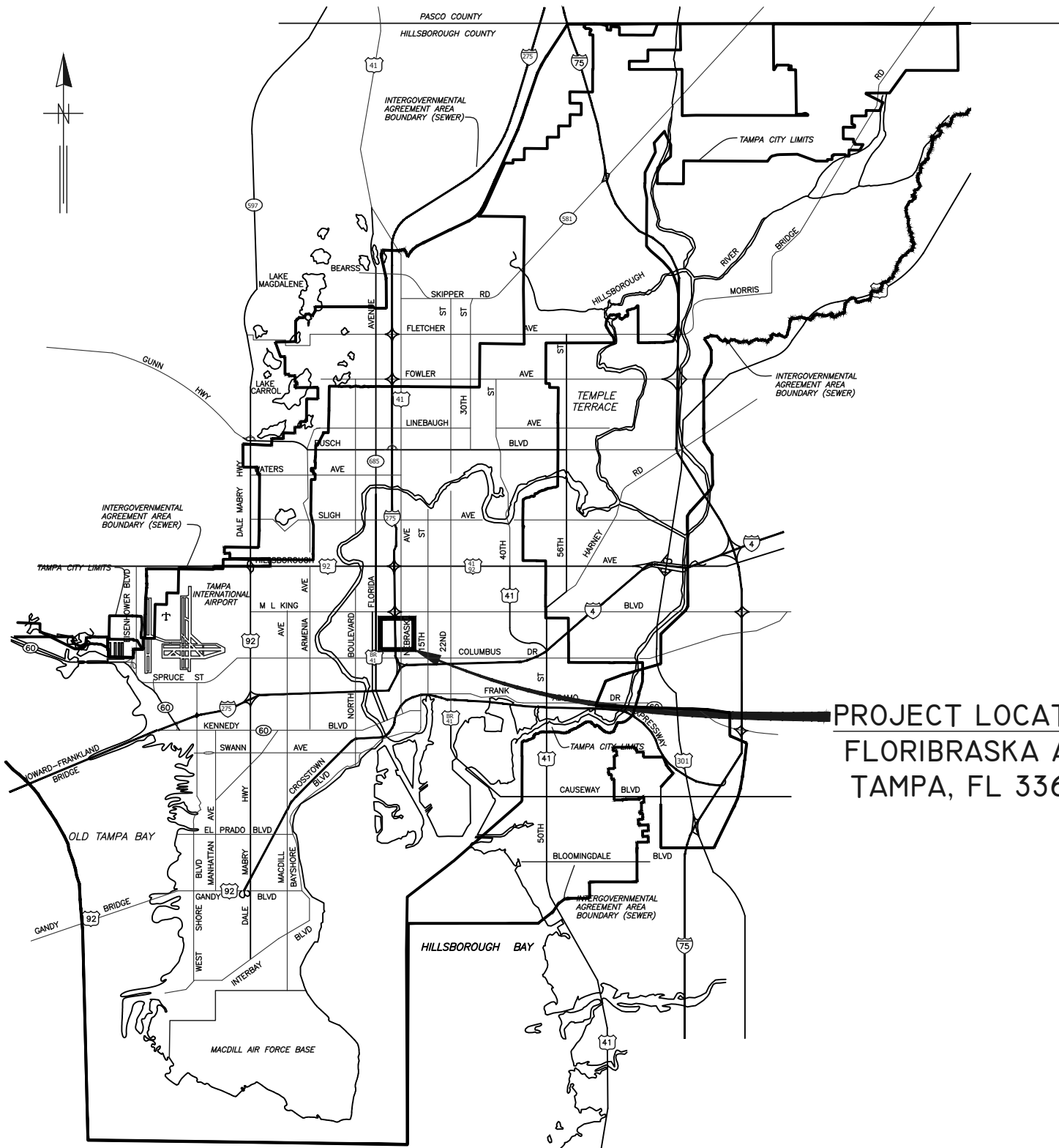


The Enclosed Document Is Provided For Your Convenience.

Please Email ALL Questions:
[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)

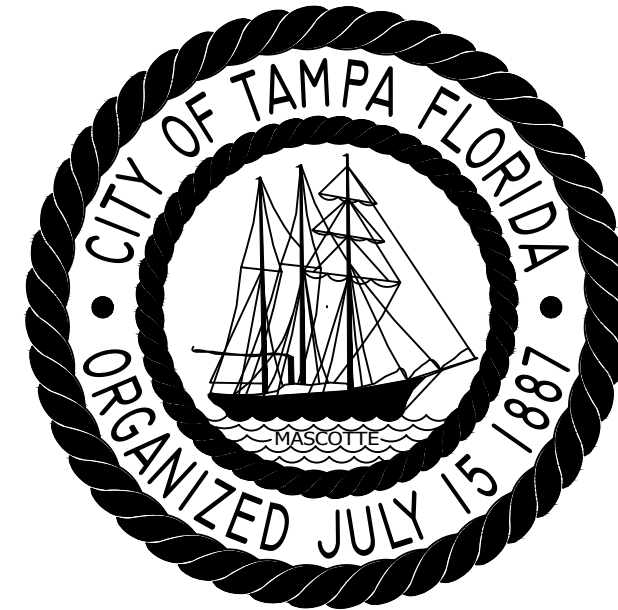
City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456

LOCATION MAP



PROJECT LOCATION
FLORIBRASKA AVE
TAMPA, FL 33603

CITY of TAMPA



WASTEWATER DEPARTMENT ENGINEERING DIVISION

PLANS FOR FLORIBRASKA GRAVITY SEWER REHABILITATION BY CURED-IN-PLACE PIPE (CIPP) LINING

CONTRACT No. 21-C-00037

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		

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

DES: VT
DRN: KLT
CKD: ----
DATE: Jul-2021

CITY of TAMPA
WASTEWATER DEPARTMENT

FLORIBRASKA GRAVITY SEWER
REHABILITATION BY CIPP
COVER SHEET

SHEET

1

GENERAL NOTES

1. THE SCOPE OF THIS PROJECT SHALL CONSIST OF REHABILITATION OF 8", 10", 12", 16", 18", AND 21" 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. DURING THE MOT, CONTRACTOR MUST MAINTAIN ACCESS TO ALL DRIVEWAYS FOR THE DURATION OF THE PROJECT.
4. 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. 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/)
5. 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.
6. 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.
7. BYPASS PUMPS SHALL BE CAPABLE OF DELIVERING 300 GPM FOR 8", 600 GPM FOR 10", 800 GPM FOR 12", 1,450 GPM FOR 16", 1,550 GPM FOR 18", AND 2,000 GPM FOR 21". THE 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.
8. THE PROPOSED LINER THICKNESS FOR THE 8" SEWER SHALL BE 6.0 MM THICKNESS, 10"/12"/16" SEWER SHALL BE 7.5 MM THICKNESS, 18" SEWER SHALL BE 9.0 MM, AND 21" SHALL BE 10.5 MM.
9. CONTRACTOR SHALL RESTORE ALL LANDSCAPING, SODDING, SPRINKLER SYSTEM PIPING AND PAVEMENT THAT MAY HAVE BEEN DAMAGED DURING CONSTRUCTION TO ITS ORIGINAL CONDITION OR BETTER.
10. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH WASTEWATER PERSONNEL AND PUMPING STATION OPERATIONS.
11. 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.
12. 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.
13. ALL EXPOSED STEEL REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ANY DETERIORATION/RUST AND COATED WITH THE PROPOSED COATING SYSTEM.

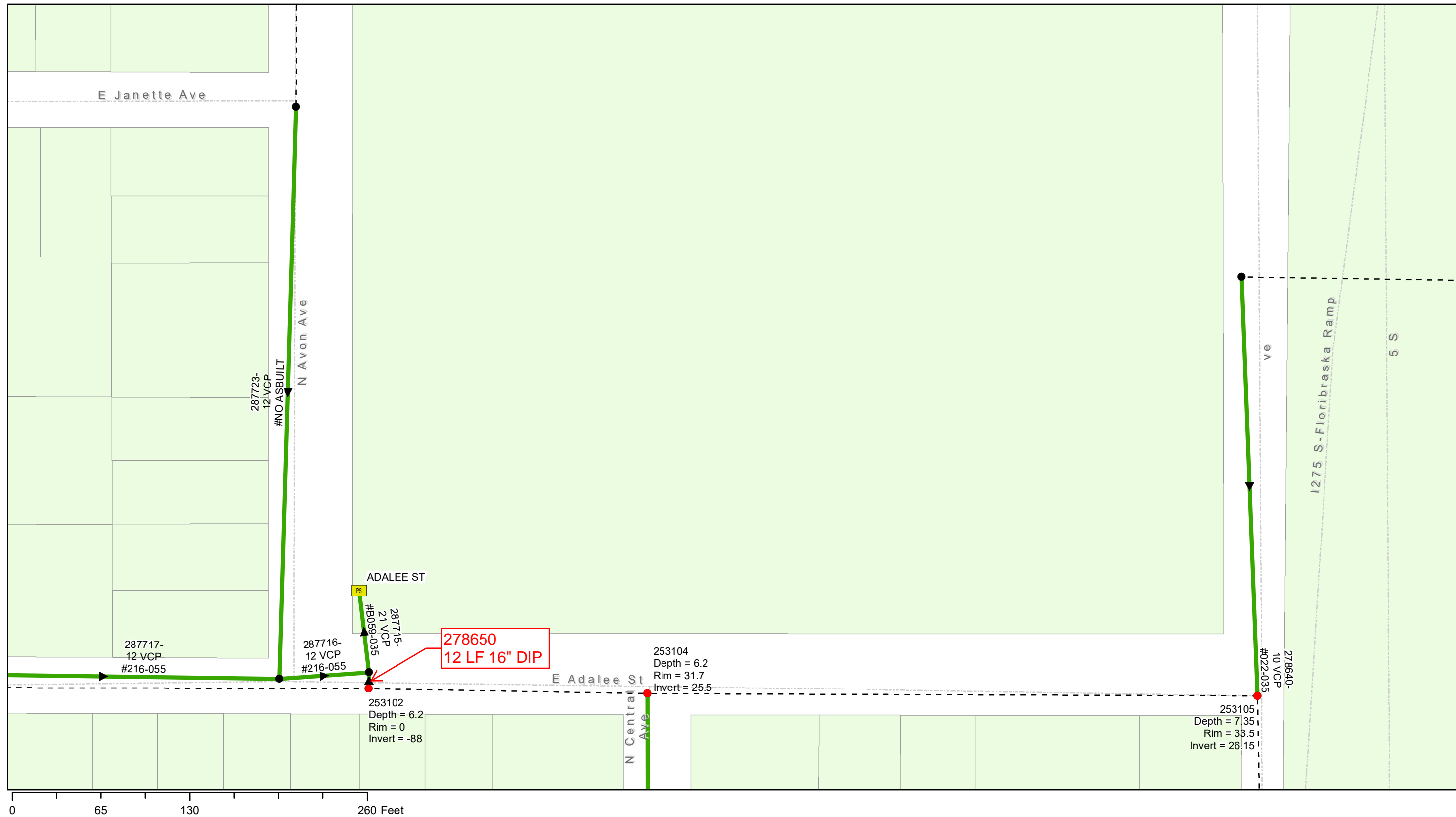
PROPOSED MANHOLE COATING SYSTEM THICKNESS	
Location	Coating System
Manhole Barrel	250 MILS (MIN)
Manhole Benches	250 MILS (MIN)

INDEX	
SHT. NO.	DESCRIPTION
1	COVER SHEET
2	NOTE AND INDEX
3	OVERALL PROJECT LOCATION MAP
4	AREA MAP
5	AREA MAP
6	AREA MAP
7	AREA MAP
8	AREA MAP
9	AREA MAP
10	AREA MAP
11	AREA MAP
12	AREA MAP
13-14	MANHOLE REHABILITATION DETAIL
15-18	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.

\\sewer\sewer\Share\WasteWater\Projects\Floribrasca Ave from N Tampa St. to 9th St. Rehabilitation by CIPP\Drafting\DWG\Floribrasca from Tampa to 9th St Gravity Sewer Rehab.dwg

JACINTO CARLOS FERRAS, P.E. #49454 DESIGN DIVISION HEAD WASTEWATER DEPARTMENT	No.	DATE	REVISIONS	DES: VT	CITY of TAMPA WASTEWATER DEPARTMENT	FLORIBRASKA GRAVITY SEWER REHABILITATION BY CIPP NOTES & INDEX	SHEET 2
	1			DRN: KLT			
	2			CKD: ----			
	3			DATE: Jul-2021			



