

10/25/2023



TOTAL NO. OF SHEETS - 17

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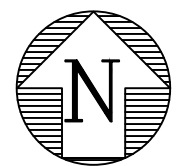
ADAM SWANEY, P.E.
NO. 72235

OLD DIXE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
COVER

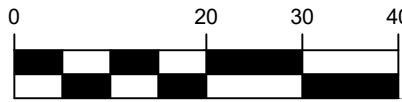


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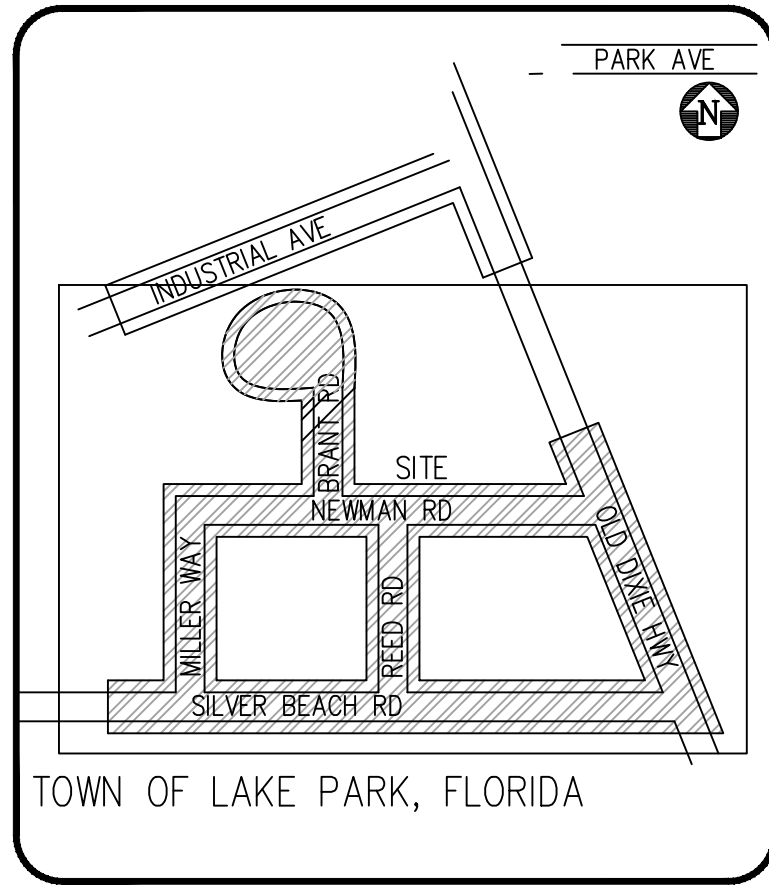
18187.01	JULIAN PROJECTS R218187.27 Lake Park Sepic to Sewer18187.27 COVER	9/1/2023	STAFF	
		DATE	DRAWN	
			PROJECT ENGINEER	MK
			PROJECT MANAGER	ACS
			CHECKED	LT



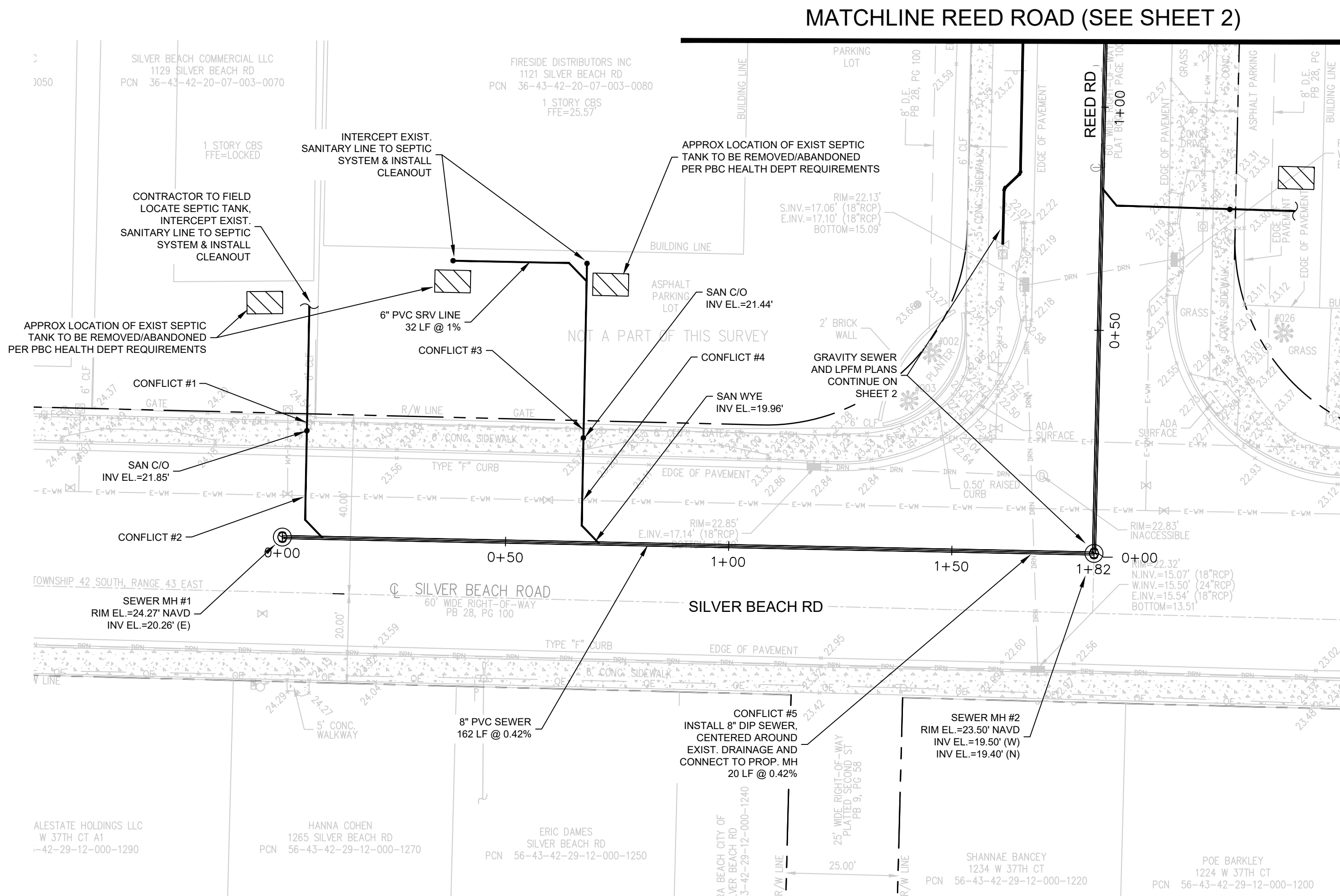
GRAPHIC SCALE



SCALE: 1" = 20'



LOCATION MAP
N.T.S.



LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FM EXISTING FORCE MAIN
- WM EXISTING WATER MAIN
- PROPERTY LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT

CONFLICT TABLE

CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
1	EXST. 3" LPFM EL.=22.88'	PROP. 6" SAN SRV EL.=21.47'	1'-5"
2	EXST. 8" DIP WM EL.=22.23'	PROP. 6" SAN SRV EL.=21.23'	1'-0"
3	EXST. 3" LPFM EL.=22.48'	PROP. 6" SAN SRV EL.=21.47'	1'-0"
4	EXST. 8" DIP WM EL.=22.30'	PROP. 6" SAN SRV EL.=21.30'	1'-0"
5	PROP. 8" DIP GSM EL.=19.56'	EXST. 18" RCP STM EL.=17.17'	2'-5"

GENERAL NOTES:

- ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD.88) AND REFERENCE THE FOLLOWING PALM BEACH COUNTY BENCHMARK 'FRIDGE' HAVING AN ELEVATION OF 18.023 (NAVD88) AS PUBLISHED BY PALM BEACH COUNTY ENGINEERING.
CONVERSION FACTOR:
FRIDGE: 18.103(NAVD88) + 1.524 = 14.627(INGVD29)
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- TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP, INC DATED AUGUST 4, 2023.
- ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
- CONTRACTOR TO FIELD VERIFY LOCATION OF SEPTIC TANK PRIOR TO CONSTRUCTION. SEPTIC TANK ABANDONMENT AND CONNECTION TO PROPOSED SYSTEM SHALL OCCUR AFTER PBC HEALTH DEPARTMENT CLEARANCE OF THE NEW SEWER SYSTEM.

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J:\Land Projects\RD1818727 Lake Park Septic to Sewer\1818727 Sewer Plans.dwg DATE: 10/26/2023 11:56 AM



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DATE	DRAWN	PROJECT ENGINEER	PROJECT MANAGER	CHECKED
OCTOBER	MK	MK	ACS	ACS

JOB NO.
18187.27

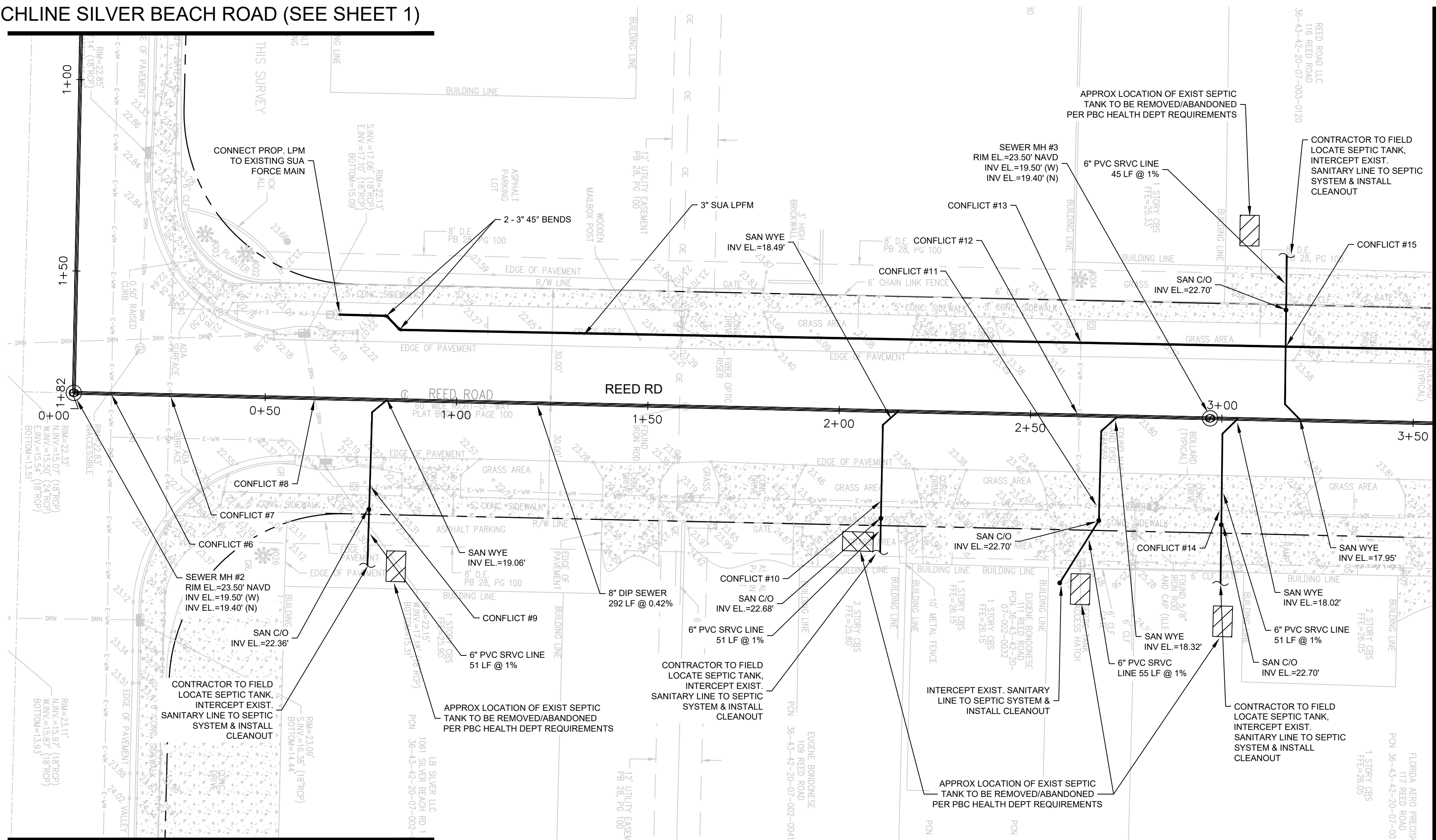
OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - SILVER BEACH ROAD

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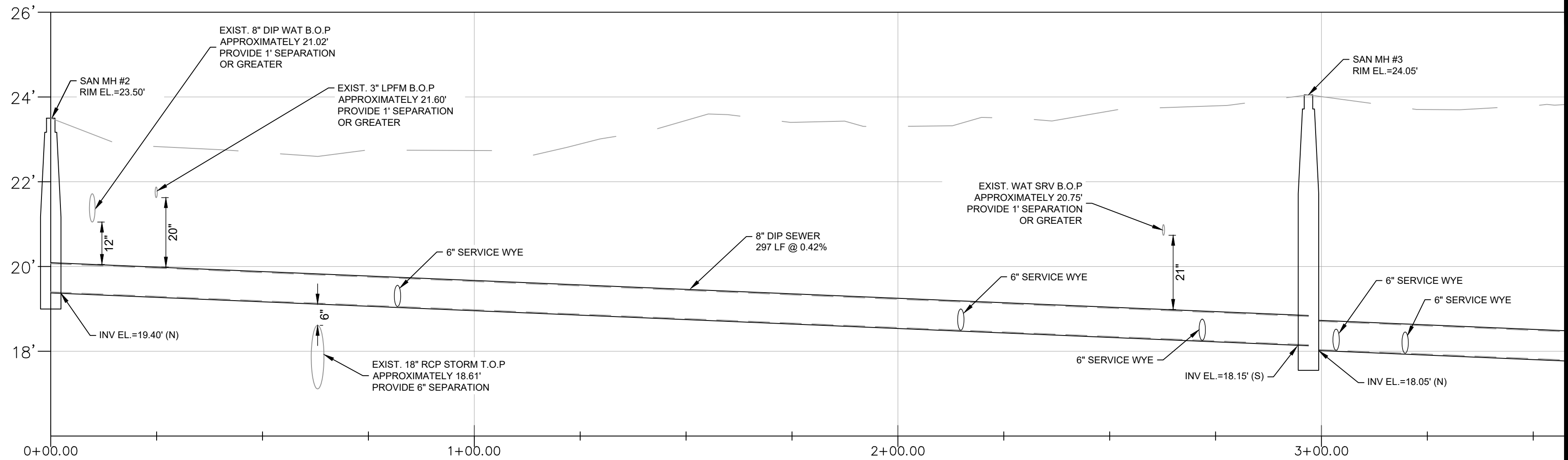
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NO. 72235

REVISIONS	NO.	DATE	REMARKS	BY

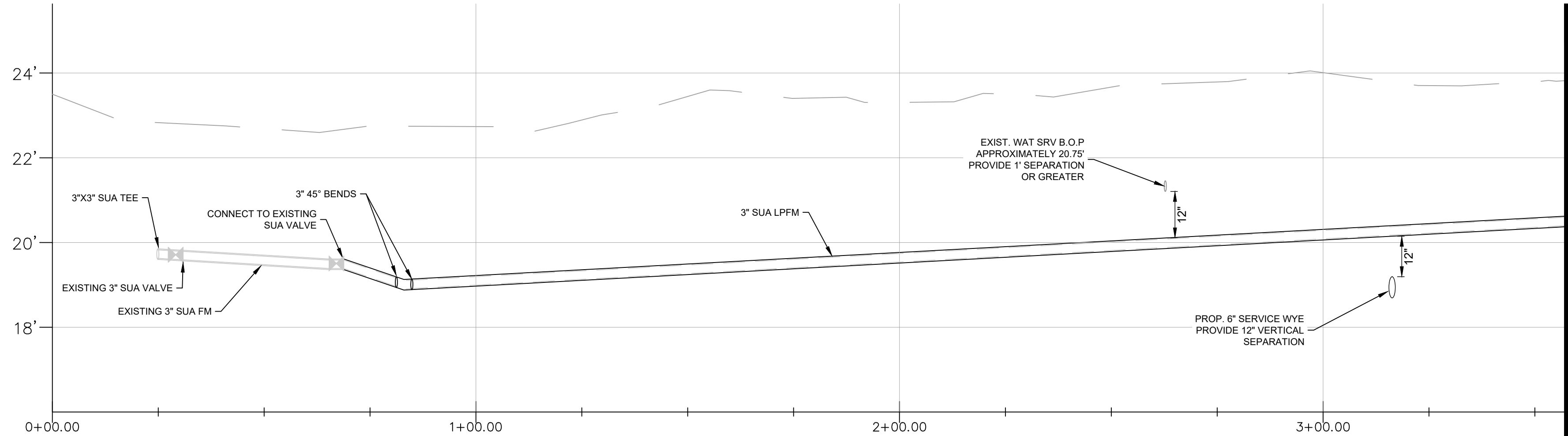
MATCHLINE SILVER BEACH ROAD (SEE SHEET 1)



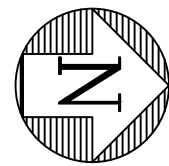
MATCHLINE SILVER BEACH ROAD (SEE SHEET 10)



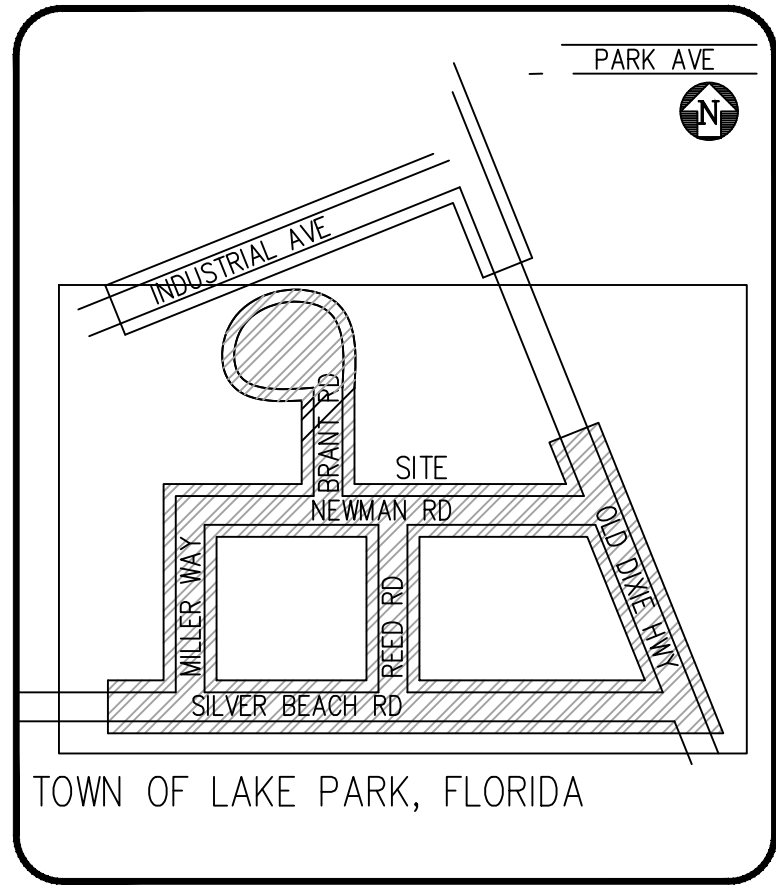
GRAVITY SEWER MAIN PROFILE



FORCE MAIN PROFILE



GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FM EXISTING FORCE MAIN
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- PROPERTY LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT

CONFLICT TABLE

CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
6	EXST. 8" DIP WM EL.=21.02'	PROP. 8" DIP GSM EL.=20.02'	1'-0"
7	EXST. 3" LPFM EL.=21.60'	PROP. 8" DIP GSM EL.=19.96'	1'-0"
8	PROP. 8" DIP GSM EL.=19.14'	EXST. 18" RCP STM EL.=18.61'	0'-6"
9	EXST. 6" AC WM EL.=20.08'	PROP. 6" SAN SRV EL.=19.31'	0'-9"
10	EXST. 6" AC WM EL.=20.75'	PROP. 6" SAN SRV EL.=19.08'	1'-0"
11	EXST. 6" AC WM EL.=20.50'	PROP. 6" SAN SRV EL.=19.00'	1'-6"
12	EXST. (") WAT SRV EL.=20.75'	PROP. 8" DIP GSM EL.=18.98'	1'-9"
13	EXST. (") WAT SRV EL.=20.75'	PROP. 3" LPFM EL.=19.75'	1'-0"
14	EXST. 6" AC WM EL.=20.50'	PROP. 6" SAN SRV EL.=19.00'	1'-6"
15	PROP. 3" LPFM EL.=21.40'	PROP. 6" SAN SRV EL.=18.90'	1'-6"

