

# DUKE ENERGY

CALL K.U.P.I.  
2 BUSINESS DAY BEFORE YOU DIG  
1-800-752-6007

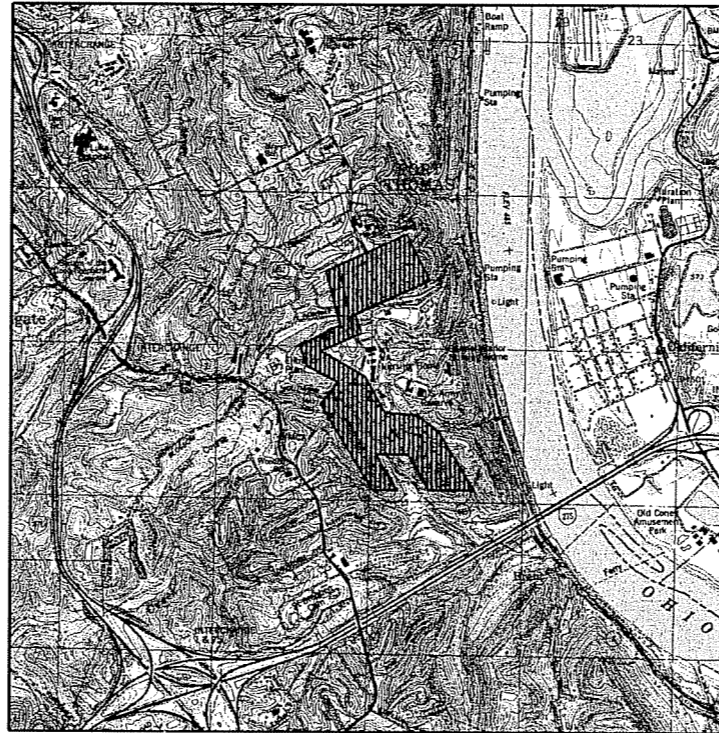
GAS DEPARTMENT  
DUKE ENERGY

1  
42

SOUTHEAST DISTRICT

- CONSTRUCTION NOTES:
- 1) NO DIRECTIONAL DRILLING OF SP MAIN WILL BE ALLOWED UNLESS APPROVED BY THE GAS ENGINEERING SPONSOR
  - 2) CONTACT GAS SYSTEMS OPERATIONS SUPERVISOR PRIOR TO STARTING JOB TO VERIFY GAS FLOW
  - 3) CONTACT PRESSURE SUPERVISOR FOR RECONNECTION OF CONTROL LINE.

AUTHORIZED  
November 10, 2007  
CONSTRUCTION  
DRAWING



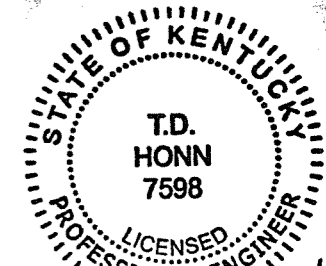
VICINITY MAP  
N.T.S.

MAIN ABANDONMENT		
4" CIMJ	1940	758'
4" CIC	1938	12'
4" CIMJ	1938	165'
6" CIMJ	1938	446'
6" CIMJ	1938	31'
6" SC	1930	359'
6" SC	1928	799'
4" CIC	1936	561'
2" PL	1974	53'
4" CIC	1940	12'
4" SC	1928	242'
4" CIC	1936	410'
6" SWPC	1987	44'
6" SC	1928	
2" S	1915	90'
6" CIMJ	1939	1386'
4" CIMJ	1952	155'
4" CIMJ	1940	1142'
4" PL	2003	1'
3" PL	2003	76'
6" SWPC	1985	7'
6" SC	1929	35'
6" SWPC	1985	5'
3" SWPC	1985	3'
4" CIMJ	1963	3'
4" CIC	1931	416'
4" CIMJ	1941	831'
6" CIMJ	1959	8'
4" CIC	1937	1218'
4" CIC	1937	364'
4" ST	1923	160'
4" CIC	1936	
6" CIMJ	1959	10'
6" CIC	1937	12'
6" CIMJ	1939	
4" CIC	1937	179'
6" SWPC	1973	96'
6" CIMJ	1949	100'

MAIN ABANDONMENT		
6" CIMJ	1948	127'
6" SC	1928	190'
3" S	1924	337'
4" SWPC	1998	68'
4" SWPC	1964	100'
4" CIBS	1938	396'
4" SWPC	1989	13'
4" CIMJ	1947	82'
4" CIMJ	1947	314'
6" SC	1930	
4" ST	1930	259'
4" CIC	1937	241'
4" CI	1964	2'
4" CIMJ	1951	250'
6" CIMJ	1952	160'
6" CIMJ	1955	237'
4" CIMJ	1956	252'
4" CIMJ	1957	82'
2" SCPC	1957	164'
4" CIMJ	1955	91'
4" CIMJ	1961	249'
6" CIMJ	1952	229'
4" CIMJ	1953	184'
2" CU	1953	132'



4/29/08 Gary J. Hebbeler



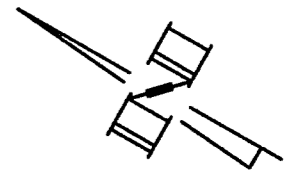
4/29/08 T.D. Honn

WELDING PROCEDURE(S) REQUIRED	PIPE INSTALLED ON JOB					PERMIT(S) REQUIRED
	SIZE	KIND	WALL THICKNESS	EST. QUANTITIES	ACTUAL QUANTITIES	
SPEC. # _____	2	PL		80'		City of Fort Thomas Kentucky Department of Transportation
SPEC. # _____	4	PL		8,840'		
SPEC. # _____	6	PL		2,403'		
SPEC. # _____	4"	S	.188	94'		
SPEC. # _____	6"	S	.188	59'		
SPEC. # _____	8"	S	.188	1,128'		
	12"	S	.219	6'		
	TOTAL ACTUAL INSTALLED					
DESIGN REVIEW OF COMPLETED CONSTRUCTION JOB		CORROSION ENGINEERING		TEST CONN. PER STANDARD 7.7.1		
SPONSOR _____ DATE _____		APPR. BY: _____		NO. PROPOSED _____		
FIELD CHANGE REQUEST DOCUMENT REQUIRED: YES <input type="checkbox"/> NO <input type="checkbox"/>		COATING TYPE INSPECTION: VISUAL <input type="checkbox"/> JEOP <input checked="" type="checkbox"/> TYPE PATCH MATERIAL		NO. INSTALLED _____		
TRANSMISSION DESIGN DOCUMENT REQUIRED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		CONDITION OF PIPE COATING WHEN DELIVERED TO JOB: GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR <input type="checkbox"/>		NO. TESTED OK (P/S INDICATOR) _____		
		INSULATION CHECKED <input type="checkbox"/> NO CHECKED		PLASTIC SEPARATIONS INSTALLED <input type="checkbox"/>		
				CONTINUITY OF COUPLINGS CHECKED <input type="checkbox"/>		
				CASING CHECKED FOR SHORT <input type="checkbox"/>		
FIELD PRESSURE TEST			SUPERVISOR BLOCK			
ALL PIPELINES REQUIRED TESTING BEFORE PLACING INTO SERVICE. PRESSURE CHARTS AND FORMS SHOULD BE FORWARDED TO GAS ENGINEERING AND PLANNING			SUPERVISOR OR CONTRACTOR _____			
REQUIRED TEST PRESSURE RANGE: MIN <u>90</u> PSIG TO MAX <u>100</u> PSIG			RECORDED BY _____			
HOURS <u>24</u> MEDIUM AIR			DATE STARTED _____ DATE PLACED IN SERVICE _____			
TESTED BY _____ DATE _____			DATE COMPLETED _____ PERMIT NO. _____			
INSTALLATION WORKCODES W. O. #						MOD 355 MAIN REPLACEMENT FORT THOMAS, CAMPBELL CO., KY
ABANDONMENT GO483552 B8018						
RENEW SERVICE M-C R0483552						
RENEW SERVICE C-M MC0483552						
RELOCATE METER CIBSMM						
DRAWN _____ EMS 11-10-07						
CHECKED _____ DAH 7-30-09						
APPROVED _____						
CLOSED BY _____						
EST. FOOTAGE 12,610'						
PASSPORT# 601607						

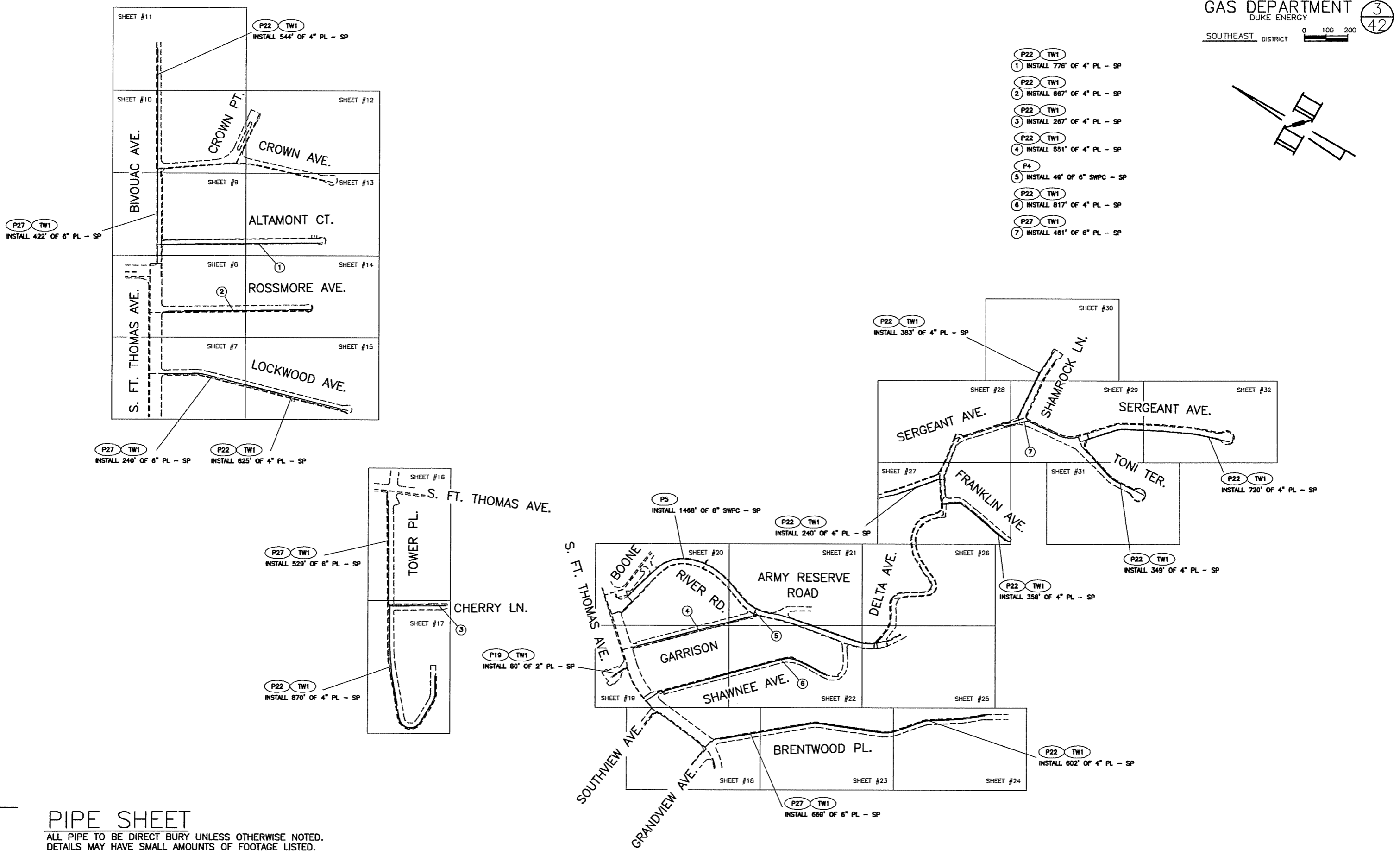
CPCN Filing  
April, 2008  
Module 355

REVISIONS





- (P22 TW1) 1) INSTALL 778' OF 4" PL - SP
- (P22 TW1) 2) INSTALL 667' OF 4" PL - SP
- (P22 TW1) 3) INSTALL 267' OF 4" PL - SP
- (P22 TW1) 4) INSTALL 551' OF 4" PL - SP
- (P4) 5) INSTALL 48' OF 6" SWPC - SP
- (P22 TW1) 6) INSTALL 817' OF 4" PL - SP
- (P27 TW1) 7) INSTALL 461' OF 6" PL - SP



PIPE SHEET

ALL PIPE TO BE DIRECT BURY UNLESS OTHERWISE NOTED.  
DETAILS MAY HAVE SMALL AMOUNTS OF FOOTAGE LISTED.

REVISIONS





MAIN MATERIAL LIST

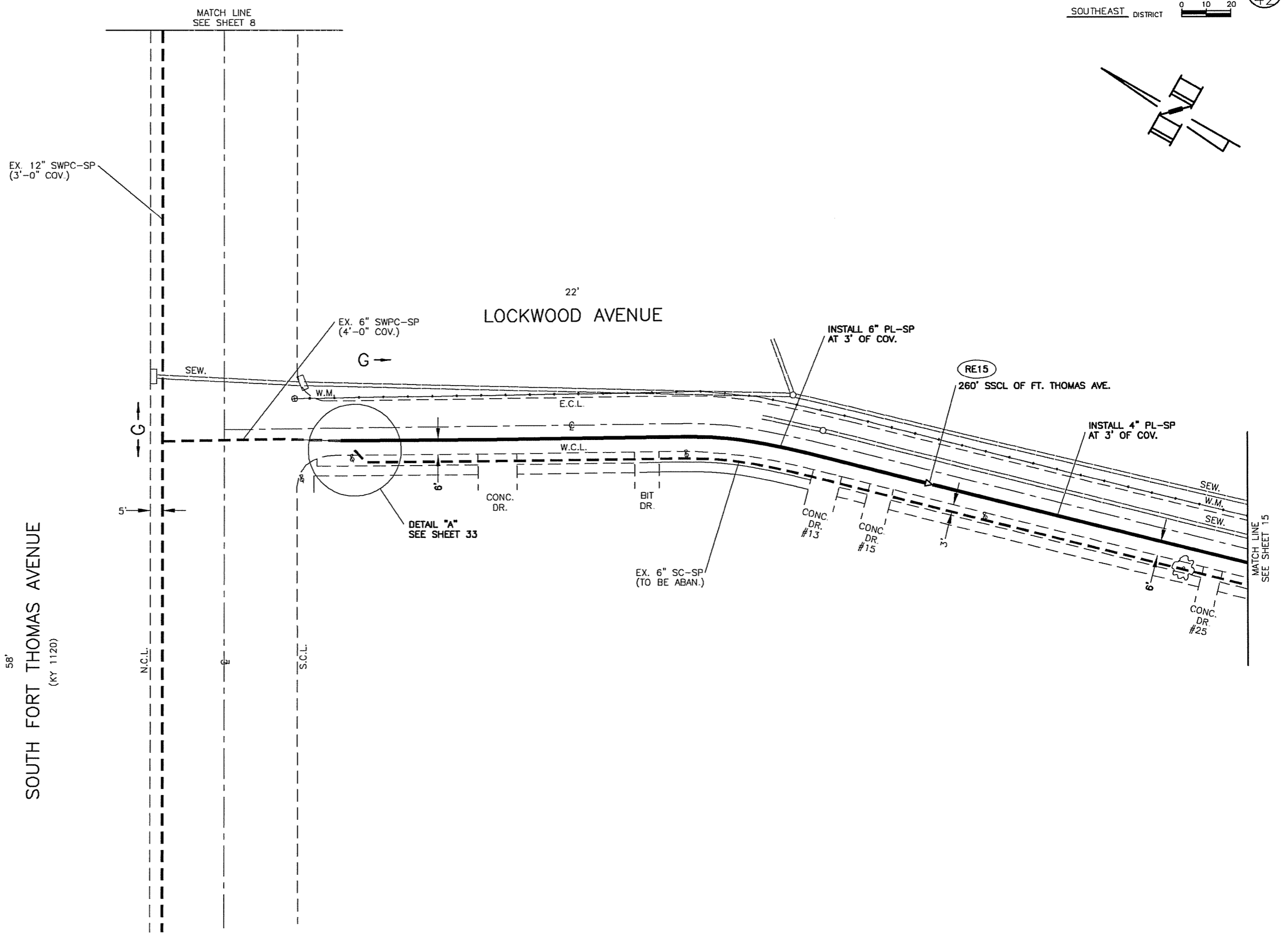
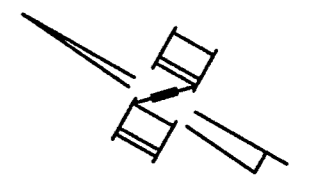
ITEM	DESCRIPTION	STOCK NO.	EST.	ACTUAL
4PLDR			13	
4PLDR	3/4" BRASS CAP	0050093089	13	
4PLDR	4" x 1" ELECTROFUSION TEE	0000903923	13	
4PLDR	1" x 3/4" PL-BRASS TRANSITION FITTING	0000520028	13	
4PLDR	4" IPS BUTT FUSION TEE	0050057867	13	
4PLDR	1" - 90 DEG. BUTT FUSION ELL	0050088393	13	
4PLDR	ROUND VALVE BOX	0050057322	13	
4PLDR	ROUND VALVE BOX LID	0050057324	13	
4PLDR	1" ELECTROFUSION COUPLING	0050057411	13	
4PLDR	4" IPS BUTT FUSION CAP	0050057347	13	
6PLDR			3	
6PLDR	6" x 1" ELECTROFUSION TEE	0000903927	3	
6PLDR	6" IPS BUTT FUSION CAP	0050088404	3	
6PLDR	3/4" BRASS CAP	0050093089	3	
6PLDR	1" x 3/4" PL-BRASS TRANSITION FITTING	0000520028	3	
6PLDR	ROUND VALVE BOX	0050057322	3	
6PLDR	ROUND VALVE BOX LID	0050057324	3	
6PLDR	1" ELECTROFUSION COUPLING	0050057411	3	
6PLDR	1" - 90 DEG. BUTT FUSION ELL	0050088393	3	
6PLDR	6" IPS BUTT FUSION TEE	0050088411	3	
AN3	17# GALVOMAG	0050056182	24	
AS3	RECT. VALVE BOX ASSEMBLY	0050057269	1	
B08	CATHODIC TERMINAL BOX	0050057325	1	
B09	ROUND VALVE BOX	0050057322	34	
B09	ROUND VALVE BOX LID	0050057324	34	
CA30	6" IPS BUTT FUSION CAP	0050088404	1	
CA32	2" IPS PURGE POINT FITTING	0050057593	14	
CO10	6" COUPLING #39 S-S INS	0050057458	2	
CO12	12" COUPLING #39 S-S INS	0050057460	2	
CO24	6" S X 4" PL REDUCING COUPLING	0050057498	3	
CO27	2" COUPLING #711 S-PL W/STIFFENER	0050057490	1	
CO3	4" COUPLING #38 S-S NON-INS	0050057418	4	
CO30	6" ELECTROFUSION COUPLING	0050091357	17	
CO33	4" COUPLING #711 S-PL W/ STIFFENER	0050057434	7	
CO34	6" COUPLING #711 S-PL W/ STIFFENER	0050057436	9	
CO41	4" ELECTROFUSION COUPLING	0050057407	19	
CO49	8" COUPLING #711 S-S NON-INS	0050092528	2	
CO51	8" X 6" S-S REDUCING COUPLING NON-INS	0050092530	1	
CO9	4" COUPLING #39 S-S INS	0050057457	1	
EL14	4" - 45 DEG. WELD ELL	0050057537	2	
EL15	6" - 45 DEG. WELD ELL	0050057559	2	
EL16	8" - 45 DEG. WELD ELL	0050057561	3	
EL3	4" - 90 DEG. L.R. WELD ELL	0050057539	1	
EL38	4" - 45 DEG. IPS BUTT FUSION ELL	0050057554	9	
EL39	4" - 90 DEG. IPS BUTT FUSION ELL	0050057555	1	
EL43	6" - 45 DEG. IPS BUTT FUSION ELL	0050088405	9	
EL44	6" - 90 DEG. IPS BUTT FUSION ELL	0050088406	1	
EL5	8" - 90 DEG. L.R. WELD ELL	0050057560	2	
P19	2" PLASTIC PIPE - 500' .216 SDR 11	0050056008	80'	
P22	4" IPS PLASTIC PIPE - 40' .395 SDR 11.5	0050056058	8,840'	
P27	6" IPS PLASTIC PIPE - 40' .491 SDR 13.5	0050088398	2,403'	
P3	4" SWPC PIPE .188 API 5L - GRADE X-42	0050105451	94'	
P4	6" SWPC PIPE .188 API 5L - GRADE X-42	0050105452	59'	
P5	8" SWPC PIPE .188 API 5L - GRADE X-42	0050105453	1,128'	
P6	12" SWPC PIPE .219 API 5L - GRADE X-42	0050105454	6'	
RE11	4" IPS x 2" IPS BUTT FUSION REDUCER	0050057758	13	
RE15	6" IPS x 4" IPS BUTT FUSION REDUCER	0050088410	13	
RE4	8" x 4" WELD REDUCER	0050057741	2	
RE5	8" x 6" WELD REDUCER	0050057751	1	
SB	TRACER WIRE SPLIT BOLT	0000933615	9	
ST6	4" STIFFENER	0050057855	1	
ST7	6" STIFFENER	0050088413	2	
TE39	4" IPS BUTT FUSION TEE	0050057867	1	

