

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS" AND CITY OF KEOKUK SPECIFICATIONS.

MUTCD 2023 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.



NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL 1-800-292-8989 OR 811

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

CITY OF KEOKUK, IA

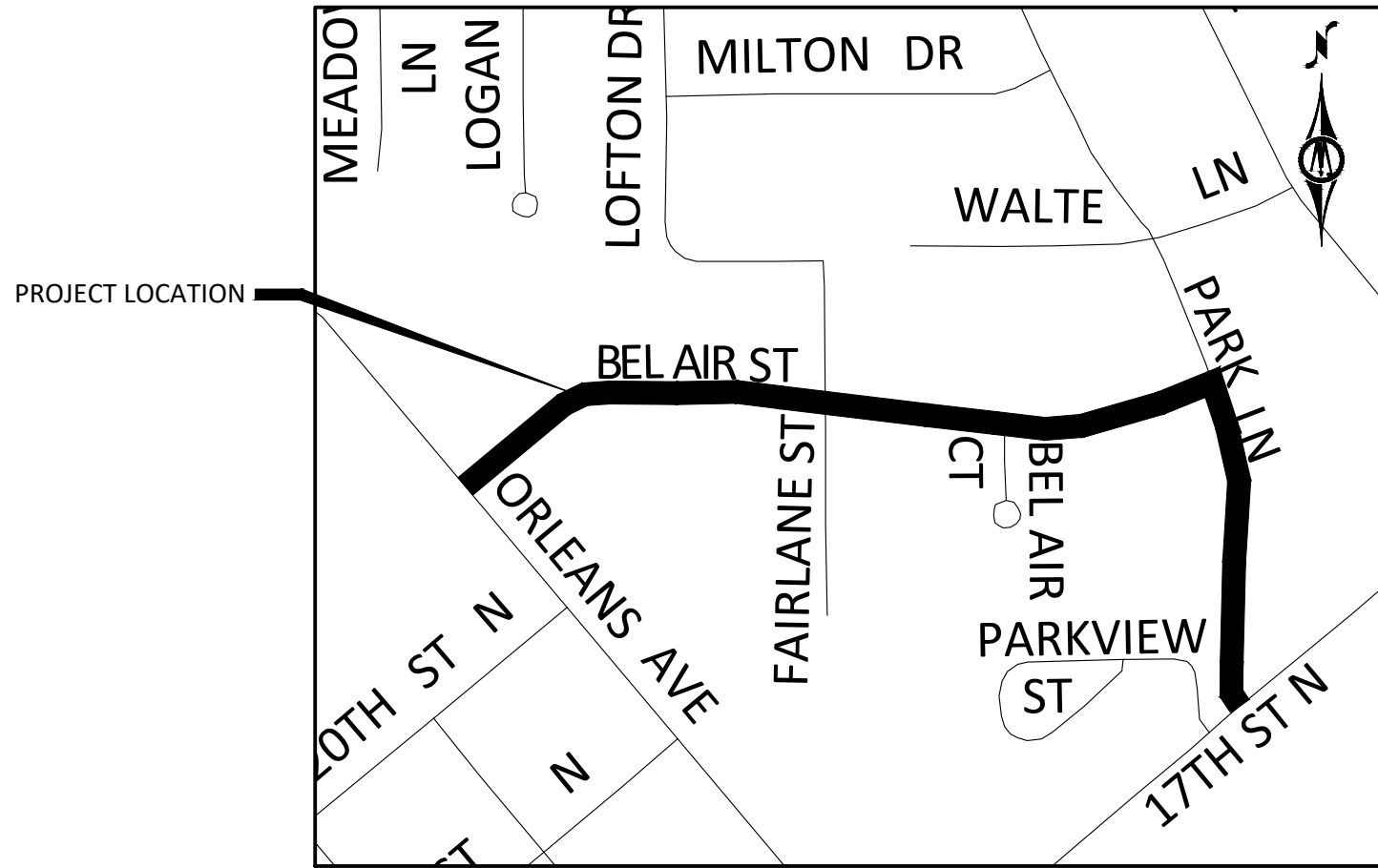
CONSTRUCTION PLANS FOR

BEL-AIR STREET RECONSTRUCTION

FULL-DEPTH RECONSTRUCTION
 BMI PROJECT NO. : 25X141032000
 APRIL 2026

SHEET NUMBER	SHEET TITLE
A.01 - A.03	TITLE SHEET, LEGEND, PROJECT OVERVIEW
B.01	TYPICAL SECTIONS
C.01 - C.03	QUANTITIES AND ESTIMATE REFERENCE INFORMATION
D.01 - D.05	PLAN & PROFILE - MAINLINE
E.01-E.02	PLAN & PROFILE - SIDE STREETS
F.01-F.05	REMOVALS
G.01 - G.04	REFERENCES & BENCHMARKS
J.01	STAGING & TRAFFIC CONTROL
K.01 - K.02	INTERSECTION GEOMETRY
L.01 - L.05	GEOMETRICS & JOINTING
M.01	STORM SEWER PLAN
M.02-M.04	SANITARY SEWER PLAN & PROFILE
R.01 - R.05	EROSION CONTROL
W.01 - W.08	CROSS SECTIONS - MAINLINE

THIS PLAN SET CONTAINS **48** SHEETS.



RESOURCE LIST

CITY OF KEOKUK

City Hall
 501 Main St
 Keokuk, IA 52632

City Clerk:
 Celeste El Anfaoui

Mayor: Mark Smidt

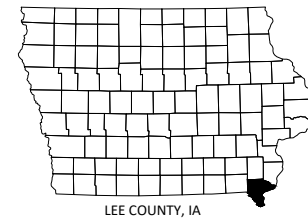
City Council Members:

- Doug Matlick
- Devon Dade
- Todd Marshall
- Tyler Walker
- Kathie Mahoney
- Steve Andrews
- Matt Van Berkum
- Roger Bryant
- Mike Greenwald

Utility Superintendent:
 Sewer - Michael Clark
 Water - David Bogner



MAP OF THE CITY OF KEOKUK
 LEE COUNTY, IA



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

David Millmeyer
 DAVID E. MILLMEYER, P.E.

LICENSE NUMBER: P28884 DATE: 2026/04/01

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2027

PAGES OR SHEETS COVERED BY THIS SEAL:
ALL SHEET

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CLIENT PROJ. NO.: 25X141032000			

CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 TITLE SHEET

SHEET
A.01

EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		REGULATION STATION GAS
	AIR CONDITION UNIT		SATELLITE DISH
	ANTENNA		SIGN TRAFFIC
	AUTO SPRINKLER CONNECTION		SIGNAL CONTROL CABINET
	BARRICADE PERMANENT		SOIL BORING
	BASKETBALL POST		SIREN
	BENCH		TELEPHONE BOOTH
	BIRD FEEDER		TILE INLET
	BOLLARD		TILE OUTLET
	BUSH		TILE RISER
	CATCH BASIN RECTANGULAR CASTING		TRANSFORMER-ELECTRIC
	CATCH BASIN CIRCULAR CASTING		TREE-CONIFEROUS
	CURB STOP		TREE-DEAD
	CLEAN OUT		TREE-DECIDUOUS
	CULVERT END		TREE STUMP
	DRINKING FOUNTAIN		TRAFFIC ARM BARRIER
	DOWN SPOUT		TRAFFIC SIGNAL
	ELECTRIC CAR CHARGE STATION		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VAULT
	GRILL		VENT PIPE
	GUY WIRE ANCHOR		WATER SPIGOT
	HANDHOLE		WELL
	HANDICAP SPACE		WETLAND DELINEATED MARKER
	IRRIGATION SPRINKLER HEAD		WETLAND
	IRRIGATION VALVE BOX		WET WELL
	LIFT STATION CONTROL PANEL		YARD HYDRANT
	LIFT STATION		
	LIGHT POLE		
	MAILBOX		
	MANHOLE-COMMUNICATION		
	MANHOLE-ELECTRIC		
	MANHOLE-GAS		
	MANHOLE-HEAT		
	MANHOLE-RECLAIMED WATER		
	MANHOLE-SANITARY SEWER		
	MANHOLE-STORM SEWER		
	MANHOLE-UTILITY		
	MANHOLE-WATER		
	METER		
	DRIVE-THRU MICROPHONE		
	PARKING METER		
	PAVEMENT MARKING		
	PEDESTAL-COMMUNICATION		
	PEDESTAL-ELECTRIC		
	PEDESTRIAN PUSH BUTTON		
	PICNIC TABLE		
	POLE-UTILITY		
	POST		
	RAILROAD SIGNAL POLE		

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS
	LIGHT POLE

SURVEY SYMBOLS

	BENCHMARK LOCATION		CAST IRON MONUMENT
	CONTROL POINT		STONE MONUMENT
	MONUMENT FOUND		

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	RECLAIMED WATER

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING
	TRENCHLESS PIPE (PLAN VIEW)
	TRENCHLESS PIPE (PROFILE VIEW)

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROJECT LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

HATCH PATTERNS

	HMA PAVEMENT		SIDEWALK		PCC PAVEMENT
	DRIVEWAY		GRAVEL		

EXISTING PRIVATE UTILITY LINES

NOTE:
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	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

UTILITIES IDENTIFIED WITH A QUALITY LEVEL OTHER THAN D:

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

UTILITY QUALITY LEVELS:

- LEVEL D - INFORMATION COMES SOLELY FROM EXISTING UTILITY RECORDS.
- LEVEL C - SURVEYING ABOVE GROUND UTILITY FACILITIES, SUCH AS MANHOLES, VALVE BOXES, ETC; AND CORRELATING THIS INFORMATION WITH EXISTING UTILITY RECORDS.
- LEVEL B - THE USE OF SURFACE GEOPHYSICAL TECHNIQUES TO DETERMINE THE EXISTENCE AND HORIZONTAL POSITION OF UNDERGROUND UTILITIES.
- LEVEL A - THE USE OF NONDESTRUCTIVE DIGGING EQUIPMENT AT HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GV	GATE VALVE	SAN	SANITARY SEWER
ADJ	ADJUST	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
ALT	ALTERNATE	HH	HANDHOLE	SERV	SERVICE
B-B	BACK TO BACK	HMA	HOT MIX ASPHALT	SHLD	SHOULDER
BLDG	BUILDING	HP	HIGH POINT	STA	STATION
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STD	STANDARD
BR	BEGIN RADIUS	HYD	HYDRANT	STM	STORM SEWER
BV	BUTTERFLY VALVE	I	INVERT	TC	TOP OF CURB
CB	CATCH BASIN	K	CURVE COEFFICIENT	TE	TEMPORARY EASEMENT
C&G	CURB AND GUTTER	L	LENGTH	TEMP	TEMPORARY
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TNH	TOP NUT HYDRANT
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TP	TOP OF PIPE
CL	CENTER LINE	LT	LEFT	TYP	TYPICAL
CL	CLASS	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CSP	CORRUGATED STEEL PIPE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CLVT	CULVERT	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL	WS	WATER SERVICE
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE		
E	EXTERNAL CURVE DISTANCE	PCC	PORTLAND CEMENT CONCRETE	AC	ACRES
ESMT	EASEMENT	PE	PERMANENT EASEMENT	CF	CUBIC FEET
ELEC	ELECTRIC	PED	PEDESTRIAN, PEDESTAL	CV	COMPACTED VOLUME
ELEV/EL	ELEVATION	PERF	PERFORATED PIPE	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERM	PERMANENT	EA	EACH
ER	END RADIUS	PI	POINT OF INTERSECTION	EV	EXCAVATED VOLUME
EX	EXISTING	PL	PROPERTY LINE	LB	POUND
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LF	LINEAR FEET
F-F	FACE TO FACE	PT	POINT OF TANGENT	LS	LUMP SUM
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	LV	LOOSE VOLUME
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SF	SQUARE FEET
FM	FORCEMAIN	R	RADIUS	SV	STOCKPILE VOLUME
FO	FIBER OPTIC	RCP	REINFORCED CONCRETE PIPE	SY	SQUARE YARD
F.O.	FIELD ORDER	RET	RETAINING		
GRAN	GRANULAR	R/W	RIGHT-OF-WAY		
GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT		
GU	GUTTER	RT	RIGHT		



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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION

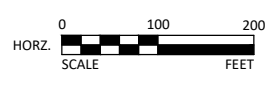
LEGEND

SHEET

A.02



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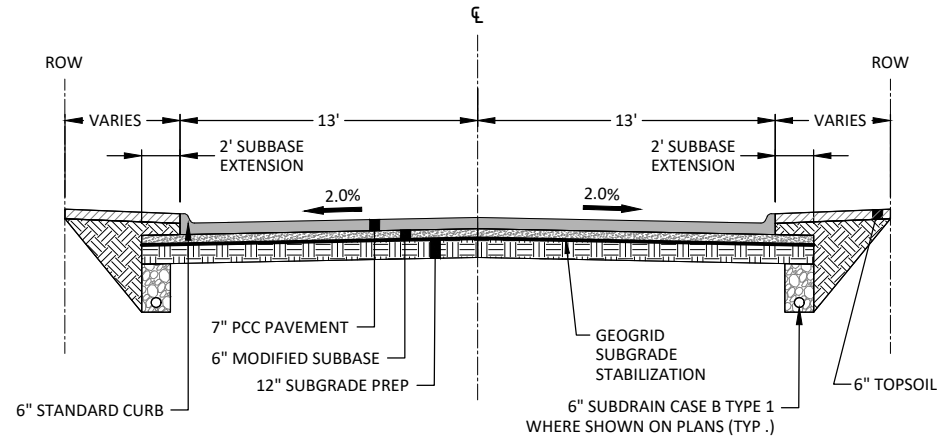


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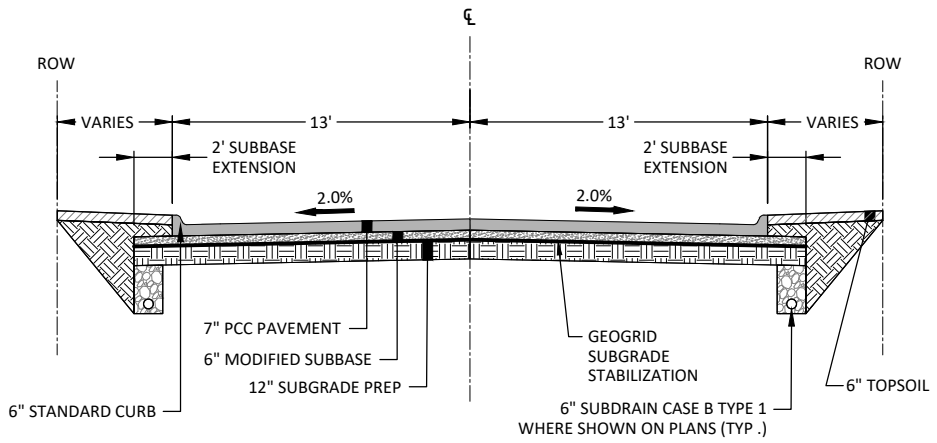
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CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 PROJECT OVERVIEW

SHEET
A.03



A PROPOSED TYPICAL SECTION - BEL-AIR STREET
 STA:100+73.13 to STA: 117+60.02 NOT TO SCALE



B PROPOSED TYPICAL SECTION - PARK LANE
 STA:200+94.12 to STA:208+47.25 NOT TO SCALE

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CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 TYPICAL SECTIONS

SHEET
 B.01

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS-BUILT QUANT.
1	2010-C	CLEARING AND GRUBBING	LS	1	
2	2010-D-1	TOPSOIL, ON-SITE	CY	840	
3	2010-E	EXCAVATION, CLASS 10	CY	640	
4	2010-G	SUBGRADE PREPARATION	SY	8445	
5	2010-I	SUBGRADE TREATMENT, GEOGRID	SY	8445	
6	2010-J	SUBBASE, MODIFIED, 6 INCHES	SY	8445	
7	4010-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8 INCH	LF	1190	
8	4010-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 6 INCH	LF	132	
9	4010-E	SANITARY SEWER SERVICE STUB, PVC, 4 INCH	EA	17	
10	4010-H	REMOVAL OF SANITARY SEWER, PVC, 8 INCH	LF	1189	
11	4010-H	REMOVAL OF SANITARY SEWER, PVC, 6 INCH	LF	132	
12	4010-H	REMOVAL OF SANITARY SEWER, PVC, 4 INCH	LF	29	
13	4010-I	SANITARY SEWER CLEANOUT, 4 INCH	EA	1	
14	4020-999-A	REMOVE AND REPLACE TILE OUTLET	EA	5	
15	4040-A	SUBDRAIN, CASE B TYPE 1, PVC, 6 INCH	LF	4141	
16	4040-C-1	SUBDRAIN CLEANOUT, TYPE A-1, 6 INCH	EA	10	
17	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, TYPE A, 6 INCH	EA	8	
18	4050-G-3	BYPASS PUMPING	LS	1	
19	6010-A	SANITARY MANHOLE, SW-301, 48 INCH	EA	5	
20	6010-B	INTAKE, SW-501	EA	2	
21	6010-B	INTAKE, SW-505	EA	2	
22	6010-B	INTAKE, SW-509	EA	1	
23	6010-E	MANHOLE ADJUSTMENT, MINOR	EA	1	
24	6010-H	REMOVE MANHOLE	EA	5	
25	6010-H	REMOVE INTAKE	EA	5	
26	7010-A	PAVEMENT, PCC, 7 INCH, CLASS C	SY	7326	
27	7030-A-1	REMOVAL OF SIDEWALK	SY	413	
28	7030-A-3	REMOVAL OF DRIVEWAY	SY	967	
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6 INCH	SY	997	
30	7040-H	PAVEMENT REMOVAL	SY	7390	
31	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS	EA	12	
33	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - PERMANENT LAWN	AC	1.04	
34	9040-F-1	WATTLE, STRAW, 9 INCH	LF	4082	
35	9040-F-2	WATTLE, REMOVAL	LF	4082	
36	9040-T-1	INLET PROTECTION DEVICE, AREA INTAKE	EA	5	
37	9040-T-1	INLET PROTECTION DEVICE, OPEN THROAT CURB INTAKE	EA	1	
38	11010-A	CONSTRUCTION SURVEY	LS	1	
39	11020-A	MOBILIZATION	LS	1	
40	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	
41	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	

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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
ESTIMATED PROJECT QUANTITIES

SHEET
C.01

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ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-C	CLEARING AND GRUBBING CLEARING AND GRUBBING LOCATIONS SHALL BE MARKED OUT AND APPROVED BY THE ENGINEER PRIOR TO BEGINNING OF OPERATIONS. CONTRACTOR SHALL TAKE CARE TO PROTECT ALL TREES AND OTHER PLANT MATERIALS THAT ARE NOT IDENTIFIED AS REMOVAL.
2	2010-D-1	TOPSOIL, ON-SITE TOPSOIL WITHIN THE GRADING LIMITS OF THE PROJECT SHALL BE STRIPPED, SALVAGED, AND RESPREAD AT A MINIMUM DEPTH OF 6". ITEM INCLUDES HAULING OFF-SITE TO STORE AND HAULING BACK IN IF NEEDED. SALVAGED TOPSOIL SHALL REMAIN WITHIN THE RIGHT-OF-WAY UNLESS AGREEMENTS MADE WITH THE PROPERTY OWNER. CONTRACTOR TO PAY FOR RESTORATION COST IF LOCATED OUTSIDE OF THE RIGHT OF WAY.
3	2010-E	EXCAVATION, CLASS 10 THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING SOIL, HAULING, DISPOSAL/EXPORT AND RE-GRADING AS PER PLAN TO FACILITATE ALL PROPOSED SECTIONS. ALL BORROW SHALL BE PROVIDED BY THE CONTRACTOR. EXCESS OR UNSUITABLE EXCAVATED MATERIAL WILL BECOME PROPERTY OF THE CONTRACTOR AND WILL BE HAULED OFF-SITE INCIDENTAL TO THE ITEM. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR OVERHAUL OF WASTE. TOPSOIL SHALL BE PLACED AND SPREAD TO A MINIMUM THICKNESS OF 6" IN ALL DISTURBED TURF AREAS AND PAID FOR AS TOPSOIL, ON-SITE. RAW CUT = 50 CY, RAW FILL = 71 CY, ADJUSTED FILL (1.30 FACTOR) = 92 CY RAW EARTHWORK QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY ARE A COMPARISON OF EXISTING CONDITIONS AND PROPOSED CONDITIONS AND MAY INCLUDE MATERIALS AND OPERATIONS PAID FOR UNDER OTHER BID ITEMS E.G. PAVEMENT REMOVAL, STORM SEWER TRENCHED, PCC PAVEMENT, SUBBASE, TOPSOIL, COMPOST AMENDMENT, ETC. MEASUREMENT WILL NOT BE MADE AND QUANTITY PAID WILL BE ON A PERCENT OF ITEM COMPLETE.
4	2010-G	SUBGRADE PREPARATION A. THIS ITEM SHALL ONLY BE USED IN AREAS WHERE PROOFROLL FAILS AND REQUIRED BY THE ENGINEER. THIS ITEM SHALL BE TO A DEPTH OF 12 INCHES, COMPLETED IN 2 - 6" LIFTS, EXTENDING 2 FOOT BEYOND THE PAVEMENT EDGE. IN INSTANCES OF CONFLICT WITH EXISTING UTILITIES, THE DEPTH MAY BE REDUCED AS DIRECTED BY THE ENGINEER.
5	2010-I	SUBGRADE TREATMENT, GEOGRID THIS PAY ITEM SHALL BE FOR THE FURNISHING AND INSTALLATION OF THE GEOTEXTILE FABRIC USED IN EXCAVATION, CLASS 13, UNSUITABLE OR UNSTABLE MATERIAL. THIS MATERIAL SHALL BE A WOVEN GEOTEXTILE FABRIC MEETING THE REQUIREMENT OF SUDAS 2010, 2.04.
6	2010-J	SUBBASE, MODIFIED, 6 INCHES BID ITEM SHALL BE USED UNDER ALL SIDE STREET ROADWAY PAVEMENT SECTIONS EXTENDING 2 FEET BEYOND THE PAVEMENT EDGE.
7	4010-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 8 INCH A. REFER TO M SHEETS FOR SANITARY LOCATIONS. CONTRACTOR SHALL MANDREL TEST AND TELEVIEW ALL SANITARY SEWERS AND TURN OVER DATA TO CITY UPON COMPLETION OF THE TESTING AND INSPECTION PRIOR TO SUBGRADE PREPARATION. DATA SUBMITTAL TO BE APPROVED BY ENGINEER. ANY VISIBLE LEAKS SHALL BE REPAIRED REGARDLESS OF SEVERITY. CONTRACTOR SHALL RE-VIDEO ANY REQUIRED REPAIRS AND PROVIDE VIDEO TO THE CITY AT NO ADDITIONAL COST. B. PIPE EMBEDMENT DETAIL, TYPE F-3. FURNISHING AND PLACING ELBOWS AND TEES, CONNECTION OF SERVICES, PLUGS, CONNECTION TO EXISTING SANITARY SEWER AND BEDDING MATERIALS AS REQUIRED SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. E. ALL SERVICES AS IDENTIFIED ON THE M SHEETS ARE APPROXIMATE LOCATIONS.
8	4010-A-1	SANITARY SEWER GRAVITY MAIN, TRENCHED, PVC, 6 INCH A. REFER TO M SHEETS FOR SANITARY LOCATIONS. CONTRACTOR SHALL MANDREL TEST AND TELEVIEW ALL SANITARY SEWERS AND TURN OVER DATA TO CITY UPON COMPLETION OF THE TESTING AND INSPECTION PRIOR TO SUBGRADE PREPARATION. DATA SUBMITTAL TO BE APPROVED BY ENGINEER. ANY VISIBLE LEAKS SHALL BE REPAIRED REGARDLESS OF SEVERITY. CONTRACTOR SHALL RE-VIDEO ANY REQUIRED REPAIRS AND PROVIDE VIDEO TO THE CITY AT NO ADDITIONAL COST. B. PIPE EMBEDMENT DETAIL, TYPE F-3. FURNISHING AND PLACING ELBOWS AND TEES, CONNECTION OF SERVICES, PLUGS, CONNECTION TO EXISTING SANITARY SEWER AND BEDDING MATERIALS AS REQUIRED SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. E. ALL SERVICES AS IDENTIFIED ON THE M SHEETS ARE APPROXIMATE LOCATIONS.
9	4010-E	SANITARY SEWER SERVICE STUB, PVC, 4 INCH A. ALL SERVICES AS IDENTIFIED ON THE M SHEETS ARE APPROXIMATE LOCATIONS. B. CONTRACTOR RESPONSIBLE FOR VERIFYING TYPE AND SIZE OF EACH SERVICE. THIS ITEM SHALL INCLUDE ALL PIPE, BENDS, CONNECTIONS AND FITTINGS NEEDED FOR RELOCATION OF EXISTING SERVICE. C. MEASUREMENT OF THIS ITEM SHALL PAID PER EACH SERVICE RELOCATED, REGARDLESS OF SERVICE SIZE. A. QUANTITY IS ESTIMATED TO ESTABLISH A UNIT PRICE, ONLY QUANTITY APPROVED WILL BE PAID.
10	4010-H	REMOVAL OF SANITARY SEWER, PVC, 8 INCH REFER TO F SHEETS FOR LOCATIONS.
11	4010-H	REMOVAL OF SANITARY SEWER, PVC, 6 INCH REFER TO F SHEETS FOR LOCATIONS.
12	4010-H	REMOVAL OF SANITARY SEWER, PVC, 4 INCH REFER TO F SHEETS FOR LOCATIONS.

13	4010-I	SANITARY SEWER CLEANOUT, 4 INCH A. REFER TO M SHEETS FOR LOCATIONS. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, AND COUPLING BANDS.
14	4020-999-A	REMOVE AND REPLACE TILE OUTLET THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, COUPLING BANDS, AND RODENT GUARDS FOR ALL SUBDRAIN OUTLETS.
15	4040-A	SUBDRAIN, CASE B TYPE 1, PVC, 6 INCH THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TRENCH EXCAVATION, FURNISHING AND PLACEMENT OF BEDDING AND BACKFILL MATERIAL, ENGINEERING FABRIC, CONNECTORS, AND ELBOWS AND TEES. THE LENGTH OF ELBOWS AND TEES OF THE PIPES INSTALLED WILL BE INCLUDED IN THE LENGTH OF PIPE MEASURED
16	4040-C-1	SUBDRAIN CLEANOUT, TYPE A-1, 6 INCH THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, AND COUPLING BANDS.
17	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, TYPE A, 6 INCH THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, PIPE, NON-SHRINK GROUT, COUPLING BANDS, AND RODENT GUARDS FOR ALL SUBDRAIN OUTLETS AND CONNECTIONS. CORE DRILLING INTO PRECAST STRUCTURES SHALL BE INCIDENTAL TO THIS ITEM. ALL OUTLETS AND CONNECTIONS ARE SCHEDULED TO BE CAST IN PLACE WITH AT THE TIME OF THE STRUCTURES BEING BUILT.
18	4050-G-3	BYPASS PUMPING A. THIS ITEM SHALL INCLUDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY FOR BYPASS PUMPING FLOW FOR SANITARY SEWER IMPROVEMENTS. B. PAYMENT SHALL BE LUMP SUM
19	6010-A	SANITARY MANHOLE, SW-301, 48 INCH A. REFER TO M SHEETS FOR SANITARY LOCATIONS AND PROFILES. B. ANY VISIBLE LEAKS SHALL BE REPAIRED. MANHOLE CASTINGS SHALL READ "SANITARY SEWER" AND BE SW-601 TYPE B. C. SANITARY MANHOLE SHALL HAVE INTERNAL CHIMNEY SEAL. D. THIS ITEM INCLUDES CONNECTION TO EXISTING PIPES.
20	6010-B	INTAKE, SW-501 A. REFER TO M SHEETS FOR LOCATIONS AND ELEVATIONS. ALL STRUCTURES SHALL HAVE A MINIMUM DEPTH OF 5 FEET BELOW FORM GRADE WITH SUMPS FILLED WITH CONCRETE. B. EXISTING PIPE SIZES AND LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO THE ORDERING OF ANY INTAKE MATERIALS.
21	6010-B	INTAKE, SW-505 A. REFER TO M SHEETS FOR LOCATIONS AND ELEVATIONS. ALL STRUCTURES SHALL HAVE A MINIMUM DEPTH OF 5 FEET BELOW FORM GRADE WITH SUMPS FILLED WITH CONCRETE. B. EXISTING PIPE SIZES AND LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO THE ORDERING OF ANY INTAKE MATERIALS.
22	6010-B	INTAKE, SW-509 A. REFER TO M SHEETS FOR LOCATIONS AND ELEVATIONS. ALL STRUCTURES SHALL HAVE A MINIMUM DEPTH OF 5 FEET BELOW FORM GRADE WITH SUMPS FILLED WITH CONCRETE. B. EXISTING PIPE SIZES AND LOCATIONS SHALL BE FIELD VERIFIED PRIOR TO THE ORDERING OF ANY INTAKE MATERIALS.
23	6010-E	MANHOLE ADJUSTMENT, MINOR A. REFER TO D SHEETS FOR LOCATIONS. THIS BID ITEM SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO ADJUST CASTINGS TO FINISHED GRADE. THIS ITEM INCLUDES THE REMOVAL AND REPLACEMENT OF ADJUSTMENT RINGS AND THE INSTALLATION OF NEW CASTINGS. OLD CASTING SHALL BE SALVAGED TO THE CITY. B. FURNISH NEW TYPE 3 CASTING WHERE POSSIBLE, TYPE 2 CASTING WITH ENGINEER APPROVAL. ITEM ALSO INCLUDES SAW CUTTING AND REMOVING PAVEMENT FULL DEPTH FOR PCC BOXOUT PER SECTION 7010, FIGURE 7010.103 OR 7020, FIGURE 7020.201. CONSTRUCT PCC BOXOUT WITH CLASS C OR CLASS M CONCRETE. ADDITIONAL TRAFFIC CONTROL AND LOCATING OF THE MANHOLES IS CONSIDERED INCIDENTAL TO THIS ITEM.
24	6010-H	REMOVE MANHOLE A. REFER TO F SHEETS FOR LOCATIONS. B. THIS BID IEM SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO REMOVE ALL COMPONENTS OF THE EXISTING STRUCTURE AND LEGALLY DISPOSING AT AN OFF SITE LOCATION. C. ALL CASTINGS SHALL BE SALVAGED AND DELIVERED TO THE CITY, UNLESS DIRECTED OTHERWISE, INCIDENTAL TO THE REMOVAL
25	6010-H	REMOVE INTAKE A. REFER TO F SHEETS FOR LOCATIONS. B. THIS BID IEM SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO REMOVE ALL COMPONENTS OF THE EXISTING STRUCTURE AND LEGALLY DISPOSING AT AN OFF SITE LOCATION. C. ALL CASTINGS SHALL BE SALVAGED AND DELIVERED TO THE CITY, UNLESS DIRECTED OTHERWISE, INCIDENTAL TO THE REMOVAL
26	7010-A	PAVEMENT, PCC, 7 INCH, CLASS C CONCRETE SHALL BE A C-4 MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. CURB AND GUTTER SECTION IS INCLUDE IN THE AREA OF THIS ITEM AND SHALL BE INCIDENTAL TO PAVEMENT CONSTRUCTION. REINFORCEMENT SHALL BE EPOXY COATED. 6 INCH MODIFIED SUBBASE SHALL BE PLACED UNDER THE PAVEMENT AND IS PAID FOR UNDER A SEPARATE BID ITEM. NO ADDITIONAL PAYMENT FOR COLD WEATHER PAVING OPERATIONS. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING AND PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INDICENTAL TO THIS ITEM.

27	7030-A-1	REMOVAL OF SIDEWALK ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
28	7030-A-3	REMOVAL OF DRIVEWAY ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6 INCH A. REFER TO D SHEETS FOR LAYOUT. ALL JOINTS SHALL BE CUT TO A DEPTH OF T/3 AND SEALED. B. ALL CONCRETE SHALL BE CLASS C AND MEET MINIMUM COMPRESSIVE STRENGTH REQUIREMENT OF 4,000 PSI AT 28 DAYS. AREAS NOT MEETING THIS REQUIREMENT SHALL BE SUBJECT TO REPAIRS, REPLACEMENT OR REDUCED PAYMENT AS DETERMINED BY THE ENGINEER AND TEST RESULTS WILL REPRESENT ALL CONCRETE PLACED IN THE SAME LOT. CERTIFIED PLANT INSPECTION SHALL BE REQUIRED BY CONTRACTOR. LOW AIR TOLERANCE LIMIT PER 7010-3.08-B. NO ADDITIONAL PAYMENT WILL BE MADE FOR COLD WEATHER CONCRETE OR COVERING IF REQUIRED. CRACKED PANELS SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE UNLESS, IN THE JUDGEMENT OF THE ENGINEER, THE CRACK CAN BE ROUTED AND SEALED.
30	7040-H	PAVEMENT REMOVAL A. THE THICKNESS OF THE EXISTING PAVEMENT IS VARIABLE. FULL DEPTH SAW CUTS SHALL BE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. B. THIS ITEM SHALL INCLUDE ALL LABOR AND EQUIPMENT NECESSARY TO REMOVE ALL ROADWAY PAVING AND EARTHWORK NEEDED TO MAKE THE PROPOSED IMPROVEMENTS. REFER TO Q SHEETS FOR REMOVAL LIMITS. SAW CUTS SHALL BE INCIDENTAL TO ITEMS. PAYMENT SHALL BE MADE FOR THE AREA OF ROADWAY PAVEMENT REMOVED, REGARDLESS OF THICKNESS.
31	8030-A	TEMPORARY TRAFFIC CONTROL A. REFER TO J SHEETS FOR STAGING AND TRAFFIC CONTROL. B. ALL ROAD AND PEDESTRIAN CLOSURES SHALL BE INCLUDED WITH THIS ITEM. C. CONTRACTOR SHALL SUBMIT PEDESTRIAN DETOUR ROUTES BASED ON PHASING PLAN. ANY ALTERATIONS TO THE STAGING PLAN SHOWN ON THE J SHEETS SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE OWNER TO REVIEW PRIOR TO COMMENCING WORK.
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS A. THIS ITEM INCLUDES THE REMOVAL OF EXISTING CITY OWNED STREET SIGNS. THIS BID ITEM INCLUDES REMOVAL OF THE EXISTING SIGNS, POLES AND SALVAGING TO THE CITY. B. PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT PRICE PER EACH SIGN REMOVED. THIS PAYMENT SHALL BE CONSIDERED FULL COMPENSATION FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO REMOVE EACH SIGN.
33	9010-B	HYDRAULIC SEEDING, SEEDING, FERTILIZING, AND MULCHING, TYPE 1 - PERMANENT LAWN SEED ALL AREAS DISTURBED BY CONSTRUCTION AS INDICATED ON PLANS. THE COST FOR WATERING UNTIL SEED ESTABLISHMENT IS ACCEPTED SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. ROCK PICKING, FINISH GRADING, SEED BED PREP AND RESEEDING ARE CONSIDERED INCIDENTAL TO THIS ITEM. SEED AND FERTILIZER SHALL BE APPLIED PRIOR TO MULCHING. THE CONTRACTOR IS RESPONSIBLE FOR MOWING AND MAINTAINING SEEDED AREAS UNTIL THE PROJECT IS ACCEPTED BY THE OWNER. SEEDING OF AREAS DISTURBED OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER. THE SEEDING RATE SHALL BE AT LEAST 260 LBS/ACRE. APPLY A 6-24-24, NITROGEN, PHOSPHATE, POTASH, COMMERCIAL FERTILIZER OR EQUIVALENT AT THE RATE OF 300 LBS PER ACRE. APPLY MULCHING PER MANUFACTURERS RECOMMENDATIONS. SEEDING AREAS ASSUMED FOR TWO APPLICATIONS OVER THE AREAS DISTURBED.
34	9040-F-1	WATTLE, STRAW, 9 INCH REFER TO R SHEETS FOR FILTER SOCK LOCATIONS. IF CONTRACTOR DETERMINES THAT ADDITIONAL QUANTITY IS REQUIRED TO PROPERLY PROTECT THE SITE AS REQUIRED BY THE NPDES GENERAL PERMIT NO.2, THEY MUST NOTIFY THE ENGINEER AND HAVE APPROVAL PRIOR TO THE INSTALLATION. REMOVAL OF THE ITEM SHALL BE PAID AS SEPERATE BID ITEMS. THIS ITEM TO BE PAID PER LINEAR FOOT INSTALLED.
35	9040-F-2	WATTLE, REMOVAL REMOVAL OF FILTER SOCKS SHALL BE EXECUTED AFTER SEEDING IS ESTABLISHED OR AS DIRECTED BY ENGINEER.
36	9040-T-1	INLET PROTECTION DEVICE, AREA INTAKE A. REFER TO R SHEETS FOR LOCATIONS. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY FOR INSTALLATION, REMOVAL AND OFF-SITE DISPOSAL OF ACCUMULATED SEDIMENT, AND REMOVAL OF DEVICE UPON COMPLETION OF THE PROJECT. B. PROTECTION DEVICES SHALL BE DROP-IN BASKETS FOR ALL NEW STRUCTURES. AREA INTAKES SHALL HAVE 10 FEET OF FILTER SOCK UTILIZED AS THE INLET PROTECTION DEVICE. COMPENSATION FOR AREA INTAKES WILL BE MADE PER EACH LOCATION PROTECTED.



