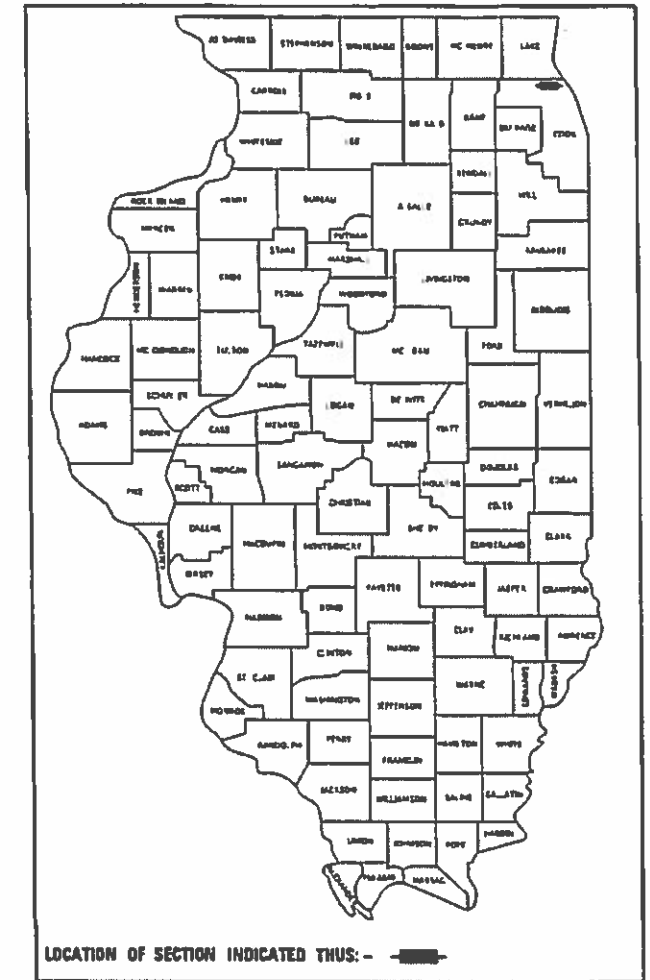


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01 BR	COOK	184	1
		ILLINOIS	CONTRACT NO. 60N83	

D-91-407-11



FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

F.A.P. 305
WILLOW ROAD
EXISTING ADT: 35,400 (2006)
DESIGN ADT: 35,400 (2014)
SPEED LIMIT: 45 MPH

PATRIOT BLVD
EXISTING ADT: 2,550 (2014)
DESIGN ADT: 2,550 (2014)
SPEED LIMIT: 35 MPH

PROJECT IS LOCATED
IN THE VILLAGE OF
GLENVIEW

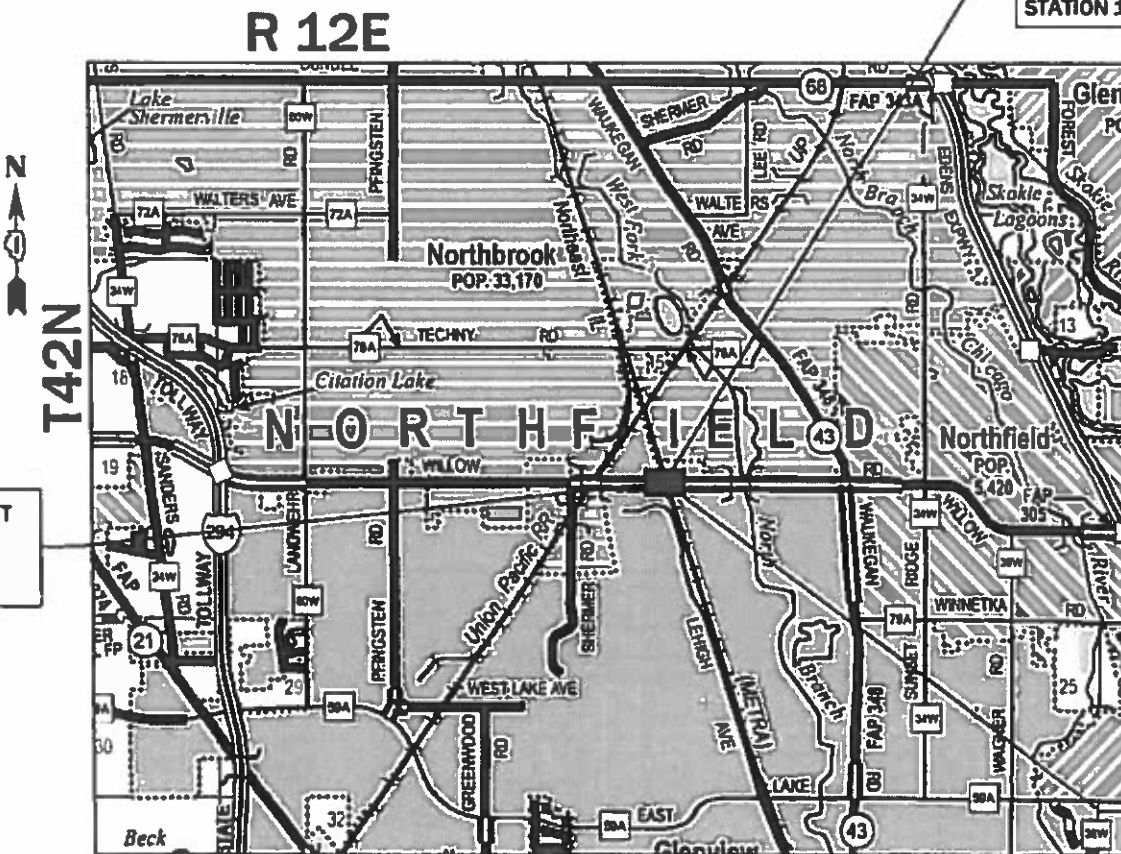


[Signature] 11/27/2018
L.C. 1-04 and 1-04
LICENSE EXPIRES NOV. 30, 2019

**PROPOSED
HIGHWAY PLANS**
FAP ROUTE 305 (WILLOW RD)
OVER LEHIGH AVENUE/PATRIOT BLVD
& SOO LINE RAILROAD
SECTION 1920.01-BR
PROJECT NHPP-H84D(514)
BRIDGE WIDENING AND REHABILITATION
COOK COUNTY

C-91-407-11

END IMPROVEMENT
STATION 107+20
PROJECT ENDS
STATION 103+52.5



BEGIN IMPROVEMENT
STATION 92+50
PROJECT BEGINS
STATION 96+61.4

BRIDGE WIDENING
STRUCT. NO. 016-0533
STA. 100+07.18

CONSTRUCT
RETAINING WALLS
STRUCT. NO. 016-1391
STRUCT. NO. 016-1393
STA. 101+30 TO
STA. 104+75 RT.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *December 7, 2018*

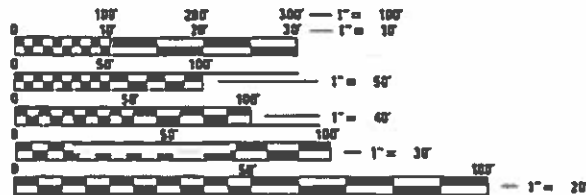
[Signature] REGIONAL ENGINEER

Feb 7 2019

[Signature] ENGINEER OF DESIGN AND ENVIRONMENT

Feb 20 2019

[Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION



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

PROJECT MANAGER: HELEN PAZON, P.E. (847) 705-4523

GROSS LENGTH = 691 FT. = 0.13 MILE
NET LENGTH = 691 FT. = 0.13 MILE



PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

CONTRACT NO. 60N83

INDEX OF SHEETS

1 COVER SHEET
 2 INDEX OF SHEETS AND HIGHWAY STANDARDS
 3-15 SUMMARY OF QUANTITIES
 16-17 EXISTING AND PROPOSED TYPICAL SECTIONS
 18-21 SCHEDULE OF QUANTITIES
 22 ALIGNMENT, TIES AND BENCHMARKS
 23-24 ROADWAY PLAN & PROFILE
 25 PATRIOT PLAN
 26 PAVEMENT JOINT ELEVATIONS
 27-35 SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
 36 EROSION CONTROL PLAN
 37 DRAINAGE AND UTILITIES PLAN & PROFILE
 38-39 RIGHT-OF-WAY PLANS
 40 PAVEMENT MARKING, SIGNAGE AND LANDSCAPING PLAN
 41 REMOVAL PLAN
 42 PROPOSED INTERCONNECT SCHEMATIC
 43 EXISTING AND TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN
 44 PROPOSED TRAFFIC SIGNAL INTERCONNECT PLAN
 45-102 STRUCTURE PLANS - S.N. 016-0533
 103-110 EXISTING BRIDGE PLANS - 2006
 110-134 EXISTING BRIDGE PLANS - 1969
 135-142 EXISTING BRIDGE PLANS - 1942
 143-155 STRUCTURE PLANS - S.N. 016-1391
 156-167 STRUCTURE PLANS - S.N. 016-1393
 168 DRAINAGE AND LANDSCAPING DETAILS
 169-179 DISTRICT DETAILS
 180-194 CROSS SECTIONS

LIST OF DISTRICT DETAILS

BD-5 DETAILS FOR CONCRETE MEDIAN TYPE SB (DOWELLED), CORRUGATED MEDIAN (MODIFIED)
 BD-7 DETAILS FOR STORM SEWER CONNECTION TO EXISTING SEWER
 BD-8 DETAILS FOR FRAMES AND LIDS ADJUSTMENT FOR MILLING
 BD-24 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
 BD-48 PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER
 BD-51 BENCHING DETAIL FOR EMBANKMENT WIDENING
 TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTION, AND DRIVEWAYS
 TC-11 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
 TC-13 TYPICAL PAVEMENT MARKINGS
 TC-22 ARTERIAL ROAD SIGN INFORMATION

LIST OF STATE STANDARDS

000001-07 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 001001-02 AREAS OF REINFORCEMENT BARS
 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 420001-09 PAVEMENT JOINTS
 420106-06 36' (10.8 M) JOINTED PCC PAVEMENT
 420401-13 BRIDGE APPROACH PAVEMENT CONNECTOR
 515001-03 NAME PLATE FOR BRIDGES
 601001-05 PIPE UNDERDRAINS
 602001-02 CATCH BASIN, TYPE A
 604091-03 FRAME AND GRATE, TYPE 24
 606101-05 TYPE A GUTTER (INLET, OUTLET, AND ENTRANCE)
 606301-04 PC CONCRETE ISLANDS AND MEDIANS
 630201-07 PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
 631031-15 TRAFFIC BARRIER TERMINAL, TYPE 6
 643001-02 SAND MODULE IMPACT ATTENUATORS
 664001-02 CHAIN LINK FENCE
 667101-02 PERMANENT SURVEY MARKERS
 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
 701011-04 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
 701421-08 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
 701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS > 45 MPH
 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
 701801-06 SIDEWALK, CORNER, OR CROSSWALK CLOSURE
 701901-08 TRAFFIC CONTROL DEVICES
 704001-08 TEMPORARY CONCRETE BARRIER
 720001-01 SIGN PANEL MOUNTING DETAILS
 725001-01 OBJECT AND TERMINAL MARKERS
 782001-01 CURB REFLECTORS
 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
 812001 RACEWAY EMBEDDED IN STRUCTURE
 814001-03 HANDHOLES
 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
 878001-10 CONCRETE FOUNDATION DETAILS
 880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
 886001-01 DETECTOR LOOP INSTALLATIONS
 886006-01 TYPICAL LAYOUT FOR DETECTOR LOOPS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL *J.U.L.I.E.* AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGE OF GLENVIEW.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- USE #8 EPOXY-COATED TIE BARS, CONFORMING TO ART. 1006.10 OF THE STANDARD SPECIFICATIONS, FOR ALL TIE BARS. USE THE *LONGITUDINAL CONSTRUCTION JOINT (TIE BAR GROUDED IN PLACE)* DETAIL SHOWN ON HIGHWAY STANDARD 420001 FOR ALL LONGITUDINAL JOINTS AND FOR TYING PCC PAVEMENT WIDENING TO EXISTING CONCRETE PAVEMENT AS SHOWN ON THE PLANS.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT [OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)], WILL BE VERIFIED IN THE FIELD BY THE ENGINEER.
- DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
- SIDEWALK REMOVAL AND P.C.C. SIDEWALK 5' LOCATIONS SHALL BE VERIFIED BY THE ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS, THE ENGINEER SHALL CONTACT MR. CORY JUCIUS, ARTERIAL TRAFFIC FIELD ENGINEER, AT CORY.JUCIUS@ILLINOIS.GOV.
- WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED THEIR LOCATION.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.
- FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.
- EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL *TYPICAL APPLICATIONS * RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)* SHOWN IN THE PLANS.
- THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH FULLY LOADED TANDEM-AXLE TRUCK.
- 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 THE CONTRACTOR'S OWN EXPENSE.
- PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED A MINIMUM OF 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.
- BACKFILLING STORM SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART. 550.07 (back) OF THE SSRBC WILL NOT BE ALLOWED.

GENERAL NOTES (LANDSCAPING)

- UNLESS OTHERWISE NOTED, ALL PERENNIALS SHALL BE PLANTED ONE FOOT ON CENTER AND MULCHED AS DESCRIBED IN ARTICLE 254.08 OF THE STANDARD SPECIFICATIONS.
- VILLAGE WATER AND SEWER MAINS MAY BE LOCATED IN THE LANDSCAPE AREA.
- THE CONTRACTOR WILL NOT BE ALLOWED TO PROCEED WITH ANY PLANTING WORK UNTIL ALL UTILITY OWNERS FIELD LOCATE THEIR FACILITIES WHICH MAY INTERFERE WITH CONSTRUCTION OPERATIONS.
- THE ACTUAL LOCATION OF PROPOSED LANDSCAPING WILL BE ADJUSTED IN THE FIELD TO AVOID UTILITIES.
- INTERSEEDING, CLASS 2A IS TO BE USED TO RENOVATE AREAS WHERE EXISTING TURF IS IN POOR CONDITION. EXACT LOCATIONS WILL BE DETERMINED DURING CONSTRUCTION BY THE ENGINEER.
- UNDERBRUSH OR DEBRIS AT PLANTING LOCATIONS SHALL BE REMOVED AND DISPOSED OF ACCORDING TO SECTION 201 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COSTS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.

GENERAL NOTES (SWPPP)

- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR WILL NEED TO SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL ESC MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION AND IDOT'S BEST MANAGEMENT PRACTICES MAINTENANCE GUIDE: ([HTTP://WWW.IDOT.ILLINOIS.GOV/TRANSPORTATION-SYSTEM/ENVIRONMENT/EROSION-AND-SEDIMENT-CONTROL](http://www.idot.illinois.gov/transportation-system/environment/erosion-and-sediment-control)).
- THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.
- THE CONTRACTOR SHALL CHECK ALL ESC MEASURES WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT.
- THE CONTRACTOR SHOULD PROVIDE TO THE RE A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE WILL REDUCE THE POTENTIAL FOR THE OFFSITE DISCHARGE OF SEDIMENT BEARING WATERS, ESPECIALLY WHEN RAIN IS FORECASTED, SO THAT FLOW WILL NOT ERODE. LACK OF APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN ESC EFFICIENCY DEDUCTION.
- ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
- TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 14 DAYS OR MORE.
- UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.
- EROSION CONTROL ITEMS ARE CONSIDERED TO BE A HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE RE.

GENERAL NOTES (MWRD)

- NO ACCESS HATCHES AND MANHOLE COVERS ON MWRD STRUCTURES AND MANHOLES WITHIN THE PROJECT AREA SHALL BE BURIED OR COVERED. NO DEBRIS SHALL ENTER MWRD STRUCTURES, SEWERS, OR FACILITIES. MWRD PERSONNEL SHALL HAVE 24-HOUR-A-DAY UNRESTRICTED ACCESS TO ALL MWRD FACILITIES.
- MWRD MANHOLES SHALL BE LOCATED, PROTECTED AND/OR ADJUSTED TO GRADE, IF NECESSARY. PRIOR AUTHORIZATION IS REQUIRED TO MAKE ANY STRUCTURAL MODIFICATIONS, INCLUDING MANHOLEFRAME AND LID ADJUSTMENTS. AUTHORIZATION MAY BE OBTAINED BY CONTACTING MS. MANJU SHARMA, DIRECTOR OF MAINTENANCE AND OPERATIONS, AT (312) 751-5101.

	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -			305	1920.01-BR	COOK	194	2
	PLOT DATE = 1/7/2019	DATE - 11/21/18	REVISED -			CONTRACT NO. 60N83				
	SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5					ILLINOIS FED. AID PROJECT				

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
20100500	*TREE REMOVAL, ACRES	ACRE	0.5	0.5			
20200100	EARTH EXCAVATION	CU YD	4705	4705			
20400800	FURNISHED EXCAVATION	CU YD	4475	4475			
20800150	TRENCH BACKFILL	CU YD	92	92			
21101665	TOPSOIL FURNISH AND PLACE, 18"	SQ YD	6391	6391			
21101805	COMPOST FURNISH AND PLACE, 2"	SQ YD	150	150			
25000310	*SEEDING, CLASS4	ACRE	1.5	1.5			
25100115	MULCH, METHOD 2	ACRE	1.3	1.3			
25100630	*EROSION CONTROL BLANKET	SQ YD	6391	6391			
28000250	*TEMPORARY EROSION CONTROL SEEDING	POUND	134	134			
28000305	TEMPORARY DITCH CHECKS	FOOT	50	50			
28000400	PERIMETER EROSION BARRIER	FOOT	250	250			
28000500	INLET AND PIPE PROTECTION	EACH	3	3			
28000510	INLET FILTERS	EACH	28	28			

* SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N83	

URBAN

SUMMARY OF QUANTITIES			80% FED 20% STATE				
		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
28100105	STONE RIPRAP, CLASS A3	SQ YD	26	26			
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1857	1857			
31101200	SUBBASE GRANULAR MATERIAL, TYPE B4"	SQ YD	4901	4901			
40701841	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"	SQ YD	122	122			
42000060	WELDED WIRE REINFORCEMENT	SQ YD	532	532			
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	532	532			
42000501	PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)	SQ YD	1698	1698			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	6499	6499			
44000100	PAVEMENT REMOVAL	SQ YD	339	339			
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	4497	4497			
44000600	SIDEWALK REMOVAL	SQ FT	4472	4472			
44001980	CONCRETE BARRIER REMOVAL	FOOT	150	150			
44003100	MEDIAN REMOVAL	SQ FT	16416	16416			
44004250	PAVED SHOULDER REMOVAL	SQ YD	39	39			

• SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N83	

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	45	45			
50102400	CONCRETE REMOVAL	CU YD	50.9		50.9		
50102700	MASONRY REMOVAL	CU YD	0.2		0.2		
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1		1		
50157300	PROTECTIVE SHIELD	SQ YD	1766		1766		
50200100	STRUCTURE EXCAVATION	CU YD	1131		961		170
50300225	CONCRETE STRUCTURES	CU YD	682.4		470.1		212.3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1130		1130		
50300260	BRIDGE DECK GROOVING	SQ YD	3576		3576		
50300285	FORM LINER TEXTURED SURFACE	SQ FT	3939				3939
50300300	PROTECTIVE COAT	SQ YD	5429		5429		
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	350.5		350.5		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
50500505	STUD SHEAR CONNECTORS	EACH	20061		19074		987

▪ SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 3 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	5
CONTRACT NO. 60N83			ILLINOIS FED. AID PROJECT	

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	459190		426190		33,000
50800515	BAR SPLICERS	EACH	2524		2524		
50901730	BRIDGE FENCE RAILING	FOOT	673		673		
50901750	PARAPET RAILING	FOOT	348		348		
51100100	SLOPE WALL 4 INCH	SQ YD	1576		1576		
51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	2409		2409		
51202305	DRIVING PILES	FOOT	2409		2409		
51203200	TEST PILE METAL SHELLS	EACH	4		4		
51500100	NAME PLATES	EACH	3		1		2
52000110	PREFORMED JOINT STRIP SEAL	FOOT	274		274		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	34		34		
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	17		17		
52100505	ANCHOR BOLTS, 5/8"	EACH	136		136		
52100530	ANCHOR BOLTS, 1 1/4"	EACH	44		44		

▪ SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - EJL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 4 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	6
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

URBAN

80% FED
20% STATE

SUMMARY OF QUANTITIES			TOTAL	0004	0013	0021	0044
CONSTRUCTION CODE	TYPE:	UNIT	QUANTITY	ROADWAY	BRIDGE SN016-0533	SAFETY 100% VILLAGE	RETAINING WALL SN016-1391
CODE NO.	ITEM						
52200010	TEMPORARY SHEET PILING	SQ FT	2830		2830		
52200100	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	1410				1410
52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	1492				1492
52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	16843				16,843
52200250	UNTREATED TIMBER LAGGING	SQ FT	3246				3,246
550A0050	STORM SEWERS, CLASS A, TYPE 112"	FOOT	186	186			
550A0340	STORM SEWERS, CLASS A, TYPE 212"	FOOT	30	30			
550A0640	STORM SEWERS, CLASS A, TYPE 312"	FOOT	99	99			
55100500	STORM SEWER REMOVAL12"	FOOT	249	249			
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	407		407		
58700300	CONCRETE SEALER	SQ FT	1743		1743		
59000200	EPOXY CRACK INJECTION	FOOT	90		90		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	447		216		231
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	956	956			

▪ SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES	
SCALE:	SHEET 5 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	7
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

URBAN

SUMMARY OF QUANTITIES			80% FED 20% STATE				
CONSTRUCTION CODE TYPE:			TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
60200105	CATCH BASINS, TYPE A, 4' -DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	4	4			
60201340	CATCH BASINS, TYPE A, 4' -DIAMETER, TYPE 24 FRAME AND GRATE	EACH	4	4			
60250200	CATCH BASINS TO BE ADJUSTED	EACH	18	18			
60255500	MANHOLES TO BE ADJUSTED	EACH	5	5			
60265700	VALVE VAULTS TO BE ADJUSTED	EACH	1	1			
60500050	REMOVING CATCH BASINS	EACH	8	8			
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	3	3			
60602800	CONCRETE GUTTER, TYPE B	FOOT	623	623			
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	613	613			
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	4114	4114			
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	13974	13974			
60620000	CONCRETE MEDIAN, TYPE SB-6.24	SQ FT	421	421			
63000003	*STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	1263	1263			
63100085	*TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4			

* SPECIALTY
ITEMS

SUMMARY OF QUANTITIES

80% FED
20% STATE

CODE NO.	ITEM	UNIT	CONSTRUCTION CODE TYPE:				
			TOTAL QUANTITY	0004 ROADWAY	0013 BRIDGE SNO16-0533	0021 SAFETY 100% VILLAGE	0044 RETAINING WALL SNO16-1391
63200310	GUARDRAIL REMOVAL	FOOT	1575	1575			
63800920	*MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	1413	1413			
64300240	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1			
66400305	CHAIN LINK FENCE, 6'	FOOT	198	198			
66700205	* PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1			
66900200	* NON-SPECIAL WASTE DISPOSAL	CU YD	300	300			
66900530	* SOIL DISPOSAL ANALYSIS	EACH	3	3			
66901001	* REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1			
66901002	* ON-SITE MONITORING OF REGULATED SUBSTANCES	CAL DAY	9	9			
66901003	* REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1			
67100100	MOBILIZATION	L SUM	1	1			
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	360	360			
70300100	SHORT TERM PAVEMENT MARKING	FOOT	12367	12367			
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3699	3699			

* SPECIALTY ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 7 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60N83	

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	21	21			
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	36953	36953			
70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	268	268			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	3919	3919			
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	12346	12346			
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2			
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4			
70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	13	13			
72000100	*SIGN PANEL - TYPE 1	SQ FT	9	9			
78000200	*THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2767	2767			
78003110	*PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	603	603			
78009000	*MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	56	56			
78009004	*MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	6139	6139			
78009006	*MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	300	300			

* SPECIALTY
ITEMS

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
78009012	▪MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	230	230			
78100100	▪RAISED REFLECTIVE PAVEMENT MARKER	EACH	68	68			
78200005	▪GUARDRAIL REFLECTORS, TYPE A	EACH	26	26			
78200011	▪BARRIER WALL REFLECTORS, TYPE C	EACH	20	20			
78200020	▪CURB REFLECTORS	EACH	76	76			
78300200	▪RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	86	86			
81028210	▪UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	431	431			
81200240	*CONDUIT EMBEDDED IN STRUCTURE, 2 1/2" DIA., PVC	FOOT	353		353		
81301400	*JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 18"X18"X6"	EACH	2		2		
81400100	▪HANDHOLE	EACH	4	3		1	
85000200	▪MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2			
87300925	▪ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2375	2375			
87301225	▪ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 143C	FOOT	1600			1600	
87301900	▪ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 61C	FOOT	1570			1570	

▪ SPECIALTY
ITEMS



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 9 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	11
CONTRACT NO. 60N83				
[ILLINOIS] FED. AID PROJECT				

URBAN

80% FED
20% STATE

SUMMARY OF QUANTITIES			TOTAL	0004	0013	0021	0044
CONSTRUCTION CODE	TYPE:	UNIT	QUANTITY	ROADWAY	BRIDGE SNO16-0533	SAFETY 100% VILLAGE	RETAINING WALL SNO16-1391
CODE NO.	ITEM						
87502480	▪TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1	1			
87800100	▪CONCRETE FOUNDATION, TYPE A	FOOT	8	4		4	
87900200	▪DRILL EXISTING HANDHOLE	EACH	4	3		1	
89501400	▪RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1			1	
89502300	▪REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4000	4000			
89502380	▪REMOVE EXISTING HANDHOLE	EACH	7	6		1	
89502400	▪REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1	1			
C3005924	▪SHRUB, RHUS GLABRA (SMOOTH SUMAC), 2' HEIGHT, BARE ROOT	EACH	460	460			
C3006024	▪SHRUB, RHUS TYPHINA (STAGHORN SUMAC), 2' HEIGHT, BARE ROOT	EACH	730	730			
E20210G1	▪VINE-PARTHENOCISSUS QUINQUEFOLIA ENGEL MANNII (ENGELMANNII VIRGINIA CREEPER), 1-GALLON POT	EACH	195	195			
K0029642	▪WEED CONTROL, PRE-EMERGENT HERBICIDE	GALLON	2	2			
X0321809	▪PERMANENT GROUND ANCHOR	EACH	20				20
X0324085	▪EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1600			1600	

▪ SPECIALTY
ITEMS



USER NAME = MS.USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - EJL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 10 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	12
CONTRACT NO. 60N83			ILLINOIS FED. AID PROJECT	

URBAN

SUMMARY OF QUANTITIES

80% FED
20% STATE

CONSTRUCTION CODE TYPE:			TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SN016-0533	SAFETY 100% VILLAGE	RETAINING WALL SN016-1391
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2940	2940			
X4400500	COMBINATION CURB AND GUTTER REMOVAL (SPECIAL)	FOOT	407	407			
X4404400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	1908	1908			
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	214	214			
X6640535	CHAIN LINK FENCE, 6' ATTACHED TO STRUCTURE	FOOT	385				385
X6700410	ENGINEERS FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	19	19			
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	3342	3342			
X7240505	* RELOCATE SIGN PANEL AND POST	EACH	2	2			
X7830074	*GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	603	603			
X8500100	TEMPORARY FLASHING BEACON INSTALLATION	EACH	1	1			
X8710024	*FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12FSM24	FOOT	2375	2375			
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	36		36		
Z0004552	APPROACH SLAB REMOVAL	SQ YD	361		361		

▪ SPECIALTY
ITEMS

	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -			305	1920.01-BR	COOK	194	13
	PLOT DATE = 12/13/2018	CHECKED - E.JL	REVISED -			CONTRACT NO. 60N83				
		DATE - 11/21/18	REVISED -			ILLINOIS FED. AID PROJECT				

SCALE: SHEET 11 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

URBAN

SUMMARY OF QUANTITIES			80% FED 20% STATE				
		CONSTRUCTION CODE TYPE:	TOTAL	0004	0013	0021	0044
CODE NO.	ITEM	UNIT	QUANTITY	ROADWAY	BRIDGE SN016-0533	SAFETY 100% VILLAGE	RETAINING WALL SN016-1391
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	556	556			
Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1		1		
Z0010400	CLEANING BRIDGE SEATS	SQ FT	378		378		
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO.1	L SUM	1		1		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	56		56		
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	44		44		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Z0018004	DRAINAGE SCUPPERS, DS-12	EACH	11		11		
Z0018800	DRAINAGE SYSTEM	L SUM	1		1		
Z0019600	DUST CONTROL WATERING	UNIT	19	19			
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	154	154			
Z0034100	MASONRY WALL CONSTRUCTION	SQ FT	132		132		
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	1054		358		696
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1			

▪ SPECIALTY
ITEMS

URBAN

80% FED
20% STATE

SUMMARY OF QUANTITIES			TOTAL	0004	0013	0021	0044	0044
CONSTRUCTION CODE	TYPE:	UNIT	QUANTITY	ROADWAY	BRIDGE SN016-0533	SAFETY 100% VILLAGE	RETAINING WALL SN016-1391	RETAINING WALL SN016-1393
CODE NO.	ITEM							
Z0062456	TEMPORARY PAVEMENT	SQ YD	4711	4711				
X12200221	NON-PRESSURE CONNECTION TO EXISTING WATER MAIN	EA	1	1				
X1200220	FIRE HYDRANT WITH AUXILIARY VALVE INSTALLATION	EA	1	1				
X1200219	DUCTILE IRON WATER MAIN PIPE INSTALLATION, 8-INCH	FOOT	26	26				
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIAMETER	FOOT	777	652		125		
88000105	FLASHING BEACON INSTALLATION	EACH	1	1				
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1			1		
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1			1		
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	550	550				
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1			1		
56400500	FIRE HYDRANTS TO BE REMOVED	EACH	1	1				
∅ Z0076600	TRAINEES	HOUR	1500	1500				
∅ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	1500	1500				

∅ 0042 ■ SPECIALTY ITEMS



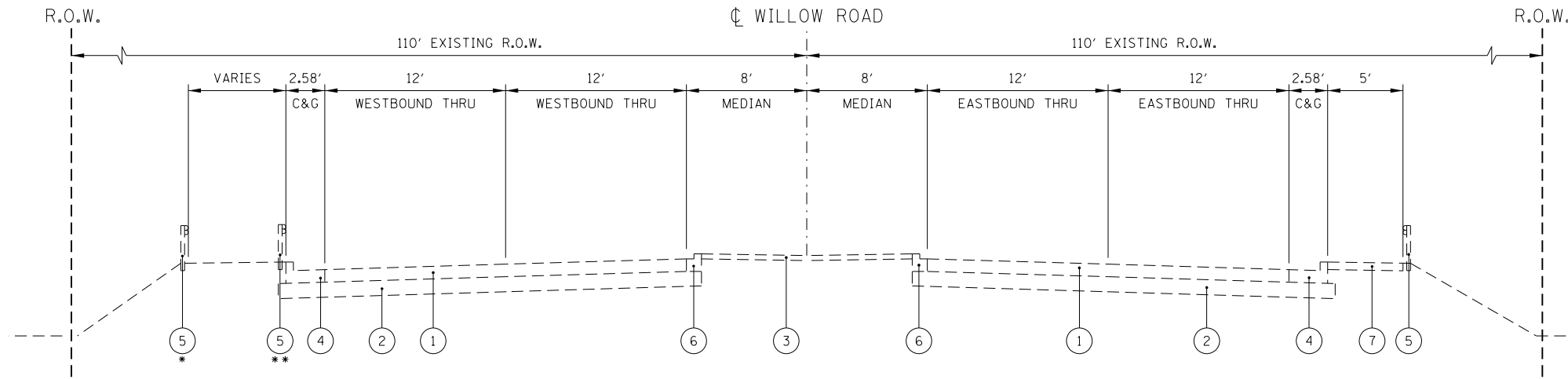
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - EJL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 13 OF 13 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	15
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



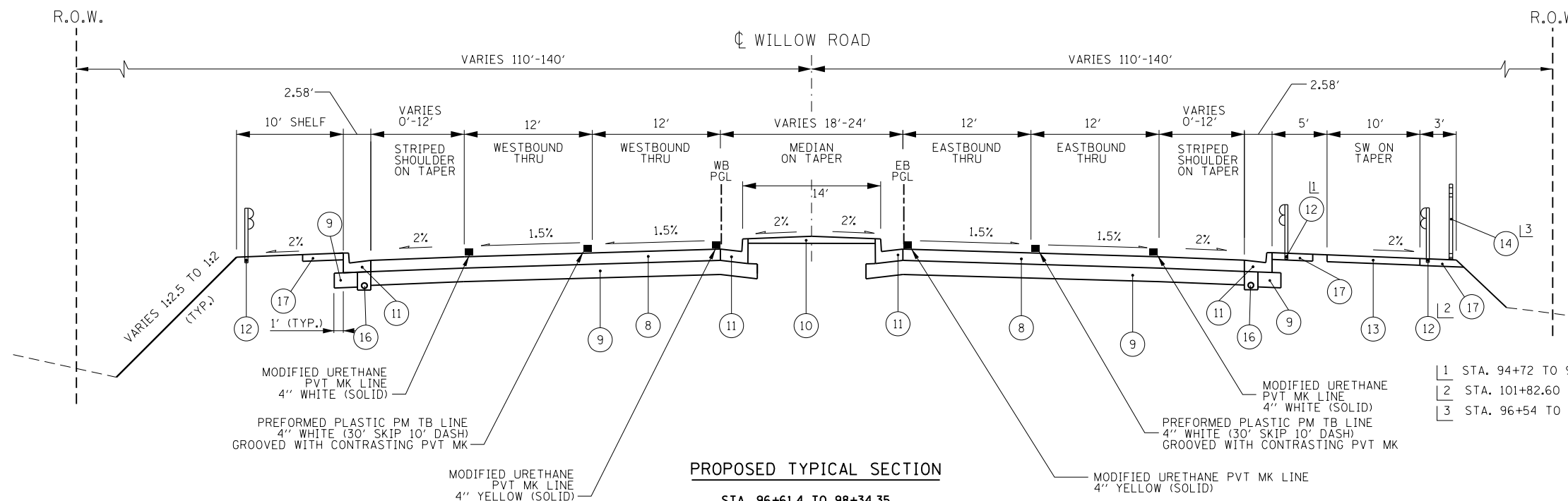
• FROM STA. 94+84 TO STA. 98+50
 ** FROM STA. 101+39 TO STA. 105+36

EXISTING TYPICAL SECTION

STA. 96+61.4 TO 98+34.35
 STA. 101+82.60 TO 103+52.50

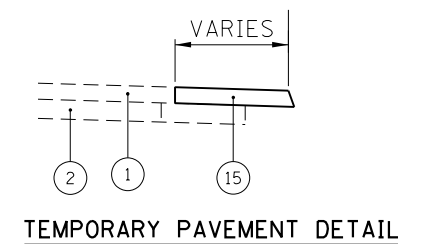
LEGEND

- ① EXISTING P.C.C. PAVEMENT, 8.5-10"
- ② EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6-12"
- ③ EXISTING CONCRETE MEDIAN SURFACE 4", SLOPE VARIES
- ④ EXISTING COMBINATION CONCRETE B-6.24 CURB & GUTTER
- ⑤ EXISTING GUARDRAIL
- ⑥ EXISTING COMBINATION CONCRETE B-6.12 CURB & GUTTER
- ⑦ EXISTING SIDEWALK
- ⑧ PROPOSED P.C.C. PAVEMENT, 10" (JOINTED)
- ⑨ AGGREGATE SUBGRADE IMPROVEMENT, 12"
- ⑩ PROPOSED CONCRETE MEDIAN SURFACE 4", SLOPE VARIES
- ⑪ PROPOSED COMBINATION CONCRETE B-6.24 CURB & GUTTER
- ⑫ PROPOSED GUARDRAIL- SEE PLANS
- ⑬ PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- ⑭ PROPOSED 6' CHAIN LINK FENCE
- ⑮ TEMPORARY HMA PAVEMENT, 2" SURFACE, 8" BINDER
- ⑯ PIPE UNDERDRAINS 4"
- ⑰ HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL



PROPOSED TYPICAL SECTION

STA. 96+61.4 TO 98+34.35
 STA. 101+82.60 TO 103+52.50



NOTES:

- 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 "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE AC TYPE SHALL BE "PR 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- 3) FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.
- 4) QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.
- 5) SEE SHEET NO. 16 FOR HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART.
- 6) USE THERMOPLASTIC PAVEMENT MARKINGS ON EXISTING HOT-MIX ASPHALT SECTIONS OF WILLOW ROAD EAST OF THE BRIDGE.

- 1 STA. 94+72 TO 98+46
- 2 STA. 101+82.60 TO 103+52.50
- 3 STA. 96+54 TO 98+51.36



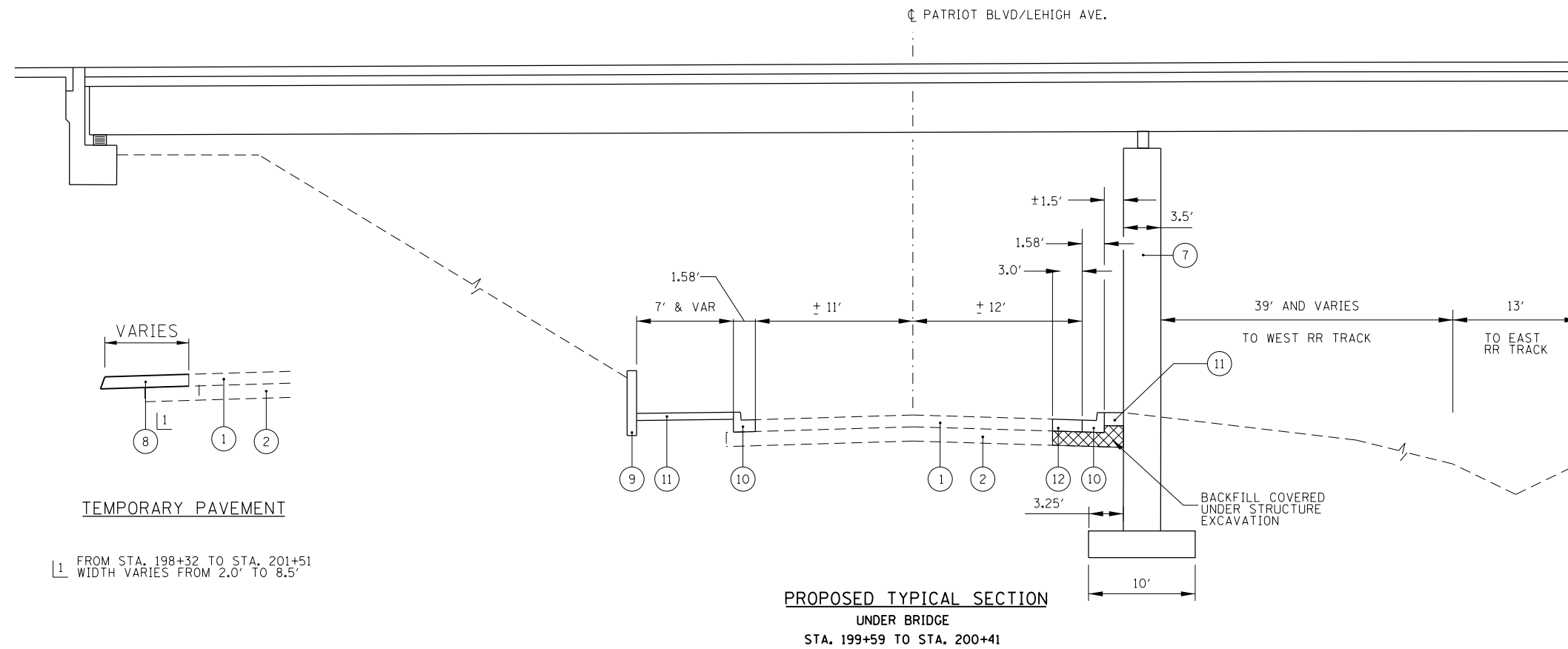
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

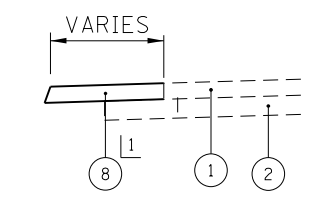
**TYPICAL SECTION
 WILLOW ROAD**

SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	16
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

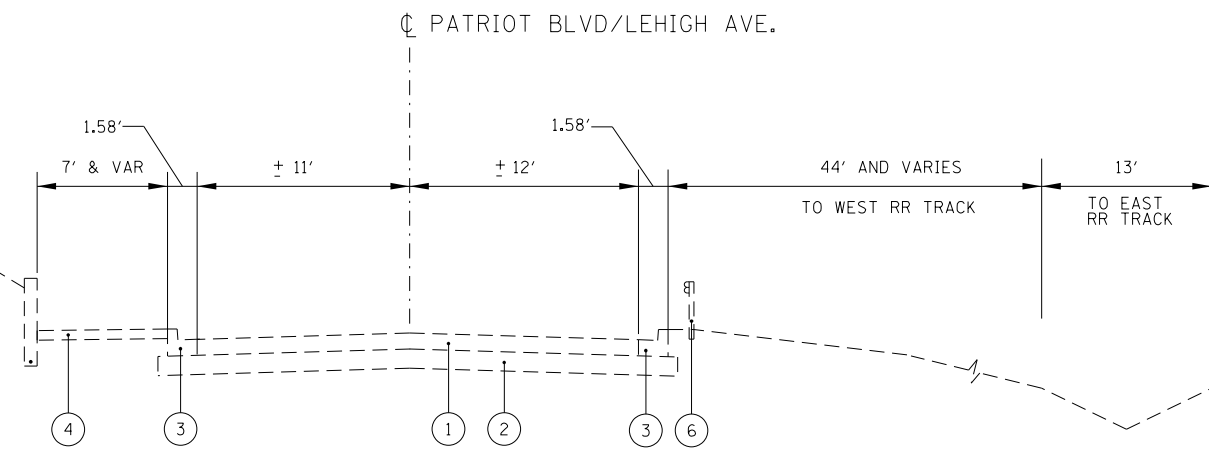


- LEGEND**
- ① EXISTING HMA PAVEMENT
 - ② EXISTING SUB-BASE
 - ③ EXISTING COMBINATION CONCRETE B-6.12 CURB & GUTTER
 - ④ EXISTING SIDEWALK
 - ⑤ EXISTING BLOCK RETAINING WALL
 - ⑥ EXISTING GUARDRAIL
 - ⑦ PROPOSED PIER WIDENING (SEE PLANS)
 - ⑧ TEMPORARY HMA PAVEMENT, 2" SURFACE, 6" BINDER
 - ⑨ PROPOSED MASONRY WALL - SEE STRUCTURE PLANS
 - ⑩ PROPOSED COMBINATION CURB AND GUTTER, TYPE B6.12
 - ⑪ PORTLAND CEMENT CONCRETE SIDEWALK, 5"
 - ⑫ CLASS D PATCH, 9"



TEMPORARY PAVEMENT

1 FROM STA. 198+32 TO STA. 201+51
WIDTH VARIES FROM 2.0' TO 8.5'



EXISTING TYPICAL SECTION

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)
(Z0062456) TEMPORARY PAVEMENT (WILLOW ROAD)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 MM); 2"	4.0% @ 70 GYR	(QC/OA)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 8"	4.0% @ 70 GYR	(QC/OA)
(Z0062456) TEMPORARY PAVEMENT (PATRIOT BLVD)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 MM); 2"	4.0% @ 70 GYR	(QC/OA)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 6"	4.0% @ 70 GYR	(QC/OA)
(Z0005216) HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL (WILLOW ROAD)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 6"	4.0% @ 50 GYR	(QC/OA)
(44201753) PATCHING (PATRIOT BLVD)		
CLASS D PATCH (HMA BINDER IL-19 MM)	4.0% @ 70 GYR	(QC/OA)
(40701841) HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 8" (WILLOW ROAD ALLEY)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM); 2"	4.0% @ 50 GYR	(QC/OA)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 6"	4.0% @ 50 GYR	(QC/OA)

- NOTES:**
- QMP DESIGNATION: QUALITY CONTROL/ QUALITY ASSURANCE (QC/OA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)
 - THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES QUANTITIES IS 112/LB/SQ YD/IN.
 - ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER AN IMPROVED SUBGRADE UTILIZING A 4" SUBBASE GRANULAR MATERIAL, TYPE B (CA-6).
 - THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE AC TYPE SHALL BE "PR 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
 - FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

DRAINAGE STRUCTURE SCHEDULE									
STR NO.	STATION	OFFSET	STRUCTURE TYPE	COVER TYPE	RIM ELEV	INVERT	INVERT	INVERT	INVERT
BC-01	93+12.5	86.8' RT	EX. BLIND CONNECTION	EX OL	651.25				
BC-02	94+62.1	86.8' RT	EX. BLIND CONNECTION	EX OL	655.44				
BC-03	96+12.2	86.9' RT	EX. BLIND CONNECTION	EX OL	658.38				
BC-04	97+66.6	92.2' RT	EX. BLIND CONNECTION	EX OL	653.64	631.00 N			
BC-05	98+81.0	82.1' RT	EX. BLIND CONNECTION	EX OL	645.72	629.00 N			
BC-06	101+83.5	81.8' RT	EX. BLIND CONNECTION	EX OL	646.15	629.00 N			
BC-07	102+24.8	82.1' RT	EX. BLIND CONNECTION	EX OL	646.76	629.00 N			
BC-08	103+71.5	85.4' RT	EX. BLIND CONNECTION	EX OL	641.75				
BC-09	105+11.7	86.4' RT	EX. BLIND CONNECTION	EX OL	638.44				
CB-01	93+12.7	40.0' LT	EX. CATCH BASIN	EX OL	654.45	650.15 E			
CB-02	93+12.3	9.9' RT	EX. CATCH BASIN	EX OL	654.11	649.61 W	649.61 E		
CB-03	93+11.9	13.8' RT	EX. CATCH BASIN	EX OL	654.28	649.88 W	649.68 E		
CB-04	93+12.0	40.3' RT	EX. CATCH BASIN	EX OL	654.38	649.68 W	649.78 E		
CB-05	94+61.6	40.0' LT	EX. CATCH BASIN	EX OL	660.34	656.04 E			
CB-06	94+61.4	4.2' LT	EX. CATCH BASIN	EX OL	660.13	655.93 W	655.83 E		
CB-07	94+61.9	5.8' RT	EX. CATCH BASIN	EX OL	660.38	656.08 W	655.98 E		
CB-08	94+62.5	13.9' RT	EX. CATCH BASIN	EX OL	660.28	655.78 W	655.78 E		
CB-09	94+61.6	40.2' RT	EX. CATCH BASIN	EX OL	660.28	655.58 W	655.48 E		
CB-10	96+11.3	38.8' LT	EX. CATCH BASIN	EX OL	664.92	660.82 E			
CB-11	96+10.8	12.3' LT	EX. CATCH BASIN	EX OL	664.86	660.36 W	660.36 E		
CB-12	96+09.8	1.0' RT	EX. CATCH BASIN	EX OL	664.87	660.47 W	660.27 E		
CB-13	96+11.7	12.2' RT	EX. CATCH BASIN	EX OL	664.82	660.12 W	660.12 E		
CB-14	96+11.6	38.8' RT	EX. CATCH BASIN	EX OL	664.84	659.44 W	659.44 E		
CB-15	97+59.3	34.8' LT	EX. CATCH BASIN	EX OL	667.02	662.12 E			
CB-16	98+56.1	33.5' LT	EX. CATCH BASIN	EX OL	668.03				
CB-17	98+76.1	32.9' RT	EX. CATCH BASIN	EX OL	668.25	651.00			
CB-18	101+37.1	33.2' LT	EX. CATCH BASIN	EX OL	668.28				
CB-19	101+57.8	32.4' RT	EX. CATCH BASIN	EX OL	668.12				
CB-20	102+09.4	33.8' RT	EX. CATCH BASIN	EX OL	667.28	661.08 E			
CB-21	103+60.4	33.8' RT	EX. CATCH BASIN	EX OL	664.41	657.81 E			
CB-22	103+59.9	33.8' RT	EX. CATCH BASIN	EX OL	664.60	656.90 W	656.7 E		
CB-23	105+08.2	33.5' LT	EX. CATCH BASIN	EX OL	660.44	655.54 E			
CB-24	105+10.2	33.7' RT	EX. CATCH BASIN	EX OL	660.58	654.08 W	653.98 E		
CB-25	106+59.0	33.8' LT	EX. CATCH BASIN	EX OL	655.05	650.15 E			
CB-26	106+59.3	33.5' RT	EX. CATCH BASIN	EX OL	655.26	649.26 W	649.16 E		
CB-30	99+85.8	135.6' RT	EX. CATCH BASIN	EX OL	640.97	632.87 S	633.07 N		
CB-31	98+94.2	79.9' LT	EX. CATCH BASIN	EX OL	642.16	637.76 N	637.76 S	637.56 N	
CB-32	99+17.5	89.3' LT	EX. CATCH BASIN	EX OL	642.30	637.90 N			
CB-33	99+17.5	89.3' LT	EX. CATCH BASIN	EX OL	666.97	660.77 W	660.67 E		
CB-34	97+62.1	35.1' RT	EX. CATCH BASIN	EX OL	667.13	660.83 W	660.73 E		
CB-50	97+62.2	41.9' LT	CB TA 4 DIA	T24F&G	667.03	662.86 E			
CB-51	97+62.2	40.1' RT	CB TA 4 DIA	T24F&G	667.04	662.04 W	662.04 E		
CB-52	98+43.2	44.5' LT	CB TA 4 DIA	T1F	662.70	658.53 E		SEE NOTE 4	
CB-53	98+69.7	44.5' RT	CB TA 4 DIA	T1F	662.70	657.44 W	657.44 E		SEE NOTE 4
CB-54	101+42.7	44.5' LT	CB TA 4 DIA	T1F	662.70	658.53 E			SEE NOTE 4
CB-55	101+71.6	44.5' RT	CB TA 4 DIA	T1F	662.70	657.44 W	657.44 E		SEE NOTE 4
CB-56	102+22.0	41.7' LT	CB TA 4 DIA	T24F&G	667.27	663.25 E			
CB-57	102+22.0	44.2' RT	CB TA 4 DIA	T24F&G	667.22	662.39 W	662.39 E		
CB-58	105+50.0	97.5' RT	CB TC	TY, 8 G	634.39	631.39 W	630.89		
JC-01	91+00.2	90.7' RT	EX. JUNCTION CHAMBER	EX OL	644.68				
JC-02	97+85.2	91.0' RT	EX. JUNCTION CHAMBER	EX OL	649.99				
MH-01	99+08.3	84.0' RT	EX. MANHOLE	EX OL	642.17				
MH-02	105+62.7	88.8' RT	EX. MANHOLE	EX OL	635.33				
MH-03	99+38.3	148.8' RT	EX. MANHOLE	EX OL	642.32				
MH-04	99+60.1	158.4' RT	EX. MANHOLE	EX OL	641.73				
MH-05	99+79.9	138.3' RT	EX. MANHOLE	EX OL	641.10				
MH-06	98+97.3	64.9' LT	EX. MANHOLE	EX OL	643.37				
MH-07	99+06.1	85.3' LT	EX. MANHOLE	EX OL	642.54				
MH-10	99+58.4	65.8' RT	EX. MANHOLE	EX OL	641.62				
MH-11	99+19.2	54.3' LT	EX. MANHOLE	EX OL	642.62				
MH-12	92+90.0	91.0' RT	EX. MANHOLE	EX CL	649.63				

PAVEMENT SCHEDULE					
LOCATION	42000080 BR APPR PVT CON (PCC)	42000501 PCC PVT 10 JOINTED	30300112 AGG SUBGRADE IMPR 12	44000100 PAVT REMOVAL SPL	44000100 PAVT REMOVAL
	SY	SY	SY	SY	SY
STA. 97+95 TO STA. 98+29	110				
STA. 97+95 TO STA. 98+45	170				
STA. 101+72 TO STA. 102+15	156				
STA. 101+85 TO STA. 102+15	96				
STA. 96+61 TO STA. 97+95		436	473		
STA. 96+61 TO STA. 97+95		407	443		
STA. 102+15 TO STA. 103+53		417	455		
STA. 102+15 TO STA. 103+53		438	486		
STA. 96+61 TO STA. 98+32				467	
STA. 96+61 TO STA. 98+45				491	
STA. 101+69 TO STA. 103+53				491	
STA. 101+81 TO STA. 103+53				459	
STA. 102+64 TO STA. 105+50					2646
STA. 199+26 TO STA. 199+57					14
STA. 200+32 TO STA. 200+57					14
STA. 200+59 TO STA. 200+78					17
TOTALS =	532	1698	1857	1908	2691

SEE NOTE 6 LOCATION		55100500 STORM SEWER REM 12 FOOT	550A0050 STORM SEW CL A 1 12 FOOT	550A0340 STORM SEW CL A 2 12 FOOT	550A0640 STORM SEW CL A 3 12 FOOT	20800150 TRENCH BACKFILL CU YD	60108204 PIPE UNDERDRAINS FOOT	60200105 CB TA 4 DIA T1F OL EACH	60201340 CB TA 4 DIA T24F&G EACH	60250200 CB ADJUST EACH	60255500 MAN ADJUST EACH	60500050 REMOV CATCH BAS EACH	Z0056608 STORM SEW WM REQ 12 FOOT	60265700 VV TO BE ADJUST EACH				
CB-6	94+61	4' LT																
CB-7	94+61	6' RT																
CB-8	94+63	14' RT																
CB-10	96+11	39' LT																
CB-11	96+11	12' LT																
CB-12	96+10	1' RT																
CB-13	96+12	12' RT																
CB-14	96+12	39' RT																
CB-16	98+56	34' LT																
CB-17	98+76	33' RT																
CB-21	103+60	34' LT																
CB-22	103+60	34' RT																
CB-23	105+08	34' RT																
CB-24	105+10	34' RT																
CB-25	106+59	34' RT																
CB-26	106+59	34' RT																
INL-01	99+26	75' RT																
CB-31	98+94	80' LT																
CB-32	98+94	47' LT																
WVW	98+94	59' LT																
MH-01	99+08	84' RT																
MH-06	98+97	65' LT																
MH-10	99+58	66' RT																
MH-11	99+19	54' LT																
MH-12	97+90	91' RT																
CB-15	97+59	35' LT	CB-33	97+62														
CB-33	97+62	35' RT	BC-04	97+63														
CB-16	98+56	33' LT	CB-17	98+76														
CB-17	98+76	33' RT	BC-05	98+92														
CB-18	101+37	33' LT	CB-19	101+58														
CB-19	101+58	32' RT	BC-06	101+74														
CB-34	102+09	34' RT	CB-20	102+09														
CB-20	102+09	34' RT	BC-07	102+25														
1	CB-50	97+62	43' LT	CB-51	97+62													
2	CB-51	97+62	42' RT	BC-04	97+63													
3	CB-52	98+51	45' LT															
4	CB-53	98+70	45' RT															
5	CB-54	101+42	45' LT															
6	CB-55	101+66	45' RT															
7	CB-56	102+22	43' LT	CB-57	102+22													
8	CB-57	102+09	46' RT	BC-07	102+25													
9	CB-10	96+11	39' LT	CB-50	97+62													
10	CB-50	97+62	43' LT		98+10													
11	CB-14	96+12	39' RT	CB-51	97+62													
12	CB-51	97+62	40' RT		98+39													
13	CB-56	101+74	46' LT	CB-56	102+10													
14	CB-56	102+10	43' LT	CB-21	103+60													
15	CB-57	102+09	46' RT	CB-22	103+60													
16	CB-58	105+58	98' RT	MH-2	105+63													
17	WALL	103+19	102' RT	CB-58	105+50													
TOTALS =						249	186	30	99	92	956	4	4	19	5	8	53	1

EROSION CONTROL SCHEDULE								
LOCATION	25100630 EROSION CONTR BLANKET SQ YD	28000250 TEMP EROS CONTR SEED POUND	28000400 PERIMETER EROS BAR FOOT	28000305 TEMP DITCH CHECKS FOOT	28000500 INLET & PIPE PROTECT EACH	28000510 INLET FILTERS EACH	28100105 STONE RIPRAP CLASS A3 SQ YD	Z0019600 DUST CONTROL WATERING UNITS
STA. 96+61 TO STA. 98+92	1320	27						4
STA. 96+61 TO STA. 99+40	1039	22						4
STA. 100+77 TO STA. 105+23	2105	45						7
STA. 100+95 TO STA. 105+50	1926	40						

CURBS, GUTTERS, MEDIANS, FENCE AND SIDEWALKS														
LOCATION	44003100 MEDIAN REMOVAL SQ FT	60618300 CONC MEDIAN SURF 4 SQ FT	60620000 CONC MED TSB6. 24 SQ FT	44000500 COMB CURB GUTTER REM FOOT	X4400500 COMB C&G REMOV SPL FOOT	60603800 COMB CC&G TB6. 12 FOOT	60605000 COMB CC&G TB6. 24 FOOT	60602800 CONC GUTTER TB FOOT	60600095 CLASS S1 CONC OUTLET CU YD	X6640300 CH LK FENCE REMOV FOOT	66400305 CH LK FENCE 6 FOOT	42400200 PC CONC SIDEWALK 5 SQ FT	44000600 SIDEWALK REM SQ FT	
STA. 92+50 TO STA. 98+34 MED	8834	7882												
STA. 92+50 TO STA. 93+20 RT			420											
STA. 101+50 TO STA. 107+20 MED	7582	6092												
STA. 92+50 TO STA. 98+65 LT				615										
STA. 92+50 TO STA. 98+72 RT				622										
STA. 94+65 TO STA. 98+52 LT				387										
STA. 92+50 TO STA. 98+60 RT				611										
STA. 101+54 TO STA. 107+20 LT				566										
STA. 101+61 TO STA. 107+20 LT				559										
STA. 101+41 TO STA. 107+07 RT				566										
STA. 101+49 TO STA. 107+20 RT				571										
STA. 101+06 TO STA. 103+44 RT								238						
STA. 101+30 TO STA. 103+20 RT								190						
STA. 102+80 TO STA. 104+75 RT								195						
STA. 101+06 TO STA. 101+30 RT									1.6					
STA. 103+40 TO STA. 103+64 RT									1.6					
STA. 96+61 TO STA. 98+75 RT										214			1156	
STA. 96+61 TO STA. 98+51 RT											198			
STA. 101+64 TO STA. 104+73 RT													1453	
STA. 93+20 TO STA. 98+30 LT							511							
STA. 93+20 TO STA. 98+34 RT							514							
STA. 94+65 TO STA. 98+17 LT							352							
STA. 92+50 TO STA. 98+47 RT							597							
STA. 101+68 TO STA. 107+07 LT							541							
STA. 101+80 TO STA. 107+20 LT							540							
STA. 101+84 TO STA. 107+20 RT							536							
STA. 101+97 TO STA. 107+20 RT							523							
STA. 96+63 TO STA. 98+50 RT												1854		
STA. 101+97 TO STA. 104+73 RT												2772		
STA. 198+30 TO STA. 201+51 LT						321	321							
STA. 199+00 TO STA. 199+55 RT						55	55							
STA. 200+34 TO STA. 200+55 RT						21	21							
STA. 200+71 TO STA. 200+81 RT						10								
STA. 198+70 TO STA. 201+51 LT												1873	1863	
TOTALS =	16416	13974	420	4497	407	397	4114	623	3.2	214	198	6499	4472	

PAVEMENT MARKING SCHEDULE														
LOCATION	78009004 MOD URETH PM LINE 4 (WHITE) FOOT	78009004 MOD URETH PM LINE 4 (YELLOW) FOOT	78000200 THPL PVT MK LINE 4 (YELLOW) FOOT	78000200 THPL PVT MK LINE 4 (WHITE) FOOT	78009006 MOD URETH PM LINE 6 (WHITE) FOOT	78009012 MOD URETH PM LINE 12 (WHITE) FOOT	78009000 MOD URETH PM LTR-SYM SQ FT	X0327980 PAVMT MRKG REM WTR BL SQ FT	78100100 RAISED REFL PAVT MKR EACH	78300200 RAISED REF PVT MK REM EACH	78003110 PREF PL PM TB LINE 4 FOOT	X7830074 GRV RCSD PVT MRKG 7 FOOT		
STA. 91+00 TO STA. 103+53 EB RT	1253							418						
STA. 92+00 TO STA. 103+53 WB LT	1153							385						
STA. 96+61 TO STA. 103+24 EB LT	663													
STA. 96+89 TO STA. 103+53 WB RT	664													
STA. 91+00 TO STA. 103+53 EB LT		1253						418						
STA. 92+00 TO STA. 103+53 WB RT		1153						385						
STA. 92+00 TO STA. 93+20 WB					120			60						
STA. 92+00 TO STA. 93+20 WB					120			60						
STA. 93+20 TO STA. 95+59 WB					60			30						
STA. 96+61 TO STA. 103+24 WB						115								
STA. 96+89 TO STA. 103+53 EB						115								
STA. 198+30 TO STA. 201+50 Pat			323					108	34					
STA. 198+30 TO STA. 201+50 Pat			323					108						
STA. 92+90 WB1							28	28						
STA. 92+90 WB2							28	28						
STA. 91+00 TO STA. 103+53 EB LL								105	12	30	314	314		
STA. 92+00 TO STA. 103+53 WB LL								97	12	30	289	289		
STA. 103+53 TO STA. 107+78 EB LT			425					142						
STA. 103+53 TO STA. 108+70 WB RT			517					173						
STA. 103+53 TO STA. 107+78 EB RT				425				142						
STA. 103+53 TO STA. 108+70 WB LT				517				173						
STA. 103+53 TO STA. 107+78 EB LL				107				36	5	13				
STA. 103+53 TO STA. 108+70 WB LL				130				44	5	13				
TOTALS =	3733	2406	1588	1179	300	230	56	2940	68	86	603	603		
		6139		2767										

GUARDRAIL SCHEDULE							
LOCATION	63200310 GUARDRAIL REMOVAL	63000001 SPBGR TY A 6 FT POSTS	Z0005216 HMA STAB 6 AT SPBGR	63100085 TR BAR TRM T6	78200005 GUARDRAIL REFL TP A	78200011 BAR WALL REFL TYPE C	
	FOOT	FOOT	SQ YD	EACH	EACH	EACH	
STA. 94+65 TO STA. 98+50 LT	383						
STA. 94+83 TO STA. 97+98 RT	315						
STA. 97+94 TO STA. 98+75 RT	81						
STA. 101+39 TO STA. 105+36 LT	399						
STA. 101+64 TO STA. 105+04 RT	340						
STA. 198+98 TO STA. 199+54 RT	57						
STA. 94+65 TO STA. 97+89 LT		325.0	178		7		
STA. 97+89 TO STA. 98+31 LT				1			
STA. 94+83 TO STA. 98+08 RT		325.0	149		7		
STA. 98+05 TO STA. 98+47 RT				1			
STA. 101+49 TO STA. 101+91 LT				1			
STA. 101+89 TO STA. 105+38 LT		350.0	130		7		
STA. 102+03 TO STA. 102+45 RT				1			
STA. 102+42 TO STA. 105+05 RT		262.5	99		5		
STA. 98+31 TO STA. 101+49 LT							10
STA. 98+46 TO STA. 101+97 RT							10
STA. 198+98 TO STA. 199+55 RT							
TOTALS =	1575	1262.5	556	4	26	20	

LANDSCAPING SCHEDULE							
LOCATION	20100500 TREE REMOVAL	21101665 TOPSOIL F & P 18	21101805 COMPOST F & P 2	25000310 SEEDING CL 4	25100115 MULCH METHOD 2	E20210G1 V-PARTHEN QUIN EM 1G	K0029642 WEED CONT PRE-EM HBCC
	ACRE	SQ YD	SQ YD	ACRE	ACRE	EACH	GAL
STA. 101+42 TO STA. 102+65 RT	0.22						
STA. 102+73 TO STA. 105+23 LT	0.41						
STA. 96+61 TO STA. 98+92 LT		1320	1320	0.27	0.27		0.25
STA. 96+61 TO STA. 99+40 RT		1039	1039	0.22	0.22		0.25
STA. 100+77 TO STA. 105+23 LT		2105	2105	0.45	0.45		0.50
STA. 100+95 TO STA. 105+50 RT		1926	1926	0.40	0.40		0.50
STA. 102+80 TO STA. 104+75 RT						195	
TOTALS =	0.63	6390	6390	1.3	1.3	195	1.5

SIGNAGE SCHEDULE			
LOCATION	72000100 SIGN PANEL T1	X7240505 RELOC SIGN PANEL&POST	Z0030850 TEMP INFO SIGNING
	SQ FT	EACH	SQ FT
STA. 103+59 45.9' RT	11		
STA. 96+00 50.0' LT		1	
STA. 102+33 51.0' LT		1	
WEST RT			77
EAST LT			77
TOTALS =	11	2	154

TEMPORARY ITEMS (PAVEMENT MARKING, PAVEMENT, CONC BARRIER)														
LOCATION	70300904	70300904	70300906	Z0062456	70300100	70301000	70400100	70400200	63800920	70600240	70600260	70600352		
	PAVT MARK TAPE T4 4 (WHITE) FOOT	PAVT MARK TAPE T4 4 (YELLOW) FOOT	PAVT MARK TAPE T4 6 (WHITE) FOOT	TEMP PAVEMENT SQ YD	SHORT TERM PVMT MARK FOOT	WORK ZONE PAVT MK REM SQ FT	TEMP CONC BARRIER FOOT	REL TEMP CONC BARRIER FOOT	MOD GLAR SCR SYS TEMP	IMP ATTN TEMP NRD TL2 EACH	IMP ATTN TEMP FRN TL3 EACH	IMP ATTN REL NRD TL3 EACH		
PRE-STAGE 1														
STA 91+00 TO STA 108+20 EB1		1720			172	573								
STA 91+00 TO STA 108+20 EB2	430				43	143								
STA 92+50 TO STA 108+70 WB2	405				41	135								
STA 92+50 TO STA 108+70 WB1		1620			162	540								
STA 92+50 TO STA 98+65 MED				1260										
STA 101+49 TO STA 107+20 MED				972										
STA 92+80 TO STA 107+20 LT							1437.5				1			
STA 92+80 TO STA 106+90 RT							1437.5				1			
STAGE 1														
STA 91+00 TO STA 108+20 EB1		1720			172	573								
STA 91+00 TO STA 108+20 EB2	410				41	137								
STA 92+50 TO STA 106+45 EB3	1395				140	465								
STA 92+50 TO STA 108+70 WB1		1620			162	540								
STA 92+50 TO STA 108+70 WB2	405				41	135								
STA 92+50 TO STA 93+20 LT1				18	2	9								
STA 92+50 TO STA 93+20 LT2				18	2	9								
STA 92+50 TO STA 98+81 RT				801										
STA 101+61 TO STA 105+35 RT				481										
STA 95+60 TO STA 105+35 RT								975.0					1	
STAGE 2														
STA 93+50 TO STA 108+70 WB1		1520			152	507								
STA 92+00 TO STA 107+07 WB2	1507				151	502								
STA 93+50 TO STA 108+20 WB3	368				37	123								
STA 93+50 TO STA 108+20 EB1		1470			147	490								
STA 95+15 TO STA 105+63 EB2	1048				105	349								
STA 92+50 TO STA 106+07 EB3	355				36	118								
STA 92+00 TO STA 93+30 LT1				33	3									
STA 92+00 TO STA 93+00 LT2				25	3									
STA 94+65 TO STA 98+17 LT				297										
STA 101+67 TO STA 107+08 LT				666										
STA 95+21 TO STA 104+69 RT								950.0					1	
STA 96+37 TO STA 104+12 LT								775.0					1	
STA 93+50 TO STA 106+85							1162.5	175.0	1337.5		2			
STAGE 3														
STA 92+48 TO STA 107+22 EB1	1474				147	491								
STA 92+48 TO STA 107+22 EB2	369				37	123								
STA 92+80 TO STA 106+89 EB3		1409			141	470								
STA 92+80 TO STA 106+89 WB1		1409			141	470								
STA 94+72 TO STA 107+07 WB2	309				31	103								
STA 92+00 TO STA 107+07 WB3	1570				157	523								
STA 92+00 TO STA 95+20 LT2				80	8	40								
STA 94+83 TO STA 105+28 LT								1050.0					1	
STA 96+33 TO STA 103+87 LT								762.5					1	
STA 92+82 TO STA 106+92								1412.5	75.0				2	
STAGE 4														
STA 92+29 TO STA 107+22 WB1		1500			150	500								
STA 92+00 TO STA 107+78 WB2	395				40	132								
STA 92+29 TO STA 107+22 WB3	1500				150	500								
STA 92+50 TO STA 107+78 EB1		1528			153	509								
STA 92+29 TO STA 107+22 EB2	373				37	124								
STA 92+50 TO STA 107+78 EB3	1528				153	509								
STA 93+20 TO STA 95+09 LT2				47	5	24								
STA 93+00 TO STA 102+38 RT								937.5						
STA 102+38 TO STA 106+77 RT								437.5					1	
STA 93+20 TO STA 106+82 LT								1362.5					1	
STA 94+82 TO STA 106+41 LT								1162.5					1	
STA 95+49 TO STA 103+97 RT								850.0					1	
STAGE 5														
STA 92+00 TO STA 107+78 WB2	395				40	132								
STA 95+09 TO STA 107+78 WB1		1269			127	423								
STA 94+65 TO STA 107+78 WB3	1313				131	438								
STA 92+50 TO STA 107+78 EB1	1528				153	509								
STA 92+50 TO STA 107+78 EB2		1528			153	509								
STA 92+50 TO STA 107+78 EB3	382				38	127								
STA 93+20 TO STA 95+09 LT2				47	5	24								
STA 92+09 TO STA 105+25 LT								1325.0					1	
STA 95+18 TO STA 107+78 RT								1262.5					1	
PATRIOT BLVD														
STA 198+32 TO STA 201+51 NB	319				32	106								
STA 198+32 TO STA 201+51 MED		319			32	106								
STA 198+32 TO STA 201+51 SB	319				32	106								
STA 198+32 TO STA 201+51 LT				234										
STA 198+72 TO STA 201+09 NB								237.5		2				
TOTALS =	18096	18632	268	4711	3705	12346	4275.0	13437.5	1412.5	2	4	13		

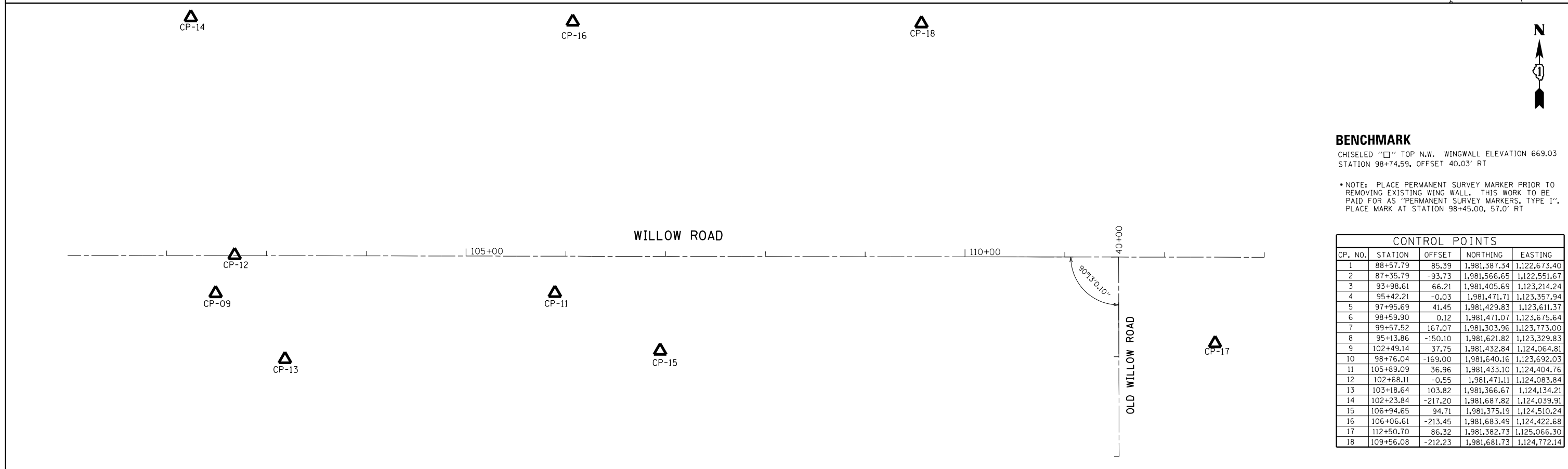
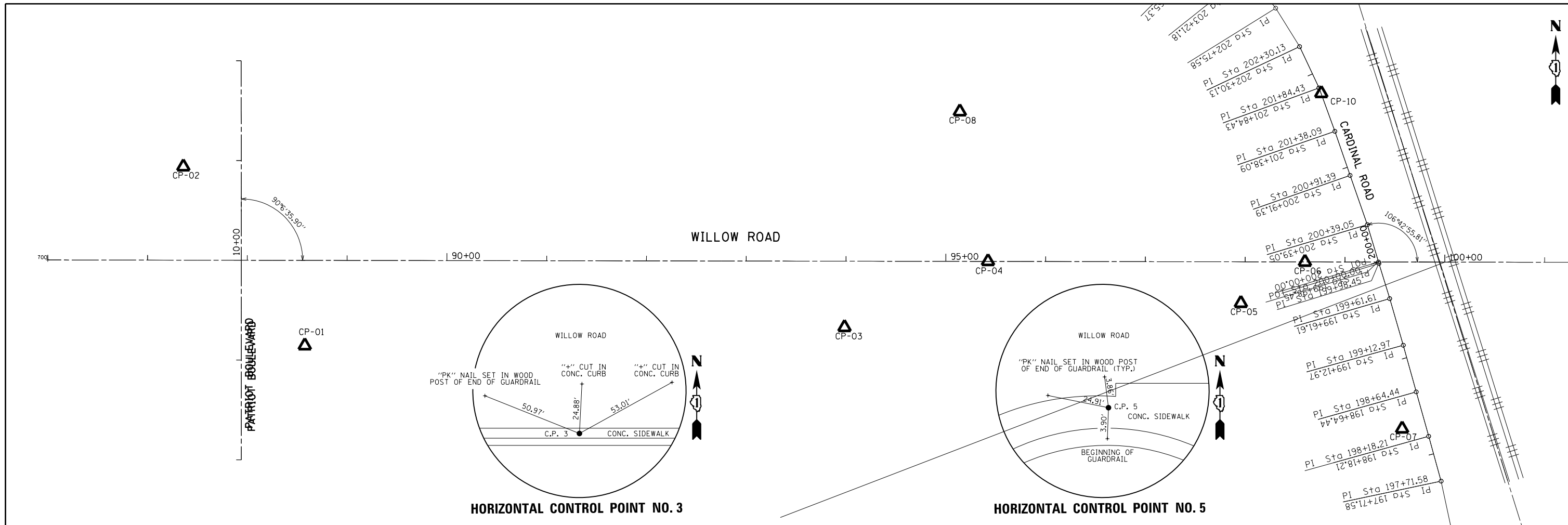


USER NAME = MS_USER	DESIGNED - LAB	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = 12/13/2018	CHECKED - E.JL	REVISED -
	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES	
SCALE:	SHEET 4 OF 4 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	21
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



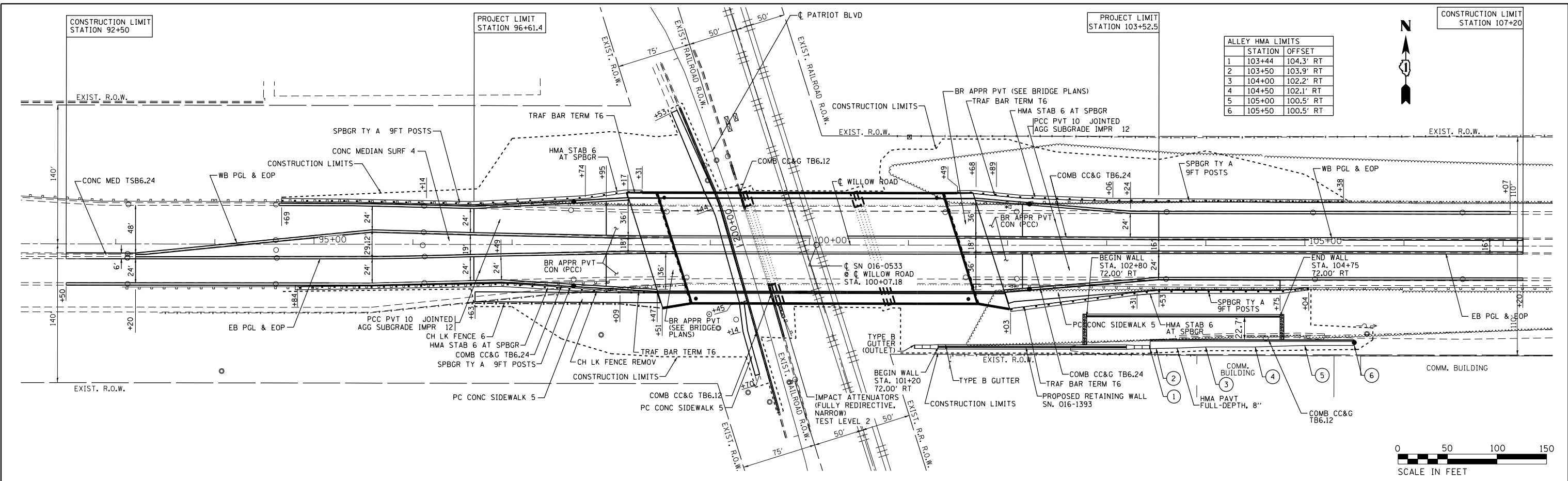
BENCHMARK
 CHISELED "□" TOP N.W. WINGWALL ELEVATION 669.03
 STATION 98+74.59, OFFSET 40.03' RT

* NOTE: PLACE PERMANENT SURVEY MARKER PRIOR TO REMOVING EXISTING WING WALL. THIS WORK TO BE PAID FOR AS "PERMANENT SURVEY MARKERS, TYPE I". PLACE MARK AT STATION 98+45.00, 57.0' RT

