METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

PLAN PACKAGE INDEX / DESCRIPTION
CIVIL EAST CONSTRUCTION
VOLUME 1 - EXISTING CONDITIONS
VOLUME 2 - CIVIL
VOLUME 3 - TRACKWORK
VOLUME 4A - BRIDGES
VOLUME 4B - BRIDGES
VOLUME 5 - TUNNELS
VOLUME 6 - RETAINING WALLS
VOLUME 7 - UTILITIES
VOLUME 8 - DRAINAGE
VOLUME 9 - URBAN DESIGN / LANDSCAPE
VOLUME 10 - TRAFFIC / LIGHTING
VOLUME 11A - STATIONS
VOLUME 11B - STATIONS
VOLUME 12 - SYSTEMS

CIVIL EAST CONSTRUCTION

VOLUME 8
DRAINAGE

THE PROPOSED SOUTHWEST LRT PROJECT IS NOT FINAL BUT IS STILL UNDER ENVIRONMENTAL REVIEW AND THE PROJECT IS SUBJECT TO CHANGE. THESE PLANS ARE NOT FINAL.

THE COUNCIL, THROUGH THE DEVELOPMENT OF THESE PLANS, DOES NOT INTEND THAT THEY WILL PREJUDICE OR COMPROMISE ANY STATE OR FEDERAL ENVIRONMENTAL REVIEW OR OTHER LEGAL REQUIREMENTS. THESE PLANS DO NOT LIMIT THE PROJECT DESIGN ALTERNATIVES OR MITIGATIVE MEASURES THAT THE COUNCIL MAY UNDERTAKE IF THE PROPOSED SWLRT PROJECT PROCEEDS TO CONSTRUCTION.

THE COUNCIL WILL NOT TAKE FINAL ACTION ON THIS MATTER UNLESS THE COUNCIL PROCEEDS WITH THE PROJECT AFTER THE FTA'S RECORD OF DECISION AND THE COUNCIL'S DETERMINATION OF ADEQUACY.

60% SUBMISSION
DATE : 09/28/15

AECOM

CIVIL EAST

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
		VOLUME 8 - DRAINAGE			
1	E0-DRN-CVR-001	COVER SHEET			
2	E0-DRN-IDX-001	VOLUME INDEX OF PLAN SHEETS			
3	E0-GEN-KEY-001	GENERAL KEY MAP			
4	E0-GEN-NTS-001	GENERAL LEGEND AND ABBREVIATIONS SHEET 1			
5	E0-GEN-NTS-002	GENERAL LEGEND AND ABBREVIATIONS SHEET 2			
6	E0-STM-NTS-001	GENERAL NOTES, ABBREVIATIONS & SYMBOLS			
7	E0-STM-NTS-002	DRAINAGE NOTES, ABBREVIATIONS & SYMBOLS			
8	E1-STM-LAY-001	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 1			
9	E2-STM-LAY-002	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 2			
10	E2-STM-LAY-003	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 3			
11	E3-STM-LAY-004	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 4			
12	E4-STM-LAY-005	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 5			
13	E4-STM-LAY-006	DRAINAGE PLAN PLAN SHEET LAYOUT SHEET 6			
14	E1-STM-PLN - 001	DRAINAGE PLAN	2496+00	2502+50	
15	E1-STM-PLN - 002	DRAINAGE PLAN	2502+50	2509+50	
16	E1-STM-PLN - 003	DRAINAGE PLAN	2509+50	2516+50	
17	E1-STM-PLN - 004	DRAINAGE PLAN	2516+50	2523+50	
18	E1-STM-PLN - 005	DRAINAGE PLAN	2523+50	2529+50	
19	E1-STM-PLN - 006	DRAINAGE PLAN	2529+50	2536+00	
20	E1-STM-PLN - 007	DRAINAGE PLAN	2536+00	2542+00	
21	E1-STM-PLN - 008	DRAINAGE PLAN	2542+00	2546+50	
22	E1-STM-PLN - 009	DRAINAGE PLAN	2546+50	2553+00	
23	E1-STM-PLN - 010	DRAINAGE PLAN	2553+00	2559+50	
24	E1-STM-PLN - 011	DRAINAGE PLAN	2559+50	2566+50	
25	E1-STM-PLN - 012	DRAINAGE PLAN	2566+50	2573+50	
26	E1-STM-PLN - 013	DRAINAGE PLAN PIERCE AVE			
27	E1-STM-PLN - 014	DRAINAGE PLAN	2573+50	2580+50	
28	E1-STM-PLN - 015	DRAINAGE PLAN	2580+50	2587+50	
29	E1-STM-PLN - 016	DRAINAGE PLAN	2587+50	2596+50	
30	E2-STM-PLN - 001	DRAINAGE PLAN	2596+50	2602+00	
31	E2-STM-PLN - 002	DRAINAGE PLAN	2602+00	2609+00	
32	E2-STM-PLN - 003	DRAINAGE PLAN	2609+00	2616+00	
33	E2-STM-PLN - 004	DRAINAGE PLAN	2616+00	2623+00	
34	E2-STM-PLN - 005	DRAINAGE PLAN	2623+00	2630+00	
35	E2-STM-PLN - 006	DRAINAGE PLAN	2630+00	2637+00	
36	E2-STM-PLN - 007	DRAINAGE PLAN	2637+00	2644+00	
37	E2-STM-PLN - 008	DRAINAGE PLAN	2644+00	2650+00	
38	E2-STM-PLN - 009	DRAINAGE PLAN LOUISIANA PARK & RIDE			
39	E2-STM-PLN - 010	DRAINAGE PLAN	2650+00	2655+00	
40	E2-STM-PLN - 011	DRAINAGE PLAN	2655+00	2660+50	
41	E2-STM-PLN - 012	DRAINAGE PLAN	2660+50	2666+00	
42	E2-STM-PLN - 013	DRAINAGE PLAN	2666+00	2673+00	
43	E2-STM-PLN - 014	DRAINAGE PLAN	2673+00	2680+00	
44	E2-STM-PLN - 015	DRAINAGE PLAN	2680+00	2687+00	
45	E2-STM-PLN - 016	DRAINAGE PLAN	2687+00	2694+00	
46	E2-STM-PLN - 017	DRAINAGE PLAN	2694+00	2699+00	
47	E2-STM-PLN - 018	DRAINAGE PLAN	2699+00	2704+00	
48	E2-STM-PLN - 019	DRAINAGE PLAN	2704+00	2709+00	
49	E2-STM-PLN - 020	DRAINAGE PLAN	2709+00	2717+00	
50	E2-STM-PLN - 021	DRAINAGE PLAN BELTLINE PARK & RIDE			
51	E2-STM-PLN - 022	DRAINAGE PLAN	2717+00	2724+00	
52	E2-STM-PLN - 023	DRAINAGE PLAN	2724+00	2731+00	
53	E2-STM-PLN - 024	DRAINAGE PLAN	2731+00	2747+00	
54	E3-STM-PLN - 001	DRAINAGE PLAN	2747+00	2751+00	
55	E3-STM-PLN - 002	DRAINAGE PLAN	2751+00	2758+00	
56	E3-STM-PLN - 003	DRAINAGE PLAN	2758+00	2765+00	
57	E3-STM-PLN - 004	DRAINAGE PLAN ABBOTT AVE			
58	E3-STM-PLN - 005	DRAINAGE PLAN	2765+00	2771+00	
59	E3-STM-PLN - 006	DRAINAGE PLAN	2771+00	2778+00	
60	E3-STM-PLN - 007	DRAINAGE PLAN	2778+00	2785+00	
61	E3-STM-PLN - 008	DRAINAGE PLAN	2785+00	2792+00	
62	E3-STM-PLN - 009	DRAINAGE PLAN	2791+00	2798+00	
63	E3-STM-PLN - 010	DRAINAGE PLAN	2798+00	2805+00	
64	E3-STM-PLN - 011	DRAINAGE PLAN	2805+00	2812+50	
65	E3-STM-PLN - 012	DRAINAGE PLAN	2812+50	2819+00	
66	E3-STM-PLN - 013	DRAINAGE PLAN	2819+00	2826+00	
67	E3-STM-PLN - 014	DRAINAGE PLAN	2826+00	2833+00	
68	E3-STM-PLN - 015	DRAINAGE PLAN	2833+00	2842+00	
69	E4-STM-PLN - 001	DRAINAGE PLAN	2842+00	2848+00	
70	E4-STM-PLN - 002	DRAINAGE PLAN	2848+00	2854+00	
71	E4-STM-PLN - 003	DRAINAGE PLAN	2854+00	2860+00	
72	E4-STM-PLN - 004	DRAINAGE PLAN	2860+00	2865+50	

CIVIL EAST

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV
73	E4-STM-PLN - 005	DRAINAGE PLAN PENN DROP-OFF			
74	E4-STM-PLN - 006	DRAINAGE PLAN	2865+50	2871+50	
75	E4-STM-PLN - 007	DRAINAGE PLAN	2871+50	2879+00	
76	E4-STM-PLN - 008	DRAINAGE PLAN	2879+00	2886+50	
77	E4-STM-PLN - 009	DRAINAGE PLAN	2886+50	2891+50	
78	E4-STM-PLN - 010	DRAINAGE PLAN	2891+50	2897+00	
79	E4-STM-PLN - 011	DRAINAGE PLAN	2897+00	2904+00	
80	E4-STM-PLN - 012	DRAINAGE PLAN VAN WHITE DROP-OFF SHEET 1			
81	E4-STM-PLN - 013	DRAINAGE PLAN VAN WHITE DROP-OFF SHEET 1			
82	E4-STM-PLN - 014	DRAINAGE PLAN	2904+00	2911+00	
83	E4-STM-PLN - 015	DRAINAGE PLAN VAN WHITE BLVD			
84	E4-STM-PLN - 016	DRAINAGE PLAN	2911+00	2918+00	
85	E4-STM-PLN - 017	DRAINAGE PLAN	2918+00	2925+00	
86	E4-STM-PLN - 018	DRAINAGE PLAN	2925+00	2932+00	
87	E4-STM-PLN - 019	DRAINAGE PLAN	2932+00	2937+00	
88	E4-STM-PLN - 020	DRAINAGE PLAN	2937+00	2943+50	
89	E4-STM-PLN - 021	DRAINAGE PLAN	2943+50	2950+00	
90	E4-STM-PLN - 022	DRAINAGE PLAN HOLDEN ST			
91	E4-STM-PLN - 023	DRAINAGE PLAN BORDER AVE			
92	E4-STM-PLN - 024	DRAINAGE PLAN ROYALSTON AVE			
93	E4-STM-PLN - 025	DRAINAGE PLAN	2950+00	2955+50	
94	E4-STM-PLN - 026	DRAINAGE PLAN	2955+50	2962+50	
95	E0-STM-NTS-003	STANDARD PLATES LIST			

CIVIL EAST

SHT #	SHEET NAME	SHEET DESCRIPTION	STATION	STATION	REV

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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60% SUBMISSION - 09/28/15

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

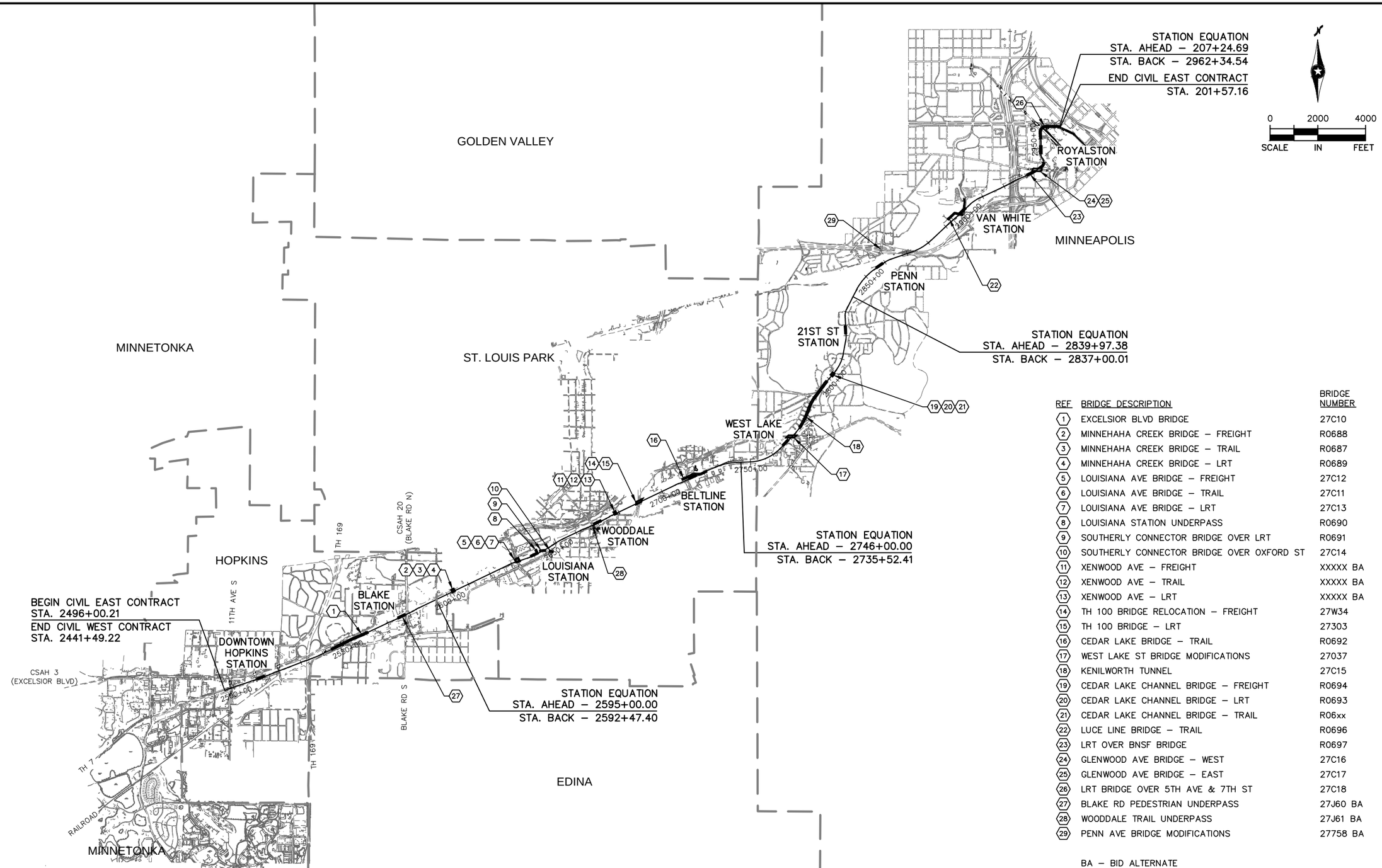
CIVIL EAST - VOLUME 8
DRAINAGE
VOLUME INDEX OF PLAN SHEETS

DISCIPLINE: GENERAL

SHEET NAME: E0-DRN-IDX - 001

SHEET 2 OF 95

Sep. 25 2015 09:07 am V:\3400_ADC\CAD\CAD MANAGEMENT\DRAWING LIST\E1-GEN-IDX.dwg By: V-KriewaMR



REF	BRIDGE DESCRIPTION	BRIDGE NUMBER
1	EXCELSIOR BLVD BRIDGE	27C10
2	MINNEHAHA CREEK BRIDGE – FREIGHT	R0688
3	MINNEHAHA CREEK BRIDGE – TRAIL	R0687
4	MINNEHAHA CREEK BRIDGE – LRT	R0689
5	LOUISIANA AVE BRIDGE – FREIGHT	27C12
6	LOUISIANA AVE BRIDGE – TRAIL	27C11
7	LOUISIANA AVE BRIDGE – LRT	27C13
8	LOUISIANA STATION UNDERPASS	R0690
9	SOUTHERLY CONNECTOR BRIDGE OVER LRT	R0691
10	SOUTHERLY CONNECTOR BRIDGE OVER OXFORD ST	27C14
11	XENWOOD AVE – FREIGHT	XXXXX BA
12	XENWOOD AVE – TRAIL	XXXXX BA
13	XENWOOD AVE – LRT	XXXXX BA
14	TH 100 BRIDGE RELOCATION – FREIGHT	27W34
15	TH 100 BRIDGE – LRT	27303
16	CEDAR LAKE BRIDGE – TRAIL	R0692
17	WEST LAKE ST BRIDGE MODIFICATIONS	27037
18	KENILWORTH TUNNEL	27C15
19	CEDAR LAKE CHANNEL BRIDGE – FREIGHT	R0694
20	CEDAR LAKE CHANNEL BRIDGE – LRT	R0693
21	CEDAR LAKE CHANNEL BRIDGE – TRAIL	R06xx
22	LUCE LINE BRIDGE – TRAIL	R0696
23	LRT OVER BNSF BRIDGE	R0697
24	GLENWOOD AVE BRIDGE – WEST	27C16
25	GLENWOOD AVE BRIDGE – EAST	27C17
26	LRT BRIDGE OVER 5TH AVE & 7TH ST	27C18
27	BLAKE RD PEDESTRIAN UNDERPASS	27J60 BA
28	WOODDALE TRAIL UNDERPASS	27J61 BA
29	PENN AVE BRIDGE MODIFICATIONS	27758 BA

BA – BID ALTERNATE

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
GENERAL
KEY MAP

DISCIPLINE: GENERAL

SHEET NAME: E0-GEN-KEY - 001

SHEET 3 OF 95

Sep, 21 2015 06:21 am V:\3400_ADC\CAD\CAD MANAGEMENT\DRAWING LIST\E0-GEN-KEY.dwg By: V-KriewaMR

TRACK LINETYPES

- ROADWAY ℄
- TRACK ℄ (LRT)
- TRACK ℄ (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- FENCE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- FENCE / RAILING
- ID — ID — INTRUSION DETECTION

CIVIL LINETYPES

- ROADWAY ℄
- TRACK ℄ (LRT)
- TRACK ℄ (FRT)
- RETAINING WALL
- BALLAST CURB
- TUNNEL WALL
- CONCRETE CURB AND GUTTER
- TRAIL
- SIDEWALK
- DRIVEWAY
- BRIDGE
- SAWCUT
- FENCE
- DELINEATED WETLAND
- WATER EDGE
- EX ROW
- PROP ROW
- PROP TCE
- PROP PE
- CROSSWALK
- STOP BAR
- MEDIAN NOSE

TRACK SYMBOLS

- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- PEDESTRIAN FLASHER
- AUTOMATIC GATE
- RAIL TURNOUT
- RAIL CROSSOVER (DOUBLE)
- RAIL CROSSOVER (SINGLE)
- POINT OF SWITCH (PS)
- OCS POLE FOUNDATION
- RAIL LUBRICATOR
- POINT OF INTERSECTION (PI) OF TURNOUT (TO)
- W2-200 — RAILROAD CURVE NUMBER

NOTE:
ALL TURNOUTS AND CROSSOVERS TO BE EQUIPPED WITH POWER SWITCH MACHINES AND SWITCH HEATERS

CIVIL SYMBOLS

- ACCESSIBLE PEDESTRIAN CURB RAMP (DESIGN VARIES)
- PROPOSED DIRECTIONAL LANE USE
- EXISTING DIRECTIONAL LANE USE
- AUTOMATIC GATE
- HANDICAP PARKING STALL
- TACTILE WARNING STRIP
- TPSS BUILDING (TPSS-SW###)
- SIGNAL OR INTERMEDIATE OR PLATFORM OR XING OR TUNNEL HOUSE OR ANY COMBINATION OF THESE

SURVEY NOTES

1. THE HORIZONTAL DATUM OF THIS MAP IS BASED ON THE HENNEPIN COUNTY COORDINATE SYSTEM WHICH IS RELATED TO THE MINNESOTA STATE PLANE COORDINATE SYSTEM NAD 83 (2007) ADJUSTMENT SOUTH ZONE.
2. THE PLANIMETRIC FEATURES SHOWN ON THIS MAP ARE AS PREPARED BY AERO-METRIC, INC. FROM AERIAL DATA AND IMAGERY COLLECTED IN APRIL 2012, AS SUPPLEMENTED BY FIELD SURVEYS COMPLETED BY MFRA, INC.
3. HORIZONTAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.14 FEET HORIZONTAL ACCURACY AT A 95% CONFIDENCE LEVEL.
4. VERTICAL POSITIONAL ACCURACY: USING THE NATIONAL STANDARD FOR SPATIAL DATA ACCURACY, THE DATA SET TESTED 0.10 FEET VERTICAL ACCURACY AT 95% CONFIDENCE LEVEL.

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
GENERAL
LEGEND AND ABBREVIATIONS
SHEET 1

DISCIPLINE: GENERAL

SHEET NAME: E0-GEN-NTS - 001

ABBREVIATIONS

AD	ALGEBRAIC DIFFERENCE
AVE	AVENUE
BGN	BEGIN
BP	BEGINNING POINT
BVCE	BEGINNING VERTICAL CURVE ELEVATION
BVCS	BEGINNING VERTICAL CURVE STATION
BLVD	BOULEVARD
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY
C&G	CURB AND GUTTER
℄	CENTERLINE
CIR	CIRCLE
CP	CANADIAN PACIFIC
CPRAIL	CANADIAN PACIFIC RAILWAY
CS	CURVE TO SPIRAL
CSAH	COUNTY STATE AID HIGHWAY
D&U	DRAINAGE AND UTILITY
DF	DIRECT FIXATION
DR	DRIVE
DTL	DETAIL
DWY	DRIVEWAY
E	EAST
Ea	ACTUAL SUPERELEVATION (INCHES)
EB	EAST BOUND
EL or ELEV	ELEVATION
EP	END POINT
ESMT	EASEMENT
Eu	UNBALANCED SUPERELEVATION (INCHES)
EVCE	ENDING VERTICAL CURVE ELEVATION
EVCS	ENDING VERTICAL CURVE STATION
EX	EXISTING
HCRRA	HENNEPIN COUNTY REGIONAL RAILROAD AUTHORITY
LH	LEFT HAND
LN	LANE
LRT	LIGHT RAIL TRANSIT
L_c	CURVE LENGTH (FEET)
L_s	SPIRAL LENGTH (FEET)
MIN	MINIMUM
MPH	MILES PER HOUR
MPLS	CITY OF MINNEAPOLIS
MPRB	MINNEAPOLIS PARK AND RECREATION BOARD
N	NORTH
NB	NORTH BOUND
NIC	NOT IN CONTRACT
NO	NUMBER
OMF	OPERATIONS AND MAINTENANCE FACILITY
OCS	OVERHEAD CONTACT SYSTEM
OH	OVERHEAD
PC	POINT OF CURVE
PE	PERMANENT EASEMENT
PITO	POINT OF INTERSECTION OF TURNOUT
PKWY	PARKWAY
POT	POINT ON TANGENT
PROP	PROPOSED
PS	POINT OF SWITCH
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS (FEET)
RD	ROAD
RL	RAIL LUBRICATOR
r	RATE OF CHANGE VERTICAL CURVE
RH	RIGHT HAND
ROW	RIGHT OF WAY
S	SOUTH
SB	SOUTH BOUND
SC	SPIRAL TO CURVE
SIG-COMM	SIGNAL COMMUNICATION
ST	STREET
ST	SPIRAL TO TANGENT
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TH	TRUNK HIGHWAY
THRU	THROUGH
TOR	TOP OF RAIL
TPSS	TRACTION POWER SUBSTATION
TRK	TRACK
TS	TANGENT TO SPIRAL
TYP	TYPICAL
UG	UNDERGROUND
V	DESIGN VELOCITY (MPH)
VC	VERTICAL CURVE
W	WEST
WB	WEST BOUND

TRAIL INDEX

ABBREVIATED NAME	FULL NAME / LOCATION
TRAIL 1	UNDER RED CIRCLE DR, LRT, AND YELLOW CIRCLE DR
TRAIL 2	FROM TRAIL 1 TO GREEN CIRCLE DR
TRAIL 3	OPUS STATION ACCESS FROM BREN RD E
TRAIL 4	FROM BREN RD W TO TRAIL 5
TRAIL 5	FROM OPUS STATION TO GREEN CIRCLE DR
TRAIL 6	FROM TRAIL 5 TO SMETANA RD
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/FROM SHADY OAK STATION TO 11TH AVE
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL TRAIL/WEST OF EXCELSIOR
CEDAR LAKE TRAIL	CEDAR LAKE LRT REGIONAL LRT TRAIL/BETWEEN EXCELSIOR AND KENILWORTH TRAIL CONNECTION
MIDTOWN GREENWAY	MIDTOWN GREENWAY/EAST OF KENILWORTH TRAIL CONNECTION
TRAIL A	KENILWORTH TRAIL (SECONDARY)/BETWEEN CEDAR-ISLES CHANNEL AND 21ST STREET STATION
TRAIL B	KENILWORTH TRAIL (SECONDARY)/BETWEEN 21ST STREET STATION AND PENN STATION
TRAIL B	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL C	10' CONNECTOR TRAIL FROM CEDAR LAKE LRT REGIONAL TRAIL TO TYLER AVE.
TRAIL D	10' CONNECTOR TRAIL/BELTLINE STATION TO CEDAR LAKE LRT REGIONAL TRAIL
KENILWORTH TRAIL	KENILWORTH TRAIL (MAIN)/W LAKE ST TO PENN STATION
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/PENN STATION TO TH 394
TRAIL E	KENILWORTH TRAIL (SECONDARY)/EAST OF W LAKE ST
TRAIL F	KENILWORTH TRAIL (SECONDARY)/WEST OF CEDAR LAKE PKWY
TRAIL G	KENILWORTH TRAIL (SECONDARY)/WEST OF PENN STATION
TRAIL G	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL H	10' CONNECTOR TRAIL/EAST OF PENN STATION TO KENWOOD PKWY
TRAIL I	NOT USED
CEDAR LAKE TRAIL	CEDAR LAKE TRAIL (MAIN)/AT-GRADE CROSSING AT PENN STATION
TRAIL J	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL K	CEDAR LAKE TRAIL (SECONDARY)/NORTHWEST OF PENN STATION
TRAIL L	CEDAR LAKE TRAIL (SECONDARY)/EAST OF PENN STATION
TRAIL M	NOT USED
TRAIL N	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO EDGEBROOOK DRIVE
TRAIL O	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO W LAKE STREET
TRAIL P	8' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO LOUISIANA AVE
TRAIL Q	10' CONNECTOR TRAIL FROM CEDAR LAKE TRAIL TO TH 7 SERVICE ROAD
TRAIL R	20' CONNECTOR TRAIL FROM VAN WHITE STATION TO CEDAR LAKE TRAIL
TRAIL S	NOT USED
TRAIL T	8' CONNECTOR TRAIL FROM VAN WHITE STATION TO VAN WHITE MEMORIAL BLVD
TRAIL U	10' TRAIL PARALLEL TO CEDAR LAKE PKWY
LUCE LINE TRAIL	LUCE LINE REGIONAL TRAIL/ON BRIDGE OVER LIGHT RAIL
TRAIL V	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL
TRAIL W	CONNECTOR TRAIL TO LUCE LINE REGIONAL TRAIL WEST OF LIGHT RAIL

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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60% SUBMISSION - 09/28/15

METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
GENERAL
LEGEND AND ABBREVIATIONS
SHEET 2

DISCIPLINE: GENERAL

SHEET NAME: E0-GEN-NTS - 002

GENERAL NOTES

1. REFER TO THE ROADWAY PLAN FOR GEOMETRICS, DIMENSIONS, PAVEMENT SPECIFICATIONS, DETAILS, STRIPING, AND OTHER SITE FEATURES.

2. PERFORM ALL UTILITY WORK IN ACCORDANCE WITH STATE AND CITY REQUIREMENTS.

3. TESTING AND INSPECTIONS: ALL PLUMBING INSTALLATIONS, INCLUDING SEWER SERVICES, MUST BE TESTED AND INSPECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINNESOTA PLUMBING CODE (MINNESOTA RULES CHAPTER 4715). COORDINATE TESTING AND INSPECTION WITH THE DEPARTMENT OF LABOR AND INDUSTRY AND THE CITY PUBLIC WORKS DEPARTMENT. NO DRAINAGE OR PLUMBING WORK MAY BE COVERED PRIOR TO COMPLETING THE REQUIRED TESTS AND INSPECTIONS. THE CONTRACTOR SHALL ASSIST THE ENGINEER TO INSPECT FOR ACCEPTANCE AND RECORD LOCATIONS OF ALL STORM SEWER SERVICE LEADS BEFORE BACKFILLING.

4. PERFORM TRENCH EXCAVATIONS FOR ALL UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF O.S.H.A. 29 CFR, PART 1926. SUBPART P, EXCAVATIONS (WWW.OSHA.GOV).

5. COORDINATE BUILDING UTILITY CONNECTION WITH THE PROPERTY OWNER PRIOR TO CONSTRUCTION. VERIFY SEWER SERVICE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

6. SUPPORT ALL IN-PLACE UTILITIES DURING EXCAVATION AND CONSTRUCTION OF THE PROPOSED UTILITY.

7. ADJUST ALL MAINTENANCE MANHOLE CASTINGS, CATCH BASIN CASTINGS, CLEANOUT COVERS, AND SIMILAR ITEMS TO ELEVATION 1/4" BELOW FINISHED GRADE.

8. INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OR RECEIVING GROOVE END OF THE PIPE POINTING UPGRADE. WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE.

9. ABANDONING EXISTING SEWER SERVICE OR MAKING NEW CONNECTIONS TO CITY SEWER MUST BE DONE TO CITY STANDARDS BY A LICENSED CONTRACTOR UNDER A PERMIT FROM PUBLIC WORKS SEWER SECTION.

10. CONTACT PRIVATE PROPERTY OWNERS TO OBTAIN APPROVAL OF THE PROPOSED PRIVATE STORM SERVICE LEAD RELOCATION OR RECONNECTION.

11. CONNECT TO EXISTING STORM SEWER MANHOLES BY EITHER SAWCUTTING OR CORE DRILLING. USE SAWS OR DRILLS THAT PROVIDE WATER TO THE BLADE. MEET ALL CITY STANDARDS AND SPECIFICATIONS FOR THE CONNECTION. RECONSTRUCT INVERTS AFTER INSTALLATION. USE WATER STOP GASKETS IN ORDER TO PROVIDE WATERTIGHT SEALS WHEN PENETRATING A STRUCTURE WALL WITH A PIPE. TAKE MEASUREMENTS BEFORE BEGINNING CONSTRUCTION TO ENSURE THAT SERVICE CONNECTIONS DO NOT CUT INTO MAINTENANCE ACCESS STRUCTURE JOINTS OR PIPE BARREL JOINTS.

12. PROVIDE AND MAINTAIN TEMPORARY DRAINAGE THROUGHOUT CONSTRUCTION UNTIL THE PERMANENT DRAINAGE SYSTEM AND STRUCTURES ARE IN PLACE AND OPERATIONAL. INSTALL TEMPORARY DITCHES, PIPING, PUMPS, OR OTHER MEANS AS NECESSARY IN ORDER TO INSURE PROPER DRAINAGE AT ALL TIMES. PROVIDE LOW POINTS IN ROADWAYS WITH POSITIVE OUTFALLS.

13. UPON COMPLETION OF STORM SEWER INSTALLATION, STORM SEWER INLETS SHALL BE PROTECTED FROM SEDIMENT BY SILT FENCE, HAY BALES, OR EQUIVALENT MEASURES. PROTECTION SHALL REMAIN IN PLACE UNTIL BITUMINOUS AREAS HAVE BEEN PAVED AND LAWN AREAS HAVE BEEN ESTABLISHED.

14. USE CLASS V FOR ALL RCP UNLESS OTHERWISE NOTED.

15. REFER TO SYSTEM PLANS FOR RAIL ACCESS BOX INSTALLATION DETAILS.

16. COORDINATE SUBDRAIN CONSTRUCTION WITH SYSTEMS GROUND RODS/WIRE, SIGNAL SYSTEMS, TRACK DEVICES, AND OTHER SYSTEMS UTILITIES TO AVOID CONFLICT.

17. SEE UTILITY PLANS AND TABS FOR UTILITY CROSSINGS.

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE PLAN
GENERAL NOTES,
ABBREVIATIONS & SYMBOLS

DISCIPLINE: DRAINAGE

SHEET NAME: E0-STM-NTS-001

LEGEND

DRAINAGE LINE TYPES

- STORM SEWER
- CASING PIPE
- DELINEATED WETLAND
- PIPE REMOVAL
- STRUCTURE REMOVAL
- PROPOSED BMP
- EP-EP-18 WETLAND ID

PROPOSED DRAINAGE SYMBOLS

- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN
- STORM SEWER FLARED END SECTION
- STORM SEWER CLEAN-OUT
- STORM SEWER PUMP STATION
- RIP RAP
- XXXX – ST STORM SEWER STRUCTURE ID

DRAINAGE PLAN CONSTRUCTION NOTES

1. CONNECT INTO EXISTING DRAINAGE STRUCTURE. FIELD VERIFY INVERT ELEVATIONS.
2. ADJUST RIM ELEVATION.
3. CONNECT TRACK SUBDRAIN.
4. CONSTRUCT STRUCTURE OVER EXISTING STORM PIPE. FIELD VERIFY PIPE ALIGNMENT AND INVERT ELEVATIONS.
5. REMOVE EXISTING CATCH BASIN. REMOVE EXISTING PIPE TO EXPOSE GROOVE END. CONNECT NEW PIPE BELL TO EXISTING GROOVE END. FIELD VERIFY INVERT ELEVATIONS.
6. CONNECT EXISTING STORM SEWER SERVICE LEADS TO MANHOLE. FIELD VERIFY INVERT ELEVATIONS.
7. REPLACE CASTING. FIELD VERIFY INVERT ELEVATIONS.
8. CONNECTION OF RETAINING WALL DRAIN TO DRAINAGE STRUCTURE.
9. CONNECT TO EXISTING STORM SEWER. FIELD VERIFY INVERT ELEVATIONS.
10. CONNECT PVC SDR 26 TO EXISTING STORM SEWER SERVICE.
11. STATION PLATFORM DRAINAGE OUTLET.
12. TRACK DRAIN FOR TRACK CROSSING AND SWITCH BOXES.
13. SPECIAL SUBDRAIN PROFILE AT THIS LOCATION.
14. BYPASS OF TRACK SUBDRAIN AT OCS POLE LOCATION.
15. SUBDRAIN CLEANOUT.

NOTE:

SEE UTILITIES PLANS FOR UTILITY LEGEND.

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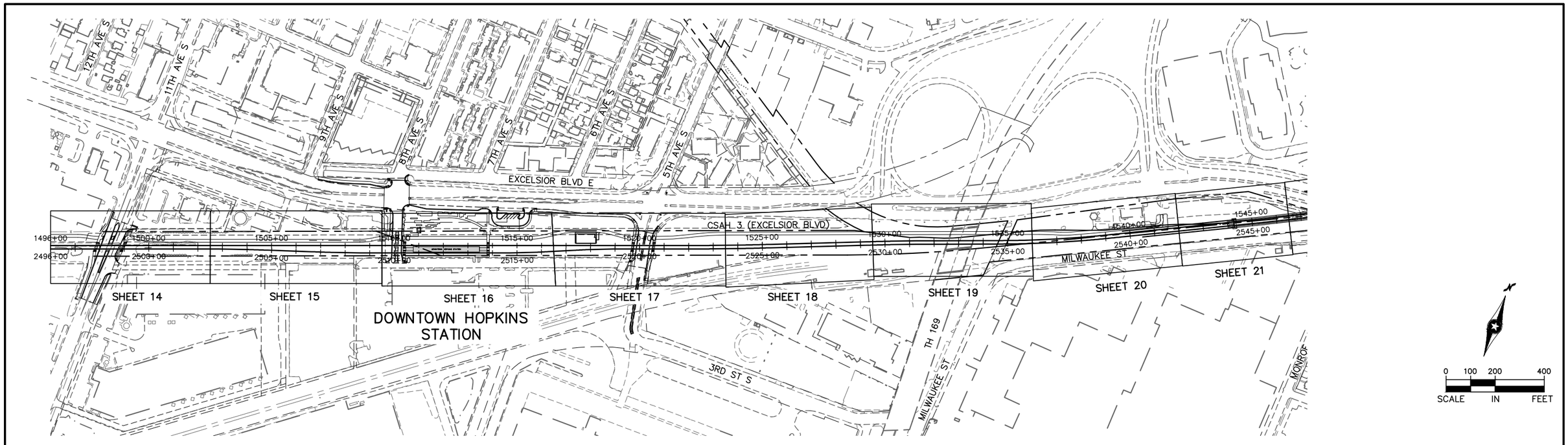
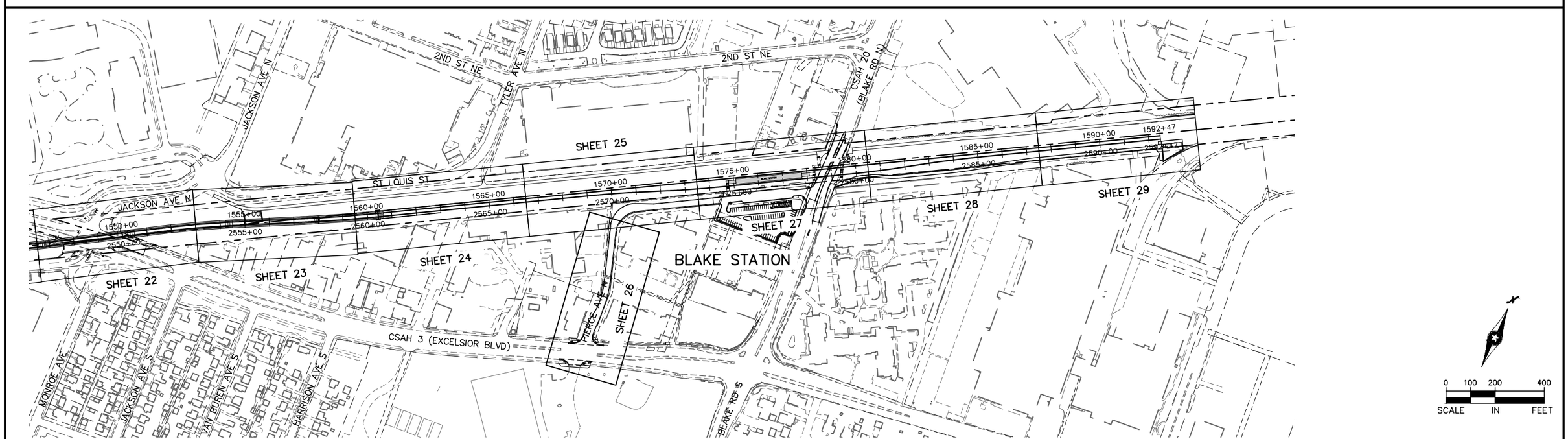
SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE PLAN
DRAINAGE NOTES, ABBREVIATIONS & SYMBOLS

DISCIPLINE: DRAINAGE

SHEET NAME: E0-STM-NTS-002





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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 1

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-LAY-001

SHEET 8 OF 95

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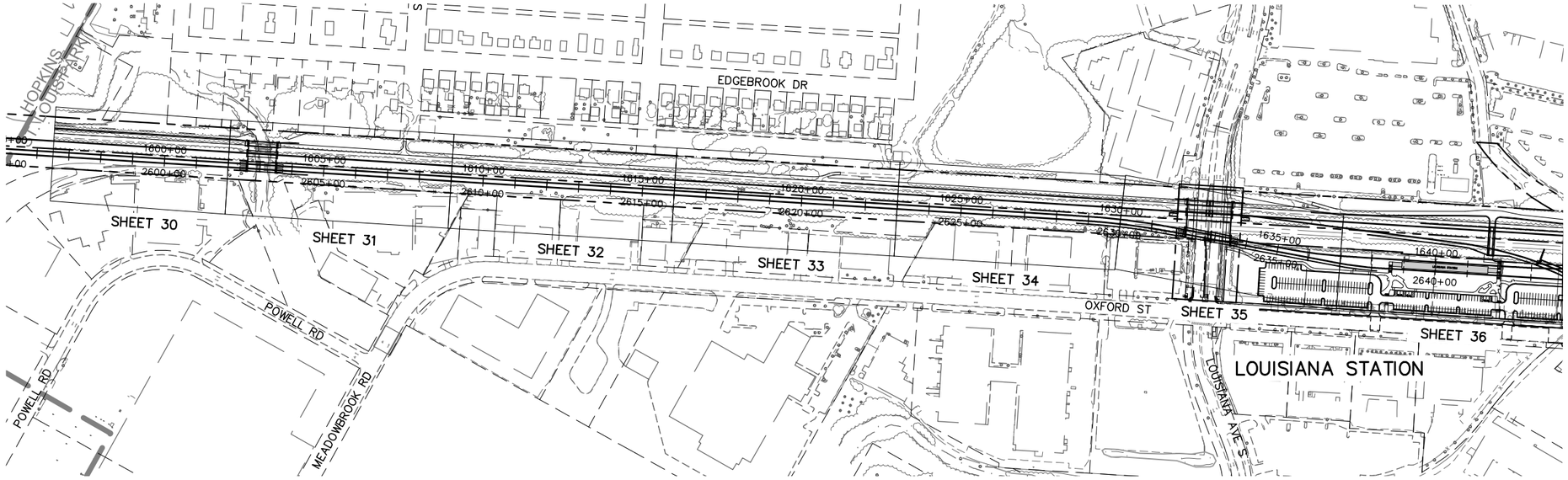

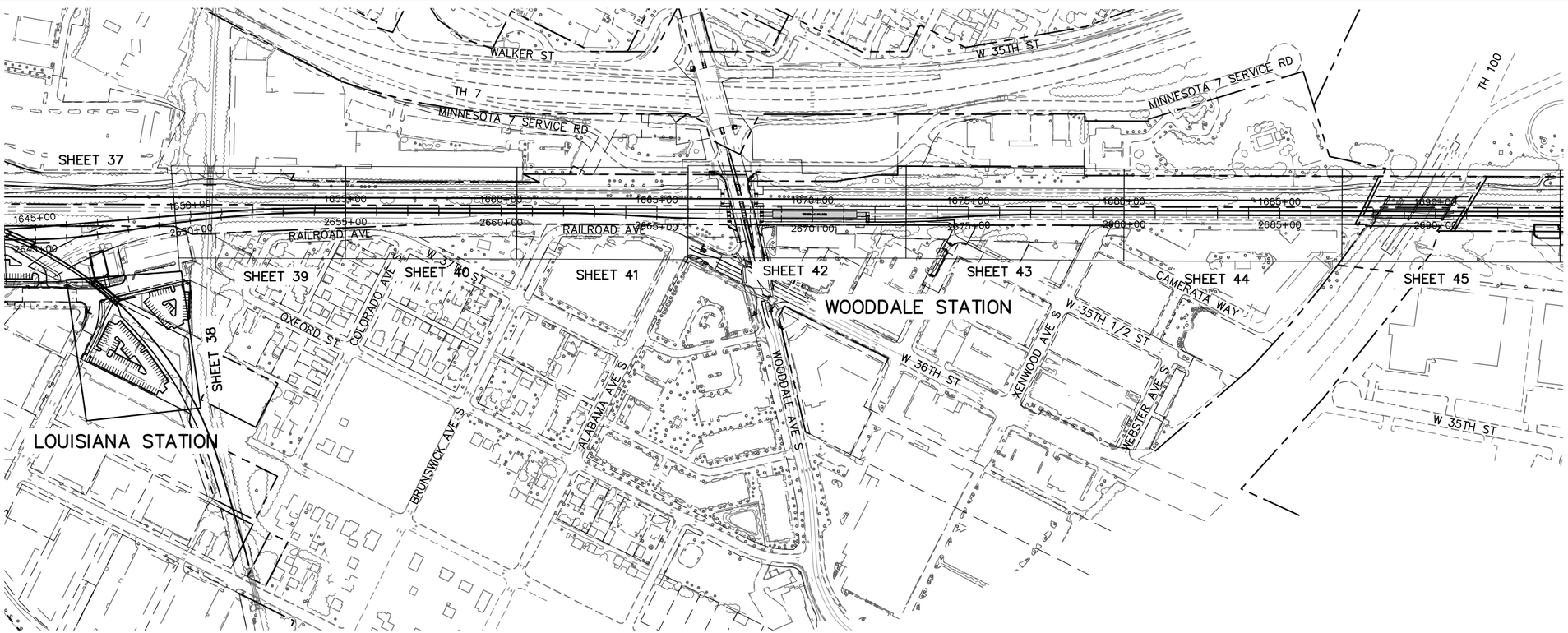

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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 2