MAIN MATERIAL LIST

ITEM	DESCRIPTION	STOCK NO.	EST.	ACTUAL
TE42	6" IPS BUTT FUSION TEE	0050088411	8	
TE5	8" WELD TEE	0050057890	3	
TE68	2" x 1" ELECTROFUSION TEE	0000903925	2	
TE70	4" x 1" ELECTROFUSION TEE	0000903923	18	
TE71	6" x 1" ELECTROFUSION TEE	0000903927	8	
TW1	TRACER WIRE	0050119416	11,323	
VA56	4" PLASTIC VALVE 80#	0050088490	1	
WE7	14" - 12" X 4" REDUCING BUTT WELDOLET	0050058149	1	
WR2	4" HEAT SHRINKABLE WRAP	0050057843	2	
WR3	6" HEAT SHRINKABLE WRAP	0050057844	3	
WR4	8" HEAT SHRINKABLE WRAP	0050057845	5	

RETIREMENT MATERIAL LIST

ITEM	DESCRIPTION	STOCK NO.	EST.	ACTUAL
CA28	4" IPS BUTT FUSION CAP	0050057347	2	
CA3	4" M.J. CAP	0050057329	2	
CA30	6" IPS BUTT FUSION CAP	0050088404	2	
CO33	4" COUPLING #711 S-PL W/ STIFFENER	0050057434	2	
CO34	6" COUPLING #711 S-PL W/ STIFFENER	0050057436	2	



MATCH LINE  
SEE SHEET 8

EX. 12" SWPC-SP  
(3'-0" COV.)

22'  
LOCKWOOD AVENUE

EX. 6" SWPC-SP  
(4'-0" COV.)

INSTALL 6" PL-SP  
AT 3' OF COV.

RE15  
260' SSCL OF FT. THOMAS AVE.

INSTALL 4" PL-SP  
AT 3' OF COV.

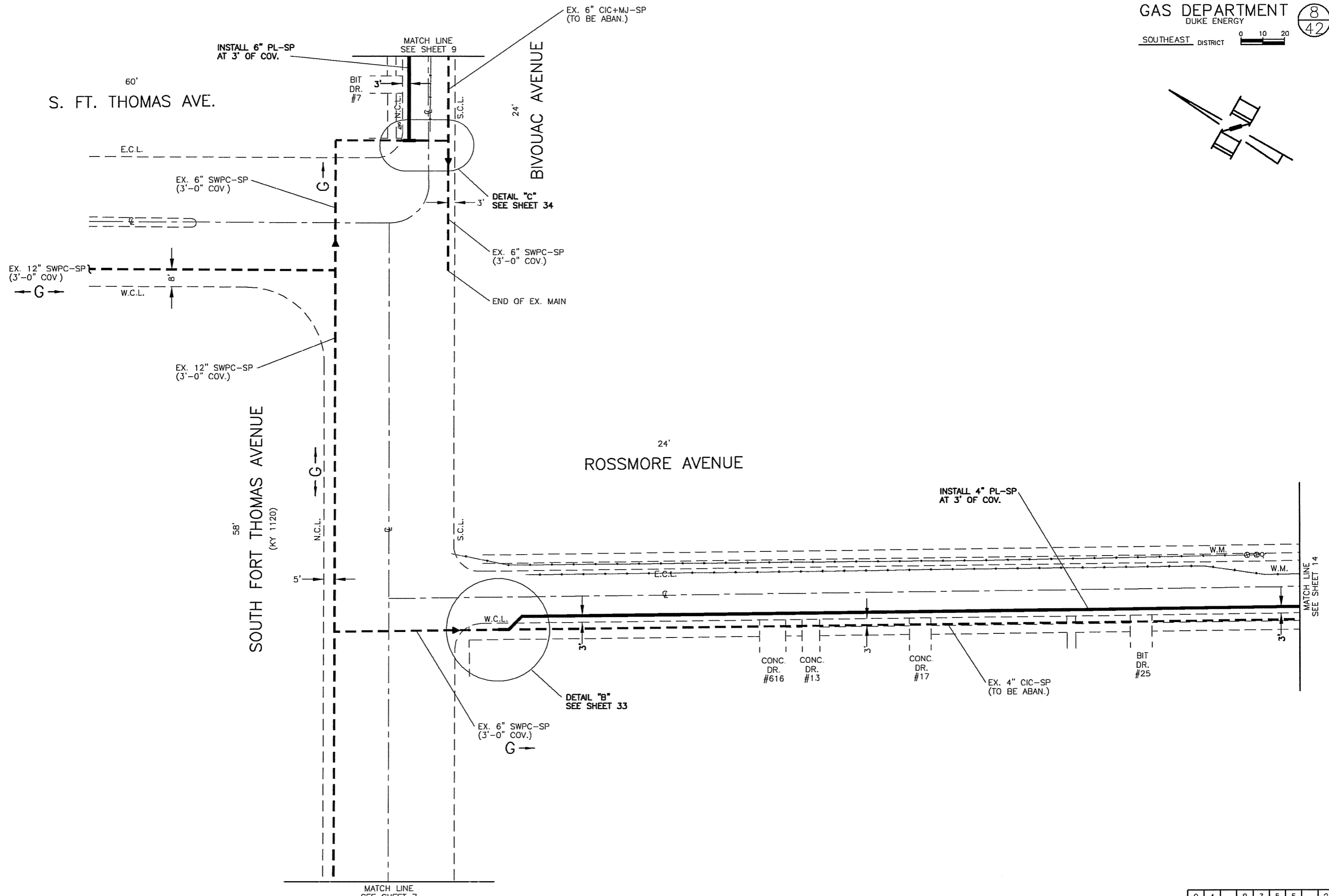
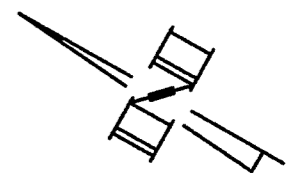
DETAIL "A"  
SEE SHEET 33

EX. 6" SC-SP  
(TO BE ABAN.)

MATCH LINE  
SEE SHEET 15

58'  
SOUTH FORT THOMAS AVENUE  
(KY 1120)

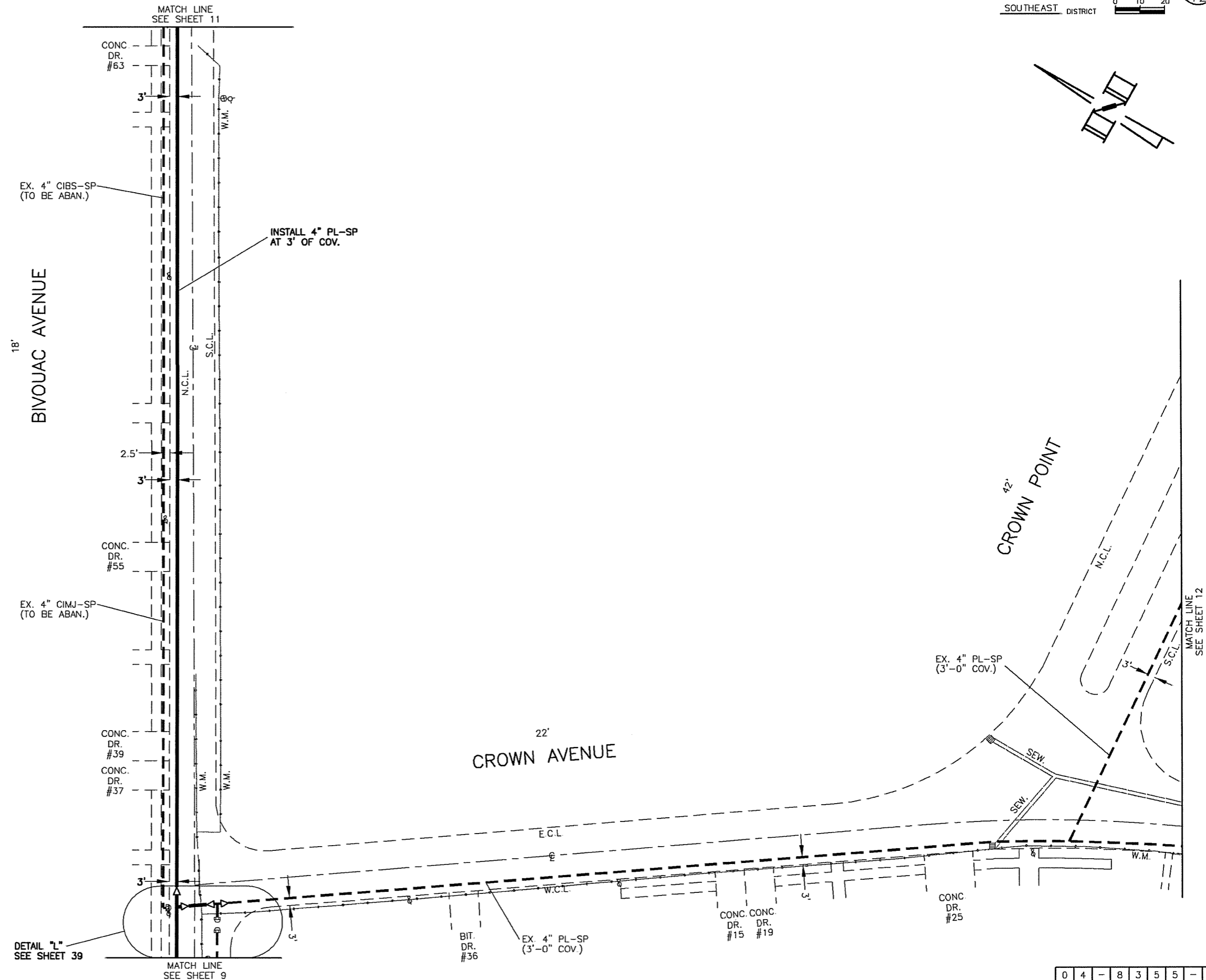
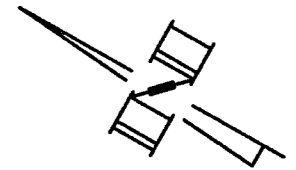
REVISIONS



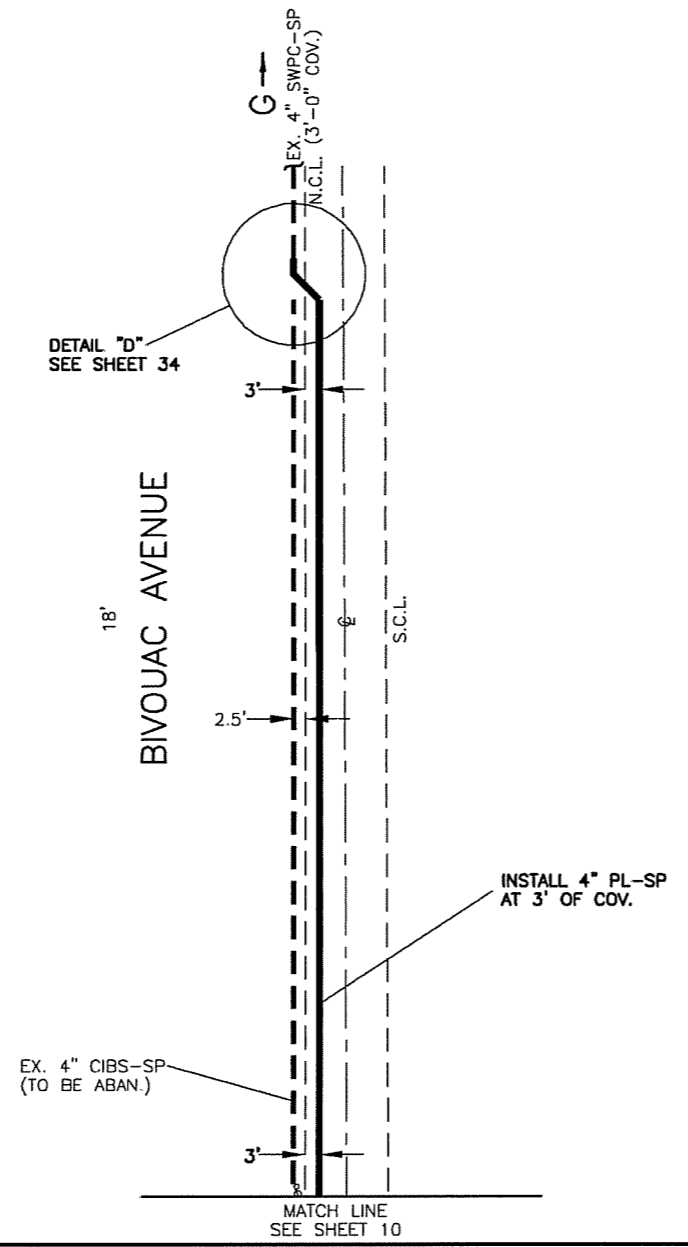
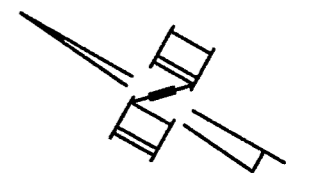
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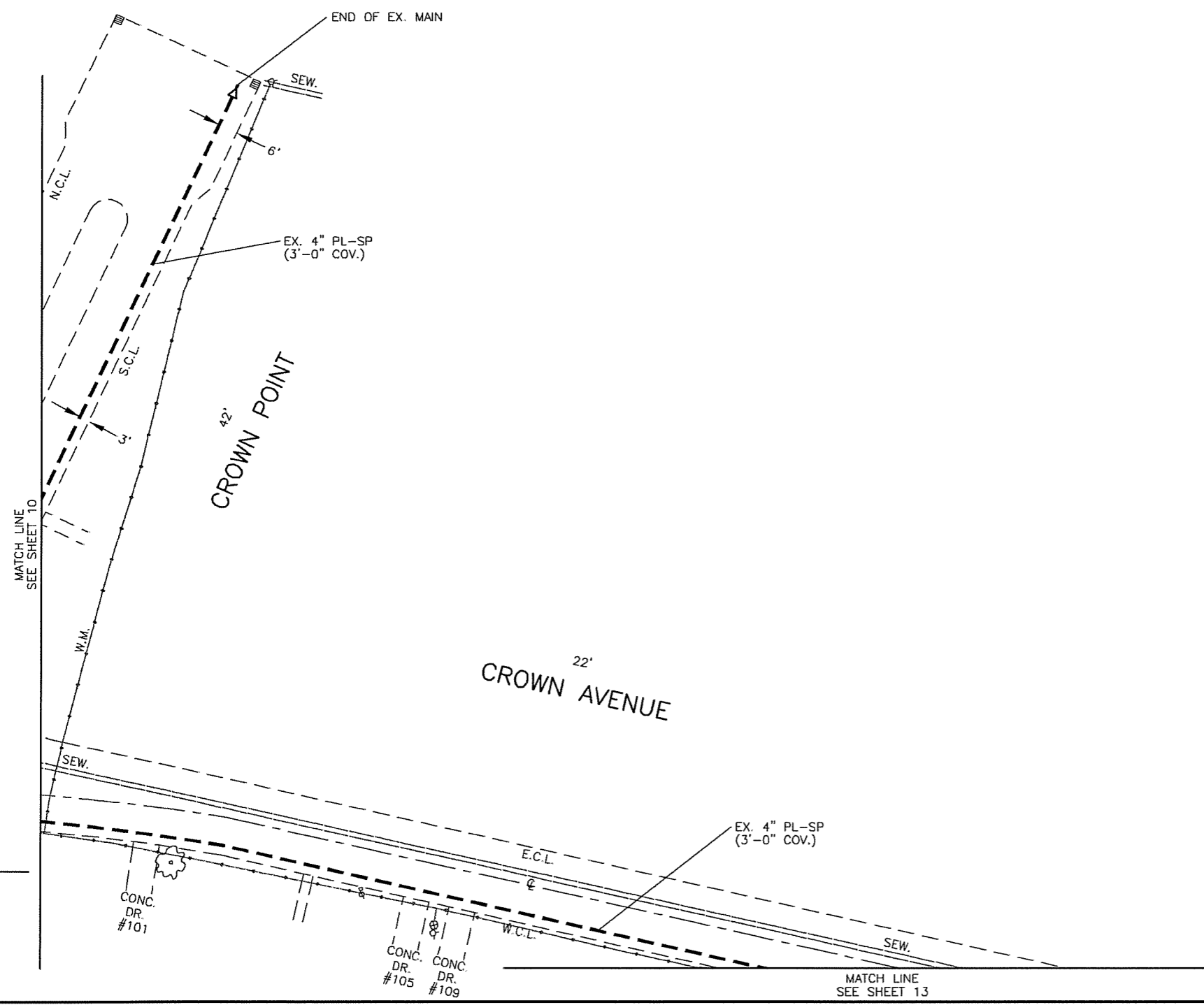
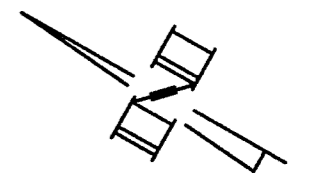


