11-06-2015 LETTING ITEM 025

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	1
	ILLINOIS	CONTRACT NO. 68689		

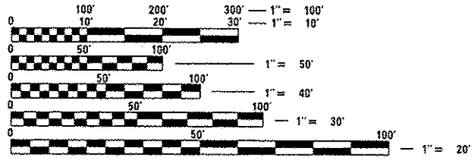
INDEX OF SHEETS

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
610001-06	SHOULDER INLET WITH CURB
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-13	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT OF WAY MARKERS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701901-04	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS, & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATION OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (FOR REFERENCE ONLY)

DISTRICT 4 STANDARDS - INCLUDED AS SHEETS 64-74.

205001-D4	SLOPE STEPS DETAL
406101-D4	BUTT JOINTS (3 SHEETS)
440001-D4	HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
601101-D4	SLOPE DRAIN DETAILS FOR BURIED PIPES
601301-D4	PIPE ELBOW
601401-D4	DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES
630101-D4	GUARDRAIL EROSION CONTROL TREATMENTS (2 SHEETS)
667101-D4	PERMANENT SURVERY TIE & PERMANENT SURVEY MARKERS TY. I - TY. II



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

DISTRICT 4 NO. (309) 671-3455
PROJECT ENGINEER: RICH DOTSON
PROJECT MANAGER: TERRISA WORSFOLD
TOWNSHIP(S):
CONTRACT NO. 68689 CAT. NO. 033443-00D

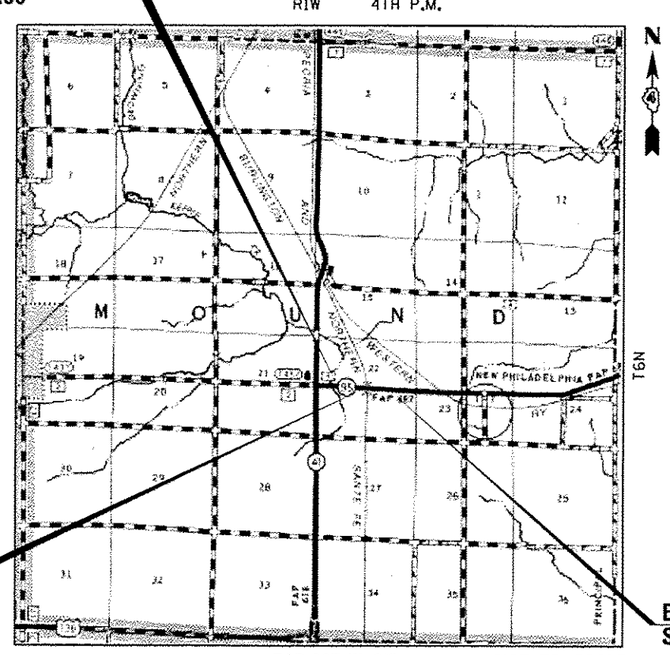
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP ROUTE 687 (IL 95)
SECTION (122VB) BR-1
PROJECT ACF-0687(008)
BRIDGE REPLACEMENT
McDONOUGH COUNTY

C-94-021-07

BEGIN IMPROVEMENT
STA. 17+00.00



BRIDGE REPLACEMENT
STA. 26+97.33
EXIST SN 055-0017
PROP SN 055-0082
IL 95 OVER BNSF RR

END IMPROVEMENT
STA. 35+05.27

FAP 687 (IL 95) NOT TO SCALE
RURAL MINOR ARTERIAL
ADT (2015) 1,700
ADT (2035) 2,074
SU (2015) 20
MU (2015) 49
PV (2015) 1,581

NET LENGTH OF PROJECT = 1,800.00 FT = 0.341 MILE
TOTAL LENGTH OF PROJECT = 1,800.00 FT = 0.341 MILE
DESIGN SPEED = 45 MPH/POSTED SPEED = 55 MPH

design firm no. 184001036
whks
engineers + planners + land surveyors
7018 KINGSMILL COURT, SPRINGFIELD, IL 62711-7387, (217) 483-9457

D-94-020-07

LOCATION OF SECTION INDICATED THUS: —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8-14 20 15
Kamil A. Barnett
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Oct 2 20 15
John D. Baranzelli, P.E. /bs
ENGINEER OF DESIGN AND ENVIRONMENT
Oct 2 20 15
Omer Osman, P.E. /bs
DIRECTOR OF HIGHWAYS/ CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LICENSED PROFESSIONAL ENGINEER
CORY W. CHAMBERLAIN
062-055298
STATE OF ILLINOIS

Cory W. Chamberlain 8/13/2015
Expires: 11/30/2015

GENERAL NOTES

AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR AFTER CONTRACT AWARD. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

TREE REMOVAL - UTILITY RELOCATION

TREE REMOVAL MAY BE NECESSARY PRIOR TO UTILITY COMPANIES BEING ABLE TO RELOCATE THEIR FACILITIES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHOULD COORDINATE ANY CONTRACT TREE REMOVAL ACTIVITIES WITH THE UTILITY COMPANIES TO ELIMINATE CONFLICTS AND POTENTIAL DELAYS CAUSED BY UTILITY TREE REMOVAL ACTIVITIES OR INCOMPLETE UTILITY RELOCATIONS.

TREE REMOVAL

THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

UTILITIES - LOCATIONS/INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN --- ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
BDE FORM 2290 (WASTE/USE AREA REVIEW)
A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
COLOR PHOTOGRAPHS DEPICTING THE USE AREA
BORROW AREA ENTRY AGREEMENT FORM – D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

SEEDING – SIDE SLOPE RIPPING

ALL SLOPES STEEPER THAN 3 TO 1 AND OVER 15 FT (4.5 M) IN HEIGHT SHALL BE RIPPED. THIS SHALL CONSIST OF RIPPING BETWEEN 18 INCHES TO 24 INCHES (450 MM TO 600 MM) DEEP NORMAL TO THE SLOPE. THE INTERVAL OF RIPPING ALONG THE SLOPE SHALL BE 12 FT. (3.6 M). THIS WORK SHALL BE DONE AFTER THE SEED BED HAS BEEN PREPARED BUT BEFORE ANY FERTILIZER OR SEED HAS BEEN APPLIED. THE FERTILIZER AND SEED SHALL BE APPLIED WITHIN A 24-HOUR PERIOD AFTER THE RIPPING HAS BEEN DONE. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE VARIOUS ITEMS OF SEEDING INVOLVED.

PAVEMENT STATION NUMBERS & PLACEMENT

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY ¾ INCH (20 MM) WIDE, 5 INCHES (125 MM) HIGH AND 5/8 INCH (15 MM) DEEP.

THE PAVEMENT STATION NUMBERS SHALL BE INSTALLED AS SPECIFIED HEREIN: INTERVAL – 200 FEET, BOTTOM OF NUMBERS – 6 INCHES FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

LOCATION - RIGHT EDGE OF PAVEMENT IN THE DIRECTION OF INCREASING STATIONS.

POSITION – STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER.

FORMAT – PAVEMENT STATIONS SHALL USE THIS FORMAT "XXX", WHERE X REPRESENTS THE PAVEMENT STATION.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS.

BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.

PAVING SURFACE COURSE

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

RIGHT-OF-WAY MARKERS

WHEN INSTALLING RIGHT-OF-WAY MAKERS, CARE SHALL BE TAKEN TO NOT DISTURB ANY EXISTING PROPERTY/RIGHT-OF-WAY PINS. IF A PROPERTY/RIGHT-OF-WAY PIN IS FOUND AT THE LOCATION OF A PROPOSED RIGHT-OF-WAY MARKER, THE MARKER SHALL BE PLACED ONE (1) FOOT IN FRONT OF THE PIN.

ENGINEERS FIELD OFFICE

ADD THE FOLLOWING SENTENCE TO THE END OF PARAGRAPH 670.02 (I) AND 670.04 (E): ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

SIGNING

SIGN LOCATIONS MAY VARY FROM THE STATIONS SHOWN ON THE PLANS IN ACCORDANCE WITH DIRECTIONS FROM THE ENGINEER AT THE TIME OF CONSTRUCTION. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES.

ALL WOOD POST LOCATIONS SHALL BE VERIFIED WITH THE BUREAU OF OPERATIONS, TRAFFIC SECTION, BEFORE INSTALLATION.

NO PASSING ZONE VERIFICATION

THE RESIDENT SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE STRIPING.

CRITICAL PATH WORK SCHEDULE REQUIREMENT

THE CONTRACTOR WILL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHALL SHOW THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.

PROJECT SPECIFIC

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012", THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED UNDER THE HIGHWAY STANDARDS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING APPLICATION RATES HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

HOT-MIX ASPHALT	112	LBS/SQ YD/INCH
AGGREGATE SHOULDERS, TYPE B	2.05	TON/CU YD
GUARDRAIL AGG. EROSION CONTROL	2.05	TON/CU YD
SUBBASE GRANULAR MATERIAL, TYPE A	2.05	TON/CU YD

FORTY-EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR SHALL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UNDERGROUND UTILITIES.

THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER EACH RAINFALL EVENT EQUAL TO ½" OR MORE.

DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES. TEMPORARY STABILIZATION OF WORK AREAS IS REQUIRED FOR ALL AREAS REMAINING UNDISTURBED FOR 14 DAYS, UNLESS WORK RESUMES PRIOR TO 21 DAYS. TEMPORARY STABILIZATION MUST BE APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO STARTING ANY OTHER CONSTRUCTION WORK AT THE SITE.

ALL STATIONS AND OFFSETS ARE REFERENCED FROM THE EXISTING CENTERLINE ALIGNMENT.

THE EXISTING AND PROPOSED CROSS SECTIONS HAVE BEEN PLOTTED ALONG THE EXISTING CENTERLINE ALIGNMENT.

ALL SAW CUTS NECESSARY TO COMPLETE THE WORK AS DETAILED IN THESE PLAN SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED.

THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE ALL ROAD SIGNS WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION. THIS WORK SHALL BE INCLUDED IN THE COST OF THIS CONTRACT.

THE CONTRACTOR MUST SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD PRIOR TO BEGINNING ANY GRADING ON THE PROJECT SITE.

FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD'S COORDINATION REQUIREMENTS AS PART OF THE SPECIFICATIONS OR SPECIAL PROVISION OF THE PROJECT.

MIXTURE DESIGN TABLE

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT.

MIXTURE USE(S):	SURFACE COURSE	BINDER COURSE (ALL LIFTS)	HMA SHOULDER (SURFACE LIFT)	HMA SHOULDER (LOWER LIFTS)
AC/PG:	PG64-22	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5	IL 19.0	IL 9.5	IL 19.0
FRICTION AGGREGATE:	MIX D (DOLMITE ONLY)	N.A.	MIX C	N.A.
QUALITY MANAGEMENT PROGRAM:	QCQA	QCQA	QCQA	QCQA

1) INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL MAXIMUM AGGREGATE SIZE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2) FOR DESIGN PURPOSES, MIXTURE WEIGHT FOR ALL MIXES IS DETERMINED TO BE 112.0 IB/S.Y./IN., UNLESS OTHERWISE NOTED.
3) SUBLOT SIZES FOR PFP AND QCP MIXES WILL BE 1000 TONS, UNLESS OTHERWISE AGREED TO BY THE ENGINEER AND THE PAVING CONTRACTOR.
4) HMA PRIME COAT SHALL BE APPLIED BETWEEN ALL HMA LIFTS.

STRUCTURE DESIGN TRAFFIC

STRUCTURAL DESIGN TRAFFIC: YEAR 2025

PV = 93% SU = 4% MU = 3%

ROADWAY/STREET CLASSIFICATION: CLASS III

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:

P = 50% S = 50% M = 50%

TRAFFIC FACTOR: ACTUAL TF = 0.31 AC TYPE = AC - 20

MINIMUM TF = 3.16

PG GRADE: BINDER 64-22 SURFACE = 64-22

SUBGRADE SUPPORT RATING: POOR

COMMITMENTS:

COMMITMENTS:

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENTS WERE MADE.

THE RESIDENT ENGINEER SHALL CONTACT STUDIES AND PLANS CONCERNING ANY MAJOR PLAN CHANGES.

STATUS OF UTILITIES

NAME AND ADDRESS OF UTILITY	TYPE	LOCATION	ESTIMATED DATE RELOCATION COMPLETE
MCDONOUGH TELEPHONE COOPERATIVE	BURIED TELEPHONE	STA. 17+00 TO STA. 35+00, LT.	RELOCATE PRIOR TO CONSTRUCTION
AMREN GAS	BURIED GAS	STA. 19+00 TO STA. 33+00, RT.	RELOCATE PRIOR TO CONSTRUCTION

J.U.L.I.E. 1-800-892-0123

WHEN THE JULIE IS CALLED, AMEREN GAS DAMAGE PREVENTION SHALL BE CONTACTED WITH THE JULIE TICKET NUMBER. THE CONTACT INFORMATION IS: DAVE SMITH, SUPERINTENDENT OF DAMAGE PREVENTION. 217-424-6932 (OFFICE), 217-412-6400 (CELL); OR STEVE TOWNER, GAS TECHNICAL ENGINEER, 217-424-8110 (OFFICE), 217-412-7618 (CELL).

THE ABOVE REPRESENTS THE BEST INFORMATION OF THE DEPARTMENT AND IS INCLUDED SOLELY FOR THE CONVENIENCE OF THE BIDDER. THE APPLICABLE PROVISIONS OF ARTICLES 105.07 AND 107.20 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SHALL APPLY.

THE CONTRACTOR SHOULD NOTIFY THE ENGINEER, IN WRITING, OF ANY UTILITY ADJUSTMENT OR REMOVAL, WHICH HAS NOT BEEN COMPLETED AS REQUIRED FOR THE CONTRACTOR'S OPERATIONS. A REQUEST, FOR AN EXTENSION OF TIME ONLY, WILL BE CONSIDERED TO THE EXTENT THE CONTRACTOR'S OPERATIONS WERE AFFECTED.

THE CONTRACTOR SHALL CONTACT THE FOLLOWING AGENCIES PRIOR TO CLOSING IL 95:

SENATOR JOHN SULLIVAN
STATE SENATE-47TH DISTRICT
926 BROADWAY, SUITE 6
QUINCY, IL. 62301

REPRESENTATATIVE NORINE HAMMOND
HOUSE OF REPRESENTATIVE-93RD DISTRICT
331 NORTH LAFAYETTE STREET
P.O. BOX 170
MACOMB, IL 61455

TOM HICKMAN
MCDONOUGH COUNTY ENGINEER
204 S. WESTERN
MACOMB, IL 61455
309-833-4186

SHERIFF RICK VANBROOKER
MCDONOUGH COUNTY SHERIFF'S DEPARTMENT
110 S. MACARTHUR ST.
MACOMB, IL 61455
309-833-2323

CAPTAIN ROBERT ELLIOTT
ILLINOIS STATE POLICE
1600 N LAFAYETTE ST.
MACOMB, IL 61455-9194
309-833-4046 (DISTRICT 14 – BOTH MCDONOUGH & FULTON CO'S)

BUSHNELL FIRE PROTECTION DISTRICT
410 N. DEAN ST.
BUSHNELL, IL 61422-1229
309-772-2416

MARIETTA FIRE STATION
115 W. COAL
MARIETTA IL 61459
309-926-6371

POSTMASTER LIN MYRS
UNITED STATES POST OFFICE
107 W. COAL ST.
MARIETTA, IL 61549
309-926-7711

POSTMASTER JILL SOLLENBERGER
UNITED STATES POST OFFICE
205 S RANDOLPH ST.
MACOMB, IL 61455
309-833-5584

POSTMASTER SHENNA BODEN
UNITED STATES POST OFFICE
223 E HAIL ST.
BUSHNELL, IL 61422
309-772-3515

PRINCIPAL JOHN LAMB
BUSHNELL-PRAIRIE CITY HIGH SCHOOL
847 WALNUT ST.
BUSHNELL, IL 61422
309-772-3123

PRINCIPAL JOELLEN PENSINGER
BUSHNELL-PRAIRIE CITY ELEMENTARY SCHOOL
345 E HESS
BUSHNELL, IL 61422
309-772-9464

ROGER MCCORMICK
MOUND TOWNSHIP
70 MONA ST.
MARIETTA, IL 61459
309-337-1238

FULTON COUNTY ENGINEER
NICOLE GRUBE
430 E. OAK ST.
CANTON, IL 61520
309-647-0351

MAYOR JAMES EVANS (MAYOR OF BUSHNELL)
138 E. HAIL
BUSHNELL, IL 61422
309-722-2521

LINDA BRADFORD
MARIETTA VILLAGE PRESIDENT
P.O. BOX 114
MARIETTA, IL 61459
309-926-6112 (HOME)

design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = 0468689-sht-gennote.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 100.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 9/14/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS TABLES AND COMMITMENTS
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VBIBR-1	McDONOUGH	95	3
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	 BRIDGE 0011	100% STATE
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	27	27		
20100500	TREE REMOVAL, ACRES	ACRE	0.3	0.3		
20200100	EARTH EXCAVATION	CU YD	9,750	9,750		
20400800	FURNISHED EXCAVATION	CU YD	26,279	26,279		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	19,776	19,776		
21400100	GRADING AND SHAPING DITCHES	FOOT	507	507		
25000210	SEEDING, CLASS 2A	ACRE	2.4	2.4		
25000300	SEEDING, CLASS 3	ACRE	2.6	2.6		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	520	520		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	520	520		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	520	520		
25000750	MOWING	ACRE	3.5			3.5
25003210	INTERSEEDING, CLASS 2A	ACRE	0.8	0.8		
25100115	MULCH, METHOD 2	ACRE	2.6	2.6		

14

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	 BRIDGE 0011	100% STATE
25100630	EROSION CONTROL BLANKET	SQ YD	12,635	12,635		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1,725	1,725		
28000305	TEMPORARY DITCH CHECKS	FOOT	696	696		
28000400	PERIMETER EROSION BARRIER	FOOT	507	507		
28100107	STONE RIPRAP, CLASS A4	SQ YD	463		463	
28200200	FILTER FABRIC	SQ YD	463		463	
31100100	SUBBASE GRANULAR MATERIAL, TYPE A	TON	1,159	1,159		
40600285	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POUND	7,576	7,576		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	701	701		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	2,436	2,436		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	381	381		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	95	95		
44000100	PAVEMENT REMOVAL	SQ YD	229	229		
44004250	PAVED SHOULDER REMOVAL	SQ YD	284	284		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	 BRIDGE 0011	100% STATE
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	797	797		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	249	249		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	
50105220	PIPE CULVERT REMOVAL	FOOT	228	228		
50157300	PROTECTIVE SHIELD	SQ YD	129		129	
50200100	STRUCTURE EXCAVATION	CU YD	251		251	
50300225	CONCRETE STRUCTURES	CU YD	215.6		215.6	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	296.6		296.6	
50300260	BRIDGE DECK GROOVING	SQ YD	703		703	
50300280	CONCRETE ENCASEMENT	CU YD	10.8		10.8	
50300300	PROTECTIVE COAT	SQ YD	906		906	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	STUD SHEAR CONNECTORS	EACH	4,032		4,032	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	95,980		95,980	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	 BRIDGE 0011	100% STATE
~~50800515~~	~~BAR SPLICERS~~	~~EACH~~	~~72~~		~~72~~	
51201600	FURNISHING STEEL PILES HP12x53	FOOT	645		645	
51202100	FURNISHING STEEL PILES HP14x117	FOOT	995		995	
51202305	DRIVING PILES	FOOT	1,640		1,640	
51203600	TEST PILE STEEL HP12x53	EACH	2		2	
51204100	TEST PILE STEEL HP14x117	EACH	2		2	
51204650	PILE SHOES	EACH	24		24	
51500100	NAME PLATES	EACH	1		1	
52100520	ANCHOR BOLTS, 1"	EACH	24		24	
52100540	ANCHOR BOLTS, 1 1/2"	EACH	24		24	
54210182	PIPE ELBOW, 12"	EACH	8	8		
54215547	METAL END SECTIONS 12"	EACH	4	4		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	57		57	
60100945	PIPE DRAINS 12"	FOOT	383	383		

14

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	BRIDGE 0011	100% STATE
	60500060	REMOVING INLETS	EACH	10	10		
	60900515	CONCRETE THRUST BLOCKS	EACH	4	4		
	61000335	TYPE G INLET BOX, STANDARD 610001	EACH	4	4		
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	325.0	325.0		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
	63200310	GUARDRAIL REMOVAL	FOOT	771	771		
	66201120	CONCRETE SHOULDER CURB	FOOT	52	52		
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	12	12		
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1		1	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8		
	67000600	ENGINEER'S FIELD LABORATORY	CAL MO	8	8		
	67100100	MOBILIZATION	L SUM	1	1		
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1	1		

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 5 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	1122VBIBR-1	McDONOUGH	95	8
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE FEDERAL FUNDS 80% FED / 20% STATE ROADWAY 0004	 BRIDGE 0011	100% STATE
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	6,090	6,090		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	20	20		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	16	16		
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	4	4		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	171	171		
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	44		44	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
	Z0016702	DETOUR SIGNING	L SUM	1	1		
	Z0022800	FENCE REMOVAL	FOOT	1,252	1,252		
	Z0034105	MATERIAL TRANSFER DEVICE	TON	2,817	2,817		
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	130		130	
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
ϕ	Z0076600	TRAINEES	HOUR	500	500		
	Z0064540	SEEPAGE COLLAR	EACH	4	4		
ϕ	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500		

* SPECIALTY ITEM ϕ 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				FEDERAL FUNDS		
				80% FED / 20% STATE		
				ROADWAY	BRIDGE	100% STATE
				0004	0011	
X2020502	BRACED EXCAVATION	CU YD	59.7		59.7	
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	88		88	
X6660410	REMOVE RIGHT-OF-WAY MARKERS	EACH	8	8		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		

design firm no. 184001036

whks engineers + planners + land surveyors

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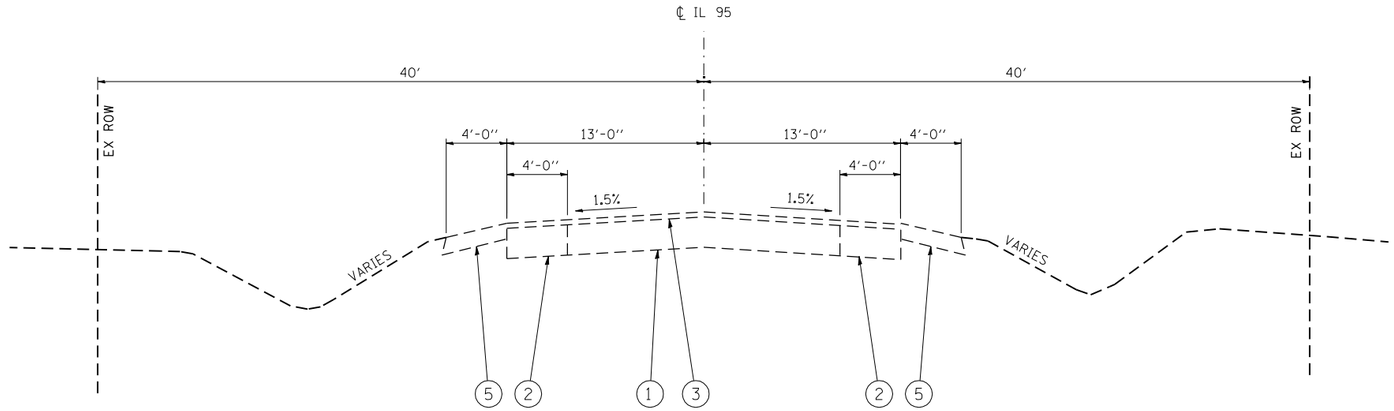
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	10
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

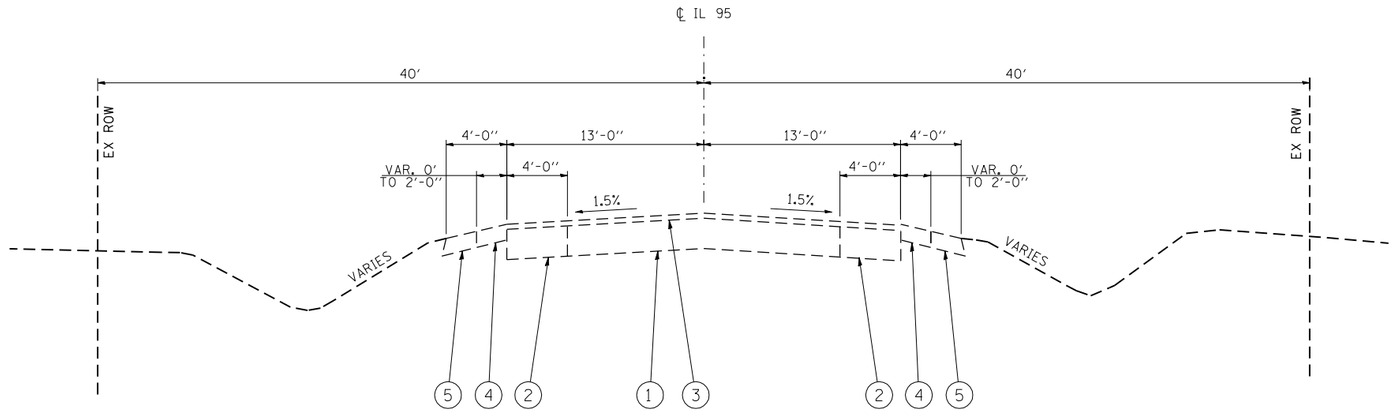


EXISTING TYPICAL SECTION

STA. 17+00.00 TO STA. 17+22.00 RT
STA. 17+00.00 TO STA. 17+30.00 LT
STA. 32+80.00 TO STA. 35+05.27 RT
STA. 32+70.00 TO STA. 35+05.27 LT

LEGEND

1. EXISTING PCC PAVEMENT, ± 9''
2. EXISTING HMA BASE COURSE WIDENING, 9''
3. EXISTING HMA OVERLAY, ± 3''
4. EXISTING PAVED SHOULDERS, 6'' (HMA OR PCC)
5. EXISTING AGGREGATE SHOULDERS, 6''
6. EXISTING RIPRAP
7. EXISTING STEEL PLATE BEAM GUARDRAIL
8. PROPOSED PAVEMENT REMOVAL
9. PROPOSED PAVED SHOULDER REMOVAL
10. PROPOSED GUARDRAIL REMOVAL
11. PROPOSED FURNISHED EXCAVATION
12. PROPOSED TOPSOIL, FURNISH AND PLACE, 4''
13. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 12''
14. PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2¼'' AND VAR.
15. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX ''D'', N50, 1½''
16. PROPOSED PAVEMENT BREAKING
17. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8''
18. PROPOSED AGGREGATE SHOULDERS, TYPE B, 8''
19. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
20. PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL
21. PROPOSED PAINT PAVEMENT MARKING - LINE 4''



EXISTING TYPICAL SECTION

STA. 17+22.00 TO STA. 17+99.00 RT
STA. 17+30.00 TO STA. 17+99.00 LT
STA. 32+04.00 TO STA. 32+80.00 RT
STA. 32+04.00 TO STA. 32+70.00 LT

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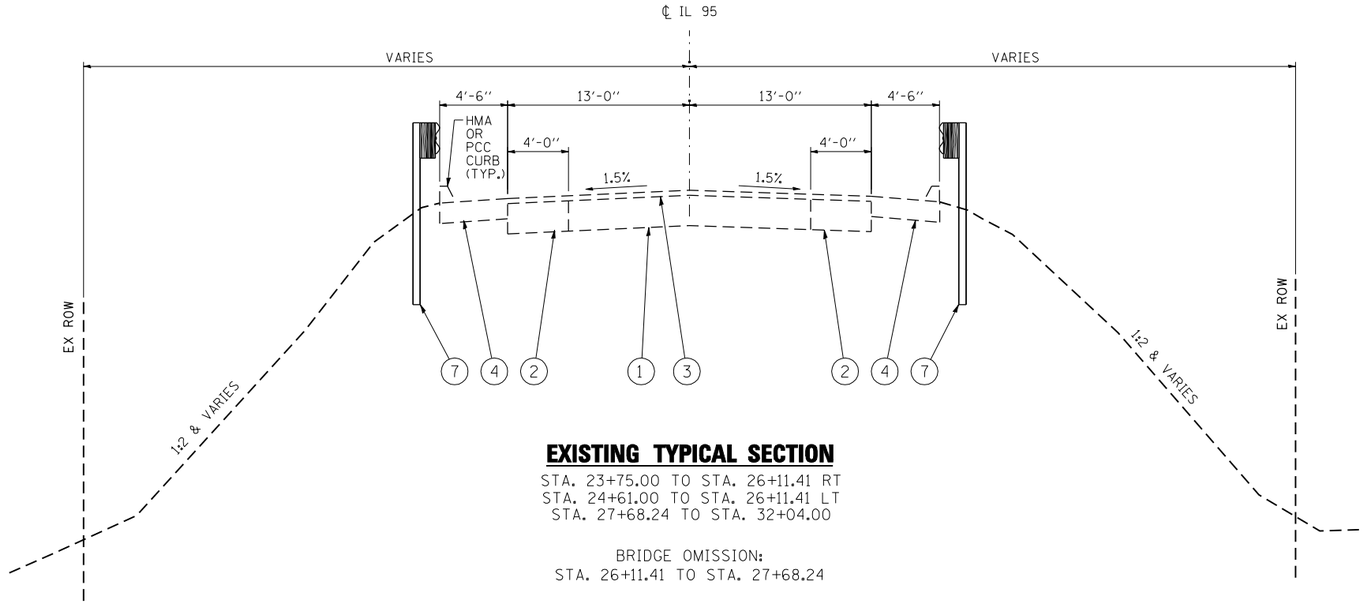
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1'' = 10' | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	11
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



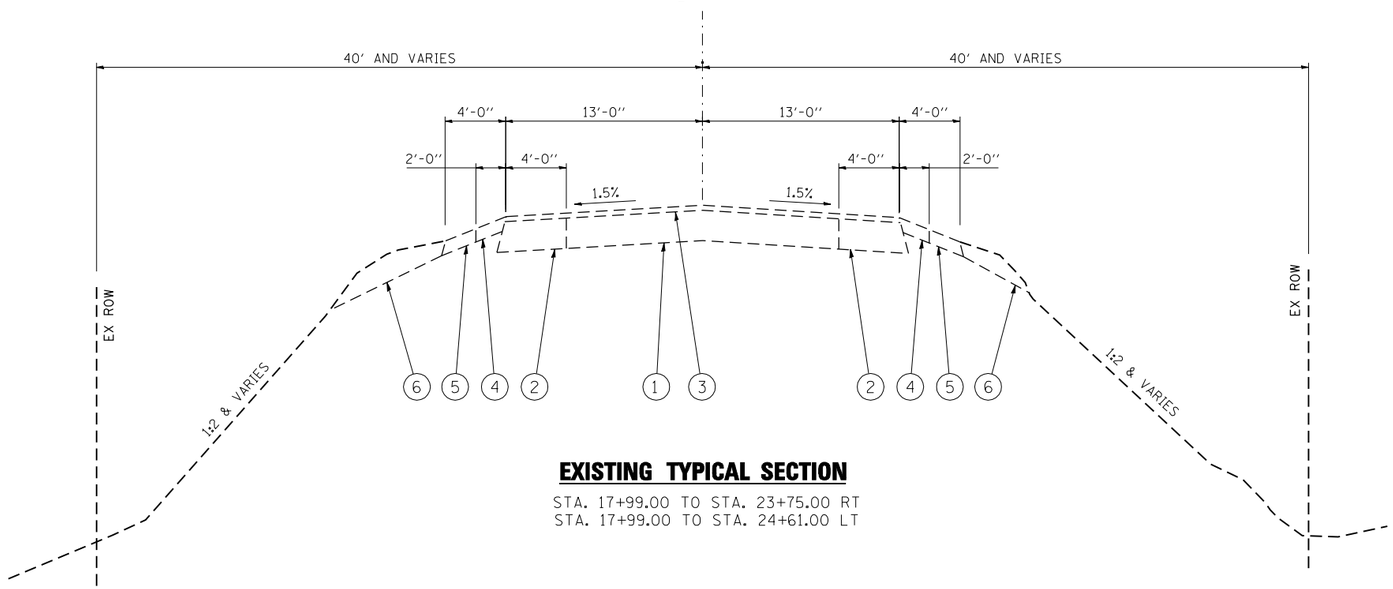
EXISTING TYPICAL SECTION

STA. 23+75.00 TO STA. 26+11.41 RT
STA. 24+61.00 TO STA. 26+11.41 LT
STA. 27+68.24 TO STA. 32+04.00

BRIDGE OMISSION:
STA. 26+11.41 TO STA. 27+68.24

LEGEND

1. EXISTING PCC PAVEMENT, ± 9″
2. EXISTING HMA BASE COURSE WIDENING, 9″
3. EXISTING HMA OVERLAY, ± 3″
4. EXISTING PAVED SHOULDERS, 6″ (HMA & PCC)
5. EXISTING AGGREGATE SHOULDERS, 6″
6. EXISTING RIPRAP
7. EXISTING STEEL PLATE BEAM GUARDRAIL
8. PROPOSED PAVEMENT REMOVAL
9. PROPOSED PAVED SHOULDER REMOVAL
10. PROPOSED GUARDRAIL REMOVAL
11. PROPOSED FURNISHED EXCAVATION
12. PROPOSED TOPSOIL, FURNISH AND PLACE, 4″
13. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 12″
14. PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2¼″ AND VAR.
15. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1½″
16. PROPOSED PAVEMENT BREAKING
17. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8″
18. PROPOSED AGGREGATE SHOULDERS, TYPE B, 8″
19. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6′ POSTS
20. PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL
21. PROPOSED PAINT PAVEMENT MARKING - LINE 4″



EXISTING TYPICAL SECTION

STA. 17+99.00 TO STA. 23+75.00 RT
STA. 17+99.00 TO STA. 24+61.00 LT

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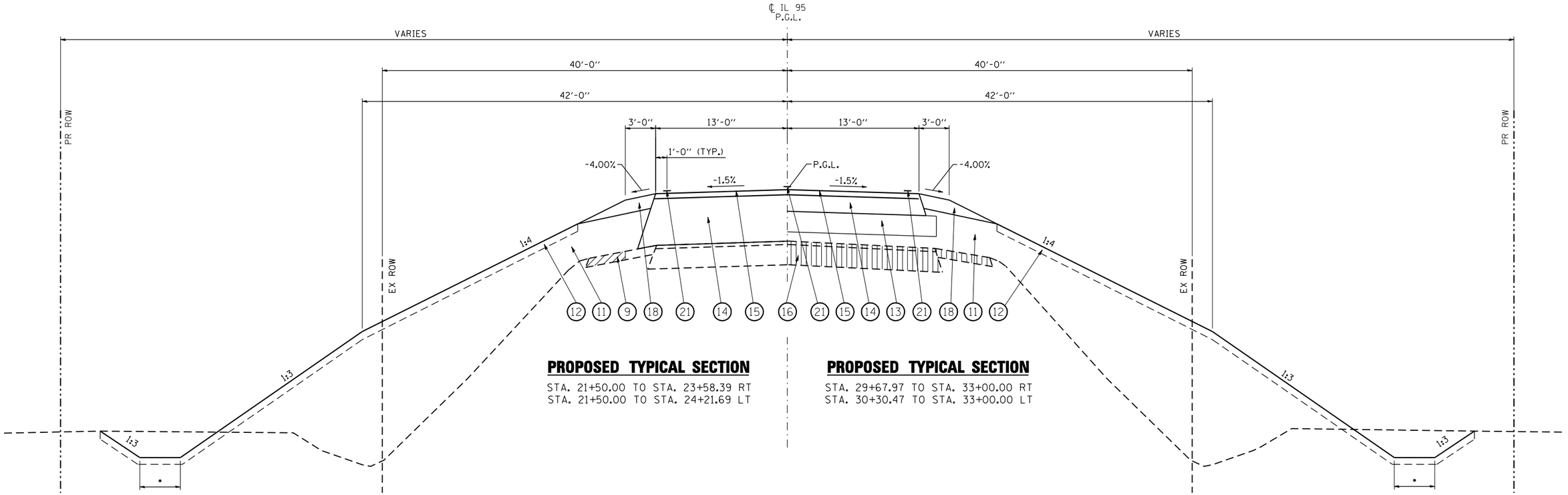
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1″ = 10′ | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	12
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION

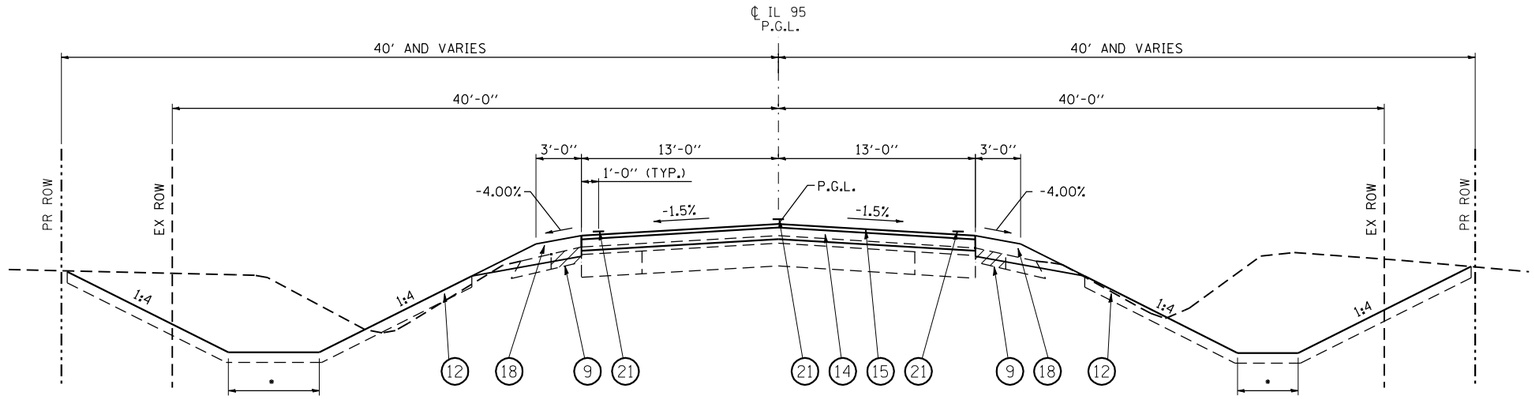
STA. 21+50.00 TO STA. 23+58.39 RT
STA. 21+50.00 TO STA. 24+21.69 LT

PROPOSED TYPICAL SECTION

STA. 29+67.97 TO STA. 33+00.00 RT
STA. 30+30.47 TO STA. 33+00.00 LT

LEGEND

1. EXISTING PCC PAVEMENT, ± 9″
2. EXISTING HMA BASE COURSE WIDENING, 9″
3. EXISTING HMA OVERLAY, ± 3″
4. EXISTING PAVED SHOULDERS, 6″
5. EXISTING AGGREGATE SHOULDERS, 6″
6. EXISTING RIPRAP
7. EXISTING STEEL PLATE BEAM GUARDRAIL
8. PROPOSED PAVEMENT REMOVAL
9. PROPOSED PAVED SHOULDER REMOVAL
10. PROPOSED GUARDRAIL REMOVAL
11. PROPOSED FURNISHED EXCAVATION
12. PROPOSED TOPSOIL, FURNISH AND PLACE, 4″
13. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 12″
14. PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2¼″ AND VAR.
15. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1½″
16. PROPOSED PAVEMENT BREAKING
17. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8″
18. PROPOSED AGGREGATE SHOULDERS, TYPE B, 8″
19. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6′ POSTS
20. PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL
21. PROPOSED PAINT PAVEMENT MARKING - LINE 4″



PROPOSED TYPICAL SECTION

STA. 17+00.00 TO STA. 21+50.00
STA. 33+00.00 TO STA. 35+05.27

NOTES:

1. BARN-ROOF FRONT SLOPE FROM STA. 21+50 TO STA. 24+50.
   3:1 FRONT SLOPE FROM STA. 24+50 TO STA. 29+50.
   BARN-ROOF FRONT SLOPE FROM STA. 29+50 TO STA. 31+50.

* 6′ DITCH BOTTOM FROM STA. 17+50 TO STA. 21+00, LT.
4′ DITCH BOTTOM FROM STA. 21+00.00 TO 34+50.00 LT.
4′ DITCH BOTTOM FROM STA. 17+00.00 TO 35+05.27 RT.

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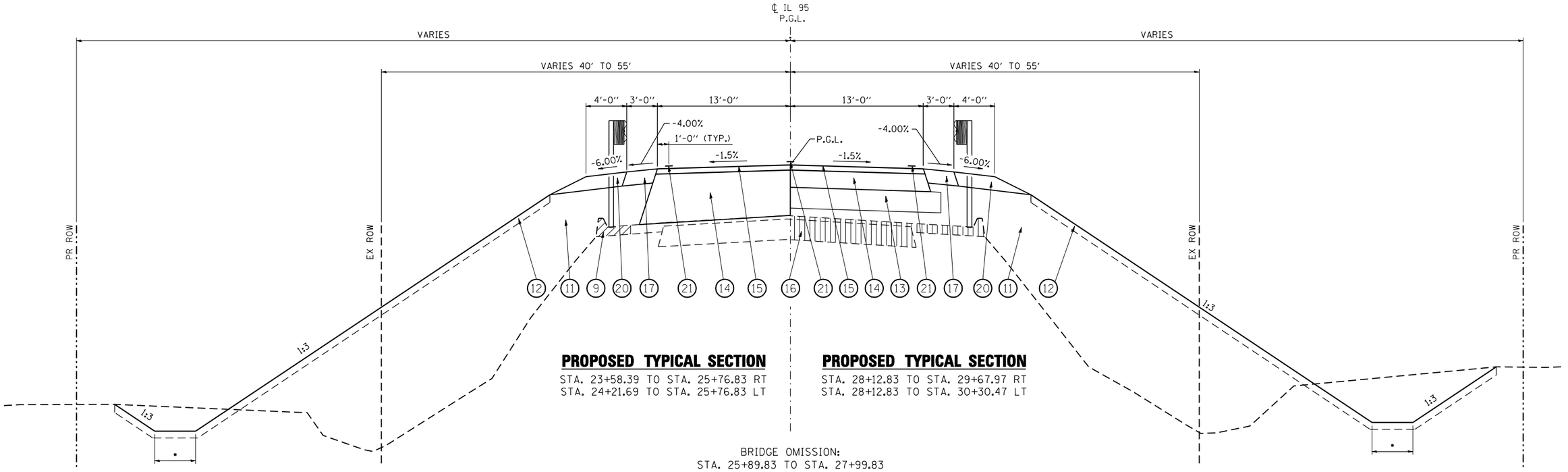
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1″ = 10′ | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	13
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL SECTION
STA. 23+58.39 TO STA. 25+76.83 RT
STA. 24+21.69 TO STA. 25+76.83 LT

PROPOSED TYPICAL SECTION
STA. 28+12.83 TO STA. 29+67.97 RT
STA. 28+12.83 TO STA. 30+30.47 LT

BRIDGE OMISSION:
STA. 25+89.83 TO STA. 27+99.83

LEGEND

1. EXISTING PCC PAVEMENT, ± 9"
2. EXISTING HMA BASE COURSE WIDENING, 9"
3. EXISTING HMA OVERLAY, ± 3"
4. EXISTING PAVED SHOULDERS, 6"
5. EXISTING AGGREGATE SHOULDERS, 6"
6. EXISTING RIPRAP
7. EXISTING STEEL PLATE BEAM GUARDRAIL
8. PROPOSED PAVEMENT REMOVAL
9. PROPOSED PAVED SHOULDER REMOVAL
10. PROPOSED GUARDRAIL REMOVAL
11. PROPOSED FURNISHED EXCAVATION
12. PROPOSED TOPSOIL, FURNISH AND PLACE, 4"
13. PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 12"
14. PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2¼" AND VAR.
15. PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1½"
16. PROPOSED PAVEMENT BREAKING
17. PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
18. PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
19. PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
20. PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL
21. PROPOSED PAINT PAVEMENT MARKING - LINE 4"

NOTES:

1. BARN-ROOF FRONT SLOPE FROM STA. 21+50 TO STA. 24+50.
   3:1 FRONT SLOPE FROM STA. 24+50 TO STA. 29+50.
   BARN-ROOF FRONT SLOPE FROM STA. 29+50 TO STA. 31+50.

