

**INDEX OF SHEETS**

SEE SHEET 2 FOR INDEX OF SHEETS

11-05-2021 LETTING ITEM 003

**HIGHWAY STANDARDS**

SEE SHEET 2 FOR LIST OF HIGHWAY STANDARDS

**DISTRICT 1 DETAILS**

SEE SHEET 2 FOR LIST OF DISTRICT 1 DETAILS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

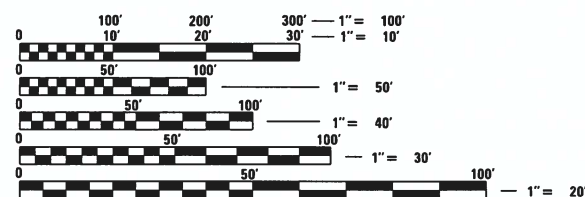
**PROPOSED  
HIGHWAY PLANS**

**MUN 3115 (CENTRAL AVENUE) OVER RAVINE  
SECTION 15-00123-00-BR  
PROJECT DVIZ(877)  
BRIDGE REPLACEMENT  
LAKE COUNTY**

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	1
		ILLINOIS	CONTRACT NO.	61H28

**CENTRAL AVENUE**

FUNCTIONAL CLASSIFICATION - LOCAL ROAD  
ADT (2016) = 286  
ADT (2040) = 320  
DESIGN SPEED = 30 MPH  
POSTED SPEED = 25 MPH

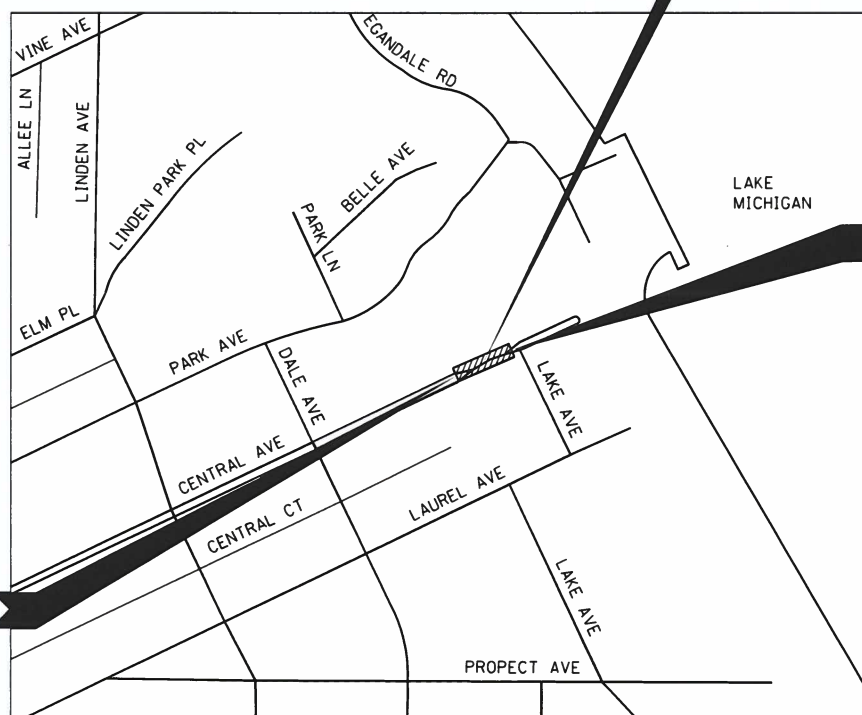


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E. SCHAUMBURG, IL

CONSULTANT ENGINEER: BRETT SAUTER, P.E., S.E. CIORBA GROUP, INC  
CONTRACT NO. 61H28



**PROJECT BEGINS  
STA 113 + 72.00**

**EXISTING S.N. 049-6554  
PROPOSED S.N. 049-6595**  
SINGLE-SPAN STRUCTURE WITH PPC BEAMS

**PROJECT ENDS  
STA 116 + 84.00**

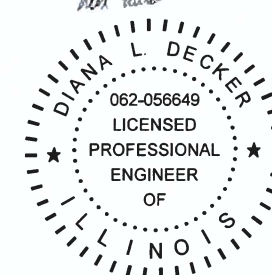
C-91-342-15

**LOCATION MAP  
(NOT TO SCALE)  
PROJECT LENGTH**

NET AND GROSS LENGTH = 312 FT. = 0.06 MILES



DATE: 7/19/2021  
SEAL EXPIRES: 11/30/2022



DATE: 7/19/2021  
SEAL EXPIRES: 11/30/2021



**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

APPROVED: Emmanuel Bay July 21, 20 21  
CITY OF HIGHLAND PARK, CITY ENGINEER

PASSED: Aug 24 20 21  
[Signature]  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW: August 24 20 21  
[Signature]  
REGIONAL ENGINEER

PLAN	SURVEYED	DATE
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NOTE BOOK NO.	CHECKED	
	AT	
	ON	
	FILE	
	NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	CHECKED	
	AT	
	ON	
	FILE	
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**INDEX OF SHEETS**

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1	COVER SHEET
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15	SCHEDULE OF QUANTITIES
16	ALIGNMENT, TIES AND BENCHMARKS
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18	EXISTING WATER AND SEWER REMOVAL PLAN
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**HIGHWAY STANDARDS**

STANDARD NO.	LIST OF DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
442201-03	CLASS C AND D PATCHES
515001-04	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
602001-02	CATCH BASIN TYPE A
602301-04	INLET TYPE A
602401-07	MANHOLE TYPE A
602601-06	PRECAST REINFORCED CONCRETE FLAT TOP SLAB
604001-05	FRAME AND LIDS TYPE 1
604011-05	FRAME AND GRATE TYPE 3V
604066-02	FRAME AND LID TYPE 15
604086-04	FRAME AND GRATE TYPE 23
604091-04	FRAME AND GRATE TYPE 24
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS- DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTORS MOUNTING DETAILS

**IDOT DISTRICT 1 DETAILS**

STANDARD NO.	LIST OF DESCRIPTION
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 2.0000' / 1"r.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 INDEX OF SHEETS AND STANDARDS**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15.00123-00.BR	LAKE	84	2
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

- ANY REFERENCE TO THE STANDARD SPECIFICATIONS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) STANDARD SPECIFICATIONS, ADOPTED APRIL 1, 2016, AND THE JANUARY 1, 2021 SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
- ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES WHICH ARE NOT SPECIFICALLY INDICATED IN THE PLANS SHALL BE PERFORMED AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- DRAINAGE STRUCTURE ELEVATIONS: GRADES OF SEWER LINES WERE DETERMINED FROM AVAILABLE PLANS AND SURVEYS. ACCORDINGLY, AS DIRECTED BY THE ENGINEER, THE INVERTS OF THE PROPOSED DRAINAGE WILL BE REVISED TO MEET EXISTING FIELD CONDITIONS.
- THE TOP OF ALL STRUCTURES SHALL BE FLUSH WITH THE ADJACENT SURFACE OR AT THE INDICATED ELEVATIONS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL SALVAGE AND DELIVER ALL UNDAMAGED FRAMES AND LIDS/GRATES TO THE CITY PUBLIC WORKS FACILITY. THE ENGINEER SHALL COORDINATE A DELIVERY DATE AND TIME.
- THE APPROXIMATE LOCATION OF KNOWN UTILITIES ARE SHOWN ON THE PLANS. HOWEVER, THE CITY DOES NOT GUARANTEE ITS ACCURACY. PRIOR TO COMMENCING OPERATIONS ON THE PROJECT WHICH MAY IN ANY WAY CREATE THE POSSIBILITY OF INVOLVEMENT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL CONTACT THE UTILITY INVOLVED. ADJUSTMENT OF ALL PUBLIC UTILITIES WITHIN THE LIMITS OF IMPROVEMENT WILL BE DONE BY THE RESPECTIVE OWNERS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCE CAUSED BY THESE ADJUSTMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATION BEFORE STARTING CONSTRUCTION OPERATIONS.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON CITY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE CITY.
- ALL HMA PAVING SHALL FOLLOW DESIGNATED DRIVING LANES. NO LONGITUDINAL PAVING JOINT OR SEAMS ARE ALLOWED WITHIN THE DRIVING LANES. ALL LONGITUDINAL PAVING JOINTS OR SEAMS WILL BE BETWEEN THE DRIVING LANES.
- HMA AND PCC DRIVEWAYS SHALL BE CONSTRUCTED WITH FLARES ACCORDING TO THE HIGHLAND PARK TYPICAL DRIVEWAY AND SIDEWALK DETAIL. BRICK PAVER DRIVES SHALL BE CONSTRUCTED TO MATCH EXISTING LAYOUT.
- A REGIONAL 404 PERMIT WILL BE OBTAINED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO. THE CONTRACTOR MUST SUBMIT AN IN-STREAM WORK PLAN TO THE USACE AND LAKE COUNTY SMC FOR APPROVAL PRIOR TO ANY WORK IN THE RAVINE.
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
- ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.
- STATION AND OFFSET SHOWN FOR DRAINAGE STRUCTURES INSTALLED ALONG THE ROADWAY CURB AND GUTTER ARE TAKEN AT THE EDGE OF PAVEMENT. FOR ALL OTHER LOCATIONS, STATION AND OFFSET IS TAKEN AT THE STRUCTURE CENTER.

**SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION**

- SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- FOR THOSE DEVELOPMENTS THAT REQUIRE A DESIGNATED EROSION CONTROL INSPECTOR (DEC), INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
  - UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
  - AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING AREA TO BE DONE IN PHASES, THE PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA-1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE INSTALLED AT ANY POINT WHERE THE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGIC DISTURBED AREAS TO AN APPROPRIATED SEDIMENT TRAP OR BASIN.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFER.
- SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURES APPROVED BY THE ENFORCEMENT OFFICER.
- APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DEWATERING SYSTEM OR A SIMILAR MEASURE AS APPROVED BY THE ENFORCEMENT OFFICER. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE ENFORCEMENT OFFICER, OR APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRE BY THE ENFORCEMENT OFFICER.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER GOVERNING AGENCY.

**COMMITMENTS**

- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS THROUGHOUT THE RECONSTRUCTION LIMITS AT ALL TIMES. IF DRIVEWAY ACCESS MUST BE RESTRICTED, THE PROPERTY OWNER MUST BE GIVEN A MINIMUM OF TWO CONSTRUCTION NOTICES, ONE 24 HOURS AND ONE 2 HOURS IN ADVANCE OF WHEN THE DRIVEWAY CONSTRUCTION IS TO OCCUR.
- PRIOR TO BEGINNING OF CONSTRUCTION ACTIVITIES, THE IDOT WILL COMPLETE HISTORIC ILLINOIS ENGINEERING RECORD (HIER) LEVEL III RECORDATION OF THE EXISTING BRIDGE. THE IDOT WILL SUBMIT THE DRAFT HIER (95%) TO THE SHPO, AND THE IDOT MUST RECEIVE WRITTEN CONCURRENCE FROM THE SHPO THAT THE DRAFT HIER DOCUMENTATION IS ACCEPTABLE PRIOR TO IDOT APPROVING DEMOLITION OF THE EXISTING BRIDGE. THE CITY OF HIGHLAND PARK MUST ENSURE THE EXISTING BRIDGE IS NOT SUBJECT TO DEMOLITION PRIOR TO WRITTEN APPROVAL FROM THE IDOT. THE IDOT WILL ENSURE THE FINAL HIER (100%) DOCUMENTATION IS SUBMITTED TO THE SHPO FOR REVIEW AND APPROVAL.
- IN COORDINATION WITH THE IDOT, THE CITY OF HIGHLAND PARK WILL ENSURE THE REPLACEMENT BRIDGE REPLICATES KEY DESIGN FEATURES OF THE EXISTING BRIDGE. THE PLANS FOR THE NEW BRIDGE WILL BE SUBMITTED TO THE IDOT AND WILL BE REVIEWED AND APPROVED BY THE SHPO PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. THE PROPOSED BRIDGE DESIGN WILL PROVIDE SOLID CONCRETE PARAPET WALLS WITH CONCRETE CAP, AND WITHOUT END POSTS.

PLAN	SURVEYED	DATE
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NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 GENERAL NOTES AND COMMITMENTS**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	3
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

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CONSTRUCTION TYPE CODE
80% FED 20% LOCAL STP-BR

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE			
						RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
						0004	0042	0043	0010
*		20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	365	365			
*		20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	124	124			
Δ		20101000	TEMPORARY FENCE	FOOT	180	180			
*		20101200	TREE ROOT PRUNING	EACH	5	5			
		20200100	EARTH EXCAVATION	CU YD	1,320	1,320			
		20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	40	40			
		20800150	TRENCH BACKFILL	CU YD	674	394		280	
		21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SO YD	124	124			
		21101625	TOPSOIL FURNISH AND PLACE, 6"	SO YD	1,336	1,336			
*		25100115	MULCH, METHOD 2	ACRE	0.25	0.25			
*		25200110	SODDING, SALT TOLERANT	SO YD	606	606			
Δ *		25200200	SUPPLEMENTAL WATERING	UNIT	4	4			
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	29	29			
		28000400	PERIMETER EROSION BARRIER	FOOT	570	570			
		28000510	INLET FILTERS	EACH	19	19			



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	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES

SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.
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MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 4
CONTRACT NO. 61H28				ILLINOIS FED. AID PROJECT

PLAN	DATE	BY
	DATE	BY
NOTE BOOK NO.	SURVEYED	
	ALIGNMENT CHECKED	
NOTE BOOK NO.	PT. OF WAY CHECKED	
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PROFILE	DATE	BY
	DATE	BY
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NOTE BOOK NO.	STRUCTURE NOTATIONS CHECKED	

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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			
RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
0004	0042	0043	0010

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
		28001200	TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET	SO YD	730	730			
		28100105	STONE RIPRAP, CLASS A3	SO YD	592				592
		28200200	FILTER FABRIC	SO YD	592				592
Δ		30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	50	50			
Δ		30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SO YD	728	728			
		35101600	AGGREGATE BASE COURSE, TYPE B 4"	SO YD	323	323			
		40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	222	222			
		40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	170	170			
		40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	78	78			
		42000060	WELDED WIRE REINFORCEMENT	SO YD	139	139			
		42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SO YD	139	139			
		42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SO YD	52	52			
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1,748	1,748			
		42400800	DETECTABLE WARNINGS	SO FT	20	20			
		44000100	PAVEMENT REMOVAL	SO YD	998	998			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - AMH	REVISED -
PLOT DATE = 8/31/2021	CHECKED - EPS	REVISED -
	DATE - 8/31/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT SUMMARY OF QUANTITIES</b>			
SCALE: N.T.S.	SHEET	OF	SHEETS
STA.	TO STA.		

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	5
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

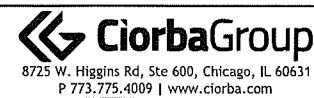
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PROFILE	SURVEYED BY	DATE	CHECKED BY	DATE

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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			
RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
0004	0042	0043	0010

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
		44000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	183	183			
		44000300	CURB REMOVAL	FOOT	91	91			
		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	105	105			
		44000600	SIDEWALK REMOVAL	SO FT	1,151	1,151			
		44201737	CLASS D PATCHES, TYPE I, 8 INCH	SO YD	5	5			
		44201741	CLASS D PATCHES, TYPE II, 8 INCH	SO YD	17	17			
		50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1				1
		50200100	STRUCTURE EXCAVATION	CU YD	1,820				1,820
		50300225	CONCRETE STRUCTURES	CU YD	299.0				299.0
		50300255	CONCRETE SUPERSTRUCTURE	CU YD	241.5				241.5
		50300260	BRIDGE DECK GROOVING	SO YD	527				527
		50300285	FORM LINER TEXTURED SURFACE	SO FT	1,579				1,579
		50300300	PROTECTIVE COAT	SO YD	857				857
		50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	105.9				105.9
Δ		50401320	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BEAMS, IL45	FOOT	619				619



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - AMH	REVISED -
PLOT DATE = 8/31/2021	CHECKED - EPS	REVISED -
	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES

SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	6
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
ALIGNMENT CHECKED	
PLAN OF WORK CHECKED	
FIELD FILE NAME	
PLAN	
NOTE BOOK	
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DATE	
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REVISIONS	
NOTED	
GRADES CHECKED	
PLAN NO.	
STRUCTURE NOTATIONS CRKD	
PROFILE	
NOTE BOOK	
NO.	

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CONSTRUCTION TYPE CODE
80% FED 20% LOCAL STP-BR

SPECIAL PROVISION	SPECIAL TY ITEM	CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE			
						RDWY	TRAINEEES	WATERMAIN	BRIDGE REPLACE
						0004	0042	0043	0010
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	128,460				128,460
	*	50901720	BICYCLE RAILING	FOOT	95				95
		51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	1,970				1,970
		51202305	DRIVING PILES	FOOT	1,970				1,970
		51203200	TEST PILE METAL SHELLS	EACH	3				3
		51204650	PILE SHOES	EACH	13				13
		51500100	NAME PLATES	EACH	1				1
		52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6				6
		52100520	ANCHOR BOLTS, 1"	EACH	22				22
		52200020	TEMPORARY SOIL RETENTION SYSTEM	SO FT	1,619				1,619
		52200900	CONCRETE STRUCTURES (RETAINING WALL)	CU YD	132.7				132.7
		54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	2			
		54247110	GRATING FOR CONCRETE FLARED END SECTION 18"	EACH	2	2			
		55100200	STORM SEWER REMOVAL 6"	FOOT	37	37			
		550A0330	STORM SEWERS, CLASS A, TYPE 2 10"	FOOT	43	43			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - AMH	REVISED -
PLOT DATE = 8/31/2021	CHECKED - EPS	REVISED -
	DATE - 8/31/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	7
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

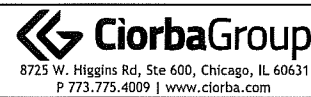
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NOTE BOOK NO.	RT. OF WAY CHECKED	
	PAID FILE NAME	

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NOTE BOOK NO.	PLAN NOTED	
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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE			
						RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
						0004	0042	0043	0010
		550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	67	67			
		550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	59	59			
		55100300	STORM SEWER REMOVAL 8"	FOOT	65	65			
		55100400	STORM SEWER REMOVAL 10"	FOOT	168	168			
		55100500	STORM SEWER REMOVAL 12"	FOOT	152	152			
Δ *		56100900	WATER MAIN 12"	FOOT	194			194	
Δ *		56101110	WATER MAIN 20"	FOOT	316			316	
Δ *		56105780	BUTTERFLY VALVES 20"	EACH	2			2	
		58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	630				630
		59100100	GEOCOMPOSITE WALL DRAIN	SO YD	350				350
		60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2	2			
		60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	40	40			
		60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	312	312			
		60200310	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	4	4			
		60201305	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 15 FRAME AND LID	EACH	1	1			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - AMH	REVISED -
PLOT DATE = 8/31/2021	CHECKED - EPS	REVISED -
	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	8
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	BY	DATE
	ALIGNMENT CHECKED		
NOTE BOOK NO.	RT. OF WAY CHECKED		
	ROAD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
NOTE BOOK NO.	STRUCTURE NOTATIONS		
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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			
RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
0004	0042	0043	0010

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
		60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	4	4			
		60203905	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
		60205005	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 15 FRAME AND LID	EACH	2	2			
		60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
		60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
		60222200	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 15 FRAME AND LID	EACH	1	1			
		60237460	INLETS, TYPE A, TYPE 23 FRAME AND GRATE	EACH	1	1			
		60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	3	3			
		60600605	CONCRETE CURB, TYPE B	FOOT	72	72			
		60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	256	256			
		60500040	REMOVING MANHOLES	EACH	1	1			
		60500050	REMOVING CATCH BASINS	EACH	5	5			
		60500060	REMOVING INLETS	EACH	3	3			
		63200310	GUARDRAIL REMOVAL	FOOT	72	72			
		67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
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PLOT DATE = 8/31/2021	CHECKED - EPS	REVISED -
	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	9
CONTRACT NO.				61H28
ILLINOIS FED. AID PROJECT				

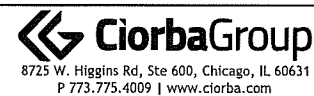
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NOTE BOOK NO.	B.M. NOTED		
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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			
RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
0004	0042	0043	0010

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
		67100100	MOBILIZATION	L SUM	1	1			
Δ *		66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1,850	940			910
Δ *		66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1			
Δ *		66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2			
Δ *		66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1			
Δ *		66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1			
Δ *		66901006	REGULATED SUBSTANCE MONITORING	CAL DA	5	3			2
		70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6	6			
	*	72000100	SIGN PANEL - TYPE 1	SQ FT	5	5			
	*	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	6	6			
	*	72900100	METAL POST - TYPE A	FOOT	15	15			
	*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	592	592			
	*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	115	115			
	*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	268	268			
	*	A2018718	TREE, ULMUS CARPINIFOLIA MORTON, (ACCOLADE ELM), 2" CALIPER, BALLED AND BURLAPPED	EACH	6	6			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - AMH	REVISED -
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	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES

SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	10
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	DATE
	ALIGNED	DATE
NOTE BOOK NO.	RT. OF WAY CHECKED	DATE
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PROFILE	SURVEYED	DATE
	GRADES CHECKED	DATE
NOTE BOOK NO.	STRUCTURE NOTATIONS	DATE

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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE			
						ROWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
						0004	0042	0043	0010
*		A2C05660	TREE, OSTRYA VIRGINIANA (IRONWOOD), 7' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	5	5			
*		C2003272	SHRUB, HAMAMELIS VERNALIS (VERNAL WITCH HAZEL), 6' HEIGHT, BALLED AND BURLAPPED	EACH	6	6			
Δ		X0322918	PROPOSED MANHOLE/CATCH BASIN CONNECTION OVER EXISTING STORM SEWER	EACH	4	4			
Δ		X0326806	WASHOUT BASIN	L SUM	1	1			
Δ		X0327989	REMOVE EXISTING BRICK PAVERS	SQ FT	391	391			
Δ		X0540000	BRICK PAVERS	SQ FT	179	179			
Δ	*	X1200130	GATE VALVE 12" WITH VAULT, 5' DIAMETER	EACH	1			1	
Δ	*	X1200221	NON-PRESSURE CONNECTION TO EXISTING WATER MAIN	EACH	2			2	
Δ		X2010400	STUMP REMOVAL ONLY	UNIT	50	50			
Δ	*	X2200003	FENCE (SPECIAL)	FOOT	15	15			
Δ	*	X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.50	0.50			
Δ	*	X2501820	SEEDING, CLASS 5 (MODIFIED)	ACRE	0.50	0.50			
Δ	*	X2510900	TURF REINFORCEMENT MAT (SPECIAL)	SQ YD	379	379			
Δ	*	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	351	351			
Δ		X3400004	RETAINING WALL REMOVAL	FOOT	106	106			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 20,0000' / in.	DRAWN - AMH	REVISED -
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	DATE - 8/31/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	11
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
PAID FILE NAME	
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NOTE BOOK	
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DATE	
BY	
SURVEYED	
GRADES CHECKED	
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PROFILE	
NOTE BOOK	
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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			
RDWY	TRINEES	WATERMAIN	BRIDGE REPLACE
0004	0042	0043	0010

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	RDWY	TRINEES	WATERMAIN	BRIDGE REPLACE
Δ		X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	4	4			
Δ		X4023000	TEMPORARY ACCESS (ROAD)	EACH	2	2			
Δ		X5509900	ABANDON AND FILL EXISTING STORM SEWER	FOOT	31	31			
Δ	*	X5610651	ABANDON EXISTING WATER MAIN, FILL WITH CLSM	FOOT	274			274	
Δ	*	X5610662	WATER MAIN TO BE ABANDONED, 12"	FOOT	260			260	
Δ	*	X5610712	WATER MAIN REMOVAL, 12"	FOOT	23			23	
Δ	*	X5610720	WATER MAIN REMOVAL, 20"	FOOT	22			22	
Δ	*	X5620116	WATER SERVICE CONNECTION (SHORT)	EACH	1			1	
Δ	*	X5630712	CONNECTION TO EXISTING WATER MAIN 12"	EACH	4			4	
Δ	*	X5640175	FIRE HYDRANT COMPLETE	EACH	2			2	
Δ	*	X6026622	VALVE VAULTS TO BE REMOVED	EACH	1			1	
Δ		X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
Δ	*	XX000503	SPLIT RAIL FENCE	FOOT	13	13			
Δ	*	XX005106	PVC CASING PIPE, 18"	FOOT	29			29	
Δ	*	XX006586	PVC CASING PIPE 30"	FOOT	38			38	



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/31/2021	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT SUMMARY OF QUANTITIES			
SCALE: N.T.S.	SHEET	OF	SHEETS
STA.	TO STA.		

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	12
CONTRACT NO.				61H28
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
		BY
NOTE BOOK NO.	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	FIELD FILE NAME	

PROFILE	DESIGNED	DATE
		BY
NOTE BOOK NO.	GRADES CHECKED	
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CONSTRUCTION TYPE CODE			
80% FED 20% LOCAL STP-BR			

SPECIAL PROVISION	SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION TYPE CODE			
						RDWY	TRAINEES	WATERMAIN	BRIDGE REPLACE
						0004	0042	0043	0010
Δ		Z0001850	ARCHITECTURAL PRECAST CONCRETE PANEL	EACH	16				16
Δ		Z0013797	STABILIZED CONSTRUCTION ENTRANCE	50 YD	600	600			
Δ		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Δ		Z0018005	DRAINAGE SCUPPERS, DS-12M10	EACH	10				10
Δ		Z0018800	DRAINAGE SYSTEM	L SUM	1				1
Δ		Z0022810	FENCE REMOVAL (SPECIAL)	FOOT	28	28			
Δ		Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	223				223
Δ		Z0056668	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 12"	FOOT	155	155			
Δ		Z0056670	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 18"	FOOT	127	127			
Δ		Z0076600	TRAINEES	HOUR	500		500		
Δ		Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500		500		
Δ		Z0076870	UNDERDRAIN CONNECTION TO STRUCTURE	EACH	8	8			



USER NAME = Roadway	DESIGNED - MLH	REVISED -
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	DATE - 8/31/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
SUMMARY OF QUANTITIES

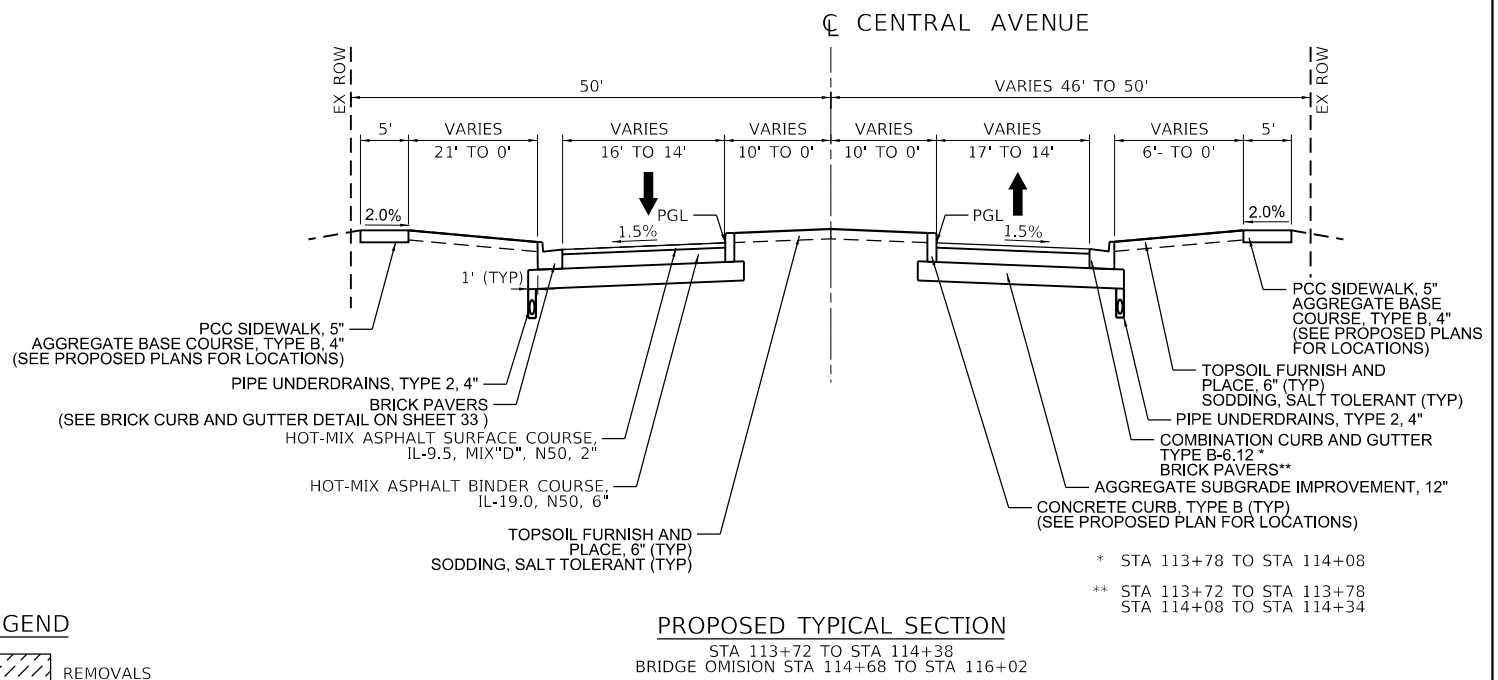
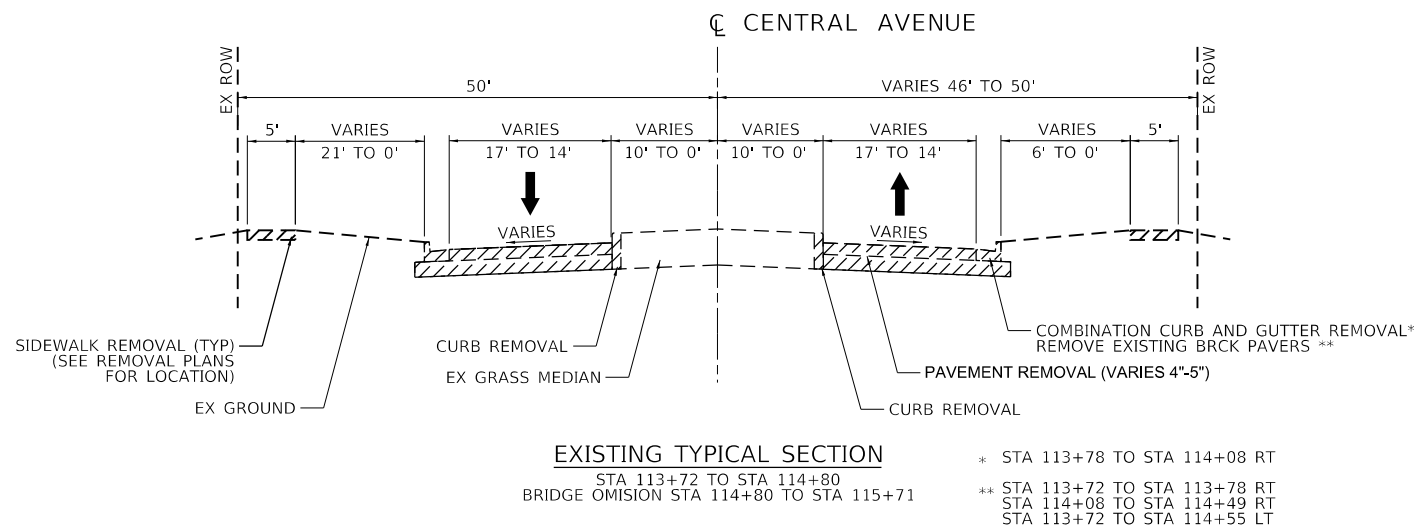
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MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	13
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

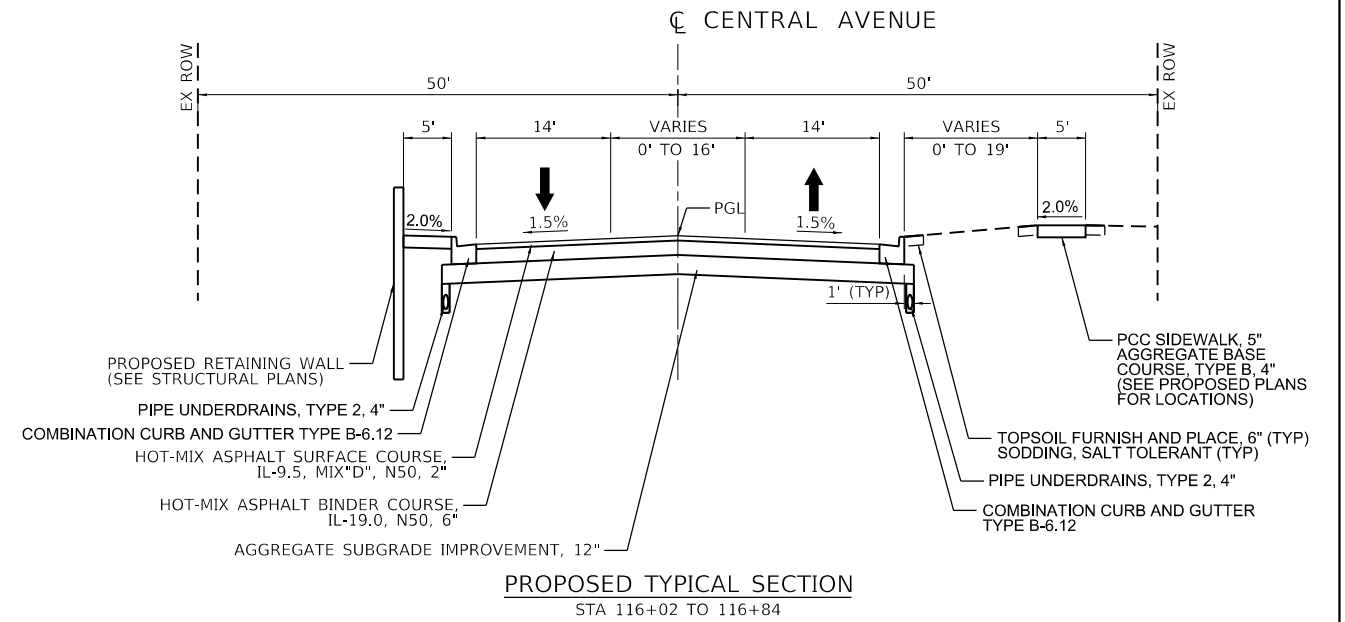
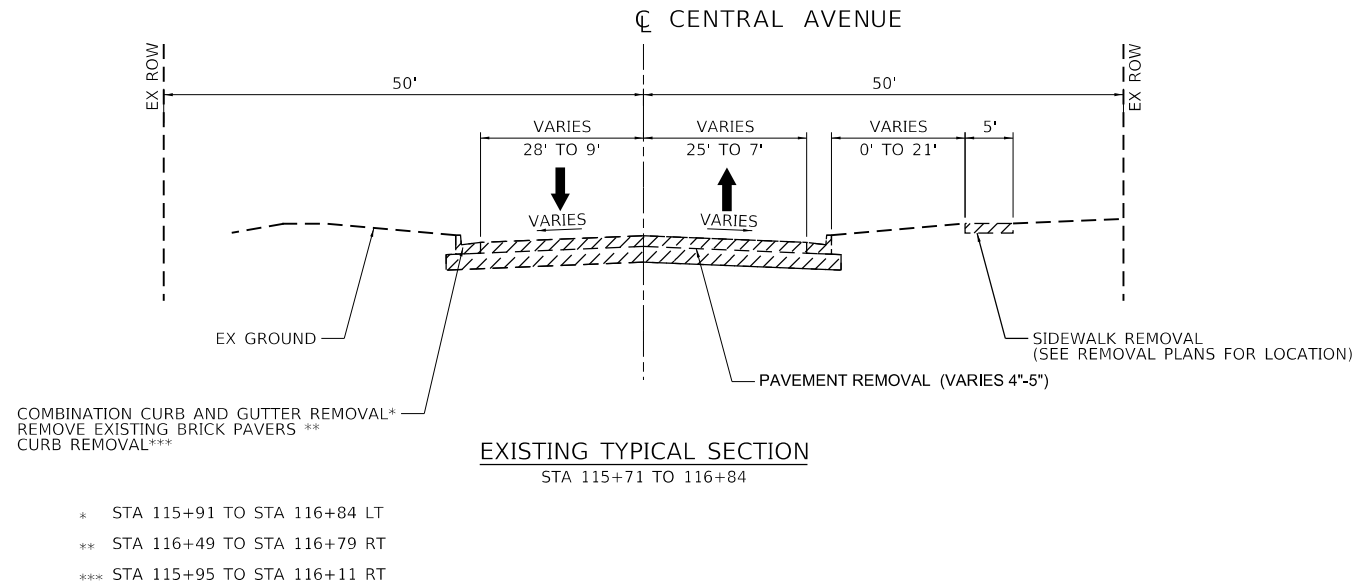
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**LEGEND**  
 REMOVALS



MIXTURE TYPE	PERCENT AIR VOIDS
<b>PAVEMENT RECONSTRUCTION</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50; 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 6"	4% @ 50 GYR.
<b>DRIVEWAYS</b>	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N50; 3" (IN 2 LIFTS)	4% @ 50 GYR.
<b>PATCHING</b>	
CLASS D PATCHES (HMA BINDER IL-19mm) 8 INCH	4% @ 50 GYR.

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SB5/SBR PG 76-22" AND FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY SPECIAL PROVISIONS.
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 TYPICAL SECTIONS**  
 SCALE: 1" = 10' SHEET 1 OF 1 SHEETS STA. TO STA.

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	14
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
GRADE CHECKED	
STRUCTURE NOTATION CHECKED	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
PROFILE	
NOTE BOOK	
NO.	

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EARTHWORK SCHEDULE						
[1]						
STATION	LENGTH	EARTH EXCAVATION	EARTH EXCAVATION FOR EMBANKMENT ADJUSTED FOR SHRINKAGE (15%)	EMBANKMENT	TOPSOIL REMOVAL (UNSUITABLE)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	(FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
AHEAD						
113+72						
113+93	21.05	21.7	18.5	6.2	4.4	12.2
114+00	6.95	7.1	6.1	1.9	1.5	4.1
BACK ONLY						
114+38	38.13	37.2	31.7	5.2	14.7	26.4
BRIDGE OMISSION						
BRIDGE	91.50	61.3	52.1	0.0	0.0	52.1
AHEAD ONLY						
116+05						
116+28	23.02	16.6	14.1	0.9	6.1	13.2
116+50	21.98	20.3	17.3	0.9	5.4	16.4
BACK ONLY						
116+83	33.00	73.9	62.8	1.3	5.3	61.5
RAVINE						
		1,080.4				
	TOTAL	1,318.5	202.4	16.5	37.4	185.9
	ROUNDUP	1,320.0	205.0	20.0	40.0	190.0

NOTES:  
 [1] - PROVIDED FOR INFORMATION ONLY.

SEEDING, CLASS 4 (MODIFIED) (X2501800), SEEDING, CLASS 5 (MODIFIED) (X2501820), TURF REINFORCEMENT MAT (SPECIAL) (X2510900), TEMPORARY EROSION CONTROL SEEDING (28000250), TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET (28001200)						
ALIGNMENT	STA	STA	OFFSET	ACRE (X2501800) (X2501820)	SQ YD (X2510900) (21101625) (28001200)	POUND (28000250)
CENTRAL AVENUE	114+54	114+77	RT	0.008	37	0.80
CENTRAL AVENUE	114+78	115+52	LT	0.032	154	3.20
CENTRAL AVENUE	115+23	115+63	RT	0.020	94	2.00
CENTRAL AVENUE	116+10	116+64	LT	0.020	94	2.00
			TOTAL	0.080	379	8.00

SEEDING, CLASS 4 (MODIFIED) (X2501800), SEEDING, CLASS 5 (MODIFIED) (X2501820), EROSION CONTROL BLANKET (SPECIAL) (X2511630), TEMPORARY EROSION CONTROL SEEDING (28000250), TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET (28001200)						
ALIGNMENT	STA	STA	OFFSET	ACRE (X2501800) (X2501820)	SQ YD (X2511630) (21101625) (28001200)	POUND (28000250)
CENTRAL AVENUE	114+66	115+16	RT/LT	0.052	250	5.20
CENTRAL AVENUE	115+37	115+71	RT/LT	0.014	68	1.40
CENTRAL AVENUE	116+01	116+35	LT	0.007	33	0.70
			TOTAL	0.073	351	7.30
			ROUNDED TOTAL	0.250	351	8.00

SODDING, SALT TOLERANT (25200110), SUPPLEMENTAL WATERING (25200200), TEMPORARY EROSION CONTROL SEEDING (28000250), MULCH, METHOD 2 (25100115)							
ALIGNMENT	STA	STA	OFFSET	ACRE (25100115)	SQ YD (25200110) (21101625)	POUND (28000250)	UNITS (25200200)
CENTRAL AVENUE	113+69	114+04	CL	0.013	59	1.30	0.36
CENTRAL AVENUE	113+69	113+86	RT	0.005	24	0.50	0.15
CENTRAL AVENUE	113+69	114+48	LT	0.029	137	2.90	0.83
CENTRAL AVENUE	113+99	114+55	RT	0.010	46	1.00	0.28
CENTRAL AVENUE	114+32	114+65	RT	0.003	14	0.30	0.09
CENTRAL AVENUE	114+34	114+59	LT	0.004	17	0.40	0.10
CENTRAL AVENUE	114+56	114+67	LT	0.001	2	0.10	0.01
CENTRAL AVENUE	114+60	114+90	LT	0.006	29	0.60	0.18
CENTRAL AVENUE	115+58	115+71	RT	0.003	13	0.30	0.08
CENTRAL AVENUE	115+82	116+21	RT	0.022	104	2.20	0.63
CENTRAL AVENUE	116+33	116+74	RT	0.017	81	1.70	0.49
CENTRAL AVENUE	116+55	116+94	LT	0.014	67	1.40	0.41
CENTRAL AVENUE	116+64	116+82	RT	0.002	9	0.20	0.06
CENTRAL AVENUE	116+78	116+82	RT	0.001	4	0.10	0.03
			TOTAL	0.130	606	13.00	3.70
			ROUNDED TOTAL	0.250	606	13.00	4.00

TEMPORARY FENCE (20101000)			
ALIGNMENT	STA	OFFSET	LF
CENTRAL AVENUE	113+70	RT	20
CENTRAL AVENUE	113+72	LT	20
CENTRAL AVENUE	113+86	LT	20
CENTRAL AVENUE	114+02	LT	20
CENTRAL AVENUE	114+50	LT	20
CENTRAL AVENUE	115+23	LT	20
CENTRAL AVENUE	115+87	RT	20
CENTRAL AVENUE	116+14	RT	20
CENTRAL AVENUE	116+62	RT	20
		TOTAL	180

PERIMETER EROSION CONTROL BARRIER (28000400)				
ALIGNMENT	STA	STA	OFFSET	LF
CENTRAL AVENUE	114+02	115+52	LT/RT	301
CENTRAL AVENUE	115+23	115+61	RT	117
CENTRAL AVENUE	116+21	116+67	LT	55
CENTRAL AVENUE	115+81	116+20	RT	38
CENTRAL AVENUE	116+32	116+74	RT	41
CENTRAL AVENUE	116+89	116+94	LT	18
			TOTAL	570

TREE, ULMUS CARPINIFOLIA MORTON, (ACCOLADE ELM), 2" CALIPER, BALLED AND BURLAPPED (A2018718)			
ALIGNMENT	STA	OFFSET	EACH
CENTRAL AVENUE	114+11	30.3 RT	1
CENTRAL AVENUE	114+18	36.4 LT	1
CENTRAL AVENUE	116+02	40.6 RT	1
CENTRAL AVENUE	116+35	44.2 LT	1
CENTRAL AVENUE	116+47	31.3 RT	1
CENTRAL AVENUE	116+69	32.1 LT	1
		TOTAL	6

SHRUB, HAMAMELIS VERNALIS (VERNAL WITCH HAZEL), 6' HEIGHT, BALLED AND BURLAPPED (C2003272)			
ALIGNMENT	STA	OFFSET	EACH
CENTRAL AVENUE	114+97	27.8 LT	1
CENTRAL AVENUE	115+01	43.4 LT	1
CENTRAL AVENUE	114+91	29.6 RT	1
CENTRAL AVENUE	115+40	35.8 RT	1
CENTRAL AVENUE	115+56	30.6 RT	1
CENTRAL AVENUE	116+18	30.2 LT	1
		TOTAL	6

STABILIZED CONSTRUCTION ENTRANCE (Z0013797)			
ALIGNMENT	STA	OFFSET	SQ YD
CENTRAL AVENUE	113+72	RT	200
CENTRAL AVENUE	113+72	LT	200
CENTRAL AVENUE	116+55	CL	200
		TOTAL	600

TREE, OSTRYA VIRGINIANA (IRONWOOD), 7' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED (A2C05660)			
ALIGNMENT	STA	OFFSET	EACH
CENTRAL AVENUE	114+66	26.3 LT	1
CENTRAL AVENUE	114+76	31.1 RT	1
CENTRAL AVENUE	116+07	26.0 RT	1
CENTRAL AVENUE	116+15	44.3 RT	1
CENTRAL AVENUE	116+40	44.2 RT	1
		TOTAL	5

TREE ROOT PRUNING (20101200)			
ALIGNMENT	STA	OFFSET	EACH
CENTRAL AVENUE	113+70	RT	1
CENTRAL AVENUE	114+50	LT	1
CENTRAL AVENUE	115+23	LT	1
CENTRAL AVENUE	115+87	RT	1
CENTRAL AVENUE	116+62	RT	1
		TOTAL	5

INLET FILTER (28000510)				
ALIGNMENT	STA	STA	OFFSET	EACH
CENTRAL AVENUE	113+72	114+67	RT	4
CENTRAL AVENUE	113+76	114+68	LT	3
CENTRAL AVENUE	116+00	117+05	RT	6
CENTRAL AVENUE	116+00	116+72	LT	6
		TOTAL		19



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 80,0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 SCHEDULE OF QUANTITIES

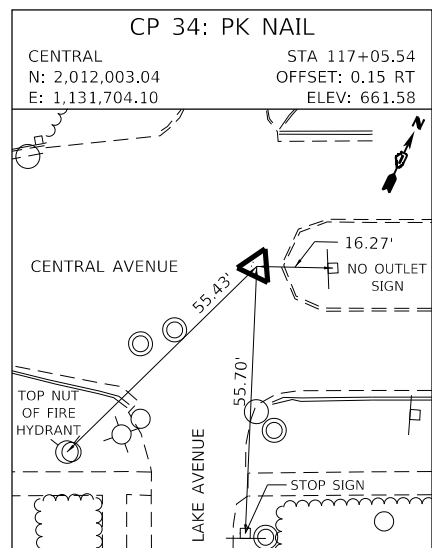
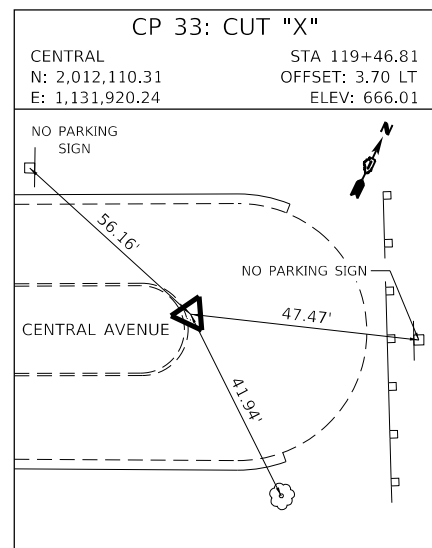
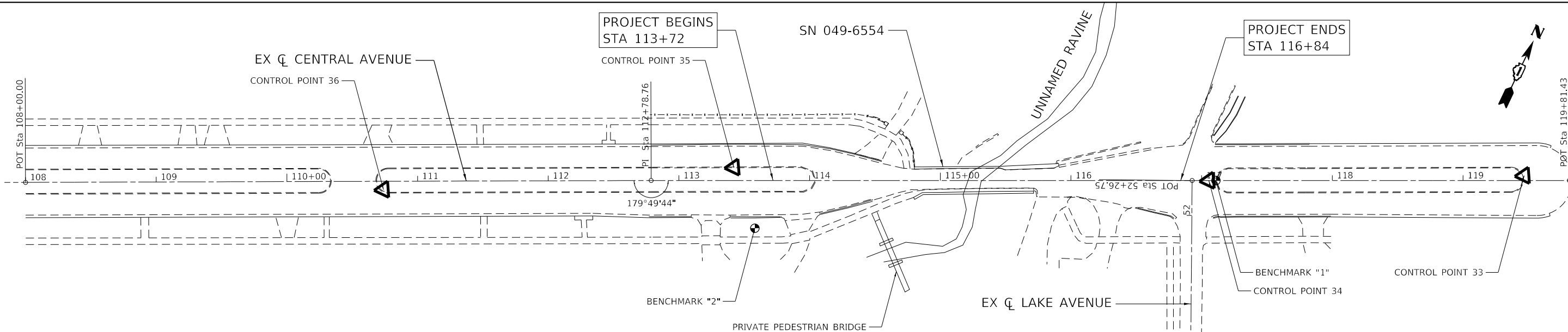
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MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	15
			CONTRACT NO.	61H28
		ILLINOIS	FED. AID PROJECT	

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
FILE NAME	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
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CHECKED	
STRUCTURE	
NOTATIONS	
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**PROJECT COORDINATES**

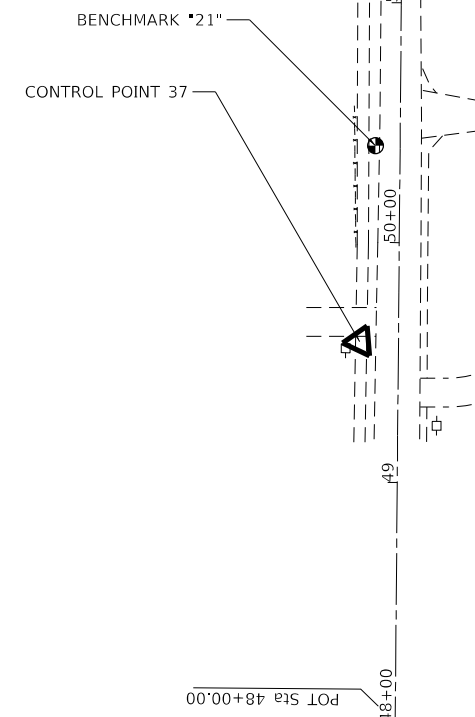
CENTRAL AVENUE - EXISTING ALIGNMENT

DESCRIPTION	STATION	NORTHING	EASTING
P.O.T.	108+00.00	2,011,612.31	1,130,887.19
P.I.	112+78.76	2,011,819.57	1,131,318.77
P.O.T.	119+81.43	2,012,121.86	1,131,953.09

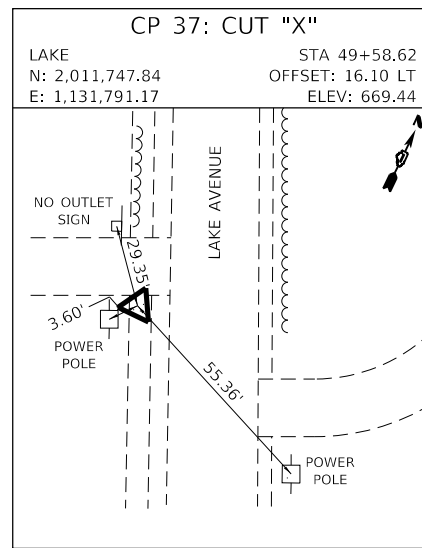
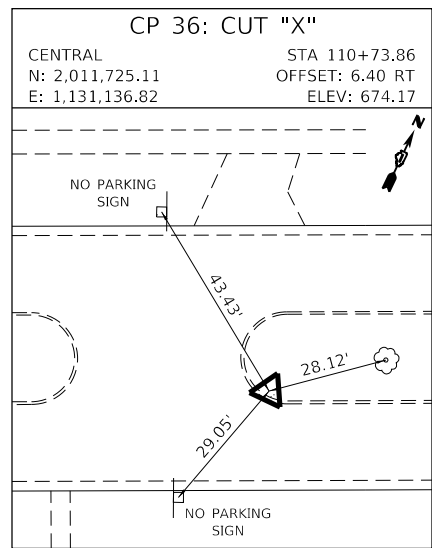
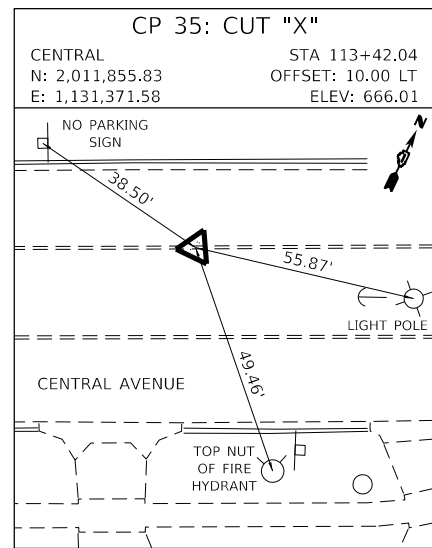
**PROJECT COORDINATES**

LAKE AVENUE - EXISTING ALIGNMENT

DESCRIPTION	STATION	NORTHING	EASTING
P.O.T.	48+00.00	2,011,997.67	1,131,692.49
P.O.T.	52+26.75	2,011,610.89	1,131,872.81



- NOTES:**
- ALL COORDINATES SHOWN ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, MAP COORDINATES REFLECT NAD 83-12 (2011)
  - ALL COORDINATE VALUES SHOWN ARE IN THE U.S. SURVEY FOOT UNITS.
  - ELEVATIONS REFLECT THE NAVD 88 (GEOID12A ADJUSTMENT).
  - SOME OR ALL OF THE CONTROL POINTS AND BENCHMARKS MAY BE DESTROYED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND RELOCATE THESE OUTSIDE OF THE CONSTRUCTION LIMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.



**PROJECT BENCHMARKS**

CENTRAL AVENUE

PT #	STATION	OFFSET	ELEV	DESCRIPTION
BM "1"	117+11	0' LT	662.00	CUT "X" IN THE TOP OF CURB IN THE CENTER OF THE NOSE MEDIAN EAST OF LAKE AVENUE
BM "2"	113+58	37' RT	668.27	TOP NUT OF THE FIRE HYDRANT LOCATED SOUTHWEST OF THE SN 049-6554; 1ST FIRE HYDRANT WEST OF THE BRIDGE

LAKE AVENUE

BM #	STATION	OFFSET	ELEV	DESCRIPTION
BM "21"	50+40	10 LT	667.03	CITY OF HIGHLAND PARK BENCHMARK (BM 21): 6"X6" CONCRETE MONUMENT WITH BRASS CAP LOCATED ON THE WEST SIDE OF LAKE AVENUE, SOUTH OF CENTRAL AVENUE



USER NAME =	Roadway	DESIGNED -	MLH	REVISED -	
		DRAWN -	AMH	REVISED -	
		CHECKED -	EPS	REVISED -	
		DATE -	8/23/2021	REVISED -	
PLOT SCALE =	80.0000" / in.				
PLOT DATE =	8/23/2021				

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 ALIGNMENT, TIES AND BENCHMARKS**

SCALE: 1" = 40' SHEET 1 OF 1 SHEETS STA. TO STA.

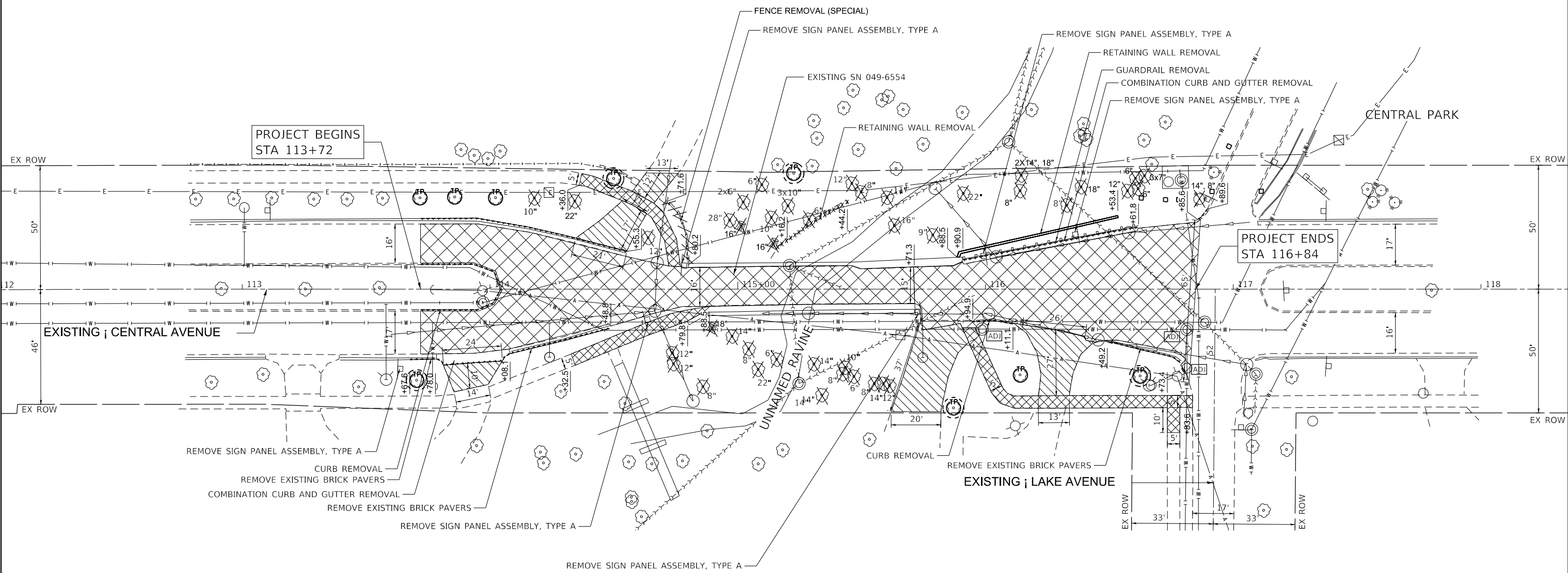
MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	16
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		





PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHECKED	



- REMOVAL LEGEND**
- PAVEMENT REMOVAL
  - DRIVEWAY PAVEMENT REMOVAL
  - SIDEWALK REMOVAL
  - TREE REMOVAL
  - STUMP REMOVAL ONLY
  - FRAMES AND LIDS TO BE ADJUSTED
  - TREE PROTECTION (PAID AS 20 LF OF TEMPORARY FENCE)
  - TREE ROOT PRUNING AND PROTECTION



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	DRAWN - AMH	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

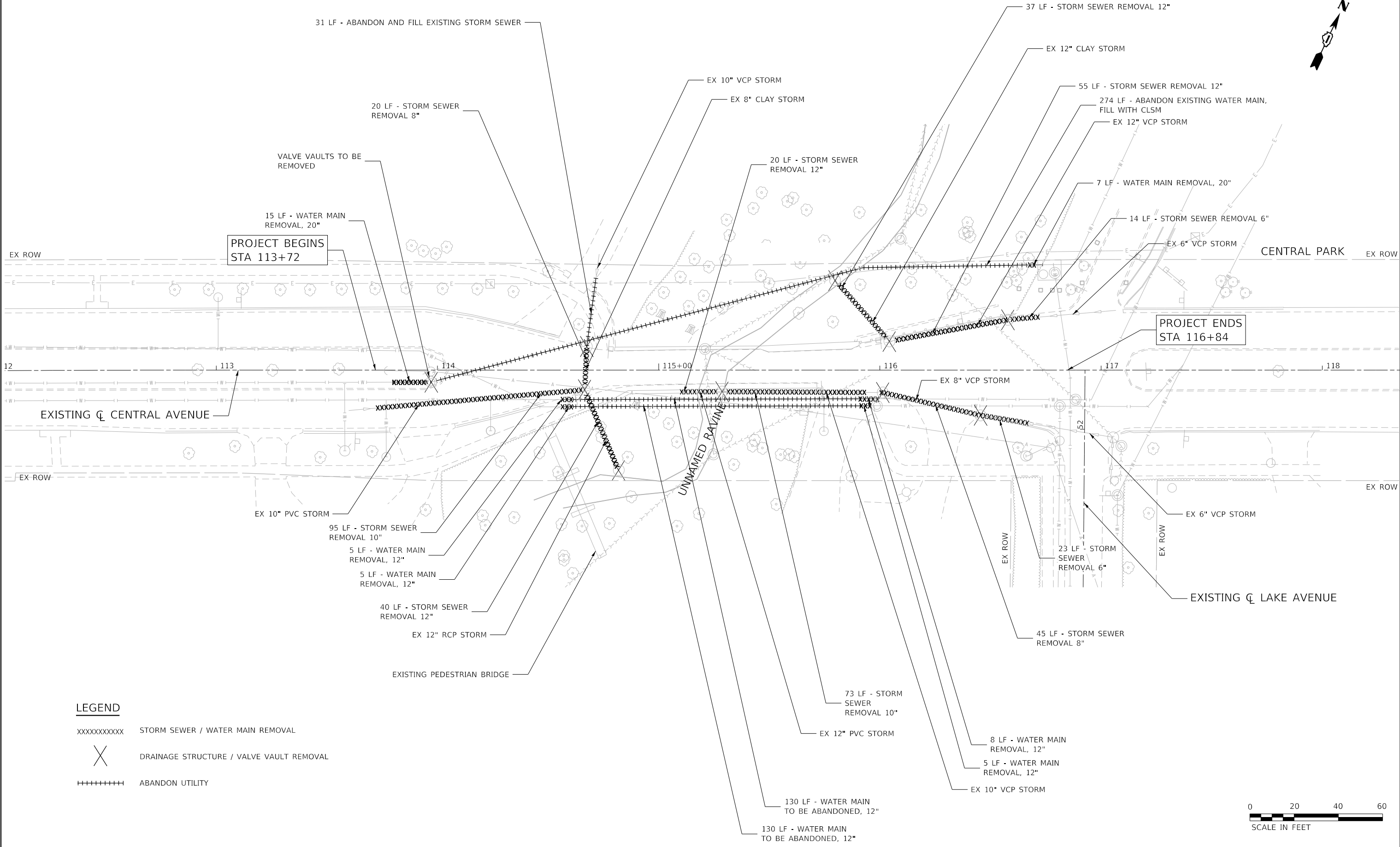
<b>CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT EXISTING CONDITIONS AND REMOVAL PLAN</b>	
SCALE: 1" = 20'	SHEET 1 OF 1 SHEETS
STA. 113+72	TO STA. 116+84

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 17
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	



PLAN	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK	ALIGNMENT CHECKED	
	NO. _____	FILE NAME

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK	GRADES CHECKED	
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USER NAME = Roadway	DESIGNED - JG	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN - DDG	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

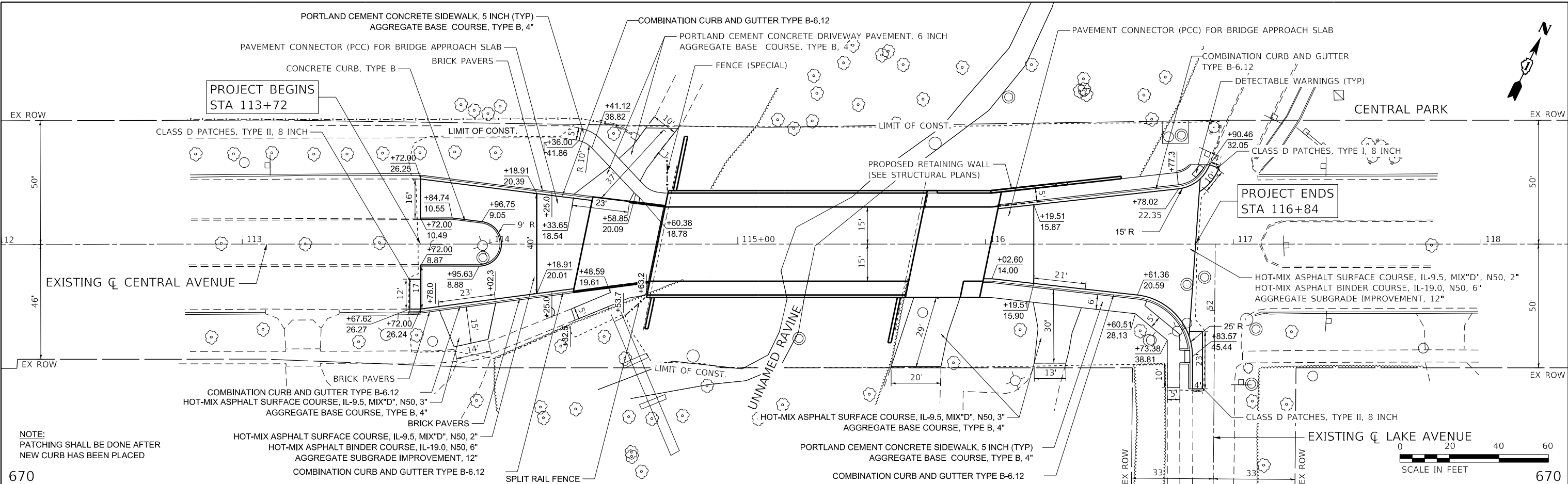
**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
EXISTING WATER AND SEWER REMOVAL PLAN**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA. 113+72 TO STA. 116+84

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 18
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	CHECKED
	CHECKED	NO.
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	CHECKED
	STRUCTURE	NOTATION
	NO.	