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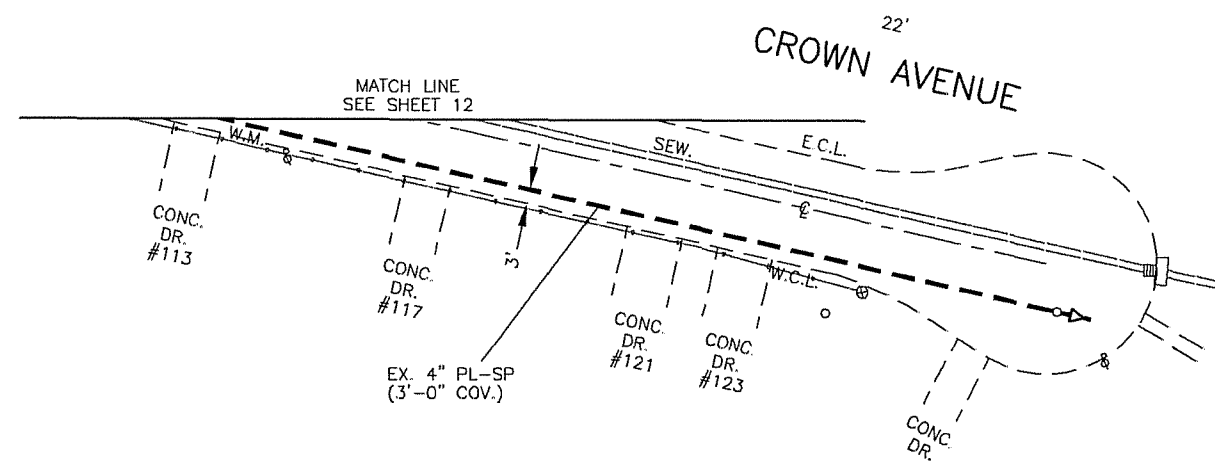
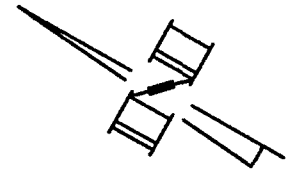


DETAIL "D"  
SEE SHEET 34

REVISIONS



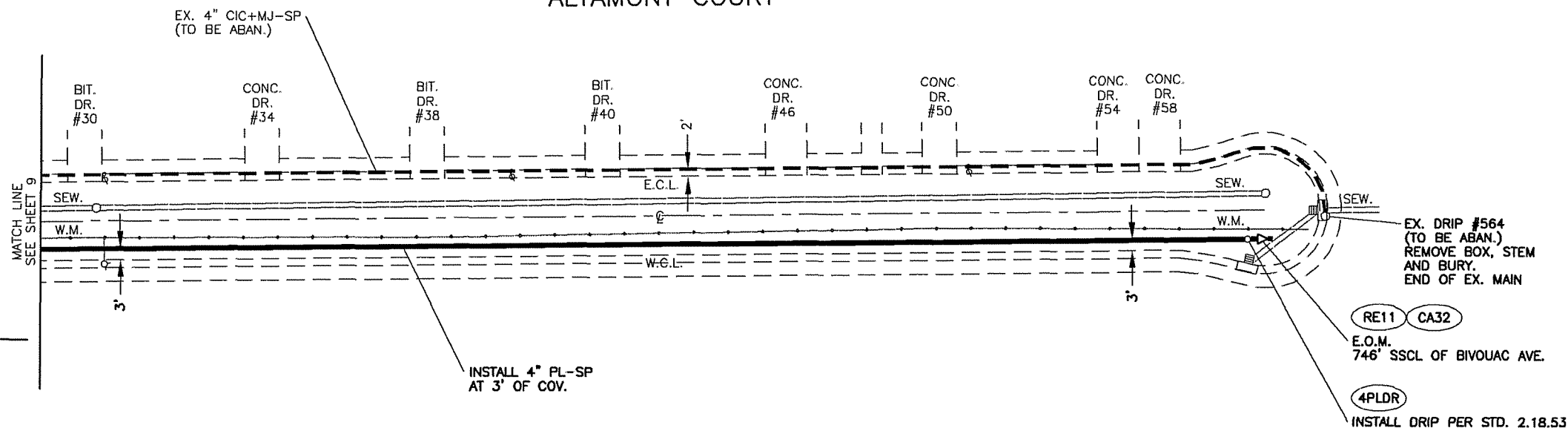
REVISIONS



MATCH LINE  
SEE SHEET 12

22'  
CROWN AVENUE

22'  
ALTAMONT COURT



MATCH LINE  
SEE SHEET 9

EX. 4" CIC+MJ-SP  
(TO BE ABAN.)

EX. DRIP #564  
(TO BE ABAN.)  
REMOVE BOX, STEM  
AND BURY.  
END OF EX. MAIN

INSTALL 4" PL-SP  
AT 3' OF COV.

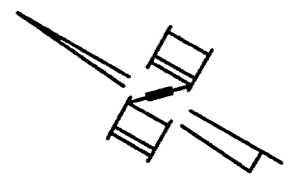
RE11 CA32

E.O.M.  
746' SSCL OF BIVOUAC AVE.

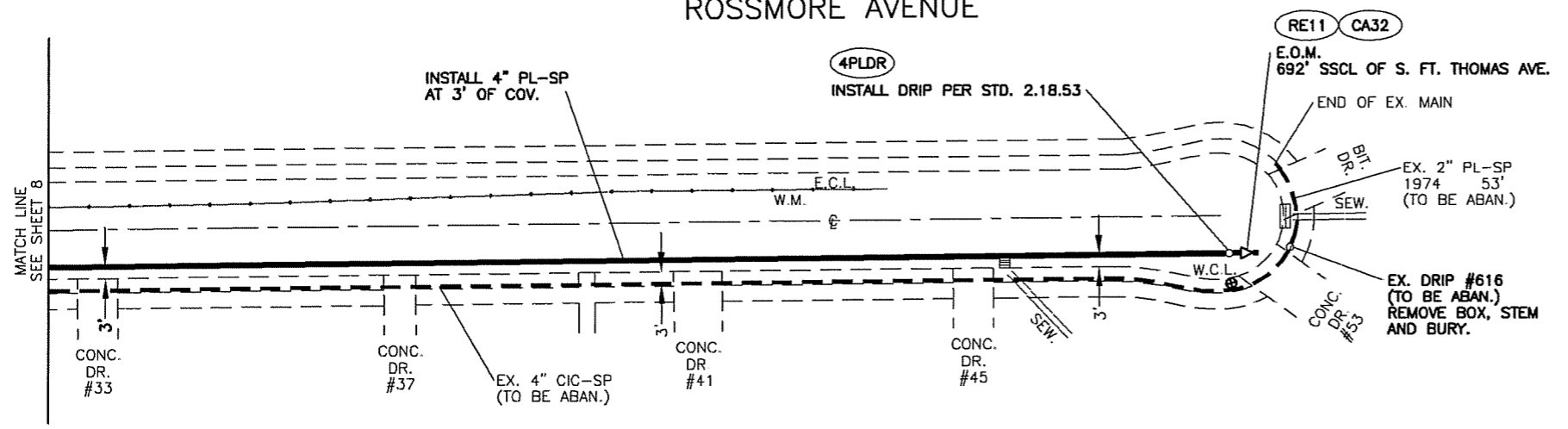
4PLDR

INSTALL DRIP PER STD. 2.18.53

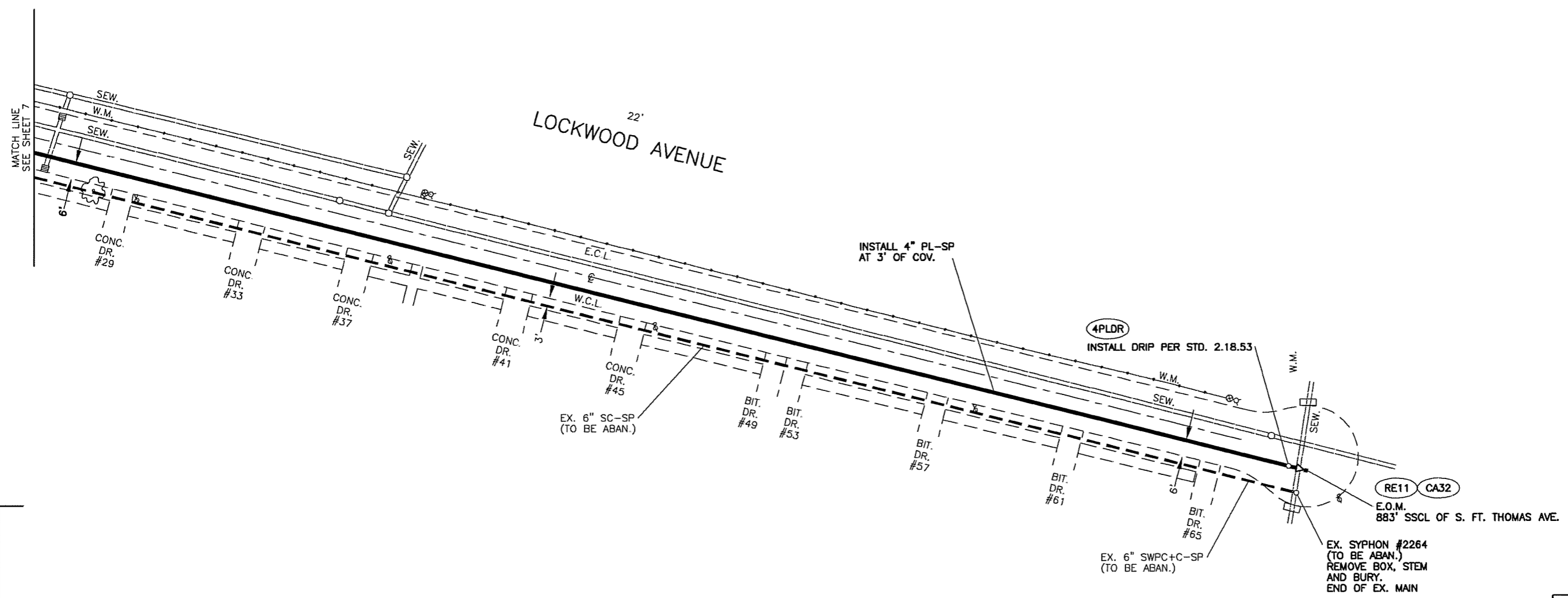
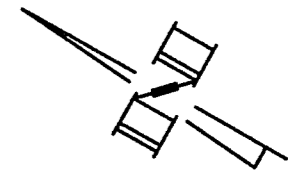
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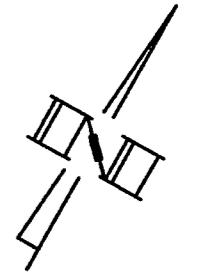
24'  
ROSSMORE AVENUE



REVISIONS

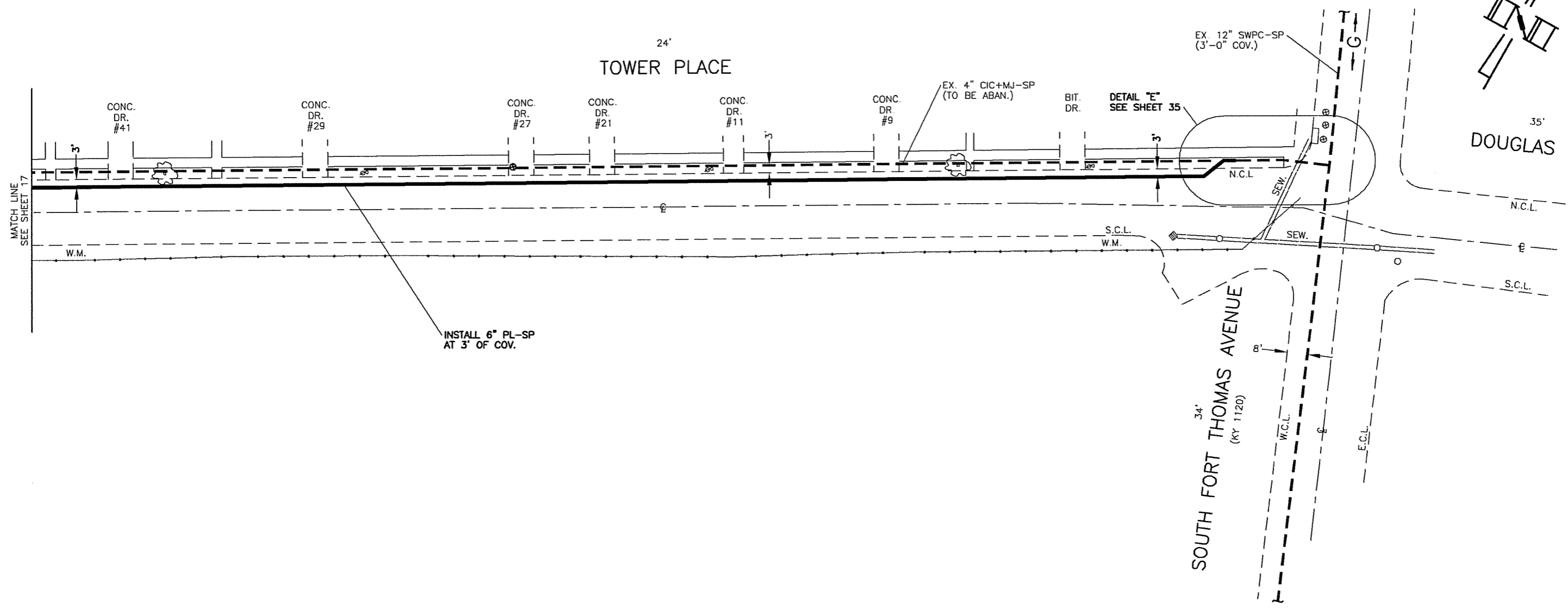


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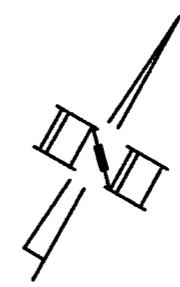
24'  
TOWER PLACE

35'  
DOUGLAS DR.