* 6' DITCH BOTTOM FROM STA. 17+50 TO STA. 21+00, LT.
   4' DITCH BOTTOM FROM STA. 21+00.00 TO 34+50.00 LT.
   4' DITCH BOTTOM FROM STA. 17+00.00 TO 35+05.27 RT.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	14
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

SEEDING SCHEDULE

LOCATION			25000210 SEEDING, CLASS 2A	25000300 SEEDING, CLASS 3	25003210 INTERSEEDING, CLASS 2A	25000400 NIT FERT NUTR RATE		25000500 PHOS FERT NUTR RATE		25000600 POT FERT NUTR RATE		25100115 MULCH, METHOD 2	25100630 EROS CNTRL BLANKET	28000250 TEMP EROS CNTRL SEEDING RATE		
STATION	STATION	LT/RT	(ACRE)	(ACRE)	(ACRE)	(LBS/ACRE)	(POUND)	(LBS/ACRE)	(POUND)	(LBS/ACRE)	(POUND)	(ACRE)	(SQ YD)	(LBS/ACRE)	APPLICATIONS	(POUND)
17+50.00	26+69.00	RT			0.28	90	25	90	25	90	25			100	3	84
17+00.00	26+75.00	RT	0.65			90	59	90	59	90	59	0.7		100	3	195
21+50.00	26+62.00	RT		0.76		90	68	90	68	90	68		3,679	100	3	228
17+00.00	26+55.00	LT			0.23	90	21	90	21	90	21			100	3	69
17+00.00	26+75.00	LT	0.73			90	66	90	66	90	66	0.8		100	3	219
21+50.00	26+63.00	LT		0.78		90	70	90	70	90	70		3,776	100	3	234
27+16.00	35+05.00	RT			0.14	90	13	90	13	90	13			100	3	42
27+07.00	35+05.00	RT	0.50			90	45	90	45	90	45	0.5		100	3	150
27+07.00	31+00.00	RT		0.49		90	45	90	45	90	45		2,372	100	3	147
27+16.00	35+05.00	LT			0.10	90	9	90	9	90	9			100	3	30
27+07.00	35+05.00	LT	0.51			90	46	90	46	90	46	0.6		100	3	153
27+07.00	31+50.00	LT		0.58		90	53	90	53	90	53		2,808	100	3	174
TOTAL			**2.4**	**2.6**	**0.8**		**520**		**520**		**520**	**2.6**	**12,635**			**1,725**

ROW MARKERS SCHEDULE

LOCATION		66600105 FURNISHING AND ERECTING RIGHT OF WAY MARKERS	X6660410 REMOVE RIGHT OF WAY MARKERS
STATION	OFFSET	(EACH)	(EACH)
17+00.00	40' LT	1	
17+50.00	40' RT	1	
24+00.00	125' RT	1	
24+50.00	130' LT	1	
25+00.00	55' LT		1
26+28.29	130' LT	1	
26+32.00	55' LT		1
26+37.71	125' RT	1	
27+19.54	125' LT	1	
27+23.00	55' LT		1
27+32.25	55' RT		1
27+35.46	120' RT	1	
28+00.00	55' RT		1
28+00.00	55' LT		1
28+00.00	125' LT	1	
28+00.00	120' RT	1	
30+00.00	40' LT		1
30+00.00	40' RT		1
34+00.00	40' LT	1	
34+00.00	40' RT	1	
	TOTAL =	**12**	**8**

EROSION CONTROL SCHEDULE

LOCATION			HEIGHT	28000305 TEMPORARY DITCH CHECKS	28000400 PERIMETER EROSION BARRIER
STATION	STATION	OFFSET	(FOOT)	(FOOT)	(FOOT)
IL 95					
17+00		26.9' RT	1.5	16	
18+50		34.8' RT	1.5	16	
20+00		52.4' RT	1.5	16	
21+50		68.5' RT	1.5	13	
22+25		76.0' RT	1.5	13	
23+00		85.3' RT	1.5	13	
23+75		93.6' RT	1.5	13	
24+50		101.9' RT	1.5	13	
25+25		101.3' RT	1.5	13	
26+00		103.1' RT	1.5	13	
27+21		100.3' RT	1.5	13	
27+75		99.2' RT	1.5	13	
29+25		90.5' RT	1.5	13	
30+00		80.5' RT	1.5	13	
30+75		66.8' RT	1.5	13	
31+50		55.2' RT	1.5	16	
32+25		45.4' RT	1.5	16	
33+00		35.9' RT	1.5	16	
33+75		28.5' RT	1.5	16	
34+50		24.9' RT	1.5	16	
17+00		30.0' LT	1	14	
18+00		34.7' LT	1	14	
19+00		43.5' LT	1	14	
20+00		56.7' LT	1	14	
21+00		71.7' LT	1	14	
23+00		93.3' LT	2	16	
24+00		103.9' LT	2	16	
25+00		108.5' LT	2	16	
25+50		107.8' LT	1.5	13	
25+83		107.0' LT	1	12	
26+16		106.3' LT	1	12	
27+10		104.8' LT	1.5	13	
28+60		99.0' LT	1.5	13	
30+10		86.2' LT	1.5	13	
31+00		71.1' LT	1.5	13	
31+50		63.1' LT	1.5	13	
32+00		57.2' LT	1.5	16	
32+50		49.1' LT	1.5	16	
33+00		41.6' LT	1.5	16	
33+50		35.0' LT	1.5	16	
34+00		30.0' LT	1.5	16	
34+33		27.7' LT	1	12	
34+66		25.9' LT	1	12	
RR					
1+75		12.5' RT	1	8	
2+25		12.8' RT	1	8	
2+75		13.0' RT	1	8	
3+23		13.0' RT	1	8	
3+73		13.0' RT	1	8	
4+23		13.0' RT	1	8	
1+75		30.4' LT	1	8	
2+25		29.7' LT	1	8	
2+75		27.9' LT	1	8	
3+27		26.7' LT	1	8	
4+27		30.9' LT	1	8	
1+75	4+27	RT-LT			252
1+75	4+30	RT-LT			255
TOTAL =				**696**	**507**

GUARDRAIL SCHEDULE

LOCATION			63000001 STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	63100085 TRAFFIC BARRIER TERMINAL, TYPE 6	63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL)	63200310 GUARDRAIL REMOVAL	78200410 GUARDRAIL MARKERS, TYPE A	78201000 TERMINAL MARKER - DIRECT APPLIED
STATION	STATION	OFFSET	(FOOT)	(EACH)	(EACH)	(FOOT)	(EACH)	(EACH)
23+94.83	24+44.83	RT			1			1
24+44.83	25+57.33	RT	112.5				4	
25+57.33	26+07.33	RT		1				
24+57.33	25+07.33	RT		1			4	
25+07.33	25+57.33	RT	50.0					
25+57.33	26+07.33	RT			1			1
27+82.33	28+32.33	LT			1			1
28+32.33	28+82.33	LT	50.0					
28+82.33	29+32.33	LT		1			4	
27+82.33	28+32.33	LT		1				
28+32.33	29+44.83	LT	112.5				4	
29+44.83	29+94.83	LT			1			1
23+75.00	26+11.00	RT				236		
27+68.00	29+19.00	RT				150		
24+61.00	26+11.00	LT				149		
27+68.00	30+07.00	LT				237		
		TOTAL =	**325.0**	**4**	**4**	**771**	**16**	**4**

INLET BOX AND PIPE DRAINS SCHEDULE

LOCATION		54210182 PIPE ELBOW, 12"	54215547 METAL END SECTIONS 12"	60100945 PIPE DRAINS 12"	60900515 CONCRETE THRUST BLOCKS	61000335 TYPE G INLET BOX, STANDARD 610001	66201120 CONCRETE SHOULDER CURB	Z0064540 SEEPAGE COLLAR
STATION	OFFSET	(EACH)	(EACH)	(FOOT)	(EACH)	(EACH)	(FOOT)	(EACH)
25+82.00	RT	2	1	97	1	1	13	1
25+82.00	LT	2	1	100	1	1	13	1
28+07.70	RT	2	1	90	1	1	13	1
28+07.70	LT	2	1	96	1	1	13	1
	TOTAL =	**8**	**4**	**383**	**4**	**4**	**52**	**4**

EARTHWORK SCHEDULE

LOCATION			20200100 EARTH EXCAVATION	EARTH EXCAVATION ADJUSTMENT FOR SHRINKAGE	EMBANKMENT (FILL)	20400800 EARTH BALANCE WASTE (+) OR SHORTAGE (-) (FURNISHED EXCAVATION)	21101615 TOPSOIL FURN AND PLACE, 4"
			(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
IL 95							
17+00.00	TO	26+19.83	6,181	4,636	20,284	-15,648	12,107
27+69.83	TO	35+05.27	3,569	2,677	13,307	-10,630	7,669
		TOTALS =	9,750	7,313	33,591	-26,279	19,776

EARTH EMBANKMENT SHRINKAGE FACTOR = 25%

ESTIMATED QUANTITY FOR BENCHING IS INCLUDED IN THE EARTHWORK SCHEDULE (STA. 19+50 TO 31+50)

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-S00.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 10.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES OF QUANTITIES
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	15
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

PAVING SCHEDULE

LOCATION			31100100 SUB-BASE GRANULAR MATERIAL, TYPE A	40600285 POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	40603080 HMA BINDER COURSE, IL-19.5, N50	40603335 HMA SURFACE COURSE, MIX "D", N50	42001430 BRIDGE APPROACH CONNECTOR PAVEMENT (FLEXIBLE)	48101600 AGGREGATE SHOULDERS, TYPE B 8"	48203029 HMA SHOULDERS, 8"	Z0034105 MATERIAL TRANSFER DEVICE	Z0001002 GUARDRAIL AGGREGATE EROSION CONTROL
STATION	STATION	OFFSET	(TON)	(POUND)	(TON)	(TON)	(SQ YD)	(SQ YD)	(SQ YD)	(TON)	(TON)
17+00.00	23+58.00	RT						219			
17+00.00	24+21.69	LT						241			
17+00.00	18+13.19			147		27				27	
18+13.19	18+56.90			85	16	11				27	
18+56.90	25+89.83			2,858	1470	175				1645	
25+76.83	25+89.83		34				48				
23+58.00	25+76.83	RT		16					73		
23+58.00	26+19.83	RT									50
24+22.00	25+76.83	LT		12					52		
24+22.00	26+19.83	LT									36
27+99.83	28+12.83		34				48				
27+99.83	33+00.00			3,901							
28+12.83	33+00.00		1,091		709	118				828	
27+69.83	29+67.97	RT									36
28+12.83	29+68.00	RT		12					52		
27+69.83	30+30.00	LT									49
28+12.83	30+30.00	LT		16					73		
29+67.97	35+05.27	RT						179			
30+30.47	35+05.27	LT						158			
33+00.00	34+19.48			388	225	29				254	
34+19.48	34+62.74			84	16	10				26	
34+62.74	35+05.27			55		10				10	
TOTAL			**1,159**	**7,576**	**2,436**	**381**	**95**	**797**	**249**	**2,817**	**171**

ROADWAY REMOVAL ITEMS SCHEDULE

LOCATION			40600982 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	44000100 PAVEMENT REMOVAL	44004250 PAVED SHOULDER REMOVAL
STATION	STATION	OFFSET	(SQ YD)	(SQ YD)	(SQ YD)
17+00.00	18+56.90		453		
17+22.00	18+00.00	RT			15
17+30.00	18+00.00	LT			14
18+00.00	19+00.00	RT			33
18+00.00	19+00.00	LT			47
25+76.83	26+11.41			100	
23+75.00	25+76.83	RT			56
25+76.83	26+11.41	RT			18
24+61.00	25+76.83	LT			32
25+76.83	26+11.41	LT			18
27+68.24	28+12.83			129	
27+68.24	28+12.83	RT			25
27+68.24	28+12.83	LT			25
34+19.48	35+05.27		248		
	TOTAL =		**701**	**229**	**284**

TREE REMOVAL SCHEDULE

LOCATION			20100110 TREE REM (6 TO 15 UNITS) DIA	20100500 TREE REM, ACRES
STATION	STATION	OFFSET	(UNIT)	(ACRE)
25+39	26+37	RT		0.06
27+18	28+81	RT		0.21
27+22		90' LT	12	
30+90		41' RT	15	
		TOTAL =	**27**	**0.3**

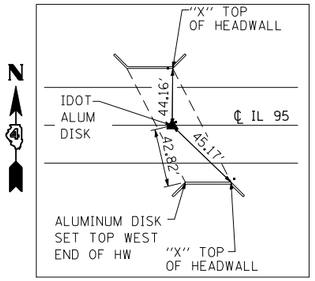
PAVEMENT MARKING SCHEDULE

LOCATION			TYPE	COLOR	78001110 PAINT PAVEMENT MARKING - LINE 4"	78100100 RAISED REFLECTIVE PAVEMENT MARKER
STATION	STATION	OFFSET			(FOOT)	(EACH)
17+00.00	35+05.27	12' LT	SOLID	WHITE	1,806	
17+00.00	35+05.27	12' RT	SOLID	WHITE	1,806	
17+00.00	25+84.00	CL	SOLID	YELLOW	884	
17+00.00	25+84.00	CL	SKIP DASH	YELLOW	221	
25+84.00	28+77.00	CL	DOUBLE SOLID	YELLOW	586	
28+77.00	35+05.27	CL	SKIP DASH	YELLOW	158	
28+77.00	35+05.27	CL	SOLID	YELLOW	629	
17+00.00	26+19.83	CL				11
27+69.83	35+05.27	CL				9
			TOTAL =		**6,090**	**20**

CULVERT REMOVAL SCHEDULE

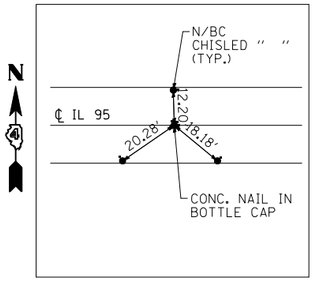
LOCATION		50105220 PIPE CULVERT REMOVAL	60500060 REMOVING INLETS
STATION	OFFSET	(FOOT)	(EACH)
18+00	13.9' RT	10	1
18+00	14.7' LT	12	1
20+99	14.7' RT	24	1
21+44	14.5' LT		1
24+03	16.2' RT	31	1
24+84	16.4' LT	36	1
27+14	61.5' RT	19	
27+25	67.5' LT	2	
28+89	16.4' RT	29	1
29+74	16.0' LT	25	1
32+00	14.5' LT	20	1
32+00	14.6' RT	20	1
TOTAL =		**228**	**10**

ALIGNMENT COORDINATES			
IL 95	STA.	N	E
POINT 100	8+98.51	1392842.520	2203620.035
POINT 112	41+42.38	1392637.619	2206857.426
BNSF RR	STA.	N	E
RR1	0+00.00	1392431.672	2205411.055
RR2	5+70.35	1393001.966	2205419.125



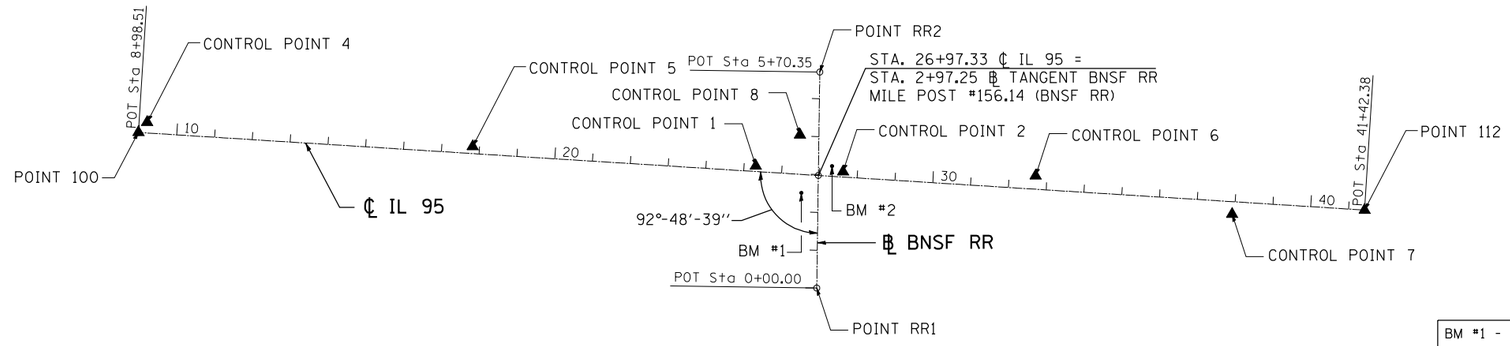
POINT #100

IDOT ALUM DISK
STA. 8+98.51, 0.00 RT
N 1392842.520
E 2203620.035



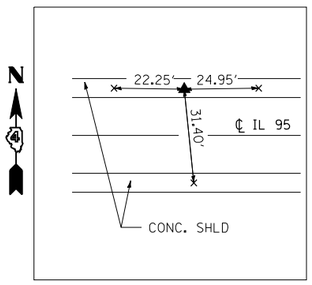
POINT #112

CONC NAIL IN BOTTLE CAP
STA. 41+42.38, 0.00 RT
N 1392637.619
E 2206857.426



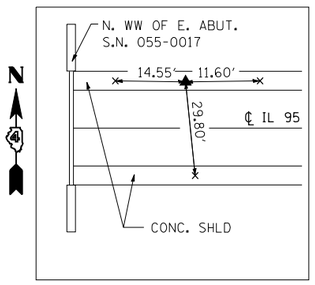
BENCH MARKS

BM #1 - STA. 26+33, 18' RT. CHISLED "□" TOP OF CONC. WINGWALL ELEV. 684.08	BM #2 - STA. 27+47, 17' LT. BRASS TABLET TOP OF CONC. WINGWALL ELEV. 684.16



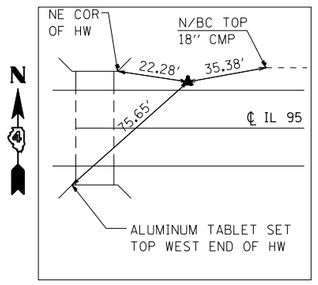
CONTROL POINT #1

STAR DRILL INSIDE
CHSLD "X" IN CONC. SHLD
STA. 25+30.98, 14.51 LT
N 1392753.888
E 2205250.161



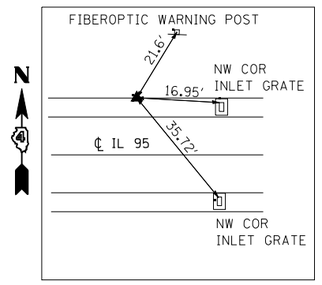
CONTROL POINT #2

STAR DRILL INSIDE
CHSLD "X" IN CONC. SHLD
STA. 27+61.83, 13.91 LT
N 1392738.702
E 2205480.516



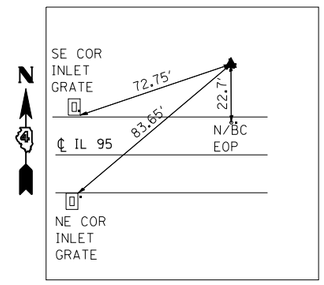
CONTROL POINT #4

5/8" I.P.
STA. 9+19.76, 28.28 LT
N 1392869.399
E 2203643.028



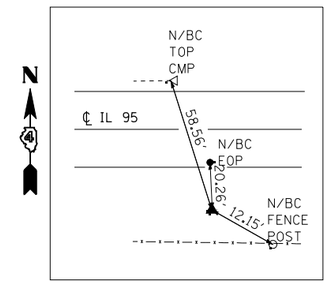
CONTROL POINT #5

5/8" I.P.
STA. 17+81.77, 18.98 LT
N 1392805.675
E 2204502.726



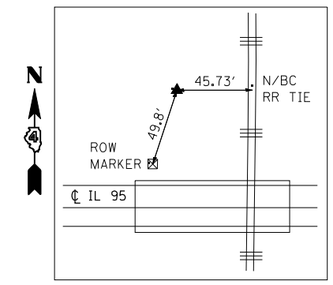
CONTROL POINT #6

5/8" I.P.
STA. 32+69.71, 35.41 LT
N 1392728.081
E 2205988.741



CONTROL POINT #7

5/8" I.P.
STA. 37+94.11, 33.24 RT
N 1392626.442
E 2206507.753



CONTROL POINT #8

5/8" I.P.
STA. 26+42.10, 103.83 LT
N 1392836.003
E 2205366.703

design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - LIN ENG	REVISED	
FILE NAME = D468689-sht-ATB.dgn	CHECKED - CWC	REVISED	
PLOT SCALE = 400.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES & BENCHMARKS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 400' | SHEET NO. 1 OF 1 SHEETS | STA. 8+98.51 TO STA. 41+42.38

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	17
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

LEGEND

- PR HMA SURF REM - BUTT JOINT
- PR PVT REM
- PR APPR SLAB REM *
- PR REM OF EXIST STRUCT
- PR PVT BREAK **
- PR PAVED SHLDR REM

* COST INCLUDED IN REMOVAL OF EXISTING STRUCTURES

** PAVEMENT BREAKING SHALL BE ACCORDING TO SECTION 205.03 OF THE STANDARD SPECIFICATIONS AND WILL NOT BE PAID FOR SEPARATELY BUT SHALL CONSIDERED IN THE VARIOUS PAY ITEMS IN THE CONTRACT.

SHAROLYN S. DANIELS AND HOWARD L. DANIELS AS CO-TRUSTEES OF THE SHAROLYN S. DANIELS FAMILY TRUST AGREEMENT

DONALD C. SWARTZBAUGH

RALPH C. SIMMONS AND CAROL B. SIMMONS, CO-TRUSTEES

CONSTANCE CLARKE PURDUM

BEGIN IMPROVEMENT SECTION (122VB)BR-1 STA. 17+00.00

STA. 18+00, 14.7' LT. INLET, RIM = 651.92 15" CMP W/FLARED END SECTION

STA. 18+00, 13.9' RT. INLET, RIM = 651.86 15" CMP W/FLARED END SECTION

PR HMA SURF REM - BUTT JOINT

PR PIPE CULV REM AND REM INLETS

PR PAVED SHLDR REM

RELOCATE BY OTHERS

PR REM INLETS

STA. 21+44, 14.5' LT. INLET

EXIST RIPRAP TO BE REM (COST INCL IN EARTH EX)

STA. 20+99, 14.7' RT. INLET, RIM = 662.05 15" CMP AND CONC THRUST BLOCK

PR PIPE CULV REM, AND REM INLETS

STA. 24+84, 16.4' LT. INLET, RIM = 680.35 15" CMP W/FLARED END SECTION AND CONC THRUST BLOCK

STA. 24+03, 16.2' RT. INLET, RIM = 677.05 15" CMP

PR PIPE CULV REM, AND REM INLETS

PR PIPE CULV REM STA. 27+25

PR REM ROW MKRS

PR PAVED SHLDR REM

PR GUARD-RAIL REM

PR TREE REM, ACRES

* PR APPR SLAB REM

END PR FENCE REM, STA. 26+39, 63.6' RT

BEGIN PR FENCE REM, STA. 26+41, 125.0' RT

PR PIPE CULV REM STA. 27+14

RELOCATE GAS STAND PIPE BY OTHERS

BEGIN PR FENCE REM, STA. 27+24, 125.0' LT

PR TREE REM (6 TO 15 UNITS DIA)

PR REM OF EXIST STRUCT

PR PIPE CULV REM, AND REM INLETS

STA. 29+74, 16.0' LT. INLET, RIM = 677.32 15" CMP W/FLARED END SECTION AND CONC THRUST BLOCK

PR REM ROW MKRS

PR FENCE REM

PR PVT REM

PR PVT BREAK

PR PAVED SHLDR REM

PR GUARD-RAIL REM

BM #2

BM #1

PR PIPE CULV REM, REM INLETS

PR REM ROW MKRS

STA. 28+89, 16.4' RT. INLET, RIM = 680.94 15" CMP W/FLARED END SECTION AND CONC THRUST BLOCK

PR FENCE REM

PR TREE REM, ACRES

BEGIN PR FENCE REM, STA. 27+36, 120.0' RT

℄ TANGENT BNSF RR

℄ IL 95

EXIST. R.O.W.

EXIST. RIPRAP

CROP LINE

FIELD

PR ACCESS RD

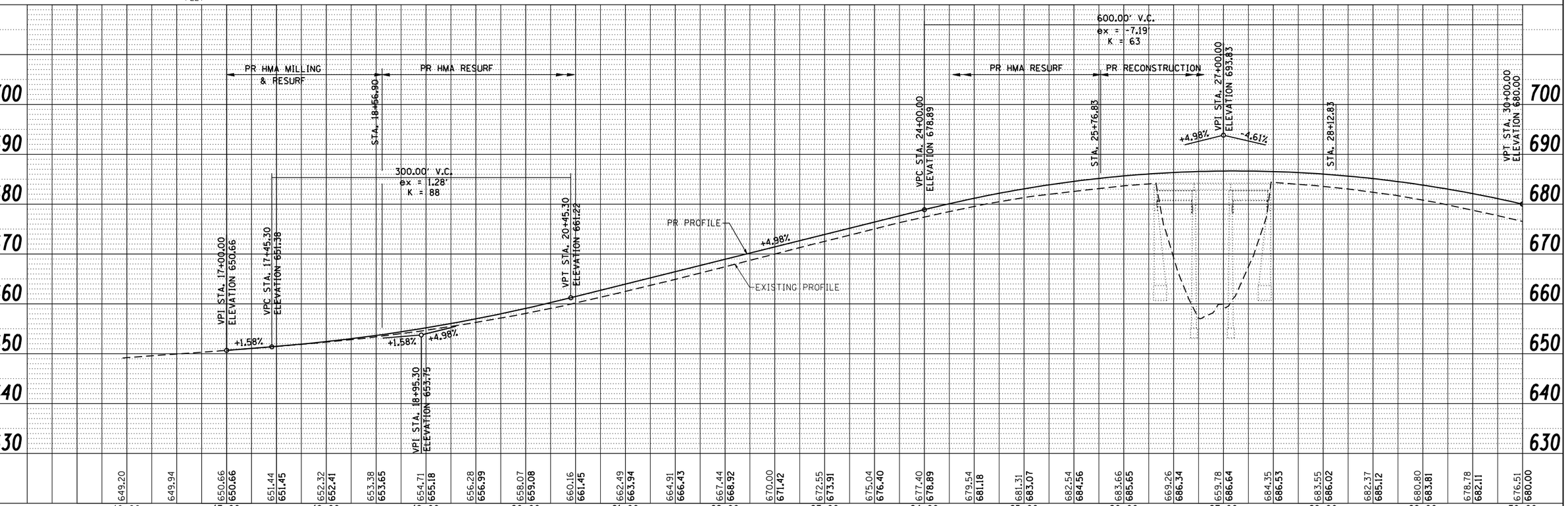
MATCHLINE STA. 30+00.00

N

GRAPHIC SCALE

METERS: 20 0 20 40 60 80 100

FEET: 50 0 50 100 150 200 250



design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	
	FILE NAME = D468689-sht-TBRplnprf.dgn	CHECKED - BTM	REVISED	
	PLOT SCALE = 100.0000 ' / IN.	DRAWN - GSJ	REVISED	
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

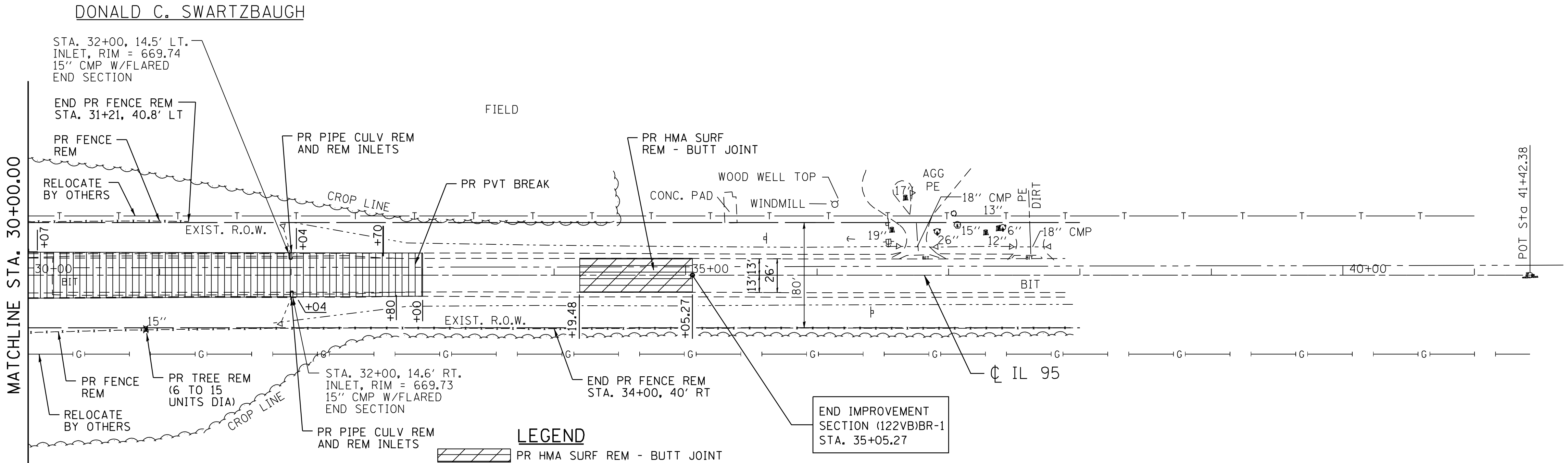
REMOVAL PLAN AND PROFILE
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 17+00.00 TO STA. 30+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	18
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

PLAN: SURVEYED | PLOTTED | DRAWING CHECKED | R/W, EASEMENT CHECKED | ALIGNMENT CHECKED | CADD FILE NAME | NOTE BOOK | NO. | BY | DATE

PROFILE: SURVEYED | PLOTTED | DRAWING CHECKED | B.M. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

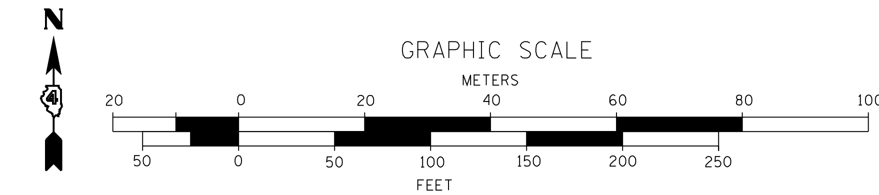


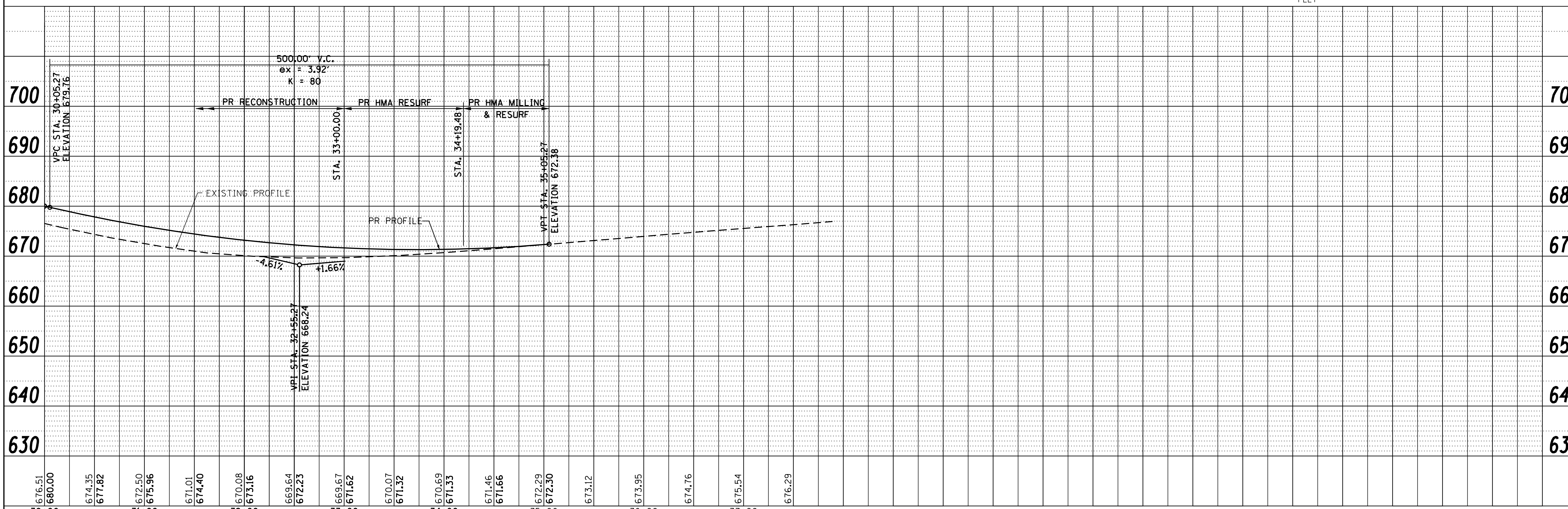
LEGEND

- PR HMA SURF REM - BUTT JOINT
- PR PVT REM
- PR APPR SLAB REM *
- PR REM OF EXIST STRUCT
- PR PVT BREAK **
- PR PAVED SHLDR REM

* COST INCLUDED IN REMOVAL OF EXISTING STRUCTURES

** PAVEMENT BREAKING SHALL BE ACCORDING TO SECTION 205.03 OF THE STANDARD SPECIFICATIONS AND WILL NOT BE PAID FOR SEPARATELY BUT SHALL CONSIDERED IN THE VARIOUS PAY ITEMS IN THE CONTRACT.





PLAN: SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME / NOTE BOOK NO. / BY / DATE

PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTAT'NS CHK'D / NOTE BOOK NO. / BY / DATE

design firm no. 184001036 — whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-TBRplnprf.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 100.0000 '/ IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

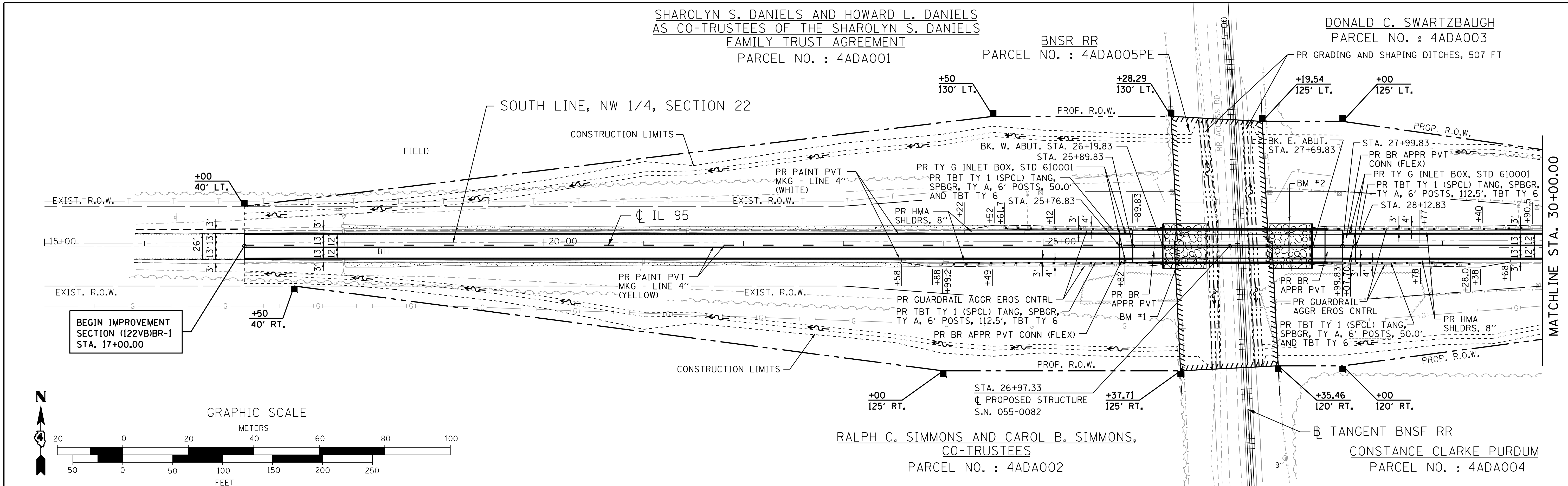
REMOVAL PLAN AND PROFILE
IL 95 OVER BNSF RAILROAD

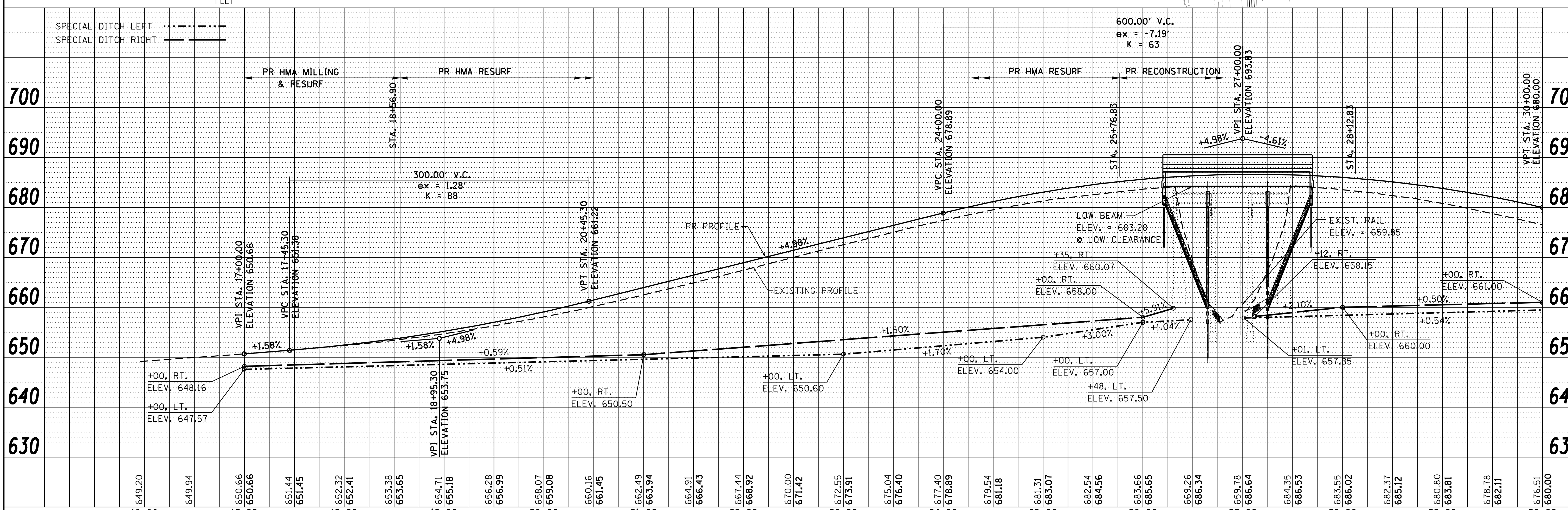
SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 30+00.00 TO STA. 35+05.27

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	19

CONTRACT NO. 68689

ILLINOIS FED. AID PROJECT


SHAROLYN S. DANIELS AND HOWARD L. DANIELS
AS CO-TRUSTEES OF THE SHAROLYN S. DANIELS
FAMILY TRUST AGREEMENT
PARCEL NO. : 4ADA001
BNSR RR
PARCEL NO. : 4ADA005PE
DONALD C. SWARTZBAUGH
PARCEL NO. : 4ADA003
PR GRADING AND SHAPING DITCHES, 507 FT
SOUTH LINE, NW 1/4, SECTION 22
CONSTRUCTION LIMITS
FIELD
EXIST. R.O.W.
PROP. R.O.W.
℄ IL 95
BIT
+50 130' LT.
+28.29 130' LT.
+19.54 125' LT.
+00 125' LT.
+00 40' LT.
+50 40' RT.
BK. W. ABUT. STA. 26+19.83
STA. 25+89.83
PR TY G INLET BOX, STD 610001
PR TBT TY 1 (SPCL) TANG, SPBGR, TY A, 6' POSTS, 50.0' AND TBT TY 6
STA. 25+76.83
PR PAINT PVT MKG - LINE 4" (WHITE)
PR HMA SHLDRS, 8"
BK. E. ABUT. STA. 27+69.83
BM #2
STA. 27+99.83
PR BR APPR PVT CONN (FLEX)
PR TY G INLET BOX, STD 610001
PR TBT TY 1 (SPCL) TANG, SPBGR, TY A, 6' POSTS, 112.5', TBT TY 6
STA. 28+12.83
PR PAINT PVT MKG - LINE 4" (YELLOW)
PR GUARDRAIL AGGR EROS CNTRL
PR TBT TY 1 (SPCL) TANG, SPBGR, TY A, 6' POSTS, 112.5', TBT TY 6
PR BR APPR PVT CONN (FLEX)
PR BR APPR PVT
BM #1
PR BR APPR PVT
PR GUARDRAIL AGGR EROS CNTRL
PR TBT TY 1 (SPCL) TANG, SPBGR, TY A, 6' POSTS, 50.0' AND TBT TY 6
PR HMA SHLDRS, 8"
BEGIN IMPROVEMENT SECTION (122VB)BR-1 STA. 17+00.00
+00 125' RT.
STA. 26+97.33
℄ PROPOSED STRUCTURE S.N. 055-0082
+37.71 125' RT.
+35.46 120' RT.
+00 120' RT.
℄ TANGENT BNSF RR
RALPH C. SIMMONS AND CAROL B. SIMMONS, CO-TRUSTEES
PARCEL NO. : 4ADA002
CONSTANCE CLARKE PURDUM
PARCEL NO. : 4ADA004
MATCHLINE STA. 30+00.00
GRAPHIC SCALE
METERS
20 0 20 40 60 80 100
50 0 50 100 150 200 250
FEET
N


SPECIAL DITCH LEFT
SPECIAL DITCH RIGHT
PR HMA MILLING & RESURF
PR HMA RESURF
PR HMA RESURF
PR RECONSTRUCTION
600.00' V.C.
ex = -7.19'
K = 63
300.00' V.C.
ex = 1.28'
K = 88
STA. 18+56.90
VPI STA. 17+00.00 ELEVATION 650.66
VPC STA. 17+45.30 ELEVATION 651.38
VPI STA. 18+95.30 ELEVATION 653.75
VPT STA. 20+45.30 ELEVATION 661.22
VPC STA. 24+00.00 ELEVATION 678.89
STA. 25+76.83
VPI STA. 27+00.00 ELEVATION 693.83
STA. 28+12.83
VPT STA. 30+00.00 ELEVATION 680.00
+4.98%
-4.61%
+1.58%
+1.58%
+4.98%
PR PROFILE
EXISTING PROFILE
LOW BEAM ELEV. = 683.28 @ LOW CLEARANCE
EXIST. RAIL ELEV. = 659.85
+35, RT. ELEV. 660.07
+00, RT. ELEV. 658.00
+12, RT. ELEV. 658.15
+00, RT. ELEV. 661.00
+00, RT. ELEV. 660.00
+01, LT. ELEV. 657.85
+00, LT. ELEV. 654.00
+00, LT. ELEV. 657.00
+48, LT. ELEV. 657.50
+00, LT. ELEV. 650.60
+00, RT. ELEV. 650.50
+00, RT. ELEV. 648.16
+00, LT. ELEV. 647.57
+0.59%
+0.51%
+1.50%
+1.70%
+3.00%
+5.91%
+1.04%
+2.10%
+0.50%
+0.54%
700 690 680 670 660 650 640 630
649.20 649.94 650.66 650.66 651.44 651.45 652.32 652.41 653.38 653.65 654.71 655.18 656.28 656.99 658.07 659.08 660.16 661.45 662.49 663.94 664.91 666.43 667.44 668.92 670.00 671.42 672.55 673.91 675.04 676.40 677.40 678.89 679.54 681.18 681.31 683.07 682.54 684.56 683.66 685.65 669.26 686.34 659.78 686.64 684.35 686.53 683.55 686.02 682.37 685.12 680.80 683.81 678.78 682.11 676.51 680.00
16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED
FILE NAME = D468689-sht-plnprf.dgn	CHECKED - BTM	REVISED
PLOT SCALE = 100.0000 ' / IN.	DRAWN - GSJ	REVISED
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL 95 OVER BNSF RAILROAD

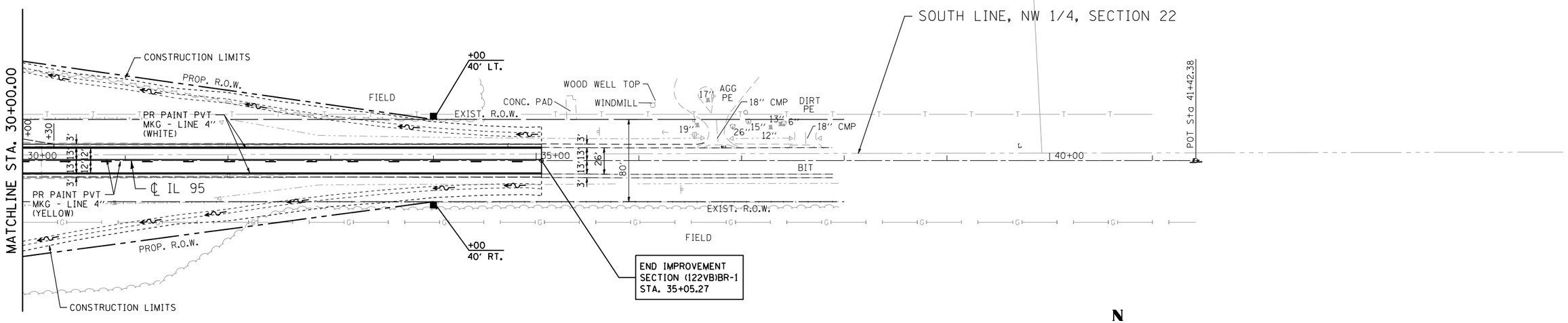
SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 17+00.00 TO STA. 30+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	20

CONTRACT NO. 68689

ILLINOIS FED. AID PROJECT

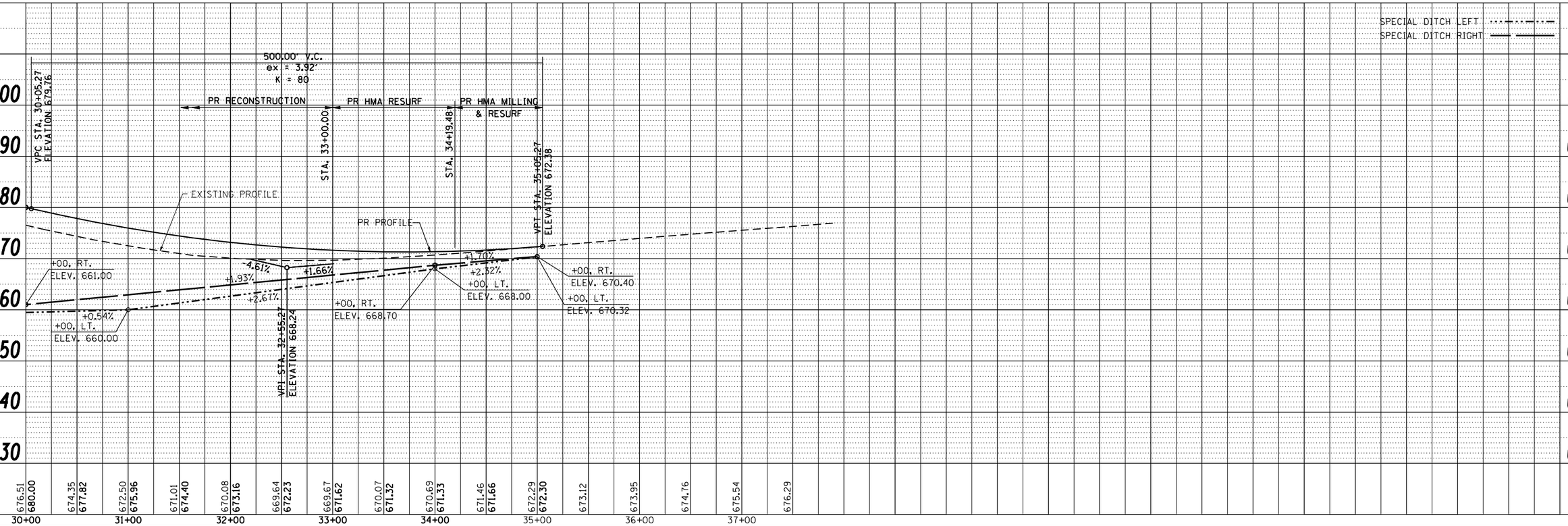
DONALD C. SWARTZBAUGH
PARCEL NO. : 4ADA003



N

GRAPHIC SCALE
METERS
20 0 20 40 60 80 100
50 0 50 100 150 200 250
FEET

CONSTANCE CLARKE PURDUM
PARCEL NO. : 4ADA004



design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED
	FILE NAME = D468689-sht-plnprf.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 100.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

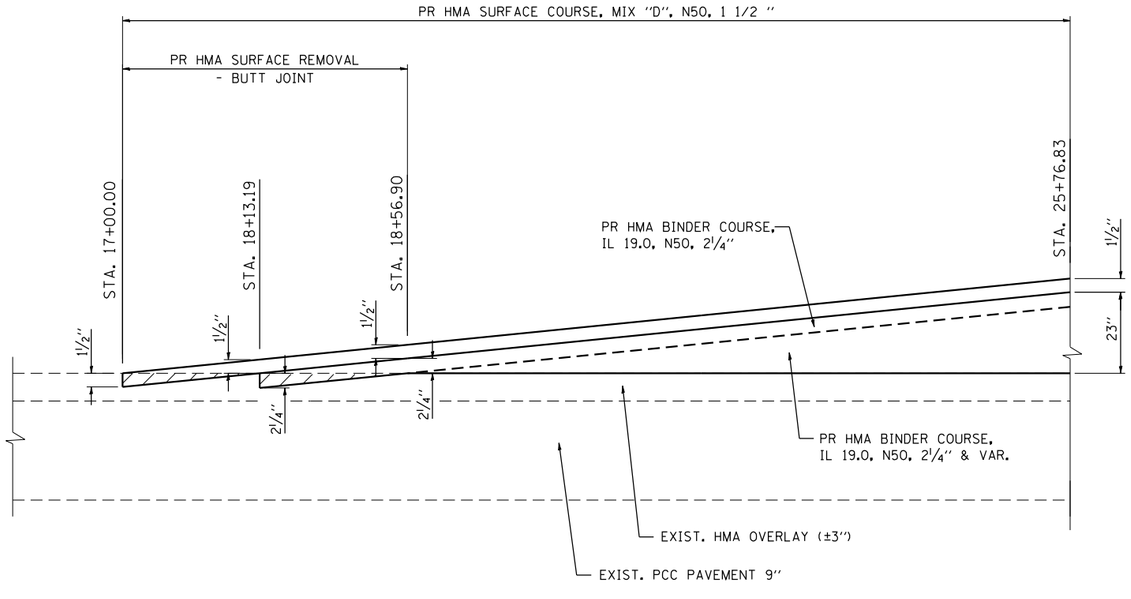
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 30+00.00 TO STA. 35+05.27

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	21
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

PLAN
PROFILE
SURVEYED
PLOTTED
DRAWN CHECKED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE
BM. NOTED
STRUCTURE NOTATNS CHKD

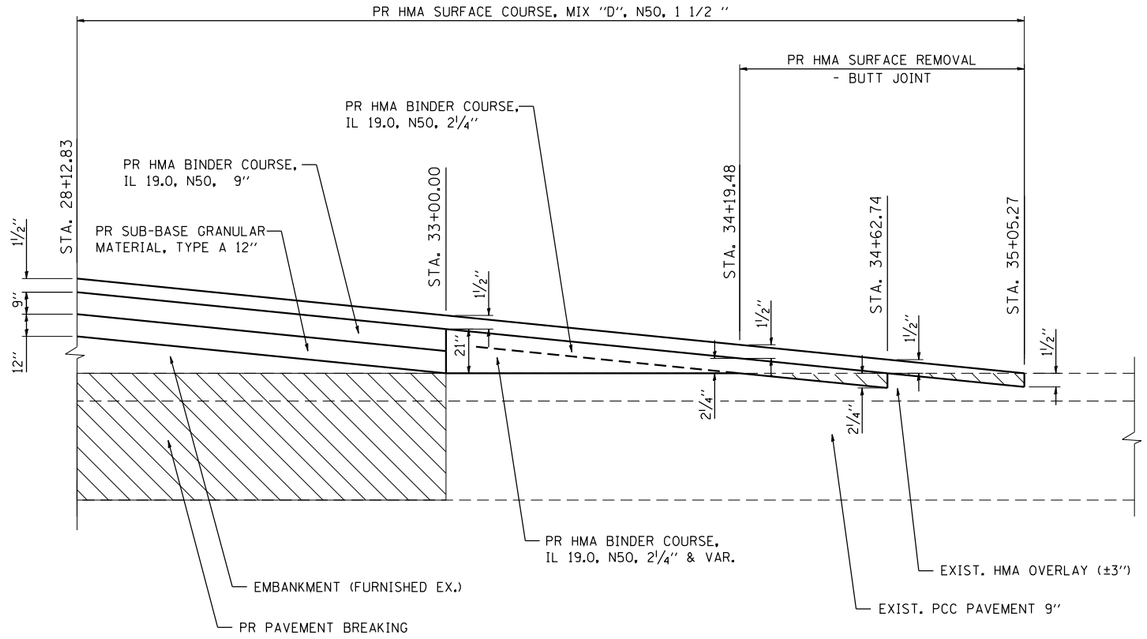


PAVEMENT DETAIL

STA. 17+00.00 TO STA. 25+76.80

NOTES:

1. SAW CUTS WILL NOT BE PAID FOR SEPARATELY, BUT THE COST WILL BE INCLUDED IN HMA SURFACE REMOVAL - BUTT JOINT.
2. SEE BUTT JOINT DETAILS, CASE 2, DISTRICT 4 STANDARDS, FOR DETAILS.
3. PAVEMENT BREAKING SHALL BE ACCORDING TOSECTION 205.03 OF THE STANDARD SPECIFICATIONS AND WILL NOT BE PAID FOR SEPARATELY BUT SHALL CONSIDERED IN THE VARIOUS PAY ITEMS IN THE CONTRACT.

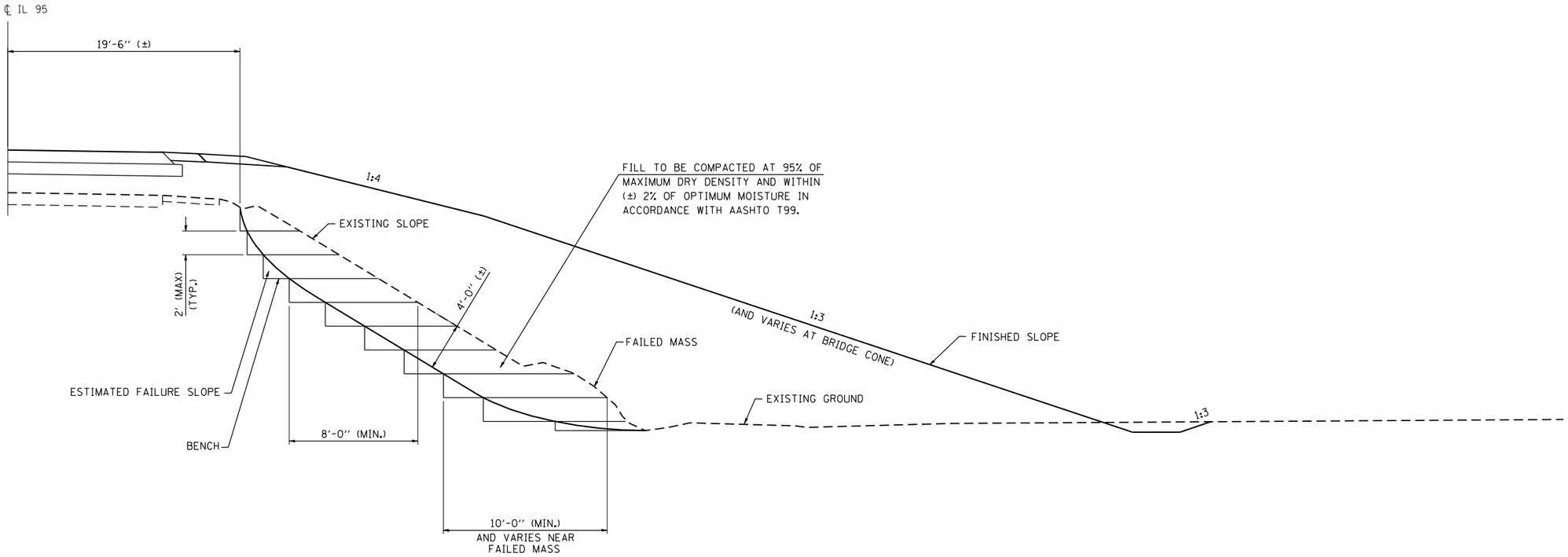


PAVEMENT DETAIL

STA. 28+12.80 TO STA. 35+05.27

design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT DETAILS IL 95 OVER BNSF RAILROAD
	FILE NAME = D468689-sht-details.dgn	CHECKED - BTM	REVISED		SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.
	PLOT SCALE = 10.0000 ' / IN.	DRAWN - GSJ	REVISED		
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	22
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



BENCHING DETAIL

STA. 21+00.00 TO STA. 26+00.00 (LT. & RT.)
STA. 27+70.00 TO STA. 31+00.00 (LT. & RT.)

NOTES:

THE PROPOSED BENCHING IS INTENDED TO REMEDIATE THE 4' (APPROX.) DEEP SURFICIAL FAILURE BY REMOVING THE ENTIRE SOIL MASS ABOVE THE ESTIMATED FAILURE SURFACE WITHIN THE STATION LIMITS SHOWN. IN LIEU OF PROVIDING THE BENCHING SHOWN, THE CONTRACTOR MAY REMOVE 4' OF SOIL FROM TOP TO BOTTOM OF THE SLOPE (WITHIN THE LIMITS SHOWN) AND THEN BENCH INTO THE REMAINING SLOPE PER THE D4 STANDARD - SLOPE STEPS DETAIL.

BENCHING OUTSIDE OF THE LIMITS SHOWN SHALL BE DONE IN ACCORDANCE WITH THE D4 STANDARD - SLOPE STEPS DETAIL.

EXCAVATING THE BENCH CUTS AS SHOWN OR PER THE D4 STANDARD - SLOPE STEPS DETAIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED WITH THE CONTRACT UNIT PRICE, CUBIC YARD, FOR EARTH EXCAVATION. THIS PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS NECESSARY TO COMPLETE THIS WORK.