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USER NAME	= Roadway
PLOT SCALE	= 40,000.00' / in.
PLOT DATE	= 8/23/2021

DESIGNED	- MLH	REVISED	-
DRAWN	- AMH	REVISED	-
CHECKED	- EPS	REVISED	-
DATE	- 8/23/2021	REVISED	-

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT**  
**PROPOSED PLAN AND PROFILE**

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 113+72 TO STA. 116+84

MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	19
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	PLOTTED	BY
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EASTBOUND  
Central Avenue  
BRIDGE CLOSED  
FOLLOW DETOUR

3

60"x48"  
6" BLACK LETTERS ON  
ORANGE REFLECTIVE  
BACKGROUND

1

WESTBOUND  
Central Avenue  
BRIDGE CLOSED  
FOLLOW DETOUR

3

60"x48"  
6" BLACK LETTERS ON  
ORANGE REFLECTIVE  
BACKGROUND

2

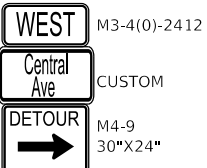
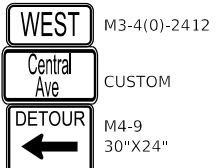
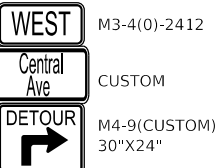
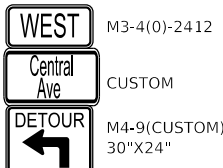
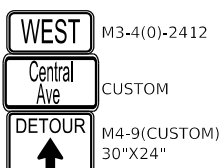
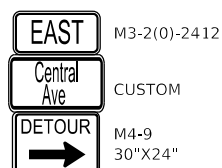
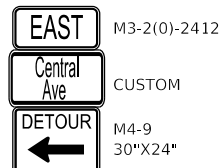
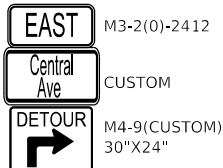
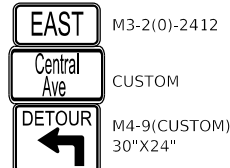
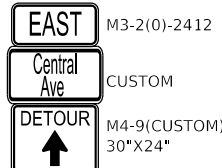
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3

END  
DETOUR

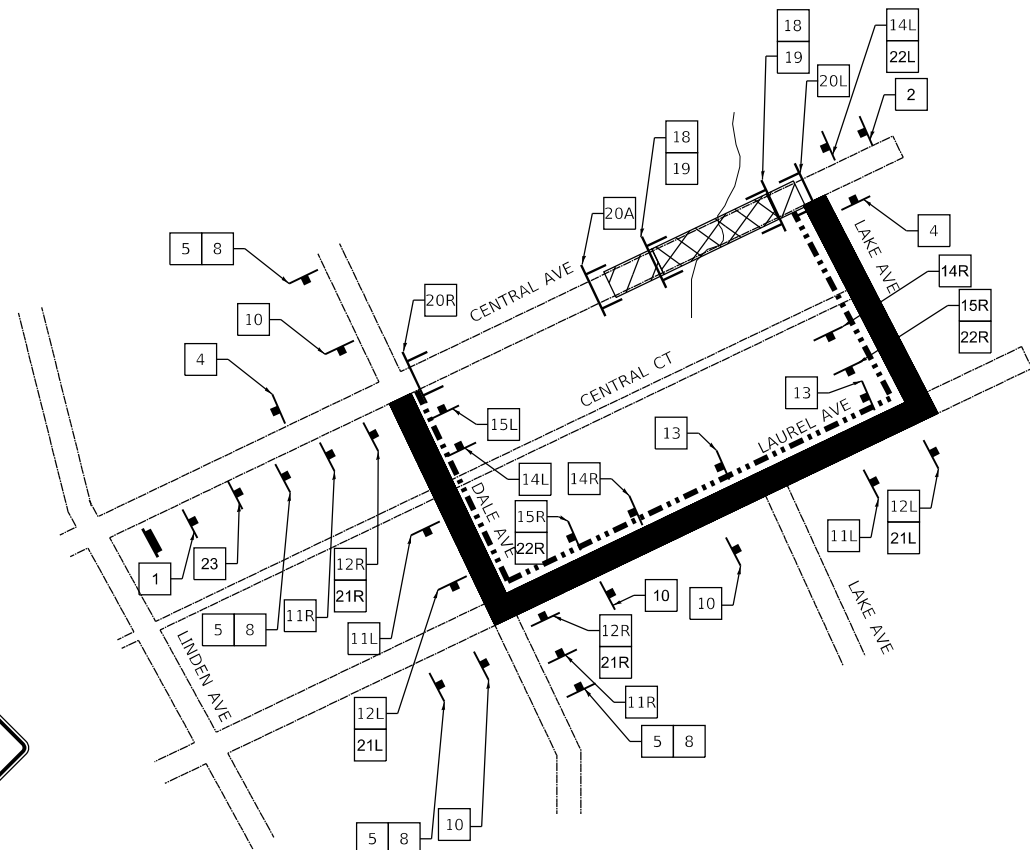
4

M4-8a-2418



NOTES:

- SIGN 1 WITH SIGN 3 COVERING SHALL BE PLACED ONE (1) WEEK PRIOR TO CLOSURE. REMOVE SIGN 3 ONCE DETOUR BEGINS.
- THE CONTRACTOR SHALL CALL J.U.L.I.E. BEFORE INSTALLING SIGNS.
- ROAD CLOSURE SIGNAGE SHALL NOT BE INSTALLED ON ANY STREET LIGHT POLES OR SIGNAL POLES.
- ROAD CLOSURE SIGNAGE SHALL NOT BLOCK ANY EXISTING SIGNS AND CANNOT USE THE EXISTING SIGN POSTS.
- TYPE III BARRICADE PLACEMENT SHALL FOLLOW HIGHWAY STANDARD 701901.
- SIGN SPACING SHALL FOLLOW DISTRICT 1 DETAIL TC-21 UNLESS NOTED ON PLAN.
- PLAN NOT TO SCALE.
- PEDESTRIAN DETOUR SIGNS SHALL BE MOUNTED ONE ON EACH SIDE OF A SUPPORT TO FACE THE DIRECTION OF ONCOMING PEDESTRIANS. SIGN SYMBOLS OMITTED IN PLAN VIEW FOR CLARITY.



**LEGEND:**

- PROPOSED VEHICLE DETOUR ROUTE
- PROPOSED PEDESTRIAN DETOUR ROUTE
- DETOUR SIGN POST-MOUNTED PER ARTICLE 701.14 AND HIGHWAY STANDARD 701901
- TYPE III BARRICADE WITH FLASHERS
- CHANGEABLE MESSAGE SIGN
- ROAD PARTIALLY CLOSED TO THRU TRAFFIC
- ROAD CLOSED TO ALL TRAFFIC



USER NAME = Roadway	DESIGNED - MLH	REVISED -
PLOT SCALE = 400,000' / in.	DRAWN - AMH	REVISED -
PLOT DATE = 8/23/2021	CHECKED - EPS	REVISED -
	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 DETOUR PLAN

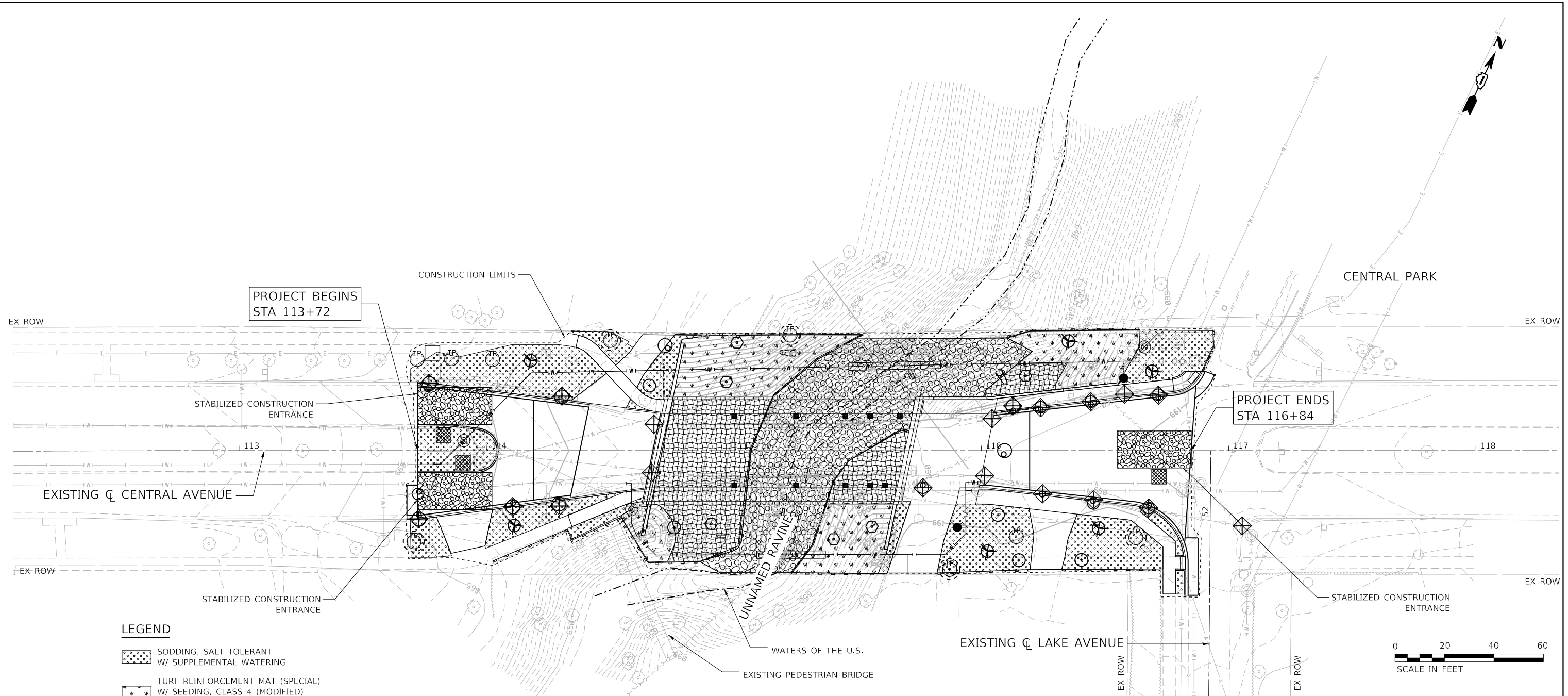
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MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 20
CONTRACT NO. 61H28				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO.	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
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	NOTE BOOK	
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	BY	
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**LEGEND**

- SODDING, SALT TOLERANT W/ SUPPLEMENTAL WATERING
- TURF REINFORCEMENT MAT (SPECIAL) W/ SEEDING, CLASS 4 (MODIFIED) AND SEEDING, CLASS 5 (MODIFIED)
- EROSION CONTROL BLANKET (SPECIAL) W/ SEEDING, CLASS 4 (MODIFIED) AND SEEDING, CLASS 5 (MODIFIED)
- INLET FILTER
- PERIMETER EROSION BARRIER
- CONCRETE WASHOUT BASIN
- TREE PROTECTION (PAID AS 20 LF OF TEMPORARY FENCE)
- TREE ROOT PRUNING AND PROTECTION
- TREE, ULMUS CARPINIFOLIA MORTON, (ACCOLADE ELM), 2" CALIPER, BALLED AND BURLAPPED
- TREE, OSTRYA VIRGINIANA, (IRONWOOD), 7' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED
- SHRUB, HAMAMELIS VERNALIS, (VERNAL WITCH HAZEL), 6' HEIGHT, BALLED AND BURLAPPED

**NOTES**

1. ALL TEMPORARY EROSION CONTROL BLANKET FOR THIS PROJECT SHALL BE ADJUSTED TO WILDLIFE SAFETY TYPE.
2. AREAS WITHIN THE RAVINE WILL BE PERMANENTLY STABILIZED WITH TURF REINFORCEMENT MAT, SPECIAL ON SLOPES 3:1 OR STEEPER, AND EROSION CONTROL BLANKET, SPECIAL ON SLOPES LESS STEEP THAN 3:1, WHERE NO RIPRAP IS INDICATED. THESE AREAS WILL BE TEMPORARILY STABILIZED WITH TEMPORARY EROSION CONTROL SEEDING AND TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET. ALL SODDED AREAS SHALL HAVE TOPSOIL FURNISH AND PLACE, 6" AND SUPPLEMENTAL WATERING.
3. ALL SEEDED AREAS SHALL HAVE TOPSOIL FURNISH AND PLACE, 6". SEE SHEET 3 FOR ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION NOTES.
4. TEMPORARY EROSION CONTROL SEEDING AND MULCH, METHOD 2 SHALL BE USED TO TEMPORARILY STABILIZE ANY DISTURBED AREAS THAT WILL BE PERMANENTLY STABILIZED WITH SODDING, WITH SLOPES LESS STEEP THAN 3:1, REMAINING IDLE IN EXCESS OF 7 DAYS.

**TYPICAL CONSTRUCTION SEQUENCING**

- 1.) INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
  - A.) SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
  - B.) SILT FENCE INSTALLATION
  - C.) CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
  - D.) STABILIZED CONSTRUCTION ENTRANCE
- 2.) TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB)
- 3.) STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE
- 4.) TEMPORARILY STABILIZE TOPSOIL STOCKPILES (SEED AND SILT FENCE AROUND TOE OF SLOPE)
- 5.) INSTALL STORM SEWER, SANITARY SEWER, WATER MAIN AND ASSOCIATED INLET & OUTLET PROTECTION
- 6.) TEMPORARILY STABILIZE ALL AREAS INCLUDING LOTS THAT HAVE REACHED TEMPORARY GRADE
- 7.) CONSTRUCT ROADWAY
- 8.) PLANT TREES
- 9.) PERMANENTLY STABILIZE ALL PERVIOUS AREAS
- 10.) REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

\* SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR EVERY TWO WEEKS AND AFTER EVERY 1/2 INCH OR GREATER RAINFALL EVENT



USER NAME = Roadway	DESIGNED - JG	REVISED -
	DRAWN - DDG	REVISED -
PLOT SCALE = 40,000' / in.	CHECKED - RD	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
EROSION CONTROL AND LANDSCAPING PLAN**

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 113+72 TO STA. 116+84

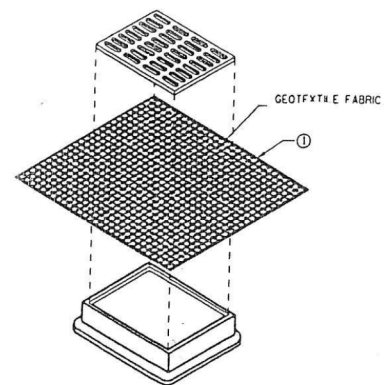
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	21
CONTRACT NO.			61H28	

ILLINOIS FED. AID PROJECT

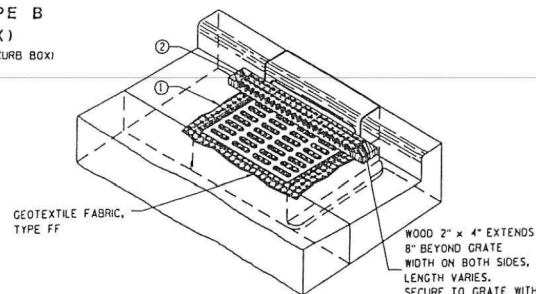
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REVISIONS	
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DATE	
BY	
REVISIONS	
NO.	

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**INLET PROTECTION, TYPE B  
(WITHOUT CURB BOX)**  
 (CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**INSTALLATION NOTES:**

1. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.
2. TYPE C SHALL BE UTILIZED WITH CURB HEADS, A 1 1/2" X 3 3/8" MINIMUM, PIECE OF LUMBER SHALL BE WRAPPED AND SECURED IN THE FABRIC AND PLACED IN FRONT OF THE CURB HEAD AS SHOWN ON THE PLAN. THE LUMBER SHALL NOT BLOCK THE ENTIRE OPENING OF THE CURB BOX AND BE SECURED TO THE GRATE WITH WIRE OR PLASTIC TIES.
3. ALL FABRICS USED AS PART OF AN INLET PROTECTION DEVICE MUST BE SELECTED FROM THE LIST OF APPROVED FABRICS CERTIFIED FOR INLET PROTECTION, GEO-TEXTILE FABRIC, IN ACCORDANCE WITH STATE STANDARD SPECS FOR ROAD AND BRIDGES CONSTRUCTION - JANUARY 1, 2012, ARTICLE 1080.05 ON PAGE 971.



City of Highland Park  
 Department of Public Works  
 1150 Half Day Rd, Highland Park, IL 60035

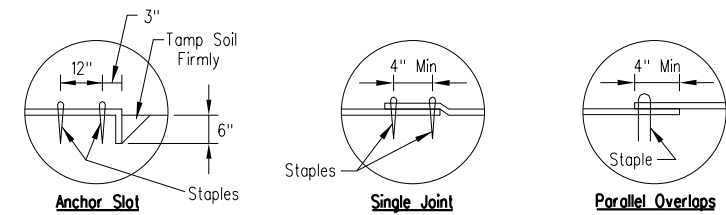
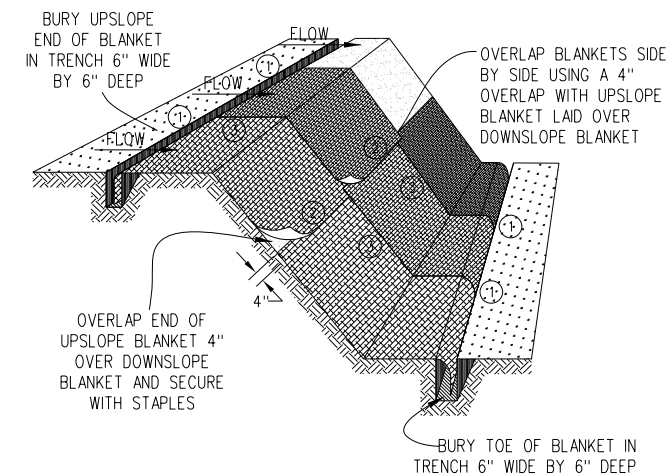
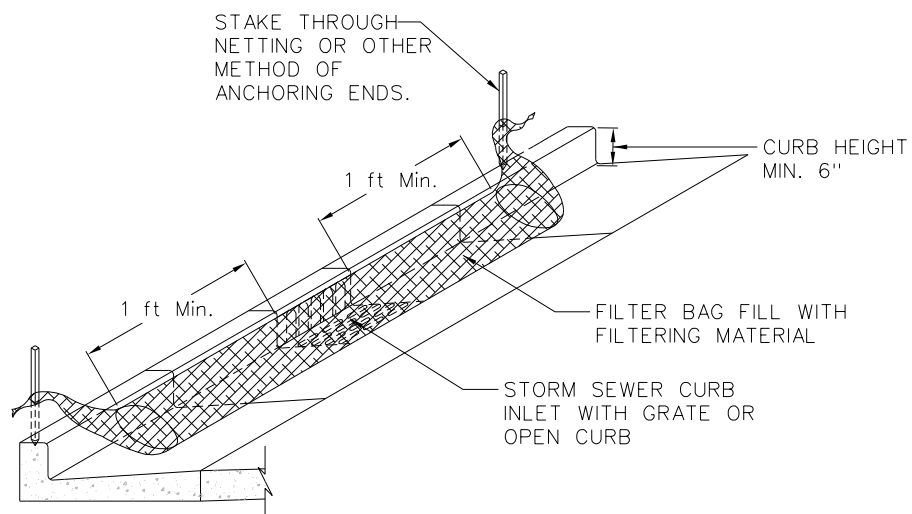
**INLET PROTECTION (TYPE B - W/O CURB  
BOX; TYPE C - W/ CURB BOX)**

H.P. DWG. No. STR-1037  
 Drawn By: M.B.  
 Revised By: E.J.



DATE: 27th Sept. 2013  
 Approved By: J.M.W.

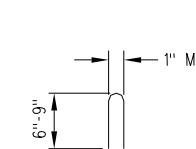
**INLET PROTECTION - IMPERVIOUS AREAS  
CURB PROTECTION**



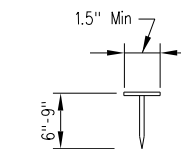
**DETAIL 1**

**DETAIL 2**

**DETAIL 3**



**STAPLE DETAIL**



**PUSH PIN DETAIL**

**NOTES:**

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stitched blankets. Non-stitched shall use 4 staples per s.y. of material. This equates to 200 staples with stitched blanket and 400 staples with non-stitched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
4. All anchor slots shall be stapled at approximately 12" intervals.

REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO.	IUM-561C
SHEET	1 OF 1
DATE	01-11-11

File No. IUM-530

**EROSION CONTROL  
BLANKET INSTALLATION DETAILS**

Designed	_____	Date	_____
Drawn By	JOHNSON	Date	11/08
Checked	_____	Date	_____
Approved	_____	Date	_____



USER NAME = Roadway  
 PLOT SCALE = 2.0000' / 1"  
 PLOT DATE = 8/23/2021

DESIGNED - JG  
 DRAWN - DDG  
 CHECKED - RD  
 DATE - 8/23/2021

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

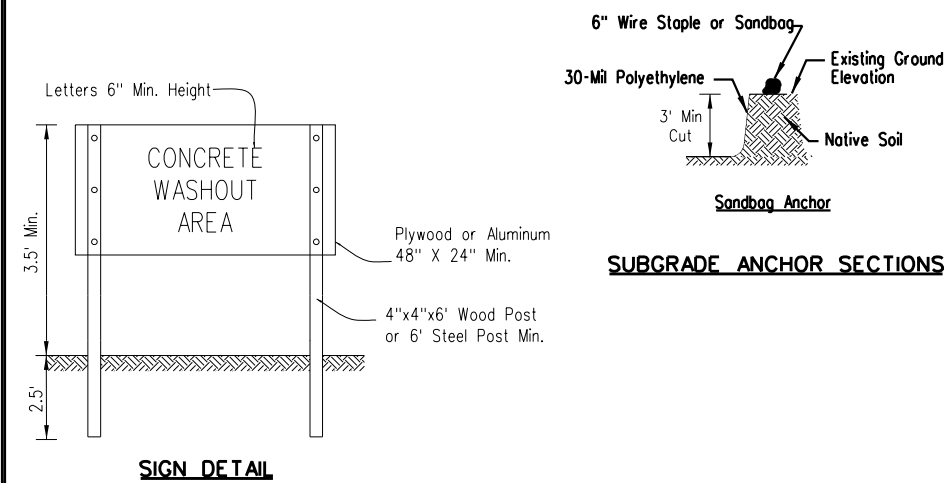
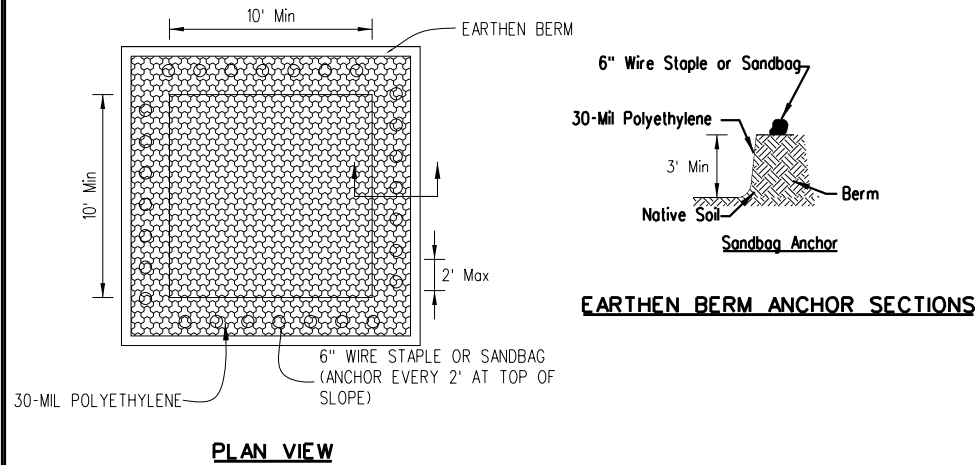
**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
EROSION CONTROL AND LANDSCAPING DETAILS**

SCALE: N.T.S. SHEET 1 OF 3 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	22
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

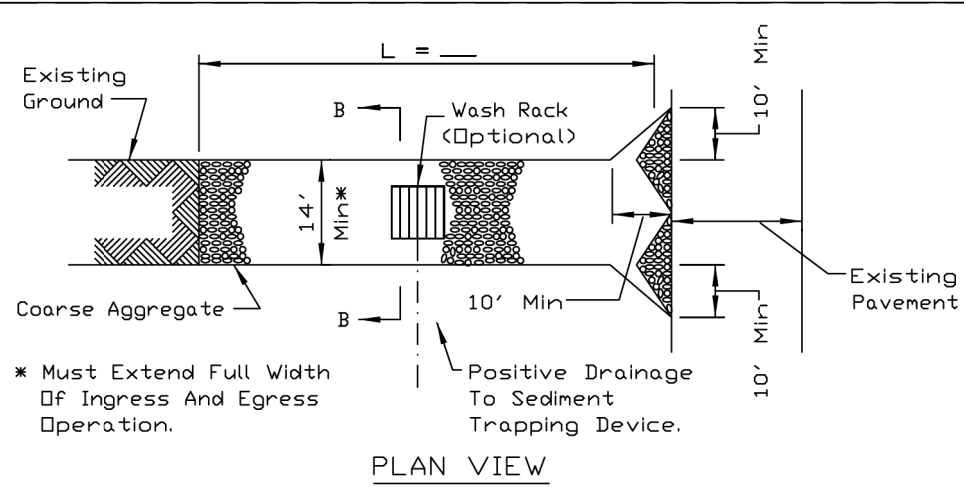
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BY	
REVISIONS	
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DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



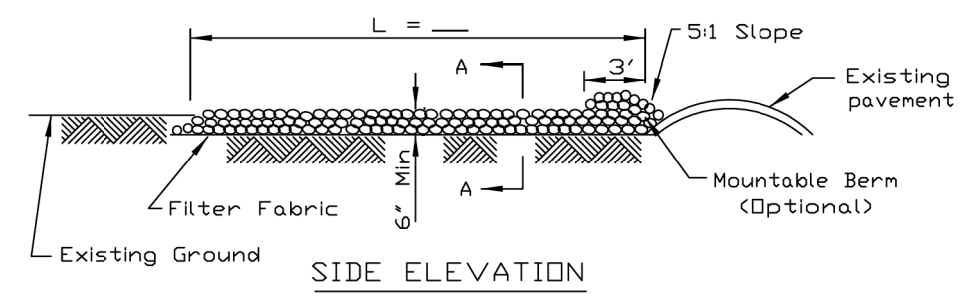
- NOTES:
- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
  - Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

DESIGNED	JG	DATE	
DRAWN	DDG	DATE	
CHECKED	RD	DATE	
APPROVED		DATE	

### STABILIZED CONSTRUCTION ENTRANCE PLAN



\* Must Extend Full Width Of Ingress And Egress Operation.



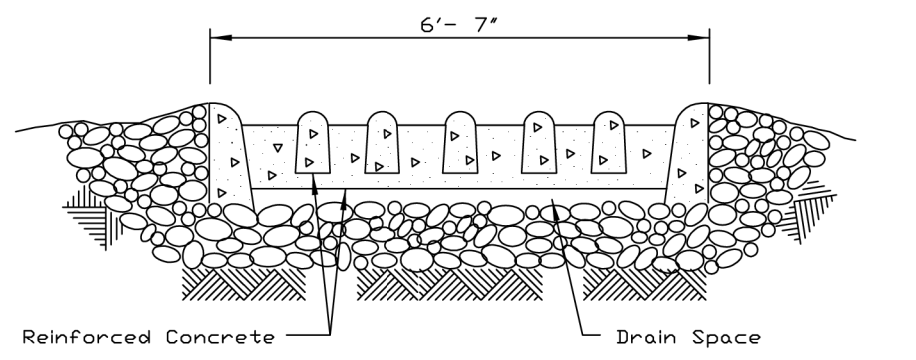
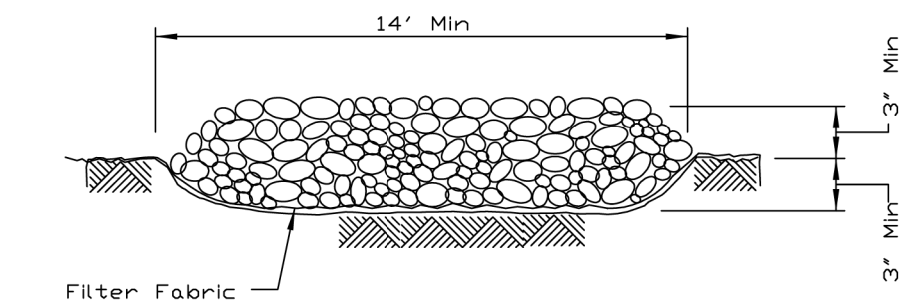
- NOTES:
- Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
  - Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
  - Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
  - If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO. IL-630  
SHEET 1 OF 2  
DATE 8-18-94

### STABILIZED CONSTRUCTION ENTRANCE PLAN



REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO. IL-630  
SHEET 2 OF 2  
DATE 8-18-94

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USER NAME	= Roadway	DESIGNED	- JG	REVISED	-
PLOT SCALE	= 2.0000' / 1"	DRAWN	- DDG	REVISED	-
PLOT DATE	= 8/23/2021	CHECKED	- RD	REVISED	-
		DATE	- 8/23/2021	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
EROSION CONTROL AND LANDSCAPING DETAILS

SCALE: N.T.S. SHEET 2 OF 3 SHEETS STA. TO STA.

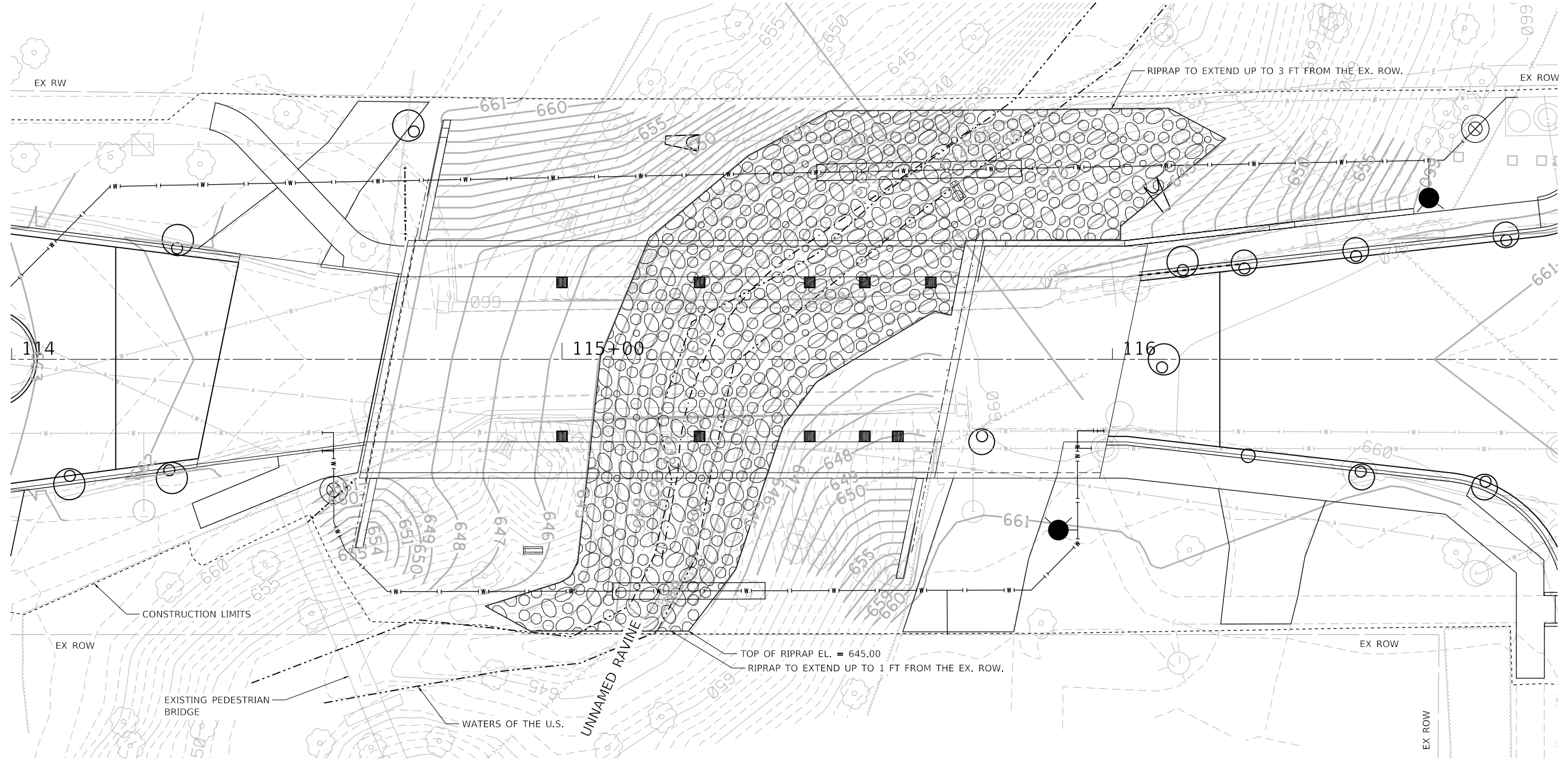
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3115	15-00123-00-BR	LAKE	84	23
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



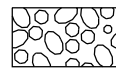


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	PLOTTED	
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



**LEGEND**



RIPRAP CLASS A3, W/ FILTER FABRIC  
(SEE STRUCTURAL SHEETS FOR QUANTITY)

---637--- EXISTING CONTOURS

—637— PROPOSED CONTOURS

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USER NAME = Roadway	DESIGNED - JG	REVISED -
	DRAWN - DDG	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - RD	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
RAVINE STABILIZATION PLAN**

SCALE: 1" = 10' SHEET 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	25
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
PROFILE	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	
NO.	

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EXISTING CROSSING UTILITY					PROPOSED SEWER				
ID	STATION	OFFSET	UTILITY	ASSUMED TP/BP	SIZE (IN.)	SIZE (IN.)	TP/BP	CLEARANCE (FT.)	
1	113+77	27.6 RT	WATER SERVICE	657.76 BP	2	12	656.43 TP	1.34	
2	114+24	22.7 RT	WATER SERVICE	656.21 BP	2	12	655.46 TP	0.75	
3	114+29	8.8 RT	EX. WATER MAIN	654.86 BP	12	18	653.68 TP	1.18	
4	114+29	13.4 RT	EX. WATER MAIN	654.70 BP	12	18	653.69 TP	1.01	
5	114+30	3.1 LT	EX. WATER MAIN	657.76 TP	20	18	653.64 TP	4.12	
6	114+11	24.4 LT	PR. WATER MAIN	655.35 TP	20	12	657.67 BP	2.32	

SEWER CROSSING TABLE									
EXISTING CROSSING UTILITY					PROPOSED SEWER				
ID	STATION	OFFSET	UTILITY	ASSUMED TP/BP	SIZE (IN.)	SIZE (IN.)	TP/BP	CLEARANCE (FT.)	
7	114+50	32.0 LT	PR. WATER MAIN	653.55 BP	20	18	653.05 TP	0.50	
8	114+63	38.4 LT	ELECTRIC	656.76 BP	2	18	653.49 TP	4.64	
9	115+22	39.7 LT	ELECTRIC	647.00 TP	2	18	649.81 BP	2.81	
10	116+52	20.5 LT	EX. SANITARY	641.48 TP	8	12	653.75 BP	12.28	
11	116+33	13.1 RT	EX. WATER MAIN	654.76 BP	12	18	652.65 TP	2.10	
12	116+39	16.3 RT	EX. WATER MAIN	654.61 BP	12	18	652.68 TP	1.92	

**LEGEND**

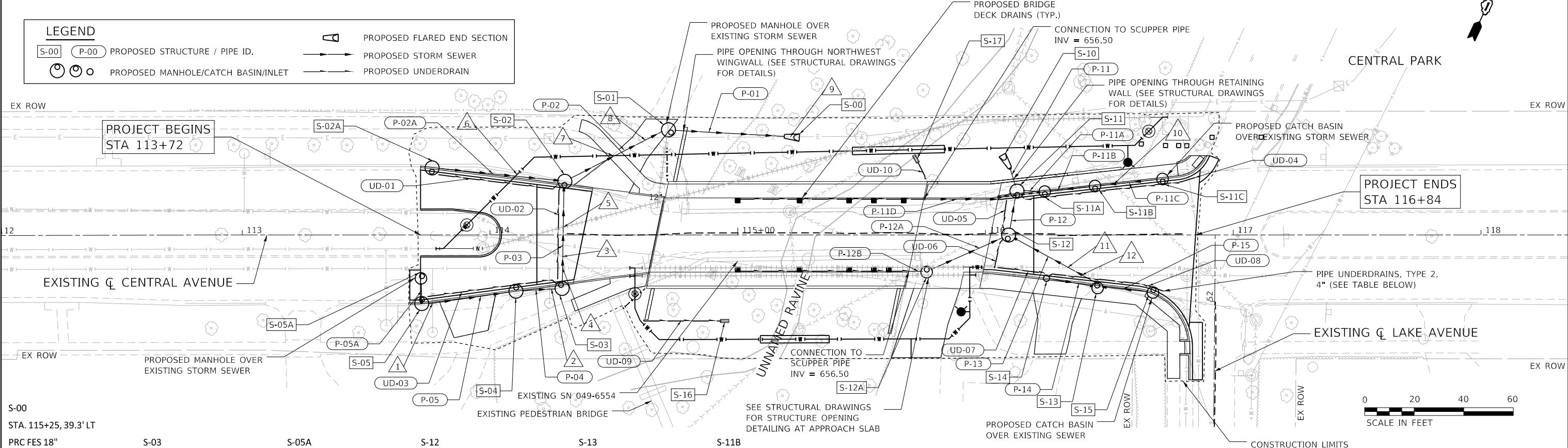
S-00 (P-00) PROPOSED STRUCTURE / PIPE ID.

○ ○ ○ PROPOSED MANHOLE/CATCH BASIN/INLET

▶ PROPOSED FLARED END SECTION

→ PROPOSED STORM SEWER

→ PROPOSED UNDERDRAIN



S-00	STA. 115+25, 39.3' LT	PRC FES 18"	INV. = 650.00 (W)
S-01	STA. 114+72, 42.5' LT	MH TY A, 5' DIA., TY 1 FR & CL	RIM = 660.20 INV = 657.37 (N-EX.) INV = 651.27 (SW,E)
S-02	STA. 114+30, 19.0' LT	CB TY A, 5' DIA., TY 15 FR & CL	RIM = 661.82 INV = 651.88 (S) INV = 651.40 (NE) INV = 657.76 (W)
S-02A	STA. 113+77, 25.7' LT	CB TY A, 4' DIA., TY 24 FR & GR	RIM = 663.90 INV = 658.00 (E)
S-03	STA. 114+28, 18.7' RT	CB TY A, 5' DIA., TY 15 FR & CL	RIM = 661.87 INV = 654.29 (W) INV = 652.00 (N)
S-04	STA. 114+10, 21.2' RT	CB TY A, 4' DIA., TY 24 FR & GR	RIM = 662.47 INV = 655.10 (W) INV = 654.35 (E)
S-05	STA. 113+72, 26.2' RT	CB TY A, 4' DIA., TY 24 FR & GR	RIM = 664.04 INV = 655.27 (N,E)
S-05A	STA. 113+72, 17.5' RT	MH TY A, 4' DIA., TY 1 FR & CL	RIM = 664.05 INV = 657.35 (W-EX.) INV = 655.32 (S)
S-10	STA. 116+06, 32.3' LT	PRC FES 18"	INV. = 644.00 (SE)
S-11	STA. 116+13, 15.2' LT	MH TY A, 5' DIA., TY 15 FR & CL	RIM = 660.25 INV = 653.77 (E) INV = 650.75 (S) INV = 656.32 (W) INV = 646.00 (N) 2' SUMP
S-12	STA. 116+09, CL	CB TY A, 5' DIA., TY 1 FR & CL	RIM = 660.43 INV = 654.83 (SW) INV = 650.82 (N, SE)
S-13	STA. 116+46, 18.8' RT	CB TY A, 4' DIA., TY 15 CL	RIM = 660.57 INV = 653.91 (E) INV = 651.01 (NW) INV = 656.82 (W)
S-14	STA. 116+25, 16.5' RT	IN TY A, TY 23 FR & GR	RIM = 660.36 INV = 656.90 (E)
S-15	STA. 116+68, 22.3' RT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.78 INV = 655.39 (E-EX.) INV = 654.01 (W)
S-16	STA. 114+96, 34.7' RT	STA. 114+96, 34.7' RT	CONC. HEADWALL FOR PIPE DRAINS INV = 646.50 (W)
S-17	STA. 115+71, 32.2' LT	CONC. HEADWALL FOR PIPE DRAINS	INV = 638.50 (SE)
S-11B	STA. 116+44, 18.6' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.83 INV = 655.78 (E-EX.) INV = 654.01 (W)
S-11C	STA. 116+72, 21.6' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.83 INV = 655.78 (E-EX.) INV = 654.01 (W)
S-12A	STA. 115+76, 15.0' RT (S/O AT F.O.C)	CB TY A, 4' DIA., TY 24 FR & GR	RIM = 659.90 INV = 656.44 (W) INV = 655.00 (NE)
S-12B	STA. 116+24, 16.4' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.35 INV = 653.80 (W,E)
S-11A	STA. 116+72, 21.6' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.83 INV = 655.78 (E-EX.) INV = 654.01 (W)
S-11B	STA. 116+44, 18.6' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.83 INV = 655.78 (E-EX.) INV = 654.01 (W)
S-11C	STA. 116+72, 21.6' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.83 INV = 655.78 (E-EX.) INV = 654.01 (W)
S-12A	STA. 115+76, 15.0' RT (S/O AT F.O.C)	CB TY A, 4' DIA., TY 24 FR & GR	RIM = 659.90 INV = 656.44 (W) INV = 655.00 (NE)
S-12B	STA. 116+24, 16.4' LT	CB TY A, 4' DIA., TY 3V FR & GR	RIM = 660.35 INV = 653.80 (W,E)
P-01	45 LF - 18" RCP TY 2 @ 2.82%	TBF = 0 CY	
P-02	42 LF - 18" WMQP TY 2 @ 0.30%	TBF = 58 CY	
P-02A	49 LF - 12" WMQP TY 2 @ 0.50%	TBF = 16 CY	
P-03	40 LF - 18" WMQP TY 2 @ 0.30%	TBF = 56 CY	
P-04	14 LF - 12" WMQP TY 2 @ 0.50%	TBF = 13 CY	
P-05	34 LF - 12" WMQP TY 2 @ 0.50%	TBF = 36 CY	
P-05A	9 LF - 12" WMQP TY 2 @ 0.50%	TBF = 10 CY	
P-11	7 LF - 18" WMQP TY 2 @ 28.57%	TBF = 0 CY	
P-12	14 LF - 18" RCP TY 2 @ 0.50%	TBF = 19 CY	
P-12A	32 LF - 12" WMQP TY 2 @ 0.50%	TBF = 9 CY	
P-13	38 LF - 18" WMQP TY 2 @ 0.50%	TBF = 51 CY	
P-14	17 LF - 12" WMQP TY 2 @ 0.50%	TBF = 3 CY	
P-15	19 LF - 12" RCP TY 2 @ 0.50%	TBF = 14 CY	
P-11A	7 LF - 12" RCP TY 2 @ 0.50%	TBF = 5 CY	
P-11B	17 LF - 12" RCP TY 2 @ 0.50%	TBF = 13 CY	
P-11C	24 LF - 12" RCP TY 2 @ 0.50%	TBF = 21 CY	
P-11D	37 LF - 10" RCP TY 2 @ 0.50%	TBF = 7 CY	
P-12B	6 LF - 10" RCP TY 2 @ 1.00%	TBF = 1 CY	

UNDERDRAIN TABLE	
ID NO.	LENGTH (LF)
UD-01	51
UD-02	39
UD-03	55
UD-04	72
UD-05	13
UD-06	13
UD-07	21
UD-08	48
TOTAL	312
PIPE UNDERDRAINS, 4" (SPECIAL) (60108100)	
UD-09	32
UD-10	8
TOTAL	40

NOTE: ONE UNDERDRAIN CONNECTION TO STRUCTURE SHALL BE INSTALLED PER UNDERDRAIN LENGTH SHOWN FOR PAY ITEM 60108204.



USER NAME = Roadway	DESIGNED - JG	REVISED -
	DRAWN - DGG	REVISED -
PLOT SCALE = 40,000' / in.	CHECKED - RD	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
PROPOSED DRAINAGE PLAN

SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 113+72 TO STA. 116+84

MUN RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 26
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

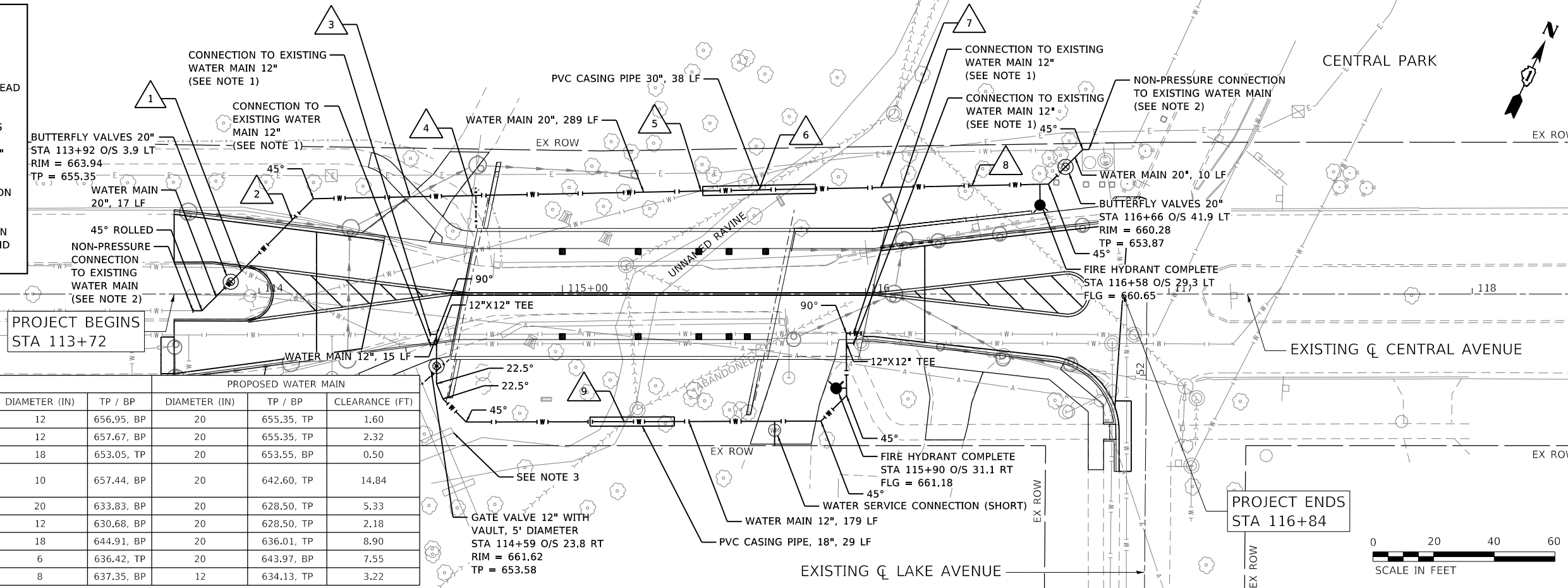
**SHEET NOTES:**

1. CONNECTIONS SHALL BE FULLY EXPOSED AND FINAL FITTINGS FOR HORIZONTAL AND VERTICAL ALIGNMENTS SHALL BE CONFIRMED. ALL MATERIALS FOR THE CONNECTION SHALL BE SUPPLIED ON-SITE 24 HOURS AHEAD OF SCHEDULED SHUTDOWN.
2. THE EXISTING WATER MAIN WHERE THESE CONNECTIONS WILL BE MADE ARE CONCRETE PRESSURE PIPE. \*NON-PRESSURE CONNECTION TO EXISTING WATER MAIN\* SHALL INCLUDE A TRANSITION FITTING DESIGNED SPECIFICALLY FOR PROVIDING A RESTRAINED JOINT COUPLING OF CONCRETE PRESSURE PIPE TO DUCTILE IRON PIPE OF THE CLASS SPECIFIED.
3. CONTRACTOR SHALL STAGE EQUIPMENT AND EXCAVATION TO AVOID DAMAGE TO EXISTING PEDESTRIAN BRIDGE AND BRIDGE FOOTINGS.

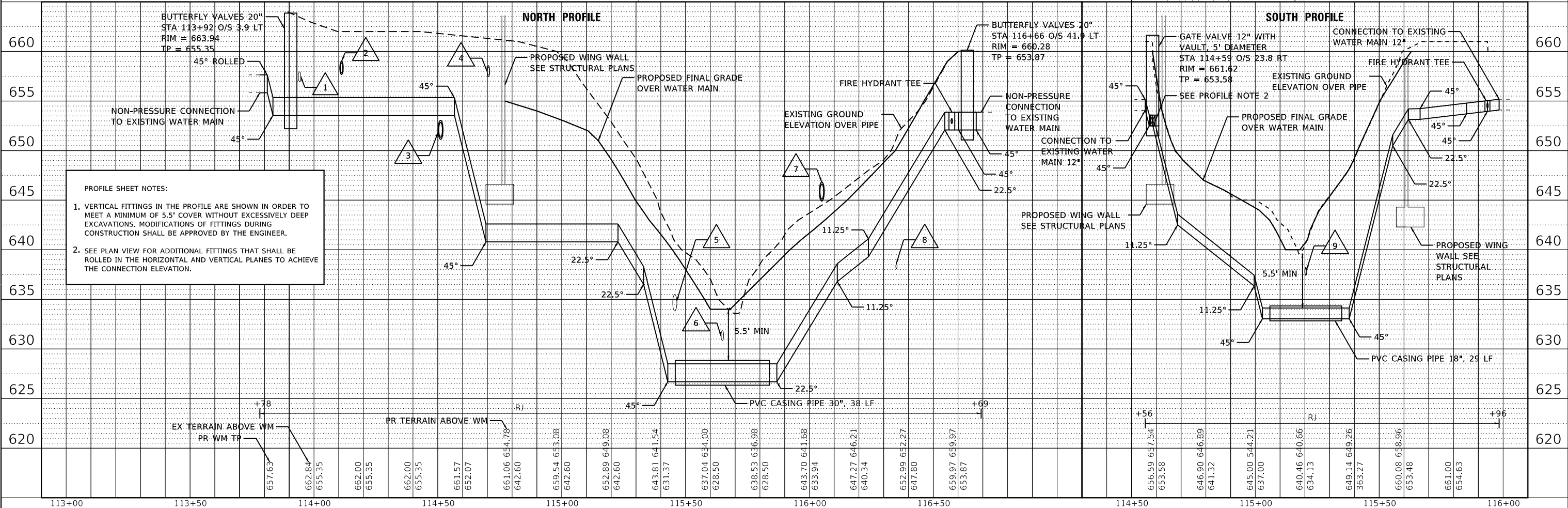
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BY	
REVISION	
NO.	
DESCRIPTION	

DATE	
BY	
REVISION	
NO.	
DESCRIPTION	

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CROSSING	STATION	UTILITY	CROSSED UTILITY			PROPOSED WATER MAIN		
			DIAMETER (IN)	TP / BP	CLEARANCE (FT)	DIAMETER (IN)	TP / BP	CLEARANCE (FT)
1	113+94	EX WATER MAIN	12	656.95, BP	1.60	20	655.35, TP	1.60
2	114+11	PR STORM SEWER, WMQP	12	657.67, BP	2.32	20	655.35, TP	2.32
3	114+50	PR STORM SEWER, WMQP	18	653.05, TP	0.50	20	653.55, BP	0.50
4	114+71	EX STORM SEWER, TO BE ABANDONED	10	657.44, BP	14.84	20	642.60, TP	14.84
5	115+46	EX WATER MAIN	20	633.83, BP	5.33	20	628.50, TP	5.33
6	115+65	EX SANITARY SEWER	12	630.68, BP	2.18	20	628.50, TP	2.18
7	116+05	PR STORM SEWER, WMQP	18	644.91, BP	8.90	20	636.01, TP	8.90
8	116+35	EX SANITARY SEWER	6	636.42, TP	7.55	20	643.97, BP	7.55
9	115+20	EX SANITARY SEWER	8	637.35, BP	3.22	12	634.13, TP	3.22



**PROFILE SHEET NOTES:**

1. VERTICAL FITTINGS IN THE PROFILE ARE SHOWN IN ORDER TO MEET A MINIMUM OF 5.5' COVER WITHOUT EXCESSIVELY DEEP EXCAVATIONS. MODIFICATIONS OF FITTINGS DURING CONSTRUCTION SHALL BE APPROVED BY THE ENGINEER.
2. SEE PLAN VIEW FOR ADDITIONAL FITTINGS THAT SHALL BE ROLLED IN THE HORIZONTAL AND VERTICAL PLANES TO ACHIEVE THE CONNECTION ELEVATION.

113+00	113+50	114+00	114+50	115+00	115+50	116+00	116+50	117+00	117+50	118+00
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USER NAME = Roadway	DESIGNED - LAM	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - CLB	REVISED -
PLOT DATE = 8/23/2021	CHECKED - LAM	REVISED -
	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 PROPOSED WATER MAIN PLAN AND PROFILE**

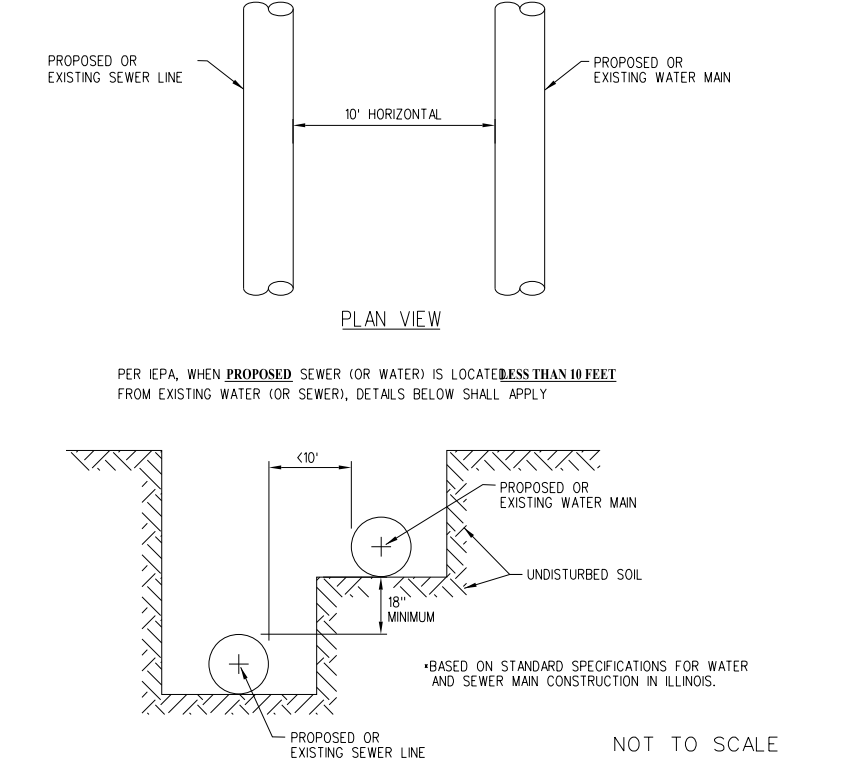
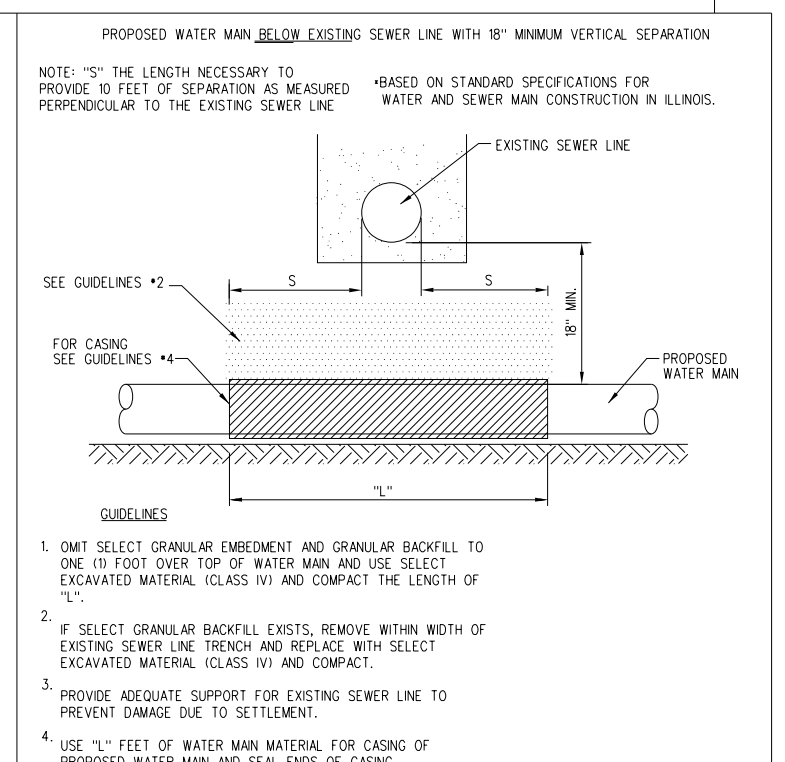
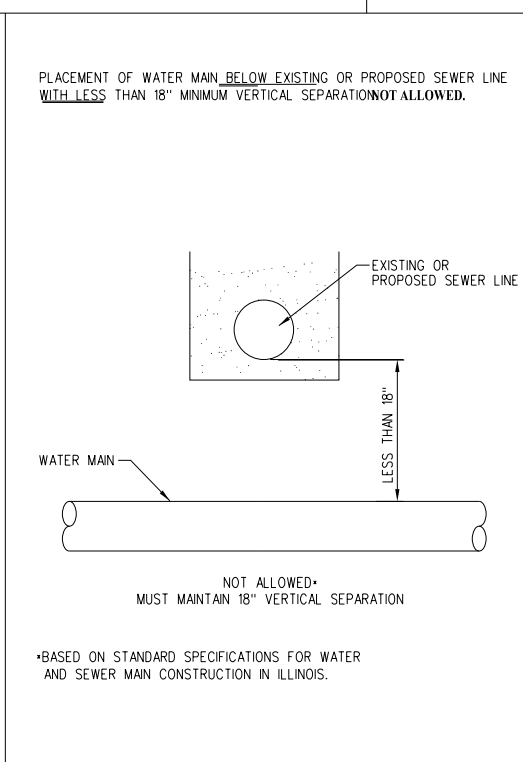
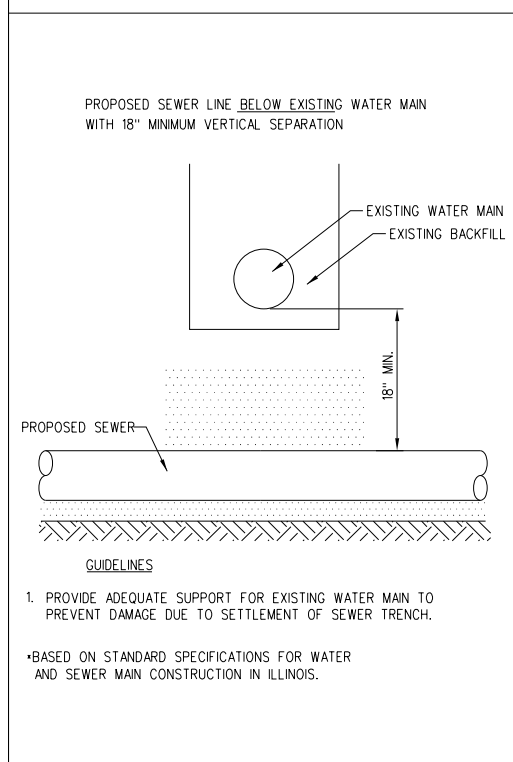
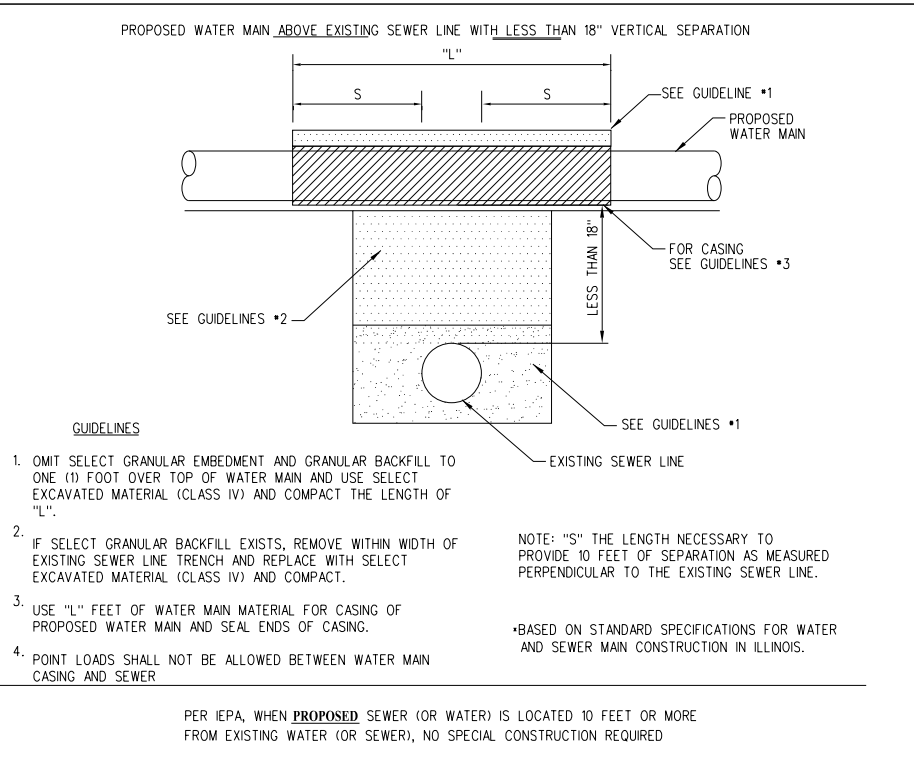
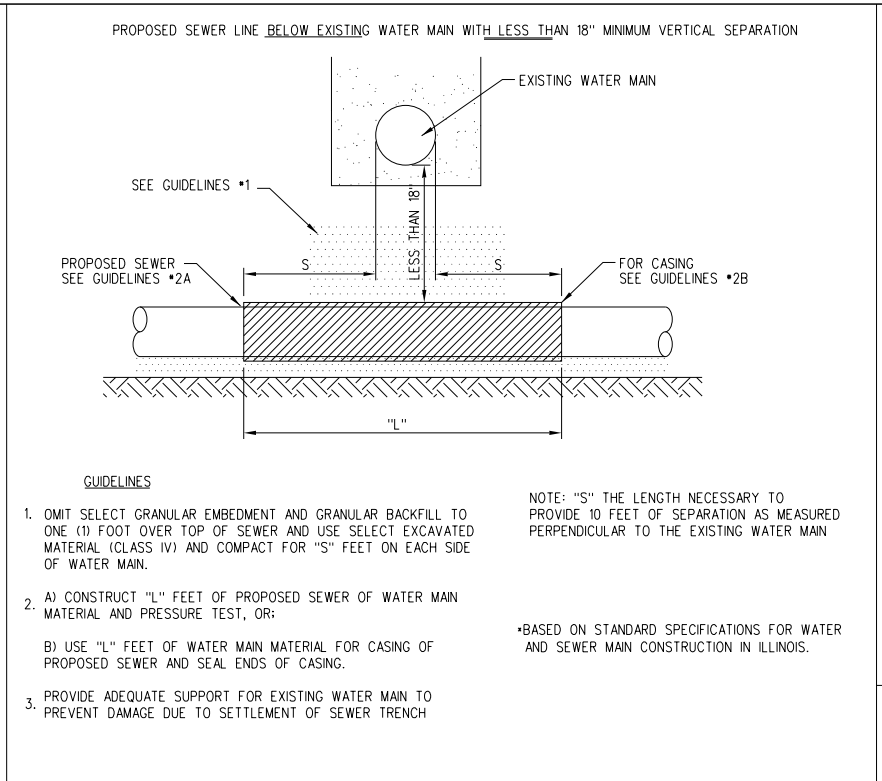
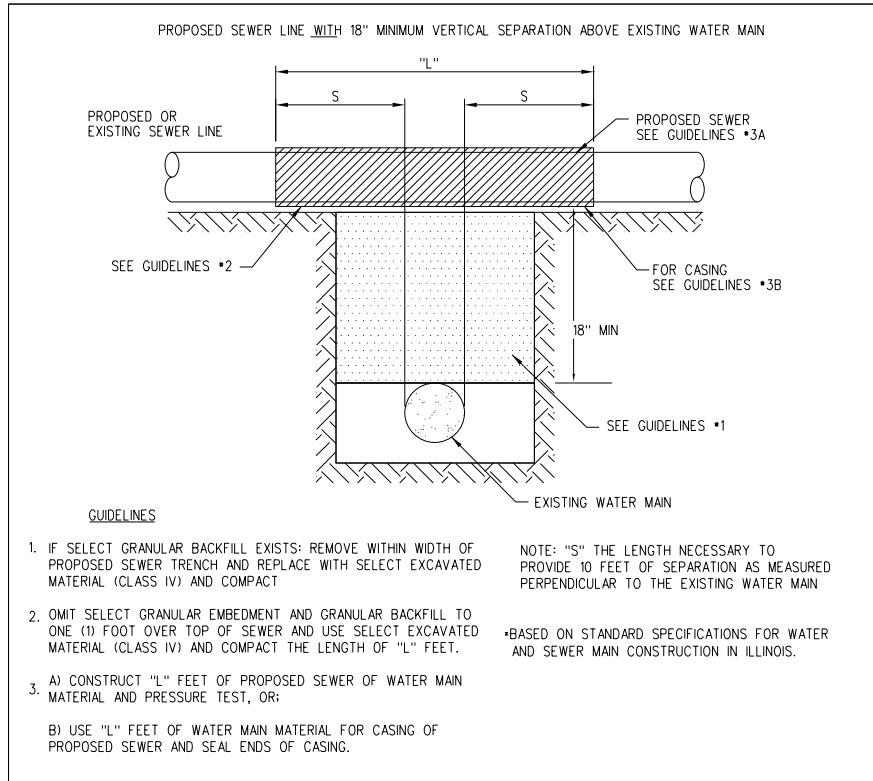
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	27
CONTRACT NO. 61H28				



DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	

DATE	
BY	
REVIEWED	
PLANNED	
NOTED	
NO.	