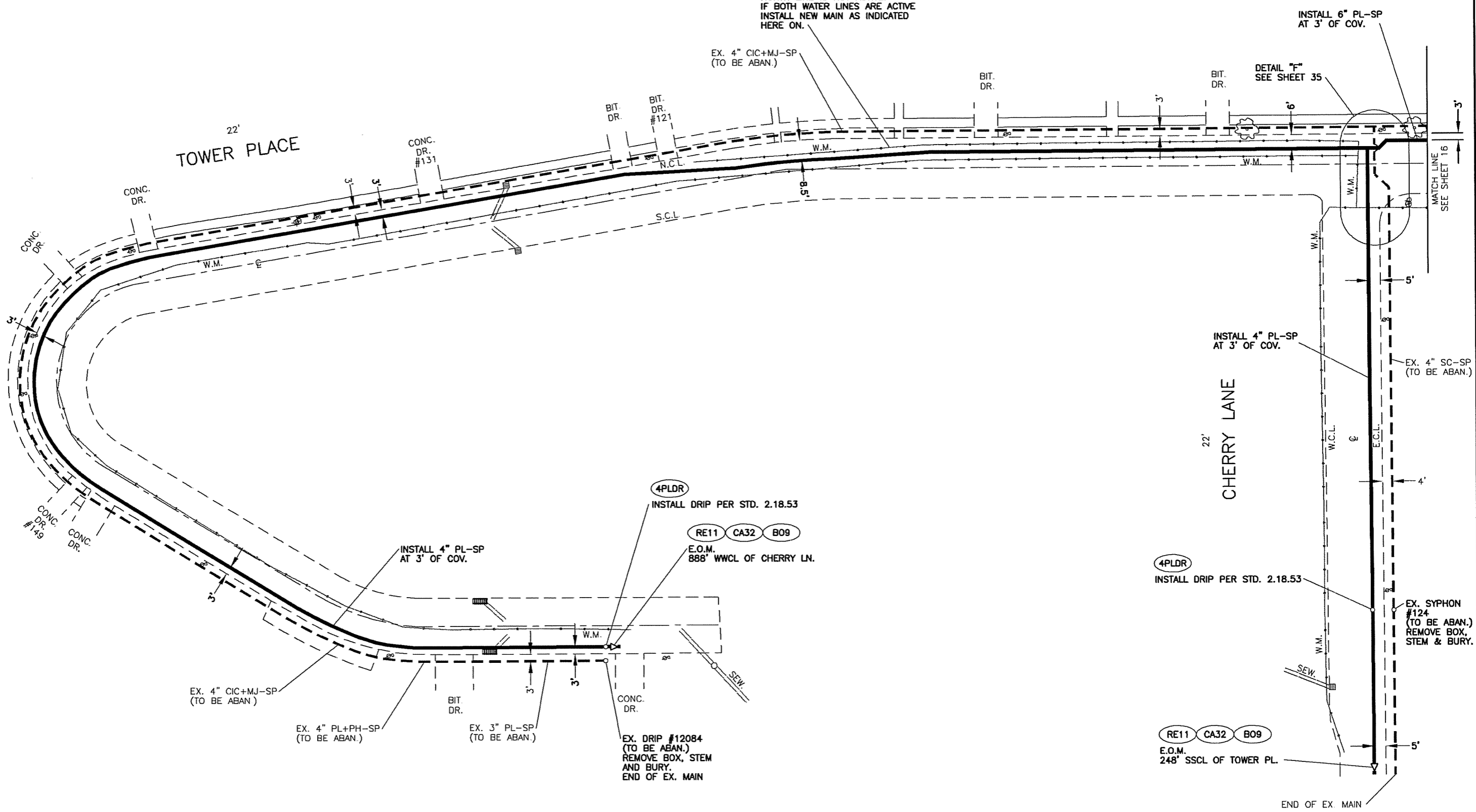


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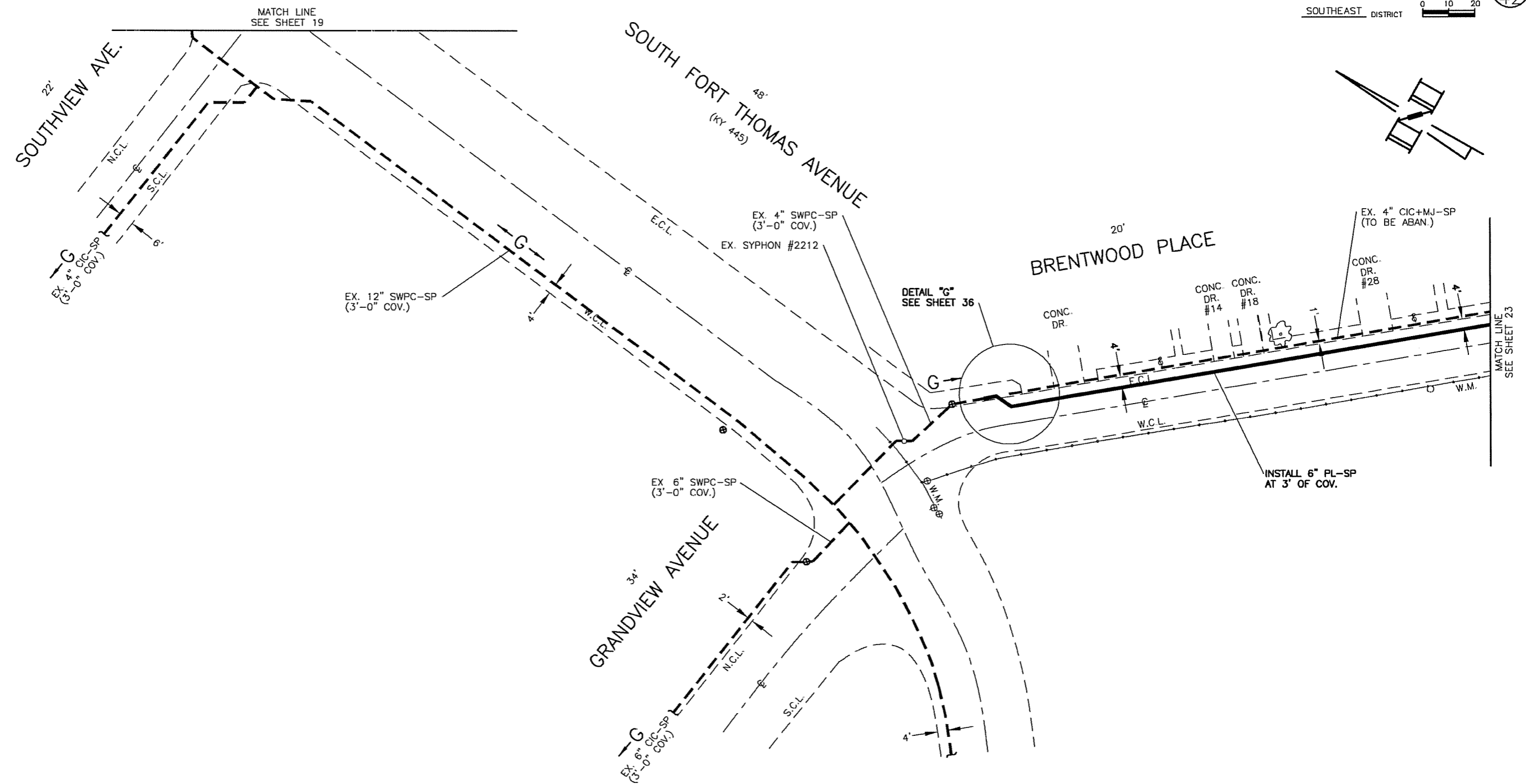




NOTE:  
INSTALL MAIN AT 3' SNCL IF THE  
NORTH LINE IS NOT ACTIVE.  
IF BOTH WATER LINES ARE ACTIVE  
INSTALL NEW MAIN AS INDICATED  
HERE ON.



REVISIONS



REVISIONS

MATCH LINE  
SEE SHEET 20

22'  
GARRISON

INSTALL 4" PL-SP  
AT 3' OF COV.

EX. 4" SWPC-SP  
(3'-0" COV.)

EX. 12" SWPC-SP  
(3'-0" COV.)

48'  
SOUTH FORT THOMAS AVENUE  
(KY 445)

DETAIL "J"  
SEE SHEET 38

INSTALL 2" PL-SP  
AT 3' OF COV.

4PLDR  
INSTALL DRIP PER STD. 2.18.53

RE11  
BO9  
CA32  
E.O.M.

EX. SYPHON #2332  
(TO BE ABAN.)  
REMOVE BOX, STEM  
AND BURY  
END OF EX. MAIN

EX. 2" S-SP  
(TO BE ABAN.)

DETAIL "I"  
SEE SHEET 37

22'  
SHAWNEE AVENUE

EX. 3" S-SP  
(TO BE ABAN.)

EX. 6" SC-SP  
(TO BE ABAN.)

CONC. DR. #18

CONC. DR. #22

CONC. DR. #26

CONC. DR. #16

CONC. DR. #23

EX. 4" CIC-SP  
(TO BE ABAN.)

CONC. DR. #27

CONC. DR. #31

CONC. DR. #33

BIT. DR. #21

CONC. DR. #17

BIT. DR. #15

DETAIL "H"  
SEE SHEET 36

INSTALL 4" PL-SP  
AT 3' OF COV.

MATCH LINE  
SEE SHEET 22

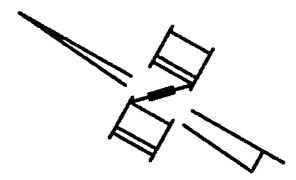
MATCH LINE  
SEE SHEET 18

REVISIONS

0 4 - 8 3 5 5 - 2

WR4  
INSTALL 8" HEAT SHRINKABLE  
WRAP AT ALL 8" WELDS.  
(20 REQUIRED)

22'  
RIVER ROAD  
(KY 445)



SOUTH FORT THOMAS AVENUE  
(KY 445)

36'  
BOONE

INSTALL 8" SWPC-SP  
AT 3.5' OF COV.

AN3

EX. 6" CIMJ-SP  
(TO BE ABAN.)

EX. 4" S-SP  
SERVICE C-M  
ID#40505

EX. 8" SWPC-SP  
(3'-0" COV.)

EL5  
50' SSCL OF  
S. FT. THOMAS AVE.

EL5  
66' SSCL OF  
S. FT. THOMAS AVE.

EX. 12" SWPC-SP  
(3'-0" COV.)

EX. 12" SWPC+PH-SP  
(3'-0" COV.)

DETAIL "K"  
SEE SHEET 38

EX. 4" ST-SP  
(TO BE ABAN.)

22'  
GARRISON

INSTALL 4" PL-SP  
AT 3' OF COV.

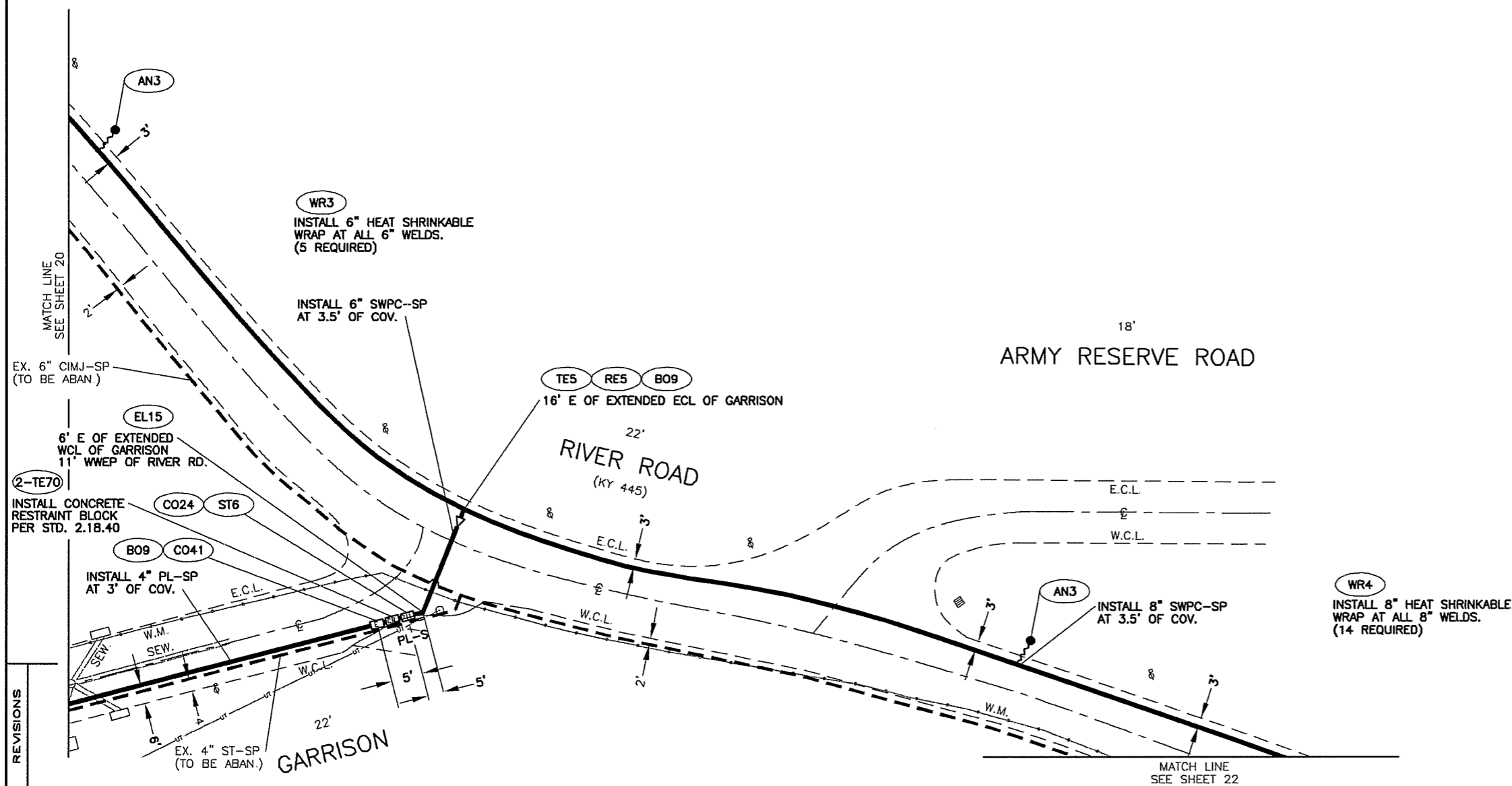
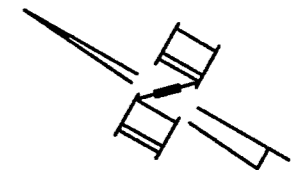
EX. 4" CIC-SP  
(TO BE ABAN.)

MATCH LINE  
SEE SHEET 21

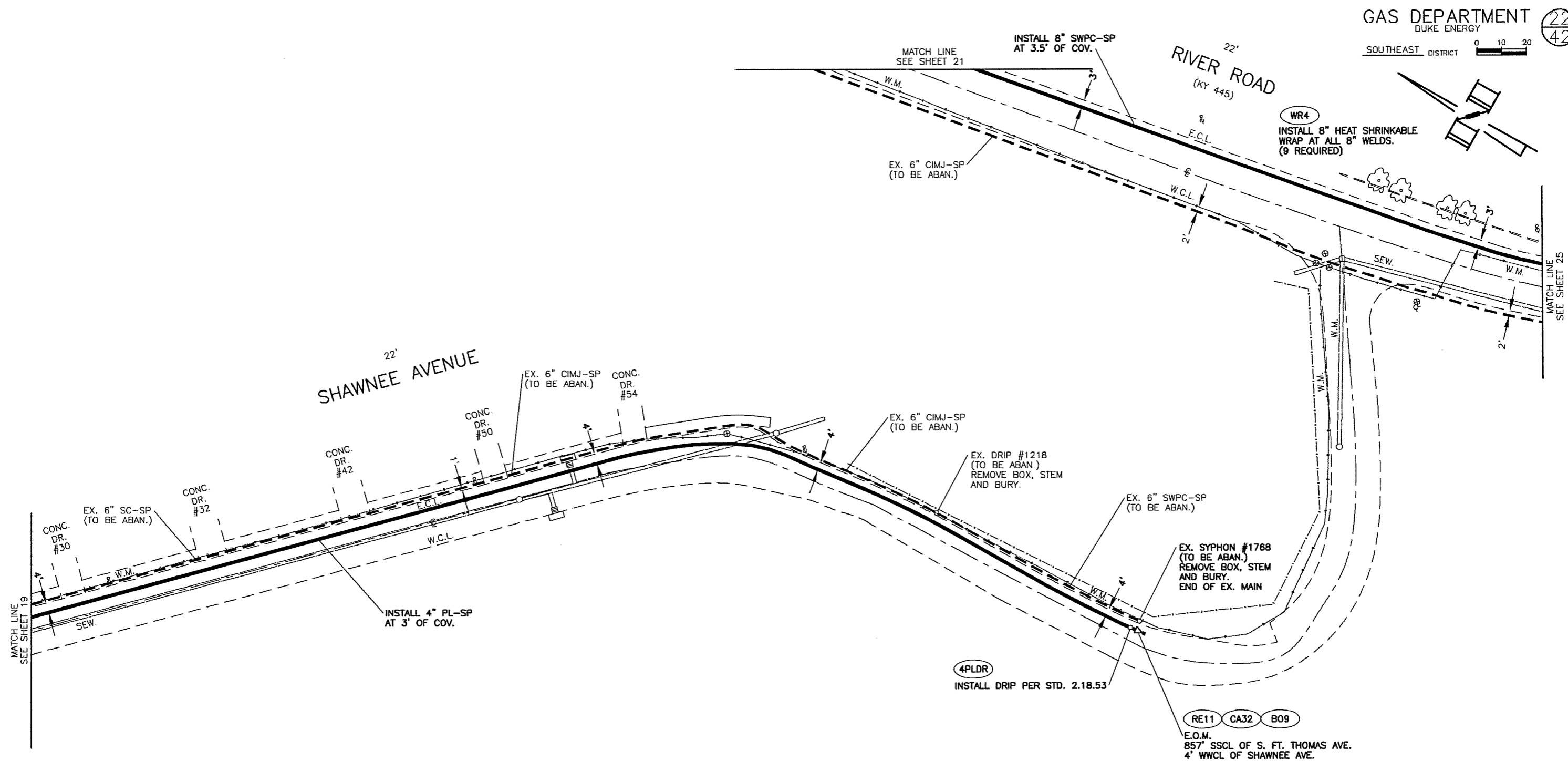
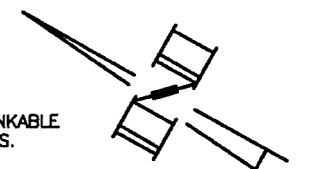
MATCH LINE  
SEE SHEET 19

REVISIONS

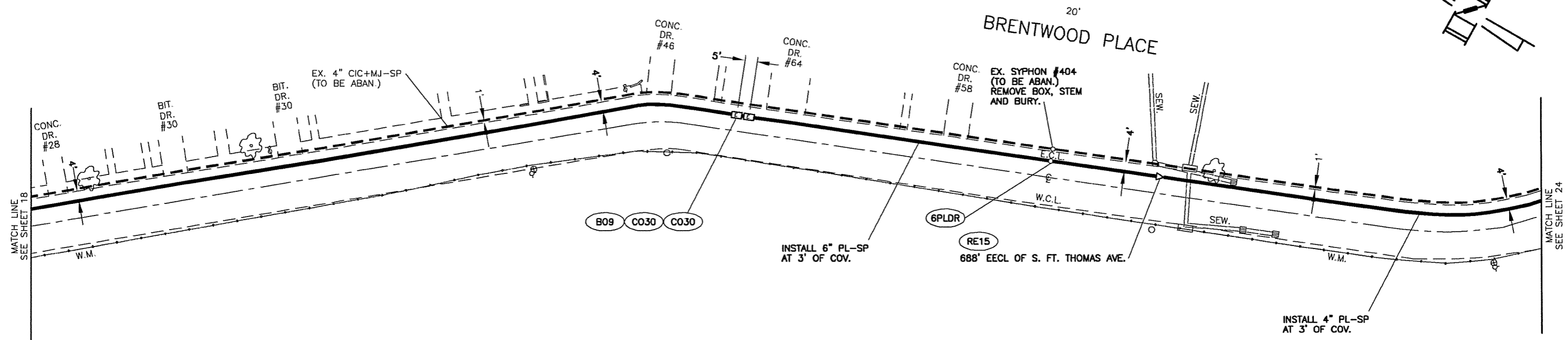
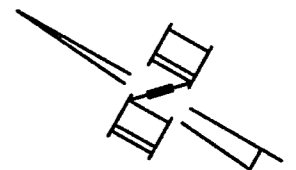
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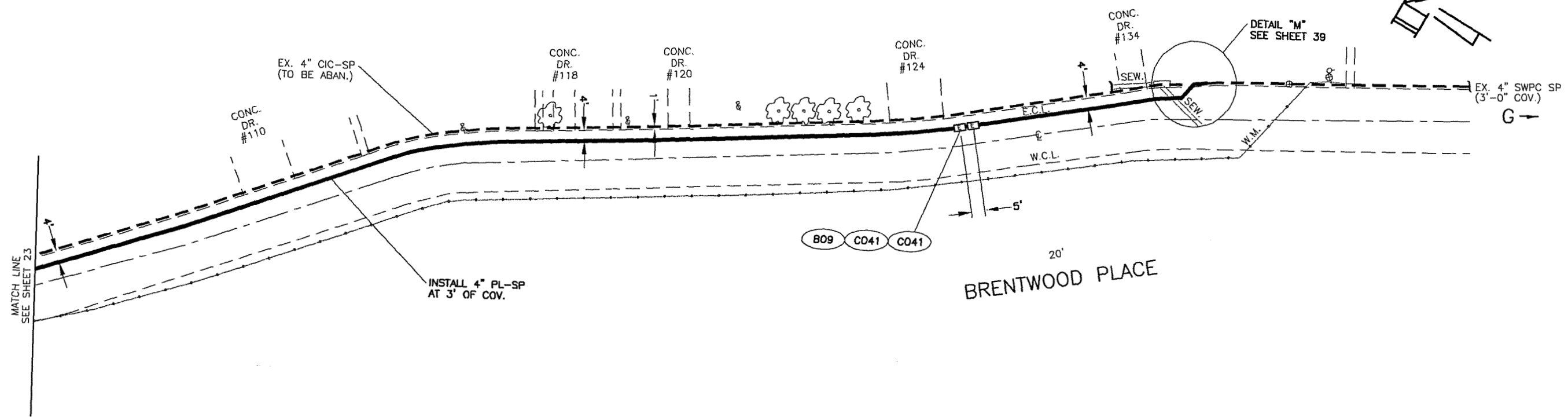
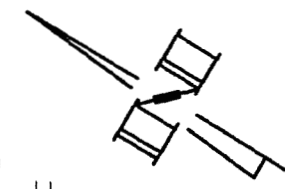
REVISIONS



REVISIONS



REVISIONS



MATCH LINE  
SEE SHEET 23

EX. 4" CIC-SP  
(TO BE ABAN.)