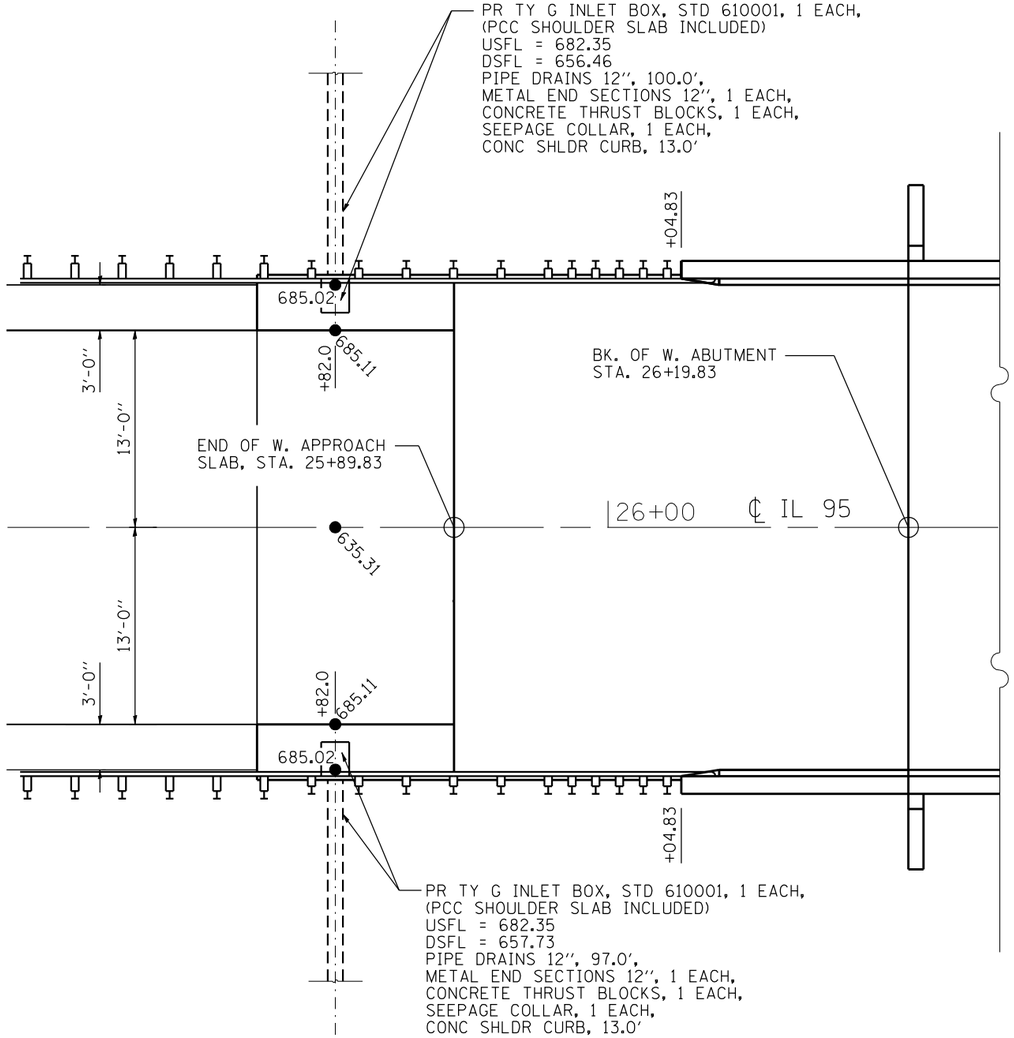
design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - WANG ENG	REVISED
	FILE NAME = D468689-sht-details.dgn	CHECKED - CWC	REVISED
	PLOT SCALE = 10.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

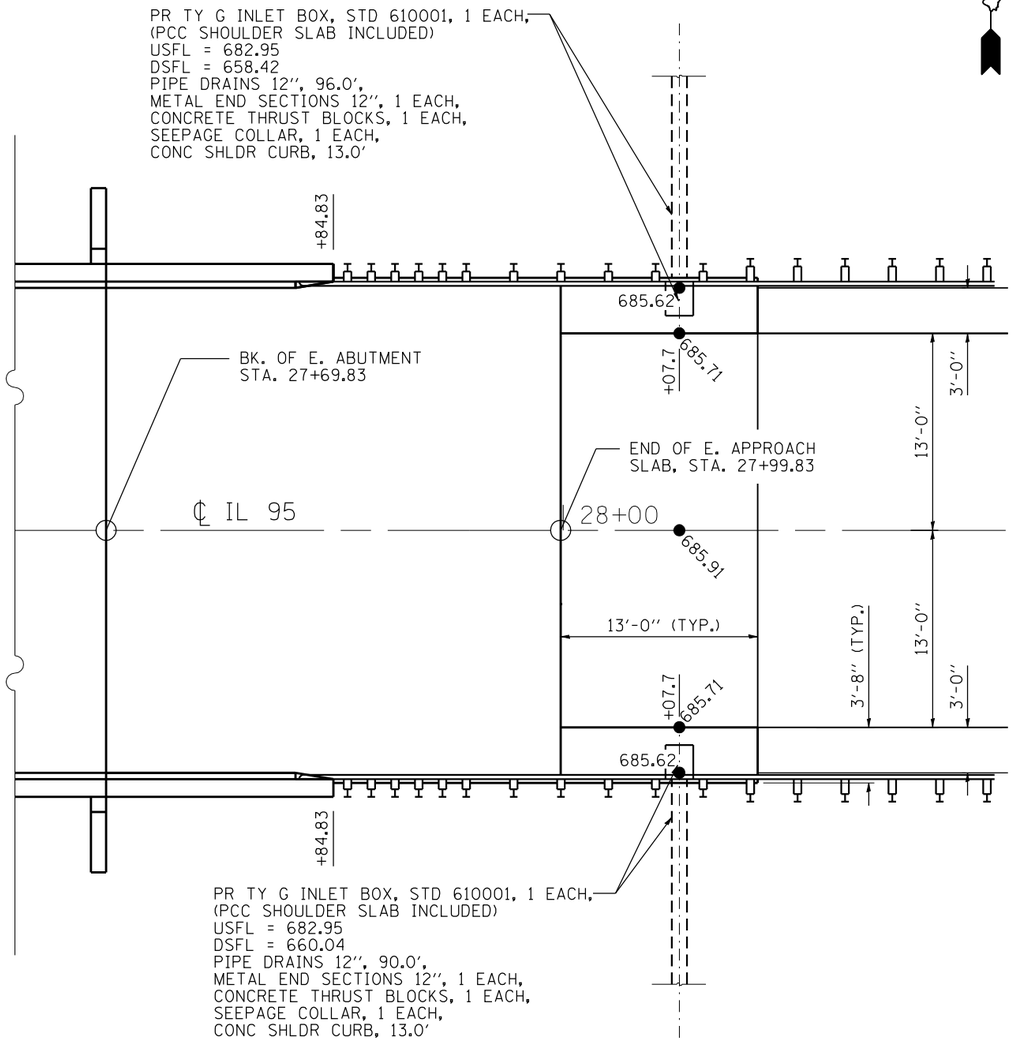
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	23
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		





N

4

NOTES:

1. WORK THIS DRAWING WITH THE INCLUDED DISTRICT 4 STANDARDS 601101-D4, 601301-D4, AND 601401-D4.
2. THE DETAIL SHOWN FOR THE PROPOSED CURB ON THE STANDARD SHALL BE OMITTED, AND THE PROPOSED CURB SHALL MATCH THAT ON THE PROPOSED BRIDGE APPROACH PAVEMENT.
3. CONCRETE CURB TO BE POURED MONOLITHICALLY WITH THE REST OF THE SLAB FOR THE PROPOSED INLET.
4. INLETS SHALL BE PLACED TO MISS GUARDRAIL POSTS.

design firm no. 184001036

whks engineers + planners + land surveyors

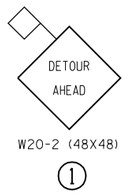
USER NAME = gjameson	DESIGNED - JAC	REVISED
FILE NAME = D468689-sht-shldr inlet	CHECKED - BTM	REVISED
PLOT SCALE = 10.0000 ' / IN.	DRAWN - GSJ	REVISED
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHOULDER INLET DETAILS

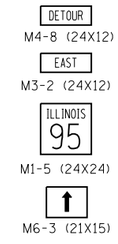
SCALE: 1" = 5' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	24
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



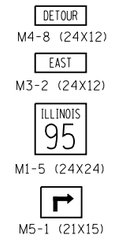
W20-2 (48X48)

①



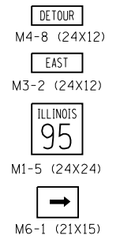
M4-8 (24X12)
M3-2 (24X12)
M1-5 (24X24)
M6-3 (21X15)

②



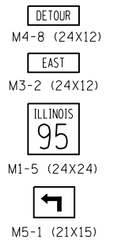
M4-8 (24X12)
M3-2 (24X12)
M1-5 (24X24)
M5-1 (21X15)

③



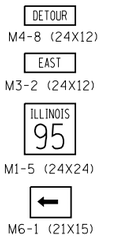
M4-8 (24X12)
M3-2 (24X12)
M1-5 (24X24)
M6-1 (21X15)

④



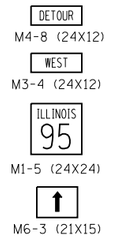
M4-8 (24X12)
M3-2 (24X12)
M1-5 (24X24)
M5-1 (21X15)

⑤



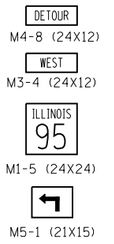
M4-8 (24X12)
M3-2 (24X12)
M1-5 (24X24)
M6-1 (21X15)

⑥



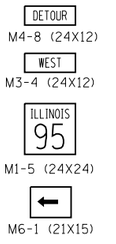
M4-8 (24X12)
M3-4 (24X12)
M1-5 (24X24)
M6-3 (21X15)

⑦



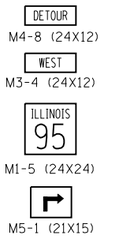
M4-8 (24X12)
M3-4 (24X12)
M1-5 (24X24)
M5-1 (21X15)

⑧



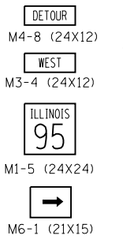
M4-8 (24X12)
M3-4 (24X12)
M1-5 (24X24)
M6-1 (21X15)

⑨



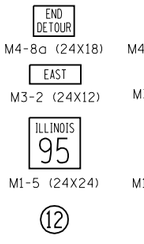
M4-8 (24X12)
M3-4 (24X12)
M1-5 (24X24)
M5-1 (21X15)

⑩



M4-8 (24X12)
M3-4 (24X12)
M1-5 (24X24)
M6-1 (21X15)

⑪



M4-8a (24X18)
M3-2 (24X12)
M1-5 (24X24)

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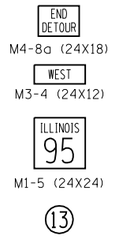
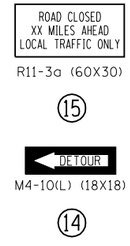


M4-8a (24X18)
M3-4 (24X12)
M1-5 (24X24)

⑬

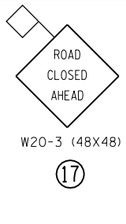


R11-3a (60X30)
M4-10(L) (18X18)

⑭ ⑮

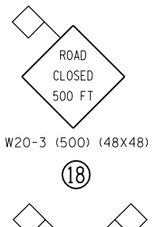
R11-2 (48X30)

⑯



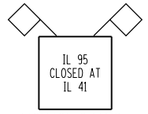
W20-3 (48X48)

⑰



W20-3 (500) (48X48)

⑱



(48X48) ORANGE

⑲

PRAIRIE CITY
IL 41
IL 9
IL 97
BUSHNELL
CH 15
CH 2
SEE DETAIL A
NEW PHILADELPHIA
MARIETTA
CUBA
SMITHFIELD
IL 95
PROJECT LOCATION
USE STANDARDS 701901 AND BLR 21 FOR ROAD CLOSURE

design firm no. 184001036

whks
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED
FILE NAME = D468689-sht-detour.dgn	CHECKED - BTM	REVISED
PLOT SCALE = 50.0000 ' / IN.	DRAWN - GSJ	REVISED
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR PLAN
IL 95 OVER BNSF RAILROAD

SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	25
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

DETOUR GENERAL NOTES

ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2004", THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION.

THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST 21 DAYS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

IF DEEMED NECESSARY BY THE ENGINEER, A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOURS IS TO BE IN EFFECT. THE CONTRACTOR SHALL SUPPLY, TO THE ENGINEER, THE NAMES AND TELEPHONES NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK.

THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY THE CONTRACTOR ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.

ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.

THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

WHEN REQUIRED, THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18" x 18".

ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8 FEET IN WIDTH EACH, FOR A SINGLE APPROACH LANE.

THE "ROAD CLOSED" (R11-2) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.

DURING NON-WORKING HOURS, AT THE POINT OF THE ROAD CLOSURE TO ALL TRAFFIC, THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.

CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED WITHIN 25 FEET BEHIND THE TYPE III BARRICADES. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.

ALL SIGNS SHOWN SHALL BE FURNISHED, ERECTED, AND MAINTAINED BY THE CONTRACTOR. FURNISHING, PLACEMENT, AND REMOVAL OF ALL DETOUR SIGNS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION FOR "DETOUR SIGNING".

THE LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

THE NUMBER AND LOCATION OF SIGNS MAY VARY DUE TO FIELD CONFLICTS. THE EXACT LOCATION OF ALL TRAFFIC CONTROL ITEMS SHALL BE APPROVED BY THE ENGINEER, CONTRACTOR, AND BUREAU OF OPERATIONS PRIOR TO ROAD CLOSURE. ANY CHANGES SHALL BE CONSIDERED AS INCLUDED IN THE PAY ITEM FOR "DETOUR SIGNING".

REFER TO STANDARD 701901 AND BLR 21 FOR ALL OTHER SIGNING AND PLACEMENT NOT SHOWN IN THIS DETAIL.

ALL M6-3 / M5-1 / M6-1 AND M4-8 SIGNS MAY BE COMBINED AS SHOWN:

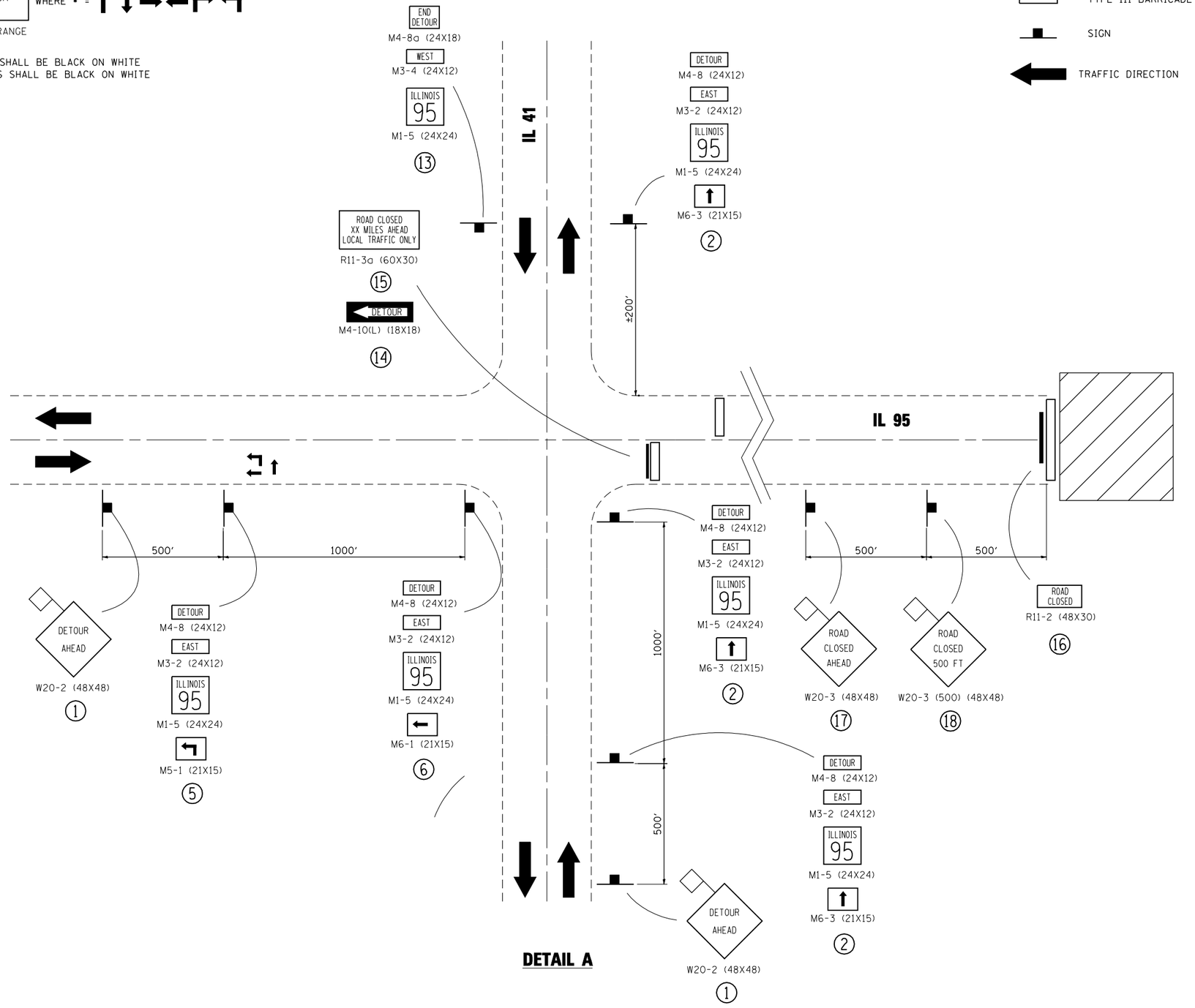
DETOUR
*
(12X15) ORANGE

WHERE * = ↑ ↓ → ← ↱ ↰

M3 SIGNS SHALL BE BLACK ON WHITE
M1-5 SIGNS SHALL BE BLACK ON WHITE

LEGEND

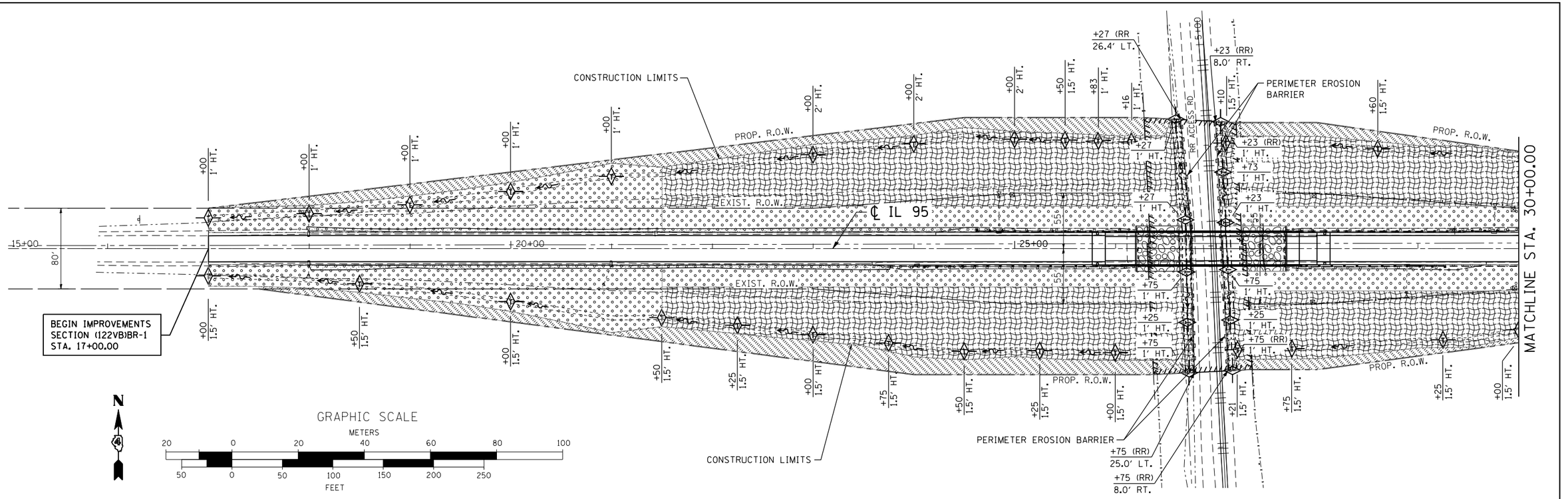
- WORK AREA
- TYPE III BARRICADE
- SIGN
- TRAFFIC DIRECTION

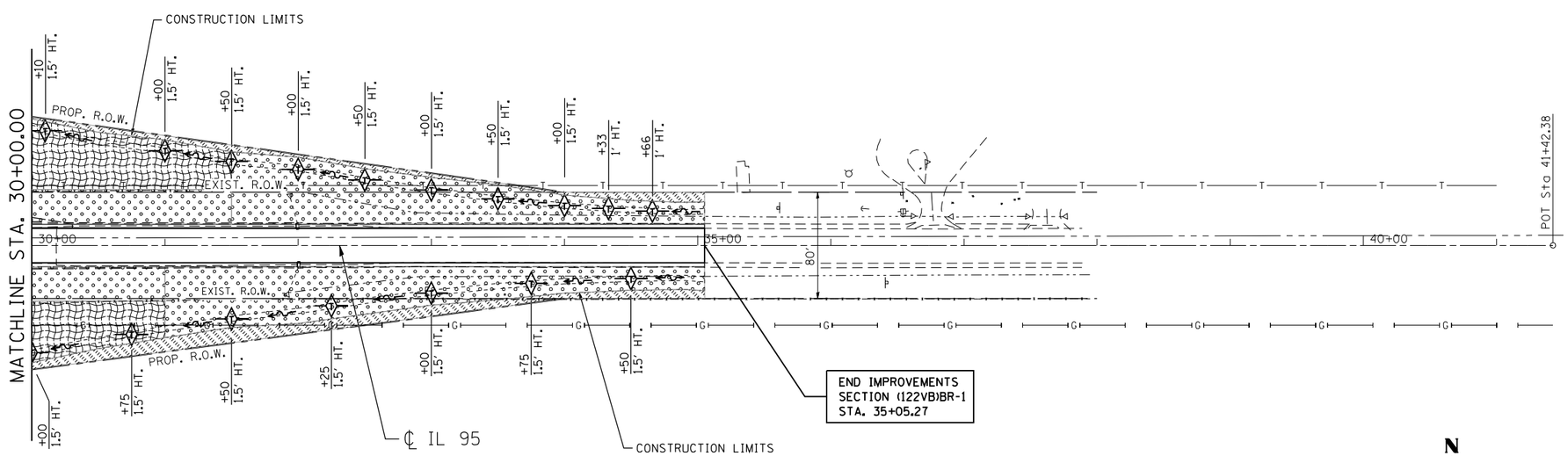


DETAIL A

design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**DETOUR DETAILS AND GENERAL NOTES IL 95 OVER BNSF RAILROAD**
	FILE NAME = D468689-sht-detour.dgn	CHECKED - BTM	REVISED		
	PLOT SCALE = 50.0000 ' / IN.	DRAWN - GSJ	REVISED		
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED		SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	26
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			





LEGEND

- INTERSEEDING, CLASS 2A
- EROSION CONTROL BLANKET AND SEEDING, CLASS 3
- SEEDING, CLASS 2A, AND MULCH, METHOD 2
- RIP RAP
- TEMPORARY DITCH CHECK
- PERIMETER EROSION BARRIER

NOTES:

1. THE ULTIMATE RECEIVING WATERS FOR STORM WATER RUNOFF FROM THIS SITE IS KEPPLE CREEK.
2. THE LOCATIONS OF THE PERIMETER EROSION BARRIER AND TEMPORARY DITCH CHECKS MAY BE ADJUSTED BY THE ENGINEER TO ADJUST FOR FIELD CONDITIONS.

N

GRAPHIC SCALE

METERS

20 0 20 40 60 80 100

50 0 50 100 150 200 250

FEET

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-eros.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 100.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 95 OVER BNSF RAILROAD

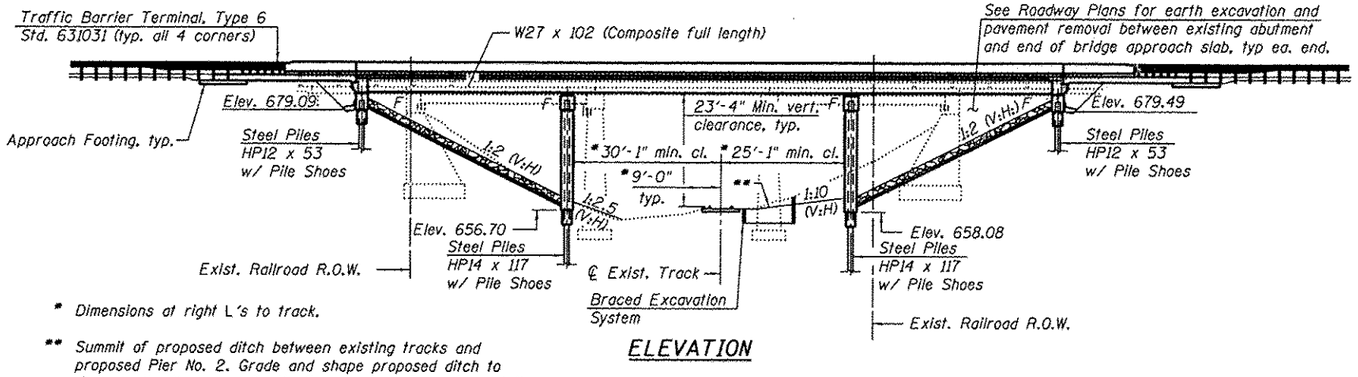
SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 17+00.00 TO STA. 35+05.27

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	27
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

Bench Mark: BM #1 - Chiseled "□" in top of S.W. Wingwall S.N. 055-0017. Sta. 26+33, 18' Rt., Elev. 684.08
BM #2 - State of IL Brass Disk set in top of N.E. Wingwall S.N. 055-0017. Sta. 27+47. 17' Lt., Elev. 684.16

Existing Structure: S.N. 055-0017 built in 1931 as S.B.I. Route 95, Section 122VB. The original 3-span Reinforced Concrete T-Beam superstructure was replaced with 17" P.P.C. Deck Beams in 1985 utilizing the existing spill thru abutments and 3-column frame piers. The caps of the existing substructure were widened to accommodate the new, wider superstructure. 117'-2¼" bk. to bk. abutments, 34'-0" out to out superstructure. Structure to be removed and replaced. Road to be closed and traffic detoured during construction.

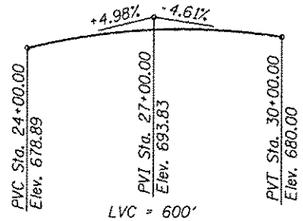
Salvage: Salvage existing Steel Beams under P.P.C. Deck Beams and deliver to IDOT Bridge Maintenance Yard, 604 Camp St., East Peoria, IL 61611.



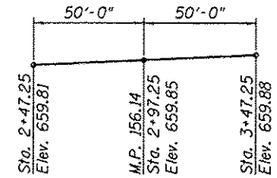
ELEVATION

* Dimensions at right L's to track.

** Summit of proposed ditch between existing tracks and proposed Pier No. 2. Grade and shape proposed ditch to drain to the North and South. See Roadway Plans for details.



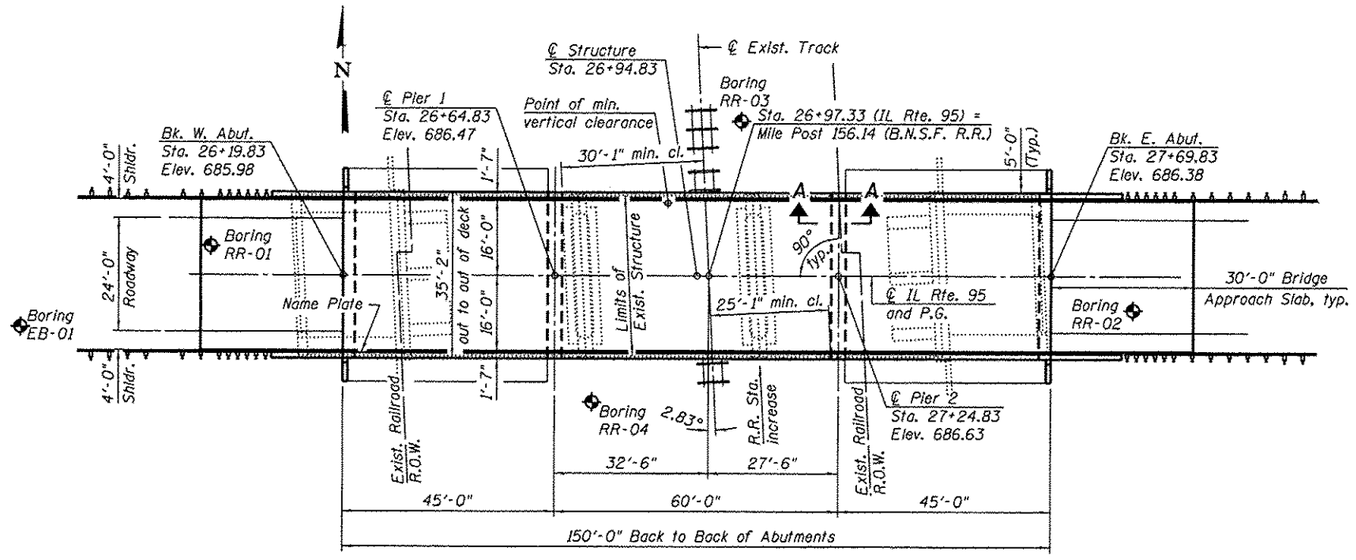
PROFILE GRADE
Along ℄ IL Rte. 95



PROFILE GRADE
Top of Rail B.N.S.F. R.R.

Note:
The Elevation of the Existing Top of Rail shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to the commencement of construction.

INDEX OF SHEETS



PLAN

LEGEND

Soil Boring Location

Notes:
For Section A-A, see sheet 2 of 36.
For Structure Removal Plan and Braced Excavation System details, see sheet 3 of 36.

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

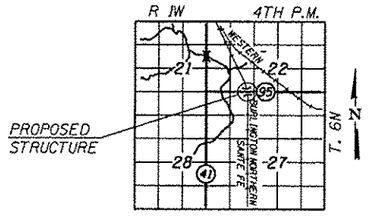
DESIGN SPECIFICATIONS
AASHTO LRFD Design Specifications, 5th Edition with 2010 Interims

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Grade 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.112
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.172
Soil Site Class = D

STATE OF ILLINOIS
SLADE B. CHELBIAN
081-006565
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER
Expires: 11/30/2016
8/13/15

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 95 OVER B.N.S.F. R.R.
F.A.P. RTE. 687 - SEC. (122VB)BR-1
MCDONOUGH COUNTY
STATION 26+94.83
STRUCTURE NO. 055-0082

design firm no. 184001036 — whks engineers • planners • land surveyors

USER NAME = #OPERATOR#	DESIGNED - TJZ	REVISED	
FILE NAME = 055z002-68689.dgn	CHECKED - SBC	REVISED	
PLOT SCALE = 0.2 '/ in.	DRAWN - DLH	REVISED	
PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	28
		CONTRACT NO. 68689		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

Fasteners shall be ASTM A325 Type 3. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 105,600 lbs.

All structural steel shall be AASHTO M 270 Grade 50W.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{1}/_{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 1'-6". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

Slipforming of parapets is not allowed.

The Contractor is advised that the existing PPC Deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for the removal and replacement of the superstructure.

Any shoring system that impacts the Railroad's operation and/or supports the Railroad's embankment shall be designed and constructed per Railroad Guidelines for Temporary Shoring.

Erection over the Railroad's track shall be planned such that it enables the track(s) to remain open to traffic per Railroad Requirements.

All permanent clearances shall be verified before project closeout.

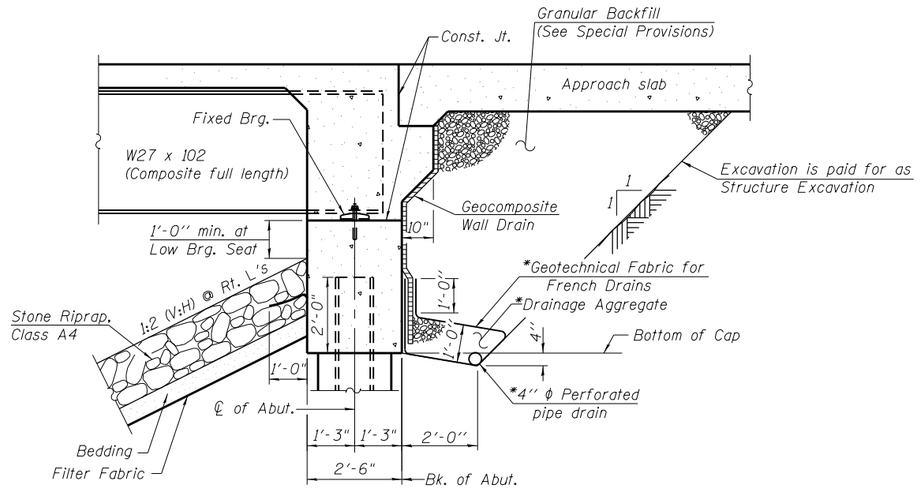
Call the following numbers at least 48 hours prior to commencing work to determine location of Railroad Utilities:

Fiber Optic Engineering, "Call Before You Dig", call 1-800-533-2891.

Grade Crossing / Signal Hotline, call 1-800-832-5452.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		463	463
Filter Fabric	Sq. Yd.		463	463
Removal of Existing Structures	Each		1	1
Protective Shield	Sq. Yd.		129	129
Structure Excavation	Cu. Yd.		251	251
Concrete Structures	Cu. Yd.		215.6	215.6
Concrete Superstructure	Cu. Yd.	296.6		296.6
Bridge Deck Grooving	Sq. Yd.	703		703
Concrete Encasement	Cu. Yd.		10.8	10.8
Protective Coat	Sq. Yd.	906		906
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	4,032		4,032
Reinforcement Bars, Epoxy Coated	Pound	72,450	23,530	95,980
Furnishing Steel Piles HP 12 x 53	Foot		645	645
Furnishing Steel Piles HP 14 x 117	Foot		995	995
Driving Piles	Foot		1,640	1,640
Test Pile Steel HP 12 x 53	Each		2	2
Test Pile Steel HP 14 x 117	Each		2	2
Pile Shoes	Each		24	24
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	24		24
Anchor Bolts, $1^{1}/_{2}$"	Each	24		24
Geocomposite Wall Drain	Sq. Yd.		57	57
Braced Excavation	Cu. Yd.		59.7	59.7
Granular Backfill For Structures	Cu. Yd.		88	88
Asbestos Bearing Pad Removal	Each	44		44
Pipe Underdrains for Structures 4"	Foot		130	130



SECTION THRU INTEGRAL ABUTMENT

(Horizontal dimensions are at right L's.)

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

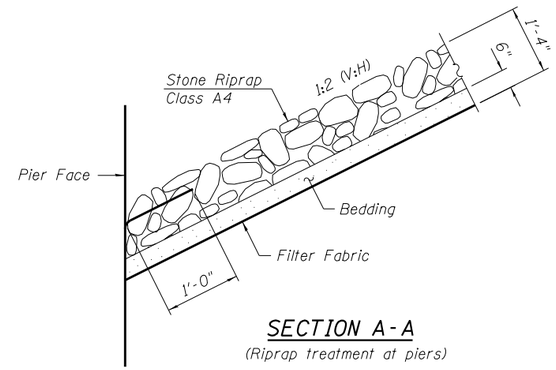
Note:

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

STATION 26+94.83
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 687 SEC. (122VB)BR-1
LOADING HL-93
STRUCTURE NO. 055-0082

NAME PLATE

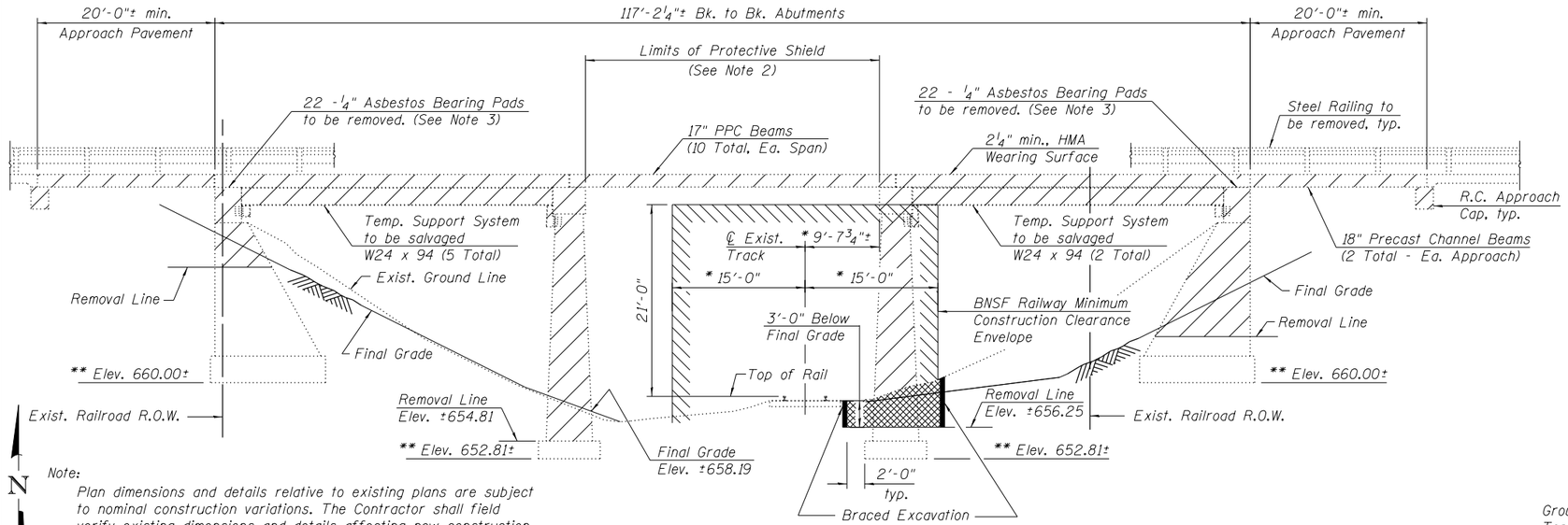
See Std. 515001



SECTION A-A

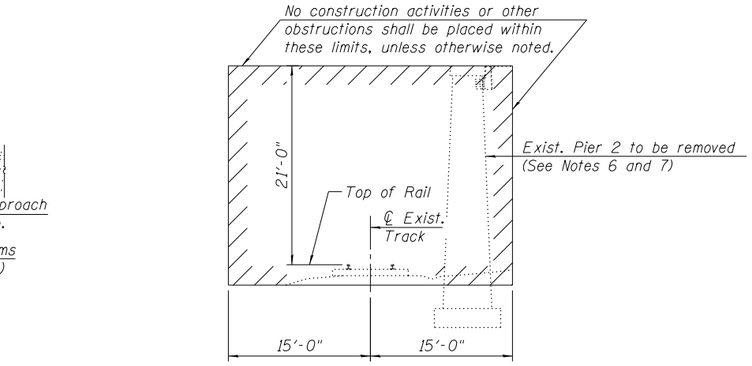
(Riprap treatment at piers)

design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 055-0082	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME = 055S0082-68689.dgn	CHECKED - SBC	REVISED			687	(122VB)BR-1	McDONOUGH	95	29
	PLOT SCALE = 0.2 '' / in.	DRAWN - DLH	REVISED						CONTRACT NO. 68689	
	PLOT DATE = 9/24/2015	CHECKED - SBC	REVISED		SHEET NO. 2 OF 36 SHEETS			ILLINOIS	FED. AID PROJECT	



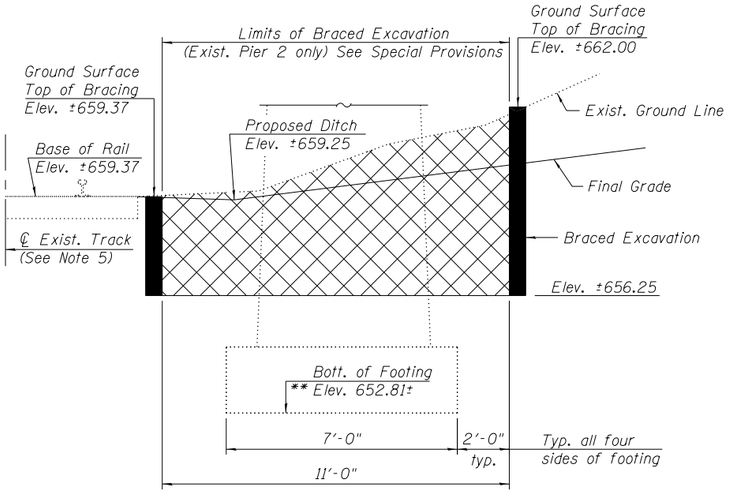
Note:
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction.

REMOVAL ELEVATION



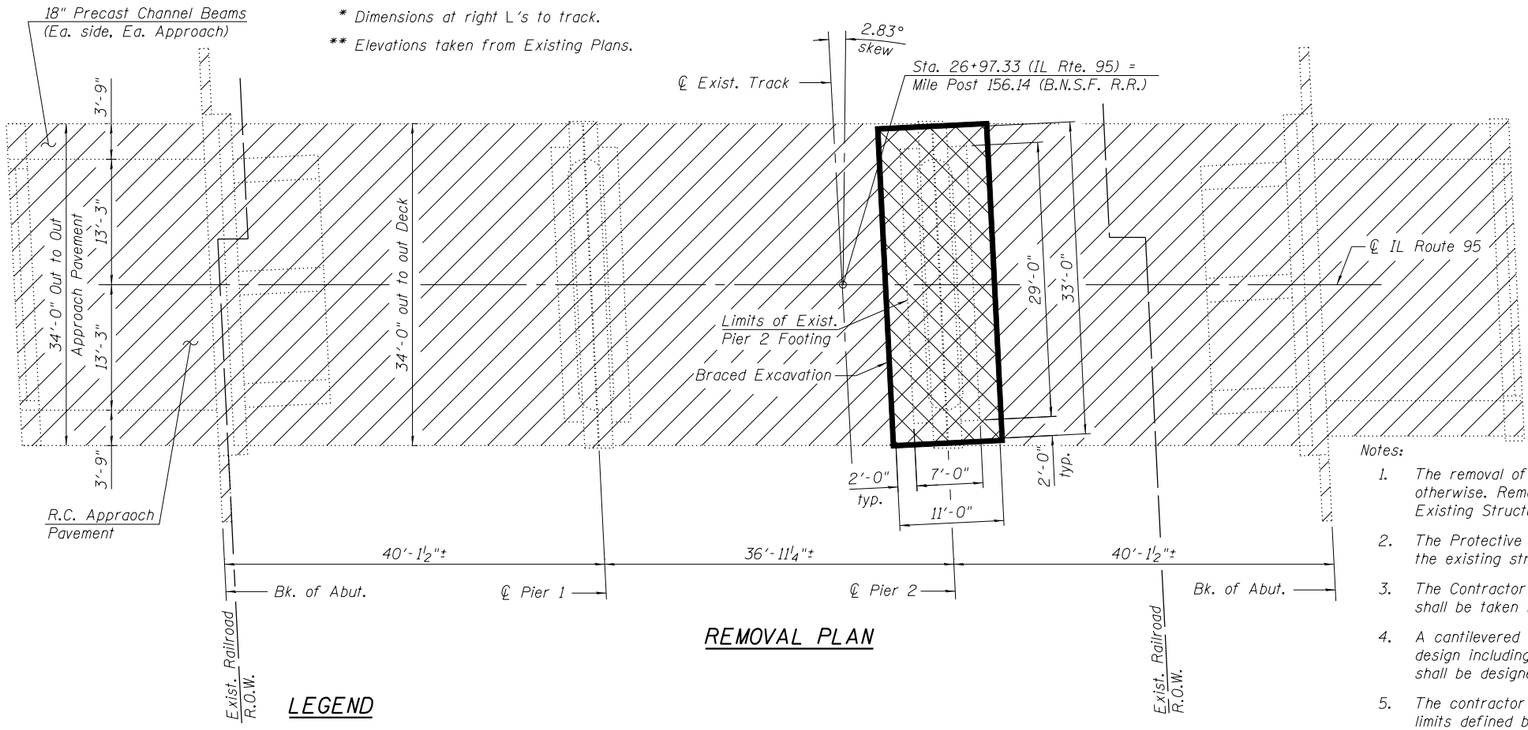
MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(Normal to Railroad)



BRACED EXCAVATION DETAIL

(Dimensions at right L's to Pier)



REMOVAL PLAN

LEGEND

Limits of Removal of Existing Structures (See Note 1)

Limits of Braced Excavation (See Note 4)

BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures	Each	1
Asbestos Bearing Pad Removal	Each	44
Braced Excavation	Cu. Yd.	59.7
Protective Shield	Sq. Yd.	129

Notes:

1. The removal of the existing structure shall be in accordance with Article 501 of the Standard Specifications, unless noted otherwise. Removal of existing railing, approach pavement, and wearing surface is included in the pay item Removal of Existing Structures.
2. The Protective Shield shall protect the limits shown. The width to be protected shall be the out-to-out width of the existing structure.
3. The Contractor is advised that the existing bearing pads at each abutment contain asbestos. All necessary precautions shall be taken in removing, handling, transporting and disposing of the bearing pads. See Special Provisions.
4. A cantilevered sheet piling design does not appear feasible. The Contractor shall submit a Braced Excavation System design including plan details and calculations for review and acceptance by the Engineer. The Braced Excavation System shall be designed and constructed per Railroad Guidelines for Temporary Shoring. See Special Provisions.
5. The contractor must monitor and record top-of-rail elevations and track alignment. The movement shall be within the limits defined by local Railroad Manager of Track Maintenance (MTM). Displacements exceeding the limits defined by the MTM must be immediately reported to the Railroad. Monitoring and any required track adjusted, as needed, shall be included in the cost of Braced Excavation.
6. All demolition within the BNSF Railroad's right-of-way and/or demolition that may impact the Railroad's track or operations shall comply with the Railroad's Demolition requirements.
7. The demolition required at Existing Pier 2 is within the BNSF Railroad's Minimum Construction Clearance Envelope. This will require temporary closure of the Railroad's track during installation and removal of the braced excavation system. Coordination with the BNSF Railroad will be required. See Special Provisions.

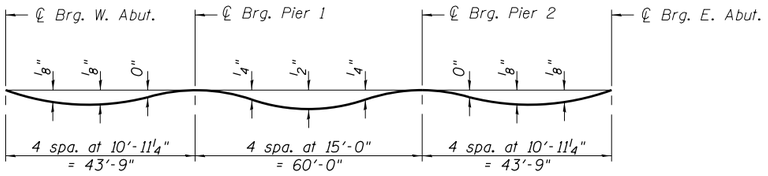
design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED	
FILE NAME = 055$082-68689.dgn	CHECKED - SBC	REVISED	
PLOT SCALE = 02 '' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE REMOVAL PLAN AND DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 3 OF 36 SHEETS

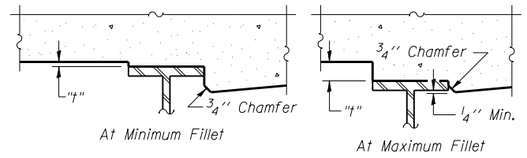
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	30
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			



Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 4 and 5 of 36.

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

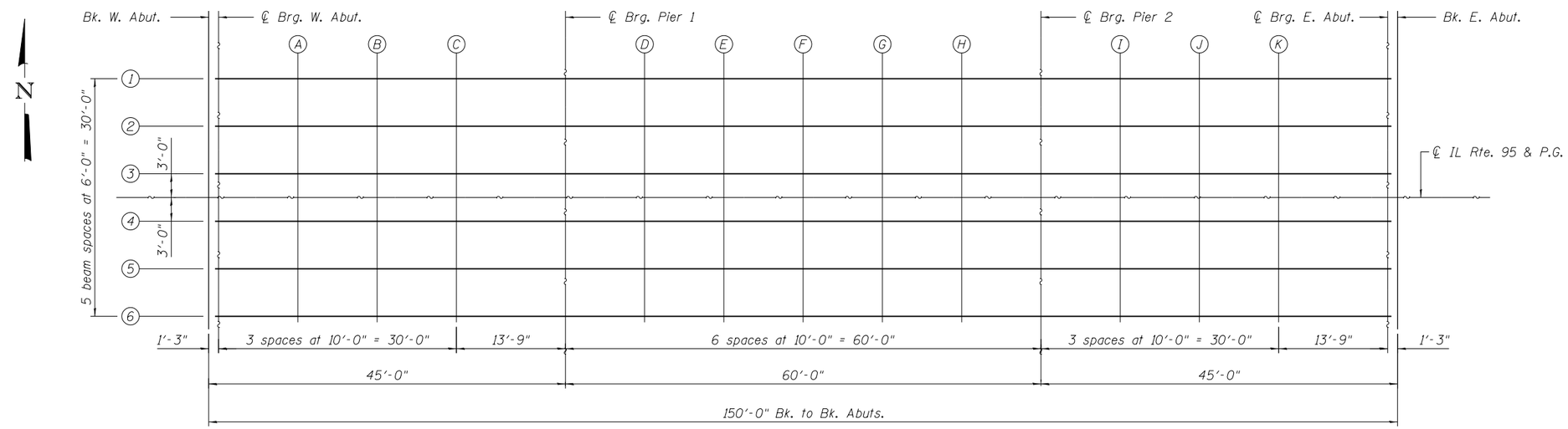


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 4 and 5 of 36, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	-15.00	685.73	685.73
℄ Brg. W. Abut	26+21.08	-15.00	685.74	685.74
A	26+31.08	-15.00	685.88	685.89
B	26+41.08	-15.00	686.00	686.02
C	26+51.08	-15.00	686.11	686.11
℄ Pier 1	26+64.83	-15.00	686.22	686.22
D	26+74.83	-15.00	686.29	686.31
E	26+84.83	-15.00	686.34	686.37
F	26+94.83	-15.00	686.38	686.42
G	27+04.83	-15.00	686.39	686.43
H	27+14.83	-15.00	686.40	686.41
℄ Pier 2	27+24.83	-15.00	686.38	686.38
I	27+34.83	-15.00	686.36	686.36
J	27+44.83	-15.00	686.31	686.32
K	27+54.83	-15.00	686.25	686.26
℄ Brg. E. Abut.	27+68.58	-15.00	686.14	686.14
Bk. E. Abut.	27+69.83	-15.00	686.13	686.13



PLAN

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	-9.00	685.84	685.84
℄ Brg. W. Abut	26+21.08	-9.00	685.85	685.85
A	26+31.08	-9.00	685.99	686.00
B	26+41.08	-9.00	686.11	686.12
C	26+51.08	-9.00	686.22	686.22
℄ Pier 1	26+64.83	-9.00	686.33	686.33
D	26+74.83	-9.00	686.40	686.41
E	26+84.83	-9.00	686.45	686.48
F	26+94.83	-9.00	686.49	686.53
G	27+04.83	-9.00	686.50	686.54
H	27+14.83	-9.00	686.51	686.52
℄ Pier 2	27+24.83	-9.00	686.49	686.49
I	27+34.83	-9.00	686.46	686.47
J	27+44.83	-9.00	686.42	686.43
K	27+54.83	-9.00	686.36	686.37
℄ Brg. E. Abut.	27+68.58	-9.00	686.25	686.25
Bk. E. Abut.	27+69.83	-9.00	686.24	686.24

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	-3.00	685.93	685.93
℄ Brg. W. Abut	26+21.08	-3.00	685.95	685.95
A	26+31.08	-3.00	686.08	686.09
B	26+41.08	-3.00	686.20	686.22
C	26+51.08	-3.00	686.31	686.32
℄ Pier 1	26+64.83	-3.00	686.43	686.43
D	26+74.83	-3.00	686.49	686.51
E	26+84.83	-3.00	686.54	686.58
F	26+94.83	-3.00	686.58	686.62
G	27+04.83	-3.00	686.60	686.63
H	27+14.83	-3.00	686.60	686.62
℄ Pier 2	27+24.83	-3.00	686.59	686.59
I	27+34.83	-3.00	686.56	686.56
J	27+44.83	-3.00	686.51	686.53
K	27+54.83	-3.00	686.45	686.47
℄ Brg. E. Abut.	27+68.58	-3.00	686.34	686.34
Bk. E. Abut.	27+69.83	-3.00	686.33	686.33

℄ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	0.00	685.98	685.98
℄ Brg. W. Abut	26+21.08	0.00	685.99	685.99
A	26+31.08	0.00	686.13	686.14
B	26+41.08	0.00	686.25	686.26
C	26+51.08	0.00	686.36	686.36
℄ Pier 1	26+64.83	0.00	686.47	686.47
D	26+74.83	0.00	686.54	686.55
E	26+84.83	0.00	686.59	686.62
F	26+94.83	0.00	686.63	686.67
G	27+04.83	0.00	686.64	686.68
H	27+14.83	0.00	686.65	686.66
℄ Pier 2	27+24.83	0.00	686.63	686.63
I	27+34.83	0.00	686.60	686.61
J	27+44.83	0.00	686.56	686.57
K	27+54.83	0.00	686.50	686.51
℄ Brg. E. Abut.	27+68.58	0.00	686.39	686.39
Bk. E. Abut.	27+69.83	0.00	686.38	686.38

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	3.00	685.93	685.93
℄ Brg. W. Abut	26+21.08	3.00	685.95	685.95
A	26+31.08	3.00	686.08	686.09
B	26+41.08	3.00	686.20	686.22
C	26+51.08	3.00	686.31	686.32
℄ Pier 1	26+64.83	3.00	686.43	686.43
D	26+74.83	3.00	686.49	686.51
E	26+84.83	3.00	686.54	686.58
F	26+94.83	3.00	686.58	686.62
G	27+04.83	3.00	686.60	686.63
H	27+14.83	3.00	686.60	686.62
℄ Pier 2	27+24.83	3.00	686.59	686.59
I	27+34.83	3.00	686.56	686.56
J	27+44.83	3.00	686.51	686.53
K	27+54.83	3.00	686.45	686.47
℄ Brg. E. Abut.	27+68.58	3.00	686.34	686.34
Bk. E. Abut.	27+69.83	3.00	686.33	686.33

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	9.00	685.84	685.84
℄ Brg. W. Abut	26+21.08	9.00	685.85	685.85
A	26+31.08	9.00	685.99	686.00
B	26+41.08	9.00	686.11	686.12
C	26+51.08	9.00	686.22	686.22
℄ Pier 1	26+64.83	9.00	686.33	686.33
D	26+74.83	9.00	686.40	686.41
E	26+84.83	9.00	686.45	686.48
F	26+94.83	9.00	686.49	686.53
G	27+04.83	9.00	686.50	686.54
H	27+14.83	9.00	686.51	686.52
℄ Pier 2	27+24.83	9.00	686.49	686.49
I	27+34.83	9.00	686.46	686.47
J	27+44.83	9.00	686.42	686.43
K	27+54.83	9.00	686.36	686.37
℄ Brg. E. Abut.	27+68.58	9.00	686.25	686.25
Bk. E. Abut.	27+69.83	9.00	686.24	686.24

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	26+19.83	15.00	685.73	685.73
℄ Brg. W. Abut	26+21.08	15.00	685.74	685.74
A	26+31.08	15.00	685.88	685.89
B	26+41.08	15.00	686.00	686.02
C	26+51.08	15.00	686.11	686.11
℄ Pier 1	26+64.83	15.00	686.22	686.22
D	26+74.83	15.00	686.29	686.31
E	26+84.83	15.00	686.34	686.37
F	26+94.83	15.00	686.38	686.42
G	27+04.83	15.00	686.39	686.43
H	27+14.83	15.00	686.40	686.41
℄ Pier 2	27+24.83	15.00	686.38	686.38
I	27+34.83	15.00	686.36	686.36
J	27+44.83	15.00	686.31	686.32
K	27+54.83	15.00	686.25	686.26
℄ Brg. E. Abut.	27+68.58	15.00	686.14	686.14
Bk. E. Abut.	27+69.83	15.00	686.13	686.13

Note:
Work this sheet with sheet 4 of 36.

