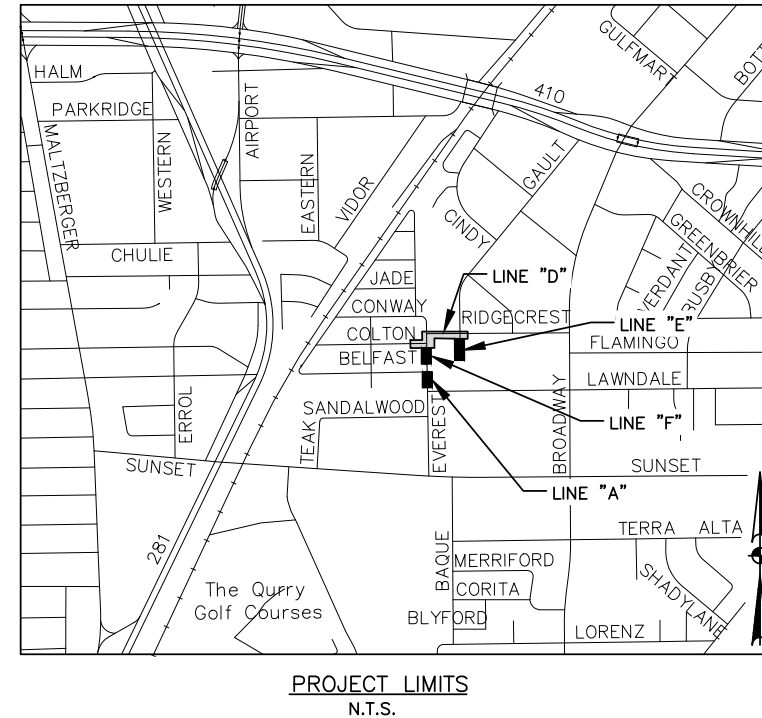


SAN ANTONIO
WATER SYSTEM

SAWS JOB NO: 17-5522

BELFAST & JANDA SUSAN DRAINAGE IMPROVEMENTs - p h a s e ii
SANITARY SEWER p l a n s



ELEVATIONS POSTED FOR TOP OF
MANHOLES ARE FOR REFERENCE
ONLY. IT SHALL BE THE
RESPONSIBILITY OF THE CONTRACTOR
TO MAKE ALLOWANCES AND
ADJUSTMENTS FOR THE TOP OF
MANHOLES TO MATCH THE FINISHED
GRADE FOR THE STREET
IMPROVEMENTS (NSPI).



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No.	Revision	Drawn	Approved	Date	
REVISIONS					
		WASTEWATER COVER			
DEVELOPER:					
CONT.		BUDGET PROJ.			
SUBMITTED _____		100% SUBMITTAL			
APPROVED _____					
MAP No.1666608,166610,1686608,168610				SHEET	
SECT. No.		JOB No.		OF	
DR. FJC LCK. BAL		17-5522		1	
				OF 12	

GENERAL NOTES

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:

- A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage."
C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction."
D. Current City of San Antonio "Standard Specifications for Construction."
E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The Contractor shall obtain SAWS Standard Details from SAWS website, http://www.saws.org/business_center/specs. Unless otherwise noted within design plans.

3. The Contractor is to notify and make arrangements with the SAWS Construction Inspection Division at 210-233-3500, and provide notification procedures the contractor will use to notify affected home residents and/or property owners 72 hours prior to excavation.

4. Locations and depths of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.

5. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:

San Antonio Water System:
SAWS Utility Locates: <http://www.saws.org/Service/Locates>

COSA Drainage 210-207-8048
COSA Traffic Signal Operations 210-207-7720
Texas State Wide One Call Locator 1-800-545-6005 or 811

6. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition as a result of damages done by the project's construction.

7. All work in Texas Highway Department and Bexar County right-of-way shall be done in accordance with respective construction specifications and permit.

8. The Contractor shall comply with City of San Antonio or other governing Municipality's tree ordinances when excavating near trees.

9. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.

10. Any work completed without prior written authorization which is not included in these plans and specifications will not be compensated by the San Antonio Water System.

11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to constworkreq@saws.org.

Weekend Work: Contractors are required to notify the SAWS Inspection Construction department 48 hours in advance to request weekend work. Request should be sent to constworkreq@saws.org.

Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.

12. PRE CON SITE VIDEO: Before the start of any construction. The site must be video recorded by the contractor with one copy submitted to SAWS Inspections. A pre-site video will provide accurate documentation of the existing conditions (NSPI).

13. POWER POLE BRACING: Contractors should be advised that there are existing overhead utility poles along the project corridor. Contractors should further be advised that if the distance from the outside face of a utility trench to the face of a utility pole is less than 5 feet, said utility pole is subject to bracing, based on a determination made by utility pole owner. Costs incurred by contractor for bracing of these utility poles is subsidiary to that respective utility company's work. It is advisable for the contractor to review the construction documents, and visit the construction site to determine potential impacts.

14. CONSTRUCTION SEQUENCING: It is the contractor sole responsibility to schedule sequencing for removal and installation of existing and proposed SAWS utilities in conjunction with general project construction. Sequence of construction activities shall be considered in order to minimize the extent and duration of disturbances.

Sewer Section:

15. The Contractor is responsible for ensuring that no sanitary sewer overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:

- A. Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at 210-704-SAWS (210-704-7297). Provide the address of the spill and an estimated volume or flow.
B. Attempt to eliminate the source of the SSO.
C. Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
D. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soil/materials.
E. Clean the affected sewer mains and remove any debris.
F. Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24 hours.

Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by SAWS, including any fines from EPA.

No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the TCEQ and SAWS.

16. The Contractor shall provide bypass pumping of sewage around each segment of pipe to be replaced, in accordance with SAWS Special Specification Item No. 864-S1, "Bypass Pumping Small Diameter Sanitary Sewers" and Item No. 864-S2, "Bypass Pumping Large Diameter Sanitary Sewers". Payment for such work will be made under the bid item "Sanitary Sewer (Bypass Pumping)" (Lump Sum) as per SAWS Special Specification.

17. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the SAWS Construction Inspection Division at 210-233-3500 and/or SAWS Production groups at least one week or more in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.

18. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements (NSPI).

19. SMART MANHOLE COVERS: The Contractor shall notify Juan C. Ramirez at 210-233-3558 and SAWS EOC at 210-704-SAWS (210-233-7297) a minimum of 72 hours, not counting weekends or SAWS holidays, before working on the pipe or manhole, in order to have SAWS remove the Smart Cover. Any damage done to the Smart Cover will be charged to the Contractor through a change order.

20. CONTRACTOR to verify SAWS asset numbers with SAWS Inspector prior to televising new sewer mains.

SHEET INDEX

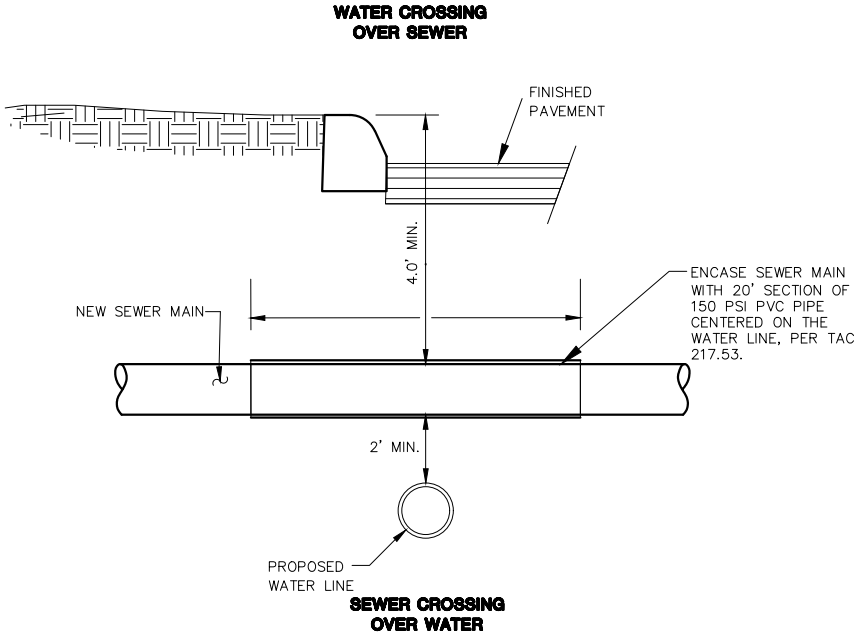
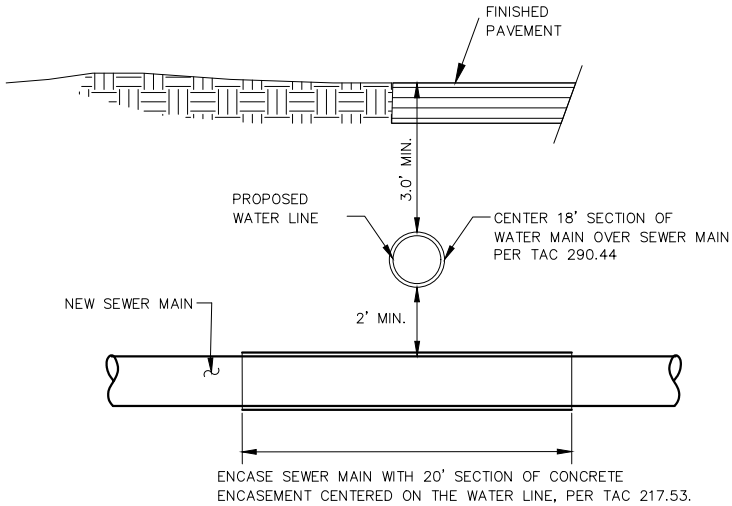
Sheet Number	Sheet Title
1	WASTEWATER COVER
2	WASTEWATER GENERAL NOTES
3	WASTEWATER QUANTITIES
4	SURVEY CONTROL
5	WASTEWATER LINE A STA. 201+53.72 TO 200+85.75
6	WASTEWATER LINE D STA. 600+47.26 TO 300+97.00
7	WASTEWATER LINE D STA. 302+94.95 TO 304+49.44
8	WASTEWATER LINE E
9	WASTEWATER LINE F
10	WASTEWATER FLOW BYPASS 1 OF 3
11	WASTEWATER FLOW BYPASS 2 OF 3
12	WASTEWATER FLOW BYPASS 3 OF 3

