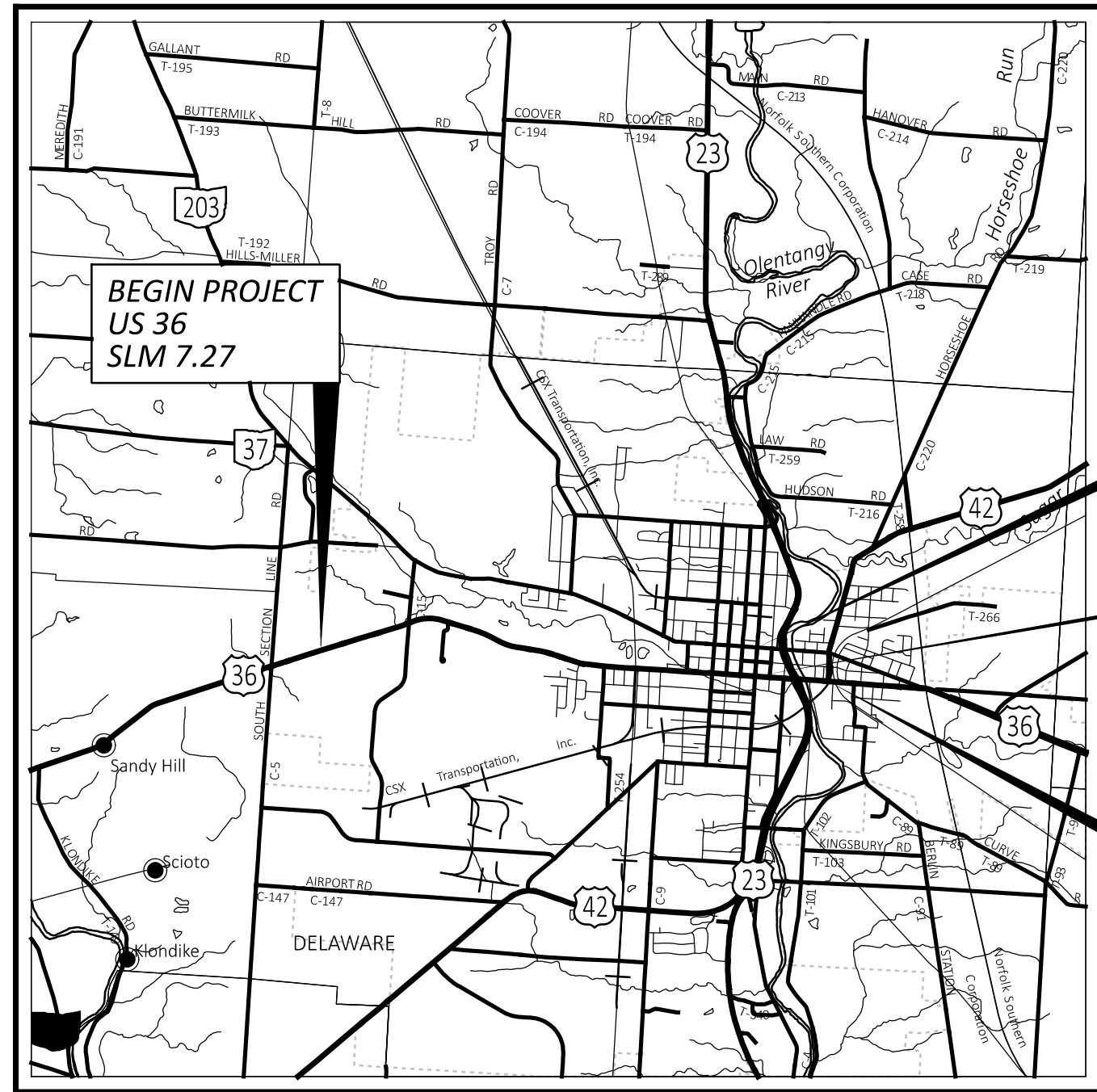


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

DEL-36/521-7.27/0.01

CITY OF DELAWARE
DELAWARE COUNTY



LOCATION MAP

LATITUDE: 40°18'00" LONGITUDE: 83°05'25"



PORTION TO BE IMPROVED	-----
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	===== -----
STATE ROUTES	-----
COUNTY & TOWNSHIP ROADS	-----
OTHER ROADS	-----

DESIGN DESIGNATION	US 36 6.929-10.144	10.144-10.373	10.373 - 10.614	SR 521 0.000-0.186
CURRENT ADT (2025)	14,000	18,500	20,000	9,100
DESIGN YEAR ADT (2037)	16,500	21,500	22,500	9,400
DESIGN HOURLY VOLUME (2037)	1,900	2,200	2,500	1,100
DIRECTIONAL DISTRIBUTION	51%	54%	58%	53%
TRUCKS (24 HOUR B&C)	8%	3%	6%	3%
DESIGN SPEED	EQUALS LEGAL		35 MPH	25 MPH
LEGAL SPEED	55 MPH	35 MPH	35 MPH	25 MPH
	45 MPH (7.418-8.634))			
	35 MPH (8.634-9.866)			
	25 MPH (9.866-10.239)			

DESIGN FUNCTIONAL CLASSIFICATION: 04 MINOR ARTERIAL (URBAN) 03 PRINCIPAL ARTERIAL (URBAN) 04 MINOR ARTERIAL (URBAN)

NHS PROJECT: NO YES NO NO

DESIGN EXCEPTIONS: NONE REQUIRED ADA DESIGN WAIVERS: NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days
Before You Dig

OHIO811.org
Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:

INDEX OF SHEETS:

TITLE	P.1
SCHEMATIC PLAN	P.2 - P.3
TYPICAL SECTIONS	P.4 - P.5
TYPICAL DETAILS	P.6
GENERAL NOTES	P.7
MAINTENANCE OF TRAFFIC NOTES	P.8 - P.10
GENERAL SUMMARY	P.11 - P.12
PAVEMENT REPAIR CALCULATIONS	P.14
PAVEMENT CALCULATIONS	P.13 - P.15
DEL-36 PLAN	P.16 - P.33
DEL-521 PLAN	P.34 - P.35
TRAFFIC CONTROL CALCULATIONS	P.36 - P.39
STRUCTURES OVER 20 FOOT	P.40

PRELIMINARY PLAN - 4/9/24

FEDERAL PROJECT NUMBER

E200(518)

RAILROAD INVOLVEMENT

CSXT

PROJECT DESCRIPTION

RESURFACING OF 3.24 MILES OF US 36 AND 0.17 MILES OF SR 521 IN THE CITY OF DELAWARE, DELAWARE COUNTY.

PROJECT ALSO INCLUDES PAVEMENT REPAIRS AND MINOR STRUCTURE WORK ON DEL-36-1043.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.57 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.00 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Anthony C. Turowski, P.E.
District 06 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-2.4	07/19/13	MT-95.31	07/19/19	TC-41.20	10/18/13	800	1/19/24
BP-3.1	01/19/24	MT-95.32	04/19/19	TC-42.20	10/18/13	821	4/20/12
		MT-95.60	04/19/19	TC-52.10	10/18/13	832	7/21/23
		MT-95.61	04/19/19	TC-52.20	01/15/21	921	04/20/12
		MT-97.10	04/19/19	TC-65.10	01/17/14		
		MT-97.12	01/20/17	TC-65.11	01/19/24		
		MT-99.20	04/19/19	TC-71.10	04/21/23		
		MT-101.90	07/17/20	TC-74.10	07/21/23		
		MT-105.10	01/17/20				

ENGINEER'S SEAL

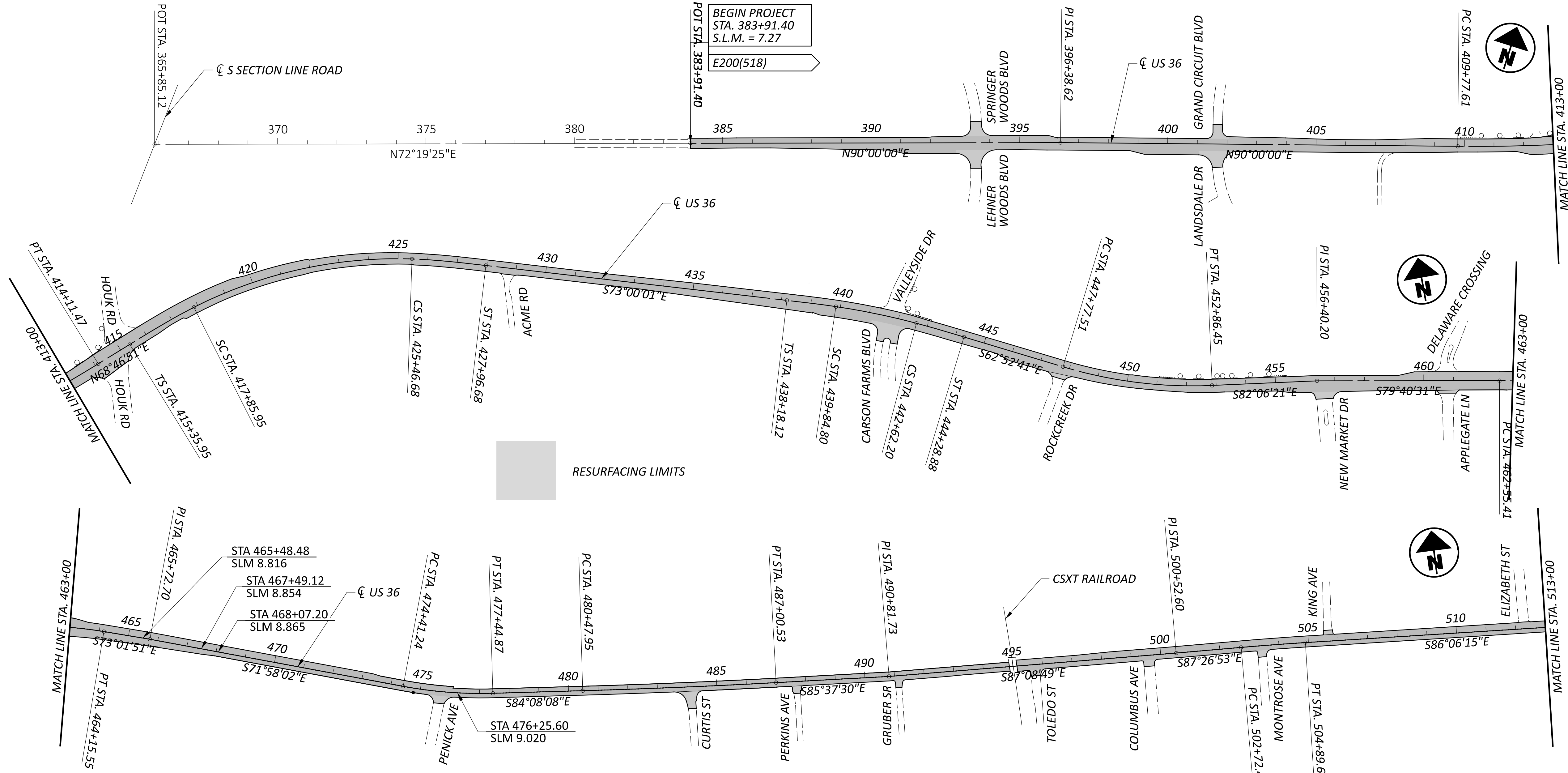


DEL-36/521-7.27/0.01

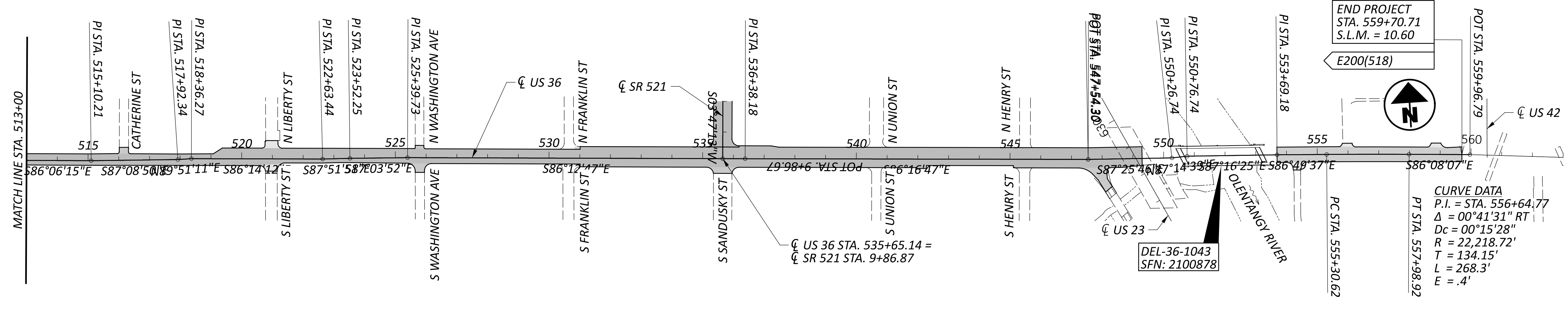
MODEL: 111608_GT001 PAPER SIZE: 34x22 (in.) DATE: 4/9/2024 TIME: 10:37:00 AM USER: kbowman pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 06\Delaware\111608\400-Engineering\Roadway\Sheets\111608_GT001.dgn

DEL-36/521-7.27/0.01 PID#111608

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	P.1
TOTAL	P.40



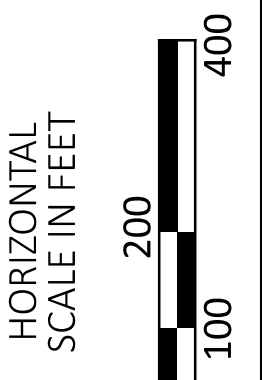
SPLIT #	CATEGORY	PLAN SPLIT CODE	DESCRIPTION
1	STP > 200,000	01/S>2/05	URBAN PAVING PLAN SPLIT FOR CITY OF DELAWARE. US 36 SLMS 7.27-8.816, 8.854-8.865, 9.020-10.60, SR 521
2	STP > 200,000	02/S>2/05	GENERAL SYSTEM PAVING PLAN SPLIT. US 36 SLMS 8.816-8.854, 8.865-9.020.



CURVE DATA
 P.I. = STA. 556+64.77
 Δ = 00°41'31" RT
 Dc = 00°15'28"
 R = 22,218.72'
 T = 134.15'
 L = 268.3'
 E = .4'

BEGIN PROJECT
 STA. 383+91.40
 S.L.M. = 7.27

END PROJECT
 STA. 559+70.71
 S.L.M. = 10.60



SCHEMATIC PLAN
US 36

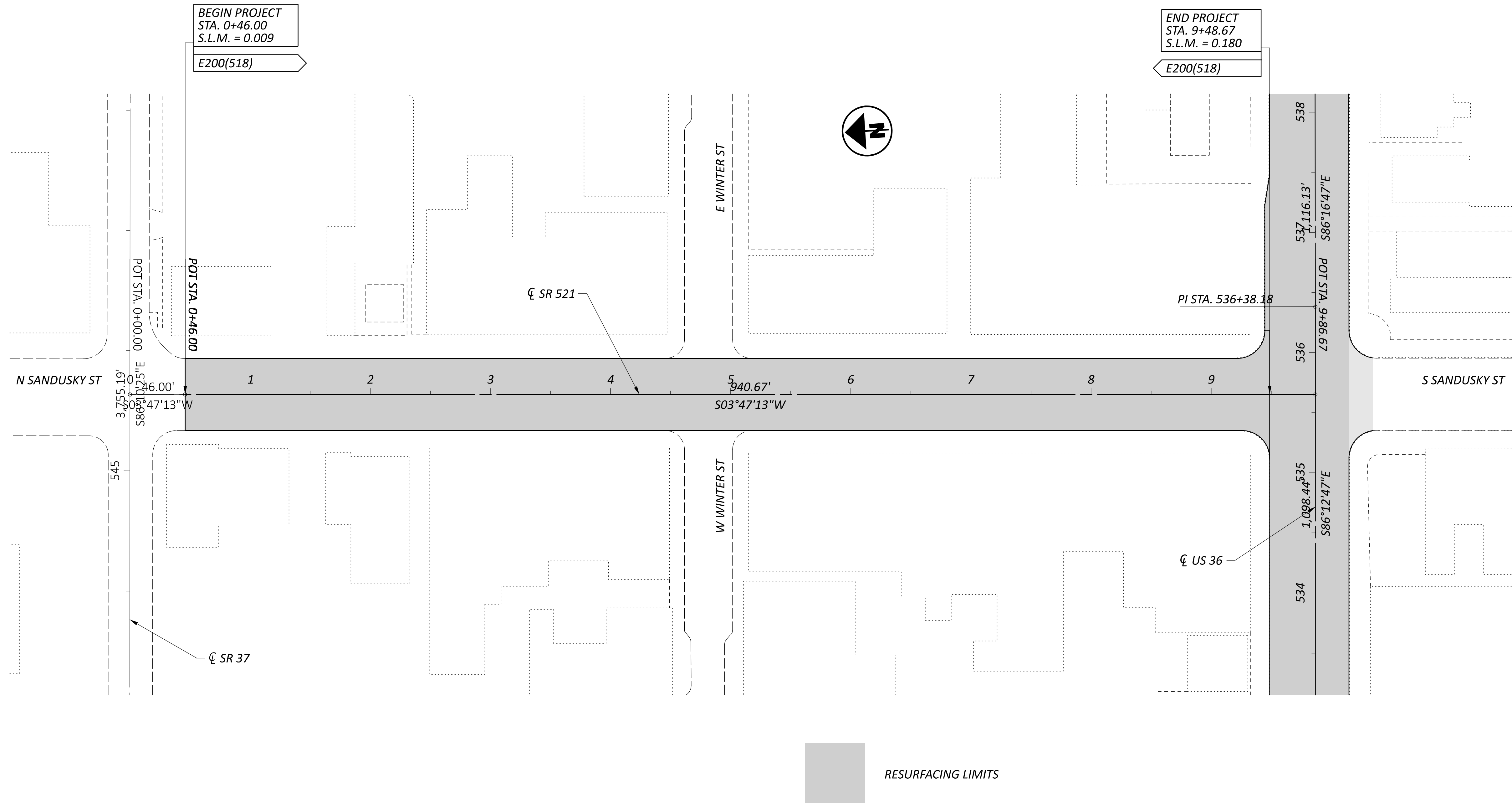
DESIGN AGENCY

DESIGNER
KLM

REVIEWER
 XXX MM-DD-YY

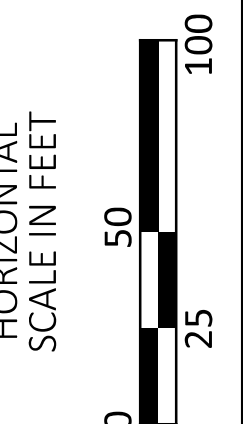
PROJECT ID
111608

SHEET TOTAL
 P.2 P.40



BEGIN PROJECT
STA. 0+46.00
S.L.M. = 0.009
E200(518)

END PROJECT
STA. 9+48.67
S.L.M. = 0.180
E200(518)



SCHEMATIC PLAN
SR 521

DESIGN AGENCY

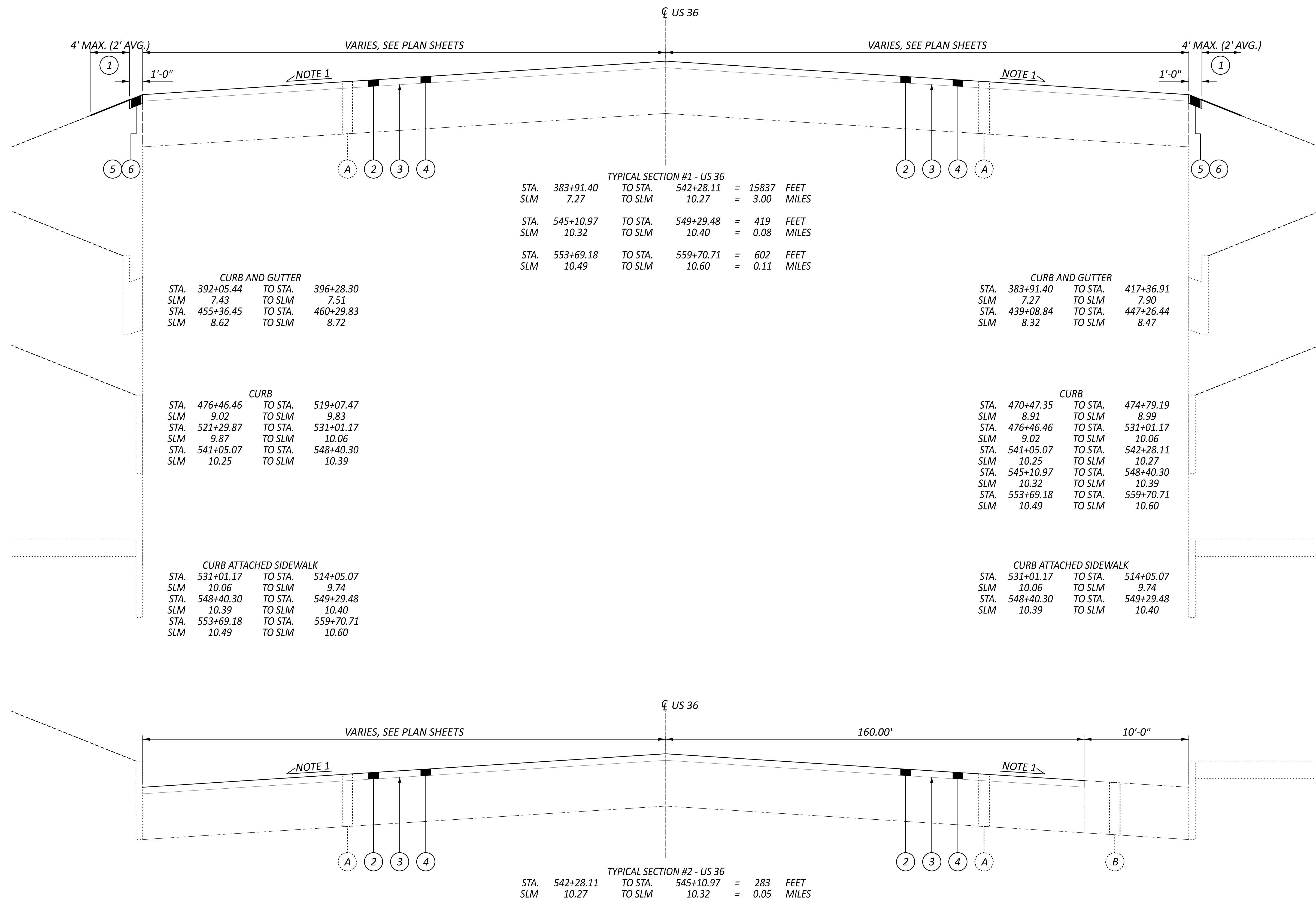


DESIGNER
KLM

REVIEWER
XXX MM-DD-YY

PROJECT ID
111608

SHEET TOTAL
P.3 P.40



TYPICAL SECTION #1 - US 36

STA. 383+91.40	TO STA. 542+28.11	= 15837 FEET
SLM 7.27	TO SLM 10.27	= 3.00 MILES
STA. 545+10.97	TO STA. 549+29.48	= 419 FEET
SLM 10.32	TO SLM 10.40	= 0.08 MILES
STA. 553+69.18	TO STA. 559+70.71	= 602 FEET
SLM 10.49	TO SLM 10.60	= 0.11 MILES