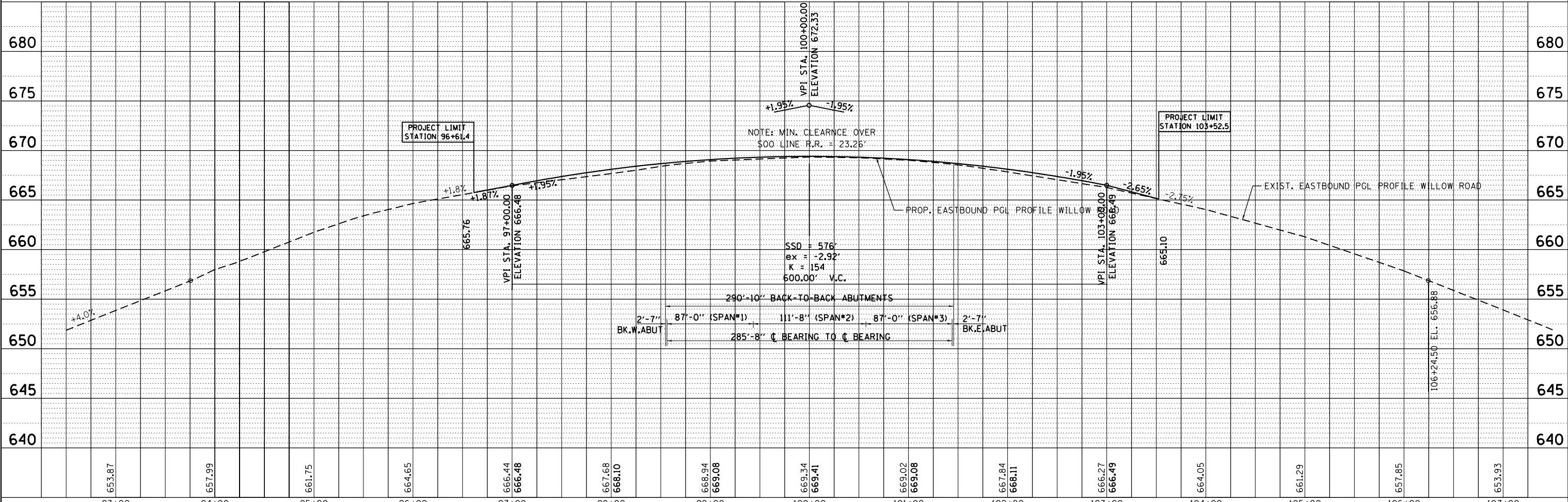
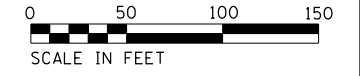
CONTROL POINTS				
CP. NO.	STATION	OFFSET	NORTHING	EASTING
1	88+57.79	85.39	1,981,387.34	1,122,673.40
2	87+35.79	-93.73	1,981,566.65	1,122,551.67
3	93+98.61	66.21	1,981,405.69	1,123,214.24
4	95+42.21	-0.03	1,981,471.71	1,123,357.94
5	97+95.69	41.45	1,981,429.83	1,123,611.37
6	98+59.90	0.12	1,981,471.07	1,123,675.64
7	99+57.52	167.07	1,981,303.96	1,123,773.00
8	95+13.86	-150.10	1,981,621.82	1,123,329.83
9	102+49.14	37.75	1,981,432.84	1,124,064.81
10	98+76.04	-169.00	1,981,640.16	1,123,692.03
11	105+89.09	36.96	1,981,433.10	1,124,404.76
12	102+68.11	-0.55	1,981,471.11	1,124,083.84
13	103+18.64	103.82	1,981,366.67	1,124,134.21
14	102+23.84	-217.20	1,981,687.82	1,124,039.91
15	106+94.65	94.71	1,981,375.19	1,124,510.24
16	106+06.61	-213.45	1,981,683.49	1,124,422.68
17	112+50.70	86.32	1,981,382.73	1,125,066.30
18	109+56.08	-212.23	1,981,681.73	1,124,772.14

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

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



ALLEY HMA LIMITS		
STATION	OFFSET	
103+44	104.3' RT	
103+50	103.9' RT	
104+00	102.2' RT	
104+50	102.1' RT	
105+00	100.5' RT	
105+50	100.5' RT	

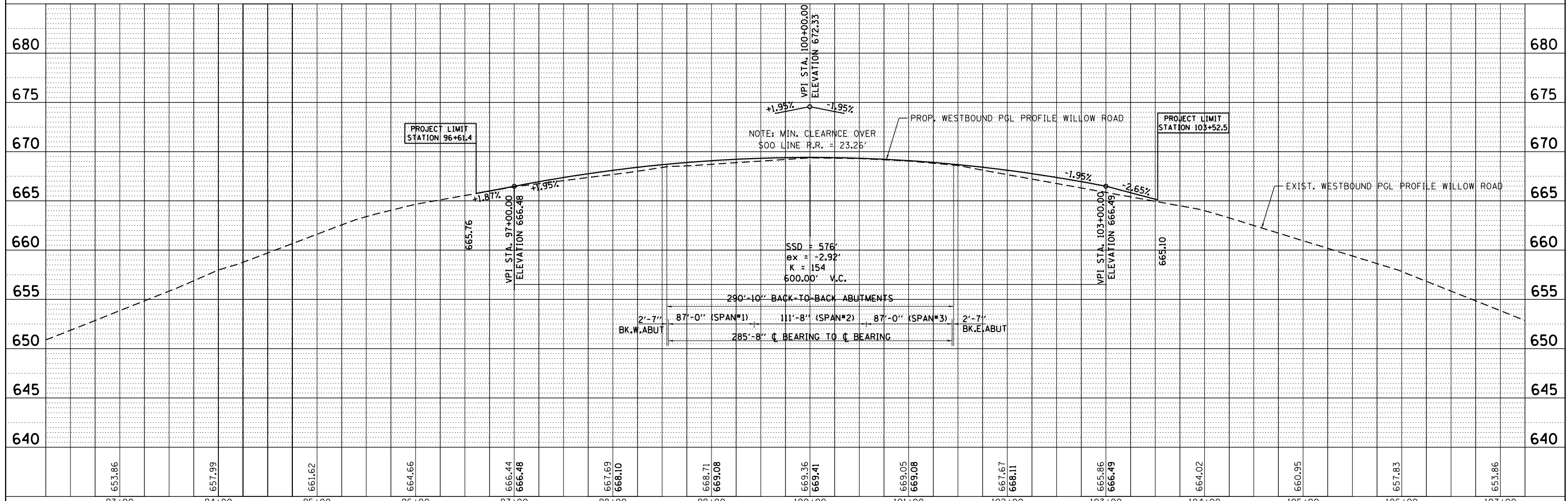


	USER NAME = MS.USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE EASTBOUND PGL	F.A. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 23		
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -			SCALE: 1" = 50'	SHEET OF SHEETS	STA. 96+61.4 TO STA. 103+52.5	CONTRACT NO. 60N83			
	PLOT DATE = 12/13/2018	DATE - 11/21/17	REVISED -			ILLINOIS FED. AID PROJECT						

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CADD FILE NAME		

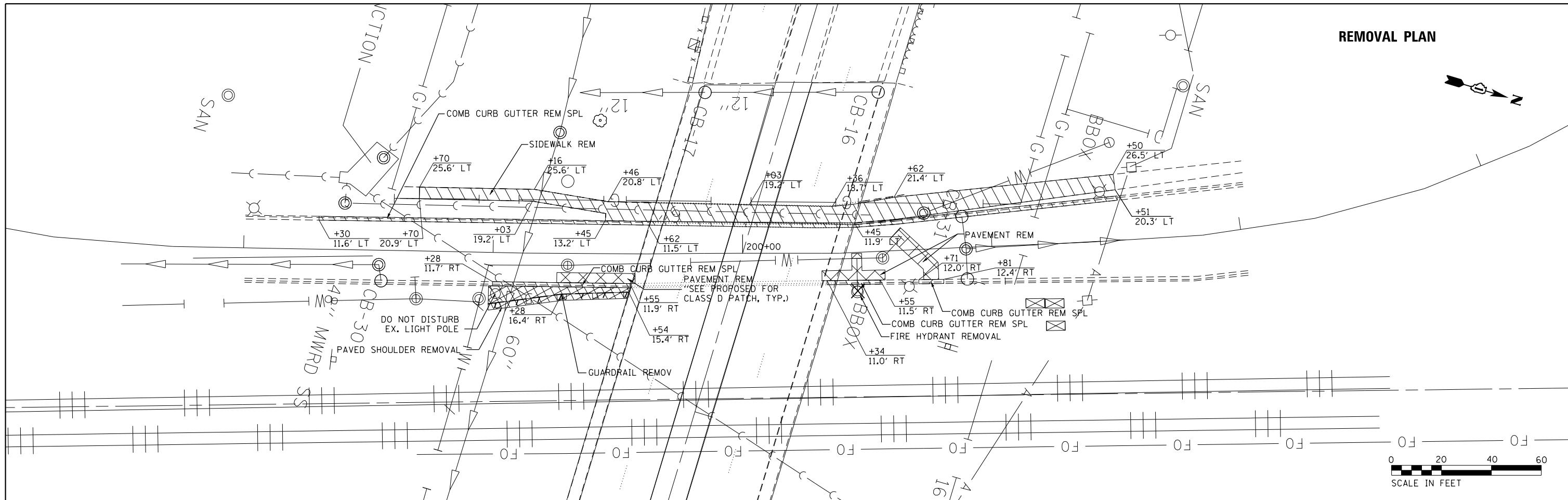
PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	NOTE BOOK		
	NO.		
	CADD FILE NAME		

SEE EASTBOUND PLAN AND PROFILE FOR WESTBOUND PLAN ELEMENTS

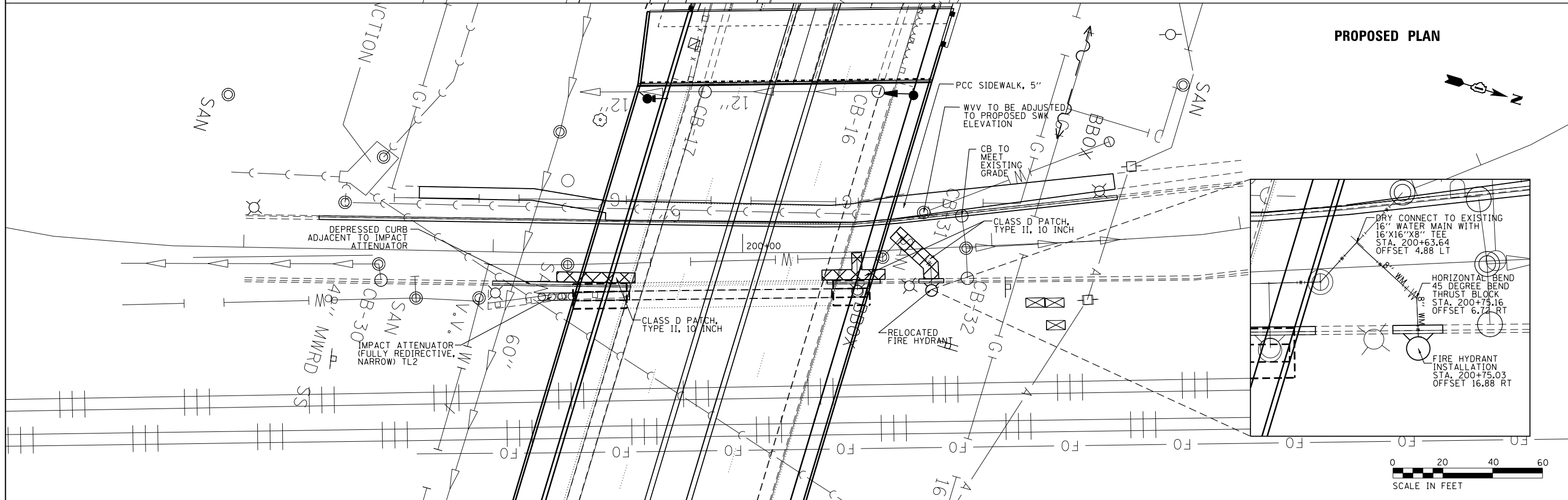


MILHOUSE	USER NAME = MS.USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE WESTBOUND PGL	SCALE: 1" = 50'	SHEET	OF	SHEETS	STA. 96+61.4	TO STA. 103+52.5	F.A. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 24
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -			CONTRACT NO. 60N83										
	PLOT DATE = 12/13/2018	DATE - 11/21/17	REVISED -			ILLINOIS FED. AID PROJECT										

REMOVAL PLAN



PROPOSED PLAN



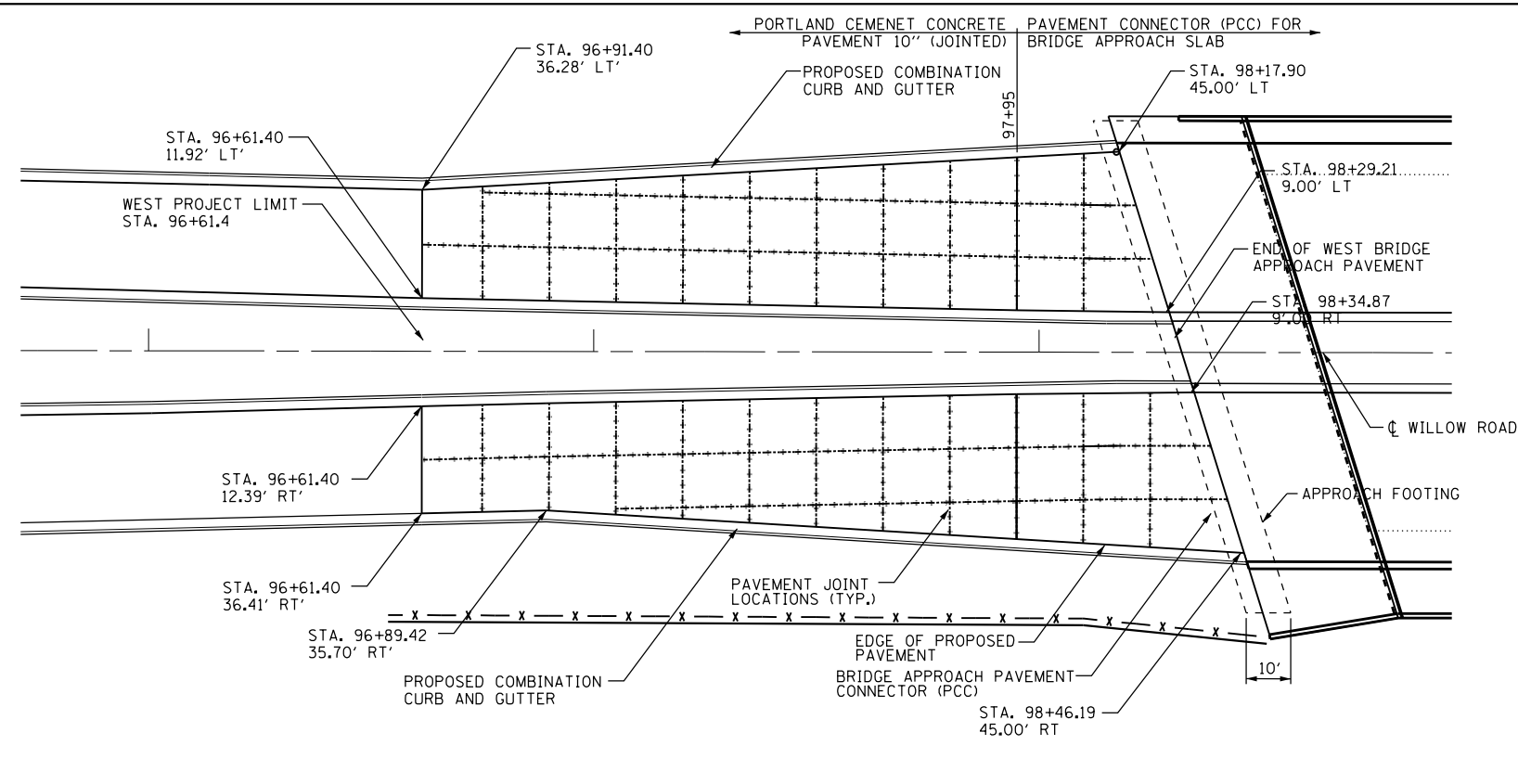
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

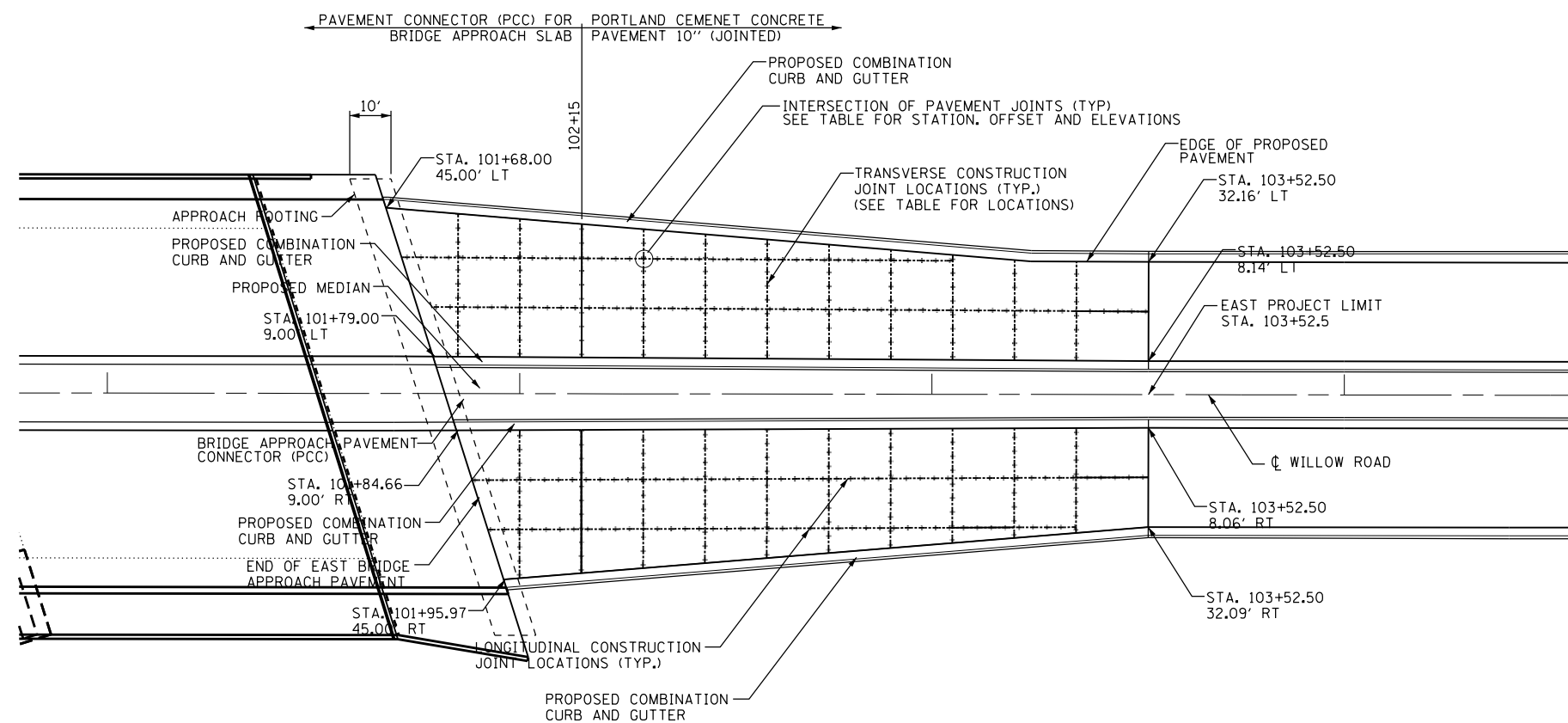
PATRIOT PLAN

SCALE: SHEET OF SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	25
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
96+61.40	-36.28	665.39	97+35.00	-40.39	666.65	97+95.00	-43.75	667.47
96+61.40	-23.92	665.58	97+35.00	-34.53	666.76	97+95.00	-33.39	667.68
96+61.40	-11.92	665.76	97+35.00	-22.52	666.94	97+95.00	-21.38	667.86
96+61.40	12.39	665.76	97+35.00	-10.52	667.12	97+95.00	-9.38	668.04
96+61.40	24.39	665.58	97+35.00	10.71	667.12	97+95.00	9.46	668.04
96+61.40	36.41	665.40	97+35.00	22.71	666.94	97+95.00	21.47	667.86
96+75.00	-37.04	665.63	97+35.00	34.71	666.76	97+95.00	33.47	667.68
96+75.00	-23.66	665.83	97+35.00	38.41	666.69	97+95.00	41.99	667.51
96+75.00	-11.66	666.01	97+50.00	-41.23	666.87	98+10.00	-44.59	667.64
96+75.00	12.03	666.01	97+50.00	-34.24	667.01	98+10.00	-33.10	667.87
96+75.00	24.04	665.83	97+50.00	-22.24	667.19	98+10.00	-21.10	668.05
96+75.00	36.06	665.65	97+50.00	-10.24	667.37	98+10.00	-9.10	668.23
96+90.00	-37.88	665.88	97+50.00	10.40	667.37	98+10.00	9.15	668.23
96+90.00	-23.38	666.11	97+50.00	22.40	667.19	98+10.00	21.16	668.05
96+90.00	-11.38	666.29	97+50.00	34.40	667.01	98+10.00	33.16	667.87
96+90.00	11.64	666.29	97+50.00	39.31	666.92	98+10.00	42.89	667.68
96+90.00	23.64	666.11	97+65.00	-42.07	667.09	98+17.90	-45.00	667.73
96+90.00	35.73	665.93	97+65.00	-33.96	667.25	98+21.67	-33.00	668.01
97+05.00	-38.72	666.14	97+65.00	-21.95	667.43	98+25.00	9.00	668.41
97+05.00	-35.10	666.22	97+65.00	-9.95	667.61	98+25.00	21.00	668.23
97+05.00	-23.09	666.40	97+65.00	10.08	667.61	98+25.00	33.00	668.05
97+05.00	-11.09	666.58	97+65.00	22.09	667.43	98+25.00	43.78	667.83
97+05.00	11.33	666.58	97+65.00	34.09	667.25	98+25.44	-21.00	668.23
97+05.00	23.33	666.40	97+65.00	40.20	667.13	98+29.21	-9.00	668.46
97+05.00	36.63	666.19	97+80.00	-42.91	667.29	98+34.87	9.00	668.52
97+20.00	-39.55	666.40	97+80.00	-33.67	667.47	98+38.64	21.00	668.38
97+20.00	-34.81	666.50	97+80.00	-21.67	667.65	98+42.42	33.00	668.24
97+20.00	-22.81	666.68	97+80.00	-9.67	667.83	98+46.19	45.00	668.04
97+20.00	-10.81	666.86	97+80.00	9.77	667.83			
97+20.00	11.02	666.86	97+80.00	21.78	667.65			
97+20.00	23.02	666.68	97+80.00	33.78	667.47			
97+20.00	35.02	666.50	97+80.00	41.10	667.33			
97+20.00	37.52	666.45						



STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.	STATION	OFFSET	ELEV.
101+67.68	-45.00	667.89	102+45.00	-38.71	666.97	103+05.00	-33.82	665.96
101+71.46	-33.00	668.09	102+45.00	-32.67	667.09	103+05.00	-32.38	665.99
101+75.22	-21.02	668.23	102+45.00	-20.67	667.27	103+05.00	-20.38	666.17
101+79.00	-9.00	668.36	102+45.00	-8.67	667.45	103+05.00	-8.38	666.35
101+84.66	9.00	668.30	102+45.00	8.61	667.45	103+05.00	8.33	666.35
101+85.00	-43.61	667.72	102+45.00	20.66	667.27	103+05.00	20.33	666.17
101+85.00	-32.97	667.94	102+45.00	32.66	667.09	103+05.00	32.33	665.99
101+85.00	-20.97	668.12	102+45.00	40.99	666.93	103+05.00	36.02	665.91
101+85.00	-8.97	668.30	102+60.00	-37.49	666.75	103+20.00	-32.60	665.58
101+88.43	20.98	668.07	102+60.00	-32.60	666.85	103+20.00	-20.30	665.77
101+92.19	33.00	667.84	102+60.00	-20.60	667.03	103+20.00	-8.30	665.95
101+95.97	45.00	667.56	102+60.00	-8.60	667.21	103+20.00	8.24	665.95
102+00.00	-42.38	667.56	102+60.00	8.53	667.21	103+20.00	20.24	665.77
102+00.00	-32.90	667.75	102+60.00	20.58	667.03	103+20.00	32.24	665.59
102+00.00	-20.90	667.93	102+60.00	32.58	666.85	103+20.00	34.78	665.54
102+00.00	-8.90	668.10	102+60.00	39.75	666.70	103+35.00	-32.23	665.19
102+00.00	8.84	668.10	102+75.00	-36.27	666.51	103+35.00	-20.23	665.37
102+00.00	20.91	667.92	102+75.00	-32.53	666.59	103+35.00	-8.23	665.55
102+00.00	32.91	667.74	102+75.00	-20.53	666.77	103+35.00	8.16	665.55
102+00.00	44.67	667.51	102+75.00	-8.53	666.95	103+35.00	20.16	665.37
102+15.00	-41.16	667.38	102+75.00	8.46	666.95	103+35.00	33.54	665.16
102+15.00	-32.82	667.54	102+75.00	20.49	666.77	103+52.50	-32.16	664.73
102+15.00	-20.82	667.72	102+75.00	32.49	666.59	103+52.50	-20.14	664.91
102+15.00	-8.82	667.90	102+75.00	38.51	666.47	103+52.50	-8.14	665.09
102+15.00	8.83	667.90	102+90.00	-35.04	666.26	103+52.50	8.06	665.09
102+15.00	20.83	667.72	102+90.00	-32.45	666.31	103+52.50	20.06	664.91
102+15.00	32.83	667.54	102+90.00	-20.45	666.49	103+52.50	32.09	664.73
102+15.00	43.47	667.33	102+90.00	-8.45	666.67			
102+30.00	-39.94	667.18	102+90.00	8.38	666.67			
102+30.00	-32.75	667.33	102+90.00	20.41	666.49			
102+30.00	-20.75	667.51	102+90.00	32.41	666.31			
102+30.00	-8.75	667.69	102+90.00	37.26	666.21			
102+30.00	8.75	667.69						
102+30.00	20.75	667.51						
102+30.00	32.75	667.33						
102+30.00	42.23	667.14						

NOTE: PLACE TIE BARS PER STANDARD 420106-04



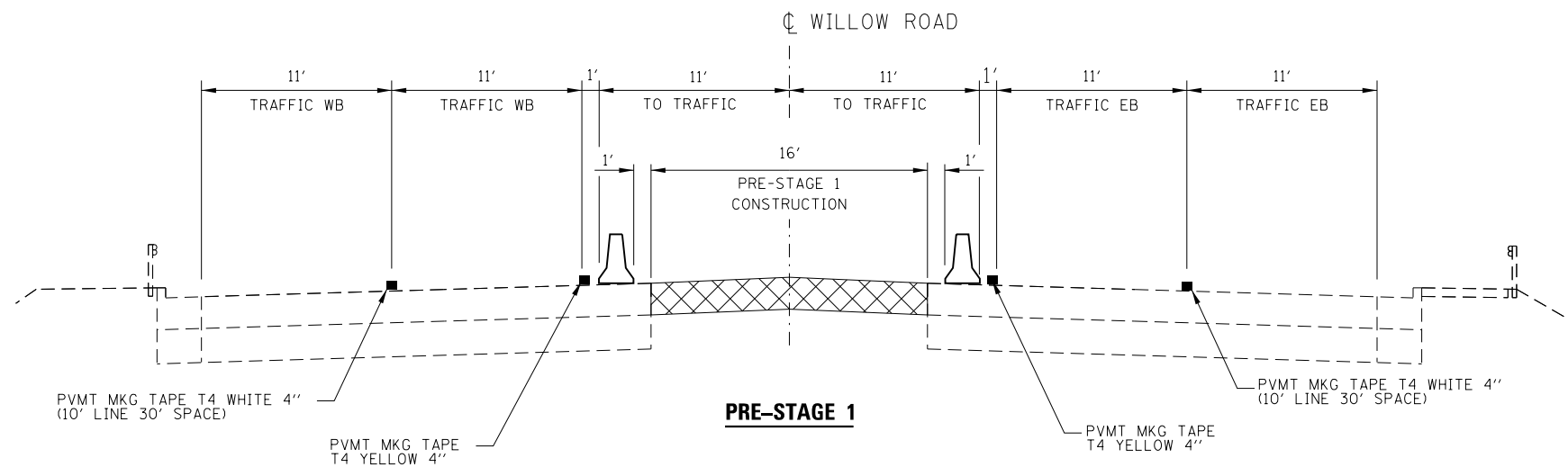
MILHOUSE	USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
	PLOT DATE = 12/13/2018	CHECKED - E.JL	REVISED -
		DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT JOINT ELEVATIONS

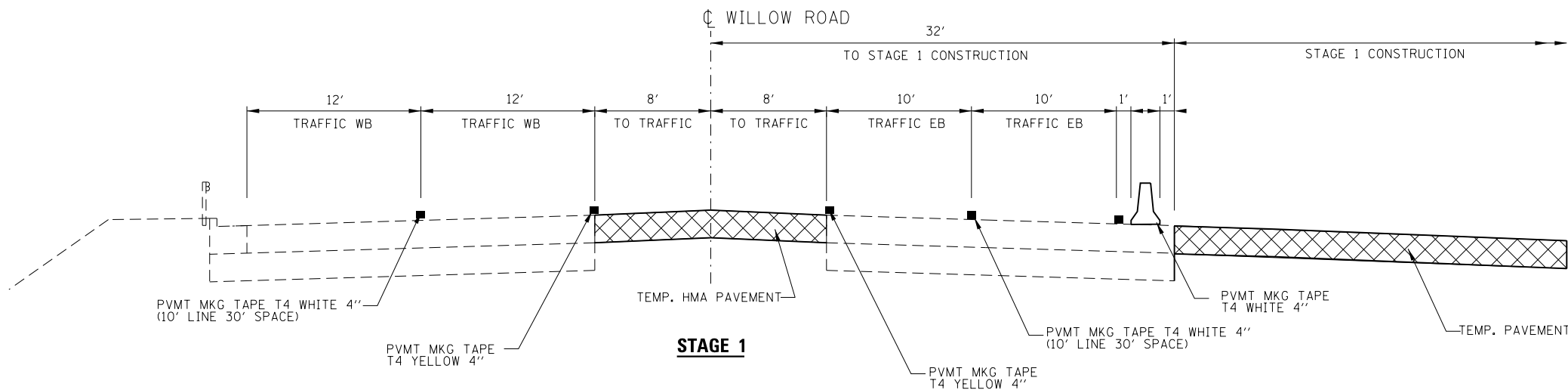
SCALE: 1"=20' SHEET OF SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	26
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



PRE-STAGE 1 CONSTRUCTION NOTES

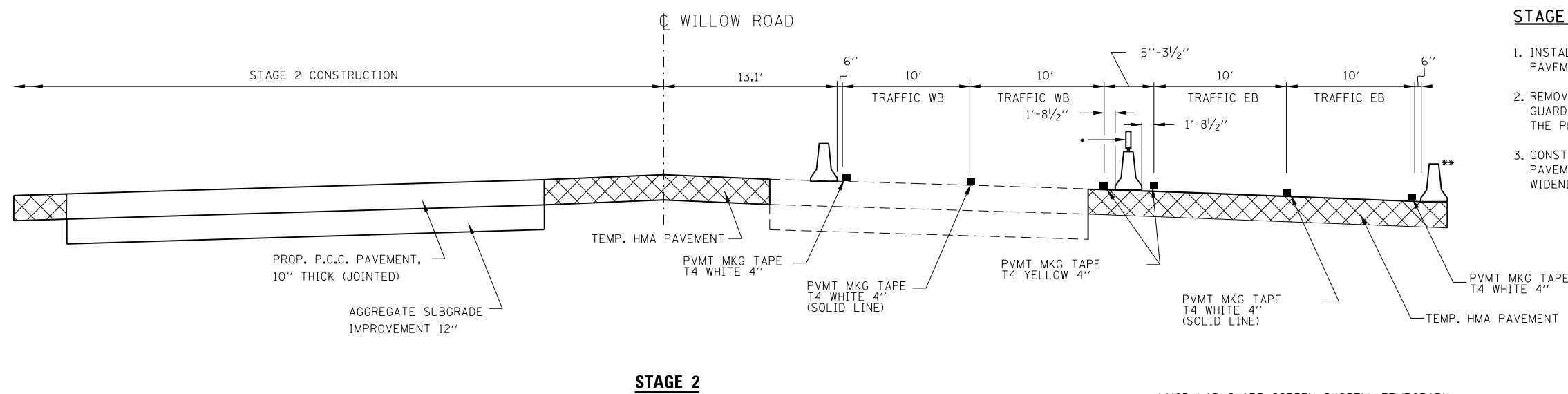
1. INSTALL TEMPORARY CONCRETE BARRIER AND TEMPORARY PAVEMENT MARKING AND SHIFT TRAFFIC TO TEMPORARY LANES.
2. REMOVE MEDIAN TO LIMITS SHOWN AND CONSTRUCT TEMPORARY HMA PAVEMENT.



INSTALL STAGE 1 TEMPORARY CONCRETE BARRIER, SIGNS AND TEMPORARY PAVEMENT MARKING ACCORDING TO PLANS.

REMOVE STAGE 1 PORTION OF THE EXISTING BRIDGE STRUCTURE, EASTBOUND GUARDRAIL, CURB AND GUTTER, SIDEWALK, FENCE AND PAVEMENT AS SHOWN ON THE PLANS.

CONSTRUCT THE STAGE 1 PORTION OF THE PROPOSED STRUCTURE, APPROACH PAVEMENT, EASTBOUND EMBANKMENT WIDENING AND THE TEMPORARY HMA PAVEMENT REQUIRED FOR STAGE 2.



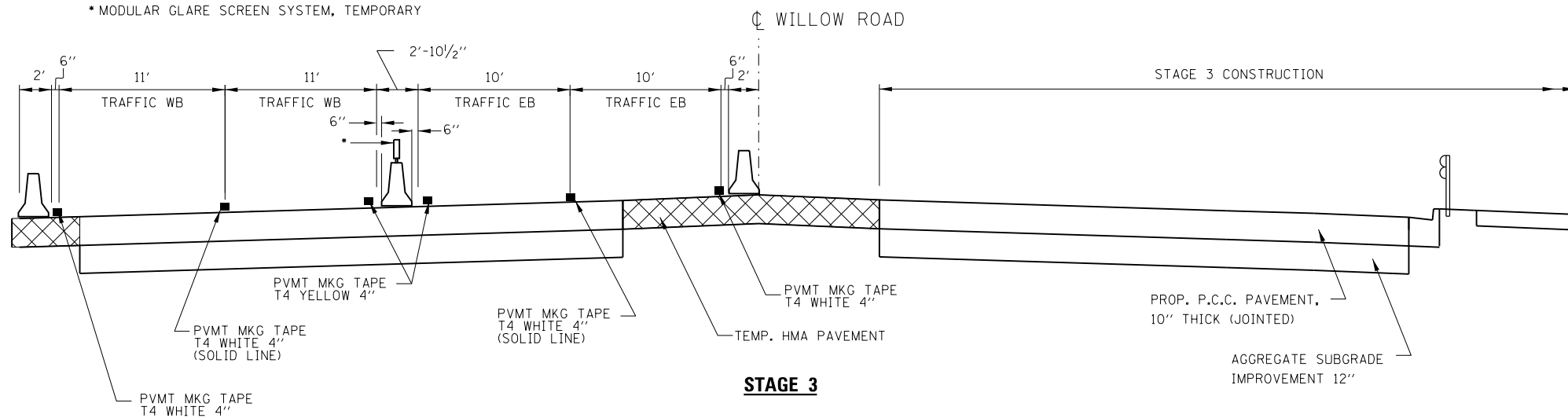
STAGE 2 CONSTRUCTION NOTES

1. INSTALL STAGE 2 TEMPORARY CONCRETE BARRIER, SIGNS AND TEMPORARY PAVEMENT MARKING ACCORDING TO PLANS.
2. REMOVE STAGE 2 PORTION OF THE EXISTING BRIDGE STRUCTURE, WESTBOUND GUARDRAIL, CURB AND GUTTER, SIDEWALK, FENCE AND PAVEMENT AS SHOWN ON THE PLANS.
3. CONSTRUCT THE STAGE 2 PORTION OF THE PROPOSED STRUCTURE, APPROACH PAVEMENT, WESTBOUND EMBANKMENT WIDENING AND THE TEMPORARY HMA PAVEMENT REQUIRED FOR STAGE 3.

* MODULAR GLARE SCREEN SYSTEM, TEMPORARY
 ** OMIT STAGE 2 TEMPORARY CONCRETE BARRIER ACROSS BRIDGE IN LIEU OF PARAPET

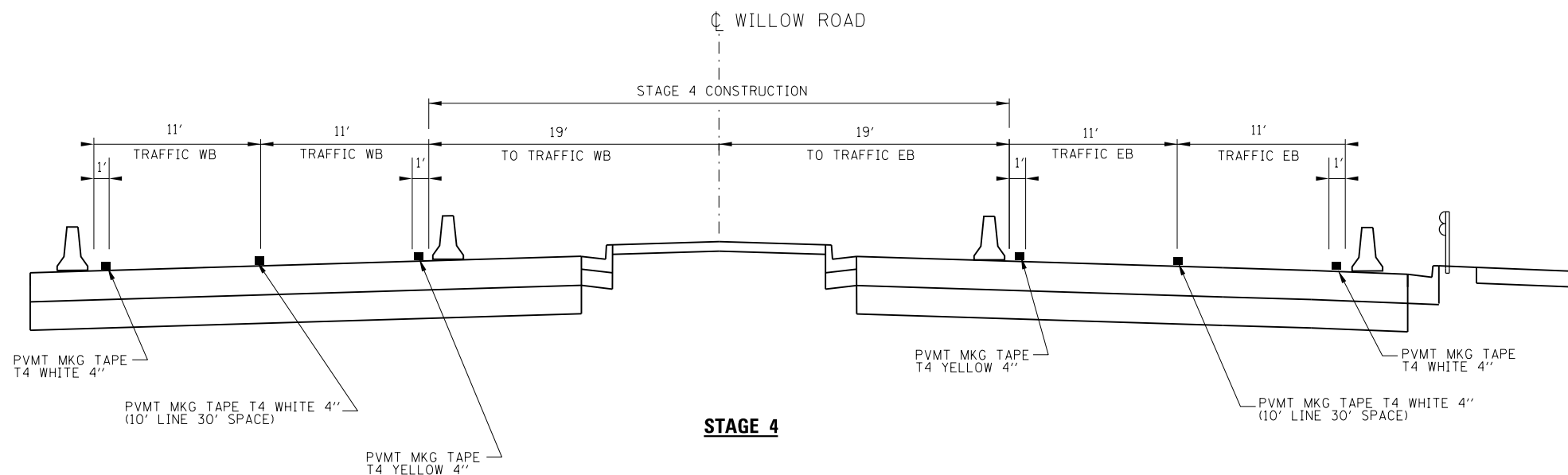
	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL STAGE CROSS SECTIONS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -				305	1920.01-BR	COOK	194	27
	PLOT DATE = 12/13/2018	CHECKED - EJL	REVISED -				CONTRACT NO. 60N83				
	DATE - 11/21/18	REVISED -		SCALE:	SHEET 1 OF 2 SHEETS	STA. 96+61.4 TO STA. 103+52.5	ILLINOIS FED. AID PROJECT				

* MODULAR GLARE SCREEN SYSTEM, TEMPORARY



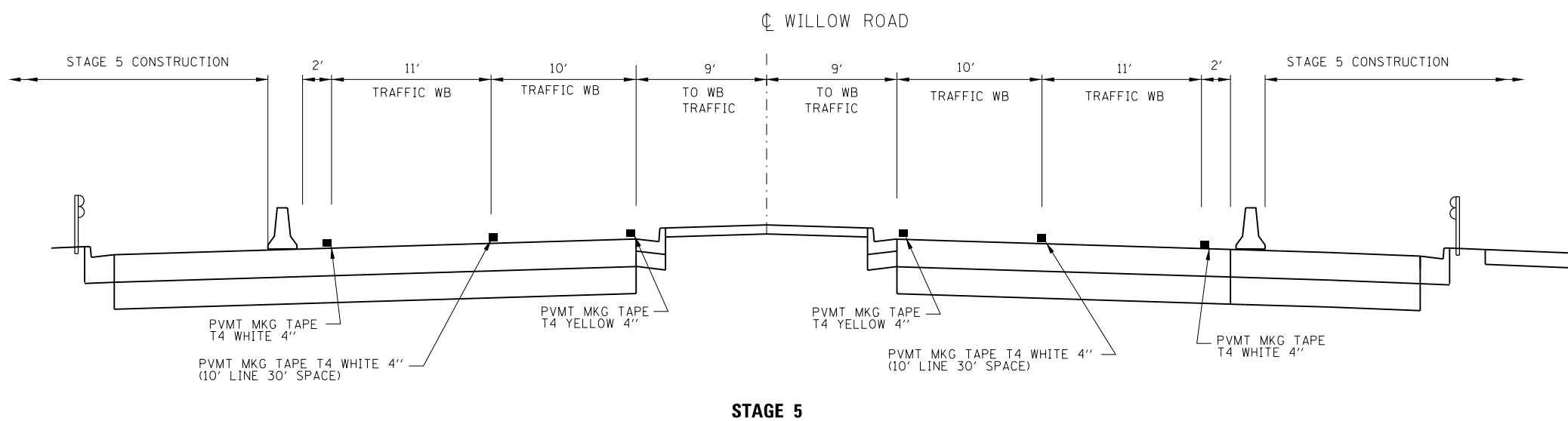
STAGE 3 CONSTRUCTION NOTES

1. INSTALL STAGE 3 TEMPORARY CONCRETE BARRIER, SIGNS AND TEMPORARY PAVEMENT MARKING ACCORDING TO PLANS.
2. REMOVE STAGE 3 PORTION OF THE EXISTING BRIDGE STRUCTURE.
3. CONSTRUCT THE STAGE 3 PORTION OF THE PROPOSED STRUCTURE, AND APPROACH PAVEMENT.



STAGE 4 CONSTRUCTION NOTES

1. INSTALL STAGE 4 TEMPORARY CONCRETE BARRIER, SIGNS AND TEMPORARY PAVEMENT MARKING ACCORDING TO PLANS.
2. CONSTRUCT ROADWAY AND BRIDGE MEDIAN AND MEDIAN CURB AND GUTTER.



STAGE 5 CONSTRUCTION NOTES

1. INSTALL STAGE 5 TEMPORARY CONCRETE BARRIER, SIGNS AND TEMPORARY PAVEMENT MARKING ACCORDING TO PLANS.
2. CONSTRUCT EASTBOUND AND WESTBOUND GUARDRAIL, OUTSIDE CURB AND GUTTER, SIDEWALK, FENCE, DRAINAGE AND LANDSCAPING ITEMS.



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
DRAWN - LCR	REVISED -	
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

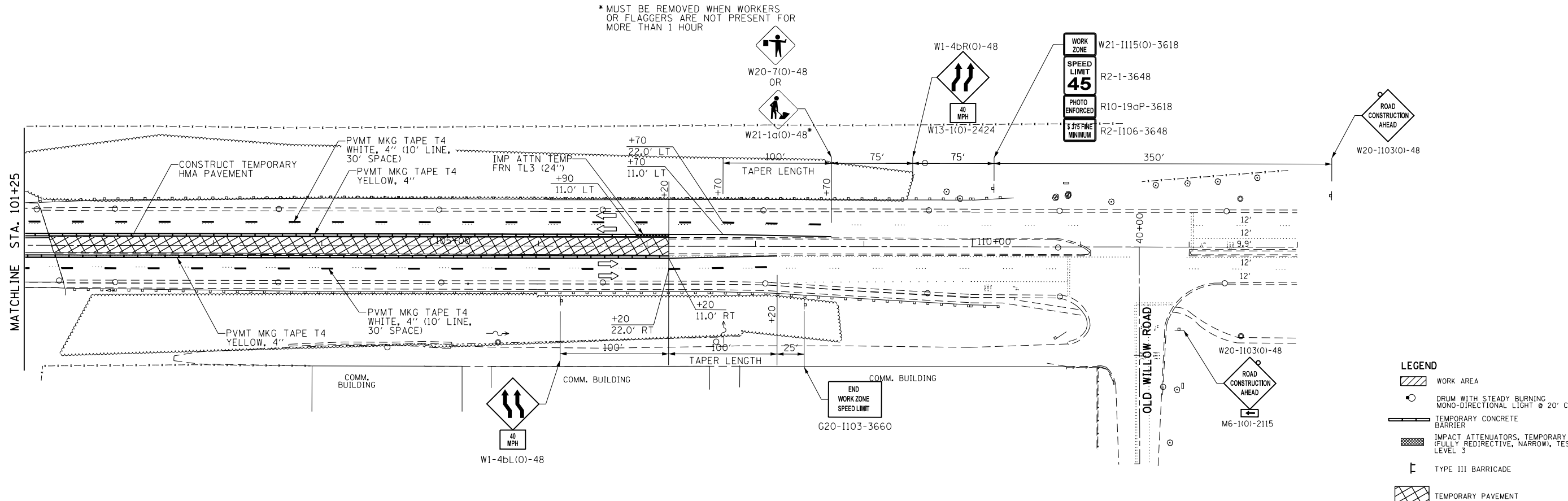
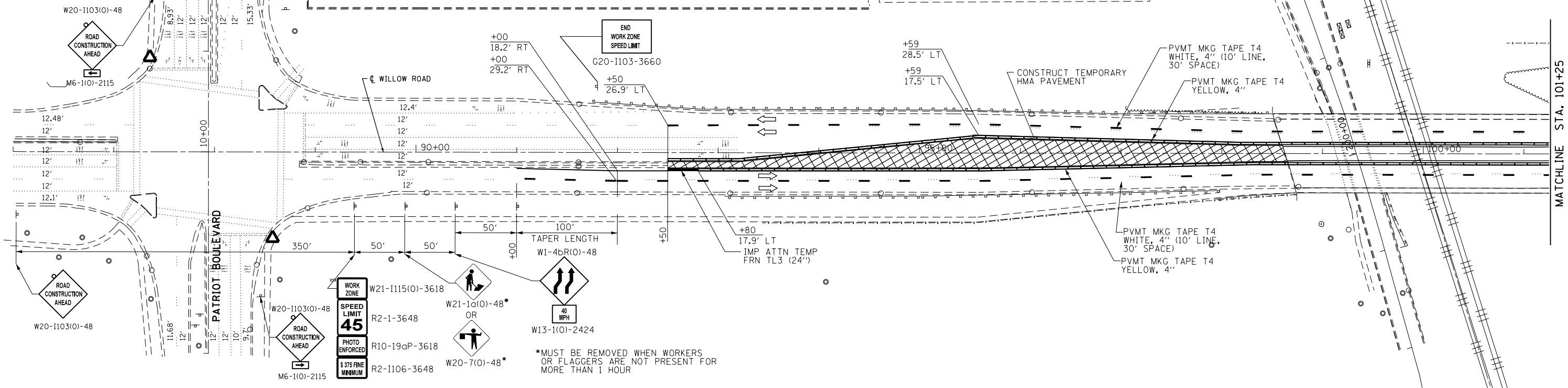
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE CROSS SECTIONS**

SCALE: SHEET 2 OF 2 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	28
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

PINNING SCHEDULE						
PRE-STAGE 1					TCB	X7040125
STATION		STATION	SIDE	FOOT	SEGMENTS	TCB
92+80	TO	107+20	EB	1440	115	351
92+50	TO	106+90	WB	1440	115	351



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 1/7/2019	DATE - 11/21/18	REVISED -

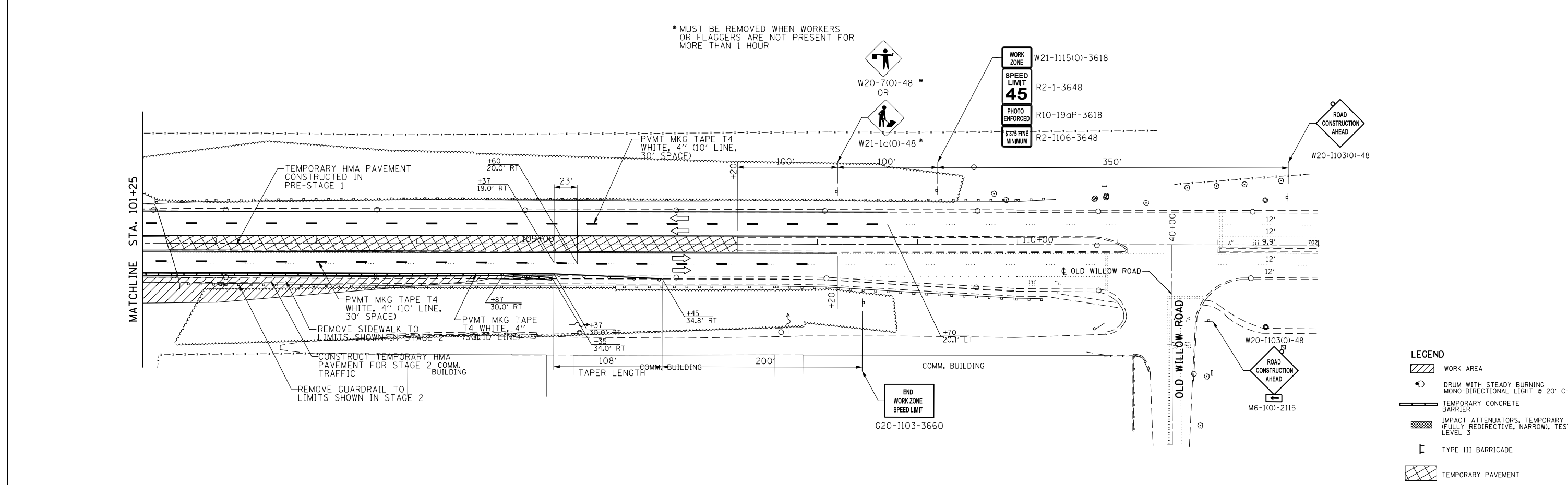
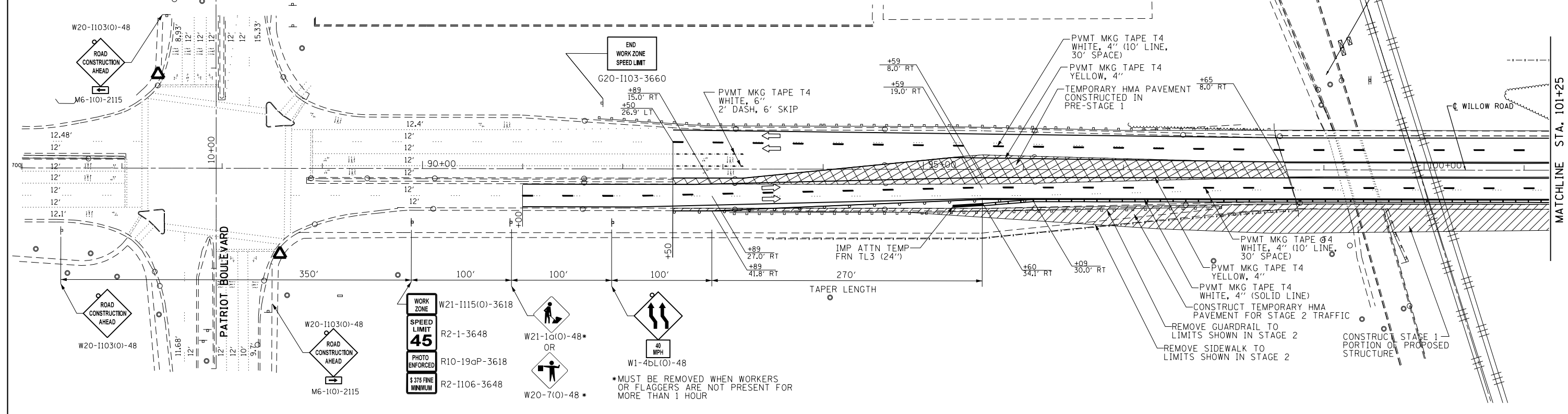
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
PRE-STAGE 1**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	29
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

PINNING SCHEDULE						
STAGE 1		SIDE	LENGTH FOOT	TCB SEGMENTS EACH	X7040125 PINNING TCB	
STATION	STATION				EACH	EACH
97+68	TO 105+35	EB	767	61	189	



* MUST BE REMOVED WHEN WORKERS OR FLAGGERS ARE NOT PRESENT FOR MORE THAN 1 HOUR



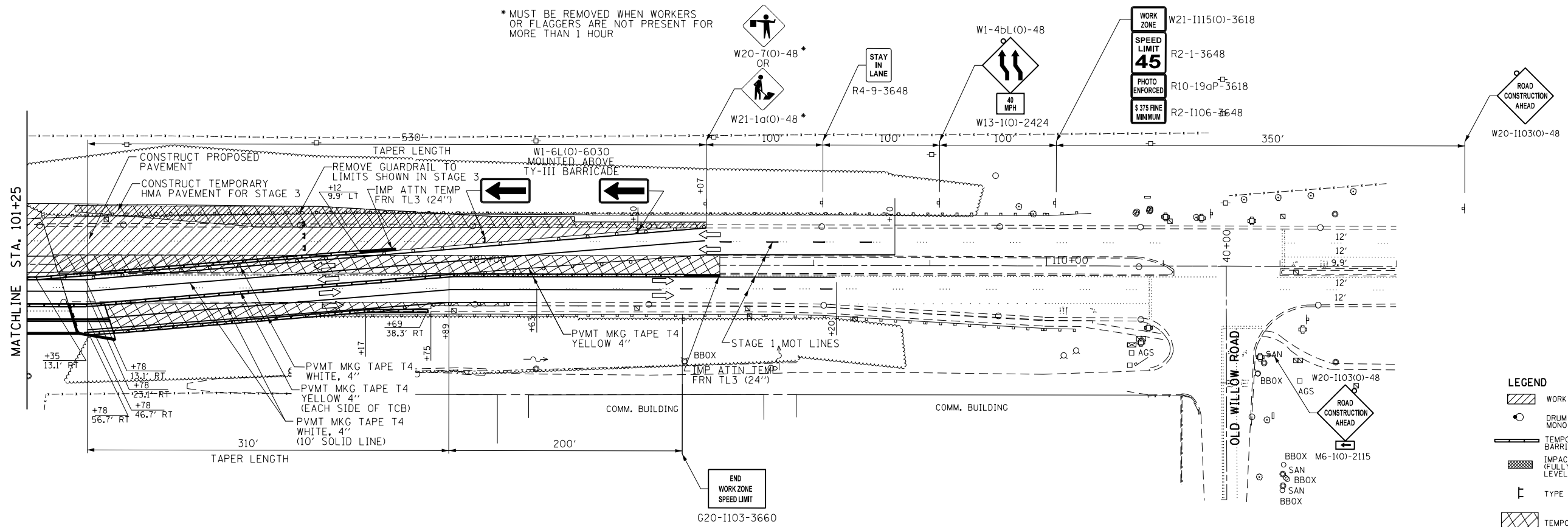
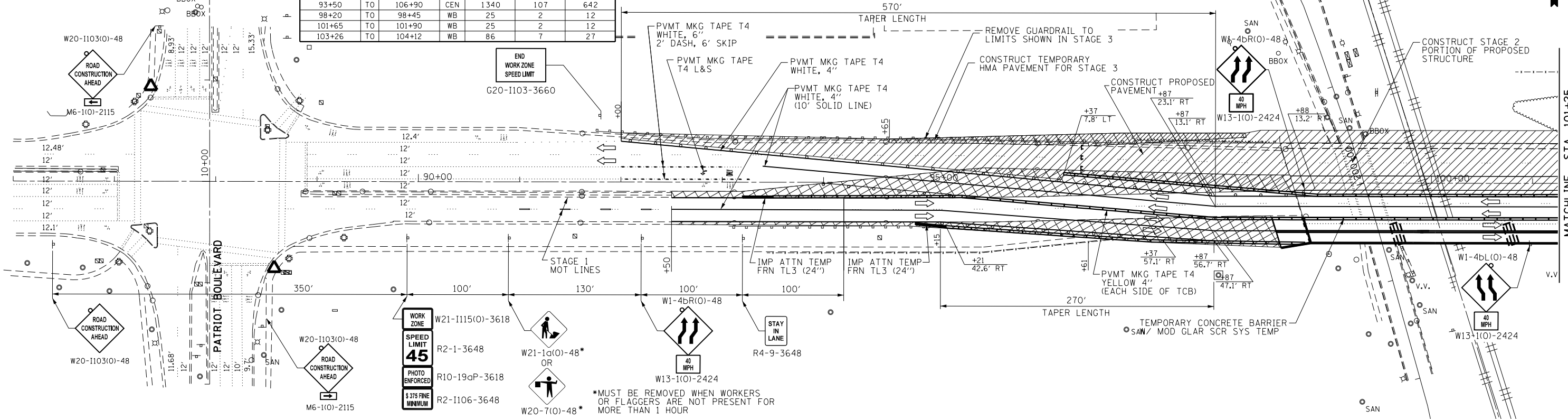
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 1/7/2019	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL			
STAGE 1			
SCALE:	SHEET 1 OF 1 SHEETS	STA. 96+61.4 TO STA. 103+52.5	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	30
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

PINNING SCHEDULE						
STAGE 2			LENGTH	TCB SEGMENTS	X7040125 PINNING	TCB
STATION	TO	STATION				
95+21	TO	98+50	EB	329	26	84
101+49	TO	104+69	EB	270	22	72
93+50	TO	106+90	CEN	1340	107	642
98+20	TO	98+45	WB	25	2	12
101+65	TO	101+90	WB	25	2	12
103+26	TO	104+12	WB	86	7	27



LEGEND

- WORK AREA
- DRUM WITH STEADY BURNING MONO-DIRECTIONAL LIGHT @ 20' C-C
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY PAVEMENT



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = 1/7/2019	CHECKED - EJL	REVISED -
	DATE - 11/21/18	REVISED -

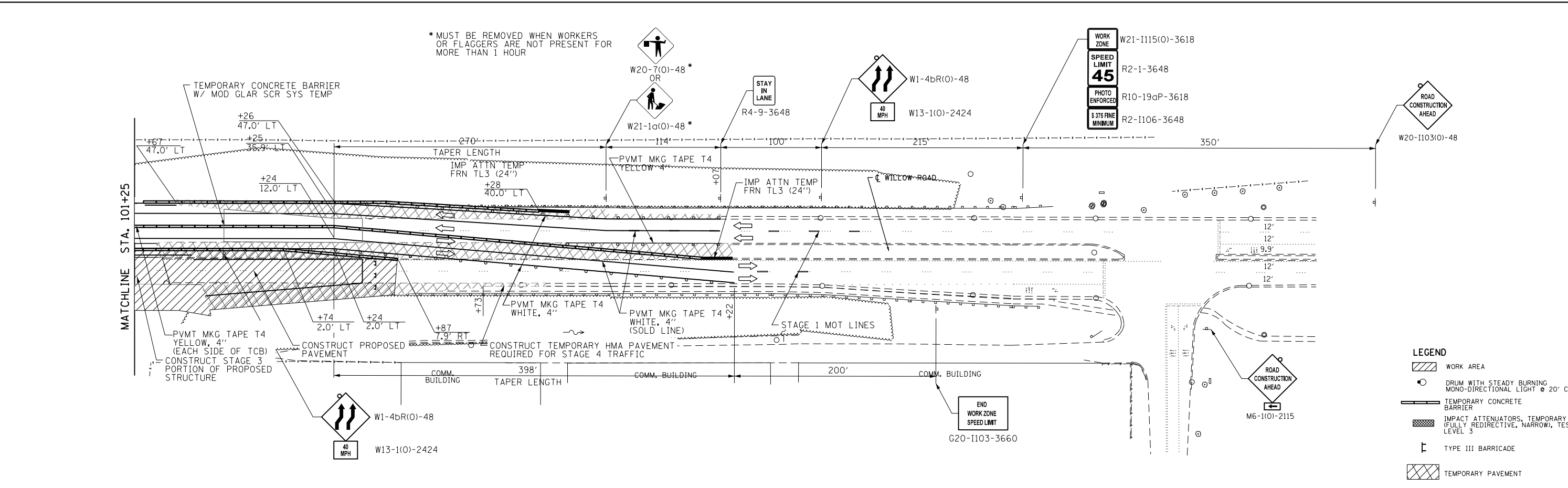
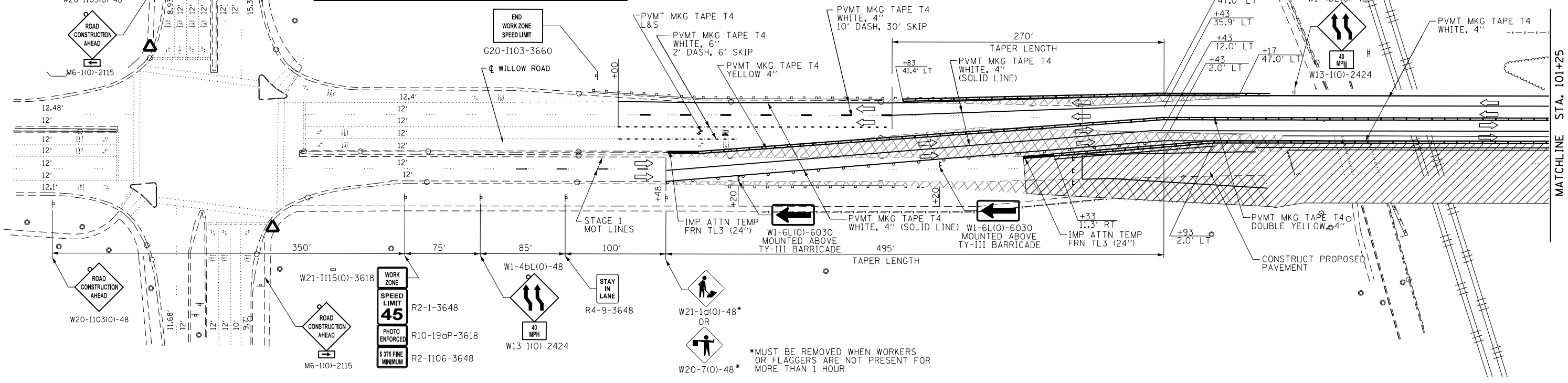
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 2**

SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	31
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

PINNING SCHEDULE						
STAGE 3			LENGTH	TCB	X7040125	
STATION	TO	STATION	FOOT	SEGMENTS	EACH	PINNING
96+33	TO	96+96	EB	62.5	5	21
103+25	TO	103+87	EB	62.5	5	21
92+80	TO	98+31	CEN	551	44	264
101+81	TO	106+89	CEN	508	41	246
94+83	TO	98+48	WB	333	27	87
101+35	TO	105+28	WB	361	29	93



LEGEND

- WORK AREA
- DRUM WITH STEADY BURNING MONO-DIRECTIONAL LIGHT @ 20' C-C
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE
- TEMPORARY PAVEMENT



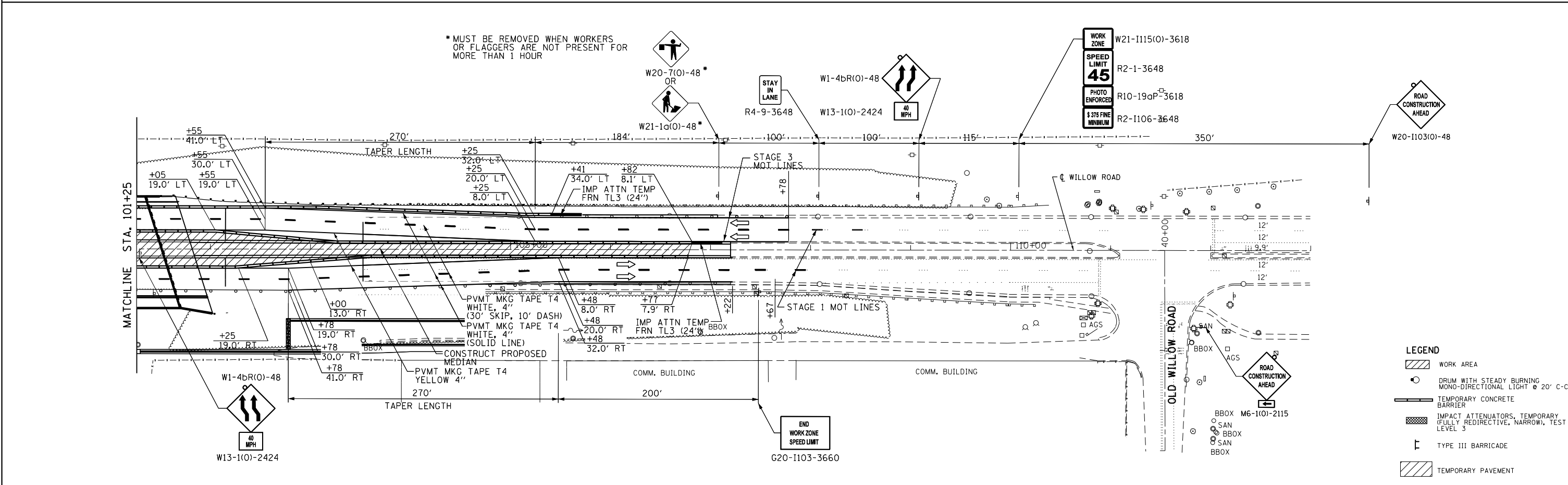
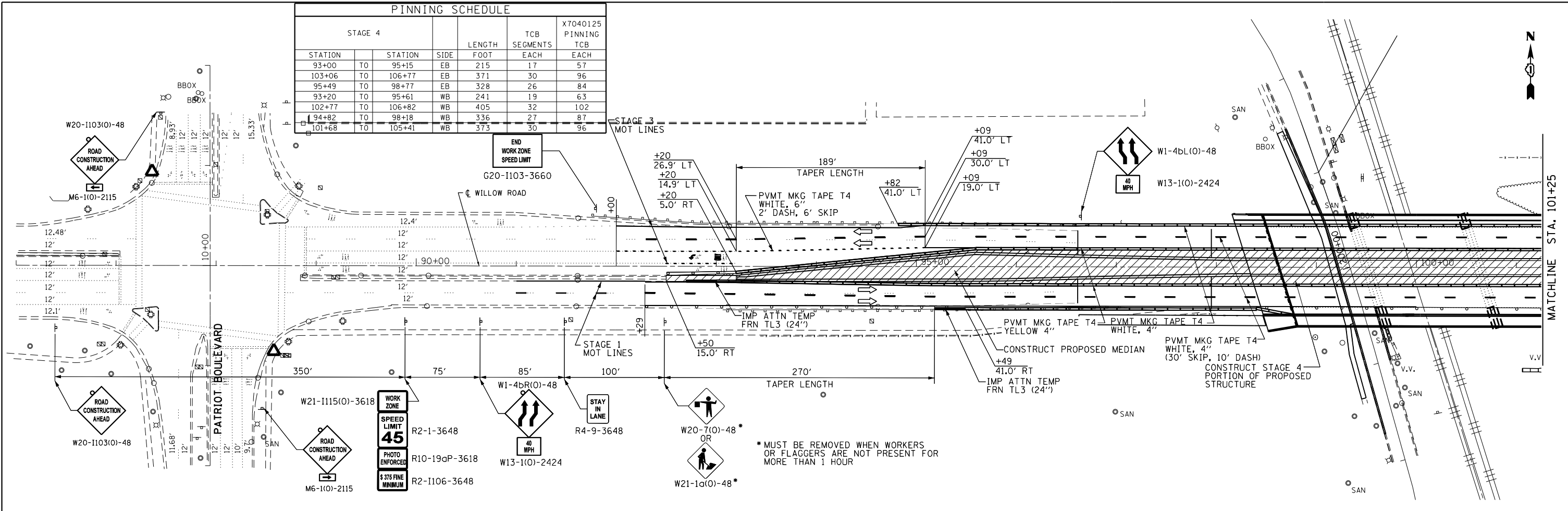
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -
PLOT DATE = 1/7/2019	CHECKED - E.JL	REVISED -
	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
STAGE 3
SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	32
				CONTRACT NO. 60N83
ILLINOIS FED. AID PROJECT				

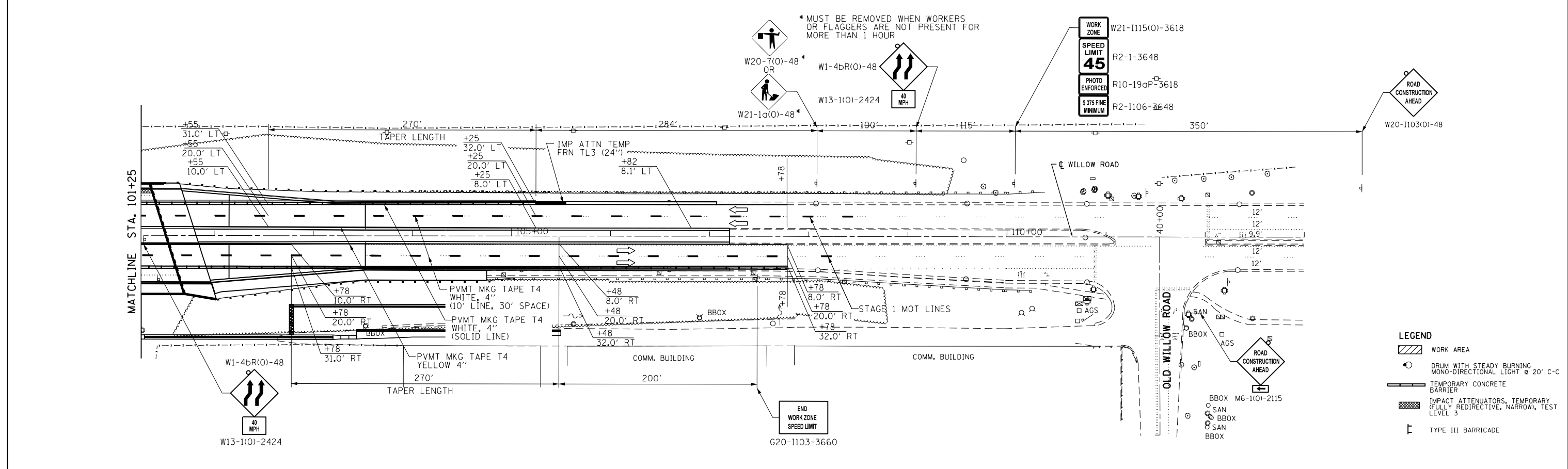
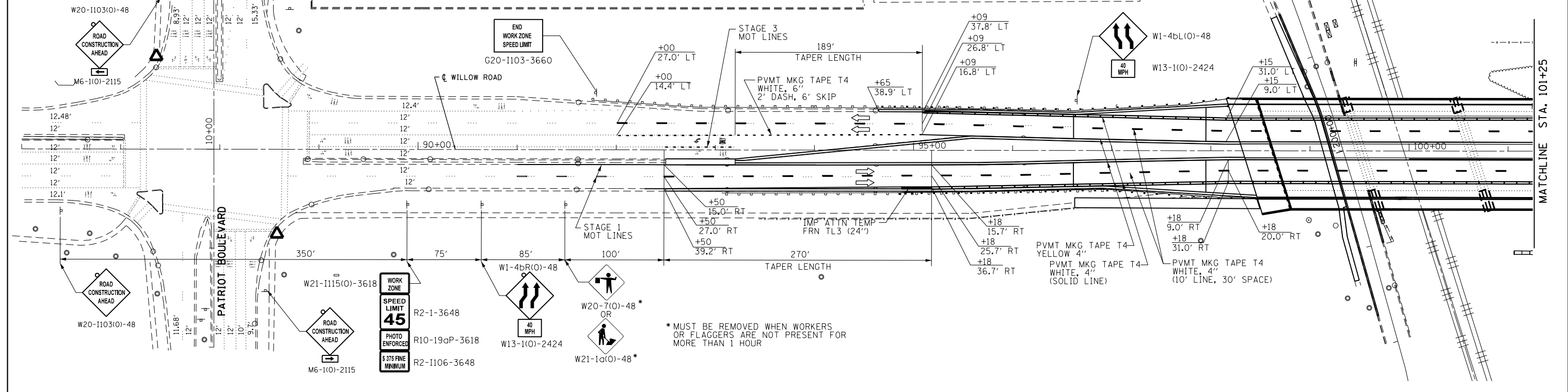
PINNING SCHEDULE						
STAGE 4			LENGTH	TCB	X7040125	
STATION	TO	STATION	FOOT	SEGMENTS	EACH	PINNING
						TCB
93+00	TO	95+15	EB	215	17	57
103+06	TO	106+77	EB	371	30	96
95+49	TO	98+77	EB	328	26	84
93+20	TO	95+61	WB	241	19	63
102+77	TO	106+82	WB	405	32	102
94+82	TO	98+18	WB	336	27	87
101+68	TO	105+41	WB	373	30	96



	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL STAGE 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -			305	1920.01-BR	COOK	194	33
	PLOT DATE = 1/7/2019	DATE - 11/21/18	REVISED -			CONTRACT NO. 60N83			ILLINOIS FED. AID PROJECT	

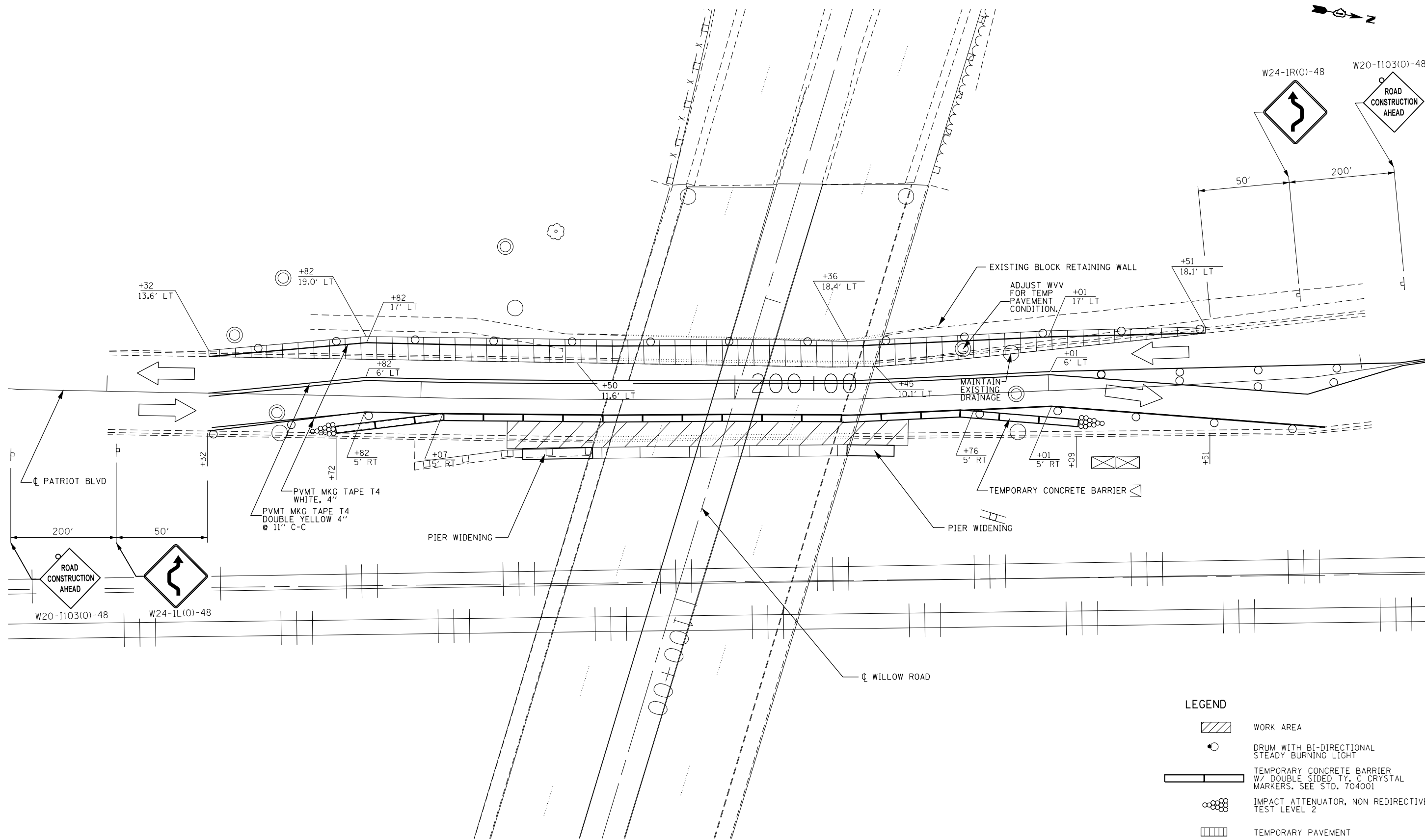
SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

PINNING SCHEDULE						
STAGE 5			LENGTH	TCB	X7040125 PINNING	
STATION	TO	STATION	FOOT	SEGMENTS	EACH	TCB
95+18		97+15	EB	197	16	54
103+16		107+78	EB	462	37	117
94+65		97+09	WB	244	20	66
103+44		105+25	WB	181	14	48



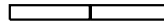




LEGEND

- WORK AREA
- DRUM WITH STEADY BURNING MONO-DIRECTIONAL LIGHT @ 20' C-C
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3
- TYPE III BARRICADE



LEGEND

	WORK AREA
	DRUM WITH BI-DIRECTIONAL STEADY BURNING LIGHT
	TEMPORARY CONCRETE BARRIER W/ DOUBLE SIDED TY, C CRYSTAL MARKERS. SEE STD. 704001
	IMPACT ATTENUATOR, NON REDIRECTIVE, TEST LEVEL 2
	TEMPORARY PAVEMENT



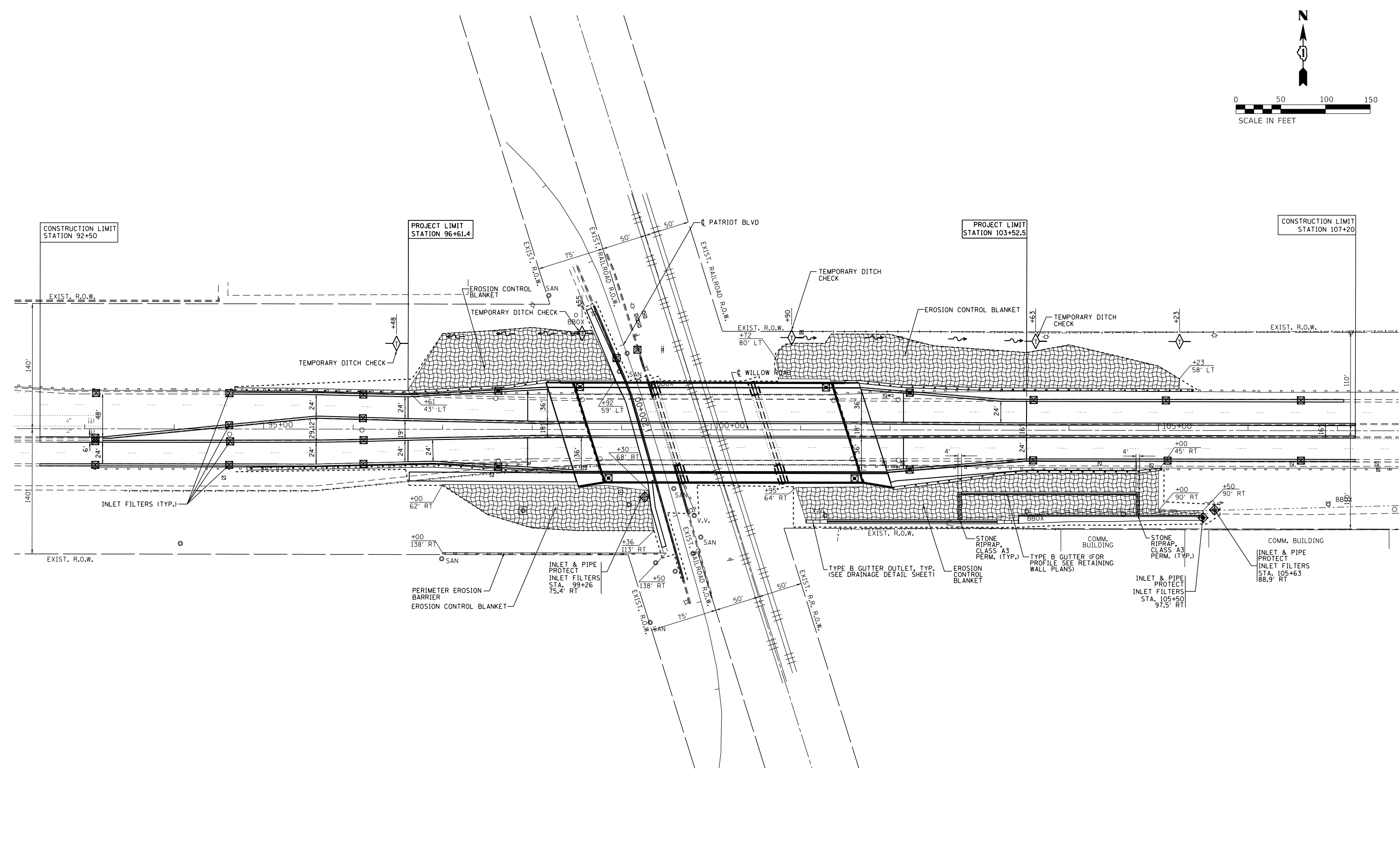
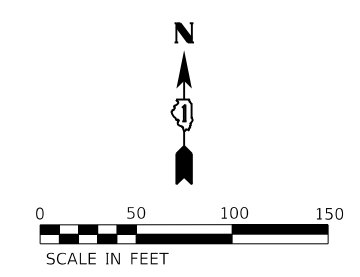
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 1/7/2019	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
PATRIOT BLVD**

SCALE: 1"=30' SHEET 1 OF 1 SHEETS STA. 198+32 TO STA. 201+51

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	35
				CONTRACT NO. 60N83
ILLINOIS FED. AID PROJECT				



USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

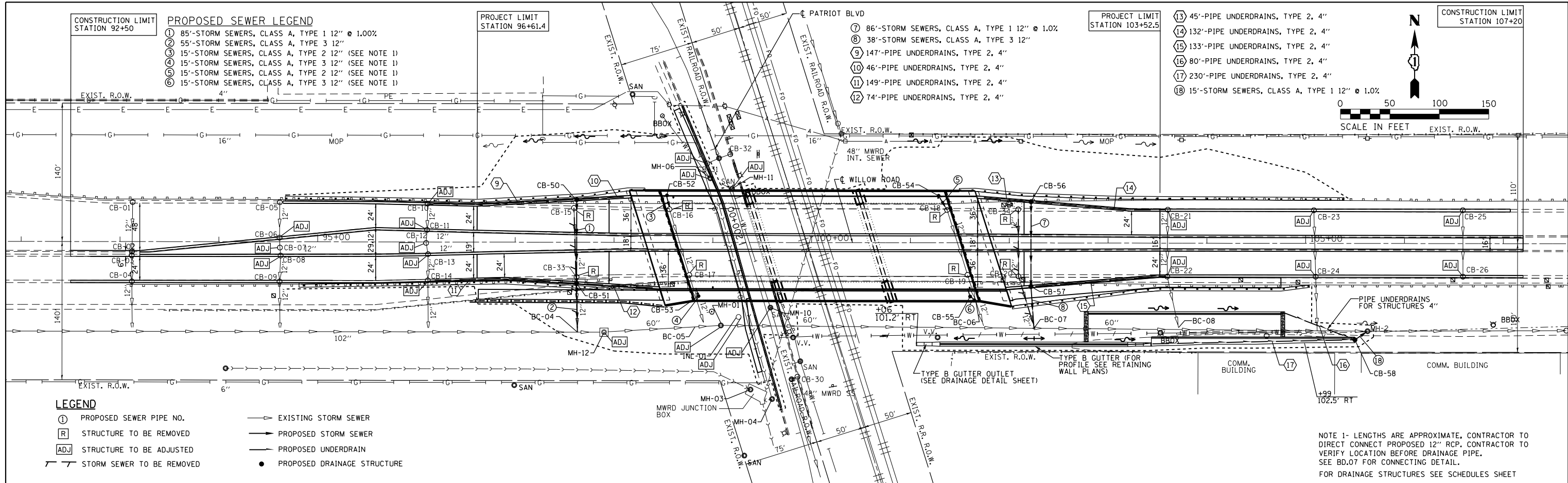
EROSION CONTROL PLAN

SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	36
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

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

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTATIONS OK'D
	NO.
	NO.
	NO.
	NO.