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-LAY-002

SHEET 9 OF 95

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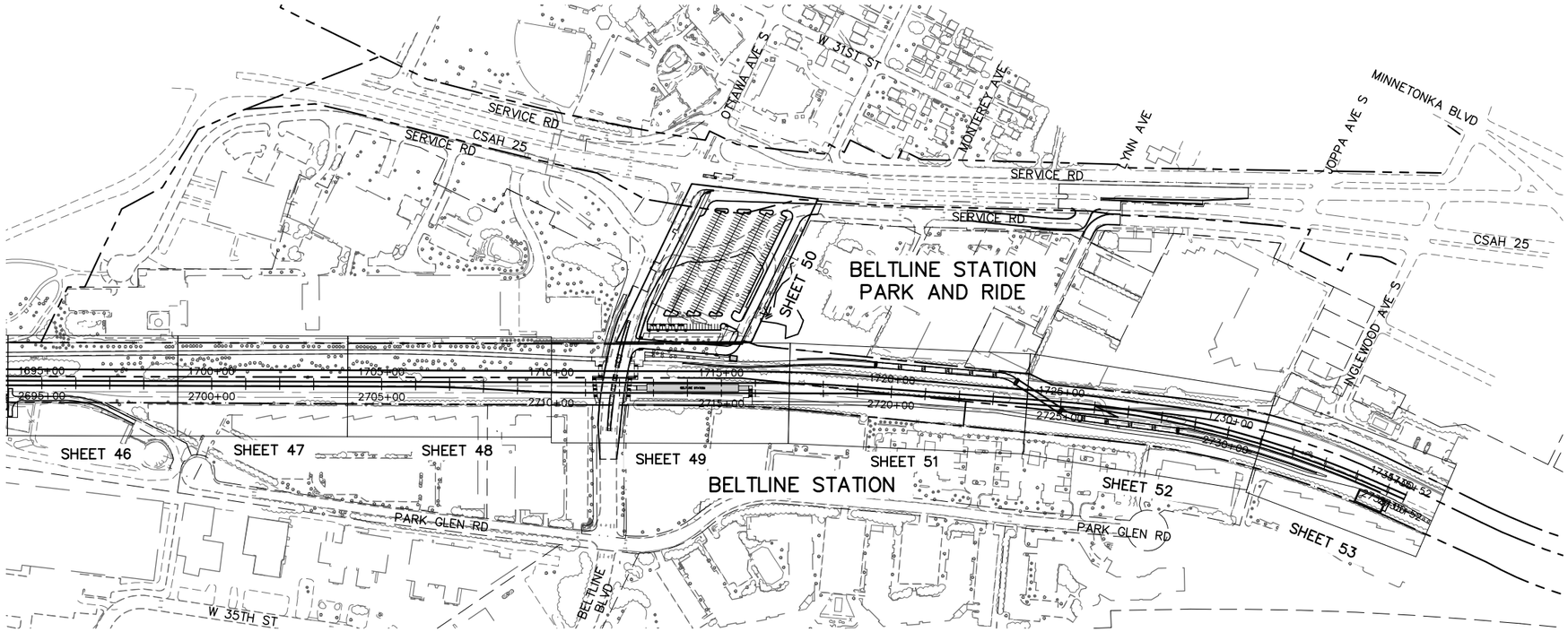

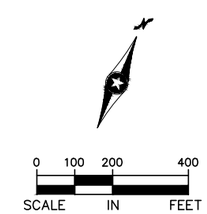

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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 3

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-LAY-003

SHEET 10 OF 95

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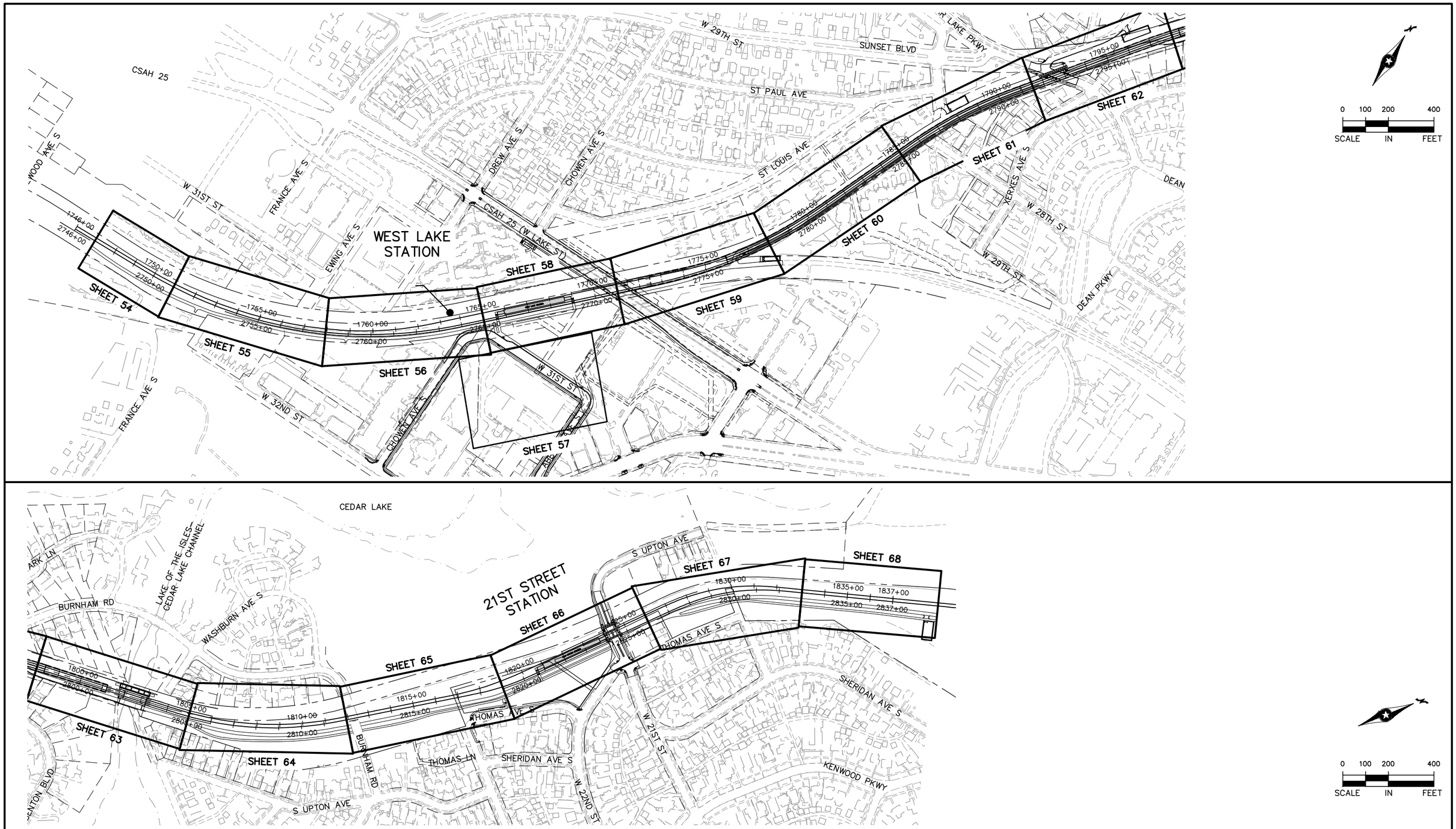

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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 4

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-LAY-004

SHEET 11 OF 95

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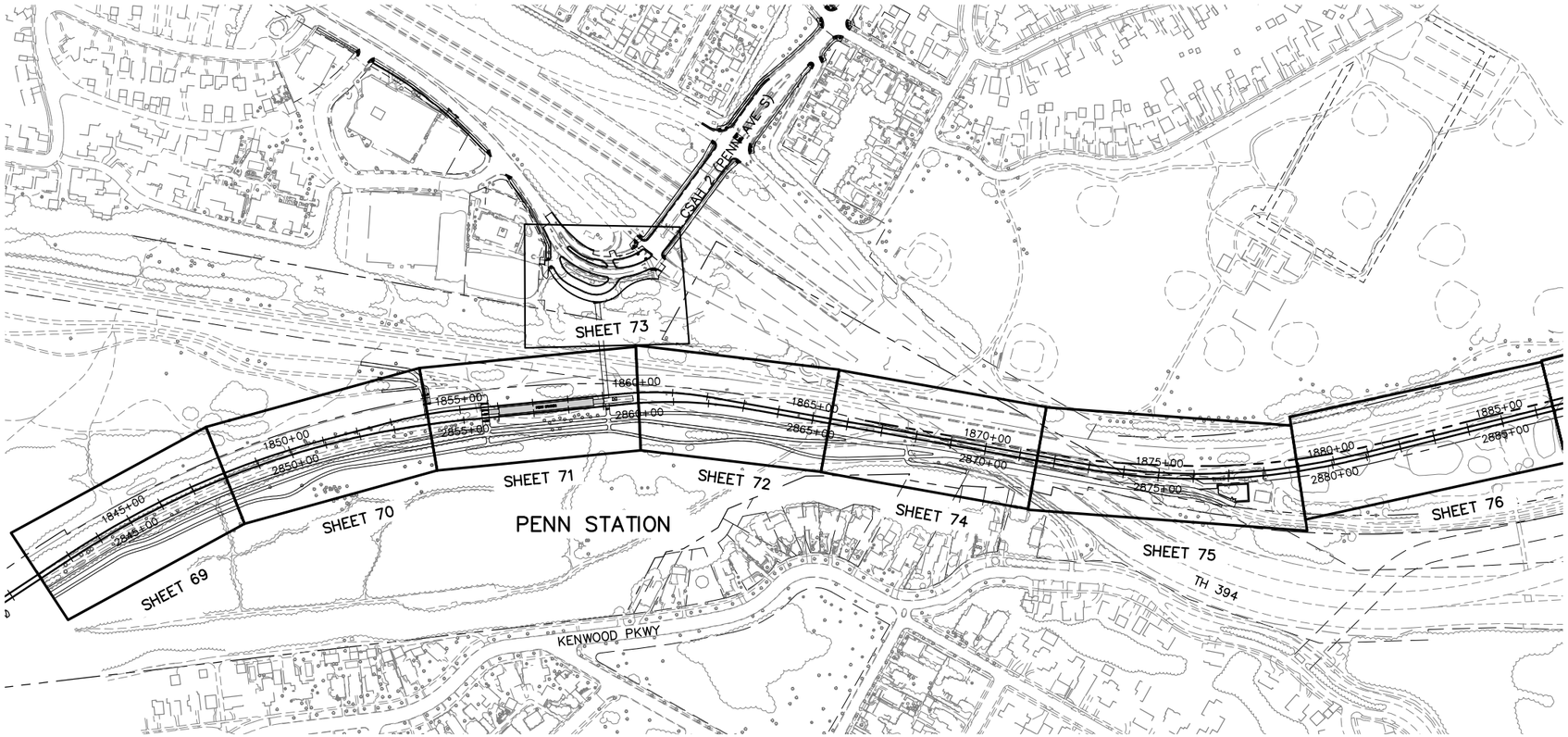

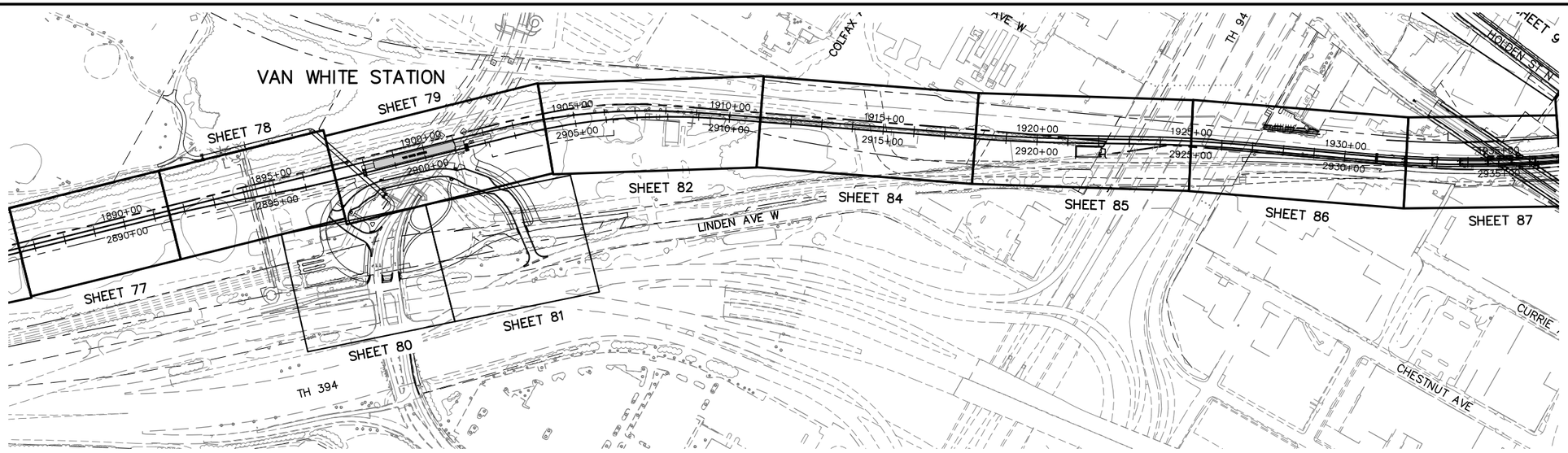

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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 5

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-LAY-005

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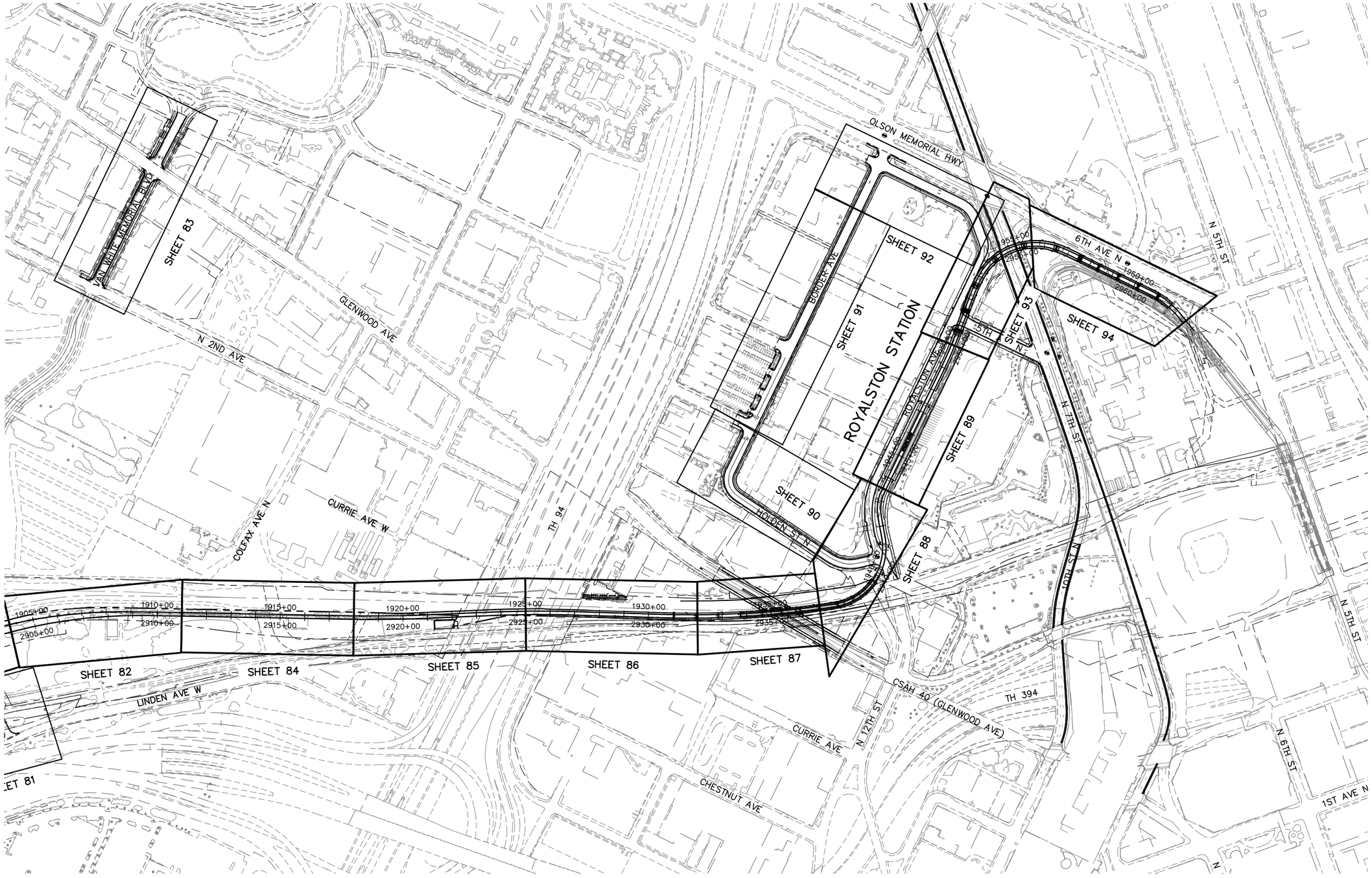

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CIVIL EAST - VOLUME 8
DRAINAGE PLAN
PLAN SHEET LAYOUT
SHEET 6

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-LAY-006

SHEET 13 OF 95

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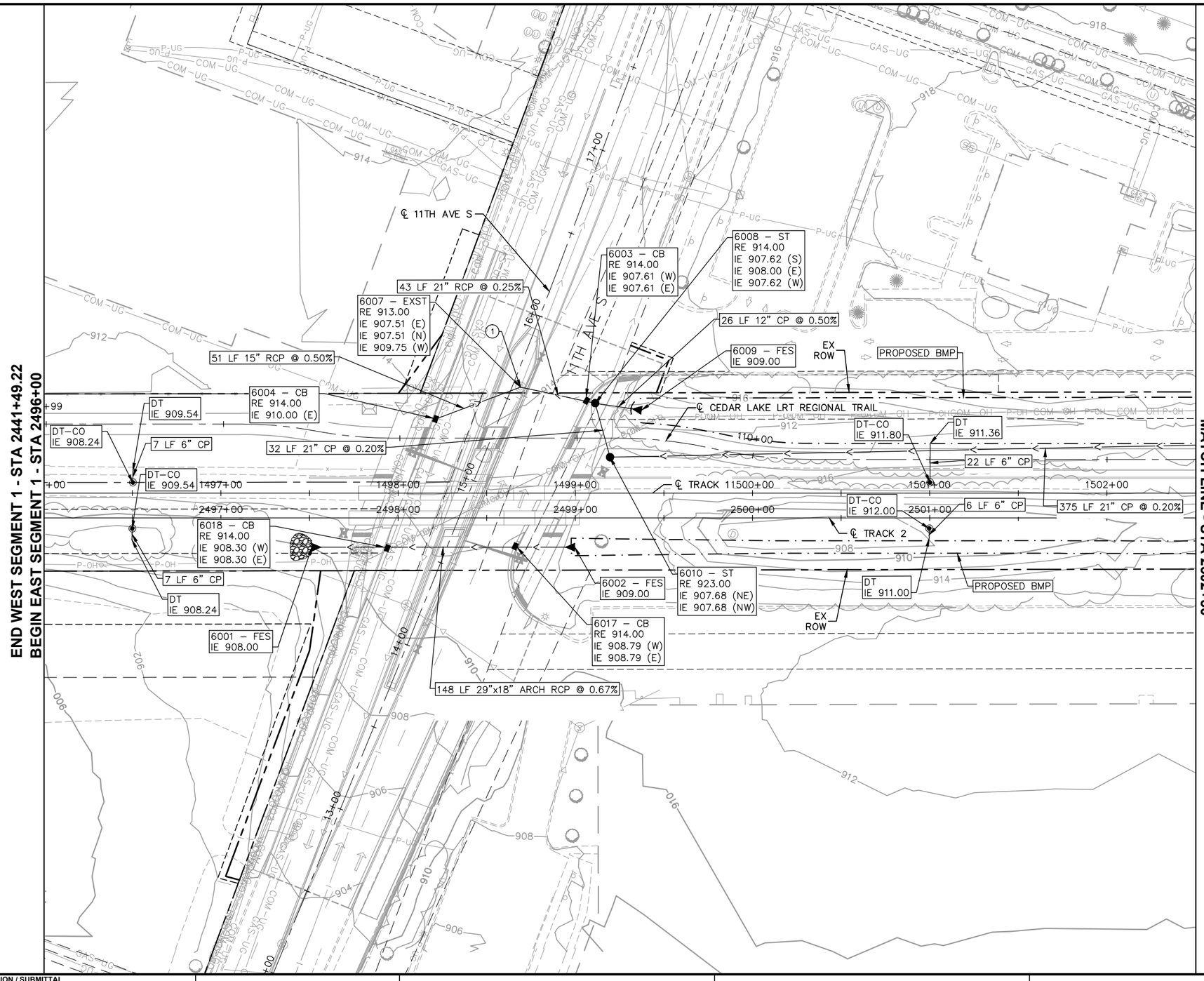

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Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2496+00 TO STA 2502+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 001

SHEET 14 OF 95

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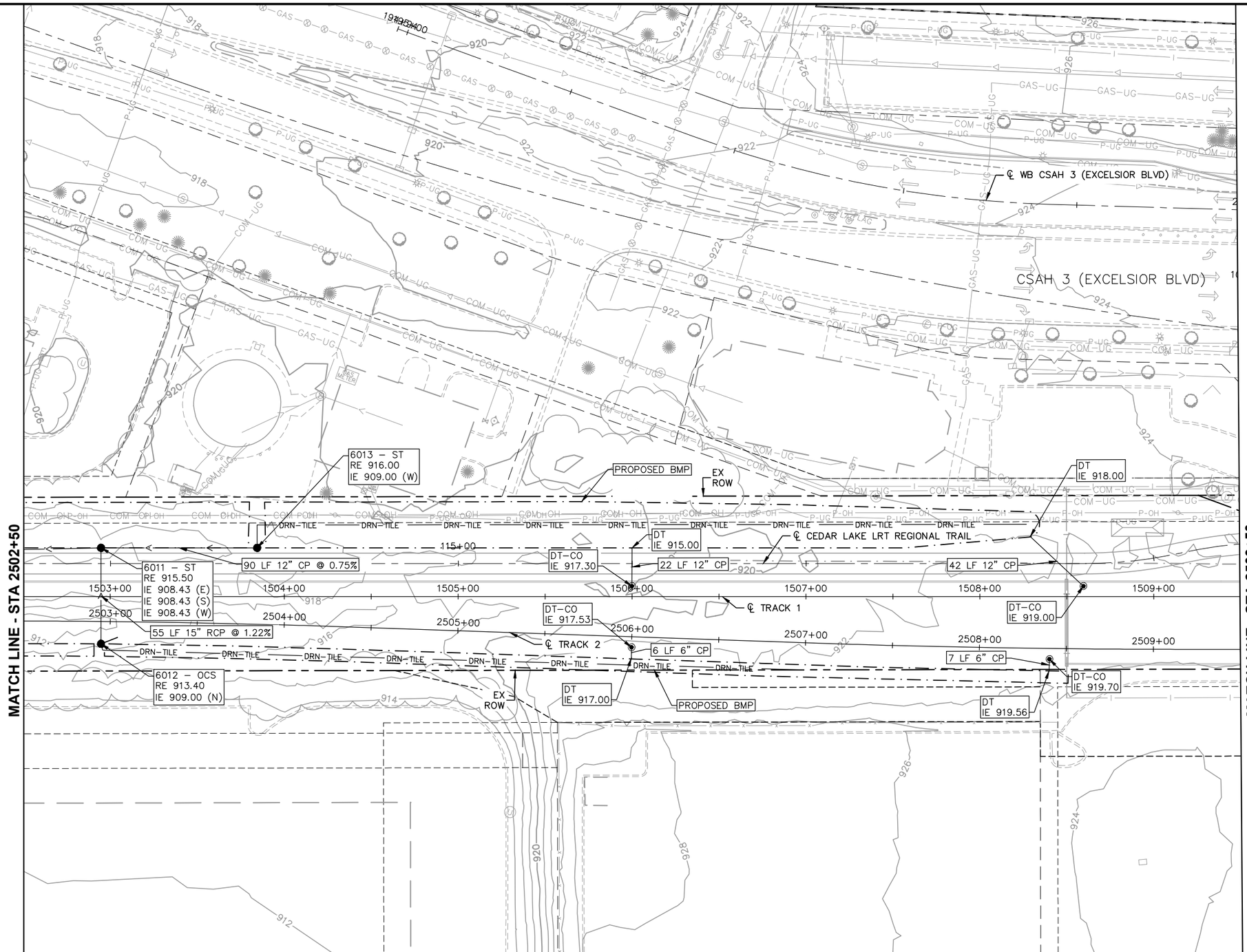

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CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2502+50 TO STA 2509+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 002

SHEET 15 OF 95

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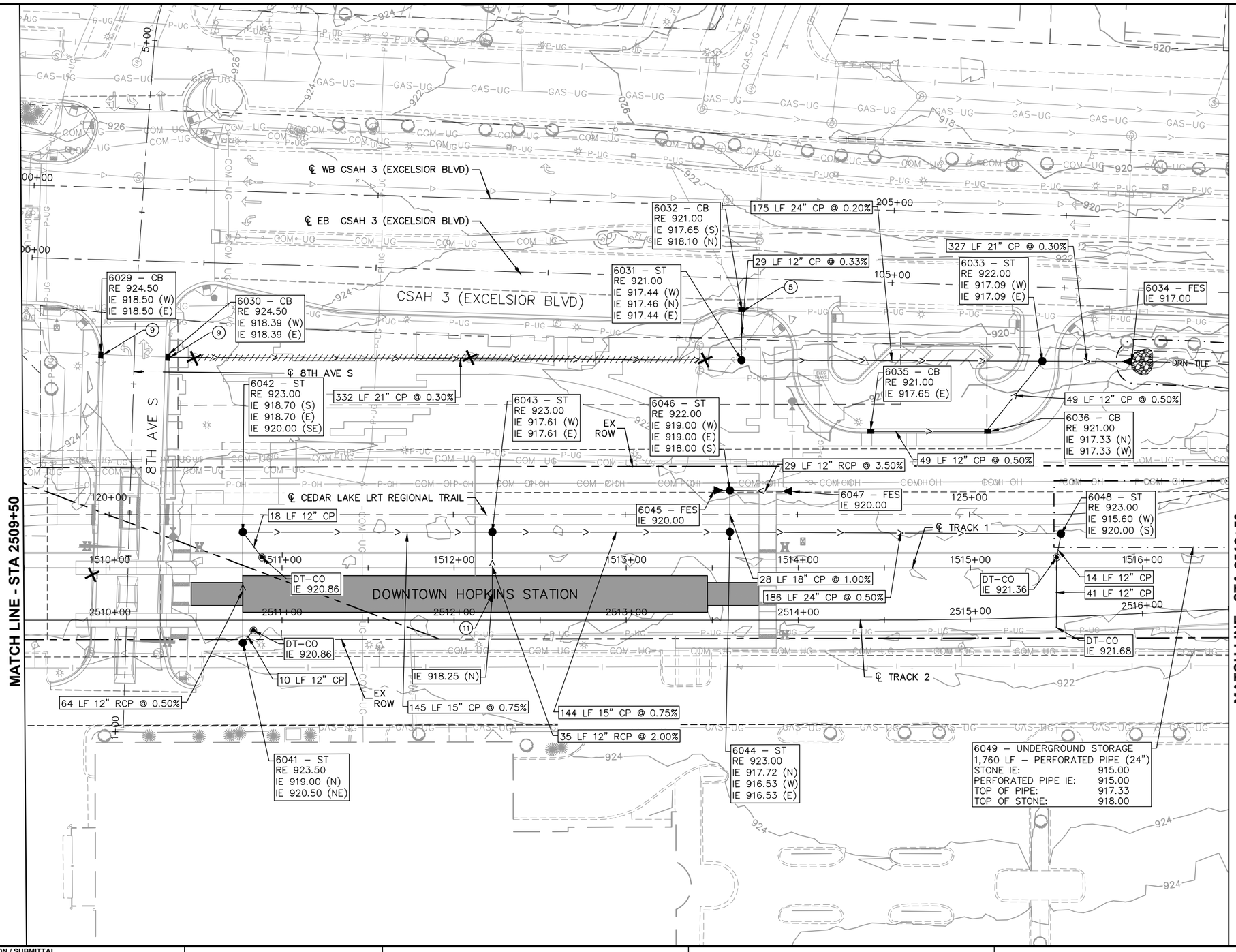

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CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2509+50 TO STA 2516+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 003

SHEET 16 OF 95

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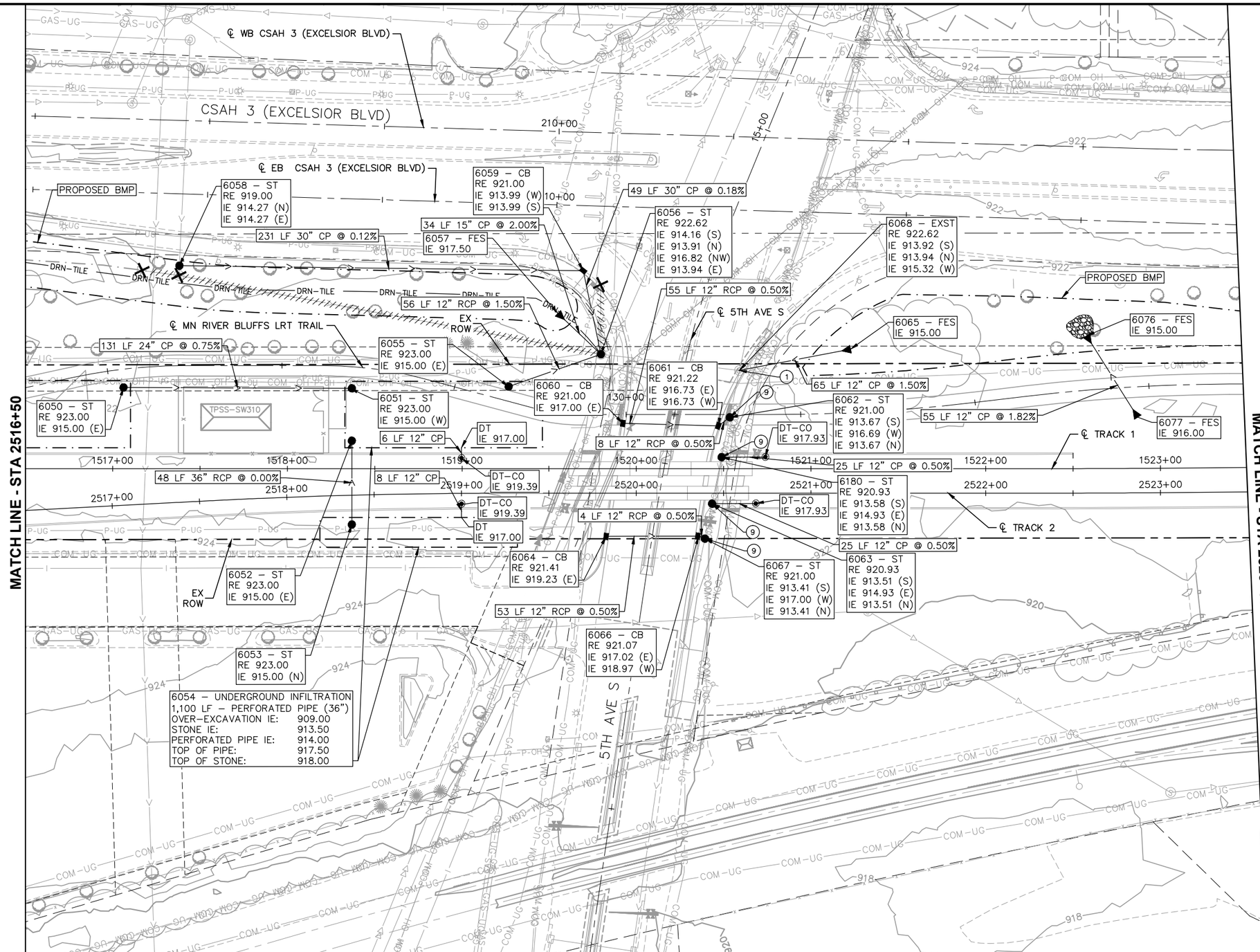

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Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2516+50 TO STA 2523+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 004

SHEET 17 OF 95

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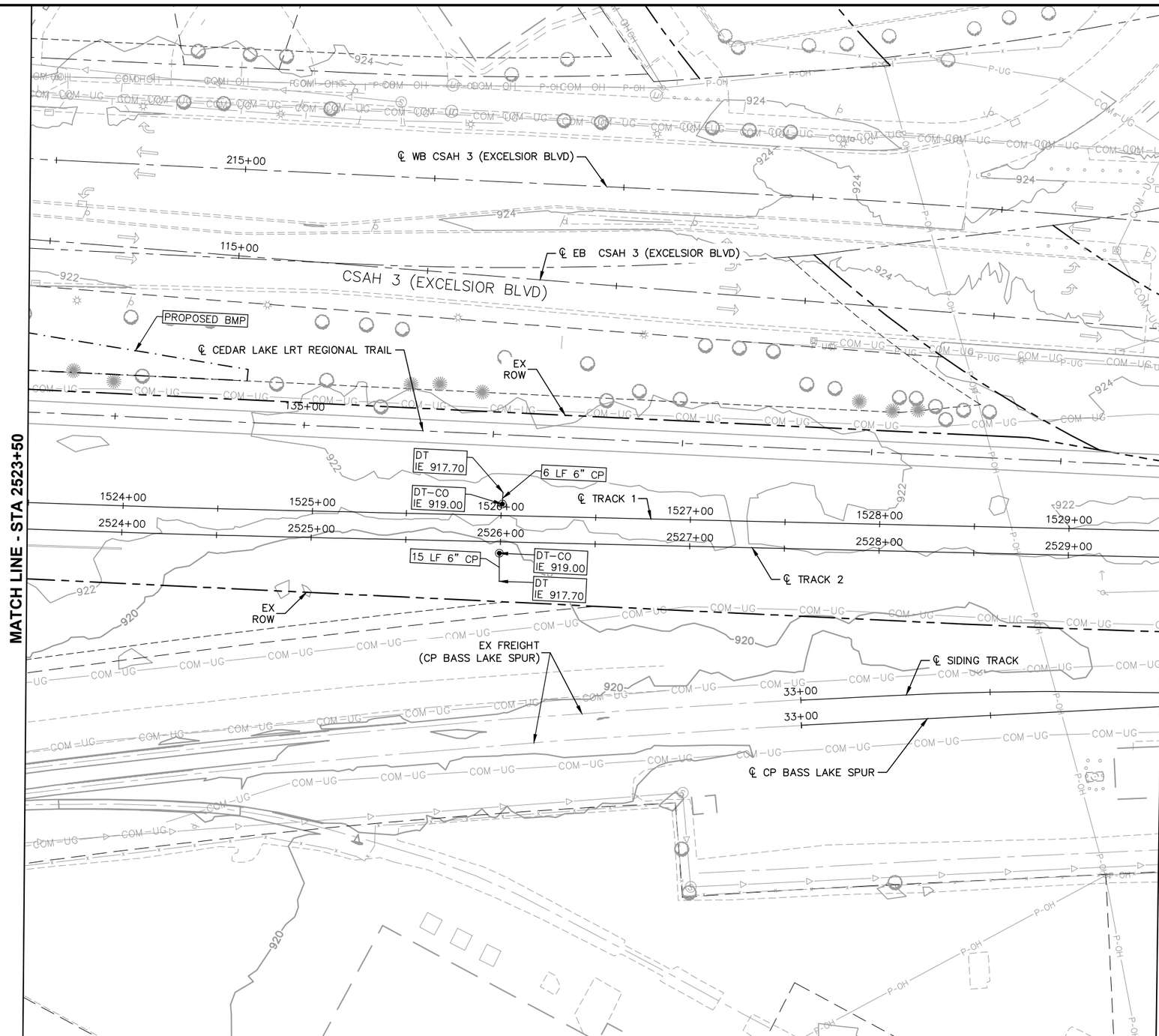

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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2523+50 TO STA 2529+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 005

SHEET 18 OF 95

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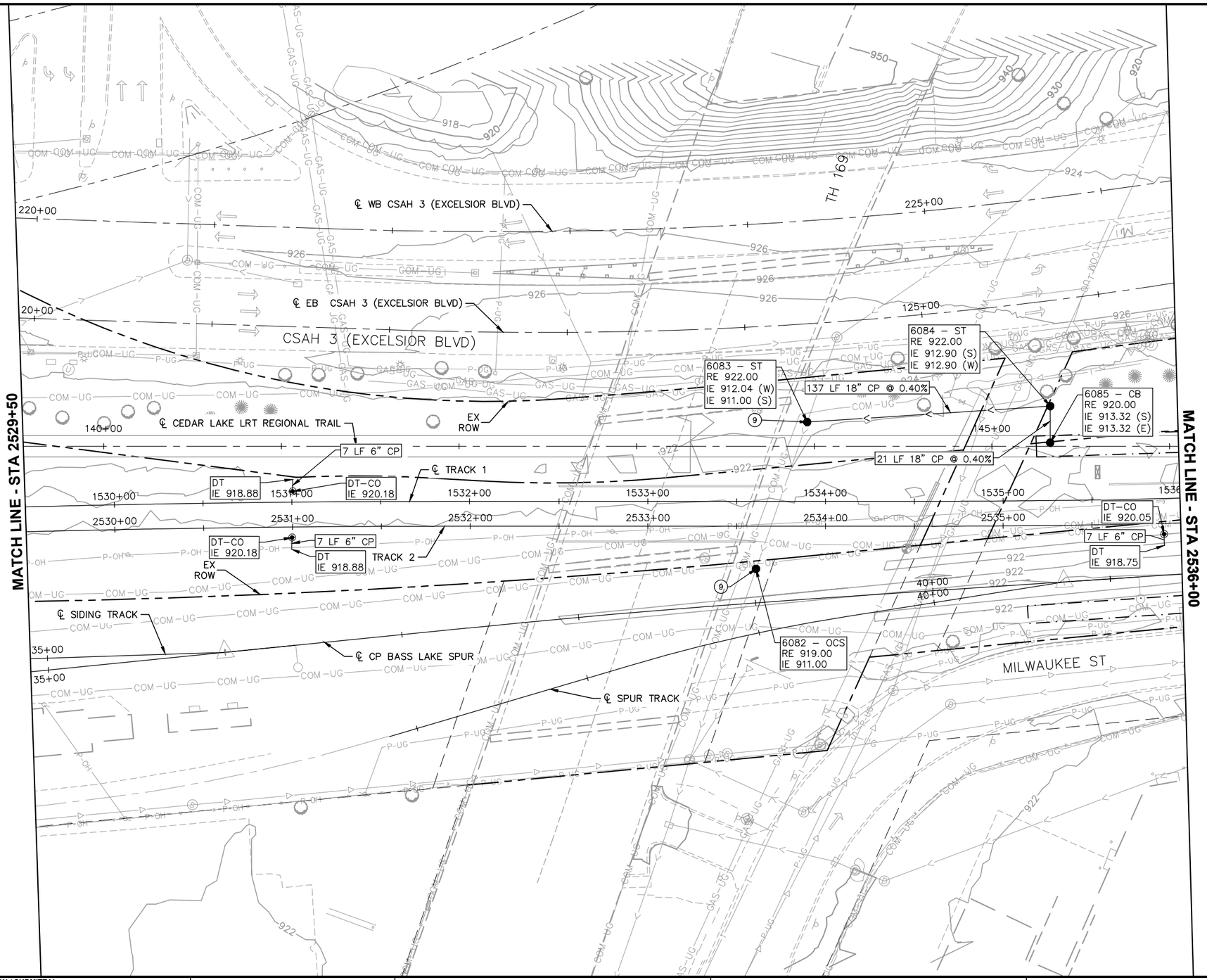

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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2529+50 TO STA 2536+00

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 006

SHEET 19 OF 95

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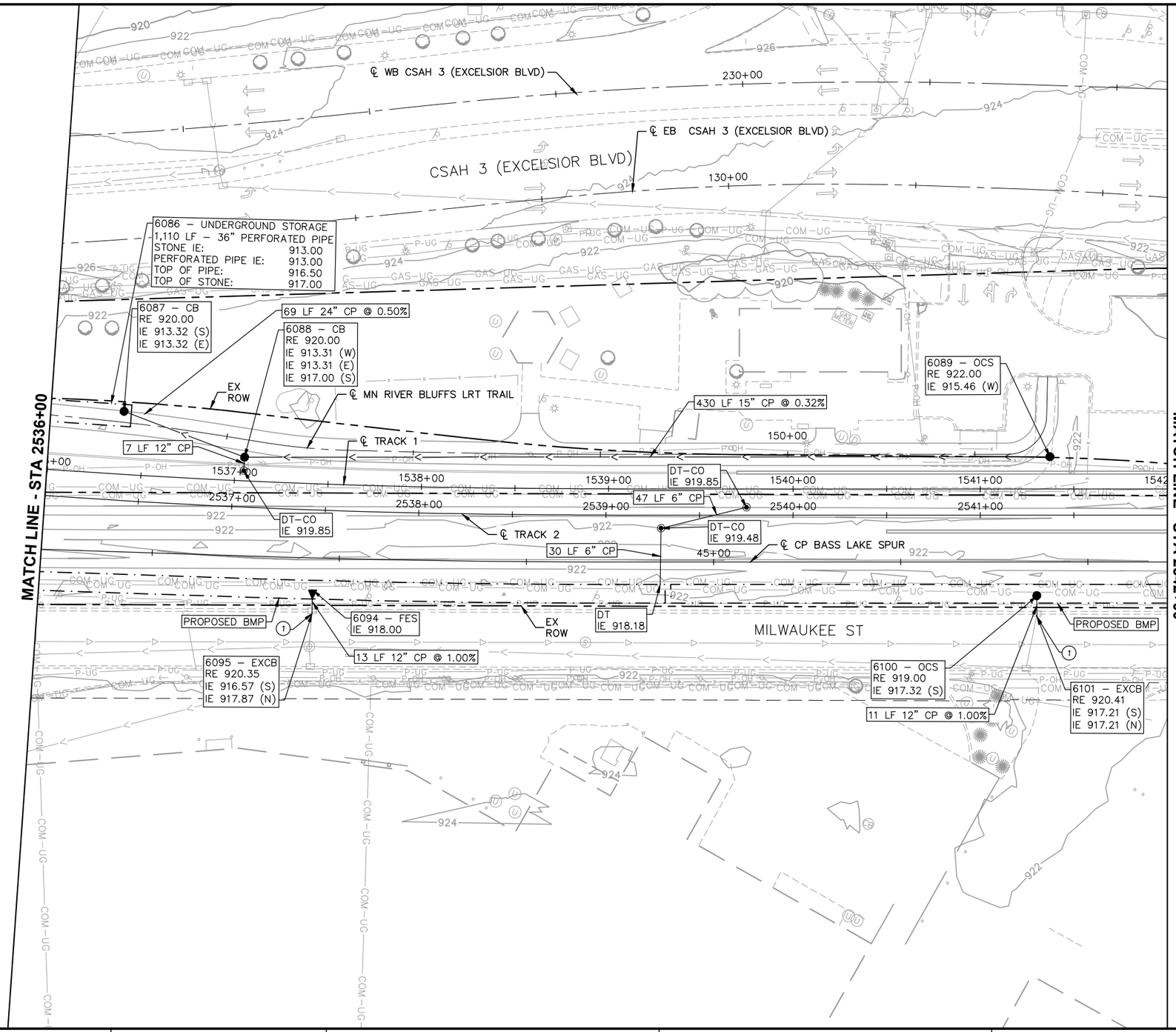

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Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2536+00 TO STA 2542+00

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 007

SHEET 20 OF 95

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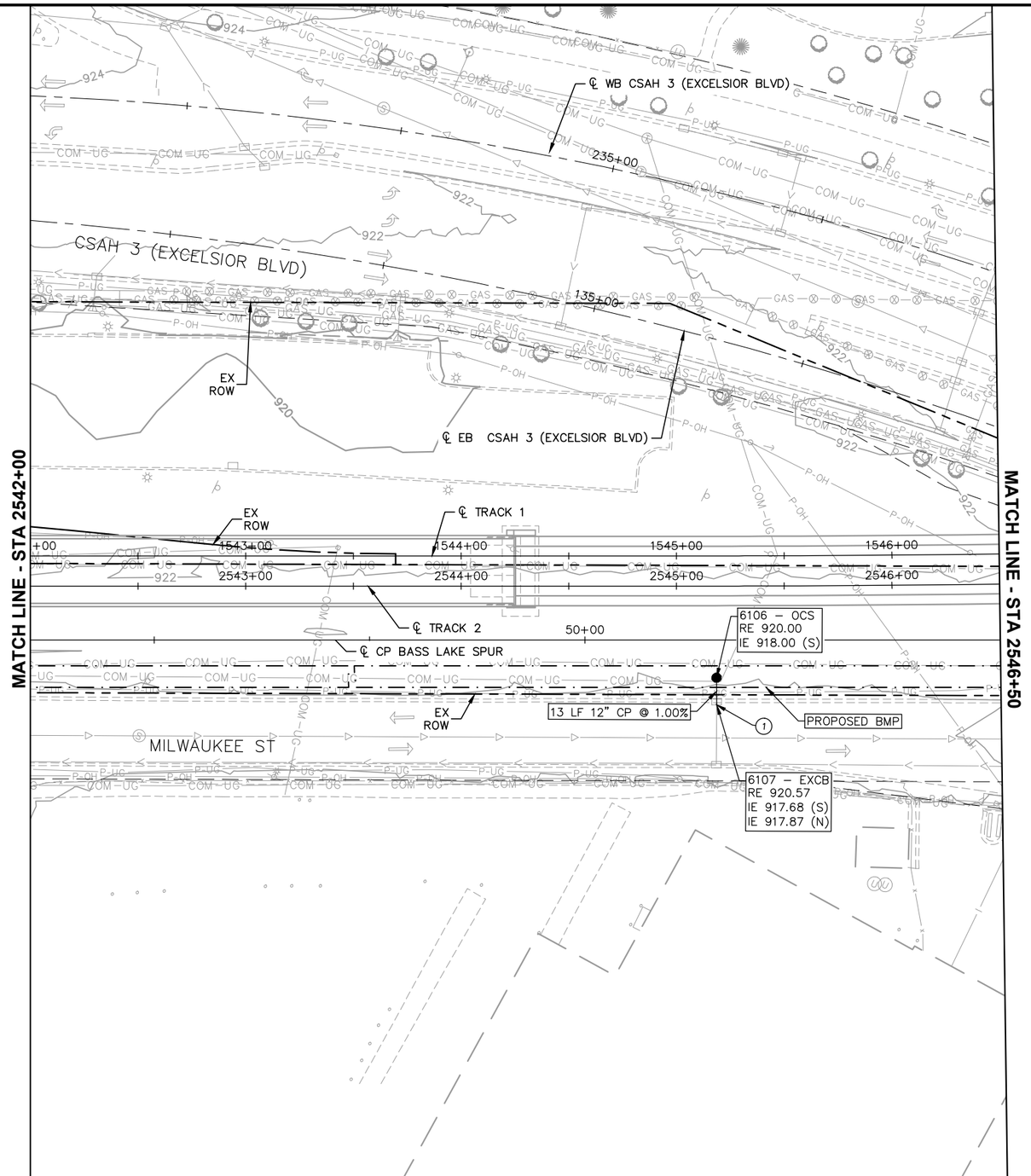