CURB AND GUTTER

STA. 383+91.40	TO STA. 417+36.91
SLM 7.27	TO SLM 7.90
STA. 439+08.84	TO STA. 447+26.44
SLM 8.32	TO SLM 8.47

CURB AND GUTTER

STA. 392+05.44	TO STA. 396+28.30
SLM 7.43	TO SLM 7.51
STA. 455+36.45	TO STA. 460+29.83
SLM 8.62	TO SLM 8.72

CURB

STA. 476+46.46	TO STA. 519+07.47
SLM 9.02	TO SLM 9.83
STA. 521+29.87	TO STA. 531+01.17
SLM 9.87	TO SLM 10.06
STA. 541+05.07	TO STA. 548+40.30
SLM 10.25	TO SLM 10.39

CURB ATTACHED SIDEWALK

STA. 531+01.17	TO STA. 514+05.07
SLM 10.06	TO SLM 9.74
STA. 548+40.30	TO STA. 549+29.48
SLM 10.39	TO SLM 10.40
STA. 553+69.18	TO STA. 559+70.71
SLM 10.49	TO SLM 10.60

CURB

STA. 470+47.35	TO STA. 474+79.19
SLM 8.91	TO SLM 8.99
STA. 476+46.46	TO STA. 531+01.17
SLM 9.02	TO SLM 10.06
STA. 541+05.07	TO STA. 542+28.11
SLM 10.25	TO SLM 10.27
STA. 545+10.97	TO STA. 548+40.30
SLM 10.32	TO SLM 10.39
STA. 553+69.18	TO STA. 559+70.71
SLM 10.49	TO SLM 10.60

CURB ATTACHED SIDEWALK

STA. 531+01.17	TO STA. 514+05.07
SLM 10.06	TO SLM 9.74
STA. 548+40.30	TO STA. 549+29.48
SLM 10.39	TO SLM 10.40

TYPICAL SECTION #2 - US 36

STA. 542+28.11	TO STA. 545+10.97	= 283 FEET
SLM 10.27	TO SLM 10.32	= 0.05 MILES

- (A) EXISTING ASPHALT SURFACE ON VARYING UNDERLAYERS
- (B) EXISTING CONCRETE PAVEMENT
- (1) ITEM 209 - LINEAR GRADING
- (2) ITEM 254 - 1.5" PAVEMENT PLANING, ASPHALT CONCRETE
- (3) ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS TABLE 407.06-1)

- (4) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- (5) ITEM 617 - 2.00" COMPACTED AGGREGATE
- (6) ITEM 617 - SHOULDER PREPARATION

NOTES:
 1. MATCH EXISTING CROSS SLOPE
 2. TYPICAL SECTIONS ARE NOT TO SCALE

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

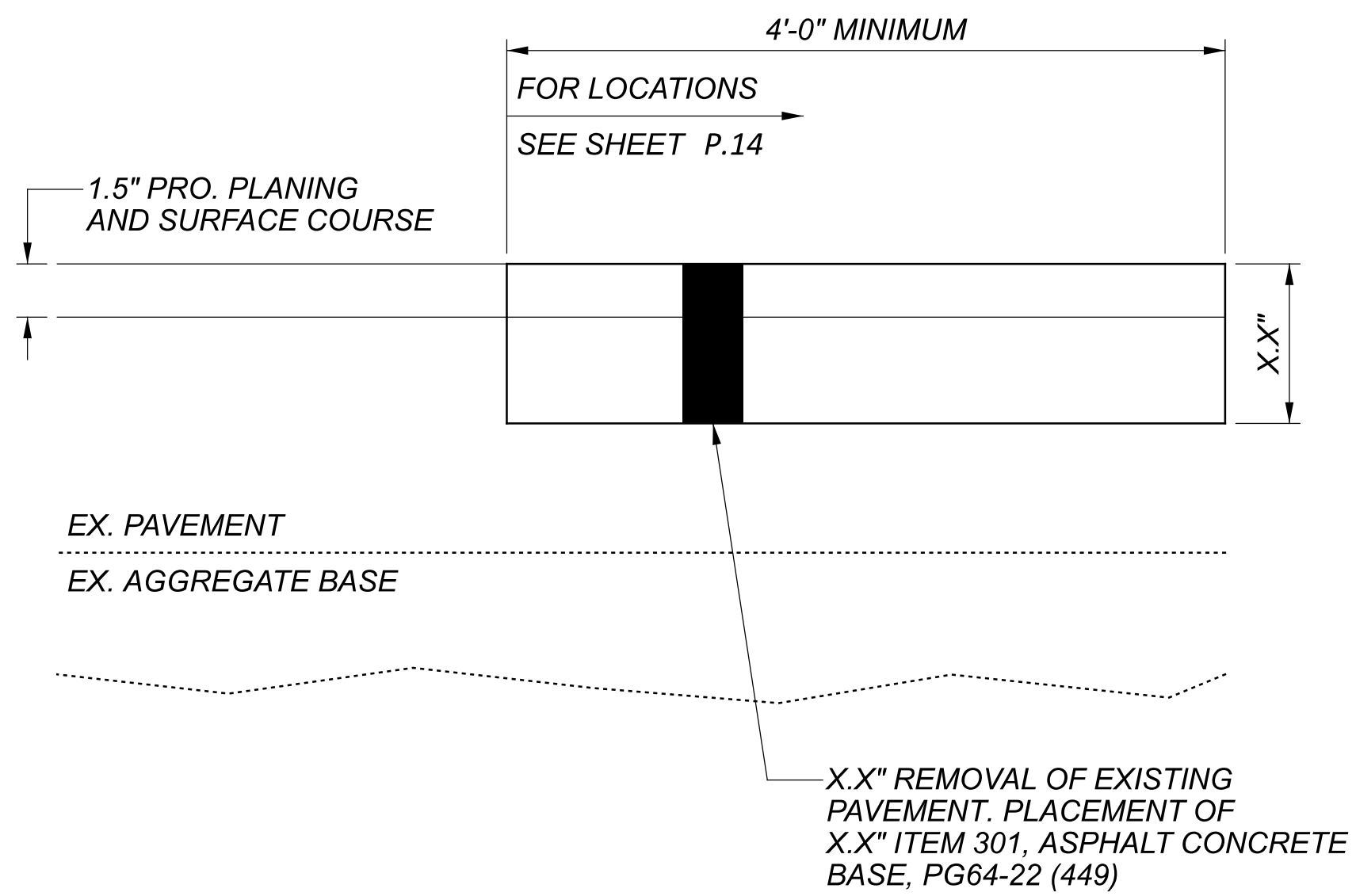
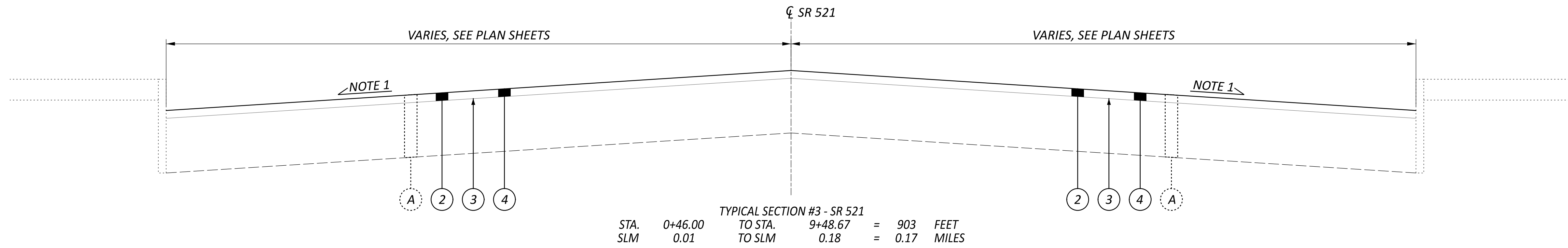
XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL

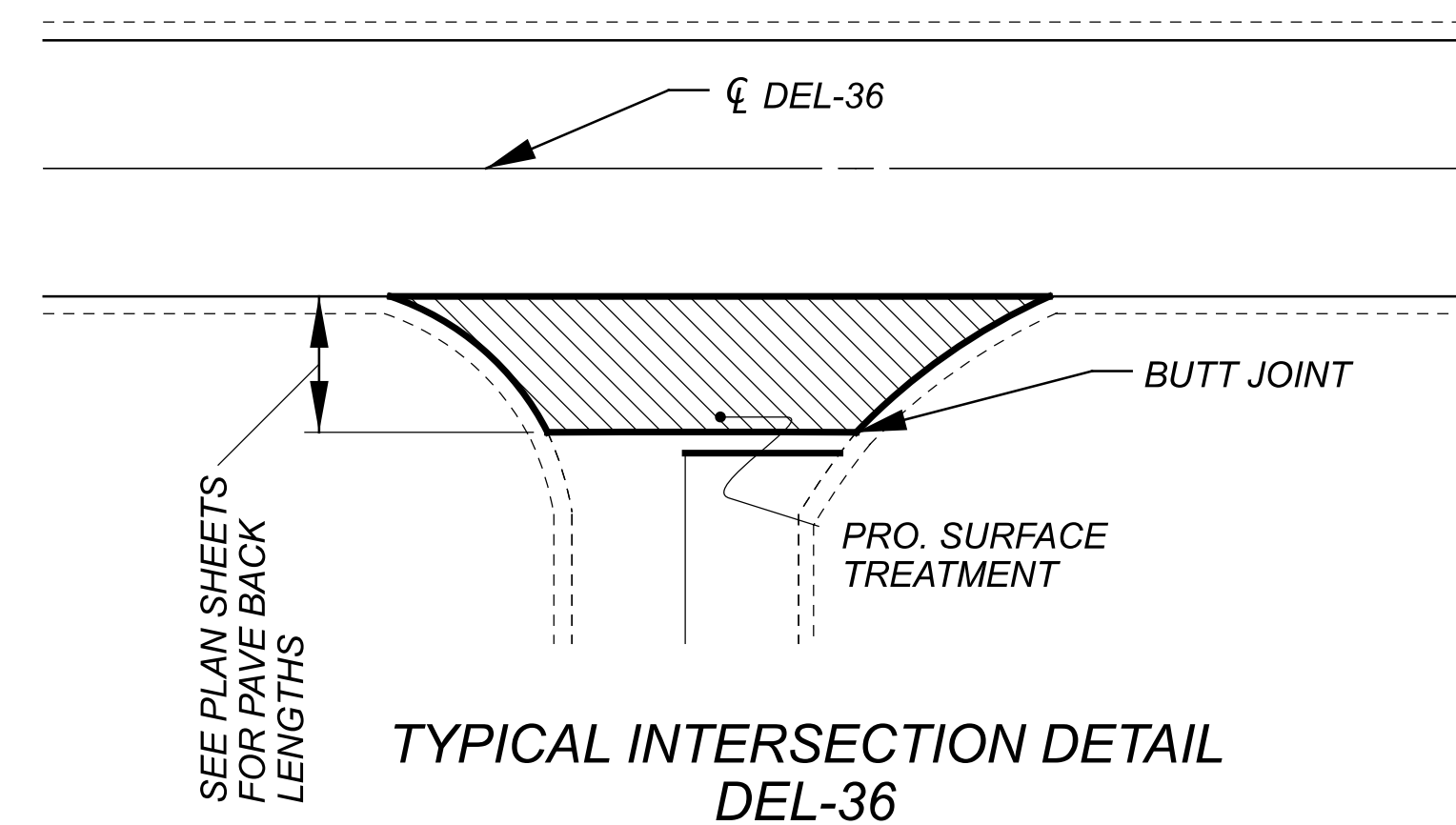
P.4 P.40



TYPICAL DETAIL #1

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, X.X"

FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, X.X" SEE GENERAL NOTES



TYPICAL INTERSECTION DETAIL DEL-36

1.5" PAVEMENT PLANING AND RESURFACING (449)

ROUTE	SLM	TO	SLM	BUILD-UP BASED ON EXISTING PLANS*
US 36	7.28	-	7.46	1" ASPHALT ON MACADAM
US 36	7.46	-	7.70	1.25" ASPHALT ON MACADAM
US 36	7.70	-	8.02	3" ASPHALT ON 7" ASPHALT BASE
US 36	8.02	-	8.59	4.5" ASPHALT ON 7" BASE
US 36	8.59	-	9.03	3" ASPHALT ON 7" ASPHALT BASE
US 36	9.03	-	9.06	4.25" ASPHALT ON 8" MACADAM
US 36	9.06	-	9.96	2.25" ASPHALT ON 12" BRICK
US 36	9.96	-	10.18	1" ASPHALT ON 12" BRICK
US 36	10.18	-	10.40	4.25" ASPHALT ON 6" CONCRETE
US 36	10.40	-	10.60	3" ASPHALT ON 6" CONCRETE
SR 521	0.00	-	0.18	MIN. 1.5" ASPHALT ON UNKNOWN BASE

*BUILD-UPS ARE PROVIDED FOR REFERENCE ONLY AND MAY NOT REFLECT ACTUAL FIELD CONDITIONS.

- EXISTING ASPHALT SURFACE ON VARYING UNDERLAYERS
- EXISTING CONCRETE PAVEMENT
- ITEM 209 - LINEAR GRADING
- ITEM 254 - 1.5" PAVEMENT PLANING, ASPHALT CONCRETE
- ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS TABLE 407.06-1)

- ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)
- ITEM 617 - 2.00" COMPACTED AGGREGATE
- ITEM 617 - SHOULDER PREPARATION

NOTES:
 1. MATCH EXISTING CROSS SLOPE
 2. TYPICAL SECTIONS ARE NOT TO SCALE

DESIGN AGENCY



DESIGNER
 KLM

REVIEWER

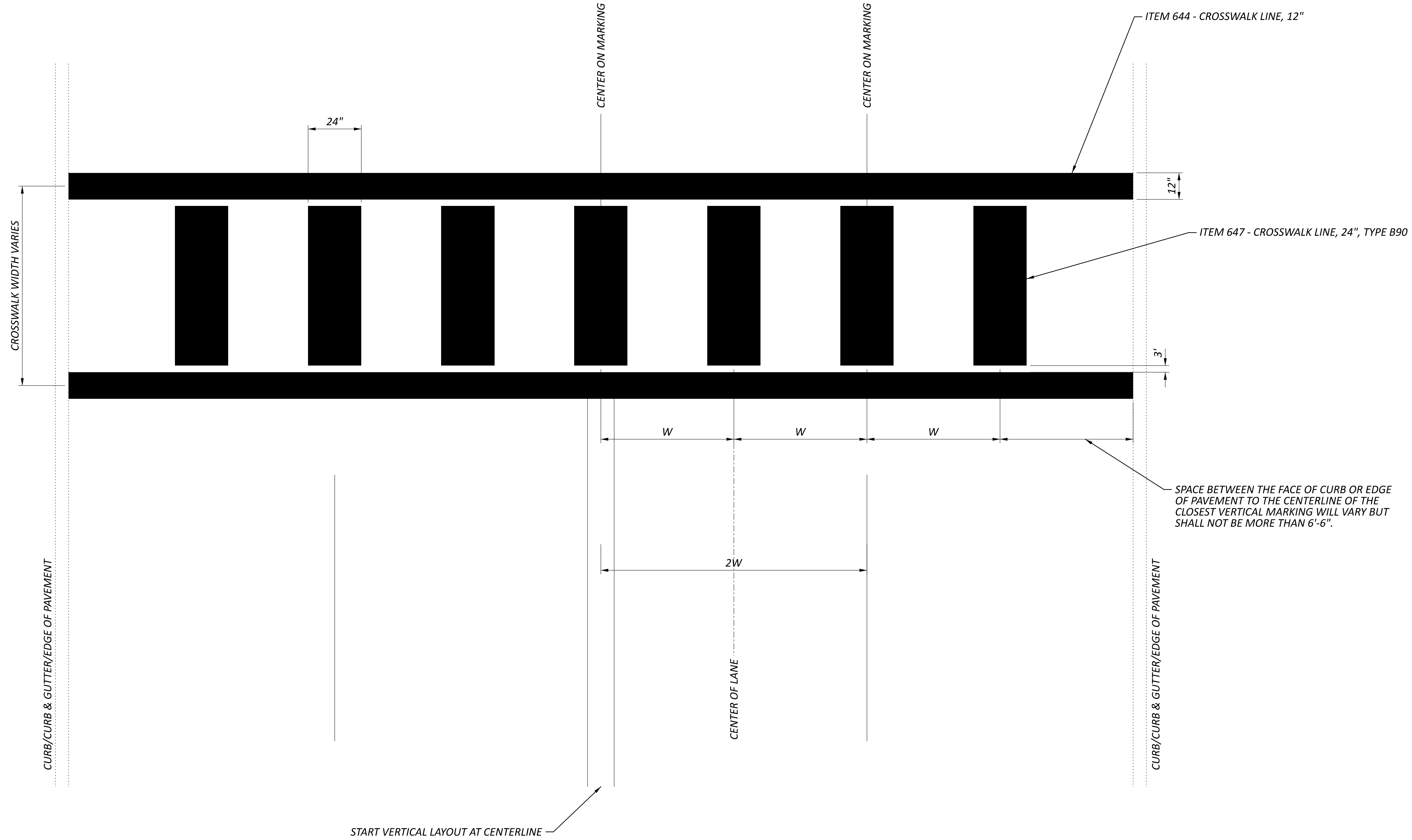
XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL

P.5 P.40



CROSSWALK MARKING DETAIL

DESIGN AGENCY



DESIGNER
KLM
 REVIEWER
XXX MM-DD-YY
 PROJECT ID
111608
 SHEET TOTAL
P.6 | P.40

GENERAL:

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER (SEE 108.02) AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ALIGNMENT AND PROFILE:

THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE THE SAME AS EXISTING.

CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

CONTINGENCY QUANTITIES:

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

REMOVAL ITEMS:

GASPHALT AND MISCELLANEOUS HARDWARE DESIGNATED FOR REMOVAL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE REMOVED ITEM.

WORK LIMITS:

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PART-WIDTH / FULL-WIDTH CONSTRUCTION:

BECAUSE OF THE NECESSITY TO BUILD PORTIONS OF THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

CENTERLINE CONSTRUCTION / RIGHT OF WAY:

THE INTENT OF THIS PROJECT IS THAT ALL WORK IS TO BE COMPLETED WITHIN THE EXISTING RIGHT OF WAY. THE CENTERLINE SHOWN IN THIS PLAN IS TO BE CONSIDERED A CENTERLINE OF CONSTRUCTION ONLY AND NOT TO BE CONSTRUED AS THE ACTUAL GEOMETRIC ALIGNMENT OF THE ROADWAY. THIS CENTERLINE PROVIDED IS TO BE USED AS A REFERENCE OF PROJECT LENGTH ONLY AND SHALL NOT BE USED TO ESTABLISH PRECISE LOCATIONS OF ANY OTHER FEATURES SUCH AS/NOT LIMITED TO THE EXISTING RIGHTS OF WAY. ANY RIGHT OF WAY LOCATION SHOWN IN THE PLAN IS A GRAPHICAL REPRESENTATION (OF SAID RIGHT OF WAY) CONFIRMING THAT THE PLANNED WORK HAS BEEN DETERMINED TO BE IN ODOT RIGHT OF WAY. IN THE EVENT THAT ANY ACTIVITIES DEVIATE FROM THE PLAN, THE CONTRACTOR MAY BE REQUIRED, PER THE ENGINEER, TO VERIFY THE RIGHT OF WAY LIMITS IN THE FIELD. PAYMENT FOR ANY RIGHT OF WAY VERIFICATION WILL BE INCLUDED UNDER THE LUMP SUM BID ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

UTILITIES:

NO UTILITY IMPACT IS ANTICIPATED DUE TO THE SCOPE OF WORK. THE ODOT CONTRACTOR IS REQUIRED TO CONTACT OHIO811 A MINIMUM OF 48 HOURS EXCLUDING WEEKENDS AND HOLIDAYS TO PERMIT ALL UNDERGROUND UTILITIES AN OPPORTUNITY TO MARK THEIR LINES AND TO ENSURE ALL UTILITIES ARE MARKED PRIOR TO BEGINNING WORK. IT IS ALSO THE ODOT CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL NON-MEMBERS OF OHIO811 DIRECTLY A MINIMUM OF 48 HOURS NOTICE EXCLUDING WEEKENDS AND HOLIDAYS PRIOR TO EXCAVATION OCCURRING AT ANY LOCATIONS TO PROVIDE THEM WITH THE SAME OPPORTUNITY.

MANHOLES AND OTHER CASTING STRUCTURES:

THE ITEM PROVIDED BELOW IS A CONTINGENCY QUANTITY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER AT VARIOUS LOCATIONS. THE ITEM SHALL INCLUDE THE COST OF ALL MATERIAL, LABOR, EQUIPMENT, AND HARDWARE NECESSARY TO ADJUST CASTINGS TO GRADE TO THE PROPOSED ASPHALT ELEVATION AS DIRECTED.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY.

ITEM 611 - MANHOLE ADJUSTED TO GRADE = 4 EACH
ITEM 638 - VALVE BOX ADJUSTED TO GRADE = 4 EACH

SEEDING AND MULCHING:

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS AND HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 659 - TOPSOIL = 311 CY
ITEM 659 - SEEDING AND MULCHING = 2778 SY
ITEM 659 - REPAIR SEEDING AND MULCHING = 139 SY
ITEM 659 - INTER-SEEDING = 139 SY
ITEM 659 - COMMERCIAL FERTILIZER = 0.38 TON
ITEM 659 - LIME = 0.57 ACRE
ITEM 659 - WATER = 15 MGAL

APPLY SEEDING AND MULCHING TO ALL AREAS OF EXPOSED SOIL WITHIN THE LINEAR GRADING WORK. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THE AVERAGE 2' LINEAR GRADING WIDTH.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, X.X" :

ALL REPAIR AREAS DETAILED IN THE PLAN SHALL BE VERIFIED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF WORK. THE REPAIR AREAS SHALL CONSIST OF REMOVING X.X INCHES OF PAVEMENT AND PLACING X.X INCHES OF ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449). THE AVERAGE WIDTH SHALL NOT BE LESS THAN 4 FEET. FOR MORE INFORMATION SEE DETAIL ON SHEET P.5. WORK SHALL BE PERFORMED PRIOR TO PLANING. NO MORE PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE) SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

FOR LOCATIONS AND QUANTITIES, SEE SHEET P.14.