TECHNICAL GUIDANCE MANUAL

WATER AND SEWER SEPARATION REQUIREMENTS (PER IEPA)

7/1/15

STD. DWG. NO. 41

PAGE NO. 42

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	DRAWN - DDG	REVISED -
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PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 WATER AND SEWER DETAILS

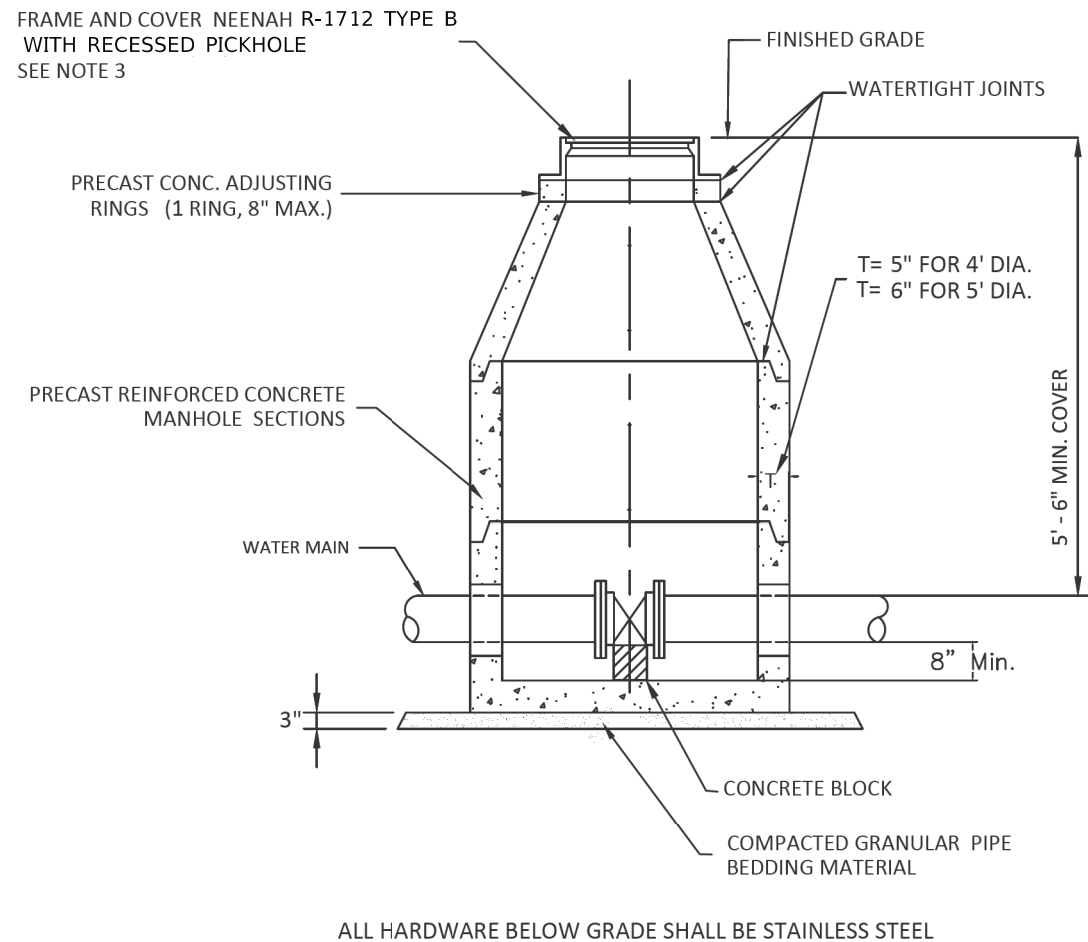
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MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	29
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
REVISIONS	
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DATE	
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REVISIONS	
NO.	

- NOTES:  
 1. CONCENTRIC CONE REQUIRED  
 2. USE: 4'-0" DIAMETER FOR WATER VALVE SIZES 8" AND SMALLER, 5'-0" DIAMETER OR LARGER FOR SIZES LARGER THAN 8"  
 3. FOR CLOSED LIDS USE ITEM: HIGHLAND PARK FRAME LID (SPECIAL)



**WATER VALVE VAULT  
DETAIL**

City of Highland Park  
 Department of Public Works  
 1150 Half Day Rd, Highland Park, IL 60035

H.P. DWG. No. WD-1002  
 Drawn By: M.B.  
 Revised By: JP3

DATE: 26th March 2019  
 Approved By: *Amal Bony*



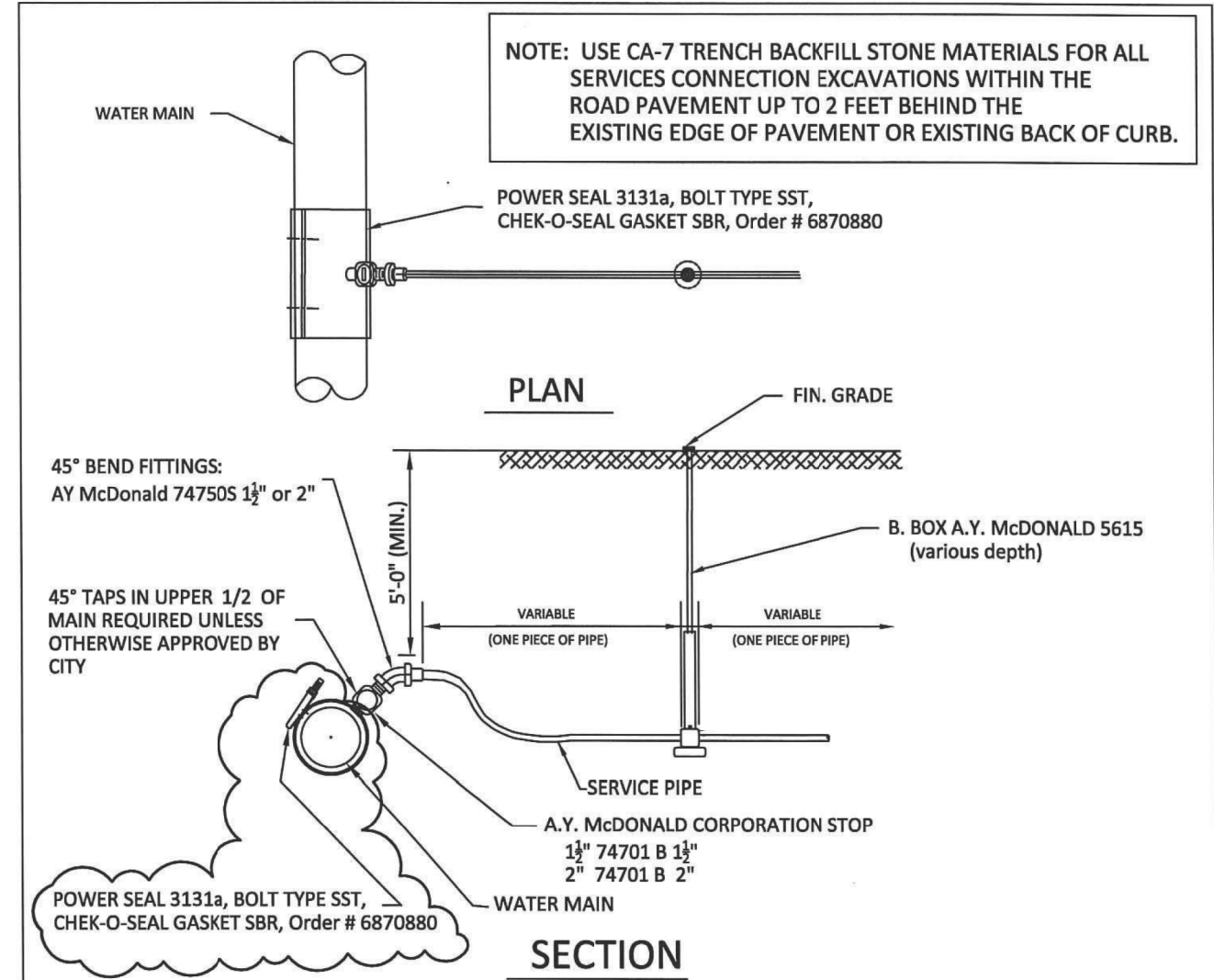
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	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 WATER AND SEWER DETAILS

SCALE: N.T.S. SHEET 3 OF 5 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	30
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



NOTE: USE CA-7 TRENCH BACKFILL STONE MATERIALS FOR ALL SERVICES CONNECTION EXCAVATIONS WITHIN THE ROAD PAVEMENT UP TO 2 FEET BEHIND THE EXISTING EDGE OF PAVEMENT OR EXISTING BACK OF CURB.

SERVICE PIPE	CORP. STOP
3/4"	3/4"
1"	1"
1 1/2"	1 1/2"
2"	1 1/2" X 2"

- NOTE:  
 1. NO WATER MAIN TAP FOR NEW DEVELOPMENT UNTIL PERMITS ARE ISSUED.  
 2. ALL MATERIALS SHALL BE LEAD FREE.



City of Highland Park  
 Department of Public Works  
 1150 Half Day Rd, Highland Park, IL 60035

**WATER SERVICE  
DETAIL**

H.P. DWG. No. WD-1007  
 Drawn By: M.B.  
 Revised By: E.J.



DATE: 20th Mar, 2017  
 Approved By: *E. Gomez*

DATE	
BY	
PLAN	
NO.	
NOTE BOOK	
NO.	
DATE	
BY	
PROFILE	
NO.	
NOTE BOOK	
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DATE	
BY	

DATE	
BY	
PROFILE	
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BY	

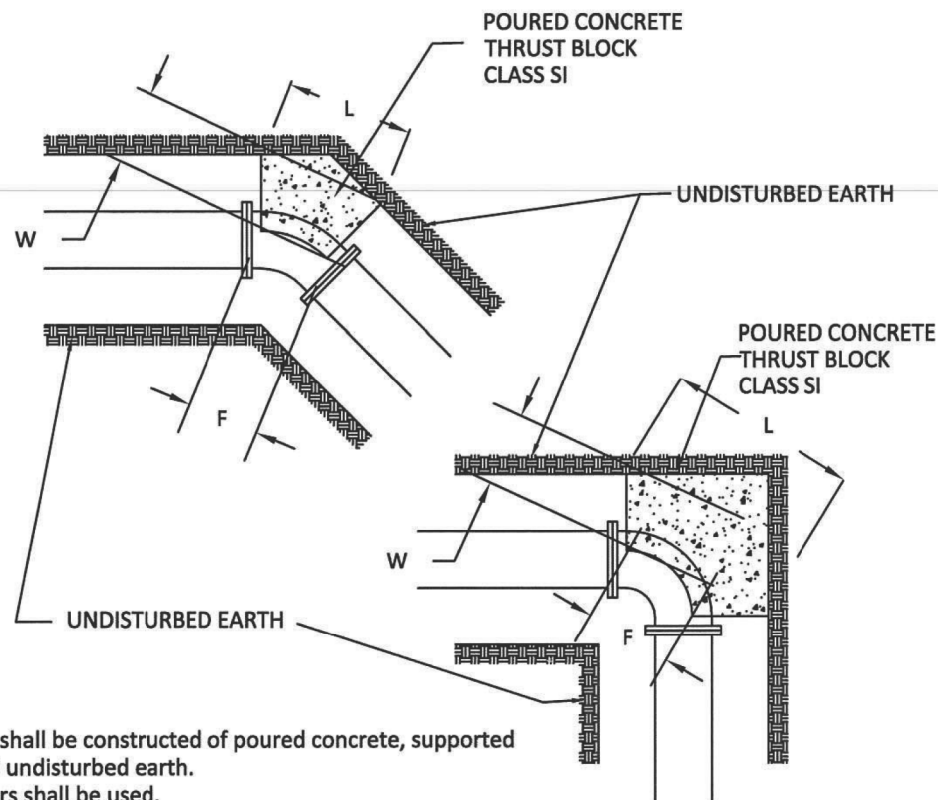
THRUST BLOCK SCHEDULE:

All Thrust Blocking Incidental to Water Main Construction.

Thrust Blocking for all fittings under 10 inches shall have a minimum dimension of 1'x1' at the point of contact with undisturbed earth.

Plugged Ends shall be thrust blocked the same as Tee.

Tabulated Thrust Blocking is figured on Allowable Bearing Pressure of Soil at 4,000 PSF. If Allowable Bearing Pressure of Soil is 2,000 PSF, the tabulated bearing area of contact to the undisturbed earth shall be doubled.



Notes:

- 1. All Thrust Blocking shall be constructed of poured concrete, supported with wood forms and undisturbed earth.
- 2. MEGA-LUG retainers shall be used.
- 3. All nuts, bolts and washers shall be STAINLESS STEEL.

SHEET 1 OF 2



City of Highland Park  
Department of Public Works  
1150 Half Day Rd, Highland Park, IL 60035

THRUST BLOCK  
DETAIL

H.P. DWG. No. WD-1008 SHEET 1 OF 2  
Drawn By: M.B.  
Revised By: E.J.

DATE: 27th Sept. 2013  
Approved By: J.M.W.



29 - 1

29 (1/2)

THRUST BLOCK SCHEDULE:

FITTINGS	DIMENSIONS (FT.)			
	H	L	W	F
TEE: 16" X 16" X 16"	2.5'	3.0'	2.0'	2.0'
16" - 90°	3.0'	3.5'	2.0'	2.0'
16" - 45°	3.0'	2.0'	2.0'	2.0'
16" - 22 1/2"	2.0'	2.0'	1.5'	1.0'
TEE: 14" X 14" X 10"	2.0'	2.5'	1.5'	2.0'
14" - 90°	2.5'	3.0'	1.5'	2.0'
14" - 45°	2.0'	2.5'	1.5'	1.5'
TEE: 12" X 12" X 12"	2.0'	2.5'	1.5'	2.0'
TEE: 12" X 12" X 8"	1.5'	2.0'	1.5'	1.5'
TEE: 12" X 12" X 6"	1.0'	1.5'	1.5'	1.0'
12" - 90°	2.0'	3.0'	1.5'	2.0'
12" - 45°	1.5'	2.0'	1.5'	1.0'
12" - 22 1/2"	1.0'	1.5'	1.5'	1.0'
TEE: 10" X 10" X 10"	1.5'	2.0'	1.5'	1.5'
10" - 90°	2.0'	3.0'	1.5'	1.5'
10" - 45°	1.5'	1.5'	1.5'	1.0'

THRUST BLOCK LEGEND:

H	THICKNESS
L	LENGTH FROM UNEXCAVATED SOIL
W	SPACE BETWEEN FITTINGS AND SOIL
F	WIDTH AT FITTINGS

SHEET 2 OF 2



City of Highland Park  
Department of Public Works  
1150 Half Day Rd, Highland Park, IL 60035

THRUST BLOCK  
DETAIL

H.P. DWG. No. WD-1008 SHEET 2 OF 2  
Drawn By: M.B.  
Revised By: E.J.

DATE: 27th Sept. 2013  
Approved By: J.M.W.



29 - 2

29 (1/2)

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
WATER AND SEWER DETAILS

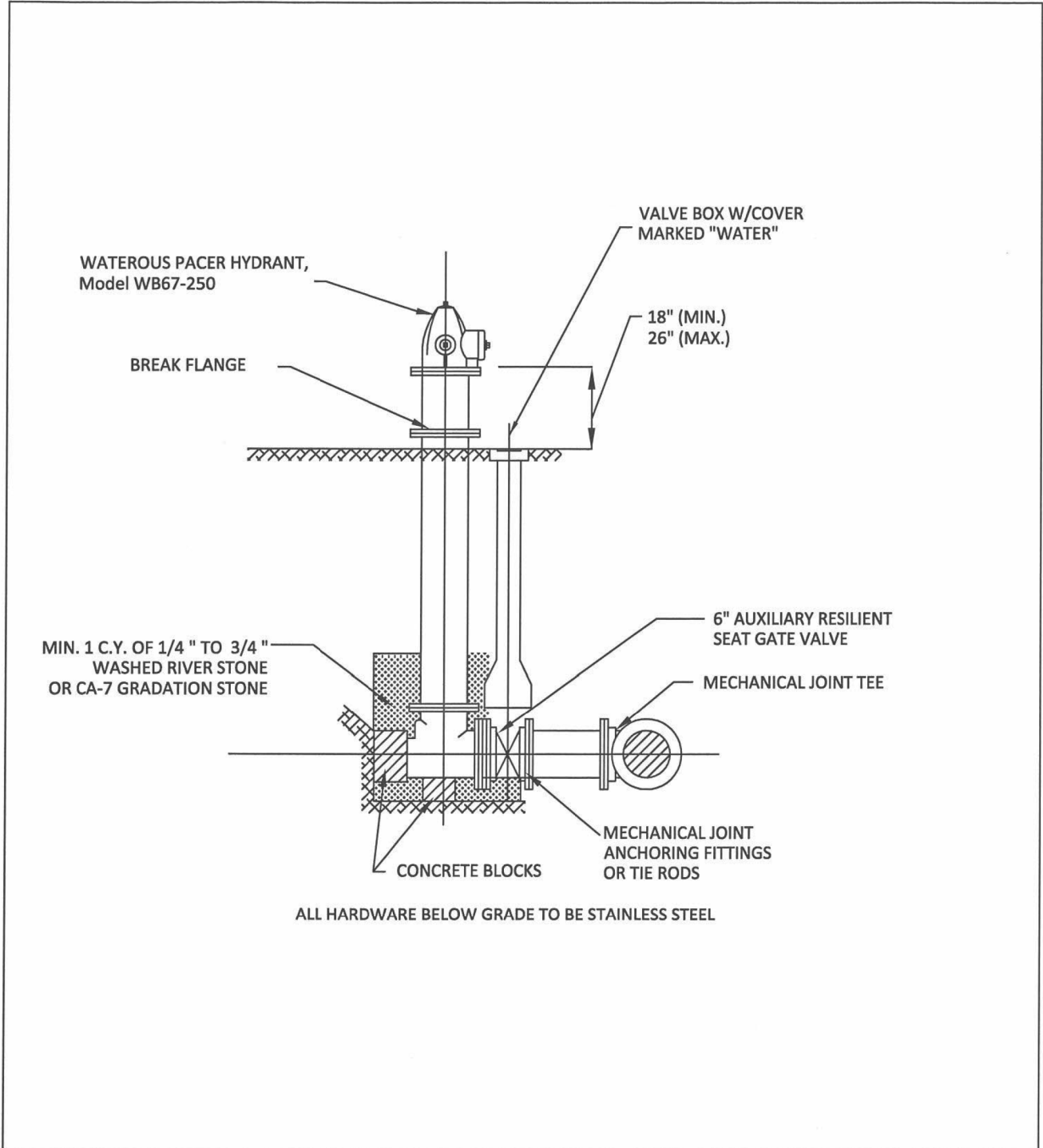
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MUN RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

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MIN. 1 C.Y. OF 1/4" TO 3/4" WASHED RIVER STONE OR CA-7 GRADATION STONE

ALL HARDWARE BELOW GRADE TO BE STAINLESS STEEL



## FIRE HYDRANT INSTALLATION DETAIL



City of Highland Park  
 Department of Public Works  
 1150 Half Day Rd, Highland Park, IL 60035

H.P. DWG. No. WD-1006  
 Drawn By: M.B.  
 Revised By: E.J.

DATE: 28th Feb. 2014  
 Approved By: J.M.W.



USER NAME = Roadway	DESIGNED - LAM	REVISED -
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	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT	
WATER AND SEWER DETAILS	
SCALE: N.T.S.	SHEET 5 OF 5 SHEETS STA. TO STA.

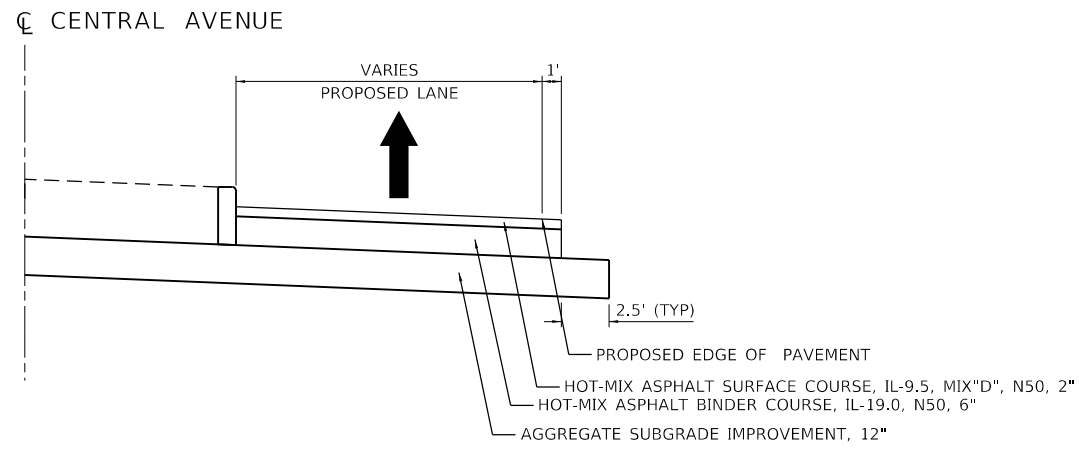
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3115	15-00123-00-BR	LAKE	84	32
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



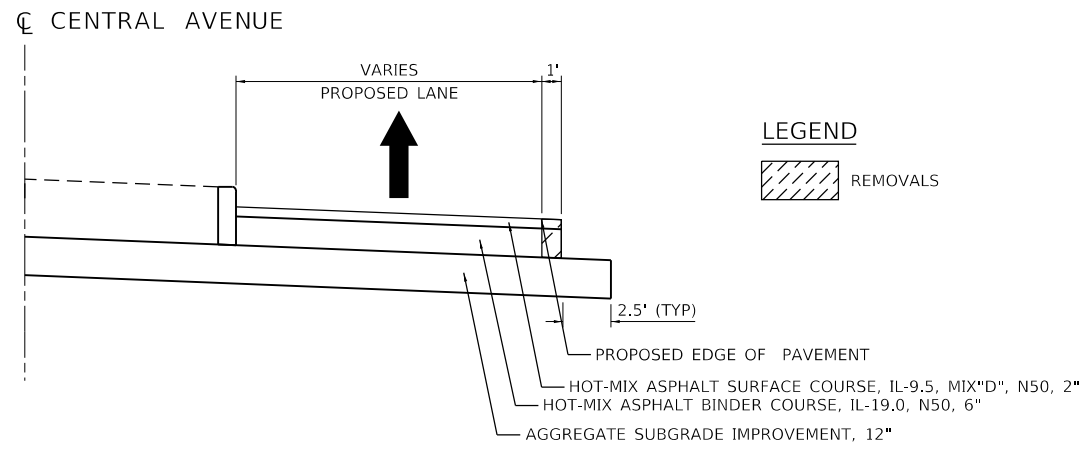
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	BY	

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	PLOTTED	
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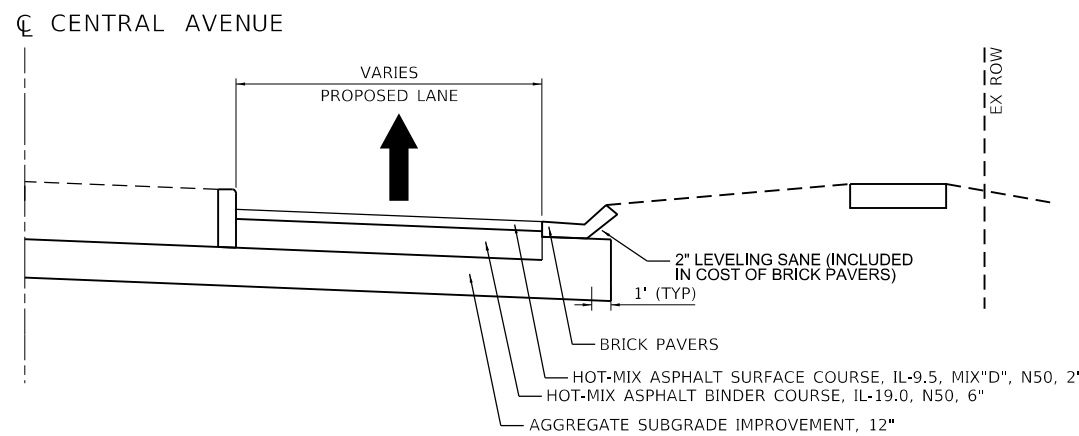
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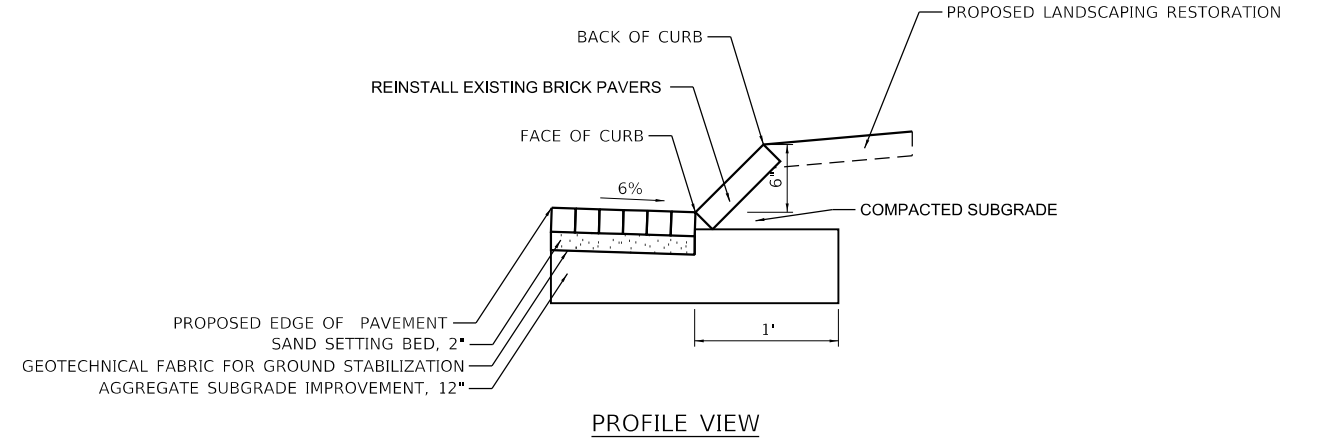
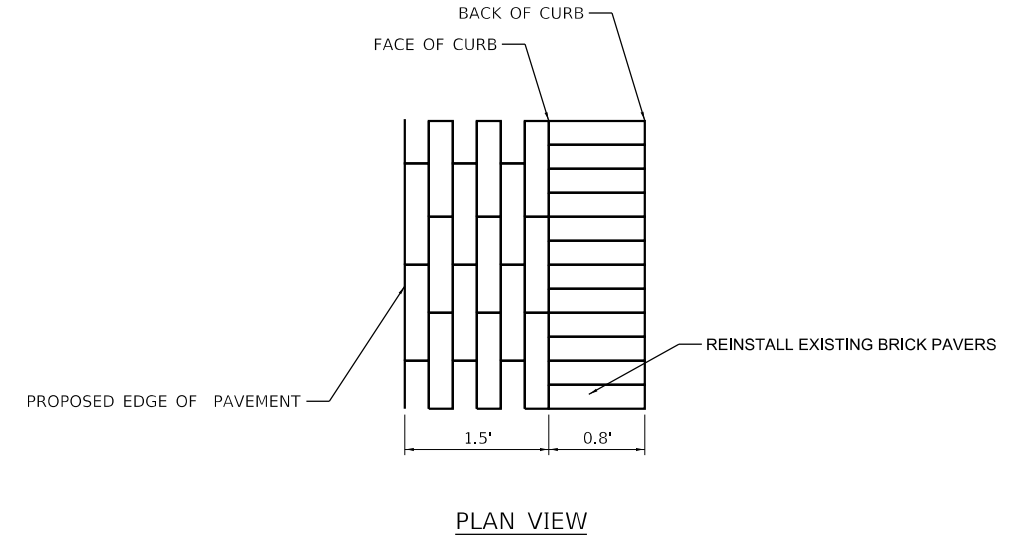
**BRICK PAVERS DETAIL STEP 1**  
PAVE ONE FOOT BEYOND PROPOSED EDGE OF PAVEMENT



**BRICK PAVERS DETAIL STEP 2**  
REMOVE ADDITIONAL ONE FOOT OF PAVEMENT



**BRICK PAVERS DETAIL STEP 3**  
ADD BRICK PAVER CURB AND GUTTER



**BRICK PAVERS CURB AND GUTTER DETAIL**



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
BRICK CURB AND GUTTER DETAILS**

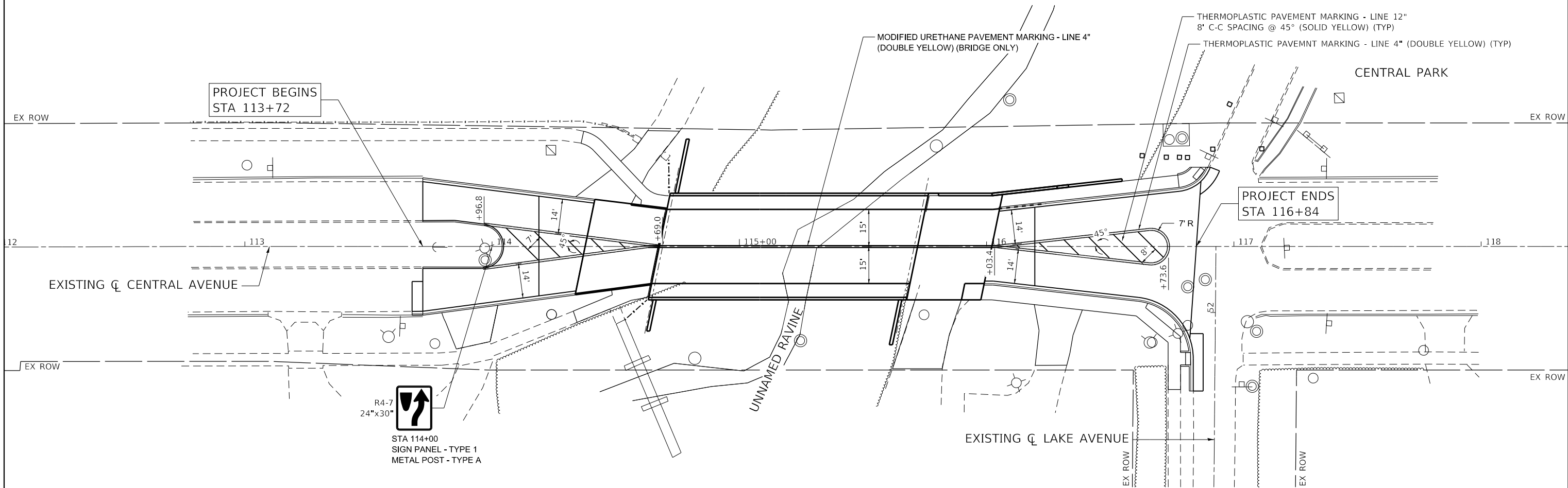
SCALE: 1" = 10' SHEET 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	33
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



R4-7  
24"x30"  
  
STA 114+00  
SIGN PANEL - TYPE 1  
METAL POST - TYPE A



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USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
PAVEMENT MARKING AND SIGNING PLAN

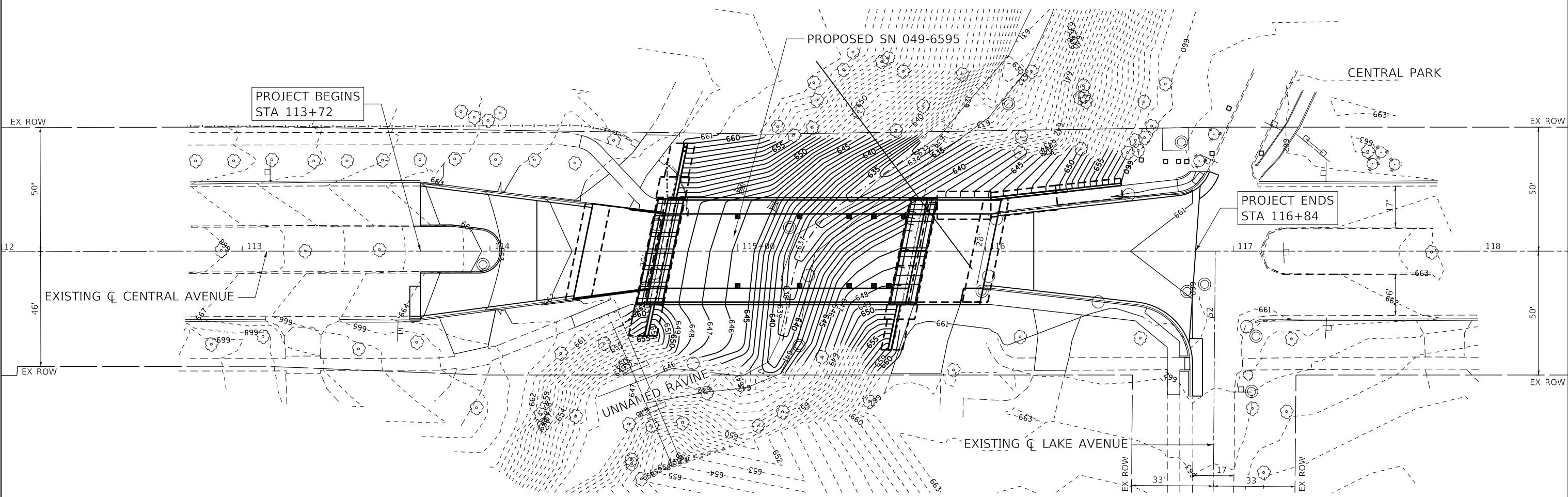
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	34
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHECKED	



**LEGEND**

- 637--- EXISTING MINOR CONTOURS
- 665--- EXISTING MAJOR CONTOURS
- 637— PROPOSED MINOR CONTOURS
- 640— PROPOSED MAJOR CONTOURS



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USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE - 8/23/2021	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
GRADING PLAN**

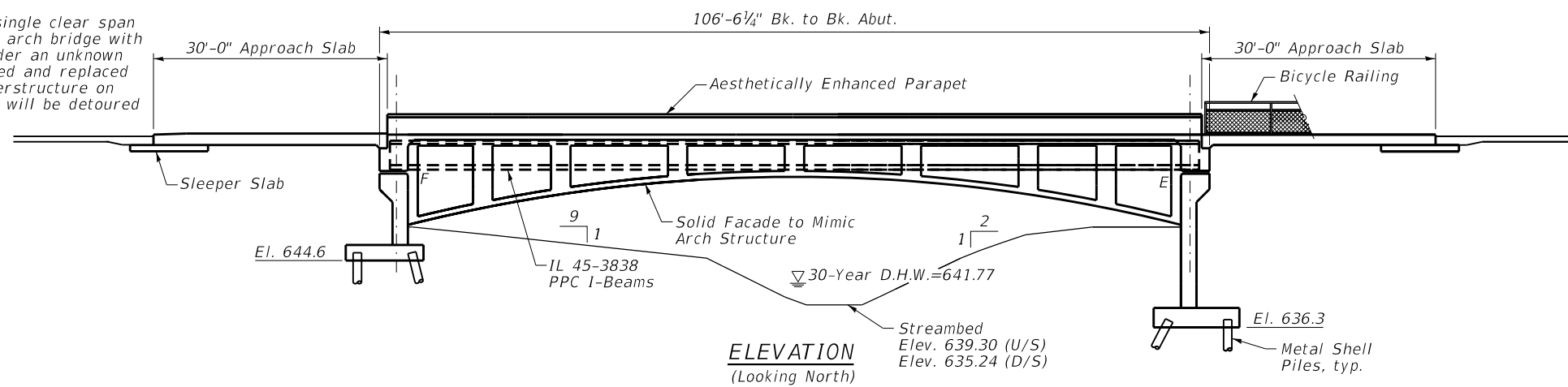
SCALE: 1" = 20' SHEET 1 OF 1 SHEETS STA. 113+72 TO STA. 116+84

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	35
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

Bench Mark: Chisled "X" in north concrete median curb on Central Avenue approximately 150' west of  $\bar{C}$  bridge Elev. 666.01

Existing Structure: S.N. 049-6554, single clear span  $\pm 50'-0"$ ,  $20'-4"$  o. to o. R.C. spandrel arch bridge with a rise of  $\pm 20'-0"$ . Built in 1935 under an unknown contract. The bridge shall be removed and replaced with a single span PPC I-Beam superstructure on integral abutments. Roadway traffic will be detoured during construction.

No Salvage.



**DESIGN SPECIFICATIONS**

2017 8th Edition AASHTO LRFD Bridge Design Specifications

**LOADING HL-93**

Allow 50#/ sq. ft. for future wearing surface.

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Superstructure concrete)  
 $f_y = 60,000$  psi (Reinf.)

**PRECAST UNITS**

Beams:  
 $f'_c = 6,500$  psi  
 $f'_c = 8,500$  psi  
 $f_{bu} = 270,000$  psi (0.6 dia. low-lax strands)

Arch:  
 $f'_c = 5,000$  psi

**SEISMIC DATA**

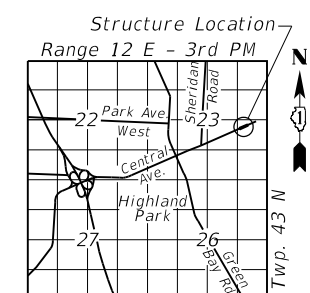
Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.065g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.096g  
 Soil Site Class = C



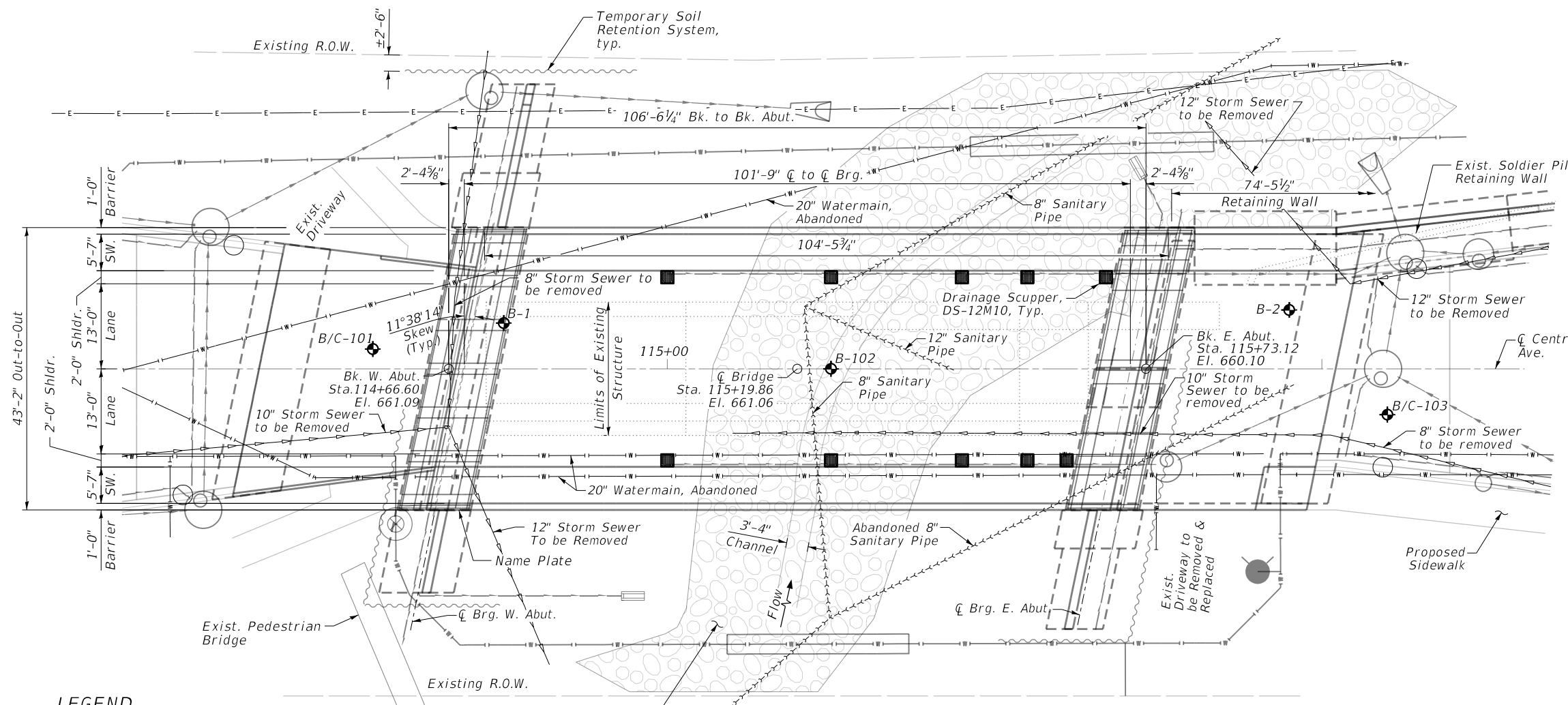
DATE: 08/31/21  
 SEAL EXPIRES: 11/30/2022

*Alex Durbak*

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO LRFD Bridge Design Specifications"



**LOCATION SKETCH**



**PLAN**

**LEGEND**

- Existing Storm Sewer
- Abandoned Sanitary Pipe
- Proposed Pipe Underdrain
- Proposed Underground Water Line
- Existing Underground Electric
- Proposed Storm Drain
- Temporary Soil Retention System
- Soil Borings

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PLOT DATE = 08/31/21	CHECKED - BWS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

SHEET 5-01 OF 5-37 SHEETS

**GENERAL PLAN & ELEVATION  
 CENTRAL AVENUE OVER UNNAMED RAVINE  
 LAKE COUNTY**

**SECTION NO. 15-00123-00-BR  
 STATION 115+19.86  
 STRUCTURE NO. 049-6595**

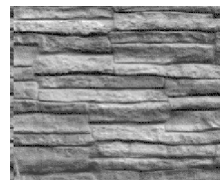
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	36
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

- Reinforcement bars designated (E) shall be epoxy coated.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Formliner shall be Autumn Leaves Drystack [Keyed] Pattern.

**INDEX OF SHEETS**

- S-1 General Plan & Elevation
- S-2 General Notes, Bill of Material & Index of Sheets
- S-3 Removal Plan
- S-4 Top of Deck Elevations 1
- S-5 Top of Deck Elevations 2
- S-6 Top of West Approach Slab Elevations
- S-7 Top of East Approach Slab Elevations
- S-8 Deck Plan and Cross Section
- S-9 Superstructure Details 1
- S-10 Abutment Diaphragm Details
- S-11 Bridge Approach Slab Details 1
- S-12 Bridge Approach Slab Details 2
- S-13 Bridge Approach Slab Details 3
- S-14 Drainage Scupper, DS-12M10
- S-15 Bridge Railing
- S-16 Closed Drainage System
- S-17 Framing Plan
- S-18 Beam Details 1
- S-19 Beam Details 2
- S-20 Bearing Details
- S-21 West Abutment
- S-22 East Abutment
- S-23 Abutment Details
- S-24 Northwest Wingwall
- S-25 Southwest Wingwall
- S-26 Southeast Wingwall
- S-27 Retaining Wall 1
- S-28 Retaining Wall 2
- S-29 Precast Facsia Panel
- S-30 Precast Facsia Panel Details 1
- S-31 Precast Facsia Panel Details 2
- S-32 HP Pile Details
- S-33 Soil Boring Logs 1
- S-34 Soil Boring Logs 2
- S-35 Soil Boring Logs 3
- S-36 Soil Boring Logs 4
- S-37 Soil Boring Logs 5



**FORMLINER**

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elevations (ft.)		Item 113
	W. Abut.	E. Abut.	
Q100	647.00	640.00	5
Q200	647.00	640.00	
Design	647.00	640.00	
Check	647.00	640.00	

UNNAMED RAVINE  
 BUILT 2021 BY  
 CITY OF HIGHLAND PARK  
 SEC. 15-00123-00-BR  
 STATION 115+19.86  
 STR. NO. 049-6595  
 LOADING HL-93

**NAME PLATE**  
 (See Std. 515.01)

**WATERWAY INFORMATION**

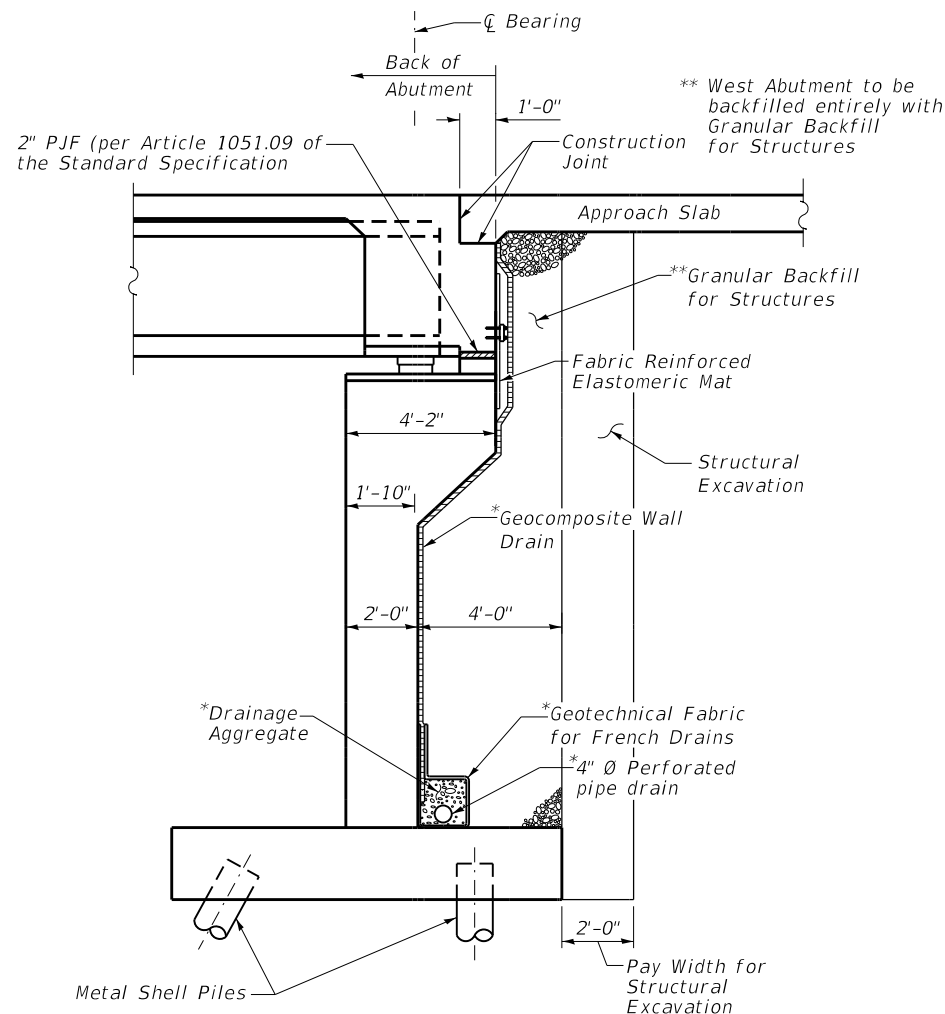
Drainage Area = 0.036 sq. mi. Low Grade Elev. 660.06 @ Sta. 115+56

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head -Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	62.6	7.29	7.19	641.75	0.00	0.06	641.75	641.77
Base	100	83.1	8.76	8.94	642.05	0.00	0.06	642.05	642.07
Overtopping	> 500	-	-	-	-	-	-	-	-
Max. Calc.	500	118.4	10.98	12.0	642.53	0.00	0.07	642.53	642.54

2-Yr. Flow Rate = 33 cfs

**TOTAL BILL OF MATERIAL**

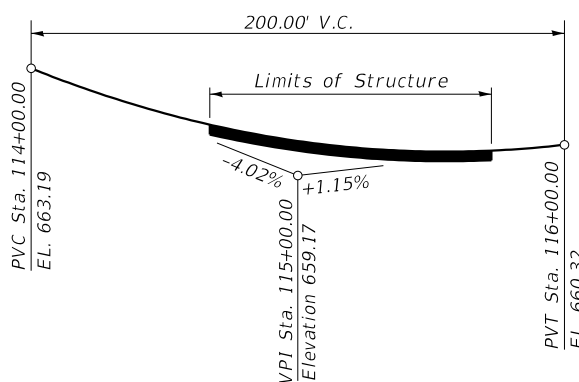
ITEM	DESCRIPTION	UNIT	SP	SUB	SUPER	TOTAL
28100105	Stone Riprap, Class A3	Sq Yd		592		592
28200200	Filter Fabric	Sq Yd		592		592
50100100	Removal Of Existing Structures	Each		0.5	0.5	1
50200100	Structure Excavation	Cu Yd		1,820		1,820
50300225	Concrete Structures	Cu Yd		299.0		299.0
50300255	Concrete Superstructure	Cu Yd			241.5	241.5
50300260	Bridge Deck Grooving	Sq Yd			527	527
50300285	Form Liner Textured Surface	Sq Ft			1,579	1,579
50300300	Protective Coat	Sq Yd			857	857
50301350	Concrete Superstructure (Approach Slab)	Cu Yd			105.9	105.9
50401320	Furnishing And Erecting Precast Prestressed Concrete Beams, 1L45	Foot			619	619
50800205	Reinforcement Bars, Epoxy Coated	Pound		44,520	83,940	128,460
50901720	Bicycle Railing	Foot		95		95
51200958	Furnishing Metal Shell Piles 14"X0.25"	Foot		1,970		1,970
51202305	Driving Piles	Foot		1,970		1,970
51203200	Test Pile Metal Shells	Each		3		3
51204650	Pile Shoes	Each		13		13
51500100	Name Plates	Each			1	1
52100010	Elastomeric Bearing Assembly, Type I	Each		6		6
52100520	Anchor Bolts, 1"	Each		22		22
52200020	Temporary Soil Retention System	Sq Ft		1,619		1,619
52200900	Concrete Structures (Retaining Wall)	Cu Yd		132.7		132.7
58600101	Granular Backfill For Structures	Cu Yd		630		630
59100100	Geocomposite Wall Drain	Sq Yd		350		350
Z0001850	Architectural Precast Concrete Panel	Each	*	16		16
Z0018005	Drainage Scuppers, DS-12M10	Each	*	10		10
Z0018800	Drainage System	L Sum	*	1		1
Z0046304	Pipe Underdrains For Structures 4"	Foot	*	223		223



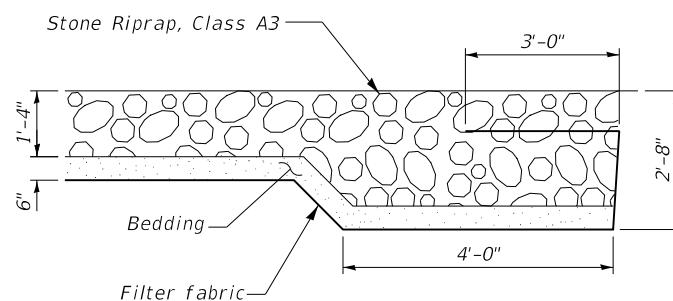
**SECTION THRU SEMI-INTEGRAL ABUTMENT**  
 (Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.  
 (See Special Provisions)

Note:  
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



**PROFILE GRADE**  
 (Along Center Roadway)



**FLANK STONE RIPRAP DETAIL**

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	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, BILL OF MATERIAL & INDEX OF SHEETS  
 STRUCTURE NO. 049-6595**

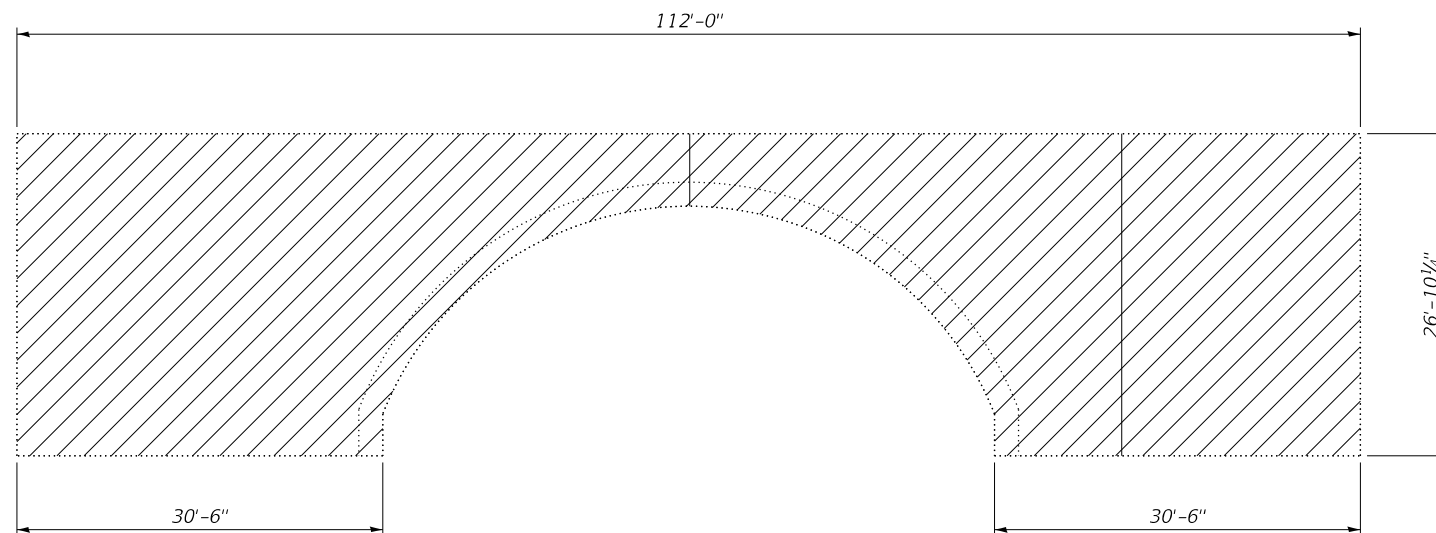
SHEET 5-02 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	37
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

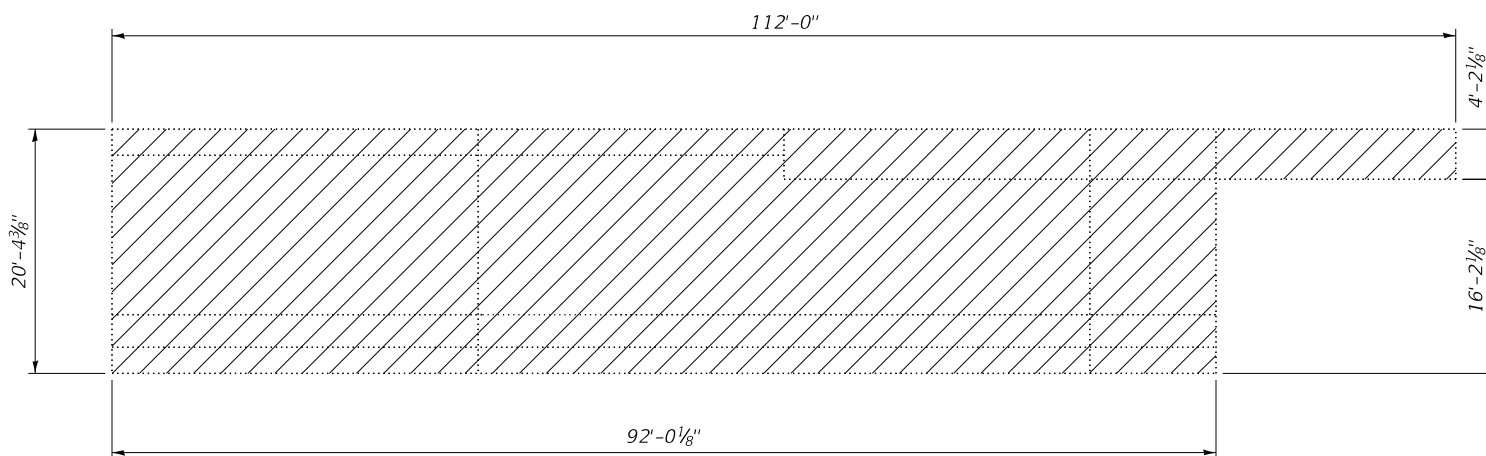
Cost of railing removal included in Removal of Existing Structures

Remove wall to 1'-0" below finished grade or to bottom of footing where it conflicts with the Proposed Retaining Wall.