0 65 130 260 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP

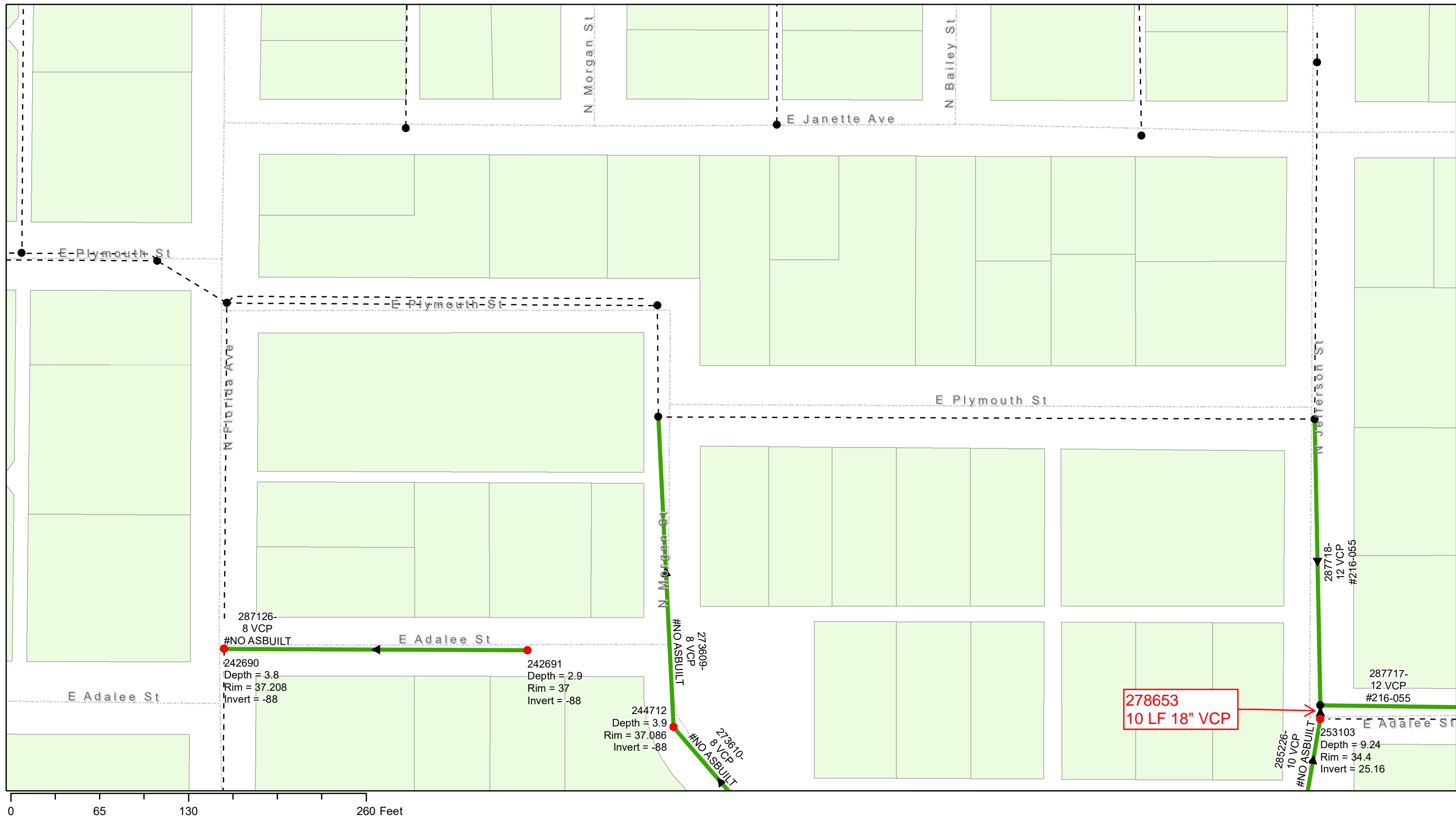
City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- Proposed CIPP Lining Area



Sheet No.
4



0 65 130 260 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP

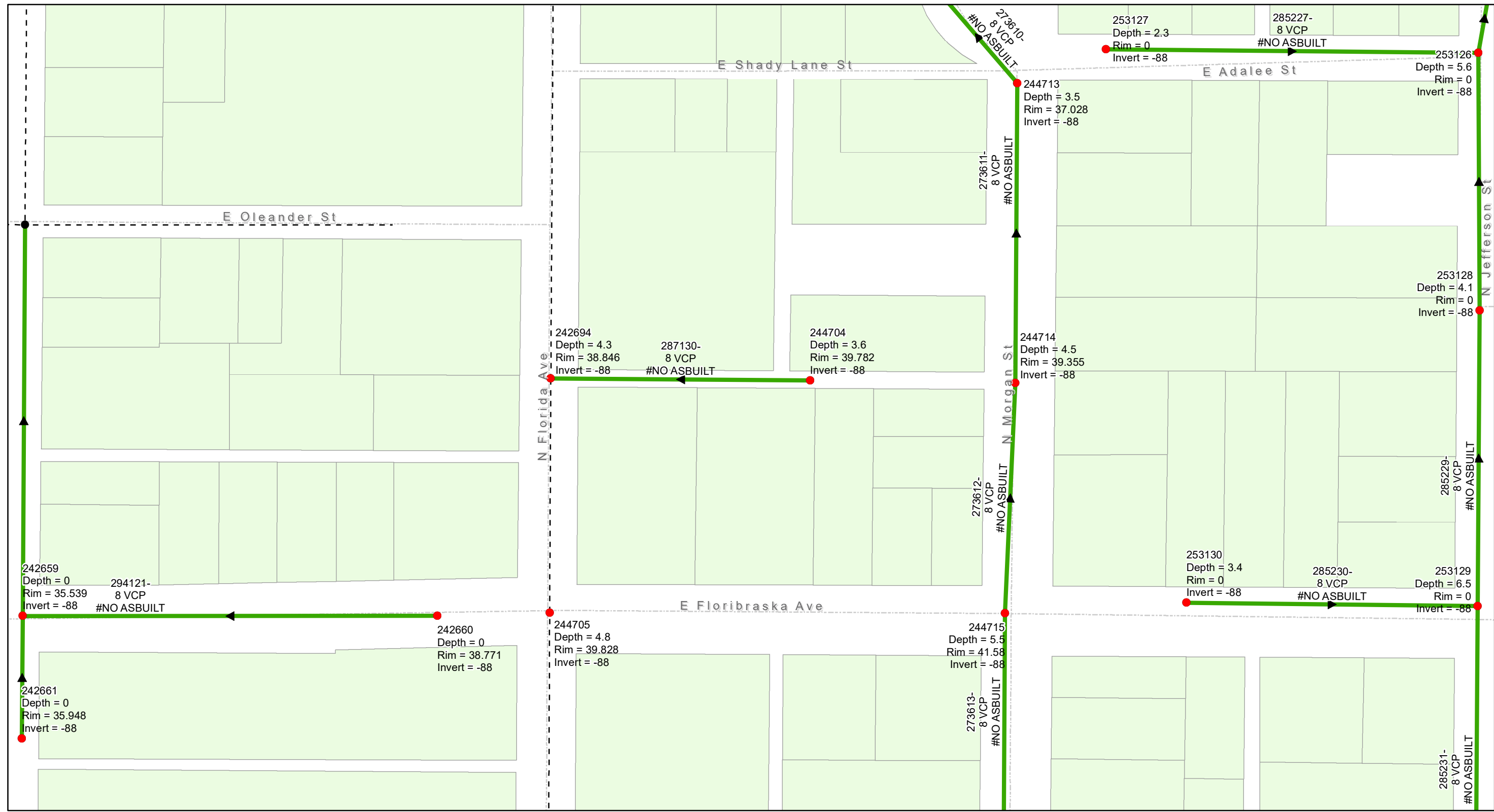
City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area



Sheet No.
5




0 75 150 300 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP


City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required) - - - - - Ex Wastewater (no rehabilitation required)
- Proposed Manhole Rehabilitation ➔ Proposed CIPP Lining Area



N



Sheet No.

6




0 75 150 300 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP


City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area

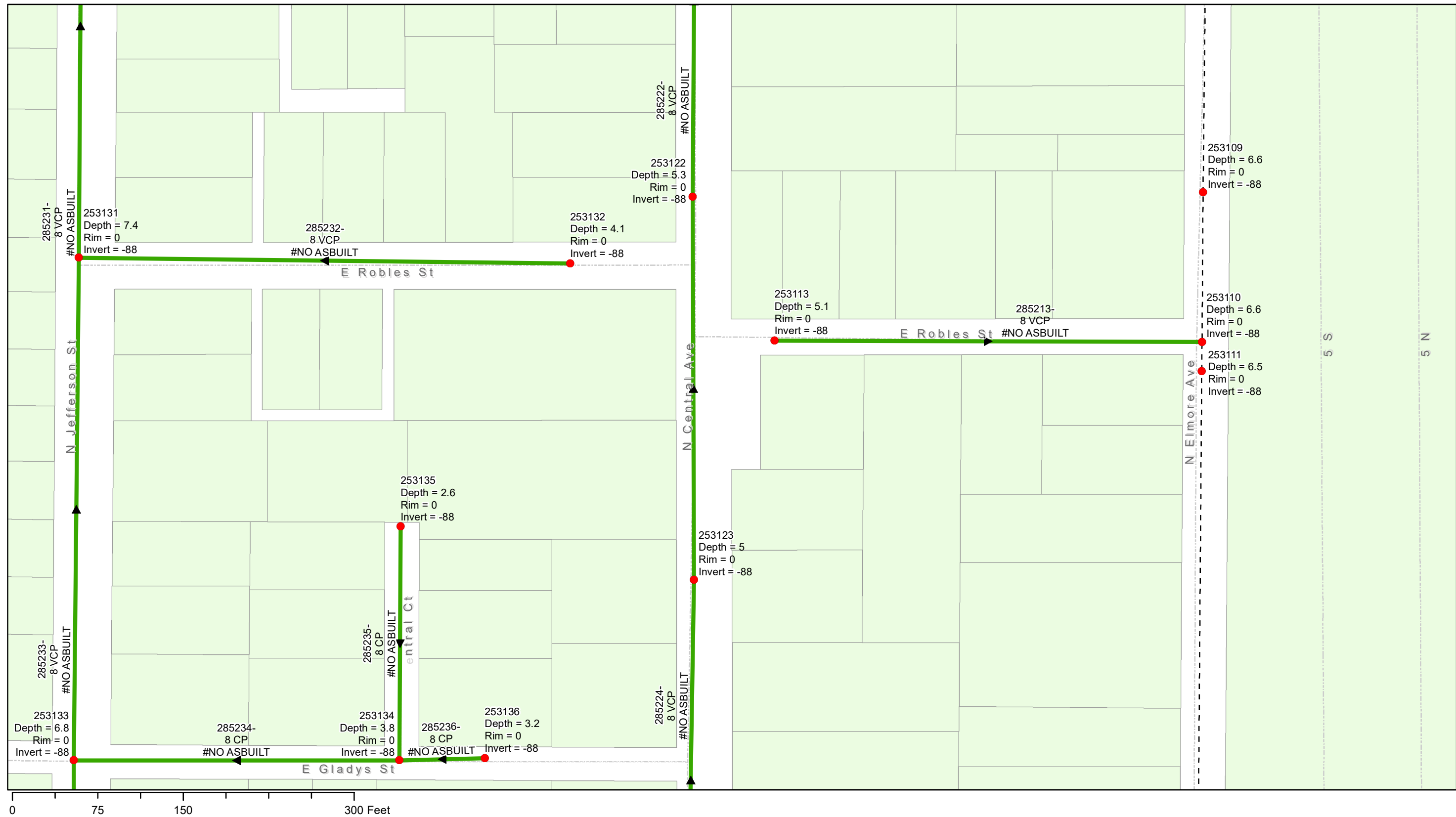


N



Sheet No.

7



0 75 150 300 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP

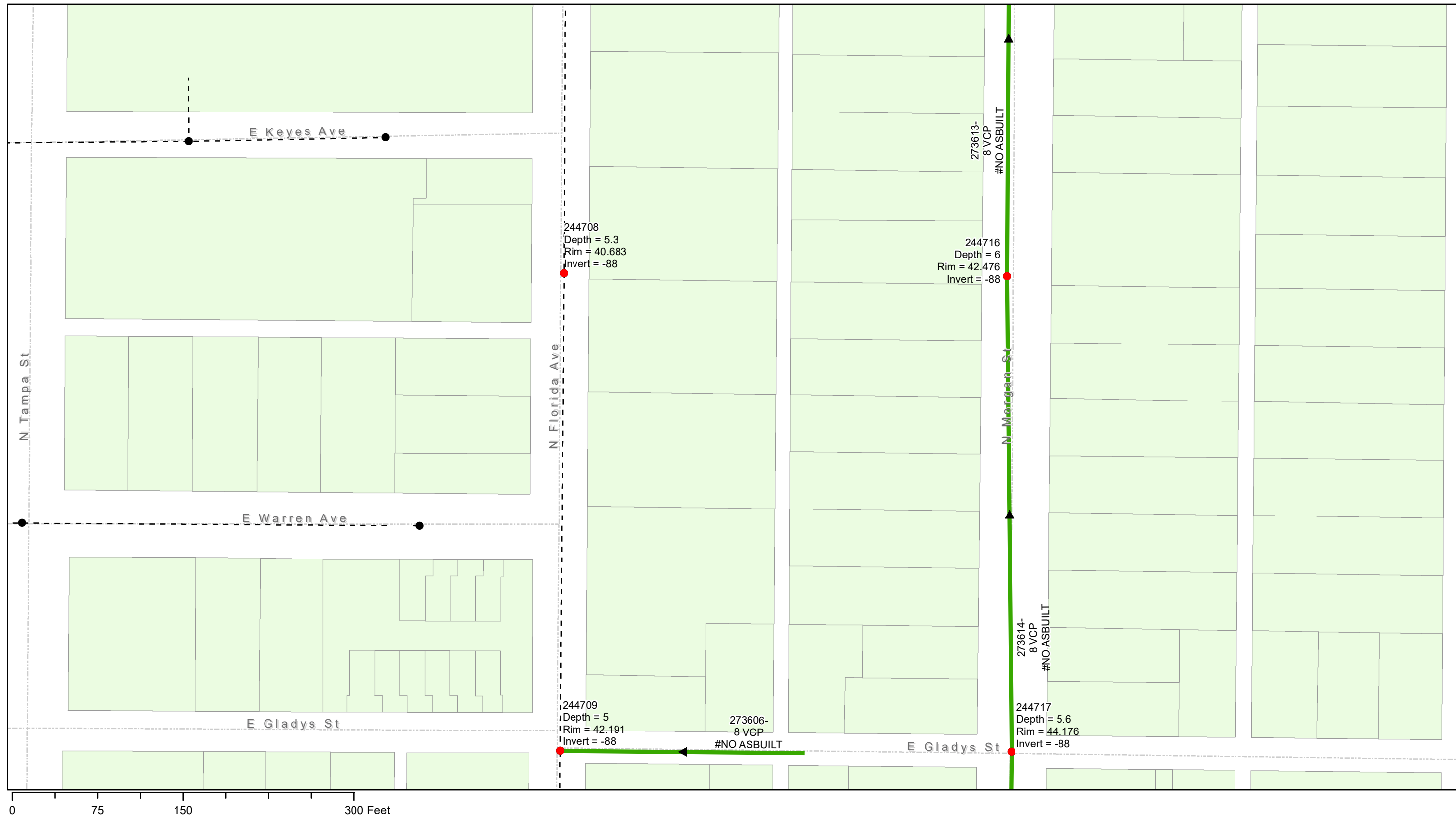
City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area



