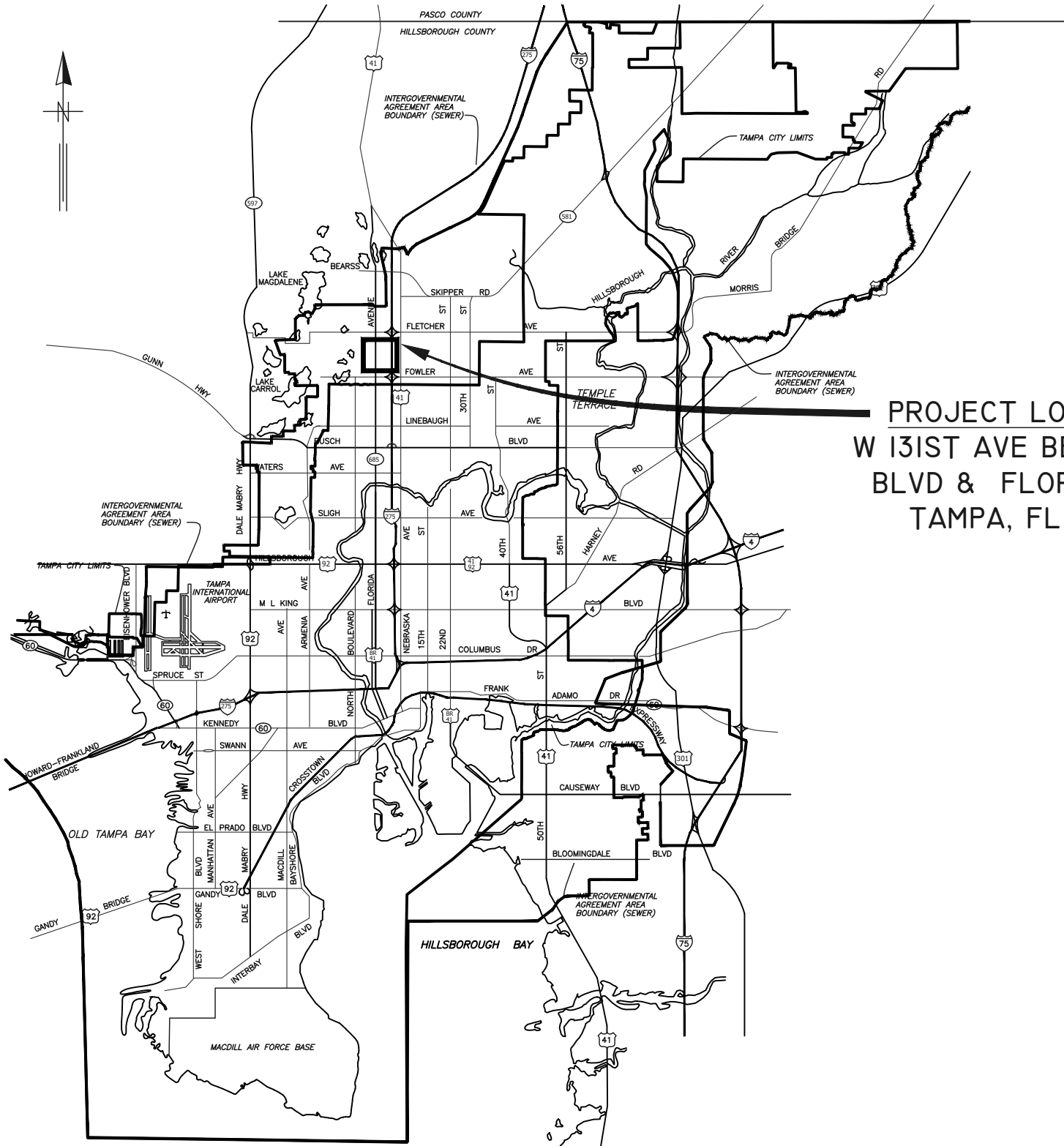


LOCATION MAP



PROJECT LOCATION  
 W 131ST AVE BETWEEN N  
 BLVD & FLORIDA AVE  
 TAMPA, FL 33612

# CITY of TAMPA



## WASTEWATER DEPARTMENT ENGINEERING DIVISION

### PLANS FOR 131ST AVE TRUNK SEWER REHABILITATION BY CIPP

CONTRACT No. 21-C-00033

NOTE:  
 ATTENTION IS DIRECTED TO THE FACT THAT  
 THESE PLANS MAY HAVE BEEN REDUCED IN  
 SIZE BY REPRODUCTION. THIS MUST BE  
 CONSIDERED WHEN OBTAINING SCALED DATA.

No.	DATE	REVISIONS
1		
2		
3		

DES: DR  
 DRN: KLT  
 CKD:  
 DATE: Nov-2021

CITY of TAMPA  
 WASTEWATER DEPARTMENT

131ST AVE TRUNK SEWER  
 REHABILITATION BY CIPP  
 COVER SHEET

SHEET  
 1

**GENERAL NOTES**

1. THE SCOPE OF THIS PROJECT SHALL CONSIST OF REHABILITATION OF 8" TO 30" DIA WASTEWATER PIPELINE BY INSTALLATION OF CURED IN PLACE PIPE LINER AND ALL APPURTENANCE ASSOCIATED WITH COMPLETION OF THE PROJECT.
2. ELEVATION INFORMATION SHOWN ON THESE PLANS IS REFERENCED TO N.G.V.D. 1929 UNLESS OTHERWISE STATED AND ARE BASED ON RECORD DRAWINGS.
3. SHEETS 8-23 ARE THE EXISTING AS-BUILTS OF THE SEWER PIPES TO BE REHABILITATED.
4. DURING THE MOT, CONTRACTOR MUST MAINTAIN ACCESS TO ALL DRIVEWAYS FOR THE DURATION OF THE PROJECT.
5. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING THE NECESSARY ROAD CLOSURE AND RIGHT-OF-WAY PERMITS FROM THE APPROPRIATE GOVERNMENT AGENCIES HAVING JURISDICTION OVER THE SPECIFIC ROADWAYS. NORTH BLVD AT COUNTRY CLUB IS A CITY OF TAMPA ROAD. 131ST AVENUE & NORTH BLVD NORTH OF COUNTRY CLUB IS A HILLSBOROUGH COUNTY ROAD. FLORIDA AVENUE IS AN FDOT ROAD. A CITY OF TAMPA RIGHT OF WAY ACCELA PERMIT SHALL BE SUBMITTED FOR EACH ROADWAY AT THE FOLLOWING WEBSITE [HTTP://ACA.TAMPAGOV.NET/](http://aca.tampagov.net/)
6. IN ORDER TO OBTAIN ROADWAY CLOSURE OR RIGHT-OF WAY PERMITS, AT MINIMUM, THE CONTRACTOR MUST SUBMIT DETAILED MAINTENANCE OF TRAFFIC (MOT) PLANS ALONG WITH APPLICATIONS TO THE APPROPRIATE AGENCY. THE MOT(S) SHALL CONFORM TO APPLICABLE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) INDEX DRAWINGS (MOST CURRENT EDITION). THE GOVERNING AGENCIES MAY REQUIRE ADDITIONAL INFORMATION AND DICTATE SPECIFIC WORK TIMES DURING NON-PEAK TRAFFIC HOURS. REFER TO SPECIFIC PROVISIONS FOR SPECIFIC TRAFFIC CONTROL REQUIREMENTS.
7. CONTINUOUS SEWER SERVICE MUST BE MAINTAINED AT ALL TIMES. WORK DURING LOW FLOW PERIODS OR NIGHT WORK MAY BE REQUIRED. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PRIVATE AND CITY PUMPING STATIONS AND SEWER SERVICE VIA VACUUM TRUCKS. CONTRACTOR IS RESPONSIBLE FOR DEWATERING, COLLECTING AND DISPOSING OF ALL WATER AND SLUDGE FROM EXISTING FACILITIES AS NECESSARY TO MAINTAIN SERVICE. COST FOR THIS WORK SHALL BE INCLUDED IN THE VARIOUS CONTRACT ITEMS AND NO ADDITIONAL PAYMENT WILL BE MADE. SEE ADDITIONAL BYPASS NOTES BELOW.
8. BYPASS PUMPS SHALL BE OF THE SELF PRIMING QUIET FLOW TYPE PUMP. BYPASS PUMP NOISE SHALL STRICTLY COMPLY TO ALL LOCAL REGULATIONS AND ORDINANCES COVERING NOISE CONTROL. THIS MAY REQUIRE CONSTRUCTING SOUND ATTENUATING ENCLOSURE AROUND PUMPS. BYPASS METHOD SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER.
9. THE PROPOSED LINER THICKNESS FOR THE 8" SEWER SHALL BE 0.236" THICK. CIPP LINER FOR 24" SEWER SHALL BE 0.472" THICK. CIPP LINER FOR 27" & 30" SEWER SHALL BE 0.583" THICK.
10. CONTRACTOR SHALL RESTORE ALL LANDSCAPING, SODDING, SPRINKLER SYSTEM PIPING AND PAVEMENT THAT MAY HAVE BEEN DAMAGED DURING CONSTRUCTION TO ITS ORIGINAL CONDITION OR BETTER.
11. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH WASTEWATER PERSONNEL AND PUMPING STATION OPERATIONS.
12. OSHA STANDARD EQUIPMENT SUCH AS SAFETY HARNESES, GAS MONITORS, LOWER EXPLOSIVE LIMIT (LEL) DETECTORS, BREATHING APPARATUS, ETC. SHALL BE UTILIZED WHERE THE WORK DICTATES THEIR USE.
13. THIS PROJECT INCLUDES REHABILITATION OF MANHOLES BY APPLICATION OF A STRUCTURAL COATING SYSTEM AND ALL APPURTENANCES ASSOCIATED WITH THE PROJECT.
14. DURING THE MANHOLE'S INTERIOR CLEANING OPERATION, THE CONTRACTOR MUST PROVIDE A MEANS OF CAPTURING AND DISPOSING OF THE REMOVED DEBRIS. THIS METHOD SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
15. ALL EXPOSED STEEL REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ANY DETERIORATION/RUST AND COATED WITH THE PROPOSED COATING SYSTEM.
16. THE ONLY EXCAVATION NECESSARY FOR THIS PROJECT IS FOR THE REMOVAL AND REPLACEMENT OF THE MANHOLE FRAME AND COVERS. FOR THESE CASES, THE CONTRACTOR IS REQUIRED TO CALL SUNSHINE AT 1-800-432-4770 TO DETERMINE UTILITY LOCATIONS PRIOR TO EXCAVATION.

**BYPASS NOTES**

1. CONTINUOUS SEWER SERVICE MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
2. A COMPLETE BYPASS PLAN SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.
3. MINIMUM TANKER STORAGE CAPACITY SHALL NOT BE LESS THAN 5,000 GALLONS.
4. ANY CITY OWNED PUMP STATION SHUT DOWN OR VALVE TURNING REQUIRES ADVANCED COORDINATION WITH CITY STAFF. CONTRACTOR SHALL PROVIDE A MINIMUM 2 WEEKS ADVANCED NOTICE BEFORE ANY FORCE MAIN DIVERSION OR CITY OWNED PUMP SHUT DOWN.
5. ALL BYPASS PUMPING SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS.

**REFER TO OVERALL PROJECT MAP (NEXT SHEET) FOR REFERENCE TO MANHOLE FID#s.**

**BYPASSING OF 27" PIPE FROM FID #253828 TO FID #254244 (NORTH BOULEVARD & 131ST):**

THE MAJORITY OF THE FLOW ON THE 27" GRAVITY SEWER ALONG NORTH BLVD & 131ST AVENUE IS FROM THE FOWLER & OLA FORCE MAINS. THE FOWLER FM DISCHARGES INTO FID #253828 ON NORTH BLVD . THE OLA FORCE MAIN DISCHARGES INTO FID#254238 AT 131ST & OLA. THESE TWO FORCE MAINS CAN BE TEMPORARILY DIVERTED TO DISCHARGE INTO FID# 254245 NEAR THE INTERSECTION OF 131ST & FLORIDA AVE TO ALLOW FOR LINING. BYPASSING OF ANY REMAINING FLOW SHALL BE ACCOMPLISHED BY TANKER TRUCKS. ESTIMATED PEAK FLOW OF THE REMAINING FLOW IS 100 GPM.

**BYPASSING OF 27" & 30" PIPES FROM FID #254244 TO FID #3100257 (131ST):**

LINING OF 27" & 30" PIPE IN 131ST AT FLORIDA AVE WILL REQUIRE BYPASS OF UPSTREAM FLOW VIA TANKERS. ESTIMATED PEAK FLOW IN THIS PIPE IS 700 GPM.

**BYPASSING OF 24" FROM FID #254249 TO FID #3100257 (FLORIDA AVE NORTH OF 131ST):**

LINING OF 24" PIPE IN FLORIDA AVE WILL REQUIRE BYPASS OF UPSTREAM FLOW VIA TANKERS. ESTIMATED PEAK FLOW IN THIS PIPE IS 200 GPM.

INDEX	
SHT. NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL & BYPASS NOTES AND INDEX
3	131ST AVE OVERALL PROJECT LOCATION MAP
4-5	AREA MAPS
6	MANHOLE REHABILITATION DETAIL
7	MANHOLE DETAIL
8-23	WASTEWATER RECORD DRAWINGS FOR REFERENCE **

\*\* RECORD DRAWINGS ARE BEING PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT INTENDED TO SHOW ADDITIONAL WORK FOR THIS CONTRACT. THE CITY DOES NOT GUARANTEE THE ACCURACY OF THE RECORD DRAWINGS.

PROPOSED MANHOLE COATING SYSTEM THICKNESS	
Location	Coating System
Manhole Barrel	250 MILS (MIN)
Manhole Benches	250 MILS (MIN)

K:\wastewater\_projects\131st\_ave & florida\_ave\_trunk\_sewer\_rehabilitation\Drafting\DWG\131st\_Ave\_Trunk\_Sewer\_Rehab.dwg

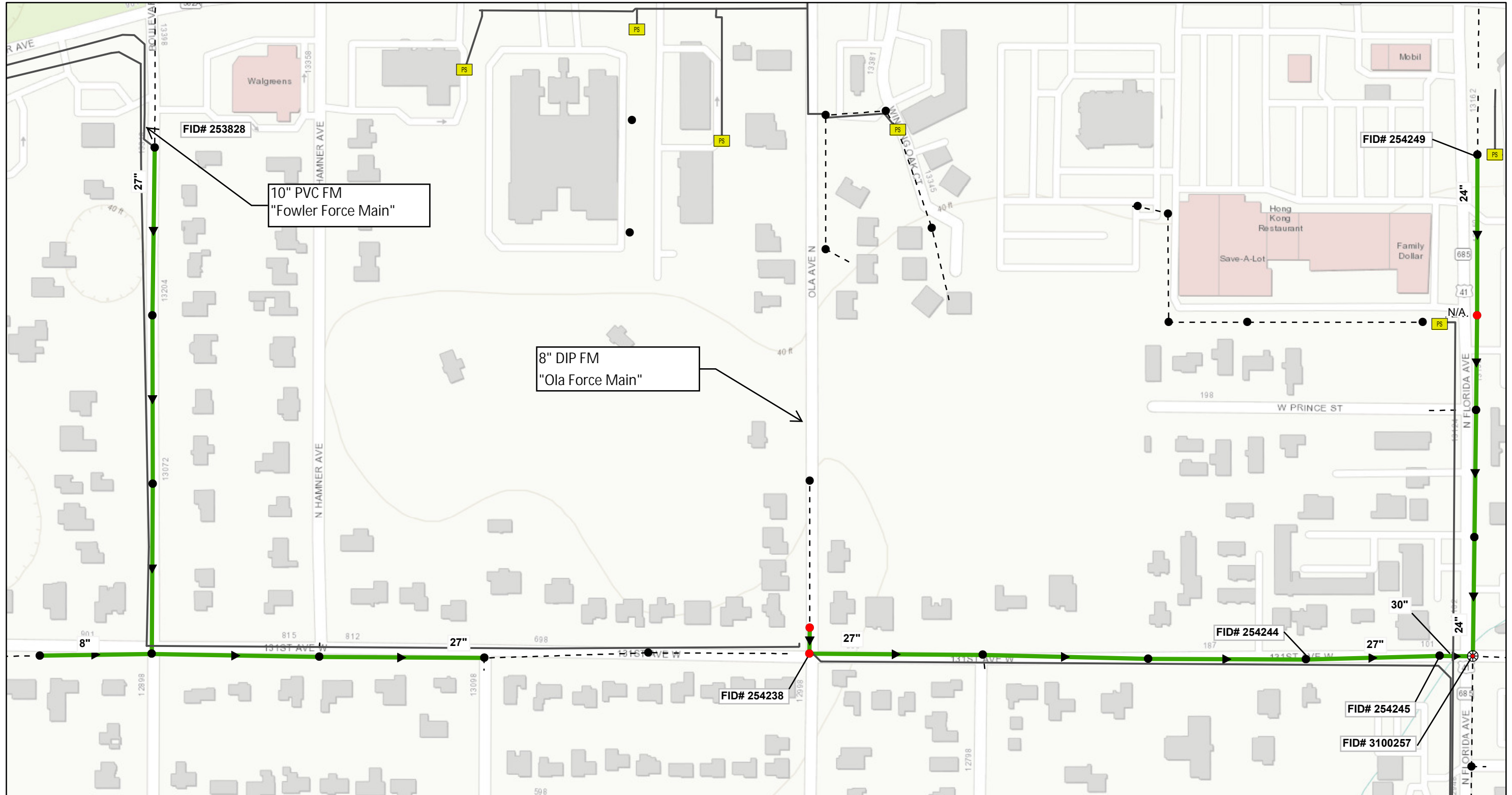
No.	DATE	REVISIONS
1		
2		
3		

DES: DR  
DRN: KLT  
CKD:  
DATE: Nov-2021

**CITY of TAMPA**  
**WASTEWATER DEPARTMENT**

131ST AVE TRUNK SEWER  
REHABILITATION BY CIPP  
NOTES & INDEX

SHEET  
2



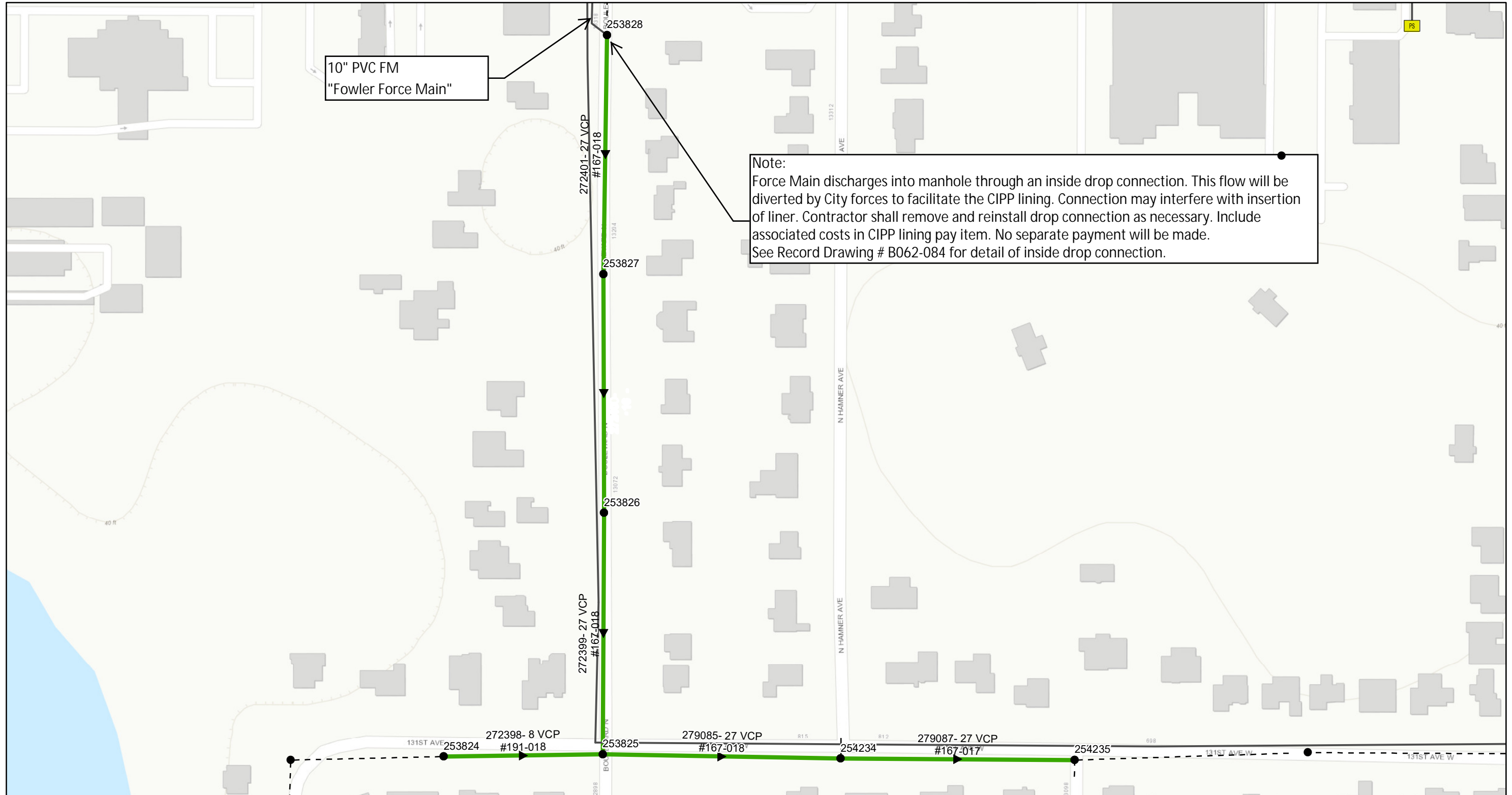
0 0.03 0.06 0.12 Miles

# 131st Ave and Florida Ave

## City of Tampa Wastewater Department

- Proposed Manhole Rehabilitation
- Ex Manhole (no rehabilitation required)
- ⊗ Ex Junction Chamber
- ➔ Proposed Lining Area
- Ex Wastewater (no rehabilitation required)
- Ex Pressurized Mains (no rehabilitation required)





10" PVC FM  
"Fowler Force Main"

Note:  
Force Main discharges into manhole through an inside drop connection. This flow will be diverted by City forces to facilitate the CIPP lining. Connection may interfere with insertion of liner. Contractor shall remove and reinstall drop connection as necessary. Include associated costs in CIPP lining pay item. No separate payment will be made. See Record Drawing # B062-084 for detail of inside drop connection.