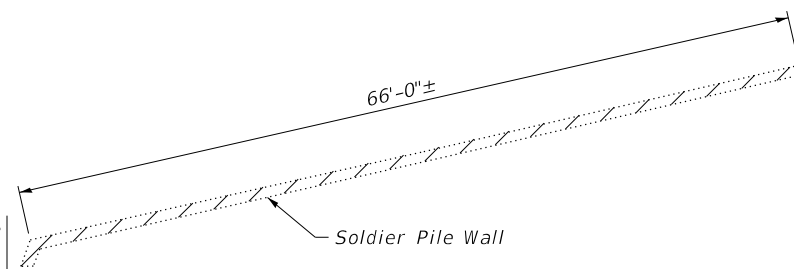
**SOLDIER PILE WALL**



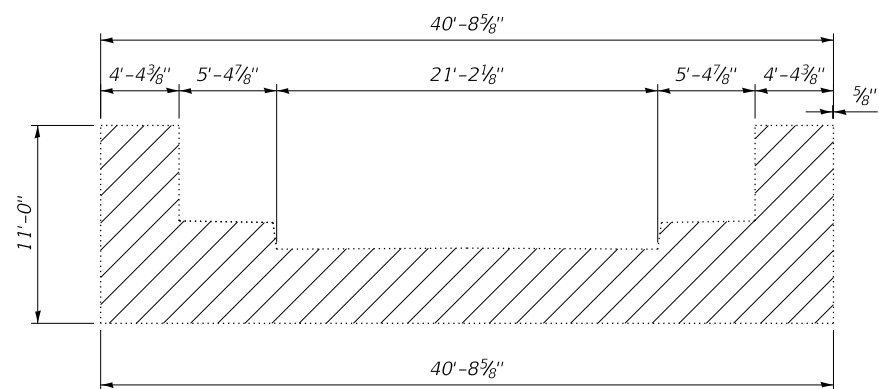
**ELEVATION**  
(Looking North)



**PLAN**



Soldier Pile Wall



**EXISTING CROSS SECTION**

**LEGEND**

Existing Structure Removal

**NOTES:**

- HMA removal and fill over Arch is paid for separately, see Roadway Plans.
- Existing plans for the bridge and retaining wall are not available.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Removal Of Existing Structures	Each	1

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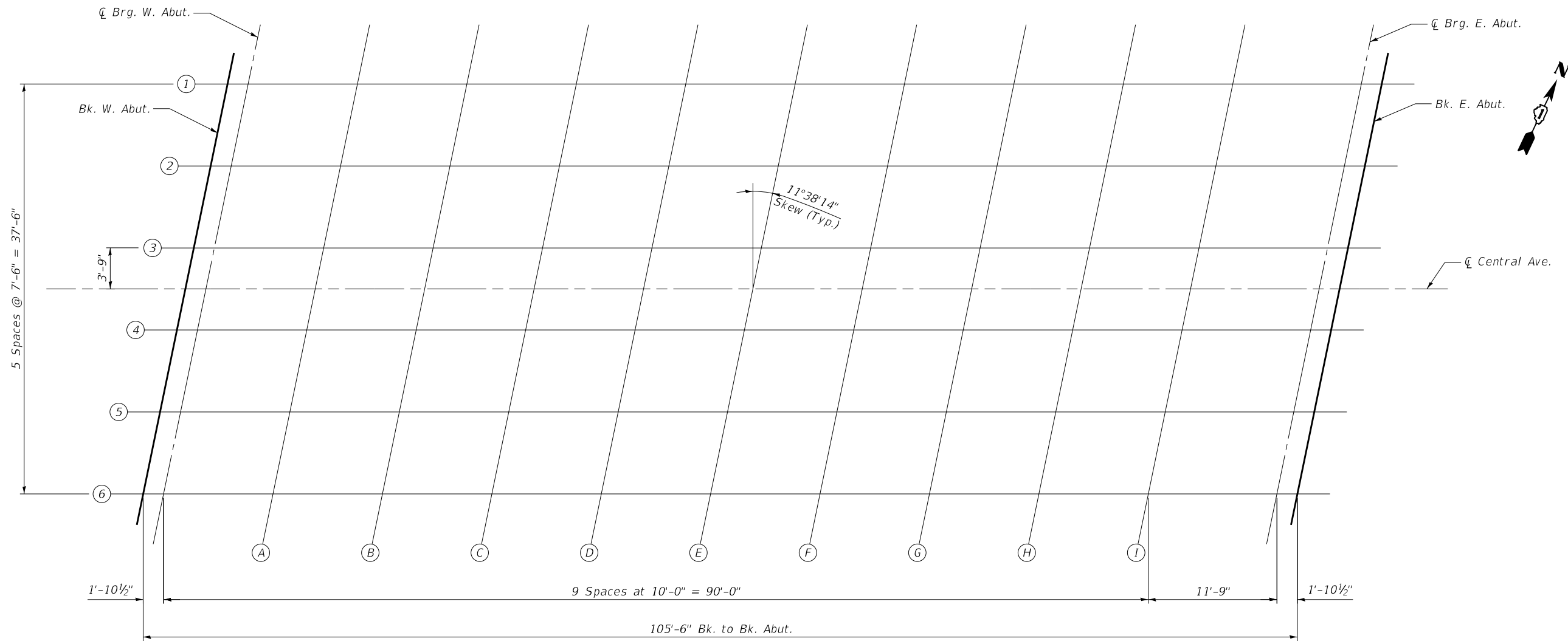
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PLOT DATE = 08/31/21	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN**  
**STRUCTURE NO. 049-6595**

SHEET S-03 OF S-37 SHEETS

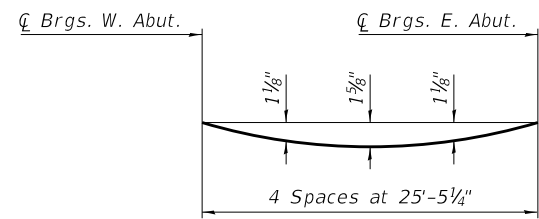
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	38
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		



PLAN

BEAM 1

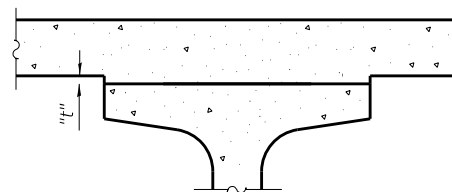
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Bk. W. Abut	114+70.46	-18.75	660.72	660.72
CL. Brg. W. Abut	114+72.84	-18.75	660.67	660.67
A	114+82.84	-18.75	660.47	660.50
B	114+92.84	-18.75	660.29	660.36
C	115+02.84	-18.75	660.14	660.24
D	115+12.84	-18.75	660.02	660.13
E	115+22.84	-18.75	659.92	660.04
F	115+32.84	-18.75	659.85	659.96
G	115+42.84	-18.75	659.80	659.90
H	115+52.84	-18.75	659.78	659.86
I	115+62.84	-18.75	659.79	659.83
CL. Brg. E. Abut.	115+74.60	-18.75	659.83	659.83
CL Bk. E. Abut	115+76.98	-18.75	659.84	659.84



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams).

Note:  
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets S-4 & S-5. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS

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	DRAWN - SBA	REVISED -
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PLOT DATE = 08/31/21	DATE -	REVISED -

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	39
CONTRACT NO.			61H28	

BEAM 2

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

BEAM 3

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

P.G.L.

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

BEAM 4

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

BEAM 5

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

BEAM 6

Table with 5 columns: Location, Station, Offset, Theoretical Grade Elevations, Theoretical Grade Elevations Adjusted For Dead Load Deflection. Rows include CL Bk. W. Abut, CL Brg. W. Abut, A through I, CL Brg. E. Abut, and CL Bk. E. Abut.

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Table with 4 columns: USER NAME, DESIGNED, DRAWN, CHECKED, PLOT SCALE, PLOT DATE, REVISED, DATE. Values include Structural, APD, SBA, BWS, 0:2.0000 "x" / in., 08/31/21.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

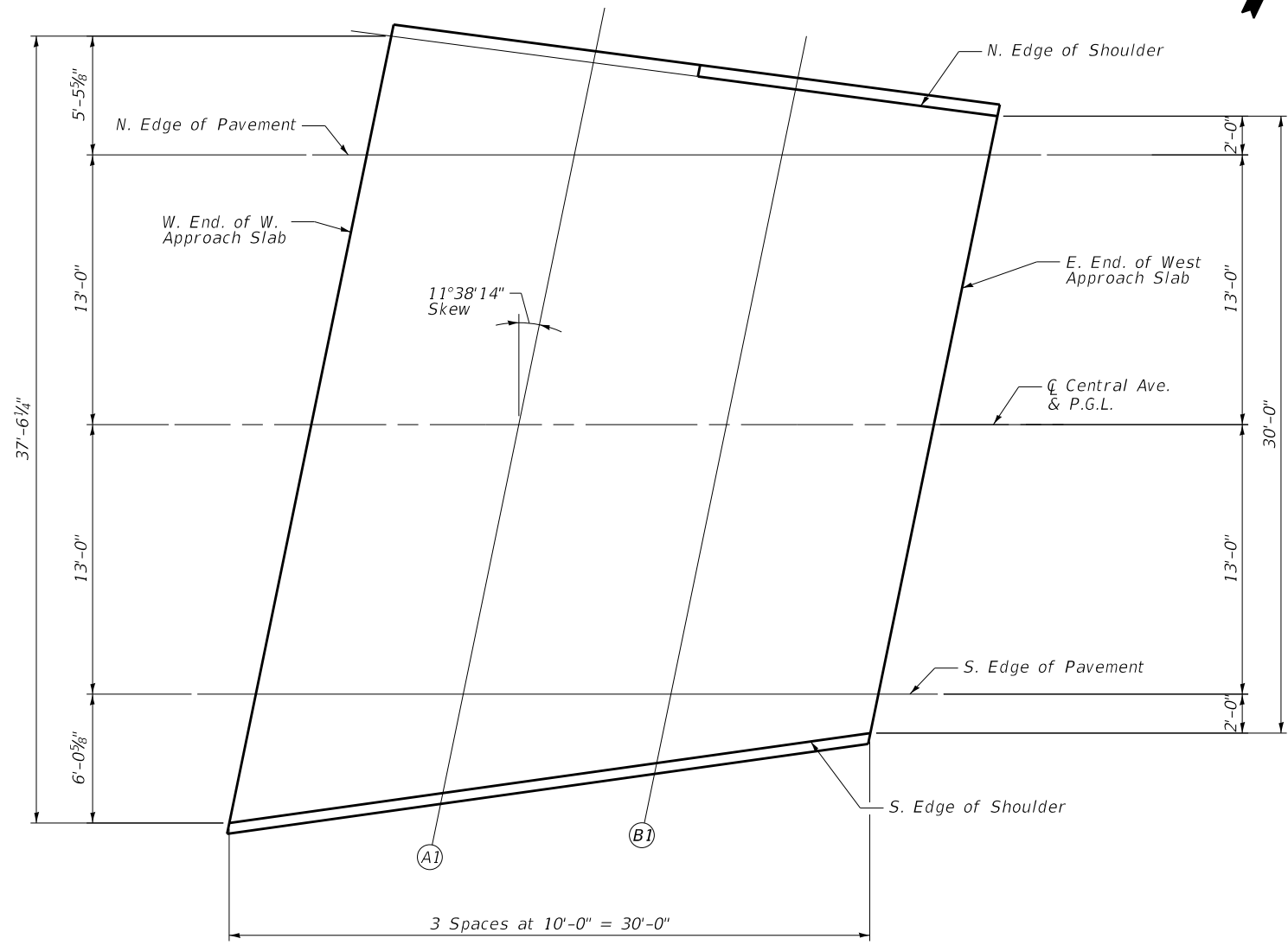
TOP OF DECK ELEVATIONS 2
STRUCTURE NO. 049-6595

Table with 6 columns: MUN RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO. Values include 3115, 15-00123-00-BR, LAKE, 84, 40, 61H28.

SHEET 5-05 OF 5-37 SHEETS

ILLINOIS FED. AID PROJECT





PLAN

N. EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach Slab	114+41.98	-18.52	661.45
A1	114+51.72	-17.39	661.20
B1	114+61.45	-16.19	660.96
E. End of W. Approach Slab	114+71.22	-15.00	660.76

N. EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach Slab	114+40.80	-13.00	661.57
A1	114+50.80	-13.00	661.29
B1	114+60.80	-13.00	661.03
E. End of W. Approach Slab	114+70.80	-13.00	660.80

CL CENTRAL AVENUE & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach Slab	114+38.13	0.00	661.85
A1	114+48.13	0.00	661.55
B1	114+58.13	0.00	661.29
E. End of W. Approach Slab	114+68.13	0.00	661.05

S. EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach Slab	114+35.45	13.00	661.73
A1	114+45.45	13.00	661.43
B1	114+55.45	13.00	661.16
E. End of W. Approach Slab	114+65.45	13.00	660.92

N. EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach Slab	114+34.17	19.05	661.68
A1	114+44.47	17.70	661.39
B1	114+54.77	16.35	661.13
E. End of W. Approach Slab	114+65.04	15.00	660.90

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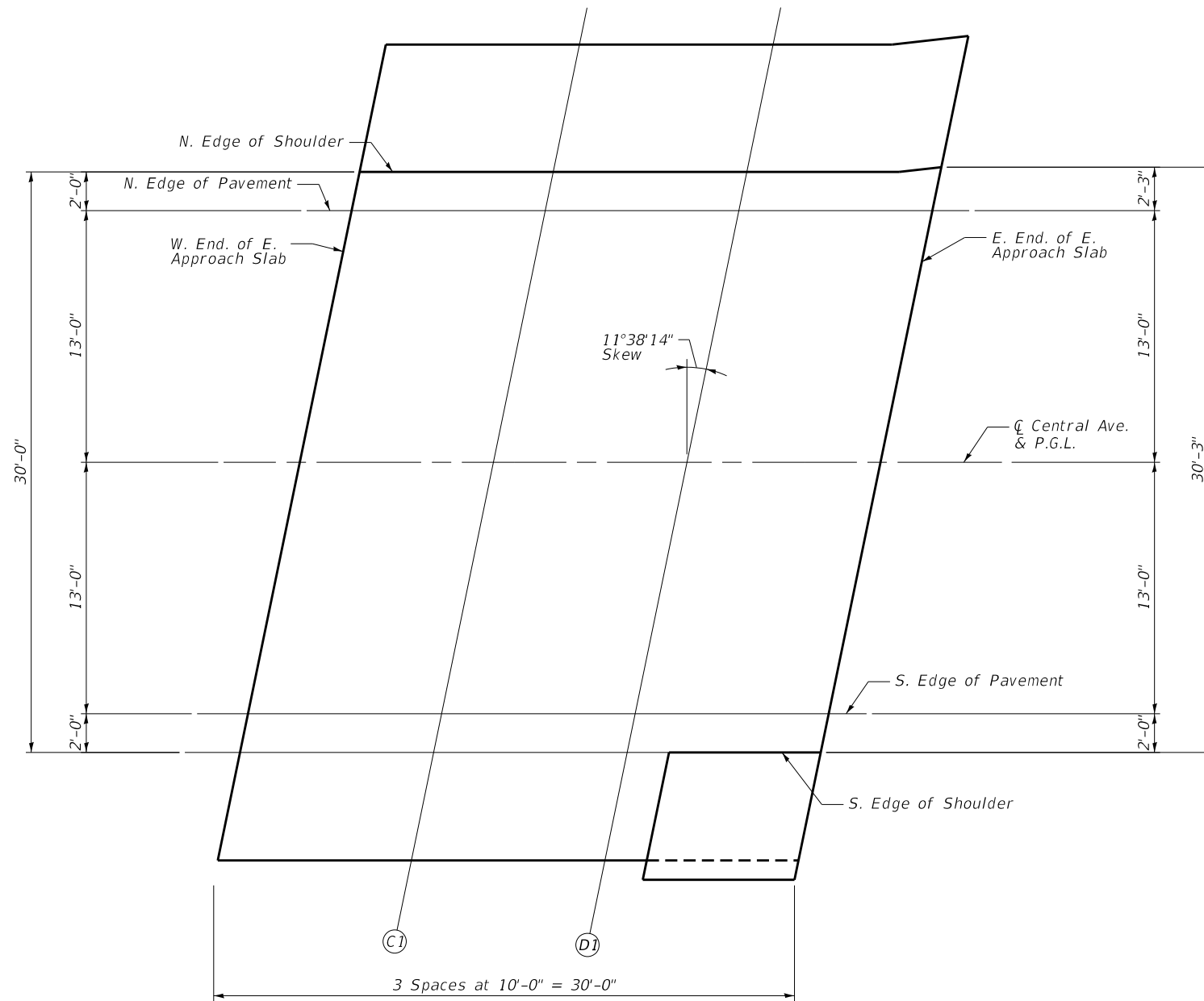


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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TOP OF WEST APPROACH SLAB ELEVATIONS**  
**STRUCTURE NO. 049-6595**

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	41
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		



PLAN

N. EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach Slab	115+74.67	-15.00	659.89
C1	115+84.67	-15.00	659.95
D1	115+94.67	-15.00	660.04
E. End of E. Approach Slab	116+04.72	-15.24	660.15

N. EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach Slab	115+74.26	-13.00	659.91
C1	115+84.26	-13.00	659.98
D1	115+94.26	-13.00	660.06
E. End of E. Approach Slab	116+04.26	-13.00	660.17

CL CENTRAL AVENUE & P.G.L.

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach Slab	115+71.59	0.00	660.10
C1	115+81.59	0.00	660.15
D1	115+91.59	0.00	660.23
E. End of E. Approach Slab	116+01.59	0.00	660.34

S. EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach Slab	115+68.91	13.00	659.89
C1	115+78.91	13.00	659.94
D1	115+88.91	13.00	660.01
E. End of E. Approach Slab	115+98.91	13.00	660.11

N. EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach Slab	115+68.50	15.00	659.86
C1	115+78.50	15.00	659.91
D1	115+88.50	15.00	659.98
E. End of E. Approach Slab	115+98.50	15.00	660.08

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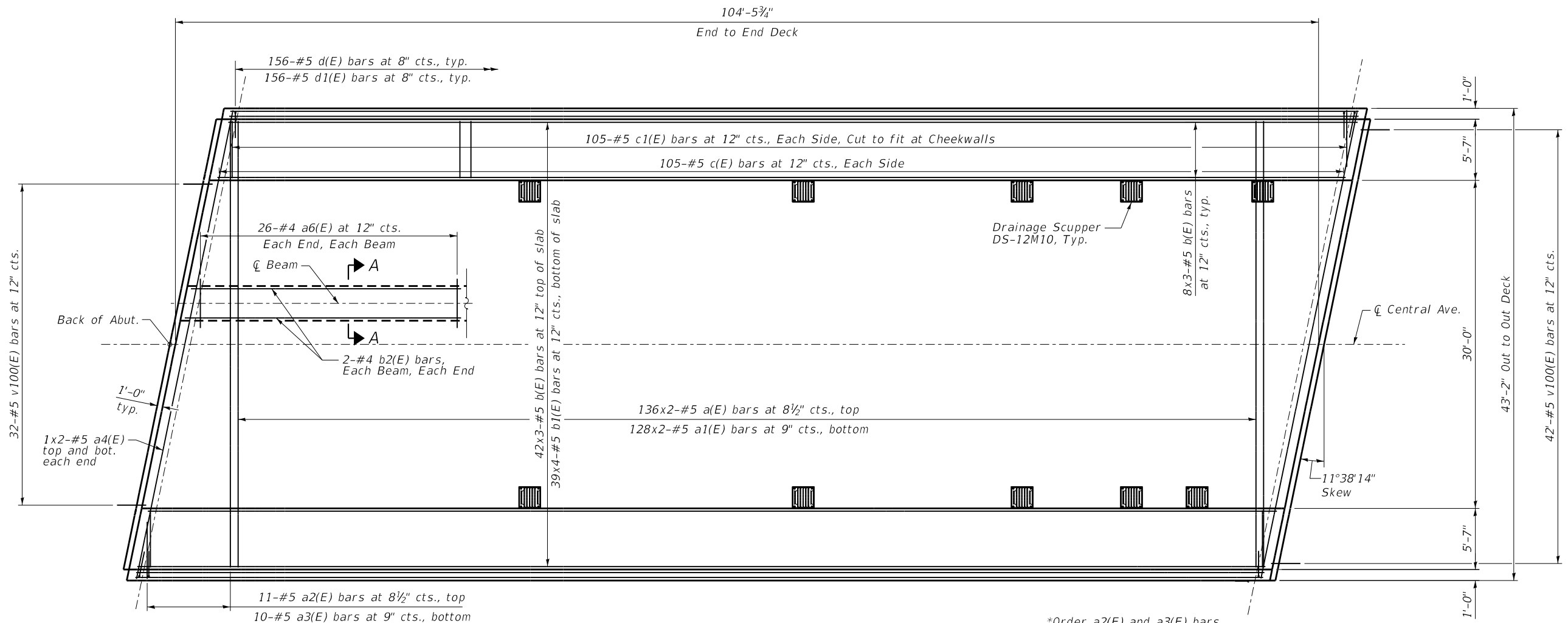
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 049-6595

SHEET 5-07 OF 5-37 SHEETS

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 42
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61H28	

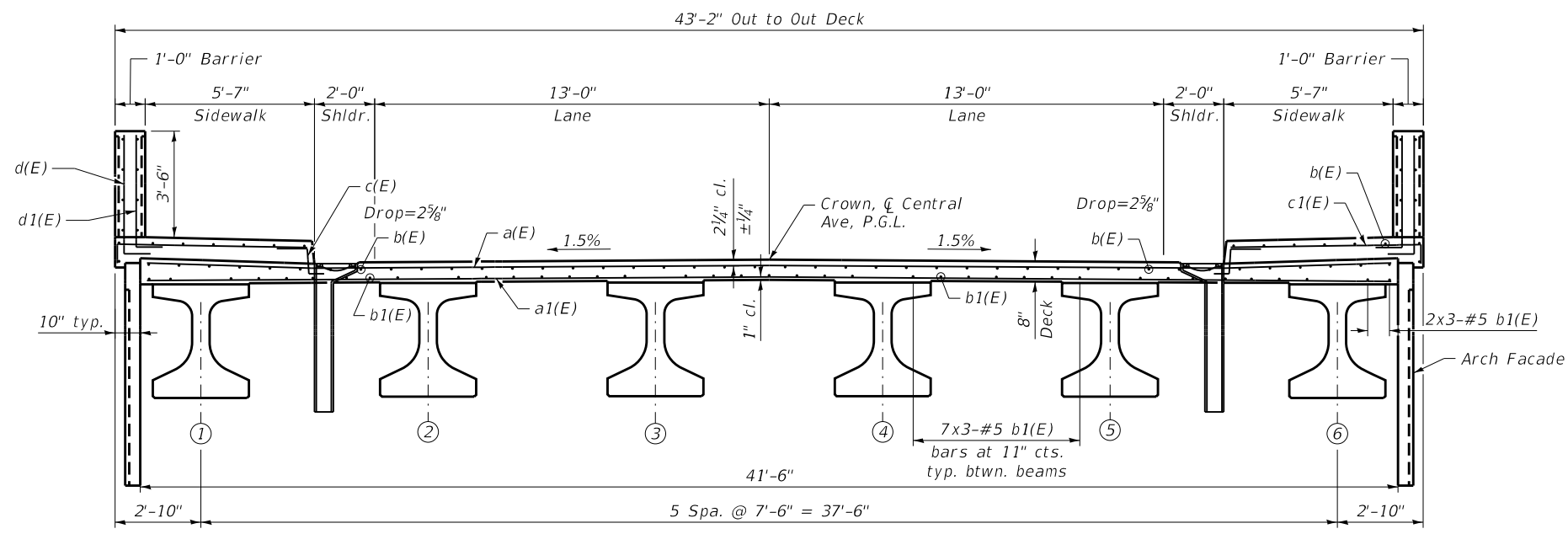


PLAN

\*Order a2(E) and a3(E) bars Full Length. Cut bars in field to fit skew and use the remainder of bars at other end of deck.

MINIMUM BAR LAP

#5 bar = 3'-6"  
#4 bar = 2'-5"



CROSS SECTION  
(Looking East)

NOTES:

1. See sheets S-9 thru S-10 for Superstructure Details.
2. See sheet S-9 for Bill of Material and Section A-A.
3. Bars indicated thus 20x3 #5 etc. indicates 20 lines of bars with 3 lengths per line.
4. For Scupper locations see Sheet S-16.

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 DRAWN - SBA  
 CHECKED - BWS  
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DESIGNED - APD  
 DRAWN - SBA  
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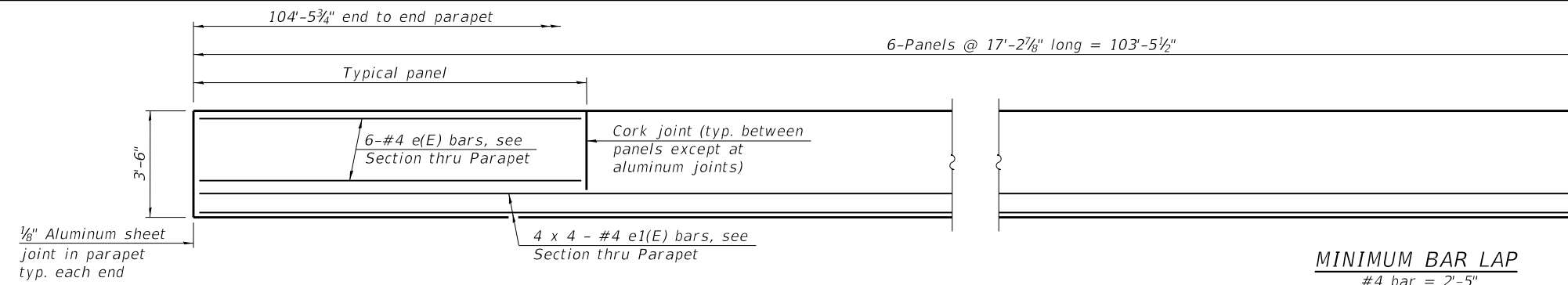
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DECK PLAN AND CROSS SECTION  
 STRUCTURE NO. 049-6595

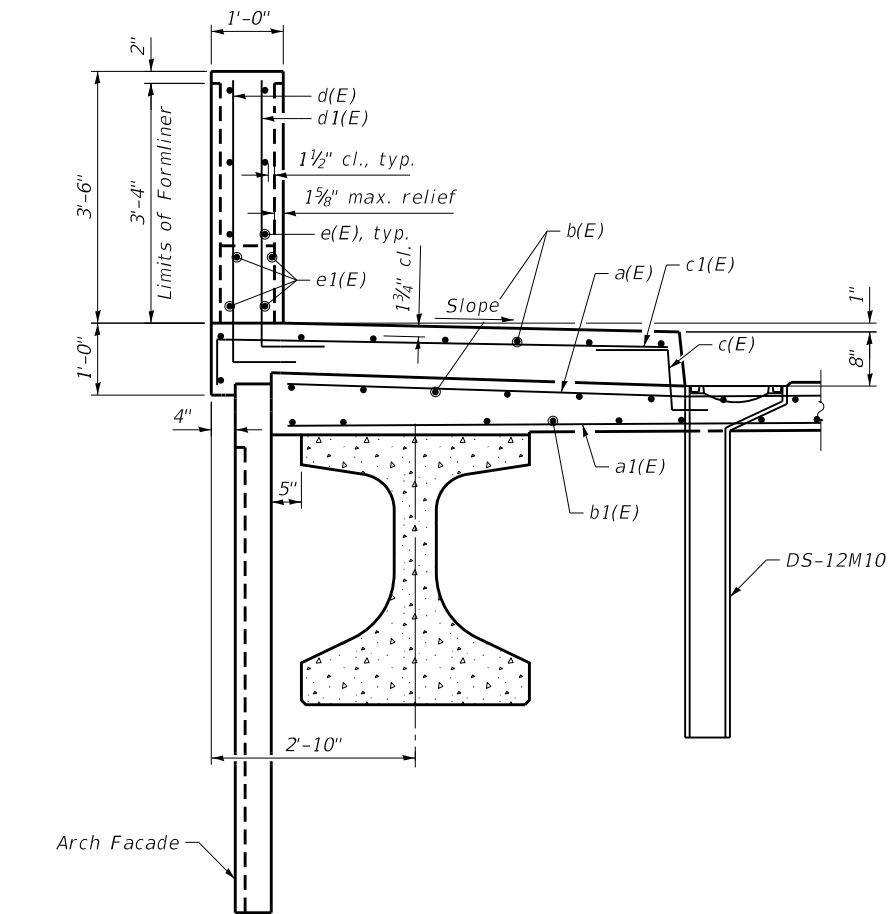
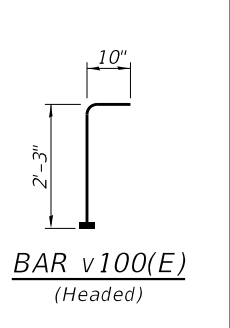
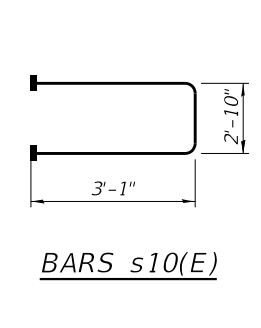
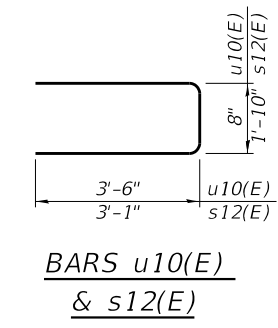
SHEET 5-08 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

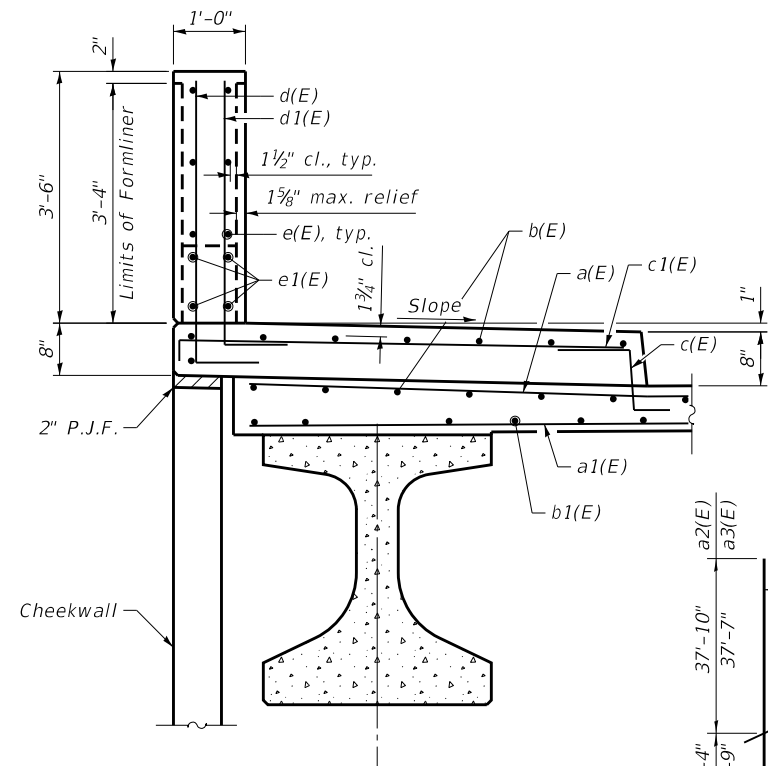


INSIDE ELEVATION OF PARAPET

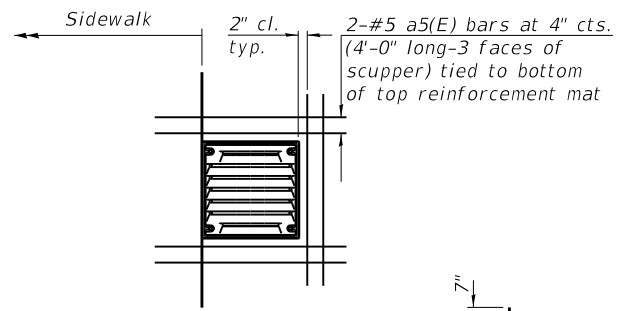
MINIMUM BAR LAP  
#4 bar = 2'-5"



SECTION THRU PARAPET

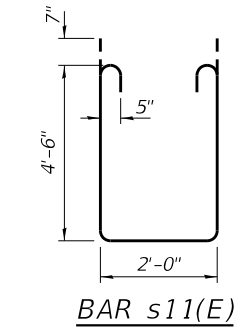


SECTION THRU PARAPET AT CHEEKWALL

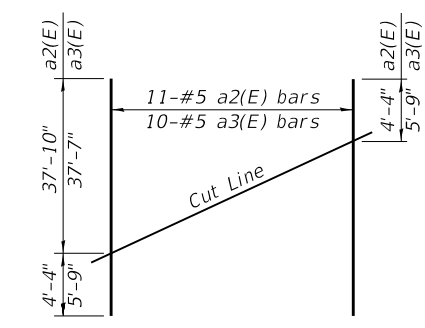


PLAN

Cut longitudinal reinforcement to clear drainage scuppers.

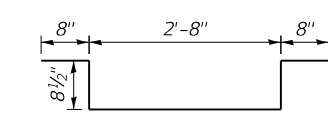


BAR s11(E)

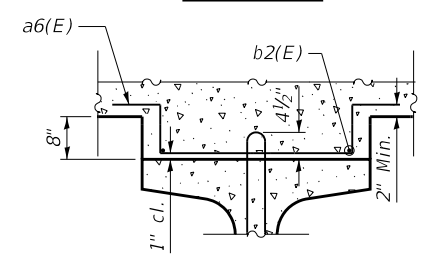


FIELD CUTTING DIAGRAM

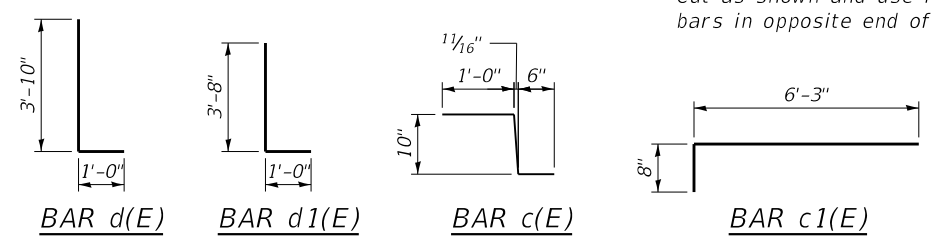
Order a2(E) and a3(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



BAR a6(E)

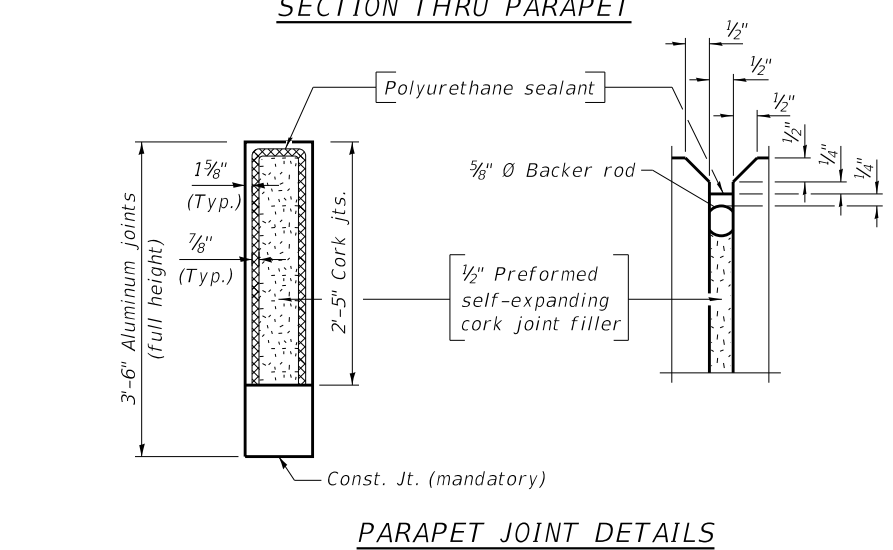


SECTION A-A



NOTES

- The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
- The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
- Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
- Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

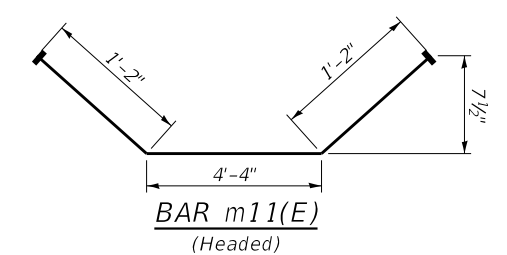


PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	272	#5	22'-4"	—
a1(E)	256	#5	22'-4"	—
a2(E)	11	#5	42'-2"	—
a3(E)	10	#5	43'-4"	—
a4(E)	8	#5	22'-10"	—
a5(E)	60	#5	4'-0"	—
a6(E)	312	#4	5'-5"	U
b(E)	174	#5	37'-1"	—
b1(E)	156	#5	28'-6"	—
b2(E)	24	#4	27'-0"	—
c(E)	210	#5	2'-4"	—
c1(E)	210	#5	7'-1"	—
d(E)	312	#5	4'-10"	—
d1(E)	312	#5	4'-8"	—
e(E)	72	#4	16'-8"	—
e1(E)	32	#4	28'-0"	—
m10(E)	24	#6	22'-10"	—
m11(E)	24	#6	6'-8"	—
m12(E)	30	#6	6'-2"	—
m13(E)	12	#6	1'-6"	—
m14(E)	8	#4	22'-3"	—
m15(E)	24	#5	4'-0"	—
s10(E)	44	#5	9'-0"	U
s11(E)	44	#5	12'-2"	U
s12(E)	48	#5	8'-0"	U
u10(E)	44	#4	7'-8"	U
v100(E)	74	#5	3'-1"	L

Concrete Superstructure	Cu Yd	236.0
Bridge Deck Grooving	Sq Yd	326
Protective Coat	Sq Yd	598
Form Liner Textured Surface	Sq Ft	1,380
Reinforcement Bars, Epoxy Coated	Pound	36,590



BAR m11(E) (Headed)

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 1  
STRUCTURE NO. 049-6595

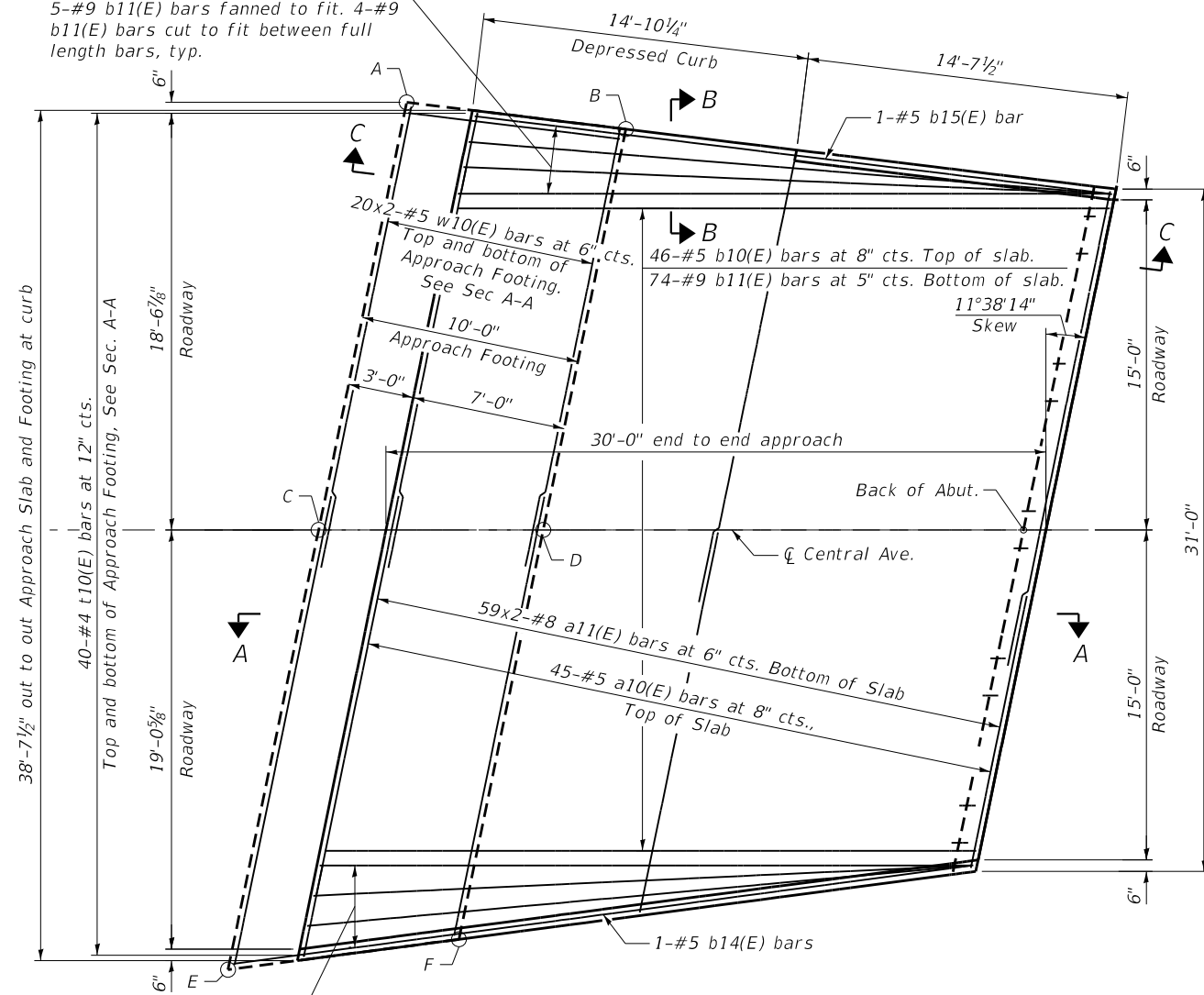
SHEET 5-09 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	44
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



4-#5 b10(E) bars fanned to fit. 3-#5 b10(E) bars cut to fit between full length bars, typ.

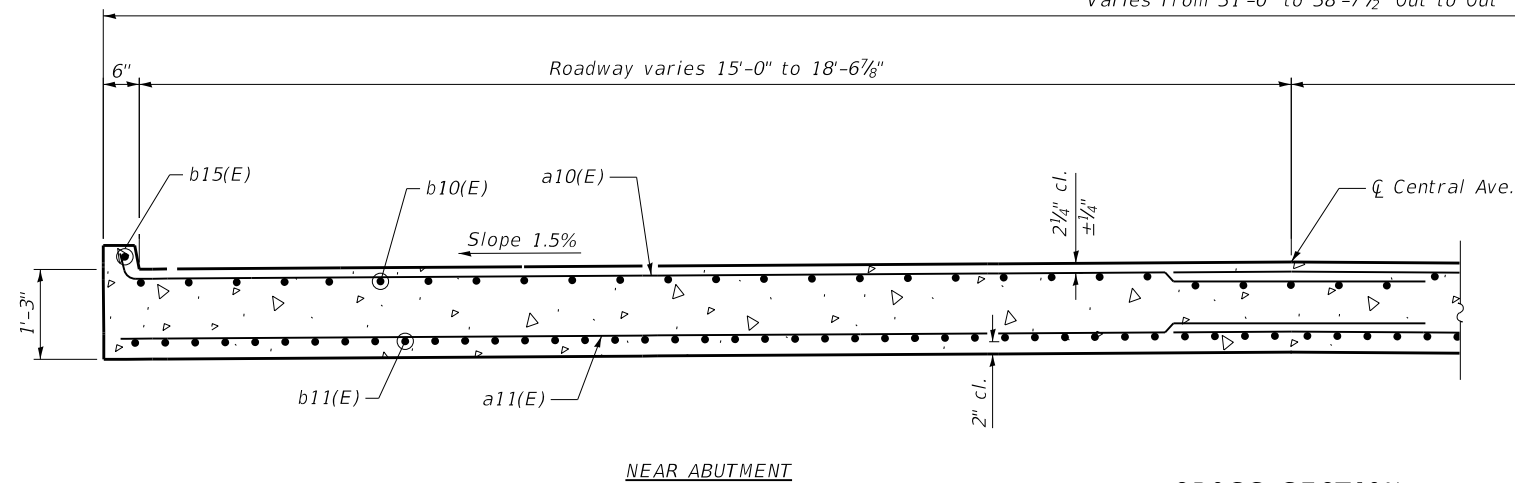
5-#9 b11(E) bars fanned to fit. 4-#9 b11(E) bars cut to fit between full length bars, typ.



4-#5 b10(E) bars fanned to fit. 3-#5 b10(E) bars cut to fit between long bars.  
6-#9 b11(E) bars fanned to fit. 5-#9 b11(E) bars cut to fit between long bars.

PLAN

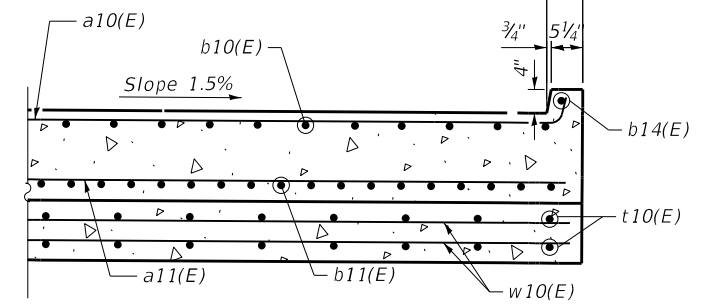
Varies from 31'-0" to 38'-7 1/2" Out to Out



NEAR ABUTMENT

CROSS SECTION  
(Looking East)

Roadway varies 15'-0" to 19'-0 5/8"



AT APPROACH FOOTING

TOP AND BOTTOM ELEVATIONS  
FOR APPROACH FOOTING

Point	Offset	Top	Bottom
A	-19.43	661.54	660.29
B	-18.22	661.27	660.02
C	0.00	661.96	660.71
D	0.00	661.65	660.40
E	19.99	662.39	661.14
F	18.61	662.04	660.79

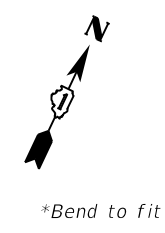
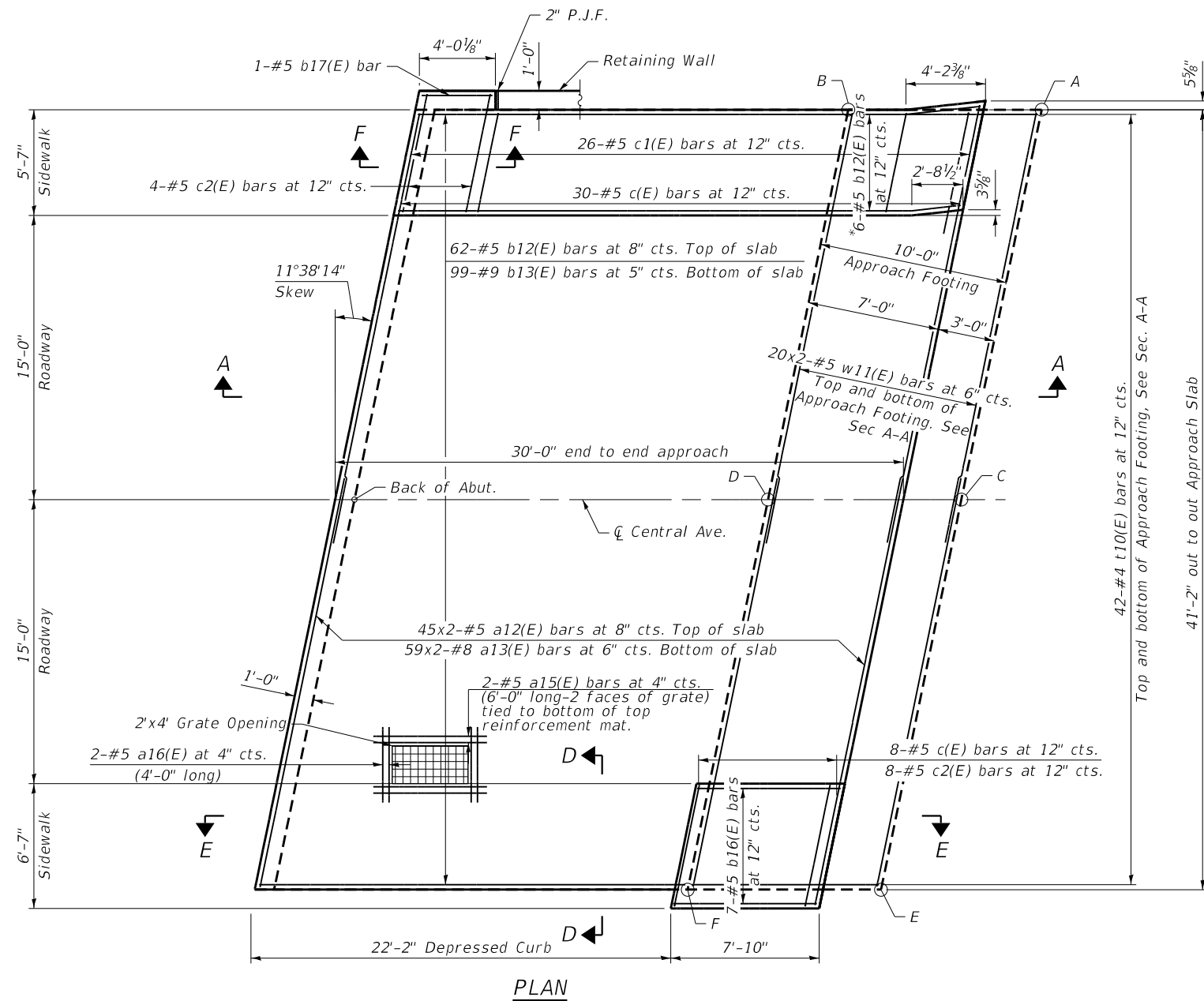
NOTES:

- For Sections A-A thru C-C see Sheet S-13.
- Fan t10(E) bars to fit at ends with a maximum spacing of 12" o.c.

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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

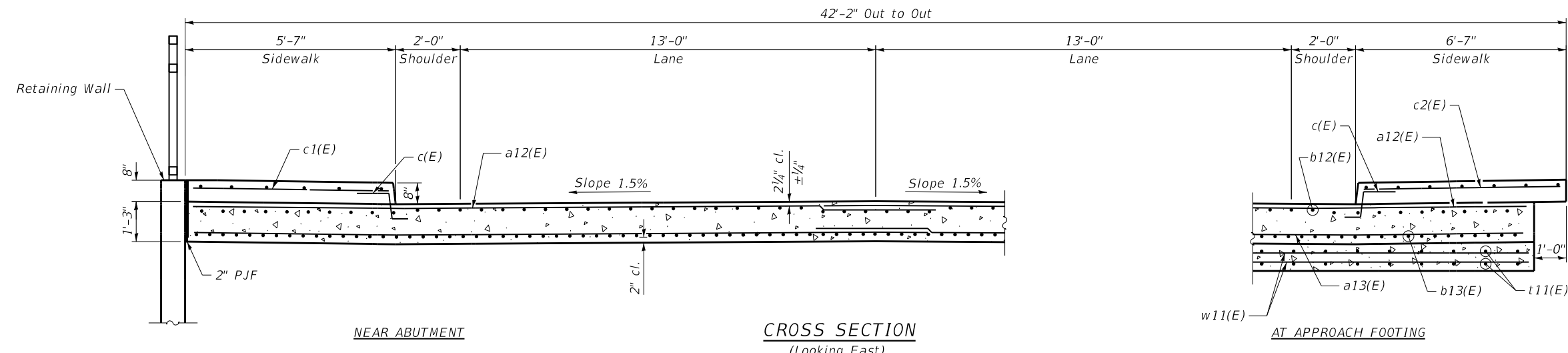


**TOP AND BOTTOM ELEVATIONS  
FOR APPROACH FOOTING**

Point	Offset	Top	Bottom
A	-20.58	660.00	658.75
B	-20.58	660.12	658.87
C	0.00	660.27	659.02
D	0.00	660.38	659.13
E	20.58	660.53	659.28
F	20.58	660.64	659.39

**NOTE:**  
1. For Sections A-A, D-D, E-E, and View F-F see Sheet S-13.

**PLAN**



**NEAR ABUTMENT**

**CROSS SECTION  
(Looking East)**

**AT APPROACH FOOTING**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

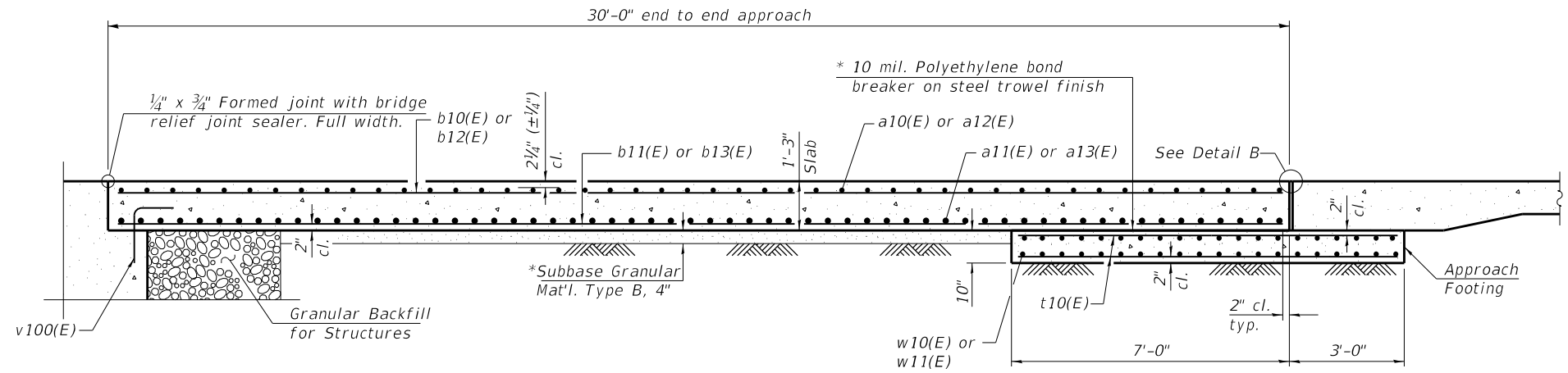
**BRIDGE APPROACH SLAB DETAILS 2  
STRUCTURE NO. 049-6595**

SHEET 5-12 OF 5-37 SHEETS

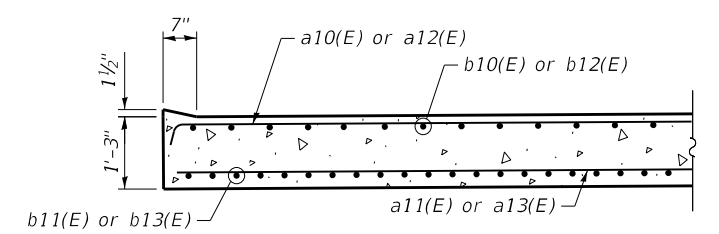
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CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

**TWO APPROACHES  
BILL OF MATERIAL**

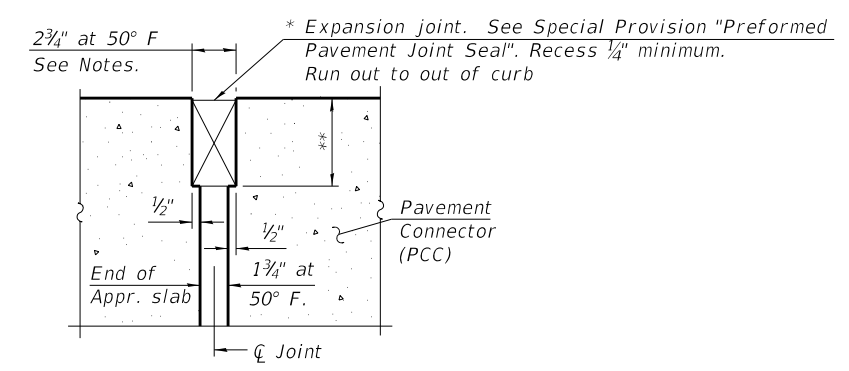
Bar	No.	Size	Length	Shape
a10(E)	90	#5	21'-10"	—
a11(E)	118	#8	22'-4"	—
a12(E)	90	#5	22'-8"	—
a13(E)	118	#8	23'-7"	—
a15(E)	4	#5	6'-0"	—
a16(E)	4	#5	4'-0"	—
b10(E)	60	#5	29'-8"	—
b11(E)	94	#9	29'-8"	—
b12(E)	68	#5	29'-8"	—
b13(E)	99	#9	29'-8"	—
b14(E)	1	#5	30'-6"	—
b15(E)	1	#5	9'-8"	—
b16(E)	7	#5	7'-6"	—
b17(E)	1	#5	3'-8"	—
c(E)	38	#5	2'-4"	⌒
c1(E)	26	#5	5'-3"	—
c2(E)	12	#5	6'-3"	—
w10(E)	80	#5	22'-1"	—
w11(E)	80	#5	22'-8"	—
t10(E)	164	#4	9'-11"	—
Concrete Structures		Cu Yd	25.0	
Concrete Superstructure		Cu Yd	5.5	
Bridge Deck Grooving		Sq Yd	201	
Protective Coat		Sq Yd	264	
Concrete Superstructure (Approach Slab)		Cu Yd	105.9	
Reinforcement Bars, Epoxy Coated		Pound	47,350	



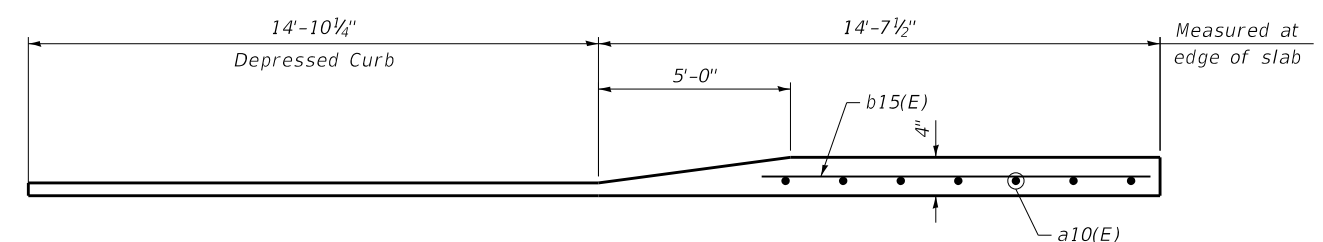
**SECTION A-A**



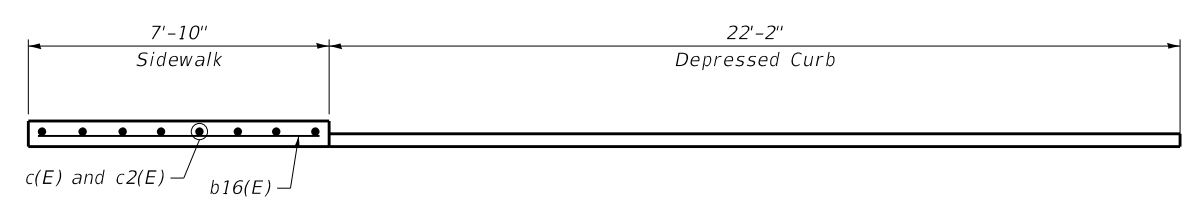
**SECTION B-B or D-D**  
(At Depressed Curb North Edge of West Approach Slab and at South Edge of East Approach Slab)



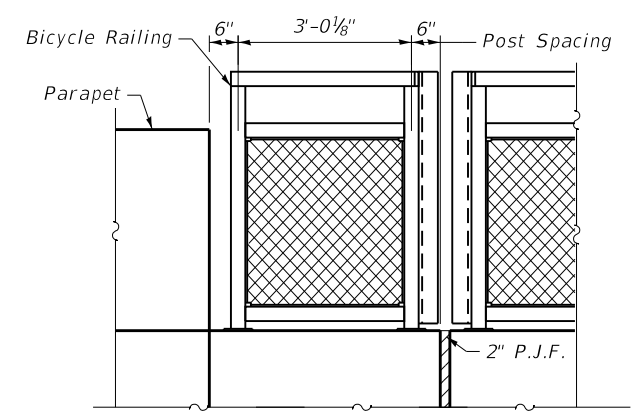
**DETAIL B**  
(@ Rt. L's)



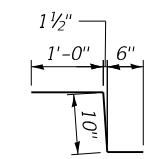
**SECTION C-C**



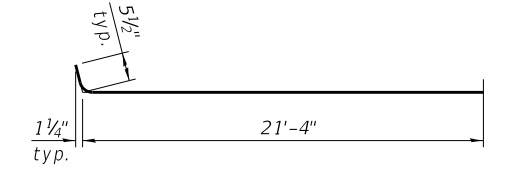
**SECTION E-E**



**VIEW F-F**



**BAR c(E)**



**BAR a10(E)**

**Notes:**  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.  
 Sidewalk concrete shall be paid for as Concrete Superstructure.  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet S-2.