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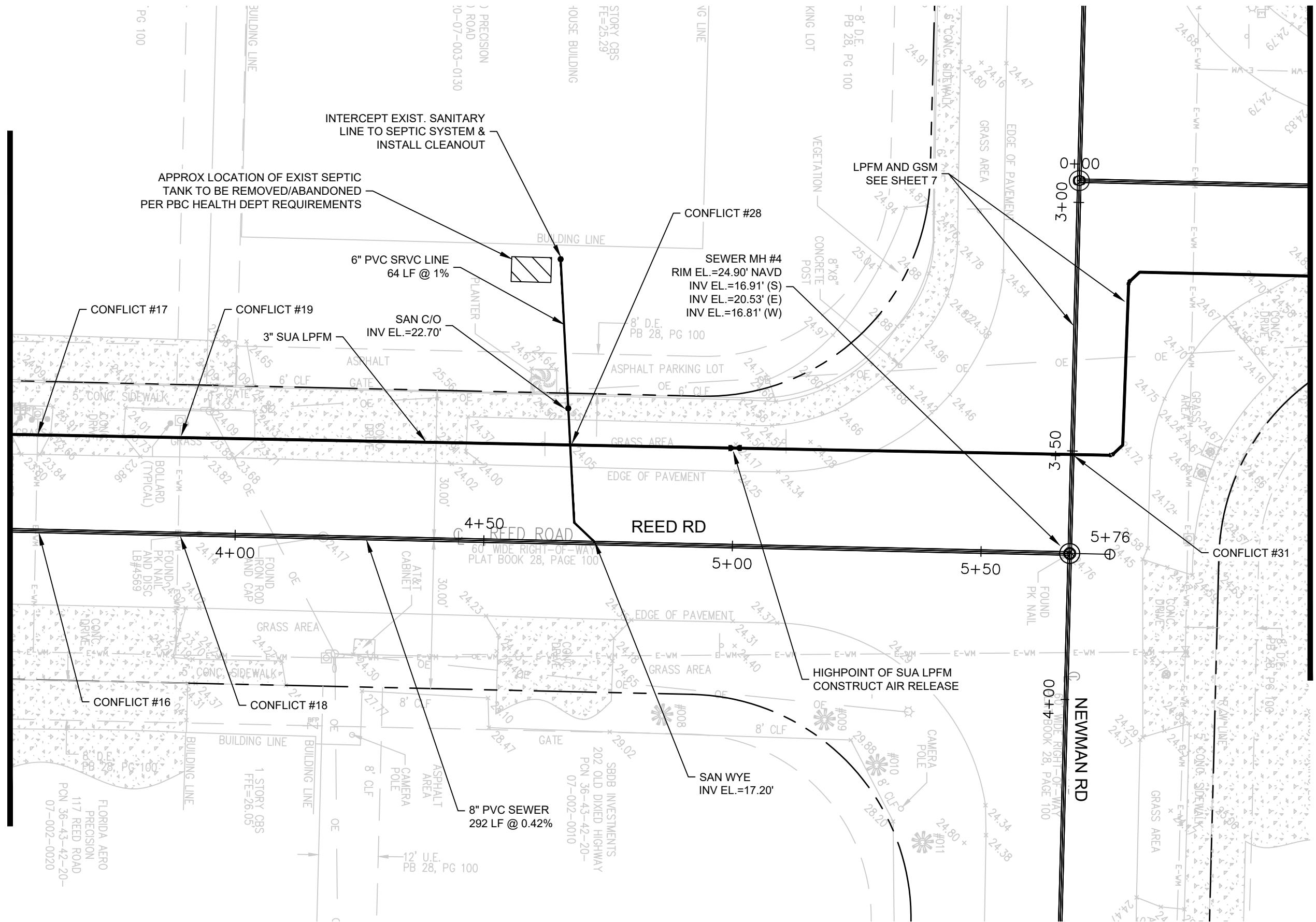
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TOWN OF LAKE PARK, FL
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DATE	DRAWN	CHK	PROJECT	MANAGER	CHECKED
06/19/2023	MK	MK	ACS	ACS	
2	17				

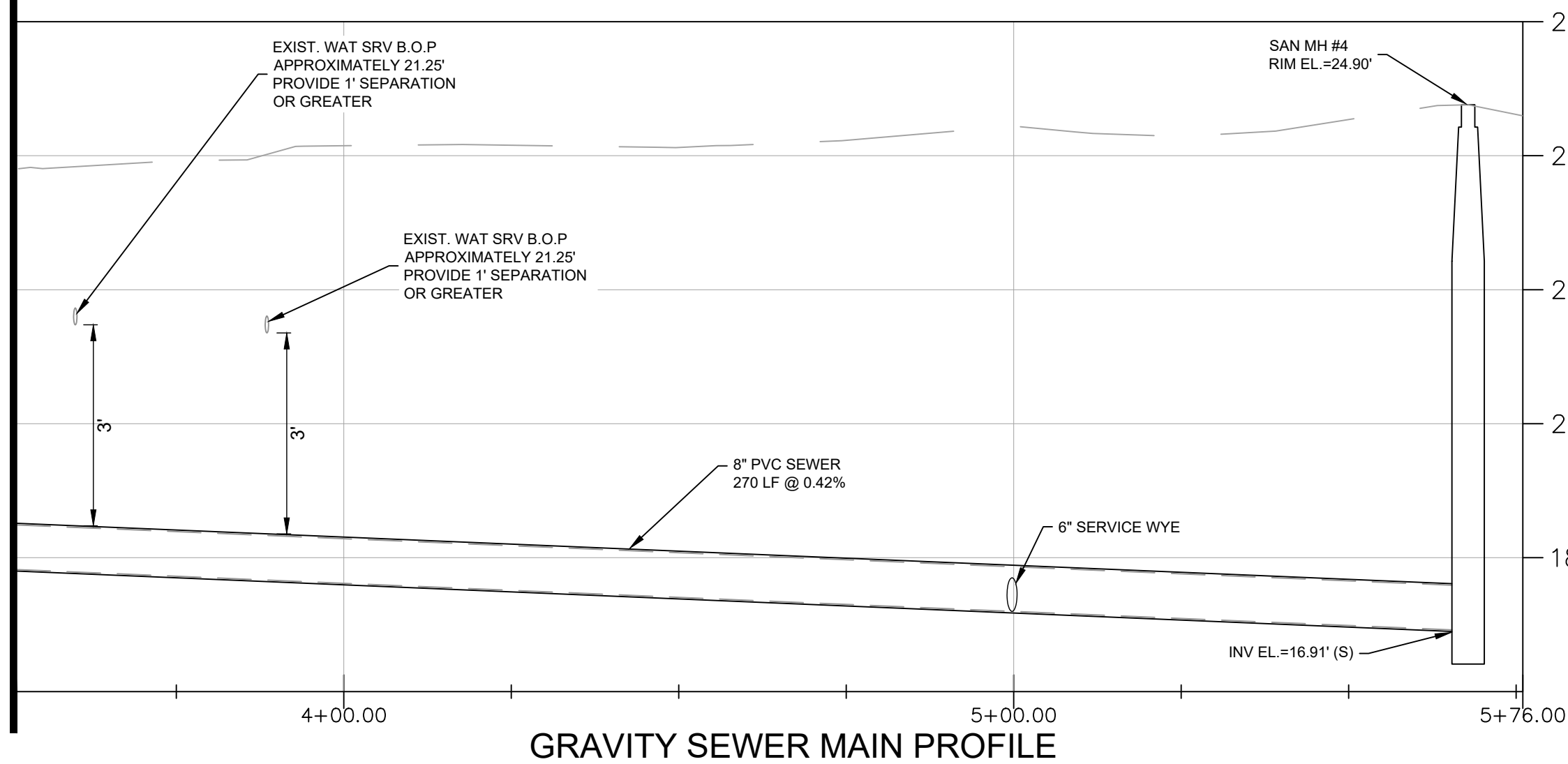
J:\Land Projects\RD18187.27 Lake Park Septic to Sewer\18187.27 Sewer Plans.dwg DATE: 10/26/2023 11:56 AM
JOB NO.
18187.27
CONSTRUCTION, NOT FOR

MATCHLINE REED ROAD (SEE SHEET 2)



MATCHLINE NEWMAN ROAD (SEE SHEET 7)

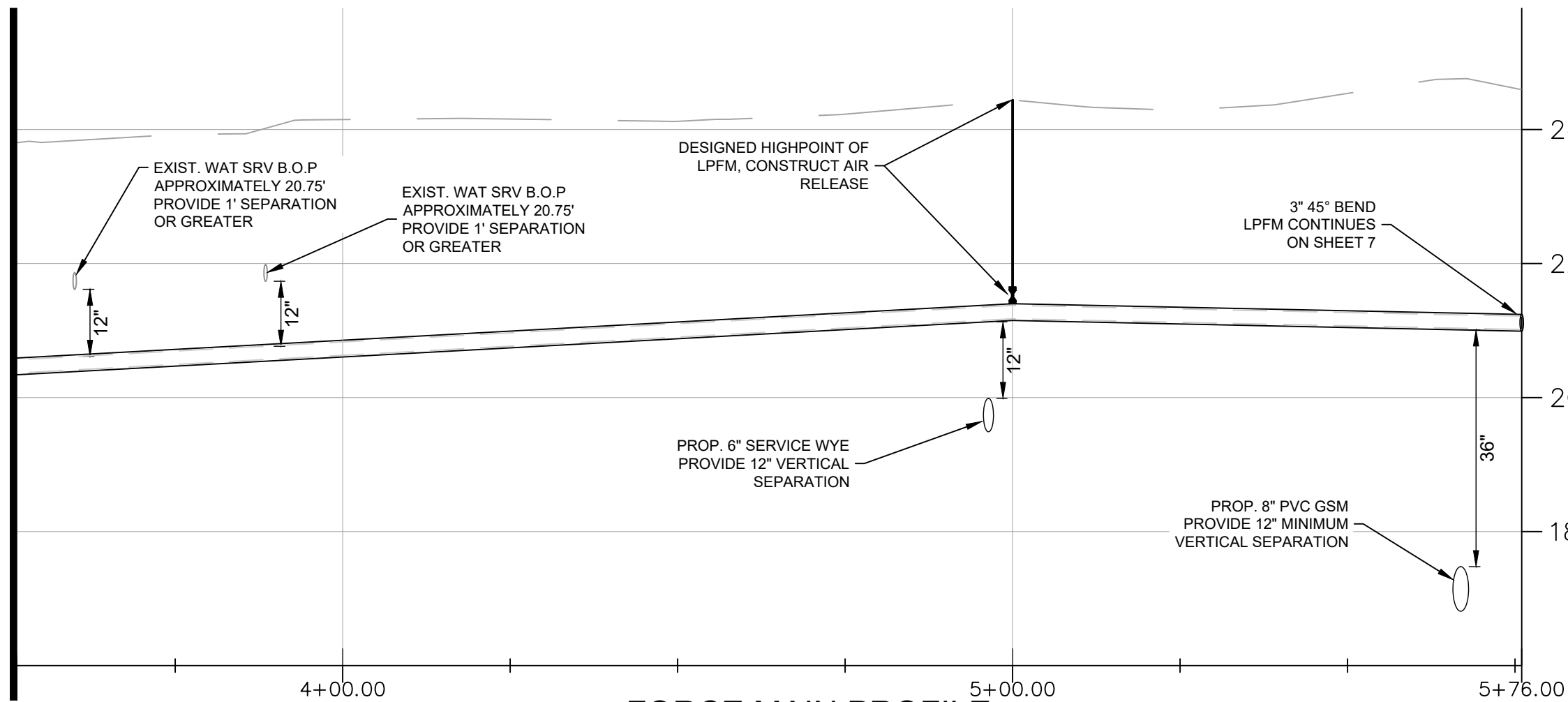
MATCHLINE REED ROAD (SEE SHEET 2)



GRAVITY SEWER MAIN PROFILE

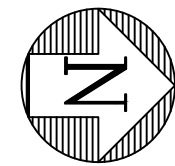
MATCHLINE NEWMAN ROAD (SEE SHEET 7)

MATCHLINE REED ROAD (SEE SHEET 2)

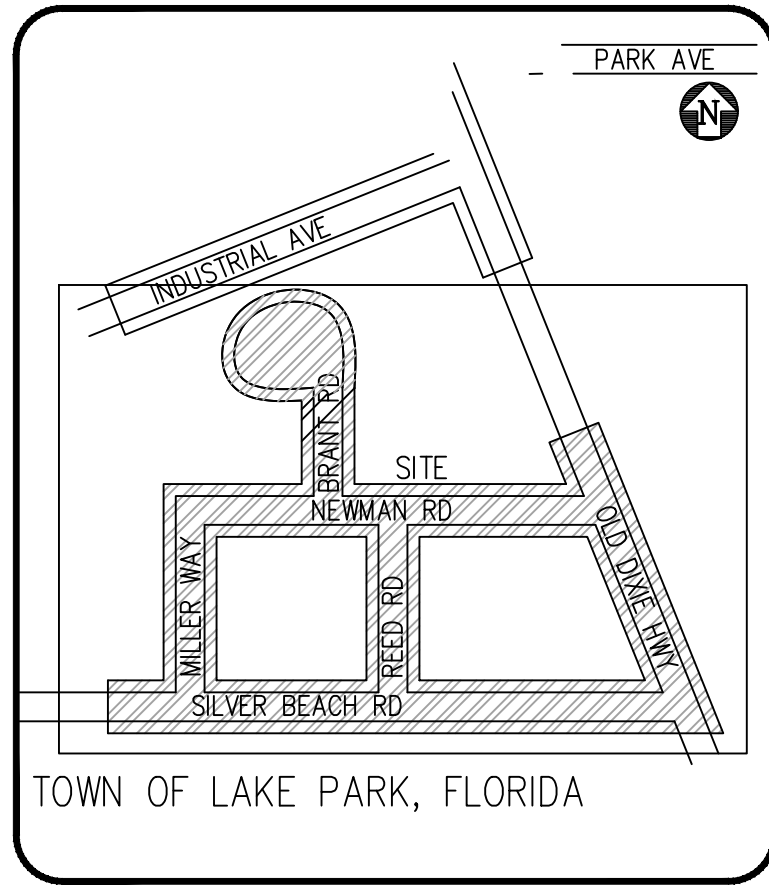


FORCE MAIN PROFILE

MATCHLINE NEWMAN ROAD (SEE SHEET 7)



GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'



LOCATION MAP
N.T.S.

LEGEND

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- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- FM EXISTING FORCE MAIN
- WM EXISTING WATER MAIN
- PROPERTY LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT

CONFLICT TABLE			
CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
16	EXST. (") WAT SRV EL.=21.25'	PROP. 8" PVC GSM EL.=18.45'	2'-10"
17	EXST. (") WAT SRV EL.=21.25'	PROP. 3" LPFM EL.=20.25'	1'-0"
18	EXST. (") WAT SRV EL.=21.25'	PROP. 8" PVC GSM EL.=18.33'	2'-11"
19	EXST. (") WAT SRV EL.=21.25'	PROP. 3" LPFM EL.=20.25'	1'-0"
28	PROP. 3" LPFM EL.=21.93'	EXST. (") LPFM EL.=20.79'	1'-2"
31	PROP. 3" LPFM EL.=20.48'	PROP. 8" PVC GSM EL.=17.48'	3'-0"

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DATE	06/19/2023	DATE	06/19/2023
DRAWN	MK	CHECKED	ACS
PROJECT ENGINEER	MK	PROJECT MANAGER	ACS
3		17	
JOB NO.		18187.27	

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - REED ROAD

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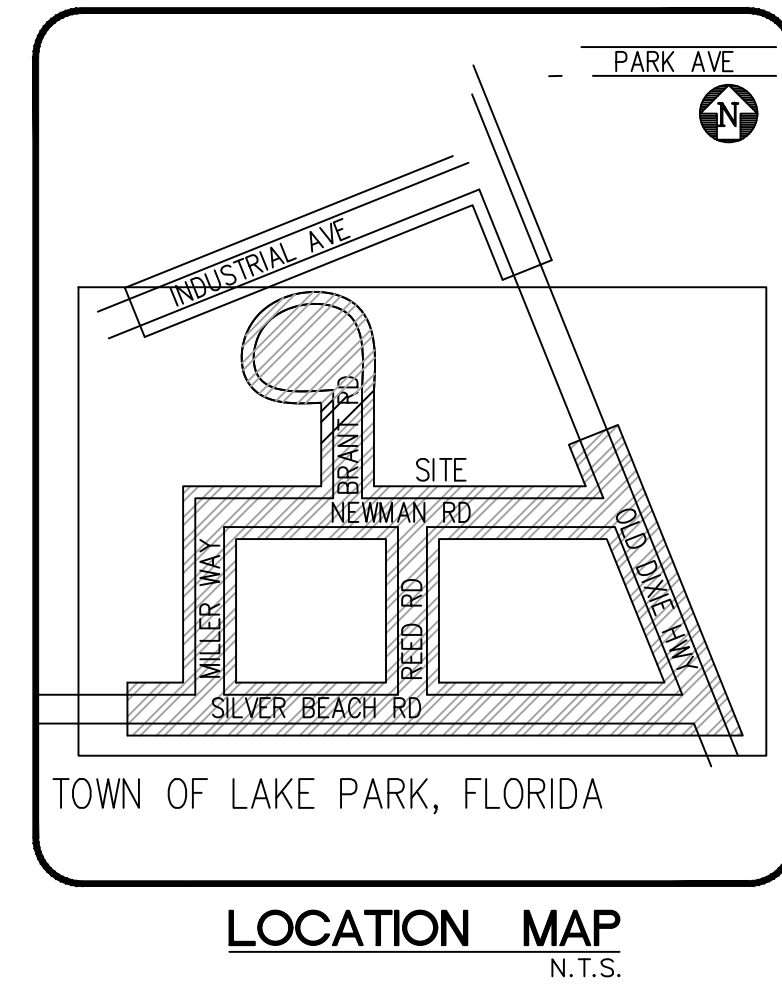
NO. DATE





REMARKS

BY

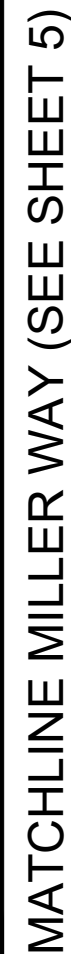
This plan view illustrates the sanitary sewer intercept system along Miller Way. The main sewer line runs horizontally across the center, with stationing from 0+00 to 2+00. Key features include:

- Sewer Lines:** A 6" PVC SRVC line at 1% slope runs parallel to the main line. Other lines include an 8" PVC sewer (225 LF @ 0.42%), a 6" PVC SRVC line (45 LF @ 1%), and another 6" PVC SRVC line (70 LF @ 1%).
- Manholes and Inverts:** Several manholes are shown with their invert elevations: SAN C/O INV EL = 21.75', SAN WYE INV EL = 20.02', SAN C/O INV EL = 21.80', SAN WYE INV EL = 19.56', SAN C/O INV EL = 21.00', SAN WYE INV EL = 19.70', SAN C/O INV EL = 22.90', and SAN WYE INV EL = 20.05' (N).
- Intercept Tank Locations:** Three locations are marked as "APPROX LOCATION OF EXIST SEPTIC TANK TO BE REMOVED/ABANDONED PER PBC HEALTH DEPT REQUIREMENTS".
- Conflicts:** Conflicts #20 and #22 are identified near the intersection of Miller Way and other streets.
- Buildings and Landmarks:** Various buildings are labeled, including "HARBOR LAND INC 109 MILLER WAY", "WAREHOUSE BUILDING", "CONCRETE & BRICK PAVERS AREA", and "GRASS AREA".
- Other Features:** The plan shows asphalt areas, concrete sidewalks, chain link fences, and existing utility lines like water and gas.