CONSTRUCTION LIMIT STATION 92+50

PROJECT LIMIT STATION 96+61.4

PROJECT LIMIT STATION 103+52.5

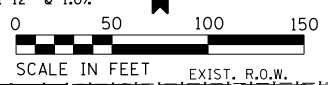
CONSTRUCTION LIMIT STATION 107+20

PROPOSED SEWER LEGEND

- ① 85'-STORM SEWERS, CLASS A, TYPE 1 12" @ 1.00%
- ② 55'-STORM SEWERS, CLASS A, TYPE 3 12"
- ③ 15'-STORM SEWERS, CLASS A, TYPE 2 12" (SEE NOTE 1)
- ④ 15'-STORM SEWERS, CLASS A, TYPE 3 12" (SEE NOTE 1)
- ⑤ 15'-STORM SEWERS, CLASS A, TYPE 2 12" (SEE NOTE 1)
- ⑥ 15'-STORM SEWERS, CLASS A, TYPE 3 12" (SEE NOTE 1)

- ⑦ 86'-STORM SEWERS, CLASS A, TYPE 1 12" @ 1.0%
- ⑧ 38'-STORM SEWERS, CLASS A, TYPE 3 12"
- ⑨ 147'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑩ 46'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑪ 149'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑫ 74'-PIPE UNDERDRAINS, TYPE 2, 4"

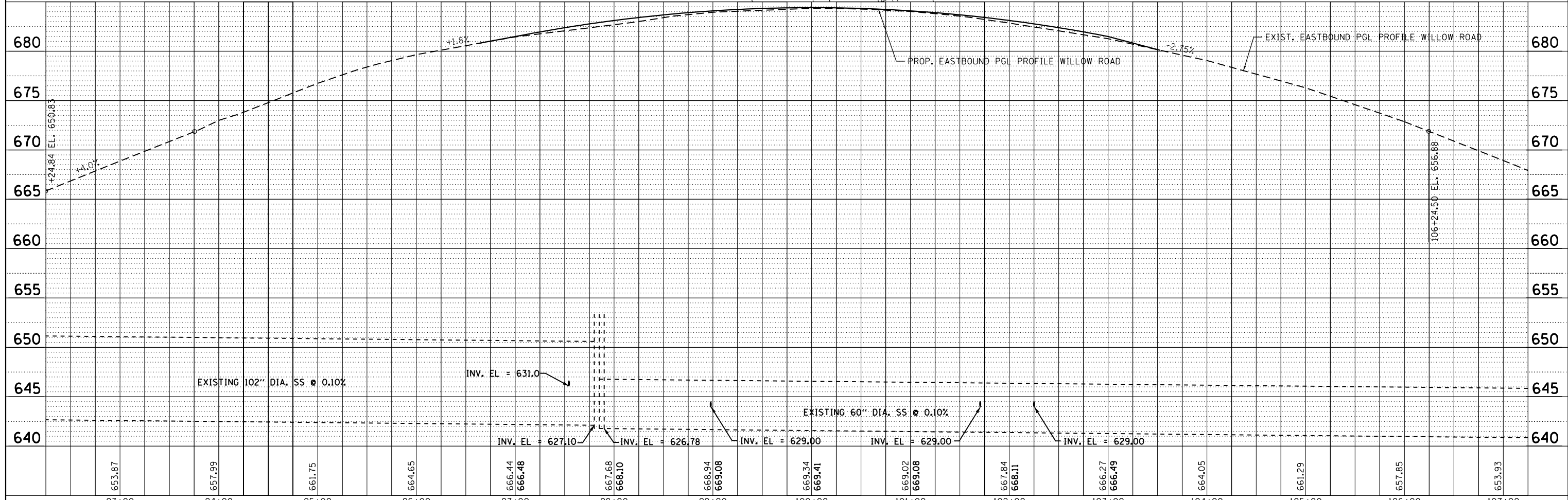
- ⑬ 45'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑭ 132'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑮ 133'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑯ 80'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑰ 230'-PIPE UNDERDRAINS, TYPE 2, 4"
- ⑱ 15'-STORM SEWERS, CLASS A, TYPE 1 12" @ 1.0%



LEGEND

- ① PROPOSED SEWER PIPE NO.
- R STRUCTURE TO BE REMOVED
- ADJ STRUCTURE TO BE ADJUSTED
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED UNDERDRAIN
- STORM SEWER TO BE REMOVED
- PROPOSED DRAINAGE STRUCTURE

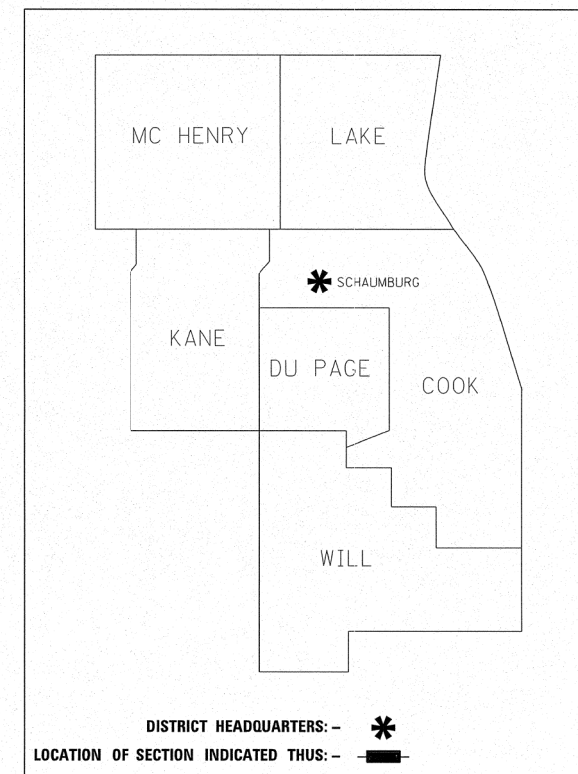
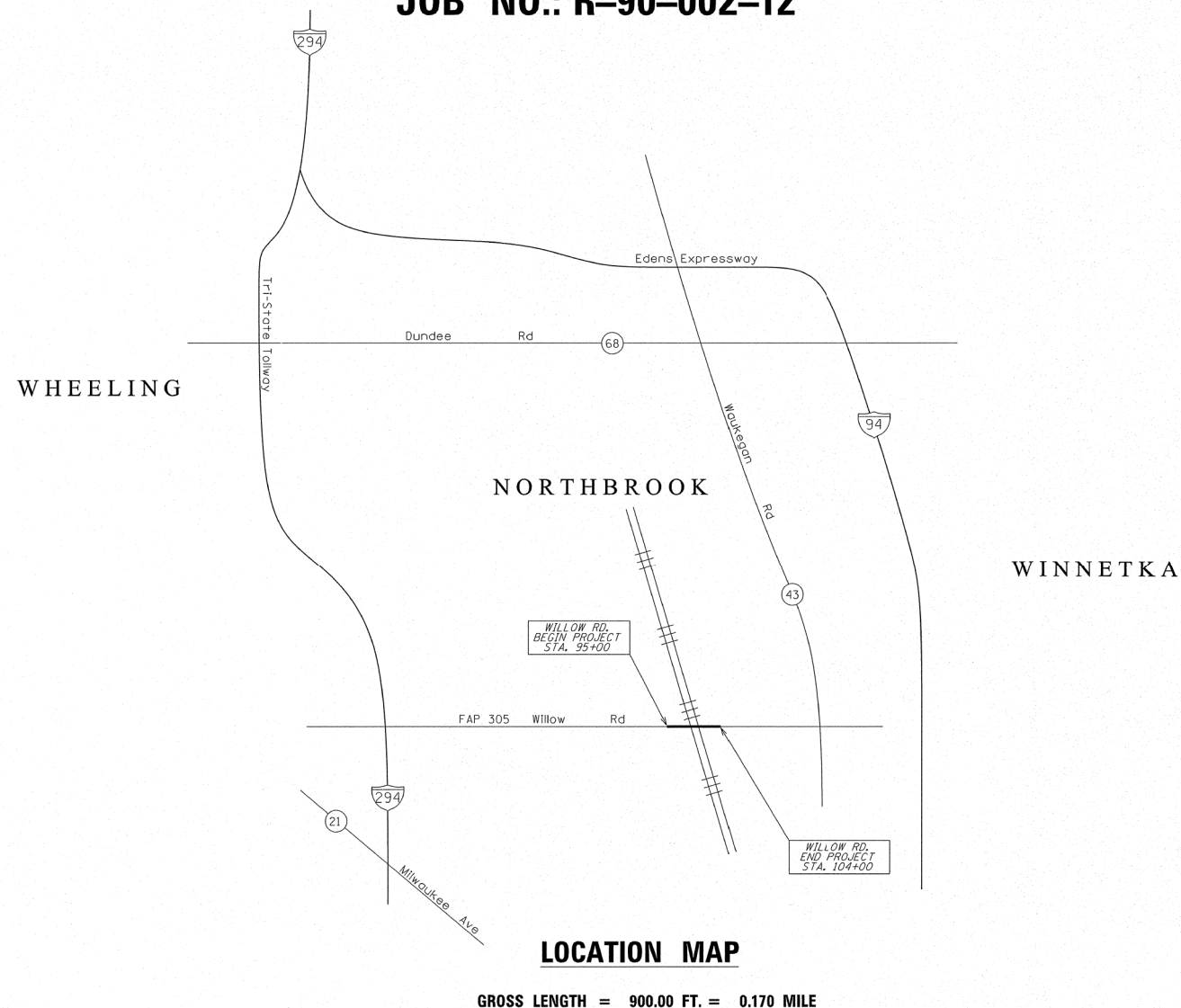
NOTE 1- LENGTHS ARE APPROXIMATE, CONTRACTOR TO DIRECTLY CONNECT PROPOSED 12" RCP. CONTRACTOR TO VERIFY LOCATION BEFORE DRAINAGE PIPE. SEE B0.07 FOR CONNECTING DETAIL. FOR DRAINAGE STRUCTURES SEE SCHEDULES SHEET



	USER NAME = MS-USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE AND UTILITIES PLAN AND PROFILE	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -			305	1920.01-BR	COOK	194	37
	PLOT DATE = 12/13/2018	DATE - 11/21/17	REVISED -			CONTRACT NO. 60N83			ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS

ROUTE: FAP 305 WILLOW ROAD
SECTION:
COUNTY: COOK
LIMITS: AT METRA (FKA, SOO RAILROAD)
JOB NO.: R-90-002-12



**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

RT & A Ruettiger, Tonelli & Associates, Inc.
Surveyors • Engineers • Planners • Landscape Architects • G.I.E. Consultants
129 CAPSTA DRIVE - SHOREWOOD, ILLINOIS 60404
PH. (815) 744-6600 FAX (815) 744-0101
website: www.ruettiger.com
R.T. & A. Dwg. No.: 2013-1008

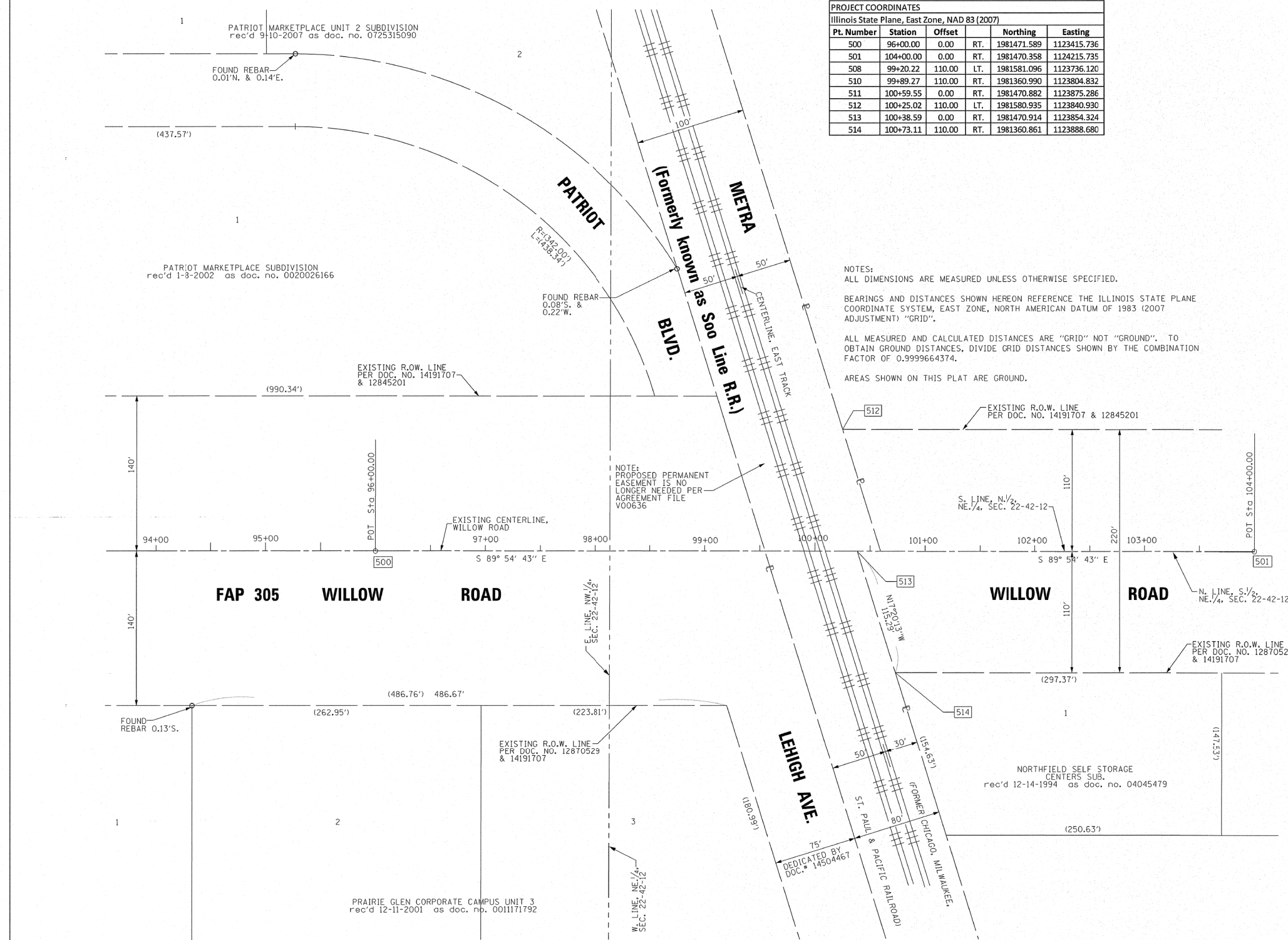
IDOT USE ONLY

RECEIVED
OCT 20 2014
PLATS & LEGALS

REVISED: 10-20-2014/Per IDOT request

MILHOUSE	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RIGHT-OF-WAY PLANS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -		SCALE: 1"=20'	SHEET 1 OF 2 SHEETS	STA. 96+61.4 TO STA. 103+52.5	305	1920.01-BR	COOK	194	38
	PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -				CONTRACT NO. 60N83					
ILLINOIS FED. AID PROJECT												

PART OF THE NW.1/4 & NE.1/4 OF SECTION 22 TWP. 42N., R.12E. OF THE 3RD. P.M., IN COOK COUNTY, ILLINOIS.



PROJECT COORDINATES					
Illinois State Plane, East Zone, NAD 83 (2007)					
Pt. Number	Station	Offset		Northing	Easting
500	96+00.00	0.00	RT.	1981471.589	1123415.736
501	104+00.00	0.00	RT.	1981470.358	1124215.735
508	99+20.22	110.00	LT.	1981581.096	1123736.120
510	99+89.27	110.00	RT.	1981360.990	1123804.832
511	100+59.55	0.00	RT.	1981470.882	1123875.286
512	100+25.02	110.00	LT.	1981580.935	1123840.930
513	100+38.59	0.00	RT.	1981470.914	1123854.324
514	100+73.11	110.00	RT.	1981360.861	1123888.680

NOTES:
 ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.
 BEARINGS AND DISTANCES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) "GRID".
 ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION FACTOR OF 0.9999664374.
 AREAS SHOWN ON THIS PLAT ARE GROUND.

LEGEND

SECTION / QUARTER SECTION LINE
 PLATTED LOT LINES
 PROPERTY (DEED) LINE
 APPARENT PROPERTY LINE
 EXISTING CENTERLINE
 PROPOSED CENTERLINE
 EXISTING RIGHT OF WAY LINE
 PROPOSED RIGHT OF WAY LINE
 EXISTING EASEMENT
 PROPOSED EASEMENT
 EXISTING ACCESS CONTROL LINE
 PROPOSED ACCESS CONTROL LINE
 MEASURED DIMENSION
 COMPUTED DIMENSION
 RECORDED DIMENSION
 EXISTING BUILDING

- IRON PIPE OR ROD FOUND ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET ● 5 / 8" REBAR SET
- T1 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- T2
- T3
- BT1 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT2
- BT3
- STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
) SS
 COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, KENNETH J. PESAVENTO, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-001251,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 22, TOWNSHIP 42 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

FIELD WORK COMPLETED ON 10-17-2013.
 DATED AT SHOREWOOD, ILLINOIS THIS DAY OF 2014 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3425
 LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



RT & A Ruettiger, Tonelli & Associates, Inc.
 Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
 129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404
 PH: (815) 744-6000 FAX: (815) 744-0101
 website: www.rtaeng.com
 R.T. & A. Dwg. No.: 2013-1008

PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 FAP 305 WILLOW ROAD

IDOT USE ONLY
 RECEIVED
 OCT 20 2014
 PLATS & LEGALS

LIMITS: @ 500 RAILROAD COUNTY: COOK
 SECTION: JOB NO.: R-90-002-12
 STA. 96+00 TO STA. 104+00
 SCALE: 1"=50' SHEET 2 OF 2 SHEETS

BUREAU OF LAND ACQUISITION
 201 WEST CENTER COURT
 SCHAMBURG, ILLINOIS 60196

REVISION DATE: 10/20/2014 REVISION MADE BY: TLW
 REVISION DATE: 03/28/2014 REVISION MADE BY: TLW
 REVISION DATE: 03/14/2014 REVISION MADE BY: TLW
 REVISION DATE: 12/10/2013 REVISION MADE BY: TLW



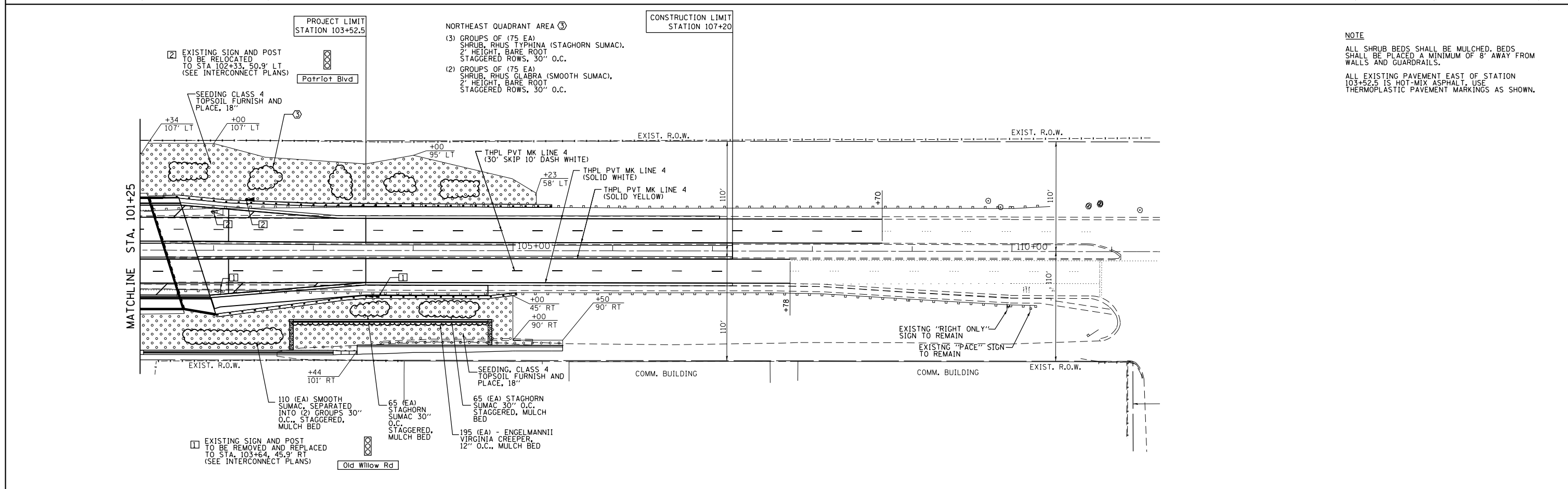
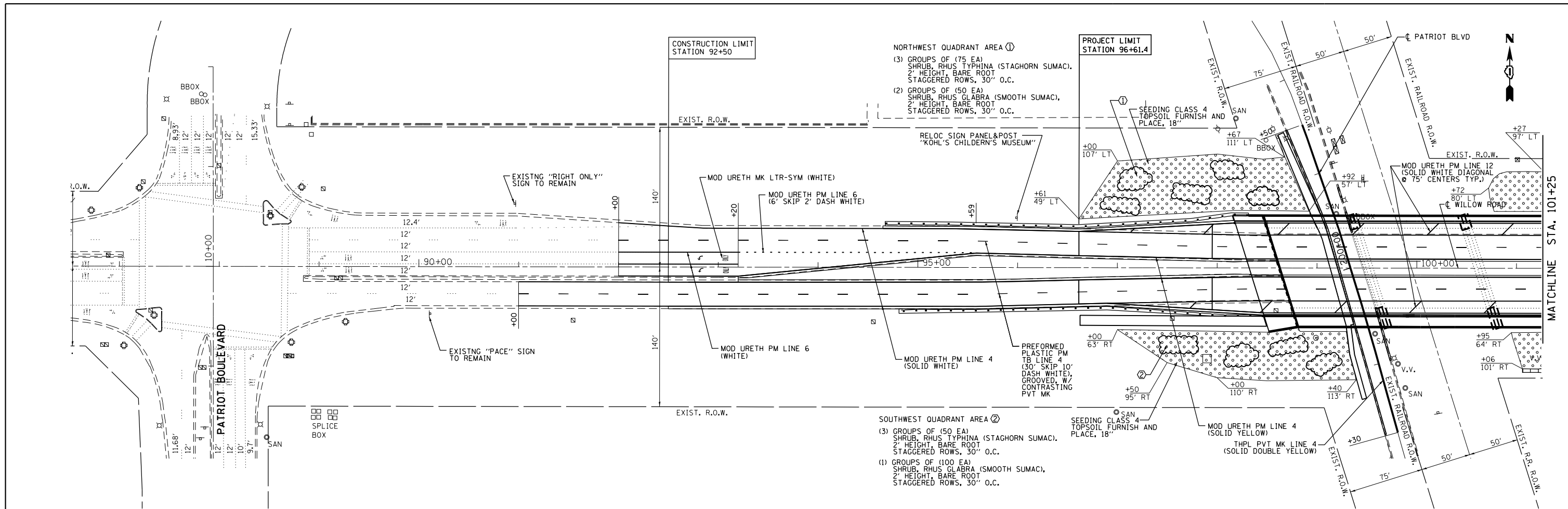
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY PLANS

SCALE: SHEET 2 OF 2 SHEETS STA. 96+61.4 TO STA. 103+52.5

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	39
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

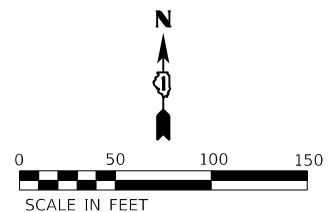
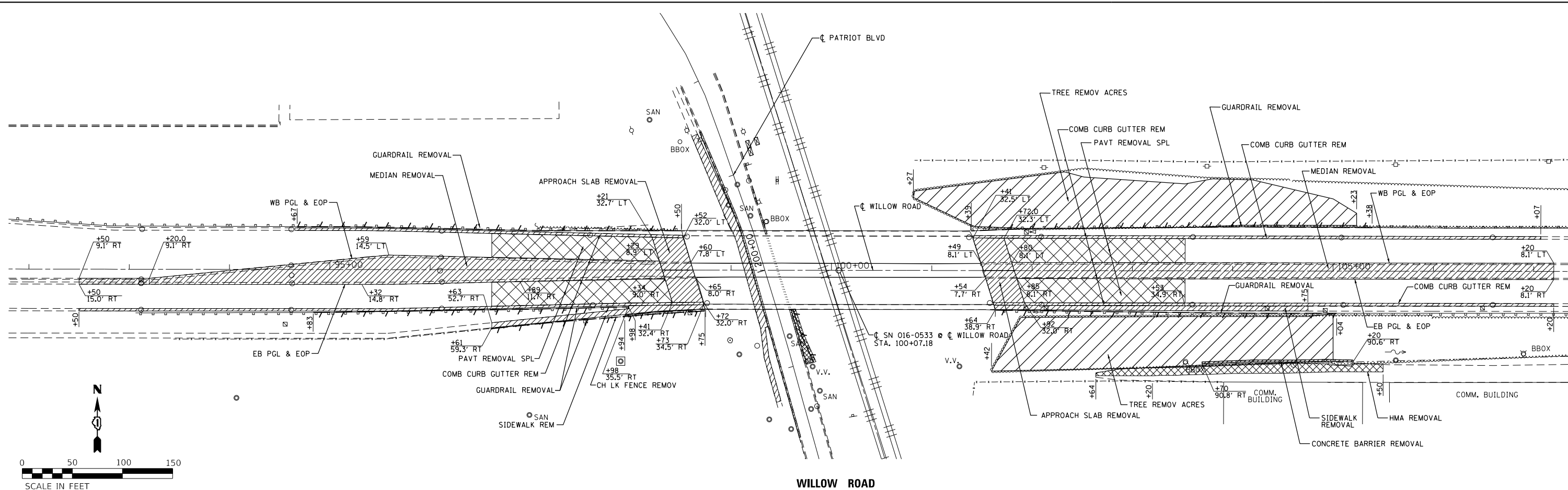


NOTE

ALL SHRUB BEDS SHALL BE MULCHED. BEDS SHALL BE PLACED A MINIMUM OF 8' AWAY FROM WALLS AND GUARDRAILS.

ALL EXISTING PAVEMENT EAST OF STATION 103+52.5 IS HOT-MIX ASPHALT. USE THERMOPLASTIC PAVEMENT MARKINGS AS SHOWN.

MILHOUSE	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING, SIGNAGE AND LANDSCAPING PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -			305	1920.01-BR	COOK	194	40
	PLOT DATE = 12/13/2018	CHECKED - E.JL	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5	CONTRACT NO. 60N83				
		DATE - 11/21/18	REVISED -			ILLINOIS FED. AID PROJECT				



WILLOW ROAD

NOTE:
 1. CONTRACTOR IS TO REPLACE PROPOSED SIDEWALK REMOVAL ITEMS ALONG PATRIOT BLVD IN KIND.



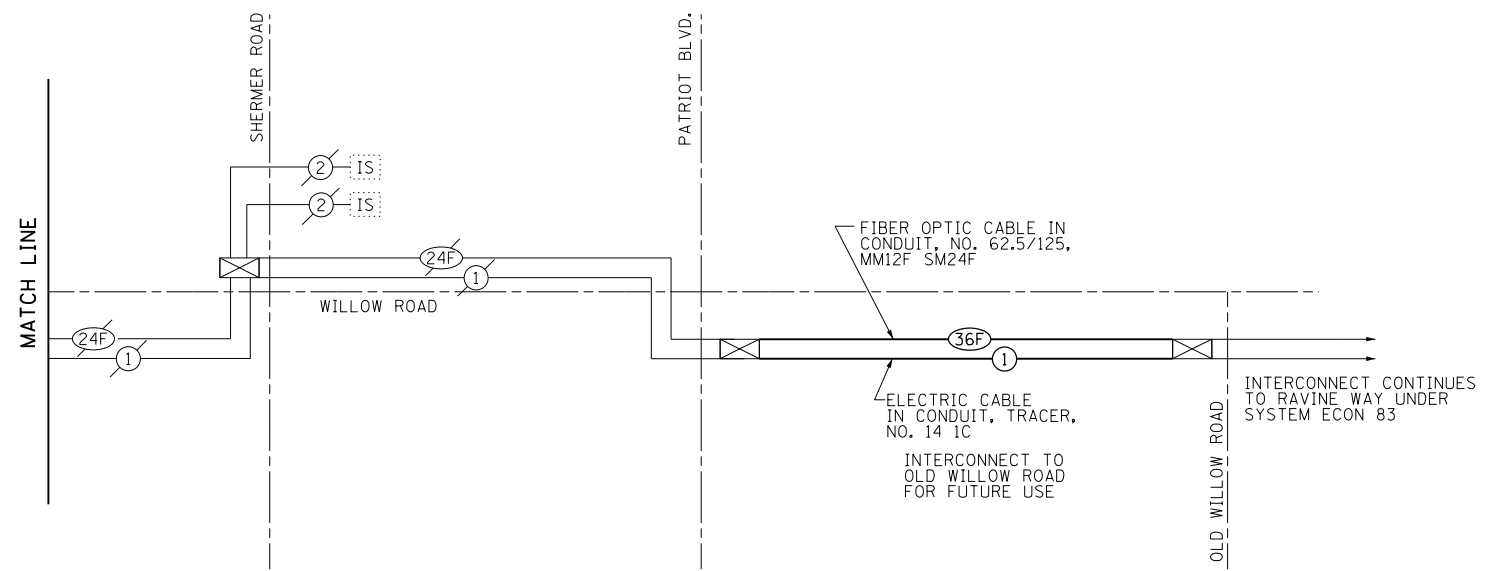
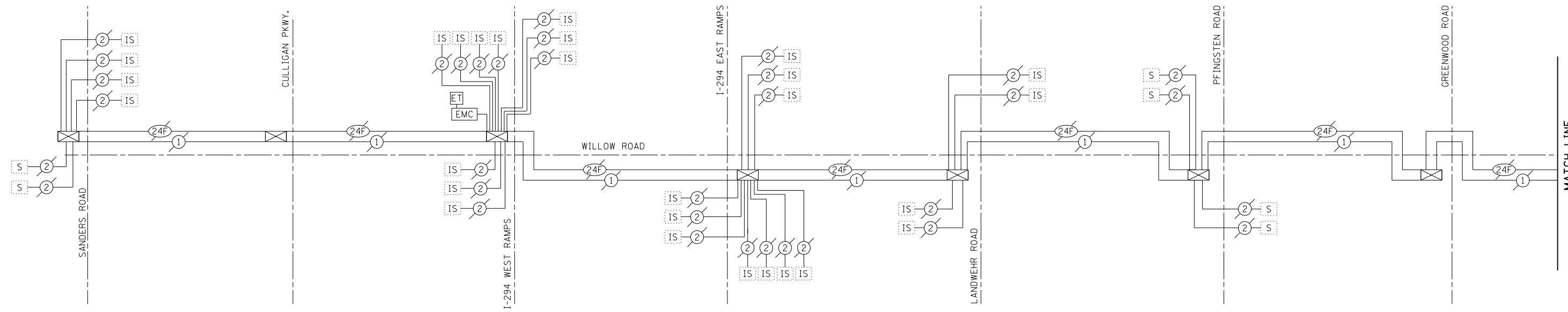
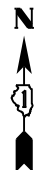
USER NAME = MS_USER	DESIGNED - LAB	REVISED -
	DRAWN - LCR	REVISED -
PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISED -
PLOT DATE = 12/13/2018	DATE - 11/21/18	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

REMOVAL PLAN

SCALE: SHEET 1 OF 1 SHEETS STA. 96+61.4 TO STA. 103+52.5

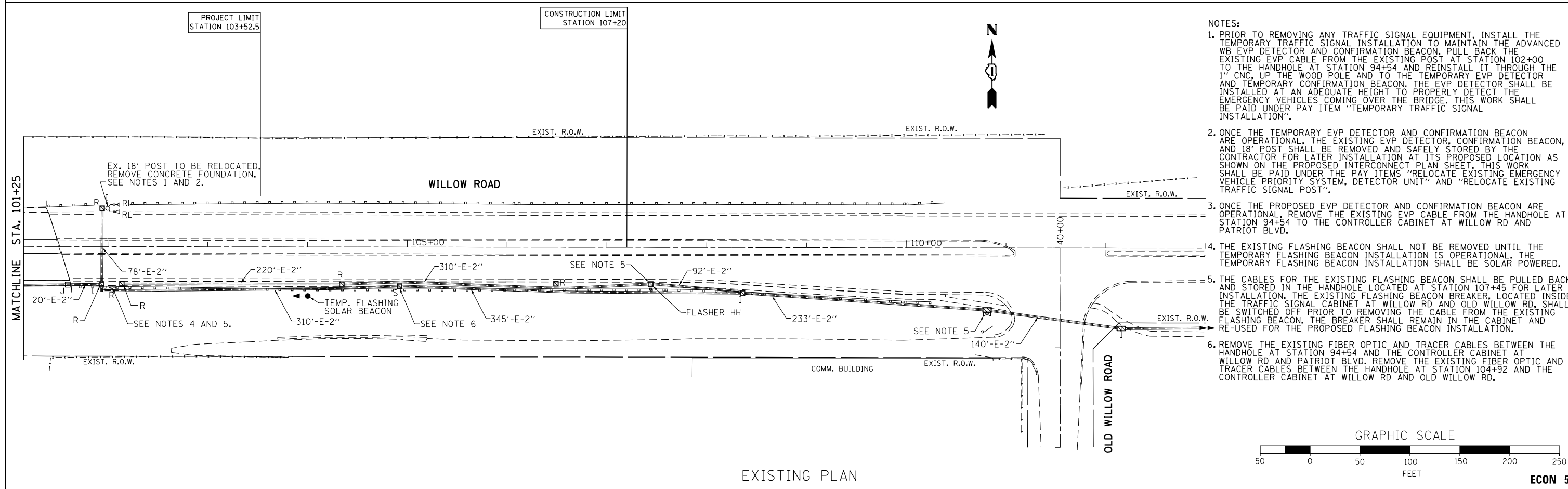
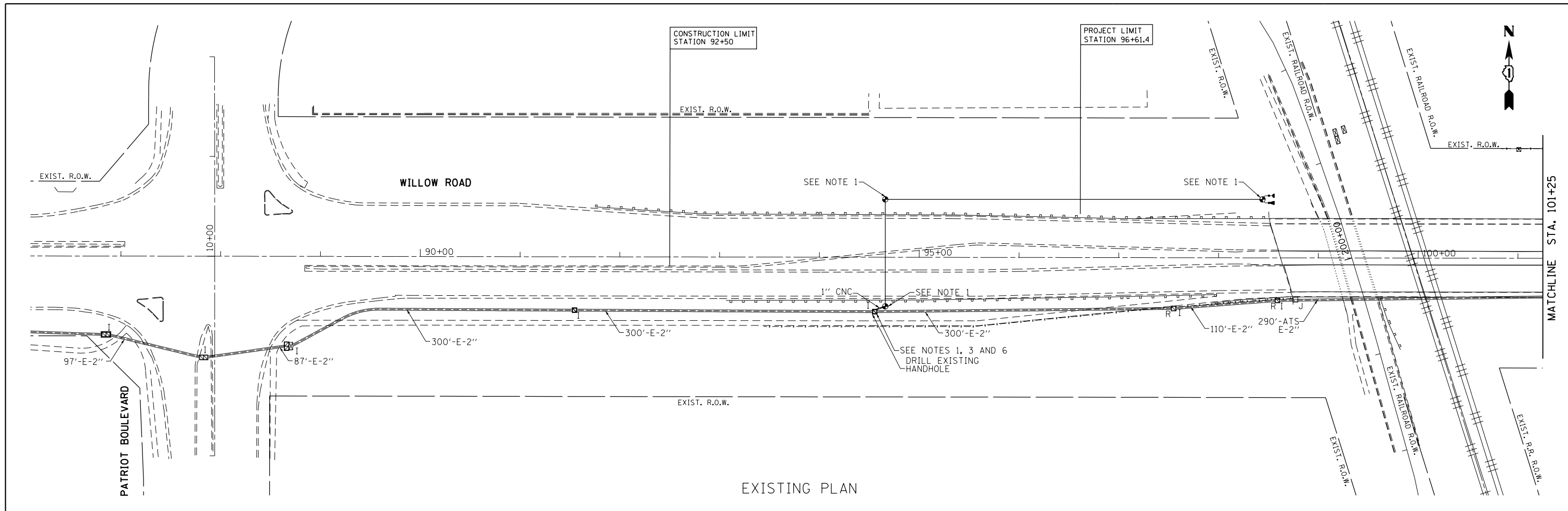
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	41
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



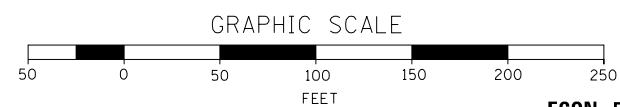
SCHEDULE OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA	FOOT	777
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	431
81200240	CONDUIT EMBEDDED IN STRUCTURE, 2 1/2" DIA., PVC	FOOT	353
81301400	JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 18" X 18" X 6"	EACH	2
81400100	HANDHOLE	EACH	4
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	2,375
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,600
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,570
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8
87900200	DRILL EXISTING HANDHOLE	EACH	4
88000105	FLASHING BEACON INSTALLATION	EACH	1
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4,000
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	550
89502380	REMOVE EXISTING HANDHOLE	EACH	7
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
89502400	REMOVE EXISTING FLASHING BEACON INSTALLATION COMPLETE	EACH	1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,600
X8500100	TEMPORARY FLASHING BEACON INSTALLATION	EACH	1
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	2,375

ECON 5

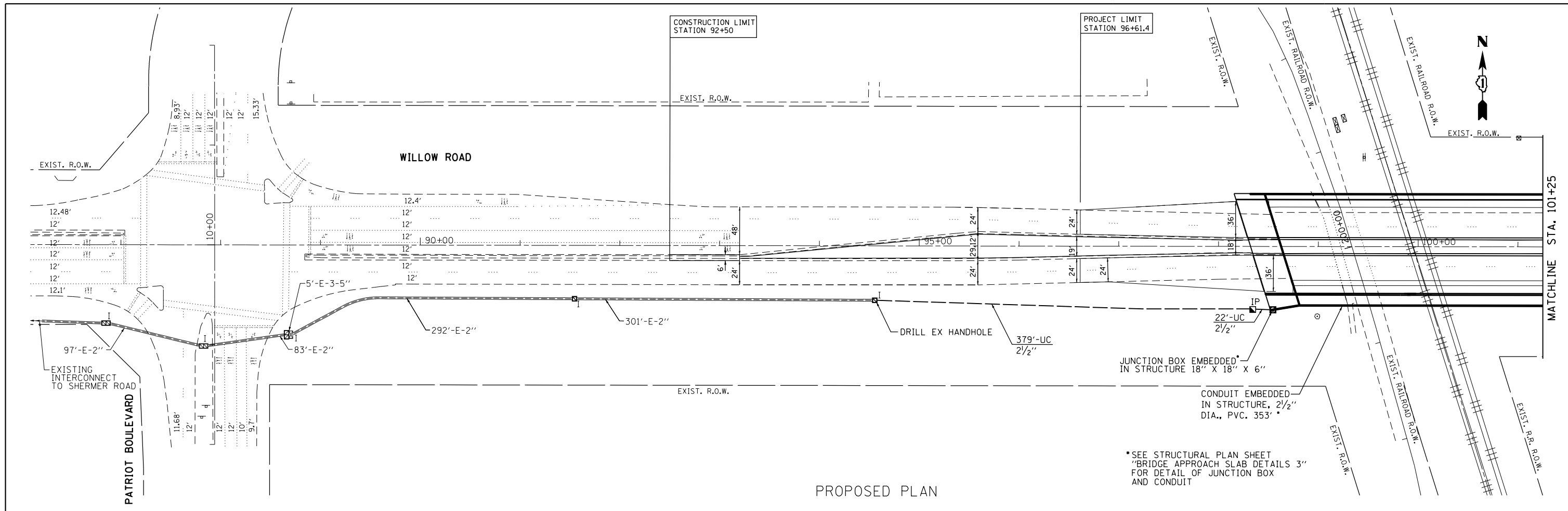
	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED INTERCONNECT SCHEMATIC		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - LCR	REVISIONS -	305				1920.01-BR	COOK	194	42	
	PLOT SCALE = *SCALE*	CHECKED - E.JL	REVISIONS -				CONTRACT NO. 60N83				
PLOT DATE = 1/2/2019	DATE - 11/21/18	REVISIONS -	SCALE:	SHEET 1 OF 1 SHEETS	STA. 96+61.4 TO STA. 103+52.5	ILLINOIS FED. AID PROJECT					



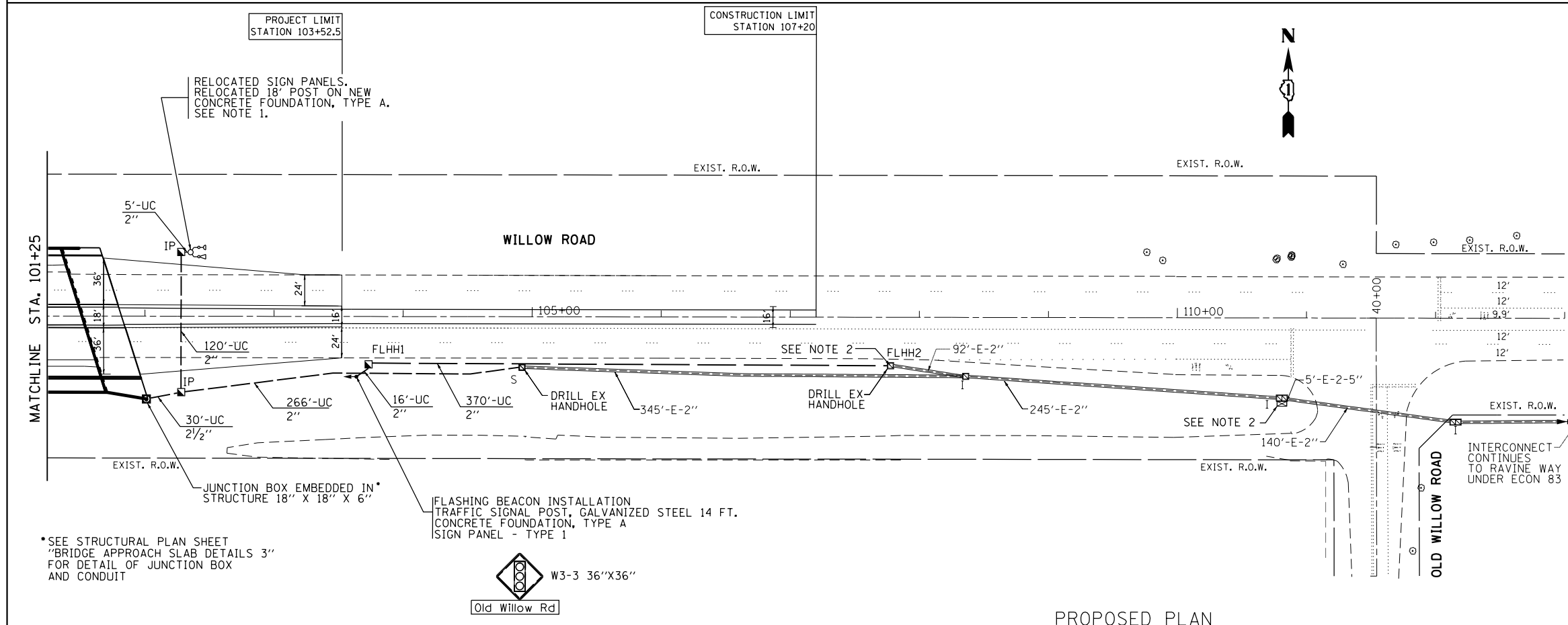
- NOTES:
1. PRIOR TO REMOVING ANY TRAFFIC SIGNAL EQUIPMENT, INSTALL THE TEMPORARY TRAFFIC SIGNAL INSTALLATION TO MAINTAIN THE ADVANCED WB EVP DETECTOR AND CONFIRMATION BEACON, PULL BACK THE EXISTING EVP CABLE FROM THE EXISTING POST AT STATION 102+00 TO THE HANDHOLE AT STATION 94+54 AND REINSTALL IT THROUGH THE 1" CNC, UP THE WOOD POLE AND TO THE TEMPORARY EVP DETECTOR AND TEMPORARY CONFIRMATION BEACON. THE EVP DETECTOR SHALL BE INSTALLED AT AN ADEQUATE HEIGHT TO PROPERLY DETECT THE EMERGENCY VEHICLES COMING OVER THE BRIDGE. THIS WORK SHALL BE PAID UNDER PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION".
 2. ONCE THE TEMPORARY EVP DETECTOR AND CONFIRMATION BEACON ARE OPERATIONAL, THE EXISTING EVP DETECTOR, CONFIRMATION BEACON, AND 18' POST SHALL BE REMOVED AND SAFELY STORED BY THE CONTRACTOR FOR LATER INSTALLATION AT ITS PROPOSED LOCATION AS SHOWN ON THE PROPOSED INTERCONNECT PLAN SHEET. THIS WORK SHALL BE PAID UNDER THE PAY ITEMS "RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT" AND "RELOCATE EXISTING TRAFFIC SIGNAL POST".
 3. ONCE THE PROPOSED EVP DETECTOR AND CONFIRMATION BEACON ARE OPERATIONAL, REMOVE THE EXISTING EVP CABLE FROM THE HANDHOLE AT STATION 94+54 TO THE CONTROLLER CABINET AT WILLOW RD AND PATRIOT BLVD.
 4. THE EXISTING FLASHING BEACON SHALL NOT BE REMOVED UNTIL THE TEMPORARY FLASHING BEACON INSTALLATION IS OPERATIONAL. THE TEMPORARY FLASHING BEACON INSTALLATION SHALL BE SOLAR POWERED.
 5. THE CABLES FOR THE EXISTING FLASHING BEACON SHALL BE PULLED BACK AND STORED IN THE HANDHOLE LOCATED AT STATION 107+45 FOR LATER INSTALLATION. THE EXISTING FLASHING BEACON BREAKER, LOCATED INSIDE THE TRAFFIC SIGNAL CABINET AT WILLOW RD AND OLD WILLOW RD, SHALL BE SWITCHED OFF PRIOR TO REMOVING THE CABLE FROM THE EXISTING FLASHING BEACON. THE BREAKER SHALL REMAIN IN THE CABINET AND RE-USED FOR THE PROPOSED FLASHING BEACON INSTALLATION.
 6. REMOVE THE EXISTING FIBER OPTIC AND TRACER CABLES BETWEEN THE HANDHOLE AT STATION 94+54 AND THE CONTROLLER CABINET AT WILLOW RD AND PATRIOT BLVD. REMOVE THE EXISTING FIBER OPTIC AND TRACER CABLES BETWEEN THE HANDHOLE AT STATION 104+92 AND THE CONTROLLER CABINET AT WILLOW RD AND OLD WILLOW RD.



	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -					305	1920.01-BR	COOK	194	43
	PLOT DATE = 1/4/2019	CHECKED - E.JL	REVISED -					CONTRACT NO. 60N83				
				SCALE: SHEET OF SHEETS STA. 96+61.4 TO STA. 103+52.5			ILLINOIS FED. AID PROJECT					

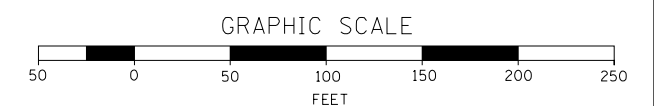


PROPOSED PLAN



PROPOSED PLAN

- NOTES:
1. THE ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C AND THE EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C WILL BE INSTALLED FROM THIS POST/HANDHOLE TO THE CONTROLLER CABINET AT WILLOW ROAD AND PATRIOT BOULEVARD. THE POST AND HANDHOLES WITH THE ELECTRIC CABLE FOR THE EMERGENCY VEHICLE PREEMPTION WILL BE GROUNDED. THE CONDUIT BETWEEN THE HANDHOLE ADJACENT TO THE POST WITH THE EVP EQUIPMENT AND THE DOUBLE HANDHOLE IN FRONT OF THE CONTROLLER CABINET AT WILLOW ROAD AND PATRIOT BLVD WILL REQUIRE GROUNDING CABLE RUNNING THROUGH IT.
 2. REINSTALL THE CABLES FOR THE EXISTING FLASHING BEACON THAT WERE STORED IN HANDHOLE (FLHH2) LOCATED AT STATION 107+45 THROUGH THE PROPOSED CONDUIT AND HANDHOLE (FLHH1) AND TO THE PROPOSED FLASHING BEACON INSTALLATION. THE EXISTING FLASHING BEACON BREAKER, LOCATED INSIDE THE TRAFFIC SIGNAL CABINET AT WILLOW RD AND OLD WILLOW RD, SHALL BE RE-USED FOR THE PROPOSED FLASHING BEACON INSTALLATION.



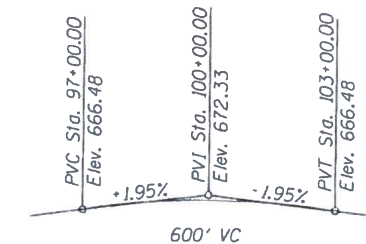
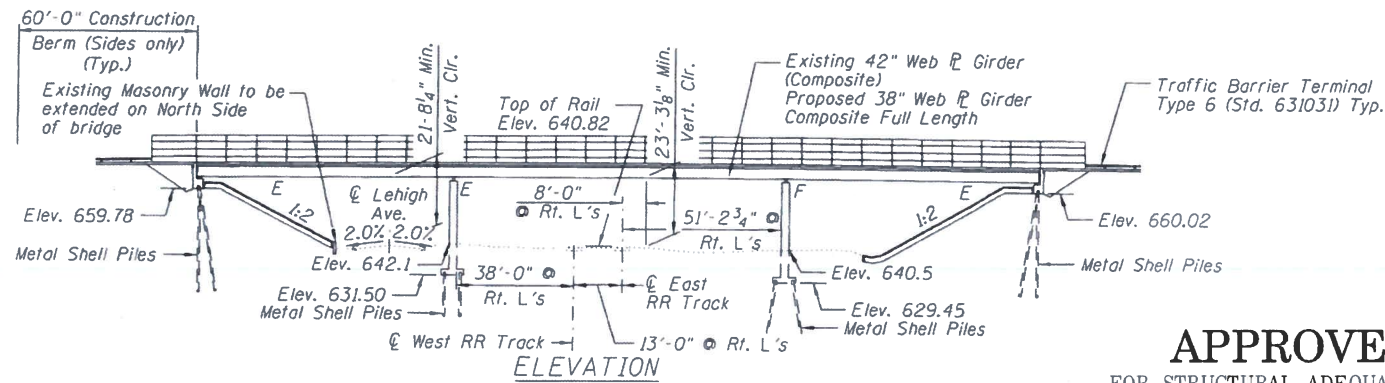
	USER NAME = MS_USER	DESIGNED - LAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TRAFFIC SIGNAL INTERCONNECT PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	DRAWN - LCR	REVISED -					305	1920.01-BR	COOK	194	44
PLOT DATE = 1/7/2019	CHECKED - E.JL	DATE - 11/21/18	REVISED -	SCALE: SHEET OF SHEETS STA. 96+61.4 TO STA. 103+52.5			CONTRACT NO. 60N83 ILLINOIS FED. AID PROJECT					

Bench Mark BM: Located on southwest wingwall, Sta. 98+74.59, 40.03' Rt., Elev. 669.03

Existing Structure: S.N. 016-0533 originally constructed in 1942 as CH Route 110. The structure was reconstructed and widened in 1969 as County Highway 110 and there were deck repairs in 2006. The existing structure consists of a 3 span composite continuous steel beam bridge supported on the original closed concrete abutments, widened pile stub abutments, and the original and widened footing supported piers. The back to back of abutment length is 290'-10" and out to out of deck is 80'-0". The existing deck is to be removed and the structure widened on both sides.

Traffic to be maintained utilizing stage construction. Traffic to be maintained on Lehigh Ave. during pier widening.

Salvage: See General Notes 13 on Sheet 2.



**EXISTING PROFILE GRADE
T/RAIL EAST RR TRACK**

Station	Elevation
599+01.02	640.67
599+61.61	640.76
600+01.58	640.79
600+38.61	640.82
601+02.43	640.86

**PROFILE GRADE
(located at 9.0' off of Willow Road)**

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges 17th Edition

DESIGN STRESSES

FIELD UNITS (New Construction)

$f'_c = 3,500$ psi
 $f'_c = 4,000$ psi (Superstructure Concrete)
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)

FIELD UNITS (Existing Construction)

$f'_c = 1,400$ psi
 $f_s = 20,000$ psi (reinforcement)
 $f_s = 20,000$ psi (structural steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration Coefficient (A) = 0.035g
 Site Coefficient (S) = 1.0

**EXISTING PROFILE GRADE
T/RAIL WEST RR TRACK**

Station	Elevation
498+97.84	640.63
499+62.04	640.68
499+98.07	640.70
500+39.05	640.70
500+98.30	640.75

**EXISTING PROFILE GRADE
LEHIGH AVE.**

Station	Elevation
199+12.97	641.55
199+61.61	641.87
199+98.45	642.24
200+39.05	642.67
200+91.39	642.57

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

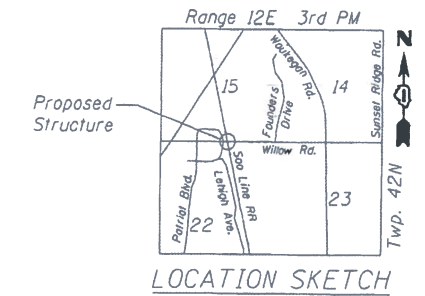
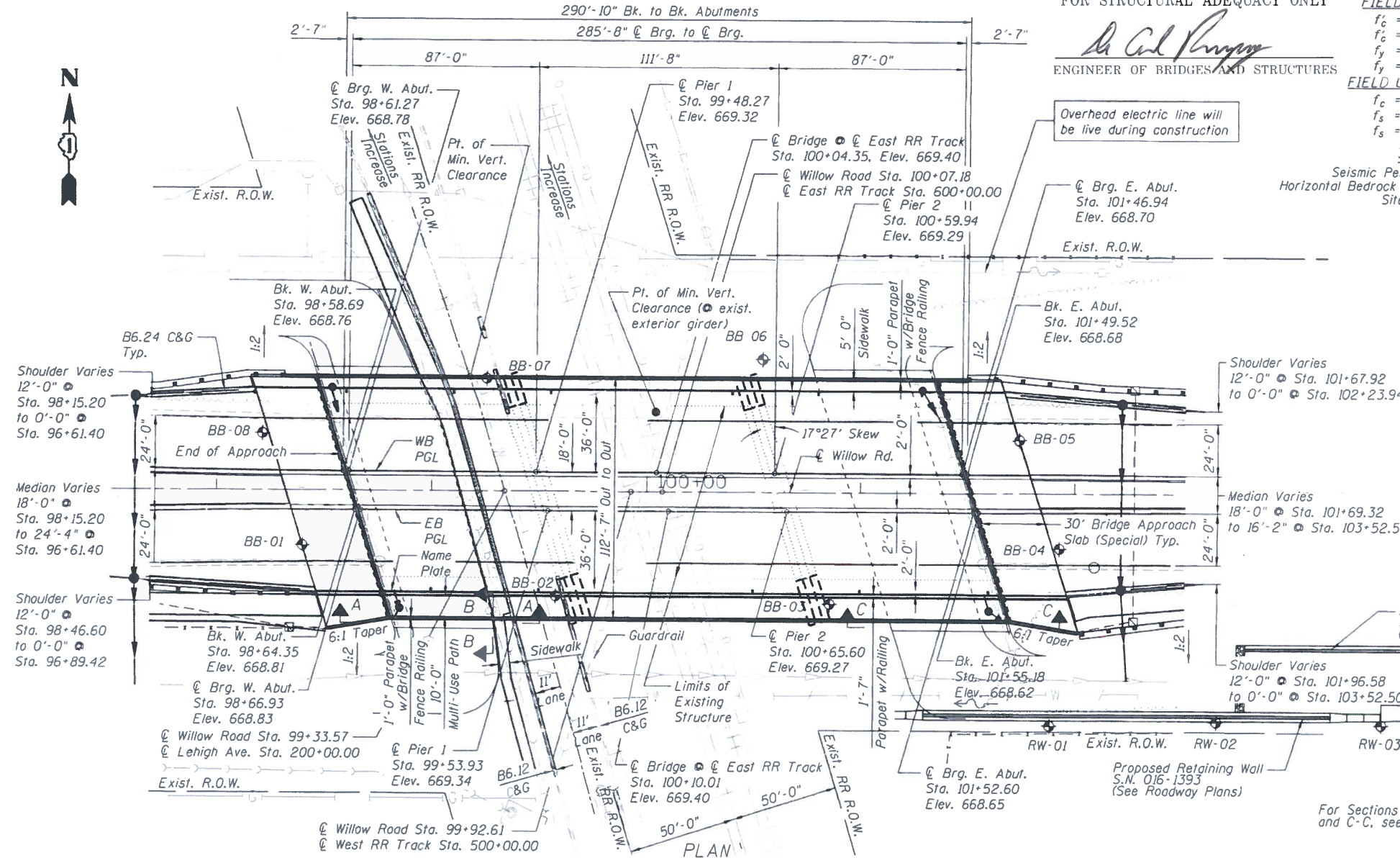
Frederic C. Owens
ENGINEER OF BRIDGES AND STRUCTURES

Overhead electric line will be live during construction



Frederic C. Owens 11/31/19
Signature Date

November 30, 2020
Expires



**GENERAL PLAN
WILLOW ROAD OVER LEHIGH AVENUE
& 500 LINE RAILROAD
FAP 305 SEC. 1920.01-BR
COOK COUNTY
STA. 100+07.18
STRUCTURE NO. 016-0533**

For Sections A-A, B-B and C-C, see Sheet 2

	USER NAME = MS.USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN STRUCTURE NO. 016-0533	SHEET NO. 45 TOTAL SHEETS 194	COUNTY COOK SECTION 1920.01-BR	CONTRACT NO. 60NB3
	PLOT SCALE = 1/8\"/>							
	PLOT DATE = 1/31/2019	CHECKED - LAS	REVISED -					

FILE#

GENERAL NOTES

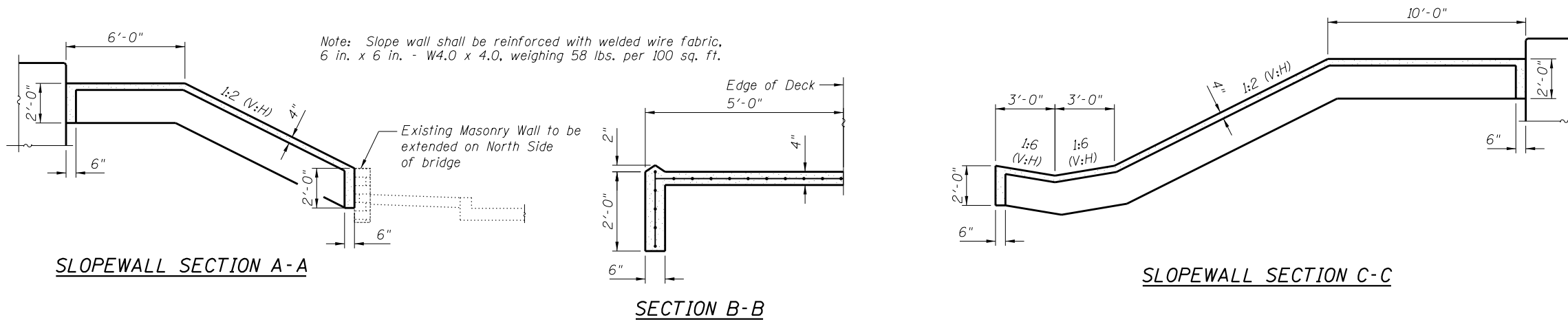
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in dia., holes $\frac{15}{16}$ in dia., unless otherwise noted.
- Calculated weight of Structural Steel = 411,640 lbs.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ in. (0.01 ft). Adjustment shall be made either by grinding the surface or by shiming the bearings.
- Concrete Sealer shall be applied to the designated areas of the new concrete backwall, bridge seat and front face of pile cap of the abutments.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5 YR 3/4.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Slipforming of the parapets is not allowed.
- The Contractor shall salvage the existing protective shielding and the existing aluminum railing including all posts, rails and fasteners. These items should be transported and unloaded by the Contractor to the District Bridge Yard in Elk Grove at 1101 Biesterfeld Road during the week days of Monday-Friday between the hours of 8 AM and 2 PM. The Contractor shall notify the District Bridge Office 48 hours in advance of the delivery at (847) 956-1444. Cost included in Removal of Existing Concrete Deck.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd		50.9	50.9
Masonry Removal	Cu Yd		0.2	0.2
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq Yd	1,766		1,766
Structure Excavation	Cu Yd		961	961
Concrete Structures	Cu Yd		470.1	470.1
Concrete Superstructure	Cu Yd	1,130.0		1,130.0
Bridge Deck Grooving	Sq Yd	3,576		3,576
Protective Coat	Sq Yd	5,429		5,429
Concrete Superstructure (Approach Slab)	Cu Yd	350.5		350.5
Furnishing and Erecting Structural Steel	L Sum	1		1
Stud Shear Conectors	Each	19,074		19,074
Reinforcement Bars, Epoxy Coated	Pound	359,560	66,630	426,190
Bar Splicers	Each	2,074	450	2,524
Bridge Fence Railing	Foot	673		673
Parapet Railing	Foot	348		348
Slope Wall 4 Inch	Sq Yd		1,576	1,576
Furnishing Metal Shell Piles 14" x 0.250"	Foot		2,409	2,409
Driving Piles	Foot		2,409	2,409
Test Pile Metal Shells	Each		4	4
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	274		274
Elastomeric Bearing Assembly, Type I	Each	34		34
Elastomeric Bearing Assembly, Type II	Each	17		17
Anchor Bolts, $\frac{5}{8}$ "	Each	136		136
Anchor Bolts, $1\frac{1}{4}$ "	Each	44		44
Temporary Sheet Piling	Sq Ft		2,830	2,830
Concrete Sealer	Sq Ft		1,743	1,743
Epoxy Crack Injection	Foot		90	90
Geocomposite Wall Drain	Sq Yd		216	216
Conduit Embedded in Structure, 2 $\frac{1}{2}$ " Dia., PVC	Foot	353		353
Junction Box, Stainless Steel, Embedded in Structure, 18"x18"x6"	Each	2		2
Cleaning and Painting Steel Bridge No. 1	L Sum	1		1
Granular Backfill for Structures	Cu Yd		407	407
Jack and Remove Existing Bearings	Each	36		36
Approach Slab Removal	Sq Yd	361		361
Drainage System	L Sum	1		1
Containment and Disposal of Lead Paint Cleaning Residues	L Sum	1		1
Cleaning Bridge Seats	Sq Ft		378	378
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq Ft		56	56
Structural Repair of Concrete (Depth Greater Than 5")	Sq Ft		44	44
Drainage Scuppers, DS-12	Each	11		11
Masonry Wall Construction	Sq Ft		132	132
Pipe Underdrains For Structures, 4"	Foot		358	358

INDEX OF SHEETS

- General Plan
- General Data 1
- General Data 2
- Stage Construction
- Temporary Concrete Barrier for Stage Construction
- Top of Slab Elevations 1
- Top of Slab Elevations 2
- Top of Slab Elevations 3
- Top of Slab Elevations 4
- Top of Slab Elevations 5
- West Approach Top of Slab Elevations
- East Approach Top of Slab Elevations
- Superstructure 1
- Superstructure 2
- Superstructure Details 1
- Superstructure Details 2
- Superstructure Details 3
- Superstructure Details 4
- Drainage Scupper, DS-12
- Bridge Approach Slab Details 1
- Bridge Approach Slab Details 2
- Bridge Approach Slab Details 3
- Parapet Railing
- Bridge Fence Railing, Parapet Mounted
- Preformed Joint Strip Seal-Sidewalk 1
- Preformed Joint Strip Seal-Sidewalk 2
- Preformed Joint Strip Seal-Sidewalk 3
- Framing Plan
- Structural Steel Details 1
- Structural Steel Details 2
- West Abutment Bearing Details
- East Abutment Bearing Details
- Pier Bearing Details
- Existing Abutment Removal Details
- West Abutment Elevation
- West Abutment Top View
- West Abutment Pile Cap Plan
- East Abutment Elevation
- East Abutment Top View
- East Abutment Pile Cap Plan
- West Abutment Details
- East Abutment Details
- Abutment Details
- Pier Repair Details
- Pier 1
- Pier 2
- Masonry Wall
- Drainage System
- Bar Splicer Assembly and Mechanical Splicer Details
- Metal Shell Pile Details
- Boring Logs 1
- Boring Logs 2
- Boring Logs 3
- Boring Logs 4
- Boring Logs 5
- Boring Logs 6
- Boring Logs 7



STATION 100+07.18
REBUILT 201. BY
STATE OF ILLINOIS
F.A.P. RT. 305
SEC. 1920.01-BR
LOADING HS20-44
STR. NO. 016-0533

NAME PLATE
See Std. 515001

Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.

FILED



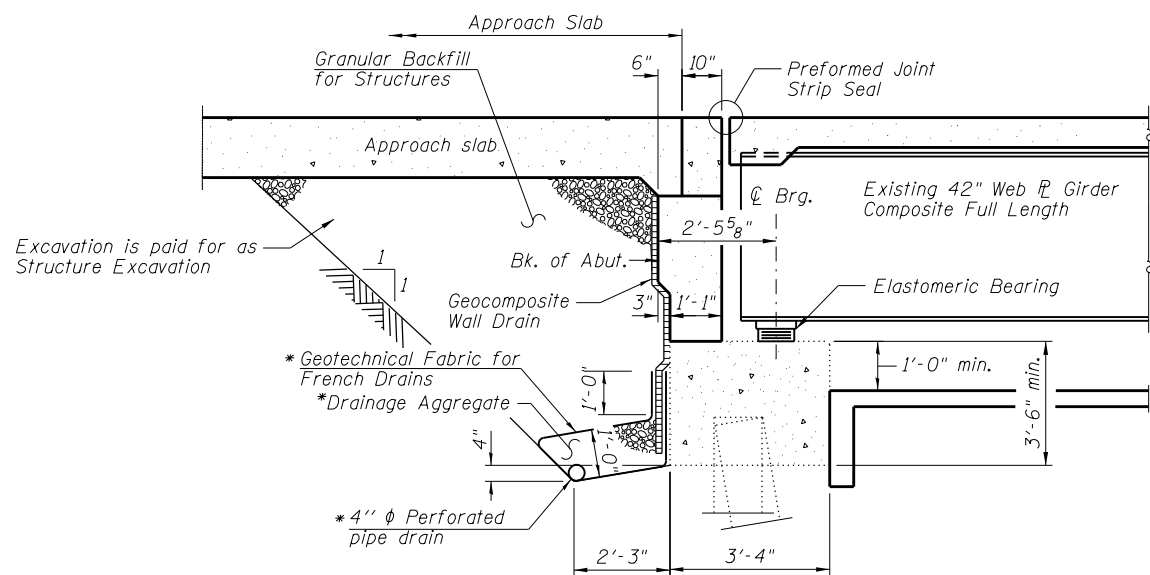
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA 1
STRUCTURE NO. 016-0533

SHEET NO. 2 OF 57 SHEETS

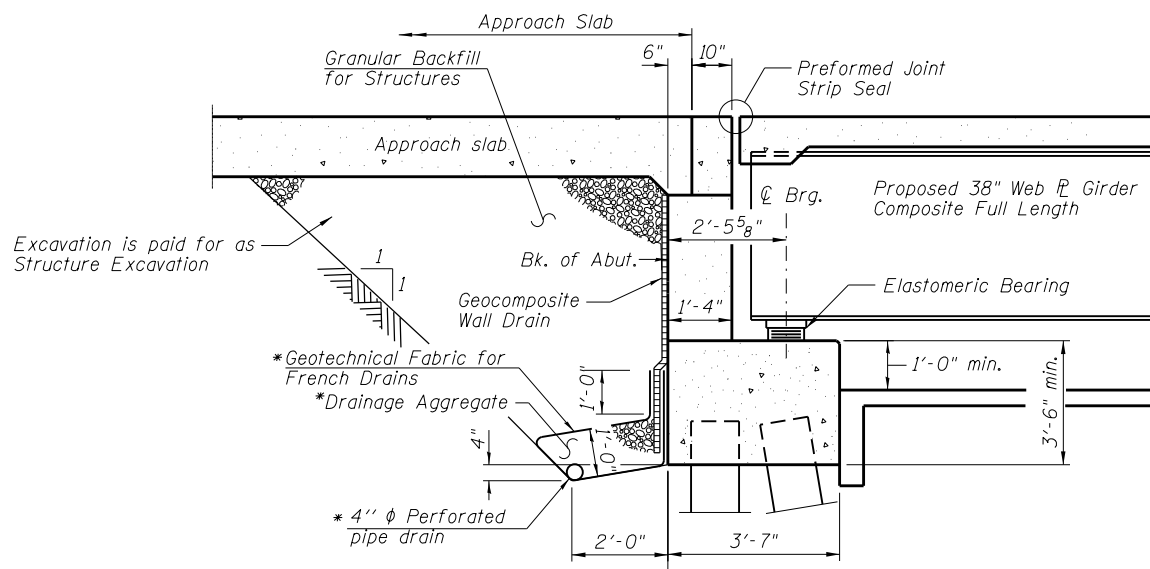
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	46
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



SECTION THRU EXISTING ABUTMENTS

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

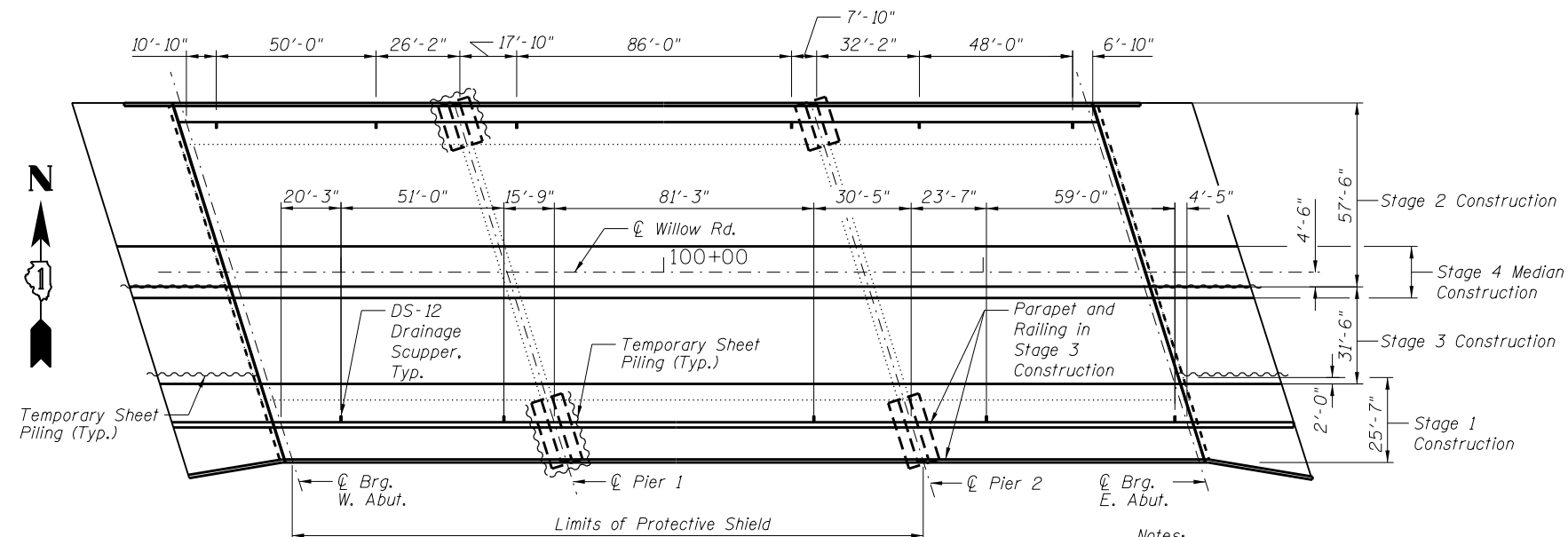


SECTION THRU PROPOSED ABUTMENTS

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

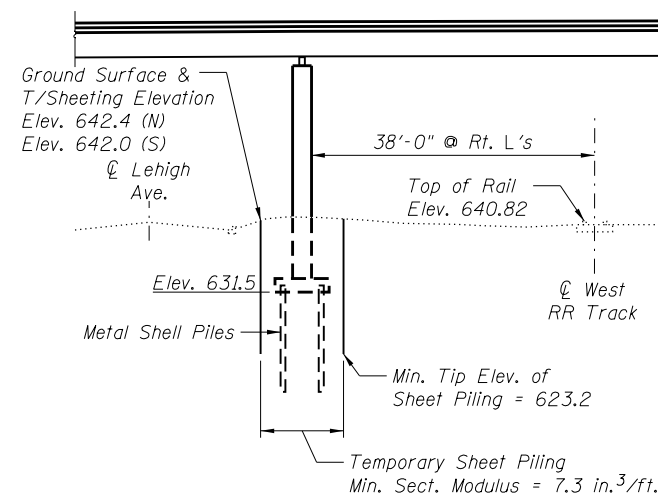
All drainage system components shall extend 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



STAGING, PROTECTIVE SHIELD & SCUPPER LOCATION PLAN

Notes:
Scuppers shall be located clear of all diaphragms.

See Stage Construction Detail on Sheet 16 for location of joint between Stage 1 and Stage 3.