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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2542+00 TO STA 2546+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 008

SHEET 21 OF 95

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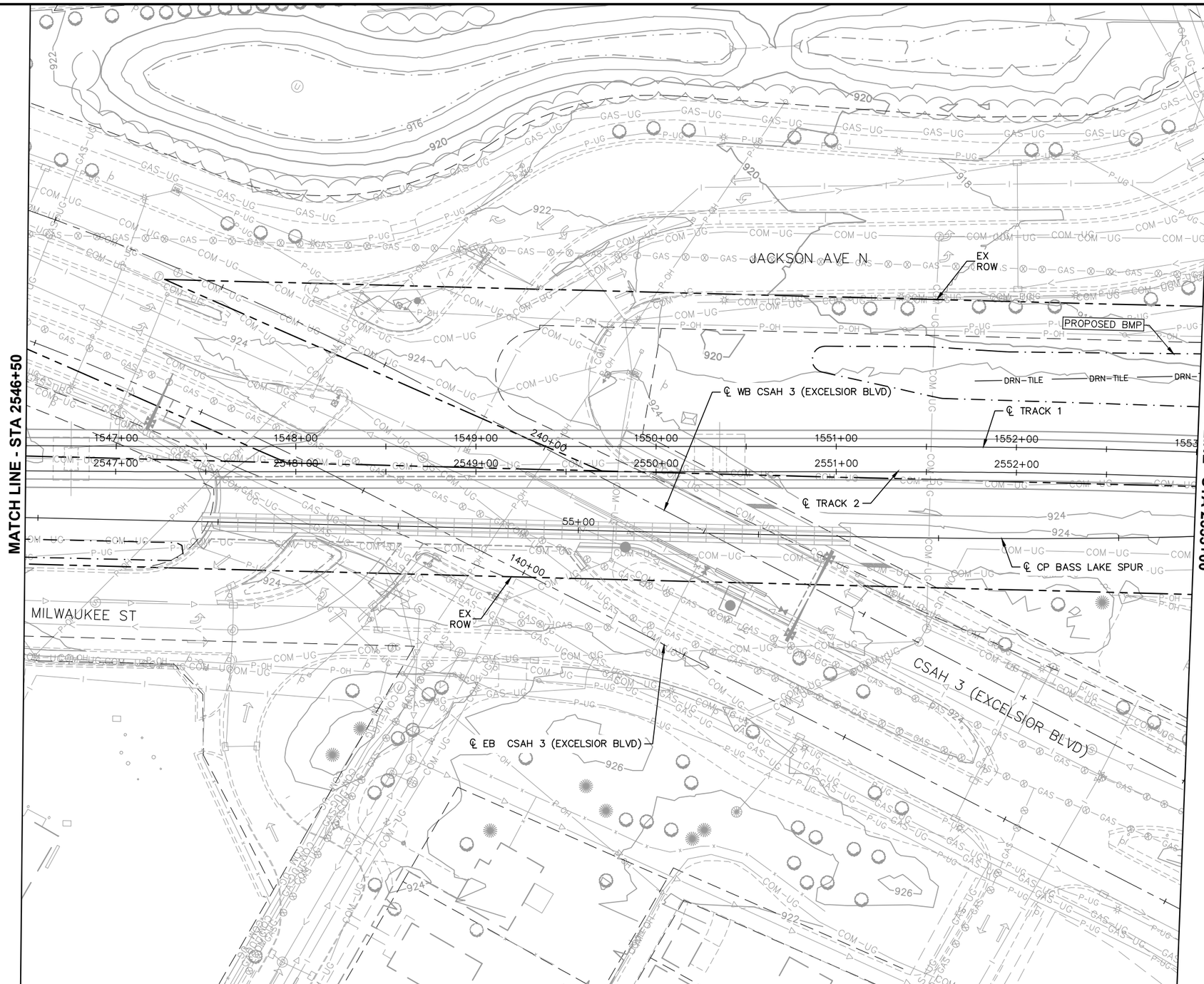

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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2546+50 TO STA 2553+00

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 009

SHEET 22 OF 95

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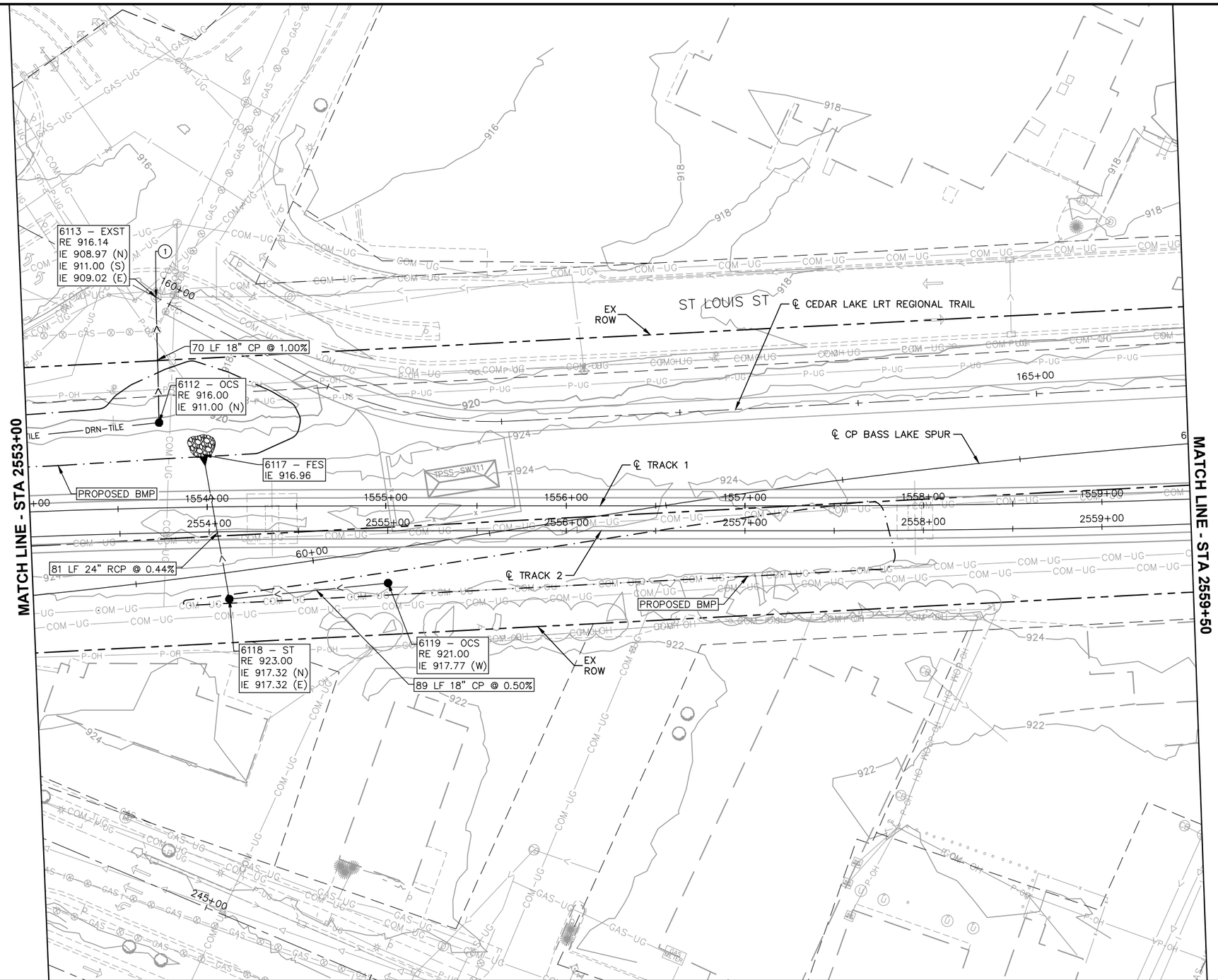

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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2553+00 TO STA 2559+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 010

SHEET 23 OF 95

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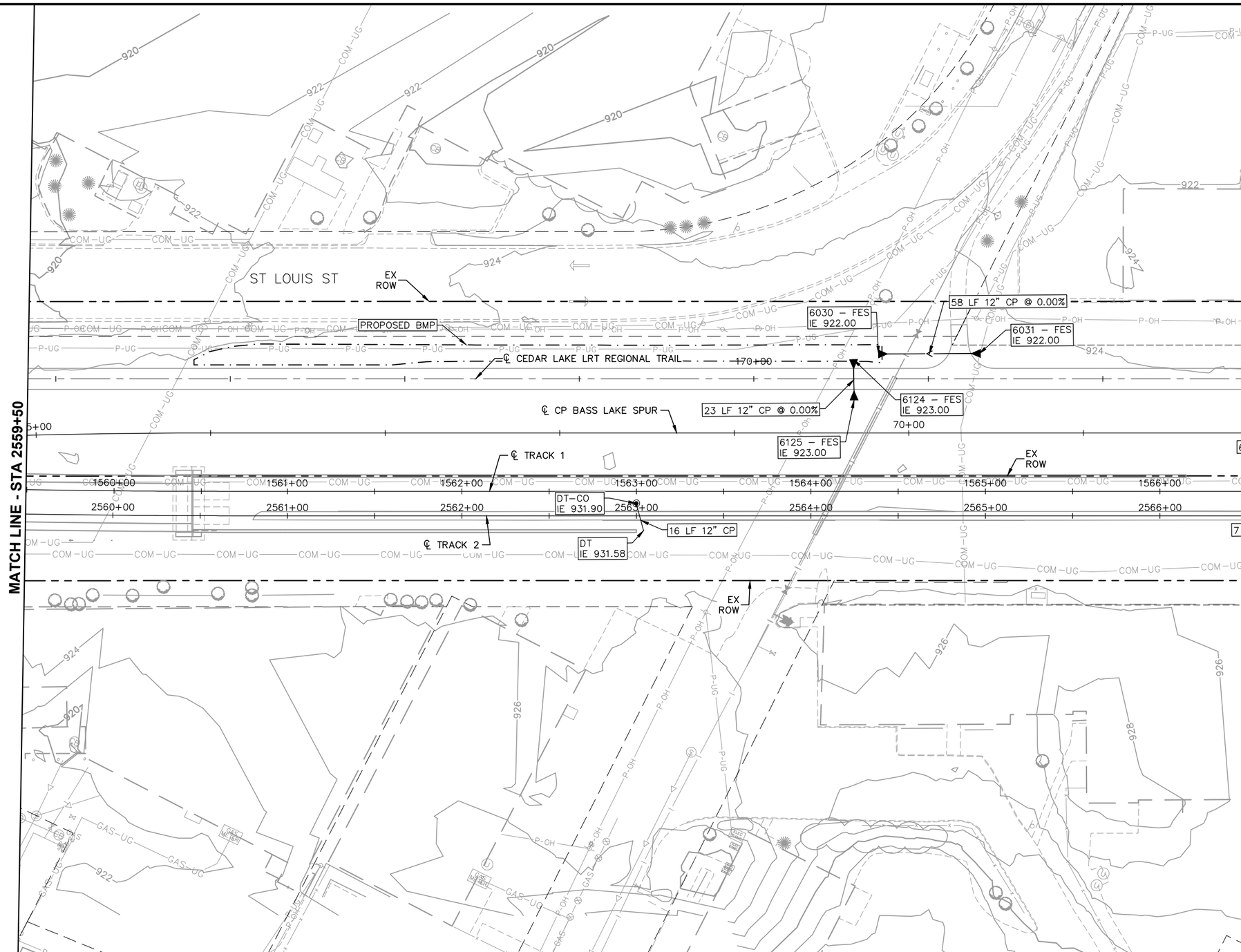

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SCALE IN FEET

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Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2559+50 TO STA 2566+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 011

SHEET 24 OF 95

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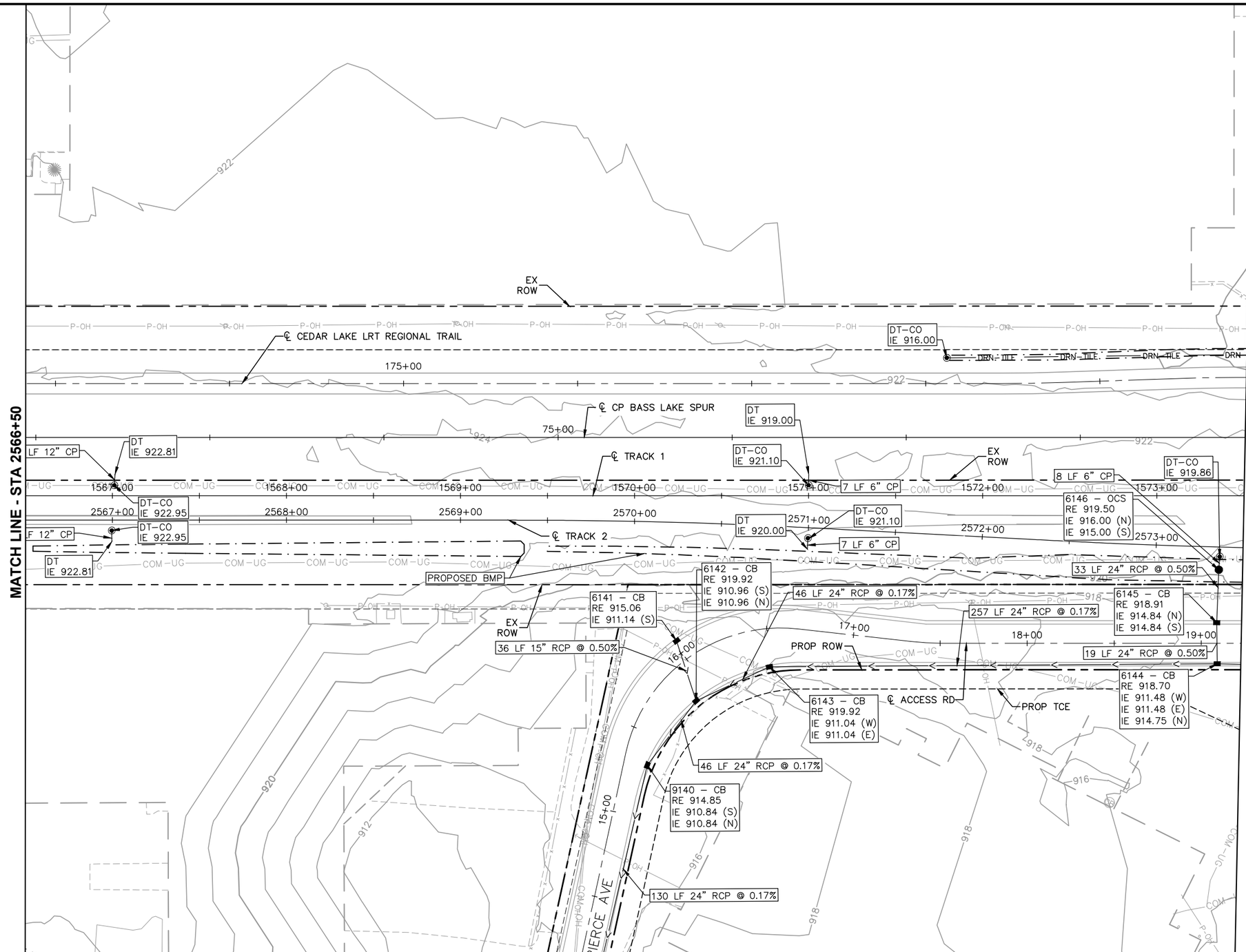

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Green Line LRT Extension

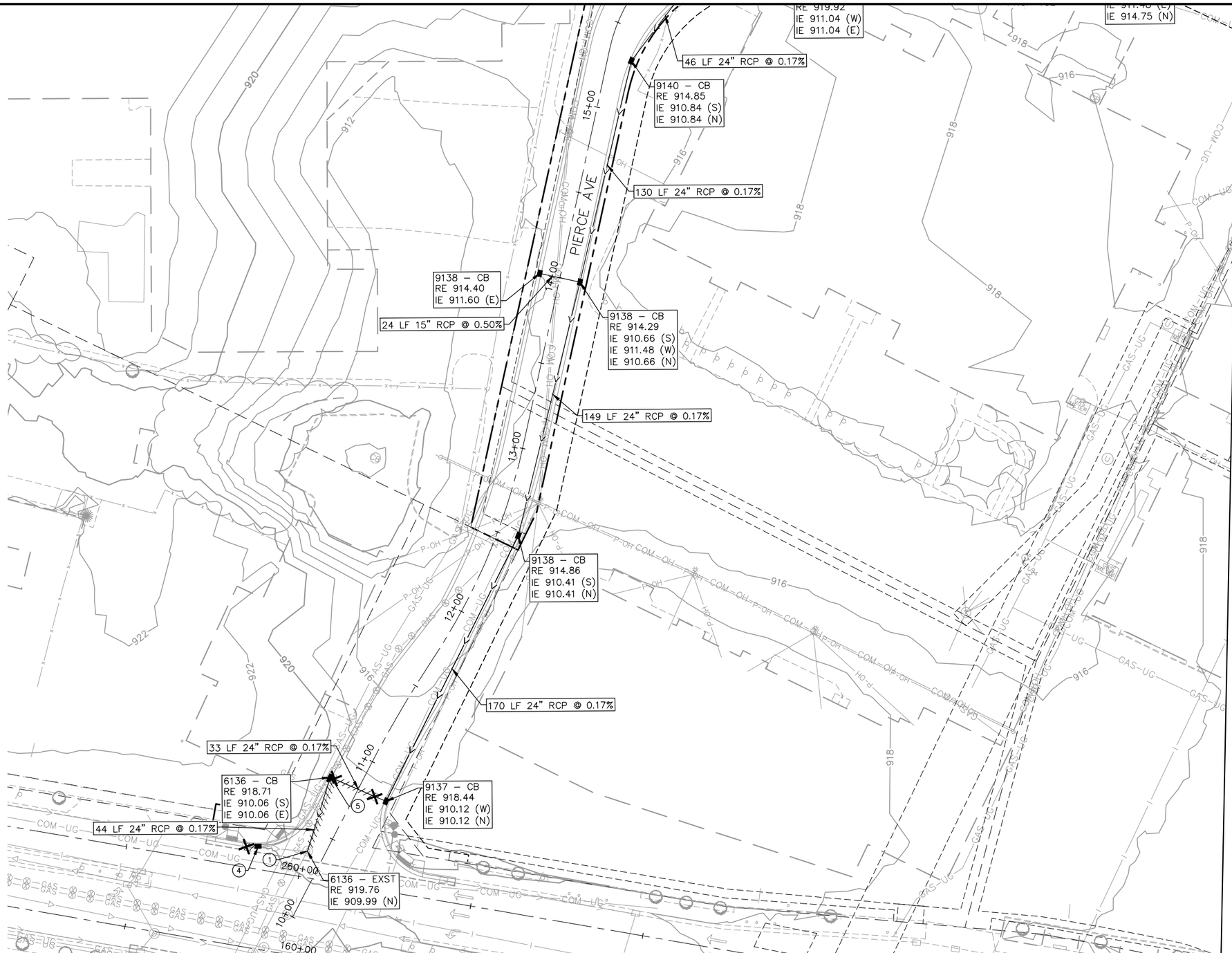
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2566+50 TO STA 2573+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 012

SHEET 25 OF 95

Sep, 21 2015 03:46 pm V:\3400_ADC\CAD\SEGMENT E1\PLAN SHEETS\STORM SEWER\E1-STM-PLN.dwg By: 589



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

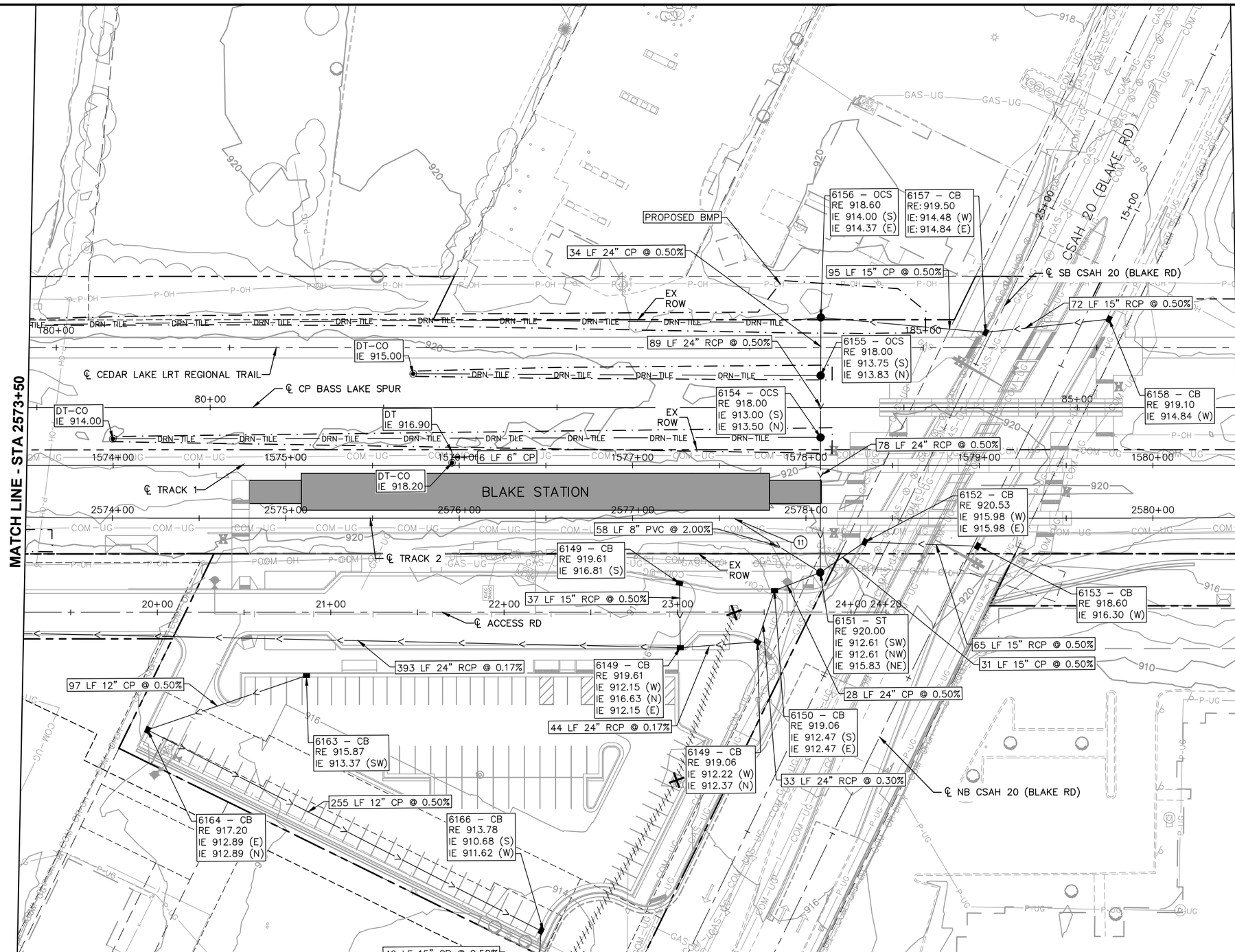
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
PIERCE AVE

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 013

SHEET 26 OF 95

Sep. 21 2015 03:47 pm V:\3400_ADC\CAD\SEGMENT E1\PLAN SHEETS\STORM SEWER\E1-STM-PLN.dwg By: 589



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

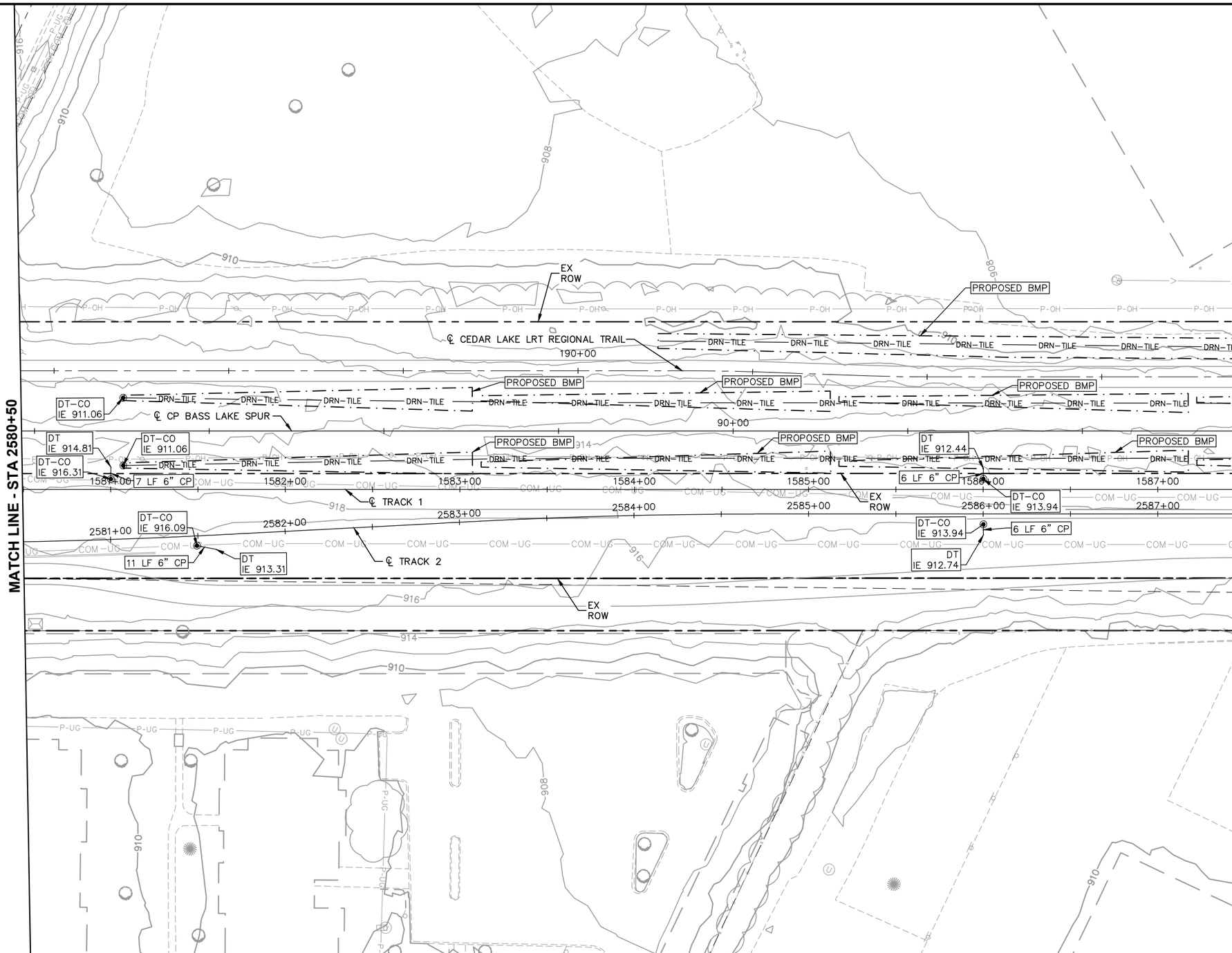
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2573+50 TO STA 2580+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 014

SHEET 27 OF 95

Sep, 21 2015 03:47 pm V:\3400_ADC\CAD\SEGMENT E1\PLAN SHEETS\STORM SEWER\E1-STM-PLN.dwg By: 589



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SCALE HORIZONTAL IN FEET

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SOUTHWEST Green Line LRT Extension

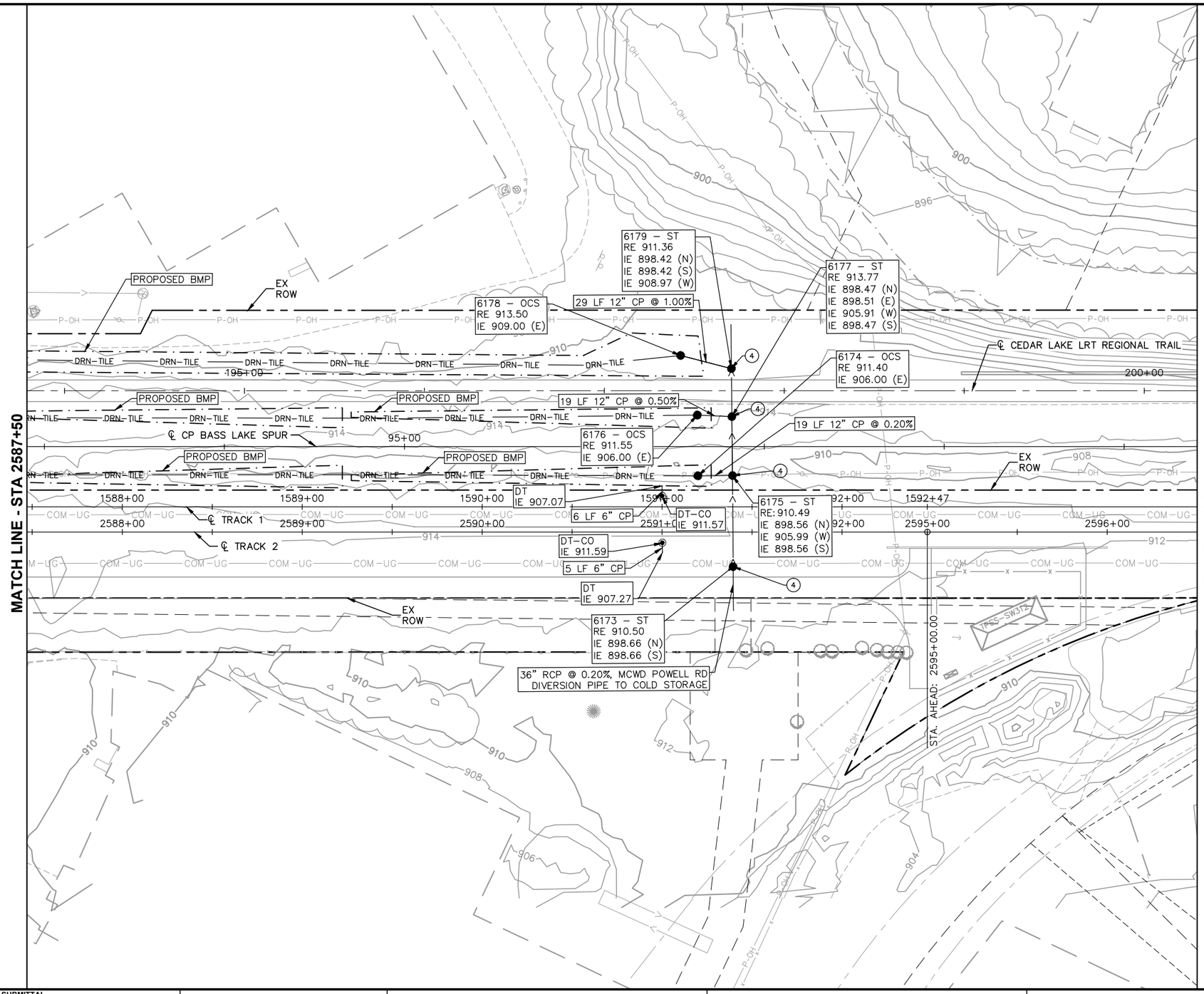
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2580+50 TO STA 2587+50

DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 015

SHEET 28 OF 95

Sep, 21 2015 03:48 pm V:\3400_ADC\CAD\SEGMENT E1\PLAN SHEETS\STORM SEWER\E1-STM-PLN.dwg By: 589



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HORIZONTAL
SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

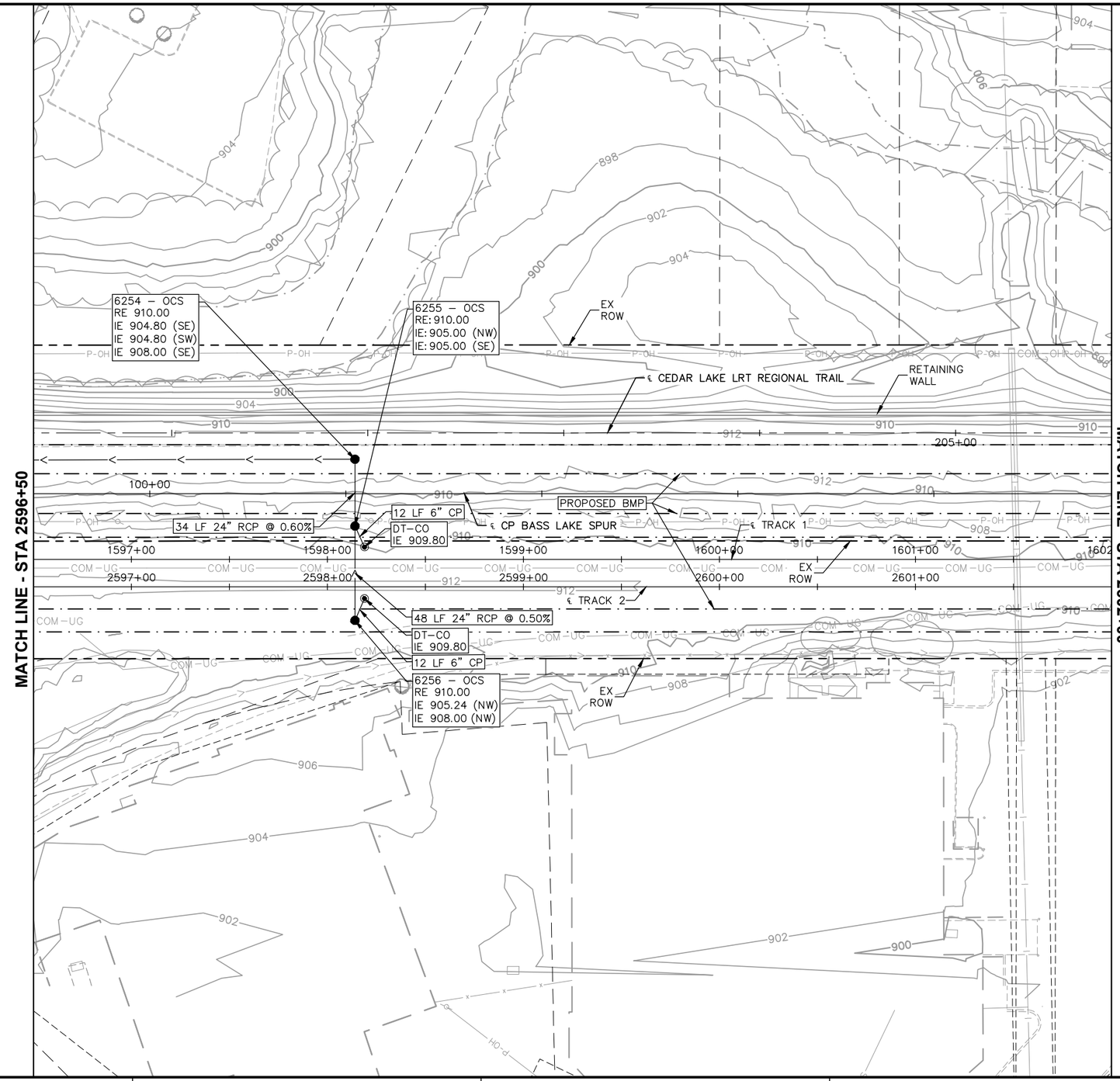
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2587+50 TO STA 2596+50

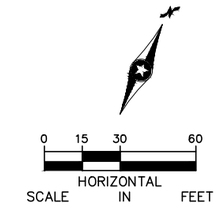
DISCIPLINE: DRAINAGE

SHEET NAME: E1-STM-PLN - 016

SHEET 29 OF 95

Sep, 21 2015 03:49 pm V:\3400_ADC\CAD\SEGMENT E1\PLAN SHEETS\STORM SEWER\E1-STM-PLN.dwg By: 589





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SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2596+50 TO STA 2602+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 001

SHEET 30 OF 95

Sep, 21 2015 04:10 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498

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SOUTHWEST Green Line LRT Extension

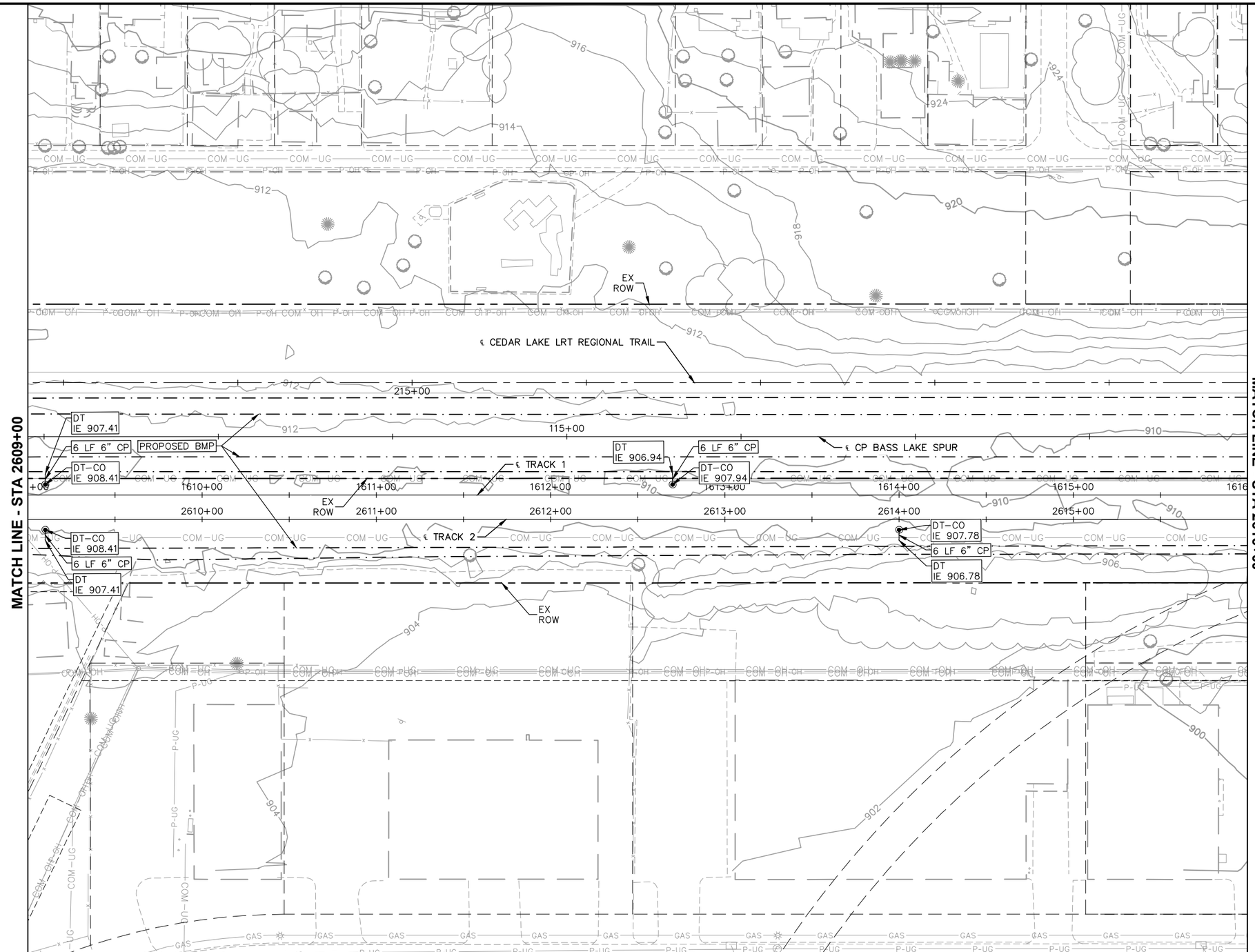
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2602+00 TO STA 2609+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 002

SHEET 31 OF 95

Sep. 21 2015 04:11 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

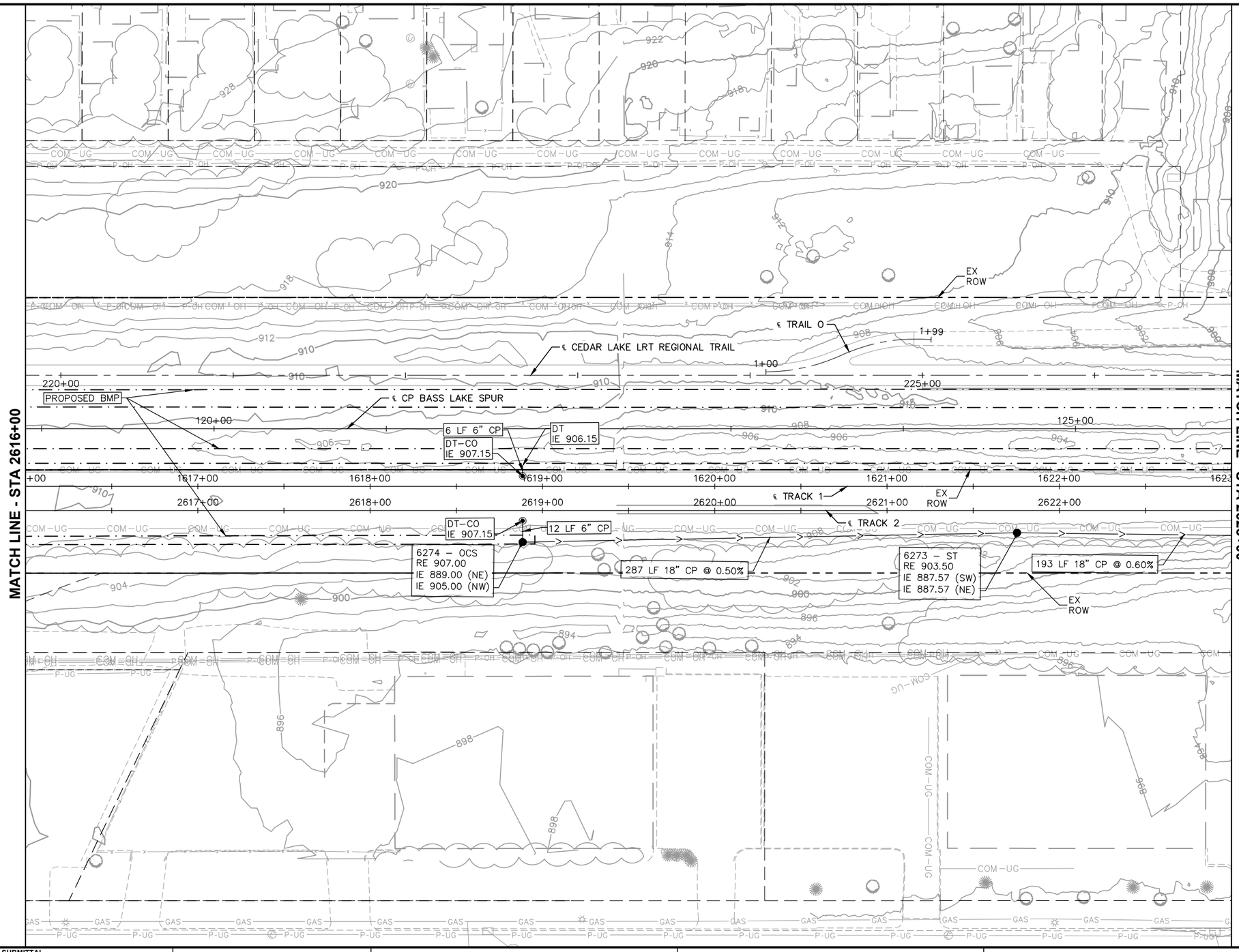
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2609+00 TO STA 2616+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 003