**MINIMUM BAR LAP**  
 #5 bar = 3'-6"  
 #8 bar = 5'-6"

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DRAWN - SBA	REVISED -	
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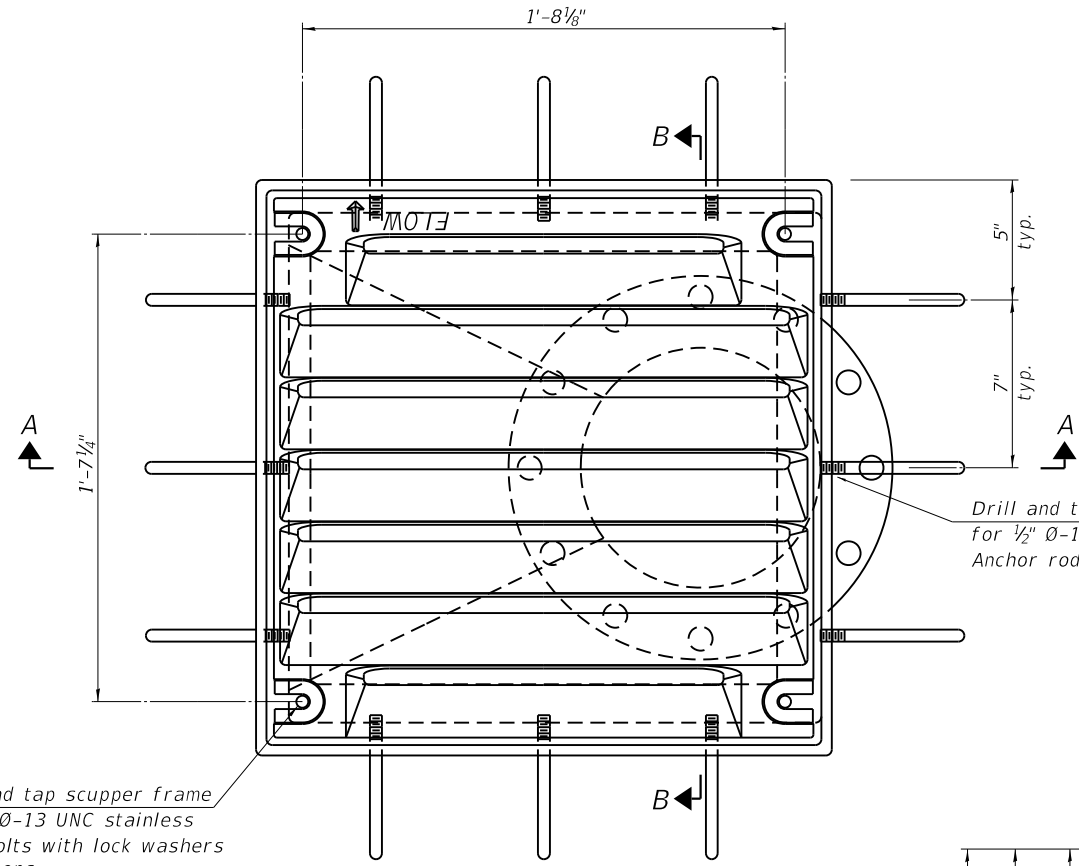
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS 3  
STRUCTURE NO. 049-6595**

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 48
CONTRACT NO. ILLINOIS FED. AID PROJECT			61H28	

SHEET 5-13 OF 5-37 SHEETS

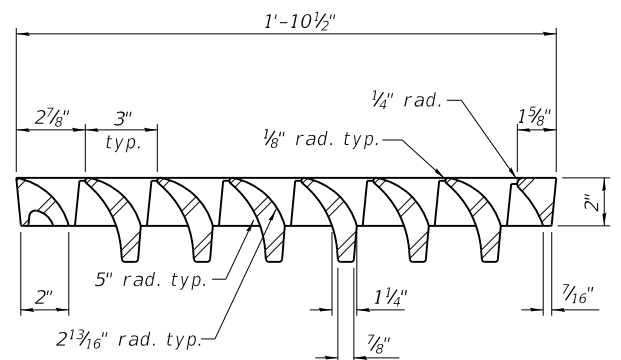




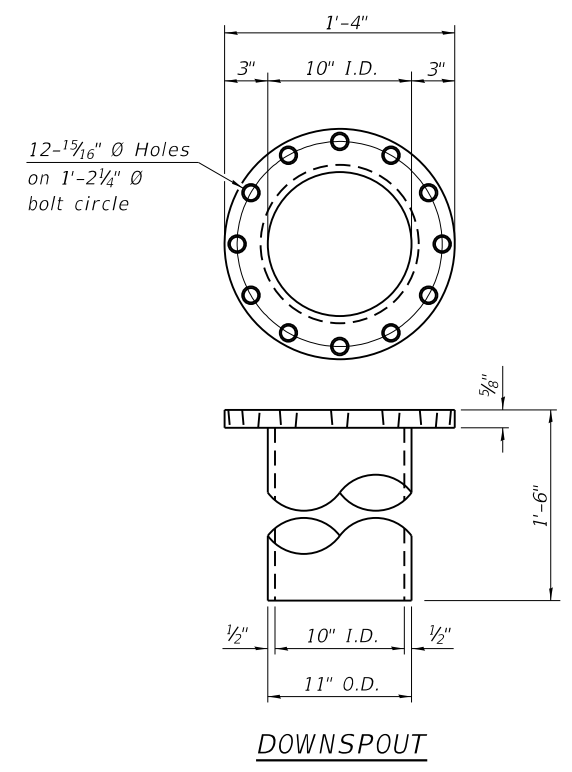
**PLAN**

Drill and tap scupper frame for 1/2" Ø-13 UNC stainless steel bolts with lock washers 4 locations

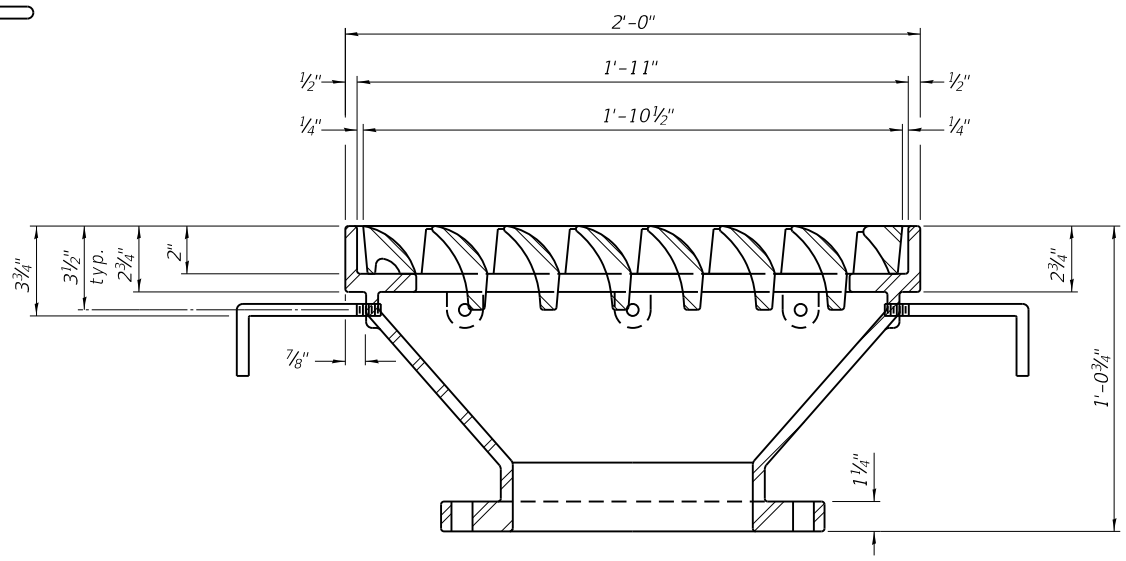
Drill and tap scupper frame for 1/2" Ø-13 UNC threaded Anchor rods 12 locations



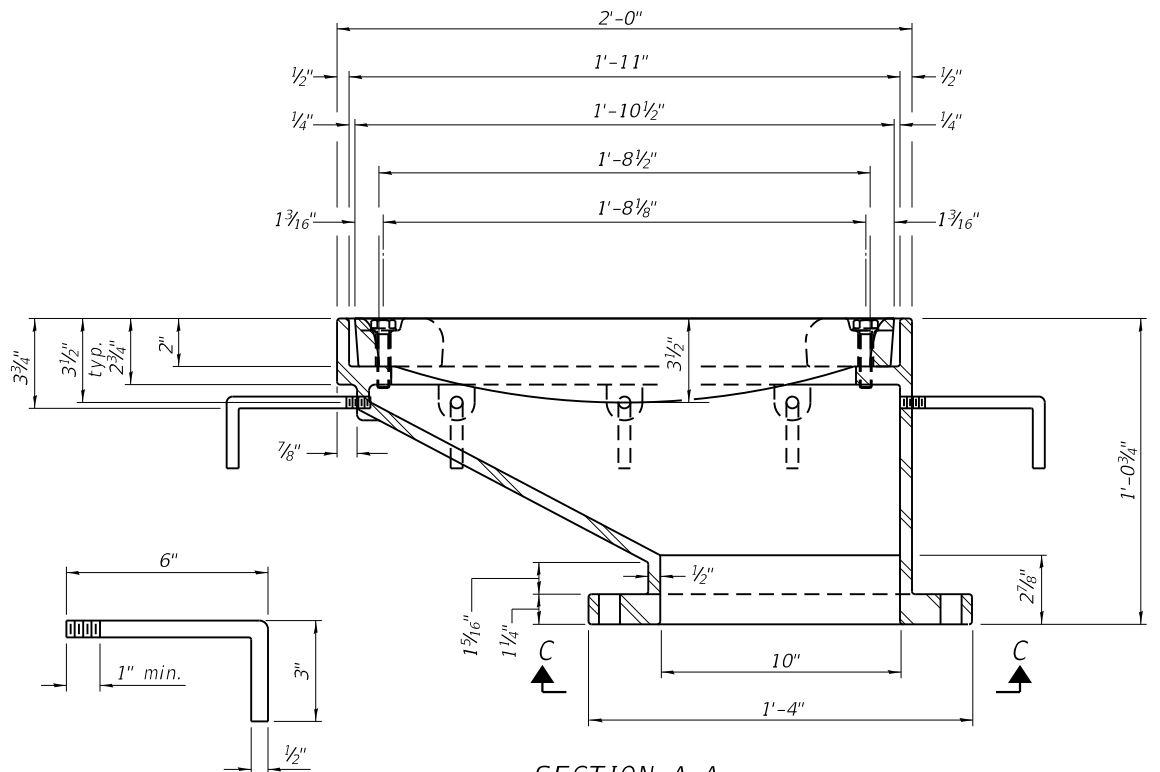
**VANE GRATE DETAIL**



**DOWNSPOUT**



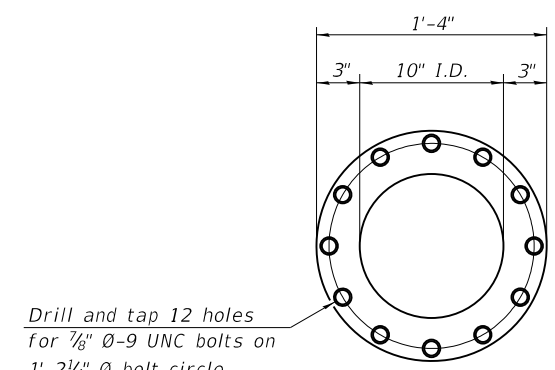
**SECTION B-B**



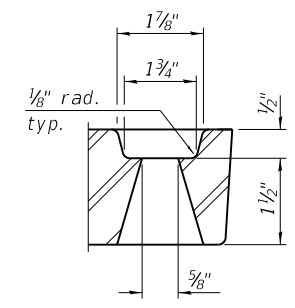
**SECTION A-A**

See sheet S-9 of S-37 for scupper location relative to parapet.

**ANCHOR ROD DETAIL**



**VIEW C-C**



**GRATE BOLT HOLE DETAIL**

**Notes:**  
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.  
 Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.  
 Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.  
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.  
 Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.  
 As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.  
 Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet of .  
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
 Cost of the grate, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-12M10.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12M10	Each	10

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 FILE NAME: R:\Proj\00211366\100211366.dwg

DS-12M10 1-1-2020



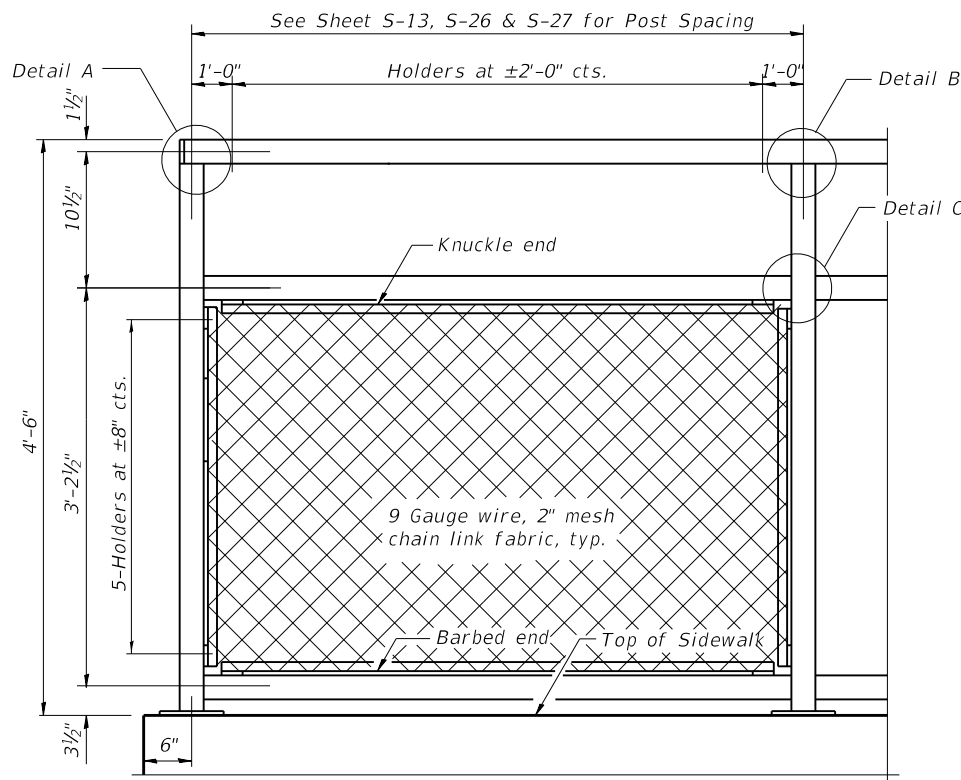
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	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

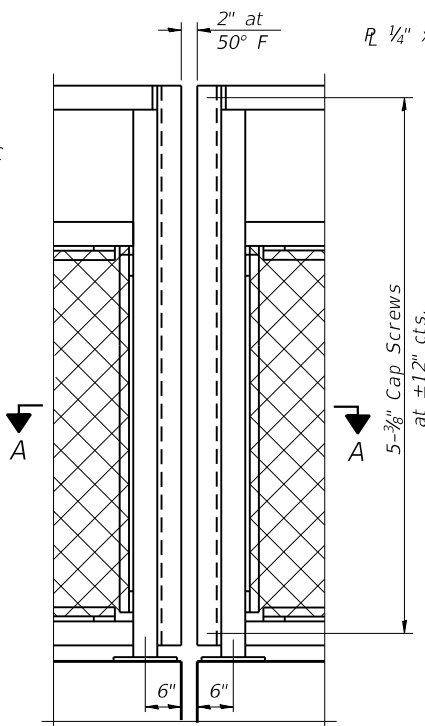
**DRAINAGE SCUPPER, DS-12M10  
 STRUCTURE NO. 049-6595**

SHEET 5-14 OF 5-37 SHEETS

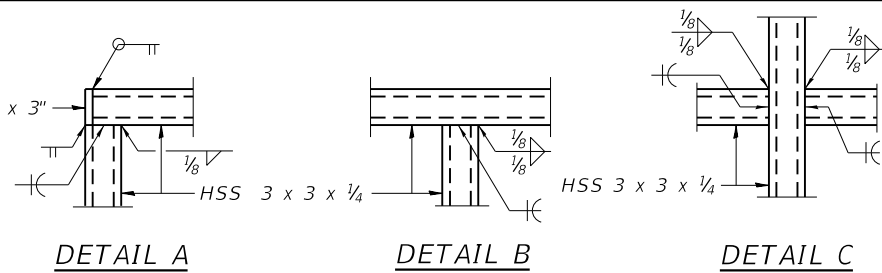
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	49
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		



**BICYCLE RAILING**



**BICYCLE RAILING**

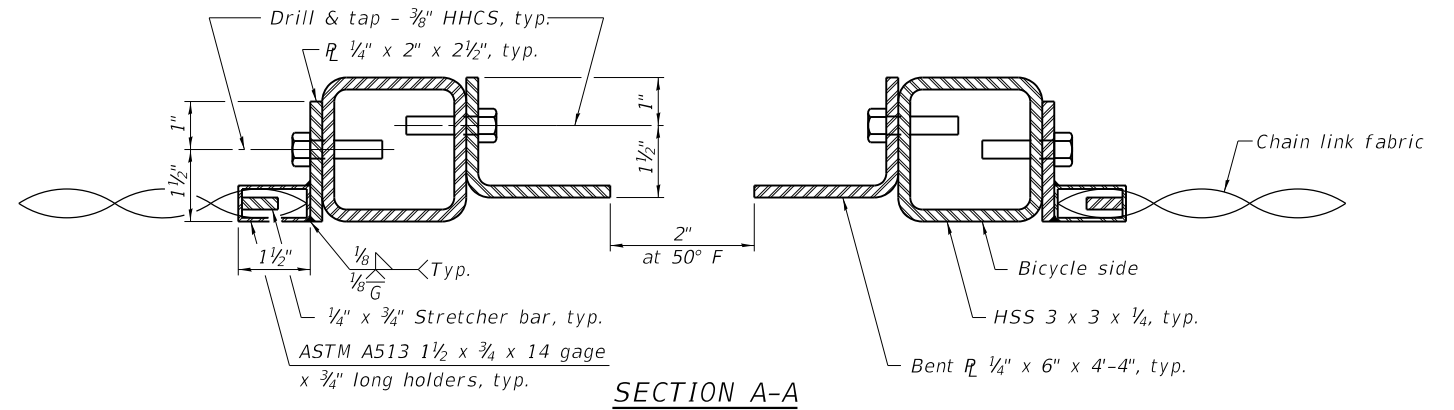


**DETAIL A**

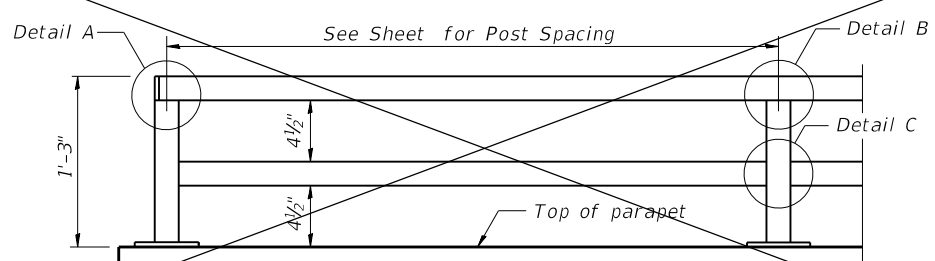
**DETAIL B**

**DETAIL C**

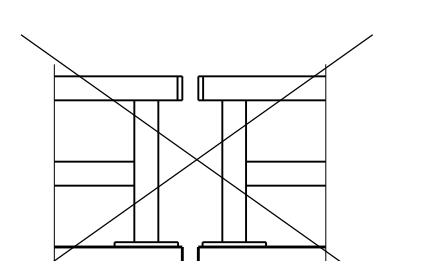
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



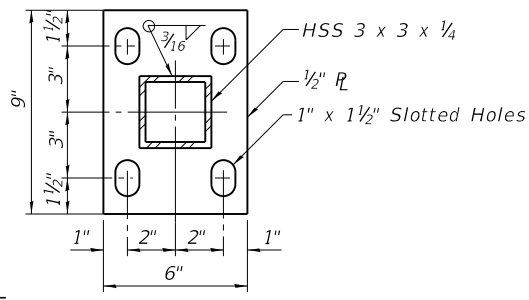
**SECTION A-A**



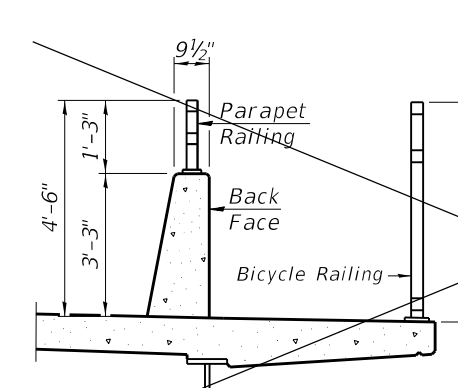
**PARAPET RAILING  
ELEVATION  
(Inside Face of Two Element Rail)**



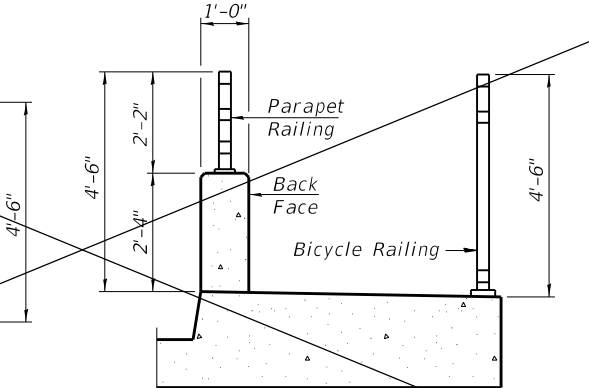
**PARAPET RAILING  
ELEVATION AT EXPANSION JOINT  
(Two Element Rail Shown - Three Element Rail Similar)**



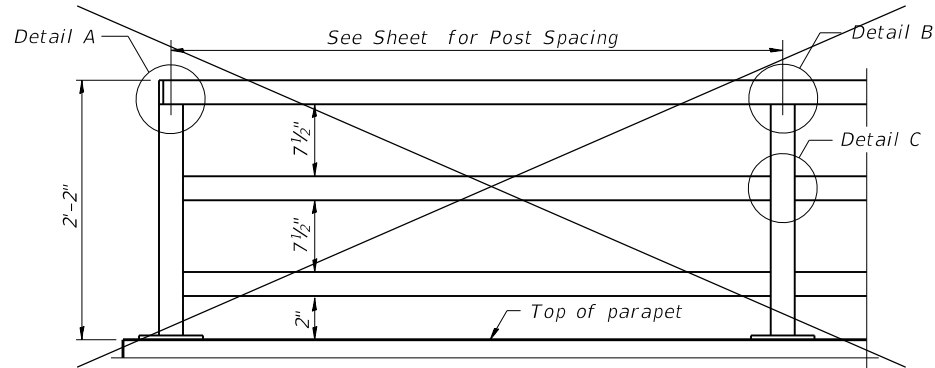
**BASE R**



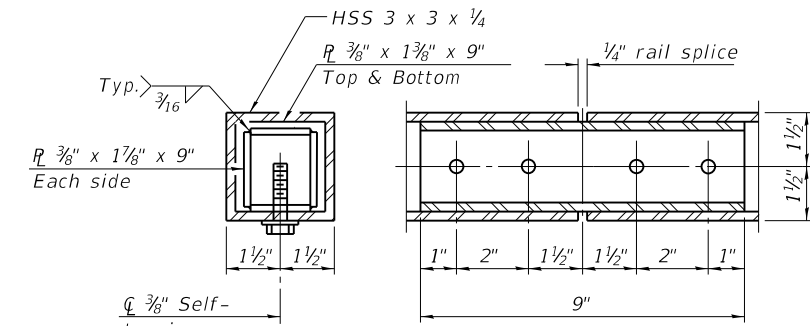
**SECTION THRU DECK**



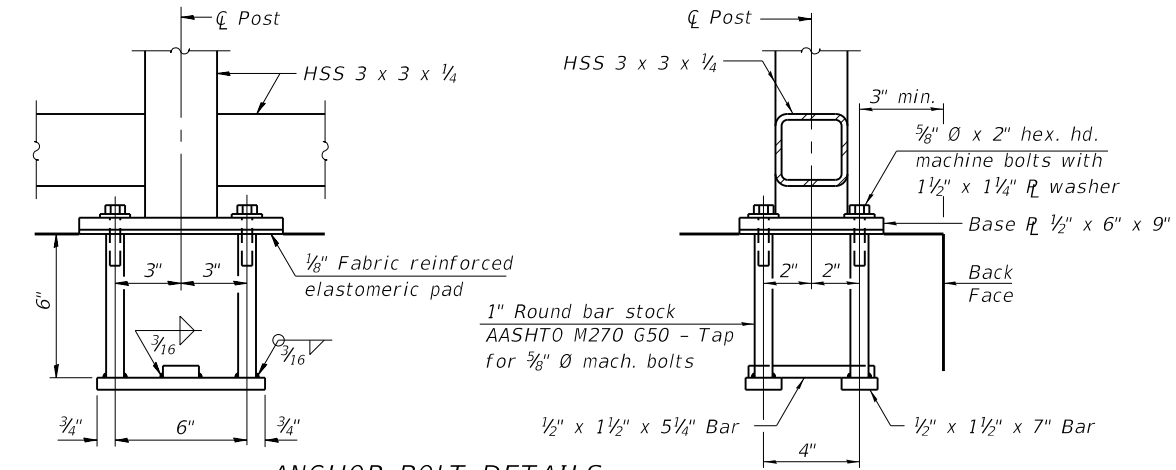
**SECTION THRU SIDEWALK**



**PARAPET RAILING  
ELEVATION  
(Inside Face of Three Element Rail)**



**RAIL SPLICE**



**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bicycle Railing	Foot	95

Notes:  
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.  
CVN testing may be omitted for the Bicycle Railing.

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**R-29**  
  
 8725 W. Higgins Rd, Ste 600, Chicago, IL 60631  
 P 773.775.4009 | www.ciorba.com

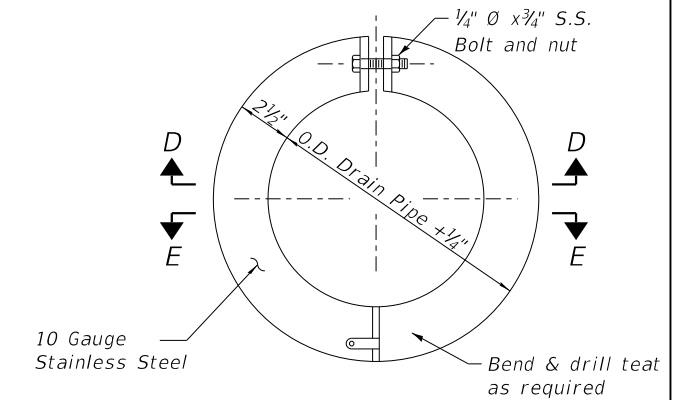
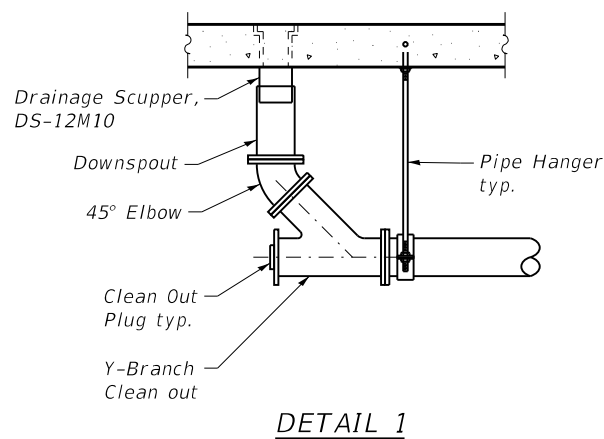
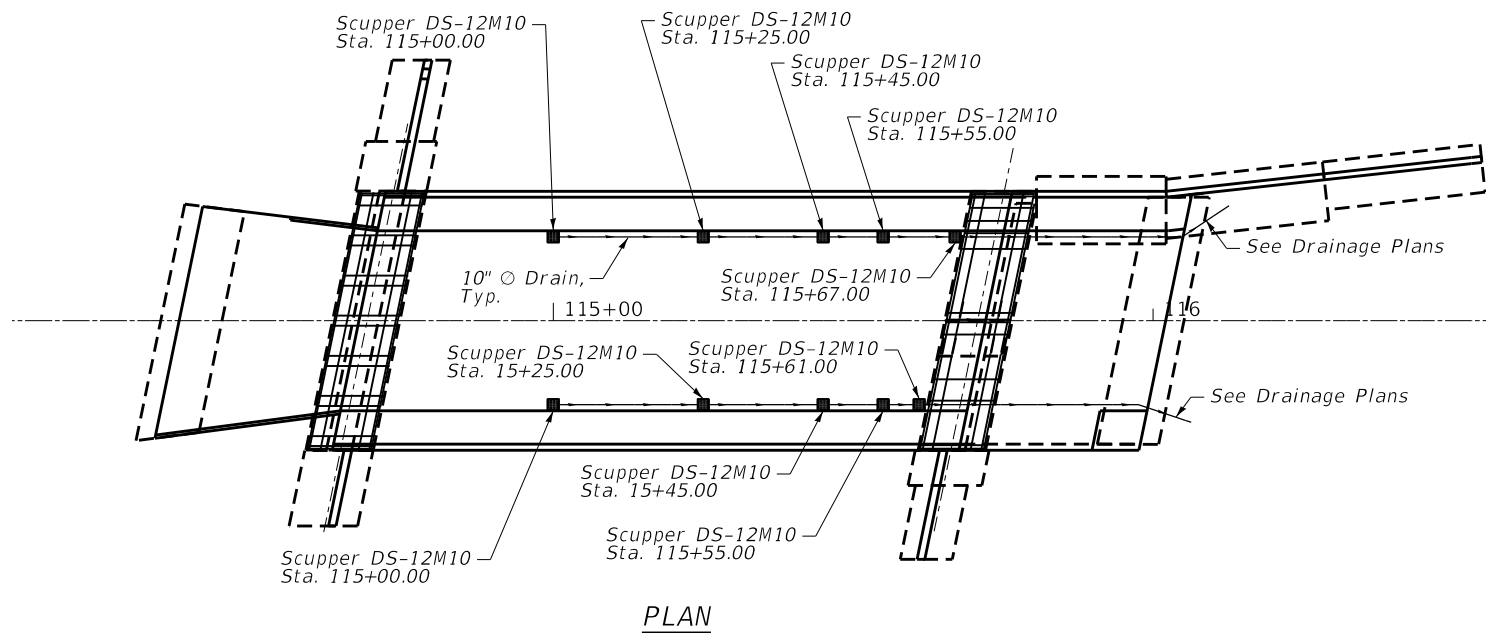
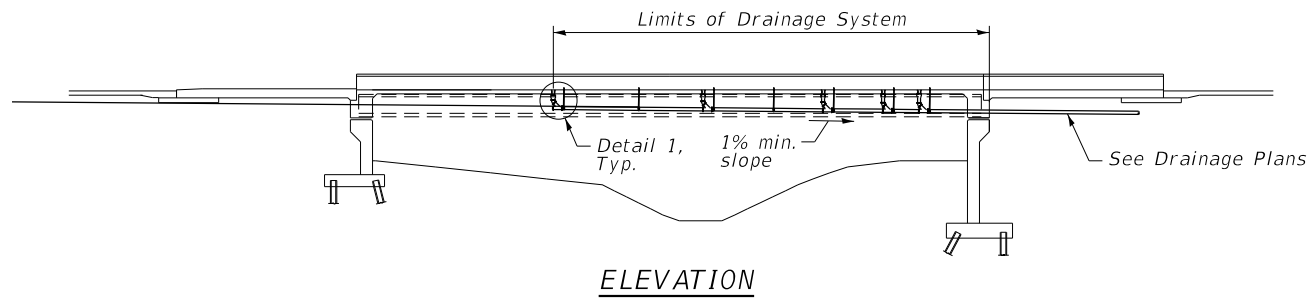
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

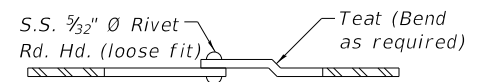
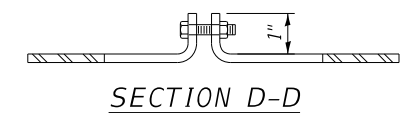
**BRIDGE RAILING  
STRUCTURE NO. 049-6595**

SHEET 5-15 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

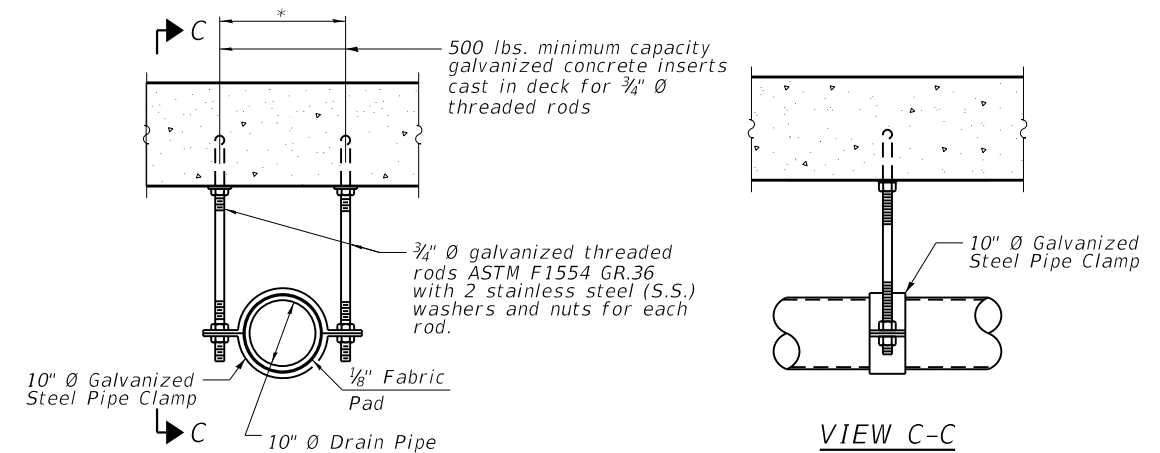


DETAIL OF EXPANSION COLLAR



SECTION E-E

\* Dimension as required by Pipe Clamp



COLLECTOR PIPE HANGER DETAIL

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Drainage System	L Sum	1

**LEGEND**

————— Indicates Direction of Flow

**NOTES:**

1. Provide structural support from proposed deck slab for drain pipe per manufacturer's recommendation, not to exceed 5' cts. Cost included with "Drainage System".
2. Steel straps, bars and plates shall meet the requirements of AASHTO M270, Grade 36 or 50.
3. All pipes, pipe fittings and brackets needed shall be included with cost of "Drainage System".
4. Color of fiberglass pipe shall be grey.

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CLOSED DRAINAGE SYSTEM  
STRUCTURE NO. 049-6595

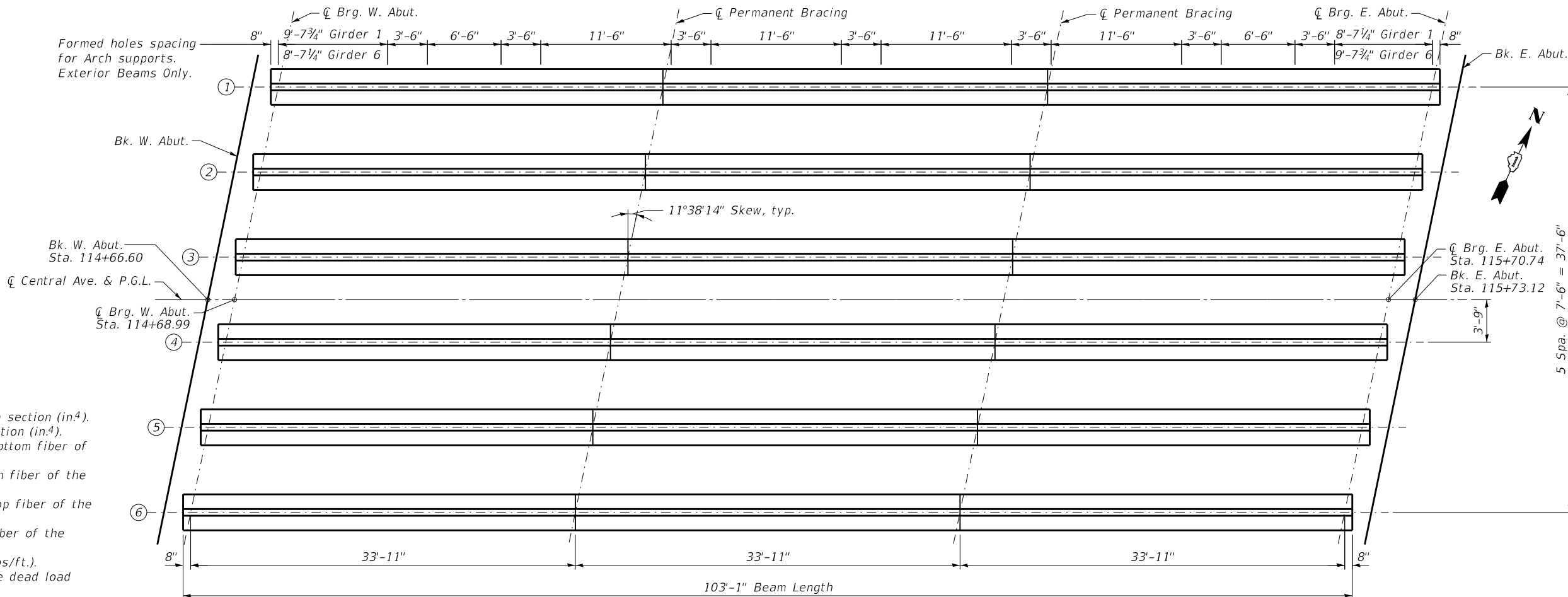
SHEET 5-16 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

INTERIOR BEAM MOMENT TABLE	
	0.5 Sp. 1
$I$ (in. <sup>4</sup> )	223,604
$I'$ (in. <sup>4</sup> )	485,210
$S_b$ (in. <sup>3</sup> )	11004
$S_b'$ (in. <sup>3</sup> )	15,795
$S_t$ (in. <sup>3</sup> )	9060
$S_t'$ (in. <sup>3</sup> )	33,978
$DC1$ (kips/ft.)	2.36
$M_{DC1}$ (kip-ft.)	2,258
$DC2$ (kips/ft.)	0.64
$M_{DC2}$ (kip-ft.)	830
$DW$ (kips/ft.)	0.31
$M_{DW}$ (kip-ft.)	349
$M_L + IM$ (kip-ft.)	1,826

INTERIOR BEAM REACTION TABLE	
	East & West Abut.
$R_{DC1}$ (kips)	120.2
$R_{DC2}$ (kips)	32.6
$R_{DW}$ (kips)	16.0
$R_L + IM$ (kips)	100.9
$R_{Total}$ (kips)	269.8

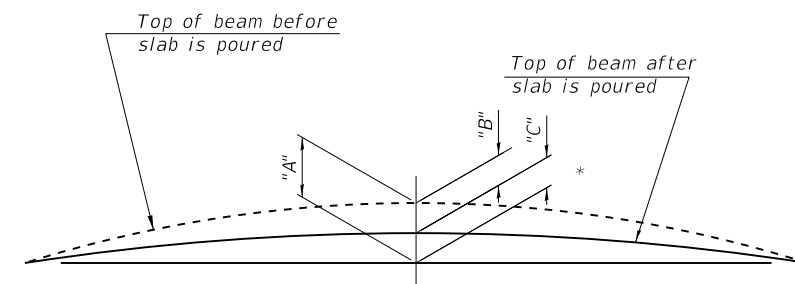
$I$ : Non-composite moment of inertia of beam section (in.<sup>4</sup>).  
 $I'$ : Composite moment of inertia of beam section (in.<sup>4</sup>).  
 $S_b$ : Non-composite section modulus for the bottom fiber of the prestressed beam (in.<sup>3</sup>).  
 $S_b'$ : Composite section modulus for the bottom fiber of the prestressed beam (in.<sup>3</sup>).  
 $S_t$ : Non-composite section modulus for the top fiber of the prestressed beam (in.<sup>3</sup>).  
 $S_t'$ : Composite section modulus for the top fiber of the prestressed beam (in.<sup>3</sup>).  
 $DC1$ : Un-factored non-composite dead load (kips/ft.).  
 $M_{DC1}$ : Un-factored moment due to non-composite dead load (kip-ft.).  
 $DC2$ : Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).  
 $M_{DC2}$ : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).  
 $DW$ : Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).  
 $M_{DW}$ : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).  
 $M_L + IM$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



**FRAMING PLAN**

- \* "A" = Prestress Camber
- \* "B" = Dead Load Deflection
- \* "C" = Residual Camber
- \* Round off to the nearest 1/8"

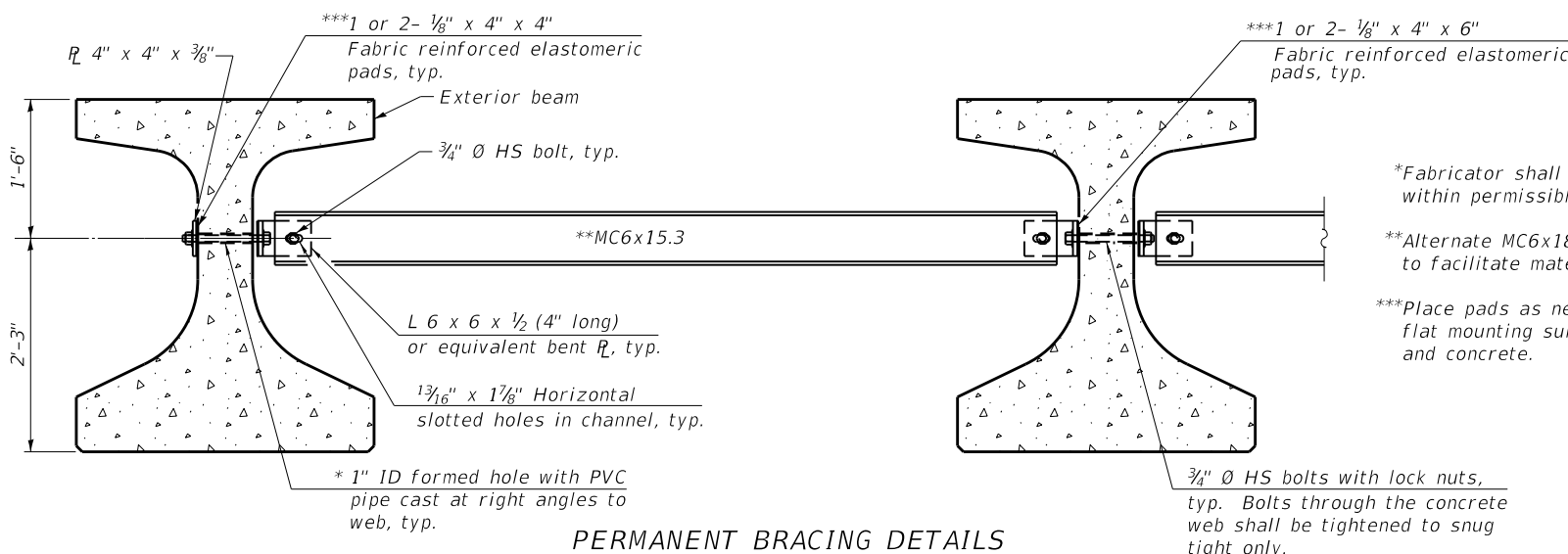
A	B	C
3 7/8"	2 3/8"	2 1/4"



**CAMBER & DEFLECTION DIAGRAM**

**NOTES:**

- All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
- Two hardened washers are required for each set of oversized holes.
- All holes shall be 1 5/16" Ø unless otherwise noted. 3/4" x 3" x 3" plate washers are required over all slotted holes.
- All bolts shall be galvanized according to AASHTO M232.
- Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
- Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.



- \*Fabricator shall locate to miss strands within permissible tolerances.
- \*\*Alternate MC6x18 channels are permitted to facilitate material acquisition.
- \*\*\*Place pads as necessary to provide a flat mounting surface between the steel and concrete.

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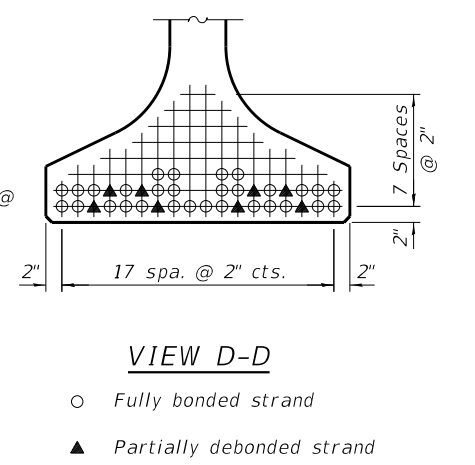
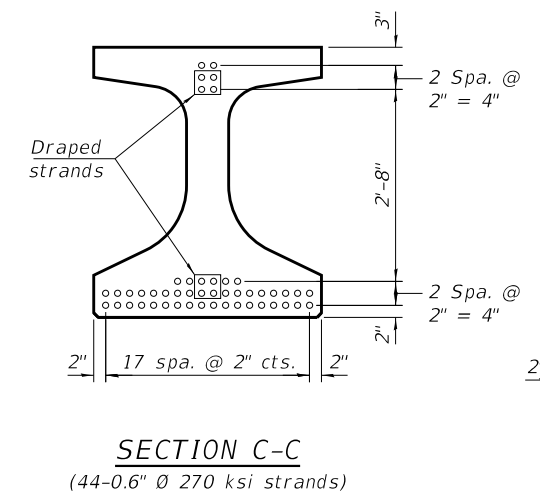
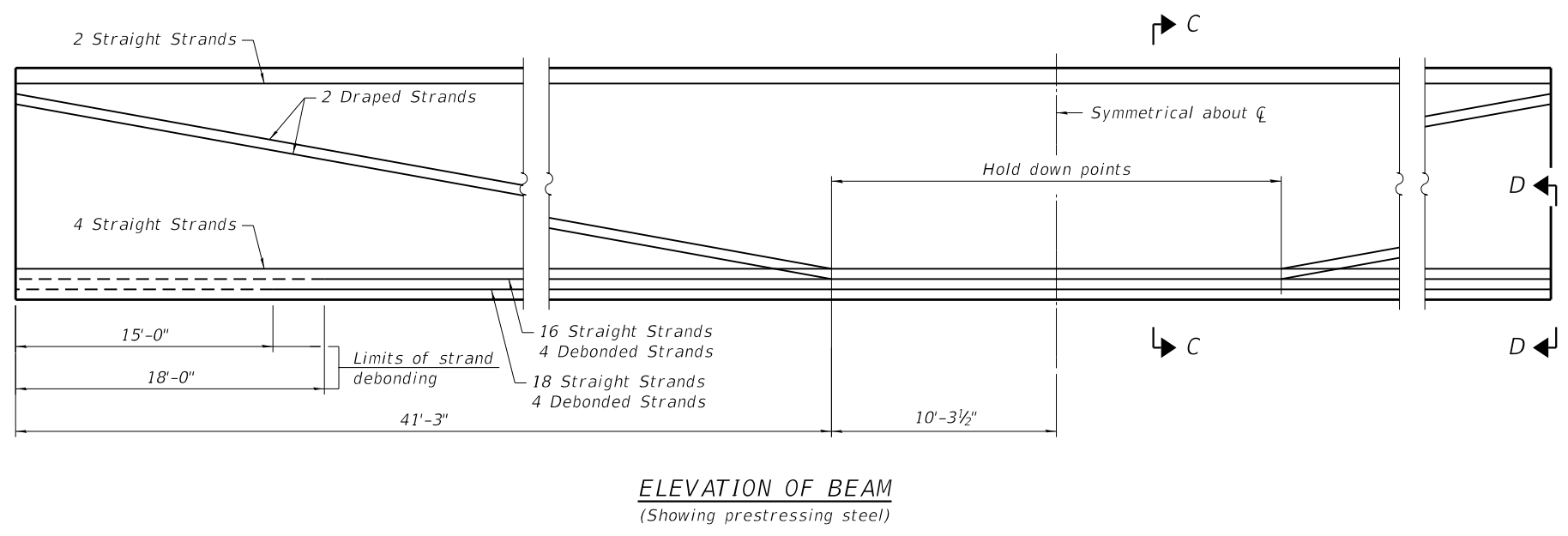
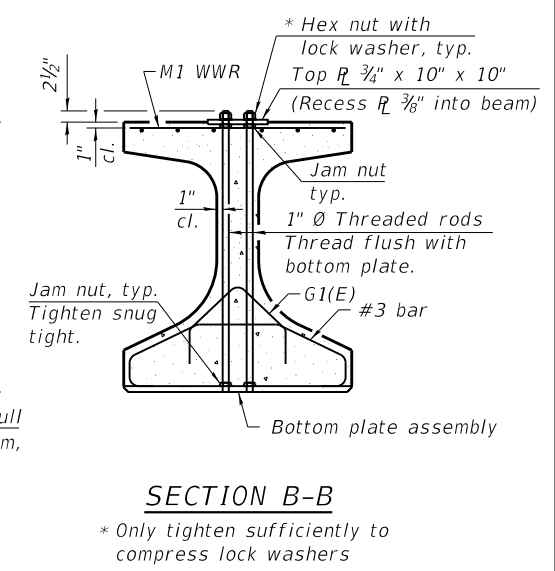
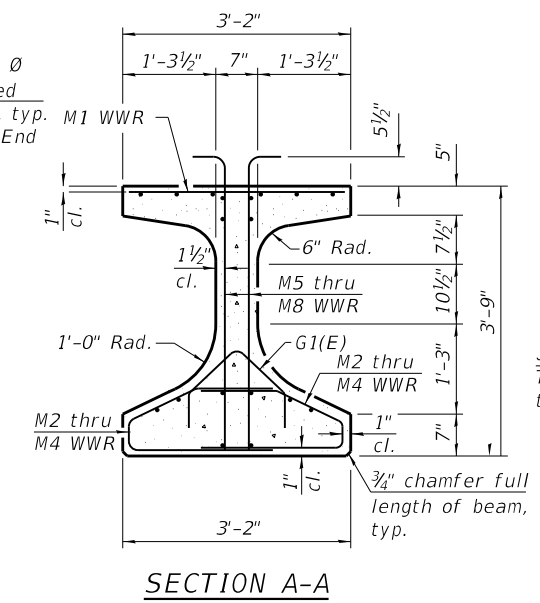
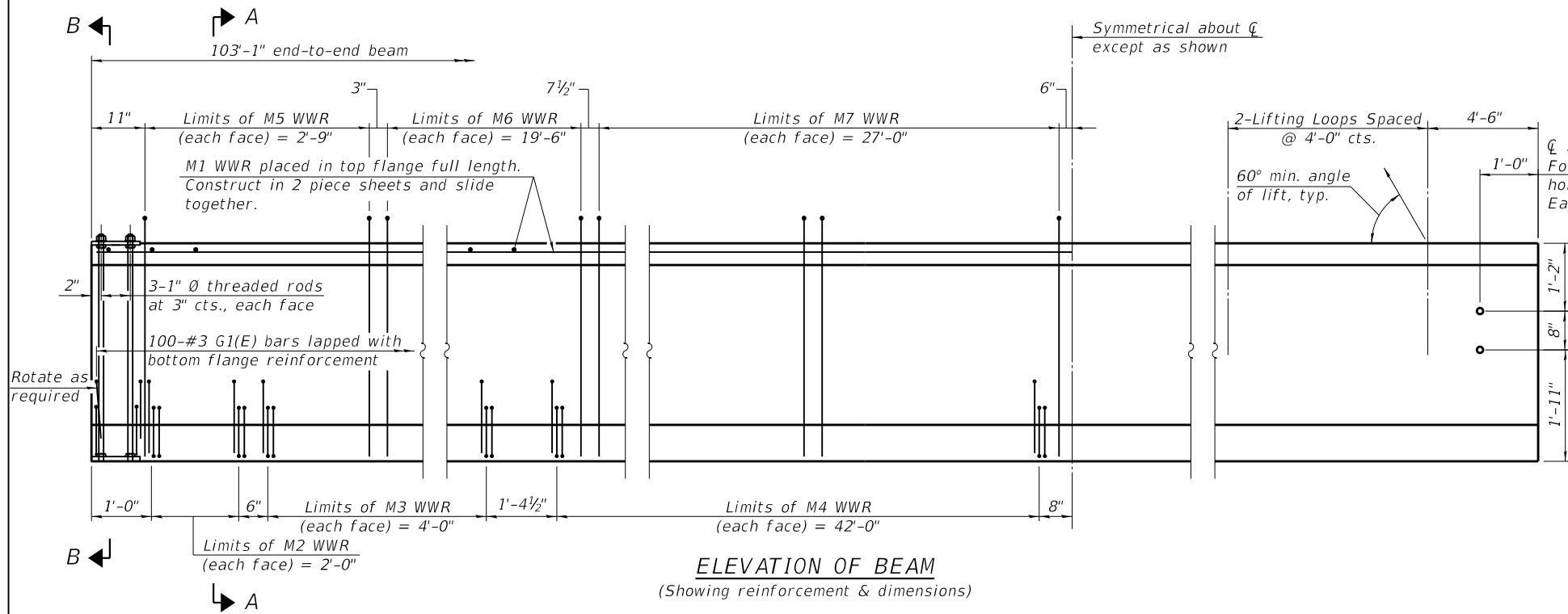
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN  
STRUCTURE NO. 049-6595**

SHEET 5-17 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	52
CONTRACT NO.			61H28	

ILLINOIS FED. AID PROJECT



**NOTE:**  
1. See Sheet S-19 for Additional Details and Bill of Materials.

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IL45-3838 2-25-2019  
**CiorbaGroup**  
8725 W. Higgins Rd, Ste 600, Chicago, IL 60631  
P 773.775.4009 | www.ciorba.com

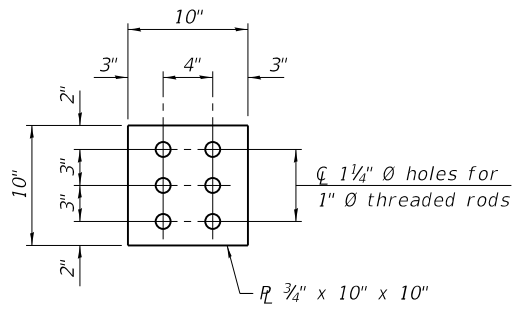
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

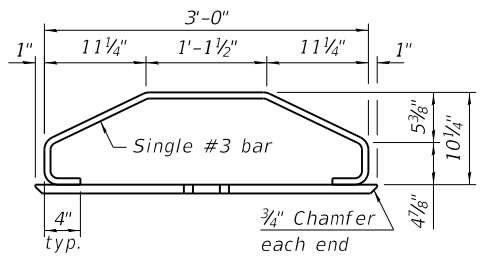
**BEAM DETAILS 1**  
**STRUCTURE NO. 049-6595**

SHEET 5-18 OF 5-37 SHEETS

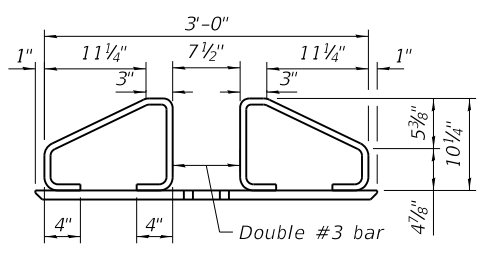
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	53
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



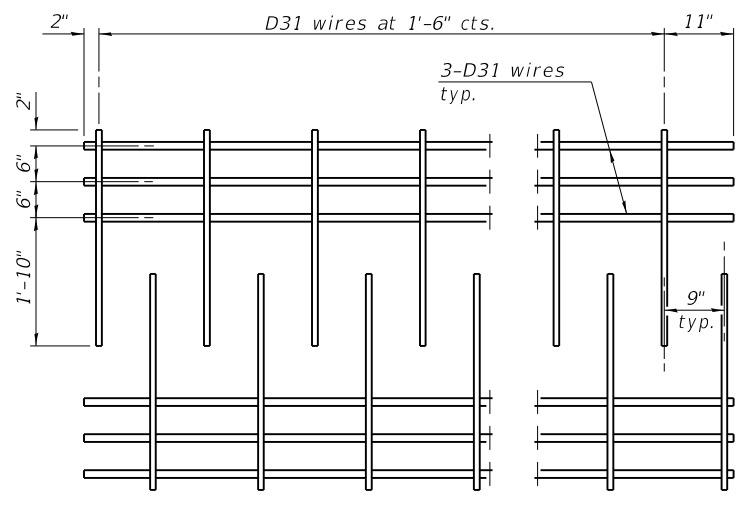
PLAN - TOP PLATE



SECTION A-A  
BOTTOM PLATE ASSEMBLY



SECTION B-B  
BOTTOM PLATE ASSEMBLY

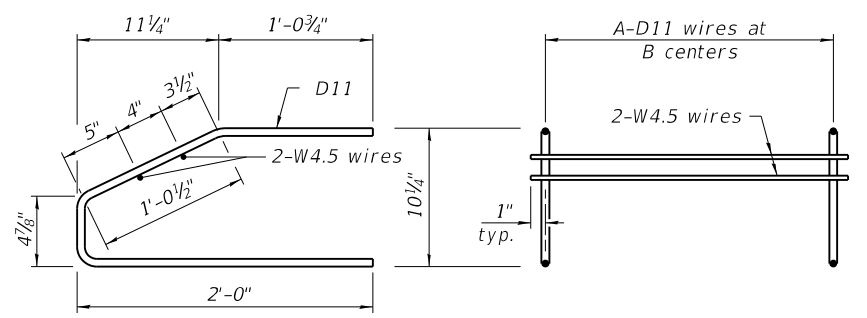


M1 WWR DETAIL

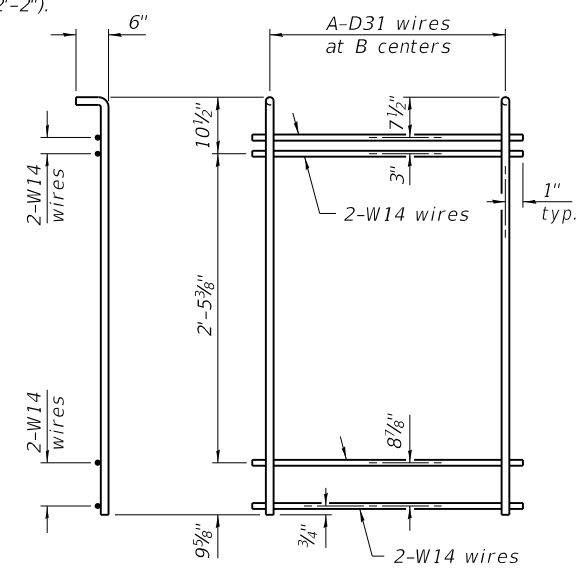
When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").

TABLE OF DIMENSIONS  
(WWR tables are based on Grade 60)

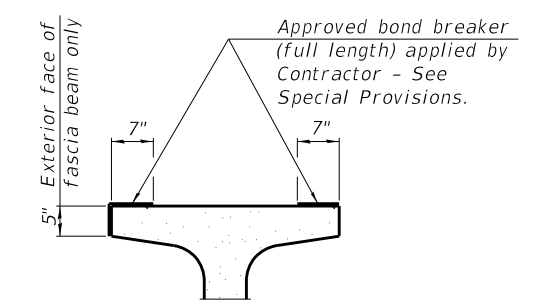
WWR	A	B
M2	9	3"
M3	9	6"
M4	28	1'-6"
M5	12	3"
M6	39	6"
M7	28	1'-0"
M8	0	2'-0"



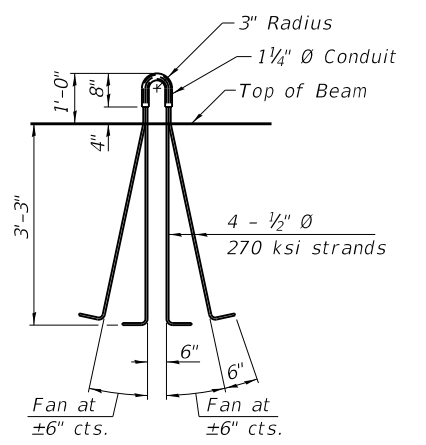
M2 THRU M4 WWR DETAIL  
(See Table of Dimensions)



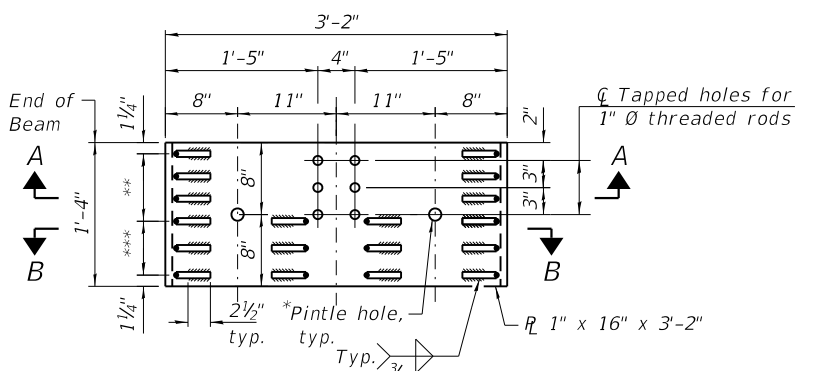
M5 THRU M8 WWR DETAIL  
(See Table of Dimensions)



SECTION THRU TOP FLANGE  
(Showing limits of bond breaker)



LIFTING LOOP DETAIL

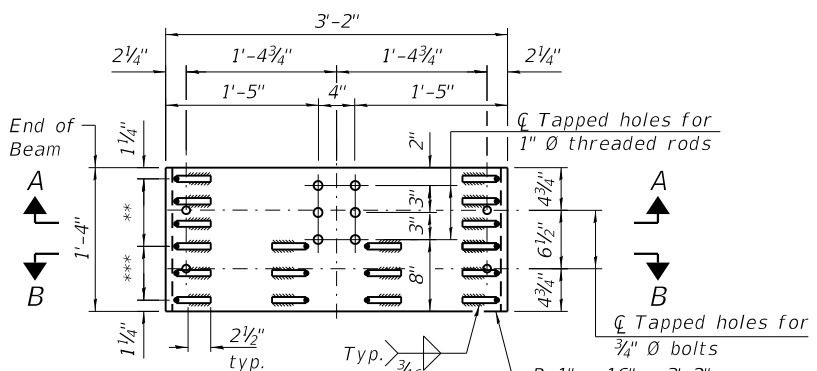


PLAN - EXPANSION END  
BOTTOM PLATE ASSEMBLY

\*1 3/8" Ø holes for Pintles. Plug before casting beam. One side of beam only

\*\*\*3 Spaces at 2 1/2" = 7 1/2", Single #3 bar

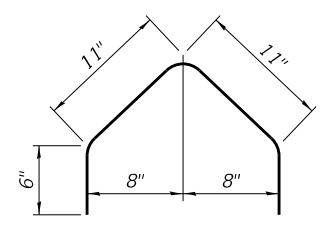
\*\*\*2 Spaces at 3" = 6", Double #3 bar



PLAN - FIXED END  
BOTTOM PLATE ASSEMBLY

\*\*\*3 Spaces at 2 1/2" = 7 1/2", Single #3 bar

\*\*\*2 Spaces at 3" = 6", Double #3 bar



BAR G1(E)

NOTES:

1. Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.
2. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.
3. The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.
4. A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
5. Bend the extended strands inward on the fascia beams to maintain 1 1/2" clearance inside the pier diaphragm.
6. The top and bottom plates shall be AASHTO M270 Grade 50.
7. The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111.
8. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232. Threaded rods shall be ASTM F 1554 Grade 55.
9. Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.
10. Beams shall not be released from the fabricator until they have attained 30 days of age or older.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL45	Ft.	619

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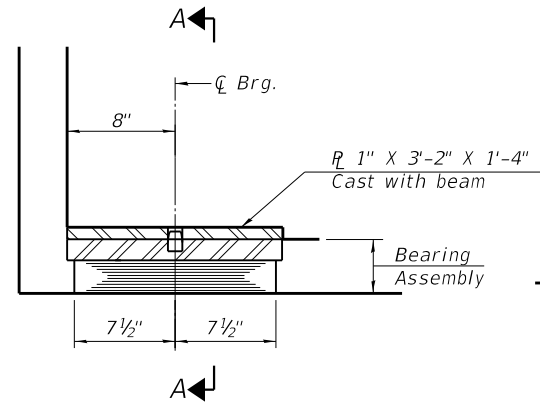
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	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

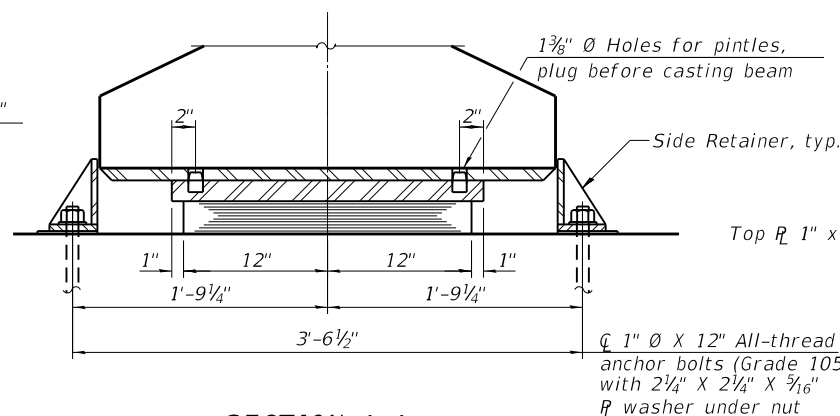
BEAM DETAILS 2  
STRUCTURE NO. 049-6595

SHEET 5-19 OF 5-37 SHEETS

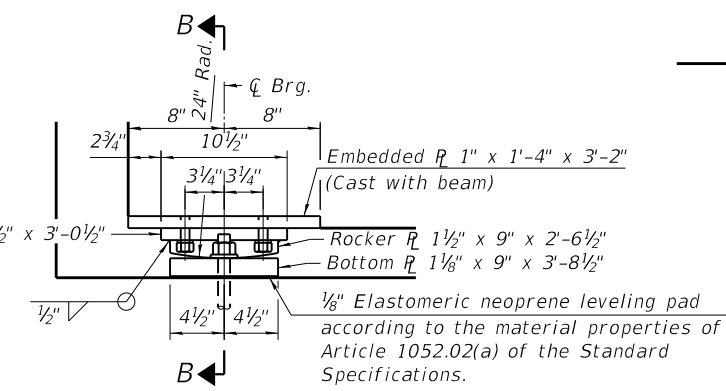
MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 54
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	



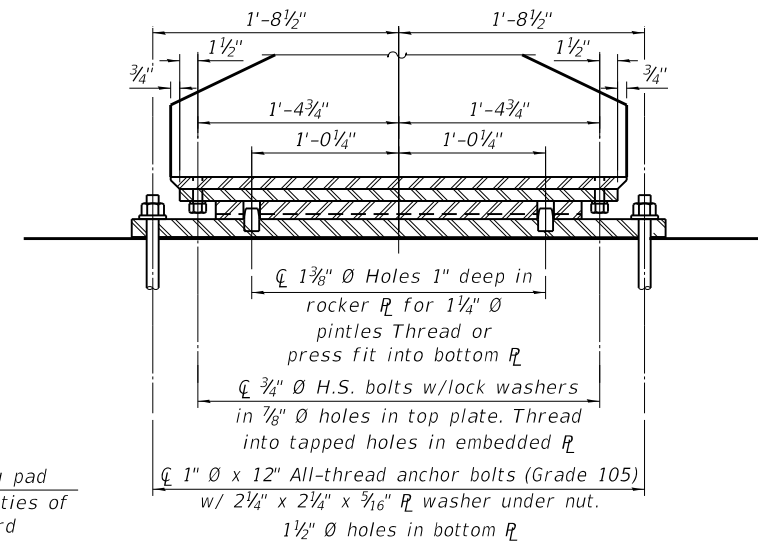
ELEVATION AT EAST ABUT.