CONC.  
DR.  
#110

CONC.  
DR.  
#118

CONC.  
DR.  
#120

CONC.  
DR.  
#124

CONC.  
DR.  
#134

DETAIL "M"  
SEE SHEET 39

EX. 4" SWPC SP  
(3'-0" COV.)

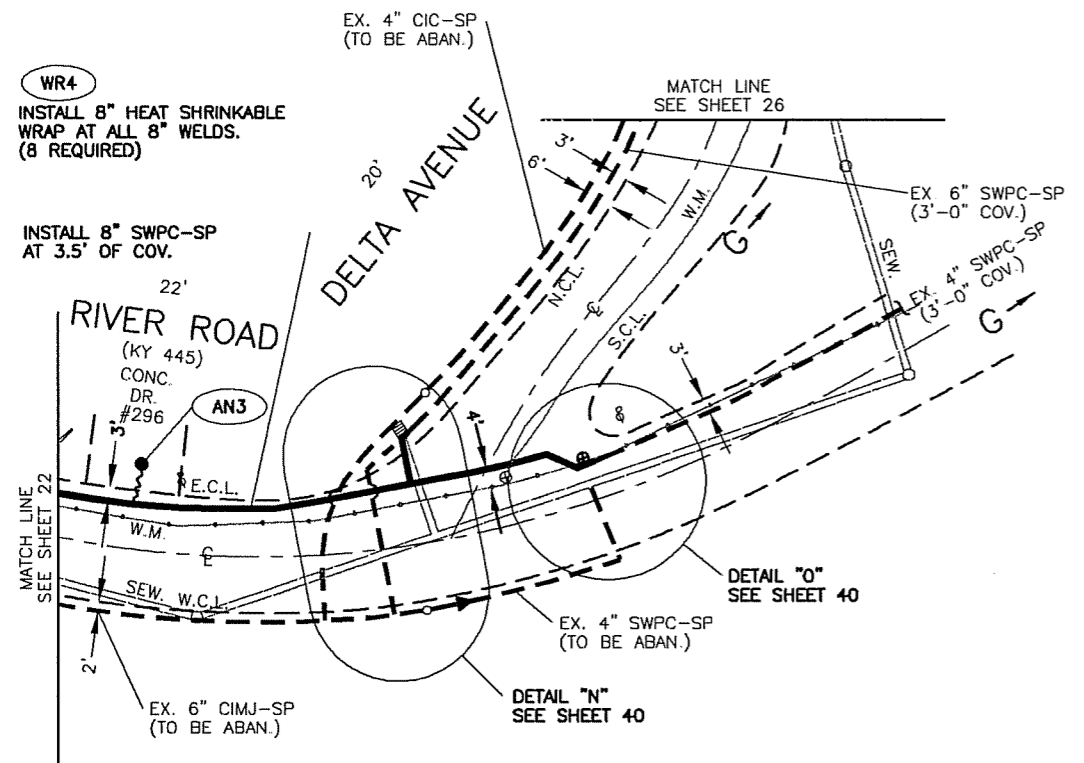
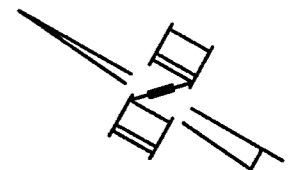
INSTALL 4" PL-SP  
AT 3' OF COV.

B09 C041 C041

20'  
BRENTWOOD PLACE

REVISIONS





WR4  
INSTALL 8" HEAT SHRINKABLE WRAP AT ALL 8" WELDS. (8 REQUIRED)

INSTALL 8" SWPC-SP AT 3.5' OF COV.

22'  
RIVER ROAD  
(KY 445)  
CONC. DR. #296  
AN3

MATCH LINE  
SEE SHEET 26

EX. 6" SWPC-SP  
(3'-0" COV.)

EX. 4" SWPC-SP  
(3'-0" COV.)

DETAIL "O"  
SEE SHEET 40

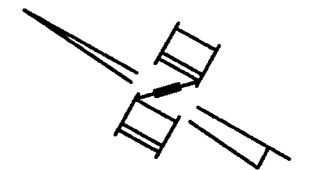
EX. 4" SWPC-SP  
(TO BE ABAN.)

DETAIL "N"  
SEE SHEET 40

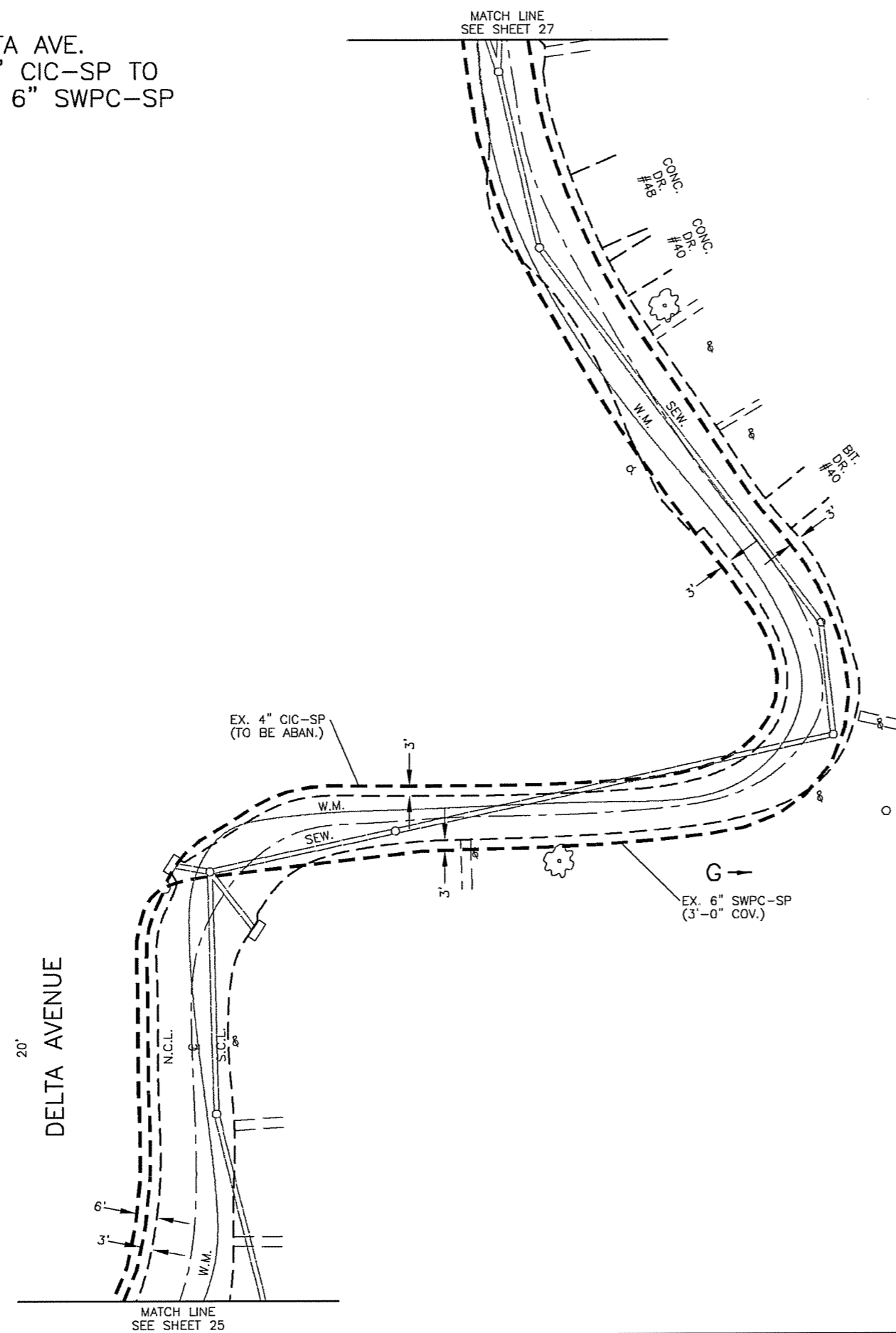
EX. 6" CIMJ-SP  
(TO BE ABAN.)

NOTE:  
SP SERVICES ON DELTA AVE.  
CONNECTED TO EX. 4" CIC-SP TO  
BE TIED OVER TO EX. 6" SWPC-SP

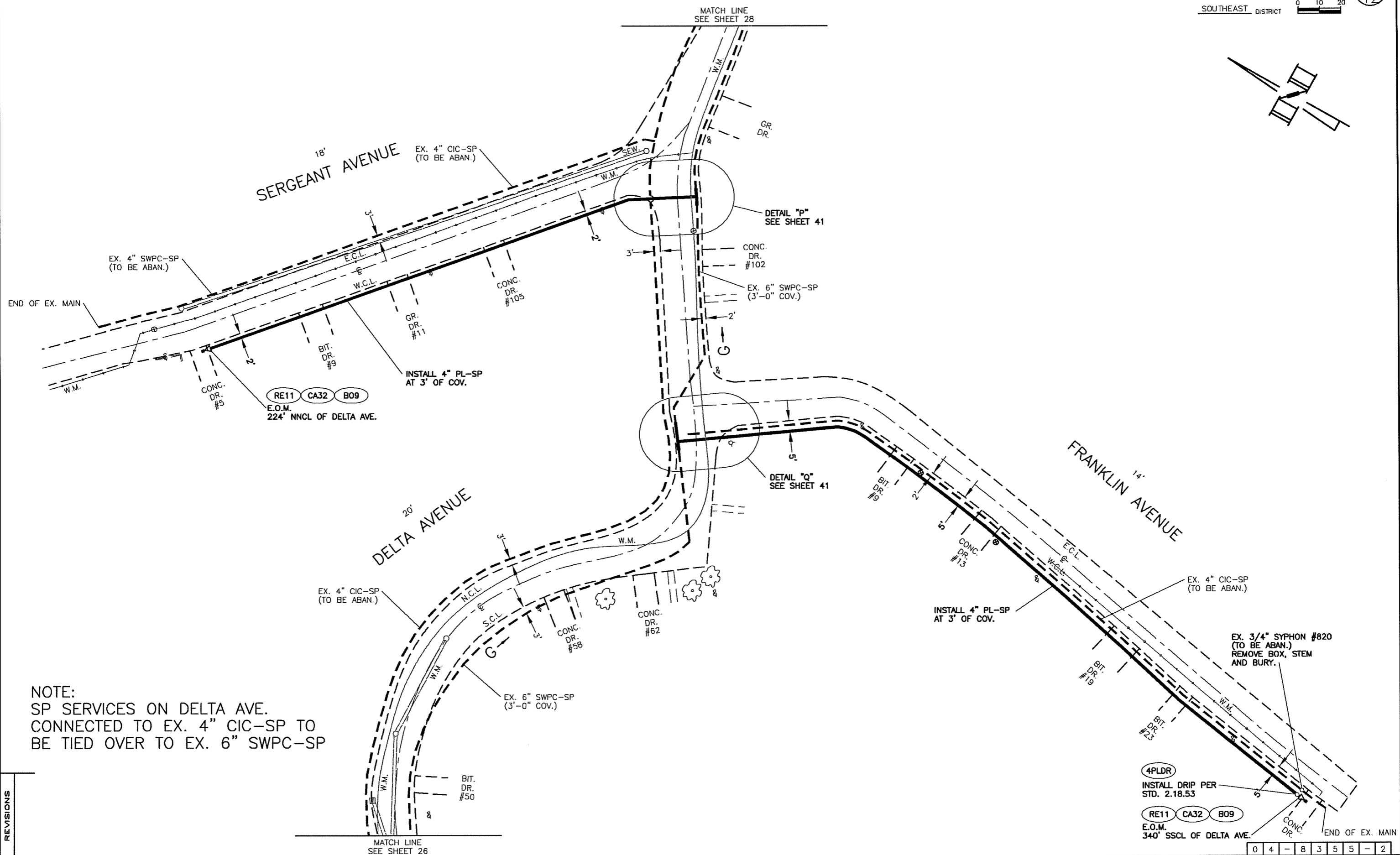
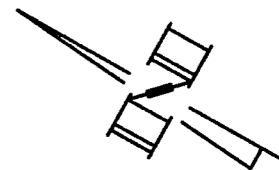
REVISIONS



NOTE:  
SP SERVICES ON DELTA AVE.  
CONNECTED TO EX. 4" CIC-SP TO  
BE TIED OVER TO EX. 6" SWPC-SP



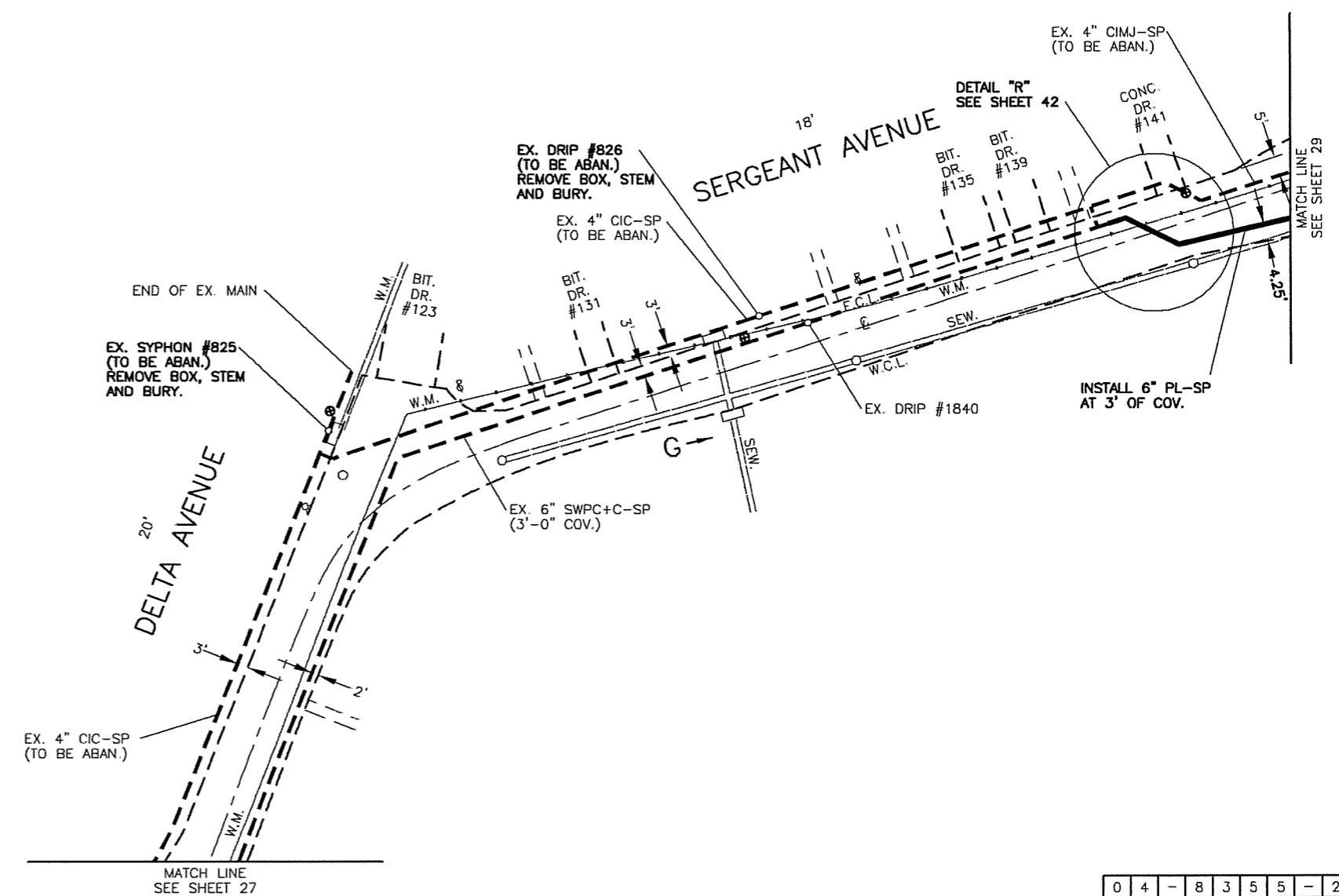
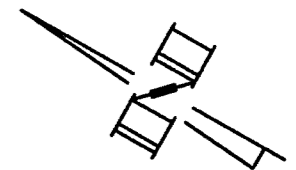
REVISIONS



NOTE:  
SP SERVICES ON DELTA AVE.  
CONNECTED TO EX. 4" CIC-SP TO  
BE TIED OVER TO EX. 6" SWPC-SP

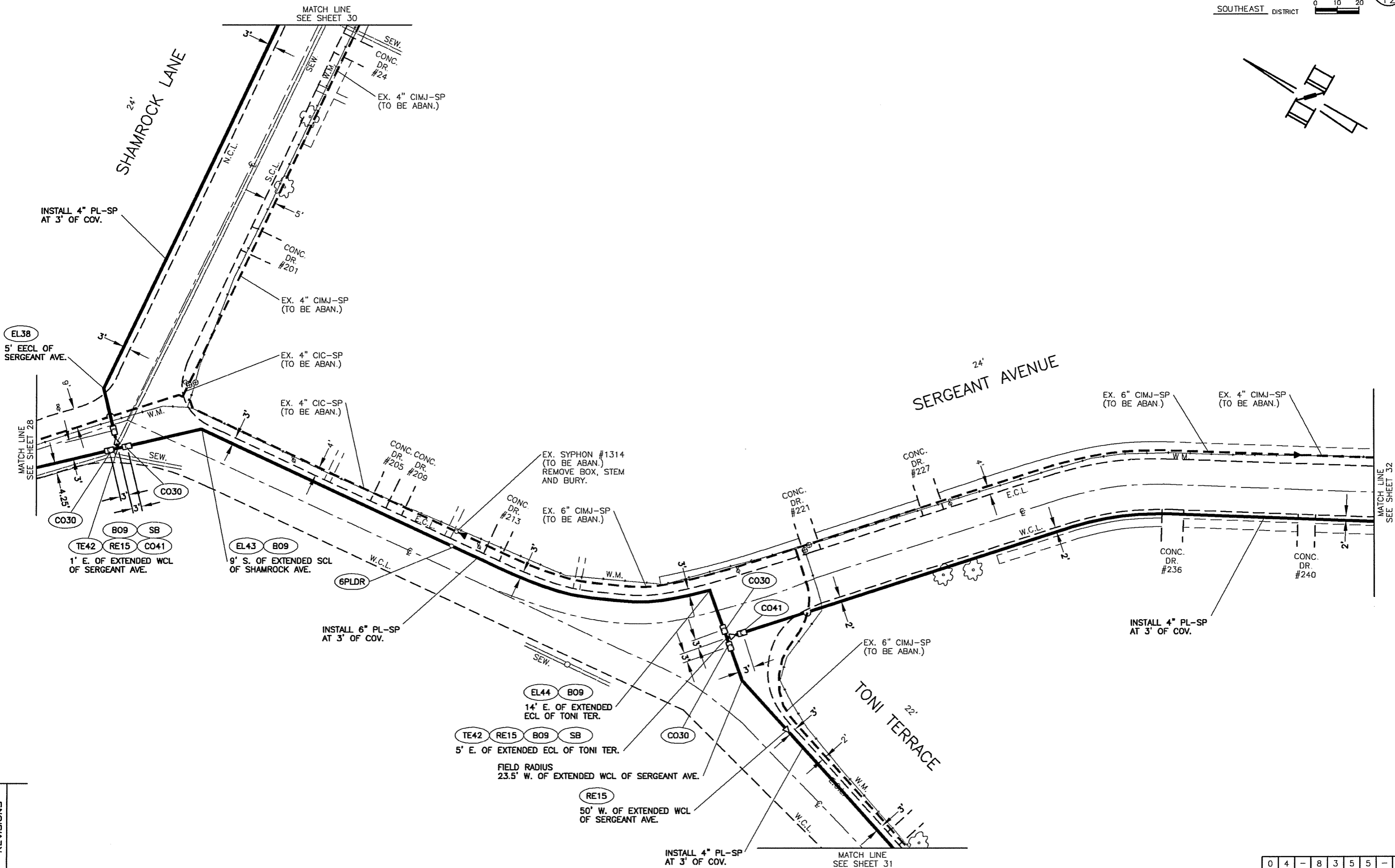
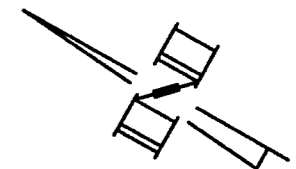
REVISIONS