TEMPORARY SHEET PILING

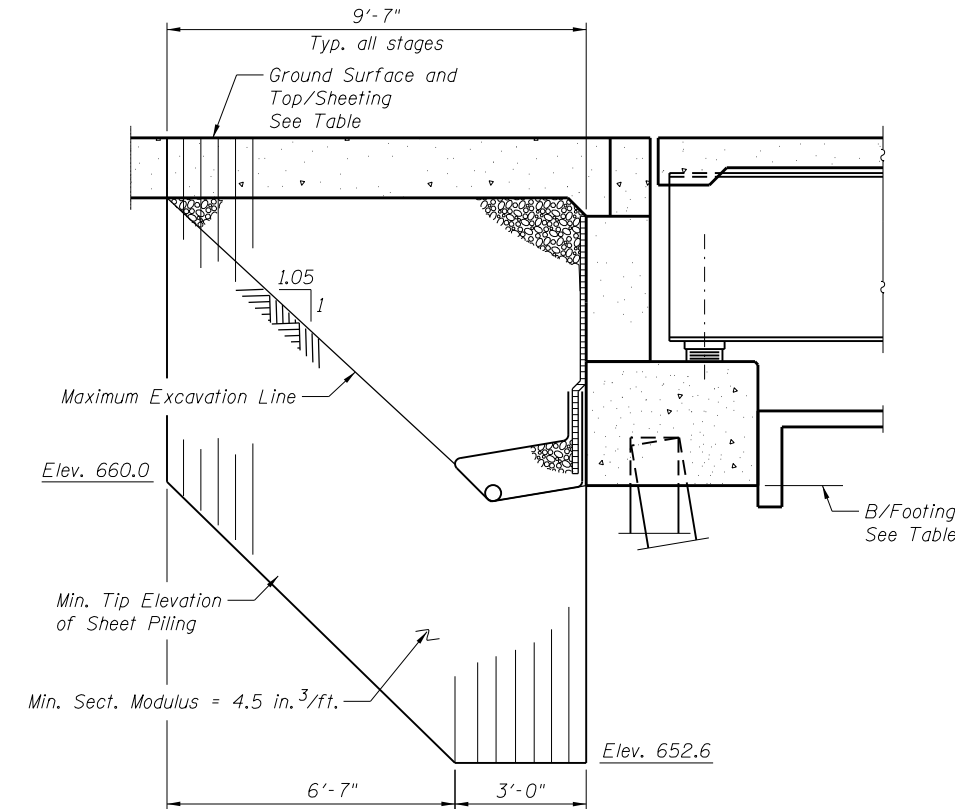
(Pier 1)

Notes:

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Total Length Stage 1 Sheeting = 68'

Total Length Stage 2 Sheeting = 54'



TEMPORARY SHEET PILING

(Proposed W. Abut. shown, other locations similar)

TABLE OF ELEVATIONS

Location	Stage	Ground Surface Elevation	B/Footing Elevation
W. Abut.	1/3	668.5	659.8
W. Abut.	2/3	668.9	660.0
E. Abut.	1/3	668.2	660.0
E. Abut.	2/3	668.7	660.0

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

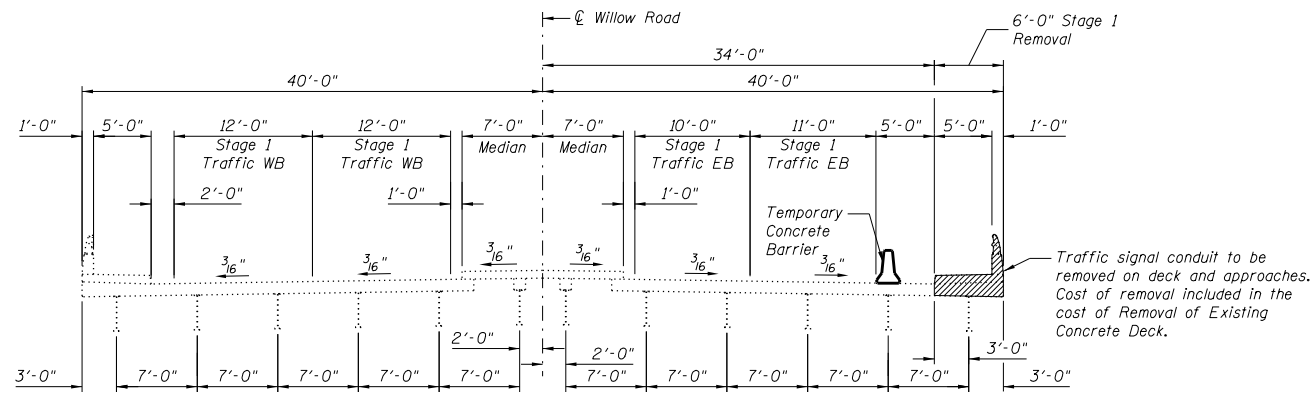
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA 2
STRUCTURE NO. 016-0533

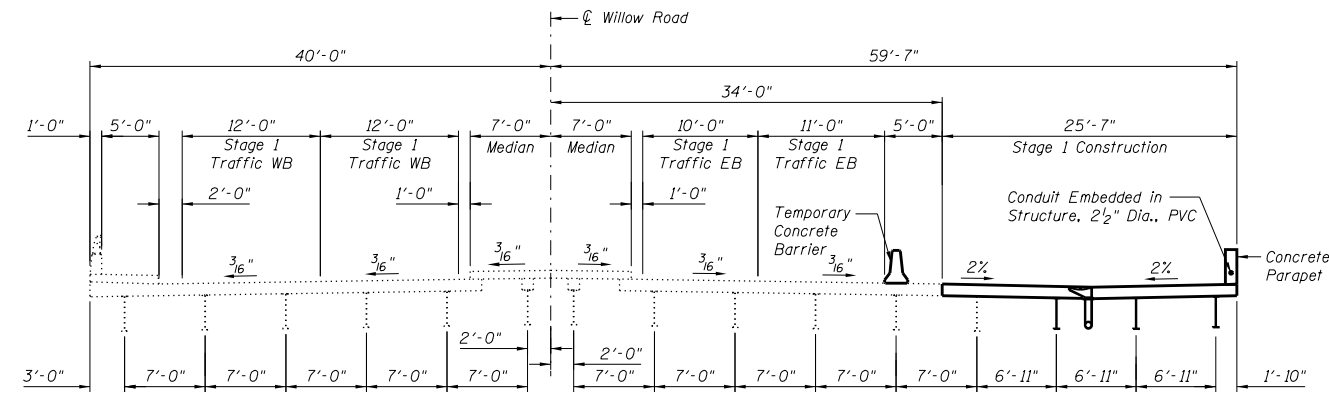
SHEET NO. 3 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	47
CONTRACT NO. 60N83				

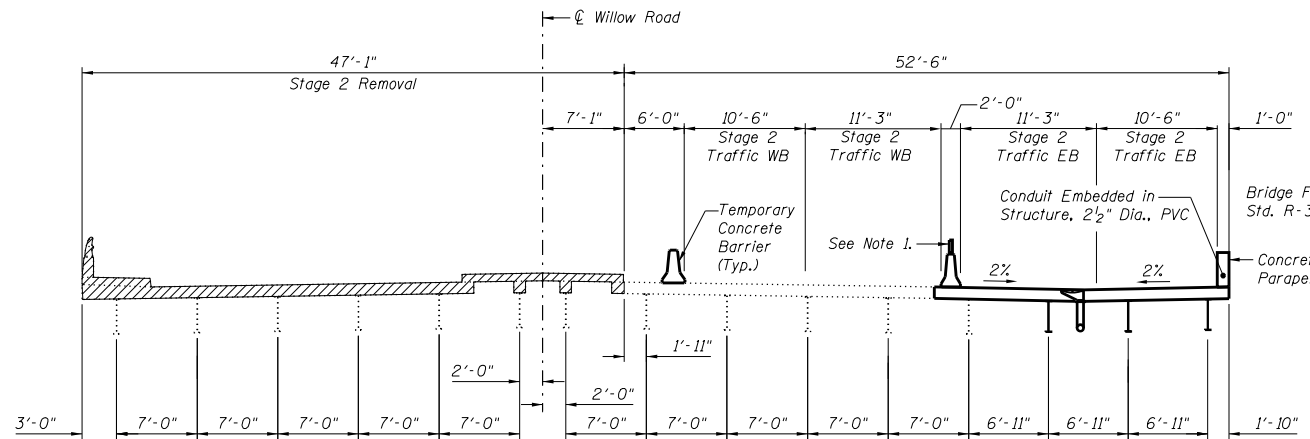
ILLINOIS FED. AID PROJECT



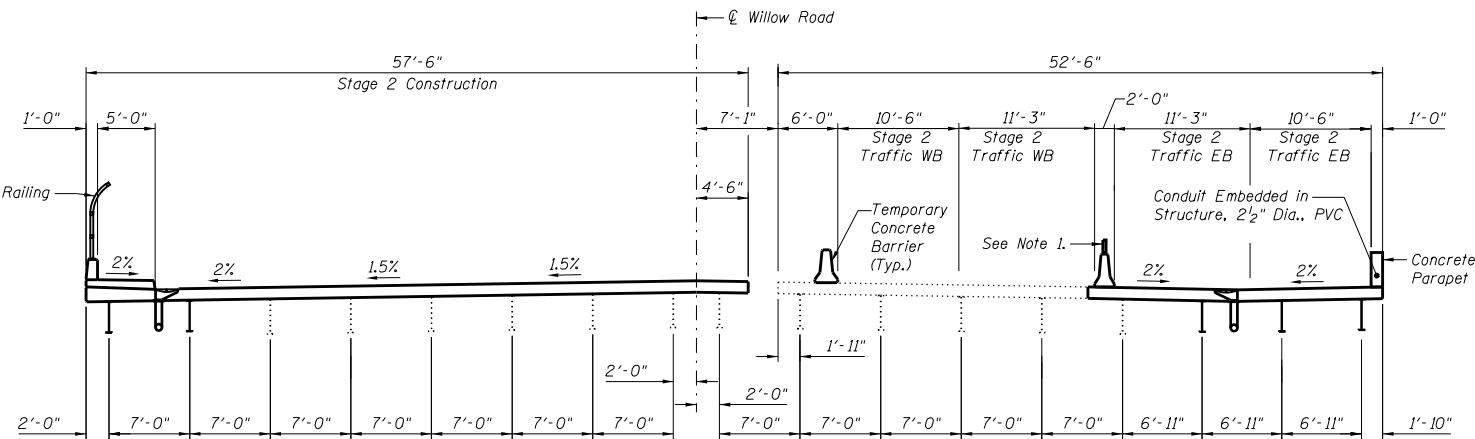
STAGE 1 REMOVAL
(Looking East)



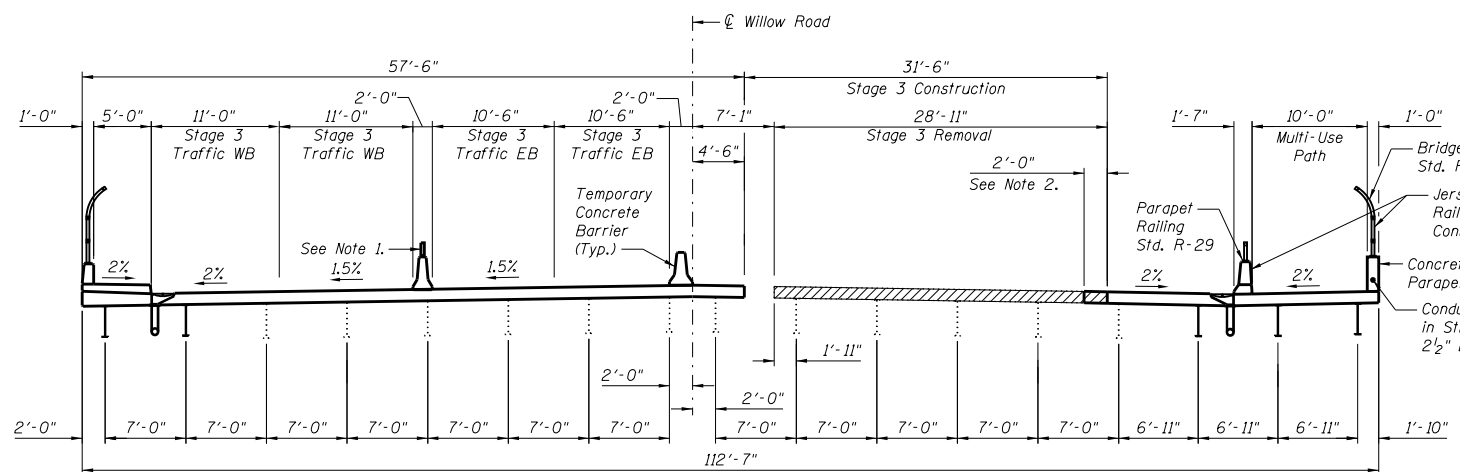
STAGE 1 CONSTRUCTION
(Looking East)



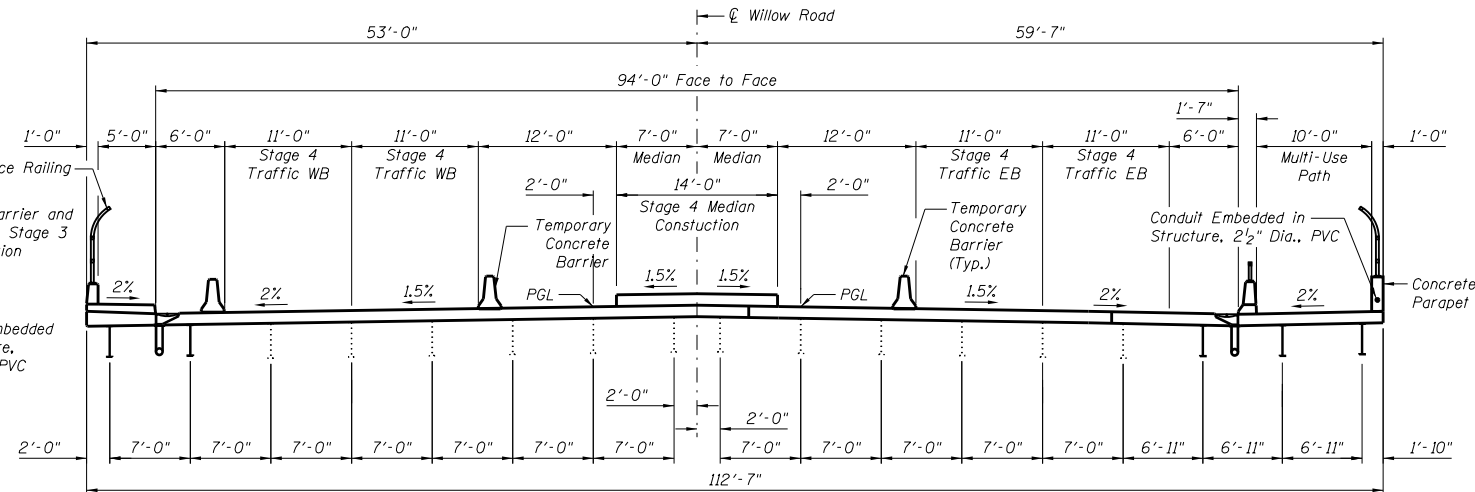
STAGE 2 REMOVAL
(Looking East)



STAGE 2 CONSTRUCTION
(Looking East)



STAGE 3 REMOVAL & CONSTRUCTION
(Looking East)



STAGE 4 CONSTRUCTION
(Looking East)

- Notes:
1. Install MODULAR GLARE SCREEN SYSTEM, TEMPORARY on top of Temporary Concrete Barrier
 2. See Stage Construction Detail on Sheet 16 for location of joint between Stage 1 and Stage 3.

LEGEND

Concrete Removal

\$FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

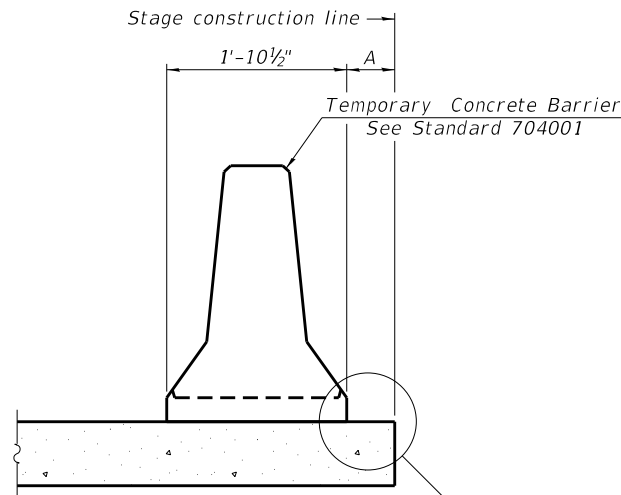
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION
STRUCTURE NO. 016-0533**

SHEET NO. 4 OF 57 SHEETS

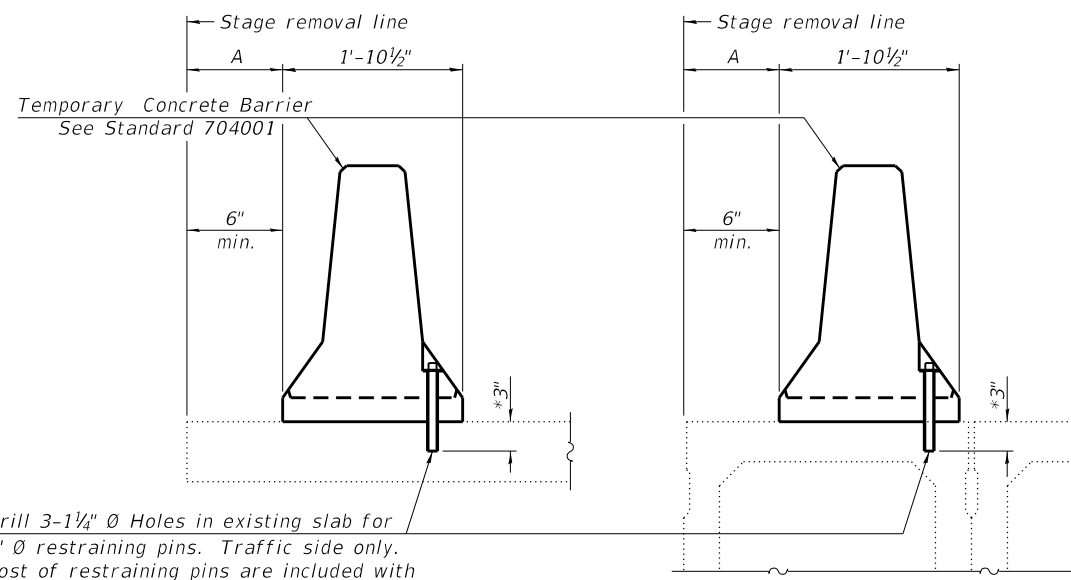
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	48
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



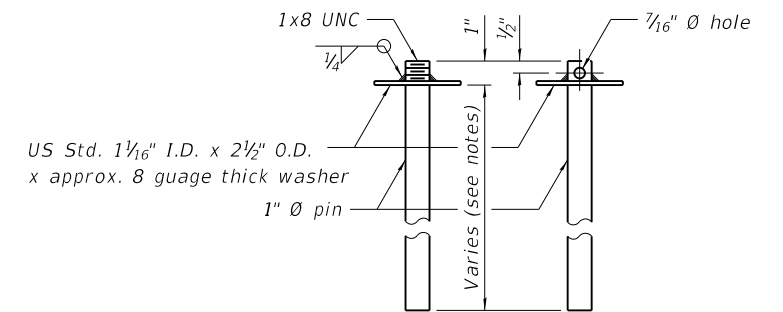
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

EXISTING DECK BEAM

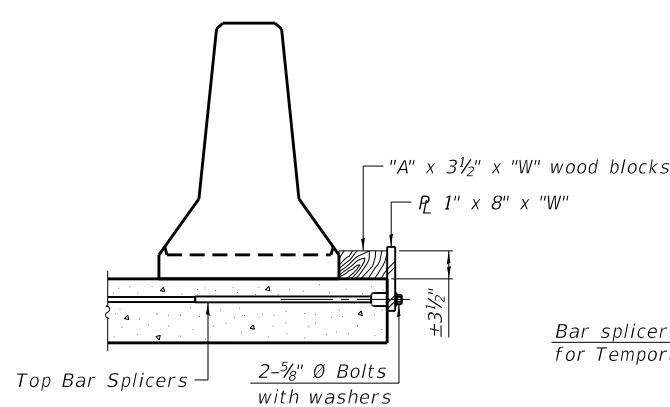
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

SECTIONS THRU SLAB OR DECK BEAM

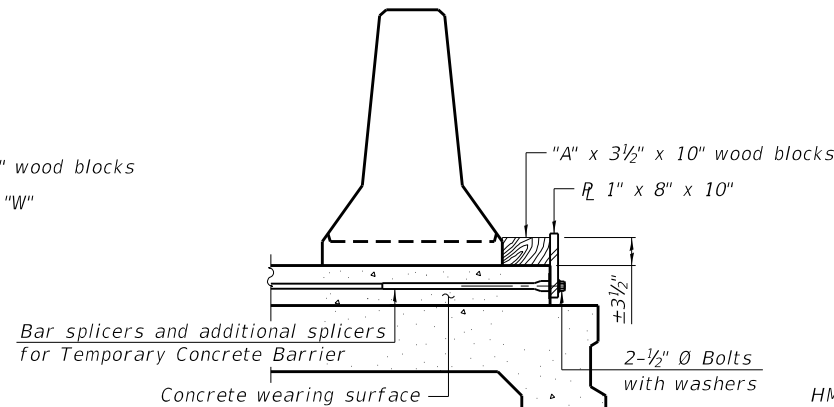


RESTRAINING PIN

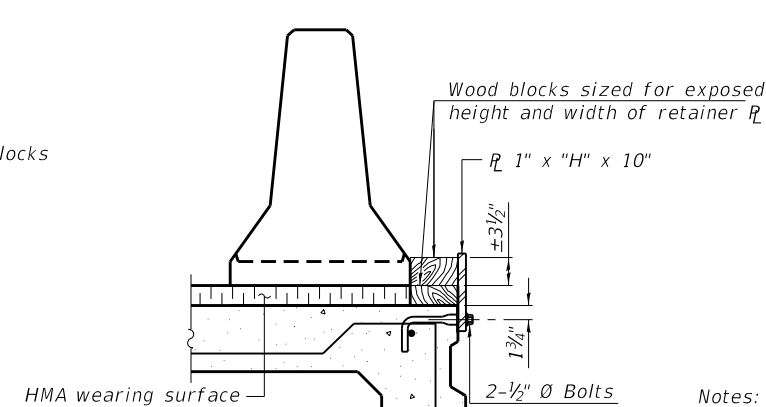
US Std. 1 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer



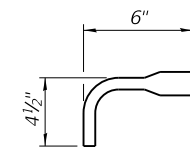
DETAIL I



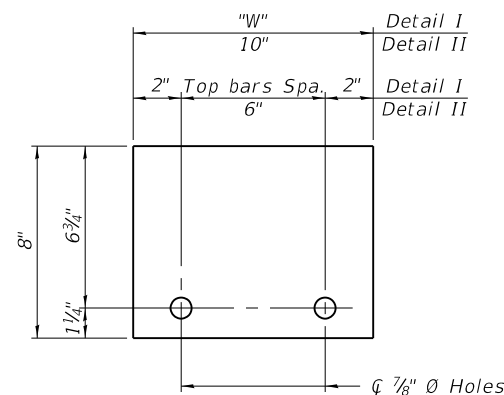
DETAIL II



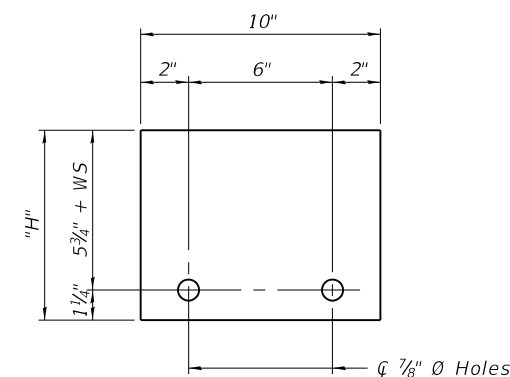
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W" (Detail I and II)



STEEL RETAINER R 1" x "H" x 10" (Detail III)

Notes:

- Cost of retainer assembly is included with Temporary Concrete Barrier.
- A retainer assembly shall be located at the approximate center of each temporary concrete barrier.
- The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
- When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
- For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I - Installation for a new bridge deck or bridge slab.
- Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

FILED

R-27

8-11-2017



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

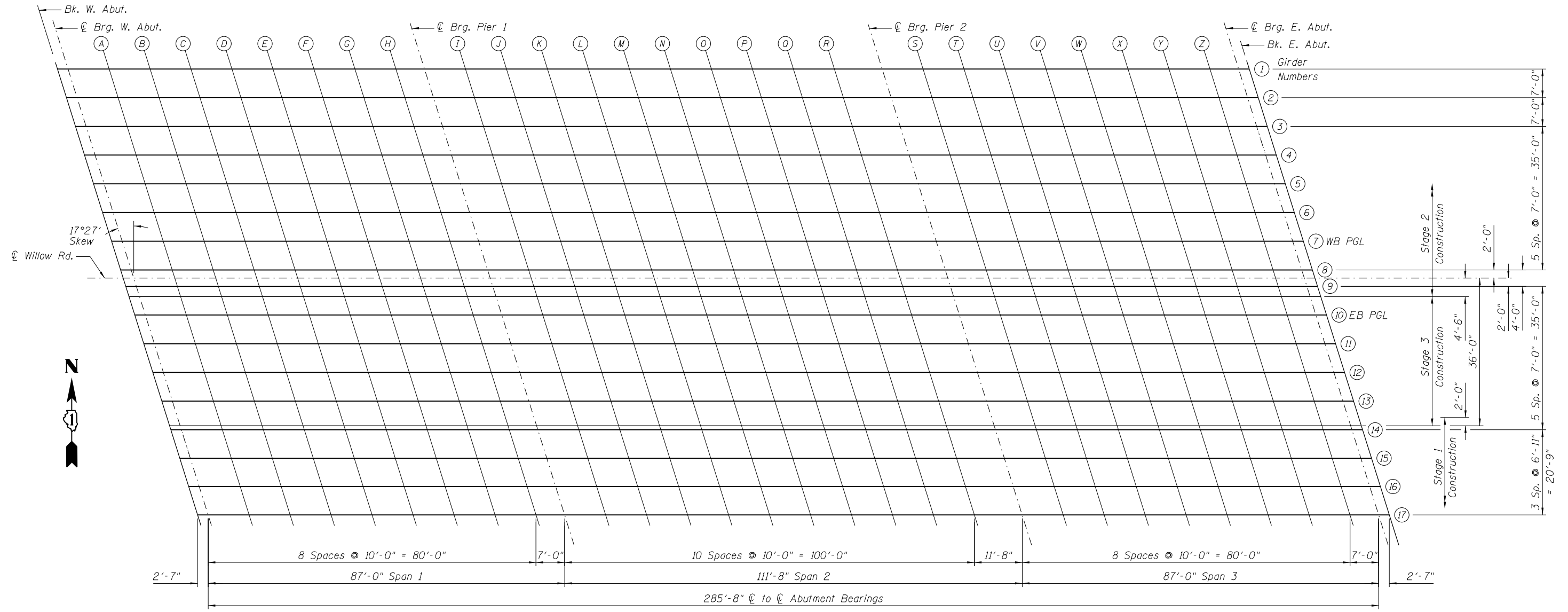
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-0533

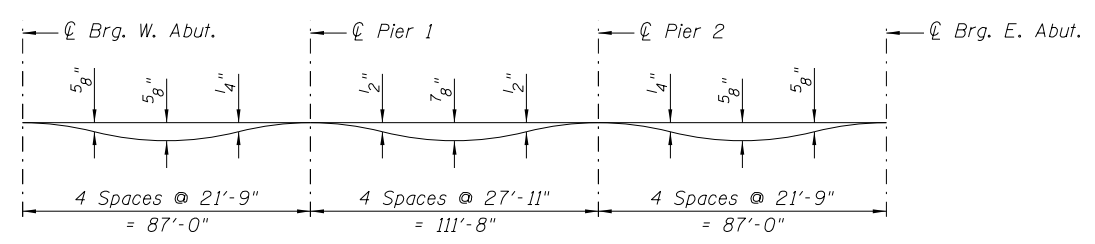
SHEET NO. 5 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	49
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

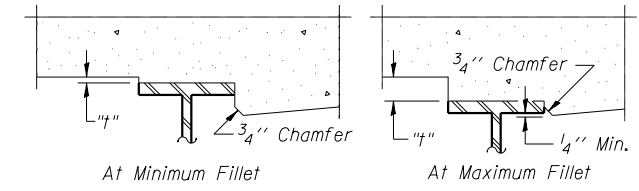


PLAN FOR TOP OF SLAB ELEVATIONS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)
 Note:
 The above deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 7 thru 10.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown on this sheet. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 7 thru 10, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = #SCALE#	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 1
 STRUCTURE NO. 016-0533**

SHEET NO. 6 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	50
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+45.49	-51.00	667.91	667.91
CL Brg. W. Abut.	98+48.07	-51.00	667.93	667.93
A	98+58.07	-51.00	668.03	668.06
B	98+68.07	-51.00	668.12	668.17
C	98+78.07	-51.00	668.20	668.26
D	98+88.07	-51.00	668.28	668.33
E	98+98.07	-51.00	668.35	668.39
F	99+08.07	-51.00	668.41	668.44
G	99+18.07	-51.00	668.47	668.48
H	99+28.07	-51.00	668.52	668.52
Pier 1	99+35.07	-51.00	668.55	668.55
I	99+45.07	-51.00	668.59	668.59
J	99+55.07	-51.00	668.62	668.64
K	99+65.07	-51.00	668.65	668.69
L	99+75.07	-51.00	668.66	668.72
M	99+85.07	-51.00	668.68	668.75
N	99+95.07	-51.00	668.68	668.76
O	100+05.07	-51.00	668.68	668.75
P	100+15.07	-51.00	668.68	668.72
Q	100+25.07	-51.00	668.66	668.69
R	100+35.07	-51.00	668.65	668.65
Pier 2	100+46.74	-51.00	668.61	668.61
S	100+56.74	-51.00	668.58	668.59
T	100+66.74	-51.00	668.54	668.56
U	100+76.74	-51.00	668.49	668.53
V	100+86.74	-51.00	668.44	668.44
W	100+96.74	-51.00	668.38	668.44
X	101+06.74	-51.00	668.31	668.37
Y	101+16.74	-51.00	668.24	668.28
Z	101+26.74	-51.00	668.16	668.18
CL Brg. E. Abut.	101+33.74	-51.00	668.10	668.10
Bk. E. Abut.	101+36.32	-51.00	668.08	668.08

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+47.69	-44.00	668.07	668.07
CL Brg. W. Abut.	98+50.27	-44.00	668.10	668.10
A	98+60.27	-44.00	668.19	668.22
B	98+70.27	-44.00	668.28	668.32
C	98+80.27	-44.00	668.36	668.42
D	98+90.27	-44.00	668.43	668.49
E	99+00.27	-44.00	668.50	668.55
F	99+10.27	-44.00	668.56	668.59
G	99+20.27	-44.00	668.62	668.63
H	99+30.27	-44.00	668.67	668.67
Pier 1	99+37.27	-44.00	668.70	668.70
I	99+47.27	-44.00	668.73	668.74
J	99+57.27	-44.00	668.77	668.79
K	99+67.27	-44.00	668.79	668.83
L	99+77.27	-44.00	668.81	668.87
M	99+87.27	-44.00	668.82	668.89
N	99+97.27	-44.00	668.82	668.90
O	100+07.27	-44.00	668.82	668.89
P	100+17.27	-44.00	668.82	668.86
Q	100+27.27	-44.00	668.80	668.83
R	100+37.27	-44.00	668.78	668.79
Pier 2	100+48.94	-44.00	668.75	668.75
S	100+58.94	-44.00	668.71	668.72
T	100+68.94	-44.00	668.67	668.69
U	100+78.94	-44.00	668.62	668.66
V	100+88.94	-44.00	668.57	668.62
W	100+98.94	-44.00	668.51	668.56
X	101+08.94	-44.00	668.44	668.49
Y	101+18.94	-44.00	668.37	668.41
Z	101+28.94	-44.00	668.28	668.30
CL Brg. E. Abut.	101+35.94	-44.00	668.22	668.22
Bk. E. Abut.	101+38.52	-44.00	668.20	668.20

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+49.89	-37.00	668.23	668.23
CL Brg. W. Abut.	98+52.47	-37.00	668.26	668.26
A	98+62.47	-37.00	668.35	668.38
B	98+72.47	-37.00	668.44	668.48
C	98+82.47	-37.00	668.52	668.57
D	98+92.47	-37.00	668.59	668.65
E	99+02.47	-37.00	668.66	668.70
F	99+12.47	-37.00	668.72	668.75
G	99+22.47	-37.00	668.77	668.78
H	99+32.47	-37.00	668.82	668.82
Pier 1	99+39.47	-37.00	668.85	668.85
I	99+49.47	-37.00	668.88	668.89
J	99+59.47	-37.00	668.91	668.94
K	99+69.47	-37.00	668.93	668.98
L	99+79.47	-37.00	668.95	669.01
M	99+89.47	-37.00	668.96	669.03
N	99+99.47	-37.00	668.96	669.04
O	100+09.47	-37.00	668.96	669.02
P	100+19.47	-37.00	668.95	669.00
Q	100+29.47	-37.00	668.94	668.96
R	100+39.47	-37.00	668.91	668.92
Pier 2	100+51.14	-37.00	668.88	668.88
S	100+61.14	-37.00	668.84	668.85
T	100+71.14	-37.00	668.80	668.82
U	100+81.14	-37.00	668.75	668.79
V	100+91.14	-37.00	668.70	668.74
W	101+01.14	-37.00	668.63	668.69
X	101+11.14	-37.00	668.56	668.62
Y	101+21.14	-37.00	668.49	668.53
Z	101+31.14	-37.00	668.41	668.42
CL Brg. E. Abut.	101+38.14	-37.00	668.34	668.34
Bk. E. Abut.	101+40.72	-37.00	668.32	668.32

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+52.09	-30.00	668.38	668.38
CL Brg. W. Abut.	98+54.67	-30.00	668.40	668.40
A	98+64.67	-30.00	668.49	668.52
B	98+74.67	-30.00	668.58	668.63
C	98+84.67	-30.00	668.66	668.71
D	98+94.67	-30.00	668.73	668.79
E	99+04.67	-30.00	668.79	668.84
F	99+14.67	-30.00	668.85	668.88
G	99+24.67	-30.00	668.91	668.92
H	99+34.67	-30.00	668.95	668.95
Pier 1	99+41.67	-30.00	668.98	668.98
I	99+51.67	-30.00	669.01	669.02
J	99+61.67	-30.00	669.04	669.07
K	99+71.67	-30.00	669.06	669.11
L	99+81.67	-30.00	669.08	669.14
M	99+91.67	-30.00	669.09	669.16
N	100+01.67	-30.00	669.09	669.16
O	100+11.67	-30.00	669.09	669.15
P	100+21.67	-30.00	669.07	669.12
Q	100+31.67	-30.00	669.06	669.08
R	100+41.67	-30.00	669.03	669.04
Pier 2	100+53.34	-30.00	669.00	669.00
S	100+63.34	-30.00	668.96	668.96
T	100+73.34	-30.00	668.92	668.93
U	100+83.34	-30.00	668.86	668.90
V	100+93.34	-30.00	668.81	668.86
W	101+03.34	-30.00	668.74	668.80
X	101+13.34	-30.00	668.67	668.73
Y	101+23.34	-30.00	668.60	668.64
Z	101+33.34	-30.00	668.51	668.53
CL Brg. E. Abut.	101+40.34	-30.00	668.45	668.45
Bk. E. Abut.	101+42.92	-30.00	668.43	668.43

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+54.29	-23.00	668.50	668.50
CL Brg. W. Abut.	98+56.87	-23.00	668.53	668.53
A	98+66.87	-23.00	668.62	668.65
B	98+76.87	-23.00	668.70	668.75
C	98+86.87	-23.00	668.78	668.84
D	98+96.87	-23.00	668.85	668.91
E	99+06.87	-23.00	668.91	668.96
F	99+16.87	-23.00	668.97	669.00
G	99+26.87	-23.00	669.02	669.04
H	99+36.87	-23.00	669.07	669.07
Pier 1	99+43.87	-23.00	669.09	669.09
I	99+53.87	-23.00	669.13	669.13
J	99+63.87	-23.00	669.15	669.18
K	99+73.87	-23.00	669.17	669.22
L	99+83.87	-23.00	669.19	669.25
M	99+93.87	-23.00	669.19	669.26
N	100+03.87	-23.00	669.19	669.27
O	100+13.87	-23.00	669.19	669.25
P	100+23.87	-23.00	669.18	669.22
Q	100+33.87	-23.00	669.16	669.18
R	100+43.87	-23.00	669.13	669.14
Pier 2	100+55.54	-23.00	669.09	669.09
S	100+65.54	-23.00	669.06	669.06
T	100+75.54	-23.00	669.01	669.03
U	100+85.54	-23.00	668.96	668.99
V	100+95.54	-23.00	668.90	668.95
W	101+05.54	-23.00	668.83	668.89
X	101+15.54	-23.00	668.76	668.82
Y	101+25.54	-23.00	668.68	668.72
Z	101+35.54	-23.00	668.60	668.62
CL Brg. E. Abut.	101+42.54	-23.00	668.53	668.53
Bk. E. Abut.	101+45.12	-23.00	668.51	668.51

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+56.49	-16.00	668.63	668.63
CL Brg. W. Abut.	98+59.07	-16.00	668.65	668.65
A	98+69.07	-16.00	668.74	668.77
B	98+79.07	-16.00	668.82	668.87
C	98+89.07	-16.00	668.90	668.96
D	98+99.07	-16.00	668.97	669.03
E	99+09.07	-16.00	669.03	669.08
F	99+19.07	-16.00	669.09	669.12
G	99+29.07	-16.00	669.14	669.15
H	99+39.07	-16.00	669.18	669.18
Pier 1	99+46.07	-16.00	669.21	669.21
I	99+56.07	-16.00	669.24	669.25
J	99+66.07	-16.00	669.26	669.29
K	99+76.07	-16.00	669.28	669.32
L	99+86.07	-16.00	669.29	669.35
M	99+96.07	-16.00	669.30	669.37
N	100+06.07	-16.00	669.30	669.37
O	100+16.07	-16.00	669.29	669.35
P	100+26.07	-16.00	669.28	669.32
Q	100+36.07	-16.00	669.26	669.28
R	100+46.07	-16.00	669.23	669.24
Pier 2	100+57.74	-16.00	669.19	669.19
S	100+67.74	-16.00	669.15	669.16
T	100+77.74	-16.00	669.10	669.12
U	100+87.74	-16.00	669.05	669.08
V	100+97.74	-16.00	668.99	669.04
W	101+07.74	-16.00	668.92	668.98
X	101+17.74	-16.00	668.85	668.90
Y	101+27.74	-16.00	668.77	668.81
Z	101+37.74	-16.00	668.68	668.70
CL Brg. E. Abut.	101+44.74	-16.00	668.62	668.62
Bk. E. Abut.	101+47.32	-16.00	668.59	668.59

SHEET NO.

	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">TOP OF SLAB ELEVATIONS 2 STRUCTURE NO. 016-0533</p>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -			305	1920.01-BR	COOK	194	51
	PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83				

SHEET NO. 7 OF 57 SHEETS

ILLINOIS FED. AID PROJECT

WB PGL WILLOW ROAD & GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+58.69	-9.00	668.76	668.76
CL Brg. W. Abut.	98+61.27	-9.00	668.78	668.78
A	98+71.27	-9.00	668.87	668.89
B	98+81.27	-9.00	668.95	668.99
C	98+91.27	-9.00	669.02	669.08
D	99+01.27	-9.00	669.09	669.14
E	99+11.27	-9.00	669.15	669.20
F	99+21.27	-9.00	669.20	669.23
G	99+31.27	-9.00	669.25	669.27
H	99+41.27	-9.00	669.29	669.30
Pier 1	99+48.27	-9.00	669.32	669.32
I	99+58.27	-9.00	669.35	669.36
J	99+68.27	-9.00	669.37	669.40
K	99+78.27	-9.00	669.39	669.43
L	99+88.27	-9.00	669.40	669.46
M	99+98.27	-9.00	669.40	669.47
N	100+08.27	-9.00	669.40	669.47
O	100+18.27	-9.00	669.39	669.46
P	100+28.27	-9.00	669.38	669.42
Q	100+38.27	-9.00	669.36	669.38
R	100+48.27	-9.00	669.33	669.34
Pier 2	100+59.94	-9.00	669.29	669.29
S	100+69.94	-9.00	669.25	669.25
T	100+79.94	-9.00	669.20	669.22
U	100+89.94	-9.00	669.14	669.18
V	100+99.94	-9.00	669.08	669.13
W	101+09.94	-9.00	669.01	669.07
X	101+19.94	-9.00	668.94	668.99
Y	101+29.94	-9.00	668.86	668.90
Z	101+39.94	-9.00	668.77	668.79
CL Brg. E. Abut.	101+46.94	-9.00	668.70	668.70
Bk. E. Abut.	101+49.52	-9.00	668.68	668.68

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+60.89	-2.00	668.88	668.88
CL Brg. W. Abut.	98+63.47	-2.00	668.90	668.90
A	98+73.47	-2.00	668.99	669.02
B	98+83.47	-2.00	669.07	669.12
C	98+93.47	-2.00	669.14	669.20
D	99+03.47	-2.00	669.21	669.26
E	99+13.47	-2.00	669.27	669.31
F	99+23.47	-2.00	669.32	669.35
G	99+33.47	-2.00	669.37	669.38
H	99+43.47	-2.00	669.41	669.41
Pier 1	99+50.47	-2.00	669.43	669.43
I	99+60.47	-2.00	669.46	669.47
J	99+70.47	-2.00	669.48	669.51
K	99+80.47	-2.00	669.50	669.54
L	99+90.47	-2.00	669.51	669.57
M	100+00.47	-2.00	669.51	669.58
N	100+10.47	-2.00	669.51	669.58
O	100+20.47	-2.00	669.50	669.56
P	100+30.47	-2.00	669.48	669.53
Q	100+40.47	-2.00	669.46	669.48
R	100+50.47	-2.00	669.43	669.44
Pier 2	100+62.14	-2.00	669.38	669.38
S	100+72.14	-2.00	669.34	669.35
T	100+82.14	-2.00	669.29	669.31
U	100+92.14	-2.00	669.23	669.27
V	101+02.14	-2.00	669.17	669.22
W	101+12.14	-2.00	669.10	669.16
X	101+22.14	-2.00	669.03	669.08
Y	101+32.14	-2.00	668.94	668.98
Z	101+42.14	-2.00	668.85	668.87
CL Brg. E. Abut.	101+49.14	-2.00	668.79	668.79
Bk. E. Abut.	101+51.72	-2.00	668.76	668.76

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+62.15	2.00	668.89	668.89
CL Brg. W. Abut.	98+64.73	2.00	668.92	668.92
A	98+74.73	2.00	669.00	669.03
B	98+84.73	2.00	669.08	669.12
C	98+94.73	2.00	669.15	669.21
D	99+04.73	2.00	669.22	669.27
E	99+14.73	2.00	669.27	669.32
F	99+24.73	2.00	669.33	669.36
G	99+34.73	2.00	669.37	669.39
H	99+44.73	2.00	669.41	669.41
Pier 1	99+51.73	2.00	669.43	669.43
I	99+61.73	2.00	669.46	669.47
J	99+71.73	2.00	669.48	669.51
K	99+81.73	2.00	669.50	669.54
L	99+91.73	2.00	669.51	669.57
M	100+01.73	2.00	669.51	669.58
N	100+11.73	2.00	669.51	669.58
O	100+21.73	2.00	669.49	669.56
P	100+31.73	2.00	669.48	669.52
Q	100+41.73	2.00	669.45	669.48
R	100+51.73	2.00	669.42	669.43
Pier 2	100+63.40	2.00	669.38	669.38
S	100+73.40	2.00	669.33	669.34
T	100+83.40	2.00	669.28	669.30
U	100+93.40	2.00	669.23	669.26
V	101+03.40	2.00	669.16	669.21
W	101+13.40	2.00	669.09	669.15
X	101+23.40	2.00	669.02	669.07
Y	101+33.40	2.00	668.93	668.97
Z	101+43.40	2.00	668.84	668.86
CL Brg. E. Abut.	101+50.40	2.00	668.77	668.77
Bk. E. Abut.	101+52.98	2.00	668.75	668.75

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+62.93	4.50	668.86	668.86
CL Brg. W. Abut.	98+65.52	4.50	668.88	668.88
A	98+75.52	4.50	668.97	669.00
B	98+85.52	4.50	669.05	669.09
C	98+95.52	4.50	669.12	669.17
D	99+05.52	4.50	669.18	669.24
E	99+15.52	4.50	669.24	669.29
F	99+25.52	4.50	669.29	669.32
G	99+35.52	4.50	669.34	669.35
H	99+45.52	4.50	669.38	669.38
Pier 1	99+52.52	4.50	669.40	669.40
I	99+62.52	4.50	669.43	669.43
J	99+72.52	4.50	669.45	669.47
K	99+82.52	4.50	669.46	669.50
L	99+92.52	4.50	669.47	669.53
M	100+02.52	4.50	669.47	669.54
N	100+12.52	4.50	669.47	669.54
O	100+22.52	4.50	669.46	669.52
P	100+32.52	4.50	669.44	669.48
Q	100+42.52	4.50	669.41	669.44
R	100+52.52	4.50	669.38	669.39
Pier 2	100+64.18	4.50	669.34	669.34
S	100+74.18	4.50	669.29	669.30
T	100+84.18	4.50	669.24	669.26
U	100+94.18	4.50	669.18	669.22
V	101+04.18	4.50	669.12	669.17
W	101+14.18	4.50	669.05	669.11
X	101+24.18	4.50	668.97	669.03
Y	101+34.18	4.50	668.89	668.93
Z	101+44.18	4.50	668.80	668.82
CL Brg. E. Abut.	101+51.18	4.50	668.73	668.73
Bk. E. Abut.	101+53.77	4.50	668.70	668.70

EB PGL WILLOW ROAD & GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+64.35	9.00	668.81	668.81
CL Brg. W. Abut.	98+66.93	9.00	668.83	668.83
A	98+76.93	9.00	668.91	668.94
B	98+86.93	9.00	668.99	669.04
C	98+96.93	9.00	669.06	669.12
D	99+06.93	9.00	669.12	669.18
E	99+16.93	9.00	669.18	669.23
F	99+26.93	9.00	669.23	669.26
G	99+36.93	9.00	669.28	669.29
H	99+46.93	9.00	669.31	669.32
Pier 1	99+53.93	9.00	669.34	669.34
I	99+63.93	9.00	669.36	669.37
J	99+73.93	9.00	669.38	669.41
K	99+83.93	9.00	669.40	669.44
L	99+93.93	9.00	669.40	669.46
M	100+03.93	9.00	669.40	669.47
N	100+13.93	9.00	669.40	669.47
O	100+23.93	9.00	669.39	669.45
P	100+33.93	9.00	669.37	669.41
Q	100+43.93	9.00	669.34	669.37
R	100+53.93	9.00	669.31	669.32
Pier 2	100+65.60	9.00	669.27	669.27
S	100+75.60	9.00	669.22	669.22
T	100+85.60	9.00	669.17	669.19
U	100+95.60	9.00	669.11	669.14
V	101+05.60	9.00	669.04	669.09
W	101+15.60	9.00	668.97	669.03
X	101+25.60	9.00	668.89	668.95
Y	101+35.60	9.00	668.81	668.85
Z	101+45.60	9.00	668.72	668.73
CL Brg. E. Abut.	101+52.60	9.00	668.65	668.65
Bk. E. Abut.	101+55.18	9.00	668.62	668.62

GIRDER 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+66.55	16.00	668.72	668.72
CL Brg. W. Abut.	98+69.13	16.00	668.74	668.74
A	98+79.13	16.00	668.83	668.85
B	98+89.13	16.00	668.90	668.95
C	98+99.13	16.00	668.97	669.03
D	99+09.13	16.00	669.03	669.09
E	99+19.13	16.00	669.09	669.13
F	99+29.13	16.00	669.14	669.17
G	99+39.13	16.00	669.18	669.19
H	99+49.13	16.00	669.22	669.22
Pier 1	99+56.13	16.00	669.24	669.24
I	99+66.13	16.00	669.26	669.27
J	99+76.13	16.00	669.28	669.30
K	99+86.13	16.00	669.29	669.34
L	99+96.13	16.00	669.30	669.36
M	100+06.13	16.00	669.30	669.37
N	100+16.13	16.00	669.29	669.36
O	100+26.13	16.00	669.28	669.34
P	100+36.13	16.00	669.26	669.30
Q	100+46.13	16.00	669.23	669.26
R	100+56.13	16.00	669.20	669.21
Pier 2	100+67.80	16.00	669.15	669.15
S	100+77.80	16.00	669.10	669.11
T	100+87.80	16.00	669.05	669.07
U	100+97.80	16.00	668.99	669.02
V	101+07.80	16.00	668.92	668.97
W	101+17.80	16.00	668.85	668.91
X	101+27.80	16.00	668.77	668.82
Y	101+37.80	16.00	668.68	668.72
Z	101+47.80	16.00	668.59	668.61
CL Brg. E. Abut.	101+54.80	16.00	668.52	668.52
Bk. E. Abut.	101+57.38	16.00	668.49	668.49

FILE\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 3
STRUCTURE NO. 016-0533**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	52
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+68.75	23.00	668.64	668.64
CL Brg. W. Abut.	98+71.33	23.00	668.66	668.66
A	98+81.33	23.00	668.74	668.76
B	98+91.33	23.00	668.81	668.86
C	99+01.33	23.00	668.88	668.94
D	99+11.33	23.00	668.94	669.00
E	99+21.33	23.00	668.99	669.04
F	99+31.33	23.00	669.04	669.07
G	99+41.33	23.00	669.08	669.10
H	99+51.33	23.00	669.12	669.12
Pier 1	99+58.33	23.00	669.14	669.14
I	99+68.33	23.00	669.16	669.17
J	99+78.33	23.00	669.18	669.20
K	99+88.33	23.00	669.19	669.23
L	99+98.33	23.00	669.19	669.25
M	100+08.33	23.00	669.19	669.26
N	100+18.33	23.00	669.18	669.26
O	100+28.33	23.00	669.17	669.23
P	100+38.33	23.00	669.15	669.19
Q	100+48.33	23.00	669.12	669.15
R	100+58.33	23.00	669.08	669.09
Pier 2	100+70.00	23.00	669.04	669.04
S	100+80.00	23.00	668.99	668.99
T	100+90.00	23.00	668.93	668.95
U	101+00.00	23.00	668.87	668.90
V	101+10.00	23.00	668.80	668.85
W	101+20.00	23.00	668.73	668.78
X	101+30.00	23.00	668.65	668.70
Y	101+40.00	23.00	668.56	668.60
Z	101+50.00	23.00	668.46	668.48
CL Brg. E. Abut.	101+57.00	23.00	668.39	668.39
Bk. E. Abut.	101+59.58	23.00	668.37	668.37

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+70.95	30.00	668.55	668.55
CL Brg. W. Abut.	98+73.53	30.00	668.57	668.57
A	98+83.53	30.00	668.65	668.68
B	98+93.53	30.00	668.72	668.77
C	99+03.53	30.00	668.79	668.84
D	99+13.53	30.00	668.85	668.90
E	99+23.53	30.00	668.90	668.95
F	99+33.53	30.00	668.95	668.98
G	99+43.53	30.00	668.99	669.00
H	99+53.53	30.00	669.02	669.02
Pier 1	99+60.53	30.00	669.04	669.04
I	99+70.53	30.00	669.06	669.07
J	99+80.53	30.00	669.08	669.10
K	99+90.53	30.00	669.09	669.13
L	100+00.53	30.00	669.09	669.15
M	100+10.53	30.00	669.09	669.16
N	100+20.53	30.00	669.08	669.15
O	100+30.53	30.00	669.06	669.12
P	100+40.53	30.00	669.04	669.08
Q	100+50.53	30.00	669.01	669.03
R	100+60.53	30.00	668.97	668.98
Pier 2	100+72.20	30.00	668.92	668.92
S	100+82.20	30.00	668.87	668.88
T	100+92.20	30.00	668.81	668.83
U	101+02.20	30.00	668.75	668.79
V	101+12.20	30.00	668.68	668.73
W	101+22.20	30.00	668.60	668.66
X	101+32.20	30.00	668.52	668.58
Y	101+42.20	30.00	668.43	668.47
Z	101+52.20	30.00	668.34	668.36
CL Brg. E. Abut.	101+59.20	30.00	668.27	668.27
Bk. E. Abut.	101+61.78	30.00	668.24	668.24

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+72.84	36.00	668.46	668.46
CL Brg. W. Abut.	98+75.42	36.00	668.48	668.48
A	98+85.42	36.00	668.56	668.58
B	98+95.42	36.00	668.63	668.68
C	99+05.42	36.00	668.69	668.75
D	99+15.42	36.00	668.75	668.81
E	99+25.42	36.00	668.80	668.85
F	99+35.42	36.00	668.85	668.88
G	99+45.42	36.00	668.89	668.90
H	99+55.42	36.00	668.92	668.92
Pier 1	99+62.42	36.00	668.94	668.94
I	99+72.42	36.00	668.96	668.97
J	99+82.42	36.00	668.97	669.00
K	99+92.42	36.00	668.98	669.03
L	100+02.42	36.00	668.98	669.04
M	100+12.42	36.00	668.98	669.05
N	100+22.42	36.00	668.97	669.04
O	100+32.42	36.00	668.95	669.01
P	100+42.42	36.00	668.93	668.97
Q	100+52.42	36.00	668.90	668.92
R	100+62.42	36.00	668.86	668.87
Pier 2	100+74.09	36.00	668.81	668.81
S	100+84.09	36.00	668.76	668.76
T	100+94.09	36.00	668.70	668.72
U	101+04.09	36.00	668.63	668.67
V	101+14.09	36.00	668.56	668.61
W	101+24.09	36.00	668.48	668.54
X	101+34.09	36.00	668.40	668.46
Y	101+44.09	36.00	668.31	668.35
Z	101+54.09	36.00	668.21	668.23
CL Brg. E. Abut.	101+61.09	36.00	668.14	668.14
Bk. E. Abut.	101+63.67	36.00	668.11	668.11

GIRDER 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+73.15	37.00	668.44	668.44
CL Brg. W. Abut.	98+75.73	37.00	668.46	668.46
A	98+85.73	37.00	668.54	668.57
B	98+95.73	37.00	668.61	668.66
C	99+05.73	37.00	668.68	668.73
D	99+15.73	37.00	668.73	668.79
E	99+25.73	37.00	668.79	668.83
F	99+35.73	37.00	668.83	668.86
G	99+45.73	37.00	668.87	668.88
H	99+55.73	37.00	668.90	668.90
Pier 1	99+62.73	37.00	668.92	668.92
I	99+72.73	37.00	668.94	668.95
J	99+82.73	37.00	668.96	668.98
K	99+92.73	37.00	668.96	669.01
L	100+02.73	37.00	668.96	669.02
M	100+12.73	37.00	668.96	669.03
N	100+22.73	37.00	668.95	669.02
O	100+32.73	37.00	668.93	668.99
P	100+42.73	37.00	668.91	668.95
Q	100+52.73	37.00	668.87	668.90
R	100+62.73	37.00	668.84	668.85
Pier 2	100+74.40	37.00	668.79	668.79
S	100+84.40	37.00	668.73	668.74
T	100+94.40	37.00	668.68	668.69
U	101+04.40	37.00	668.61	668.65
V	101+14.40	37.00	668.54	668.59
W	101+24.40	37.00	668.46	668.52
X	101+34.40	37.00	668.38	668.43
Y	101+44.40	37.00	668.29	668.33
Z	101+54.40	37.00	668.19	668.21
CL Brg. E. Abut.	101+61.40	37.00	668.12	668.12
Bk. E. Abut.	101+63.98	37.00	668.09	668.09

\$FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS 4
STRUCTURE NO. 016-0533**

SHEET NO. 9 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	53
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

GIRDER 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+75.32	43.92	668.32	668.32
CL Brg. W. Abut.	98+77.91	43.92	668.34	668.34
A	98+87.91	43.92	668.42	668.44
B	98+97.91	43.92	668.49	668.53
C	99+07.91	43.92	668.55	668.61
D	99+17.91	43.92	668.61	668.66
E	99+27.91	43.92	668.66	668.70
F	99+37.91	43.92	668.70	668.73
G	99+47.91	43.92	668.74	668.75
H	99+57.91	43.92	668.77	668.77
Pier 1	99+64.91	43.92	668.79	668.79
I	99+74.91	43.92	668.81	668.81
J	99+84.91	43.92	668.82	668.84
K	99+94.91	43.92	668.83	668.87
L	100+04.91	43.92	668.83	668.89
M	100+14.91	43.92	668.82	668.89
N	100+24.91	43.92	668.81	668.88
O	100+34.91	43.92	668.79	668.85
P	100+44.91	43.92	668.76	668.81
Q	100+54.91	43.92	668.73	668.76
R	100+64.91	43.92	668.69	668.70
Pier 2	100+76.57	43.92	668.64	668.64
S	100+86.57	43.92	668.58	668.59
T	100+96.57	43.92	668.52	668.54
U	101+06.57	43.92	668.46	668.49
V	101+16.57	43.92	668.39	668.43
W	101+26.57	43.92	668.31	668.36
X	101+36.57	43.92	668.22	668.28
Y	101+46.57	43.92	668.13	668.17
Z	101+56.57	43.92	668.03	668.05
CL Brg. E. Abut.	101+63.57	43.92	667.96	667.96
Bk. E. Abut.	101+66.16	43.92	667.93	667.93

GIRDER 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+77.50	50.83	668.35	668.35
CL Brg. W. Abut.	98+80.08	50.83	668.37	668.37
A	98+90.08	50.83	668.45	668.48
B	99+00.08	50.83	668.52	668.56
C	99+10.08	50.83	668.58	668.64
D	99+20.08	50.83	668.63	668.69
E	99+30.08	50.83	668.68	668.73
F	99+40.08	50.83	668.72	668.76
G	99+50.08	50.83	668.76	668.77
H	99+60.08	50.83	668.79	668.79
Pier 1	99+67.08	50.83	668.81	668.81
I	99+77.08	50.83	668.82	668.83
J	99+87.08	50.83	668.84	668.86
K	99+97.08	50.83	668.84	668.88
L	100+07.08	50.83	668.84	668.90
M	100+17.08	50.83	668.83	668.90
N	100+27.08	50.83	668.82	668.89
O	100+37.08	50.83	668.80	668.86
P	100+47.08	50.83	668.77	668.82
Q	100+57.08	50.83	668.74	668.76
R	100+67.08	50.83	668.70	668.71
Pier 2	100+78.75	50.83	668.64	668.64
S	100+88.75	50.83	668.59	668.59
T	100+98.75	50.83	668.52	668.54
U	101+08.75	50.83	668.46	668.49
V	101+18.75	50.83	668.38	668.43
W	101+28.75	50.83	668.30	668.36
X	101+38.75	50.83	668.22	668.27
Y	101+48.75	50.83	668.12	668.16
Z	101+58.75	50.83	668.02	668.04
CL Brg. E. Abut.	101+65.75	50.83	667.95	667.95
Bk. E. Abut.	101+68.33	50.83	667.92	667.92

GIRDER 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	98+79.67	57.75	668.51	668.51
CL Brg. W. Abut.	98+82.26	57.75	668.53	668.53
A	98+92.26	57.75	668.60	668.63
B	99+02.26	57.75	668.67	668.72
C	99+12.26	57.75	668.73	668.79
D	99+22.26	57.75	668.78	668.84
E	99+32.26	57.75	668.83	668.88
F	99+42.26	57.75	668.87	668.90
G	99+52.26	57.75	668.91	668.92
H	99+62.26	57.75	668.93	668.94
Pier 1	99+69.26	57.75	668.95	668.95
I	99+79.26	57.75	668.97	668.97
J	99+89.26	57.75	668.98	669.00
K	99+99.26	57.75	668.98	669.02
L	100+09.26	57.75	668.98	669.04
M	100+19.26	57.75	668.97	669.04
N	100+29.26	57.75	668.95	669.02
O	100+39.26	57.75	668.93	668.99
P	100+49.26	57.75	668.90	668.95
Q	100+59.26	57.75	668.87	668.89
R	100+69.26	57.75	668.82	668.83
Pier 2	100+80.92	57.75	668.77	668.77
S	100+90.92	57.75	668.71	668.72
T	101+00.92	57.75	668.65	668.67
U	101+10.92	57.75	668.58	668.62
V	101+20.92	57.75	668.50	668.55
W	101+30.92	57.75	668.42	668.48
X	101+40.92	57.75	668.33	668.39
Y	101+50.92	57.75	668.24	668.28
Z	101+60.92	57.75	668.14	668.16
CL Brg. E. Abut.	101+67.92	57.75	668.06	668.06
Bk. E. Abut.	101+70.51	57.75	668.04	668.04

\$FILEL\$



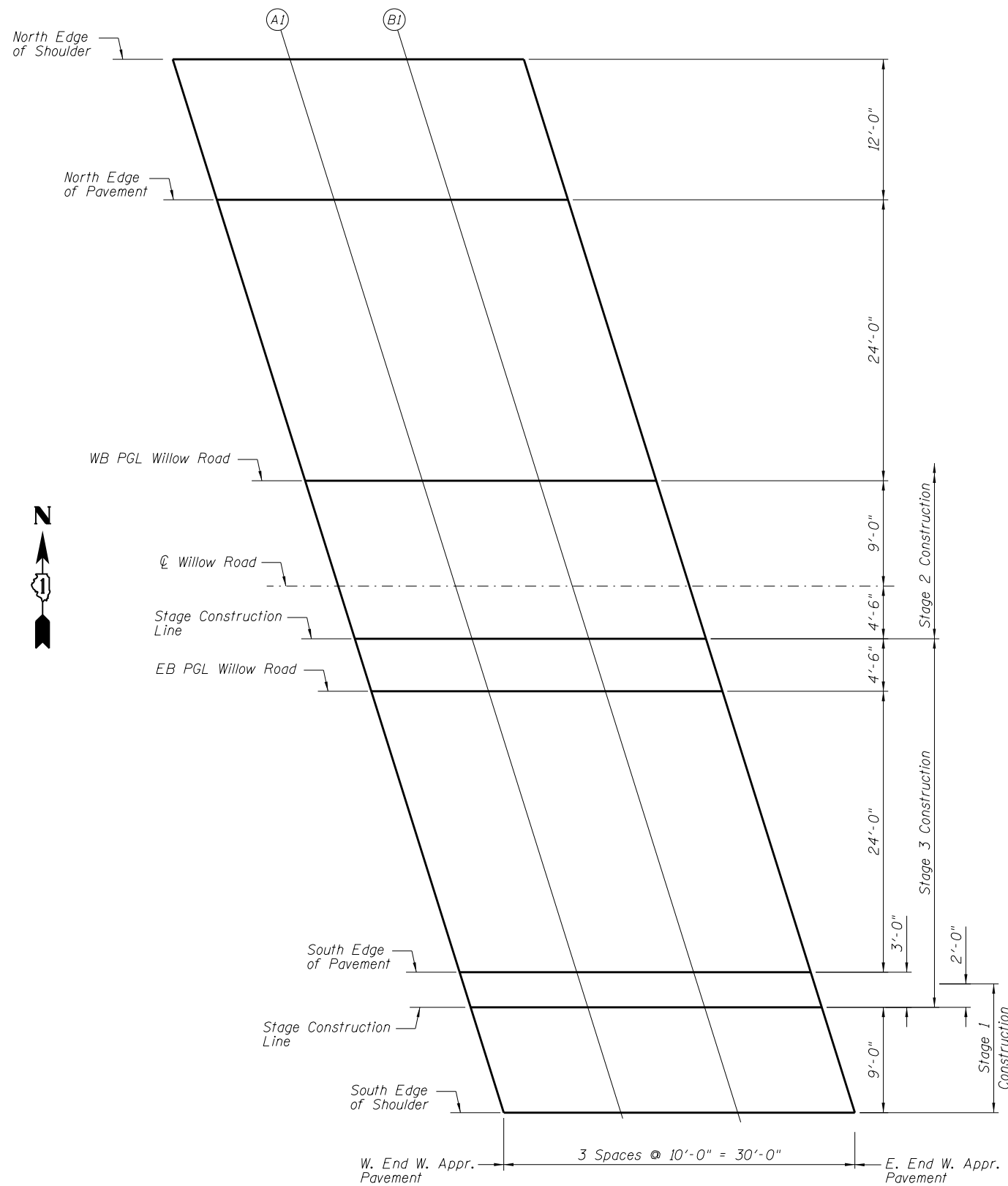
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS 5
STRUCTURE NO. 016-0533

SHEET NO. 10 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	54
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



PLAN FOR TOP OF SLAB ELEVATIONS

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+17.90	-45.00	667.73
A1	98+27.90	-45.00	667.84
B1	98+37.90	-45.00	667.95
E. End W. Appr. Pvmt.	98+47.90	-45.00	668.05

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+21.67	-33.00	668.01
A1	98+31.67	-33.00	668.12
B1	98+41.67	-33.00	668.23
E. End W. Appr. Pvmt.	98+51.67	-33.00	668.33

WB PGL WILLOW ROAD

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+29.21	-9.00	668.46
A1	98+39.21	-9.00	668.56
B1	98+49.21	-9.00	668.67
E. End W. Appr. Pvmt.	98+59.21	-9.00	668.76

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+33.46	4.50	668.57
A1	98+43.46	4.50	668.68
B1	98+53.46	4.50	668.77
E. End W. Appr. Pvmt.	98+63.46	4.50	668.87

EB PGL WILLOW ROAD

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+34.87	9.00	668.52
A1	98+44.87	9.00	668.62
B1	98+54.87	9.00	668.72
E. End W. Appr. Pvmt.	98+64.87	9.00	668.81

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+42.42	33.00	668.24
A1	98+52.42	33.00	668.34
B1	98+62.42	33.00	668.43
E. End W. Appr. Pvmt.	98+72.42	33.00	668.52

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+43.36	36.00	668.19
A1	98+53.36	36.00	668.29
B1	98+63.36	36.00	668.38
E. End W. Appr. Pvmt.	98+73.36	36.00	668.46

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	98+46.19	45.00	668.04
A1	98+56.19	45.00	668.13
B1	98+66.19	45.00	668.22
E. End W. Appr. Pvmt.	98+76.19	45.00	668.31

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

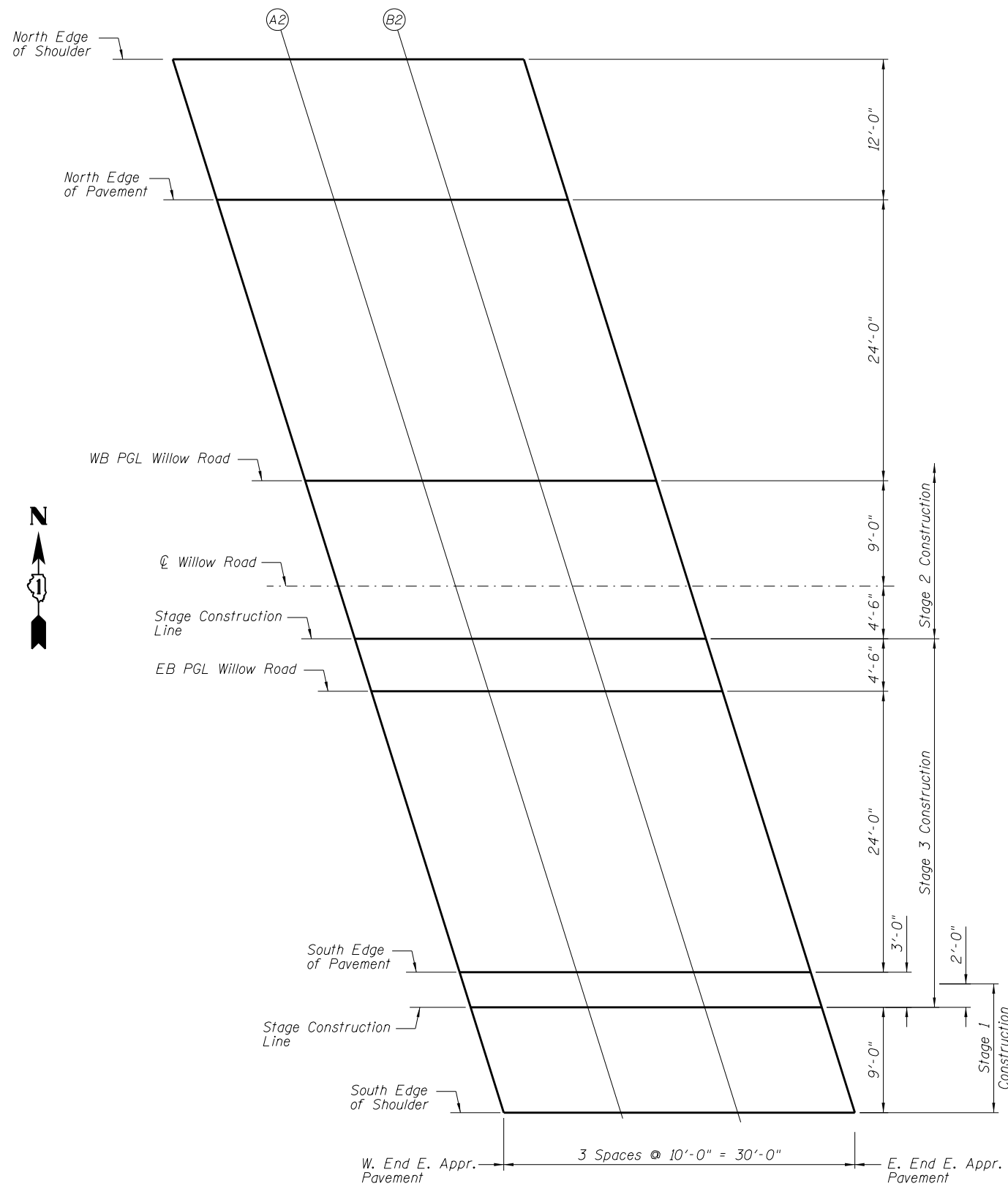
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST APPROACH TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0533**

SHEET NO. 11 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	55
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



PLAN FOR TOP OF SLAB ELEVATIONS

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+37.68	-45.00	668.19
A2	101+47.68	-45.00	668.10
B2	101+57.68	-45.00	668.00
E. End E. Appr. Pvmt.	101+67.68	-45.00	667.89

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+41.46	-33.00	668.39
A2	101+51.46	-33.00	668.30
B2	101+61.46	-33.00	668.20
E. End E. Appr. Pvmt.	101+71.46	-33.00	668.09

WB PGL WILLOW ROAD

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+49.00	-9.00	668.68
A2	101+59.00	-9.00	668.58
B2	101+69.00	-9.00	668.48
E. End E. Appr. Pvmt.	101+79.00	-9.00	668.36

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+53.24	4.50	668.71
A2	101+63.24	4.50	668.61
B2	101+73.24	4.50	668.50
E. End E. Appr. Pvmt.	101+83.24	4.50	668.38

EB PGL WILLOW ROAD

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+54.66	9.00	668.63
A2	101+64.66	9.00	668.52
B2	101+74.66	9.00	668.41
E. End E. Appr. Pvmt.	101+84.66	9.00	668.30

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+62.20	33.00	668.19
A2	101+72.20	33.00	668.08
B2	101+82.20	33.00	667.97
E. End E. Appr. Pvmt.	101+92.20	33.00	667.84

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+63.15	36.00	668.12
A2	101+73.15	36.00	668.01
B2	101+83.15	36.00	667.89
E. End E. Appr. Pvmt.	101+93.15	36.00	667.77

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	101+65.97	45.00	667.91
A2	101+75.97	45.00	667.80
B2	101+85.97	45.00	667.68
E. End E. Appr. Pvmt.	101+95.97	45.00	667.56

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

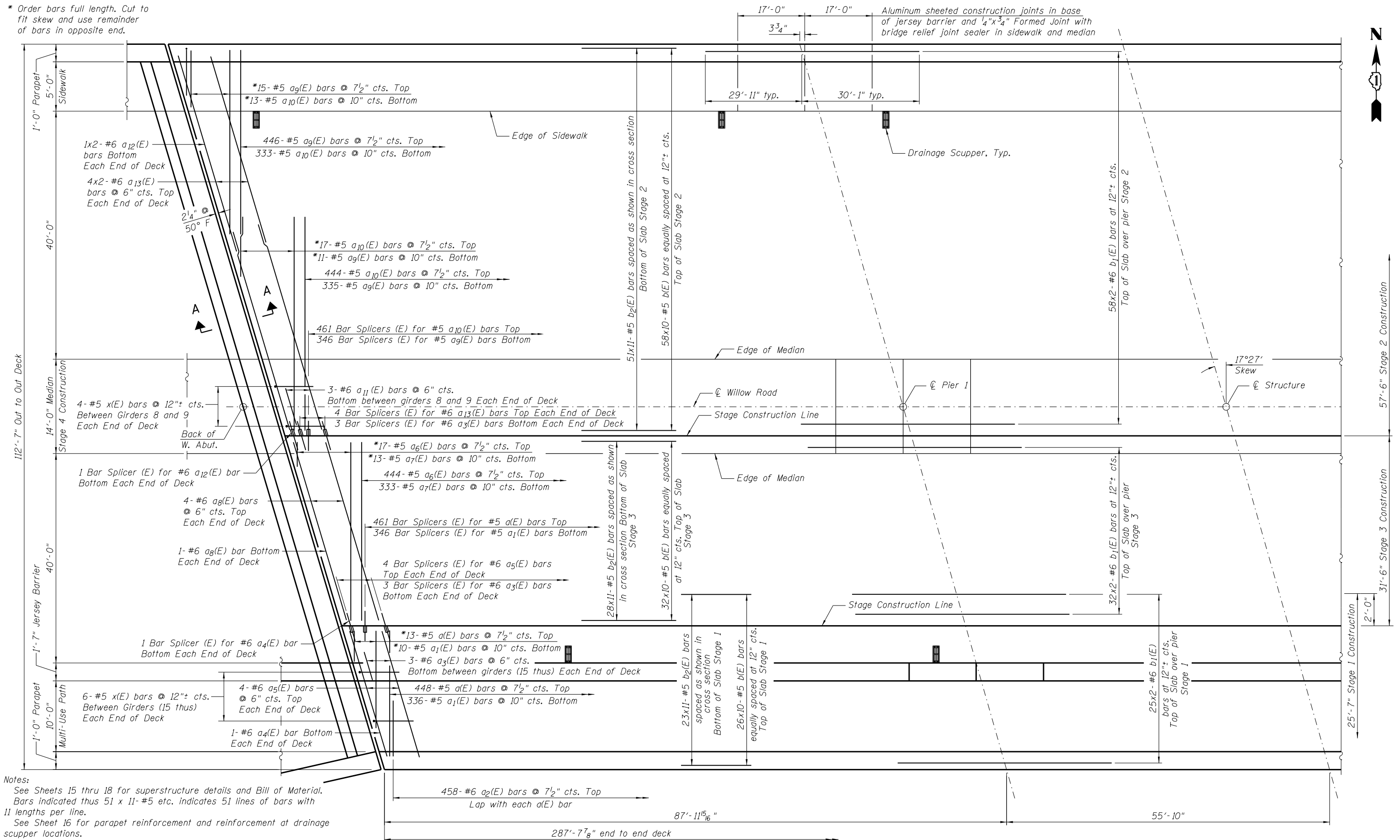
**EAST APPROACH TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0533**

SHEET NO. 12 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	56
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

* Order bars full length. Cut to fit skew and use remainder of bars in opposite end.



Notes:
 See Sheets 15 thru 18 for superstructure details and Bill of Material.
 Bars indicated thus 51 x 11-#5 etc. indicates 51 lines of bars with 11 lengths per line.
 See Sheet 16 for parapet reinforcement and reinforcement at drainage scupper locations.
 #6 a3(E) bars to be cut at Stage Construction Line. Remainder of bar to be used in next stage.
 See Stage Construction Detail on Sheet 16.
 See Section A-A on Sheet 18.
 See Sheet 3 for Drainage Scupper Locations.

PARTIAL PLAN

MINIMUM BAR LAP
 #5 Bar = 3'-3"
 #6 Bar = 3'-10"

FILEL\$

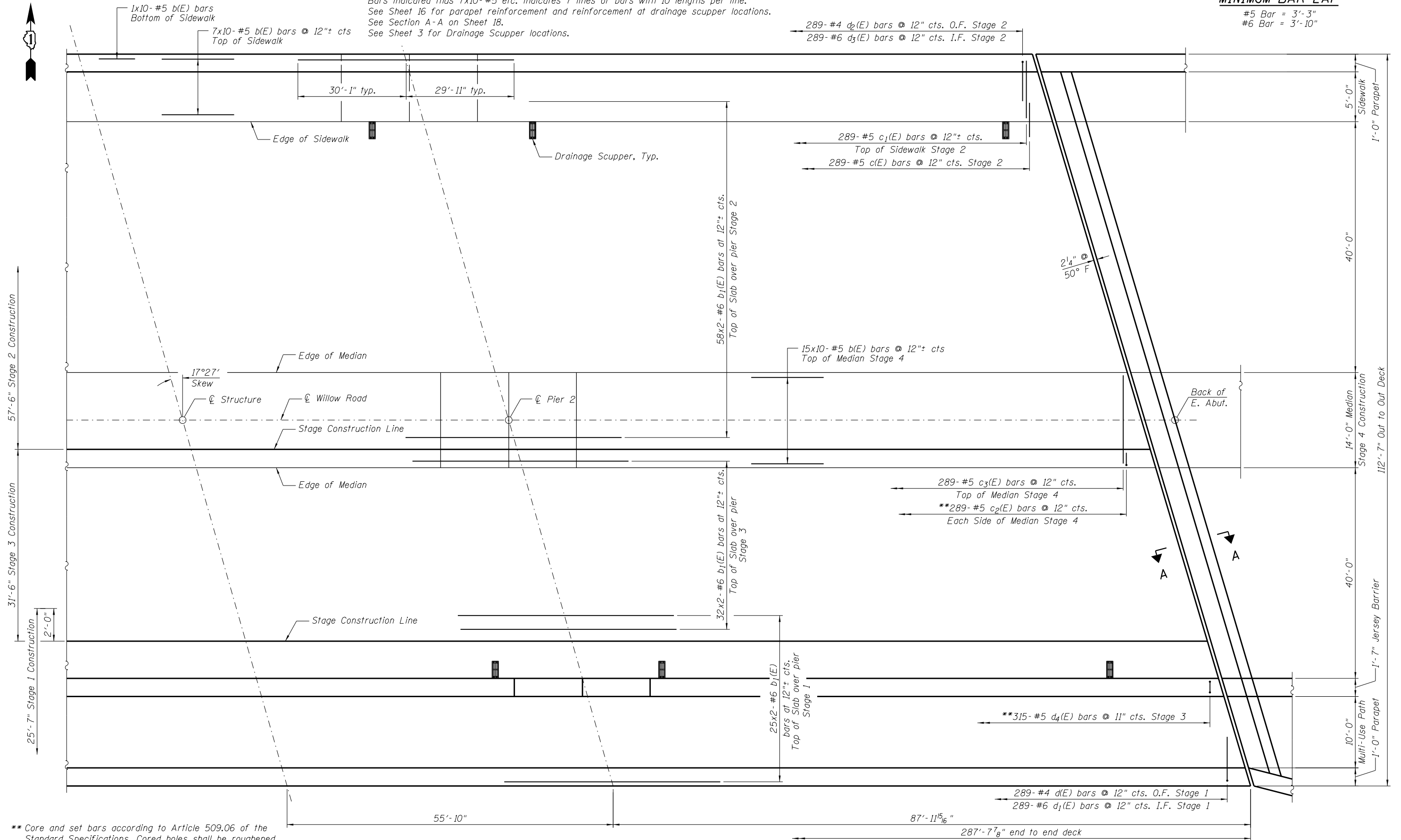
	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE 1 STRUCTURE NO. 016-0533	F.A.P. RT.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -			305	1920.01-BR	COOK	194	57
	PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83			ILLINOIS FED. AID PROJECT	



Notes:
 See Sheets 15 thru 18 for superstructure details and Bill of Material.
 Bars indicated thus 7x10-#5 etc. indicates 7 lines of bars with 10 lengths per line.
 See Sheet 16 for parapet reinforcement and reinforcement at drainage scupper locations.
 See Section A-A on Sheet 18.
 See Sheet 3 for Drainage Scupper locations.