0 0.0225 0.045 0.09 Miles

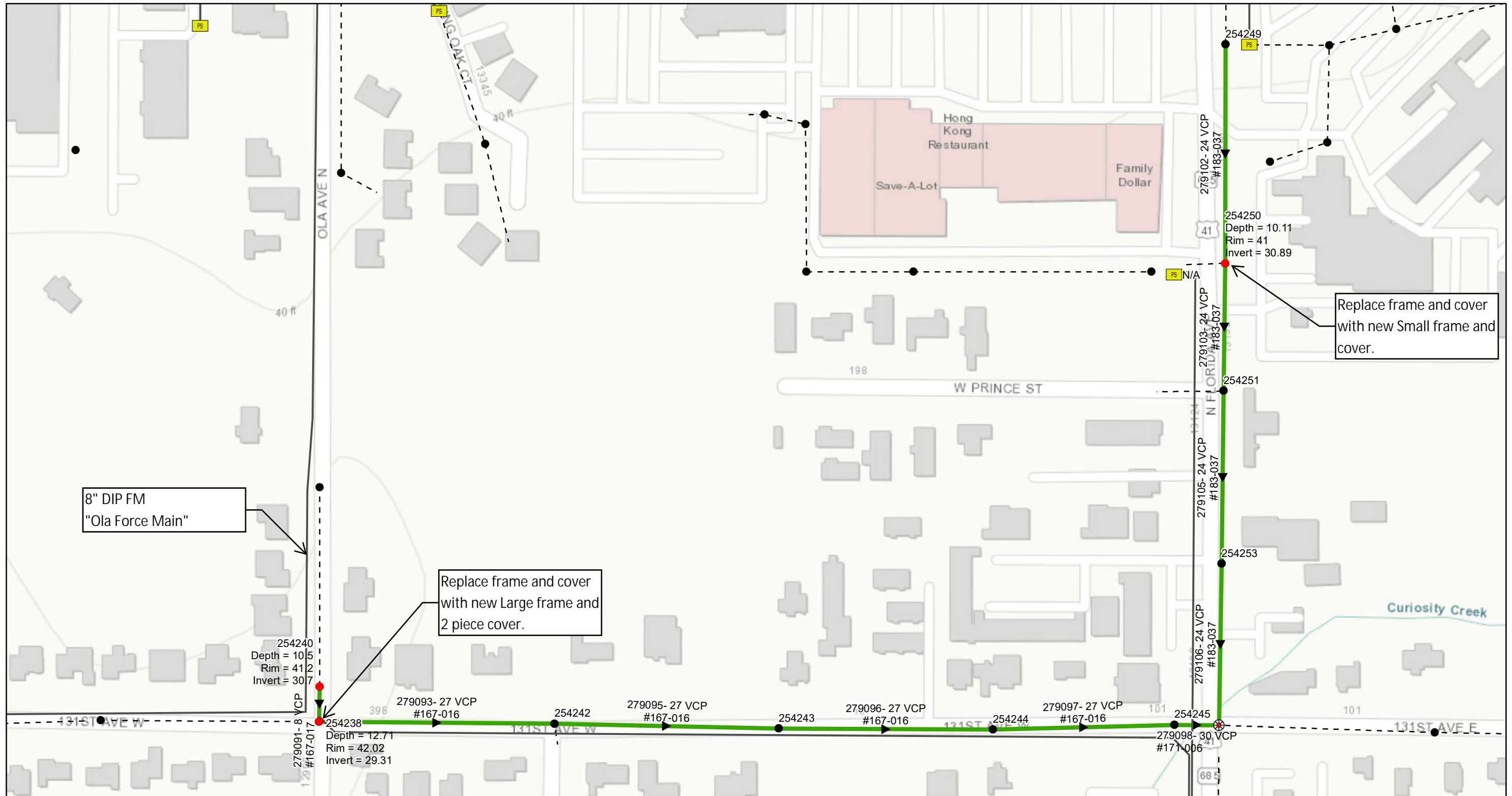
**131st Ave and Florida Ave**  
City of Tampa Wastewater Department

- Proposed Manhole Rehabilitation
- Ex Manhole (no rehabilitation required)
- ⊗ Ex Junction Chamber
- ➔ Proposed Lining Area
- - - - - Ex Wastewater (no rehabilitation required)
- Ex Pressurized Mains (no rehabilitation required)



Sheet No.  
**4**





0 0.0225 0.045 0.09 Miles

# 131st Ave and Florida Ave

## City of Tampa Wastewater Department

- Proposed Manhole Rehabilitation
- ➔ Proposed Lining Area
- Ex Manhole (no rehabilitation required)
- - - - - Ex Wastewater (no rehabilitation required)
- ⊗ Ex Junction Chamber
- — — — — Ex Pressurized Mains (no rehabilitation required)

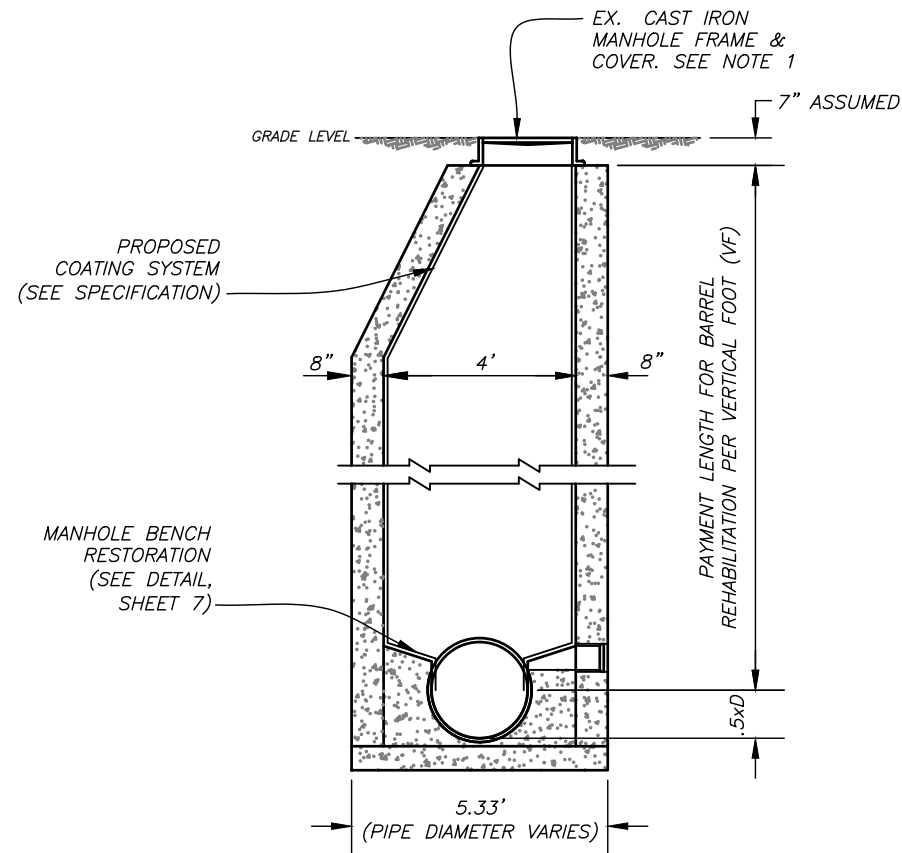


Sheet No.  
**5**

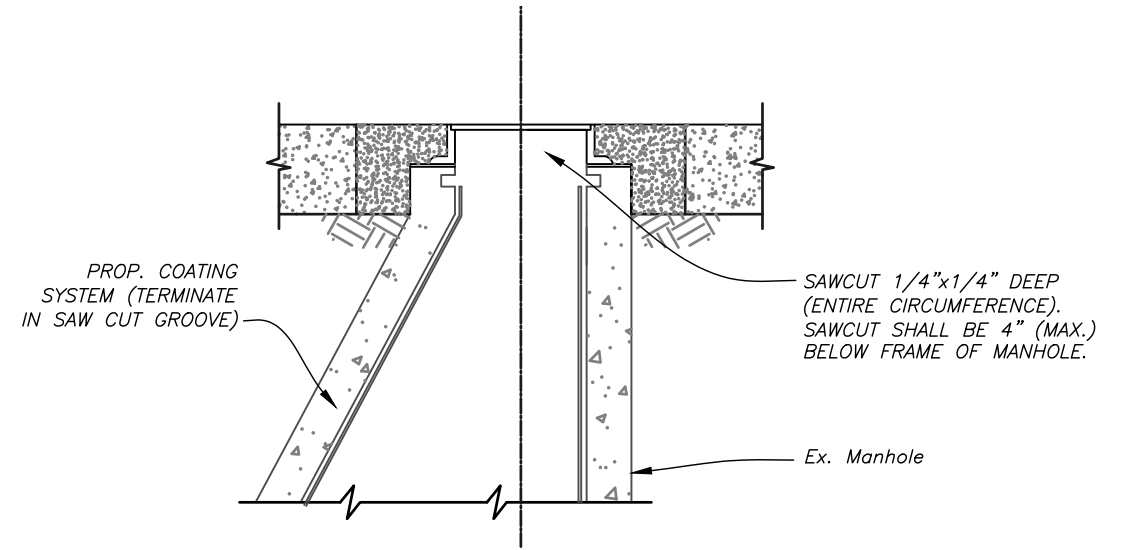


NOTES

1. REMOVE ALL DEBRIS AND LOOSE BRICKS FROM THE TOP OF THE BENCH.
2. INSTALL A MINIMUM 1" THICK CLASS "D" CONCRETE OVER EXISTING BENCH. ALLOW CONCRETE TO CURE (MIN. 24 HRS. UNLESS OTHERWISE APPROVED BY THE ENGINEER).
3. OVERLAY BENCHES WITH PROPOSED COATING SYSTEM.
4. PROVIDE 6" COATING THICKNESS TRANSITION. PAYMENT FOR THIS ITEM IS INCLUDED IN THE BENCH RESTORATION.

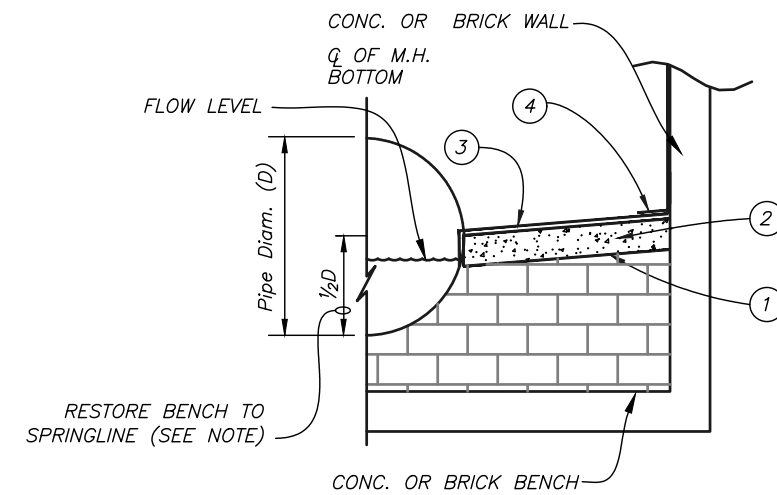


**TYPE "B"**  
**CONCRETE MANHOLE**  
NOT TO SCALE



**COATING TERMINATION DETAIL**

SCALE: N.T.S.



**TYPICAL MANHOLE BENCH RESTORATION DETAIL**

SCALE: N.T.S.

No.	DATE	REVISIONS
1		
2		
3		

DES: DR  
DRN: KLT  
CKD:  
DATE: Nov-2021

**CITY of TAMPA**  
**WASTEWATER DEPARTMENT**

131ST AVE TRUNK SEWER  
REHABILITATION BY CIPP  
MANHOLE REHABILITATION DETAIL

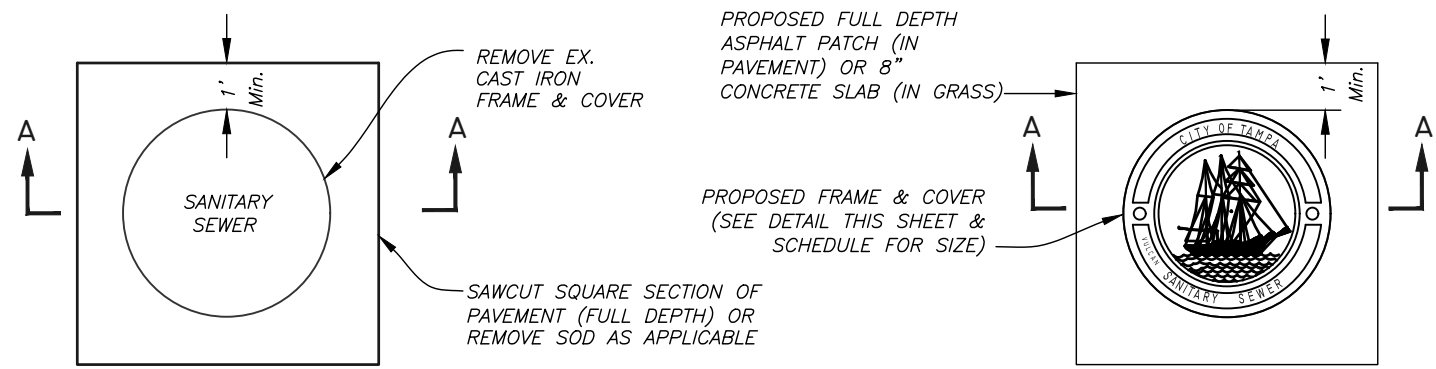
SHEET

6

m

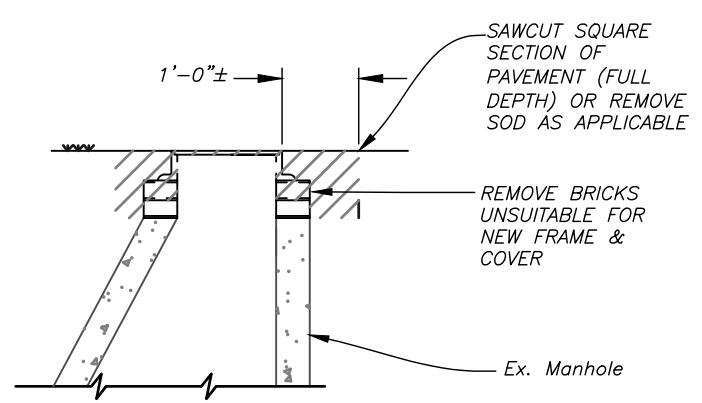
**ASPHALT RESTORATION NOTE**

PAVEMENT RESTORATION SHALL CONSIST OF 12" PERMANENT BASE (CRUSHED CONCRETE) AND 2" PERMANENT ASPHALT SUPERPAVE PAVEMENT, UNLESS OTHERWISE NOTED. IF LOCATED IN D.O.T. ROW, AN ADDITIONAL 1 1/2" SUPERPAVE ASPHALT IS REQUIRED.

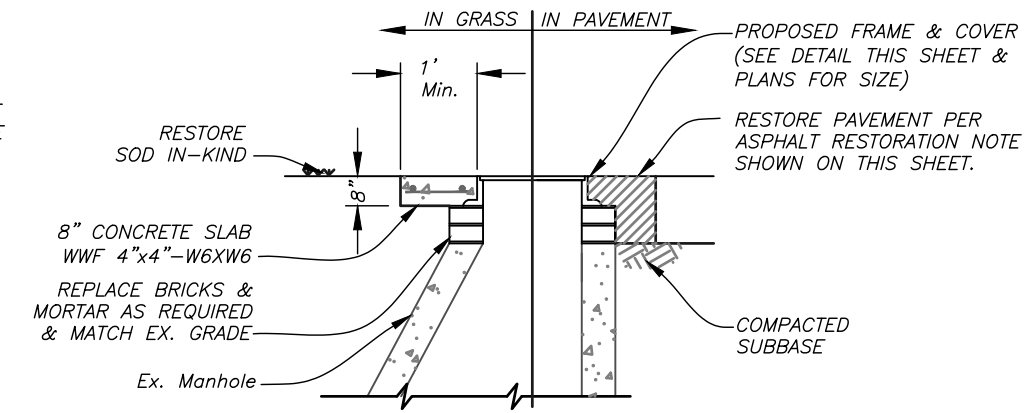


**PLAN**

**COVER SECTION**



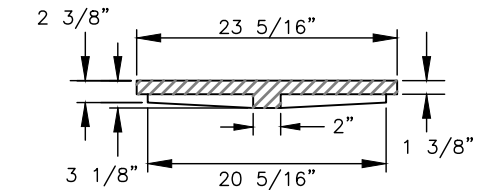
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REMOVAL DETAIL**



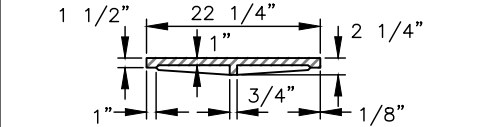
**SECTION B-B  
REPLACEMENT  
DETAIL**

**SMALL COVER DETAIL**

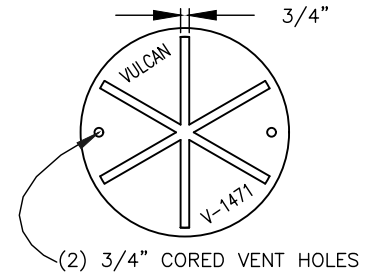
**LARGE COVER DETAIL**



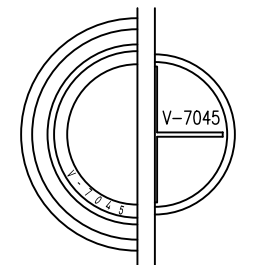
**COVER SECTION**



**INNER & OUTER COVER SECTIONS**



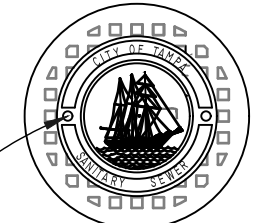
**COVER BACK**



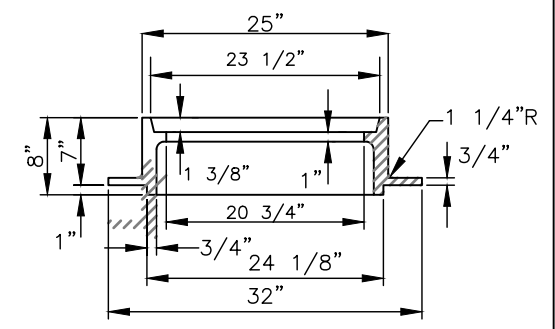
**COVER BACKS**



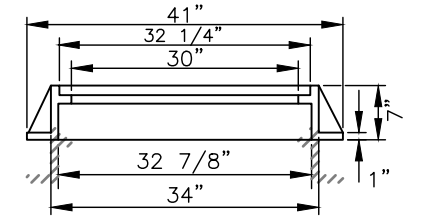
**COVER FACE**



**COVER FACES**



**FRAME SECTION**



**FRAME SECTION**

FOR MH'S OF SEWERS 24" OR LESS IN DIAMETER:  
VULCAN FOUNDRY NO. V-1471,  
U.S. FOUNDRY NO. 575-AT, OR EQUAL

FOR MH'S OF SEWERS 27" OR GREATER IN DIAMETER:  
VULCAN FOUNDRY NO. V-7045,  
U.S. FOUNDRY NO. 230-AB-M, OR EQUAL

**HEAVY DUTY CAST IRON MANHOLE FRAME & COVER DETAILS**

K:\wastewater projects\131st ave & florida ave trunk sewer rehabilitation\Drafting\DWG\131st Ave Trunk Sewer Rehab.dwg

No.	DATE	REVISIONS
1		
2		
3		

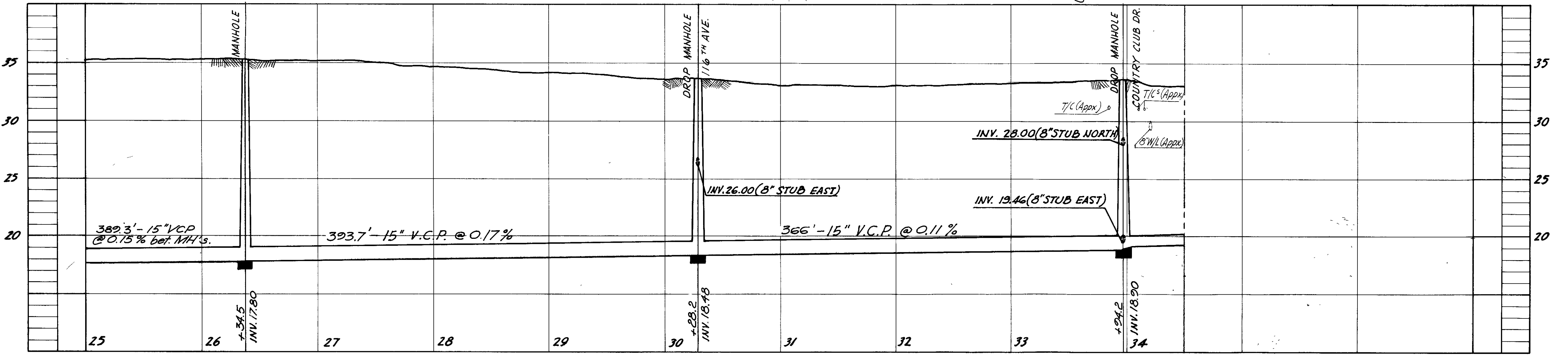
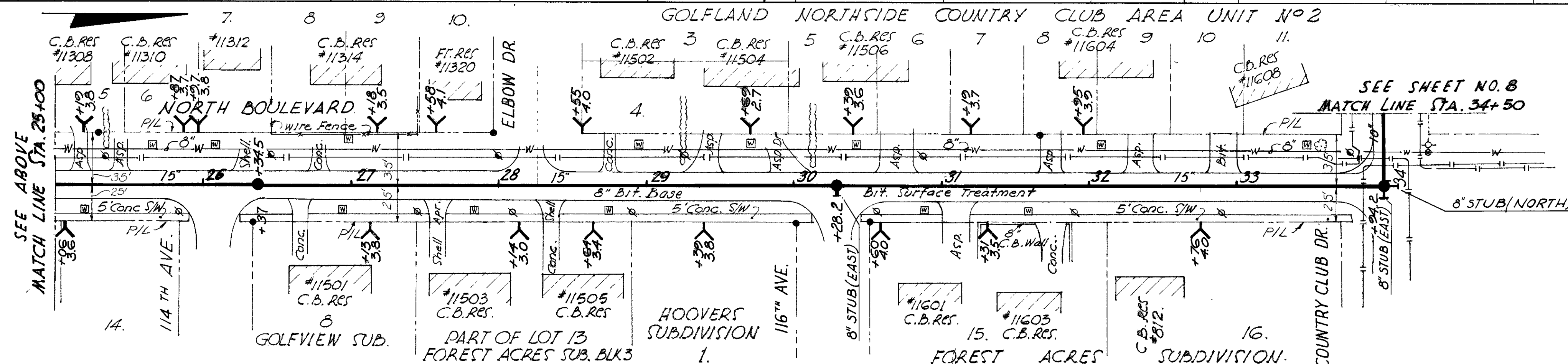
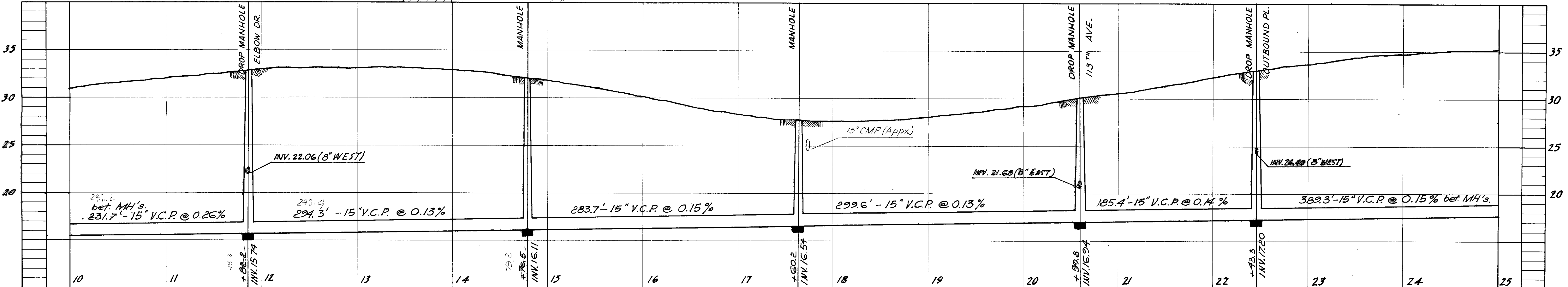
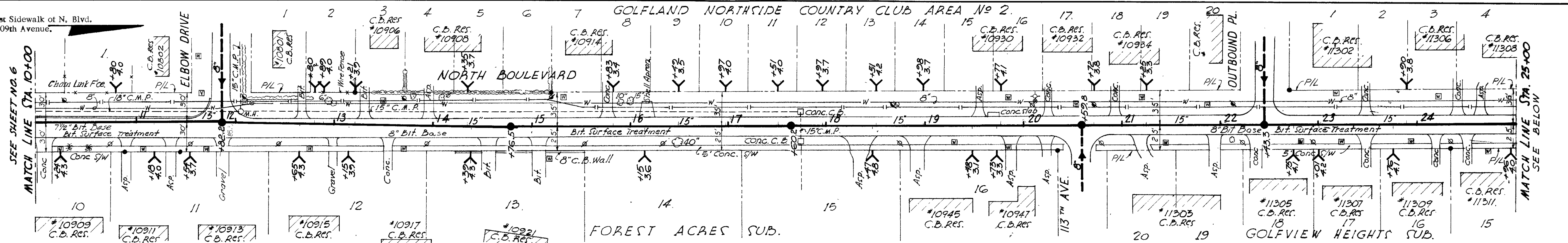
DES: DR  
DRN: KLT  
CKD:  
DATE: Dec-2021