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37	9040-T-1	<p>INLET PROTECTION DEVICE, OPEN THROAT CURB INTAKE</p> <p>A. REFER TO R SHEETS FOR LOCATIONS. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL LABOR AND MATERIALS NECESSARY FOR INSTALLATION, REMOVAL AND OFF-SITE DISPOSAL OF ACCUMULATED SEDIMENT, AND REMOVAL OF DEVICE UPON COMPLETION OF THE PROJECT.</p> <p>B. AREA INTAKES SHALL HAVE 10 FEET OF FILTER SOCK UTILIZED AS THE INLET PROTECTION DEVICE.</p>
38	11010-A	<p>CONSTRUCTION SURVEY</p> <p>REFER TO 'G' SHEETS FOR CONTROL POINT AND BENCHMARK LOCATIONS.</p>
39	11020-A	<p>MOBILIZATION</p> <p>THIS ITEM IS FOR ALL PREPATORY WORK AND COSTS INCURRED BEFORE BEGINNING THE WORK ON THE PROJECT AND DURING THE PROJECT. THIS ITEM SHALL ALSO INCLUDE THE COSTS FOR ANY STAGED CONSTRUCTION AND EQUIPMENT SET UP TO COMPLETE THE WORK. NO CHANGE IN CONTRACT PRICE WILL BE MADE FOR ANY ADDITIONAL WORK ADDED TO THE CONTRACT.</p>
40	11030-A	<p>MAINTENANCE OF POSTAL SERVICE</p> <p>CONTRACTOR TO MAINTAIN POSTAL SERVICE AT ALL TIMES DURING CONSTRUCTION. THERE MAY BE TIMES DURING CONSTRUCTION WHERE THE POSTAL SERVICE OR OTHER DELIVERY SERVICES MAY NOT HAVE ACCESS TO MAIL FACILITIES AT WHICH THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY ACCESS TO THOSE FACILITIES. TEMPORARY MAILBOX RELOCATION AND REINSTALLATION OR THE ESTABLISHMENT OF A TEMPORARY MAIL DROP BOX OR A COMBINATION OF THESE ITEMS SHALL BE INCLUDED IN THIS ITEM. REMOVAL AND REINSTALLATION OF MAILBOXES SHALL BE INCIDENTAL TO THIS ITEM. THIS INCLUDES MATERIALS AND LABOR TO REPLACE ANY MATERIALS DAMAGED IF NECESSARY.</p>
41	11030-B	<p>MAINTENANCE OF SOLID WASTE COLLECTION</p> <p>CONTRACTOR TO MAINTAIN SOLID WASTE COLLECTION AT ALL TIMES DURING CONSTRUCTION. THERE MAY BE TIMES DURING CONSTRUCTION WHERE THE SOLID WASTE COLLECTION AGENCIES MAY NOT HAVE ACCESS TO SOLID WASTE RECEPTACLES OR FACILITIES AT WHICH THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY ACCESS TO THOSE RECEPTACLES OR FACILITIES. THE ESTABLISHMENT OF A TEMPORARY TRASH PICKUP AREA SHALL BE COORDINATED WITH THE SOLID WASTE COLLECTION AGENCY PRIOR TO THE ESTABLISHMENT OF THE TEMPORARY AREA AND SHALL BE INCLUDED IN THIS ITEM.</p>

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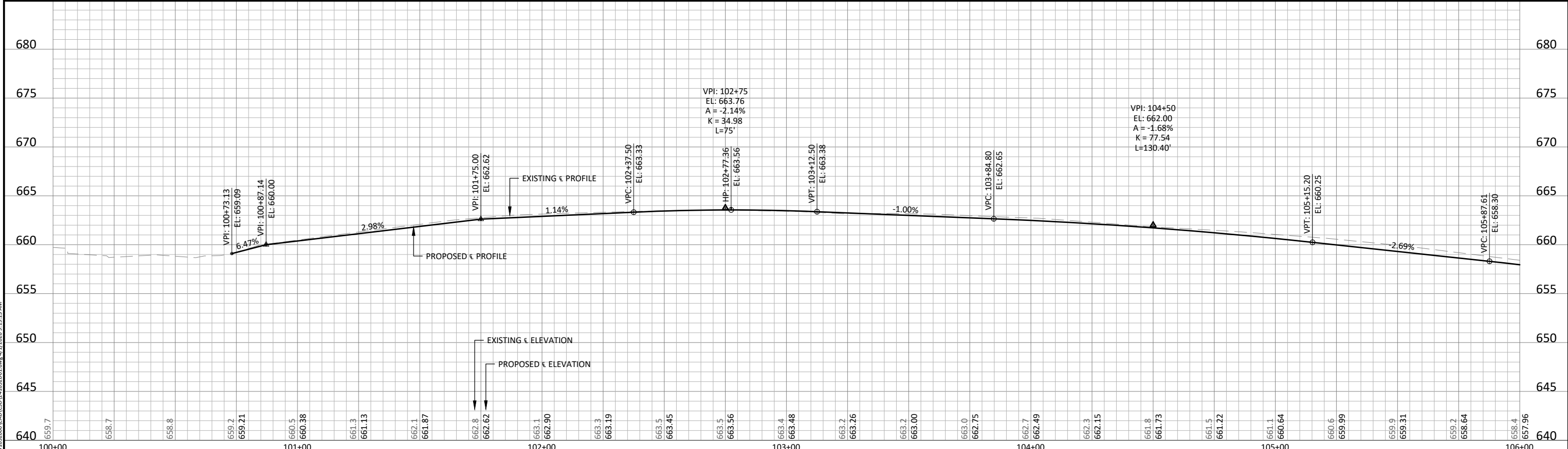
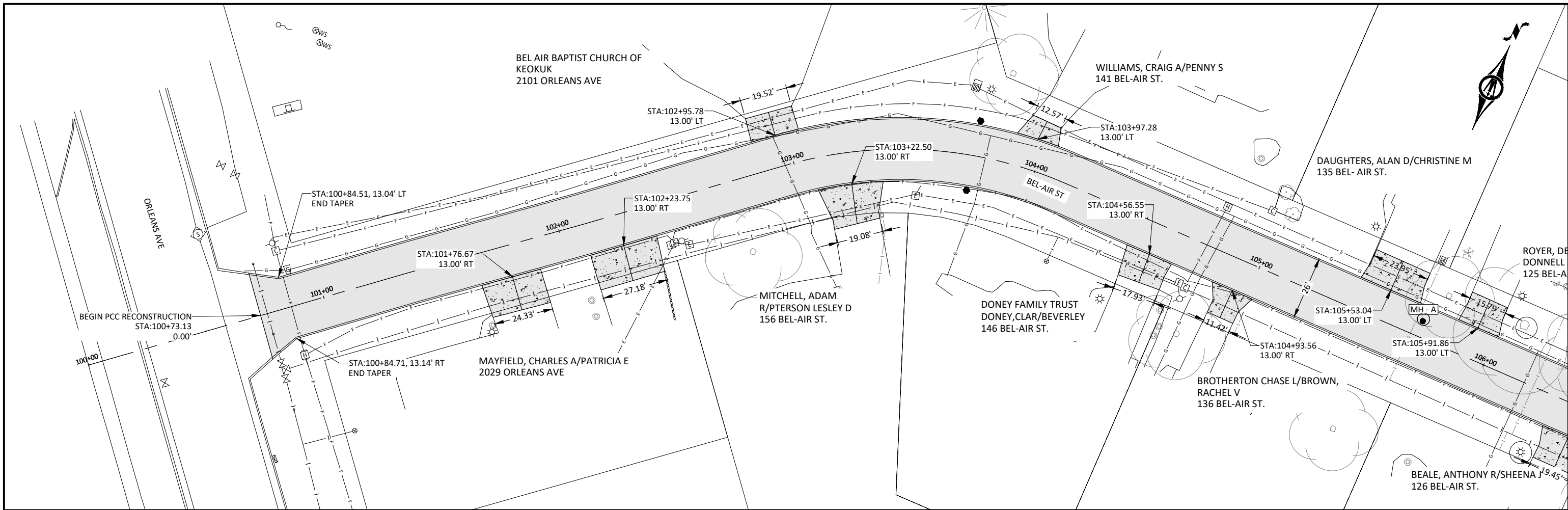


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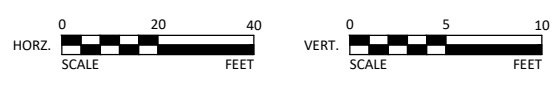
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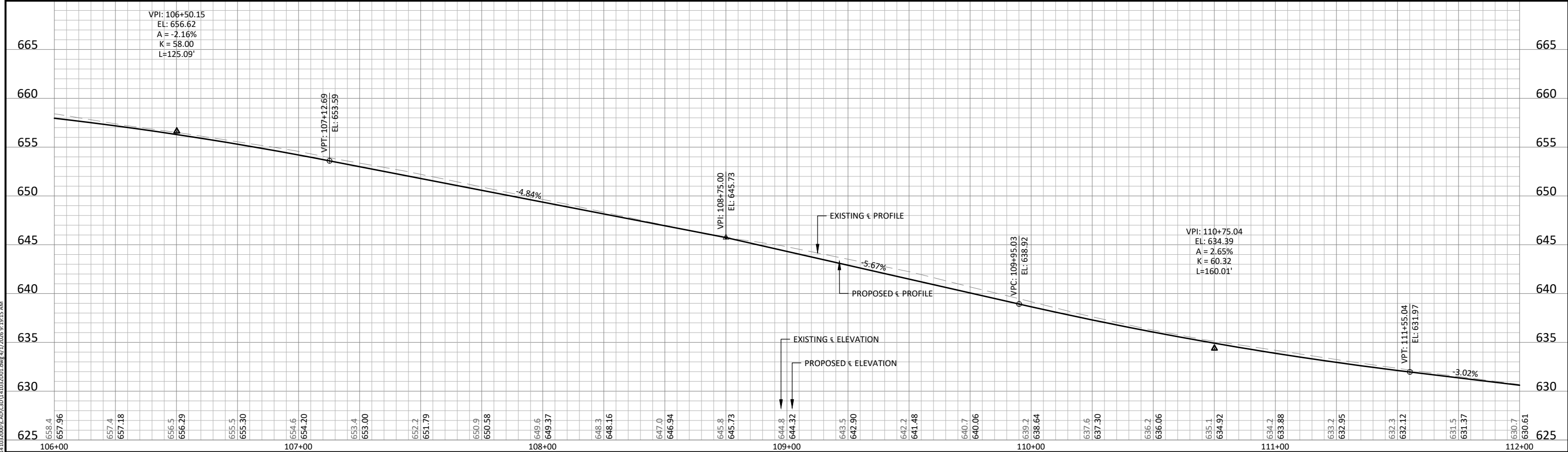
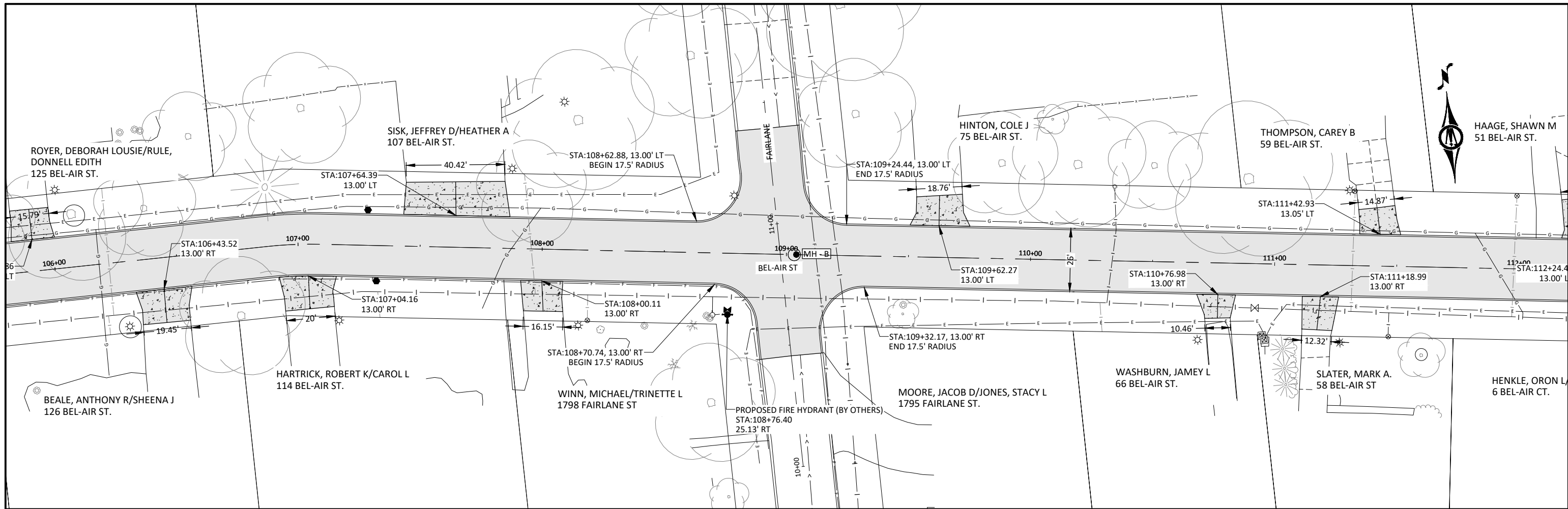


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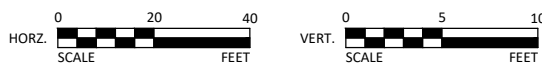
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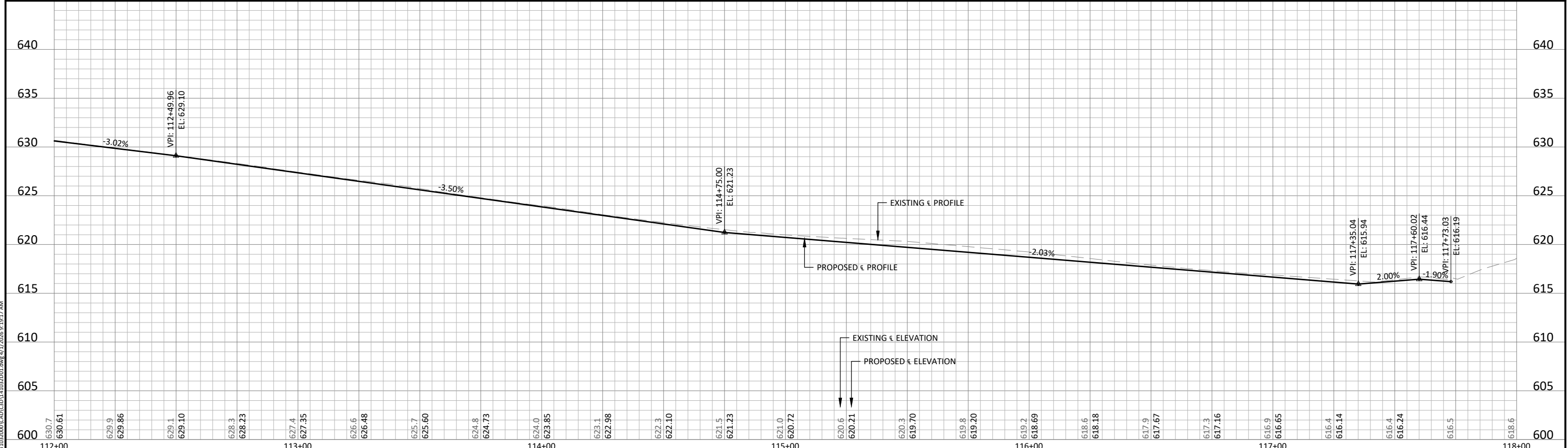
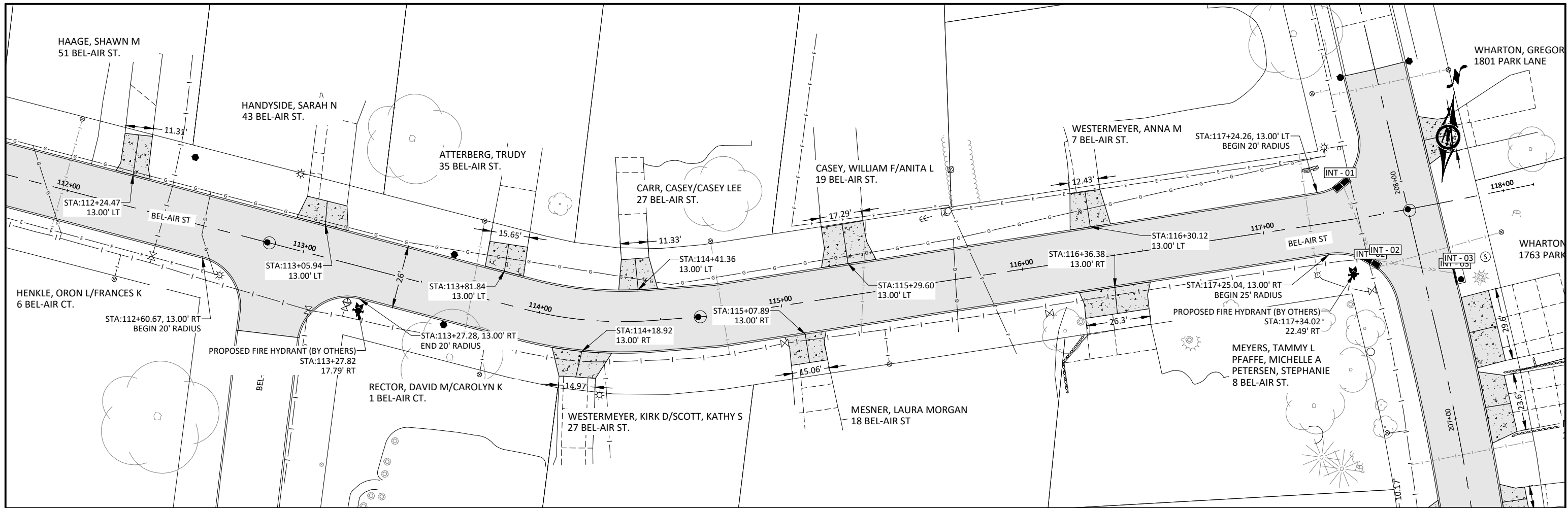


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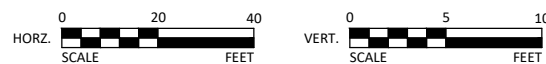
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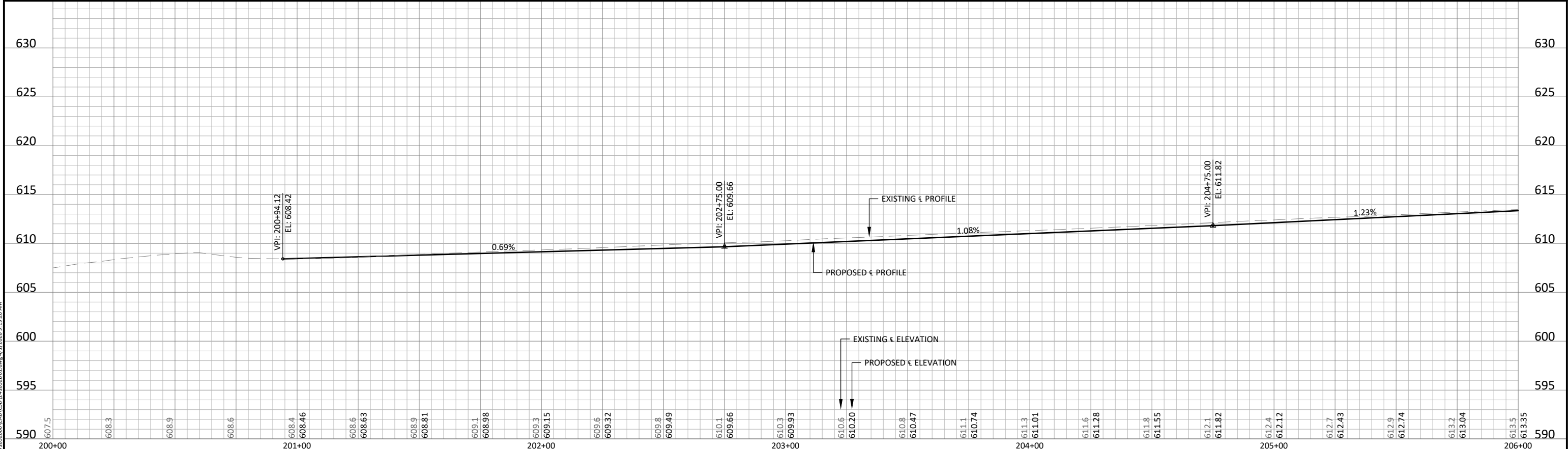
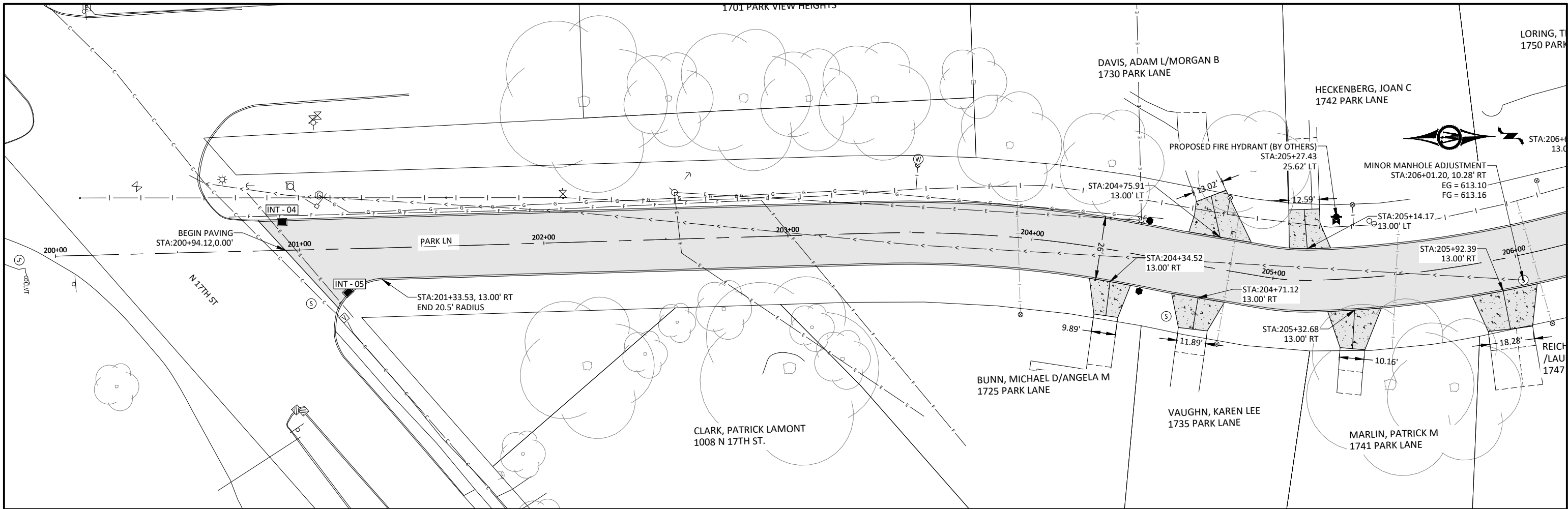


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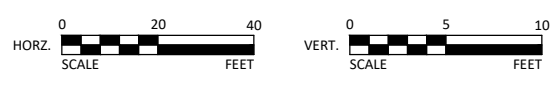
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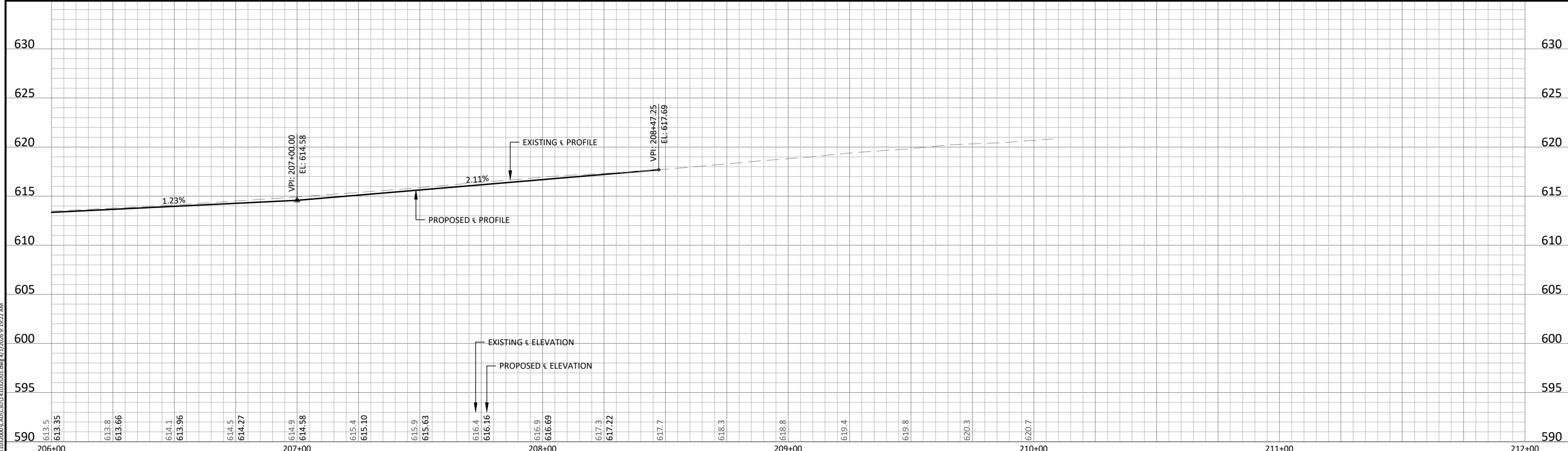
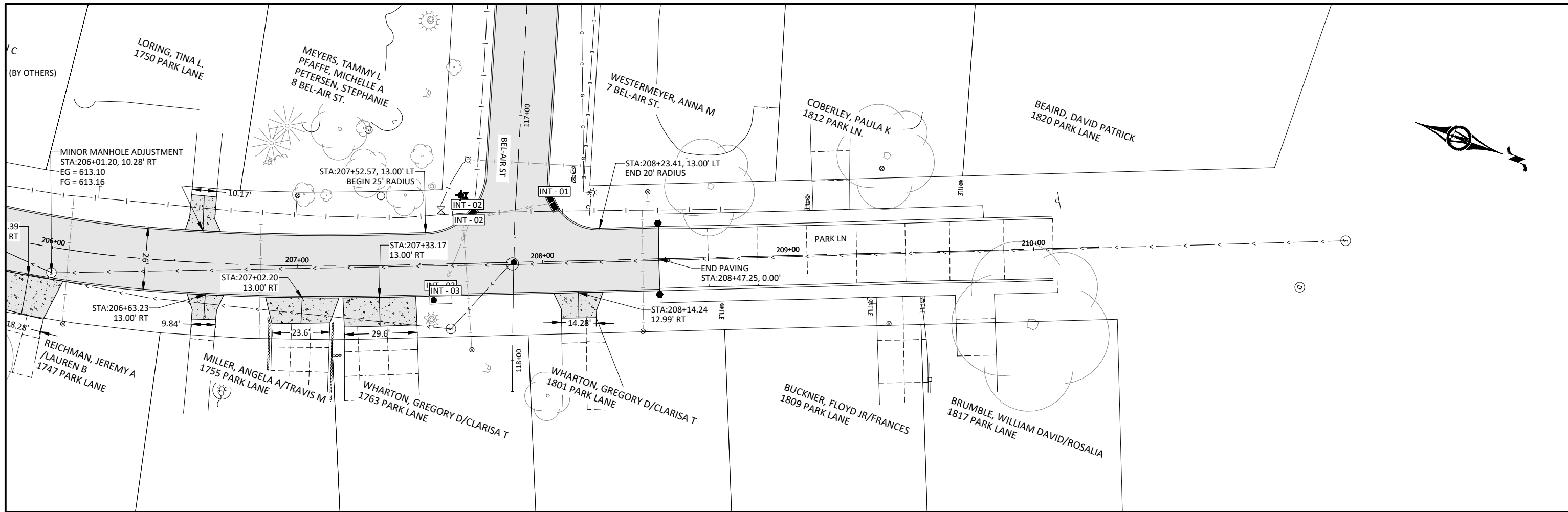


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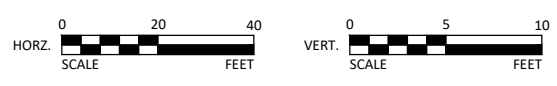
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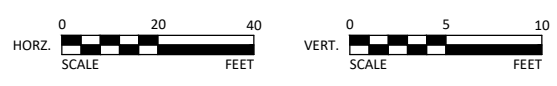
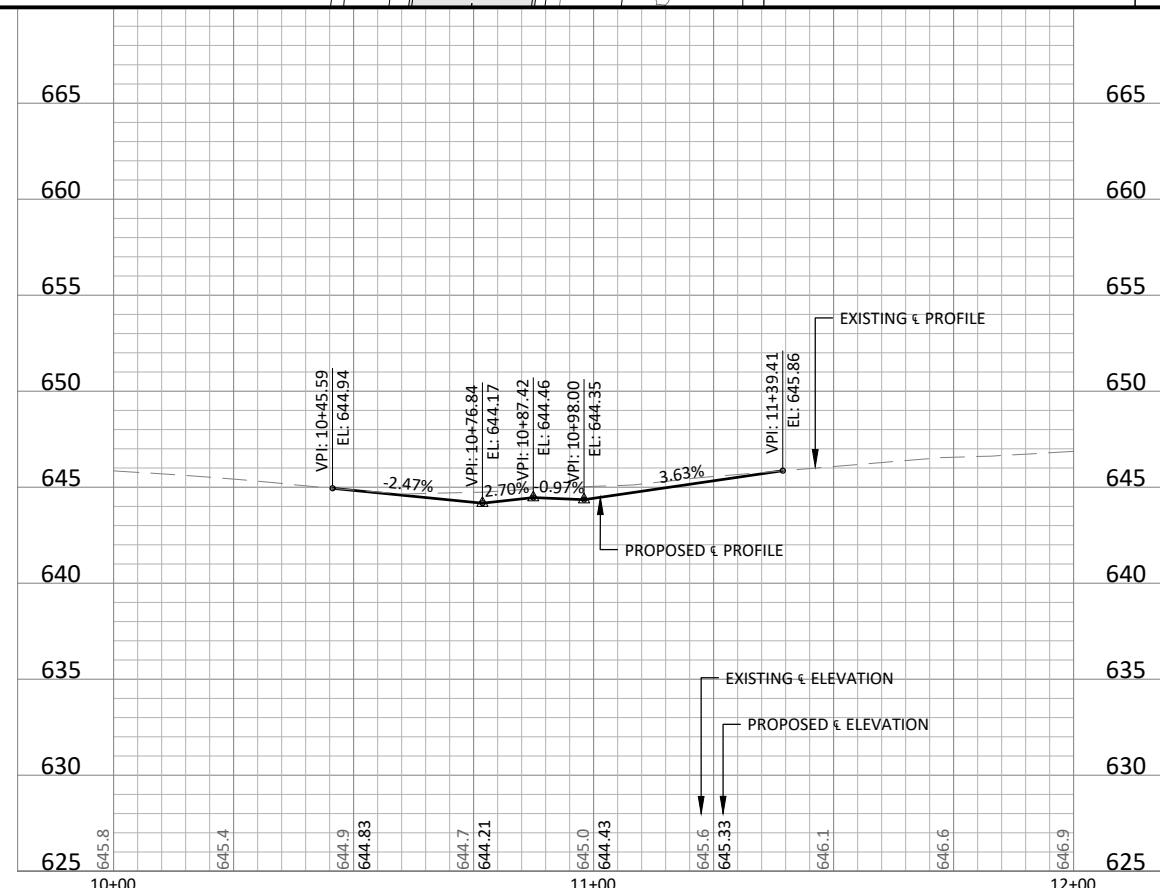
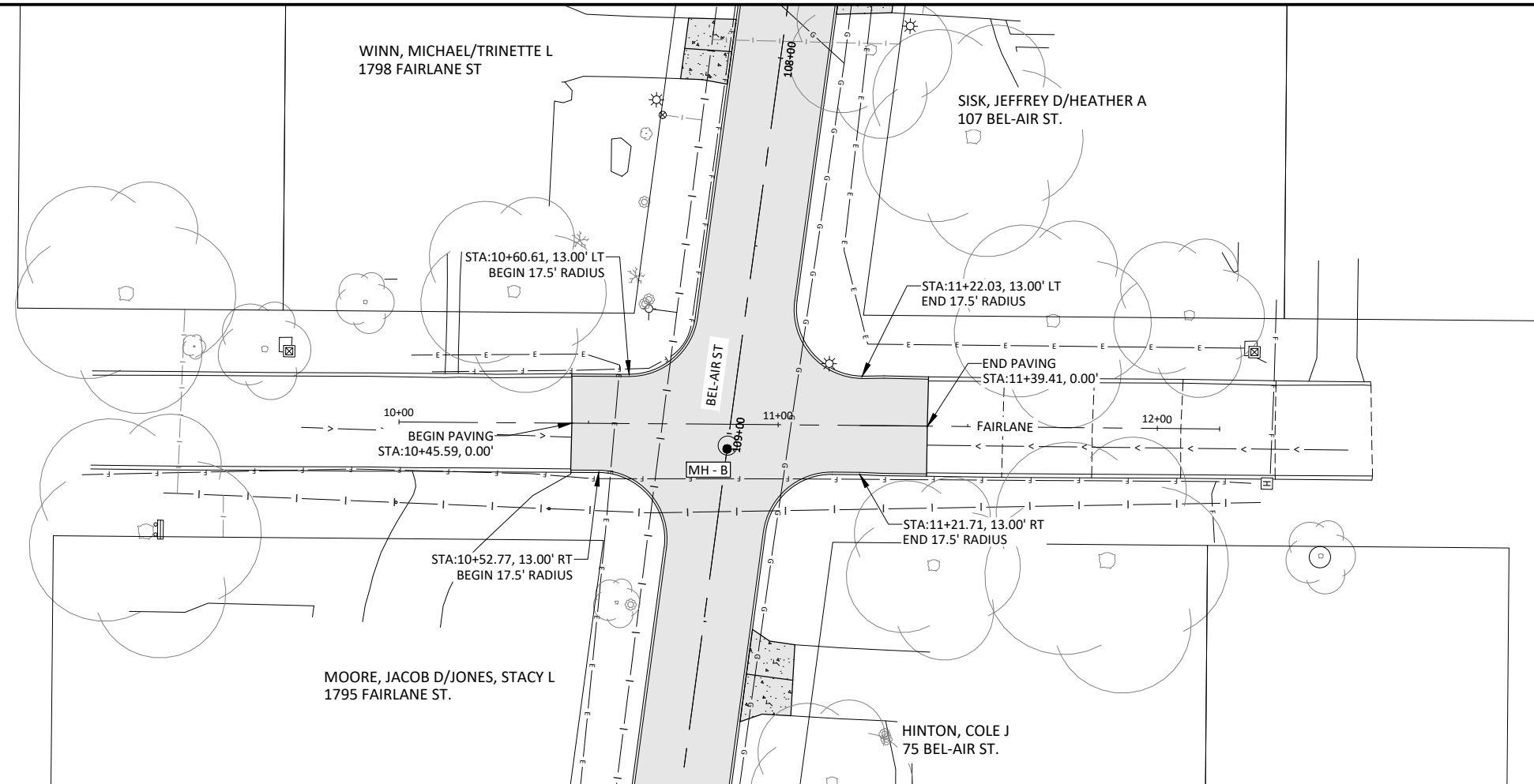