MINIMUM BAR LAP

#5 Bar = 3'-3"
 #6 Bar = 3'-10"



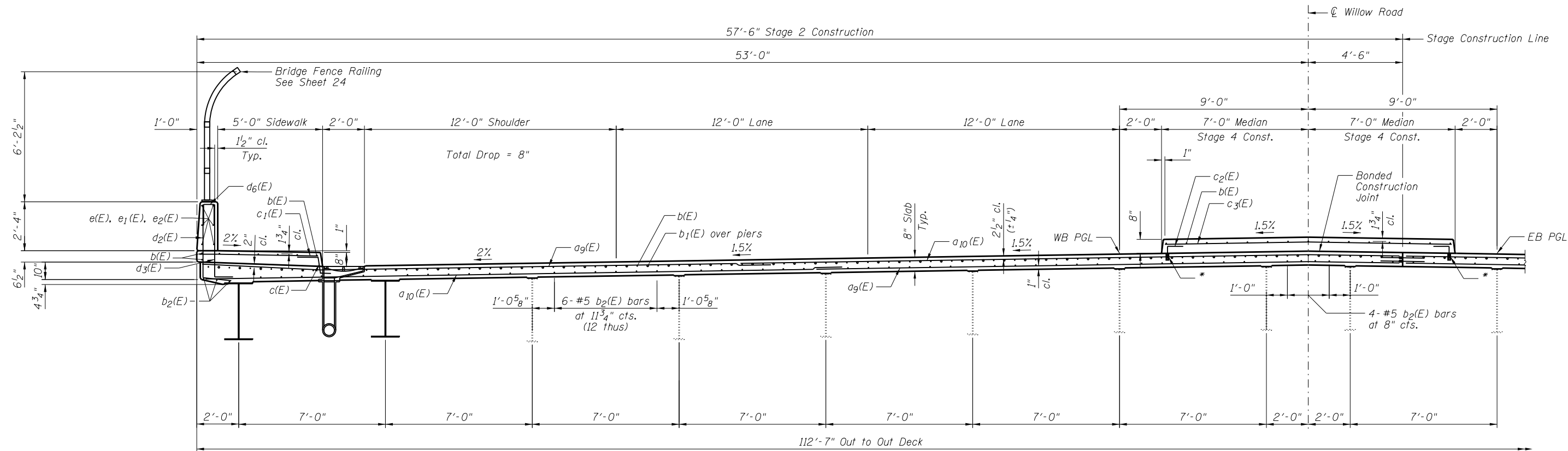
** Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

PARTIAL PLAN

FILEL\$

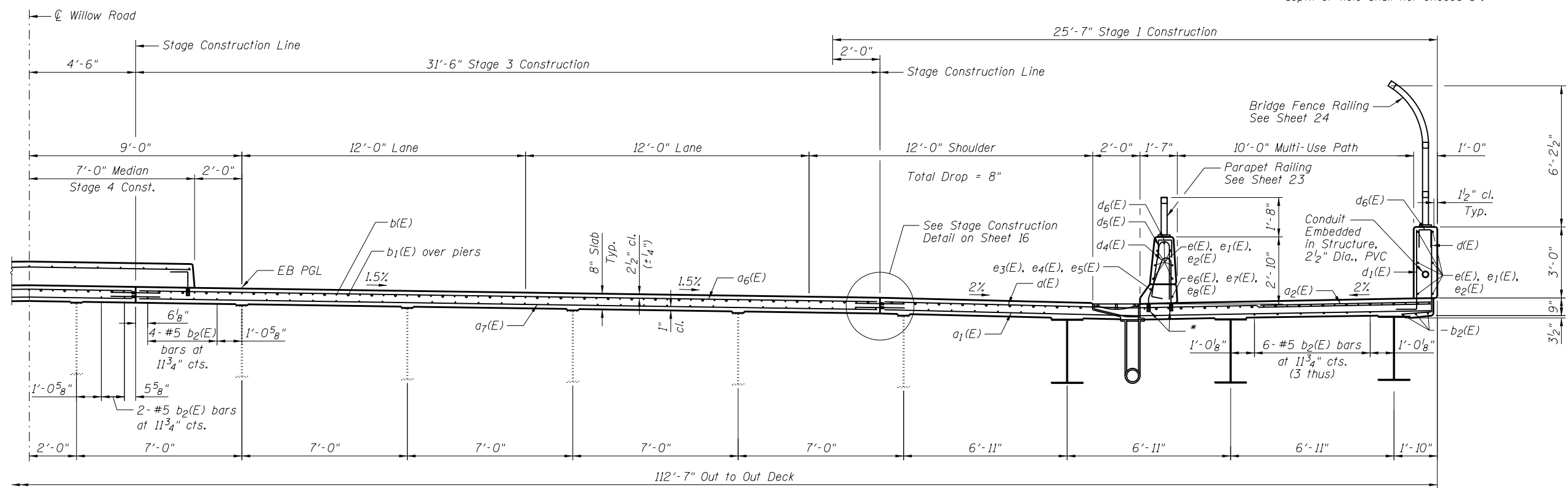
	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE 2 STRUCTURE NO. 016-0533	F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 58	
	PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83					
	PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -			ILLINOIS FED. AID PROJECT					

SHEET NO. 14 OF 57 SHEETS



DECK CROSS SECTION
(Looking East)

* Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".



DECK CROSS SECTION
(Looking East)

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

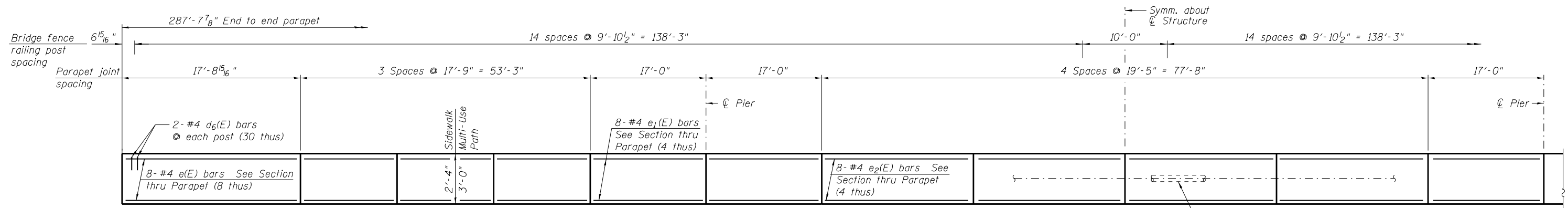
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 1
STRUCTURE NO. 016-0533

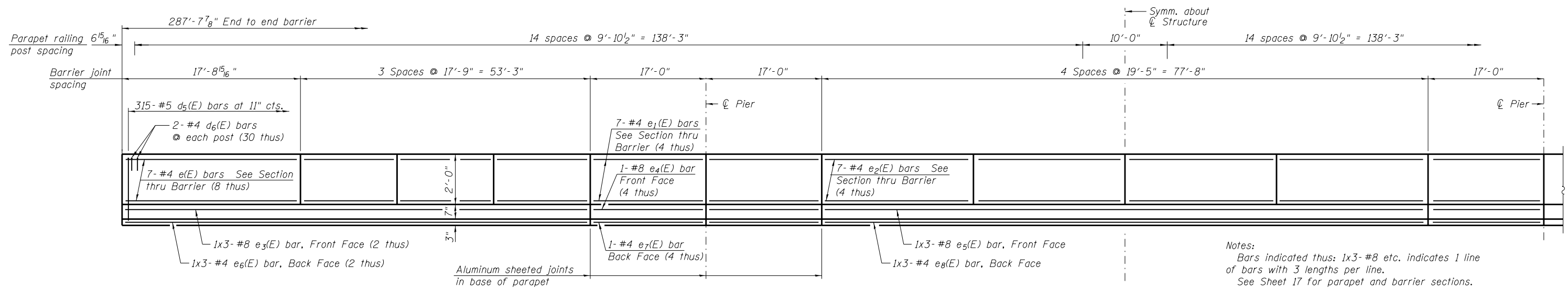
SHEET NO. 15 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	59
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



**INSIDE ELEVATION OF MULTIUSE PATH PARAPET (STAGE 1)
& SIDEWALK PARAPET (STAGE 2)**



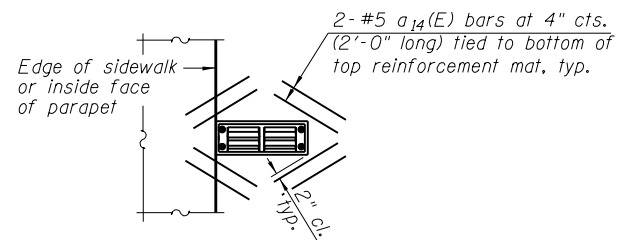
INSIDE ELEVATION OF JERSEY BARRIER (STAGE 3)

Note: Apply Protective Coat to the top and both vertical faces of the jersey barrier

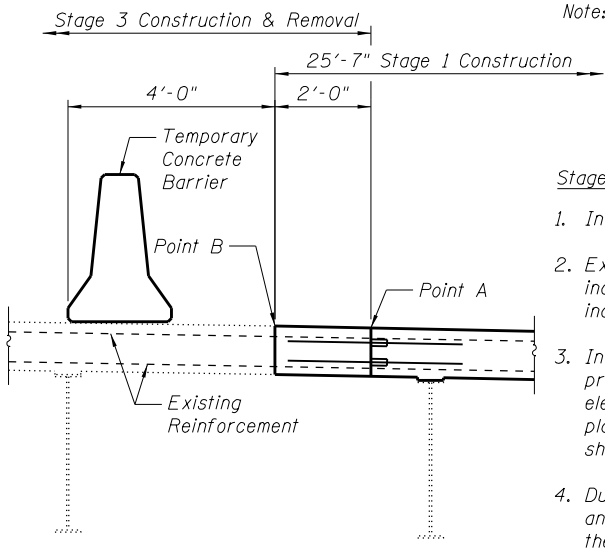
Notes:
Bars indicated thus: 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.
See Sheet 17 for parapet and barrier sections.

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



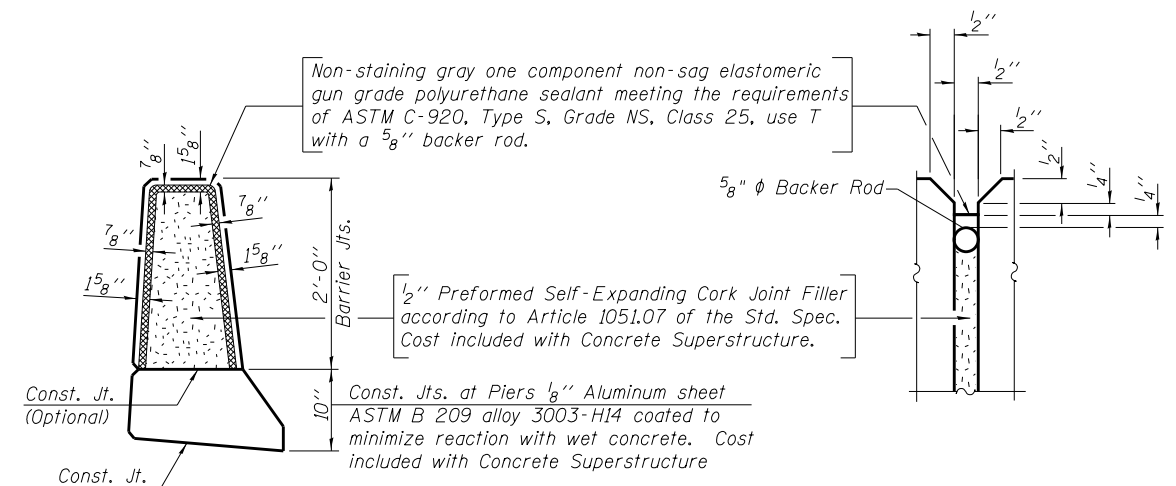
REINFORCEMENT AT DRAINAGE SCUPPER



STAGE CONSTRUCTION DETAIL

Stage Construction Detail Notes:

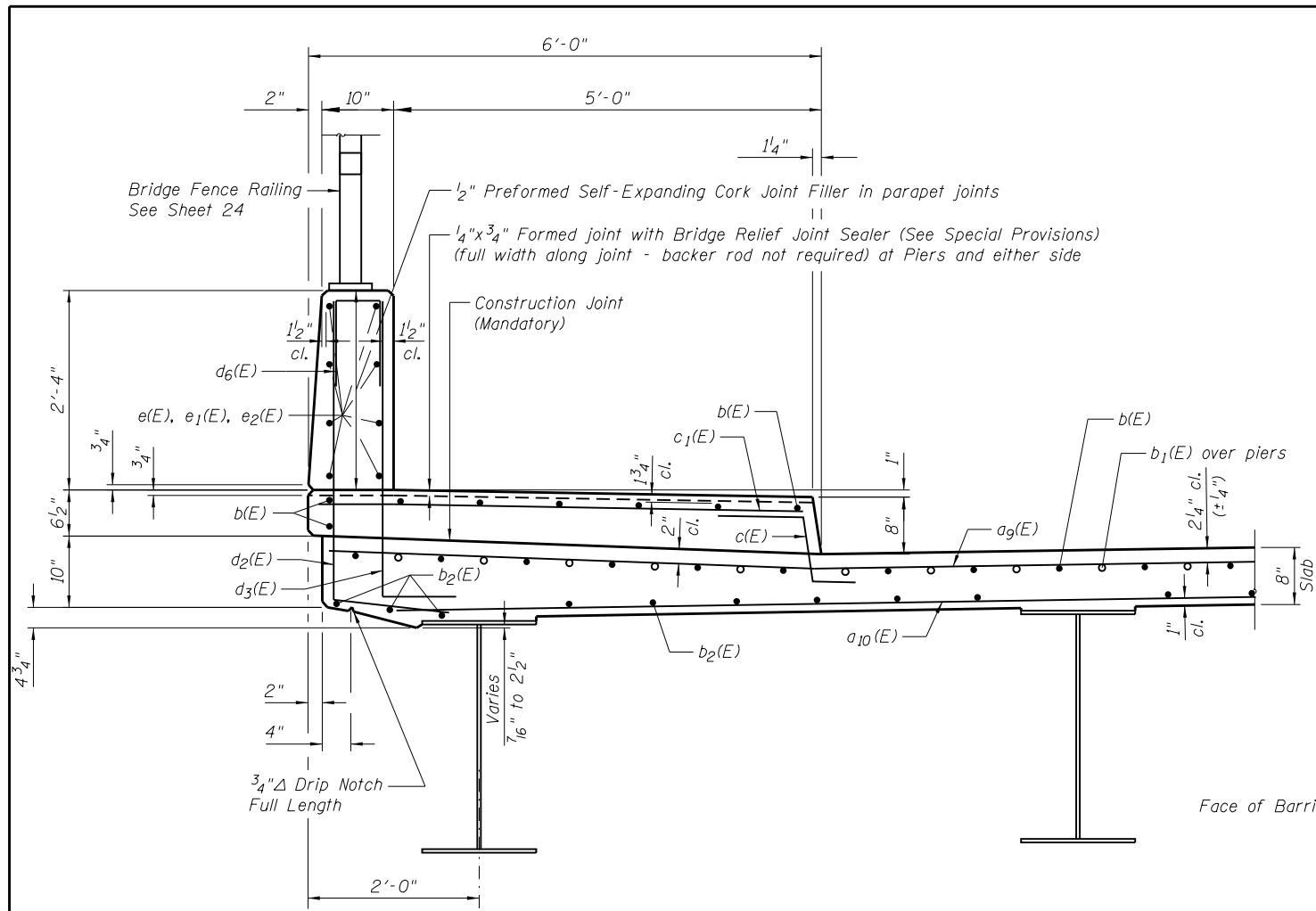
- In Stage 1, remove southern 6' of existing deck.
- Existing transverse reinforcement shall be cleaned and incorporated into the new Stage 1 construction. Cost included with Removal of Existing Concrete Deck.
- In Stage 1, new deck shall be placed to Point A using proposed elevations and shall match the existing elevations at Point B. Bar Splicer Assemblies shall be placed at Point A. Proposed longitudinal reinforcement shall be provided to Point B during Stage 1 Construction.
- During Stage 3, the deck shall be removed to Point A and the proposed reinforcement shall be attached to the Bar Splicer Assemblies. Longitudinal reinforcement between Points A & B provided in Stage 1 to be removed and new longitudinal reinforcement installed in Stage 3.



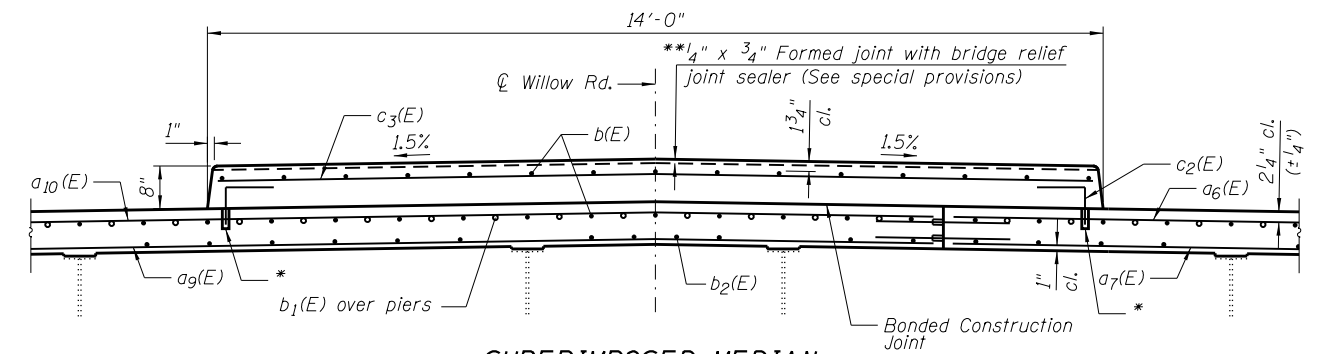
JERSEY BARRIER JOINT DETAILS
(Parapet Joints similar)

FILEL\$

	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS 2 STRUCTURE NO. 016-0533	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -			305	1920.01-BR	COOK	194	60
	PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83				
	CHECKED - LAS	REVISED -			SHEET NO. 16 OF 57 SHEETS	ILLINOIS FED. AID PROJECT				



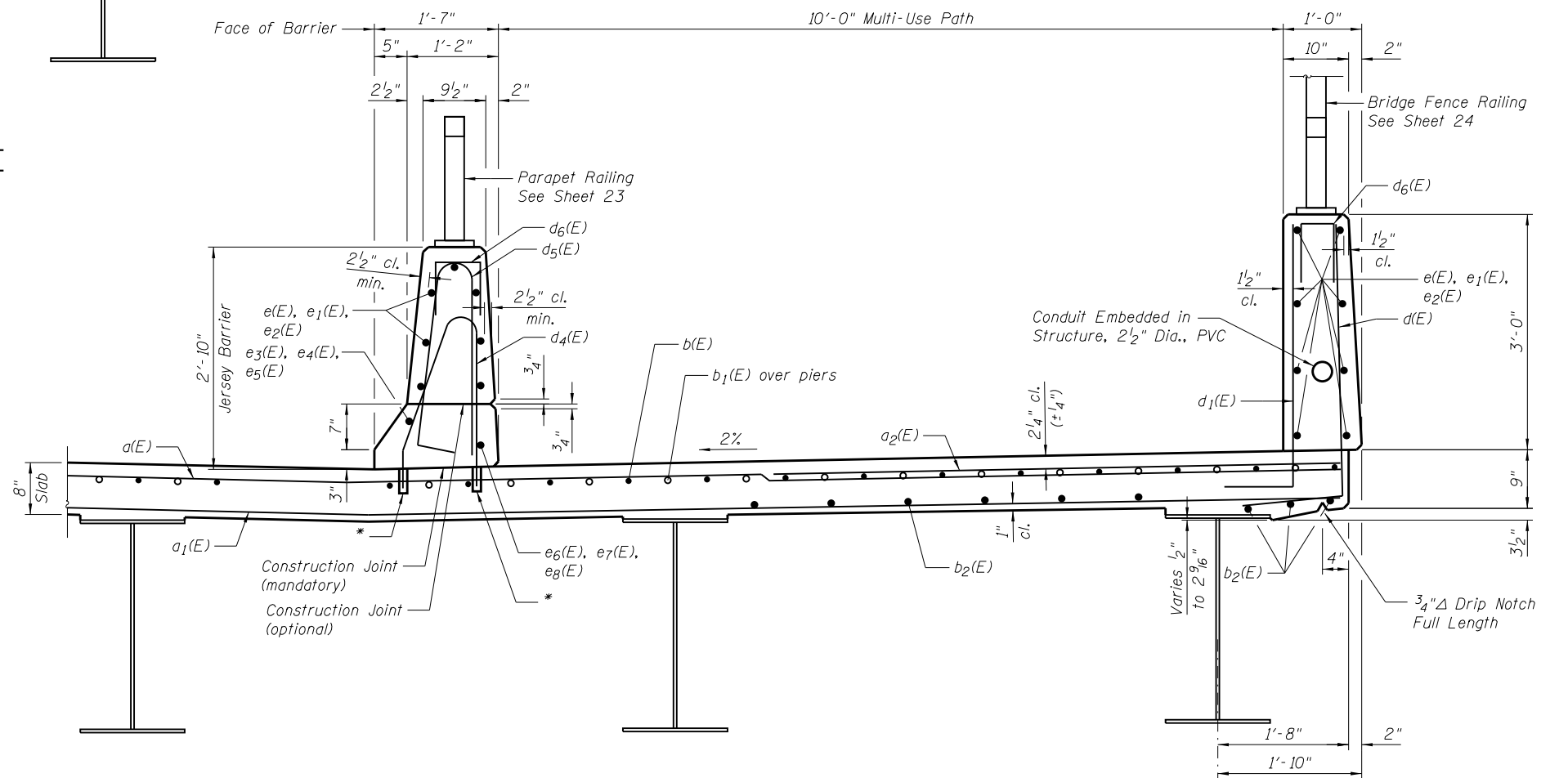
SECTION THRU SIDEWALK & NORTH PARAPET



SUPERIMPOSED MEDIAN

** Full width along joint - backer rod not required.

* Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".



SECTION THRU MULTI-USE PATH & SOUTH PARAPET

\$FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS 3
STRUCTURE NO. 016-0533

SHEET NO. 17 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	61
CONTRACT NO. 60N83				

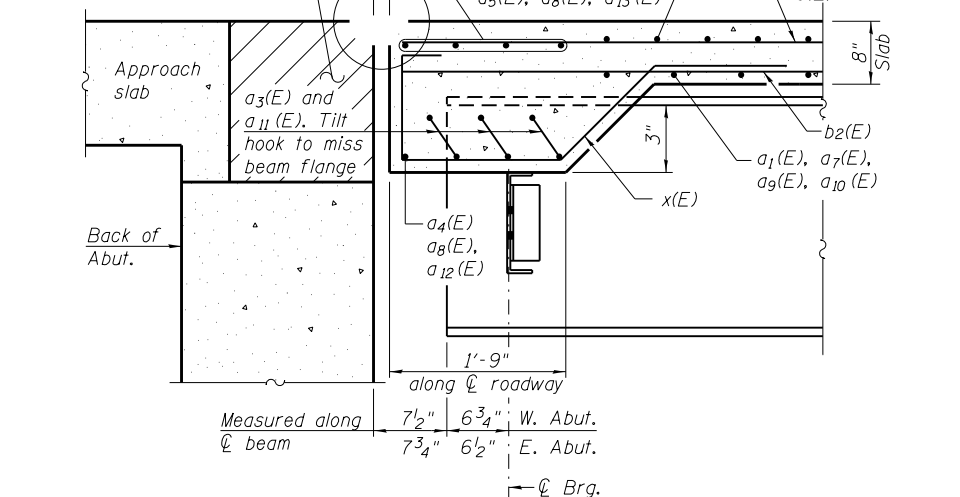
ILLINOIS FED. AID PROJECT

**SUPERSTRUCTURE
BILL OF MATERIAL**

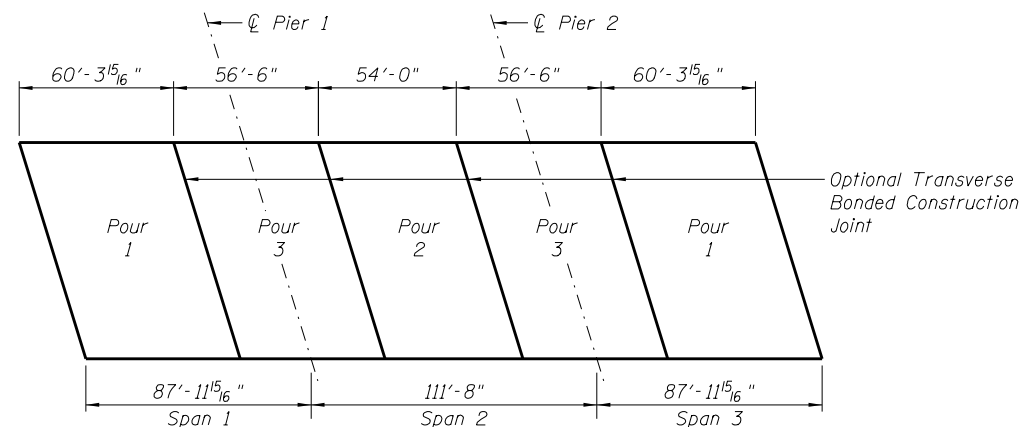
Bar	No.	Size	Length	Shape
a(E)	461	#5	23'-1"	—
a ₁ (E)	346	#5	22'-11"	—
a ₂ (E)	458	#6	6'-6"	—
a ₃ (E)	90	#6	8'-3"	⌋
a ₄ (E)	2	#6	22'-5"	—
a ₅ (E)	8	#6	24'-2"	—
a ₆ (E)	461	#5	31'-2"	—
a ₇ (E)	346	#5	31'-2"	—
a ₈ (E)	10	#6	32'-7"	—
a ₉ (E)	807	#5	28'-5"	—
a ₁₀ (E)	807	#5	32'-0"	—
a ₁₁ (E)	6	#6	5'-2"	⌋
a ₁₂ (E)	4	#6	31'-0"	—
a ₁₃ (E)	16	#6	32'-0"	—
a ₁₄ (E)	88	#5	2'-0"	—
b(E)	1390	#5	31'-8"	—
b ₁ (E)	460	#6	31'-11"	—
b ₂ (E)	1122	#5	29'-1"	—
c(E)	289	#5	2'-4"	⌋
c ₁ (E)	289	#5	5'-7"	—
c ₂ (E)	578	#5	1'-8"	⌋
c ₃ (E)	289	#5	13'-6"	—
d(E)	289	#4	4'-1"	⌋
d ₁ (E)	289	#6	4'-3"	⌋
d ₂ (E)	289	#4	4'-4"	⌋
d ₃ (E)	289	#6	4'-4"	⌋
d ₄ (E)	315	#5	4'-8"	⌋
d ₅ (E)	315	#5	5'-7"	⌋
d ₆ (E)	180	#4	2'-0"	⌋
e(E)	184	#4	17'-5"	—
e ₁ (E)	92	#4	16'-8"	—
e ₂ (E)	92	#4	19'-1"	—
e ₃ (E)	6	#8	27'-0"	—
e ₄ (E)	4	#8	16'-8"	—
e ₅ (E)	3	#8	29'-3"	—
e ₆ (E)	6	#4	24'-11"	—
e ₇ (E)	4	#4	16'-8"	—
e ₈ (E)	3	#4	27'-2"	—
x(E)	188	#5	6'-5"	⌋
Reinforcement Bars, Epoxy Coated			Pound	229,130
Concrete Superstructure			Cu. Yds.	1090.1

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.

For details of expansion joint, see sheet 25 of 57. Also see Stage 2 Construction Detail on sheet 43 of 57.



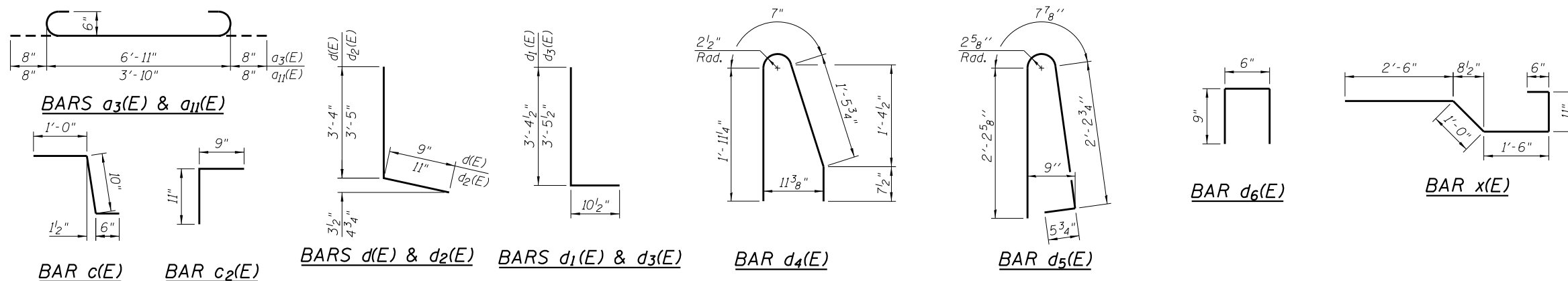
SECTION A-A



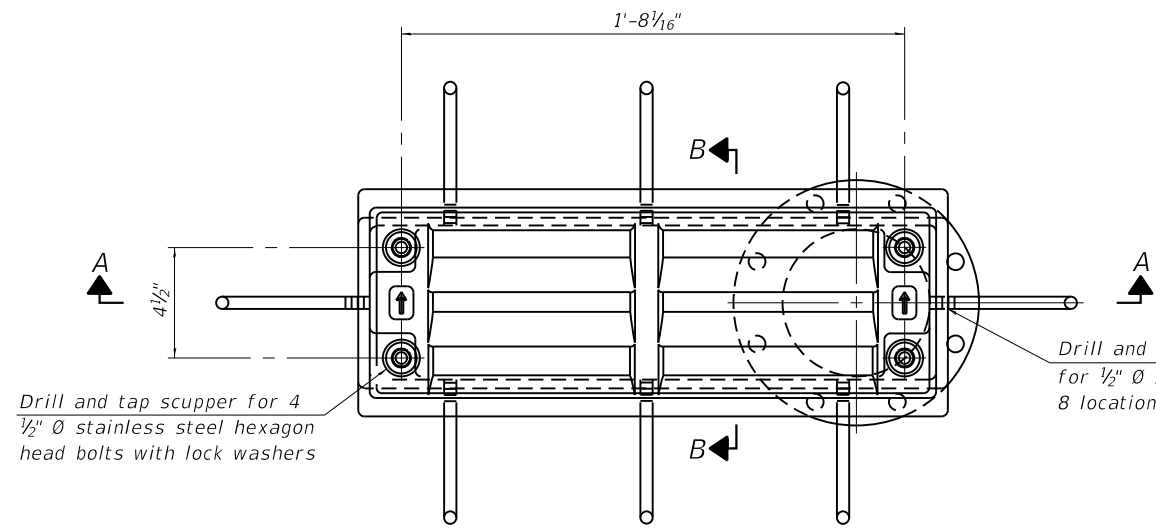
When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

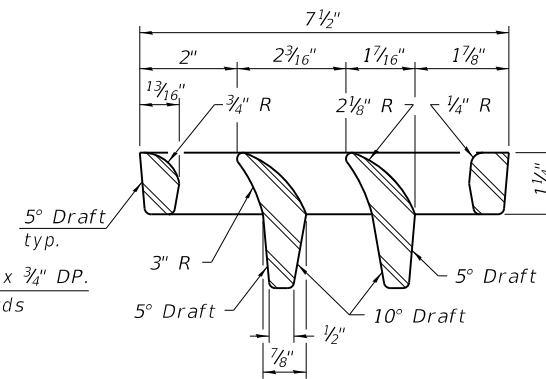
DECK POURING SEQUENCE



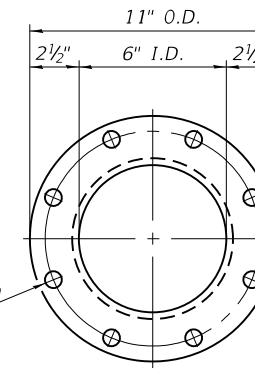
FILEL\$



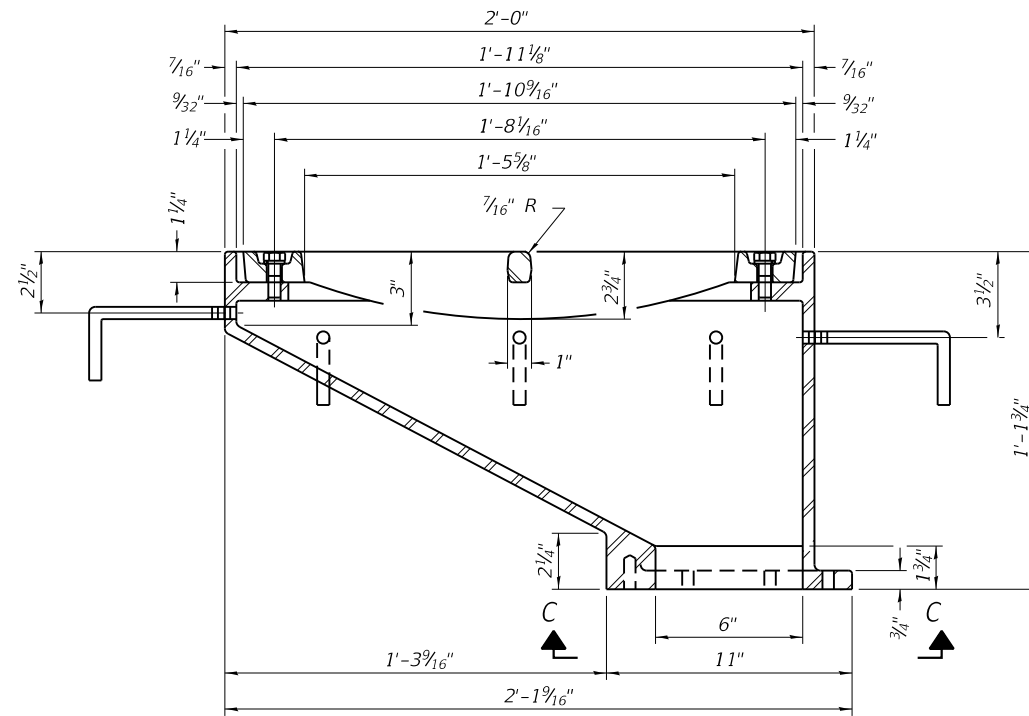
PLAN



VANE GRATE DETAIL

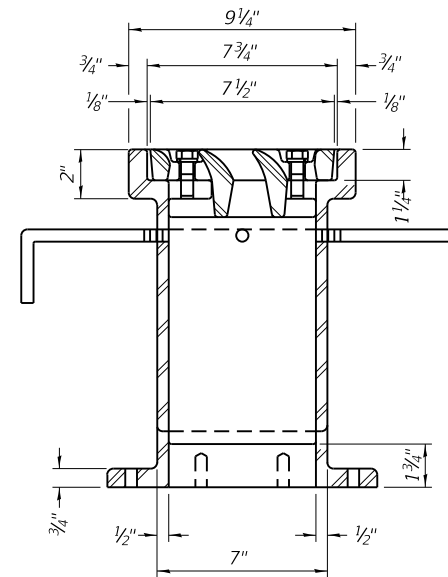


8-9/16" Ø holes on an 9 1/2" Ø bolt circle

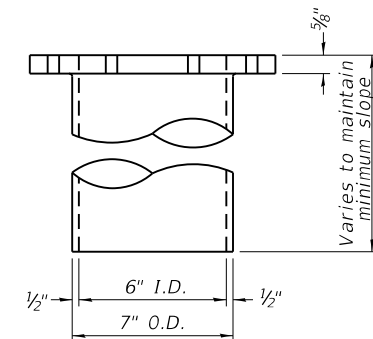


SECTION A-A

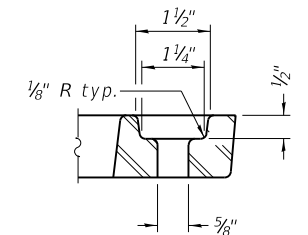
See sheet 15 of 57 for scupper location relative to parapet.



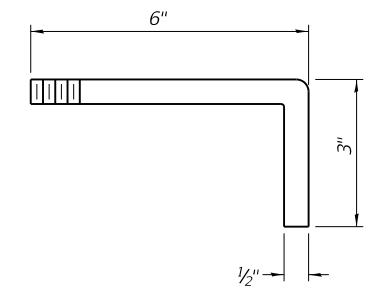
SECTION B-B



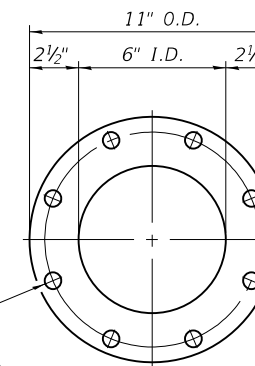
DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL



VIEW C-C

Drill and tap 8 holes for 1/2"-13 bolts on a 9 1/2" Ø bolt circle. (2 blind holes are 1 1/4" deep, 6 thru holes)

Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel 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 frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.
 Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	11

DS-12

2-17-2017



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

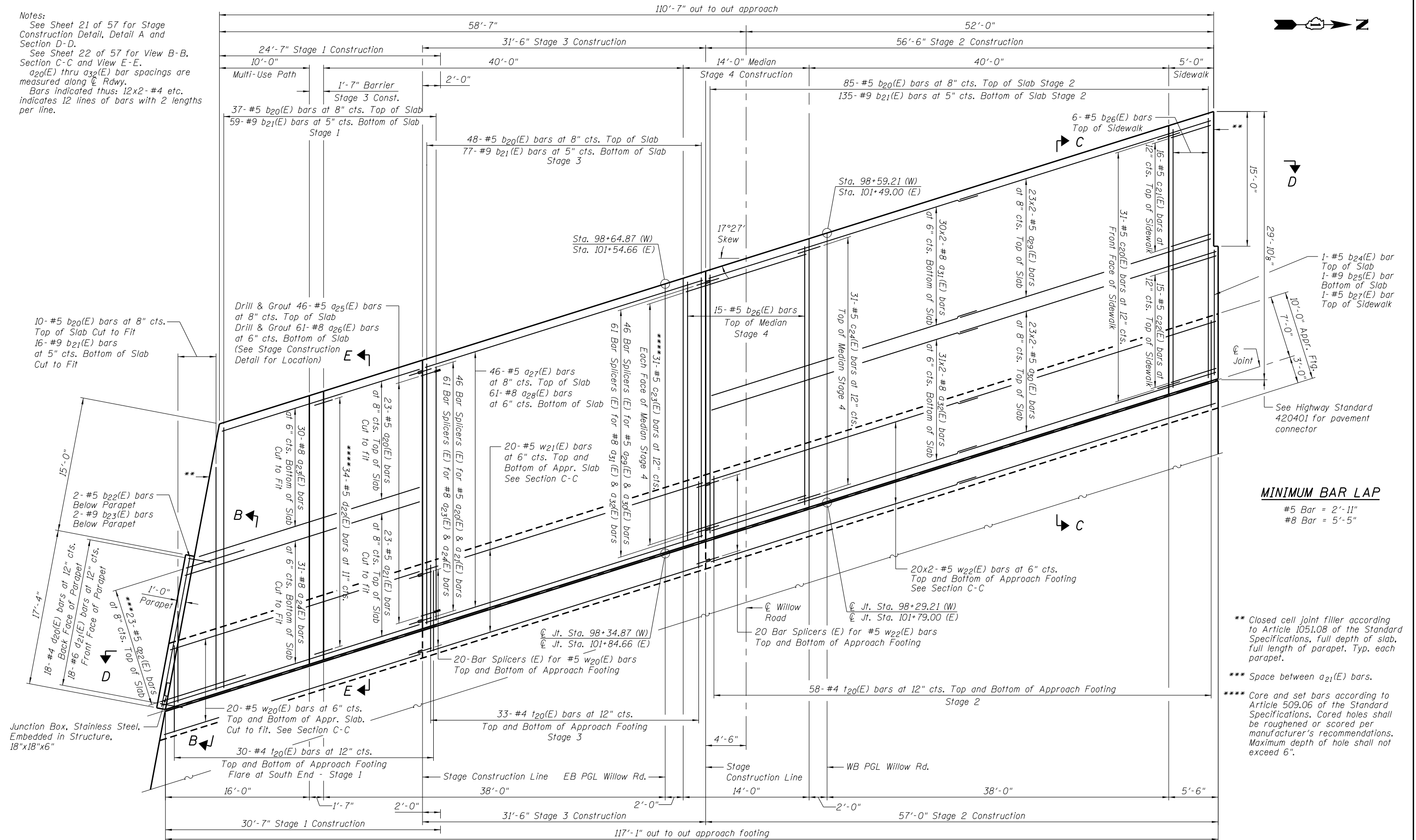
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-0533

SHEET NO. 19 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	63
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

Notes:
 See Sheet 21 of 57 for Stage Construction Detail, Detail A and Section D-D.
 See Sheet 22 of 57 for View B-B, Section C-C and View E-E.
 $a_{20}(E)$ thru $a_{32}(E)$ bar spacings are measured along ϕ Rdwy.
 Bars indicated thus: 12x2-#4 etc. indicates 12 lines of bars with 2 lengths per line.



MINIMUM BAR LAP
 #5 Bar = 2'-11"
 #8 Bar = 5'-5"

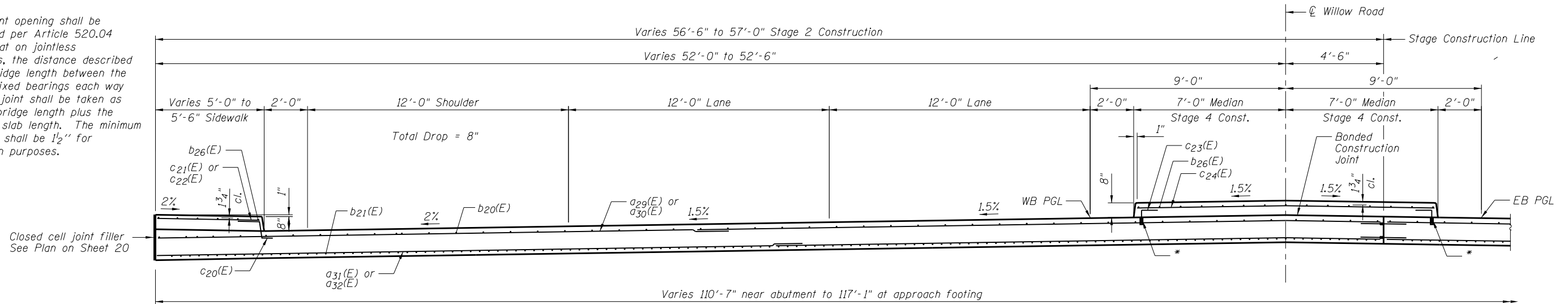
** Closed cell joint filler according to Article 1051.08 of the Standard Specifications, full depth of slab, full length of parapet. Typ. each parapet.
 *** Space between $a_{21}(E)$ bars.
 **** Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

PLAN
 (East Approach Shown, West Approach Similar)

FILED

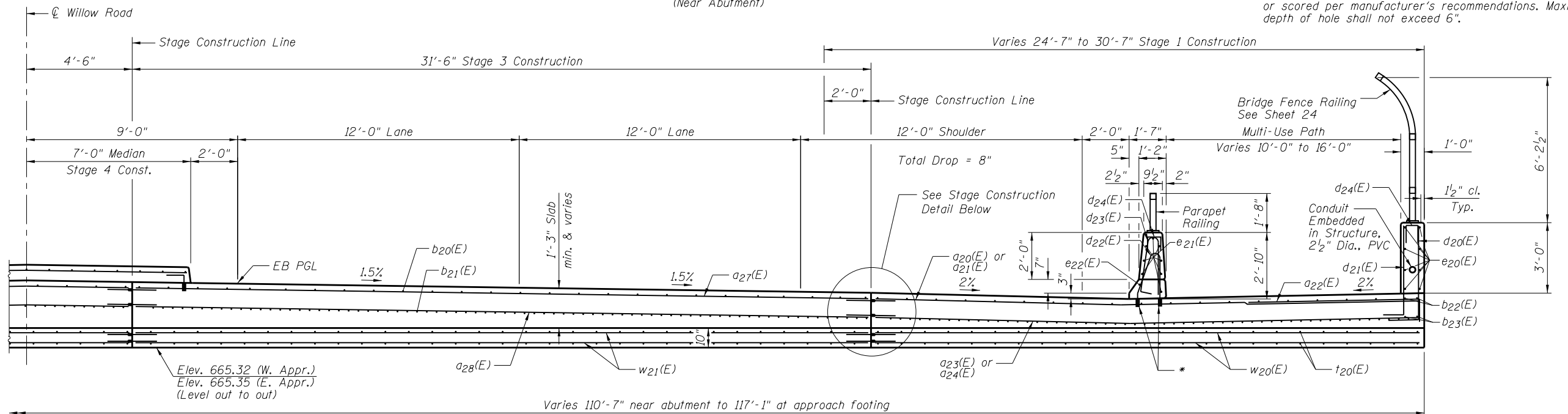
	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS 1 STRUCTURE NO. 016-0533	F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 64
	PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83				
	PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -			ILLINOIS FED. AID PROJECT				

Note:
The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.

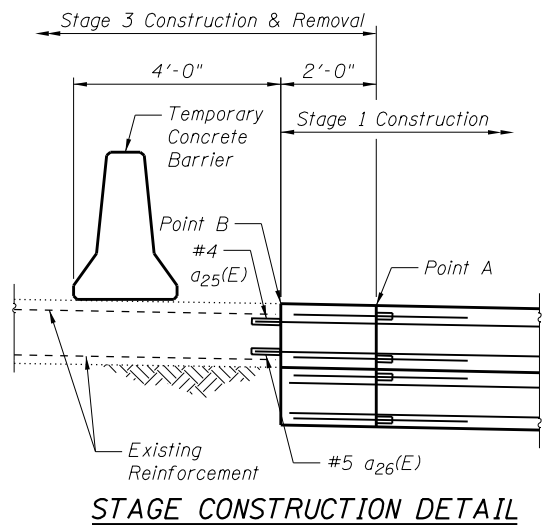


SECTION D-D
(Near Abutment)

*Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".



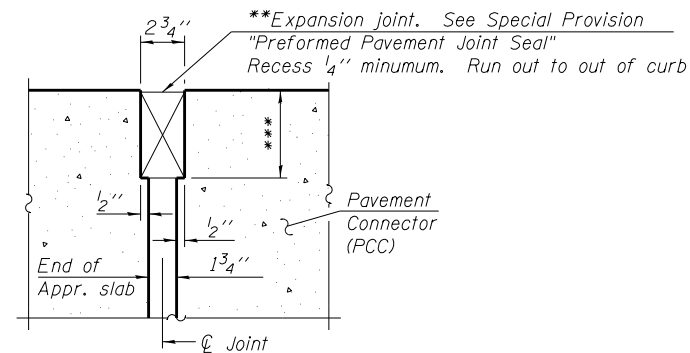
SECTION D-D
(At Approach Footing)



STAGE CONSTRUCTION DETAIL

Stage Construction Detail Notes:

- In Stage 1, remove south curb & gutter, sidewalk and guardrail.
- Existing reinforcement will not extend into proposed Stage 1 approach slab. Drill and epoxy grout #4 a25(E) and #5 a26(E) bars into existing approach as shown at Point B according to Section 584 of the Standard Specifications. Adjust spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.
- In Stage 1, new approach slab and footing shall be placed to Point A using proposed elevations and shall match the existing elevations at Point B. Bar Splicer Assemblies shall be placed at Point A. Proposed longitudinal reinforcement shall be provided to Point B during Stage 1 Construction.
- During Stage 3, the approach slab and footing shall be removed to Point A and the proposed reinforcement shall be attached to the Bar Splicer Assemblies. Longitudinal reinforcement between Points A & B provided in Stage 1 to be removed and new longitudinal reinforcement installed in Stage 3.



DETAIL A

(Detail A shown, applies to Highway Standard 420401.

**Cost included with Concrete Superstructure (Approach Slab).

***Per manufacturer recommendations

SFILES



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS 2
STRUCTURE NO. 016-0533

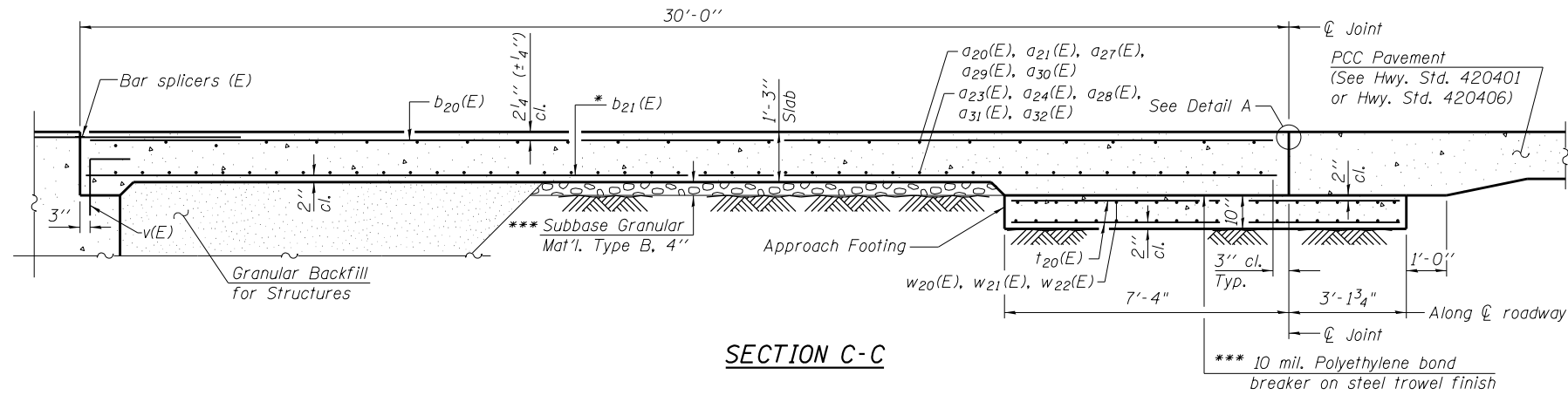
SHEET NO. 21 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	65
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

Notes:

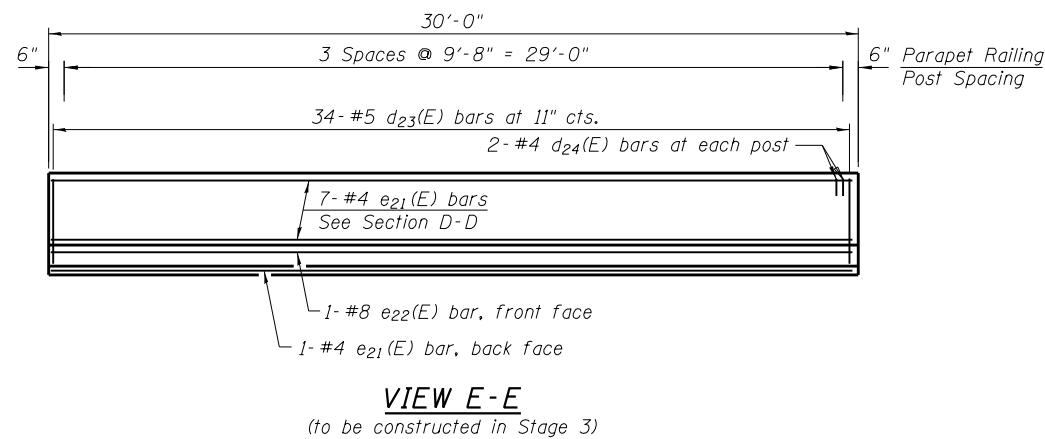
Median, sidewalk and parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 See sheet 21 of 57 for Detail A.
 For v(E) bar details, see sheet 43 of 57.
 For bar splicer details, see sheet 49 of 57.
 For Granular Backfill for Structures and drainage treatment details, see sheet 3 of 57.
 For additional parapet details, see sheet 16 of 57.
 For Stage Construction Detail, see sheet 21 of 57.



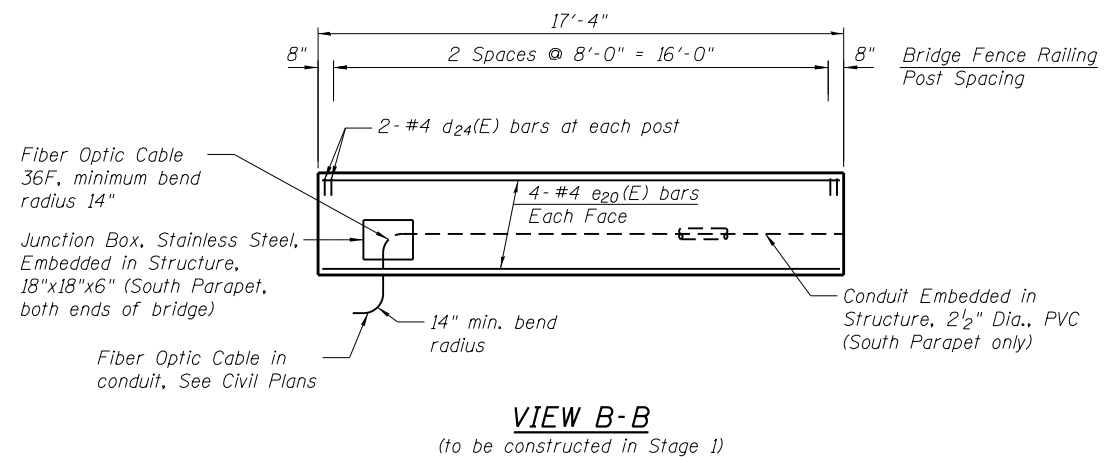
* Tilt #9 b21(E) bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.

**TWO APPROACHES
 BILL OF MATERIAL**

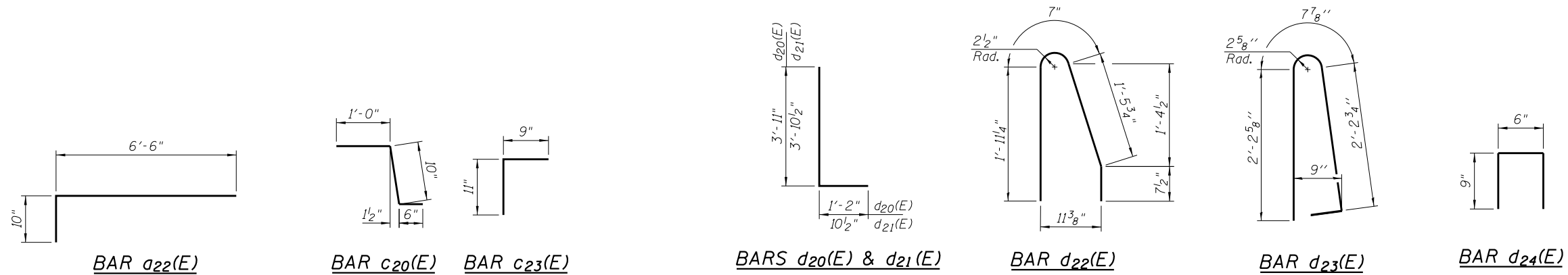
Bar	No.	Size	Length	Shape
a20(E)	46	#5	26'-5"	—
a21(E)	46	#5	29'-7"	—
a22(E)	46	#5	7'-4"	┌
a23(E)	60	#8	26'-5"	—
a24(E)	62	#8	29'-7"	—
a25(E)	92	#5	5'-10"	—
a26(E)	122	#5	8'-4"	—
a27(E)	92	#5	32'-8"	—
a28(E)	122	#8	32'-8"	—
a29(E)	92	#5	30'-11"	—
a30(E)	92	#5	31'-2"	—
a31(E)	120	#8	32'-2"	—
a32(E)	124	#8	32'-5"	—
b20(E)	360	#5	29'-8"	—
b21(E)	574	#9	29'-8"	—
b22(E)	4	#5	17'-0"	—
b23(E)	4	#9	17'-0"	—
b24(E)	2	#5	14'-8"	—
b25(E)	2	#9	14'-8"	—
b26(E)	42	#5	29'-8"	—
b27(E)	2	#5	14'-8"	—
c20(E)	62	#5	2'-4"	└
c21(E)	32	#5	4'-10"	—
c22(E)	30	#5	5'-4"	—
c23(E)	124	#5	1'-8"	└
c24(E)	62	#5	14'-2"	—
d20(E)	36	#4	5'-1"	└
d21(E)	36	#6	4'-9"	└
d22(E)	68	#5	4'-8"	└
d23(E)	68	#5	5'-7"	└
d24(E)	28	#4	2'-0"	└
e20(E)	16	#4	17'-0"	—
e21(E)	16	#4	29'-8"	—
e22(E)	2	#8	29'-8"	—
i20(E)	484	#4	10'-2"	—
w20(E)	80	#5	29'-7"	—
w21(E)	80	#5	32'-8"	—
w22(E)	160	#5	31'-4"	—
Concrete Structures		Cu. Yd.	75.8	
Reinforcement Bars, Epoxy Coated		Pound	144,140	
Concrete Superstructure		Cu. Yds.	39.9	
Concrete Superstructure (Approach Slab)		Cu. Yd.	350.5	



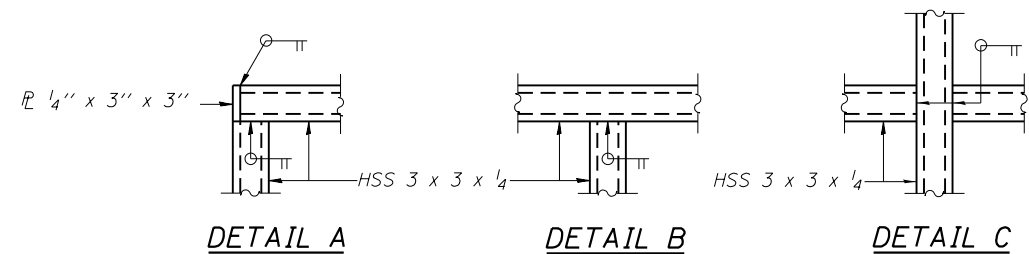
VIEW E-E
 (to be constructed in Stage 3)



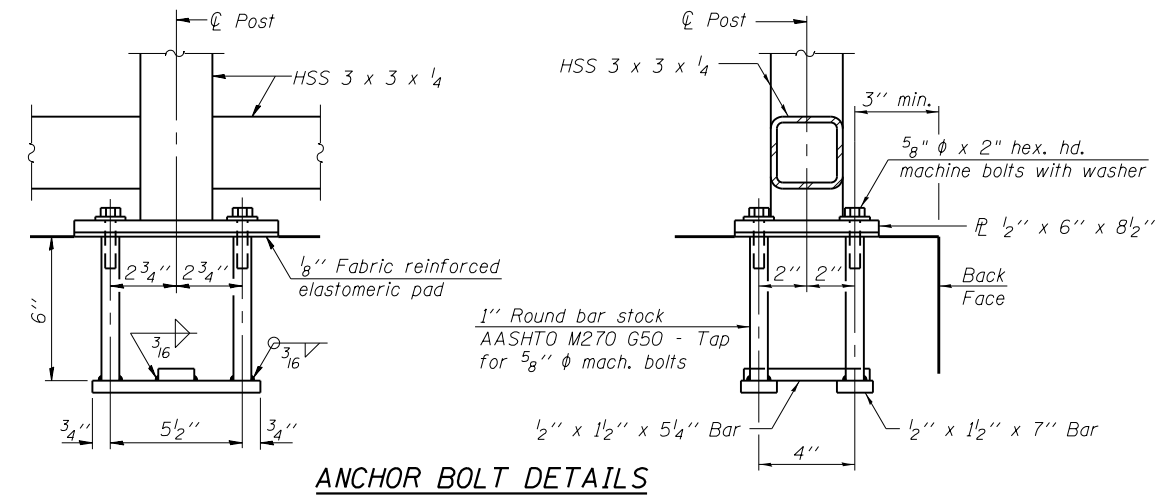
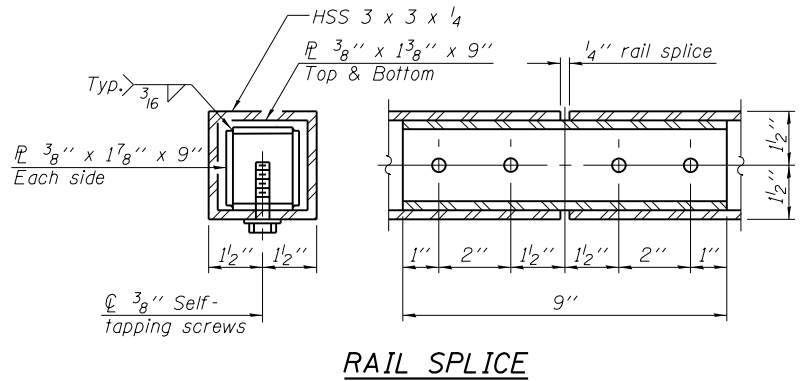
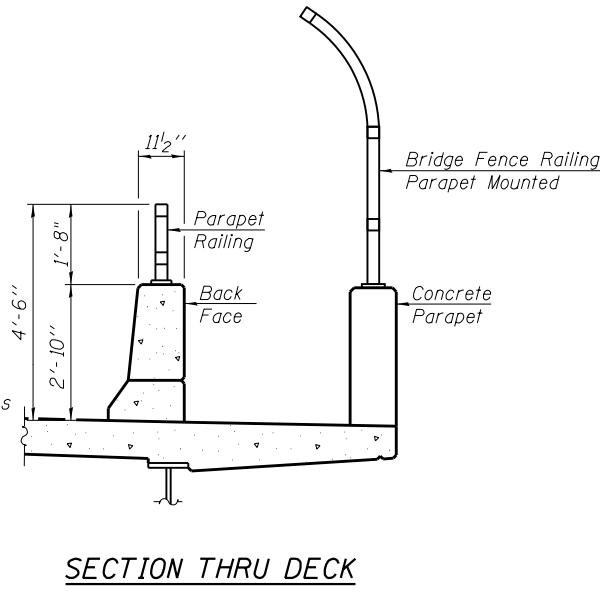
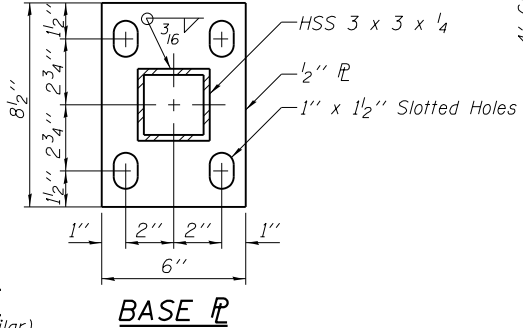
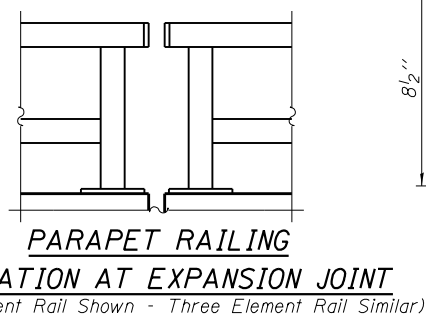
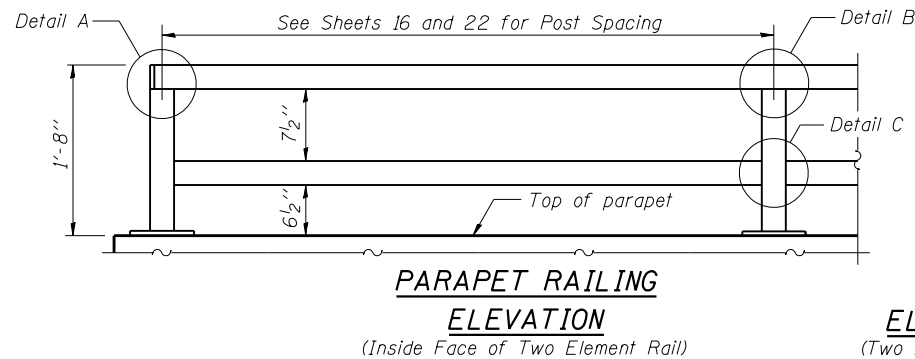
VIEW B-B
 (to be constructed in Stage 1)



\$FILEL\$



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



In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" phi 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
Parapet Railing	Foot	348

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.31(b) of the Standard Specifications. CVN testing may be omitted for the Bicycle Railing.

R-29 (Modified)



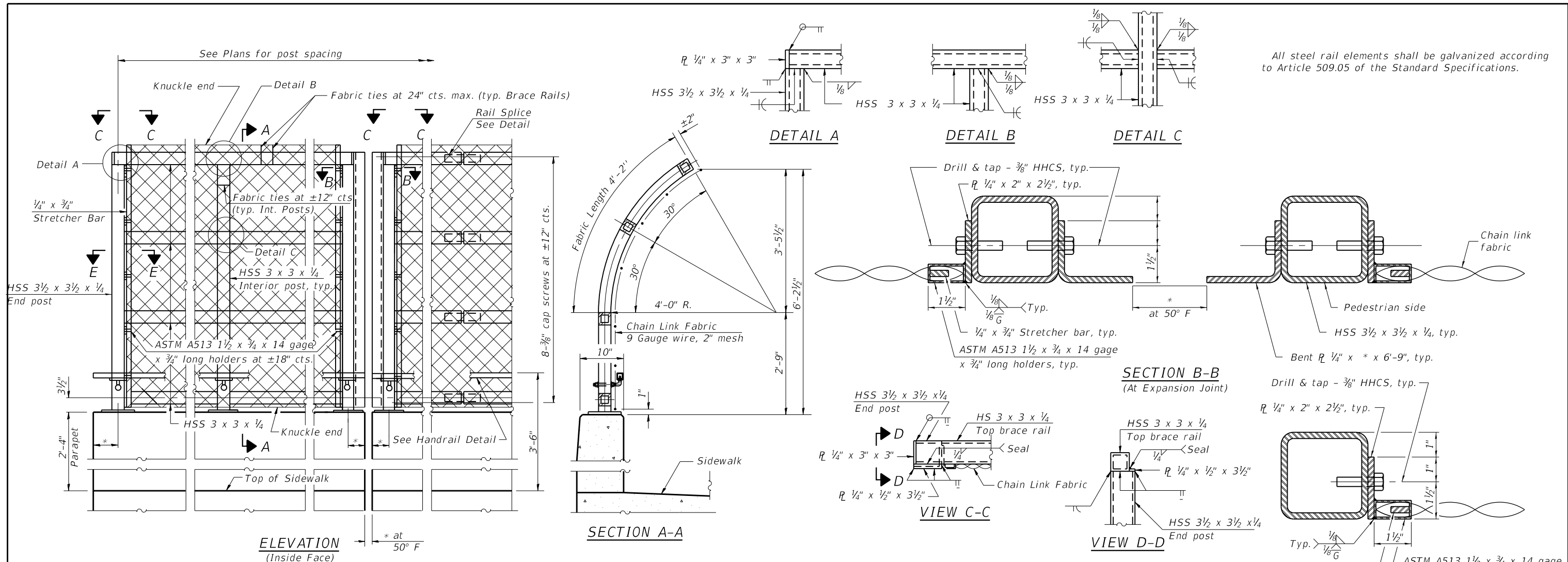
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

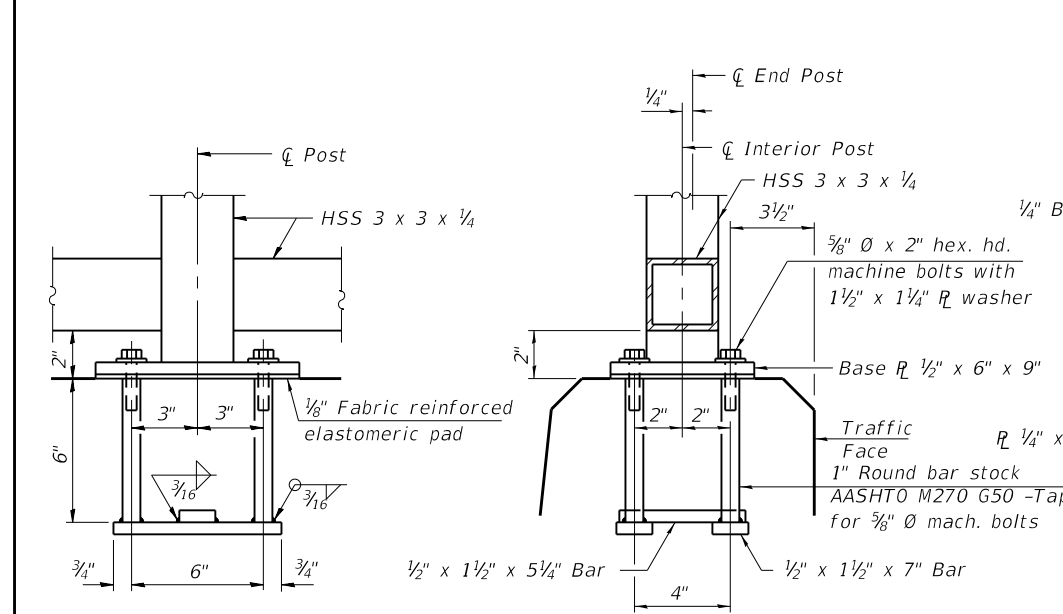
PARAPET RAILING
STRUCTURE NO. 016-0533
SHEET NO. 23 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	67
CONTRACT NO. 60N83				

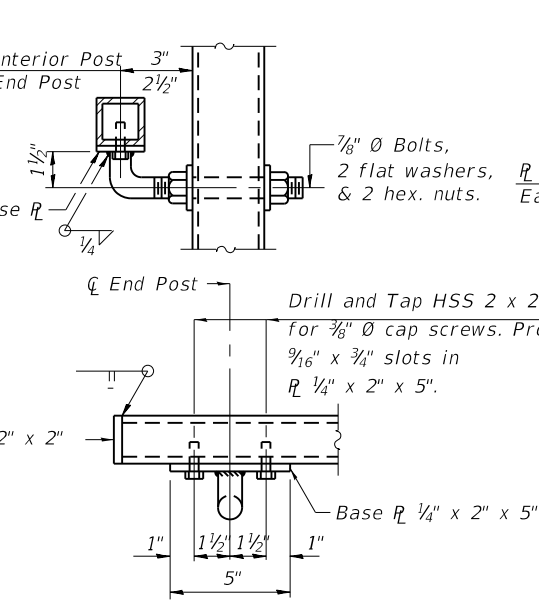
ILLINOIS FED. AID PROJECT



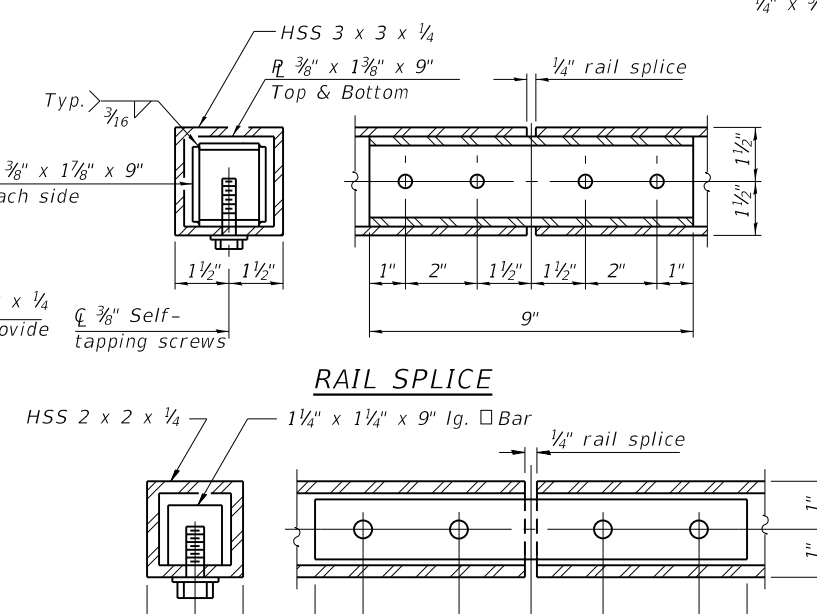
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



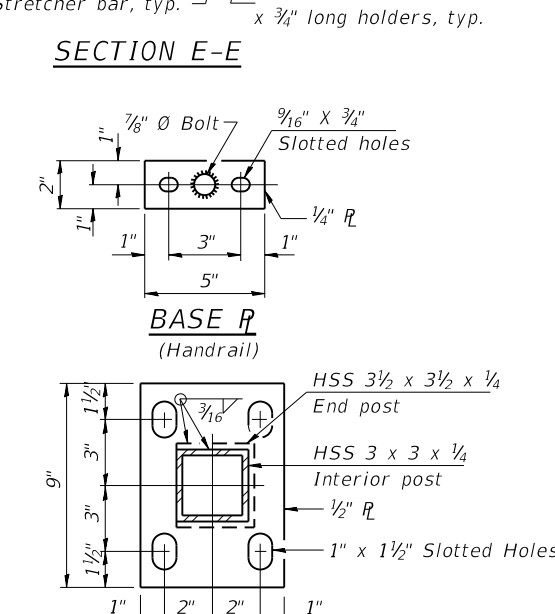
ANCHOR BOLT DETAILS
 In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



HANDRAIL DETAIL



RAIL SPLICE



BASE P (Handrail)

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	673

Note:
 CVN testing may be omitted for the railing.