0	4	-	8	3	5	5	-	2
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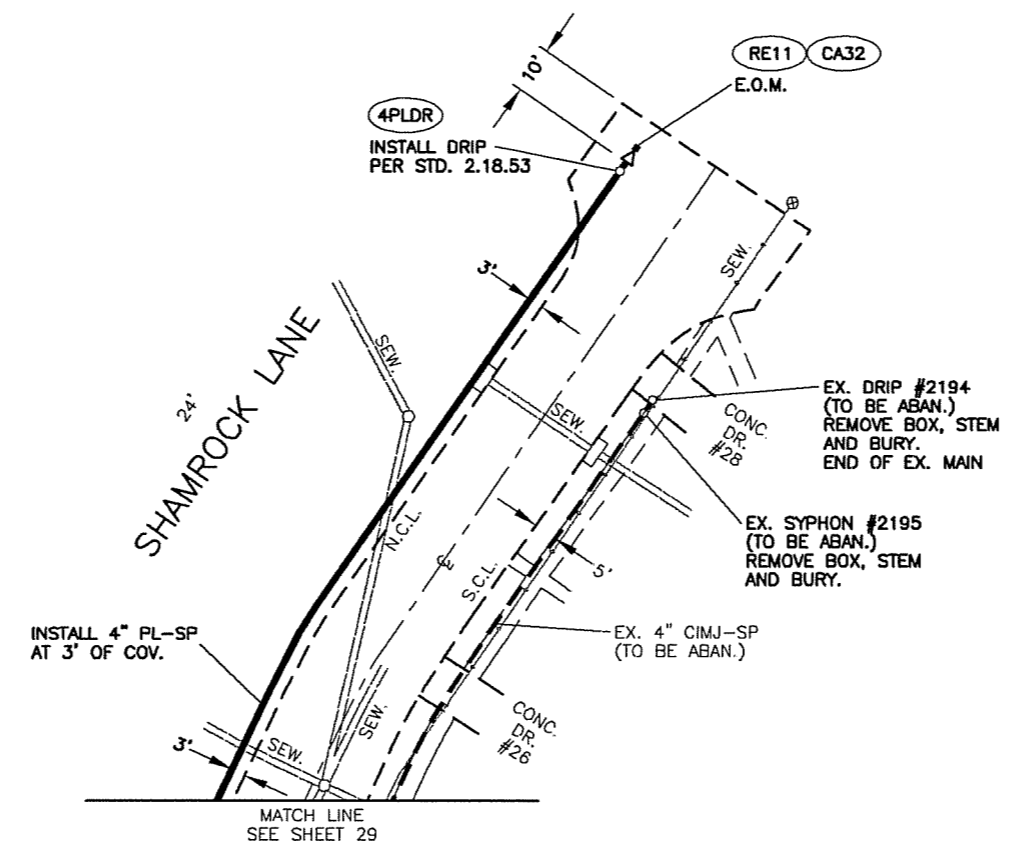
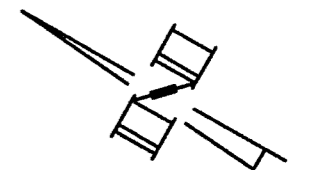


NOTE:  
SP SERVICES ON DELTA AVE.  
CONNECTED TO EX. 4" CIC-SP TO  
BE TIED OVER TO EX. 6" SWPC-SP

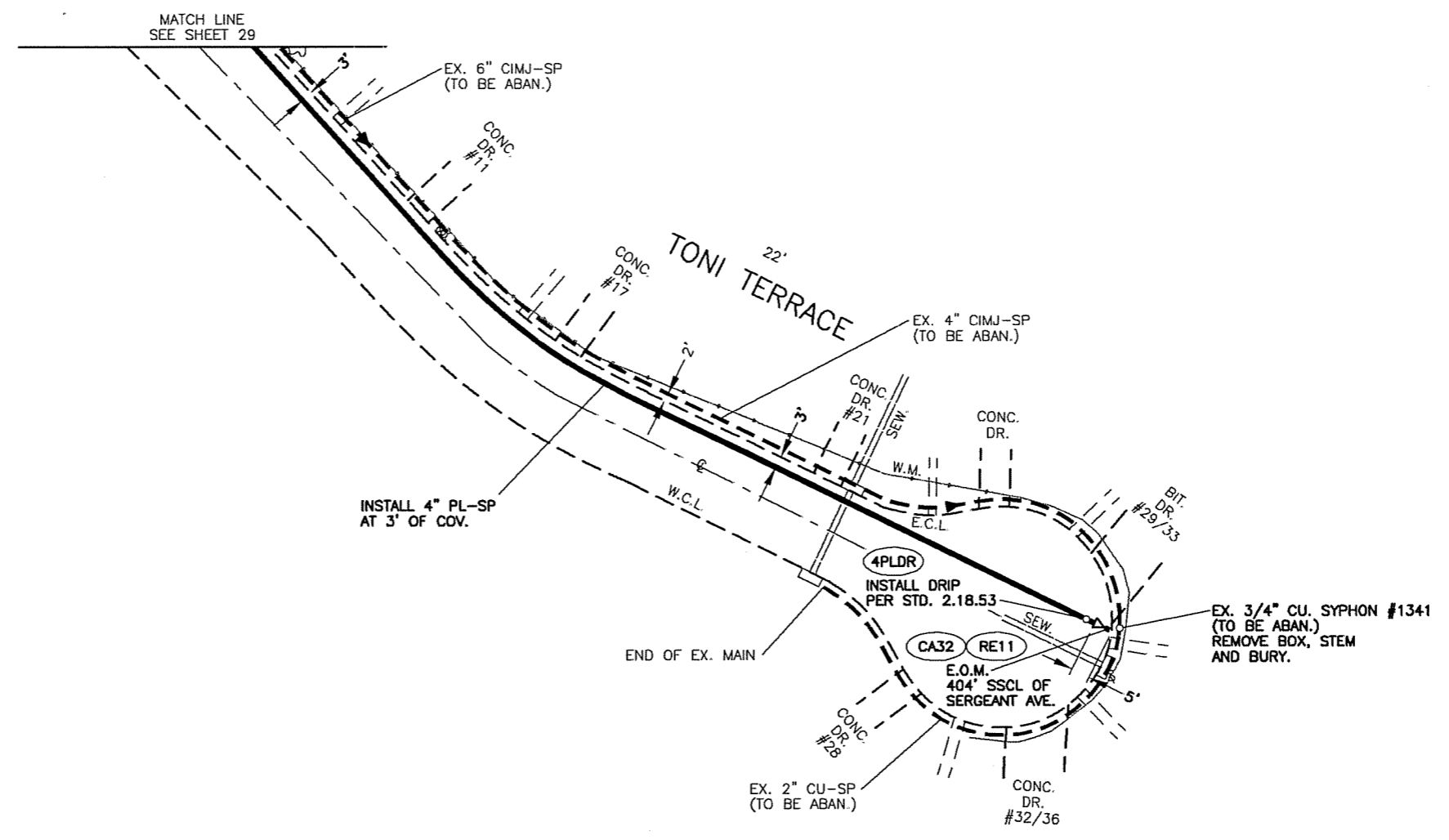
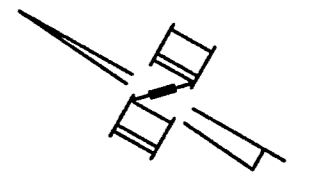
REVISIONS



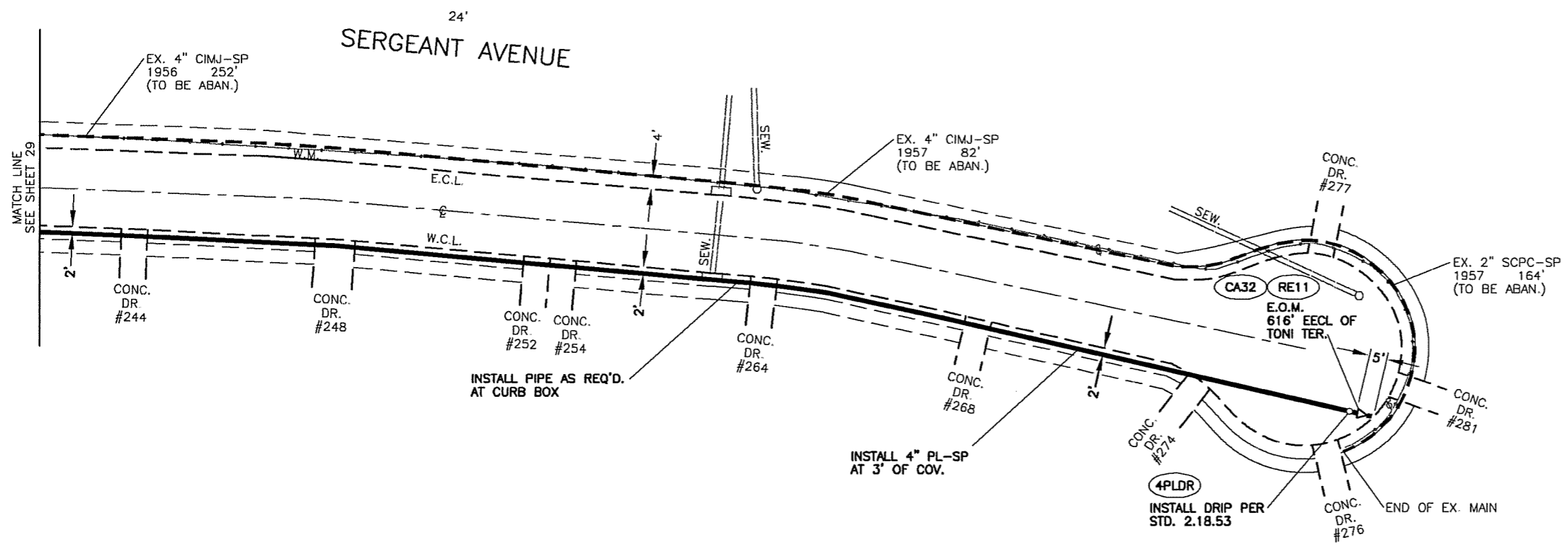
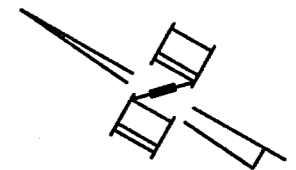
REVISIONS



REVISIONS

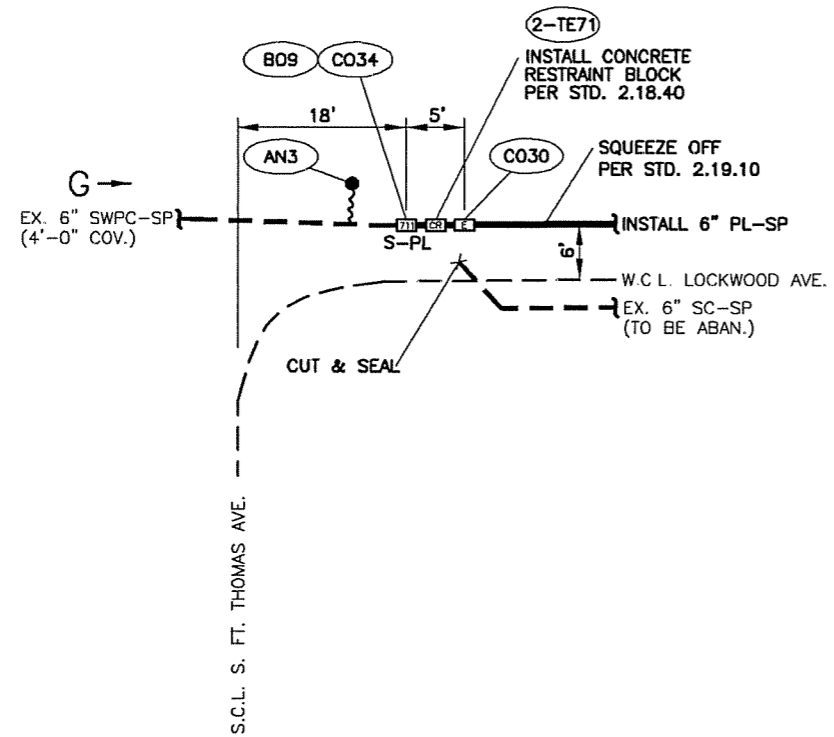


REVISIONS

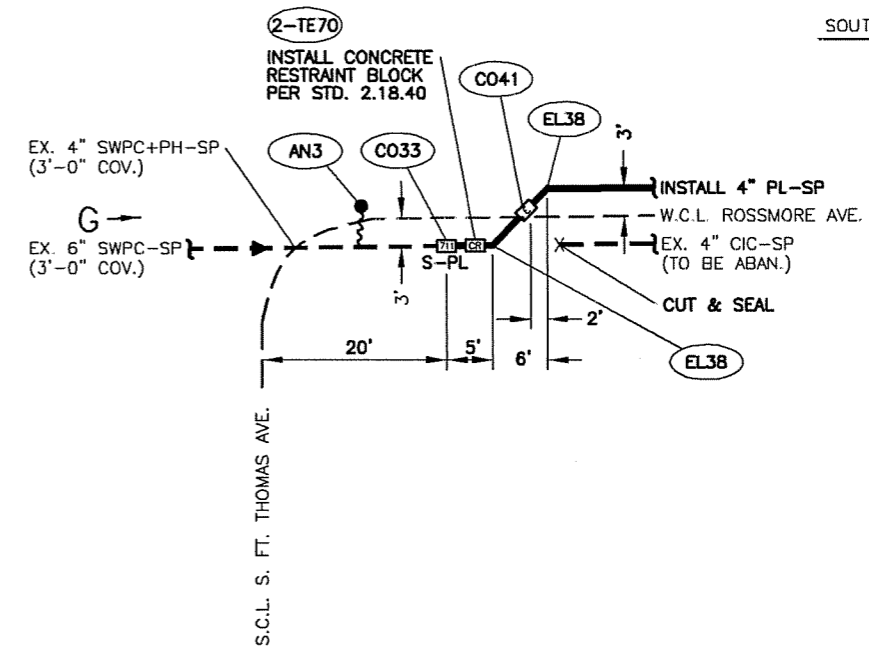


REVISIONS



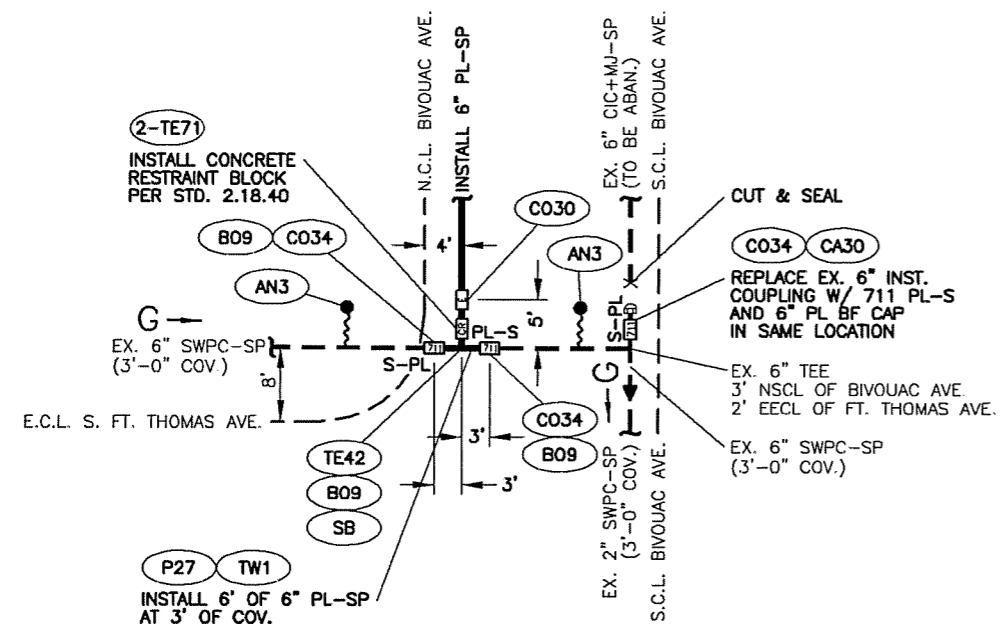


**DETAIL "A"**  
N.T.S.  
(FROM SHEET 7)

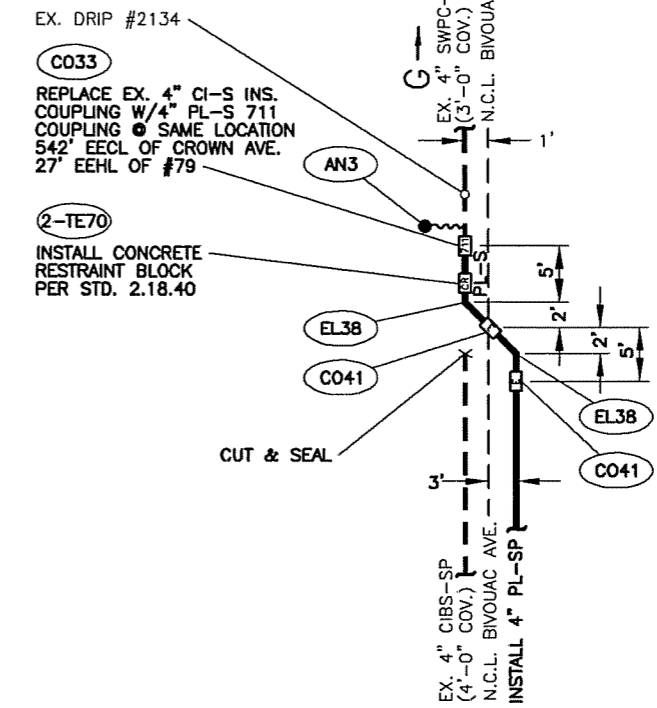


**DETAIL "B"**  
N.T.S.  
(FROM SHEET 8)

REVISIONS

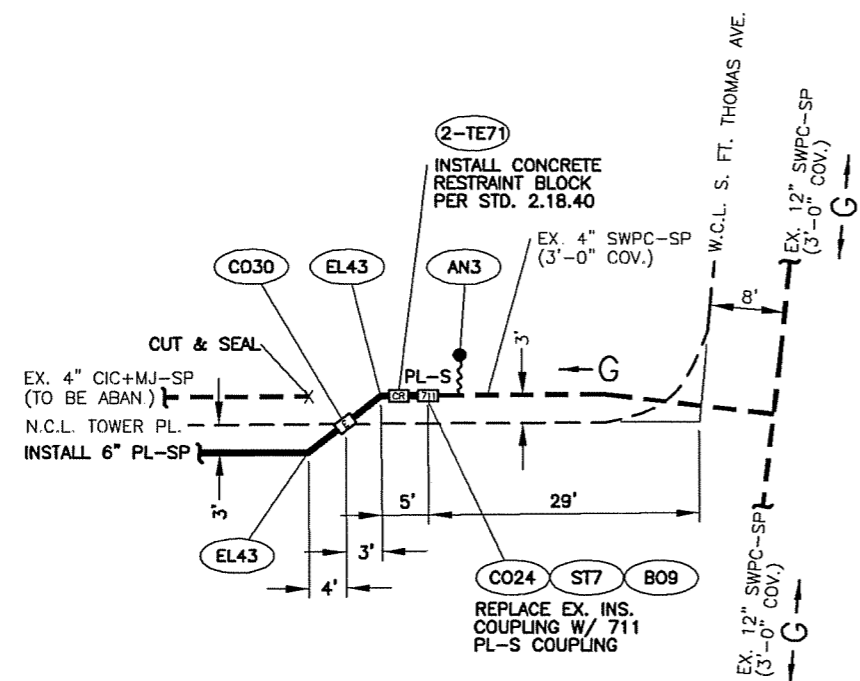


DETAIL "C"  
N.T.S.  
(FROM SHEET 8)