STANDARD SAWS SANITARY SEWER DETAILS

THE FOLLOWING STANDARD SAWS CONSTRUCTION DETAILS HAVE BEEN UTILIZED IN THESE PLANS:

DD-804-01	DD-854-03
DD-804-02	DD-856-01
DD-848-01	DD-856-02
DD-852-01	DD-858-01
DD-852-02	DD-858-02
DD-852-03	
DD-852-07	
DD-854-01	
DD-854-02	

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.



TYPICAL WATER / SEWER LINE CROSSING
SCALE: N.T.S.



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REVISIONS					
		WASTEWATER GENERAL NOTES			
DEVELOPER:					
CONT.		BUDGET PROJ.			
SUBMITTED		100% SUBMITTAL			
APPROVED _____					
MAP No.166608,166610,168608,168610				SHEET	
SECT. No.		JOB No.		2	
DR. FJC		CK. BAL		OF 12	

OVERALL QUANTITIES

SUMMARY OF QUANTITIES			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	1086
848.1	8" PVC SANITARY SEWER ASTM 2241 (0'-6')	LF	399
848.2	8" PVC SANITARY SEWER ASTM 2241 (6'-10')	LF	687
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	10
852.3	EXTRA DEPTH MANHOLE	VF	10
854	SANITARY SEWER LATERALS	LF	382
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	18
858	CONCRETE ENCASEMENT	CY	55
860	VERTICAL STACKS	VF	4
864	SANITARY SEWER BYPASS PUMPING	LS	1
866	SEWER MAIN PRE-TELEVISION	LF	1086
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	1086

SHEET 5

SANITARY SEWER			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	68
848	8" PVC SANITARY SEWER (6'-10')	LF	68
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	2
854	SANITARY SEWER LATERALS	LF	25
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	1
858	CONCRETE ENCASEMENT	CY	2
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	68

SHEET 8

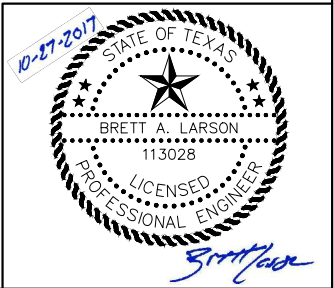
SANITARY SEWER			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	339
848	8" PVC SANITARY SEWER (0'-6')	LF	339
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	2
854	SANITARY SEWER LATERALS	LF	170
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	7
858	CONCRETE ENCASEMENT	CY	30
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	339

SHEET 6

SANITARY SEWER			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	400
848	8" PVC SANITARY SEWER (6'-10')	LF	400
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	3
852.3	EXTRA DEPTH MANHOLES (> 6')	VF	6.6
854	SANITARY SEWER LATERALS	LF	69
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	4
858	CONCRETE ENCASEMENT	CY	10
860	VERTICAL STACKS	VF	4
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	400

SHEET 9

SANITARY SEWER			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	122
848	8" PVC SANITARY SEWER (0'-6')	LF	60
848	8" PVC SANITARY SEWER (6'-10')	LF	62
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	1
854	SANITARY SEWER LATERALS	LF	28
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	2
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	122



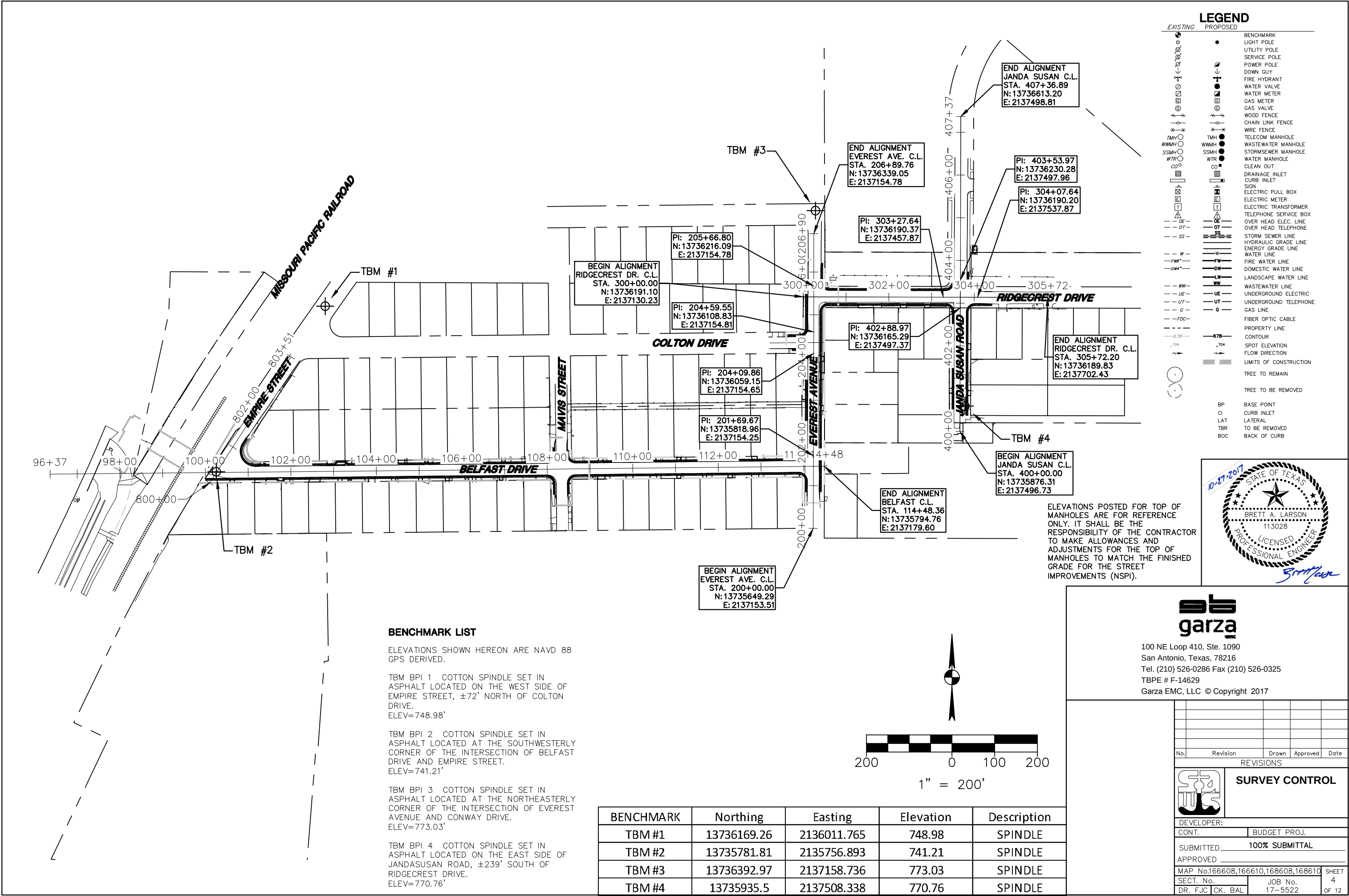
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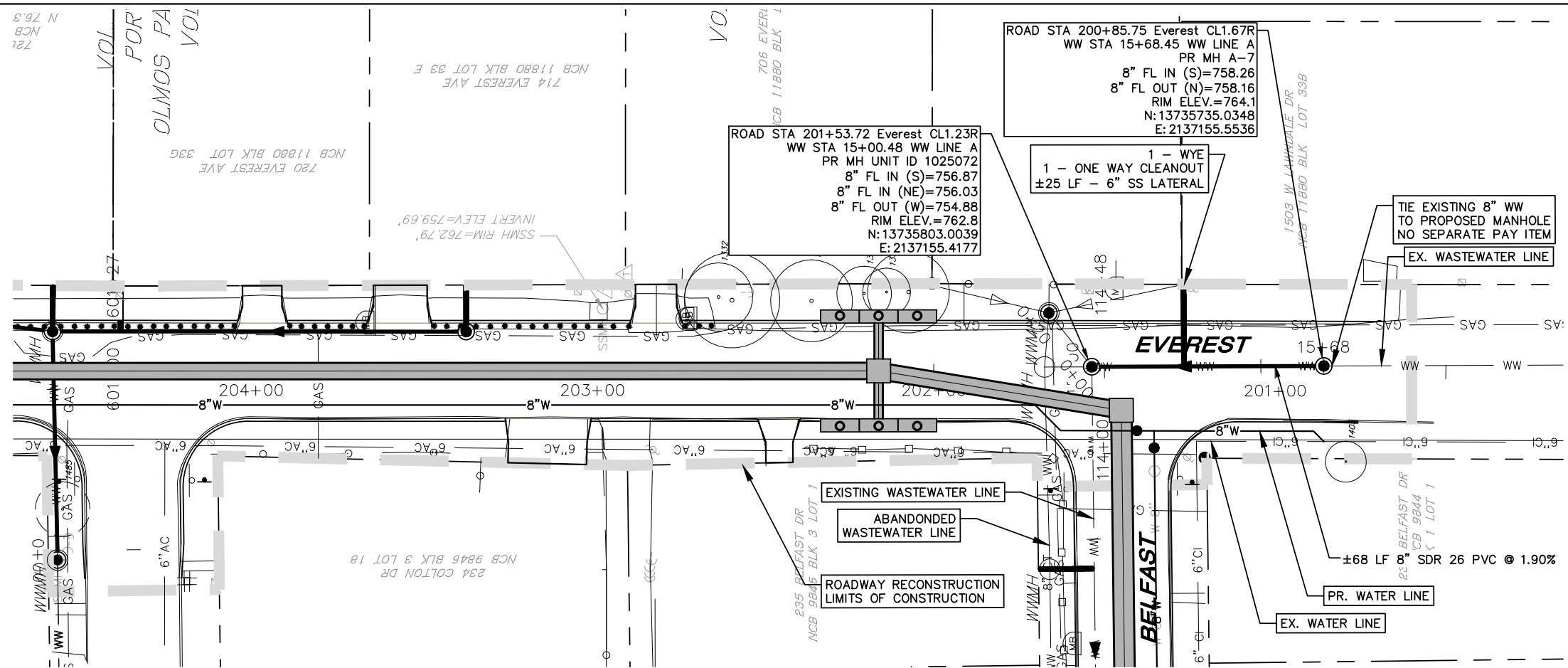
SANITARY SEWER			
ITEM NUMBER	ITEM DESCRIPTION	UNIT	APPROXIMATE QUANTITIES
550	TRENCH EXCAVATION SAFETY PROTECTION	LF	157
848	8" PVC SANITARY SEWER (6'-10')	LF	157
852.1	SANITARY SEWER MANHOLE (0'-6')	EA	2
852.3	EXTRA DEPTH MANHOLES (> 6')	VF	3.3
854	SANITARY SEWER LATERALS	LF	50
854.1	ONE-WAY SANITARY SEWER CLEAN-OUT	EA	2
858	CONCRETE ENCASEMENT	CY	13
866	SEWER MAIN TELEVISION INSPECTION (8"-15")	LF	157