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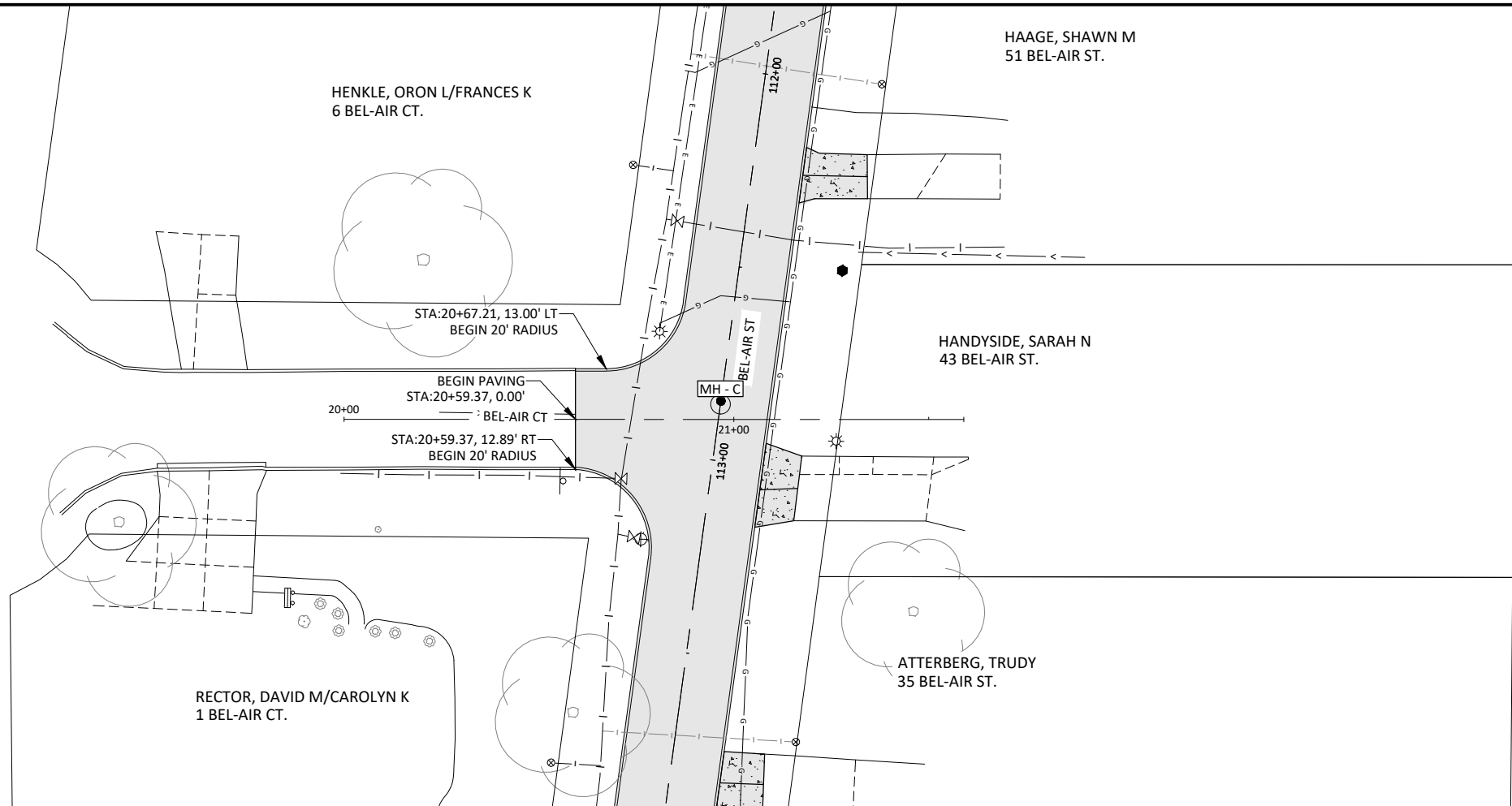
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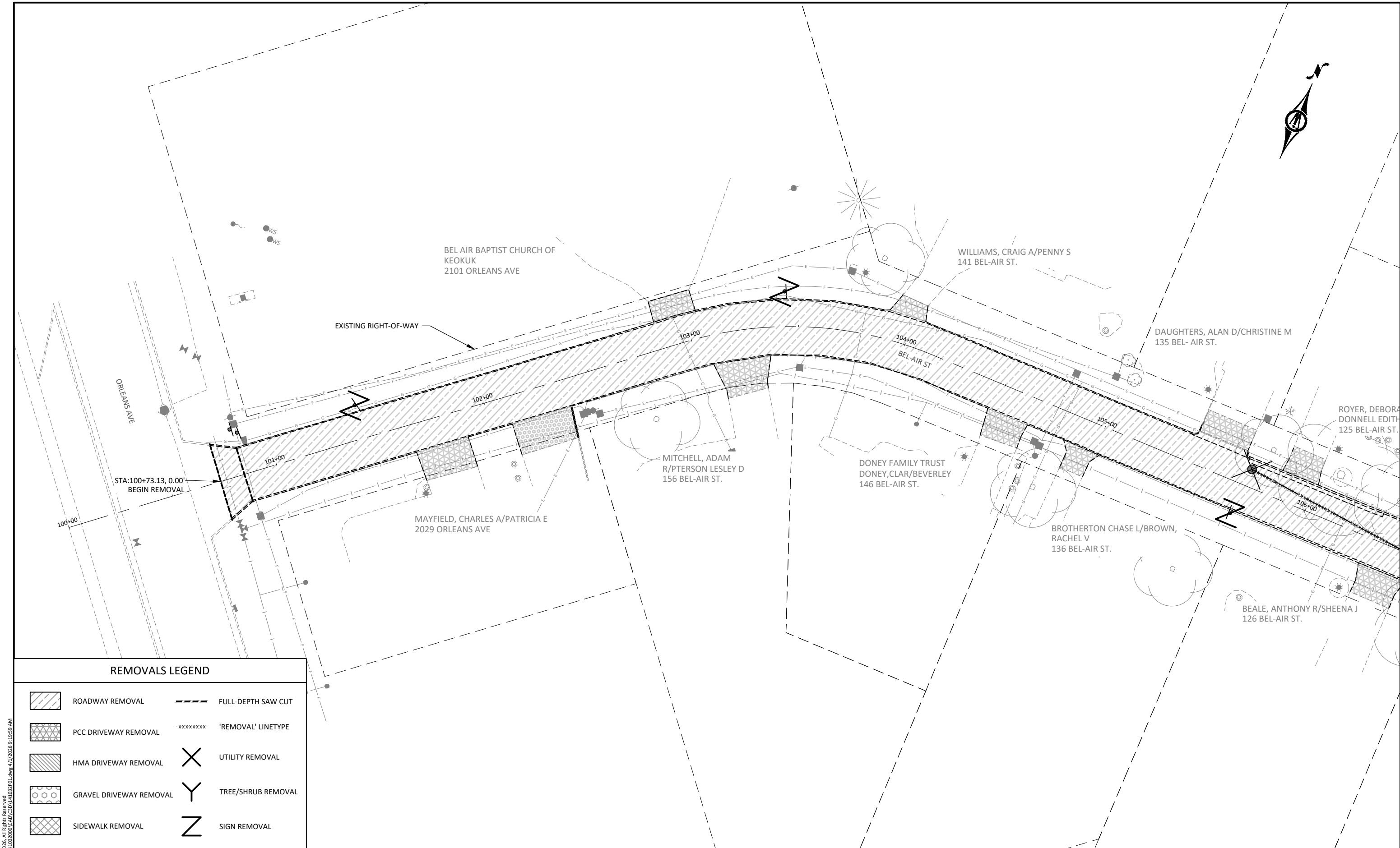
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REMOVALS LEGEND

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|--|-------------------------|--|--------------------|
| | ROADWAY REMOVAL | | FULL-DEPTH SAW CUT |
| | PCC DRIVEWAY REMOVAL | | 'REMOVAL' LINETYPE |
| | HMA DRIVEWAY REMOVAL | | UTILITY REMOVAL |
| | GRAVEL DRIVEWAY REMOVAL | | TREE/SHRUB REMOVAL |
| | SIDEWALK REMOVAL | | SIGN REMOVAL |



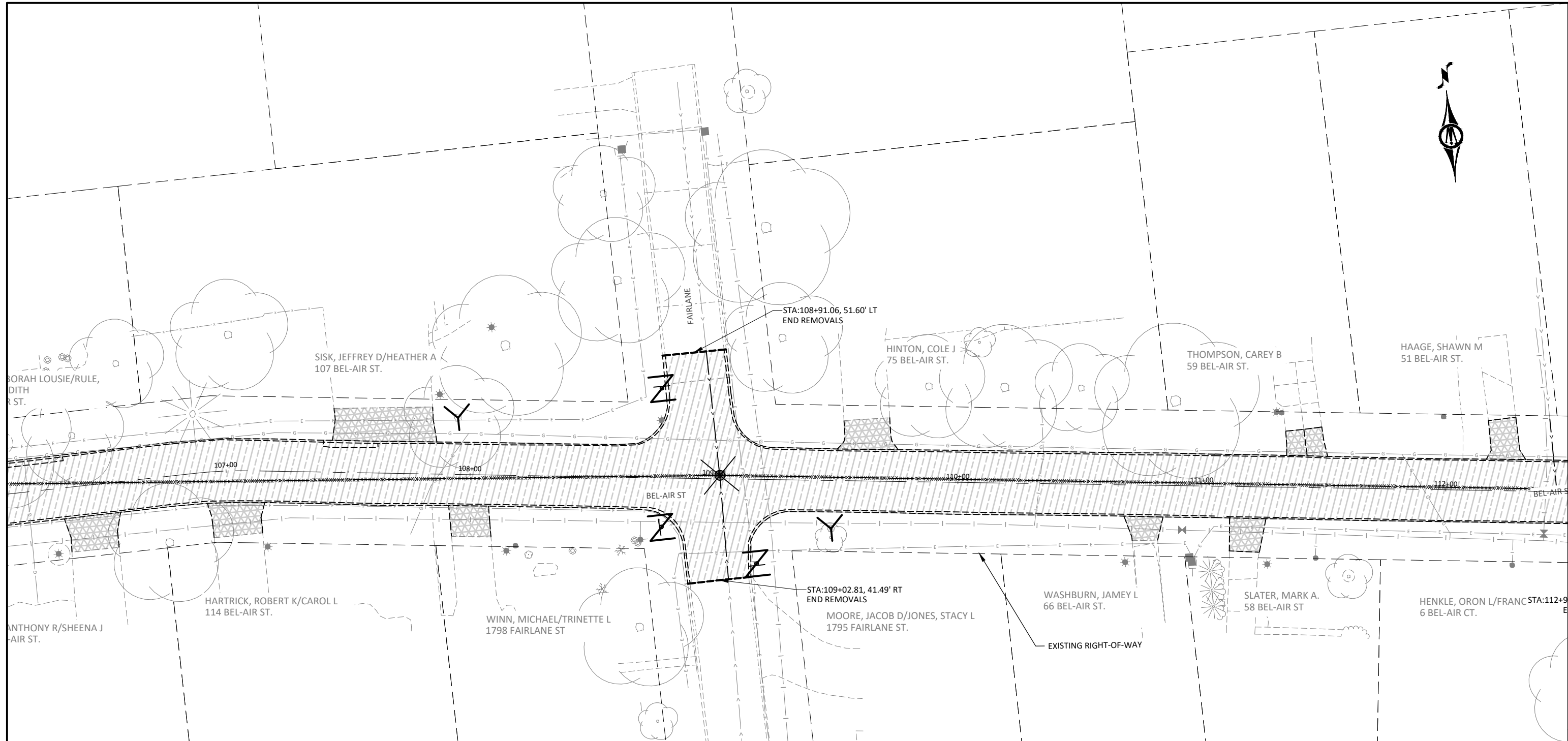
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CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 REMOVALS PLAN

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REMOVALS LEGEND

- ROADWAY REMOVAL
- PCC DRIVEWAY REMOVAL
- HMA DRIVEWAY REMOVAL
- GRAVEL DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- FULL-DEPTH SAW CUT
- 'REMOVAL' LINETYPE
- UTILITY REMOVAL
- TREE/SHRUB REMOVAL
- SIGN REMOVAL



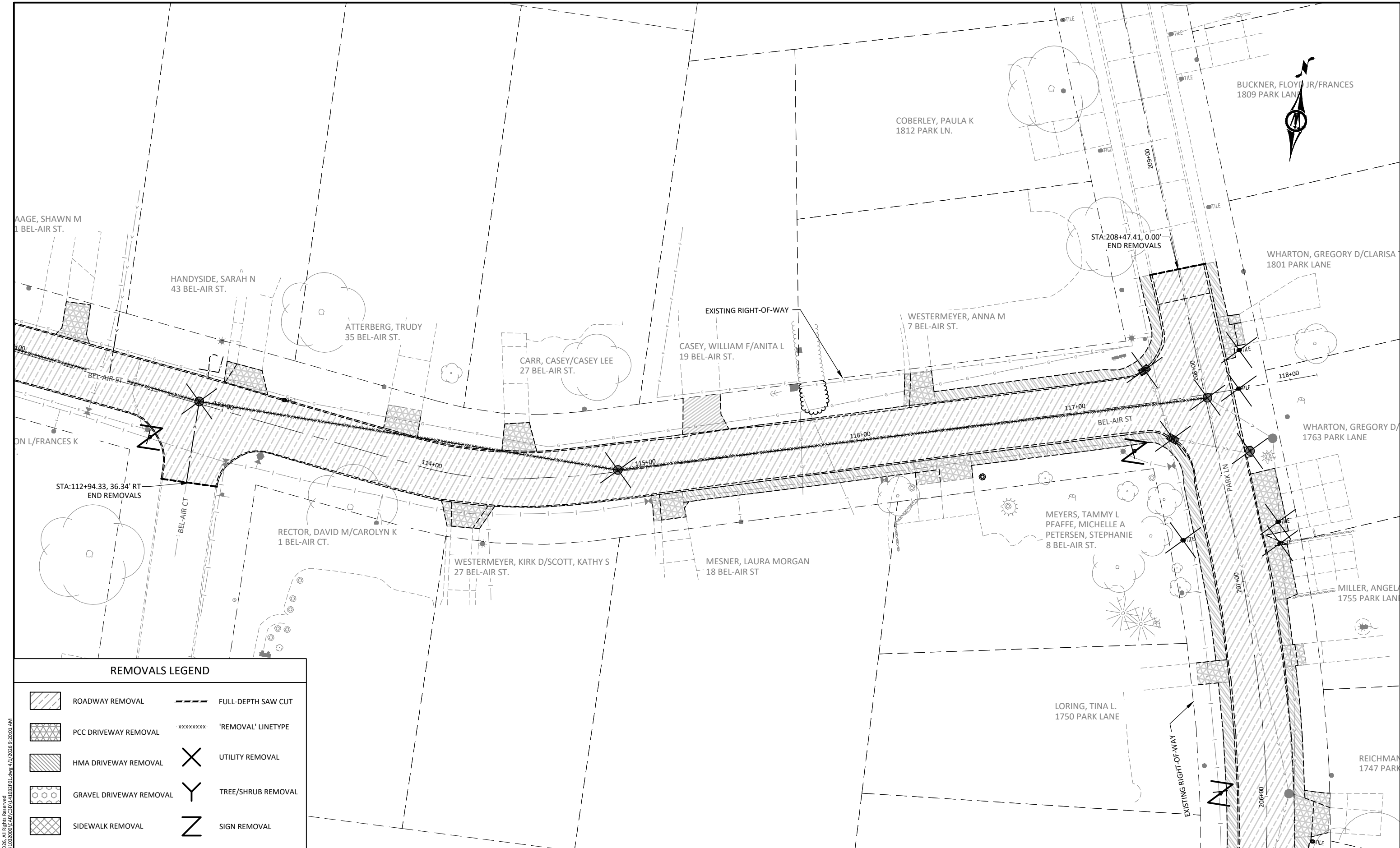
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CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 REMOVALS PLAN

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BUCKNER, FLOYD JR/FRANCES
1809 PARK LANE

COBERLEY, PAULA K
1812 PARK LN.

AAGE, SHAWN M
1 BEL-AIR ST.

HANDYSIDE, SARAH N
43 BEL-AIR ST.

ATTERBERG, TRUDY
35 BEL-AIR ST.

CARR, CASEY/CASEY LEE
27 BEL-AIR ST.

CASEY, WILLIAM F/ANITA L
19 BEL-AIR ST.

WESTERMEYER, ANNA M
7 BEL-AIR ST.

WHARTON, GREGORY D/CLARISA
1801 PARK LANE

STA:112+94.33, 36.34' RT
END REMOVALS

STA:208+47.41, 0.00'
END REMOVALS

RECTOR, DAVID M/CAROLYN K
1 BEL-AIR CT.

WESTERMEYER, KIRK D/SCOTT, KATHY S
27 BEL-AIR ST.

MESNER, LAURA MORGAN
18 BEL-AIR ST

MEYERS, TAMMY L
PFAFFE, MICHELLE A
PETERSEN, STEPHANIE
8 BEL-AIR ST.

WHARTON, GREGORY D/
1763 PARK LANE

MILLER, ANGELA
1755 PARK LANE

LORING, TINA L.
1750 PARK LANE

REICHMAN
1747 PARK

REMOVALS LEGEND

- ROADWAY REMOVAL
- PCC DRIVEWAY REMOVAL
- HMA DRIVEWAY REMOVAL
- GRAVEL DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- FULL-DEPTH SAW CUT
- 'REMOVAL' LINETYPE
- UTILITY REMOVAL
- TREE/SHRUB REMOVAL
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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
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FREY, SCOTTA /MARGARET M
1700 PARK VIEW HEIGHTS

FREY, SCOTT A/MARGARET M
1701 PARK VIEW HEIGHTS

DAVIS, ADAM L/MORGAN B
1730 PARK LANE

HECKENBERG, JOAN C
1742 PARK LANE

LORING, TINA L
1750 PARK LAN

STA:200+94.40, 0.00'
BEGIN REMOVAL

PARK LN

202+00

203+00

204+00

205+00

206+00

N 17TH ST

EXISTING RIGHT-OF-WAY

BUNN, MICHAEL D/ANGELA M
1725 PARK LANE











VAUGHN, KAREN LEE
1735 PARK LANE

MARLIN, PATRICK M
1741 PARK LANE

REICHMAN
/LAUREN B
1747 PARK

CLARK, PATRICK LAMONT
1008 N 17TH ST.

REMOVALS LEGEND

-  ROADWAY REMOVAL
-  PCC DRIVEWAY REMOVAL
-  HMA DRIVEWAY REMOVAL
-  GRAVEL DRIVEWAY REMOVAL
-  SIDEWALK REMOVAL
-  FULL-DEPTH SAW CUT
-  'REMOVAL' LINETYPE
-  UTILITY REMOVAL
-  TREE/SHRUB REMOVAL
-  SIGN REMOVAL



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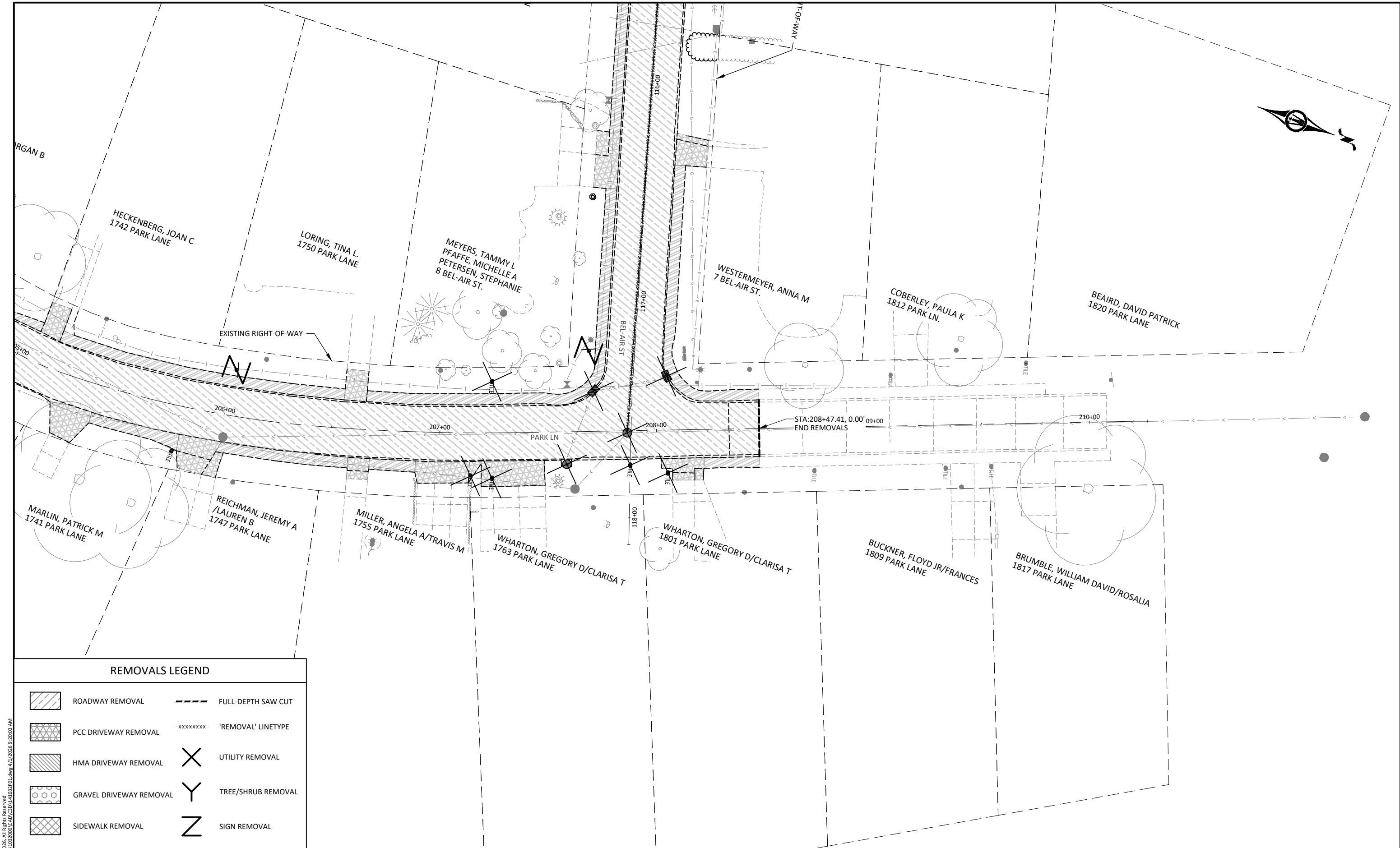
CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION

REMOVALS PLAN











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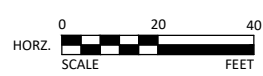
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REMOVALS LEGEND

- | | | | |
|---|-------------------------|---|--------------------|
|  | ROADWAY REMOVAL |  | FULL-DEPTH SAW CUT |
|  | PCC DRIVEWAY REMOVAL |  | 'REMOVAL' LINETYPE |
|  | HMA DRIVEWAY REMOVAL |  | UTILITY REMOVAL |
|  | GRAVEL DRIVEWAY REMOVAL |  | TREE/SHRUB REMOVAL |
|  | SIDEWALK REMOVAL |  | SIGN REMOVAL |



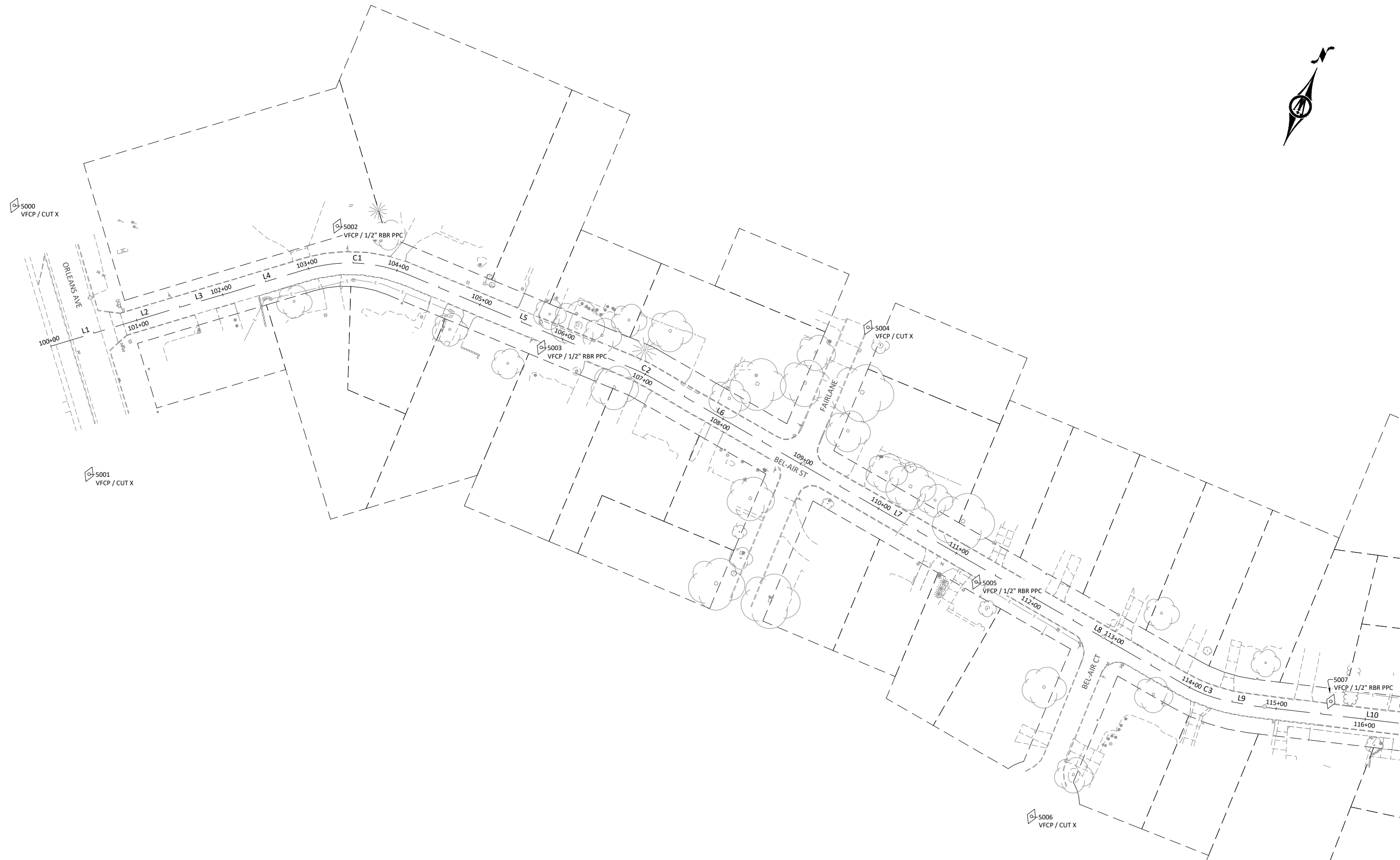
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 BEL AIR STREET RECONSTRUCTION
 REMOVALS PLAN

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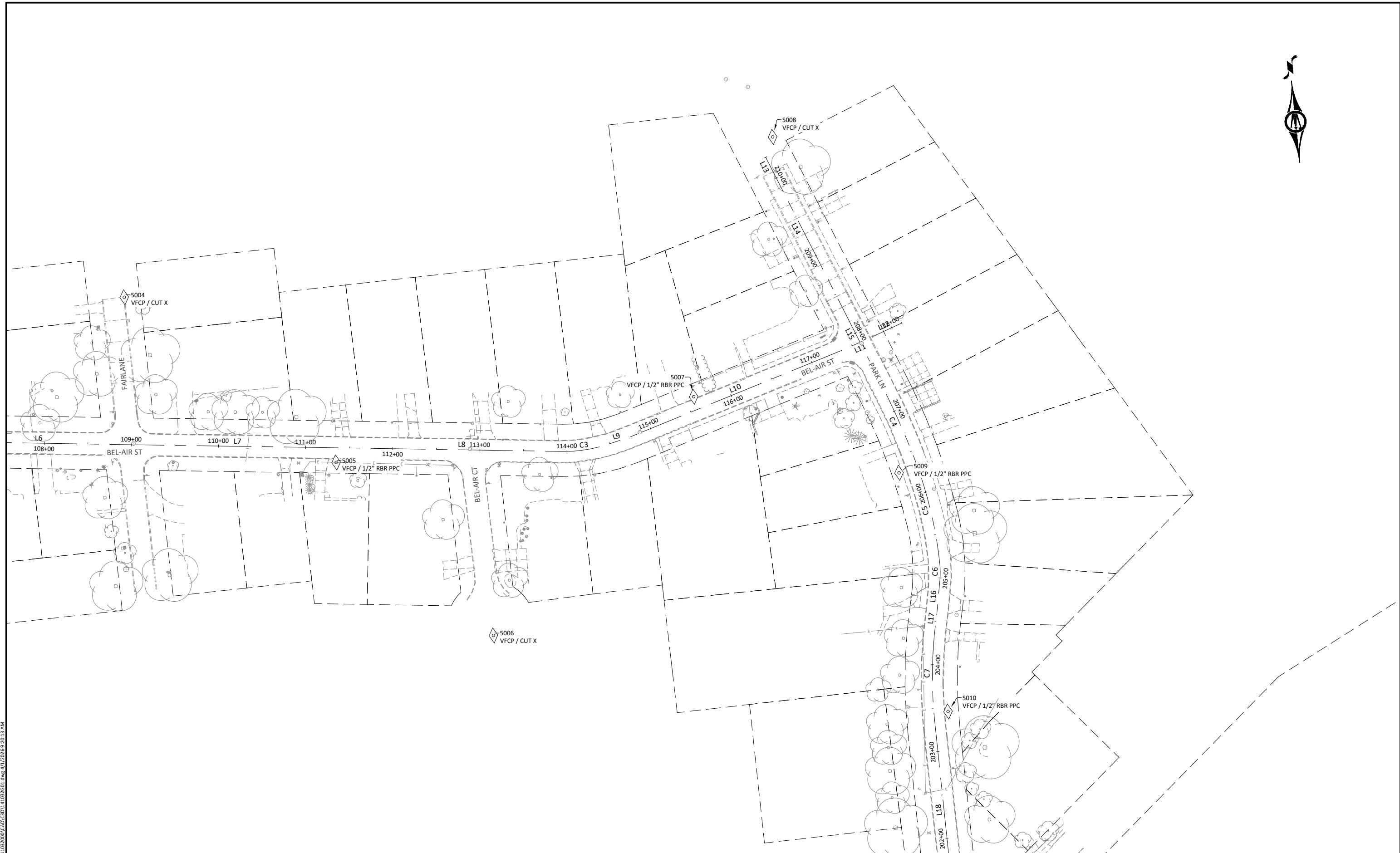


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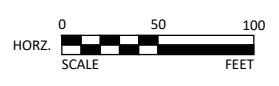
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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
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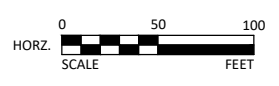
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CITY OF KEOKUK, IA
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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
REFERENCES & BENCHMARKS

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BEL-AIR											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
L1	100+00	100+84.53	84.53				157501.50	2228166.36	157555.97	2228231.00	N49° 53' 04"E
L2	100+84.53	101+37.54	53.01				157555.97	2228231.00	157590.18	2228271.50	N49° 48' 37"E
L3	101+37.54	102+10.63	73.09				157590.18	2228271.50	157636.70	2228327.87	N50° 27' 53"E
L4	102+10.63	102+95.78	85.15				157636.70	2228327.87	157691.79	2228392.80	N49° 41' 23"E
C1	102+95.78	104+13.65	117.87	39°43'34"	170.00	115.52	157691.79	2228392.80	157732.15	2228501.04	N69° 33' 10"E
L5	104+13.65	106+87.73	274.08				157732.15	2228501.04	157734.94	2228775.11	N89° 24' 57"E
C2	106+87.73	107+08.77	21.04	7°18'26"	165.00	21.03	157734.94	2228775.11	157733.82	2228796.11	S86° 55' 50"E
L6	107+08.77	108+78.84	170.07				157733.82	2228796.11	157713.91	2228965.01	S83° 16' 37"E
L7	108+78.84	111+64.95	286.11				157713.91	2228965.01	157681.07	2229249.23	S83° 24' 36"E
L8	111+64.95	113+93.67	228.72				157681.07	2229249.23	157654.48	2229476.39	S83° 19' 30"E
C3	113+93.67	114+46.80	53.13	19°01'37"	160.00	52.89	157654.48	2229476.39	157657.10	2229529.22	N87° 09' 42"E
L9	114+46.80	114+73.63	26.83				157657.10	2229529.22	157662.84	2229555.43	N77° 38' 54"E
L10	114+73.63	117+41.74	268.11				157662.84	2229555.43	157739.07	2229812.47	N73° 28' 57"E
L11	117+41.74	117+73.26	31.53				157739.07	2229812.47	157749.08	2229842.36	N71° 28' 44"E
L12	117+73.26	118+12.62	39.36				157749.08	2229842.36	157762.09	2229879.51	N70° 42' 15"E