R-32

8-11-2017
 *Variable - See Plans
 (10'-0" Maximum Post Spacing)



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

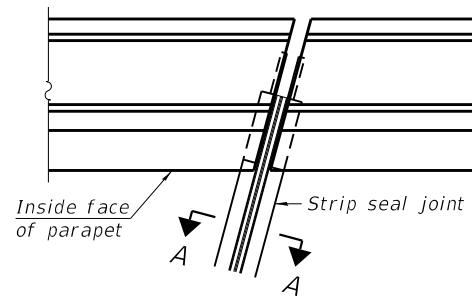
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, PARAPET MOUNTED
STRUCTURE NO. 016-0533

SHEET NO. 24 OF 57 SHEETS

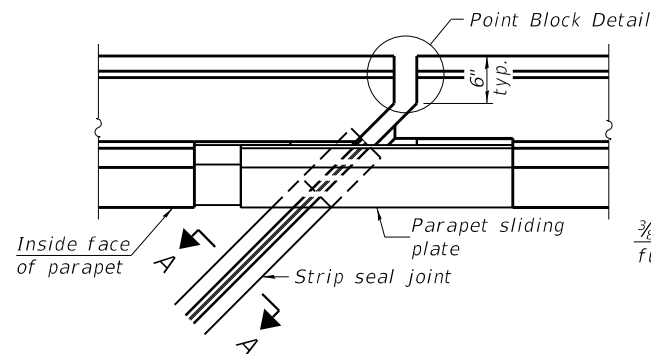
F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 68
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

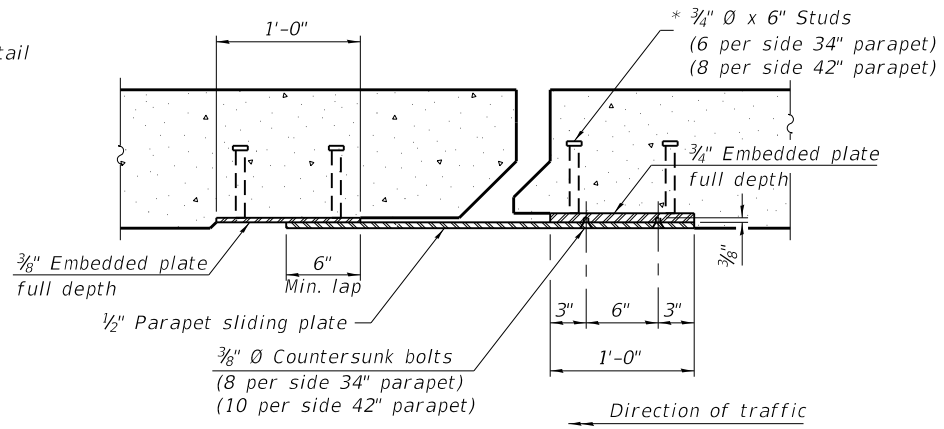


FOR SKEWS $\leq 30^\circ$

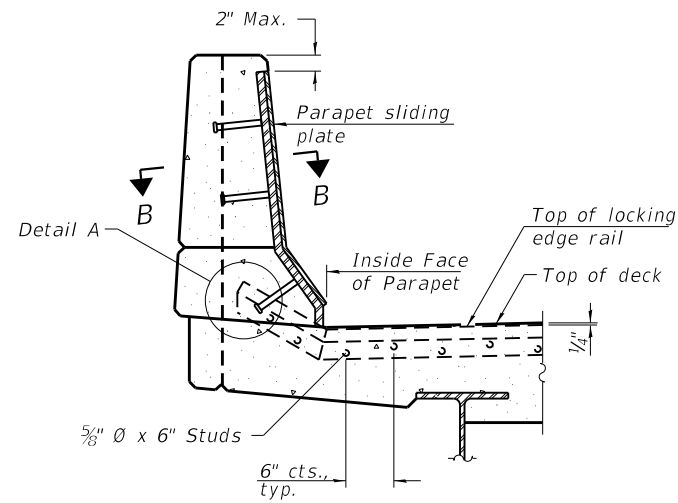
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

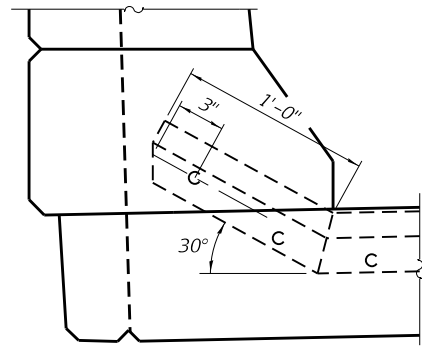


SECTION B-B

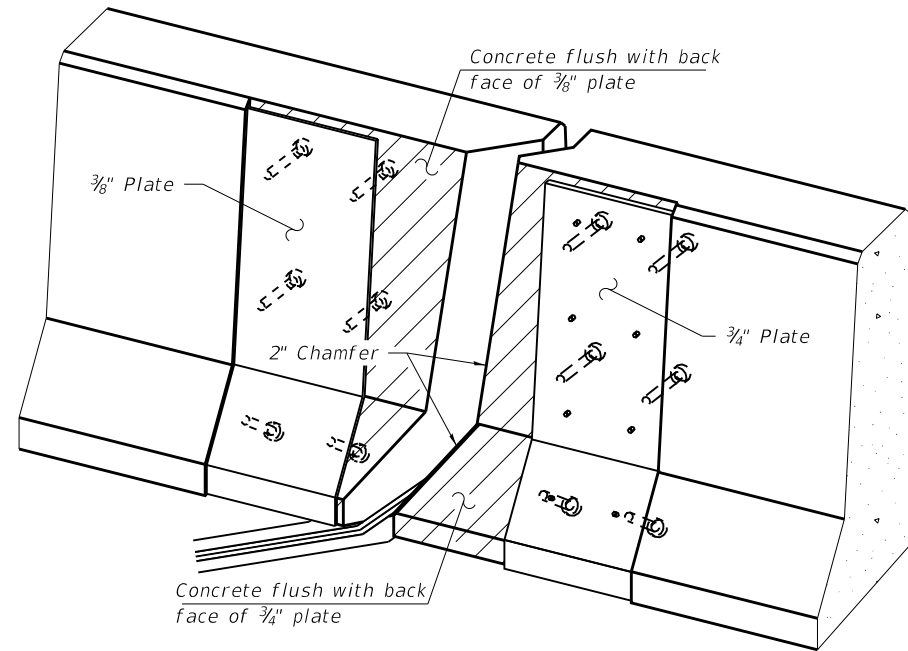


ELEVATION AT PARAPET

(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

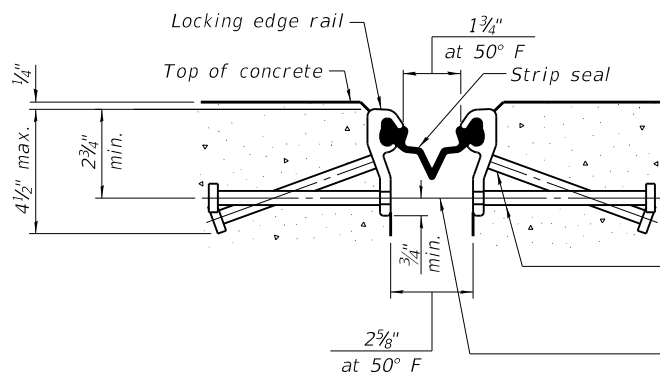
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



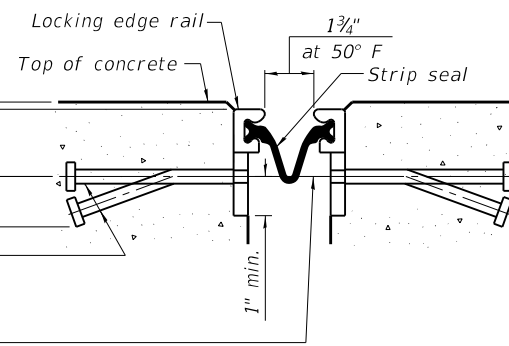
SHOWING ROLLED RAIL JOINT

* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

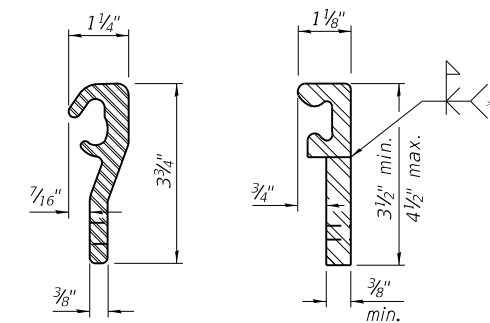
3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



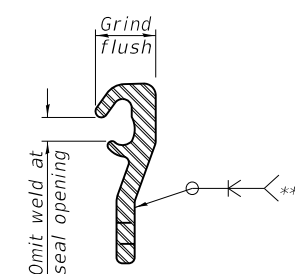
SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	274

FILED

EJ-SS-S

8-11-17

(Sheet 1 of 3)



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

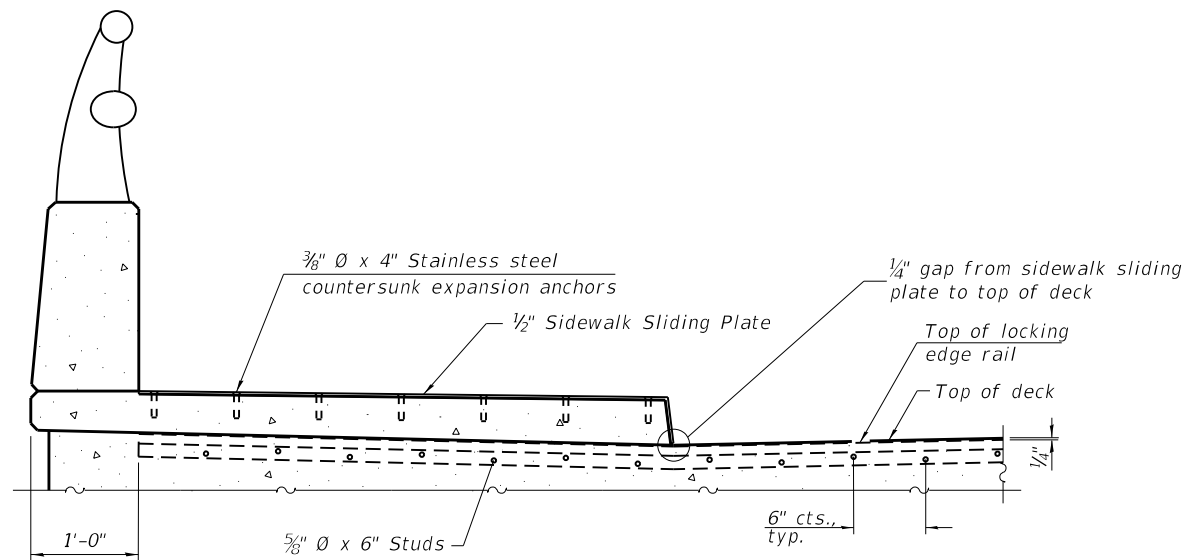
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK 1
STRUCTURE NO. 016-0533

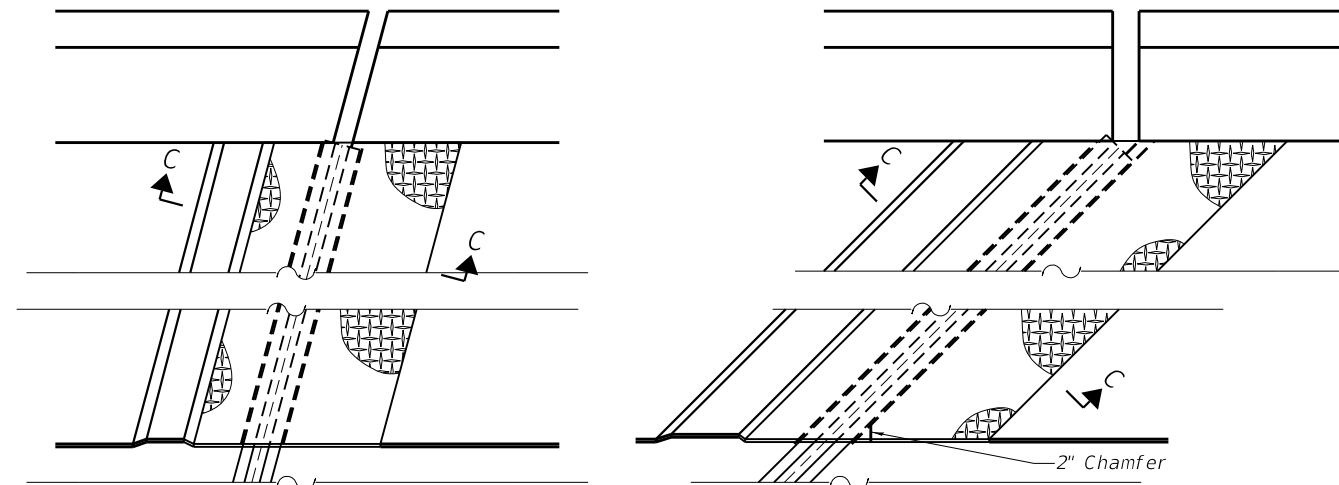
SHEET NO. 25 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	69
CONTRACT NO. 60N83				

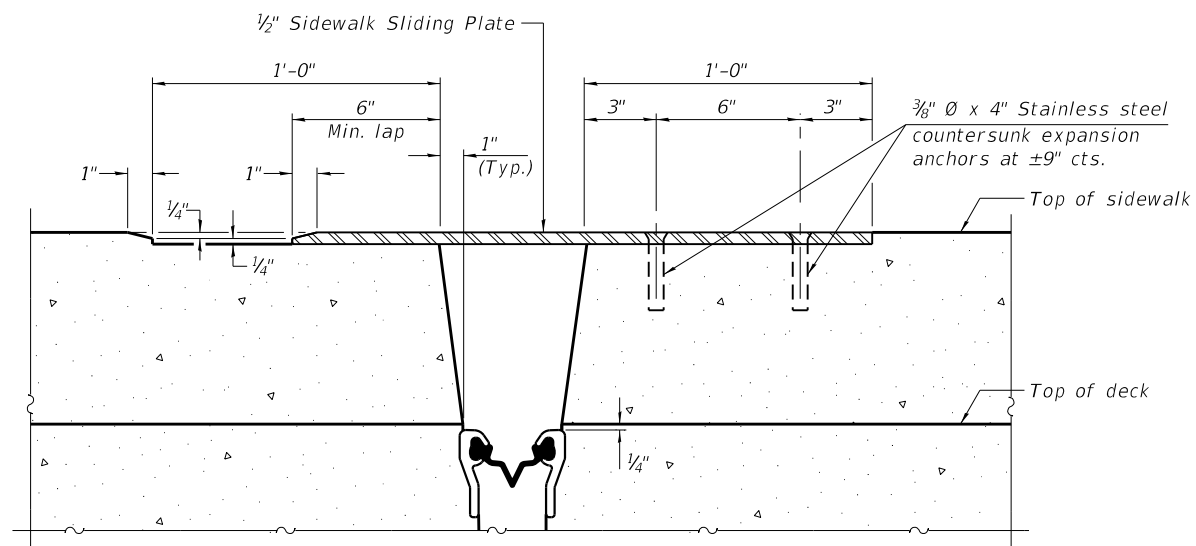
ILLINOIS FED. AID PROJECT



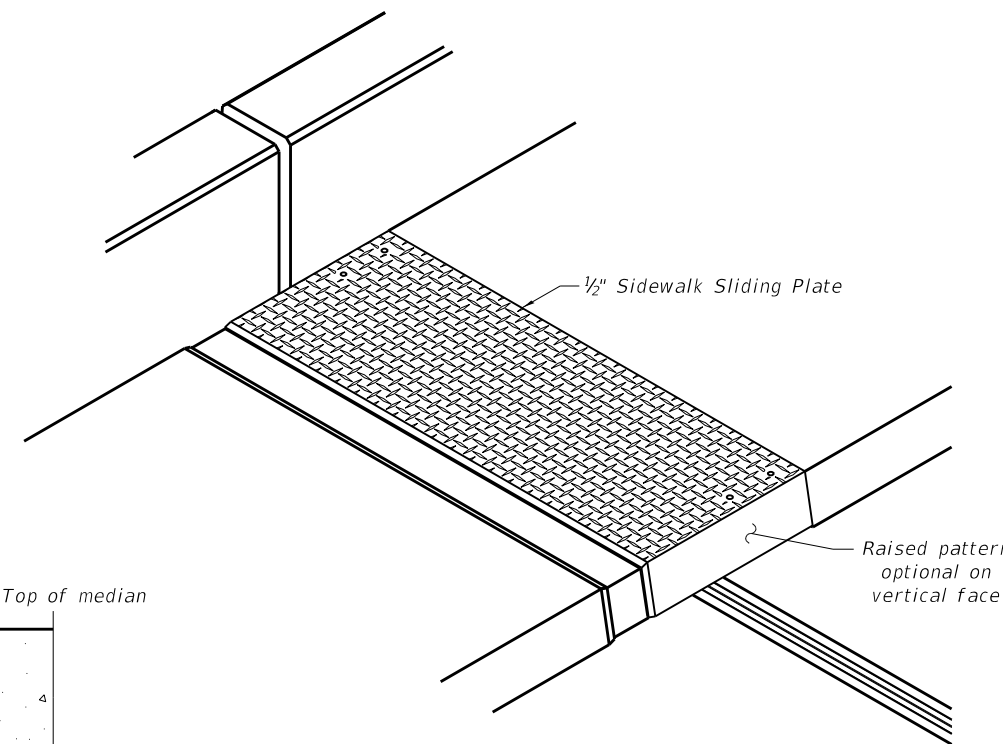
ELEVATION AT RAISED SIDEWALK



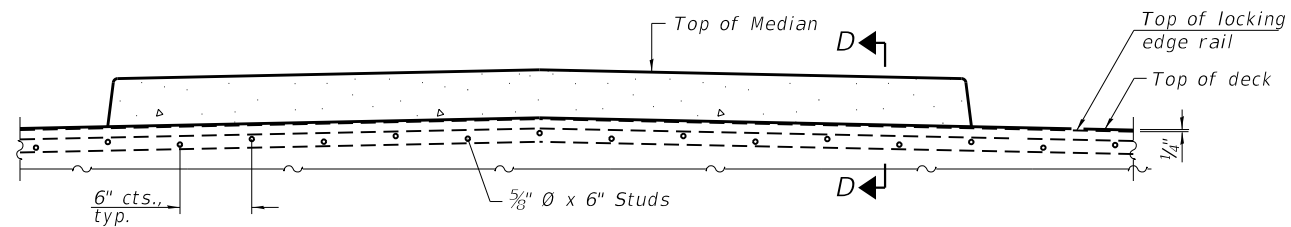
PLAN AT RAISED SIDEWALK



SECTION C-C

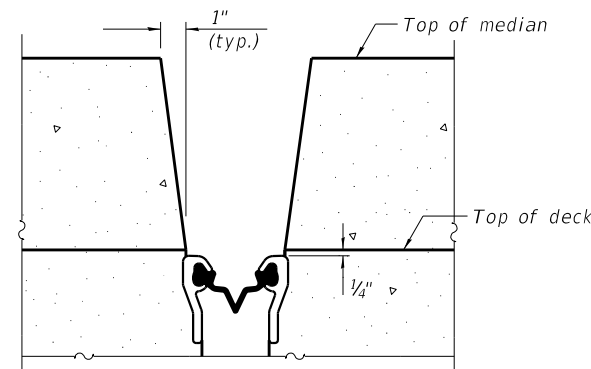


TRIMETRIC VIEW



ELEVATION AT MEDIAN

For skews $> 30^\circ$, chamfer acute corners 2" similar to sidewalk.



SECTION D-D
(at Rt. L's)

(Sheet 2 of 3)

FILEL\$

EJ-SS-S

8-11-17



USER NAME = MS_USER
 PLOT SCALE = *SCALE*
 PLOT DATE = 12/13/2018

DESIGNED - LAS
 CHECKED - DAZ
 DRAWN - TCS
 CHECKED - LAS
 REVISED -
 REVISED -
 REVISED -
 REVISED -

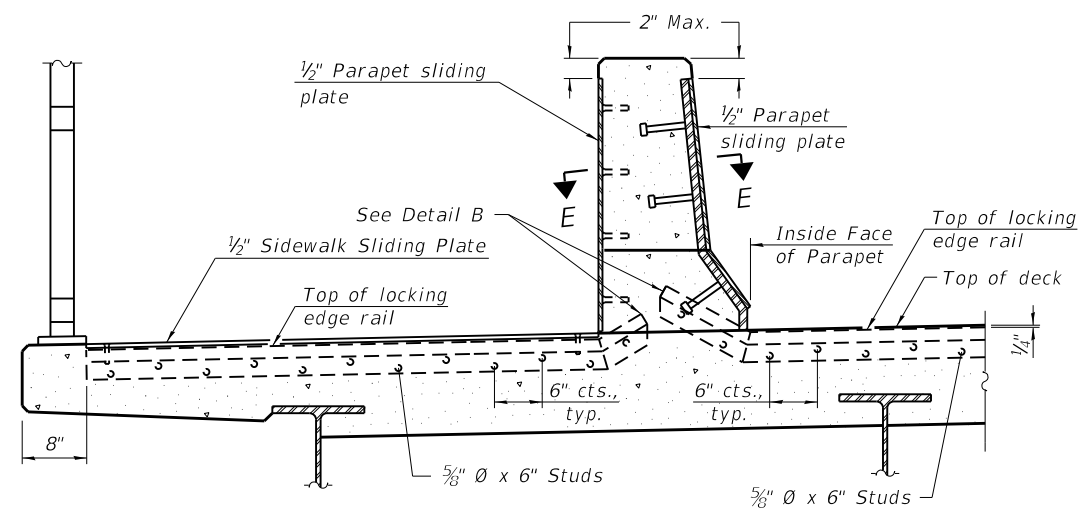
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK 2
 STRUCTURE NO. 016-0533

SHEET NO. 26 OF 57 SHEETS

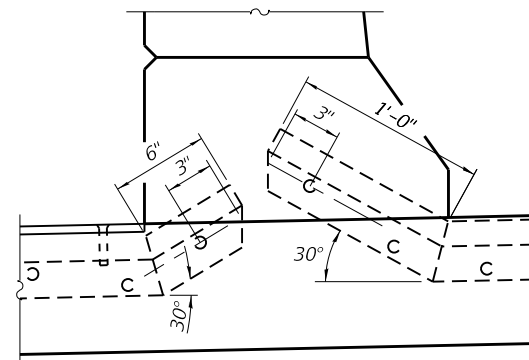
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	70
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

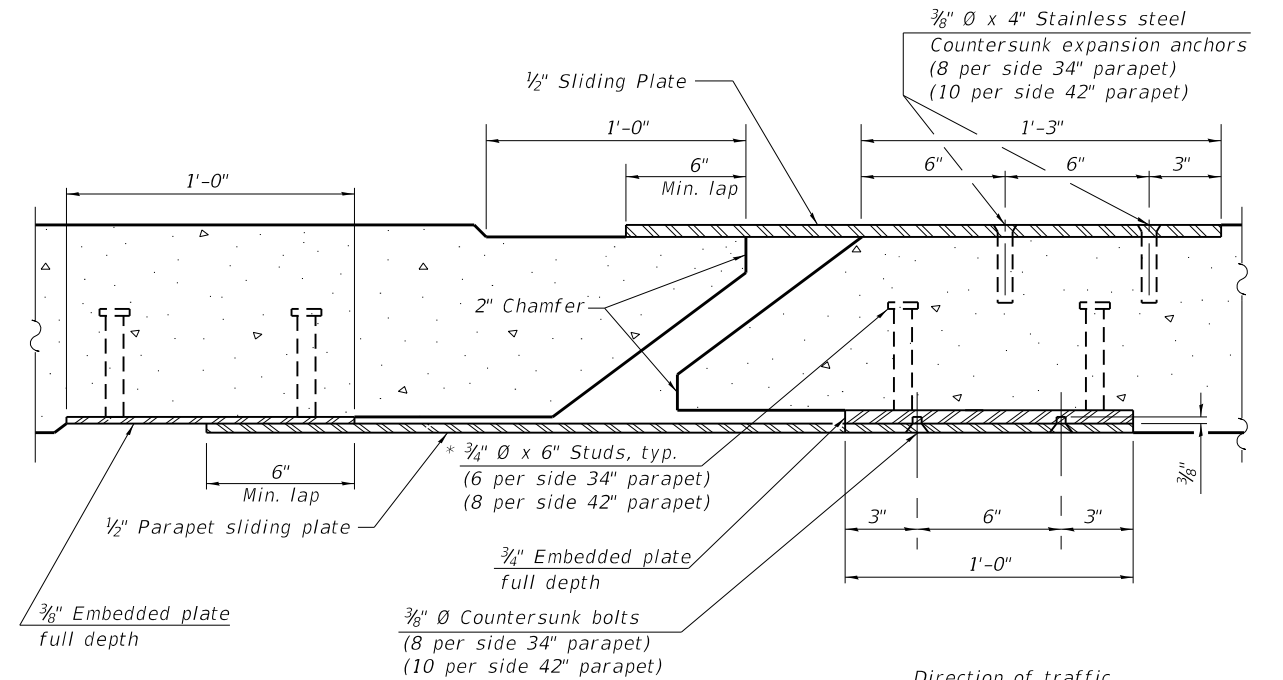


ELEVATION AT DECK LEVEL SIDEWALK

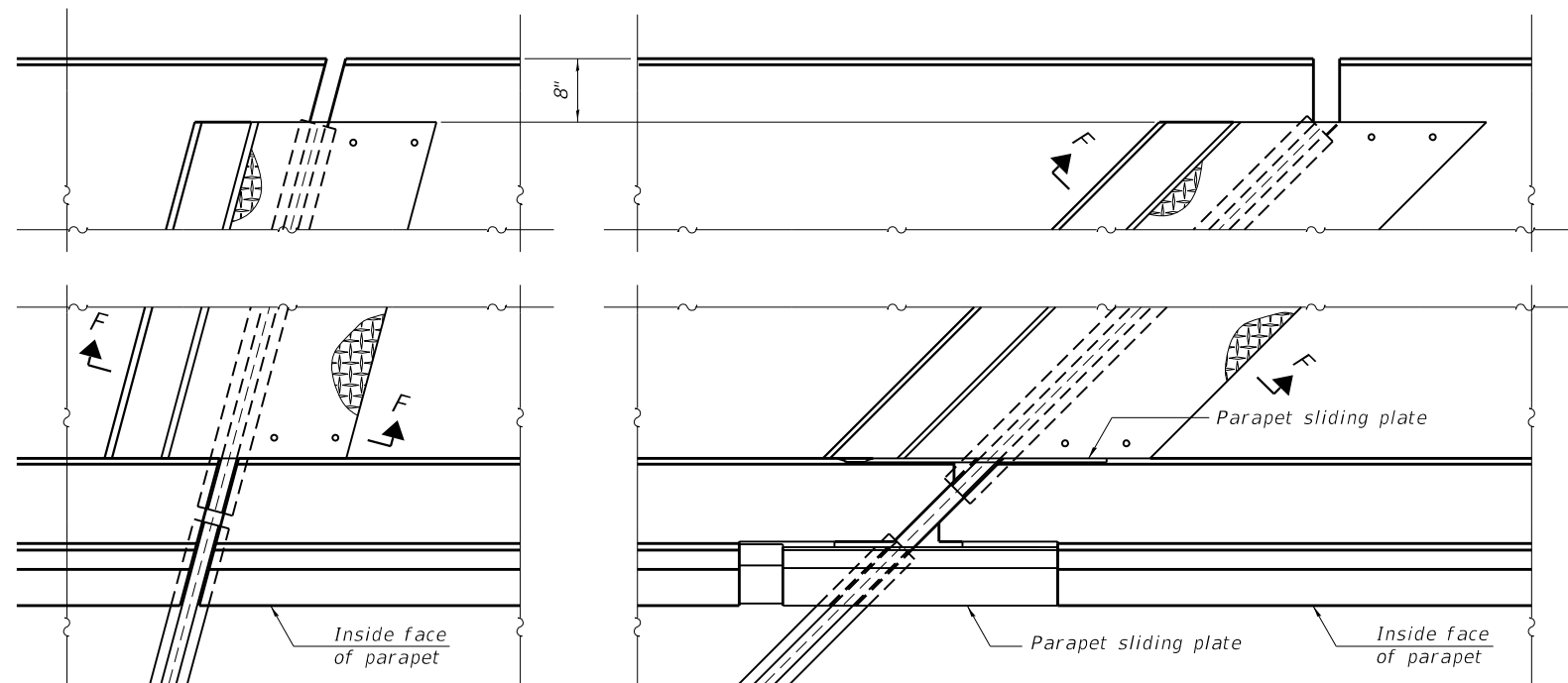
(Skews > 30° shown. Skews \leq 30° similar except as shown in plan view.)



DETAIL B



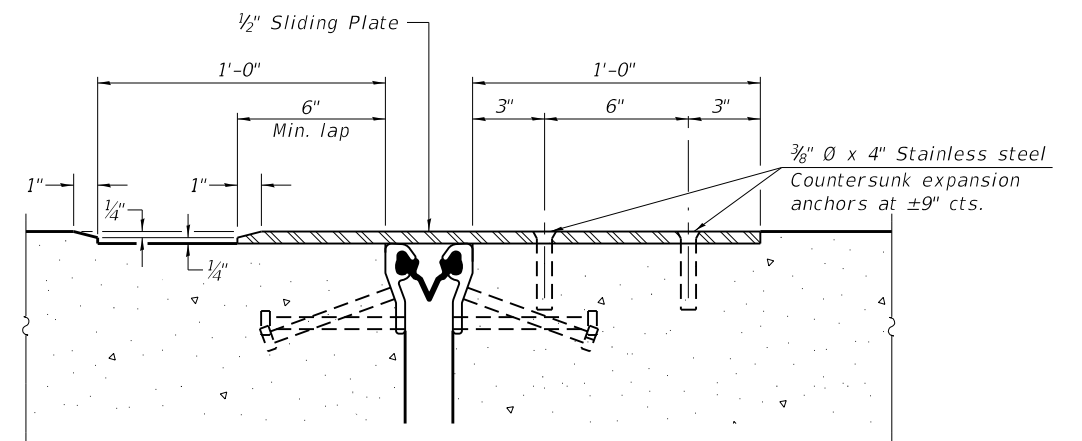
SECTION E-E



(FOR SKEWS \leq 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

(Sheet 3 of 3)

EJ-SS-S

8-11-17



USER NAME = MS_USER
 PLOT SCALE = *SCALE*
 PLOT DATE = 12/13/2018

DESIGNED - LAS
 CHECKED - DAZ
 DRAWN - TCS
 CHECKED - LAS

REVISED -
 REVISED -
 REVISED -
 REVISED -

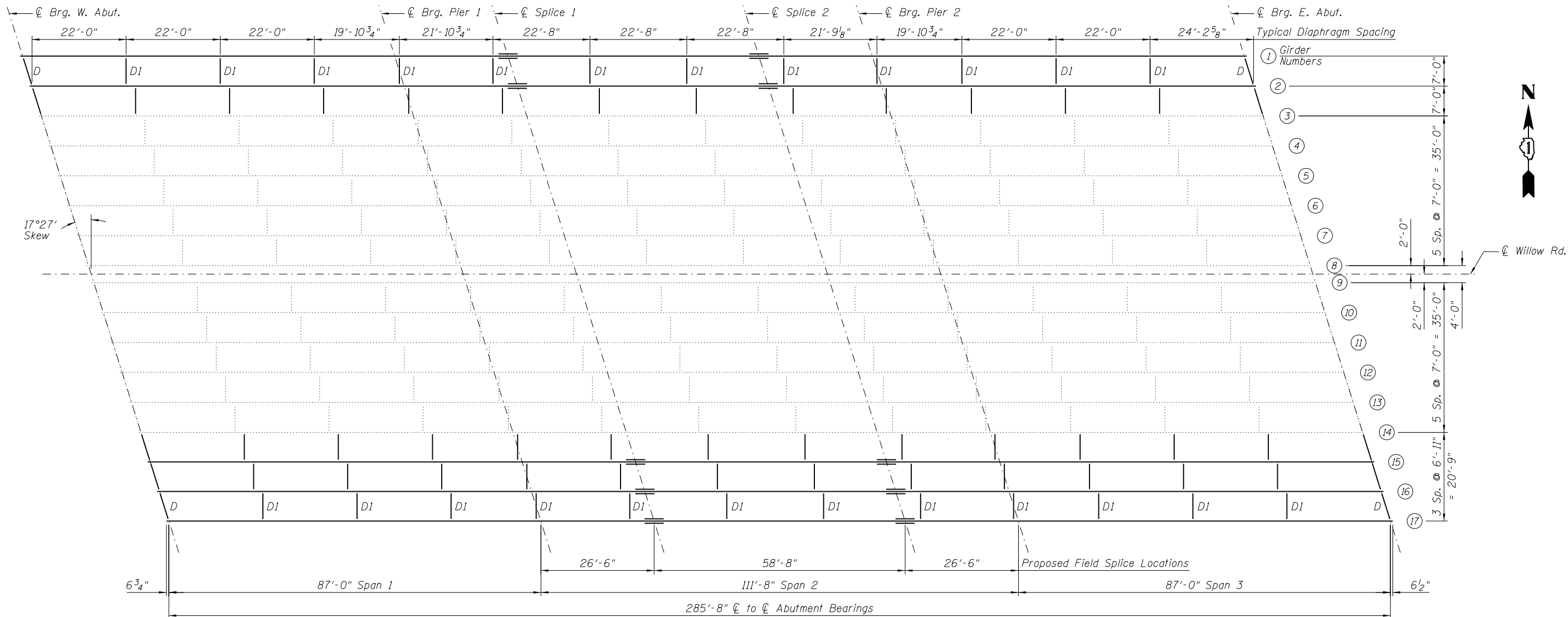
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK 3
 STRUCTURE NO. 016-0533

SHEET NO. 27 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	71
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



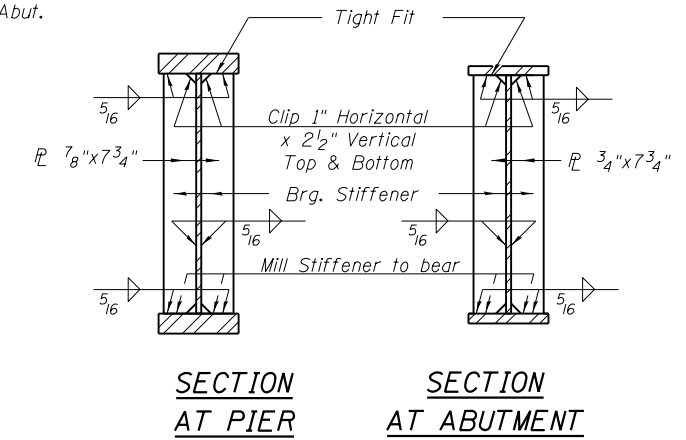
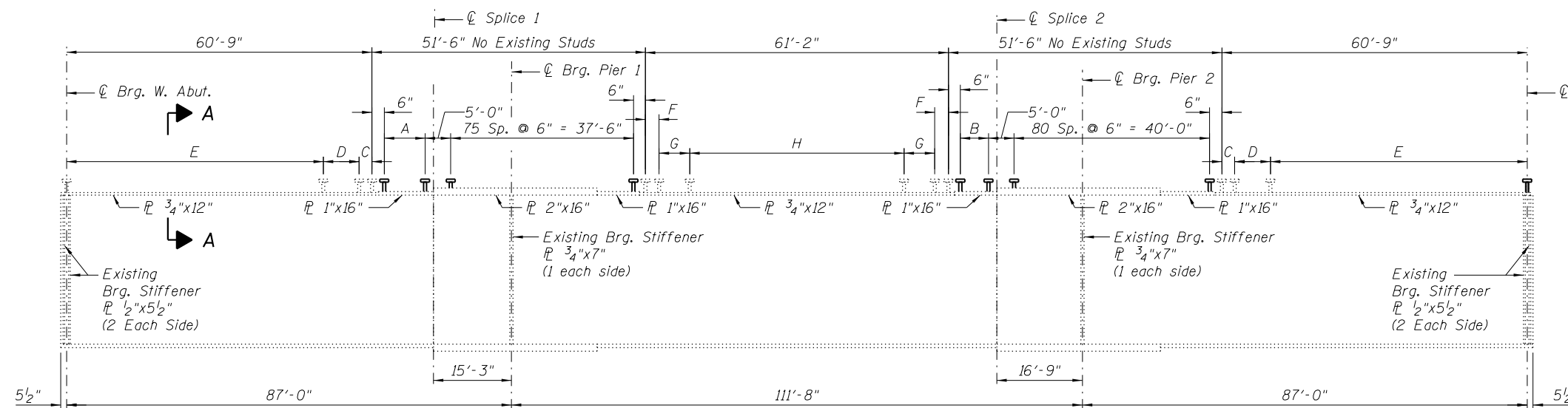
FRAMING PLAN

Notes:

1. Girders 1, 2, 15, 16 and 17 are proposed. Girders 3 thru 14 are existing.
2. All intermediate diaphragms to be normal to the centerline of girders.
3. All dimensions are horizontal.
4. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
5. For steel girder details, see Sheet 29.
6. For diaphragm details, see Sheet 30.

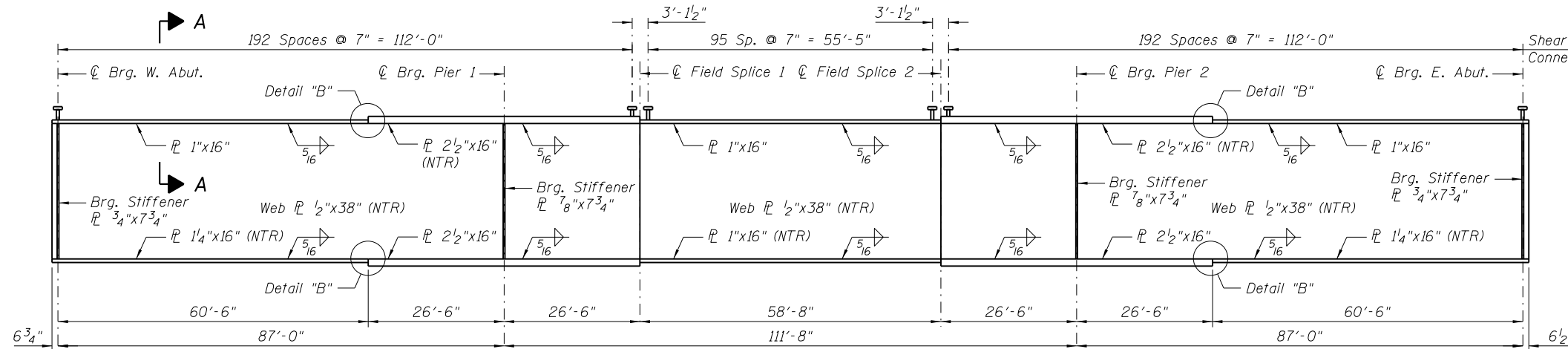
FILEL\$

	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN STRUCTURE NO. 016-0533	F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 72
	PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83				
	PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -			ILLINOIS FED. AID PROJECT				

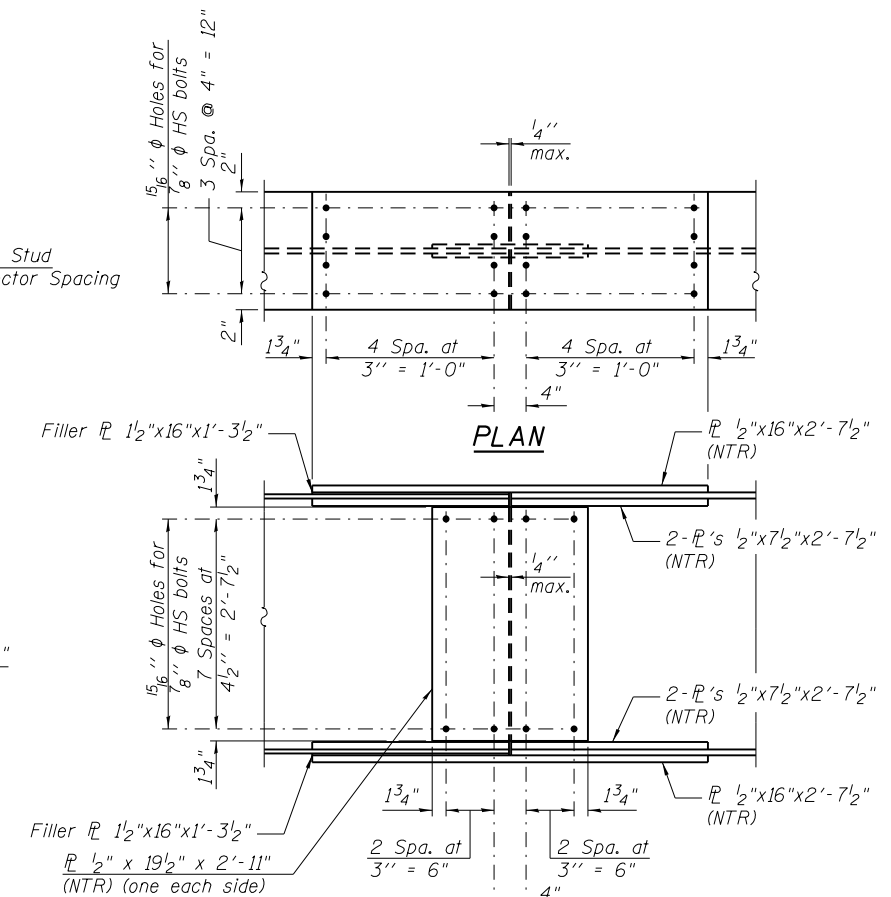


EXISTING GIRDER ELEVATION

- A = 16 Sp. @ 6" = 8'-0"
- B = 11 Sp. @ 6" = 5'-6"
- C = Existing Studs 5 Sp. @ 6" = 2'-6"
- D = Existing Studs 7 Sp. @ 12" = 7'-0" - Place 7 rows proposed studs in between existing studs
- E = Existing Studs 41 Sp. @ 15" = 51'-3" - Place 41 rows proposed studs in between existing studs
- F = Existing Studs 5 Sp. @ 6 1/2" = 2'-8 1/2"
- G = Existing Studs 6 Sp. @ 12" = 6'-0" - Place 6 rows proposed studs in between existing studs
- H = Existing Studs 35 Sp. @ 15" = 43'-9" - Place 35 rows proposed studs in between existing studs



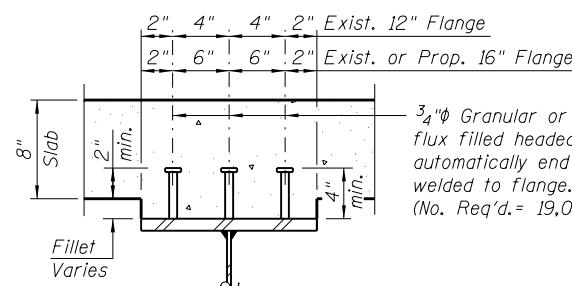
PROPOSED GIRDER ELEVATION



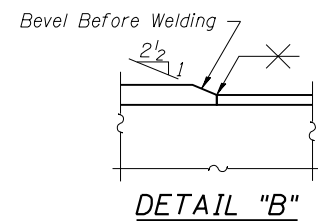
FIELD SPICE DETAIL
(10 Required)

Fasteners shall be ASTM A325 Type 1 bolts. Bolts 7/8" dia., holes 15/16" dia.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.



SECTION A-A



DETAIL "B"

TOP OF WEB ELEVATIONS
(For Fabrication Only)

Girder	℄ Brg. W Abut.	℄ Pier 1	℄ Field Splice 1	℄ Field Splice 2	℄ Pier 2	℄ Brg. E. Abut.
1	667.122	667.610	667.658	667.693	667.677	667.291
2	667.284	667.760	667.803	667.829	667.810	667.412
15	667.530	667.849	667.845	667.766	667.699	667.145
16	667.562	667.869	667.861	667.774	667.703	667.136
17	667.717	668.012	668.000	667.905	667.830	667.251

FILEL\$

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or Pier 2	0.5 Sp. 2
I_s	(in ⁴)	15959	35133	14457
$I_c(n)$	(in ⁴)	38537		33794
$I_c(3n)$	(in ⁴)	28092		25043
S_s	(in ³)	850	1634	723
$S_c(n)$	(in ³)	1133		970
$S_c(3n)$	(in ³)	1039		888
ϕ	(k/')	.943	1.138	.926
$M\phi$	('k)	431	191	384
$s\phi$	(k/')	.581	.581	.581
$M_s\phi$	('k)	265	657	249
$M\ddagger$	('k)	647	777	608
M_I	('k)	155	171	128
$^5_3[M\ddagger + M_I]$	('k)	1337	1580	1227
M_a	('k)	2643	4456	2418
M_u	('k)		6882	
$f_s\phi$ (non-comp)	(ksi)	6.1	8.7	6.4
$f_s\phi$ (comp)	(ksi)	3.1	4.8	3.4
$f_s^5_3[M\ddagger + M_I]$	(ksi)	14.2	11.5	15.2
f_s (Overload)	(ksi)	23.4	25.0	25.0
f_s (Total)	(ksi)	30.4		32.5
VR	(k)	56.5	54.7	54.7

**** Compact section

***** Braced non-compact and partially braced section

INTERIOR GIRDER REACTION TABLE			
	Abut.	Pier 1 or Pier 2	
$R\phi$	(k)	47.4	178.7
$R\ddagger$	(k)	39.5	65.5
R_I	(k)	9.3	13.8
R_{Total}	(k)	96.2	258.0

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in⁴ and in³).

ϕ : Un-factored non-composite dead load (kips/ft.).

$M\phi$: Un-factored moment due to non-composite dead load (kip-ft.).

$s\phi$: Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s\phi$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

$M\ddagger$: Un-factored live load moment (kip-ft.).

M_I : Un-factored moment due to impact (kip-ft.).

M_a : Factored design moment (kip-ft.).

$1.3 [M\phi + M_s\phi + \frac{5}{3} (M\ddagger + M_I)]$

M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compound non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

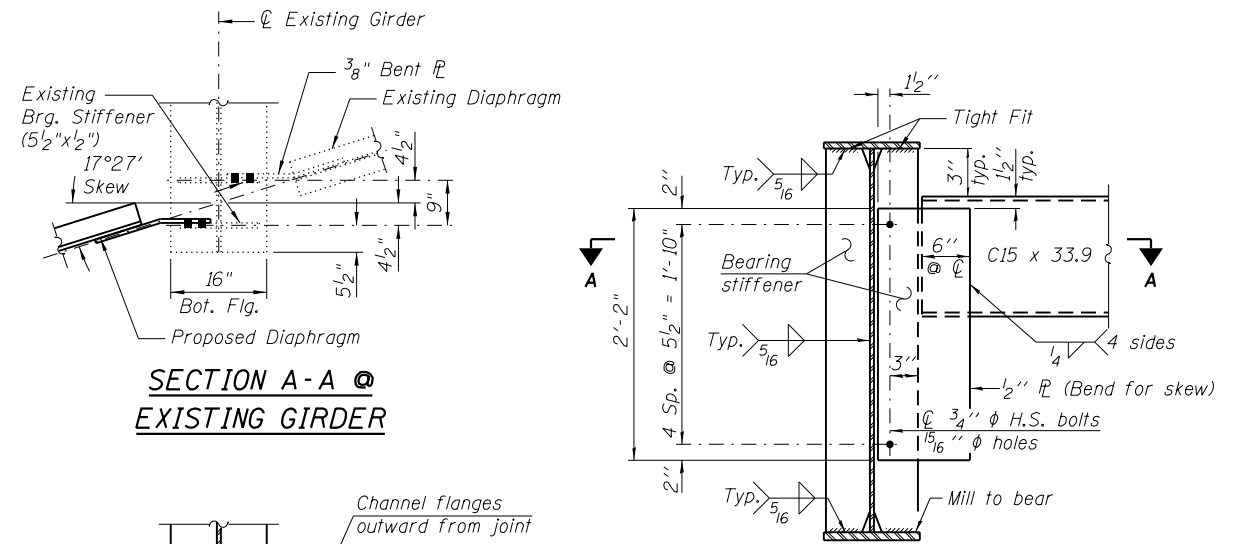
f_s (Overload): Sum of stresses as computed from the moments below (ksi).

$M\phi + M_s\phi + \frac{5}{3} (M\ddagger + M_I)$

f_s (Total): Sum of stresses as computed from the moments below (ksi).

$1.3 [M\phi + M_s\phi + \frac{5}{3} (M\ddagger + M_I)]$

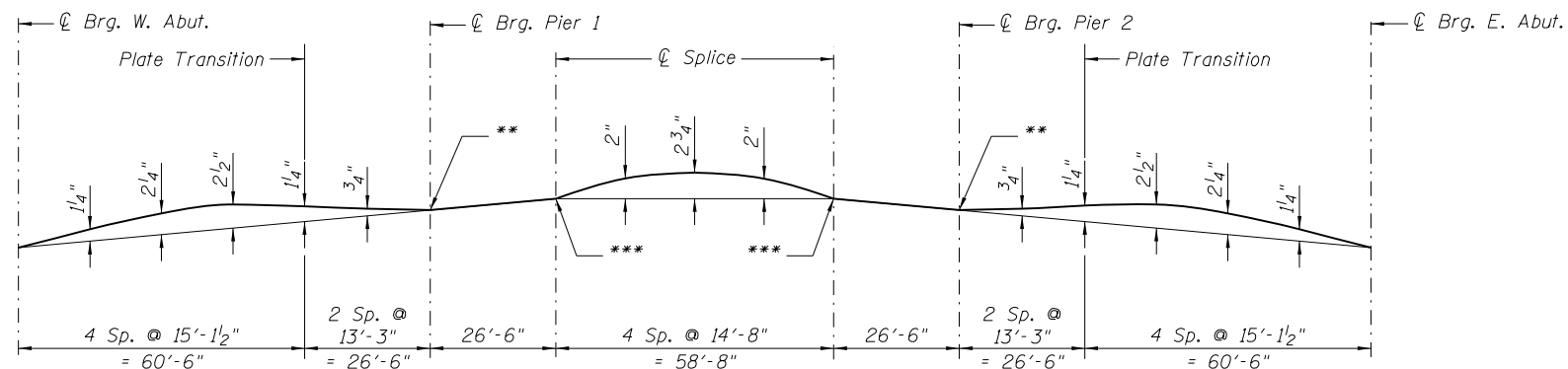
VR: Maximum \ddagger + impact shear range within span for stud shear connector design (kips).



SECTION A-A @
PROPOSED GIRDER

END DIAPHRAGM, D
(10 Required)

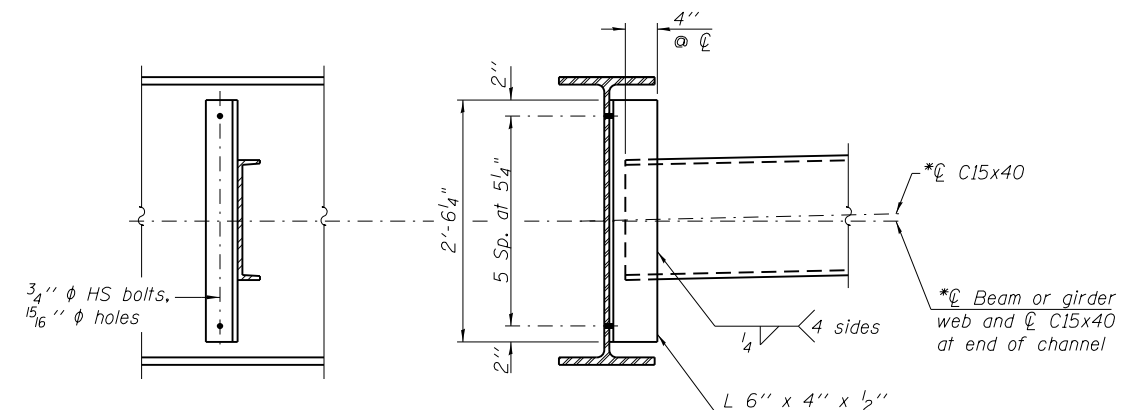
Note: Two hardened washers required for each set of oversized holes.



CAMBER DIAGRAM

**Final top of web elevations to be used in computing the bearing's seat elevations.

***Theoretical elevations before Dead Load Deflection.



INTERIOR DIAPHRAGM, D1
(60 Required)

Note:

Two hardened washers required for each set of oversized holes.

*Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the C15x40 section. The alternate, if utilized, shall be provided at no additional cost to the Department.

FILE\$



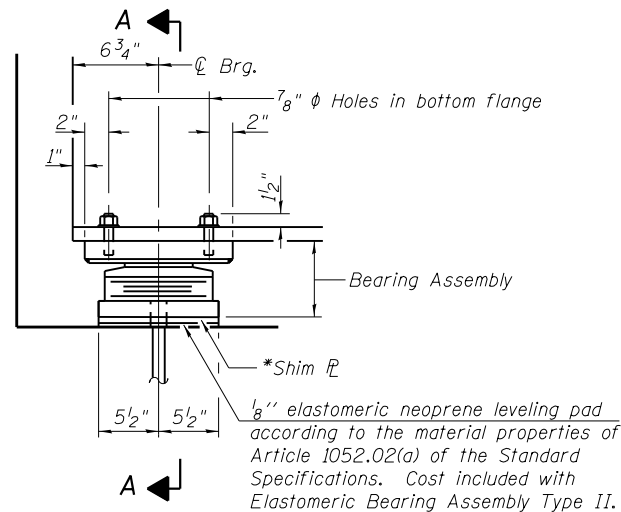
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

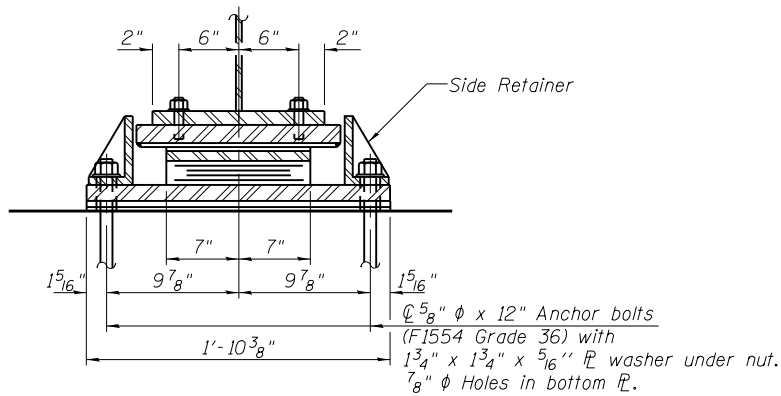
STRUCTURAL STEEL DETAILS 2
STRUCTURE NO. 016-0533

SHEET NO. 30 OF 57 SHEETS

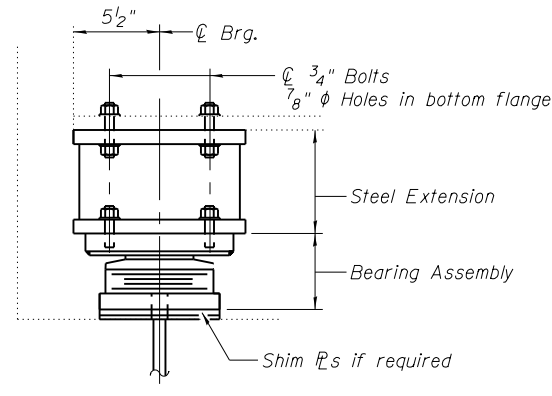
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	74
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



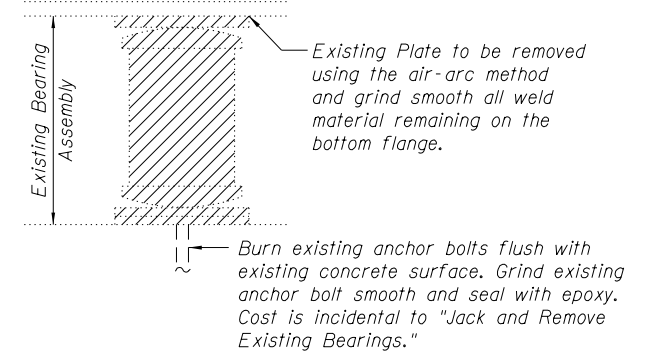
ELEVATION AT WEST ABUT.
(Proposed Girders)



SECTION A-A

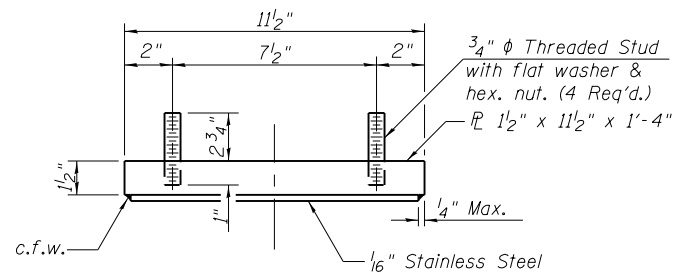


ELEVATION AT WEST ABUT.
(Existing Girders)

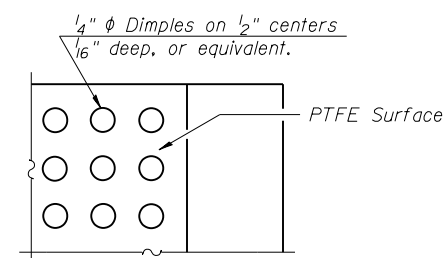


EXISTING BEARING REMOVAL DETAIL

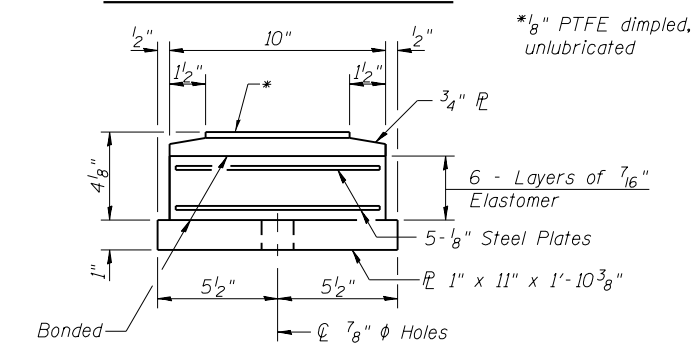
TYPE II ELASTOMERIC EXP. BRG.



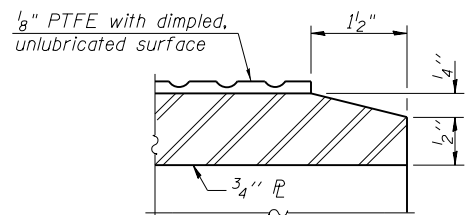
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE



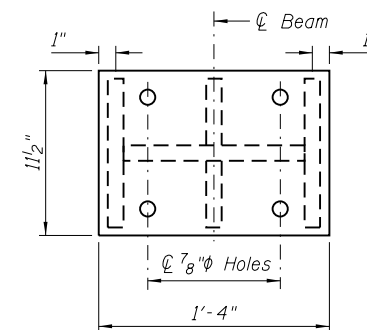
BOTTOM BEARING ASSEMBLY



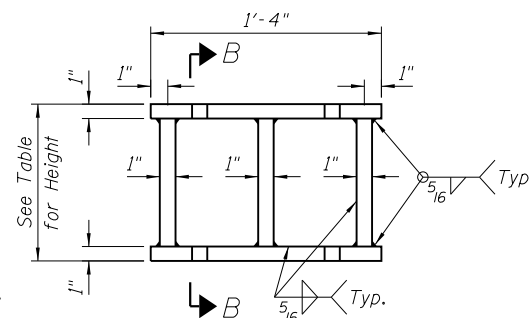
SECTION THRU PTFE

***SHIM THICKNESS TABLE**

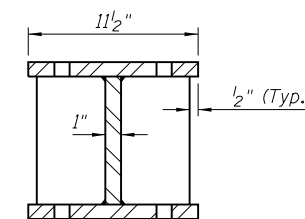
Location	Girder	Thickness
West Abutment	16	3/8



PLAN STEEL EXTENSION



ELEVATION STEEL EXTENSION



SECTION B-B

TABLE OF EXTENSION HEIGHTS

Girder Number	Height
3	7 5/16"
9, 11	7 7/16"
4, 5, 6, 10, 14	7 9/16"
8, 13	7 15/16"
12	8 1/16"
7	8 3/16"

PROCEDURE FOR JACKING AND REMOVING OF EXISTING BEARINGS

The Contractor shall submit plans for Jacking and Cribbing to the Engineer for approval, prior to commencing any work at the Bearings.
 Jacking and Removing Existing Bearings shall be done after existing deck removal is completed and before a new deck is poured.
 Diaphragms between Stage Construction Lines shall be disconnected prior to jacking, and reconnected using H.S. bolts after jacking is completed.
 All girders at all supports shall be lifted simultaneously such that the relative elevation between adjacent girders does not vary by more than 1/8" from their original relative elevation and such that the relative elevations between adjacent substructure units does not vary more than 1/4" during or after jacking operations.
 Jacking shall be limited to a minimum of 1/2" lift to replace existing bearings.
 The maximum deck load reaction with deck removed (per bearing) at each abutment is 9.0 kips and 35.0 kips at each pier.
 The jack capacity shall be 10 tons at abutments and 40 tons at piers.
 The new bearings shall be in place and the jacks shall be lowered before the new concrete deck is poured.
 Jacking shall be from abutments or slopewalls, and from piers.

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
 Prior to ordering any materials, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 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.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	17
Anchor Bolts, 5/8"	Each	68

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

SETTING ANCHOR BOLTS AT EXP. BRG.
 D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.
 BELOW 50°F. (Move bott. brg. away from fixed brg.)
 ABOVE 50°F. (Move bott. brg. toward fixed brg.)

I-2E-2 (Modified)



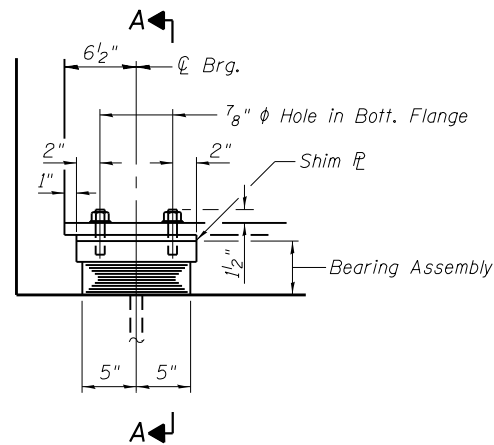
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

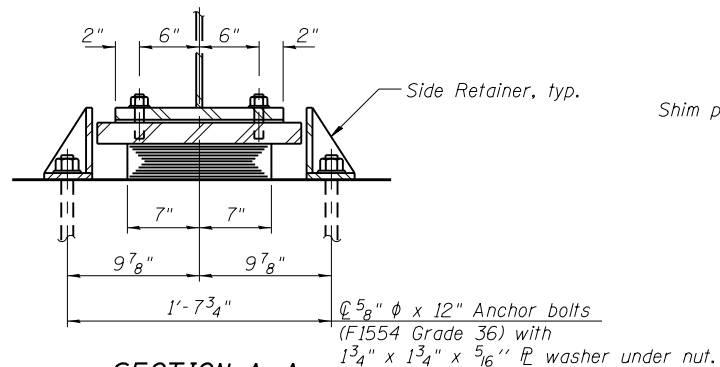
WEST ABUTMENT BEARING DETAILS
 STRUCTURE NO. 016-0533

SHEET NO. 31 OF 57 SHEETS

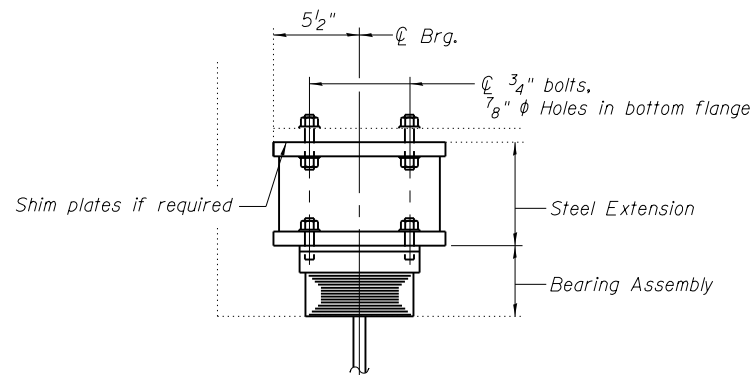
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	75
ILLINOIS FED. AID PROJECT CONTRACT NO. 60N83				



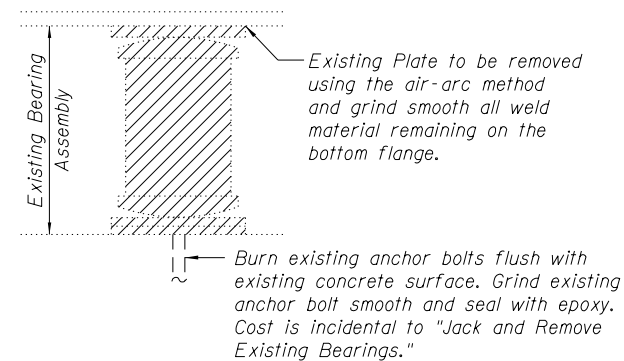
ELEVATION AT EAST ABUT.
(Proposed Girders)



SECTION A-A



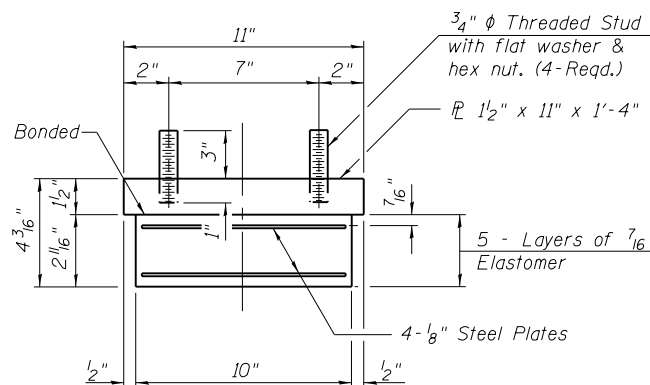
ELEVATION AT EAST ABUT.
(Existing Girders)



EXISTING BEARING REMOVAL DETAIL

Note:
For Procedure for Jacking and Removing Existing Bearings, see Sheet 29.

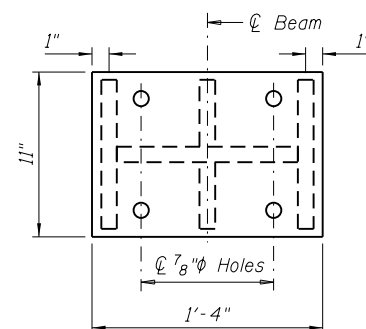
TYPE I ELASTOMERIC EXP. BRG.



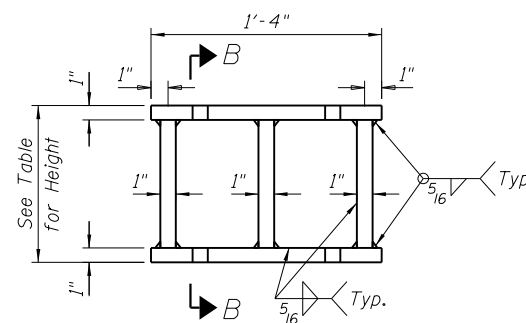
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

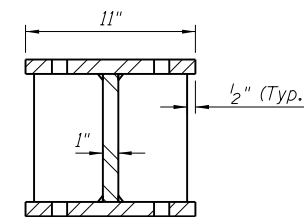
Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
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.



PLAN STEEL EXTENSION



ELEVATION STEEL EXTENSION



SECTION B-B

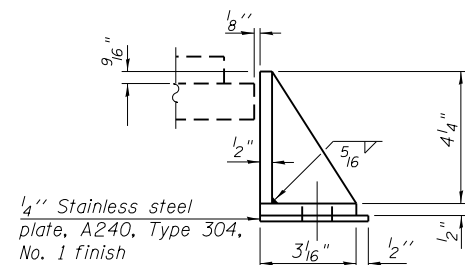
TABLE OF EXTENSION HEIGHTS

Girder Number	Height
5, 11, 12, 13	10 1/16"
3, 4, 6	10 3/16"
14	10 5/16"
7	10 7/16"
8	10 9/16"
9, 10	10 11/16"

Note:
Prior to ordering any materials, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	17
Anchor Bolts, 5/8"	Each	68



SIDE RETAINER

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

I-2E-1

(Modified)



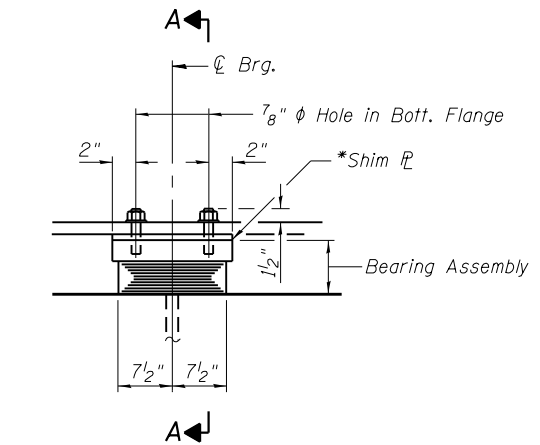
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

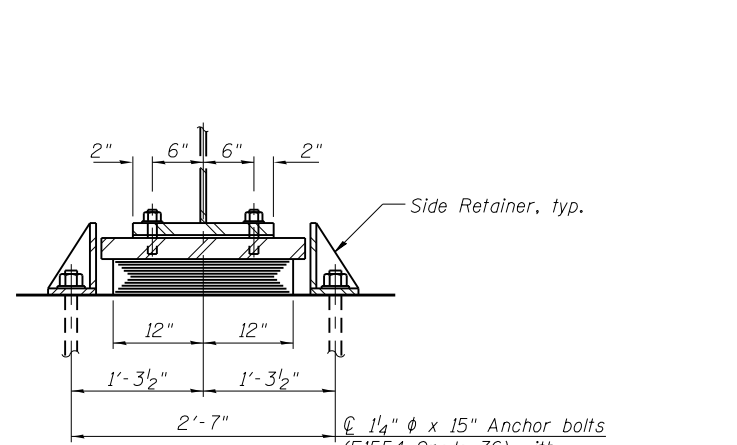
EAST ABUTMENT BEARING DETAILS
STRUCTURE NO. 016-0533

SHEET NO. 32 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	76
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

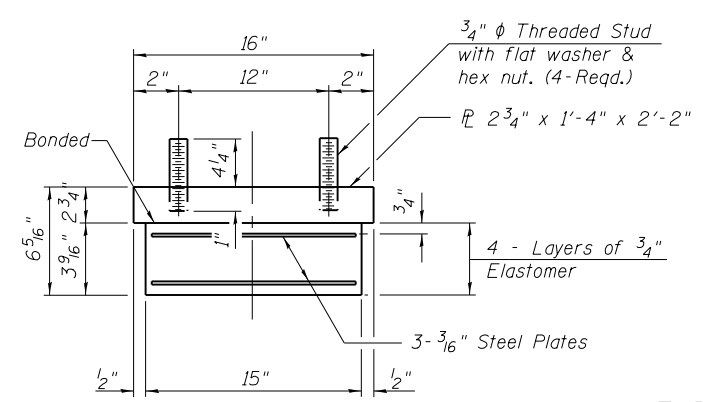


ELEVATION AT PIER 1
(Proposed Girders)



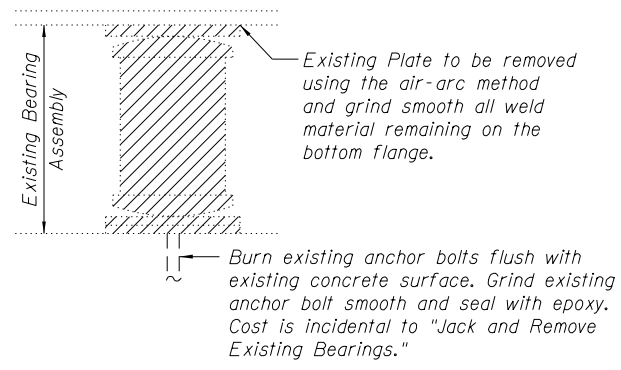
SECTION A-A
Anchor bolts (F1554 Grade 36) with 2 3/4" x 2 3/4" x 5/16" washer under nut.

TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

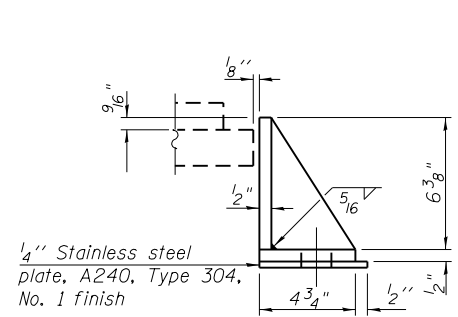
Note:
Shim plates shall not be placed under Bearing Assembly.



EXISTING BEARING REMOVAL DETAIL - PIER 1 ONLY

Note:
For Procedure for Jacking and Removing Existing Bearings, see Sheet 31.

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
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.

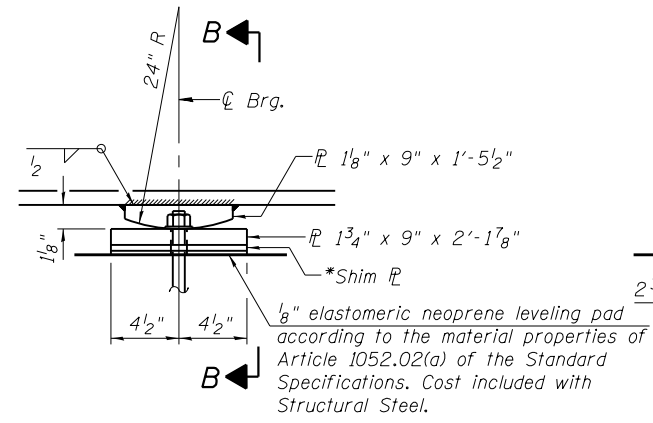


SIDE RETAINER

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

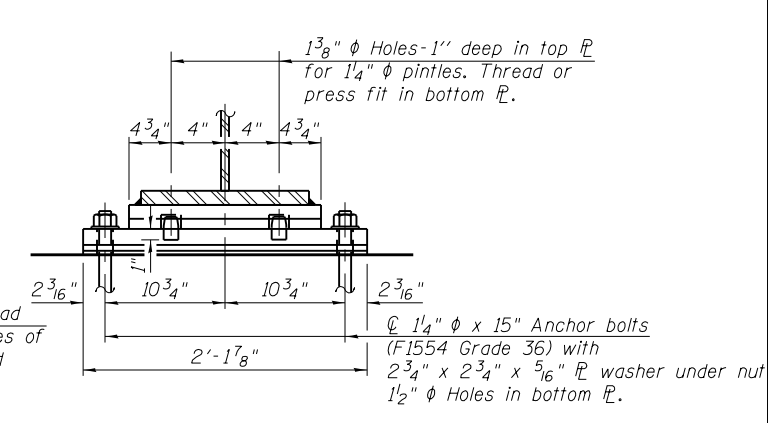
***SHIM THICKNESS TABLE**

Location	Girder	Thickness
Pier 1	16	1/4"
Pier 2	16	1/8"

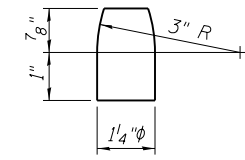


ELEVATION AT PIER 2
(Proposed Girders)

FIXED BEARING

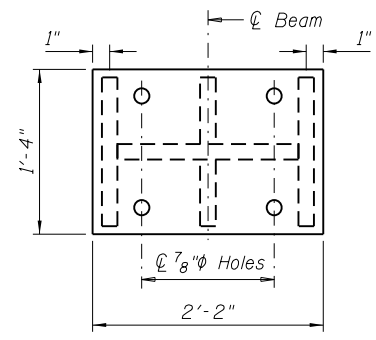


SECTION B-B

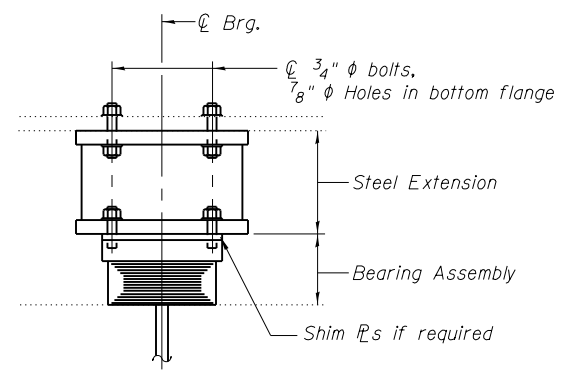


PINTLE

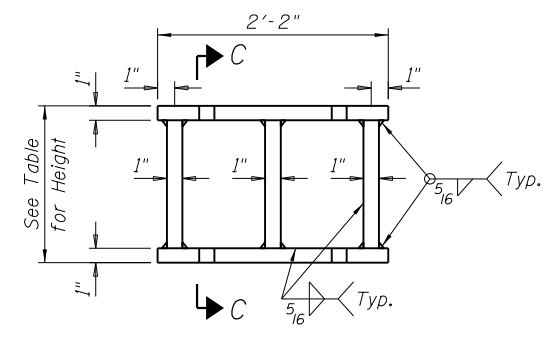
Note: Existing Fixed Bearings at Pier 2 to remain.