	PROPOSED GRINDER PUMP STATION
	PROPOSED PRIVATE GRINDER PUMP STATION
	PROPOSED OIL/GRIT SEPARATOR
	EXISTING SEPTIC TANK
— FM —	EXISTING FORCE MAIN
— WM —	EXISTING WATER MAIN
- - -	PROPERTY LINE
⊕	SANITARY MANHOLE
●	SANITARY CLEANOUT

CONFLICT TABLE			
CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
20	EXST. 4" AC WM EL.=22.50'	PROP. 6" SAN SRV EL.=21.50'	1'-0"
21	EXST. 6" FIRE EL.=22.33'	PROP. 8" PVC GSM EL.=20.02'	2'-4"
22	EXST. 4" AC WM EL.=21.67'	PROP. 6" SAN SRV EL.=20.67'	1'-0"



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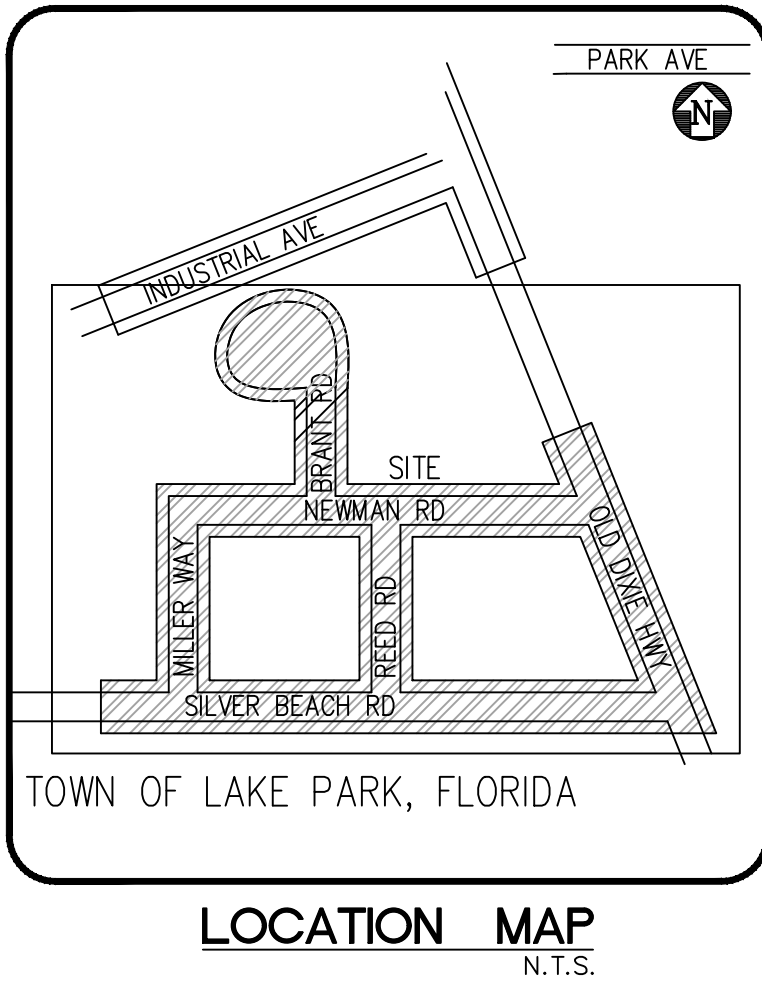
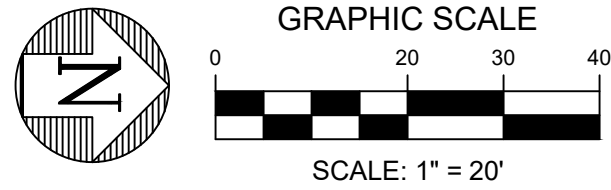
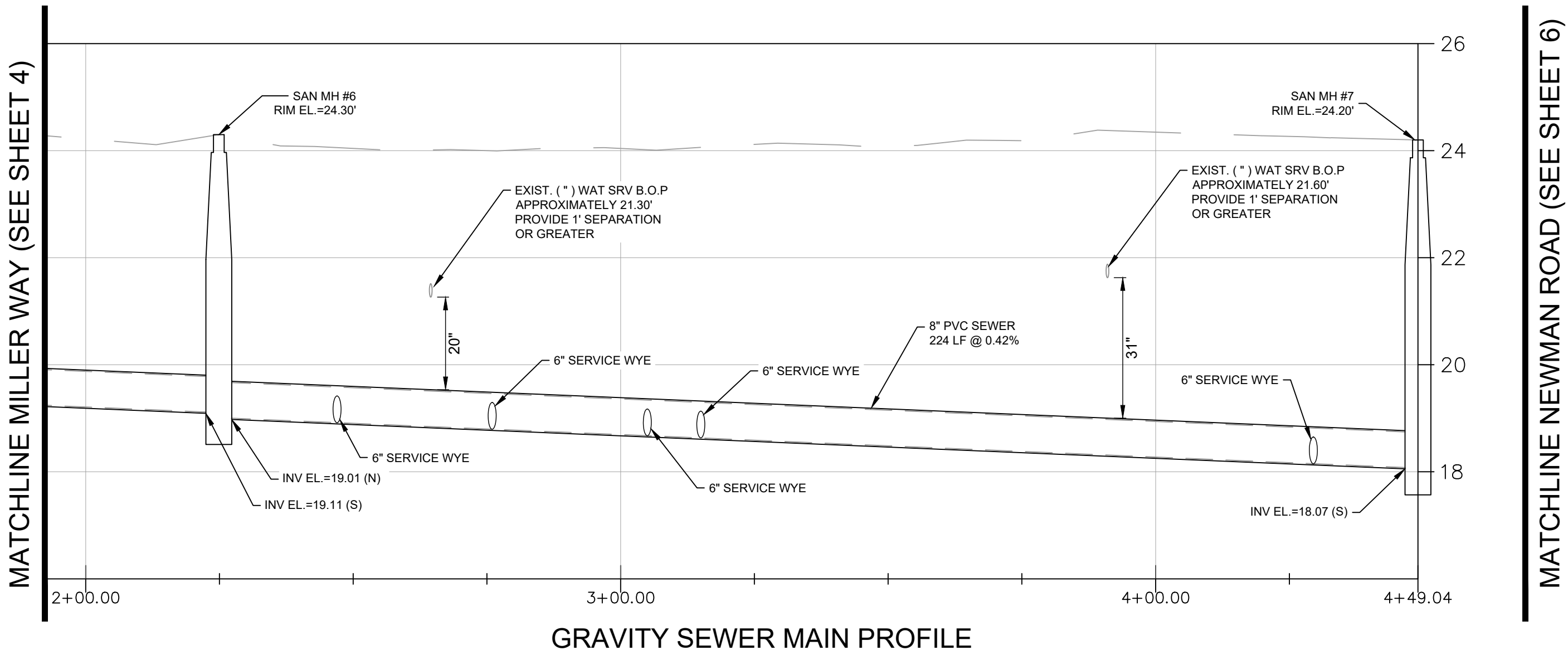
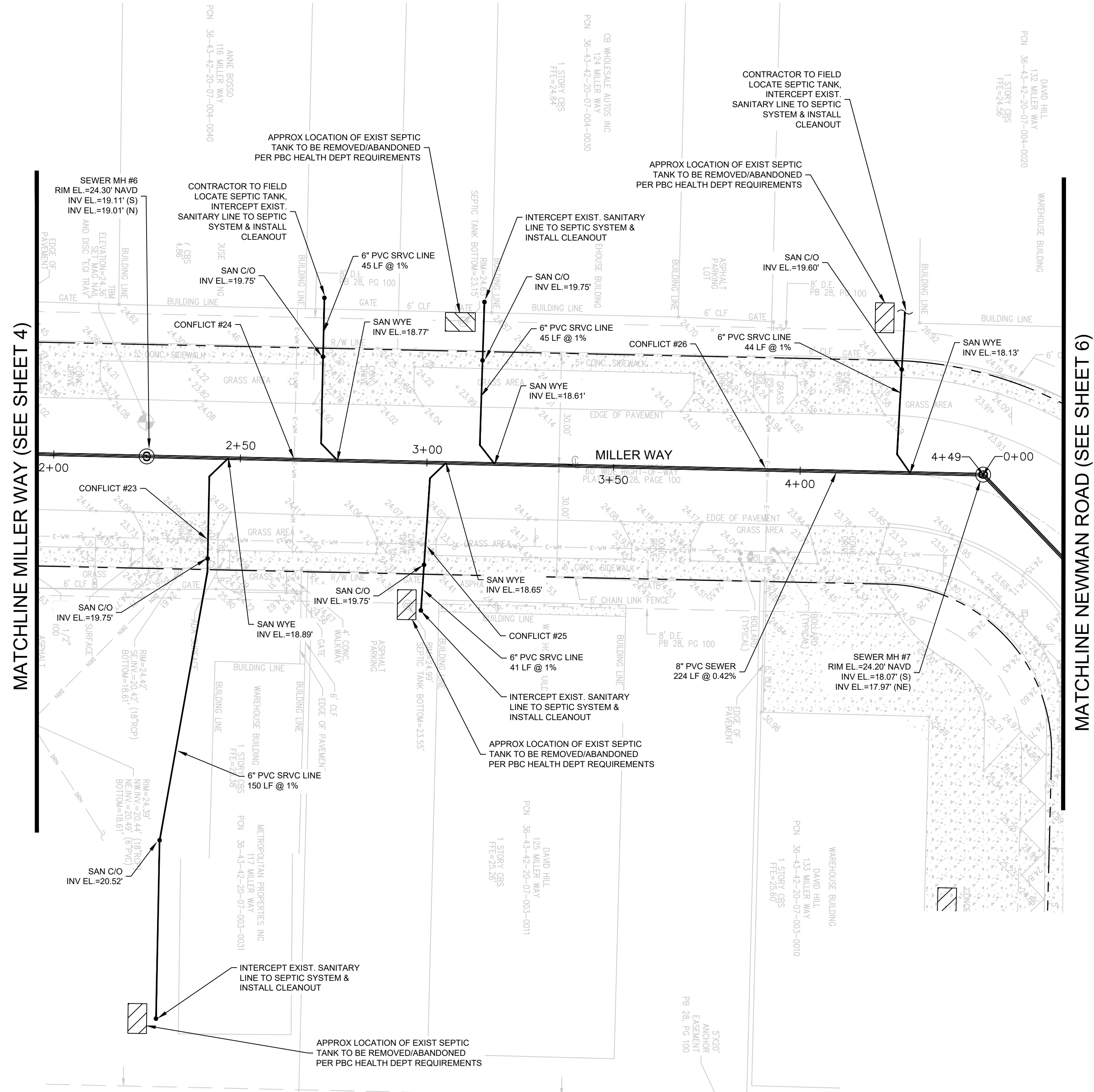
J:\Land Projects\181887\27 Lake Park Septic to Sewer\18187.27 Sewer	DATE	06/19/2023
	DRAWN	MK
	PROJECT ENGINEER	MK
	PROJECT MANAGER	ACS
	CHECKED	ACS
JOB NO. 181887 27		4 / 17

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OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - MILLER WAY



- LEGEND
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 - PROPOSED PRIVATE GRINDER PUMP STATION
 - PROPOSED OIL/GRIT SEPERATOR
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CONFLICT TABLE			
CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
23	EXST. 4" AC WM EL.=20.70'	PROP. 6" SAN SRV EL.=19.70'	1'-0"
24	EXST. (") WAT SRV EL.=21.30'	PROP. 8" PVC GSM EL.=19.53'	1'-9"
25	EXST. 4" AC WM EL.=22.00'	PROP. 6" SAN SRV EL.=21.00'	1'-0"
26	EXST. (") WAT SRV EL.=21.60'	PROP. 8" PVC GSM EL.=18.98'	2'-7"

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17					
JOB NO.					
18187.27					

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
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TRI CITY INDUSTRIAL PARK - MILLER WAY

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MAIN ROAD
-20-07-005-0110

REAL ESTATE INC
MAIN ROAD
-20-07-005-0110

FLORIDA AERO PRECISION
210 NEWMAN ROAD
PCN 36-43-42-20-07-005-0120
1 STORY CBS
FFE=25.67'

CONTRACTOR TO FIELD
LOCATE SEPTIC TANK;
INTERCEPT EXIST.
SANITARY LINE TO SEPTIC
SYSTEM & INSTALL
CLEANOUT

APPROX LOCATION OF EXIST SEPTIC
TANK TO BE REMOVED/ABANDONED
PER PBC HEALTH DEPT REQUIREMENTS

6" PVC SRVC LINE
104 LF @ 1%

INSTALL 40 LF 8" DIP SEWER
@0.42%, CONNECT TO PROP
MH AND EXTEND 10' PAST
EXIST WM

SEWER MH #8
RIM EL.=24.40' NAVD
INV EL.=17.67' (SW)
INV EL.=17.57' (E)

8" PVC SEWER
71 LF @ 0.42%

SEWER MH #7
RIM EL.=24.20' NAVD
INV EL.=18.07' (S)
INV EL.=17.97' (NE)

SEE SHEET 5
FOR MILLER WAY
GSM AND LATERALS

SAN C/O
INV EL.=22.25'

CONFLICT #27

CONFLICT #35

SAN WYE
INV EL.=17.26'

8" PVC SEWER
184 LF @ 0.42%

SAN WYE
INV EL.=17.24'

SAN C/O
INV EL.=22.25'

6" PVC SRVC LINE
59 LF @ 1%

SEWER MH #9
RIM EL.=25.00' NAVD
INV EL.=16.63' (W)
INV EL.=16.50' (E)
INV EL.=16.40' (N)

INTERCEPT EXIST. SANITARY
LINE TO SEPTIC SYSTEM &
INSTALL CLEANOUT

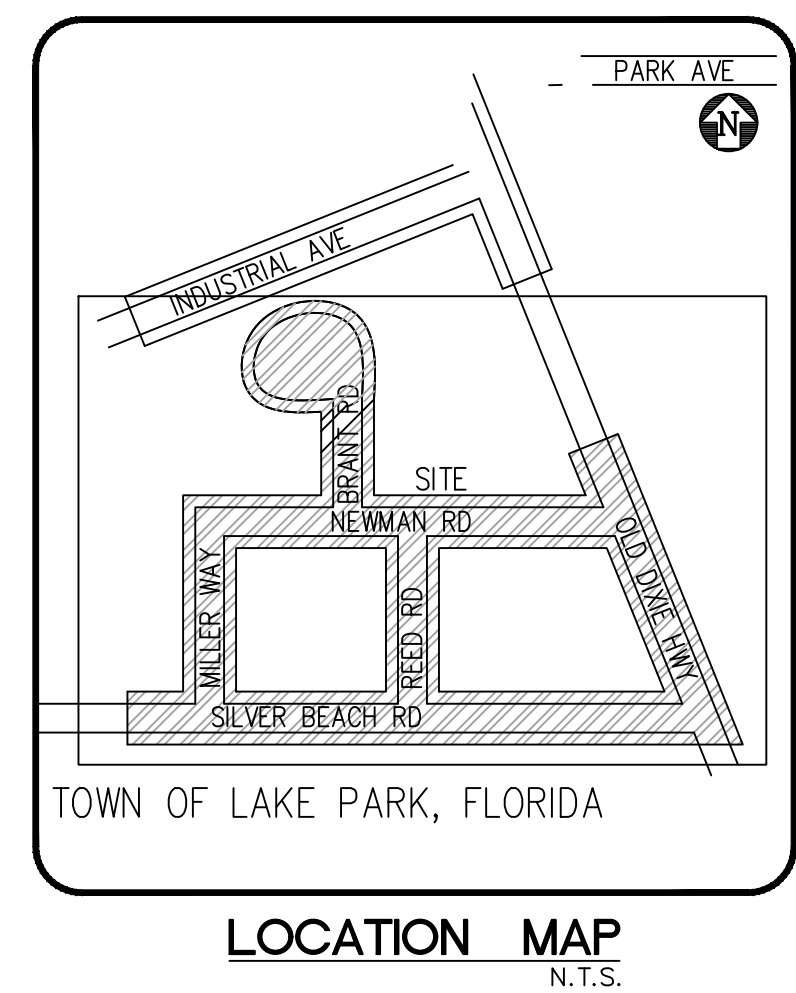
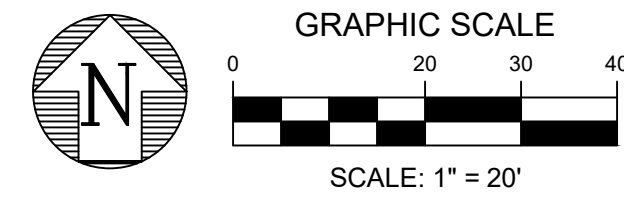
APPROX LOCATION OF EXIST SEPTIC
TANK TO BE REMOVED/ABANDONED
PER PBC HEALTH DEPT REQUIREMENTS

WAREHOUSE BUILDING
DAVID HILL
133 MILLER WAY
PCN 36-43-42-20-07-003-0010

1 STORY CBS
FFE=24.94'

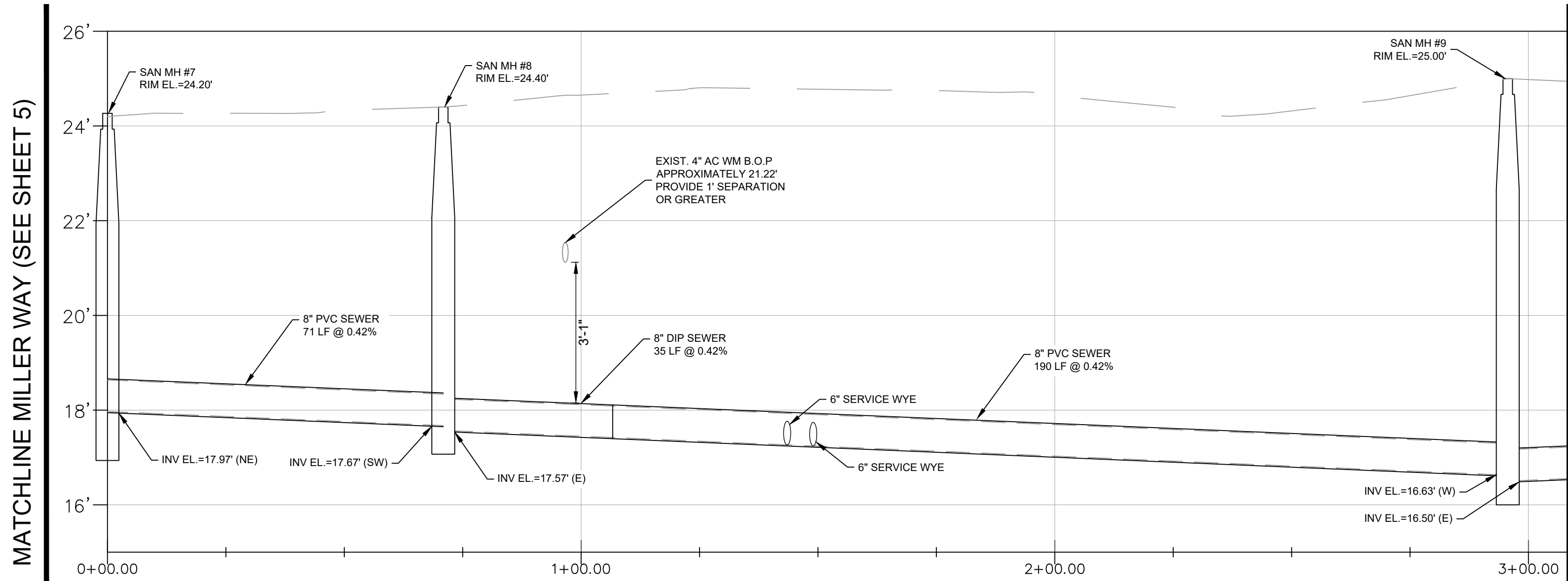
MATCHLINE MILLER WAY (SEE SHEET 5)

MATCHLINE NEWMAN ROAD (SEE SHEET 7)



- LEGEND
- PROPOSED GRINDER PUMP STATION
 - PROPOSED PRIVATE GRINDER PUMP STATION
 - PROPOSED OIL/GRIT SEPERATOR
 - EXISTING SEPTIC TANK
 - FM EXISTING FORCE MAIN
 - WM EXISTING WATER MAIN
 - PROPERTY LINE
 - SANITARY MANHOLE
 - SANITARY CLEANOUT