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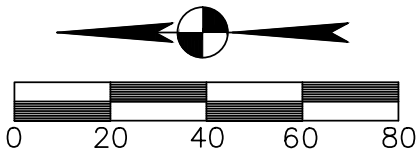
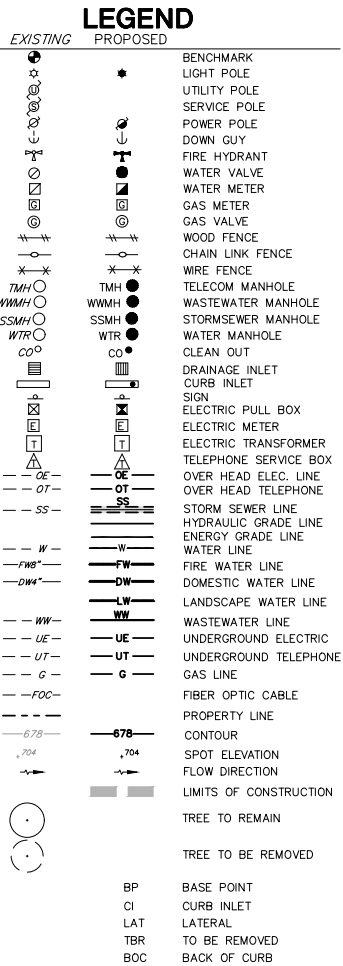
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DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED		100% SUBMITTAL		
APPROVED _____				
MAP No.166608,166610,168608,168610				SHEET
SECT. No.		JOB No.		3
DR. FJC		CK. BAL		OF 12



