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ALL MATERIALS USED AND INSTALLATIONS WITHIN THE PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE IN ACCORDANCE WITH BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION SPECIFICATIONS

NOTE:

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION.

A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC RIGHT OF WAY

BROWARD COUNTY HIGHWAY CONSTRUCTION AND
ENGINEERING DIVISION

☐ PLAN CONSISTENT
WITH PLAT REQUIREMENTS

☐ PUBLIC RIGHT OF WAY APPROVAL FOR PAVING,
GRADING AND DRAINAGE

BY: _____ DATE: _____

DOES NOT INCLUDE APPROVAL
OF PAVEMENT MARKINGS & SIGNS

B.C.H.C.E.D. REF. #180816101

LYONS ROAD

W SAMPLE ROAD

FLORIDA TURNPIKE

PROJECT LIMITS

L.S. #13

L.S. #14

W COPANS ROAD

L.S. #12

L.S. #10

LOCATION SKETCH (SCALE: N.T.S.)

CITY OF COCONUT CREEK OFFICIALS

ENGINEER OF RECORD:	
JUAN H. VAZQUEZ P.E.	DATE:
LICENSE NO. 51143	

DATE: JUNE 10, 2019
SHEET NAME: COVER
R.J. BEHAR PROJECT No.: 17039

ISSUE FOR BID

GENERAL NOTES

- 1) ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COCONUT CREEK, FLORIDA DEPARTMENT OF TRANSPORTATION, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, BROWARD COUNTY HEALTH DEPARTMENT, BROWARD COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND GROWTH MANAGEMENT, FLORIDA BUILDING CODE (LATEST EDITION), BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE.
- 2) ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER. SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE STRICTLY OBSERVED.
- 3) ALL ELEVATIONS ON THE DRAWINGS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
- 4) THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A UTILITY LOCATION SERVICE SUCH AS "SUNSHINE STATE ONE CALL OF FLA, INC." AT (800) 432-4770 AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
- 5) EXISTING UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
- 6) PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE LOCATION AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
- 7) IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- 8) THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO LOCATE, EXCAVATE AND PREPARE FOR CONNECTIONS TO THE EXISTING SYSTEMS ALL AS SHOWN ON THE DRAWINGS. THE COST FOR THIS WORK AND FOR THE ACTUAL CONNECTION TO THE EXISTING SYSTEMS SHALL BE INCLUDED IN THE BID PRICE FOR THE PROJECT AND SHALL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER.
- 9) CONTRACTOR MUST PROVIDE FOR AND MAINTAIN ADEQUATE ACCESS AT ALL TIMES TO ALL BUSINESSES AND RESIDENCES AFFECTED BY PROGRESS OF THE WORK.
- 10) PROJECT SITE SAFETY:
- A. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT IS MADE EVIDENT BY THE AGREEMENT BETWEEN OWNER AND CONTRACTOR.
- B. ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS OR ENCOUNTERED THROUGH THE PROGRESSION OF WORK AT THIS PROJECT SITE ARE ASSUMED TO BE LIVE, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS WHEN WORKING AROUND EXISTING OVERHEAD OR UNDERGROUND UTILITIES. VALVE BOXES AND MANHOLE RIM ELEVATIONS SHOWN ARE APPROXIMATE.
- 11) ALL TRAFFIC CONTROL DEVICES MAINTAINED BY BROWARD COUNTY, THAT ARE REMOVED OR DAMAGED BY CONSTRUCTION, SHALL BE REPLACED BY CONTRACTOR USING CURRENT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION STANDARDS.
- 12) ALL PAVEMENT MARKINGS AND SIGNING DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY CONTRACTOR TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARD (CURRENT EDITION).
- 13) ALL SIGNAL/STREET LIGHT FACILITIES DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY CONTRACTOR TO BROWARD COUNTY TRAFFIC ENGINEERING STANDARD (CURRENT EDITION).
- 14) ALL INSTALLATIONS WITHIN BROWARD COUNTY JURISDICTION RIGHTS OF WAY SHALL BE IN CONFORMITY WITH "BROWARD COUNTY ENGINEERING DIVISION MINIMUM STANDARDS".
- 15) LOCATION OF ENTRANCE AND EXIT PITS IS APPROXIMATE. CONTRACTOR CAN PROPOSE ANOTHER LOCATION. ALL LOCATIONS SHALL INCLUDE AIR RELEASE VALVE, PLUG VALVE AND A STUB OUT FOR FUTURE CONNECTIONS AT NO ADDITIONAL COST TO THE CITY.

GENERAL TRAFFIC CONTROL PLAN NOTES:

1. REGULATORY SPEED ESTABLISHED WITHIN THE WORK ZONE TRAVEL WAYS SHALL BE THE POSTED SPEED.
2. FDOT INDICES 613, 614, 615, 616 AND 660 SHALL BE USED FOR PAVEMENT RECONSTRUCTION, WHERE APPLICABLE.
3. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS, THE CURRENT EDITION OF THE FLORIDA DOT DESIGN STANDARDS (600 SERIES), THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. SINGLE LANE CLOSURES SHALL OCCUR ONLY DURING NON-PEAK HOURS. NON-PEAK HOURS ARE:FROM 9:00 A.M. TO 4:30 P.M. NO EXISTING LANES SHALL BE CLOSED ON SATURDAY, SUNDAY, OR ANY HOLIDAY. NO EXISTING LANES SHALL BE CLOSED ON A FRIDAY PRECEDING A SATURDAY HOLIDAY OR THE MONDAY FOLLOWING A SUNDAY HOLIDAY. NO EXISTING LANE SHALL BE CLOSED DURING SPECIAL EVENT DATES AS DETERMINED BY THE ENGINEER. THE ENGINEER MAY ADJUST LANE CLOSURE TIMES IF CONDITIONS WARRANT. WHEN UNDUE CONGESTION OCCURS THE CONTRACTOR SHALL REOPEN THE LANES TO TRAFFIC AT NOT ADDITIONAL COST TO THE OWNER.
5. LANE CLOSURES FOR CONSTRUCTION OF PEDESTRIAN RAMPS AND SIDEWALKS SHALL NOT EXTEND BEYOND THE LIMITS OF THESE IMPROVEMENTS EXCEPT TO PROVIDE A SAFE TRANSITION AREA ON THE APPROACH TO THE WORK ZONE. THE ENGINEER SHALL ADJUST THE LENGTH OF THE LANE CLOSURE AT HIS DISCRETION.
6. CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING OR PROPOSED SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXISTS, THE CONTRACTOR SHALL RESTORE THE SIGNS TO THEIR ORIGINAL POSITION. ARROWS ON THE TCP DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS UNLESS SPECIFICALLY NOTED.
7. EACH EXISTING STREET NAME AND STOP SIGN AFFECTED BY CONSTRUCTION SHALL BE RELOCATED AND MAINTAINED IN AN APPROPRIATE LOCATION FOR THE DURATION OF THE PROJECT. WHEN NO LONGER AFFECTED BY CONSTRUCTION, THESE SIGNS SHALL BE RESTORED TO THEIR ORIGINAL POSITION.
8. CONTRACTOR SHALL COORDINATE HIS STAGING AREAS WITHIN THE AVAILABLE RIGHT-OF-WAY AND LOCAL MUNICIPALITIES. CONTRACTOR SHALL MEET ALL LOCAL CODES.
9. ALL PROPERTIES SHALL HAVE ACCESS AT ALL TIMES. THIS WILL REQUIRE COORDINATION WITH THE PROPERTY OWNERS AND/OR RESIDENTS. IF A DRIVEWAY CLOSURE IS NECESSARY, THE PROPERTY OWNER AND/OR RESIDENT SHALL BE NOTIFIED SEVEN (7) DAYS IN ADVANCE OF THE CLOSURE IN ADDITION TO THE LOCATION OF THE TEMPORARY ACCESS. IF THE PROPERTY HAS MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN TO MAINTAIN ACCESS.

SURVEY NOTES

1. THESE DRAWINGS HAVE BEEN ADAPTED FROM TOPOGRAPHIC SURVEY PREPARED BY AYLWARD ENGINEERING AND SURVEYING, INC., DATED OCTOBER 11, 2017, WHICH IS AVAILABLE FOR CONTRACTOR REVIEW AND USE UPON REQUEST.
2. THE ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

GEOTECHNICAL NOTES

1. GEOTECHNICAL INFORMATION FOR THE PROJECT WAS OBTAINED BY TIERRA SOUTH FLORIDA AND IS INCLUDED IN BORING LOCATION PLAN AND LOGS PROVIDED.
2. DUE TO THE PRESENCE OF LIMEROCK FILL/HARD LIMESTONE ALONG THE PROPOSED FORCE MAIN ALIGNMENT, IT COULD TAKE ABOVE NORMAL EFFORTS TO EXCAVATE THIS MATERIAL, AND BOULDER LIKE FILL SHOULD BE EXPECTED. CONTRACTORS SHOULD TAKE THIS INTO CONSIDERATION IN THEIR BID PROPOSALS.

MAINTENANCE OF TRAFFIC

SCHOOL/PEDESTRIAN

THE MAINTENANCE OF TRAFFIC PLAN, PROVIDED BY THE CONTRACTOR, SHALL INCLUDE PROVISIONS FOR PEDESTRIAN AND/OR SCHOOL STUDENT TRAFFIC AS WELL AS VEHICULAR TRAFFIC. THE FOLLOWING ARE MINIMUM REQUIREMENTS:

- 1) THE SAFE WALK ROUTE FOR ALL SCHOOL STUDENTS WITHIN THE VICINITY OF THE CONSTRUCTION ZONE SHALL BE MAINTAINED DURING THE TIMES STUDENTS ARE ARRIVING AT OR LEAVING SCHOOL. IF THE CURRENT WALKING SURFACE CAN NOT BE MAINTAINED, THEN A TEMPORARY ROAD-ROCK 4' WALK WAY SHALL BE CREATED. THE SAFE WALK ROUTE SHALL BE SEPARATED FROM THE CONSTRUCTION ACTIVITY BY THE 4' HIGH ORANGE CONSTRUCTION FENCE FOR THE ENTIRE LENGTH OF THE PROJECT OR THE LENGTH OF THE WALK ROUTE, WHICHEVER IS LESS.
- 2) ALL CONSTRUCTION EQUIPMENT AROUND ANY DESIGNATED CROSSWALK SHALL CEASE TO OPERATE DURING THE TIMES STUDENTS ARE ARRIVING AT OR LEAVING SCHOOL. ALL CONSTRUCTION EQUIPMENT ADJACENT TO A DESIGNATED WALK ROUTE SHALL CEASE OPERATING UNLESS SATISFACTORILY BARRICADED FROM THE WALK ROUTE.
- 3) IN THE CASE THAT A DESIGNATED CROSSING OR ANY PORTION OF THE DESIGNATED WALK ROUTE CAN NOT BE MAINTAINED, THEN THE CONTRACTOR SHALL NOTIFY THE SPECIAL PROJECTS COORDINATOR AT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2671 , A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO CLOSING THAT ROUTE IN ORDER THAT AN ALTERNATE CROSSING/ROUTE CAN BE ESTABLISHED.
- 4) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ANY NECESSARY PAVEMENT, ROAD ROCK, PAVEMENT MARKING AND SIGNAGE AND/OR ANY PEDESTRIAN SIGNALIZATION AND/OR SIGNAL MODIFICATION TO ACCOMMODATE AN EXISTING OR ALTERNATE WALK ROUTE.
- 5) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE STATE CERTIFIED SCHOOL CROSSING GUARDS OR OFF DUTY POLICE OFFICERS TO CROSS STUDENTS AT ANY LOCATIONS OTHER THAN THOSE PREVIOUSLY DESIGNATED. THE CONTRACTOR MAY USE FLAGMEN, ONLY IF THEY ARE STATE CERTIFIED AS A SCHOOL CROSSING GUARD.
- 6) THIRTY (30) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE SPECIAL PROJECTS COORDINATOR AT BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847-2671, TO ARRANGE A PRE-CONSTRUCTION - SCHOOL SAFETY MEETING.
- 7) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE BROWARD COUNTY SCHOOL BOARD PUPIL TRANSPORTATION DEPARTMENT, (754) 321 -4440, TO ARRANGE A PRE-CONSTRUCTION - SCHOOL BUS ROUTE MEETING. THIS MEETING IS TO DETERMINE ALL BUS ROUTES AND TO MAKE ANY NECESSARY ARRANGEMENTS FOR REROUTING. THIS MEETING SHALL INCLUDE THE SPECIAL PROJECTS COORDINATOR FROM BROWARD COUNTY TRAFFIC ENGINEERING DIVISION, (954) 847 -2671.
- 8) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A SAFE AND ADEQUATE WALKING SURFACE FOR ALL SCHOOL CHILDREN/PEDESTRIANS. THE SAFE WALK ROUTE SHALL BE PART OF THE MAINTENANCE OF TRAFFIC PLAN.

BCTED COMMUNICATION NOTES

THE AGENCY RESPONSIBLE FOR MAINTENANCE OF THE TRAFFIC SIGNALS AND RELATED EQUIPMENT IS BROWARD COUNTY TRAFFIC ENGINEERING DIVISION (BCTED). ALL SYSTEM COMMUNICATIONS EQUIPMENT, CABLING AND RELATED MATERIAL SHALL COMPLY WITH BROWARD COUNTY'S LATEST EDITION OF MINIMUM STANDARDS AS EXPRESSED IN THE "STANDARDS AND SPECIFICATIONS - COMMUNICATION INFRASTRUCTURE" DOCUMENT. ALSO REFER TO THE COUNTY'S COMMUNICATIONS PROCEDURES AND POLICIES. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION WILL NOT ACCEPT ANY PROJECTS THAT DO NOT MEET THESE STANDARDS AND SPECIFICATIONS. FOR A COPY OF THESE STANDARDS REFER TO THE BROWARD COUNTY WEBSITE AT WWW.BROWARD.ORG/TRAFFIC UNDER PUBLICATIONS OR CONTACT ROBERT BLOUNT, COMMUNICATIONS MANAGER AT RBLOUNT@BROWARD.ORG OR 954-847-2745.

ALL BCTED COMMUNICATIONS CABLE/CONDUIT SHALL BE LOCATED A MINIMUM OF 48 HOURS IN ADVANCE.

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION

PROCEDURE FOR NOTIFICATION OF COMMUNICATION DISRUPTION

WHEN COMMUNICATIONS TO AN INTERSECTION MUST BE DISRUPTED BY A CONTRACTOR TO PERFORM WORK, THE CONTRACTOR SHALL PROVIDE AN ADVANCE TWO DAY NOTICE IN WRITING TO THE BROWARD COUNTY TRAFFIC ENGINEERING DIVISION. THE NOTIFICATION SHALL BE CONVEYED VIA ELECTRONIC MAIL (EMAIL) TO THE COMMUNICATION'S MANAGER AT RBLOUNT@BROWARD.ORG. NOTIFICATION SHALL INCLUDE CONTACT PERSON, TELEPHONE NUMBER, PURPOSE, LOCATION AND DURATION. THE DISRUPTION SHALL LAST FOR NO MORE THAN 3 CONSECUTIVE BUSINESS DAYS. WHERE POSSIBLE, THE DISRUPTION SHALL BE AT OFF PEAK HOURS BEGINNING AT 9:00AM AND ENDING AT 3:00PM.

THE FOLLOWING ITEMS ARE NOT REVIEWED OR ACCEPTED BY BROWARD COUNTY:

1. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION'S REVIEW DOES NOT INCLUDE A REVIEW AND ACCEPTANCE OF THE PROJECT'S DESIGN OR OPERATION. THESE ITEMS ARE TO BE REVIEWED AND APPROVED BY THE CITY ENGINEER.
2. BROWARD COUNTY TRAFFIC ENGINEERING DIVISION DOES NOT REVIEW AND APPROVE, OR INSPECT AND ACCEPT THE FOLLOWING ITEMS FOR MAINTENANCE: PAVEMENT MARKINGS ON OR ADJACENT TO PAVEMENT BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVEMENT BRICKS, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON-STREET PARKING AND RELATED MARKINGS AND SIGNING, IN-ROAD LIGHTING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK OR ASPHALT WORK.
3. THE CITY ENGINEER IS RESPONSIBLE FOR THE REVIEW AND APPROVAL OF THE DESIGN AND OPERATION OF THE PROJECT, AND FOR THE INSPECTION AND ACCEPTANCE OF THE FOLLOWING ITEMS THAT WILL BE MAINTAINED BY THE CITY: PAVEMENT MARKINGS ON OR ADJACENT TO PAVEMENT BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVEMENT BRICKS, PAVEMENT MARKINGS ON OR ADJACENT TO PAINTED ASPHALT, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON-STREET PARKING AND RELATED MARKINGS AND SIGNING, IN-ROAD LIGHTING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING, OFF-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK AND ASPHALT WORK.

EXISTING UTILITIES:

1" WM	1" WM	1" WM	1" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
6" WM	6" WM	6" WM	6" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
8" WM	8" WM	8" WM	8" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
10" WM	10" WM	10" WM	10" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
12" WM	12" WM	12" WM	12" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
16" WM	16" WM	16" WM	16" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
18" WM	18" WM	18" WM	18" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
4" RWM	4" RWM	4" RWM	4" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
12" RWM	12" RWM	12" RWM	12" WATER MAIN LINE, SIZE & MATERIAL MAY VARY
6" SAN FM	6" SAN FM	6" SAN FM	6" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
8" SAN FM	8" SAN FM	8" SAN FM	8" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
18" SAN FM	18" SAN FM	18" SAN FM	18" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
20" SAN FM	20" SAN FM	20" SAN FM	20" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
24" SAN FM	24" SAN FM	24" SAN FM	24" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
54" SAN FM	54" SAN FM	54" SAN FM	54" FORCE MAIN LINE, SIZE & MATERIAL MAY VARY
12" STRM	12" STRM	12" STRM	12" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
15" STRM	15" STRM	15" STRM	15" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
18" STRM	18" STRM	18" STRM	18" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
24" STRM	24" STRM	24" STRM	24" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
30" STRM	30" STRM	30" STRM	30" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
36" STRM	36" STRM	36" STRM	36" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
42" STRM	42" STRM	42" STRM	42" STORM SEWER LINE, SIZE & MATERIAL MAY VARY
6"X10"X12" STRM	6"X10"X12" STRM	6"X10"X12" STRM	6"-9" X 10'-3" BOX CULVERT, SIZE & MATERIAL MAY VARY
8" SAN	8" SAN	8" SAN	8" GRAVITY SANITARY SEWER LINE, SIZE & MATERIAL MAY VARY
10" SAN	10" SAN	10" SAN	10" GRAVITY SANITARY SEWER LINE, SIZE & MATERIAL MAY VARY
12" SAN	12" SAN	12" SAN	12" GRAVITY SANITARY SEWER LINE, SIZE & MATERIAL MAY VARY
18" SAN	18" SAN	18" SAN	18" GRAVITY SANITARY SEWER LINE, SIZE & MATERIAL MAY VARY
BCTED	BCTED	BCTED	BCTED LINE, SIZE & MATERIAL MAY VARY
FIBERNET BFO	FIBERNET BFO	FIBERNET BFO	FIBERNET BURIED FIBER OPTICS, SIZE & MATERIAL MAY VARY
EXIST. GAS	EXIST. GAS	EXIST. GAS	GAS LINE, SIZE & MATERIAL MAY VARY
COMCAST	COMCAST	COMCAST	COMCAST LINE, SIZE & MATERIAL MAY VARY
FPL	FPL	FPL	FLORIDA POWER AND LIGHT LINE, SIZE & MATERIAL MAY VARY
LEVEL 3	LEVEL 3	LEVEL 3	LEVEL 3 COMMUNICATIONS LINE, SIZE & MATERIAL MAY VARY
FIBERLIGHT 1.25" BFO	FIBERLIGHT 1.25" BFO	FIBERLIGHT 1.25" BFO	FIBERLIGHT BURIED FIBER OPTICS, SIZE & MATERIAL MAY VARY
BELLSOUTH BFO	BELLSOUTH BFO	BELLSOUTH BFO	BURIED FIBER OPTICS, SIZE & MATERIAL MAY VARY
ITS	ITS	ITS	ITS LINE, SIZE & MATERIAL MAY VARY
HOTWIRE BURIED PROPOSED	HOTWIRE BURIED PROPOSED	HOTWIRE BURIED PROPOSED	HOTWIRE BURIED, SIZE & MATERIAL MAY VARY
HOTWIRE AERIAL PROPOSED	HOTWIRE AERIAL PROPOSED	HOTWIRE AERIAL PROPOSED	HOTWIRE AERIAL, SIZE & MATERIAL MAY VARY

B.C.H.C.E.D. REF. #180816101

LEGEND

● IRON PIPE SET	CONCRETE	⬮ GATE VALVE
○ IRON PIPE FOUND	PAVERS	↶ HORIZONTAL BEND
SN↑ TRAFFIC SIGN	SHADE TREE	└ LINE PLUG
CB▢ CATCH BASIN	PALM TREE	▶ REDUCER
WV⊙ WATER VALVE	FND. FOUND	● AIR RELEASE VALVE
WM⊞ WATER METER	P.B. PLAT BOOK	
○ CLEAN OUT COVER	P.C. PAGE	
BFP∞ BACK FLOW PREVENTOR	O.R.B. OFFICIAL RECORD BOOK	
FH⊘ FIRE HYDRANT	N&D NAIL AND DISC	
⊕ SANITARY SEWER MANHOLE	CBS CONCRETE BLOCK STUCCO	
⊕ STORM SEWER MANHOLE	SF SQUARE FEET	
FPL FLORIDA POWER & LIGHT BOX	SV⊙ SEWER VALVE	
① BELLSOUTH TELEPHONE MANHOLE	CATV⊙ CABLE TV BOX	
WPP⊙ WOOD POWER POLE	TSB⊞ TRAFFIC SIGNAL BOX	
▢ CONCRETE POLE	TSP⊙ TRAFFIC LIGHT POLE	
LtX LIGHT	⊞ ELECTRIC BOX	
— GUY WIRE W/ ANCHOR	XWALK⊙ CROSSWALK	
⊙ IRRIGATION CONTROL VALVE	⊞ TELEPHONE BOX	
MP⊙ METAL POST	— CHAIN LINK FENCE	
● GAS VALVE	— GUARDRAIL	
— EXISTING ELEVATION	—OH— OVERHEAD POWER LINE	
● SEWER VALVE	— TRAVERSE LINE	

ELEVATIONS REFER TO NAVD 1988 DATUM

R.J.Behar & Company, Inc.
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CERTIFICATE OF
REGISTRATION No.
0006968
www.rjbhar.com



COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039	
Date: JUNE 10, 2019	
<u>DESIGN:</u> JHV	<u>DRAWN:</u> KL
<u>CHECK:</u> HM	
<u>REVISIONS:</u>	

REVISIONS:



PERMIT SET	NOTICE INSPECTION REQUIRED	NOTE: APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION. A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION AT (954) 577-4600 FOR INSPECTION.
MUST BE ON JOBSITE AT ALL TIMES DURING CONSTRUCTION	24 HRS. PRIOR TO CONSTRUCTION ANY WORK IN THE PUBLIC R/W CONTACT THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION AT (954) 577-4600 FOR INSPECTION.	
ALL MATERIALS USED AND INSTALLATIONS WITHIN THE PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE IN ACCORDANCE WITH BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION SPECIFICATIONS.		

BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION
☐ PLAN CONSISTENT WITH PLAT REQUIREMENTS
☐ PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE
BY: _____ DATE: _____
DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS

(SEAL)
JUAN H. VAZQUEZ, P.E. DATE _____ LICENSE NO.: 51143

GENERAL
NOTES AND
LEGEND

G-1

SHEET 2 OF 37

F:\7338_COPANSRDWSE DESIGN\CD-INTS.DWG 6/10/19 by HCSABAO

SUMMARY OF VERIFIED UTILITIES														
DATE	Vvh #	UTILITY DESCRIPTION (Owner, type)	SIZE	MATERIALS	B/L and/or C/L			EXISTING GROUND ELEVATION	LOWEST PIPE TOP ELEVATION	(X) EASTING	(Y) NORTHING	UTILITY OWNER	UTILITY DIRECTION	COMMENTS
					STATION	OFFSET	LT/RT							
9/11/18	1	RECLAIMED WATER	SEE NOTE	SEE NOTE	105+30.11	47.95	LT	12.06	7.58	922771.60	701453.37	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 12" REFUSE WATER MAIN.
9/11/18	2	STORM	6" 9" X10" 3"	RCP	114+53.53	45.35	LT	13.56	11.09	922768.53	702276.78	CITY OF COCONUT CREEK	N/W	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER.
9/11/18	3	WATER	8"	DUCTILE IRON	118+02.42	50.96	LT	11.81	9.18	922759.84	702725.62	CITY OF COCONUT CREEK	E/W	
9/11/18	4	FORCE MAIN	16"	CAST IRON	118+58.63	51.60	LT	11.85	9.29	922758.80	702781.83	CITY OF COCONUT CREEK	E/W	
9/11/18	5	RECLAIMED WATER	12"	PVC	119+94.84	47.24	LT	11.97	9.96	922762.23	702918.05	CITY OF COCONUT CREEK	E/W	
9/11/18	6	WATER	SEE NOTE	SEE NOTE	120+71.64	48.78	LT	12.40	10.39	922760.16	702994.85	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE AN 8" WATER MAIN.
9/11/18	7	WATER	8"	DUCTILE IRON	125+30.39	43.36	LT	13.41	10.15	922762.43	703453.63	CITY OF COCONUT CREEK	E/W	
9/11/18	8	CATV	1.5"	PVC	132+87.76	41.53	LT	12.18	11.46	922759.05	704210.99	COMCAST	E/W	
9/11/18	9	WATER	10"	DUCTILE IRON	133+33.19	51.74	LT	12.86	9.64	922748.52	704256.35	CITY OF COCONUT CREEK	E/W	
9/11/18	10	RECLAIMED WATER	12"	PVC	135+66.87	48.71	LT	13.30	9.72	922749.95	704490.05	CITY OF COCONUT CREEK	E/W	
9/11/18	11	WATER	8"	CAST IRON	144+56.47	51.46	LT	12.51	9.45	922741.08	705379.61	CITY OF COCONUT CREEK	E/W	
9/11/18	12	DRY HOLE	SEE NOTE	SEE NOTE	145+50.16	60.93	LT	12.24	N/A	922730.95	705473.23	CITY OF COCONUT CREEK	N/A	DUG ON LOCATOR MARKS TO A DEPTH OF 10'. NO UTILITY FOUND.
9/11/18	13	GAS	4"	PLASTIC	150+57.16	51.73	LT	13.87	11.76	922734.12	705987.74	UNKNOWN	E/W	
9/11/18	14	WATER	SEE NOTE	CAST IRON	150+64.63	54.24	LT	13.92	10.23	922736.68	705980.28	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE DUE TO GROUND WATER. PLANS INDICATE AN 18" SANITARY.
9/11/18	15	FORCE MAIN	SEE NOTE	SEE NOTE	151+89.09	69.81	LT	14.67	8.10	922717.70	706112.09	UNKNOWN	E/W	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 54" FORCE MAIN.
9/11/18	16	FORCE MAIN	SEE NOTE	SEE NOTE	154+97.92	43.61	LT	14.63	8.41	922743.77	706418.85	CITY OF COCONUT CREEK	N/S	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 24" FORCE MAIN.
9/11/18	16A	UNKNOWN	4"	PVC (GRAY)	154+95.36	46.21	LT	14.54	9.97	922738.97	706418.48	UNKNOWN	N/S	TEST HOLE REVEALED AN UNKNOWN 4" PIPE
9/11/18	17	RECLAIMED WATER	12"	PVC (PURPLE)	10+59.15	84.78	LT	13.22	9.92	922872.57	701006.01	CITY OF COCONUT CREEK	N/S	
9/11/18	18	WATER	10"	DUCTILE IRON	10+49.94	82.08	LT	13.21	9.15	922881.76	701008.77	CITY OF COCONUT CREEK	N/S	
9/11/18	19	FIBER OPTIC	2"	PVC (GRAY)	10+48.81	79.28	LT	13.17	10.49	922871.46	701003.20	BROWARD COUNTY TRAFFIC ENGINEERING	E/W	
9/11/18	20	WATER	16"	DUCTILE IRON	15+48.99	24.75	LT	11.50	9.43	923347.59	700976.04	CITY OF COCONUT CREEK	E/W	
9/11/18	21	SANITARY	8"	PVC (WHITE)	16+52.77	39.70	LT	11.11	0.26	923475.66	700967.59	CITY OF COCONUT CREEK	N/S	UNABLE TO DETERMINE SIZE DUE TO GROUND WATER. PLANS INDICATE AN 8" SANITARY.
9/11/18	22	WATER	8"	DUCTILE IRON	16+77.09	35.95	LT	11.15	8.95	923500.01	700964.00	CITY OF COCONUT CREEK	N/S	
9/11/18	23	DRY HOLE	SEE NOTE	SEE NOTE	17+49.06	38.40	LT	11.80	N/A	923571.97	700966.93	COMCAST	N/A	TEST HOLE DUG ON LOCATOR MARKS TO A DEPTH OF 8". NO UTILITY FOUND.
9/11/18	24	TELEPHONE/ELE CTRIC	2"	PVC (GRAY)	19+30.19	36.38	LT	11.96	8.46	923753.25	700965.53	FP&L	N/S	TEST HOLE REVEALED (3) 2" ELECTRIC CONDUITS
9/11/18	24A	ELECTRIC	2"	PVC (GRAY)	19+36.91	36.75	LT	11.97	8.14	923759.97	700965.92	FP&L	N/S	TEST HOLE REVEALED (3) 2" ELECTRIC CONDUITS
9/11/18	25	SANITARY	SEE NOTE	SEE NOTE	23+21.88	54.20	LT	11.36	2.47	924144.47	700985.50	CITY OF COCONUT CREEK	N/S	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE AN 8" SANITARY.
9/11/18	26	FORCE MAIN	SEE NOTE	DUCTILE IRON	26+27.05	49.13	LT	12.31	9.83	924449.87	700982.44	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 20" FORCE MAIN.
9/11/18	27	FORCE MAIN	SEE NOTE	SEE NOTE	26+13.30	47.38	RT	13.23	6.79	924436.75	700885.84	CITY OF COCONUT CREEK	N/S	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 20" FORCE MAIN.
9/11/18	28	FORCE MAIN	SEE NOTE	SEE NOTE	47+35.16	43.19	LT	11.12	9.14	926556.94	701008.42	CITY OF COCONUT CREEK	N/S	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. PLANS INDICATE A 6" CLAY SANITARY PIPE
9/11/18	29	FORCE MAIN	SEE NOTE	DUCTILE IRON	70+35.99	40.29	LT	11.58	8.57	928856.13	701082.85	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE DUE TO CONCRETE ON NORTH SIDE OF PIPE. PLANS INDICATE A 24" FORCE MAIN.
9/11/18	30	FORCE MAIN	SEE NOTE	SEE NOTE	70+72.47	7.69	RT	12.64	5.66	928894.03	701015.98	CITY OF COCONUT CREEK	E/W	UNABLE TO DETERMINE SIZE DUE TO CONCRETE ON NORTH SIDE OF PIPE. PLANS INDICATE AN 18" FORCE MAIN.
9/11/18	31	TELEPHONE	0.5"	DBC	101+64.67	60.38	LT	12.89	10.48	922761.68	701087.84	AT&T	N/S	
9/11/18	32	TELEPHONE	4"	CAST IRON	108+32.65	45.31	LT	11.93	9.51	922772.15	701755.92	AT&T	E/W	TEST HOLE REVEALED AN ENCASED TELEPHONE.
9/11/18	33	TELEPHONE	4"	CAST IRON	132+1.94	39.17	LT	12.20	9.96	922762.00	704125.19	AT&T	E/W	
9/11/18	34	TELEPHONE	4"	PVC (GRAY)	133+2.10	42.64	LT	13.11	12.06	922757.84	704225.32	AT&T	E/W	
9/11/18	35	TELEPHONE	SEE NOTE	SEE NOTE	141+9.36	47.18	LT	12.30	9.59	922747.73	705035.12	AT&T	N/S	TEST HOLE ALSO REVEALED (2) 4" GRAY PVC CONDUITS, RUNNING NORTH/SOUTH, OFFSET 6" WEST OF SURVEY MARKER, COVER = 2.87
9/11/18	36	TELEPHONE	SEE NOTE	SEE NOTE	142+84.36	52.18	LT	12.97	10.69	922738.80	705607.49	AT&T	N/S	TEST HOLE ALSO REVEALED (2) 4" GRAY PVC CONDUITS, RUNNING NORTH/SOUTH, OFFSET 6" EAST AND WEST OF SURVEY MARKER, COVER = 2.26
9/11/18	38	TELEPHONE	4"	PVC (GRAY)	152+44.13	65.02	LT	13.35	10.23	922722.11	706167.16	AT&T	E/W	TEST HOLE ALSO REVEALED (2) 4" PVC. CHIS "X" SET ON NORTHERN MOST CONDUIT.
9/11/18	39	TELEPHONE	4"	PVC (GRAY)	154.44.54	72.66	LT	14.31	12.37	922713.01	706367.46	AT&T	N/S	TEST HOLE ALSO REVEALED (2) 4" PVC. PK SET ON WESTERN MOST CONDUIT OFFSET 0.6'. TEST HOLE ALSO REVEALED A 0.5" DIRECT BURIED CABLE UNDER WESTERN MOST CONDUIT.
9/11/18	40	TELEPHONE	SEE NOTE	SEE NOTE	10+75.22	56.06	LT	13.51	8.54	922898.02	700980.15	AT&T	N/S	UNABLE TO DETERMINE SIZE AND MATERIAL DUE TO GROUND WATER. TEST HOLE ALSO REVEALED (2) 0.25" DIRECT BURIED CABLES RUNNING EAST/WEST, OFFSET 0.6' SOUTH OF HUB & TACK, COVER = 2.94'. TEST HOLE ALSO REVEALED A 2" GRAY PVC RUNNING EAST/WEST, OFFSET 0.5' SOUTH OF HUB & TACK, COVER = 1.89'
9/11/18	41	TELEPHONE	SEE NOTE	SEE NOTE	22+56.25	43.43	LT	11.66	7.08	924079.11	700974.30	AT&T	N/E	UNABLE TO DETERMINE SIZE & MATERIAL DUE TO GROUND WATER. MULTIPLE UTILITIES PRESENT.
9/11/18	42	TELEPHONE	4"	STEEL	69+45.26	40.26	LT	11.91	9.43	928766.66	701060.21	AT&T	N/S	

NOTES:

1. THE VERIFIED UTILITIES TABLE IS FOR REFERENCE ONLY.
2. THE EXISTING UTILITY AND TEST HOLE INFORMATION ON THIS PLAN IS AS PROVIDED BY INFRAMAP CORP. RJ BEHAR & COMPANY, INC. DOES NOT ASSUME ANY RESPONSIBILITY, OR LIABILITY FOR THE ACCURACY OF THIS INFORMATION. IT IS THE CONTRACTOR RESPONSIBILITY TO FIELD VERIFY LOCATIONS AND ELEVATIONS AND TO REPORT ANY DISCREPANCIES TO THE ENGINEER.