IN ADDITION TO THE QUANTITIES PROVIDED ON SHEET P.14, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN PROVIDED CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, X.X" =

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE:

THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO THE CONTRACTORS EQUIPMENT THAT MAY RESULT FROM THE PLANING OPERATION, INCLUDING DAMAGE CAUSED BY CASTINGS AND LOOP DETECTORS. THE DEPTH OF PLANING CLOSE TO THE CASTINGS SHALL BE AS DIRECTED; TO ACHIEVE A SMOOTH RIDING FINISHED PAVEMENT. GREAT CARE SHALL BE TAKEN TO PREVENT THE REMOVAL OF THE EXISTING PAVEMENT CROSS-SLOPE (CROWN) DURING THE PLANING OPERATIONS.

THE CONTRACTOR SHALL LIMIT THE PLANING OPERATION TO ONE LANE AT A TIME AS TO ENSURE THAT THE PROPOSED SURFACE COURSE IS BUTTING UP TO EITHER PROPOSED OR EXISTING ASPHALT.

PLANED PAVEMENT SHALL NOT BE EXPOSED TO TRAFFIC AT ANY TIME. FAILURE TO MEET THIS REQUIREMENT WILL SUBJECT THE CONTRACTOR TO A DISINCENTIVE OF \$900/DAY FOR EACH DAY THE PLANED SURFACE IS NOT RESURFACED.

ITEM 617 - WATER:

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY:

ITEM 617 - WATER = 1 MGAL

PROPOSED PAVEMENT MARKINGS:

IT IS THE INTENT OF THE PROPOSED PAVEMENT MARKINGS TO BE THE SAME AS EXISTING. ANY DEVIATION FROM EXISTING WILL BE IDENTIFIED WITHIN THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE AND SHAPE OF THESE EXISTING PAVEMENT MARKINGS BEFORE THE WORK OBLITERATES THEM. ANY PAVEMENT MARKING WHICH IS PLACED AT THE WRONG LOCATION SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN:

THIS ITEM SHALL CONSIST OF STATIONING USING 3 FT LATH STAKES. THE STAKES SHALL BE SPACED AT 200 FT INTERVALS AND SHALL EXTEND THROUGHOUT THE LENGTH OF EACH PROJECT LOCATION AND THROUGHOUT THE LENGTH OF ANY RAMPS.

PLACEMENT OF THE STAKES SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED OR MISSING STAKES.

CONSTRUCTION LAYOUT STAKES, AS PER PLAN WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID, WHICH SHALL BE FULL COMPENSATION FOR ALL SERVICES, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING THE REMOVAL, NECESSARY TO COMPLETE THIS ITEM.

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL

P.7 P.40

ITEM 614 - MAINTAINING TRAFFIC:

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION
 BUREAU OF TRAFFIC
 1980 WEST BROAD STREET
 COLUMBUS, OHIO 43223

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY ODOT PERSONNEL. THE CONSTRUCTION INSPECTOR SHALL APPROVE ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR CONDITION AND LOCATION BEFORE THE CONTRACTOR WILL BE ALLOWED TO BEGIN WORK. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, HIS PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

RIGHT OF WAY PERMITS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE RIGHT OF WAY PERMITS TO INSTALL MAINTENANCE OF TRAFFIC SIGNING.

LANES OPEN DURING HOLIDAYS AND SPECIAL EVENTS

NO WORK SHALL BE PERFORMED AND THE SAME NUMBER OF LANES AS WERE AVAILABLE AT THE START OF THE PROJECT SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

HOLIDAYS
 NEW YEAR'S (OBSERVED) GEN./REG. ELECTION DAY (NOV)
 MEMORIAL DAY THANKSGIVING
 FOURTH OF JULY (OBSERVED) CHRISTMAS (OBSERVED)
 LABOR DAY

SPECIAL EVENTS
 DELAWARE COUNTY FAIR - LANE OR SHOULDER CLOSURES ARE NOT PERMITTED DURING THE DELAWARE COUNTY FAIR 6AM-10PM DAILY.

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (ELECTION)	5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THANKSGIVING	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRIAN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$100 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

PUBLIC OUTREACH AND NOTIFICATION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE VIA EMAIL AT d06.pio@dot.ohio.gov TO COORDINATE EFFORTS TO NOTIFY ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING PROJECT. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO THE FIRST DAY OF WORK. ALL NOTIFICATIONS SHALL BE MADE UTILIZING THE TEMPLATE PROVIDED BY THE DISTRICT 6 PUBLIC INFORMATION OFFICE.

NOTIFICATION OF TRAFFIC RESTRICTIONS:

THROUGHOUT THE DURATION OF PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE PIO (D06.PIO@DOT.OHIO.GOV). THE PROJECT ENGINEER SHALL RECEIVE THIS NOTIFICATION PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHALL INCLUDE BUT IS NOT LIMITED TO ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHOULD LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

Notification Time Frame Table			
Item	Duration of Closure	Notification due to District 6 Communications Office	Sign Displayed to Public
Ramp & Road Closures	>= 2 weeks	21 calendar days prior to closure	14 calendar days prior to closure
	> 12 hours & < 2 weeks	14 calendar days prior to closure	7 calendar days prior to closure
	<= 12 hours	4 business days prior to closure	2 business days prior to closure
Lane Closures & Restrictions	>= 2 weeks	14 calendar days prior to closure	
	< 2 weeks	5 business days prior to closure	
Start of Construction & Traffic Pattern Changes	N/A	14 calendar days prior to implementation	

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME FRAME TABLE.

NOTIFICATION OF CONSTRUCTION INITIATION:

AT LEAST FOURTEEN DAYS PRIOR TO STARTING INITIAL CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL ADVISE THE DISTRICT OFFICE OF COMMUNICATIONS VIA EMAIL AT d06.pio@dot.ohio.gov, THE DISTRICT WORK ZONE TRAFFIC MANAGER VIA EMAIL AT d06.mot@dot.ohio.gov AND THE CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614)728-4099 OF THE ANTICIPATED START DATE OF ANY CONSTRUCTION ACTIVITIES INCLUDING BUT NOT LIMITED TO THE PLACING OF WORK ZONE SIGNS. THE NOTIFICATION SHALL ALSO INCLUDE THE PROJECT NUMBER, PID, NAME AND PHONE NUMBER OF THE CONTRACTOR, A POINT OF CONTACT AND THE ANTICIPATED IMPACT ON TRAFFIC. THE CONTRACTOR WILL IMMEDIATELY INFORM THE DISTRICT OFFICE OF COMMUNICATIONS AND THE DISTRICT WORK ZONE TRAFFIC MANAGER OF ANY AND ALL DELAYS AND/OR CHANGES REGARDING THE CONSTRUCTION INITIATION DATE.

DROPOFFS IN WORK ZONES:

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEET THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

ACCESS TO PRIVATE PROPERTY:

MAINTAIN ACCESS TO COMMERCIAL PROPERTIES WITH ONLY ONE DRIVEWAY AT ALL TIMES BY USE OF PART WIDTH CONSTRUCTION. FOR COMMERCIAL PROPERTIES WITH MULTIPLE DRIVEWAYS, DO NOT CLOSE MORE THAN ONE DRIVEWAY AT A TIME.

MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES AT ALL TIMES. WHEN A RESIDENTIAL DRIVE IS CLOSED FOR CONSTRUCTION, MAINTAIN ALTERNATE ACCESS TO THE PROPERTY. IT MAY BE REQUIRED FOR THE CONTRACTOR TO MAINTAIN ONE PASSABLE LANE WITHIN A CLOSURE IN ORDER FOR VEHICLES TO ACCESS RESIDENCY WITH A VEHICLE.

SUCCESSFULLY NOTIFY THE OCCUPANTS/OWNERS OF COMMERCIAL OR RESIDENTIAL DRIVES TO BE CLOSED AND COORDINATE THE CLOSURE AT LEAST 48 HOURS BEFORE THE CLOSURE BEGINS (SIMPLY LEAVING A WRITTEN NOTICE OR PHONE MESSAGE IS NOT SUFFICIENT). COORDINATE ALTERNATE ACCESS TO RESIDENTIAL PROPERTIES WITH THE OWNER/OCCUPANT.

USE OF STANDARD DRAWINGS:

FOR THE PURPOSE OF THIS PROJECT, "MOVING OPERATION" SHALL BE LIMITED TO PAVEMENT MARKING STRIPING.

IT MAY BE NECESSARY TO EXTEND THE ADVANCE WARNING AND BUFFER ZONES BEYOND THE MINIMUM DISTANCES SHOWN ON THE STANDARD DRAWINGS. THIS MAY BE DUE TO HORIZONTAL ALIGNMENT, VERTICAL ALIGNMENT, RAMP LOCATIONS, OR OTHER SIGHT OBSTRUCTIONS. LOCATIONS OF THE TAPER ZONES MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER, BUT TAPER LENGTHS MUST MEET THE MINIMUM STANDARDS. TAPERS SHOULD BE PLACED IN TANGENT SECTIONS WHENEVER POSSIBLE. ADDITIONAL YIELD SIGNS MAY BE REQUIRED FOR RAMPS WITHIN 1,000 FEET OF A WORK ZONE. PAYMENT SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

FOR ANY MULTILANE HIGHWAY, DEVICE SPACING SHALL BE A MAXIMUM OF 40' CENTER ON CENTER IN THE TAPERS AND 80' CENTER ON CENTER IN THE TANGENT SECTIONS.



PERMITTED LANE CLOSURES:

AT LEAST ONE LANE OF TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES UNLESS STATED OTHERWISE IN THE PLAN BY USE OF THE EXISTING AND COMPLETED PAVEMENT. WORK ZONES SHALL BE LIMITED IN LENGTH TO THE AMOUNT OF WORK THAT CAN BE PERFORMED THAT DAY. TRAFFIC SHALL BE MAINTAINED BY FLAGGERS FOR CLOSING 1 LANE OF THE 2 LANE HIGHWAY FOR PAVING OPERATIONS AS PER STANDARD DRAWINGS MT-97.10 AND MT-97.12 AND/OR WITH DRUMS FOR CLOSING 1 LANE OF THE 3 OR 4 LANE HIGHWAY FOR PAVING OPERATIONS AS PER STANDARD DRAWINGS MT-95.31, MT-95.32, MT-95.60, AND MT-95.61.

LANE CLOSURES ARE NOT PERMITTED 6AM TO 9AM AND 3PM TO 6PM. THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$100 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

CONSTRUCTION TRAFFIC:

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES IN ACCORDANCE WITH CMS 105.13 TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

MAINTENANCE OF TRAFFIC FOR MARKING PAVEMENT REPAIRS:

PROVIDE LANE CLOSURES AS PER THE MAINTENANCE OF TRAFFIC NOTES IN THESE PLANS A MINIMUM OF 24 HOURS PRIOR TO PERFORMING PAVEMENT REPAIRS TO ALLOW THE ENGINEER TO IDENTIFY AND MARK THE AREAS OF THE PAVEMENT IN NEED OF REPAIRS.

PARKING RESTRICTIONS:

CONTRACTOR SHALL INSTALL "NO PARKING" SIGNS AS DIRECTED BY THE ENGINEER AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES WITHIN WALDO CORP LIMITS. SIGNS SHALL LIST DATES IN WHICH PARKING WILL BE RESTRICTED. CONTRACTOR SHALL MINIMIZE THE AMOUNT OF TIME PARKING IS RESTRICTED TO WHAT IS NECESSARY TO COMPLETE THE PAVING/RESURFACING & CURB RAMP WORK. CONTRACTOR SHALL HAVE PARKING OPEN ON ALL DAYS IN WHICH A CREW IS NOT PRESENT ON-SITE OR THE CREW ON-SITE DOES NOT NEED THE PARKING AREAS RESTRICTED IN ORDER TO PERFORM THEIR WORK.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 & THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING REMOVAL AND REPLACEMENT, NECESSARY TO COMPLETE THIS ITEM WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

USE OF WEIGHTED CHANNELIZERS:

THE WEIGHTED CHANNELIZERS MAY BE USED IN ACCORDANCE WITH THIS SECTION. THE WEIGHTED CHANNELIZERS SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A HANDLE OR LIFTING DEVICE, WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZERS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETRO REFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETRO REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZERS SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF THE WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK, THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE TANGENT AREA. THE TANGENT AREA IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS. MAXIMUM SPACING OF THE WEIGHTED CHANNELIZERS SHALL BE 40 FEET. STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC.

BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

WORK SITE LIGHTING:

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR, AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS:

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

-DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF: THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE = 110 HOUR

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL

P.9 P.40

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN:
THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED, CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. ONLY CLASS I OR II SIGNS WILL BE PERMITTED.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLE SHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETRO REFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

A PCMS SHALL BE PLACED "AS DIRECTED BY THE PROJECT ENGINEER" IN CONJUNCTION WITH LANE CLOSURES. THE MESSAGES SHALL BE AS DIRECTED BY THE ENGINEER. THE PLACEMENT, OPERATION, MAINTENANCE, AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9" BY 15" MINIMUM, FACING TRAFFIC. THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLE SHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NEEDED.

THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LAST AS A RESULT OF POWER FAILURES TO THE ON BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHOULD BE SUPPORTED, BUT NORMALLY, NOT MORE THAN TWO MESSAGE PHASES SHOULD BE EMPLOYED, ALTHOUGH THREE PHASES MAY BE USED IN UNUSUAL CONDITIONS. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC, WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED, OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES FOR DIFFERENT DAYS OF THE WEEK.

THE CONTRACTOR, IN ACCORDANCE WITH THE PROVISIONS OF 614.03, SHALL MAINTAIN THE PCMS UNIT IN GOOD WORKING ORDER. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ENSURE PROMPT SERVICE IN THE EVENT OF A FAILURE. ANY FAILURE SHALL NOT RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE TO THE CONTRACTOR ON THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOUR PER DAY OPERATIONS AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE. THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN, AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITIES AS OUTLINED IN 104.04.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT BID PRICE PER MONTH FOR EACH ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED AND HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
ASSUMING 2 SIGNS X 3 MONTHS AND 2 SIGNS X 1 MONTH = 8 SNMT

ITEM 614 - WORK ZONE PAVEMENT MARKING, CLASS III, 642 PAINT:
WORK ZONE CENTER LINE SHALL BE PLACED TO REFLECT THE PROPOSED CENTER LINE AS DETERMINED FROM THE PROPOSED MARKINGS WITHIN THE PROJECT LIMITS. AN ADDITIONAL QUANTITY HAS BEEN INCLUDED TO STRIPE PAVEMENT REPAIRS LOCATED ON THE CENTER LINE.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION, SIZE, AND TYPE OF WORK ZONE MARKINGS NEEDED MEETING THE REQUIREMENTS OF ITEM 614 BEFORE THE REMOVAL OR RESURFACING OBLITERATES THE EXISTING.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614 - WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT = 0.99 MILE
ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT = 4.23 MILE
ITEM 614 - WZ CHANNELIZING LINE, CLASS III, 8", 642 PAINT = 5818 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT = 899 FT

WORK ZONE PAVEMENT MARKINGS ARE NOT TO BE SUBSTITUTED FOR PERMANENT PAVEMENT MARKINGS.

COORDINATION WITH ADJACENT PROJECTS:
THE CONTRACTOR SHALL COORDINATE WORK WITH ODOT AND THE CONTRACTORS ON THE ADJACENT PROJECTS:
DEL-36-11.03 (THE POINT), PID 103626

COORDINATION SHALL BE MADE TO PREVENT CONFLICTING ADVANCE WARNING SIGNS, CONFLICTING DETOUR ROUTES, OVERLAPING/CONFLICTING LANE CLOSURES, AND TO ENSURE THAT A MINIMUM DISTANCE OF 2 MILES BETWEEN ADJACENT LANE CLOSURES IS MAINTAINED. THIS IS NOT AN EXHAUSTIVE LIST OF COORDINATION ITEMS THAT MAY NEED TO BE RESOLVED BETWEEN PROJECTS. THE DEPARTMENT RESERVES THE RIGHT TO DECIDE WHICH PROJECT'S ACTIVITIES TAKE PRECEDENCE. PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WILL CONSIDER THIS AN EXCUSABLE, NON-COMPENSABLE DELAY PER 108.06.B. ON PROJECTS THAT HAVE ACTIVITIES DELAYED DUE TO CONFLICTS WHERE THE CONTRACTOR FAILED TO MEET THE NOTIFICATION REQUIREMENTS, THE DELAYS SHALL NOT BE CONSIDERED EXCUSABLE OR COMPENSABLE. ATTENDANCE AT DEPARTMENT ORDERED TRAFFIC COORDINATION MEETINGS BETWEEN ADJACENT PROJECTS SHALL BE CONSIDERED MANDATORY FOR EACH PROJECT'S SUPERINTENDENT AND WORKSITE TRAFFIC SUPERVISOR (WTS)*, AND INCIDENTAL TO THE LUMP SUM MAINTENANCE OF TRAFFIC PAYMENT ITEM.

*IF REQUIRED BY THE PROJECT

ITEM 614 - MAINTENANCE OF TRAFFIC: PAYMENT
NO ADDITIONAL COMPENSATION SHALL BE MADE BEYOND THE QUANTITIES LISTED ABOVE. ANY OTHER WORK SHALL BE PAID UNDER THE LUMP SUM PAY ITEM FOR ITEM 614, MAINTAINING TRAFFIC.

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL


P.10 P.40

DEL-36/521-7.27/0.01

MODEL: 111608_GG001 PAPER SIZE: 34x22 (in.) DATE: 4/9/2024 TIME: 10:38:18 AM USER: kbowman
 p:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 06\Delaware\111608\400-Engineering\Roadway\Sheets\111608_GG001.dgn

SHEET												PARTICIPATION			ITEM	EXT	TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.7	P.8-P.10	P.13	P.14	P.15	P.36	P.37	P.38	P.39	P.40			01/S>2/05	02/S>2/05							
			125									109	16	209	60200	125	STA	ROADWAY LINEAR GRADING		
																		EROSION CONTROL		
311												271	40	659	00300	311	CY	TOPSOIL		
2778												2422	356	659	10000	2778	SY	SEEDING AND MULCHING		
139												121	18	659	14000	139	SY	REPAIR SEEDING AND MULCHING		
139												121	18	659	15000	139	SY	INTER-SEEDING		
0.38												0.33	0.05	659	20000	0.38	TON	COMMERCIAL FERTILIZER		
0.57												0.50	0.07	659	31000	0.57	ACRE	LIME		
15												13	2	659	35000	15	MGAL	WATER		
												872	128	832	30000	1000	EACH	EROSION CONTROL		
																		DRAINAGE		
4												4		611	99654	4	EACH	MANHOLE ADJUSTED TO GRADE		
																		PAVEMENT		
		0												251	01041	0	SY	PARTIAL DEPTH PAVEMENT REPAIR (ASPHALT CONCRETE BASE), AS PER PLAN, X.X"	P.7	
			86475	10594								92597	4472	254	01000	97069	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"		
			7347	902								7868	381	407	20000	8249	GAL	NON-TRACKING TACK COAT		
			3604	252								3676	180	442	10000	3856	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)		
				191								185	6	442	22100	191	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449)		
				82	2							74	10	617	10100	84	CY	COMPACTED AGGREGATE		
				1470	22							1314	178	617	20000	1492	SY	SHOULDER PREPARATION		
1												0.9	0.1	617	25000	1	MGAL	WATER		
																		WATER WORKS		
4												4		638	10800	4	EACH	VALVE BOX ADJUSTED TO GRADE		

GENERAL SUMMARY


DESIGN AGENCY

 DESIGNER
 KLM
 REVIEWER
 XXX MM-DD-YY
 PROJECT ID
 111608
 SHEET TOTAL
 P.11 | P.40

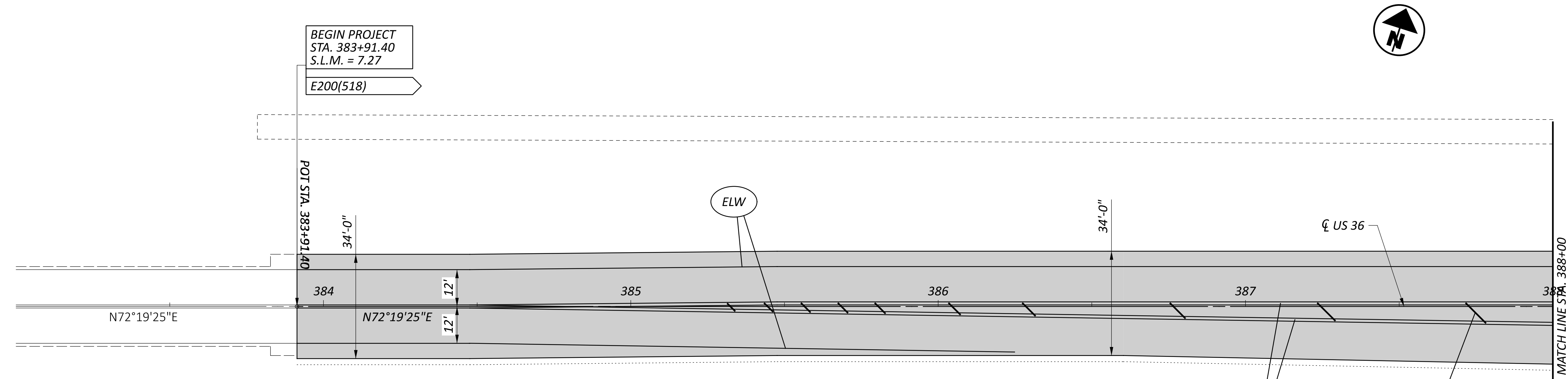
DEL-36/521-7.27/0.01

MODEL: 111608_GG002 PAPER SIZE: 34x22 (in.) DATE: 4/9/2024 TIME: 10:38:18 AM USER: kbowman
 p:\vohodo-pw-bentley.com\phidop-pw-02\Documents\01 Active Projects\District 06\Delaware\111608\400-Engineering\Roadway\Sheets\111608_GG001.dgn