CONFLICT TABLE			
CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
27	EXST. 4" WAT SRV EL.=21.22'	PROP. 8" PVC GSM EL.=18.13'	3'-1"
35	EXST. 4" AC WM EL.=21.30'	PROP. 6" SAN SRV EL.=20.05'	1'-3"



GRAVITY SEWER MAIN PROFILE

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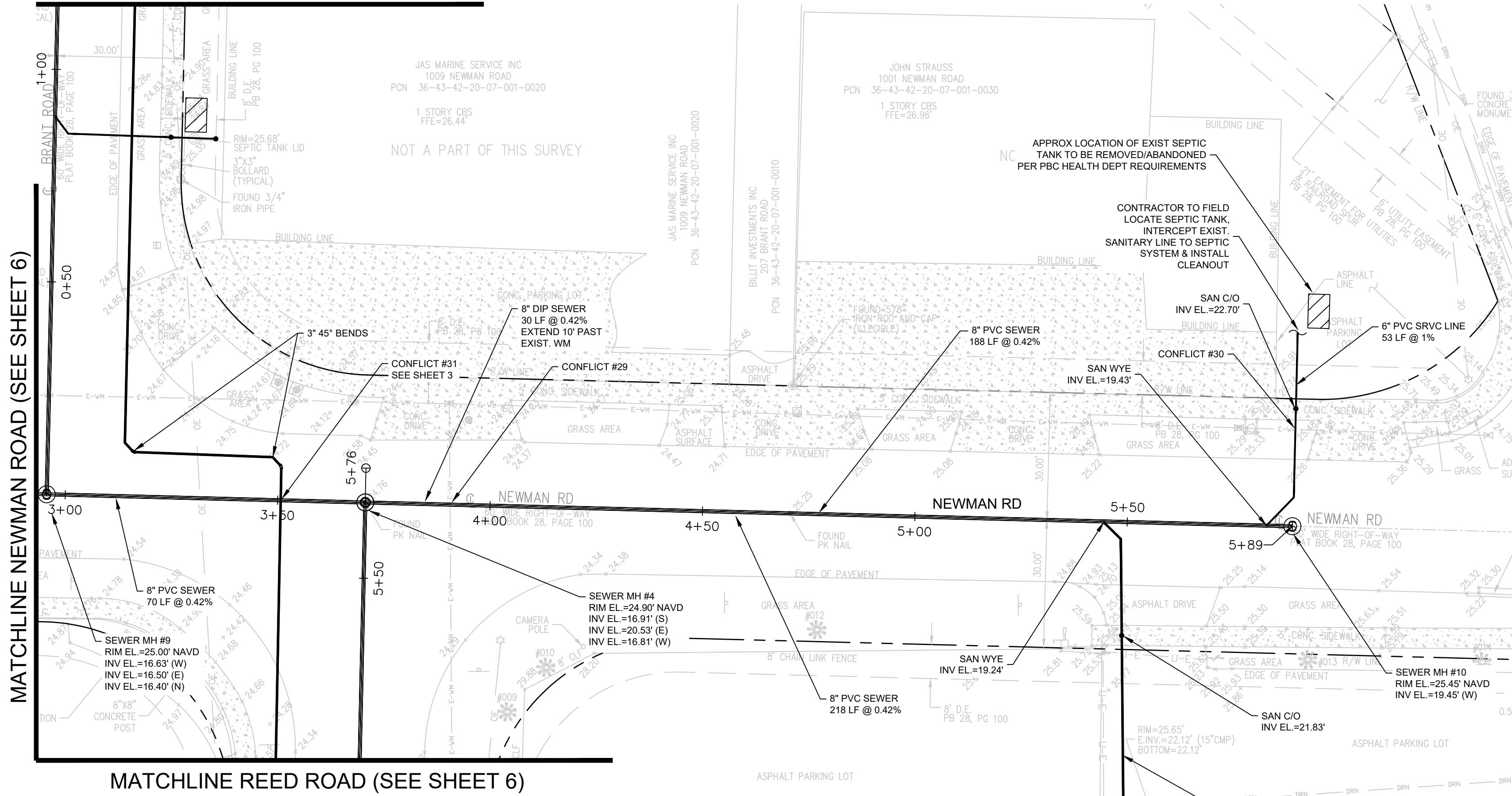
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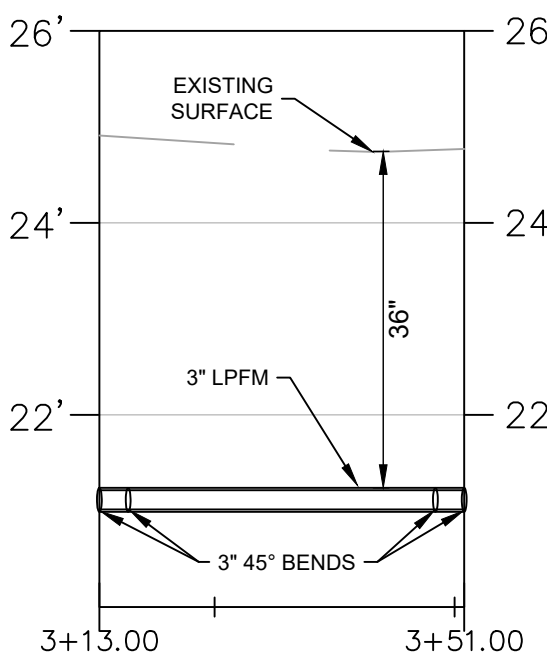
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MATCHLINE BRANT ROAD (SEE SHEET 8)



MATCHLINE REED ROAD (SEE SHEET 6)

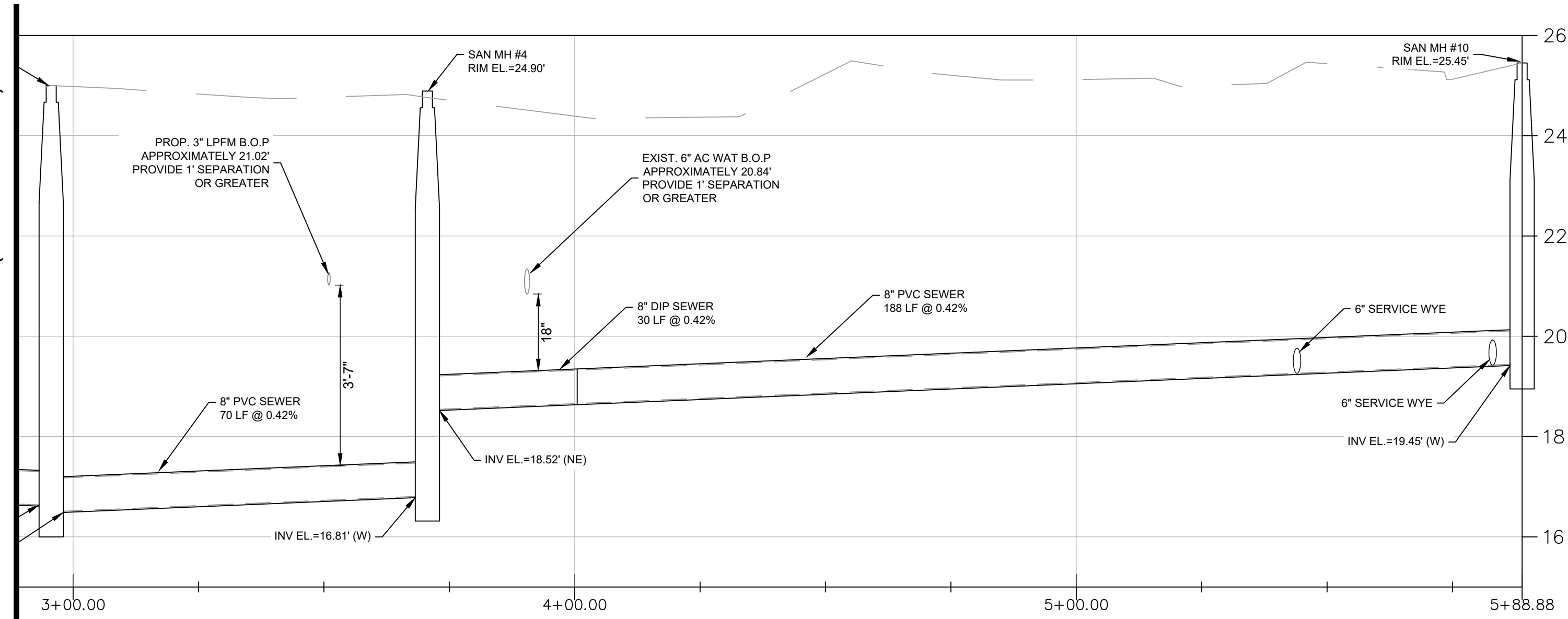
MATCHLINE BRANT ROAD (SEE SHEET 8)



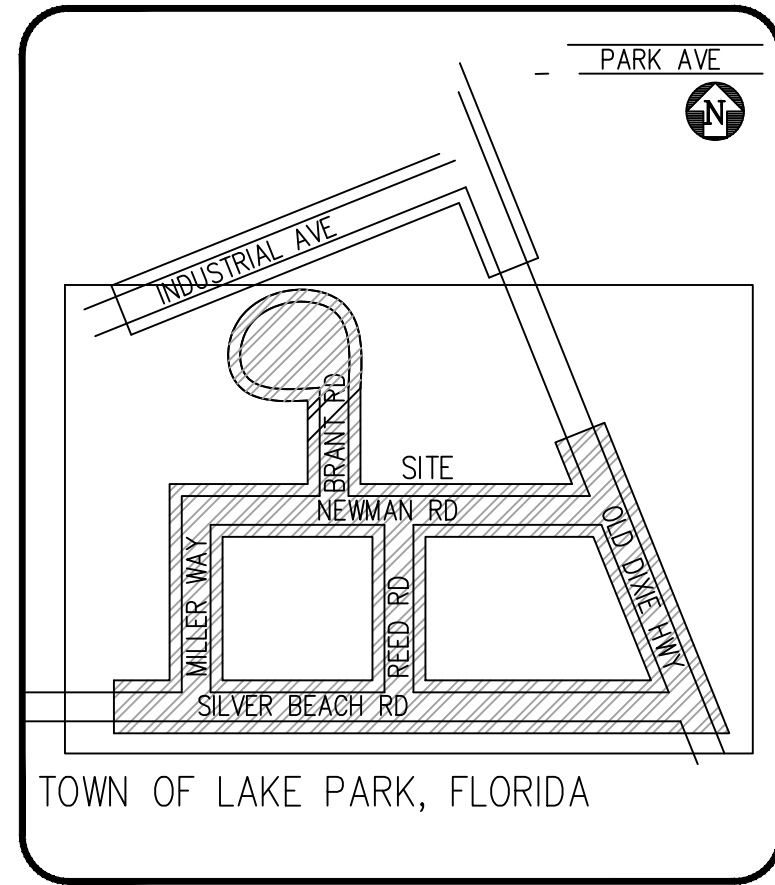
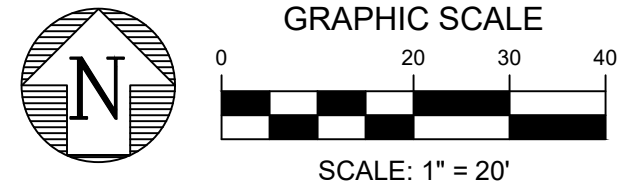
FORCE MAIN PROFILE

MATCHLINE REED ROAD (SEE SHEET 3)

MATCHLINE NEWMAN ROAD (SEE SHEET 6)



GRAVITY SEWER MAIN PROFILE



LOCATION MAP
N.T.S.

LEGEND

- PROPOSED GRINDER PUMP STATION
- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
- EXISTING FORCE MAIN
- EXISTING WATER MAIN
- PROPERTY LINE
- SANITARY MANHOLE
- SANITARY CLEANOUT

CONFLICT TABLE

CONFLICT #	BOTTOM OF PIPE	TOP OF PIPE	SEPERATION
29	EXST. 6" AC WM EL.=20.84'	PROP. 8" DIP GSM EL.=19.34'	1'-6"
30	EXST. 8" DIP WM EL.=22.23'	PROP. 6" SAN SRV EL.=19.43'	1'-10"

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17				
JOB NO. 18187.27				

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
TRI CITY INDUSTRIAL PARK - NEWMAN ROAD

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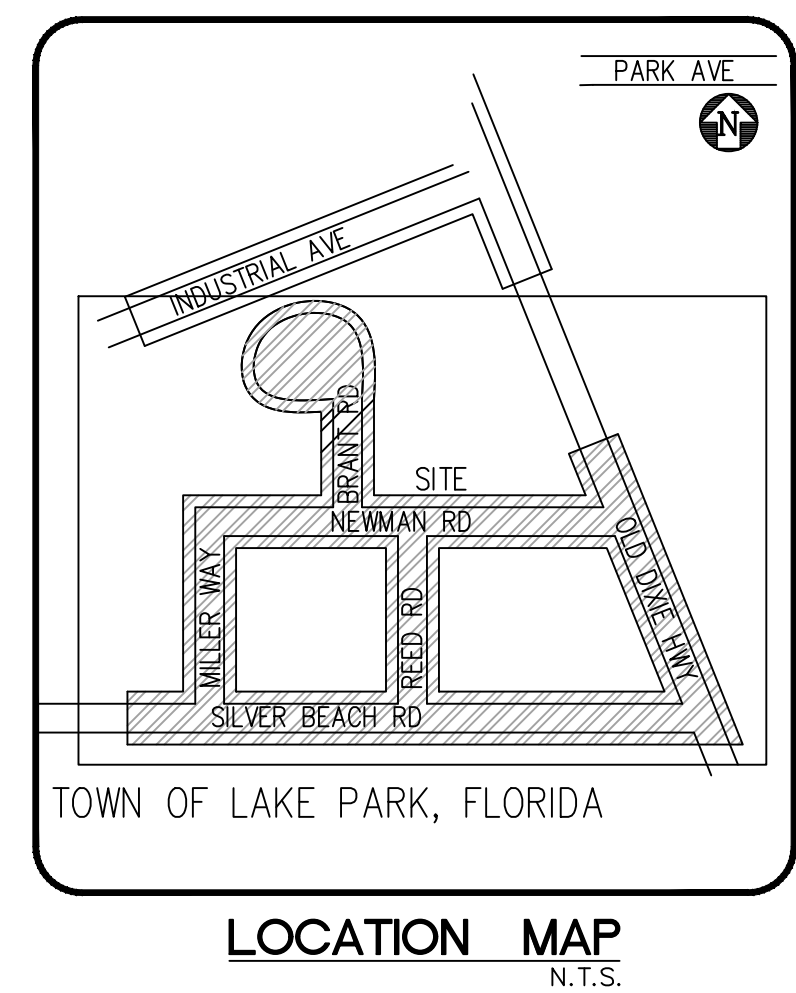
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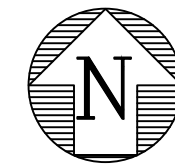


LEGEND

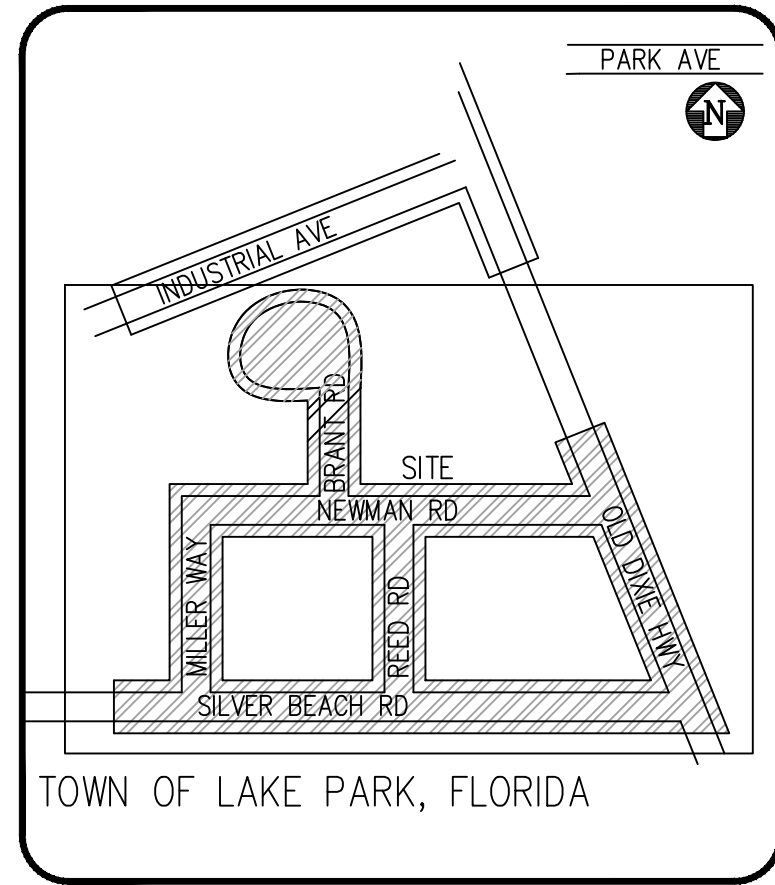
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PROPOSED PRIVATE GRINDER PUMP STATION
PROPOSED OIL/GRIT SEPERATOR
EXISTING SEPTIC TANK
FM
WM
PROPERTY LINE
SANITARY MANHOLE
SANITARY CLEANOUT

GENERAL NOTES:

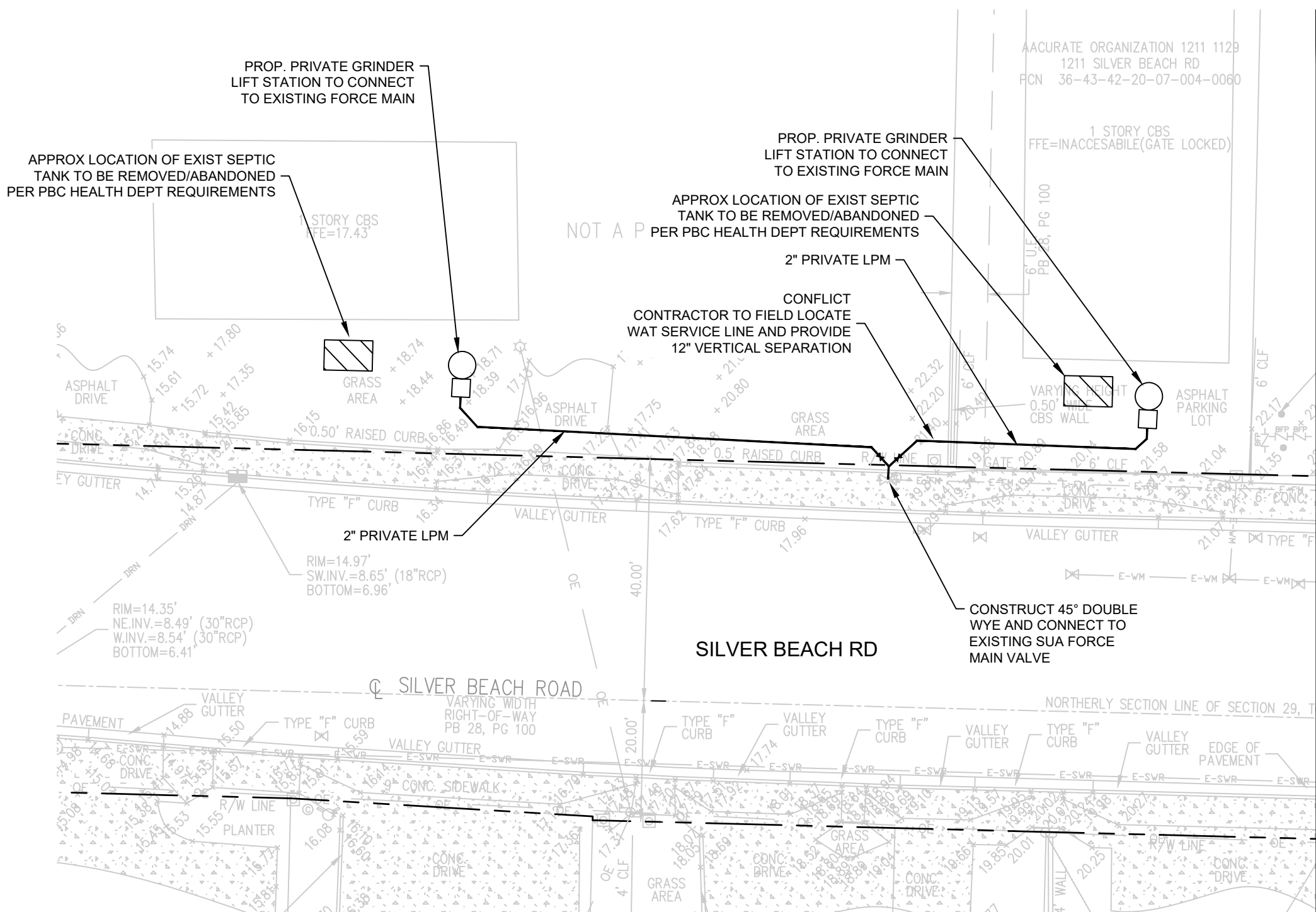
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GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 20'