**CITY of TAMPA**  
WASTEWATER DEPARTMENT

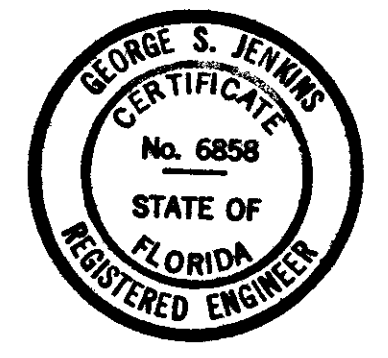
131ST AVE TRUNK SEWER  
REHABILITATION BY CIPP  
MANHOLE DETAIL

SHEET  
7

B.M. A-7-7-6  
 C.M. on East Sidewalk of N. Blvd.  
 28'± South of 109th Avenue.  
 Elev. 27.380



SEWER LINE LOCATION  
 SEC. MAP No. LINE No.  
 B-11-2



CITY OF TAMPA, FLORIDA  
 THIRD SEWER REVENUE BOND PROGRAM  
 SEWAGE DISPOSAL SYSTEM

NORTH BLVD. TRUNK SEWER  
 NORTH BLVD. - STA. 10+00 TO COUNTRY CLUB DR.  
 COUNTRY CLUB DR. - NORTH BLVD. TO STA. 34+50

J. E. GREINER COMPANY - WIDEMAN & SINGLETON ENGINEERS  
 CONSULTING ENGINEERS ASSOCIATE ENGINEERS  
 TAMPA, FLORIDA ATLANTA, GEORGIA

DES. J.E.G.  
 C.K.D. R.L.H.  
 SCALE 1" = 20'  
 DATE Mar. 23

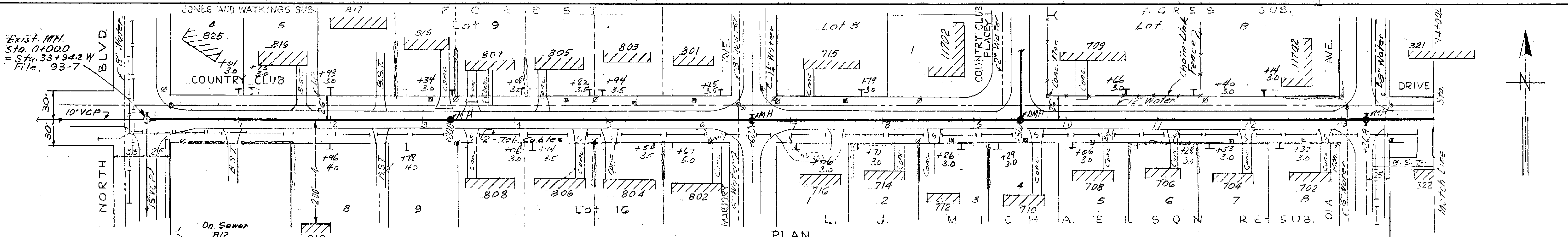
PROJECT 9  
 DIVISION A  
 SUBDISTRICT A-7b

SHEET  
 7  
 OF 33

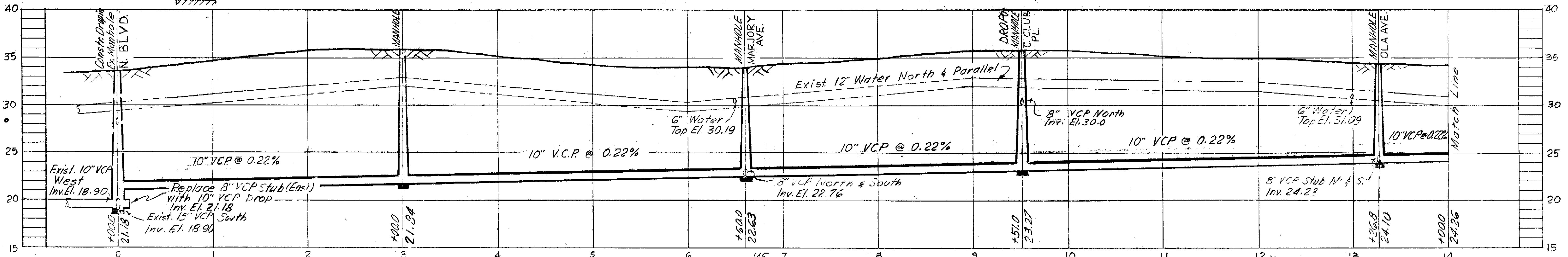
AS-BUILT PLAN  
 REVISED TO SHOW ACTUAL CONDITIONS  
 ACCORDING TO CONSTRUCTION RECORDS  
 AS OF \_\_\_\_\_ PER \_\_\_\_\_

093-007



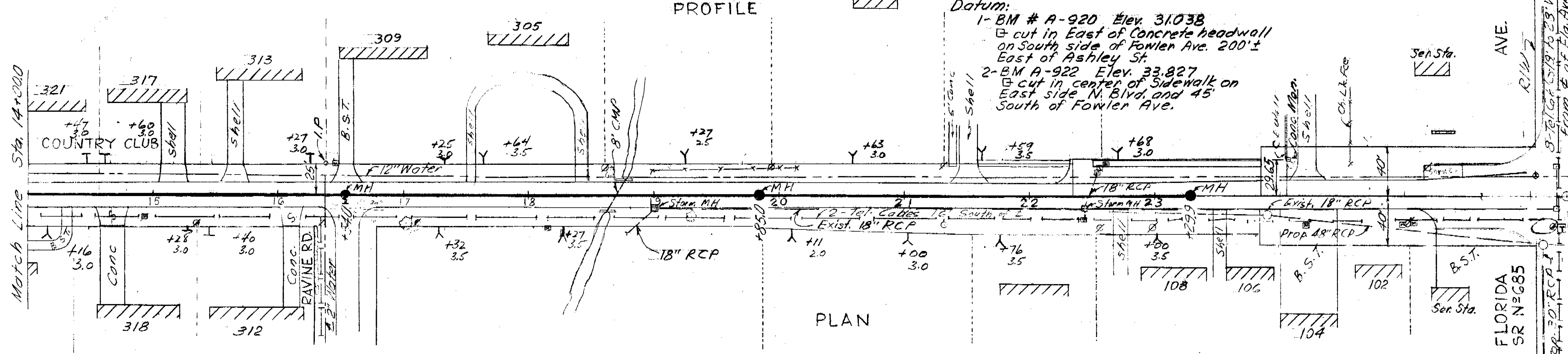


PLAN

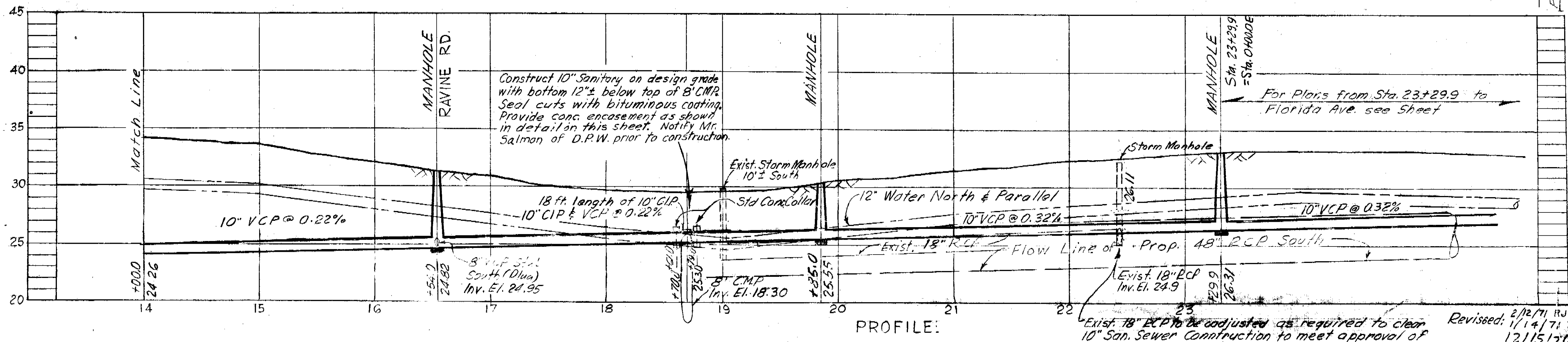


PROFILE

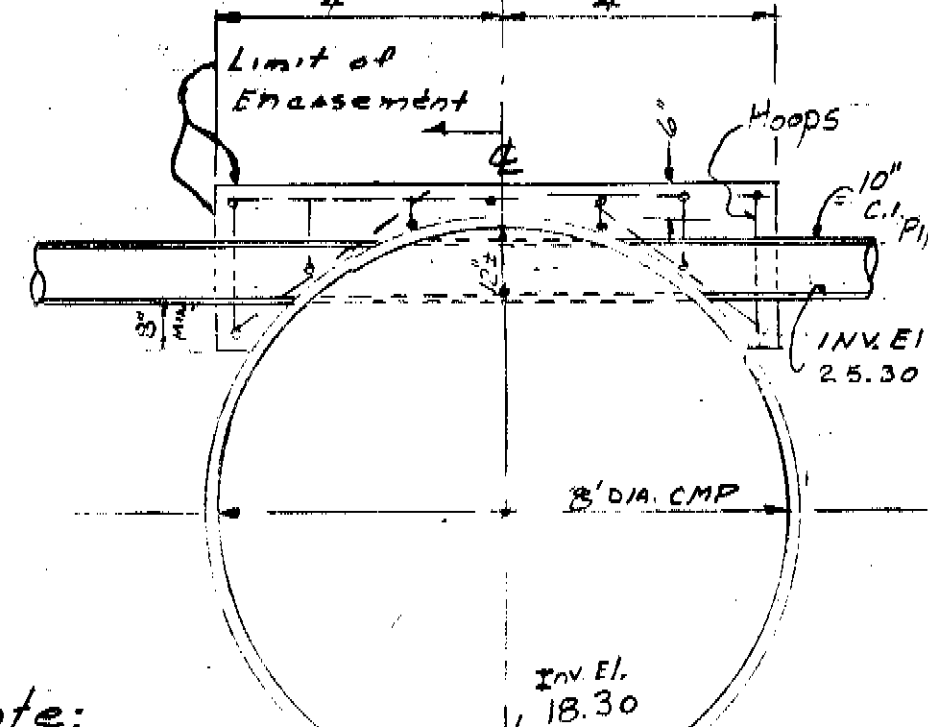
Datum:  
 1-BM # A-920 Elev. 31.038  
 □ cut in East of Concrete headwall on South side of Fowler Ave. 200'± East of Ashley St.  
 2-BM A-922 Elev. 33.827  
 □ cut in center of Sidewalk on East side N. Blvd. and 45' South of Fowler Ave.



PLAN



PROFILE:



Note:  
 All Bars Are #4  
 Place formwork inside and against the bottom surface of the C.I. Pipe for encasement seal. Remove after concrete has set & hardened

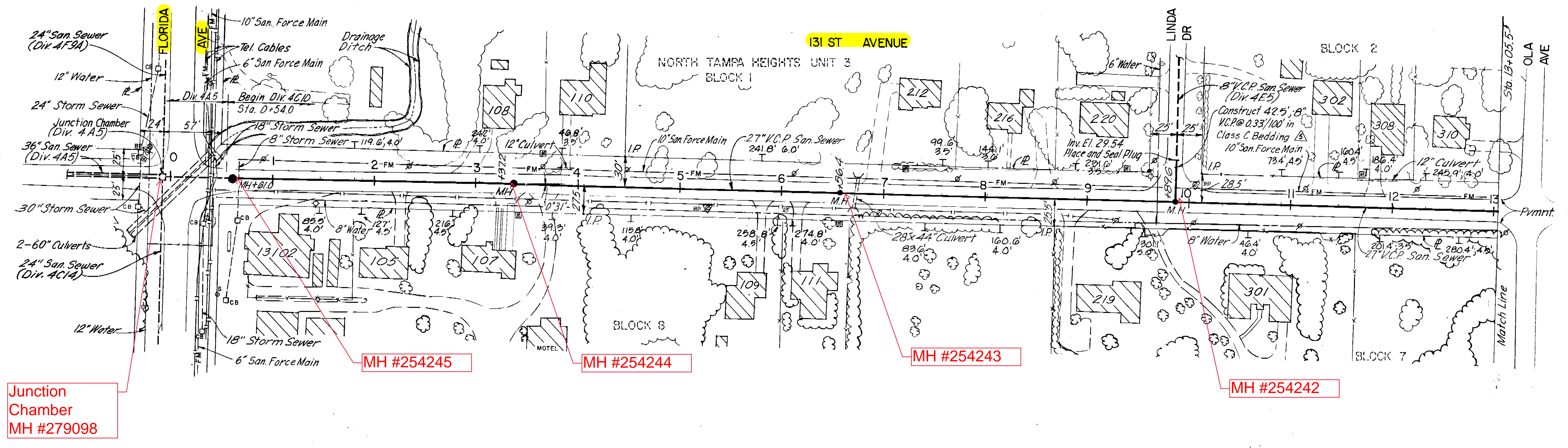
SEWER LINE LOCATION  
 SEC. MAP No. LINE No.  
 B-12-23  
 Section at centerline  
 Detail of Encasement Sta. 18+70  
 W.O. 2206

CITY OF TAMPA, FLORIDA  
 RENEWAL & REPLACEMENT  
 SEWER IMPROVEMENTS

COUNTRY CLUB DR.: North Blvd. to Florida Ave.

DES: JMR  
 DRN: JMR  
 CKD: MNS  
 DATE: AUG. 1970  
 SCALE: 1" = 50'  
 SHEET 119-33

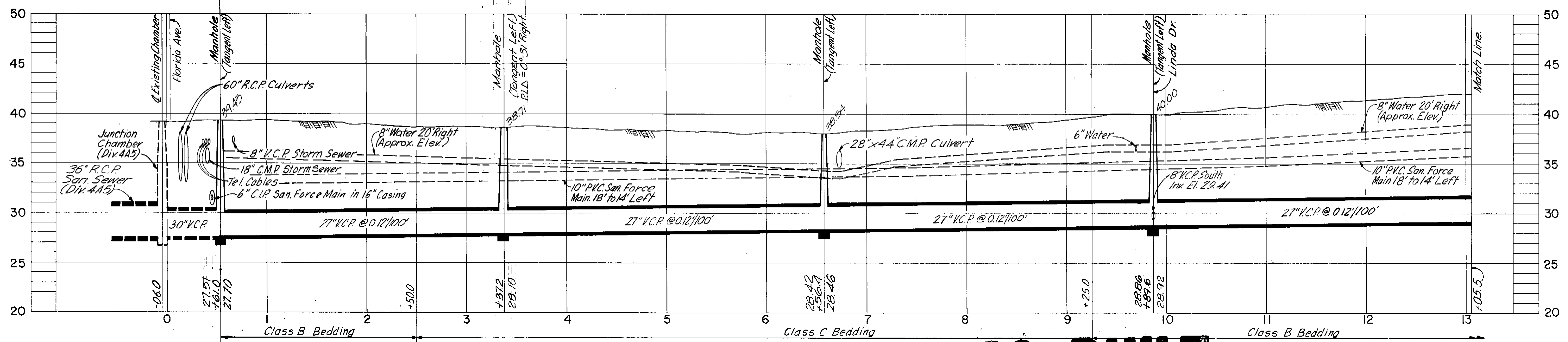
119-033



Div. 4A5 (Existing) Begin Div. 4C10 Sta. 0+54.0

PLAN

Existing Pavement: Asphaltic Concrete on Limerock Base



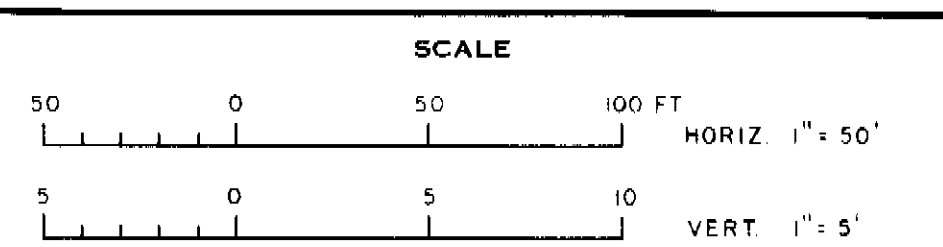
PROFILE

**AS BUILT**  
 DEP 9/15/83

- Notes:
- Station 0+54.5 is at end of existing 30\"/>
  - Install Type A House Lateral at Sta 1+00± (South). Invert at property line to be at least 2 feet below bottom of drainage ditch.

COMPILED BY PHOTOGRAMMETRIC METHODS BY  
**ABRAMS AERIAL SURVEY CORPORATION**  
 LANSING, MICHIGAN  
 DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING JANUARY 1973

REFERENCE POINT THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.	5-24-81 T.L.W. Rev. Entire Vert. Align. 4-6-81 T.L.W. Extend Stub at Sta. 9+87.5 4-6-81 T.L.W. Rev. Pipe Diameter 1-18-79 T.L.W. Add Exist. San. Force Mains 1-18-79 T.L.W. Moved Begin. of Division 1-18-79 T.L.W. Rev. Horiz. Align. Sta. 0+00 to 3+27.5
DESIGNED R.A.K., J.J.T. DRAWN F.F.L. CHECKED T.L.W.	APPROVED DATE SUPT., DEPT. OF SANITARY SEWERS DATE GREELEY AND HANSEN, ENGINEERS
GREELEY AND HANSEN ENGINEERS 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM 131ST AVE. TRUNK SEWER

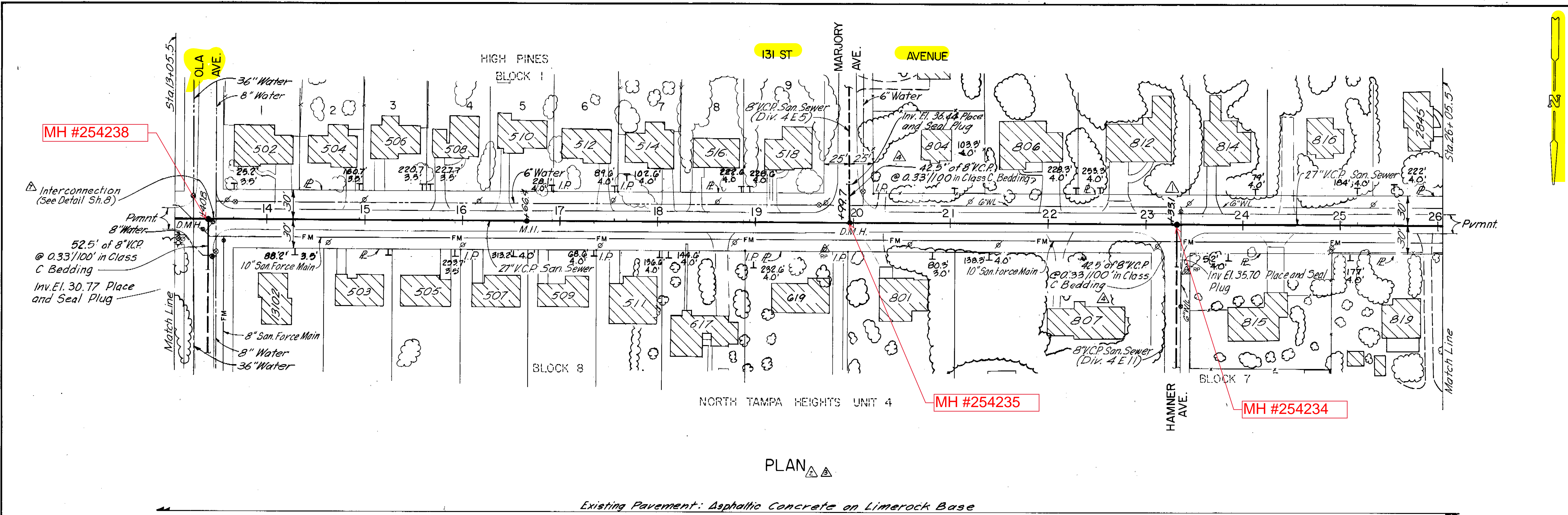


CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
 131ST AVE. TRUNK SEWER

DIVISION 4C10  
 PLAN AND PROFILE  
 STA. 0+54.0 TO STA. 13+05.5

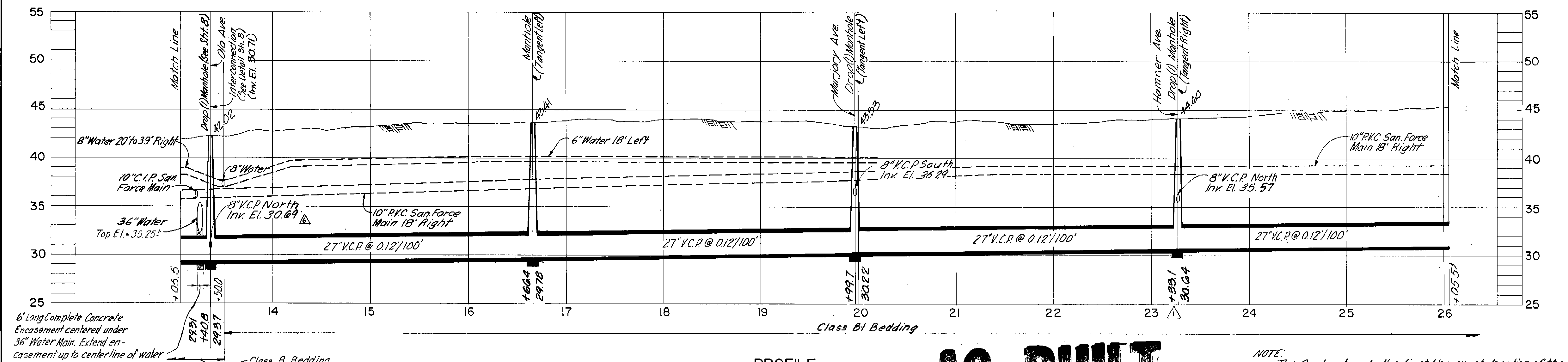
PROJ. NO. S202-70-30 D. 4C10  
 SHEET 3 OF 8  
 DATE SEPT. 1973 REV. 6

167-016



PLAN

Existing Pavement: Asphaltic Concrete on Limerock Base



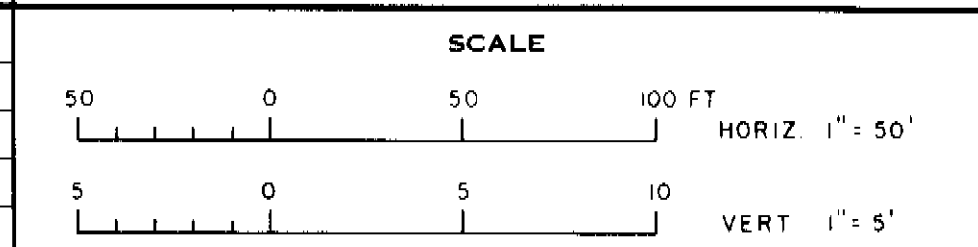
PROFILE

**AS BUILT**  
DEP 9/10/83

NOTE: The Contractor shall adjust the exact location of the manhole at Station 13+35.5 as required to accomplish the interconnection as shown in Details of Interconnection at Station 13+35.5 on Sheet B.

