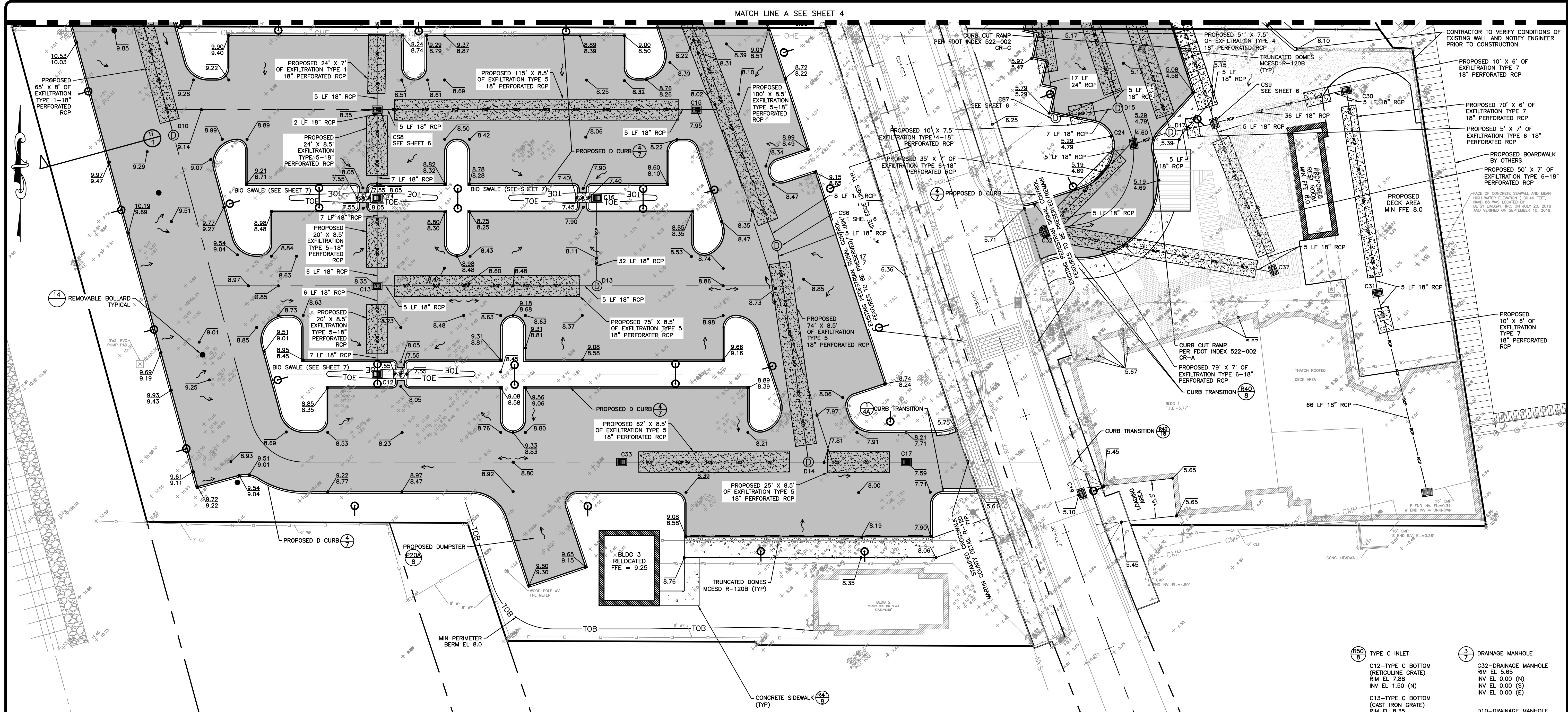
CIVIL ENGINEERS
10975 SE FEDERAL HIGHWAY
HOBE SOUND, FL 33455

PH: (772)223-8850
FAX: (772) 223-8851

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CERTIFICATE OF AUTHORIZATION: 28246

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- NOTE:
1. CATCH BASINS ADJACENT TO EXFILTRATION TO HAVE MIN 3' SUMP.
 2. ALL CATCH BASINS TO HAVE MIN 18" SUMP.
 3. ANY CHANGES TO THE FINISHED FLOOR ELEVATION MUST BE APPROVED BY THE ENGINEER.
 4. RETAINING WALL ADJACENT TO SHORELINE PROTECTION ZONE SHALL BE CONSTRUCTED PRIOR TO FILLING OR GRADING EAST AT INDIAN RIVER DRIVE.

<div><div><div>TYPE C INLET</div><div>C12-TYPE C BOTTOM (RETICULINE GRATE) RIM EL 7.88 INV EL 1.50 (N)</div><div>C13-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 8.35 INV EL 1.50 (N) INV EL 1.50 (S) INV EL 1.50 (E)</div><div>C14-TYPE C BOTTOM (RETICULINE GRATE) RIM EL 7.88 INV EL 1.50 (N) INV EL 1.50 (S)</div><div>C15-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 7.95 INV EL 1.50 (W)</div><div>C16-TYPE C BOTTOM (RETICULINE GRATE) RIM EL 7.73 INV EL 2.50 (N) INV EL 2.50 (S)</div><div>C17-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 7.59 INV EL 1.50 (W)</div><div>C24-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 4.60 INV EL 0.00 (E) INV EL 0.00 (W)</div><div>C30-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 3.40 INV EL 0.00 (W) INV EL 0.00 (S)</div><div>C31-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 4.00 INV EL 0.00 (N) INV EL 0.00 (S)</div><div>C33-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 8.38 INV EL 1.50 (E)</div><div>C37-TYPE C BOTTOM (CAST IRON GRATE) RIM EL 5.30 INV EL 0.00 (N) INV EL 0.00 (W)</div></div></div>	<div><div><div>DRAINAGE MANHOLE</div><div>C32-TYPE C BOTTOM (RETICULINE GRATE) RIM EL 5.65 INV EL 0.00 (N) INV EL 0.00 (S) INV EL 0.00 (E)</div><div>D10-DRAINAGE MANHOLE RIM EL 9.22 INV EL 1.50 (N)</div><div>D13-DRAINAGE MANHOLE RIM EL 8.19 INV EL 2.50 (N) INV EL 1.50 (W)</div><div>D14-DRAINAGE MANHOLE RIM EL 7.85 INV EL 1.50 (N) INV EL 1.50 (E) INV EL 1.50 (W)</div><div>D15-DRAINAGE MANHOLE RIM EL 4.86 INV EL 1.00 (N) INV EL 1.00 (W)</div><div>D17-DRAINAGE MANHOLE RIM EL 5.37 INV EL 0.00 (N) INV EL 0.00 (E) INV EL 0.00 (W)</div></div></div>
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FM

2-17-20

PER MARTIN COUNTY UTILITY COMMENTS

FM

1-8-20

REVISIONS PER MARTIN COUNTY

FM

12-10-19

PER MARTIN COUNTY COMMENTS

AT

9-25-19

PER REVISED MEAN HIGH WATER LINE (MHW)

AT

8-20-19

PER MARTIN COUNTY COMMENTS

BY

NO.

DATE:

CALL 48 HOURS BEFORE YOU DIG

811

VERTICAL DATUM NAVD 88

1 inch = 20 ft.

0 20 40

20

THE MILCOR GROUP, INC.

CIVIL ENGINEERS

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CERTIFICATE OF AUTHORIZATION: 28246

PAVING, GRADING, & DRAINAGE PLAN

CONCHY JOE'S

JENSEN BEACH, FLORIDA

KENNETH M. RAU

FLORIDA

PROFESSIONAL ENGINEER

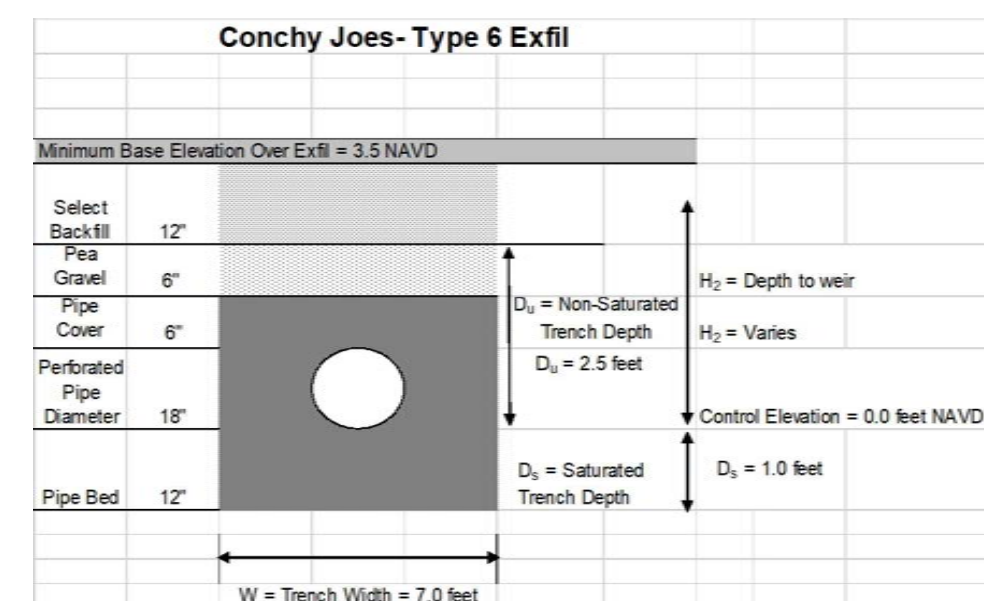
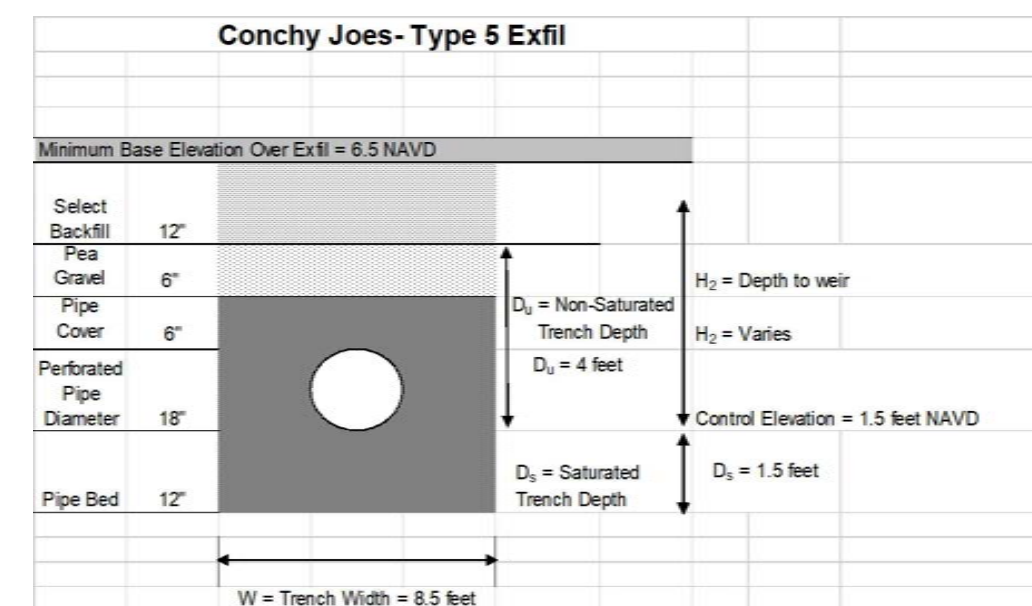
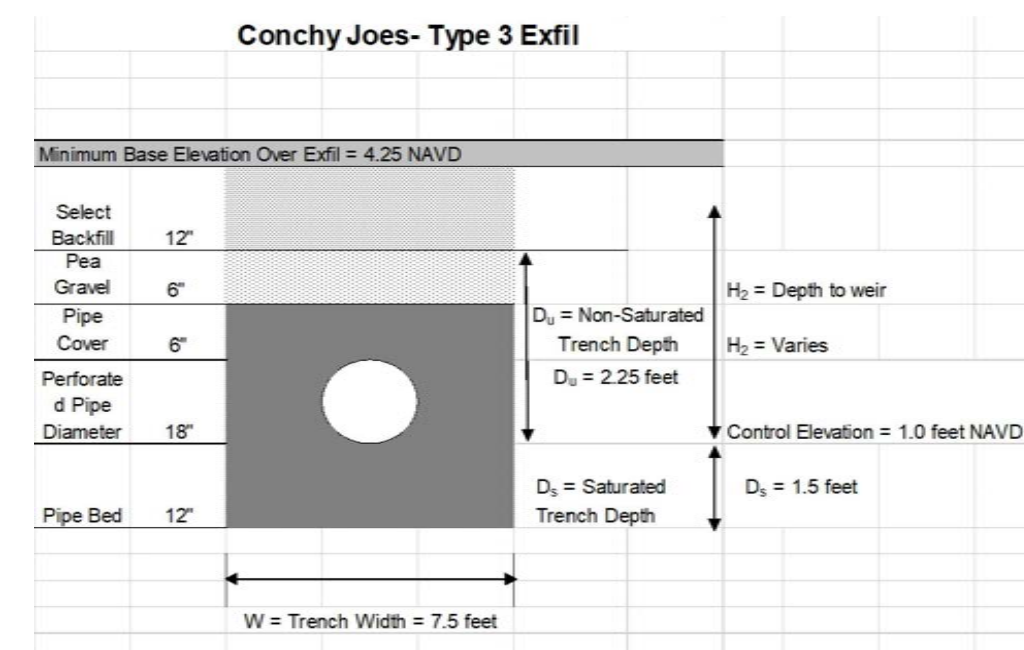
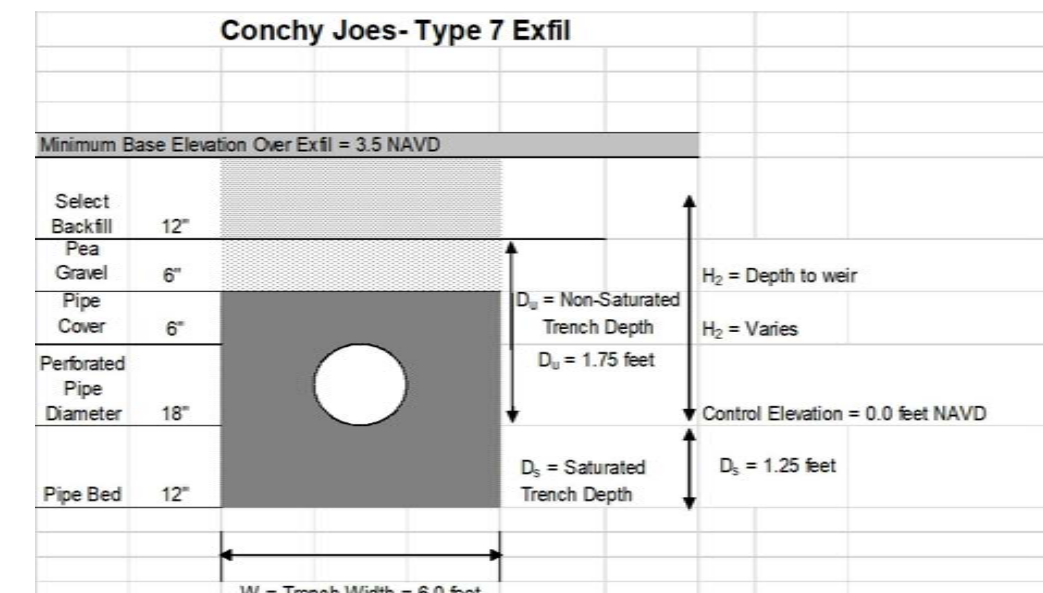
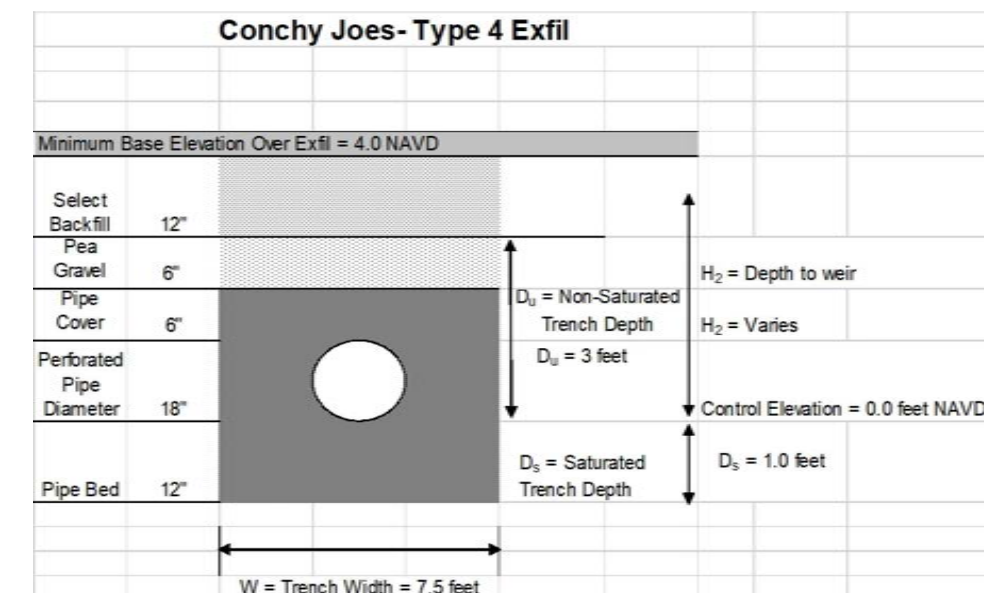
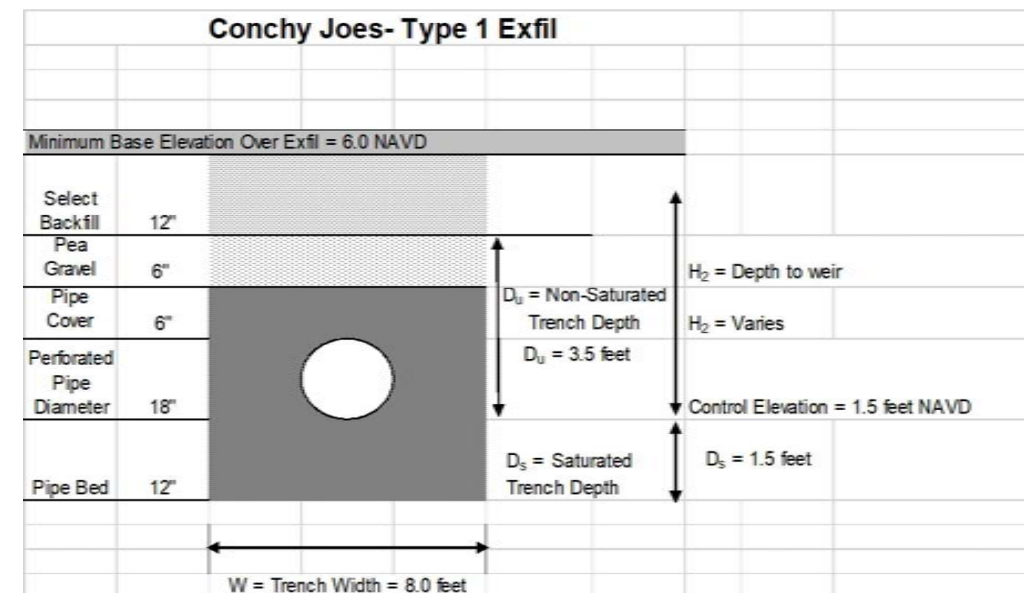
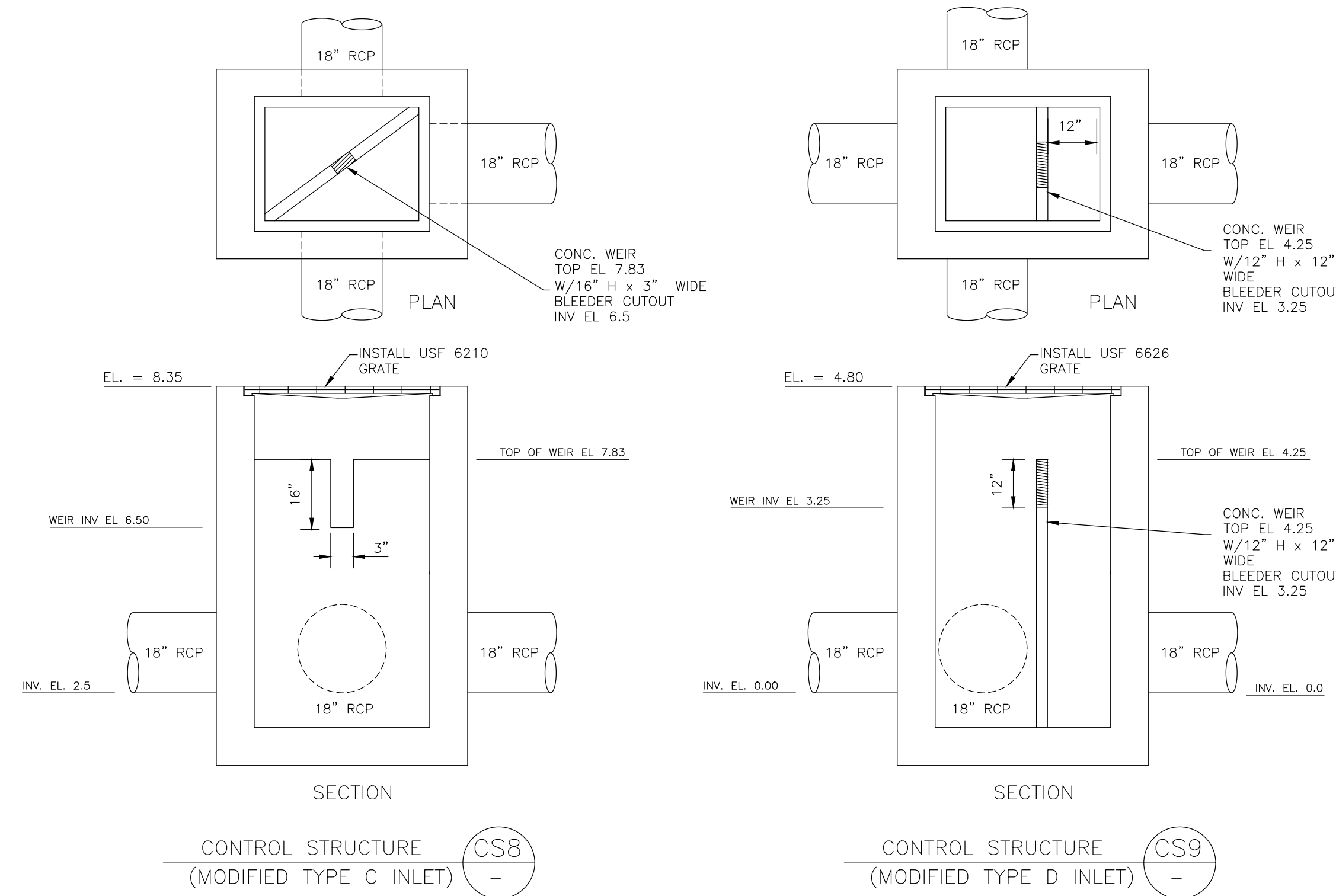
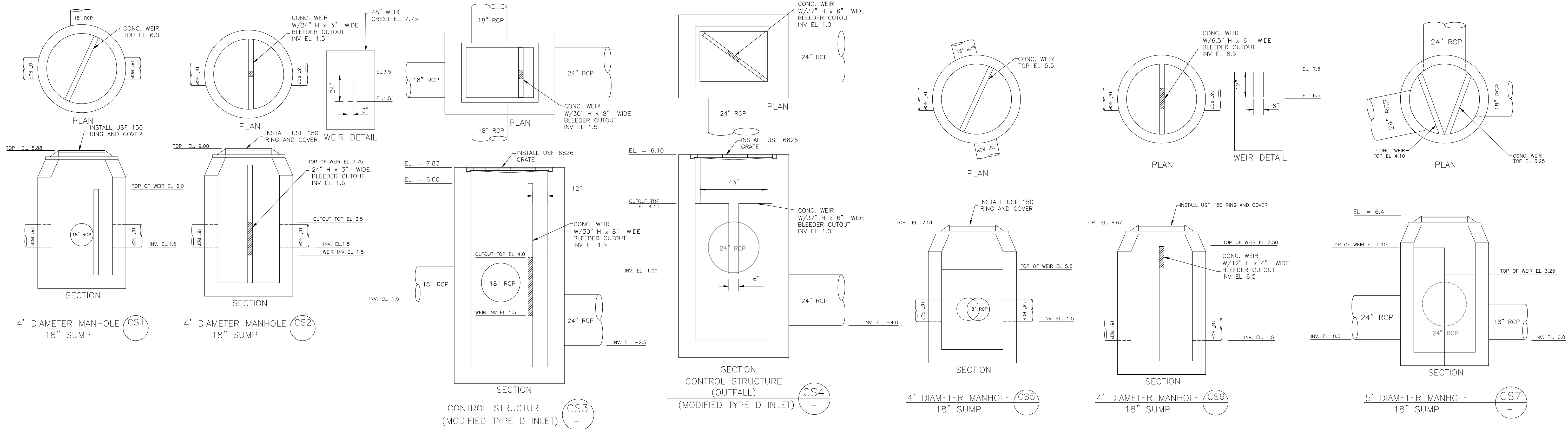
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FEB 17 2020

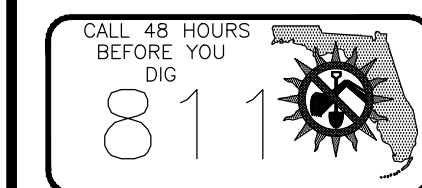
SHEET NO.

5

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NO.	DATE	REVISION	BY
1	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM
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4	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHW)	AT
5	8-20-19	PER MARTIN COUNTY COMMENTS	AT



VERTICAL DATUM NAVD 88	D.W.	3-5-2018
DRAWN:	PROJECT:	40102
FILE:	BASE.dwg	



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AUTHORIZATION: 28246

PAVING, GRADING, &
DRAINAGE DETAILS

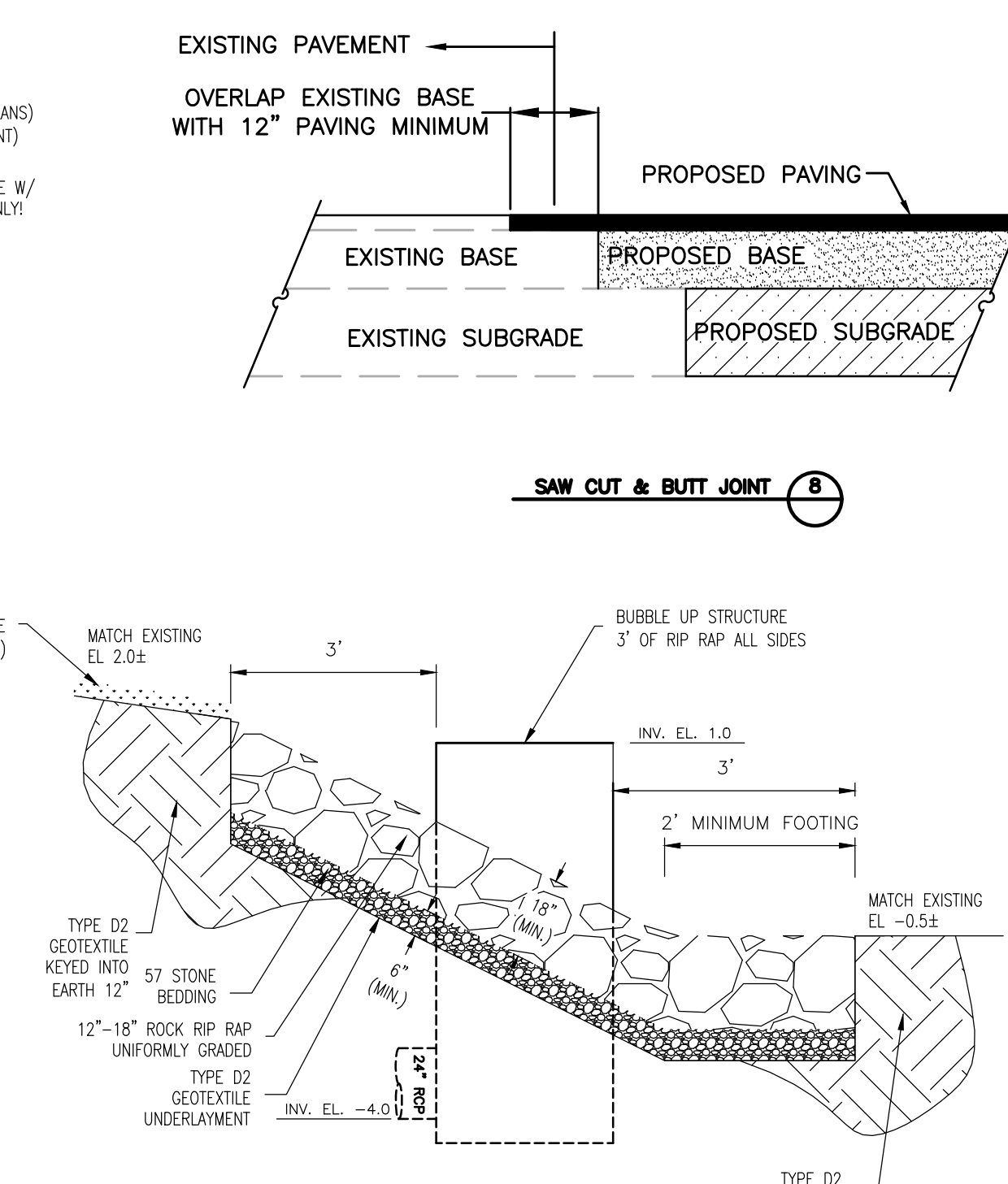
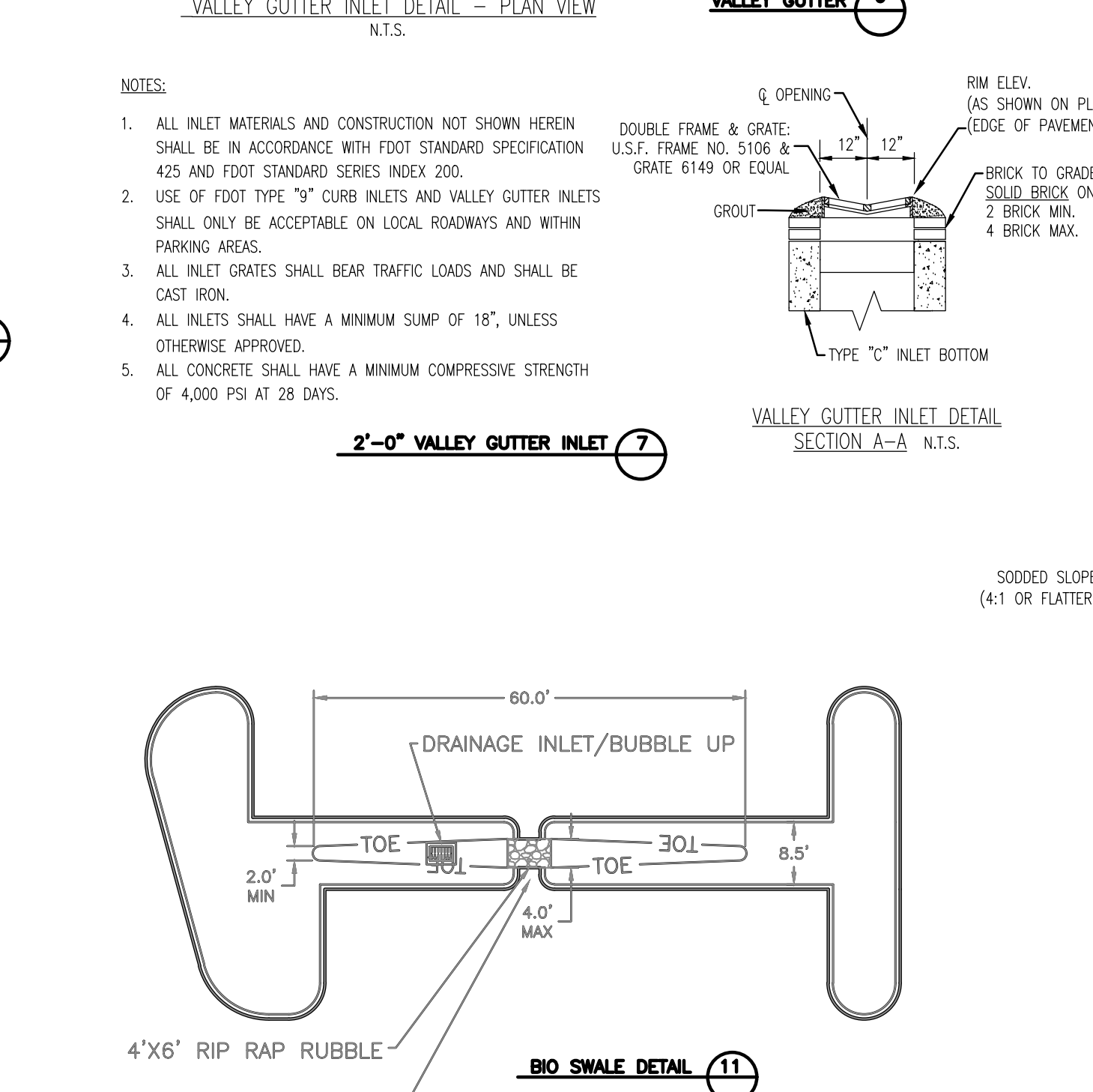
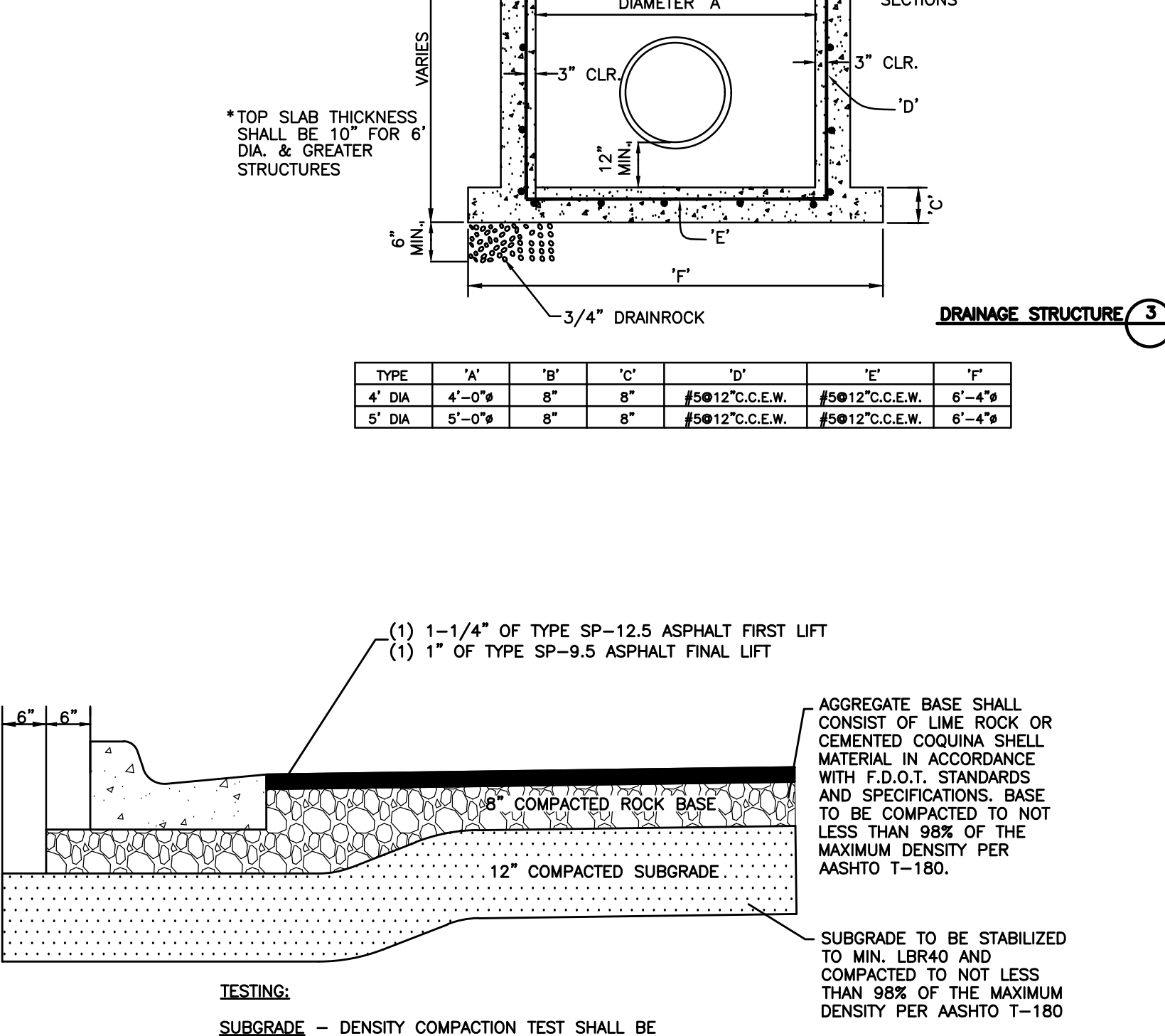
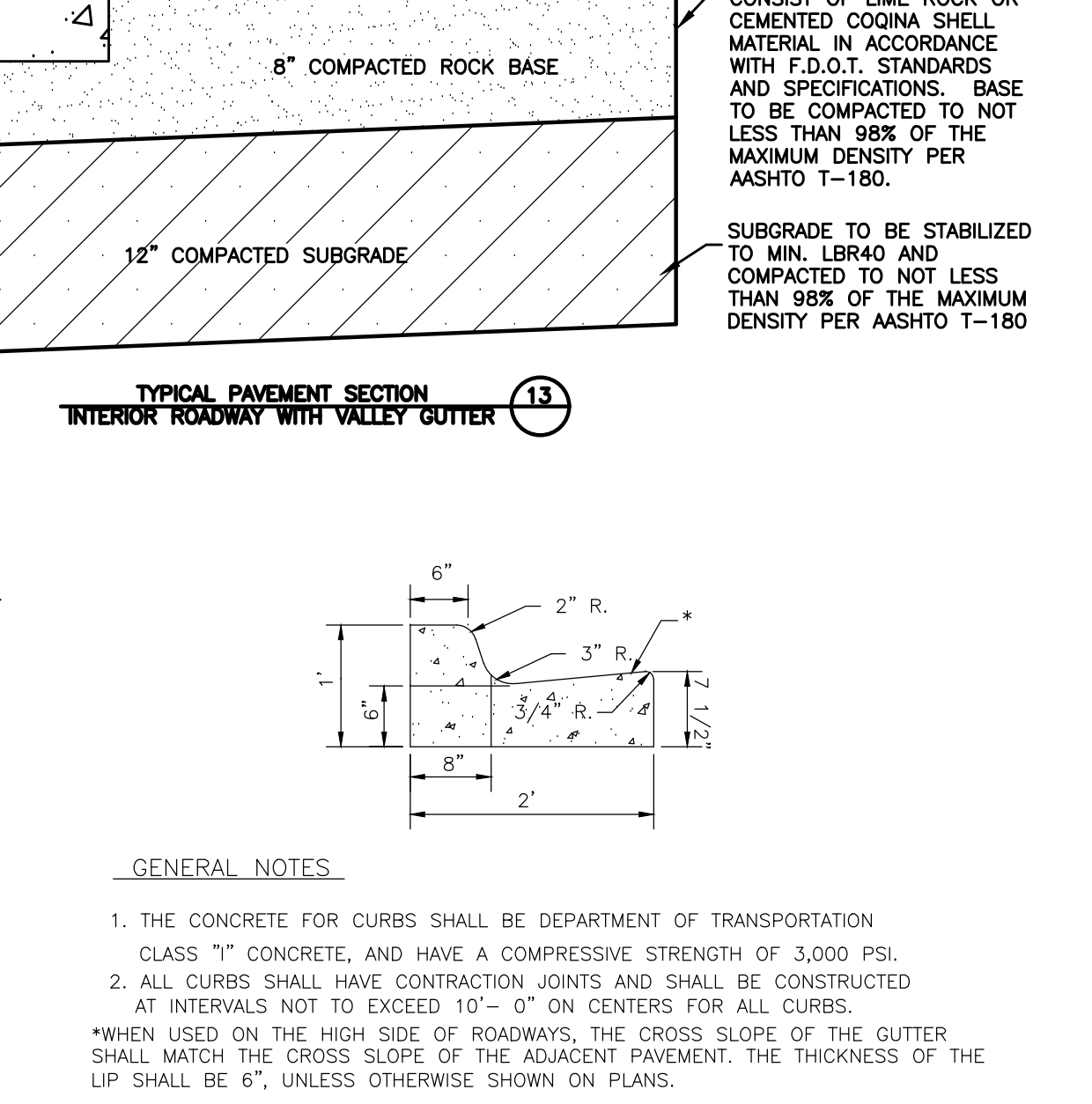
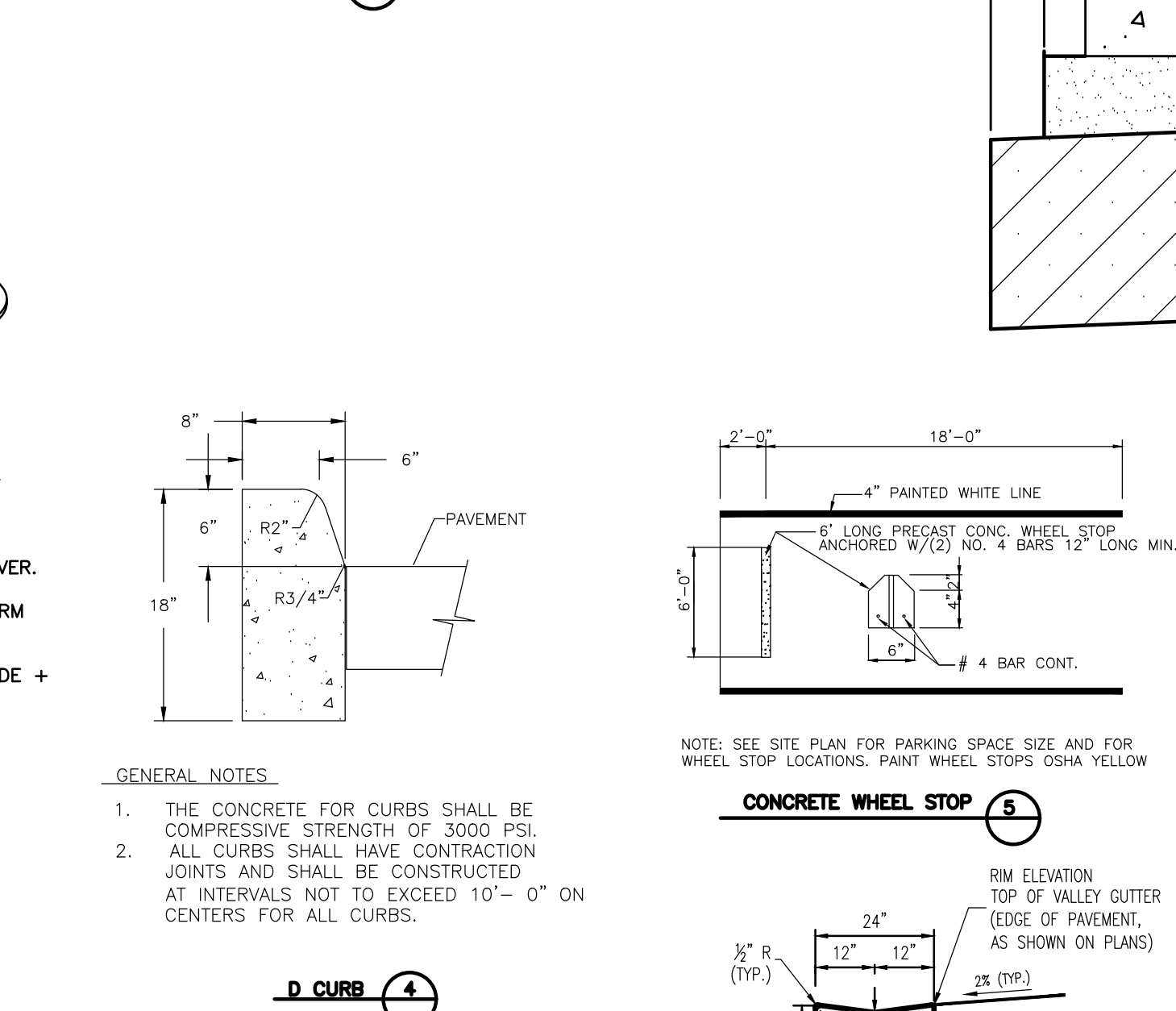
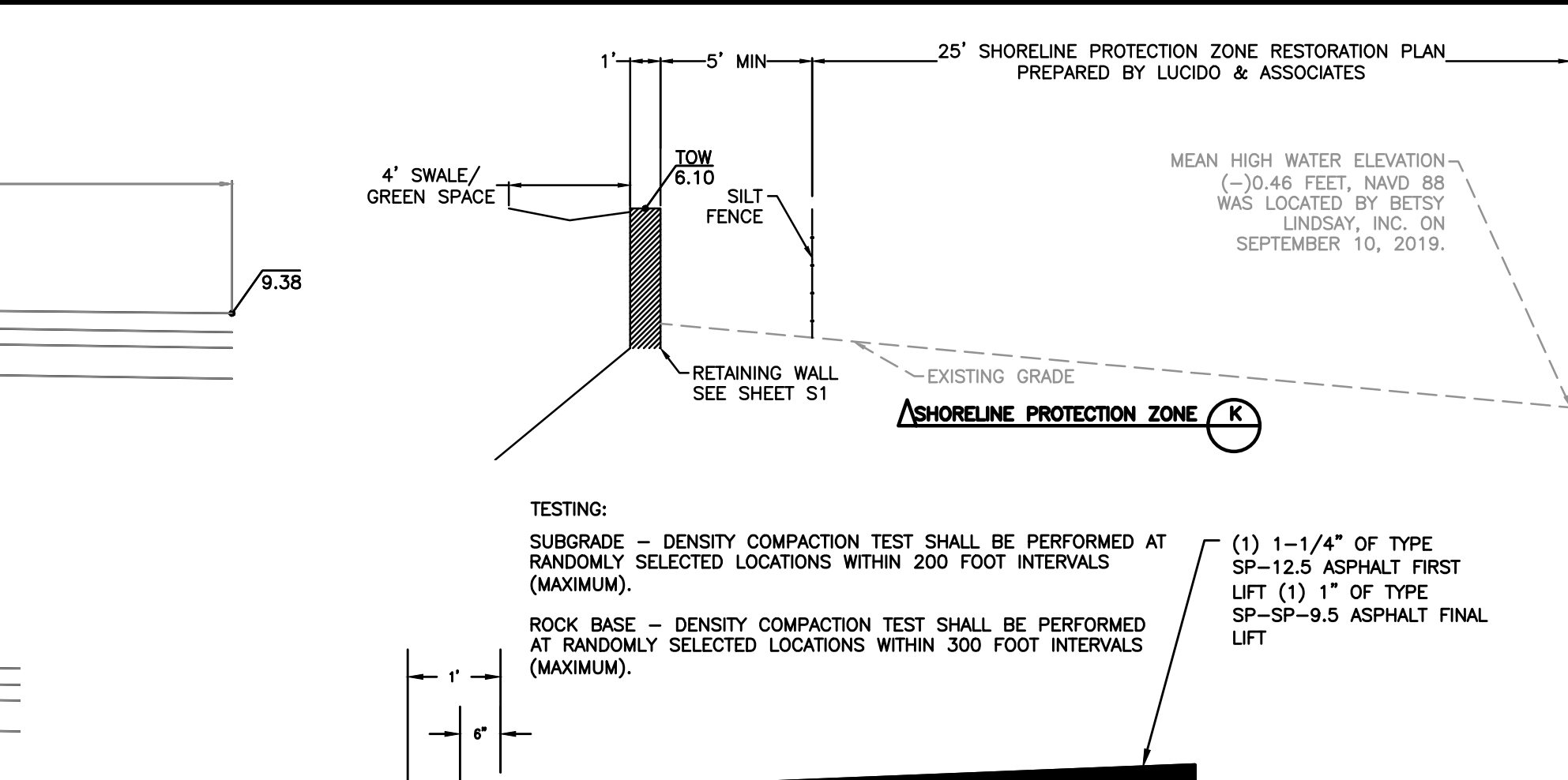
CONCHY JOE'S