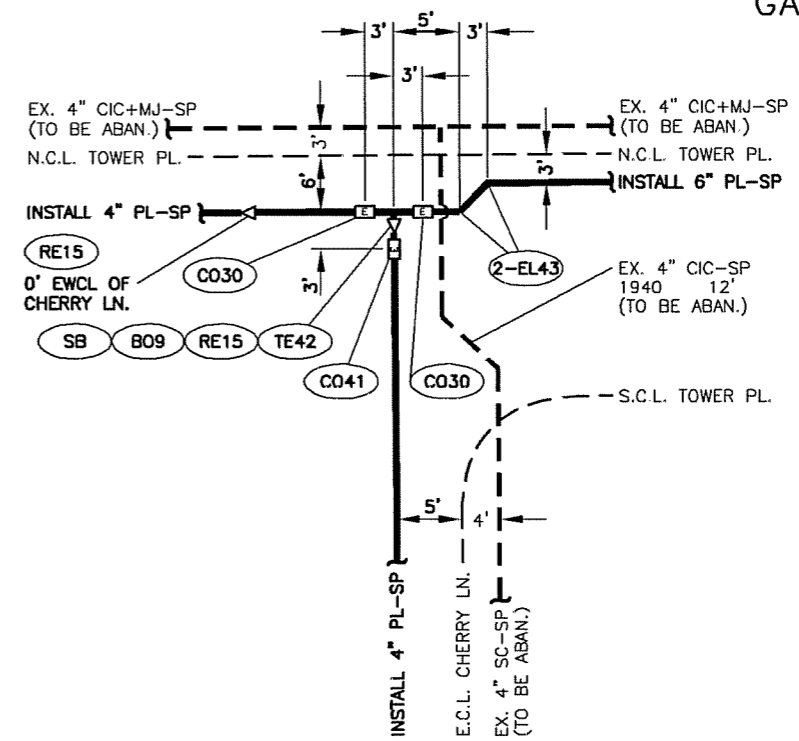


DETAIL "D"  
N.T.S.  
(FROM SHEET 11)

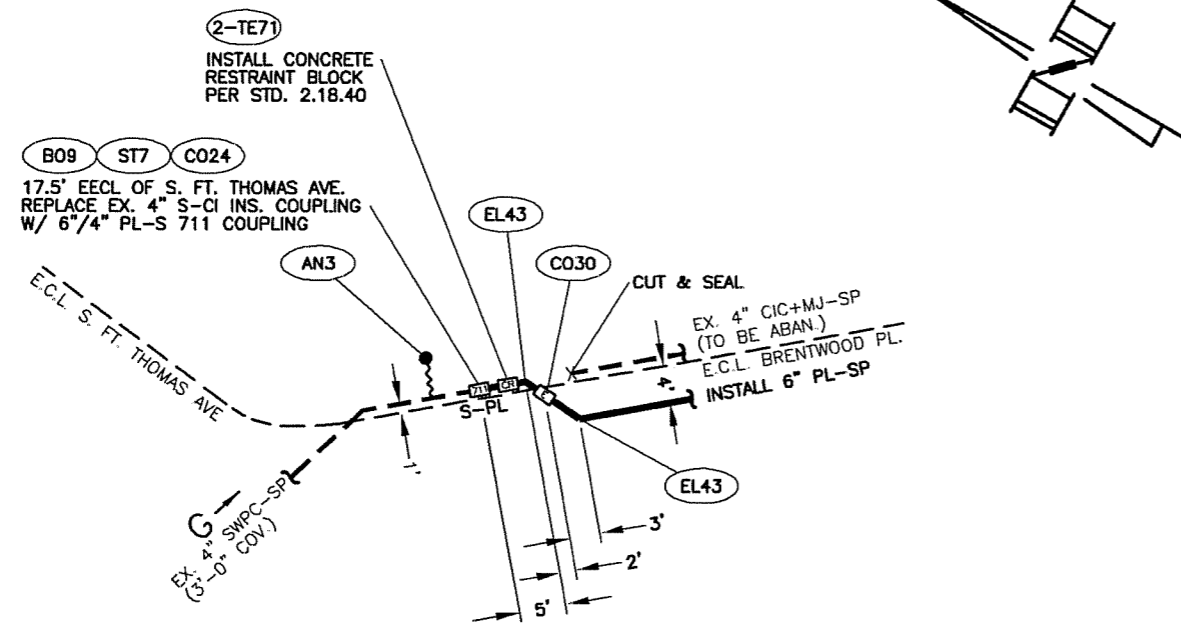
REVISIONS



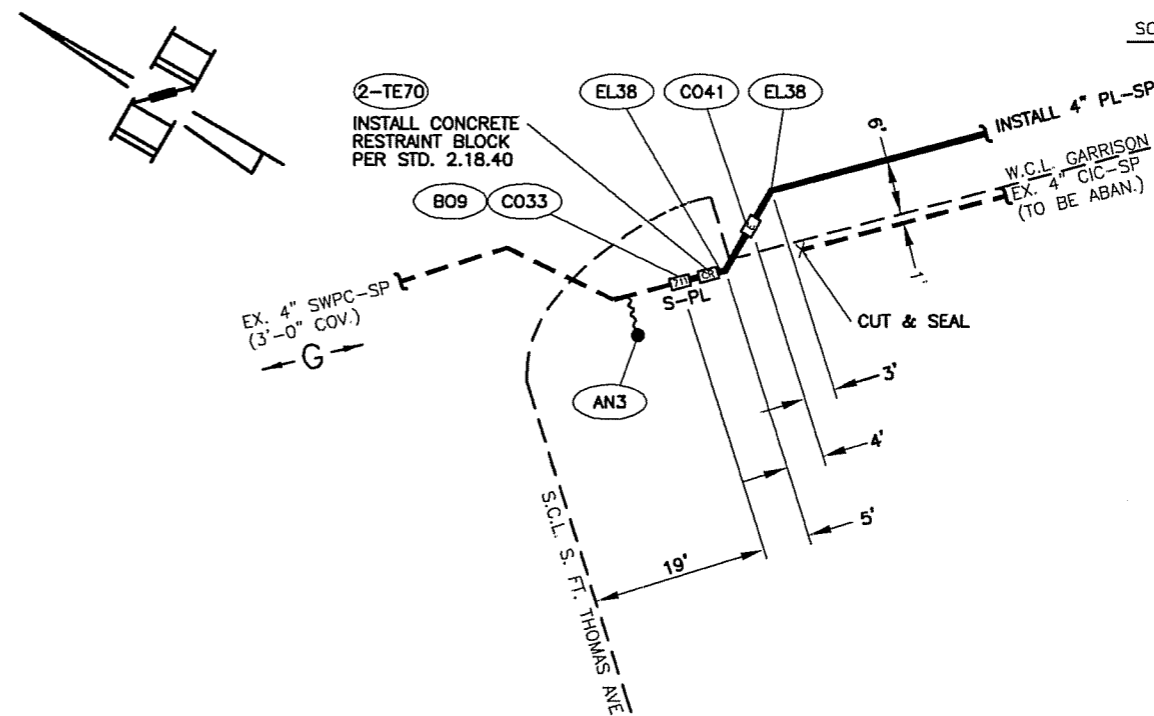
DETAIL "E"  
N.T.S.  
(FROM SHEET 16)



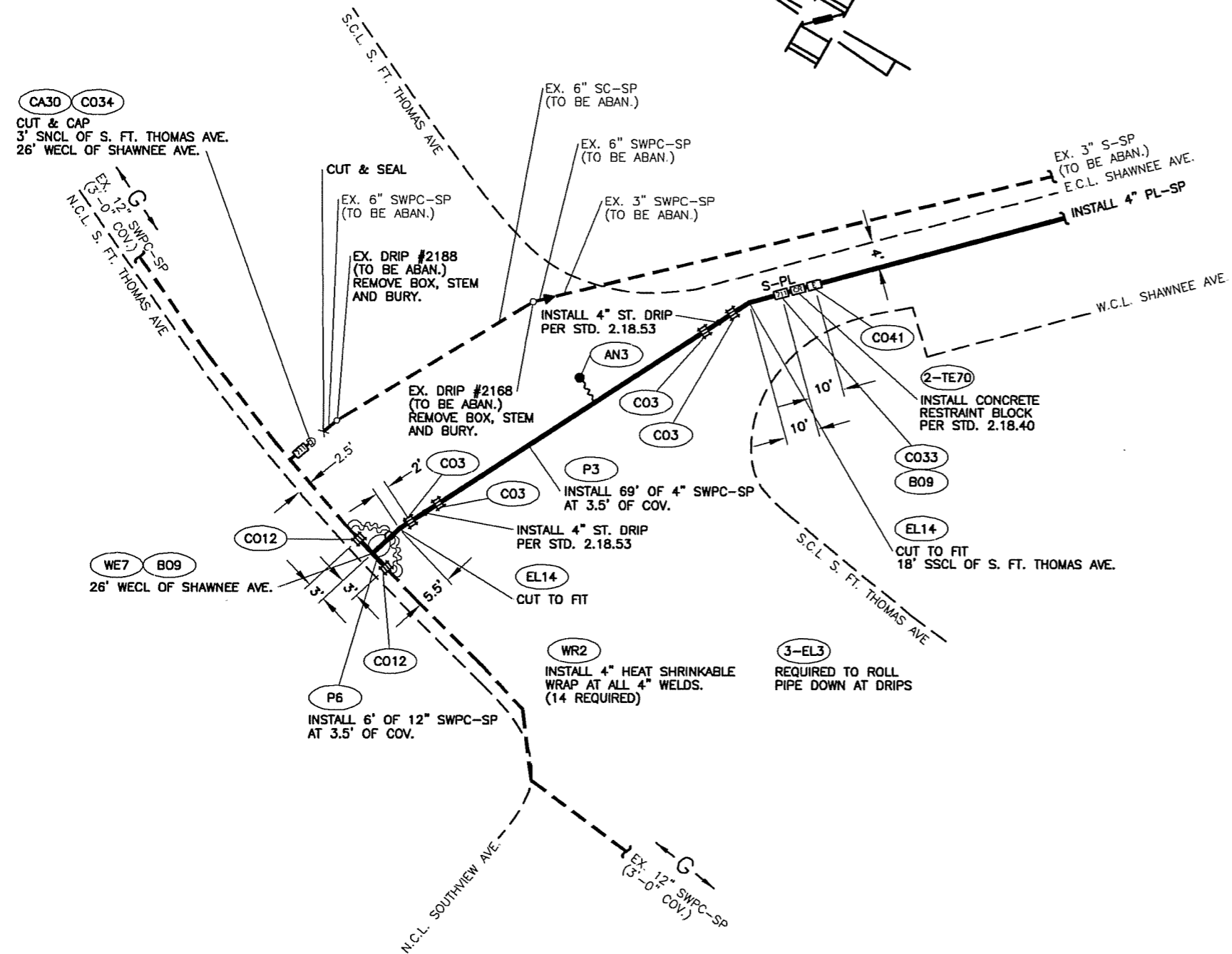
DETAIL "F"  
N.T.S.  
(FROM SHEET 17)



**DETAIL "G"**  
N.T.S.  
(FROM SHEET 18)

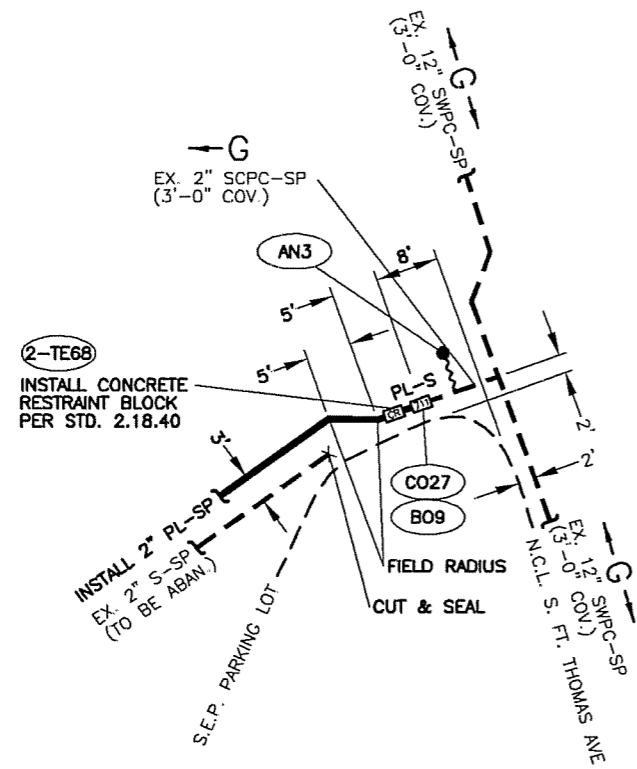


**DETAIL "H"**  
N.T.S.  
(FROM SHEET 19)

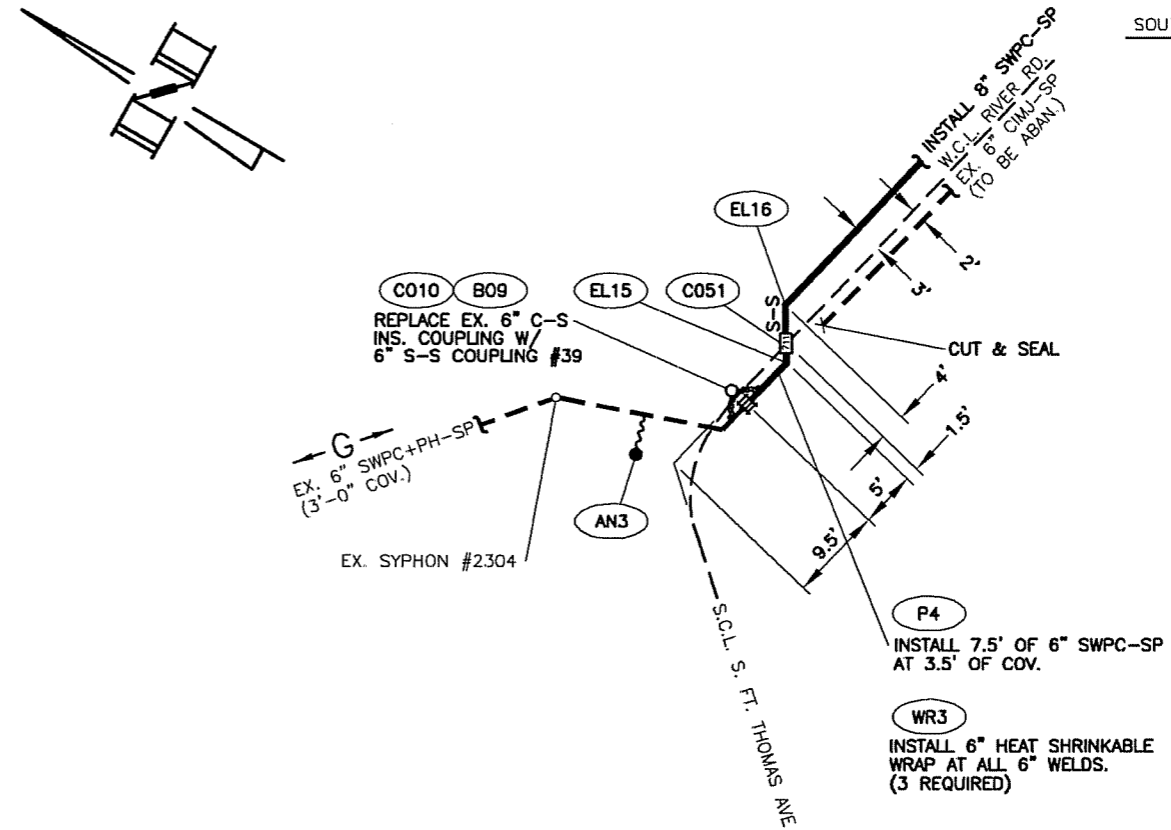


DETAIL "1"  
N.T.S.  
(FROM SHEET 19)