COMPILED BY PHOTOGRAMMETRIC METHODS  
BY  
**ABRAMS AERIAL SURVEY CORPORATION**  
LANSING, MICHIGAN  
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING JANUARY 1973

<p>△ RP REFERENCE POINT THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.</p>	<p>4/24/81 TLW Add Interconnection Sta 13+35.5 4/24/81 TLW Rev. Stub El. Sta 13+35.5 4/24/81 TLW Rev. Entire Vert Alignment 4/6/81 TLW Extend Stubs 4/6/81 TLW Rev. Pipe Diameter 1-18-79 TLW Add Exist. San. Force Main 10-12-76 TLW Moved Manhole at Hammer Ave</p>
<p>DATE _____ Supt., Dept. of Sanitary Sewers DATE _____ Greeley and Hansen, Engineers</p>	<p>NO. DATE APP. REVISION</p>

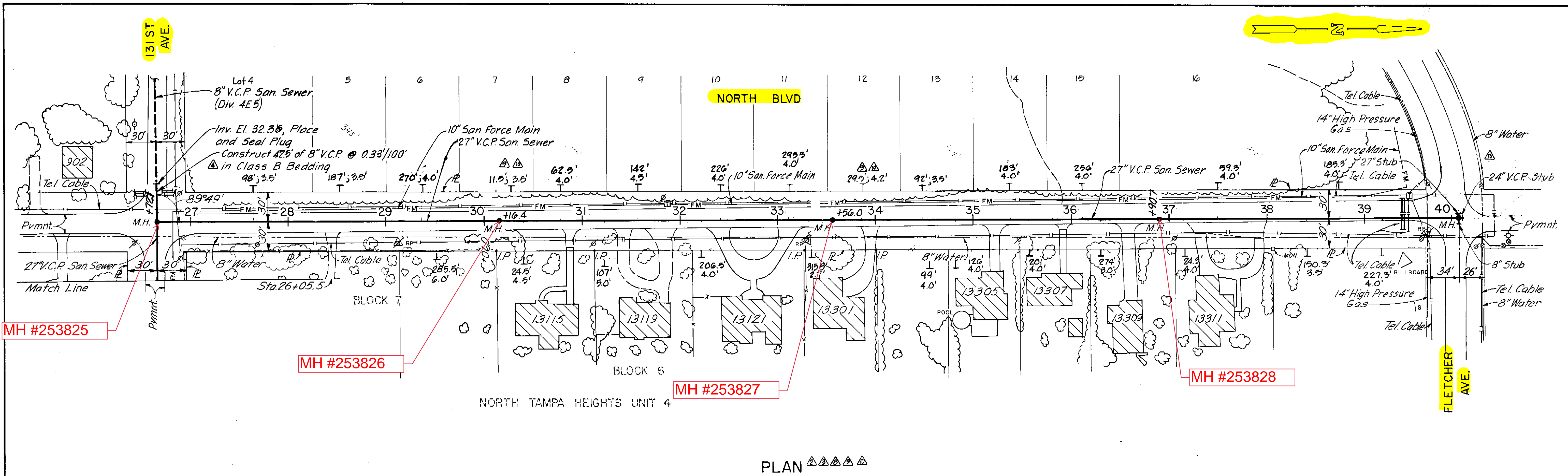


CITY OF TAMPA, FLORIDA  
SEWAGE DISPOSAL SYSTEM  
131ST AVE. TRUNK SEWER

DIVISION 4 C10  
PLAN AND PROFILE  
STA. 13+05.5 TO STA. 26+05.5

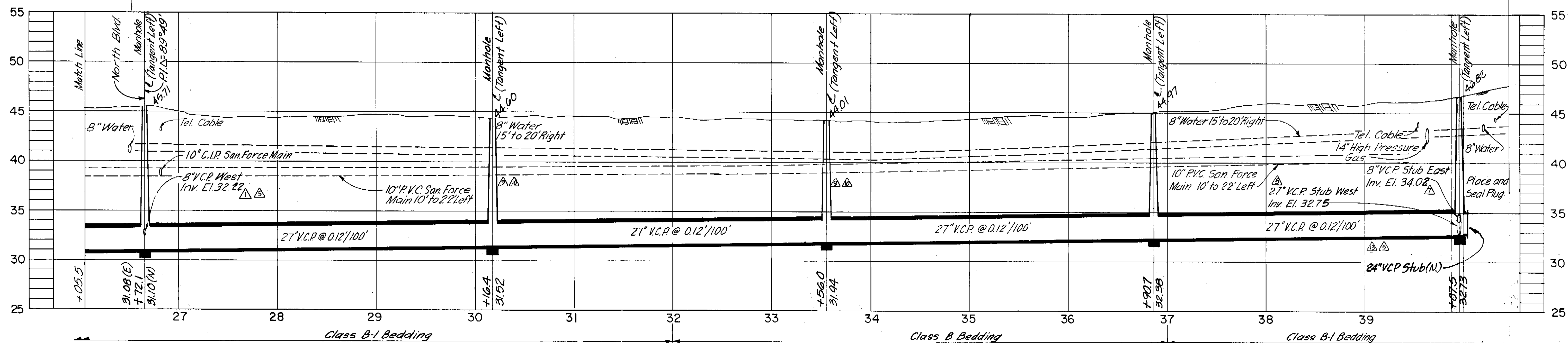
PROJ. NO. S 202-70-30D 4C10  
SHEET 4 OF 8  
DATE SEPT. 1973 REV. 7

167-017



PLAN

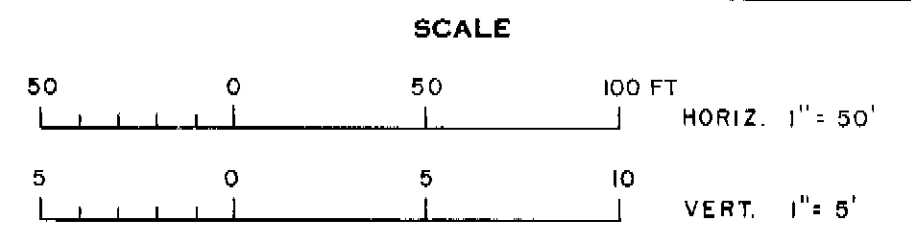
Existing Pavement: Asphaltic Concrete on Limerock Base



PROFILE

**AS BUILT**  
 DEP 9/10/85

NO.	DATE	APP.	REVISION
217782	TLW		Delete 8" Lot @ Sta. 30+06 & 33+46
1214181	TLW		Add 8" Lot at Sta. 30+06 & 33+46
1214181	TLW		Delete HC's to West Sta. 27+00 to 39+00
712981	TLW		Add Stub at Sta. 39+96
412481	TLW		Rev. Entire Vert Alignment
412481	TLW		Rev. Stub Elevations
4-6-81	TLW		Extent Stub at Sta. 26+66.0
4-6-81	TLW		Rev. Pipe Diameter
1-18-79	TLW		Add. Exist. San Force Main
4-19-74	TLW		Revised Invert Elev.
217782	TLW		Extend 24" Stub North to Sta. 40+46
217782	TLW		Delete HC. to West @ Sta. 39+15
217782	TLW		Add HC. to West @ Sta. 27+65 to 38+00



GREELEY AND HANSEN ENGINEERS  
 222 S. RIVERSIDE PLAZA  
 CHICAGO, ILLINOIS 60606

DESIGNED R.A.K., J.J.T.  
 DRAWN F.F.L.  
 CHECKED T.L.W.

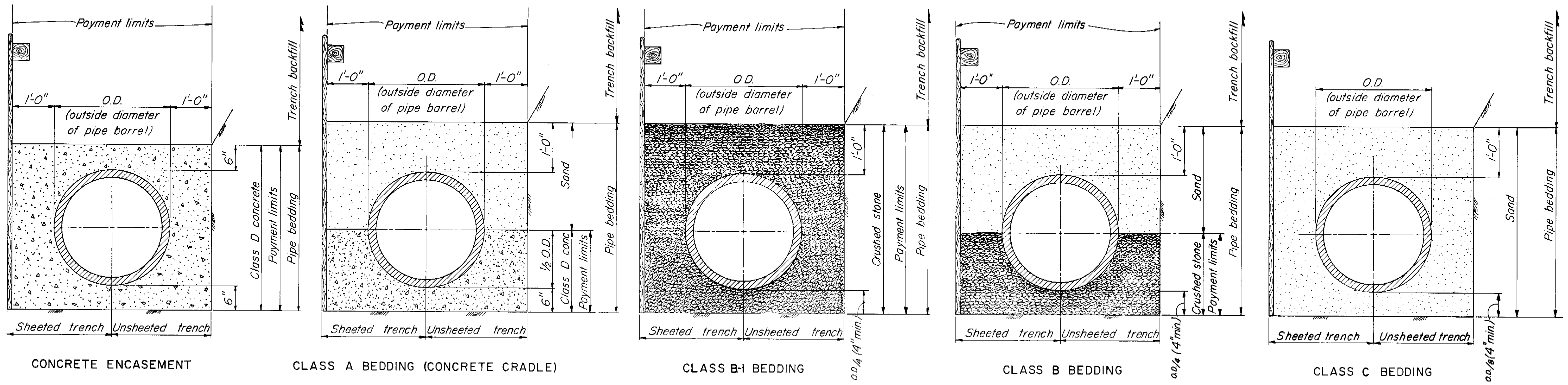
APPROVED \_\_\_\_\_  
 Supt., Dept. of Sanitary Sewers  
 GREELEY AND HANSEN, ENGINEERS

CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
 131ST AVE. TRUNK SEWER

DIVISION 4 C10  
 PLAN AND PROFILE  
 STA. 26+05.5 TO STA. 40+46.0

PROJ. NO. S 202-70-300 4C10  
 SHEET 5 OF 8  
 DATE SEPT. 1973 REV. 13

167-018

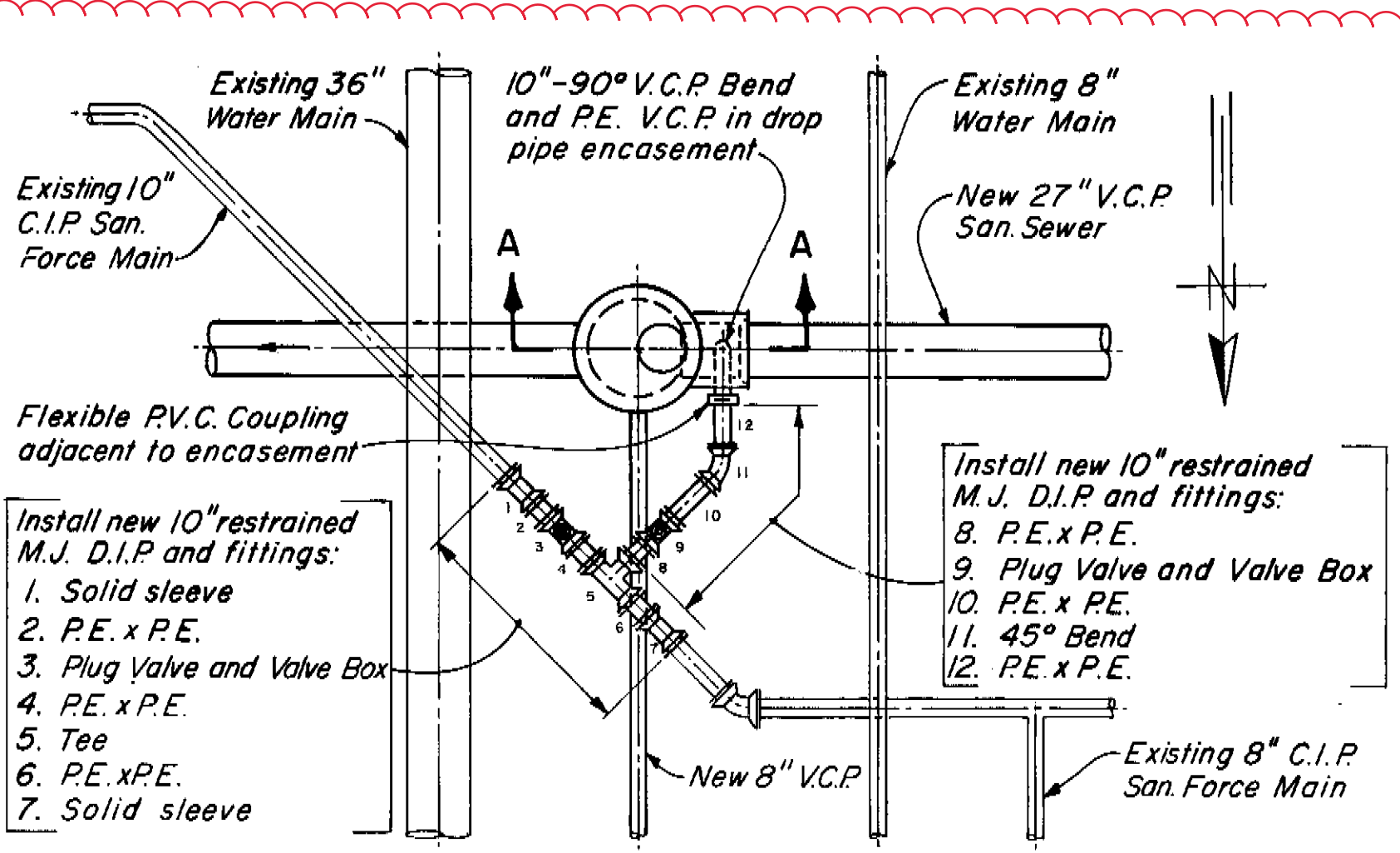
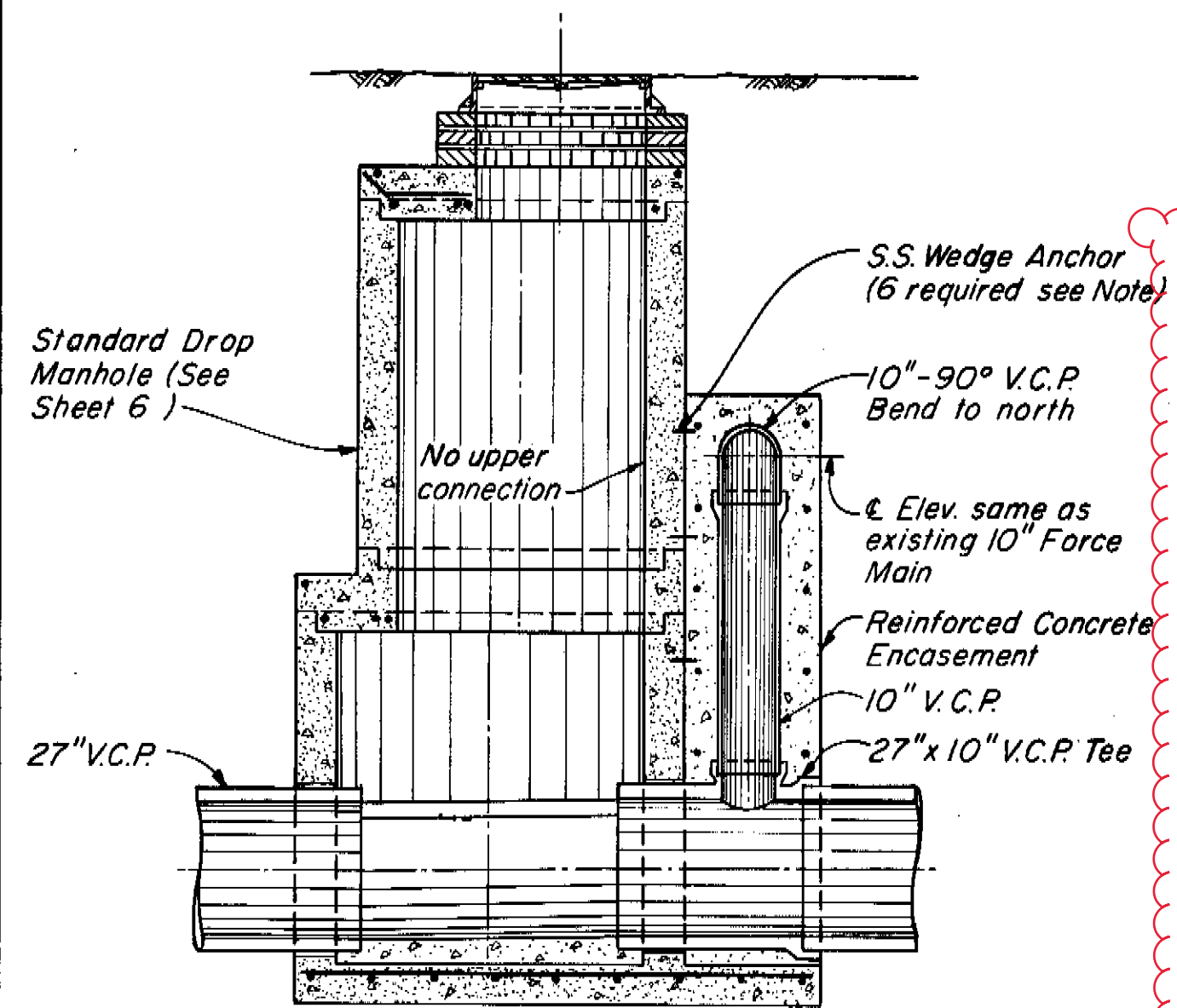


**PIPE BEDDING DETAILS**  
NOT TO SCALE

NOTES: 1. All types of pipe bedding shall extend to undisturbed earth at the sides and bottom of the trench  
2. Sand and crushed stone pipe bedding shall be placed and compacted in accordance with Specifications

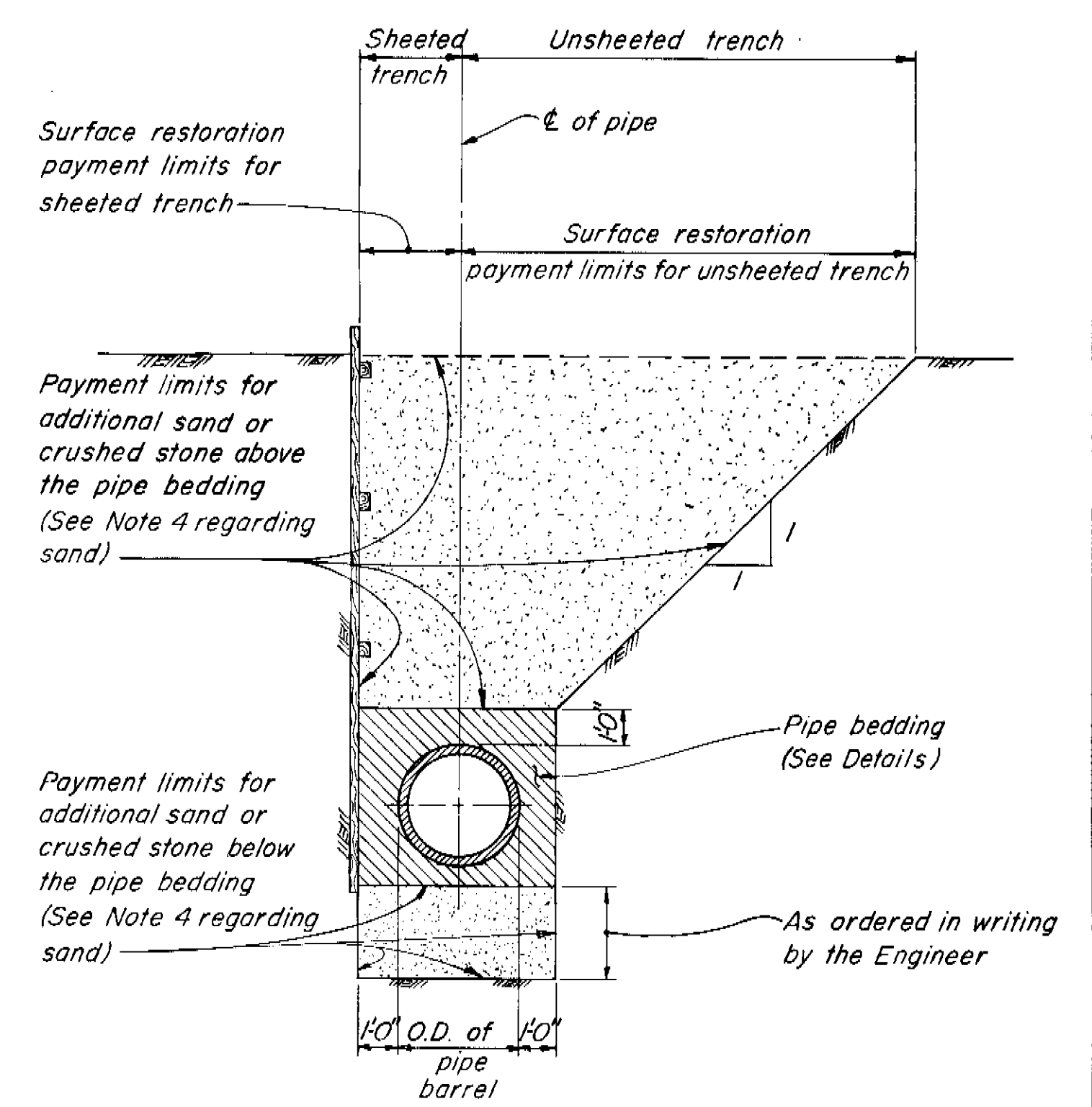
QUANTITIES FOR PAYMENT FOR ADDITIONAL PIPE BEDDING MATERIALS ORDERED IN WRITING BY THE ENGINEER

NOMINAL INSIDE PIPE DIAMETER (INCHES)	6	8	10	12	14	15	16	18	20	21	24	27	30	36	42	48	54	60	66	72
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CONCRETE ENCASEMENT	0.141	0.167	0.191	0.216	0.229	0.256	0.252	0.299	0.300	0.340	0.383	0.427	0.472	0.588	0.690	0.797	0.909	1.027	1.150	1.279
CUBIC YARDS OF CONCRETE PER LINEAR FOOT OF PIPE IN CLASS A BEDDING (CONCRETE CRADLE)	0.071	0.084	0.096	0.108	0.115	0.128	0.126	0.150	0.150	0.170	0.192	0.214	0.236	0.294	0.345	0.399	0.455	0.514	0.575	0.640
CUBIC YARDS OF CRUSHED STONE PER LINEAR FOOT OF PIPE IN CLASS B BEDDING	0.055	0.066	0.078	0.088	0.094	0.111	0.108	0.143	0.143	0.173	0.207	0.243	0.280	0.381	0.475	0.578	0.690	0.810	0.939	1.078
CUBIC YARDS OF CRUSHED STONE PER LINEAR FOOT OF PIPE IN CLASS B-1 BEDDING	0.172	0.201	0.228	0.255	0.269	0.304	0.298	0.362	0.363	0.419	0.479	0.542	0.608	0.781	0.936	1.103	1.281	1.471	1.673	1.887



NOTES FOR PAYMENT:

1. Payment for additional crushed stone or class D concrete pipe bedding materials will be made only for pipe bedding not shown on the Plans and ordered in writing by the Engineer.
2. Payment for surface restoration will be made for the actual quantities, as determined by the Engineer, of surface restored within the payment limits shown.
3. Payment for additional sand or crushed stone for trench stabilization, ordered in writing by the Engineer, will be made for the actual compacted volume, as determined by the Engineer, of sand or crushed stone placed within the payment limits shown.
4. Contractor shall use all surplus sand, approved as suitable, from excavations in this Contract prior to supplying sand from other sources. Payment for additional sand will be made only for sand supplied from sources other than excavations in this Contract. See Specifications for materials requirements.