Sheet No.
8



Floribraska Gravity Sewer Rehabilitation by CIPP

City of Tampa Wastewater Department

Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area



Sheet No.
9




0 75 150 300 Feet

Floribraska Gravity Sewer Rehabilitation by CIPP

City of Tampa Wastewater Department

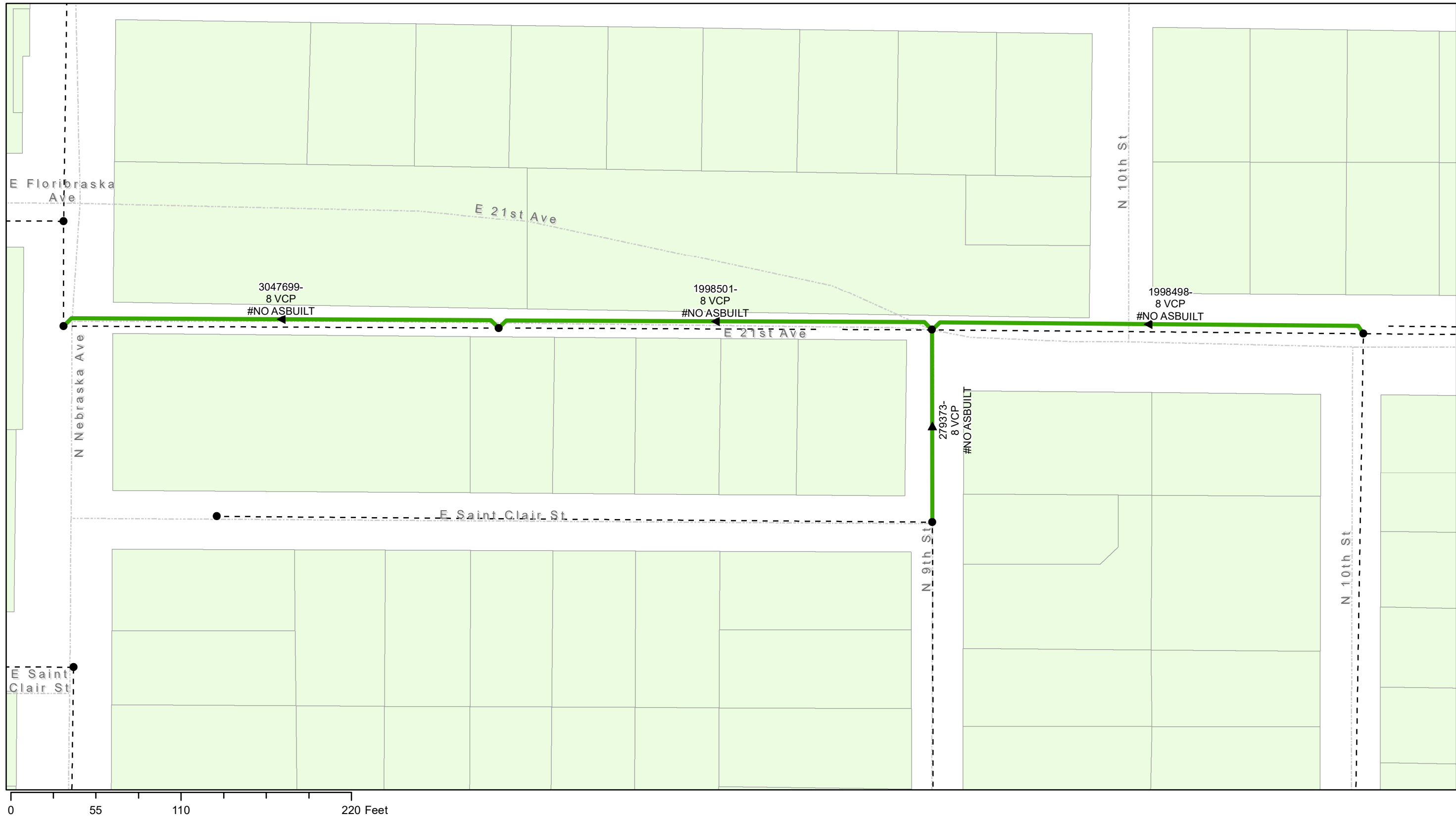
Legend

- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area



N
▲

Sheet No. **10**



0 55 110 220 Feet

**Floribruska Gravity Sewer
Rehabilitation by CIPP**
City of Tampa Wastewater Department

Legend

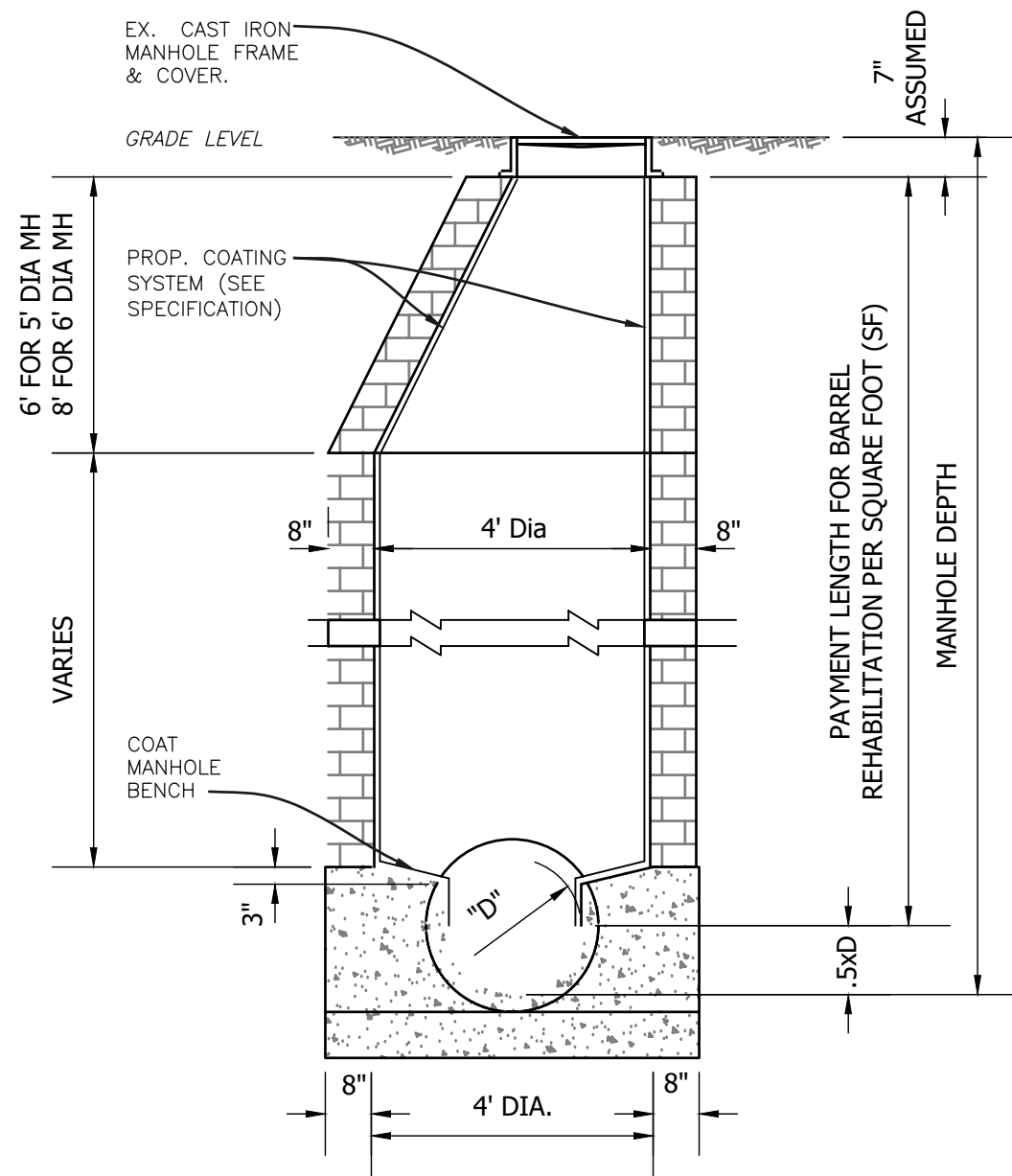
- Ex Manhole (no rehabilitation required)
- Proposed Manhole Rehabilitation
- Ex Wastewater (no rehabilitation required)
- ➔ Proposed CIPP Lining Area



Sheet No.
12

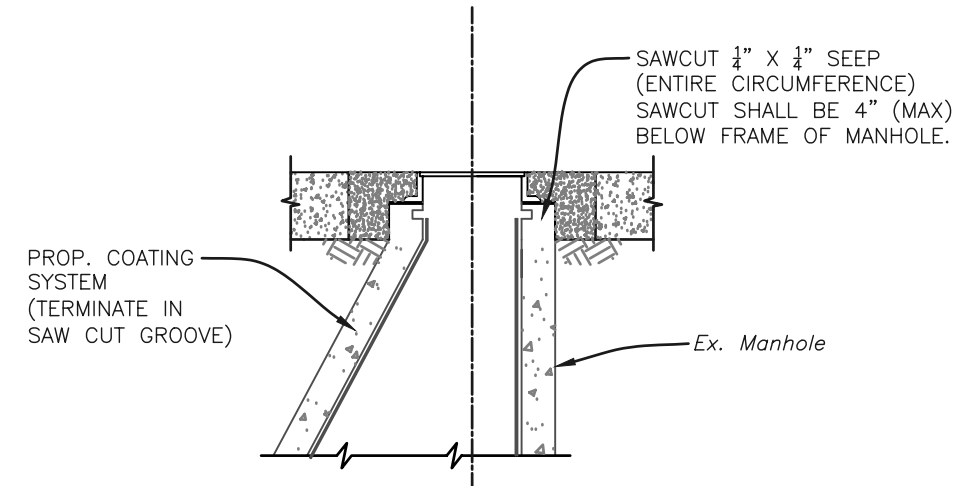
NOTES

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



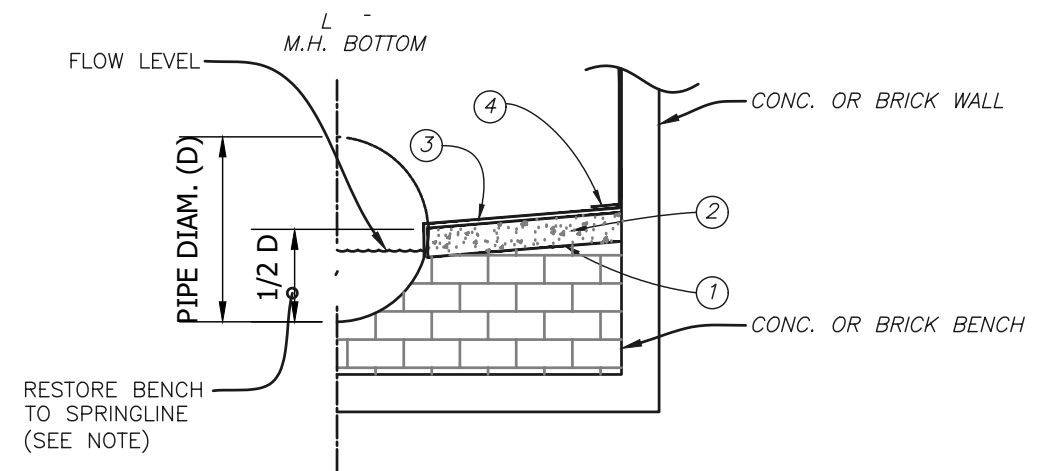
BRICK OR CONCRETE MANHOLE (TYPICAL)

SCALE: N.T.S.



COATING TERMINATION DETAIL

SCALE: N.T.S.



TYPICAL MANHOLE BENCH RESTORATION DETAIL

SCALE: N.T.S.

No.	DATE	REVISIONS
1		
2		
3		

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

DES: VT
DRN: KLT
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DATE: Jul-2021