SHEET												PARTICIPATION			ITEM	EXT	TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
P.7	P.8-P.10	P.13	P.14	P.15	P.36	P.37	P.38	P.39	P.40			01/S>2/05	02/S>2/05								
															TRAFFIC CONTROL						
								290				290		621	00100	290	EACH	RPM			
								290				290		621	54000	290	EACH	RAISED PAVEMENT MARKER REMOVED			
							1176				1176			642	30000	1176	FT	REMOVAL OF PAVEMENT MARKING			
					2.66	0.08	0.01				2.36	0.39		644	00104	2.75	MILE	EDGE LINE, 6"			
						0.40	0.47				0.87	0.00		644	00204	0.87	MILE	LANE LINE, 6"			
					2.74	1.08	0.35				3.96	0.21		644	00300	4.17	MILE	CENTER LINE			
					3201	1587	499				5287	0		644	00400	5287	FT	CHANNELIZING LINE, 8"			
						151	362				513	0		644	00404	513	FT	CHANNELIZING LINE, 12"			
					47	426	380				835	18		644	00500	853	FT	STOP LINE			
					714	1436	2775				4832	93		644	00620	4925	FT	CROSSWALK LINE, 12"			
					1133	313	36				1482	0		644	00700	1482	FT	TRANSVERSE/DIAGONAL LINE			
						2					2	0		644	01000	2	EACH	RAILROAD SYMBOL MARKING			
						1	1				2	0		644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"			
					62	40	14				116	0		644	01300	116	EACH	LANE ARROW			
						258	371				629	0		644	01520	629	FT	DOTTED LINE, 12"			
							0.12				0.12	0.00		646	10110	0.12	MILE	LANE LINE, 6"			
							0.06				0.06	0.00		646	10200	0.06	MILE	CENTER LINE			
							18				18	0		646	10300	18	FT	CHANNELIZING LINE, 8"			
							46				46	0		646	10400	46	FT	STOP LINE			
					526	1332	747				2605	0		647	20080	2605	FT	CROSSWALK LINE, 24", TYPE B90			
															STRUCTURE OVER 20 FOOT SPAN (DEL-36-10.43, SFN 2100878)						
								114			114			SPECIAL	45132000	114	FT	PRESSURE RELIEF JOINT, TYPE C	P.40		
								1514			1514			512	10050	1514	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			
								112			112			SPECIAL	51631250	112	FT	SAWING AND SEALING CONCRETE JOINTS	P.40		
								142			142			519	11100	142	SF	PATCHING CONCRETE STRUCTURE			
															MAINTENANCE OF TRAFFIC						
	110										110			614	11110	110	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE			
	49										49			614	12460	49	EACH	WORK ZONE MARKING SIGN			
	8										8			614	18601	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.10		
	0.99										0.99			614	20560	0.99	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT			
	4.23										4.02	0.21		614	21550	4.23	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT			
	5818										5818			614	23680	5818	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT			
	899										881	18		614	26610	899	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT			
															INCIDENTALS						
											LS			614	11000	LS		MAINTAINING TRAFFIC			
											LS			623	10001	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	P.7		
											LS			624	10000	LS		MOBILIZATION			

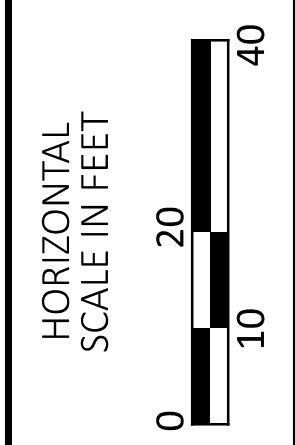
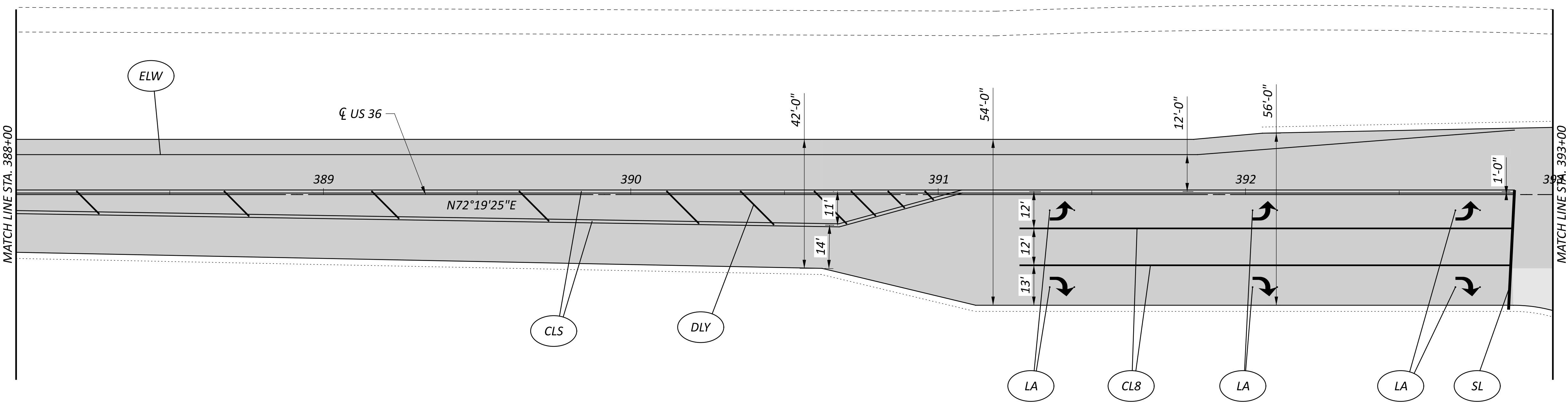
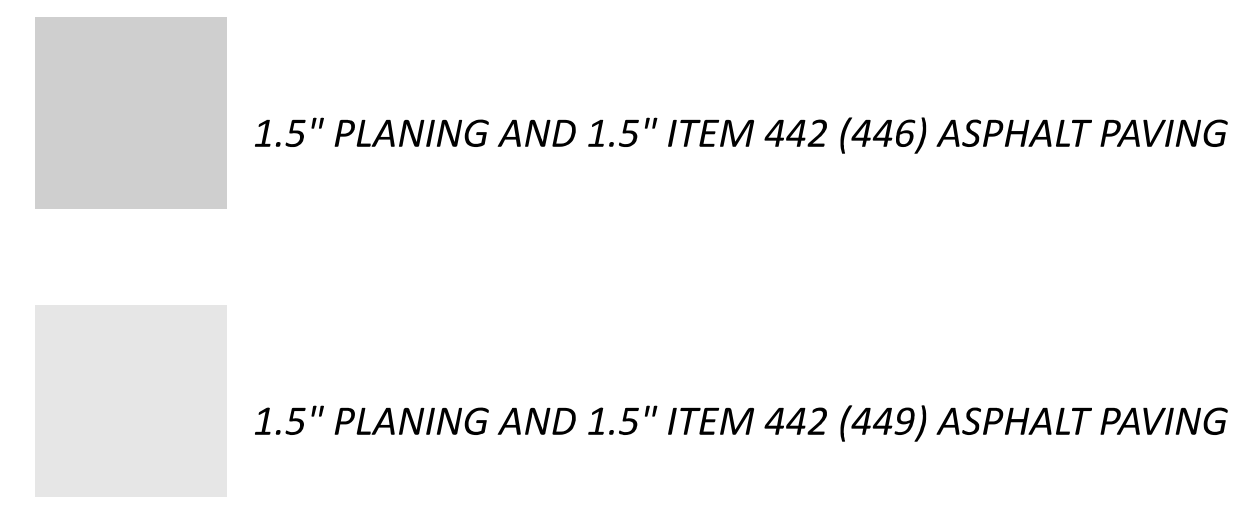
GENERAL SUMMARY

DESIGN AGENCY

 DESIGNER
 KLM
 REVIEWER
 XXX MM-DD-YY
 PROJECT ID
 111608
 SHEET TOTAL
 P.12 P.40



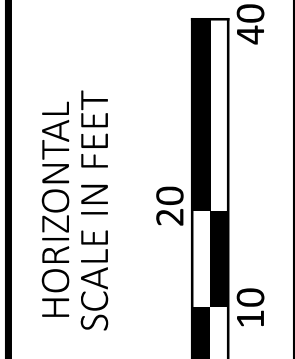
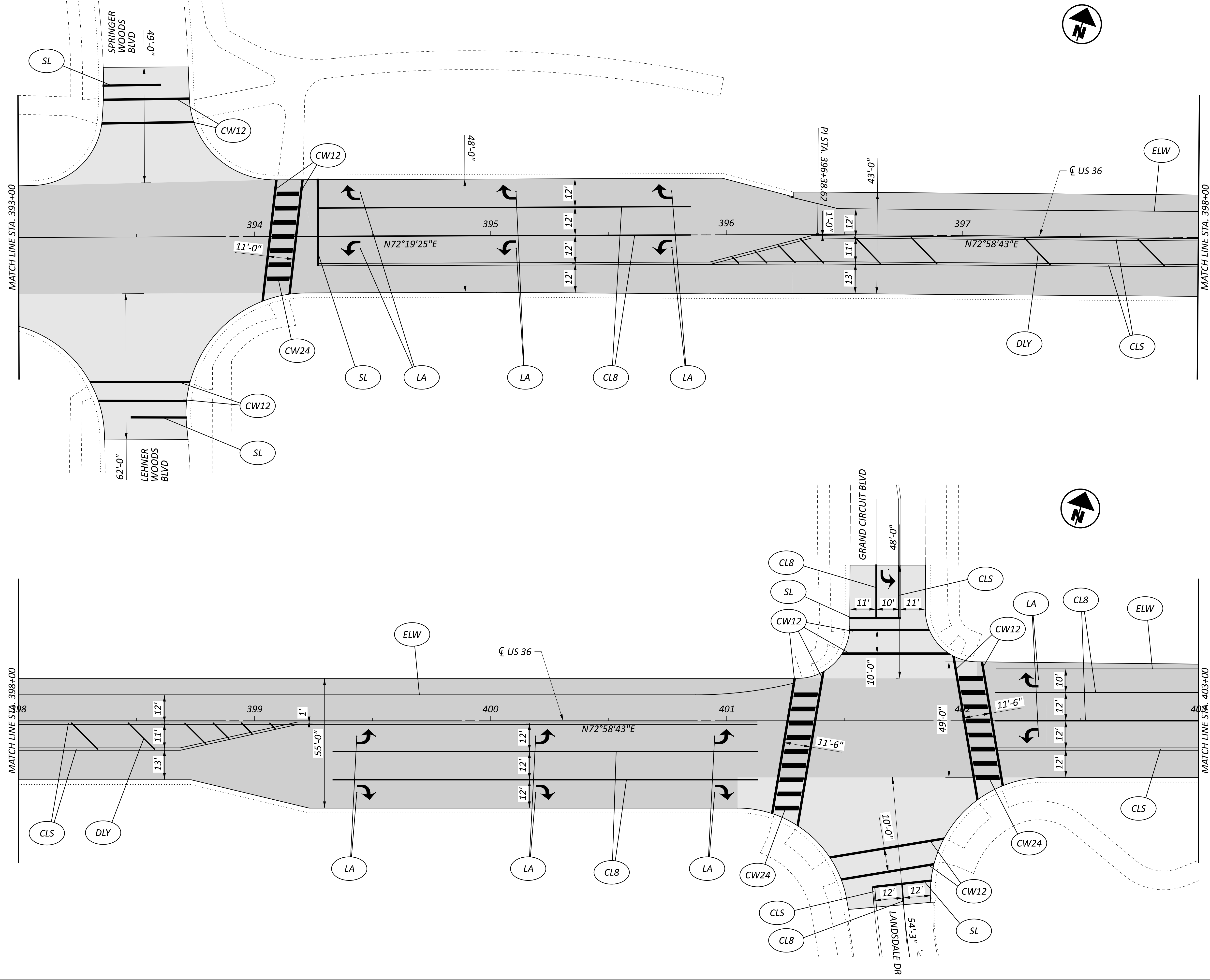
- (ELW) EDGE LINE, 6", WHITE
- (LL6) LANE LINE, 6"
- (CLS) CENTER LINE, DOUBLE SOLID
- (CLR) CENTER LINE, PASSING PROHIBITED RIGHT
- (CLL) CENTER LINE, PASSING PROHIBITED LEFT
- (CL8) CHANNELIZING LINE, 8"
- (CL12) CHANNELIZING LINE, 12"
- (SL) STOP LINE

- (CW12) CROSSWALK LINE, 12"
- (CW24) CROSSWALK LINE, 24"
- (DLY) DIAGONAL LINE, YELLOW
- (DLW) DIAGONAL LINE, WHITE
- (RR) RAILROAD SYMBOL MARKING
- (SM) SCHOOL SYMBOL MARKING, 72"
- (LA) LANE ARROW
- (DL) DOTTED LINE, 12"



DEL-36 PLAN
STA. 383+91.40 TO STA. 393+00

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	
PROJECT ID	111608
SHEET	P.16
TOTAL	P.40



DEL-36 PLAN
 STA. 393+00 TO STA. 403+00

DESIGN AGENCY

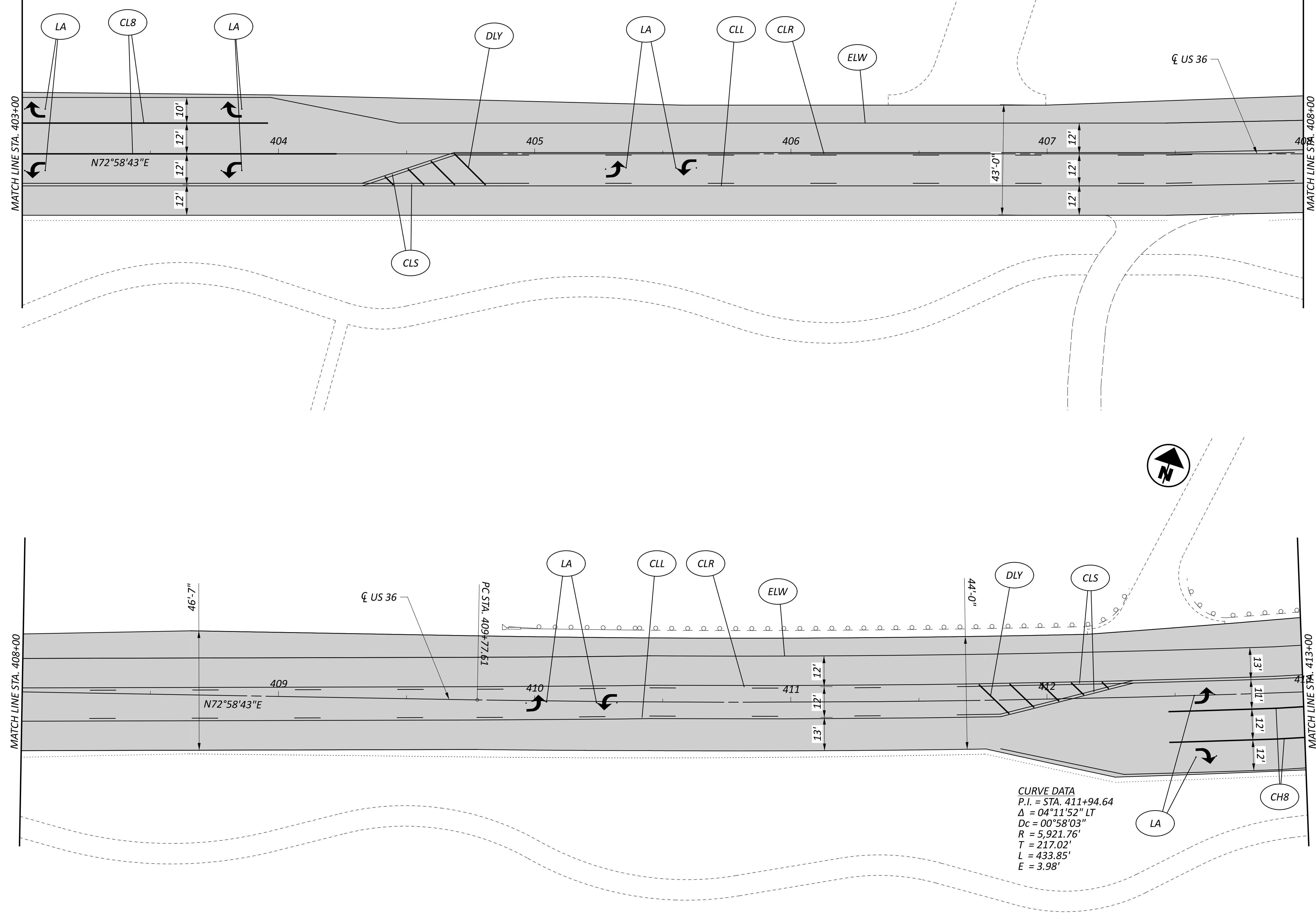


DESIGNER
 KLM

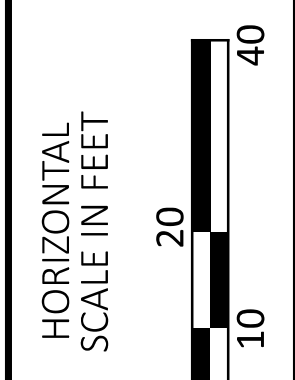
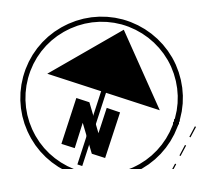
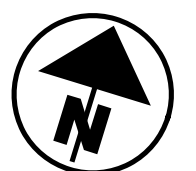
REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.17 P.40



CURVE DATA
 P.I. = STA. 411+94.64
 $\Delta = 04^{\circ}11'52'' LT$
 $Dc = 00^{\circ}58'03''$
 $R = 5,921.76'$
 $T = 217.02'$
 $L = 433.85'$
 $E = 3.98'$



DEL-36 PLAN
 STA. 403+00 TO STA. 413+00

DESIGN AGENCY

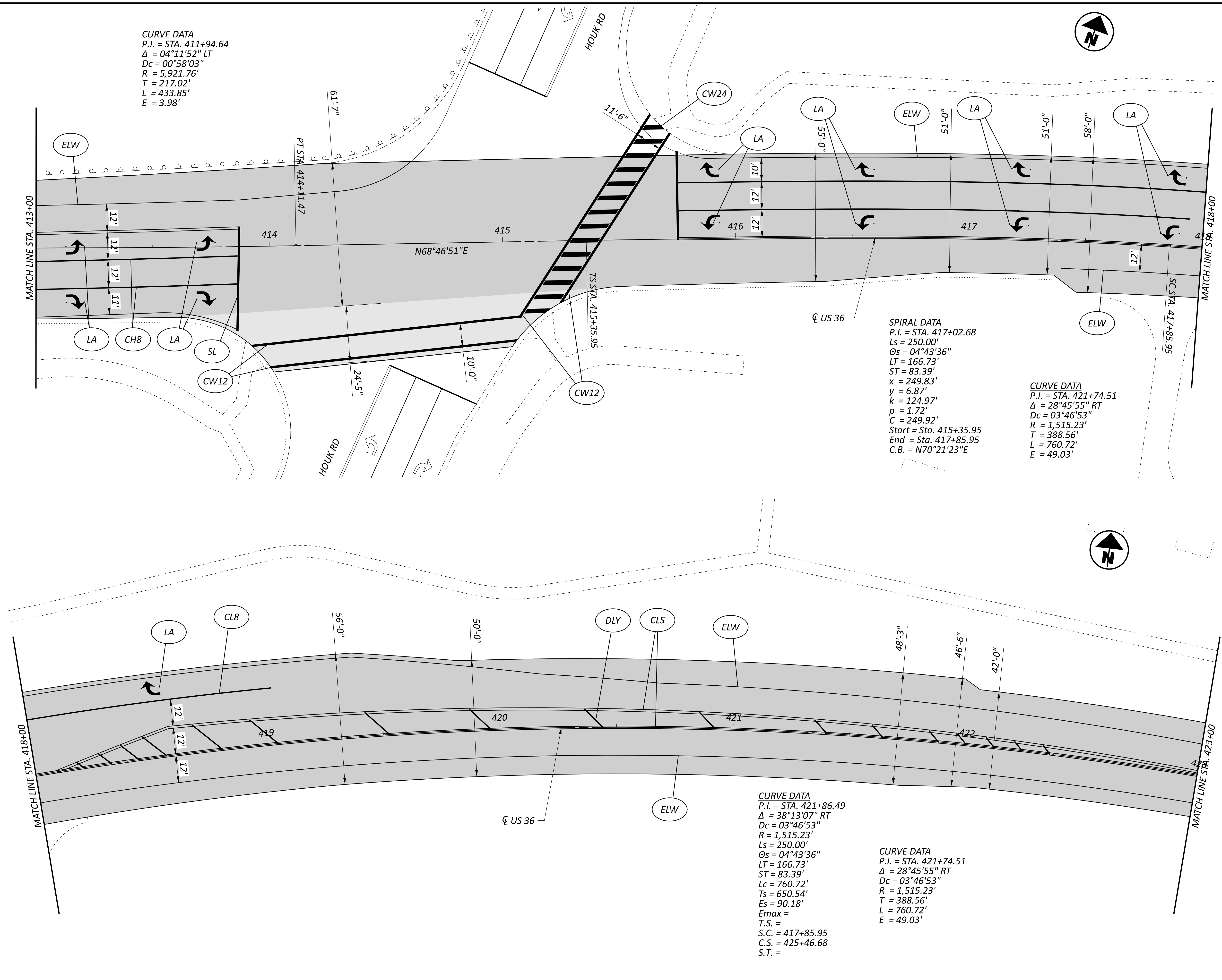


DESIGNER
 KLM

REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET	TOTAL
P.18	P.40



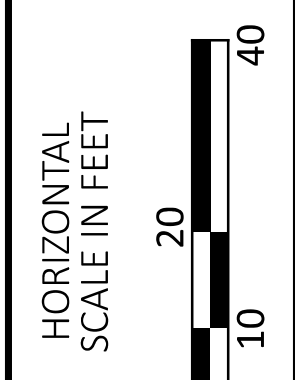
CURVE DATA
 P.I. = STA. 411+94.64
 $\Delta = 04^{\circ}11'52''$ LT
 $Dc = 00^{\circ}58'03''$
 $R = 5,921.76'$
 $T = 217.02'$
 $L = 433.85'$
 $E = 3.98'$

SPIRAL DATA
 P.I. = STA. 417+02.68
 $Ls = 250.00'$
 $\theta_s = 04^{\circ}43'36''$
 $LT = 166.73'$
 $ST = 83.39'$
 $x = 249.83'$
 $y = 6.87'$
 $k = 124.97'$
 $p = 1.72'$
 $C = 249.92'$
 Start = Sta. 415+35.95
 End = Sta. 417+85.95
 C.B. = $N70^{\circ}21'23''$ E

CURVE DATA
 P.I. = STA. 421+74.51
 $\Delta = 28^{\circ}45'55''$ RT
 $Dc = 03^{\circ}46'53''$
 $R = 1,515.23'$
 $T = 388.56'$
 $L = 760.72'$
 $E = 49.03'$

CURVE DATA
 P.I. = STA. 421+86.49
 $\Delta = 38^{\circ}13'07''$ RT
 $Dc = 03^{\circ}46'53''$
 $R = 1,515.23'$
 $Ls = 250.00'$
 $\theta_s = 04^{\circ}43'36''$
 $LT = 166.73'$
 $ST = 83.39'$
 $Lc = 760.72'$
 $Ts = 650.54'$
 $Es = 90.18'$
 $E_{max} =$
 $T.S. =$
 $S.C. = 417+85.95$
 $C.S. = 425+46.68$
 $S.T. =$