PARK LN											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
L20	200+00	200+67.31	67.31				156968.55	2229872.44	157035.85	2229872.40	N0° 01' 57"W
L19	200+67.31	201+32.25	64.94				157035.85	2229872.40	157100.80	2229872.53	N0° 06' 41"E
L18	201+32.25	203+34.67	202.42				157100.80	2229872.53	157303.22	2229871.58	N0° 16' 09"W
C7	203+34.67	204+45.97	111.30	12°52'59"	495.00	111.07	157303.22	2229871.58	157413.64	2229883.52	N6° 10' 21"E
L17	204+45.97	204+59.67	13.70				157413.64	2229883.52	157427.01	2229886.51	N12° 36' 50"E
L16	204+59.67	204+97.22	37.55				157427.01	2229886.51	157463.87	2229893.67	N10° 58' 44"E
C6	204+97.22	205+17.12	19.90	11°23'58"	100.00	19.86	157463.87	2229893.67	157483.65	2229895.49	N5° 16' 45"E
C5	205+17.12	206+42.53	125.41	15°07'40"	475.00	125.05	157483.65	2229895.49	157607.49	2229878.12	N7° 59' 04"W
C4	206+42.53	207+35.98	93.45	5°38'09"	950.00	93.41	157607.49	2229878.12	157696.14	2229848.69	N18° 21' 59"W
L15	207+35.98	208+67.47	131.49				157696.14	2229848.69	157818.75	2229801.17	N21° 11' 04"W
L14	208+67.47	210+07.88	140.40				157818.75	2229801.17	157949.54	2229750.11	N21° 19' 39"W
L13	210+07.88	210+26.62	18.74				157949.54	2229750.11	157967.00	2229743.29	N21° 19' 39"W

POINT NORTHING/EASTING DATA				
POINT NUMBER	RAW DESCRIPTION	ELEVATION	NORTH	EAST
5000	VFCP / CUT X	661.350	157629.47	2228066.79
5001	VFCP / CUT X	658.050	157387.26	2228261.74
5002	VFCP / 1/2" RBR PPC	664.012	157750.75	2228406.65
5003	VFCP / 1/2" RBR PPC	658.875	157716.30	2228669.06
5004	VFCP / CUT X	647.037	157880.71	2228994.81
5005	VFCP / 1/2" RBR PPC	633.123	157667.78	2229217.74
5006	VFCP / CUT X	637.141	157452.20	2229377.56
5007	VFCP / 1/2" RBR PPC	620.390	157701.83	2229633.56
5008	VFCP / CUT X	621.430	157989.50	2229753.57
5009	VFCP / 1/2" RBR PPC	613.871	157591.34	2229859.36
5010	VFCP / 1/2" RBR PPC	610.889	157313.17	2229887.93
5011	VFCP / 1/2" RBR PPC	615.694	157086.80	2230054.13
5012	VFCP / 1/2" RBR PPC	610.883	156925.04	2229771.25

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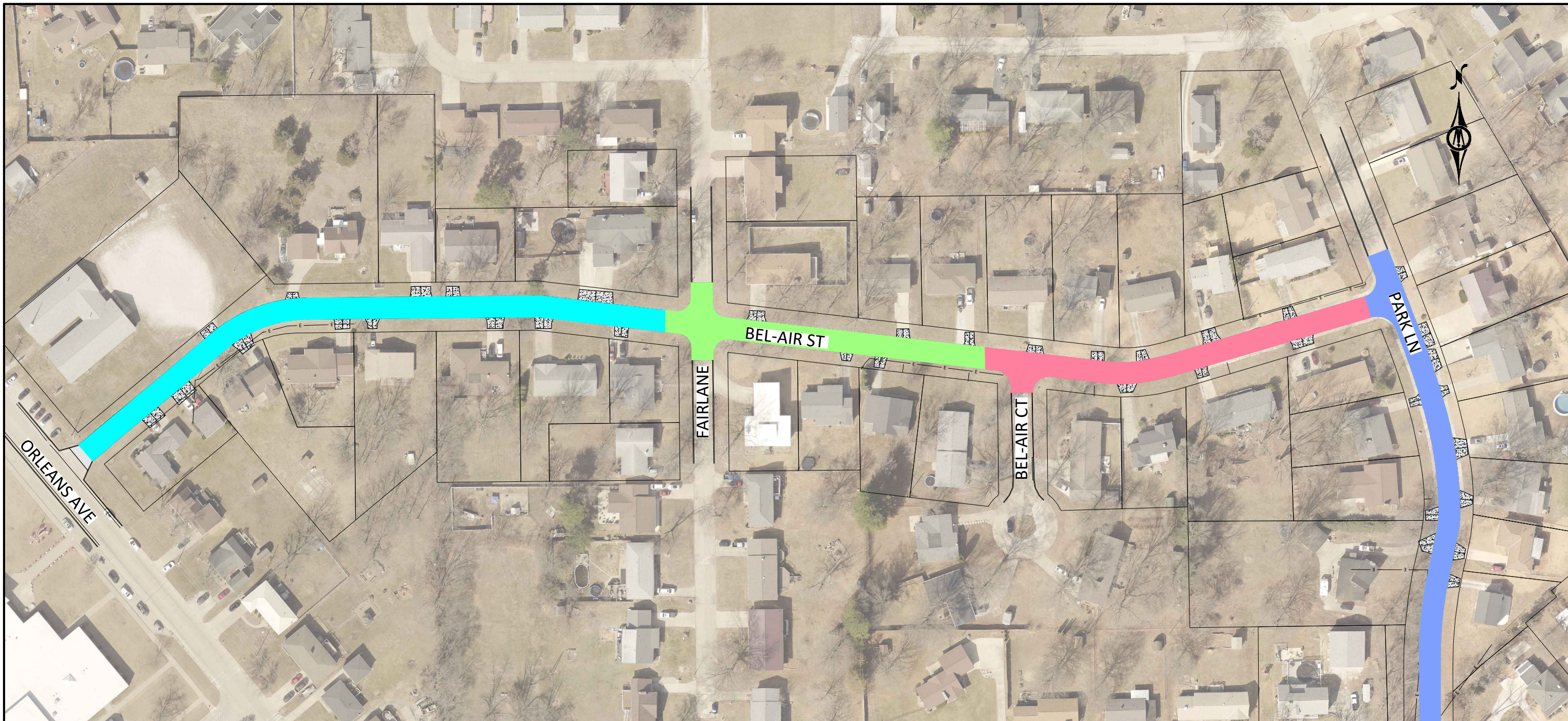


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CITY OF KEOKUK, IA
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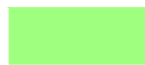
PHASE 1



PHASE 2



PHASE 3



PHASE 4



TRAFFIC CONTROL NOTES:

1. TRAFFIC CONTROL LAYOUTS SHOWN ON THESE PLANS ARE GENERAL TRAFFIC CONTROL LAYOUTS FOR INFORMATION ONLY.
2. THE CONTRACTOR SHALL DEVELOP A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 1070, 2.06 'TRAFFIC CONTROL' OF THE STANDARD SPECIFICATIONS. ANY TRAFFIC CONTROL DEVICES OR SAFETY EQUIPMENT NEEDED TO CONSTRUCT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING AND TRAFFIC CONTROL PLAN WITH PLANNED DETOURS, IF APPLICABLE, TO THE ENGINEER FOR APPROVAL BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.
3. IF NECESSARY, STREETS WILL BE CLOSED IN ACCORDANCE WITH SECTION 1070, 2.06 'TRAFFIC CONTROL' OF THE STANDARD SPECIFICATIONS.
4. ALL TRAFFIC CONTROL PLANS MUST BE REVIEWED AND APPROVED BY CITY OF KEOKUK PUBLIC WORKS STAFF COORDINATE WITH CITY STAFF PRIOR TO

PLACEMENT OF TRAFFIC CONTROL DEVICES AND SIGNS FOR EACH STAGE OF THE PROJECT.

5. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
6. ALL TRAFFIC CONTROL SIGNS SHALL BE PLACED A MINIMUM OF 2 FEET CLEAR OF THE BACK OF CURB WHERE POSSIBLE.
7. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS OF 3 DAYS OR LESS ALL OTHER TRAFFIC CONTROL SHALL BE POST MOUNTED.
8. THE PROPOSED SIGNAGE MAY BE MODIFIED TO MEET FIELD CONDITIONS, PREVENT OBSTRUCTIONS AND TO ACCOMMODATE CONSTRUCTION SCHEDULING UPON APPROVAL OF THE PROJECT ENGINEER
9. ORANGE SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES WITH "ROAD CLOSED" SIGNS ARE USED.
10. SIGNAGE MAINTENANCE SHALL BE CONSIDERED

INCIDENTAL TO TRAFFIC CONTROL AND REQUIRED AS DIRECTED BY THE ENGINEER.

11. ALL CONSTRUCTION SIGNS SHALL BE DIAMOND GRADE FLUORESCENT ORANGE OR WHITE V.I.P. SHEETING OR EQUIVALENT. (IOWA DOT TYPE VII SHEETING).
12. THE CONTRACTOR SHALL CONTACT THE CITY OF KEOKUK PUBLIC WORKS STAFF TO REMOVE ALL PERMANENT STREET SIGNS CONFLICTING WITH PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL REMOVE ALL OTHER SIGNS AS DETERMINED BY THE ENGINEER AND THEY SHALL REMAIN THE PROPERTY OF THE RESPECTIVE OWNERS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK.
13. AT THE TIME OF INITIAL SETUP OR AT THE TIME OF MAJOR STAGE CHANGES, 100 PERCENT OF EACH TYPE OF DEVICE (SIGNS, CONES, TUBULAR MARKERS, DRUMS, BARRICADES, VERTICAL PANELS, CHANGEABLE MESSAGE SIGNS, AND PAVEMENT MARKINGS) SHALL BE CLASSIFIED AS ACCEPTABLE BY THE REQUIREMENT OF THE AMERICAN TRAFFIC

SAFETY SERVICES ASSOCIATION (ATSSA), "QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES 1992." THROUGHOUT THE DURATION OF THE PROJECT, UNACCEPTABLE DEVICES OR SITUATIONS THAT ARE FOUND ON THE JOBSITE AS DETERMINED BY BEFORE MENTIONED PUBLICATION SHALL BE REPLACED OR THE SITUATION CORRECTED WITHIN 12 HOURS OF INITIAL NOTIFICATIONS BY THE ENGINEER.

14. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER, AND THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER IF STAGING ON PRIVATE PROPERTY.
15. AT EACH SIDEWALK CLOSURE LOCATION PLACE TYPE II BARRICADES WITH "SIDEWALK CLOSED" SIGNS AT EACH CLOSURE END AND PLACE "SIDEWALK CLOSED AHEAD" SIGNS ALONG THE SIDEWALK AT NEAREST STREET INTERSECTIONS ON EACH SIDE OF THE CLOSURE LOCATION IN ACCORDANCE WITH THE MUTCD.

16. MULTIPLE MOBILIZATIONS ARE ANTICIPATED FOR TRAFFIC CONTROL TO ADJUST THE TRAFFIC CONTROL DEVICES FOR THE DIFFERENT STAGES OF CONSTRUCTION. THESE MOBILIZATIONS SHALL BE INCIDENTAL TO TRAFFIC CONTROL BID ITEM.
17. CONTRACTOR SHALL MAINTAIN ACCESS FOR LOCAL RESIDENTS AS LONG AS POSSIBLE.



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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
PHASING PLAN

SHEET
J.01



SISK, JEFFREY D/HEATHER A
107 BEL-AIR ST.

STA:108+62.88, 30.50' LT
CENTER 17.5' RADIUS
1/4 FG ELEV = 645.77
1/2 FG ELEV = 645.55
3/4 FG ELEV = 645.44

STA:108+80.32, 32.73' LT
END 17.5' RADIUS
FG = 645.48

HINTON, COLE J
75 BEL-AIR ST.

STA:109+07.08, 28.31' LT
BEGIN 17.5' RADIUS
FG = 644.16

STA:109+24.44, 30.50' LT
CENTER 17.5' RADIUS
1/4 FG ELEV = 643.82
1/2 FG ELEV = 643.48
3/4 FG ELEV = 643.10

HANDYSIDE, SARAH N
43 BEL-AIR ST.

ATTERBERG, TRUDY
35 BEL-AIR ST.

FAIRLANE

STA:108+62.88, 13.00' LT
BEGIN 17.5' RADIUS
FG = 646.09

BEL-AIR ST AND FAIRLANE NORTHWEST
AND SOUTHWEST CURB PAN TIPPED OUTWARD

STA:108+70.74, 13.00' RT
BEGIN 17.5' RADIUS
FG = 645.77

STA:109+24.44, 13.00' LT
END 17.5' RADIUS
FG = 642.73

BEL-AIR ST

STA:109+32.17, 13.00' RT
END 17.5' RADIUS
FG = 642.24

BEL-AIR ST AND BEL-AIR CT SOUTHWEST
CURB PAN TIPPED OUTWARD

STA:112+60.67, 13.00' RT
BEGIN 20' RADIUS
FG = 628.47

BEL-AIR ST

STA:113+27.28, 13.00' RT
END 20' RADIUS
FG = 626.15

STA:108+70.73, 30.50' RT
CENTER 17.5' RADIUS
1/4 FG ELEV = 645.28
1/2 FG ELEV = 644.89
3/4 FG ELEV = 644.84

STA:108+88.03, 28.24' RT
END 17.5' RADIUS
FG = 644.84

STA:109+32.17, 30.50' RT
CENTER 17.5' RADIUS
1/4 FG ELEV = 643.77
1/2 FG ELEV = 643.27
3/4 FG ELEV = 642.77

STA:109+14.81, 32.72' RT
BEGIN 17.5' RADIUS
FG = 644.27

MOORE, JACOB D/JONES, STACY L
1795 FAIRLANE ST.

STA:112+60.67, 33.00' RT
CENTER 20' RADIUS
1/4 FG ELEV = 628.30
1/2 FG ELEV = 628.22
3/4 FG ELEV = 628.26

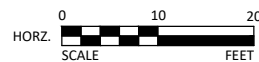
STA:112+80.49, 30.30' RT
END 20' RADIUS
FG = 628.38

BEL-AIR CT

STA:113+27.28, 33.00' RT
CENTER 20' RADIUS
1/4 FG ELEV = 627.38
1/2 FG ELEV = 626.94
3/4 FG ELEV = 626.51

STA:113+07.34, 34.56' RT
BEGIN 20' RADIUS
FG = 627.82

RECTOR, DAVID M/CAROLYN K
1 BEL-AIR CT.



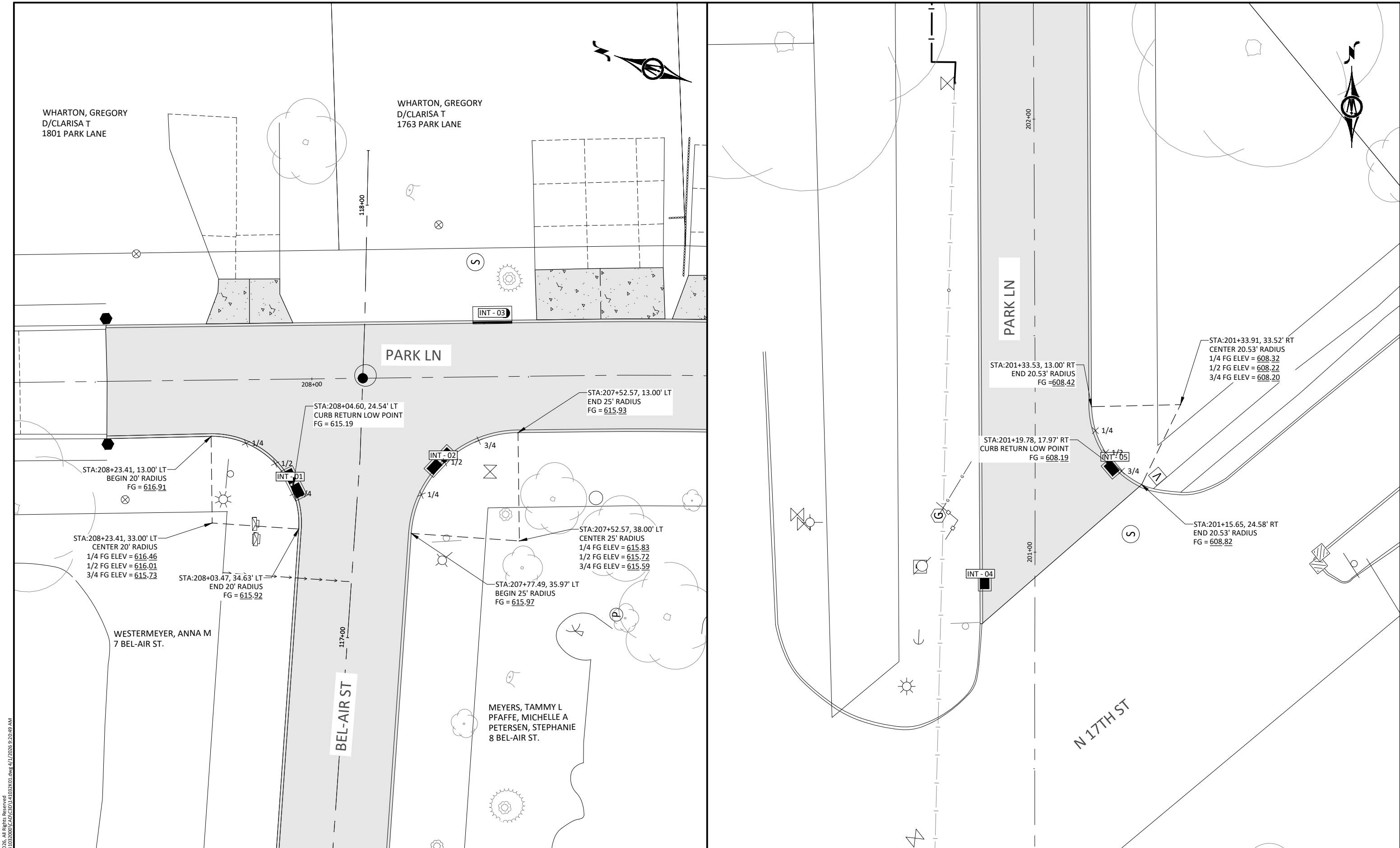
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RCK			
DEM			
CLIENT PROJ. NO.: 25X141032000			

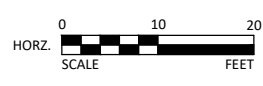
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BEL AIR STREET RECONSTRUCTION
K - INTERSECTION SHEETS

SHEET
K.01

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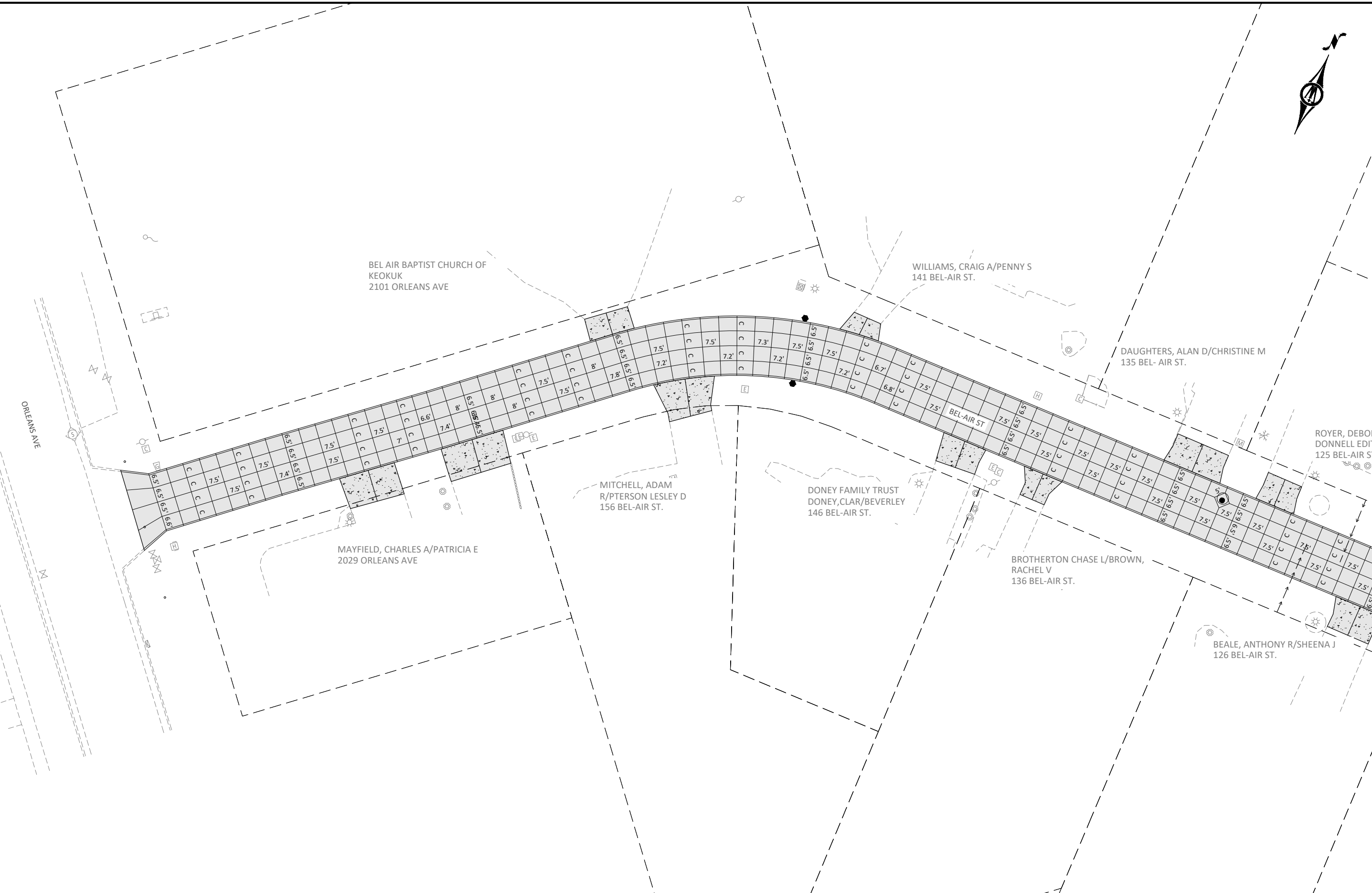


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CLIENT PROJ. NO.:		25X141032000	

CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 K - INTERSECTION SHEETS

SHEET
K.02



ORLEANS AVE

BEL AIR BAPTIST CHURCH OF KEOKUK
2101 ORLEANS AVE

WILLIAMS, CRAIG A/PENNY S
141 BEL-AIR ST.

DAUGHTERS, ALAN D/CHRISTINE M
135 BEL-AIR ST.

ROYER, DEBORAH
DONNELL EDITH
125 BEL-AIR ST.

MITCHELL, ADAM
R/PTERSON LESLEY D
156 BEL-AIR ST.

DONEY FAMILY TRUST
DONEY, CLAR/BEVERLEY
146 BEL-AIR ST.

MAYFIELD, CHARLES A/PATRICIA E
2029 ORLEANS AVE

BROTHERTON CHASE L/BROWN,
RACHEL V
136 BEL-AIR ST.

BEALE, ANTHONY R/SHEENA J
126 BEL-AIR ST.



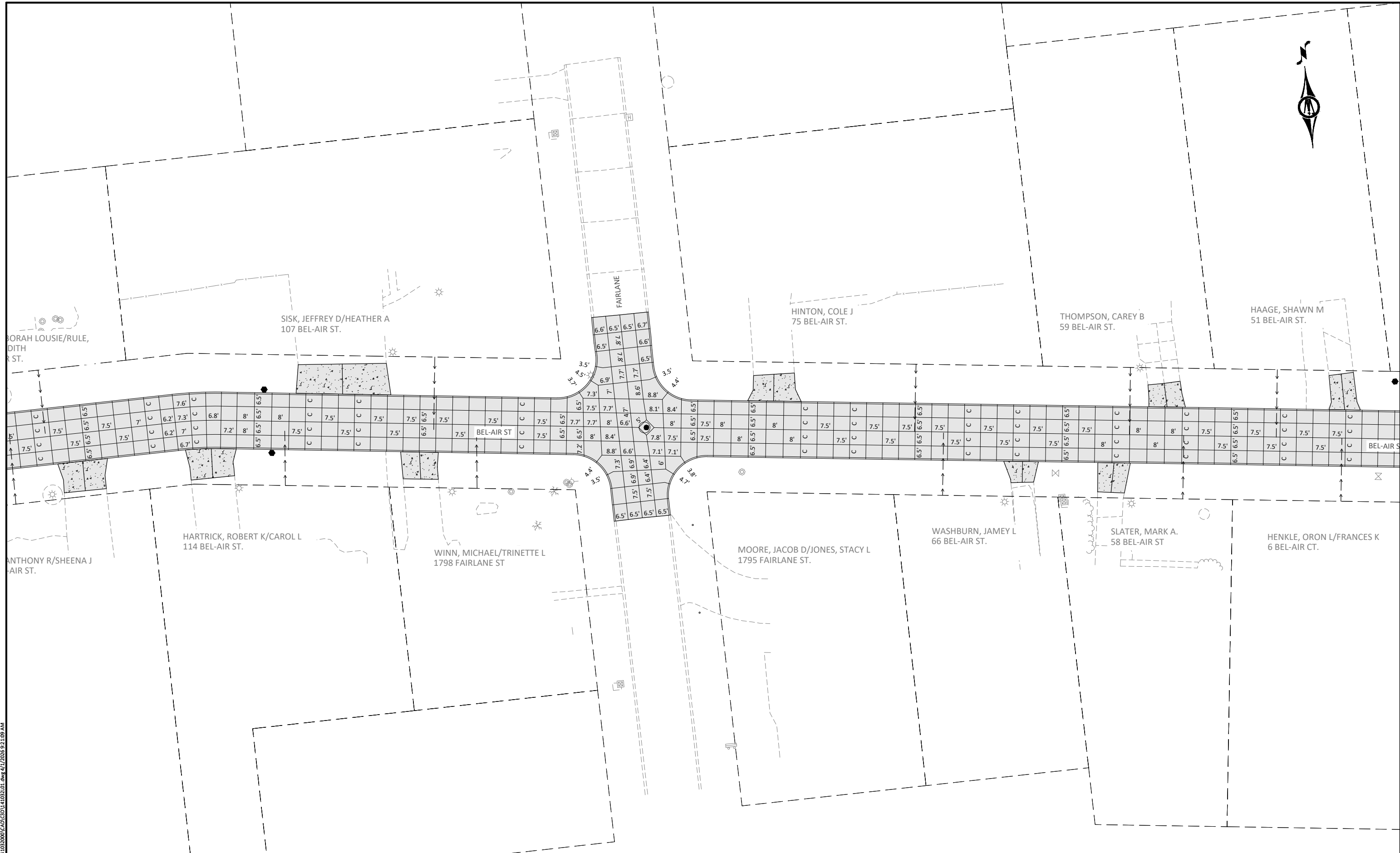
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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
GEOMETRICS & JOINTING

SHEET
L.01

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BORAH LOUSIE/RULE,
DITH
R ST.

SISK, JEFFREY D/HEATHER A
107 BEL-AIR ST.

HINTON, COLE J
75 BEL-AIR ST.

THOMPSON, CAREY B
59 BEL-AIR ST.

HAAGE, SHAWN M
51 BEL-AIR ST.

ANTHONY R/SHEENA J
AIR ST.

HARTRICK, ROBERT K/CAROL L
114 BEL-AIR ST.

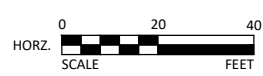
WINN, MICHAEL/TRINETTE L
1798 FAIRLANE ST

MOORE, JACOB D/JONES, STACY L
1795 FAIRLANE ST.

WASHBURN, JAMEY L
66 BEL-AIR ST.

SLATER, MARK A.
58 BEL-AIR ST

HENKLE, ORON L/FRANCES K
6 BEL-AIR CT.



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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
GEOMETRICS & JOINTING

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L.02

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BUCKNER, FLOYD JR/FRANCES
1809 PARK LANE

COBERLEY, PAULA K
1812 PARK LN.

WHARTON, GREGORY D/CLARISA
1801 PARK LANE

AAGE, SHAWN M
1 BEL-AIR ST.

HANDYSIDE, SARAH N
43 BEL-AIR ST.

ATTERBERG, TRUDY
35 BEL-AIR ST.

CARR, CASEY/CASEY LEE
27 BEL-AIR ST.

CASEY, WILLIAM F/ANITA L
19 BEL-AIR ST.

WESTERMEYER, ANNA M
7 BEL-AIR ST.

WHARTON, GREGORY D/
1763 PARK LANE

ON L/FRANCES K

RECTOR, DAVID M/CAROLYN K
1 BEL-AIR CT.

WESTERMEYER, KIRK D/SCOTT, KATHY S
27 BEL-AIR ST.

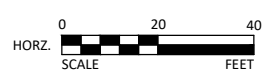
MESNER, LAURA MORGAN
18 BEL-AIR ST

MEYERS, TAMMY L
PFAFFE, MICHELLE A
PETERSEN, STEPHANIE
8 BEL-AIR ST.

MILLER, ANGELA
1755 PARK LANE

LORING, TINA L.
1750 PARK LANE

REICHMAN
1747 PARK



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CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
GEOMETRICS & JOINTING

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L.03

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FREY, SCOTTA /MARGARET M
1700 PARK VIEW HEIGHTS

FREY, SCOTT A/MARGARET M
1701 PARK VIEW HEIGHTS

DAVIS, ADAM L/MORGAN B
1730 PARK LANE

HECKENBERG, JOAN C
1742 PARK LANE

LORING, TINA L
1750 PARK LAN

N 17TH ST

PARK LN

CLARK, PATRICK LAMONT
1008 N 17TH ST.

BUNN, MICHAEL D/ANGELA M
1725 PARK LANE

VAUGHN, KAREN LEE
1735 PARK LANE

MARLIN, PATRICK M
1741 PARK LANE

REICHMAN
/LAUREN B
1747 PARK



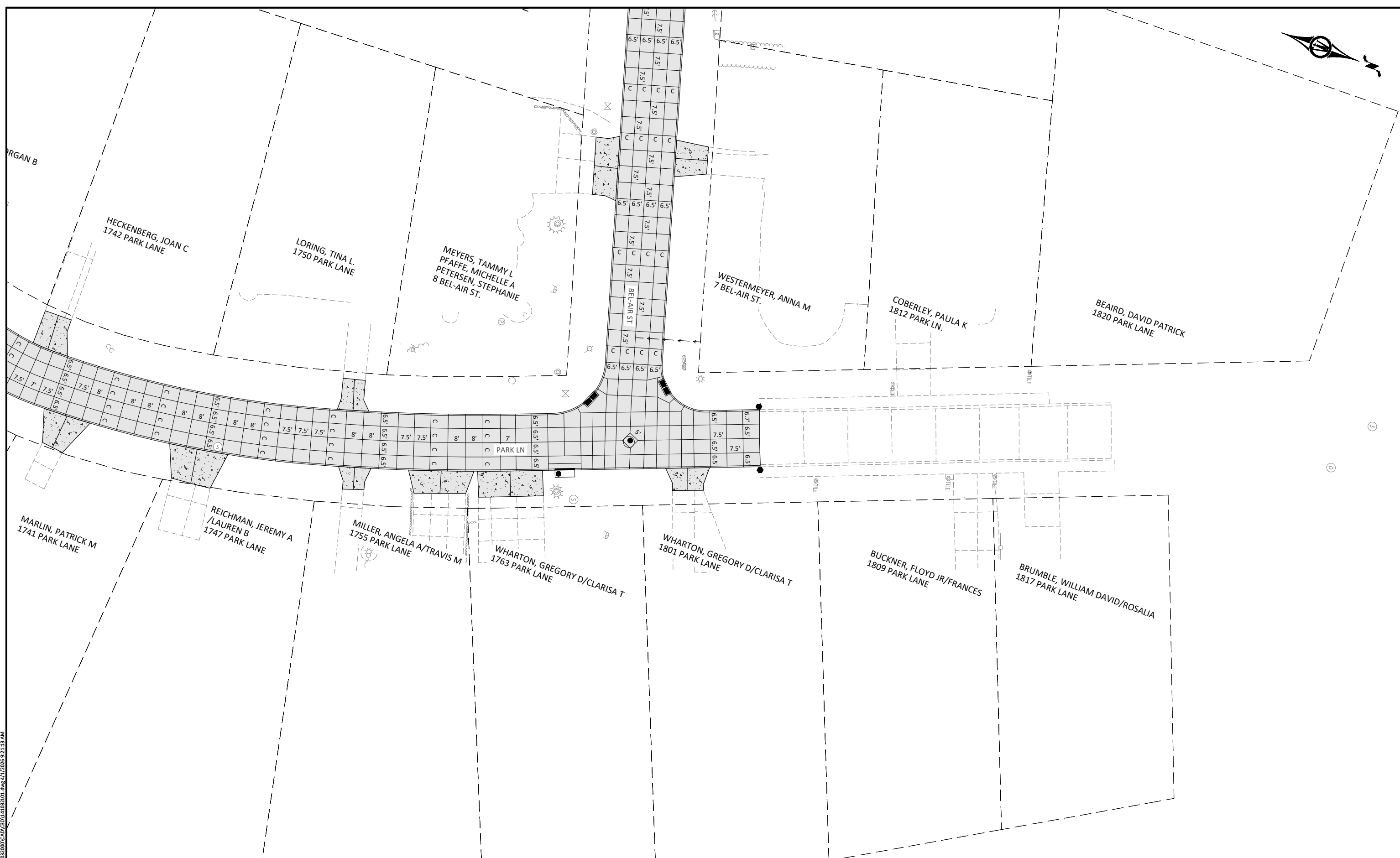
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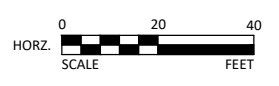
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BEL AIR STREET RECONSTRUCTION
GEOMETRICS & JOINTING