JENSEN BEACH, FLORIDA



SHEET NO.

6




(LOCATIONS VARIES)

RIP RAP DETAIL (12)

CALL 48 HOURS
BEFORE YOU
DIG

811

The logo features a map of Florida with a large 'X' over it, indicating a prohibition or restriction. The 'X' is formed by two crossed lines, one solid and one dashed, creating a sun-like or star-like pattern in the center.

VERTICAL DATUM NAVD 88			
DRAWN:	D.W.	3-5-2018	
PROJECT:	AO102		
FILE: BASE.dwg			



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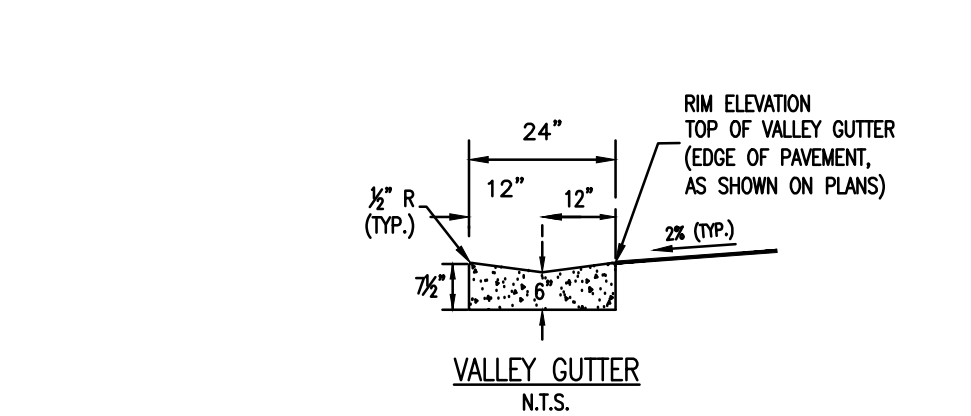
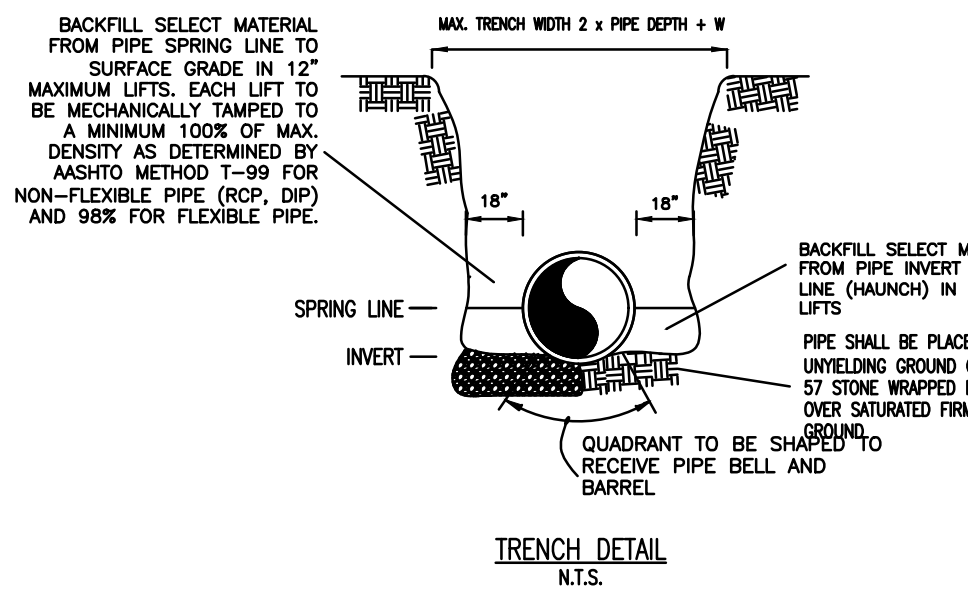
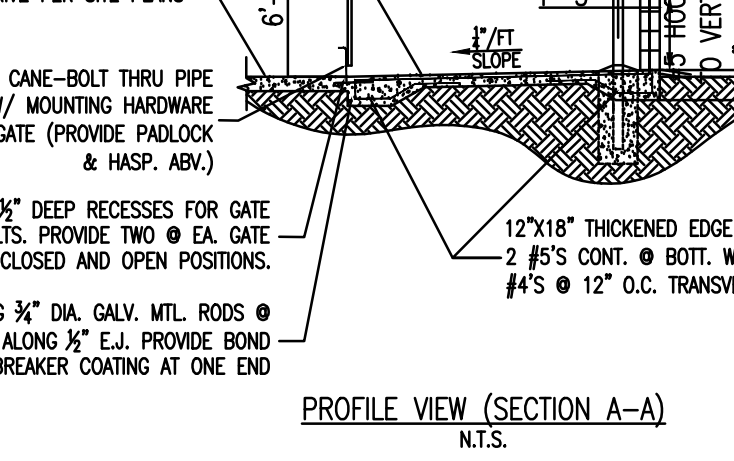
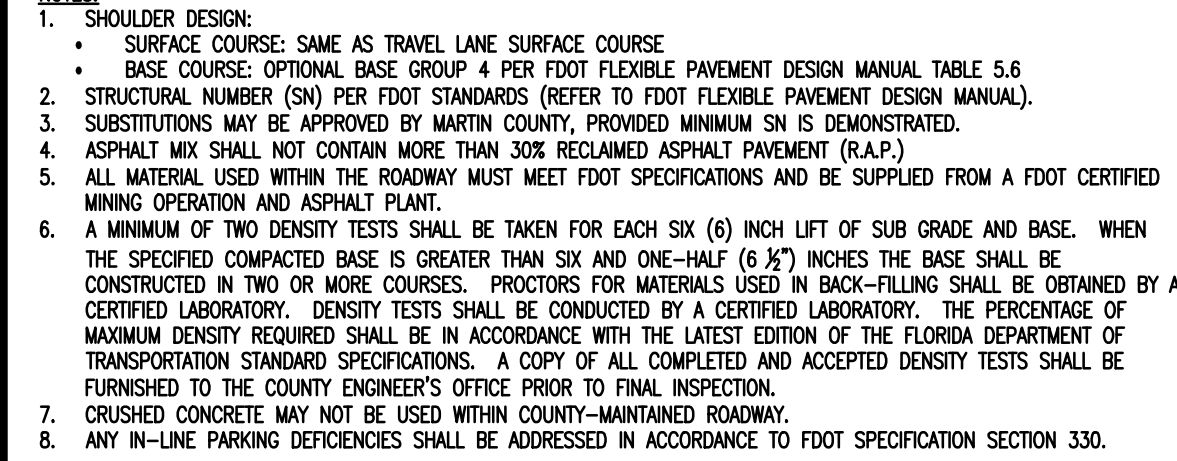
CERTIFICATE OF
AUTHORIZATION: 28246

CONCHY JOE'S
JENSEN BEACH, FLORIDA

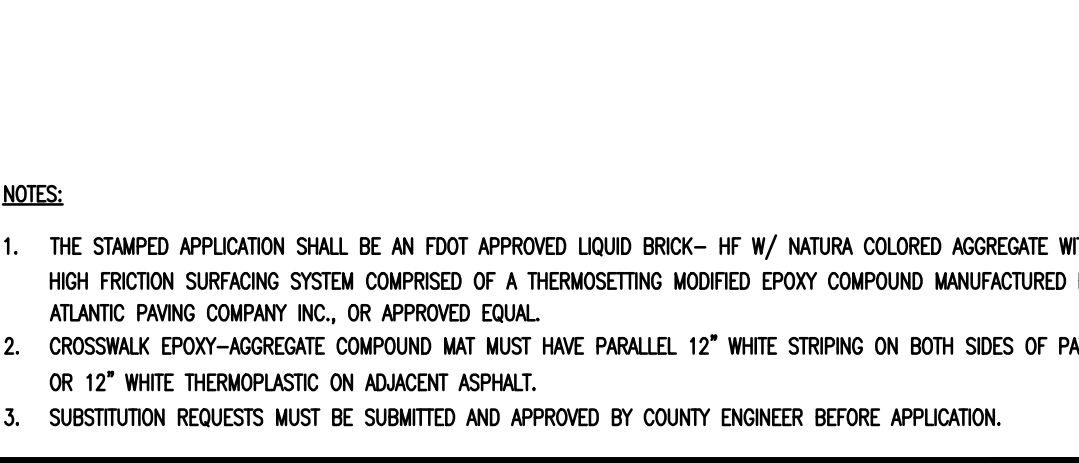
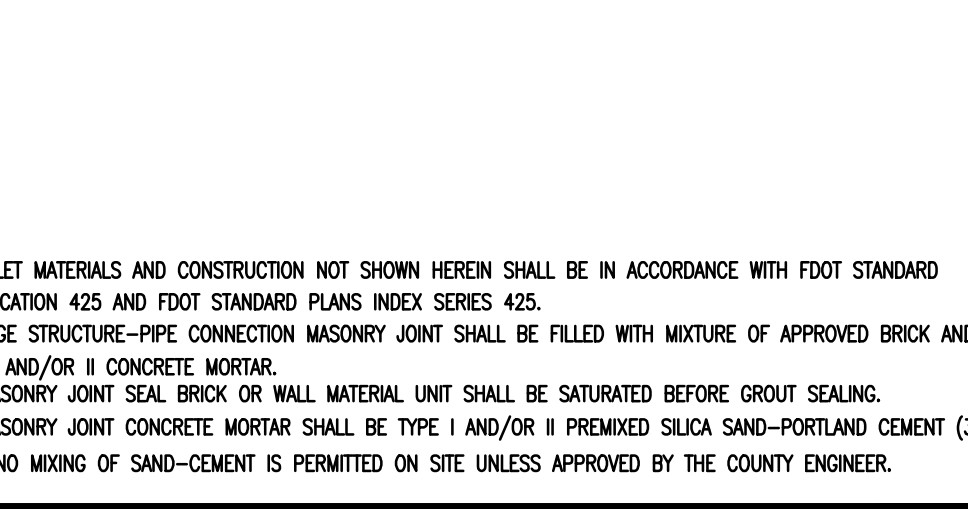
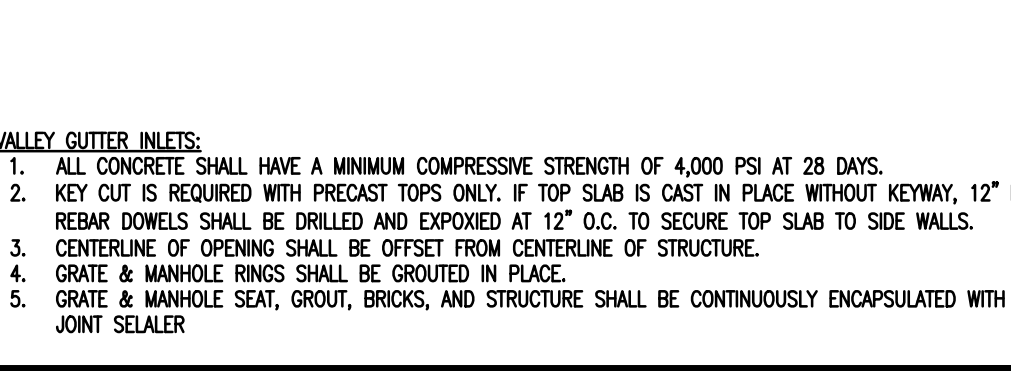
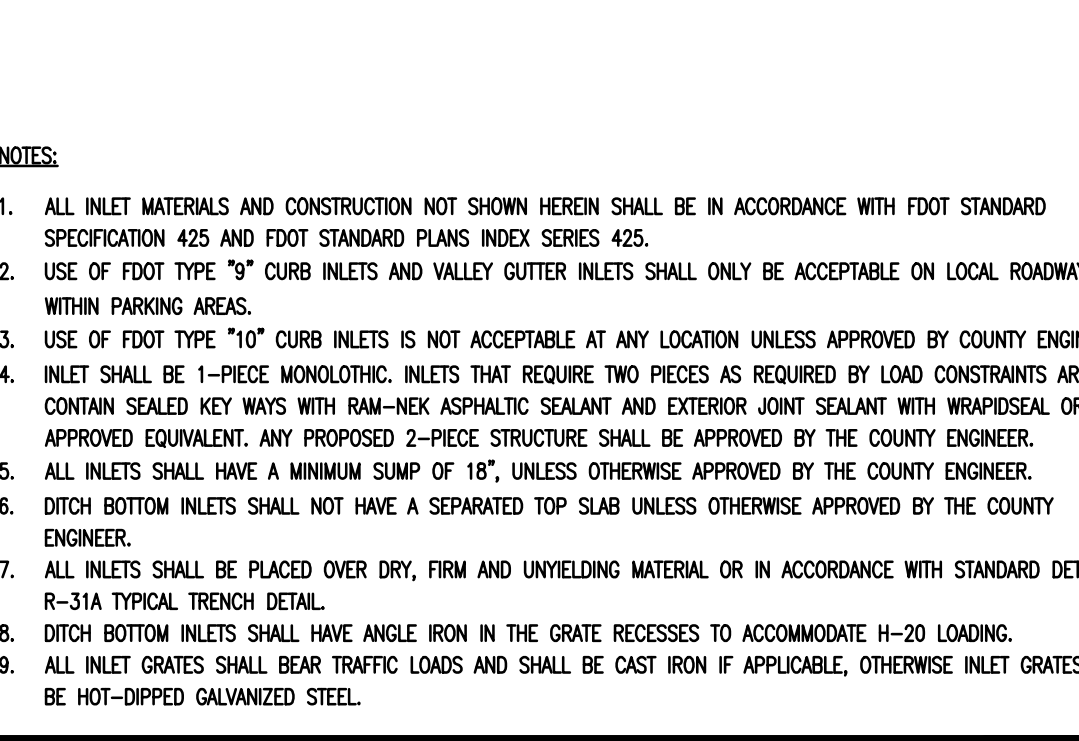
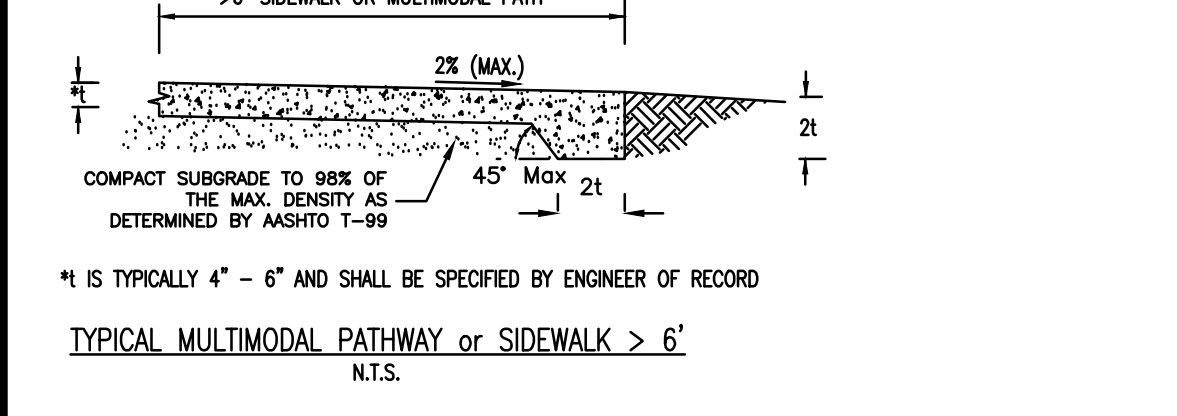


SHEET NO.

7



MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-40
CURB & GUTTER	DATE: 04/23/19



MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL
CROSSWALK (STAMPED)	R-120B DATE: 04/23/19

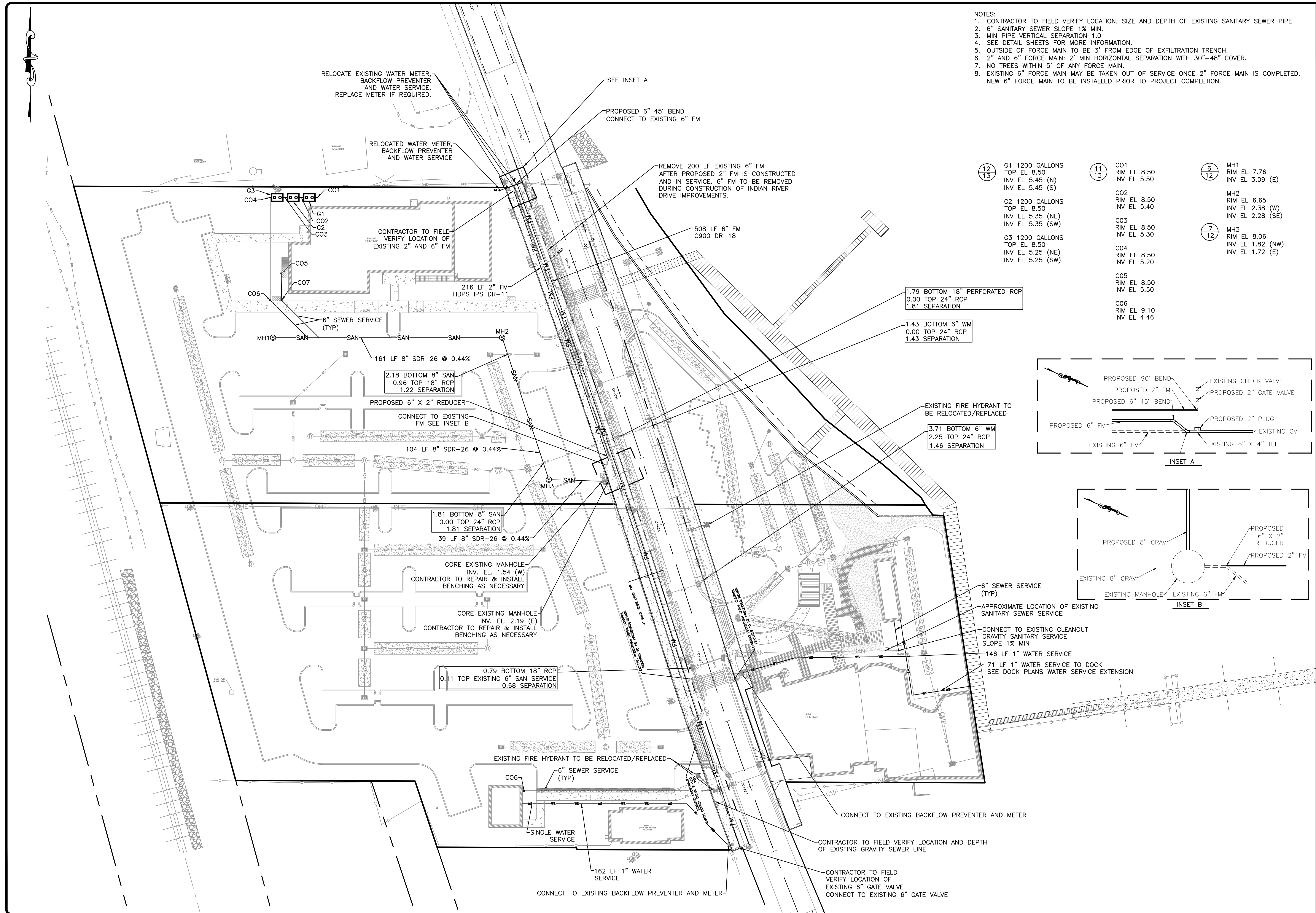
VERTICAL DATUM NAVD 88			
DRAWN:	D.W.	3-5-2018	
PROJECT:	A0102		
FILE:	BASE.dwg		



CONCHY JOE'S



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NO.	DATE	BY	REVISION
1	2-17-20	FM	PER MARTIN COUNTY UTILITY COMMENTS
2	1-8-20	FM	REVISIONS PER MARTIN COUNTY
3	12-10-19	FM	REVISIONS PER MARTIN COUNTY
4	9-25-19	AT	PER REVISED MEAN HIGH WATER LINE (MHW)
5	8-20-19	AT	PER MARTIN COUNTY COMMENTS

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10975 SE FEDERAL HIGHWAY
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CERTIFICATE OF AUTHORIZATION: 28246

UTILITY PLAN

CONCHY JOE'S

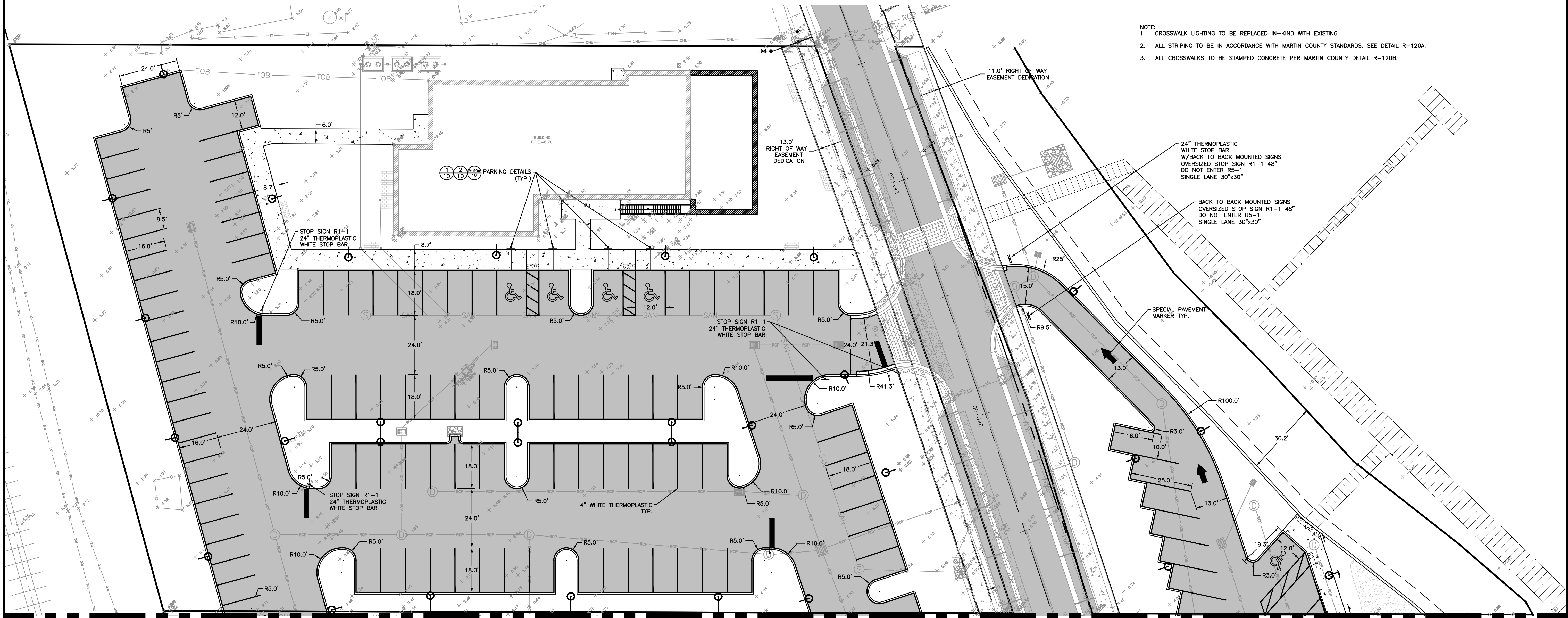
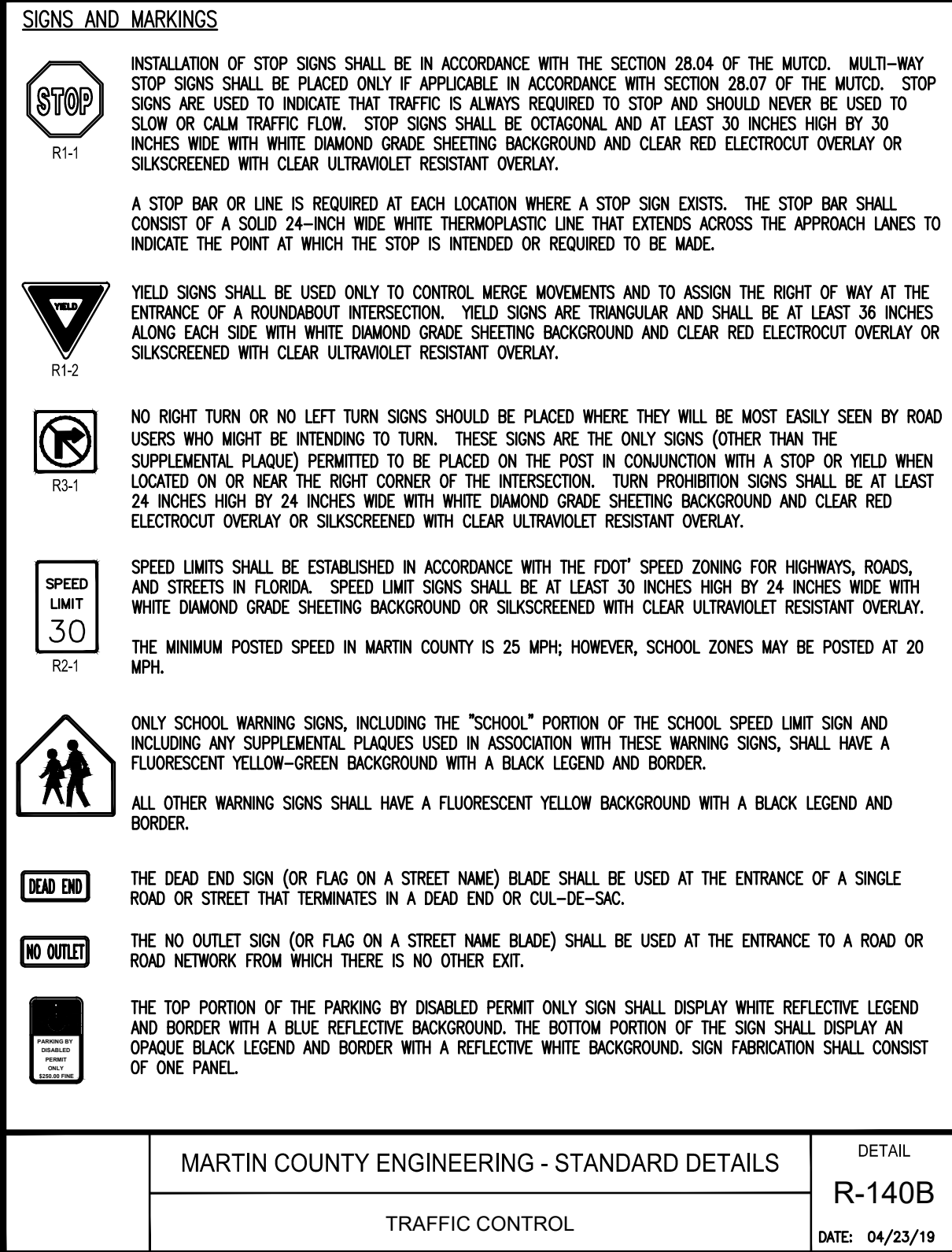
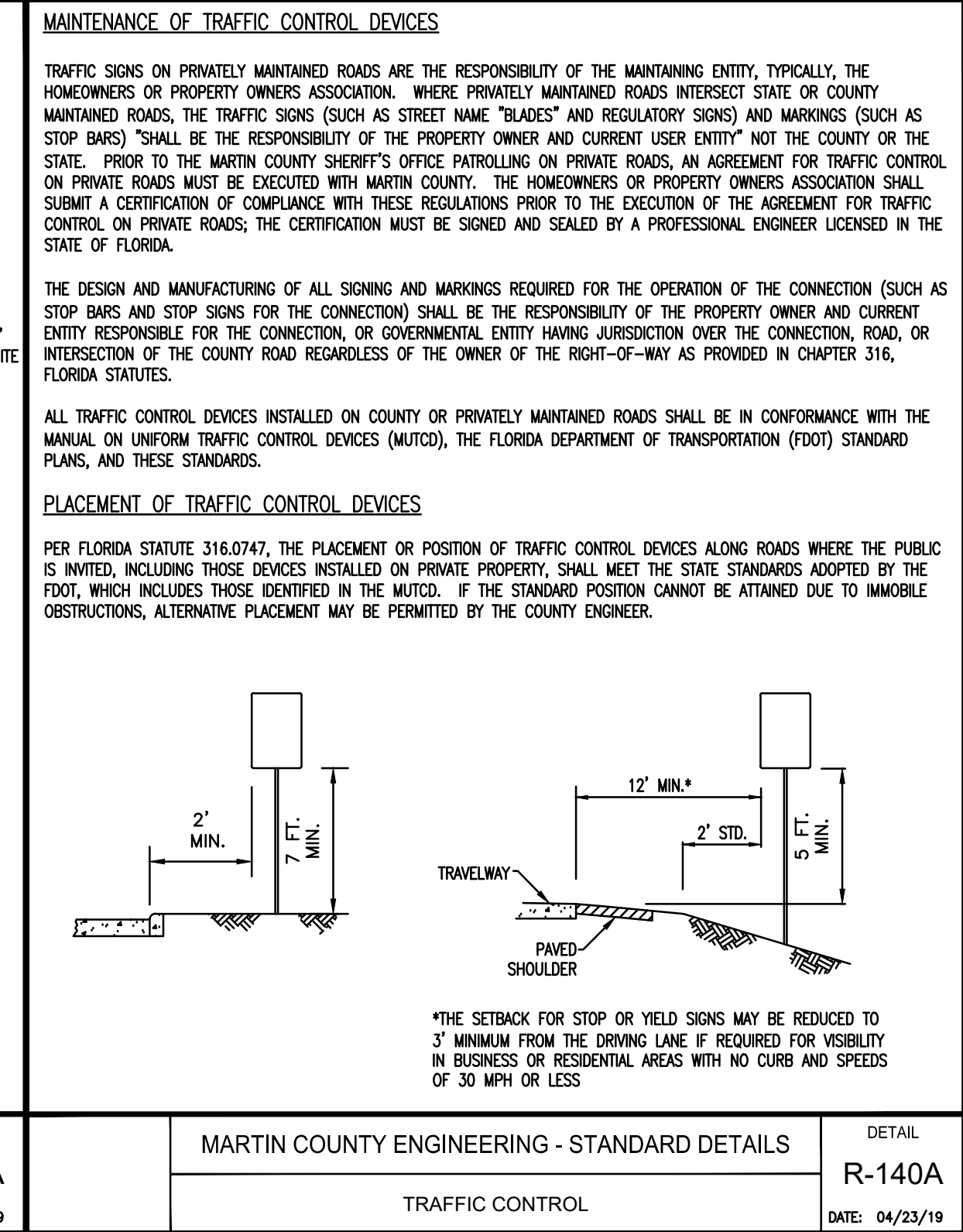
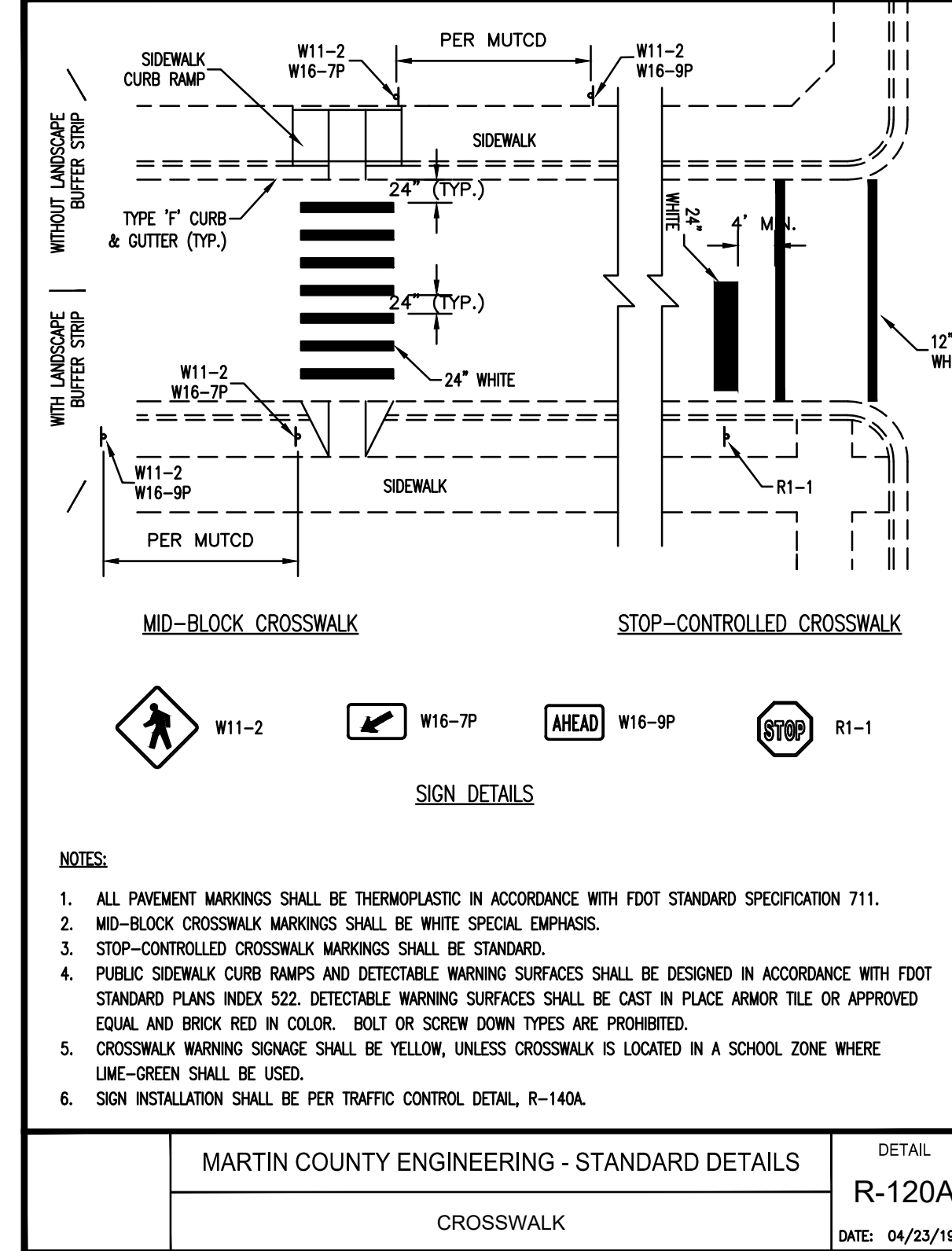
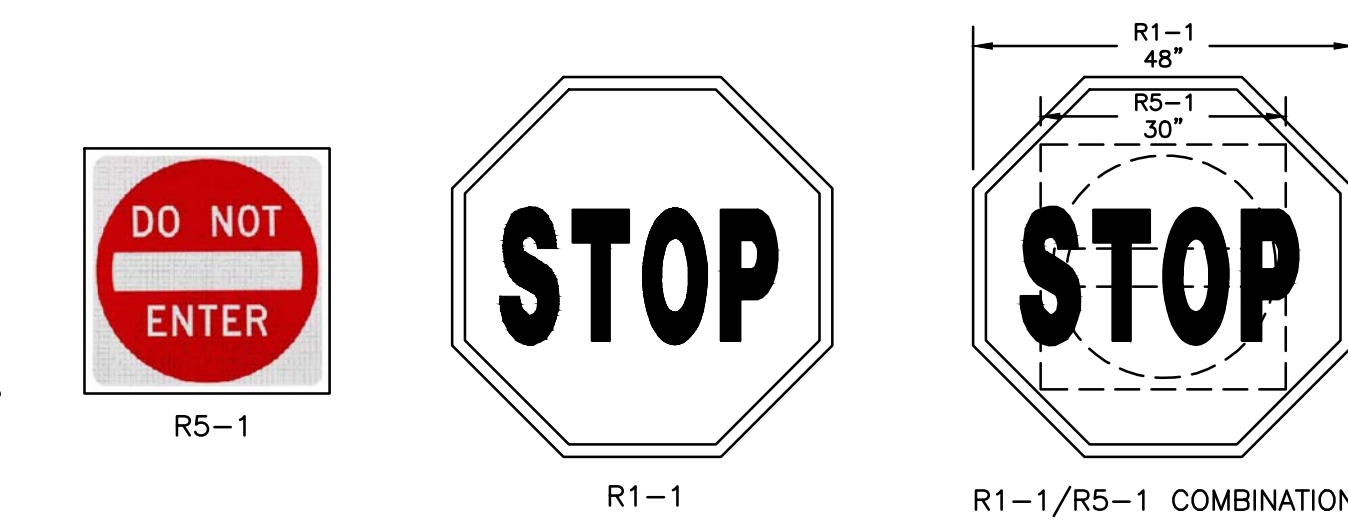
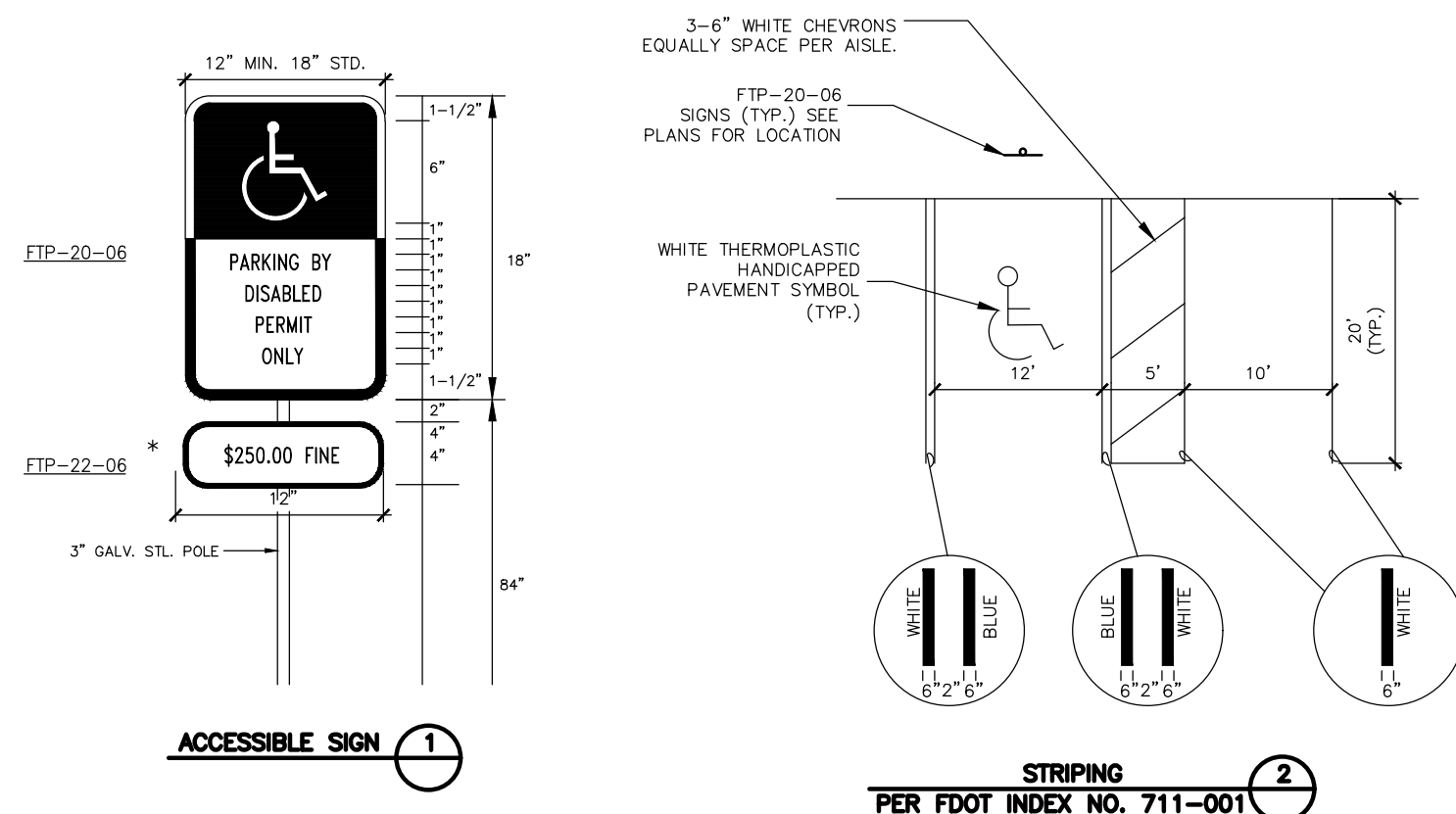
JENSEN BEACH, FLORIDA