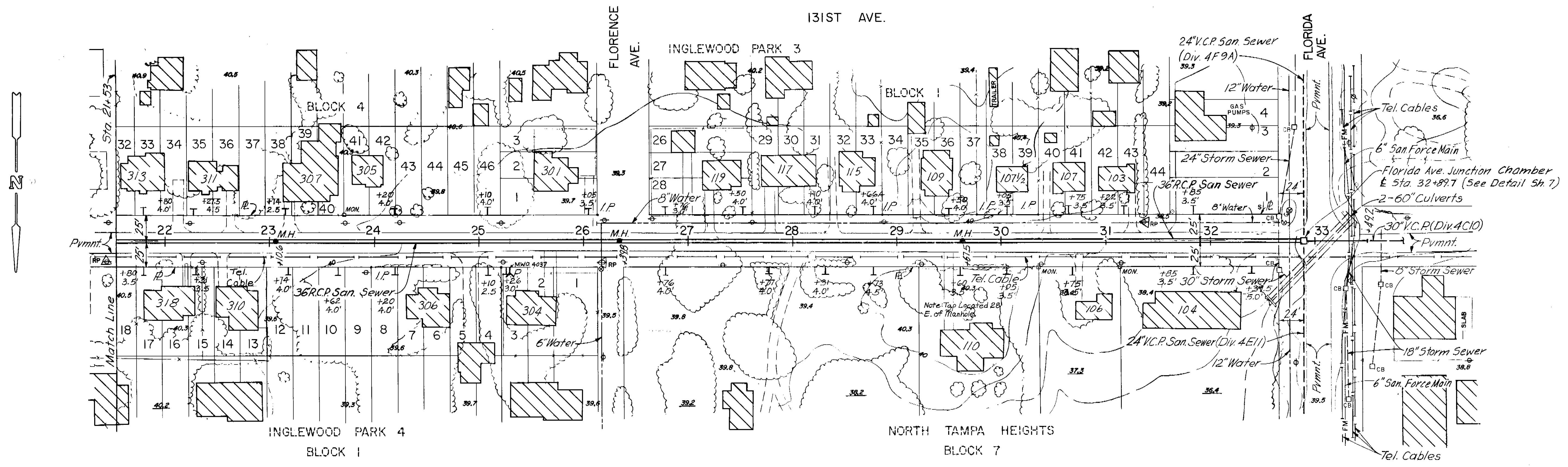


PAYMENT LIMITS FOR SURFACE RESTORATION AND ADDITIONAL SAND OR CRUSHED STONE FOR TRENCH STABILIZATION  
NOT TO SCALE

DETAILS OF INTERCONNECTION AT STA. 13+35.5  
NOT TO SCALE

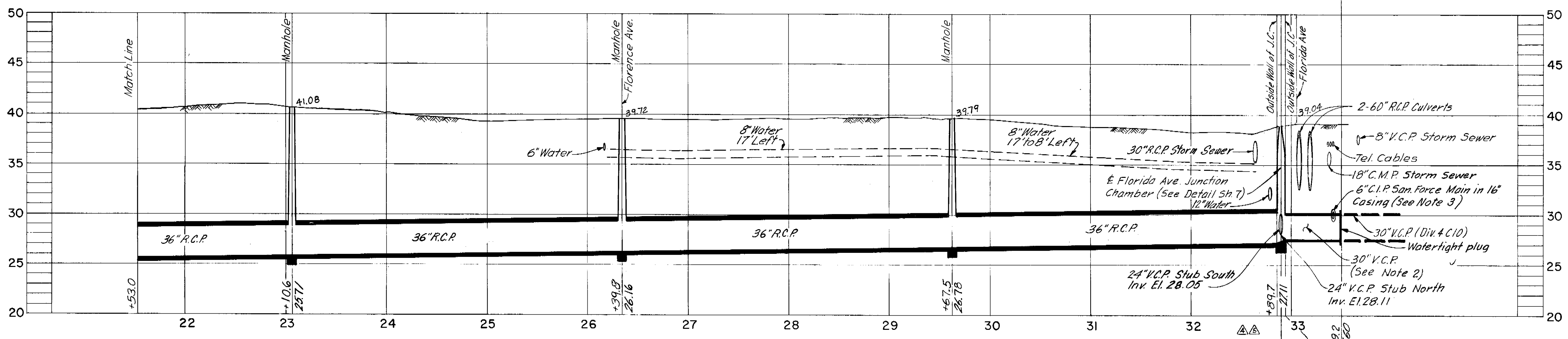
**AS BUILT**  
SEP 9/19/83

<b>GREELEY AND HANSEN ENGINEERS</b> 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED TLW	APPROVED	NO. DATE APP. REVISION 4/24/81 TLW Add Interconnection Details 4/21/81 TLW Removed M.H. Frame & Cover Detail 4/21/81 TLW Add Class B-1 Bedding, Delete Class D 3/6/78 TLW Rev. Entire Sheet	SCALE 0 2 FT 1" = 1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM 131 ST AVENUE TRUNK SEWER	DIVISION 4C10 MISCELLANEOUS DETAILS	PROJ. NO. S 202-70-30D 4C10 SHEET 8 OF 8 DATE SEPT. 1973 REV. 4
	DRAWN AA	DATE					
CHECKED TLW	SUPT., DEPT. OF SANITARY SEWERS	GREELEY AND HANSEN, ENGINEERS					



PLAN

Existing Pavement: Double Bituminous Surface Treatment on Mixed in Place Base with Extended Sides of Bituminous Surface Treatment on 6" Limerock Base

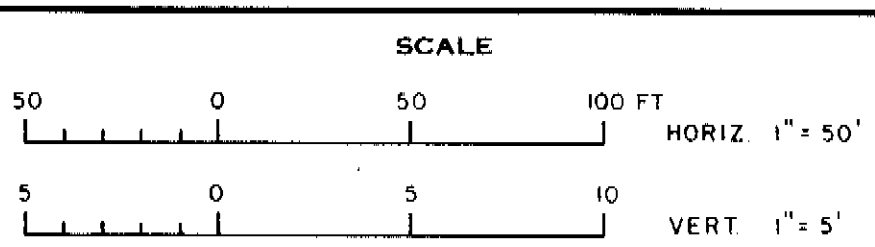


PROFILE

- NOTES:
- House laterals to south side of 131st Ave. shall pass under existing 8" water main with 18 inches minimum clearance.
  - Contractor shall construct 60 feet of 30" V.C.P. San. Sewer at 0.14'/100', and install an approved watertight plug at west end.
  - Contractor shall relocate the force main as directed by the Engineer to avoid conflict with new 30" V.C.P. Sewer

**AS BUILT**

COMPILED BY PHOTOGRAMMETRIC METHODS BY <b>ABRAMS AERIAL SURVEY CORPORATION</b> LANSING, MICHIGAN DATE OF PHOTOGRAPHY OCTOBER 1970      DATE OF MAPPING FEBRUARY 1971		REFERENCE POINT THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASIC TIES DURING CONSTRUCTION.	10/82 CS/VA AS-BUILT PER SURVEY INFO 12/79 TLW Rev. Vert. Alignment 1-24-79 TLW Add Notes 2 & 3 1-22-79 TLW Rev. Junction Chamber Location 8-29-78 TLW Rev. Junction Chamber Elev. 8-29-78 TLW Rev. Horiz. Align. Sta. 29+62 to 32+15 1-10-77 TLW Add Note 1 1-10-77 TLW Rev. Horiz. Align. Entire Sheet
<b>GREELEY AND HANSEN ENGINEERS</b> 14 E. JACKSON BOULEVARD CHICAGO, ILLINOIS 60604	DESIGNED JRS, TLW, RAK DRAWN J.R.S. CHECKED T.L.W.	APPROVED _____ DATE _____ SUPT., DEPT. OF SANITARY SEWERS DATE _____ GREELEY AND HANSEN, ENGINEERS	NO.    DATE    APP.    REVISION

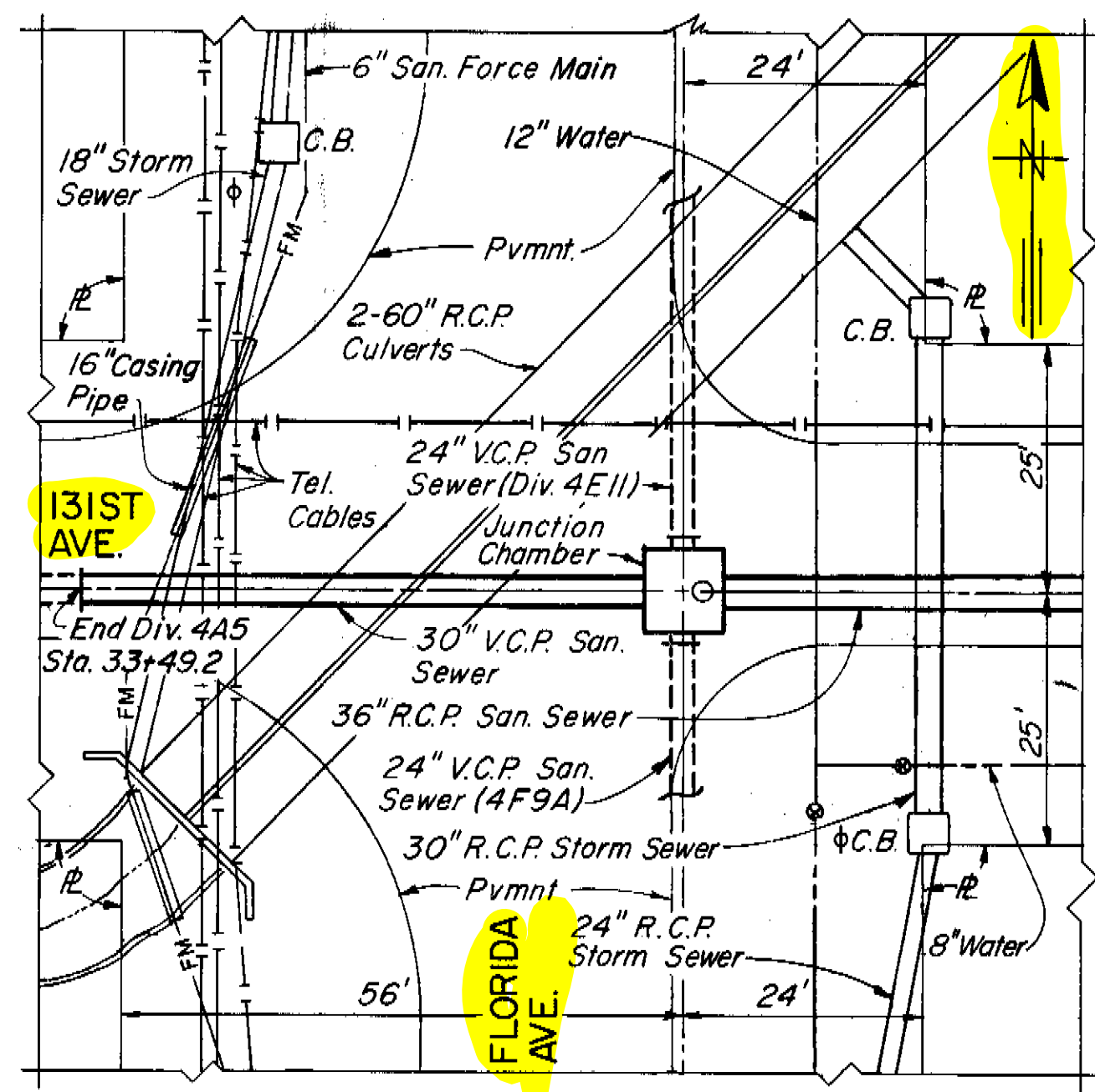


CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
**131ST AVE. INTERCEPTING SEWER (WEST)**

DIVISION 4A5  
**PLAN AND PROFILE**  
 STA. 21+53 TO STA. 33+49.2

PROJ. NO. S202-70-30D 4A5
SHEET 5 OF 10
DATE SEPT. 1972    REV. 7

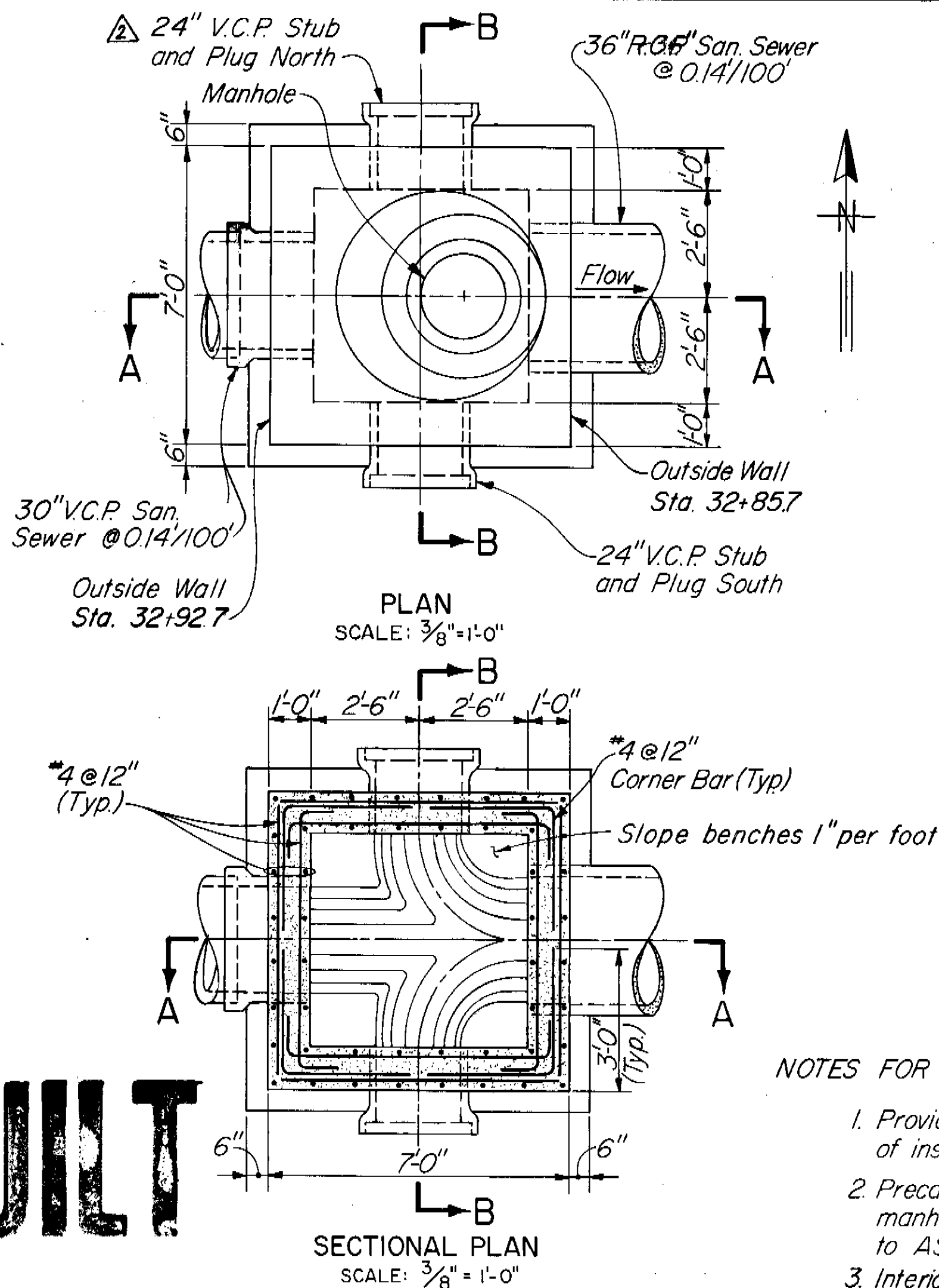
171-006



△ SITE PLAN  
SCALE: 1/16" = 1'-0"

**AS BUILT**

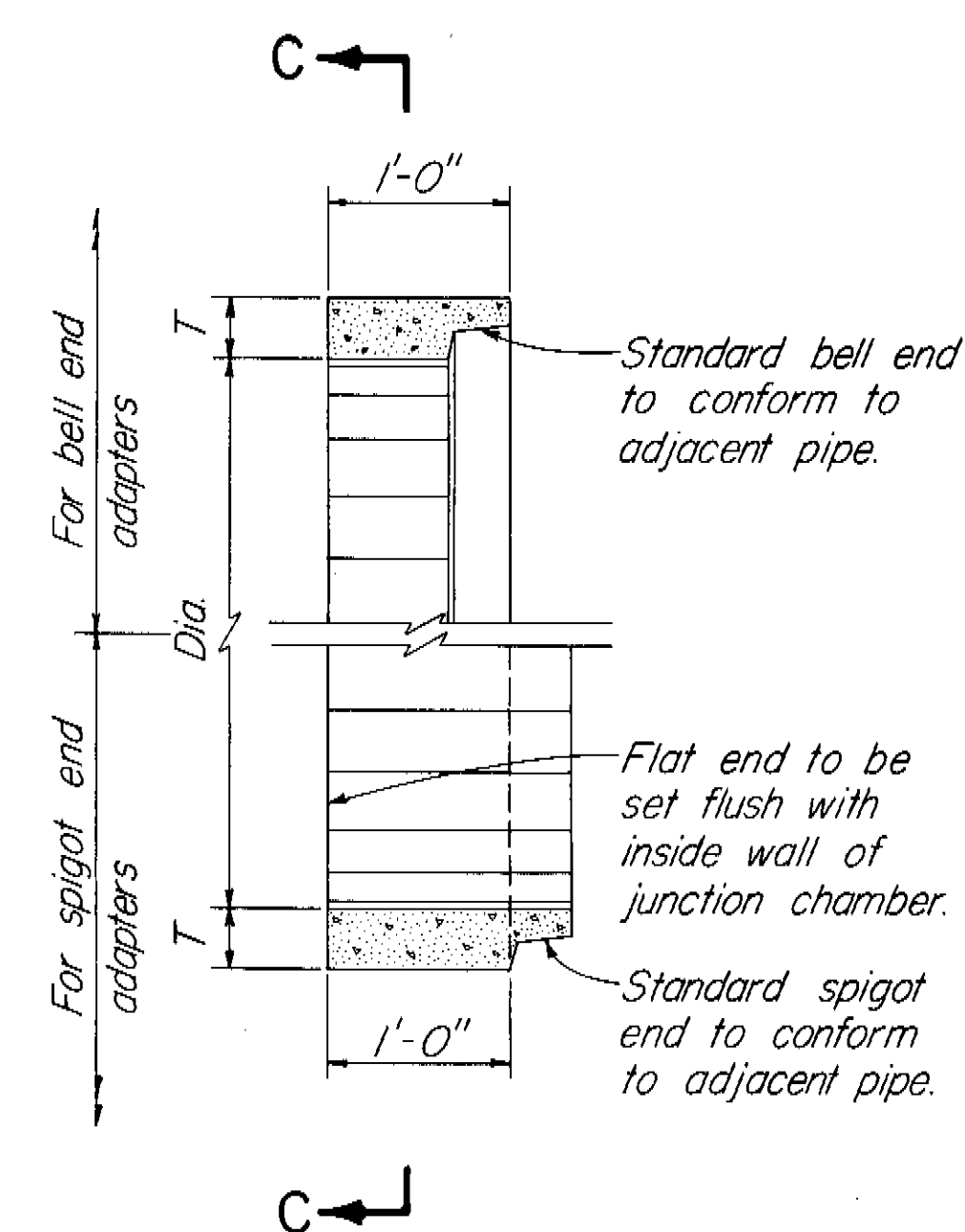
CS/WA 10/82



PLAN SCALE: 3/8" = 1'-0"  
SECTIONAL PLAN SCALE: 3/8" = 1'-0"

NOTES FOR JUNCTION CHAMBER:

1. Provide 1'-0" hook at ends of inside face reinforcing.
2. Precast concrete eccentric manhole cone shall conform to ASTM Des: C 478.
3. Interior surfaces of Junction Chamber shall be lined with plastic sheet lining as shown in detail on this sheet.
4. Install approved, continuous, 4-inch wide, flat, ribbed, center-bulb type P.V.C. waterstops in all construction joints. Waterstops shall not be less than 1/8-inch thick at the narrowest point and not less than 3/8-inch thick immediately adjacent to the bulb.

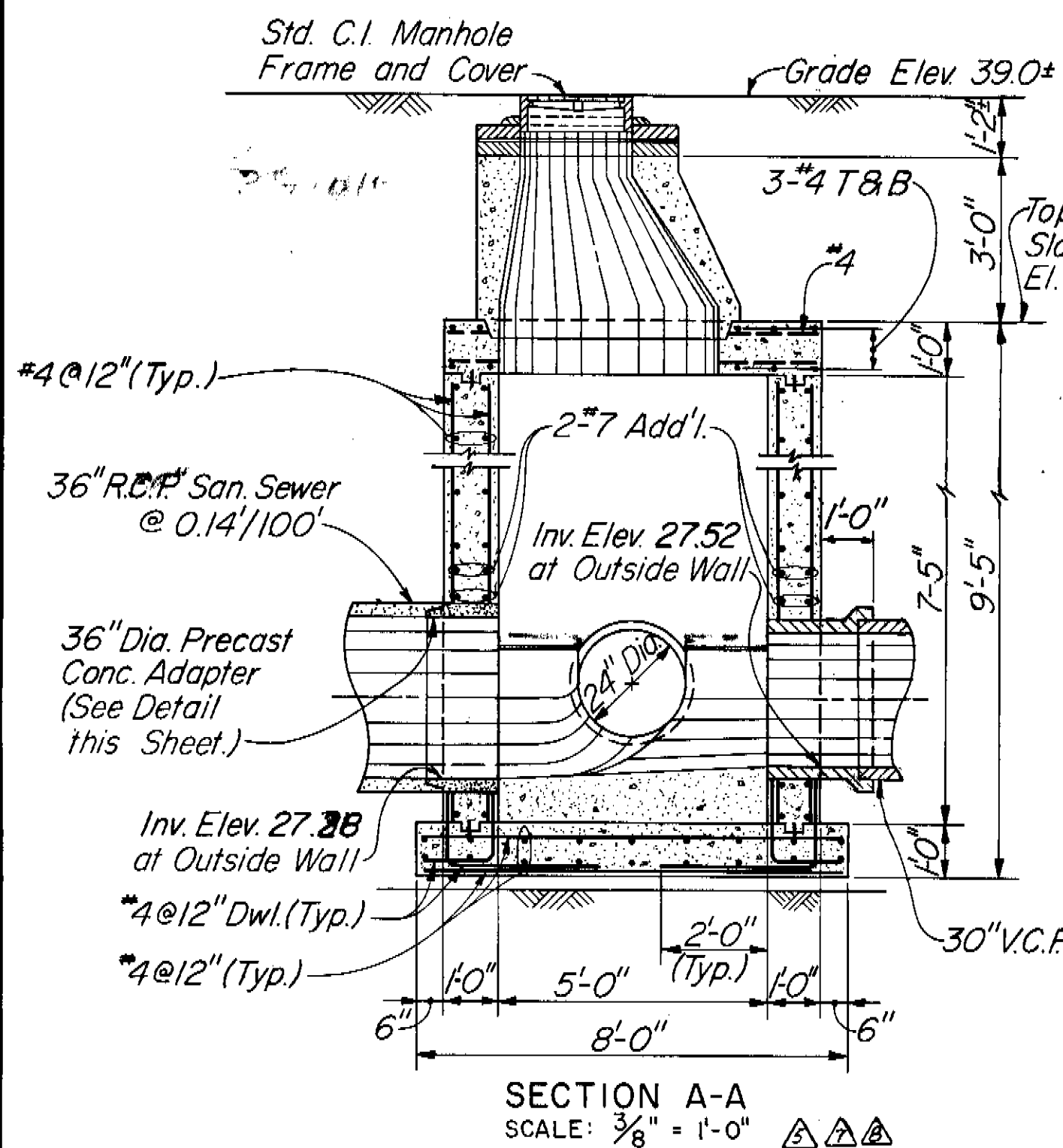
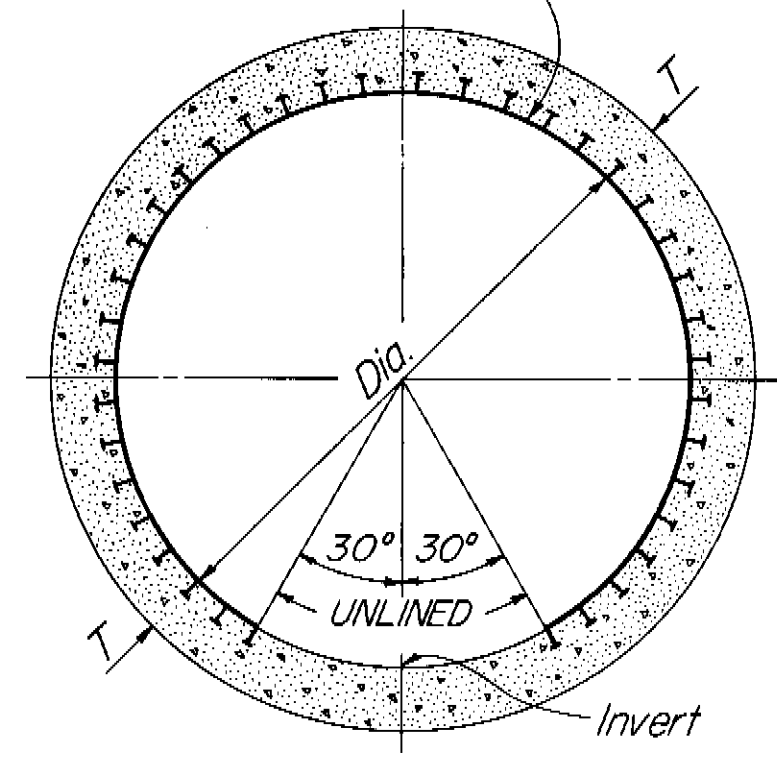