PERMIT SET		NOTICE OF INSPECTION REQUIRED		NOTE:	
MUST BE ON JOBSITE AT ALL TIMES DURING CONSTRUCTION		24 HRS. PRIOR TO CONSTRUCTION ANY WORK IN THE PUBLIC R/W CONTACT THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION AT (954) 577-4600 FOR INSPECTION.		APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION.	
ALL MATERIALS USED AND INSTALLATIONS WITHIN THE PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE IN ACCORDANCE WITH BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION SPECIFICATIONS.		A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC RIGHT OF WAY.			
BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION		(SEAL)			
☐ PLAN CONSISTENT WITH PLAT REQUIREMENTS					
☐ PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE					
BY: _____ DATE: _____					
DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS					
		JUAN H. VAZQUEZ, P.E.		DATE	
		LICENSE NO.: 51143			

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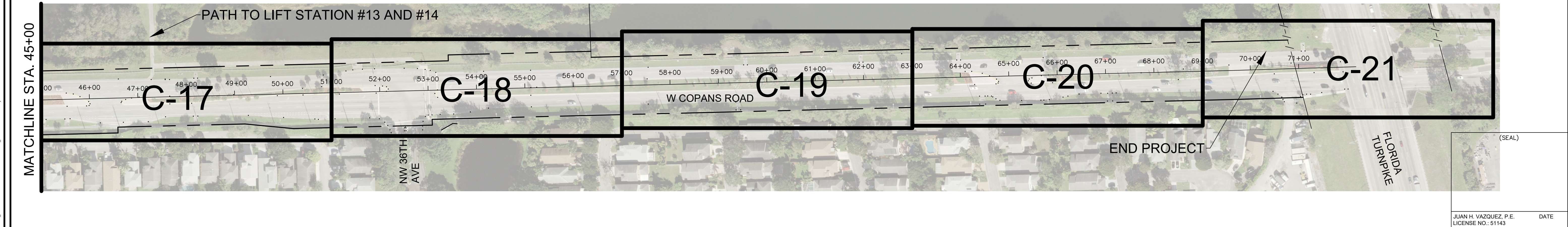
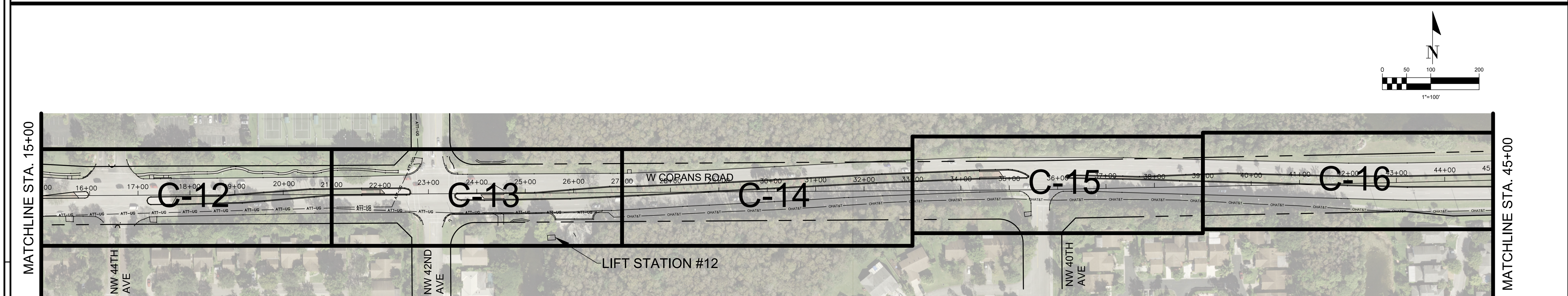
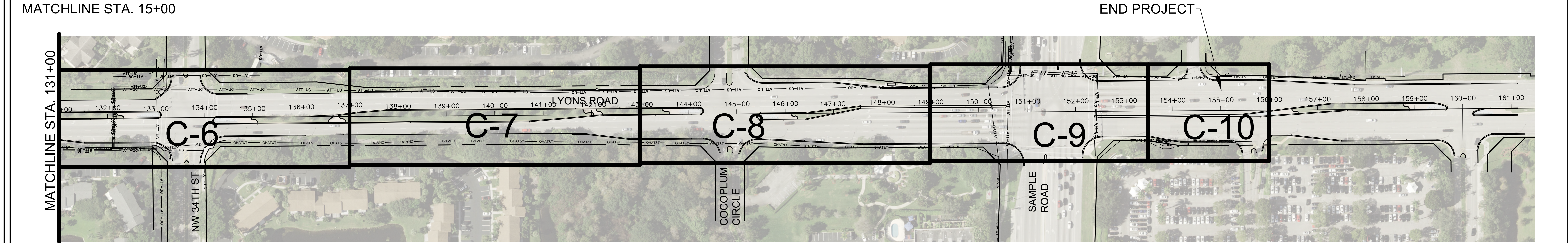
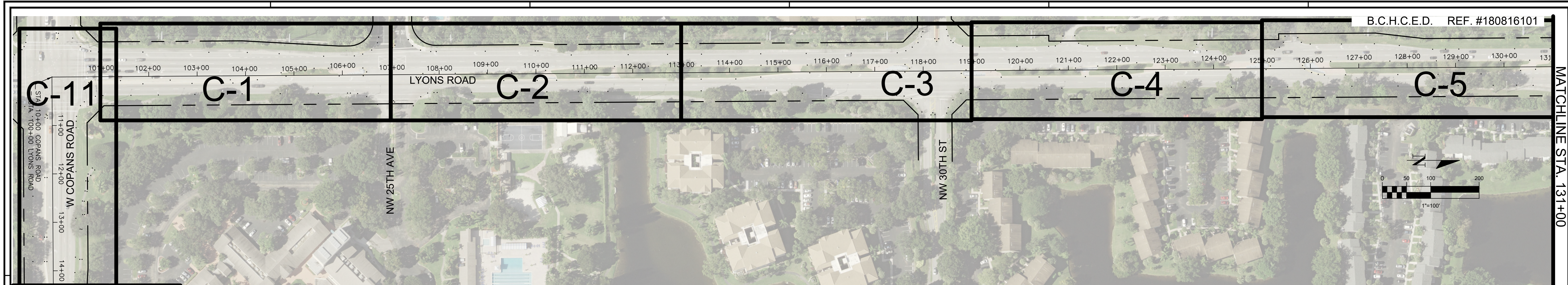
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REVISIONS:		
SHEET NAME:		
SUMMARY OF VERIFIED UTILITIES		
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SHEET 3 OF 37		



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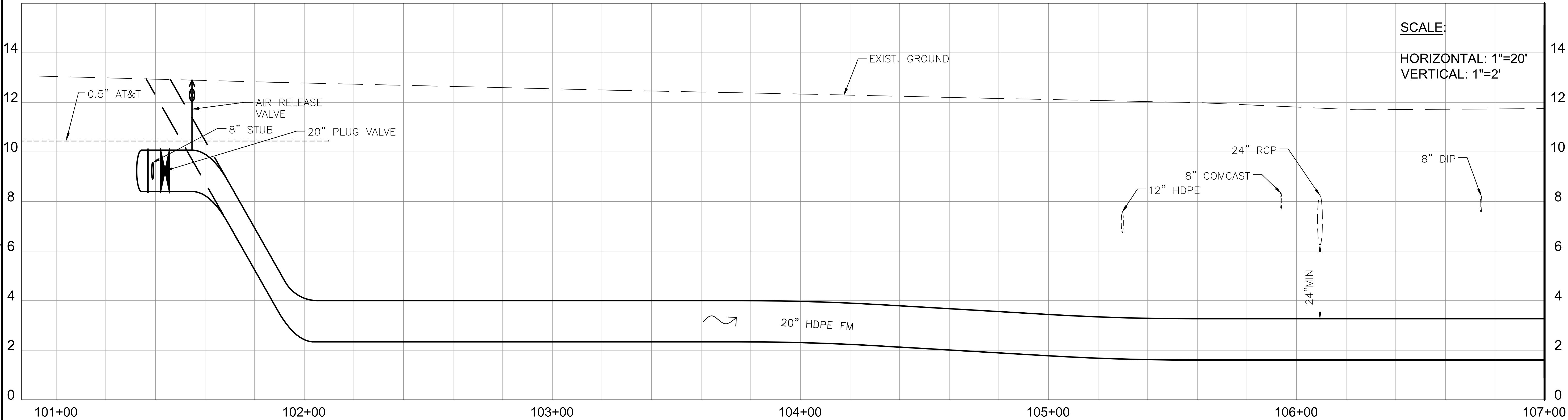
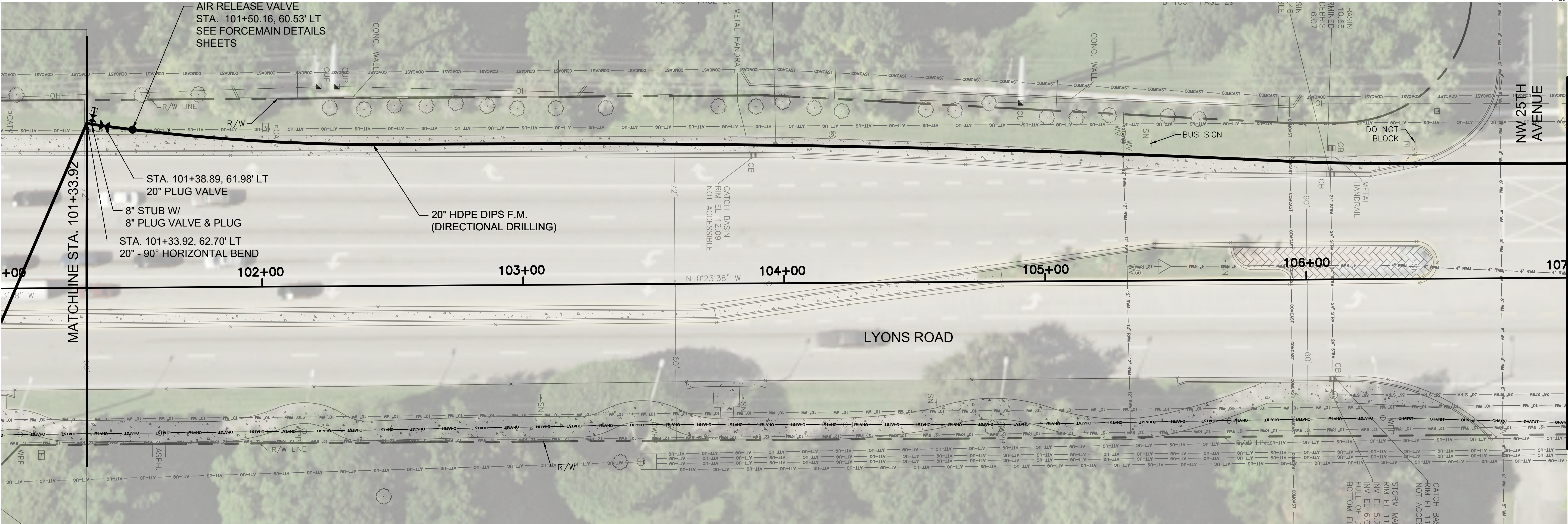
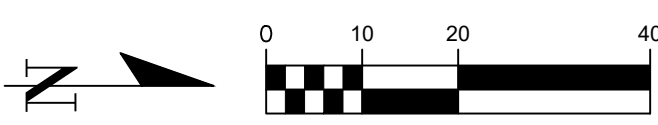
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KEY MAP

G-3

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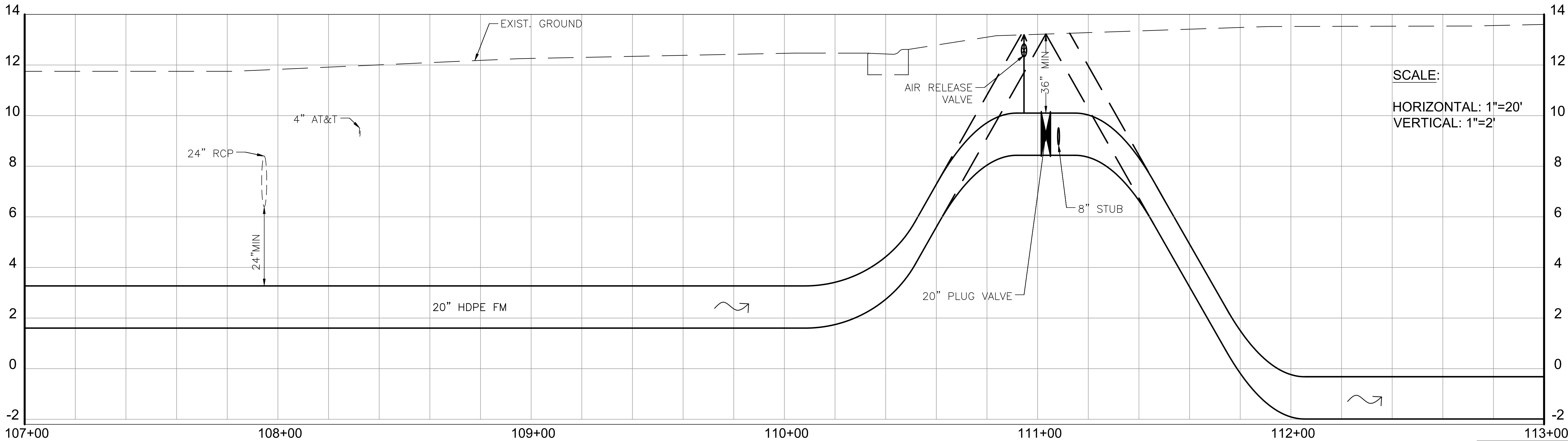
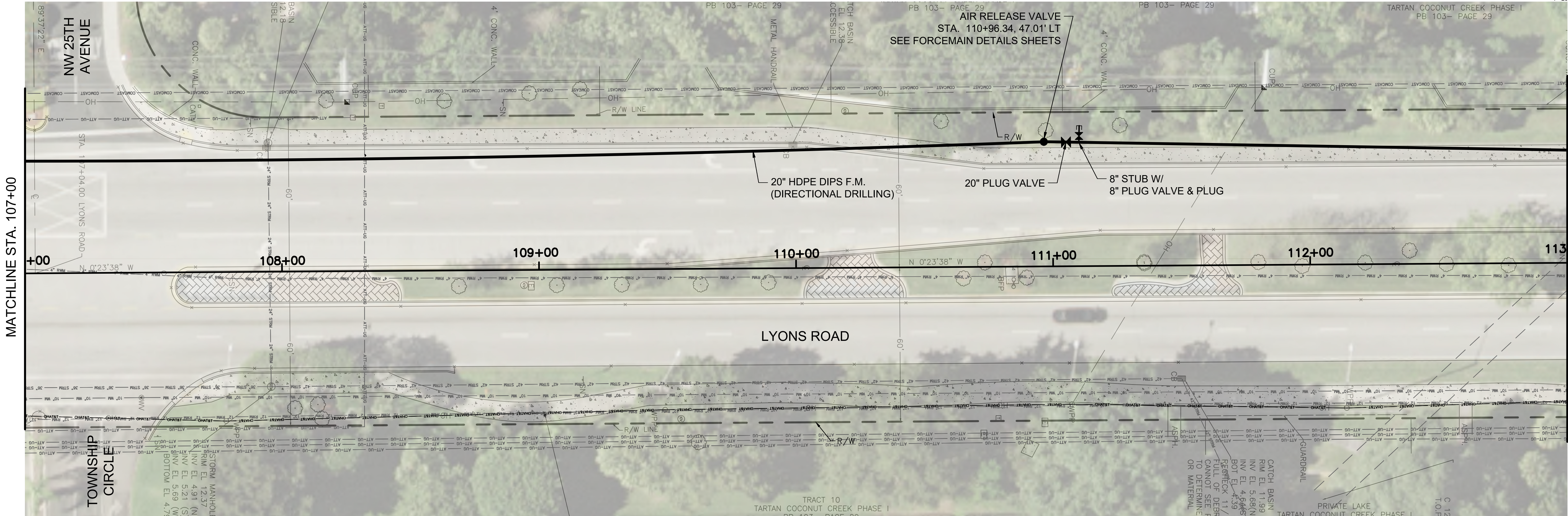
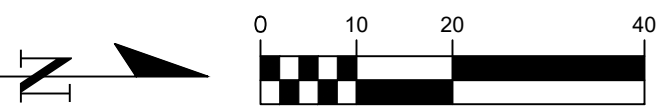
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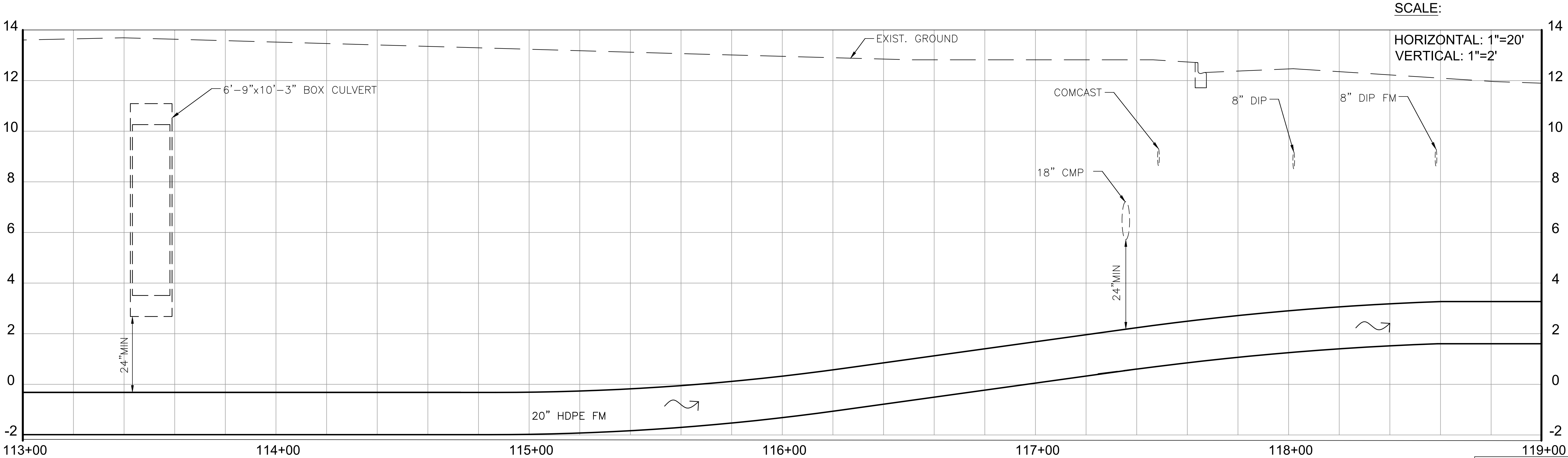
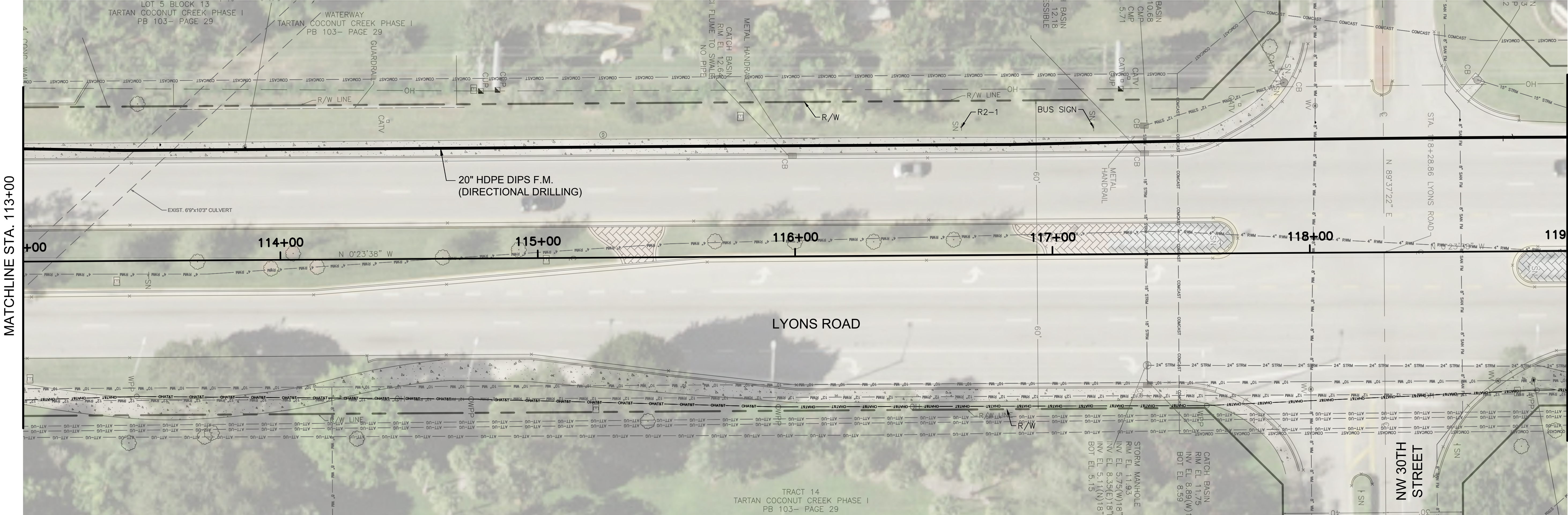
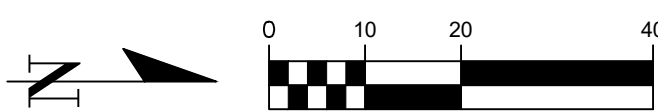
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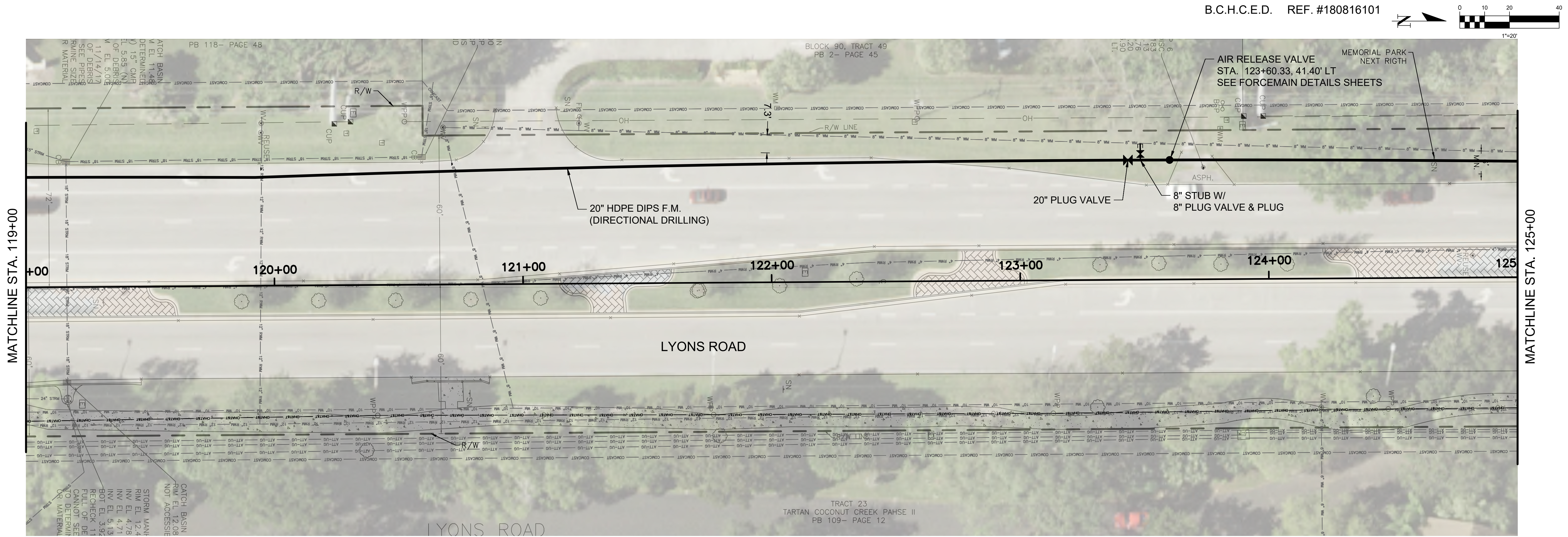
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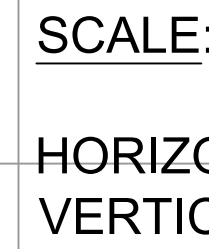
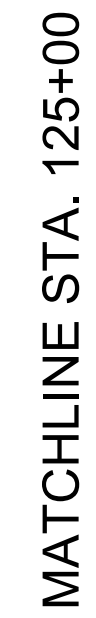
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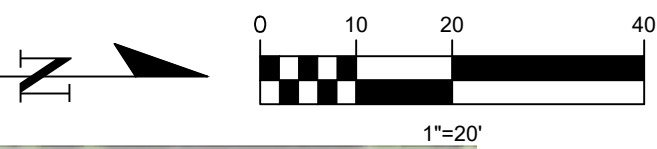
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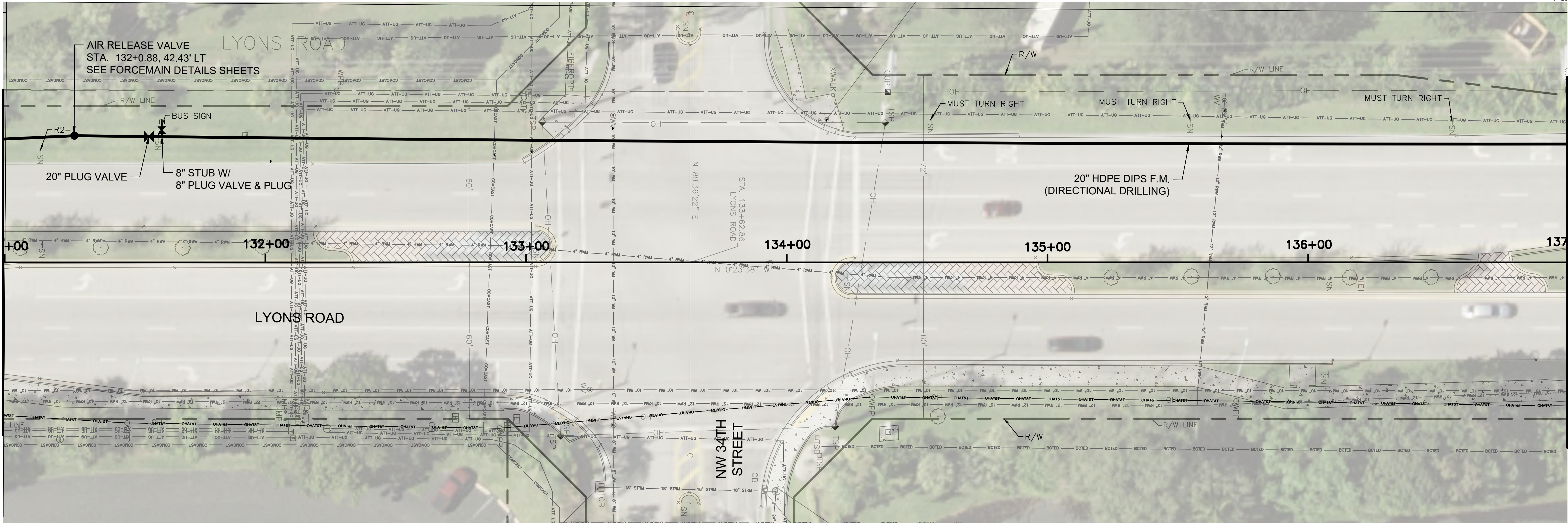
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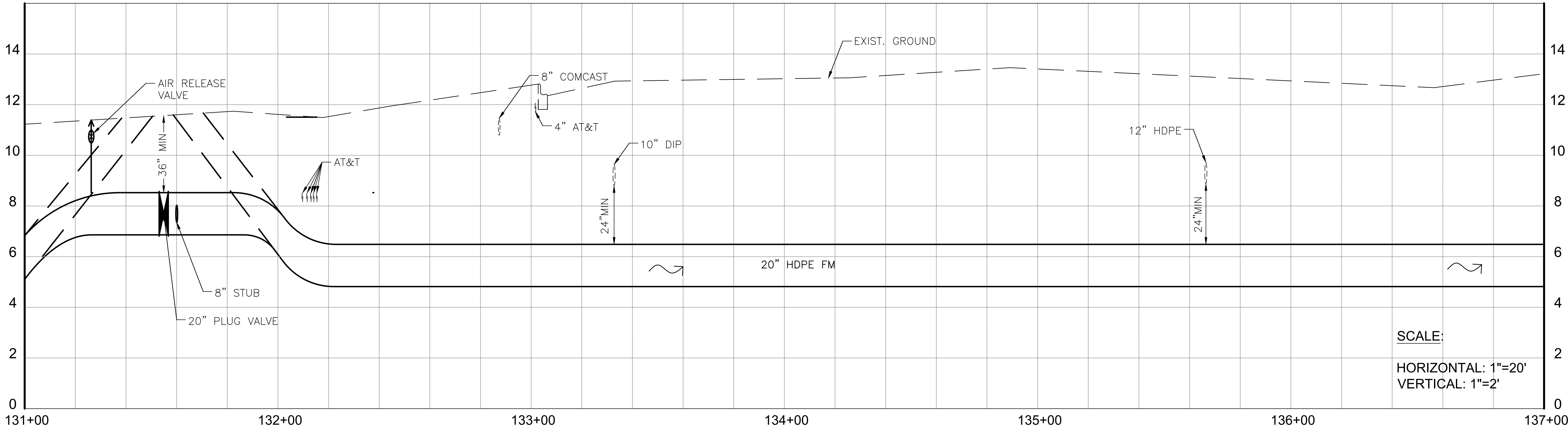
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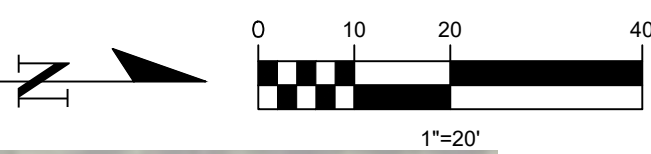
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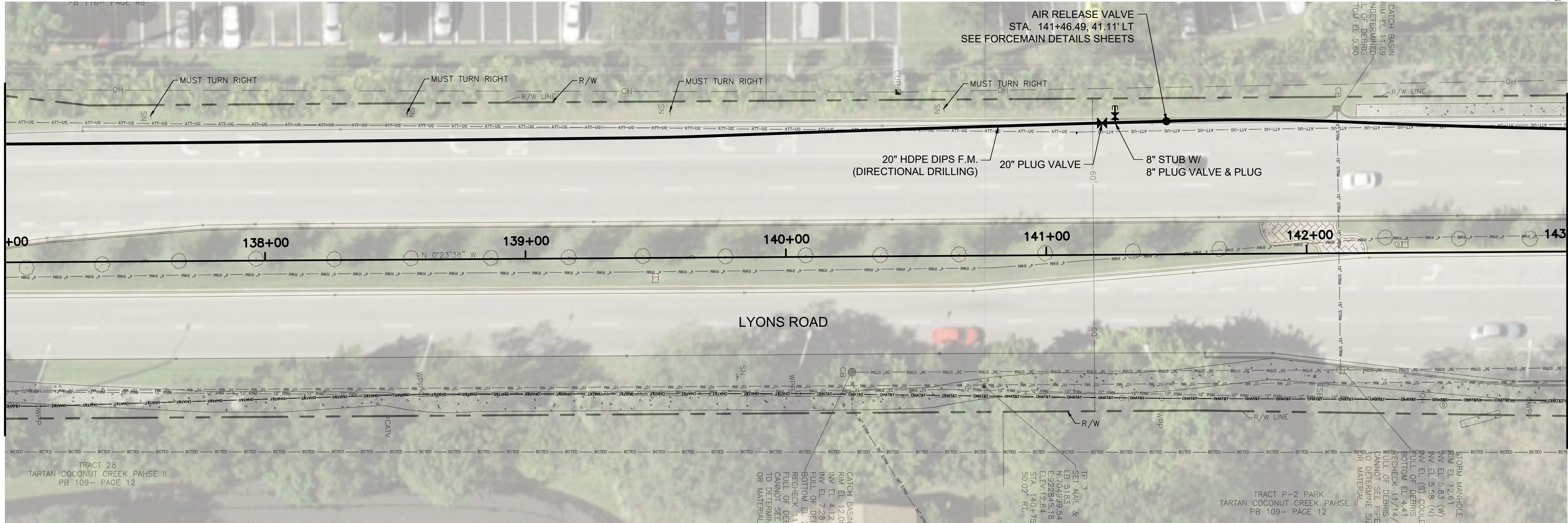
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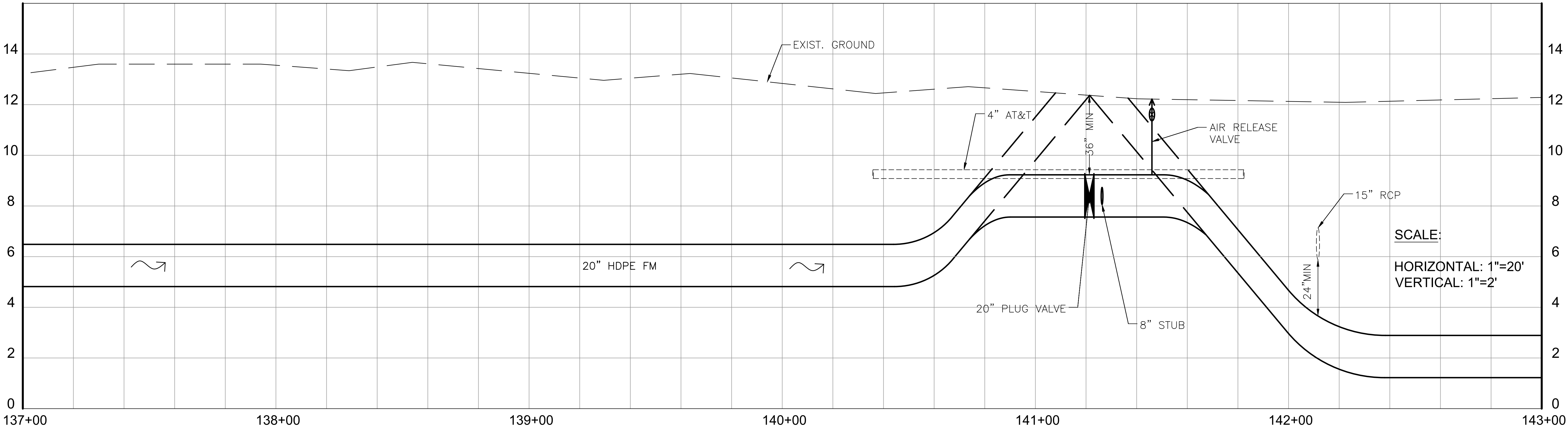
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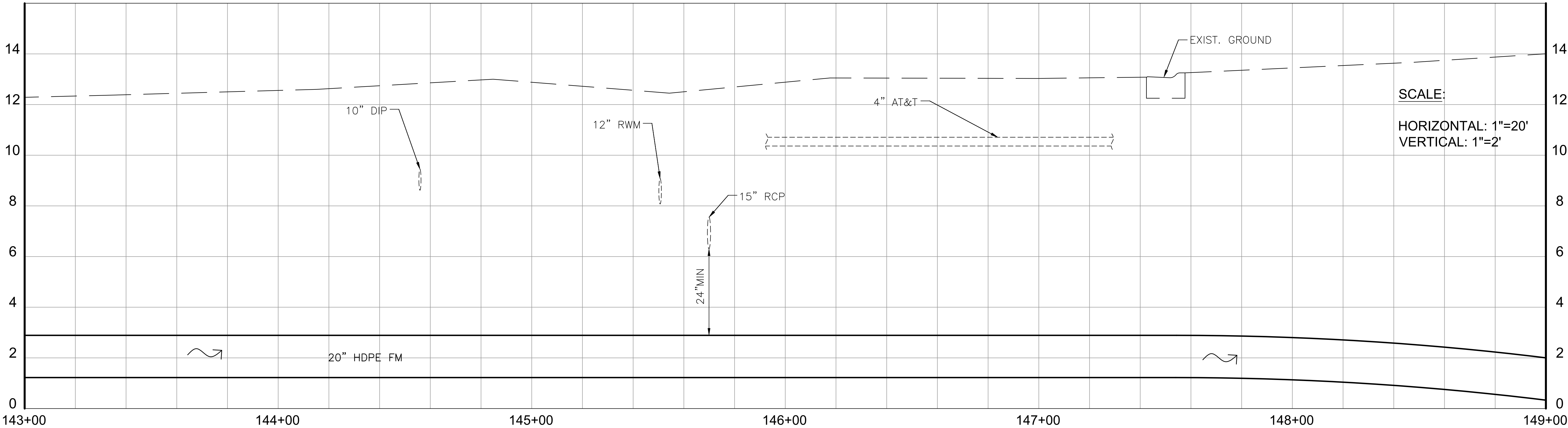
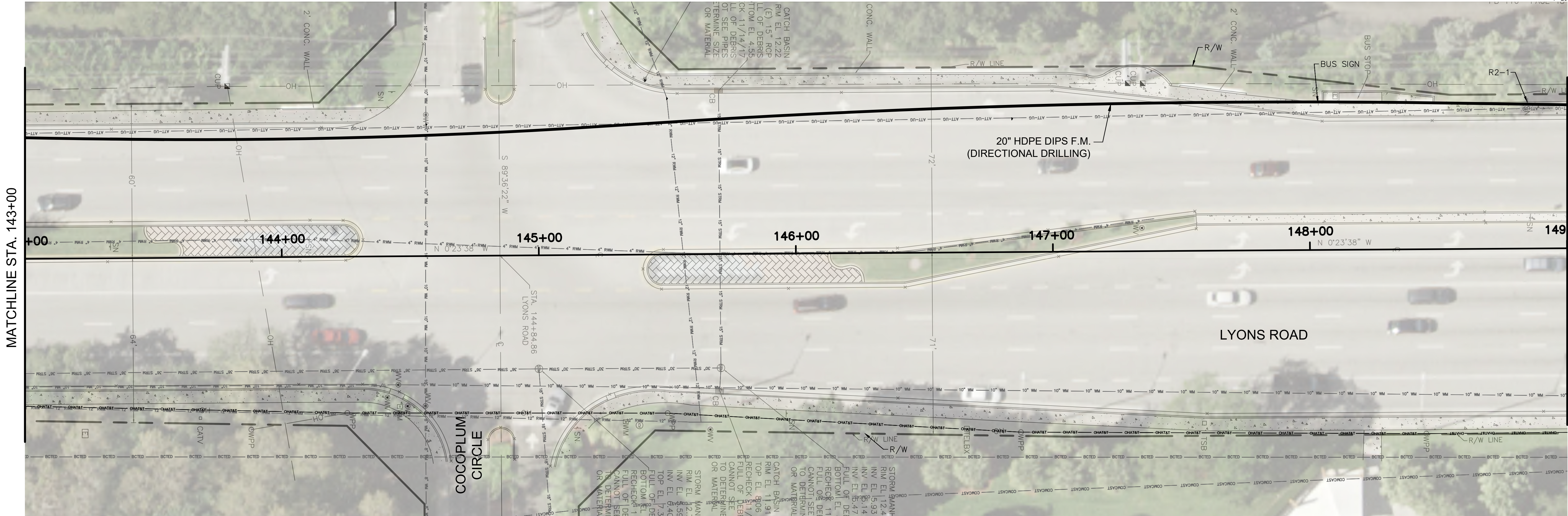
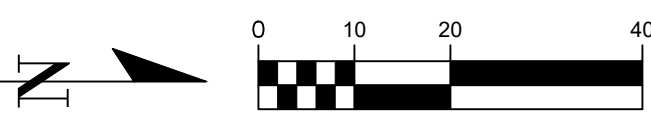