KENNETH M. RAU
No. 2739
Feb 17 2020
STATE OF FLORIDA
PROFESSIONAL ENGINEER

SHEET NO.

9

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FM	FM	FM	AT	AT	BY
PER MARTIN COUNTY UTILITY COMMENTS	REVISIONS PER MARTIN COUNTY	REVISIONS PER MARTIN COUNTY	PER REVISED MEAN HIGH WATER LINE (MHWL)	PER MARTIN COUNTY COMMENTS	REVISION:
2-17-20	1-8-20	12-10-19	9-25-19	8-20-19	DATE:
NO	NO	NO	NO	NO	NO

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VERTICAL DATUM NAVD 88

(IN FEET)

1 inch = 20 ft.

DRAWN: 3-5-2018

PROJECT: A0102

FILE: BASE.dwg

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CERTIFICATE OF AUTHORIZATION: 28246

RIGHT OF WAY EASEMENT DEDICATION, SIGNAGE, & STRIPING PLAN

CONCHY JOE'S

JENSEN BEACH, FLORIDA

KENNETH M. RAO

FLORIDA PROFESSIONAL ENGINEER

NO. 27739

Feb 17, 2020

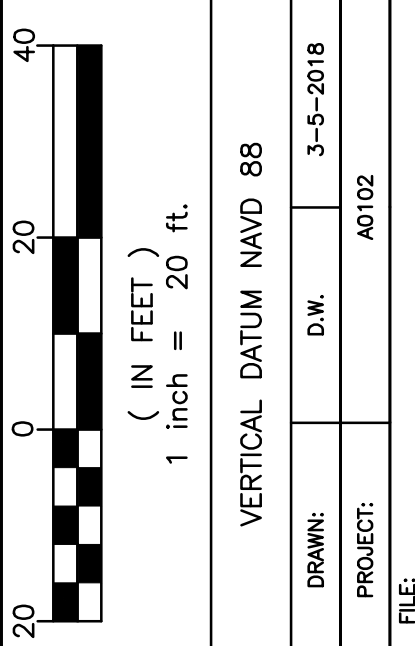
STATE OF FLORIDA

SHEET NO.

10

FACE OF CONCRETE SEAWALL AND MEAN
HIGH WATER ELEVATION (-)0.46 FEET.
NAVD 88 WAS LOCATED BY
BETSY LINDSAY, INC. ON JULY 20, 2018
AND VERIFIED ON SEPTEMBER 10, 2019

DATE	BY	REVISIONS	PER MARTIN COUNTY COMMENTS
8-20-19	AT	PER MARTIN COUNTY COMMENTS	
9-25-19	AT	PER REVISED MEAN HIGH WATER LINE (MHWL)	
12-10-19	FM	PER MARTIN COUNTY COMMENTS	
1-8-20	FM	REVISIONS PER MARTIN COUNTY	
2-17-20	FM	PER MARTIN COUNTY UTILITY COMMENTS	



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CERTIFICATE OF
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**RIGHT OF WAY EASEMENT
DEDICATION , SIGNAGE,&
STRIPING
PLAN**

CONCHY JOE'S



SHEET NO.

11

NOTE:

1. CROSSWALK LIGHTING TO BE REPLACED IN-KIND WITH EXISTING
2. ALL STRIPING TO BE IN ACCORDANCE WITH MARTIN COUNTY STANDARDS. SEE DETAIL R-120A.
3. ALL CROSSWALKS TO BE STAMPED CONCRETE PER MARTIN COUNTY DETAIL R-120B.

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GENERAL NOTES:

FOR THE PURPOSE OF THE GENERAL NOTES BELOW, THE TERM DEPARTMENT SHALL MEAN "MARTIN COUNTY UTILITIES & SOLID WASTE DEPARTMENT".

1. ALL CONNECTIONS TO EXISTING MAINS SHALL BE OBSERVED BY THE DEPARTMENT. VALVES ON EXISTING MAINS SHALL BE OPERATED BY DEPARTMENT PERSONNEL OR UNDER THEIR DIRECT SUPERVISION. TAPPING SLEEVES AND VALVE SHALL BE PRESSURE TESTED PRIOR TO TAPPING. IF SERVICE MUST BE CUT OFF TO EXISTING CUSTOMERS, THE DEPARTMENT MUST HAVE THREE DAYS NOTICE TO MAKE NECESSARY NOTIFICATIONS. THE CONTRACTOR MAY BE REQUIRED TO ASSIST IN NOTIFICATIONS. IN THIS EVENT, CONTRACTOR SHALL BE READY TO PROCEED WITH AS MUCH MATERIAL PREASSEMBLED AS POSSIBLE AT THE SITE TO MINIMIZE THE LENGTH OF SERVICE INTERRUPTION. THE DEPARTMENT WILL POSTPONE A SERVICE CUT OFF IF THE CONTRACTOR IS NOT READY TO PROCEED ON SCHEDULE. SUCH CONNECTIONS SHALL BE MADE AT NIGHT TO MINIMIZE EFFECTS UNLESS OTHERWISE AUTHORIZED BY THE DEPARTMENT. NO CUSTOMER SHOULD BE WITHOUT SERVICE FOR MORE THAN FOUR HOURS.

LOCAL CHLORINATION WILL BE REQUIRED FOR ALL PIPE AND FITTINGS USED TO COMPLETE CONNECTIONS WITH POTABLE WATER.

2. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF MARTIN COUNTY UTILITIES MINIMUM DESIGN AND CONSTRUCTION STANDARDS, ONE COPY OF THE CONTRACT DOCUMENTS, INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.

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

4. 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 THE 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 DEPARTMENT 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.

5. LOCATION OF PROPOSED FACILITIES WILL BE STAKED BY CONTRACTOR. CONTRACTOR MUST GIVE 48 HOURS NOTICE TO THE DEPARTMENT IN ADVANCE OF LAYOUT.

6. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETINGS. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT BY LETTER PRIOR TO THE PRE-CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATIONS. IN THE EVENT THE SUPERINTENDENT IS NOT PRESENT FOR ANY PERIOD OF TIME DURING CONTRACT WORK THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE IN WRITING TO THE DEPARTMENT, INCLUDING THE APPOINTMENT OF A QUALIFIED REPLACEMENT SUPERINTENDENT WHO WILL BE PRESENT DURING THE CONSTRUCTION. WORK SHALL NOT BE ALLOWED TO PROCEED UNLESS THE ASSIGNED SUPERINTENDENT IS PRESENT.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE.

WARNING: EXACT LOCATION OF UNDERGROUND UTILITIES IS NOT KNOWN NOR IS THIS DRAWING TO BE CONSTRUED AS A DEPICTION OF LOCATION OF ALL UNDERGROUND UTILITIES OR STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINATION OF LOCATION PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS RESPONSIBLE, THEREFORE, FOR ALL DAMAGE AND REPAIR COSTS.

GENERAL NOTES (Cont.):

8. DENSITY TESTS OF TRENCH BACKFILL MATERIAL SHALL BE REQUIRED AT INTERVALS OF NOT MORE THAN 500 FEET. DENSITY TESTS OF PAVEMENT OPEN-CUT AREAS INCLUDING ROADS, TURNLANES, AND DRIVES SHALL BE REQUIRED AT EACH OPEN-CUT AT INTERVALS OF NOT MORE THAN 50 FEET. ALL TESTS SHALL COMMENCE AT THE TOP OF CONDUIT AND EVERY 12 INCHES TO THE FINISH GRADE. COMPACTION SHALL BE IN ACCORDANCE WITH MARTIN COUNTY UTILITIES CONSTRUCTION STANDARDS "TYPICAL TRENCH DETAIL" AND "FLEXIBLE PAVEMENT REPLACEMENT DETAIL". FLORIDA BEARING TESTS FOR THE STABILITY OF EXISTING SUBSOIL SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 500 FEET, AND CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN THE STRATA. A CERTIFIED COPY OF THE TESTS SHALL BE PROVIDED TO THE DEPARTMENT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION OR MARTIN COUNTY ENGINEERING DEPARTMENT DEPENDING ON JURISDICTION. CONTRACTORS BID PRICE SHALL INCLUDE PAYMENT FOR ALL TESTS CONDUCTED BY AN INDEPENDENT TESTING LAB.

9. ANY LANDSCAPING DISTURBED, UNLESS OTHERWISE SHOWN ON THE PLANS, SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTORS EXPENSE.

10. ANY SIDEWALK, CURB AND GUTTER OR PAVEMENT DISTURBED, UNLESS OTHERWISE SHOWN ON PLANS, SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS AND ALL CONCRETE WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA. ALL CONSTRUCTION SHALL MEET ADA REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMITED TO, DETECTABLE WARNING SURFACES.

11. ALL SOD IS TO BE PLACED FOR THE FULL WIDTH DISTURBED AT THE PER LINEAR FOOT UNIT PRICE FOR SOD. SOD SHALL BE REPLACED TO MATCH EXISTING KIND UNLESS OTHERWISE SHOWN ON PLANS.

12. CONTRACTOR SHALL PROVIDE PROPER BENDS TO MAINTAIN REQUIRED DEPTH AND ALIGNMENT OF PIPE. COST OF BENDS NOT DESIGNATED ON PLANS SHALL BE INCLUDED WITH THE UNIT PRICE FOR PIPE.

13. ANY TREES AND/OR SCRUB OR OTHER VEGETATION NOT TO BE REPLACED SHALL BE REMOVED FROM THE PROJECT AT THE CONTRACTOR'S EXPENSE.

14. ALL RUBBLE AND UNSUITABLE MATERIAL MUST BE REMOVED FROM THE PROJECT AND DISPOSED OF PROPERLY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

15. MAILBOXES MUST BE CAPABLE OF RECEIVING MAIL AT ALL TIMES.

16. DEFLECT PIPE AS NECESSARY TO OBTAIN THE REQUIRED ALIGNMENT. USE APPROPRIATE FITTINGS WHEN DEFLECTION EXCEEDS 75% OF MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.

17. ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED. REFER TO MARTIN COUNTY UTILITIES DEPARTMENT MINIMUM DESIGN & CONSTRUCTION STANDARDS (LATEST EDITION).

18. ALL CONSTRUCTION DEWATERING (WELL POINTS, SUMPS, ETC.) WILL REQUIRE A DEWATERING PERMIT FROM SOUTH FLORIDA WATER MANAGEMENT DISTRICT. THIS SHALL BE OBTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE PRIOR TO BEGINNING OF CONSTRUCTION.

19. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS CONTRACT AS ENACTED BY THE LEGISLATURE OF THE STATE OF FLORIDA TO BE IN EFFECT AS OF OCTOBER 1, 1990.

20. A U-2 PERMIT IS REQUIRED FOR ALL WORK WITHIN COUNTY RIGHT-OF-WAY. THIS PERMIT MUST BE OBTAINED BY THE CONTRACTOR FROM THE MARTIN COUNTY ENGINEERING DEPARTMENT. ALL COSTS PAYABLE BY THE CONTRACTOR. A COPY OF THIS PERMIT MUST BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

21. ALL CONCRETE AND ASPHALT DRIVES MUST BE REPLACED FROM SAW CUT TO EDGE OF PAVEMENT.

GENERAL NOTES (Cont.):

22. LOCATIONS OF FIRE HYDRANTS AND AIR RELEASE VALVES ARE APPROXIMATE ONLY. FINAL LOCATIONS WILL BE DETERMINED BY DEPARTMENT PERSONNEL IN FIELD.

23. MAXIMUM LENGTH OF WATER MAIN AND FORCE MAIN PRESSURE TEST SHALL BE 1500 FEET. WATER SOURCE FOR FLUSHING, FILLING AND PRESSURE TESTING THE WATER MAIN SHALL BE FROM A TREATED SOURCE APPROVED BY THE DEPARTMENT.

24. 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 PIPES AND STRUCTURES, ETC.

25. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING WATER SERVICES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE EXISTING WATER SERVICES FROM DAMAGE AND REPAIR ANY BREAKS IMMEDIATELY.

26. "RECORD DRAWINGS" SHALL INCLUDE FURNISHING MARTIN COUNTY UTILITIES DEPARTMENT WITH ALL INFORMATION NECESSARY FOR A COMPLETE SET OF RECORD DRAWINGS AS STIPULATED IN THE MARTIN COUNTY UTILITIES DEPARTMENT MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION).

27. MECHANICALLY RESTRAIN LENGTHS, AS INDICATED ON DRAWING NO. 20, ON EACH SIDE OF ALL BENDS AND AS INSTRUCTED IN MARTIN COUNTY UTILITIES DEPARTMENT SPECIFICATIONS. MECHANICAL RESTRAINTS SHALL BE EITHER MEG-A-LUG, TYLER OR UNIFLANGE. THE CONTRACTORS BID PRICE FOR PIPE, GATE VALVES AND FITTINGS SHALL INCLUDE MECHANICAL RESTRAINT.

28. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL SUPPORT UTILITIES AND SHORE TRENCH AS REQUIRED TO PROTECT AND MAINTAIN EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY EACH UTILITY PRIOR TO ATTEMPTING TO SUPPORT THEIR FACILITIES. IF THE UTILITY REQUIRES THAT ONLY THEIR CREWS SHALL BE ALLOWED TO SUPPORT THEIR FACILITIES, THEN IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE WORK AND PAY THE UTILITY FOR THEIR EXPENSES IF REQUIRED. ALL COSTS FOR THIS WORK SHALL BE AT THE CONTRACTORS EXPENSE AND INCLUDED IN THE CONTRACTORS BID PRICE.

29. ALL PRESSURE TESTS SHALL BE IN ACCORDANCE WITH AWWA STANDARDS.

30. AIR RELEASE VALVE VAULT COVERS SHALL BE CONSTRUCTED PER DETAIL AS SHOWN IN THE DEPARTMENTS MINIMUM DESIGN AND CONSTRUCTION STANDARDS.

31. ALL WATER SERVICES SHALL BE DIRECTIONALLY DRILLED UNDER EXISTING PAVEMENT.

32. VALVE STEM RISER SHALL BE REQUIRED WHERE OPERATING NUT DEPTH EXCEEDS 4 FEET. THE RISER SHALL BE BOLTED TO THE VALVE NUT. METHOD AND MATERIALS SHALL BE APPROVED BY THE DEPARTMENT. COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACTORS BID UNIT PRICE FOR GATE VALVES.

33. THE CONTRACTOR SHALL CLEAN MAINS USING APPROVED POLYURETHANE PIG(S). TEMPORARY CLEANING STATIONS SHALL BE CONSTRUCTED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CLEANING METHOD OF FILLING AND CLEANING MAINS PRIOR TO START OF CONSTRUCTION. THE CLEANING PLAN SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO CONSTRUCTION. ALL COSTS FOR FILLING AND CLEANING SHALL BE AT THE CONTRACTORS EXPENSE.

34. A FLORIDA DEPARTMENT OF TRANSPORTATION PERMIT IS REQUIRED FOR ALL WORK, EXCEPT PERPENDICULAR CONNECTIONS, WITHIN THE STATE RIGHT-OF-WAY. A COPY OF THIS PERMIT MUST BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.

35. THE CONTRACTOR SHALL INSTALL TESTING POINTS FOR PRESSURE & BACTERIOLOGICAL TESTING OF WATER MAINS. THE CONTRACTOR SHALL INSTALL AND REMOVE AND PLUG CORP. STOPS PER MARTIN COUNTY UTILITY STANDARD POINT DETAIL. THE LOCATION OF TEST POINTS SHALL BE APPROVED BY THE DEPARTMENT.

GENERAL NOTES (Cont.):

36. WATER MAIN DISINFECTION SHALL BE IN ACCORDANCE WITH CURRENT AWWA, BULLETIN C-651.

37. WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH CURRENT AWWA, FDEP AND NSF STANDARDS.

38. MINIMUM COVER TO FINISHED GRADE OVER WATER MAINS SHALL BE 30 INCHES UP TO 8" DIAMETER; 10" OR LARGER SHALL HAVE 36" COVER OR GREATER TO PROVIDE A MINIMUM 18" COVER OVER OPERATING NUT OF GATE VALVES.

39. ALL MAINS SHALL BE TESTED FOR LEAKAGE. WATER SHALL BE SUPPLIED TO THE MAIN AND PUMPED TO THE REQUIRED 150 PSI PRESSURE. THE MAIN TESTED SHALL EITHER BE ISOLATED FROM PRESENTLY POTABLE LINES OR PROTECTED FROM LEAKAGE BY A DOUBLE VALVE ARRANGEMENT.

40. NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP. DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.

THE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY TESTING PROCEDURES. AFTER FLUSHING IS COMPLETED, LINE PRESSURE SHALL BE APPLIED TO THE WATER SYSTEM TO DETERMINE IF ANY MAJOR DEFECTS ARE PRESENT. THE COMPLETE WATER SYSTEM SHALL THEN BE TESTED AT A PRESSURE OF 150 PSI FOR A PERIOD OF NOT LESS THAN TWO HOURS. THE DEPARTMENT MAY, AT ITS DISCRETION, INCREASE THE PERIOD TO FOUR HOURS. MAXIMUM LENGTH OF LINE TO BE TESTED AT ONE TIME SHALL NOT EXCEED 1500 LINEAR FEET. AN OIL FILLED PRESSURE GAUGE UP TO 200 PSI AT 2 POUND INCREMENTS SHALL BE USED FOR ALL PRESSURE TESTS. NO VISIBLE MOVEMENT OF THE SYSTEM SHALL OCCUR AND LEAKAGE SHALL NOT EXCEED:

$$L = \frac{ND\sqrt{P}}{7400} \text{ PER HOUR}$$

WHERE:

- L = LEAKAGE IN GALLONS
- N = NUMBER OF JOINTS IN TEST SECTION
- P = TEST PRESSURE IN PSI
- D = DIAMETER OF PIPE IN INCHES

NOTE: MARTIN COUNTY UTILITIES DEPARTMENT'S MINIMUM DESIGN AND CONSTRUCTION STANDARDS (LATEST EDITION), ARE TO BE ADHERED TO AND WILL BE ENFORCED TO AT LEAST THESE MINIMUM STANDARDS.

48 HOURS BEFORE DIGGING
CALL TOLL-FREE
1-800-432-4770
SUNSHINE STATE ONE CALL
OF FLORIDA, INC.
UNDERGROUND UTILITIES NOTIFICATION CENTER

GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT

Dwg 1A

Revised: AUGUST 2016

STANDARD WATER/SEWER SEPARATION STATEMENT

62-555.314 Location of Public Water System Mains. For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water, fire hydrant leader, and service lines that are under the control of a public water system and that have an inside diameter of three inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Redefined Water Pipelines, and On-Site Sewage Treatment and Disposal Systems.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer.

(c) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(d) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed on-site sewage treatment and disposal system "as defined in Section 381.005(2), F.S., and Rule 64E-6.002, F.A.C."

(2) Vertical Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, and Redefined Water Pipelines.

(a) New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(b) New or relocated, underground water mains crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least 12 inches above or below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(c) At the utility crossings described in paragraphs (a) and (b) above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

(3) Separation Between Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains.

(a) No water main shall pass through, or come into contact with, any part of a sanitary sewer manhole.

(b) Effective August 28, 2003, water mains shall not be constructed or altered to pass through, or come into contact with, any part of a storm sewer manhole or inlet structure. Where it is not technically feasible or economically sensible to comply with this requirement (i.e., where there is a conflict in the routing of a water main and a storm sewer and where alternative routing of the water main or the storm sewer is not technically feasible or is not economically sensible), the Department shall allow exceptions to this requirement (i.e., the Department shall allow construction of conflict manholes), but suppliers of water or persons proposing to construct conflict manholes must first obtain a specific permit from the Department in accordance with Part V of this chapter and must provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following information:

1. A technical or economic justification for each conflict manhole.

2. A statement identifying the party responsible for maintaining each conflict manhole.

3. Assurance of compliance with the design and construction requirements in subparagraphs a through d, below.

a. Each water main passing through a conflict manhole shall have a flexible, watertight joint on each side of the manhole to accommodate differential settling between the main and the manhole.

b. Within each conflict manhole, the water main passing through the manhole shall be installed in a watertight casing pipe having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe).

c. Each conflict manhole shall have an access opening, and shall be sized, to allow for easy cleaning of the manhole.

d. Gratings shall be installed at all storm sewer inlets upstream of each conflict manhole to prevent large objects from entering the manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Redefined Water Pipelines, and On-Site Sewage Treatment and Disposal Systems. New or relocated fire hydrants with underground drains shall be located so that the drains are at least three feet from any existing or proposed storm sewer, wastewater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least ten feet from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C., and at least ten feet from any existing or proposed on-site sewage treatment and disposal system "as defined in Section 381.005(2), F.S., and Rule 64E-6.002, F.A.C."

(5) Exceptions. Where it is not technically feasible or economically sensible to comply with the requirements in subsection (1) or (2) above, the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification and provide alternative construction features that afford a similar level of reliability and public health protection. Acceptable alternative construction features include the following:

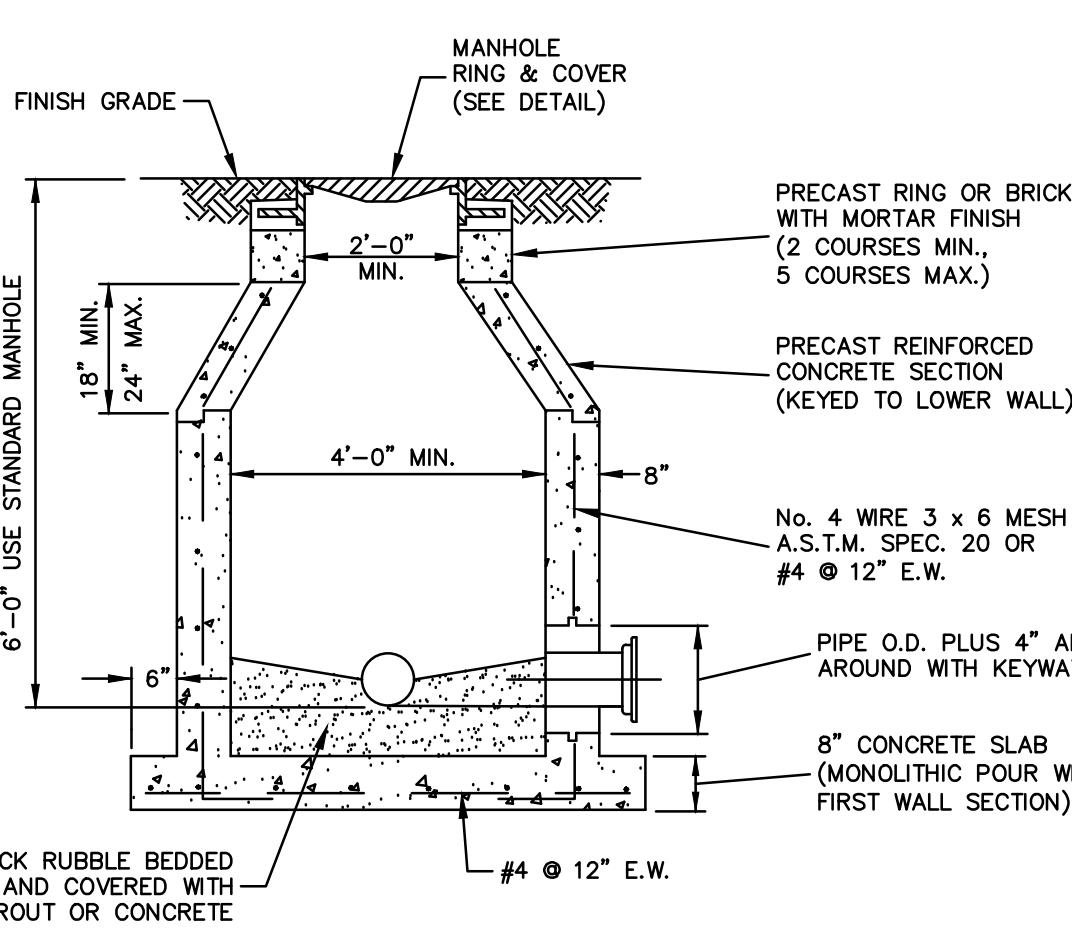
(a) Where an underground water main is being laid less than the required minimum horizontal distance from another pipeline and where an underground water main is crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline:

1. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe), or concrete encasement at least four inches thick for the water main; and

2. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe), or concrete encasement at least four inches thick for the other pipeline if it is new and is conveying wastewater or reclaimed water.

GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT

Dwg 1B



NOTES:

1. PROVIDE 0.1" DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMMEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL).
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, I.E. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

SHALLOW MANHOLE

Revised: AUGUST 2016

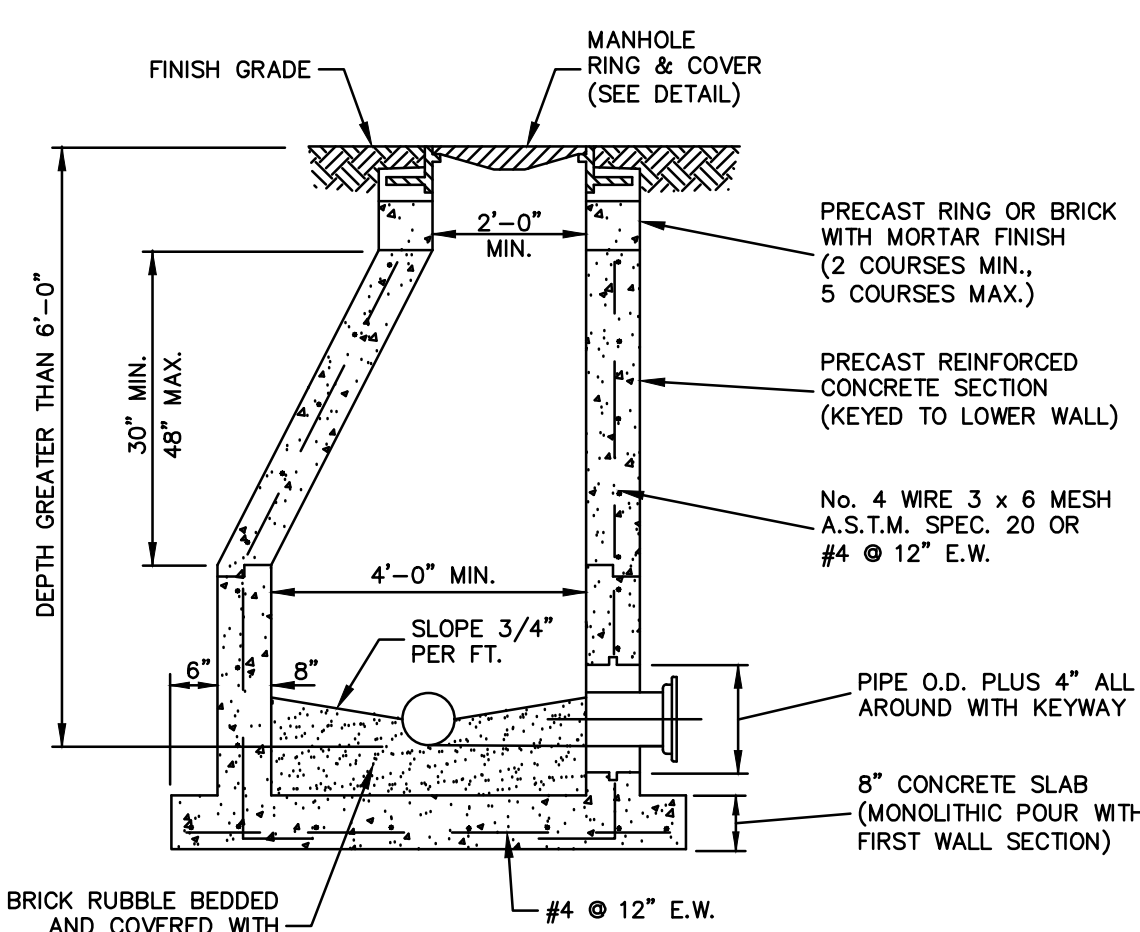
GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT

Dwg 1E

Revised: AUGUST 2016

GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT

Dwg 1C



NOTES:

1. PROVIDE 0.1" DROP THROUGH MANHOLE.
2. PRECAST CONCRETE TYPE II, 4000 P.S.I.
3. "RAMMEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
4. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
5. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM. (SEE DETAIL).
6. LIFT HOLES ARE PERMITTED.
7. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
8. SAND COLLAR OR APPROVED RUBBER BOOT MUST BE USED WITH P.V.C. PIPE.
9. MANHOLE TO RECEIVE 2 COATS WATER BASED EPOXY (PRO TECH EW-1 OR APPROVED EQUAL) ON THE INTERIOR AND EXTERIOR. TERMINAL MANHOLES, I.E. THE LAST MANHOLE PRIOR TO DISCHARGE TO A LIFT STATION, SHALL RECEIVE 2 COATS OF WATER BASED EPOXY ON THE EXTERIOR (PRO TECH EW-1 OR APPROVED EQUAL). THE INTERIOR SHALL RECEIVE COATING OF 120 MILS OF REZCLAD E-125S AR OR MIN. 1/2" SEWPER COAT OR IET SYSTEMS COATING (10 MILS PRIMARY COAT, 30 MILS INTERMEDIATE COAT, 5-10 MILS FINISH COAT) OR MIN. 1/2" REFRATTA HAC 100.

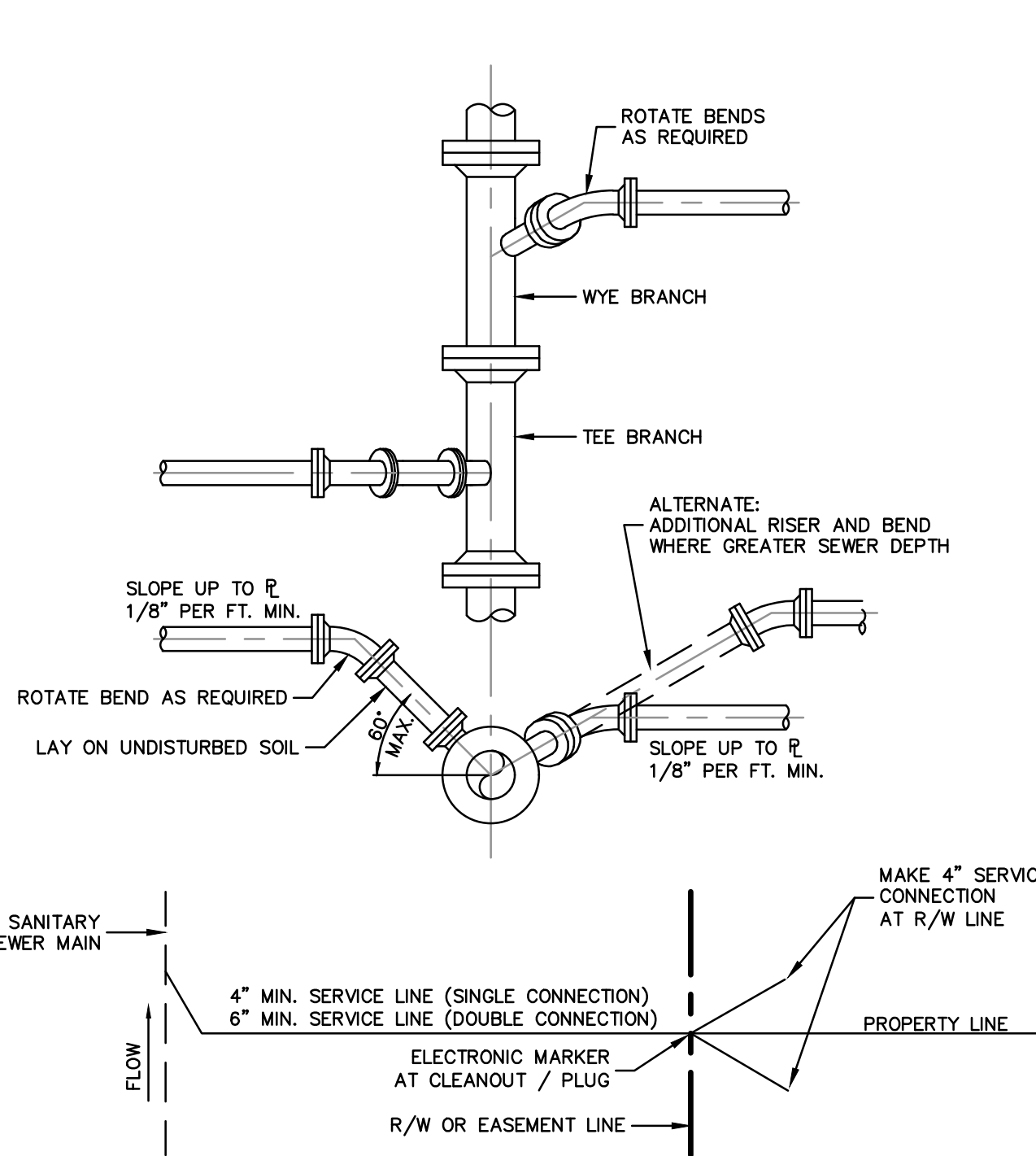
STANDARD MANHOLE

Dwg 34

Revised: AUGUST 2016

GENERAL NOTES, SPECIFICATIONS AND SEPARATION STATEMENT

Dwg 1D



NOTES:

1. SERVICE LATERALS SHALL TERMINATE WITH A CLEANOUT AT R.
2. LATERAL DEPTH AT R SHALL BE (3) FEET MIN., PLUGGED WATERTIGHT AND MARKED WITH 2" x 2" TREATED STAKE AND ELECTRONIC MARKER.