SECTION C-C  
PRECAST CONCRETE ADAPTERS

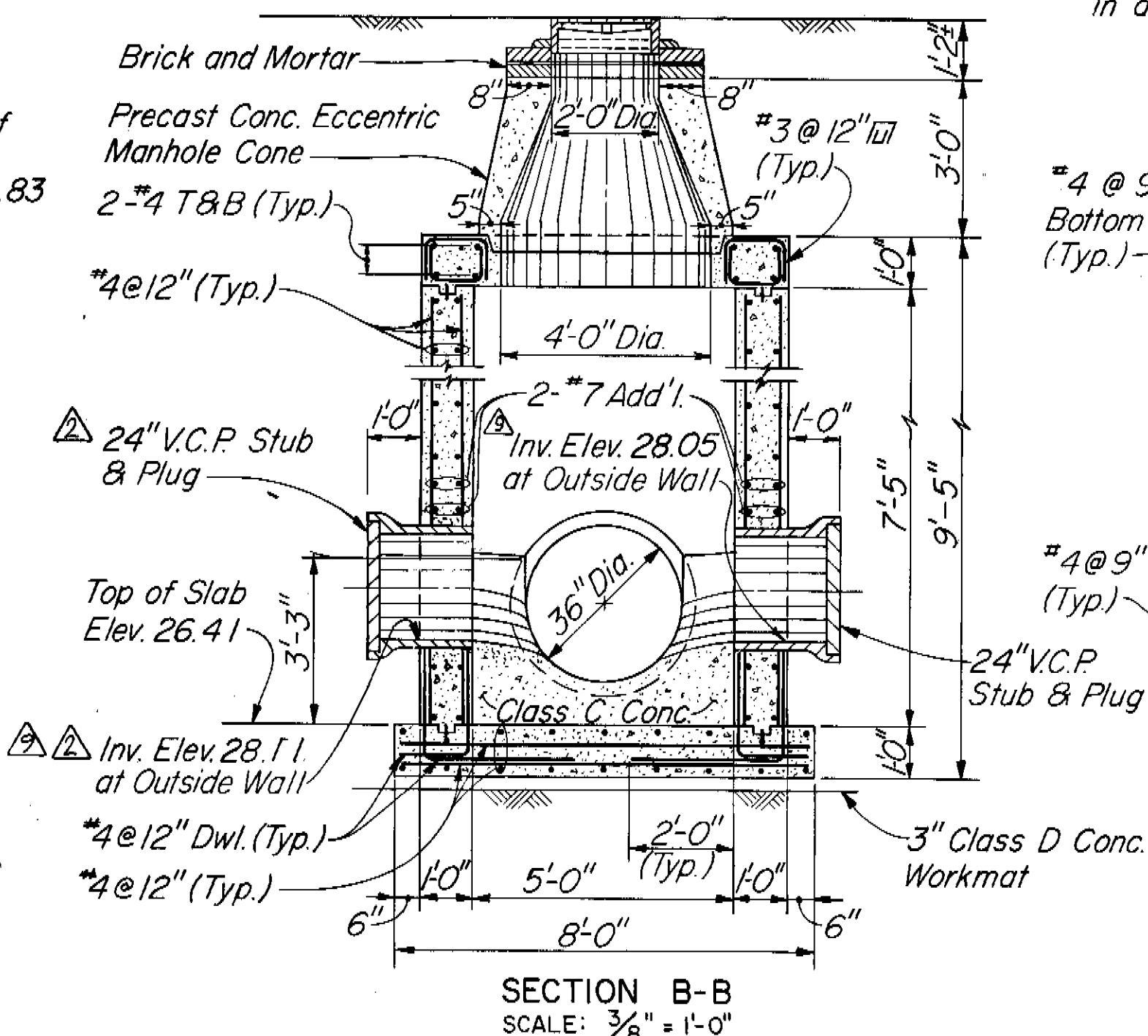
NOTES FOR ADAPTERS:

1. Precast concrete adapters shall conform to A.S.T.M. Des. C 76, Class IV.
2. Adapter wall thickness "T" shall be the same as the adjacent reinforced concrete pipe sewer wall thickness.

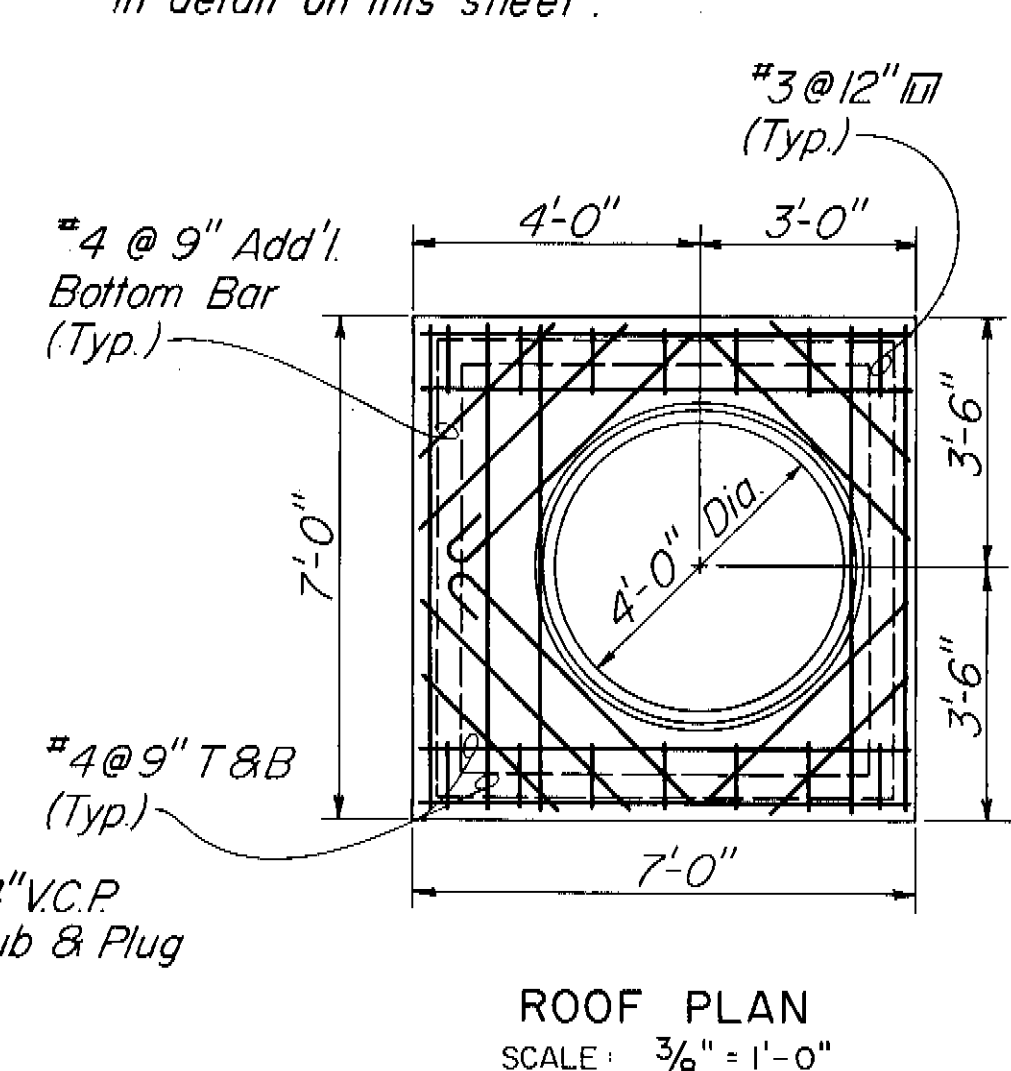
Plastic sheet lining shall cover inside adapter walls over an arc of 300 degrees. Lining connections to adjacent pipe and inside junction chamber wall shall conform to the recommendations of the lining manufacturer.



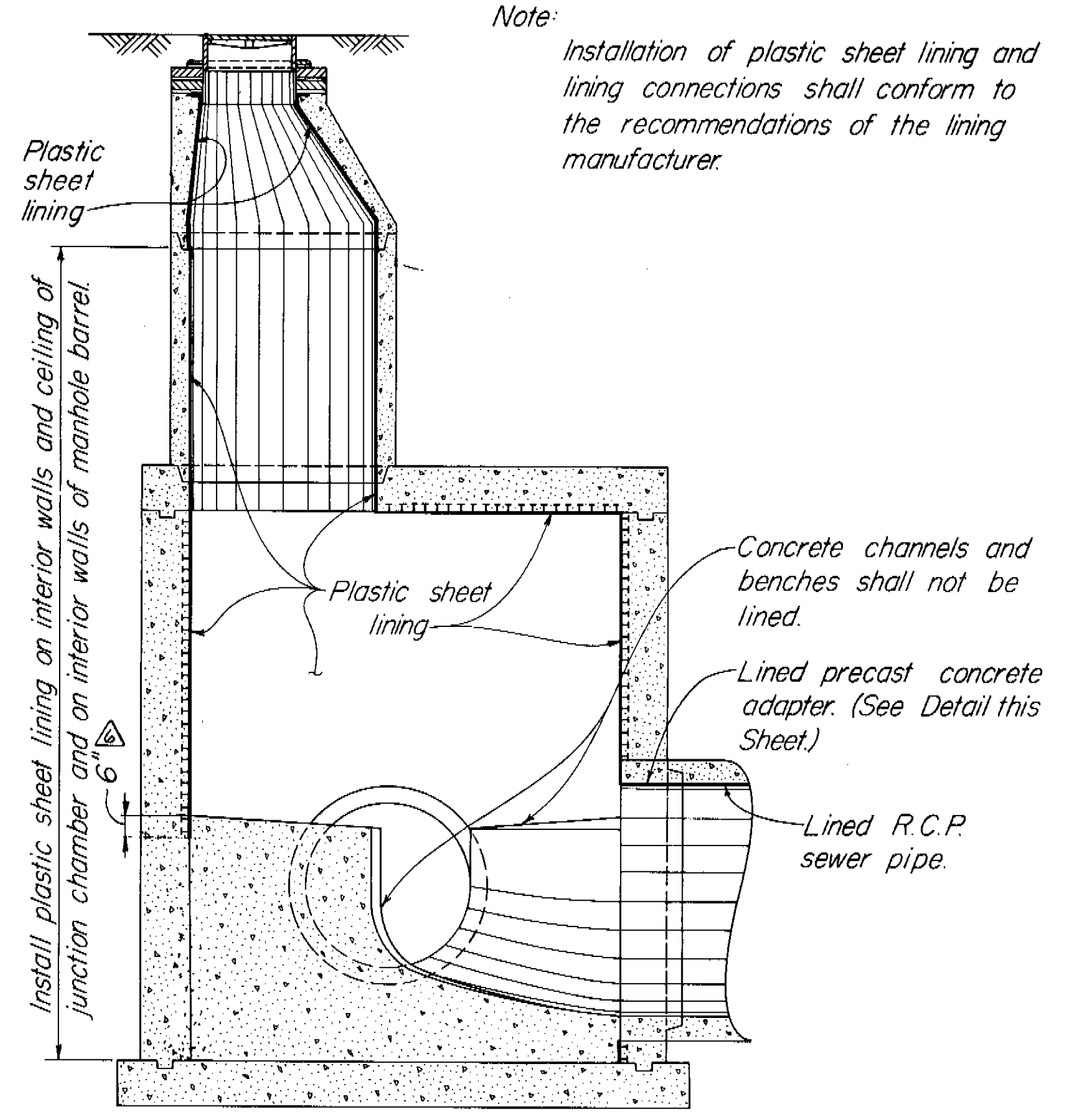
SECTION A-A SCALE: 3/8" = 1'-0"



SECTION B-B SCALE: 3/8" = 1'-0"

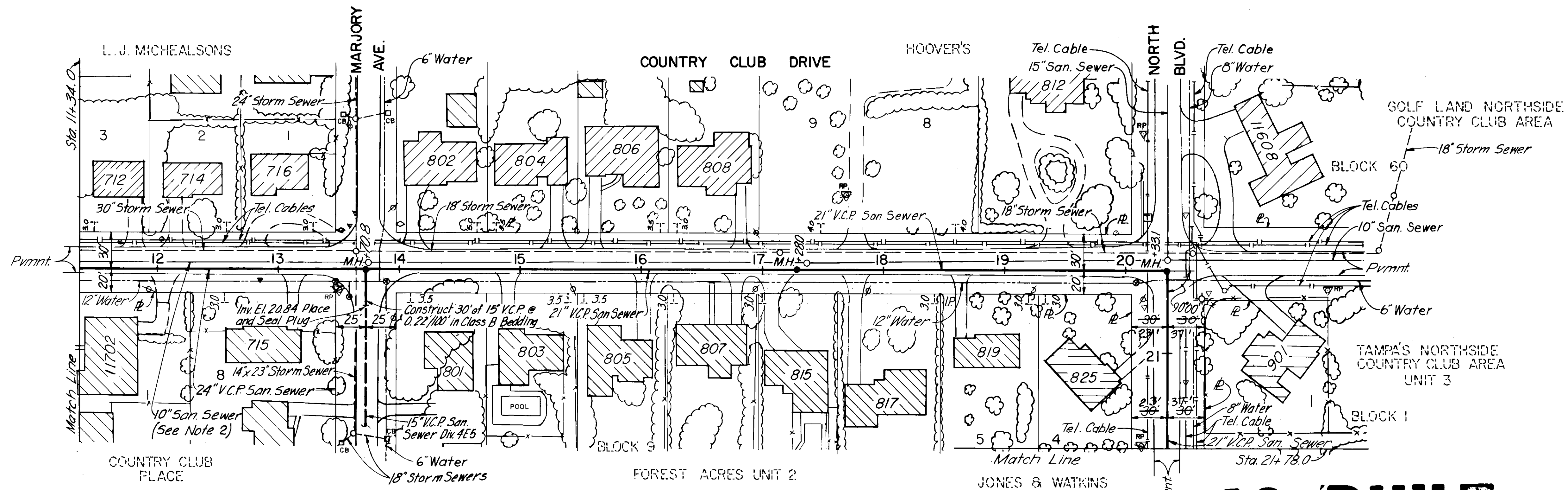


ROOF PLAN SCALE: 3/8" = 1'-0"



TYPICAL PLASTIC SHEET LINER APPLICATION FOR 131ST AVE. JUNCTION CHAMBER NOT TO SCALE

<b>GREELEY AND HANSEN ENGINEERS</b> 222 S. RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606	DESIGNED S.M.K., T.L.W. DRAWN K.E.F., J.R.S. CHECKED T.L.W.	APPROVED _____ DATE _____ SUPT., DEPT. OF SANITARY SEWERS GREELEY AND HANSEN ENGINEERS	3-16-78 T.L.W. Add Note 4 1-19-78 T.L.W. Rev. Plastic Sheet Lining Detail 10-12-78 T.L.W. Rev. North Stub Size and Elev. 5/21/76 T.L.W. Omit Table 4 Add Note 2	16 0 16 32 FT. 1/16" = 1'-0" 0 2 3 4 5 6 7 FT 3/8" = 1'-0"	CITY OF TAMPA, FLORIDA SEWAGE DISPOSAL SYSTEM 131ST AVE. INTERCEPTING SEWER (WEST)	DIVISION 4A5 FLORIDA AVE. JUNCTION CHAMBER DETAILS MISCELLANEOUS JUNCTION CHAMBER DETAILS	PROJ. NO. S202-70-30D 4A5 SHEET 7 OF 10 DATE SEPT. 1972 REV. 8
	FLORIDA AVE. JUNCTION CHAMBER			3-29-78 T.L.W. Relocate J.C. & Rev. Elevs. 4-30-79 T.L.W. Reverse N&S Stub Elevs. 8-29-78 T.L.W. Rev. Dim. In Liner App. Detail 3-12-79 T.L.W. Rev. Elevs. 1-22-79 T.L.W. Relocate J.C. & Rev. Elevs.	TYPICAL PLASTIC SHEET LINER APPLICATION FOR 131ST AVE. JUNCTION CHAMBER NOT TO SCALE		

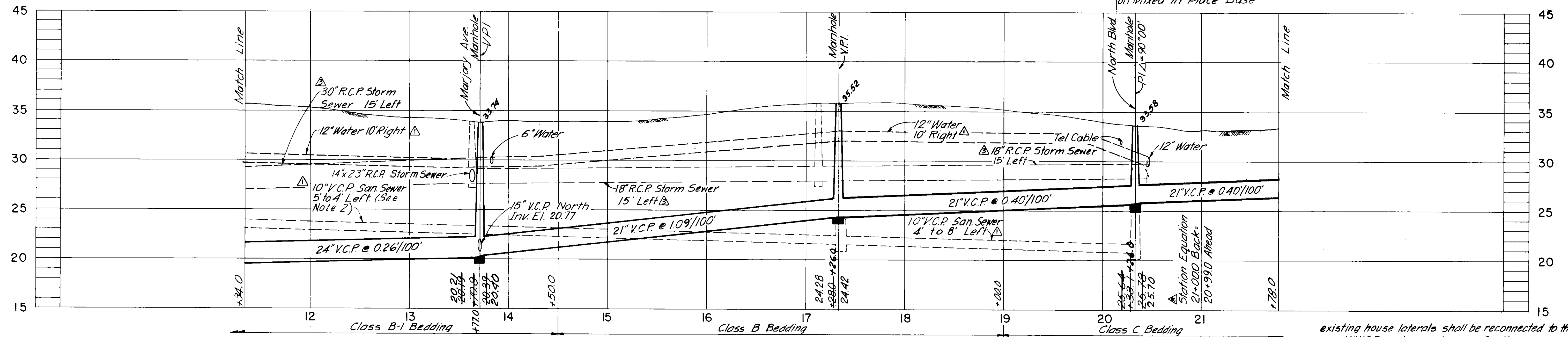


**AS BUILT**  
 Cl. 3-8-89

PLAN

Existing Pavement: Asphaltic Concrete On Double Bituminous Surface Treatment on Mixed In Place Base

Existing Pavement: Double Bituminous Surface Treatment on Mixed in Place Base



PROFILE

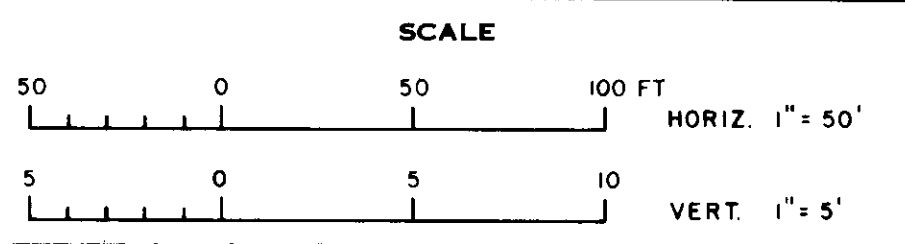
NOTES:

- All residences from Sta. 11+34 to Sta. 21+78 are served by existing sanitary sewer in Country Club Drive.
- Contractor shall remove existing 10" V.C.P. sanitary sewer from Sta. 11+34 to Sta. 17+28<sup>±</sup>, including manhole at Sta. 13+74<sup>±</sup> but not including manhole at Sta. 17+28<sup>±</sup>, to permit construction of the new 24" and 21" V.C.P. sanitary sewer. Contractor shall replace the 10" V.C.P. sanitary sewer with new materials of the original locations and elevations. Existing tees shall be replaced with wyes. The existing manhole at Sta. 13+74<sup>±</sup> shall be reconstructed with new materials 5' west of the original location as directed by the Engineer. All existing house laterals shall be reconnected to the new 10" V.C.P. replacement sewer. Sanitary sewer service shall be maintained throughout construction by approved methods.
- Existing sanitary sewer and manholes from Sta. 17+28<sup>±</sup> to Sta. 20+33.1 shall be protected in place.

COMPILED BY PHOTOGRAMMETRIC METHODS BY  
**ABRAMS AERIAL SURVEY CORPORATION**  
 LANSING, MICHIGAN  
 DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING OCTOBER 1972

△ REFERENCE POINT  
 THESE SELECTED POINTS ARE PLOTTED WITH EXTREME CARE AND ARE RECOMMENDED AS BASICS DURING CONSTRUCTION.

NO.	DATE	APP.	REVISION
1	3/89	Elo.	As Built
2	5/4/83	TLW	Add Note 2 & 3
3	5/4/83	TLW	Add Station Equation
4	5/4/83	TLW	Rev. Vert. Align Sta. 11+34 to 17+28
5	5/4/83	TLW	Rev. Horiz. Align Sta. 11+34 to 20+33
6	5/4/83	TLW	Add Bedding Classes
7	5/4/83	TLW	Delete Std. Conc. Cradle
8	5-6-81	TLW	Add St. Sewer in Plan & Profile
9	9-3-74	TLW	Add Std. Conc. Cradle
10	7-3-74	TLW	Add Utilities in Profile



CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
**COUNTRY CLUB DR. TRUNK SEWER**

DIVISION 4C2  
**PLAN AND PROFILE**  
 STA. 11+34 TO STA. 21+78

PROJ. NO. S202-70-300 4C2  
 SHEET **4** OF 8  
 DATE MAY 1973 REV. 9

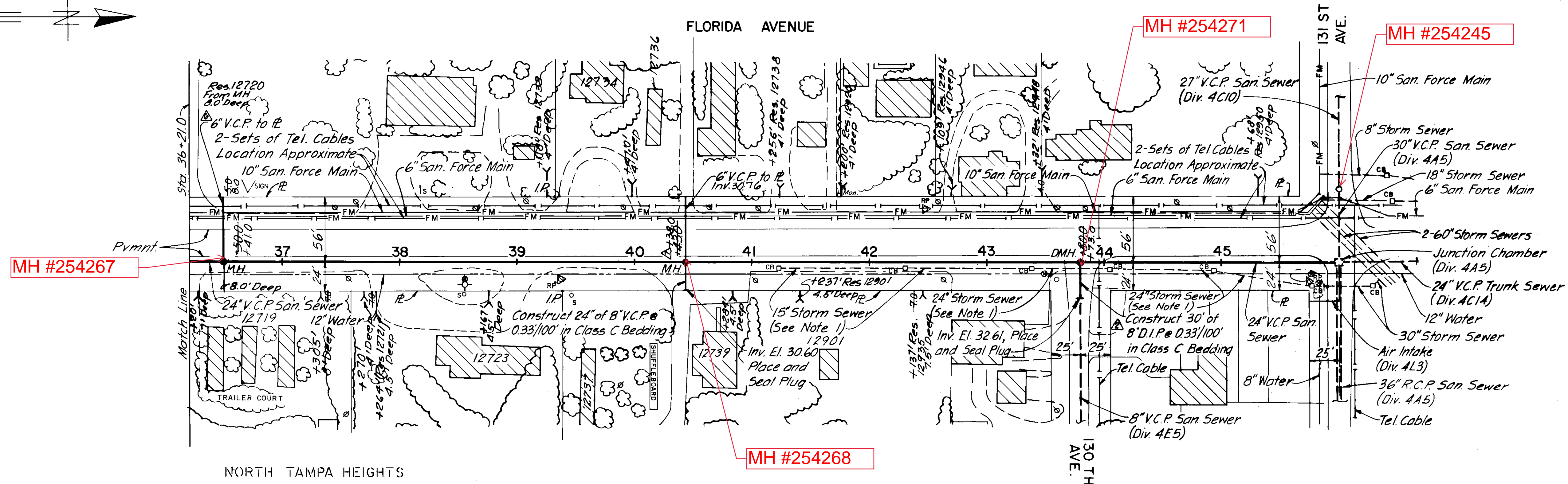
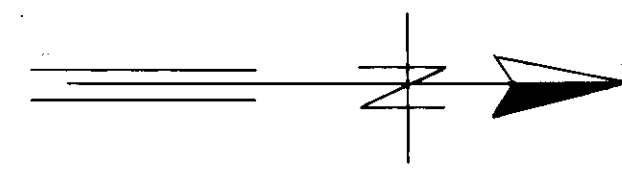
**GREELEY AND HANSEN ENGINEERS**  
 222 S. RIVERSIDE PLAZA  
 CHICAGO, ILLINOIS 60606

DESIGNED T.L.W., J.J.T.  
 DRAWN J.R.S., F.F.L.  
 CHECKED T.L.W.