SHEET 32 OF 95

Sep, 21 2015 04:12 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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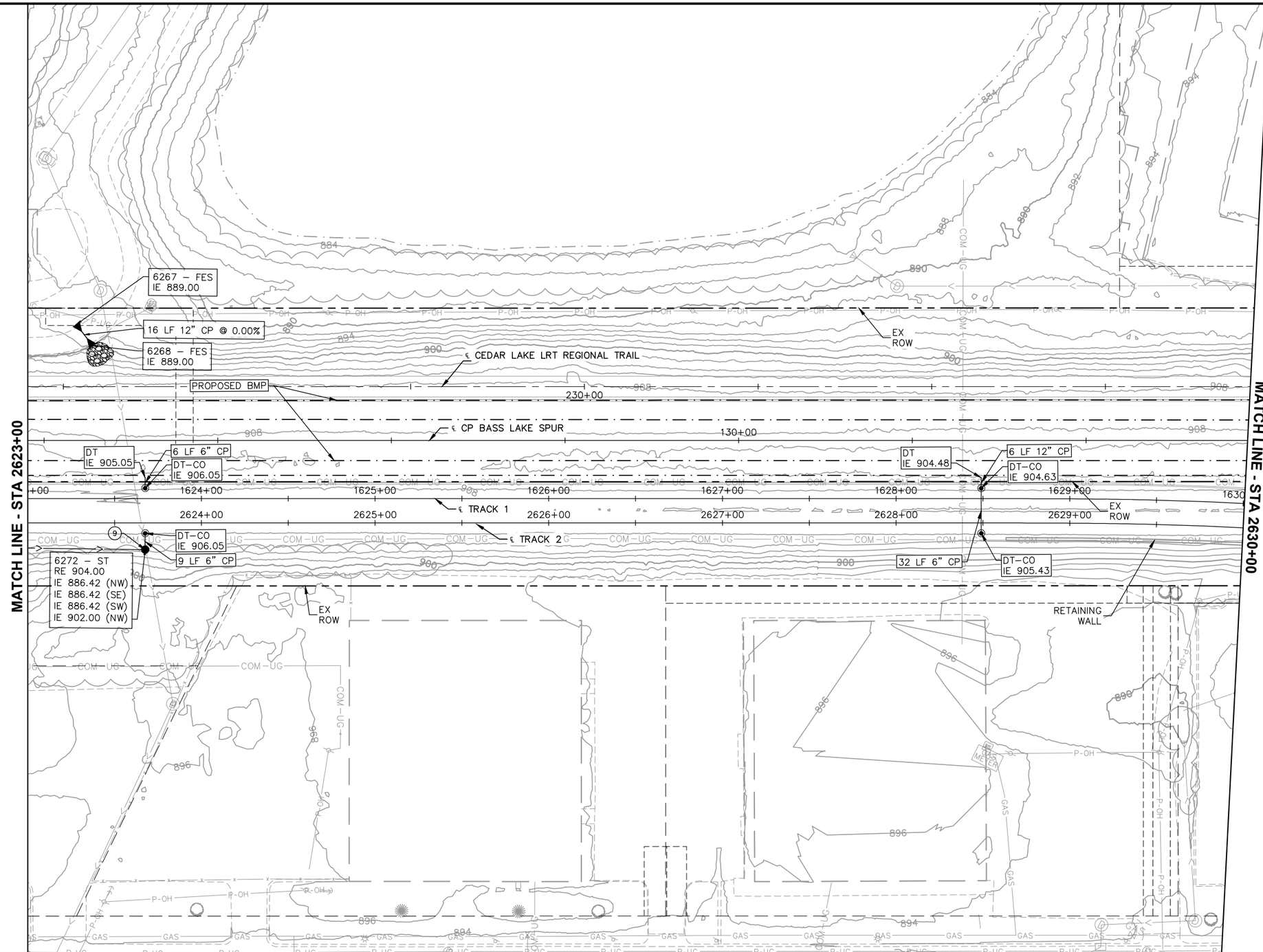
Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2616+00 TO STA 2623+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 004

SHEET 33 OF 95



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HORIZONTAL
SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

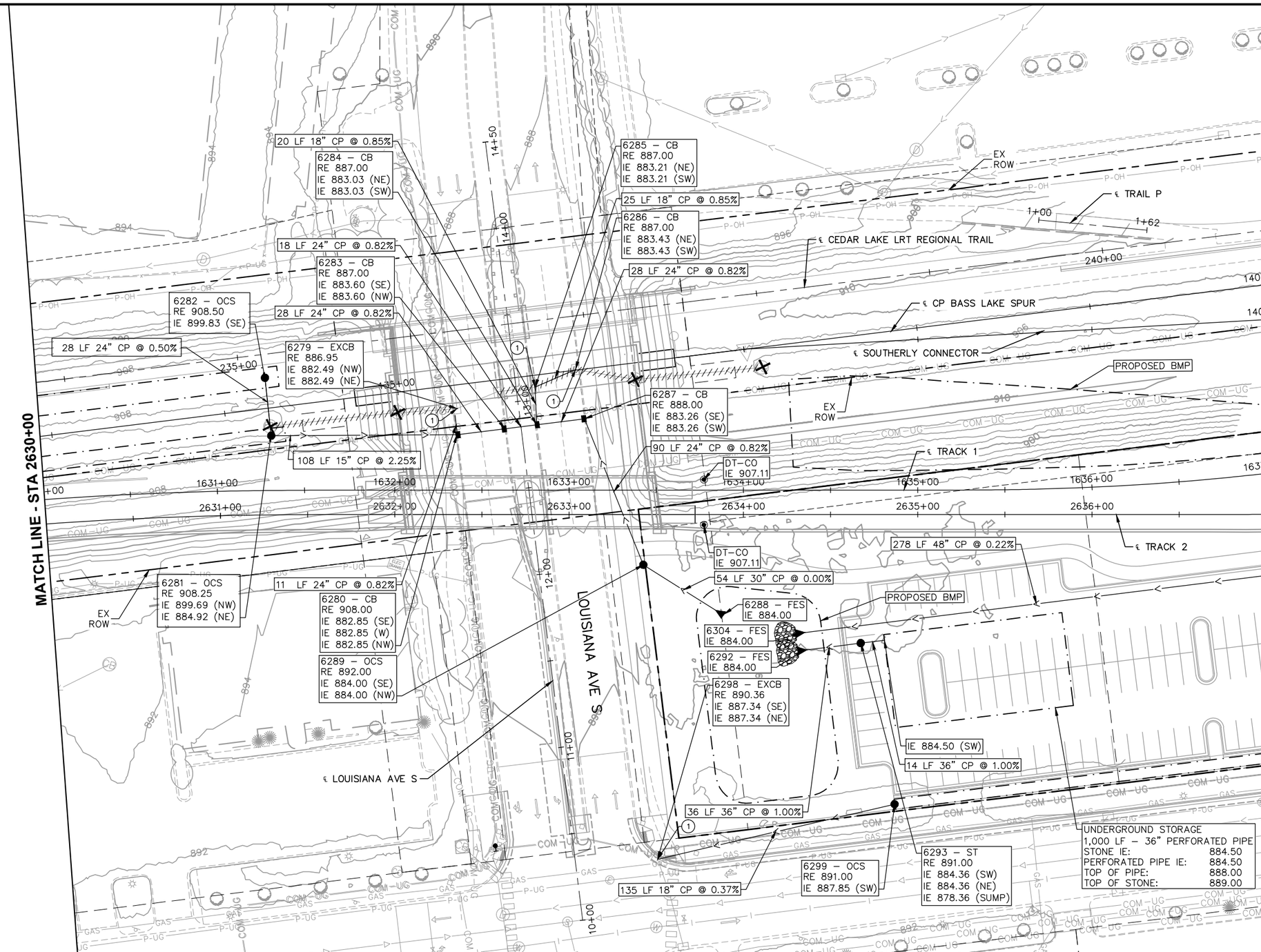
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2623+00 TO STA 2630+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 005

SHEET 34 OF 95

Sep, 21 2015 04:13 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

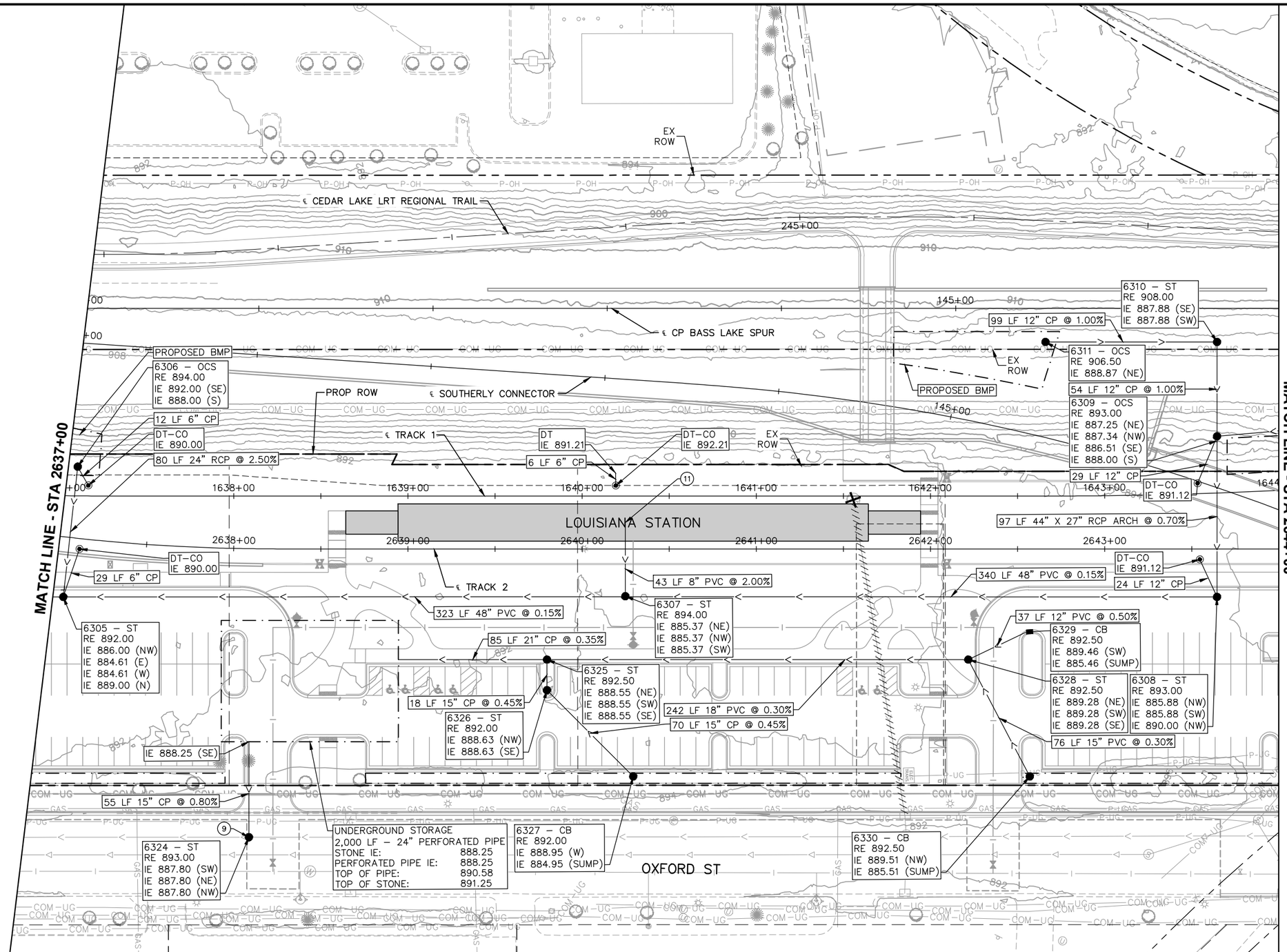
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2630+00 TO STA 2637+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 006

SHEET 35 OF 95

Sep, 21 2015 04:14 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

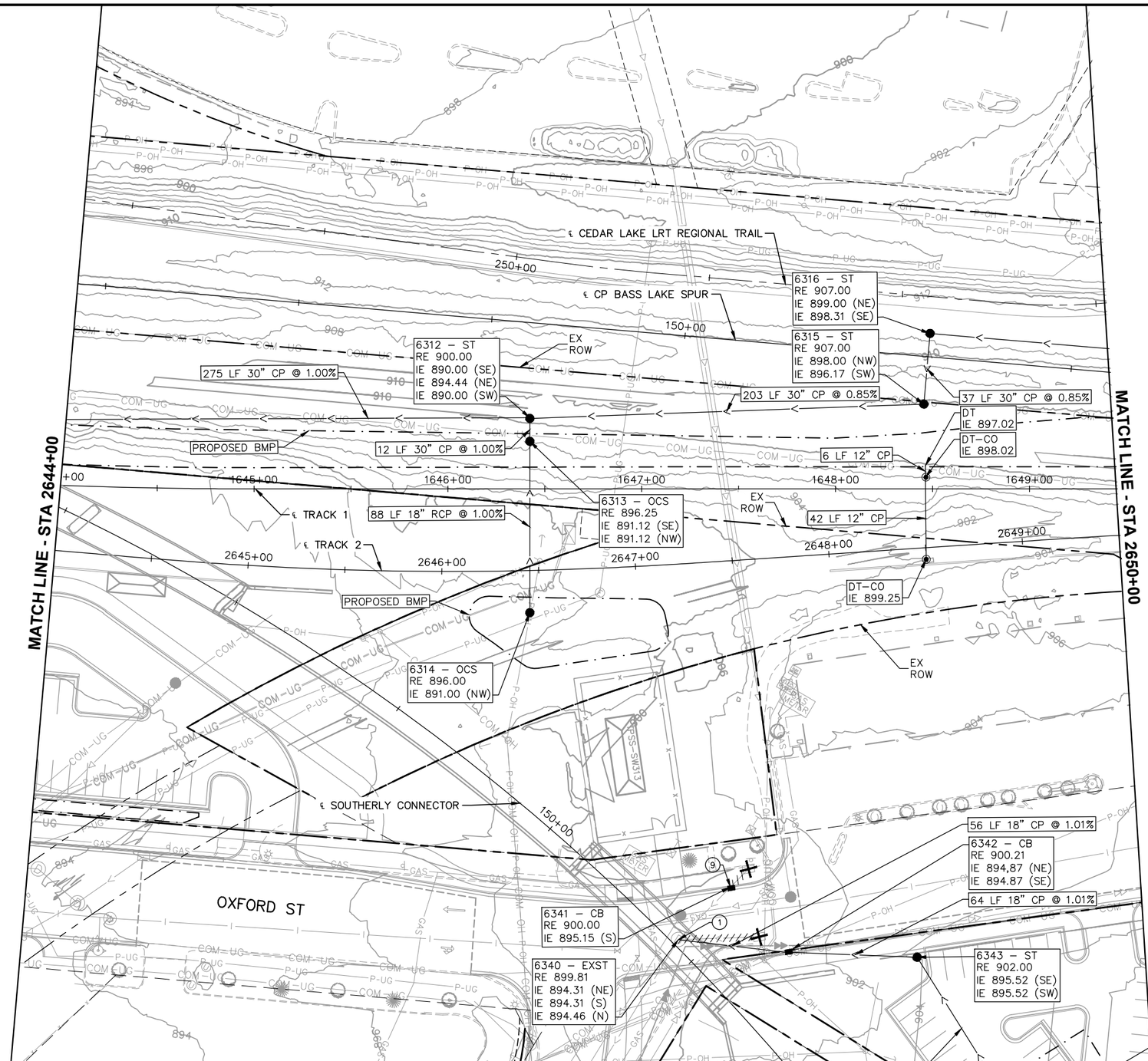
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2637+00 TO STA 2644+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 007

SHEET 36 OF 95

Sep, 21 2015 04:14 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
HORIZONTAL
SCALE IN FEET

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Green Line LRT Extension

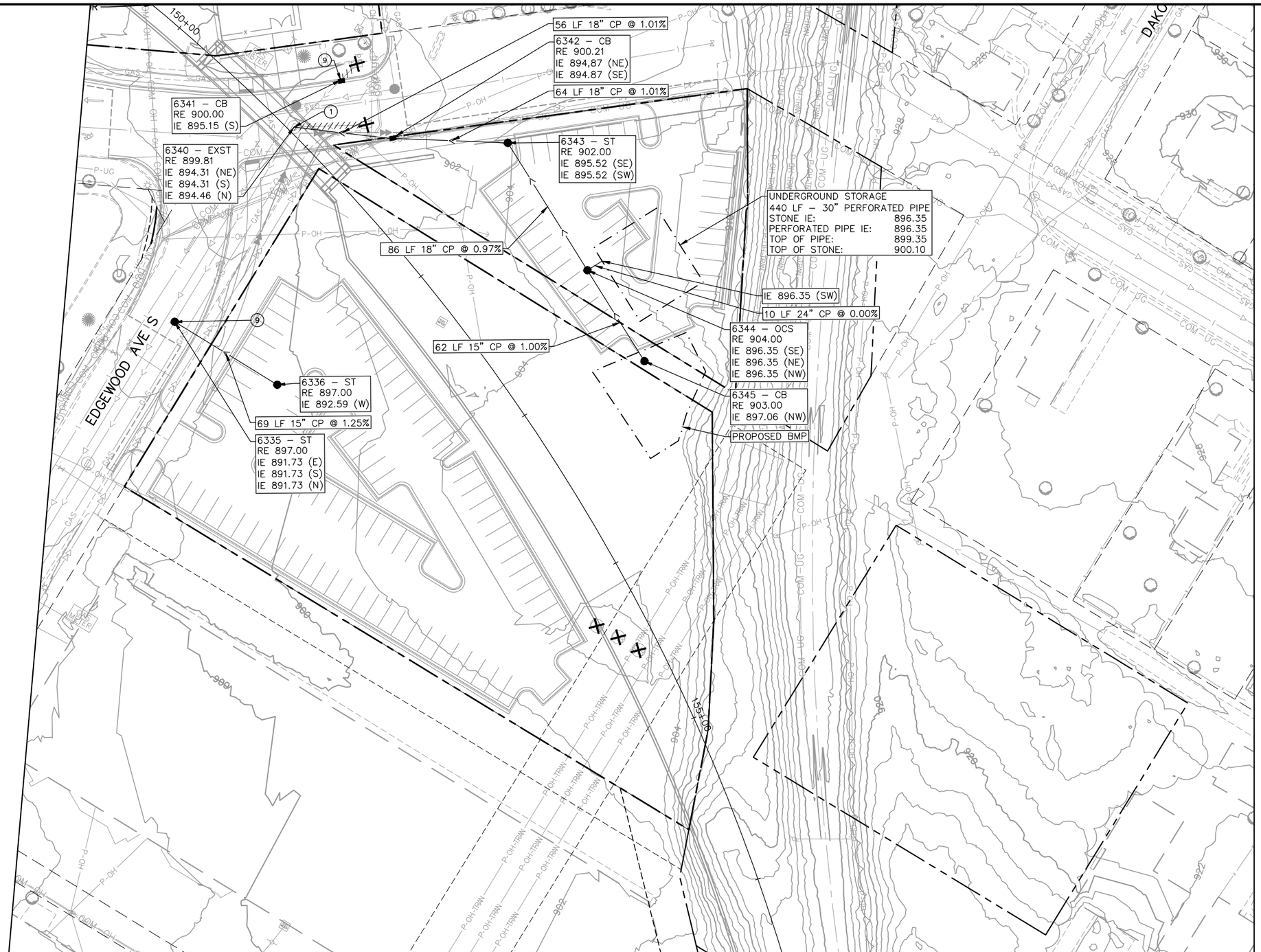
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2644+00 TO STA 2650+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 008

SHEET 37 OF 95

Sep, 21 2015 04:15 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SOUTHWEST
Green Line LRT Extension

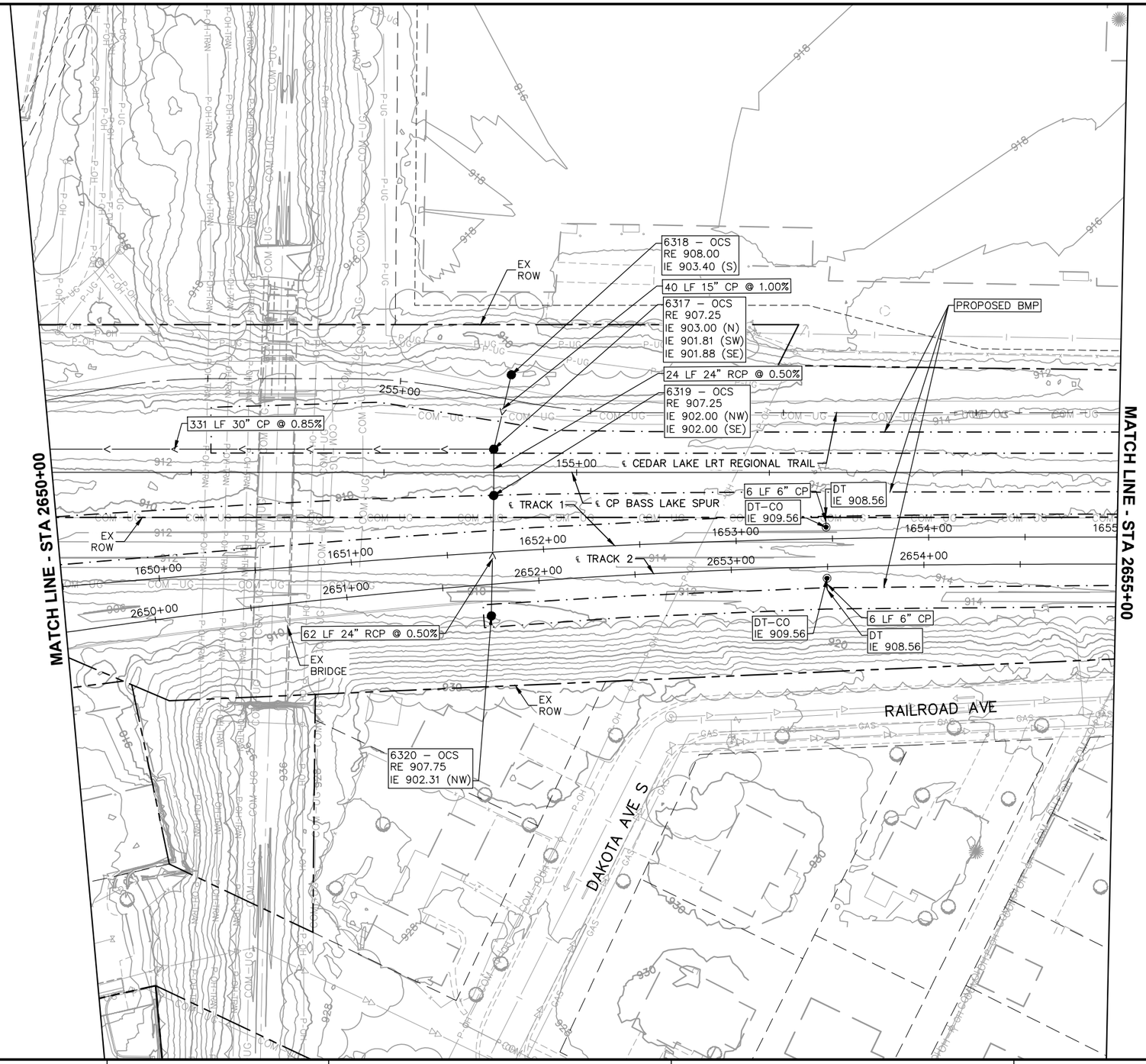
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
LOUISIANA PARK & RIDE

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 009

SHEET 38 OF 95

Sep, 21 2015 04:16 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

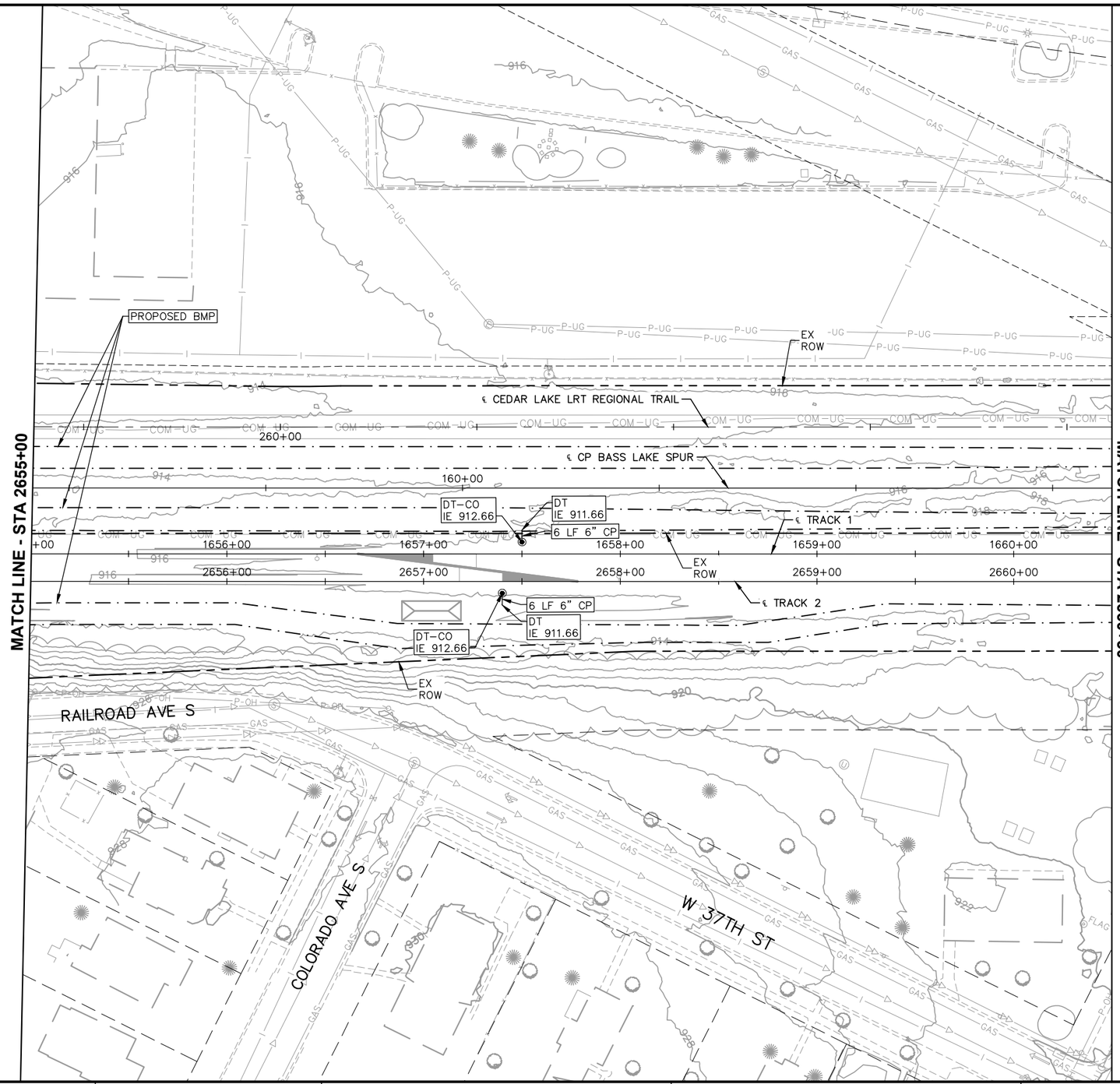
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2650+00 TO STA 2655+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 010

SHEET 39 OF 95

Sep, 21 2015 04:16 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
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SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

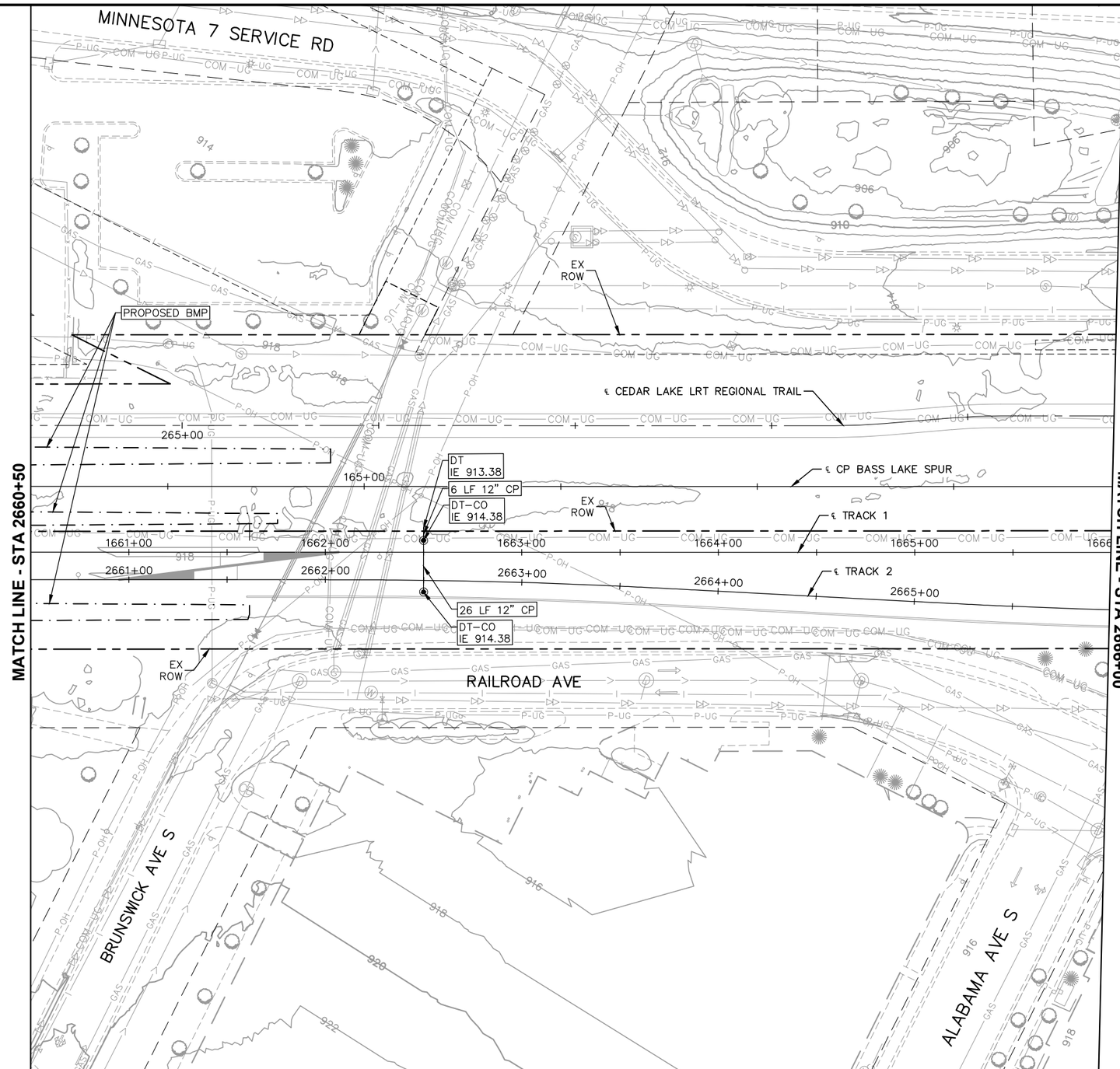
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2655+00 TO STA 2660+50

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 011

SHEET 40 OF 95

Sep, 21 2015 04:17 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
HORIZONTAL
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SOUTHWEST
Green Line LRT Extension

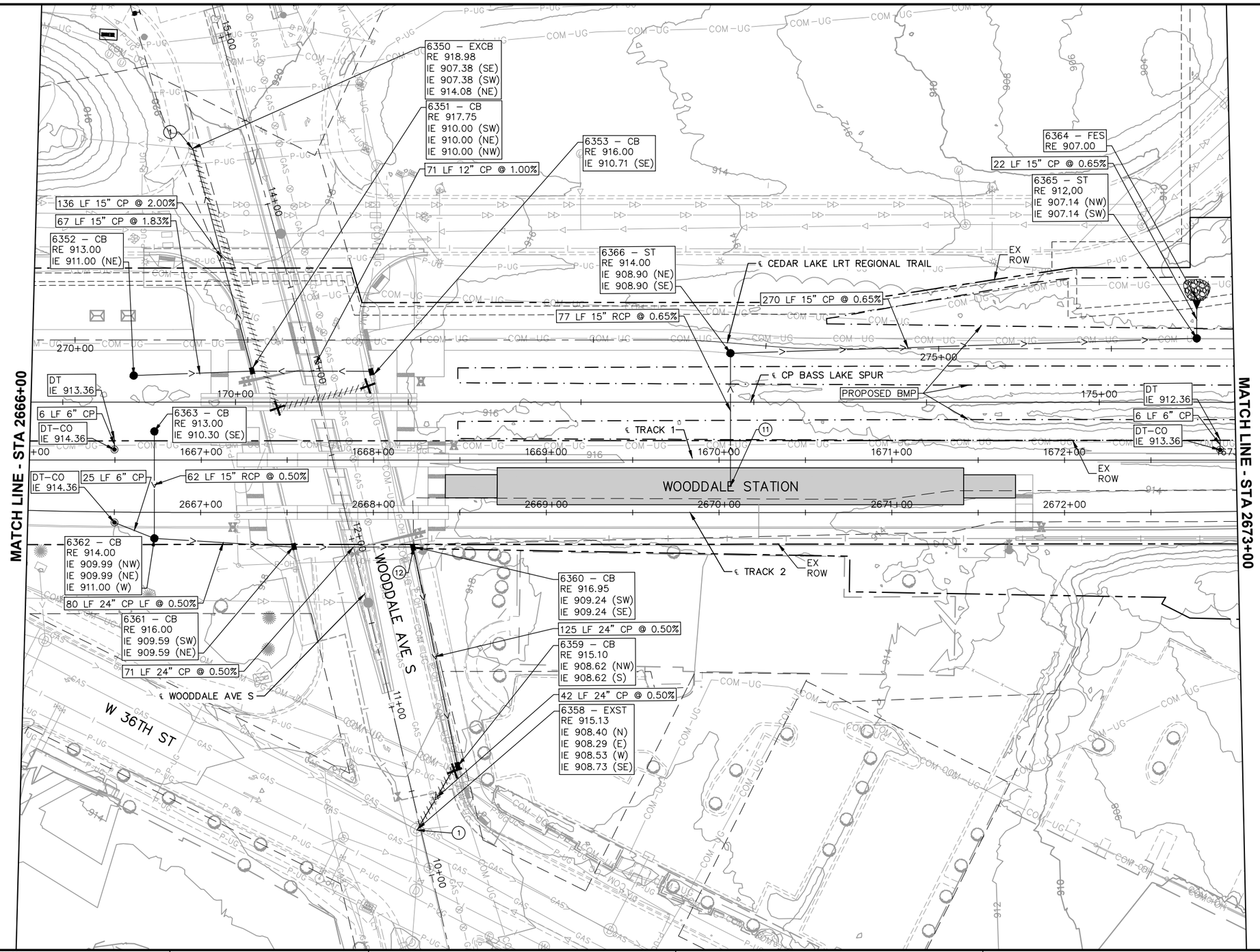
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2660+50 TO STA 2666+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 012

SHEET 41 OF 95

Sep, 21 2015 04:17 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SOUTHWEST
Green Line LRT Extension

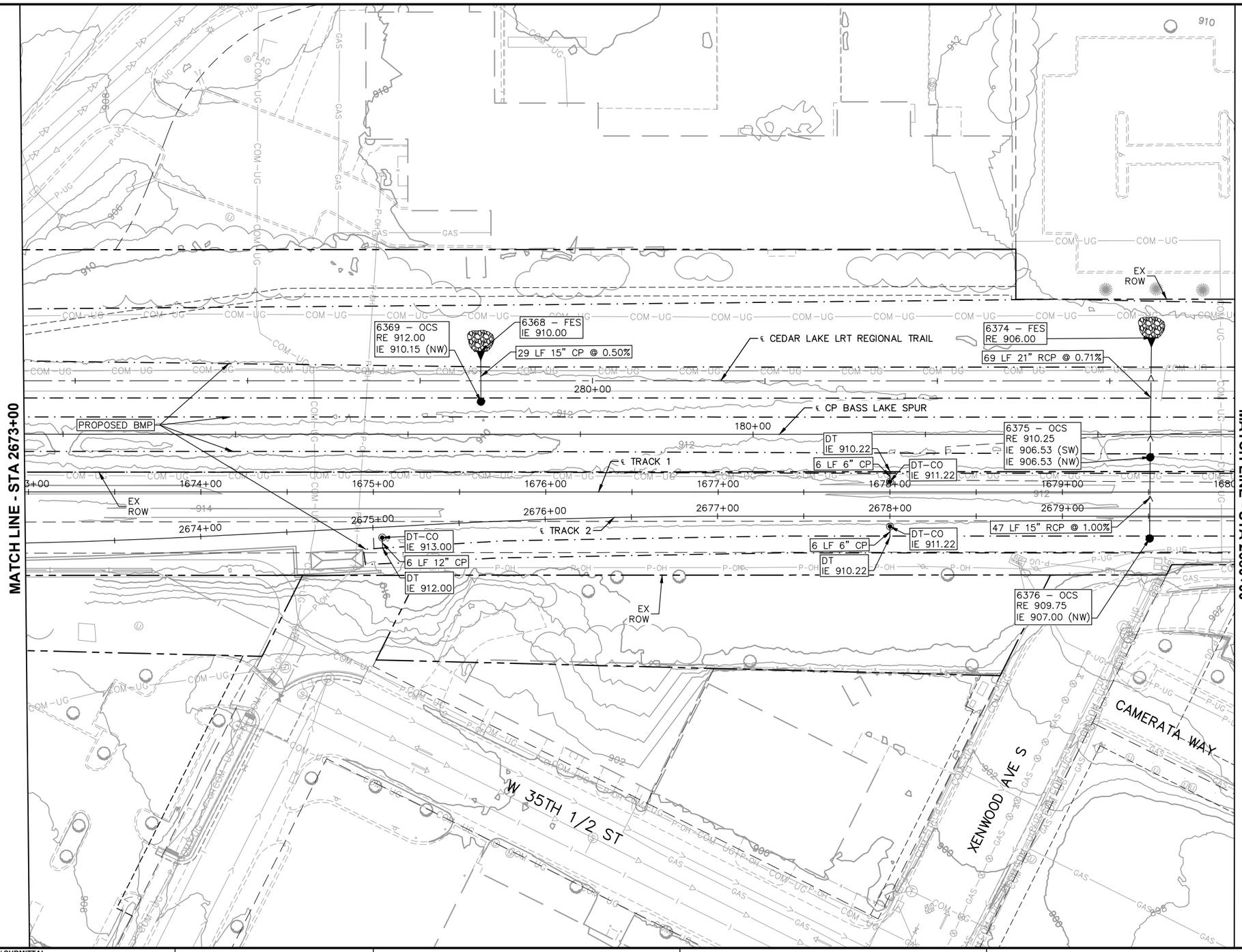
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2666+00 TO STA 2673+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 013

SHEET 42 OF 95

Sep, 21 2015 04:18 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SCALE HORIZONTAL IN FEET

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SOUTHWEST Green Line LRT Extension

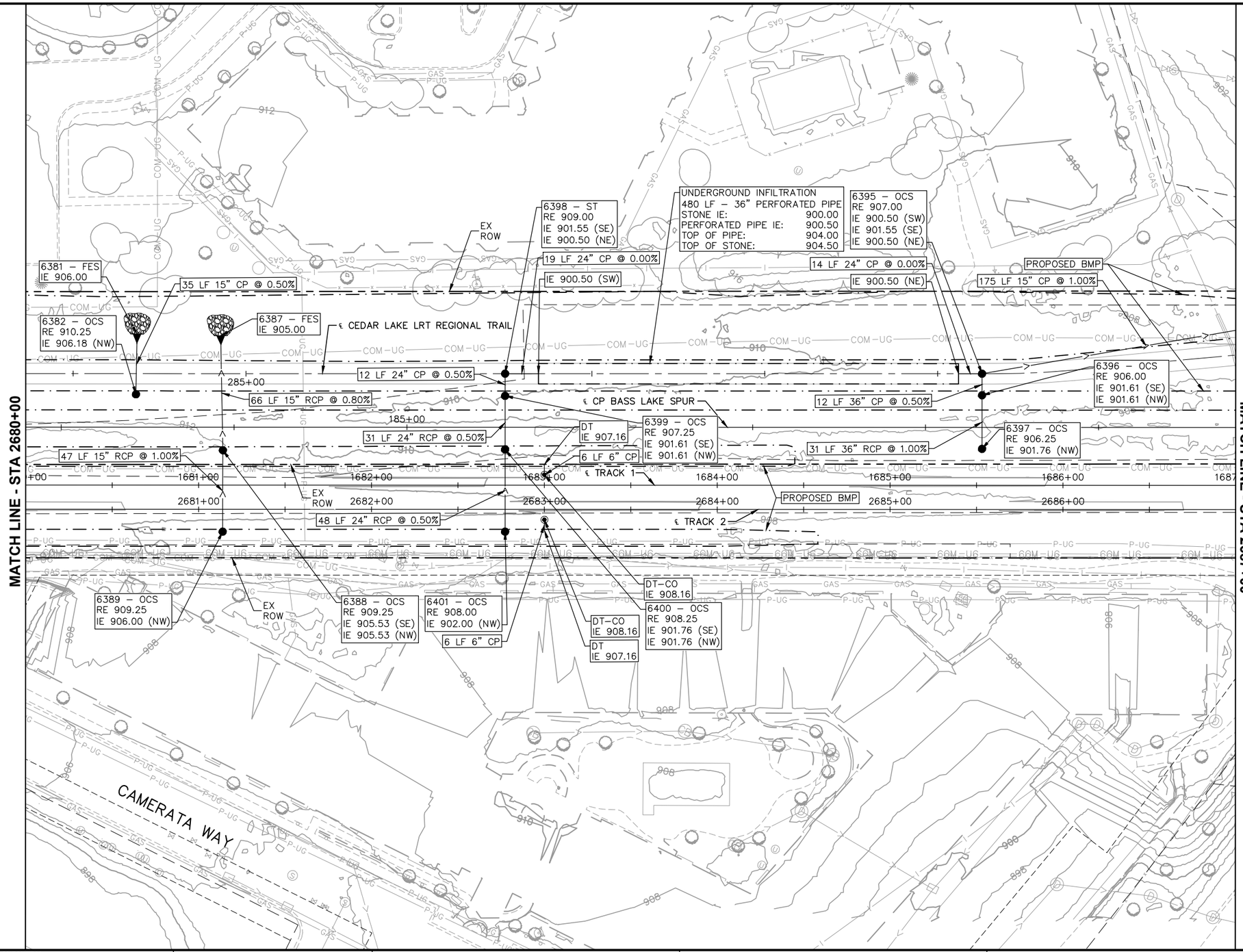
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2673+00 TO STA 2680+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 014

SHEET 43 OF 95

Sep, 21 2015 04:19 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
HORIZONTAL
SCALE IN FEET

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Green Line LRT Extension

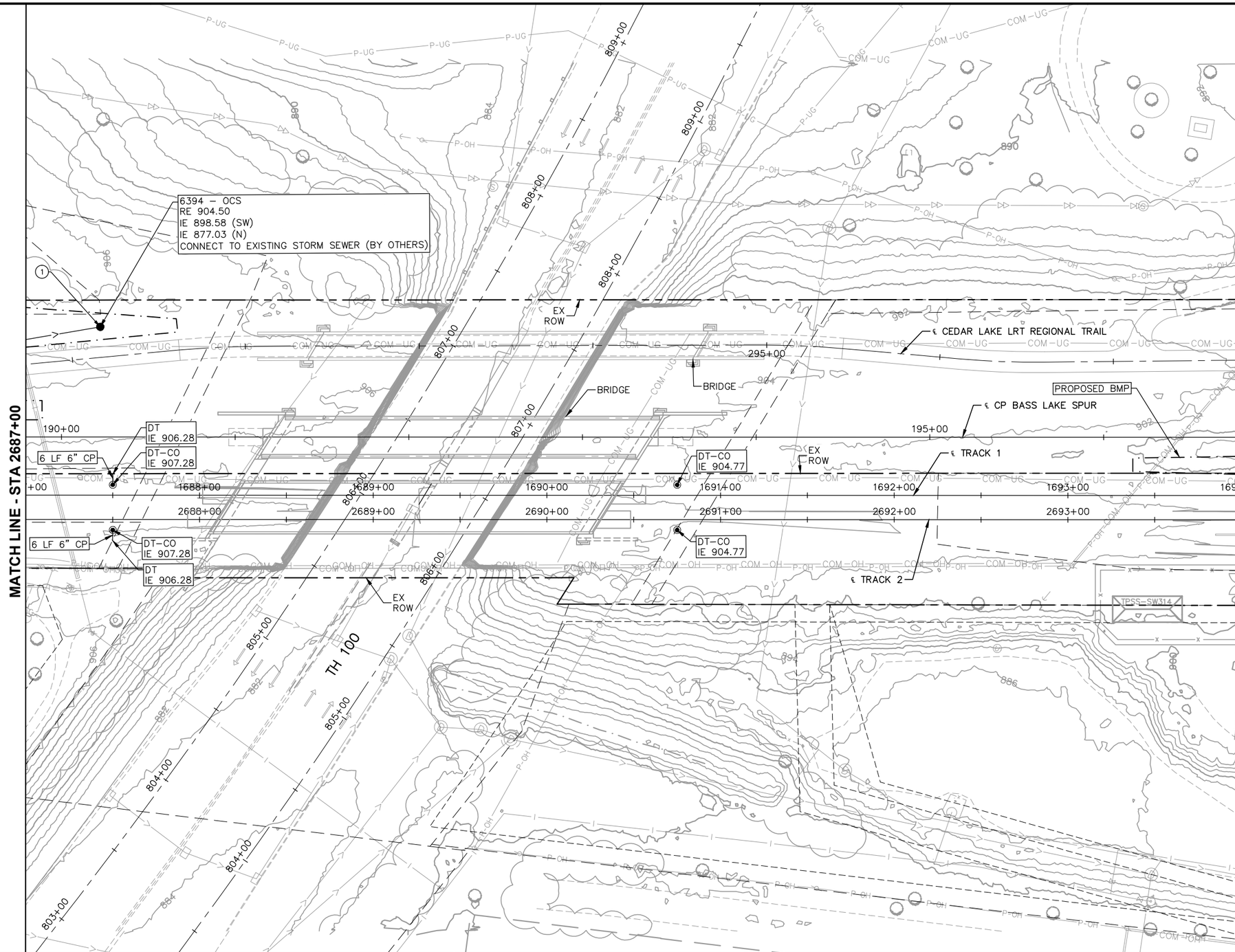
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2680+00 TO STA 2687+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 015