TYPICAL SEWER SERVICE CONNECTION

Dwg 31

Revised: AUGUST 2016



CIVIL ENGINEERS
10975 SE FEDERAL HIGHWAY
HOBE SOUND, FL 33455

PH: (772) 223-8850
FX: (772) 223-8851

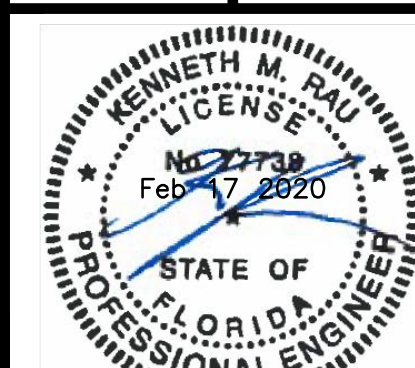
WWW.THEMILCORGROUP.COM

CERTIFICATE OF
AUTHORIZATION: 28246

MARTIN COUNTY
UTILITIES DETAILS

CONCHY JOE'S

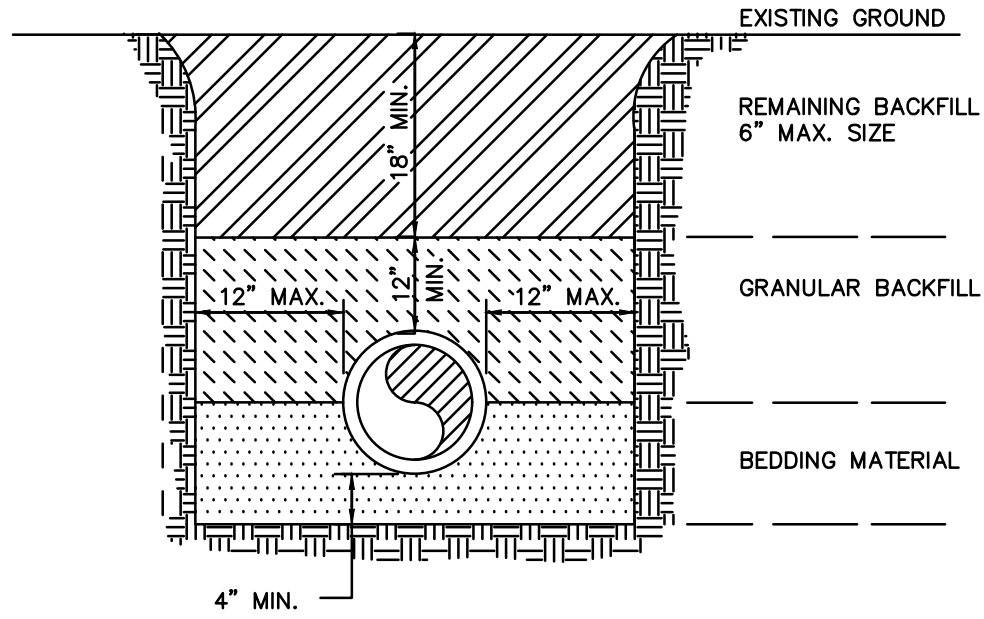
JENSEN BEACH, FLORIDA



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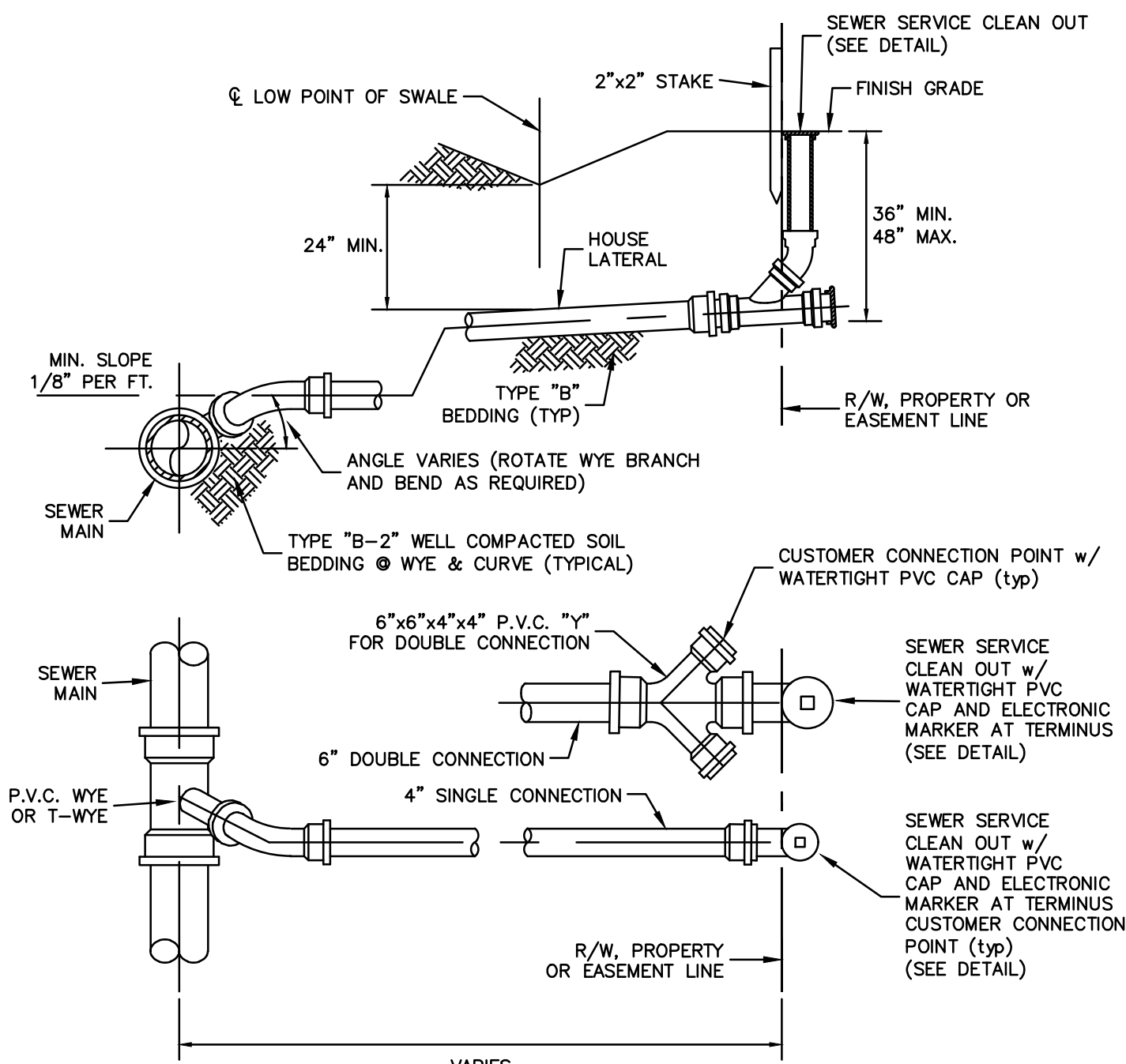
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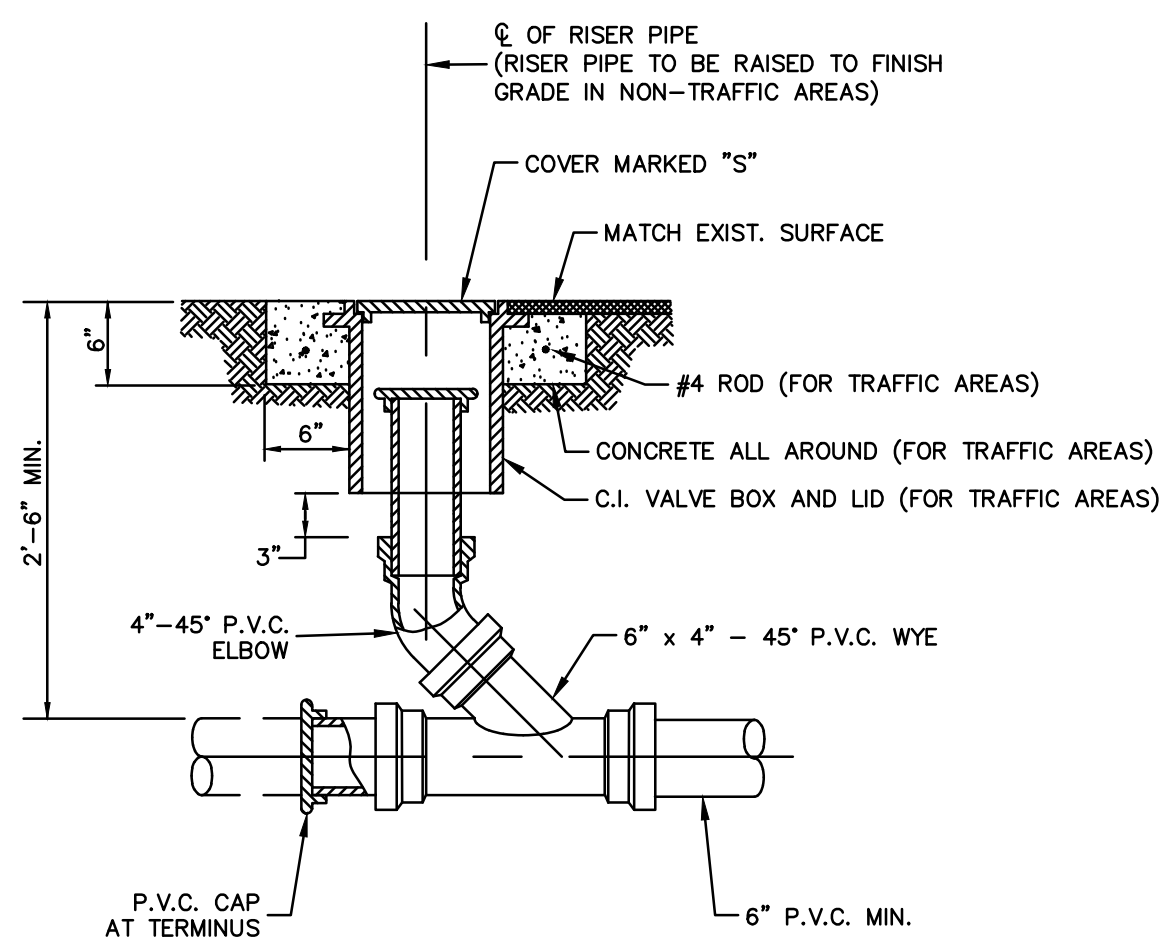
NOTES:

- BEDDING MATERIAL SHALL BE HAND PLACED IN 6" LIFTS AND SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8"-7/8" SIZING. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
- 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 DONE WITH APPROVED MATERIAL, CLEAN AND FREE OF ROCKS, MUCK AND OTHER DELETERIOUS MATTER AND COMPACTIONED BENEATH THE HAUNCHES OF THE PIPE USING MECHANICAL TAMPERS TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- BACKFILL TO BE COMPACTIONED ALONG THE SIDES OF THE PIPE AND TO A POINT ONE FOOT ABOVE THE TOP OF THE PIPE TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- A. WHERE PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING BACKFILL SHALL BE COMPACTIONED IN 6 INCH LAYERS AND COMPACTIONED TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
B. WHERE "NO" PAVEMENT IS TO BE CONSTRUCTED OVER THE PIPE THE REMAINING FILL SHALL BE COMPACTIONED IN 6 INCH LAYERS TO A DENSITY 90% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
- CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL TRENCH SAFETY REGULATIONS



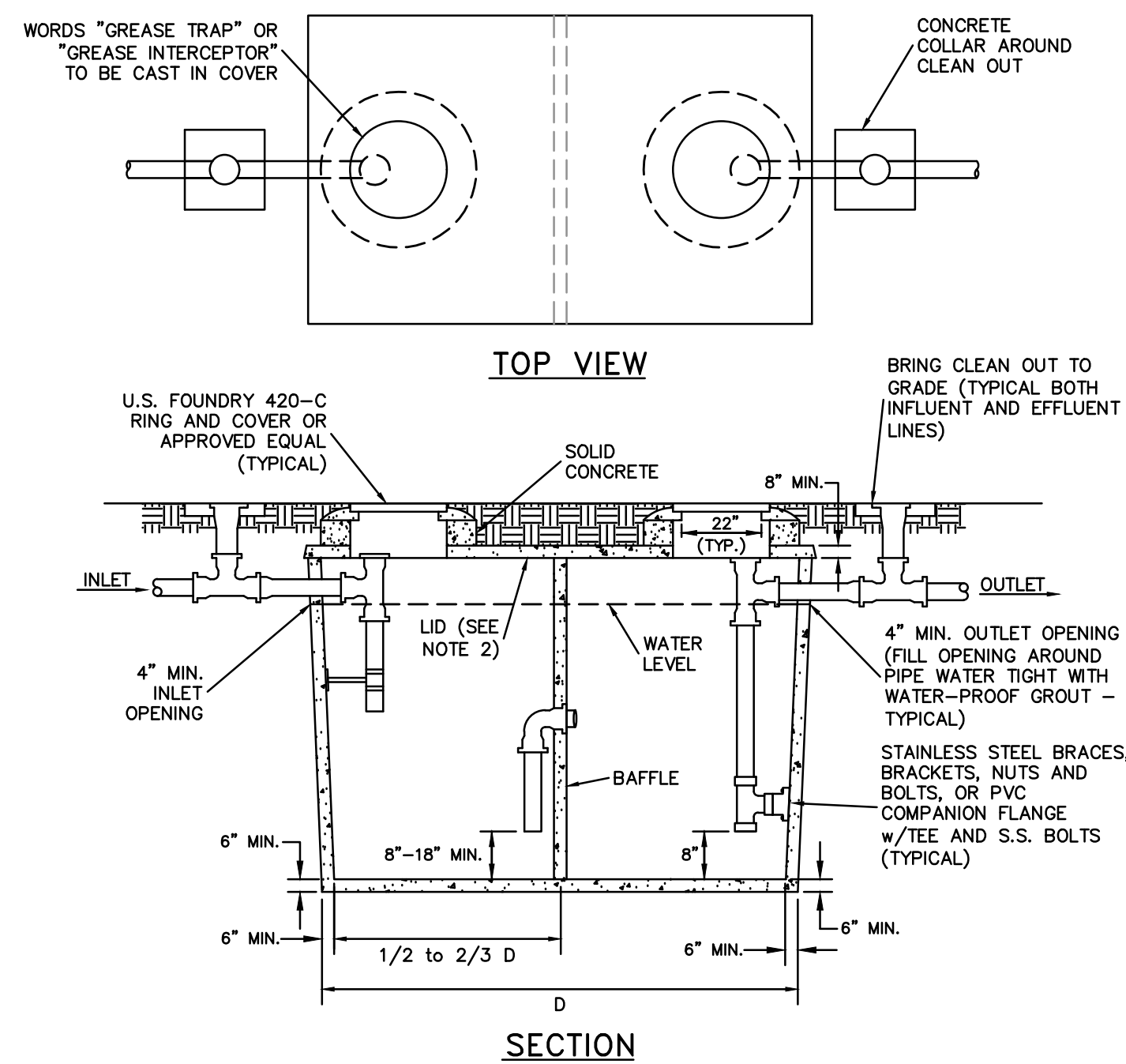
NOTES:

- INVERT OF LATERAL TO BE 36" FROM FINISHED GRADE EXCEPT ON "W" WATER LINE SIDE "O" OF STREET R/W WHERE IT SHALL DROP TO 48" AS SOON AS DEPTH OF SEWER MAIN PERMITS.
- THIS DETAIL TO BE USED WHEN TOP OF SEWER MAIN IS LESS THAN 7'-0" DEEP.
- INSTALL MAGNETIC MARKERS AT THE END OF EACH SERVICE LINE OR OPPOSITE WYES AND RECORD LOCATION.
- SERVICE LATERALS SHALL TERMINATE WITH A CLEANOUT AT R.



NOTES:

- CONCRETE PAD W/ REBAR AND CAST IRON VALVE BOX TO BE INSTALLED IN TRAFFIC AREAS ONLY.



NOTES:

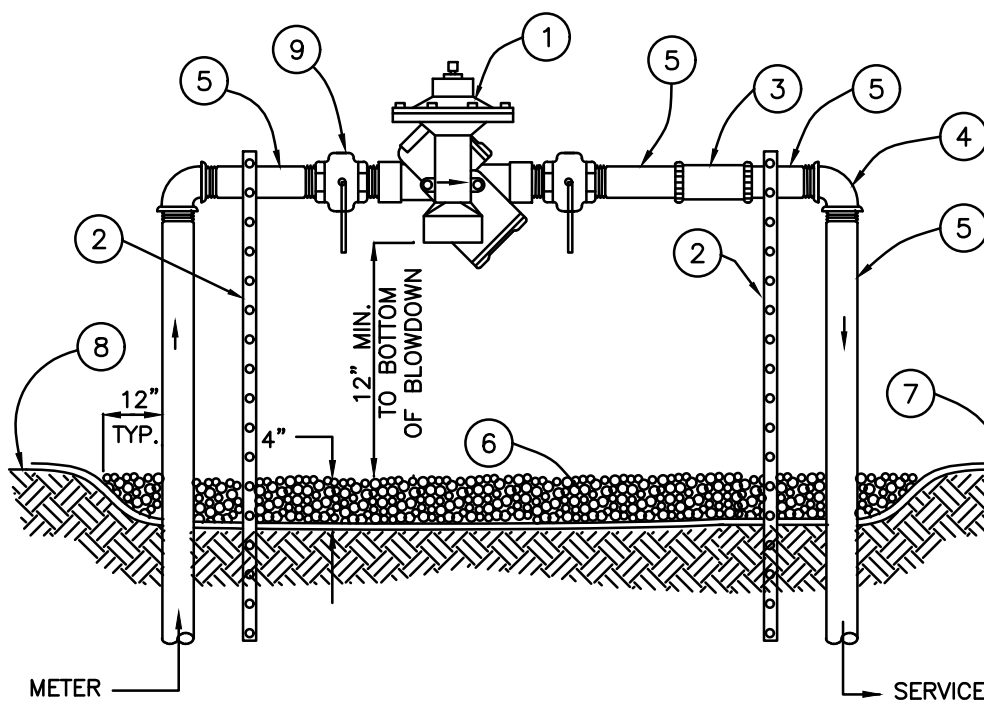
- GREASE TRAPS (SEPTIC TANKS) SHALL BE MANUFACTURED BY FLORIDA SEPTIC INC., SEBRING SEPTIC, AVERETT SEPTIC, OR APPROVED EQUAL. STATEMENT: "THIS CONCRETE STRUCTURE MEETS OR EXCEEDS ALL THE REQUIREMENTS FOR GREASE INTERCEPTORS/SEPTIC TANKS AS REQUIRED BY THE FLORIDA ADMINISTRATIVE CODE (F.A.C.), CHAPTERS 64E-6.01.1". TANK SIZES SHALL BE 750 GALLONS MINIMUM AND 1,250 GALLONS MAXIMUM AS REQUIRED BY THE F.A.C. SIZING CALCULATIONS, (3 COPIES MINIMUM), SHALL THEN BE SIGNED AND SEALED BY THE ENGINEER-OF-RECORD AND FORWARDED TO THE DEPARTMENT FOR APPROVAL. NOTE THAT GENERATION RATES FOR ORDINARY RESTAURANTS SHALL BE 16 GPD PER SEAT PER MARTIN COUNTY UTILITY DEPARTMENTAL POLICY.
- LID TYPES:
A) 4" REGULAR LID
B) 8" TRAFFIC BEARING LID
C) ALL INTERNAL COMPONENTS WILL BE CONSTRUCTED BY GREASE TRAP INSTALLER.
D) TANK INSPECTIONS WILL OCCUR WITH TANK ABOVE GROUND.
E) BAFFLE SHALL BE INSTALLED 1/2 (ONE HALF) TO 2/3 (TWO THIRDS) 'D'.
F) MEETS H-20 LOAD REQUIREMENTS.

9
TYPICAL TRENCH DETAIL
Dwg 23
Revised: AUGUST 2016

10
SANITARY SEWER LATERAL DETAIL
Dwg 32
Revised: AUGUST 2016

11
SEWER SERVICE CLEANOUT
Dwg 33
Revised: AUGUST 2016

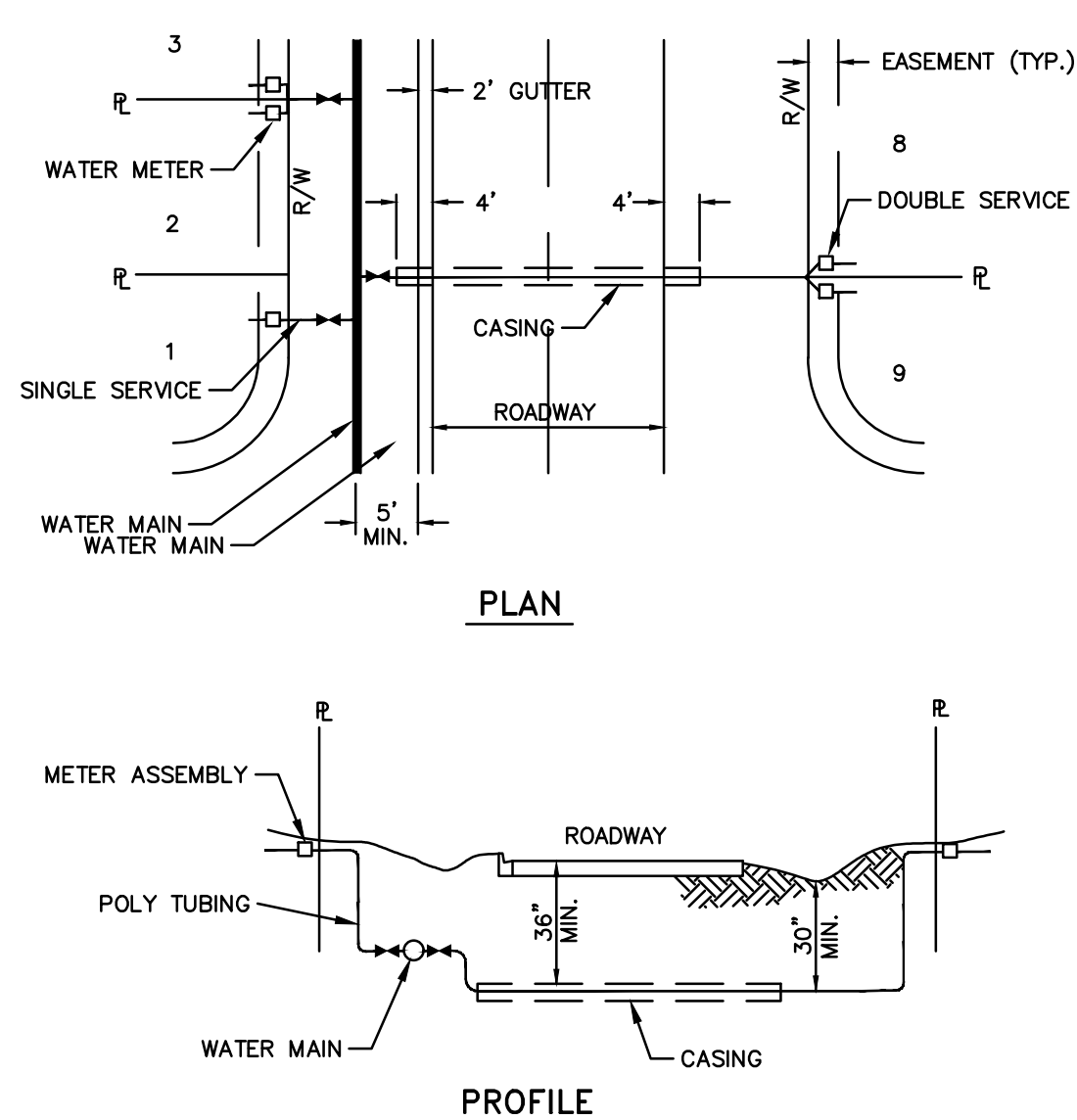
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DOUBLE-COMPARTMENT GREASE TRAP
AND OIL SEPARATOR
Revised: AUGUST 2016



ITEM	QUANT.	DESCRIPTION
1	1	2" BACKFLOW PREVENTER
2	2	1" S.S. UNISTRUT W/ S.S. STRAPS
3	1	2" COUPLING - COMPRESSION
4	2	2" X 90° ELBOW
5	4	2" X 6" NIPPLES
6		PEA GRAVEL
7		FILTER FABRIC
8	2	FINISHED GRADE
9	2	BALL VALVE

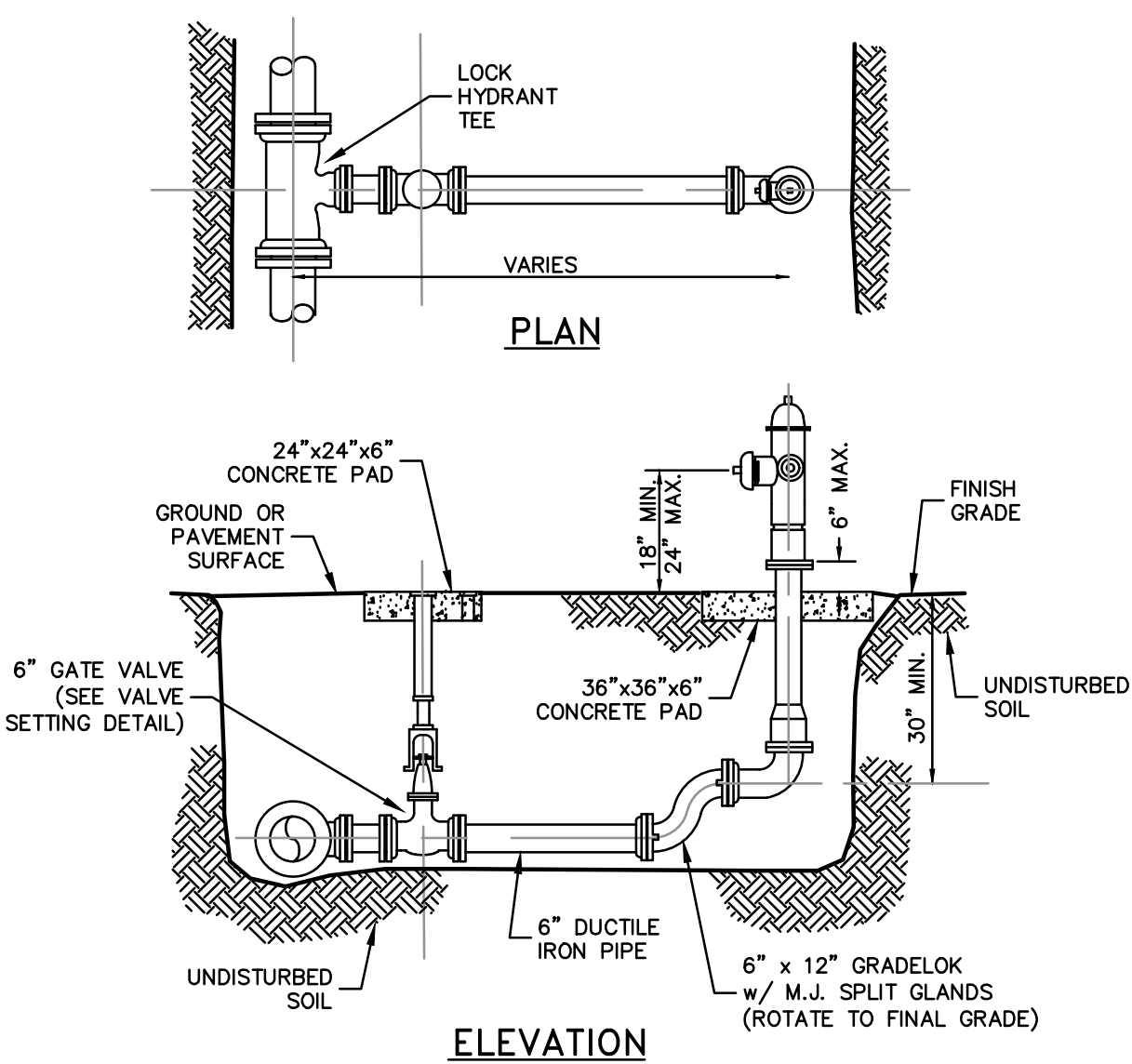
NOTES:

- INSTALLATION SHOWN ABOVE IS FOR A 2" SERVICE. CHANGE PIPING MATERIALS ACCORDINGLY FOR SERVICE SIZE.
- USE COPPER, BRASS OR STAINLESS STEEL FOR FITTINGS AND PIPE MATERIAL.



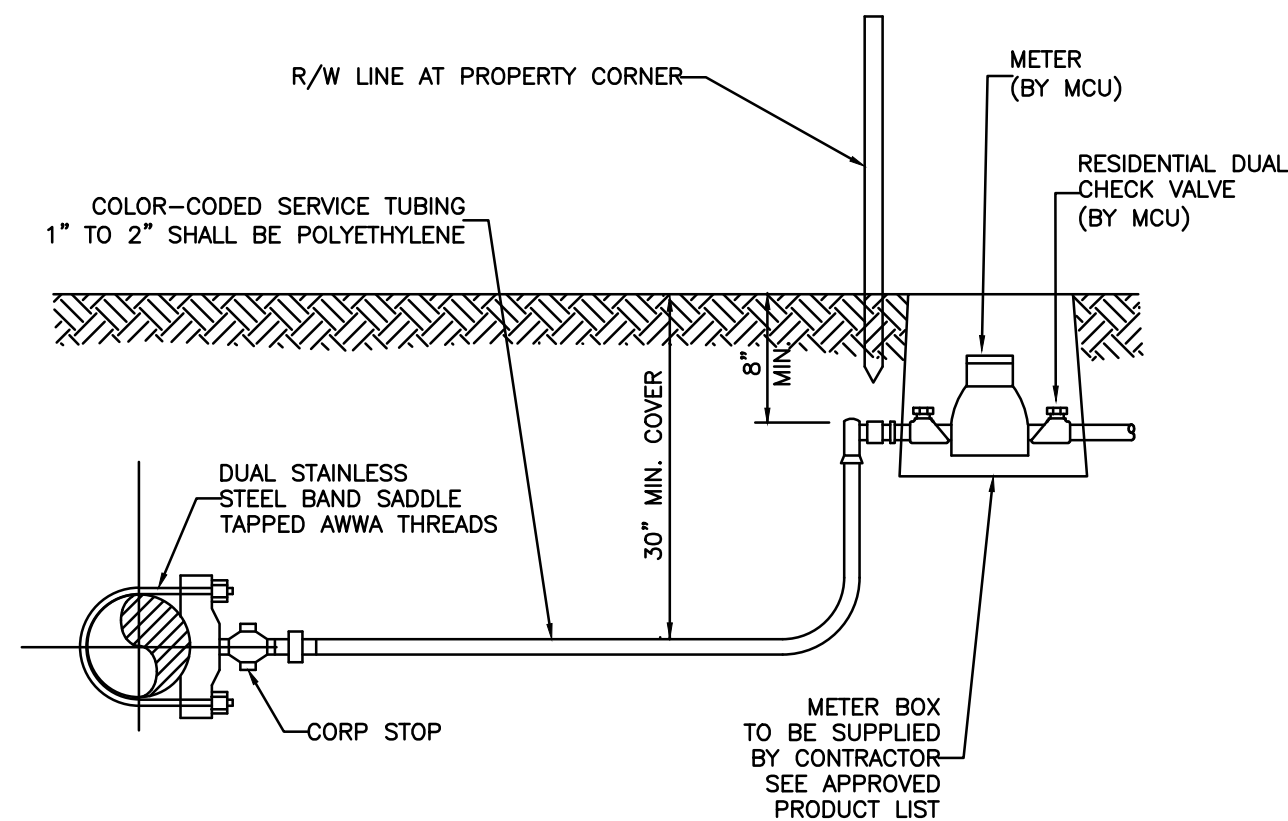
NOTES:

- HOUSE SERVICE LATERAL UNDER PAVEMENT SHALL BE INSTALLED THROUGH A 2" MINIMUM PVC SCH. 80 CASING OR HDPE CASING (EXISTING ROADWAYS).
- TAPPING SADDLE AND CORPORATION STOP MUST BE PLACED IN ACCESSIBLE AREAS, OUT FROM UNDER ANY PAVED AREAS.
- SERVICE LOCATOR WIRE SHALL BE LAID IN THE TRENCH WITH ALL SERVICES, CONNECTED TO THE MAIN WIRE AND WRAPPED AROUND THE SERVICE PIPING OR TUBING. WIRE FOR POTABLE WATER SHALL BE BLUE IN COLOR.



NOTES:

- HYDRANTS SHALL BE INSTALLED PLUMB AND TRUE.
- VALVES SHALL BE PLACED ADJACENT TO MAIN, AND TIED TO TEE.
- ANCHOR TEES ARE REQUIRED.
- ALL HYDRANTS SHALL BE TIED OFF OF MAIN.
- HYDRANTS SHALL NOT BE PLACED IN SIDEWALK, ROADWAYS OR BIKEPATHS.
- PIPE FROM VALVE TO HYDRANT SHALL BE RESTRAINED.
- HYDRANT BARREL AND BONNET COLOR TO BE OSHA YELLOW.
- THE CONNECTOR PIPE SHALL BE CEMENT LINED DUCTILE IRON, CLASS 350 AND POSITIONED BETWEEN THE FIRE HYDRANT AND GATE VALVE.
- THE CONNECTOR PIPE SHALL HAVE AN ANCHORING FEATURE AT BOTH ENDS SO THAT WHEN USED WITH M.J. SPLIT GLANDS A RESTRAINED JOINT IS PROVIDED.
- HYDRANT EXTENSIONS SHALL NOT BE ALLOWED.
- NEWLY CONSTRUCTED FIRE HYDRANTS THROUGHOUT THE PROJECT SHALL HAVE A RED "OUT OF SERVICE" DISK (JOSEPH G. POLLARD CO. OR EQUAL) ATTACHED TO 4" PUMPER NOZZLE CAP. DISK TO BE REMOVED AFTER WATER SYSTEM HAS BEEN APPROVED FOR SERVICE BY THE DEPARTMENT.
- A MAXIMUM OF 20 FEET OF HORIZONTAL PIPE SHALL TYPICALLY BE INSTALLED BETWEEN THE 6" GATE VALVE AT THE WATER MAIN AND THE HYDRANT. IF IT IS NECESSARY TO INSTALL MORE THAN 20 FEET OF HORIZONTAL PIPE, AN ADDITIONAL 6" GATE VALVE WILL BE REQUIRED AT THE HYDRANT LOCATION.



NOTES:

- MIN. SERVICE LINES SHALL BE AS FOLLOWS: 1" FOR SINGLE AND DOUBLE SERVICES WHERE METER SIZE IS 5/8"; 2" FOR SINGLE AND DOUBLE SERVICES WHERE METER SIZE IS 1".
- COMPRESSION FITTINGS SHALL BE SUITABLE FOR TUBING USED AND REQUIRE METAL (S.S.) INSERTS.
- DOUBLE SERVICES REQUIRE "U" BRANCH WITH ANGLE CURB STOPS.
- POLYETHYLENE SHALL BE AS DEFINED BY A.S.T.M. D2737 SDR9 COPPER TUBE SIZE (CTS) AND A.W.W.A. 901, LATEST EDITION, AND BE PRESSURE RATED FOR 200 PSI AND SHALL BE "ENDOPURE" BY ENDOT INDUSTRIES, INC., ROCKAWAY, N.J., OR APPROVED EQUAL.
- TUBING SHALL BE MARKED WITH SIZE, MANUFACTURERS NAME, WORKING PRESSURE, NATIONAL SANITATION FOUNDATION APPROVAL, A.S.T.M. SPECIFICATION AND PRODUCTION CODE. TUBING SHALL HAVE AN OUTSIDE DIAMETER EQUIVALENT TO THE OUTER DIAMETER OF COPPER TUBING.
- SERVICE LOCATOR WIRE SHALL BE LAID IN THE TRENCH WITH ALL SERVICES, CONNECTED TO THE MAIN WIRE AND WRAPPED AROUND THE SERVICE PIPING OR TUBING. WIRE FOR POTABLE WATER SHALL BE BLUE IN COLOR.

13
REDUCED PRESSURE BACKFLOW PREVENTER
SINGLE SERVICE, 3/4", 1", 1-1/2" AND 2"
Dwg 13
Revised: AUGUST 2016

14
WATER SERVICE CONNECTIONS (SINGLE OR DOUBLE)
PLAN / PROFILE
Dwg 3
Revised: AUGUST 2016

15
FIRE HYDRANT INSTALLATION
DETAIL AND NOTES
Dwg 7
Revised: AUGUST 2016

16
SERVICE CONNECTION DETAIL
5/8" OR 1" METER
Dwg 2
Revised: AUGUST 2016

FM	FM	FM	AT	BY
PER MARTIN COUNTY UTILITY COMMENTS	REVISIONS PER MARTIN COUNTY	REVISIONS PER MARTIN COUNTY	PER REVISED MEAN HIGH WATER LINE (MHW)	REVISIONS:
2-17-20	1-8-20	12-10-19	9-25-19	8-20-19
DATE:	DATE:	DATE:	DATE:	DATE:



VERTICAL DATUM NAVD 88	D.W.	3-5-2018
PROJECT:	FILE:	A0102-12-13.dwg



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CERTIFICATE OF
AUTHORIZATION: 28246

MARTIN COUNTY
UTILITIES DETAILS

CONCHY JOE'S

JENSEN BEACH, FLORIDA



SHEET NO.