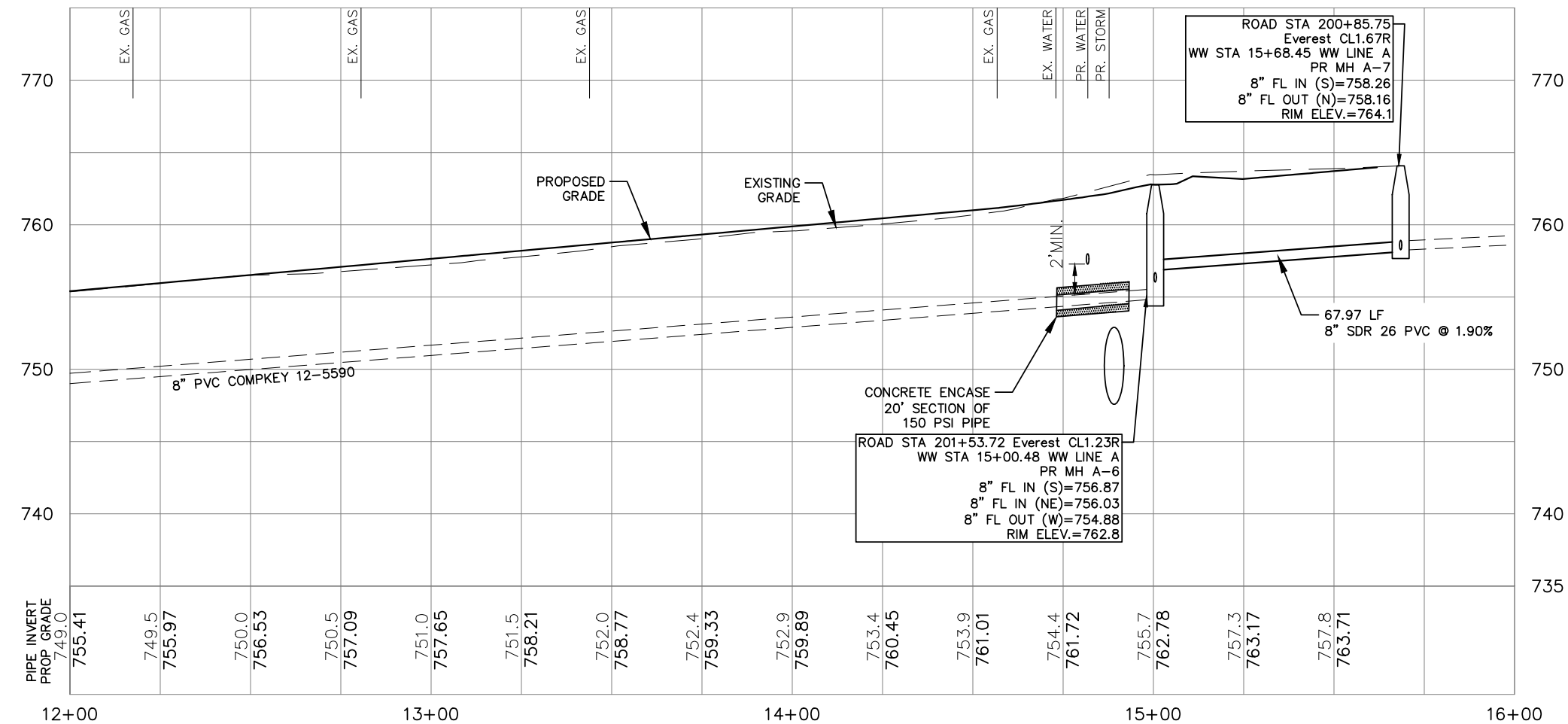


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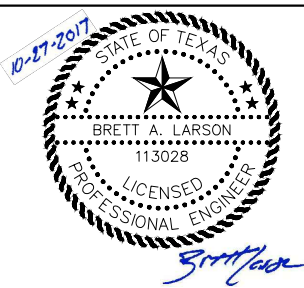
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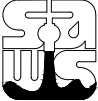
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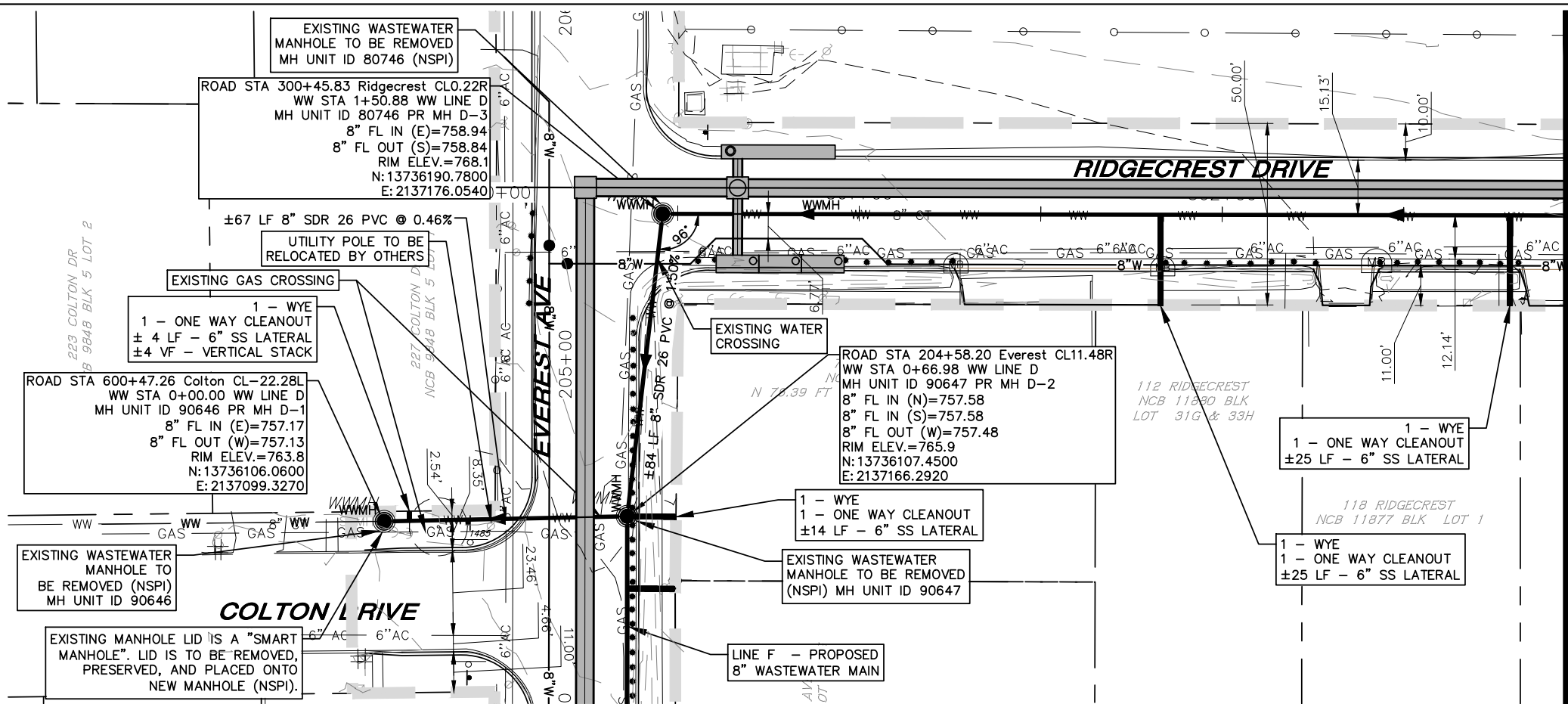


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REVISIONS					
		WASTEWATER LINE A STA. 201+53.72 TO 200+85.75			
DEVELOPER:					
CONT.		BUDGET PROJ.			
SUBMITTED		100% SUBMITTAL			
APPROVED					
MAP No.166608,166610,168608,168610					SHEET 5
SECT. No.		JOB No.			
DR. FJC CK. BAL		17-5522		OF 12	



WASTEWATER LINE D COLTON C.L. 600+47.26 TO RIDGECREST C.L. 302+95.04

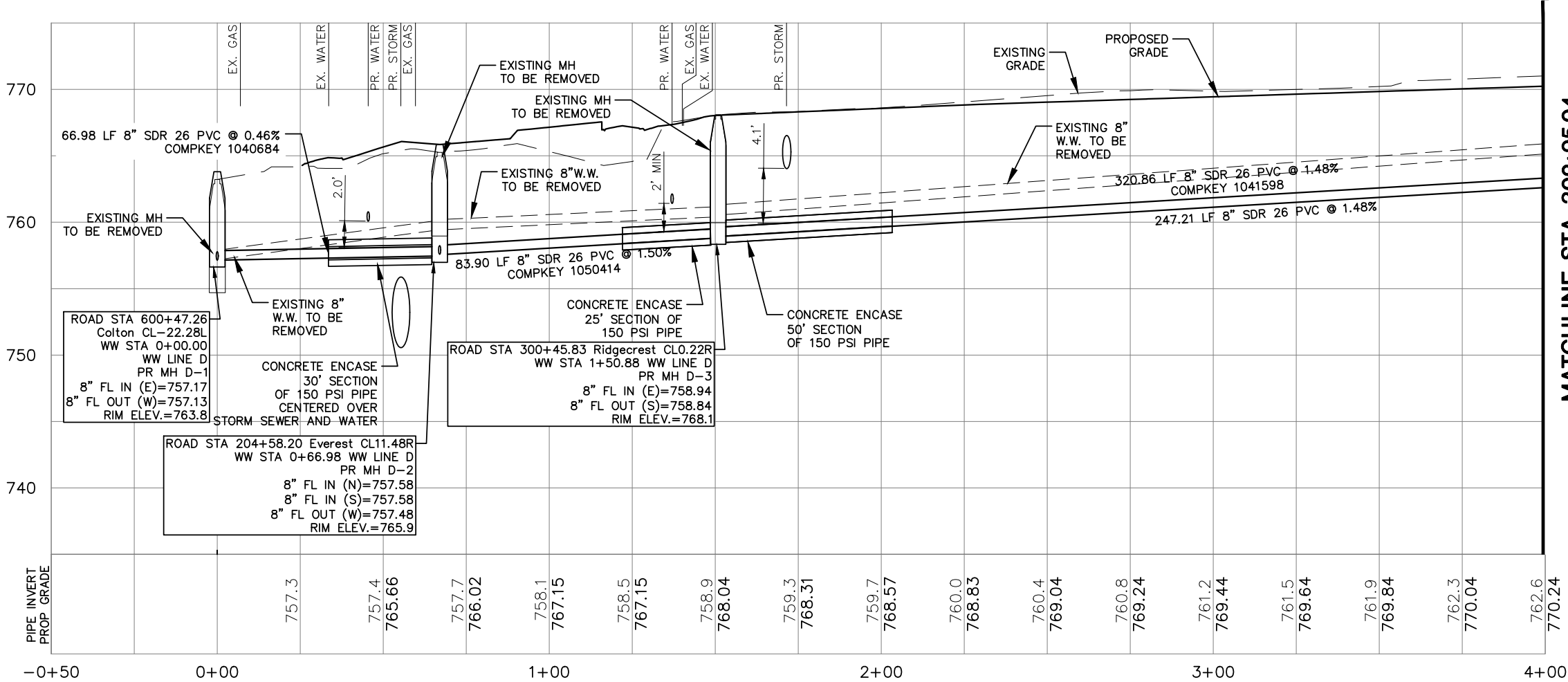
NOTES

1. THE MINIMUM ANGLE OF FLOW FOR A CONNECTING SEWER MAIN TO THE DIRECTION OF FLOW OF A SEWER SYSTEM IS 90 DEGREES.

LEGEND

EXISTING	PROPOSED	
		BENCHMARK
		LIGHT POLE
		UTILITY POLE
		SERVICE POLE
		POWER POLE
		DOWN GUY
		FIRE HYDRANT
		WATER VALVE
		WATER METER
		GAS METER
		GAS VALVE
		WOOD FENCE
		CHAIN LINK FENCE
		WIRE FENCE
		TELECOM MANHOLE
		WASTEWATER MANHOLE
		STORMSEWER MANHOLE
		WATER MANHOLE
		CLEAN OUT
		DRAINAGE INLET
		CURB INLET
		SIGN
		ELECTRIC PULL BOX
		ELECTRIC METER
		ELECTRIC TRANSFORMER
		TELEPHONE SERVICE BOX
		OVER HEAD ELEC. LINE
		OVER HEAD TELEPHONE
		STORM SEWER LINE
		HYDRAULIC GRADE LINE
		ENERGY GRADE LINE
		WATER LINE
		FIRE WATER LINE
		DOMESTIC WATER LINE
		LANDSCAPE WATER LINE
		WASTEWATER LINE
		UNDERGROUND ELECTRIC
		UNDERGROUND TELEPHONE
		GAS LINE
		FIBER OPTIC CABLE
		PROPERTY LINE
		CONTOUR
		SPOT ELEVATION
		FLOW DIRECTION
		LIMITS OF CONSTRUCTION
		TREE TO REMAIN
		TREE TO BE REMOVED
		BASE POINT
		CURB INLET
		LATERAL
		TO BE REMOVED
		BACK OF CURB

HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=10'



WASTEWATER LINE D STA. 600+47.26 TO 302+95.04

ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR THE TOP OF MANHOLES TO MATCH THE FINISHED GRADE FOR THE STREET IMPROVEMENTS (NSPI).