SHEET 44 OF 95

Sep, 21 2015 04:19 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

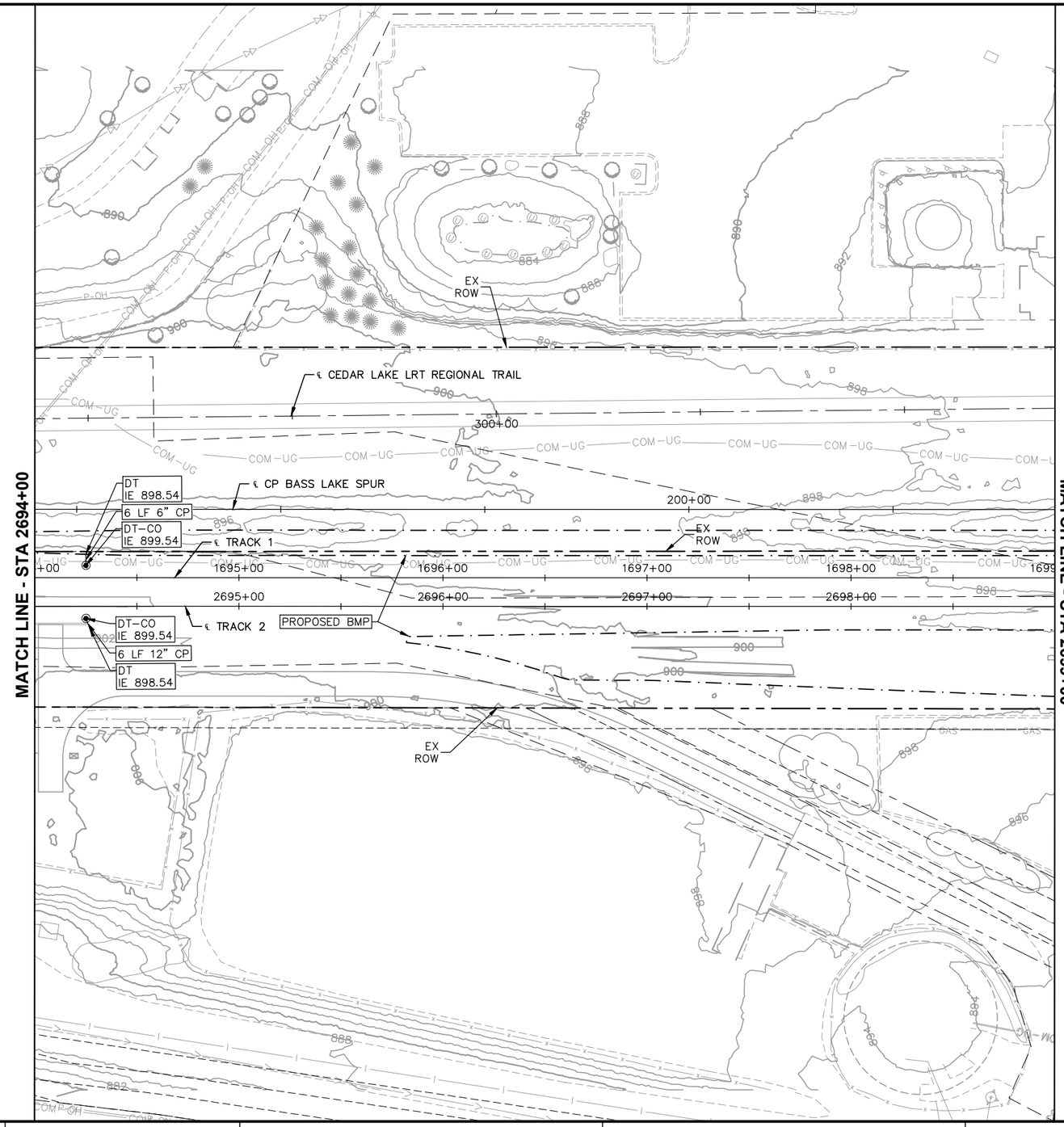
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2687+00 TO STA 2694+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 016

SHEET 45 OF 95

Sep. 21 2015 04:20 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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HORIZONTAL
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Green Line LRT Extension

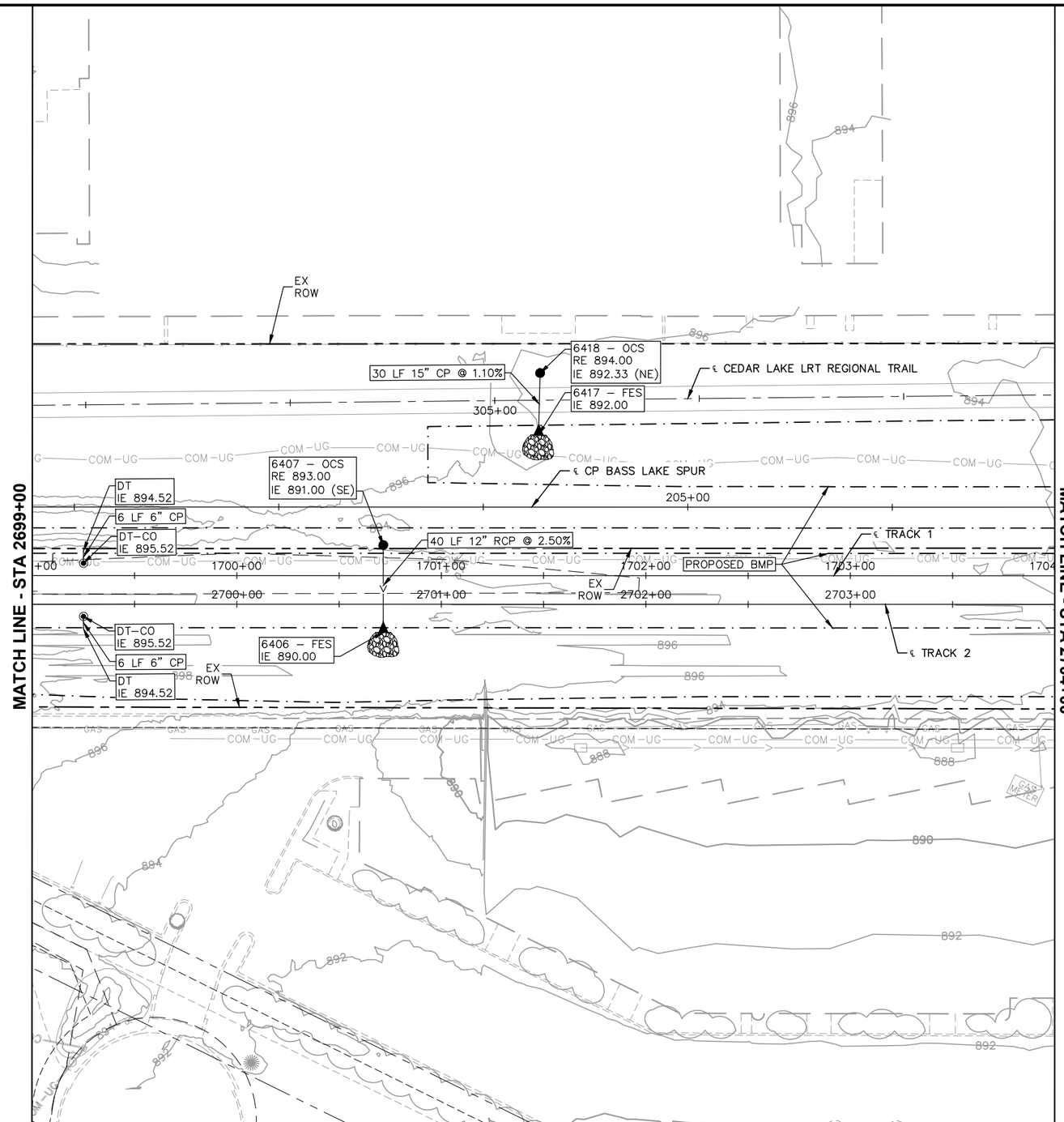
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2694+00 TO STA 2699+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 017

SHEET 46 OF 95

Sep, 21 2015 04:20 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
HORIZONTAL
SCALE IN FEET

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Green Line LRT Extension

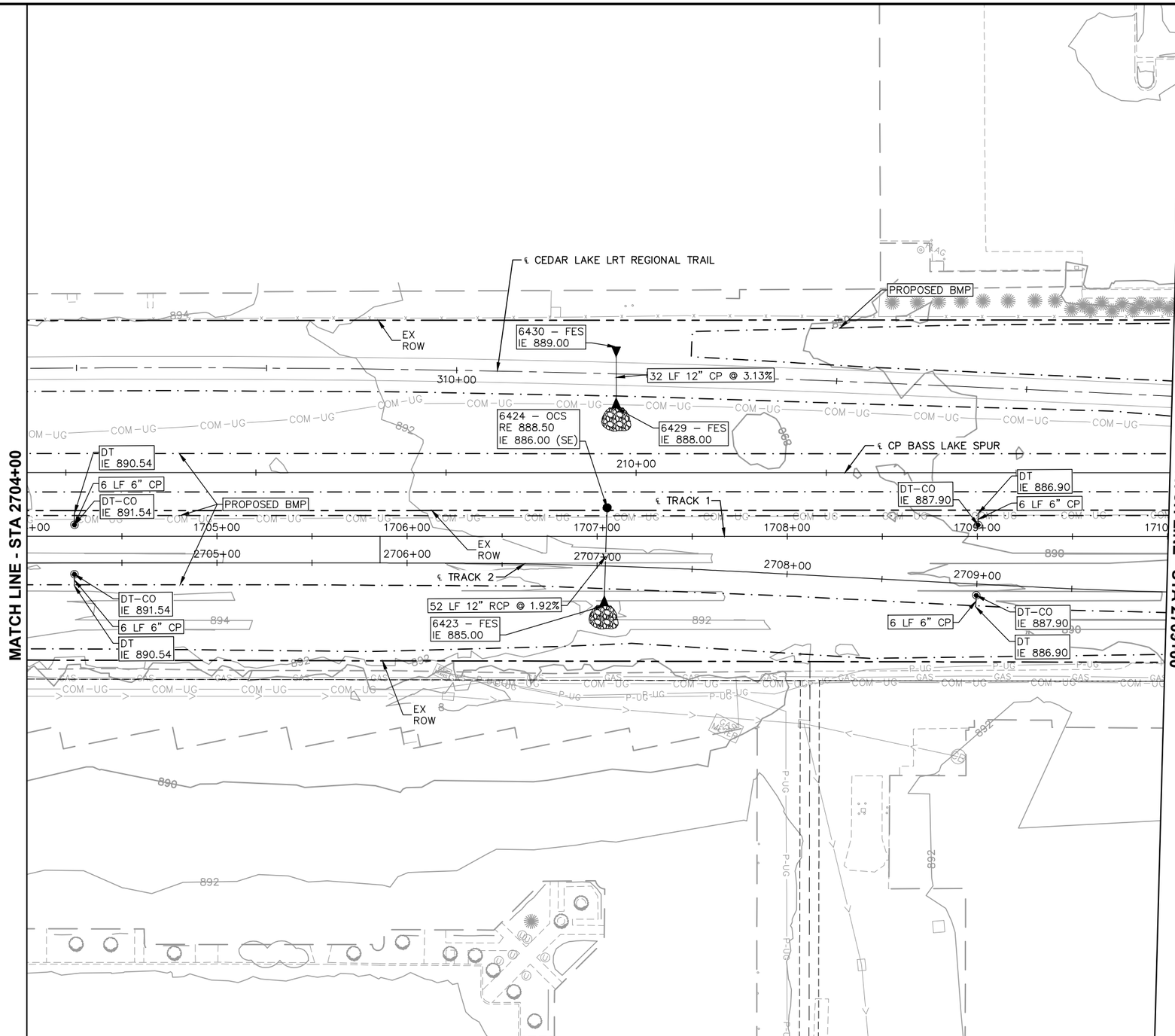
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2699+00 TO STA 2704+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 018

SHEET 47 OF 95

Sep, 21 2015 04:21 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



0 15 30 60
HORIZONTAL
SCALE IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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SOUTHWEST
Green Line LRT Extension

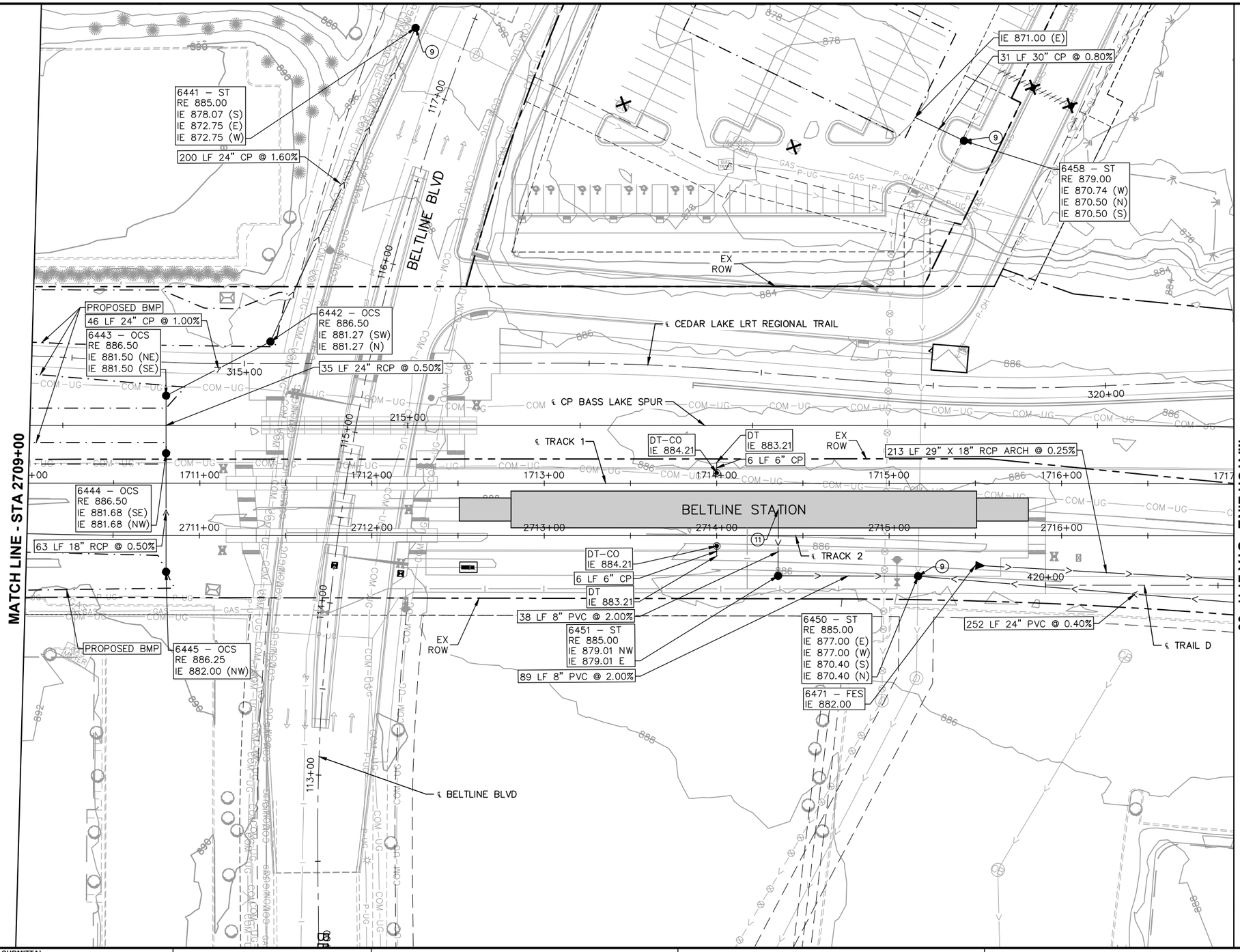
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2704+00 TO STA 2709+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 019

SHEET 48 OF 95

Sep, 21 2015 04:21 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

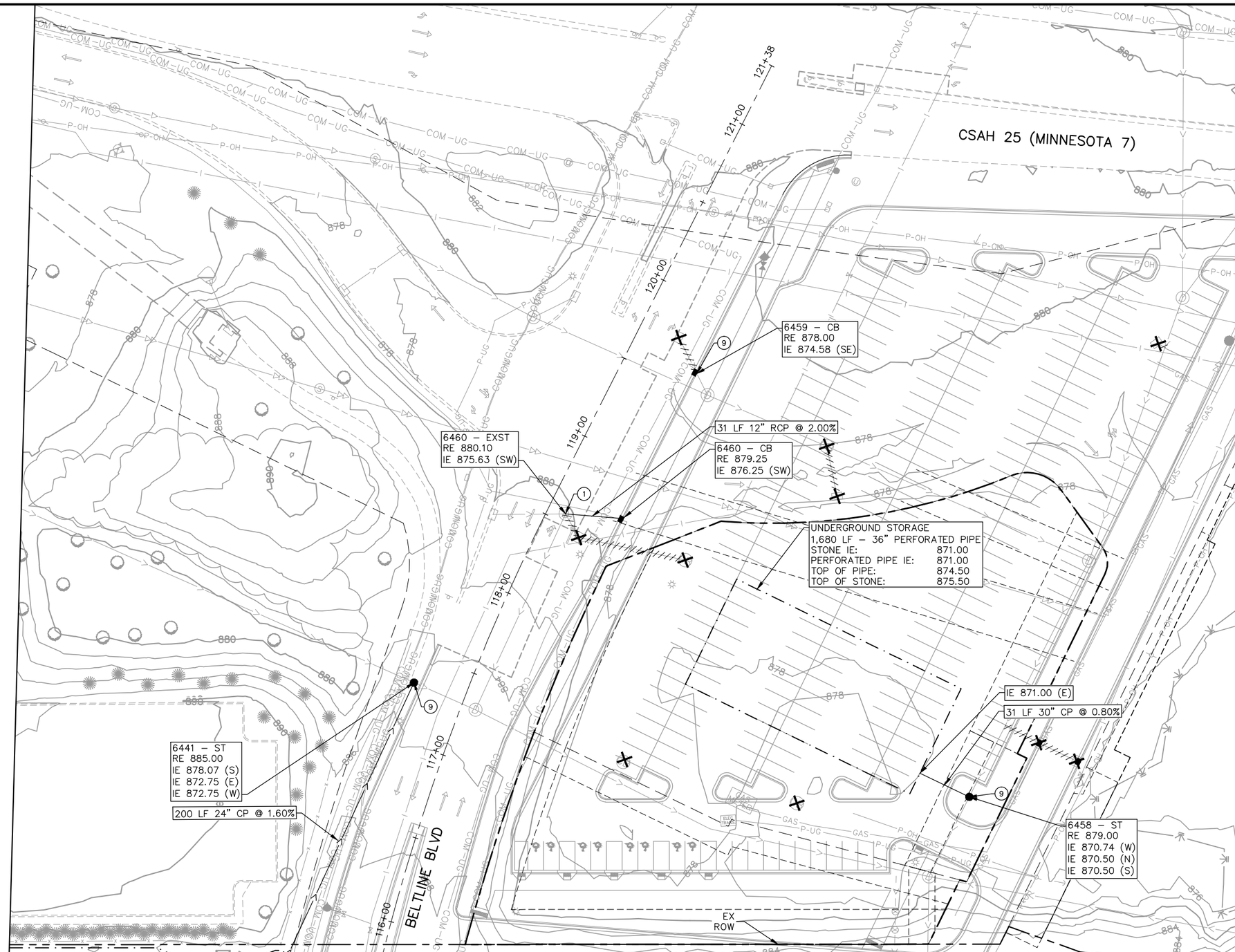
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2709+00 TO STA 2717+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 020

SHEET 49 OF 95

Sep, 21 2015 04:22 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

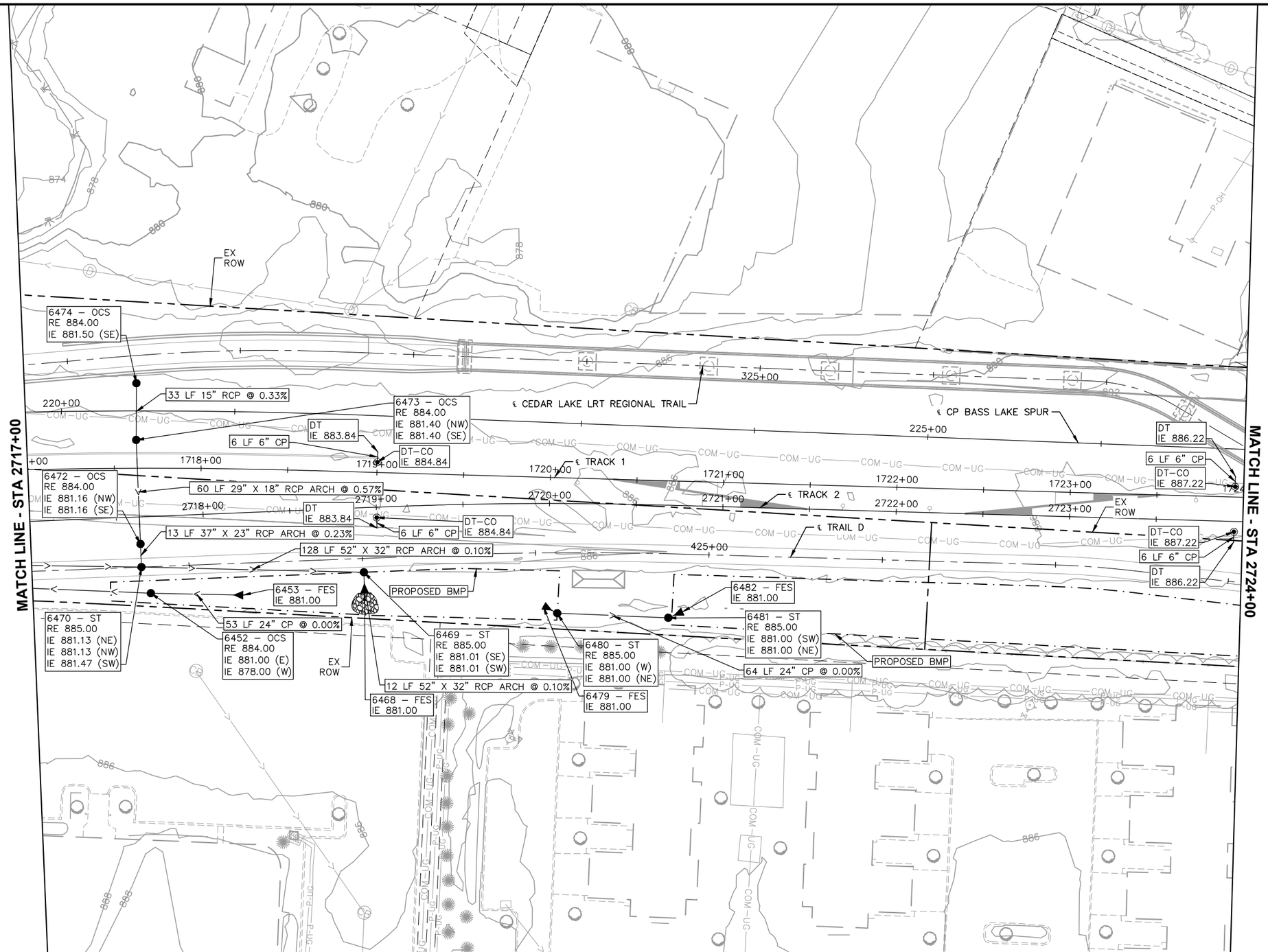
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
BELTLINE PARK & RIDE

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 021

SHEET 50 OF 95

Sep, 21 2015 04:23 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2717+00 TO STA 2724+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 022

SHEET 51 OF 95

Sep, 21 2015 04:23 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498

0 15 30 60
HORIZONTAL
SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

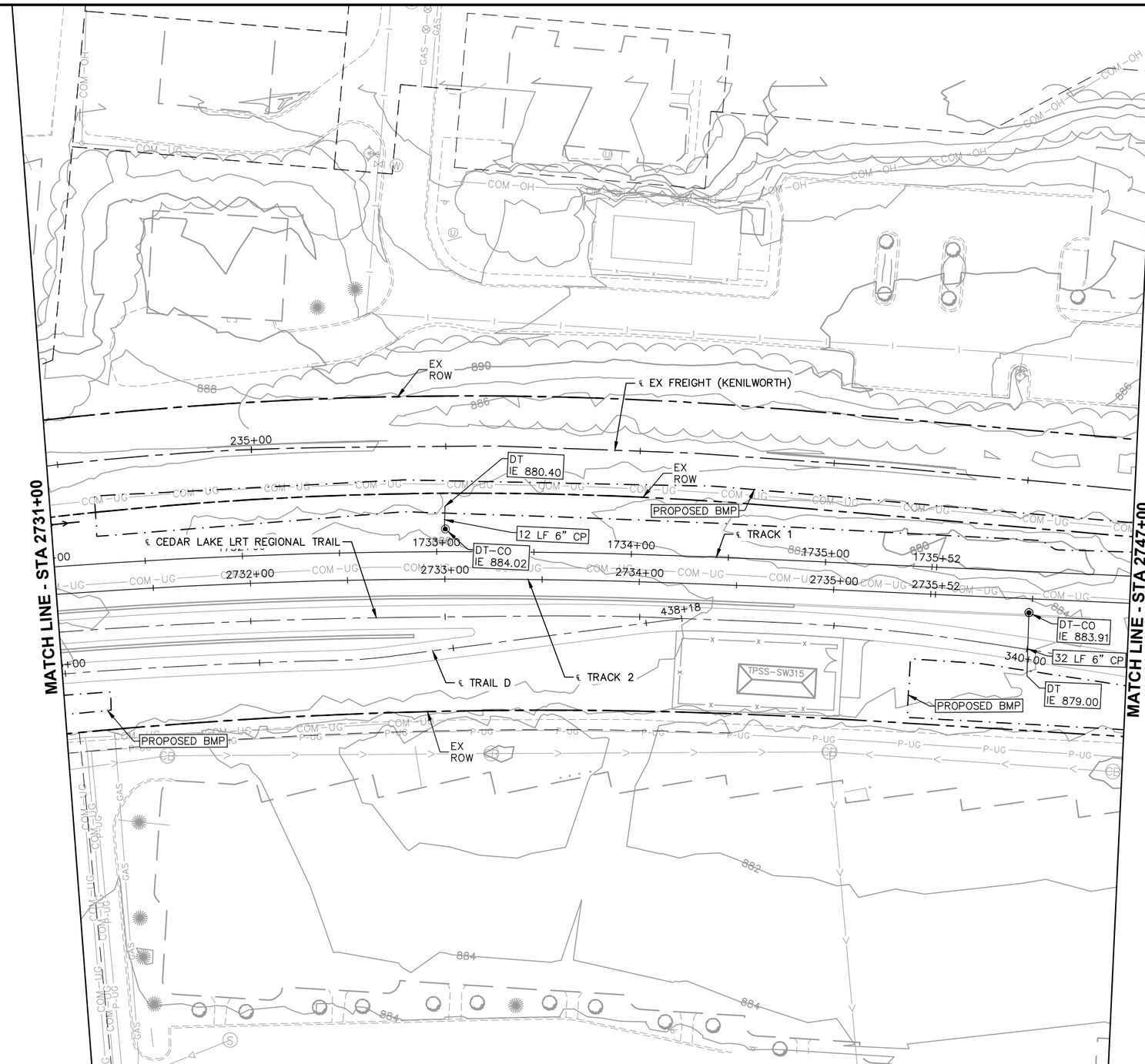
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2724+00 TO STA 2731+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 023

SHEET 52 OF 95

Sep, 21 2015 04:24 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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HORIZONTAL
SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

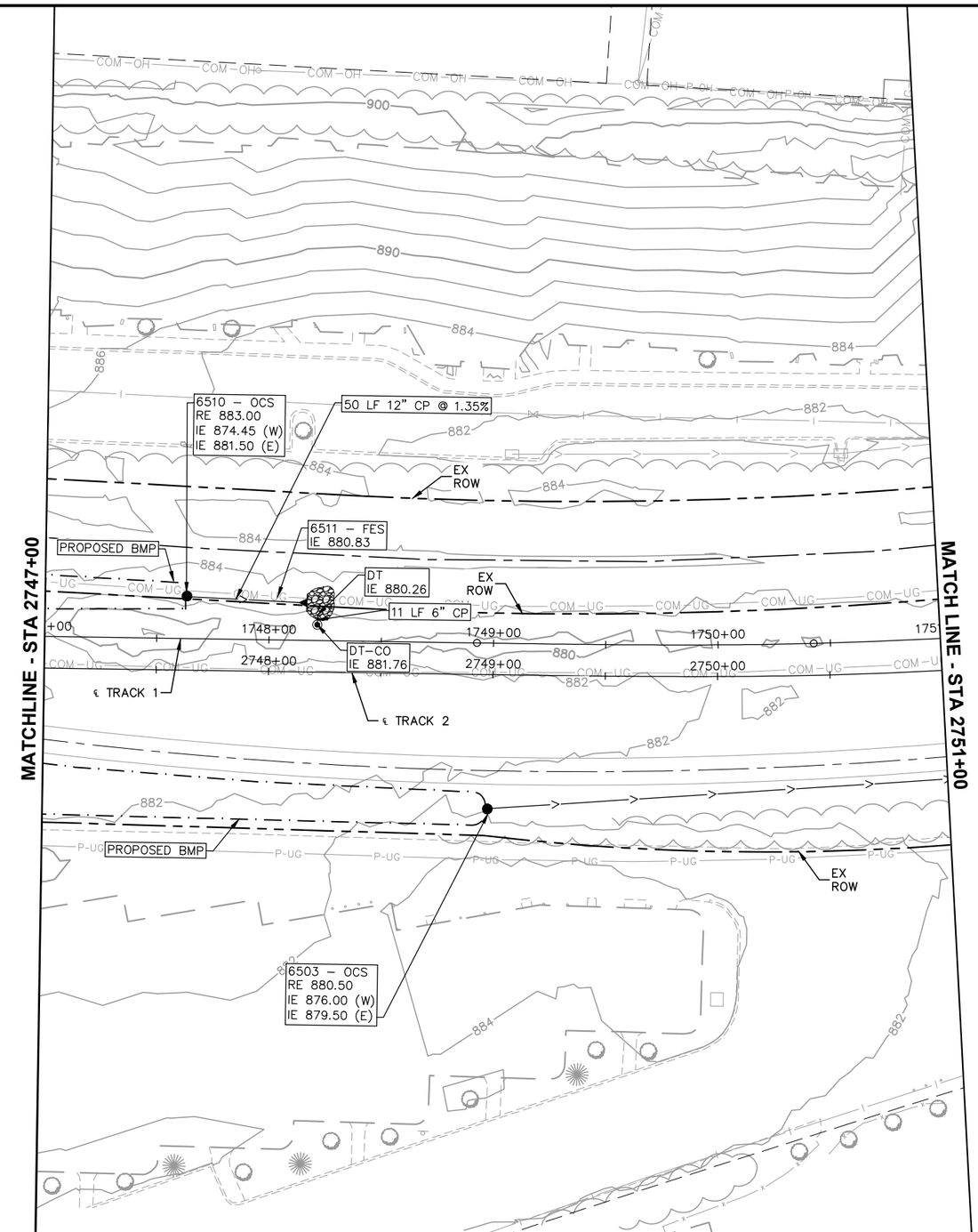
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2731+00 TO STA 2747+00

DISCIPLINE: DRAINAGE

SHEET NAME: E2-STM-PLN - 024

SHEET 53 OF 95

Sep, 21 2015 04:24 pm V:\3400_ADC\CAD\SEGMENT E2\PLAN SHEETS\STORM SEWER\E2-STM-PLN.dwg By: 498



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SCALE HORIZONTAL IN FEET

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

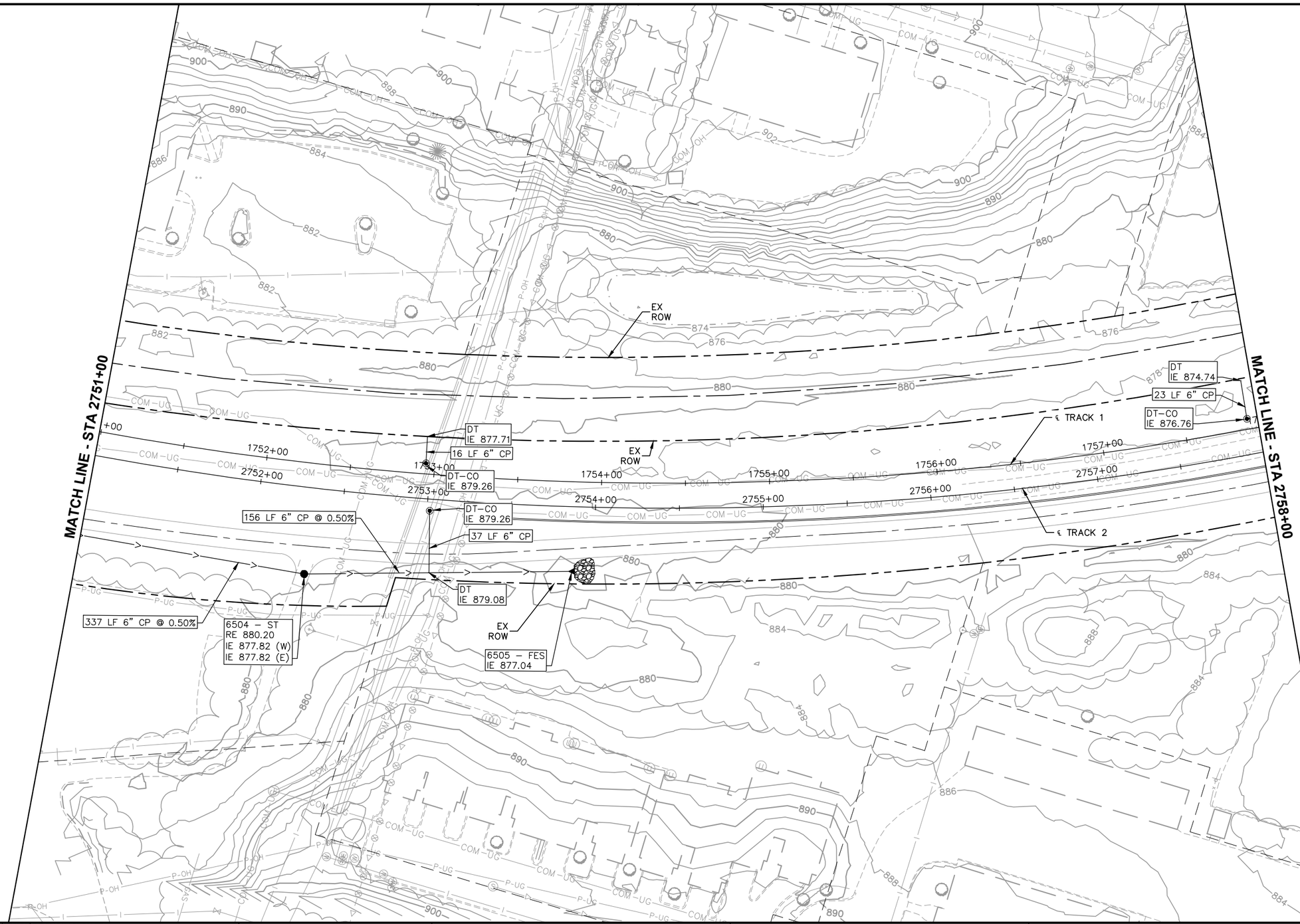
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2747+00 TO STA 2751+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 001

SHEET 54 OF 95

Sep, 21 2015 03:47 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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HORIZONTAL SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

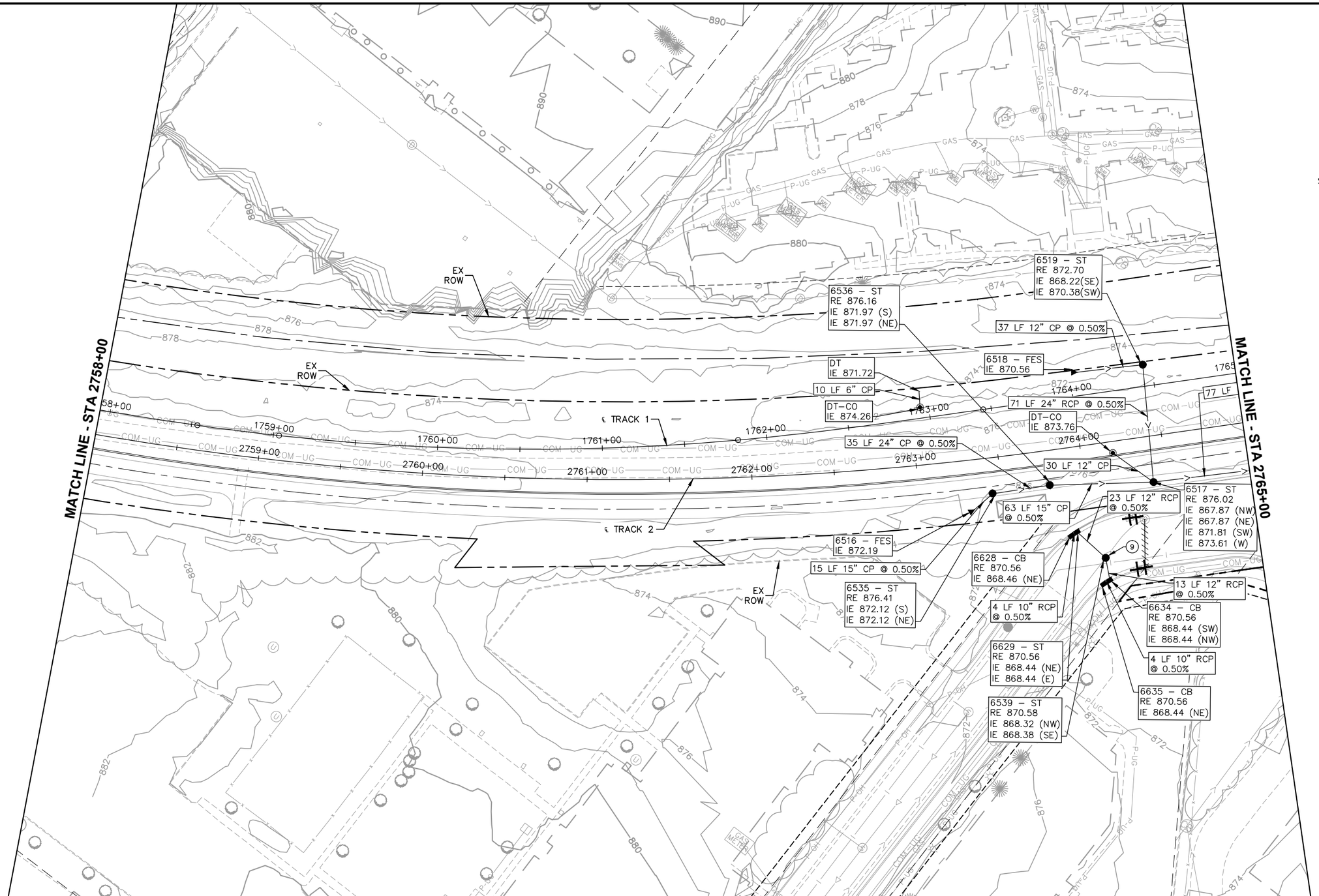
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2751+00 TO STA 2758+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 002

SHEET 55 OF 95

Sep. 21 2015 03:47 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

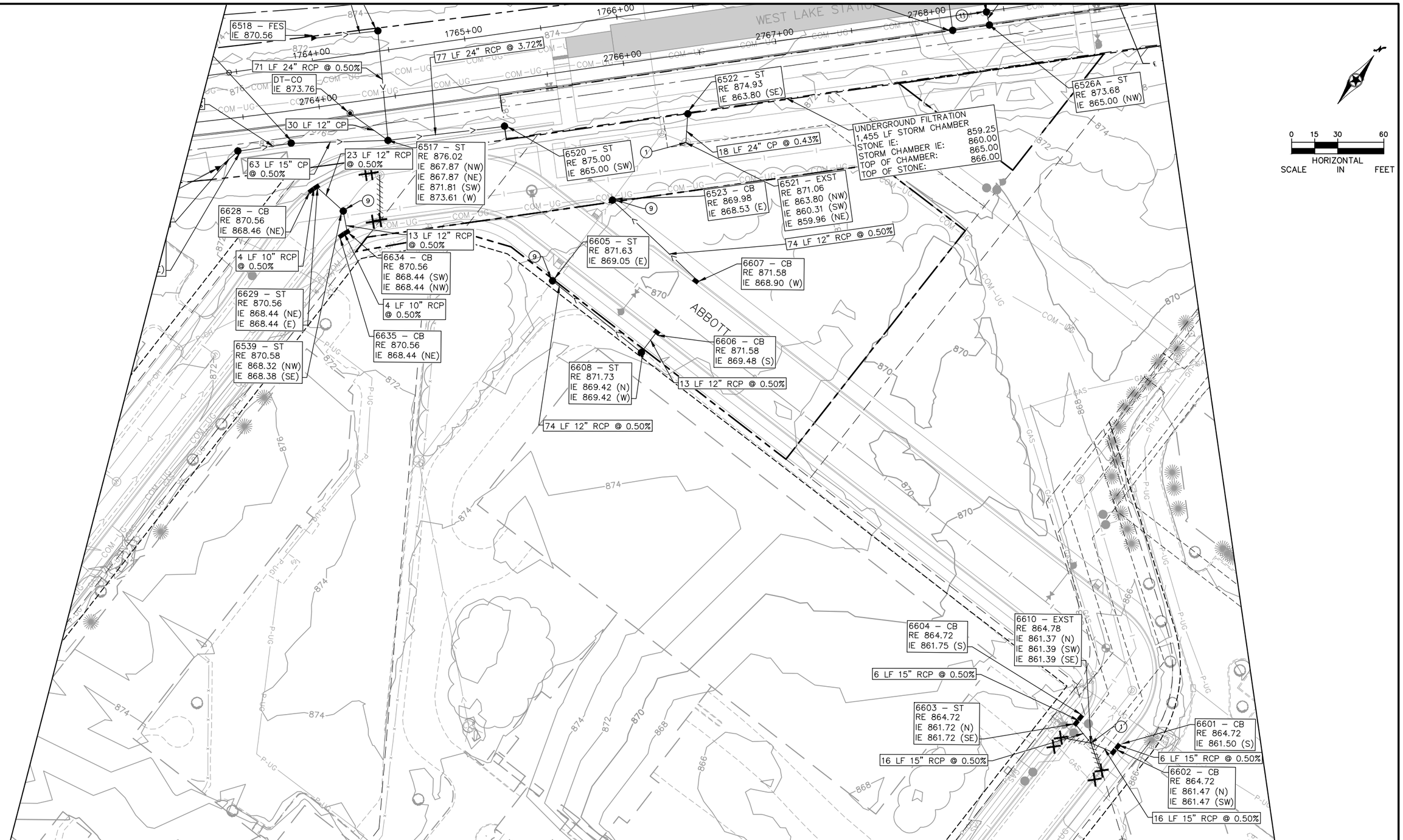
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2758+00 TO STA 2765+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 003

SHEET 56 OF 95

Sep, 21 2015 03:48 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

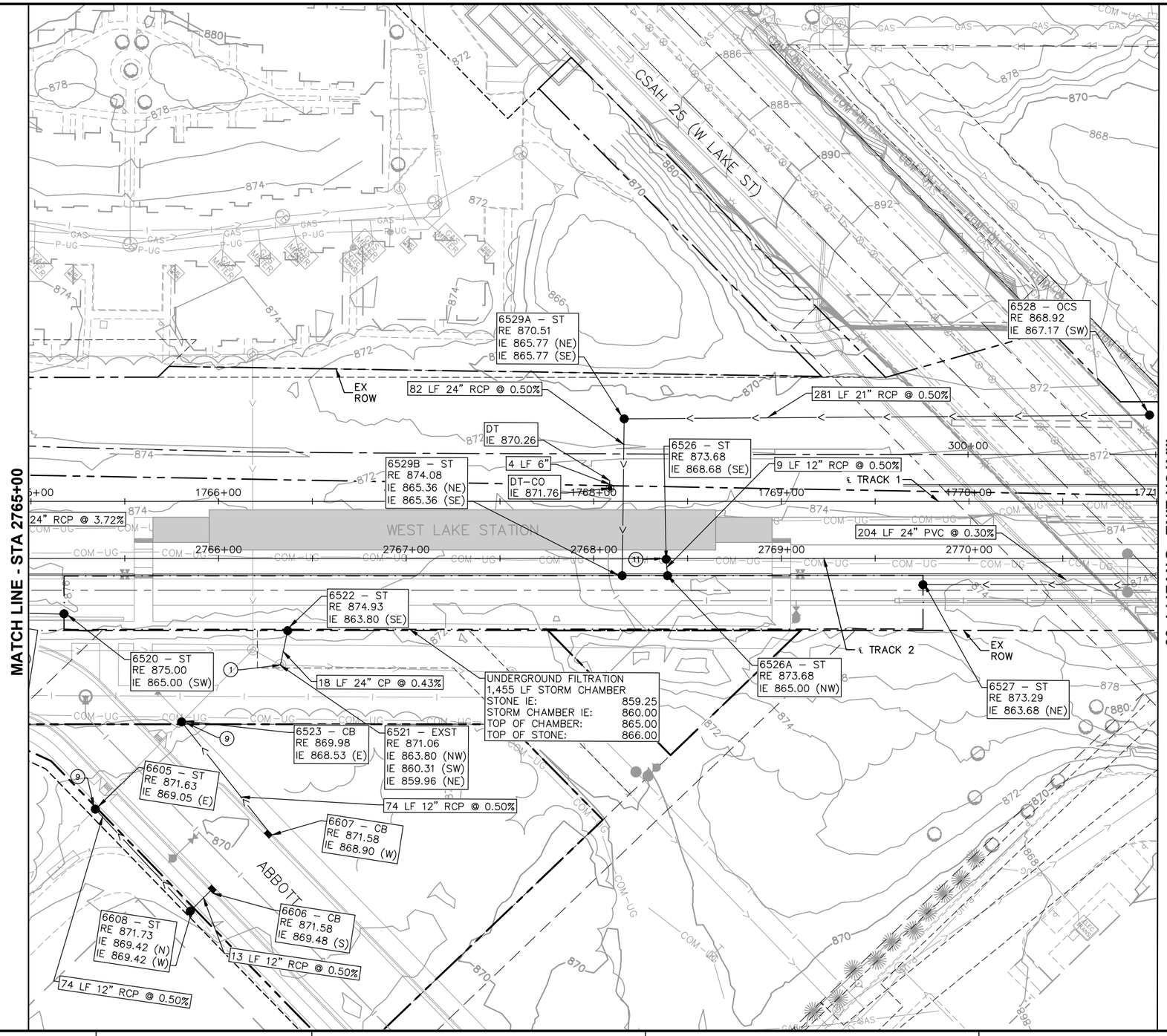
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
ABBOTT AVE