13

GENERAL

1. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGE OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER, CITY, COUNTY OR AGENCY OF JURISDICTION.
2. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
3. THE LOCATION AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITIES BY ELECTRONIC METHODS 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 OWNER PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. THIS WORK BY THE CONTRACTOR SHALL BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION. NO ADDITIONAL CORRECTION SHALL BE ALLOWED.
4. THE CONTRACTOR SHALL MAINTAIN ALL WATER SUPPLY AND SANITARY SEWER SERVICE THROUGHOUT CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL MAINTAIN EXISTING SERVICES UNTIL THE NEW LINES HAVE BEEN PROVIDED BY THE JURISDICTIONAL UTILITY.
5. PROJECT SUPERINTENDENT: THE CONTRACTOR SHALL PROVIDE A QUALIFIED SUPERINTENDENT TO REMAIN ON THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. THE SUPERINTENDENT SHALL BE PRESENT AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY COMPANY BY LETTER PRIOR TO THE PRE-CONSTRUCTION MEETING APPOINTING THE SUPERINTENDENT FOR THIS PROJECT INCLUDING A FORMAL RESUME SHOWING QUALIFICATION.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE HIS/HER COMPLETE FAMILIARITY WITH THE PROJECT SITE AND COMPONENTS TO INCLUDE SUBSURFACE CONDITIONS OF SOIL AND GROUNDWATER TABLE. BY SUBMITTAL OF A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES HIS/HER COMPLETE UNDERSTANDING AND RESPONSIBILITIES WITH RESPECT TO THE CONSTRUCTION ACTIVITIES REQUIRED UNDER THE SCOPE OF THIS PROJECT.
7. THE "TRENCH SAFETY ACT" SHALL BE INCORPORATED INTO THIS PROJECT AS ENHANCED BY THE LEGISLATURE OF THE STATE OF FLORIDA IN EFFECT SINCE OCTOBER 1, 1990.
8. AS-BUILT PLANS: THE CONTRACTOR SHALL PROVIDE A REPRODUCIBLE MYLAR COPY AND 15 PAPER COPIES OF CERTIFIED AS-BUILT SURVEYS, DRAWINGS SHALL BEAR THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE SURVEYOR AND SHALL BE SUBMITTED AFTER THE COMPLETION OF CONSTRUCTION. AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SHOW THE LOCATION OF ALL EXISTING UTILITIES TO THE SURVEYOR REGISTERED IN THE STATE OF FLORIDA, AND HE/SHE SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE FLORIDA ADMINISTRATIVE CODE AND CHAPTER 472 OF THE FLORIDA STATUTES. THE DRAWINGS SHALL BE AT A SCALE COMPARABLE TO THE DESIGN DRAWINGS PREPARED BY THE ENGINEER AND SHALL REFERENCE THE BASE LINE OF SURVEY APPEARING ON THE ENGINEERING DRAWINGS. THE HORIZONTAL AND VERTICAL LOCATION OF THE MAINS, ROADWAYS, DRAINAGE FACILITIES AND OTHER APPURTENANCES (INCLUDING ELEVATIONS AT AND BELOW THE NORMAL WATER ELEVATION) SHALL BE ACCURATELY DEPICTED TO SCALE, AS WELL AS IDENTIFIED RELATIVE TO THE BASE LINE AND TO IDENTIFIABLE PERMANENT OR SEMI PERMANENT REFERENCE POINTS EXISTING AFTER THE COMPLETION OF CONSTRUCTION. LOCATIONS SHALL BE DETERMINED FOR ALL FITTINGS, VALVES, SERVICES, PAVEMENT, HIGH AND LOW POINTS, DRAINAGE FACILITIES, HORIZONTAL AND VERTICAL CHANGES IN DIRECTION, BUT IN ANY CASE, AT INTERVAL NOT EXCEEDING ONE HUNDRED FEET (100') AS MEASURED ALONG THE CENTERLINE OF THE PIPE. THE LOCATION OF THE MAINS AND APPURTENANCES SHALL BE IDENTIFIED ON BOTH THE PLAN AND PROFILE VIEWS. UNDERGROUND UTILITIES CROSSING THE MAINS OR PARALLELING THE MAINS WITHIN TWENTY FEET (20') SHALL BE ACCURATELY SHOWN BOTH HORIZONTALLY AND VERTICALLY AND SHALL BE BASED UPON MEASUREMENTS AND OBSERVATIONS MADE IN THE FIELD BY THE SURVEYOR CERTIFYING THE SURVEY, OR BY PHOTOGRAPHIC EVIDENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION AND THE FINISHED GRADE OVER THE MAINS AND AS-BUILT SURVEY. PAYMENT FOR EACH AS-BUILT ITEM SHALL BE INCLUDED WITHIN THE UNIT PRICE FOR EACH AS-BUILT ITEM. IN ADDITION TO THE ABOVE AS-BUILT REQUIREMENTS, CONTRACTOR TO PROVIDE AS-BUILTS IN COMPLIANCE WITH THE JURISDICTIONAL UTILITY SERVICES STANDARDS. AS-BUILT REQUIREMENTS TO BE PROVIDED AT THE PRE-CONSTRUCTION MEETING.
9. THE CONTRACTOR SHALL PREPARE A PLAN SHOWING THE SCHEDULE OF WORK, INCLUDING A HIGHLIGHTED PLAN SHOWING THE ORDER OF CONSTRUCTION THAT WILL FACILITATE MAINTENANCE OF ACCESS TO THE PROJECT SITE AND CONSTRUCTION. THIS PLAN SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC AND STAGING PLAN.
10. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS, COUNTY STANDARDS AND ALL OTHER JURISDICTIONAL AGENCIES.
11. TELEPHONE, POWER, CABLE, WATER, SEWER, AND GAS LOCATIONS SHOWN ARE TAKEN FROM INFORMATION PROVIDED BY THAT UTILITY COMPANY. THESE LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE'S PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY UTILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE LOCATION OF THEIR FACILITIES.
12. ANY BENCHMARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY THE ENGINEER OF RECORD AND THE LOCAL JURISDICTIONAL MUNICIPALITY.
13. SHOP DRAWINGS ARE REQUIRED ON ALL CONSTRUCTION ITEMS. THE ENGINEER REQUIRES FIVE (5) WORKING DAYS PRIOR NOTICE TO REVIEW SHOP DRAWINGS AFTER RECEIPT. ADDITIONAL TIME MAY BE REQUIRED IF LOCAL GOVERNMENT OR MUNICIPALITIES REQUIRE AN INTERNAL REVIEW AND APPROVAL.
14. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE, AT ALL TIMES, ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
15. CONTRACTOR TO UTILIZE ONLY "APPROVED CONSTRUCTION PLANS" FOR ALL CONSTRUCTION. ANY PLANS NOT APPROVED FOR CONSTRUCTION SHALL BE CONSIDERED PRELIMINARY AND SHOULD NOT BE USED FOR BIDDING OR CONSTRUCTION.
16. CONTRACTOR TO PROVIDE SITE PLAN AS-BUILTS TO LOCAL JURISDICTIONAL MUNICIPALITY PRIOR TO CERTIFICATE OF OCCUPANCY.
17. IF HISTORICAL OR ARCHAEOLOGICAL ARTIFACTS ARE DISCOVERED ON SITE, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE LOCAL AND STATE OFFICIALS.
18. THE CONTRACTOR MUST OBTAIN A WATER USE PERMIT PRIOR TO CONSTRUCTION DEWATERING UNLESS THE WORK QUALIFIES FOR A GENERAL PERMIT.
19. CONCRETE SHALL BE CLASS 1,300 PSI MINIMUM COMPRESSIVE STRENGTH UNLESS NOTED OTHERWISE. REINFORCING SHALL BE GRADE 60 DEFORMED STEEL BARS IN ACCORDANCE WITH ASTM A-615.
20. CONTRACTOR SHALL PROTECT ALL EXISTING ABOVE OR UNDERGROUND STRUCTURES, LANDSCAPE FEATURES, TREES AND UTILITIES NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY ITEM DAMAGED BY CONSTRUCTION TO MEET ALL APPLICABLE CODES. ANY REPAIRED/REPLACED ITEMS ARE SUBJECT TO REVIEW AND APPROVAL BY APPLICABLE LOCAL JURISDICTIONAL AGENCY.
21. ALL PROPOSED UTILITY MATERIALS, CONSTRUCTION METHODS, TESTING AND DISINFECTION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS AND STREETS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE'S PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY UTILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE LOCATION OF THEIR FACILITIES.
22. ALL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS SHALL BE PROTECTED AND UNDISTURBED. IN THE EVENT THAT A CONTROL POINT IS DISTURBED OR DESTROYED, THE POINT SHALL BE RE-ESTABLISHED BY A FLORIDA REGISTERED LAND SURVEYOR. THE METHOD TO RE-ESTABLISH THE POINT SHALL BE APPROVED BY THE CITY /COUNTY ENGINEER AT THE CONTRACTORS EXPENSE.
- STORM SEWER NOTES**
1. ALL DISTURBED OUTFALL DRAINAGE AREAS SHALL BE SOODED UPON COMPLETION OF GRADING AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER.
2. PRIOR TO FINAL PAYMENT OF RETENTION, DETENTION, AND DRAINAGE DITCH QUANTITIES, ALL SLOPES AND SWALES SHALL BE SOODED TO AVOID EROSION.
3. BACKFILL TO BE COMPACTED IN NO GREATER THAN SIX (6) INCH LIFTS TO THE DENSITY OF THE UNDISTURBED ADJACENT SOILS.
4. THERE IS TO BE NO OFF-SITE HAULING WITHOUT PRIOR APPROVAL AND ALL EXCAVATED MATERIAL SHALL BE USED ON-SITE.
5. THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER MANAGEMENT SYSTEM IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS TO THE SURROUNDING ENVIRONMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE'S PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY UTILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE LOCATION OF THEIR FACILITIES.
6. WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE CONTRACTOR SHALL ASSIST THE DESIGN ENGINEER TO PROVIDE A WRITTEN STATEMENT OF COMPLETION AND CERTIFICATION BY A FLORIDA PROFESSIONAL ENGINEER. THESE STATEMENTS WILL BE REVIEWED BY THE DESIGN ENGINEER AND THE LOCAL JURISDICTIONAL MUNICIPALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND DELIVERY OF PIPE. THE CONTRACTOR IS TO USE EXTREME CAUTION WITHIN THE VICINITY OF PRIVATE UTILITY FACILITIES. THE CONTRACTOR WILL REQUEST A PRIVATE UTILITY REPRESENTATIVE'S PRESENCE DURING CONSTRUCTION IN THE VICINITY OF THEIR FACILITIES. A PROFILE OF THE PRIVATE UTILITY UTILITIES ARE NOT PROVIDED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PRIVATE UTILITIES AND OBTAINING THE LOCATION OF THEIR FACILITIES.
7. A STABLE PERMANENT AND ACCESSIBLE ELEVATION REFERENCE SHALL BE ESTABLISHED ON OR WITHIN ONE HUNDRED FEET (100') OF ALL PERMITTED DISCHARGE STRUCTURES NO LATER THAN THE SUBMISSION OF THE CERTIFICATION TO THE WATER MANAGEMENT DISTRICT. THE LOCATION OF THE ELEVATION REFERENCE MUST BE NOTED ON OR WITHIN THE CERTIFICATION REPORT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE SURFACE WATER QUALITY MANAGEMENT SYSTEM.
9. INLETS: INCLUDE THE LIST OF MATERIALS/INSTALLATION/DEWATERING/ASBUILT SURVEYING/TESTING. ALL STRUCTURES WILL REQUIRE THREE (3) CONCRETE TESTS AT PRELIMINARY LOCATIONS AND UNDER STRUCTURES OR PER LOCAL APPROVING AUTHORITY, WHICHEVER IS MORE STRINGENT.
10. CULVERTS AND STORM SEWERS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTION 443 OF THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
11. REINFORCED CONCRETE PIPE SHALL BE ASTM C-76 CLASS III IN ACCORDANCE WITH SECTION 449 OF THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
12. THE CONTRACTOR SHALL WRAP ALL STORM PIPE JOINTS. CONSTRUCTION SHALL BE PER FOOT INCH NO. 280 WITH JOVEN GETTYLE TYPE D-3 (FOOT INCH NO. 199), SECURED WITH STRAPPING. ALL JOINTS SHALL BE WRAPPED FOR A MINIMUM 18" FROM THE BAND, JOIN OR BELL AND SPIGOT AS APPLICABLE.
- PAVING, GRADING AND DRAINAGE NOTES**
1. ALL MATERIALS SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY AASHTO M 145, FOUND WITHIN THE ROAD AND PARKING LOT AREAS SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12" LIFTS COMPACTED TO NOT LESS THAN 100% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH AASHTO T-99. THICKNESS OF LAYERS MAY BE INCREASED, PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABLE OF PRODUCING THE THICK LAYERS TO SPECIFIED DENSITIES.
2. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL BE CONSISTENT FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH, AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE FOOT (1'). ITEMS INTENDED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.
3. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-A IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL, NOT MORE THAN 10% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS.
5. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEMS SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
6. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
11. PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
8. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
9. CONCRETE AND ASPHALT SHALL BE AS DESIGNATED ON THE DRAWINGS. ALL CONCRETE FOR CURBING, SIDEWALKS AND DUMPTER PADS SHALL BE A MINIMUM 3,000 PSI.
- 1

STORM SEWER NOTES

1. ALL DISTURBED OFF-ROAD DRAINAGE AREAS SHALL BE SODDED UPON COMPLETION OF GRADING AFTER AS-BUILT GRADE ELEVATIONS ARE APPROVED BY THE ENGINEER.
2. PRIOR TO FINAL PAVING OF RETENTION, DETENTION, AND DRAINAGE DITCH QUANTITIES, ALL SLOPES AND SWALES SHALL BE SODDED TO AVOID EROSION.
3. BACKFILL TO BE COMPACTED IN NO GREATER THAN SIX (6) INCH LIFTS TO THE DENSITY OF THE UNDISTURBED ADJACENT SOILS.
4. THERE IS TO BE NO OFF-SITE HAULING WITHOUT PRIOR APPROVAL AND ALL EXCAVATED MATERIAL SHALL BE USED ON-SITE.
5. THE CONTRACTOR SHALL CONSTRUCT THE STORMWATER MANAGEMENT SYSTEM IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES AND WATER QUALITY ON OR OFF-SITE. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
6. WITHIN THIRTY (30) DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE CONTRACTOR SHALL ASSIST THE DESIGN ENGINEER TO PROVIDE A WRITTEN STATEMENT OF COMPLETION AND CERTIFICATION BY A FLORIDA PROFESSIONAL ENGINEER. THESE STATEMENTS MUST SPECIFY THE ACTUAL DATE OF CONSTRUCTION COMPLETION AND MUST CERTIFY THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. THE CONSTRUCTION COMPLETION CERTIFICATION MUST INCLUDE, AT A MINIMUM, EXISTING ELEVATIONS OF THE COMPONENTS OF THE SURFACE WATER MANAGEMENT FACILITY. ADDITIONALLY, IF DEVIATIONS FROM THE APPROVED DRAWINGS ARE DISCOVERED DURING THE CERTIFICATION PROCESS, THE CERTIFICATION MUST BE ACCOMPANIED BY A COPY OF THE APPROVED PERMIT DRAWINGS WITH DEVIATIONS NOTED. SEE AS-BUILT REQUIREMENTS.
7. A STABLE PERMANENT AND ACCESSIBLE ELEVATION REFERENCE SHALL BE ESTABLISHED ON OR WITHIN ONE HUNDRED FEET (100') OF ALL PERMITTED EROSION CONTROL STRUCTURES NO LATER THAN THE DATE OF CERTIFICATION TO THE WATER MANAGEMENT DISTRICT. THE LOCATION OF THE ELEVATION REFERENCE MUST BE NOTED ON OR WITHIN THE CERTIFICATION REPORT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION OR SHOALING OF THE SURFACE WATER QUALITY MANAGEMENT SYSTEM.
9. INLETS: INCLUDE THE LIST OF MATERIALS/INSTALLATION/DEWATERING STABILIZATION/ASBUILT SURVEYING/TESTING. ALL STRUCTURES MUST REQUIRE THREE (3) COMPACTION TESTS AT DIFFERENT LOCATIONS AND UNDER STRUCTURES OR PER LOCAL APPROVING AUTHORITY, WHICHEVER IS MORE STRINGENT.
10. PIPE: CULVERTS AND STORM SEWERS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTION 430 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
11. REINFORCED CONCRETE PIPE SHALL BE ASTM C-76 CLASS III IN ACCORDANCE WITH SECTION 449 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
12. THE CONTRACTOR SHALL WRAP ALL STORM PIPE JOINTS. CONSTRUCTION SHALL BE PER FOOT INDEX NO. 280 WITH WOVEN GEOTEXTILE TYPE D-39 (FDOT INDEX NO. 199), SUFFICIENT WITH STRAPPING. ALL JOINTS SHALL BE WRAPPED FOR A MINIMUM 18" FROM THE BAND, JOINT OR BELL AND SPIGOT AS APPLICABLE.
- PAVING, GRADING, AND DRAINAGE NOTES**
1. ALL UNSUITABLE MATERIALS SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIAL AS CLASSIFIED BY ASHTO M 145, FOUND WITHIN THE ROAD AND PARKING LOT AREAS SHALL BE REMOVED DOWN TO ROCK OR SUITABLE MATERIAL AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM 12" LIFTS COMPACTED TO NOT LESS THAN 100% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE IN ACCORDANCE WITH ASHTO T-99. THE THICKNESS OF LAYERS MAY BE INCREASED PROVIDED THAT THE EQUIPMENT AND METHODS USED ARE PROVEN BY FIELD DENSITY TESTING AND CAPABILITY OF COMPACTING THICK LAYERS TO SPECIFIED DENSITIES.
2. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL BE CONSISTENT FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, GRASS, WEEDS, RUBBISH, AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE FOOT (1'). ITEMS INTENDED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE PLANS.
3. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-1.5, OR A-2-4 IN ACCORDANCE WITH ASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL, NOT MORE THAN 10% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE COURSE, CURB OR GUTTER, AND ASPHALT. THE ADVANCED ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
5. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PULPS AND PLYWOOD OR PLASTIC COVERINGS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEMS SHALL BE CLEARED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
6. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADVANCED ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
7. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
8. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAIN.
9. CONCRETE AND ASPHALT SHALL BE AS DESIGNATED ON THE DRAWINGS. ALL CONCRETE FOR CURBING, SIDEWALKS AND DUMPTER PADS SHALL BE A MINIMUM 3,000 PSI.
10. PLASTIC FIBER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL, CONFORMING TO SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.
11. THE CONCRETE SIDEWALKS SHALL BE 4" THICK ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS AT ALL COLD JOINTS. CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS SHALL BE 6 INCHES THICK ACROSS DRAINWAYS.
12. PIPE SPECIFICATIONS: THE MATERIAL TYPE SHALL BE RCP (SECTION 430 OF THE FDOT STANDARD SPECIFICATIONS).
13. BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT, CONFORMING TO THE LATEST REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 916.

PAVING, GRADING AND DRAINAGE NOTES

1. ALL UNSUITABLE MATERIALS, SUCH AS MUCK, ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS AS CLASSIFIED BY AASHTO M 145, FOUND WITHIN THE ROAD AND PARKING LOT AREAS SHALL BE REMOVED DOWN TO ROCK. ALL SUITABLE MATERIAL AND REPLACED WITH THE SPECIFIED FILL MATERIAL IN MAXIMUM LIFT COMPACTED TO MEETS, TYPAR OR OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE FOOT (1'). ITEMS INTENDED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.
2. ALL AREAS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL BE CONSISTENT FOR THE COMPLETE REMOVAL AND DISPOSAL OF ALL MUCK, STUMPS, CULMS, WEEDS, RUBBISH, AND ALL OTHER OBSTRUCTIONS RESTING ON, OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF ONE FOOT (1'). ITEMS INTENDED TO REMAIN, TO BE RELOCATED, OR TO BE ADJUSTED SHALL BE SO DESIGNATED ON THE DRAWINGS.
3. FILL MATERIAL SHALL BE CLASSIFIED AS A-1, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL, NOT MORE THAN 10% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE BEGINNING OF FILL CONSTRUCTION. THE RESULTS MAY NOT BE LIMITED TO DENSITIES FOR SUBGRADE AND BASE COURSE AND BASED ON DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, AND STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS.
5. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLYWOOD AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEMS SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
6. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAWCUT TO PROVIDE A STRAIGHT EVEN LINE.
7. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
8. SITE GRADING ELEVATIONS SHALL BE AT THE REQUIRED ELEVATION AND ALL AREAS SHALL BE GRADED TO DRAWN.
9. CONCRETE AND ASPHALT SHALL BE AS DESIGNATED ON THE DRAWINGS. ALL CONCRETE FOR CURBING, SIDEWALKS AND DUMPSER PADS SHALL BE A MINIMUM 3,000 PSI.
10. PLASTIC FIBER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL, CONFORMING TO SECTION 985 OF THE FDOT STANDARD SPECIFICATIONS.
11. THE CONCRETE SIDEWALKS SHALL BE 4" THICK ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS AT ALL COLD JOINTS. CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS SHALL BE 6 INCHES THICK ACROSS DRIVEWAYS.
12. PIPE SPECIFICATIONS: THE MATERIAL TYPE SHALL BE RCP (SECTION 430 OF THE FDOT STANDARD SPECIFICATIONS).
13. BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT, CONFORMING TO THE LATEST REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 916.

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EARTHWORK AND RELATED OPERATIONS

1. THE CONTRACTOR SHALL PROVIDE A QUALITY CONTROL PLAN FOR MONITORING OF ALL EARTHWORK AND RELATED OPERATIONS. THE QUALITY CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY EARTHWORK OR RELATED OPERATIONS. THE BACKGROUND OF THE PERSON THAT THE CONTRACTOR WILL DESIGNATE AS THE CONTRACTOR'S QUALITY CONTROL MANAGER, THE NAME AND QUALIFICATIONS OF THE PERSONS WHO WILL BE RESPONSIBLE FOR THE QUALITY CONTROL TESTING AND THE NAMES AND QUALIFICATIONS OF THE TESTING LABORATORY PERSONNEL THAT WILL BE PERFORMING THE QUALITY CONTROL TESTING.
 2. THE TESTING LABORATORY THAT IS RETAINED TO PERFORM THE CONTRACTOR'S QUALITY CONTROL TESTING MUST BE CERTIFIED BY A RECOGNIZED QUALIFYING AGENCY.
 3. THE QUALITY CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY EARTHWORK OR RELATED OPERATIONS.
 4. UTILIZATION OF MATERIALS WITH ANY ROADWAY CROSS-SECTION SHALL BE IN ACCORDANCE WITH FOOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION) UNLESS OTHERWISE SHOWN ON PLANS.
 5. IF THE EXISTING FILL IS CLASSIFIED AS A-2-4 BASED ON AASHTO M-145 CRITERIA, THE MAXIMUM PERMISSIBLE MOISTURE CONTENT SHALL BE 2 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.
- COMPACTION**
1. WHERE THERE ARE EXISTING STRUCTURES ADJACENT TO THE SITE THAT MAY BE AFFECTED BY VIBRATORY EQUIPMENT, DENISIFICATION MUST BE PERFORMED USING EQUIPMENT THAT WILL SATISFY THE REQUIRED DENISIFICATION WITHOUT THE RISK OF DAMAGE TO THE EXISTING STRUCTURES.
2. DENISIFICATION PROCEDURES MUST COMPLY WITH THE CAPABILITY OF THE EQUIPMENT EMPLOYED.
3. WHEN THE EXISTING FILL IS CLASSIFIED AS A-2-4 BASED ON AASHTO M-145 CRITERIA, THE MAXIMUM PERMISSIBLE MOISTURE CONTENT SHALL BE 2 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.
4. WHEN THE EXISTING FILL IS CLASSIFIED AS A-2-4 BASED ON AASHTO M-145 CRITERIA, THE MAXIMUM PERMISSIBLE MOISTURE CONTENT SHALL BE 2 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.

COMPACTION

- WHERE THERE ARE EXISTING STRUCTURES PRESENT TO THE SITE THAT MAY BE AFFECTED BY VIBRATORY EQUIPMENT, DENSIFICATION MUST BE PERFORMED USING
2. DENSIFICATION PROCEDURES MUST COMPLY WITH THE CAPABILITY OF THE EQUIPMENT EMPLOYED.
3. WHEN THE DENSEST SOIL IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE VIBRATORY PLATE COMPACTORS MAY BE USED. WHEN THIS CONDITION OCCURS, THE OVERALL DENSIFICATION PROCEDURE MUST BE REVISED TO COMPLY WITH THE CAPABILITY OF THE EQUIPMENT EMPLOYED. IN GENERAL, SMALL PLATE COMPACTORS WILL BE EFFECTIVE TO A MAXIMUM DEPTH OF 6 TO 8 INCHES.
- SOIL RECOMMENDATION AND REQUIREMENTS**
- STRIPPING AND GRUBBING:**
- DURING THE GRUBBING OPERATION, ROOTS WITH A DIAMETER GREATER THAN ¾ INCH, OR SMALL ROOTS IN A DENSE STATE, SHOULD BE GRUBBED AND COMPLETELY REMOVED. PROOF-ROLLING THE CLEARED SURFACE IS RECOMMENDED TO LOCATE ANY UNFORESEEN SOFT AREAS OR UNSUITABLE SURFACES OF WHICH THE USER LOOSE - FIVE FEET BELOW THE TOP 30 TO 40 FEET OF THE EXISTING SURFACE. IF THE FILL SOURCE IS NOT SUFFICIENTLY CLOSEBY (IF REQUIRED), ONE COVERAGE CONSIDERS OF PARALLEL PASSES OF THE VIBRATORY ROLLER TRAVELING AT "WALKING SPEED," EACH PASS SHOULD OVERLAP THE PRECEDING PASS BY 50% TO INSURE COMPLETE COVERAGE. SUBSEQUENT COVERAGES SHOULD BE CONDUCTED IN A DIRECTION PERPENDICULAR TO THE FIRST PASS. AFTER COVERAGE HAS BEEN OBTAINED, THE SURFACE SHOULD BE PROOF-ROLLED TO PRODUCE A DENSITY EQUIVALENT TO 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY VALUE FOR THE MATERIAL. UP TO TEN FEET IN THE BUILDING AREA, ADDITIONAL PASSES MAY BE REQUIRED IF THESE MINIMUM DENSITY REQUIREMENTS ARE NOT ACHIEVED.
- FILL REPLACEMENTS:**
- WHERE FILL IS TO BE PLACED ON NATURAL GROUND, THE SURFACE MUST FIRST BE PREPARED AS OUTLINED ABOVE. THE FILL AT GRADE SHOULD EXTEND AT LEAST FIVE FEET FROM THE EXCAVATED AREA TO THE ADJACENT EXISTING GROUND.
 - FILL SHOULD BE A UNIFORM FREE DRAINING GRANULAR SOIL (CLEAN SAND) AND BE PLACED IN LAYERS NOT TO EXCEED 12 INCHES LOOSE MEASURE AND BE COMPACTED AS OUTLINED ABOVE. SUFFICIENT COMPACTIVE EFFORT SHOULD BE APPLIED TO OBTAIN A MINIMUM OF 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY VALUE.
 - EXCAVATION AND BACKFILLING:
 - WHEN EXCAVATION AND BACKFILLING ARE REQUIRED, THE SOLIDS SHOULD BE REMOVED TO THE SPECIFIED DEPARTMENT SUFFICIENT COMPACTIVE EFFORT SHOULD BE APPLIED TO THE EXCAVATED SURFACE TO OBTAIN A MINIMUM OF 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM VALUE. BACKFILL SHALL BE UNIFORM FREE DRAINING GRANULAR SOIL (CLEAN SAND) AND BE PLACED IN LAYERS NOT TO EXCEED 12 INCHES LOOSE MEASURE. SUFFICIENT COMPACTIVE EFFORT SHOULD BE APPLIED TO EACH LAYER TO OBTAIN AT LEAST 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM VALUE. BACKFILL ON THE EXCAVATED SURFACE SHALL BE BACKFILLED BE COMPLETED WITH A SELF-PROPELLED STEEL DRUM VIBRATORY ROLLER HAVING AN OPERATING WEIGHT MINIMUM APPLIED FORCE OF 180 TONS.
4. GRASS STRIP:
- HEAVY RAINFALL AND/OR A HIGH-WATER TABLE MAY OCCUR BEFORE THE EARTHWORK COMMENCES, OR DURING THE EARTHWORK OPERATION, WHEN THESE CONDITIONS OCCUR AND THE SITE PREPARATION CANNOT BE ACHIEVED AS SPECIFIED, AN EXCAVATION OF THE EXISTING CONDITIONS SHOULD BE CONDUCTED TO REMOVE THE EXCESS WATER.
5. PAVING AREAS SUITABLE FILL MATERIAL AND THE COMPACTION OF FILL SOLIDS:
- A. THE MATERIAL TO BE PLACED IN THESE AREAS SHOULD BE SUBJECT TO A GENERAL GUIDE TO AID THE CONTRACTOR, USUALLY, THE BEST FILLS WITH 3 TO 12 PERCENT BY DRY WEIGHT OF MATERIAL PASSING THE U.S. STANDARDS NO. 200 SIEVE WITH PROPER MOISTURE CONTROL. THESE SOLIDS SHOULD DENSITY USING VIBRATORY COMPACTOR METHODS. SOILS WITH MORE THAN 12% PASSING THE NO. 200 SIEVE WILL BE MORE

EXCAVATION FOR STRUCTURES AND PIPES

1. EARTHWORK AND RELATED OPERATIONS PERFORMED ON STRUCTURES AND PIPES SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 125 AND OTHER SECTIONS OF THE SPECIFICATIONS.
2. REMEDIAL OF UNSUITABLE ORGANIC OR PLASTIC MATERIAL SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE AND SHALL BE INCIDENTAL TO OTHER WORK.
3. UTILIZATION OF MATERIALS WITHIN THE WORK LIMITS SHALL BE AS DIRECTED BY THE GEOTECHNICAL ENGINEER UNLESS OTHERWISE SHOWN ON THE PLANS.
- PIPE AND STRUCTURE BACKFILL**
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE IF EXCAVATED SOILS MEET THE REQUIREMENTS OF THE PROJECT PLANS AND SPECIFICATIONS RELATIVE TO TYPICAL CLASSIFICATION, PIPE AND STRUCTURE BACKFILL. MATERIAL SHALL BE LIMITED TO MATERIAL CLASSIFIED AS A-1, A-3 AND A-4 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE COMPACTED IN ACCORDANCE WITH F.O.D. SECTION 125 REQUIREMENTS.
2. IF THE BACKFILL MATERIAL IS CLASSIFIED AS A-2-4 BASED ON AASHTO M-145 CRITERIA, THE MAXIMUM PERMISSIBLE MOISTURE CONTENT SHALL BE 2 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT.
- CLEAN-UP**
1. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A NEAT CONDITION AT ALL TIMES AND SHALL RESTORE/REPAIR ALL DRIVEWAYS, SIDEWALKS, UTILITIES AND OTHER AREAS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIALS, DEBRIS, EQUIPMENT, ETC., FROM THE JOBSITE IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION OPERATIONS.
3. UNLESS OTHERWISE SPECIFIED OR NOTED, ALL DISTURBED AREAS TO BE RESTORED BY CONTRACTOR TO PRE-CONSTRUCTION CONDITION OR BETTER PRIOR TO THE COMMENCEMENT OF THE NEXT PHASE OF CONSTRUCTION.

CLEAN-UP

1. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A NEAT CONDITION AT ALL TIMES AND SHALL RESTORE/REPAIR ALL DRIVEWAYS, SIDEWALKS, UTILITIES, LANDSCAPING, IRRIGATION SYSTEMS, ETC., AFFECTED BY CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL REMOVE ALL EXCESS MATERIALS, DEBRIS, EQUIPMENT, ETC., FROM THE JOBSITE IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION OPERATIONS.
3. FOR FURTHER SITE MAINTENANCE REQUIREMENTS, THE CONTRACTOR IS REFERRED TO THE "AGREEMENT BETWEEN OWNER AND CONTRACTOR".
4. UNLESS OTHERWISE SPECIFIED OR NOTED, ALL DISTURBED AREAS TO BE RESTORED BY CONTRACTOR TO PRE-CONSTRUCTION CONDITION OR BETTER PRIOR TO ACCEPTANCE BY THE OWNER OR LOCAL APPROVING AUTHORITY.

SOIL EROSION PLAN

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A SPECIFIC SOIL EROSION PLAN. IN GENERAL, THE SOIL EROSION PLAN SHALL REQUIRE THAT ALL ON-SITE SOILS WILL REMAIN ON-SITE AND WILL NOT ERODE INTO THE ADJACENT ROADSIDE SWALES, ADJACENT PROPERTIES, OR RETENTION DITCHES. ALL EROSION CONTROL MEASURES SHALL BE DESIGNED TO PREVENT EROSION OF ANY TYPE. THE CONTRACTOR SHALL SCAFFRY AREAS TO PLACE VARIOUS PIPE. AFTER PLACEMENT OF THE PIPE, THESE TRENCHES SHALL BE BACKFILLED, AND COMPACTED TO 90% DENSITY. PRIOR TO DISCHARGE FROM THE SITE, SILTATION BARRIERS SHALL BE UTILIZED AS PER FLORIDA DEPARTMENT OF TRANSPORTATION INDEX 102. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES. DISCHARGES SHALL BE LIMITED TO 10% OF THE TOTAL DRAINAGE AREA REQUIRED TO COMPLY WITH ALL STATE WATER QUALITY CRITERIA, SPECIFICALLY, NO OFF-SITE DISCHARGES WILL BE ALLOWED WHICH EXCEED THE 24 HOUR TURBIDITY CRITERIA. SOIL SHALL MATCH EXISTING SOIL BEING REPLACED. ALL IRRIGATION LINES DISTURBED DUE TO THIS WORK SHALL BE REPAIRED WITHIN 24 HOURS OF THE DISTURBANCE.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE GUIDELINES AND SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988).

2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE GUIDELINES AND SPECIFICATIONS IN CHAPTER 6 OF THE FLORIDA LAND DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION, 1988).

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VERTICAL DATUM NAVD. 88		
DRAWN:	D.W.	3-5-2018
PROJECT:	A0102	
FILE: A0102-14_GENERAL NOTES.dwg		



THE
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CERTIFICATE OF
AUTHORIZATION: 28246

GENERAL NOTES

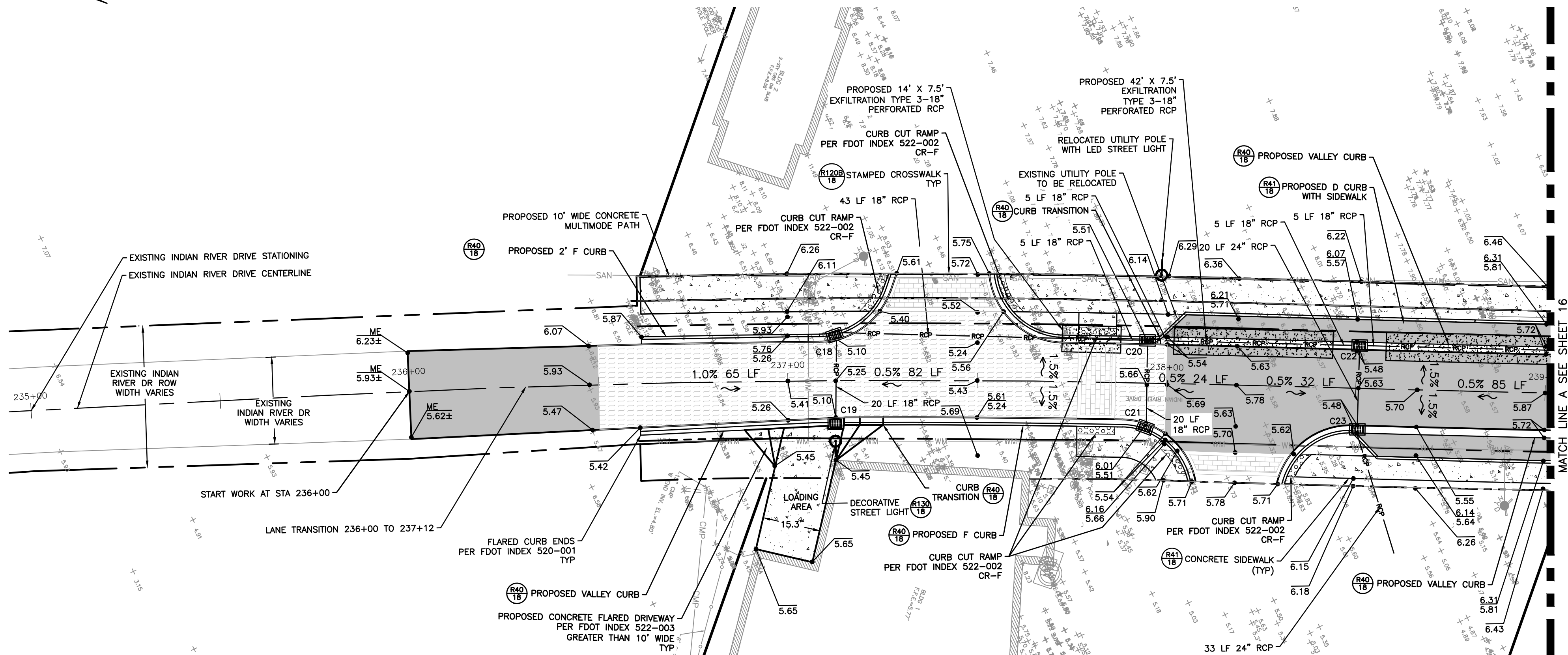
CONCHY JOE'S

JENSEN BEACH FLORIDA



SHEET NO.

14



- NOTE:
1. CATCH BASINS ADJACENT TO EXFILTRATION TO HAVE MIN 3' SUMP.
 2. ALL CATCH BASINS TO HAVE MIN 18" SUMP.
 3. INDIAN RIVER DRIVE WILL BE RECONSTRUCTED FROM STA 236+50 TO STA 238+00.
 4. INDIAN RIVER DRIVE WILL BE MILLED, LEVEL TO GRADE, AND PAVED FROM STA 236+00 TO STA 236+50 AND FROM STA 238+00 TO 242+50.
 5. ANY CHANGES TO THE FINISHED FLOOR ELEVATION MUST BE APPROVED BY THE ENGINEER.
 6. SEE FPL PLAN FOR ULTIMATE UTILITY POLE LOCATIONS.
 7. POLLUTION RETARDANT Baffle SHALL BE INCLUDED FOR STRUCTURES ADJACENT TO EXFILTRATION TRENCH.