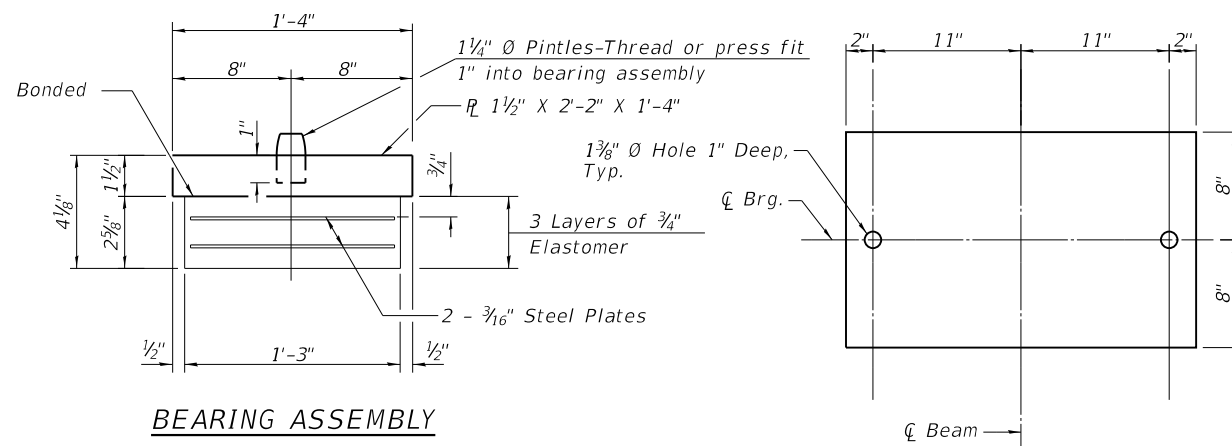
SECTION A-A



ELEVATION AT WEST ABUTMENT

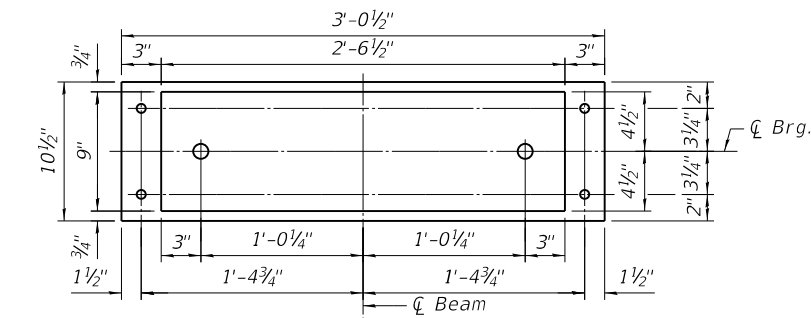


SECTION B-B

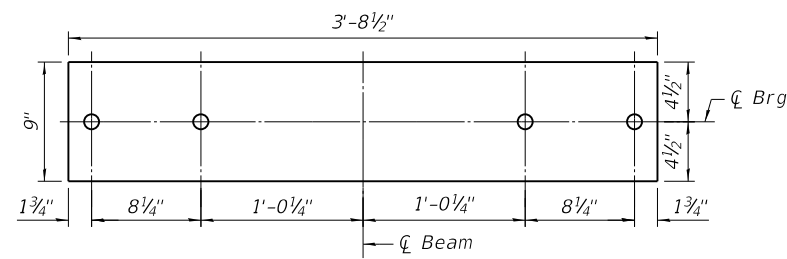


BEARING ASSEMBLY

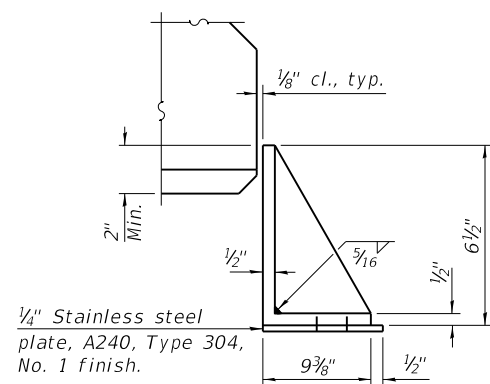
TOP PLATE PLAN  
(Expansion Bearing)



PLAN OF TOP PLATE & ROCKER PLATE  
(Looking from below at top plate and rocker plate only)

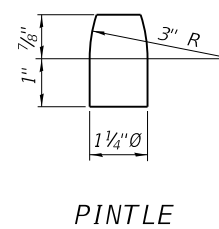
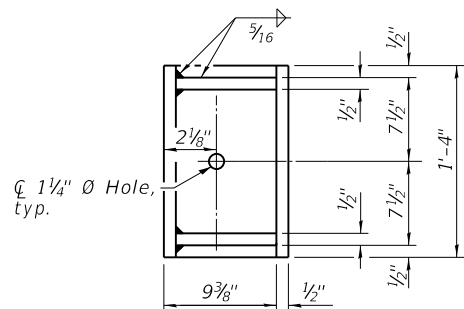


PLAN OF BOTTOM PLATE  
FIXED BEARING



SIDE RETAINER  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

TYPE I ELASTOMERIC EXP. BRG.



PINTLE

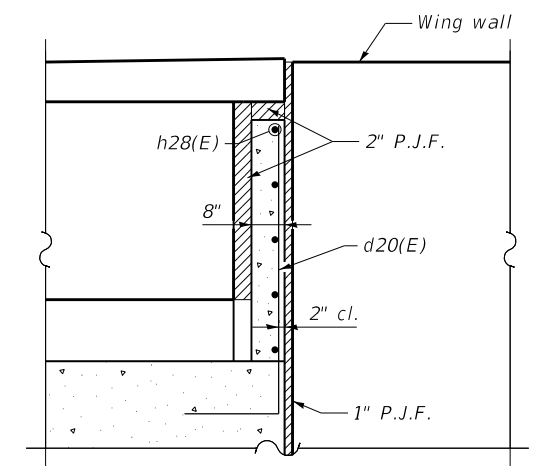
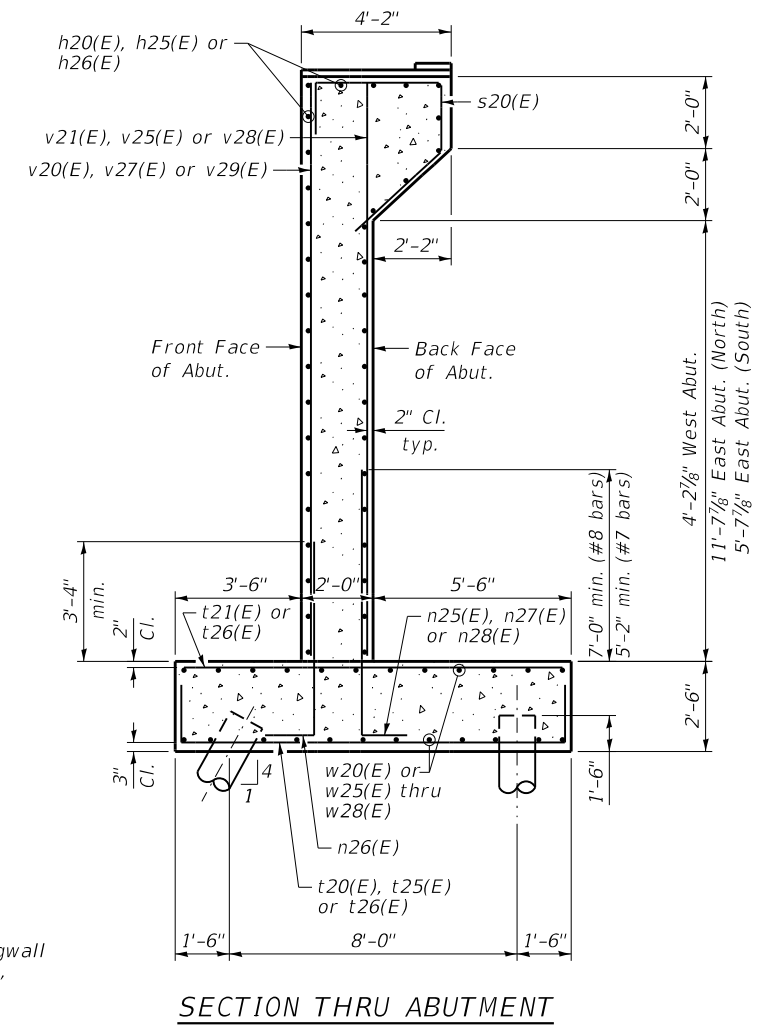
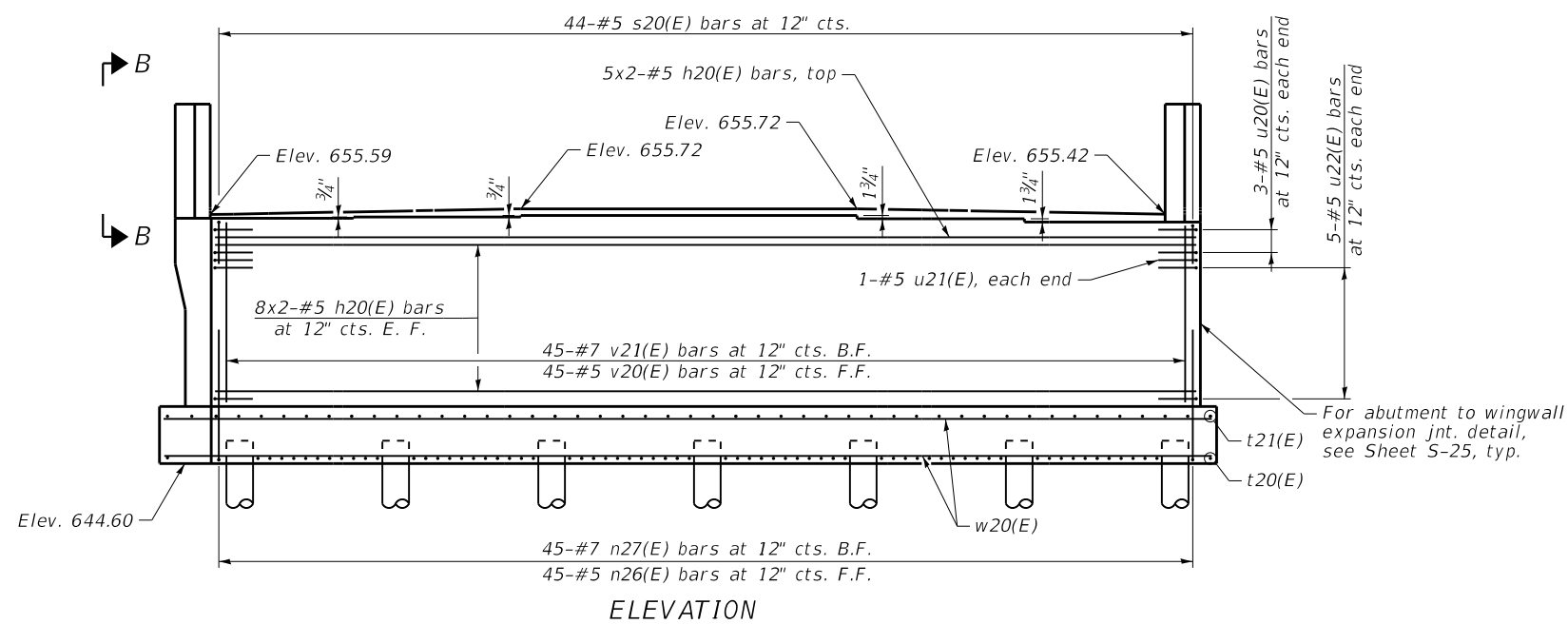
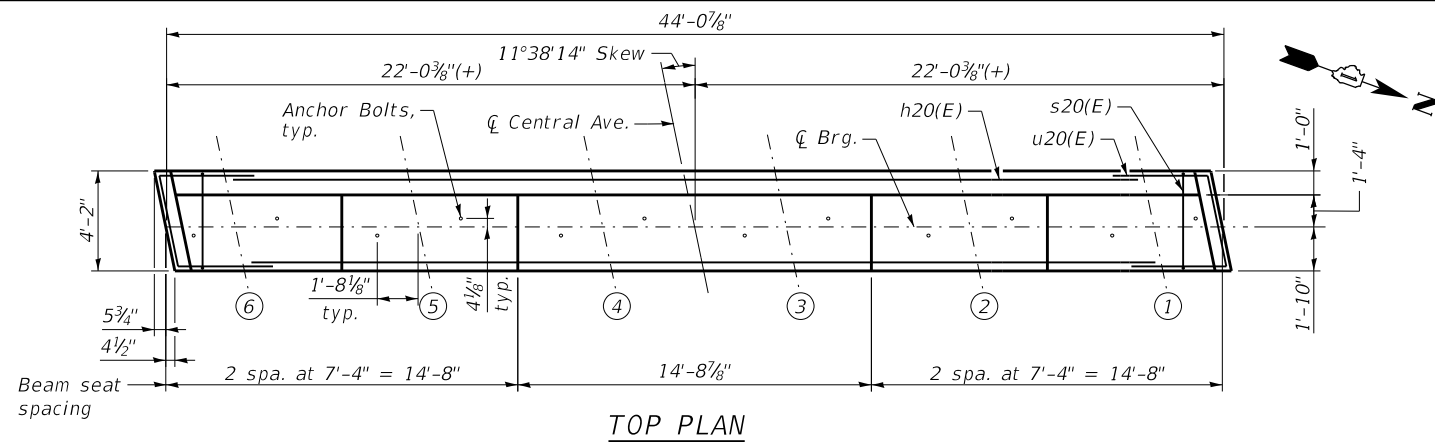
NOTES:

- Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
- See sheet S-19 for additional details of plate cast with beam.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- All plates, hardware, and leveling pads required for the fixed bearing, except anchor bolts, shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete IL45 Beams.
- All plate material for bearings shall be hot dip galvanized according to AASHTO M111.
- All bolts and washers shall be galvanized according to AASHTO M232.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	6
Anchor Bolts, 1"	Each	22

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 FILE NAME: R:\Proj\00211366\100211366.dwg



**PEDESTAL SEAT ELEVATIONS**

Girder	Elevation
1	655.34
2	655.49
3	655.64
4	655.64
5	655.57
6	655.51

**PILE DATA**

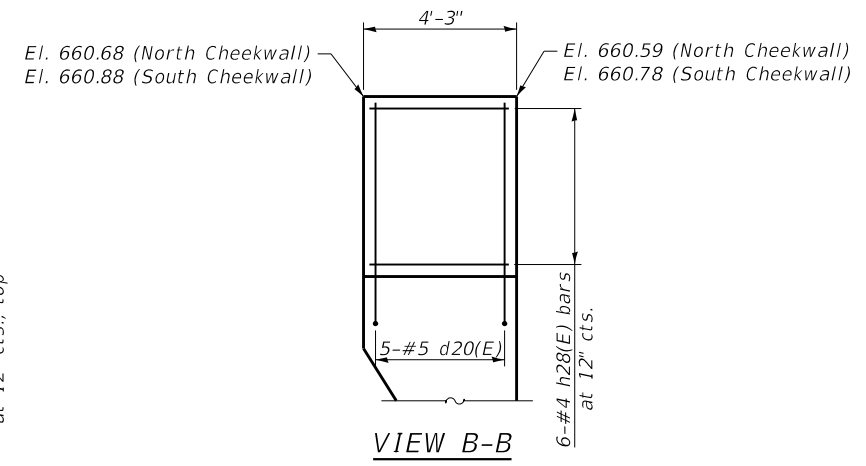
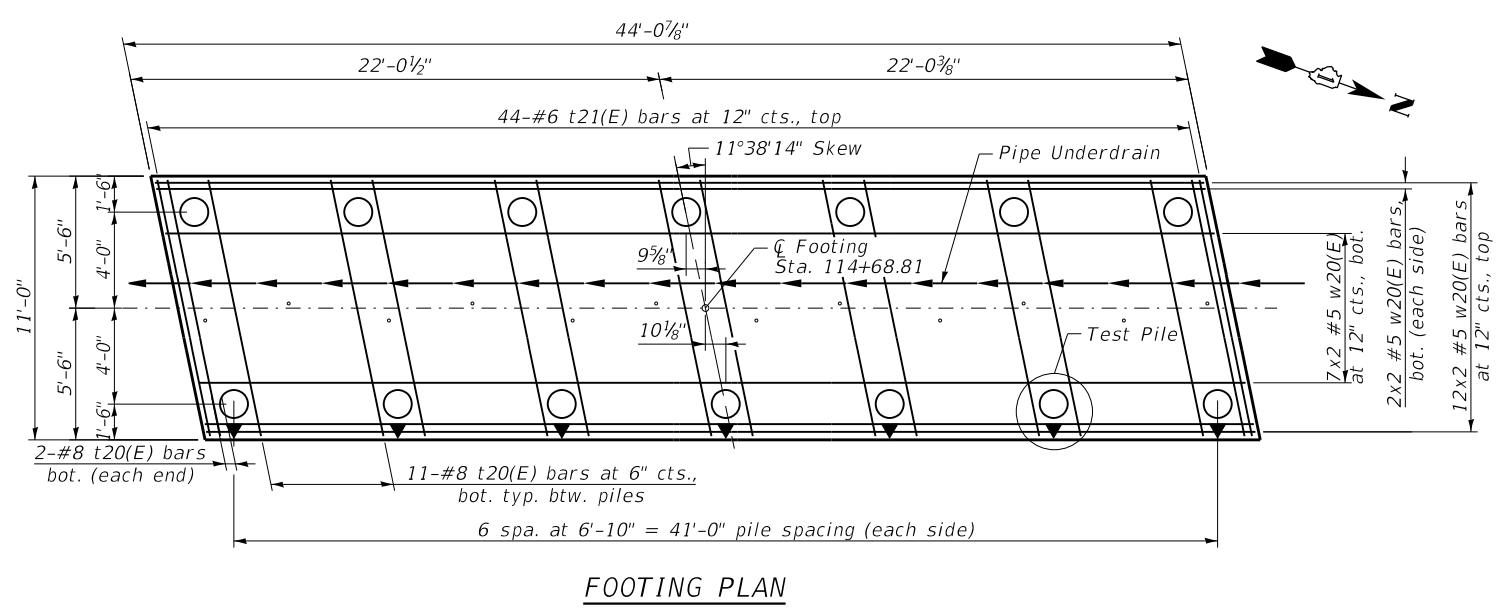
Type: Metal Shell 14"x0.250" w/ Pile Shoes  
 Nominal Required Bearing: 454 kips  
 Factored Resistance Available: 250 kips  
 Est. Length: 42'  
 No. Production Piles: 13  
 No. Test Piles: 1

**MINIMUM BAR LAP**

#5 bar = 3'-2"  
 #5 bar = 3'-7" (Horizontal)  
 #7 bar = 5'-0"

**NOTES:**

1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. For details of piles, see sheet S-32.



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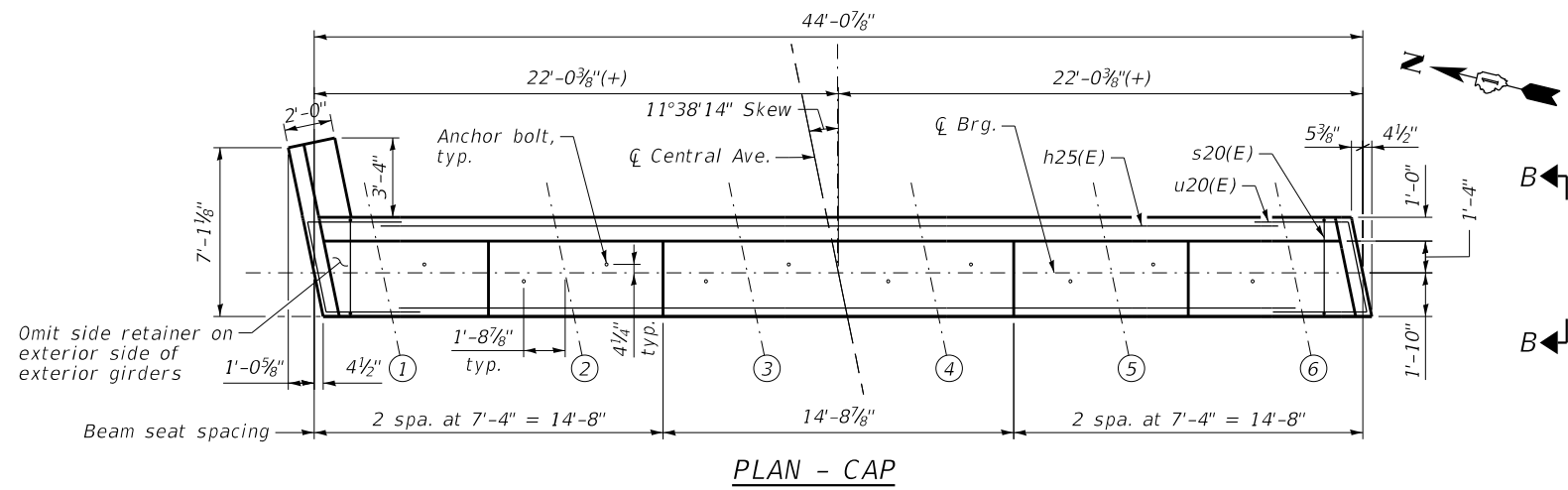
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT  
 STRUCTURE NO. 049-6595**

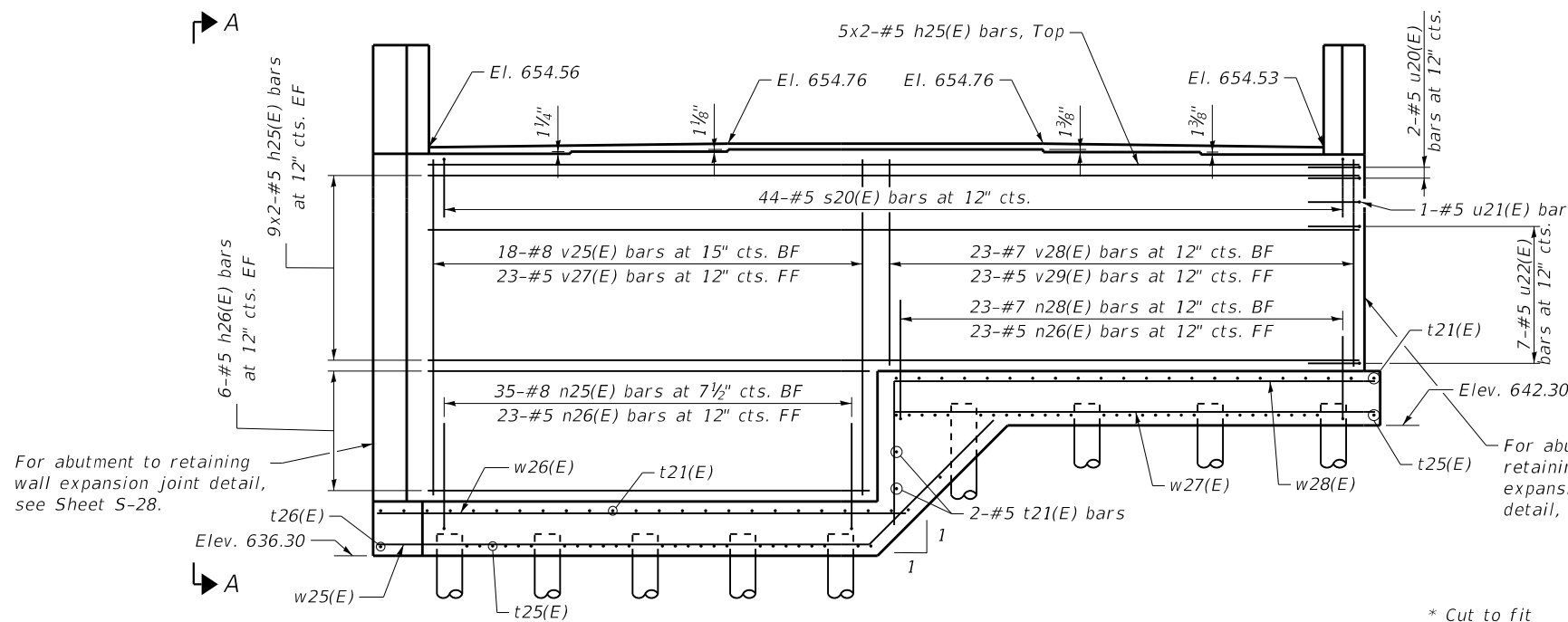
SHEET S-21 OF S-37 SHEETS

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 56
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

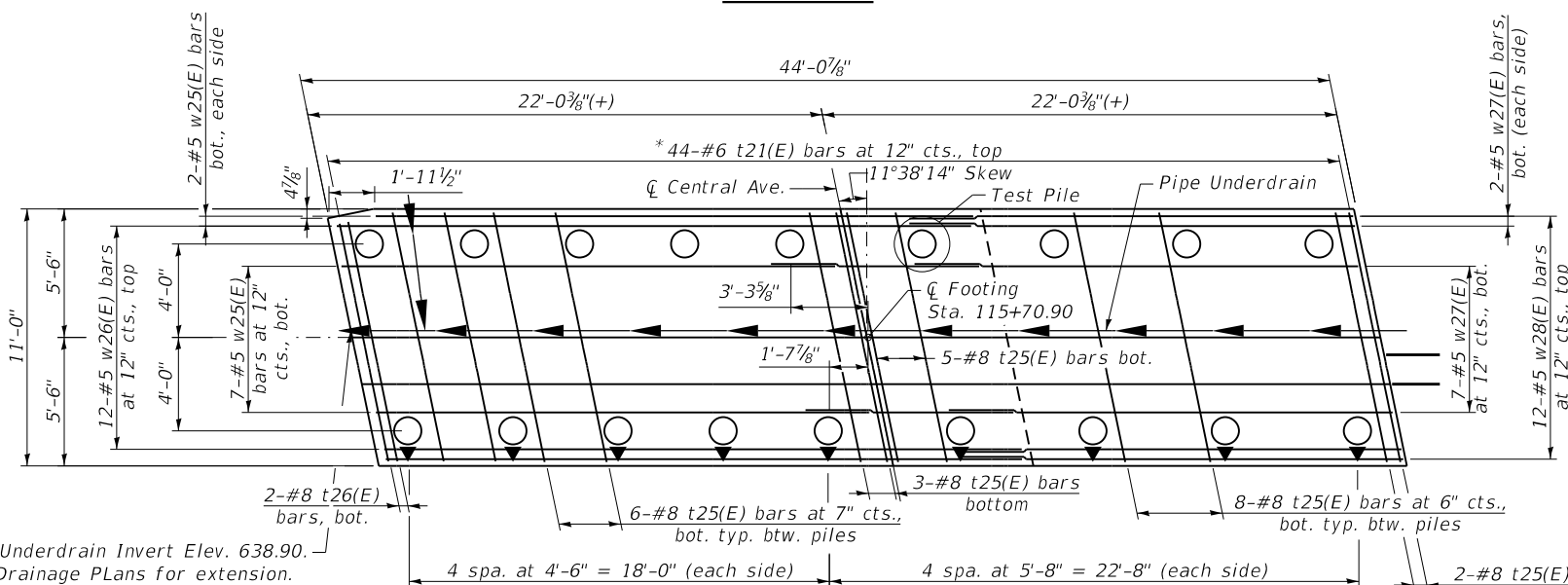




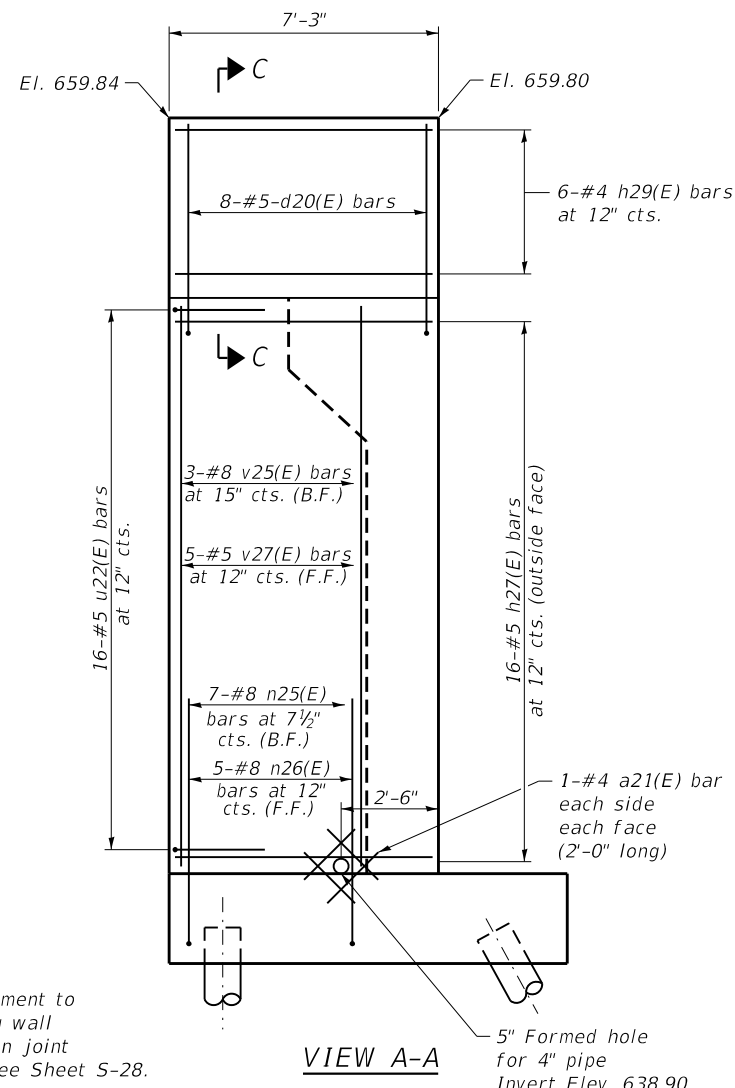
PLAN - CAP



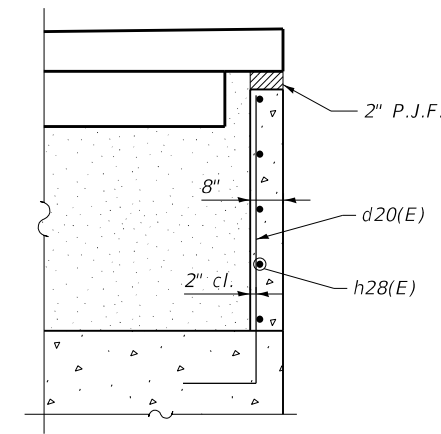
ELEVATION



FOOTING PLAN



VIEW A-A



SECTION C-C

PEDESTAL SEAT ELEVATIONS

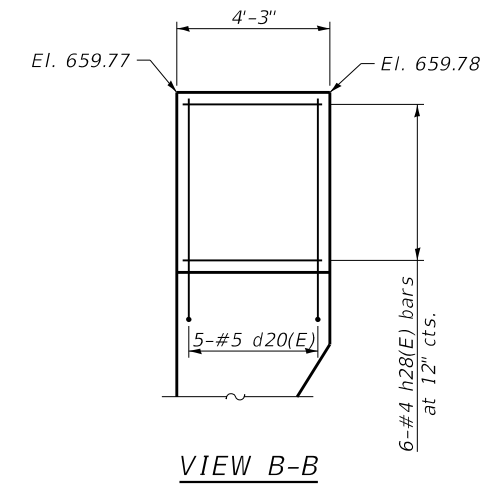
Girder	Elevation
1	654.48
2	654.58
3	654.68
4	654.68
5	654.56
6	654.45

PILE DATA

Type: Metal Shell 14"x0.250"  
 Nominal Required Bearing: 433 kips  
 Factored Resistance Available: 238 kips  
 Est. Length: 42' (North Side)  
 Est. Length: 42' (South Side)  
 No. Production Piles: 17  
 No. Test Piles: 1

MINIMUM BAR LAP

- #5 bar = 3'-2"
- #5 bar = 3'-7" (Horizontal)
- #7 bar = 5'-0"
- #8 bar = 6'-4"



VIEW B-B

NOTES:

- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- For details of piles, see sheet S-32.
- For Section Thru Abutment and Section Thru Cheekwall, see sheet S-21.

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT  
 STRUCTURE NO. 049-6595

SHEET 5-22 OF 5-37 SHEETS

MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 57
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	

**W. ABUT.  
BILL OF MATERIAL**

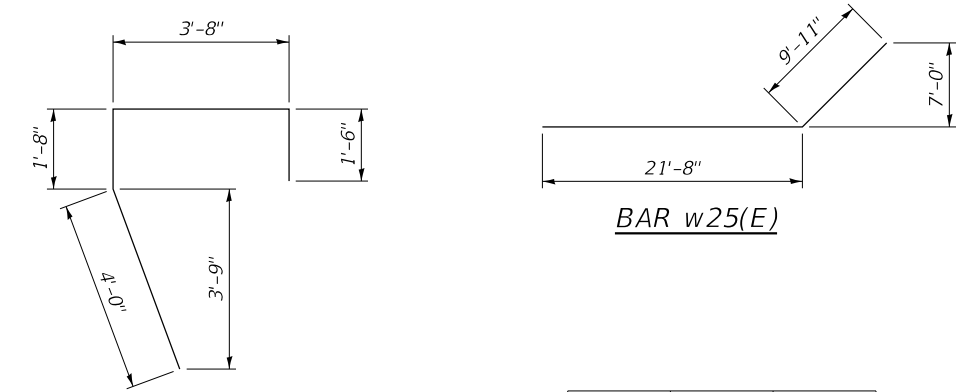
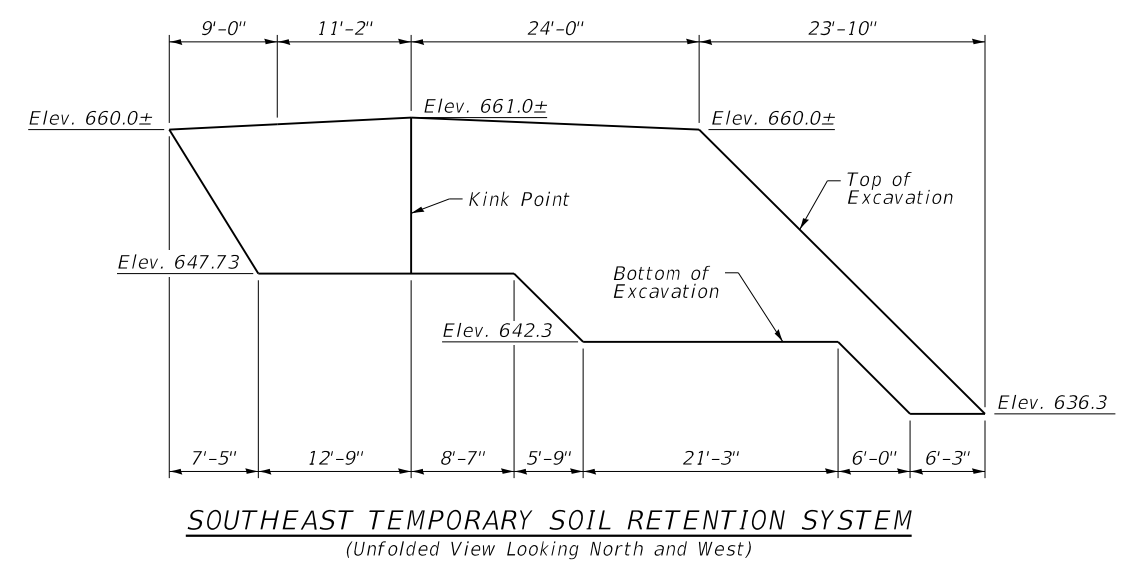
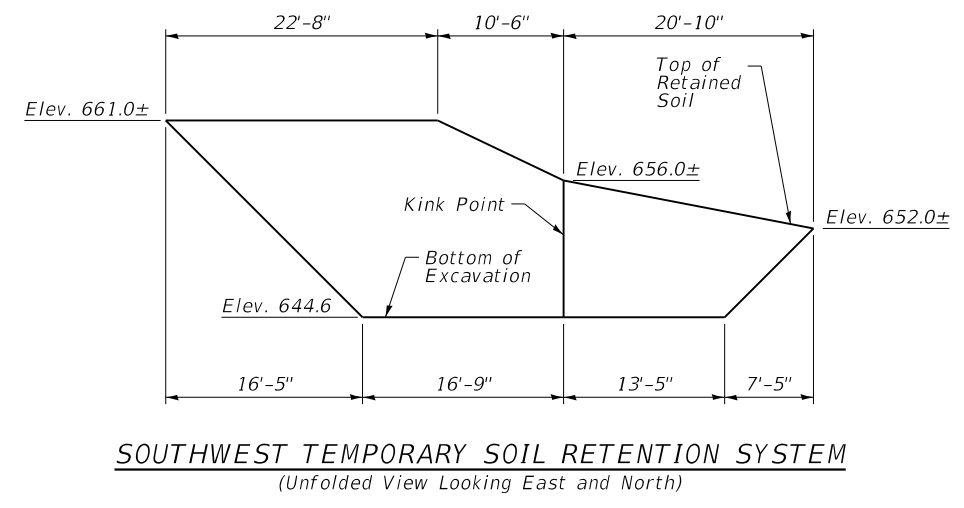
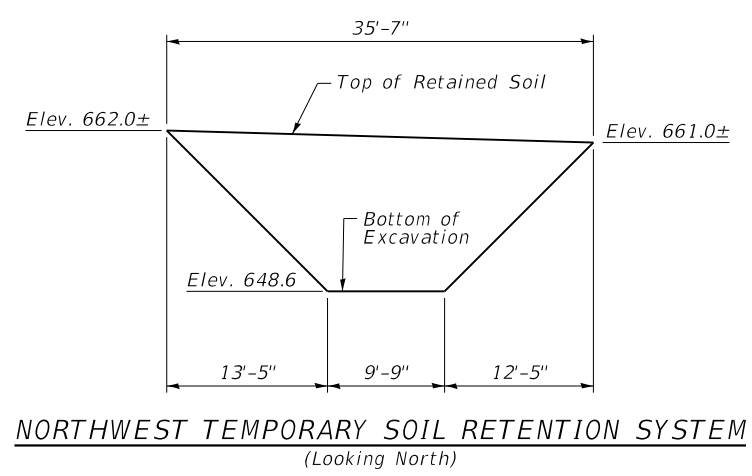
**E. ABUT.  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h20(E)	42	#5	23'-8"	—
h28(E)	12	#4	3'-9"	—
d20(E)	10	#5	7'-6"	└
n26(E)	45	#5	6'-5"	└
n27(E)	45	#7	8'-9"	└
s20(E)	44	#5	10'-10"	└
t20(E)	70	#8	13'-6"	—
t21(E)	44	#6	10'-10"	—
u20(E)	6	#5	10'-6"	┘
u20(E)	2	#5	9'-5"	┘
u22(E)	10	#5	8'-4"	┘
v20(E)	45	#5	7'-10"	—
v21(E)	45	#7	7'-10"	—
w20(E)	46	#5	23'-8"	—

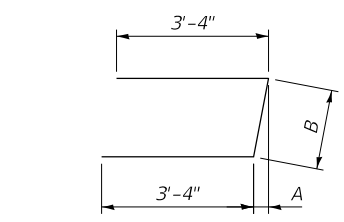
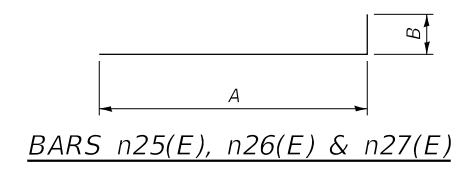
Structure Excavation	Cu Yd	390
Concrete Structures	Cu Yd	84.5
Reinforcement Bars, Epoxy Coated	Pound	8,390
Furnishing Metal Shell Piles 14"X0.25"	Foot	546
Driving Piles	Foot	546
Test Pile Metal Shells	Each	1
Pile Shoes	Each	13
Temporary Soil Retention System	Sq Ft	845
Granular Backfill For Structures	Cu Yd	165
Geocomposite Wall Drain	Sq Yd	63
Pipe Underdrains For Structures 4"	Foot	44

Bar	No.	Size	Length	Shape
a21(E)	8	#4	2'-0"	—
h25(E)	46	#5	23'-8"	—
h26(E)	12	#5	21'-8"	—
h27(E)	16	#5	11'-1"	└
h28(E)	6	#4	3'-11"	—
h29(E)	6	#4	6'-11"	—
d20(E)	13	#5	7'-6"	└
n25(E)	42	#8	10'-6"	└
n26(E)	51	#5	6'-5"	└
n27(E)	23	#7	8'-9"	└
s20(E)	44	#5	10'-10"	└
t21(E)	46	#6	10'-10"	—
t25(E)	58	#8	13'-6"	—
t26(E)	2	#8	13'-2"	—
u20(E)	2	#5	10'-6"	┘
u21(E)	1	#5	9'-5"	┘
u22(E)	23	#5	8'-4"	┘
v25(E)	21	#8	15'-4"	—
v27(E)	51	#5	15'-4"	—
v28(E)	23	#7	9'-4"	—
v29(E)	23	#5	9'-4"	—
w25(E)	11	#5	31'-7"	└
w26(E)	12	#5	22'-8"	—
w27(E)	11	#5	21'-8"	—
w28(E)	12	#5	28'-0"	—

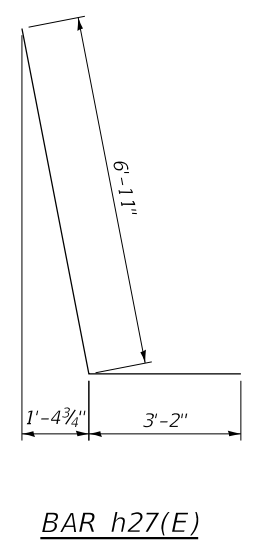
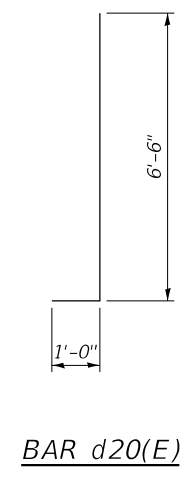
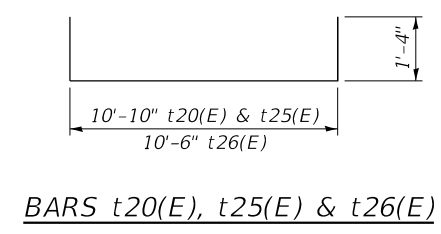
Structure Excavation	Cu Yd	410
Concrete Structures	Cu Yd	112.2
Reinforcement Bars, Epoxy Coated	Pound	10,900
Furnishing Metal Shell Piles 14"X0.25"	Foot	714
Driving Piles	Foot	714
Test Pile Metal Shells	Each	1
Temporary Soil Retention System	Sq Ft	774
Granular Backfill For Structures	Cu Yd	112
Geocomposite Wall Drain	Sq Yd	85
Pipe Underdrains For Structures 4"	Foot	48



Bar	A	B
n25(E)	9'-2"	1'-4"
n26(E)	5'-7"	10"
n27(E)	7'-7"	1'-2"



Bar	A	B
u20(E)	8 3/4"	3'-10"
u21(E)	6 1/4"	2'-9"
u22(E)	3 3/4"	1'-8"



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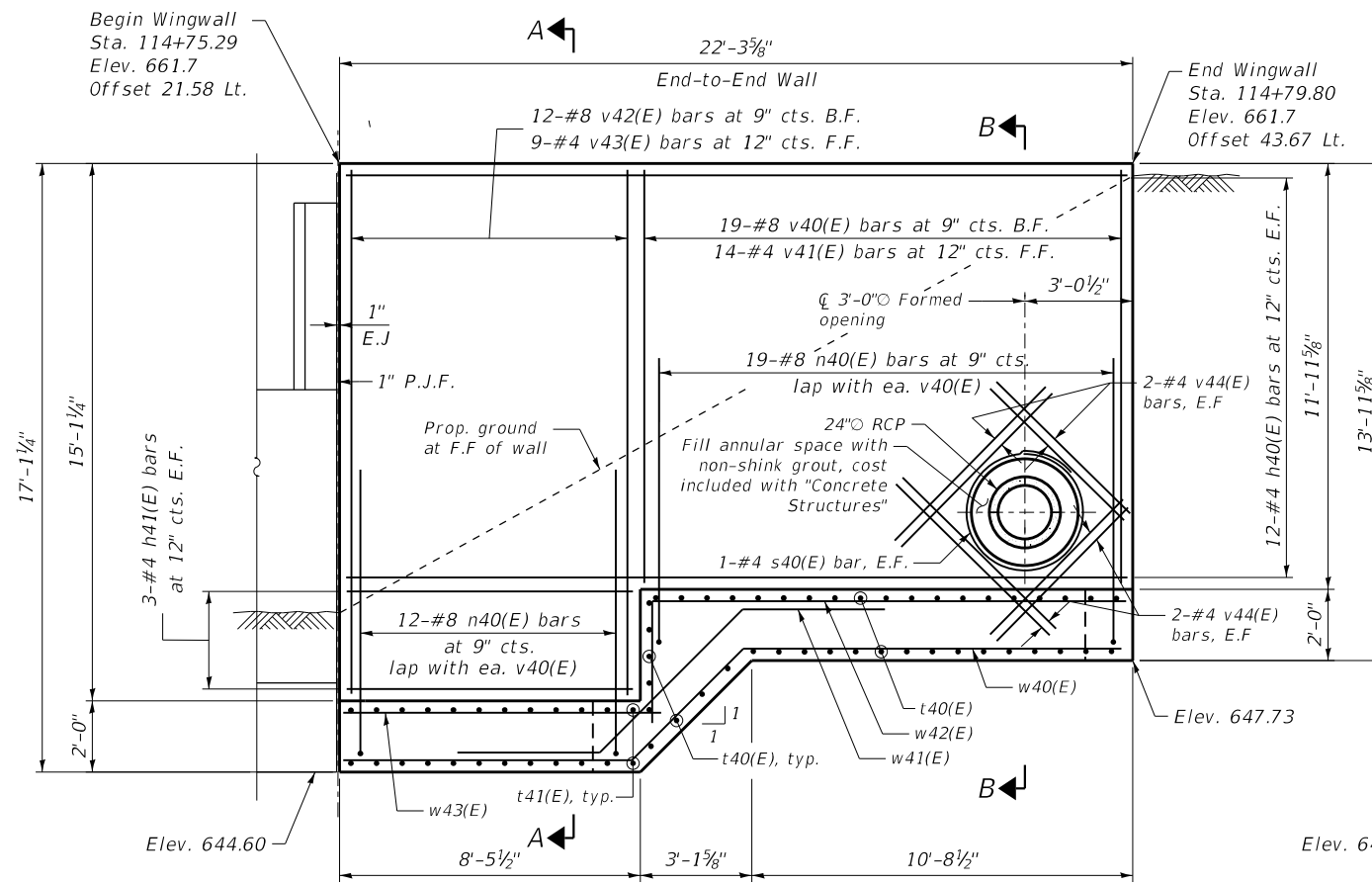
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS  
STRUCTURE NO. 049-6595**

SHEET 5-23 OF 5-37 SHEETS

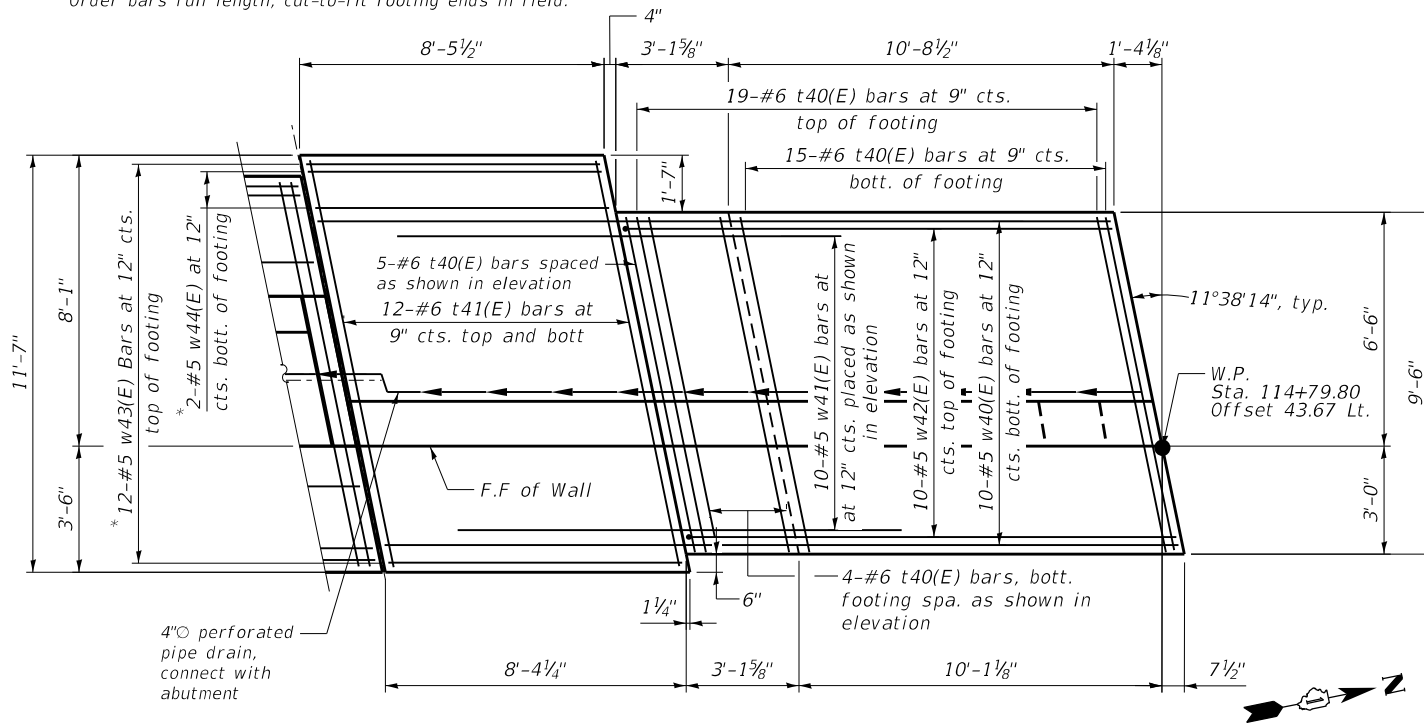
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3115	15-00123-00-BR	LAKE	84	58
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



**NORTHWEST WINGWALL ELEVATION**

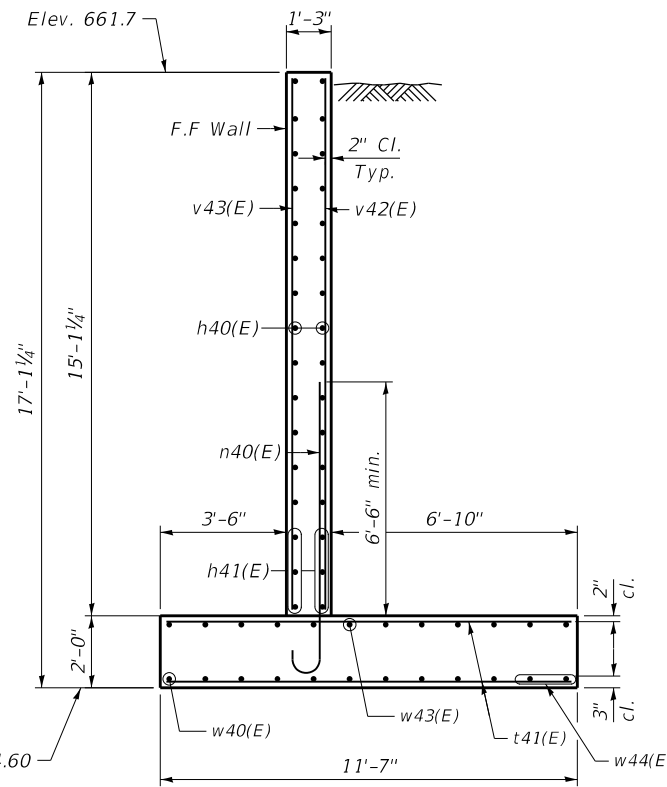
(Dimensions Measured Along F.F. of Wall)

\* Order bars full length, cut-to-fit footing ends in field.

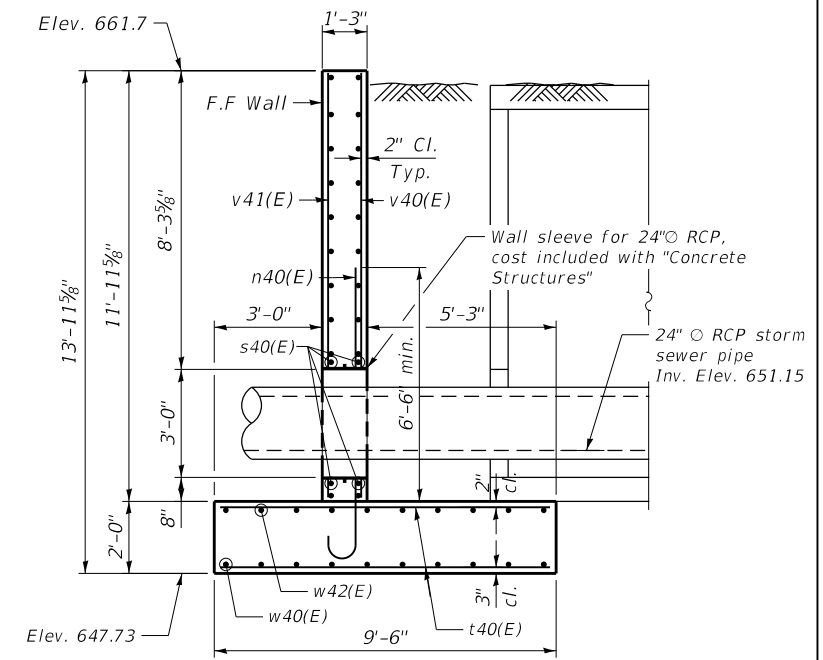


**FOOTING PLAN**

(Stem Wall Reinforcement not Shown for Clarity)



**SECTION A-A**

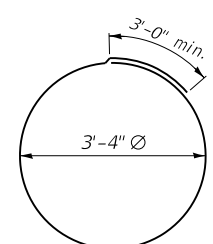


**SECTION B-B**

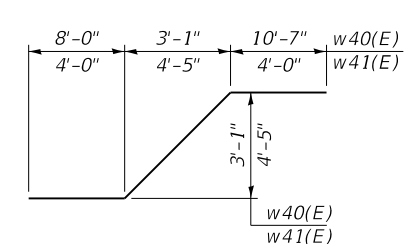
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h40(E)	24	#4	21'-11"	—
h41(E)	6	#4	8'-1"	—
n40(E)	31	#8	8'-11"	⌋
s40(E)	2	#4	13'-6"	○
t40(E)	43	#6	9'-2"	—
t41(E)	24	#6	11'-4"	—
v40(E)	19	#8	11'-8"	—
v41(E)	14	#4	11'-8"	—
v42(E)	12	#8	14'-8"	—
v43(E)	9	#4	14'-8"	—
v44(E)	16	#4	5'-6"	—
w40(E)	10	#5	23'-0"	⌋
w41(E)	10	#5	14'-3"	⌋
w42(E)	10	#5	16'-5"	⌋
w43(E)	10	#5	8'-6"	—
w44(E)	6	#5	7'-11"	—

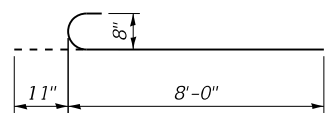
Structure Excavation	Cu Yd	187
Concrete Structures	Cu Yd	32.3
Reinforcement Bars, Epoxy Coated	Pound	4,160
Granular Backfill For Structures	Cu Yd	92
Geocomposite Wall Drain	Sq Yd	30
Pipe Underdrains For Structures 4"	Foot	23



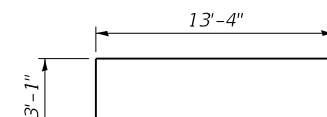
**BAR s40(E)**



**BAR w40(E), w41(E)**



**BAR n40(E)**



**BAR w42(E)**

**NOTES:**

1. Maximum applied service soil pressure  $Q_{max} = 2,320$  psf
2. For wall drainage details see Sheet S-25.

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 FILE NAME = R:\Proj\00211366\100211366.dwg - Northwest Wingwall.dwg

**CiorbaGroup**  
 8725 W. Higgins Rd, Ste 600, Chicago, IL 60631  
 P 773.775.4009 | www.ciorba.com

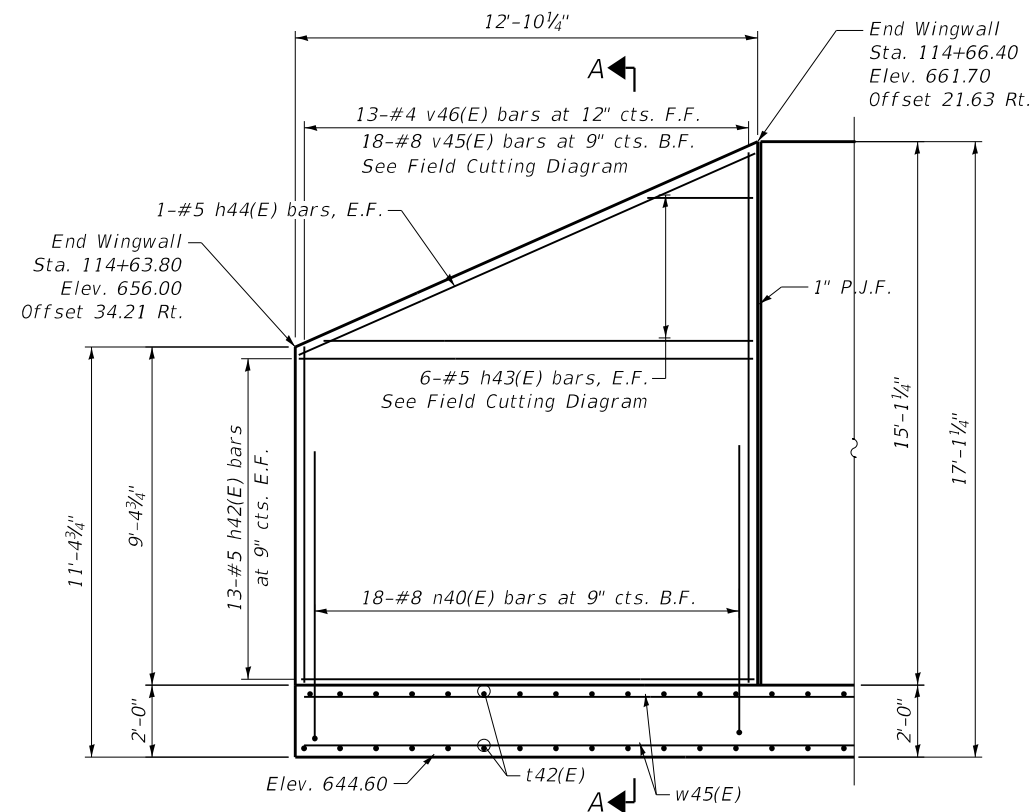
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PLOT SCALE = 0:2" = 1'-0"	DRAWN - SBA	REVISED -
PLOT DATE = 08/31/21	CHECKED - BWS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

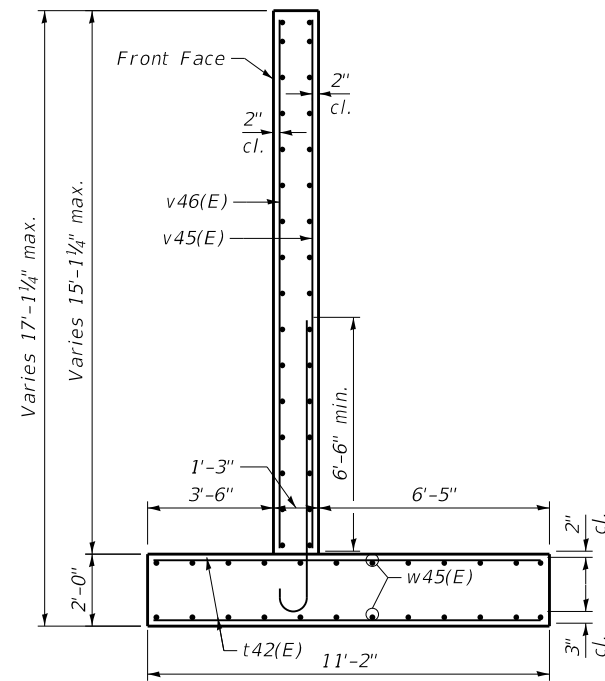
**NORTHWEST WINGWALL  
 STRUCTURE NO. 049-6595**

SHEET 5-24 OF 5-37 SHEETS

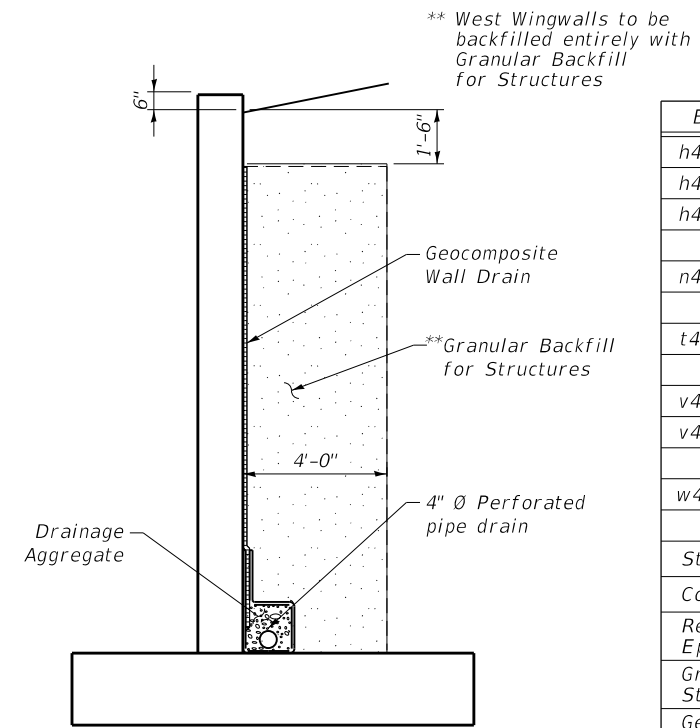
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	59
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



SOUTHWEST WINGWALL ELEVATION



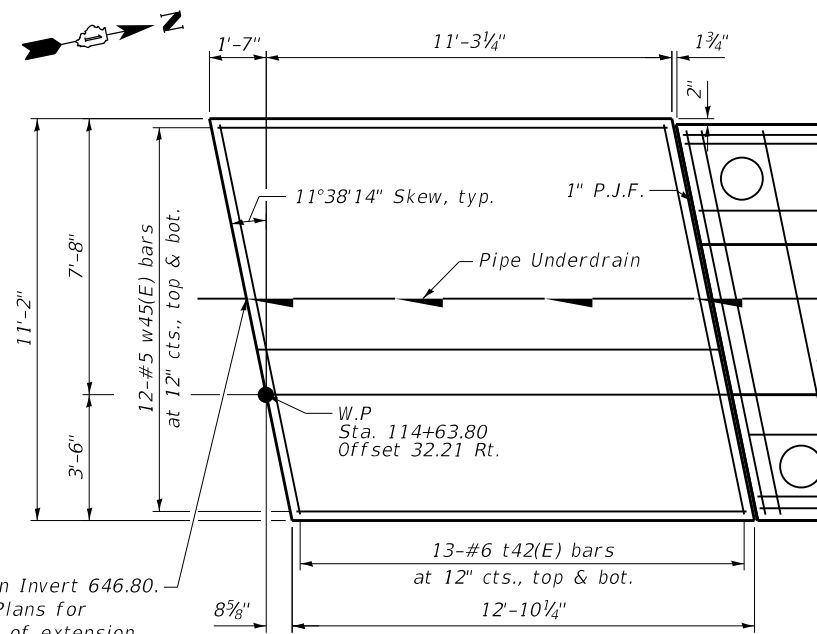
SECTION A-A



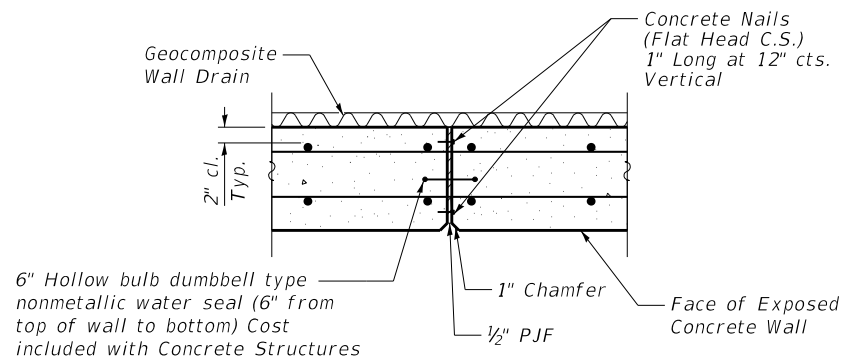
TYPICAL SECTION SHOWING DRAINAGE

BILL OF MATERIAL

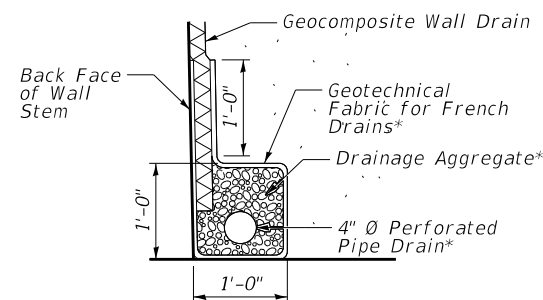
Bar	No.	Size	Length	Shape
h42(E)	26	#5	12'-3"	—
h43(E)	6	#5	14'-4"	—
h44(E)	2	#5	13'-6"	—
n40(E)	18	#8	8'-11"	⌋
t42(E)	26	#6	11'-0"	—
v45(E)	9	#8	23'-8"	—
v46(E)	7	#4	23'-8"	—
w45(E)	24	#5	12'-6"	—
Structure Excavation		Cu Yd	108	
Concrete Structures		Cu Yd	18.0	
Reinforcement Bars, Epoxy Coated		Pound	2,310	
Granular Backfill For Structures		Cu Yd	52	
Geocomposite Wall Drain		Sq Yd	16	
Pipe Underdrains For Structures 4"		Foot	13	



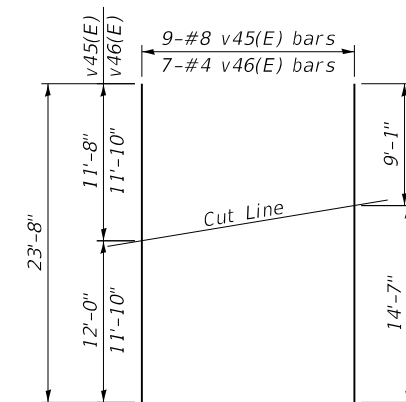
FOOTING PLAN



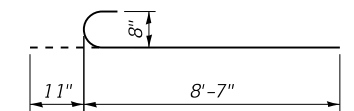
EXPANSION JOINT



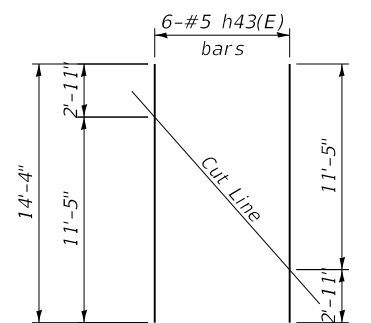
PIPE UNDERDRAIN DETAIL



FIELD CUTTING DIAGRAM



BAR n40(E)



FIELD CUTTING DIAGRAM

Order v45(E) and v46(E) bars full length. Cut as shown and place where called out in details. Discard remaining rebar.