INSIDE FACE OF NORTH PARAPET

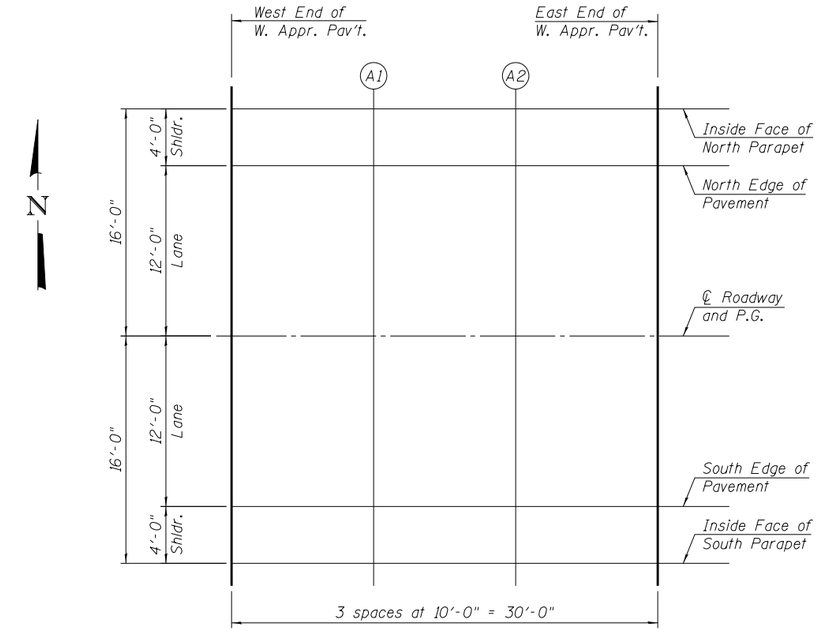
Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Pav't.	25+89.83	-16.00	685.19
A1	25+99.83	-16.00	685.38
A2	26+09.83	-16.00	685.55
E. End of W. Appr. Pav't.	26+19.83	-16.00	685.71

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Pav't.	25+89.83	-12.00	685.28
A1	25+99.83	-12.00	685.46
A2	26+09.83	-12.00	685.63
E. End of W. Appr. Pav't.	26+19.83	-12.00	685.79

℄ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Pav't.	25+89.83	0.00	685.46
A1	25+99.83	0.00	685.65
A2	26+09.83	0.00	685.82
E. End of W. Appr. Pav't.	26+19.83	0.00	685.98



PLAN
(West Approach)

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Pav't.	25+89.83	12.00	685.28
A1	25+99.83	12.00	685.46
A2	26+09.83	12.00	685.63
E. End of W. Appr. Pav't.	26+19.83	12.00	685.79

INSIDE FACE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Pav't.	25+89.83	16.00	685.19
A1	25+99.83	16.00	685.38
A2	26+09.83	16.00	685.55
E. End of W. Appr. Pav't.	26+19.83	16.00	685.71

INSIDE FACE OF NORTH PARAPET

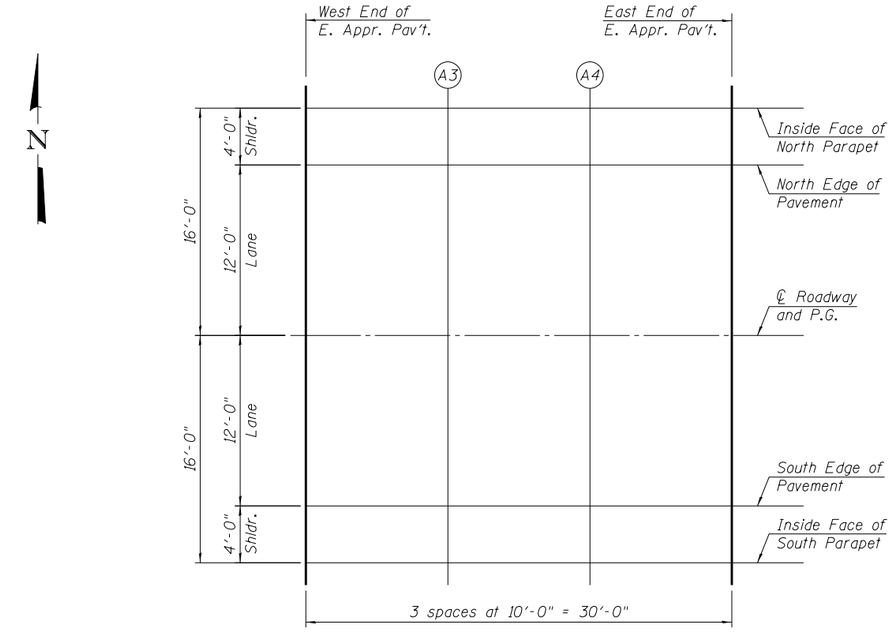
Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Pav't.	27+69.83	-16.00	686.11
A3	27+79.83	-16.00	686.01
A4	27+89.83	-16.00	685.89
E. End of E. Appr. Pav't.	27+99.83	-16.00	685.76

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Pav't.	27+69.83	-12.00	686.19
A3	27+79.83	-12.00	686.09
A4	27+89.83	-12.00	685.97
E. End of E. Appr. Pav't.	27+99.83	-12.00	685.84

℄ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Pav't.	27+69.83	0.00	686.38
A3	27+79.83	0.00	686.28
A4	27+89.83	0.00	686.16
E. End of E. Appr. Pav't.	27+99.83	0.00	686.03



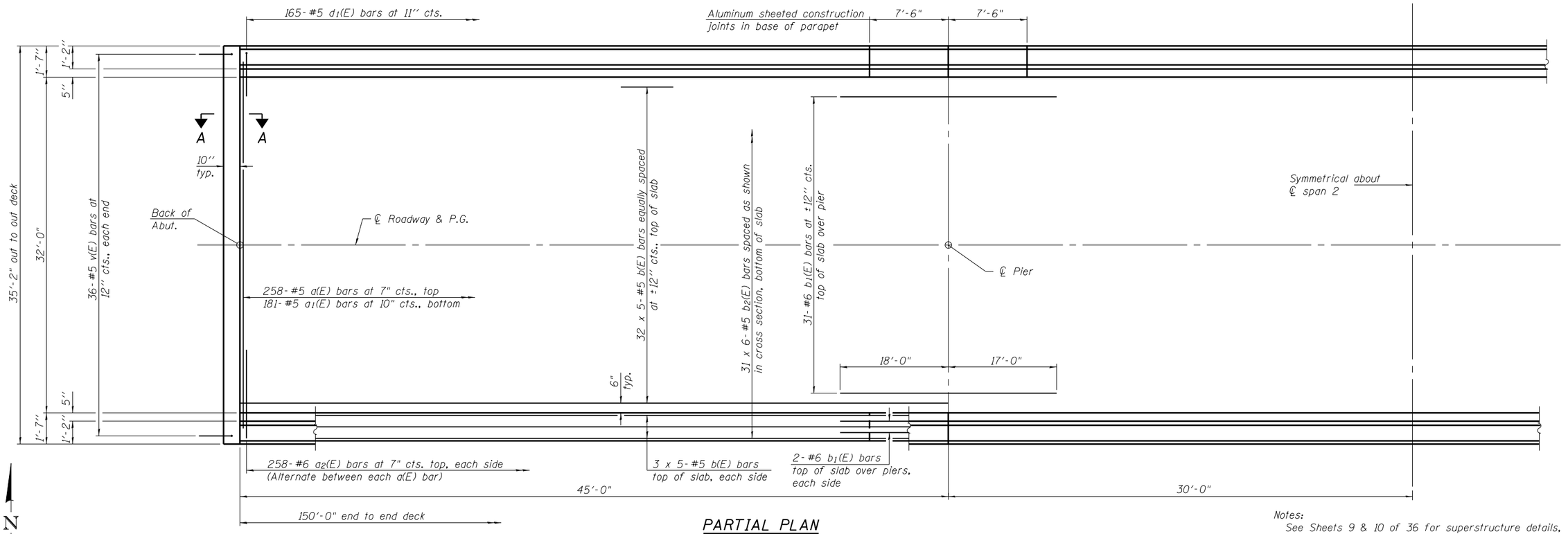
PLAN
(East Approach)

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Pav't.	27+69.83	12.00	686.19
A3	27+79.83	12.00	686.09
A4	27+89.83	12.00	685.97
E. End of E. Appr. Pav't.	27+99.83	12.00	685.84

INSIDE FACE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Pav't.	27+69.83	16.00	686.11
A3	27+79.83	16.00	686.01
A4	27+89.83	16.00	685.89
E. End of E. Appr. Pav't.	27+99.83	16.00	685.76

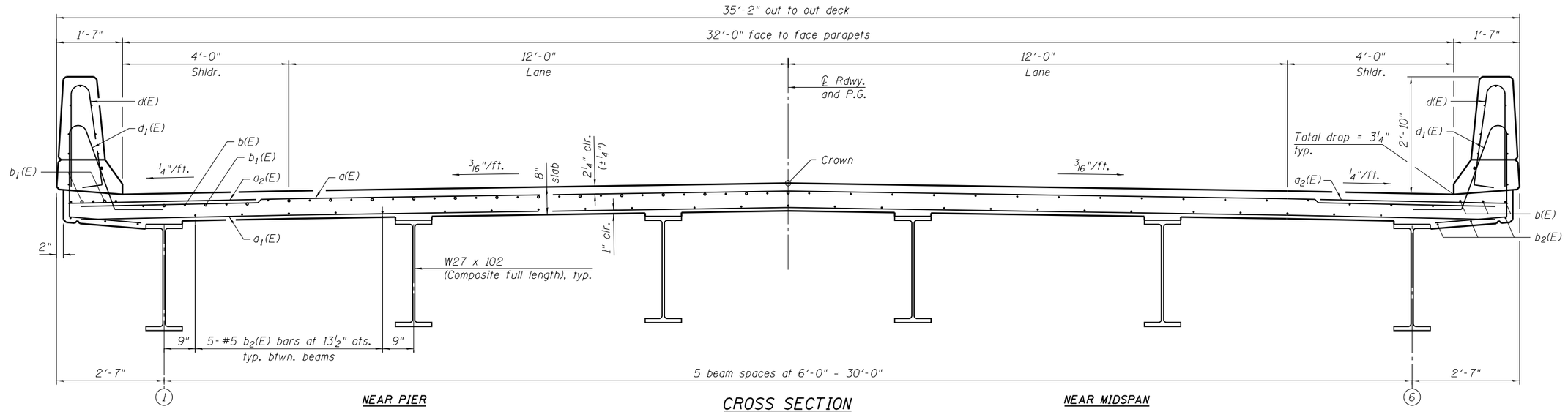


PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 2'-7"

Notes:
See Sheets 9 & 10 of 36 for superstructure details, Section A-A and Bill of Material.
Bars indicated thus 32 x 5-#5 etc. indicates 32 lines of bars with 5 lengths per line.
See Sheet 10 of 36 for parapet reinforcement.
See Sheet 20 of 36 for bar splicer details.



NEAR PIER

CROSS SECTION

(Looking East)

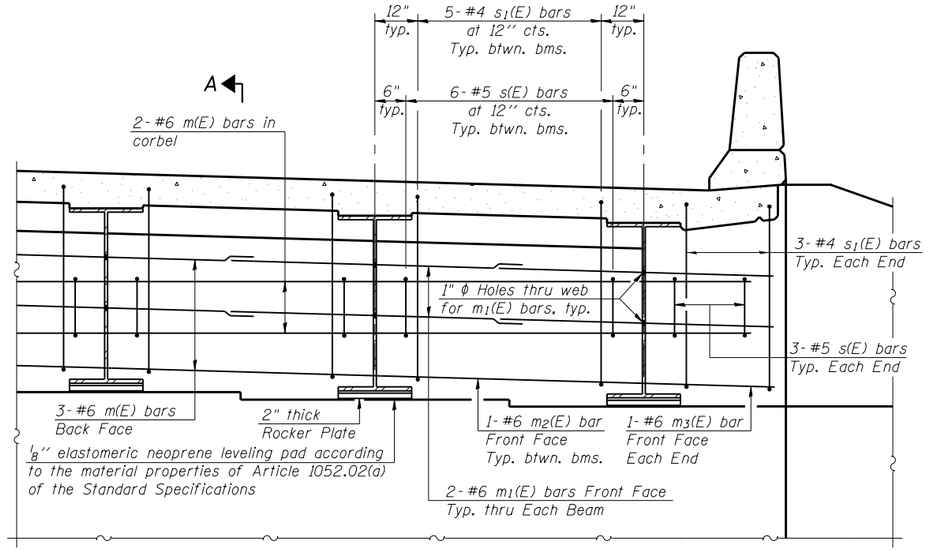
NEAR MIDSPAN

design firm no. 184001036	USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED
whks engineers + planners + land surveyors	FILE NAME = 055$082-68689.dgn	CHECKED - SBC	REVISED
	PLOT SCALE = 0.2 '/ in.	DRAWN - DLH	REVISED
	PLOT DATE = 9/29/2015	CHECKED - SBC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 055-0082
SHEET NO. 8 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	35
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



DIAPHRAGM ELEVATION AT ABUTMENT

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 36.

Concrete in diaphragm is included with Concrete Superstructure on sheet 10 of 36.

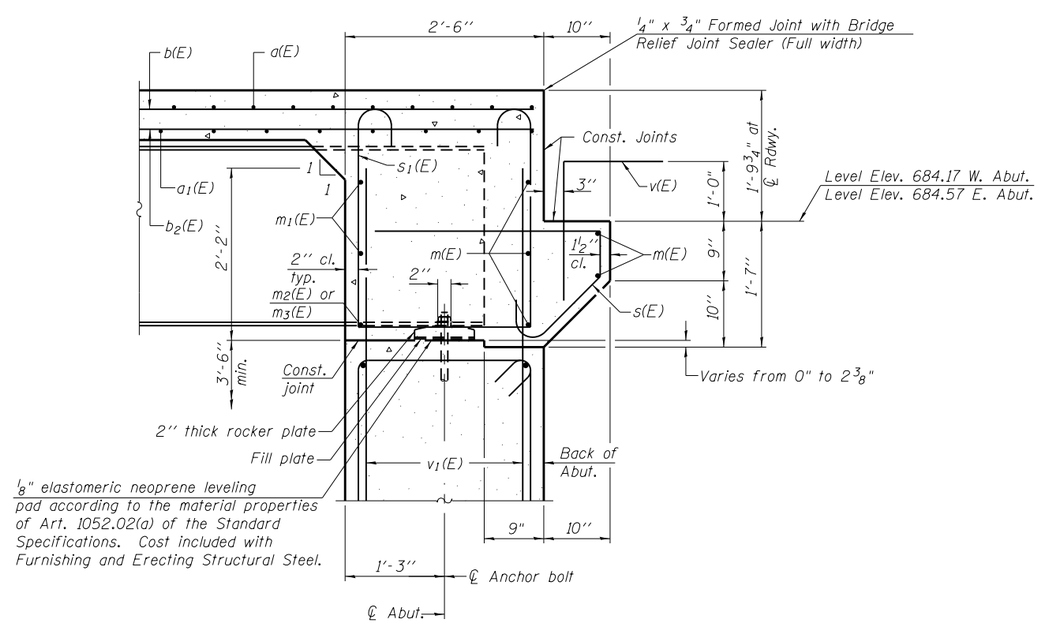
For details of bars s(E) & s_1(E) see sheet 10 of 36.

The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

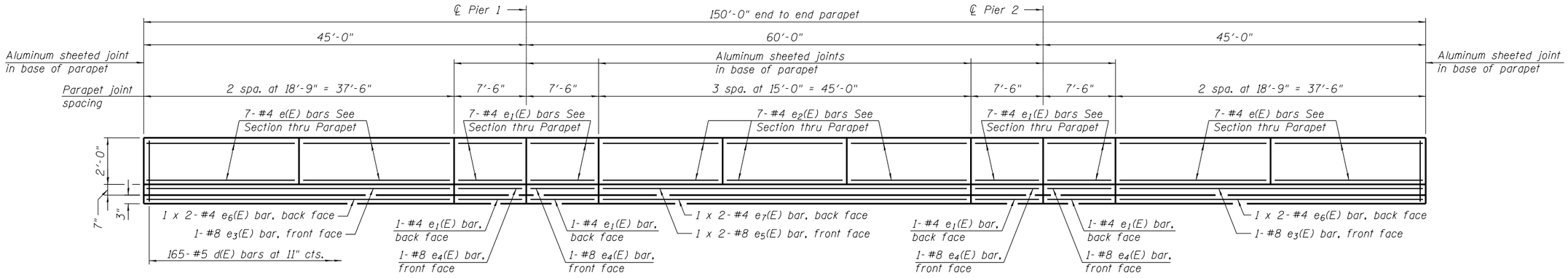
For location of holes thru web, see Sheet 13 of 36.

MIN. BAR LAP

#6 bar = 3'-4"

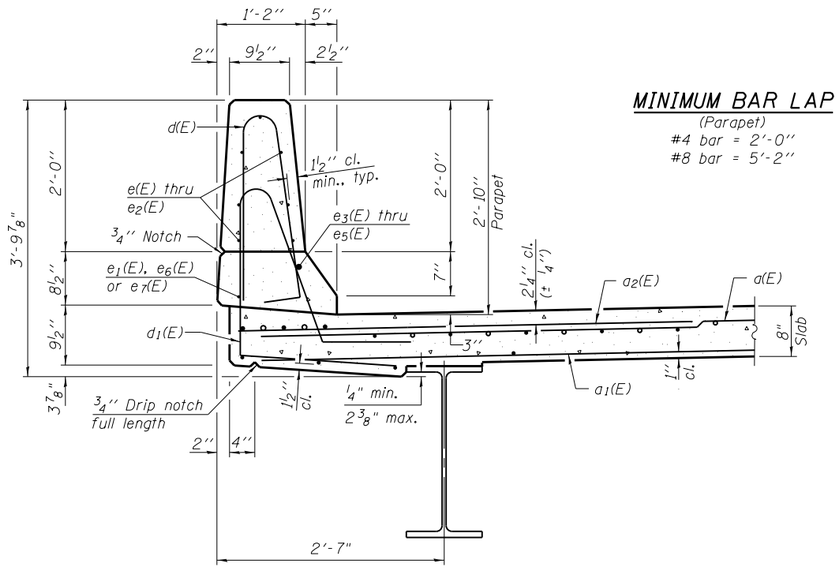


SECTION A-A



INSIDE ELEVATION OF NORTH PARAPET

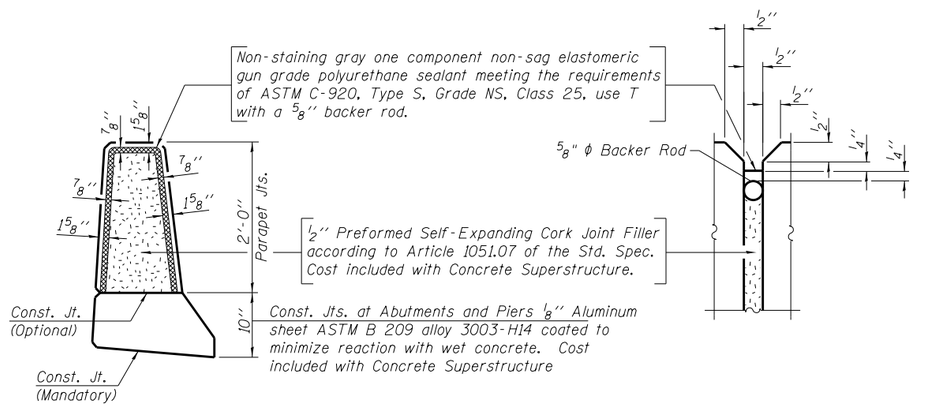
(South Parapet Similar)



MINIMUM BAR LAP

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

SECTION THRU PARAPET

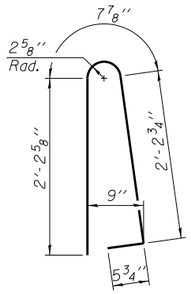


PARAPET JOINT DETAILS

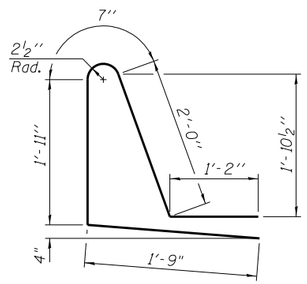
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	258	#5	34'-7"	
a1(E)	181	#5	34'-0"	
a2(E)	516	#6	6'-6"	
b(E)	190	#5	32'-1"	
b1(E)	70	#6	35'-0"	
b2(E)	186	#5	27'-2"	
d(E)	330	#5	5'-7"	
d1(E)	330	#5	7'-5"	
e(E)	56	#4	18'-6"	
e1(E)	64	#4	7'-3"	
e2(E)	42	#4	14'-9"	
e3(E)	4	#8	37'-3"	
e4(E)	8	#8	7'-3"	
e5(E)	4	#8	25'-0"	
e6(E)	8	#4	19'-8"	
e7(E)	4	#4	23'-5"	
m(E)	10	#6	34'-10"	
m1(E)	24	#6	9'-4"	
m2(E)	10	#6	5'-9"	
m3(E)	4	#6	2'-4"	
s(E)	72	#5	5'-5"	
s1(E)	62	#4	8'-6"	
v(E)	72	#5	4'-0"	
Concrete Superstructure			Cu. Yd.	188.0
Reinforcement Bars, Epoxy Coated			Pound	44,970

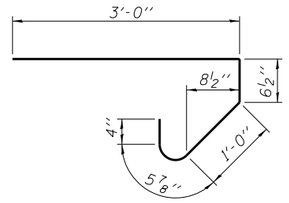
Bars indicated thus 1 x 2- #8 etc. indicates 1 line of bars with 2 lengths per line.



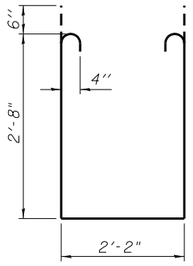
BAR d(E)



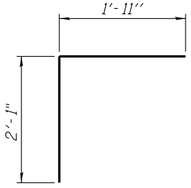
BAR d1(E)



BAR s(E)



BAR s1(E)



BAR v(E)

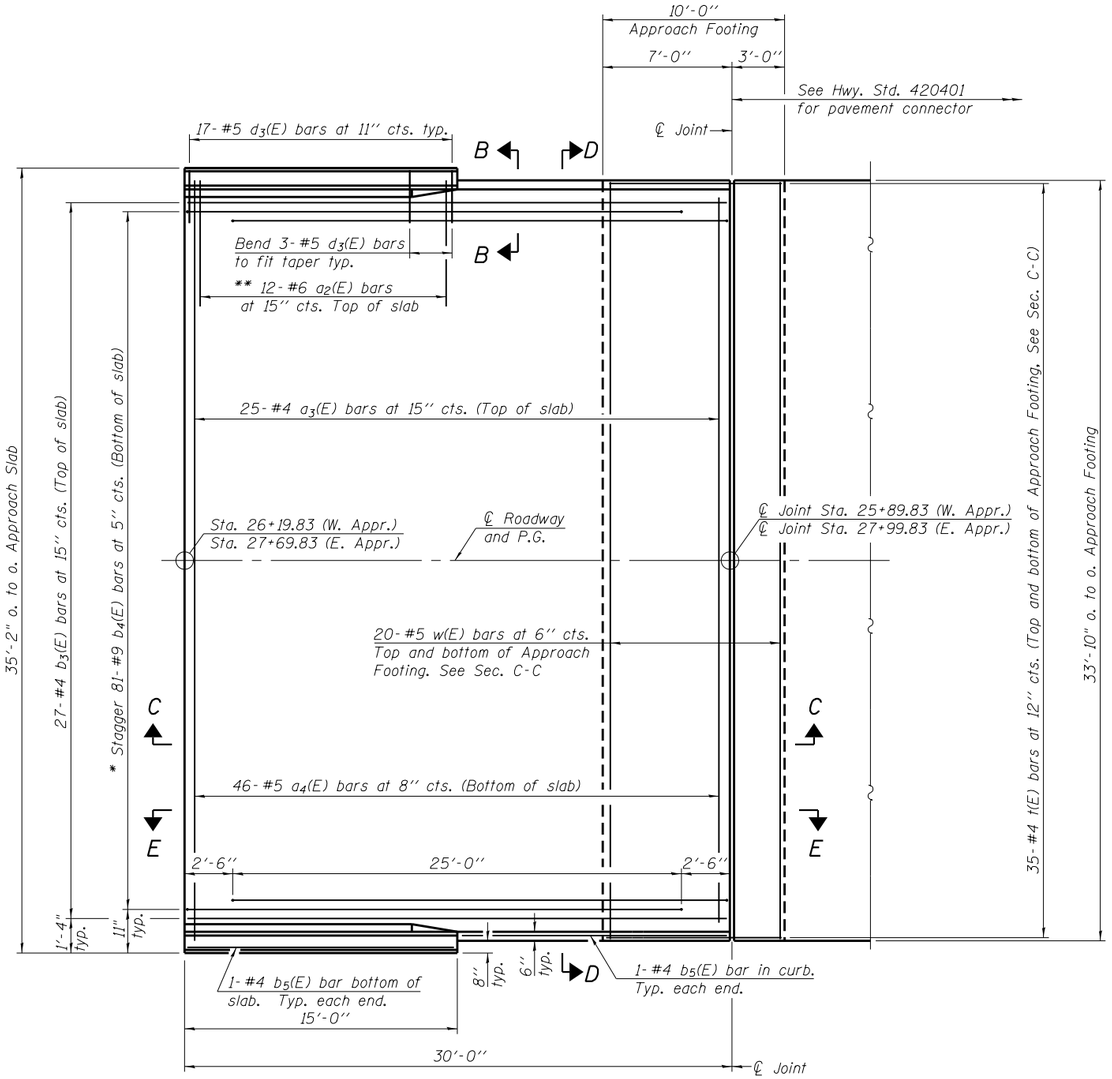
design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED
	FILE NAME = 055$0082-68689.dgn	CHECKED - SBC	REVISED
	PLOT SCALE = $s2 '=' / in.	DRAWN - DLH	REVISED
	PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 10 OF 36 SHEETS

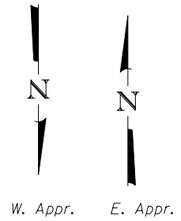
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	37
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

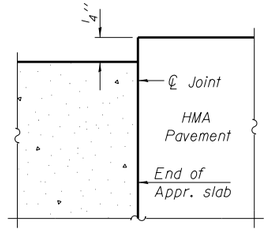
Notes:
See sheet 12 of 36 for Sections C-C & D-D and View E-E.
$a_3(E)$ and $a_4(E)$ bar spacings measured along ℄ Rdwy.



PLAN

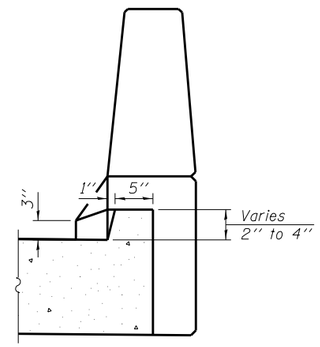
* Tilt #9 $b_4(E)$ bars as required to maintain clearance.
** Space between $a_3(E)$ bars, typ. ea. parapet.





FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

design firm no. 184001036
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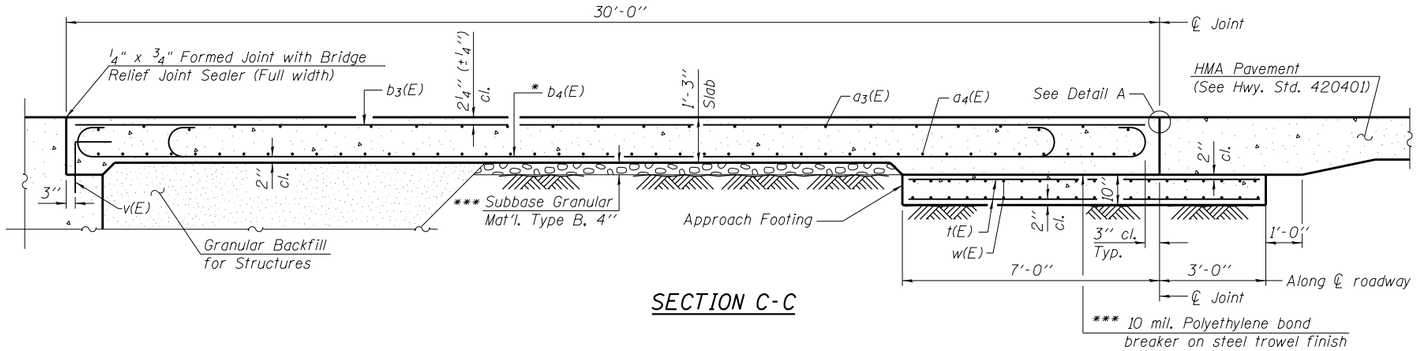
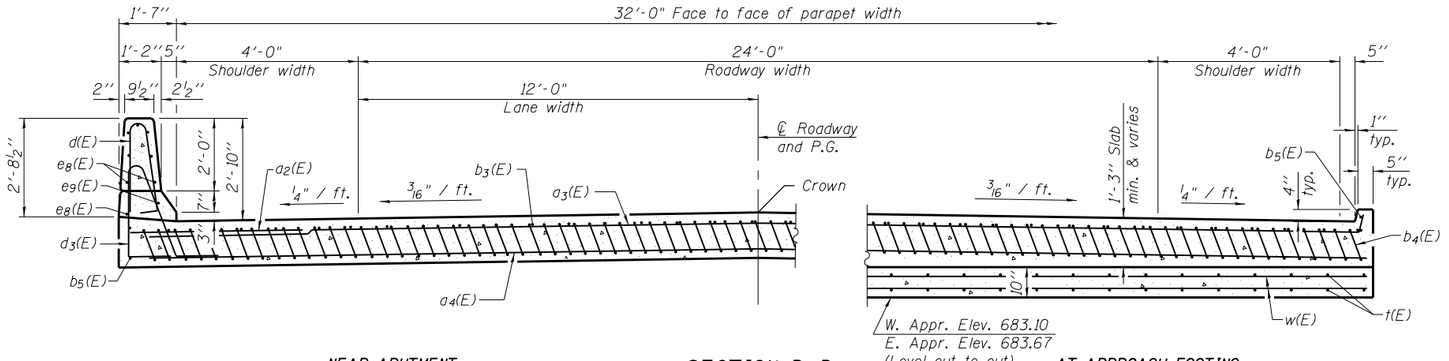
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 11 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	38
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



SECTION C-C

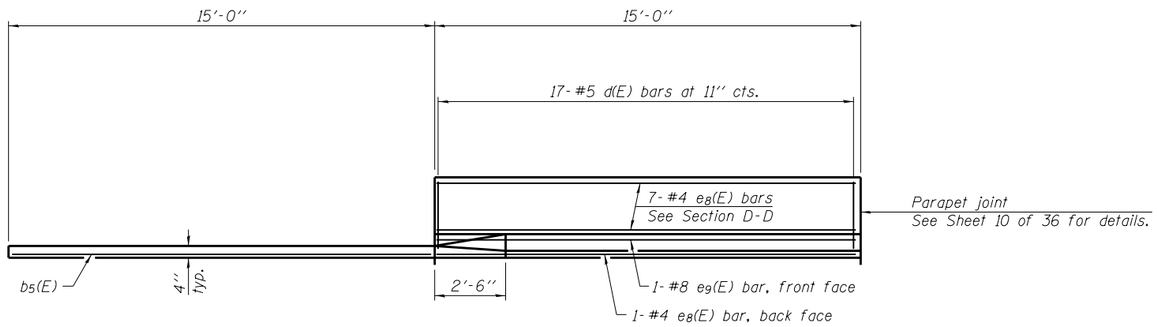


NEAR ABUTMENT

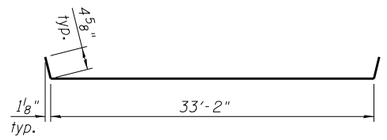
SECTION D-D

(See Plan for dimensions not shown)

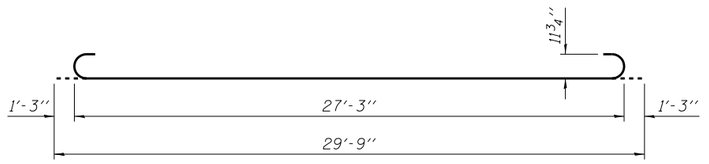
AT APPROACH FOOTING



VIEW E-E



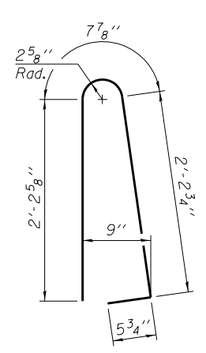
BAR a3(E)



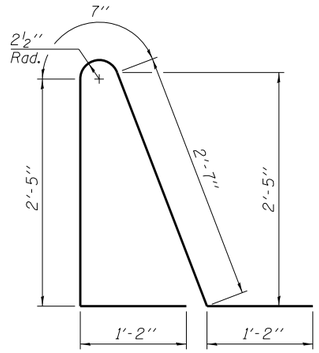
BAR b4(E)

Notes:

See sheet 11 of 36 for Detail A and View B-B.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 10 of 36.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 36.
For additional parapet details, see sheet 10 of 36.



BAR d(E)



BAR d3(E)

* Tilt #9 b4(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-6"	
a3(E)	50	#4	33'-11"	
a4(E)	92	#5	33'-6"	
b3(E)	54	#4	29'-8"	
b4(E)	162	#9	29'-9"	
b5(E)	8	#4	14'-8"	
d(E)	68	#5	5'-7"	
d3(E)	68	#5	7'-11"	
e8(E)	32	#4	14'-8"	
e9(E)	4	#8	14'-8"	
t(E)	140	#4	9'-8"	
w(E)	80	#5	33'-6"	
Concrete Superstructure			Cu. Yd.	108.6
Concrete Structures			Cu. Yd.	21.0
Reinforcement Bars, Epoxy Coated			Pound	27,480

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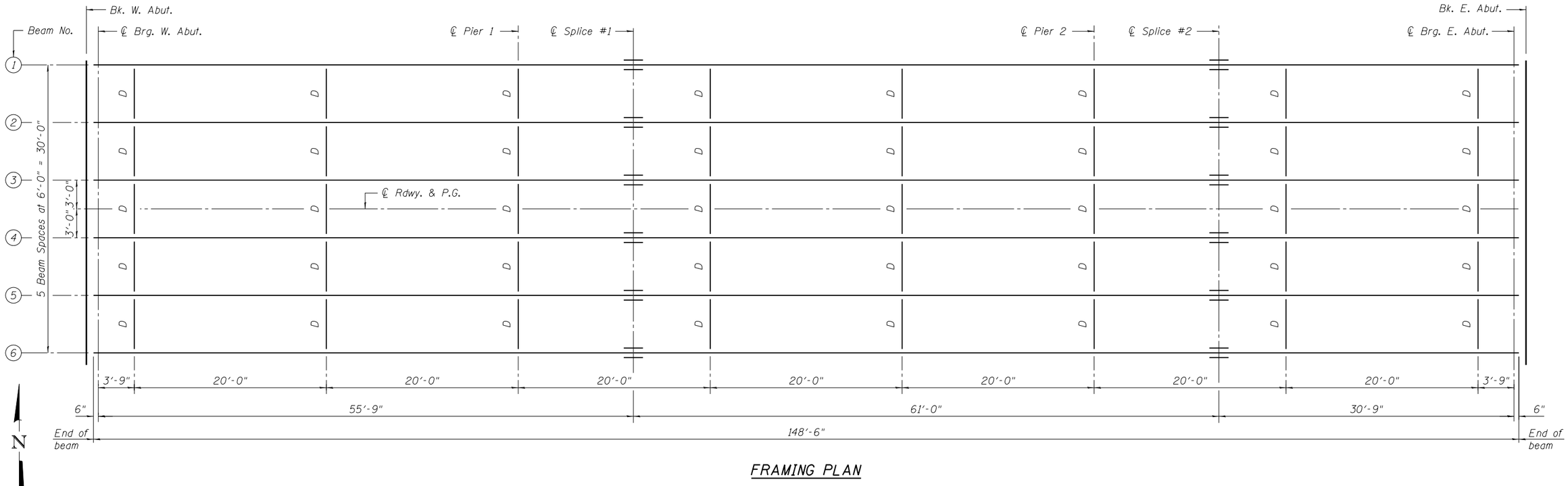
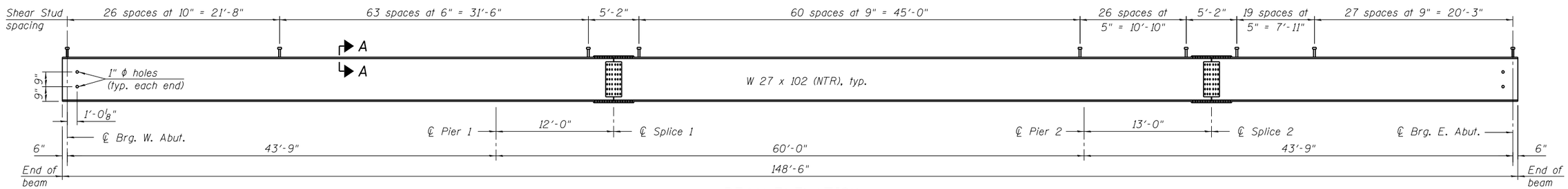
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 12 OF 36 SHEETS

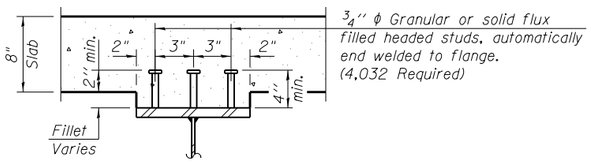
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	39
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



FRAMING PLAN



BEAM ELEVATION



3/4" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (4,032 Required)

SECTION A-A

* TOP OF BEAM ELEVATIONS

Location	℄ Brg. W. Abut.	℄ Pier 1	℄ Splice 1	℄ Pier 2	℄ Splice 2	℄ Brg. E. Abut.
Beam 1	685.03	685.43	685.54	685.57	685.57	685.42
Beam 2	685.14	685.54	685.65	685.68	685.68	685.53
Beam 3	685.23	685.63	685.74	685.77	685.77	685.62
Beam 4	685.23	685.63	685.74	685.77	685.77	685.62
Beam 5	685.14	685.54	685.65	685.68	685.68	685.53
Beam 6	685.03	685.43	685.54	685.57	685.57	685.42

* For Fabrication Only.

Notes:

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.

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

See sheet 14 of 36 for Interior Diaphragm and Splice Details.
See sheet 14 of 36 for Anchor Bolt Placement at abutments.

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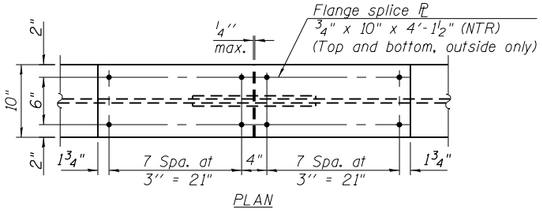
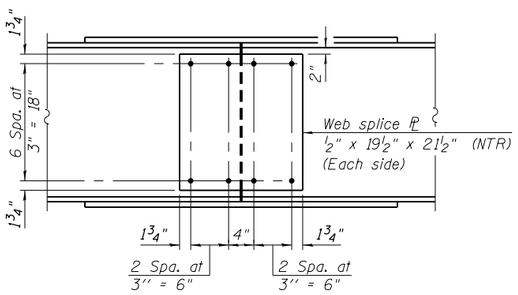
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 13 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	40
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



PLAN



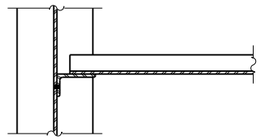
ELEVATION

SPLICE DETAIL

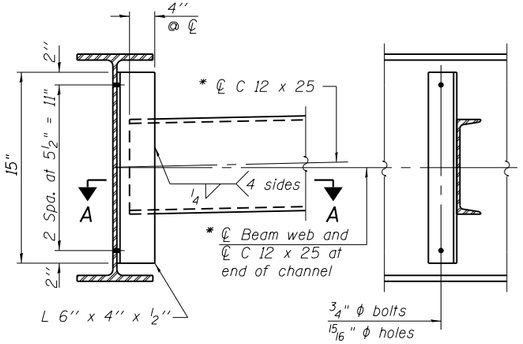
(12 Required)

Notes:

All splices are symmetrical about ℄ splice.
H.S. bolts shall be 7/8" ϕ AASHTO M164/ASTM A325 Type 3.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.



SECTION A-A



INTERIOR DIAPHRAGM

(40 Required)

* Two hardened washers required for each set of oversized holes.
Alternate C 12 x 30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.

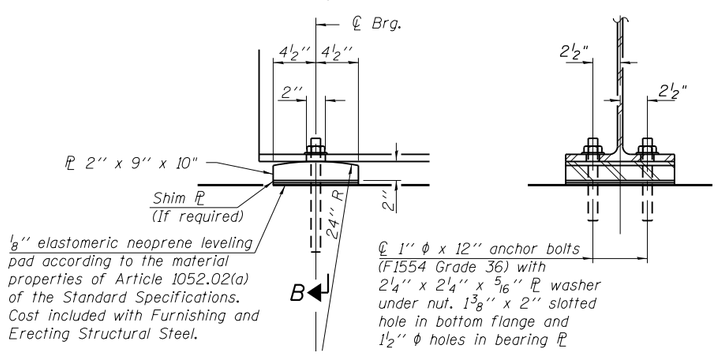
INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 & 2	0.5 Sp. 2
I_s	(in^4)	3620	3620	3620
$I_c(n)$	(in^4)	10990		10990
$I_c(3n)$	(in^4)	8024		8024
$I_c(cr)$	(in^4)		5354	
S_s	(in^3)	267.0	267.0	267.0
$S_c(n)$	(in^3)	419.8		419.8
$S_c(3n)$	(in^3)	377.4		377.4
$S_c(cr)$	(in^3)		321.5	
DC1	(k/')	0.733	0.733	0.733
M_{DC1}	('k)	87	203	126
DC2	(k/')	0.150	0.150	0.150
M_{DC2}	('k)	18	42	25
DW	(k/')	0.300	0.300	0.300
M_{DW}	('k)	35	84	51
M_{L+IM}	('k)	375	343	405
M_u (Strength I)	('k)	840	1033	974
$\phi_f M_n$	('k)	2182		2140
f_s DC1	(ksi)	3.9	9.1	5.7
f_s DC2	(ksi)	0.6	1.6	0.8
f_s DW	(ksi)	1.1	3.1	1.6
f_s (L+IM)	(ksi)	10.7	12.8	11.6
f_s (Service II)	(ksi)	19.5	30.5	23.1
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)		40.5	
$\phi_f F_n$	(ksi)		44.9	
V_f	(k)	19.0	22.8	17.6

INTERIOR GIRDER REACTION TABLE				
			W. Abut. & E. Abut.	Pier 1 & 2
**	R_{DC1}	(k)	39.2	42.6
	R_{DC2}	(k)	2.3	8.7
	R_{DW}	(k)	4.6	17.5
	R_{L+IM}	(k)	56.7	87.2
	R_{Total}	(k)	102.8	156.0

** Includes Approach Slab Dead Load Reaction at Abutments

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total-Strength I, and Service II) due to non-composite dead loads ($in.^4$ and $in.^3$).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads ($in.^4$ and $in.^3$).
$I_c(3n)$, $S_c(3n)$: 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-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$
$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).
f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}
f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.
f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.
f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.
f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L+IM)$
$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L+IM)$
$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
V_f: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
M_L and R_L include the effects of centrifugal force and superelevation.

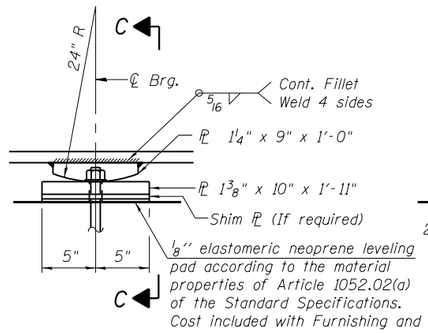


ELEVATION AT ABUTMENT

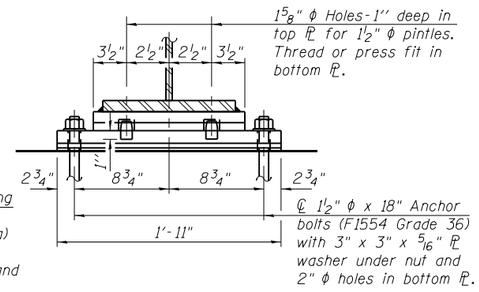
SECTION B-B

FIXED BEARING

(12 Required)



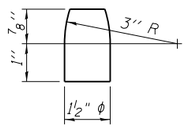
ELEVATION AT PIER



SECTION C-C

FIXED BEARING

(12 Required)



PINTLE

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	24
Anchor Bolts, 1 1/2"	Each	24

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.
Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on Bearing Details.

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DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 14 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	41
		CONTRACT NO. 68689		
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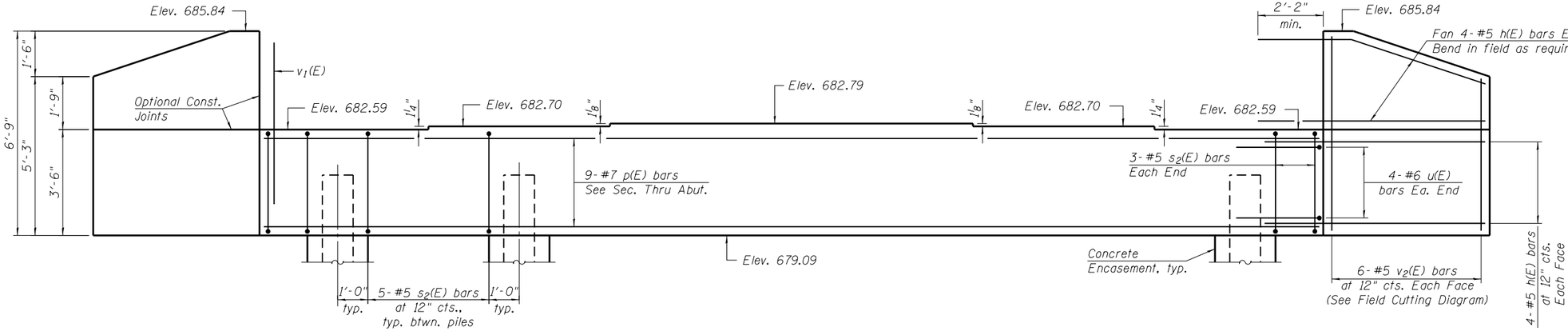
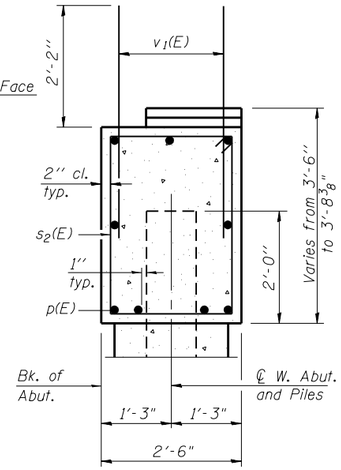
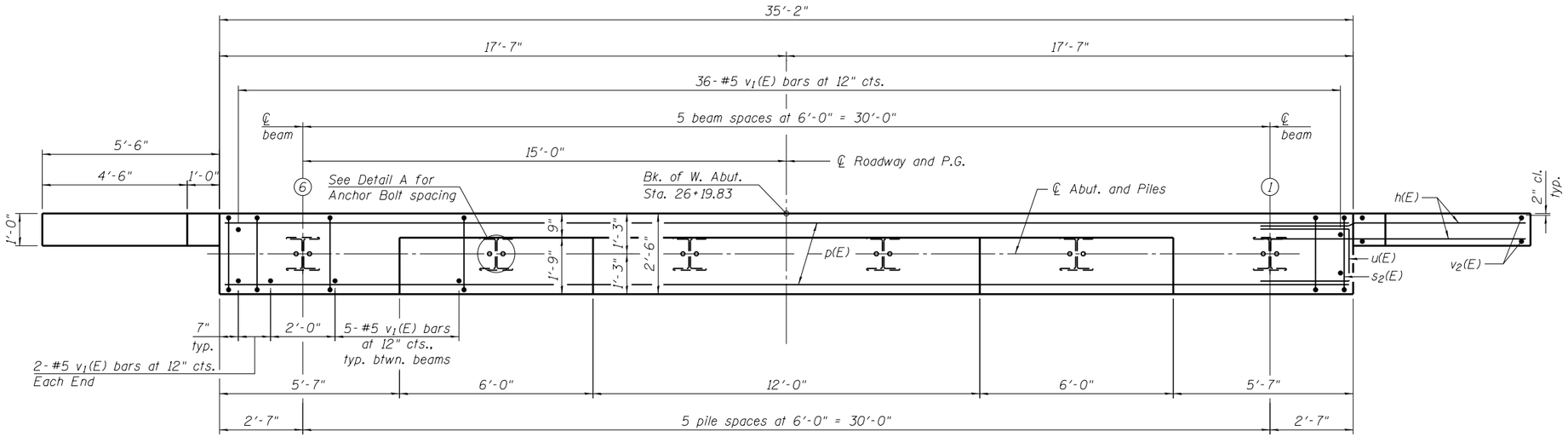


ELEVATION



SEC. THRU ABUT.