CURB INLET
FDOT INDEX 425-024
STATION 237+13, 11' LT
C18-TYPE P9 INLET
RIM EL 5.10
INV EL 1.00 (N)
INV EL 1.00 (E)

TYPE C INLET
STATION 237+13, 11' RT
C19-TYPE VALLEY GRATE INLET
RIM EL 5.10
INV EL 1.00 (W)

STATION 237+95, 11' LT
C20-TYPE P9 INLET
RIM EL 5.51
INV EL 1.00 (N)
INV EL 1.00 (S)
INV EL 1.00 (E)

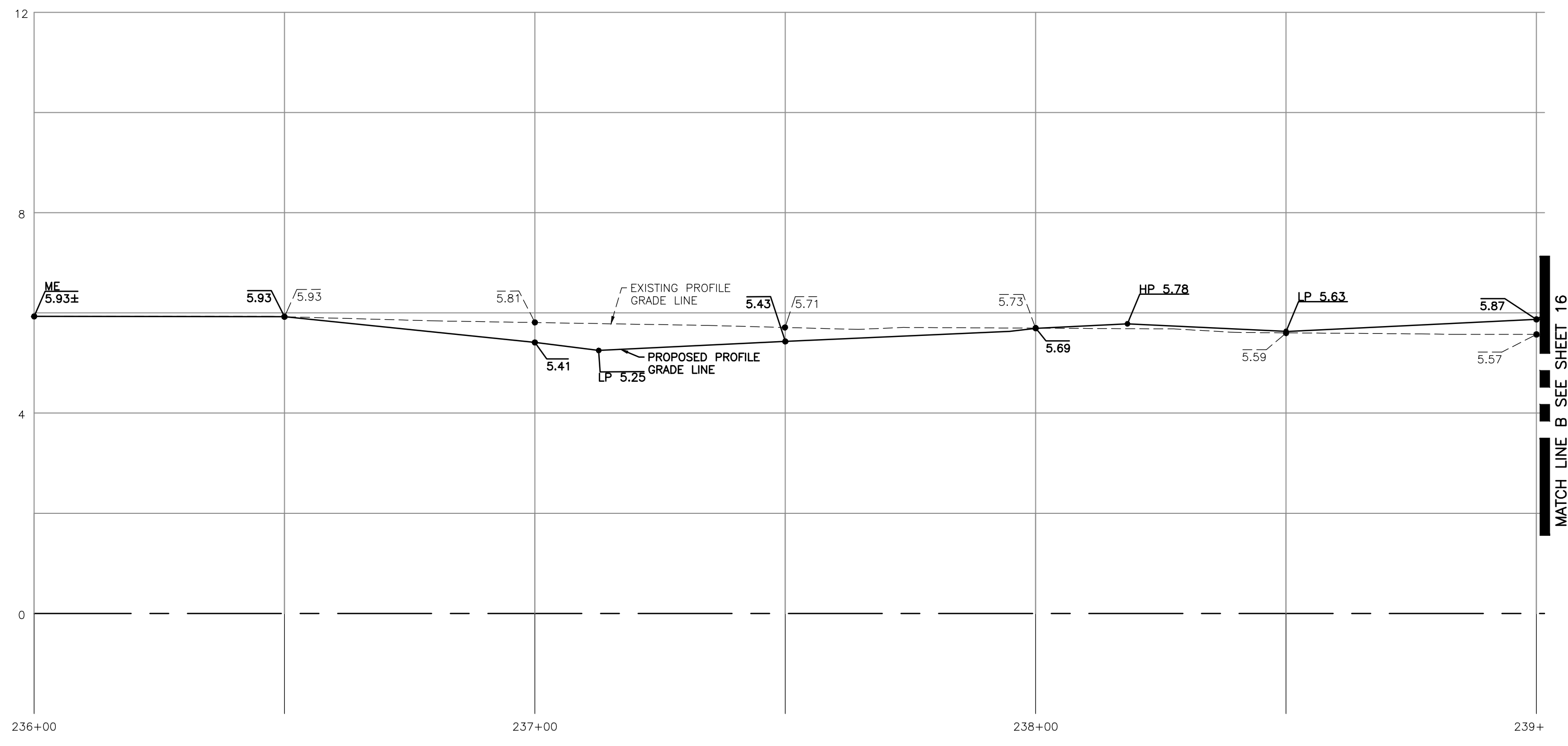
STATION 237+95, 11' RT
C21-TYPE P9 INLET
RIM EL 5.51
INV EL 1.00 (W)

STATION 238+51, 11' LT
C22-VALLEY GUTTER INLET
RIM EL 5.48
INV EL 1.00 (N)
INV EL 1.00 (S)
INV EL 1.00 (E)

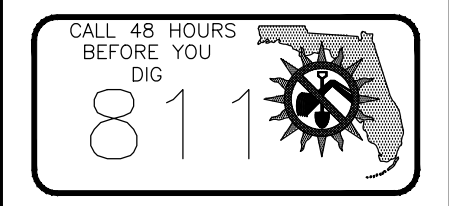
STATION 238+51, 11' RT
C23-VALLEY GUTTER INLET
RIM EL 5.48
INV EL 1.00 (W)
INV EL 0.00 (E)

LEGEND

- PROPOSED MILLING, LEVELING, WIDENING, AND REPAVING
- PROPOSED RECONSTRUCTION
- STAMPED CROSSWALK



NO.	DATE	REVISION	BY
1	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM
2	1-8-20	REVISIONS PER MARTIN COUNTY	FM
3	12-10-19	PER MARTIN COUNTY COMMENTS	FM
4	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHWL)	AT
5	8-20-19	PER MARTIN COUNTY COMMENTS	AT



VERTICAL DATUM NAVD 88	D.W.	3-5-2018
DRAWN:	PROJECT:	40102
FILE:	BASE:	Indian River Dr.dwg



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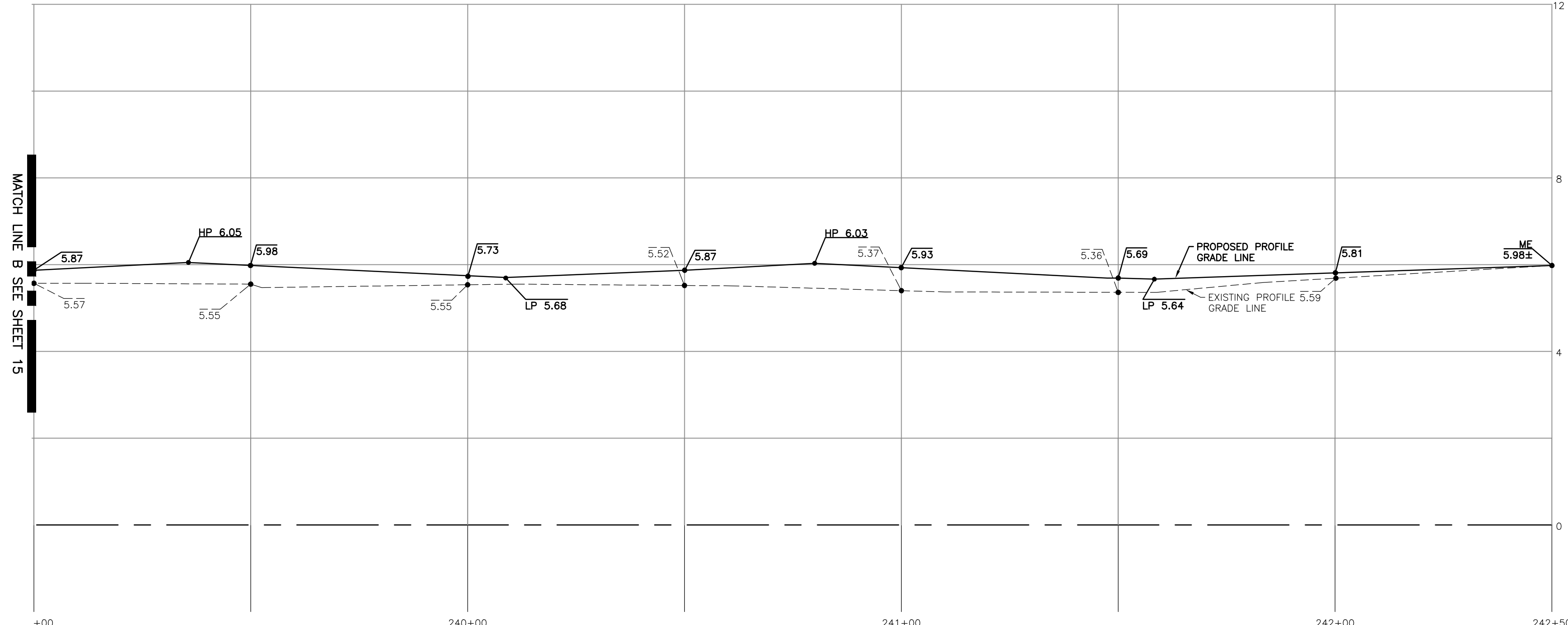
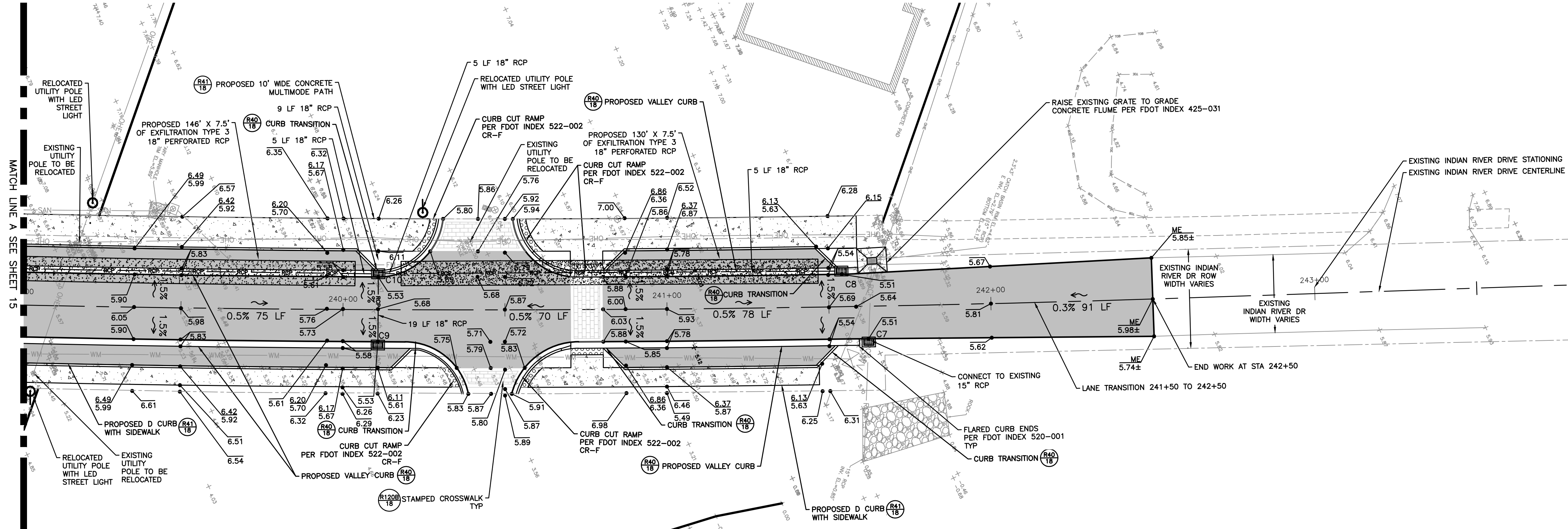
CERTIFICATE OF AUTHORIZATION: 28246

INDIAN RIVER DR
PAVING, GRADING, &
DRAINAGE PLAN

CONCHY JOE'S
JENSEN BEACH, FLORIDA



SHEET NO.
15



- NOTE:
1. CATCH BASINS ADJACENT TO EXFILTRATION TO HAVE MIN 3' SUMP.
 2. ALL CATCH BASINS TO HAVE MIN 18" SUMP.
 3. INDIAN RIVER DRIVE WILL BE RECONSTRUCTED FROM STA 236+50 TO STA 238+00.
 4. INDIAN RIVER DRIVE WILL BE MILLED, LEVEL TO GRADE, AND PAVED FROM STA 236+00 TO STA 236+50 AND FROM STA 238+00 TO 242+50.
 5. ANY CHANGES TO THE FINISHED FLOOR ELEVATION MUST BE APPROVED BY THE ENGINEER.
 6. POLLUTION RETARDANT BAFFLE SHALL BE INCLUDED FOR STRUCTURES ADJACENT TO EXFILTRATION TRENCH.
 7. SEE FPL PLAN FOR ULTIMATE UTILITY POLE LOCATIONS.
 8. POLLUTION RETARDANT BAFFLE SHALL BE INCLUDED FOR STRUCTURES ADJACENT TO EXFILTRATION TRENCH.

TYPE C INLET
STATION 241+64, 11 RT
C7-CAST IRON GRATE
RIM EL 5.51
INV EL 1.60 (W)
INV EL 1.60 (E)

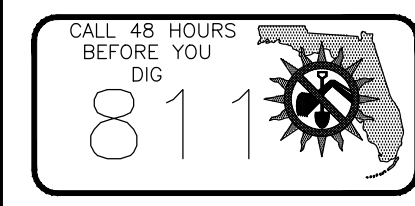
STATION 241+54, 11 LT
C8-VALLEY GUTTER INLET
RIM EL 5.51
INV EL 1.00 (S)

STATION 240+11, 11' RT
C9-VALLEY GUTTER INLET
RIM EL 5.53
INV EL 1.00 (W)

STATION 240+11, 11 LT
C10-VALLEY GUTTER INLET
RIM EL 5.53
INV EL 1.00 (N)
INV EL 1.00 (S)
INV EL 1.00 (E)

- LEGEND
- PROPOSED MILLING, LEVELING, WIDENING, AND REPAVING
 - PROPOSED RECONSTRUCTION
 - STAMPED CROSSWALK

NO.	DATE	REVISION	BY
1	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM
2	1-8-20	REVISIONS PER MARTIN COUNTY	FM
3	12-10-19	PER MARTIN COUNTY COMMENTS	FM
4	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHW)	AT
5	8-20-19	PER MARTIN COUNTY COMMENTS	AT



VERTICAL DATUM NAVD 88	D.W.	3-5-2018
DRAWN:	PROJECT:	A0102
FILE:	BASE:	Indian River Dr.dwg



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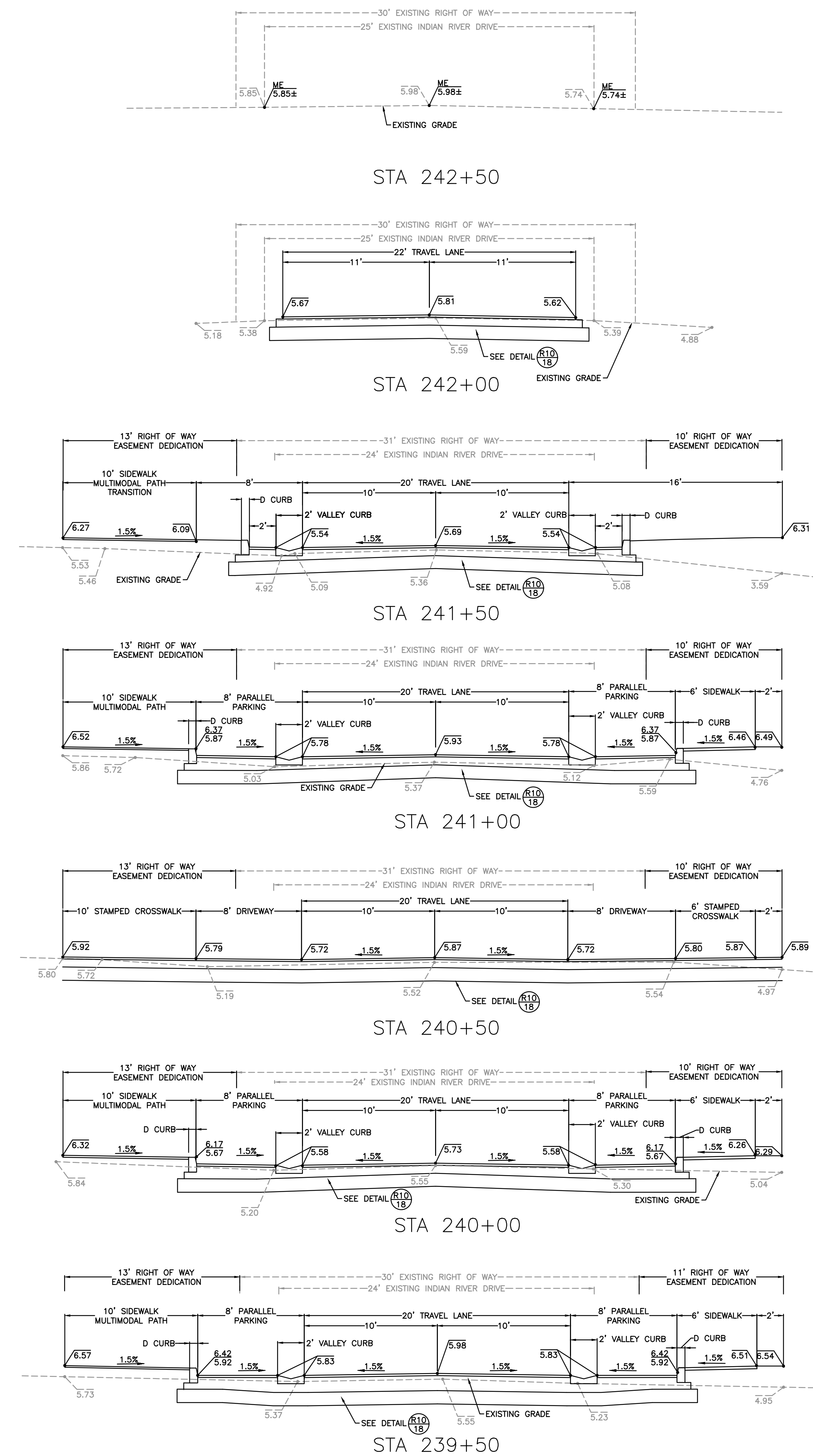
INDIAN RIVER DR
PAVING, GRADING, &
DRAINAGE PLAN

CONCHY JOE'S
JENSEN BEACH, FLORIDA

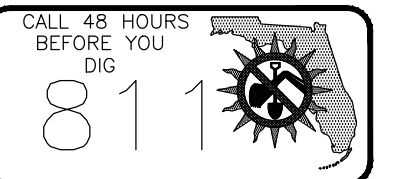


SHEET NO.

16



FM	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS	FM
FM	1-8-20	REVISIONS PER MARTIN COUNTY	FM
FM	12-10-19	PER MARTIN COUNTY COMMENTS	FM
AT	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHWL)	AT
AT	8-20-19	PER MARTIN COUNTY COMMENTS	AT
BY	NO	DATE	REVISION



DRAWN:		D.W.	3-5-2018
PROJECT:		A0102	
FILE: BASE - Indian River Dredg			



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INDIAN RIVER DR SECTIONS

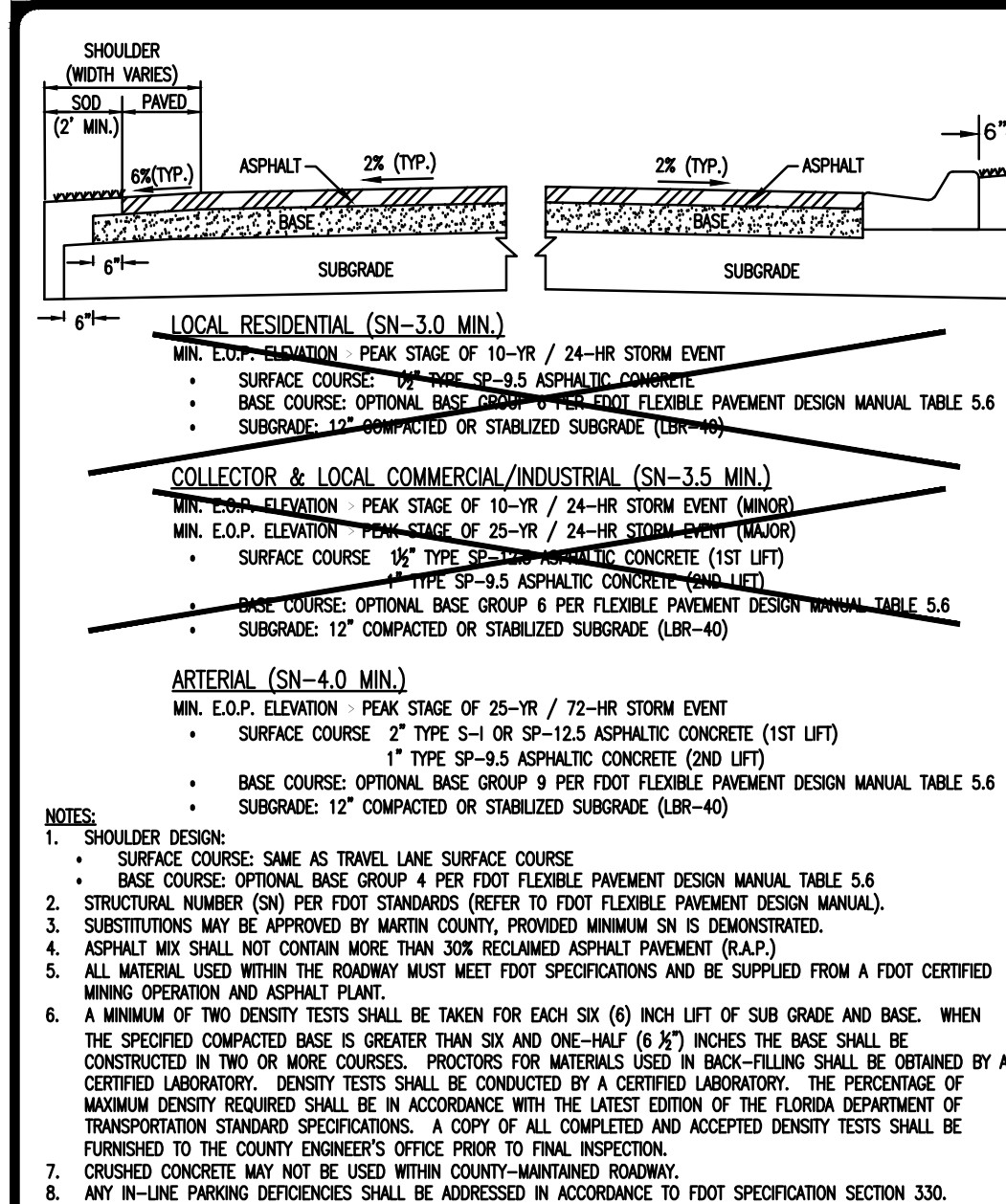
CONCHY JOE'S

WENSEN BEACH, FLORIDA

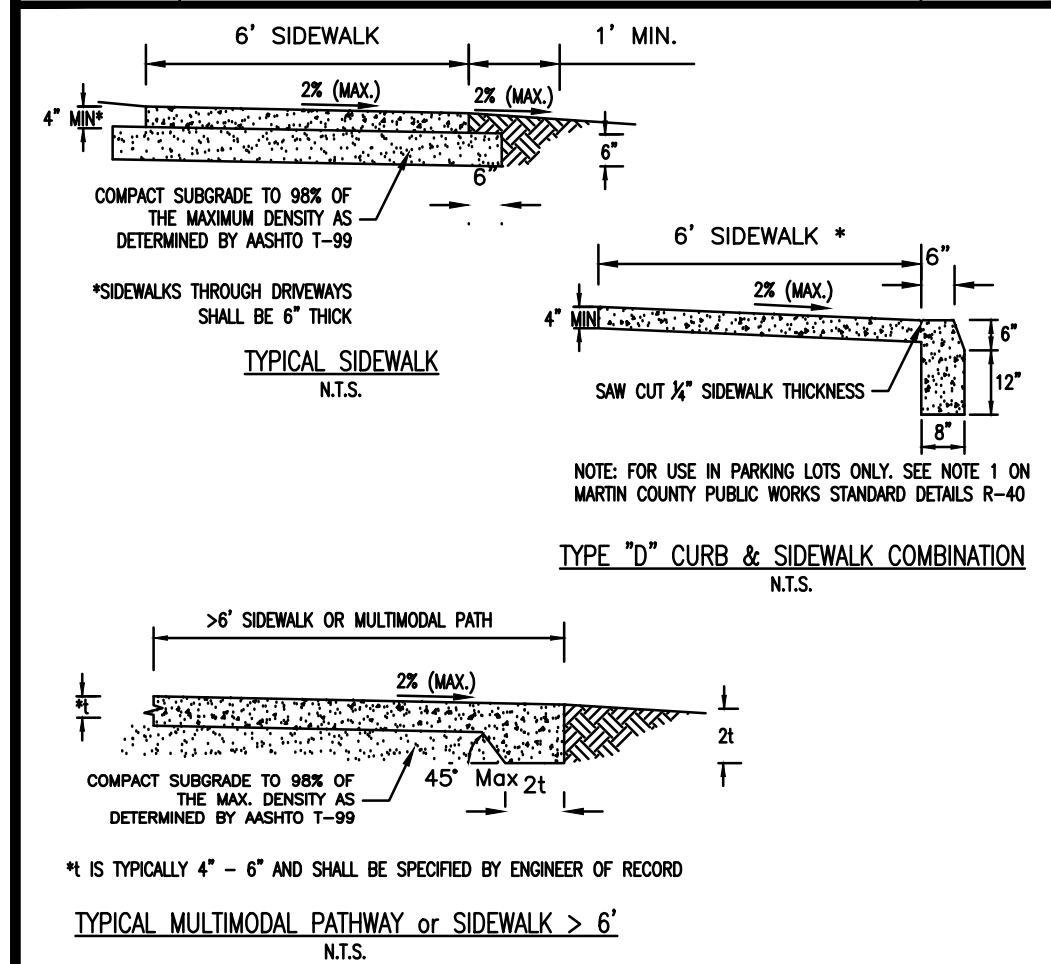


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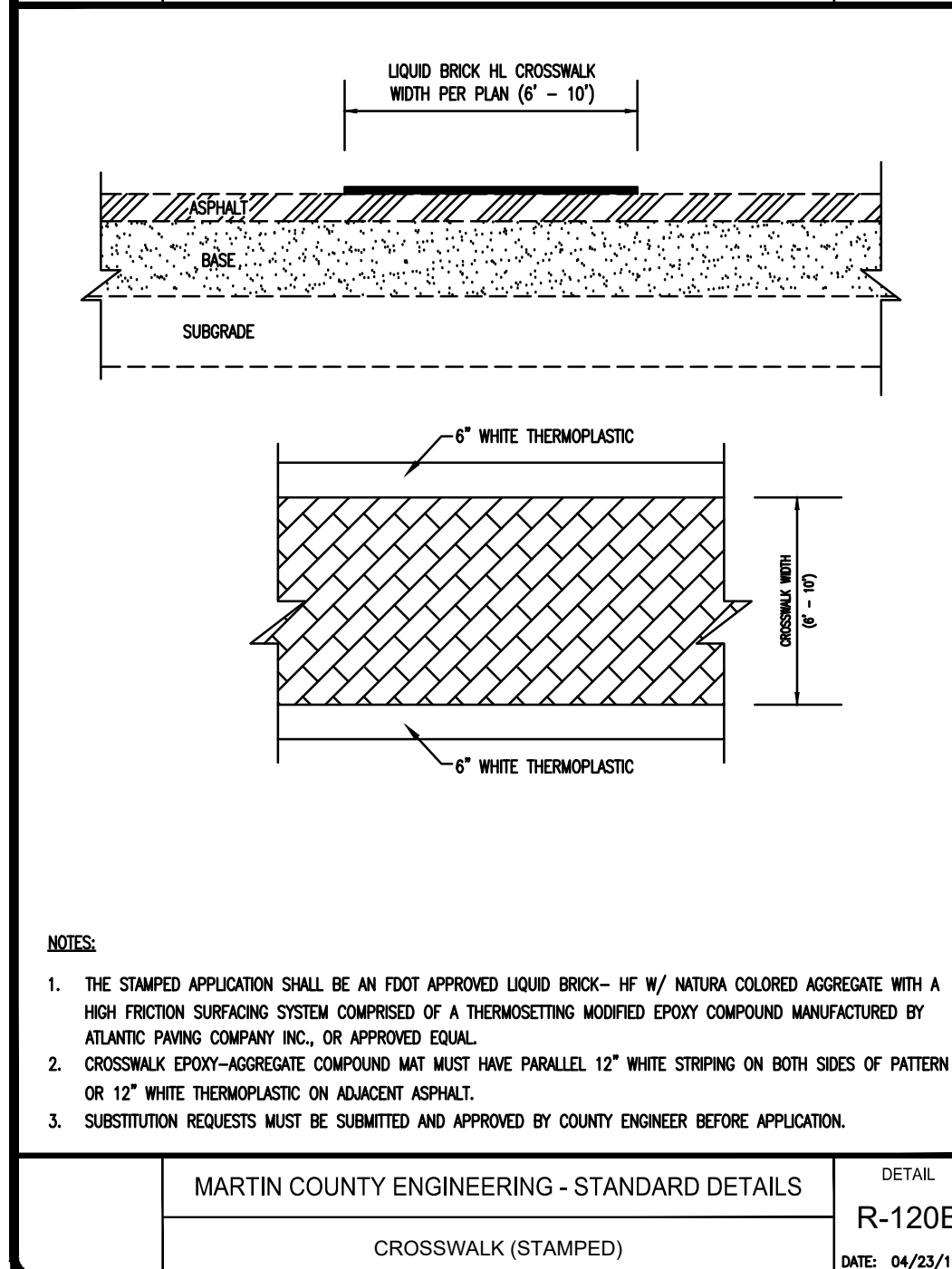
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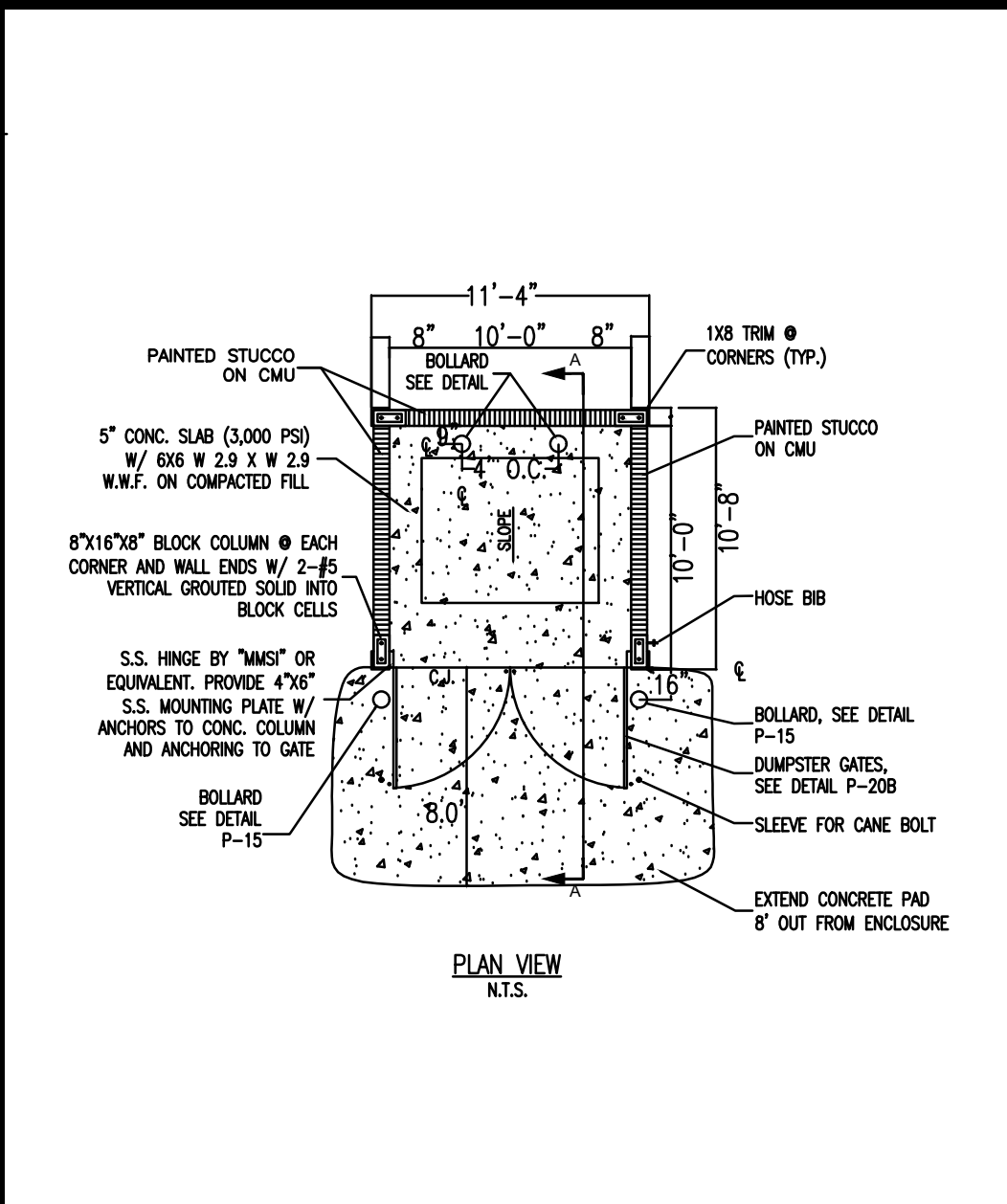
MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-10
FLEXIBLE PAVEMENT	DATE: 04/23/19



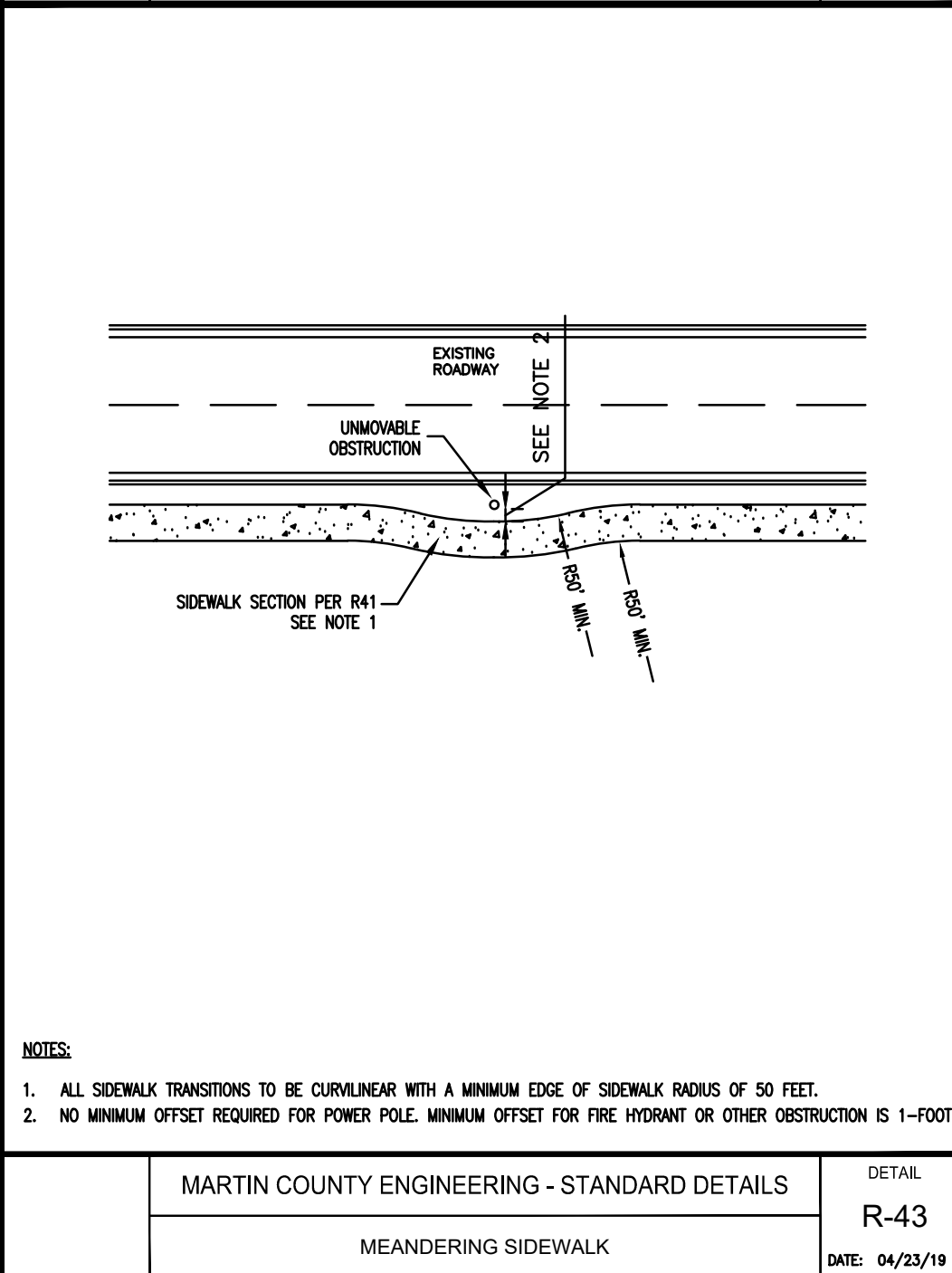
MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-41
SIDEWALK	DATE: 04/23/19



MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-120B
CROSSWALK (STAMPED)	DATE: 04/23/19

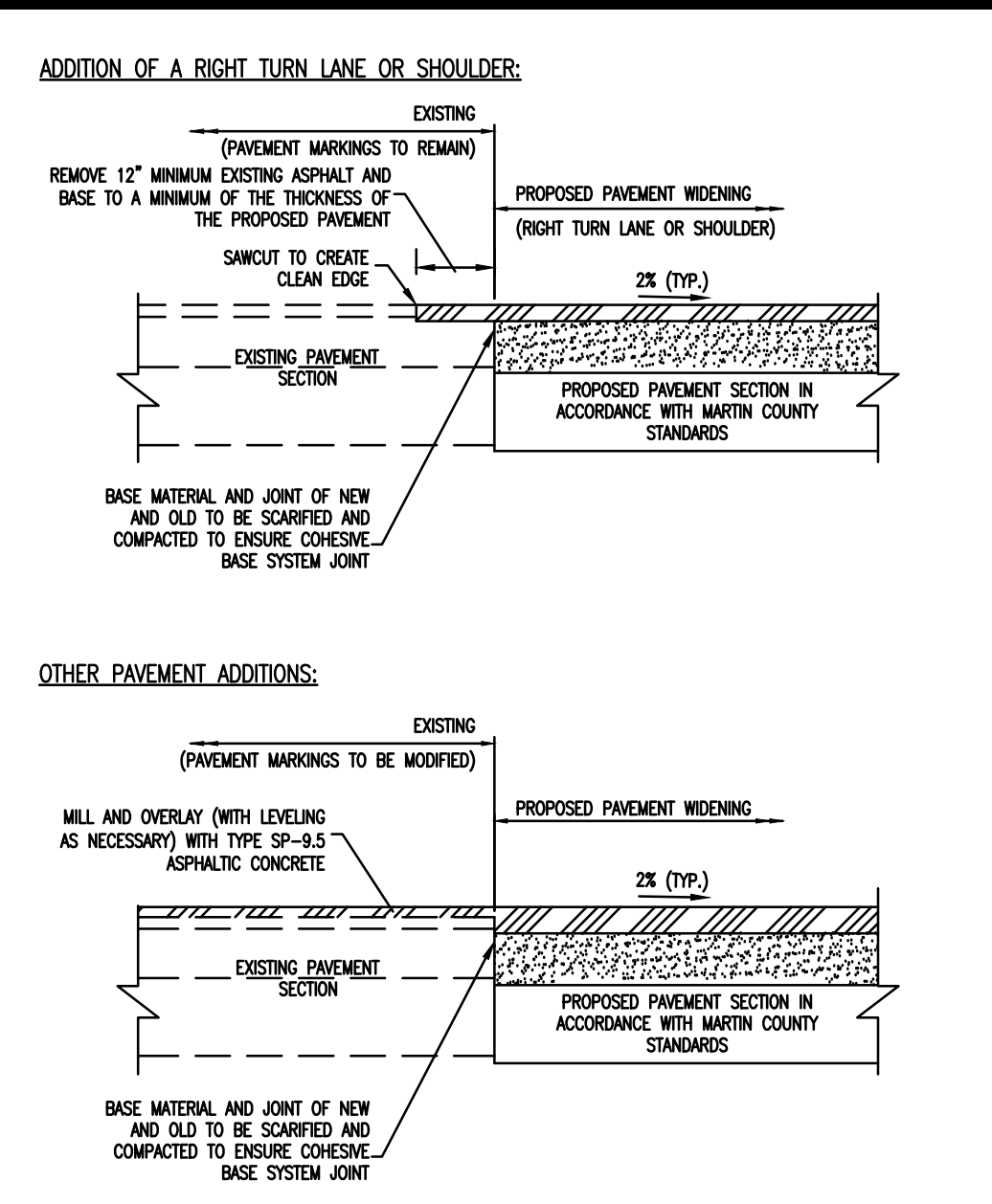


MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL P-20A
DUMPSTER ENCLOSURE	DATE: 04/23/19

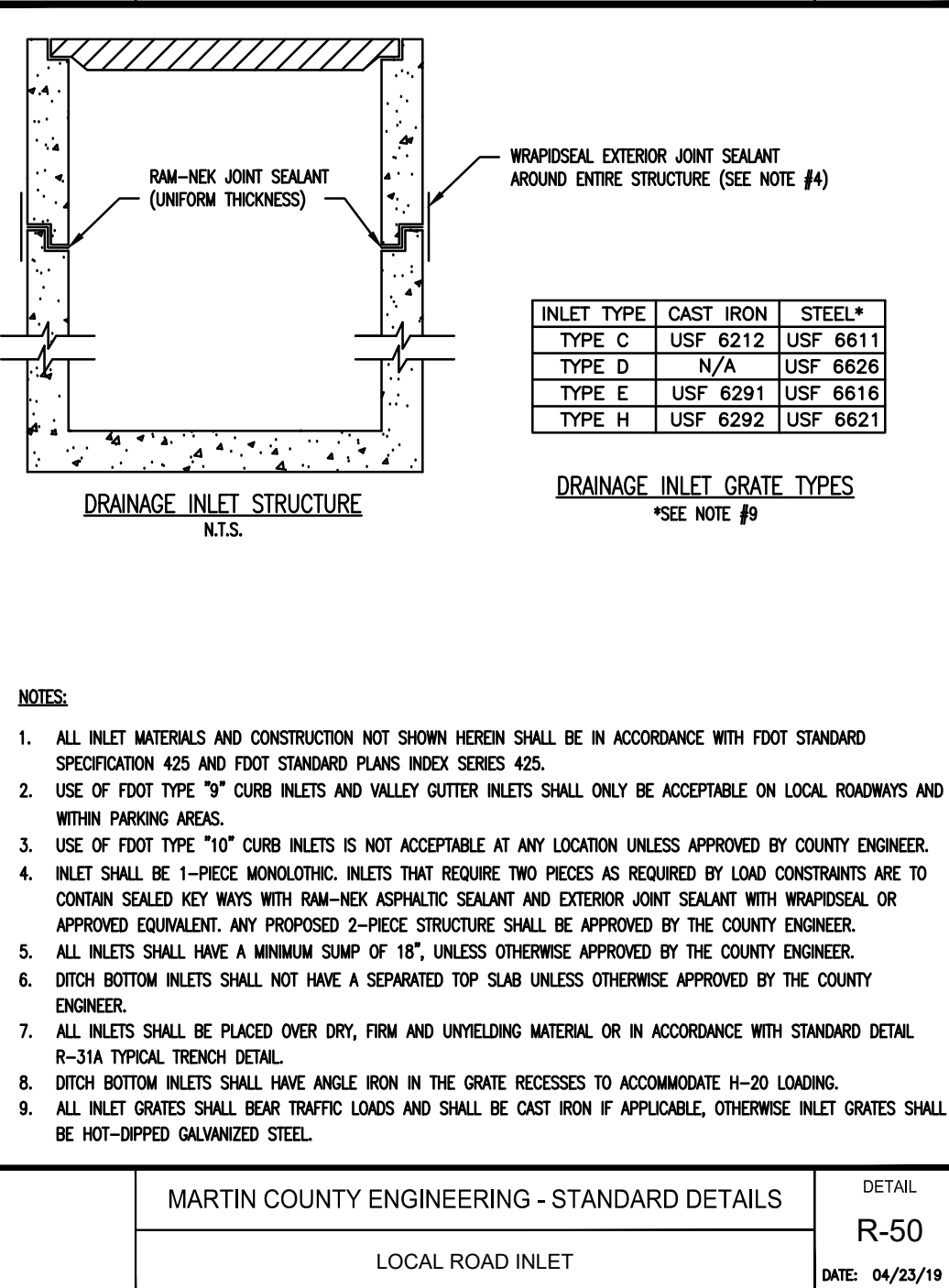


MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-43
MEANDERING SIDEWALK	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-130
STREET LIGHT	DATE: 04/23/19