Order h43(E) bars full length. Cut as shown and use remainder of bars in opposite face.

Pipe Underdrain Invert 646.80. See Drainage Plans for extension. Cost of extension included with Drainage Quantities.

NOTE:

- Maximum applied service soil pressure  $Q_{max} = 2,400$  psf

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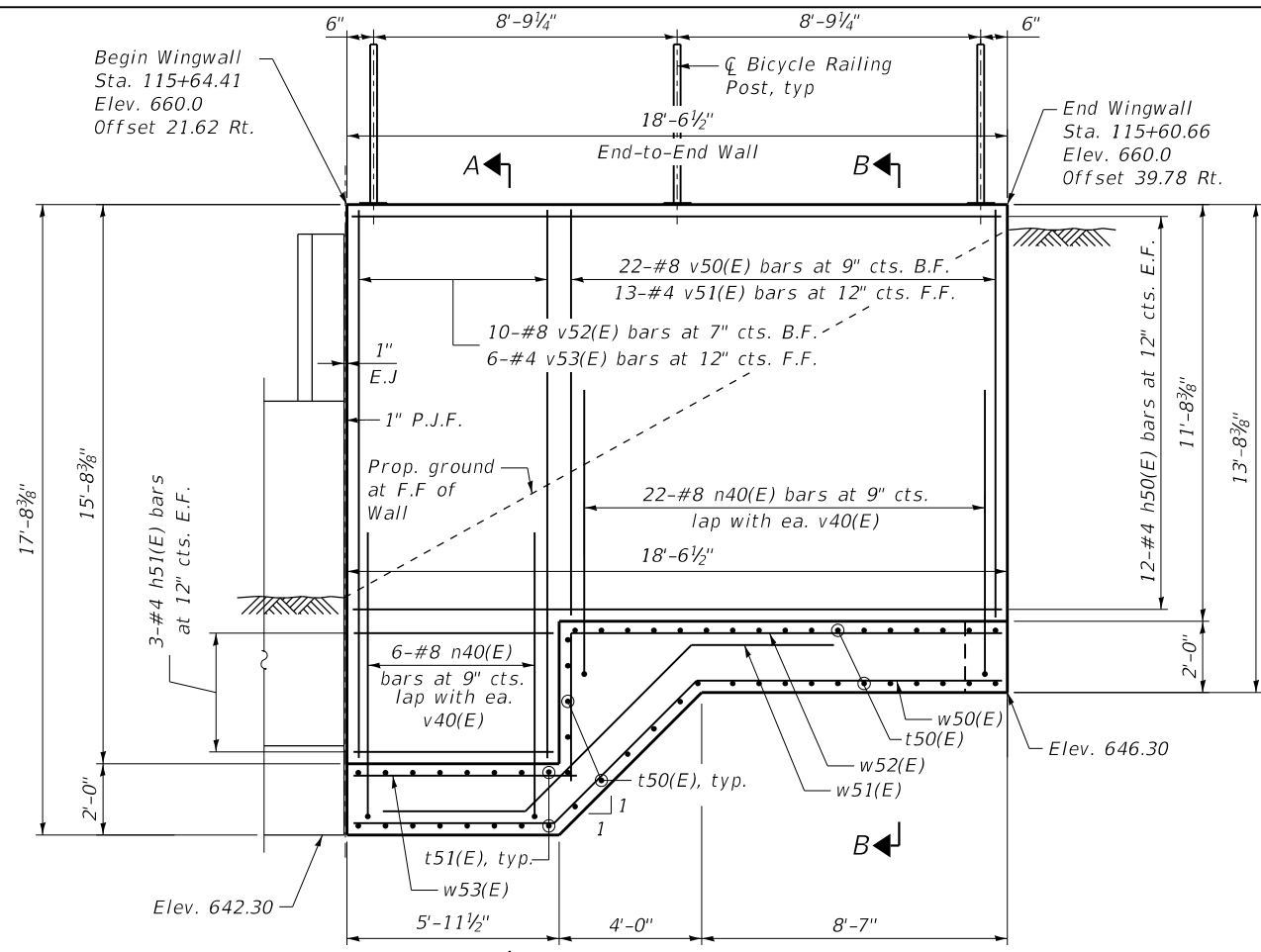
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PLOT SCALE = 0:2" = 1'-0"	DRAWN - SBA	REVISED -
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	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

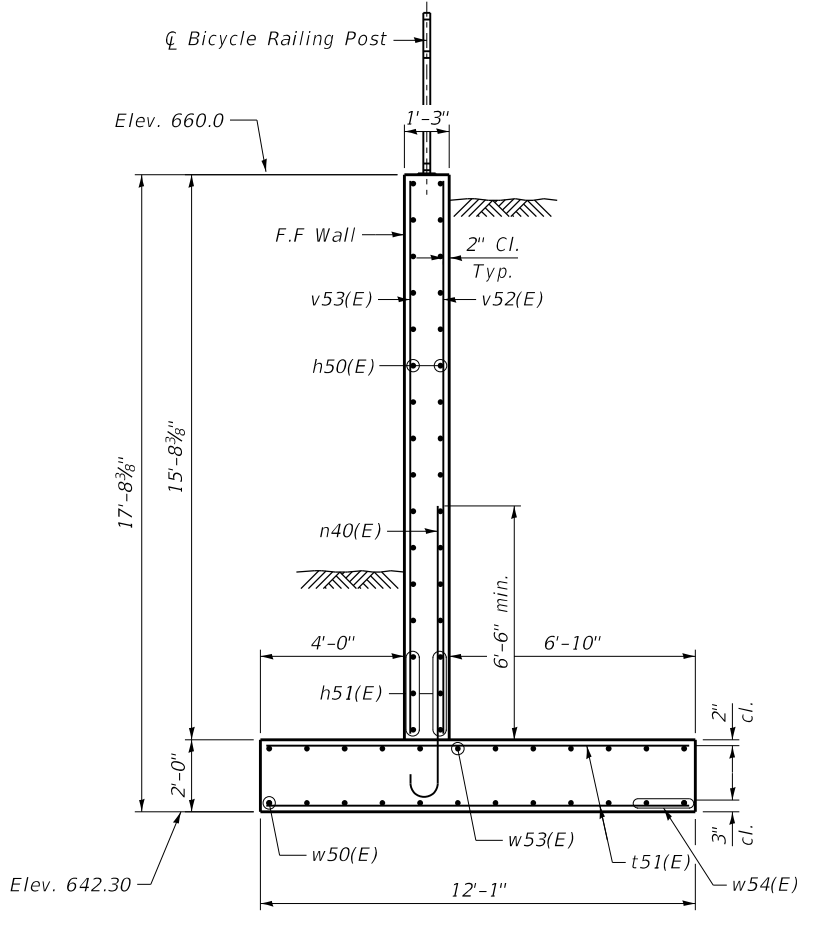
SOUTHWEST WINGWALL  
 STRUCTURE NO. 049-6595

SHEET 5-25 OF 5-37 SHEETS

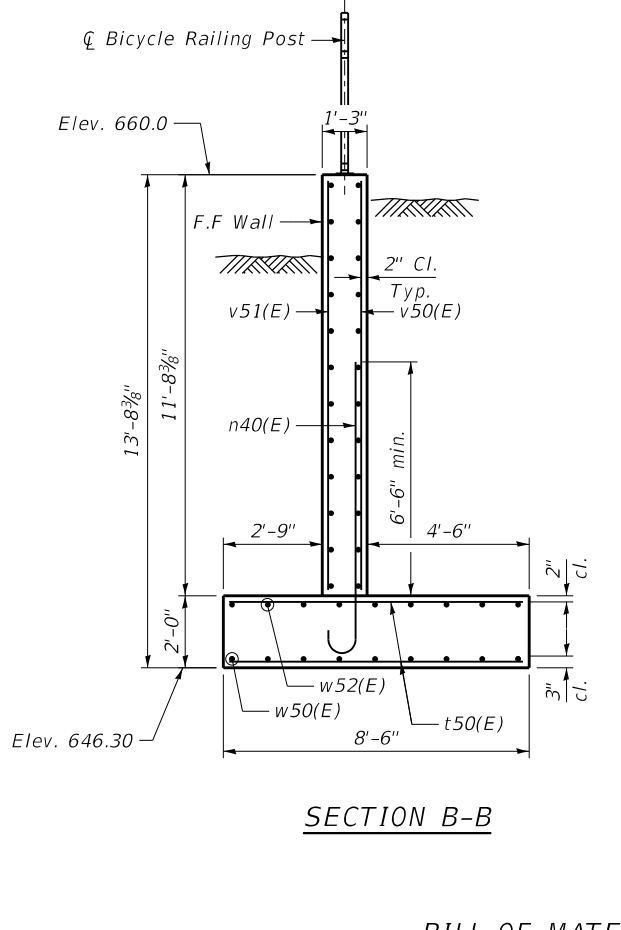
MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 60
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	



**SOUTHEAST WINGWALL ELEVATION**  
(Dimensions Measured Along F.F. of Wall)



**SECTION A-A**



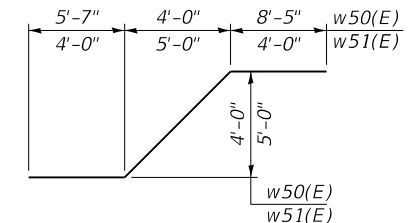
**SECTION B-B**

**BILL OF MATERIAL**

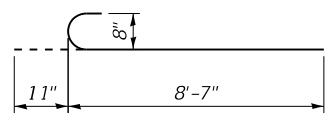
Bar	No.	Size	Length	Shape
h50(E)	24	#4	18'-2"	—
h51(E)	6	#4	5'-7"	—
n40(E)	28	#8	9'-6"	⌋
t50(E)	39	#6	8'-4"	—
t51(E)	16	#6	12'-0"	—
v50(E)	22	#8	11'-4"	—
v51(E)	13	#4	11'-4"	—
v52(E)	10	#8	15'-4"	—
v53(E)	6	#4	15'-4"	—
w50(E)	9	#5	19'-8"	⌋
w51(E)	9	#5	15'-1"	⌋
w52(E)	9	#5	16'-3"	⌋
w53(E)	9	#5	5'-7"	—
w54(E)	4	#5	5'-7"	—

**FOOTING SUPPLEMENTAL BAR SCHEDULE:**

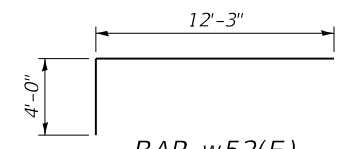
- (A) 9-#5 w50(E) bars at 12" cts. bott. of footing
- (B) 9-#5 w52(E) bars at 12" cts. top of footing
- (C) 9-#5 w51(E) bars at 12" cts. placed as shown in elevation
- (D) 8-#6 t51(E) bars at 9" cts. top and bott
- (E) 5-#6 t50(E) bars spaced as shown in elevation



**BAR w50(E), w51(E)**



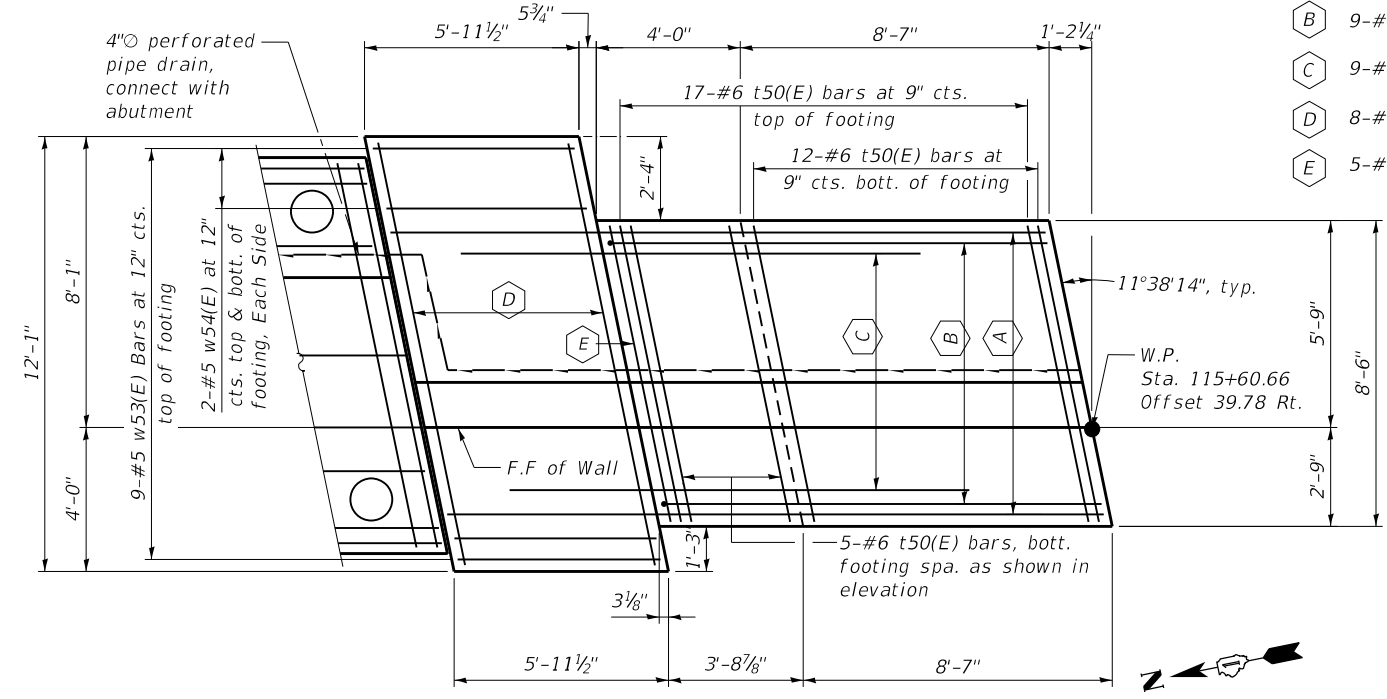
**BAR n40(E)**



**BAR w52(E)**

**NOTES:**

1. Maximum applied service soil pressure  $Q_{max} = 2,310$  psf
2. For wall drainage details see Sheet S-25.
3. For details of Bicycle Railing and anchorage details see Shee S-15.



**FOOTING PLAN**  
(Stem Wall Reinforcement not Shown for Clairity)

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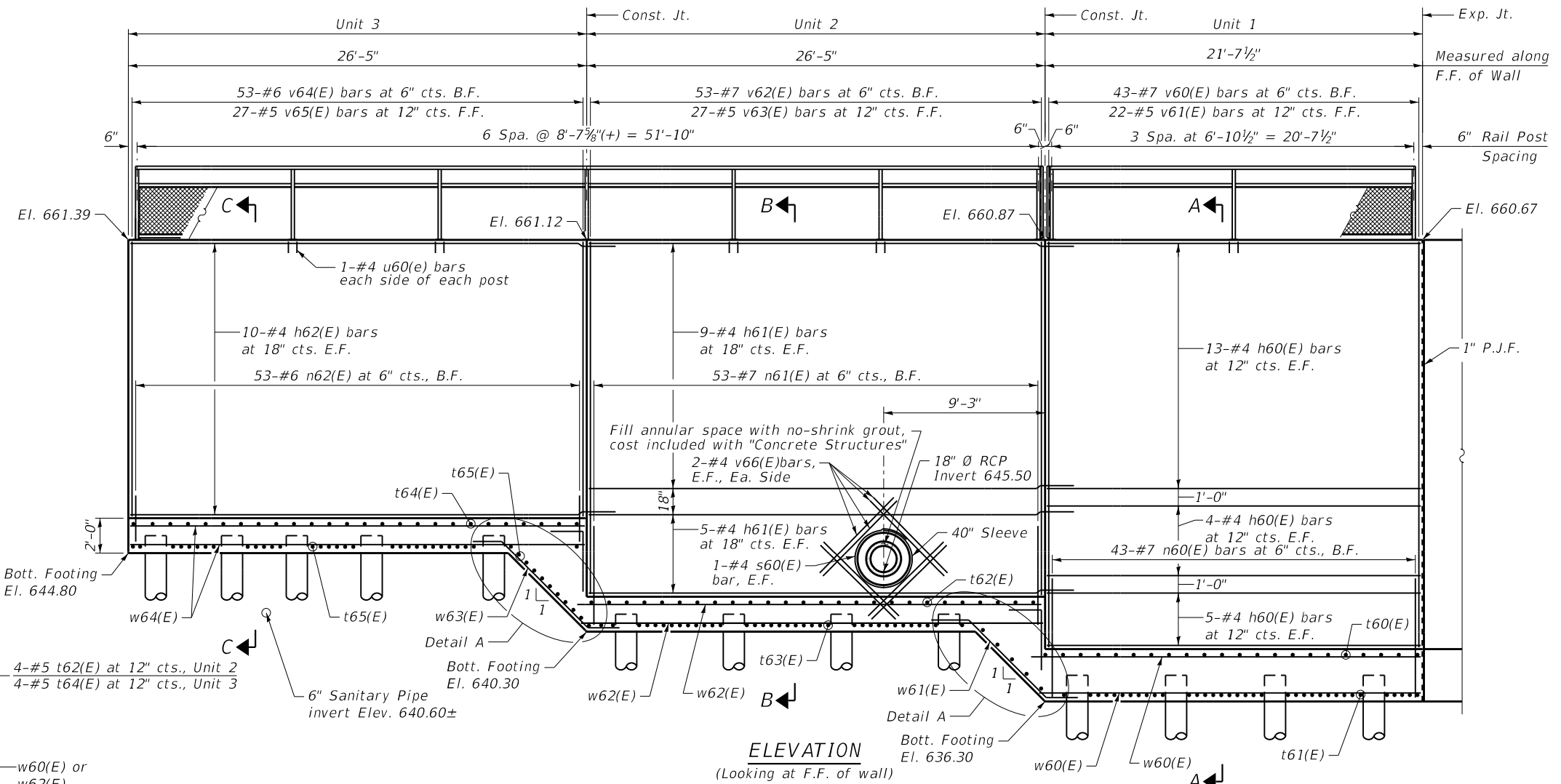
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PLOT SCALE = 0:2" = 1'-0"	DRAWN - SBA	REVISED -
PLOT DATE = 08/31/21	CHECKED - BWS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

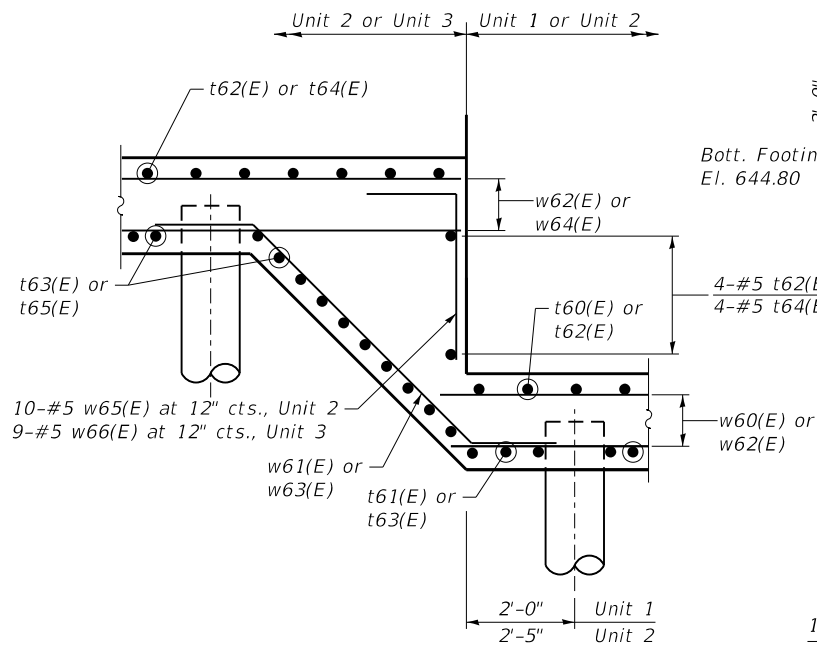
**SOUTHEAST WINGWALL  
STRUCTURE NO. 049-6595**

SHEET 5-26 OF 5-37 SHEETS

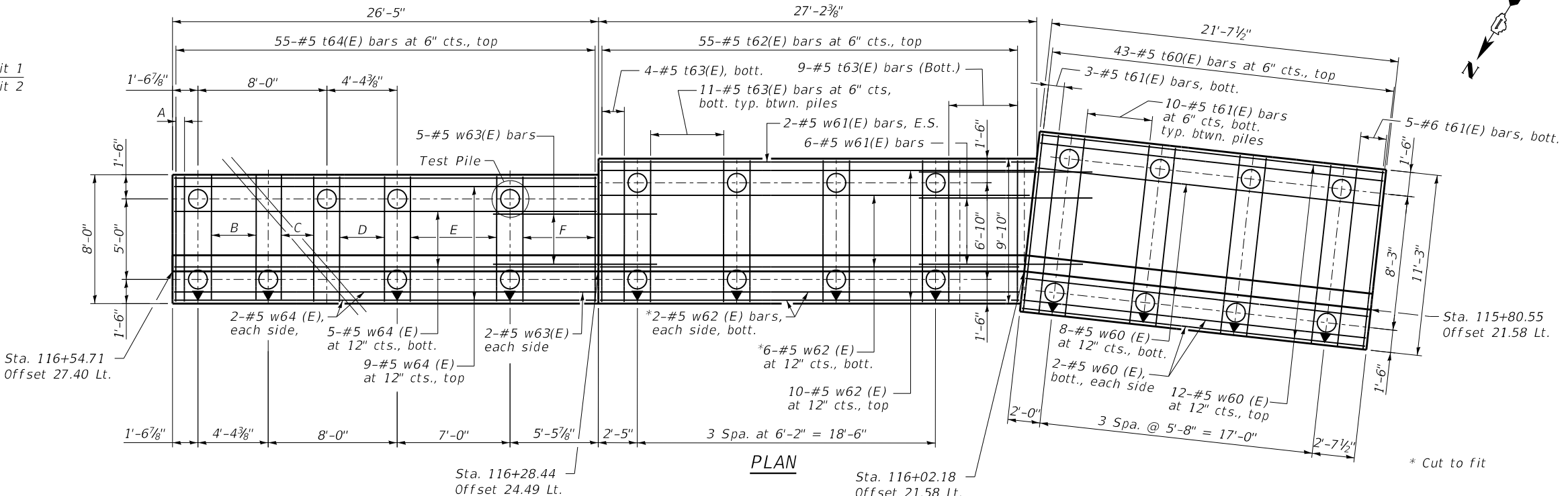
MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 61
CONTRACT NO. 61H28			ILLINOIS FED. AID PROJECT	



**ELEVATION**  
(Looking at F.F. of wall)



**DETAIL A**



**PLAN**

**SCHEDULE OF t65(E) BARS**

- A: 2-#5 T65(E) Bars
- B: 6-#5 T65(E) Bars @ 6" Cts.
- C: 5-#5 T65(E) Bars @ 6" Cts.
- D: 6-#5 T65(E) Bars @ 6" Cts.
- E: 11-#5 T65(E) Bars @ 6" Cts.
- F: 10-#5 T65(E) Bars @ 6" Cts.

Notes:  
For Sections A-A, B-B and C-C see Sheet S-28.

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USER NAME = Structural	DESIGNED - APD	REVISED -
PLOT SCALE = 0.1667' / in.	DRAWN - SBA	REVISED -
PLOT DATE = 08/31/21	CHECKED - BWS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

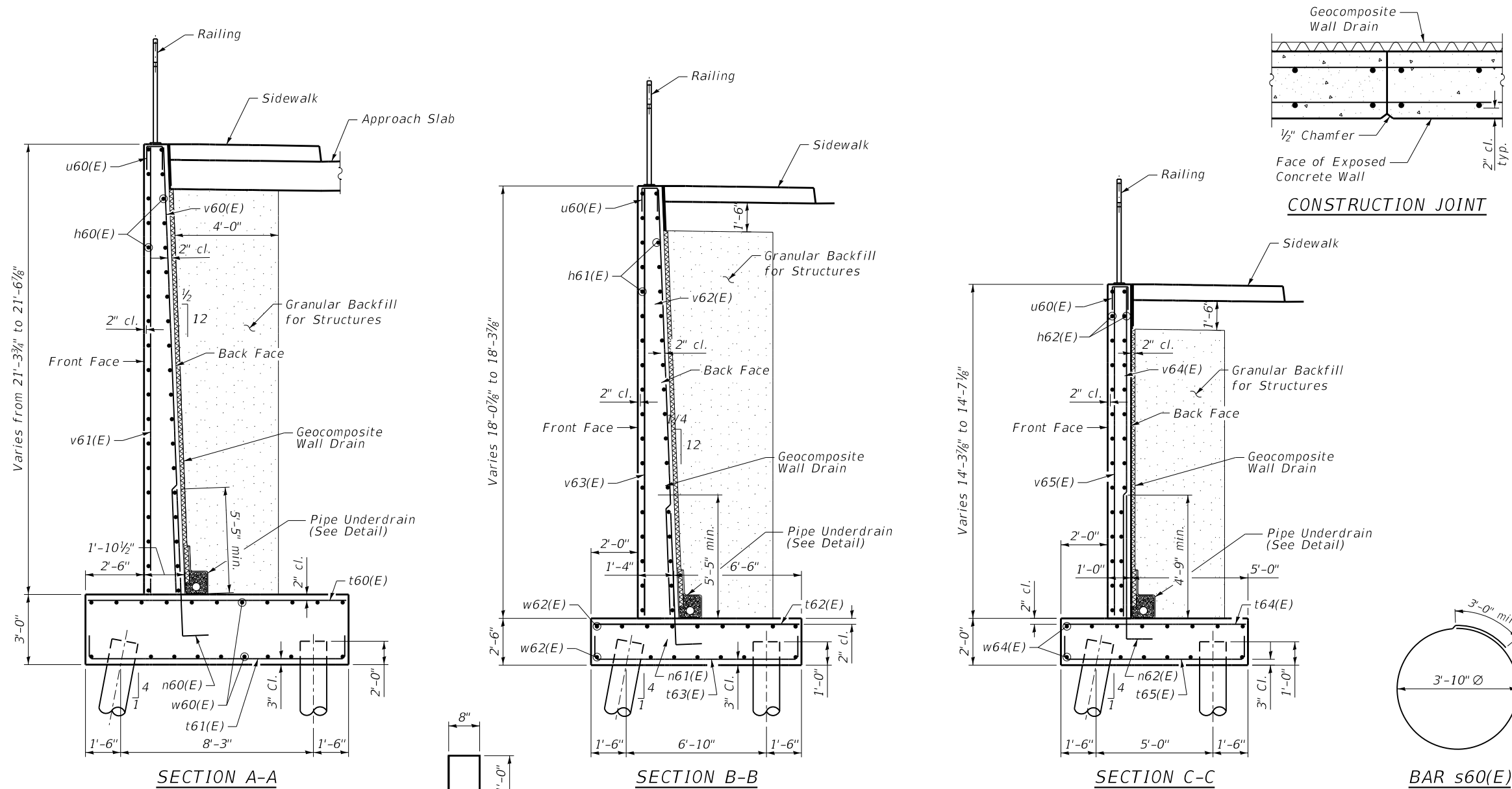
**RETAINING WALL 1  
STRUCTURE NO. 049-6595**

SHEET S-27 OF S-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	62
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

**BILL OF MATERIAL**

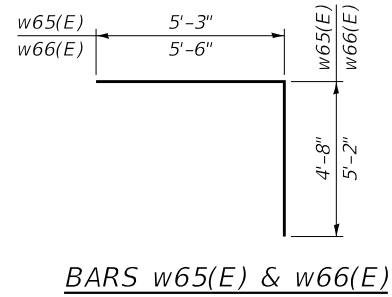
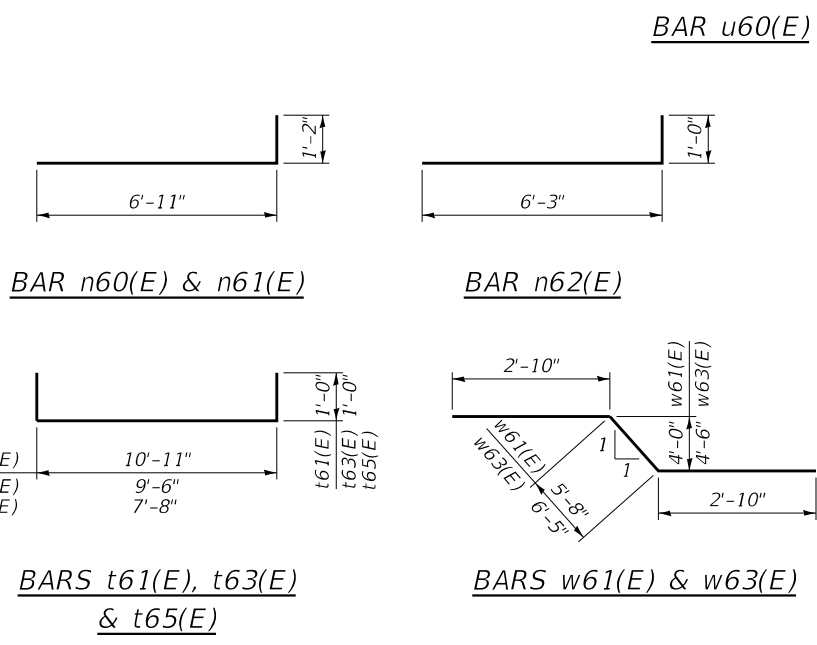
Bar	No.	Size	Length	Shape
h60(E)	44	#4	21'-4"	—
h61(E)	28	#4	29'-2"	—
h62(E)	20	#4	29'-2"	—
n60(E)	43	#7	8'-1"	└
n61(E)	53	#7	8'-1"	└
n62(E)	53	#6	7'-3"	└
s60(E)	2	#4	15'-0"	⊔
t60(E)	43	#5	10'-11"	└
t61(E)	38	#5	12'-11"	└
t62(E)	55	#5	9'-6"	└
t63(E)	46	#5	11'-6"	└
t64(E)	55	#5	7'-8"	└
t65(E)	40	#5	9'-8"	└
u60(E)	22	#4	2'-8"	└
v60(E)	43	#7	21'-0"	—
v61(E)	22	#5	21'-0"	—
v62(E)	53	#7	18'-5"	—
v63(E)	27	#5	18'-5"	—
v64(E)	53	#6	14'-0"	—
v65(E)	27	#5	14'-0"	—
v66(E)	16	#4	5'-6"	—
w60(E)	24	#5	21'-3"	└
w61(E)	10	#5	11'-4"	└
w62(E)	20	#5	26'-10"	└
w63(E)	10	#5	12'-1"	└
w64(E)	18	#5	26'-2"	└
w65(E)	10	#5	9'-11"	└
w66(E)	9	#5	10'-8"	└



**PILE DATA**

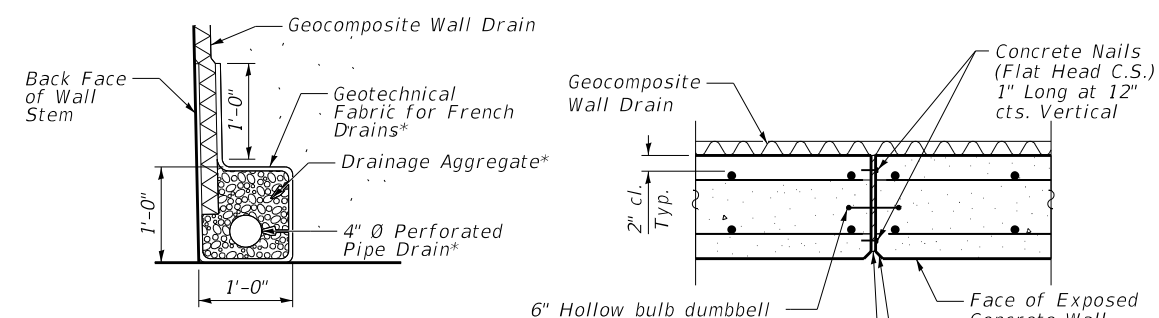
Type: MS 14" x 0.25"  
 Nominal Required Bearing: 367 kips  
 Factored Resistance Available: 202 kips  
 Est. Length: 37'  
 No. Production Piles: 8

UNIT 1	UNIT 2	UNIT 3
367 kips	290 kips	248 kips
202 kips	159 kips	137 kips
37'	29'	26'
8	8	7



**MINIMUM BAR LAP**

- #4 bar = 2'-11"
- #6 bar = 4'-4"
- #7 bar = 5'-0"



\* Included in the cost of Pipe Underdrains for Structures, 4"

DATE PLOTTED = 08/31/21 1:54:42 PM  
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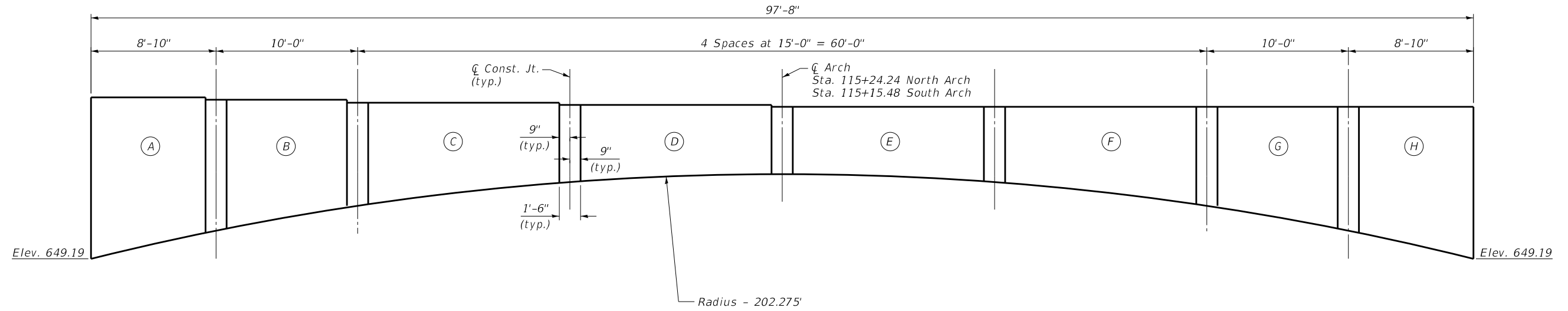
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PLOT DATE = 08/31/21	CHECKED - BWS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**RETAINING WALL 2  
 STRUCTURE NO. 049-6595**

SHEET 5-28 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	63
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



**GENERAL NOTES - PRECAST CONCRETE ARCH**

**MATERIALS**

1. All precast modules shall be manufactured with class PC concrete according to Section 504, Article 1042.02, Article 1042.03 and following requirements:
  - a. Lightweight coarse aggregates according to ASTM C330 shall be used such that the maximum cured density shall be 120 lbs./cu. ft. (ASTM C567).
  - b. The minimum 28-day compressive strength shall be 5,000 psi.
2. Reinforcing steel shall be according to Article 1006.10(a)(2).
3. All precast fascia panels shall be sealed with a concrete sealer conforming to Section 587 of the Standard Specifications. Cost included Architechural Precast Concrete Panels.
4. Steel plates and angles shall conform to AASHTO M270M Grade 36 or 50. All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

**FABRICATION:**

1. All reinforcement shall have a minimum of 1½" of clear cover.
2. Formliner shall have a maximum relief of 1⅝" and be from or equivalent to the Custom Rock pattern 1125B Autumn Leaves Drystack (Keyed).
3. Prepare all precast surfaces in accordance with sealer manufacturer's recommendations. At a minimum, all surfaces shall receive a brush-blast cleaning and water rinse.
4. The reinforcement as shown is for in-place structural adequacy only. The precaster shall be responsible for any other reinforcement required for shipping and handling as well as inserts required for lifting.

**ERECTION SEQUENCE**

1. Erect all beams.
2. Pour the deck.
3. Erect the arch panels on falsework.
4. Install the lateral supports.
5. Pour the sidewalk and closure pours.
6. Remove falsework after sidewalk has hardened.

**ARCH LAYOUT**  
(Looking North)

**TOP OF PANEL ELEVATIONS**

PANEL	NORTH	SOUTH
A	660.59	660.77
B	660.42	660.57
C	660.21	660.32
D	660.06	660.14
E	659.92	659.92
F	659.92	659.92
G	659.92	659.92
H	659.92	659.92

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PLOT SCALE = 0.1667' / in.	DRAWN - SBA	REVISED -
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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

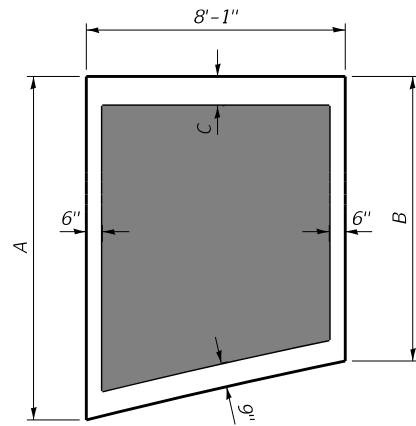
**PRECAST FASCIA PANEL  
STRUCTURE NO. 049-6595**

SHEET 5-29 OF S-37 SHEETS

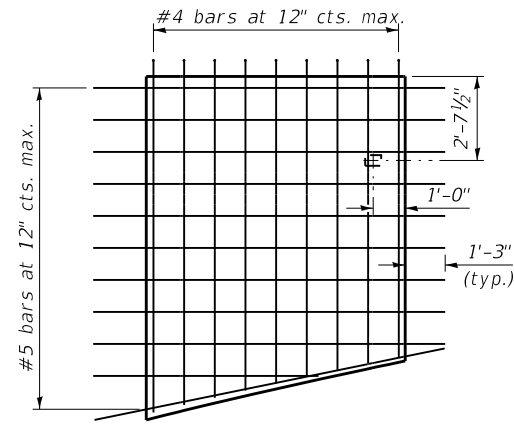
MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 64
CONTRACT NO. 61H28				

ILLINOIS FED. AID PROJECT

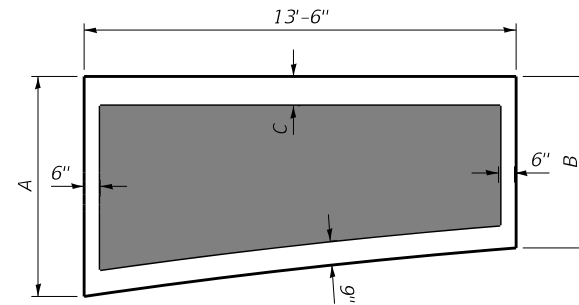




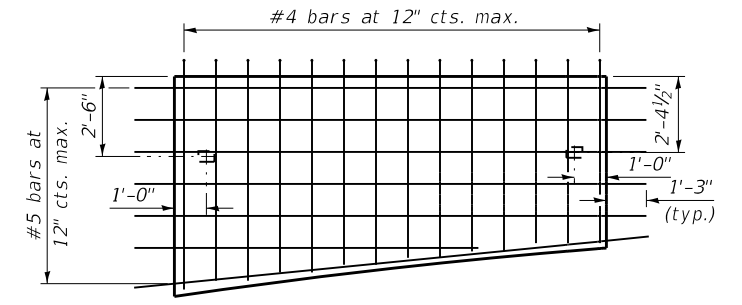
**PANEL H-NORTH/A-SOUTH**  
**ELEVATION-GEOMETRY**  
(Panel A-North/H-South mirrored)



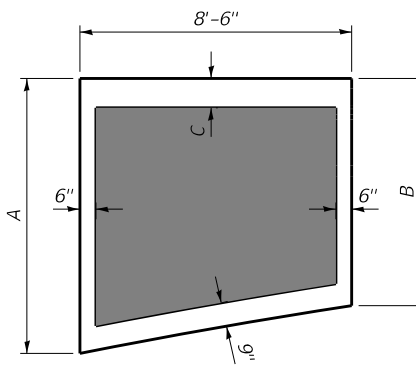
**PANEL H-NORTH/A-SOUTH**  
**ELEVATION-REBAR**  
(Panel A-North/H-South mirrored)



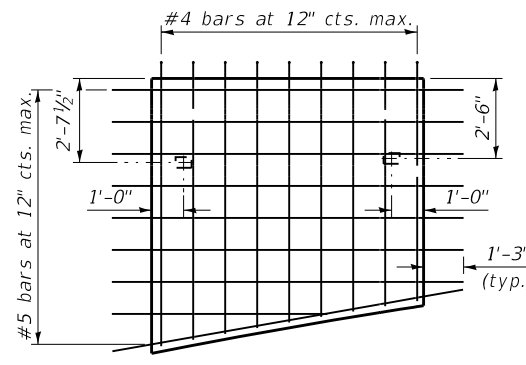
**PANEL F-NORTH/C-SOUTH**  
**ELEVATION-GEOMETRY**  
(Panel C-North/F-South mirrored)



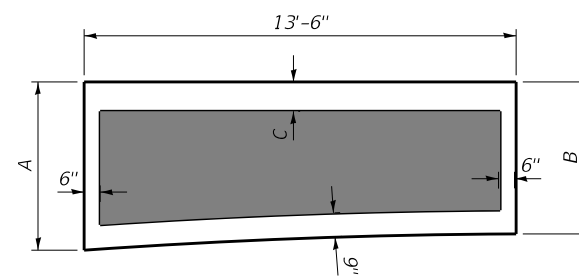
**PANEL F-NORTH/C-SOUTH**  
**ELEVATION-REBAR**  
(Panel C-North/F-South mirrored)



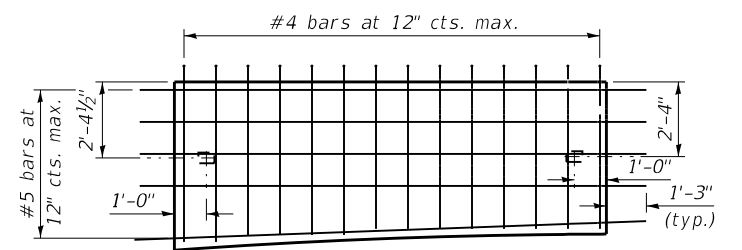
**PANEL G-NORTH/B-SOUTH**  
**ELEVATION-GEOMETRY**  
(Panel B-North/G-South mirrored)



**PANEL G-NORTH/B-SOUTH**  
**ELEVATION-REBAR**  
(Panel B-North/G-South mirrored)



**PANEL E-NORTH/D-SOUTH**  
**ELEVATION-GEOMETRY**  
(Panel D-North/E-South mirrored)



**PANEL E-NORTH/D-SOUTH**  
**ELEVATION-REBAR**  
(Panel D-North/E-South mirrored)

**PANEL DIMENSION TABLE**

Panel	A	B	C
A - North	11'-4 <sup>7</sup> / <sub>8</sub> "	9'-6 <sup>7</sup> / <sub>8</sub> "	1'-7 <sup>1</sup> / <sub>8</sub> "
A - South	11'-7"	9'-8 <sup>7</sup> / <sub>8</sub> "	1'-9 <sup>1</sup> / <sub>8</sub> "
B - North	9'-1 <sup>1</sup> / <sub>8</sub> "	7'-7 <sup>1</sup> / <sub>4</sub> "	1'-5"
B - South	9'-2 <sup>1</sup> / <sub>8</sub> "	7'-9"	1'-6 <sup>3</sup> / <sub>4</sub> "
C - North	7'-2"	5'-7 <sup>1</sup> / <sub>8</sub> "	1'-2 <sup>1</sup> / <sub>2</sub> "
C - South	7'-3 <sup>3</sup> / <sub>8</sub> "	5'-9 <sup>1</sup> / <sub>4</sub> "	1'-3 <sup>1</sup> / <sub>8</sub> "
D - North	5'-4 <sup>3</sup> / <sub>8</sub> "	4'-10 <sup>3</sup> / <sub>8</sub> "	1'-0 <sup>3</sup> / <sub>8</sub> "
D - South	5'-5 <sup>3</sup> / <sub>8</sub> "	4'-11 <sup>3</sup> / <sub>8</sub> "	1'-1 <sup>3</sup> / <sub>8</sub> "
E	4'-9"	5'-3 <sup>1</sup> / <sub>8</sub> "	11"
F	5'-4 <sup>3</sup> / <sub>8</sub> "	6'-10 <sup>1</sup> / <sub>2</sub> "	11"
G	7'-1 <sup>1</sup> / <sub>4</sub> "	8'-7 <sup>1</sup> / <sub>8</sub> "	11"
H	8'-10 <sup>3</sup> / <sub>4</sub> "	10'-8 <sup>3</sup> / <sub>4</sub> "	11"

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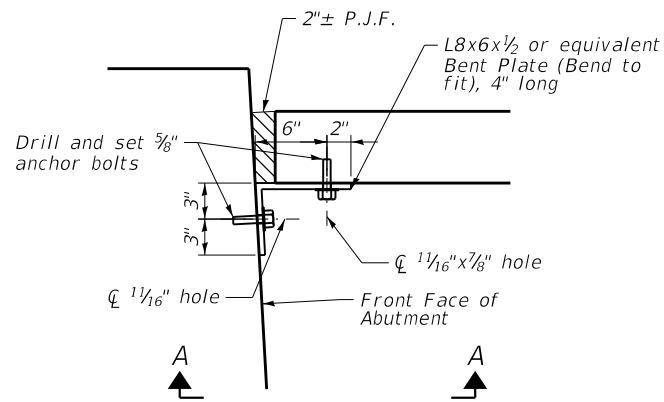
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	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

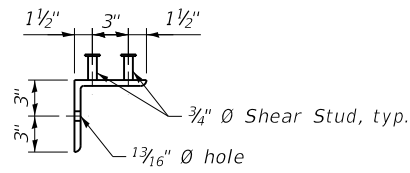
**PRECAST FASCIA PANEL DETAILS 1**  
**STRUCTURE NO. 049-6595**

SHEET 5-30 OF 5-37 SHEETS

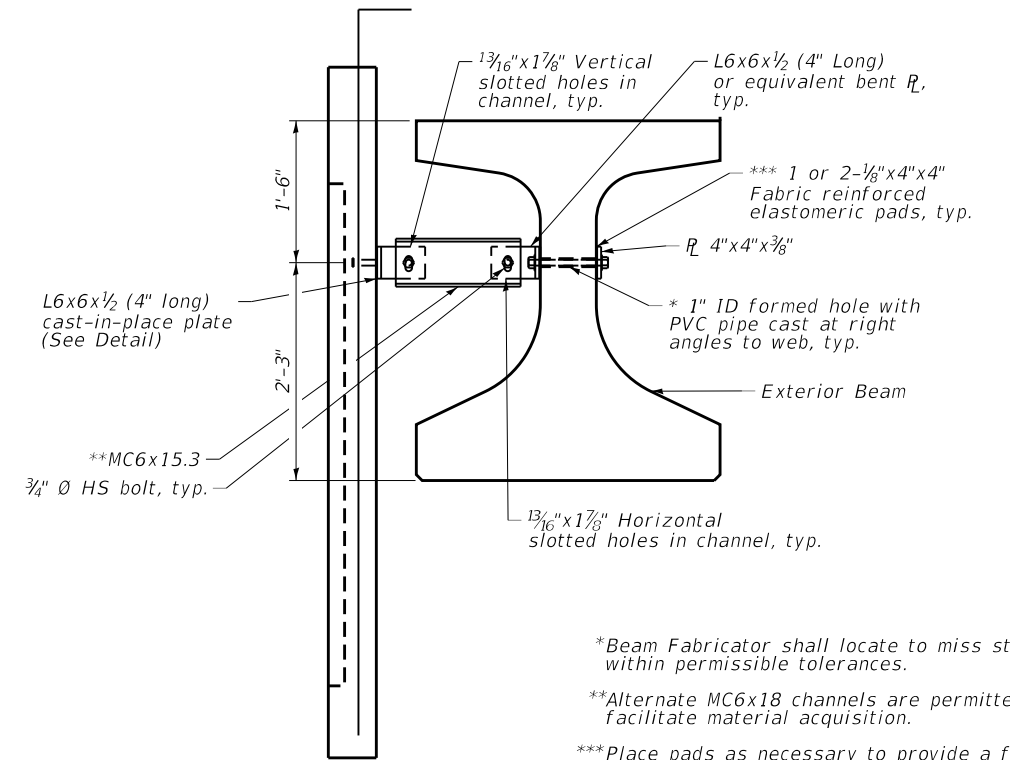
MUN. RTE. 3115	SECTION 15-00123-00-BR	COUNTY LAKE	TOTAL SHEETS 84	SHEET NO. 65
CONTRACT NO. ILLINOIS FED. AID PROJECT			61H28	



**BOTTOM SUPPORT BRACKET PLAN**

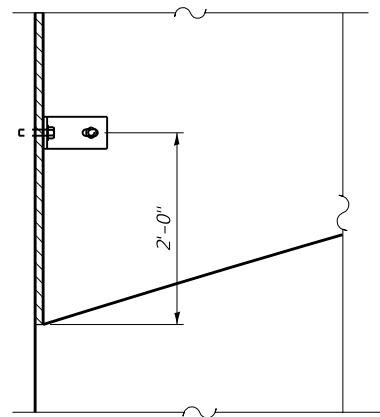


**CAST-IN-PLACE PLATE DETAIL**

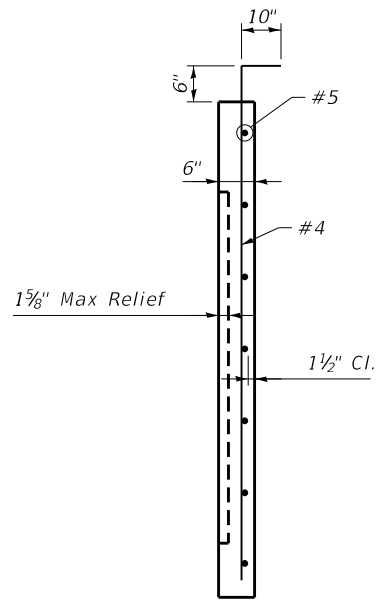


**PANEL SUPPORT CONNECTION DETAIL**

\*Beam Fabricator shall locate to miss strands within permissible tolerances.  
 \*\*Alternate MC6x18 channels are permitted to facilitate material acquisition.  
 \*\*\*Place pads as necessary to provide a flat mounting surface between the steel and concrete.



**VIEW A-A**



**TYPICAL SECTION THRU PANEL**

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Form Liner Textured Surface	Sq. Ft.	199
Architectural Precast Concrete Panel	Each	16

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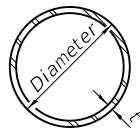
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	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PRECAST FASCIA PANEL DETAILS 2  
 STRUCTURE NO. 049-6595**

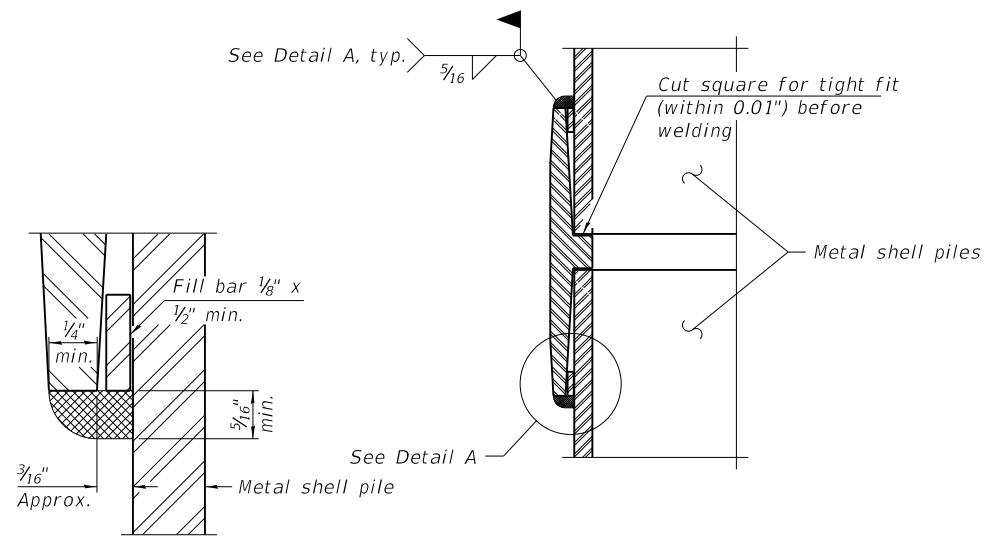
SHEET 5-31 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	66
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

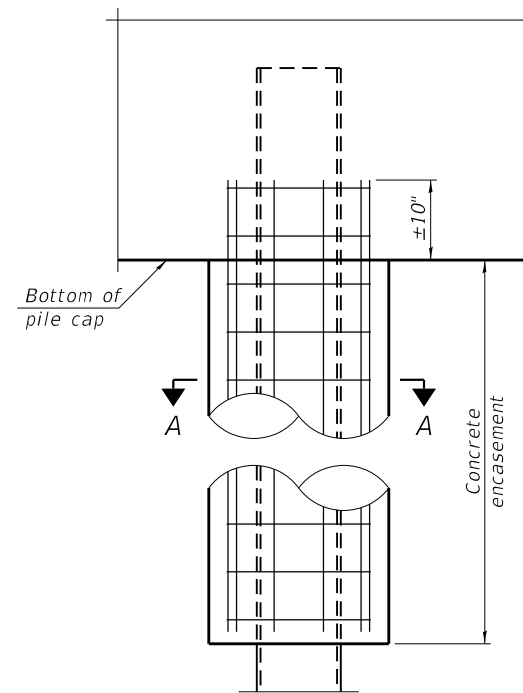


**METAL SHELL PILE TABLE**

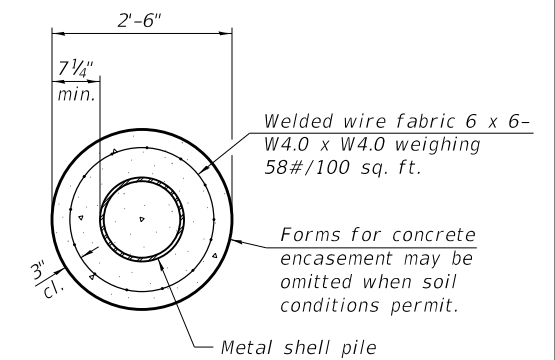
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



**DETAIL A**

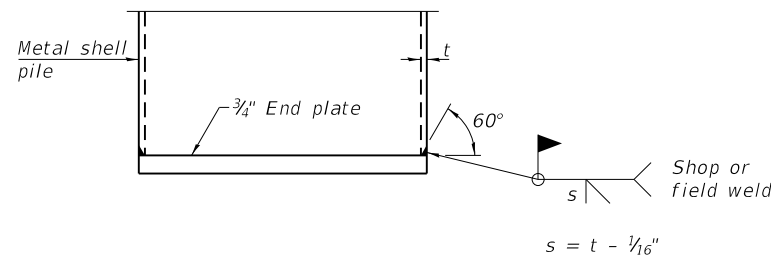


**ELEVATION**



**SECTION A-A**

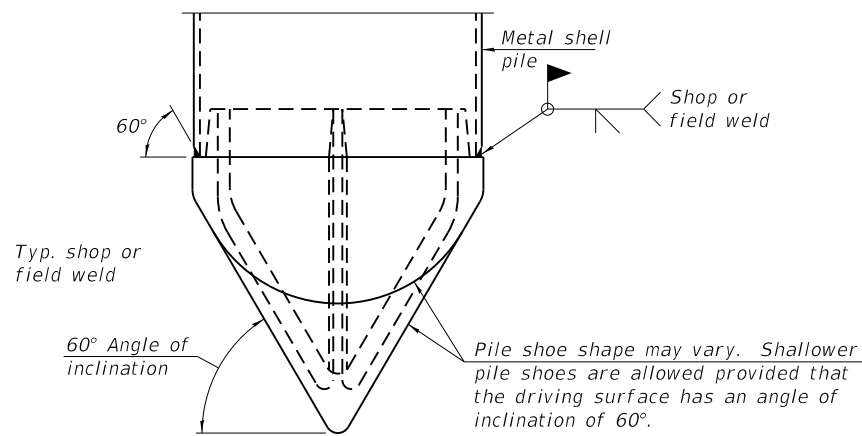
**INDIVIDUAL PILE CONCRETE ENCASEMENT**  
(When specified)



**END PLATE ATTACHMENT**

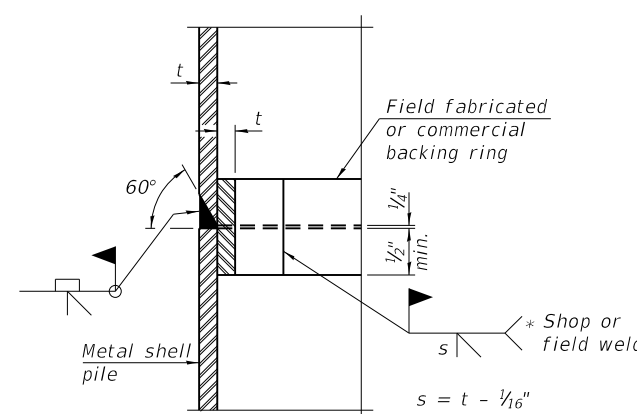
**WELDED COMMERCIAL SPLICE**

Notes:  
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
Pile segments shall be driven to solid contact with splicer before welding.