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 004

SHEET 57 OF 95

Sep, 21 2015 03:49 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST
Green Line LRT Extension

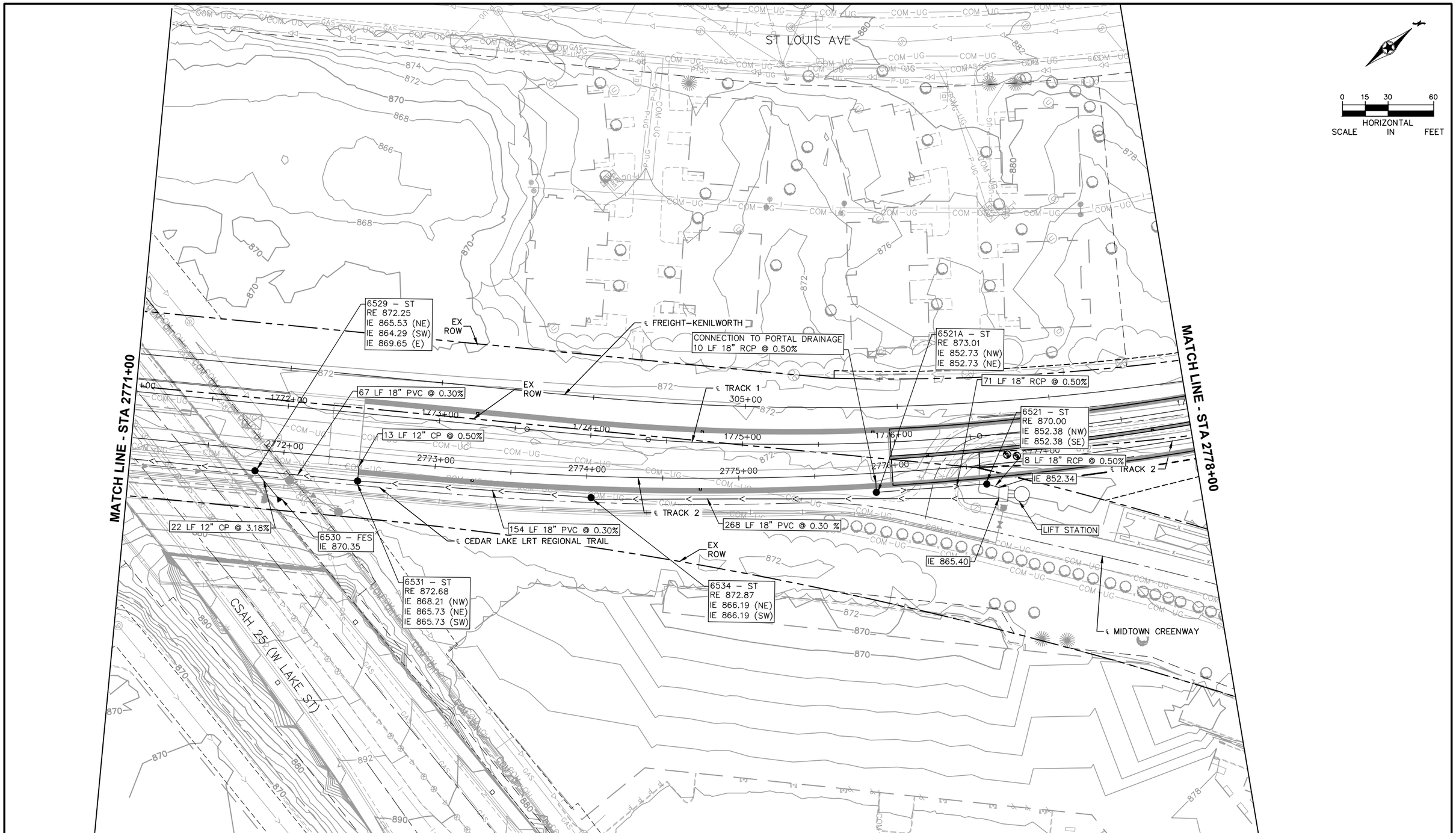
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2765+00 TO STA 2771+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 005

SHEET 58 OF 95

Sep. 21 2015 03:49 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2771+00 TO STA 2778+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 006

SHEET 59 OF 95

Sep, 21 2015 03:50 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498

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SOUTHWEST Green Line LRT Extension

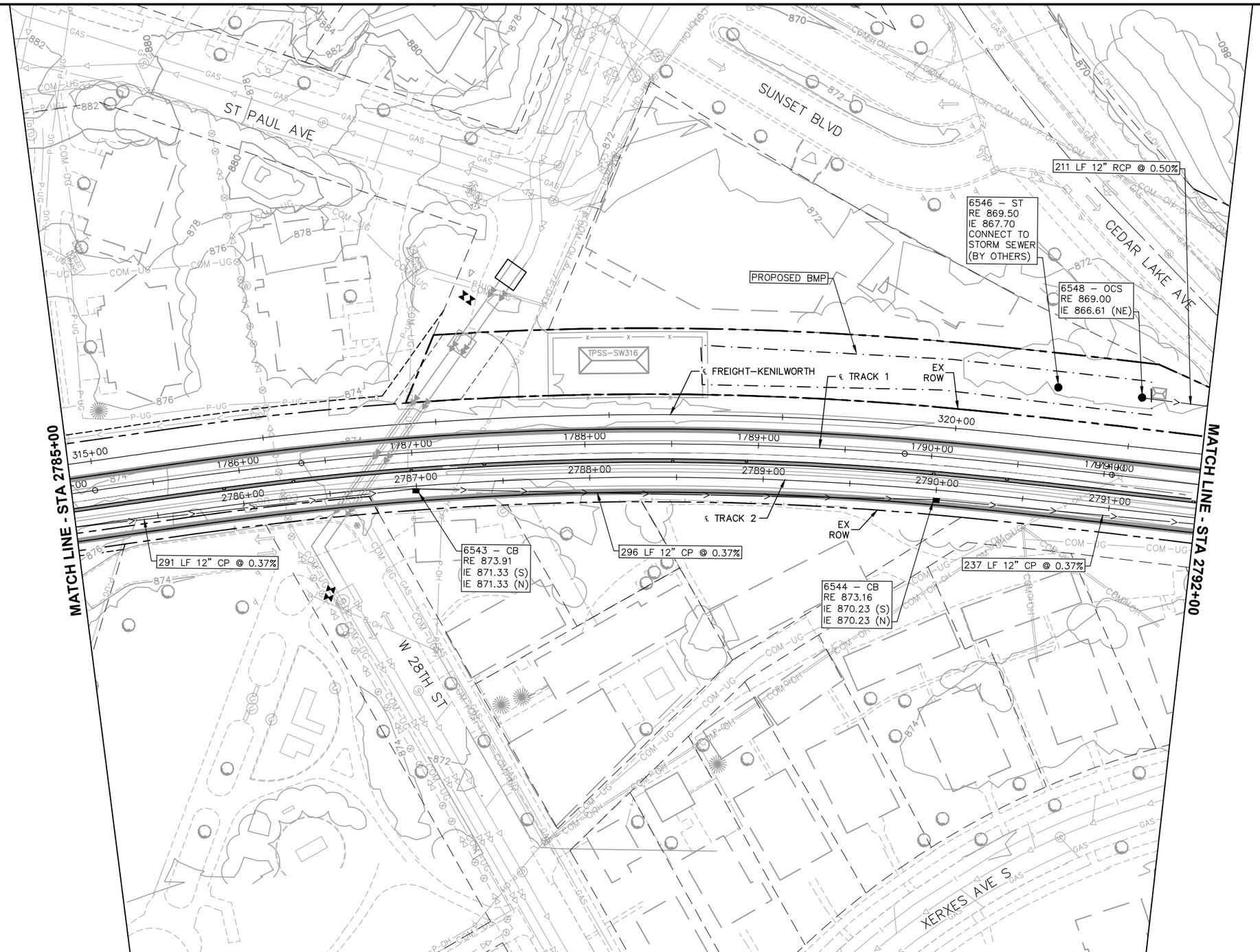
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2778+00 TO STA 2785+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 007

SHEET 60 OF 95

Sep, 21 2015 03:51 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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Green Line LRT Extension

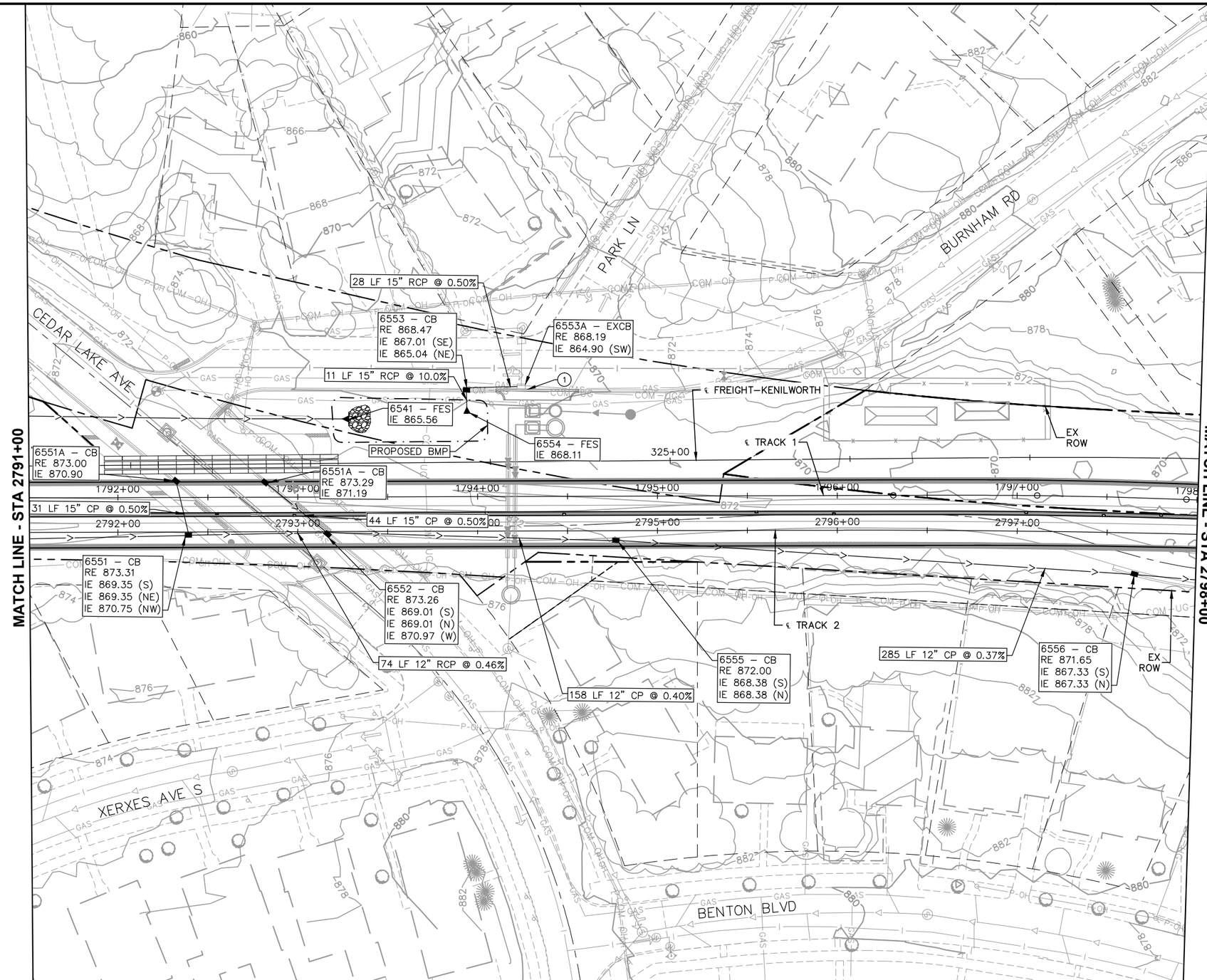
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2785+00 TO STA 2792+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 008

SHEET 61 OF 95

Sep, 21 2015 03:51 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



0 15 30 60
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Green Line LRT Extension

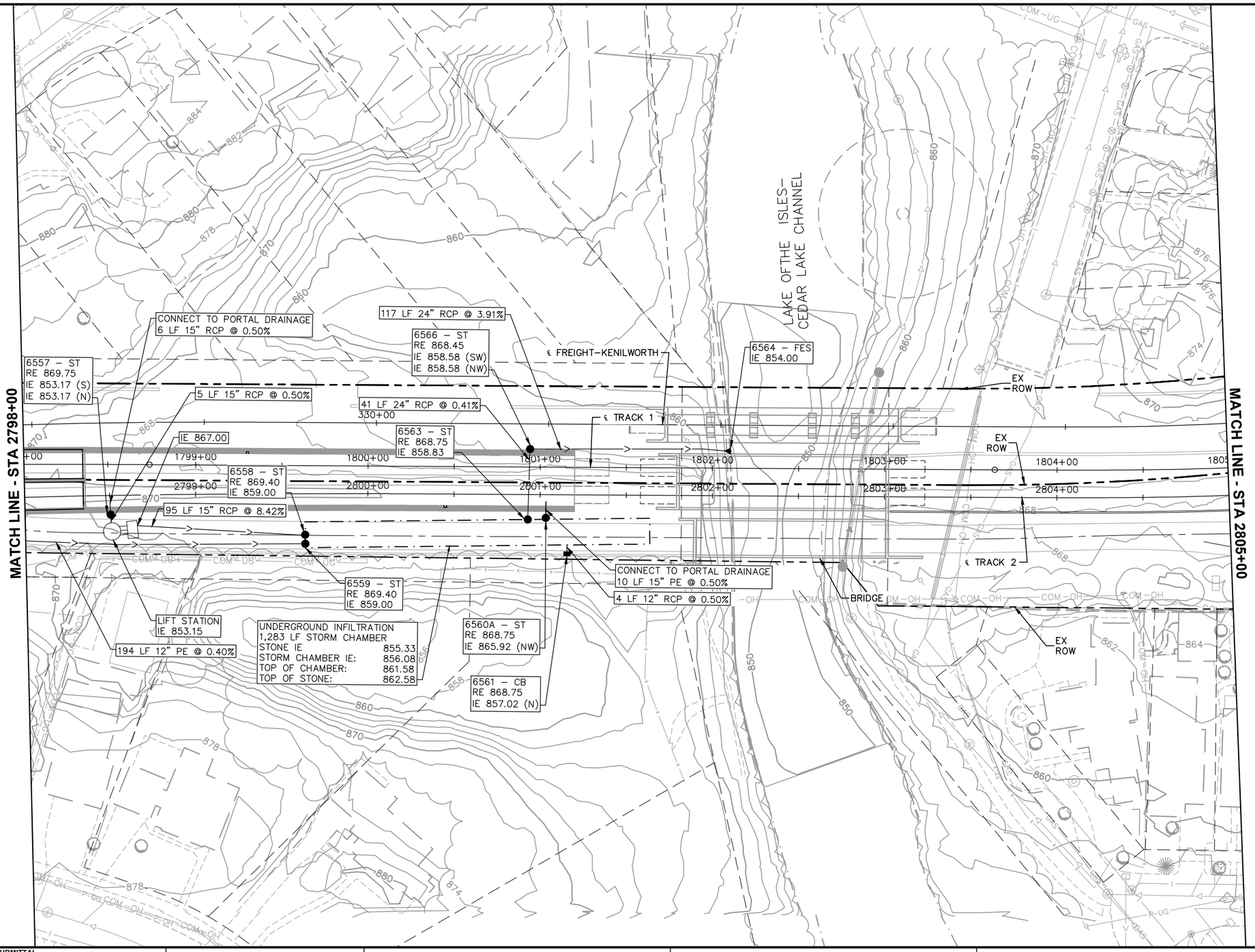
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2791+00 TO STA 2798+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 009

SHEET 62 OF 95

Sep, 21 2015 03:52 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

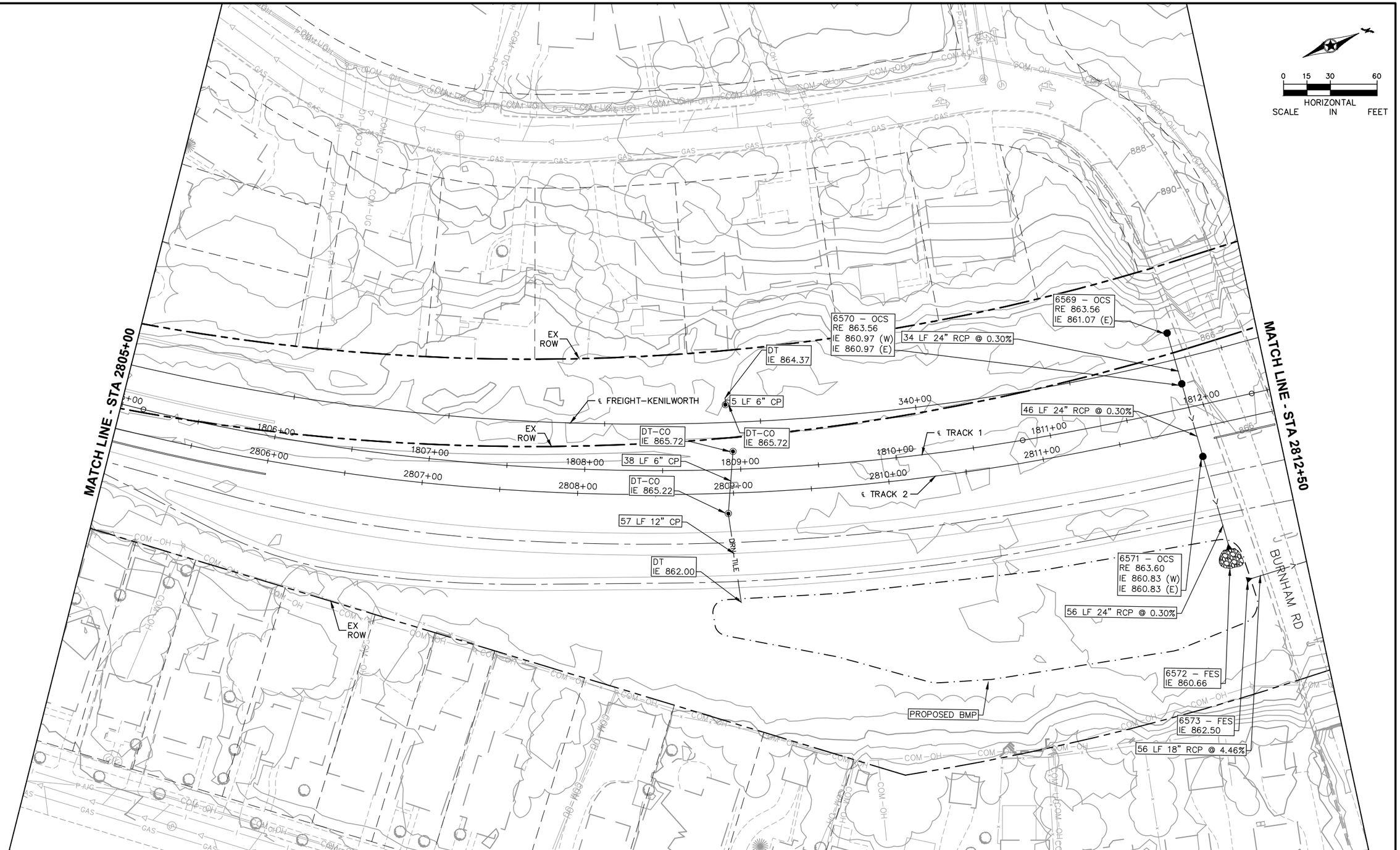
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2798+00 TO STA 2805+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 010

SHEET 63 OF 95

Sep, 21 2015 03:52 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST
Green Line LRT Extension

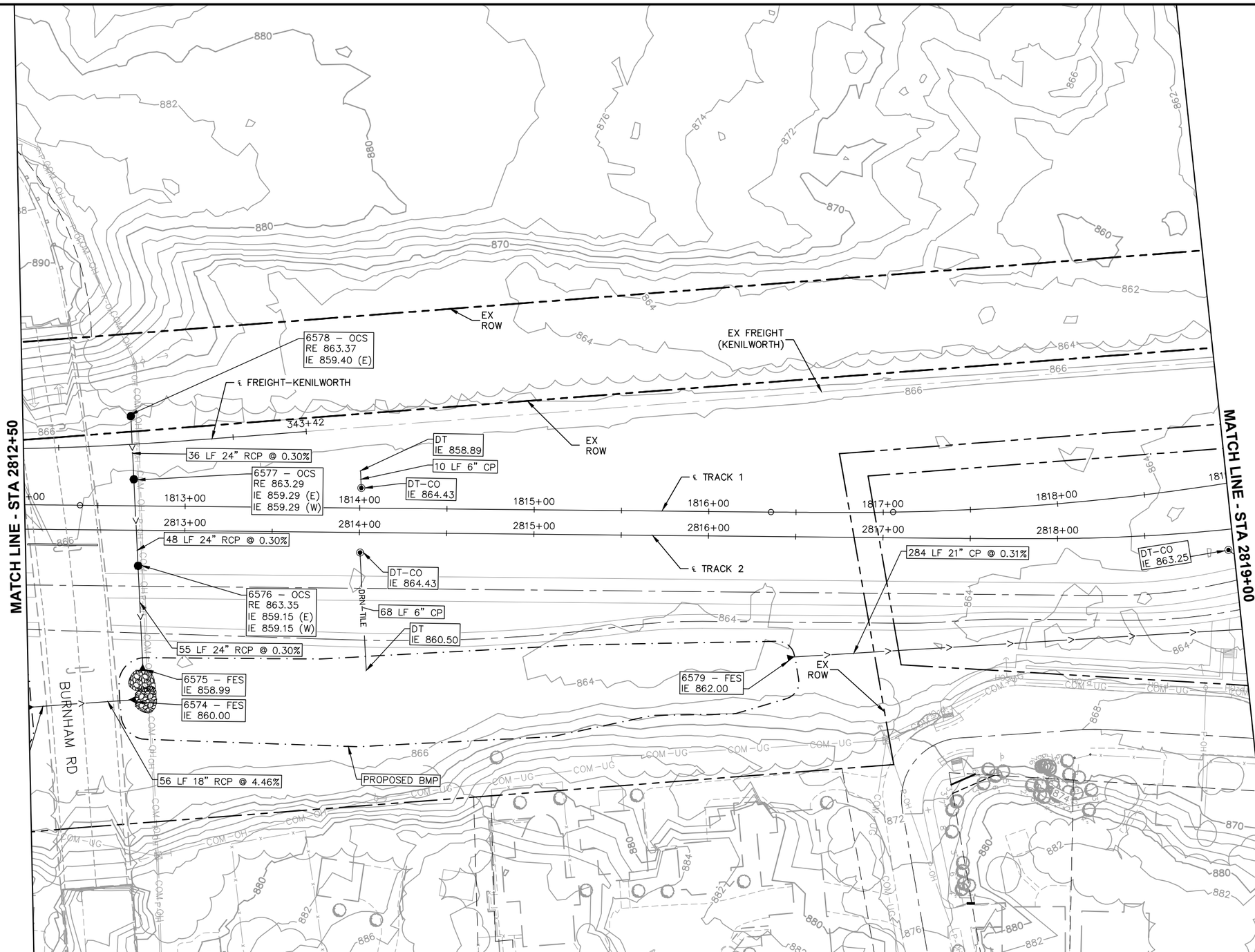
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2805+00 TO STA 2812+50

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 011

SHEET 64 OF 95

Sep, 21 2015 03:53 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

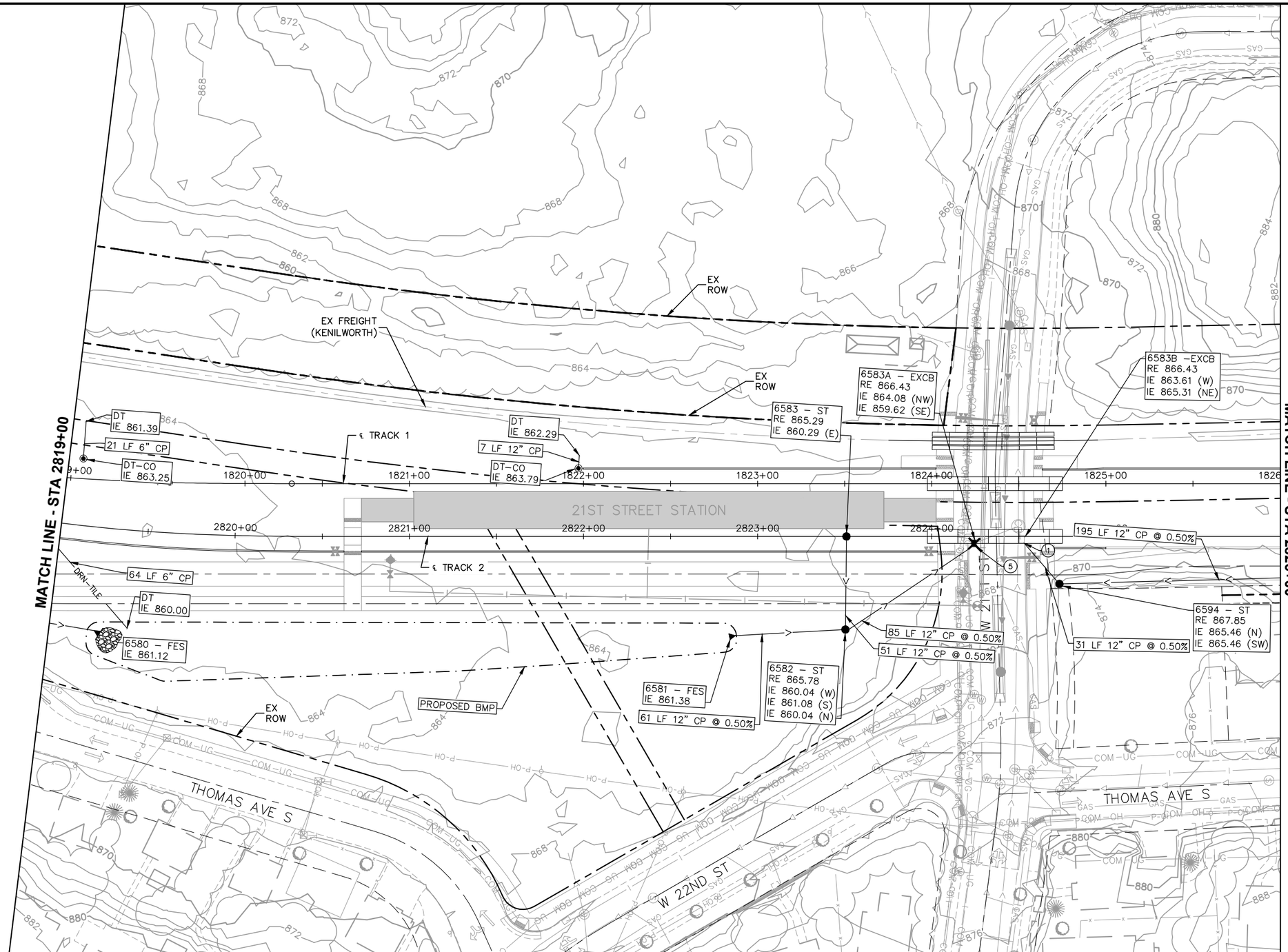
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2812+50 TO STA 2819+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 012

SHEET 65 OF 95

Sep. 21 2015 03:54 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

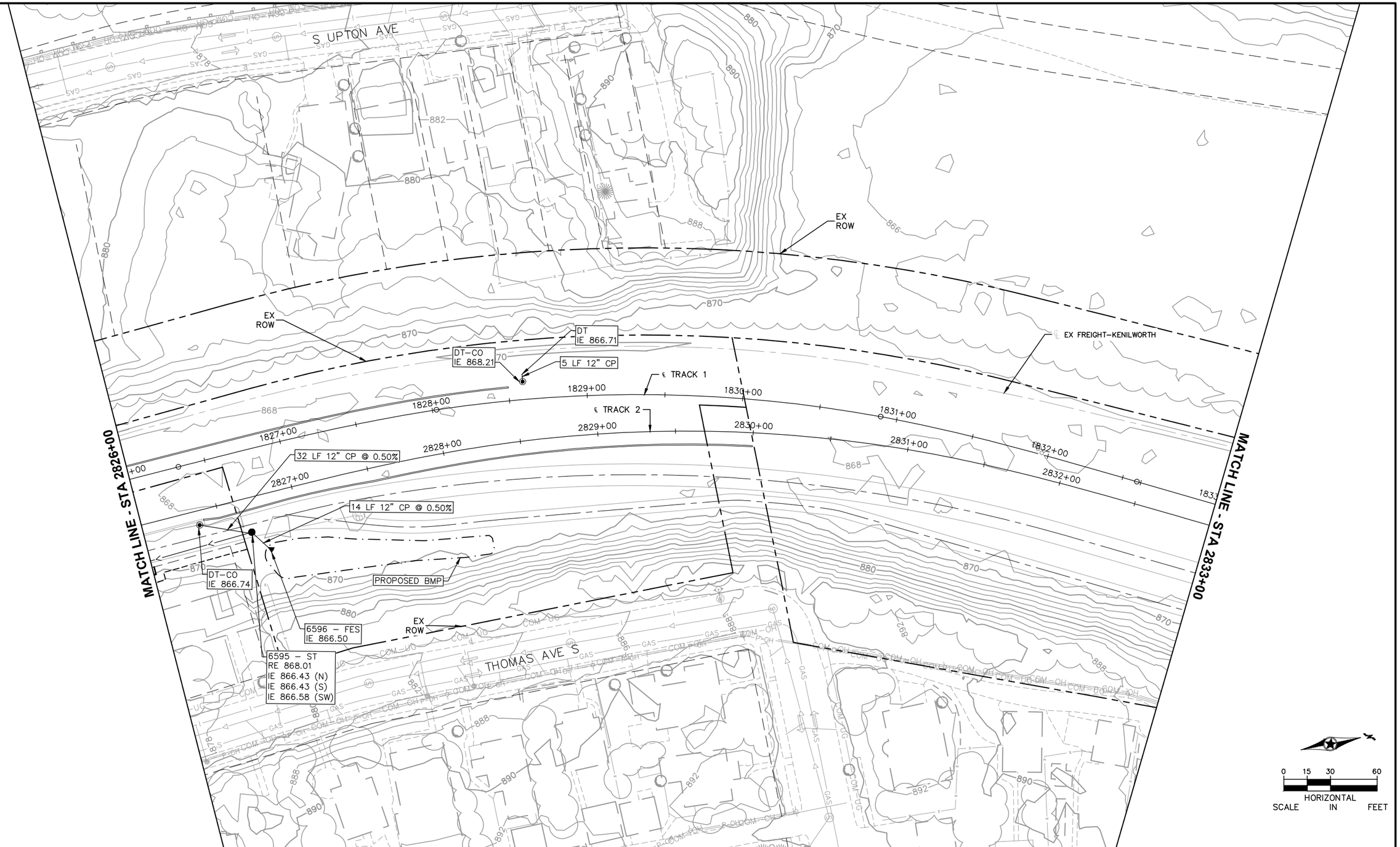
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2819+00 TO STA 2826+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 013

SHEET 66 OF 95

Sep. 21 2015 03:54 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

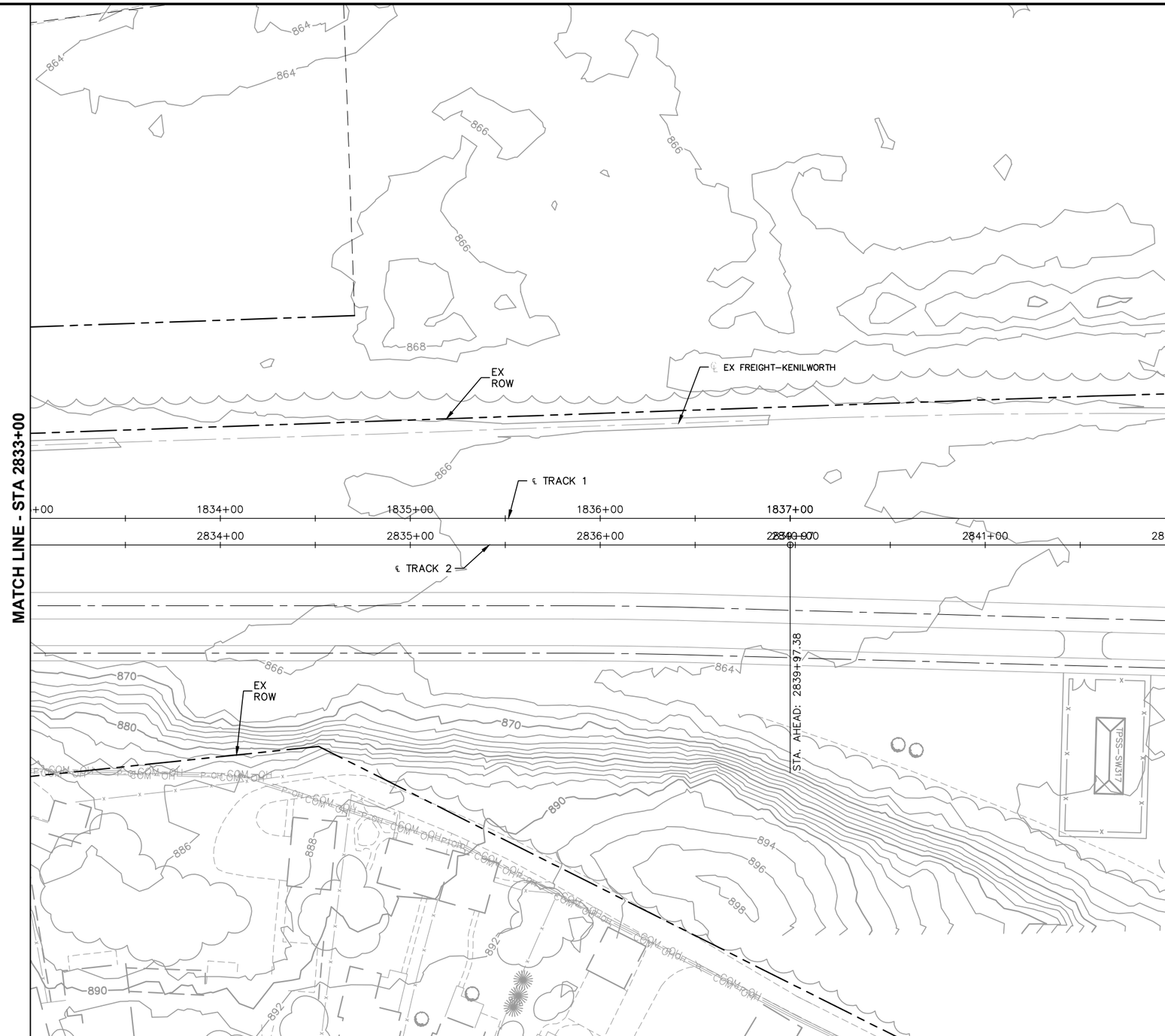
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2826+00 TO STA 2833+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 014

SHEET 67 OF 95

Sep, 21 2015 03:55 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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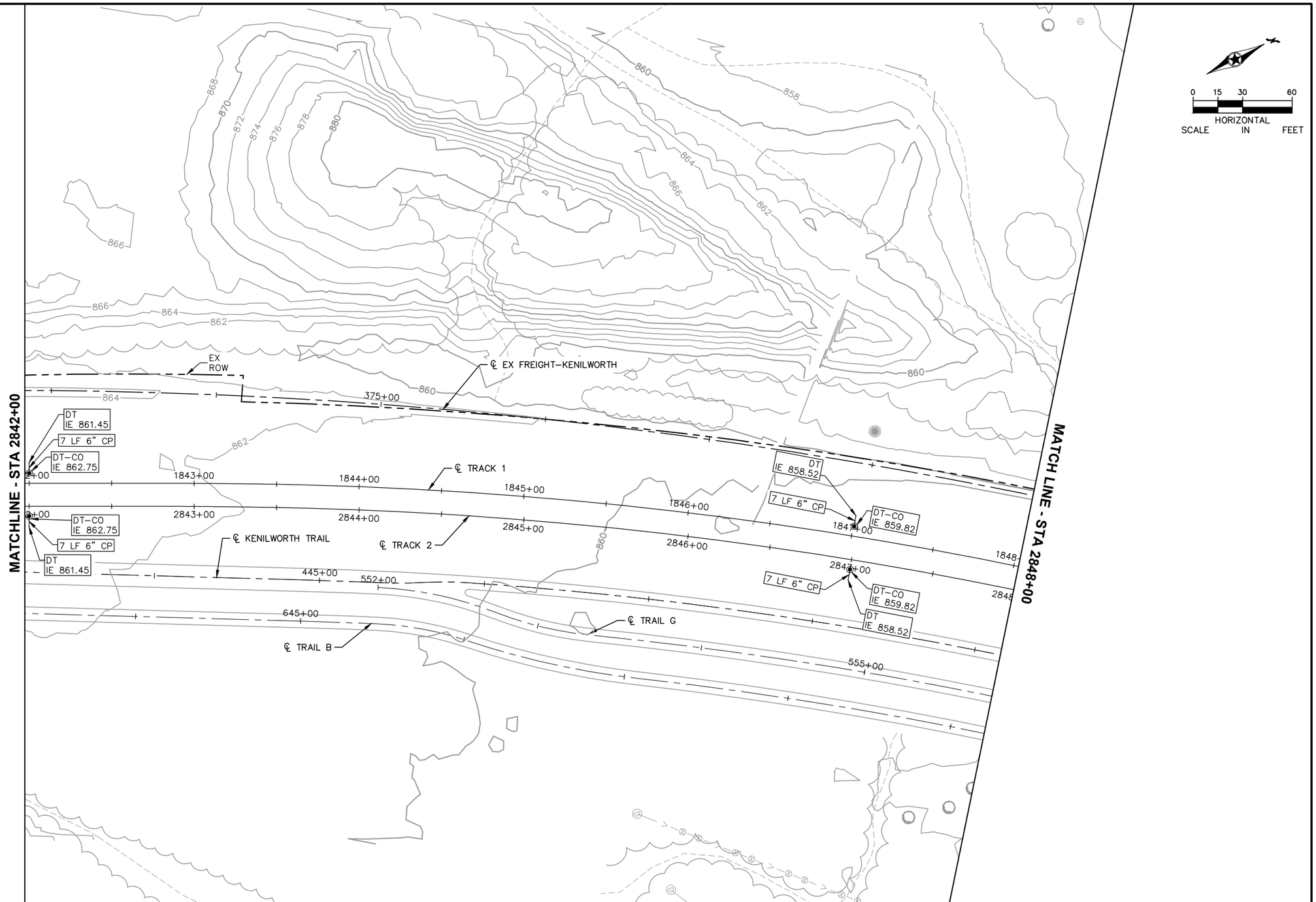
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2833+00 TO STA 2842+00

DISCIPLINE: DRAINAGE

SHEET NAME: E3-STM-PLN - 015

SHEET 68 OF 95

Sep. 21 2015 03:56 pm V:\3400_ADC\CAD\SEGMENT E3\PLAN SHEETS\STORM SEWER\E3-STM-PLN.dwg By: 498



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SOUTHWEST Green Line LRT Extension

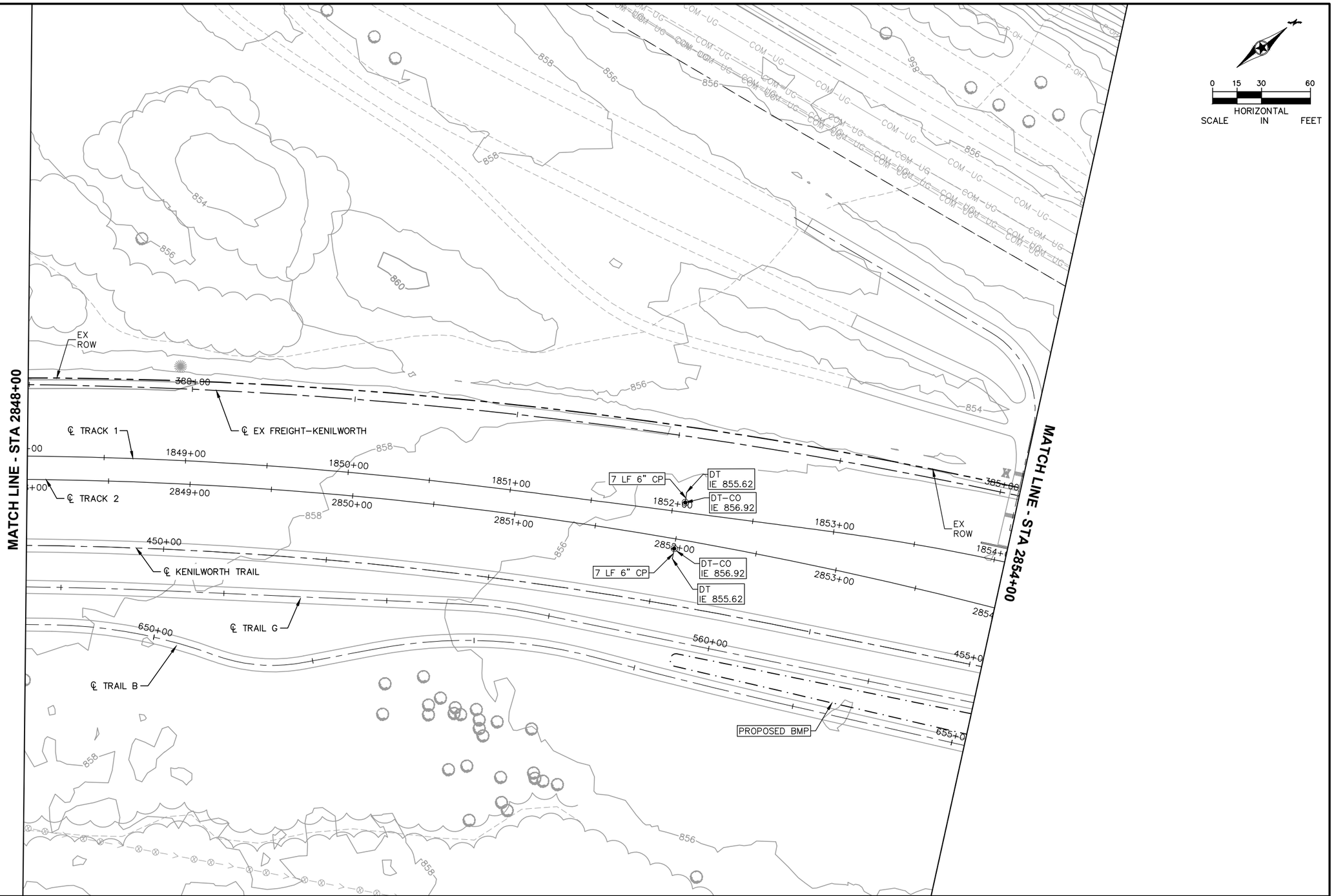
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2842+00 TO STA 2848+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 001

SHEET 69 OF 95

Sep, 21 2015 04:09 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

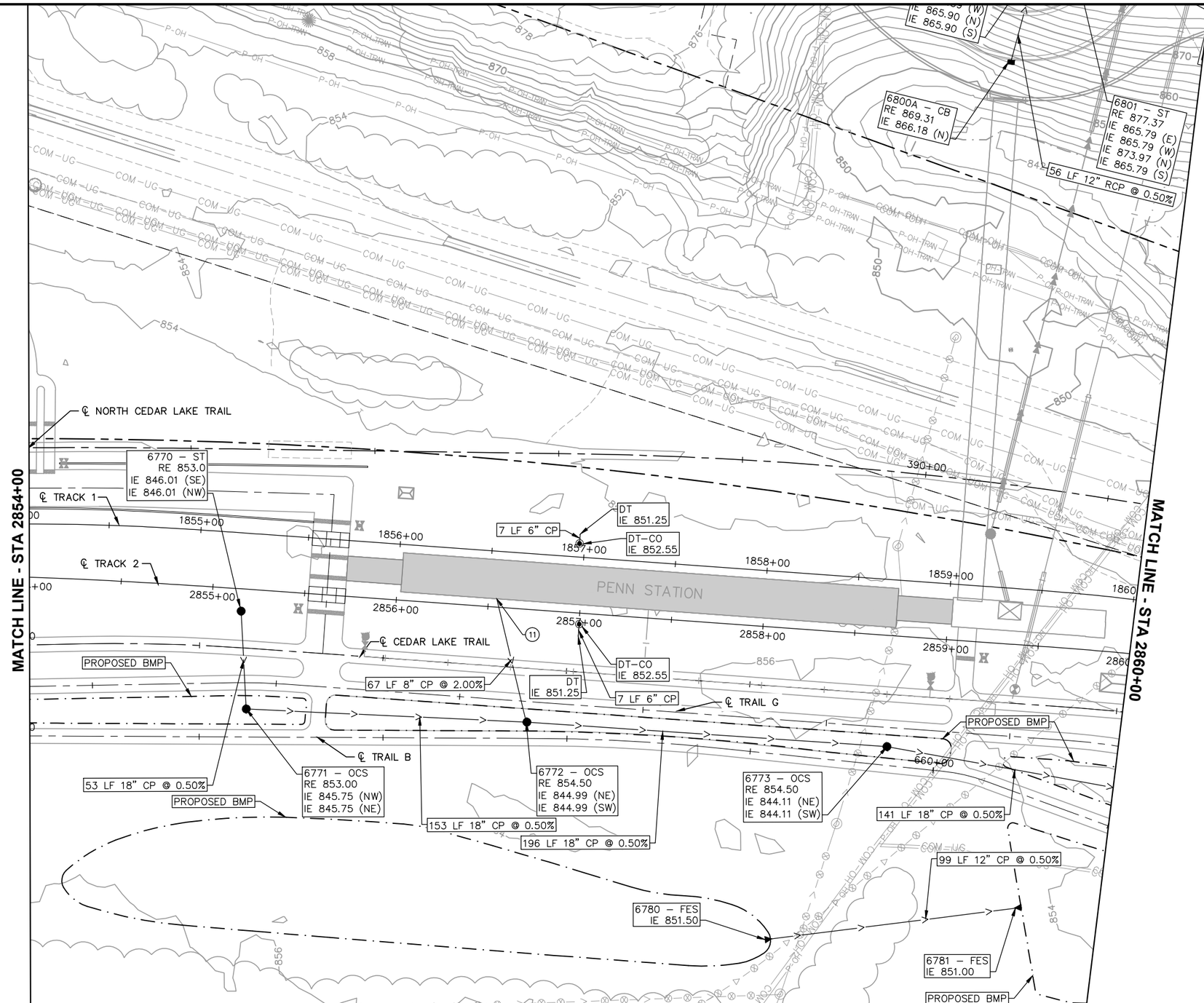
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2848+00 TO STA 2854+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 002