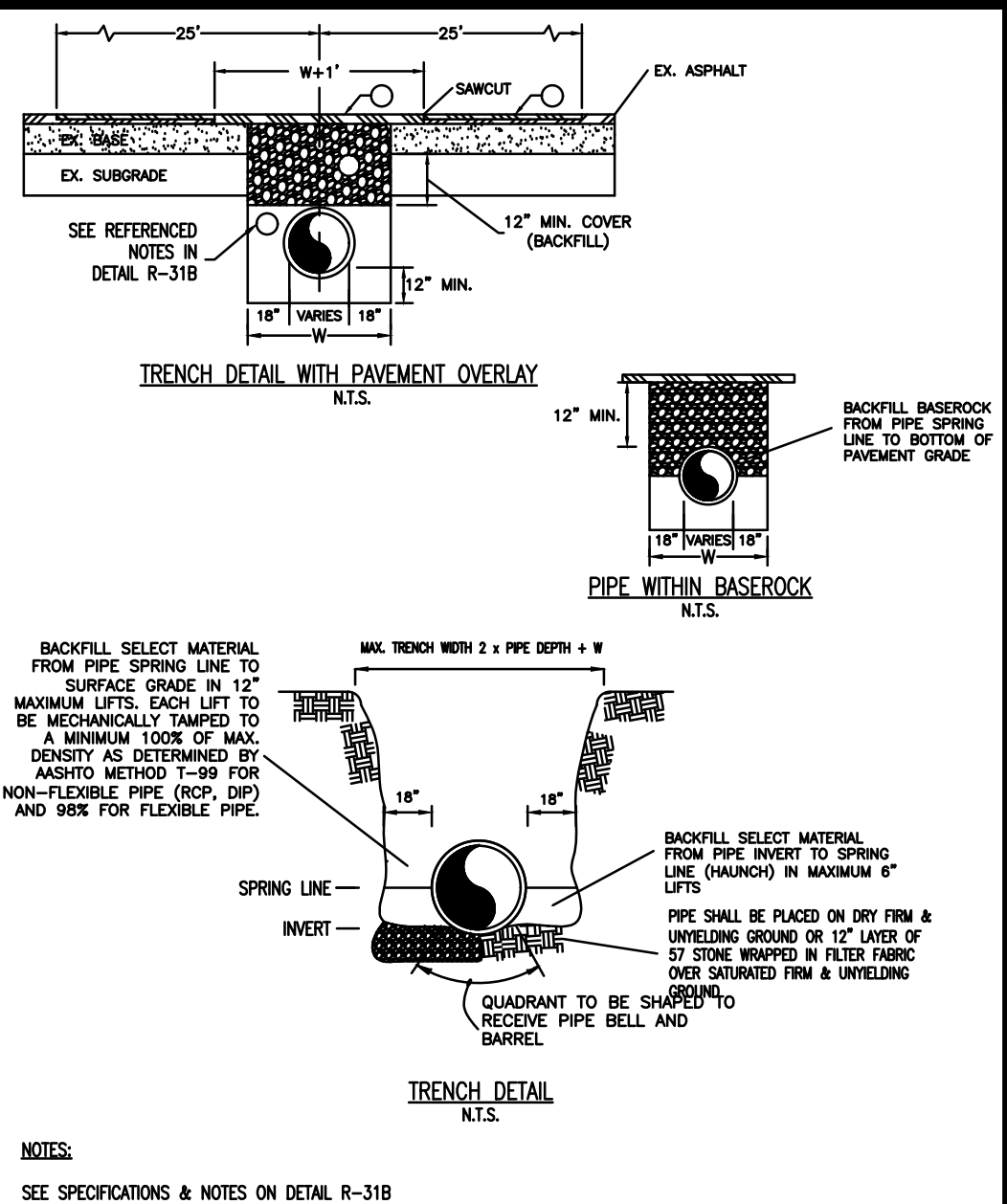


MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-30
PAVEMENT WIDENING	DATE: 04/23/19

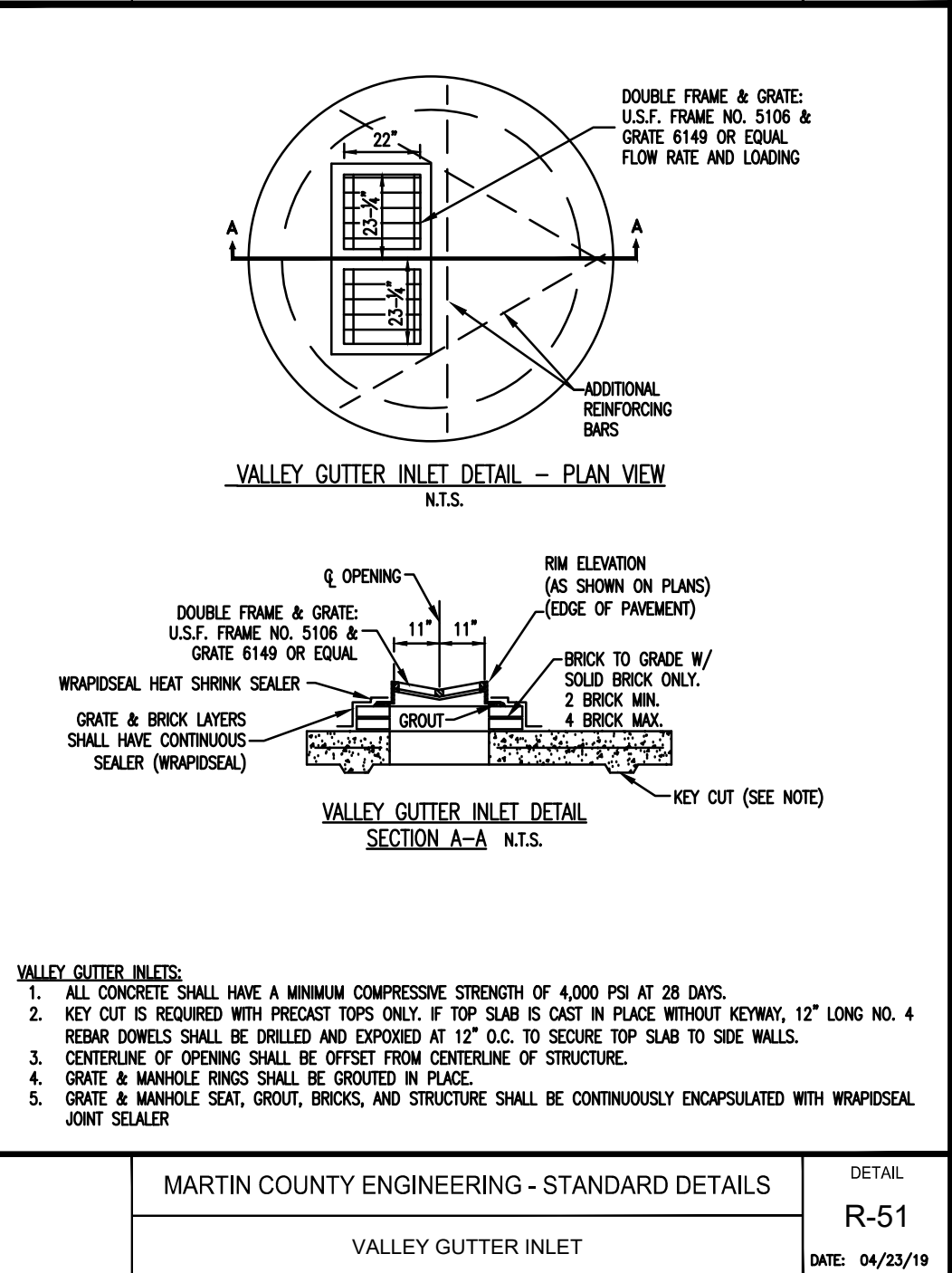


MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-50
LOCAL ROAD INLET	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-51
VALLEY GUTTER INLET	DATE: 04/23/19



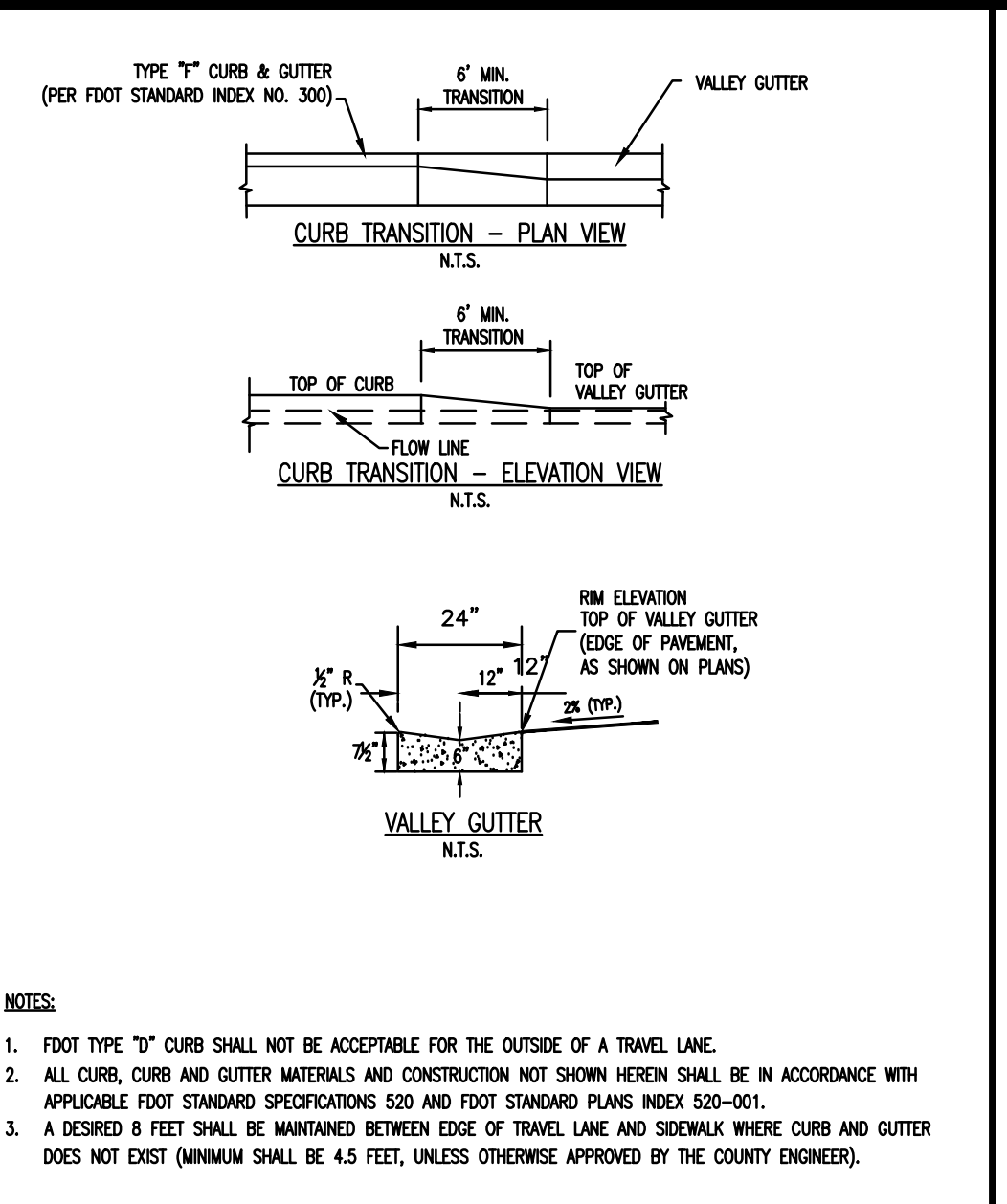
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TYPICAL OPEN CUT TRENCH	DATE: 04/23/19



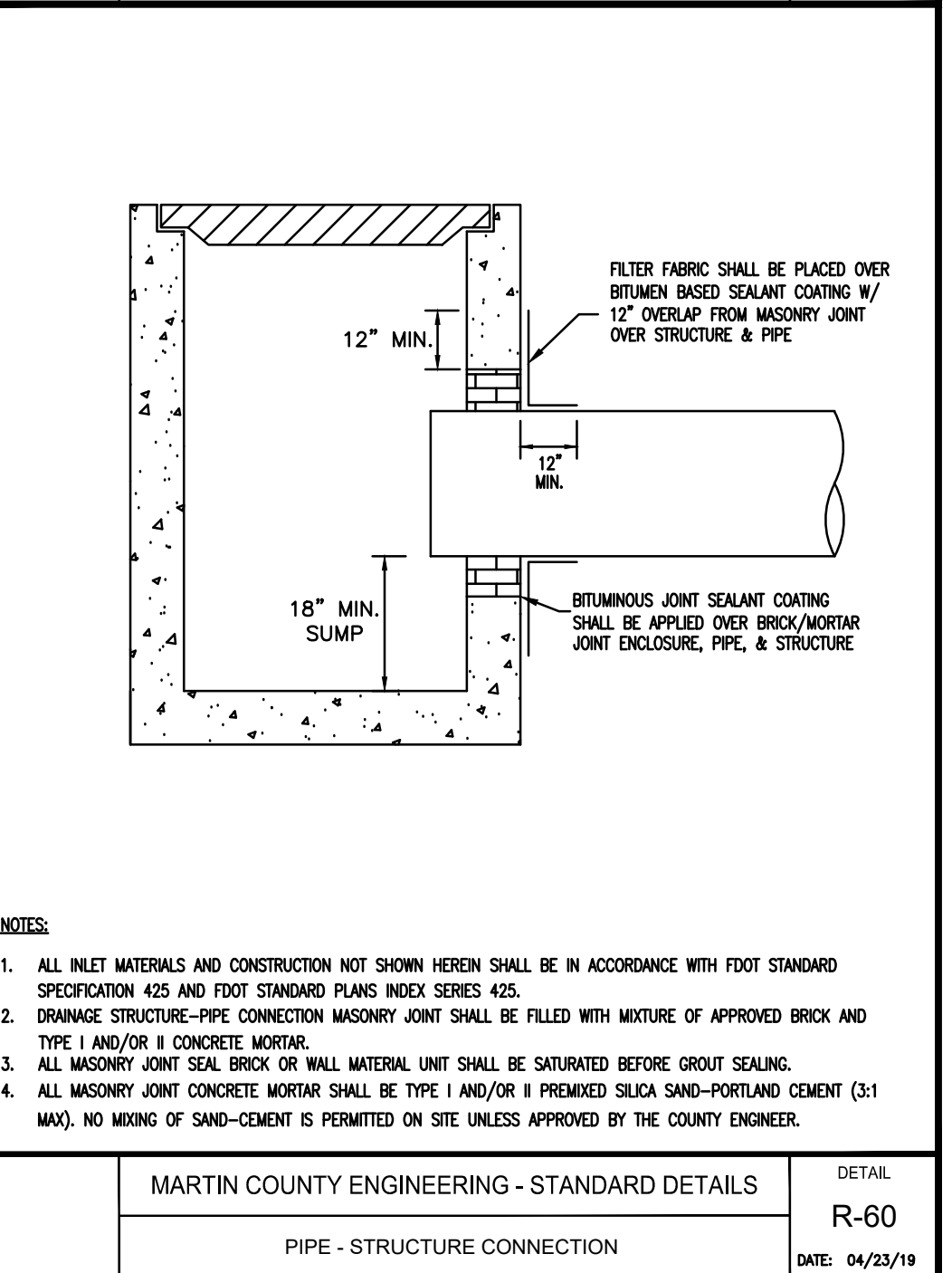
MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-51
VALLEY GUTTER INLET	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19



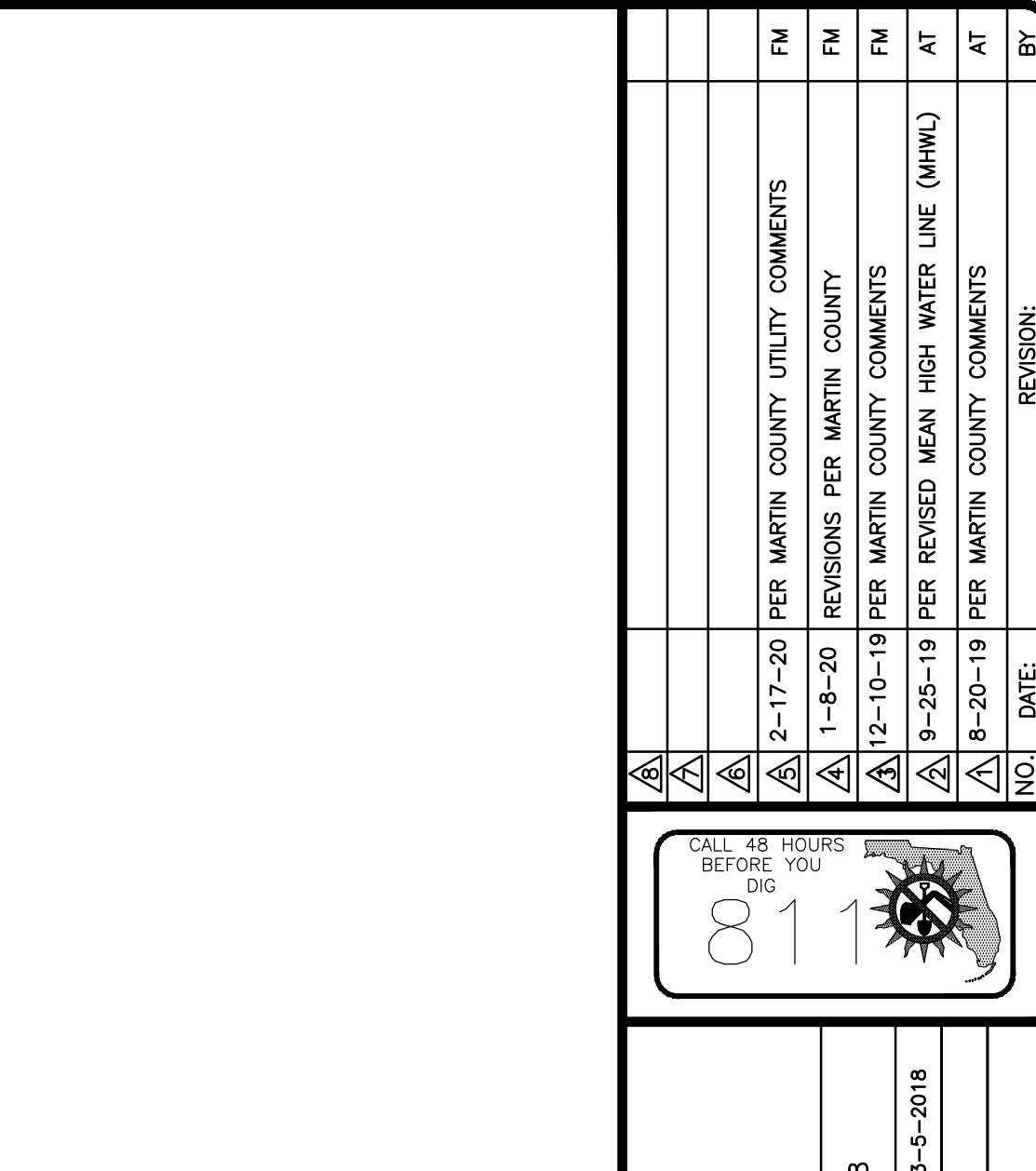
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CURB & GUTTER	DATE: 04/23/19



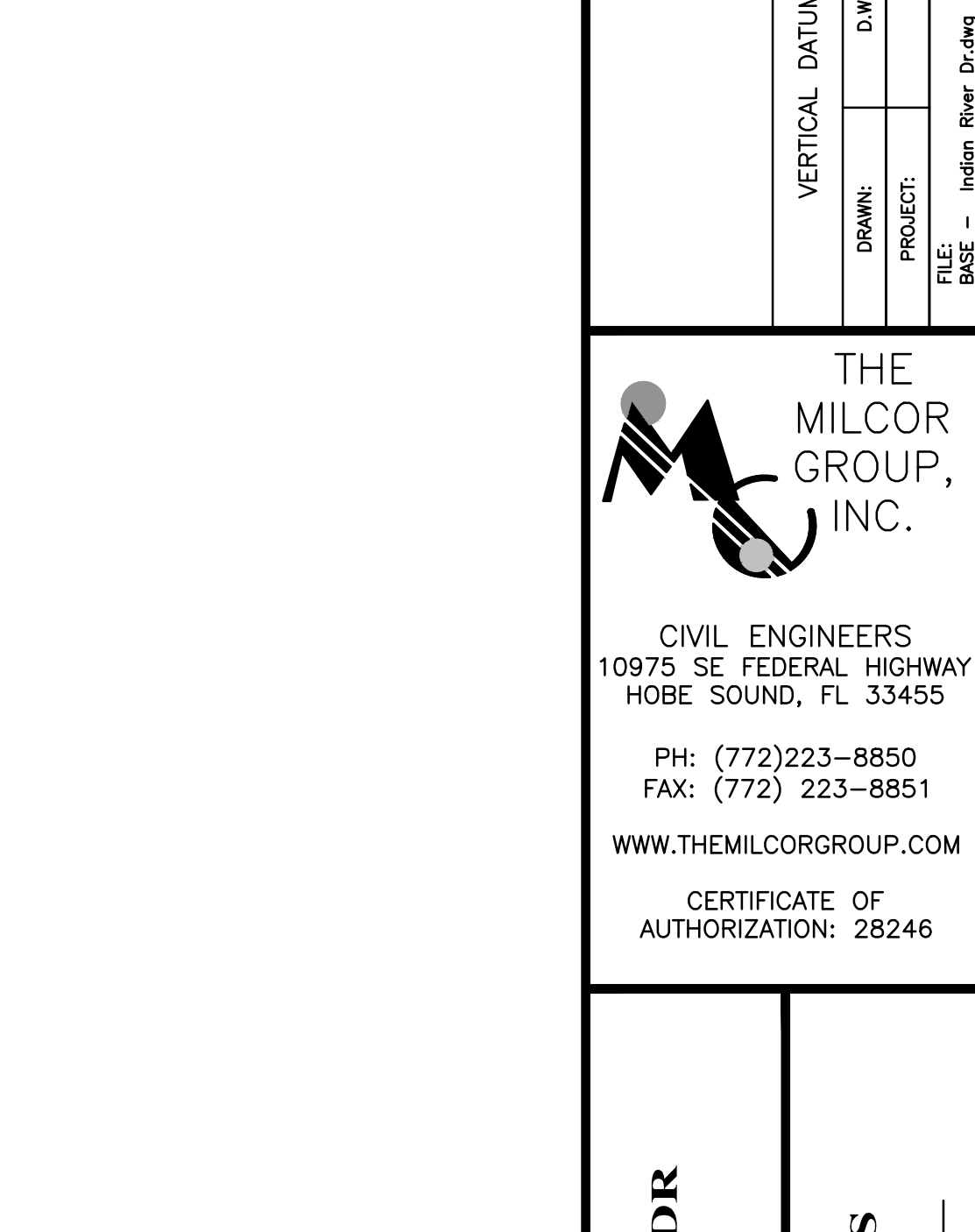
MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19



MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19



MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

MARTIN COUNTY ENGINEERING - STANDARD DETAILS	DETAIL R-60
PIPE - STRUCTURE CONNECTION	DATE: 04/23/19

811

CALL 48 HOURS BEFORE YOU DIG

811

VERTICAL DATUM NAVD 88

DRAWN: 3-5-2018

PROJECT: 40102

FILE: BASE - Indian River Dr.dwg

THE MILCOR GROUP, INC.

CIVIL ENGINEERS

10975 SE FEDERAL HIGHWAY

HOBBS SOUND, FL 33455

PH: (772)223-8850

FAX: (772) 223-8851

WWW.THEMILCORGROUP.COM

CERTIFICATE OF AUTHORIZATION: 28246

INDIAN RIVER DR DETAILS

CONCHY JOE'S

JENSEN BEACH, FLORIDA

KENNETH A. JOE

PROFESSIONAL ENGINEER

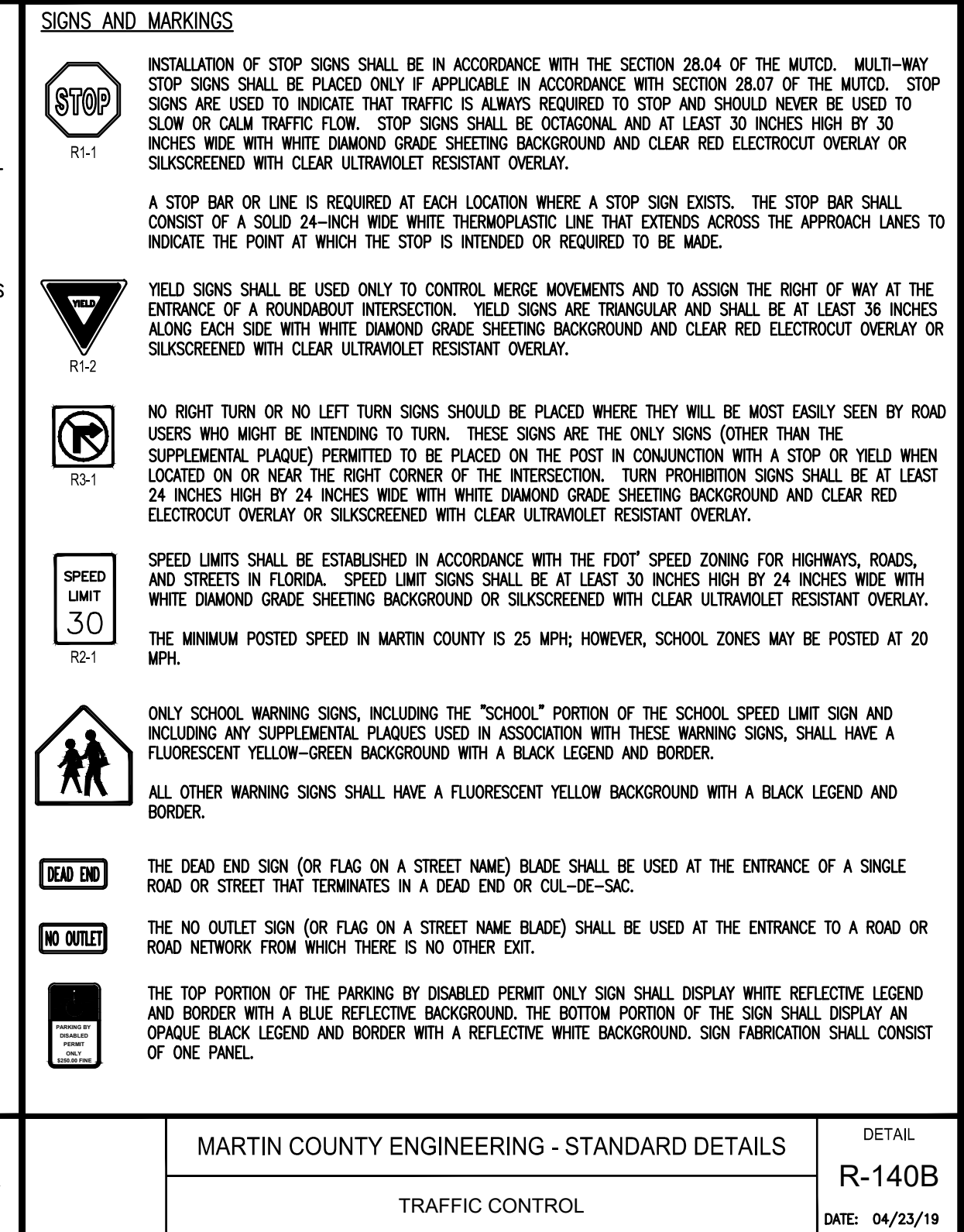
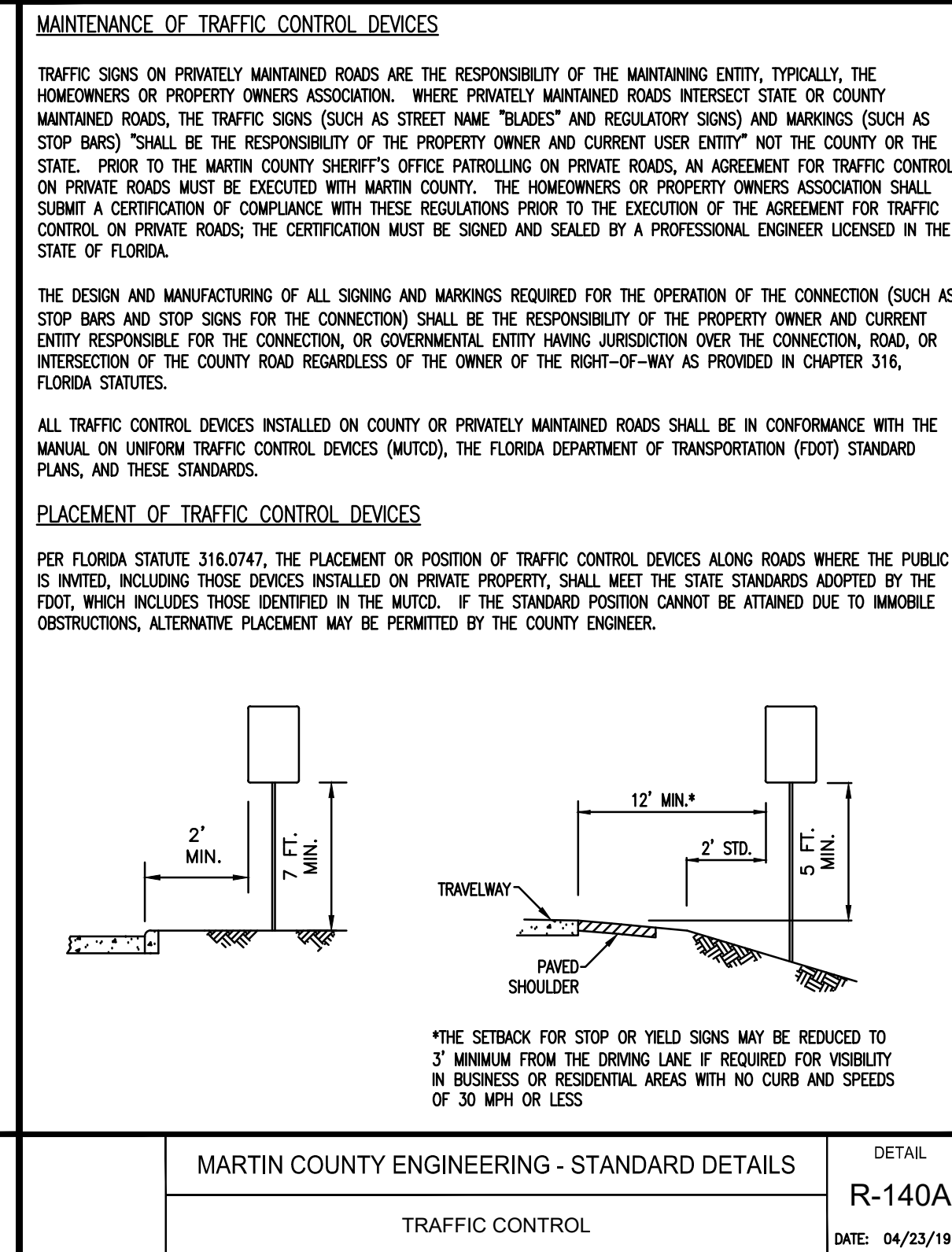
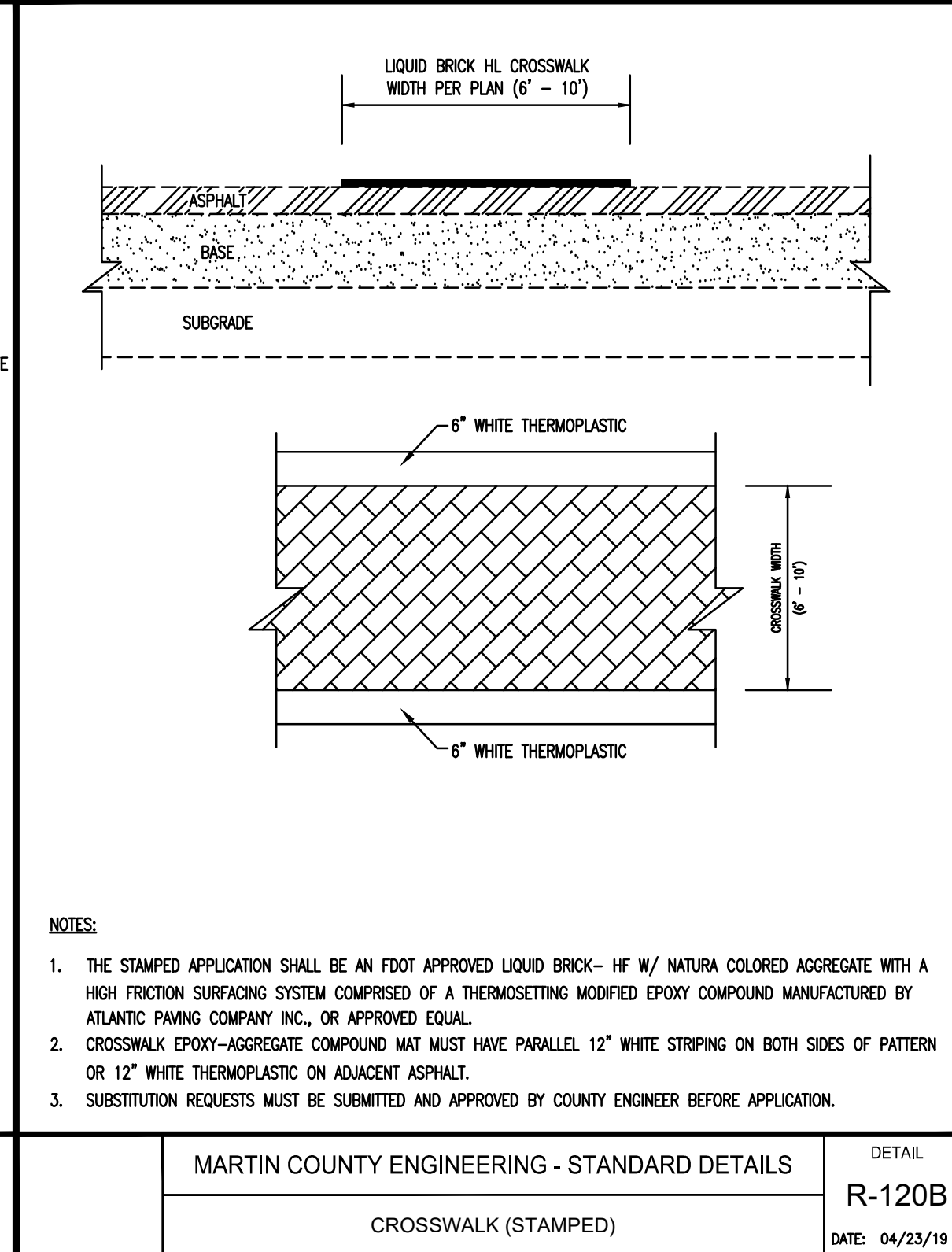
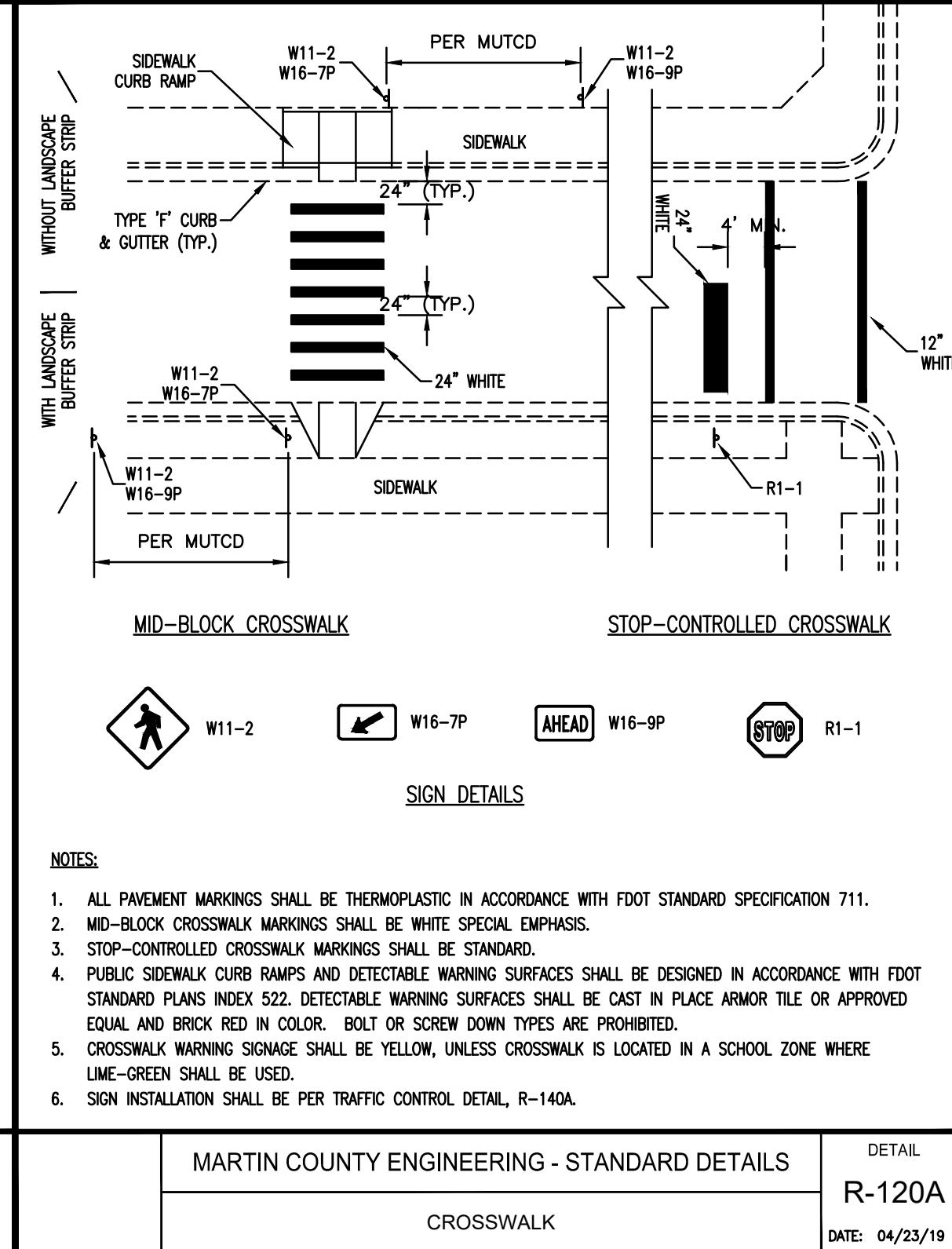
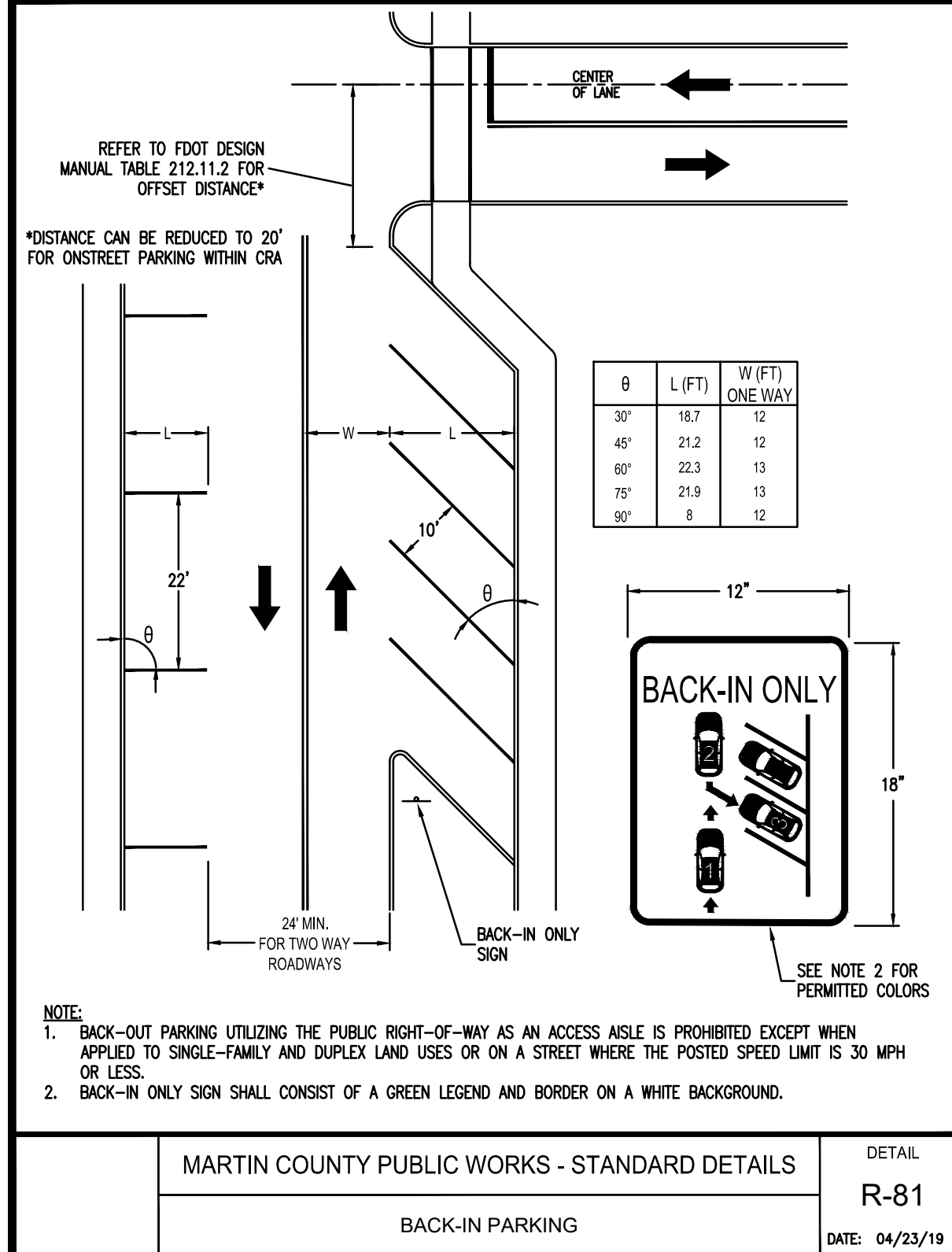
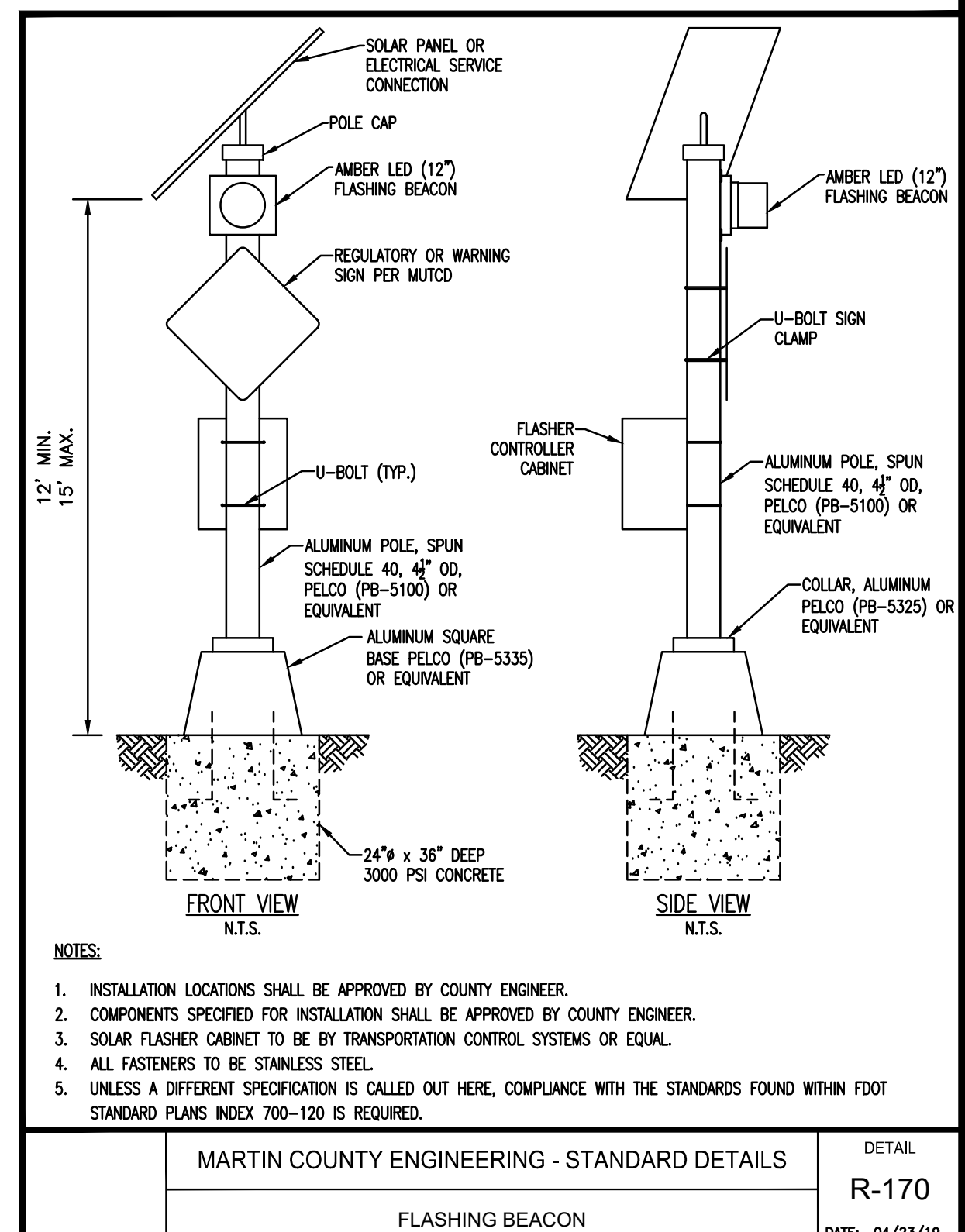
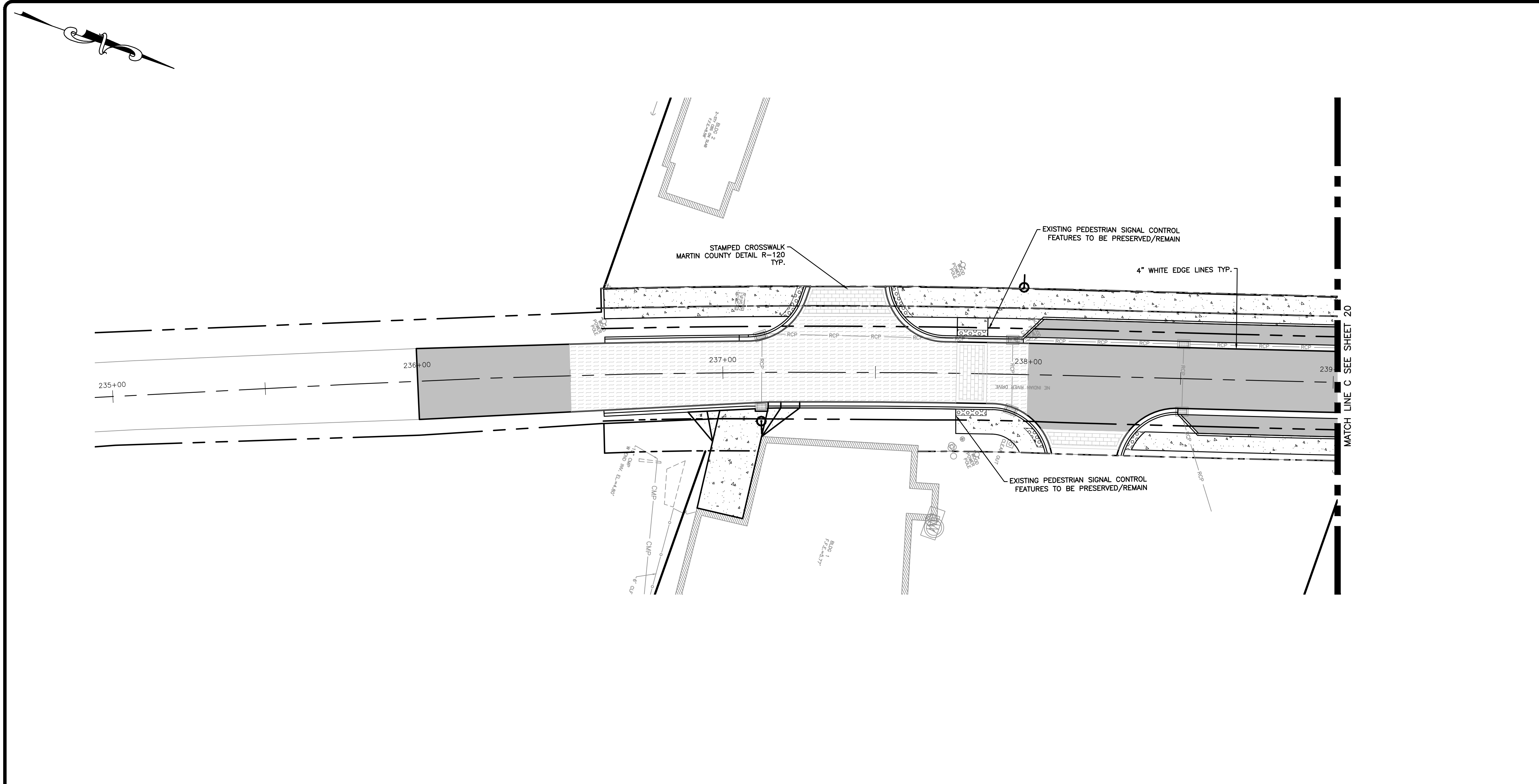
STATE OF FLORIDA