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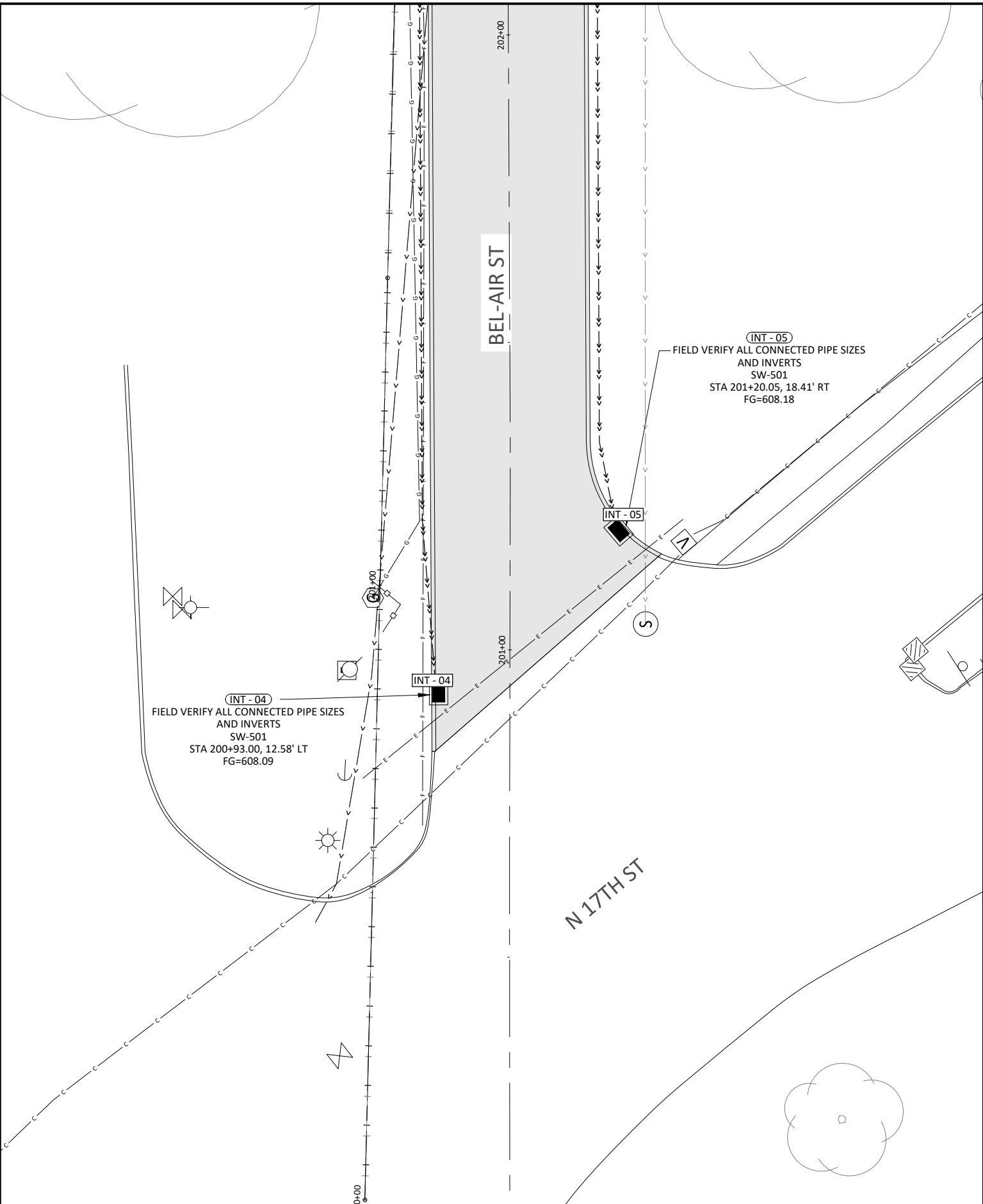
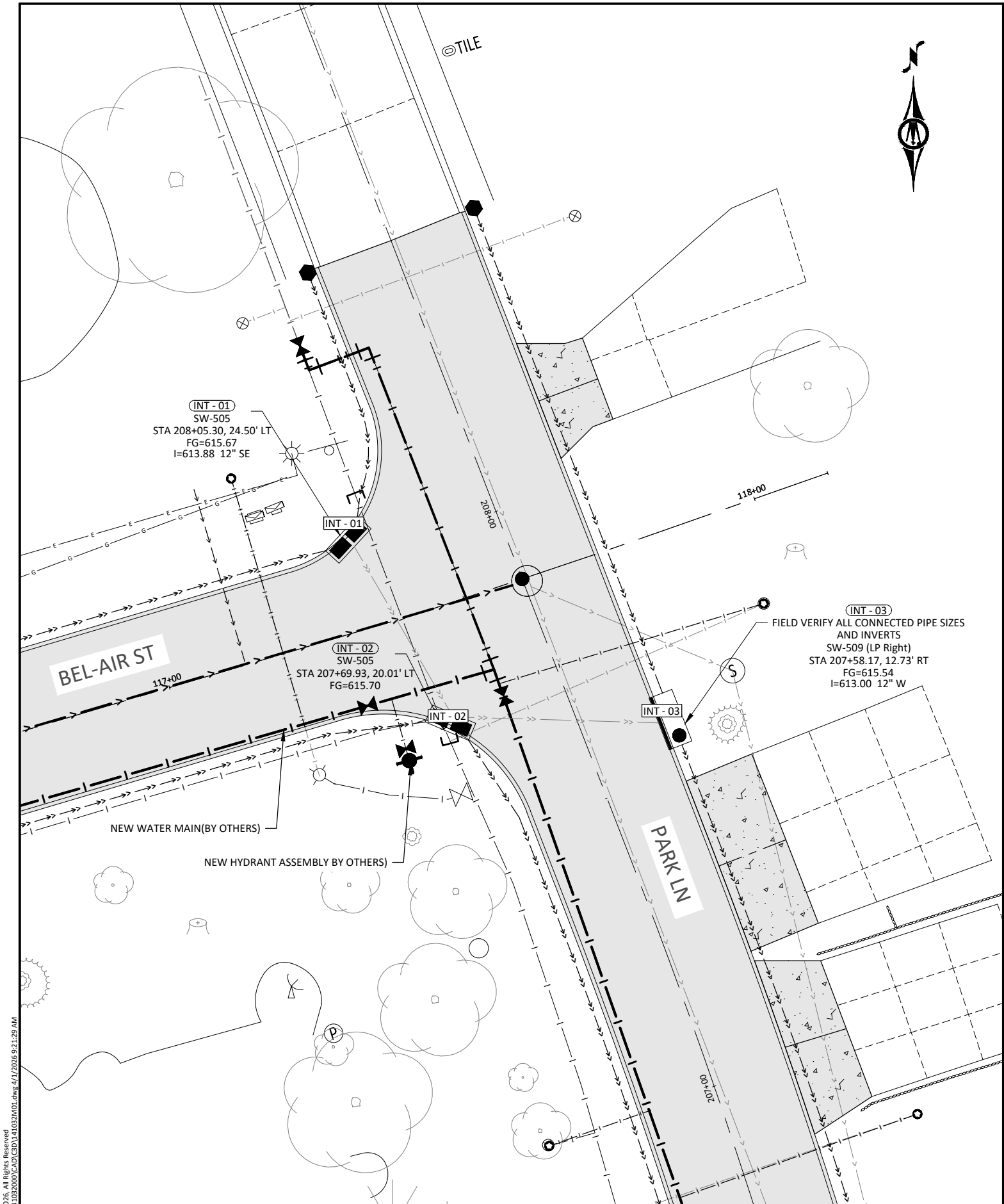


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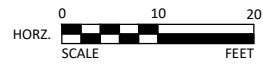
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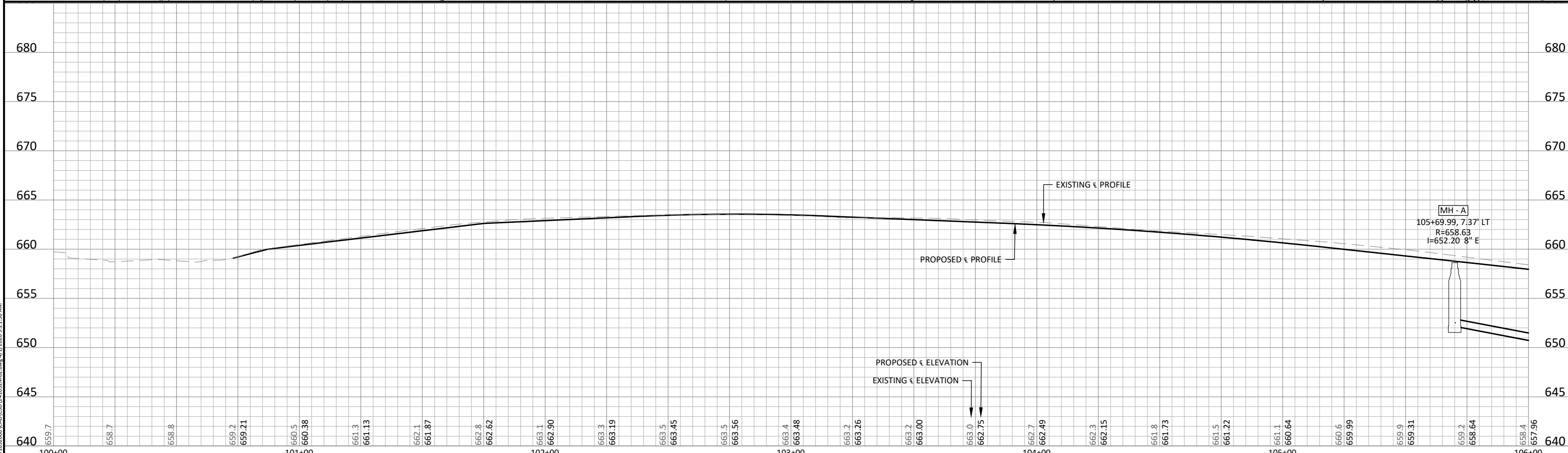
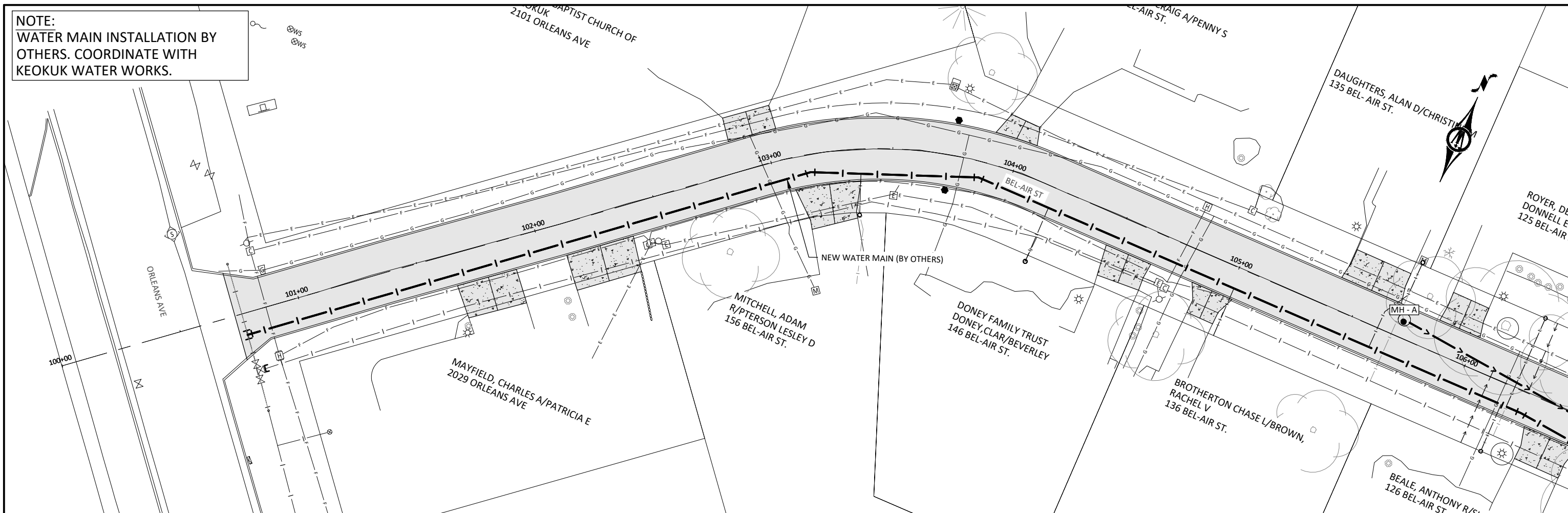
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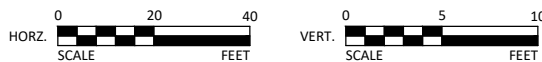
CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
M - STORM SEWER PLAN

SHEET
M.01

NOTE:
WATER MAIN INSTALLATION BY OTHERS. COORDINATE WITH KEOKUK WATER WORKS.



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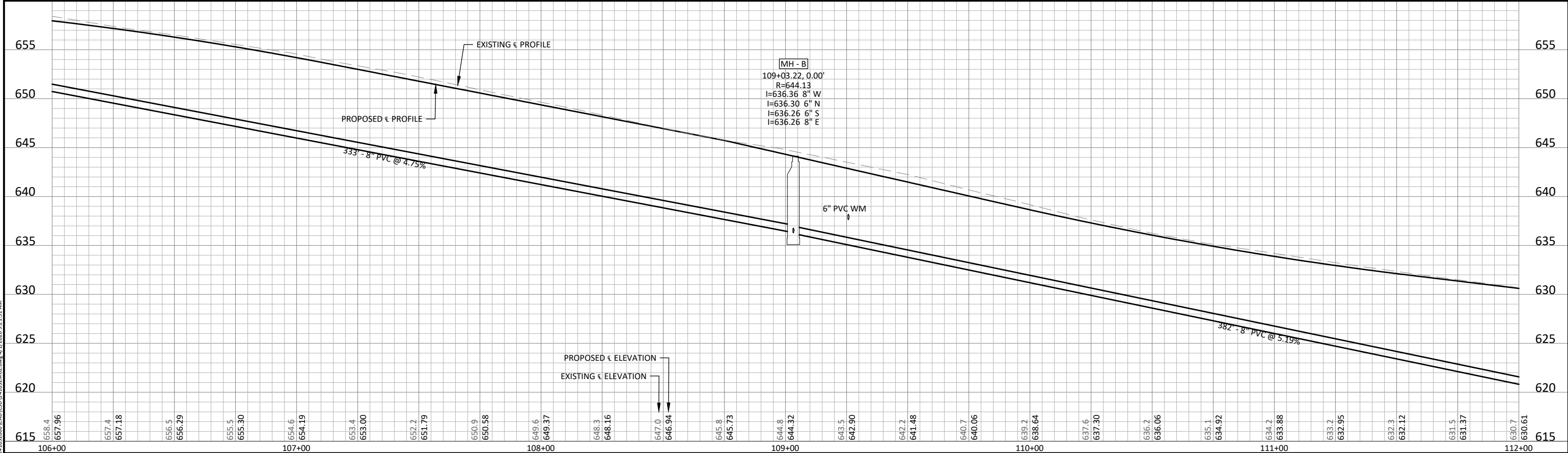
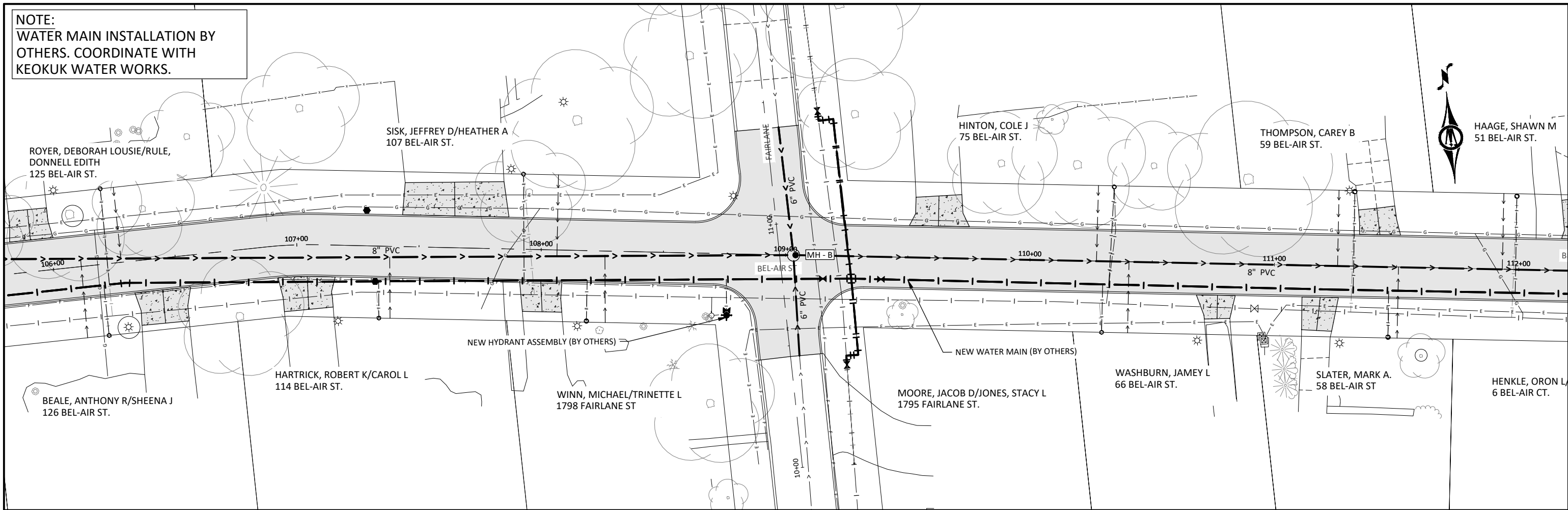
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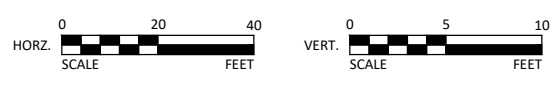
CITY OF KEOKUK, IA
BEL AIR STREET RECONSTRUCTION
SANITARY SEWER PLAN & PROFILE

SHEET
M.02

NOTE:
WATER MAIN INSTALLATION BY
OTHERS. COORDINATE WITH
KEOKUK WATER WORKS.



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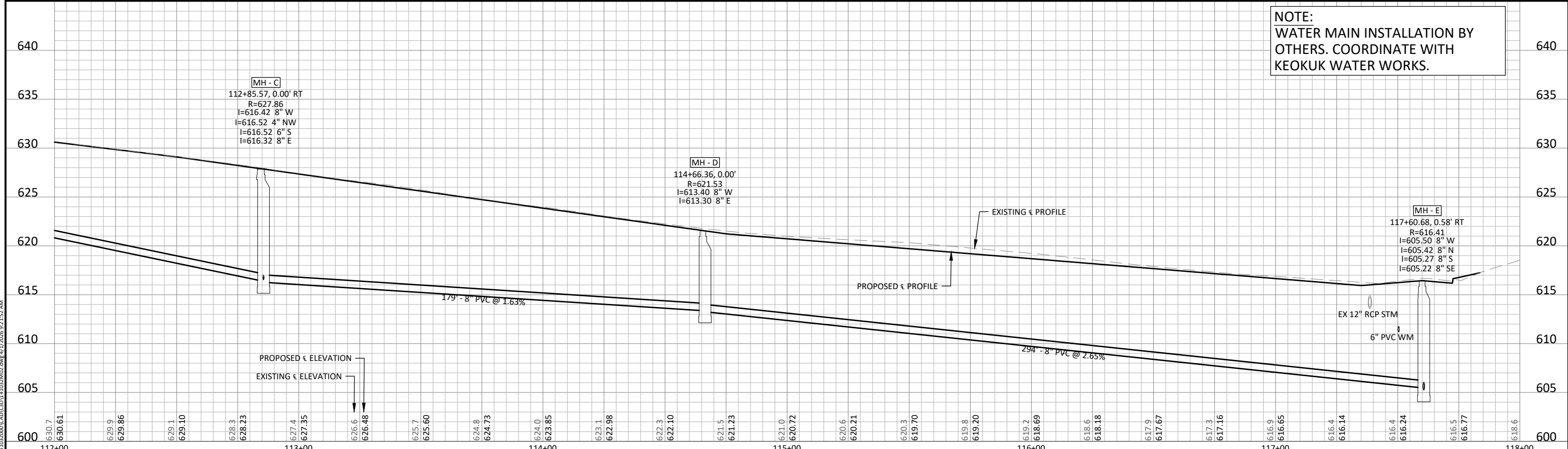
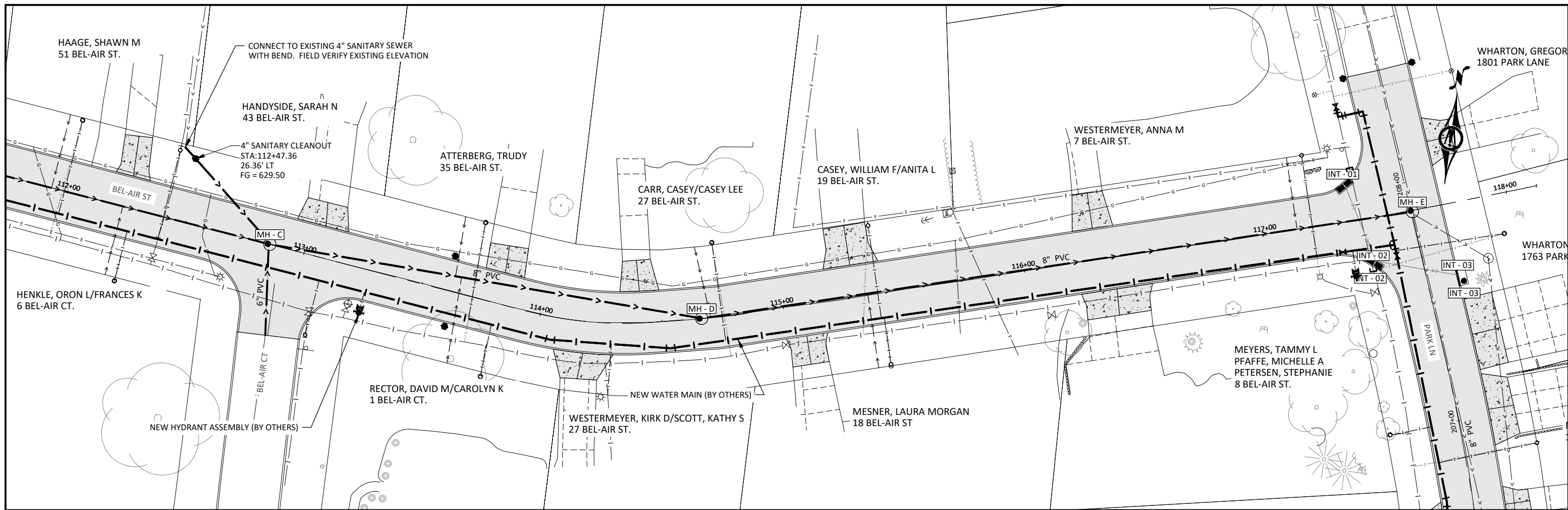


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BEL AIR STREET RECONSTRUCTION
SANITARY SEWER PLAN & PROFILE

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M.03

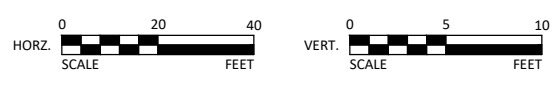


NOTE:
WATER MAIN INSTALLATION BY
OTHERS. COORDINATE WITH
KEOKUK WATER WORKS.

MH - C
112+85.57, 0.00' RT
R=627.86
I=616.42 8" W
I=616.52 4" NW
I=616.52 6" S
I=616.32 8" E

MH - D
114+66.36, 0.00'
R=621.53
I=613.40 8" W
I=613.30 8" E

MH - E
117+60.68, 0.58' RT
R=616.41
I=605.50 8" W
I=605.42 8" N
I=605.27 8" S
I=605.22 8" SE



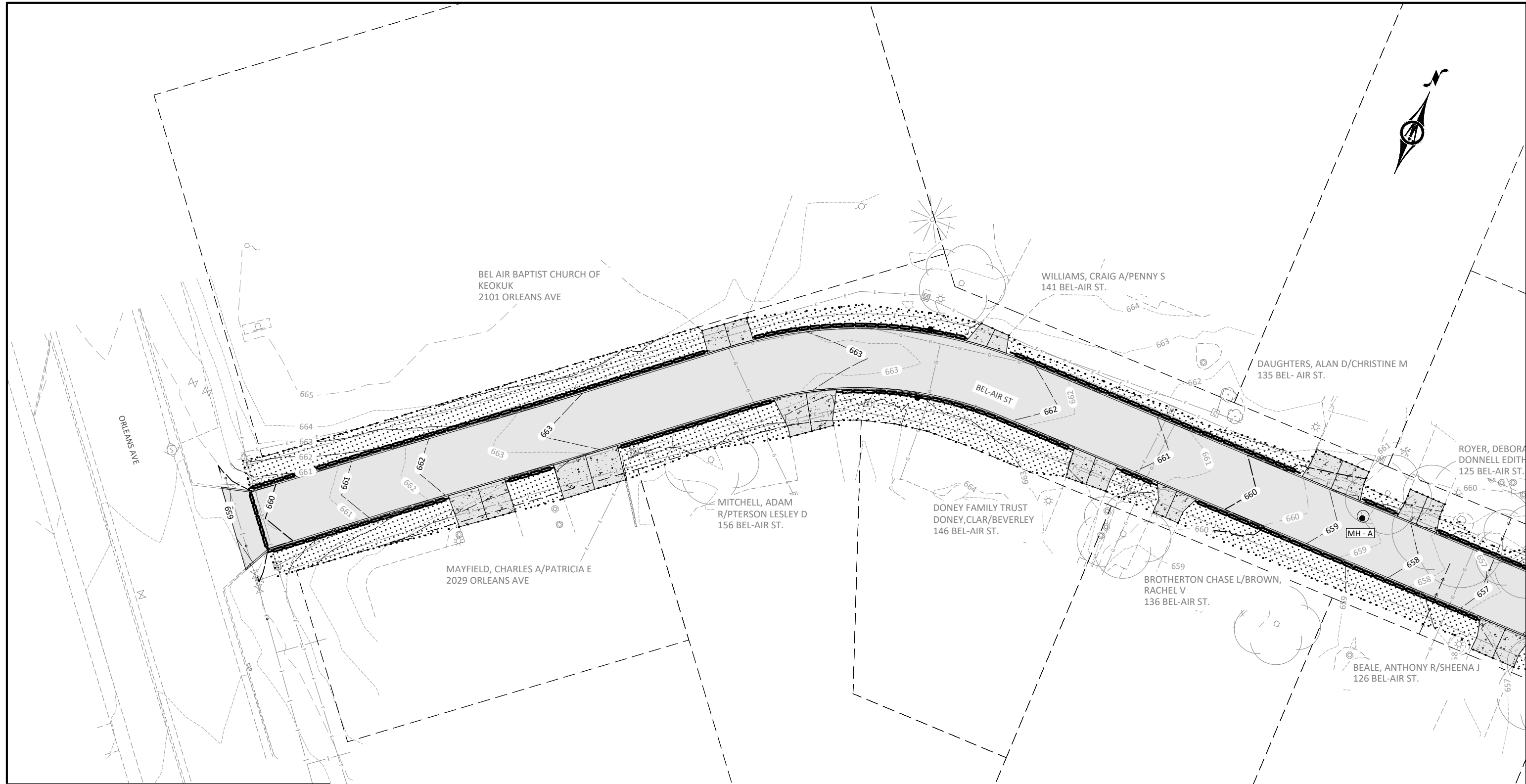
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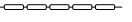




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SANITARY SEWER PLAN & PROFILE

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M.04

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EROSION CONTROL LEGEND

-  FILTER SOCK
-  SOD
-  GRADING LIMITS
-  INLET PROTECTION
-  EXISTING/PROPOSED DRAINAGE FLOW



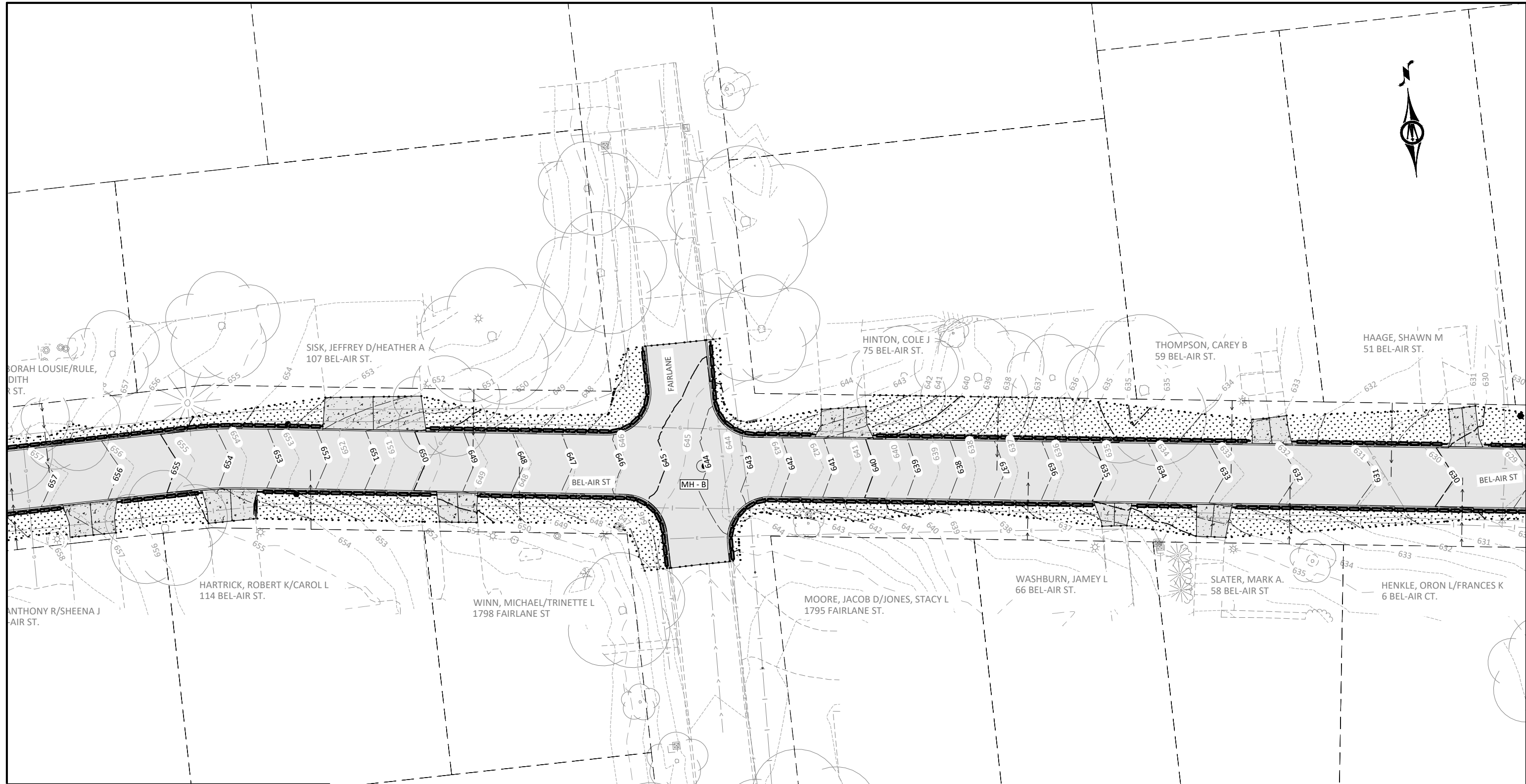
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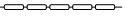




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BEL AIR STREET RECONSTRUCTION
EROSION & SEDIMENT CONTROL

SHEET
R.01

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EROSION CONTROL LEGEND

-  FILTER SOCK
-  SOD
-  GRADING LIMITS
-  INLET PROTECTION
-  EXISTING/PROPOSED DRAINAGE FLOW



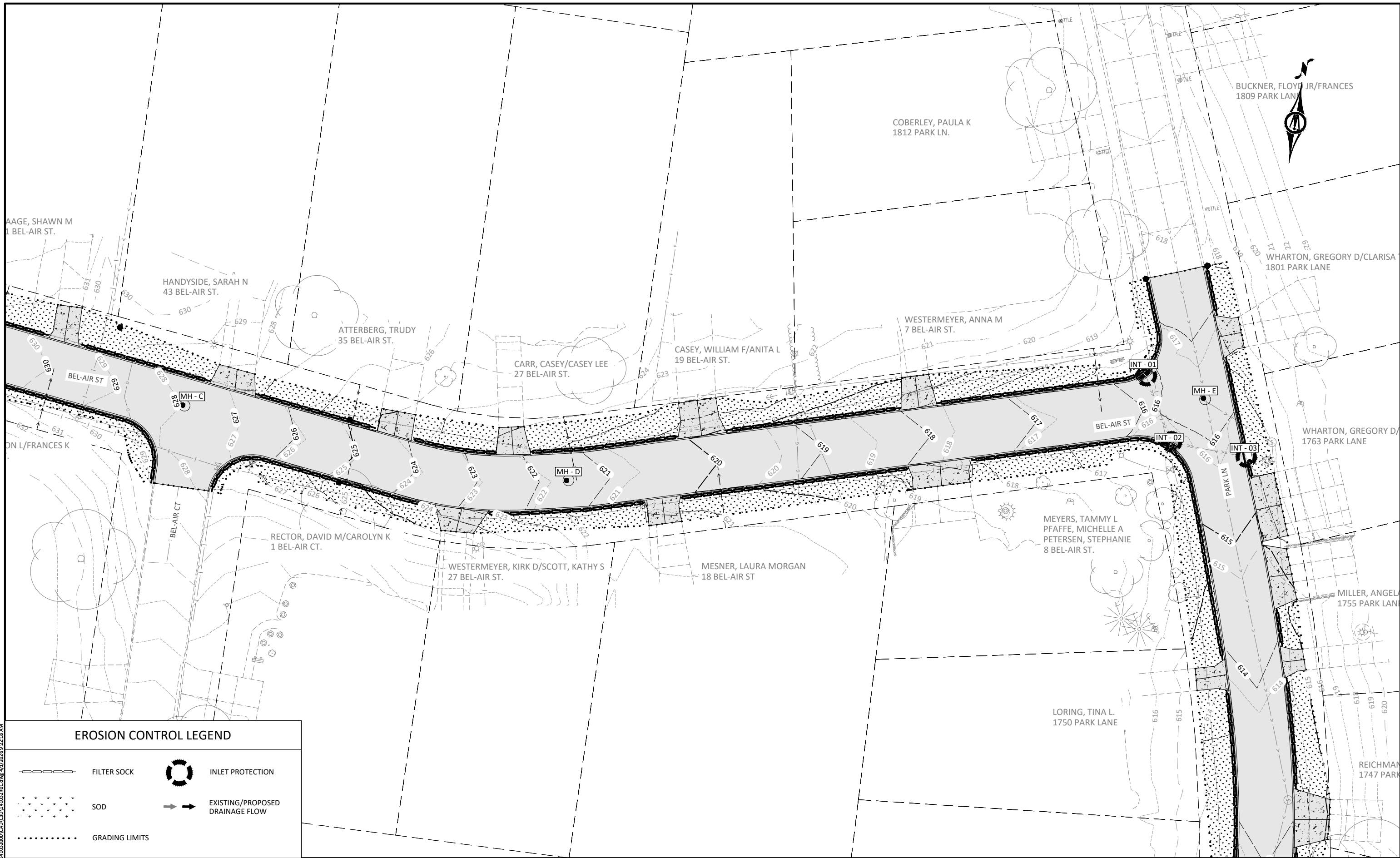
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RCK			
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CLIENT PROJ. NO. 25X141032000			

CITY OF KEOKUK, IA
 BEL AIR STREET RECONSTRUCTION
 EROSION & SEDIMENT CONTROL

SHEET
 R.02

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BUCKNER, FLOYD JR/FRANCES
1809 PARK LANE

COBERLEY, PAULA K
1812 PARK LN.

AAGE, SHAWN M
1 BEL-AIR ST.

HANDYSIDE, SARAH N
43 BEL-AIR ST.

ATTERBERG, TRUDY
35 BEL-AIR ST.

CARR, CASEY/CASEY LEE
27 BEL-AIR ST.

CASEY, WILLIAM F/ANITA L
19 BEL-AIR ST.

WESTERMAYER, ANNA M
7 BEL-AIR ST.

WHARTON, GREGORY D/CLARISA
1801 PARK LANE

WHARTON, GREGORY D/
1763 PARK LANE

RECTOR, DAVID M/CAROLYN K
1 BEL-AIR CT.

WESTERMAYER, KIRK D/SCOTT, KATHY S
27 BEL-AIR ST.

MESNER, LAURA MORGAN
18 BEL-AIR ST

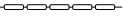




MEYERS, TAMMY L
PFAFFE, MICHELLE A
PETERSEN, STEPHANIE
8 BEL-AIR ST.

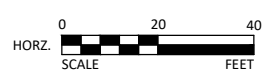
MILLER, ANGELA
1755 PARK LANE

LORING, TINA L.
1750 PARK LANE

REICHMAN
1747 PARK

EROSION CONTROL LEGEND

-  FILTER SOCK
-  SOD
-  GRADING LIMITS
-  INLET PROTECTION
-  EXISTING/PROPOSED DRAINAGE FLOW



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RCK			
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EROSION & SEDIMENT CONTROL

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R.03

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FREY, SCOTTA /MARGARET M
1700 PARK VIEW HEIGHTS

FREY, SCOTT A/MARGARET M
1701 PARK VIEW HEIGHTS

DAVIS, ADAM L/MORGAN B
1730 PARK LANE

HECKENBERG, JOAN C
1742 PARK LANE

LORING, TINA L
1750 PARK LAN

REICHMAN
/LAUREN B
1747 PARK






BUNN, MICHAEL D/ANGELA M
1725 PARK LANE

VAUGHN, KAREN LEE
1735 PARK LANE

MARLIN, PATRICK M
1741 PARK LANE

CLARK, PATRICK LAMONT
1008 N 17TH ST.