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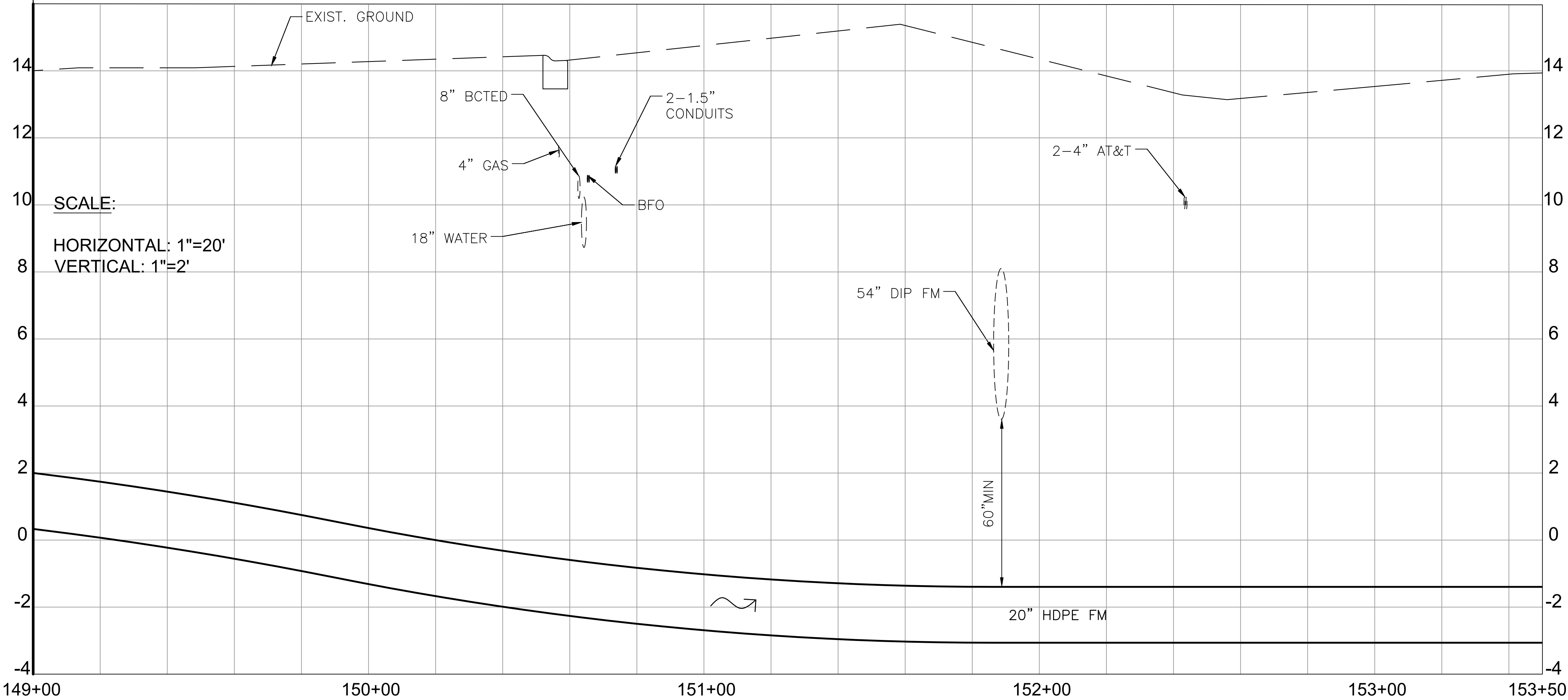
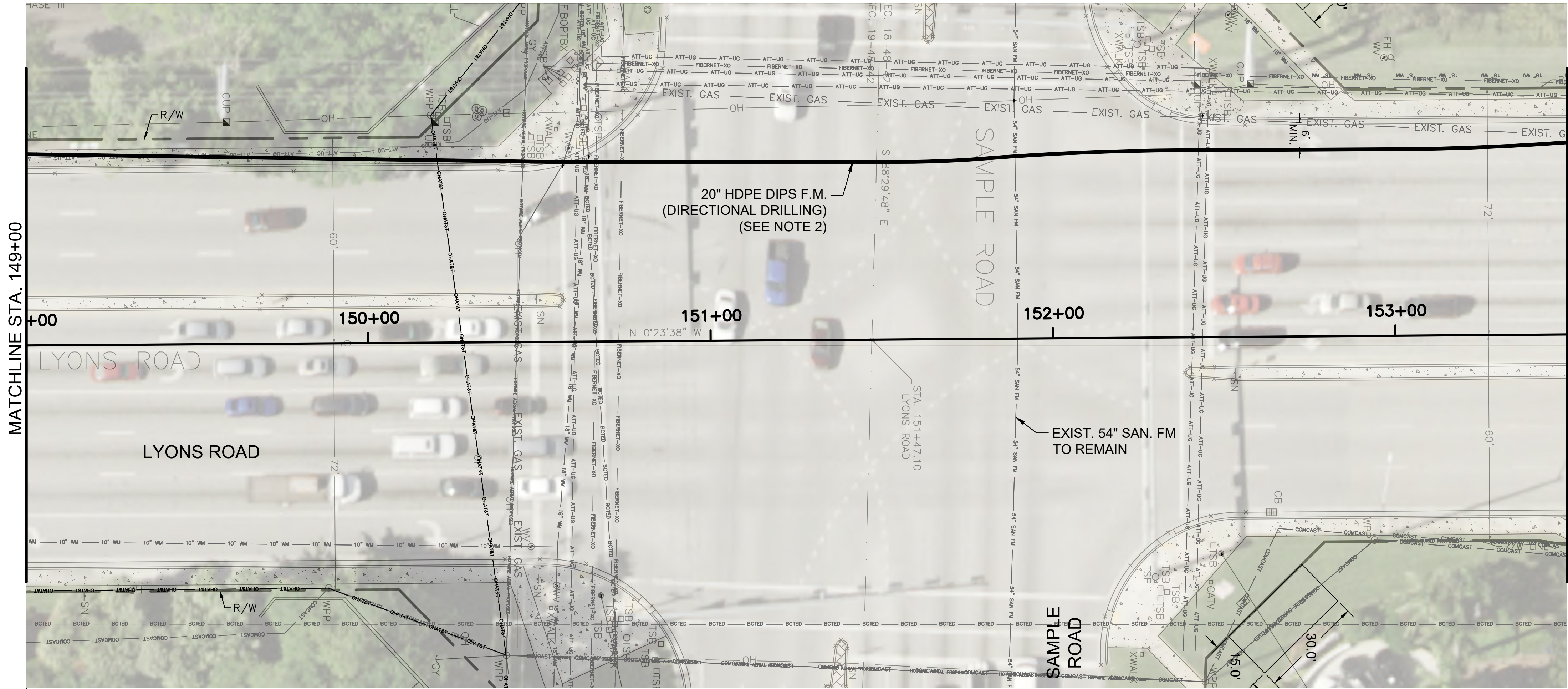
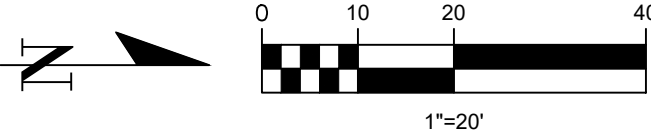


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NOTES:

1. CONTRACTOR SHALL CONTACT BROWARD COUNTY BEFORE DRILLING UNDER THE 54-INCH FORCE MAIN TO OBTAIN THEIR REQUIREMENTS BEFORE COMMENCING THE DRILLING UNDER SAMPLE ROAD.
2. DO NOT CONSTRUCT THE WEST SAMPLE RD. CROSSING UNTIL THE FDOT UTILITY PERMIT IS APPROVED. EXPECTED BY END OF NOVEMBER 2019. PERMIT HAS BEEN APPLIED FOR.

CAUTION: GAS MAIN IN AREA OF CONSTRUCTION

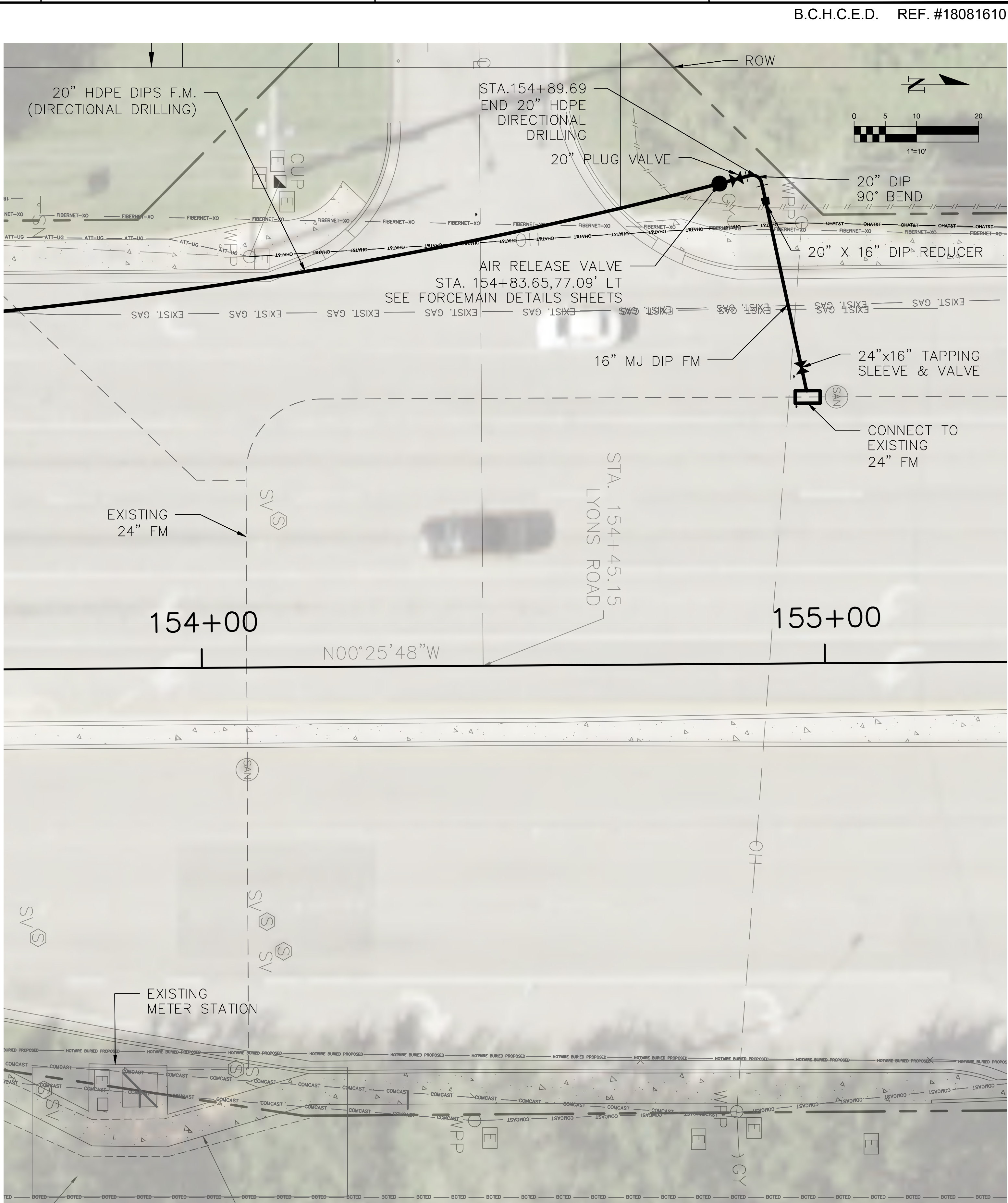
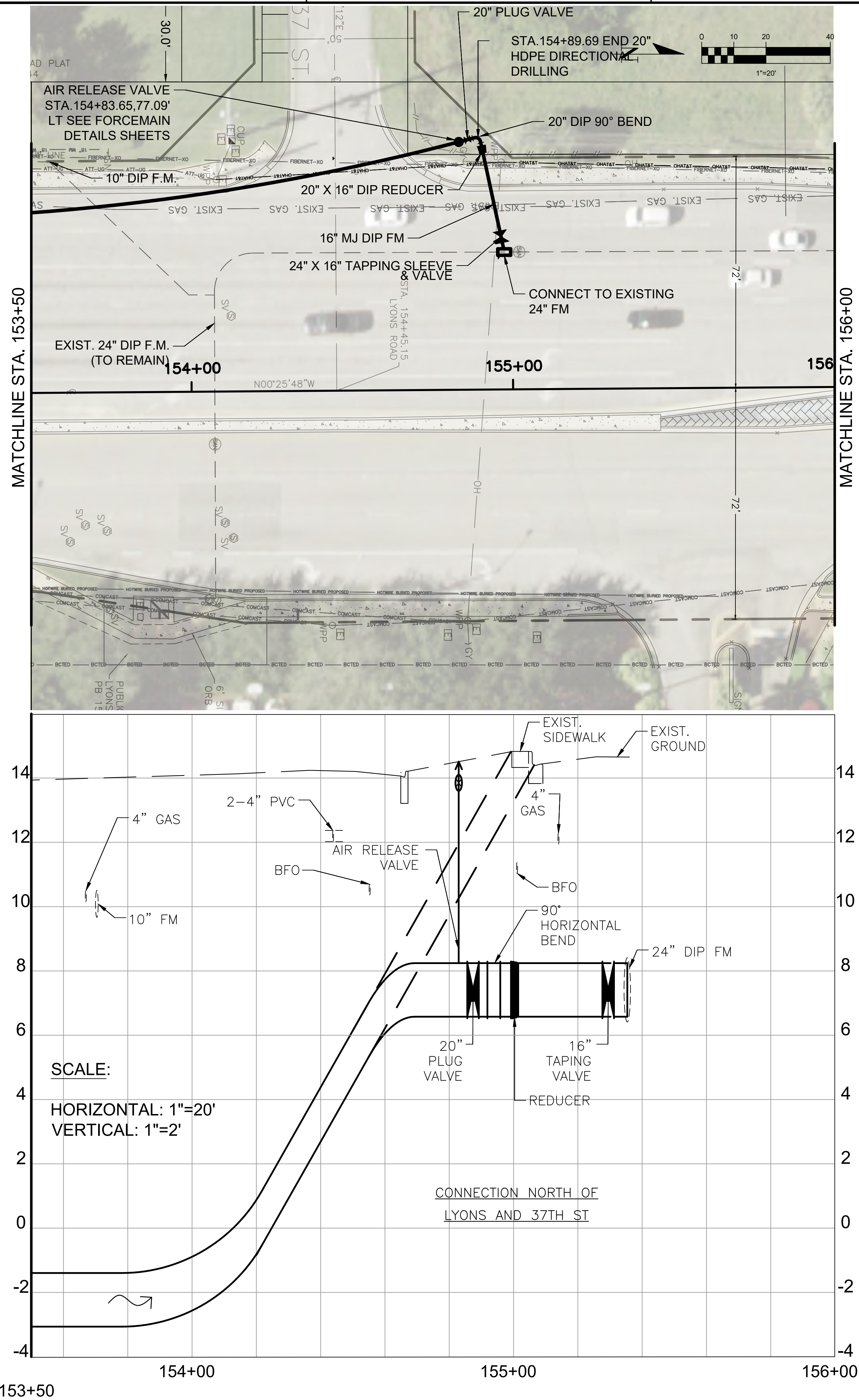


(SEAL)
JUAN H. VAZQUEZ, P.E.
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
Engineers • Planners
DESIGN OFFICE LOCATION: 6881 S.W. 198TH AVE., SUITE 302, PEMBROKE PINES, FL 33332, PH: 954-480-7771, FAX: 954-480-7781
CERTIFICATE OF PROFESSIONAL REGISTRATION NO. 00036326
www.rjbhar.com

COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK
RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM
REVISIONS:
SHEET NAME:
PLAN AND PROFILE
C-9
SHEET 13 OF 37

FIGURE COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN - LYONS DVC 8/10/19 BY HROSARIO



LYONS ROAD CONNECTION

CAUTION: GAS MAIN IN AREA OF CONSTRUCTION



(SEAL)

JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
Engineers • Planners

CERTIFICATE OF REGISTRATION No. 00053626
www.rjbhar.com

COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

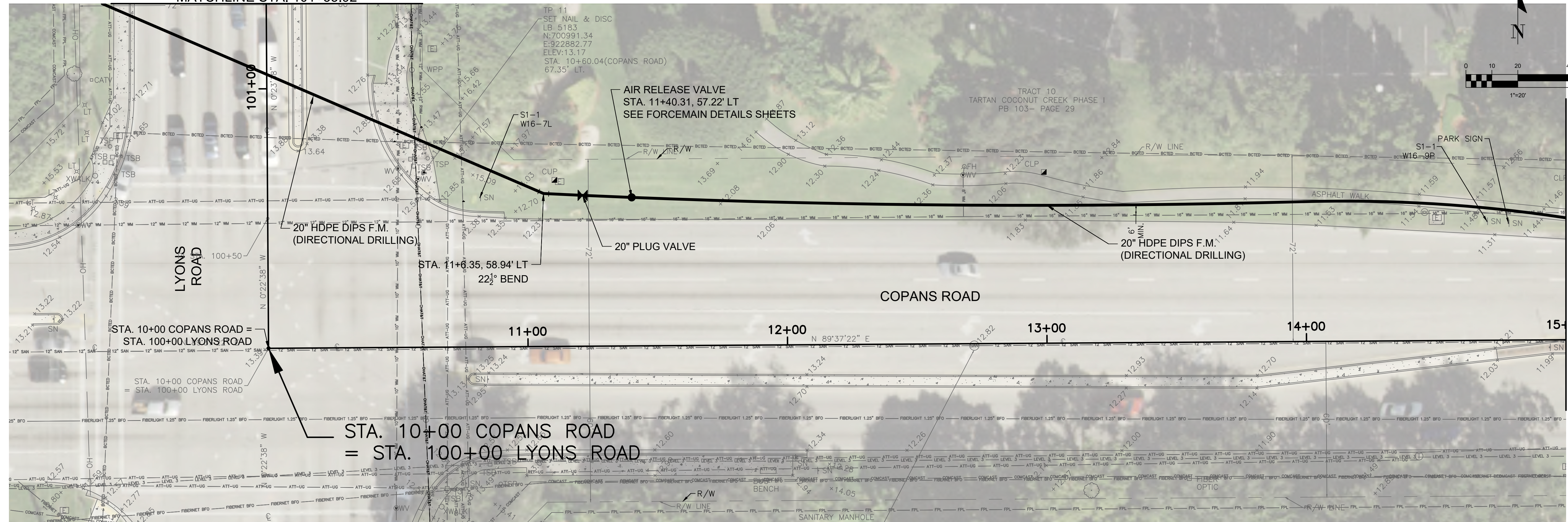
RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM
REVISIONS:

SHEET NAME:
PLAN AND PROFILE

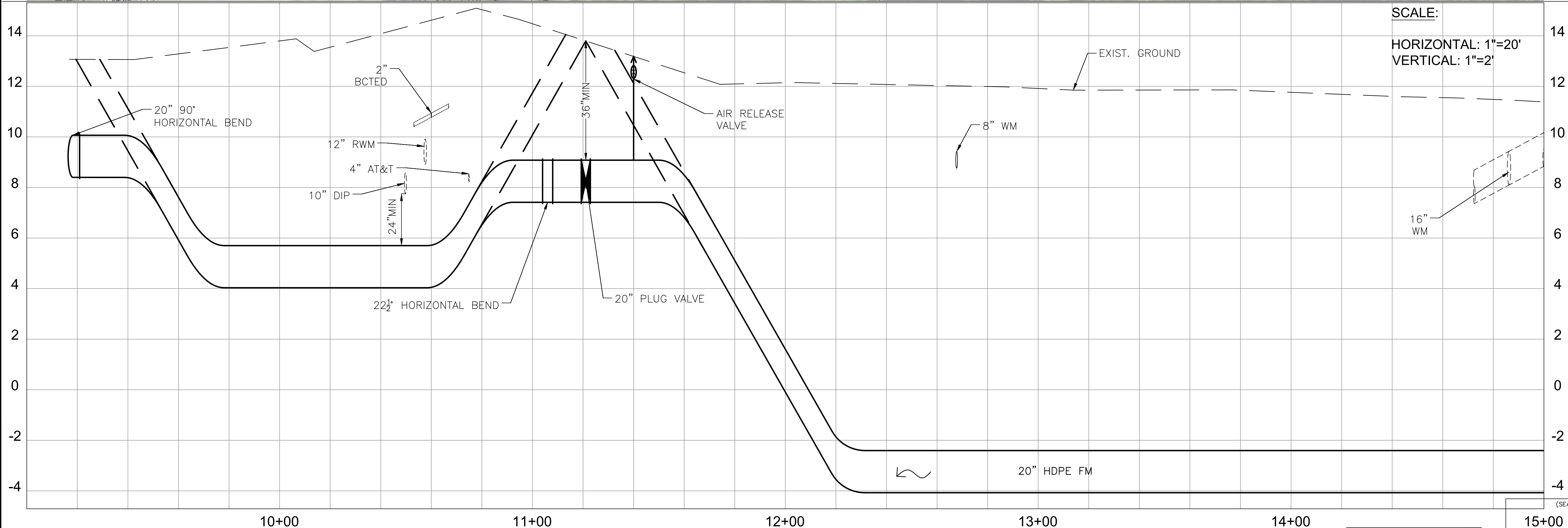
C-10
SHEET 14 OF 37

MATCHLINE STA. 101+33.92

B.C.H.C.E.D. REF. #180816101



MATCHLINE STA. 15+00



SCALE:

HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO. 51143

R.J.Behar & Company, Inc.
Engineers • Planners

CERTIFICATE OF
REGISTRATION No.
0008365
www.rjbhar.com



**COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN**
CITY OF COCONUT CREEK

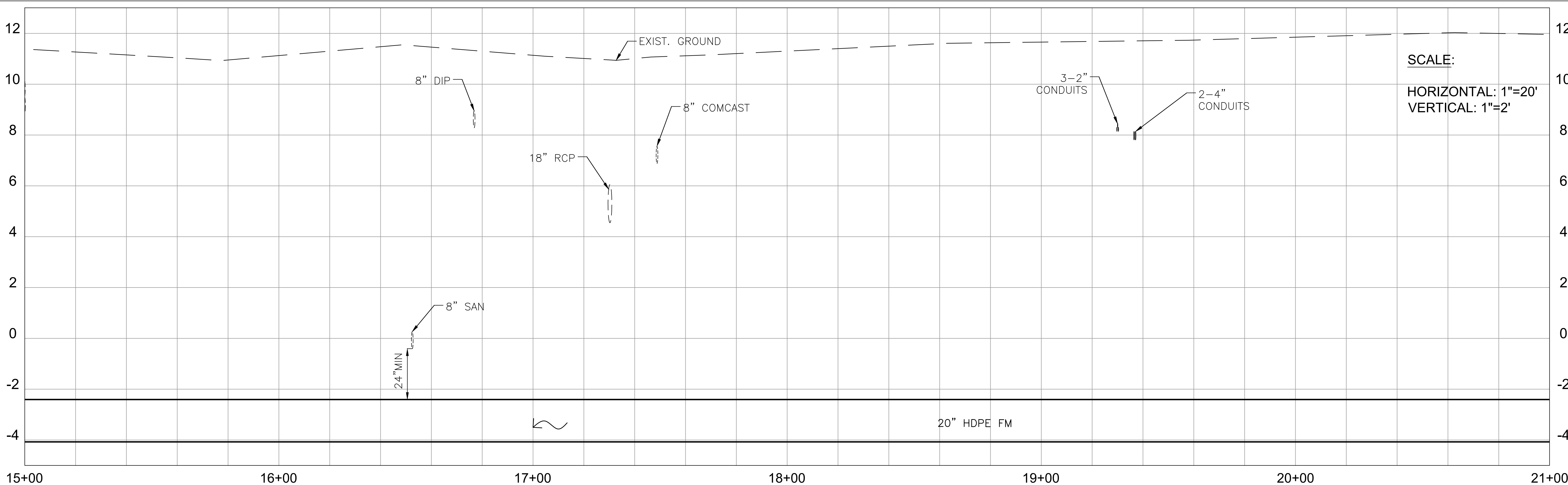
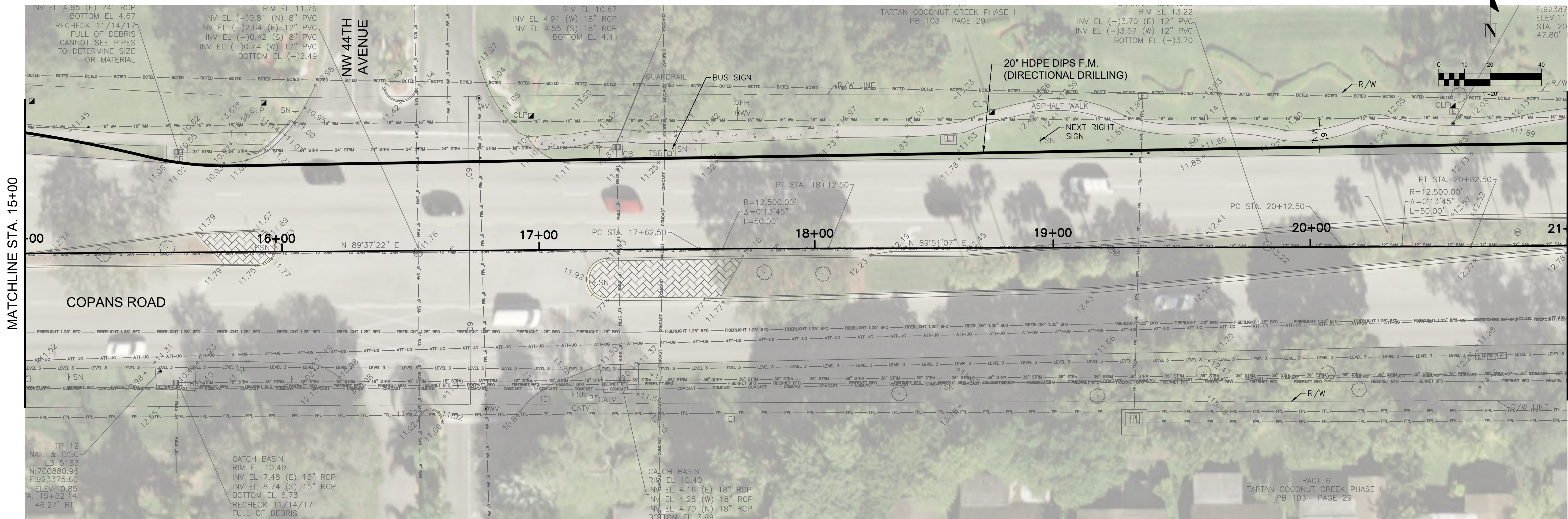
RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM

REVISIONS:

SHEET NAME:

PLAN AND
PROFILE

C-11
SHEET 15 OF 37



CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
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CERTIFICATE OF
REGISTRATION NO.
0008392

www.rjbhar.com

DESIGN OFFICE LOCATION: 6801 S.W. 198TH AVE., SUITE 302, PEMBROKE PINES, FL 33332, PH: 954-480-7771, FAX: 954-480-7781

**COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN**
CITY OF COCONUT CREEK

RJB Proj. No: 17039

Date: JUNE 10, 2019

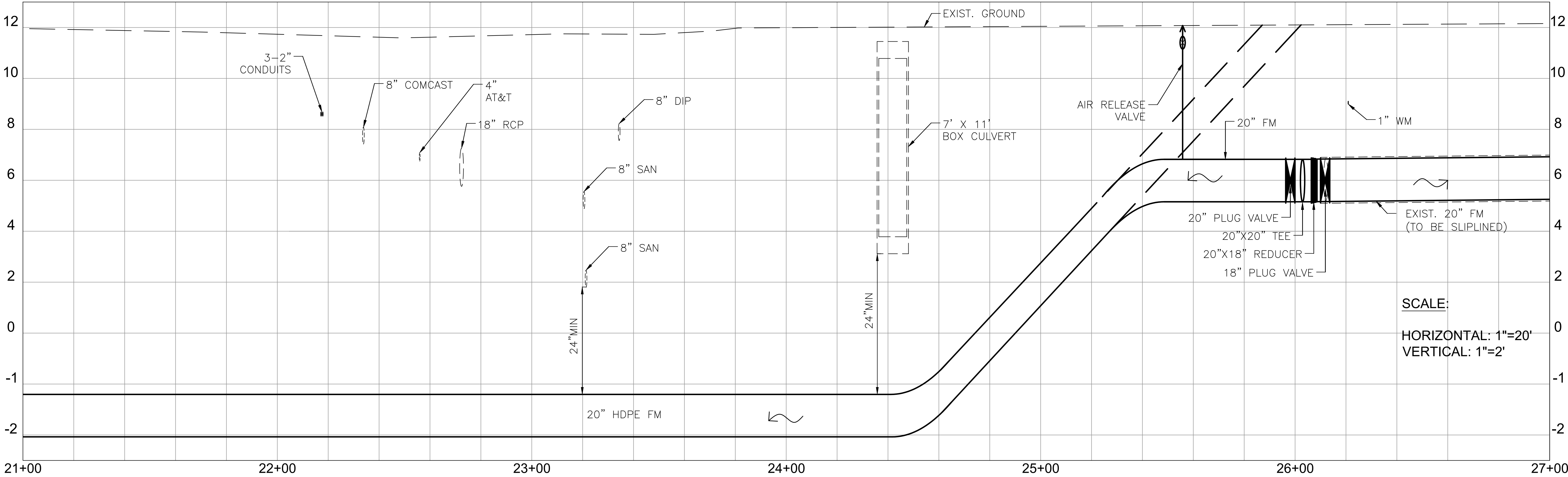
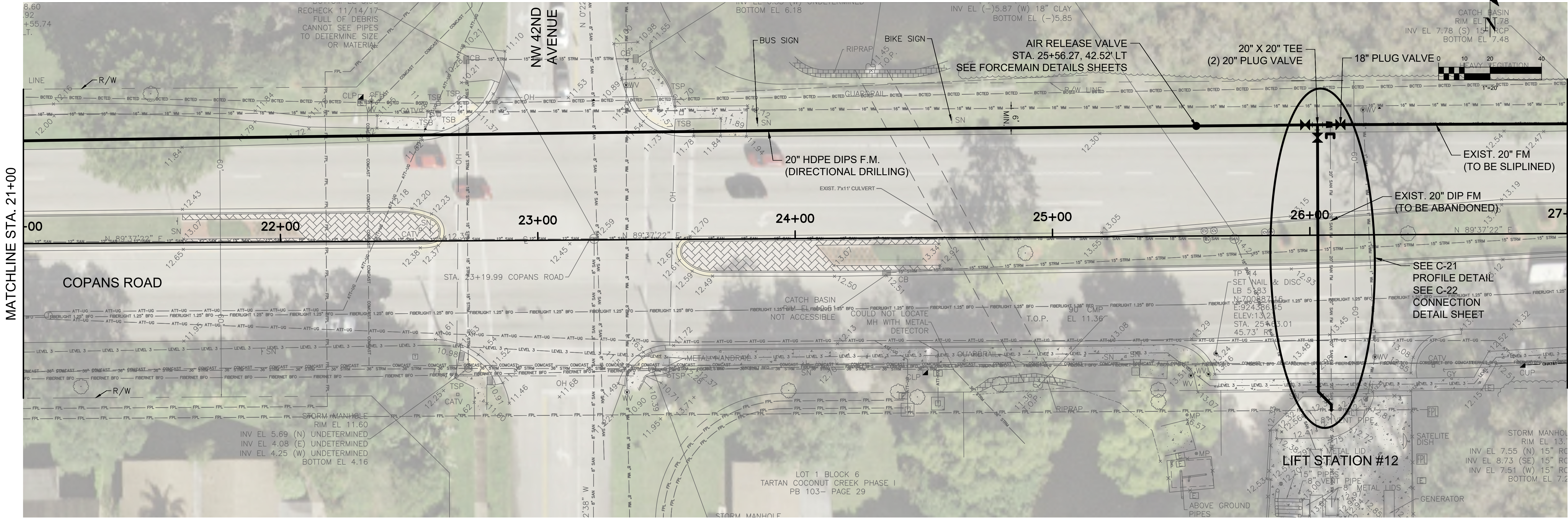
DESIGN: JHV DRAWN: SPIKL CHECK: HM