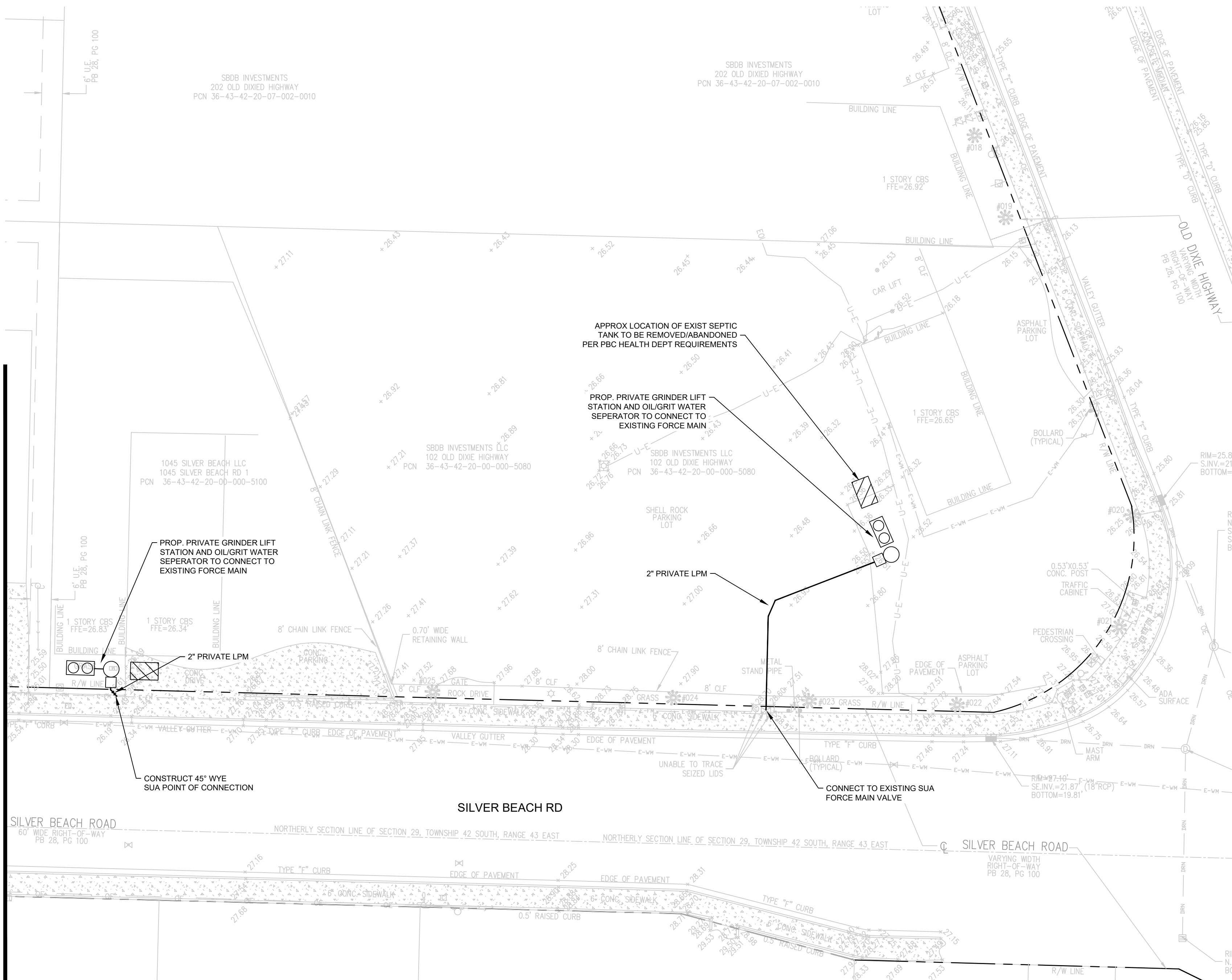


LOCATION MAP
N.T.S.



MATCHLINE (SEE SHEET 4)

MATCHLINE (SEE SHEET 2)



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DATE 06/19/2023

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PROJECT ENGINEER MK

PROJECT MANAGER ACS

CHECKED ACS

10

17

JOB NO.

18187.27

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION I - TRI CITY INDUSTRIAL PARK



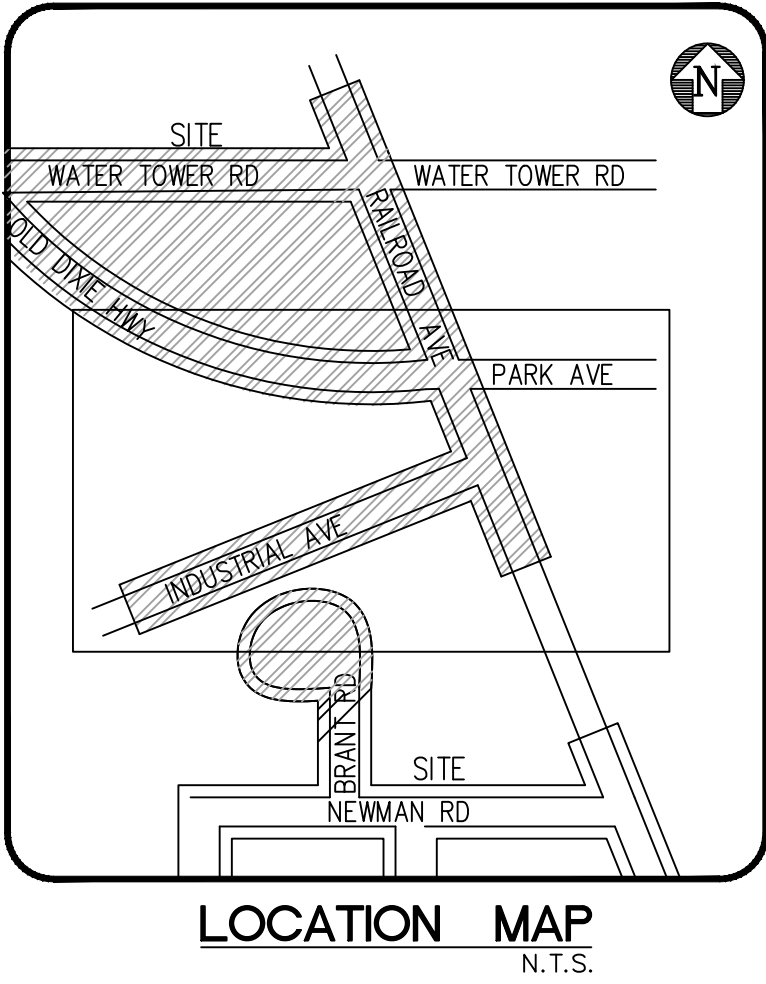
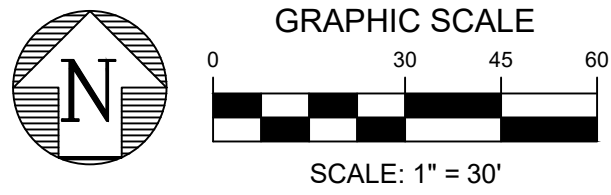
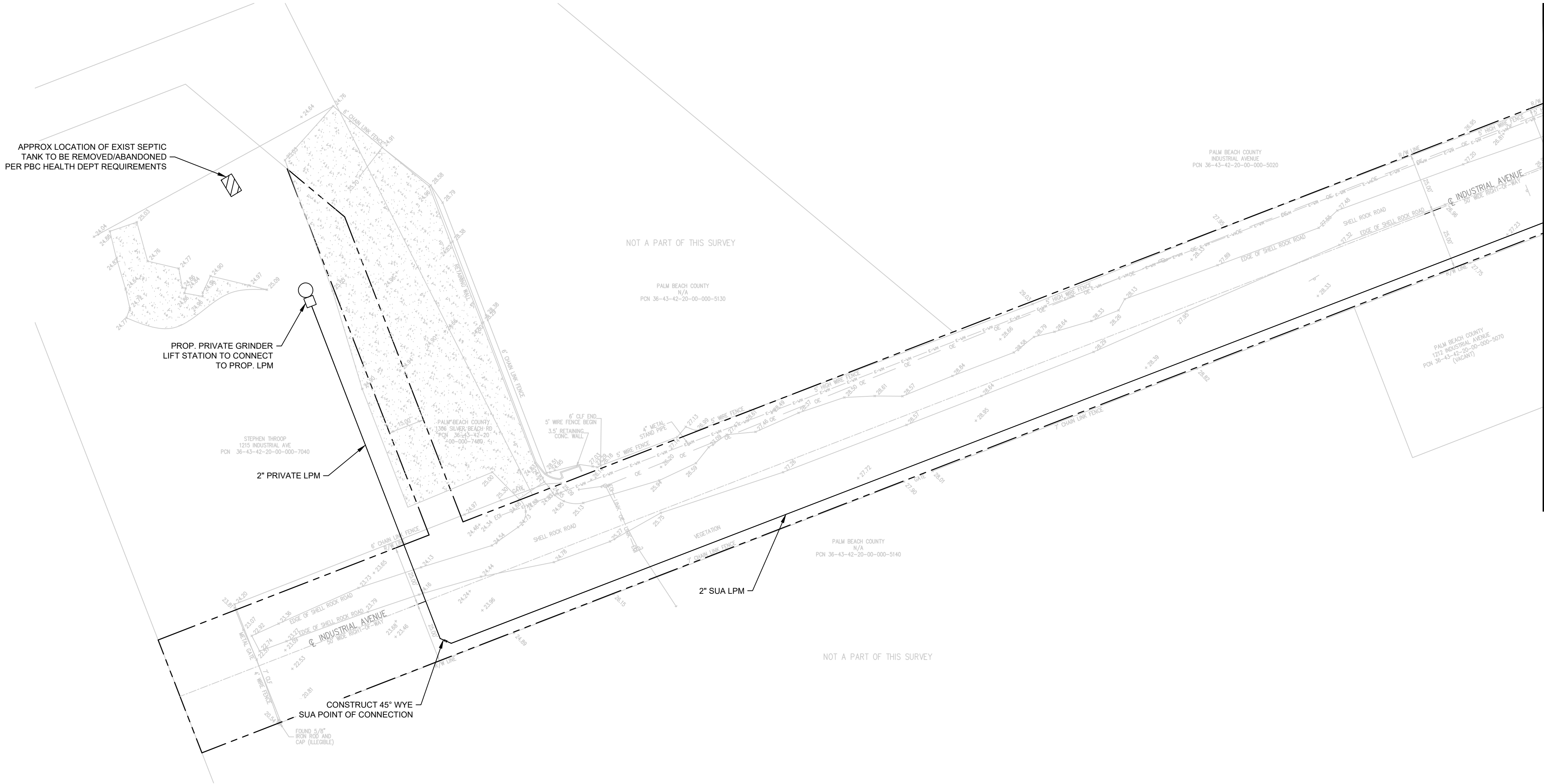
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LEGEND

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- PROPOSED PRIVATE GRINDER PUMP STATION
- PROPOSED OIL/GRIT SEPERATOR
- EXISTING SEPTIC TANK
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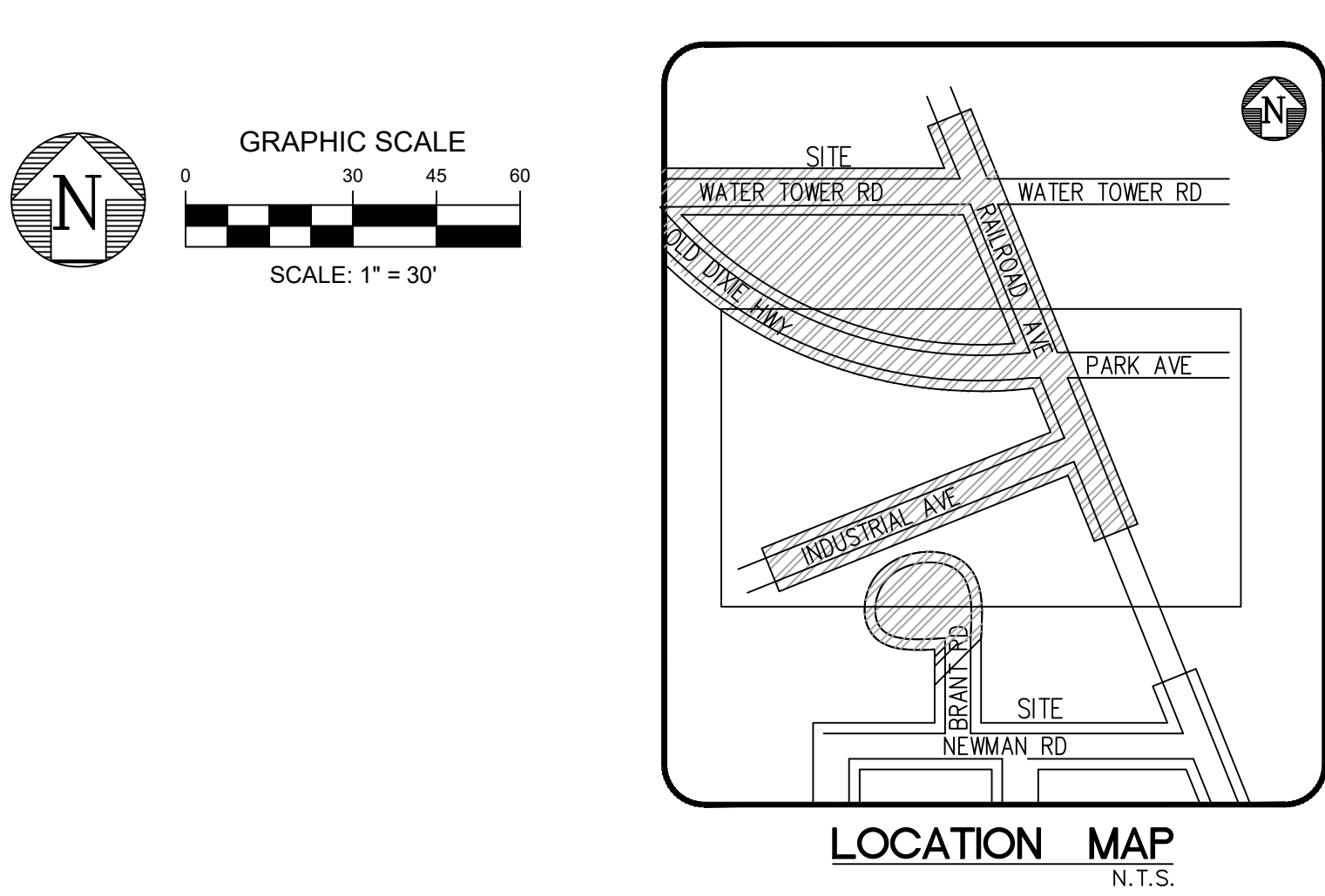
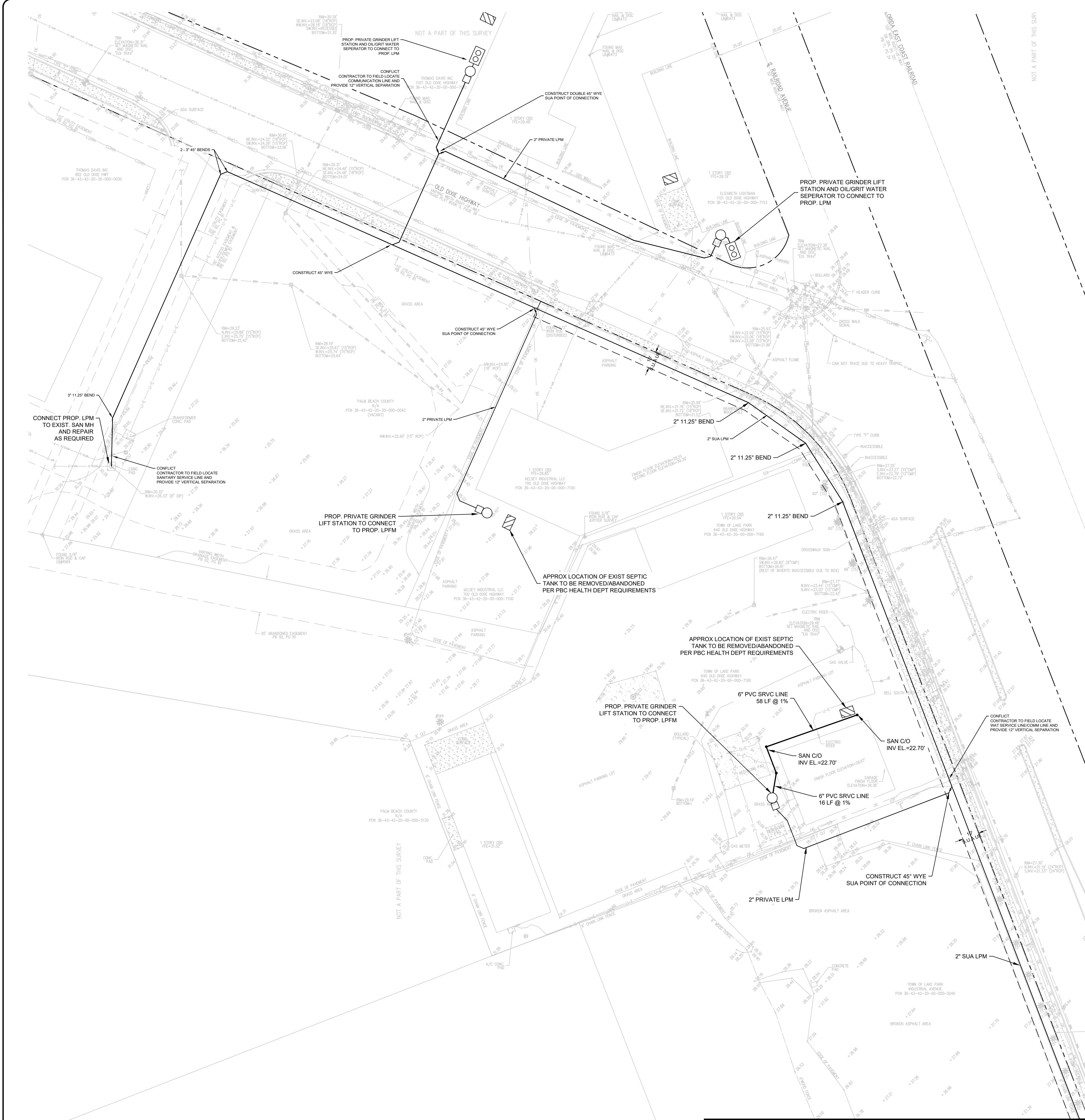
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12	17	JOB NO.	18187.27	



- LEGEND**
- PROPOSED GRINDER PUMP STATION
 - PROPOSED PRIVATE GRINDER PUMP STATION
 - PROPOSED OIL/GRIT SEPARATOR
 - EXISTING SEPTIC TANK
 - FM — EXISTING FORCE MAIN
 - WM — EXISTING WATER MAIN
 - — PROPERTY LINE
 - ⊙ — SANITARY MANHOLE
 - — SANITARY CLEANOUT