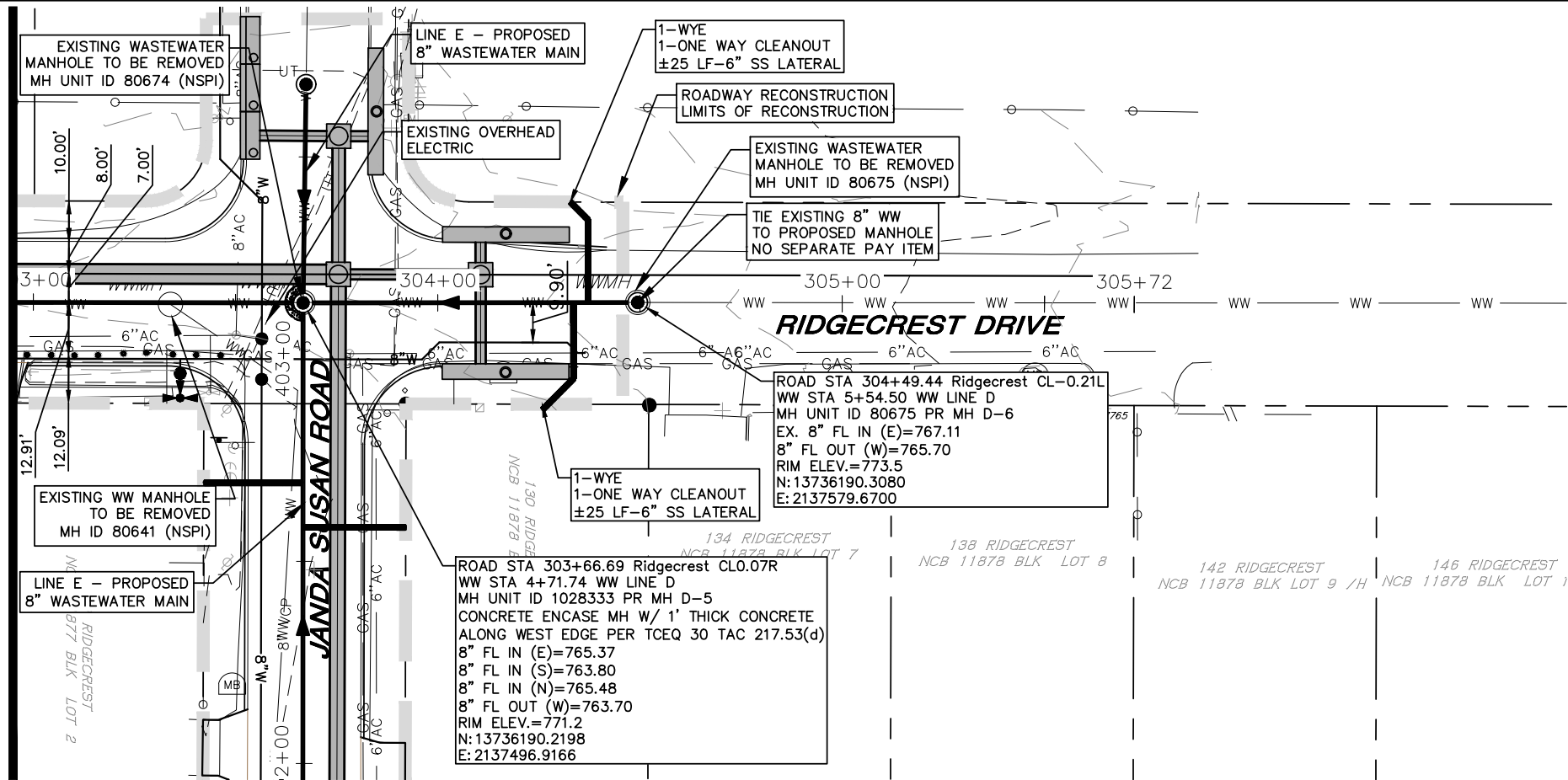
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WASTEWATER LINE
D STA. 600+47.26
TO 302+95.04

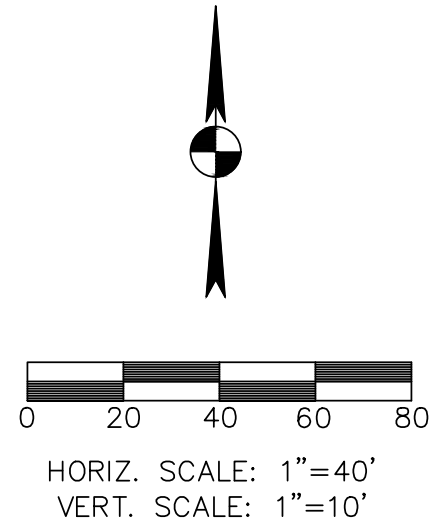
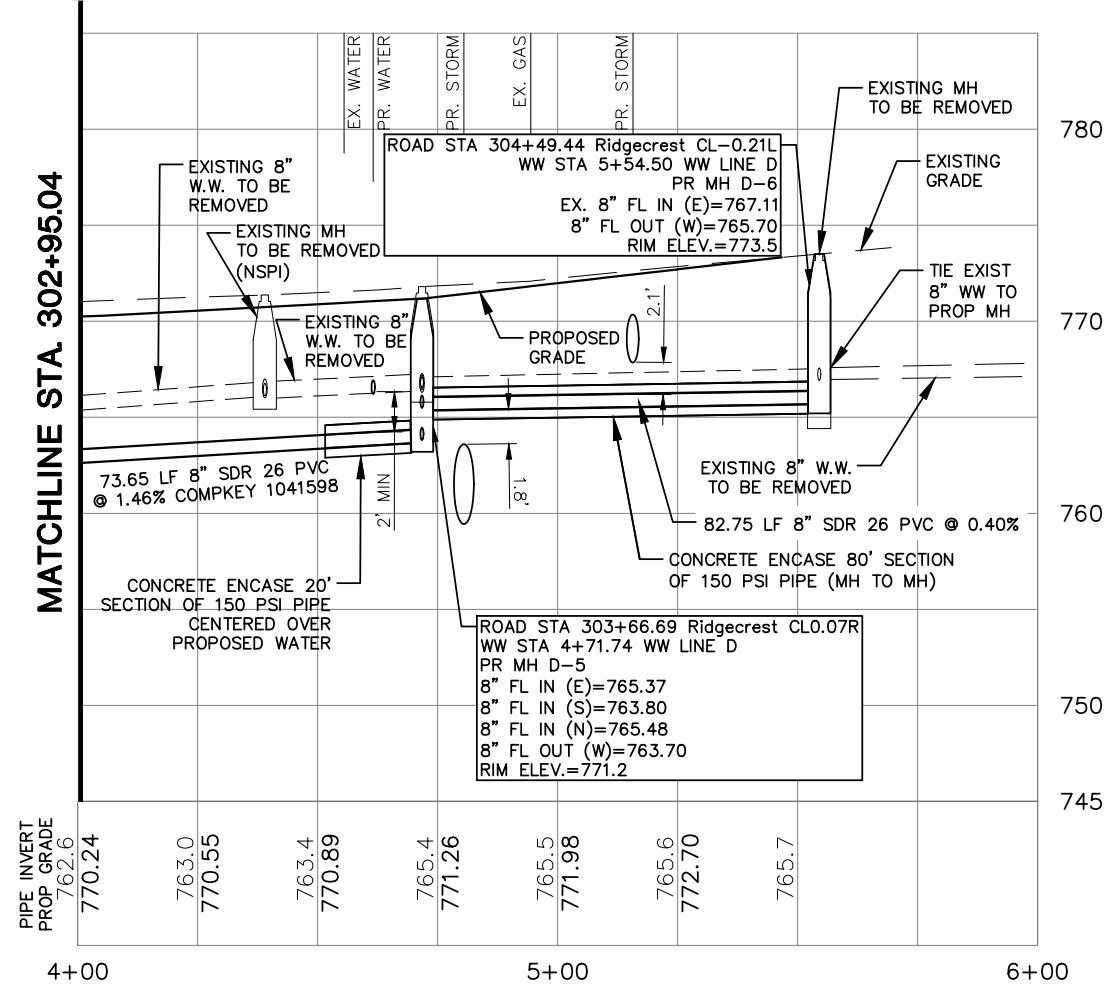
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CONT.	BUDGET PROJ.
SUBMITTED	100% SUBMITTAL
APPROVED	
MAP No.166608,166610,168608,168610	SHEET 6
SECT. No.	JOB No.
DR. FJC	CK. BAL
17-5522	OF 12