CITY of TAMPA
WASTEWATER DEPARTMENT

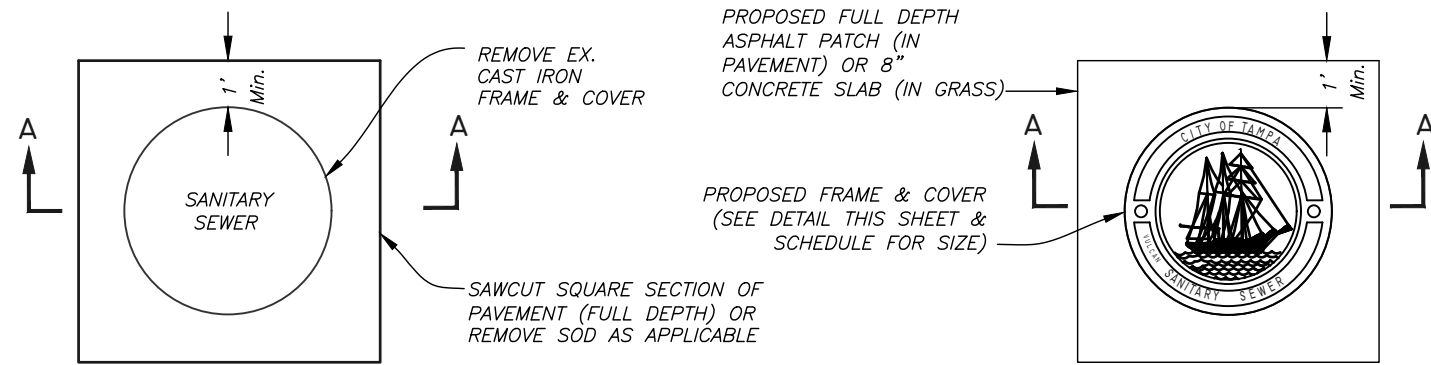
FLORIBRASKA GRAVITY SEWER
REHABILITATION BY CIPP
MANHOLE REHABILITATION DETAIL

SHEET

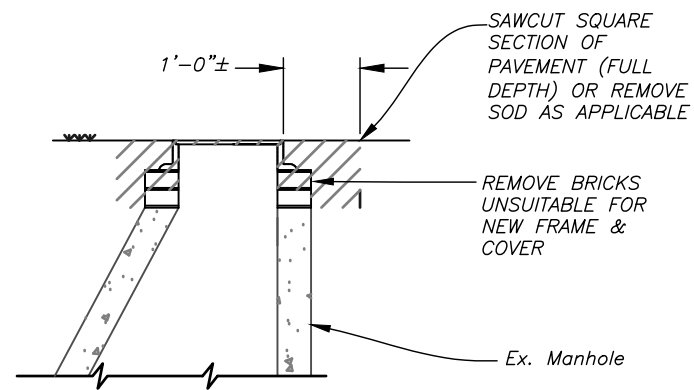
13

NOTES

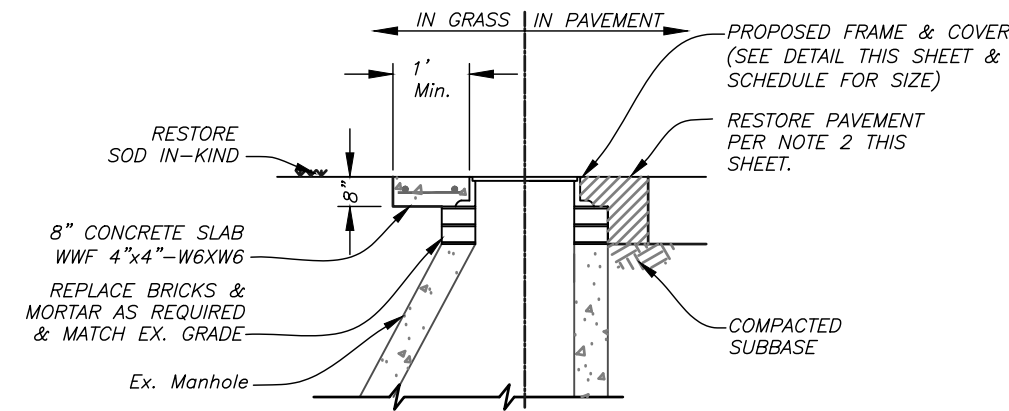
- FOR MANHOLE COVER SIZES AND WHETHER THE COVERS ARE LOCATED IN GRASS OR PAVEMENT, WILL BE PROVIDED ON EACH INDIVIDUAL WORK ORDER ISSUED UNDER THIS CONTRACT.
- PAVEMENT RESTORATION SHALL CONSIST OF 8" PERMANENT BASE (CRUSHED CONCRETE OR CRUSHED LIMEROCK BASE) AND PERMANENT ASPHALT SUPERPAVE PAVEMENT, UNLESS OTHERWISE NOTED. IF LOCATED IN D.O.T. ROW, AN ADDITIONAL 1 1/2" SUPER PAVE ASPHALT IS REQUIRED.



PLAN

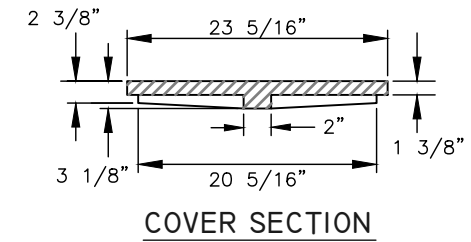


**SECTION A-A
REMOVAL DETAIL**

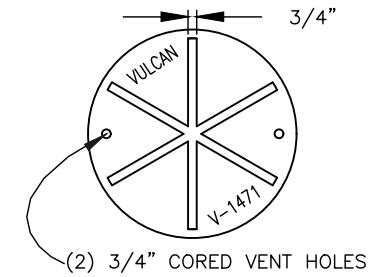


**SECTION B-B
REPLACEMENT
DETAIL**

SMALL COVER DETAIL



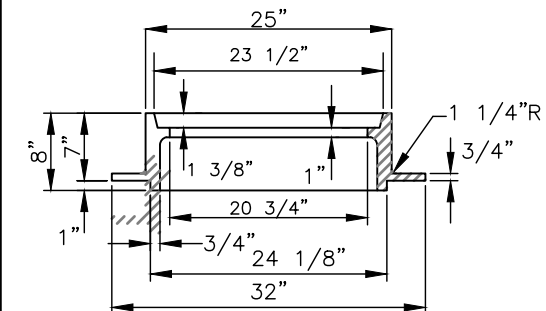
COVER SECTION



COVER BACK



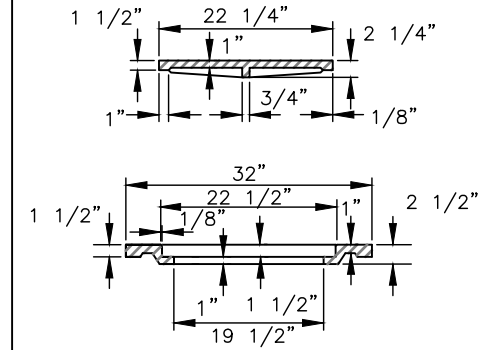
COVER FACE



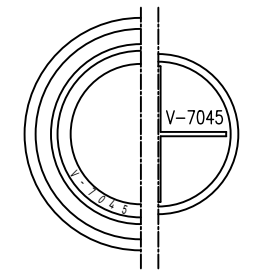
FRAME SECTION

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

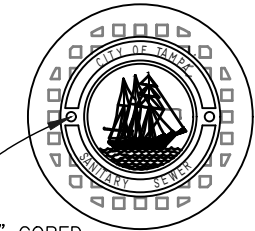
LARGE COVER DETAIL



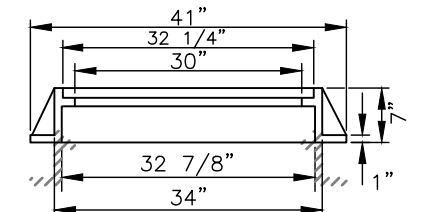
INNER & OUTER COVER SECTIONS



COVER BACKS



COVER FACES



FRAME SECTION

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

\\server\sewer\share\WasteWater\Projects\Floribrasca Ave from N Tampa St to 9th St Rehabilitation by CIPP\Drafting\DWG\Floribrasca from Tampa to 9th St Gravity Sewer Rehab.dwg