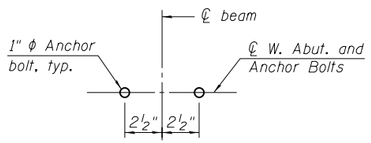
PLAN

WEST ABUTMENT BILL OF MATERIAL

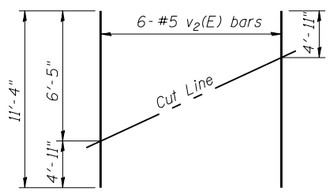
Bar	No.	Size	Length	Shape
h(E)	32	#5	7'-10"	
p(E)	9	#7	34'-10"	
s_2(E)	31	#5	11'-7"	
u(E)	8	#6	7'-2"	
v_1(E)	65	#5	4'-4"	
v_2(E)	12	#5	11'-4"	
Structure Excavation		Cu. Yd.	80	
Concrete Structures		Cu. Yd.	14.2	
Concrete Encasement		Cu. Yd.	2.1	
Reinforcement Bars, Epoxy Coated		Pound	1,800	
Furnishing Steel Piles HP 12 x 53		Foot	295	
Driving Piles		Foot	295	
Test Pile Steel HP 12 x 53		Each	1	
Pile Shoes		Each	6	

PILE DATA

Type: HP 12 x 53 w/ Pile Shoes
Nominal Required Bearing: 364 kips
Factored Resistance Available: 200 kips
Est. Length: 59 ft.
No. Production Piles: 5
No. Test Piles: 1

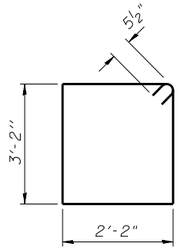


DETAIL A

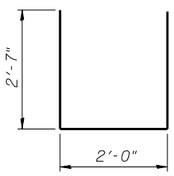


FIELD CUTTING DIAGRAM

Order v_2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s_2(E)



BAR u(E)

Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts. See Detail A.
For details of piles and Concrete Encasement, see sheet 19 of 36.
For details of the Drainage System behind abutment, see Section Thru Intergal Abutment on sheet 2 of 36.

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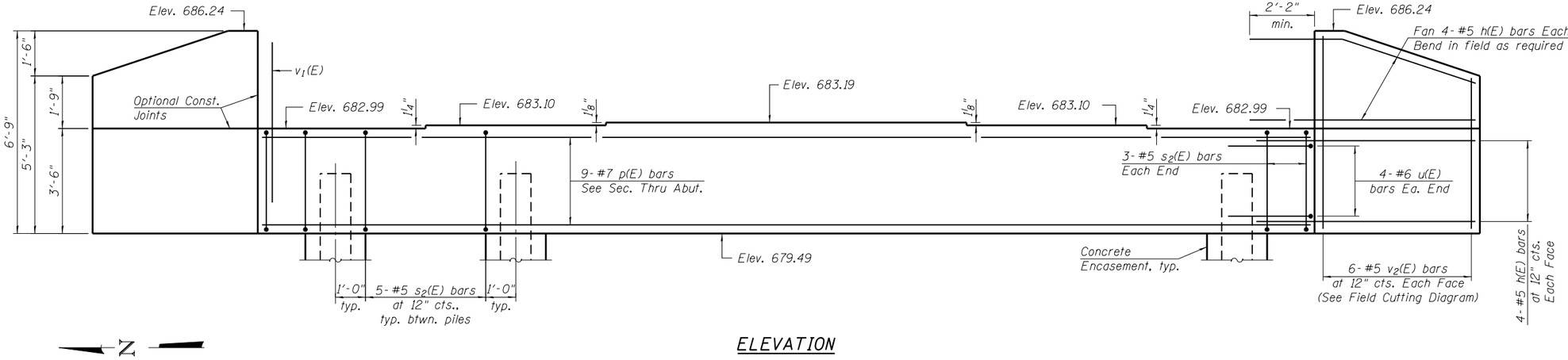
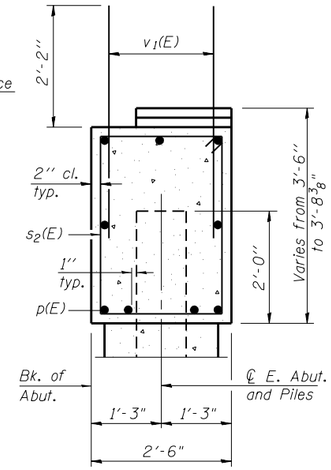
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 055-0082
SHEET NO. 15 OF 36 SHEETS

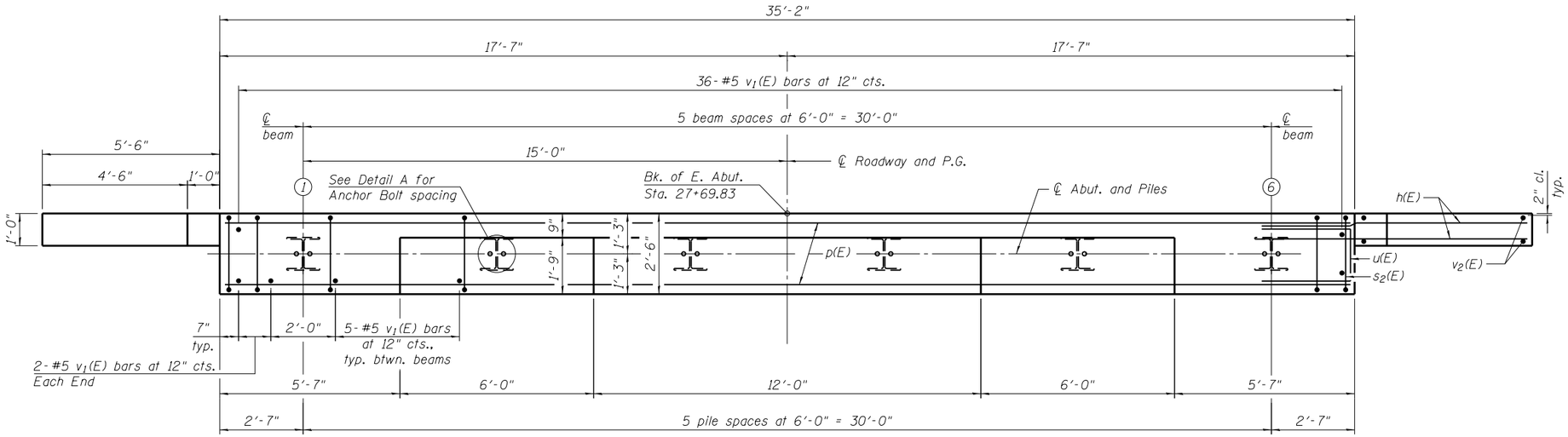
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	42
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			



ELEVATION



SEC. THRU ABUT.



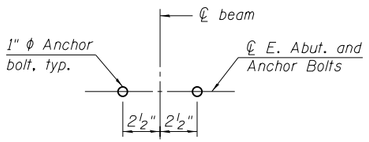
PLAN

EAST ABUTMENT BILL OF MATERIAL

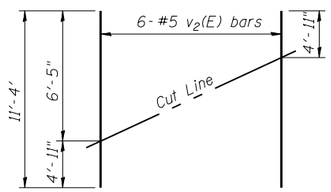
Bar	No.	Size	Length	Shape
h(E)	32	#5	7'-10"	
p(E)	9	#7	34'-10"	
s2(E)	31	#5	11'-7"	
u(E)	8	#6	7'-2"	
v1(E)	65	#5	4'-4"	
v2(E)	12	#5	11'-4"	
Structure Excavation		Cu. Yd.		80
Concrete Structures		Cu. Yd.		14.2
Concrete Encasement		Cu. Yd.		2.1
Reinforcement Bars, Epoxy Coated		Pound		1,800
Furnishing Steel Piles HP 12 x 53		Foot		350
Driving Piles		Foot		350
Test Pile Steel HP 12 x 53		Each		1
Pile Shoes		Each		6

PILE DATA

Type: HP 12 x 53 w/ Pile Shoes
Nominal Required Bearing: 364 kips
Factored Resistance Available: 200 kips
Est. Length: 70 ft.
No. Production Piles: 5
No. Test Piles: 1

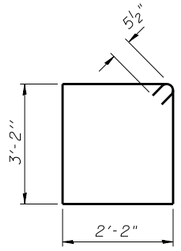


DETAIL A

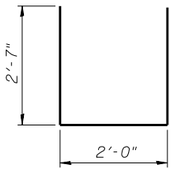


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



BAR u(E)

Notes:

Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts. See Detail A.
For details of piles and Concrete Encasement, see sheet 19 of 36.
For details of the Drainage System behind abutment, see Section Thru Intergal Abutment on sheet 2 of 36.

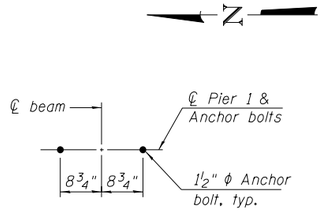
design firm no. 184001036
whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED	
FILE NAME = 055$082-68689.dgn	CHECKED - SBC	REVISED	
PLOT SCALE = 2.2 '/ in.	DRAWN - DLH	REVISED	
PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED	

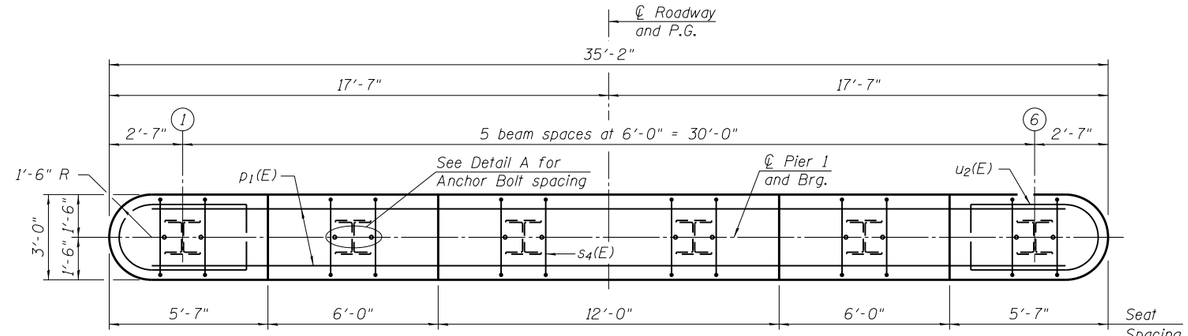
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 055-0082
SHEET NO. 16 OF 36 SHEETS

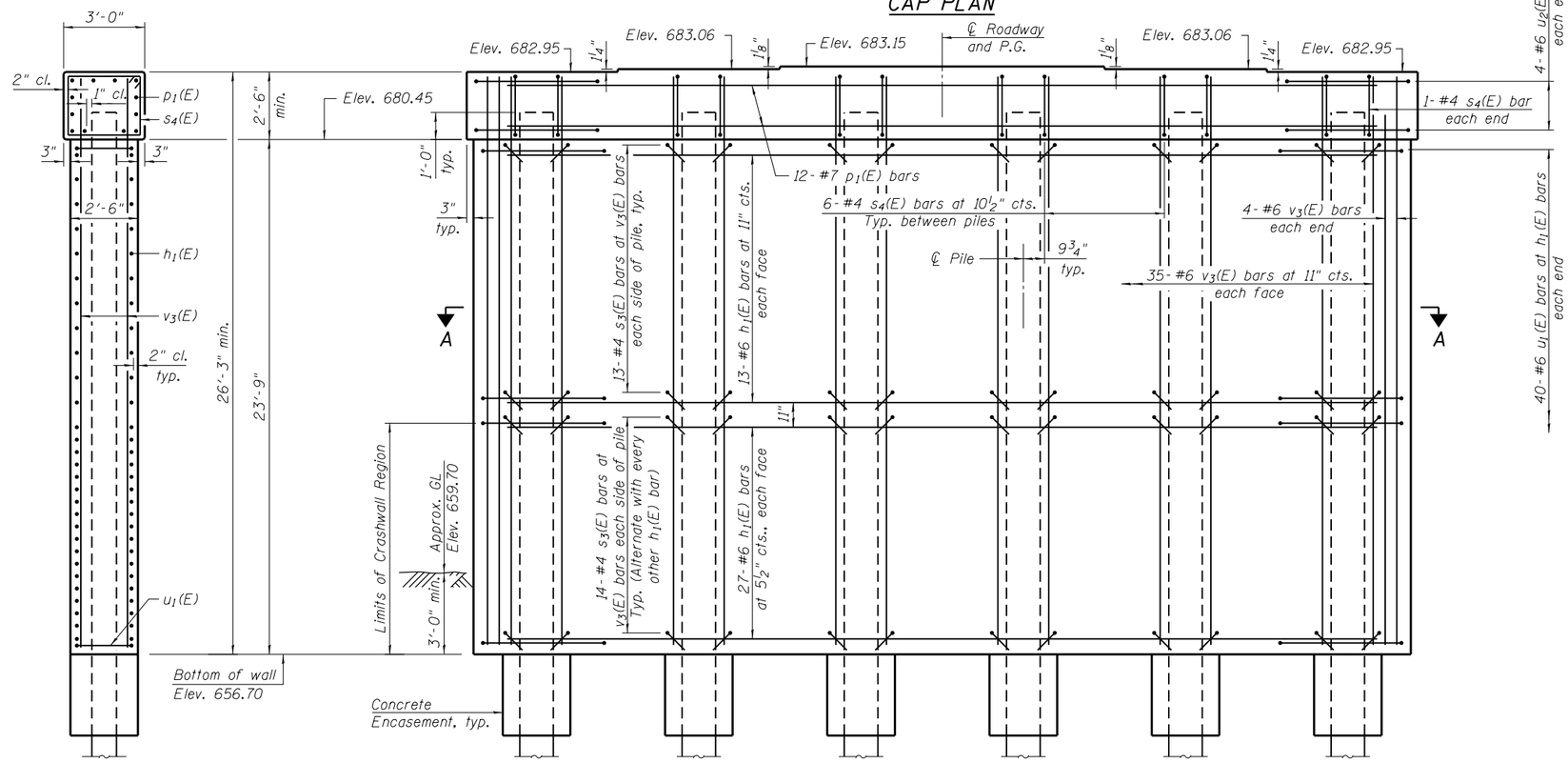
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	43
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			



DETAIL A

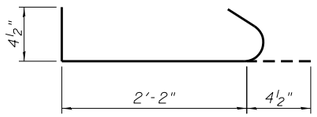


CAP PLAN

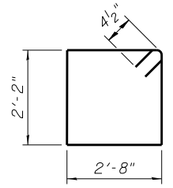


END VIEW

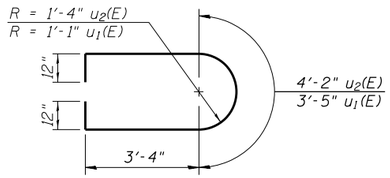
ELEVATION



BAR s_3(E)



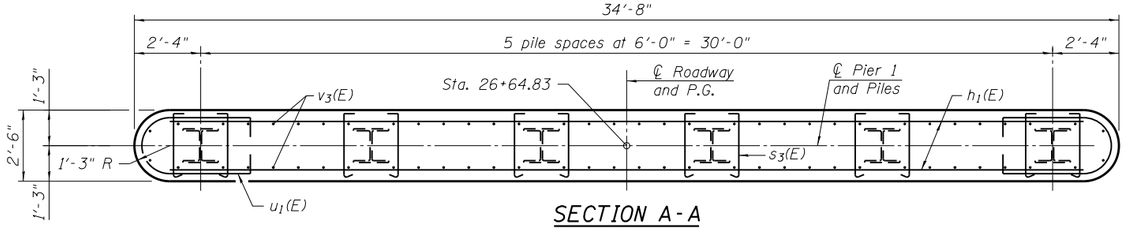
BAR s_4(E)



BARS u_1(E) & u_2(E)

PILE DATA

Type: Steel HP 14 x 117 w/ Pile Shoes
Nominal Required Bearing: 493 kips
Factored Resistance Available: 271 kips
Est. Length: 101 Ft.
Minimum Tip Elev.: 580.50 (Extreme Event II Lateral Loading)
No. Production Piles: 5
No. Test Piles: 1



SECTION A-A

PIER 1
BILL OF MATERIAL

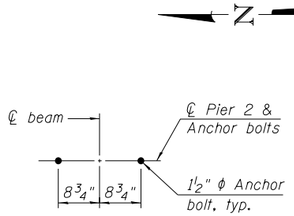
Bar	No.	Size	Length	Shape
h_1(E)	80	#6	32'-2"	——
p_1(E)	12	#7	32'-2"	——
s_3(E)	324	#4	2'-11"	⌐
s_4(E)	32	#4	10'-5"	□
u_1(E)	80	#6	12'-1"	⊃
u_2(E)	8	#6	12'-10"	⊃
v_3(E)	78	#6	25'-11"	——
Structure Excavation			Cu. Yd.	35
Concrete Structures			Cu. Yd.	85.1
Concrete Encasement			Cu. Yd.	3.3
Reinforcement Bars, Epoxy Coated			Pound	10,160
Furnishing Steel Piles HP 14 x 117			Foot	505
Driving Piles			Foot	505
Test Pile Steel HP 14 x 117			Each	1
Pile Shoes			Each	6

Notes:

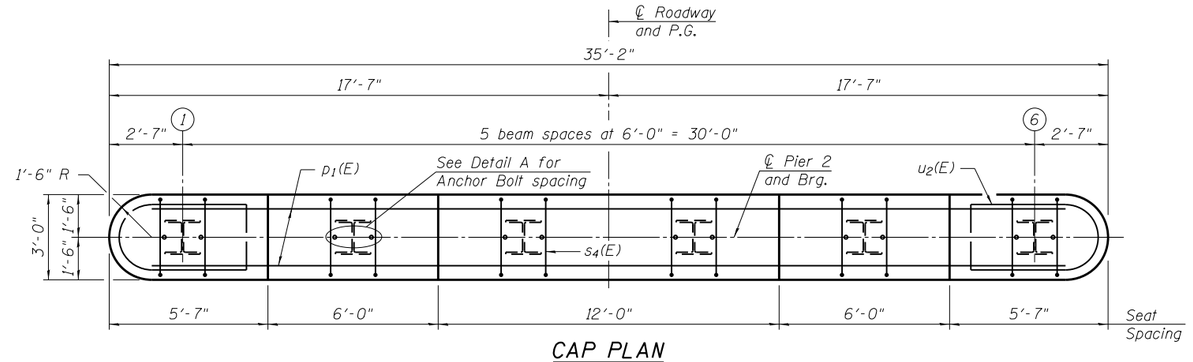
Space reinforcement in cap to miss anchor bolts. See Detail A.

Pour steps monolithically with cap.

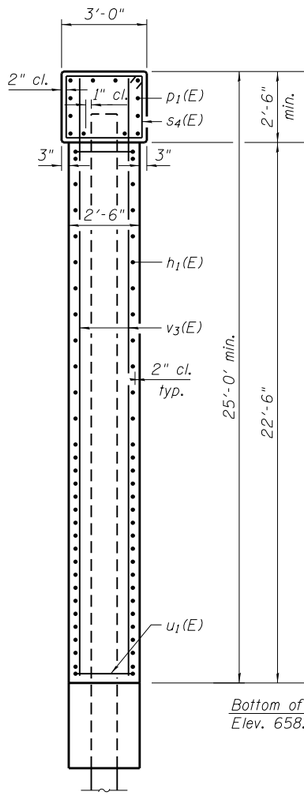
For details of piles and concrete encasement, see sheet 19 of 36.



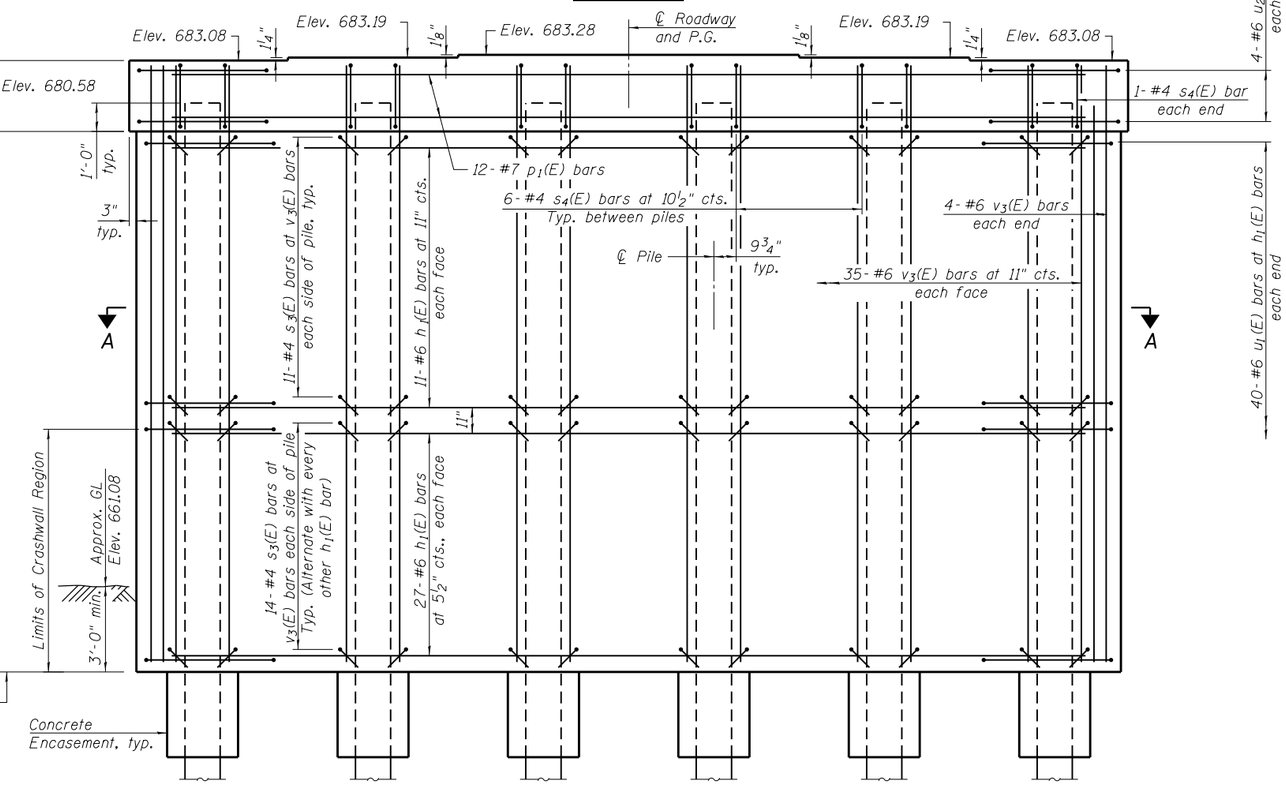
DETAIL A



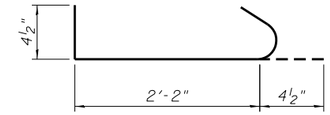
CAP PLAN



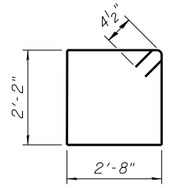
END VIEW



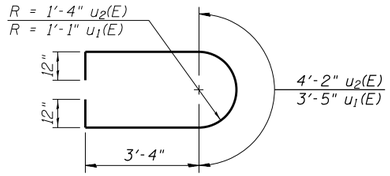
ELEVATION



BAR $s_3(E)$



BAR $s_4(E)$



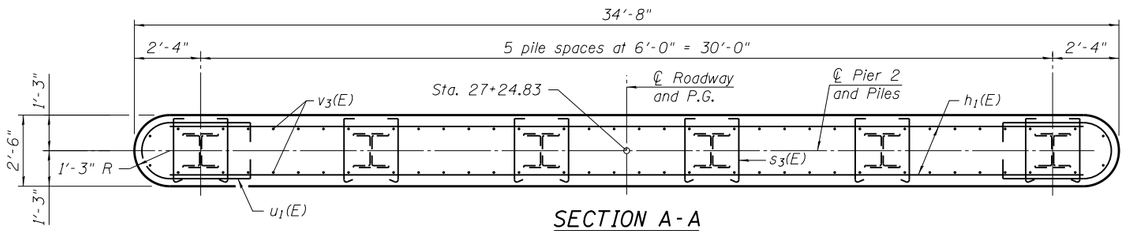
BARS $u_1(E)$ & $u_2(E)$

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	76	#6	32'-2"	——
$p_1(E)$	12	#7	32'-2"	——
$s_3(E)$	300	#4	2'-11"	⌐
$s_4(E)$	32	#4	10'-5"	□
$u_1(E)$	80	#6	12'-1"	⊃
$u_2(E)$	8	#6	12'-10"	⊃
$v_3(E)$	78	#6	24'-8"	——
Structure Excavation		Cu. Yd.	56	
Concrete Structures		Cu. Yd.	81.1	
Concrete Encasement		Cu. Yd.	3.3	
Reinforcement Bars, Epoxy Coated		Pound	9,770	
Furnishing Steel Piles HP 14 x 117		Foot	490	
Driving Piles		Foot	490	
Test Pile Steel HP 14 x 117		Each	1	
Pile Shoes		Each	6	

PILE DATA

Type: Steel HP 14 x 117 w/ Pile Shoes
Nominal Required Bearing: 524 kips
Factored Resistance Available: 288 kips
Est. Length: 98 Ft.
Minimum Tip Elev.: 584.50 (Extreme Event II
No. Production Piles: 5 Lateral Loading)
No. Test Piles: 1



SECTION A-A

Notes:

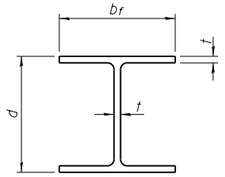
Space reinforcement in cap to miss anchor bolts. See Detail A.
Pour steps monolithically with cap.
For details of piles and concrete encasement. See sheet 19 of 36.

design firm no. 184001036	whks engineers + planners + land surveyors		
USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED	
FILE NAME = 0550082-68689.dgn	CHECKED - SBC	REVISED	
PLOT SCALE = 02 '' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

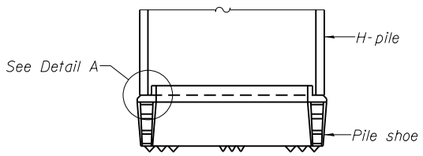
PIER 2
STRUCTURE NO. 055-0082
SHEET NO. 18 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	45
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

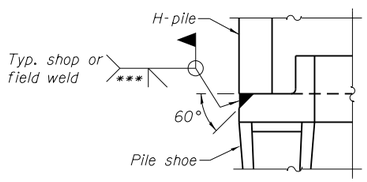


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

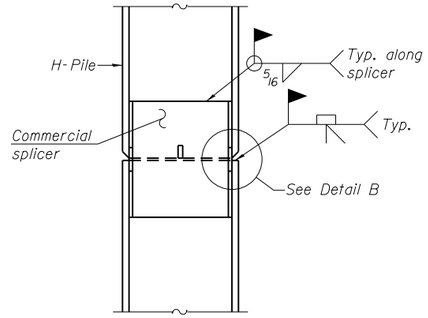


ELEVATION

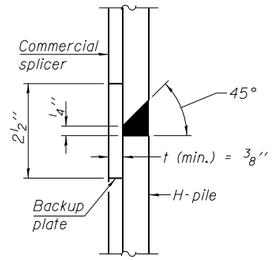


DETAIL A

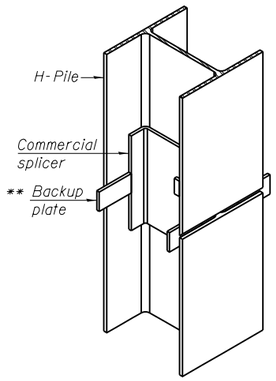
H-PILE SHOE ATTACHMENT



ELEVATION

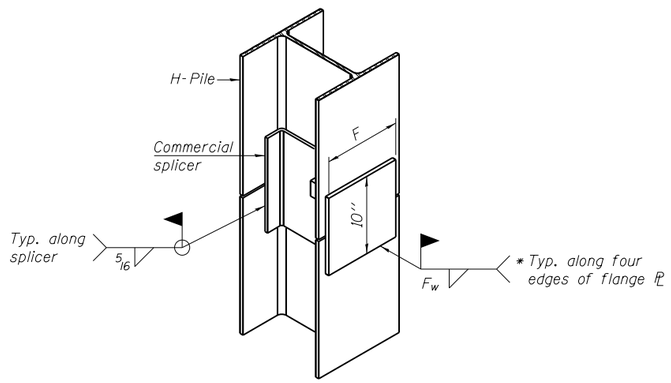


DETAIL "B"

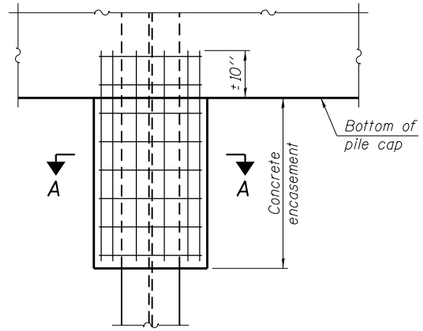


ISOMETRIC VIEW

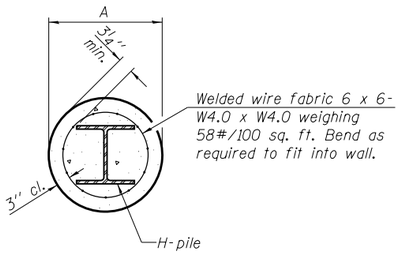
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW



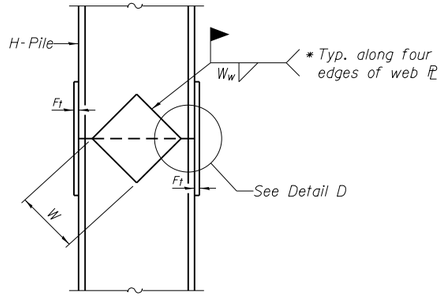
ELEVATION



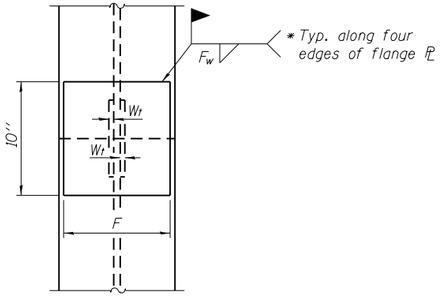
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

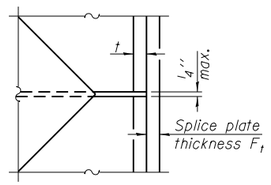
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-27-12

design firm no. 184001036 — whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED - TJZ	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED - SBC	REVISED
PLOT SCALE = 0.2 '/ in.	DRAWN - DLH	REVISED
PLOT DATE = 8/12/2015	CHECKED - SBC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 055-0082
SHEET NO. 19 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	46
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

THIS SHEET INTENTIONALLY LEFT BLANK

BORING LOG EB-01

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 673.70 ft
North: 1392741.74 ft
East: 2205044.56 ft
Station: 23+24.98
Offset: 11.12' RT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
673.6	1.5-inch thick ASPHALT --PAVEMENT--
673.1	Brown SANDY LOAM, some gravel --FILL--
	Stiff, brown CLAY and CLAY LOAM --FILL--
663.2	Stiff to very stiff, black and gray SILTY CLAY --FILL--
655.7	Stiff to very stiff, brown and gray SILTY CLAY LOAM to SILT
643.7	Boring terminated at 30.00 ft

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	4, 3, 3	1.25 P	26
2	3, 3, 3	1.75 P	27
3	2, 3, 3	NR	
4	2, 3, 3	1.75 P	26
5	2, 2, 3	1.23 B	30
6	1, 3, 3	1.07 B	27
7	2, 4, 4	2.21 B	24
8	1, 2, 3	0.43 B	29
9	1, 2, 3	0.41 B	28
10	1, 1, 1	0.32 B	21
11	2, 3, 5	2.21 B	19
12	2, 4, 4	1.64 B	21

GENERAL NOTES

Begin Drilling: 11-05-2008 Complete Drilling: 11-05-2008
Drilling Contractor: Wang Testing Service Drill Rig: Mobile B-57 TMR
Driller: K & J Logger: F. Bozga Checked by: E. Datz
Drilling Method: 3.25-IDA HSA, Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 7600102.GPJ WANGENG.GDT 3/8/10

BORING LOG RR-01

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 684.40 ft
North: 1392741.67 ft
East: 2205312.08 ft
Station: 25+91.97
Offset: 6.18' LT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
684.3	1.5-inch thick ASPHALT --PAVEMENT--
683.9	5.5-inch thick CONCRETE --PAVEMENT--
	Stiff to hard, brown and black CLAY LOAM --FILL--
678.9	Medium stiff to very stiff, black, brown, and gray SILTY CLAY --FILL--
661.4	Soft to stiff, brown SILTY CLAY LOAM to SILT
652.7	Very stiff, brown and black CLAY
647.7	Medium dense to very dense, brown SAND

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	3, 2, 3	1.00 P	28
2	3, 3, 4	4.00 P	29
3	1, 3, 3	1.48 B	27
4	1, 1, 3	1.39 B	32
5	1, 2, 3	0.82 B	32
6	1, 1, 3	0.82 B	25
7	2, 1, 3	1.00 P	24
8	1, 3, 2	1.50 P	24
9	4, 4, 6	2.00 P	26
10	2, 3, 3	1.72 B	27
11	1, 2, 2	0.33 B	27
12	1, 3, 2	0.82 B	22
13	3, 5, 9	2.05 B	19
14	4, 10, 10	NP	17

GENERAL NOTES

Begin Drilling: 11-05-2008 Complete Drilling: 11-05-2008
Drilling Contractor: Wang Testing Service Drill Rig: Mobile B-57 TMR
Driller: K & J Logger: F. Bozga Checked by: E. Datz
Drilling Method: 3.25-IDA HSA, Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling: 39.00 ft
At Completion of Drilling: 38.50 ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 7600102.GPJ WANGENG.GDT 3/8/10

BORING LOG RR-01

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WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 684.40 ft
North: 1392741.67 ft
East: 2205312.08 ft
Station: 25+91.97
Offset: 6.18' LT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
627.7	Stiff, gray CLAY
622.7	Medium dense, gray SILT
619.4	Boring terminated at 60.00 ft

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
15	0, 11, 14	NP	21
16	4, 14, 21	NP	19
17	16, 31, 37	NP	15
18	4, 4, 7	1.64 S	32
19	5, 10, 10	NP	25

GENERAL NOTES

Begin Drilling: 11-05-2008 Complete Drilling: 11-05-2008
Drilling Contractor: Wang Testing Service Drill Rig: Mobile B-57 TMR
Driller: K & J Logger: F. Bozga Checked by: E. Datz
Drilling Method: 3.25-IDA HSA, Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling: 39.00 ft
At Completion of Drilling: 38.50 ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 7600102.GPJ WANGENG.GDT 3/8/10

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BORING LOG RR-02

WEI Job No.: 760-01-02

Client ..... WHKS & Company Engineering
Project ..... IL Route 95 over the BNSF Railroad
Location ..... McDonough County, IL

Datum: NGVD
Elevation: 683.60 ft
North: 1392715.57 ft
East: 2205506.03 ft
Station: 27+87.18
Offset: 7.26' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	683.5	1.5-inch thick ASPHALT --PAVEMENT--							
	682.1	10.5-inch thick CONCRETE --APPROACH SLAB--							
		Very stiff, black CLAY LOAM --FILL--				1	2 2 2	3.50 P	24
			5			2	3 2 3	3.50 P	28
	678.1	Stiff, brown, black and gray SILTY CLAY --FILL-- --L_L = 48%, P_I = 21%-- --% Gravel = 0.1%-- --% Sand = 1.1%-- --% Silt = 67.4%-- --% Clay = 31.4%--				3	2 2 3	1.31 B	30
			10			4	2 2 4	1.15 B	26
						5	1 2 3	1.75 P	28
			15			6	2 2 6	1.85 B	23
	668.1	Loose, brown and black SAND --FILL--				7	2 2 3	NP	10
	665.9	Soft to stiff, brown and gray SILTY CLAY LOAM to SILT				8	1 2 4	0.74 B	28
			20						
		Shebly tube (ST#1) 23' to 25'				9	2 3 4	1.56 B	30
			25			10	1 1 2	0.95 B	30
		Shebly tube (ST#2) 25' to 27' --L_L = 35%, P_I = 22%-- --% Gravel = 0.0%-- --% Sand = 0.3%-- --% Silt = 80.5%-- --% Clay = 19.2%--				11	1 2 2	3.25 B	26
			30			12	2 2 3	0.33 B	20
	651.9	Stiff, brown SANDY CLAY				13	2 5 8	1.64 B	19
			35						
	646.9	Loose to dense, brown SAND				14	8 12 16	NP	18
			40						

GENERAL NOTES

Begin Drilling ..... 11-04-2008 ..... Complete Drilling 11-04-2008
Drilling Contractor ..... Wang Testing Service ..... Drill Rig Mobile B-57 TMR
Driller ..... K & J ..... Logger ..... F. Bozga ..... Checked by E. Datz
Drilling Method ..... 3.25-IDA HSA. Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling ..... 38.00 ft
At Completion of Drilling ..... 35.00 ft
Time After Drilling ..... NA
Depth to Water ..... NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENG.WC - 760-01-02.GPJ - WANGENG.GDT - 3/8/15

BORING LOG RR-02

WEI Job No.: 760-01-02

Client ..... WHKS & Company Engineering
Project ..... IL Route 95 over the BNSF Railroad
Location ..... McDonough County, IL

Datum: NGVD
Elevation: 683.60 ft
North: 1392715.57 ft
East: 2205506.03 ft
Station: 27+87.18
Offset: 7.26' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	621.9	Medium dense, gray SILT				15	2 2 2	NP	18
			45						
			50			16	9 19 26	NP	18
	614.6	Stiff, gray SILTY CLAY				17	4 13 22	NP	20
			55						
	611.9	Very dense, gray SILT				18	11 13 15	NP	20
			60						
	608.6	Boring terminated at 75.00 ft							
			65			19	6 9 12	NP	25
			70			20	9 7 9	1.89 B	22
			75			21	10 23 29	NP	22
			80						

GENERAL NOTES

Begin Drilling ..... 11-04-2008 ..... Complete Drilling 11-04-2008
Drilling Contractor ..... Wang Testing Service ..... Drill Rig Mobile B-57 TMR
Driller ..... K & J ..... Logger ..... F. Bozga ..... Checked by E. Datz
Drilling Method ..... 3.25-IDA HSA. Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling ..... 38.00 ft
At Completion of Drilling ..... 35.00 ft
Time After Drilling ..... NA
Depth to Water ..... NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENG.WC - 760-01-02.GPJ - WANGENG.GDT - 3/8/15

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED -	REVISED	
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED	
PLOT SCALE = 0.2 '/ in.	DRAWN -	REVISED	
PLOT DATE = 8/12/2015	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 055-0082
SHEET NO. 22 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	49
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

BORING LOG RR-03

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WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 659.50 ft
North: 1392760.91 ft
East: 2205425.77 ft
Station: 27+04.22
Offset: 32.77' LT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
	36-inch thick, black, gravelly SILTY LOAM with clay interbeds --FILL--
656.5	Medium stiff to very stiff, brown SILTY CLAY LOAM to SILT
648.3	Loose to medium dense, light brown, medium SAND
627.8	Very stiff, gray SILTY CLAY with sand
622.8	Stiff, gray CLAY

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
1	2, 1, 3	1.00 P	28
2	3, 3, 3	0.98 B	21
3	2, 2, 3	0.33 B	18
4	4, 6, 8	3.94 B	19
5	4, 10, 15	NP	16
6	7, 10, 12	NP	17
7	9, 12, 13	NP	17
8	1, 2, 3	NP	25
9	3, 4, 7	NP	26
10	3, 6, 8	NP	27
11	4, 7, 11	NP	27
12	6, 9, 13	NP	28
13	5, 7, 10	2.71 S	16
14	3, 5, 8	1.23 S	33

Depth (ft): 5, 10, 15, 20, 25, 30, 35, 40

GENERAL NOTES

Begin Drilling 06-17-2009 Complete Drilling 06-17-2009
Drilling Contractor Wang Testing Service Drill Rig D-50 Turbo, ATV
Driller T & E Logger E. Datz Checked by M. Snider
Drilling Method 3.25-IDA HSA, Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling 18.00 ft
At Completion of Drilling 18.00 ft
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 7600102.GPJ WANGENG.GDT 3/5/10

BORING LOG RR-03

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WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 659.50 ft
North: 1392760.91 ft
East: 2205425.77 ft
Station: 27+04.22
Offset: 32.77' LT

SOIL AND ROCK DESCRIPTION

Elevation (ft)	Description
609.8	Gray SILT
607.8	Stiff, gray SILTY CLAY
597.8	Hard, brown and gray CLAY
584.8	Boring terminated at 74.67 ft

Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
15	3, 4, 6	1.65 B	34
16	3, 4, 10	1.39 S	35
17	4, 6, 6	1.39 S	32
18	2, 4, 5	1.31 B	26
19	10, 11, 13	4.35 B	17
20	9, 22, 60	5.06 S	17
21	11, 27, 50/2"	4.50 P	20

Depth (ft): 45, 50, 55, 60, 65, 70, 75, 80

GENERAL NOTES

Begin Drilling 06-17-2009 Complete Drilling 06-17-2009
Drilling Contractor Wang Testing Service Drill Rig D-50 Turbo, ATV
Driller T & E Logger E. Datz Checked by M. Snider
Drilling Method 3.25-IDA HSA, Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling 18.00 ft
At Completion of Drilling 18.00 ft
Time After Drilling NA
Depth to Water NA
The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 7600102.GPJ WANGENG.GDT 3/5/10

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BORING LOG RR-04

WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 657.06 ft
North: 1392703.55 ft
East: 2205390.56 ft
Station: 26+72.70
Offset: 26.76' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		24-inch thick, black SILTY LOAM with gravel and cinders --FILL--							
	656.1	Medium stiff to very stiff, brown SILTY CLAY LOAM to SILT				1	1 2 3	1.64 B	26
			5			2	1 2 3	0.90 B	18
						3	3 5 8	2.46 S	20
	649.1	Medium dense, light brown, medium SAND				4	3 10 15	NP	13
			10			5	10 13 16	NP	15
			15			6	3 10 11	NP	18
						7	7 10 13	NP	18
			20			8	5 6 11	NP	27
	627.6	Medium dense, gray SILT	25			9	3 6 11	NP	26
						10	4 6 11	NP	17
			30			11	3 6 9	NP	23
						12	5 6 7	NP	22
			35			13	8 8 8	NP	19
			40			14	5 11 11	NP	23

GENERAL NOTES

Begin Drilling: 06-15-2009 Complete Drilling: 06-15-2009
Drilling Contractor: Wang Testing Service Drill Rig: D-50 Turbo, ATV
Driller: T & E Logger: E. Datz Checked by: M. Snider
Drilling Method: 3.25-IDA HSA. Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling: 15.50 ft
At Completion of Drilling: 18.00 ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENG 760102.GPJ WANGENG.GDT 3/9/15

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BORING LOG RR-04

WEI Job No.: 760-01-02

Client: WHKS & Company Engineering
Project: IL Route 95 over the BNSF Railroad
Location: McDonough County, IL

Datum: NGVD
Elevation: 657.06 ft
North: 1392703.55 ft
East: 2205390.56 ft
Station: 26+72.70
Offset: 26.76' RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	615.3	Very stiff, gray SILTY CLAY							
	612.3	Medium dense, gray SILT	45			15	4 6 9	NP	32
			50			16	5 8 10	NP	27
			55			17	2 4 7	NP	24
	600.3	Hard, brown and gray CLAY with gravel	60			18	5 9 18	5.25 B	24
	582.8	Very dense, fine SANDY LOAM with gravel	65			19	5 24 28	4.00 P	26
			70			20	9 28 35	> 4.50 P	20
			75			21	15 50/3"	> 4.50 P	18
	578.2	Boring terminated at 78.90 ft	80			22	50/5"	NP	19

GENERAL NOTES

Begin Drilling: 06-15-2009 Complete Drilling: 06-15-2009
Drilling Contractor: Wang Testing Service Drill Rig: D-50 Turbo, ATV
Driller: T & E Logger: E. Datz Checked by: M. Snider
Drilling Method: 3.25-IDA HSA. Boring backfilled with lean grout upon completion

WATER LEVEL DATA

While Drilling: 15.50 ft
At Completion of Drilling: 18.00 ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENG 760102.GPJ WANGENG.GDT 3/9/15

Bench Mark: B.M.#1 Top of R.O.W. Marker in N.W. corner of R.O.W. @ Bridge Lt. Sta. 26+30 Elev: 664.79
B.M.#2 □ chiseled in W.W. @ W. Abutment North Side. Elev. 684.18

Existing Structure: Structure number 055-0017 built as S.B.I. Rte. 95, section 122-VB at Station 26+90.4 in 1931. The existing three (3) span reinforced concrete deck girder structure has 116.92 feet back to back abutments. The Contractor shall remove the existing superstructure and provide a wider superstructure with P.P.C. deck beams and widen the substructure.

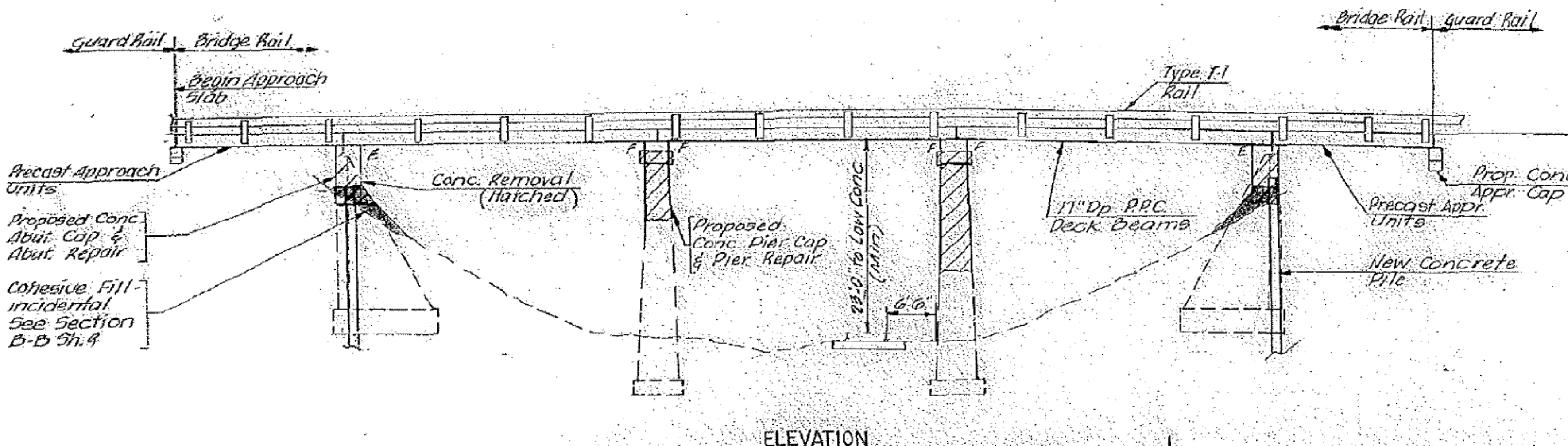
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

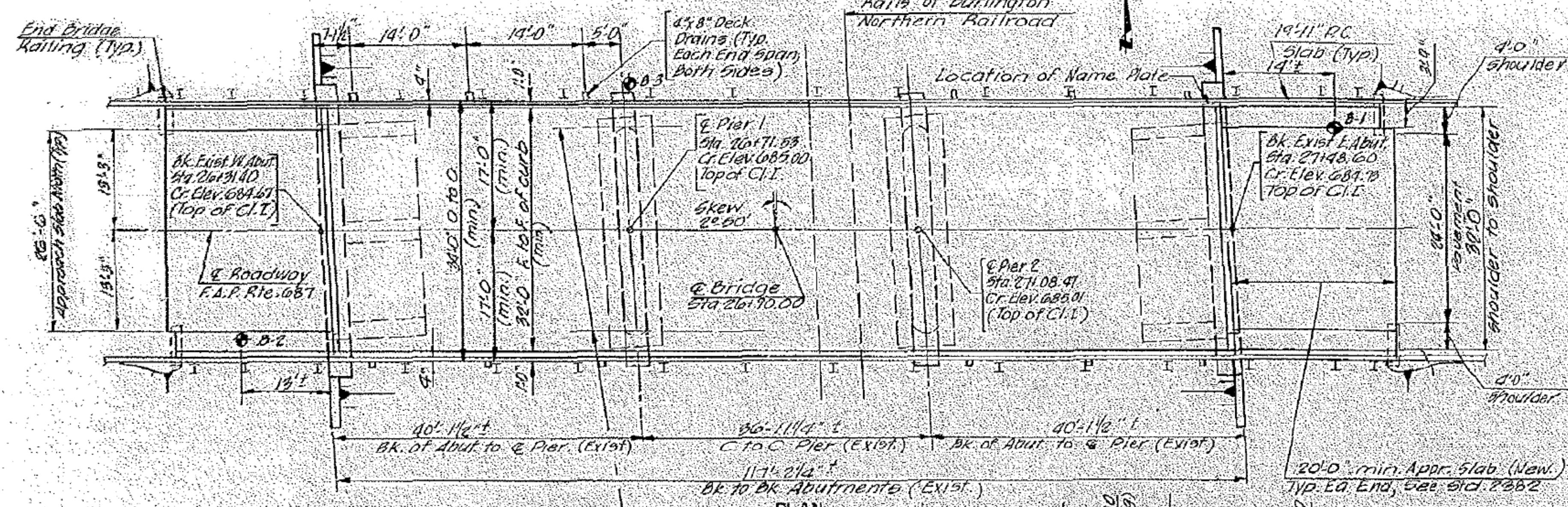
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL. 95 FAP 687	122(VB) BR	McDONOUGH	11	6

ILLINOIS FED. AID PROJ. MABR-F-687(4)

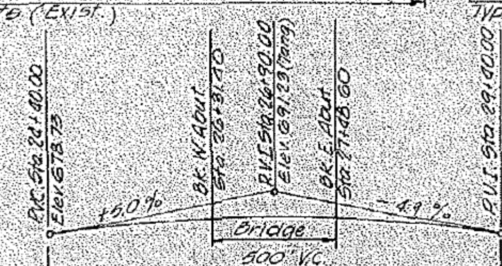
SHEET NO 1
SHEETS 11



ELEVATION



PLAN



PROFILE F.A.P. RTE. 687

DESIGN STRESSES

Design Loading: HS20-44
Future Wearing Surface: 25psf.
Design Specifications: 1977 AASHTO 1978 to 1983 Interim Specifications

Field Units
f'c = 3500 psi.
fy = 60,000 psi - rein.***

Precast Prestressed Units
f'c = 5000 psi.
f'ci = 4000 psi. (17"x36")
f'ci = 4200 psi. (17"x48")
fs = 270,000 psi. ½"φ strands
fsi = 189,000 psi. (½"φ strands)

Precast Bridge Slab
f'c = 4500 psi.
fc = 1,800 psi.
fs = 20,000 psi.
n = 8

Structural Steel (M183)
fy = 36,000 p.s.i.