CURVE DATA
 P.I. = STA. 421+74.51
 $\Delta = 28^{\circ}45'55''$ RT
 $Dc = 03^{\circ}46'53''$
 $R = 1,515.23'$
 $T = 388.56'$
 $L = 760.72'$
 $E = 49.03'$



DEL-36 PLAN
 STA. 413+00 TO STA. 423+00

DESIGN AGENCY



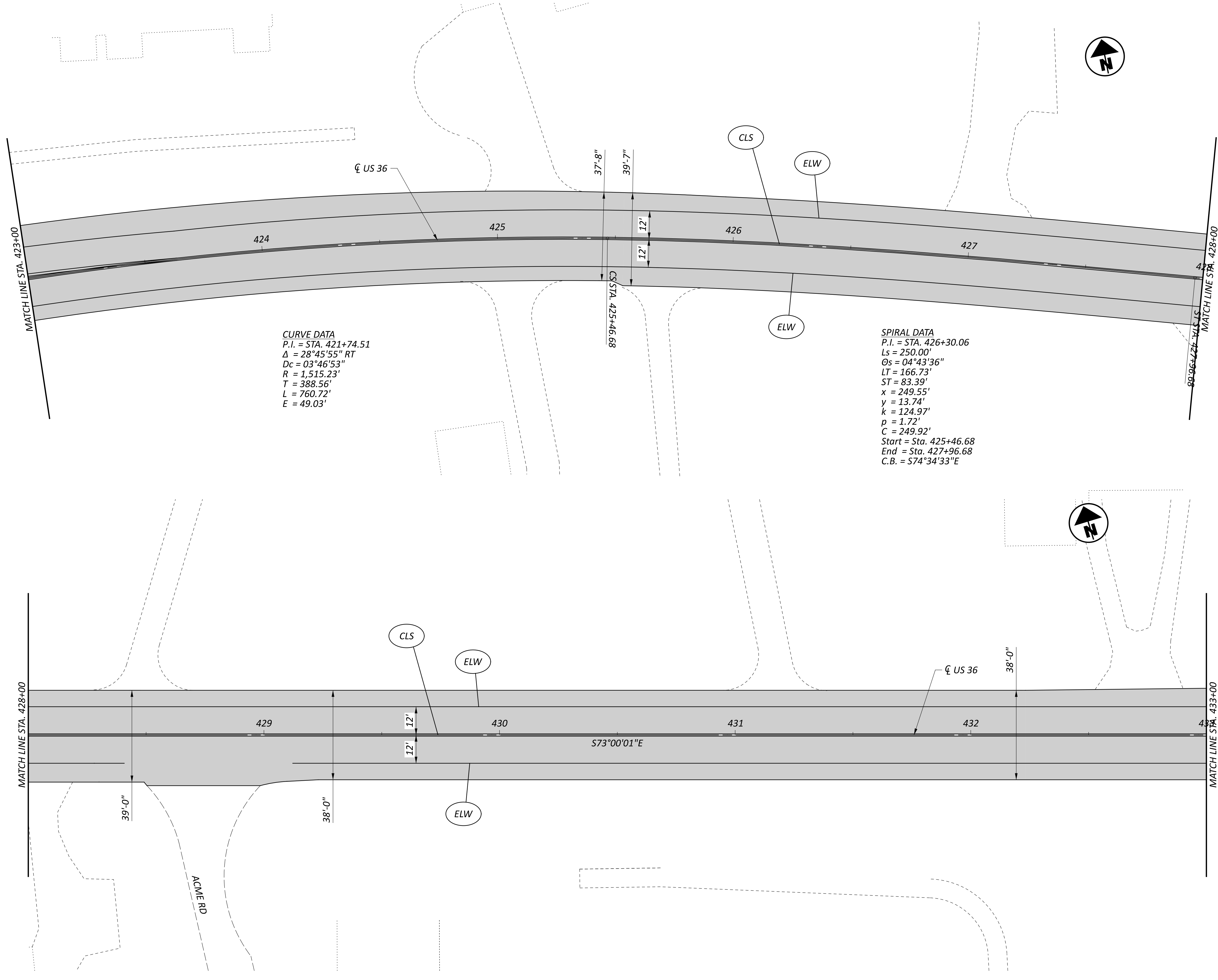
DESIGNER
 KLM

REVIEWER

XXX MM-DD-YY

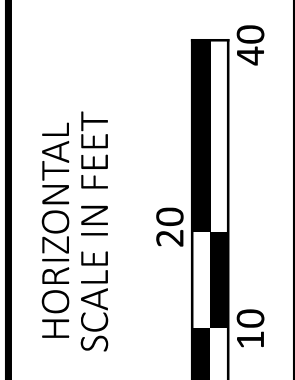
PROJECT ID
 111608

SHEET TOTAL
 P.19 P.40



CURVE DATA
 P.I. = STA. 421+74.51
 $\Delta = 28^\circ 45' 55''$ RT
 $D_c = 03^\circ 46' 53''$
 $R = 1,515.23'$
 $T = 388.56'$
 $L = 760.72'$
 $E = 49.03'$

SPIRAL DATA
 P.I. = STA. 426+30.06
 $L_s = 250.00'$
 $\theta_s = 04^\circ 43' 36''$
 $LT = 166.73'$
 $ST = 83.39'$
 $x = 249.55'$
 $y = 13.74'$
 $k = 124.97'$
 $p = 1.72'$
 $C = 249.92'$
 Start = Sta. 425+46.68
 End = Sta. 427+96.68
 C.B. = $S74^\circ 34' 33''$ E



DEL-36 PLAN
 STA. 423+00 TO STA. 433+00

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

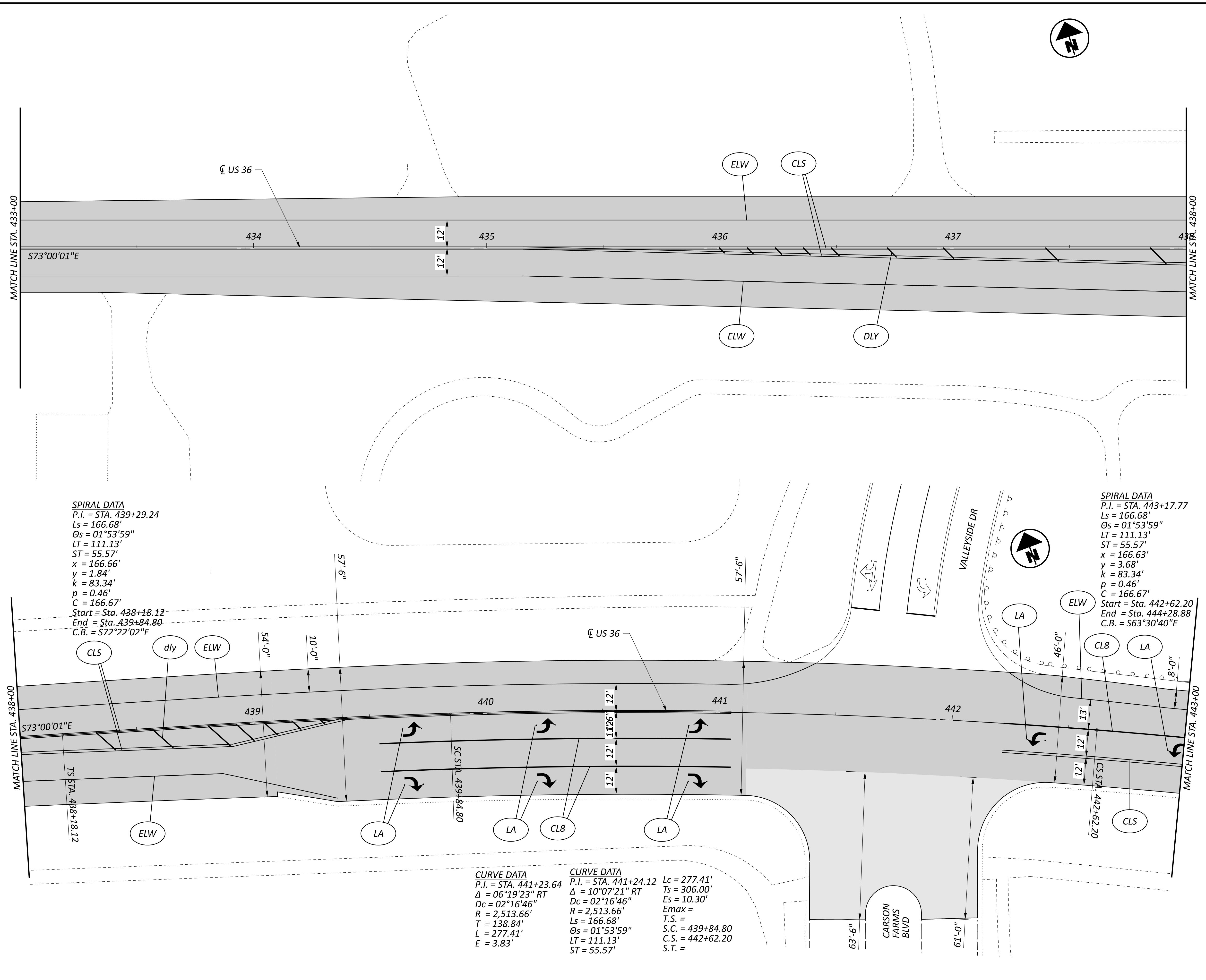
XXX MM-DD-YY

PROJECT ID

111608

SHEET TOTAL

P.20 P.40



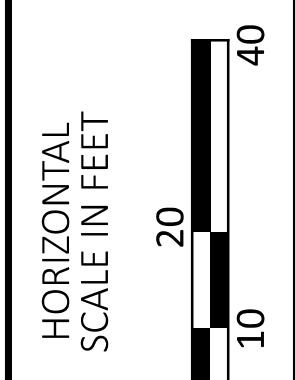
SPIRAL DATA
 P.I. = STA. 439+29.24
 Ls = 166.68'
 Os = 01°53'59"
 LT = 111.13'
 ST = 55.57'
 x = 166.66'
 y = 1.84'
 k = 83.34'
 p = 0.46'
 C = 166.67'
 Start = Sta. 438+18.12
 End = Sta. 439+84.80
 C.B. = S72°22'02"E

SPIRAL DATA
 P.I. = STA. 443+17.77
 Ls = 166.68'
 Os = 01°53'59"
 LT = 111.13'
 ST = 55.57'
 x = 166.63'
 y = 3.68'
 k = 83.34'
 p = 0.46'
 C = 166.67'
 Start = Sta. 442+62.20
 End = Sta. 444+28.88
 C.B. = S63°30'40"E

CURVE DATA
 P.I. = STA. 441+23.64
 Δ = 06°19'23" RT
 Dc = 02°16'46"
 R = 2,513.66'
 T = 138.84'
 L = 277.41'
 E = 3.83'

CURVE DATA
 P.I. = STA. 441+24.12
 Δ = 10°07'21" RT
 Dc = 02°16'46"
 R = 2,513.66'
 Ls = 166.68'
 Os = 01°53'59"
 LT = 111.13'
 ST = 55.57'

Lc = 277.41'
 Ts = 306.00'
 Es = 10.30'
 Emax =
 T.S. =
 S.C. = 439+84.80
 C.S. = 442+62.20
 S.T. =



DEL-36 PLAN
 STA. 433+00 TO STA. 443+00

DESIGN AGENCY

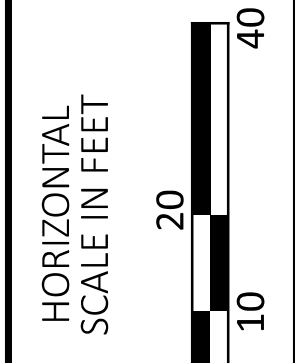
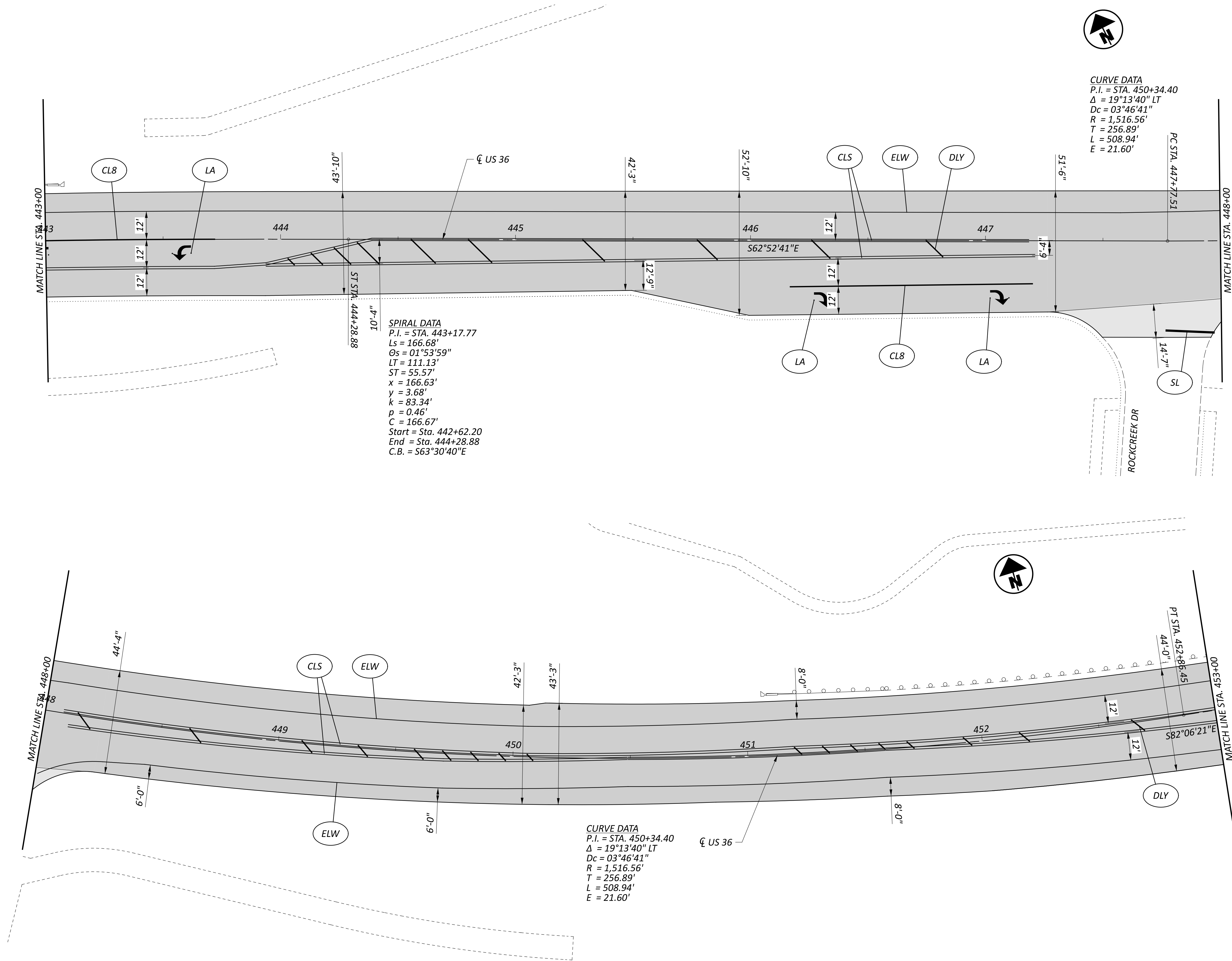


DESIGNER
 KLM

REVIEWER
 XXX MM-DD-YY

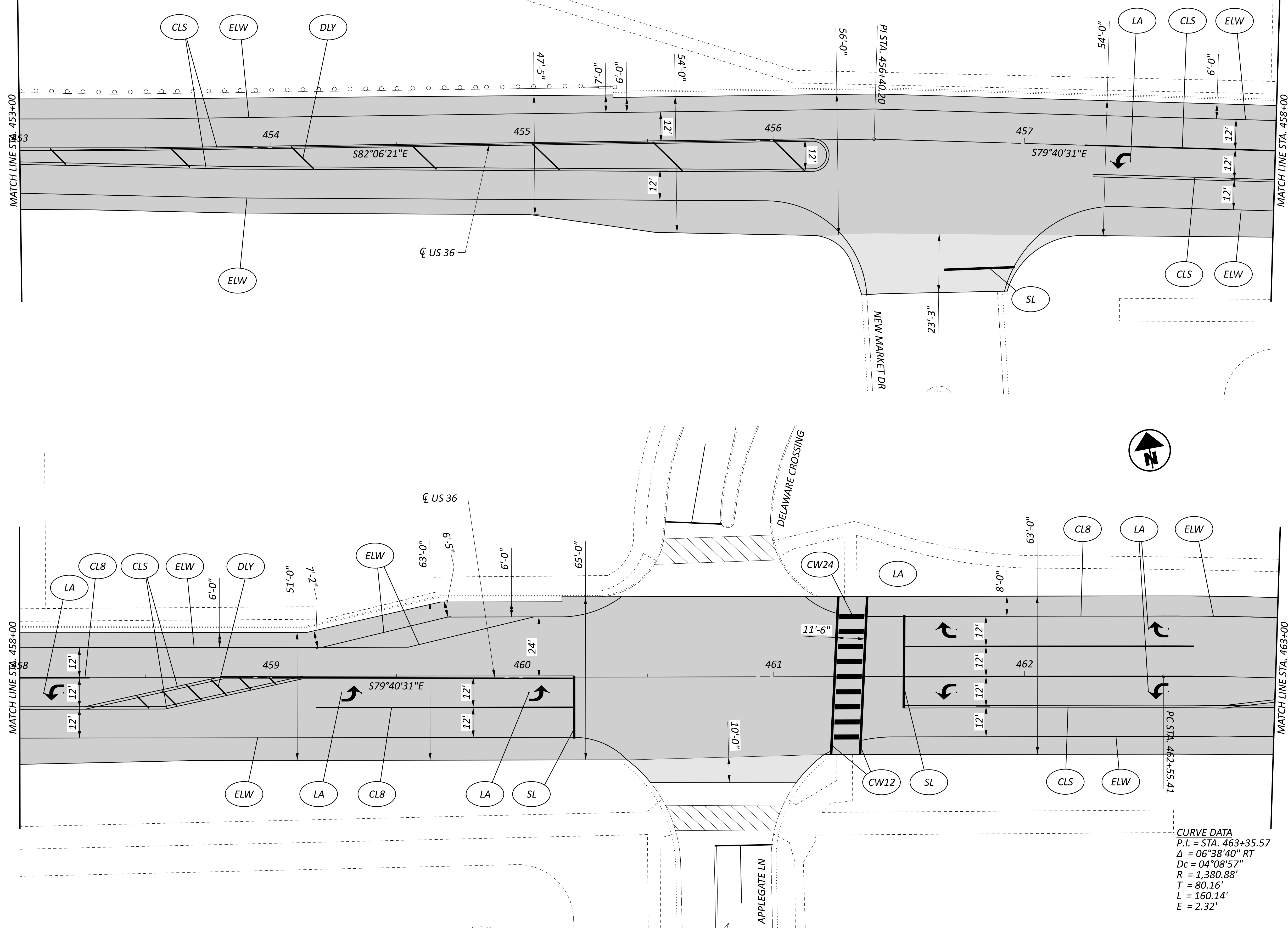
PROJECT ID
 111608

SHEET TOTAL
 P.21 P.40

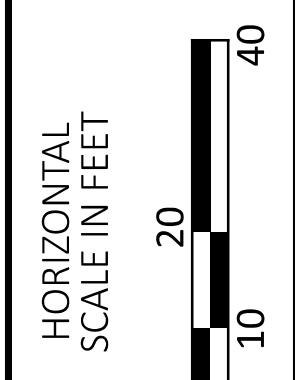


DEL-36 PLAN
 STA. 443+00 TO STA. 453+00

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	P.22
TOTAL	P.40



CURVE DATA
 P.I. = STA. 463+35.57
 $\Delta = 06^{\circ}38'40''$ RT
 $D_c = 04^{\circ}08'57''$
 $R = 1,380.88'$
 $T = 80.16'$
 $L = 160.14'$
 $E = 2.32'$



DEL-36 PLAN
 STA. 453+00 TO STA. 463+00

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

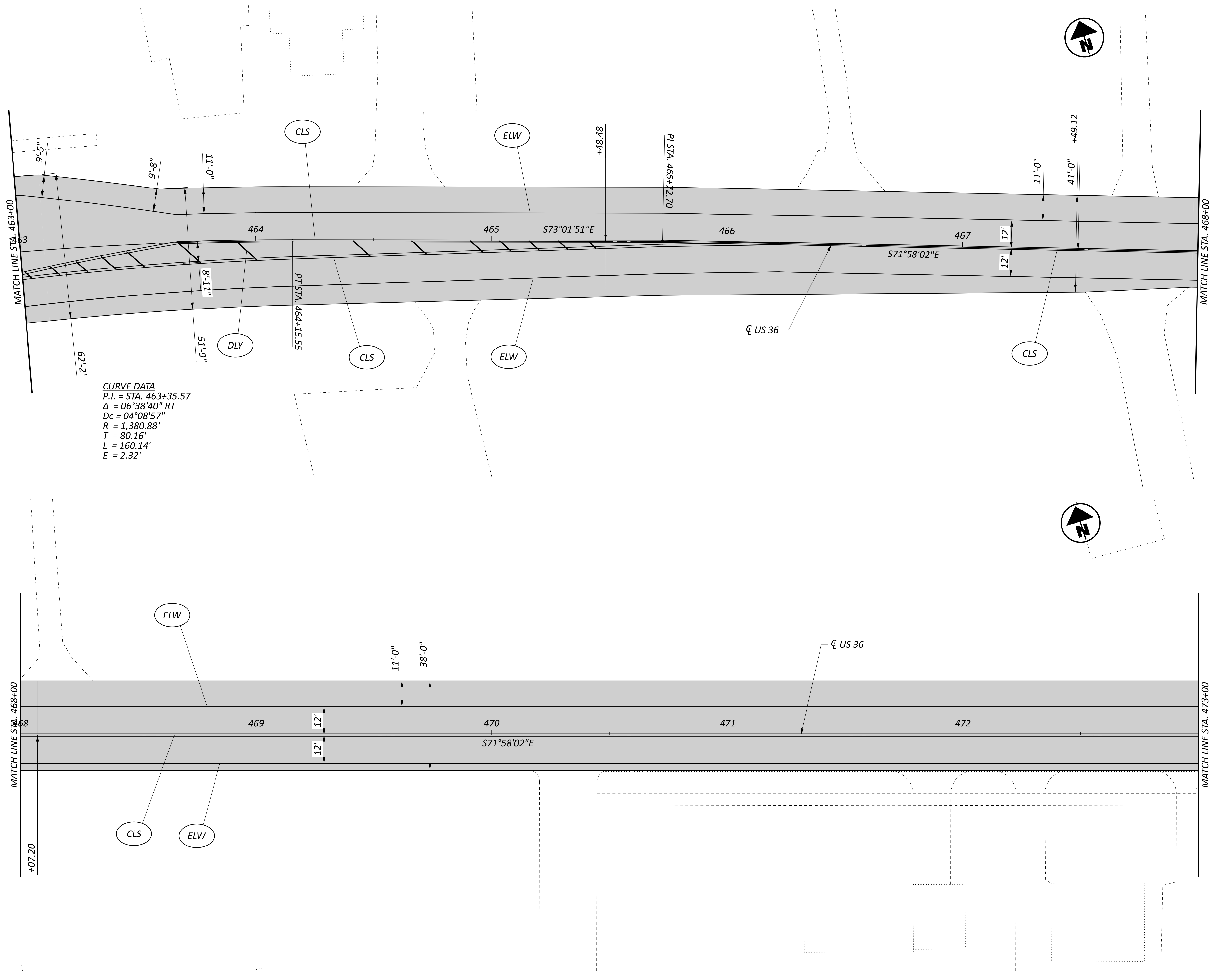
XXX MM-DD-YY

PROJECT ID

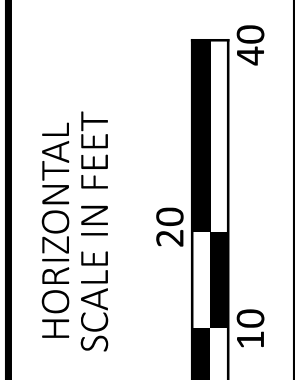
111608

SHEET TOTAL

P.23 P.40



CURVE DATA
 P.I. = STA. 463+35.57
 Δ = 06°38'40" RT
 Dc = 04°08'57"
 R = 1,380.88'
 T = 80.16'
 L = 160.14'
 E = 2.32'