MATCHLINE STA 302+95.04



WASTEWATER LINE D RIDGECREST C.L STA. 302+95.04 TO RIDGECREST C.L STA. 304+49.44

MATCHLINE STA 302+95.04



LEGEND	
EXISTING	PROPOSED

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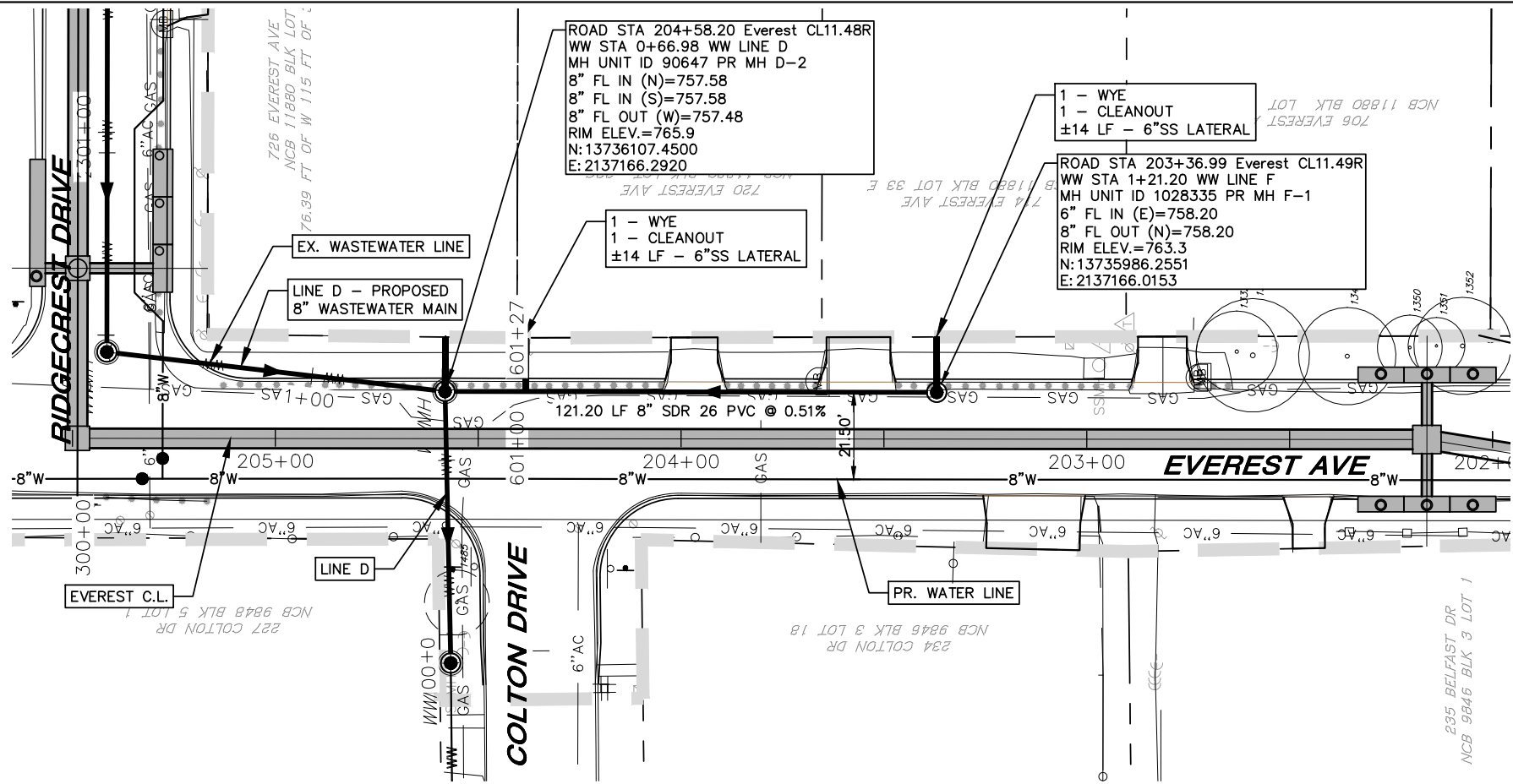


garza

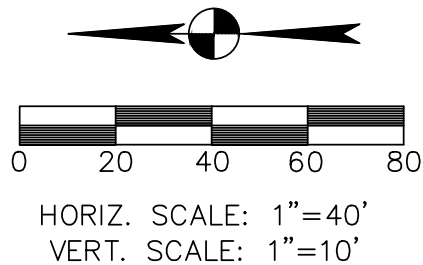
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No.	Revision	Drawn	Approved	Date

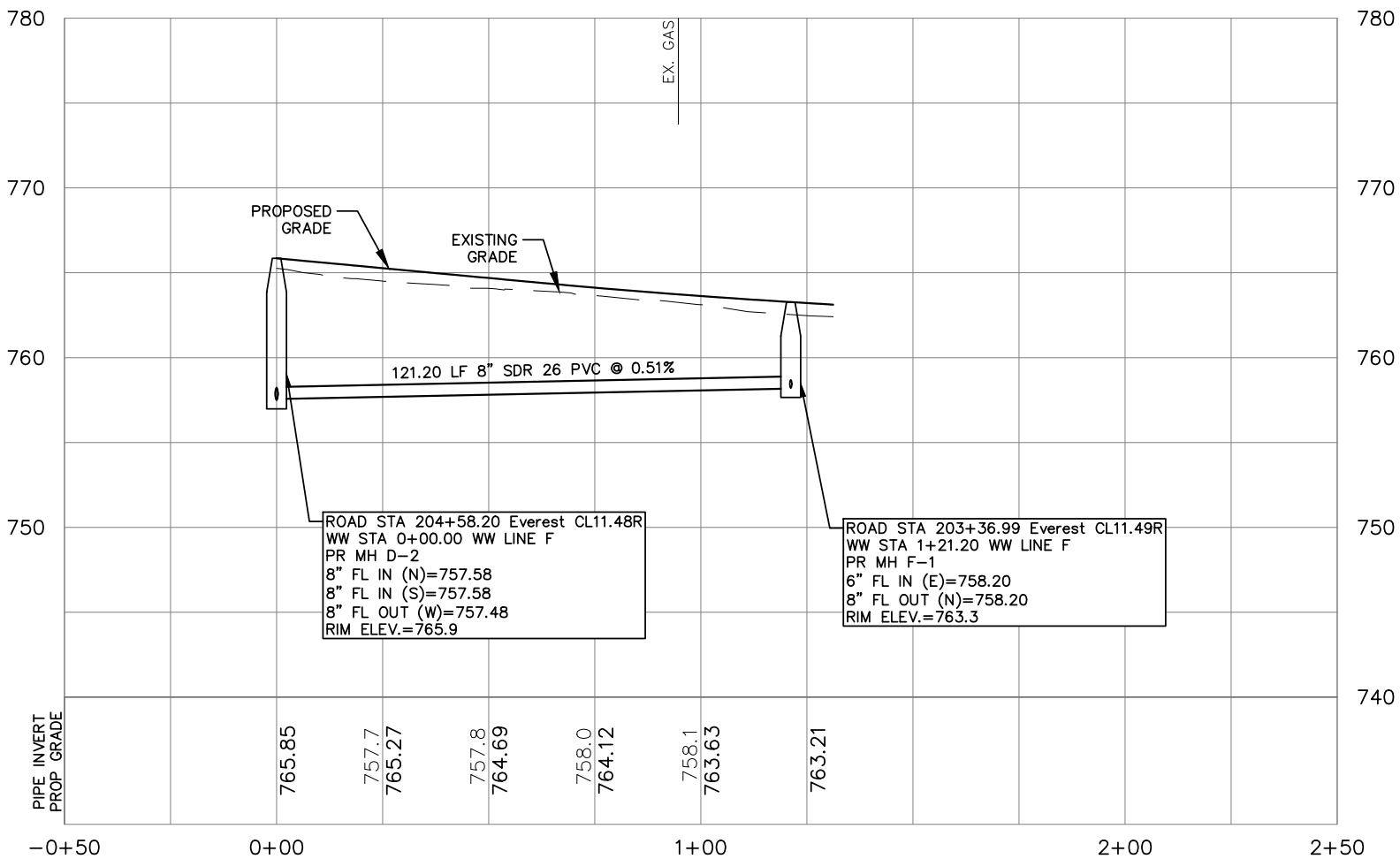
REVISIONS				
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DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED		100% SUBMITTAL		
APPROVED				
MAP No.166608,166610,168608,168610				SHEET
SECT. No.		JOB No.		7
DR. FJC		CK. BAL		OF 12