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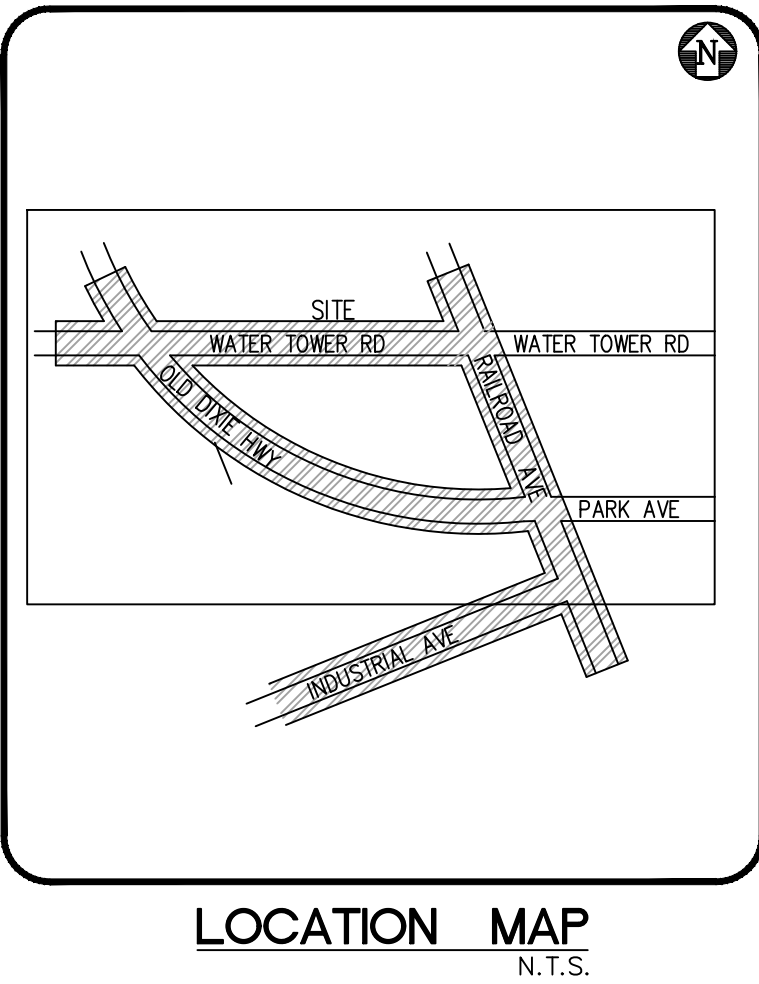
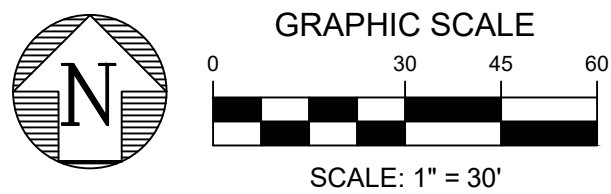
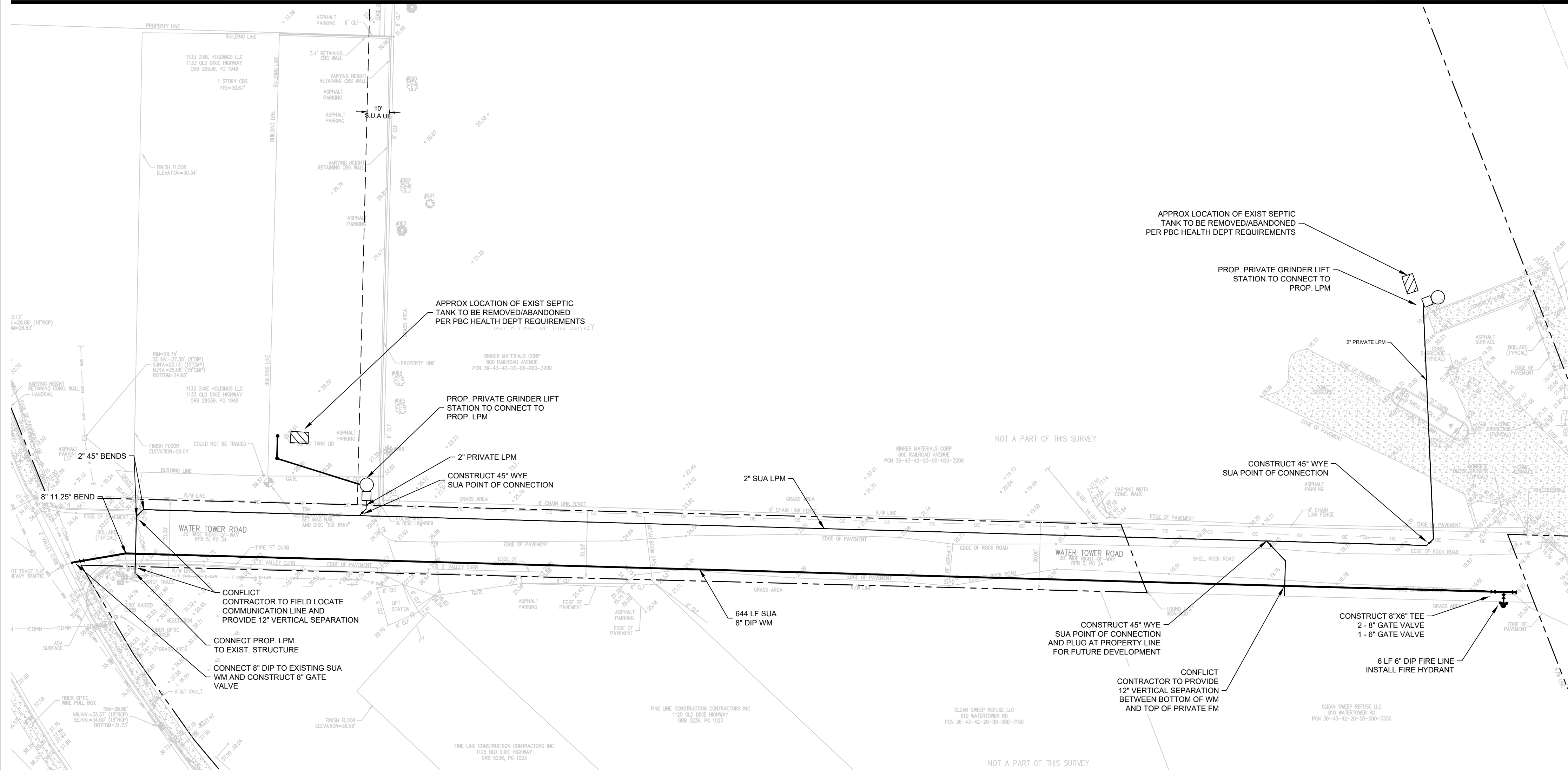
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13	17	18187.27			

MATCHLINE (SEE SHEET 15)



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PROJECT ENGINEER	MK
PROJECT MANAGER	ACS
CHECKED	ACS
JOB NO.	18187.27

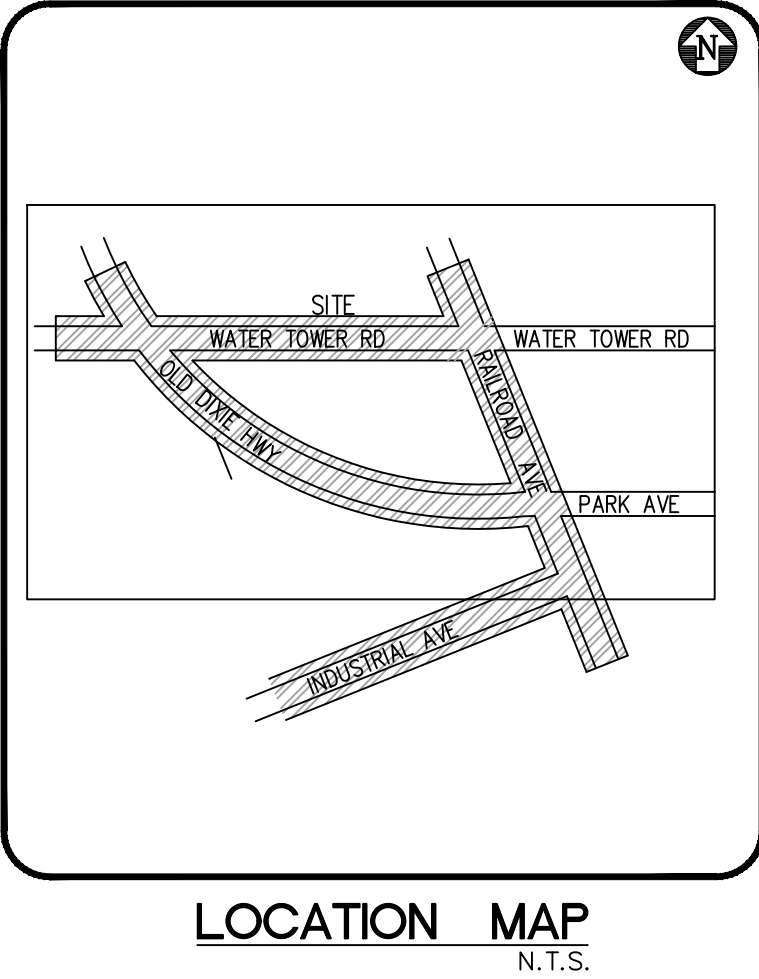
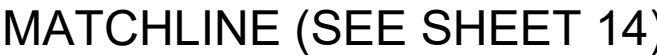


OLD DIXIE SEPTIC TO SEWER
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SECTION III - WATER TOWER ROAD

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ADAM SWANEY, P.E.

OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SECTION III - WATER TOWER ROAD

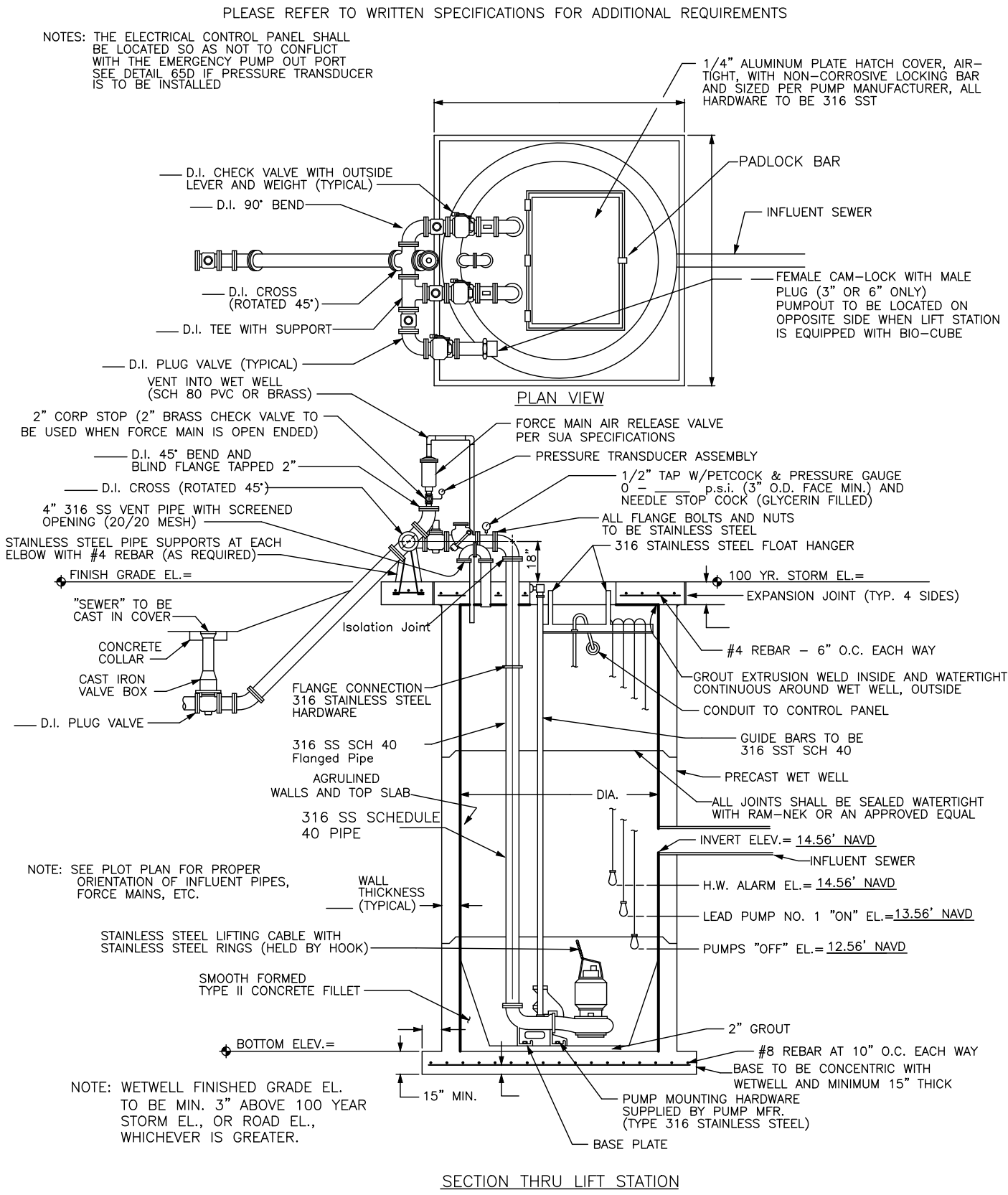


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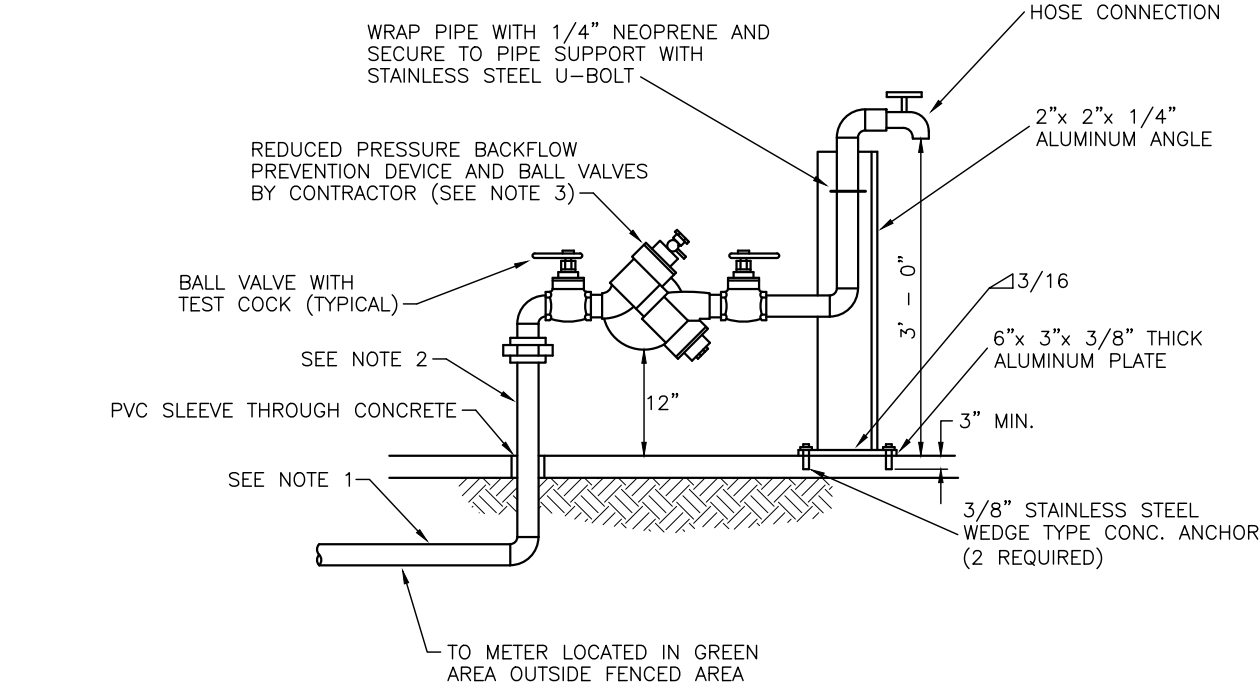
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ACS	PROJECT MANAGER
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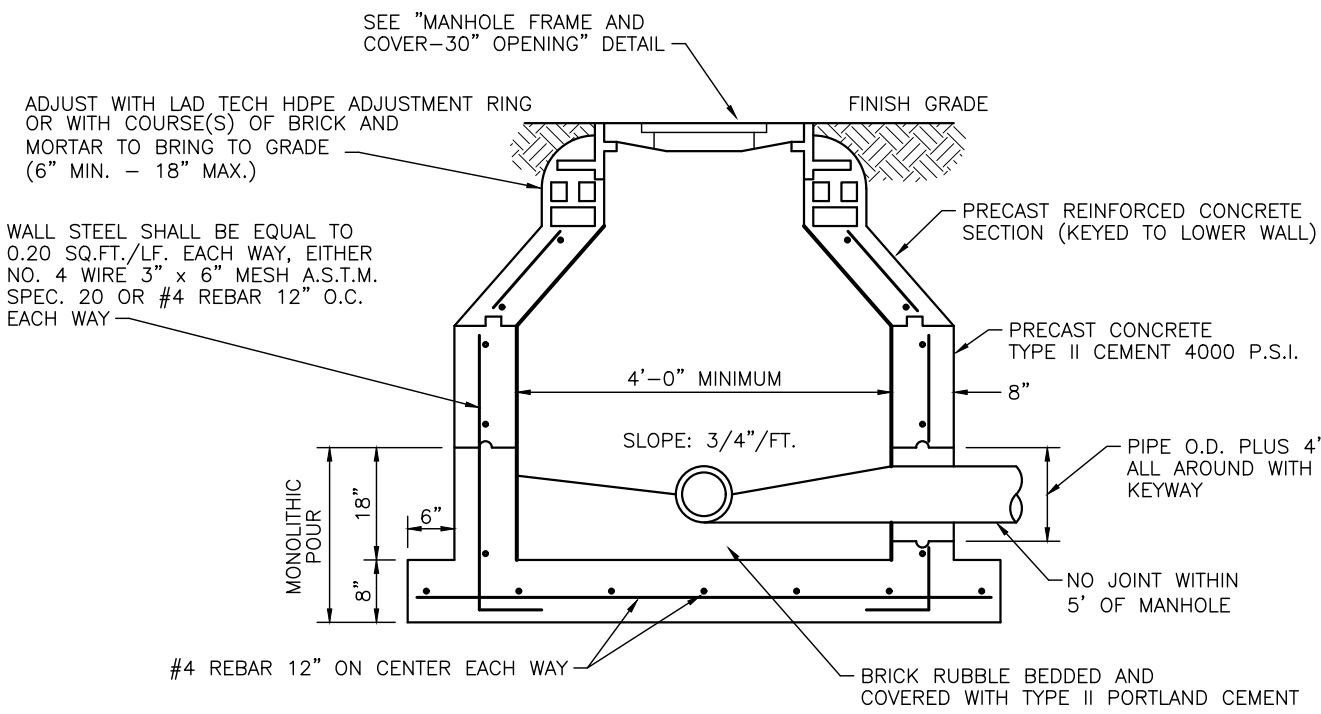


Lift Station Detail
AUGUST 26, 2020 (Rev E-23)