DEL-36 PLAN
 STA. 463+00 TO STA. 473+00

DESIGN AGENCY



DESIGNER

KLM

REVIEWER

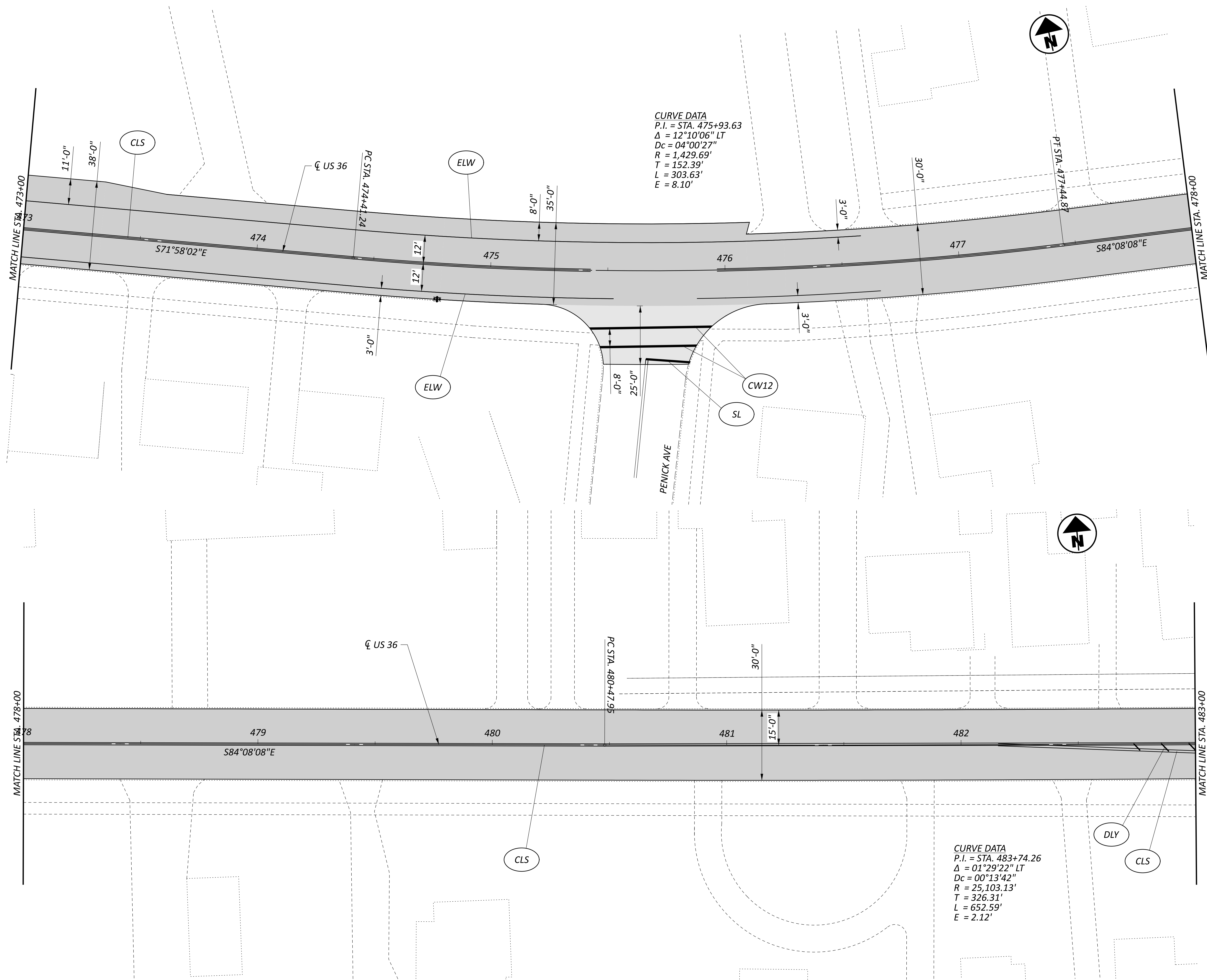
XXX MM-DD-YY

PROJECT ID

111608

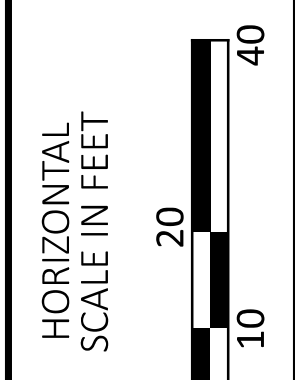
SHEET TOTAL

P.24 P.40



CURVE DATA
 P.I. = STA. 475+93.63
 $\Delta = 12^\circ 10' 06''$ LT
 $D_c = 04^\circ 00' 27''$
 $R = 1,429.69'$
 $T = 152.39'$
 $L = 303.63'$
 $E = 8.10'$

CURVE DATA
 P.I. = STA. 483+74.26
 $\Delta = 01^\circ 29' 22''$ LT
 $D_c = 00^\circ 13' 42''$
 $R = 25,103.13'$
 $T = 326.31'$
 $L = 652.59'$
 $E = 2.12'$



DEL-36 PLAN
 STA. 473+00 TO STA. 483+00

DESIGN AGENCY

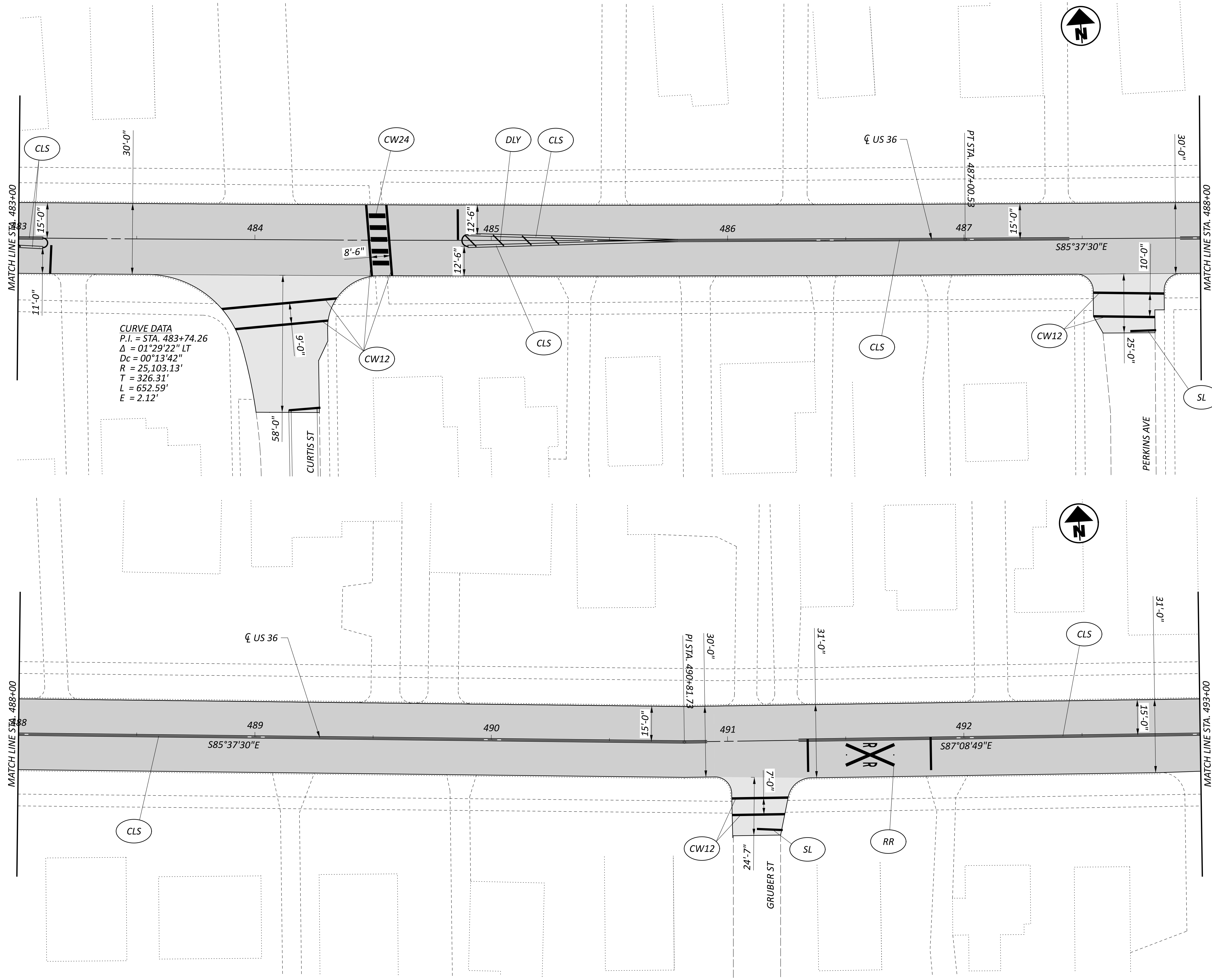


DESIGNER
 KLM

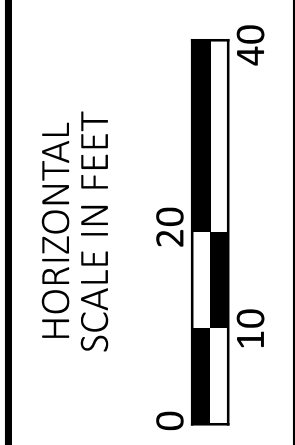
REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.25 P.40

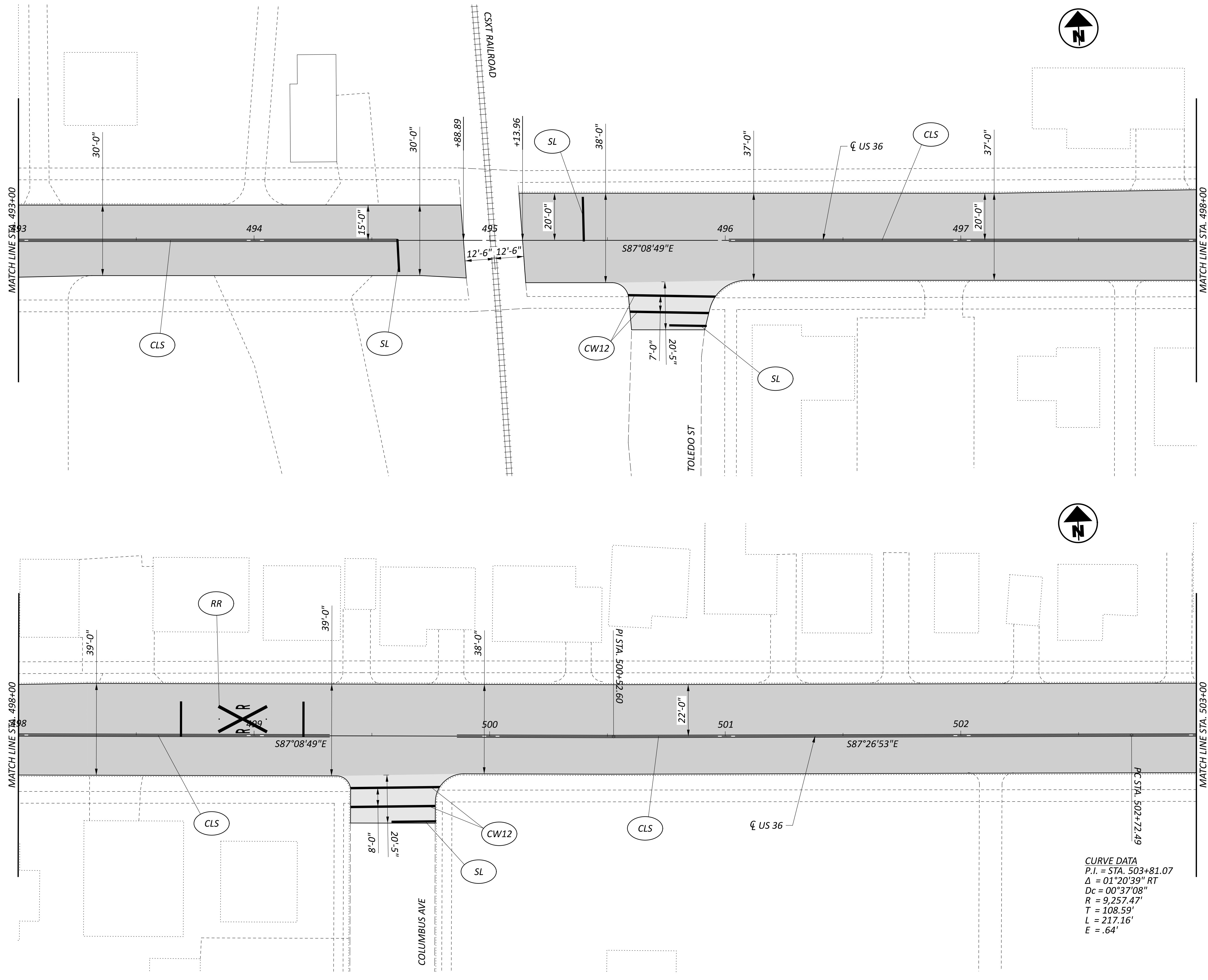


CURVE DATA
 P.I. = STA. 483+74.26
 $\Delta = 01^{\circ}29'22''$ LT
 $D_c = 00^{\circ}13'42''$ LT
 $R = 25,103.13'$
 $T = 326.31'$
 $L = 652.59'$
 $E = 2.12'$

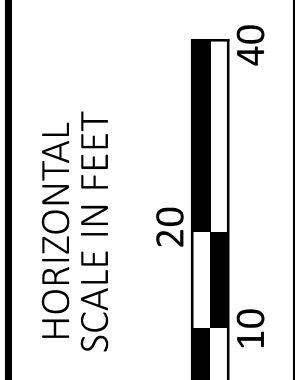


DEL-36 PLAN
 STA. 483+00 TO STA. 493+00

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	TOTAL
P.26	P.40



CURVE DATA
 P.I. = STA. 503+81.07
 $\Delta = 01^{\circ}20'39''$ RT
 $D_c = 00^{\circ}37'08''$
 $R = 9,257.47'$
 $T = 108.59'$
 $L = 217.16'$
 $E = .64'$



DEL-36 PLAN
 STA. 493+00 TO STA. 503+00

DESIGN AGENCY

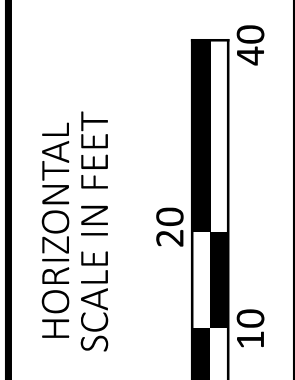
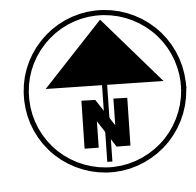
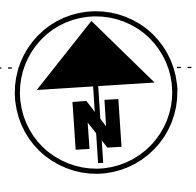
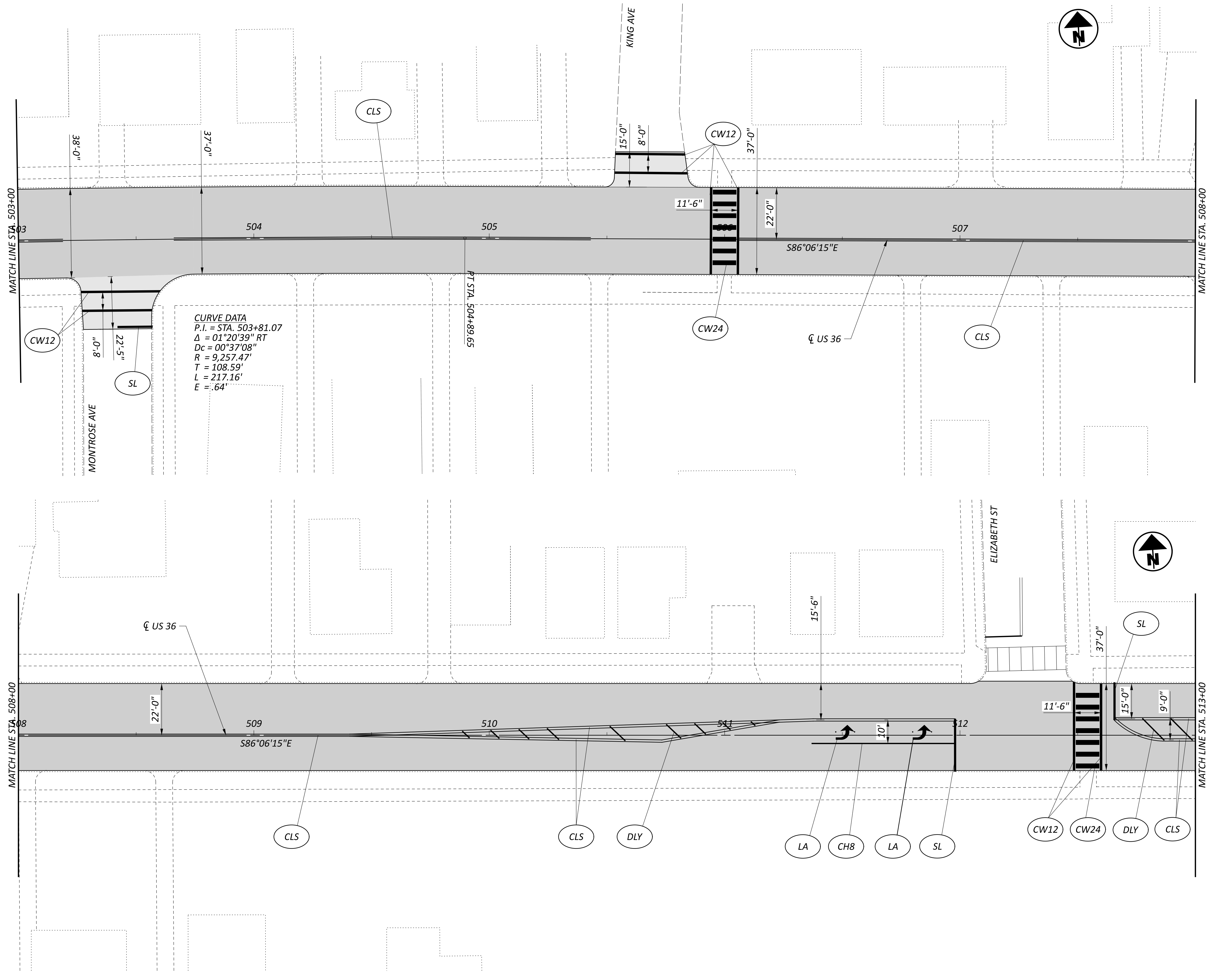