WASTEWATER LINE F



LEGEND	
EXISTING	PROPOSED
BP	BASE POINT
CI	CURB INLET
LAT	LATERAL
TBR	TO BE REMOVED
BOC	BACK OF CURB

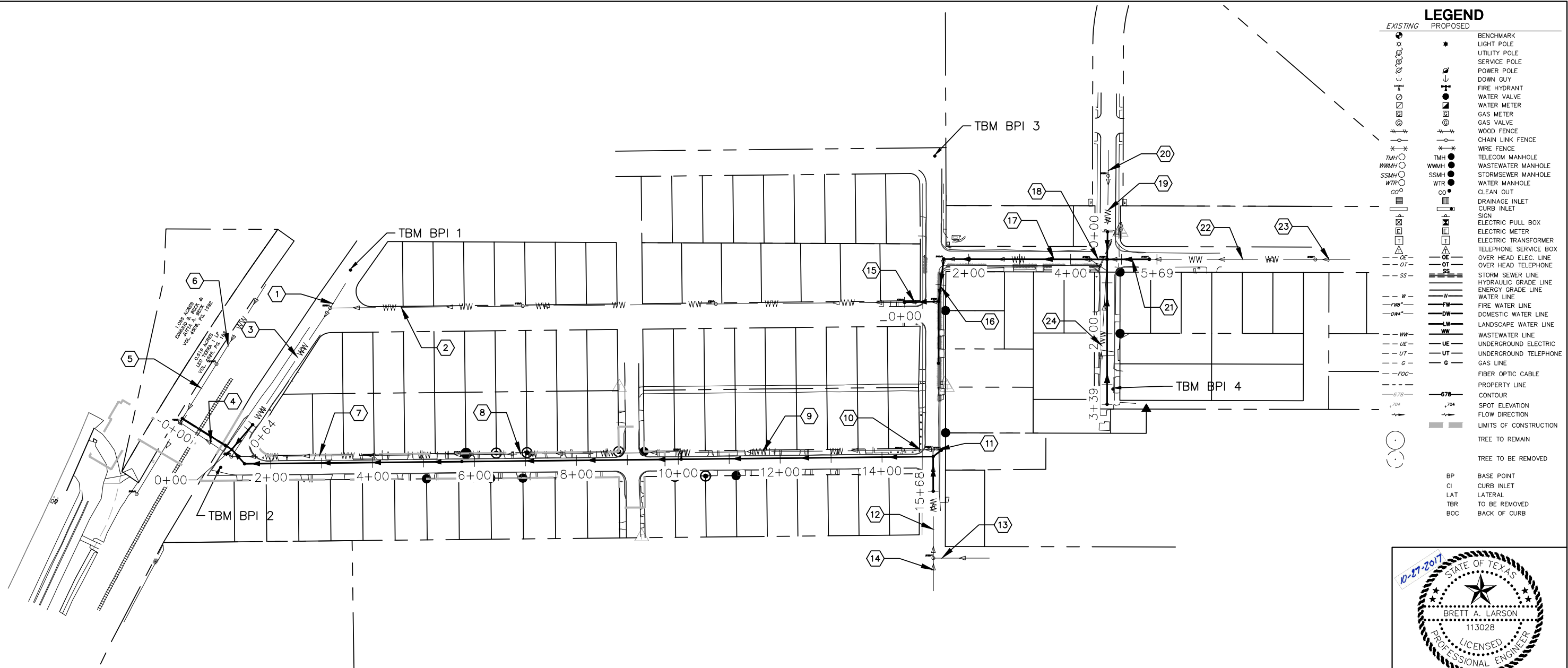


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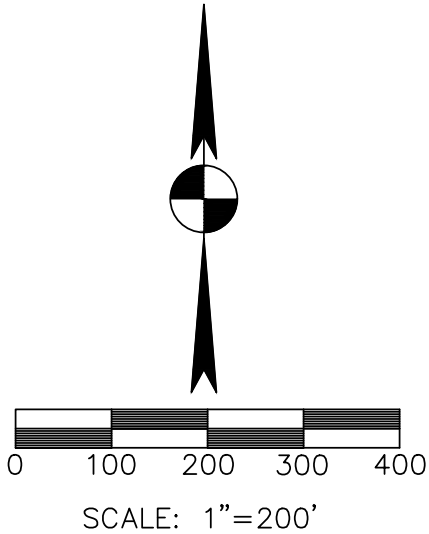
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REVISIONS				
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DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED		100% SUBMITTAL		
APPROVED _____				
MAP No.166608,166610,168608,168610				SHEET 9
SECT. No.		JOB No.		OF 12
DR. FJC CK. BAL		17-5522		



KEYNOTE	SIZE	LENGTH	SLOPE
①	8"	362	1.30%
②	8"	377	1.78%
③	8"	347	1.82%
④	8"	118	3.15%
⑤	10"	322	0.31%
⑥	10"	332	1.00%
⑦	8"	452	1.16%
⑧	8"	430	1.38%
⑨	8"	435	2.16%
⑩	8"	59	2.19%
⑪	8"	16	-1.44%
⑫	8"	213	2.04%

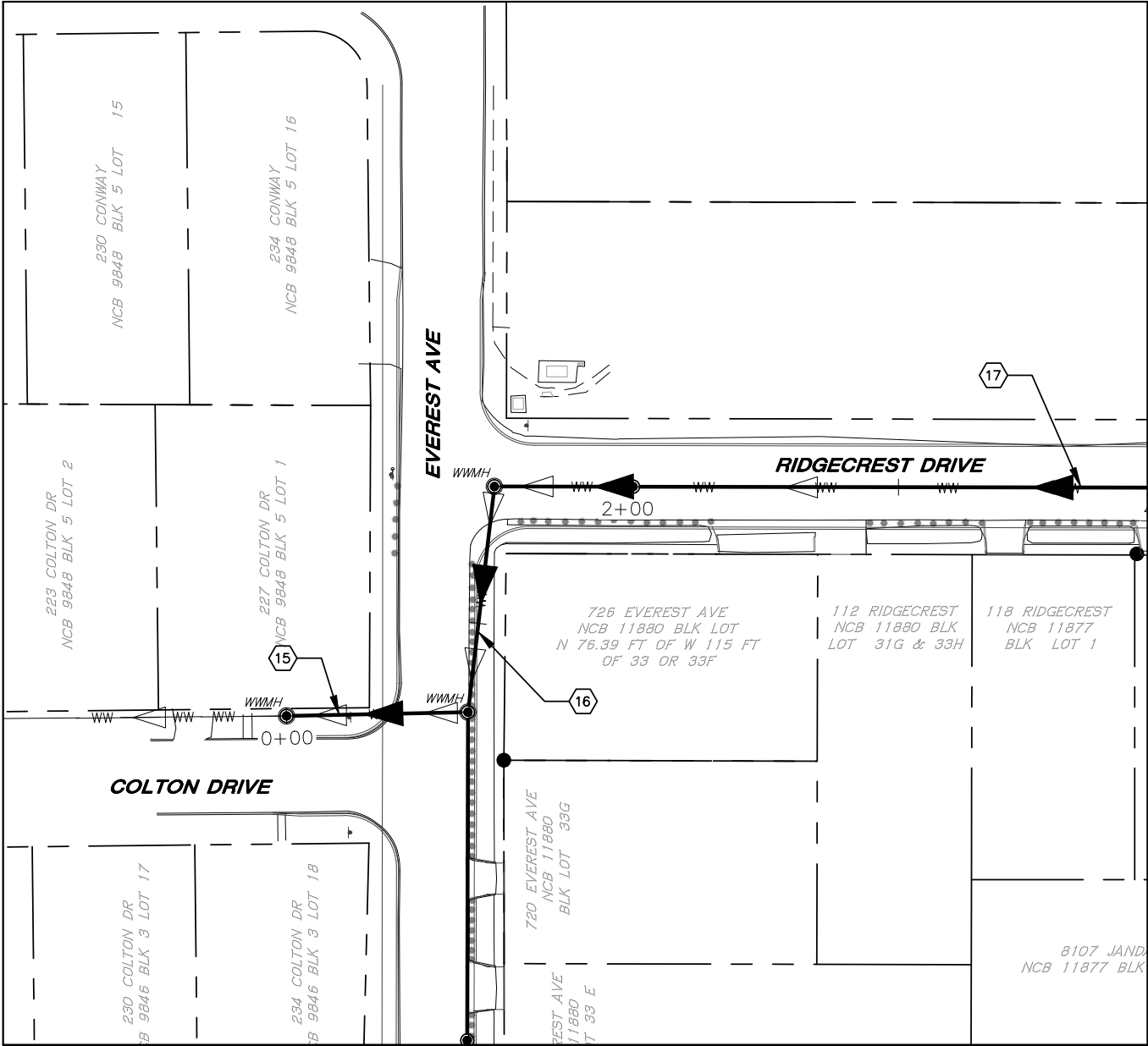
KEYNOTE	SIZE	LENGTH	SLOPE
⑬	8"	300	2.20%
⑭	6"	253	1.18%
⑮	8"	67	3.42%
⑯	8"	84	1.17%
⑰	8"	288	1.85%
⑱	8"	33	0.88%
⑲	8"	164	2.37%
⑳	8"	190	3.96%
㉑	8"	83	0.49%
㉒	8"	330	2.38%
㉓	8"	364	3.64%
㉔	8"	300	0.52%

NOTE:
1. DATA IS COLLECTED FROM ON-THE-GROUND SURVEY AND SAWS UTILITY BLOCK MAPS AND IS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY EXISTING FLOWS PRIOR TO BY-PASS PUMPING.



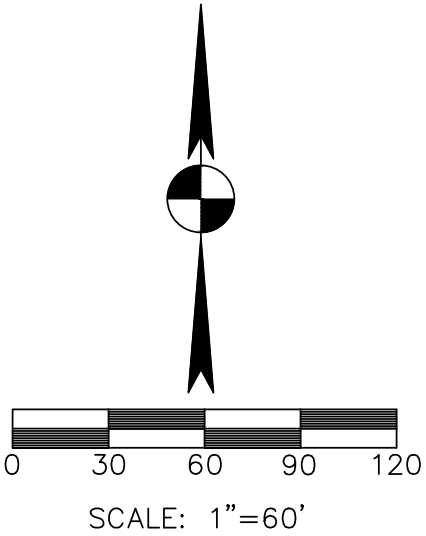
garza
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San Antonio, Texas, 78216
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TBPE # F-14629
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No.	Revision	Drawn	Approved	Date
REVISIONS				
		WASTEWATER FLOW BYPASS (SHEET 1 OF 3)		
DEVELOPER:				
CONT.		BUDGET PROJ.		
SUBMITTED		100% SUBMITTAL		
APPROVED _____				
MAP No.166608,166610,168608,168610				SHEET 10
SECT. No.		JOB No.		OF 12
DR. FJC		CK. BAL		17-5522



KEYNOTE	SIZE	LENGTH	SLOPE	FLOW
15	8"	67	3.42%	22.65
16	8"	84	1.17%	13.25
17	8"	288	1.85%	16.66

- NOTE:
1. FLOW DATA BASED ON MAXIMUM FLOW CAPACITY WITH NO SURCHARGE. NO ACTUAL FLOW DATA USED.
 2. DATA IS COLLECTED FROM ON-THE-GROUND SURVEY AND SAWS UTILITY BLOCK MAPS AND IS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY EXISTING FLOWS PRIOR TO BY-PASS PUMPING.