EROSION CONTROL LEGEND

-  FILTER SOCK
-  SOD
-  GRADING LIMITS
-  INLET PROTECTION
-  EXISTING/PROPOSED DRAINAGE FLOW



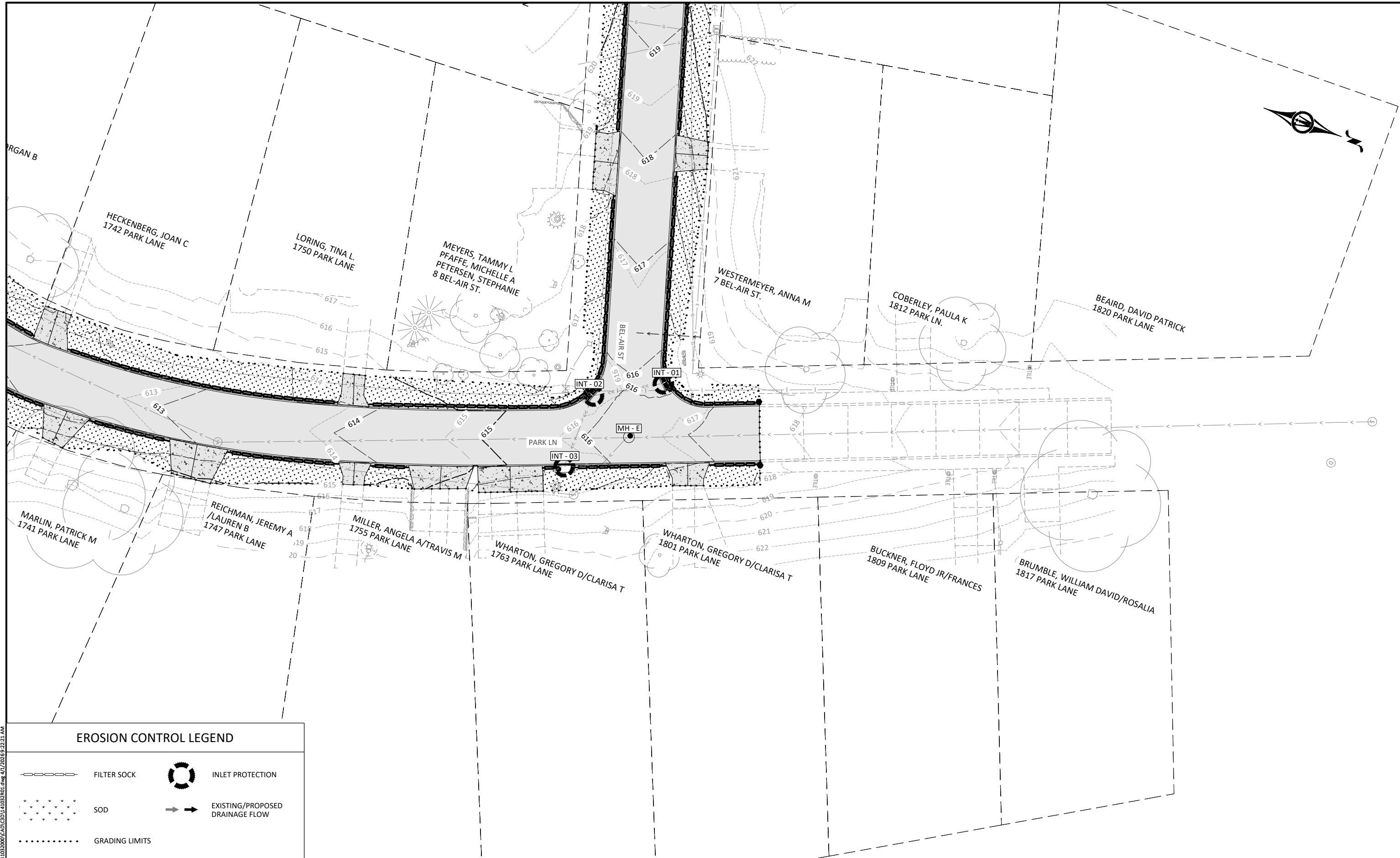
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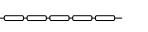




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EROSION CONTROL LEGEND

-  FILTER SOCK
-  SOD
-  GRADING LIMITS
-  INLET PROTECTION
-  EXISTING/PROPOSED DRAINAGE FLOW



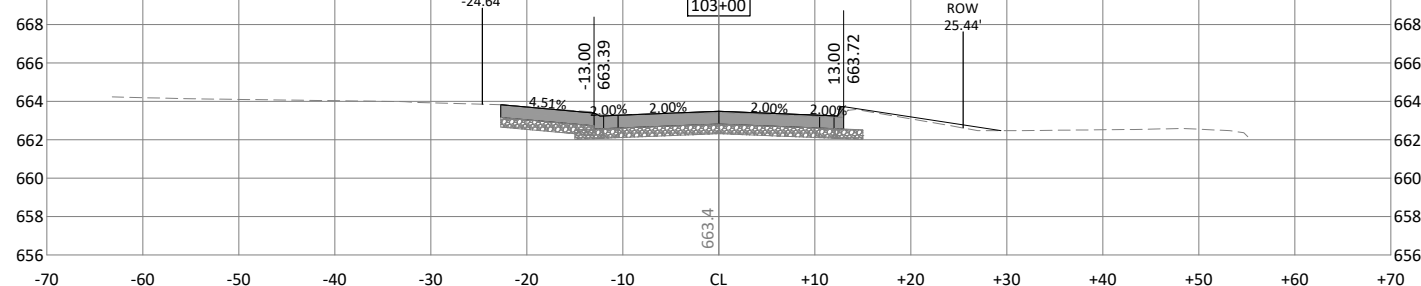
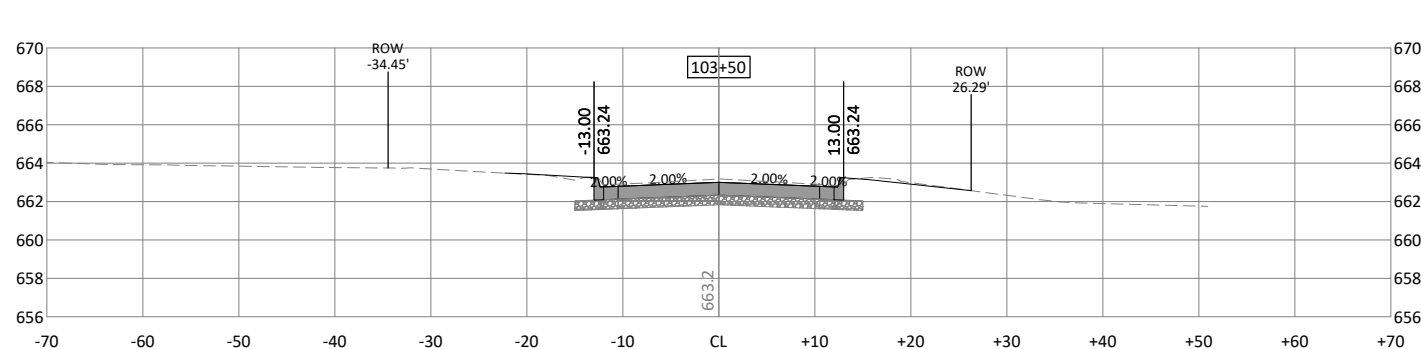
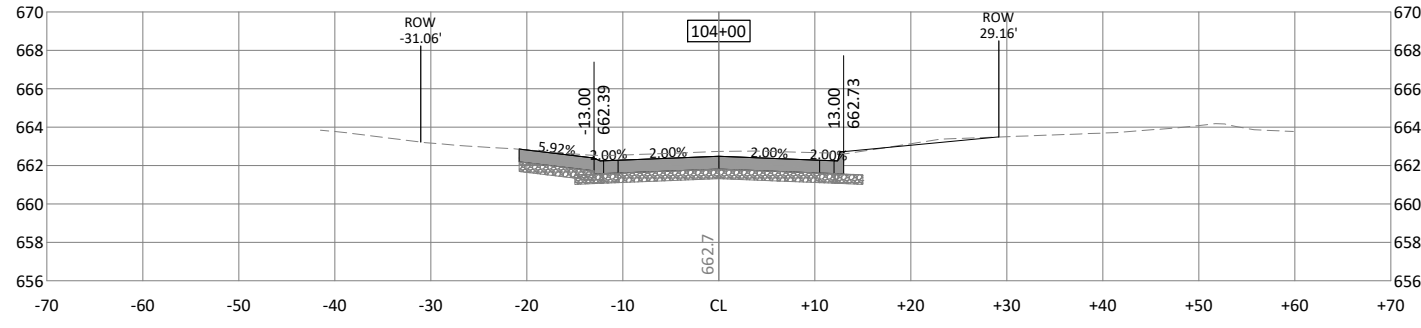
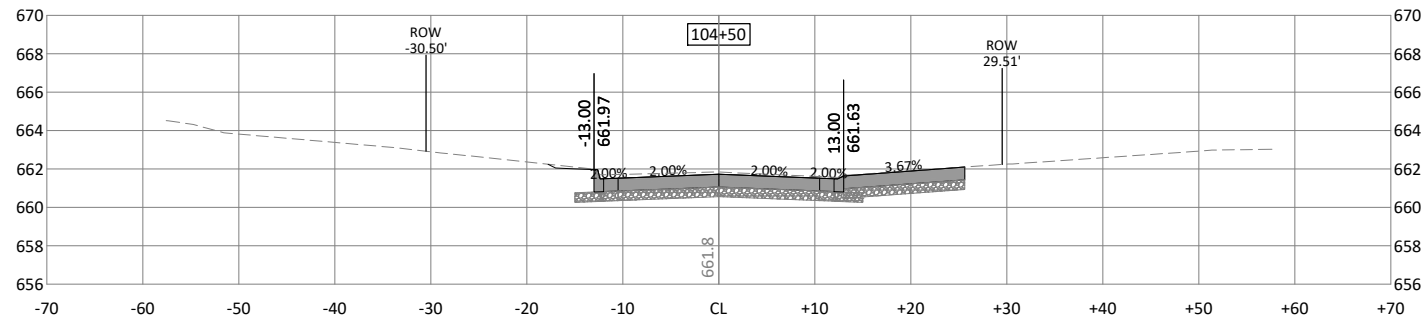
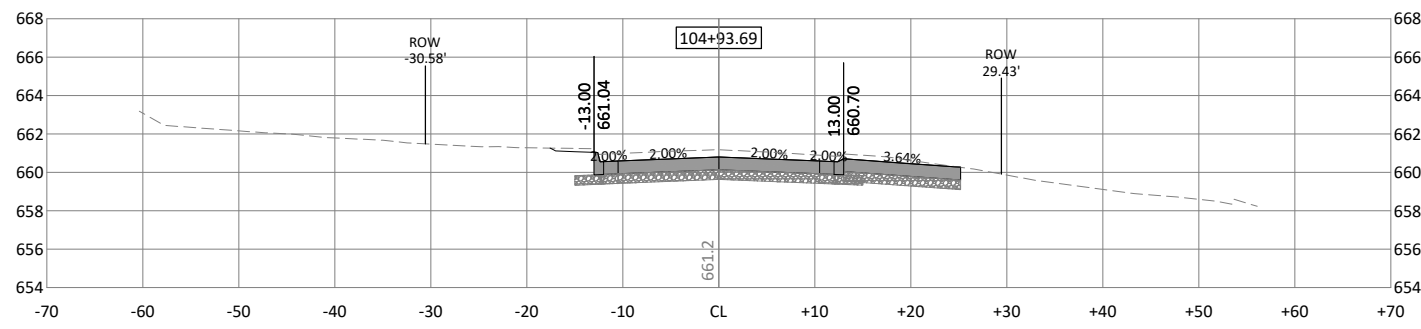
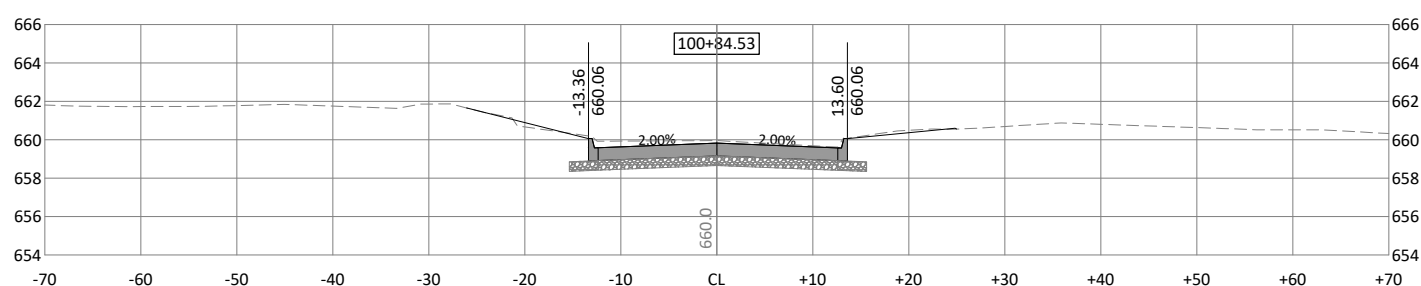
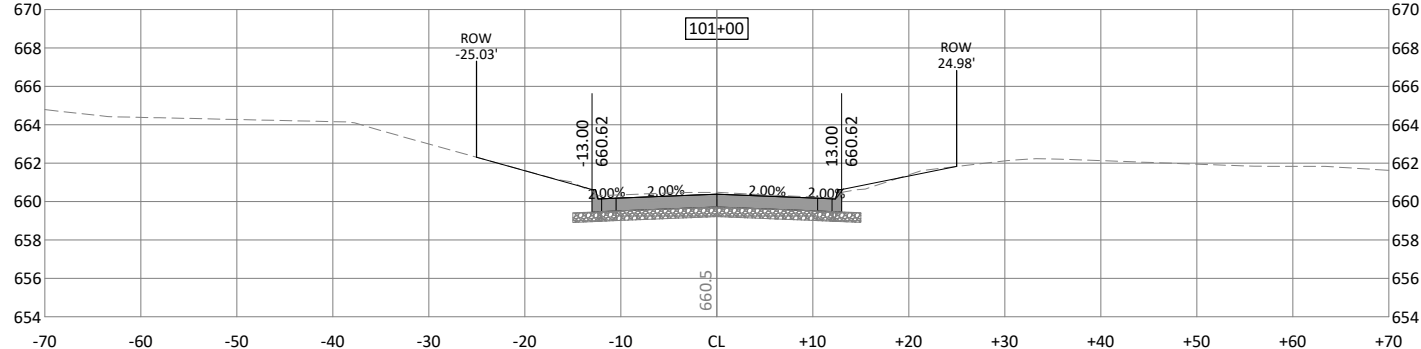
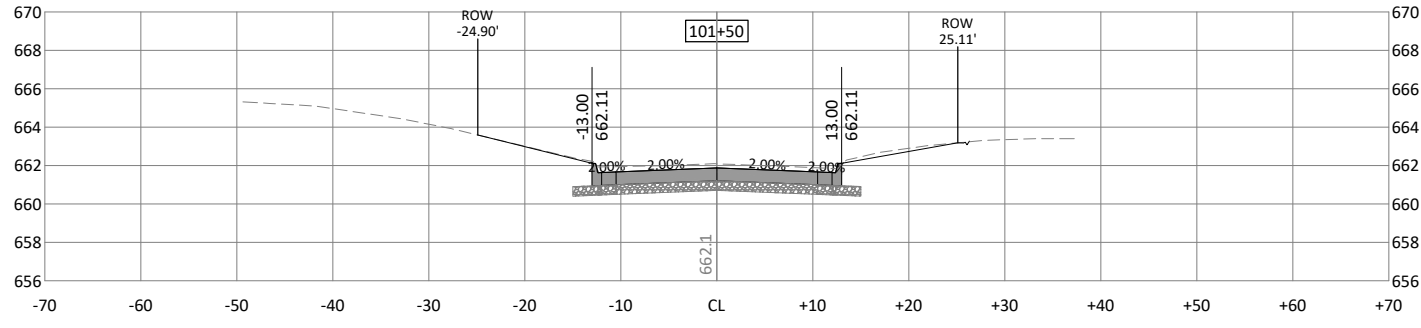
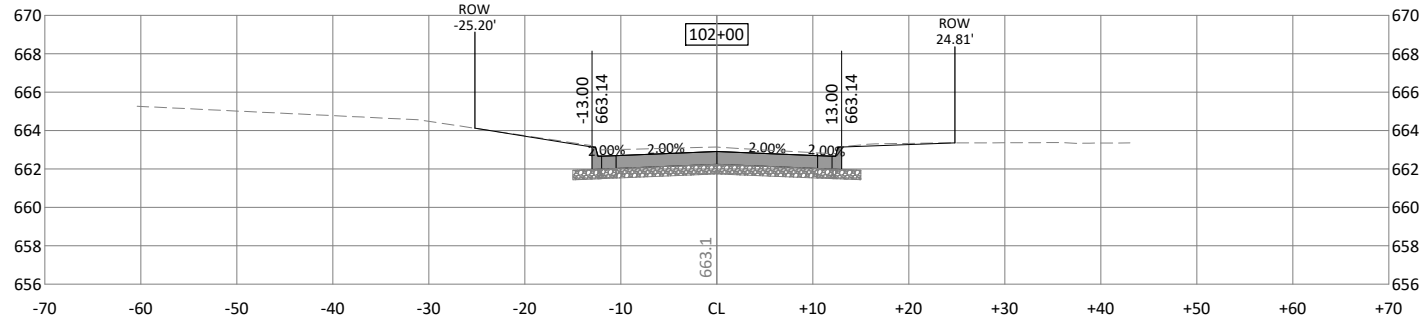
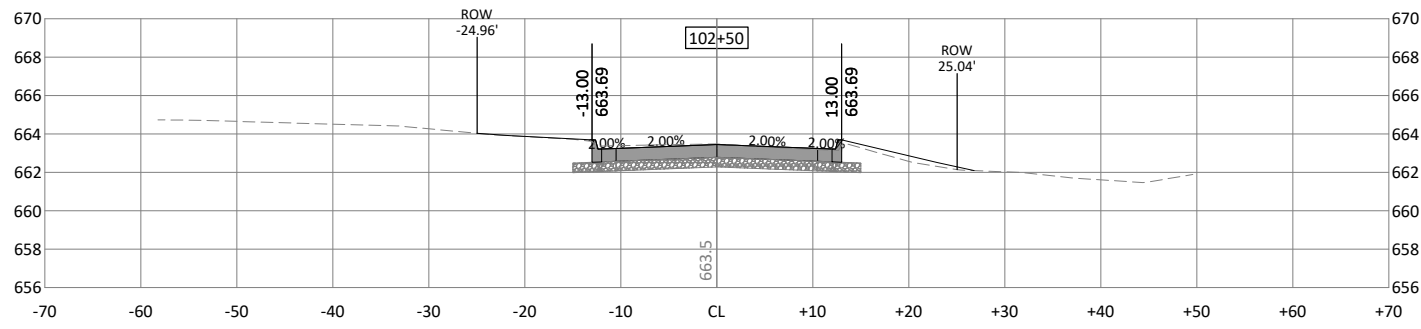
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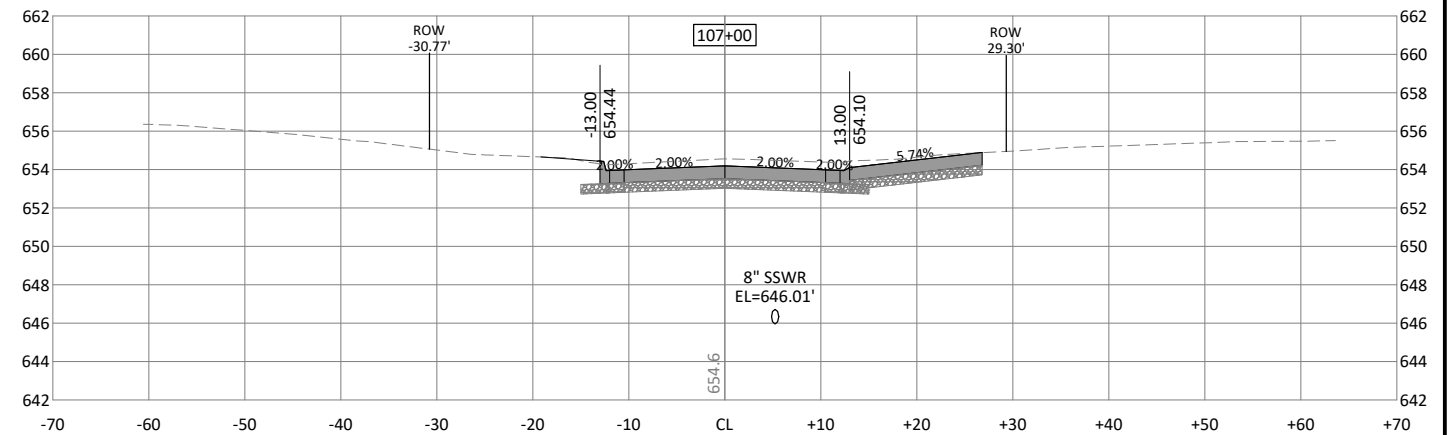
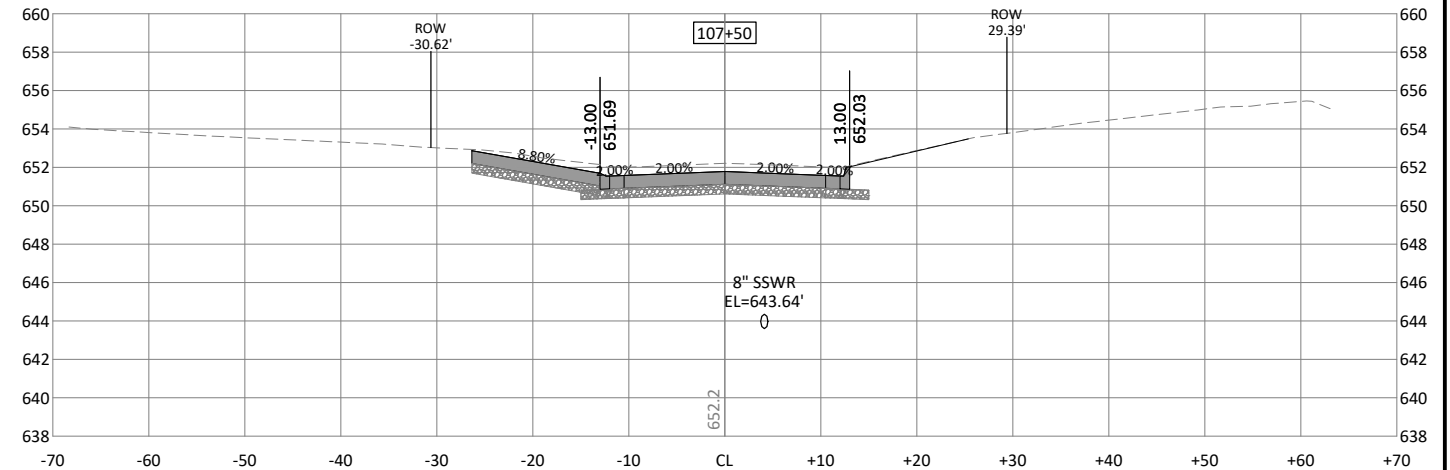
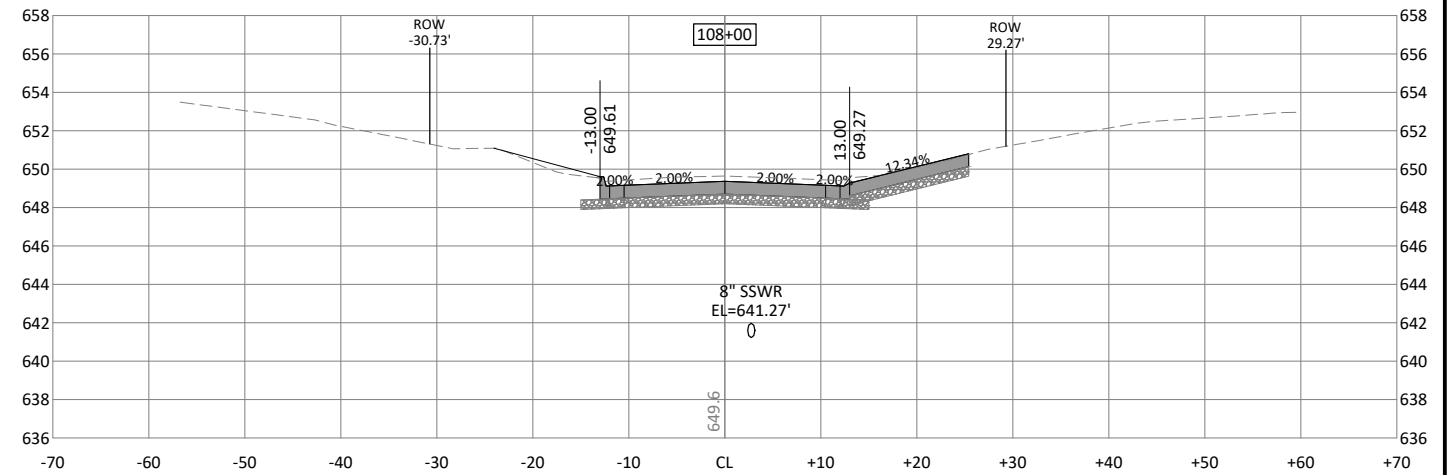
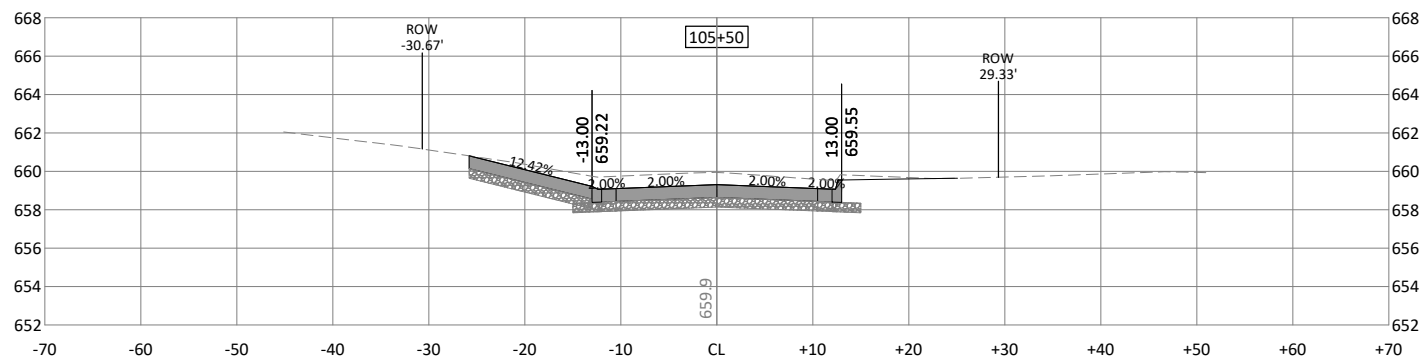
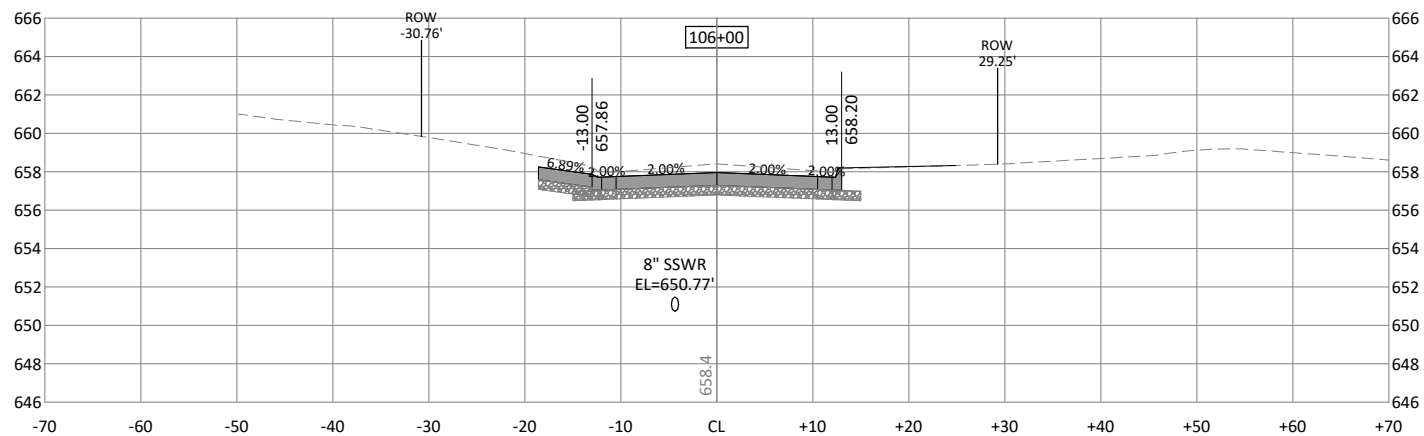
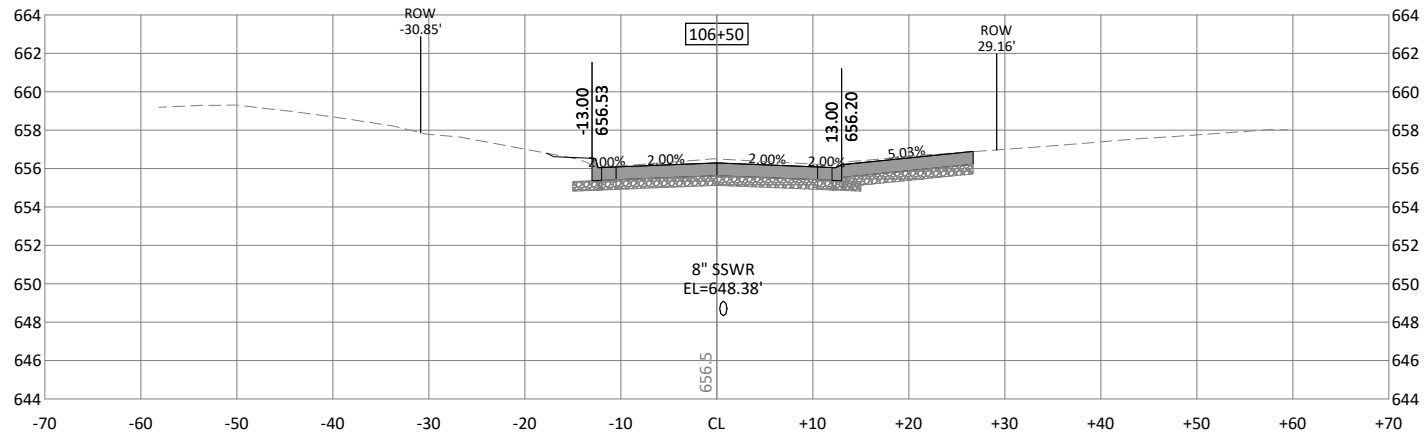
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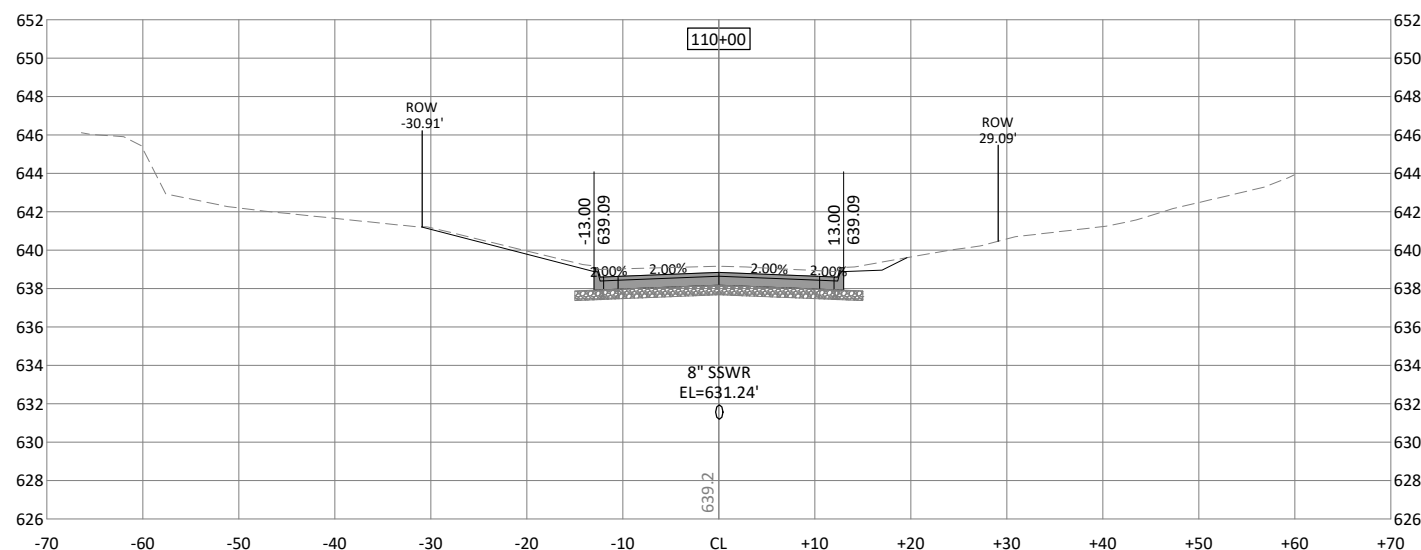
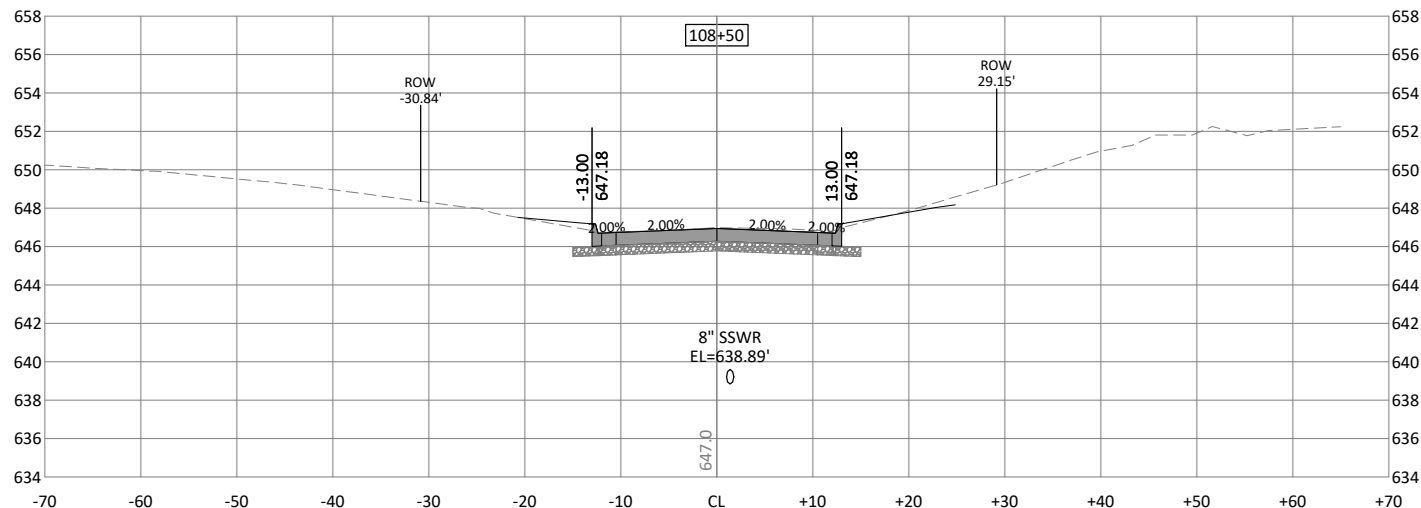
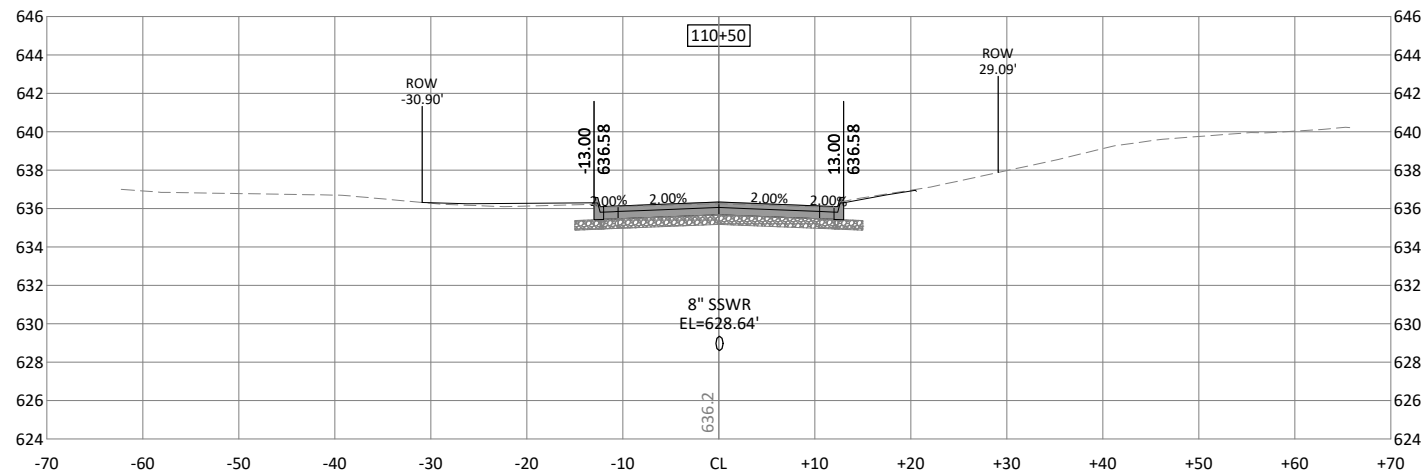
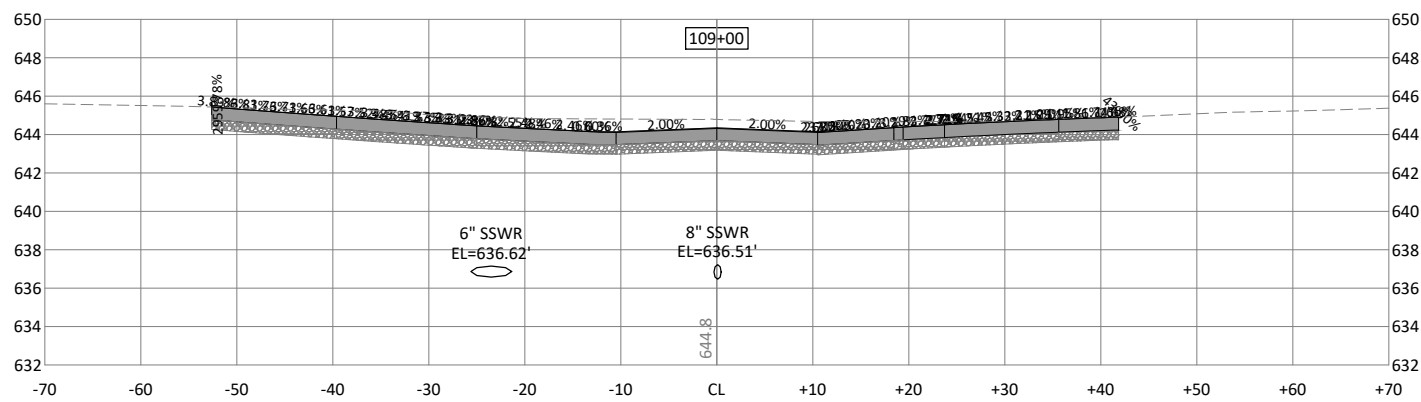
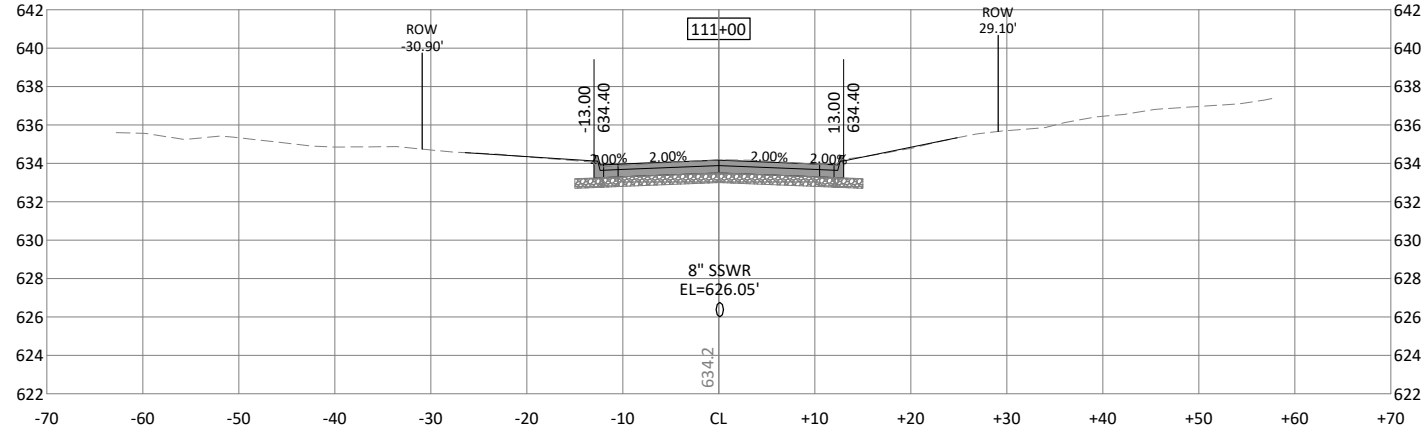
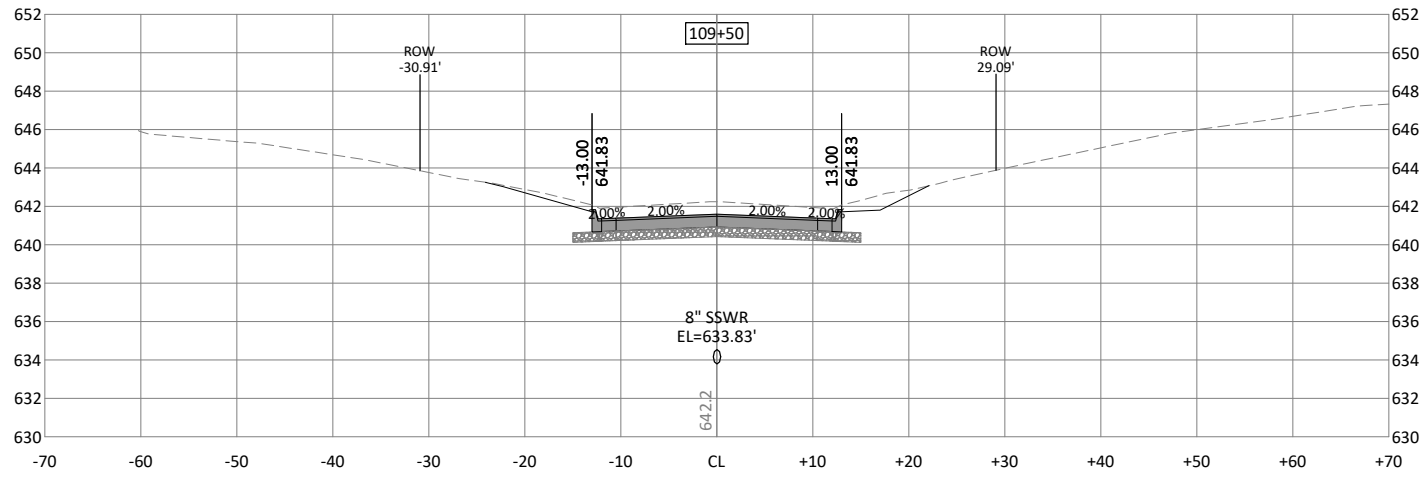