*** Except as noted in plans.

STA. 26+90
REBUILT 19 BY
STATE OF ILLINOIS
F.A.P. RTE 687 SEC(122VB) BR
LOADING HS20
STR. NO. 055-0017
F.A. PROJECT MABR-F-687(4)

NAME PLATE
(Std. 2113)

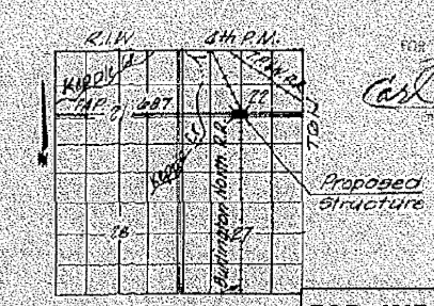
GENERAL NOTES

1. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2. The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of ¼".
3. Expansion bolts shall consist of approved expansion anchors, providing minimum certified proof load = 4,080 lbs., and ¾"φ x 12" hooked bolts.
4. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M53 Grade 60.
5. Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied.
6. See proposal for boring data.
7. All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
8. Expansion guards shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in the quantity of structural steel.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.	Total
Removal of Existing Superstructure	Ea.	1		1
Concrete Removal	Cu.Yd.		52	52
Expansion Bolts - ¾"φ	Ea.		42	42
Class X Concrete	Cu.Yd.	16.9	94.2	111.1
Precast Concrete Bridge Slab	Sq.Ft.	299		299
Precast Prestressed Concrete Beams (17" dp)	Sq.Ft.	3861		3861
Steel Railing Type T-1	L.F.	311		311
Structural Steel	Lb.	4760		4760
Reinforcement Bars	Lb.	900	8180	9080
Name Plates	Ea.	1		1
Protective Coat	Sq.Yds.	42.5		42.5
Preformed Joint Seal (2½")	L.F.	68		68
Waterproofing Membrane System	Sq.Yd.	404		404
Portland Cement Mortar Fairing Course	L.F.	1090		1090
Concrete Piles	L.F.		138	138
Permanent Survey Marker Type 1	Ea.	1		1
Bit. Concrete Surface Course, Mixture D, Class I	Tons	48.8		48.8

APPROVED
FOR STRUCTURAL ADEQUACY ONLY



LOCATION MAP

DAVID L. MAURER S.E. NO. 3921
DATE

FOR INFORMATION ONLY

GENERAL PLAN & ELEVATION
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE 96) SECTION (122 VB) BR
McDONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc.
Peoria, Illinois 61614

whks
engineers + planners + land surveyors

USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 0:2 ':" / in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 25 OF 36 SHEETS

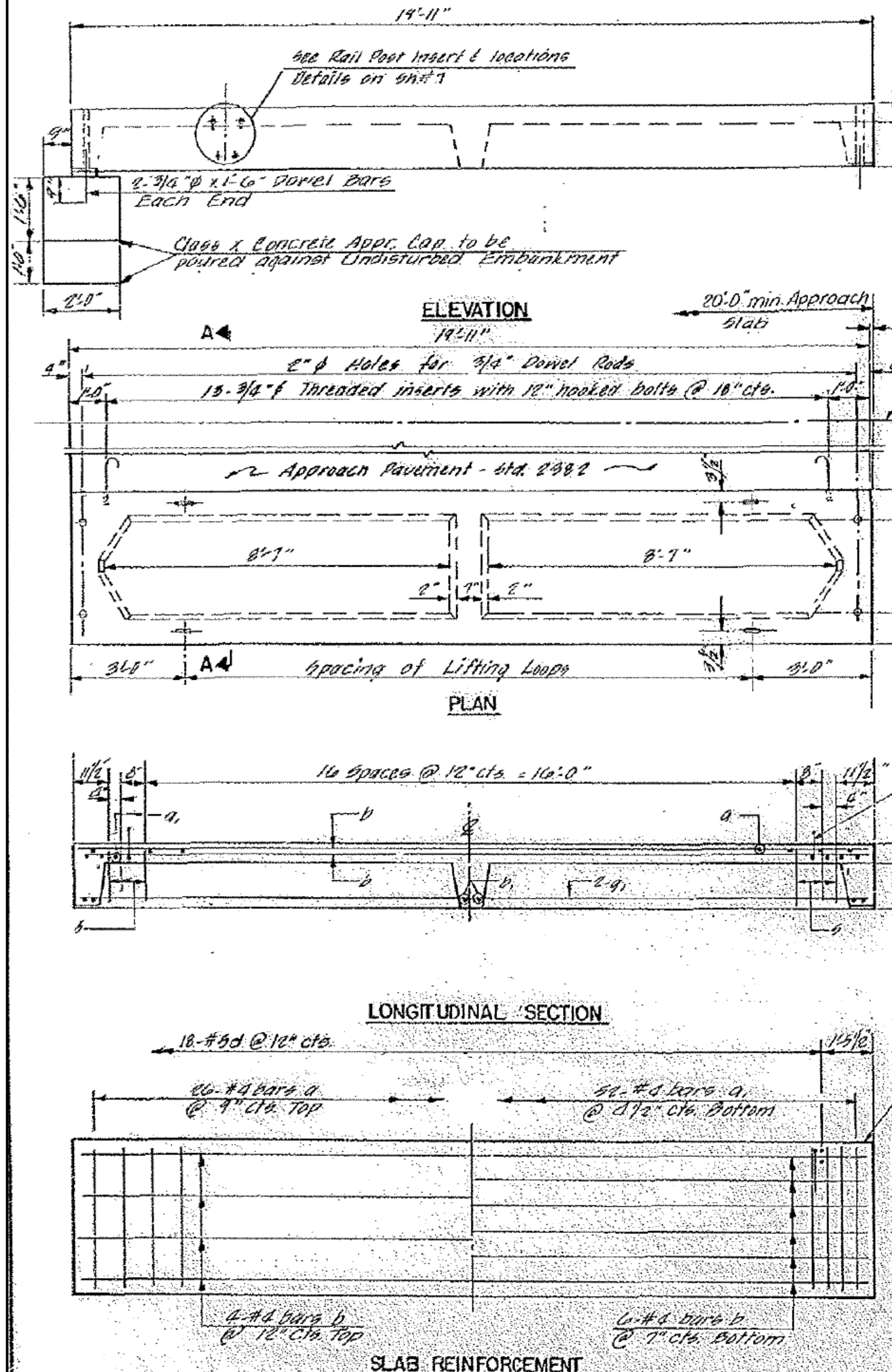
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	52

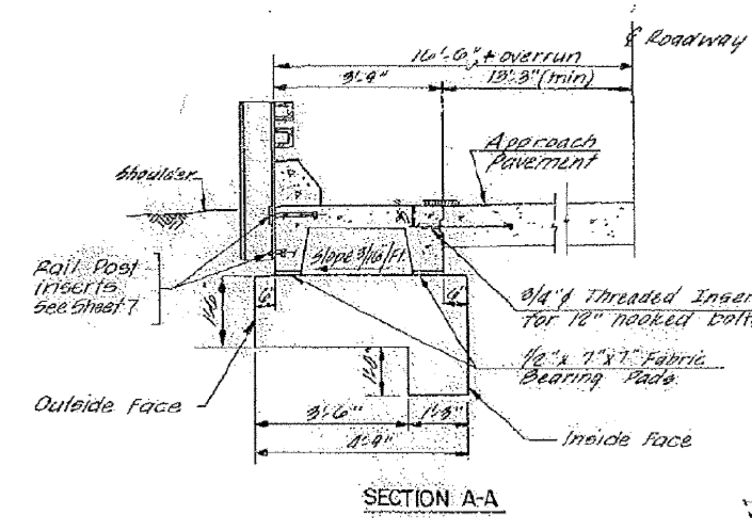
CONTRACT NO. 68689
ILLINOIS FED. AID PROJECT

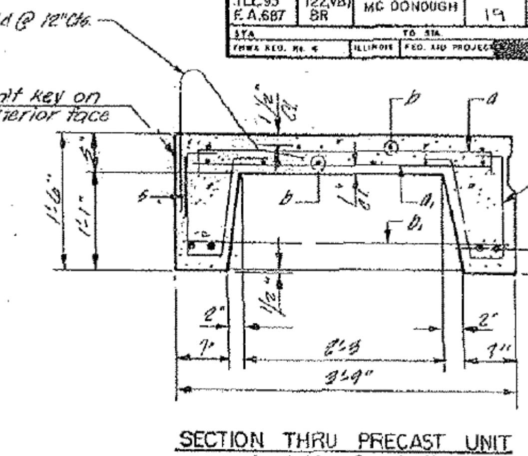
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL.95 F.A.687	(122VB) BR	MC DONOUGH	19	7

SHEET NO. 2
SHEETS 11



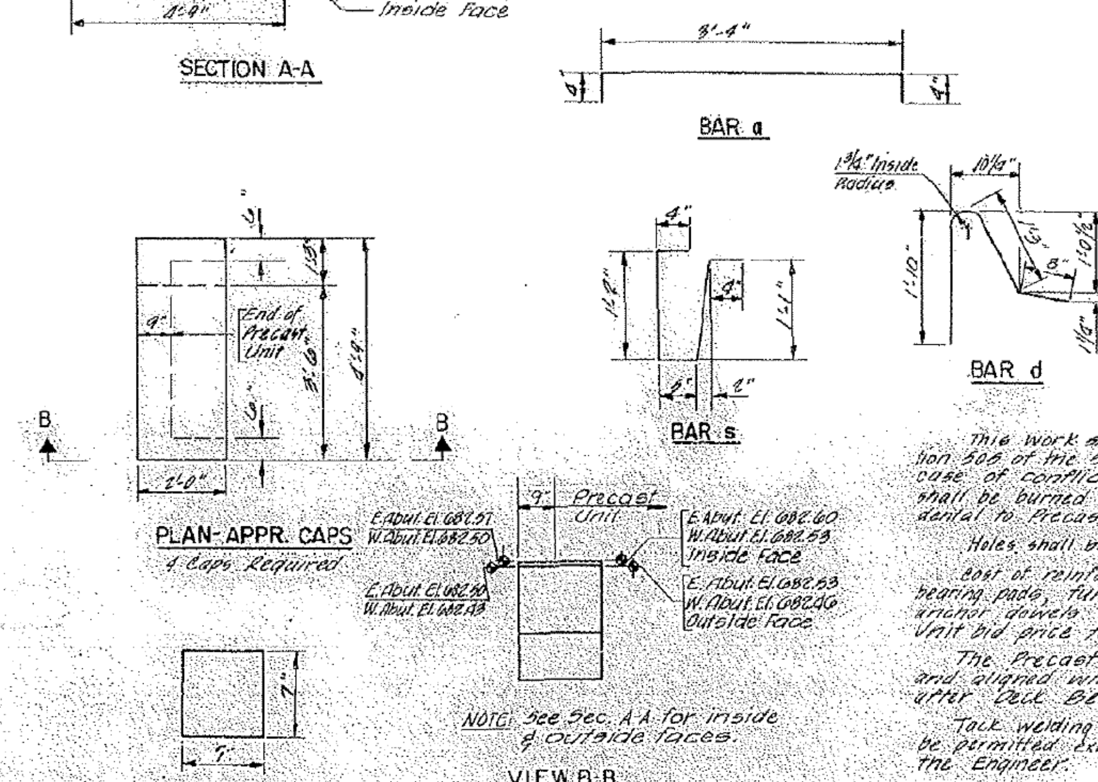




BAR LIST-ONE UNIT

Reinforcement to be cast into slab.

Bar	No.	Size	Length	Shape
a	26	#4	4'-0"	——
a,	52	#4	4'-3"	——
b	10	#4	19'-6"	——
b,	6	#4	3'-6"	——
d	18	#5	4'-2"	⌒
g	4	#10	19'-6"	——
s	42	#3	3'-4"	⊓



NOTES

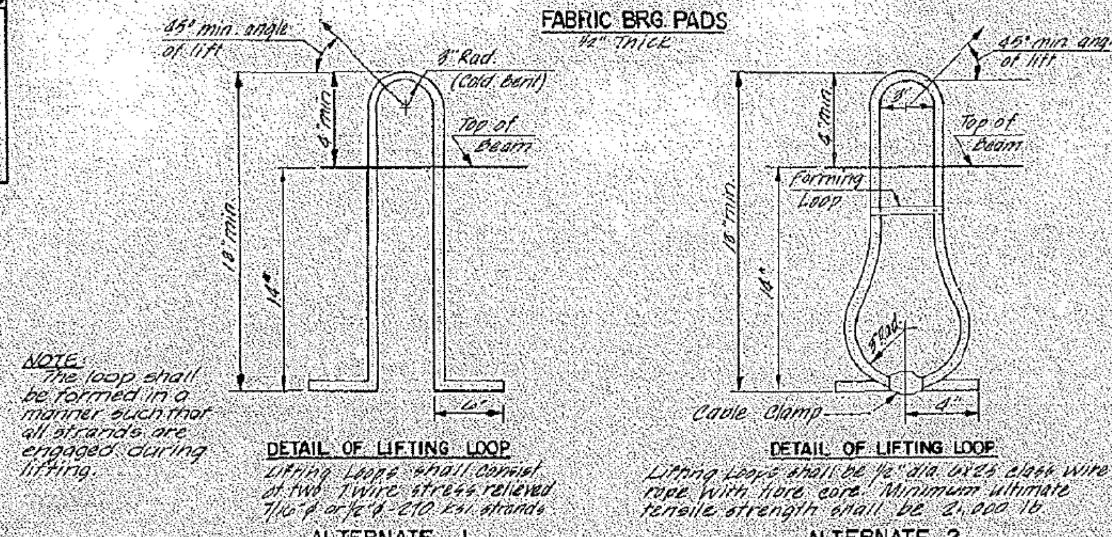
This work shall be done and paid for in accordance with Section 505 of the Standard Specifications effective October 1, 1979. In case of conflict, these notes shall take precedence. Lifting loops shall be burned off after slab has been erected. Cost incidental to Precast Concrete Bridge Slab.

Holes shall be drilled and dowel rods grouted into place.

Cost of reinforcement and accessories cast into slab unit, bearing pads, furnishing, drilling for, placing and grouting anchor dowels and 3/4"φ hooked bolts is included in Unit bid price for "Precast Concrete Bridge Slab".

The Precast Concrete Bridge Slab shall be erected and aligned with the exterior face of the exterior Deck Beam after Deck Beams are in final position.

Tack welding of stirrups to bottom longitudinal bars will not be permitted except as otherwise authorized in writing by the Engineer.



STRESSES
f'c = 6,500 psi
fc = 1,500 psi
fs = 20,000 psi
n = 6

BILL OF MATERIAL

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq. Ft.	299
Class X Concrete	Cu. Yds.	7.5

APPROACH DETAILS
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122 VB) BR
MC DONOUGH COUNTY
STATION 26+90

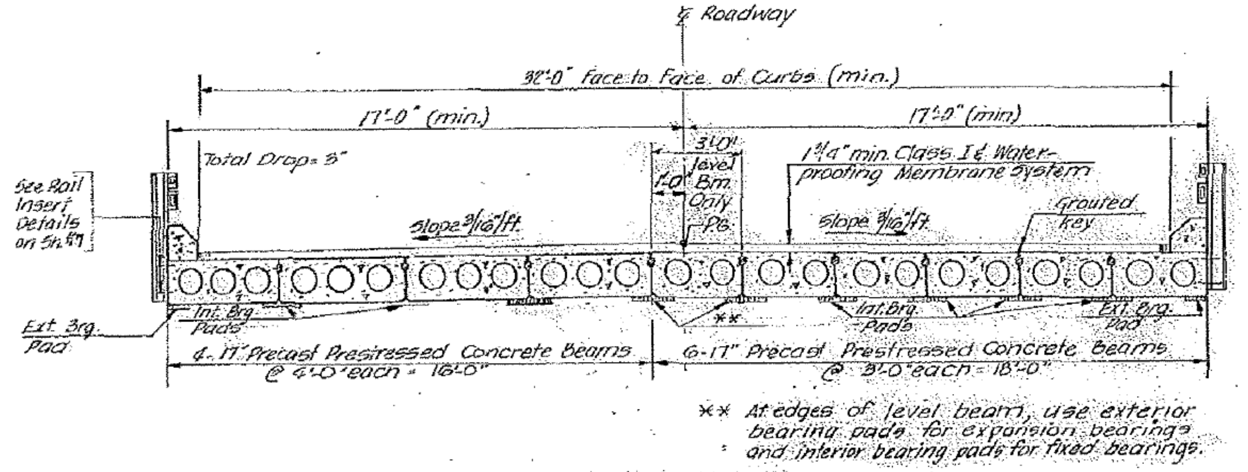
FOR INFORMATION ONLY

RANDOLPH & Associates, Inc.

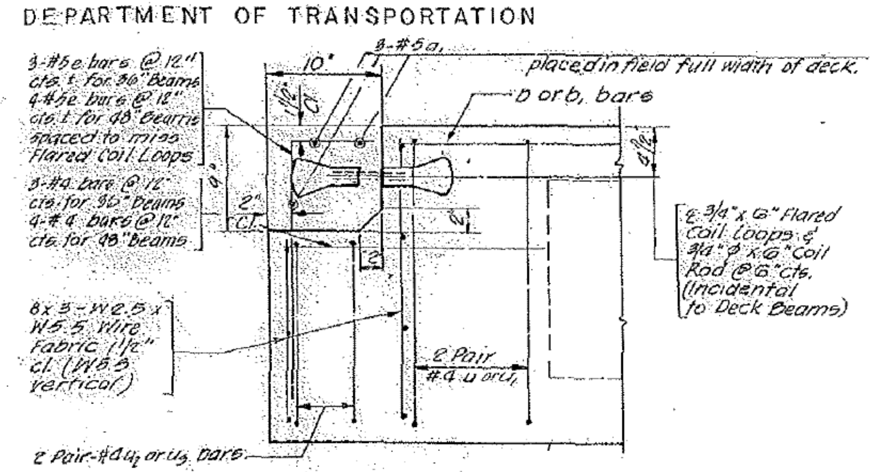
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL. 95 F.A.P. 687	122 VB BR	MC DONOUGH	19	8

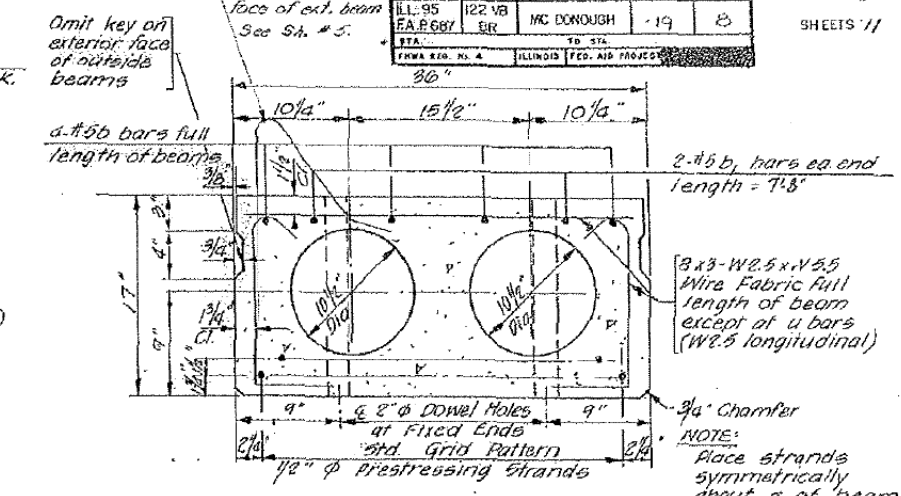
SHEET NO. 9 SHEETS 11



FULL CROSS SECTION
(Looking East)

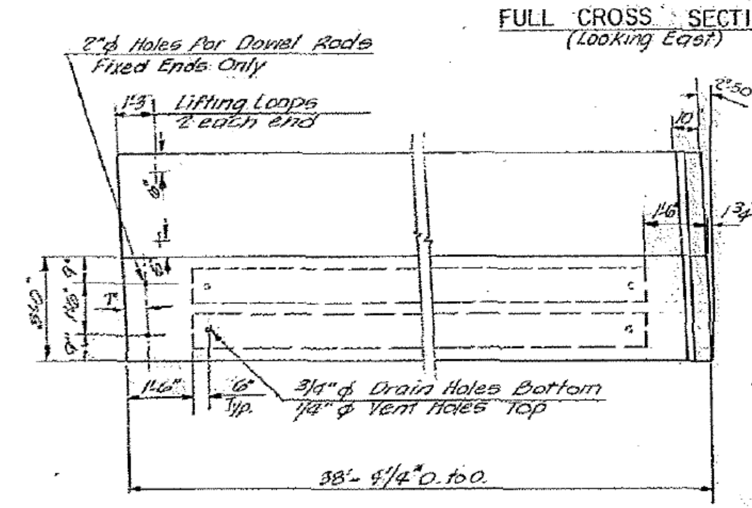


END OF BEAM (EXP. END)
(Dimensions are at Right Angles)

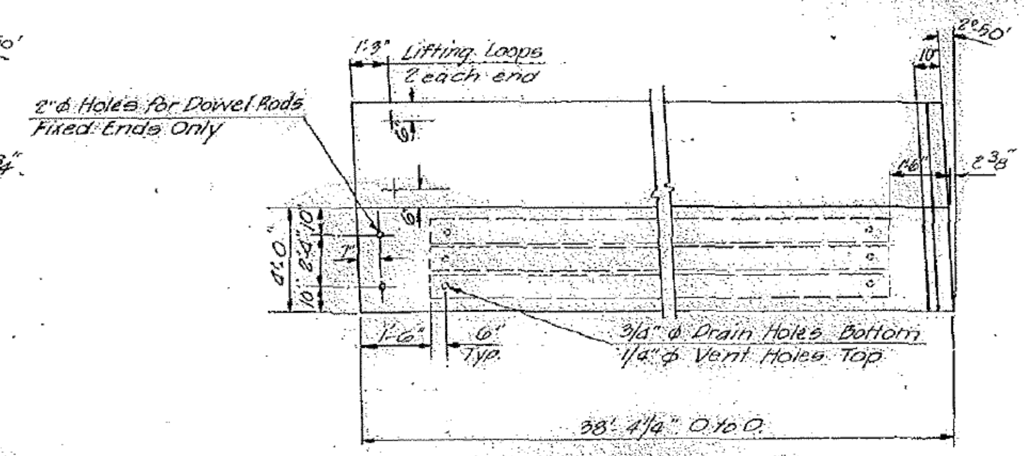


TYPICAL SECTION 36" WIDE BEAM

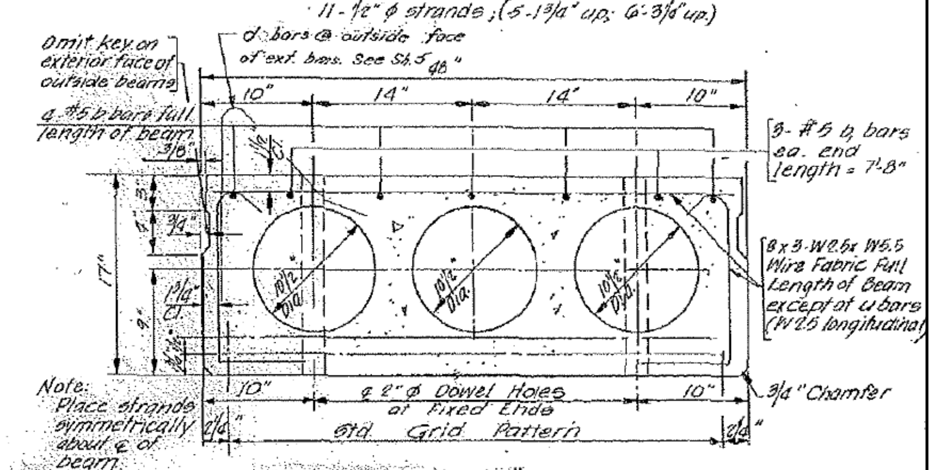
11 - 1/2" φ strands; (5-1 3/4" up; 6-3 3/8" up)



PLAN 36" BEAMS - END SPANS



PLAN 48" BEAMS - END SPANS

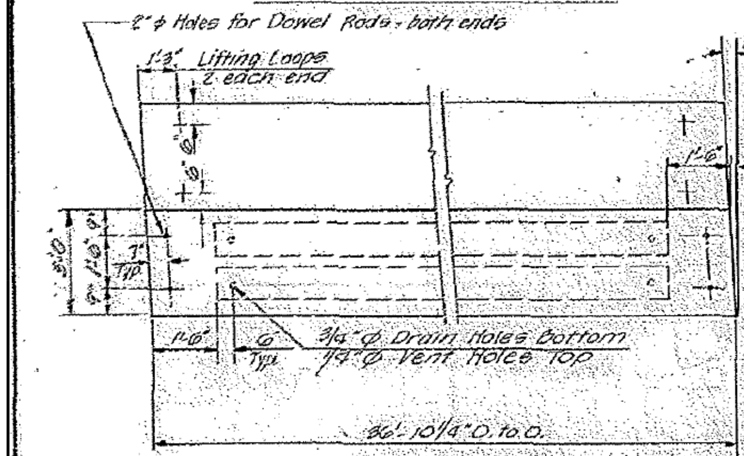


TYPICAL SECTION 48" WIDE BEAM

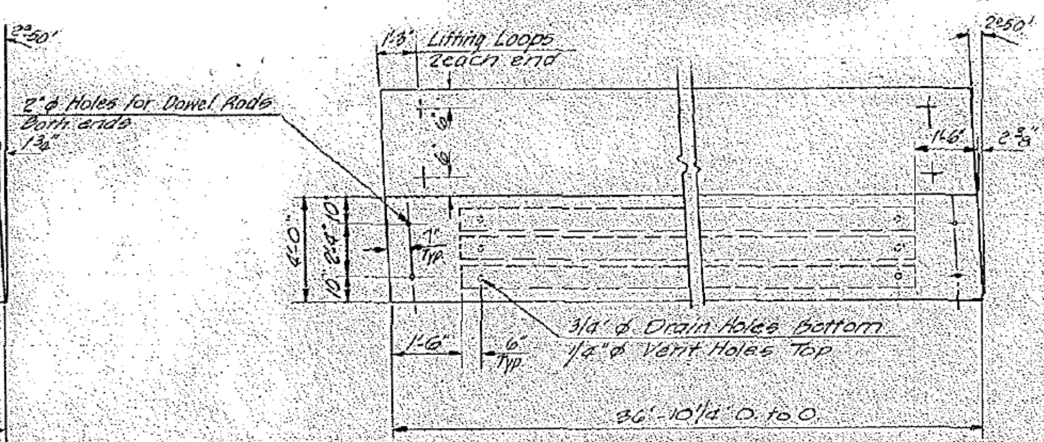
NOTE:

14 — 1/2" φ strands
(10 — 1 3/4" up; 4 - 3 1/4" up.)

Each strand stressed to 28,900 lb.



PLAN 36" BEAMS - CENTER SPAN



PLAN 48" BEAMS - CENTER SPAN

GENERAL NOTES

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sand blasting the keyway areas between top of the beam and the bottom edge of the key.

A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions shall be used in the concrete for precast, prestressed concrete deck beams.

Prestressing steel shall be non-galvanized high strength, stress-relieved 7 wire strand, Grade 270.

The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to AASHTO M31 or M53, Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Cost of reinforcement and accessories cast into the beam, of bearing pads, and of grouting longitudinal shear keys and joints is included in unit price bid for "Precast Prestressed Concrete Deck Beams (17" dp.)

Lifting Loops shall be burned off after erection, and the cost of burning off Lifting Loops shall be incidental to Precast Prestressed Concrete Deck Beams.

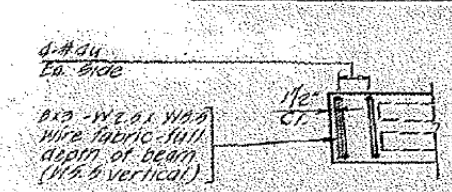
See sheet 6 for bar details.

An equal substitution of low-relaxation strands for the stress-relieved strands will be permitted.

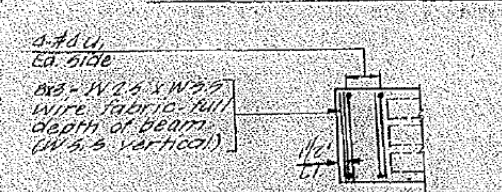
Required release strength, f'ci, shall be 4200 psi for 17"x48" bms. and 4000 psi for 17"x36" bms.

SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	12	#5	35'-0"	——
Structural Steel			lbs.	4760
Precast Prestressed Concrete Deck Beams (17" dp)			Sq. Ft.	3861
Class X Concrete			Cu. Yd.	4.8
Reinforcement Bars			Lbs.	440



FIXED END PLAN - 36" BEAMS



FIXED END PLAN - 48" BEAMS

SUPERSTRUCTURE
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122VB)BR
MCDONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc. Peoria, Illinois 61614

FOR INFORMATION ONLY

design firm no. 184001036
whks engineers • planners • land surveyors

USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 0.2 ' / in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 27 OF 36 SHEETS

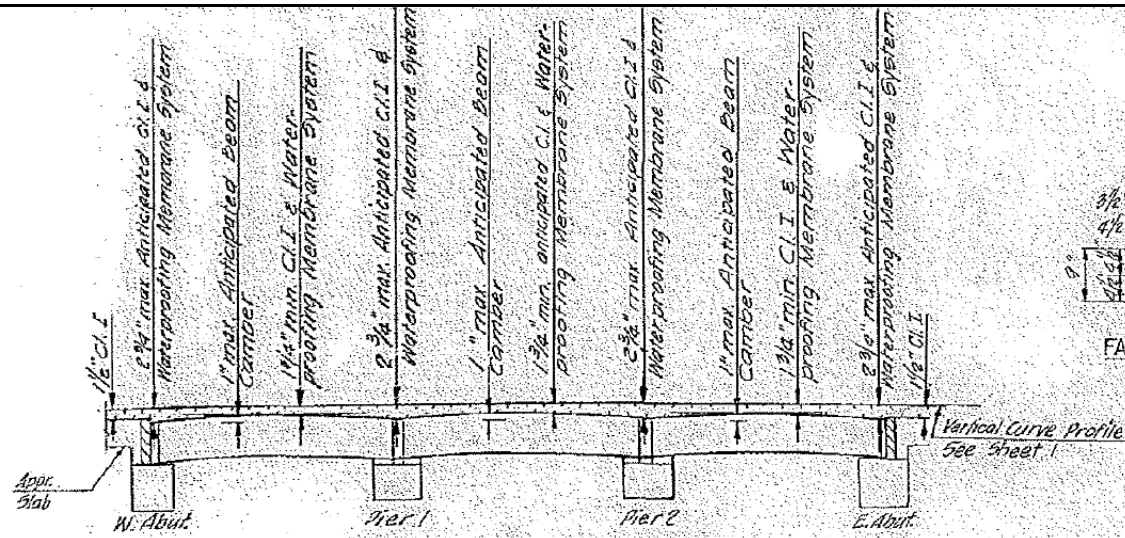
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	54

CONTRACT NO. 68689
ILLINOIS FED. AID PROJECT

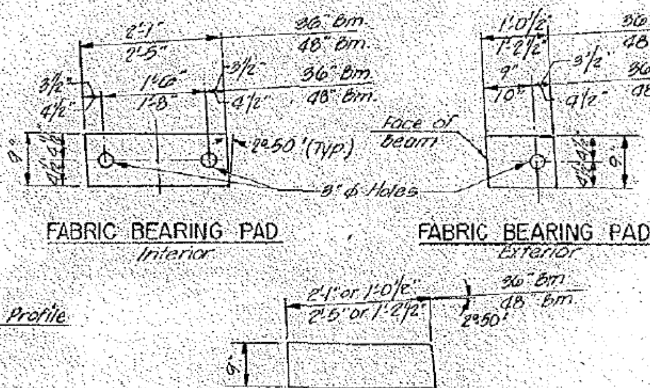
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I.L. 95 F.A.P. 687	122VB BR.	McDONOUGH	12	9

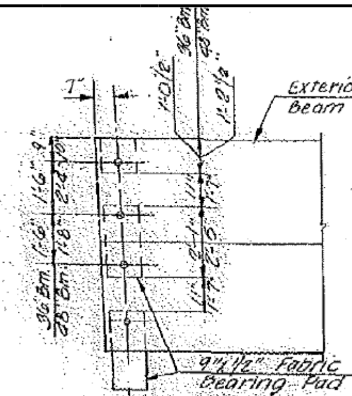
SHEET NO. 4
SHEETS 11



ANTICIPATED CAMBER DIAGRAM

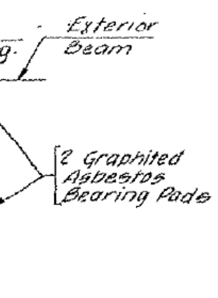


1/4" GRAPHITED ASBESTOS BEARING PAD

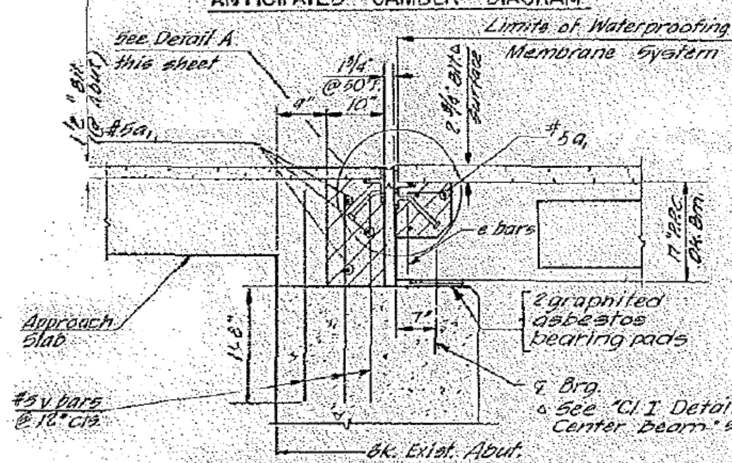


NOTE:
Provide two (2) 1/8" Fabric Shim Pads for all bearings as required.

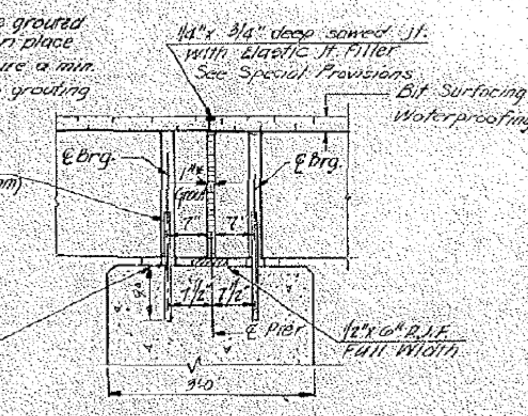
FIXED BEARINGS



EXPANSION BEARINGS



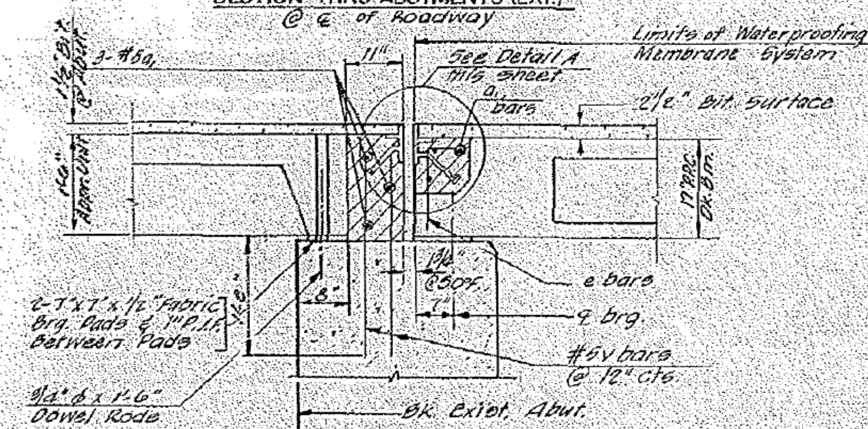
SECTION THRU ABUTMENTS (EXP)
@ ℄ of Roadway



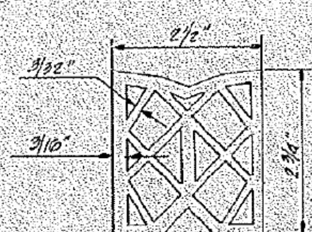
** Dowel Rods to be groured after beams are in place and allowed to cure a min. of 24 hrs. prior to grouting the shear keys.

SECTION THRU PIERS (FIXED)

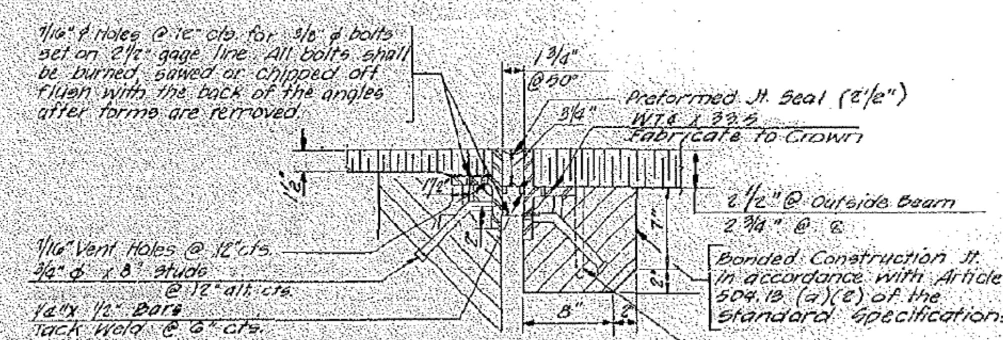
* 1" Joint shall be packed with a very dry mix of 2:1 sand & P.C. mortar. 1" dimension may vary plus or minus to accomodate tolerance in beam lengths.



SECTION THRU ABUTMENTS (EXP)
@ Outside Beam



PREFORMED JOINT SEAL (2 1/2")



DETAIL A

NOTE:
Dimensions are at right angles.
Hatched areas are to be poured after beams and precast approach units have been erected and joints grouted.

Ends of beams shall be aligned at expansion joints. Any lineal variation in the beam lengths shall be placed at the fixed joint.

CLASS X CONCRETE QUANTITIES
- Hatched area in beams billed on sheet 3.
- Hatched area connected to abutments billed on sheets 7 & 8.

SUPERSTRUCTURE DETAILS
BRIDGE OVER B.N. R.R.
F.A.P. RTE 687 (ILL. RTE. 95) SECTION (122VB) BR
McDONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc.
Peoria, Illinois

FOR INFORMATION ONLY

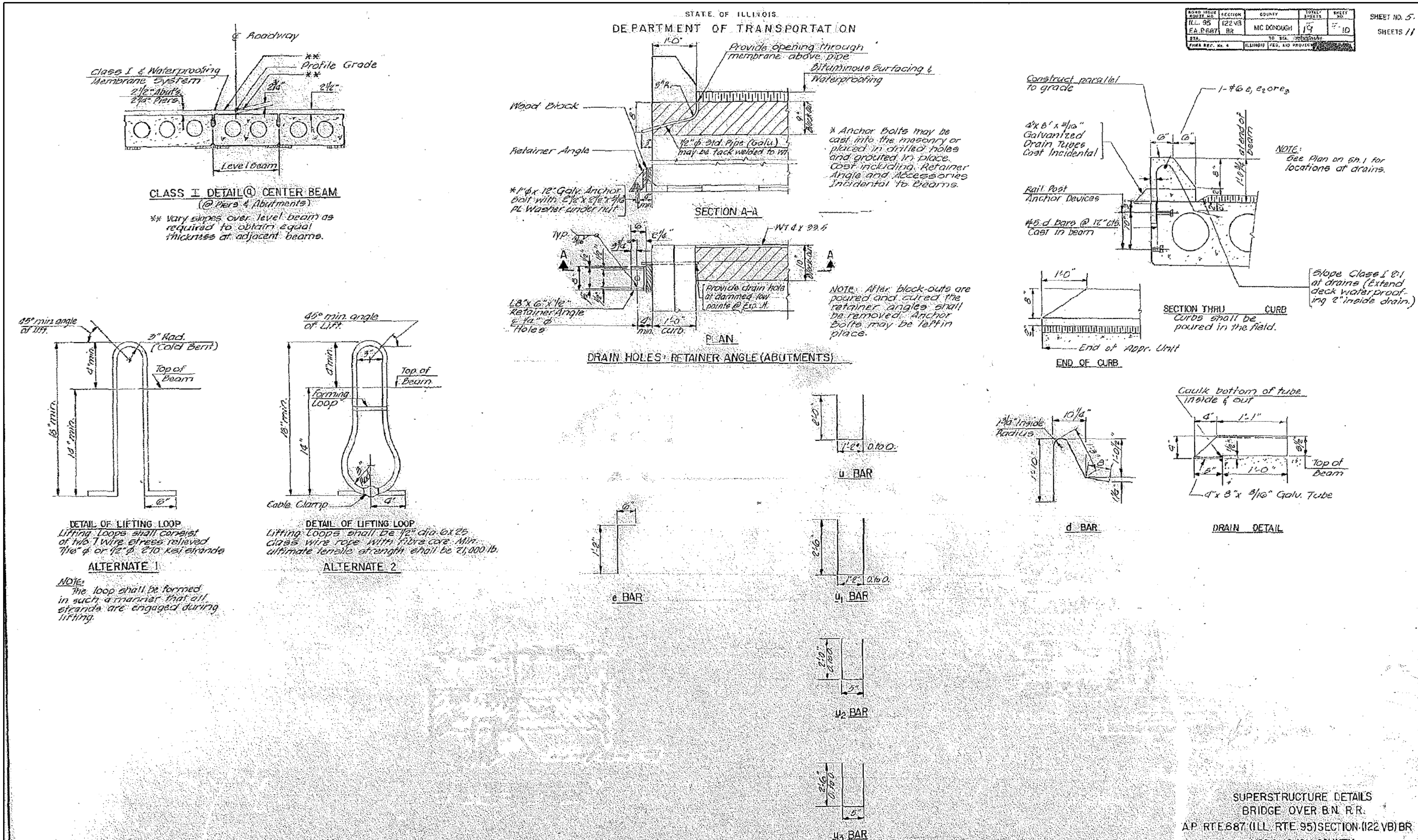
design firm no. 184001036 whks engineers • planners • land surveyors	USER NAME = $OPERATOR$	DESIGNED -	REVISED
	FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
	PLOT SCALE = 0:2 ' / in.	DRAWN -	REVISED
	PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 28 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	55

CONTRACT NO. 68689
ILLINOIS FED. AID PROJECT


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL. 95
F.A.P. 687
122 VB BR
MC DONOUGH
SHEET NO. 5
SHEETS 11
℄ Roadway
** Profile Grade
Class I & Waterproofing Membrane System
2½" Abut's.
2¼" Piers
Level Beam
CLASS I DETAIL @ CENTER BEAM
(@ Piers & Abutments)
** Vary slopes over level beam as required to obtain equal thickness at adjacent beams.
Provide opening through membrane above pipe
Bituminous Surfacing & Waterproofing
Wood Block
Retainer Angle
½" φ Std. Pipe (Galv.) may be tack welded to Wt
*1" φ x 12" Galv. Anchor Bolt with 2½"x 2½"x ⅜" PL Washer under nut
* Anchor Bolts may be cast into the masonry or placed in drilled holes and grouted in place. Cost including Retainer Angle and Accessories Incidental to Beams.
SECTION A-A
WT 4 x 33.5
Provide drain hole at dammed low points @ Exp. Jt.
L 8"x 6"x ½" Retainer Angle
Holes
PLAN
DRAIN HOLES: RETAINER ANGLE (ABUTMENTS)
NOTE: After block-outs are poured and cured the retainer angles shall be removed. Anchor Bolts may be left in place.
Construct parallel to grade
1-#6 e, e₂ or e₃
4"x 8" x ³⁄₁₆" Galvanized Drain Tubes Cost Incidental
Rail Post Anchor Devices
#5 d bars @ 12" cts. Cast in beam
NOTE: See Plan on Sh. 1 for locations of drains.
Slope Class I 8:1 at drains (Extend deck waterproofing 2" inside drain.)
SECTION THRU CURB
Curbs shall be poured in the field.
End of Appr. Unit
END OF CURB
45° min. angle of lift
3" Rad. (Cold Bent)
Top of Beam
18" min.
14" min.
DETAIL OF LIFTING LOOP
Lifting Loops shall consist of two 7 wire stress relieved ⁷⁄₁₆" φ or ½" φ 270 ksi strands
ALTERNATE 1
NOTE: The loop shall be formed in such a manner that all strands are engaged during lifting.
Forming Loop
Cable Clamp
DETAIL OF LIFTING LOOP
Lifting Loops shall be ½" dia. 6x25 class wire rope with fibre core. Min. ultimate tensile strength shall be 21,000 lb.
ALTERNATE 2
u BAR
e BAR
u₁ BAR
u₂ BAR
u₃ BAR
1⅛" Inside Radius
d BAR
Caulk bottom of tube inside & out
Top of Beam
4"x 8"x ³⁄₁₆" Galv. Tube
DRAIN DETAIL

SUPERSTRUCTURE DETAILS
BRIDGE OVER B.N. R.R.
A.P. RTE.687 (ILL. RTE. 95) SECTION (122 VB) BR
MCDONOUGH COUNTY
STATION 26+90

FOR INFORMATION ONLY

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design firm no. 184001036	whks engineers • planners • land surveyors

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

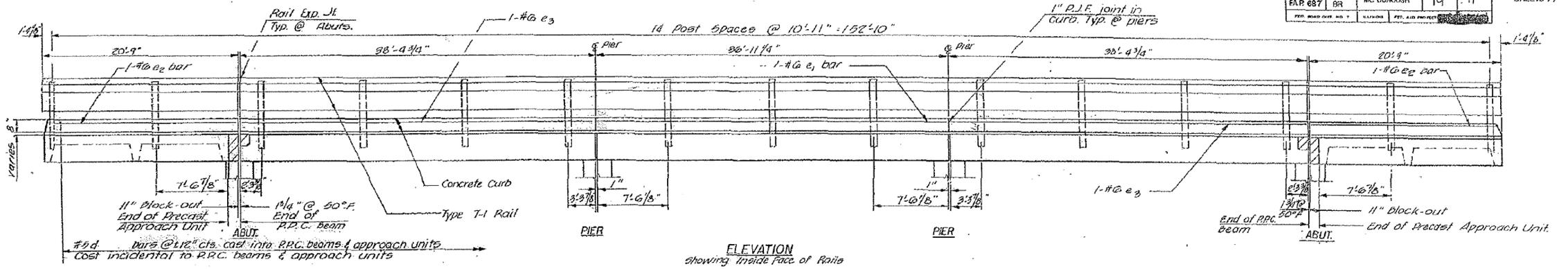
EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 29 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	56
		CONTRACT NO. 68689		
		ILLINOIS FED. AID PROJECT		

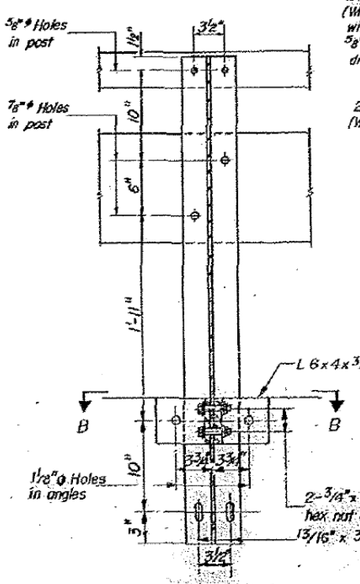
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 95 FAP 687	122(VB) BR	MC DONOUGH	19	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

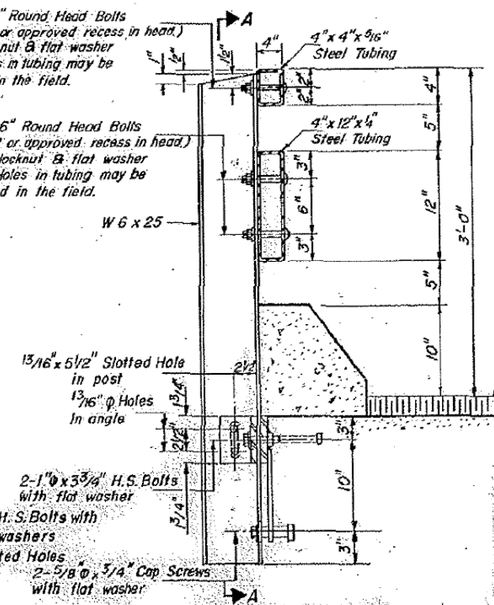
SHEET NO. 6
SHEETS 11



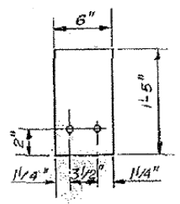
ELEVATION
Showing Inside Face of Rails



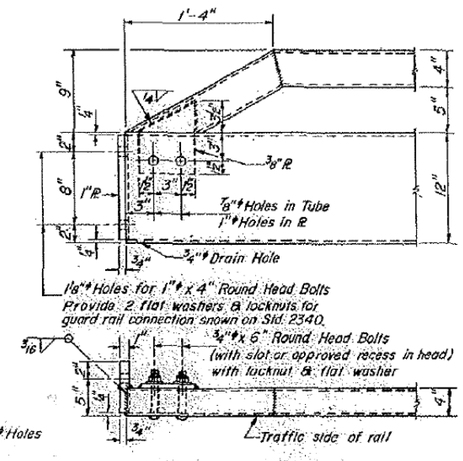
SECTION A-A



SECTION AT RAIL POST

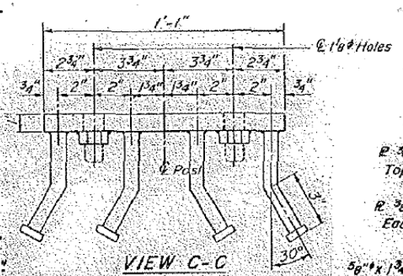


1/4" SHIM PLATE DETAIL

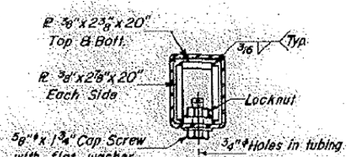


1/8"ø Holes for 1"ø x 4" Round Head Bolts Provide 2 flat washers & locknuts for guard rail connection shown on Std. 2340.

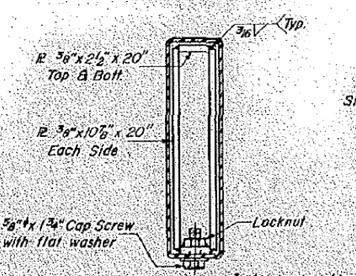
END OF RAIL DETAILS



VIEW C-C

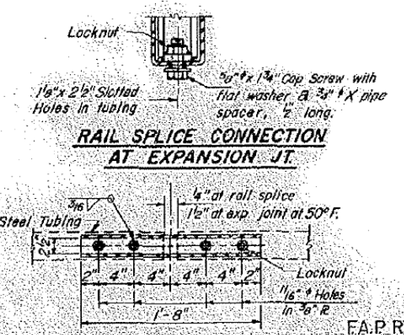


TOP RAIL



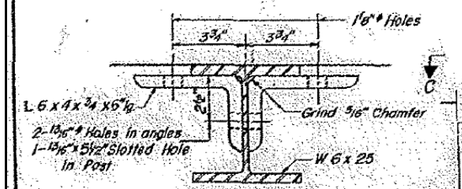
BOTTOM RAIL

SECTIONS AT RAIL SPLICE

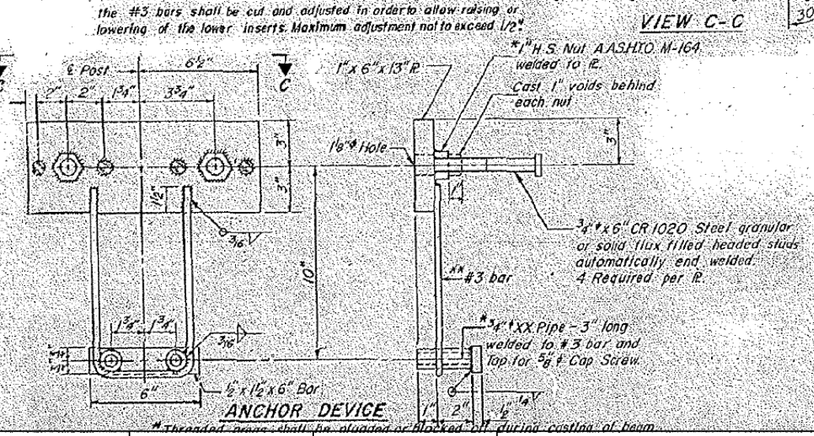


RAIL SPLICE CONNECTION AT EXPANSION JT.