REVISIONS:

SHEET NAME:
**PLAN AND
PROFILE**

C-12

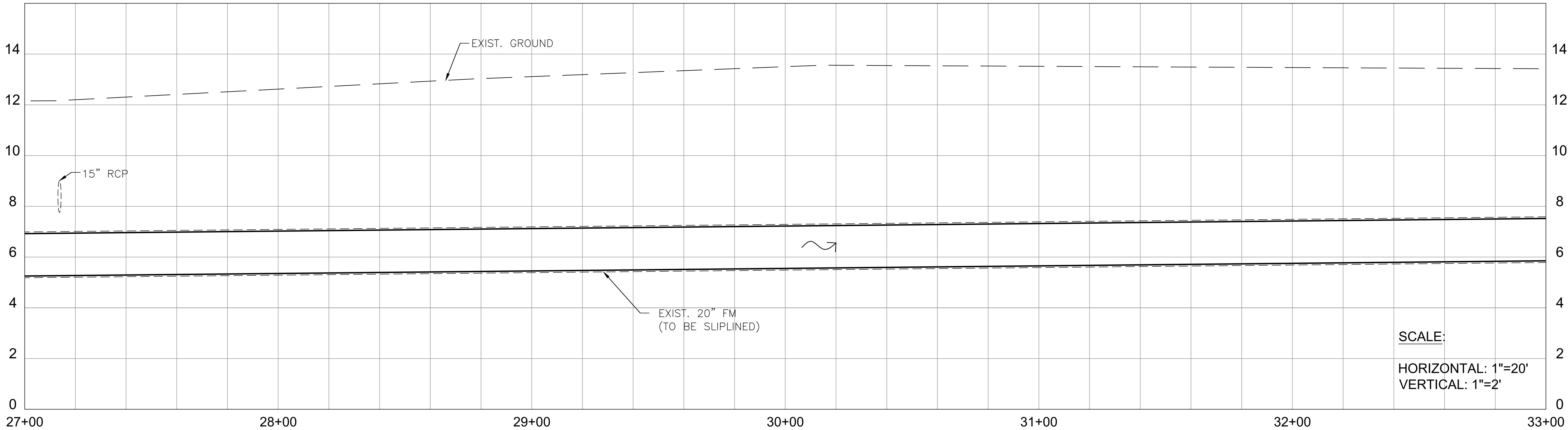
SHEET 16 OF 37



CAUTION: GAS MAIN IN AREA OF CONSTRUCTION



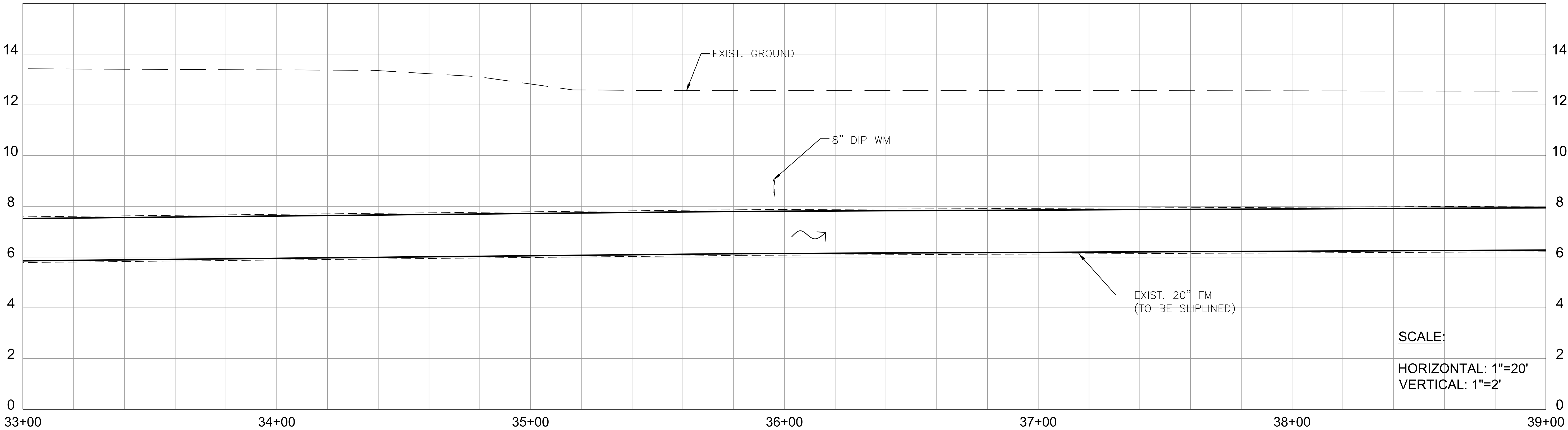
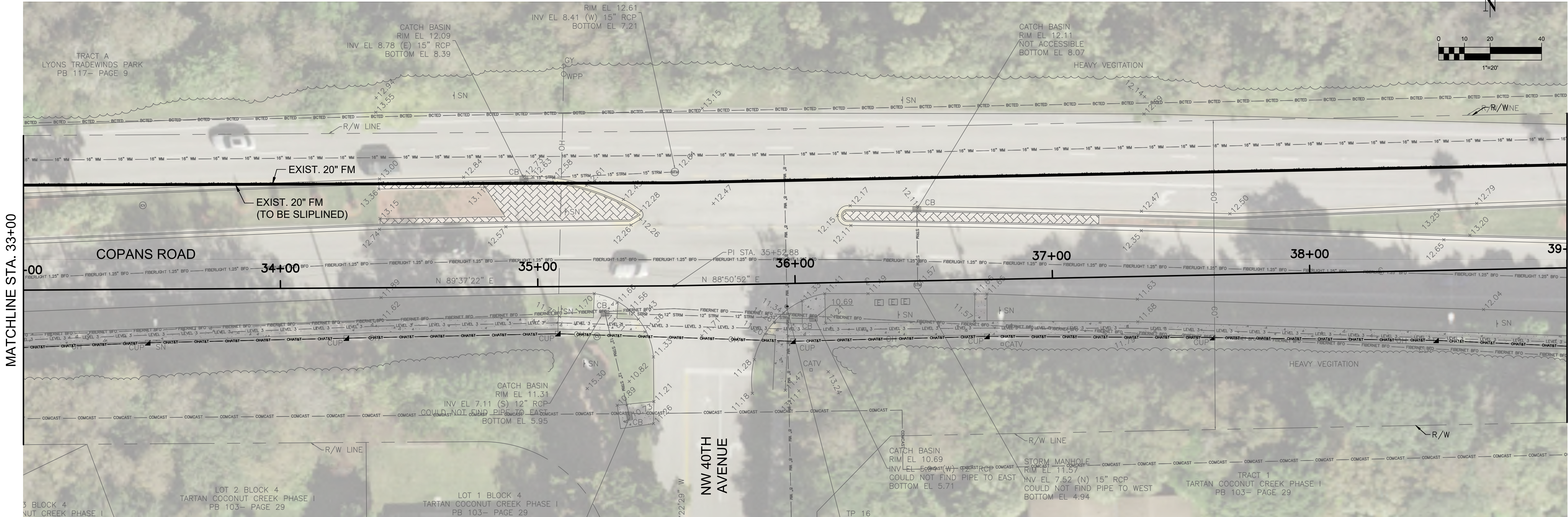
JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO. 51143



CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO. 51143



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
Engineers • Planners



CERTIFICATE OF
REGISTRATION NO.
0008362
www.rjbhar.com



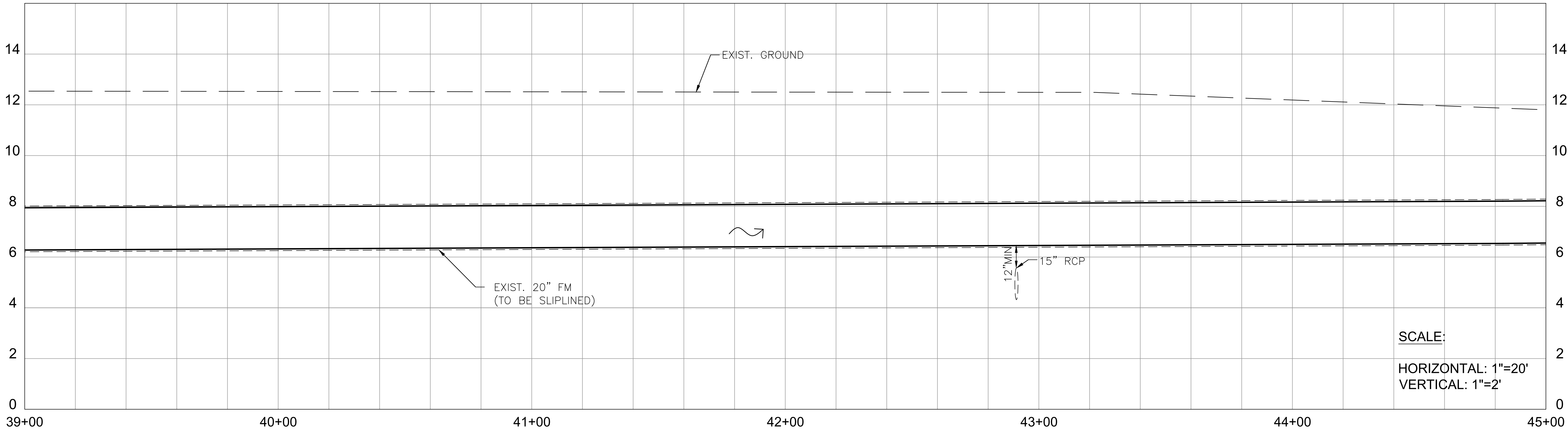
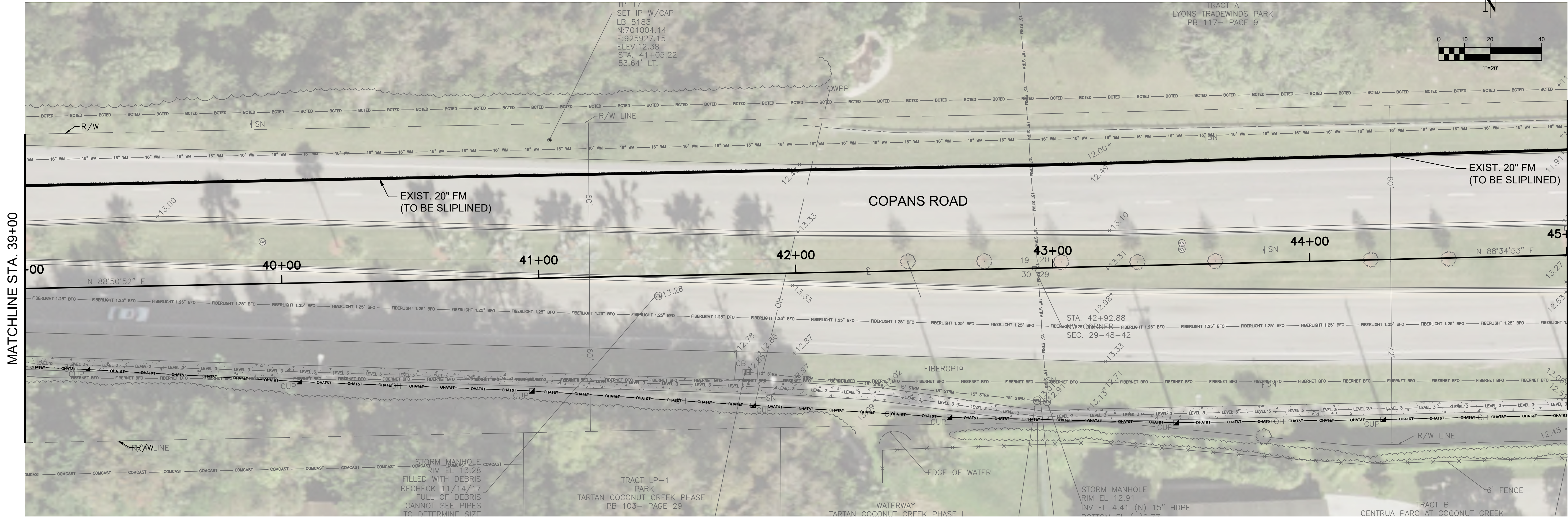
COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM
REVISIONS:

SHEET NAME:
PLAN AND
PROFILE

C-15

SHEET 19 OF 37



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
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**COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN**
CITY OF COCONUT CREEK

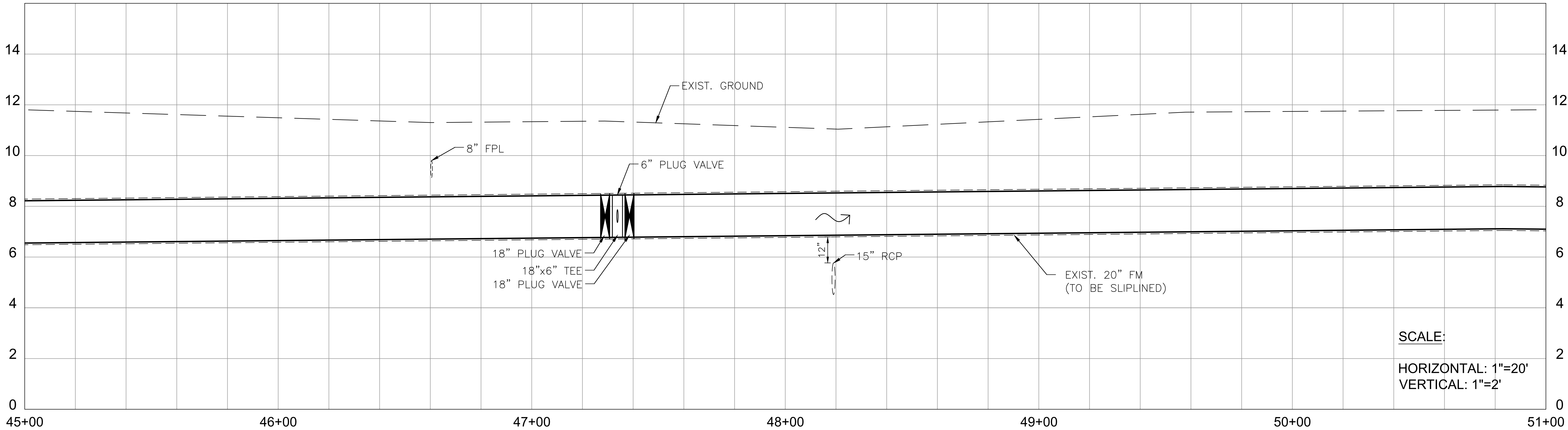
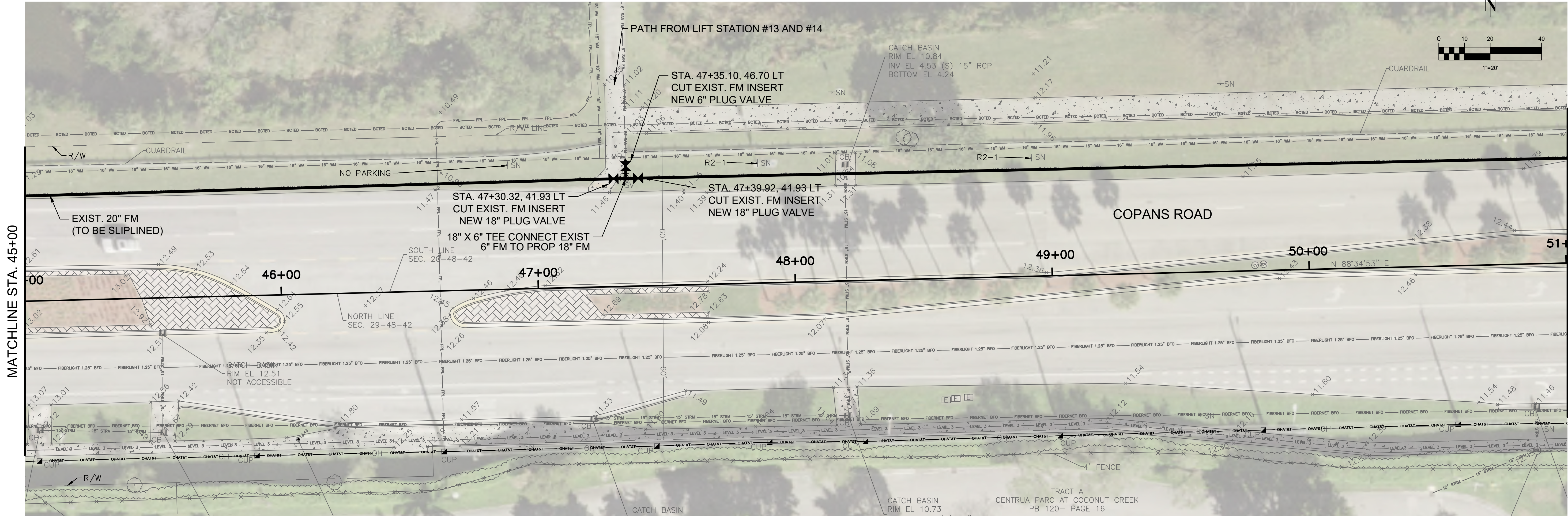
RJB Proj. No: 17039			
Date: JUNE 10, 2019			
DESIGN: JHV	DRAWN: SPIKL	CHECK: HM	

REVISIONS:

SHEET NAME:

**PLAN AND
PROFILE**

C-16
SHEET 20 OF 37



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
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COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

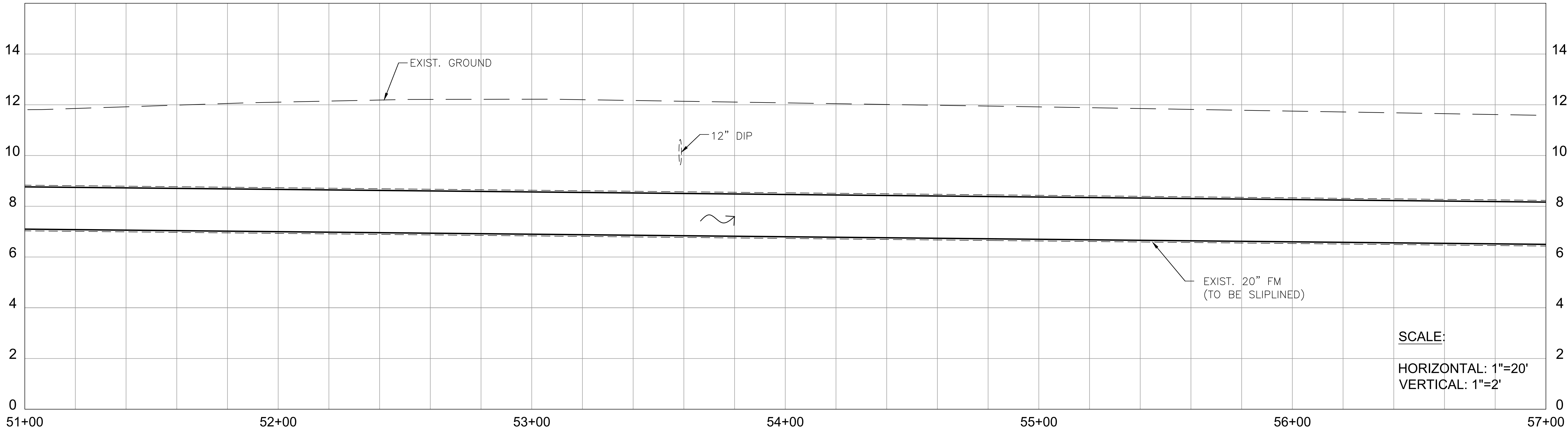
RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM
REVISIONS:

SHEET NAME:

PLAN AND
PROFILE

C-17

SHEET 21 OF 37



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA
OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
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CERTIFICATE OF
REGISTRATION NO.
0006362
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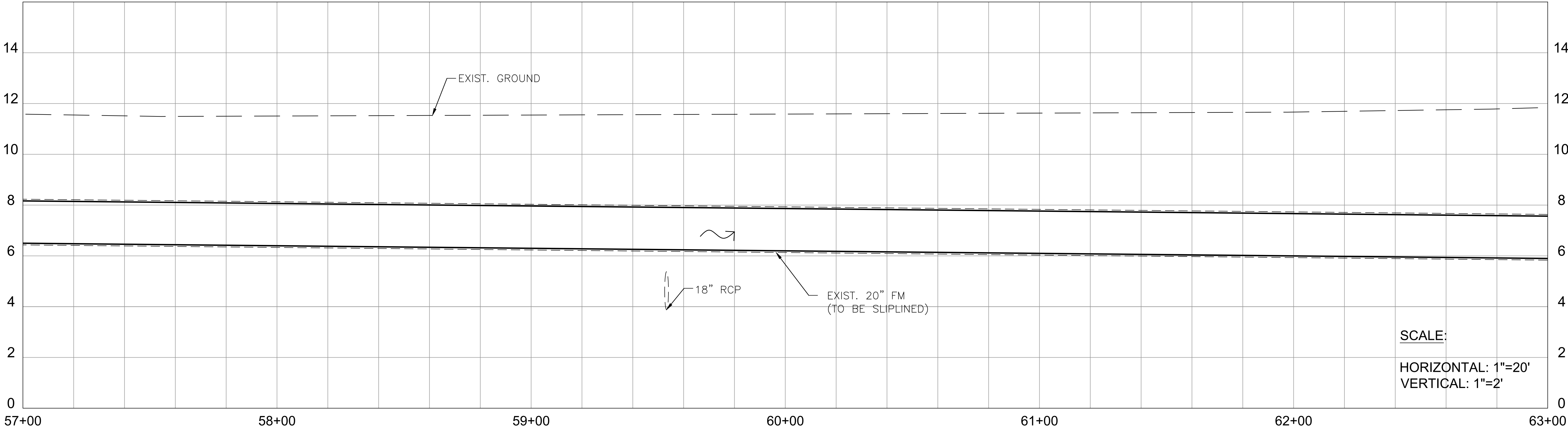
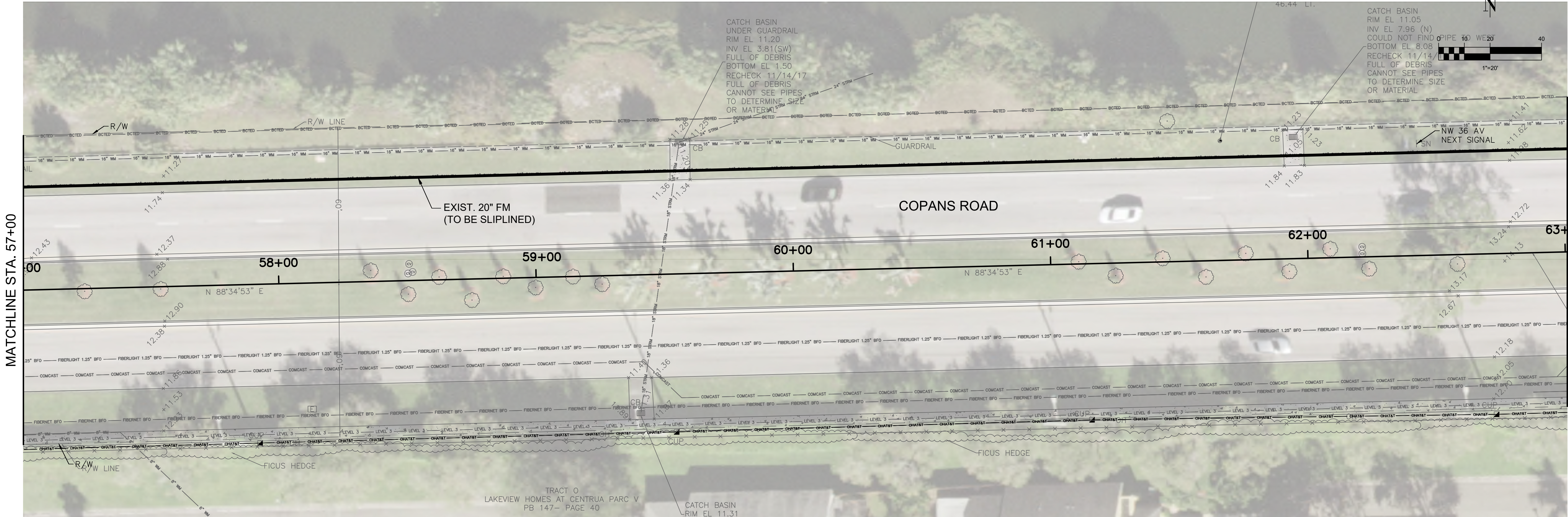
**COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN**
CITY OF COCONUT CREEK

RJB Proj. No: 17039			
Date: JUNE 10, 2019			
DESIGN: JHV	DRAWN: SPIKL	CHECK: HM	

REVISIONS:			

SHEET NAME:
**PLAN AND
PROFILE**

C-18
SHEET 22 OF 37



CAUTION: GAS MAIN IN AREA OF CONSTRUCTION



JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
Engineers • Planners

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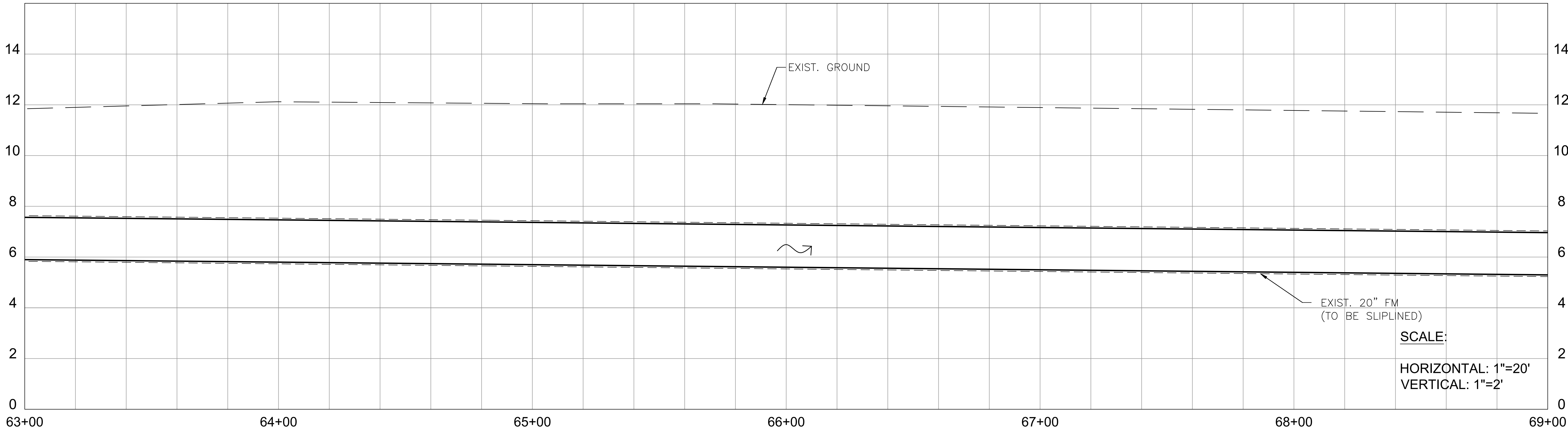
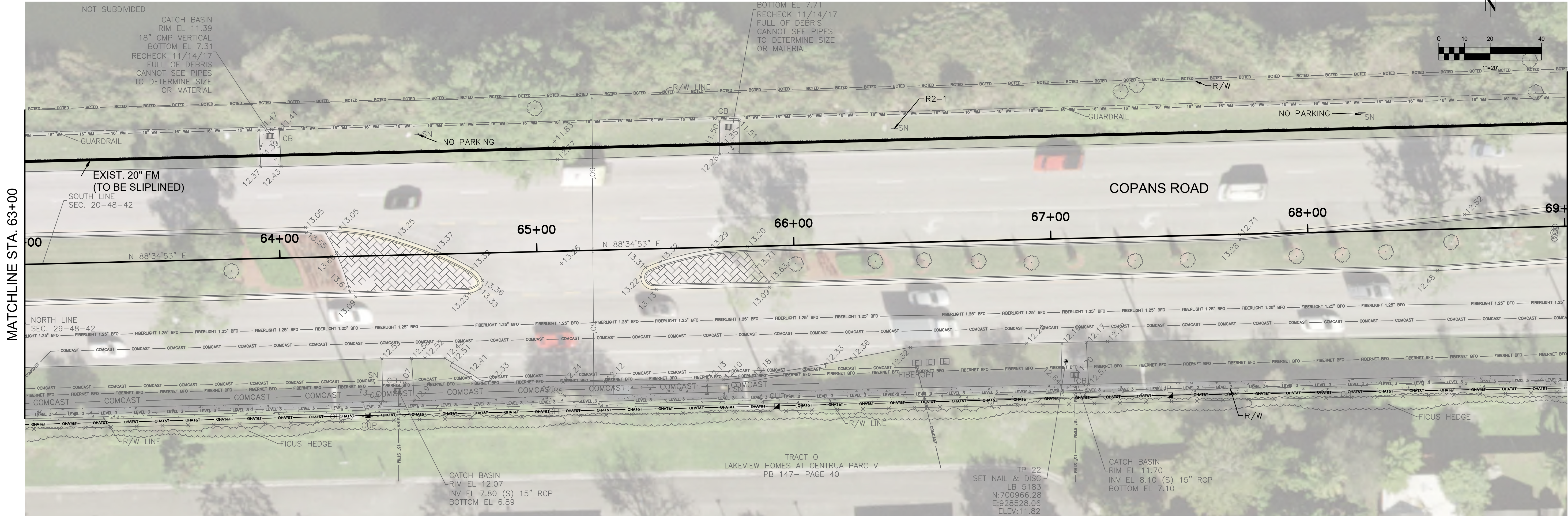
COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RUB Proj. No: 17039		
Date: JUNE 10, 2019		
DESIGN: JHV	DRAWN: SPIKL	CHECK: HM

REVISIONS:

SHEET NAME:
PLAN AND PROFILE

C-19
SHEET 23 OF 37



R.J.Behar & Company, Inc.
Engineers • Planners

CERTIFICATE OF PROFESSIONAL REGISTRATION NO. 00068926
www.rjbhar.com

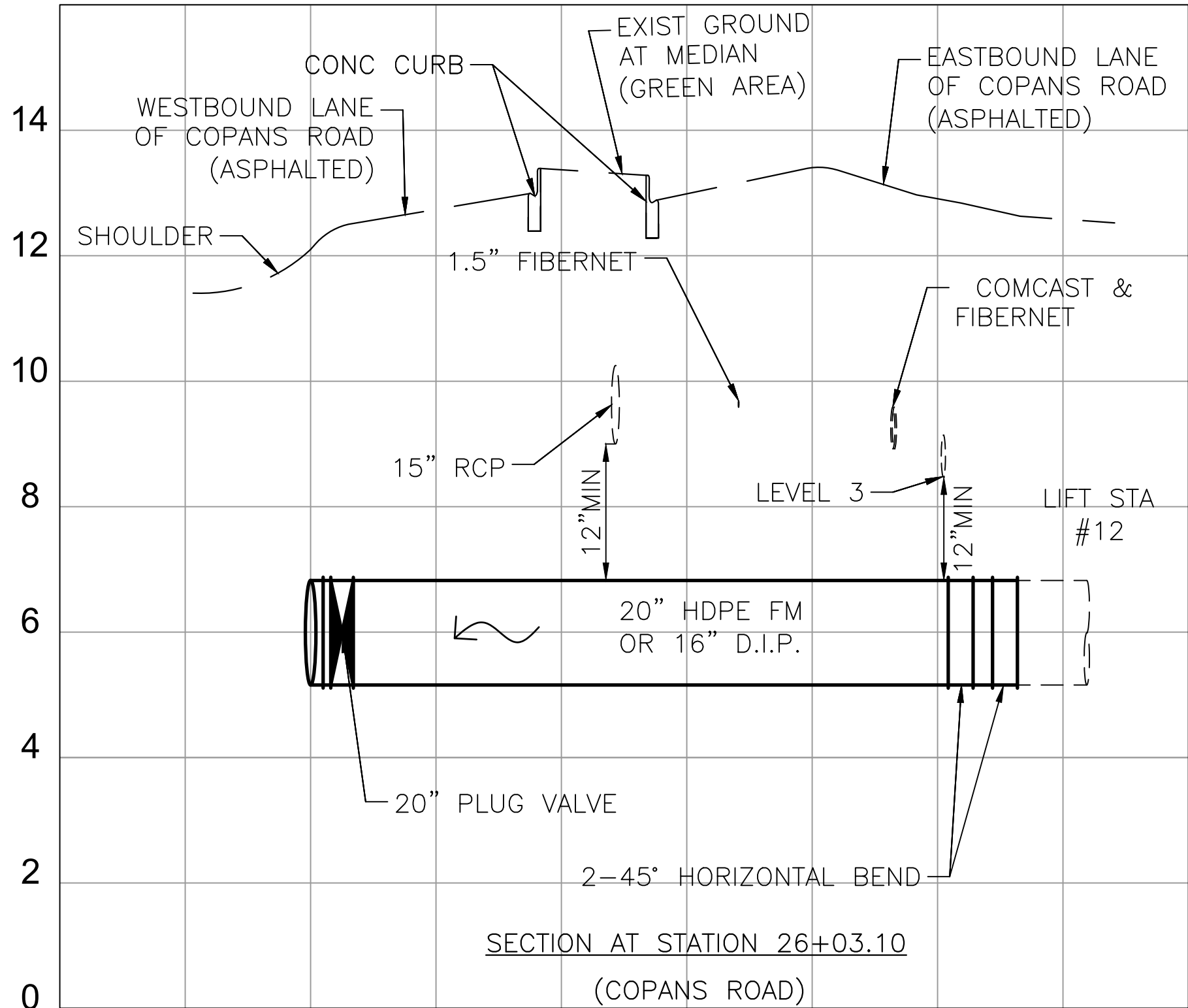
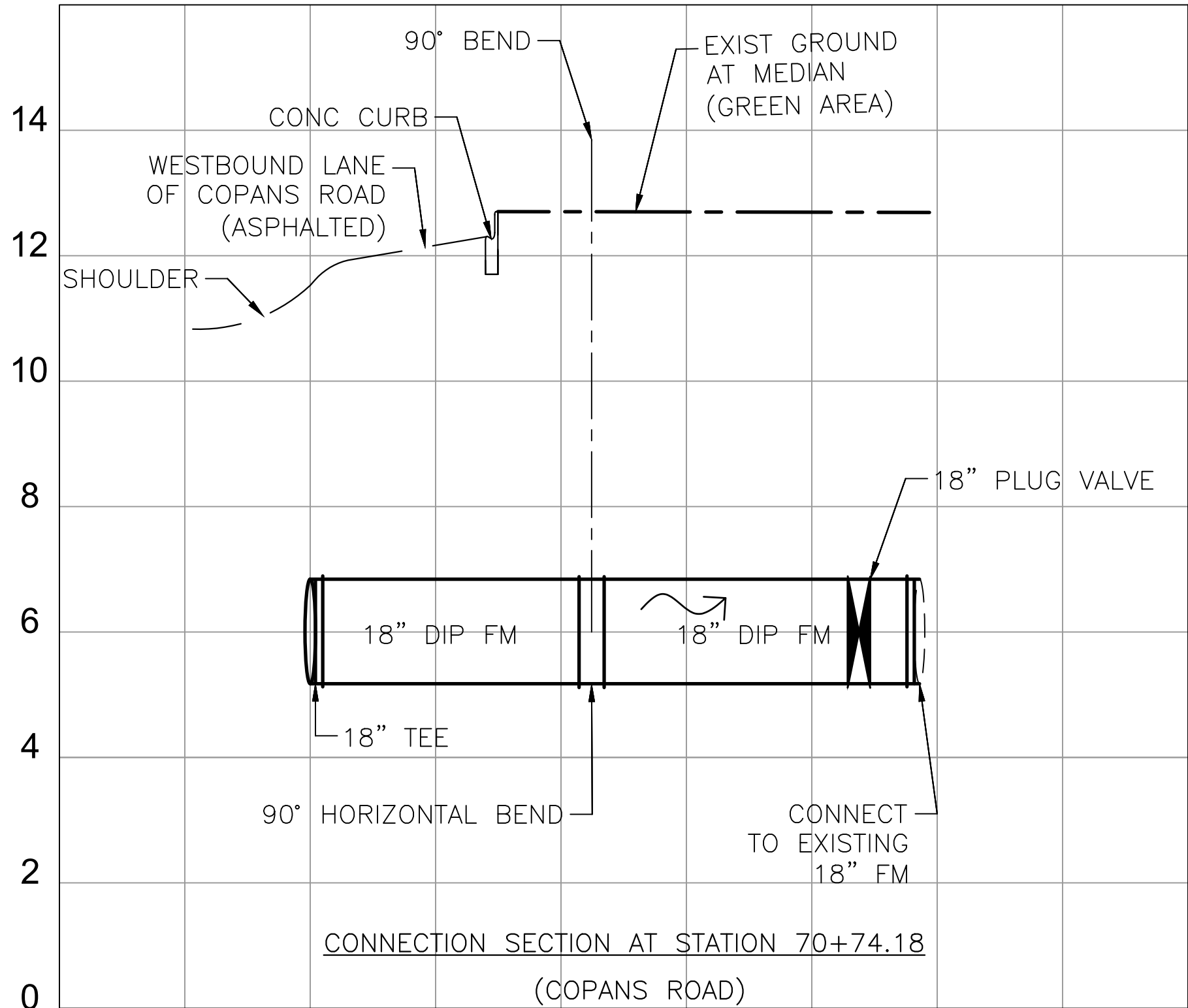
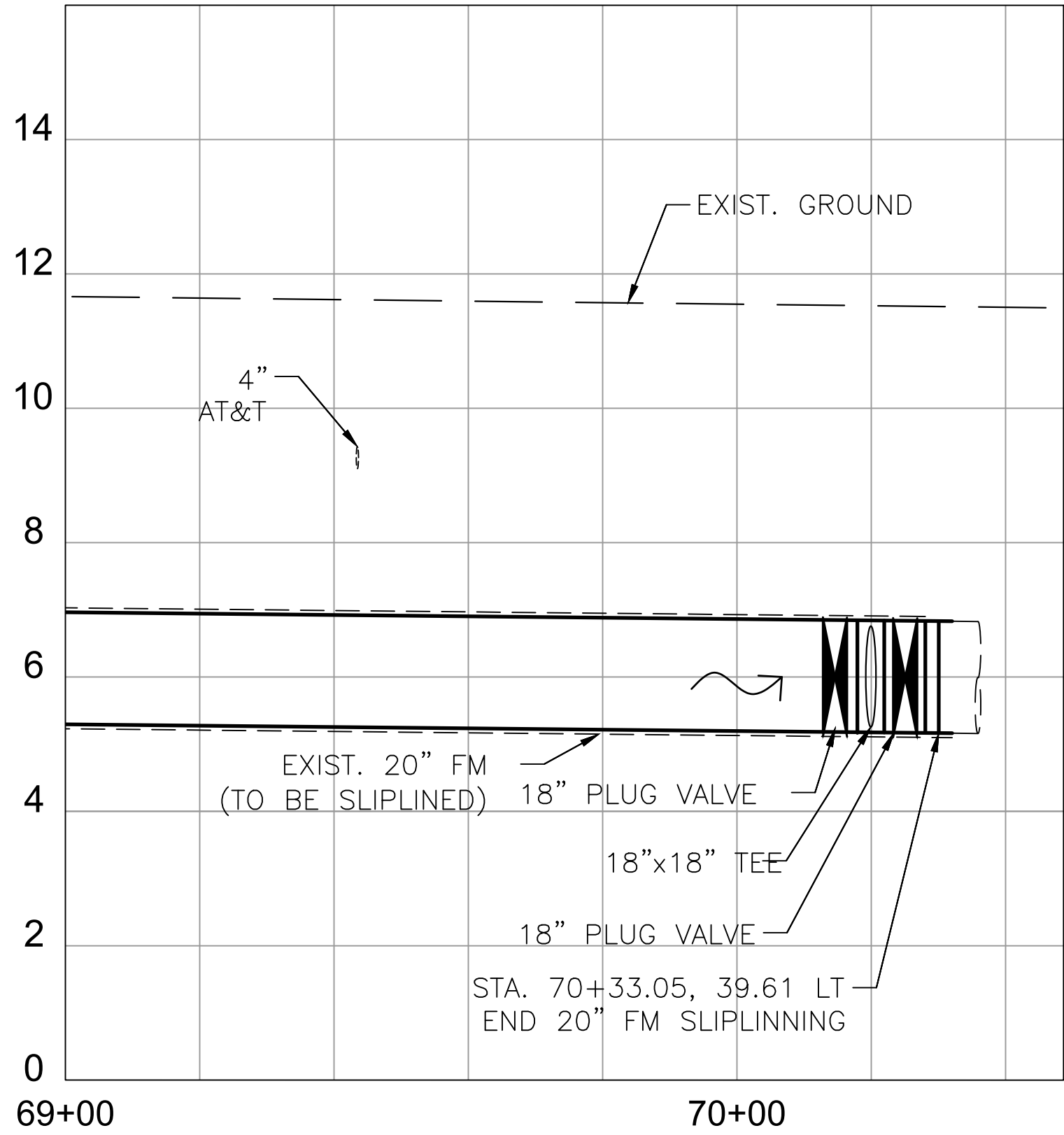
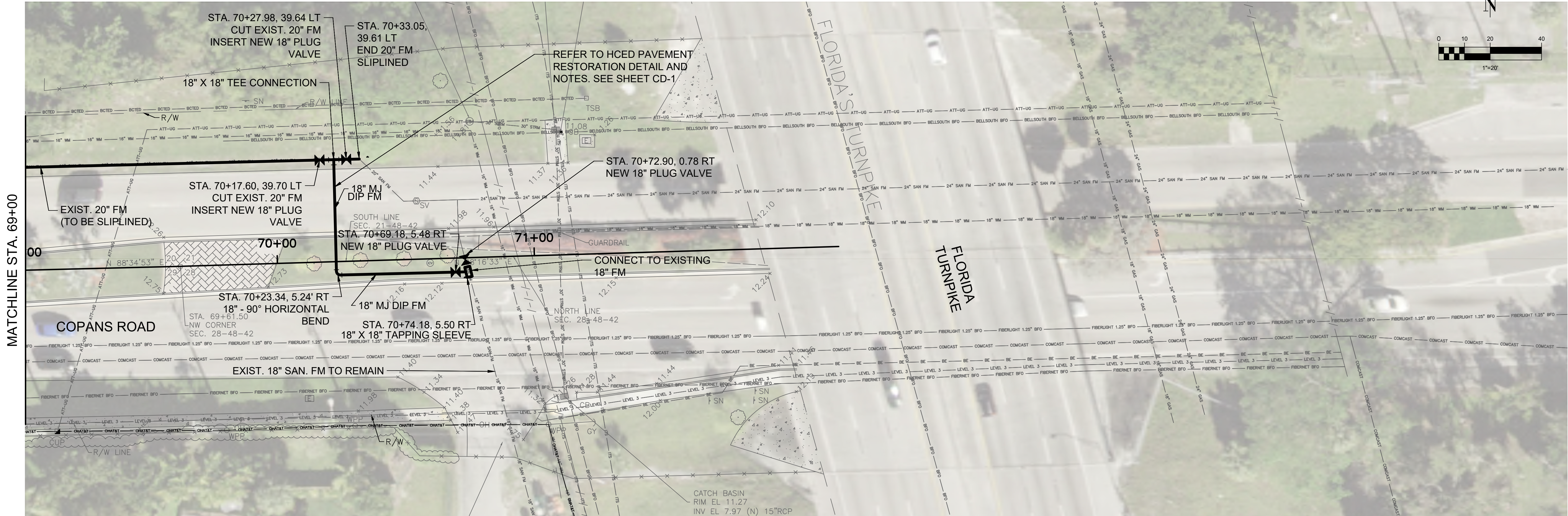
DESIGN OFFICE LOCATION: 6881 S.W. 198TH AVE., SUITE 302, PEMBROKE PINES, FL 33332, PH: 954-680-7771, FAX: 954-680-7781

COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JVB DRAWN: SPIKL CHECK: HM
REVISIONS:

SHEET NAME:
PLAN AND PROFILE

C-20
SHEET 24 OF 37



SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=2'

CAUTION: GAS MAIN IN AREA OF CONSTRUCTION



(SEAL)
JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO. 51143

R.J.Behar & Company, Inc.
Engineers • Planners

CERTIFICATE OF REGISTRATION No. 00063626
www.rjbehar.com

COPANS ROAD WASTEWATER TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: JHV DRAWN: SPIKL CHECK: HM
REVISIONS:

SHEET NAME:
PLAN AND PROFILE

C-21
SHEET 25 OF 37

① CONTRACTOR TO PROVIDE A TEMPORARY BY-PASS PUMPING SYSTEM FROM EXIST. SAN. SWR MANHOLE AND TAP TO EXIST. 20" F.M.

EXIST. PUMP STA. DESIGN CRITERIA: 1,750 GPM @ 71' TDH.

CONTRACTOR TO SHIELD THE TEMPORARY PUMPING SYSTEM WITH CONCRETE BARRIERS IF THE CLEARANCE IS LESS THAN 4 FEET FROM THE FACE OF THE CURB.

② EXIST. 20" F.M. CROSSING AT COPANS TO BE ABANDONED IN PLACE AFTER NEW CONNECTIONS ARE COMPLETE AND TESTED.

NOTE:

1. ANY DISTURBED PAVEMENT MARKINGS AND SIGNING SHALL BE REPLACED TO CURRENT B.C.T.E.D. STANDARDS.

THE FOLLOWING ITEMS ARE NOT REVIEWED OR ACCEPTED BY BROWARD COUNTY:

- BROWARD COUNTY TRAFFIC ENGINEERING DIVISION'S REVIEW DOES NOT INCLUDE A REVIEW AND ACCEPTANCE OF THE PROJECT'S DESIGN OR OPERATION. THESE ITEMS ARE TO BE REVIEWED AND APPROVED BY THE CITY ENGINEER.
- BROWARD COUNTY TRAFFIC ENGINEERING DIVISION DOES NOT REVIEW AND APPROVE, OR INSPECT AND ACCEPT THE FOLLOWING ITEMS FOR MAINTENANCE: PAVEMENT MARKINGS ON OR ADJACENT TO PAVEMENT BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVEMENT BRICKS, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON-STREET PARKING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING, OFF-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK OR ASPHALT WORK.
- THE CITY ENGINEER IS RESPONSIBLE FOR THE REVIEW AND APPROVAL OF THE DESIGN AND OPERATION OF THE PROJECT, AND FOR THE INSPECTION AND ACCEPTANCE OF THE FOLLOWING ITEMS THAT WILL BE MAINTAINED BY THE CITY: PAVEMENT MARKINGS ON OR ADJACENT TO PAVEMENT BRICKS, PAINTED ASPHALT, STAMPED ASPHALT OR PAVEMENT MARKINGS MADE OF PAVEMENT BRICKS, RAISED INTERSECTIONS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED MID-BLOCK CROSSWALKS AND RELATED MARKINGS AND SIGNING, UN-WARRANTED CROSSWALKS AND RELATED MARKINGS AND SIGNING, PAINTED/DECORATIVE CROSSWALKS, RAISED CROSSWALKS AND RELATED MARKINGS AND SIGNING, ADVANCED WARNING PAVEMENT MARKINGS FOR SPEED TABLES, BLINKER SIGNS, RECTANGULAR RAPID FLASHER BEACONS AND RELATED MARKINGS AND SIGNING, ON-STREET PARKING AND RELATED MARKINGS AND SIGNING, IN-ROAD LIGHTING AND RELATED MARKINGS AND SIGNING, GREEN BIKE LANES, FLEXIBLE DELINEATORS, DECORATIVE SIGNS AND DECORATIVE SIGN POSTS, PLANTERS, ON-SITE PAVEMENT MARKINGS AND SIGNING, OFF-SITE PAVEMENT MARKINGS AND SIGNING IN RIGHT-OF-WAY THAT IS NOT DEDICATED FOR PUBLIC USE, SIDEWALK WORK AND ASPHALT WORK.



COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039

Date: JUNE 10, 2019

DESIGN: JHV DRAWN: SPIKL CHECK: HM

REVISIONS:

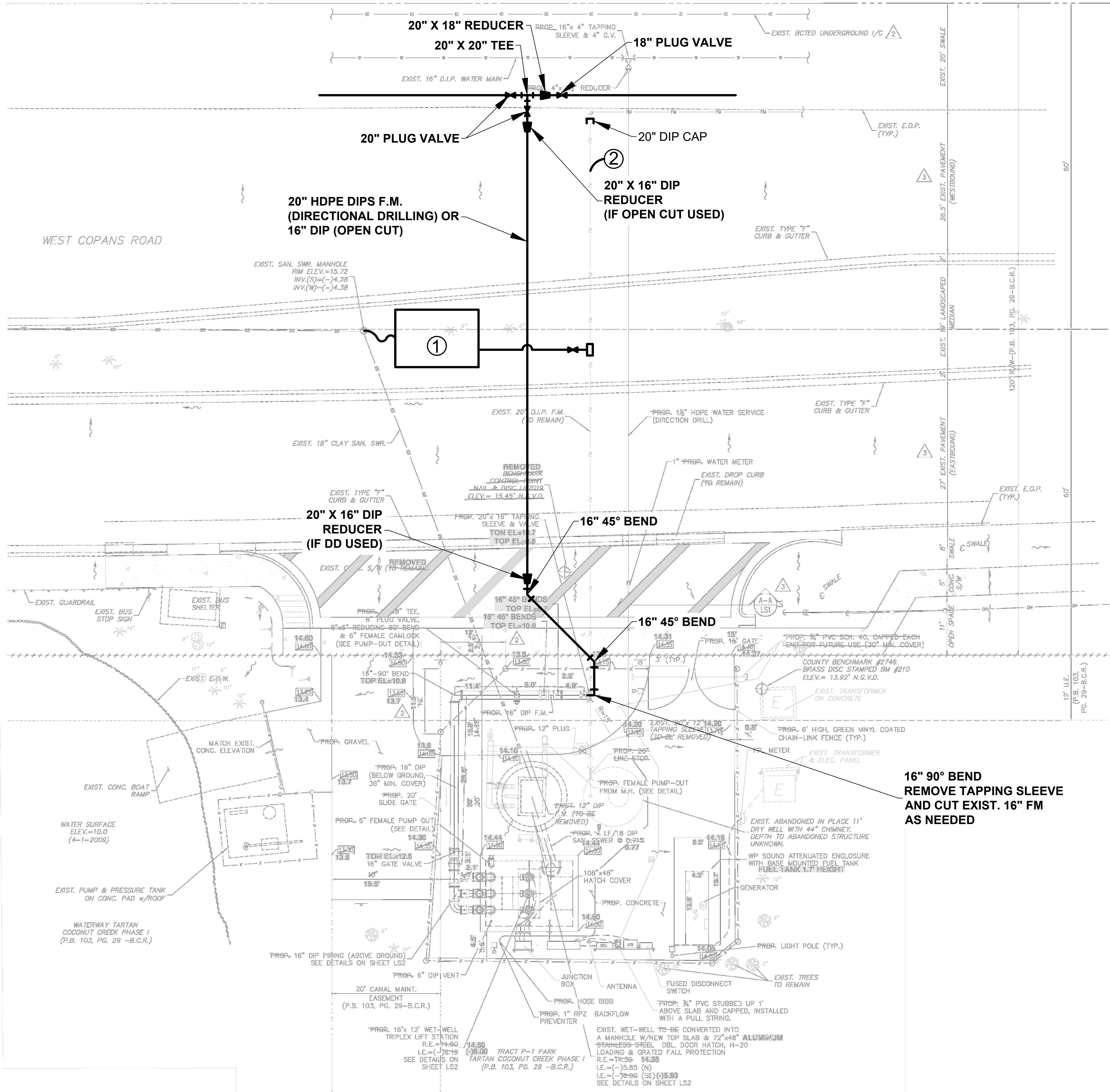
SHEET NAME:

LIFT STATION
CONNECTION
DETAILS

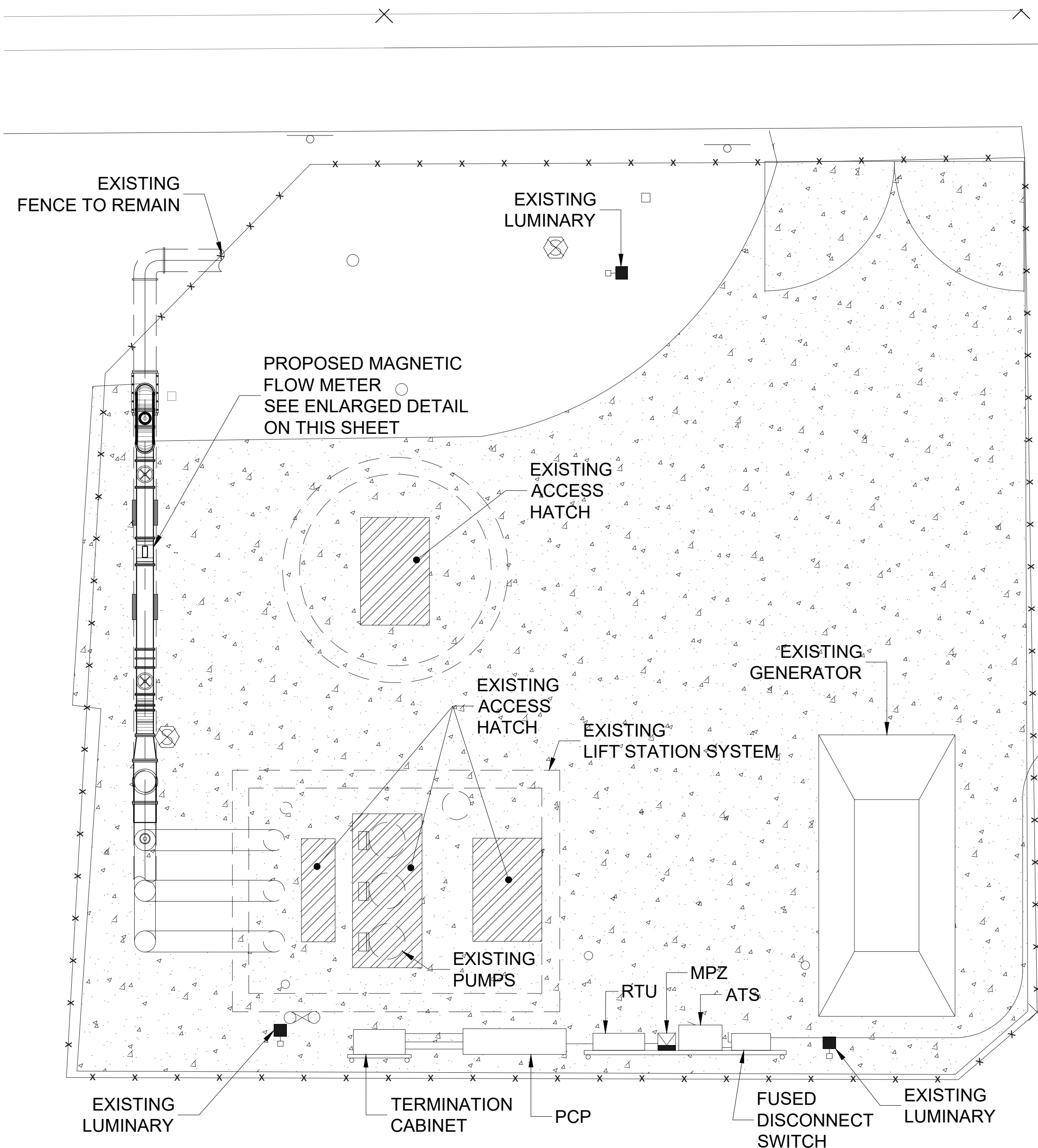
C-22

SHEET 26 OF 37

JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143



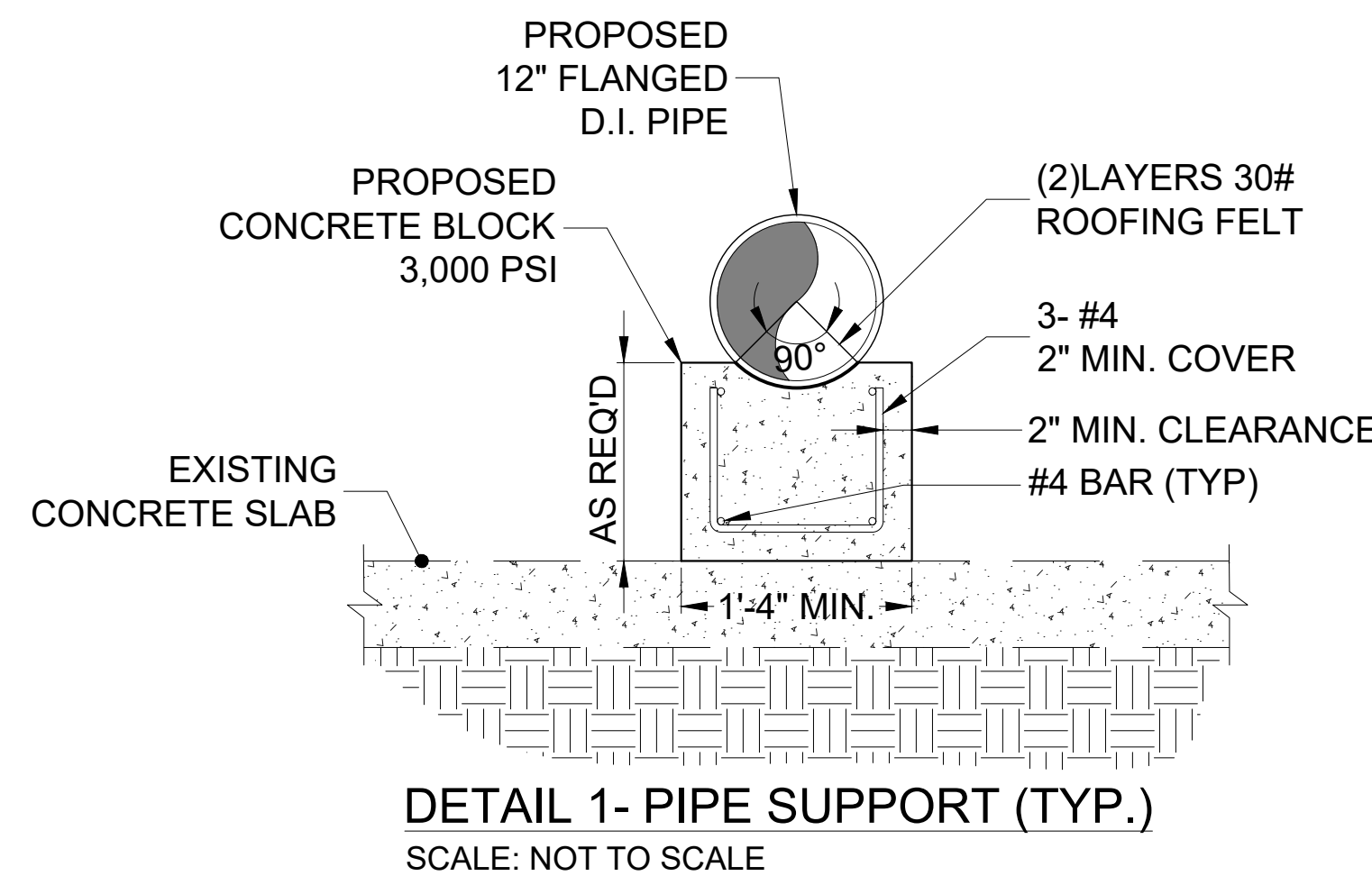
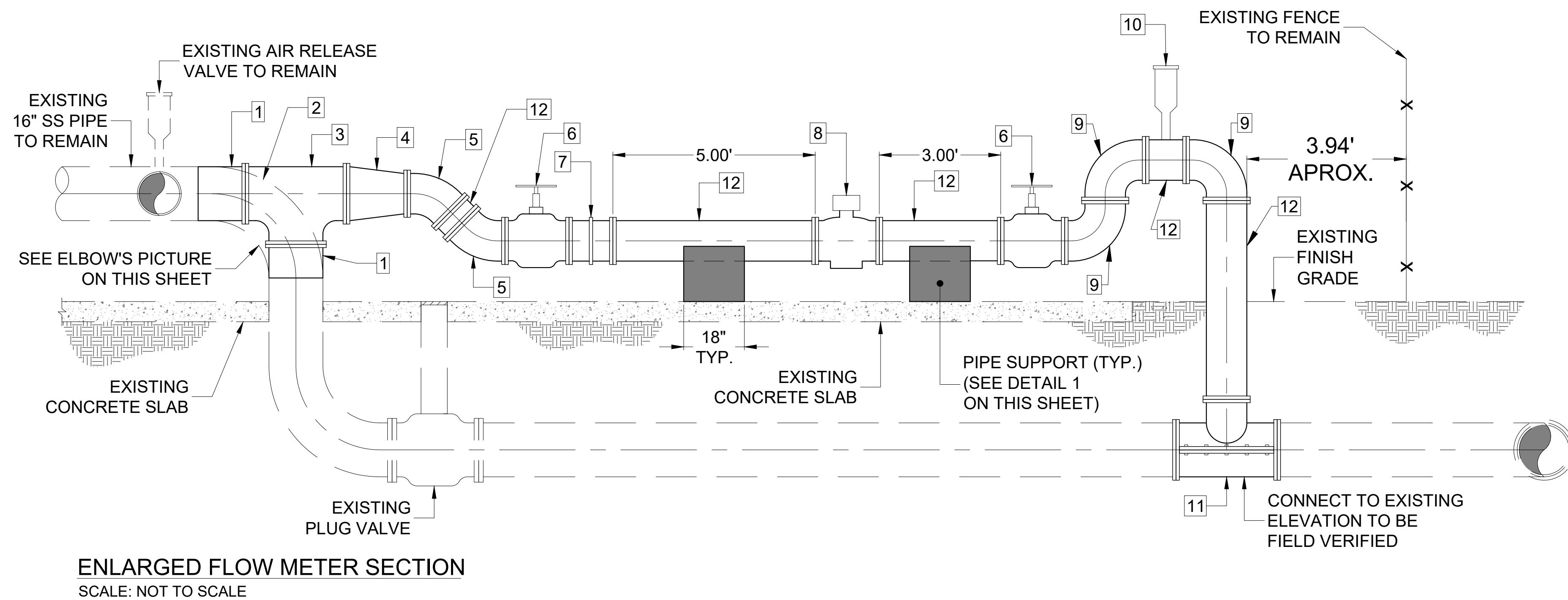
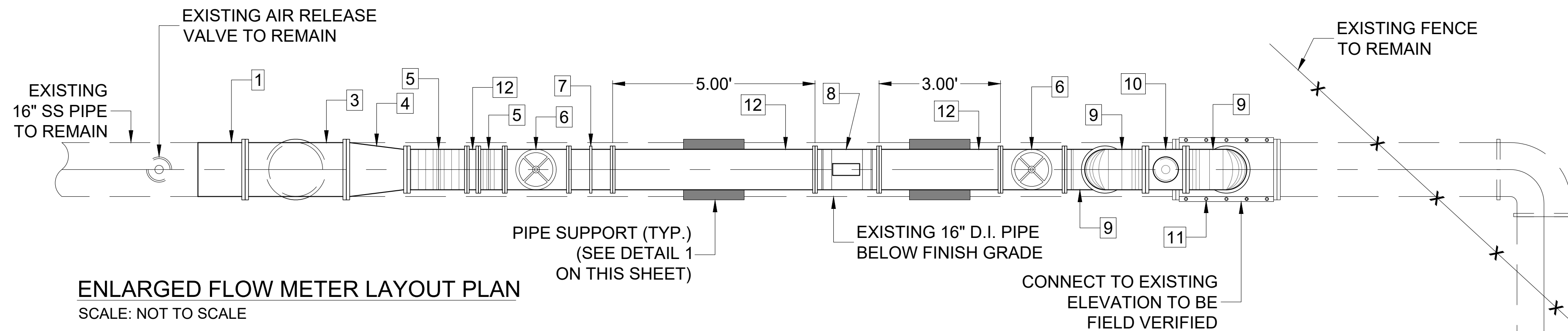
L.S.-12 CONNECTION
N.T.S.