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

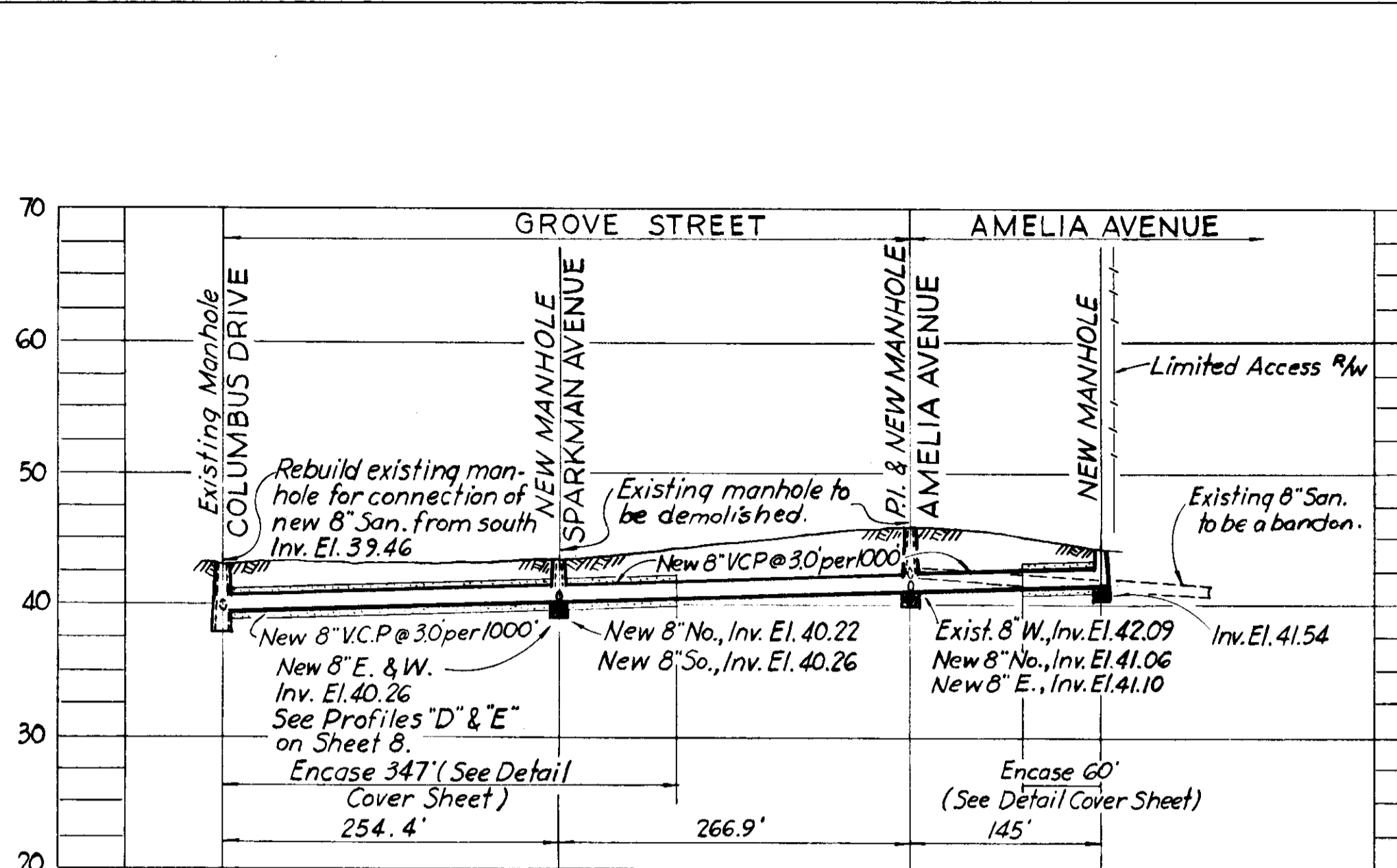
No.	DATE	REVISIONS
1		
2		
3		

DES: VT
DRN: KLT
CKD: ----
DATE: Jul-2021

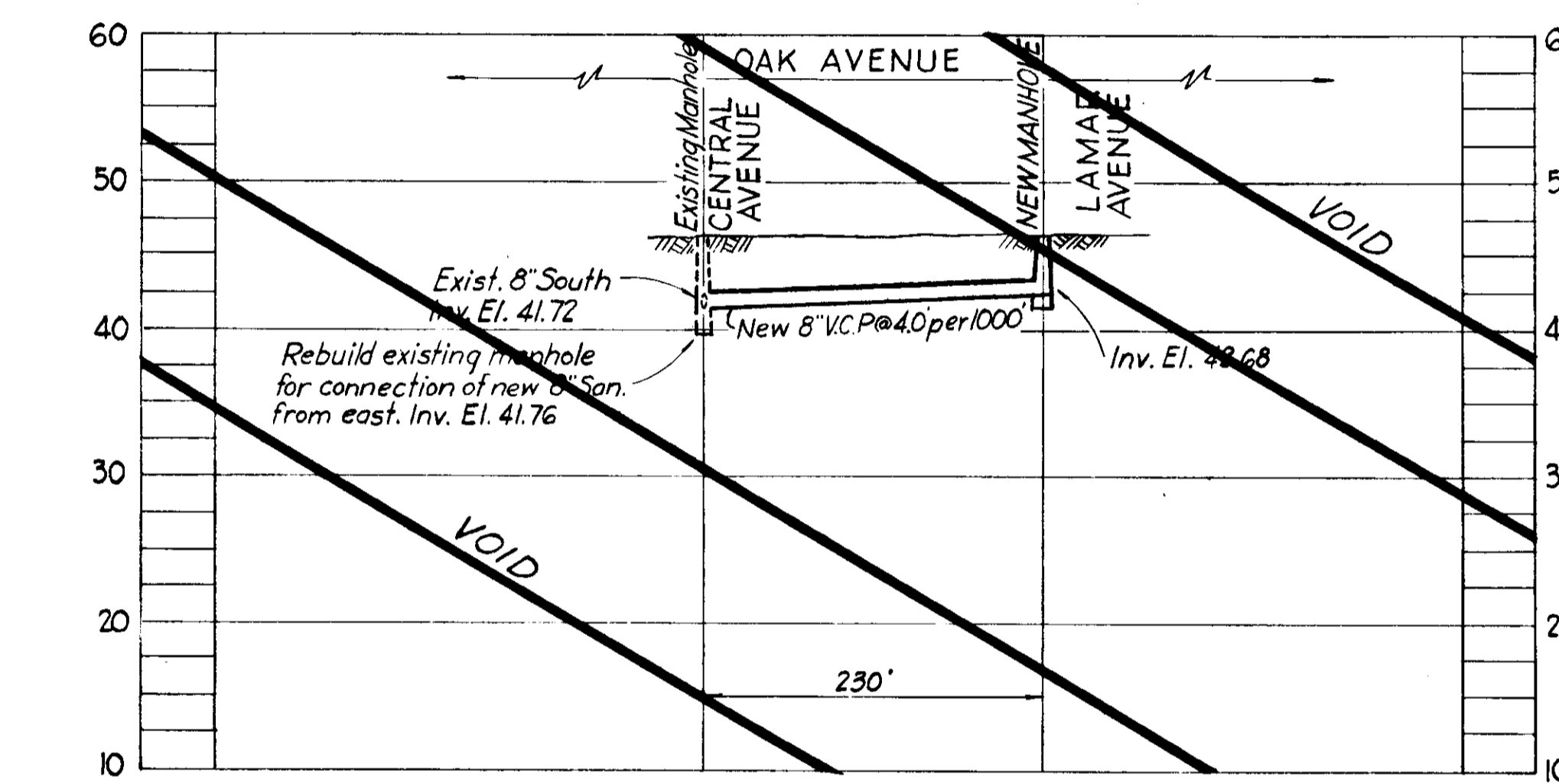
CITY of TAMPA
WASTEWATER DEPARTMENT

FLORIBRASKA GRAVITY SEWER
REHABILITATION BY CIPP
MANHOLE DETAIL

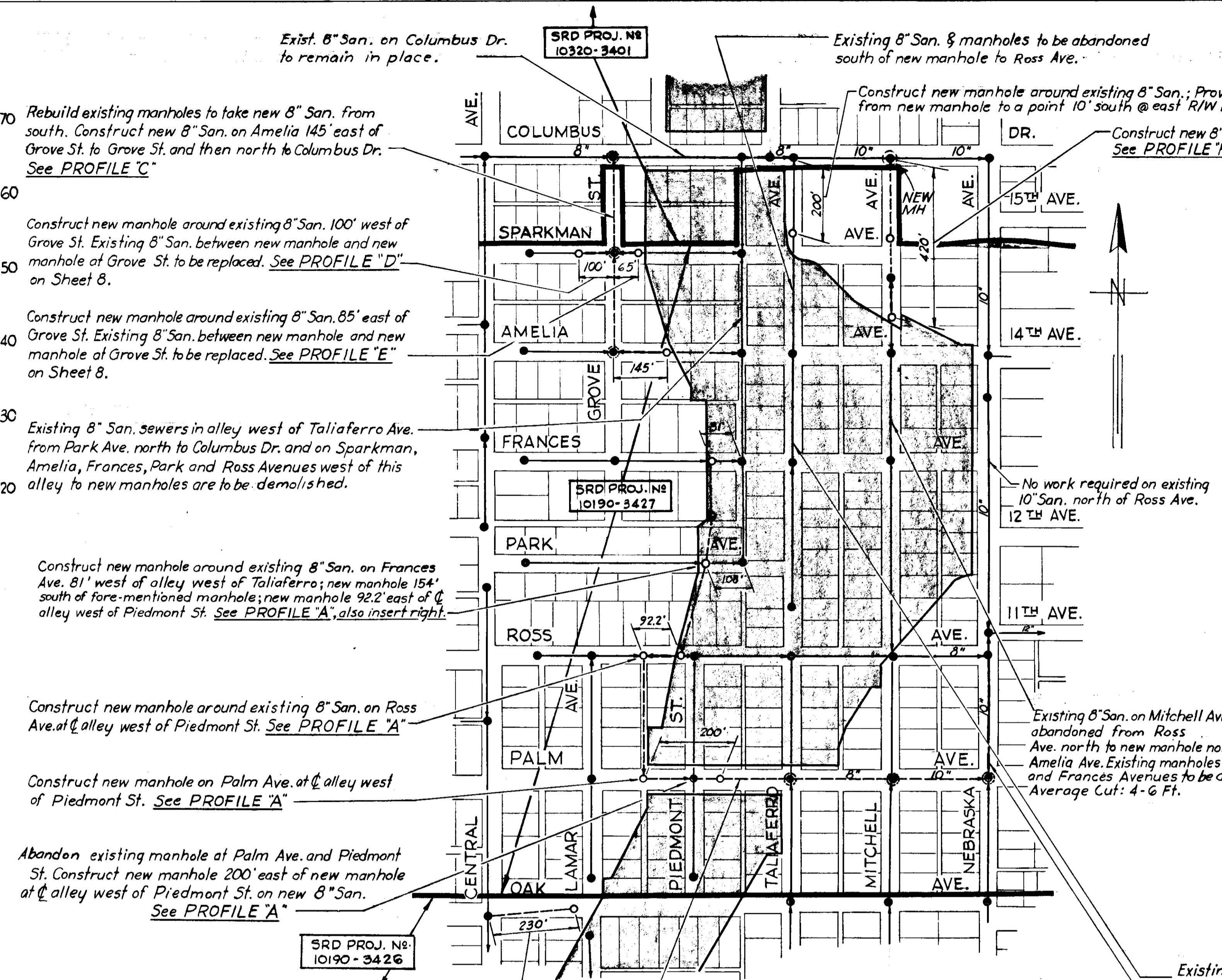
SHEET
14



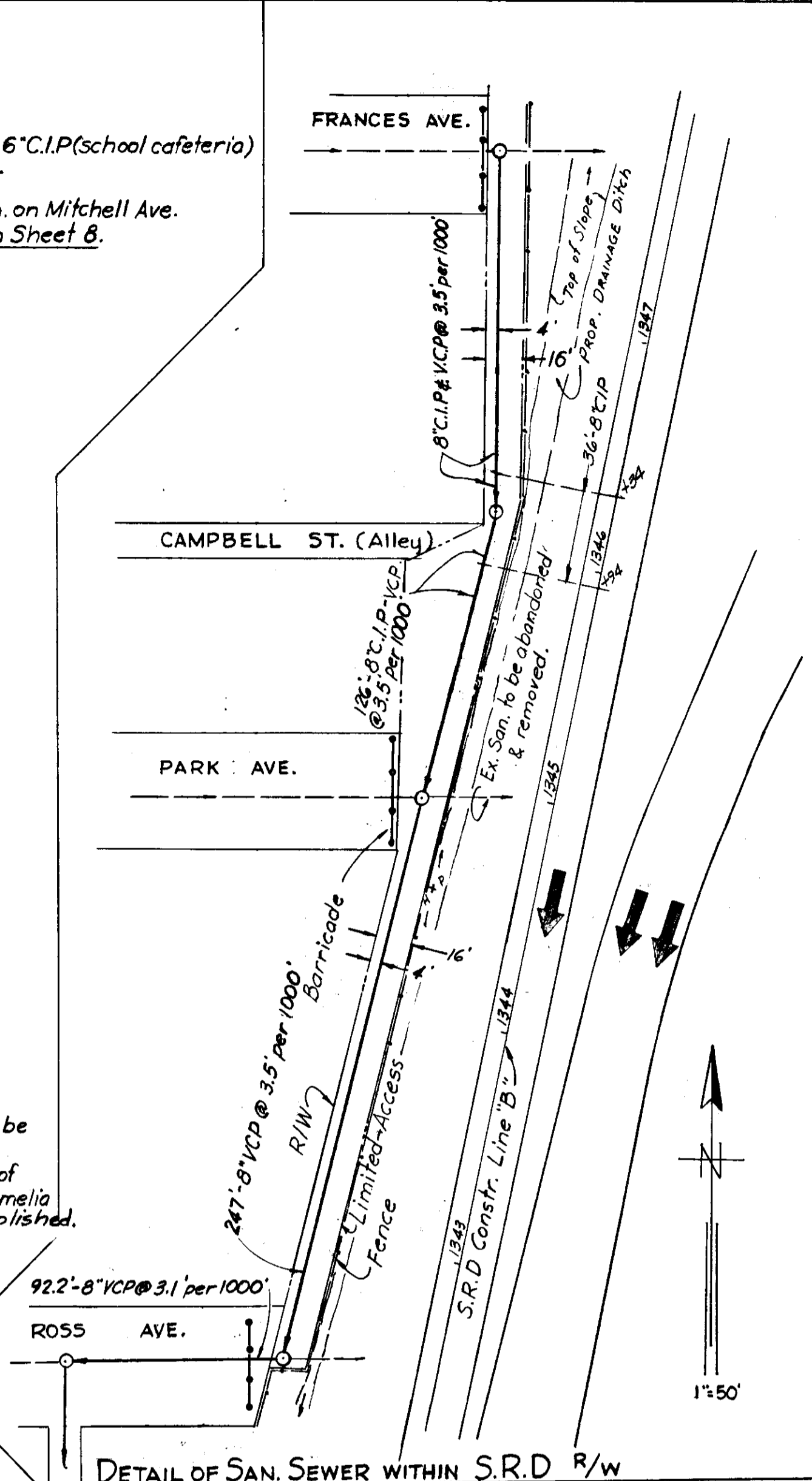
PROFILE "C"



PROFILE "A"



LOCATION PLAN



DETAIL OF SAN. SEWER WITHIN S.R.D. R/W

Construct new manhole on Oak Ave. 230' east of existing manhole at Central Ave. and new 8" San. as shown. See PROFILE "A", Sheet 6

Construct new San. from Frances Ave. southwesterly along west Expressway R/W to Palm Ave. at alley west of Piedmont St., thence east to Nebraska Ave. as shown. Existing manholes at Taliaferro and Mitchell Aves. to be replaced by new manholes. See PROFILE "A"

Existing 8" San. on Taliaferro Ave. to be abandoned from new manhole south of Columbus Dr. to end manhole south of Park Ave. Manholes at Amelia and Frances Avenues and end manhole to be demolished.

Replace existing 10" San. on Nebraska Ave. from Ross to Palm Avenue with new 10" San. Replace existing manhole at Palm Ave. with new manhole. See PROFILE "A"

Rebuild existing manholes to take new 8" San. from south. Construct new 8" San. on Amelia 145' east of Grove St. to Grove St. and then north to Columbus Dr. See PROFILE "C"

Construct new manhole around existing 8" San. 100' west of Grove St. Existing 8" San. between new manhole and new manhole at Grove St. to be replaced. See PROFILE "D" on Sheet 8.

Construct new manhole around existing 8" San. 85' east of Grove St. Existing 8" San. between new manhole and new manhole at Grove St. to be replaced. See PROFILE "E" on Sheet 8.

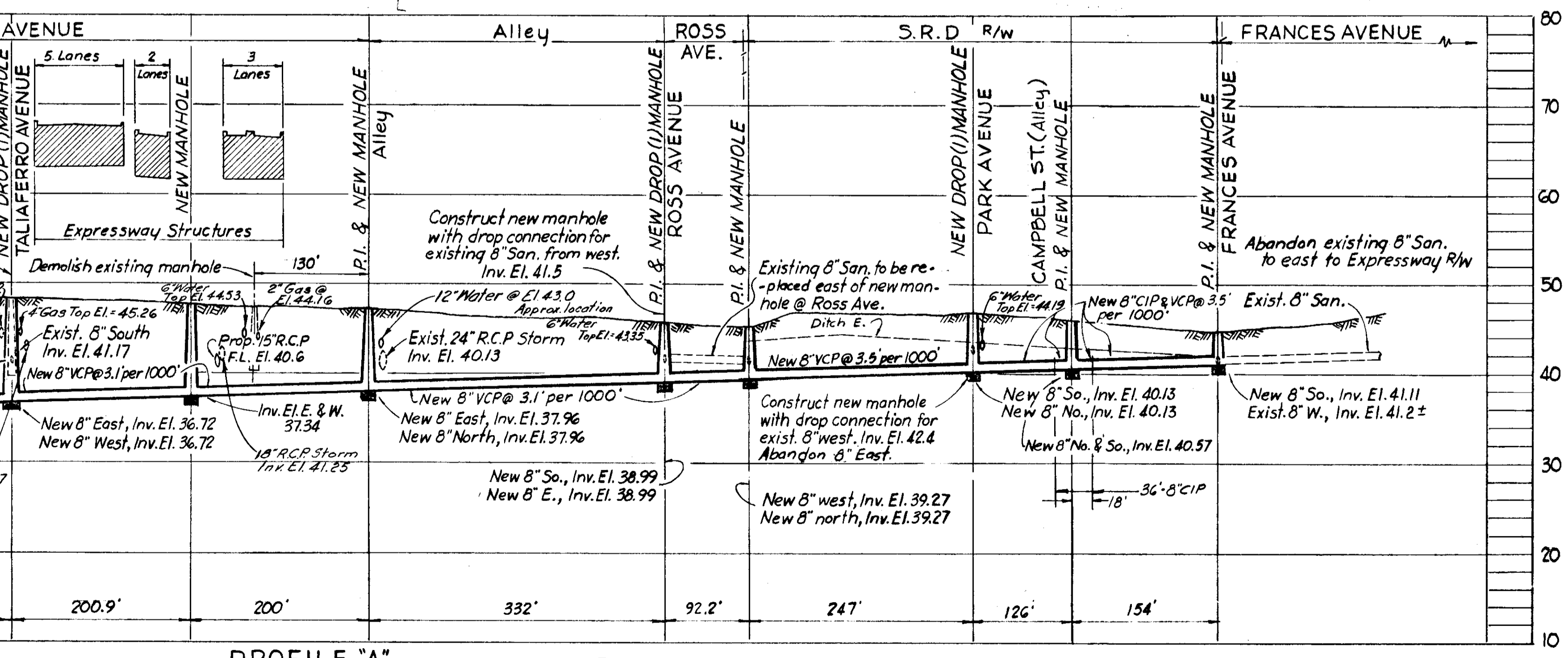
Existing 8" San. sewers in alley west of Taliaferro Ave. from Park Ave. north to Columbus Dr. and on Sparkman, Amelia, Frances, Park and Ross Avenues west of this alley to new manholes are to be demolished.

Construct new manhole around existing 8" San. on Frances Ave. 81' west of alley west of Taliaferro; new manhole 154' south of fore-mentioned manhole; new manhole 92.2' east of alley west of Piedmont St. See PROFILE "A", also insert right.