SHEET 70 OF 95

Sep. 21 2015 04:11 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

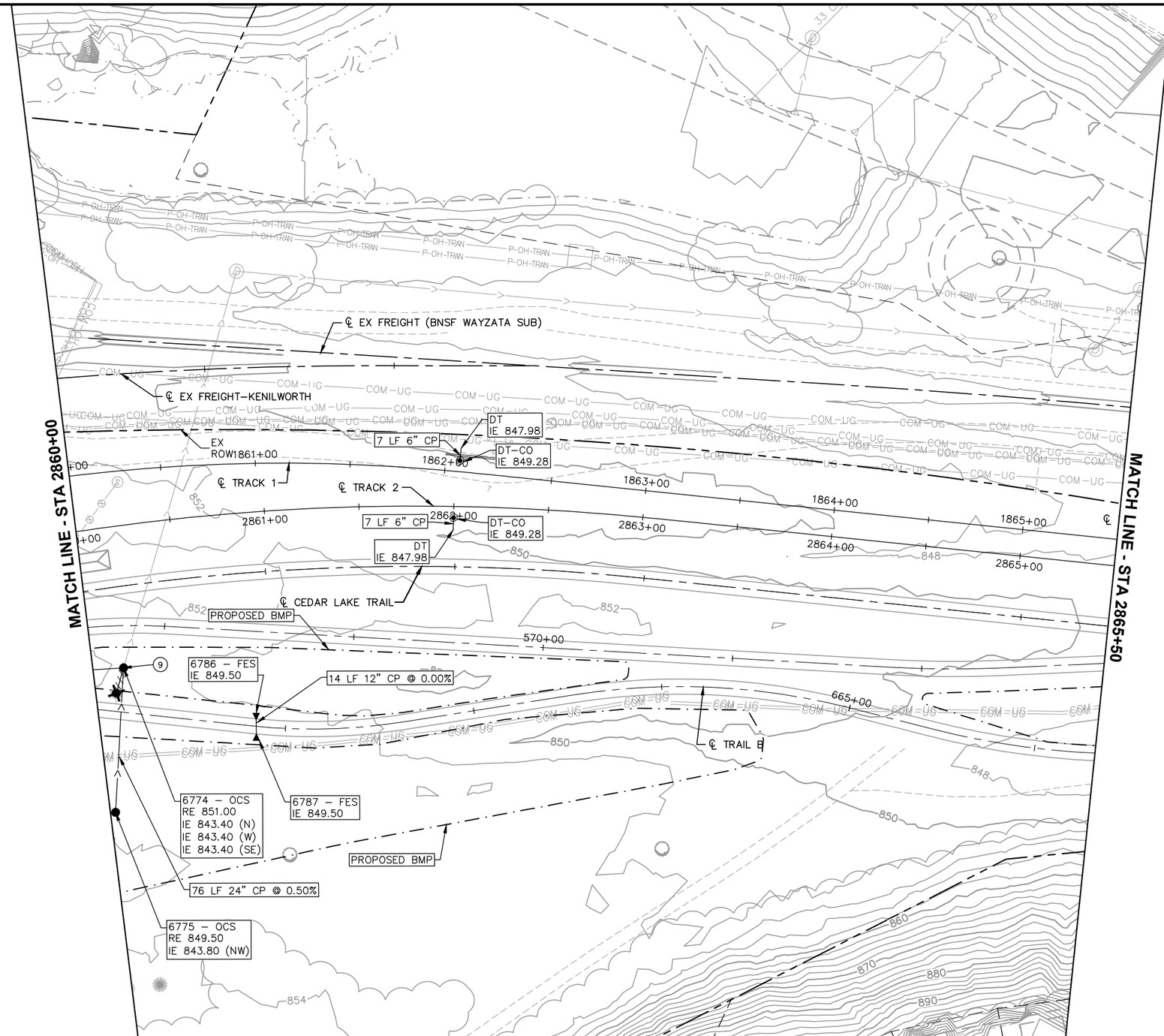
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2854+00 TO STA 2860+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 003

SHEET 71 OF 95

Sep, 21 2015 04:12 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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SOUTHWEST
Green Line LRT Extension

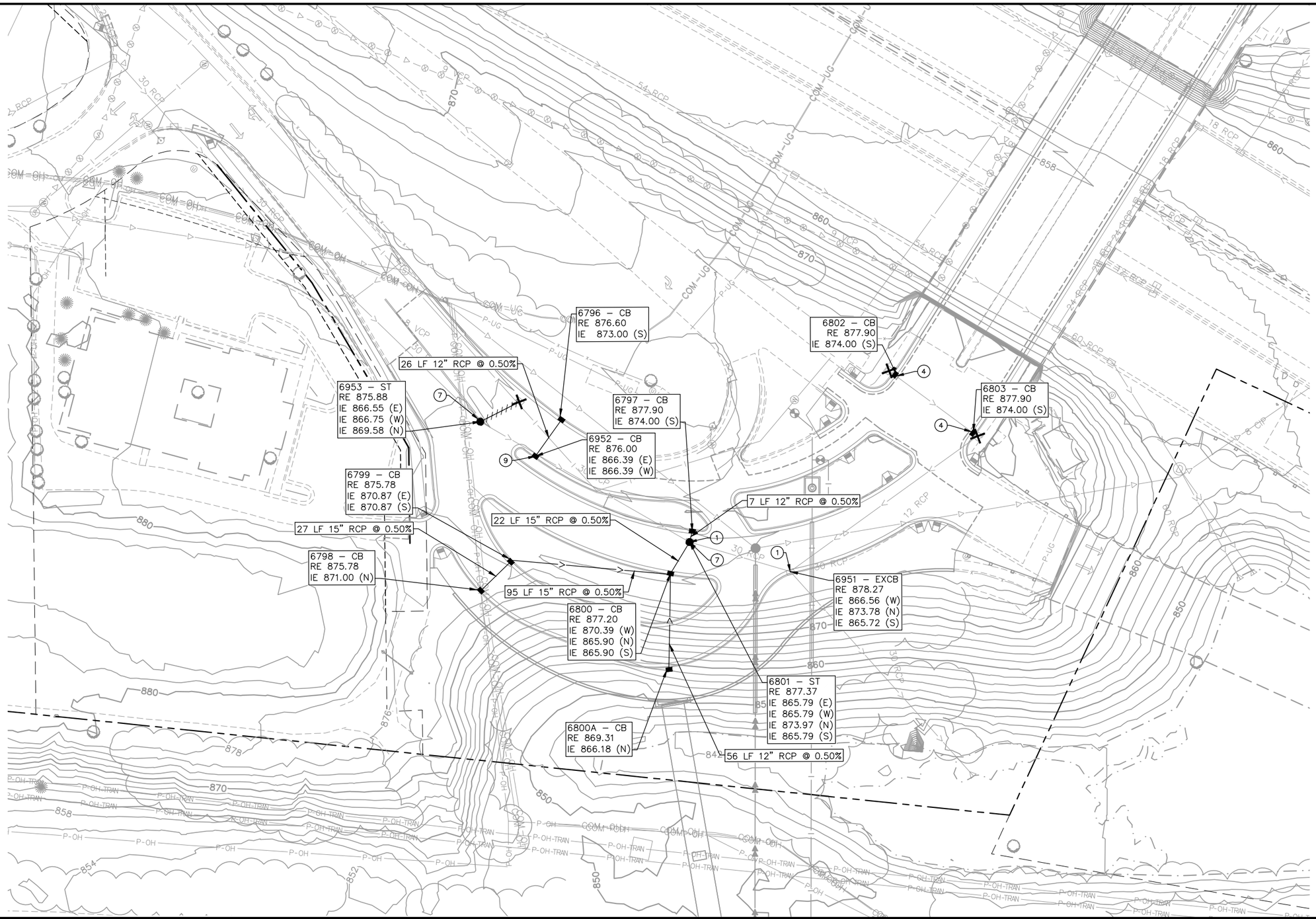
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2860+00 TO STA 2865+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 004

SHEET 72 OF 95

Sep, 21 2015 04:13 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

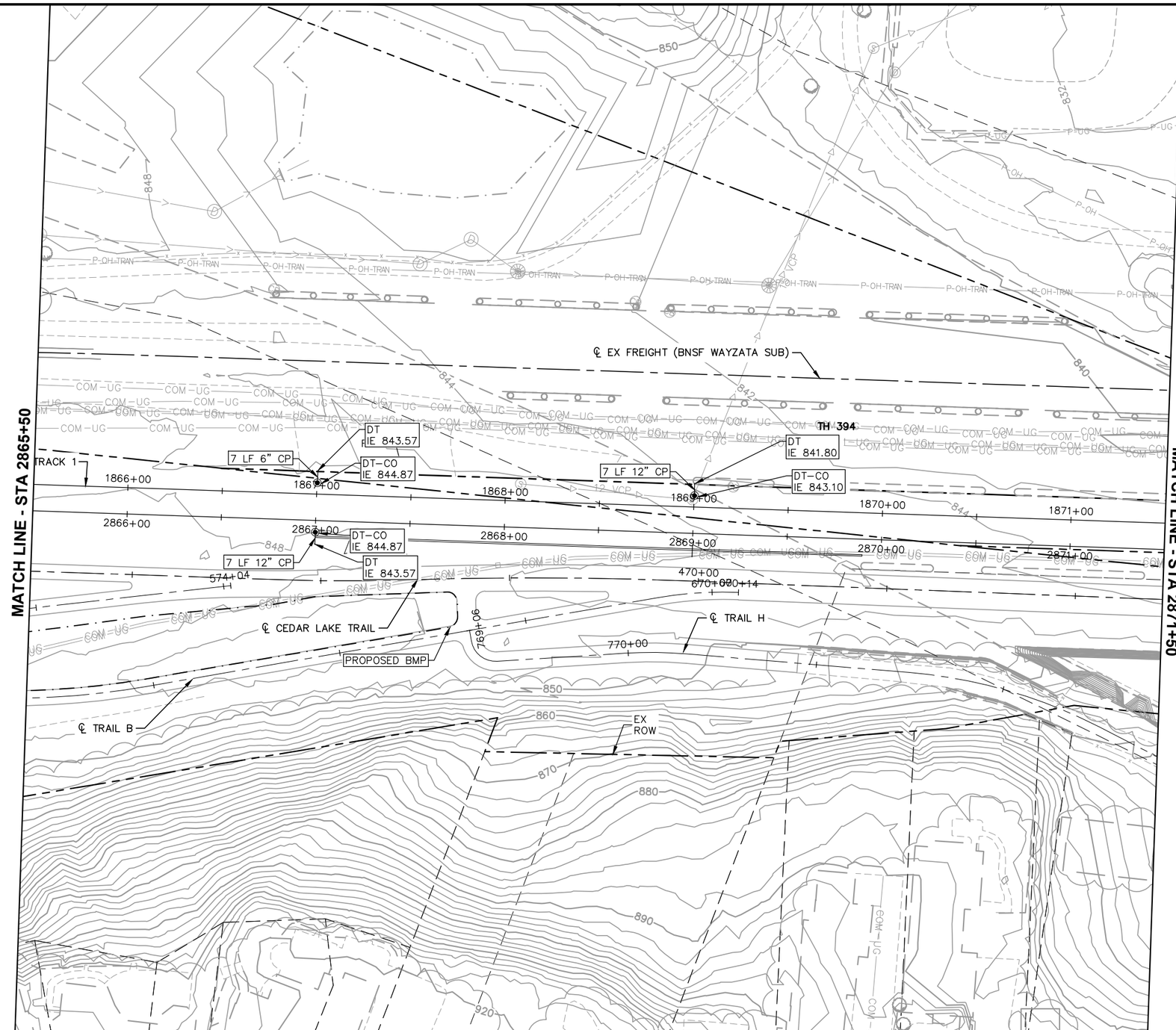
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
PENN DROP-OFF

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 005

SHEET 73 OF 95

Sep, 21 2015 04:15 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



0 15 30 60
HORIZONTAL
SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

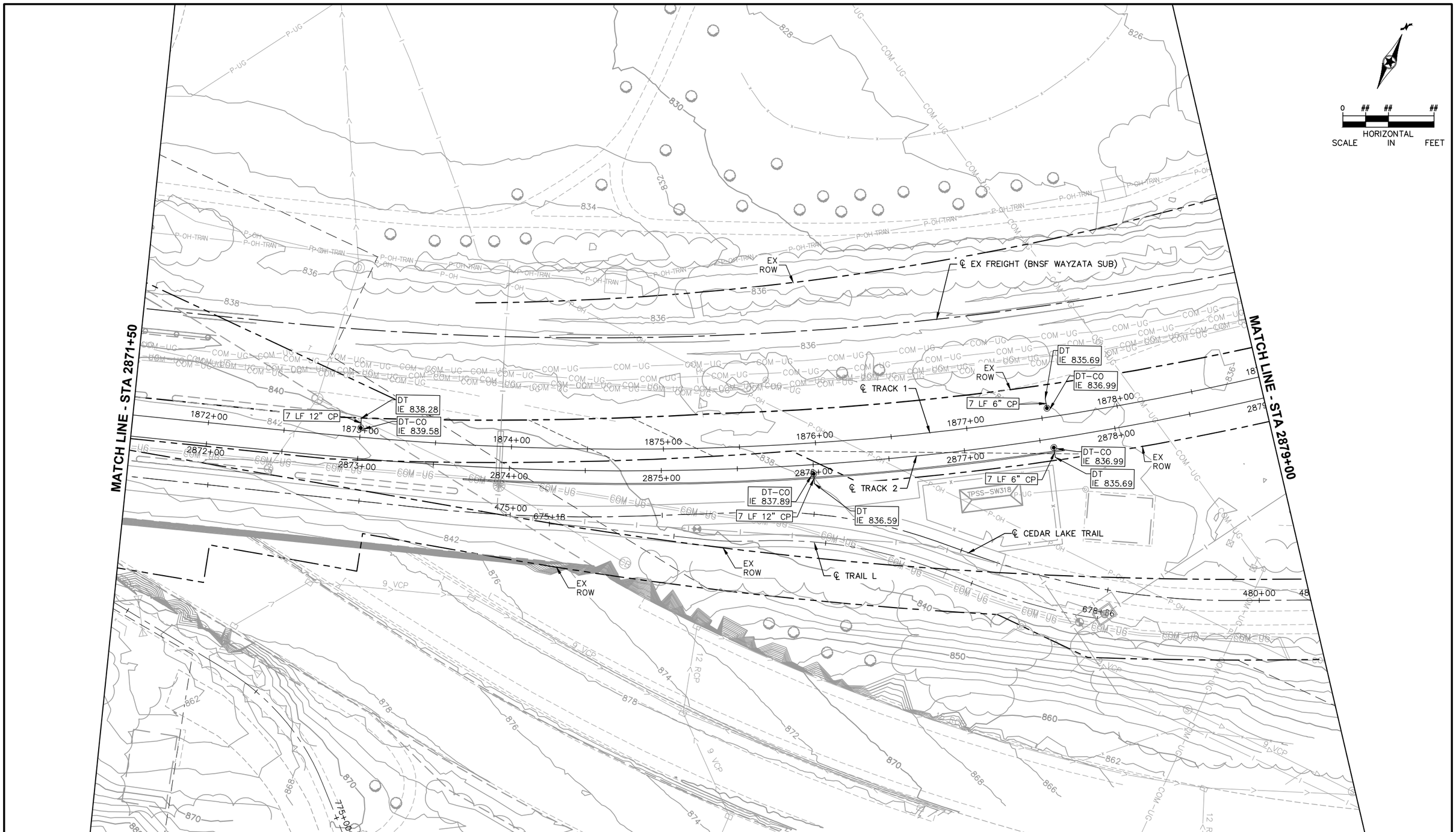
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2865+50 TO STA 2871+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 006

SHEET 74 OF 95

Sep, 21 2015 04:16 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

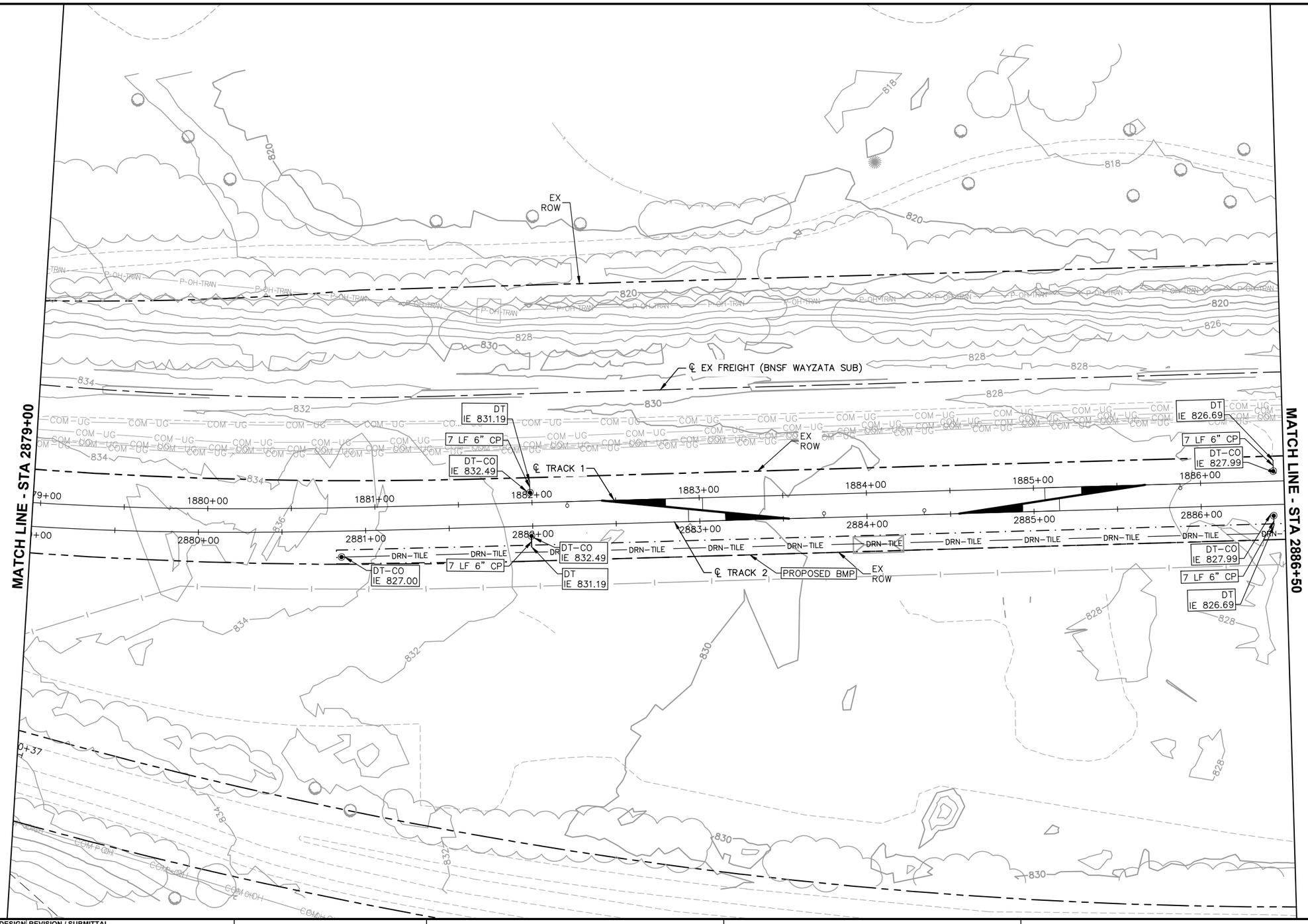
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2871+50 TO STA 2879+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 007

SHEET 75 OF 95

Sep, 21 2015 04:17 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

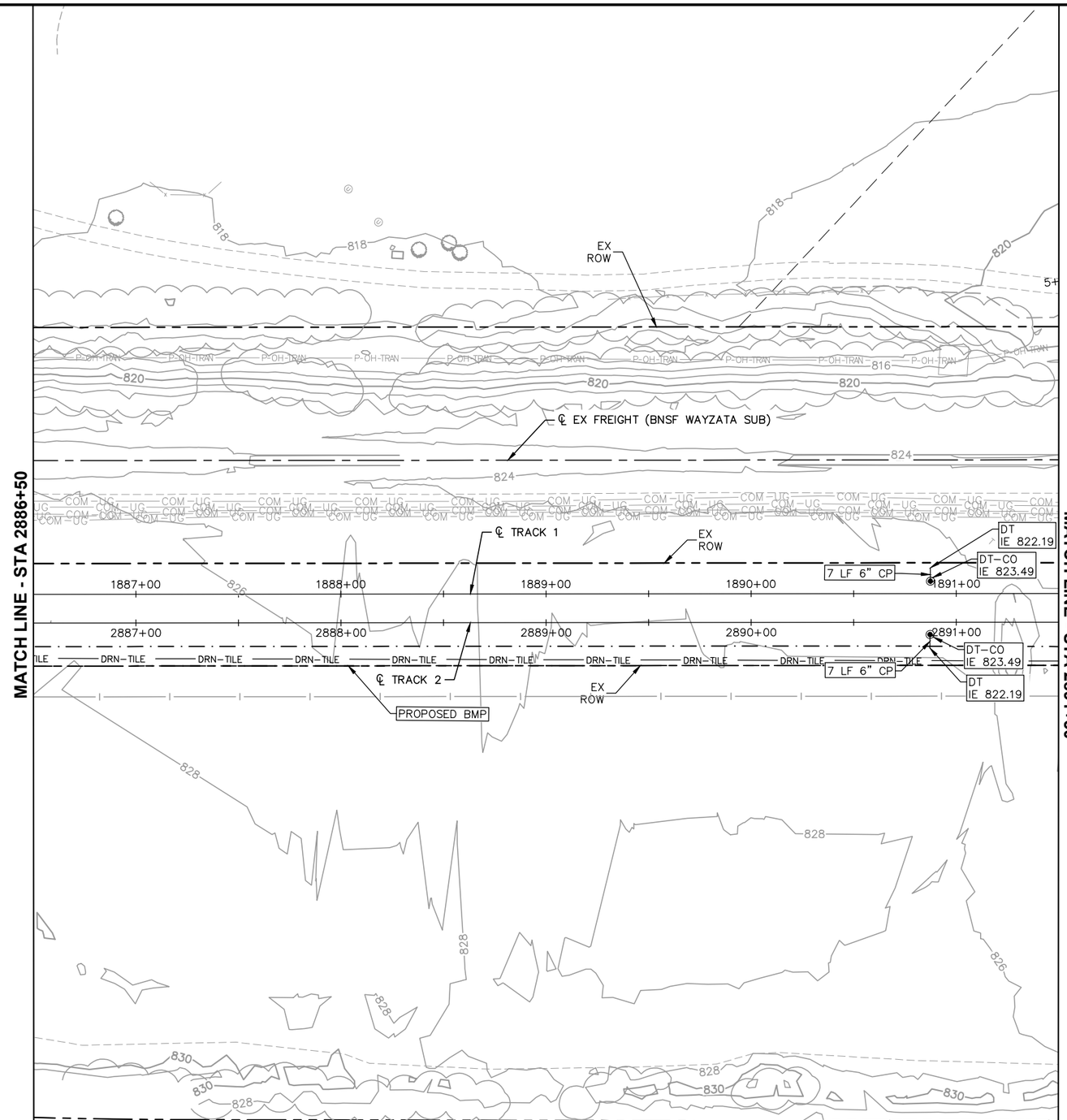
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2879+00 TO STA 2886+50

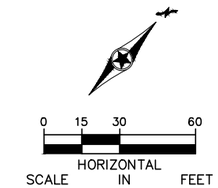
DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 008

SHEET 76 OF 95

Sep, 21 2015 04:19 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554





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SOUTHWEST Green Line LRT Extension

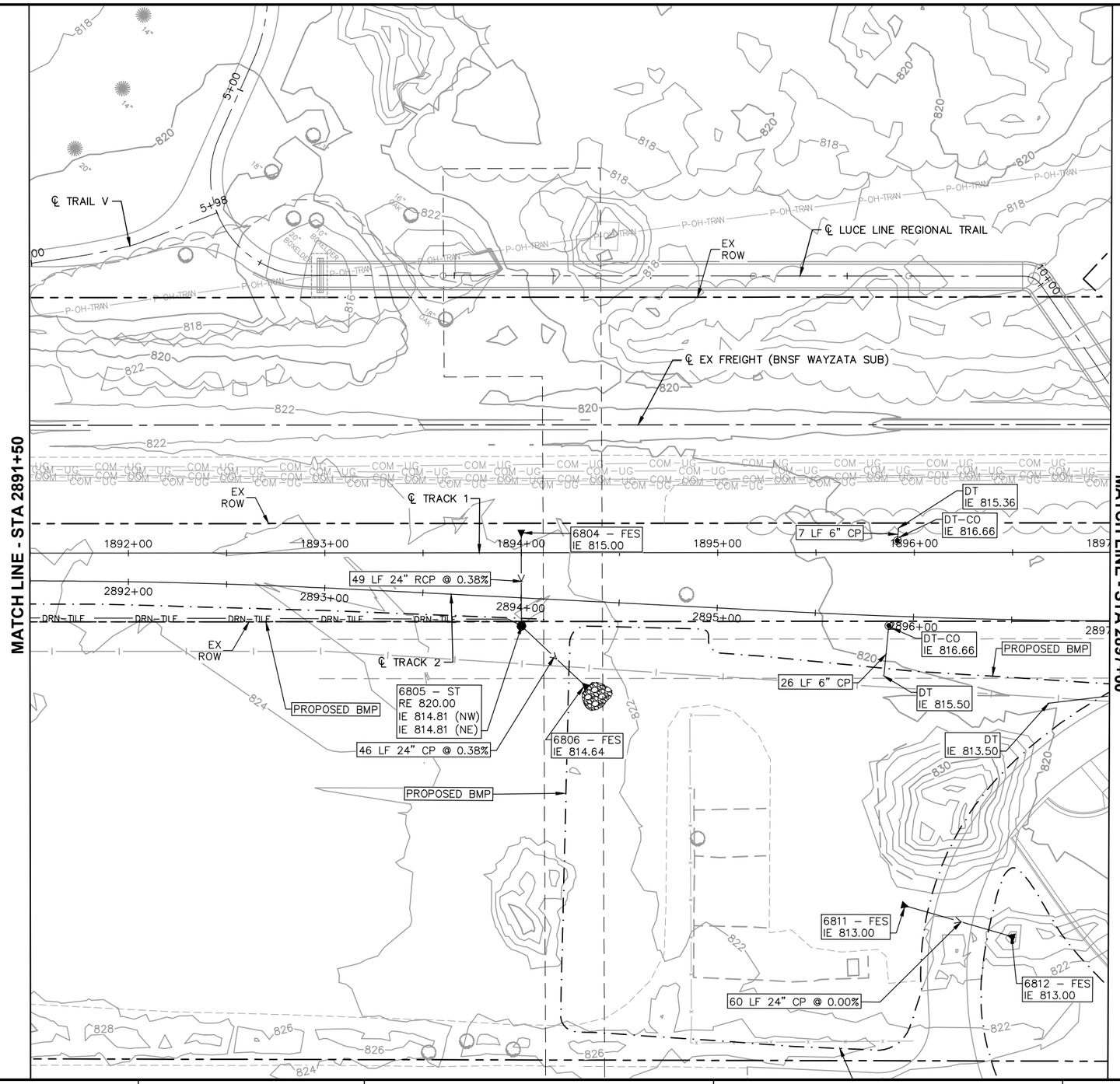
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2886+50 TO STA 2891+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 009

SHEET 77 OF 95

Sep, 21 2015 04:20 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

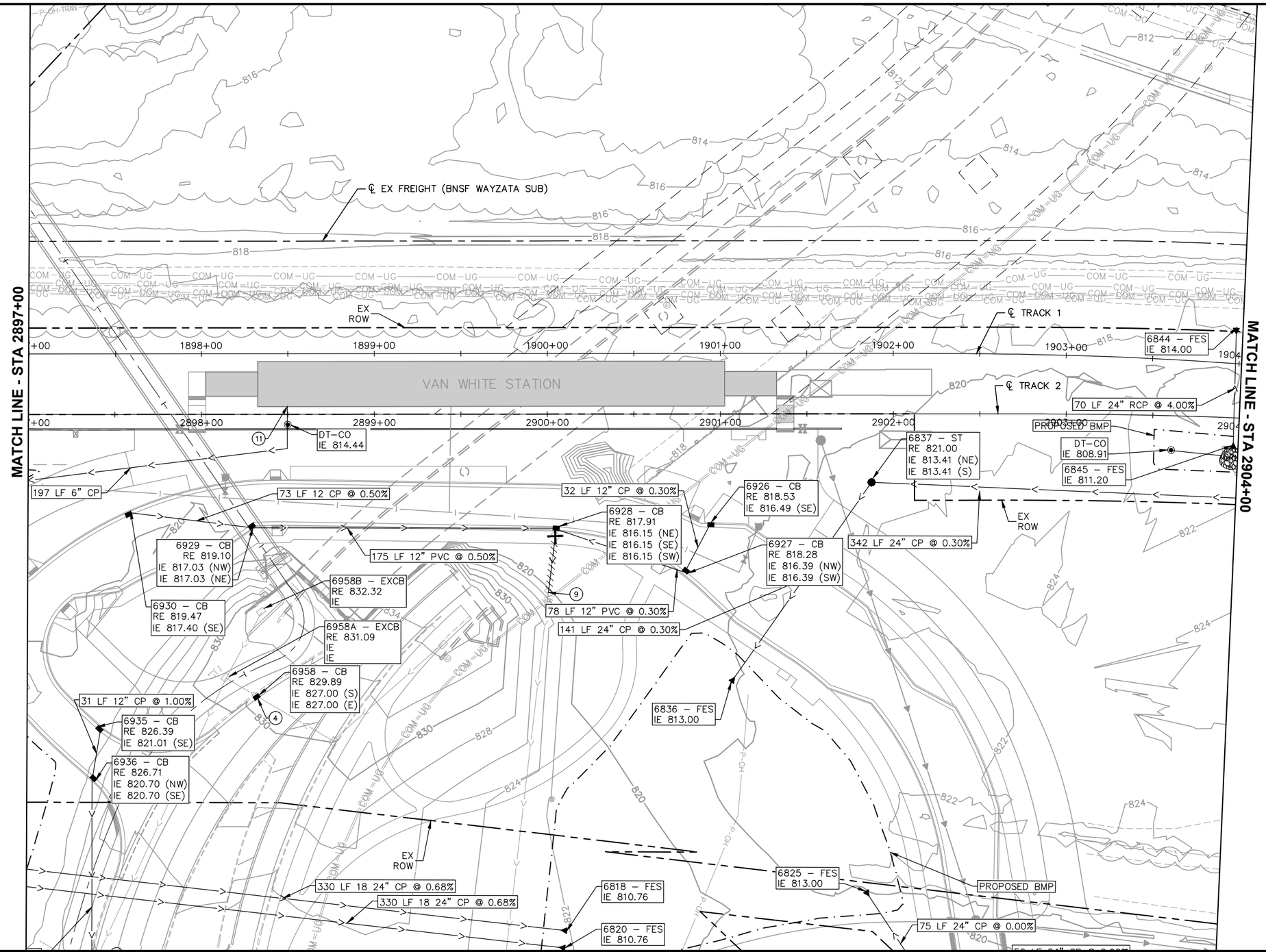
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2891+50 TO STA 2897+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 010

SHEET 78 OF 95

Sep, 21 2015 04:20 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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SOUTHWEST Green Line LRT Extension

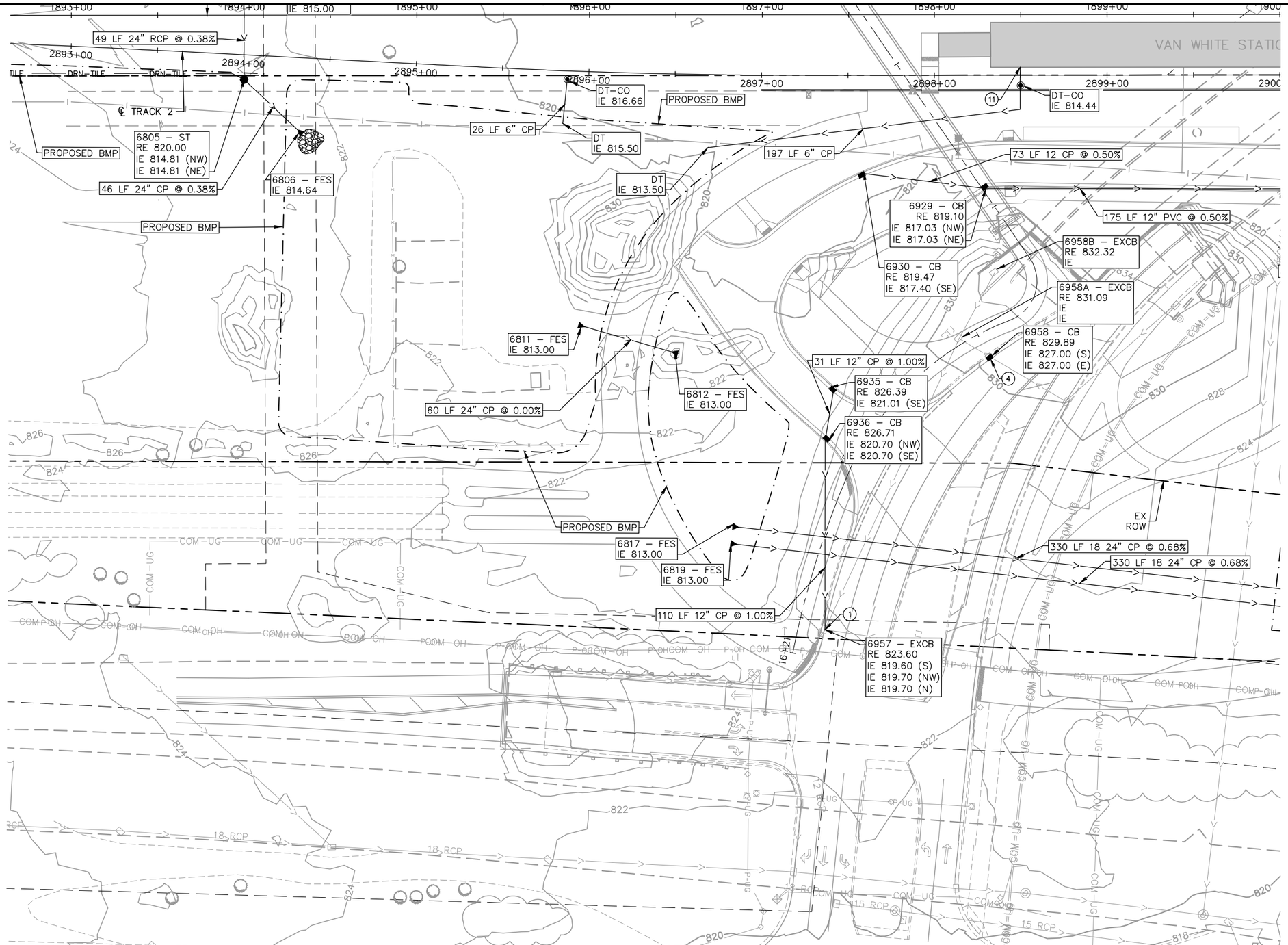
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2897+00 TO STA 2904+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 011

SHEET 79 OF 95

Sep, 21 2015 04:21 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

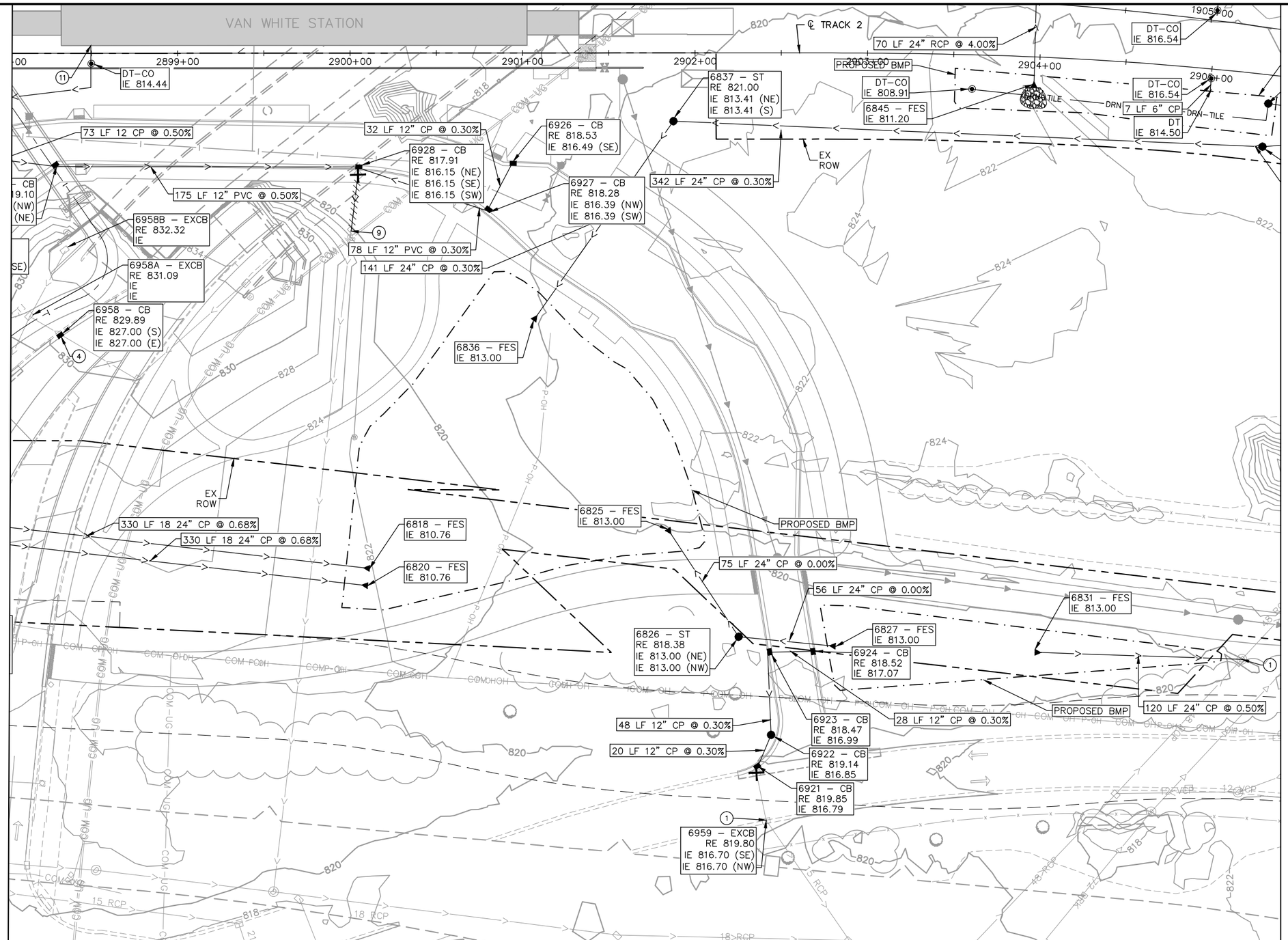
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
VAN WHITE DROP OFF SHEET 1

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 012

SHEET 80 OF 95

Sep, 21 2015 04:22 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

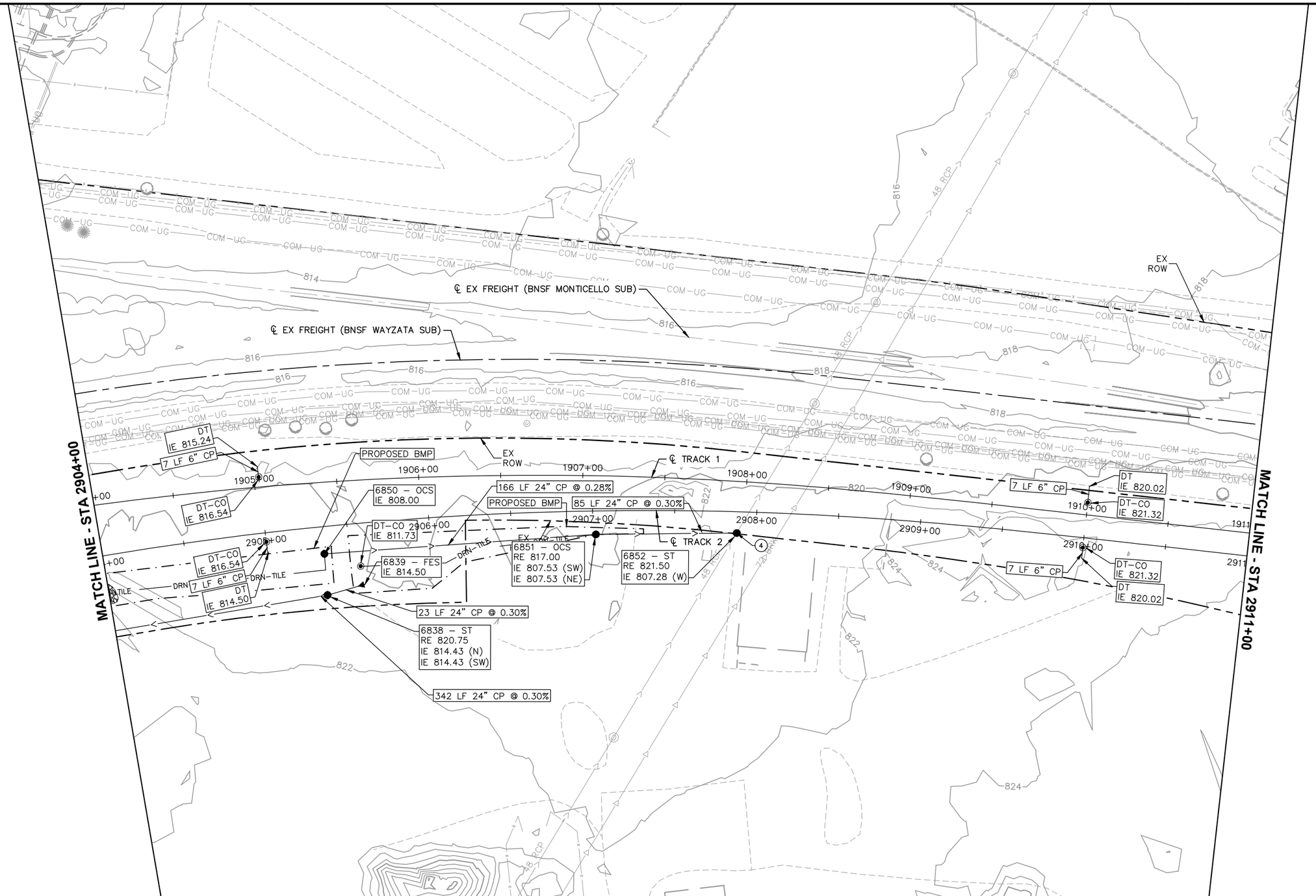
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
VAN WHITE DROP OFF SHEET 2