NO. 7739

Feb 17, 2020

SHEET NO.

18



FM	2-17-20	PER MARTIN COUNTY UTILITY COMMENTS
FM	1-8-20	REVISIONS PER MARTIN COUNTY
FM	12-10-19	PER MARTIN COUNTY COMMENTS
AT	9-25-19	PER REVISED MEAN HIGH WATER LINE (MHW)
AT	8-20-19	PER MARTIN COUNTY COMMENTS
BY	DATE:	REVISION:

CALL 48 HOURS BEFORE YOU DIG
811

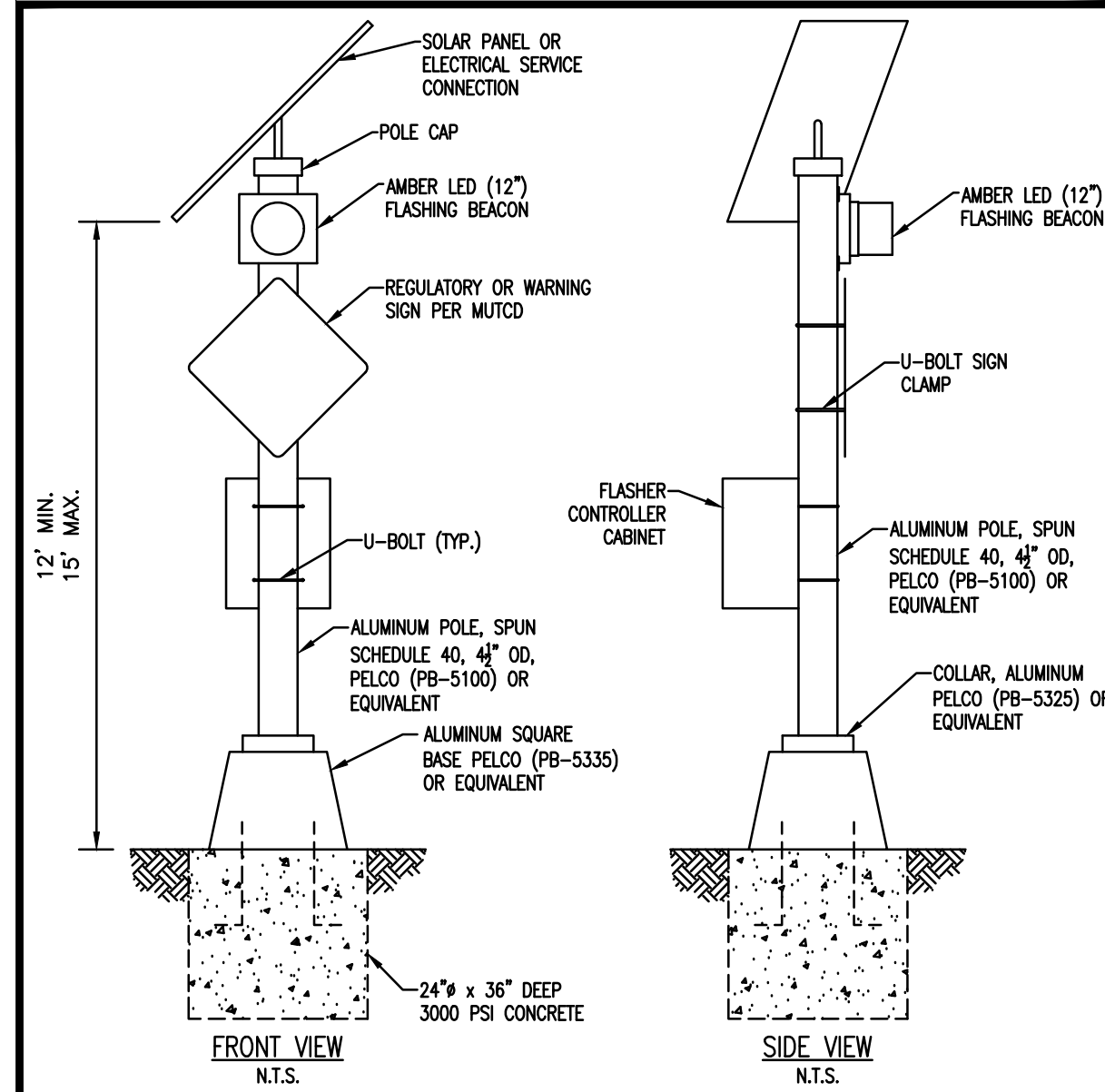
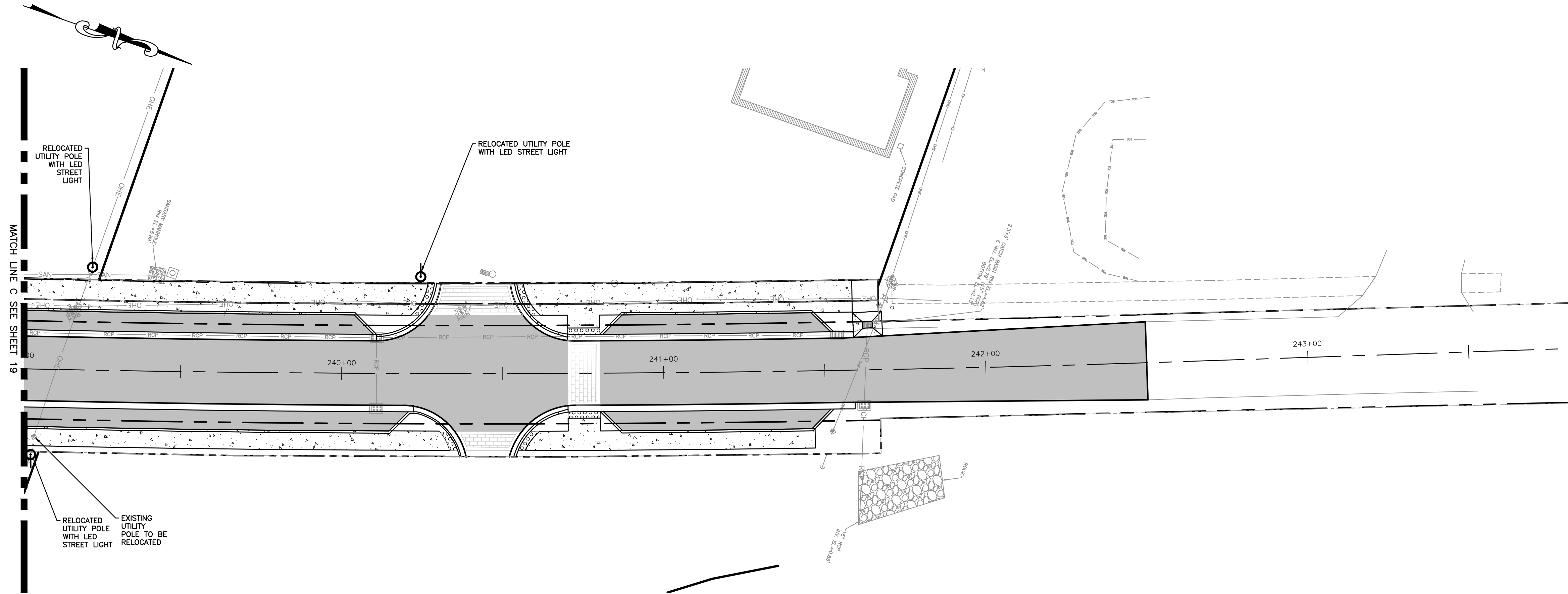
VERTICAL DATUM NAVD 88
DRAWN: 3-5-2018
PROJECT: 40102
FILE: BASE - Indian River Dr.dwg

THE MILCOR GROUP, INC.
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INDIAN RIVER DR
SIGNAGE &
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JENSEN BEACH, FLORIDA

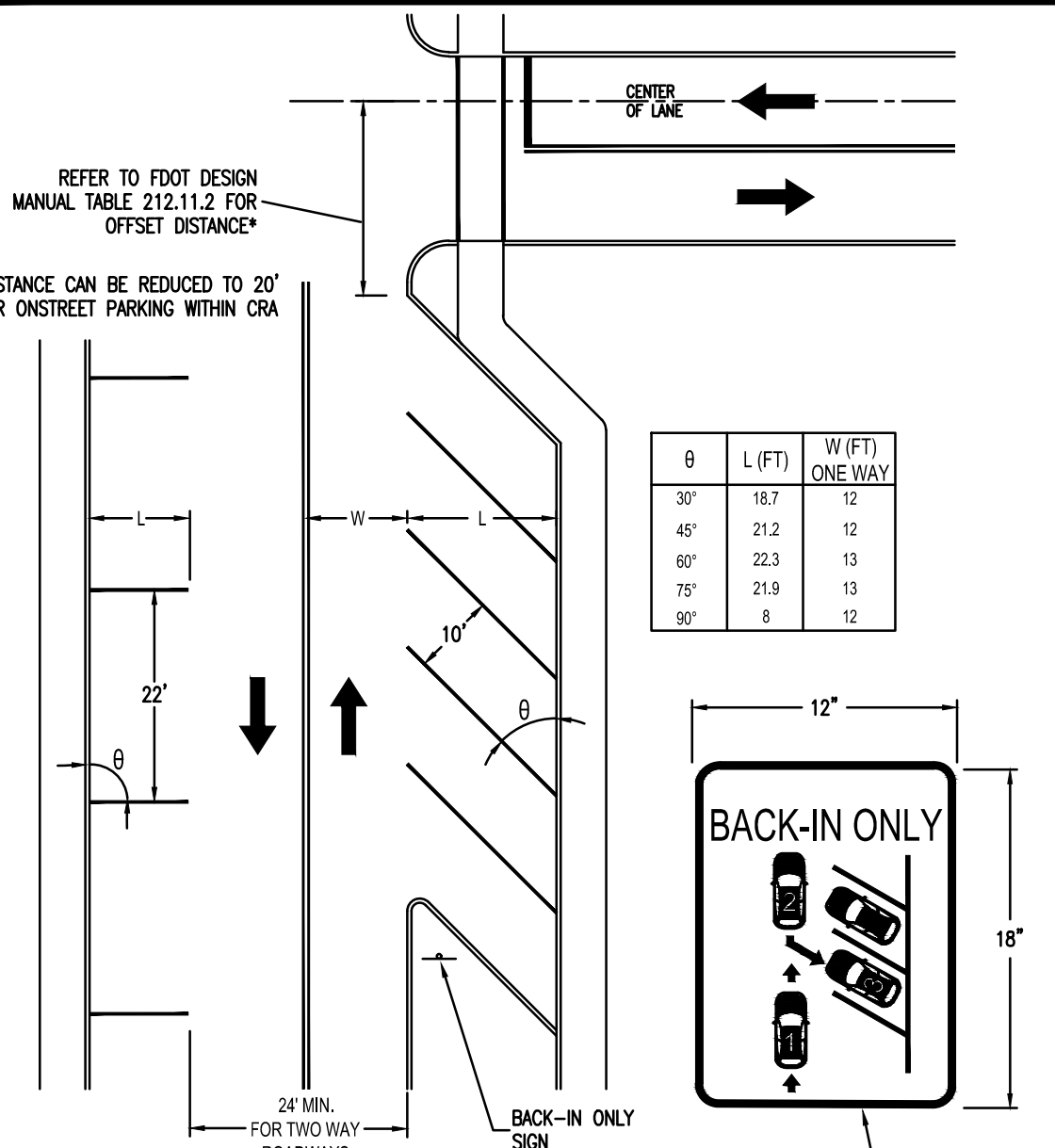
KENNETH A. RAU
FLORIDA
PROFESSIONAL ENGINEER
No. 27739
Feb 17 2020

SHEET NO.
19



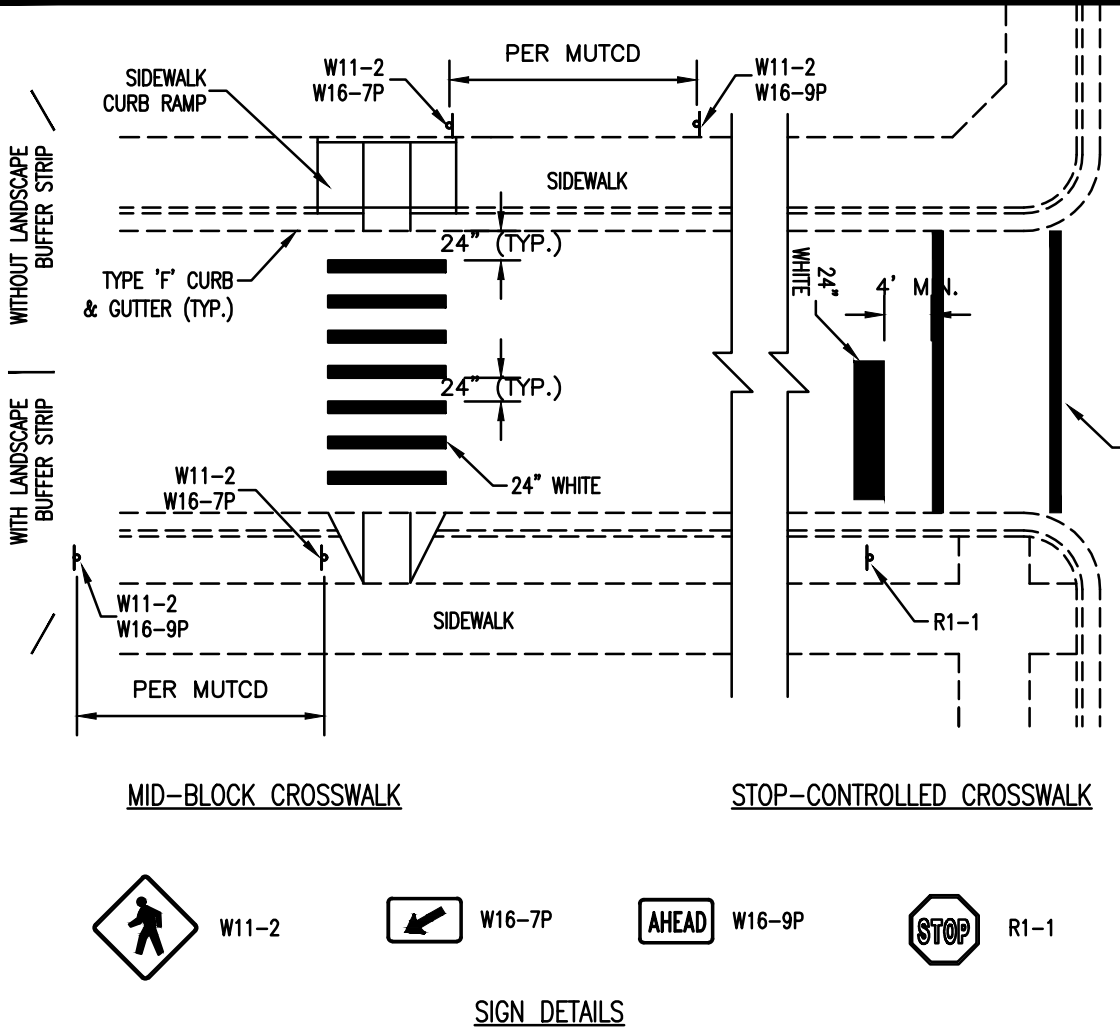
- NOTES:
1. INSTALLATION LOCATIONS SHALL BE APPROVED BY COUNTY ENGINEER.
 2. COMPONENTS SPECIFIED FOR INSTALLATION SHALL BE APPROVED BY COUNTY ENGINEER.
 3. SOLAR FLASHER CABINET TO BE BY TRANSPORTATION CONTROL SYSTEMS OR EQUAL.
 4. ALL FASTENERS TO BE STAINLESS STEEL.
 5. UNLESS A DIFFERENT SPECIFICATION IS CALLED OUT HERE, COMPLIANCE WITH THE STANDARDS FOUND WITHIN FDOT STANDARD PLANS INDEX 700-120 IS REQUIRED.

MARTIN COUNTY ENGINEERING - STANDARD DETAILS
FLASHING BEACON
DETAIL
R-170
DATE: 04/23/19



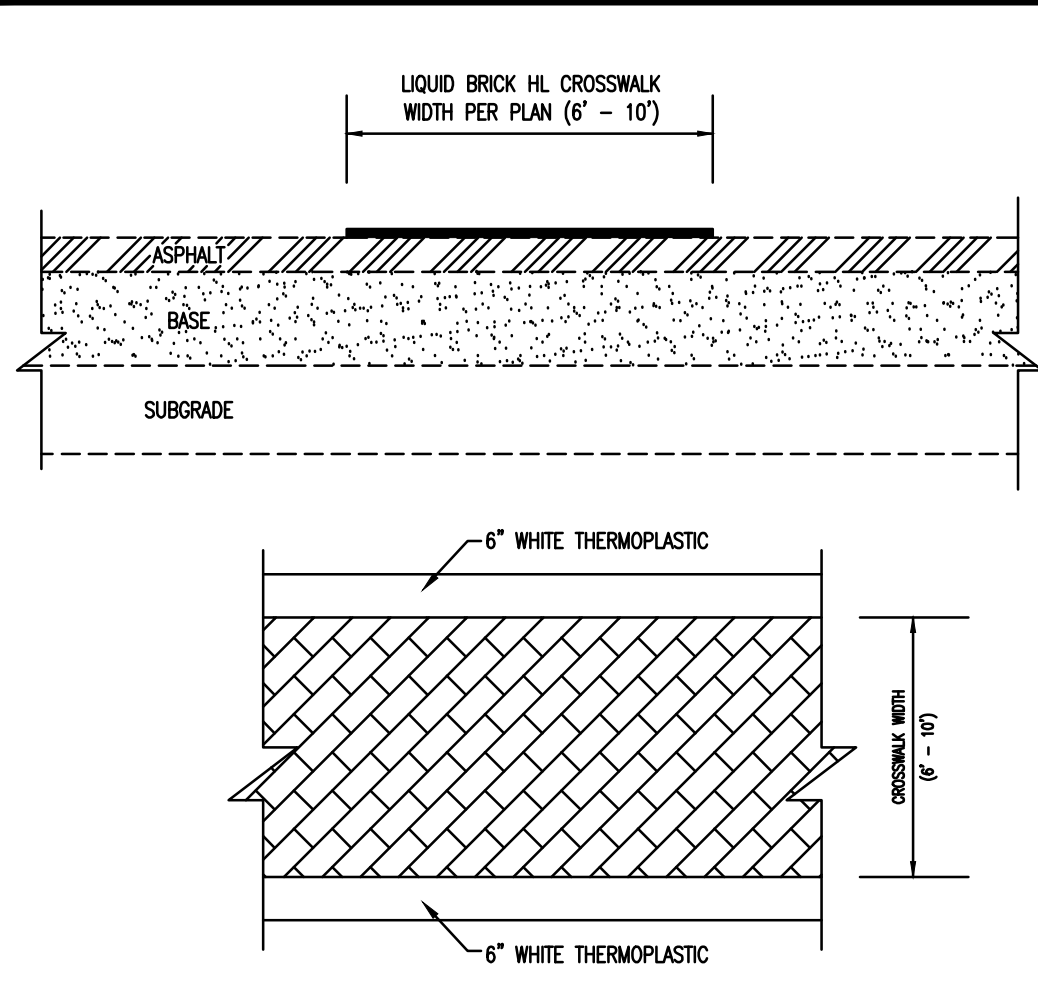
- NOTE:
1. BACK-OUT PARKING UTILIZING THE PUBLIC RIGHT-OF-WAY AS AN ACCESS AISLE IS PROHIBITED EXCEPT WHEN APPLIED TO SINGLE-FAMILY AND DUPLEX LAND USES OR ON A STREET WHERE THE POSTED SPEED LIMIT IS 30 MPH OR LESS.
 2. BACK-IN ONLY SIGN SHALL CONSIST OF A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND.

MARTIN COUNTY PUBLIC WORKS - STANDARD DETAILS
BACK-IN PARKING
DETAIL
R-81
DATE: 04/23/19



- NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 711.
 2. MID-BLOCK CROSSWALK MARKINGS SHALL BE WHITE SPECIAL EMPHASIS.
 3. STOP-CONTROLLED CROSSWALK MARKINGS SHALL BE STANDARD.
 4. PUBLIC SIDEWALK CURB RAMPS AND DETECTABLE WARNING SURFACES SHALL BE DESIGNED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 522. DETECTABLE WARNING SURFACES SHALL BE CAST IN PLACE ARMOR TILE OR APPROVED EQUAL AND BROWN RED IN COLOR. BOLT OR SCREW DOWN TYPES ARE PROHIBITED.
 5. CROSSWALK WARNING SIGNAGE SHALL BE YELLOW, UNLESS CROSSWALK IS LOCATED IN A SCHOOL ZONE WHERE LIME-GREEN SHALL BE USED.
 6. SIGN INSTALLATION SHALL BE PER TRAFFIC CONTROL DETAIL, R-140A.

MARTIN COUNTY ENGINEERING - STANDARD DETAILS
CROSSWALK
DETAIL
R-120A
DATE: 04/23/19



- NOTES:
1. THE STAMPED APPLICATION SHALL BE AN FDOT APPROVED LIQUID BRICK- HF W/ NATURA COLORED AGGREGATE WITH A HIGH FRICTION SURFACING SYSTEM COMPRISED OF A THERMOSETTING MODIFIED EPOXY COMPOUND MANUFACTURED BY ATLANTIC PAVING COMPANY INC., OR APPROVED EQUAL.
 2. CROSSWALK EPOXY-AGGREGATE COMPOUND MAT MUST HAVE PARALLEL 12" WHITE STRIPING ON BOTH SIDES OF PATTERN OR 12" WHITE THERMOPLASTIC ON ADJACENT ASPHALT.
 3. SUBSTITUTION REQUESTS MUST BE SUBMITTED AND APPROVED BY COUNTY ENGINEER BEFORE APPLICATION.

MARTIN COUNTY ENGINEERING - STANDARD DETAILS
CROSSWALK (STAMPED)
DETAIL
R-120B
DATE: 04/23/19

MAINTENANCE OF TRAFFIC CONTROL DEVICES

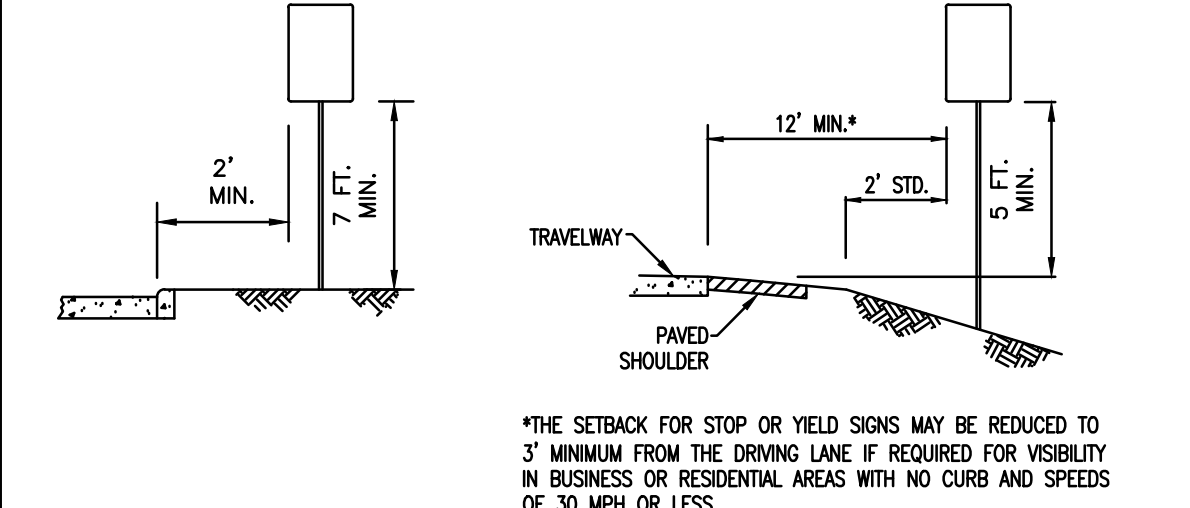
TRAFFIC SIGNS ON PRIVATELY MAINTAINED ROADS ARE THE RESPONSIBILITY OF THE MAINTAINING ENTITY, TYPICALLY, THE HOMEOWNERS OR PROPERTY OWNERS ASSOCIATION. WHERE PRIVATELY MAINTAINED ROADS INTERSECT STATE OR COUNTY MAINTAINED ROADS, THE TRAFFIC SIGNS (SUCH AS STREET NAME "BLADES" AND REGULATORY SIGNS) AND WARNINGS (SUCH AS STOP BARS) "SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND CURRENT USER ENTITY" NOT THE COUNTY OR THE STATE. PRIOR TO THE MARTIN COUNTY SHERIFF'S OFFICE PATROLLING ON PRIVATE ROADS, AN AGREEMENT FOR TRAFFIC CONTROL ON PRIVATE ROADS MUST BE EXECUTED WITH MARTIN COUNTY. THE HOMEOWNERS OR PROPERTY OWNERS ASSOCIATION SHALL SUBMIT A CERTIFICATION OF COMPLIANCE WITH THESE REGULATIONS PRIOR TO THE EXECUTION OF THE AGREEMENT FOR TRAFFIC CONTROL ON PRIVATE ROADS; THE CERTIFICATION MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA.

THE DESIGN AND MANUFACTURING OF ALL SIGNING AND MARKINGS REQUIRED FOR THE OPERATION OF THE CONNECTION (SUCH AS STOP BARS AND STOP SIGNS FOR THE CONNECTION) SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND CURRENT ENTITY RESPONSIBLE FOR THE CONNECTION, OR GOVERNMENTAL ENTITY HAVING JURISDICTION OVER THE CONNECTION, ROAD, OR INTERSECTION OF THE COUNTY ROAD REGARDLESS OF THE OWNER OF THE RIGHT-OF-WAY AS PROVIDED IN CHAPTER 316, FLORIDA STATUTES.

ALL TRAFFIC CONTROL DEVICES INSTALLED ON COUNTY OR PRIVATELY MAINTAINED ROADS SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD PLANS, AND THESE STANDARDS.

PLACEMENT OF TRAFFIC CONTROL DEVICES

PER FLORIDA STATUTE 316.0747, THE PLACEMENT OR POSITION OF TRAFFIC CONTROL DEVICES ALONG ROADS WHERE THE PUBLIC IS INVITED, INCLUDING THOSE DEVICES INSTALLED ON PRIVATE PROPERTY, SHALL MEET THE STATE STANDARDS ADOPTED BY THE FDOT, WHICH INCLUDES THOSE IDENTIFIED IN THE MUTCD. IF THE STANDARD POSITION CANNOT BE ATTAINED DUE TO IMMOBILE OBSTRUCTIONS, ALTERNATIVE PLACEMENT MAY BE PERMITTED BY THE COUNTY ENGINEER.



MARTIN COUNTY ENGINEERING - STANDARD DETAILS
TRAFFIC CONTROL
DETAIL
R-140A
DATE: 04/23/19

SIGNS AND MARKINGS

INSTALLATION OF STOP SIGNS SHALL BE IN ACCORDANCE WITH THE SECTION 28.04 OF THE MUTCD. MULTI-WAY STOP SIGNS SHALL BE PLACED ONLY IF APPLICABLE IN ACCORDANCE WITH SECTION 28.07 OF THE MUTCD. STOP SIGNS ARE USED TO INDICATE THAT TRAFFIC IS ALWAYS REQUIRED TO STOP AND SHOULD NEVER BE USED TO SLOW OR CALM TRAFFIC FLOW. STOP SIGNS SHALL BE OCTAGONAL AND AT LEAST 30 INCHES HIGH BY 30 INCHES WIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND AND CLEAR RED ELECTROOUT OVERLAY OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY.

A STOP BAR OR LINE IS REQUIRED AT EACH LOCATION WHERE A STOP SIGN EXISTS. THE STOP BAR SHALL CONSIST OF A SOLID 24-INCH WIDE WHITE THERMOPLASTIC LINE THAT EXTENDS ACROSS THE APPROACH LANES TO INDICATE THE POINT AT WHICH THE STOP IS INTENDED OR REQUIRED TO BE MADE.

YIELD SIGNS SHALL BE USED ONLY TO CONTROL MERGE MOVEMENTS AND TO ASSIGN THE RIGHT OF WAY AT THE ENTRANCE OF A ROUNDABOUT INTERSECTION. YIELD SIGNS ARE TRIANGULAR AND SHALL BE AT LEAST 36 INCHES ALONG EACH SIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND AND CLEAR RED ELECTROOUT OVERLAY OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY.

NO RIGHT TURN OR NO LEFT TURN SIGNS SHOULD BE PLACED WHERE THEY WILL BE MOST EASILY SEEN BY ROAD USERS WHO MIGHT BE INTENDING TO TURN. THESE SIGNS ARE THE ONLY SIGNS (OTHER THAN THE SUPPLEMENTAL PLACQUE) PERMITTED TO BE PLACED ON THE POST IN CONJUNCTION WITH A STOP OR YIELD WHEN LOCATED ON OR NEAR THE RIGHT CORNER OF THE INTERSECTION. TURN PROHIBITION SIGNS SHALL BE AT LEAST 24 INCHES HIGH BY 24 INCHES WIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND AND CLEAR RED ELECTROOUT OVERLAY OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY.

SPEED LIMITS SHALL BE ESTABLISHED IN ACCORDANCE WITH THE FDOT SPEED ZONING FOR HIGHWAYS, ROADS, AND STREETS IN FLORIDA. SPEED LIMIT SIGNS SHALL BE AT LEAST 30 INCHES HIGH BY 24 INCHES WIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY. THE MINIMUM POSTED SPEED IN MARTIN COUNTY IS 25 MPH; HOWEVER, SCHOOL ZONES MAY BE POSTED AT 20 MPH.

ONLY SCHOOL WARNING SIGNS, INCLUDING THE "SCHOOL" PORTION OF THE SCHOOL SPEED LIMIT SIGN AND INCLUDING ANY SUPPLEMENTAL PLACQUES USED IN ASSOCIATION WITH THESE WARNING SIGNS, SHALL HAVE A FLUORESCENT YELLOW-GREEN BACKGROUND WITH A BLACK LEGEND AND BORDER.

ALL OTHER WARNING SIGNS SHALL HAVE A FLUORESCENT YELLOW BACKGROUND WITH A BLACK LEGEND AND BORDER.

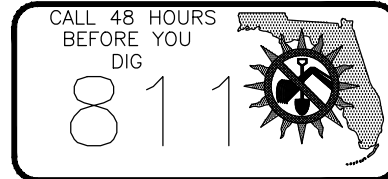
THE DEAD END SIGN (OR FLAG ON A STREET NAME) BLADE SHALL BE USED AT THE ENTRANCE OF A SINGLE ROAD OR STREET THAT TERMINATES IN A DEAD END OR CUL-DE-SAC.

THE NO OUTLET SIGN (OR FLAG ON A STREET NAME BLADE) SHALL BE USED AT THE ENTRANCE TO A ROAD OR ROAD NETWORK FROM WHICH THERE IS NO OTHER EXIT.

THE TOP PORTION OF THE PARKING BY DISABLED PERMIT ONLY SIGN SHALL DISPLAY WHITE REFLECTIVE LEGEND AND BORDER WITH A BLUE REFLECTIVE BACKGROUND. THE BOTTOM PORTION OF THE SIGN SHALL DISPLAY AN OPAQUE BLACK LEGEND AND BORDER WITH A REFLECTIVE WHITE BACKGROUND. SIGN FABRICATION SHALL CONSIST OF ONE PANEL.

MARTIN COUNTY ENGINEERING - STANDARD DETAILS
TRAFFIC CONTROL
DETAIL
R-140B
DATE: 04/23/19

NO.	DATE	REVISION	BY
1	04/23/19	PER MARTIN COUNTY UTILITY COMMENTS	FM
2	04/23/19	REVISIONS PER MARTIN COUNTY	FM
3	04/23/19	PER MARTIN COUNTY COMMENTS	FM
4	04/23/19	PER REVISED MEAN HIGH WATER LINE (MHW)	AT
5	04/23/19	PER MARTIN COUNTY COMMENTS	AT



VERTICAL DATUM NAVD 88	DRAWN: 3-5-2018	PROJECT: 40102
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JENSEN BEACH, FLORIDA



SHEET NO.