Construct new manhole around existing 8" San. on Ross Ave. at alley west of Piedmont St. See PROFILE "A"

Construct new manhole on Palm Ave. at alley west of Piedmont St. See PROFILE "A"

Abandon existing manhole at Palm Ave. and Piedmont St. Construct new manhole 200' east of new manhole at alley west of Piedmont St. on new 8" San. See PROFILE "A"



PROFILE "A"

- NOTES
1. See Cover Sheet for General Notes & Encasement Detail.
 2. This section comes under Bureau of Sanitary Sewers Work Order No 1142(d)
 3. See Sheet 8 for Profiles "D", "E" & "F"

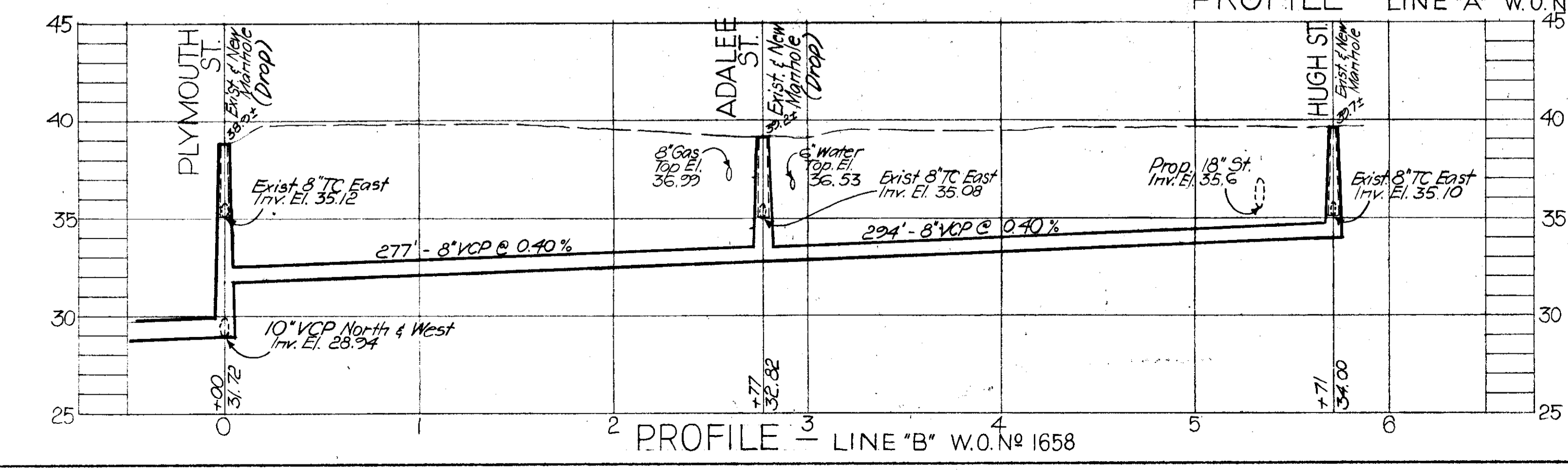
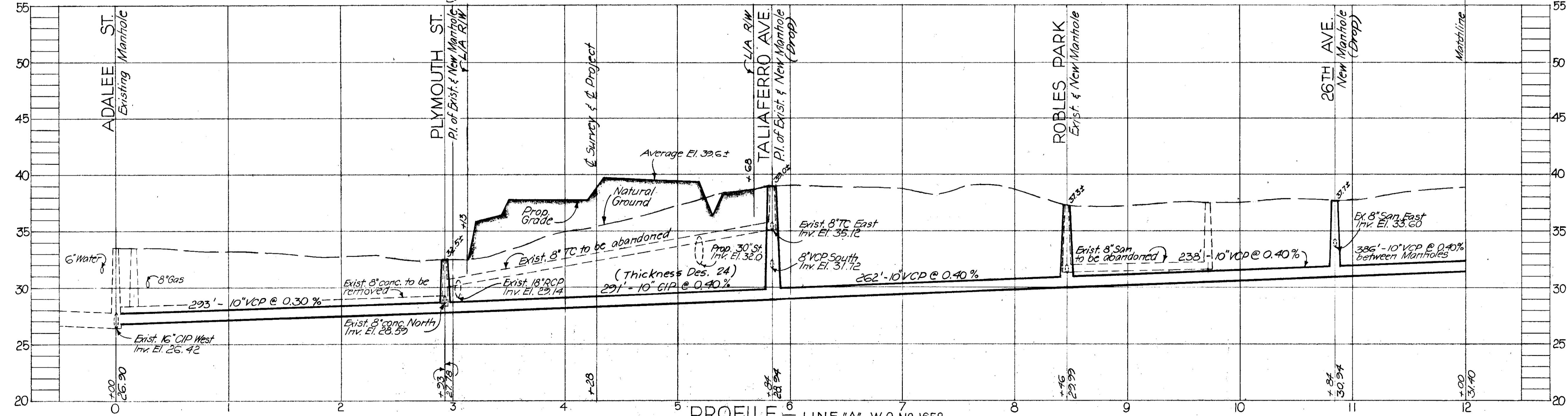
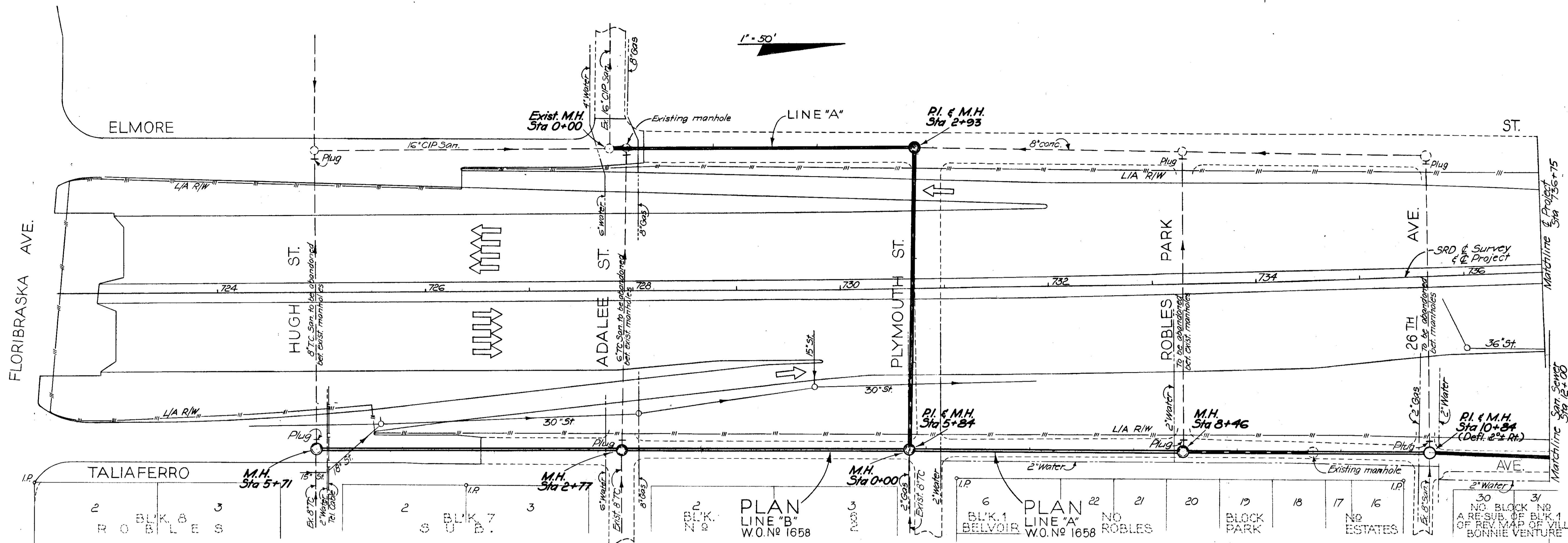
Note:
New manholes and sewers in and south of Columbus Dr. included in Bureau of San. Sewers W.O. 1142(d)

CITY OF TAMPA, FLORIDA
BUREAU OF SANITARY SEWERS
MODIFICATIONS DUE TO EXPRESSWAY SYSTEM
OAK AVE. NORTH TO SPARKMAN AVE.
& EAST TO NEBRASKA AVE.
IN CONJUNCTION WITH
S.R.D. PROJECT NO. 10320-3427

DES:RMJ
DR: CT
CKD:CMT
DATE
Nov, 1962
Ex. F.A.#6

SCALES
LOCATION PLAN: 1" = 200'
PROFILES: Horiz.: 1" = 100'
VERT.: 1" = 10'

SHEET
7a
OF 14



EXPRESSWAY FORCE ACCOUNT No 8 W.O. No 1658

CITY OF TAMPA, FLORIDA
BUREAU OF SANITARY SEWERS

MODIFICATIONS DUE TO EXPRESSWAY SYSTEM

FLORIBRASKA AVE. THROUGH E. IDLEWILD AVE.
IN CONJUNCTION WITH
S. R. D. PROJECT No 10320 - 6404

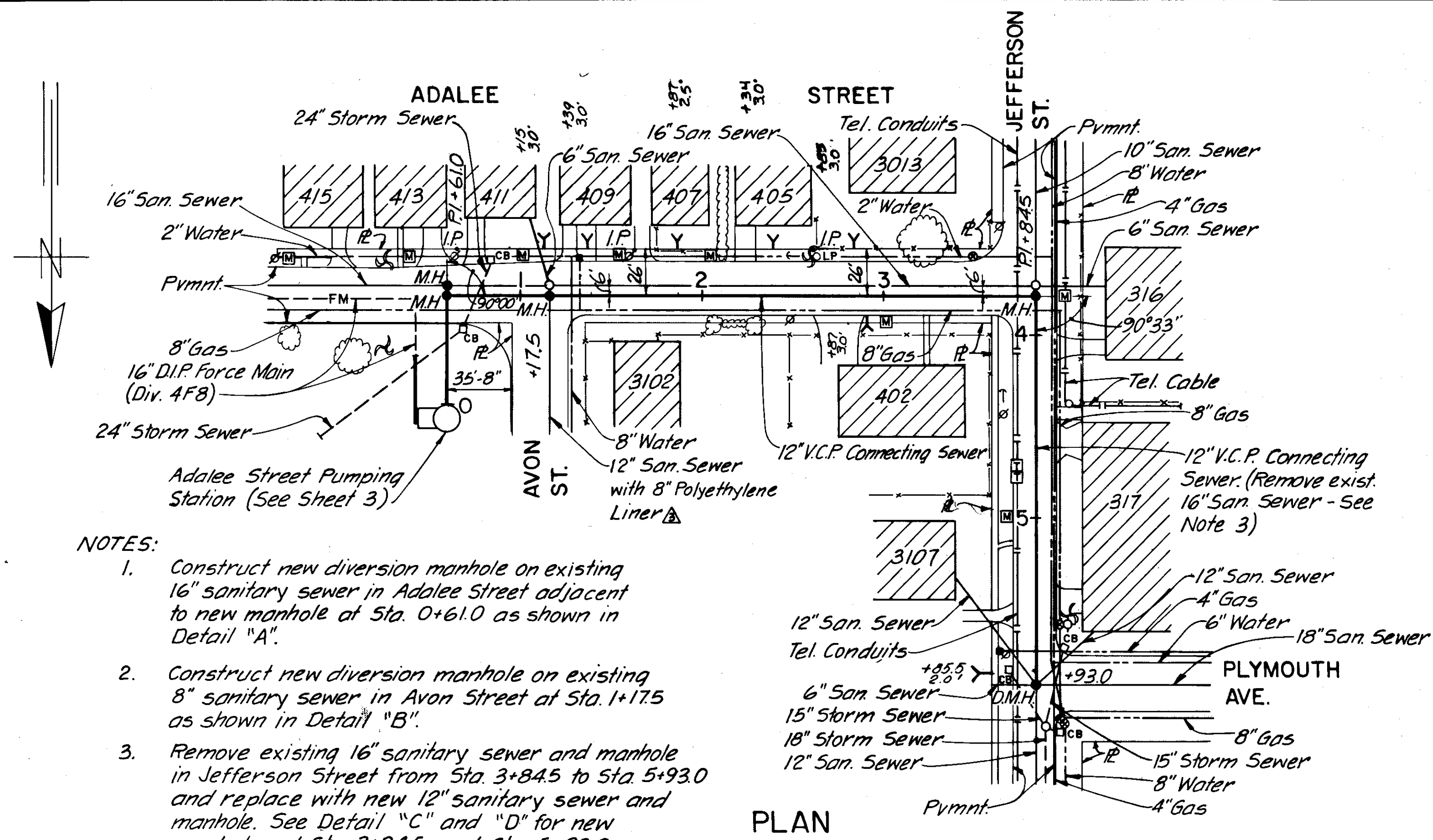
LINES 'A' & 'B'

DES. C.M.T.
DR. H.K.C.
CKD. A.S.C.
DATE MARCH 1964

SCALE: 1" = 50'