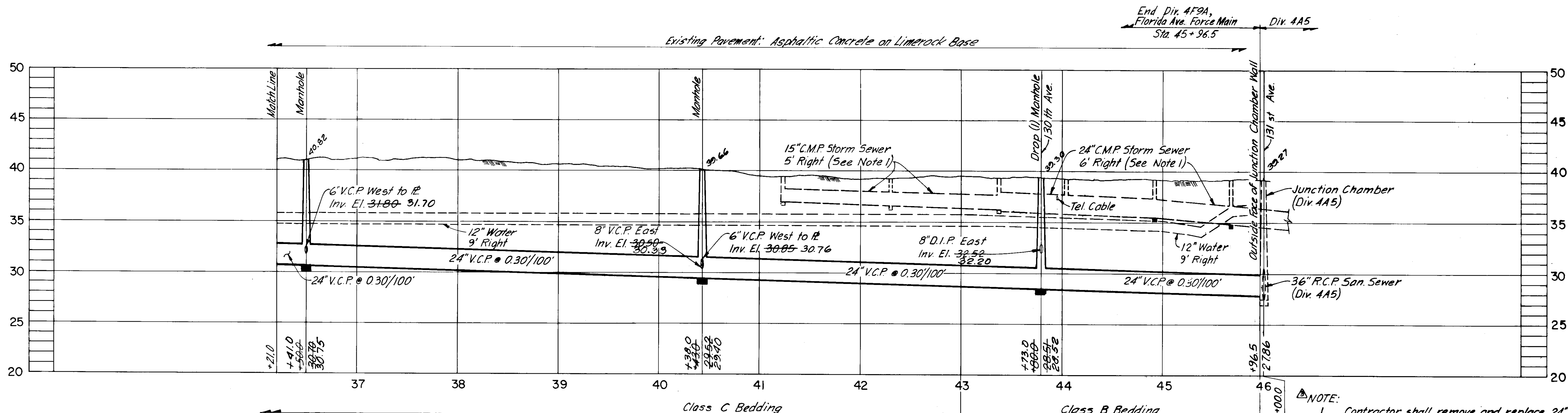
APPROVED \_\_\_\_\_  
 Supt., Dept. of Sanitary Sewers  
 GREELEY AND HANSEN, ENGINEERS

181-005





PLAN

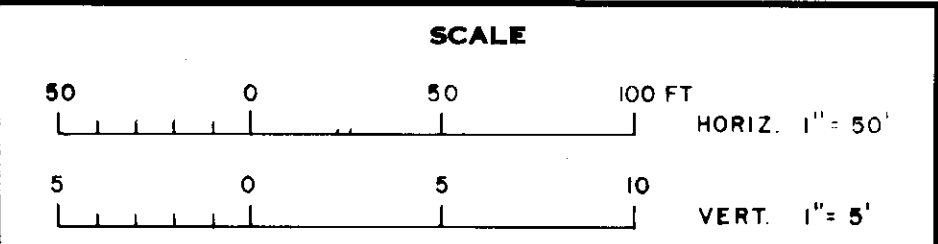


PROFILE

**AS BUILT**  
 Clr 3-8-87

NOTE:  
 Contractor shall remove and replace 24\"/>

NO.	DATE	APP.	REVISION
1	3/89	Elo	As Built.
2	7/25/83	TLW	Add House Connections
3	7/25/83	TLW	Move MH at Sta. 40+43
4	7/25/83	TLW	Add Stub at Sta. 36+50
5	5/6/83	TLW	Change Tees to Wyes
6	11/20/81	TLW	Add Stubs at Sta. 40+43
7	11/11/81	TLW	Add Note 1
8	10/9/81	TLW	Extend Stub at 130th Ave.
9	10/9/81	TLW	Rev. Vert. Align. Sta. 36+21 to 45+96.5



**GREELEY AND HANSEN ENGINEERS**  
 222 S. RIVERSIDE PLAZA  
 CHICAGO, ILLINOIS 60606

DESIGNED R.A.K., R.S.H.  
 DRAWN J.L.E., A.A.  
 CHECKED M.D.O., T.L.W.

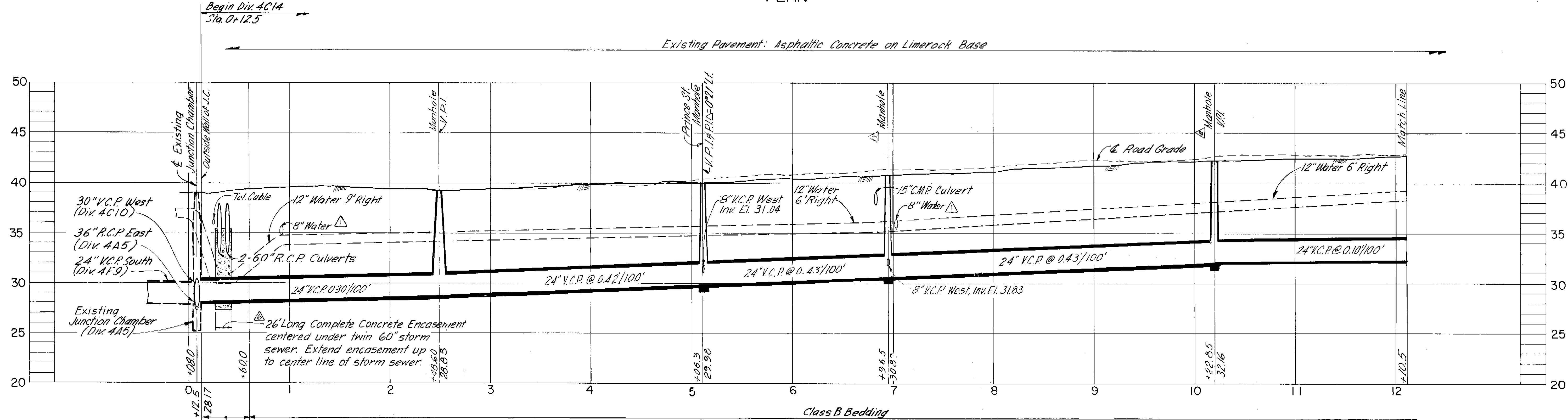
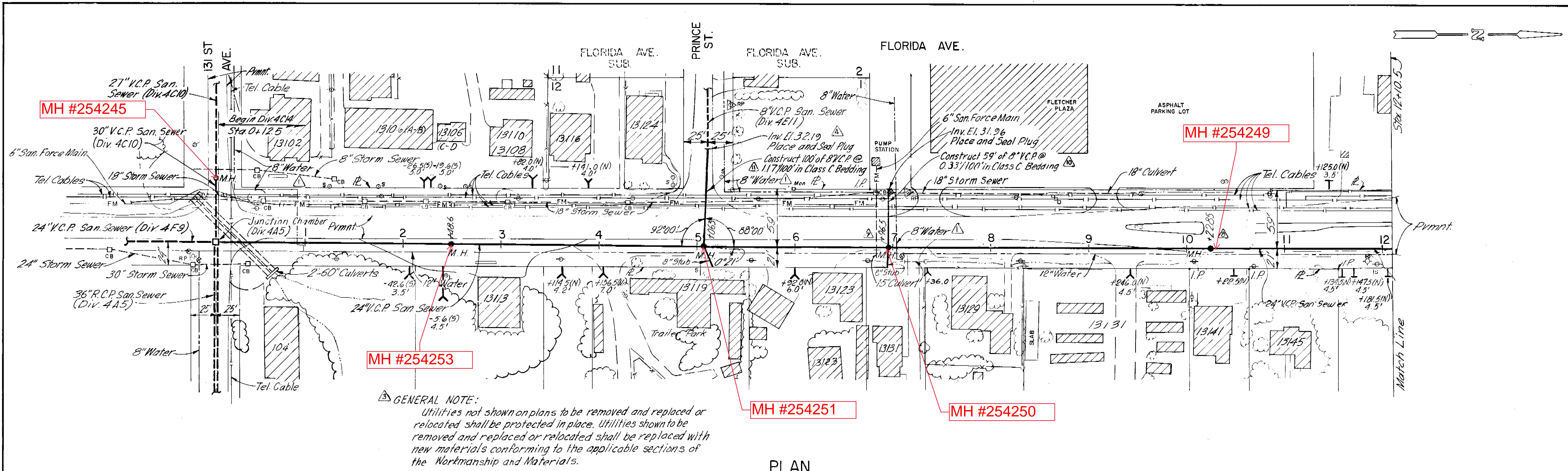
APPROVED  
 DATE  
 SUPT., DEPT. OF SANITARY SEWERS  
 DATE  
 GREELEY AND HANSEN, ENGINEERS

CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
 FORCE MAINS - E

DIVISION 4F9A  
 PLAN AND PROFILE  
 FLORIDA AVE. FORCE MAIN  
 STA. 36+21.0 TO STA. 45+96.5

PROJ. NO. S202-70-300 4F9A  
 SHEET 11 OF 15  
 DATE NOV. 1972 REV. 8

181-020



- NOTES:**
- Beginning of Division 4C14 is at outside face of junction chamber (Sta. 0+12.5). Contractor shall connect to stub in wall of chamber.
  - House laterals from Sta. 0+12.5 to Sta. 15+75± shall be Type A and shall pass under existing utilities. House laterals to the east side of Florida Ave. shall have 18" clearance below 12" water main.

COMPILED BY PHOTOGRAMMETRIC METHODS  
 BY  
**ABRAMS AERIAL SURVEY CORPORATION**  
 LANSING, MICHIGAN

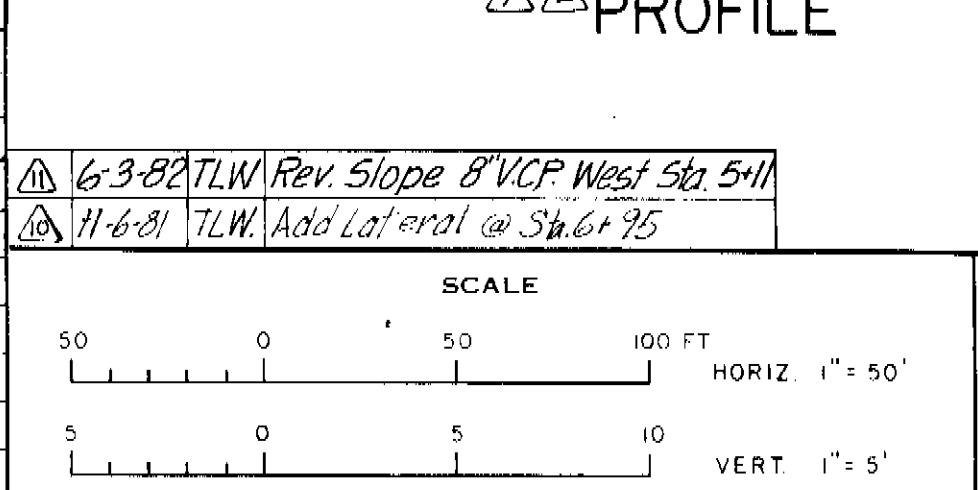
DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING JANUARY 1973

**GREELEY AND HANSEN ENGINEERS**  
 222 S. RIVERSIDE PLAZA  
 CHICAGO, ILLINOIS 60606

DESIGNED F.F.L., J.J.T.  
 DRAWN F.F.L.  
 CHECKED T.L.W.

APPROVED \_\_\_\_\_  
 DATE \_\_\_\_\_  
 SUPT., DEPT. OF SANITARY SEWERS  
 DATE \_\_\_\_\_  
 GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
5-84	E.R.		AS BUILT per white sheets.
11-6-81	TLW		Revise Vert. Align. Sta. 2+55.5 to 10+20
11-6-81	TLW		Move M.H. From Sta. 10+65 to 10+20
11-6-81	TLW		Move M.H. From Sta. 7+88 to 6+95
8-3-81	TLW		Add Encasement Sta. 0+30±
7-31-81	TLW		Revised Note 2
5-27-81	TLW		Extend Lateral
5-27-81	TLW		Add General Note
5-27-81	TLW		Revised Bedding Classes
5-27-81	TLW		Add Exist 8" Water Mains

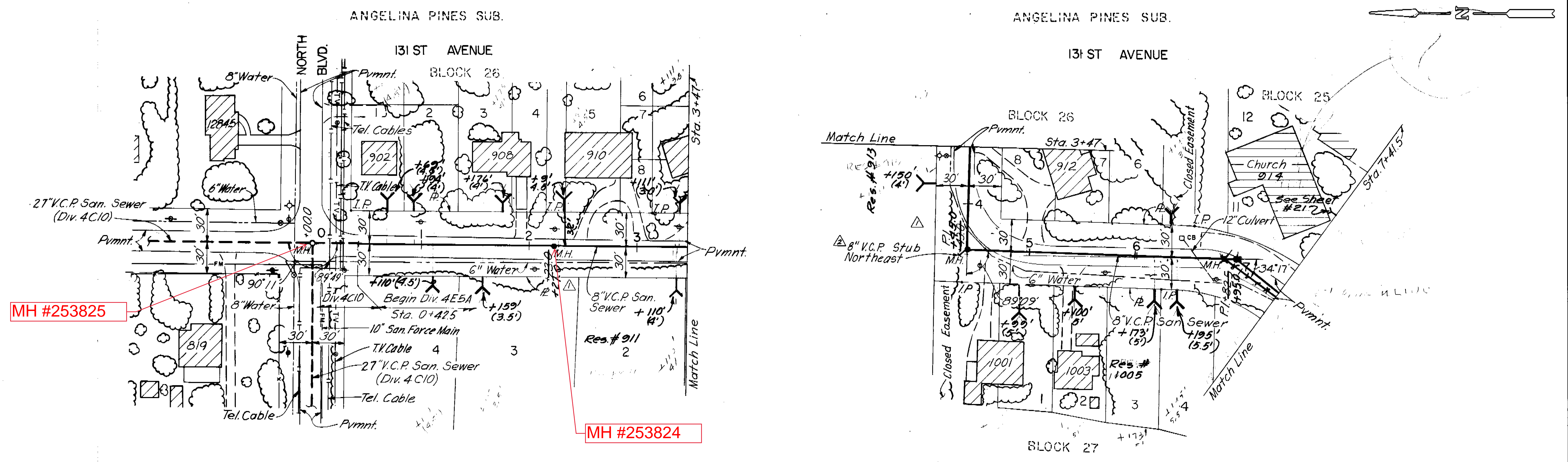


CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
**FLORIDA AVENUE TRUNK SEWER**

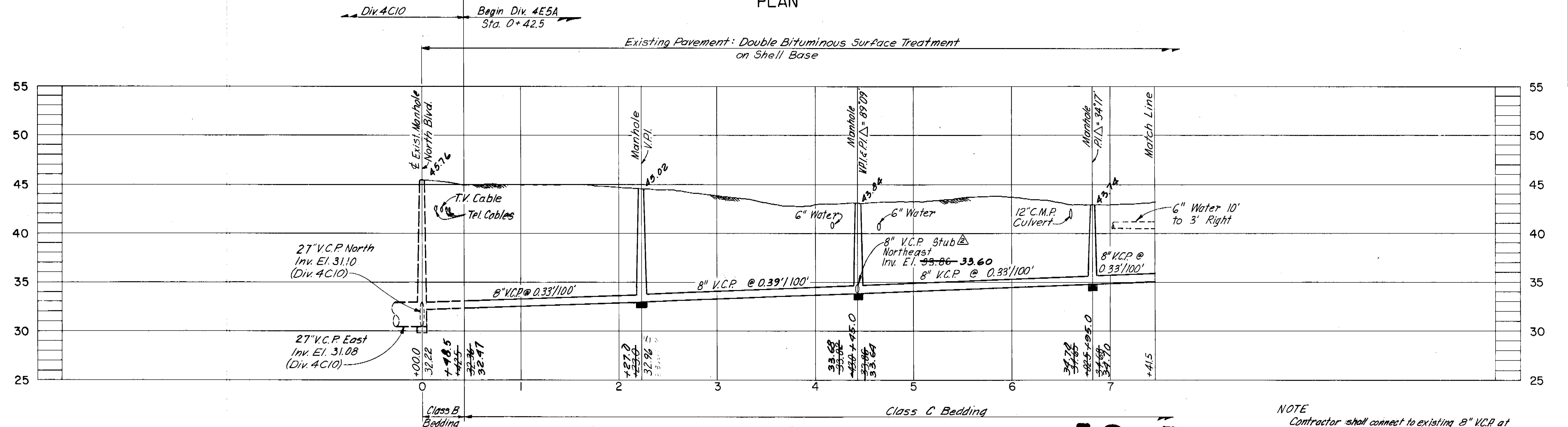
DIVISION 4C14  
**PLAN AND PROFILE**  
 FLORIDA AVENUE - STA. 0+2.5 TO STA. 12+10.5

PROJ. NO. 5202-70-300 4C14  
 SHEET **3** OF 10  
 DATE JULY 1973 REV. 11

**183-037 (184)**



PLAN



PROFILE

**AS BUILT**  
 Oct 9/10/91

NOTE  
 Contractor shall connect to existing 8" V.C.P. at Sta. 0+42.5. Contractor shall verify location and elevation of existing 8" V.C.P. prior to commencing construction.

COMPILED BY PHOTOGRAMMETRIC METHODS  
 BY  
**ABRAMS AERIAL SURVEY CORPORATION**  
 LANSING, MICHIGAN  
 DATE OF PHOTOGRAPHY OCTOBER 1970 DATE OF MAPPING JANUARY 1973

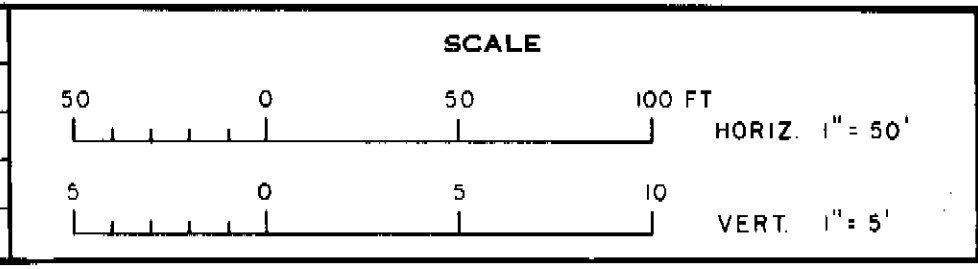
RP  
 REFERENCE POINT  
 THESE SELECTED POINTS ARE  
 PLOTTED WITH EXTREME CARE  
 AND ARE RECOMMENDED AS BASIC  
 TIES DURING CONSTRUCTION.

**GREELEY AND HANSEN ENGINEERS**  
 222 S. RIVERSIDE PLAZA  
 CHICAGO, ILLINOIS 60606

DESIGNED JRS, JJT  
 DRAWN JRS, JLE  
 CHECKED MDO, TLW

APPROVED \_\_\_\_\_  
 Supt., Dept. of Sanitary Sewers  
 DATE \_\_\_\_\_  
 GREELEY AND HANSEN, ENGINEERS

NO.	DATE	APP.	REVISION
11/20/84	TLW		Added 8" Stub
11/20/84	TLW		Removed House Connection

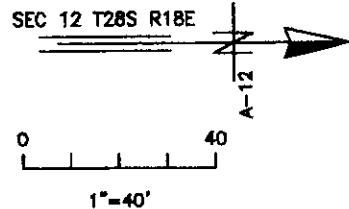


CITY OF TAMPA, FLORIDA  
 SEWAGE DISPOSAL SYSTEM  
**SEWER IMPROVEMENT AREA 34A-1**

DIVISION 4E5A  
**PLAN AND PROFILE**  
 131 ST AVE. - NORTH BLVD. TO STA. 7+41.5

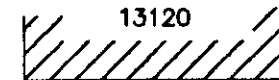
PROJ. NO. S202-70-300 4E5A  
 SHEET **18** OF 36  
 DATE JUNE, 1973 REV. 0

**191-018**



HOUSE LATERAL:  
 WEST SIDE PROPERTIES: CENTER 10 Ft OF  
 PVCPC C900 UNDER THE 8" WATER LINE.  
 EAST SIDE PROPERTIES: CENTER 10 Ft OF  
 PVCPC C900 OVER THE 36" WATER LINE.

NORTH TAMPA HEIGHTS

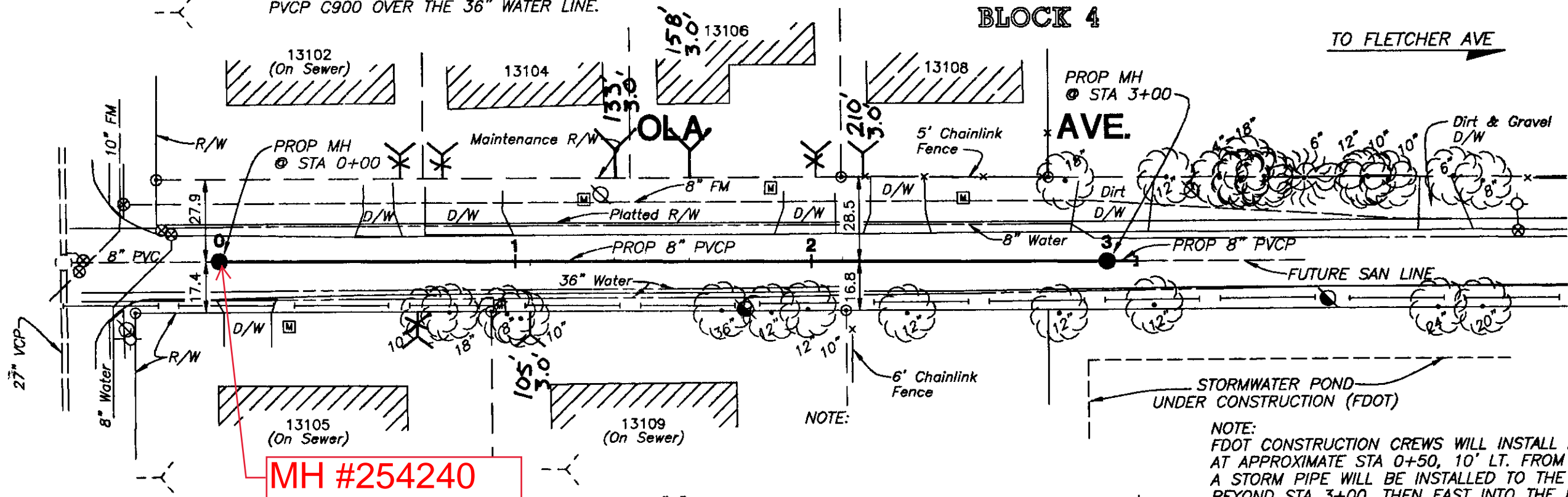


BLOCK 4

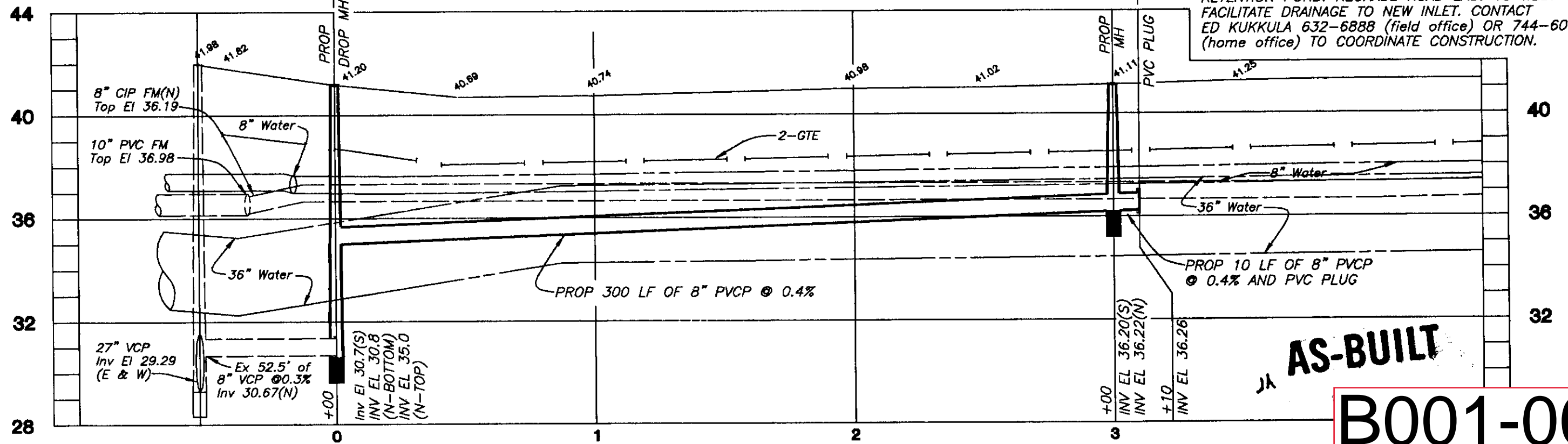
TO FLETCHER AVE

131ST AVE

PROP MH  
 @ STA 3+00  
**AVE.**



NOTE:  
 FDOT CONSTRUCTION CREWS WILL INSTALL AN INLET  
 AT APPROXIMATE STA 0+50, 10' LT. FROM THIS INLET,  
 A STORM PIPE WILL BE INSTALLED TO THE NORTH TO  
 BEYOND STA 3+00, THEN EAST INTO THE FDOT  
 RETENTION POND. REGRADE ROAD EAST TO WEST TO  
 FACILITATE DRAINAGE TO NEW INLET. CONTACT  
 ED KUKKULA 632-6888 (field office) OR 744-6052  
 (home office) TO COORDINATE CONSTRUCTION.