PROPOSED FLOW METER LAYOUT PLAN
SCALE: NOT TO SCALE



EXISTING ELBOW CONDITION
SCALE: NOT TO SCALE



LEGEND:

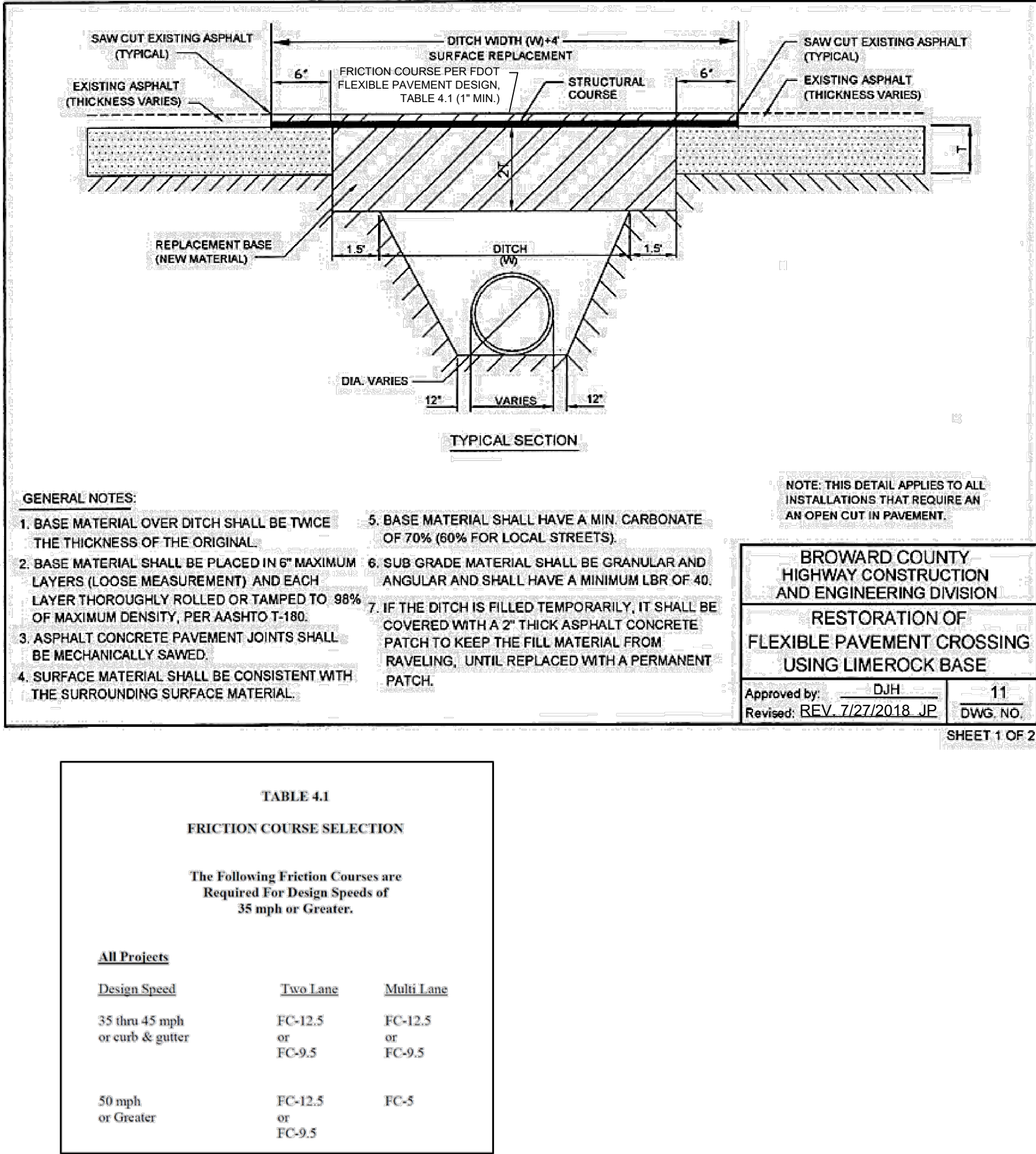
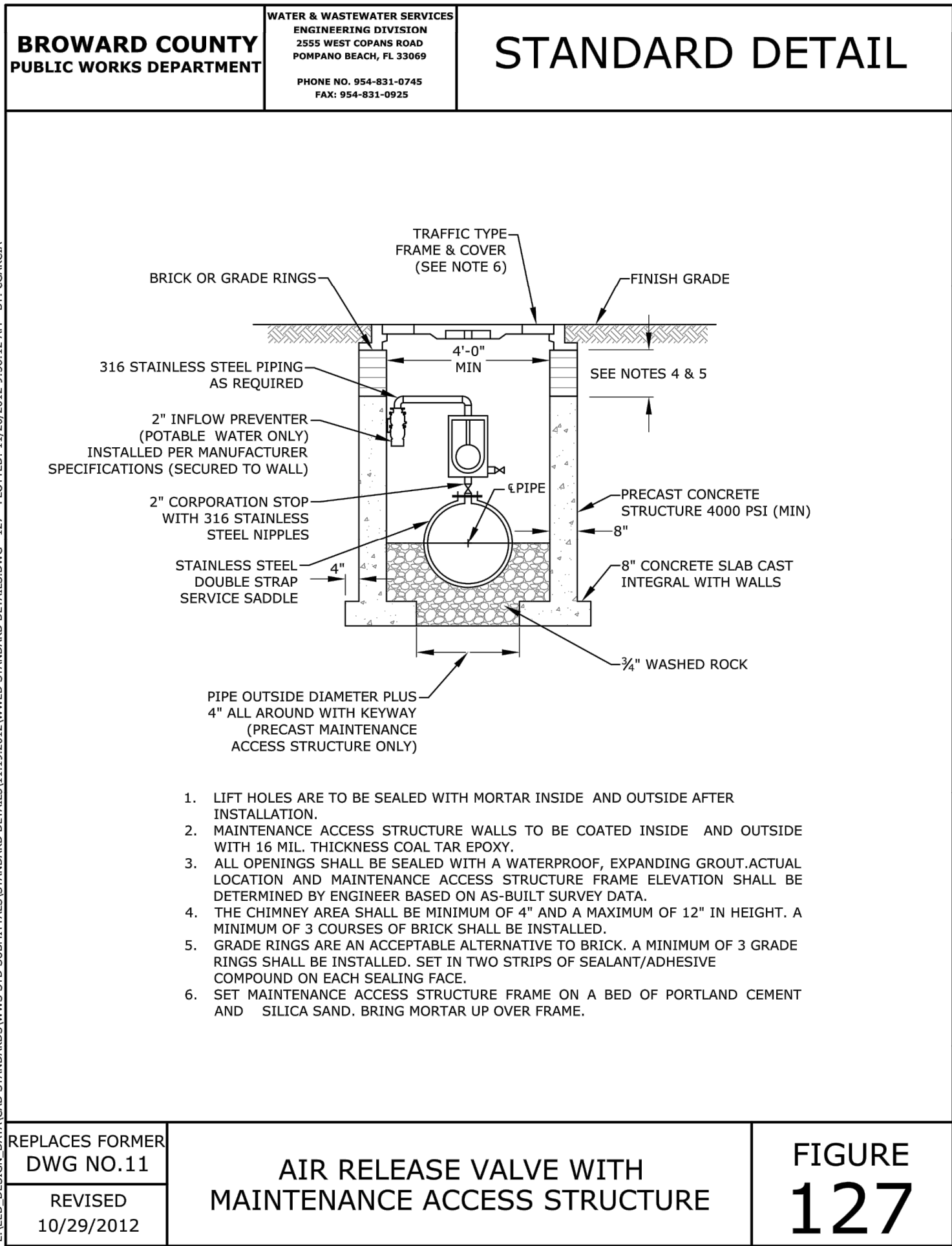
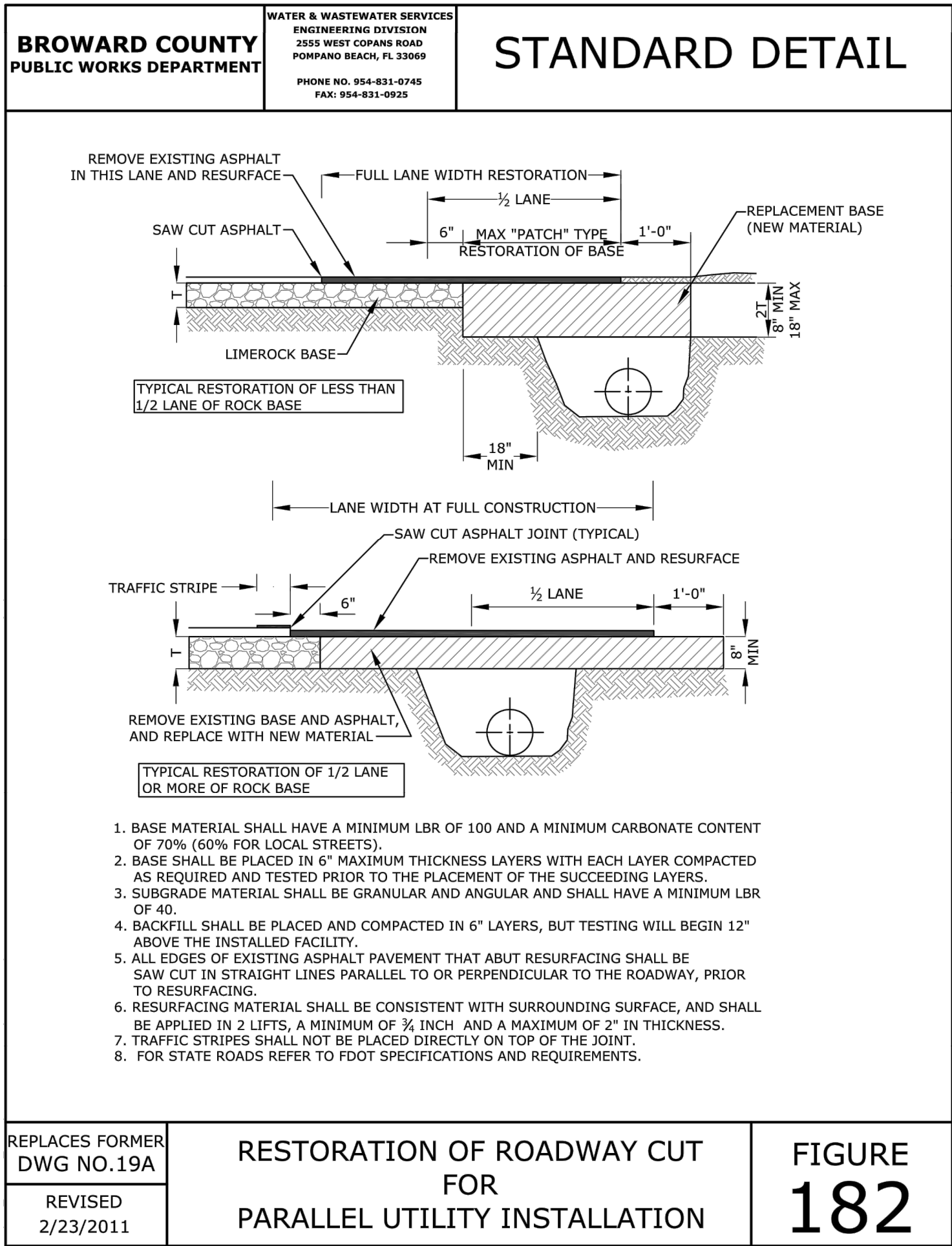
- 1 16" STAINLESS STEEL ADAPTER (PE WELD - FLANGE)
- 2 EXISTING 16" STAINLESS STEEL BEND TO BE REMOVED (SAW CUT)
- 3 16" X 16" D.I. FLANGED TEE
- 4 16" X 12" D.I. FLANGED REDUCER
- 5 12" FLANGED 45° BEND
- 6 12" FLANGED PLUG VALVE
- 7 12" D.I. FLANGED ADAPTOR DISMANTLING JOINT
- 8 12" MAGNETIC FLOW METER (FOR WASTE WATER)
- 9 12" FLANGED 90° BEND
- 10 2" AUTOMATIC AIR RELEASE VALVE
- 11 12" M.J. TAPPING SLEEVE
- 12 12" FLANGED D.I. PIPE

NOTE:

1. TOP ELEVATION OF FLOW METER PIPE SECTION SHALL BE AT OR BELOW BOTTOM ELEVATION OF EXISTING 16" S.S. PIPE AT CONNECTION.

(SEAL)

JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143



ADDITIONAL NOTES FOR RESTORATION OF FLEXIBLE PAVEMENT:

The procedure for backfill and pavement restoration is as follows:

Density tests shall be taken at 6" lift of base rock and each 8" lift of compacted fill or backfill according to the following schedule, prior to placement of the succeeding lifts:

- For any road crossing in which the road is cut and restored one lane at a time, one density test shall be taken in each lane at each lift.
- For any road crossing in which the road is cut and restored two lanes at a time, density shall be tested in one lane per lift, alternating lanes with each lift.
- For any road crossing in which the road is cut and restored three lanes at a time, density shall be tested in two locations per lift, staggering locations with each successive lift.
- Cuts in roads shall not be left open over-night unless specific permission has been obtained from the Highway Construction and Engineering Division. Trenches shall be back filled & temporary asphalt applied to make a smooth level patch. The trench shall then be excavated the next day & permanent backfill & pavement installed in accordance with these standards. The only exceptions shall be in cases where the facility installed must be tested before the roads are restored. In these cases, the permanent restoration must be performed on the day of testing or the next day.
- In cases where the installation parallels the roadway and damages the pavement, the density tests shall be made every 100' at each lift, with test locations staggered 25' for each lift.
- Roadway base material shall be compacted to a maximum of 98% of maximum dry density, as determined by AASHTO T-180 (Modified Proctor Test). Subgrade material under paved areas shall be compacted to a minimum of 100% of maximum dry density as per AASHTO T-99C. Shoulder areas and swales beyond shoulders shall be compacted to a minimum of 95% dry density, all as determined by AASHTO T-99-C (Standard Proctor Test).
- Restoration of striping, signing and signalization devices shall be accomplished immediately after pavement restoration is completed, as approved by the Traffic Engineering Division.

A copy of all Proctor and Field Tests shall be furnished to the Highway Construction and Engineering Division upon request.

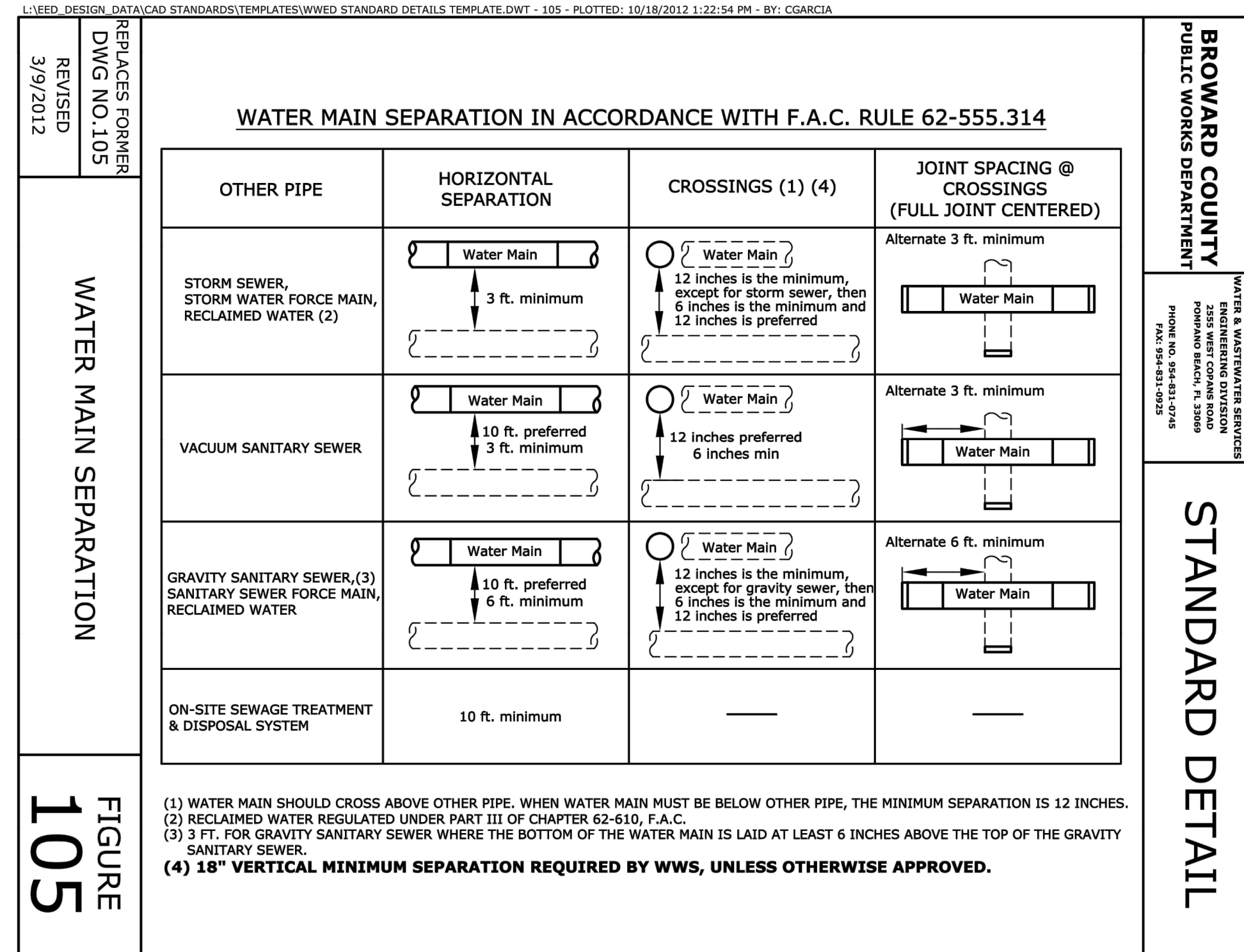
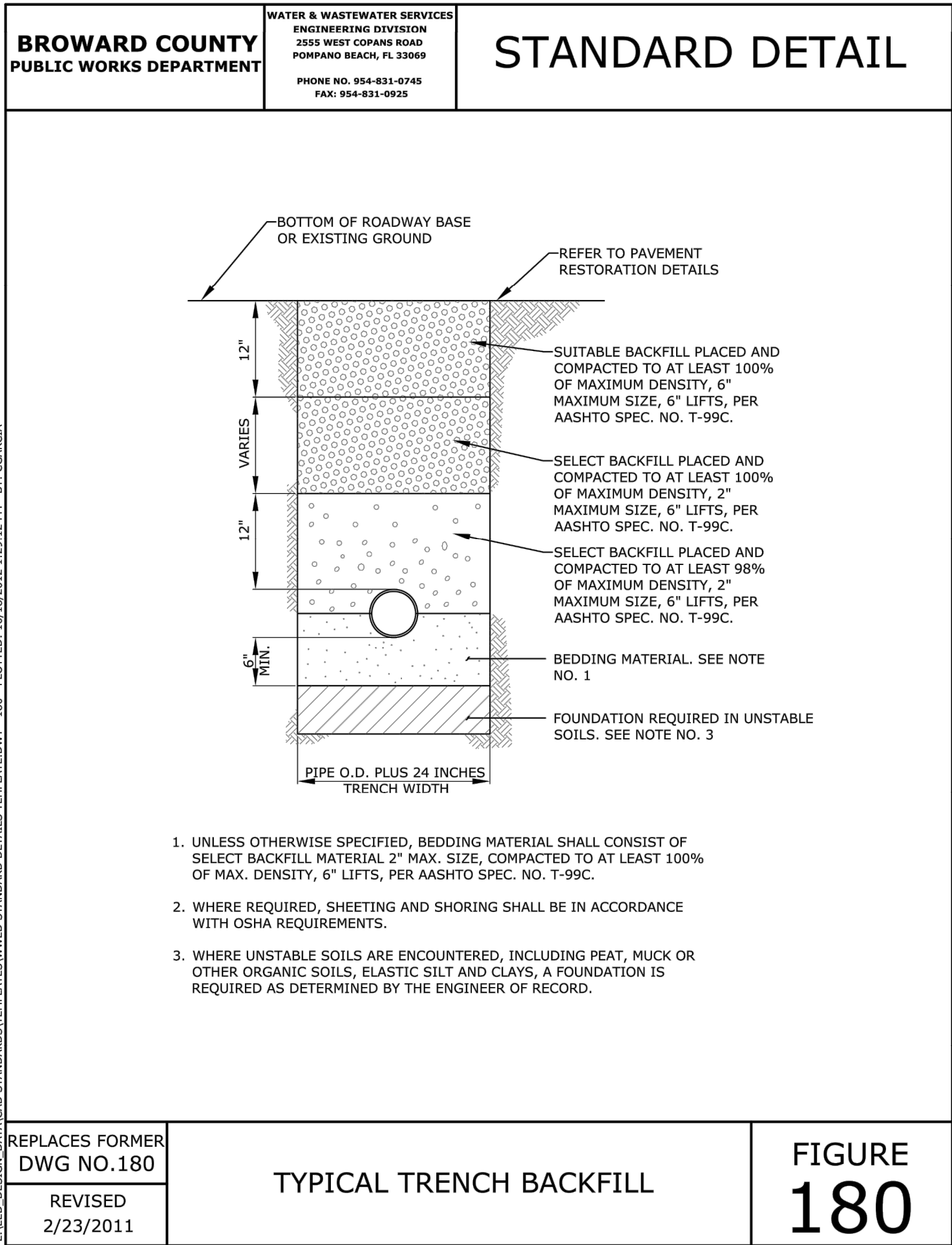
NOTE: The above represents the minimum procedure. Inspectors may require additional testing if, in their opinion conditions or prior test results warrant them.

BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

RESTORATION OF FLEXIBLE PAVEMENT CROSSING USING LIMEROCK BASE

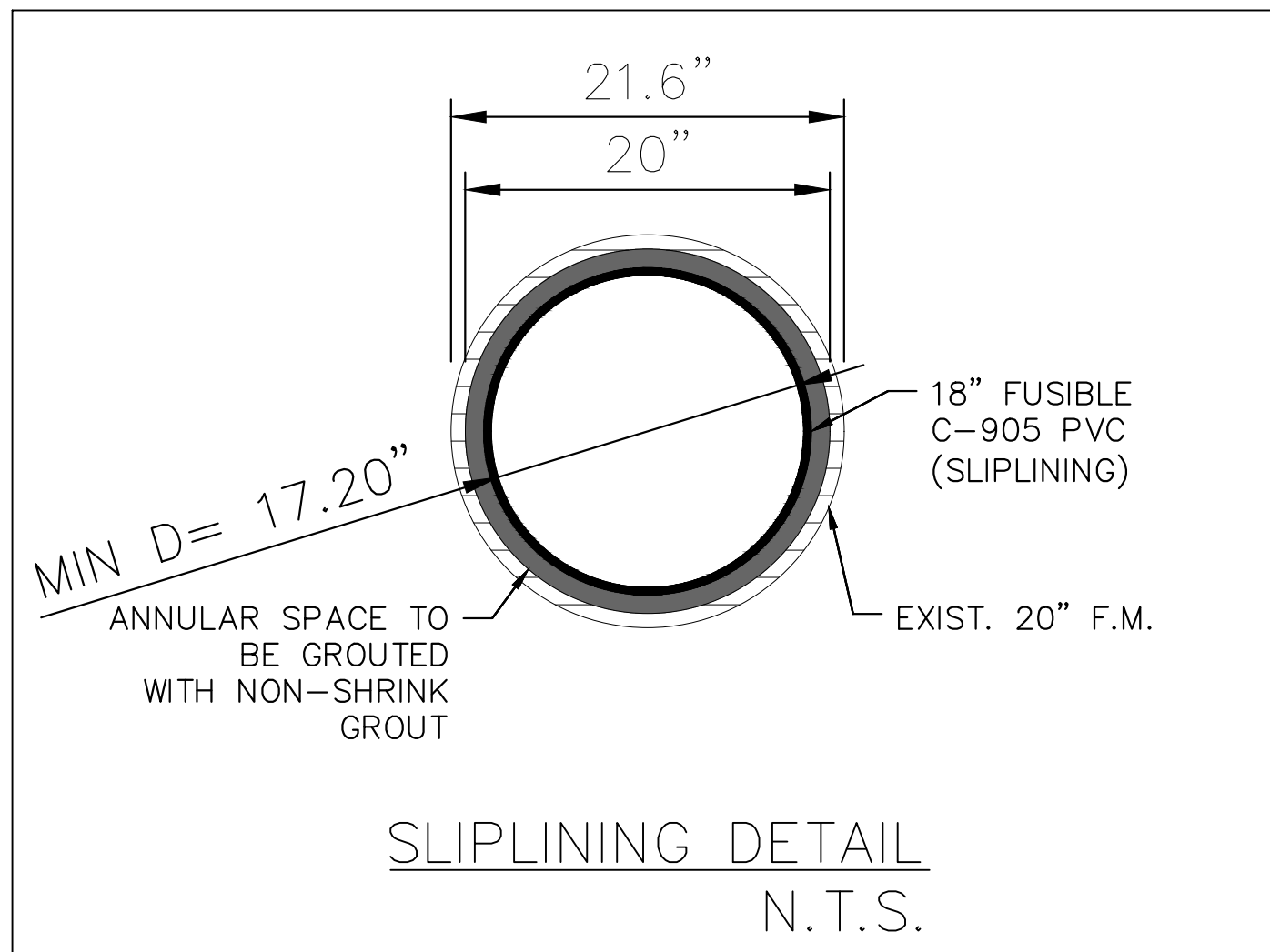
Approved by: DJH DWG NO. 11
Revised: 6/1/05 V004

SHEET 2 OF 2



ASPHALT EQUIVALENT MIXES ARE AS FOLLOWS:

TYPE S-I	TYPE SP-12.5
TYPE S-II	TYPE SP-19.0
TYPE S-III	TYPE SP-9.5



PERMIT SET

MUST BE ON JOBSITE AT ALL TIMES DURING CONSTRUCTION

NOTICE OF INSPECTION REQUIRED

24 HRS. PRIOR TO CONSTRUCTION ANY WORK IN THE PUBLIC R/W CONTACT THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION AT (954) 577-4600 FOR INSPECTION.

NOTE:

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION.

A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC RIGHT OF WAY.

BROWARD COUNTY HIGHWAY CONSTRUCTION AND ENGINEERING DIVISION

☐ PLAN CONSISTENT WITH PLAT REQUIREMENTS

☐ PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE

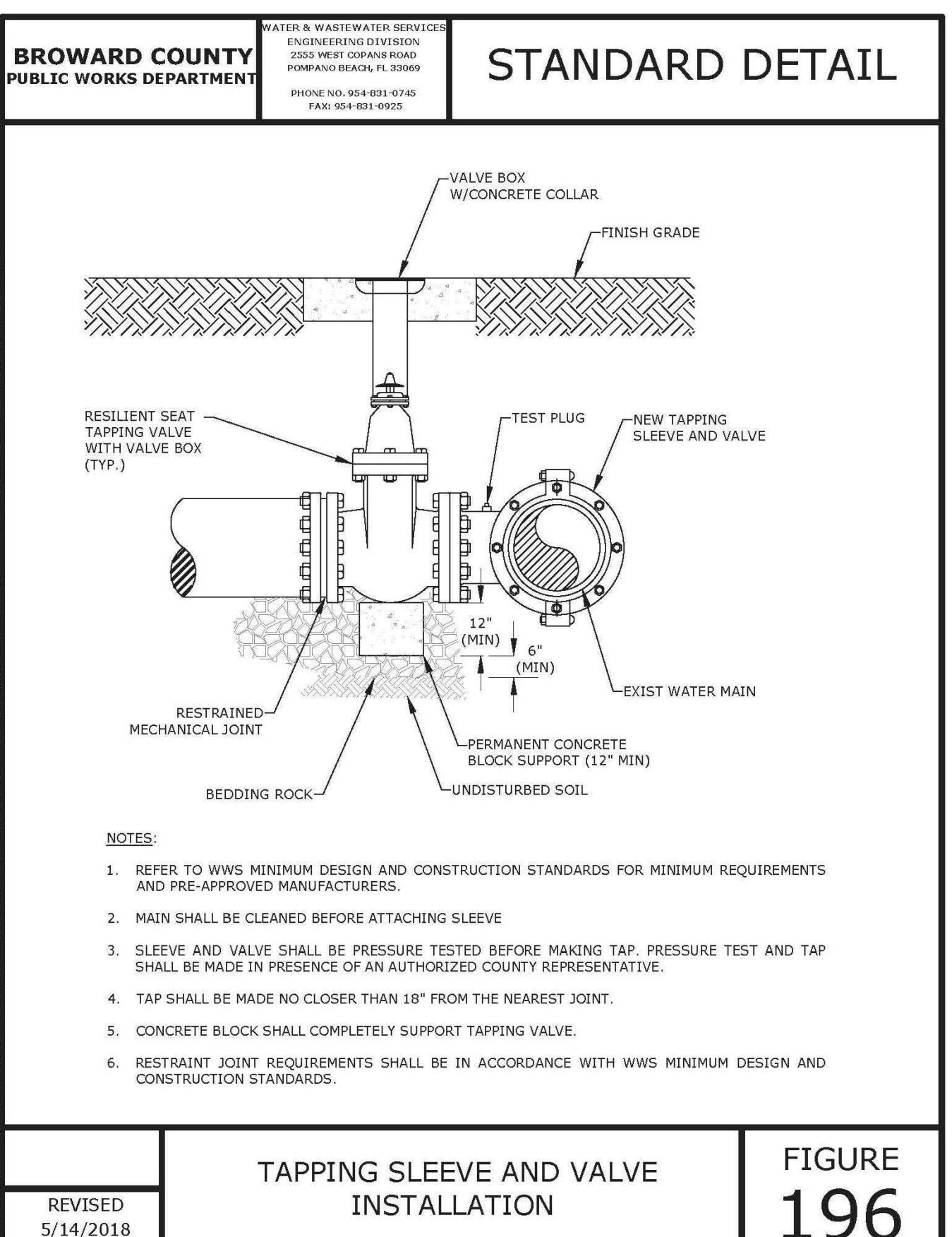
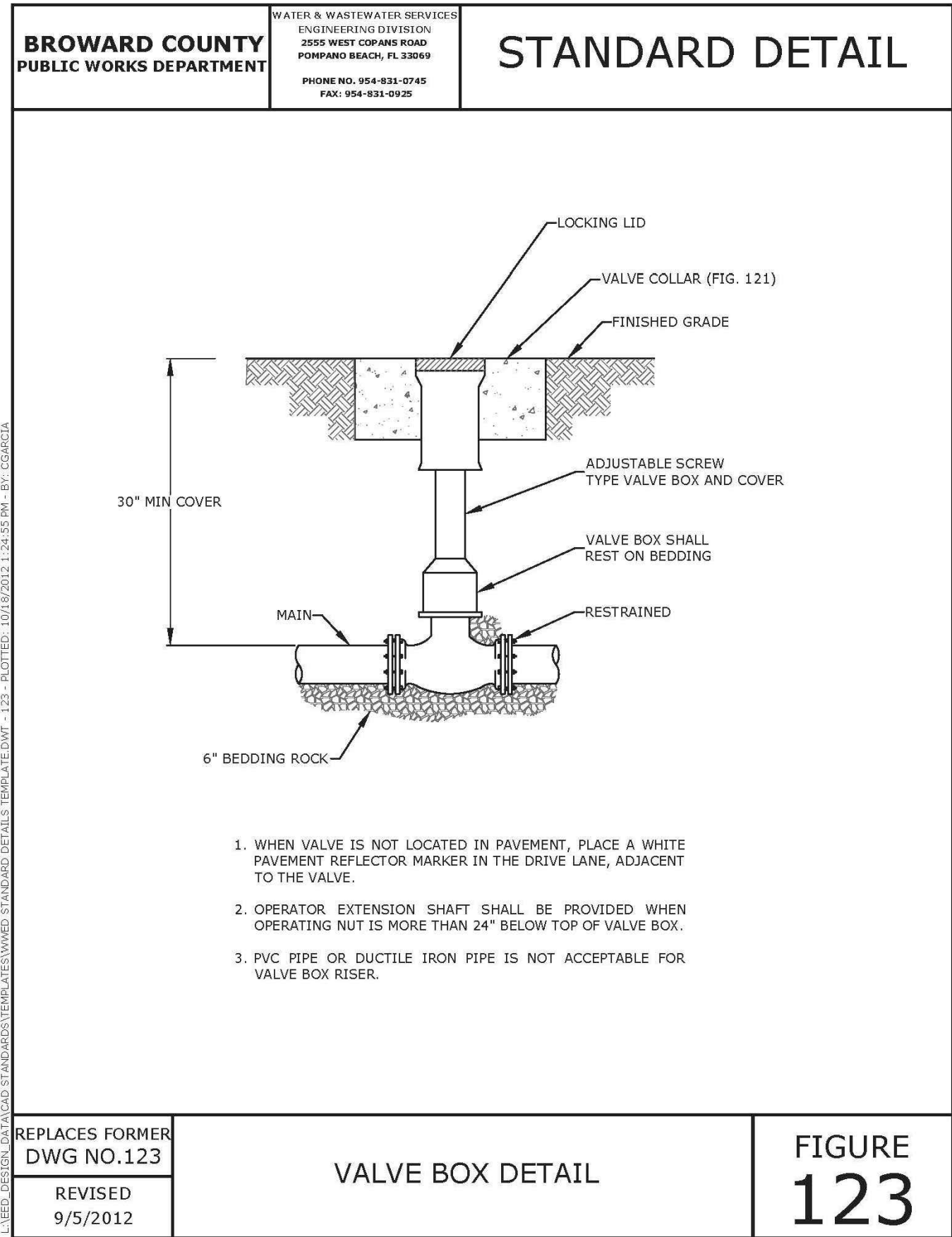
BY: _____ DATE: _____

DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS



(SEAL)

JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO. 51143

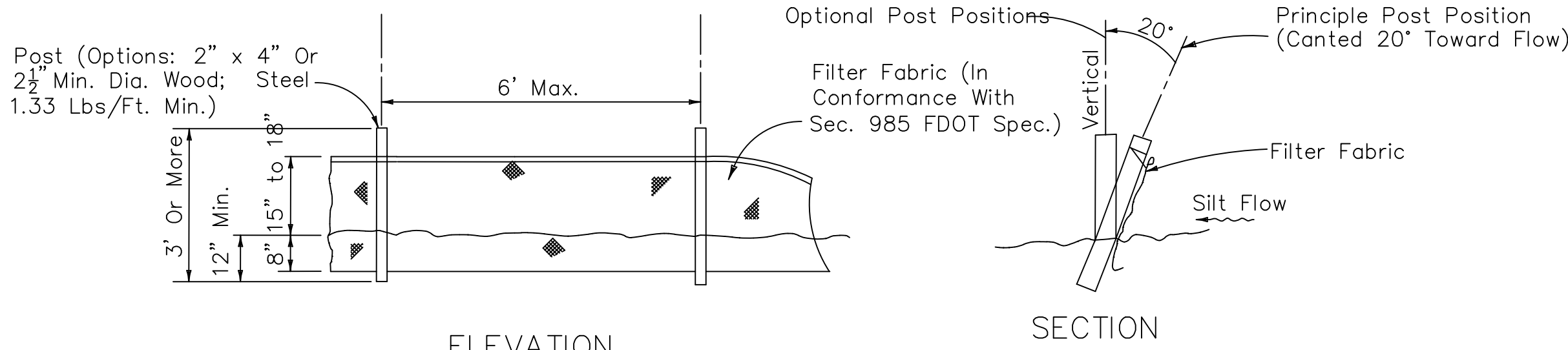


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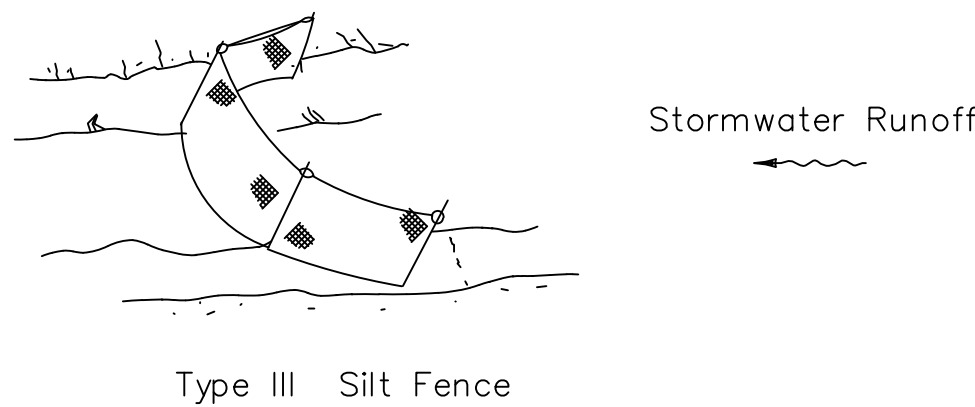
FORCEMAIN
DETAILS

CD-2

SHEET 29 OF 37

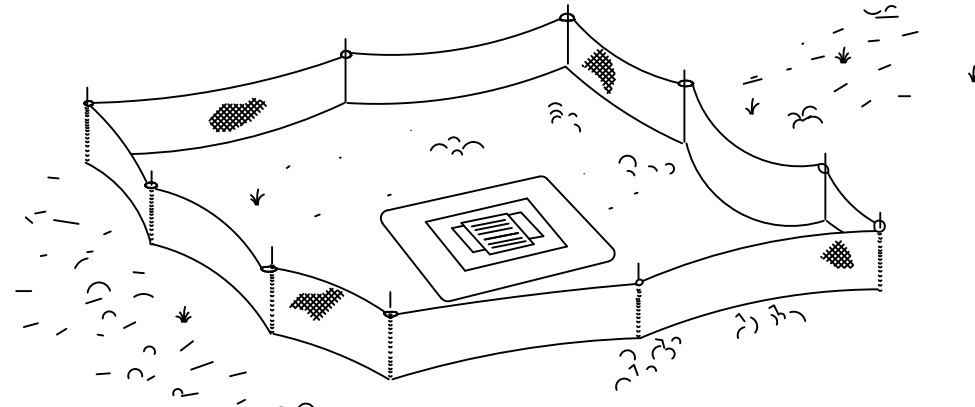


SILT FENCE DETAIL
N.T.S.