DESIGNER
 KLM

REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.27 P.40



DEL-36 PLAN
 STA. 503+00 TO STA. 513+00

DESIGN AGENCY



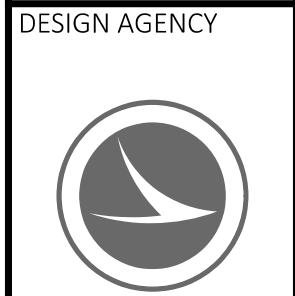
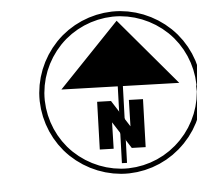
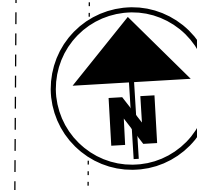
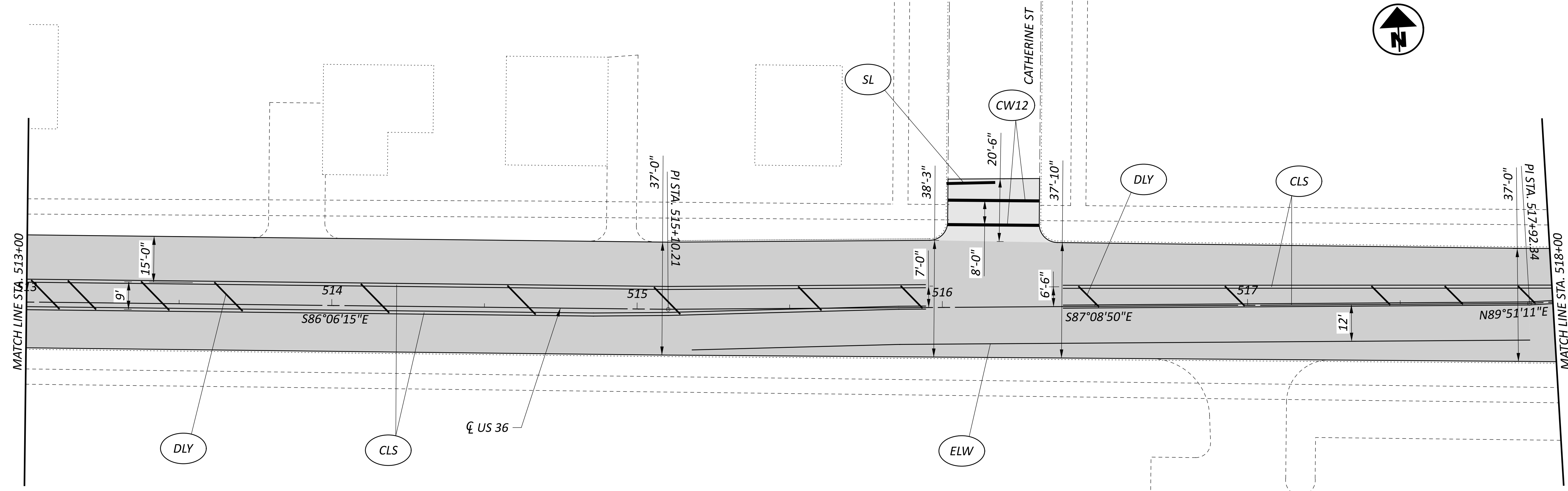
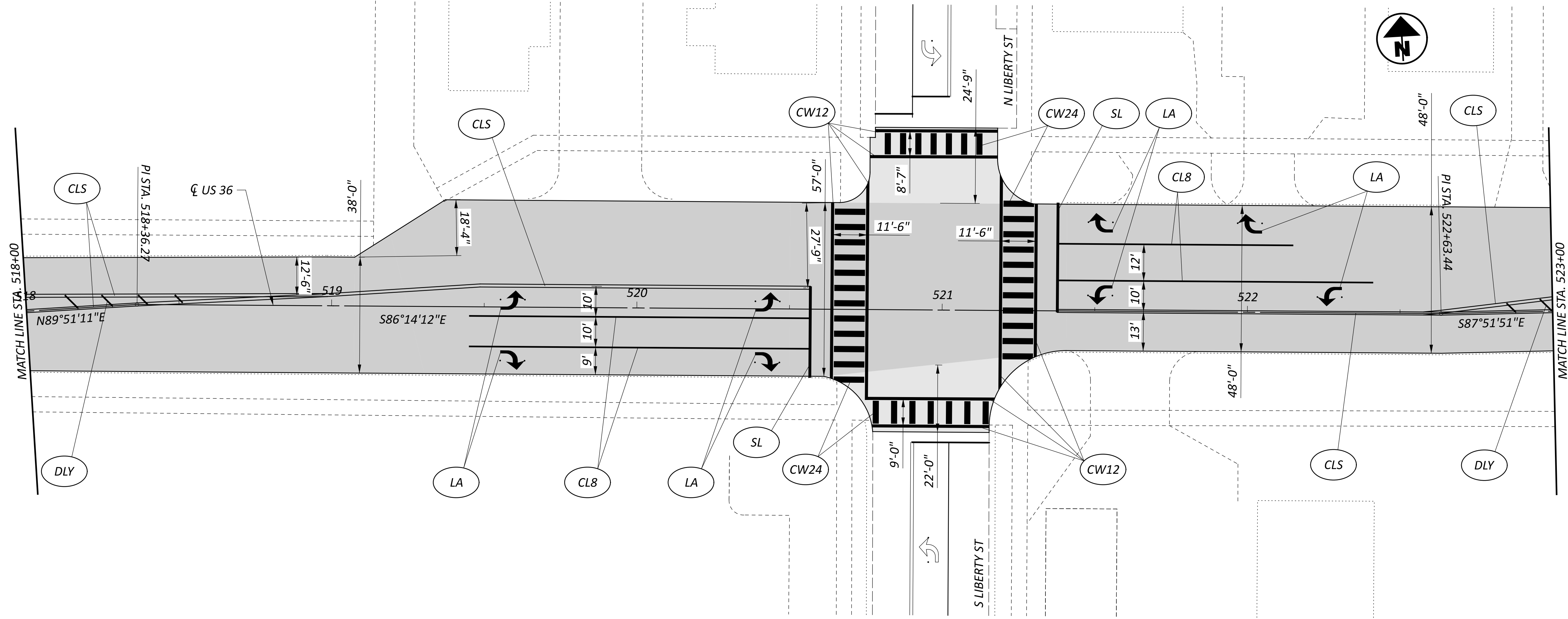
DESIGNER
 KLM

REVIEWER

XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.28 P.40



DESIGN AGENCY
DESIGNER
REVIEWER
PROJECT ID
SHEET TOTAL
P.29 P.40

DESIGN AGENCY

DESIGNER

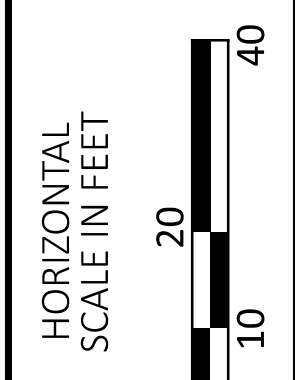
REVIEWER

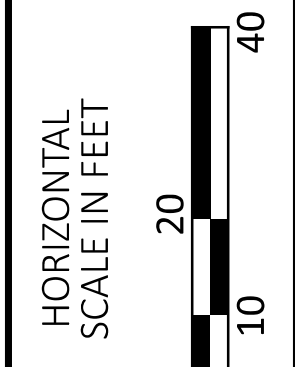
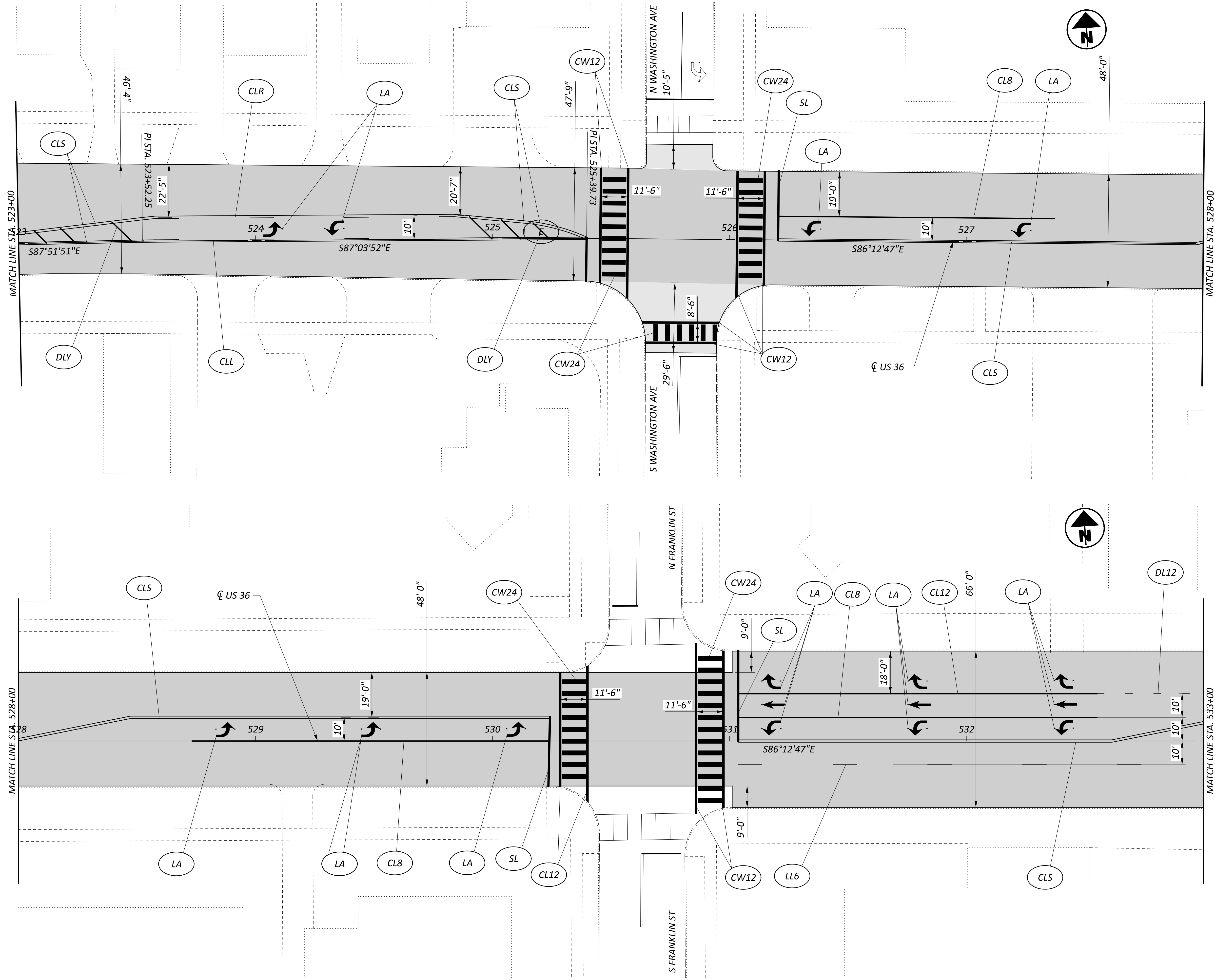
PROJECT ID

SHEET TOTAL

P.29 P.40

DEL-36 PLAN
 STA. 513+00 TO STA. 523+00



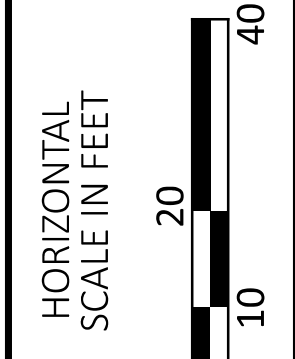
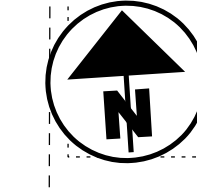
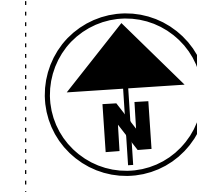
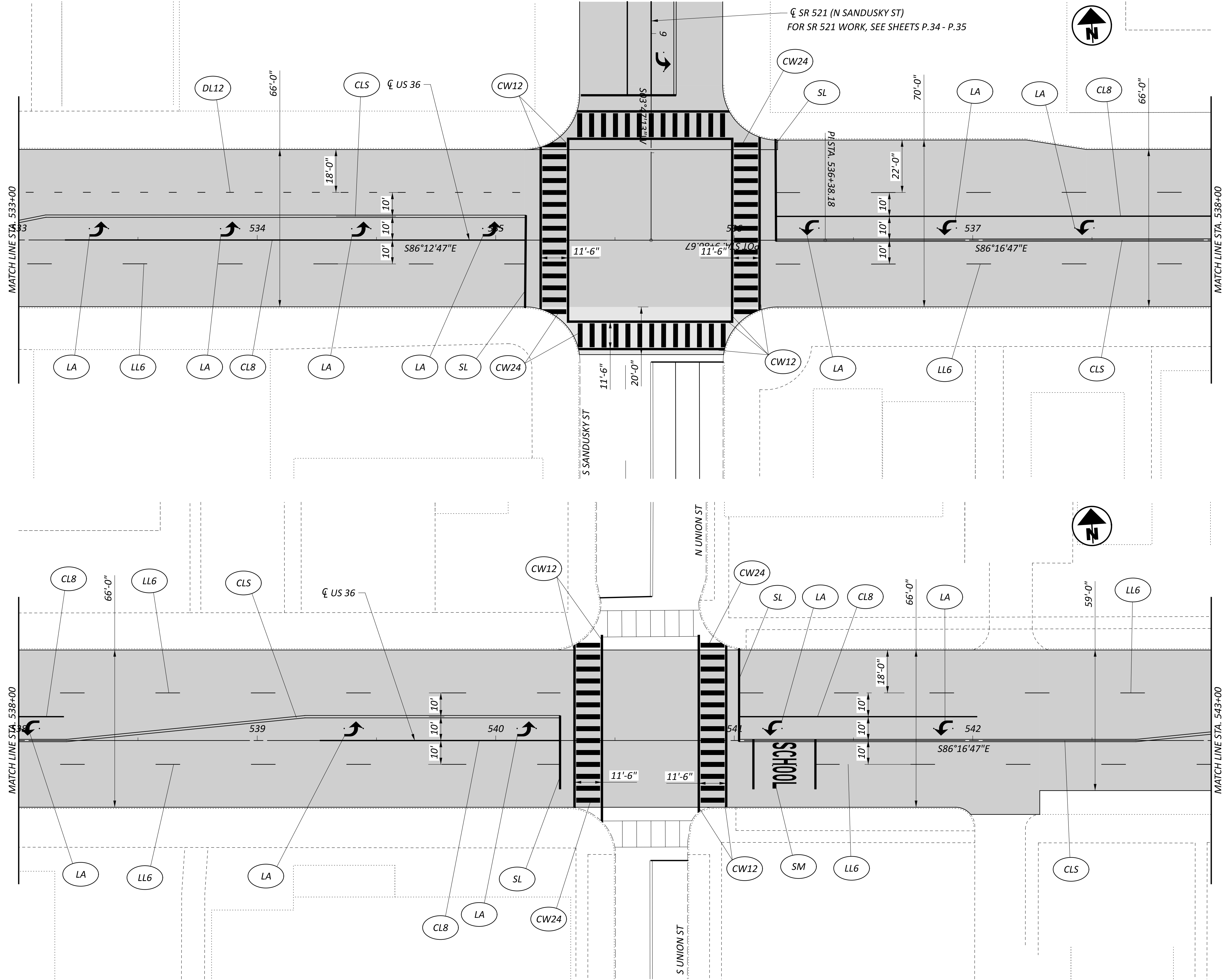


DEL-36 PLAN
STA. 523+00 TO STA. 533+00

DESIGN AGENCY



DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	TOTAL
P.30	P.40



DEL-36 PLAN
STA. 533+00 TO STA. 543+00

DESIGN AGENCY

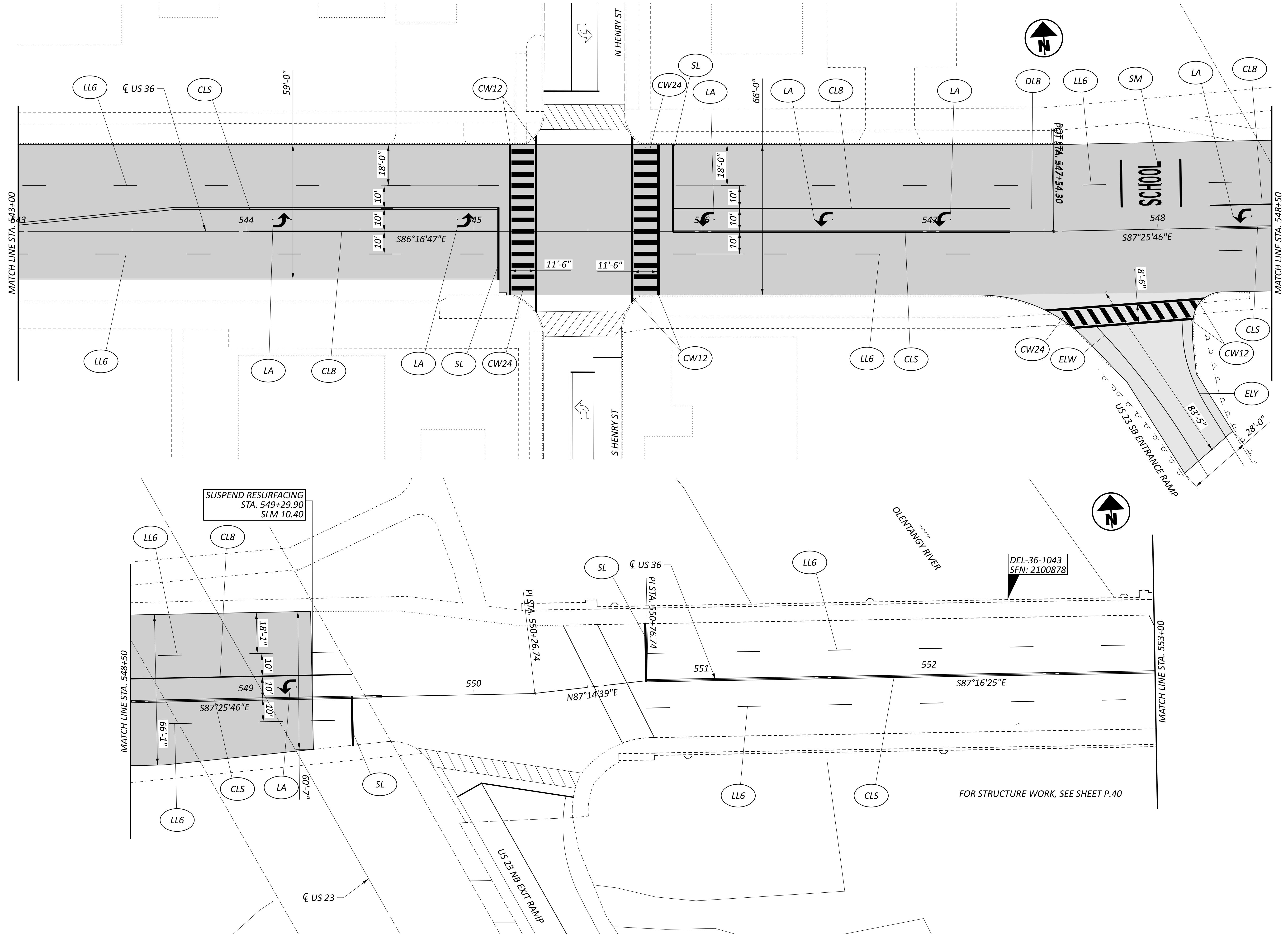


DESIGNER
KLM

REVIEWER
XXX MM-DD-YY

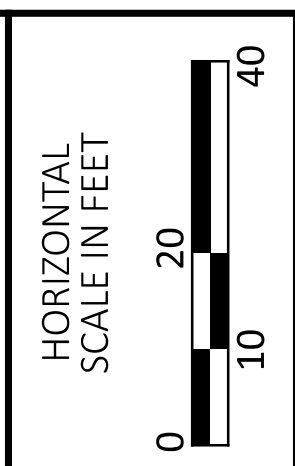
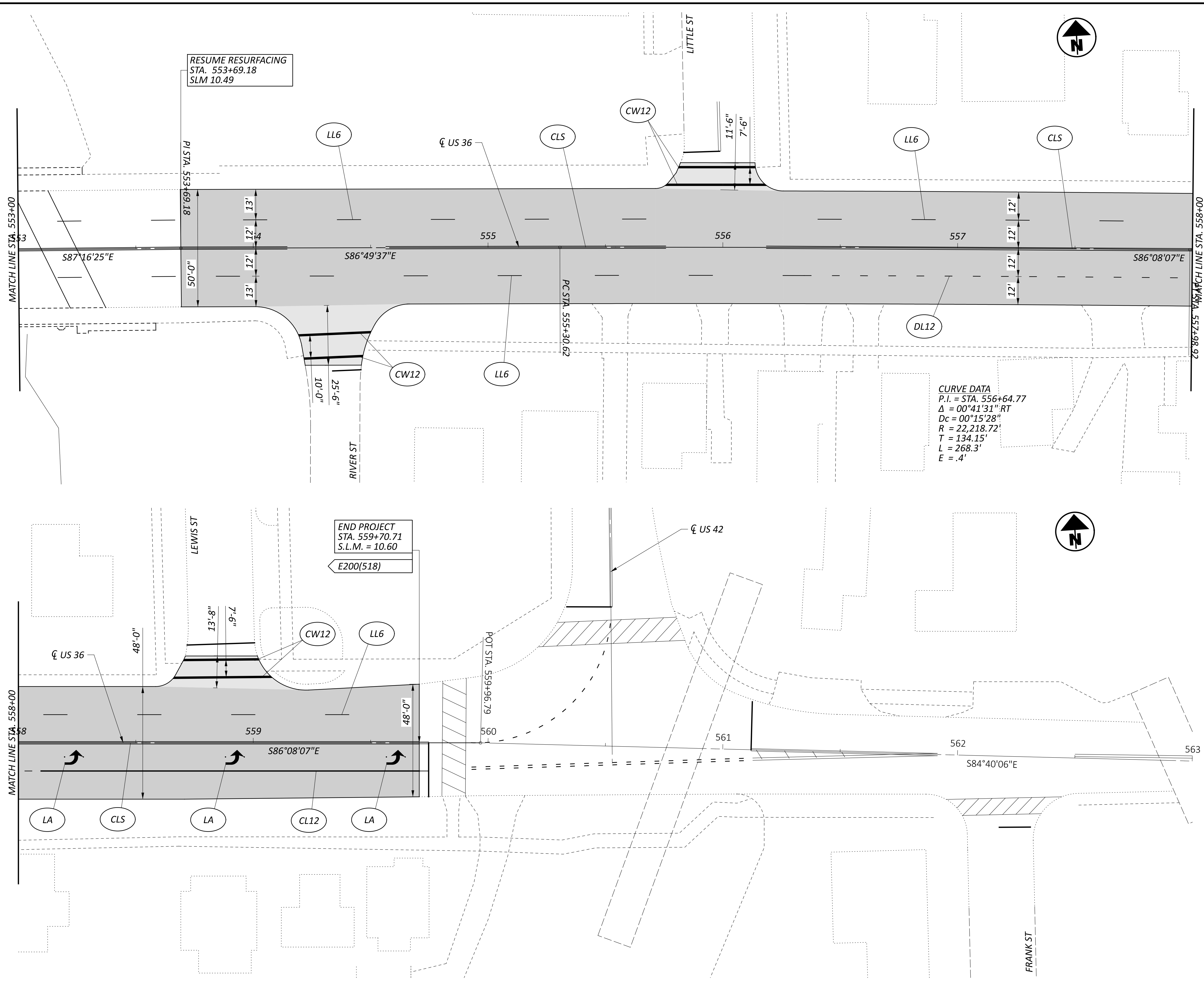
PROJECT ID
111608