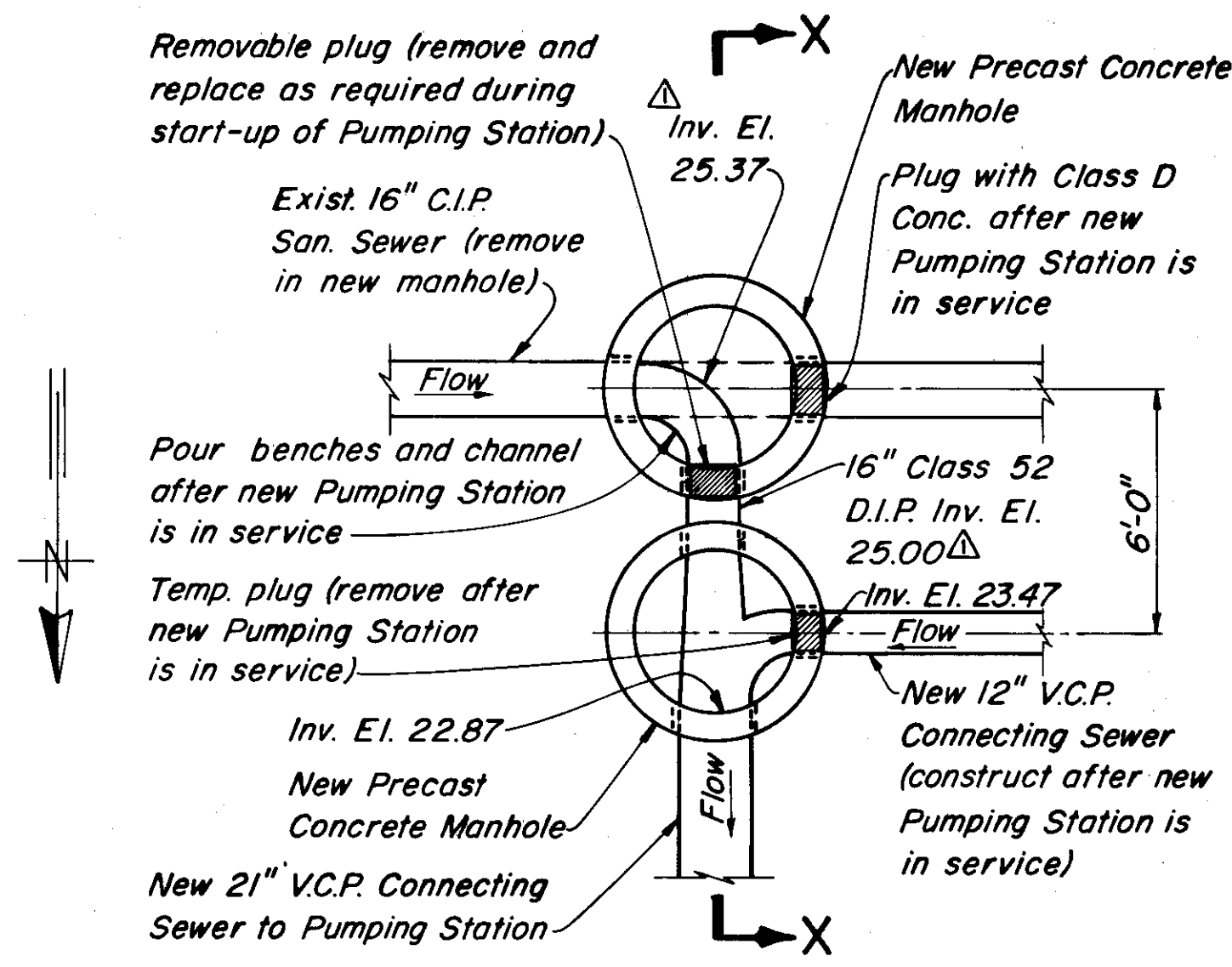
SHEET 2 OF 7

22-35

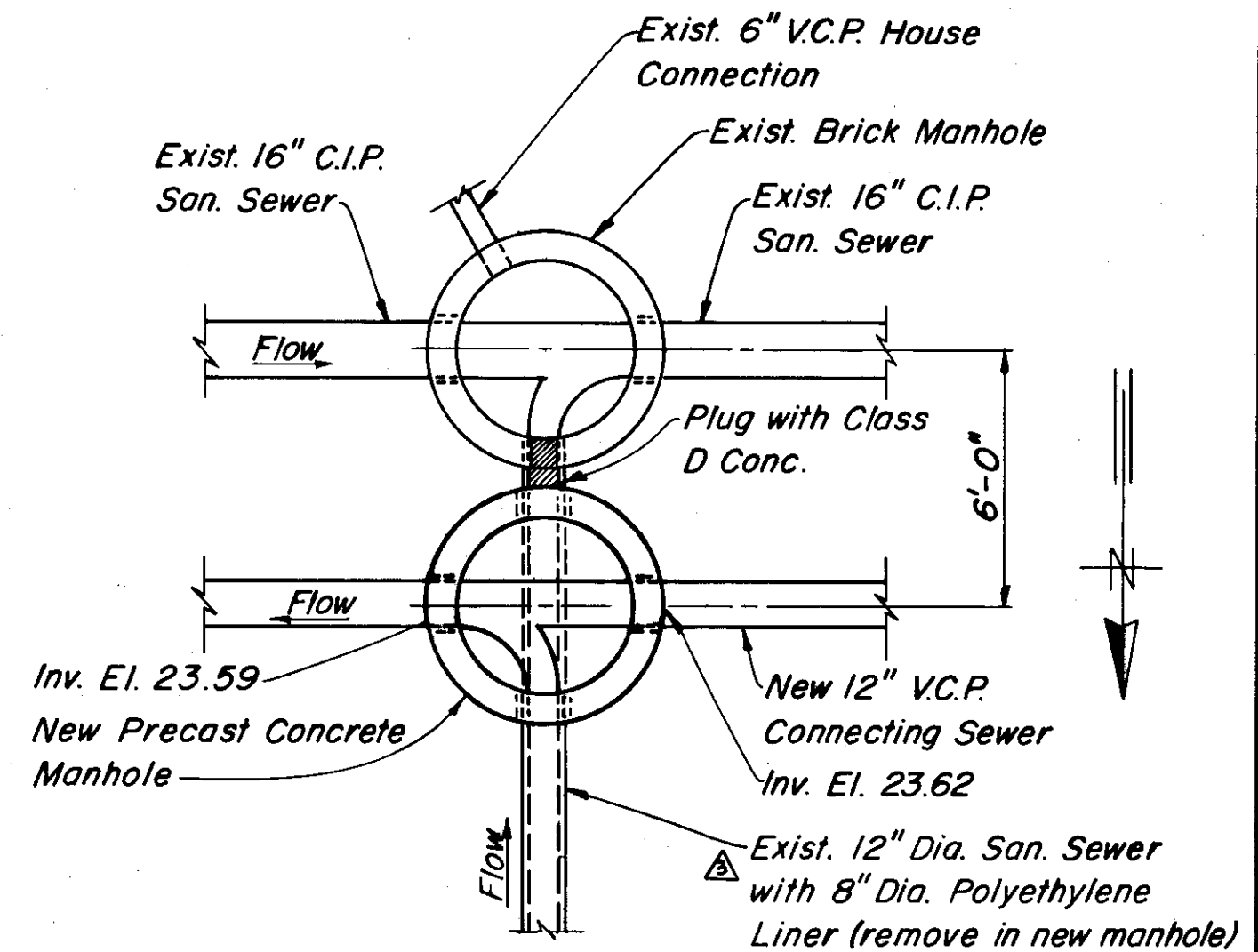


NOTES:

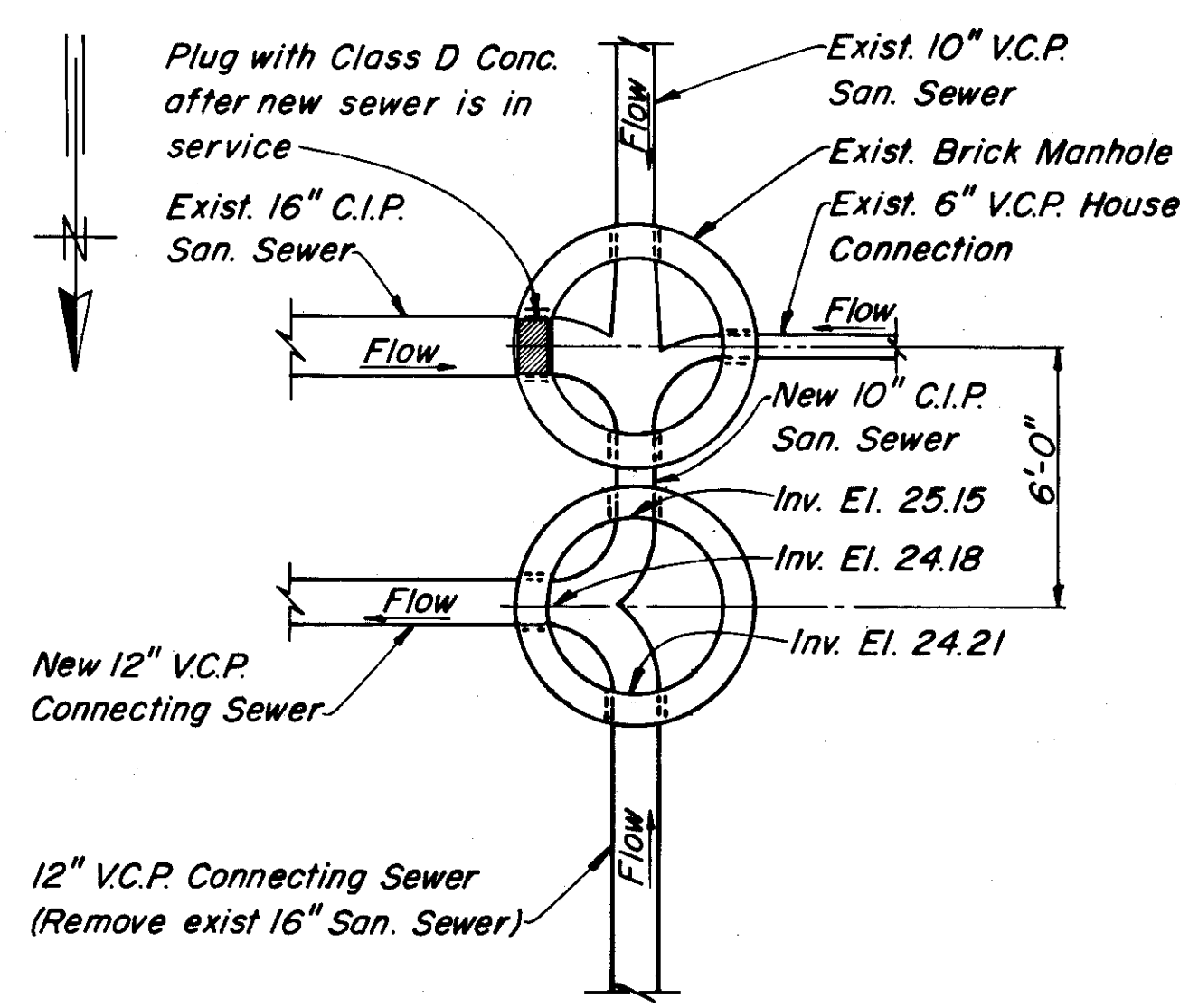
1. Construct new diversion manhole on existing 16" sanitary sewer in Adalee Street adjacent to new manhole at Sta. 0+61.0 as shown in Detail "A".
2. Construct new diversion manhole on existing 8" sanitary sewer in Avon Street at Sta. 1+17.5 as shown in Detail "B".
3. Remove existing 16" sanitary sewer and manhole in Jefferson Street from Sta. 3+84.5 to Sta. 5+93.0 and replace with new 12" sanitary sewer and manhole. See Detail "C" and "D" for new manholes at Sta. 3+84.5 and Sta. 5+93.0.



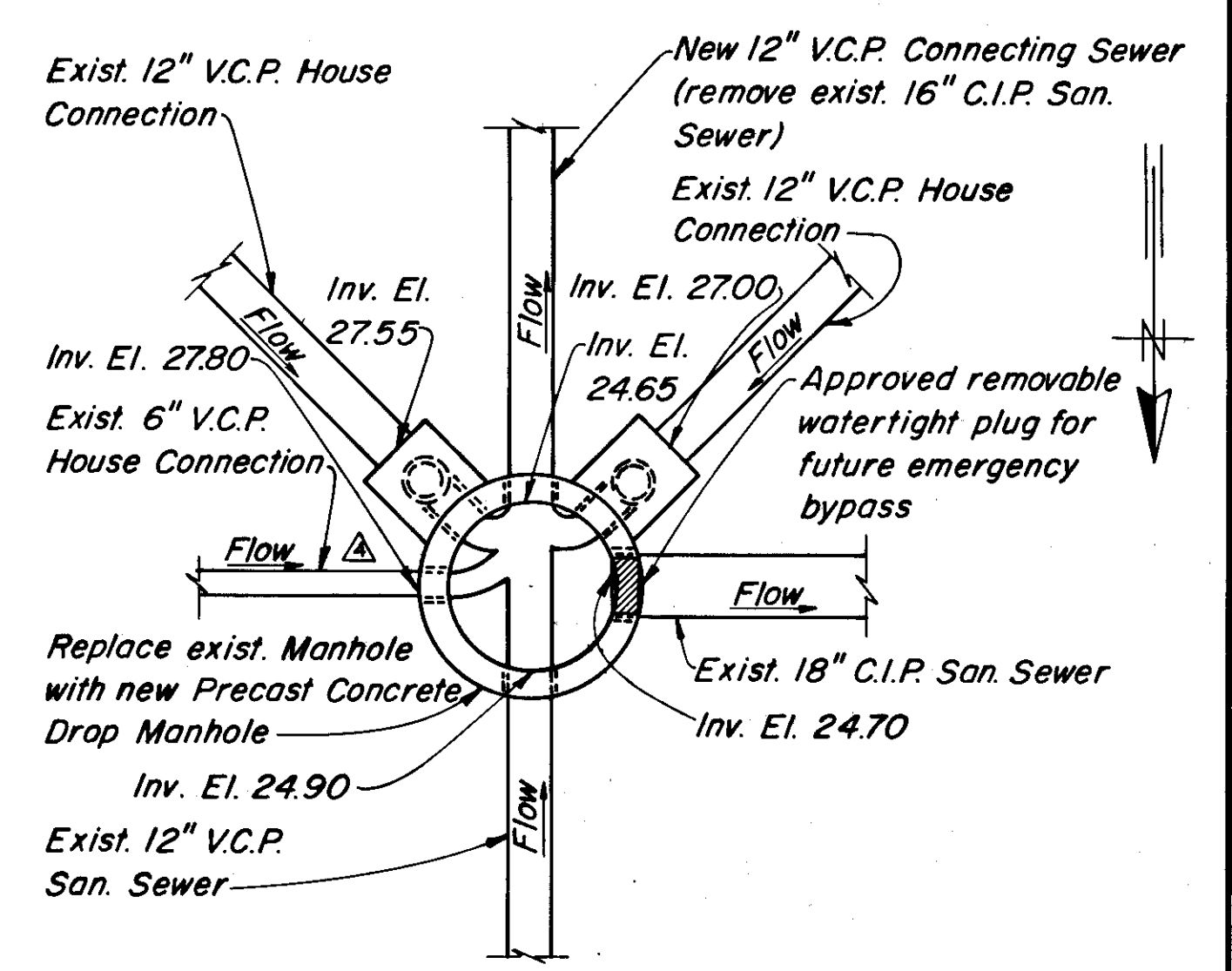
DETAIL "A"
SCALE: 1/4"=1'-0"



DETAIL "B"
SCALE: 1/4"=1'-0"