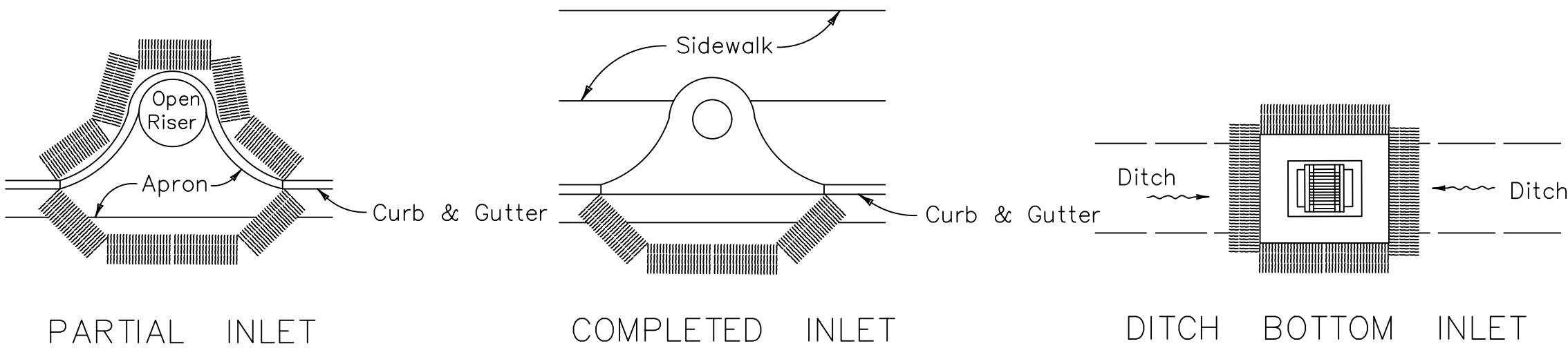
Notes:

1. Spacing for Type III Fence to be in accordance with Chart I, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3 per FDOT Standard Index 102.

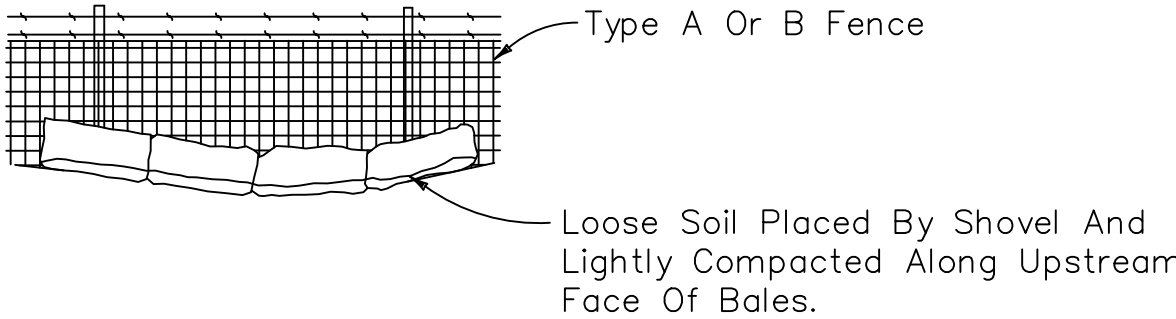


2. Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS
N.T.S.



PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
N.T.S.



BALES BACKED BY FENCE
N.T.S.

NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

- Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, sheet 1 per Index 102.
- Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
- Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
- Adjacent bales shall be butted firmly together.
- Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.

STORM WATER POLLUTION PREVENTION PRACTICES:
(FOR PROJECTS OF 0.5 ACRE OR MORE)

- TREE PROTECTION AND PRUNING SHALL BE ACCOMPLISHED AS DETAILED IN SPECIAL PROVISIONS, THE CONSTRUCTION PLANS, AND OR PER TREE ORDINANCE 12636.
- THE STORM WATER POLLUTION PREVENTION PLAN, SWPPP, SUBMITTED TO PUBLIC WORKS, SHALL DESCRIBE IN DETAIL HOW THE CONSTRUCTION EFFORT WILL BE PHASED WITH REGARDS TO MINIMIZING EROSION PROBLEMS BY THE USE OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES, FOR THE VARIOUS SEQUENCES OF CONSTRUCTION OPERATIONS.
- ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN THE SWPPP, ARE TO BE INSTALLED AT ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM, OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED ON THIS SHEET.
- ALL ENVIRONMENTAL CONTROL FEATURES ARE TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN ACCORDANCE WITH N.P.D.E.S. REQUIREMENTS. THE CONTRACTOR MUST INSURE THAT ALL EROSION CONTROL FEATURES FUNCTION PROPERLY AT ALL TIMES.
- ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS.
- ANY DAMAGED OR INEFFECTIVE ROCK BAGS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION OF ROCK BAGS INSTALLATION IS AS MENTIONED IN THE SWPPP PLANS. THE PROJECT ENGINEER MAY SPECIFY OTHER AREAS AS NECESSARY.
- DITCH BOTTOM INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH ROCK BAGS TO PREVENT SEDIMENT INTAKE.
- CURB INLETS ALSO SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. ALL EXPOSED SLOPED MATERIAL ADJACENT TO INLET, SHALL BE COVERED WITH EROSION CONTROL MATTING WITH OUTER LIMITS PROTECTED BY ROCK BAGS.
- STOCKPILED MATERIAL SHALL NOT BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER OR ROCK BAGS.
- INSPECTION OF EROSION CONTROL MEASURES AND CONDITION OF ADJACENT PROPERTIES, SHALL BE PERFORMED DAILY BY THE CONTRACTOR'S REPRESENTATIVE AND THE PROJECT ENGINEER. DEFICIENCIES SHALL BE NOTED AND CORRECTED.
- ANY OFFSITE SEDIMENT DISCHARGE TO A MUNICIPAL SEPARATE STORM WATER SYSTEM ARISING FROM THE CONTRACTOR'S ACTIVITIES IS NOT ALLOWED.
- THE USE OF SANITARY SEWERS, FRENCH DRAINS, COVER DITCHES AND/OR ROCK DRAINS FOR THE DISPOSAL OF WASTEWATER IS EXPRESSLY PROHIBITED.

* NPDES - NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
BMP - Best Management Practice.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) CHECKLIST

A. SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS:

- CLEARING & GRUBBING
- INSTALL DRAINAGE STRUCTURES
- STABILIZATION
- BASE PREPARATION
- ASPHALT APPLICATION
- PLACEMENT OF ROCK BAGS AROUND INLETS
- PLACEMENT OF ROCK BAGS AROUND MANHOLES
- APPLICATION OF FRICTION COURSE A.C.
- PAVEMENT MARKING
- REMOVE ROCK BAGS
- CLEAN ALL CONSTRUCTION DEBRIS FROM CONSTRUCTION SITE

B. GENERAL

- APPROVED STATE, LOCAL PLANS OR STORM WATER PERMITS.
- ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES.
- ALL CONTROLS SHALL BE INSPECTED DAILY.
- APPLY FERTILIZERS AND PESTICIDES ACCORDING TO STANDARD SPECIFICATIONS, DESIGN AND SPECIAL PROVISIONS.
- REPORT NON-STORM WATER DISCHARGE (INCLUDING SPILL)
- VISIT www.dep.state.fl.us/water/stormwater/npdes/

NOTES:

Total Acreage of Disturbed Soil 0.15 AC

PW NPDES Permit No. _____

Date Issued: _____

(SEAL)

JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143

R.J.Behar & Company, Inc.
Engineers • Planners



CERTIFICATE OF
REGISTRATION No.
0006362
www.rjbehar.com

DESIGN OFFICE LOCATION: 6881 S.W. 198TH AVE., SUITE 302, PEMBROKE PINES, FL 33332, PH: 954-480-7771, FAX: 954-480-7781



COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RJB Proj. No: 17039

Date: JUNE 10, 2019

DESIGN: JHV DRAWN: SPI/KL CHECK: HM

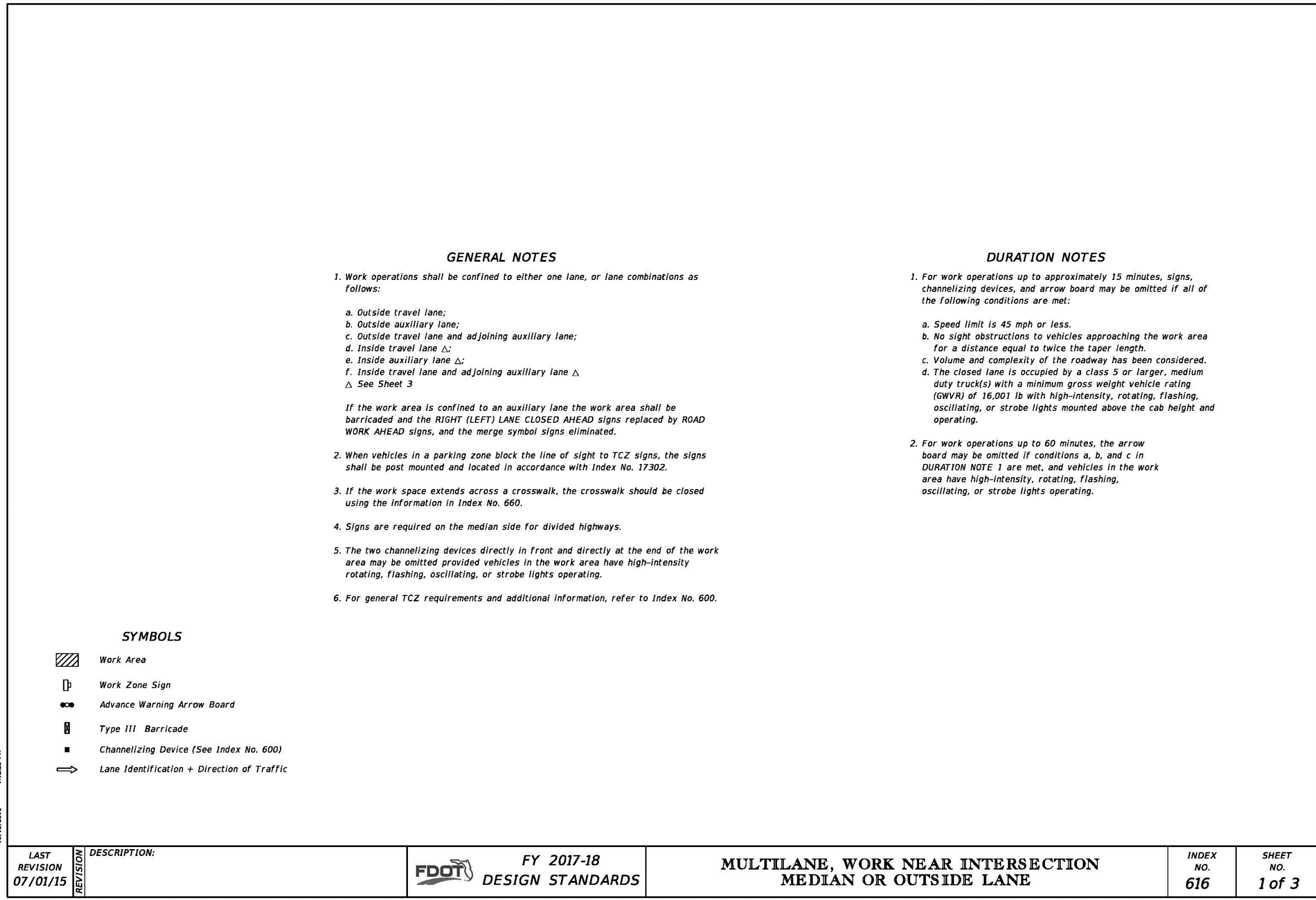
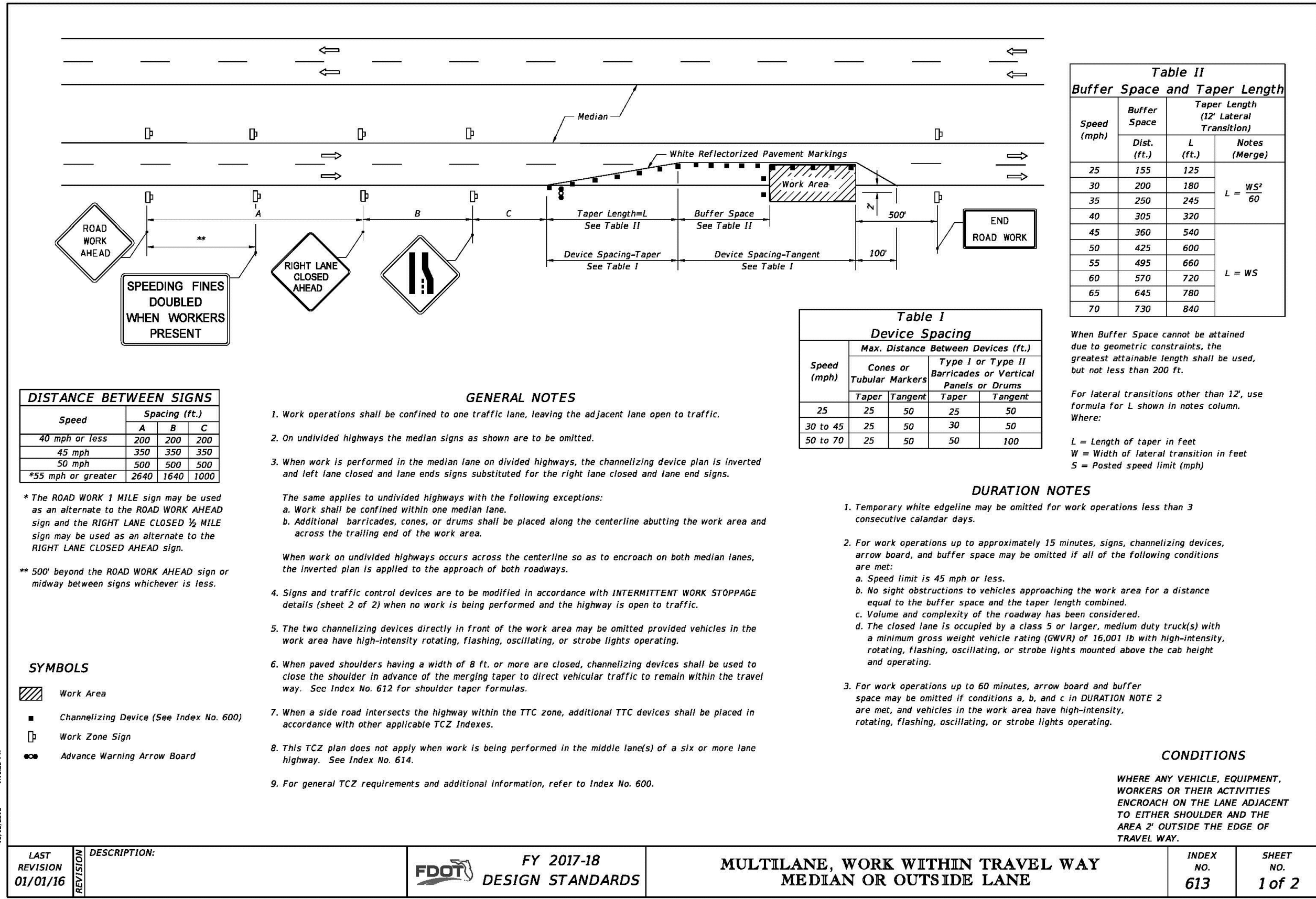
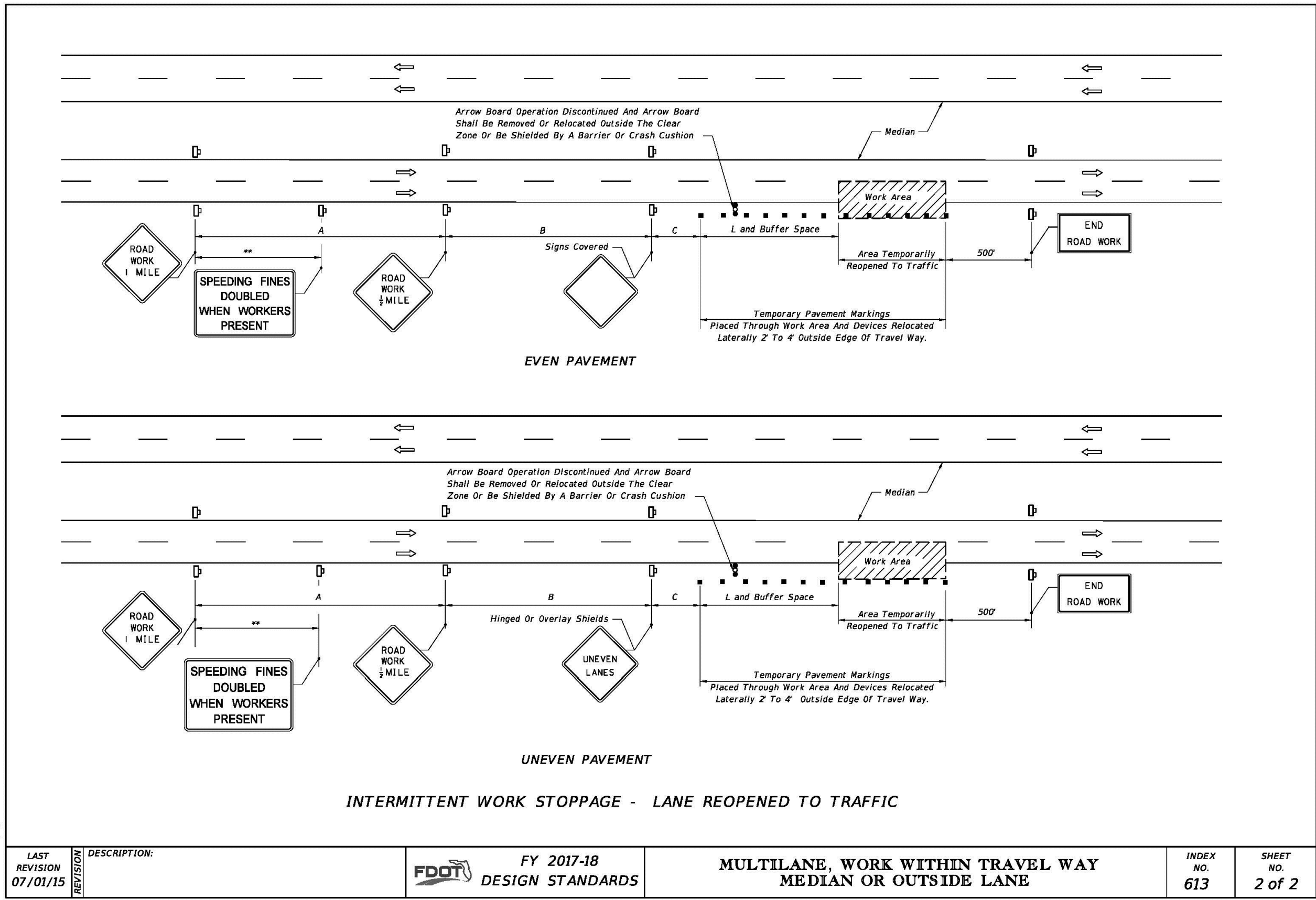
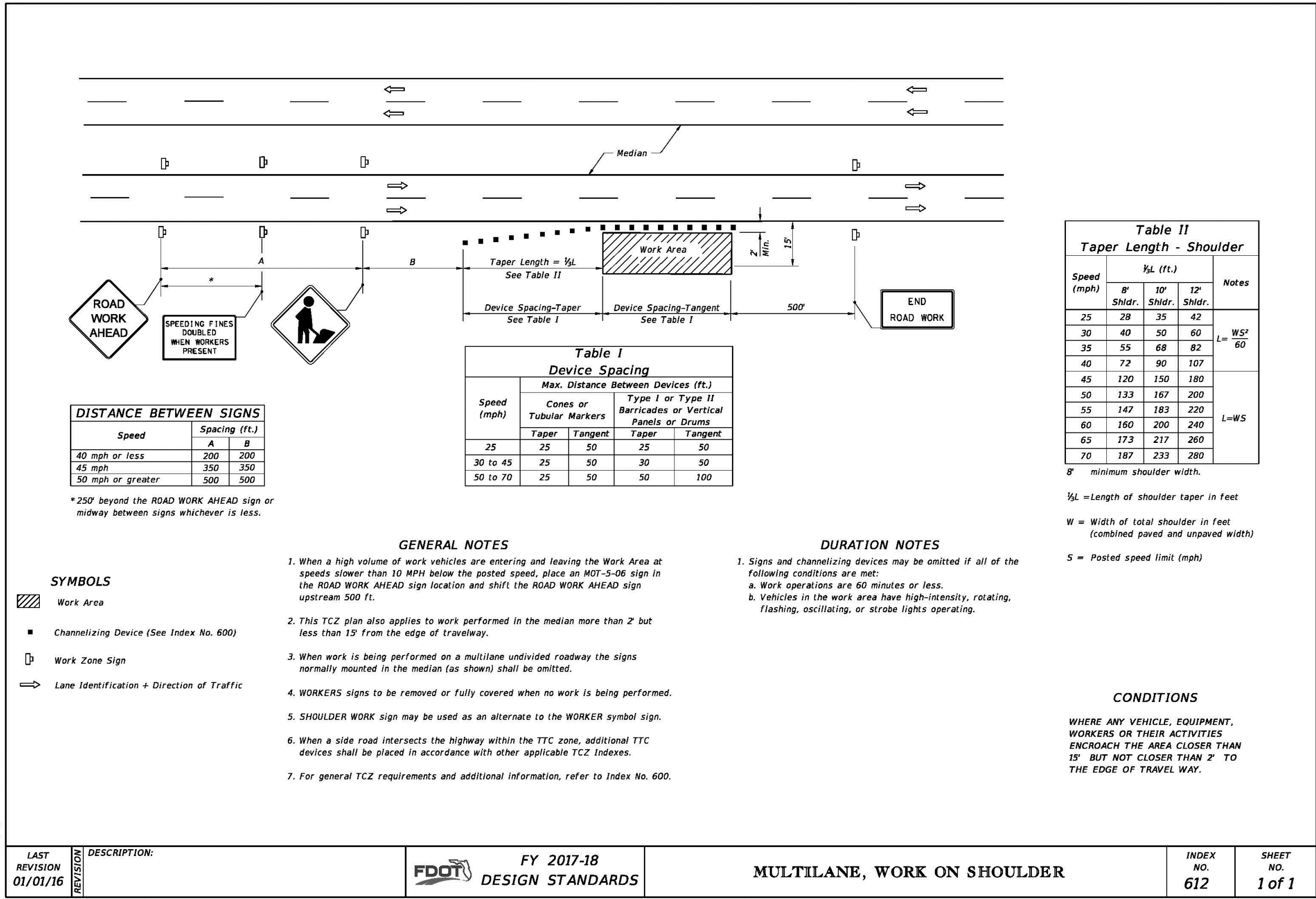
REVISIONS:

SHEET NAME:

STORMWATER
POLLUTION
PREVENTION
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SHEET 30 OF 37



COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RUB Proj. No: 17039

Date: JUNE 10, 2019

DESIGN: JHV DRAWN: SPIKL CHECK: HM

REVISIONS:

SHEET NAME:

M.O.T.

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SHEET 31 OF 37

(SEAL)
JUAN H. VAZQUEZ, P.E. DATE
LICENSE NO.: 51143



COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN
CITY OF COCONUT CREEK

RUB Proj. No: 17039

Date: JUNE 10, 2019

DESIGN: JHV DRAWN: SPIKL CHECK: HM

REVISIONS:

1. 06-07-2016 N/A

2. 06-11-2018 UPDATED FOOT INDEX REFERENCE

3. 08-23-2018 UPDATED NOTES

4. 08-23-2018

5. 08-23-2018

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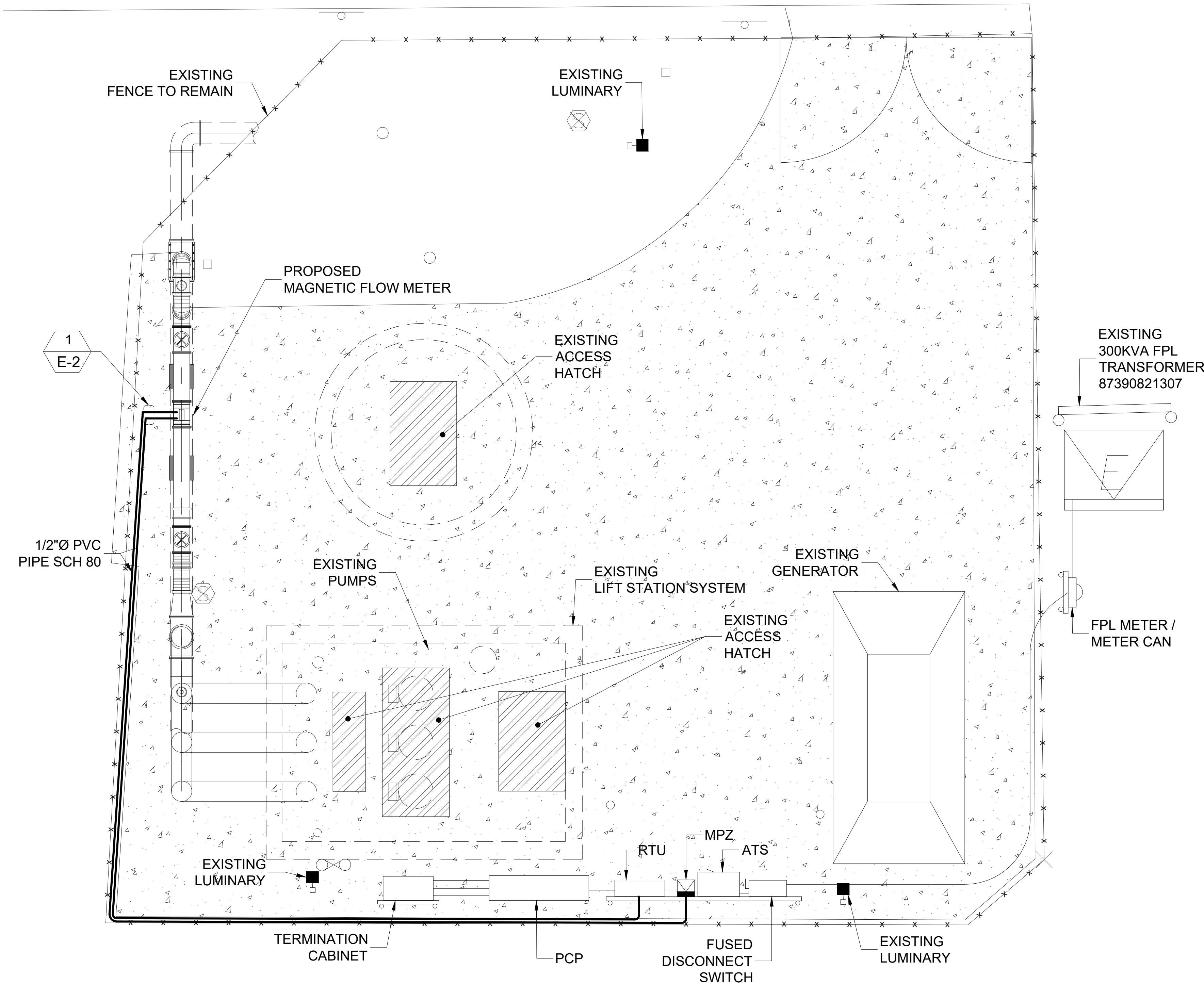
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GENERAL NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.), SOUTH FLORIDA BUILDING CODE (SFBC) AND ALL OTHER CODES AND ORDINANCES IN EFFECT AT THIS LOCATION.
- ALL MATERIALS SHALL BE NEW AND SHALL BEAR THE UL LABEL WHEN APPLICABLE.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE DRAWINGS FOR EXACT LOCATION OF EQUIPMENT. THESE DRAWINGS ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL, BUT THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND ACCEPTABLE WORKING SCHEDULE.
- THE CONTRACTOR SHALL VISIT THE JOB SITE TO DETERMINE THE EXTENT OF WORK INVOLVED WITH THESE DOCUMENTS AS SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND ALLOW FOR ANY CHANGES THAT MAY BE MADE DURING THE COMPLETION OF THE JOB. ANY ELECTRICAL WORK THAT MAY HAVE TO BE DONE TO COMPLETE ANY ALTERATIONS SHOWN ON ANY PLAN SHALL BE INCLUDED IN THIS CONTRACT WITH NO ADDITIONAL CHARGES TO THE OWNER AFTER THE CONTRACTS ARE LET.
- PRIOR TO INSTALLATION OF ROUGH ELECTRIC WIRING, CHECK NAMEPLATE DATA OF A/C EQUIPMENT, KITCHEN EQUIPMENT AND OTHER EQUIPMENT TO OBTAIN CORRECT WIRE SIZES AND OVERCURRENT DEVICE SIZES.
- CONTRACTOR'S WORK PRACTICES AND CONDITIONS MUST CONFORM WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970.
- CHECK EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND AMP RATING BEFORE CONNECTION TO CIRCUITS.
- LOAD DATA IS BASED ON INFORMATION GIVEN TO THE ENGINEER AT THE TIME OF DESIGN. VERIFY ALL EQUIPMENT AND PANEL SIZES BEFORE ORDERING.
- CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTING; AND ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- ALL CIRCUITS SHALL BE CLEARLY IDENTIFIED AND SHOWN ON PANEL DIRECTORIES. DO NOT CHANGE CIRCUIT ARRANGEMENT SHOWN ON THESE DRAWINGS.
- CIRCUITS ON THE PLAN ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS AND ROUTING OF CONDUITS TO SUIT JOB CONDITIONS.
- ALL CONDUCTORS SHALL BE IN SCH 80 CONDUIT.
- RACEWAYS INSTALLED UNDERGROUND, IN CONCRETE SLABS, AND/OR LARGER THAN 2 INCHES IN DIAMETER SHALL BE GALVANIZED RIGID STEEL. PVC PIPE SCHEDULE 40 IS ACCEPTABLE FOR UNDERGROUND INSTALLATION ONLY IF APPROVED BY LOCAL AUTHORITIES. RACEWAY 2 INCHES AND SMALLER IN DIAMETER SHALL BE I.M.C. IF EXPOSED TO WEATHER, E.M.T. ELSEWHERE. FLEXIBLE CONDUIT USED WHERE INDICATED SHALL BE METAL FOR INDOOR LOCATIONS, LIQUID-TIGHT FOR OUTDOOR LOCATIONS. USE STEEL COMPRESSION TYPE FITTING.
- CABLE AND WIRE INDICATED ON DRAWINGS SHALL BE COPPER, STRANDED, THHN/THWN INSULATION IN SIZES NO. 12 THRU NO. 8 AWG; AND COPPER, STRANDED THW INSULATION IN SIZES NO. 6 AWG AND LARGER. MINIMUM SIZE WIRE SHALL BE NO. 12 AWG, MAXIMUM SIZE SHALL BE 600 MCM.
- RACEWAYS INSTALLED IN OR THRU ANY CONCRETE SLABS BE SPACED A MINIMUM OF 3 DIA. OF THE LARGEST RACEWAY. METALLIC RACEWAYS INSTALLED UNDERGROUND OR UNDER SLABS SHALL BE COATED WITH TWO COATS OF AN ASPHALTIC PAINT.
- ROUTING OF RACEWAYS, INTERCONNECTING OUTLETS AND HOME-RUNS IS UP TO THE ELECTRICAL CONTRACTOR, BUT AFTER COMPLETION OF THE INSTALLATION, HE SHALL SUBMIT TO THE OWNER AS-BUILT DRAWINGS OF HIS WORK FOR FUTURE RECORD.
- ALL GROUND CONNECTIONS TO BE DONE AS PER 2017 EDITION OF NATIONAL ELECTRICAL CODE.
- THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDING AS REQUIRED IN ARTICLE 250 OF THE NEC. ALL RACEWAYS TO HAVE EQUIPMENT GROUND CONDUCTORS, AND WHEN CROSSING BUILDING EXPANSION JOINTS, EXPANSION FITTINGS WITH BONDING JUMPERS SHALL BE USED.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR A COMPLETE ELECTRICAL INSTALLATION IN ACCORDANCE WITH THESE DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL PERFORM ALL NECESSARY WORK AND SHALL PROVIDE ALL NECESSARY INSTRUMENTS AND SPECIAL APPARATUS TO CONDUCT ANY TEST THAT MAY BE REQUIRED TO INSURE THE SYSTEM IS FREE OF ALL IMPROPER GROUNDS AND SHORT CIRCUITS, AND THAT ALL FEEDERS ARE PROPERLY BALANCED.
- ELECTRICAL EQUIPMENT AIC RATING AND FEEDER SIZES SHOWN ON THESE PLANS ARE DESIGNED FOR MAXIMUM AVAILABLE FAULT CURRENT AND MAXIMUM ALLOWABLE VOLTAGE DROP RESPECTIVELY.
- ELECTRICAL INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF N.E.C. 110-16 (a) "CLEARANCES" AND N.E.C. 384-2 "DEDICATED SPACES" FOR SWITCHBOARDS AND PANELBOARDS INCLUDING SPACES ABOVE THE EQUIPMENT.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- PROVIDE TEMPORARY POWER AND LIGHT OUTLETS AND ALL REQUIRED CONNECTIONS FOR USE BY OTHER TRADES.
- CONTRACTOR SHALL DO HIS OWN CUTTING OF FLOOR AND WALLS AND DO ALL PATCHING. OBTAIN APPROVAL BEFORE DOING ANY CUTTING. REPAIR ANY DAMAGE DONE TO OTHER'S EQUIPMENT OR MATERIAL.
- PROVIDE FIRE STOPPING MATERIAL AT ALL CONDUIT OPENINGS IN WALL AND FLOOR, AND OTHER LOCATIONS AS REQUIRED BY CODE TO PRESERVE FIRE RATING INTEGRITY.
- CORRECTIONS OF ANY DEFECTS SHALL BE COMPLETED WITHOUT CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.
- CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE OF DEFECT FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM THE DATE OF ACCEPTANCE.