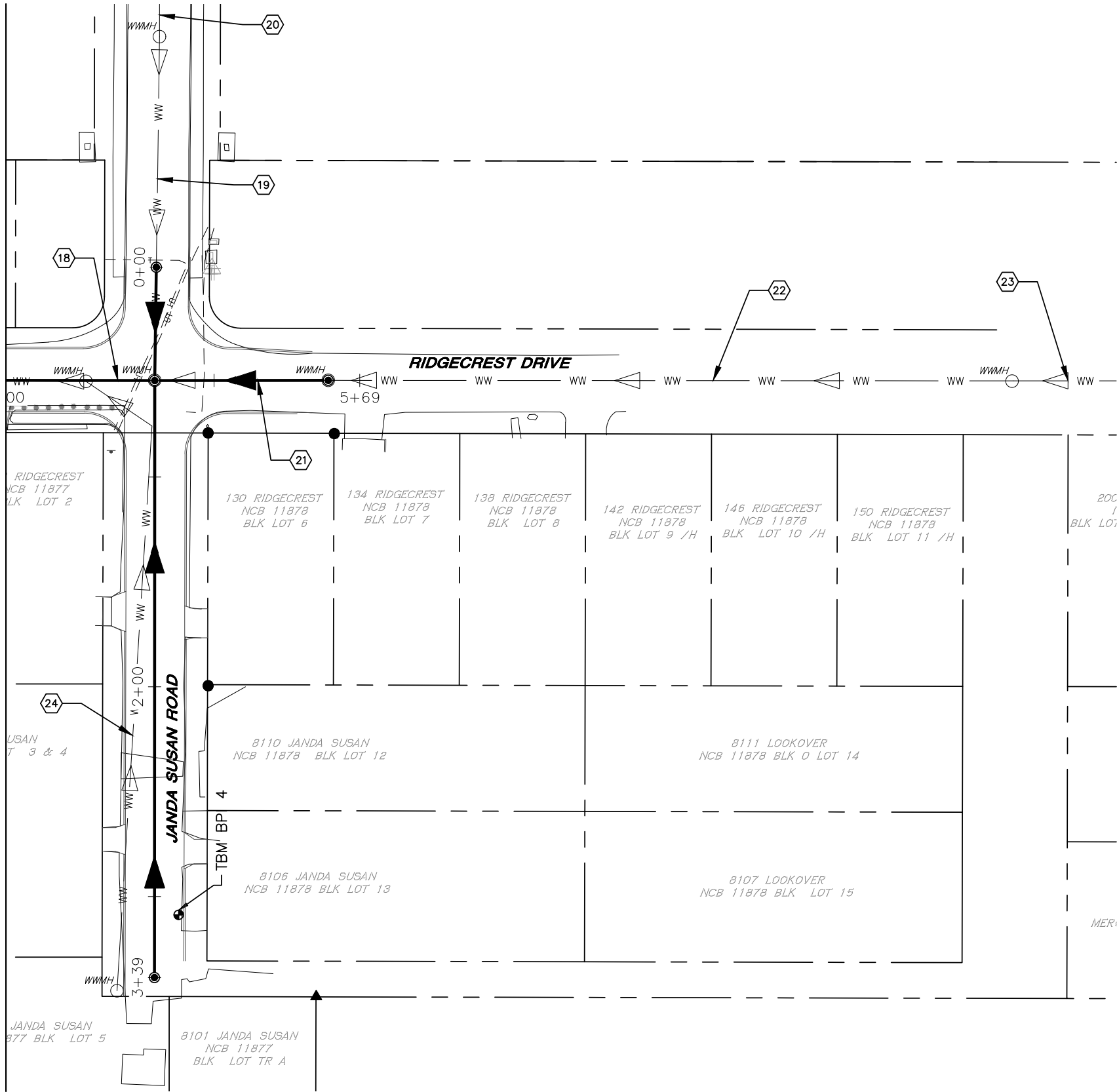
LEGEND		
EXISTING	PROPOSED	
		BENCHMARK
		LIGHT POLE
		UTILITY POLE
		SERVICE POLE
		POWER POLE
		DOWN GUY
		FIRE HYDRANT
		WATER VALVE
		WATER METER
		GAS METER
		GAS VALVE
		WOOD FENCE
		CHAIN LINK FENCE
		WIRE FENCE
		TELECOM MANHOLE
		WASTEWATER MANHOLE
		STORMSEWER MANHOLE
		WATER MANHOLE
		CLEAN OUT
		DRAINAGE INLET
		CURB INLET
		SIGN
		ELECTRIC PULL BOX
		ELECTRIC METER
		ELECTRIC TRANSFORMER
		TELEPHONE SERVICE BOX
		OVER HEAD ELEC. LINE
		OVER HEAD TELEPHONE
		STORM SEWER LINE
		HYDRAULIC GRADE LINE
		ENERGY GRADE LINE
		WATER LINE
		FIRE WATER LINE
		DOMESTIC WATER LINE
		LANDSCAPE WATER LINE
		WASTEWATER LINE
		UNDERGROUND ELECTRIC
		UNDERGROUND TELEPHONE
		GAS LINE
		FIBER OPTIC CABLE
		PROPERTY LINE
		CONTOUR
		SPOT ELEVATION
		FLOW DIRECTION
		LIMITS OF CONSTRUCTION
		TREE TO REMAIN
		TREE TO BE REMOVED
		BASE POINT
		CURB INLET
		LATERAL
		TO BE REMOVED
		BACK OF CURB



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REVISIONS								
			WASTEWATER FLOW BYPASS (SHEET 2 OF 3)					
DEVELOPER:								
CONT.				BUDGET PROJ.				
SUBMITTED				100% SUBMITTAL				
APPROVED								
MAP No.166608,166610,168608,168610								SHEET
SECT. No.				JOB No.				11
DR. FJC				CK. BAL				17-5522
								OF 12

MATCHLINE SEE SHEET 11 OF 12



KEYNOTE	SIZE	LENGTH	SLOPE	FLOW
17	8"	288	1.85%	16.66
18	8"	33	0.88%	11.49
19	8"	164	2.37%	18.85
20	8"	190	3.96%	24.37
21	8"	83	0.49%	8.57
22	8"	330	2.38%	18.89
23	8"	364	3.64%	23.36
24	8"	300	0.52%	8.83

- NOTE:
1. FLOW DATA BASED ON MAXIMUM FLOW CAPACITY WITH NO SURCHARGE. NO ACTUAL FLOW DATA USED.
 2. DATA IS COLLECTED FROM ON-THE-GROUND SURVEY AND SAWS UTILITY BLOCK MAPS AND IS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY EXISTING FLOWS PRIOR TO BY-PASS PUMPING.

EXISTING	PROPOSED	LEGEND
		BENCHMARK
		LIGHT POLE
		UTILITY POLE
		SERVICE POLE
		POWER POLE
		DOWN GUY
		FIRE HYDRANT
		WATER VALVE
		WATER METER
		GAS METER
		GAS VALVE
		WOOD FENCE
		CHAIN LINK FENCE
		WIRE FENCE
		TELECOM MANHOLE
		WASTEWATER MANHOLE
		STORMSEWER MANHOLE
		WATER MANHOLE
		CLEAN OUT
		DRAINAGE INLET
		CURB INLET
		SIGN
		ELECTRIC PULL BOX
		ELECTRIC METER
		ELECTRIC TRANSFORMER
		TELEPHONE SERVICE BOX
		OVER HEAD ELEC. LINE
		OVER HEAD TELEPHONE
		STORM SEWER LINE
		HYDRAULIC GRADE LINE
		ENERGY GRADE LINE
		WATER LINE
		FIRE WATER LINE
		DOMESTIC WATER LINE
		LANDSCAPE WATER LINE
		WASTEWATER LINE
		UNDERGROUND ELECTRIC
		UNDERGROUND TELEPHONE
		GAS LINE
		FIBER OPTIC CABLE
		PROPERTY LINE
		CONTOUR
		SPOT ELEVATION
		FLOW DIRECTION
		LIMITS OF CONSTRUCTION
		TREE TO REMAIN
		TREE TO BE REMOVED
		BP
		CI
		LAT
		TBR
		BOC



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No.	Revision	Drawn	Approved	Date	
REVISIONS					
		WASTEWATER FLOW BYPASS (SHEET 3 OF 3)			
DEVELOPER:					
CONT.		BUDGET PROJ.			
SUBMITTED		100% SUBMITTAL			
APPROVED _____					
MAP No.166608,166610,168608,168610				SHEET 12	
SECT. No.		JOB No. 17-5522			
DR. FJC		CK. BAL		OF 12	