PLAN - BOTT. SPLICE ℄ TYPICAL



SECTION B-B



ANCHOR DEVICE

* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

** Threaded areas shall be plugged or blocked off during casting of beam.

NOTES

Hollow structural steel tubing shall conform to the requirements of A.S.T.M. designation A-500 Grade B Structural Steel Tubing.

All other steel shapes and plates shall conform to the requirements of A.A.S.H.T.O. M-183 except posts and angles shall conform to A.A.S.H.T.O. M-223, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of A.S.T.M. designation A-307 except for high strength bolts, nuts and washers noted which shall conform to A.A.S.H.T.O. M-164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with A.A.S.H.T.O. M-232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. M-111 and A.S.T.M. A-385. Galvanized rail shall not be painted.

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for STEEL RAILING, TYPE T-1.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 714.08 Type B or place 1/8" fabric bearing pad between the post and concrete.

The 3/4"ø high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened in accordance with Article 507.04(g)(3) of the Standard Specifications. The 1"ø high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/2 turn. The 5/8"ø cap screws in bottom of posts shall be tightened to a snug tit only.

For multi-span bridges, sufficient 1/4" x 6" x 1'-5" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.

CURB & RAIL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e_1	2	#6	36'-6"	
e_2	4	#6	19'-7"	
e_3	4	#6	38'-0"	
Reinforcement Bars			Lbs.	460
Class X Concrete			Cu. Yds.	96
Steel Railing, Type T-1			Lin. Ft.	311

TYPE T-1 STEEL RAILING
BRIDGE OVER B.N.RR.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122 VB) BR
MC DONOUGH COUNTY
STATION 26+90

FOR INFORMATION ONLY

RANDOLPH Engineering Associates, Inc.
Peoria, Illinois 61615

SURVEYED	
DRAWN	MHK
CHECKED	DPP
DESIGNED	DPP
QUANTITIES	JLM

design firm no. 184001036
whks engineers • planners • land surveyors

USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 055S082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 8\2 '/ in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

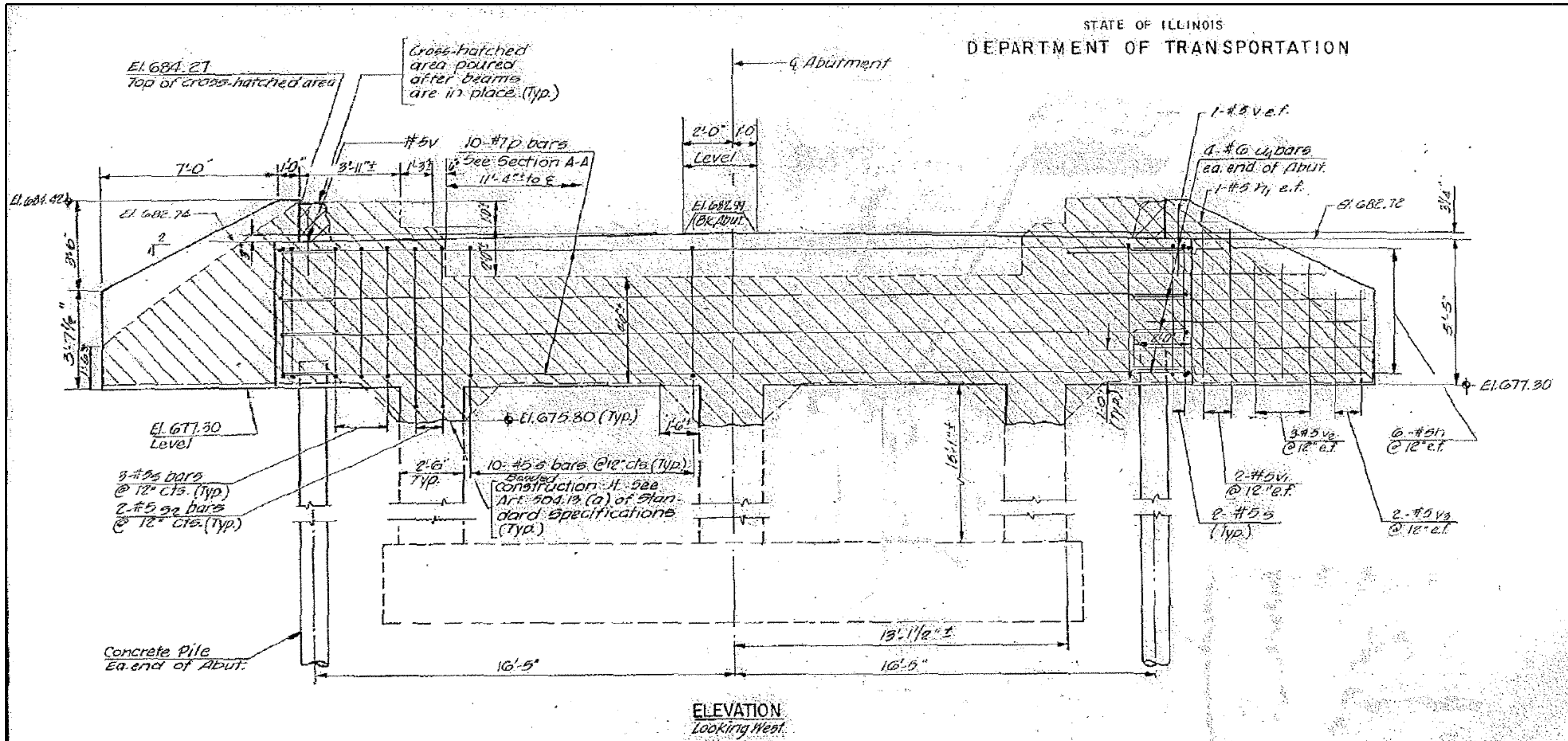
EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 30 OF 36 SHEETS

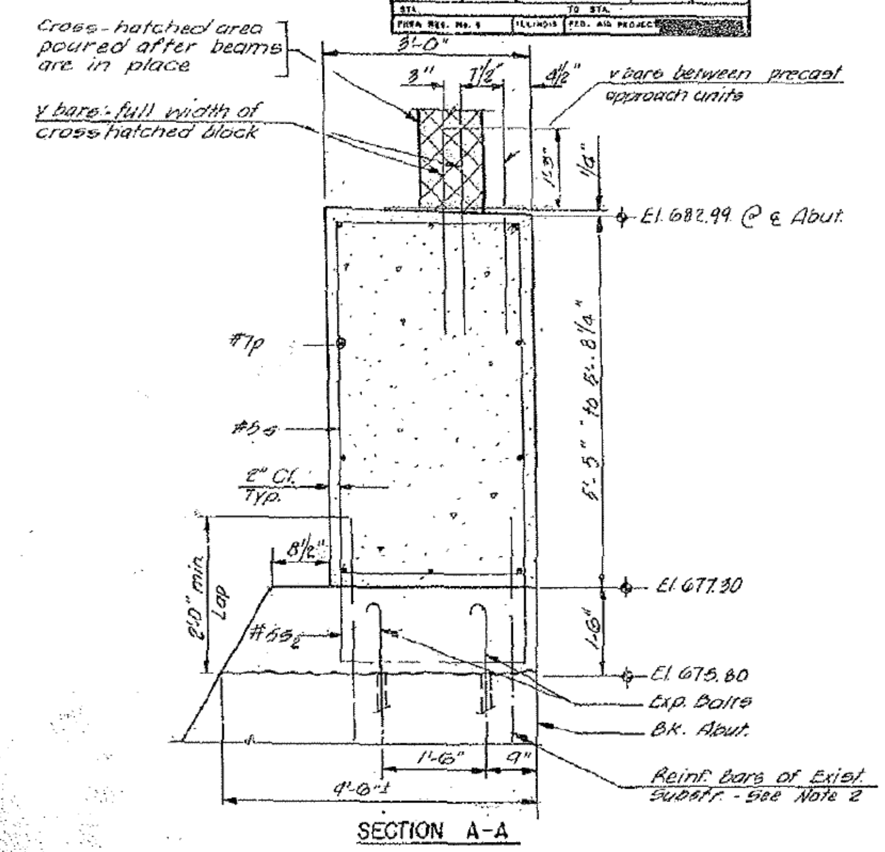
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	57
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

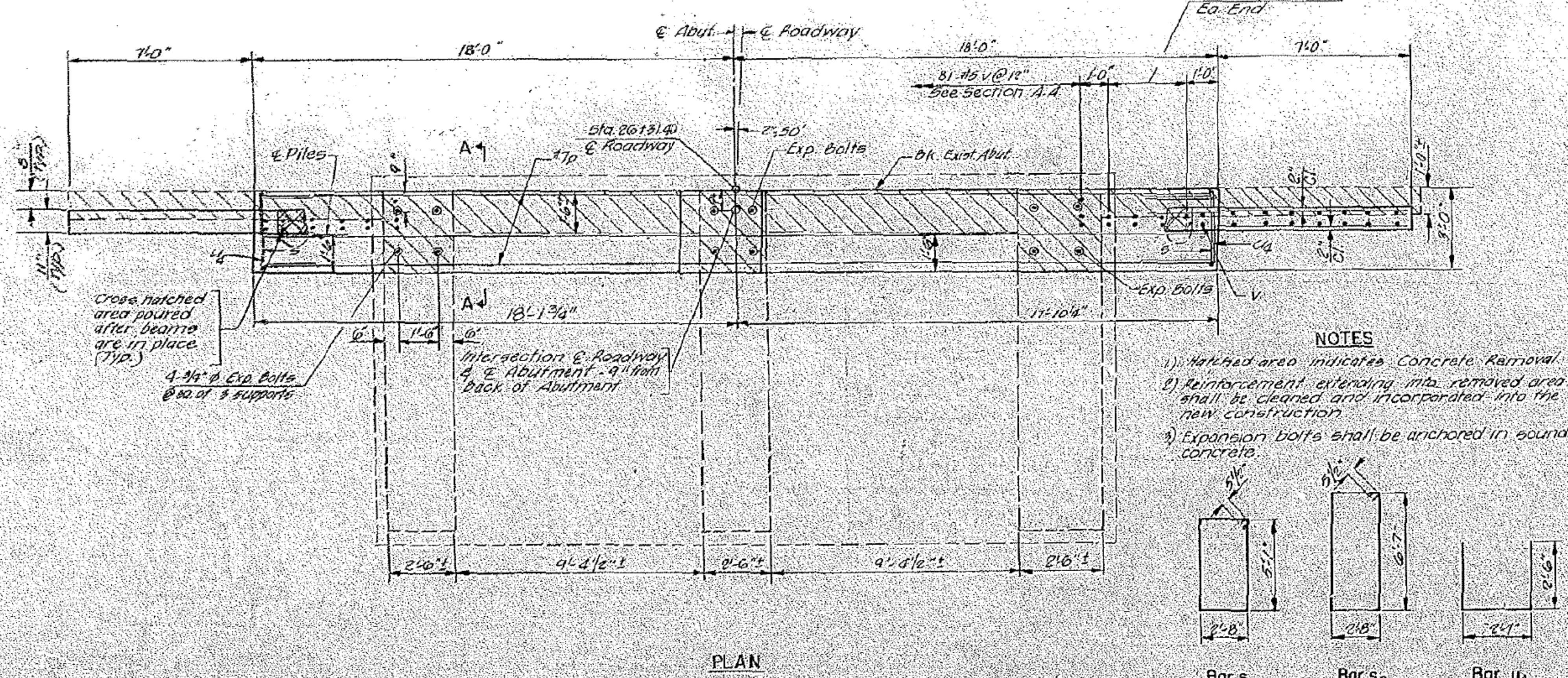
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL. 95 F.A.P. 687	122 VB BR	MC DONOUGH	19	12

SHEET NO. 7
SHEETS 11







NOTES

1) Hatched area indicates Concrete Removal.
2) Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
3) Expansion bolts shall be anchored in sound concrete.

Bar s
Bar s_2
Bar u_4

PILE DATA

Type: Concrete
Max. Cap.: 30 Ton
Est. Length: 36 Ft.
No. Req'd.: 2

BILL OF MATERIAL-W ABUTMENT

Bar	No.	Size	Length	Shape
h	24	#5	8'-6"	——
h_1	4	#5	2'-0"	——
p	10	#7	35'-9"	——
				——
s	30	#5	16'-5"	◻
s_2	6	#5	19'-6"	◻
u_4	8	#6	7'-7"	⊔
v	101	#5	3'-0"	——
v_1	8	#5	6'-0"	——
v_2	12	#5	4'-6"	——
v_3	8	#5	3'-6"	——
Class X Concrete			Cu. Yd.	28.7
Reinf. Bars			Lbs.	2,130
Exp. Bolts - 3/4" ϕ			Ea.	12
Concrete Removal			Cu. Yd.	14
Concrete Piles			L.F.	72

WEST ABUTMENT
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122VB) BR
MC DONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc.

FOR INFORMATION ONLY

design firm no. 184001036
whks engineers • planners • land surveyors

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PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082

SHEET NO. 31 OF 36 SHEETS

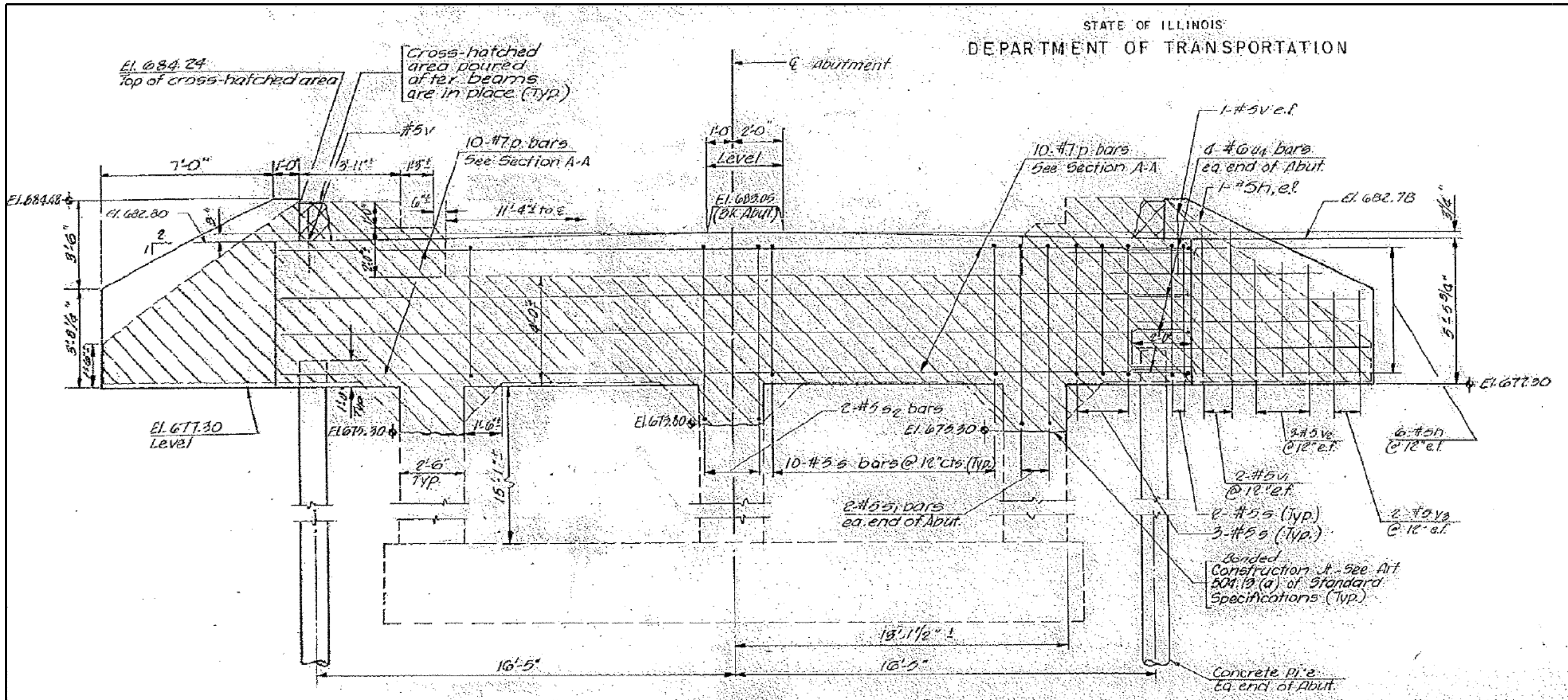
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	58

CONTRACT NO. 68689

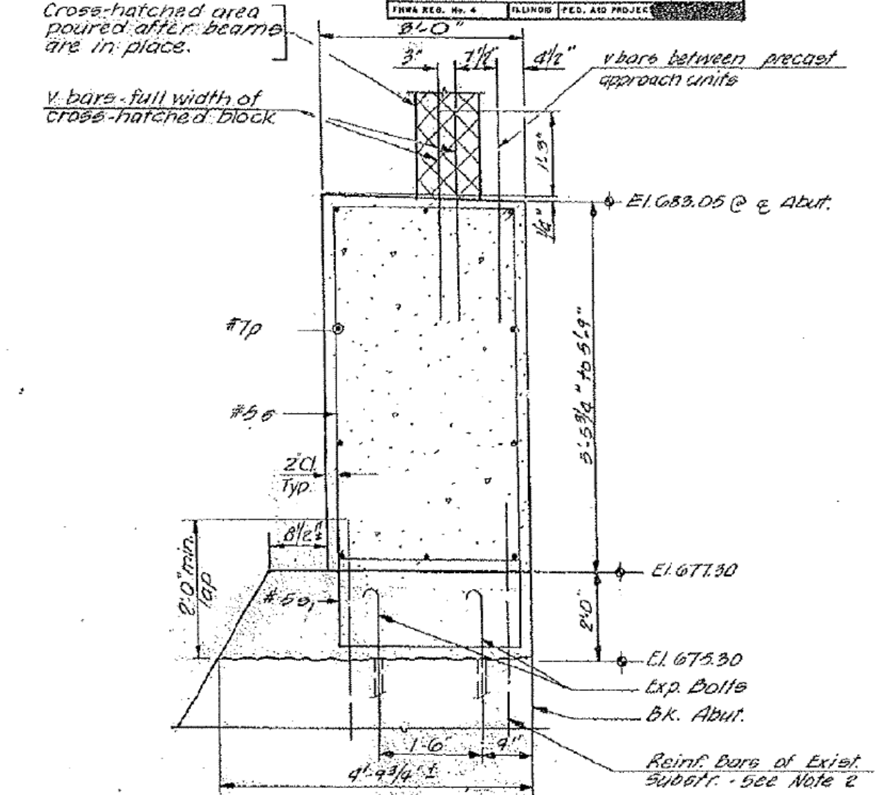
ILLINOIS FED. AID PROJECT

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL. 95 F.A.P. 687	122 VB BR	MC DONOUGH	19	13

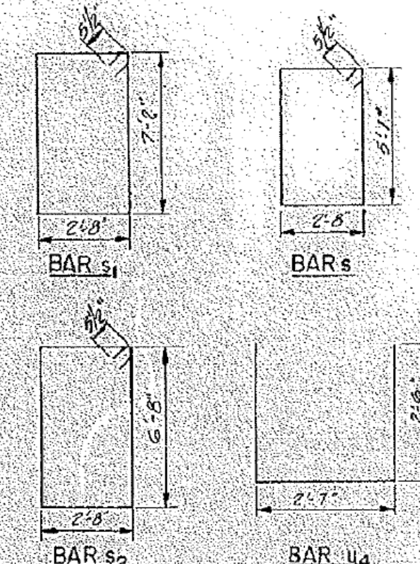
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
Looking East

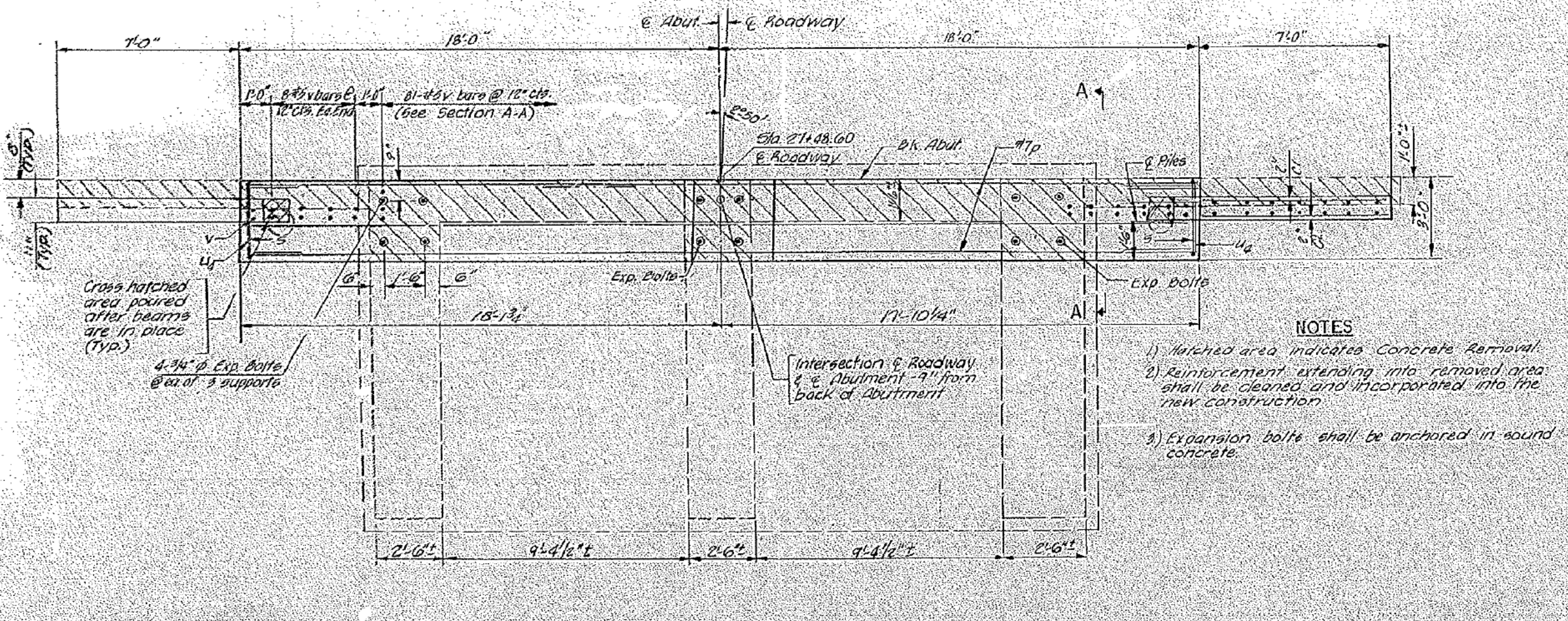


SECTION A-A



BILL OF MATERIAL - E. ABUTMENT

Bar	No.	Size	Length	Shape
h	24	#5	8'-6"	——
h_1	4	#5	2'-0"	——
p	10	#7	35'-9"	——
				——
s	30	#5	16'-5"	▢
s_1	4	#5	20'-5"	▢
s_2	2	#5	19'-5"	▢
u_4	8	#6	7'-7"	⊔
v	101	#5	3'-0"	——
v_1	8	#5	6'-0"	——
v_2	12	#5	4'-6"	——
v_3	8	#5	3'-6"	——
Class X Concrete			Cu. Yd.	29.1
Reinf. Bars			Lbs	2,140
Exp. Bolts 3/4" ϕ			Ea.	12
Concrete Removal			Cu. Yd.	14
Concrete Piles			L.F.	66



PLAN

NOTES

1) Hatched area indicates Concrete Removal.
2) Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
3) Expansion bolts shall be anchored in sound concrete.

PILE DATA

Type: Concrete
Max. Cap. 30 Ton
Est. Length 33 Ft.
No. Req'd. 2

EAST ABUTMENT
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122 VB) BR
McDONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc.

FOR INFORMATION ONLY

design firm no. 184001036
whks engineers • planners • land surveyors

USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 0:2 ' / in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 32 OF 36 SHEETS

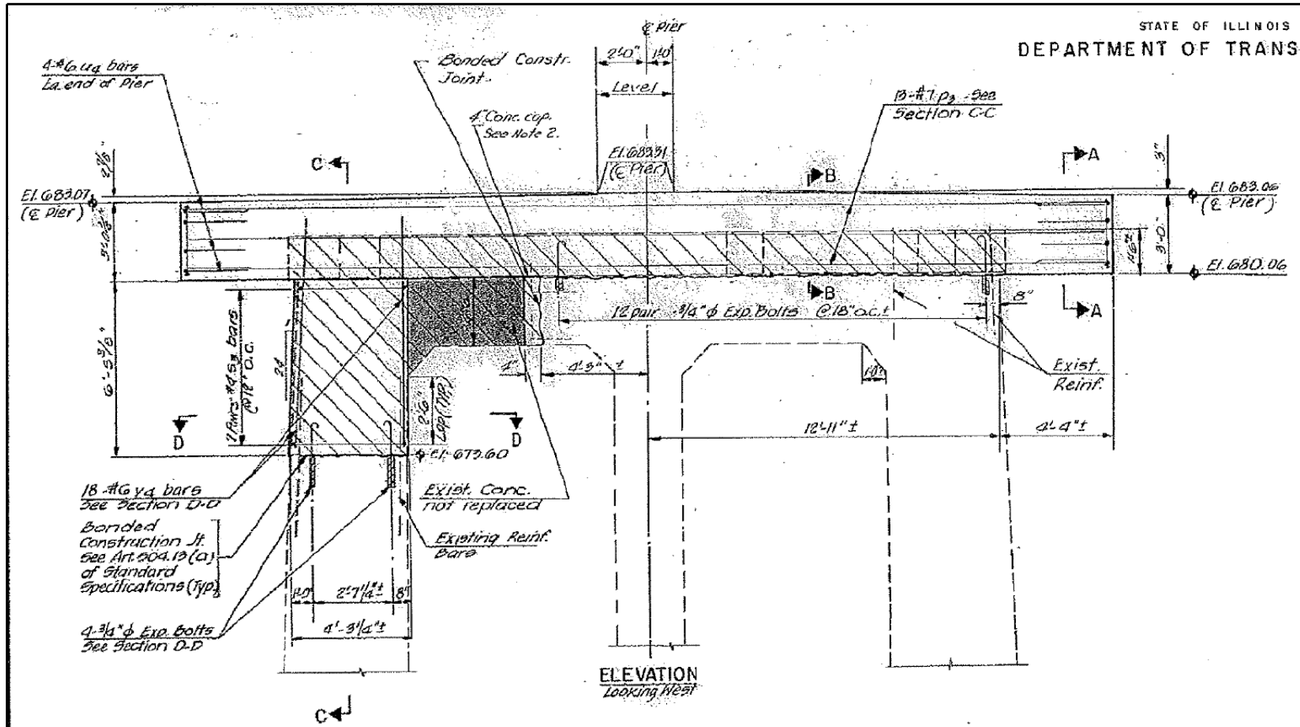
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	59

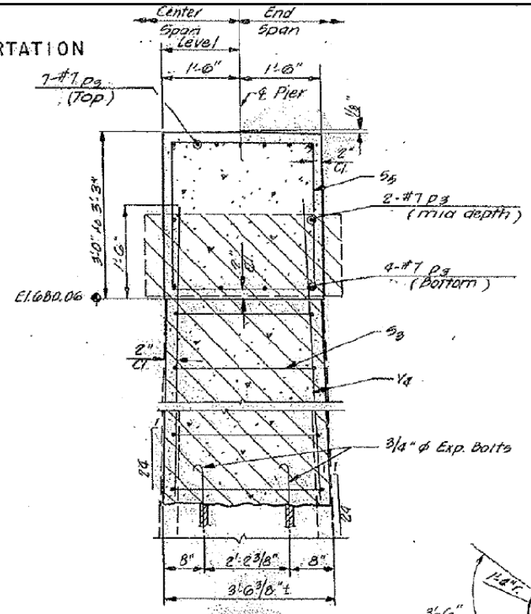
CONTRACT NO. 68689
ILLINOIS FED. AID PROJECT

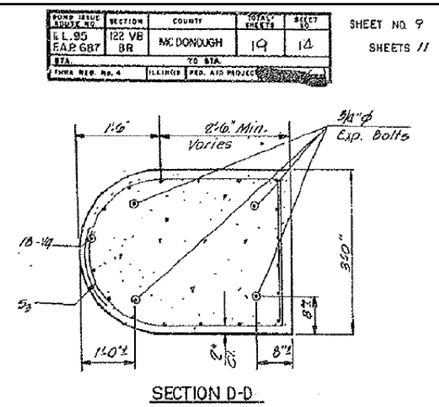
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOND ISSUE ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I.L.95	122 VB	McDONOUGH	19	14
F.A.P. 687	BR			
STA.		TO STA.		
FHWA REG. No. 4		ILLINOIS FED. AID PROJECT		

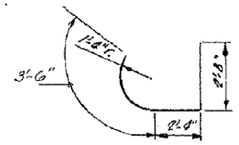
SHEET NO. 9
SHEETS 11

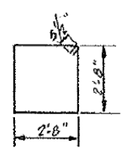


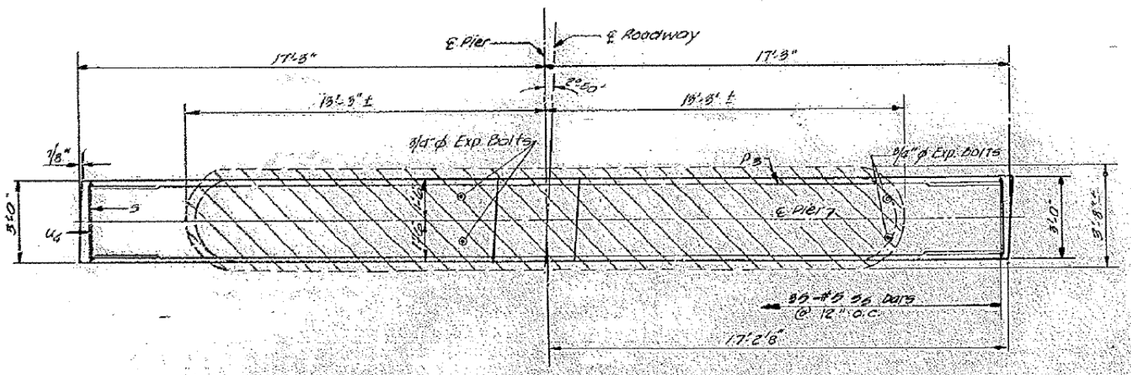


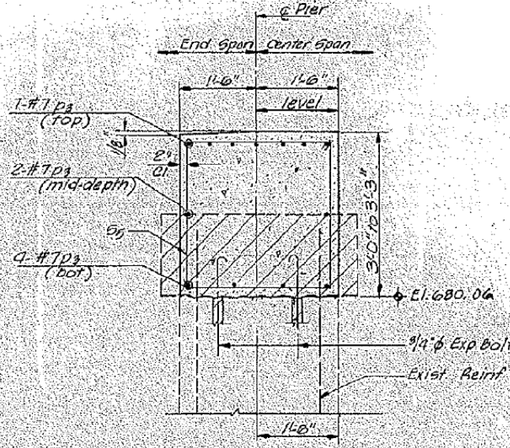


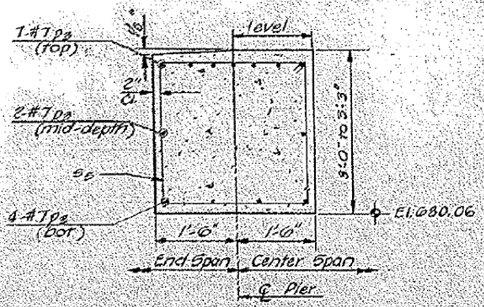
NOTE: Dimensions given are approximate for Elev. 680.06. Column dimensions vary. Match existing dimensions @ El. 679.60.











GENERAL NOTES

1. Hatched area indicates Concrete Removal.
2. Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
3. Expansion bolts shall be anchored in sound concrete.

BILL OF MATERIAL ——— PIER #1

Bar	No.	Size	Length	Shape
P3	13	#7	34'-0"	—
S3	14	#4	8'-6"	
S5	35	#5	11'-7"	
U4	8	#6	7'-7"	
U4	18	#6	8'-0"	—
Class X Concrete			Cu.Yd.	16.0
Reinforcement Bars			Lbs.	1,700
Expansion Bolts - 3/4" ϕ			Ea.	28
Concrete Removal			Cu.Yd.	9

PIER #1
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122 VB) BR
McDONOUGH COUNTY
STATION 26+90

FOR INFORMATION ONLY

RANDOLPH & Associates, Inc.
Peoria, Illinois 61614

DESIGNED - HMR
DRAWN - ODS
CHECKED - DLM

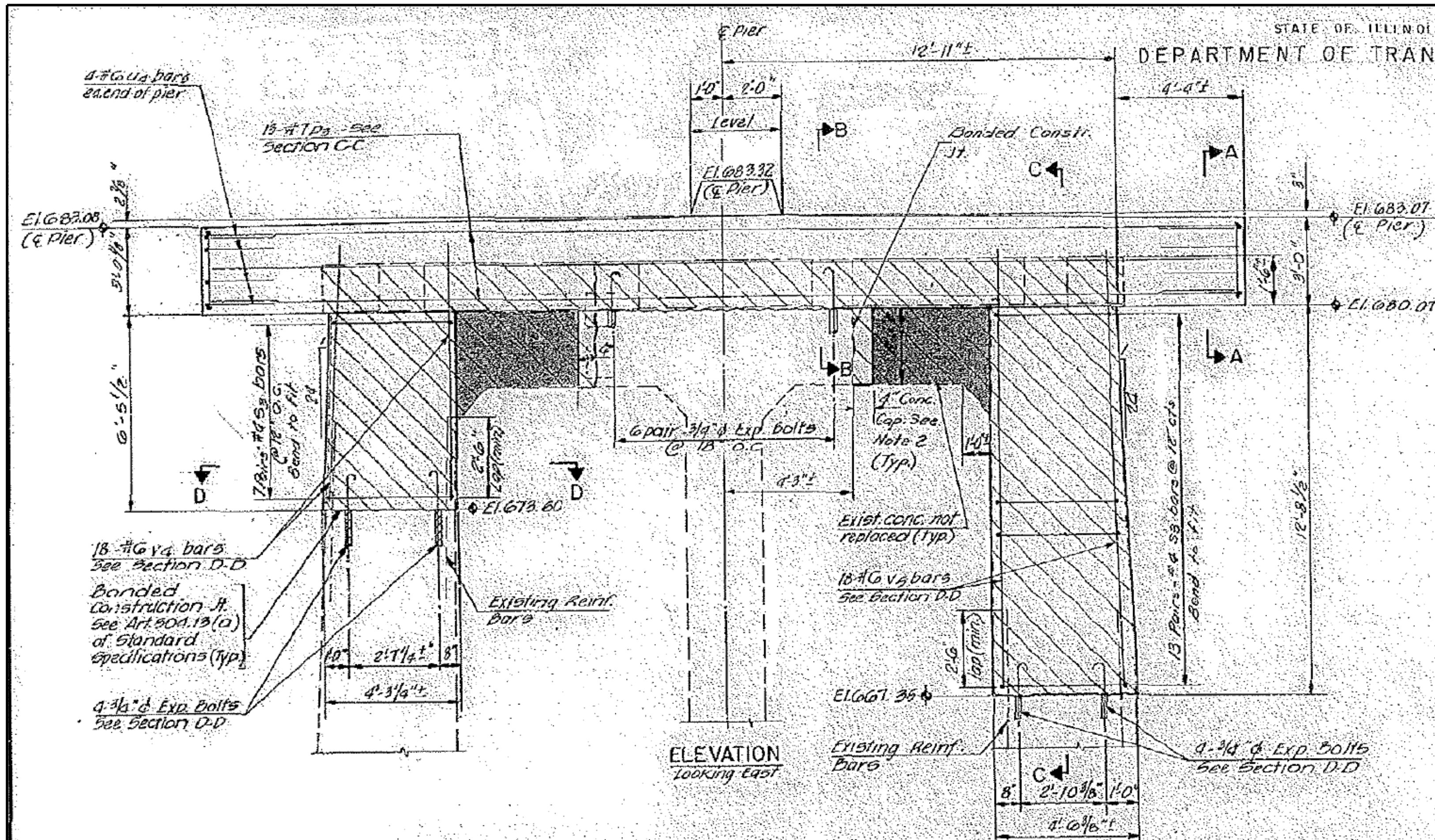
design firm no. 184001036
whks engineers + planners + land surveyors

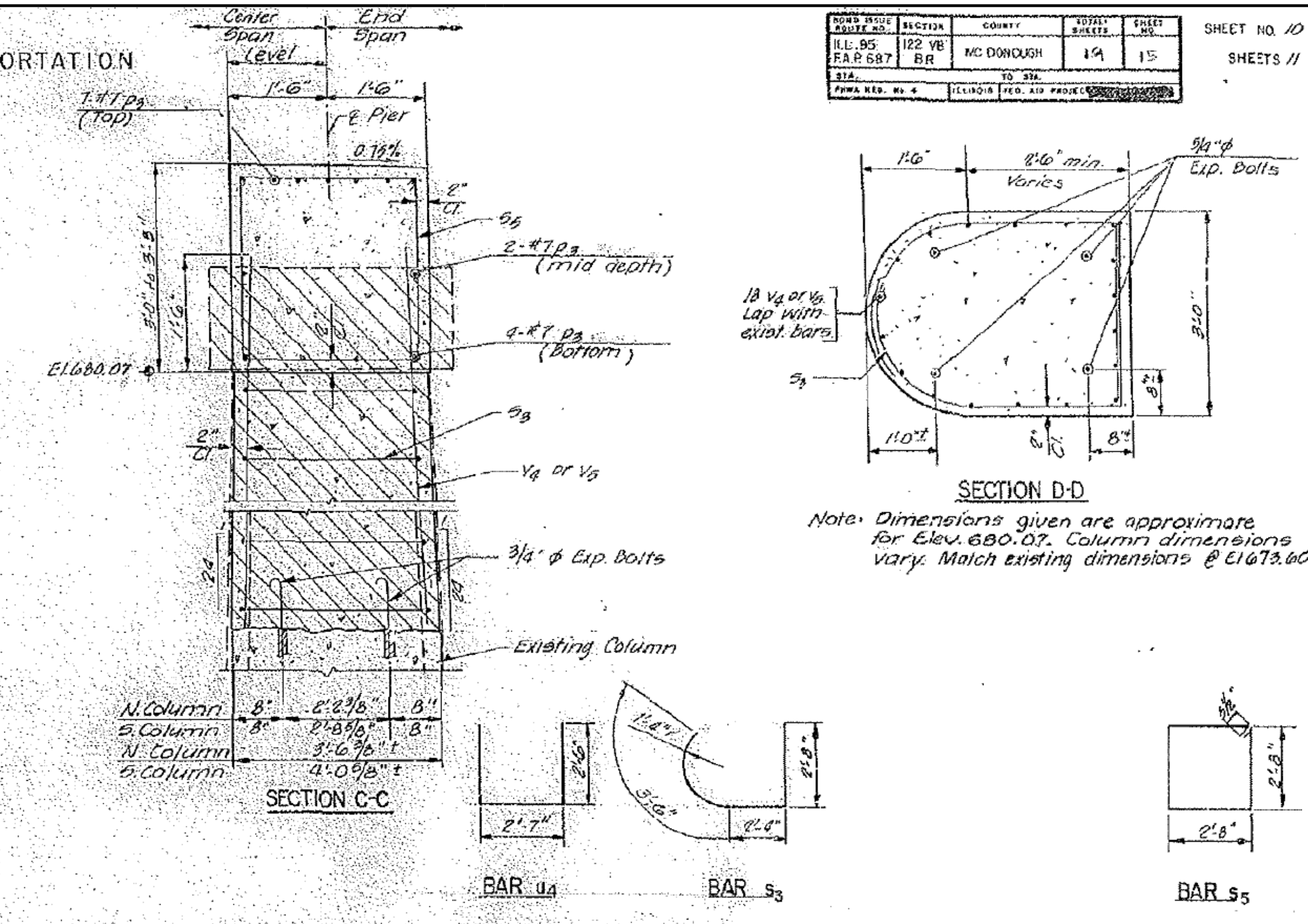
USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 0.2 '/ in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

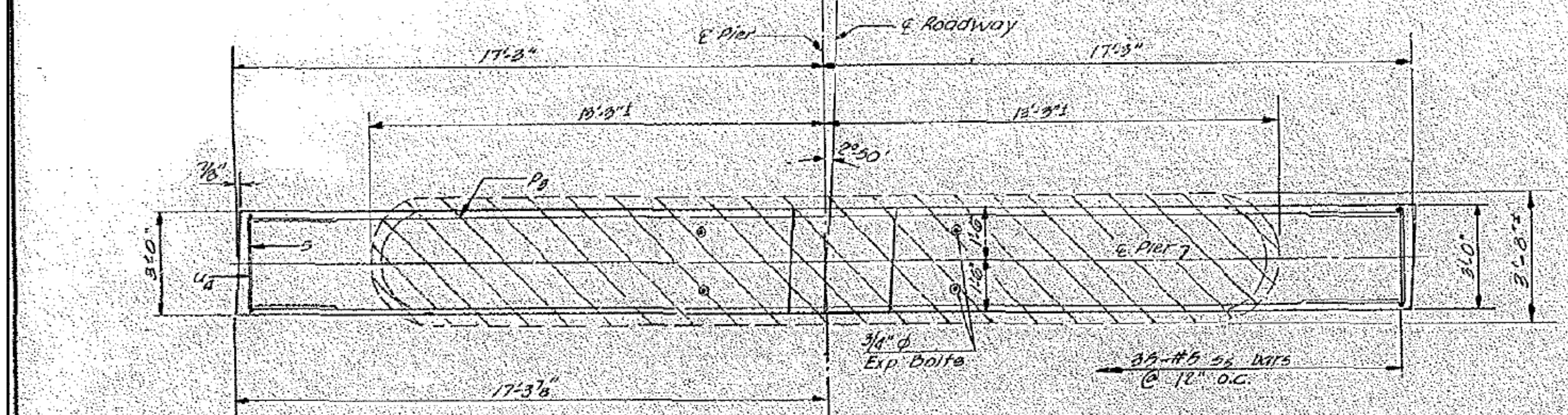
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

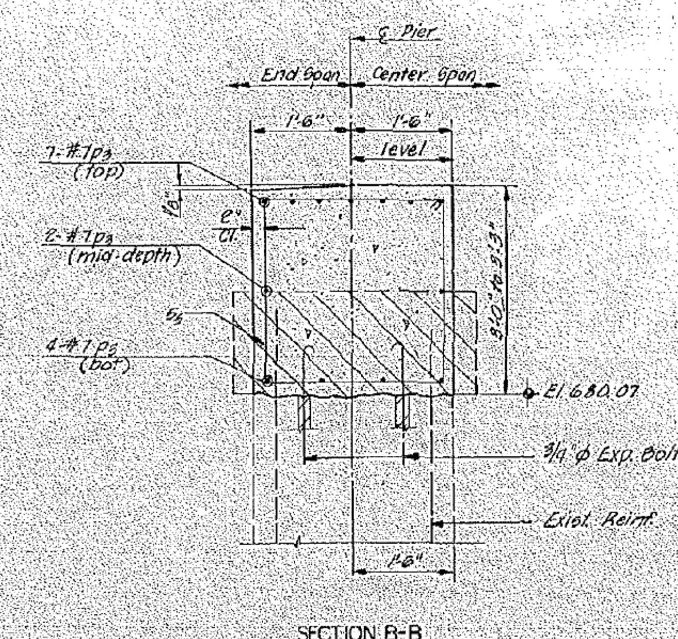
EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 33 OF 36 SHEETS

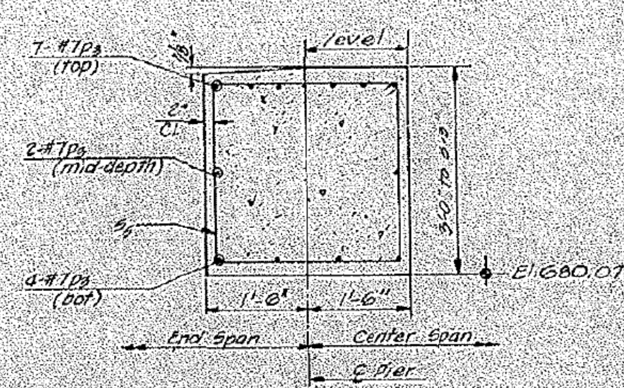
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	60
			CONTRACT NO. 68689	
	ILLINOIS	FED. AID PROJECT		











GENERAL NOTES

1. Hatched area indicates Concrete Removal.
2. Reinforcement extending into removed area shall be cleaned and incorporated into the new construction.
3. Expansion bolts shall be anchored in sound concrete.

BILL OF MATERIAL —— PIER #2

Bar	No.	Size	Length	Shape
p3	13	#7	34'-0"	——
s3	40	#4	8'-6"	ᑌ
s5	35	#5	11'-7"	◻
u4	8	#6	7'-7"	U
v4	18	#6	8'-0"	——
v5	18	#6	14'-8"	——
Class X Concrete			Cu. Yd.	21.4
Reinf. Bars			Lb.	2,210
Expansion Bolts-3/4"ϕ			Ea.	20
Concrete Removal			Cu. Yd.	17

PIER #2
BRIDGE OVER B.N. R.R.
F.A.P. RTE. 687 (ILL. RTE. 95) SECTION (122VB) BR
MC DONOUGH COUNTY
STATION 26+90

RANDOLPH & Associates, Inc.

FOR INFORMATION ONLY

design firm no. 184001036	USER NAME = $OPERATOR$	DESIGNED -	REVISED
whks engineers + planners + land surveyors	FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
	PLOT SCALE = 0:2 ':' / in.	DRAWN -	REVISED
	PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

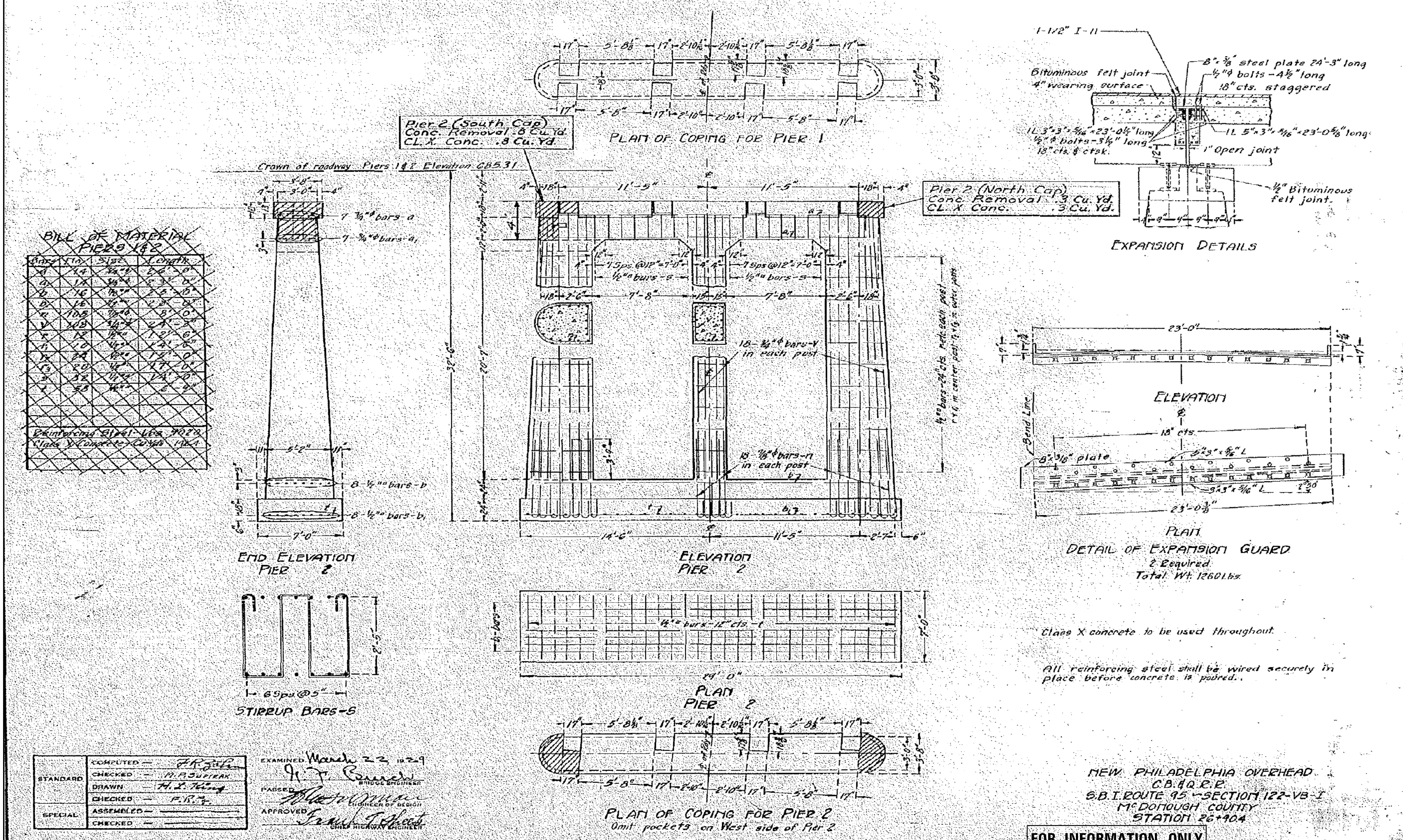
EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 34 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	61
		CONTRACT NO. 68689		
		ILLINOIS FED. AID PROJECT		

B.M. #2 Sp. & W. Horizontal in Hedge Lt. of Sta. 19+43 Elevation 654.91

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
95	122VB-I	McDonough	12	6



PLAN OF COPING FOR PIER 2
Omit pockets on West side of Pier 2

Class X concrete to be used throughout.

All reinforcing steel shall be wired securely in place before concrete is poured.