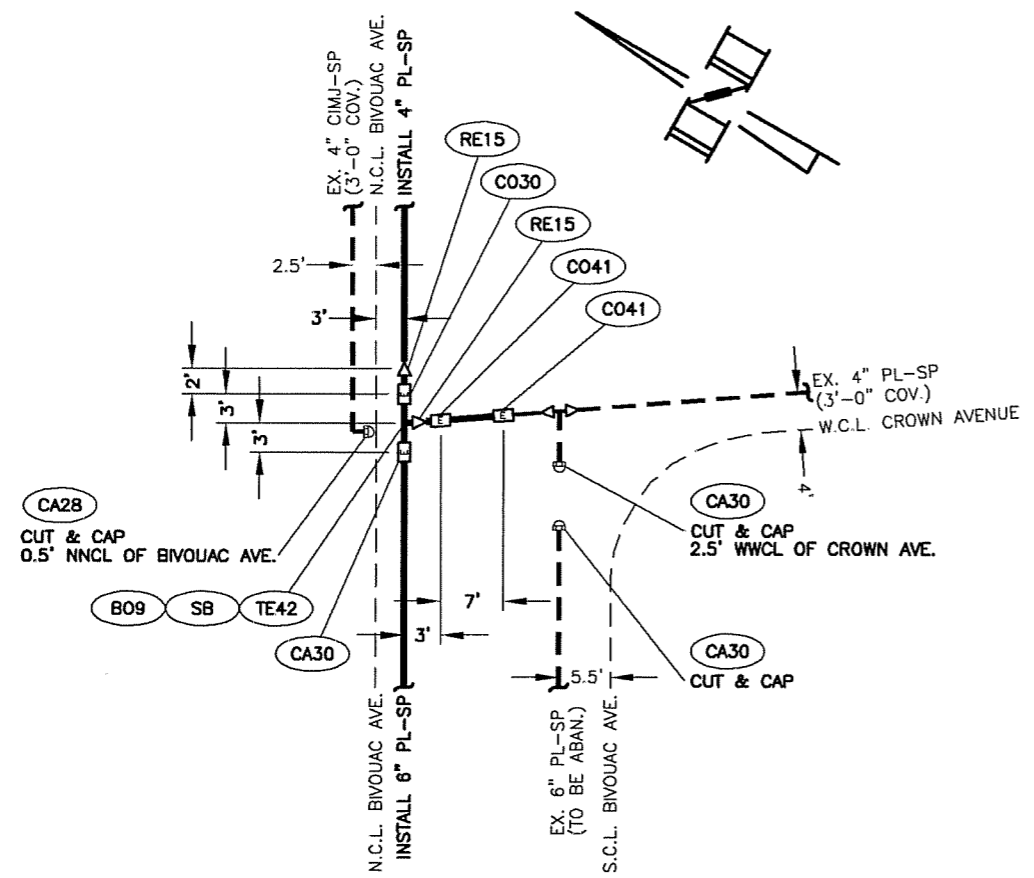
REVISIONS



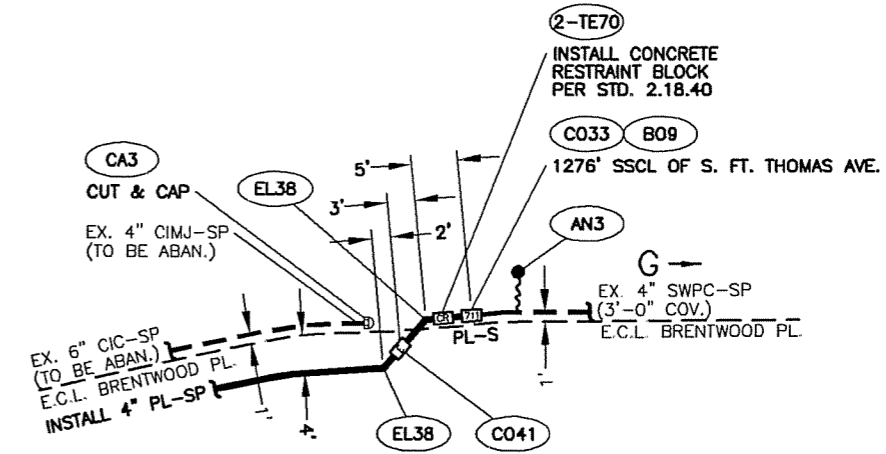
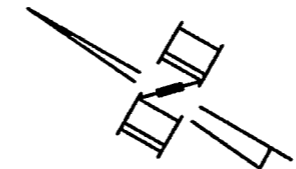
**DETAIL "J"**  
N.T.S.  
(FROM SHEET 19)



**DETAIL "K"**  
N.T.S.  
(FROM SHEET 20)

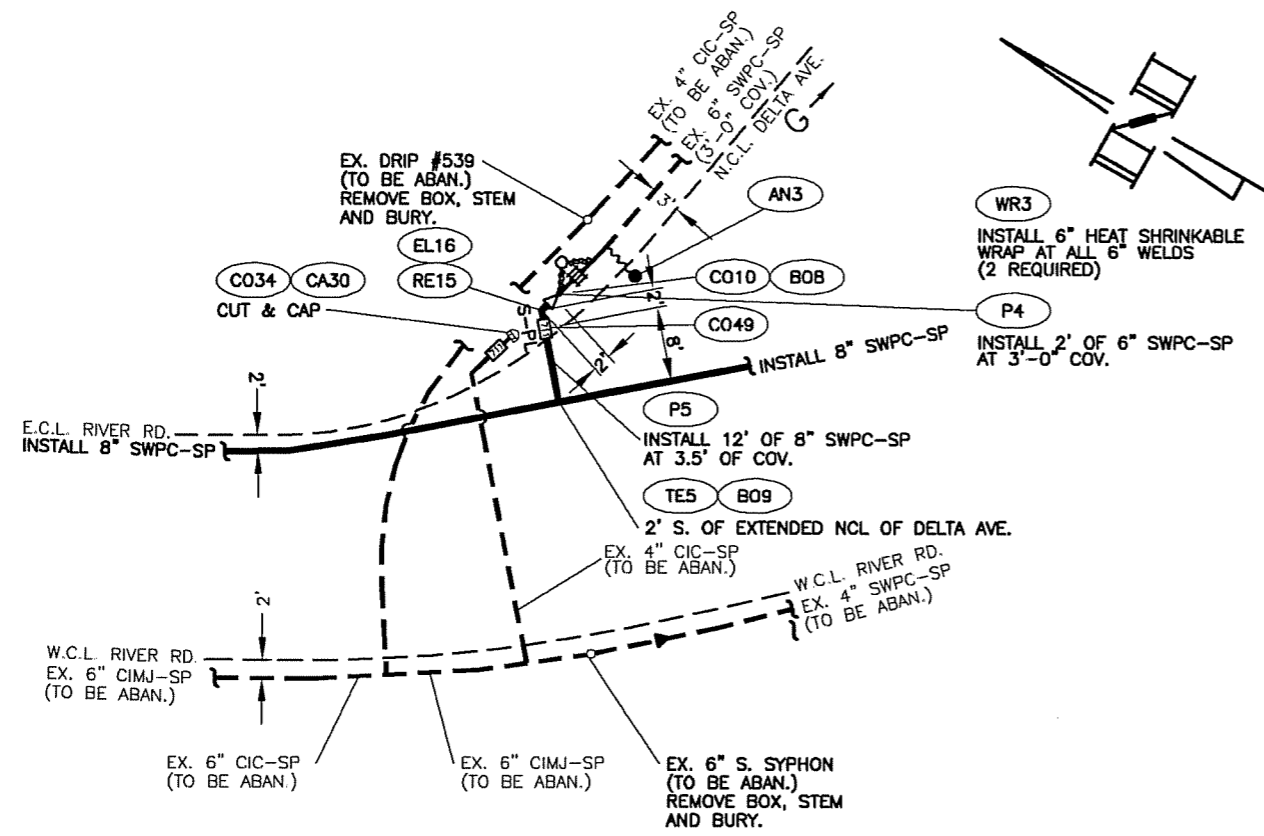


**DETAIL "L"**  
N.T.S.  
(FROM SHEET 10)

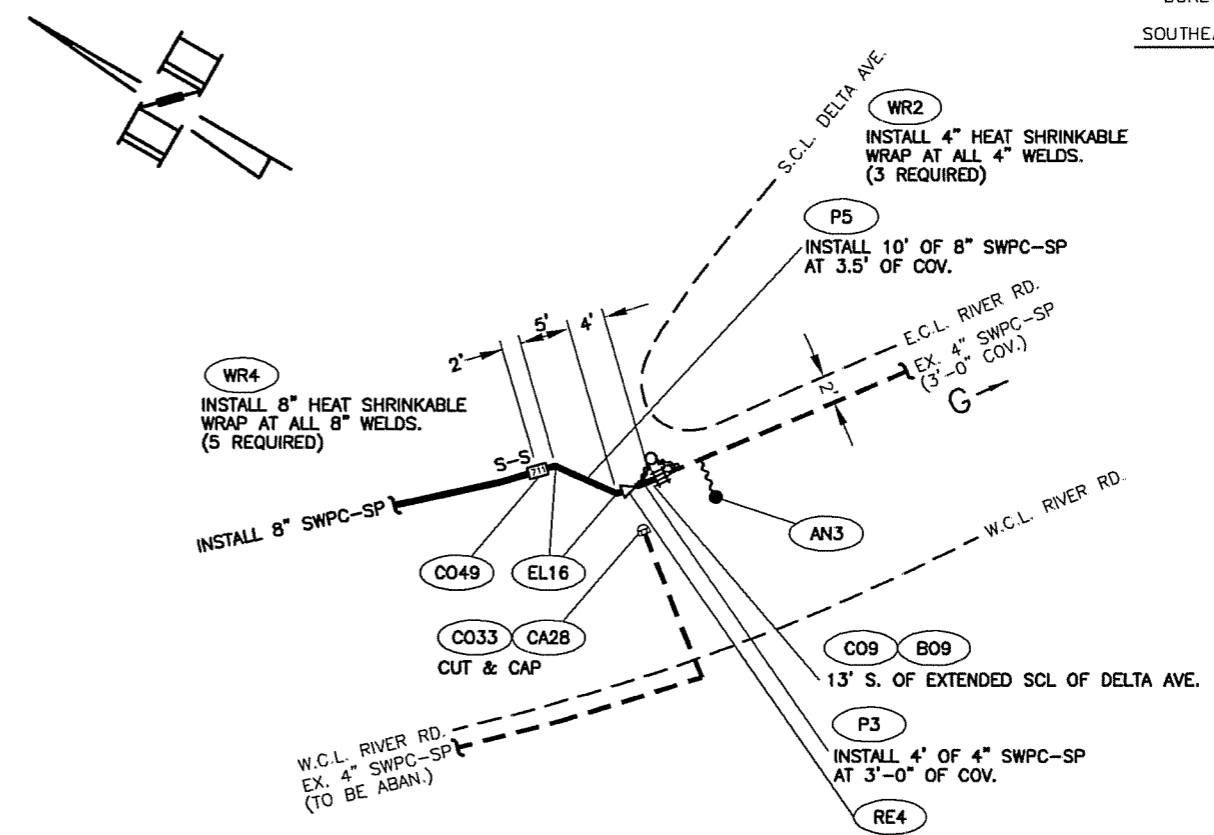


**DETAIL "M"**  
N.T.S.  
(FROM SHEET 24)

REVISIONS



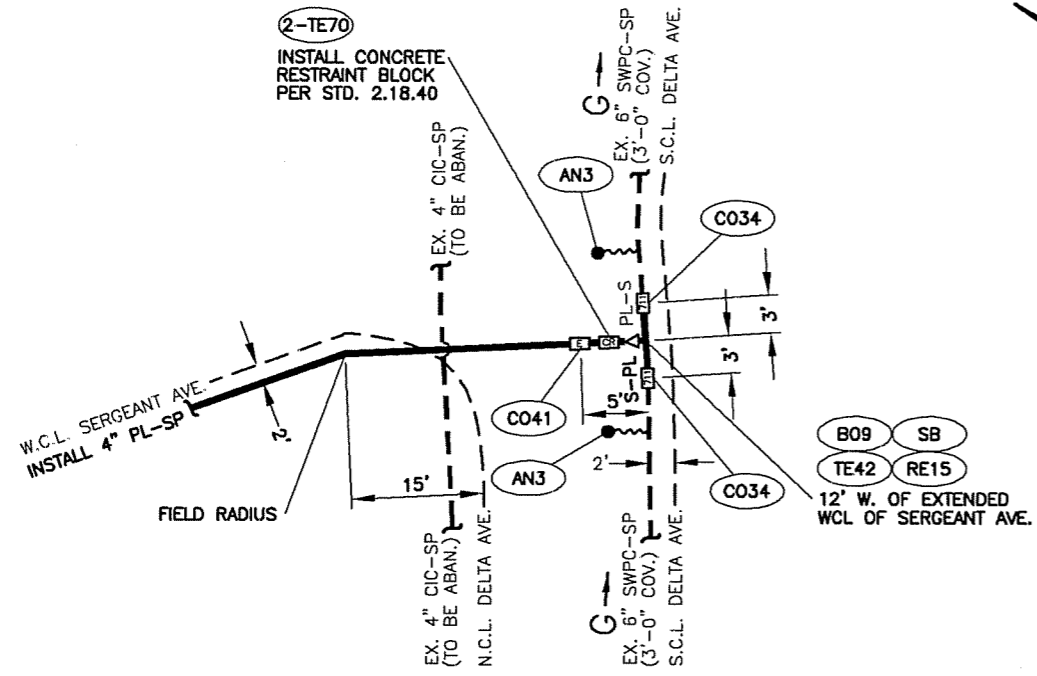
**DETAIL "N"**  
 N.T.S.  
 (FROM SHEET 25)



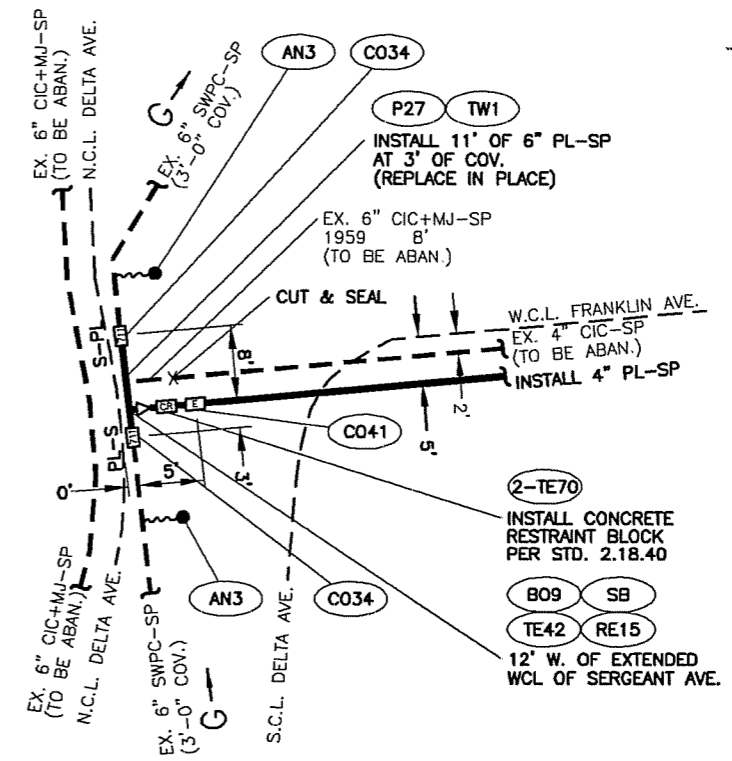
**DETAIL "O"**  
 N.T.S.  
 (FROM SHEET 25)

REVISIONS

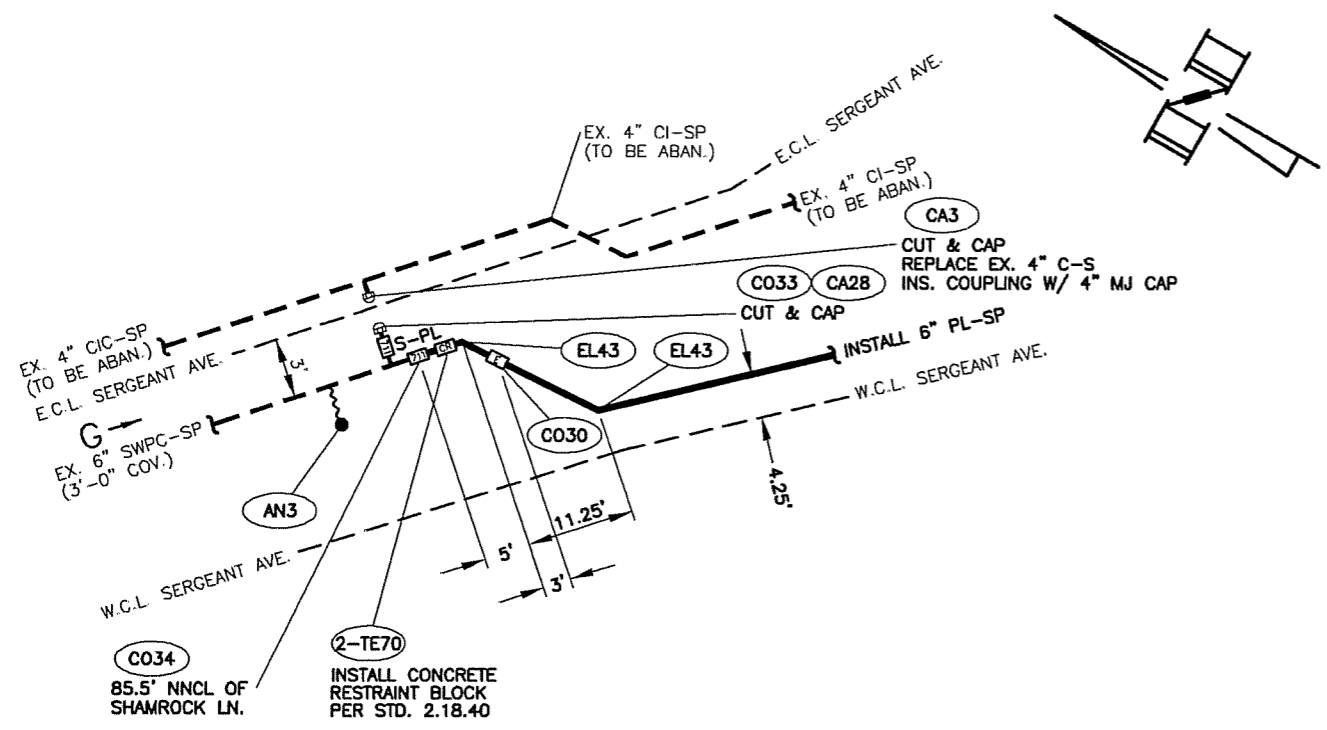




DETAIL "P"  
N.T.S.  
(FROM SHEET 27)



DETAIL "Q"  
N.T.S.  
(FROM SHEET 27)



**DETAIL "R"**  
 N.T.S.  
 (FROM SHEET 28)

REVISIONS