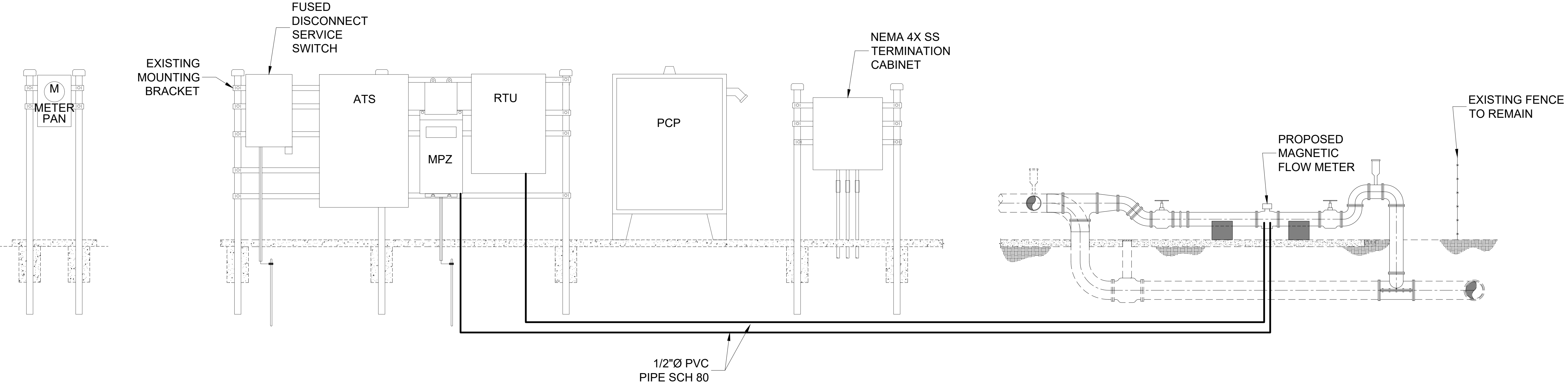


PROPOSED ELECTRICAL PLAN
SCALE: NOT TO SCALE

MARK-UP LEGEND:

	EXISTING TO REMAIN
	PROPOSED ELECTRIC SYSTEM
	10KVA MINI-POWER ZONE (MPZ). NEMA 3R STAINLESS STEEL ENCLOSURE AS MANUFACTURED BY SQUARE D OR APPROVED EQUAL
	PROPOSED MAGNETIC FLOW METER

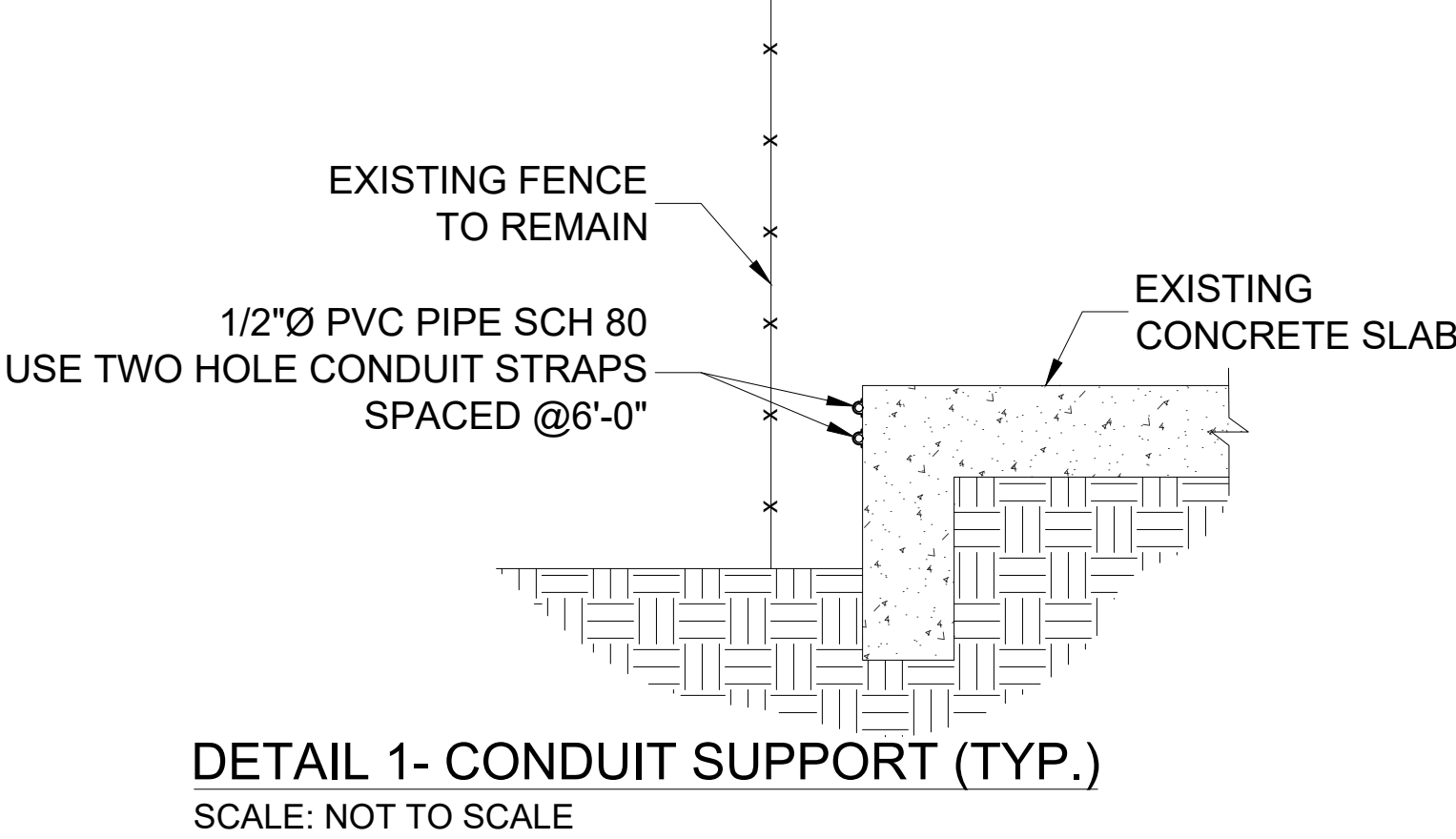
KEY NOTE: MAGNETIC FLOW METER SHALL HAVE WIRING AND CABLING PER MANUFACTURE'S RECOMMENDATION. MAGNETIC FLOW METER DATA CABLE SHALL BE PROVIDED BY THE CONTRACTOR.



RAISER DIAGRAM
SCALE: NOT TO SCALE

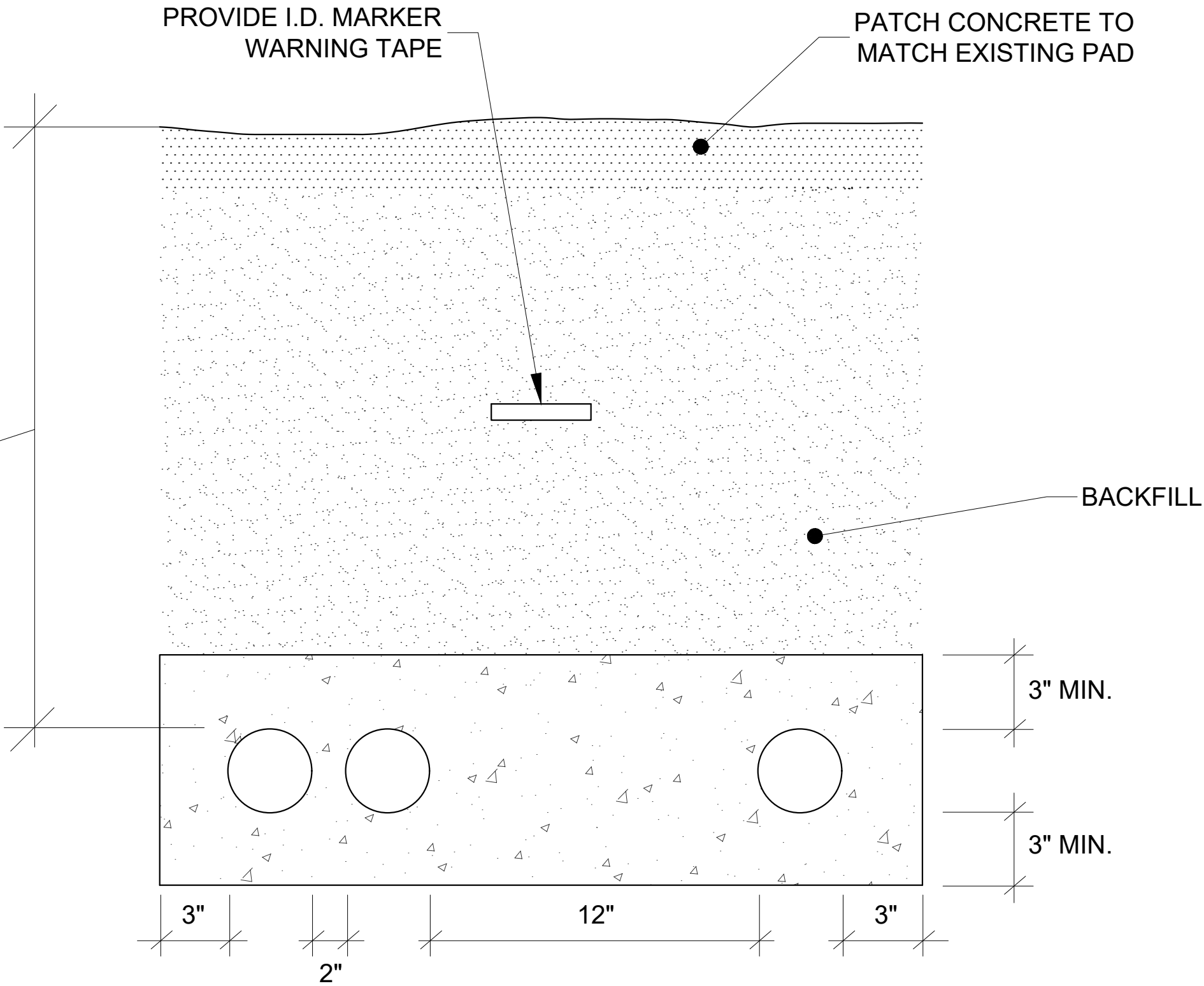
PANEL: MPZ										BUS: 60A					VOLTS: 120/240V, 1Ø, 3W				
LOCATION: EQUIPMENT SERVICE RACK										MAINS: 60A MCB					REMARKS: NEMA 3R STAINLESS STEEL				
MOUNTING: RACK										POLES: 10					A.I.C. SYMM: 10,000				
AMPS	POLE	WIRE	GND.	COND.	LOAD SERVED	BUS KVA		BUS		BUS KVA		LOAD SERVED	WIRE	GND.	COND.	POLE	AMPS		
						A	B	A	B	A	B								
20	2	12	12	1"	GEN. JACKET WATER HTR	0.50		1	2	0.20		GEN. BATTERY CHARGER	12	12	1"	1	20		
-	-	-	-	-	-		0.50	3	4		0.20	GEN. CONTROL PANEL	12	12	1"	1	20		
20	1	12	12	1"	GEN. SPACE HEATER	0.20		5	6	0.22		AREA LIGHTING	10	10	1"	1	20		
20	1	12	12	1/2"	NEW MAGMETER		0.40	7	8		0.18	GEN. MTD WP RECEPTACLE	12	12	1"	1	20		
								9	10	0.36		POLE MTD RECEPTACLES	12	12	1"	1	20		
TOTAL (PHASE):						0.70	0.90			0.78	0.38	NOTES:							
TOTAL KVA:									2.76			-							
TOTAL MAPS:									11.5										
TOTAL DEMAND AMPS:									11.5										

ELECTRIC PANEL'S SCHEDULE
SCALE: NOT TO SCALE



DETAIL 1- CONDUIT SUPPORT (TYP.)
SCALE: NOT TO SCALE

18" MIN. TO CROWN
OF PVC TYPE EB DUCT.
24" MIN. TO CROWN
UNDER ROADWAYS PER
NEC TABLE 300-5.



TYPICAL DUCTBANK DETAIL (TYP.)
SCALE: NOT TO SCALE

(SEAL)

CARMELO J. RAMOS, P.E. DATE
LICENSE NO.: 77953

R.J.Behar & Company, Inc.
Engineers • Planners

CERTIFICATE OF
REGISTRATION No:
0008305
www.rjbhar.com

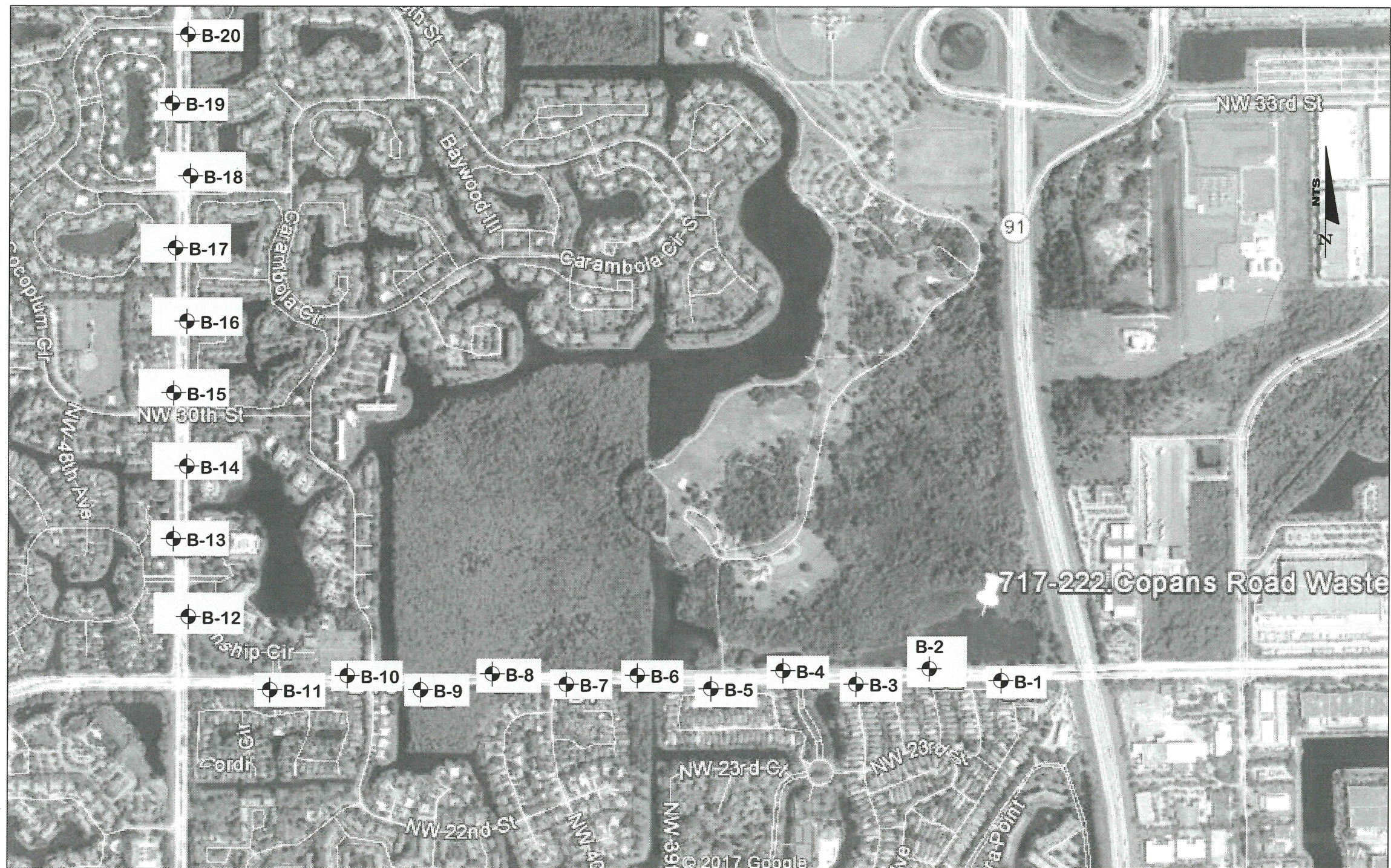
DESIGN OFFICE LOCATION: 6881 S.W. 198TH AVE., SUITE 302, PEMBROKE PINES, FL 33332, PH: 954-480-7771, FAX: 954-480-7781


**COPANS ROAD WASTEWATER
TRANSMISSION SYSTEM DESIGN**
CITY OF COCONUT CREEK

RJB Proj. No: 17039
Date: JUNE 10, 2019
DESIGN: CJR DRAWN: HRP CHECK: CJR
REVISIONS:

SHEET NAME:
**ELECTRICAL
PANEL
SCHEDULE,
RAISER DIAGRAM
AND DETAIL**

E-2
SHEET 34 OF 37



BORING LOCATION PLAN

Approximate Location of SPT Boring

DRAWN BY:

NG

CHECKED BY:

MP

APPROVED BY:

RK

DATE:

08-01-2017

ENGINEER OF RECORD:

RAJ KRISHNASAMY, P.E.

FLORIDA LICENSE NO.:

53567



RAJ KRISHNASAMY, P.E.
P.E. LICENSE NUMBER 53567
TIERRA SOUTH FLORIDA
2765 VISTA PARKWAY, S-10
WEST PALM BEACH, FL 33411
CERTIFICATE OF AUTHORIZATION 28073

ngonzalez

SCALE:

NTS

PROJECT NUMBER:

7111-17-222

GEOTECHNICAL ENGINEERING SERVICES

**COPANS ROAD WASTE WATER
REPLACEMENT DESIGN**

COCONUT CREEK, FLORIDA

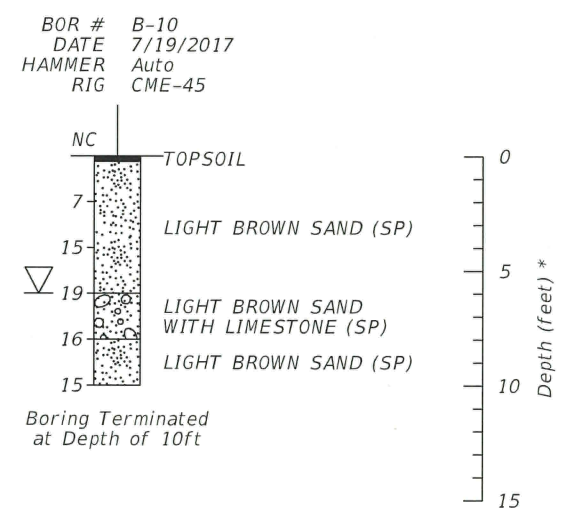
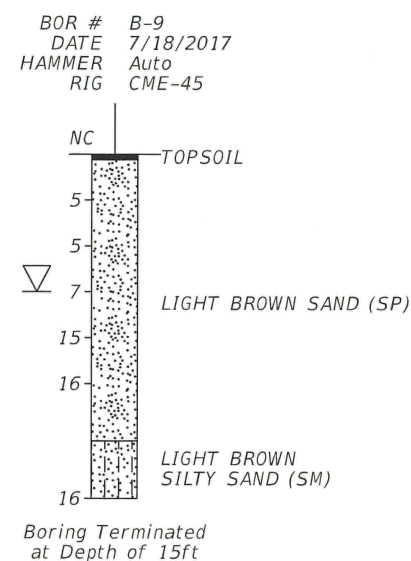
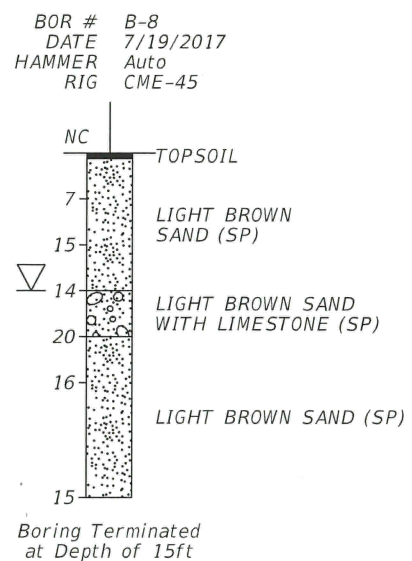
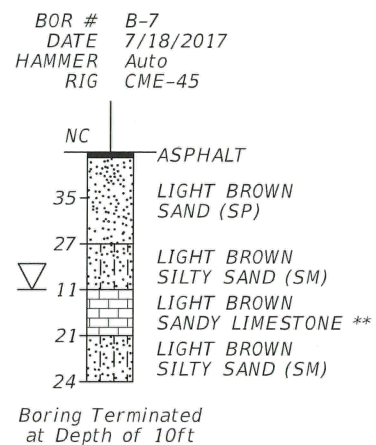
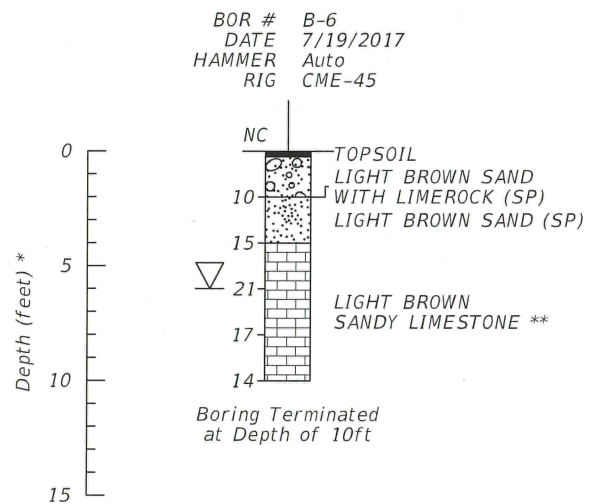
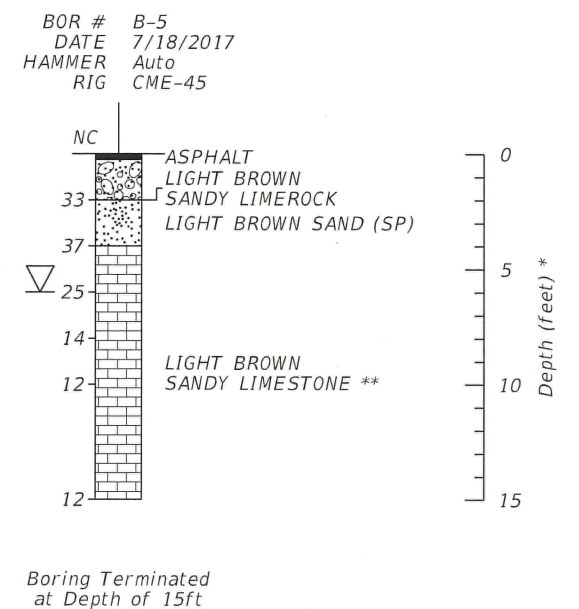
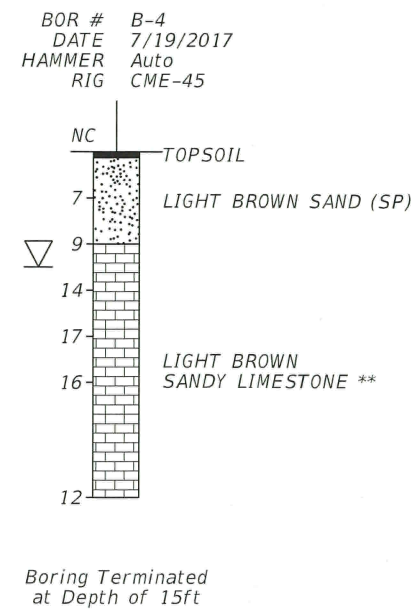
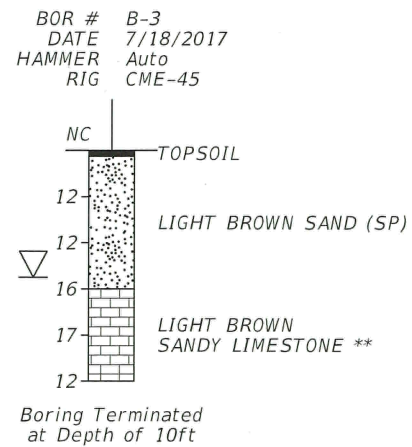
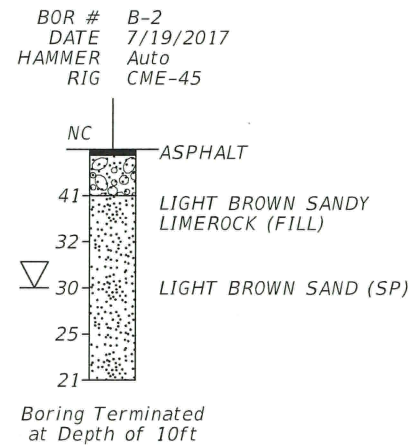
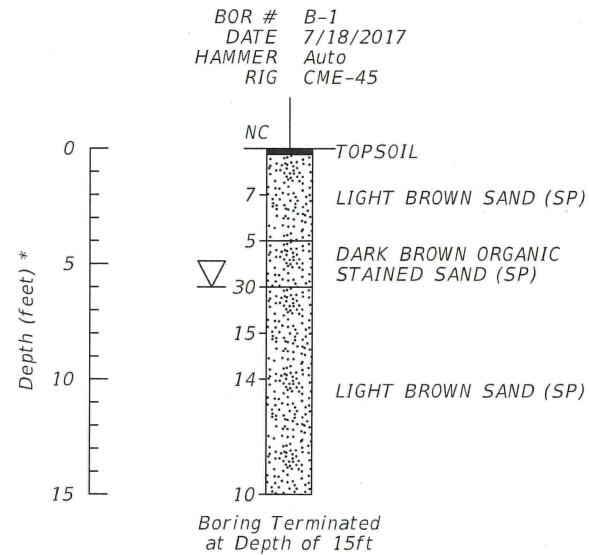
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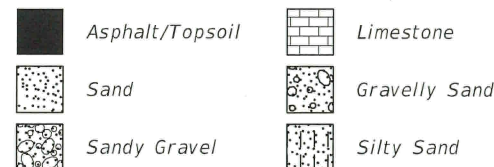
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LEGEND



NOTES

▽ ENCOUNTERED GROUNDWATER TABLE
NC NUMBERS TO THE LEFT OF BORINGS INDICATE CORRECTED SPT VALUE FOR 12" PENETRATION USING AN AUTOMATIC HAMMER CORRECTION FACTOR OF 1.24.

* DENOTES DEPTH IN FEET FROM EXISTING GROUND SURFACE

** THE LIMESTONE STRATA ENCOUNTERED WITHIN THE PROJECT SITE CORRESPOND TO ROCK FORMATION THAT TYPICALLY OFFER HIGH RESISTANCE TO EXCAVATION. SPECIAL EQUIPMENT AND BREAKING TOOLS ARE TYPICALLY REQUIRED TO EXCAVATE THESE LIMESTONE LAYERS. THESE LIMESTONE LAYERS ARE ALSO DIFFICULT TO DEWATER DUE TO ITS HIGH POROSITY AND PERMEABILITY. FOR SHEET PILE, H/KING OR Z SECTIONS, CONCRETE PILE/PANEL, AND OTHER RETAINING WALL/BULK HEAD SYSTEM RELATED WORK, THESE LIMESTONE LAYERS SHALL REQUIRED PREDRILLING TO THE MINIMUM TIP ELEVATION TO PREVENT REFUSAL CONDITIONS, STRUCTURAL DAMAGE, AND TO MINIMIZE VIBRATION- INDUCED SETTLEMENTS TO NEARBY STRUCTURES. THE COST OF PREDRILLING SHALL BE INCLUDED IN THE ASSOCIATED PAY ITEM.

DRAWN BY:
NG

CHECKED BY:
MP

APPROVED BY:
RK
DATE:
08-01-2017

ENGINEER OF RECORD:
RAJ KRISHNASAMY, P.E.
FLORIDA LICENSE NO.:
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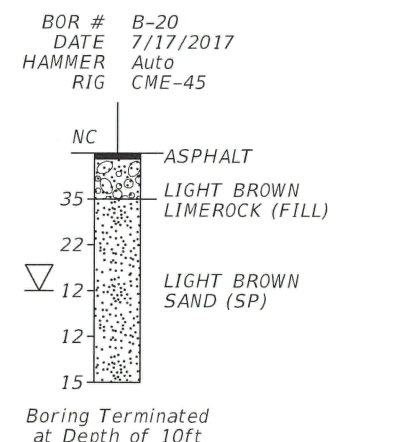
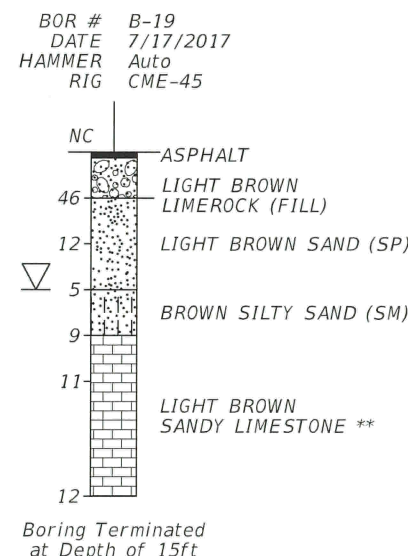
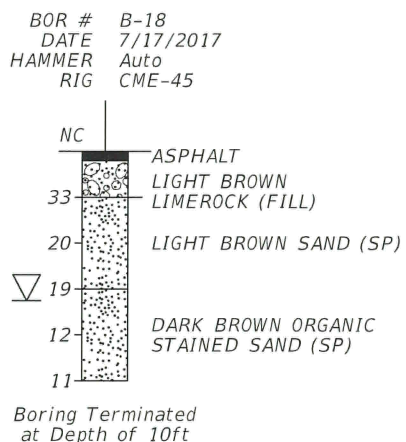
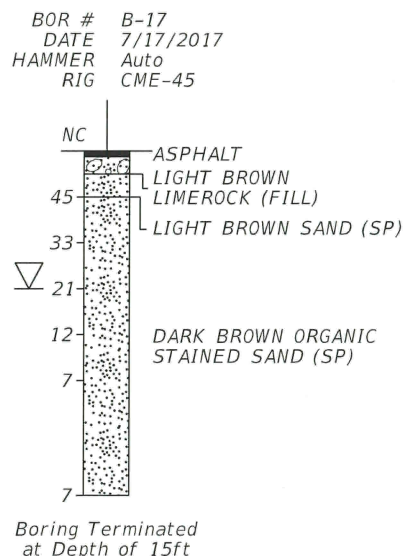
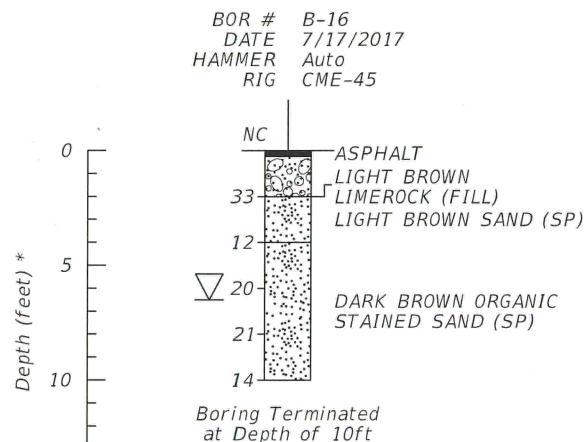
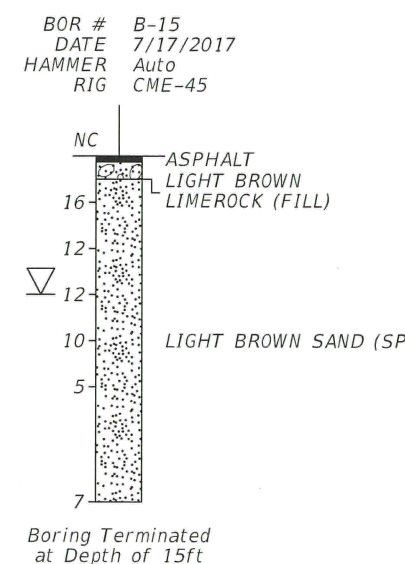
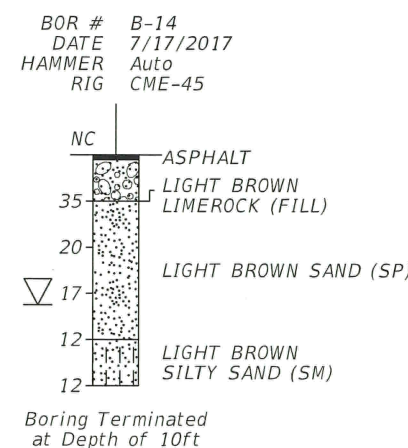
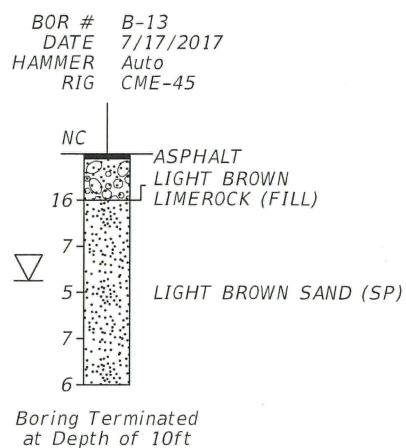
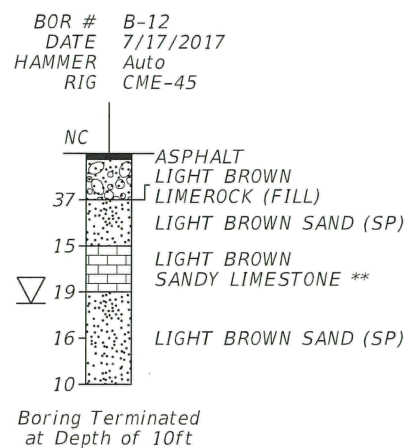
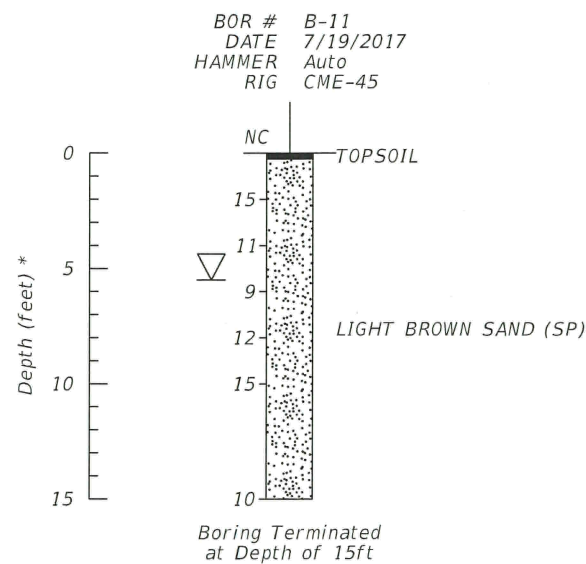
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SCALE:
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GEOTECHNICAL ENGINEERING SERVICES
COPANS ROAD WASTE WATER
REPLACEMENT DESIGN
COCONUT CREEK, FLORIDA

Sheet:
2



LEGEND

	Asphalt/Topsoil		Limestone
	Sand		Gravelly Sand
	Sandy Gravel		Silty Sand

NOTES

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Sheet:
3