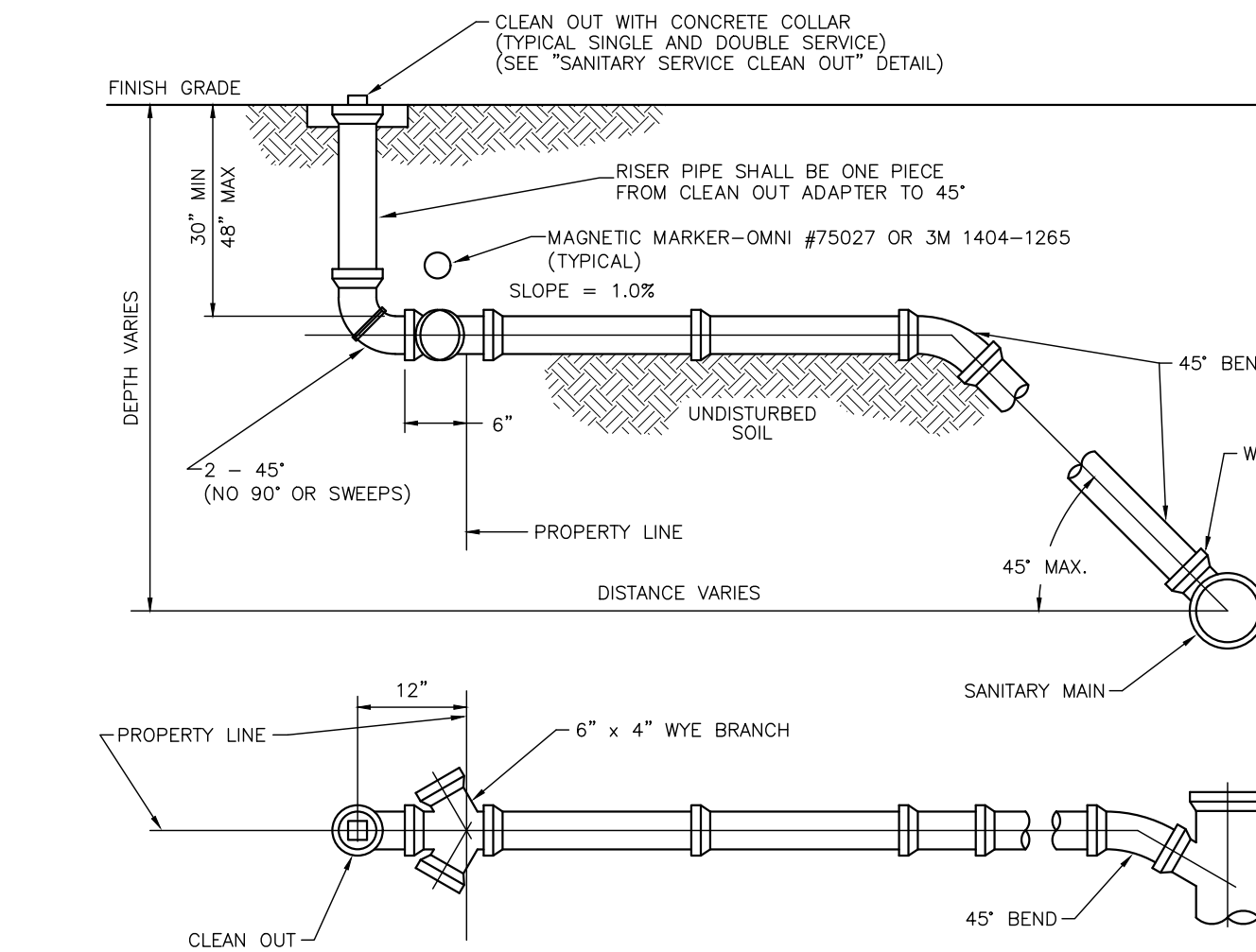
- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- TYPE "K" COPPER TUBING (SOFT DRAWN).
 - BOTH RISERS SHALL BE TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS SOLDER FITTINGS AND ADAPTERS. ONLY LEAD FREE PIPE, FITTINGS, VALVES, SOLDER AND FLUX SHALL BE PERMITTED.
 - APPROVED BACKFLOW PREVENTION DEVICES WITH SILICONE RUBBER SEAL RINGS OR DISCS:
A) WATTS MODEL LF919 3/4" TO 2"
B) AMES MODEL LF4000B 3/4" TO 2"
C) WILKINS 975 XL2 3/4" TO 2"
D) APOLLO MODEL RPLFA 3/4" TO 2"
 - BACKFLOW PREVENTION DEVICE SHALL BE EQUIPPED WITH BALL VALVES.
 - FOR PLACEMENT OF BACKFLOW ASSEMBLY WITHIN FENCED AREA SEE "TYPICAL LIFT STATION SITE PLAN" DETAIL.
 - BACKFLOW PREVENTION DEVICE SHALL BE SUPPORTED AT BOTH RISERS WITH ALUMINUM ANGLE AS SHOWN ABOVE. RISERS TO BE SECURED TO ANGLE WITH TYPE 304 SST MOUNTING HARDWARE AND NEOPRENE INSULATORS.

Lift Station Backflow Preventer Assembly
AUGUST 26, 2020 (Rev D-23)



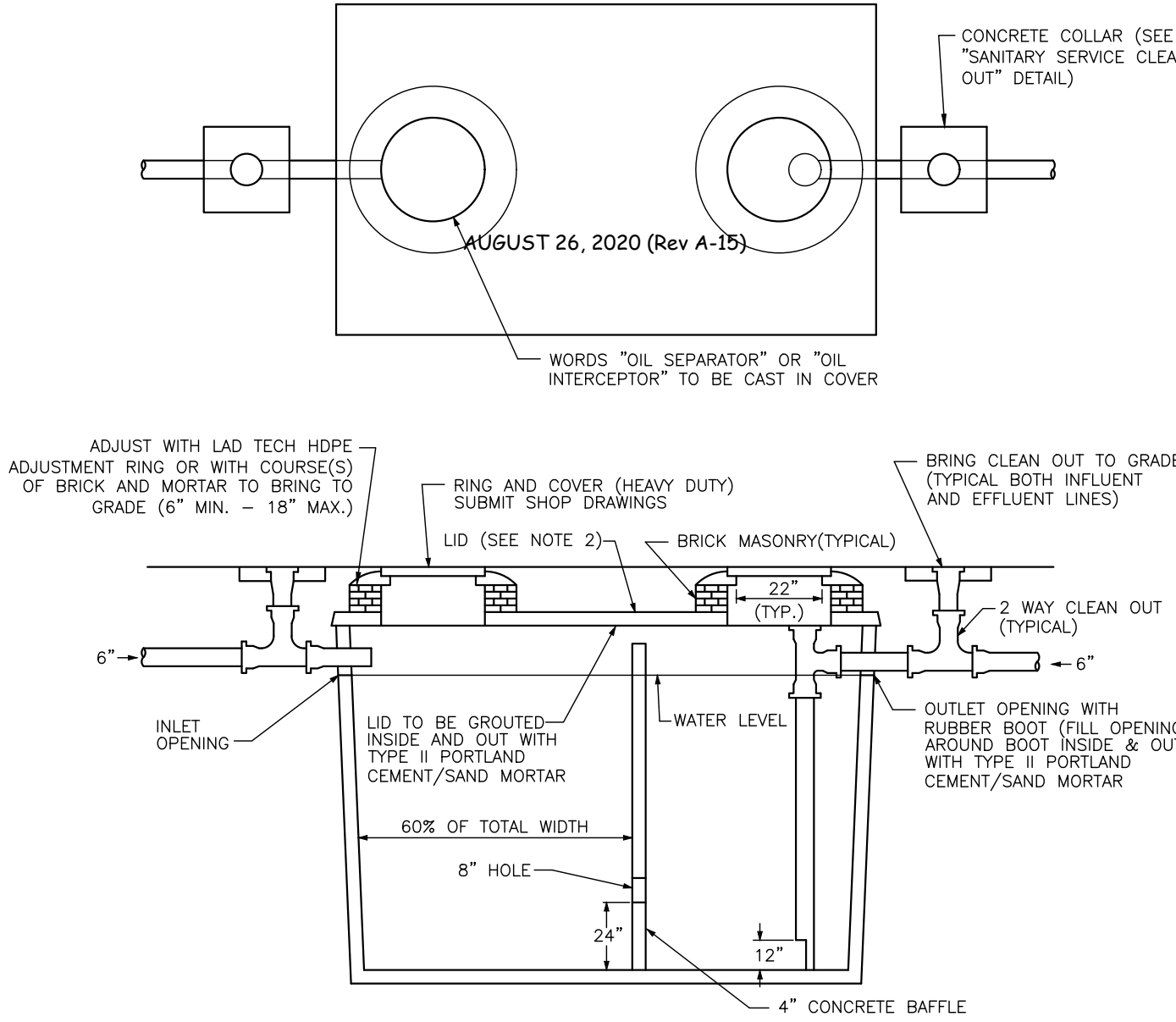
- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- MANHOLES SHALL CONFORM TO A.S.T.M. C478(MIN.)
 - WALL REINFORCEMENTS A.S.T.M. DESIGNATION A185-64.(LATEST REVISION)(MIN.)
 - IF TWO CAGES OF WIRE MESH ARE USED, ONE SHALL BE POSITIONED 3" FROM THE INSIDE SURFACE AND ONE 3" FROM THE OUTSIDE SURFACE. IF A SINGLE CAGE OR REBAR IS USED, IT SHALL BE CENTERED WITHIN WALL THICKNESS. NO EXPOSED STEEL SHALL BE PERMITTED.
 - LIFT HOLES THROUGH PRECAST STRUCTURE ARE PERMITTED.
 - A MINIMUM OF SEVEN DAYS CURE TIME IS REQUIRED PRIOR TO DELIVERY.
 - ALL PIPE HOLES SHALL BE PRECAST OR CORE DRILLED. OVERSIZED HOLES WILL BE REJECTED.
 - ANY VISIBLE REINFORCING WIRE, STEEL OR HONEYCOMBS SHALL BE CAUSE FOR REJECTION.
 - SEE TECHNICAL SPECIFICATIONS FOR BEDDING REQUIREMENTS.
 - "RAM-NEK" OR APPROVED EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
 - ALL OPENINGS SHALL BE SEALED USING ONLY TYPE II PORTLAND CEMENT/SAND MORTAR AND POTABLE WATER FOR MUD WORK ON JOINTS, LIFTING HOLES, INVERTS, ETC. WHEN AN ACCELERATOR IS NECESSARY, "ANTI HYDRO" IS THE ONLY PRODUCT APPROVED.
 - BRICK MASONRY CONSTRUCTION TO BE STUCCOED WITH 3/4" TYPE II CEMENT INSIDE AND OUTSIDE, AND INSIDE TO BE COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL.
 - A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM, AND COATED WITH TWO COATS OF KOPPERS 300 OR APPROVED EQUAL.
 - INTERIOR OF ALL SANITARY MANHOLES SHALL HAVE AGRU SURE GRIP CONCRETE PROTECTIVE LINER INSTALLED AT THE TIME OF MANUFACTURING. SEE "AGRU SURE GRIP LINER DETAILS" DRAWING FOR ADDITIONAL AGRU SURE GRIP REQUIREMENTS.

Standard Precast Manhole
AUGUST 26, 2020 (Rev B-18)



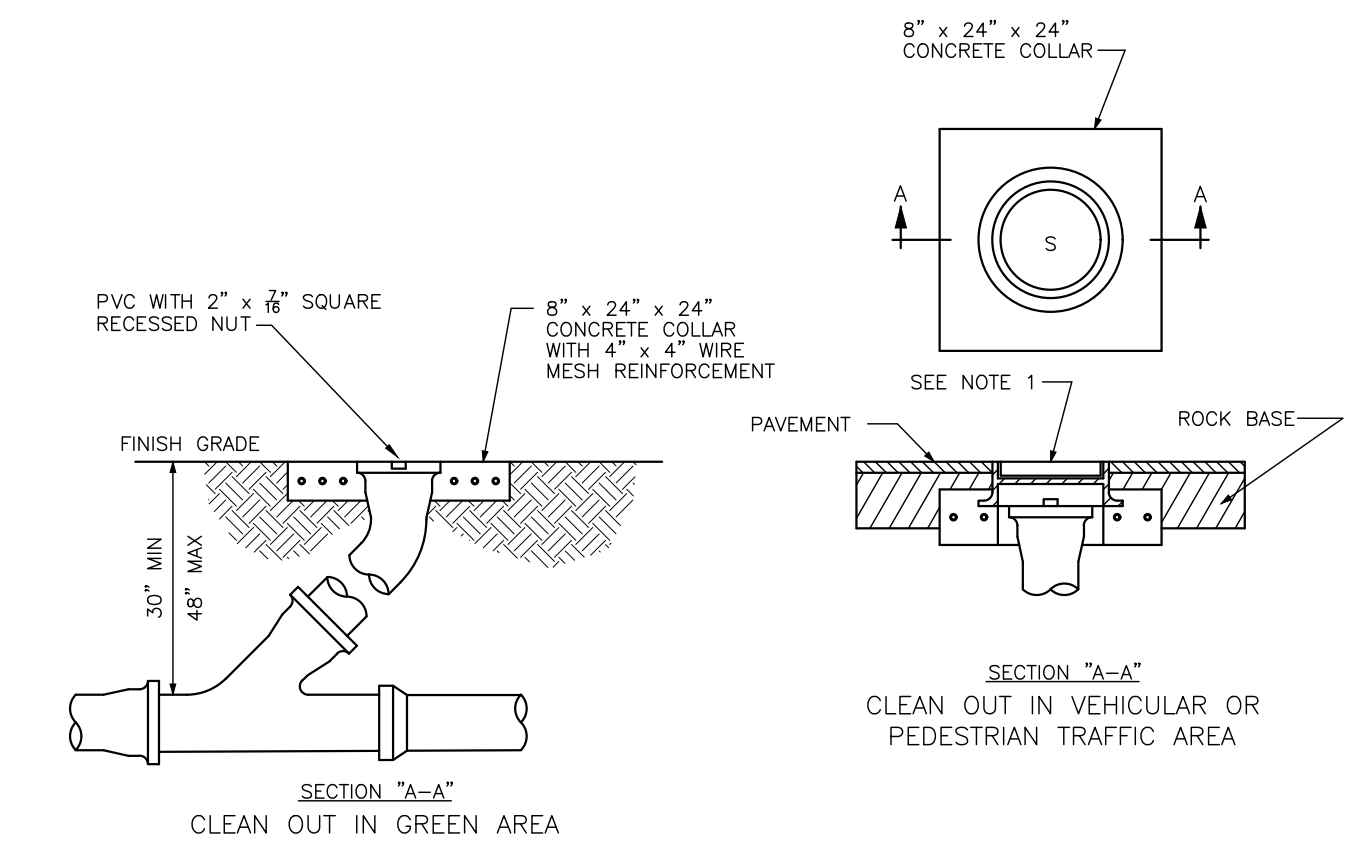
- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2" x 2" TREATED WOOD STAKE AND AN E.M.S. SANITARY SEWER MARKER.
 - EACH SERVICE CONNECTION SHALL BE PLUGGED WATER TIGHT WITH AN APPROVED CAP OR PLUG.
 - CUT OFF BELL END WHEN USING FERNCO COUPLING FOR VCP (FOR EXISTING SERVICES ONLY)
 - FOR PVC INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPOSITE END WITH PVC TO PVC KNOCK ON SLEEVE.
 - SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON "PAVEMENT REPLACEMENT" DETAIL.
 - CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
 - ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY SUA.
 - THE USE OF UNNECESSARY FITTINGS ON THE CUSTOMERS LINE TO REDUCE EXCAVATION EFFORTS WILL BE CAUSE FOR REJECTION.
 - THE USE OF 90° SWEEPS ON THE CUSTOMERS LINE IN LIEU OF 45° BENDS WILL REQUIRE AN ADDITIONAL CLEAN OUT AS SHOWN ON "SANITARY SERVICE CLEAN OUT DETAIL". THE CLEAN OUT SHALL BE ON THE HOUSE SIDE OF THE TOP SWEEP WITHIN 2' OF THE SWEEP.

Sewer Service Connection (Wye Branch)
AUGUST 26, 2020 (Rev A-15)



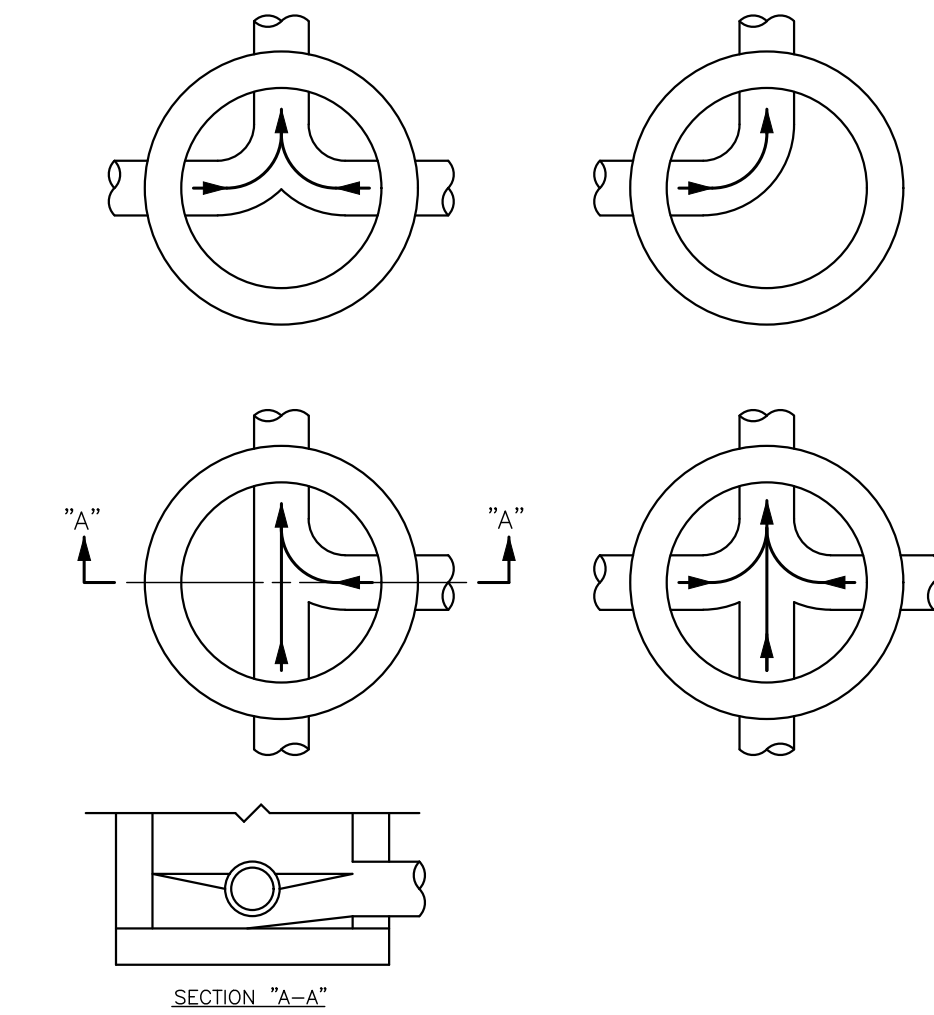
- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- SHOP DRAWINGS FOR PRECAST TANKS SHALL BEAR THE FOLLOWING STATEMENT: "THIS CONCRETE STRUCTURE MEETS OR EXCEEDS ALL THE REQUIREMENTS FOR GREASE INTERCEPTORS/SEPTIC TANKS AS IN THE FLORIDA ADMINISTRATIVE CODE, CHAPTER 10D-6 AND 64E-6, AND SUA "SPECIFICATIONS AND STANDARDS". THE SHOP DRAWINGS (3 COPIES MINIMUM) SHALL THEN BE SIGNED AND SEALED BY THE ENGINEER OF RECORD AND FORWARDED TO SUA FOR APPROVAL.
 - LID TYPES:
A) 4" REGULAR LID
B) 8" TRAFFIC BEARING LID
 - INTERIOR PIPING SHALL BE SOLVENT WELD PVC PIPE.
 - ALL TANKS IN TRAFFIC AREA SHALL BE H20 WHEEL LOAD BEARING.
 - INSPECTION OF TANK REQUIRED BY SUA PRIOR TO PLACEMENT.
 - INSPECTION OF TANK REQUIRED BY SUA AFTER TANK IS PIPED.