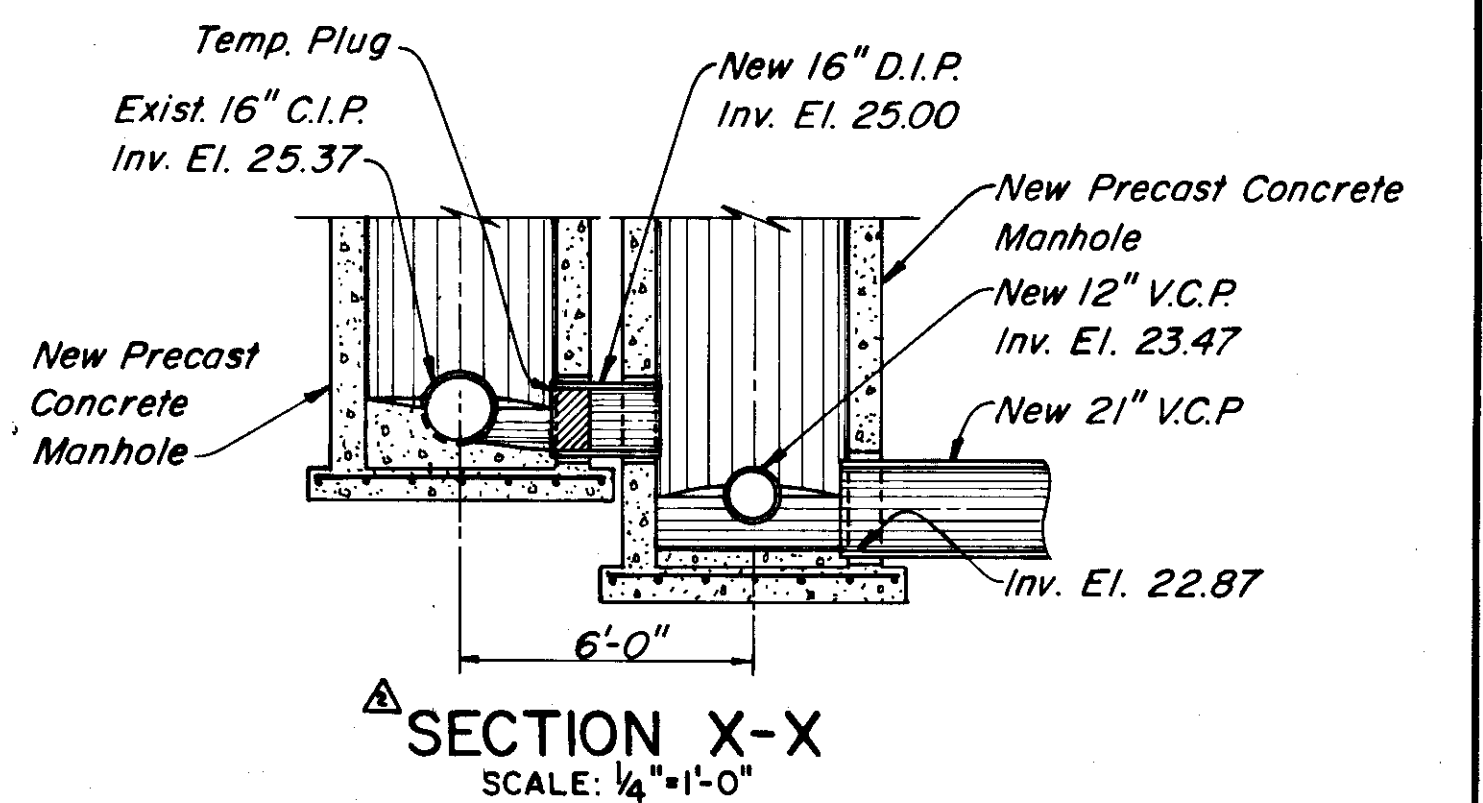


DETAIL "C"
SCALE: 1/4"=1'-0"



DETAIL "D"
SCALE: 1/4"=1'-0"

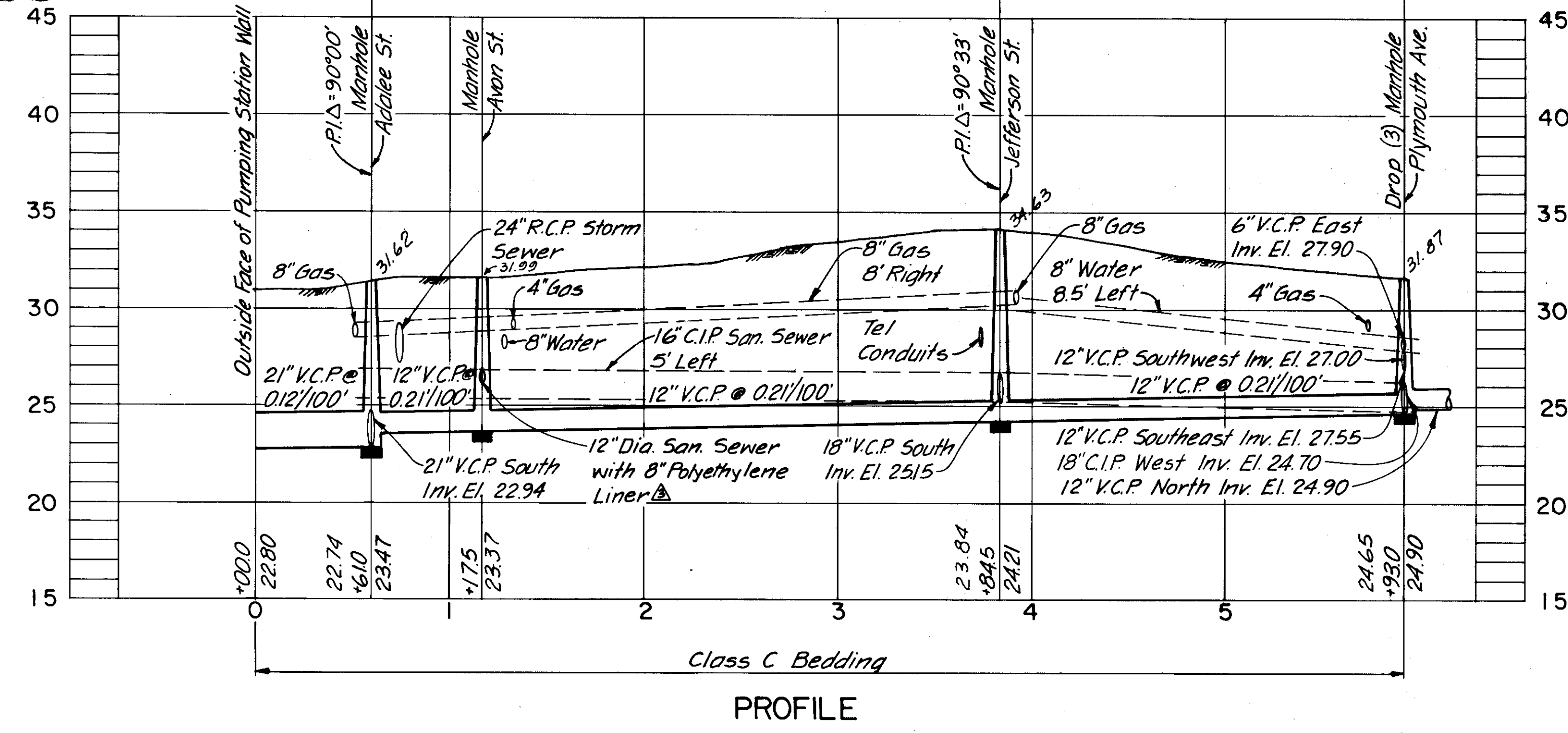
- NOTES (continued)**
4. Maintain flow in existing sewer and house laterals from Sta. 0+61.0 to Sta. 3+84.5 until new connecting sewer and replacement house laterals are tested and accepted. Contractor shall then connect all new house laterals at property lines and make flow diversions at manholes.



SECTION X-X
SCALE: 1/4"=1'-0"

AS BUILT

Not to be constructed until new Pumping Station is placed in service
Existing Pavement: Red Brick
Exist. Pvmnt.: Asphaltic Concrete over Asphaltic Brick



PROFILE

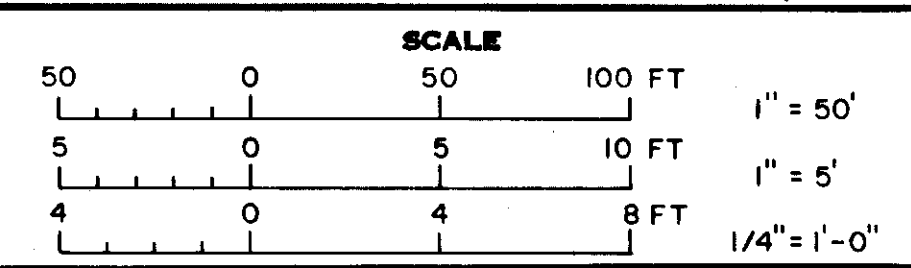
AS BUILT
CB 12-2-86

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

DESIGNED AA
DRAWN AA
CHECKED TLW

APPROVED
Supt., Dept. of Sanitary Sewers
DATE
Greeley and Hansen, Engineers

NO.	DATE	APP.	REVISION
5/17/84	TLW		AS-BUILT HOUSE CONNECTIONS
5/17/84	TLW		Del. 6" Drop Conn. Detail "D"
5/17/84	TLW		Rev. Note Re: 8" P.E. Sewer
5/17/84	TLW		Add Section X-X
5/17/84	TLW		Rev. and Add Elev. Detail "A"

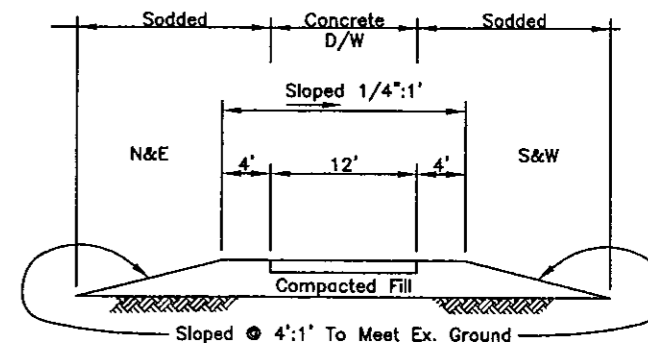
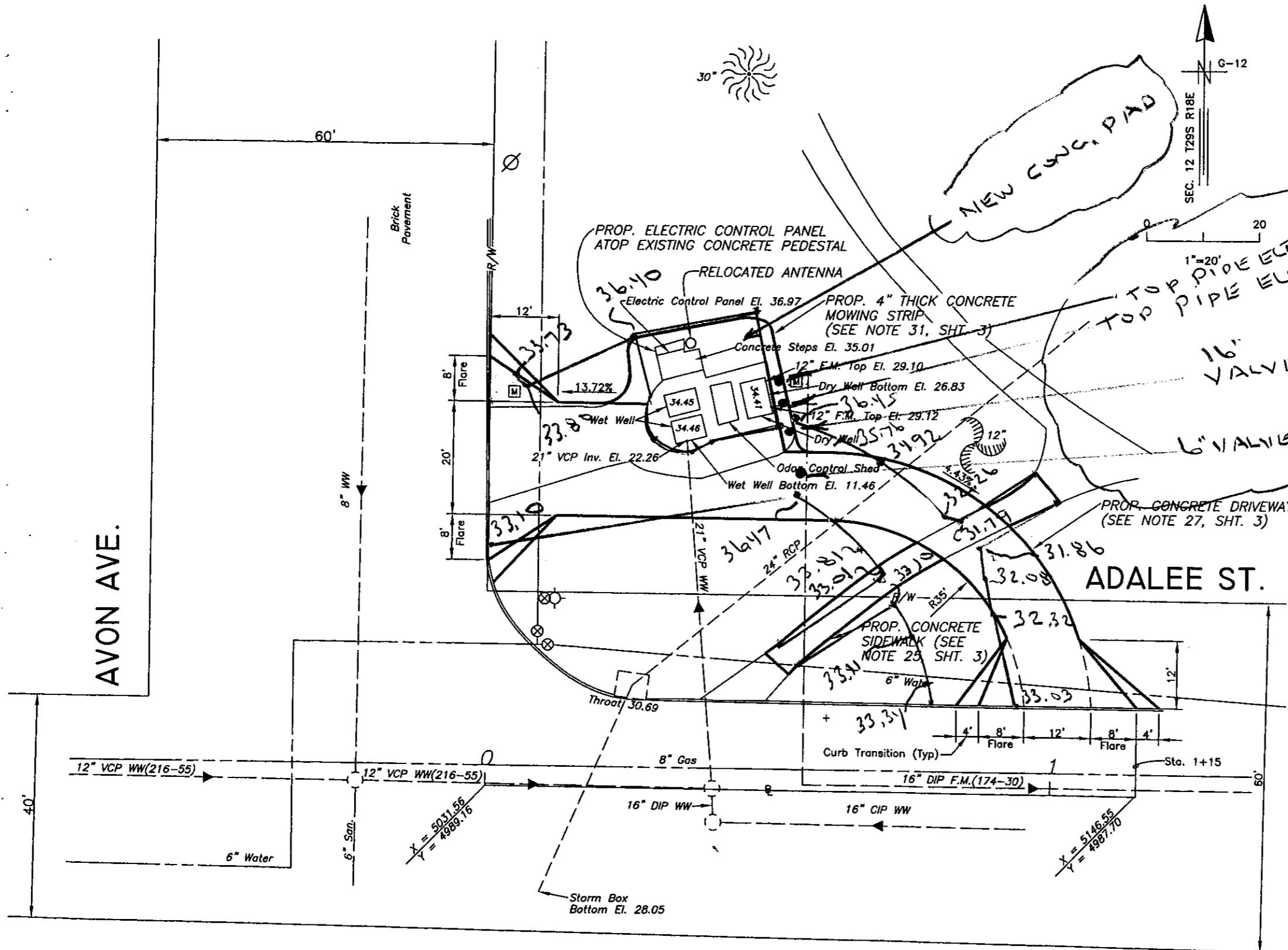


CITY OF TAMPA, FLORIDA
SEWAGE DISPOSAL SYSTEM
ADALEE STREET PUMPING STATION

DIVISION 4G7
CONNECTING SEWER

PROJ. NO. S 202-70-300 467
SHEET **7** OF 10
DATE NOV. 1982 REV. 4

216-055



TYPICAL DRIVEWAY SECTION
NOT TO SCALE

1=40
C:/ACAD200.../PS/5271

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

DES: J.P.W.
DRN: R.A.R.
CKD: *Att*
DATE: *1/10/05*

CITY of TAMPA
WASTEWATER DEPARTMENT

ADALEE PUMPING STATION
REHABILITATION
PROPOSED SITE PLAN

W.O. 5271
SHEET
5
OF 24