AS-BUILT

**B001-009**

STATION #6  
 c:\13\dwg\pipe\4723-ph1 (1=40)

*Henry Borzback*  
 HENRY BORZBACK, P.E. #39449  
 CHIEF ENGINEER  
 DEPARTMENT OF SANITARY SEWERS

*Ralph L. Metcalf II*  
 RALPH L. METCALF II, P.E.  
 DIRECTOR  
 DEPARTMENT OF SANITARY SEWERS

DES:	No.	DATE	REVISIONS
JT/RD	1		
DRN: BK	2		
CKD: [initials]	3		
DATE: 3/14/00			

**CITY of TAMPA**  
 DEPARTMENT OF SANITARY SEWERS

OLA AVE: FROM 131ST AVE TO 300' NORTH

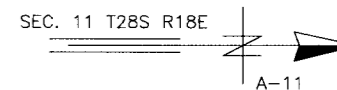
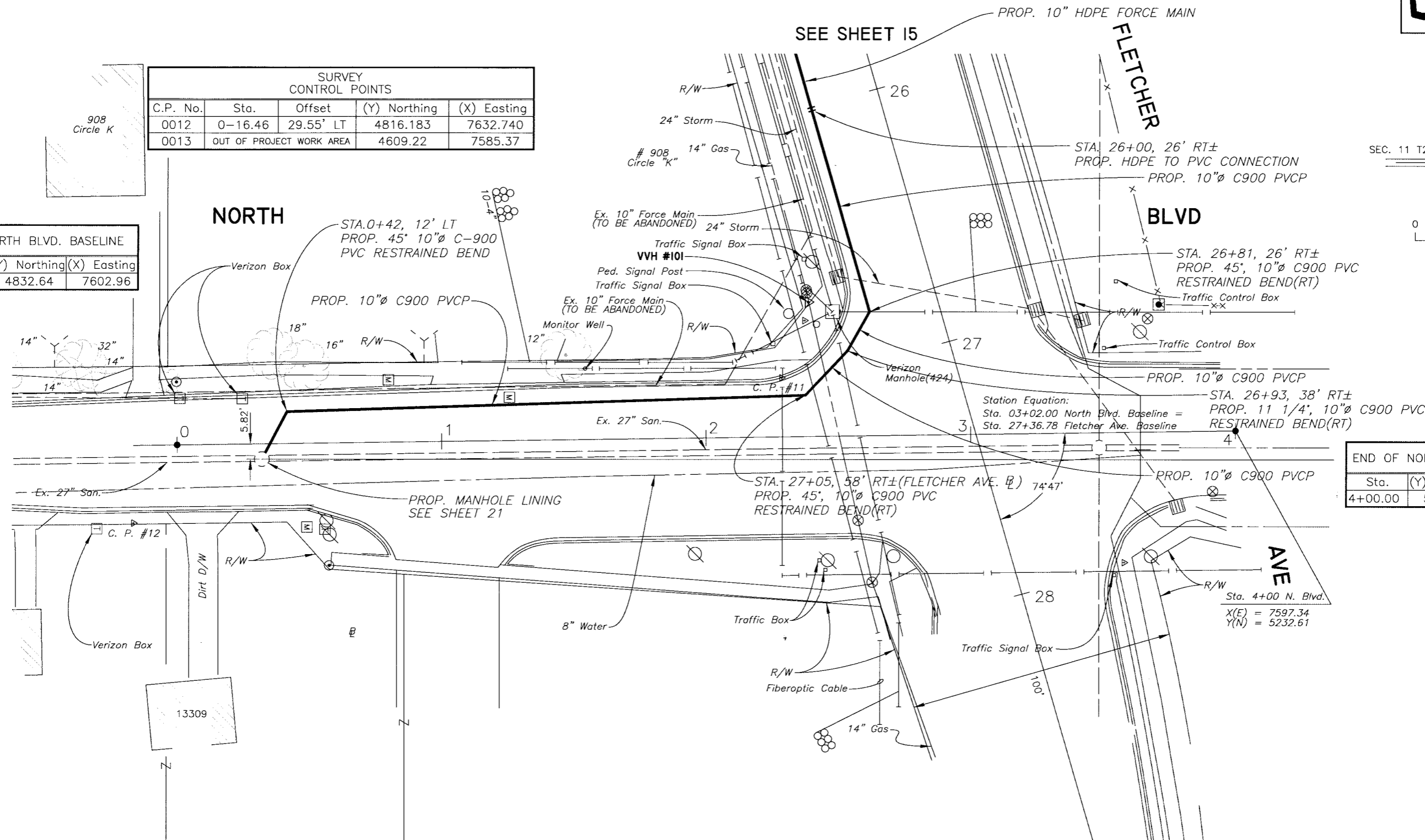
W.O. 4723  
 SHEET  
**1**  
 of 1

31-9

# B062-081

SURVEY CONTROL POINTS				
C.P. No.	Sta.	Offset	(Y) Northing	(X) Easting
0012	0+16.46	29.55' LT	4816.183	7632.740
0013	OUT OF PROJECT WORK AREA		4609.22	7585.37

BEGIN NORTH BLVD. BASELINE		
Sta.	(Y) Northing	(X) Easting
0+00.00	4832.64	7602.96



END OF NORTH BLVD. BASELINE		
Sta.	(Y) Northing	(X) Easting
4+00.00	5232.61	7597.34

**NOTE:**

IN ORDER TO ABANDON AND GROUT-FILL THE EXISTING 10" FORCE MAIN, IN THE VICINITY OF THE SOUTHWEST CORNER OF THE FLETCHER AVE. AND NORTH BLVD. INTERSECTION, AS FAR AWAY FROM VEHICULAR TRAFFIC AS PRACTICAL, EXPOSE THE 10" DIP FORCE MAIN. CUT THE FORCE MAIN AND INSTALL A RESTRAINED 10" DIP CAP ON THE DOWNSTREAM END. CONNECT THE APPROPRIATE GROUT PUMPING APPARATUS TO THE UPSTREAM END.

1=40  
C:\PROGRAMFILES\LANDDESKTOP2004\DWG\PIPE\FLETCHER-FM\SHEETS4-17.DWG

JACINTO CARLOS FERRAS, P.E. #49454  
DESIGN DIVISION HEAD  
WASTEWATER DEPARTMENT

No.	DATE	REVISIONS
3		
2		
1		

DES: J.P.W.  
DRN: BB  
CKD: JF  
DATE: 6/20/08

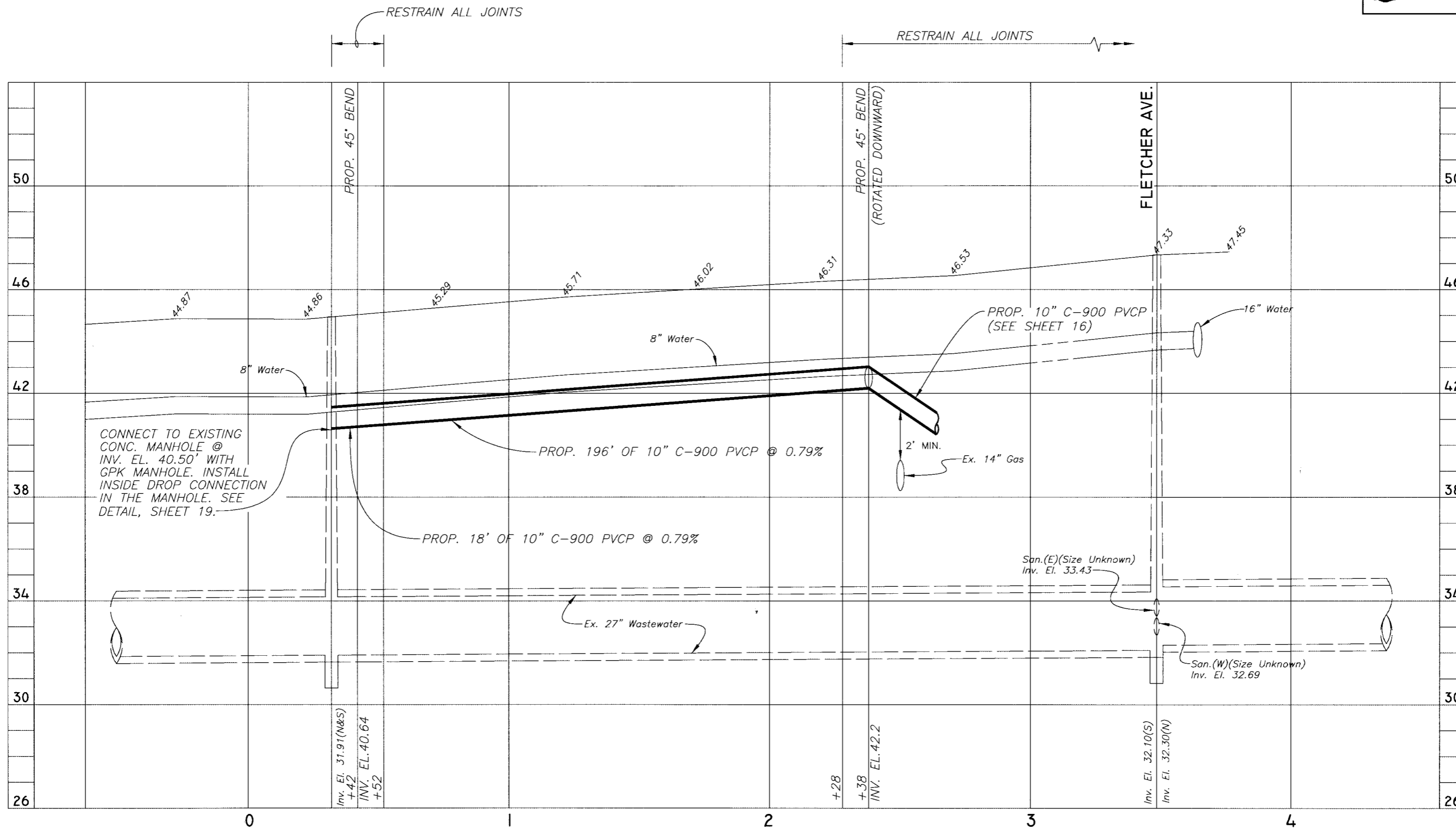
**CITY of TAMPA**  
WASTEWATER DEPARTMENT

**FLETCHER AVENUE FORCE MAIN  
REPLACEMENT  
PLAN SHEET**

W.O. 5345  
SHEET  
**17**  
OF 21

1=40

C:\PROGRAMFILES\LANDDESKTOP2004\DWG\PIPE\FLETCHER-FM\PLAN-PROFILE.DWG



SCALE:  
1"=40' HORIZ.  
1"=4' VERT.

JACINTO CARLOS FERRAS, P.E. #49454  
DESIGN DIVISION HEAD  
WASTEWATER DEPARTMENT

No.	DATE	REVISIONS
3		
2		
1		

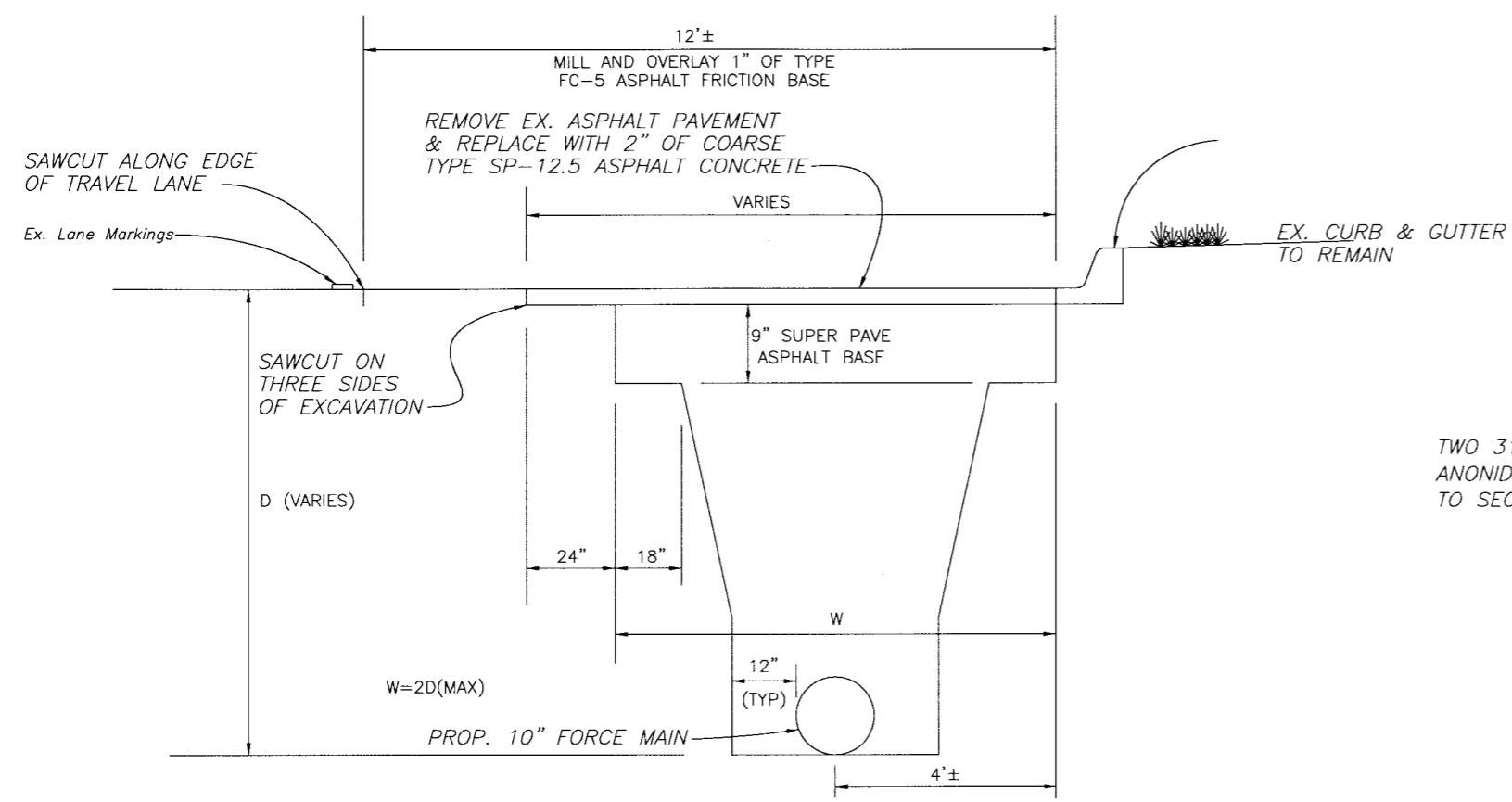
DES: J.P.W.  
DRN: BB  
CKD: JF  
DATE: 6/20/08

CITY of TAMPA  
WASTEWATER DEPARTMENT

FLETCHER AVENUE FORCE MAIN  
REPLACEMENT  
PROFILE SHEET

W.O. 5345  
SHEET  
18  
OF 21

**B062-084**

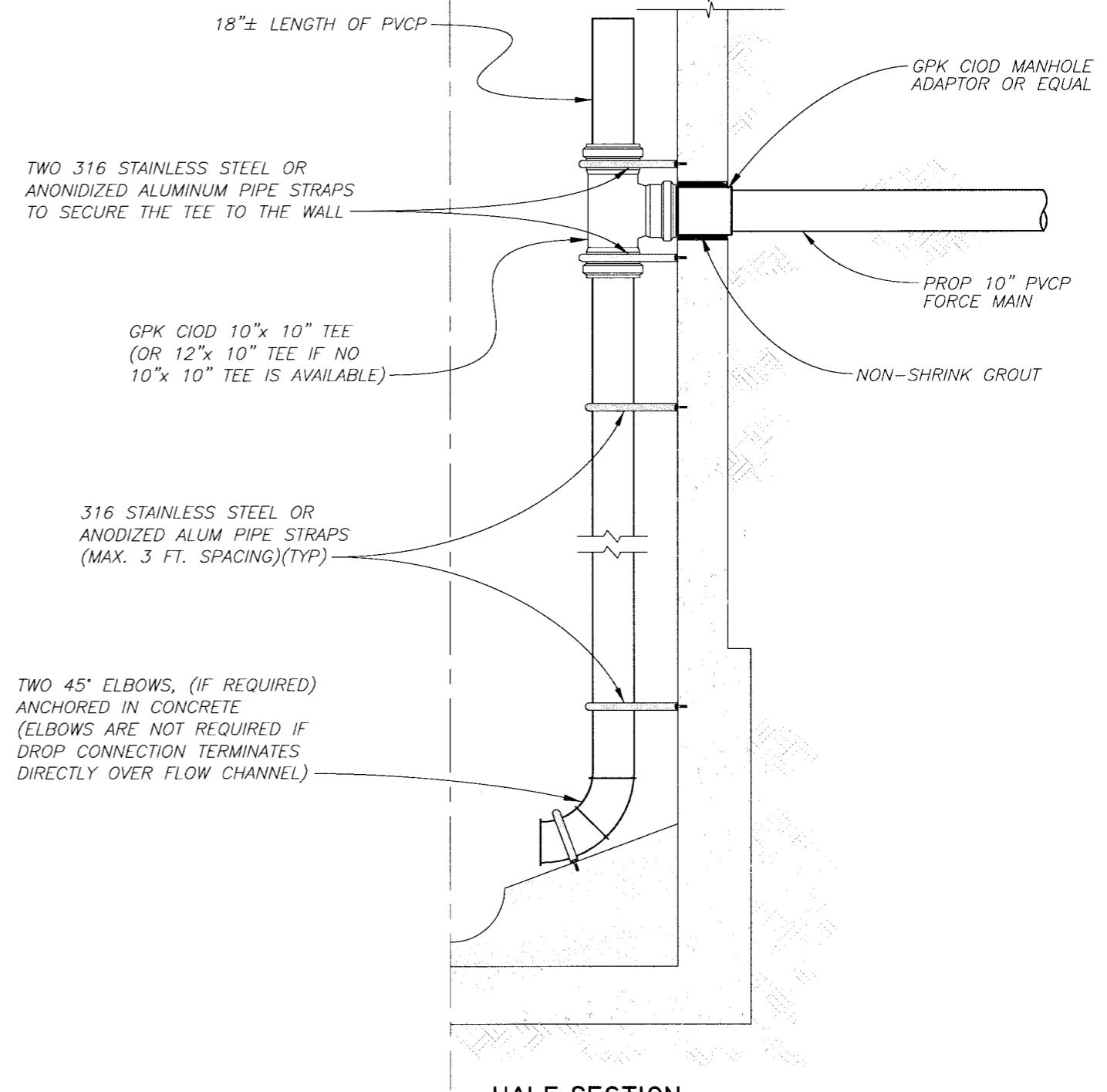


**PAVEMENT RESTORATION DETAIL**

NOT TO SCALE

**NOTES:**

1. BACKFILL AND BASE REPLACEMENT ARE ONLY TO OCCUR AT LOCATIONS OF OPEN TRENCH EXCAVATION.
2. BACKFILL AND SUB-GRADE SHALL BE INSTALLED IN 12-INCH LIFTS AND COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180-57. FLOWABLE FILL (IN ACCORDANCE WITH SECTION 121 OF THE FDOT STANDARD SPECIFICATIONS) MAY BE SUBSTITUTED.
3. SAWCUT AND REMOVE THE EXISTING ASPHALT PAVEMENT AND BASE TO 18-INCHES OUTSIDE THE COMPACTED SUBGRADE ON THREE SIDES. REMOVE THE EXISTING ASPHALT PAVEMENT AND BASE TO THE EXISTING CURB AND GUTTER ON THE FOURTH SIDE. REMOVE THE BASE TO A DEPTH OF 11-INCHES FROM THE ORIGINAL PAVEMENT SURFACE ELEVATION.
4. CONSTRUCT 9-INCHES OF SUPERPAVE ASPHALT BASE COURSE TYPE B-12.5, IN LIFTS NOT TO EXCEED 3-INCHES COMPACTED THICKNESS. TYPE SP-12.5 MIXTURE (TRAFFIC LEVEL B OR C) MAY BE SUBSTITUTED IN LIEU OF TYPE B-12.5.
5. SAWCUT AND REMOVE THE EXISTING ASPHALT PAVEMENT TO 24-INCHES OUTSIDE THE COMPACTED BASE ON THREE SIDES.
6. CONSTRUCT 2-INCHES OF SUPERPAVE ASPHALT CONCRETE, COARSE TYPE SP-12.5 TO BE LEVEL WITH THE ORIGINAL PAVEMENT SURFACE ELEVATION.
7. AFTER ALL ROAD PATCHES ASSOCIATED WITH THIS PROJECT ARE COMPLETE, CONTRACTOR SHALL MILL AND OVERLAY 1-INCH ASPHALT CONCRETE FRICTION COURSE, TYPE FC-5. MILL AND OVERLAY LIMITS SHALL BE ONE LANE IN WIDTH AND FROM STATION 20+80+/- FLETCHER AVE. TO STATION 0-20+/- NORTH BLVD. PAVEMENT SHALL FIRST BE SAWCUT AT LIMITS OF MILLING AND OVERLAY.
8. BACKFILL, BASE AND PAVEMENT REPLACEMENT AND DENSITY TESTS SHALL BE AS REQUIRED BY HILLSBOROUGH COUNTY, DEPARTMENT OF PUBLIC WORKS, ENGINEERING DIVISION.
9. PAYMENT FOR ALL SWEEPING, TACK COATS, PAVEMENT MARKINGS, TRAFFIC SENSOR LOOPS AND OTHER INCIDENTAL ITEMS SHALL BE INCLUDED IN THE UNIT COSTS OF THE ASPHALT PAVEMENT AND NO OTHER PAYMENT SHALL BE MADE.



**HALF SECTION**

**INSIDE DROP CONNECTION DETAIL**

NOT TO SCALE

C:\PROGRAMFILES\AUTODESK\MAP3D2007\DWG\PIPE\FLETCHERFM\5345-18.DWG 1=1

JACINTO CARLOS FERRAS, P.E. #49454  
 DESIGN DIVISION HEAD  
 WASTEWATER DEPARTMENT

No.	DATE	REVISIONS
3		
2		
1		

DES: J.P.W.  
 DRN: BB  
 CKD: JF  
 DATE: 6/20/08

**CITY of TAMPA**  
 WASTEWATER DEPARTMENT

**FLETCHER AVE. FORCE MAIN REPLACEMENT**  
 MANHOLE CONNECTION & PAVEMENT RESTORATION DETAILS

W.O. 5345  
 SHEET  
**20**  
 OF 21