Oil Separator
AUGUST 26, 2020 (Rev B-18)



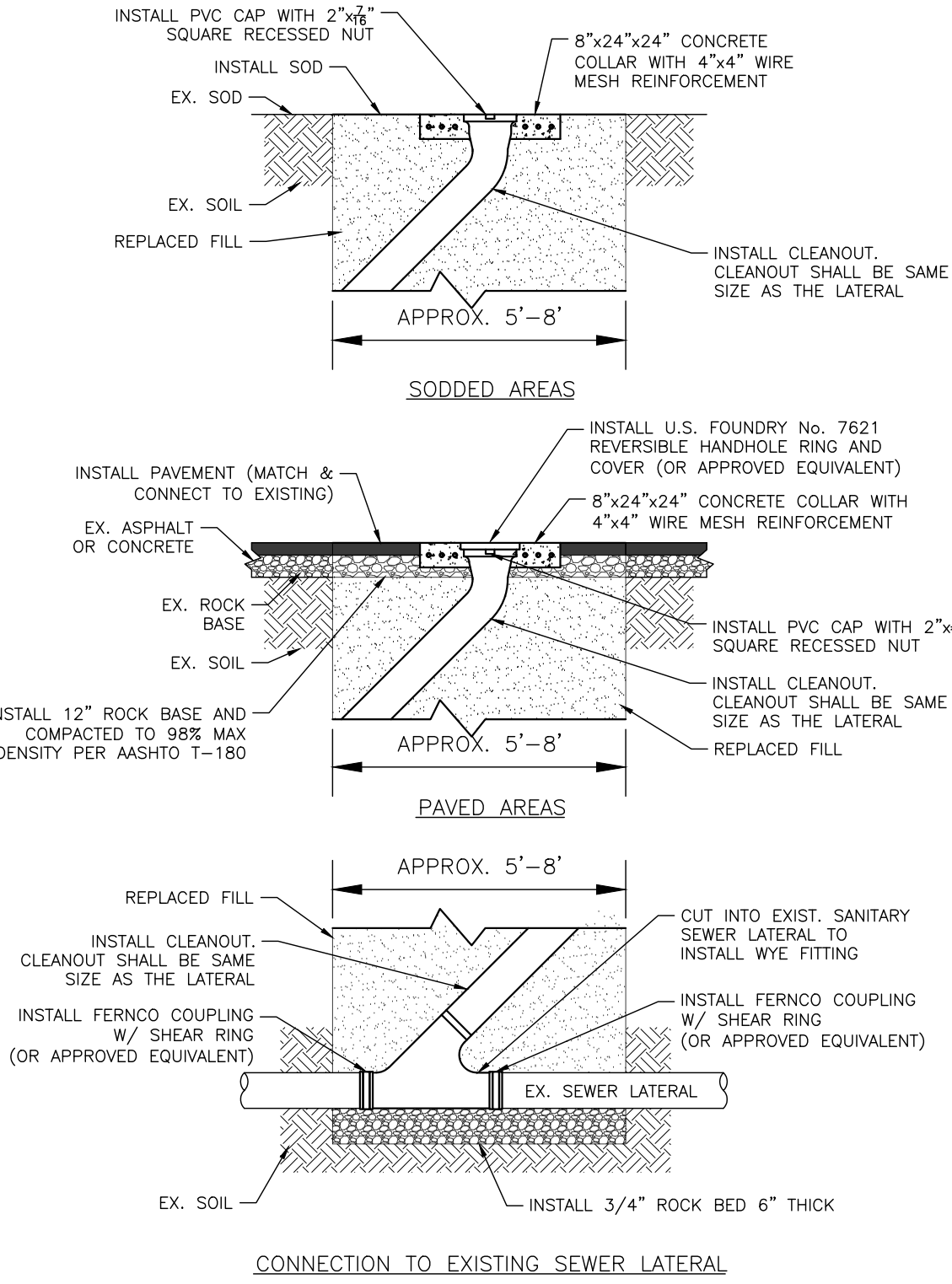
- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- U.S. FOUNDRY NO. 7621 REVERSIBLE HANDHOLE RING AND COVER OR APPROVED EQUAL SHALL BE USED, COVER TO BE CAST WITH "S" IN THE CENTER.
 - CLEAN OUT REQUIRED ON ALL SERVICES AT PROPERTY LINE OR EASEMENT LINE WHERE APPLICABLE.
 - STANDARD WYE SHALL BE USED AT CLEAN OUT.

Sanitary Service Clean Out
AUGUST 26, 2020 (Rev C-20)



- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
 - SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
 - CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
 - SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
 - INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP, WHICHEVER IS GREATER.

Flow Patterns for Invert Channels
AUGUST 26, 2020 (Rev B-23)



- NOTES:
- EXCAVATION DEPTH VARIES WITH DEPTH OF EXISTING SEWER LATERAL AND EXISTING SURFACE ELEVATIONS.
 - CONCRETE COLLARS SHALL BE MATCHED TO EXISTING GRADES IN WORK AREA.

Clean Out Connection to Existing Lateral
AUGUST 26, 2020 (Rev A-20)

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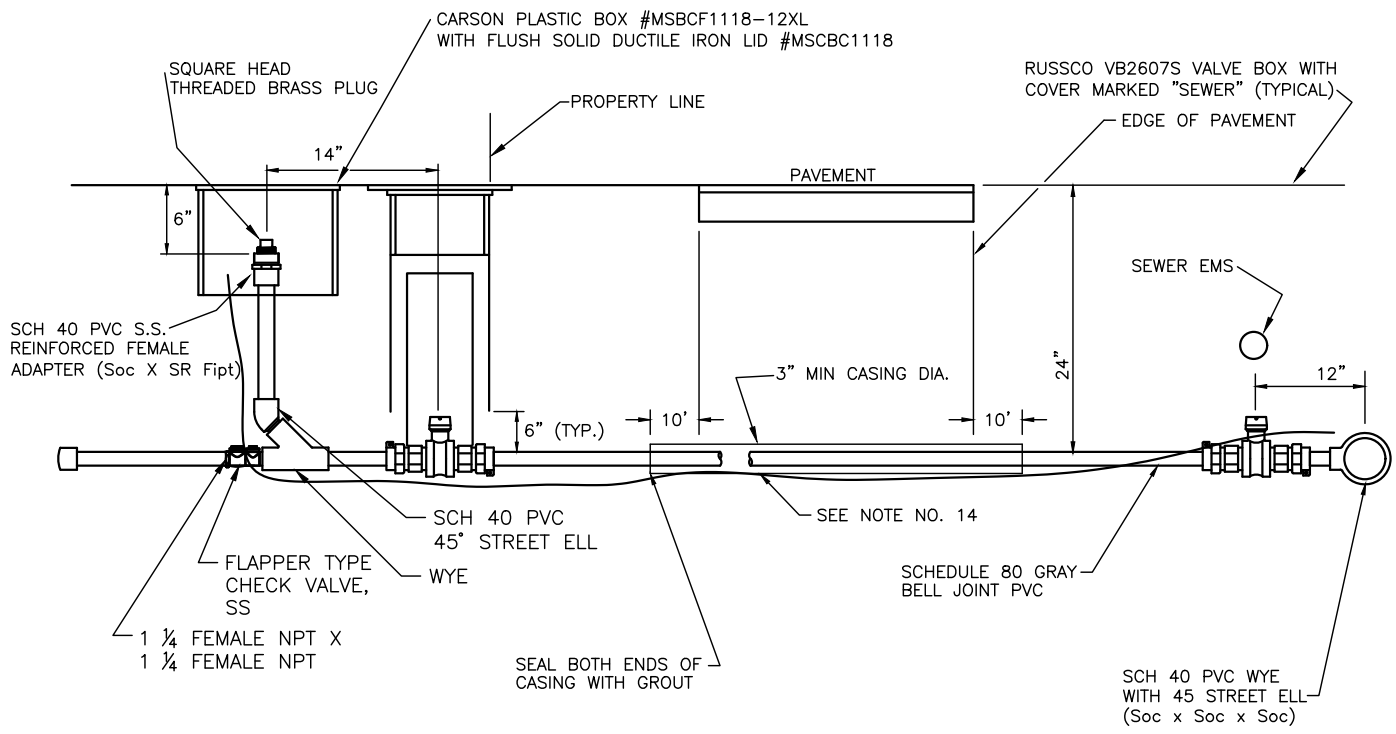
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OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SANITARY DETAILS

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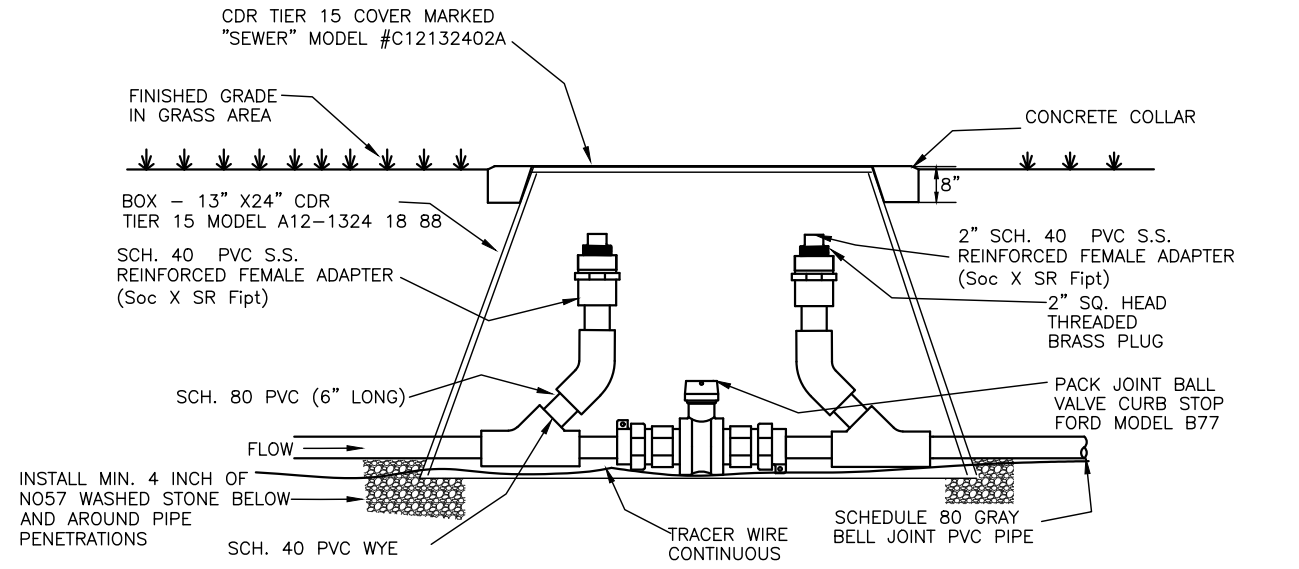
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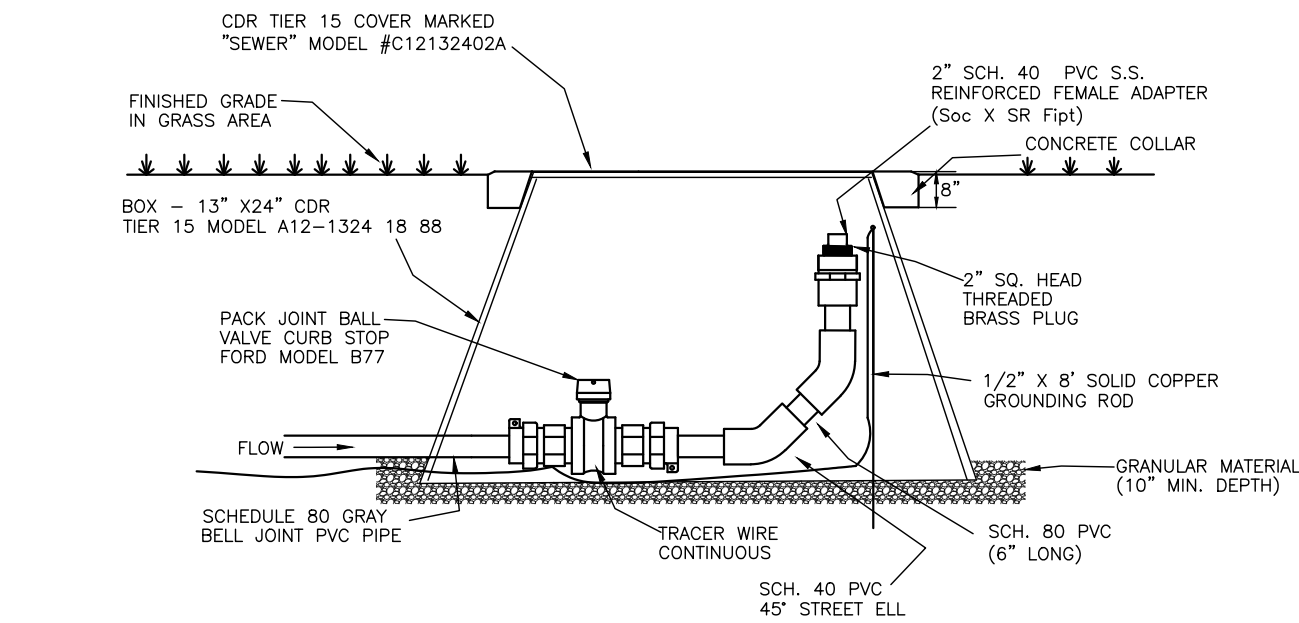


- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
 - SUCCESSIVE SERVICE LINES OFF THE LOW PRESSURE FORCE MAIN SHALL BE SPACED A MINIMUM OF 18" APART.
 - WHERE NO SIDEWALK EXISTS, VALVE BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
 - SERVICE PIPE SHALL BE SCHEDULE 80 GRAY BELL JOINT PVC, 400 PSI (CHARLOTTE PIPE), NO SLIP X SLIP COUPLINGS ALLOWED.
 - SERVICE FITTINGS SHALL BE SPEARS MANUFACTURING COMPANY ONLY, SCHEDULE 40 PVC, NO DWY FITTINGS, SCHEDULE 40 MALE ADAPTERS, SLIP COUPLINGS, SLIP BUSHINGS, OR SCHEDULE 80 PVC FITTINGS ARE ALLOWED.
 - VALVE BOXES NOT REQUIRED FOR BALL VALVE AT TEE NEXT TO MAIN ON LONG SIDE SERVICES UNLESS SPECIFICALLY INDICATED AND NOTED ON THE PLANS.
 - CONTRACTOR SHALL UTILIZE FULL LENGTHS OF BELL JOINT PIPE WHENEVER POSSIBLE UNDER ROAD CROSSINGS.
 - PLUGS SHALL BE SCHEDULE 40 RED BRASS, SOLID TYPE WITH SQUARE HEAD.
 - TRACER WIRE TO BE #6 AWG, STRANDED COPPER, TYPE THHN WITH GREEN INSULATION, USE 11" CABLE TIES TO CONNECT TO PVC PIPE AND FITTINGS. TRACER WIRE SHALL WRAP AROUND AND TERMINATE INSIDE CLEANOUT BOX WITH ENOUGH SLACK TO EXTEND 2-3' ABOVE GRADE.
 - PVC PRIMER AND CEMENT SHALL BE QATY MEDIUM BODIED.
 - THREAD SEALING COMPOUND - PIPE PASTE SHALL BE LA-CO SLIC-TITE OR HERCULES REAL-TUFF.
 - CURB STOPS SHALL BE FULL PORT BALL VALVES WITH PACK JOINT FOR PVC PIPE BOTH ENDS, FORD METER BOX COMPANY MODEL B77-555.
 - SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
 - GALVANIZED CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE, SCHEDULE 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF SUA. CASING SHOULD EXTEND TEN (10) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
A) 2" MAIN USE 4" CASING
B) 3" MAIN USE 6" CASING
 - ALL OTHER UTILITIES SHALL BE LOCATED 4" MINIMUM CLEAR OF ALL LOW PRESSURE MAINS AND SERVICES.
 - ZIP TIE TRACER WIRE TO PIPE EVERY 5'.

Low Pressure Sewer Service Installation
AUGUST 26, 2020 (Rev B-18)



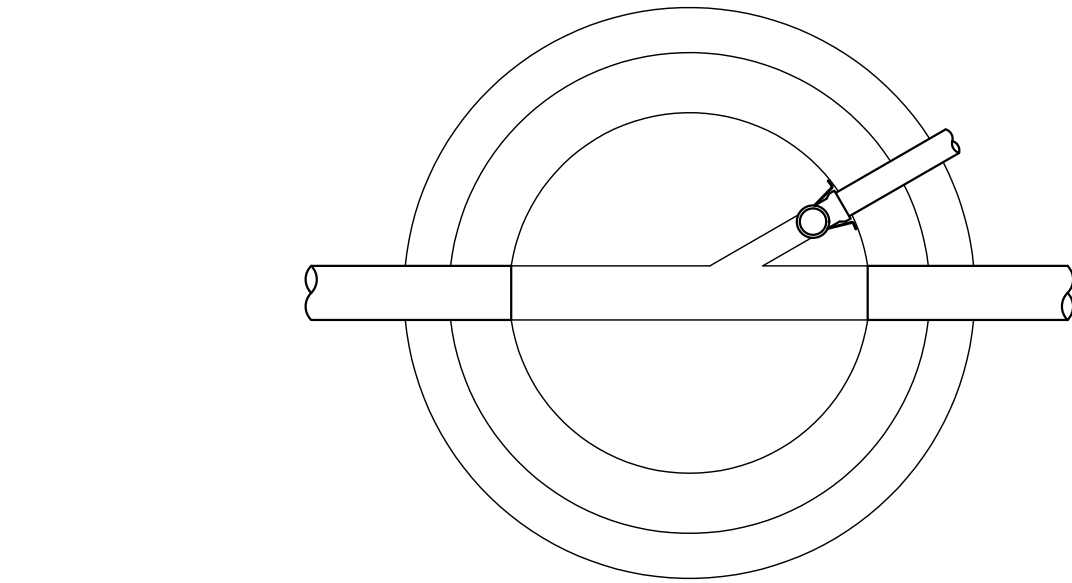
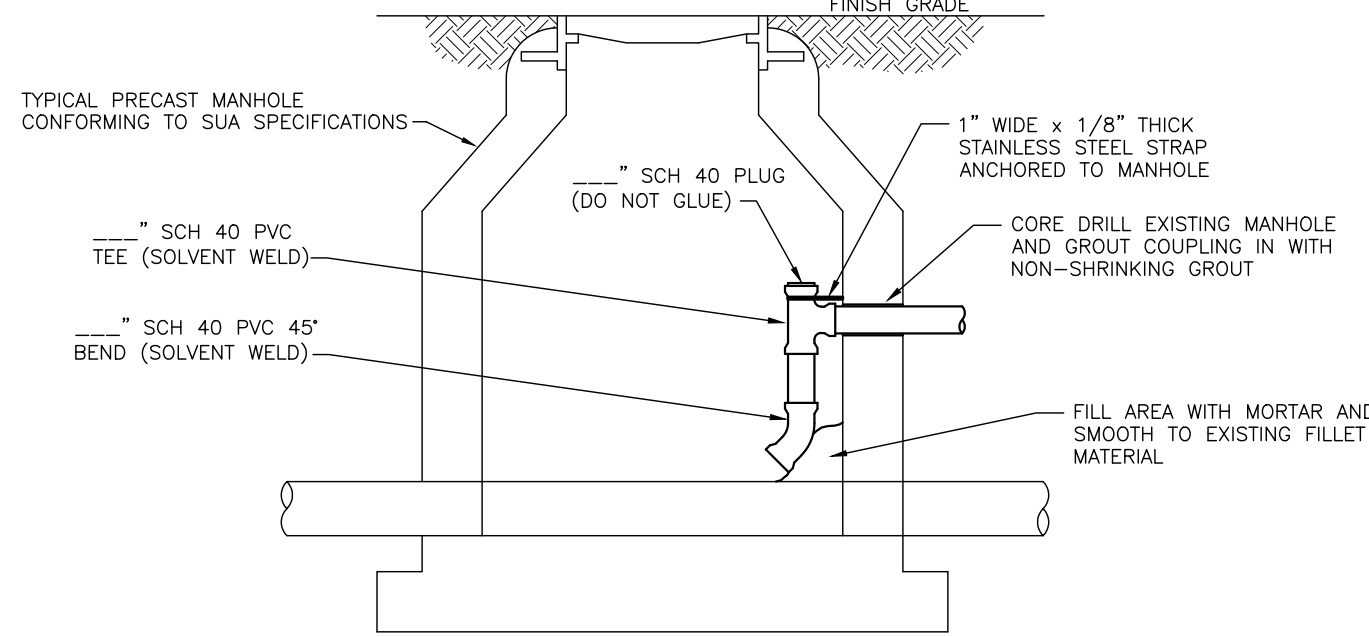
In-Line Cleanout Port and Main Line Valve



Terminal Cleanout Port and Main Line Valve

- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- MAINLINE VALVES SHALL BE FULL PORT BALL VALVES WITH PACK JOINT FOR PVC PIPE BOTH ENDS, FORD METER BOX B77
 - PIPE AND FITTING SIZE WILL BE DETERMINED BY PROJECT FLOW CALCULATIONS.
 - DEPTH SHALL BE 24" UNLESS OTHERWISE REQUIRED BY ROAD PERMITTING AGENCY.
 - ZIP TRACER WIRE TO PIPE EVERY 10'.

Low Pressure Sewer Cleanout Port with Valve
AUGUST 26, 2020 (Rev C-19)



- NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)
- NO INSIDE DROP IS PERMITTED IN A MANHOLE WITH MORE THAN TWO INVERTS.
 - INTERIOR OF MANHOLE SHALL BE COATED IN ACCORDANCE WITH THE AUTHORITY'S MINIMUM CONSTRUCTION STANDARDS AND SPECIFICATIONS.

Low Pressure Force Main into Manhole Connection
AUGUST 26, 2020 (Rev A-15)

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OLD DIXIE SEPTIC TO SEWER
TOWN OF LAKE PARK, FL
GRAVITY AND LOW PRESSURE FORCE MAIN PLANS
SANITARY DETAILS

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