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 013

SHEET 81 OF 95

Sep, 21 2015 04:23 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

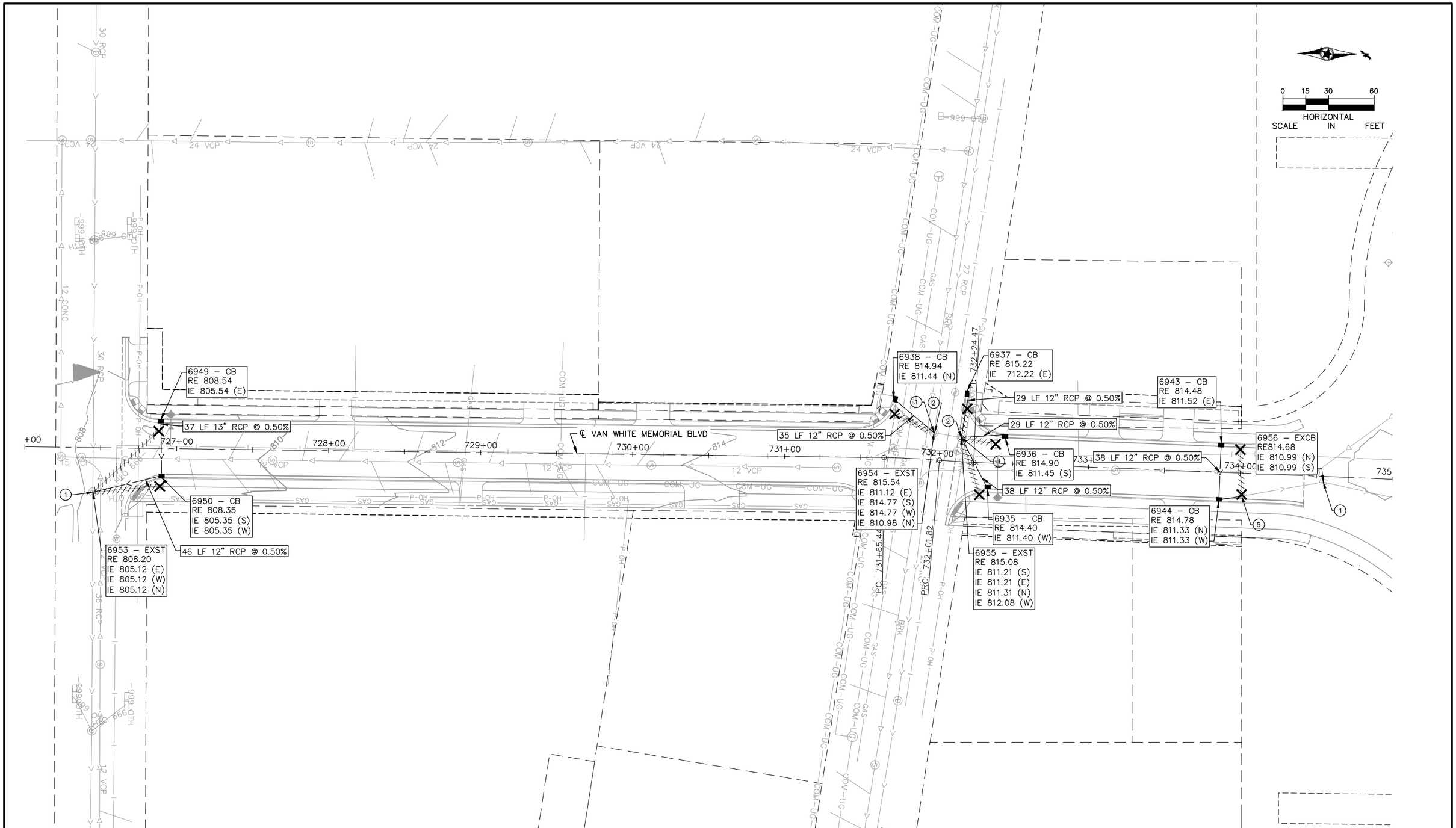
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2904+00 TO STA 2911+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 014

SHEET 82 OF 95

Sep, 21 2015 04:24 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
VAN WHITE BLVD

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 015

SHEET 83 OF 95

Sep, 21 2015 04:25 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554

0 15 30 60
HORIZONTAL
SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2911+00 TO STA 2918+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 016

SHEET 84 OF 95

Sep. 21 2015 04:25 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554

0 15 30 60
HORIZONTAL
SCALE IN FEET

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SOUTHWEST
Green Line LRT Extension

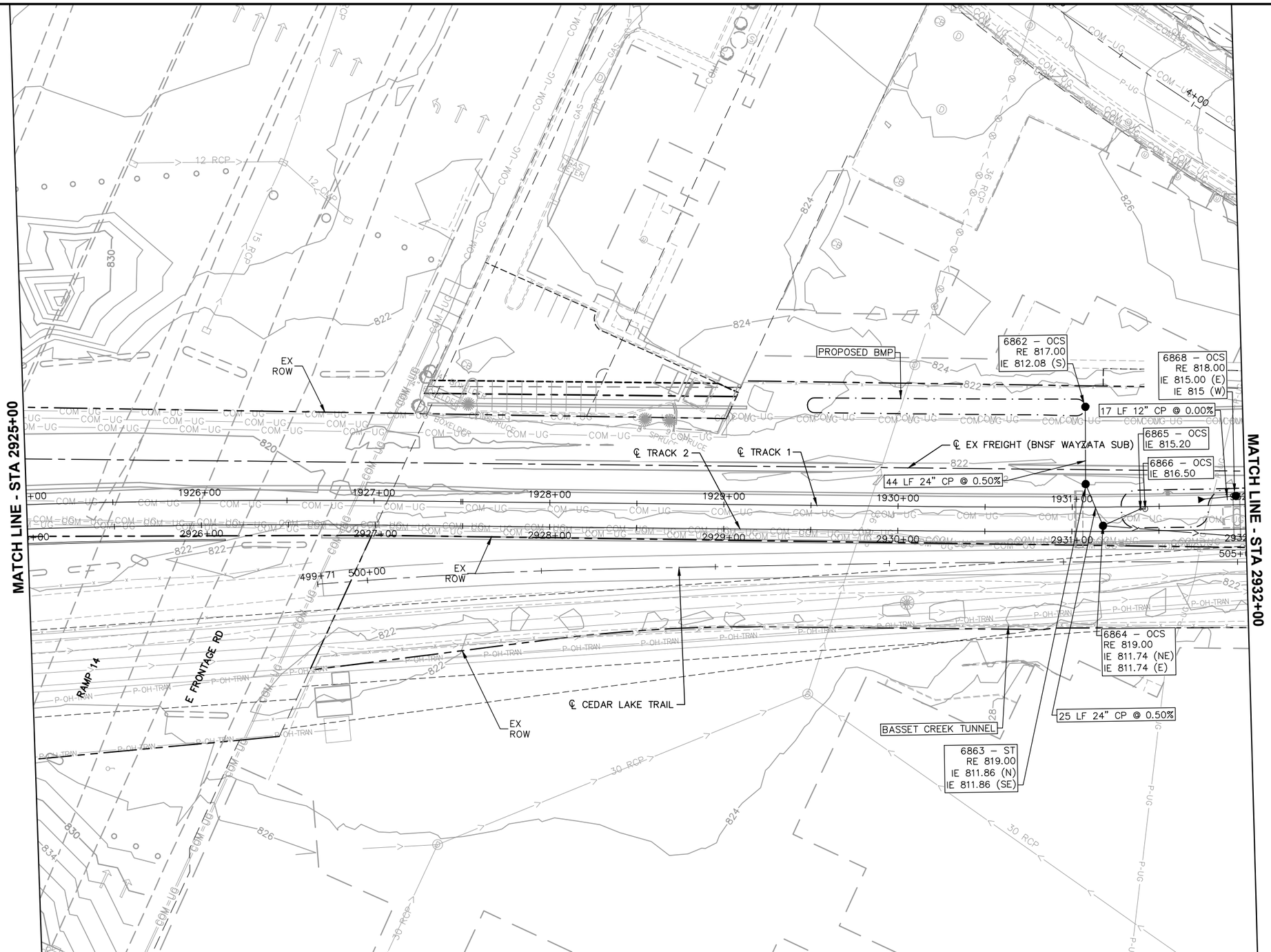
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2918+00 TO STA 2925+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 017

SHEET 85 OF 95

Sep, 21 2015 04:26 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

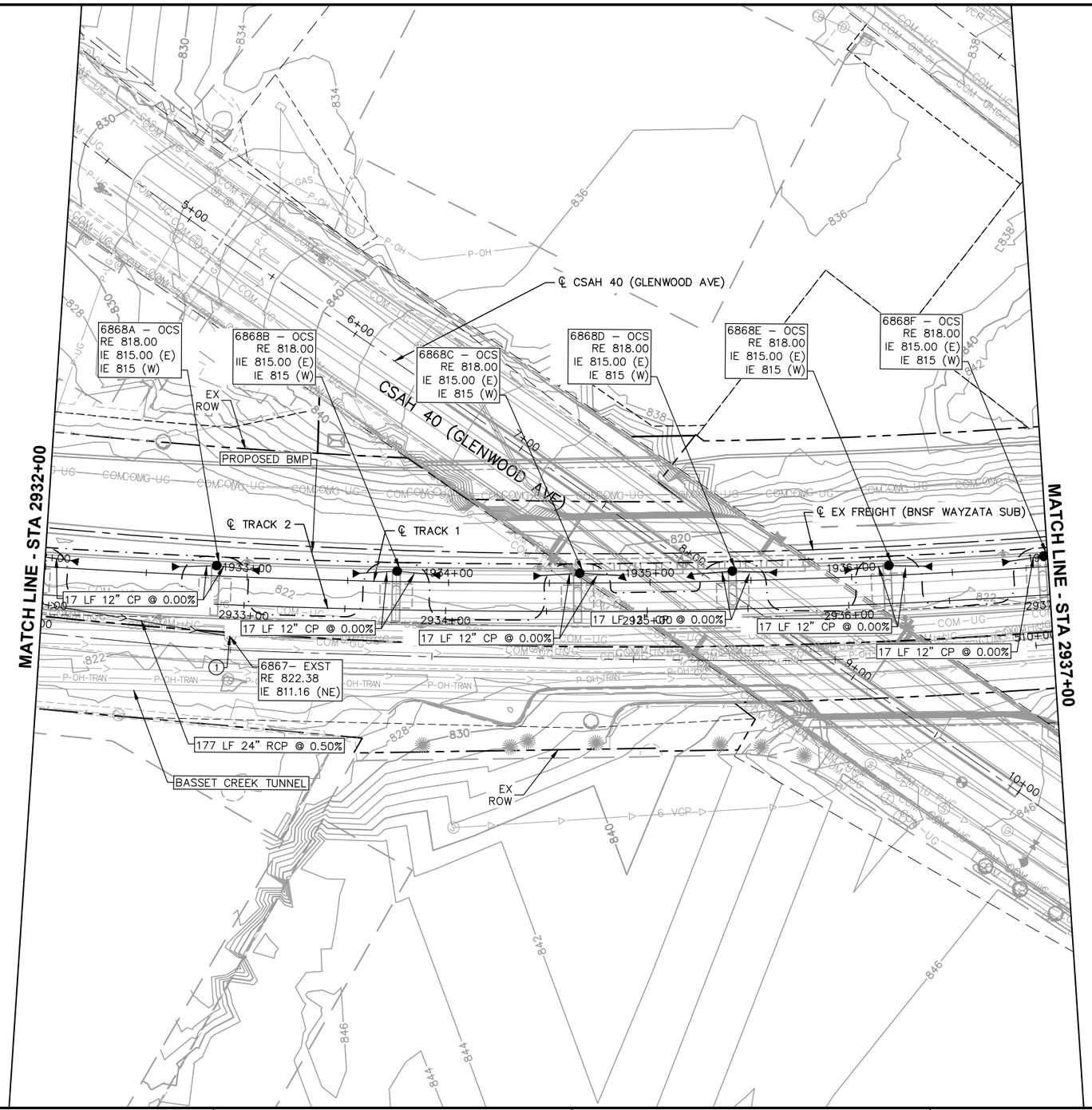
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2925+00 TO STA 2932+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 018

SHEET 86 OF 95

Sep, 21 2015 04:27 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



0 15 30 60
HORIZONTAL
SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

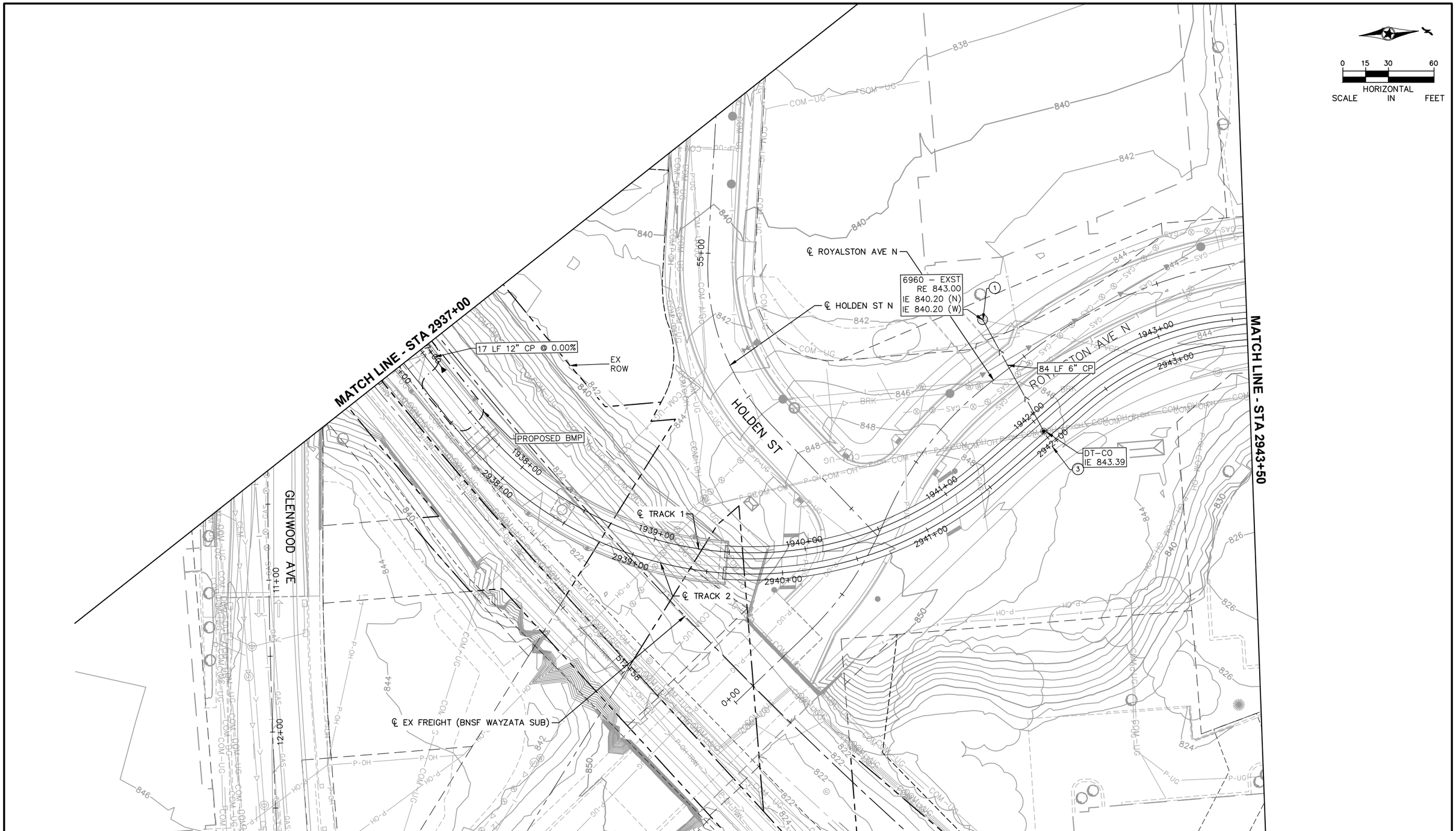
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2932+00 TO STA 2937+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 019

SHEET 87 OF 95

Sep, 21 2015 04:28 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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SOUTHWEST
Green Line LRT Extension

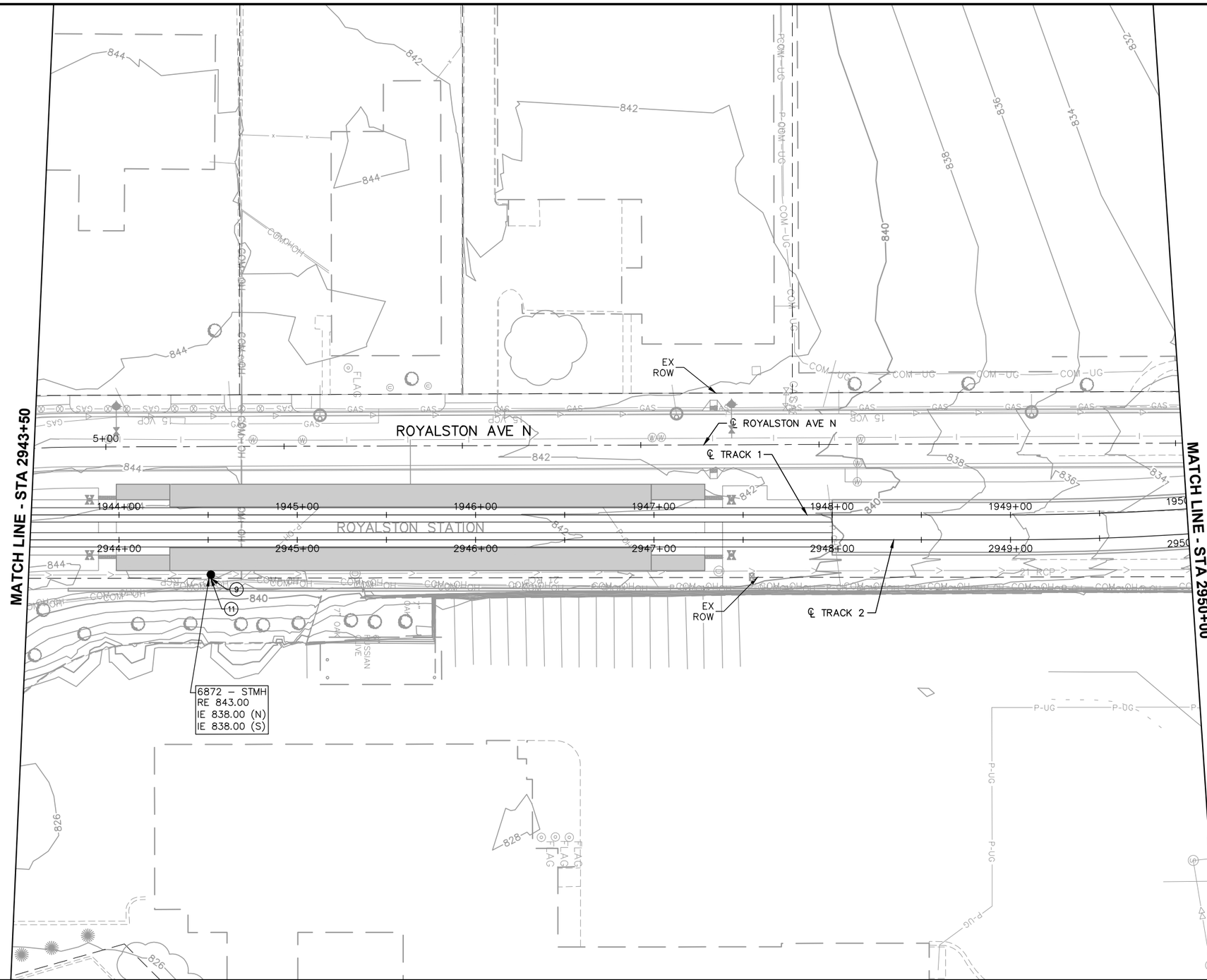
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2937+00 TO STA 2943+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 020

SHEET 88 OF 95

Sep, 21 2015 04:29 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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SOUTHWEST Green Line LRT Extension

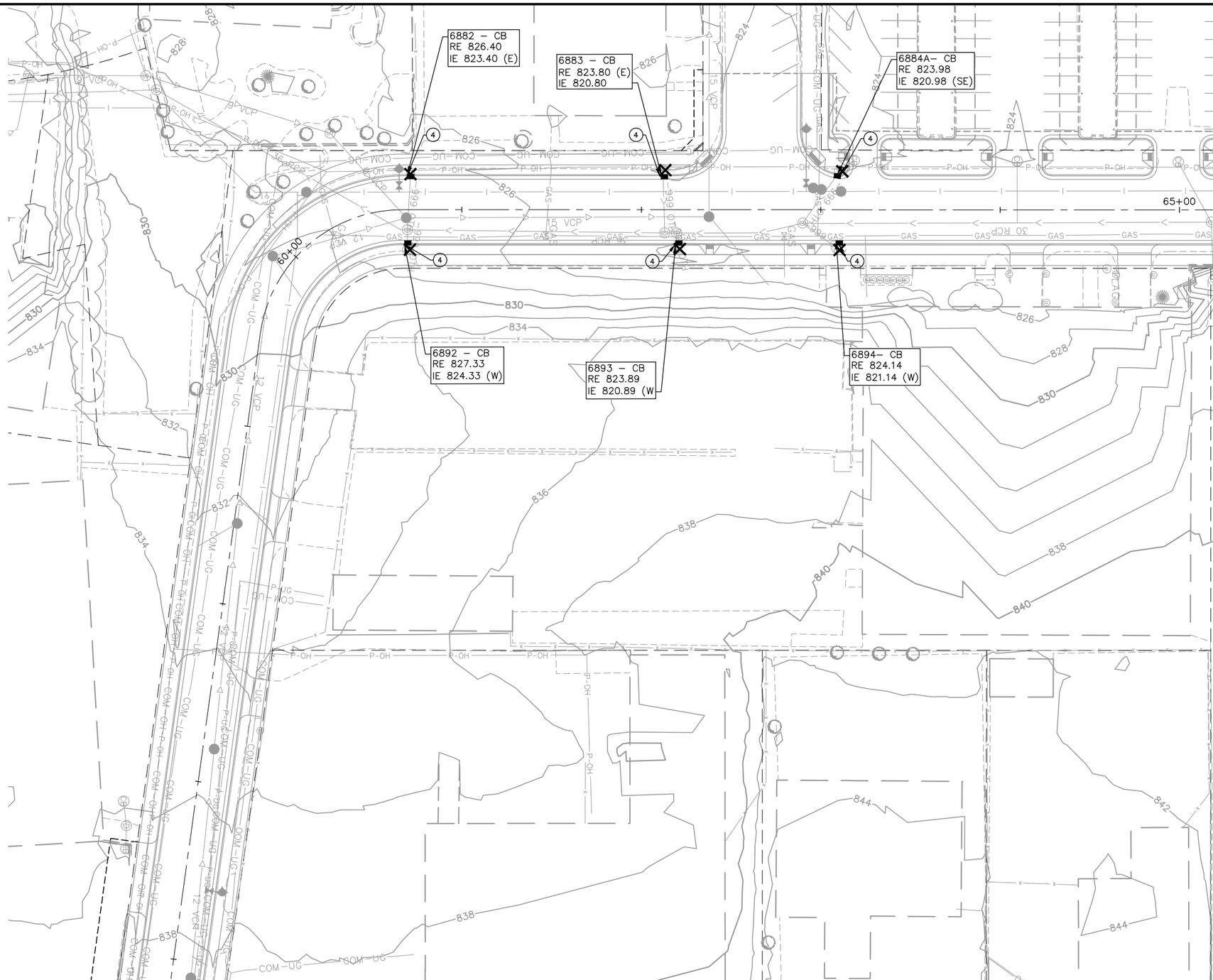
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2943+50 TO STA 2950+00

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 021

SHEET 89 OF 95

Sep, 21 2015 04:30 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



0 15 30 60
HORIZONTAL
SCALE IN FEET

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

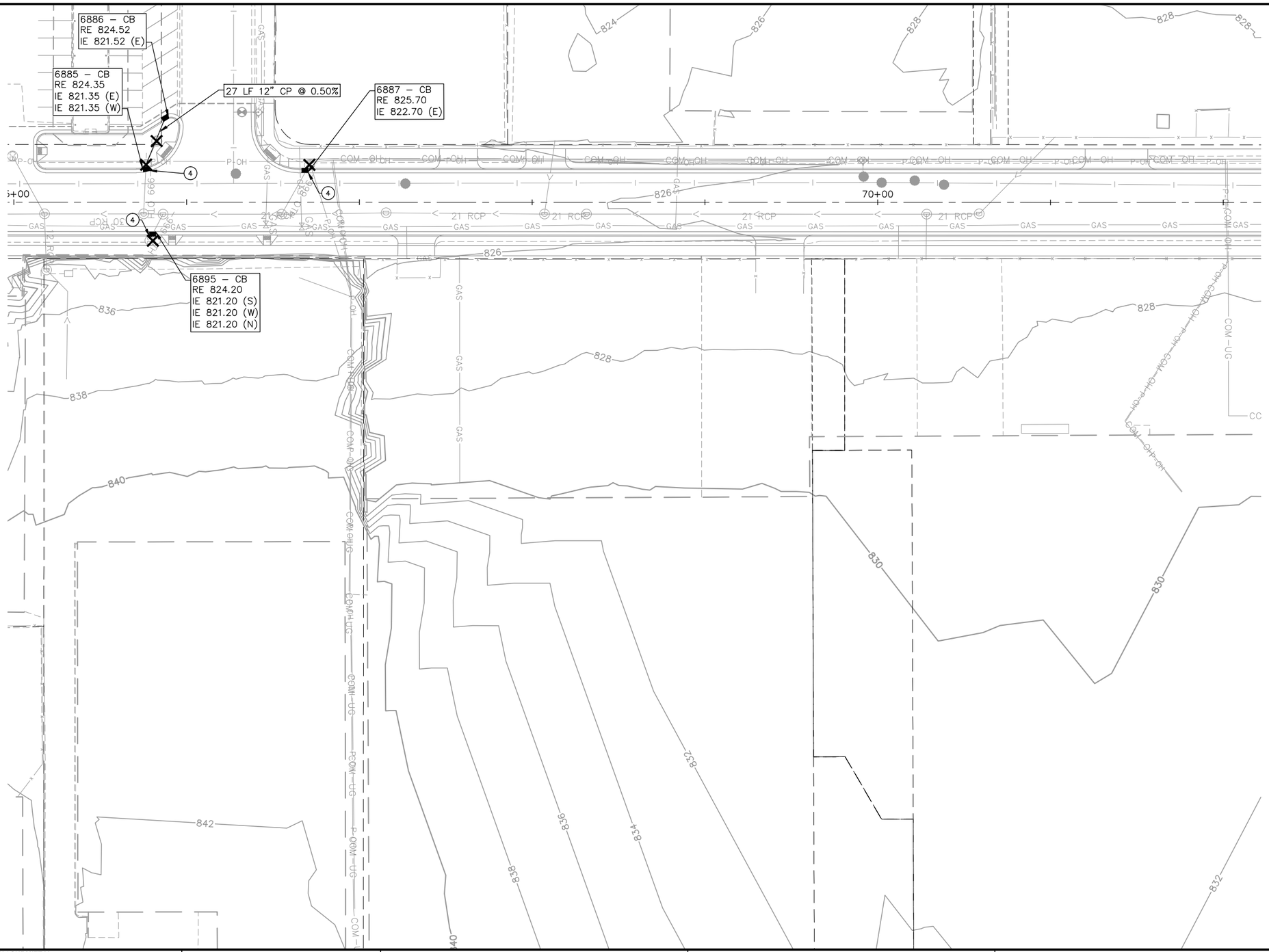
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
HOLDEN ST

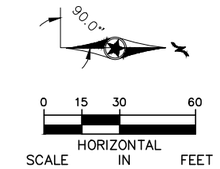
DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 022

SHEET 90 OF 95

Sep, 21 2015 04:30 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554





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XXX XXX
XXX XX/XX/XX

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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

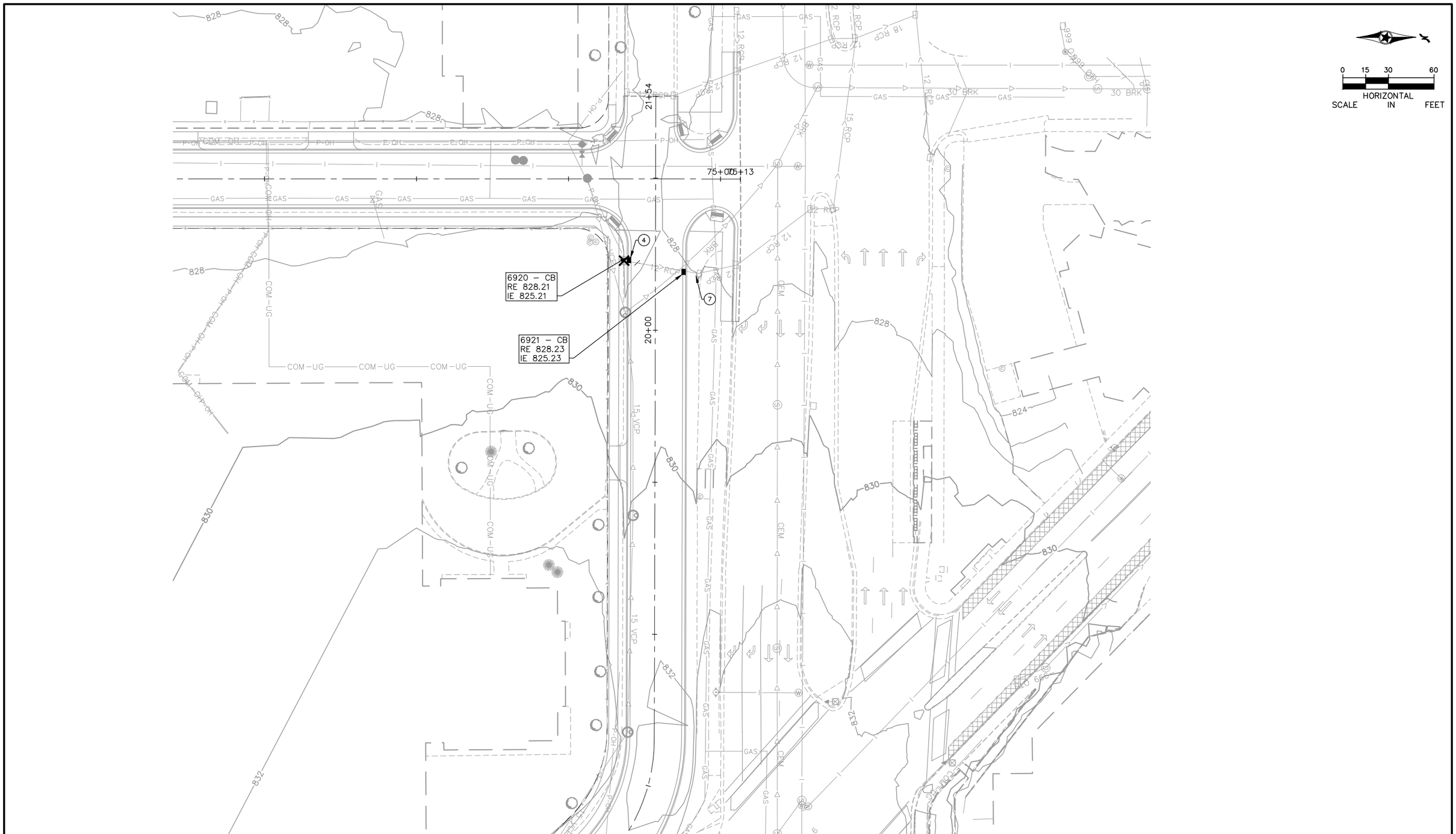
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
BORDER AVE

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 023

SHEET 91 OF 95

Sep. 21 2015 04:31 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

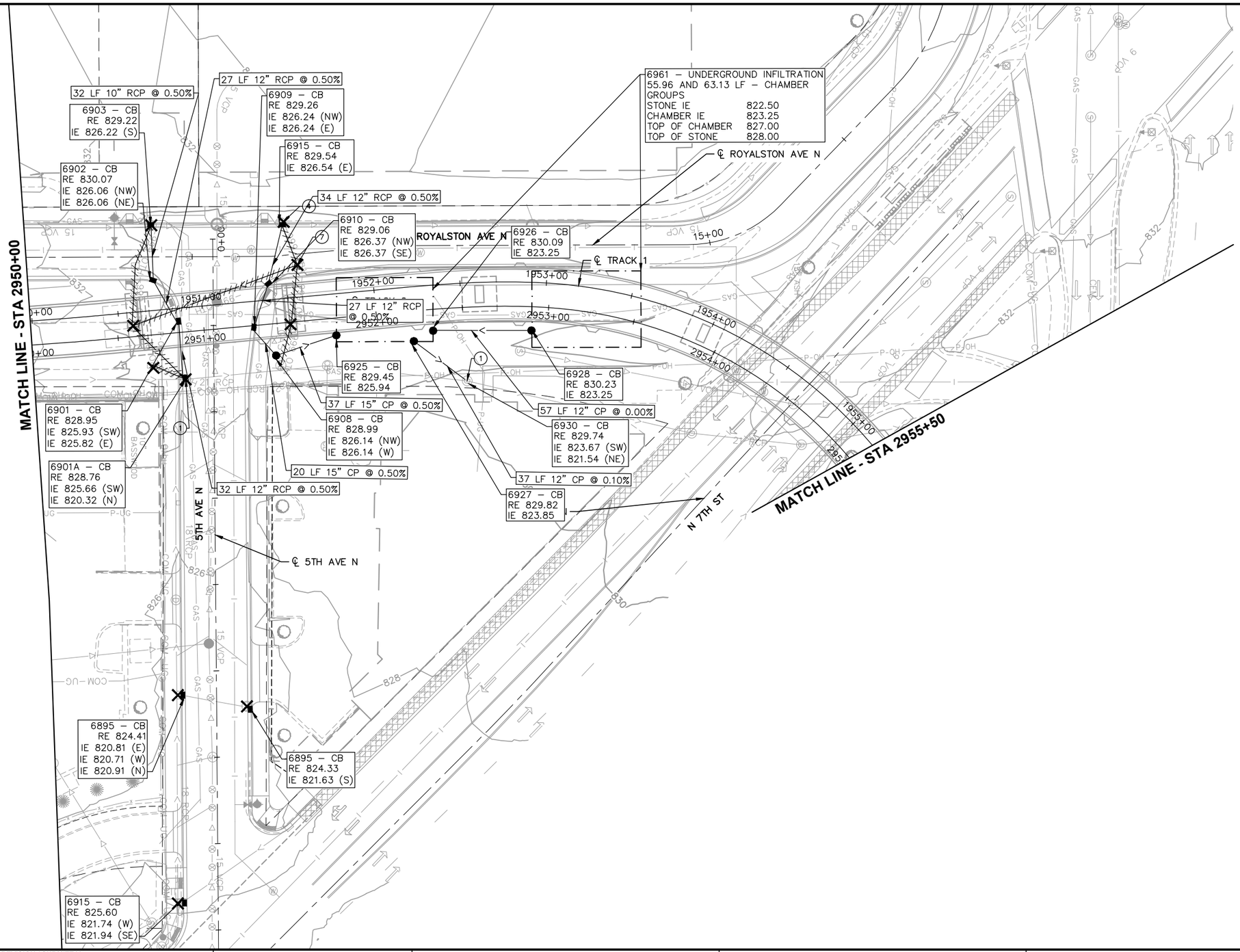
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
ROYALSTON AVE

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 024

SHEET 92 OF 95

Sep, 21 2015 04:32 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST
Green Line LRT Extension

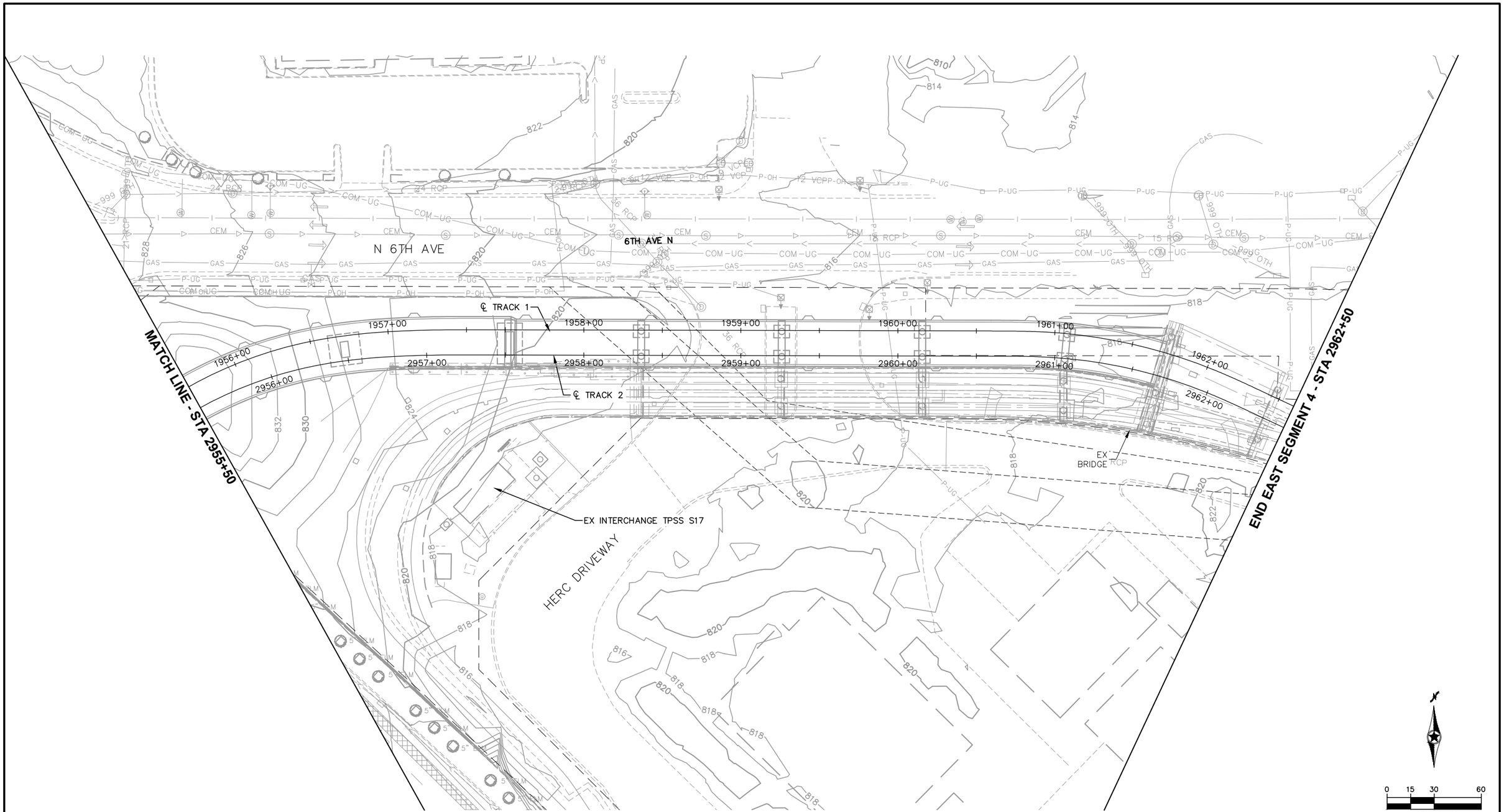
CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2950+00 TO STA 2955+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 025

SHEET 93 OF 95

Sep, 21 2015 04:33 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554



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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
DRAINAGE
PLAN
STA 2955+50 TO STA 2962+50

DISCIPLINE: DRAINAGE

SHEET NAME: E4-STM-PLN - 026

SHEET 94 OF 95

Sep, 21 2015 04:34 pm V:\3400_ADC\CAD\segment e4\plan sheets\storm sewer\E4-STM-PLN.dwg By: 554

MNDOT AND CITY STANDARD PLATES LIST

SOURCE	PLATE NO.	DESCRIPTION
MINNESOTA DEPARTMENT OF TRANSPORTATION*	3000L	REINFORCED CONCRETE PIPE (5 SHEETS)
	3006G	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
	3007E	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
	3100G	CONCRETE APRON FOR REINFORCED CONCRETE PIPE
	3133D	RIPRAP AT RCP OUTLETS
	4007C	PRECAST MECHANICAL JOINT SEWER MANHOLE
	4010H	CONCRETE SHORT CONE & ADJUSTING RING (SECTIONAL CONCRETE)
	4011E	PRECAST CONCRETE BASE
	4020J	MANHOLE OR CATCH BASIN (FOR USE WITH OR WITHOUT TRAFFIC LOADS) (2 SHEETS)
	4022A	MANHOLE OR CATCH BASIN COVER (3 ft. X 2 ft. OPENING)
	4026A	CONCRETE ENCASED CONCRETE ADJUSTING RINGS
	4101D	RING CASTING FOR MANHOLE OR CATCH BASIN
	4110F	COVER CASTING FOR MANHOLE (FOR USE IN ALL TRAFFIC AREAS) – CASTING NO. 715 AND 716
	4129G	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE) - CASTING NO. 802A
	4132F	CATCH BASIN FRAME CASTING (FOR SQUARE GRATE) - CASTING NO. 805
	4140D	SPECIAL GRATE CASTINGS FOR CATCH BASIN (CONVEX AND CONCAVE) - CASTING NO. 720 AND 721
	4143E	STOOL GRATE & CONCRETE FRAME (MEDIAN DRAINS) - CASTING NO. 731
	4152C	CATCH BASIN GRATE CASTING - CASTING NO. 814A
	4154B	CATCH BASIN GRATE CASTING - CASTING NO. 816
	4160D	CURB BOX CASTING FOR CATCH BASIN - CASTING NO. 823A AND 833A
	8150C	INSTALLATION OF CULVERT MARKERS
CITY OF HOPKINS	DGN-5	SILT FENCE DETAIL
	SS-3	STANDARD SANITARY SEWER MANHOLE
	SS-6	WATERTIGHT CASTING - MANHOLE
	SS-7	WATERTIGHT CASTING - FLAT SLAB MANHOLE
	ST-1	STORM SEWER MANHOLE WITH CONE SECTION
	ST-2	CATCH BASIN (MAX. DEPTH 4.5')
	ST-3	FLARED END SECTION WITH TRASH GUARD
	ST-3A	RIPRAP DETAIL FOR FLARED END SECTIONS
	ST-4	CATCH BASIN DETAIL
	ST-5	PRECAST STORM SEWER CATCH BASIN MANHOLE WITH REINFORCED CONCRETE TOP SLAB
	ST-6	STORM SEWER BEDDING
	ST-9	SUMP CATCH BASIN MANHOLE
	ST-10	TYPICAL TREATMENT POND
	ST-10A	WETLAND MITIGATION DETAIL
	ST-11	TYPICAL TREATMENT POND
	ST-12	SKIMMER STRUCTURE
	ST-13	ALTERNATE SKIMMER STRUCTURE
	ST-14	ALTERNATE SKIMMER STRUCTURE
	ST-16	SKIMMER STRUCTURE - WEIR MANHOLE
CITY OF ST LOUIS PARK	SS-1	MANHOLE COVER
	SS-2	TYPE B CATCH BASIN
	SS-3	TYPE C MH-CB
	SS-4	FLARED END SECTION

SOURCE	PLATE NO.	DESCRIPTION
CITY OF MINNEAPOLIS	SEWR-1000-R1	TYPICAL MANHOLE CONSTRUCTION (MNDOT DESIGN F MODIFIED)
	SEWR-1001-R1	PRECAST RISER SECTIONS
	SEWR-1003	MANHOLE BASE SLAB
	SEWR-1004	SHORT CONE TOP SLAB
	SEWR-1008-R1	PRECAST CATCH BASIN POT (MNDOT DESIGN N)
	SEWR-1009	CATCH BASIN INSTALLATION
	SEWR-1010	CATCH BASIN STRUCTURE REQUIREMENTS
	SEWR-2000	MANHOLE COVER CITY LOGO
	SEWR-2001	SELF-SEALING MANHOLE COVER
	SEWR-2002	SIDEWALK COVER
	SEWR-2003	CIRCULAR VANE GRATE
	SEWR-2004	STANDARD PROFILE MANHOLE RING CASTING
	SEWR-2005	LOW PROFILE MANHOLE RING CASTING
	SEWR-2006	CATCH BASIN CASTING
	SEWR-2007	CURB BOX CASTING FOR CATCH BASIN
	SEWR-2008	CATCH BASIN GRATE TYPE "V"
	SEWR-3001	WATERTIGHT PIPE CONNECTIONS
	SEWR-3004	CONCRETE PIPE TIES
	SEWR-3005	RIPRAP AT RC PIPE OUTLETS (1 OF 2)
	SEWR-3006	RIPRAP AT RC PIPE-ARCH OUTLETS (2 OF 2)
	SEWR-3010	RC PIPE FLARED END/APRON TRASH GUARD
	SEWR-4000	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES
	SEWR-4001	RC PIPE 66" AND UNDER (R-4 CONFINED O-RING GASKET JOINT, 1 OF 2)
	SEWR-4014	CONCRETE APRON FOR RC PIPE
	SEWR-4015	PVC PIPE STANDARDS
	SEWR-4016	SLOTTED DRAIN FOR 12" THROUGH 30" DIAMETER CM PIP
	SEWR-7000	PARK BOARD MANHOLE COVER CITY LOGO
	SEWR-7001	PARK BOARD CATCH BASIN GRATE TYPE "V"
	SEWR-7002	PARK BOARD GREEN SPACE INLET GRATE
	SEWR-7003	PARK BOARD NARROW TYPE 1 CATCH BASIN GRATE
	SEWR-7004	PARK BOARD NARROW TYPE 2 CATCH BASIN GRATE
	SEWR-7005	PARK BOARD NARROW TYPE 3 CATCH BASIN GRATE
	SEWR-7006	PARK BOARD CATCH BASIN GRATE 814A MNDOT STYLE
	SEWR-7007	PARK BOARD SLOTTED RECTANGULAR CATCH BASIN GRATE
	SEWR-7008	PARK BOARD RECTANGULAR CATCH BASIN GRATE
	SEWR-7009	PARK BOARD SLOTTED SQUARE CATCH BASIN GRATE

*TYPE B-5, B-9, M-11, AND A-7 CASTING ASSEMBLIES ASSUMED

NO.	DATE	BY	CHECK	DESIGN	REVISION / SUBMITTAL

AECOM

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METROPOLITAN COUNCIL

SOUTHWEST Green Line LRT Extension

CIVIL EAST - VOLUME 8
STANDARD PLATES LIST

DISCIPLINE: DRAINAGE

SHEET NAME: E0-STM-NTS-003

SHEET 95 OF 95