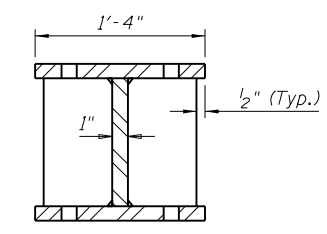
PLAN STEEL EXTENSION



ELEVATION AT PIER 1
(Existing Girders)



ELEVATION STEEL EXTENSION



SECTION C-C

Note:
Prior to ordering any materials, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

TABLE OF EXTENSION HEIGHTS-PIER 1 ONLY

Girder Number	Height
3 thru 8, 11 thru 14	9 1/16"
9, 10	9 15/16"

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	17
Anchor Bolts, 1 1/4"	Each	44

I-2E-1 (Modified)



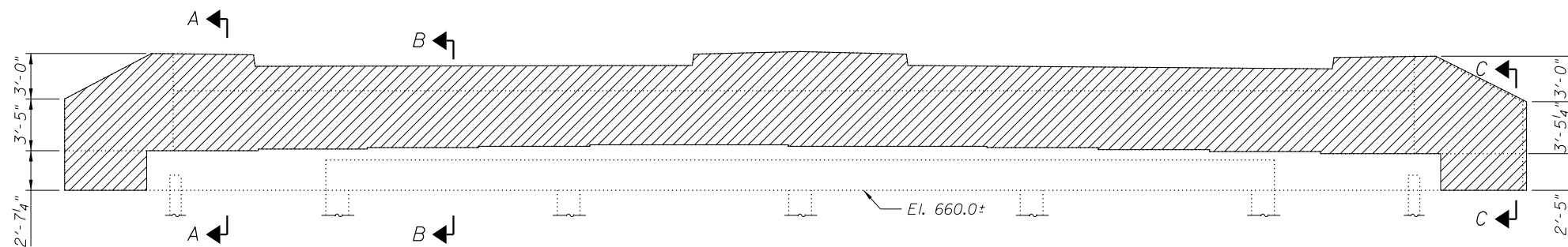
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

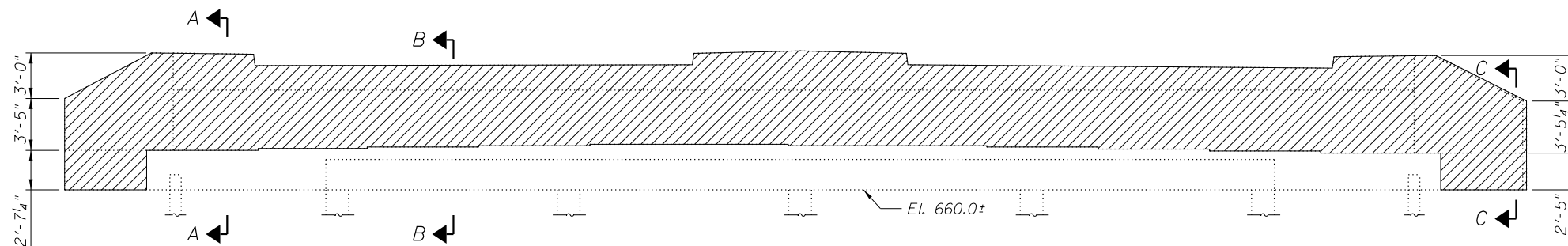
PIER BEARING DETAILS
STRUCTURE NO. 016-0533

SHEET NO. 33 OF 57 SHEETS

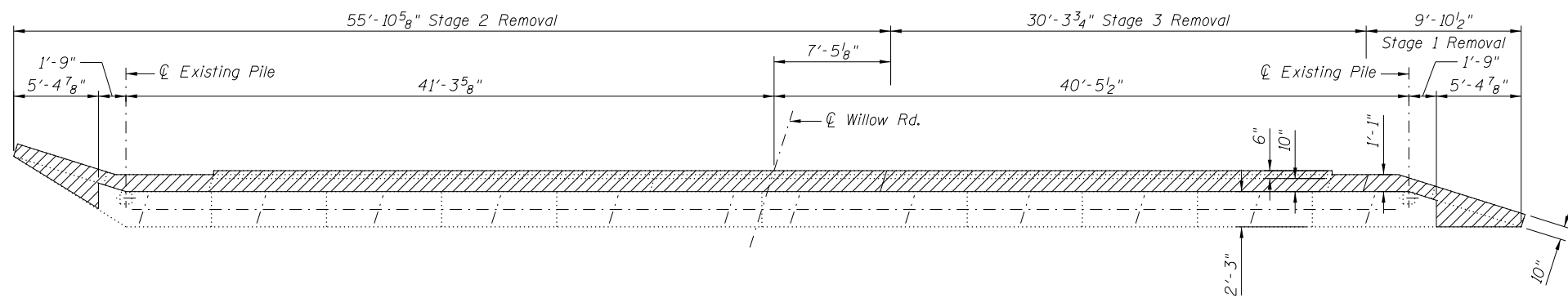
F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 77
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



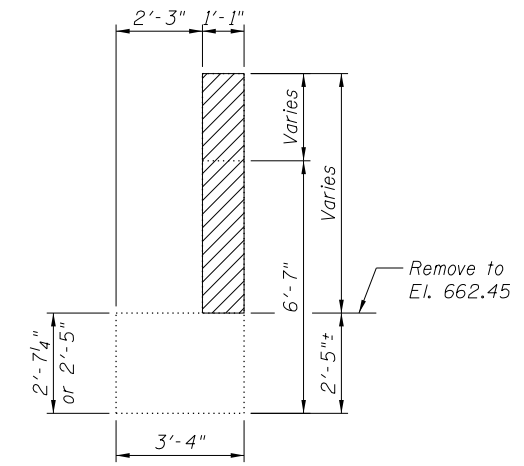
EAST ABUTMENT REMOVAL



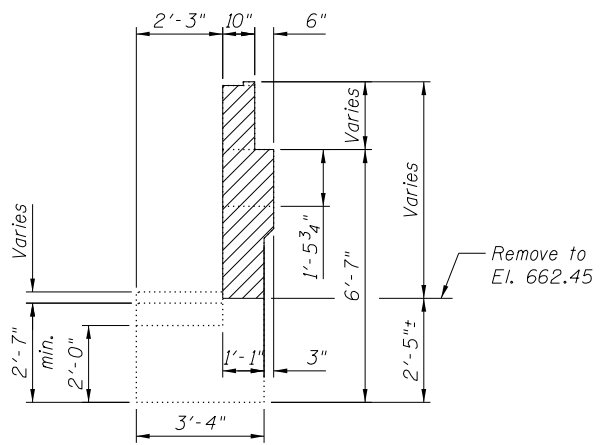
WEST ABUTMENT REMOVAL



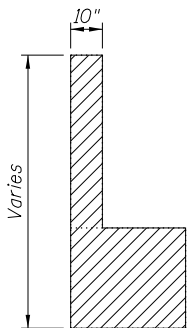
ABUTMENT PLAN
(East Abutment shown, West Abutment similar)



SECTION A-A



SECTION B-B



SECTION C-C

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu Yd	50.9

LEGEND



FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

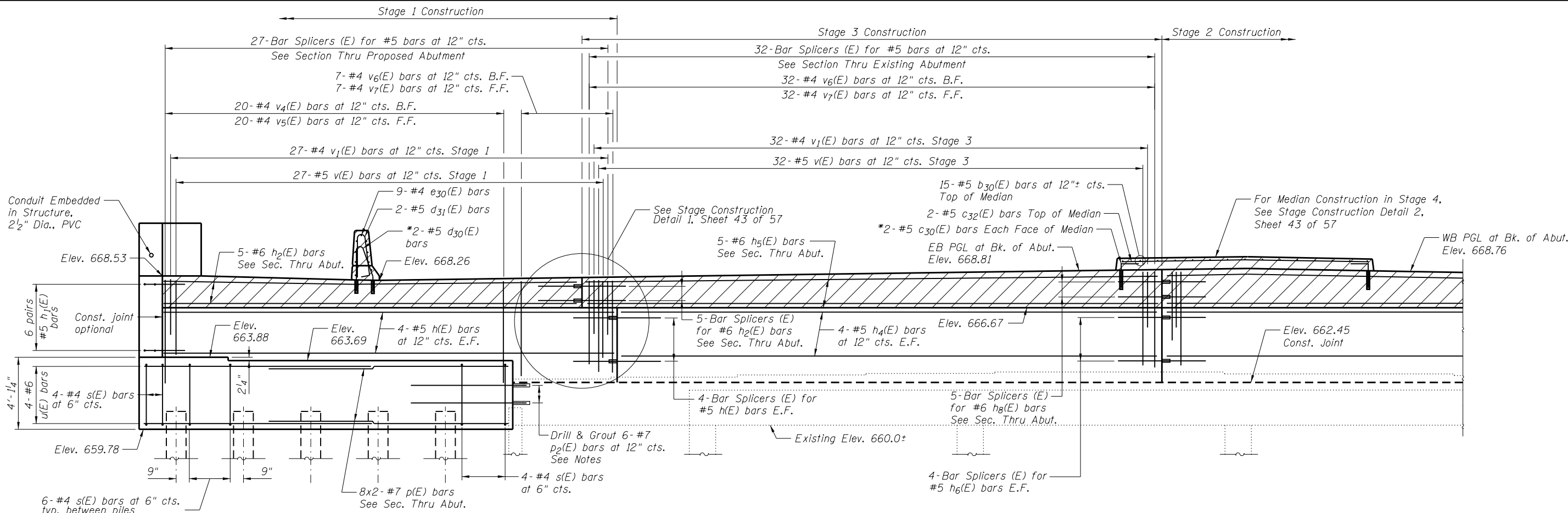
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0533

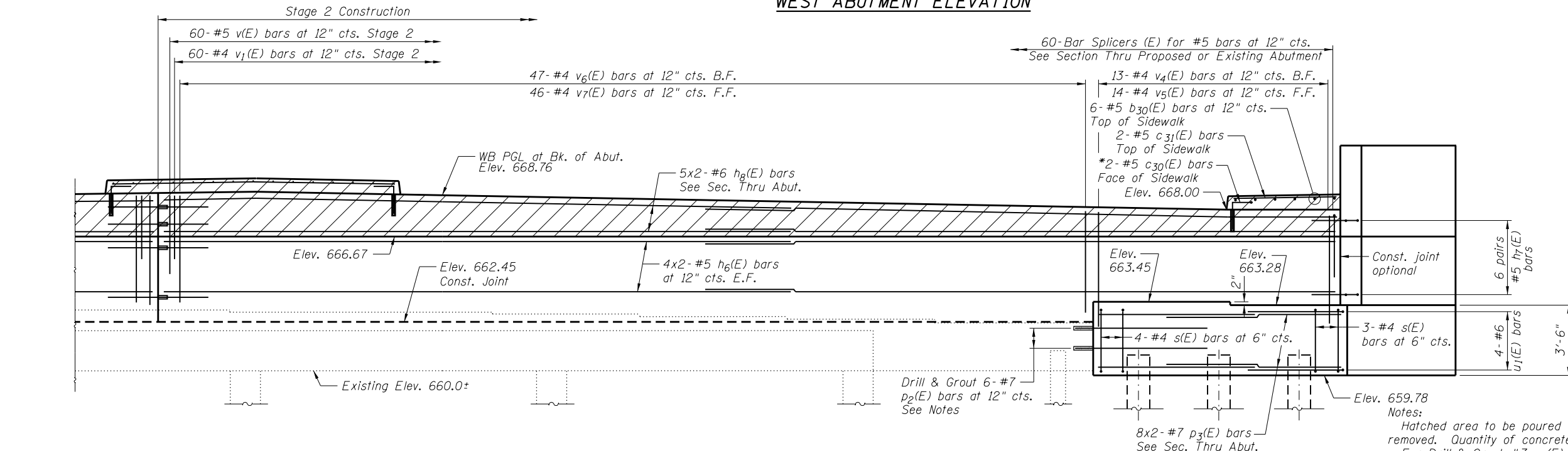
SHEET NO. 34 OF 57 SHEETS

F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 78
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



WEST ABUTMENT ELEVATION



WEST ABUTMENT ELEVATION

LEGEND
 B.F. = Back Face
 F.F. = Front Face
 E.F. = Each Face

* Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

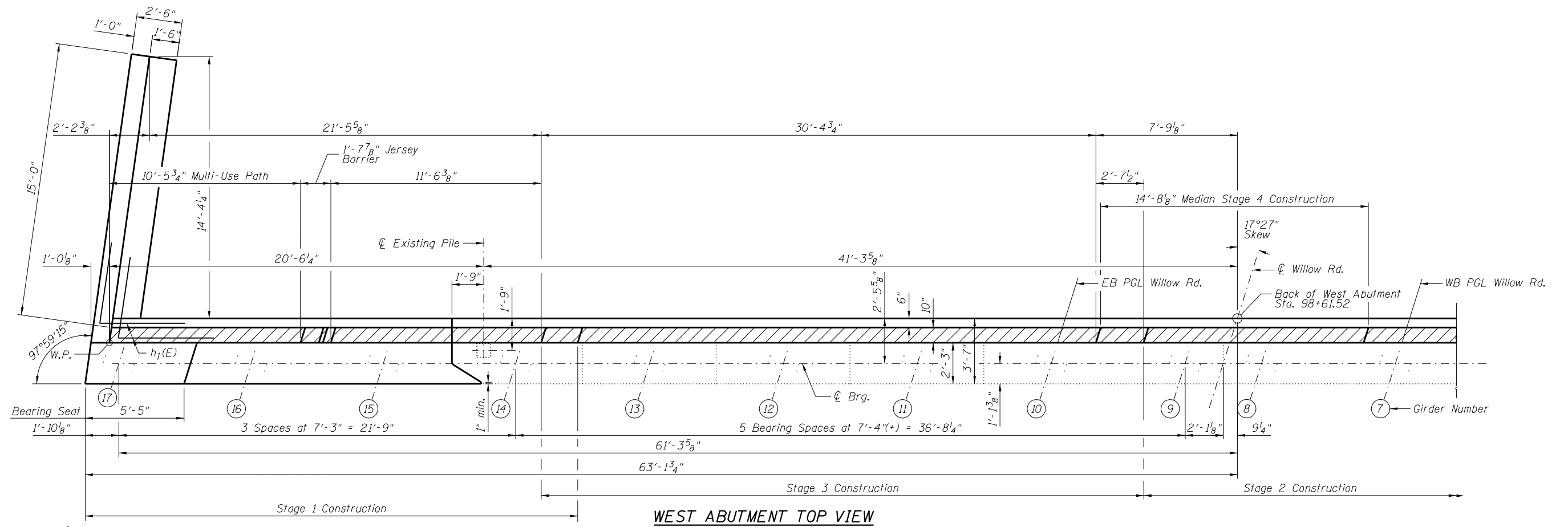
MIN. BAR LAP

- #5 bar = 3'-8"
- #6 bar = 4'-5"
- #7 bar = 5'-10"

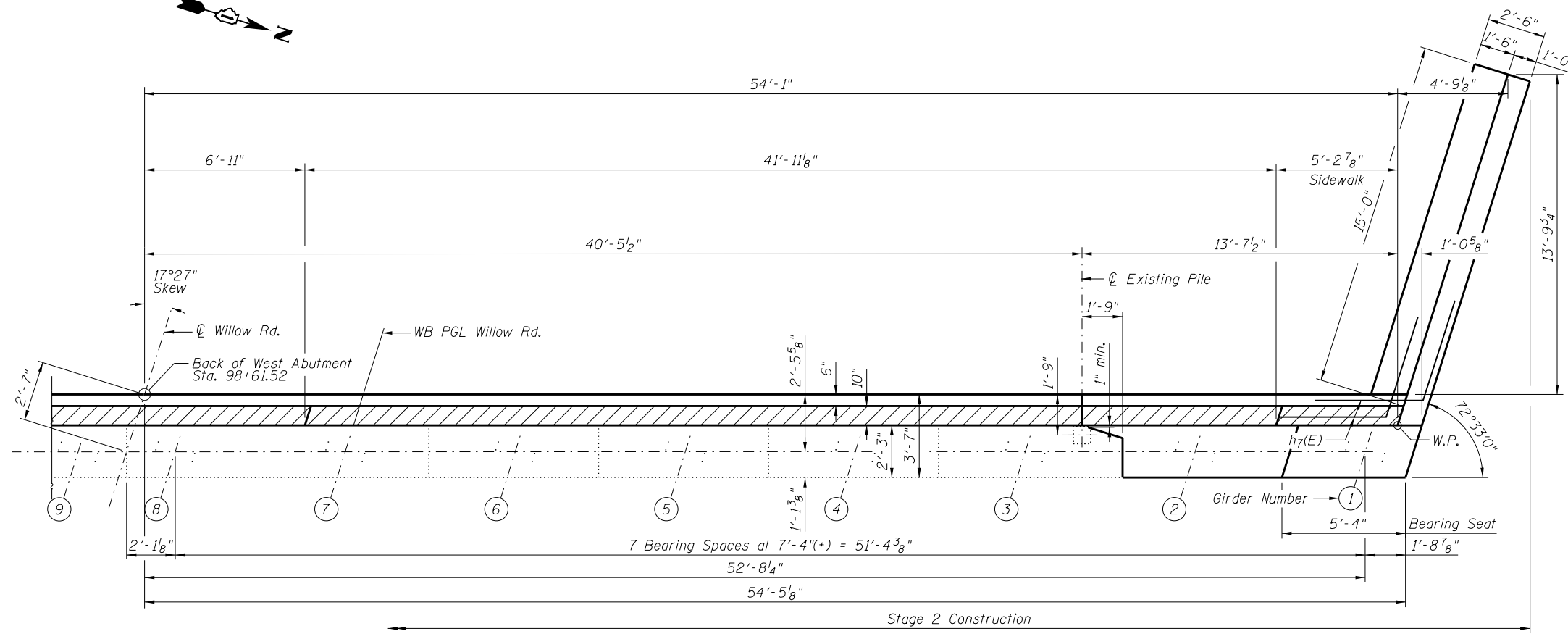
Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 For Drill & Grout #7 p₂(E) bars adjust spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep. Bars shall be drilled a minimum of 6" from the edge of concrete.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 For details of Bar Splicers, see sheet 49 of 57.
 For details of piles, see sheet 50 of 57.
 For sections and details, see sheets 41 and 43 of 57.
 Bars indicated thus: 8x2-#7 etc. indicates 8 lines of bars with 2 lengths per line.

S:\FILES

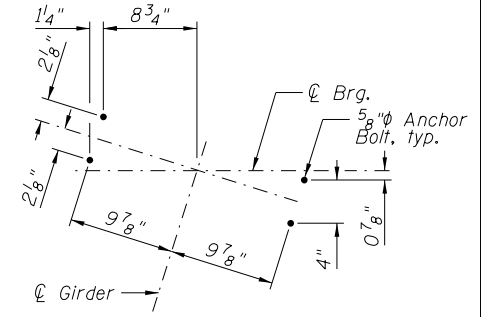
MILHOUSE	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT ELEVATION STRUCTURE NO. 016-0533	F.A.P. RTE. = 305	SECTION = 1920.01-BR	COUNTY = COOK	TOTAL SHEETS = 194	SHEET NO. = 79	
	PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83					
	PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -			ILLINOIS FED. AID PROJECT					



WEST ABUTMENT TOP VIEW



WEST ABUTMENT TOP VIEW



BEARING ANCHOR BOLT LAYOUT

Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Work with sheets 35, 37, 41 and 43.

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

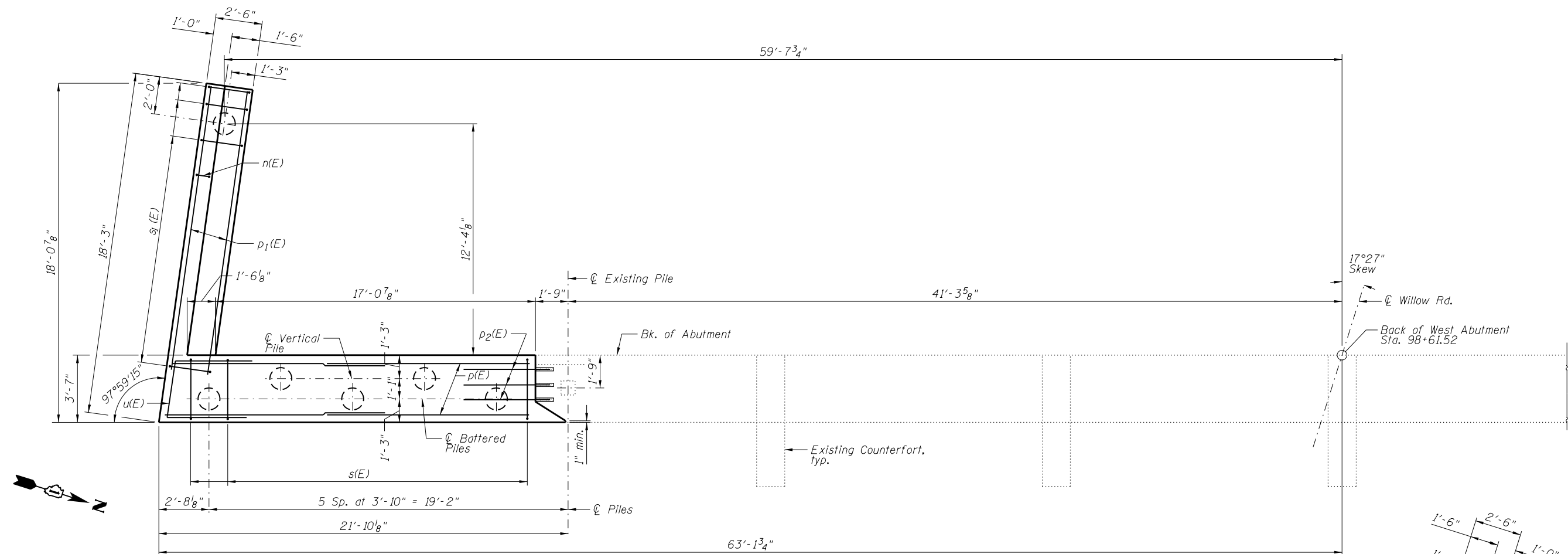
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT TOP VIEW
 STRUCTURE NO. 016-0533

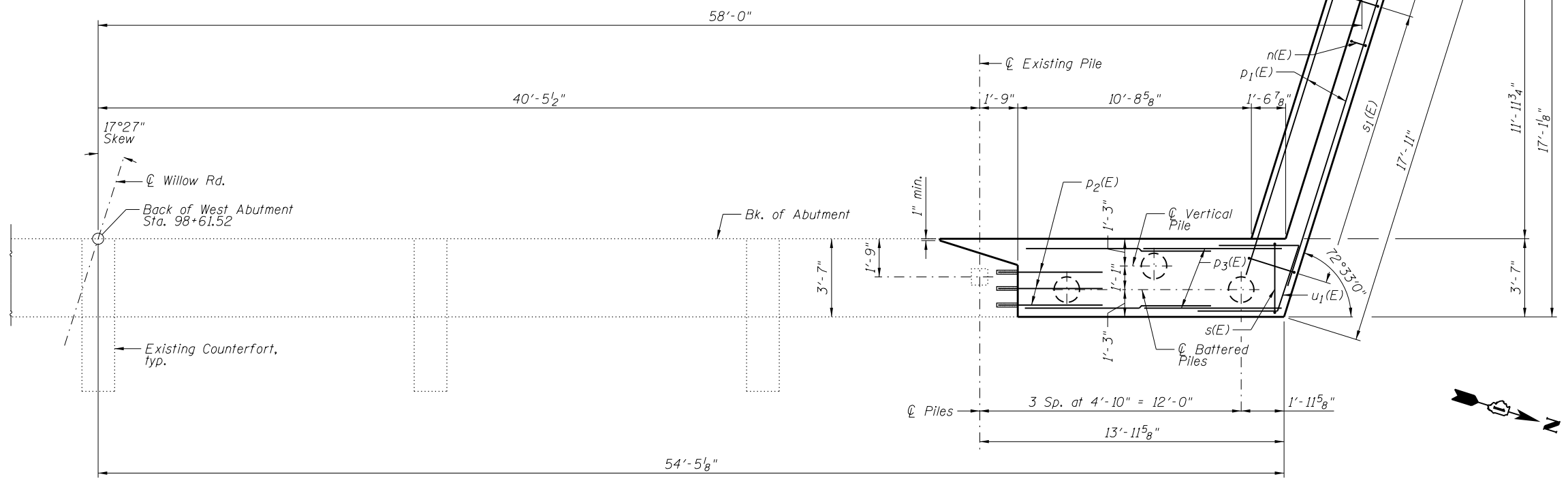
SHEET NO. 36 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	80
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT



WEST ABUTMENT PLAN - PILE CAP



WEST ABUTMENT PLAN - PILE CAP

Notes:
 For Pile Data, see Sheet 43 of 57.
 For Details and Sections, see Sheets 41 and 43 of 57.
 Work with Sheets 35, 36, 41 and 43.

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

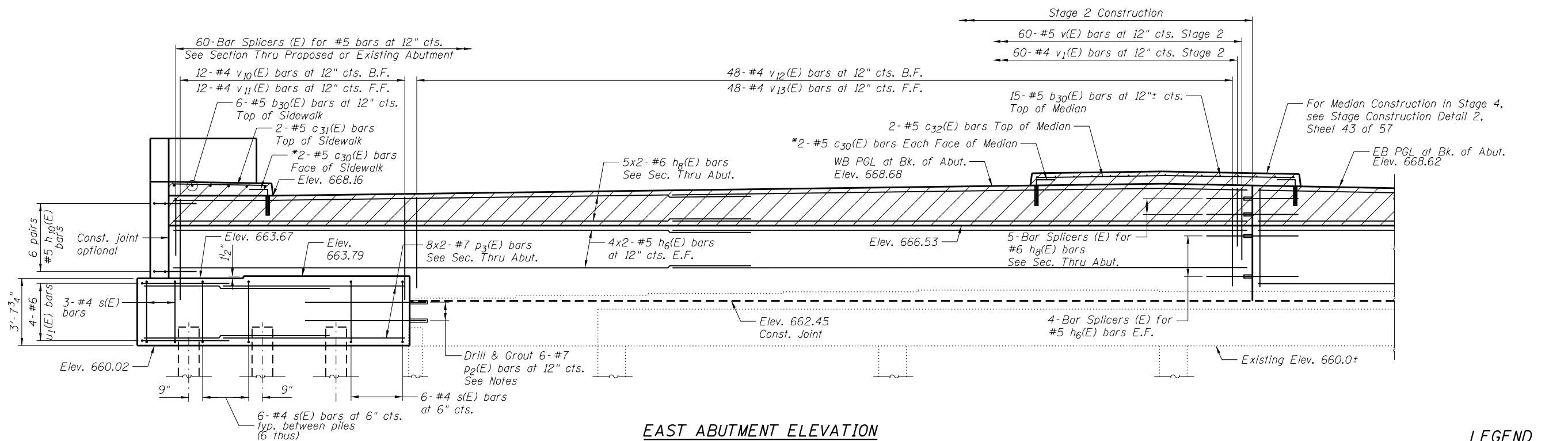
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT PILE CAP PLAN
 STRUCTURE NO. 016-0533

SHEET NO. 37 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	81
CONTRACT NO. 60N83				

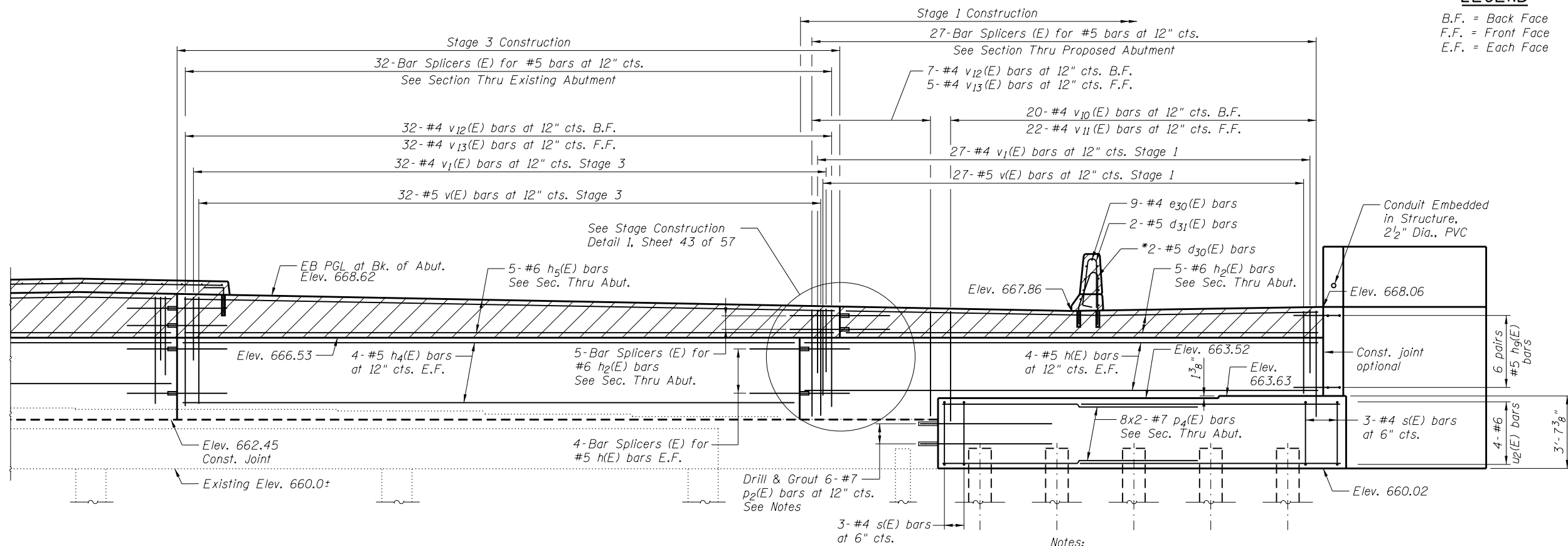
ILLINOIS FED. AID PROJECT



EAST ABUTMENT ELEVATION

LEGEND

B.F. = Back Face
 F.F. = Front Face
 E.F. = Each Face



EAST ABUTMENT ELEVATION

Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 For Drill & Grout #7 p2(E) bars adjust spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep. Bars shall be drilled a minimum of 6" from the edge of concrete.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 For details of Bar Splicers, see sheet 49 of 57.
 For details of piles, see sheet 50 of 57.
 For sections and details, see sheets 42 and 43 of 57.
 Bars indicated thus: 8x2-#7 etc. indicates 8 lines of bars with 2 lengths per line.

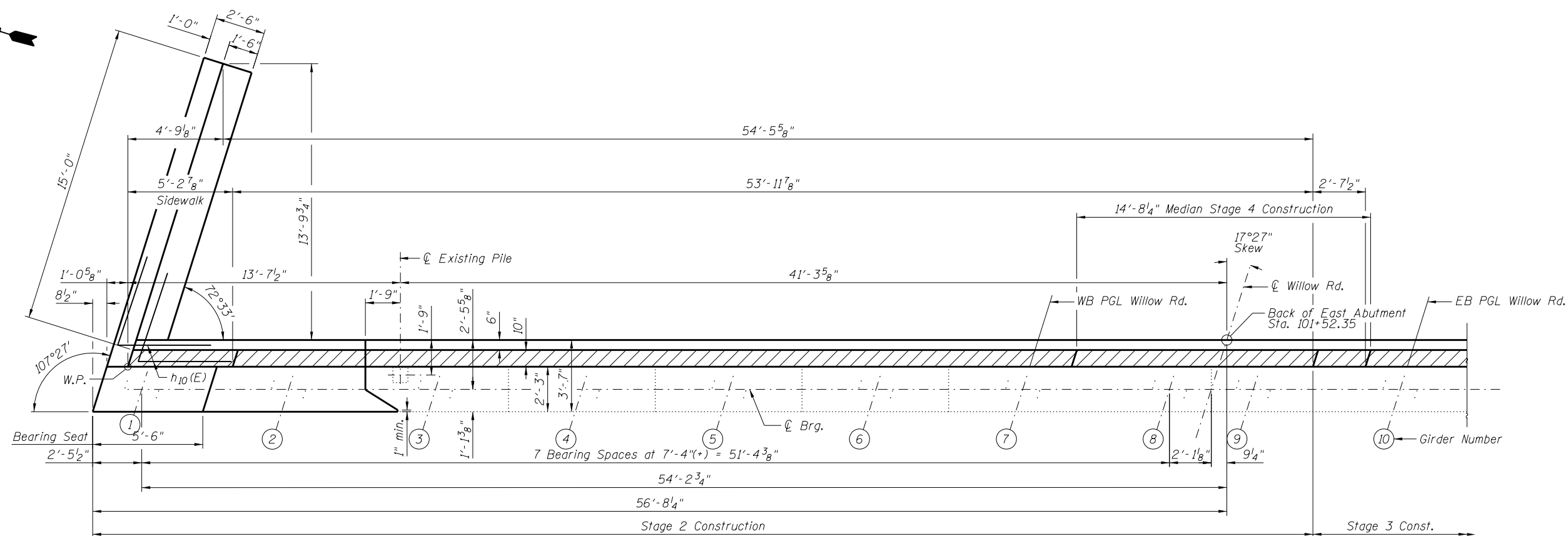
* Core and set bars according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

MIN. BAR LAP

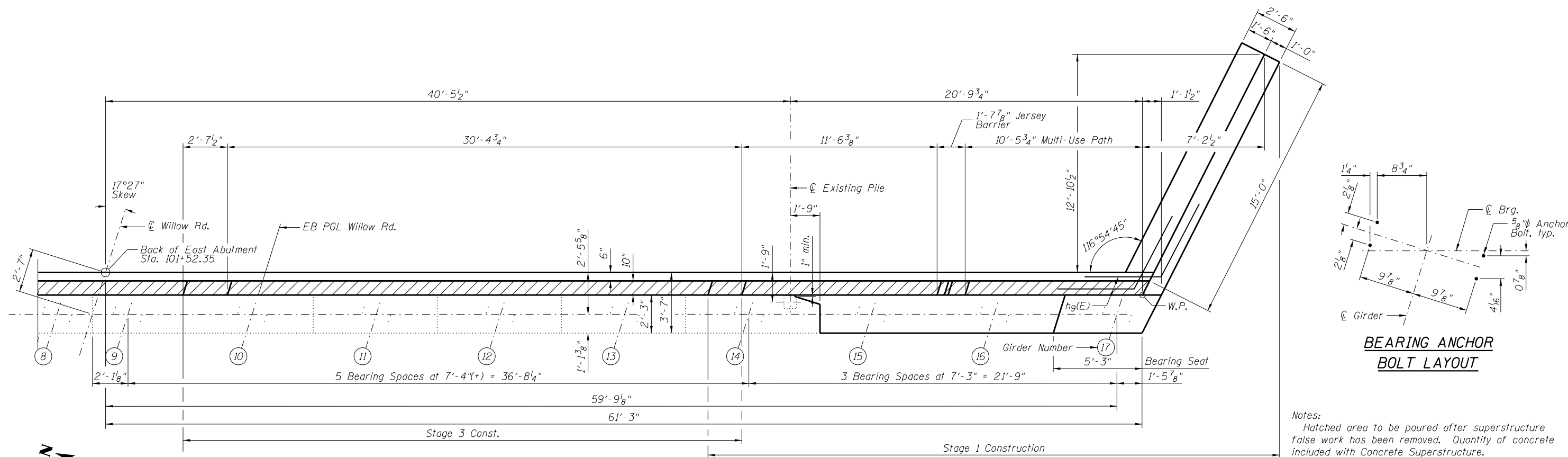
#5 bar = 3'-8"
 #6 bar = 4'-5"
 #7 bar = 5'-10"

FILED

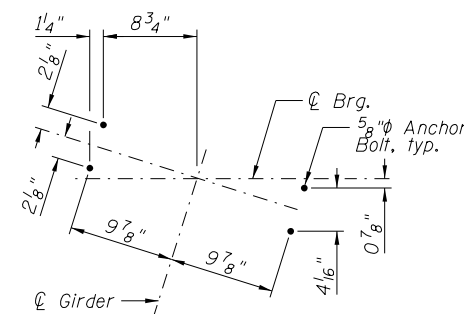
	USER NAME = MS_USER	DESIGNED - LAS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT ELEVATION STRUCTURE NO. 016-0533	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -			305	1920.01-BR	COOK	194	82
	PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -			CONTRACT NO. 60N83				
	CHECKED - LAS	REVISED -			SHEET NO. 38 OF 57 SHEETS	ILLINOIS FED. AID PROJECT				



EAST ABUTMENT TOP VIEW



EAST ABUTMENT TOP VIEW



BEARING ANCHOR BOLT LAYOUT

Notes:
 Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 Work with Sheets 38, 40, 42 and 43.

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

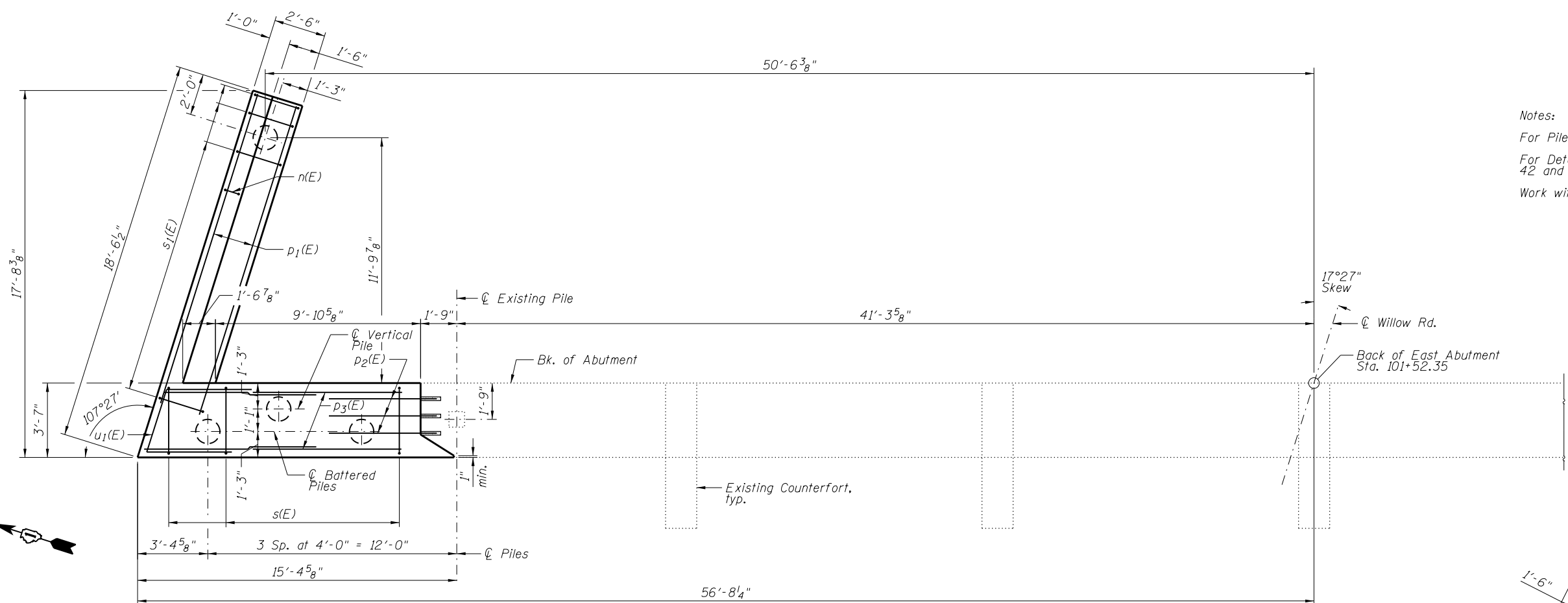
EAST ABUTMENT TOP VIEW
STRUCTURE NO. 016-0533

SHEET NO. 39 OF 57 SHEETS

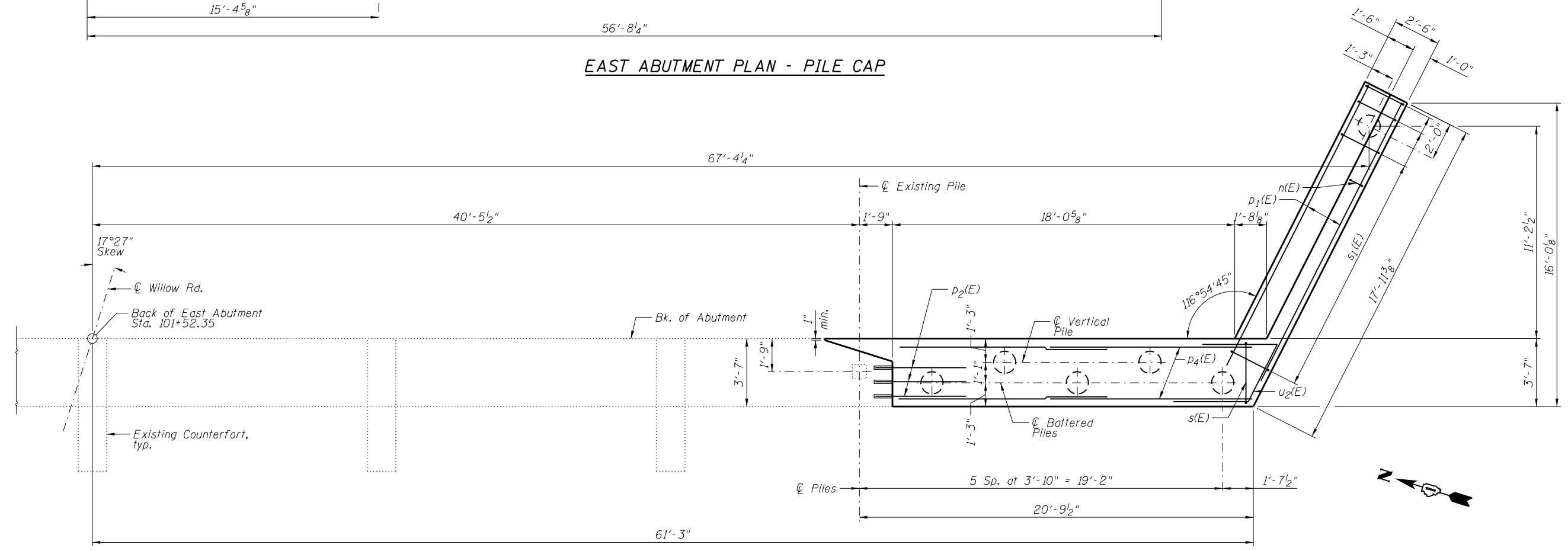
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	83
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



Notes:
 For Pile Data, see Sheet 43 of 57.
 For Details and Sections, see Sheets 42 and 43 of 57.
 Work with Sheets 38, 39, 42 and 43.



EAST ABUTMENT PLAN - PILE CAP



EAST ABUTMENT PLAN - PILE CAP

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

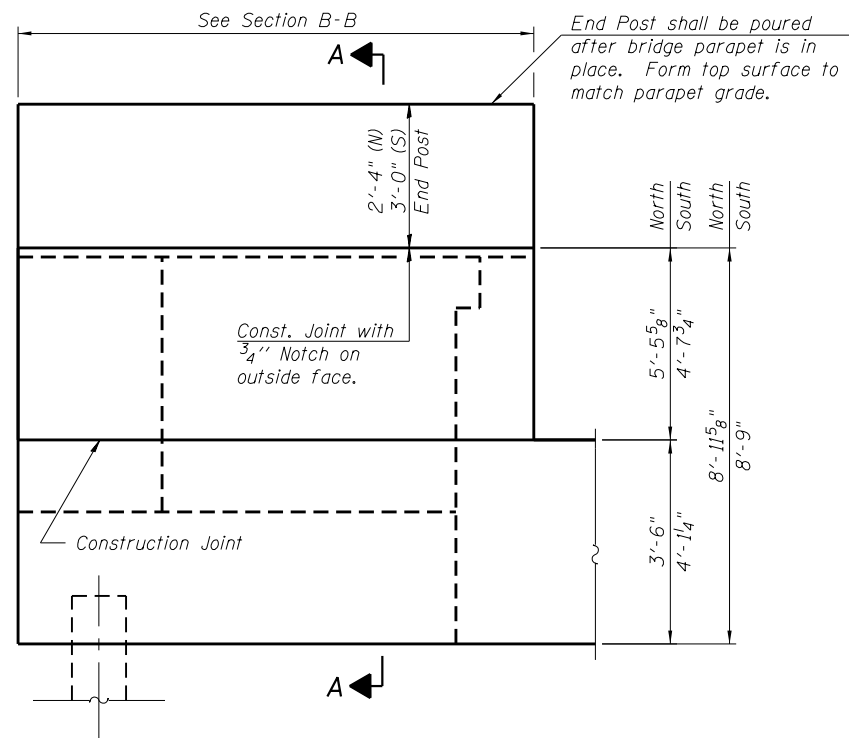
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT PILE CAP PLAN
 STRUCTURE NO. 016-0533**

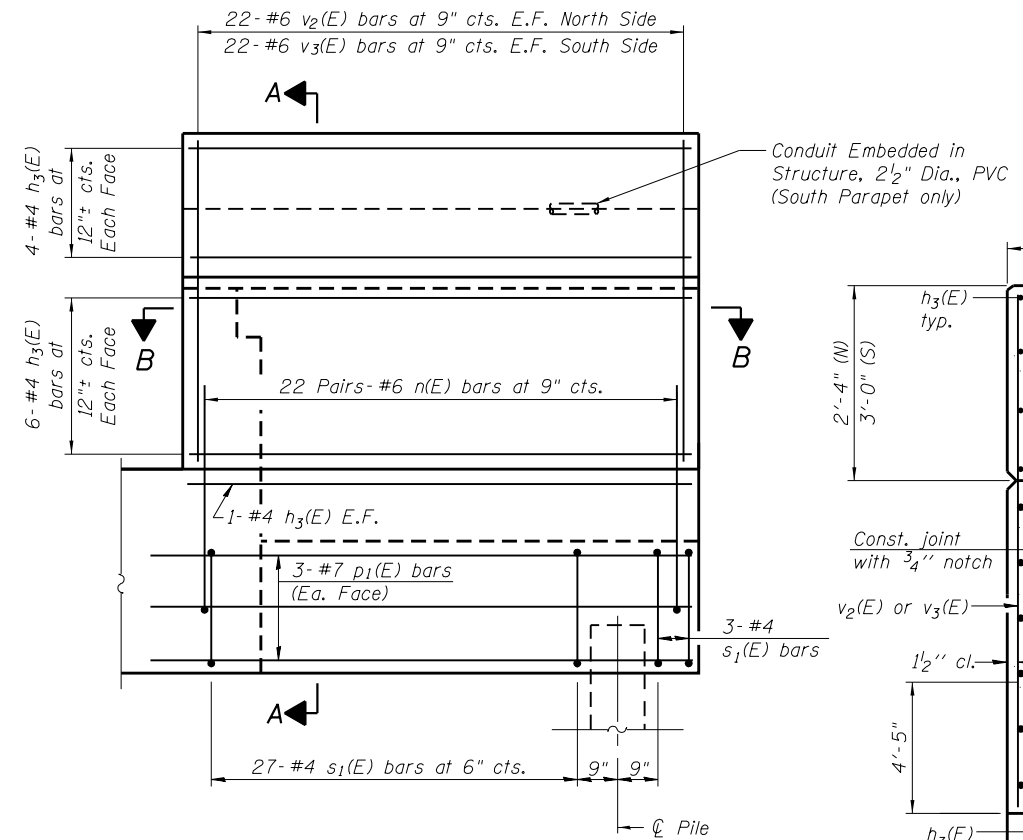
SHEET NO. 40 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	84
CONTRACT NO. 60N83				

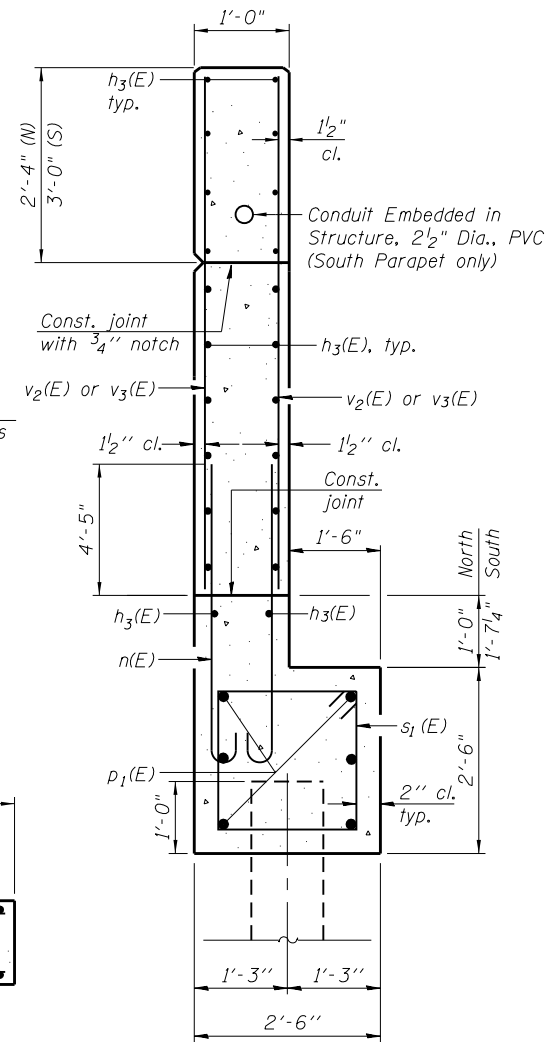
ILLINOIS FED. AID PROJECT



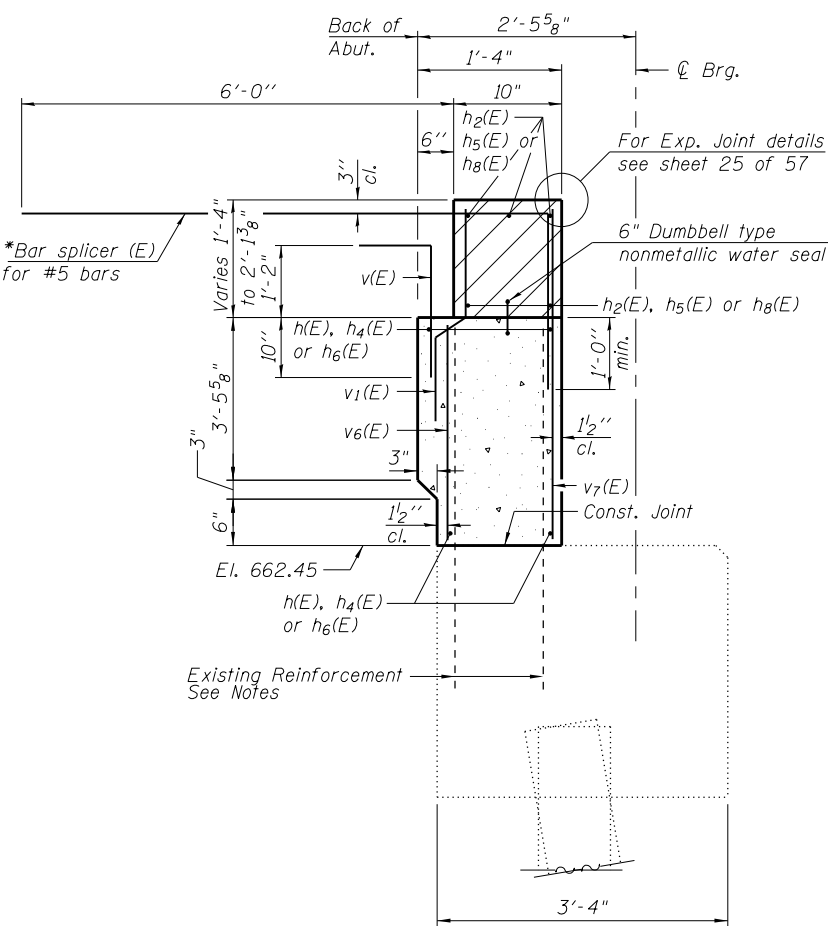
WING WALL ELEVATION
Showing Dimensions



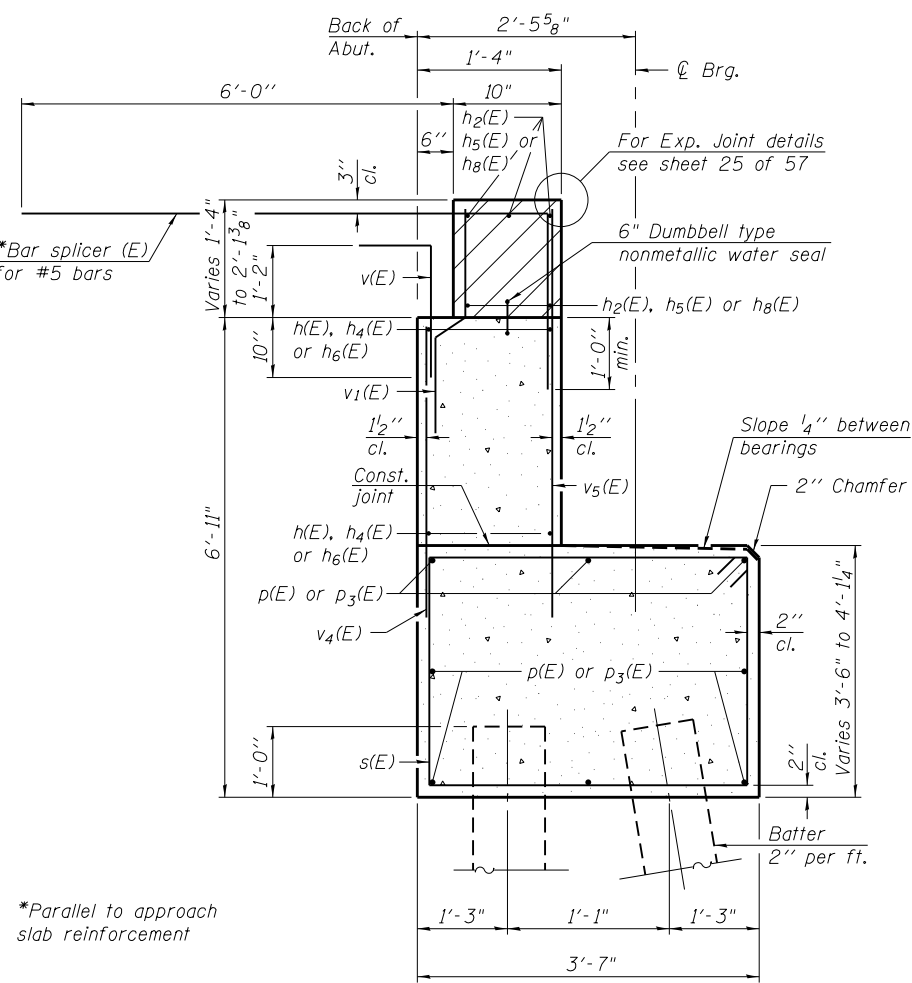
WING WALL ELEVATION
Showing Reinforcement



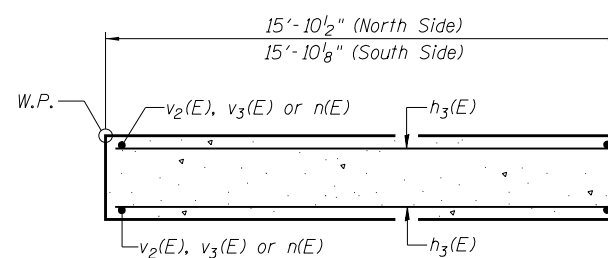
SECTION A-A



SEC. THRU EXISTING ABUT.



SEC. THRU PROPOSED ABUT.



SECTION B-B

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure. Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap. Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 57. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. 6" Dumbbell type nonmetallic water seal shall be in accordance with Section 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.

FILED



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

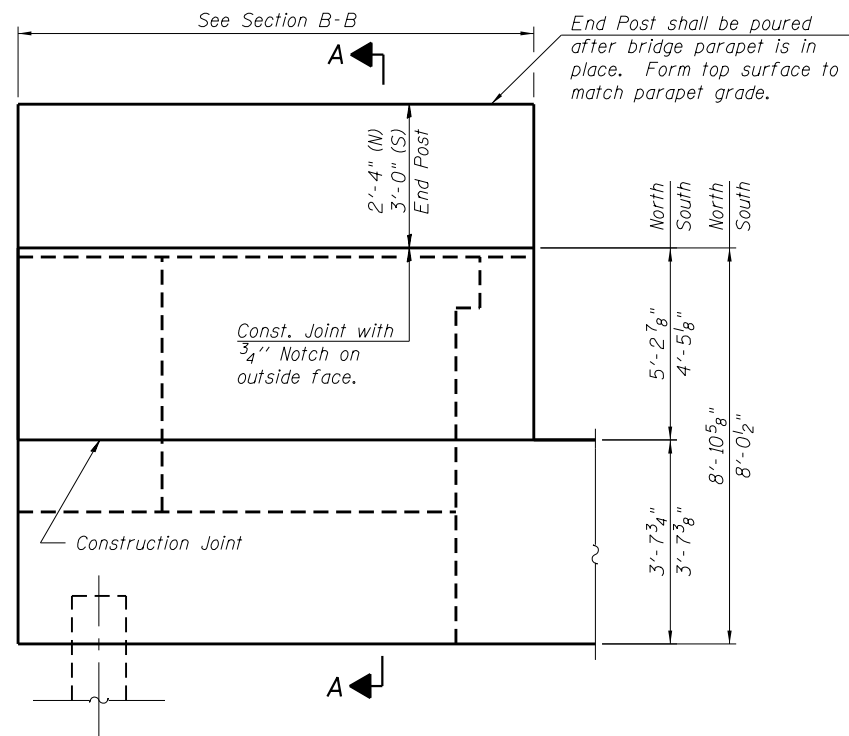
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 016-0533

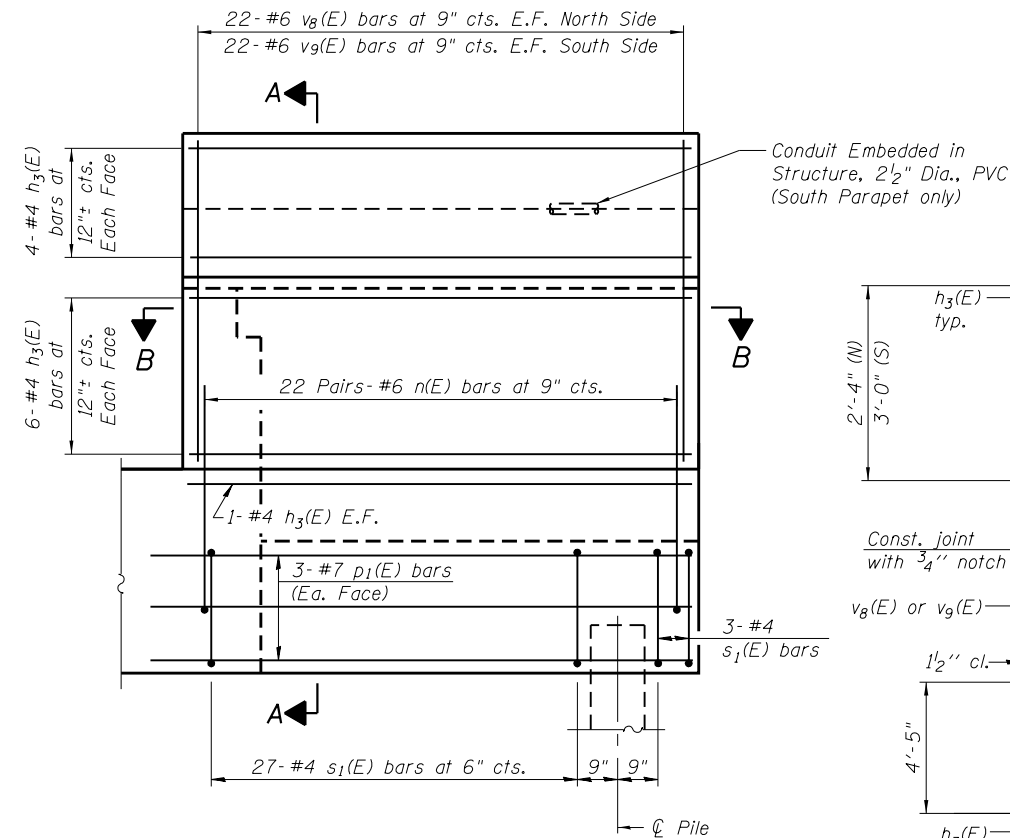
SHEET NO. 41 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	85
CONTRACT NO. 60N83				

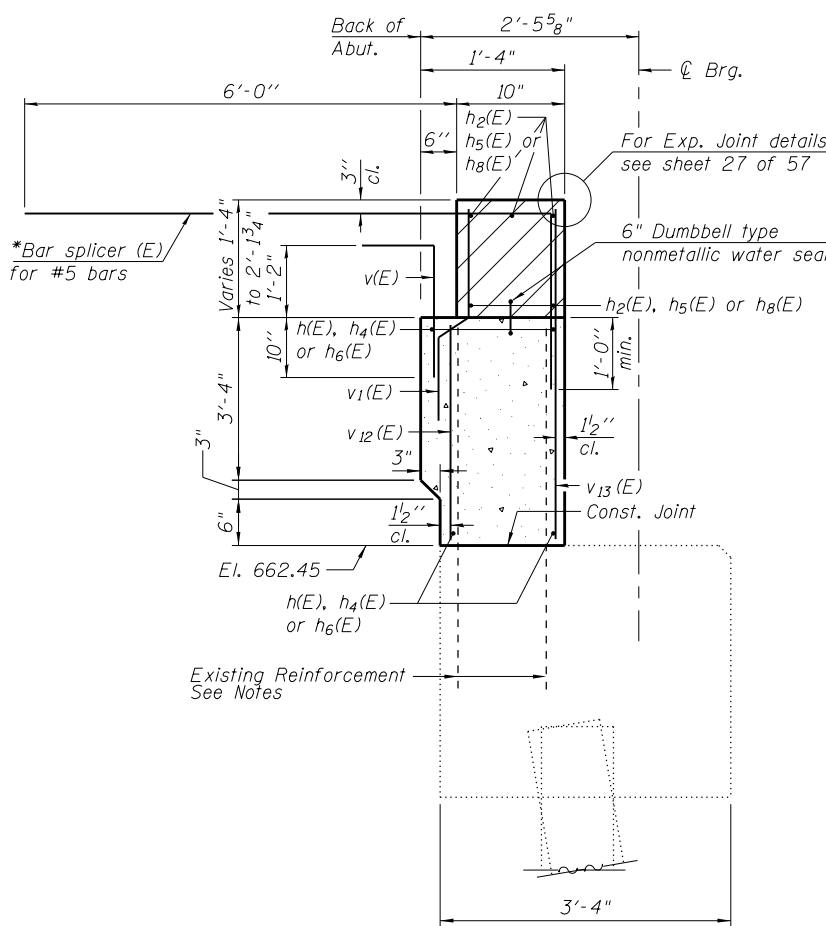
ILLINOIS FED. AID PROJECT



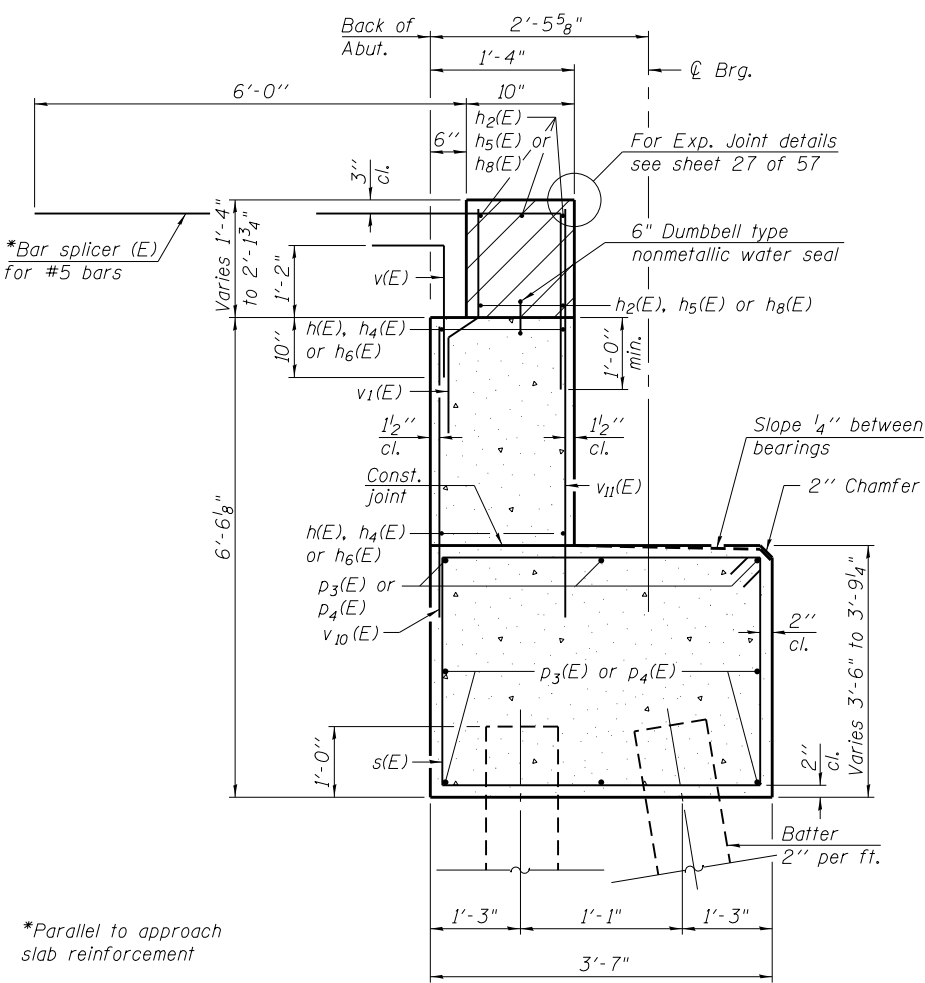
WING WALL ELEVATION
Showing Dimensions



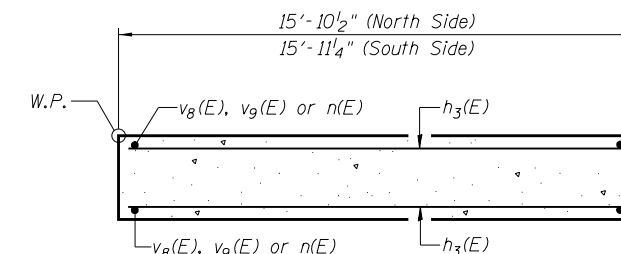
WING WALL ELEVATION
Showing Reinforcement



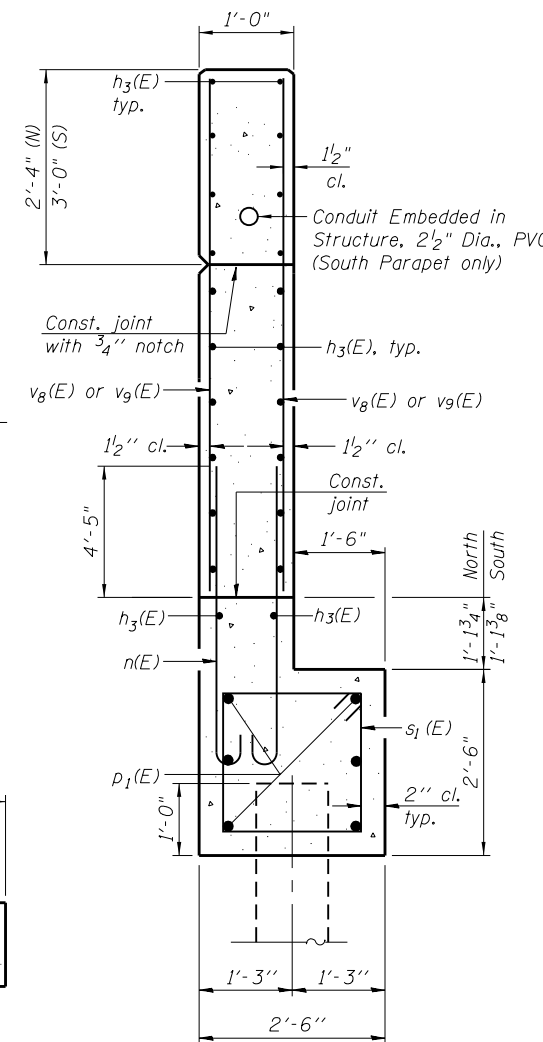
SEC. THRU EXISTING ABUT.



SEC. THRU PROPOSED ABUT.



SECTION B-B



SECTION A-A

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
Quantity of concrete in end post included with Concrete Superstructure on sheet 20 of 57.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
6" Dumbbell type nonmetallic water seal shall be in accordance with Section 503.12 and 1054 of the Standard Specifications. Cost included with Concrete Structures.

FILEL\$



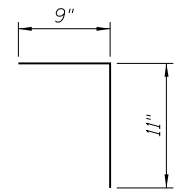
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

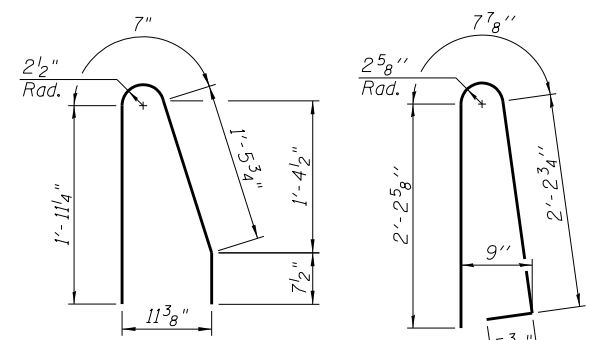
EAST ABUTMENT DETAILS
STRUCTURE NO. 016-0533

SHEET NO. 42 OF 57 SHEETS

F.A.P. RFE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	86
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				

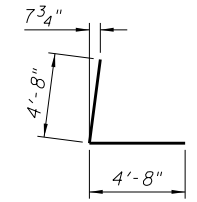


BAR c₃₀(E)

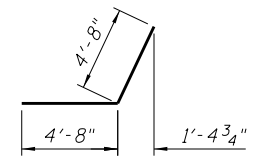


BAR d₃₀(E)

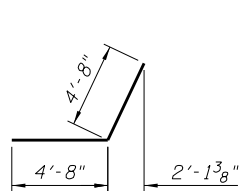
BAR d₃₁(E)



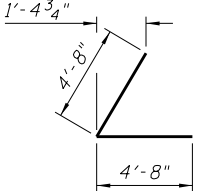
BAR h₁(E)



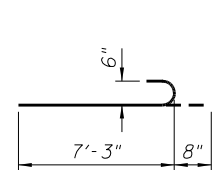
BAR h₇(E)



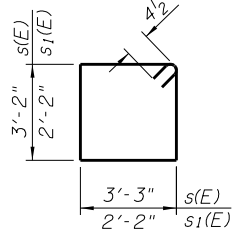
BAR h₉(E)



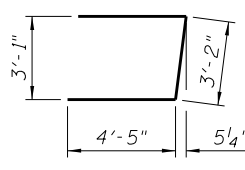
BAR h₁₀(E)



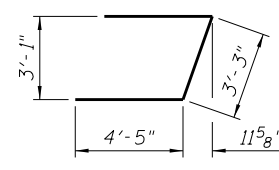
BAR n(E)



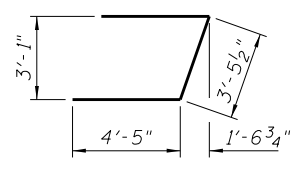
BARS s(E) & s₁(E)



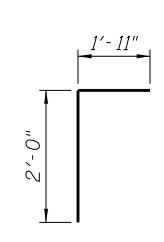
BAR u(E)



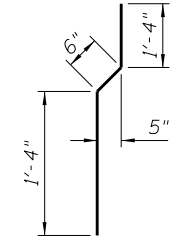
BAR u₁(E)



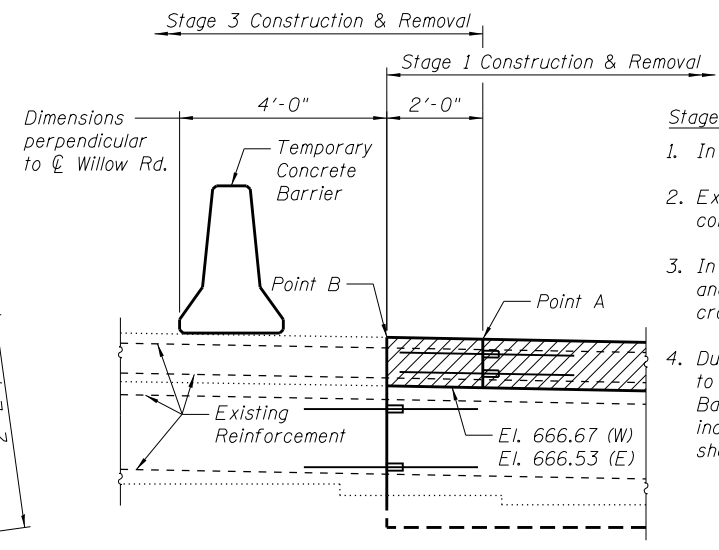
BAR u₂(E)



BAR v(E)

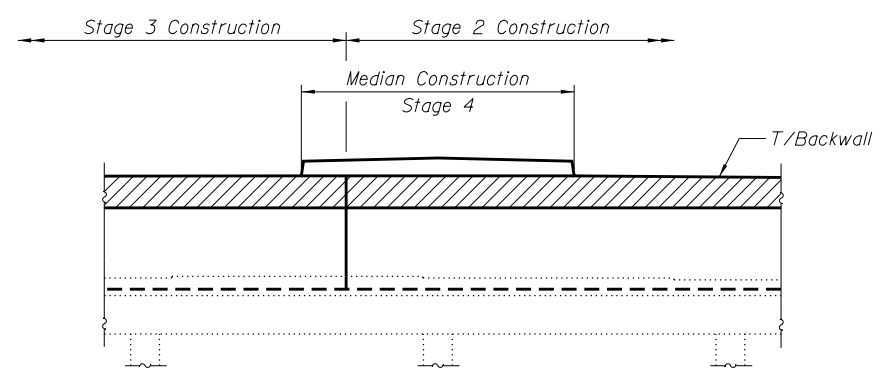


BAR v₁(E)



STAGE CONSTRUCTION DETAIL 1
(East Abutment shown, West Abutment similar)

- Stage Construction Detail 1 Notes:**
1. In Stage 1, remove southern portion of abutment. (See Details on Sheet 34).
 2. Existing reinforcement shall be cleaned and incorporated into the new Stage 1 construction. Cost included with Concrete Removal.
 3. In Stage 1, new backwall shall be placed to Point A using proposed elevations and shall match the existing elevations at Point B. Bar Splicer Assemblies in cross hatch shall be placed at Point A.
 4. During Stage 3, cross hatched area between Points A and B shall be removed to Point A and the proposed horizontal reinforcement shall be attached to the Bar Splicer Assemblies. The vertical reinforcement and Bar Splicers to be incorporated into the approach slab that were installed in Stage 1 Construction shall be cleaned and incorporated into Stage 3 Construction.



STAGE CONSTRUCTION DETAIL 2
(East Abutment shown, West Abutment similar)

- Stage Construction Detail 2 Notes:**
1. During Stage 2 and Stage 3 Backwall shall be placed without median. Preformed Joint Strip Seal shall be placed at top of backwall.
 2. During Stage 4, the preformed joint strip seal shall be placed at top of median.

**WEST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
b ₃₀ (E)	21	#5	7"	—
c ₃₀ (E)	6	#5	1'-8"	└
c ₃₁ (E)	2	#5	4'-11"	—
c ₃₂ (E)	2	#5	14'-4"	—
d ₃₀ (E)	2	#5	4'-8"	∧
d ₃₁ (E)	2	#5	5'-7"	∧
e ₃₀ (E)	9	#4	7"	—
h(E)	8	#5	26'-6"	—
h ₁ (E)	12	#5	9'-4"	└
h ₂ (E)	5	#6	24'-5"	—
h ₃ (E)	44	#4	15'-6"	—
h ₄ (E)	8	#5	30'-7"	—
h ₅ (E)	5	#6	32'-8"	—
h ₆ (E)	16	#5	31'-10"	—
h ₇ (E)	12	#5	9'-4"	└
h ₈ (E)	10	#6	32'-2"	—
n(E)	88	#6	7'-11"	—
p(E)	16	#7	13'-5"	—
p ₁ (E)	12	#7	16'-0"	—
p ₂ (E)	12	#7	6'-10"	—
p ₃ (E)	16	#7	10'-6"	—
s(E)	51	#4	13'-7"	☑
s ₁ (E)	60	#4	9'-5"	☑
u(E)	4	#6	12'-0"	└
u ₁ (E)	4	#6	12'-1"	└
v(E)	119	#5	3'-11"	└
v ₁ (E)	119	#4	3'-2"	└
v ₂ (E)	44	#6	7'-5"	—
v ₃ (E)	44	#6	7'-4"	—
v ₄ (E)	33	#4	5'-0"	—
v ₅ (E)	34	#4	7'-4"	—
v ₆ (E)	86	#4	3'-11"	—
v ₇ (E)	85	#4	5'-3"	—
Structure Excavation	Cu. Yd.	251		
Concrete Structures	Cu. Yd.	53.5		
Reinforcement Bars, Epoxy Coated	Pound	8,580		
Furnishing Metal Shell Piles 14"x0.25"	Foot	360		
Test Pile Metal Shells	Each	1		
Driving Piles	Foot	360		
Cleaning Bridge Seats	Sq. Ft.	189		

**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
b ₃₀ (E)	21	#5	7"	—
c ₃₀ (E)	6	#5	1'-8"	└
c ₃₁ (E)	2	#5	4'-11"	—
c ₃₂ (E)	2	#5	14'-4"	—
d ₃₀ (E)	2	#5	4'-8"	∧
d ₃₁ (E)	2	#5	5'-7"	∧
e ₃₀ (E)	9	#4	7"	—
h(E)	8	#5	26'-6"	—
h ₂ (E)	5	#6	24'-5"	—
h ₃ (E)	44	#4	15'-6"	—
h ₄ (E)	8	#5	30'-7"	—
h ₅ (E)	5	#6	32'-8"	—
h ₆ (E)	16	#5	31'-10"	—
h ₈ (E)	10	#6	32'-2"	—
h ₉ (E)	12	#5	9'-4"	└
h ₁₀ (E)	12	#5	9'-4"	└
n(E)	88	#6	7'-11"	—
p ₁ (E)	12	#7	16'-0"	—
p ₂ (E)	12	#7	6'-10"	—
p ₃ (E)	16	#7	10'-6"	—
p ₄ (E)	16	#7	14'-4"	—
s(E)	51	#4	13'-7"	☑
s ₁ (E)	60	#4	9'-5"	☑
u ₁ (E)	4	#6	12'-1"	└
u ₂ (E)	4	#6	12'-4"	└
v(E)	119	#5	3'-11"	└
v ₁ (E)	119	#4	3'-2"	└
v ₈ (E)	44	#6	7'-3"	—
v ₉ (E)	44	#6	7'-1"	—
v ₁₀ (E)	32	#4	4'-9"	—
v ₁₁ (E)	34	#4	6'-11"	—
v ₁₂ (E)	87	#4	3'-9"	—
v ₁₃ (E)	85	#4	5'-1"	—
Structure Excavation	Cu. Yd.	241		
Concrete Structures	Cu. Yd.	51.2		
Reinforcement Bars, Epoxy Coated	Pound	8,550		
Furnishing Metal Shell Piles 14"x0.25"	Foot	396		
Test Pile Metal Shells	Each	1		
Driving Piles	Foot	396		
Cleaning Bridge Seats	Sq. Ft.	189		

PILE DATA

Type: Metal Shell 14"φ w/1/4" walls
 Nominal Required Bearing: 360k
 Factored Resistance Available: 120k
 Est. Length: 40' (W), 44' (E)
 No. Production Piles: 9 (W), 9 (E)
 No. Test Piles: 1 (W), 1 (E)

FILEL\$

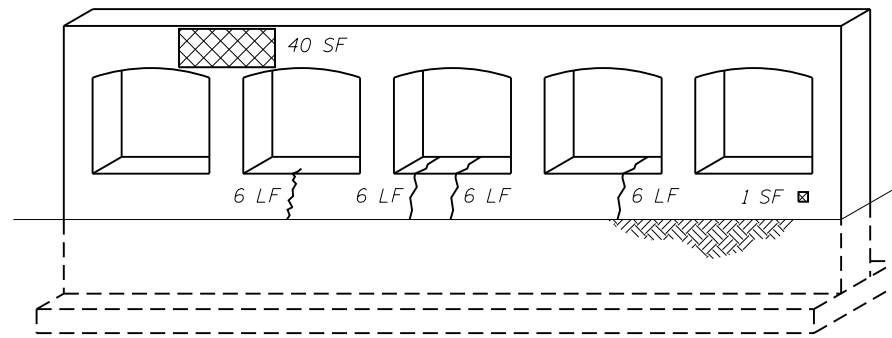


USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

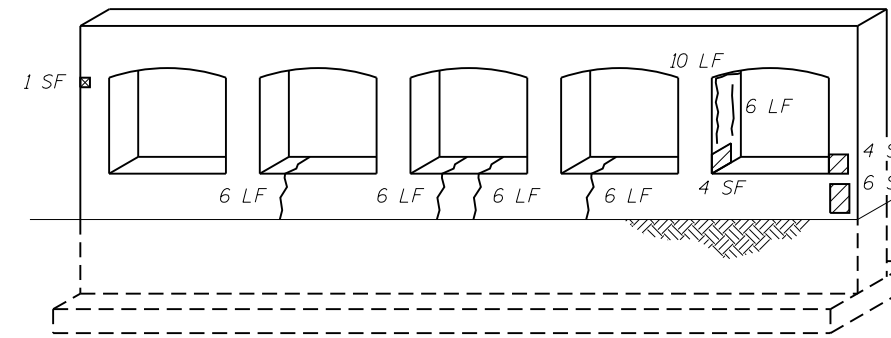
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS
STRUCTURE NO. 016-0533**
SHEET NO. 43 OF 57 SHEETS

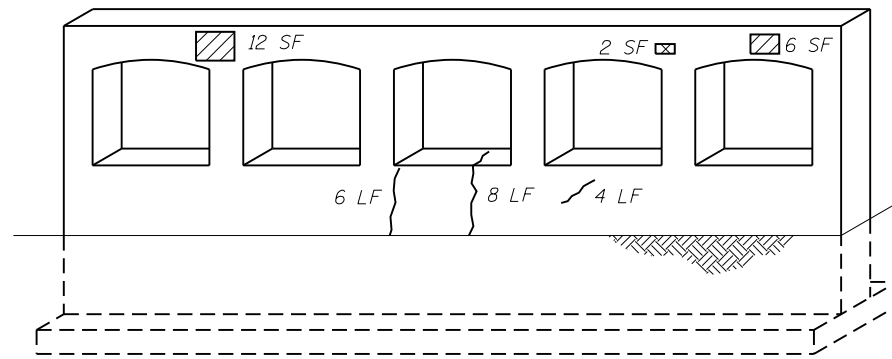
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	87
CONTRACT NO. 60N83				
ILLINOIS FED. AID PROJECT				



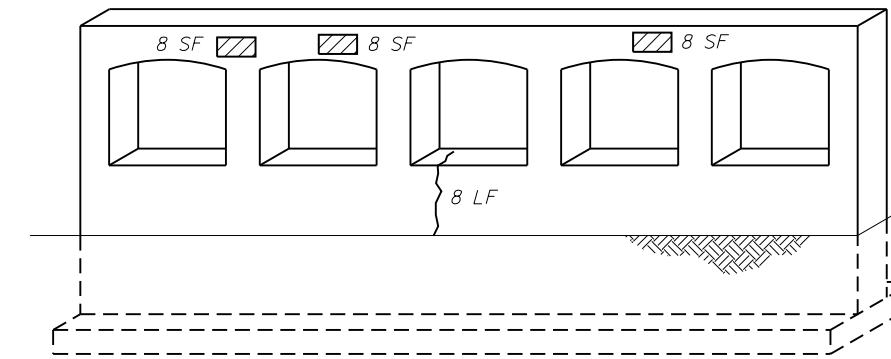
PIER 1 WEST FACE



PIER 1 EAST FACE






PIER 2 WEST FACE



PIER 2 EAST FACE

LEGEND

-  Structural Repair of Concrete (Depth Equal to or Less Than 5")
-  Structural Repair of Concrete (Depth Greater Than 5")
-  Epoxy Crack Injection

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	56
Structural Repair of Concrete (Depth Greater Than 5")	Sq Ft	44
Epoxy Crack Injection	Lin Ft	90

\$FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
	CHECKED - DAZ	REVISED -
PLOT SCALE = *SCALE*	DRAWN - TCS	REVISED -
PLOT DATE = 12/13/2018	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIR DETAILS
STRUCTURE NO. 016-0533

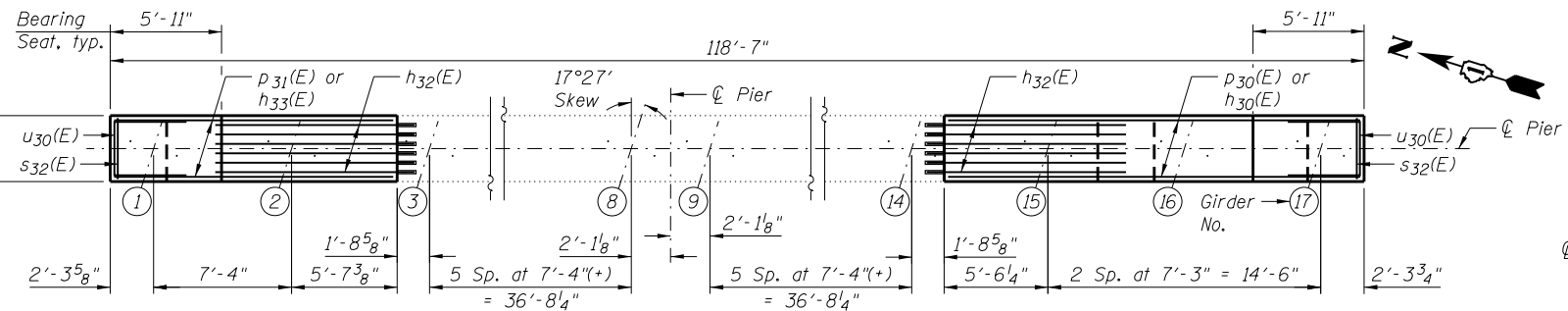
SHEET NO. 44 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	88
				CONTRACT NO. 60N83
ILLINOIS FED. AID PROJECT				

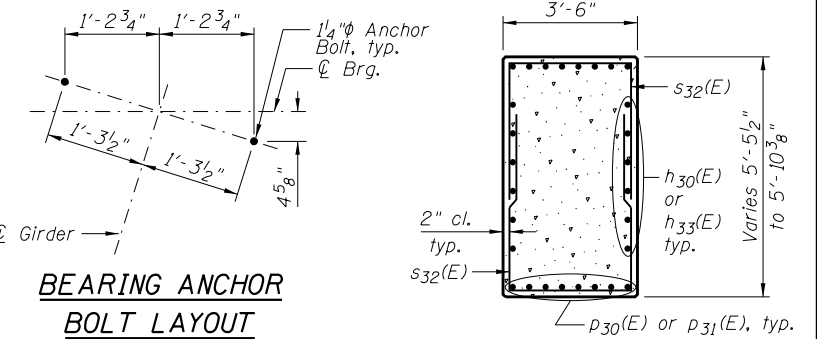
Notes:
 Space reinforcement in cap to miss anchor bolts.
 For details of bar splicers, see sheet 49 of 57.
 For details of piles, see sheet 50 of 57.
 For Drill & Grout bars adjust spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep. Bars shall be drilled a minimum of 6" from the edge of concrete.