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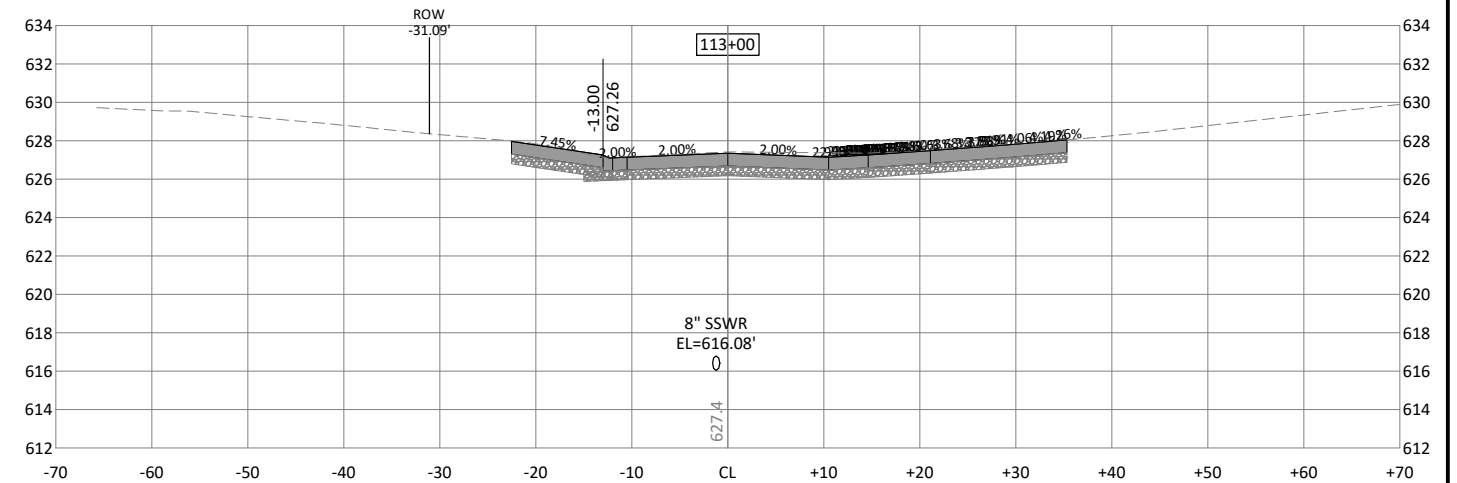
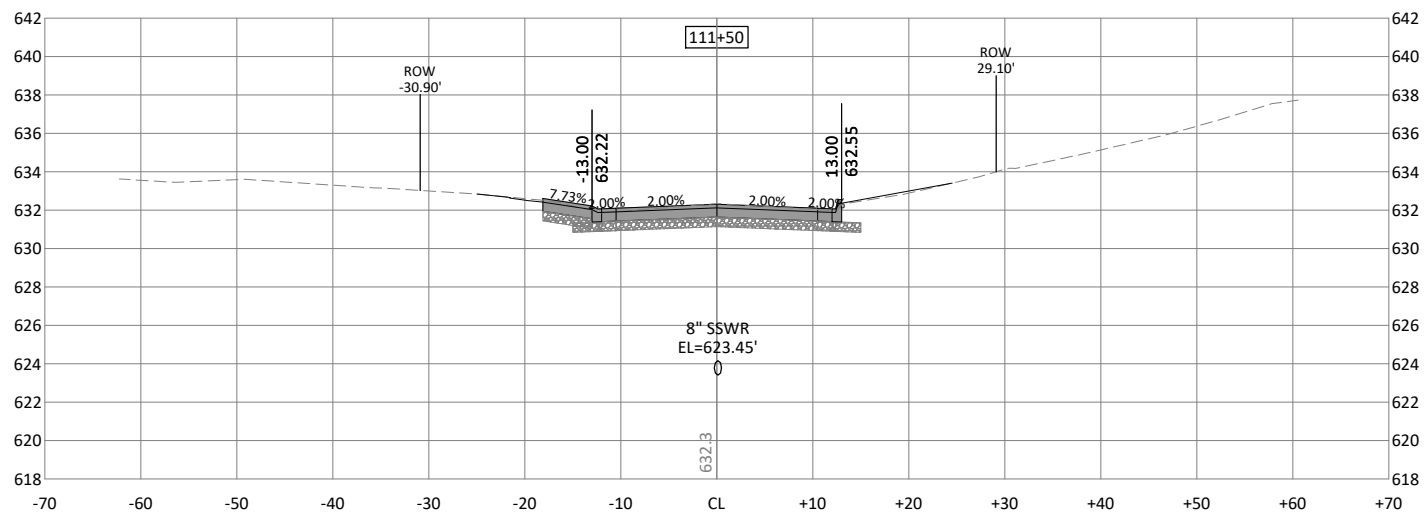
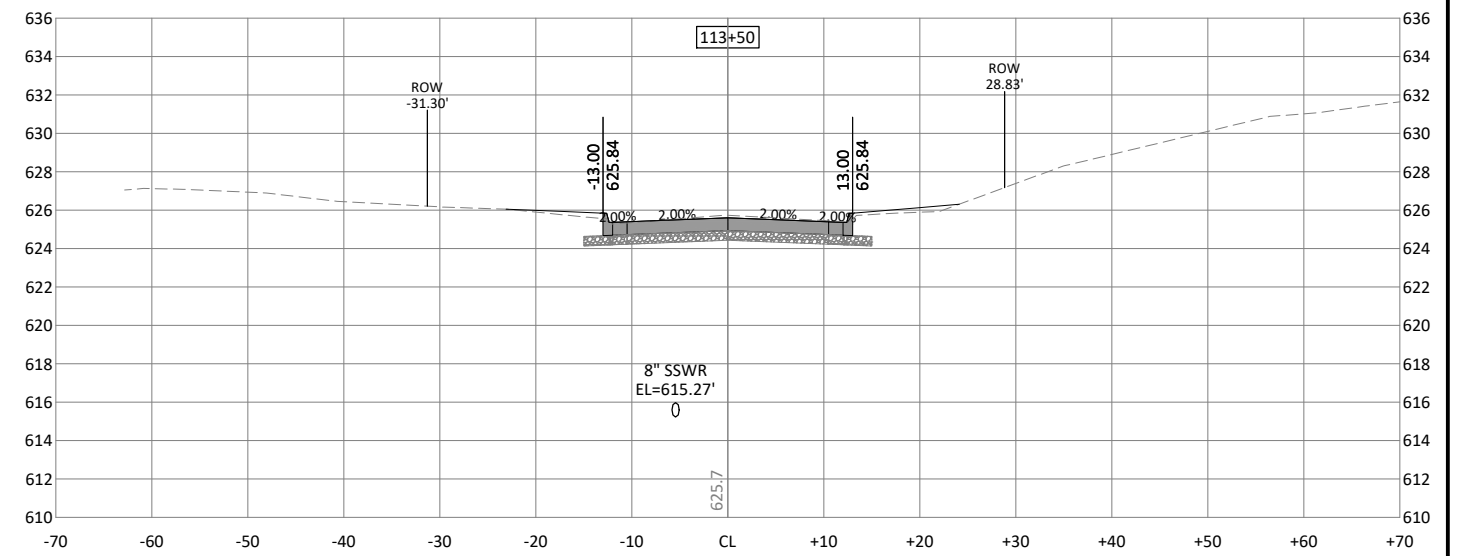
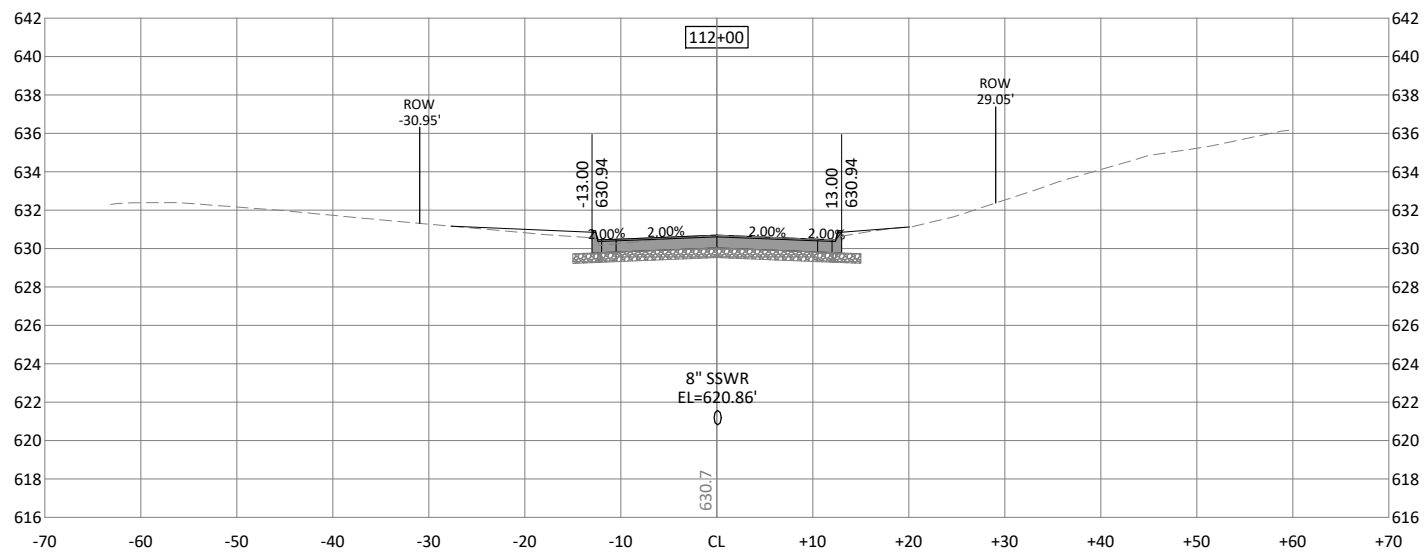
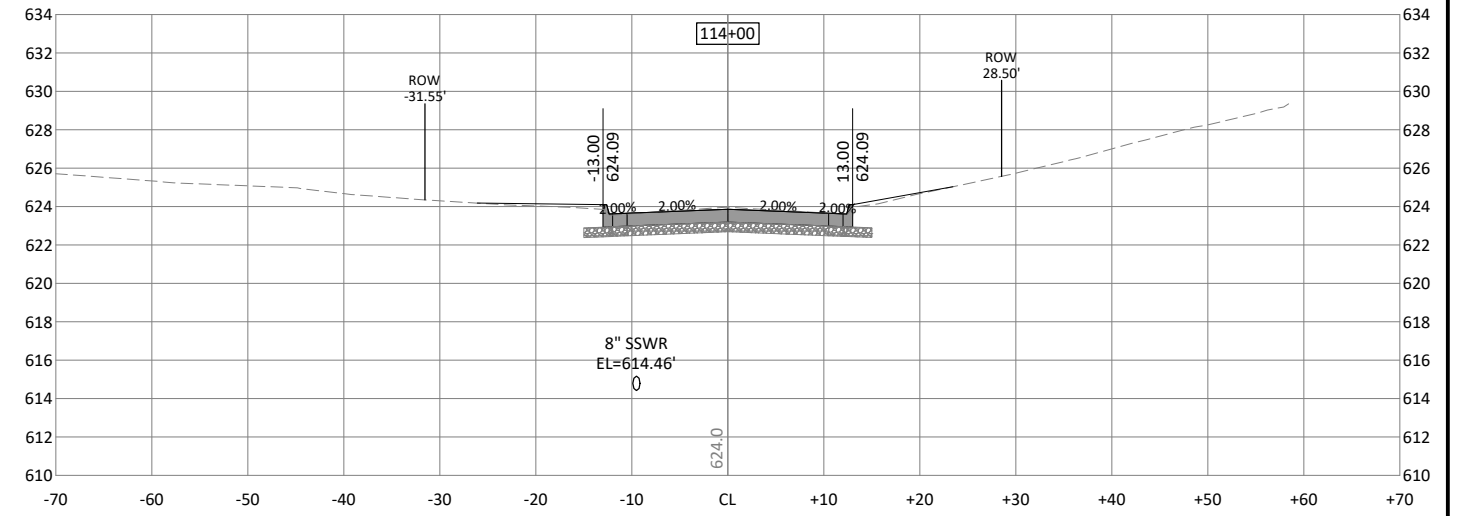
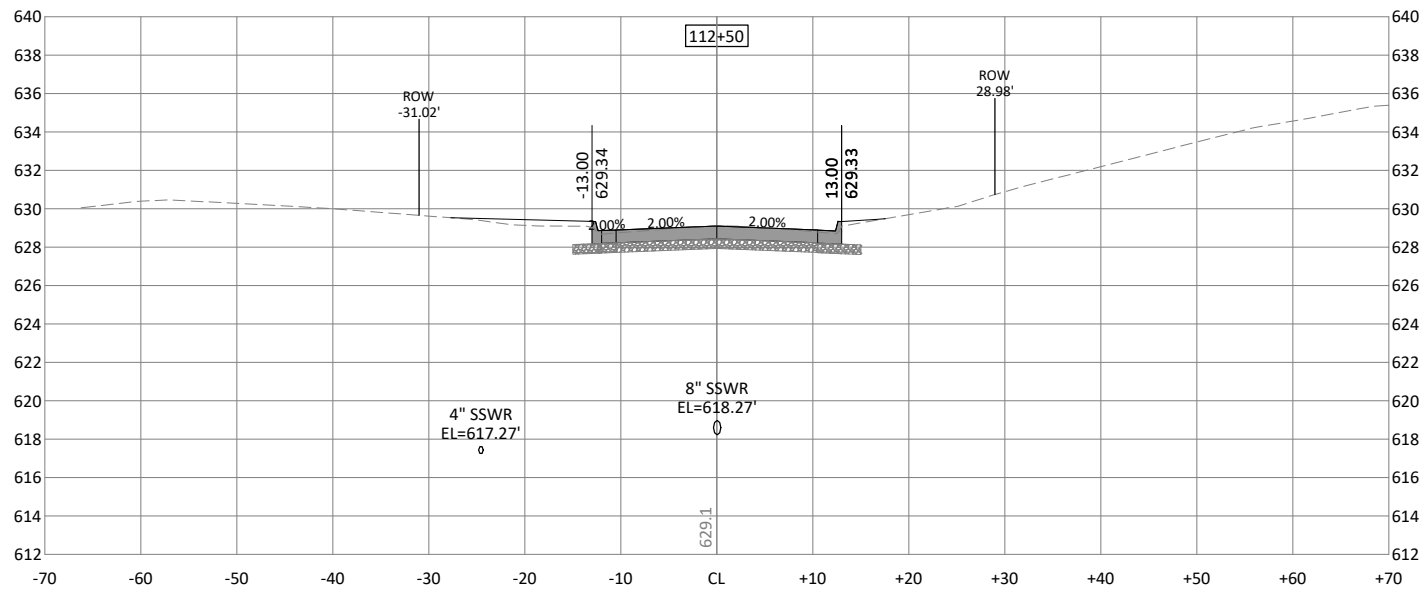
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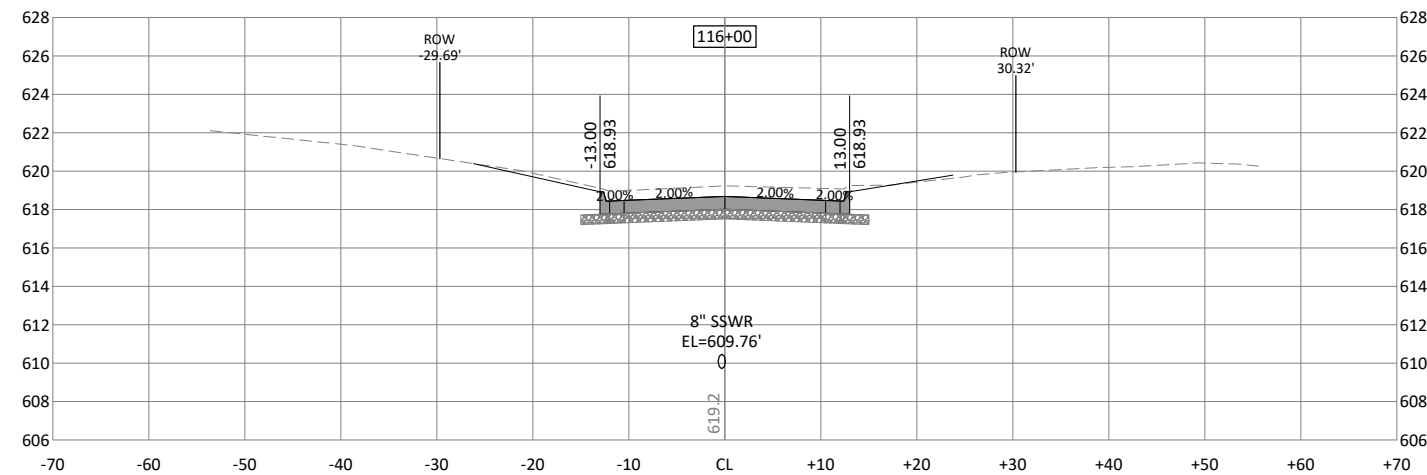
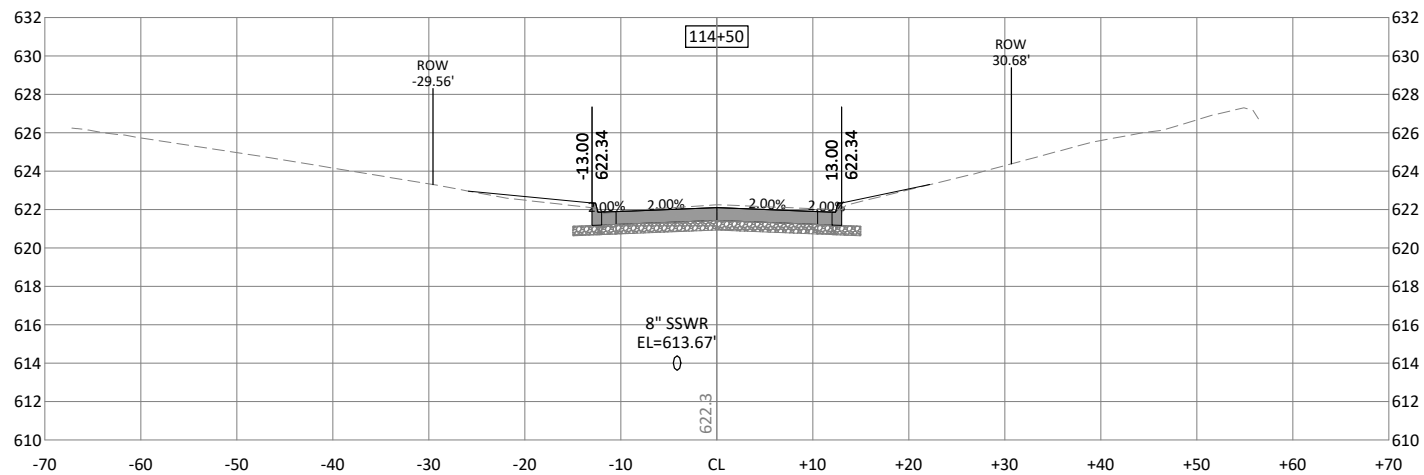
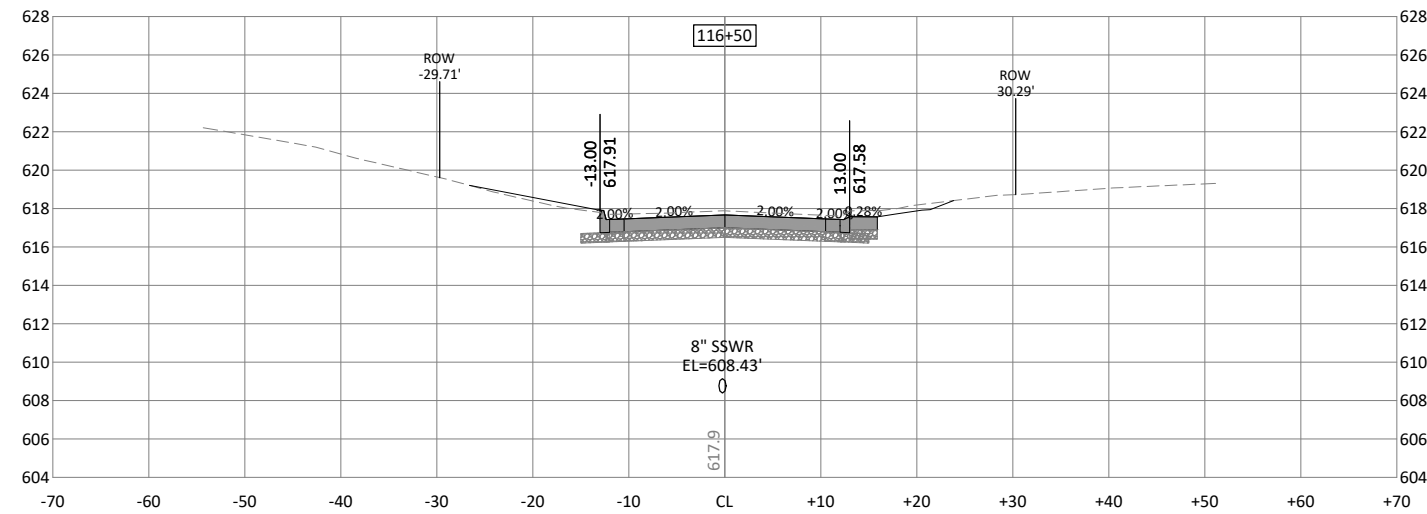
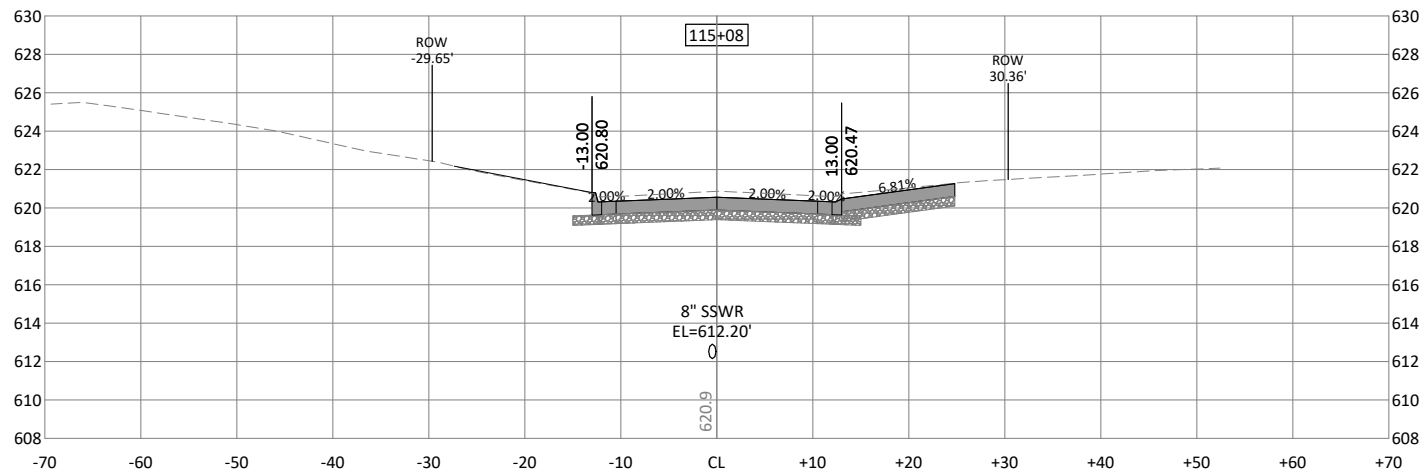
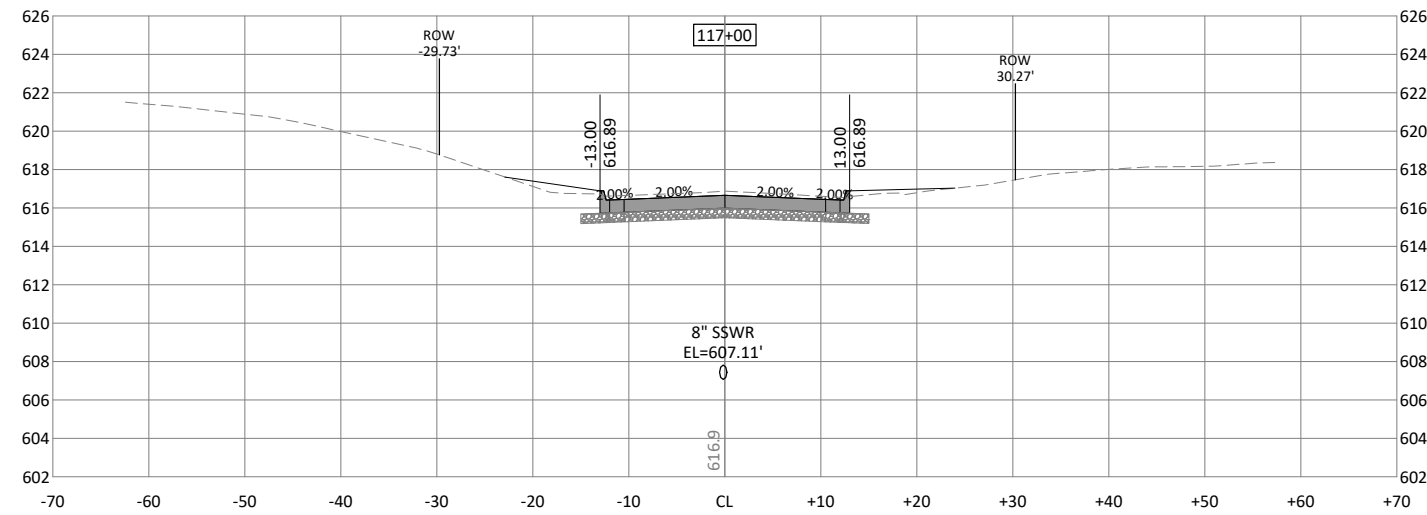
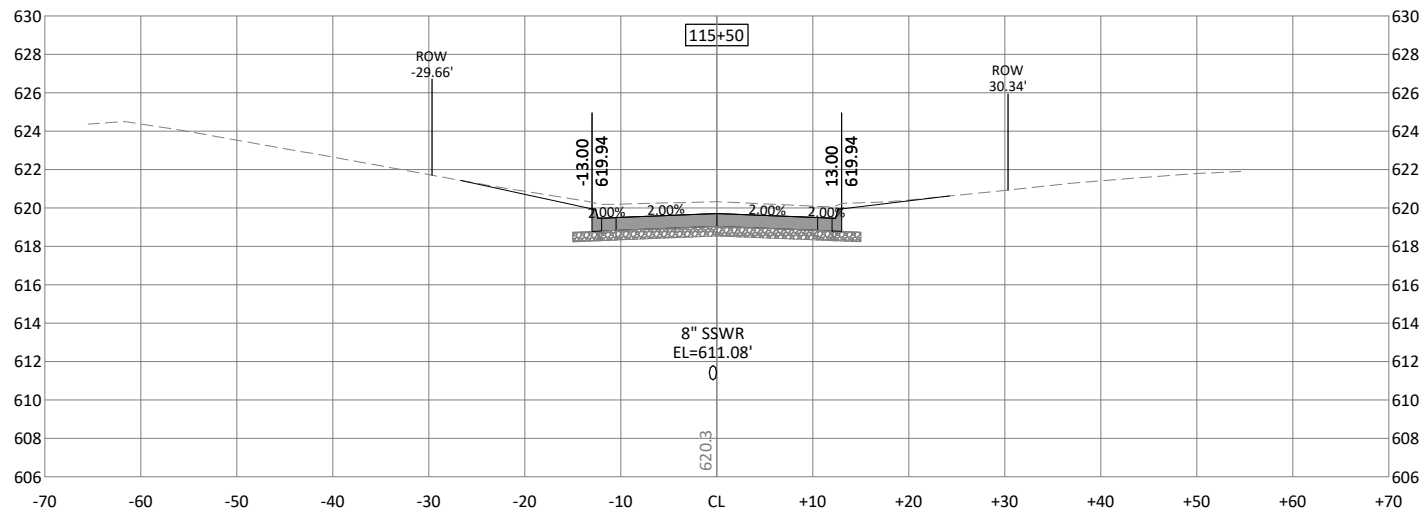