SHEET TOTAL
P.31 P.40



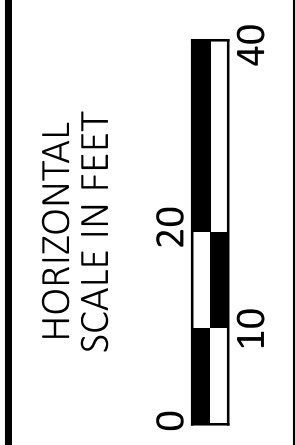
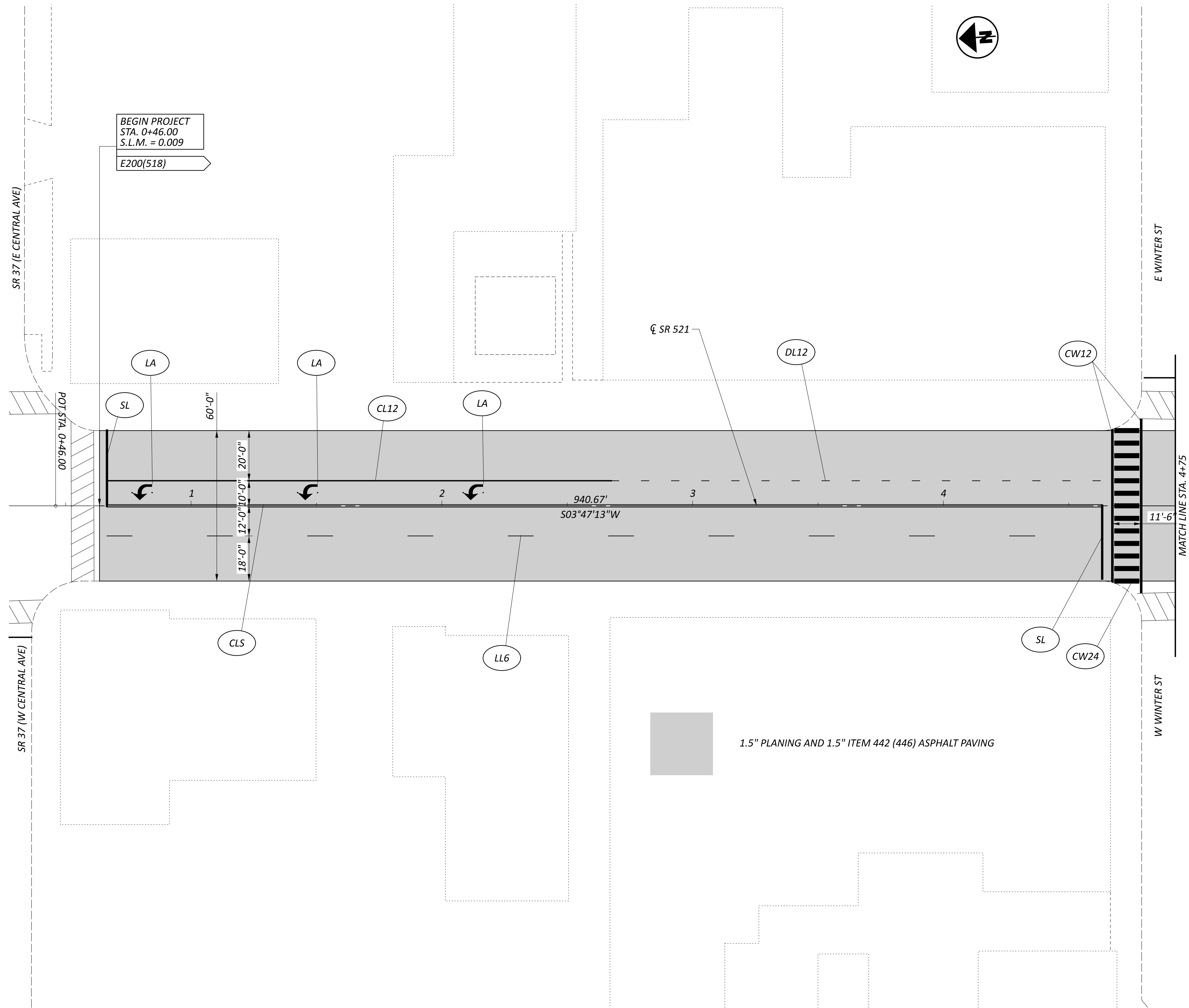
DEL-36 PLAN
STA. 543+00 TO STA. 553+00

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	TOTAL
P.32	P.40



DEL-36 PLAN
 STA. 553+00 TO STA. 559+70.71

DESIGN AGENCY	
DESIGNER	KLM
REVIEWER	XXX MM-DD-YY
PROJECT ID	111608
SHEET	TOTAL
P.33	P.40



DEL-521 PLAN
 STA. 0+46 TO STA. 5+10

DESIGN AGENCY

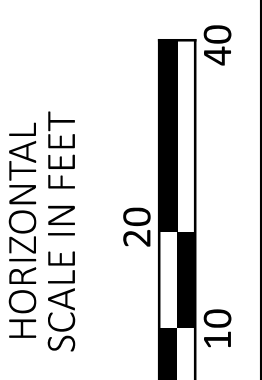
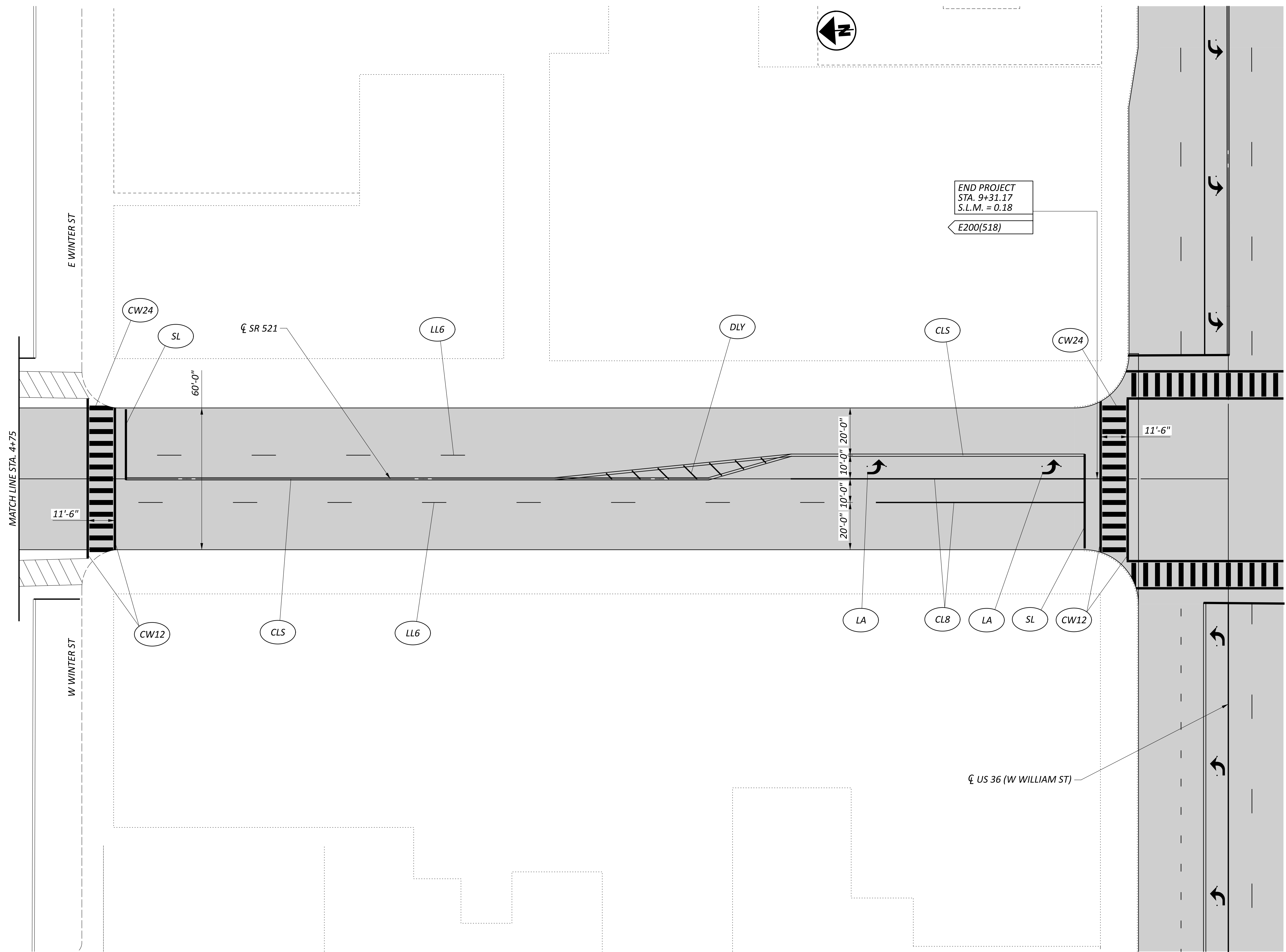


DESIGNER
 KLM

REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.34 P.40



DEL-521 PLAN
 STA. 5+10 TO STA. 9+48.67

DESIGN AGENCY



DESIGNER
 KLM

REVIEWER
 XXX MM-DD-YY

PROJECT ID
 111608

SHEET TOTAL
 P.35 P.40

DETAIL	STANDARD DRAWING TC-65.10
1	EDGE LINE
2	CHANNELIZING LINE
3	LANE LINE
4	CENTER LINE

DETAIL	STANDARD DRAWING TC-65.11
5	ENTRANCE RAMP
6	EXIT RAMP
7	4 LANE DIVIDED TO 2 LANE TRANSITION
8	4 LANE UNDIVIDED TO 2 LANE TRANSITION
9	MULTILANE DIVIDED HIGHWAY

DETAIL	STANDARD DRAWING TC-65.11
10	APPROACH W/ LEFT TURN LANE
11	STOP APPROACH
12	TWO WAY LEFT TURN LANE
13	ONE LANE BRIDGE
14	HORIZONTAL CURVE

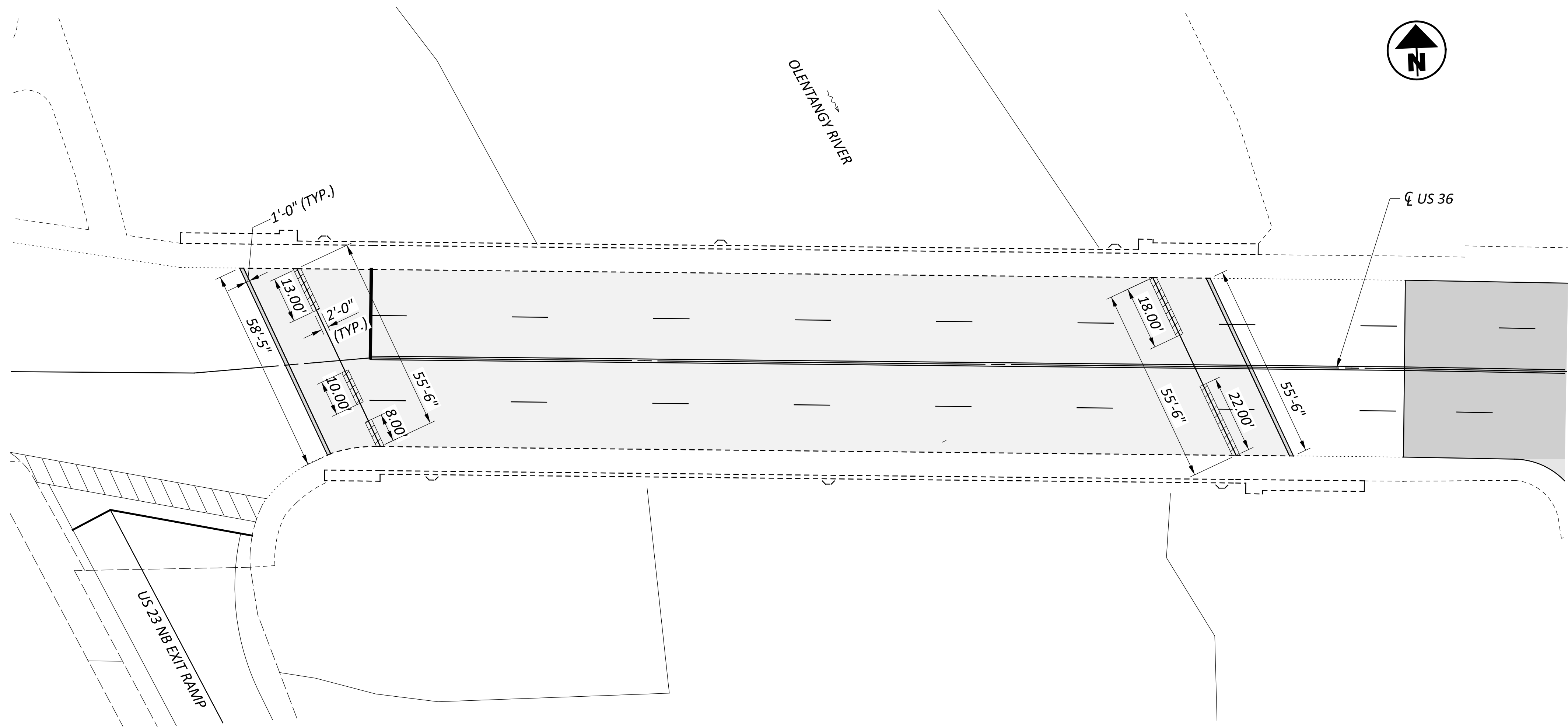
LOCATION										REFLECTOR TYPE											621		REMARKS				
C O U N T Y	R O U T E	B E G I N G P O I N T	E N D I N G P O I N T	B E G I N N G L E N G T H	E N D I N G L E N G T H	L E N G T H	L E N G T H	S I D E	D E T A I L	ONE WAY				TWO WAY								RAISED PAVEMENT MARKER REMOVED	RPM				
										WHITE		YELLOW	WHITE RED		YELLOW RED		YELLOW YELLOW										
										RIGHT EDGE LINE	FOR 12" DOTTED LINE	LANE LINE	LEFT EDGE LINE	RIGHT EDGE LINE	CHANNELIZING LINE	LANE LINE	LEFT EDGE LINE	LEFT EDGE LINE	CENTER LINE								
40'	80'	40'	120'	80'	40'	80'	40'	80'	20'	40'	80'	EACH	EACH														
DEL	36	383+91.40	384+47.61	7.271	7.282	56	0.011		4															2	2	2	
DEL	36	384+47.61	391+07.74	7.282	7.407	660	0.125		10															18	18	18	
DEL	36	391+07.74	392+87.52	7.407	7.441	180	0.034		3/4						10									3	13	13	
DEL	36	394+26.89	395+93.08	7.467	7.499	166	0.031		3/4						10									3	13	13	
DEL	36	395+93.08	399+18.53	7.499	7.560	325	0.062		10															10	10	10	
DEL	36	399+18.53	401+13.01	7.560	7.597	194	0.037		3/4						12									3	15	15	
DEL	36	402+14.25	404+32.69	7.616	7.658	218	0.041		2/4/11						12									4	22	22	
DEL	36	404+32.69	405+87.24	7.658	7.687	155	0.029		10/11/12															6	10	10	
DEL	36	405+87.24	410+14.25	7.687	7.768	427	0.081		19/12		10													10	22	22	
DEL	36	410+14.25	412+33.72	7.768	7.809	219	0.042		10/11/12															8	14	14	
DEL	36	412+33.72	413+87.24	7.809	7.838	154	0.029		2/4/11						10									3	17	17	
DEL	36	415+75.26	418+08.71	7.874	7.918	233	0.044		2/4/11						14									4	24	24	
DEL	36	418+08.71	419+03.59	7.918	7.936	95	0.018		4/10/11						3									4	10	10	
DEL	36	419+03.59	423+63.67	7.936	8.023	460	0.087		19/11		4													12	18	18	
DEL	36	423+63.67	423+75.26	8.023	8.026	12	0.002		19/11		1													1	2	2	
DEL	36	423+75.26	435+15.79	8.026	8.242	1141	0.216		4															14	14	14	
DEL	36	435+15.79	439+40.79	8.242	8.322	425	0.080		10															12	12	12	
DEL	36	439+40.79	441+05.10	8.322	8.353	164	0.031		3/4						10									2	12	12	
DEL	36	442+22.34	443+93.83	8.375	8.408	171	0.032		3/4						5									3	8	8	
DEL	36	443+93.83	446+17.03	8.408	8.450	223	0.042		10															8	8	8	
DEL	36	446+17.03	447+21.04	8.450	8.470	104	0.020		2/10						4									2	6	6	
DEL	36	448+07.84	456+21.68	8.486	8.640	814	0.154		4/10															20	20	20	
TOTALS CARRIED TO GENERAL SUMMARY																							290	290			

RAISED PAVEMENT MARKER CALCULATIONS

DESIGN AGENCY

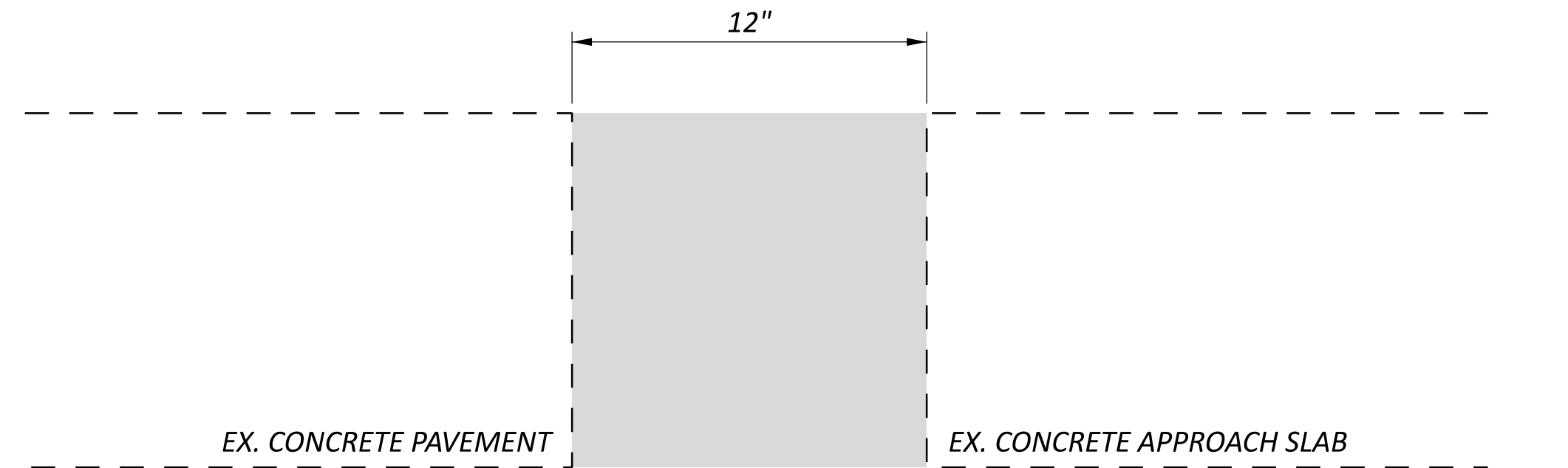


DESIGNER
KLM
REVIEWER
XXX MM-DD-YY
PROJECT ID
111608
SHEET TOTAL
P.39 P.40

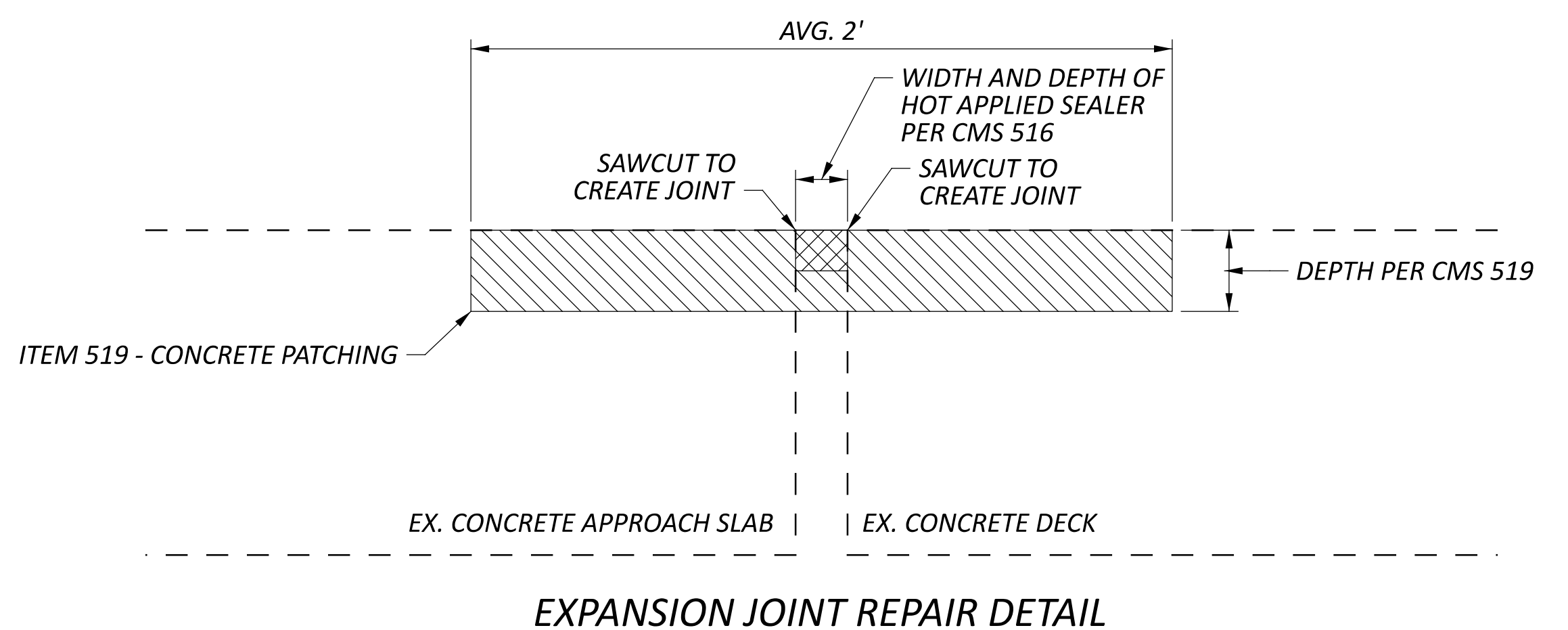


EXISTING STRUCTURE	
TYPE:	3 SPAN CONTINUOUS COMPOSITE STEEL BEAM WITH REINFORCED CONCRETE DECK & MODIFIED EXISTING CONCRETE/STONE SUBSTRUCTURE UNITS
SPANS:	79'-2"± - 81'-5"± - 79'-3"± C/C BEARINGS
ROADWAY:	50' F/F CURBS
LOADING:	MS18 (CASE II) AND THE ALTERNATE MILITARY LOADING
SKEW:	25° 45' RIGHT FORWARD
WEARING SURFACE:	MONOLITHIC CONCRETE
APPROACH SLABS:	AS-1-81M 15' LONG
ALIGNMENT:	TANGENT
CROWN:	0.016
STRUCTURE FILE NUMBER:	2100878
DATE BUILT:	1952
DISPOSITION:	JOINT REPAIR AND SURFACE SEALING

- EXPANSION JOINT REPAIR
- 12" PRESSURE RELIEF JOINT, TYPE C
- SEALING OF CONCRETE SURFACES (NON-EPOXY)
- ASPHALT RESURFACING



12" PRESSURE RELIEF JOINT, TYPE C DETAIL
 SEE SCD BP-2.4 FOR ADDITIONAL DETAILS



REFERENCE	COUNTY	ROUTE	SLM	SIDE	AREA	QUANTITIES					REMARKS	
						451	512	516	519			
					SF	FT	SY	FT	SF			
	DEL	36				58						PAVEMENT/REAR APPROACH SLAB JOINT
	DEL	36			765		85					REAR APPROACH SLAB
	DEL	36						56	62			REAR APPROACH SLAB/DECK JOINT
	DEL	36			12101		1345					DECK
	DEL	36						56	80			DECK/FORWARD APPROACH SLAB JOINT
	DEL	36			755		84					FORWARD APPROACH SLAB
	DEL	36				56						FORWARD APPROACH SLAB/PAVEMENT JOINT
						114	1514	112	142			

SITE PLAN
 BRIDGE NO. DEL-36-1043
 OVER OLENTANGY RIVER

SFN	2100878
DESIGN AGENCY	
DESIGNER	CHECKER
KLM	XXX
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	
111608	
SUBSET	TOTAL
1	2
SHEET	TOTAL
P.40	P.40