PILE DATA

Type: Metal Shell 14"φ with 1/4" walls
 Nominal Required Bearing: 420k
 Allowable Resistance Available: 140k
 Est. Length: 39'
 No. Production Piles: 19
 No. Test Piles: 1

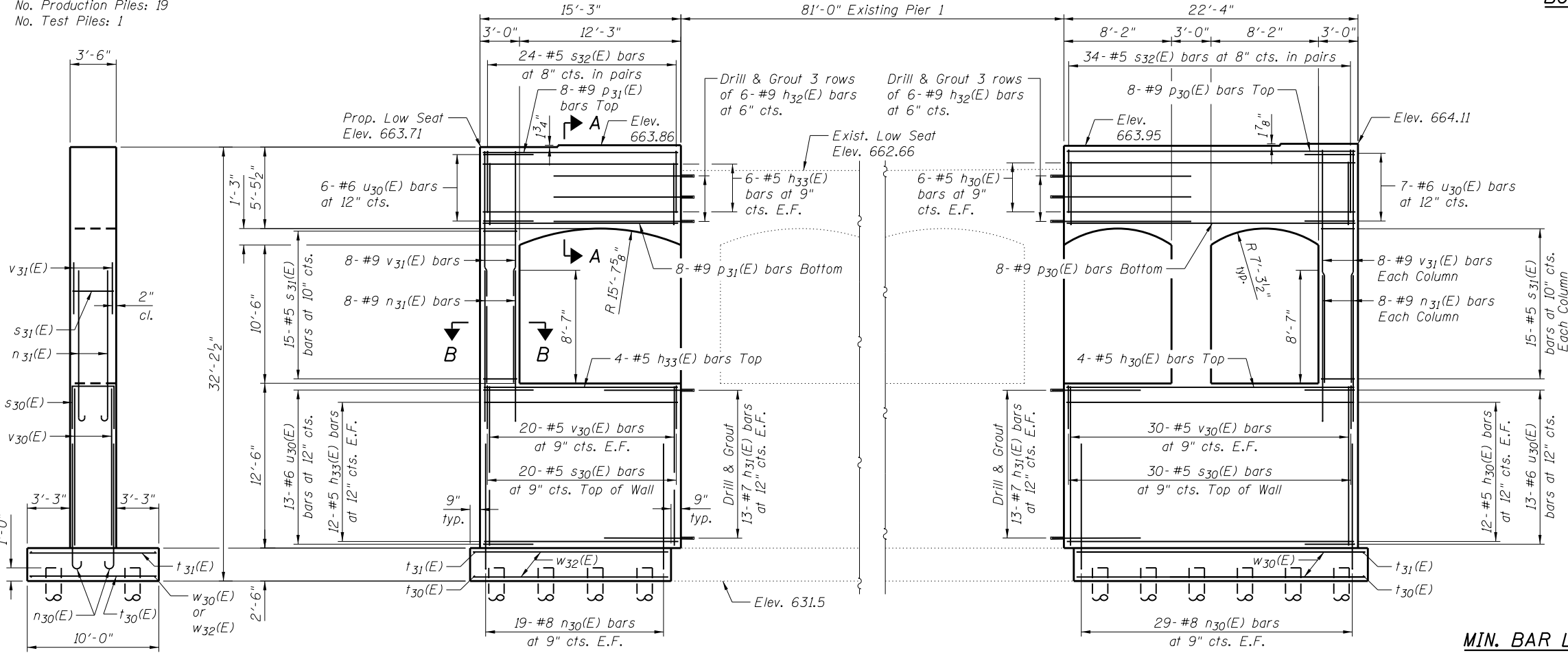


TOP PLAN



BEARING ANCHOR BOLT LAYOUT

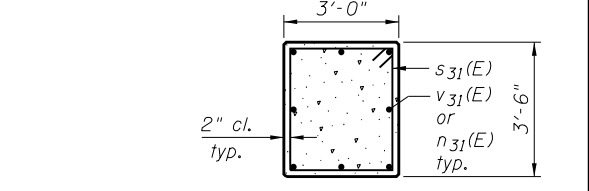
SECTION A-A



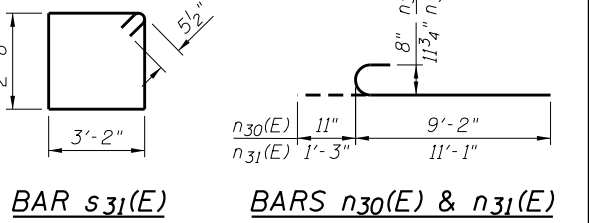
ELEVATION
(Looking East)

END VIEW

MIN. BAR LAPS
 #5 bar = 3'-8"
 #7 bar = 5'-10"



SECTION B-B

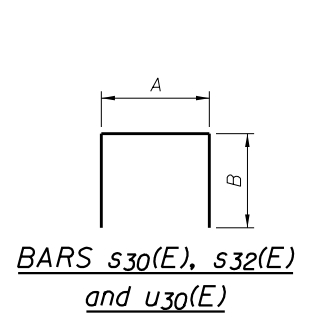


BAR s31(E)

BARS n30(E) & n31(E)

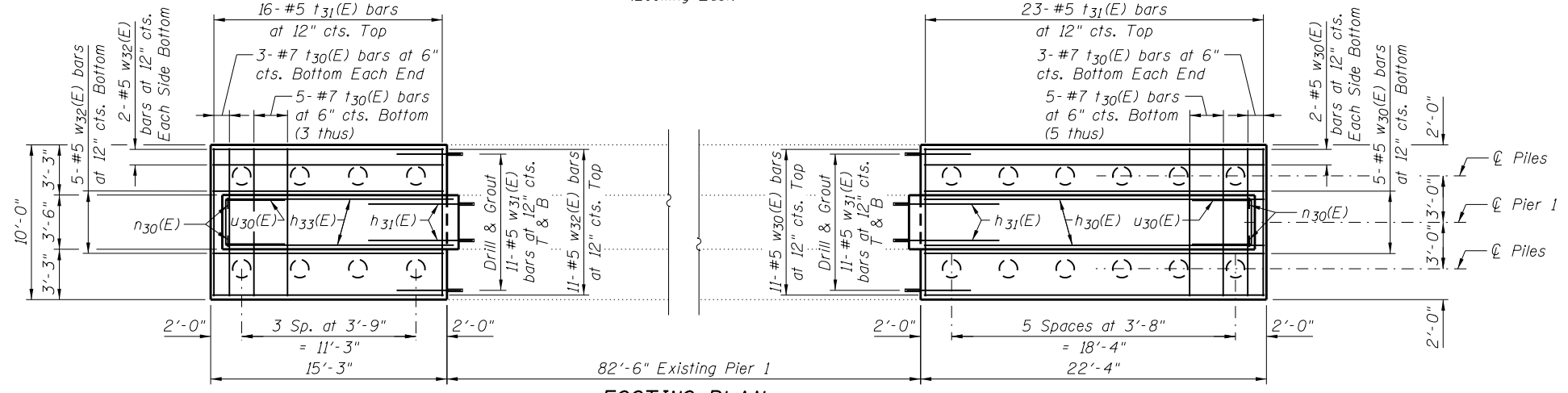
BILL OF MATERIAL

Bar No.	Size	Length	Shape
h30(E)	40	#5	22'-0"
h31(E)	52	#7	6'-9"
h32(E)	36	#9	10'-7"
h33(E)	40	#5	14'-11"
n30(E)	96	#8	10'-1"
n31(E)	24	#9	12'-4"
p30(E)	16	#9	22'-0"
p31(E)	16	#9	14'-11"
s30(E)	50	#5	13'-2"
s31(E)	45	#5	12'-7"
s32(E)	116	#5	12'-0"
t30(E)	52	#7	9'-8"
t31(E)	39	#5	9'-8"
u30(E)	39	#6	10'-6"
v30(E)	100	#5	12'-3"
v31(E)	24	#9	16'-11"
w30(E)	20	#5	22'-0"
w31(E)	44	#5	4'-7"
w32(E)	20	#5	14'-11"
Structure Excavation		Cu. Yd.	230
Concrete Structures		Cu. Yd.	139.3
Reinforcement Bars, Epoxy Coated		Pound	17,560
Furnishing Metal Shell Piles 14"φx0.25"		Foot	741
Driving Piles		Foot	741
Test Pile Metal Shell		Each	1



A & B DIMENSIONS

Bar	A	B
s30(E)	3'-2"	5'-0"
s32(E)	3'-2"	4'-5"
u30(E)	2'-10"	3'-10"



FOOTING PLAN

FILE#



USER NAME = MS_USER
 PLOT SCALE = *SCALE*
 PLOT DATE = 12/13/2018

DESIGNED - LAS
 CHECKED - DAZ
 DRAWN - TCS
 CHECKED - LAS

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

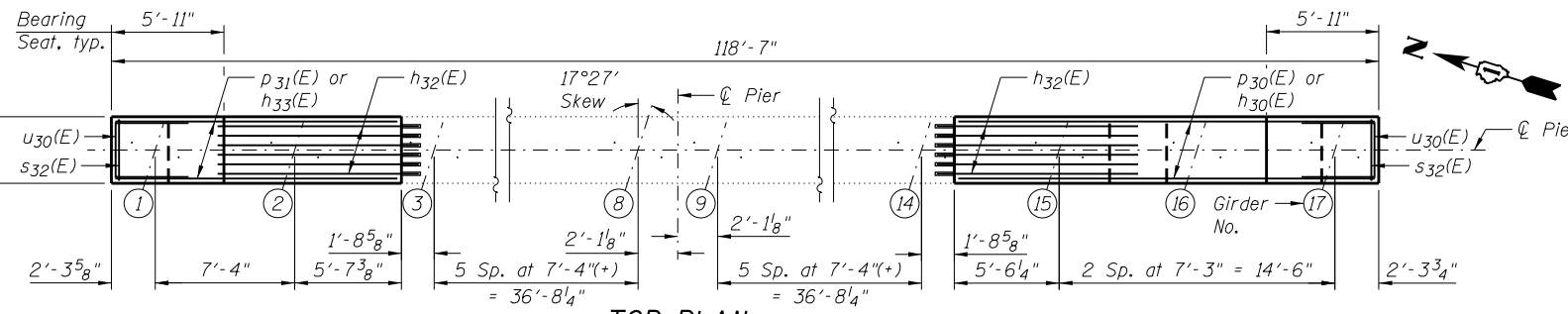
PIER 1
STRUCTURE NO. 016-0533
 SHEET NO. 45 OF 57 SHEETS

F.A.P. RTE. 305
 SECTION 1920.01-BR
 COUNTY COOK
 TOTAL SHEETS 194
 SHEET NO. 89
 CONTRACT NO. 60N83
 ILLINOIS FED. AID PROJECT

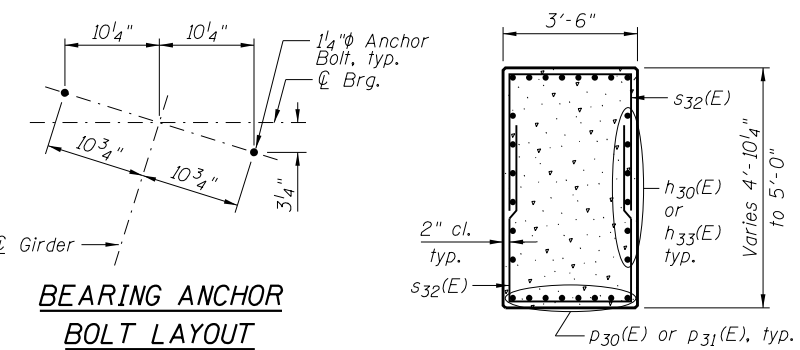
Notes:
 Space reinforcement in cap to miss anchor bolts.
 For details of bar splicers, see sheet 49 of 57.
 For details of piles, see sheet 50 of 57.
 For Drill & Grout bars adjust spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep. Bars shall be drilled a minimum of 6" from the edge of concrete.

PILE DATA

Type: Metal Shell 14"φ with 1/4" walls
 Nominal Required Bearing: 420k
 Allowable Resistance Available: 140k
 Est. Length: 48'
 No. Production Piles: 19
 No. Test Piles: 1

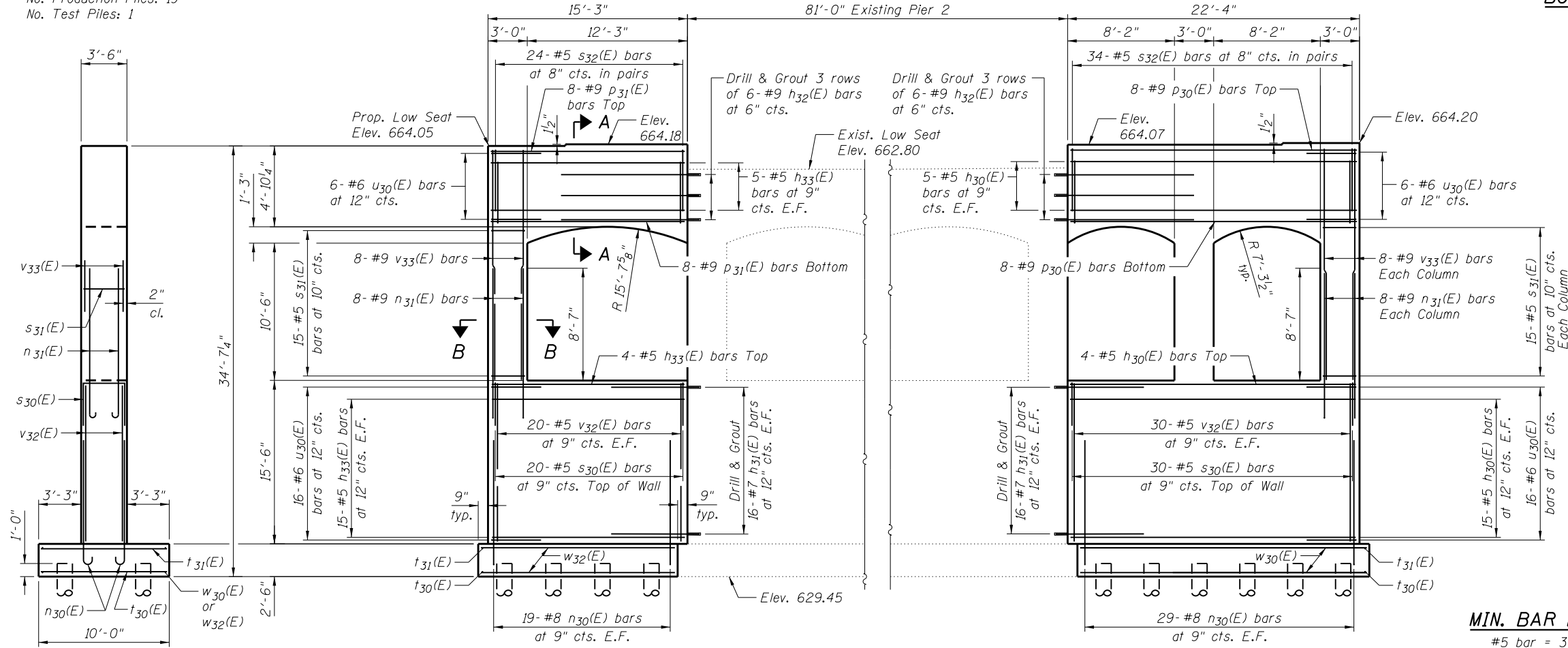


TOP PLAN



BEARING ANCHOR BOLT LAYOUT

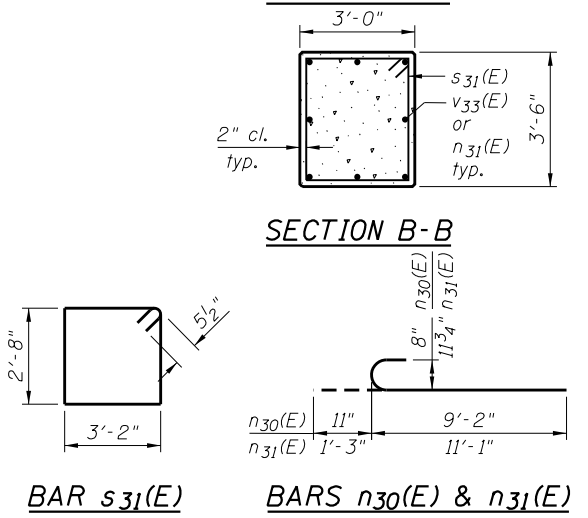
SECTION A-A



ELEVATION
(Looking East)

END VIEW

MIN. BAR LAPS
 #5 bar = 3'-8"
 #7 bar = 5'-10"



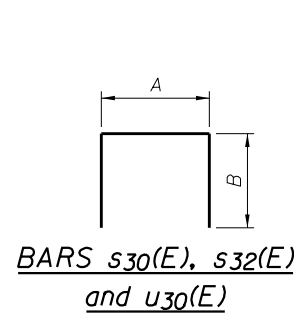
SECTION B-B

BAR s31(E)

BARS n30(E) & n31(E)

BILL OF MATERIAL

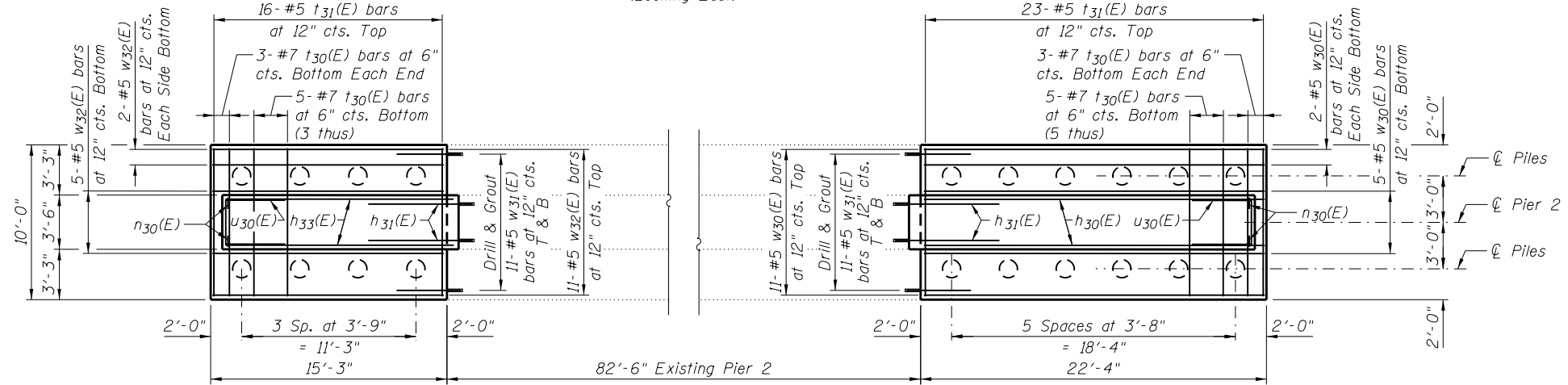
Bar	No.	Size	Length	Shape
h30(E)	44	#5	22'-0"	—
h31(E)	64	#7	6'-9"	—
h32(E)	36	#9	10'-7"	—
h33(E)	44	#5	14'-11"	—
n30(E)	96	#8	10'-1"	—
n31(E)	24	#9	12'-4"	—
p30(E)	16	#9	22'-0"	—
p31(E)	16	#9	14'-11"	—
s30(E)	50	#5	13'-2"	□
s31(E)	45	#5	12'-7"	□
s32(E)	116	#5	12'-0"	□
t30(E)	52	#7	9'-8"	—
t31(E)	39	#5	9'-8"	—
u30(E)	44	#6	10'-6"	□
v32(E)	100	#5	15'-3"	—
v33(E)	24	#9	16'-5"	—
w30(E)	20	#5	22'-0"	—
w31(E)	44	#5	4'-7"	—
w32(E)	20	#5	14'-11"	—
Structure Excavation			Cu. Yd.	239
Concrete Structures			Cu. Yd.	150.3
Reinforcement Bars, Epoxy Coated			Pound	18,230
Furnishing Metal Shell Piles 14"φx0.25"			Foot	912
Driving Piles			Foot	912
Test Pile Metal Shell			Each	1



BARS s30(E), s32(E) and u30(E)

A & B DIMENSIONS

Bar	A	B
s30(E)	3'-2"	5'-0"
s32(E)	3'-2"	4'-5"
u30(E)	2'-10"	3'-10"



FOOTING PLAN

FILE#



USER NAME = MS_USER
 PLOT SCALE = *SCALE*
 PLOT DATE = 12/13/2018

DESIGNED - LAS
 CHECKED - DAZ
 DRAWN - TCS
 CHECKED - LAS

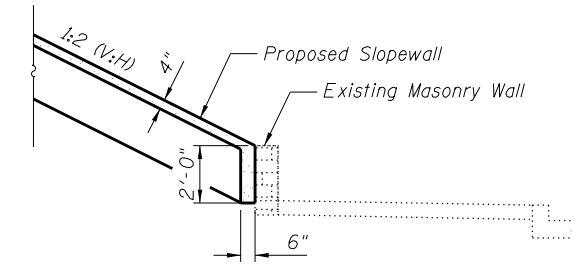
REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

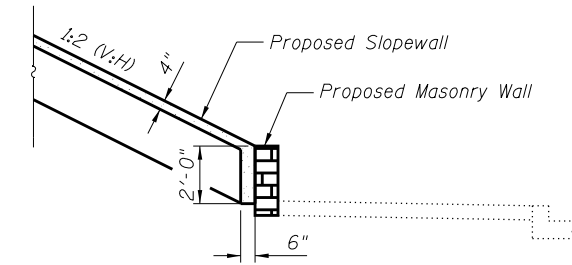
PIER 2
STRUCTURE NO. 016-0533
 SHEET NO. 46 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	90

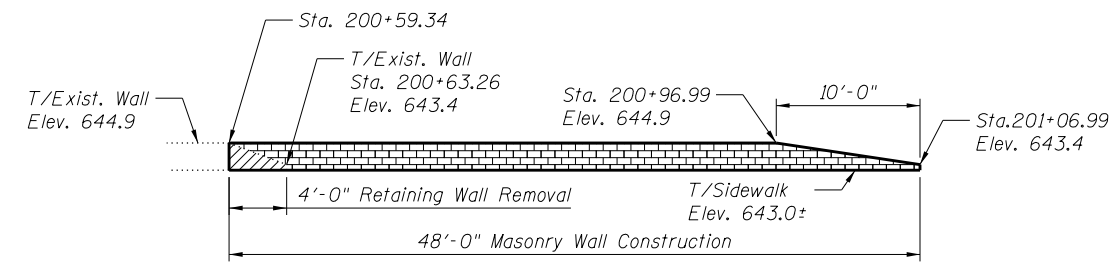
CONTRACT NO. 60N83
 ILLINOIS FED. AID PROJECT



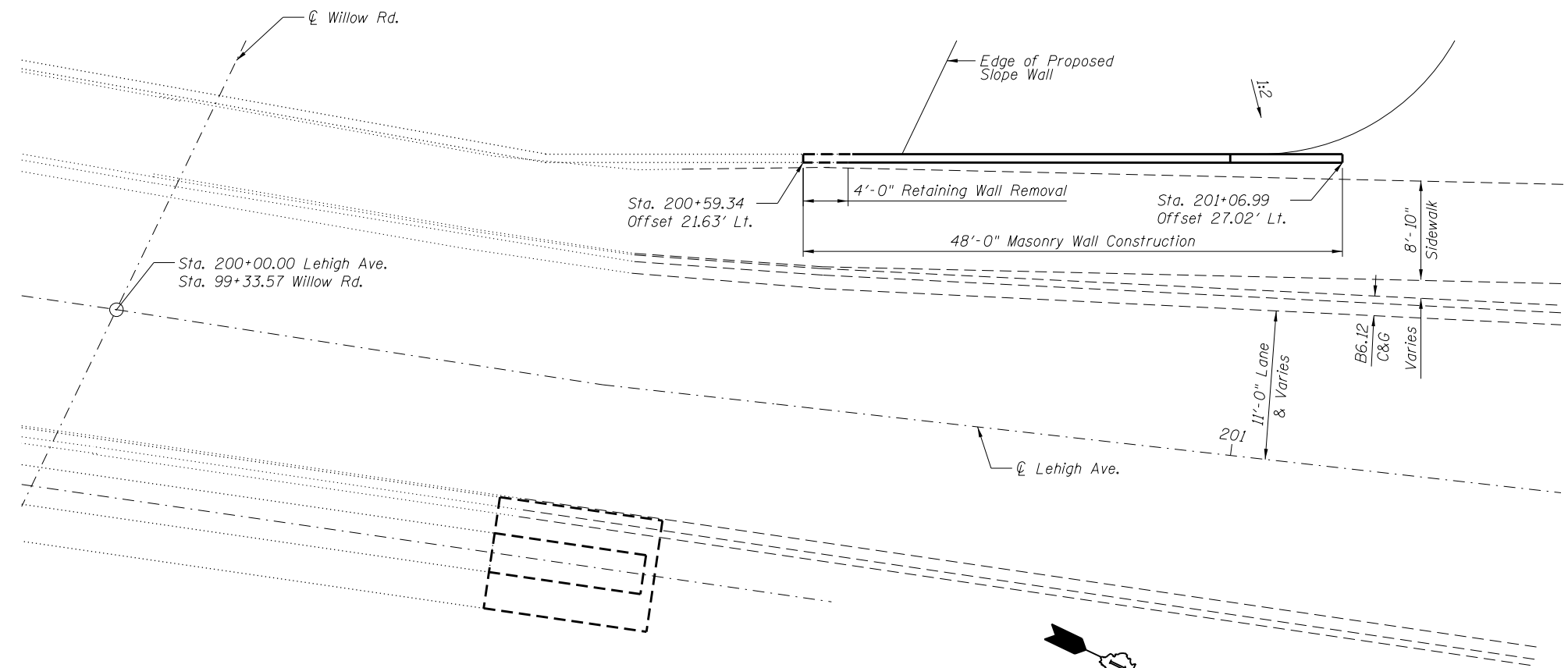
EXISTING MASONRY WALL SECTION



PROPOSED MASONRY WALL SECTION



MASONRY WALL ELEVATION



MASONRY WALL PLAN

Notes:
 Masonry wall to be constructed in-kind to the limits shown on the plans.
 See Civil Drawings for sidewalk removal and replacement.

BILL OF MATERIAL

Item	Unit	Total
Masonry Removal	Cu. Yd.	0.2
Masonry Wall Construction	Sq. Ft.	132

FILEL\$



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

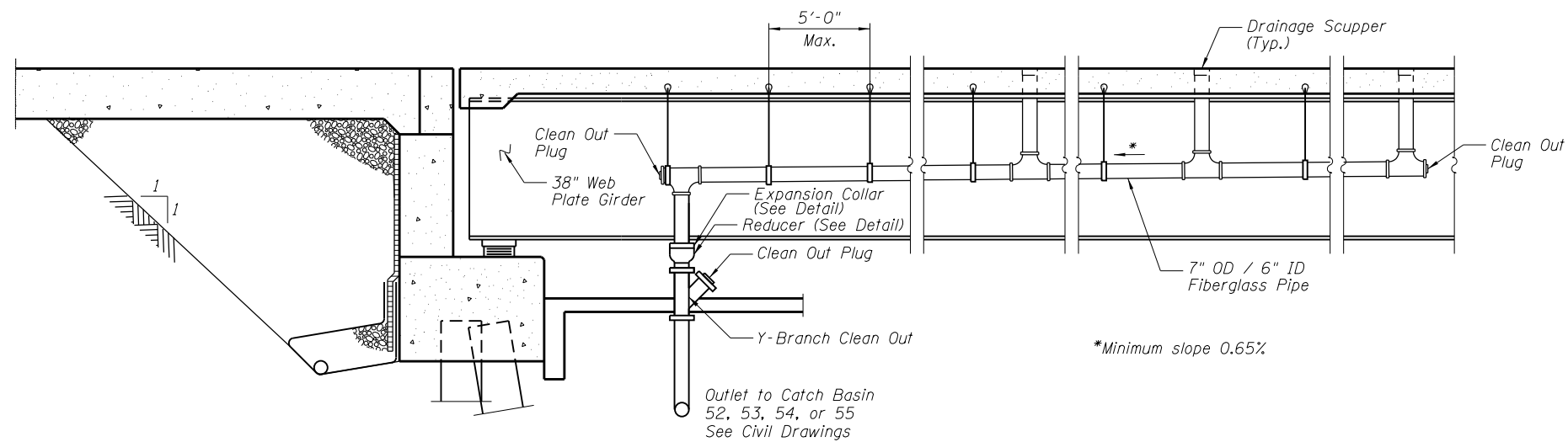
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MASONRY WALL
 STRUCTURE NO. 016-0533**

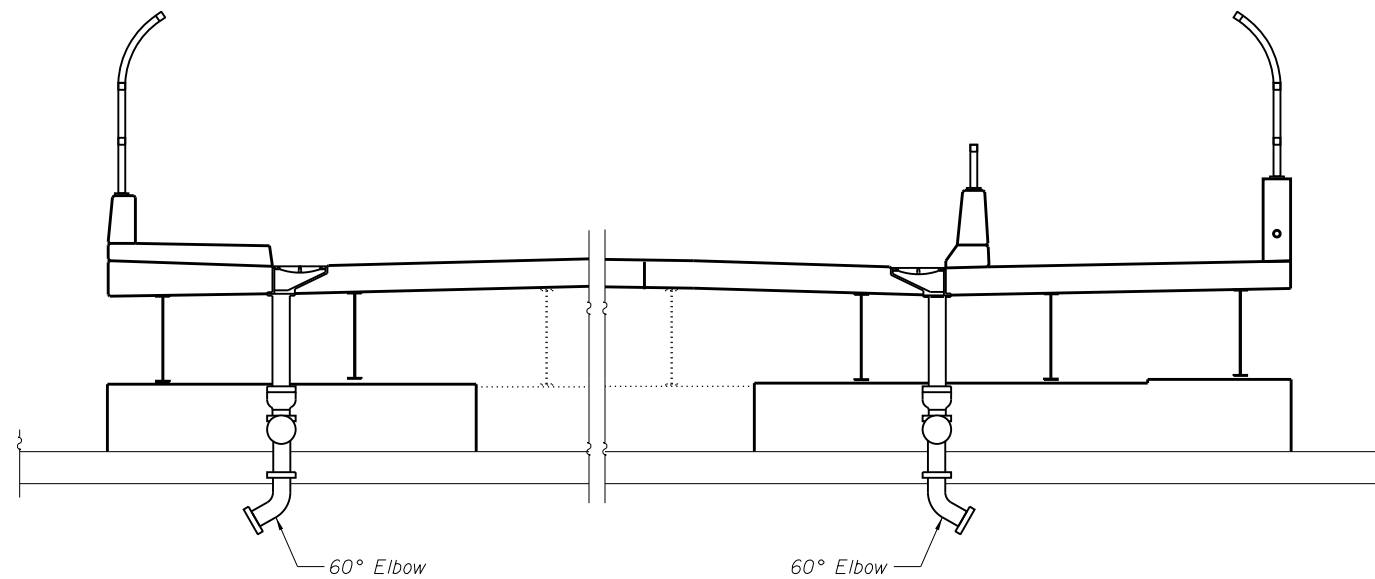
SHEET NO. 47 OF 57 SHEETS

F.A.P. RTE. 305	SECTION 1920.01-BR	COUNTY COOK	TOTAL SHEETS 194	SHEET NO. 91
				CONTRACT NO. 60N83

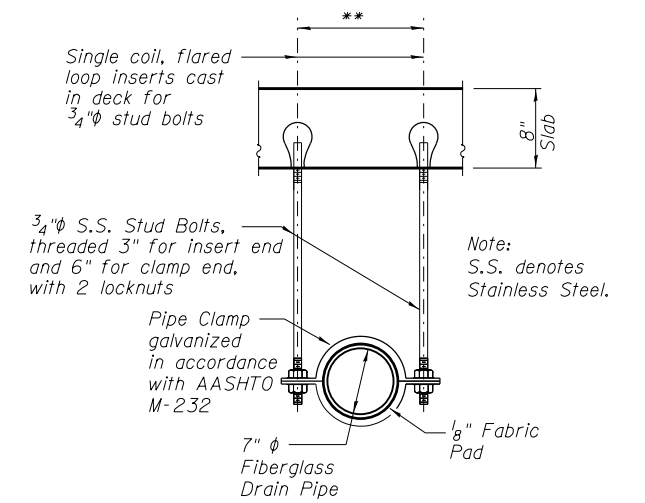
ILLINOIS FED. AID PROJECT



END VIEW - DRAINAGE SYSTEM
(West Abut. shown, East Abut. similar)

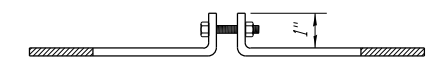


ELEVATION VIEW - DRAINAGE SYSTEM
(East Abut. shown, West Abut. similar)

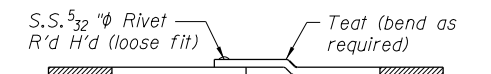
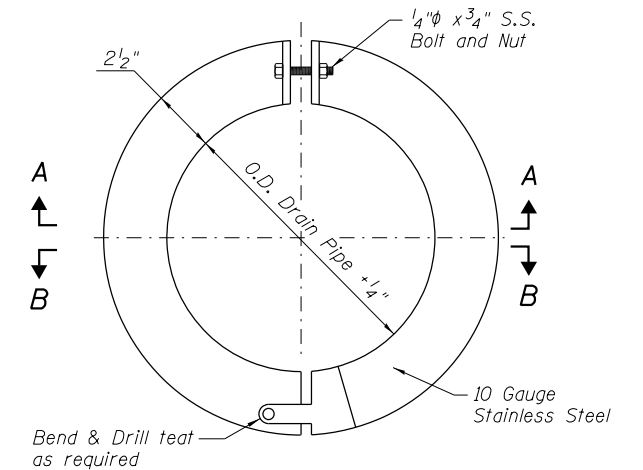


PIPE SUPPORT DETAIL

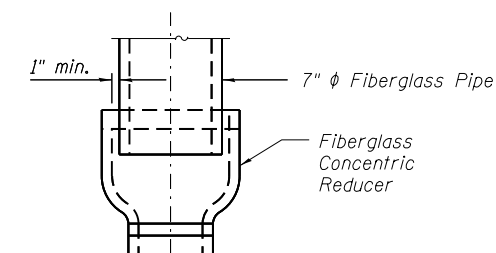
** Dimension as required by Pipe Clamp



SECTION A-A



SECTION B-B
DETAIL OF EXPANSION COLLAR



REDUCER DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage System	L Sum	1

\$FILEL\$



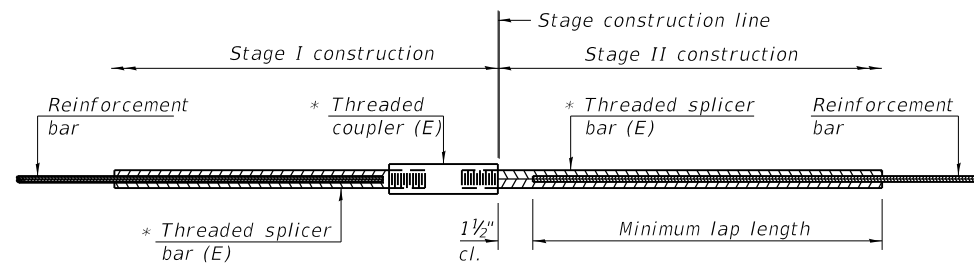
USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SYSTEM
STRUCTURE NO. 016-0533

SHEET NO. 48 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	92
				CONTRACT NO. 60N83
ILLINOIS FED. AID PROJECT				

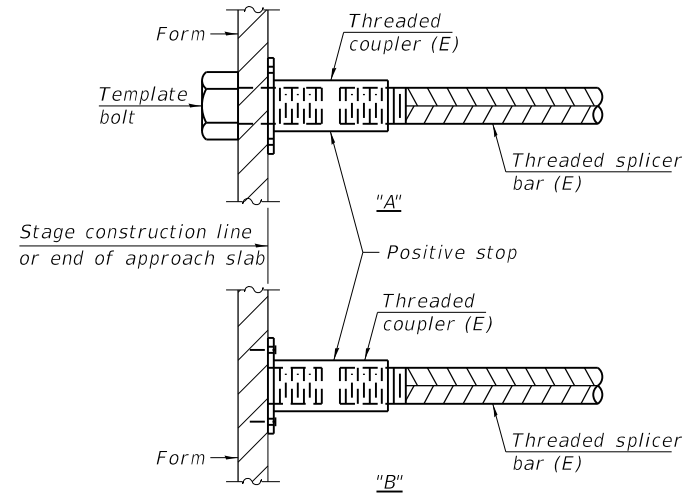


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

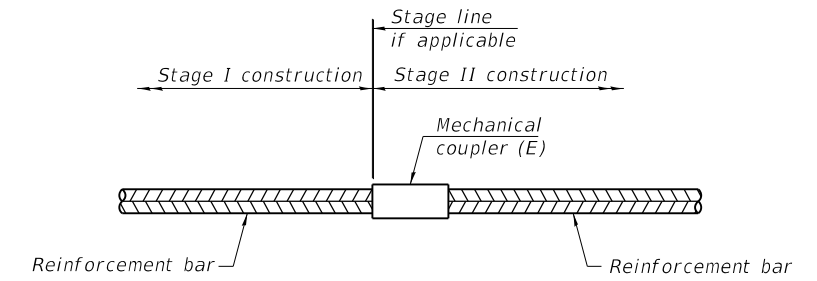
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	1614	3'-3"
Deck	#6	32	3'-10"
Approach Slab	#5	184	3'-7"
Approach Slab	#8	244	6'-1"
Appr. Slab Footing	#5	160	3'-3"
Abutment	#5	32	3'-8"
Abutment	#6	20	4'-5"



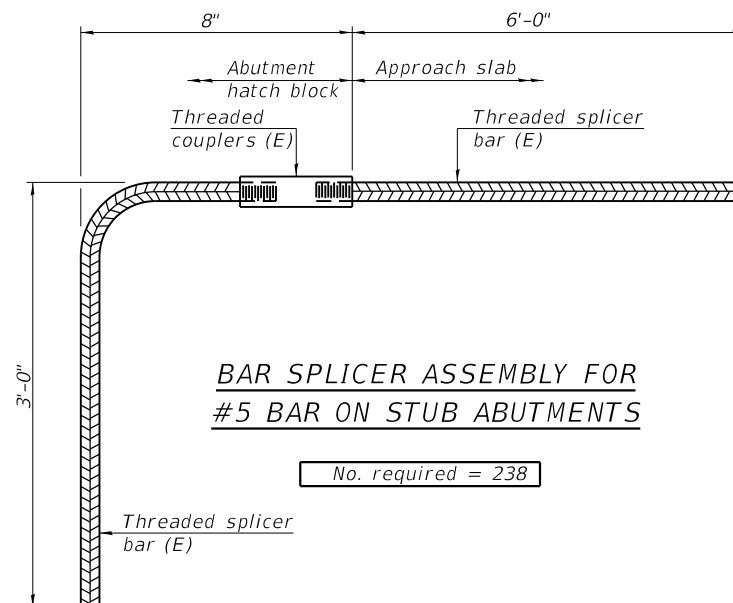
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 238

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILED

BSD-1

2-17-2017



USER NAME = MS_USER	DESIGNED - LAS	REVISED -
PLOT SCALE = *SCALE*	CHECKED - DAZ	REVISED -
PLOT DATE = 12/13/2018	DRAWN - TCS	REVISED -
	CHECKED - LAS	REVISED -

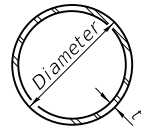
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-0533

SHEET NO. 49 OF 57 SHEETS

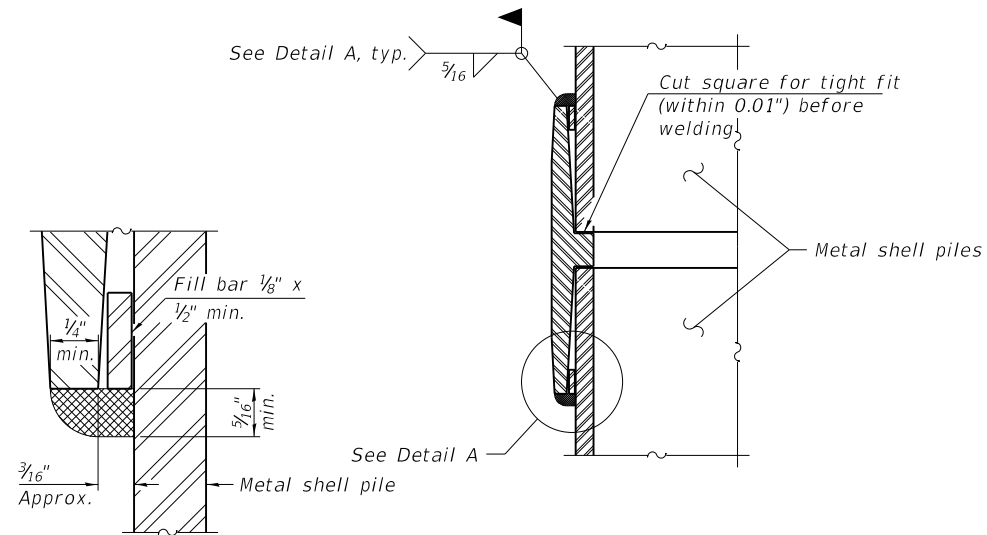
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	93
CONTRACT NO. 60N83				

ILLINOIS FED. AID PROJECT

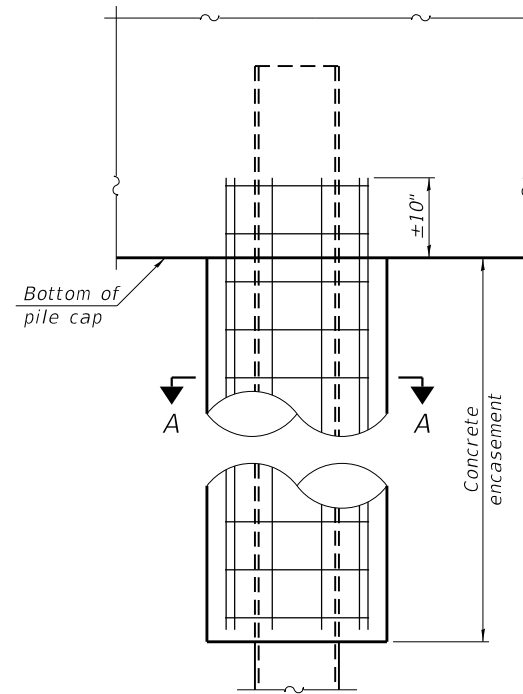


METAL SHELL PILE TABLE

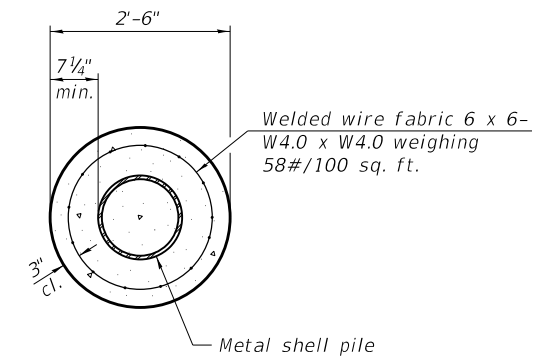
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

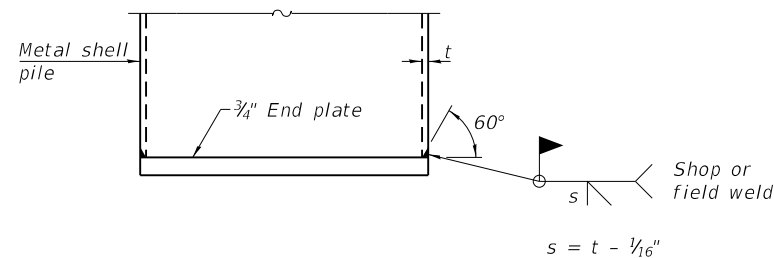


ELEVATION



SECTION A-A

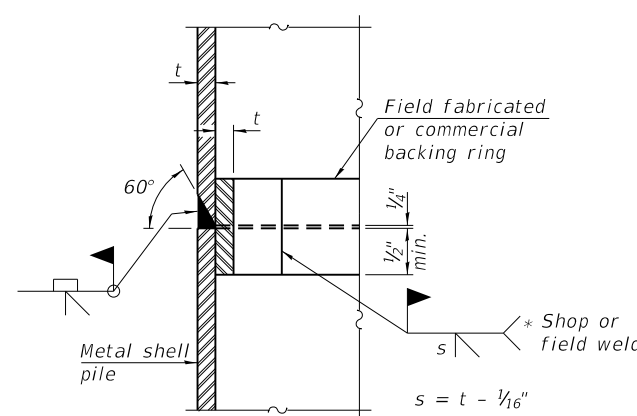
INDIVIDUAL PILE CONCRETE ENCASEMENT AT PIERS



END PLATE ATTACHMENT

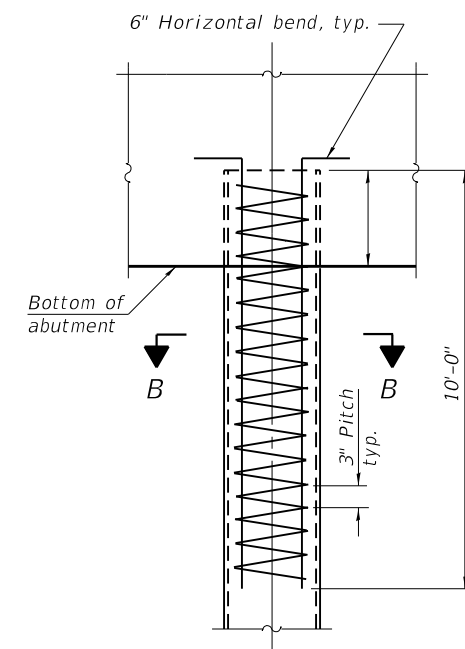
WELDED COMMERCIAL SPLICE

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.

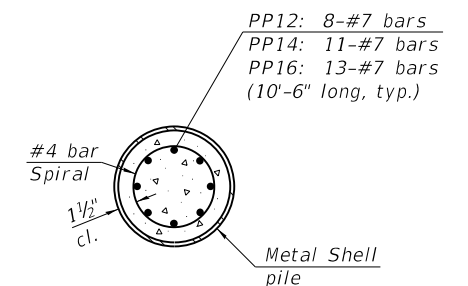


COMPLETE PENETRATION WELD SPLICE

* 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.



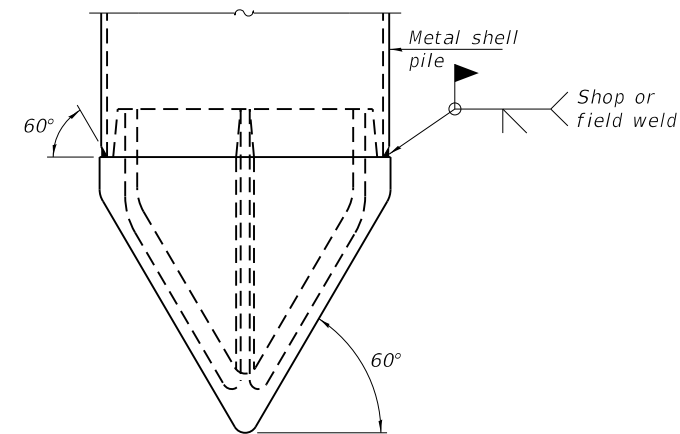
ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS

PP12: 8-#7 bars
 PP14: 11-#7 bars
 PP16: 13-#7 bars
 (10'-6" long, typ.)



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 90-60 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).

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

FILEL\$

F-MS 8-11-2017



USER NAME = MS_USER
 PLOT SCALE = *SCALE*
 PLOT DATE = 12/13/2018

DESIGNED - LAS
 CHECKED - DAZ
 DRAWN - TCS
 CHECKED - LAS

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

METAL SHELL PILE DETAILS
 STRUCTURE NO. 016-0533

SHEET NO. 50 OF 57 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-BR	COOK	194	94

CONTRACT NO. 60N83

ILLINOIS FED. AID PROJECT

SOIL BORING BB-01 (Page 1 of 3)

<p>wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938</p>	BORING LOG BB-01		Datum: NGVD Elevation: 667.65 ft North: 1981445.85 ft East: 1123855.74 ft Station: 98+40 Offset: 25.37 RT
	Client: Zoka Engineering Project: Willow Road Over Lehigh Ave and SOO Line RR Location: Glenview, IL	WEI Job No.: 703-03-01	

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
667.6	7.5-inch thick CONCRETE --PAVEMENT--												
666.6	6-inch thick CRUSHED STONE --AGGREGATE BASE--												
664.6	Very stiff, brown and gray CLAY LOAM with trace gravel --FILL--	1	6	2.05	15				9	6	3.77	23	
		2	3	1.97	18				10	6	3.94	19	
		3	2	2.21	19				11	6	4.26	16	
		4	2	1.72	19		639.6	Very stiff, black SILTY CLAY LOAM with trace organic matter --BURIED TOPSOIL--	12	3	3.00	24	
		5	2	3.85	18		636.1	Stiff to hard, gray SILTY CLAY with trace gravel	13	9	8.61	19	
		6	2	2.38	23				14	5	2.87	19	
		7	2	2.54	22				15	7			
		8	3	2.54	18				16	7			

GENERAL NOTES Begin Drilling: 02-14-2012 Drilling Contractor: Wang Testing Service Driller: K&K Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.		WATER LEVEL DATA White Drilling: DRY At Completion of Drilling: MUD Time After Drilling: NA Depth to Water: NA	
---	--	---	--

SOIL BORING BB-01 (Page 2 of 3)

<p>wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938</p>	BORING LOG BB-01		Datum: NGVD Elevation: 667.65 ft North: 1981445.85 ft East: 1123855.74 ft Station: 98+40 Offset: 25.37 RT
	Client: Zoka Engineering Project: Willow Road Over Lehigh Ave and SOO Line RR Location: Glenview, IL	WEI Job No.: 703-03-01	

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
		15	4	1.97	20				19	5	2.13	20	
		16	5						20	6			
		17	3	1.72	22				21	8	NP	13	
		18	4	1.97	21		696.9	Medium dense, gray SILTY LOAM with trace gravel	22	9			
		19	4	1.97	21				23	11			
		20	5	2.46	19		691.6	Very stiff to hard, gray SILTY CLAY LOAM with trace gravel	24	12	5.74	13	
		21	7						25	6	3.77	15	
		22	7						26	11			
		23	8						27	16			

GENERAL NOTES Begin Drilling: 02-14-2012 Drilling Contractor: Wang Testing Service Driller: K&K Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.		WATER LEVEL DATA White Drilling: DRY At Completion of Drilling: MUD Time After Drilling: NA Depth to Water: NA	
---	--	---	--

SOIL BORING BB-01 (Page 3 of 3)

<p>wangeng@wangeng.com 1145 N Main Street Lombard, IL 60148 Telephone: 630 953-9928 Fax: 630 953-9938</p>	BORING LOG BB-01		Datum: NGVD Elevation: 667.65 ft North: 1981445.85 ft East: 1123855.74 ft Station: 98+40 Offset: 25.37 RT
	Client: Zoka Engineering Project: Willow Road Over Lehigh Ave and SOO Line RR Location: Glenview, IL	WEI Job No.: 703-03-01	

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
		23	8	4.92	14				28	15			
		24	12	5.74	13				29	13			
		25	6	3.77	15				30	16			
							672.6	Boring terminated at 95.00 ft					

GENERAL NOTES Begin Drilling: 02-14-2012 Drilling Contractor: Wang Testing Service Driller: K&K Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.		WATER LEVEL DATA White Drilling: DRY At Completion of Drilling: MUD Time After Drilling: NA Depth to Water: NA	
---	--	---	--

\$FILEL\$

	USER NAME = MS_USER PLOT SCALE = *SCALE* PLOT DATE = 12/13/2018	DESIGNED - LAS CHECKED - DAZ DRAWN - TCS CHECKED - LAS	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS 1 STRUCTURE NO. 016-0533 SHEET NO. 51 OF 57 SHEETS	F.A.P. RTE. 305 SECTION 1920.01-BR COUNTY COOK TOTAL SHEETS 194 SHEET NO. 95 CONTRACT NO. 60N83 ILLINOIS FED. AID PROJECT
--	---	---	--	---	--	---

SOIL BORING BB-02 (Page 1 of 2)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-02
 WEI Job No.: 703-03-01
 Client: Zroka Engineering
 Project: Willow Road Over Lehigh Ave and SOO Line RR
 Location: Glenview, IL

Datum: NGVD
 Elevation: 641.81 ft
 North: 1981422.53 ft
 East: 1123773.70 ft
 Station: 99+58
 Offset: 48.51 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
950.7	13-inch thick ASPHALT --PAVEMENT--												
939.9	Medium dense, gray CRUSHED STONE --AGGREGATE BASE--	1	8	NP	6				9	4	4	1.31	16
	Stiff, brown and black SILTY CLAY --FILL--	2	4	3	1.80	20			10	3	4	1.31	19
		3	3	5					11	3	4	1.48	19
936.3	Stiff, brown and gray CLAY with trace gravel		1	2	1.25	28			12	3	5	1.64	18
			2	3					13	5	7	2.46	18
933.8	Stiff to very stiff, brown SILTY CLAY with trace gravel		4	6	3.28	22			14	4	5	1.64	17
			5	6					15	3	5	2.62	17
931.3	Stiff to very stiff, gray SILTY CLAY with trace gravel		4	6	2.95	18			16	2	4	1.64	19
			5	10					17	3	4	2.38	19
			6	7					18	2	4	1.64	19
			7	4					19	3	4	2.38	19
			8	5					20	2	4	1.64	19
			9	5					21	4	5	1.64	17

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	02-10-2012	Complete Drilling	02-10-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 ATV
Driller	K&K	Logger	F. Bozga
Drilling Method	3.25" IDA HSA upto 30' followed by 3" roller bit mud. rotary. Boring backfill upon completion.		
While Drilling	DRY	At Completion of Drilling	MUD
Time After Drilling	NA	Depth to Water	NA

SOIL BORING BB-02 (Page 2 of 2)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-02
 WEI Job No.: 703-03-01
 Client: Zroka Engineering
 Project: Willow Road Over Lehigh Ave and SOO Line RR
 Location: Glenview, IL

Datum: NGVD
 Elevation: 641.81 ft
 North: 1981422.53 ft
 East: 1123773.70 ft
 Station: 99+58
 Offset: 48.51 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
939.9	Very stiff to hard, gray SILTY CLAY LOAM with trace gravel	15	4	6	1.23	19			19	9	11	5.68	14
			6	9					20	8	12	5.25	14
			7	10					21	7	10	3.53	18
			8	10					22	22	22	NP	10
939.9	Very dense, gray SILTY LOAM with some gravel, sand, and rock fragments		24	34	NP	11			23	7	10	3.53	18
			31						24	22	22	NP	10
			22	22					25	22	22	NP	10
			28						26	22	22	NP	10
			28						27	22	22	NP	10
			28						28	22	22	NP	10
			28						29	22	22	NP	10
			28						30	22	22	NP	10
			28						31	22	22	NP	10
			28						32	22	22	NP	10
			28						33	22	22	NP	10
			28						34	22	22	NP	10
			28						35	22	22	NP	10
			28						36	22	22	NP	10
			28						37	22	22	NP	10
			28						38	22	22	NP	10
			28						39	22	22	NP	10
			28						40	22	22	NP	10

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	02-10-2012	Complete Drilling	02-10-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 ATV
Driller	K&K	Logger	F. Bozga
Drilling Method	3.25" IDA HSA upto 30' followed by 3" roller bit mud. rotary. Boring backfill upon completion.		
While Drilling	DRY	At Completion of Drilling	MUD
Time After Drilling	NA	Depth to Water	NA

SOIL BORING BB-03 (Page 1 of 2)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-03
 WEI Job No.: 703-03-01
 Client: Zroka Engineering
 Project: Willow Road Over Lehigh Ave and SOO Line RR
 Location: Glenview, IL

Datum: NGVD
 Elevation: 641.46 ft
 North: 1981419.26 ft
 East: 1123901.43 ft
 Station: 99+88
 Offset: 51.58 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
949.5	12-inch thick, black CLAY LOAM --TOPSOIL--												
	Hard, brown CLAY LOAM with little gravel --FILL--	1	6	8	4.28	14			9	5	5	1.50	21
			8	9					10	4	4	2.46	20
938.5	Stiff, brown SILTY CLAY LOAM with little gravel and traces of woods and roots --FILL--	2	3	3	1.80	24			11	5	6	2.05	19
			3	6					12	3	4	1.58	20
			5	6					13	5	5	2.62	19
936.0	Medium stiff to very stiff, brown and gray SILTY CLAY with trace gravel		2	2	0.74	18			14	5	7	2.62	19
			3	3					15	4	6	2.87	14
			2	3					16	4	6	2.87	14
			3	7					17	3	3	3.03	19
			4	3					18	3	4	2.46	19
			5	7					19	3	6	2.87	14
			6	6					20	4	4	2.30	18
			7	4					21	4	5	2.30	18
			4	5					22	3	4	2.30	18
			5	5					23	3	4	2.30	18
			6	5					24	3	4	2.30	18
			7	5					25	3	4	2.30	18
			8	5					26	3	4	2.30	18
			9	5					27	3	4	2.30	18
			10	5					28	3	4	2.30	18
			11	5					29	3	4	2.30	18
			12	5					30	3	4	2.30	18
			13	5					31	3	4	2.30	18
			14	5					32	3	4	2.30	18
			15	5					33	3	4	2.30	18
			16	5					34	3	4	2.30	18
			17	5					35	3	4	2.30	18
			18	5					36	3	4	2.30	18
			19	5					37	3	4	2.30	18
			20	5					38	3	4	2.30	18
			21	5					39	3	4	2.30	18
			22	5					40	3	4	2.30	18

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	02-08-2012	Complete Drilling	02-08-2012
Drilling Contractor	Wang Testing Service	Drill Rig	D-50 ATV
Driller	K&K	Logger	B. Wilson
Drilling Method	3.25" IDA HSA upto 20' followed by 3" roller bit mud. rotary. Boring backfill upon completion.		
While Drilling	DRY	At Completion of Drilling	MUD
Time After Drilling	NA	Depth to Water	NA

\$FILEL\$

SOIL BORING BB-03 (Page 2 of 2)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-03
WEI Job No.: 703-03-01
Client: Zoka Engineering
Project: Willow Road Over Lehigh Ave and SOO Line RR
Location: Glenview, IL

Datum: NGVD
Elevation: 641.46 ft
North: 1981419.26 ft
East: 1123901.43 ft
Station: 99+86
Offset: 51.58 RT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
650.5	2-inch thick ASPHALT over 8-inch thick CONCRETE -PAVEMENT-						650.5	2-inch thick ASPHALT over 8-inch thick CONCRETE -PAVEMENT-					
	3-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-							3-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-					
	Very stiff to hard, brown, gray and black SILTY CLAY to SILTY CLAY LOAM with trace gravel -FILL-							Very stiff to hard, brown, gray and black SILTY CLAY to SILTY CLAY LOAM with trace gravel -FILL-					
		15	7	8	2.05	17			15	7	8	2.05	17
		16	8	10	3.77	14			16	8	10	3.77	14
		17	9	11					17	9	11		
		18	10	12					18	10	12		
		19	11	13					19	11	13		
		20	12	14	4.18	15			20	12	14	4.18	15
		21	13	15					21	13	15		
599.5	Hard, gray SILTY CLAY LOAM with trace gravel						669.5	Dense, gray SILT					
		55	14	16	2.05	16			55	14	16	2.05	16
		56	15	17	4.59	15			56	15	17	4.59	15
		57	16	18					57	16	18		
		58	17	19					58	17	19		
		59	18	20	5.66	13			59	18	20	5.66	13
		60	19	21			666.5	Boring terminated at 75.00 ft					
		61	20	22					61	20	22		
		62	21	23					62	21	23		
		63	22	24					63	22	24		
		64	23	25					64	23	25		
		65	24	26					65	24	26		
		66	25	27					66	25	27		
		67	26	28					67	26	28		
		68	27	29					68	27	29		
		69	28	30					69	28	30		
		70	29	31					70	29	31		
		71	30	32					71	30	32		
		72	31	33					72	31	33		
		73	32	34					73	32	34		
		74	33	35					74	33	35		
		75	34	36					75	34	36		
		76	35	37					76	35	37		
		77	36	38					77	36	38		
		78	37	39					78	37	39		
		79	38	40					79	38	40		
		80	39	41					80	39	41		
		81	40	42					81	40	42		
		82	41	43					82	41	43		
		83	42	44					83	42	44		
		84	43	45					84	43	45		
		85	44	46					85	44	46		
		86	45	47					86	45	47		
		87	46	48					87	46	48		
		88	47	49					88	47	49		
		89	48	50					89	48	50		
		90	49	51					90	49	51		
		91	50	52					91	50	52		
		92	51	53					92	51	53		
		93	52	54					93	52	54		
		94	53	55					94	53	55		
		95	54	56					95	54	56		
		96	55	57					96	55	57		
		97	56	58					97	56	58		
		98	57	59					98	57	59		
		99	58	60					99	58	60		
		100	59	61					100	59	61		

GENERAL NOTES
Begin Drilling: 02-08-2012 Complete Drilling: 02-08-2012
Drilling Contractor: Wang Testing Service Drill Rig: D-50 ATV
Driller: K&K Logger: B. Wilson Checked by:
Drilling Method: 3.25" IDA HSA upto 20' followed by 3" roller bit mud rotary. Boring backfill upon completion.

WATER LEVEL DATA
While Drilling: DRY
At Completion of Drilling: MUD
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

SOIL BORING BB-04 (Page 1 of 3)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-04
WEI Job No.: 703-03-01
Client: Zoka Engineering
Project: Willow Road Over Lehigh Ave and SOO Line RR
Location: Glenview, IL

Datum: NGVD
Elevation: 687.82 ft
North: 1981445.15 ft
East: 1124008.71 ft
Station: 101+93
Offset: 25.25 RT

Page 1 of 3

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (tsf)	Moisture Content (%)
687.82	2-inch thick ASPHALT over 8-inch thick CONCRETE -PAVEMENT-						687.82	2-inch thick ASPHALT over 8-inch thick CONCRETE -PAVEMENT-					
	3-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-							3-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-					
	Very stiff to hard, brown, gray and black SILTY CLAY to SILTY CLAY LOAM with trace gravel -FILL-							Very stiff to hard, brown, gray and black SILTY CLAY to SILTY CLAY LOAM with trace gravel -FILL-					
		9	5	6	2.87	16			9	5	6	2.87	16
		10	6	8					10	6	8		
		11	7	9					11	7	9		
		12	8	10					12	8	10		
		13	9	11					13	9	11		
		14	10	12					14	10	12		
		15	11	13					15	11	13		
		16	12	14					16	12	14		
		17	13	15					17	13	15		
		18	14	16					18	14	16		
		19	15	17					19	15	17		
		20	16	18					20	16	18		
		21	17	19					21	17	19		
		22	18	20					22	18	20		
		23	19	21					23	19	21		
		24	20	22					24	20	22		
		25	21	23					25	21	23		
		26	22	24					26	22	24		
		27	23	25					27	23	25		
		28	24	26					28	24	26		
		29	25	27					29	25	27		
		30	26	28					30	26	28		
		31	27	29					31	27	29		
		32	28	30					32	28	30		
		33	29	31					33	29	31		
		34	30	32					34	30	32		
		35	31	33					35	31	33		
		36	32	34					36	32	34		
		37	33	35					37	33	35		
		38	34	36					38	34	36		
		39	35	37					39	35	37		
		40	36	38					40	36	38		
		41	37	39					41	37	39		
		42	38	40					42	38	40		
		43	39	41					43	39	41		
		44	40	42					44	40	42		
		45	41	43					45	41	43		
		46	42	44					46	42	44		
		47	43	45					47	43	45		
		48	44	46					48	44	46		
		49	45	47					49	45	47		
		50	46	48					50	46	48		
		51	47	49					51	47	49		
		52	48	50					52	48	50		
		53	49	51					53	49	51		
		54	50	52					54	50	52		
		55	51	53					55	51	53		
		56	52	54					56	52	54		
		57	53	55					57	53	55		
		58	54	56					58	54	56		
		59	55	57					59	55	57		
		60	56	58					60	56	58		
		61	57	59					61	57	59		
		62	58	60					62	58	60	</	

SOIL BORING BB-04 (Page 3 of 3)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-04
WEI Job No.: 703-03-01
Client: Zoka Engineering
Project: Willow Road Over Lehigh Ave. and SOO Line RR
Location: Glenview, IL

Datum: NGVD
Elevation: 667.82 ft
North: 1981445.15 ft
East: 1124008.71 ft
Station: 101+93
Offset: 25.25 RT

Page 3 of 3

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)
87.8	2-inch thick ASPHALT over 10-inch thick CONCRETE -PAVEMENT-												
	12-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-	1	6	NP	9								
	-FILL-	2	5	4.5	21								
		3	4	4.5	12								
		4	3	2.54	14								
		5	2	1.89	18								
		6	2	1.39	20								
		7	3	2.62	17								
		8	3	2.30	18								
90.0	Boring terminated at 90.00 ft.												

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling: 02-15-2012	Complete Drilling: 02-15-2012	While Drilling: <input checked="" type="checkbox"/> DRY	
Drilling Contractor: Wang Testing Service	Drill Rig: D-50 ATV	At Completion of Drilling: <input checked="" type="checkbox"/> MUD	
Driller: K&K	Logger: F. Bozza	Time After Drilling: NA	
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.		Depth to Water: NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

SOIL BORING BB-05 (Page 1 of 3)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-05
WEI Job No.: 703-03-01
Client: Zoka Engineering
Project: Willow Road Over Lehigh Ave. and SOO Line RR
Location: Glenview, IL

Datum: NGVD
Elevation: 668.36 ft
North: 1981495.43 ft
East: 1123989.75 ft
Station: 101+74
Offset: 24.72 LT

Page 1 of 3

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)
	2-inch thick ASPHALT over 10-inch thick CONCRETE -PAVEMENT-												
	12-inch thick, brown, GRAVELLY SAND -AGGREGATE BASE-	1	6	NP	9								
	-FILL-	2	5	4.5	21								
		3	4	4.5	12								
		4	3	2.54	14								
		5	2	1.89	18								
		6	2	1.39	20								
		7	3	2.62	17								
		8	3	2.30	18								
		9	3	2.96	21								
		10	4	7	9								
		11	5	6	8								
		12	4	5	8								
		13	3	3	6								
		14	7	9	12								
		15	4	6	7								
		16	5	7	7								
		17	4	7	8								
		18	5	6	12								
		19	4	6	9								
		20	5	7	9								
		21	4	5	6								
		22	7	8	13								
		23	7	8	13								

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling: 02-16-2012	Complete Drilling: 02-16-2012	While Drilling: <input checked="" type="checkbox"/> DRY	
Drilling Contractor: Wang Testing Service	Drill Rig: D-50 ATV	At Completion of Drilling: <input checked="" type="checkbox"/> MUD	
Driller: K&K	Logger: F. Bozza	Time After Drilling: NA	
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.		Depth to Water: NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

SOIL BORING BB-05 (Page 2 of 3)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-05
WEI Job No.: 703-03-01
Client: Zoka Engineering
Project: Willow Road Over Lehigh Ave. and SOO Line RR
Location: Glenview, IL

Datum: NGVD
Elevation: 668.36 ft
North: 1981495.43 ft
East: 1123989.75 ft
Station: 101+74
Offset: 24.72 LT

Page 2 of 3

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows in)	Cu (tsf)	Moisture Content (%)
		24	4	6	7								
		25	4	7	9								
		26	5	6	8								
		27	4	5	8								
		28	5	7	7								
		29	4	7	8								
		30	5	6	12								
		31	4	7	8								
		32	5	6	12								
		33	4	7	8								
		34	5	6	12								
		35	4	7	8								
		36	5	6	12								
		37	4	7	8								
		38	5	6	12								
		39	4	7	8								
		40	5	6	12								

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling: 02-16-2012	Complete Drilling: 02-16-2012	While Drilling: <input checked="" type="checkbox"/> DRY	
Drilling Contractor: Wang Testing Service	Drill Rig: D-50 ATV	At Completion of Drilling: <input checked="" type="checkbox"/> MUD	
Driller: K&K	Logger: F. Bozza	Time After Drilling: NA	
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.		Depth to Water: NA	
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

\$FILEL\$

SOIL BORING BB-05 (Page 3 of 3)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-05
 WEI Job No.: 703-03-01
 Datum: NGVD
 Elevation: 668.36 ft
 North: 1951495.43 ft
 East: 1123889.75 ft
 Station: 101+74
 Offset: 24.72 LT

Client: **Zroka Engineering**
 Project: **Willow Road Over Lehigh Ave and SOO Line RR**
 Location: **Glenview, IL**

Page 3 of 3

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
694.4	Very dense, gray SILT	85	23	13 24 36	NP	22							
691.9	Very stiff to hard, gray SILTY CLAY LOAM with trace gravel	90	24	9 17 25	4.92 B	15							
		95	25	7 10 16	3.61 B	15							
		99.4	26	10 12 18	3.77 B	14							

GENERAL NOTES
 Boring terminated at 100.00 ft.
 Begin Drilling: 02-16-2012, Complete Drilling: 02-16-2012
 Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
 Driller: K&K, Logger: F. Bozza, Checked by: [Signature]
 Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.

WATER LEVEL DATA
 While Drilling: DRY
 At Completion of Drilling: MUD
 Time After Drilling: NA
 Depth to Water: NA

SOIL BORING BB-06 (Page 1 of 2)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-06
 WEI Job No.: 703-03-01
 Datum: NGVD
 Elevation: 640.00 ft
 North: 1981532.35 ft
 East: 1123889.85 ft
 Station: 100+54
 Offset: 61.46 LT

Client: **Zroka Engineering**
 Project: **Willow Road Over Lehigh Ave and SOO Line RR**
 Location: **Glenview, IL**

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
	12-inch thick brown SILTY CLAY -TOPSOIL-												
639.0	Very stiff, brown SILTY CLAY with crushed asphalt -FILL-	1	9 8 4		2.50 P	20							
637.0	Loose, black LOAM -FILL- -MOIST-	2	2 2 3		NP	32							
634.5	Stiff to very stiff, gray and brown SILTY CLAY with trace gravel	3	2 4 5		2.05 B	20							
		4	4 7 7		1.25 P	23							
		10	10										
629.5	Stiff to very stiff, gray SILTY CLAY with trace gravel	5	8 9 15		4.59 B	17							
		6	6 8 11		1.50 P	19							
		7	5 6 7		1.97 B	21							
		8	6 4 7		1.80 B	20							
		20	20										

GENERAL NOTES
 Begin Drilling: 02-08-2012, Complete Drilling: 02-09-2012
 Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
 Driller: K&K, Logger: B. Wilson, Checked by: [Signature]
 Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.

WATER LEVEL DATA
 While Drilling: 10.50 ft
 At Completion of Drilling: MUD
 Time After Drilling: NA
 Depth to Water: NA

SOIL BORING BB-06 (Page 2 of 2)

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: 630 953-9928
 Fax: 630 953-9938

BORING LOG BB-06
 WEI Job No.: 703-03-01
 Datum: NGVD
 Elevation: 640.00 ft
 North: 1981532.35 ft
 East: 1123889.85 ft
 Station: 100+54
 Offset: 61.46 LT

Client: **Zroka Engineering**
 Project: **Willow Road Over Lehigh Ave and SOO Line RR**
 Location: **Glenview, IL**

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
645		15	6 8 8		2.30 B	15							
		45	15										
		50	16										
		60	17										
		65	18										
		70	19										
		75	20										
		80	21										
		85	22										
653.5	Dense, gray SILT	85	19	10 11 17	4.67 B	15							
		85	20	8 11 15	3.28 B	14							
		90	21	7 11 15	3.36 B	17							
		95	22	15 17 23	NP	18							

GENERAL NOTES
 Boring terminated at 80.00 ft.
 Begin Drilling: 02-08-2012, Complete Drilling: 02-09-2012
 Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
 Driller: K&K, Logger: B. Wilson, Checked by: [Signature]
 Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud rotary. Boring backfill upon completion.

WATER LEVEL DATA
 While Drilling: 10.50 ft
 At Completion of Drilling: MUD
 Time After Drilling: NA
 Depth to Water: NA

FILEL\$

SOIL BORING BB-07 (Page 1 of 2)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-07
WEI Job No.: 703-03-01

Datum: NGVD
Elevation: 642.50 ft
North: 1981523.19 ft
East: 1123740.76 ft
Station: 99+25
Offset: 52.09 LT

Client: **Zroka Engineering**
Project: **Willow Road Over, Lehigh Ave and SOO Line RR**
Location: **Glenview, IL**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
641.4	13-inch thick ASPHALT --PAVEMENT--	0											
	Medium dense, gray CRUSHED STONE --AGGREGATE BASE--	1	1	12 15 12	NP	5			9	2 3 5	1.89 B	19	
639.5	Loose, brown and gray, coarse GRAVELLY SAND --FILL--	2	2	7 5 4	NP	6			10	3 4 5	1.56 B	19	
637.0	Stiff, brown and gray CLAY LOAM --FILL-- --MOIST--	3	3	2 2 3	1.48 B	29			11	3 5 7	1.72 B	19	
		4	4	1 3 5	1.00 P	26			12	5 5 7	1.80 B	17	
632.0	Hard, brown SILTY CLAY with trace gravel	5	5	4 6 9	6.07 B	19			13	4 5 8	2.13 B	19	
		6	6	3 5 8	4.51 B	18			14	4 5 8	2.38 B	18	
627.0	Stiff to very stiff, gray SILTY CLAY with trace gravel	7	7	4 4 6	2.38 B	13			15	12 14 31	5.33 B	12	
		8	8	2 4 5	2.05 B	20			16	8 8 14	1.23 B	15	
		9	9						17	8 8 14	1.23 B	14	
		10	10						18	12 14 31	5.33 B	12	

GENERAL NOTES
Begin Drilling: 02-13-2012, Complete Drilling: 02-13-2012
Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
Driller: K&K, Logger: F. Bozza, Checked by: [blank]
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.
rotary. Boring backfill upon completion.

WATER LEVEL DATA
While Drilling: DRY
At Completion of Drilling: MUD
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

SOIL BORING BB-07 (Page 2 of 2)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-07
WEI Job No.: 703-03-01

Datum: NGVD
Elevation: 642.50 ft
North: 1981523.19 ft
East: 1123740.76 ft
Station: 99+25
Offset: 52.09 LT

Client: **Zroka Engineering**
Project: **Willow Road Over, Lehigh Ave and SOO Line RR**
Location: **Glenview, IL**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
627.0	Very stiff to hard, gray SILTY CLAY LOAM with trace gravel	11	11	4 6 7	1.23 B	15			19	10 15 30	5.74 B	12	
		12	12	4 6 7	1.23 B	15			20	8 10 14	3.53 B	16	
		13	13	8 8 14	1.23 B	14			21	10 13 15	3.03 B	16	
		14	14	12 14 31	5.33 B	12			22				
626.0	Boring terminated at 75.00 ft	75											

GENERAL NOTES
Begin Drilling: 02-13-2012, Complete Drilling: 02-13-2012
Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
Driller: K&K, Logger: F. Bozza, Checked by: [blank]
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.
rotary. Boring backfill upon completion.

WATER LEVEL DATA
While Drilling: DRY
At Completion of Drilling: MUD
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

SOIL BORING BB-08 (Page 1 of 3)

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BB-08
WEI Job No.: 703-03-01

Datum: NGVD
Elevation: 667.17 ft
North: 1981497.45 ft
East: 1123636.62 ft
Station: 99+21
Offset: 26.19 LT

Client: **Zroka Engineering**
Project: **Willow Road Over, Lehigh Ave and SOO Line RR**
Location: **Glenview, IL**

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
666.8	7-inch thick CONCRETE --PAVEMENT--	0											
	17-inch thick, brown, GRAVELLY SAND --AGGREGATE BASE--	1	1	16 10 8	NP	16			9	3 4 7	2.50 P	17	
656.2	Very stiff to hard, brown and gray SILTY CLAY LOAM with trace gravel --FILL--	2	2	5 7 8	4.50 P	18			10	4 4 8	1.89 B	18	
		3	3	5 6 8	2.21 B	16			11	3 5 7	2.05 B	21	
639.2	Very stiff, black SILTY CLAY LOAM with organic matter --BURIED TOPSOIL--	4	4	4 6 9	3.77 B	16			12	5 8 11	2.50 P	32	
635.7	Stiff to hard, brown and gray SILTY CLAY with trace gravel	5	5	3 5 7	3.12 B	17			13	6 7 8	4.92 B	20	
		6	6	3 4 7	2.46 B	18			14	6 8 10	3.77 B	19	
		7	7	2 4 4	2.46 B	17							
		8	8	3 5 6	3.36 B	17							

GENERAL NOTES
Begin Drilling: 02-17-2012, Complete Drilling: 02-17-2012
Drilling Contractor: Wang Testing Service, Drill Rig: D-50 ATV
Driller: K&K, Logger: F. Bozza, Checked by: [blank]
Drilling Method: 3.25" IDA HSA upto 30' followed by 3" roller bit mud.
rotary. Boring backfill upon completion.

WATER LEVEL DATA
While Drilling: DRY
At Completion of Drilling: MUD
Time After Drilling: NA
Depth to Water: NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

\$FILEL\$