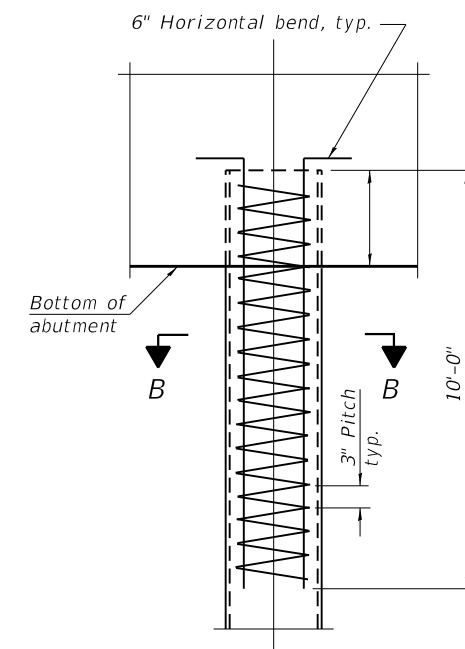
**PILE SHOE ATTACHMENT**

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

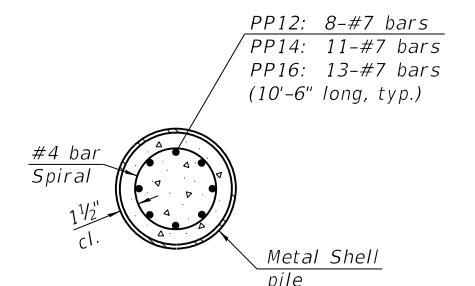


**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**



**SECTION B-B**

**REINFORCEMENT AT ABUTMENTS**  
(Omit when concrete encasement is specified)

Note:  
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

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F-MS 1-1-2020



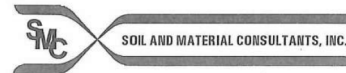
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	DRAWN - SBA	REVISED -
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PLOT DATE = 08/31/21	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS  
STRUCTURE NO. 049-6595**

SHEET 5-32 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	67
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



File No. 22596 **BORING LOG** B-101

Client Ciorba Group, Inc. Sheet 1 of 1

Comments Central Avenue Project Central Avenue Bridge Date 3/25/16

Station 114+55 Location Highland Park, IL Drilled By AL

3' N. of CL Equipment  CME 45B  H.A.  Other Logged By DA

Elev., ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu
659.6'	(See Core Log)											
	Brown clay, some silt, trace sand & gravel, damp, very stiff to hard		1	SS	15"	4	7	3.0	15.9	120.9	3.9	
			5	2	SS	18"	7	13	4.0	18.0	115.0	3.7
			3	SS	18"	8	13	4.5+	14.6	119.9	5.7	
651.0'	End of Boring		10	4	SS	18"	10	17	4.5+	15.4	120.8	6.6

Water Level— depth, ft. elev., ft.  
 - while drilling: dry  
 - after drilling: dry  
 - hrs. after drilling:

S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %.  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".  
 Pen. - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs./cu.ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b

**SOIL AND MATERIAL CONSULTANTS, INC.**

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
 ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 3/25/16

File No.: 22596

**CORE LOG**

Client: Ciorba Group, Inc. Reference Central Ave. Bridge, Highland Pk., IL

Core No: C-101 Work Done By: DB & JL

Location of Core: Central Ave., Station 114+55, 3' N. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0--		
1--	1-3/4" Bituminous concrete - surface	Full
2--	1-1/4" Bituminous concrete - surface	Full
3--		
4--	1-3/4" Bituminous concrete - surface	Full
5--		
6--		
7--	6-1/4" Crushed limestone with fines (1"-2" in size)	Partial
8--		
9--		
10--		
11--		
12--		
13--	6-1/4" Brown sand	None
14--		
15--		
16--		
17--	Total 17-1/4"	
18--	E.O.C.	
19--		
20--		

G-333



File No. 22596 **BORING LOG** B-1

Client Ciorba Group, Inc. Sheet 1 of 4

Comments Central Avenue Project Central Avenue Bridge Date 3/29/16

Station 114+75 Location Highland Park, IL Drilled By AL

7' N. of CL Equipment  CME 45B  H.A.  Other Logged By DA

Elev., ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu
	(a,b & c) see page 4 of 4											
659.8'												
	Brown-dark brown clay & silt, trace sand & gravel, damp-very damp, stiff Fill		1	SS	10"	2	4	1.0	25.7	95.7	1.5	
			5	2	SS	6"	5	9	1.5	16.1		
656.0'	Brown clay, some silt, trace sand & gravel, damp, hard		3	SS	14"	7	13	4.5+	14.8	117.2	4.7	
652.5'			10	4	SS	18"	10	19	4.5+	15.5	116.4	3.9
650.0'	Gray-brown clay, some silt, trace sand & gravel, damp, very stiff		5	SS	18"	8	14	4.5+	14.9	118.7	3.1	
			15	6	SS	18"	8	15	2.5	15.3	119.9	2.3
			7	SS	18"	8	15	3.0	13.3	123.0	2.3	
643.0'			20	8	SS	18"	8	13	3.25	15.1	120.3	3.2
641.0'	Gray clay, some silt, trace sand & gravel, damp, very stiff											

Water Level— depth, ft. elev., ft.  
 - while drilling: dry  
 - after drilling: dry  
 - hrs. after drilling:

S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.  
 B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %.  
 N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".  
 Pen. - pocket penetrometer reading, tons/sq. ft. Uw - dry unit weight of soil, lbs./cu.ft.  
 Qu - unconfined compressive strength, tons/sq. ft.

F-111b

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 PLOT DATE = 08/31/21

DESIGNED - APD  
 DRAWN - SBA  
 CHECKED - BWS  
 DATE -

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 1  
 STRUCTURE NO. 049-6595

SHEET 5-33 OF 5-37 SHEETS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	68
CONTRACT NO.			61H28	
ILLINOIS			FED. AID PROJECT	







**SOIL AND MATERIAL CONSULTANTS, INC.**

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
 ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 3/25/16  
 File No.: 22596

**CORE LOG**

Client: Ciorba Group, Inc. Reference: Central Ave. Bridge, Highland Pk., IL  
 Core No: C-103 Work Done By: DB & JL  
 Location of Core: Central Ave., Station 116+10, 7' S. of CL

Comments:

(Depth, In.)	Type of Material	Recovery
0 --		
1 --		
2 --	3-0" Bituminous concrete - surface	Full
3 --		
4 --	1-1/2" Bituminous concrete - surface	Full
5 --		
6 --		
7 --		
8 --	6-1/2" Crushed limestone with fines (1"-3" in size)	Partial
9 --		
10 --		
11 --		
12 --		
13 --		
14 --	4-3/4" Brown sand	Partial
15 --		
16 --	E.O.C. Total 15-3/4"	
17 --		
18 --		
19 --		
20 --		

G-333

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	DRAWN - SBA	REVISED -
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PLOT DATE = 08/31/21	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS 5  
 STRUCTURE NO. 049-6595**

SHEET 5-37 OF 5-37 SHEETS

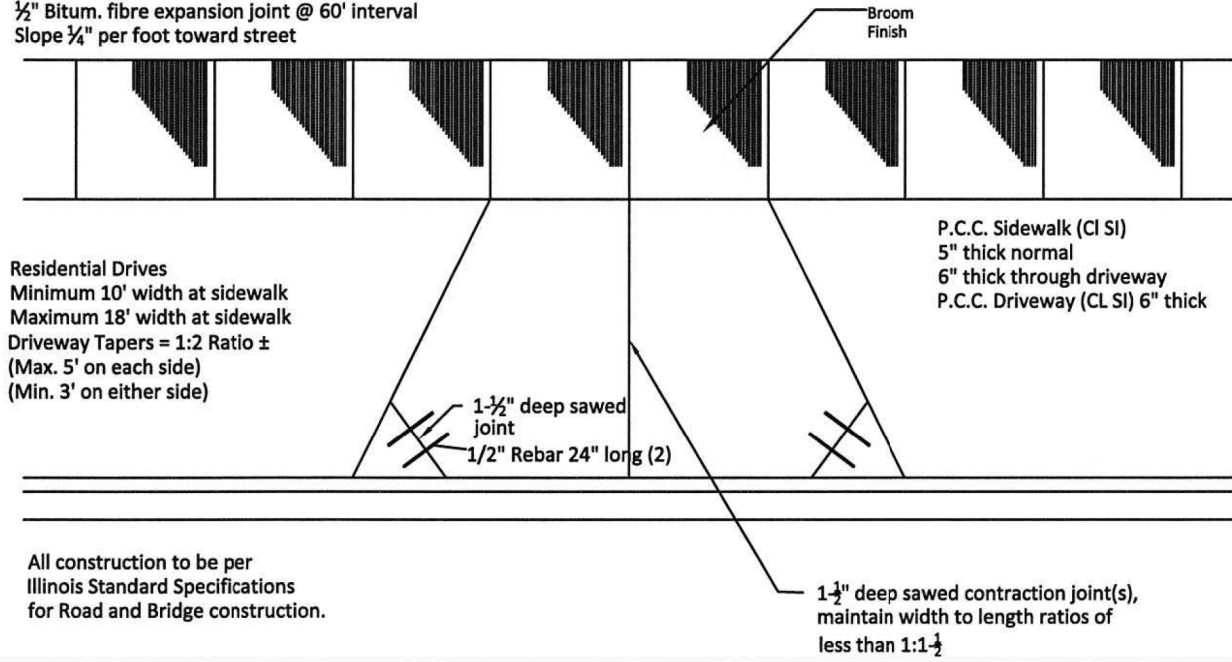
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3115	15-00123-00-BR	LAKE	84	72
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		



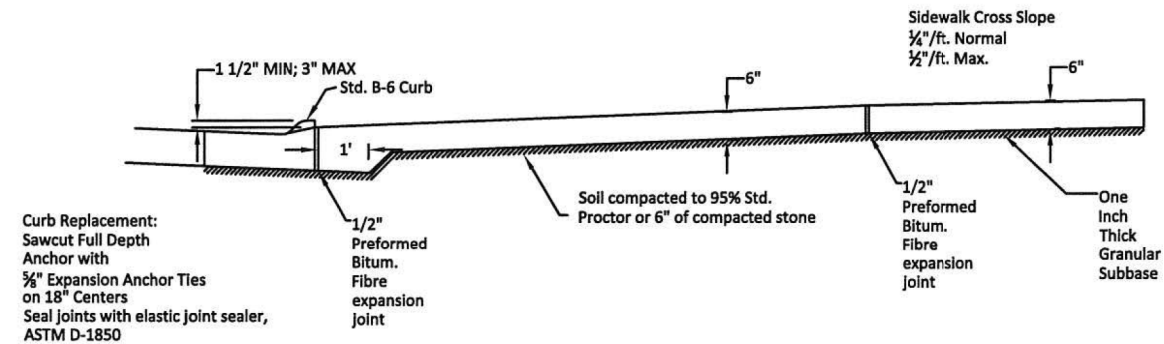
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PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

Dummy Contraction Joint every 5'  
 1-1/2" deep contraction joint @ 15' interval  
 1/2" Bitum. fibre expansion joint @ 60' interval  
 Slope 1/4" per foot toward street



Plan View



Cross Section View



City of Highland Park  
 Department of Public Works  
 1150 Half Day Rd, Highland Park, IL 60035

TYPICAL DRIVEWAY  
 & SIDEWALK DETAIL

H.P. DWG. No. STR-1031  
 Drawn By: M.B.  
 Revised By: E.J.



DATE: 27th Sept. 2013  
 Approved By: J.M.W.

DATE PLOTTED = 8/23/2021 10:55:50 AM  
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DESIGNED - MLH  
 DRAWN - AMH  
 CHECKED - EPS  
 DATE - 8/23/2021

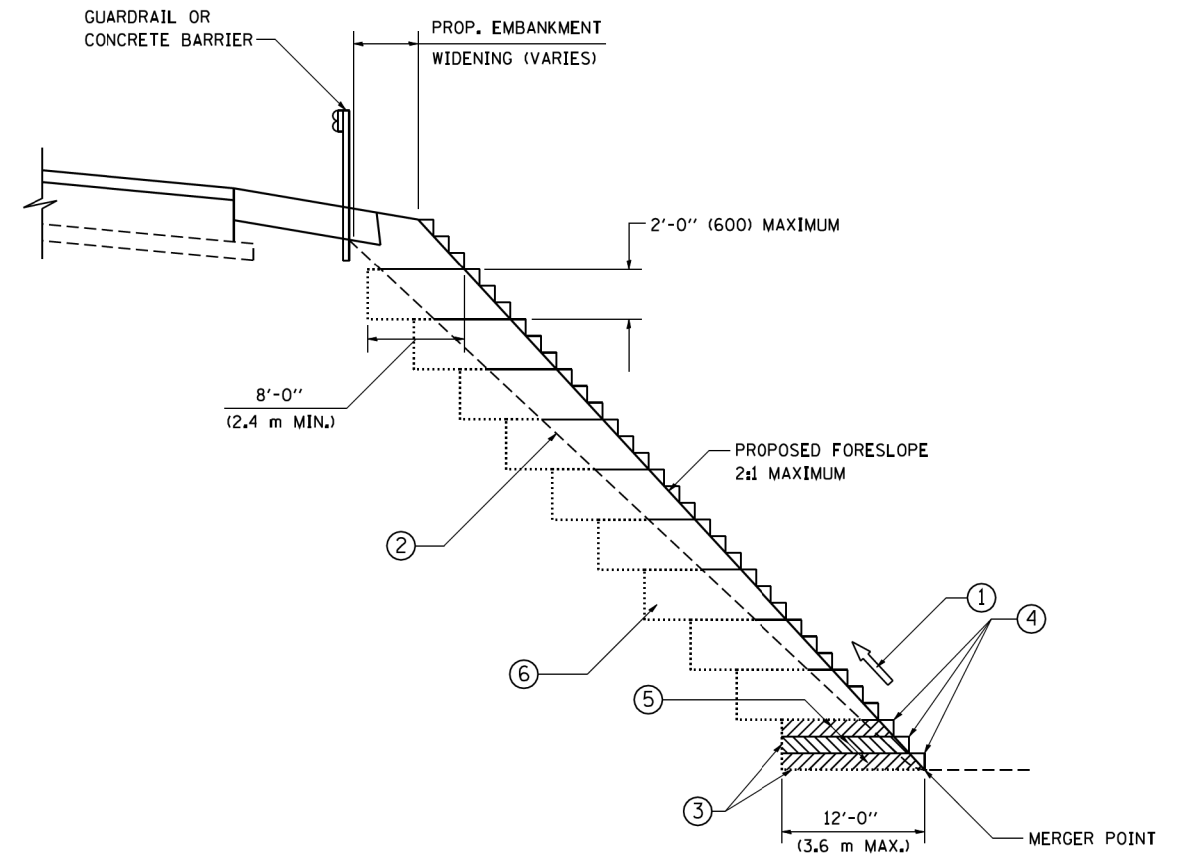
REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 TYPICAL SIDEWALK AND DRIVEWAY DETAIL

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	73
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				



**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**NOTES:**

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR 'EARTH EXCAVATION'. THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

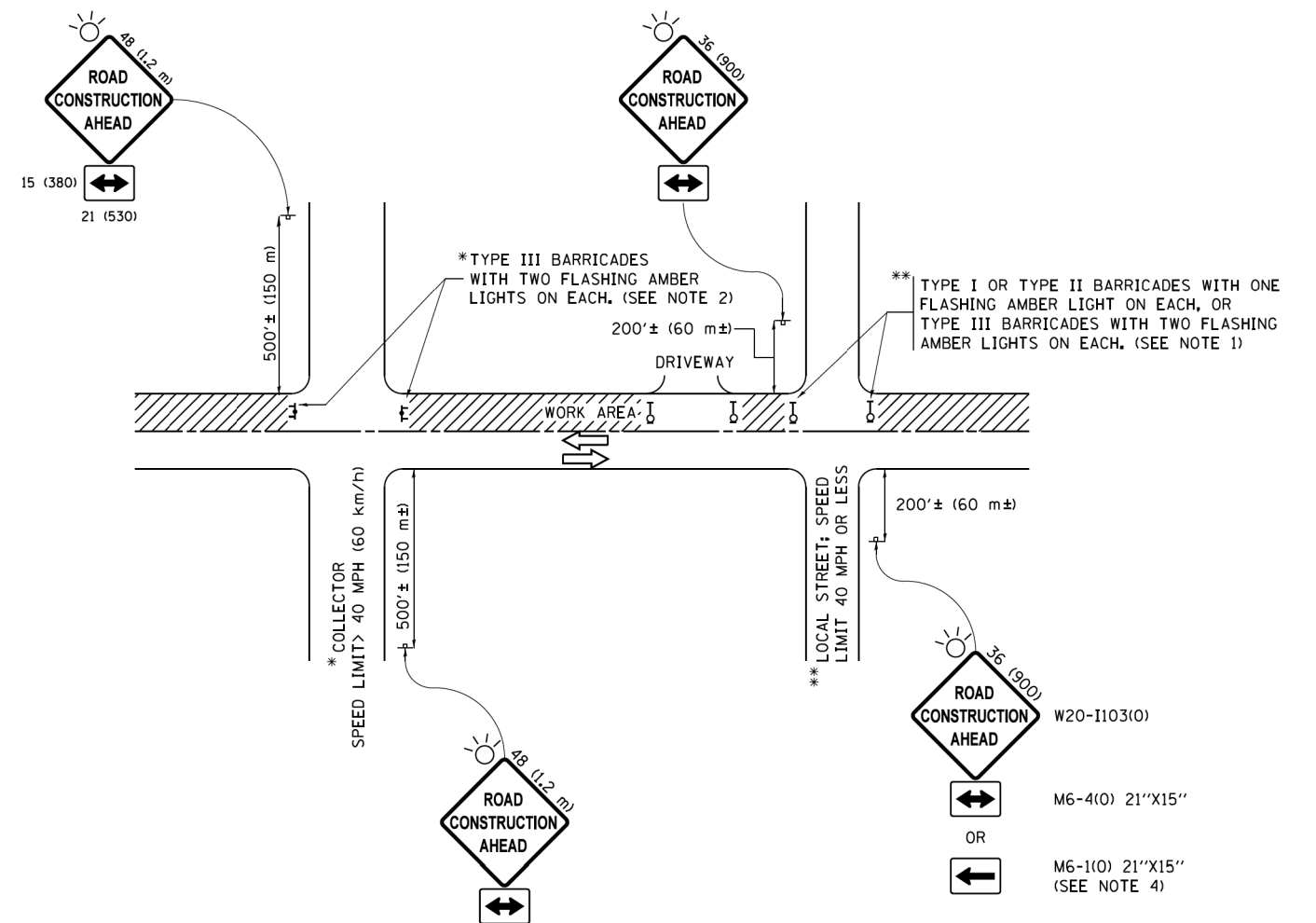
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

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		CHECKED - S.E.B.	REVISED -
		DATE - 06-16-04	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>BENCHING DETAIL FOR EMBANKMENT WIDENING</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	74
<b>BD-51</b>			CONTRACT NO. 61H28	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

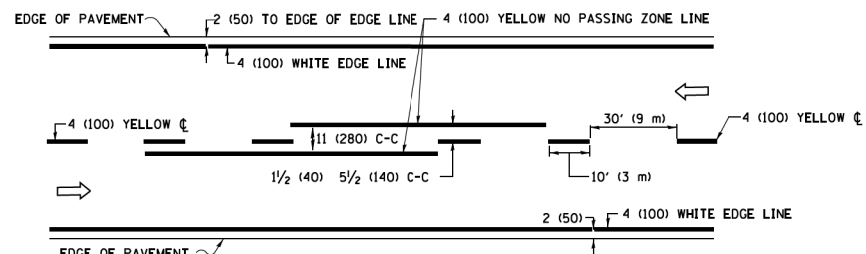
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

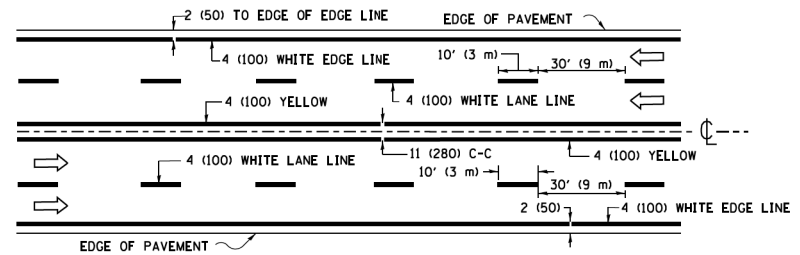
**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

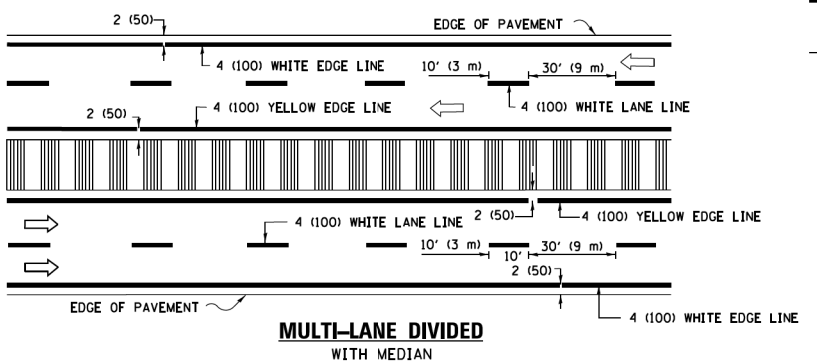
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	75
TC-10			CONTRACT NO.	61H28
ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

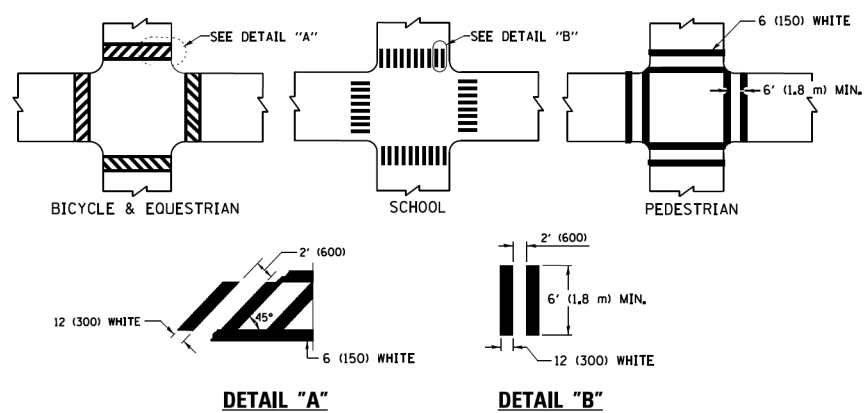


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

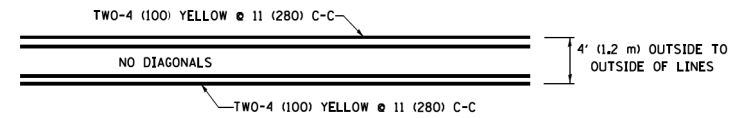


**DETAIL "A"**

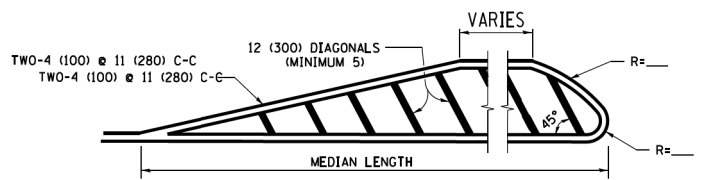
**DETAIL "B"**

**TYPICAL CROSSWALK MARKING**

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



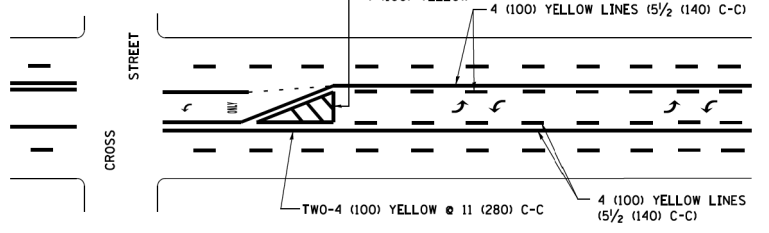
**4' (1.2 m) WIDE MEDIANS ONLY**



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

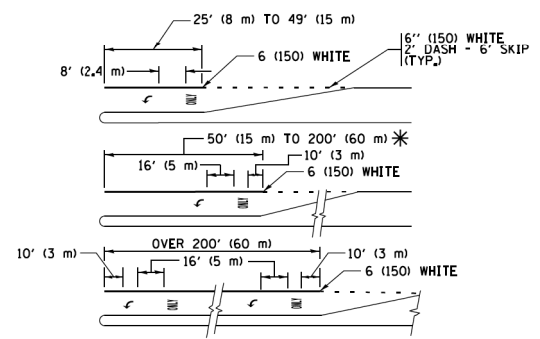
**MEDIANS OVER 4' (1.2 m) WIDE**



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

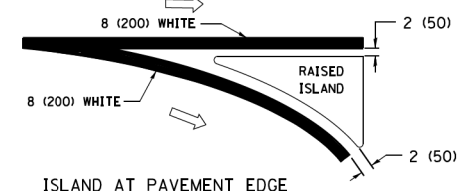
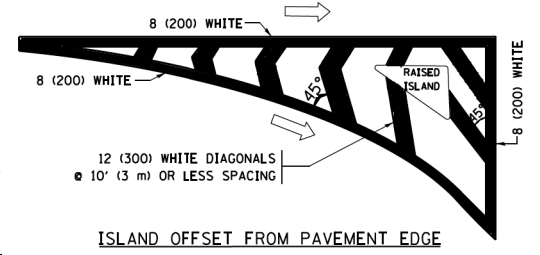


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

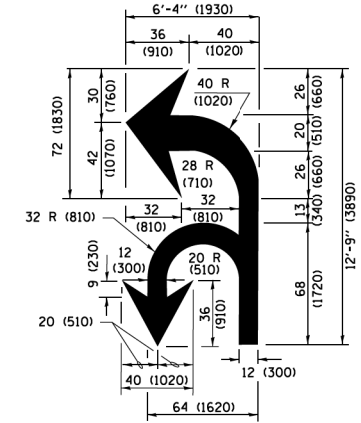
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

**TYPICAL LEFT (OR RIGHT) TURN LANE**

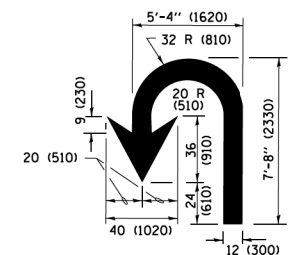
**TYPICAL TURN LANE MARKING**



**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS; 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.


All dimensions are in inches (millimeters) unless otherwise shown.


FILE NAME =	USER NAME = lryss	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
W:\dststd\22x34\1013.dgn		DRAWN -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50,000' / 1" =	CHECKED -	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16


**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>		MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
<b>TYPICAL PAVEMENT MARKINGS</b>		3115	15-00123-00-BR	LAKE	84	76
SCALE: NONE	SHEET 1 OF 1 SHEETS	STA.	TO STA.	<b>TC-13</b>		
				ILLINOIS FED. AID PROJECT	CONTRACT NO. 61H28	






**ROUTE MARKERS**

 FOR U.S. ROUTES  
M1-40-2424






 FOR ILLINOIS ROUTES  
M1-50-2424

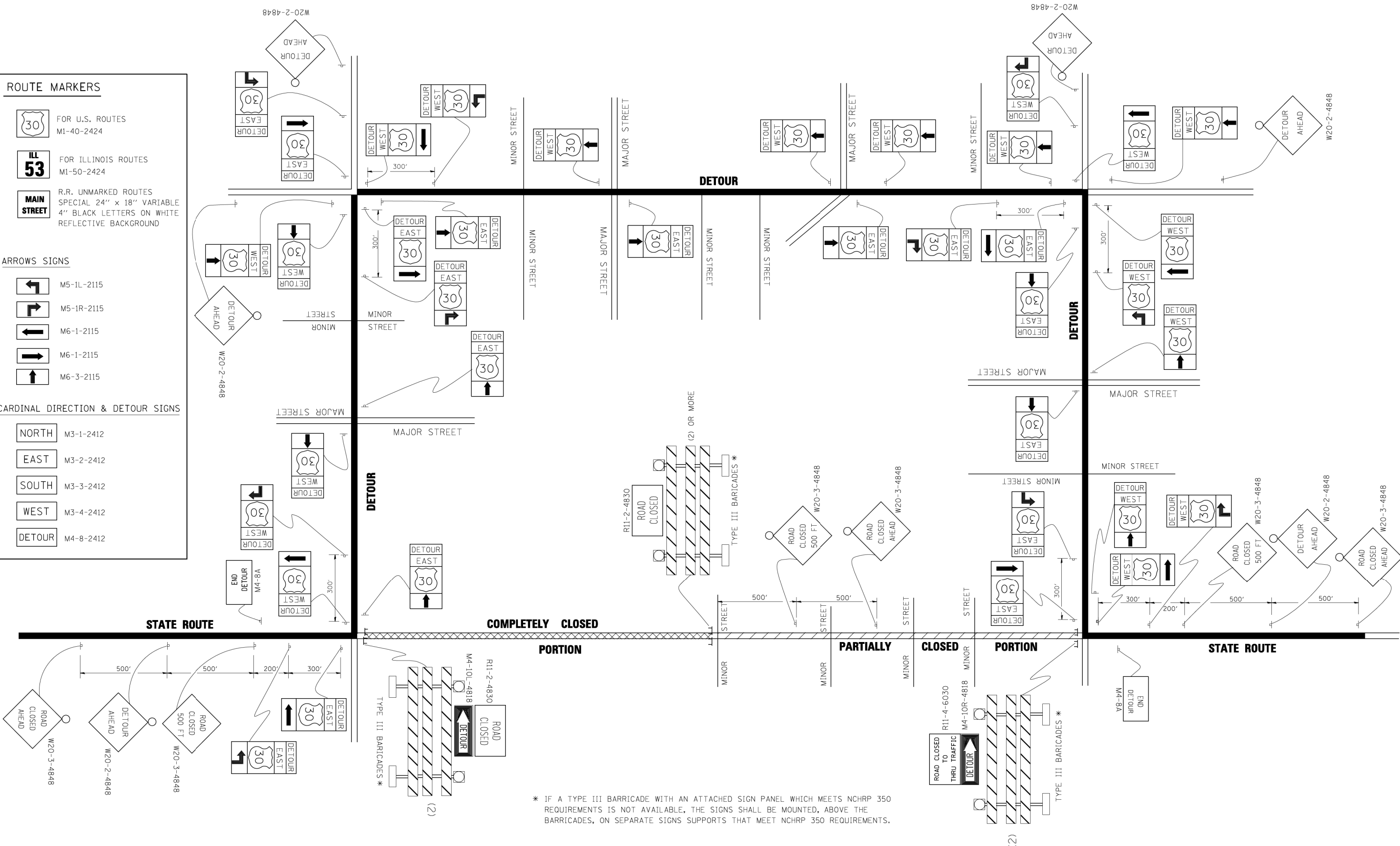
 R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

-  M5-1L-2115
-  M5-1R-2115
-  M6-1-2115
-  M6-1-2115
-  M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

-  NORTH M3-1-2412
-  EAST M3-2-2412
-  SOUTH M3-3-2412
-  WEST M3-4-2412
-  DETOUR M4-8-2412



\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = d-ivakosgn	DESIGNED -	REVISED - 10-18-02
c:\p\work\p\WIDOT\DRIVAKOSGN\d0108315\1421.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		PLOT SCALE = 49.9999' / IN.	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

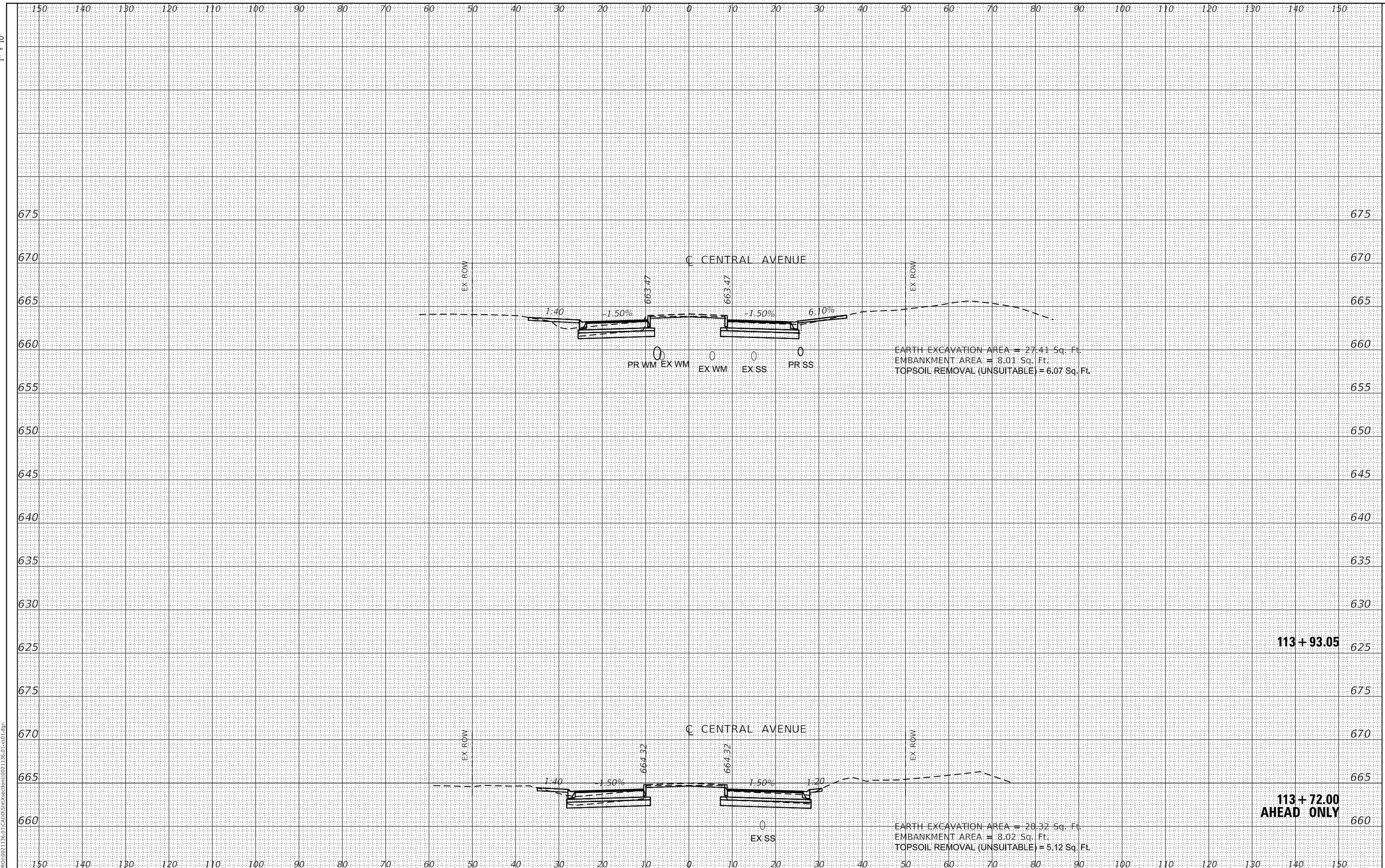
<b>DETOUR SIGNING FOR CLOSING STATE HIGHWAYS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	77
<b>TC-21</b>		CONTRACT NO.	61H28	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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EARTH EXCAVATION AREA = 27.41 Sq. Ft.  
 EMBANKMENT AREA = 8.01 Sq. Ft.  
 TOPSOIL REMOVAL (UNSUITABLE) = 6.07 Sq. Ft.

EARTH EXCAVATION AREA = 28.32 Sq. Ft.  
 EMBANKMENT AREA = 8.02 Sq. Ft.  
 TOPSOIL REMOVAL (UNSUITABLE) = 5.12 Sq. Ft.



USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 CROSS SECTIONS**

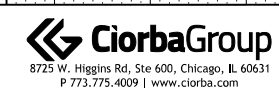
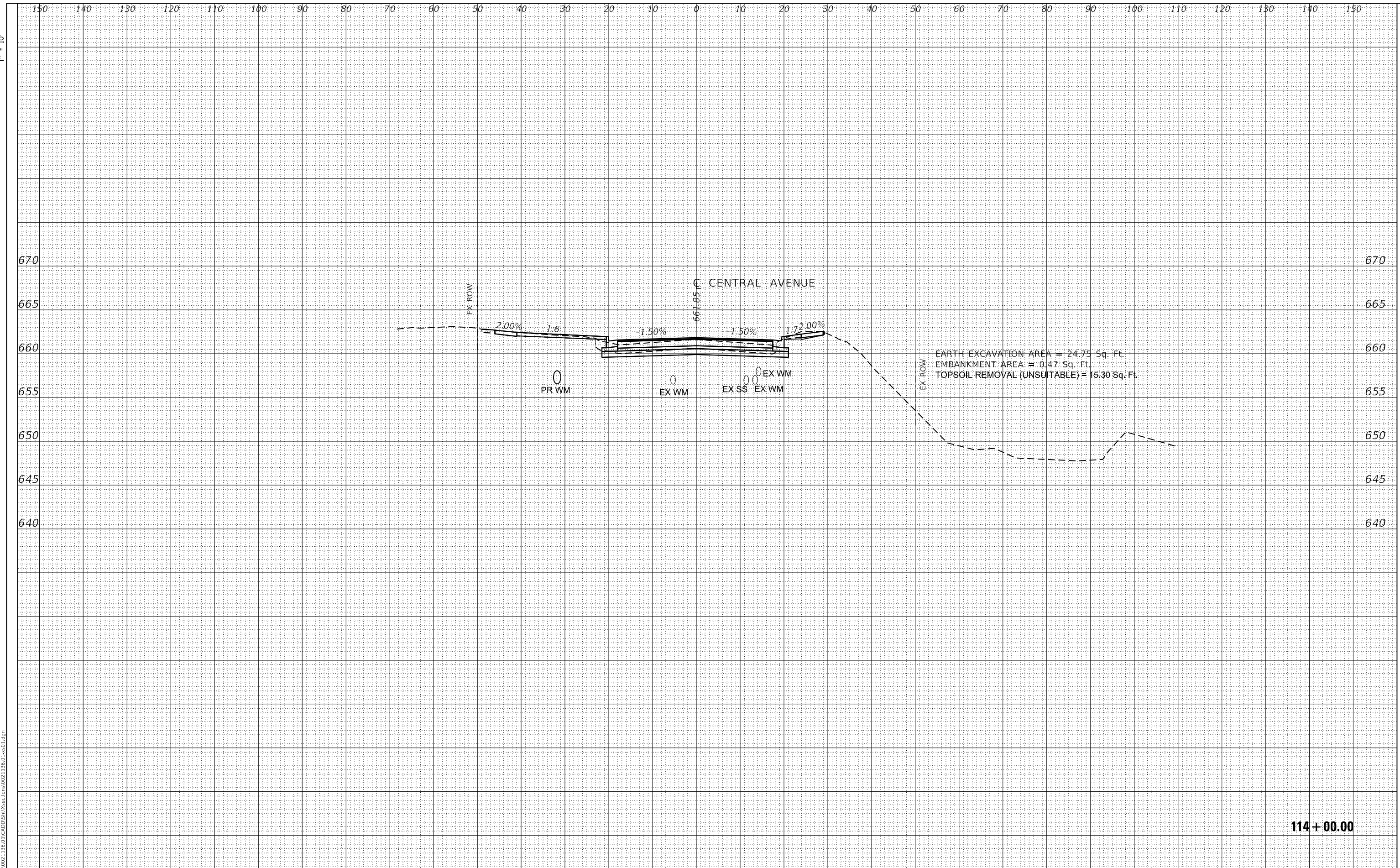
SCALE: 1" = 10' SHEET OF SHEETS STA. 113+72.00 TO STA. 113+93.05

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	78
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 CROSS SECTIONS

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	79
CONTRACT NO.			61H28	

SCALE: 1" = 10' SHEET OF SHEETS STA. 114+00.00 TO STA. 114+00.00

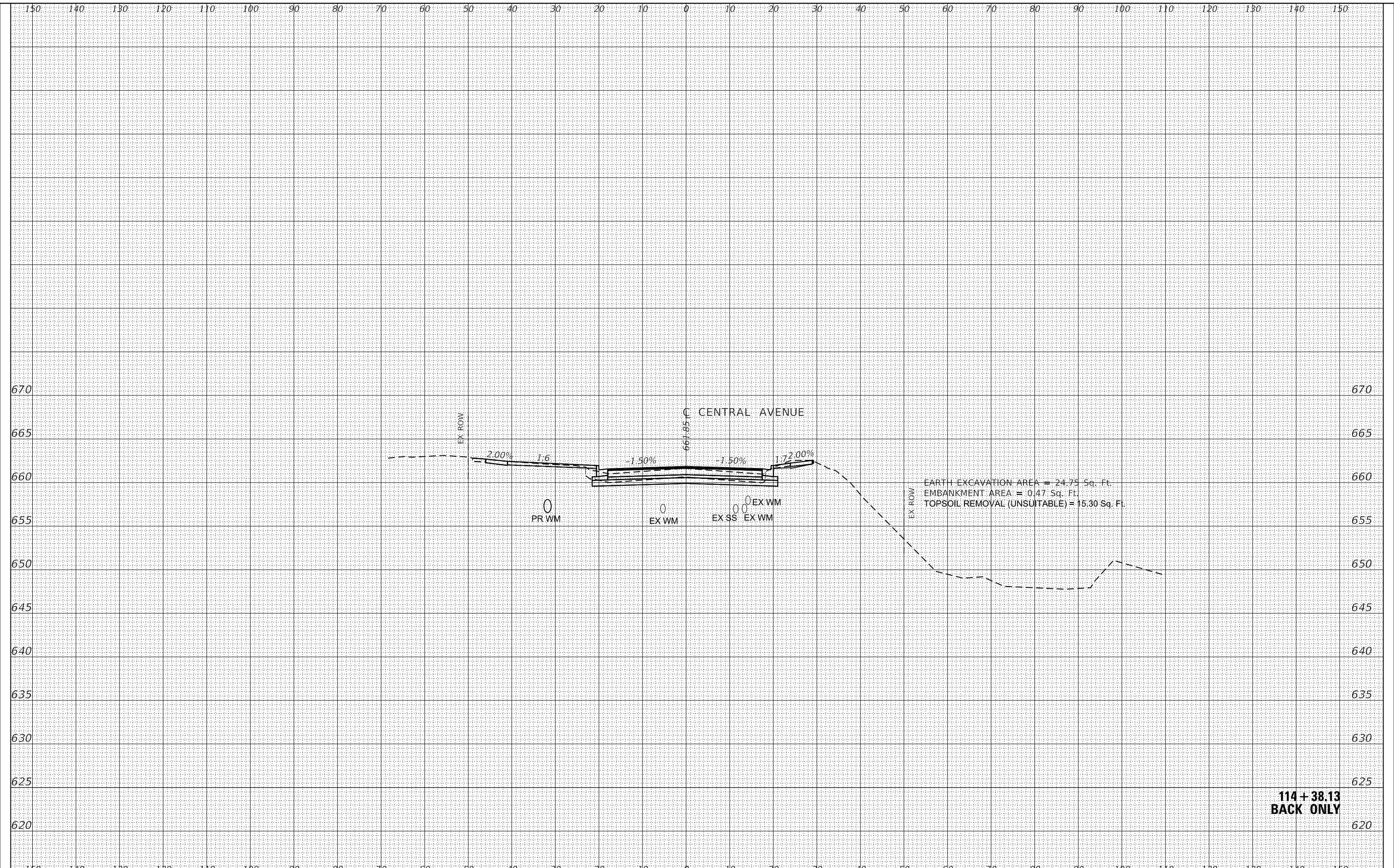
ILLINOIS FED. AID PROJECT

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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1" = 10'



**114 + 38.13  
BACK ONLY**



USER NAME = Roadway	DESIGNED - MLH	REVISED -
	DRAWN - AMH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - EPS	REVISED -
PLOT DATE = 8/23/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT CROSS SECTIONS</b>	
SCALE: 1" = 10'	SHEET OF SHEETS
STA. 114+38.13	TO STA. 114+38.13

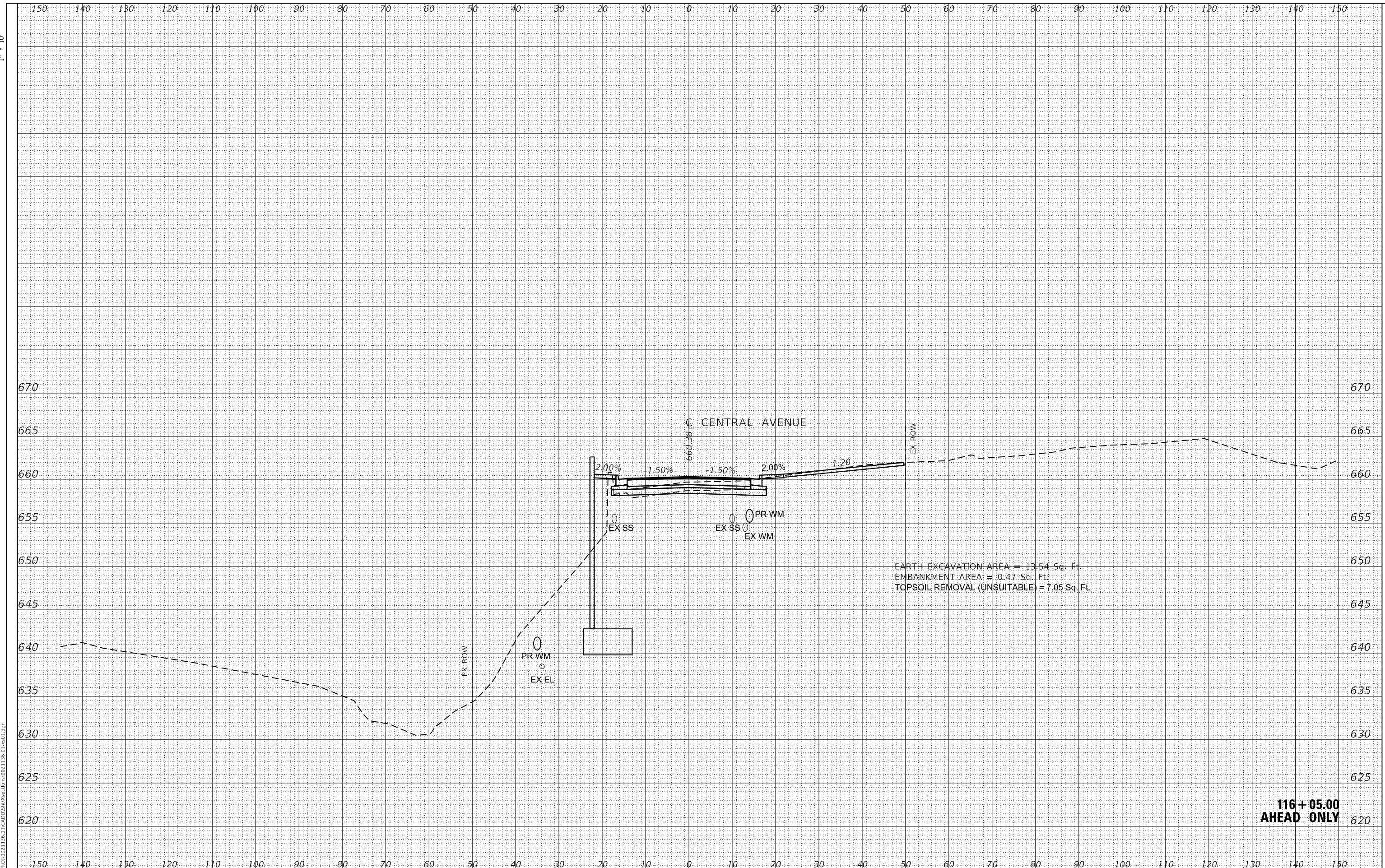
MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	80
CONTRACT NO. 61H28				
ILLINOIS		FED. AID PROJECT		



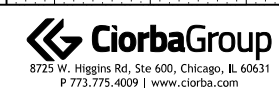
FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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**116 + 05.00  
AHEAD ONLY**



USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

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REVISIONS	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
CROSS SECTIONS**

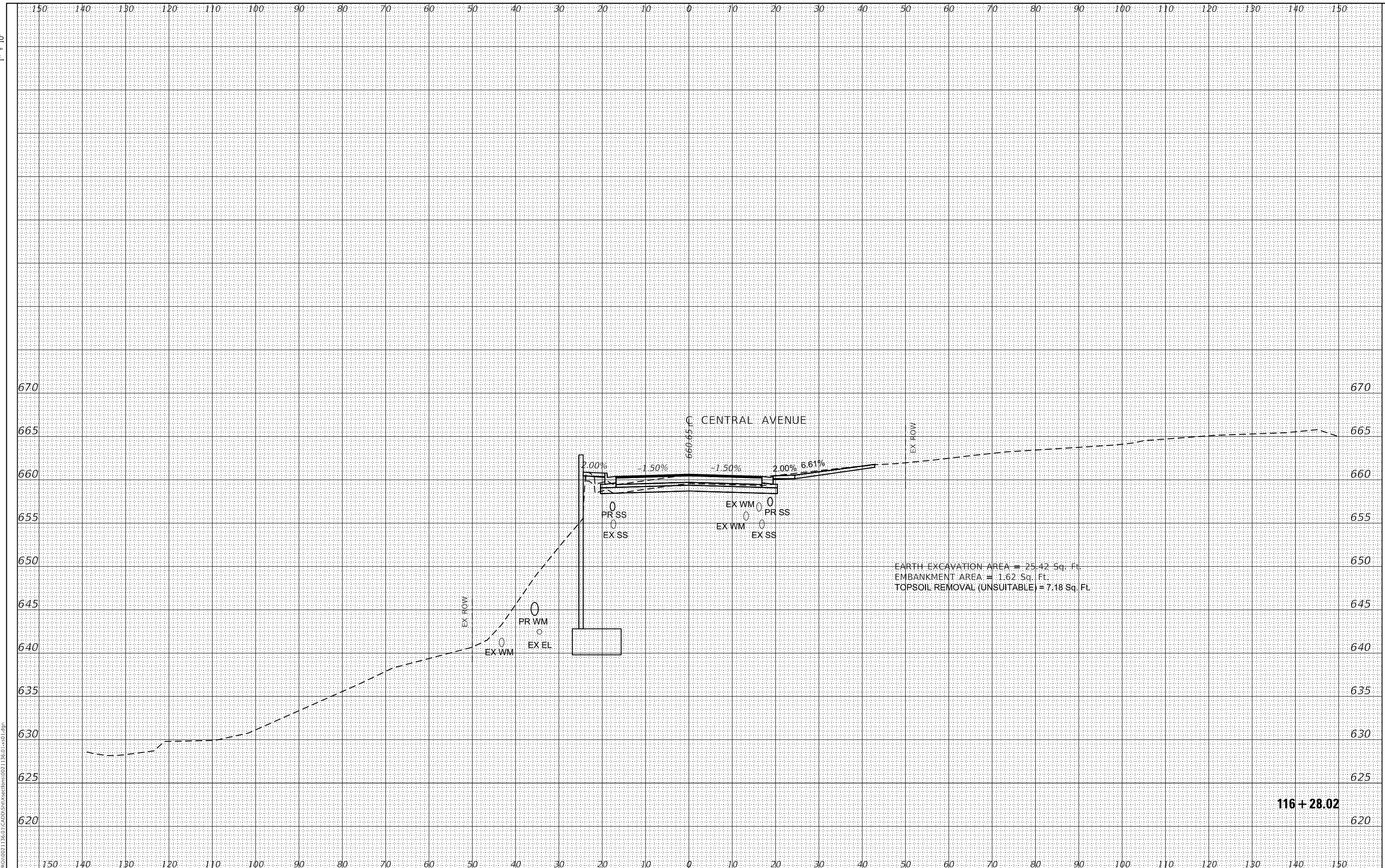
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	81
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

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EARTH EXCAVATION AREA = 25.42 Sq. Ft.  
 EMBANKMENT AREA = 1.62 Sq. Ft.  
 TOPSOIL REMOVAL (UNSUITABLE) = 7.18 Sq. Ft.

116 + 28.02



USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

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REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 CROSS SECTIONS**

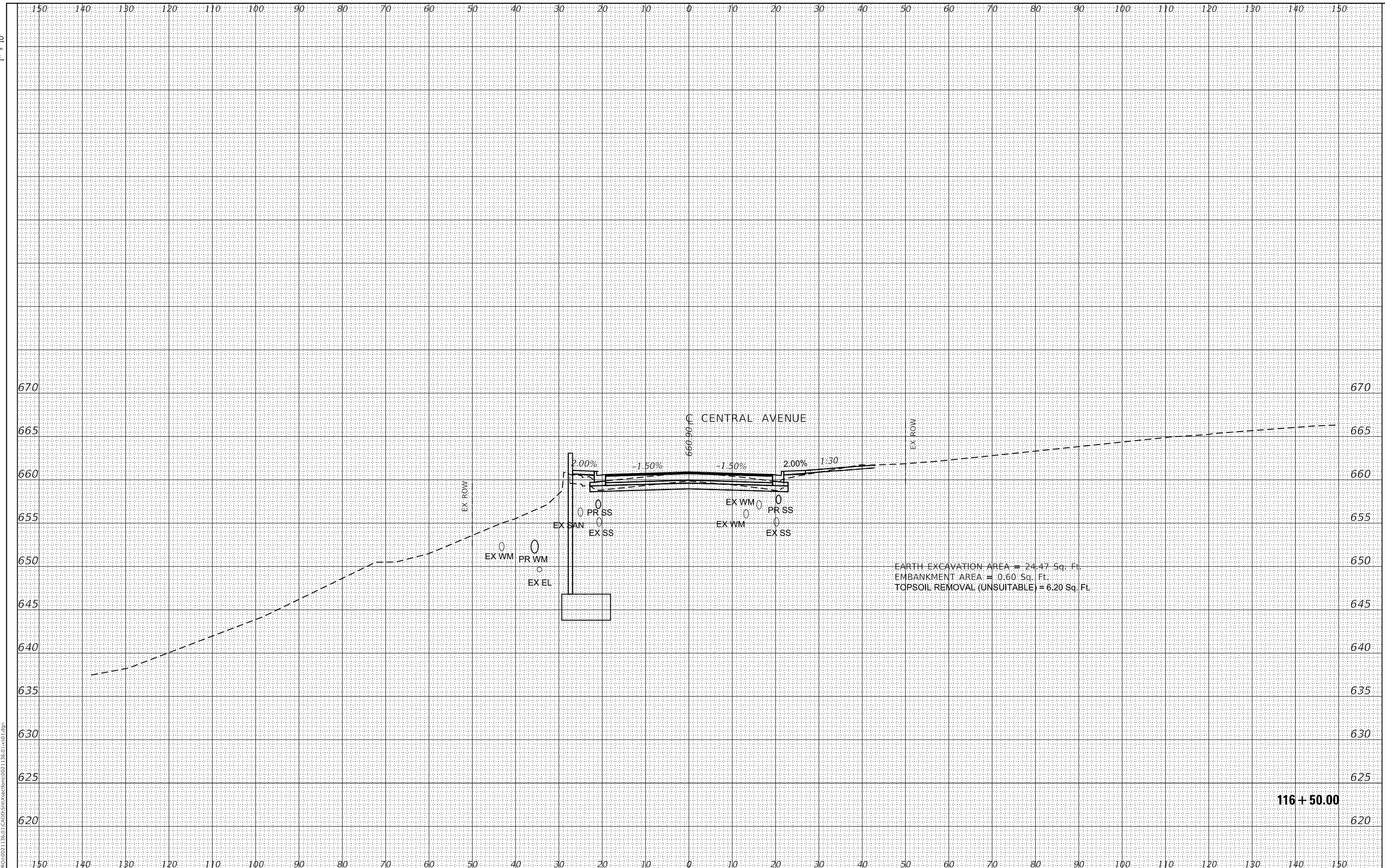
SCALE: 1" = 10' SHEET OF SHEETS STA. 116+28.02 TO STA. 116+28.02

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	82
CONTRACT NO.			61H28	
ILLINOIS		FED. AID PROJECT		

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
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EARTH EXCAVATION AREA = 24.47 Sq. Ft.  
 EMBANKMENT AREA = 0.60 Sq. Ft.  
 TOPSOIL REMOVAL (UNSUITABLE) = 6.20 Sq. Ft.



USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

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REVISIONS	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 CROSS SECTIONS

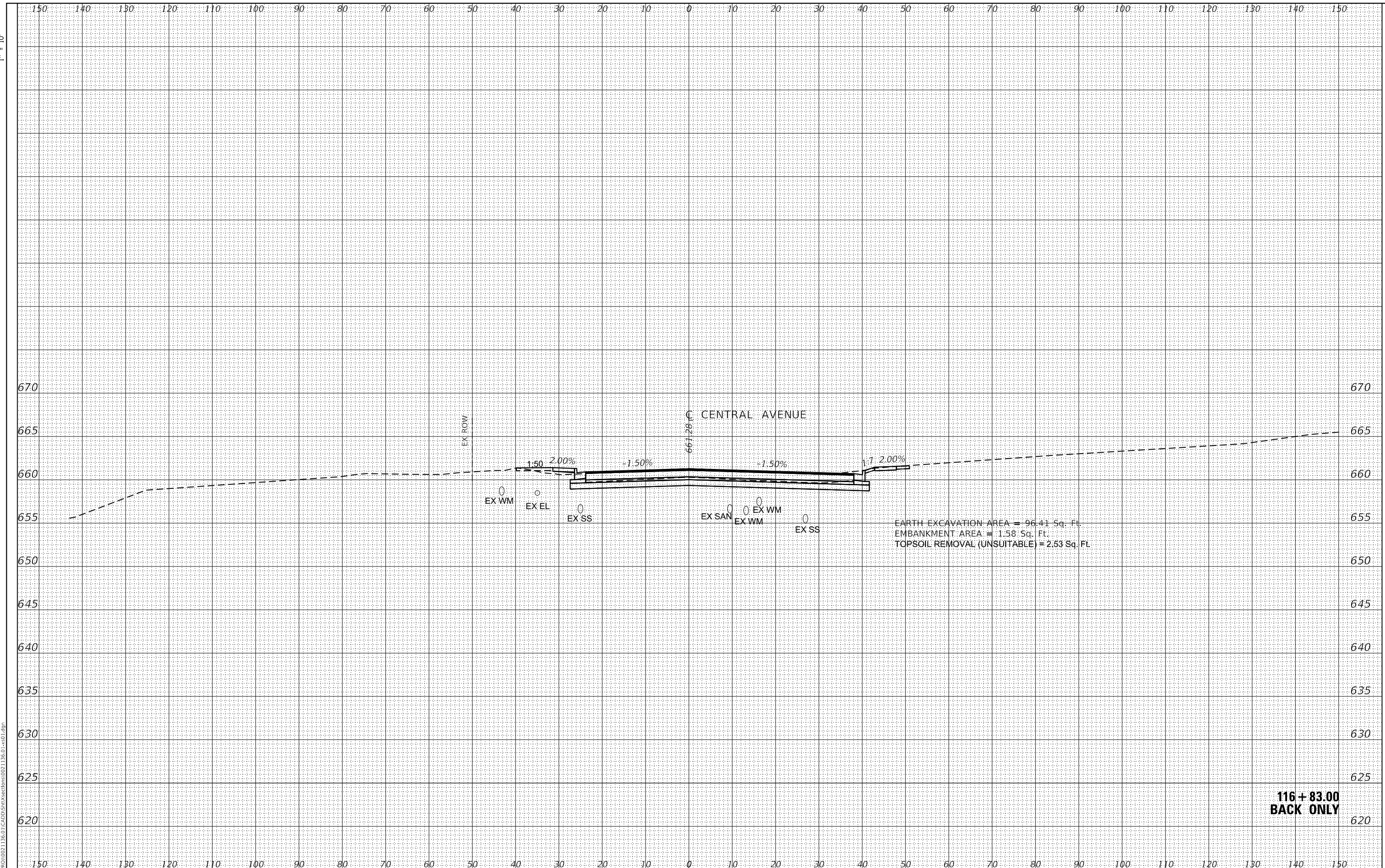
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MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	83
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS	
	CHECKED	

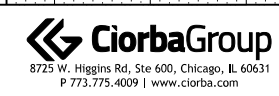
ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS	
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 PLOT CONFIG = CG-PDF.plt  
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 FILE NAME: R:\P\0021136.0\1\CADD\Struct\Sections\0021136.0-1x83.0.dwg



EARTH EXCAVATION AREA = 96.41 Sq. Ft.  
 EMBANKMENT AREA = 1.58 Sq. Ft.  
 TOPSOIL REMOVAL (UNSUITABLE) = 2.53 Sq. Ft.

**116 + 83.00  
 BACK ONLY**



USER NAME =	Roadway
DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

DESIGNED -	MLH
DRAWN -	AMH
CHECKED -	EPS
DATE -	

REVISIONS	
REVISED -	
REVISED -	
REVISED -	
REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CENTRAL AVENUE OVER RAVINE BRIDGE REPLACEMENT  
 CROSS SECTIONS**

SCALE: 1" = 10' SHEET OF SHEETS STA. 116+83.00 TO STA. 116+83.00

MUN. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3115	15-00123-00-BR	LAKE	84	84
CONTRACT NO.			61H28	
ILLINOIS FED. AID PROJECT				