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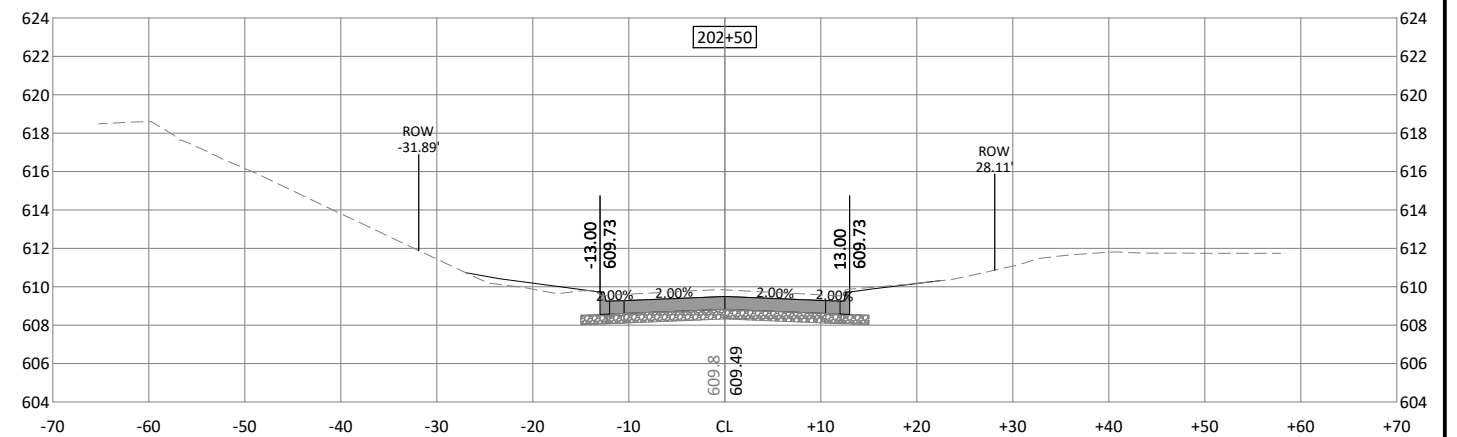
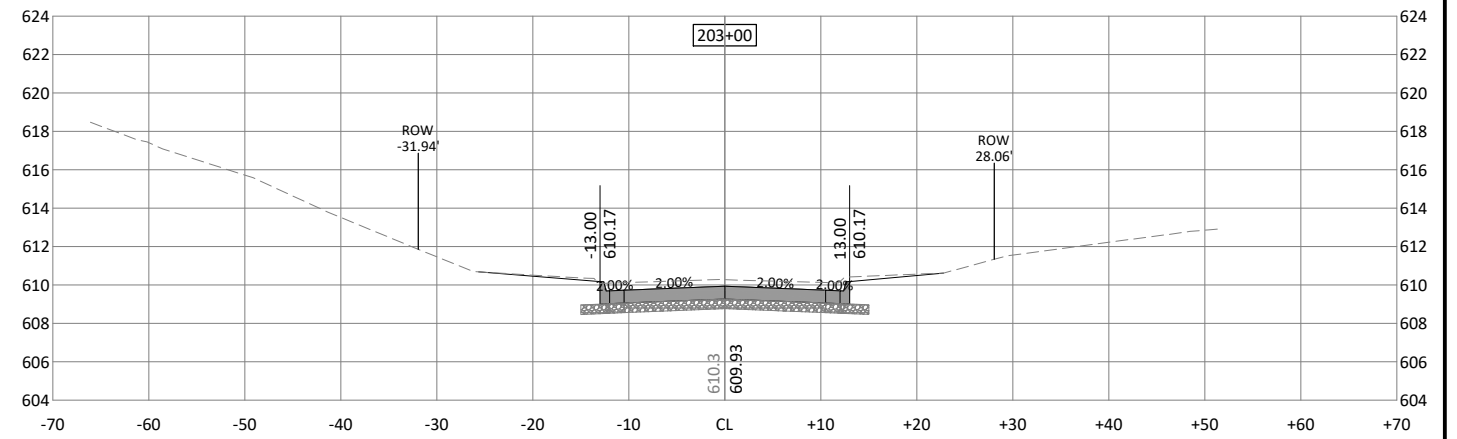
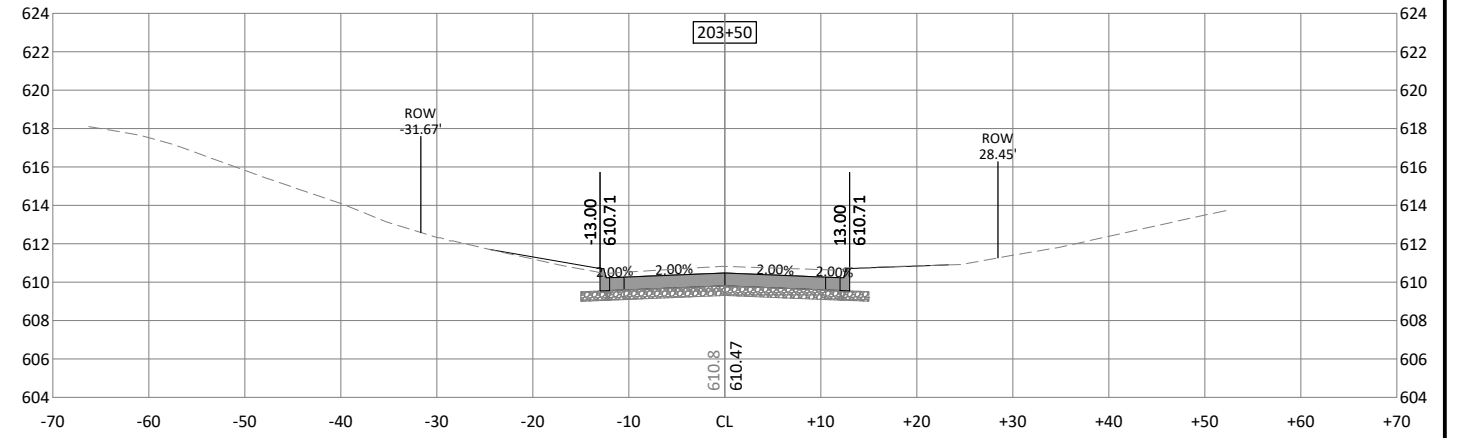
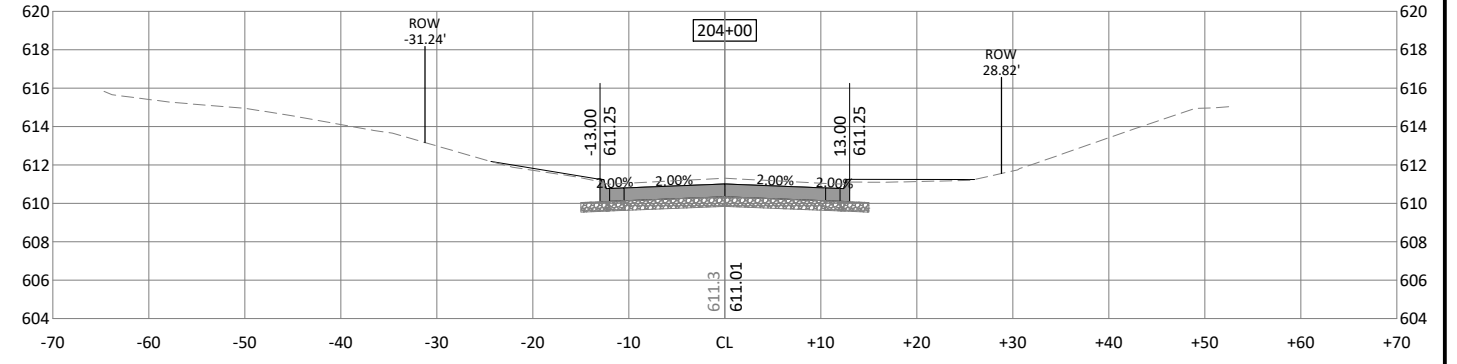
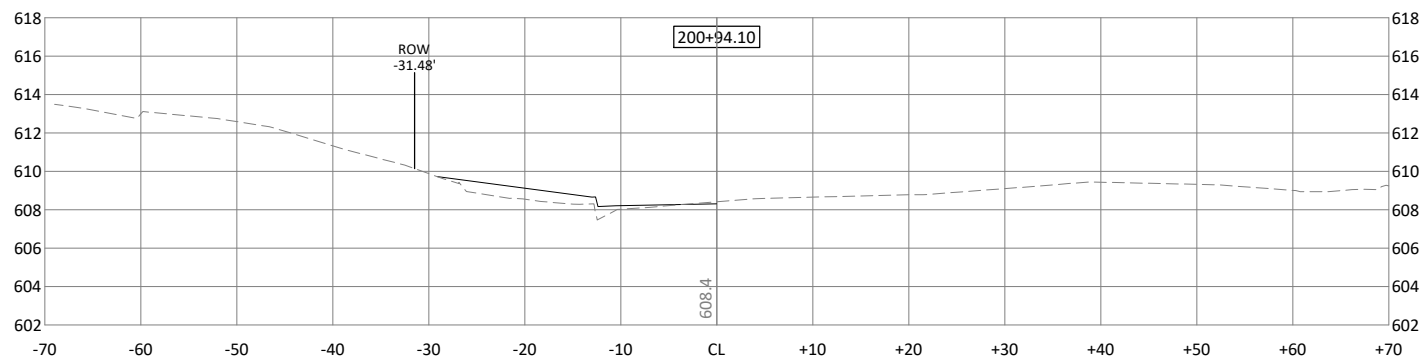
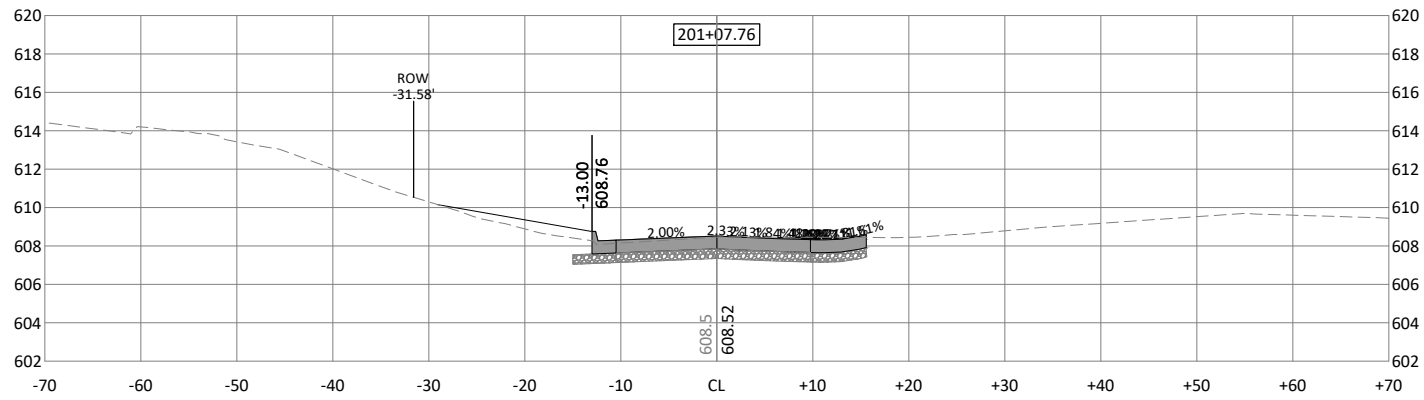
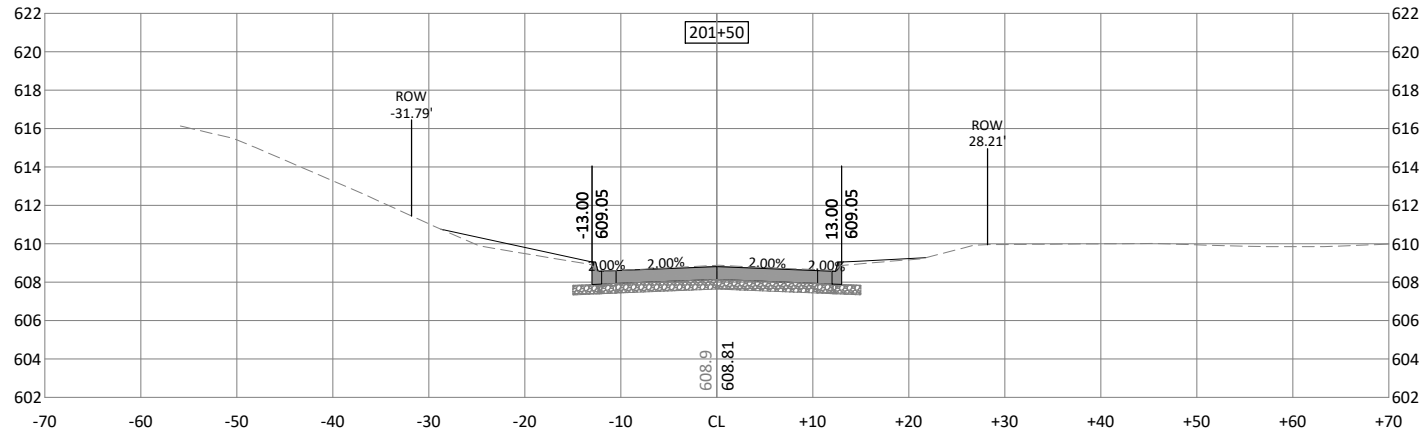
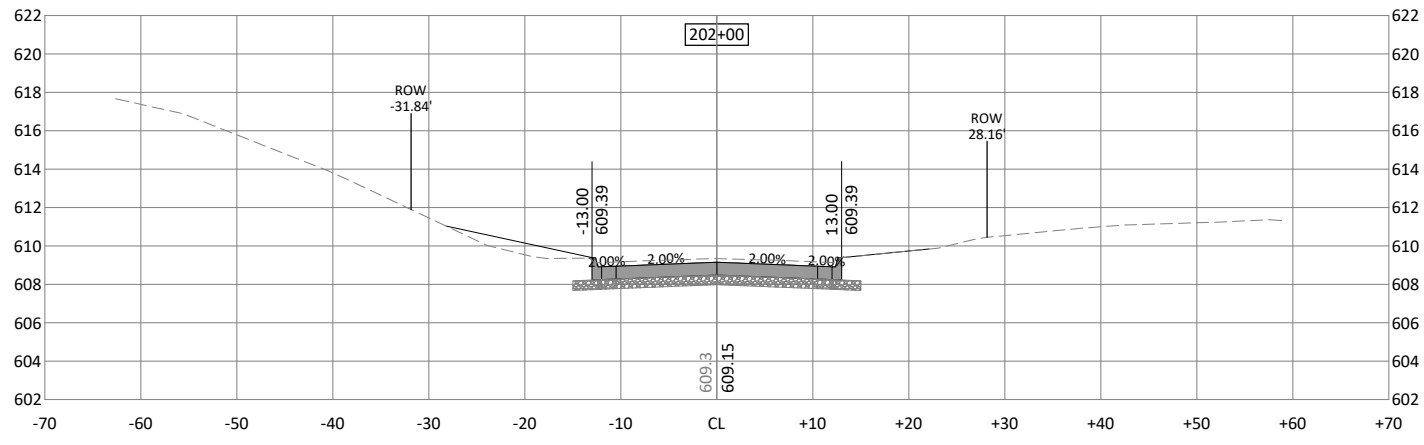


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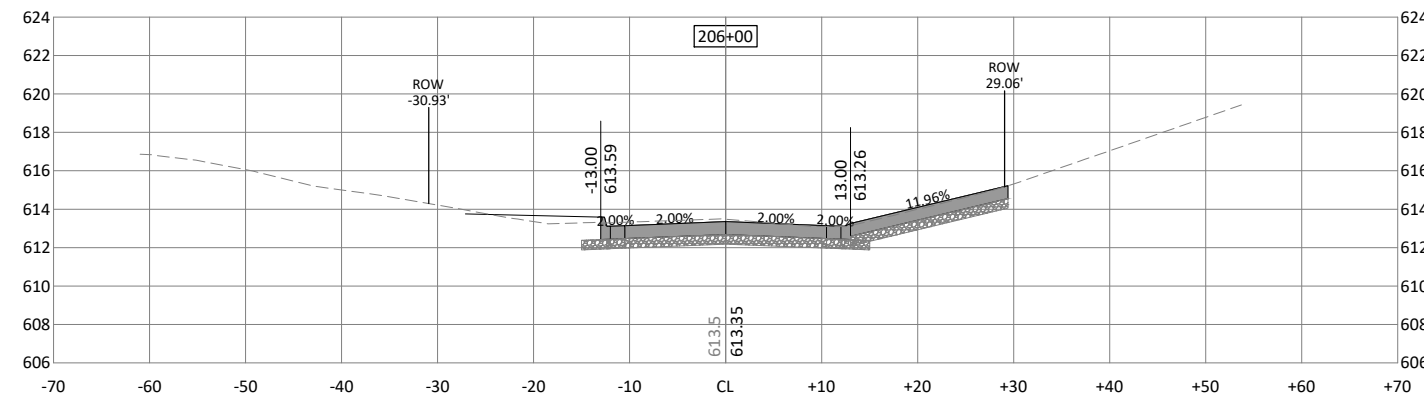
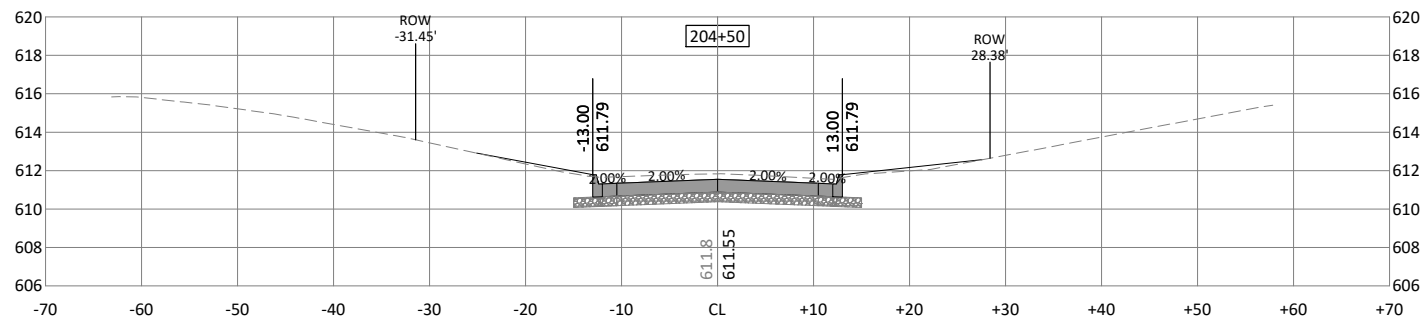
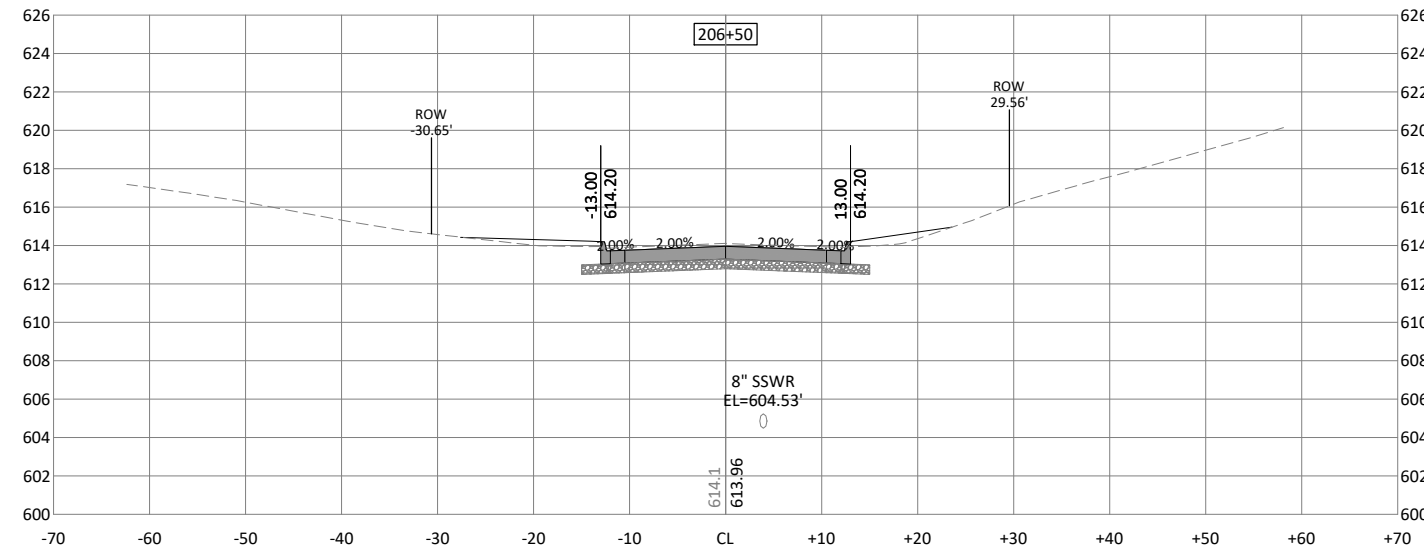
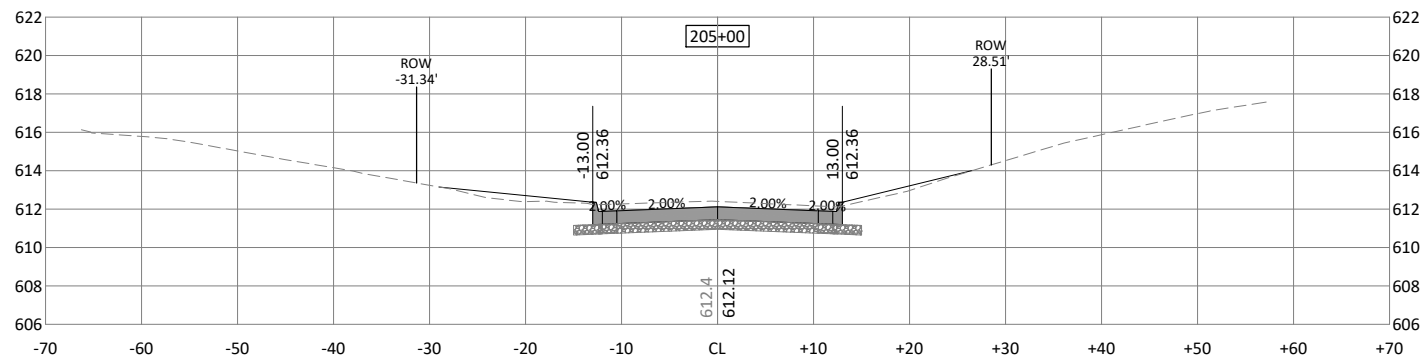
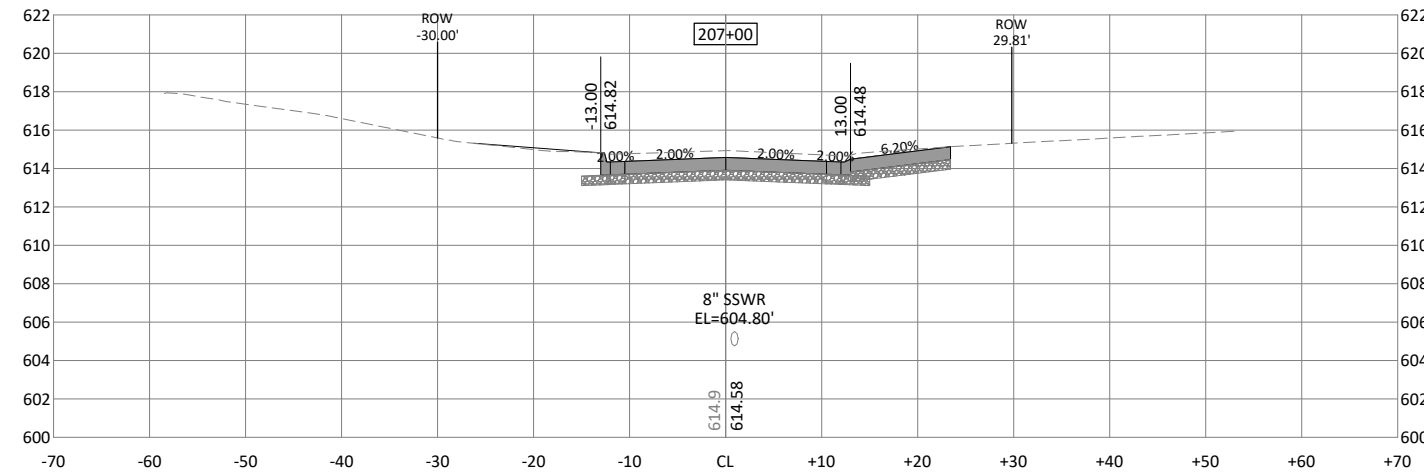
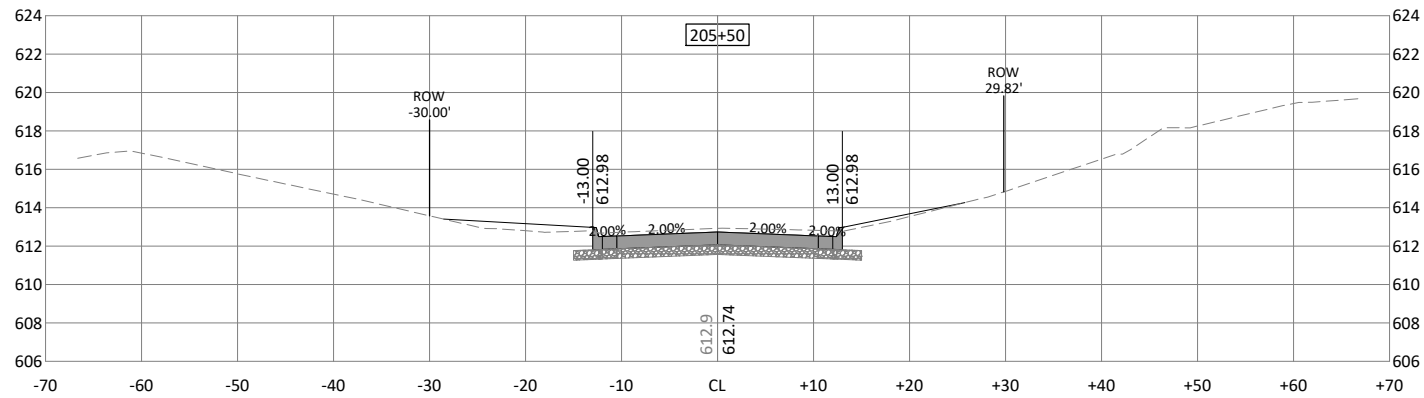


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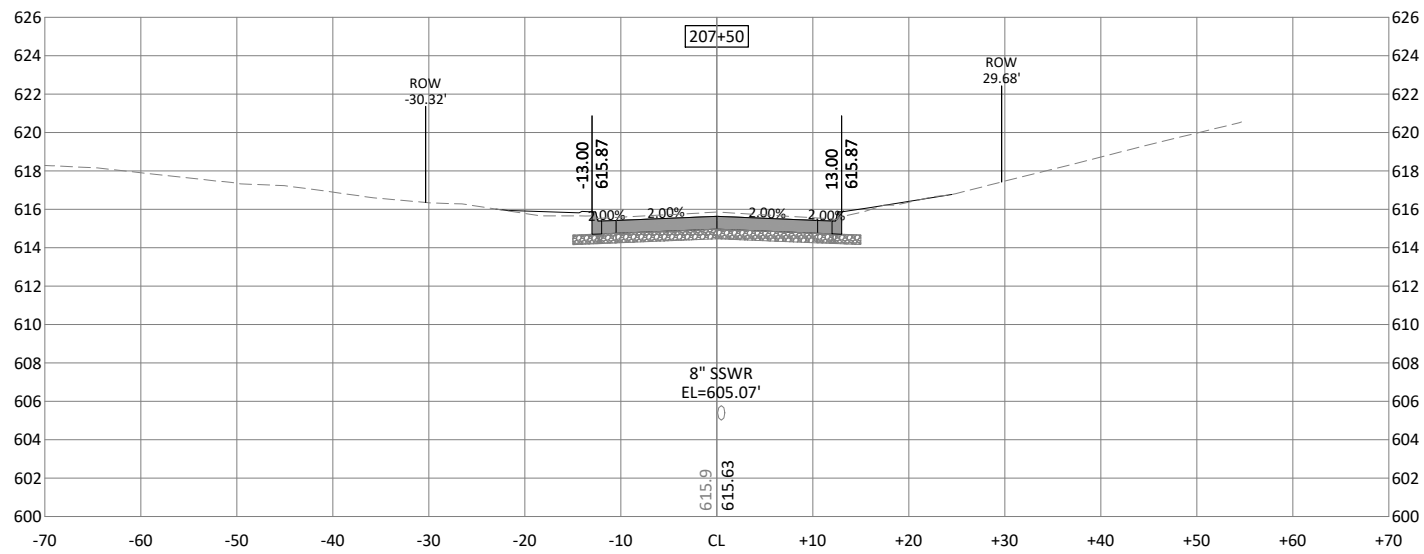
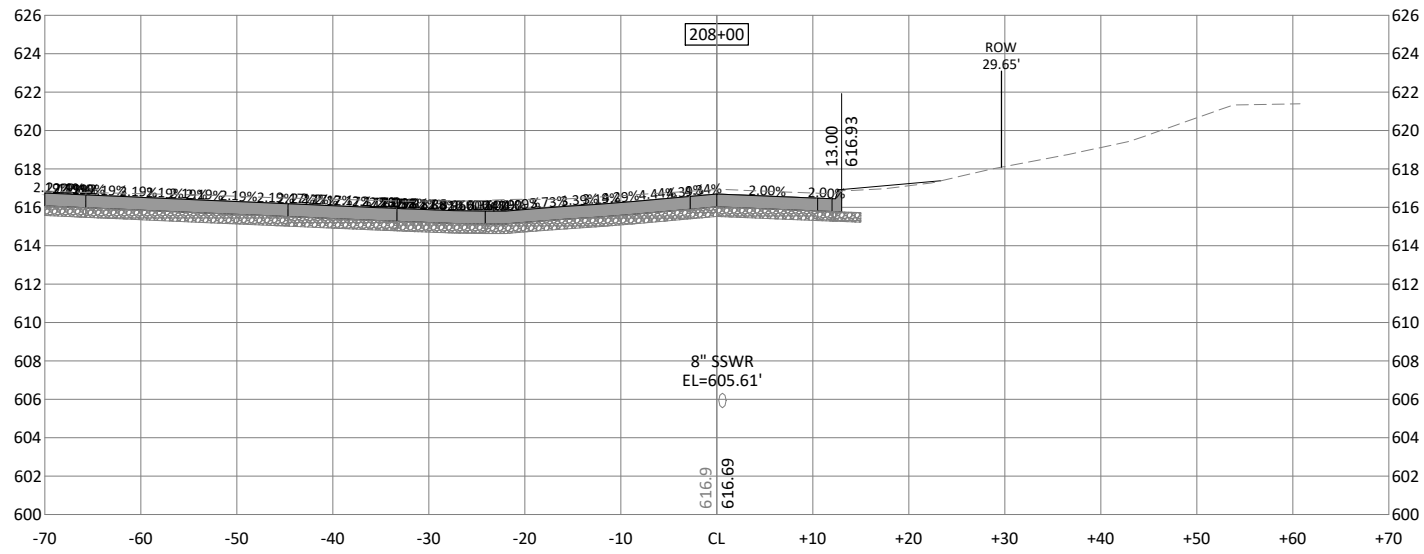
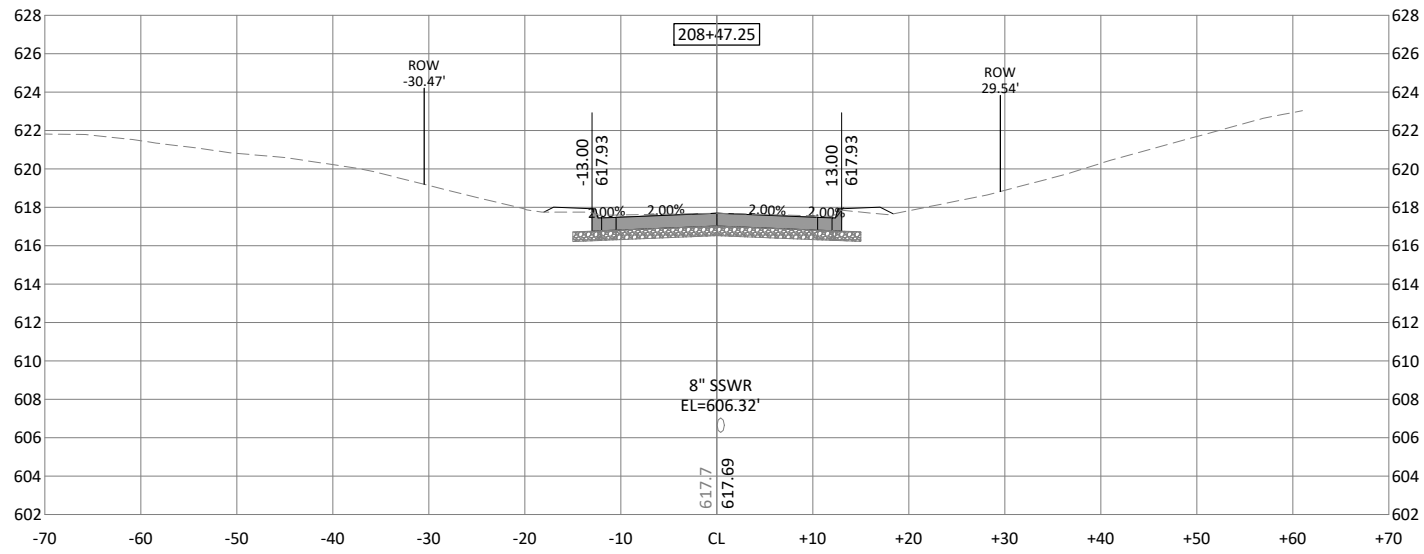


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