NEW PHILADELPHIA OVERHEAD
C.B. & Q. R.R.
S.B.I. ROUTE 95 - SECTION 122-VB-I
McDONOUGH COUNTY
STATION 26+90.4

STANDARD	COMPUTED — F.R. Zahn
	CHECKED — M.A. Supitsak
	DRAWN — H.L. King
	CHECKED — F.R.Z.
SPECIAL	ASSEMBLED —
	CHECKED —

EXAMINED March 22 1929 — BRIDGE ENGINEER
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

FOR INFORMATION ONLY

design firm no. 184001036 — whks engineers + planners + land surveyors

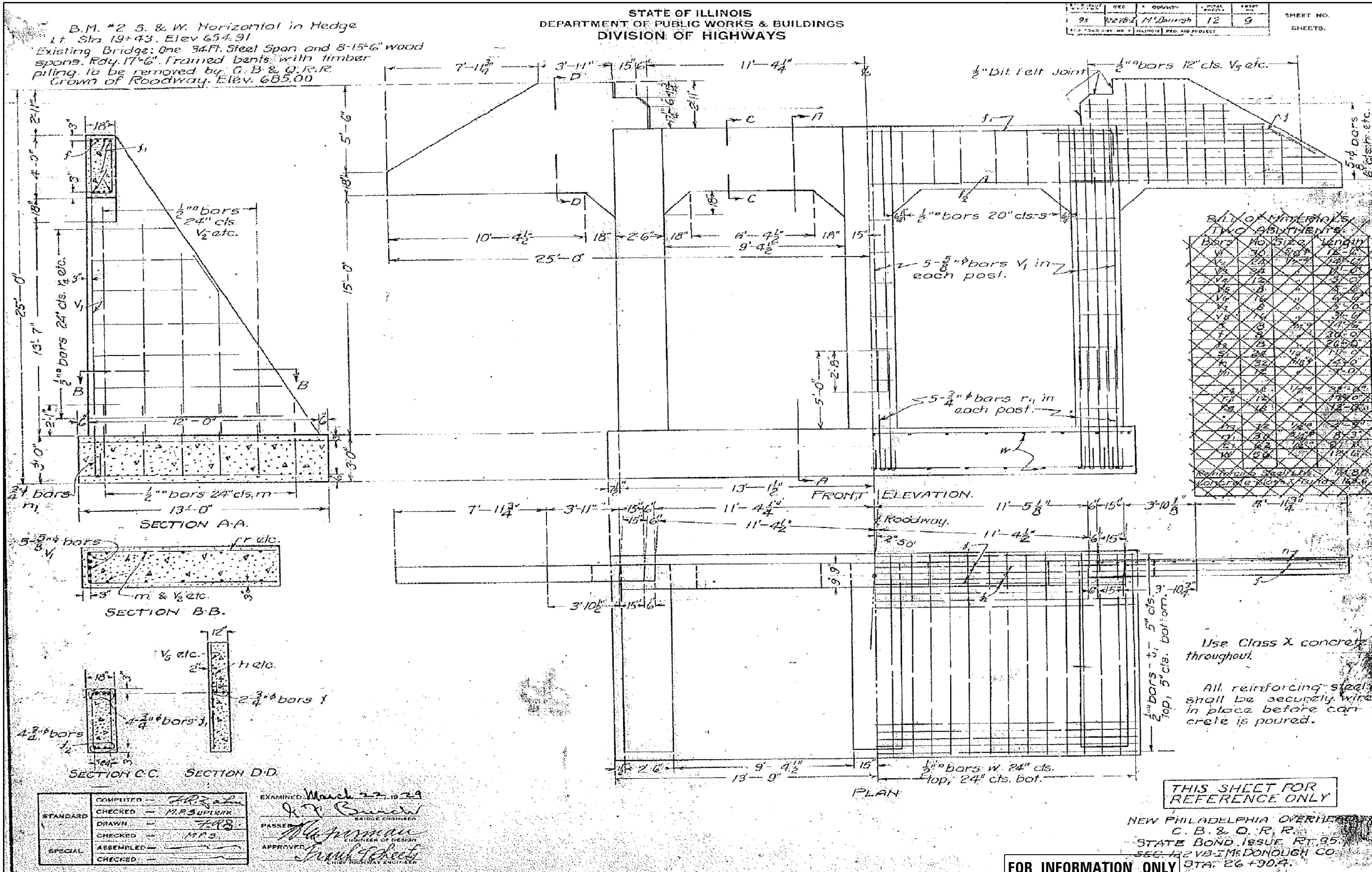
USER NAME = $OPERATOR$	DESIGNED -	REVISED
FILE NAME = 0550082-68689.dgn	CHECKED -	REVISED
PLOT SCALE = 0:2 ' / in.	DRAWN -	REVISED
PLOT DATE = 8/12/2015	CHECKED -	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 35 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	62

CONTRACT NO. 68689
ILLINOIS FED. AID PROJECT


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
SHEET NO.
SHEETS.
95
12
9
B.M. #2 S. & W. Horizontal in Hedge
Lt. Sta. 19+43. Elev 654.91
Existing Bridge: One 34Ft. Steel Span and 8-15-6" wood spans. Rdy. 17'-6". Framed bents with timber piling. To be removed by: C. B. & Q. R. R.
Crown of Roadway. Elev. 685.00
½"Bit. Felt Joint
½"ø bars 12" cts. V₅ etc.
5-⅝"ø bars 6" cts. h. etc.
½"ø bars 24" cts. V₂ etc.
½"ø bars 20" cts. s
5-⅝"ø bars V₁ in each post.
5-¾"ø bars r₁ in each post.
B/L OF MATERIALS TWO ABUTMENTS
SECTION A-A.
SECTION B-B.
SECTION C-C.
SECTION D-D.
FRONT ELEVATION.
PLAN
½"ø bars 24" cts. m
½"ø bars w. 24" cts. top, 24" cts. bot.
½"ø bars - t. - 5" cts. top, 5" cts. bottom.
Use Class X concrete throughout.
All reinforcing steel shall be securely wired in place before concrete is poured.
THIS SHEET FOR REFERENCE ONLY
NEW PHILADELPHIA OVERHEAD
C. B. & Q. R. R.
STATE BOND ISSUE RT. 95.
SEC. 122 VB-I McDONOUGH CO.
STA. 26 +90.4.
EXAMINED March 22 1929
BRIDGE ENGINEER
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER
STANDARD
SPECIAL
COMPUTED
CHECKED — M.P.S.
DRAWN
CHECKED — M.P.S.
ASSEMBLED
CHECKED

FOR INFORMATION ONLY

design firm no. 184001036	whks engineers • planners • land surveyors

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PLOT DATE = 8/12/2015	CHECKED -	REVISED

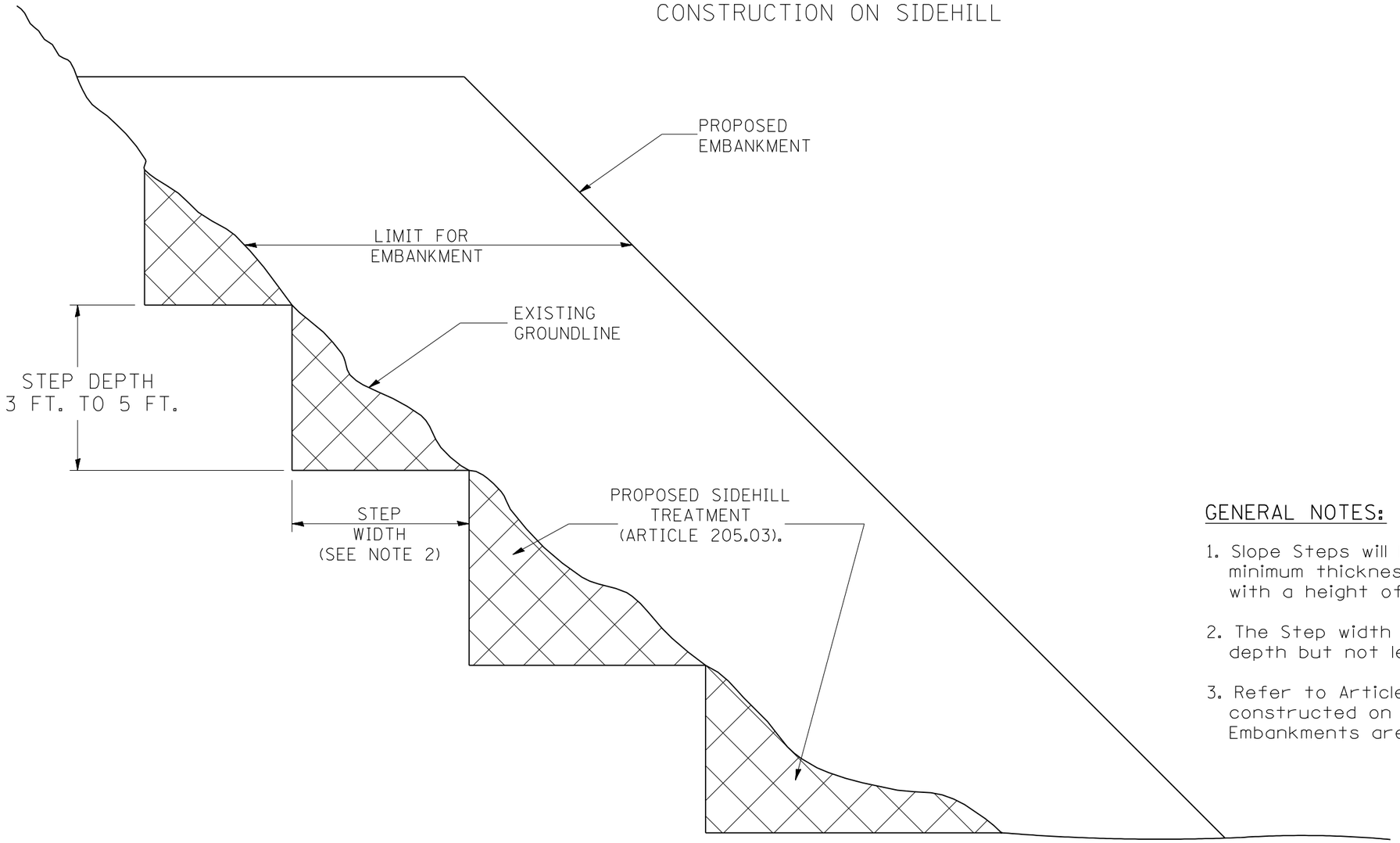
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
STRUCTURE NO. 055-0082
SHEET NO. 36 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	63
		CONTRACT NO. 68689		
		ILLINOIS FED. AID PROJECT		

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).

2. The Step width shall be twice the Step depth but not less than 6 feet.

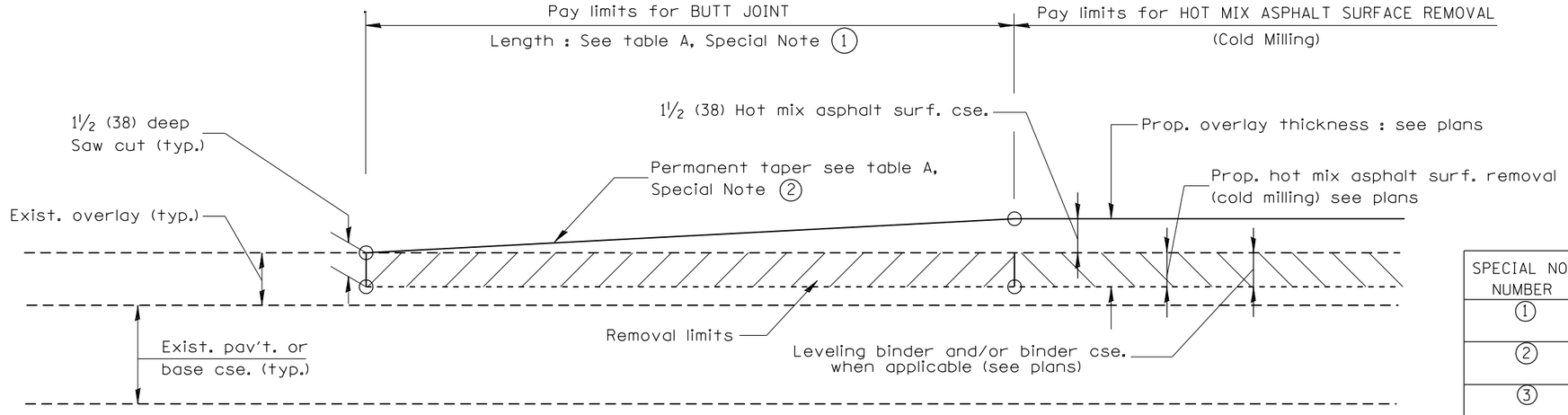
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT
(IN ACCORDANCE WITH
205 OF THE STANDARD SPECIFACATION).

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SLOPE STEPS DETAIL	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BOX, REVISED GENERAL NOTES.							687	(122VB)BR-1	McDONOUGH	95	64
10-16-06	REVISED TO 2007 SPEC.	M.A.								CONTRACT NO. 68689		
							NOT TO SCALE	CADD STD. 205001-D4	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	



CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

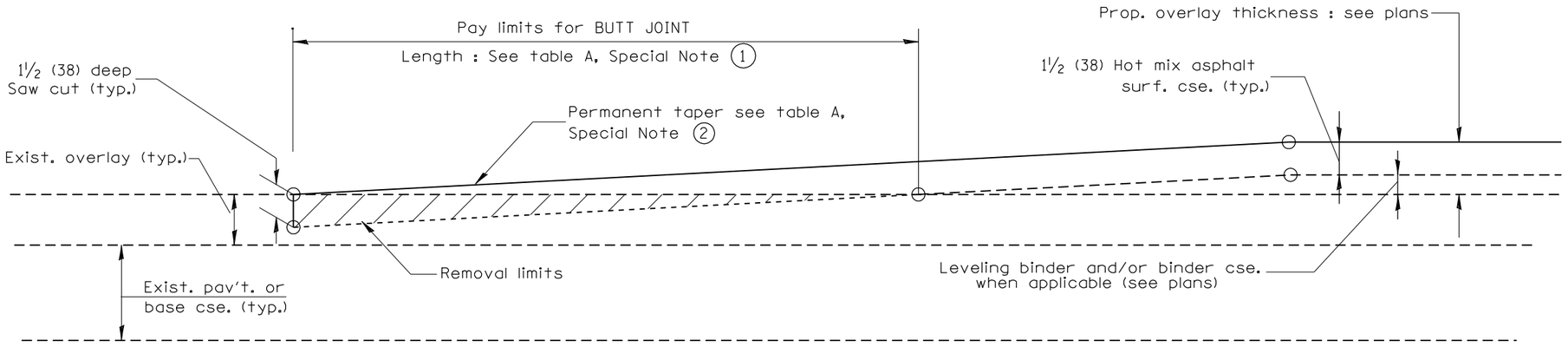
SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.

2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.

3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

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

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.					
04-01-97	CORRECTION TO DEPTH	J.A.					
09-15-05	REVISED DESIGNER NOTE	M.M.A.					
10-16-06	REVISED TO 2007 SPEC.	M.A.					

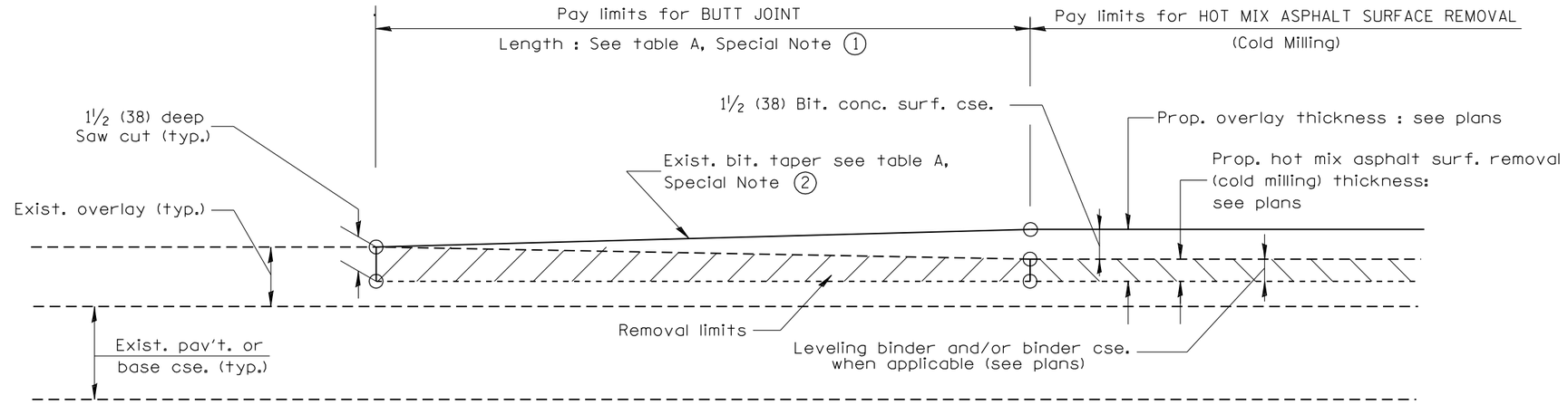
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

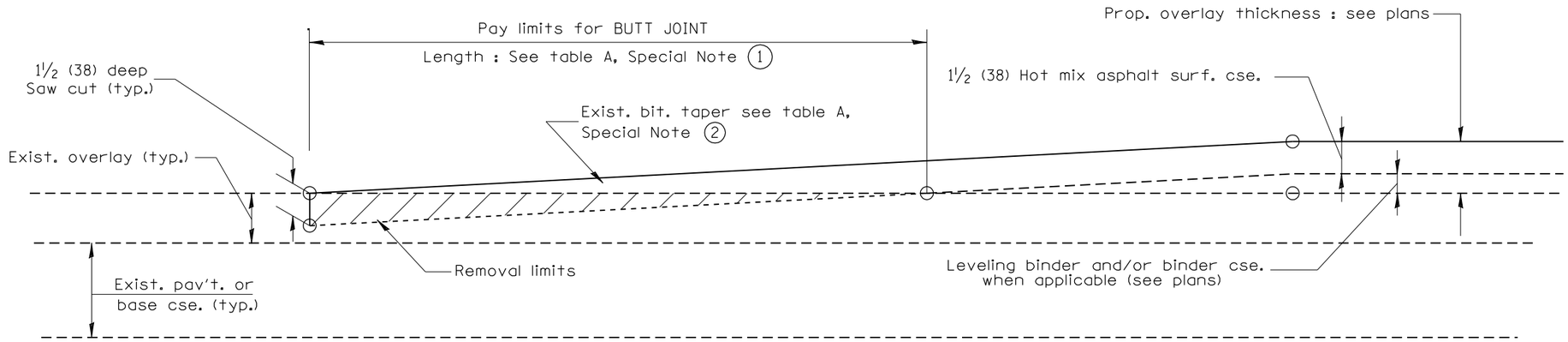
NOT TO SCALE

SHT. 1 OF 3
CADD STD. 406101-D4

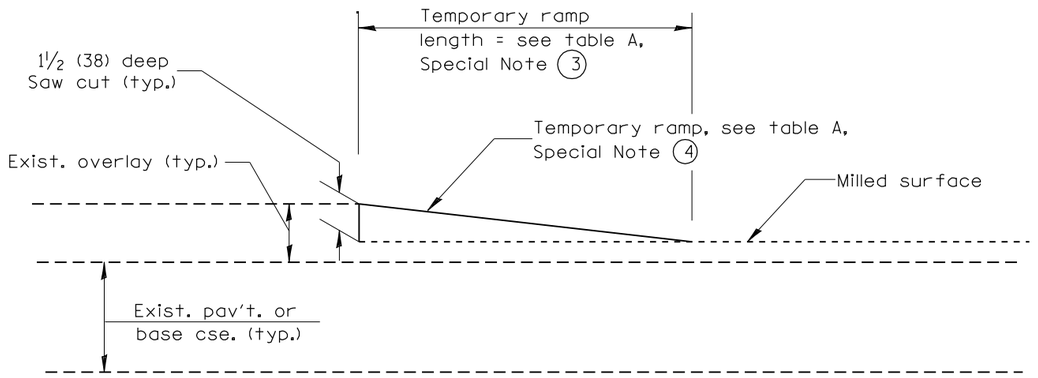
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	65
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

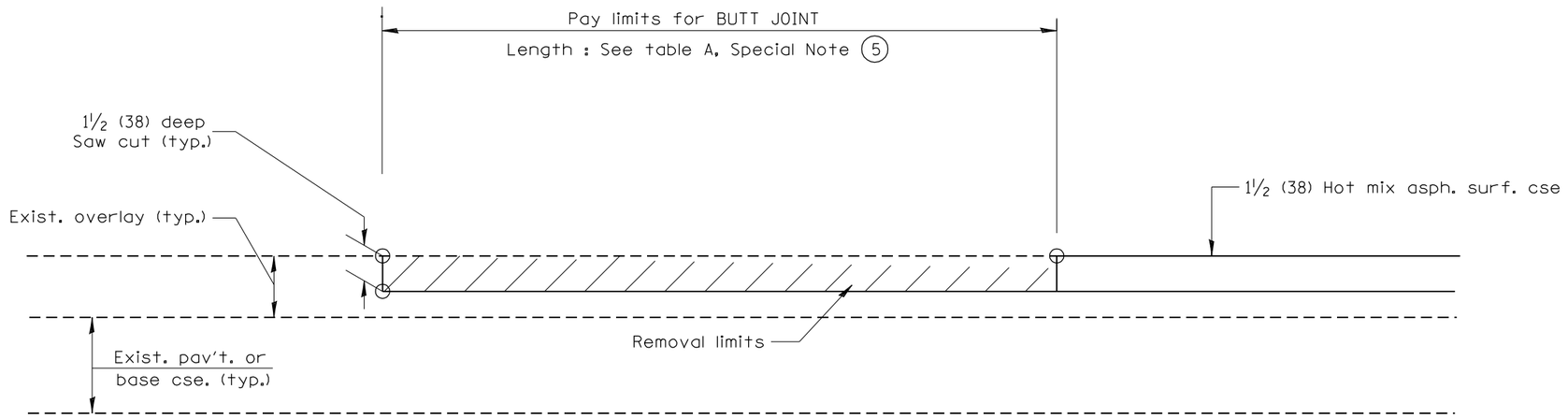
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	66
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

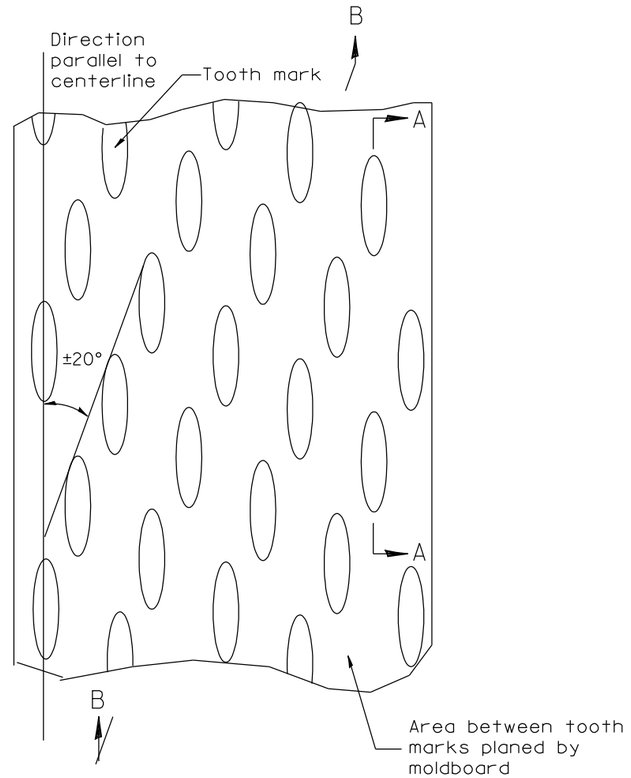
BUTT JOINTS

NOT TO SCALE

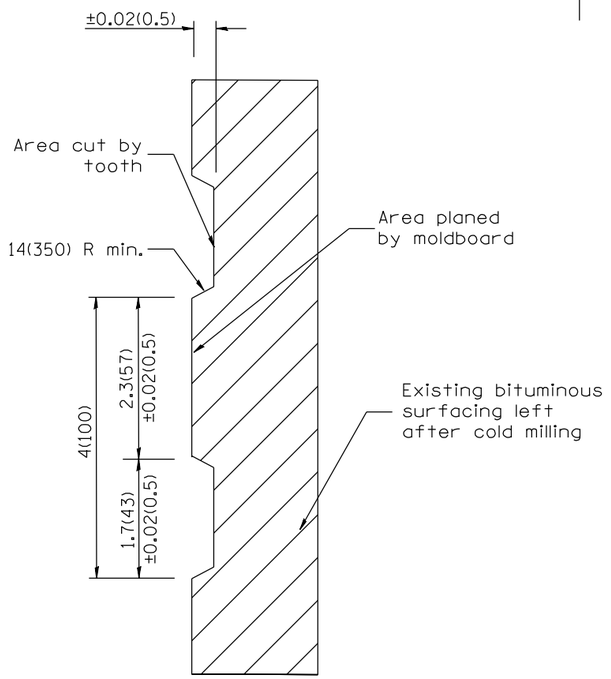
SHT. 3 OF 3
CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	67
		CONTRACT NO. 68689		

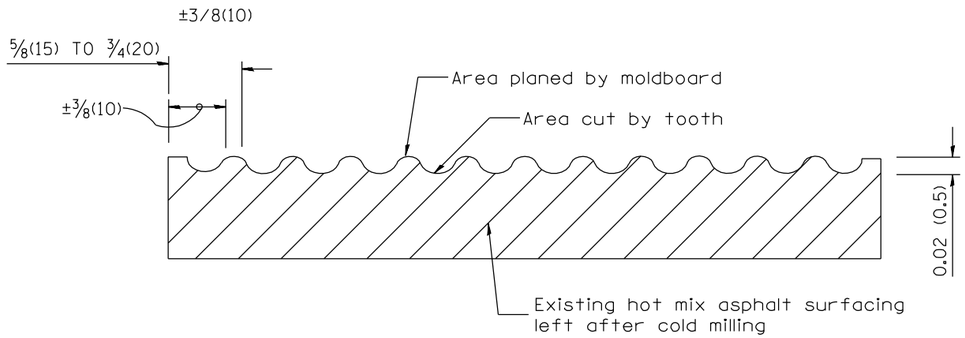
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



PLAN



SECTION A-A



SECTION B-B PROJECTED
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.

2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

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

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

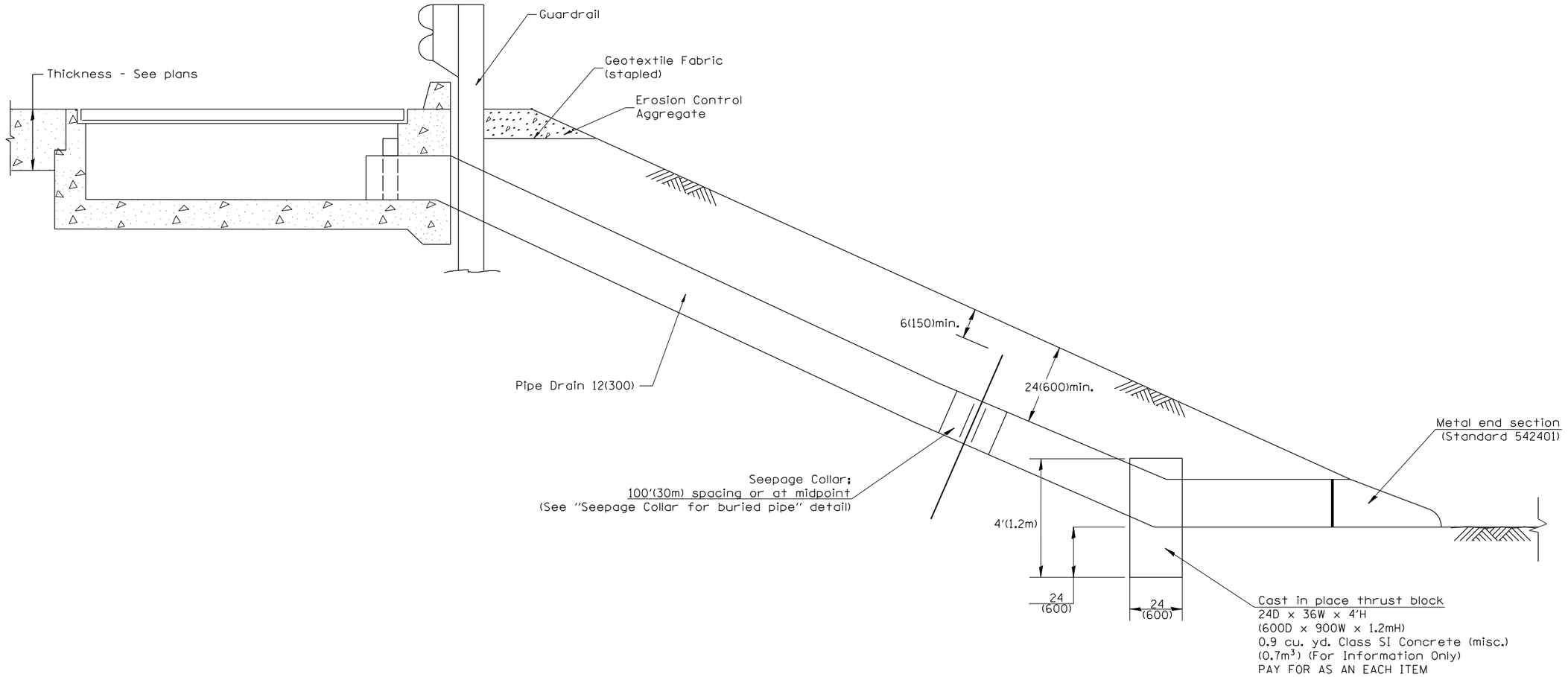
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE

CADD STD. 440001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	68
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLOPE DRAIN FOR BURIED PIPES



GENERAL NOTES

1. The material for Pipe Drains shall be bituminous coated galvanized corrugated steel culvert pipe or bituminous coated corrugated aluminum alloy pipe in accordance with Article 601.02(b) or 601.02(e) or Polyvinyl Chloride (PVC) pipe in accordance with Article 601.02 (s).

2. An approved mastic material (Article 1055.01) shall be applied to the inside of the connecting bands.

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

QUANTITIES
CALC. BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

01-01-97	RENUM. H-1.04, NEW REVISION BOX, REVISED TITLE	T.P.	7-15-15	DELETED BC&D DETAIL FOR APPROACH DRAINS	R.D.	
	BOX, REVISED DESIGNER NOTES, ADDED QUANTITY					
	CALCULATION BOX					
10-16-06	REVISED TO 2007 SPEC.	M.A.				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPE DRAIN DETAIL FOR BURIED PIPES

NOT TO SCALE — CADD STD. 601101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	69
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

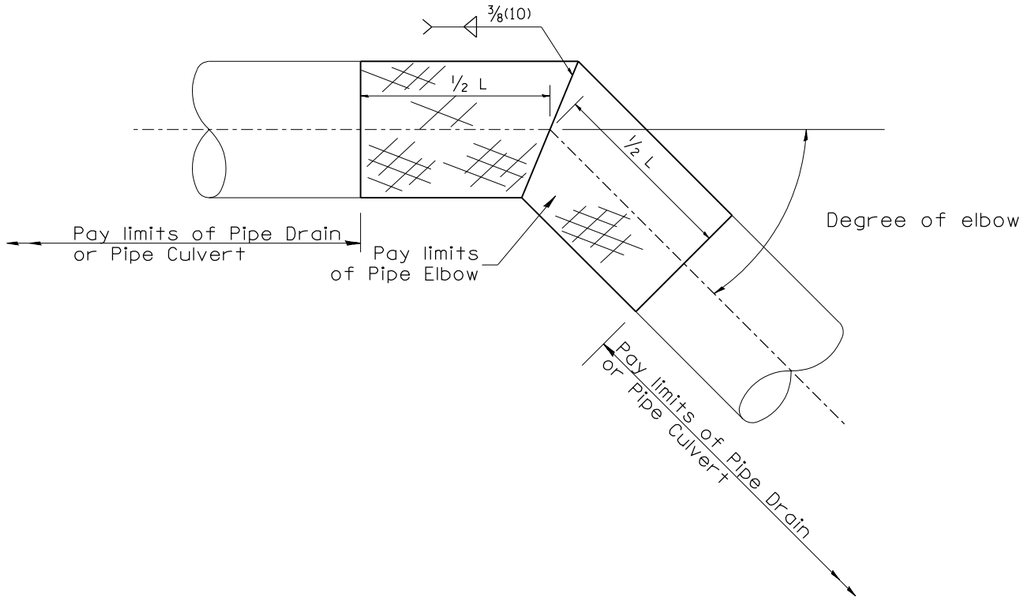
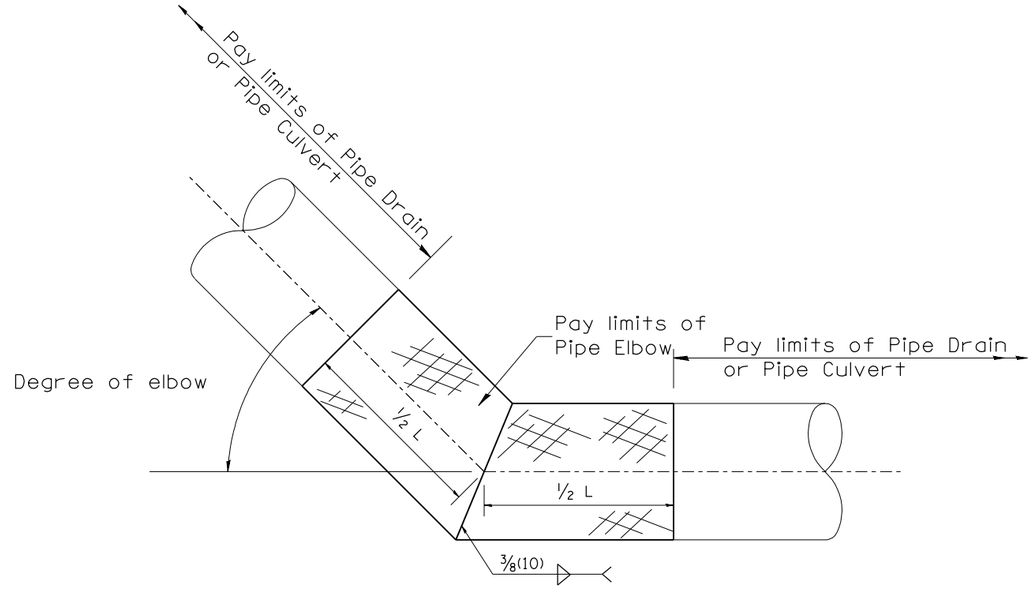


TABLE A		
ELBOW DESIGN CONTROLS		
PIPE DIAMETER	L = Pay limits of Pipe Elbow and minimum length of pipe required for fabrication	
	DEGREE OF ELBOW ≤ 45°	DEGREE OF ELBOW ≥ 46°
12(300)	24(600)	4'(1.22M)
15(375)	24(600)	4'(1.22M)
18(450)	24(600)	4'(1.22M)
21(525)	24(600)	4'(1.22M)
24(600)	4'(1.22M)	4'(1.22M)
30(750)	4'(1.22M)	6'(1.83M)
36(900)	4'(1.22M)	6'(1.83M)

TABLE B	
ELBOW DESIGN CONTROLS	
EARTH SLOPE (V:H)	DEGREE OF ELBOW *
1:6	9°
1:4	14°
1:3	18°
1:2	26°
1:1 1/2	33°

* Approximate - based upon 0.5% inlet and outlet flowlines.



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

01-01-97	RENUM. J-11.05, NEW REVISION BOX,	T.P.
	REVISED TITLE BOX	
10-16-06	REVISED TO 2007 SPEC.	M.A.

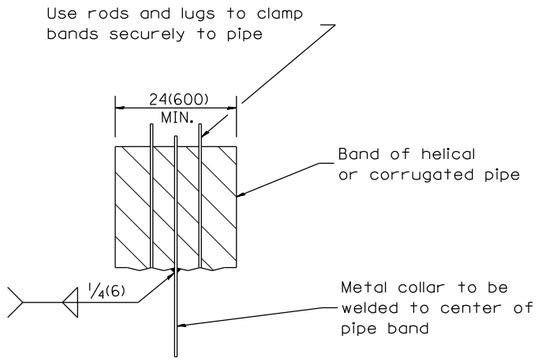
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIPE ELBOW

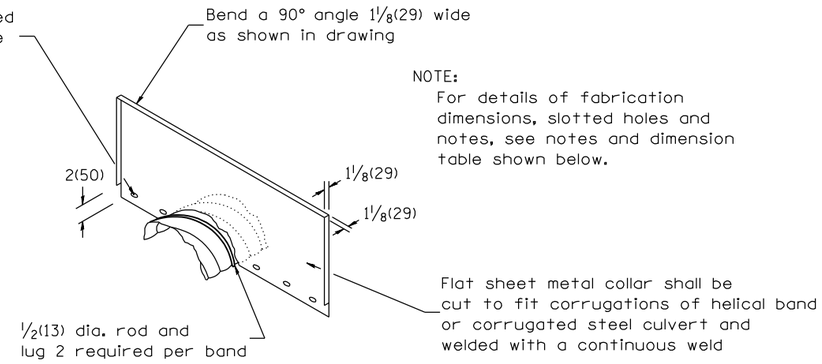
NOT TO SCALE

CADD STD. 601301-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	70
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

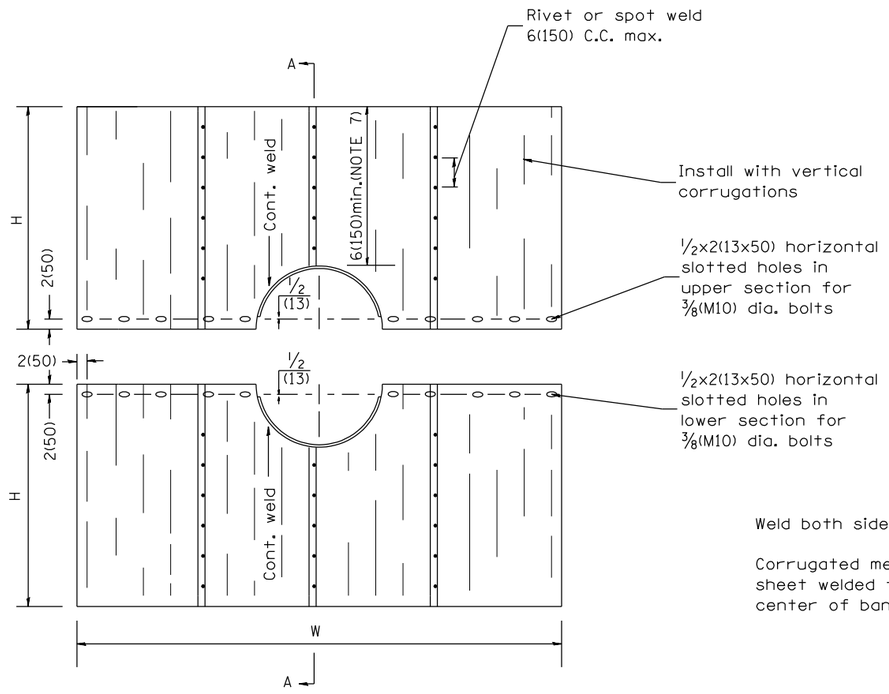


PARTIAL ELEVATION

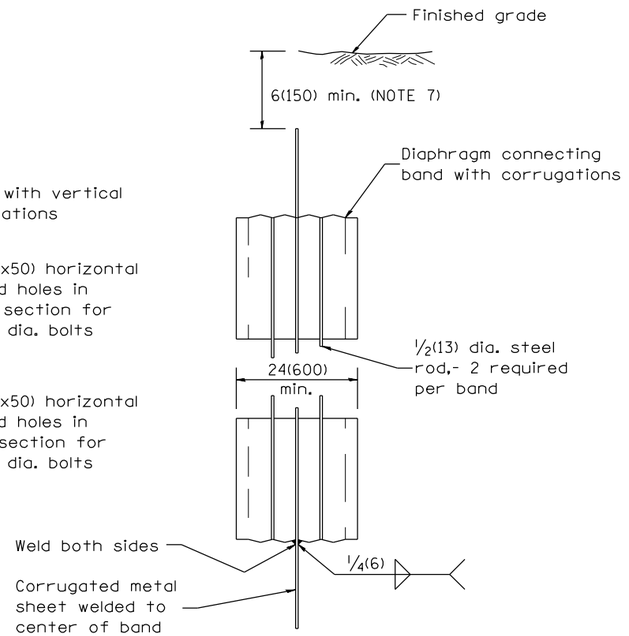


ISOMETRIC VIEW

DETAILS OF CORRUGATED PIPE COLLAR



ELEVATION



SECTION A-A

DETAILS OF SEEPAGE COLLAR

SEEPAGE COLLAR SPACING
Less than 24(600) pipe: 100′ (30m) spacing or midpoint
Equal to or greater than 24(600) pipe: 80′ (24m) spacing or midpoint

NOTES FOR COLLARS:

1. Materials and coatings for all collars shall be the same as that specified for the pipe, except that bituminous coated steel or aluminum collars may be used with PVC pipe.

2. Collars shall be shop fabricated, assembled and marked by painting to identify matching half sections of each collar.

3. The laps between the half sections and between the pipe and connecting bands shall be caulked with fiberized asphalt mastic at the time of installation.

4. All tank lugs, rods, and nuts shall be galvanized steel. Where aluminum collars are used, The rods and lugs shall be separated from the aluminum bands. By at least two (2) layers of 2(50) wide plastic tape with a total thickness of 2 1/4 mils or more.

5. The collars shall be welded to the connecting bands as shown on the drawings, all welds shall be treated as specified for class I, II, and III welds, miscellaneous. (Refer to AWS Standard Specifications)

6. Bands shall be fabricated from material having the same class of corrugations as the pipe to which it is to be attached.

7. Upper half of sheet may be cut shorter to provide 6(150) min. earth cover.

SEEPAGE COLLAR DIMENSION TABLE

PIPE DIAMETER	NOMINAL COLLAR SIZE	FABRICATIONS DIMENSIONS	
		W(WIDTH)	H(HEIGHT)
12(300) 15(375), 18(450) 21(525), 24(600)	8′x6′ (2.4m x 1.8m)	8′-0″ (2.44m)	38(966)
27(675) 30(750)	8′x7′ (2.4m x 2.1m)	8′-0″ (2.44m)	3′-8″ (1.12m)
36(900), 42(1050) 48(1200)	10′x7′ (3.0m x 2.1m)	10′-0″ (3.05m)	3′-8″ (1.12m)

Collar dimensions shown may be increased to allow fabrication from standard size sheets.

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

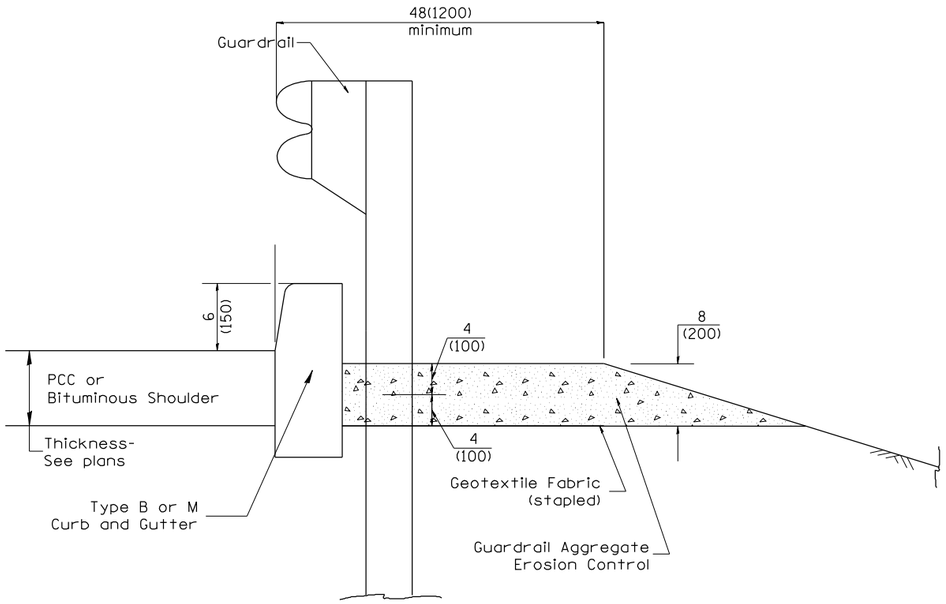
01-01-97	RENUM. J-10.02, NEW REVISION BOX, REVISED	T.P.
	TITLE BOX, REVISED DESIGNER NOTES	
10-16-06	REVISED TO 2007 SPEC.	M.A.
7-15-15	REVISED NOTE 1 FOR PVC PIPE	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

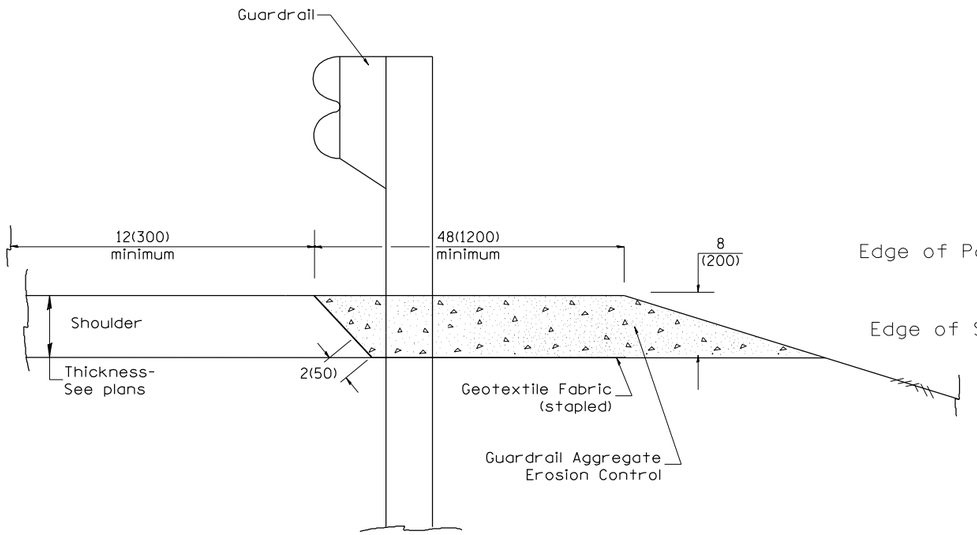
DETAILS OF SEEPAGE COLLARS FOR BURIED PIPES

NOT TO SCALE — CADD STD. 601401-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	71
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

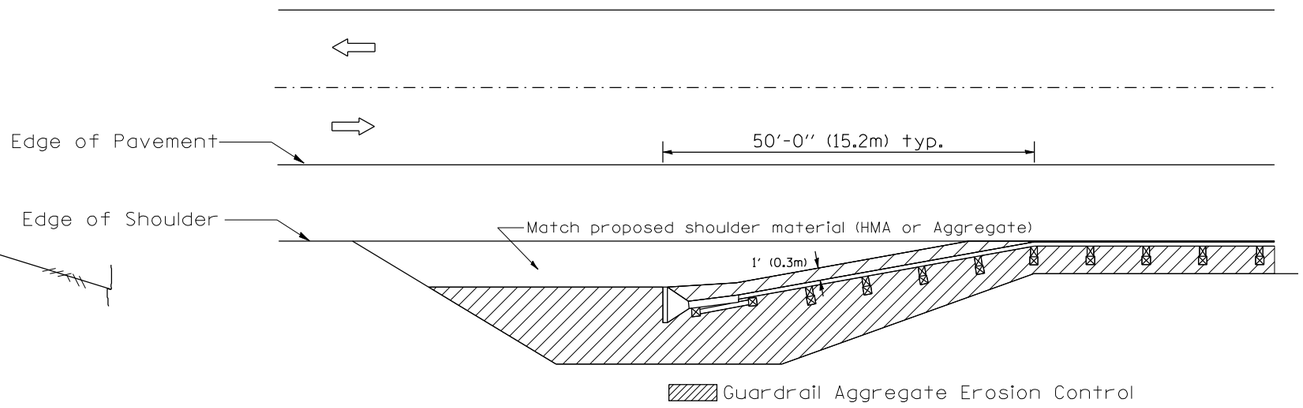
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



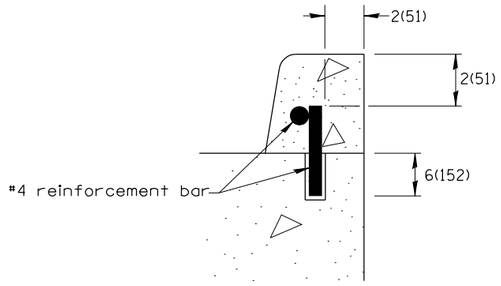
All dimensions are in inches (millimeters) unless otherwise noted.

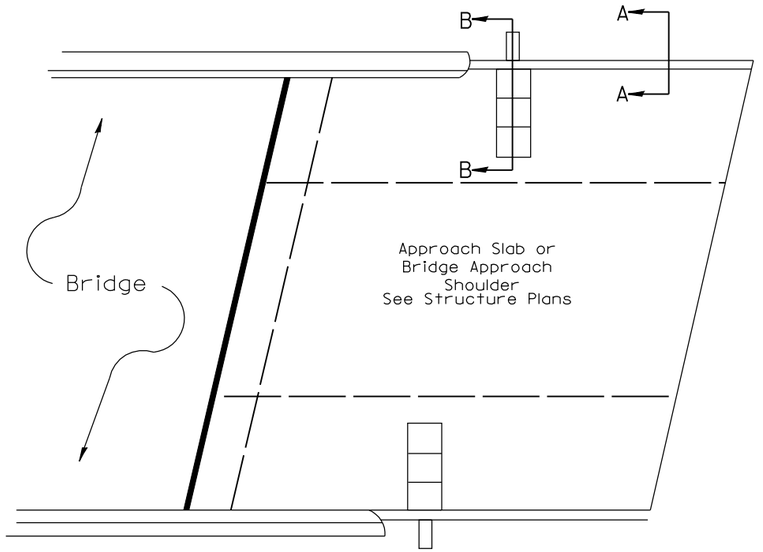
01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	3-7-11	Added Detail showing plan view	R.D.	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**	**GUARDRAIL EROSION CONTROL TREATMENTS** SHT. 1 OF 2 NOT TO SCALE CADD STD. 630101-D4
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	8-10-12	Revised curb "B" and aggregate	R.D.		
11-03-00	CORRECTION TO NOTES	M.A.	7-15-15	Addressed shoulder inlet curb	R.D.		
10-16-06	REVISED TO 2007 SPEC.	M.A.					

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	72
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAIL ''A''

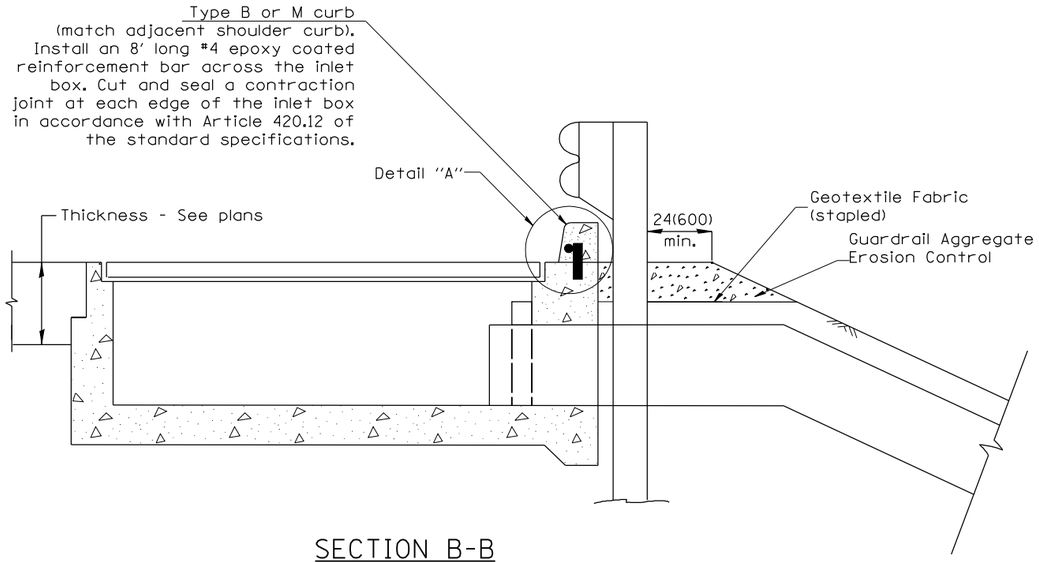
#4 reinforcement bars may be cast in PCC apron and precast inlet box or drilled and anchored with an apporoved chemical adhesive at 2' spacing. Cost of curb and reinforcement are included in the cost of shoulder inlet.





PLAN VIEW

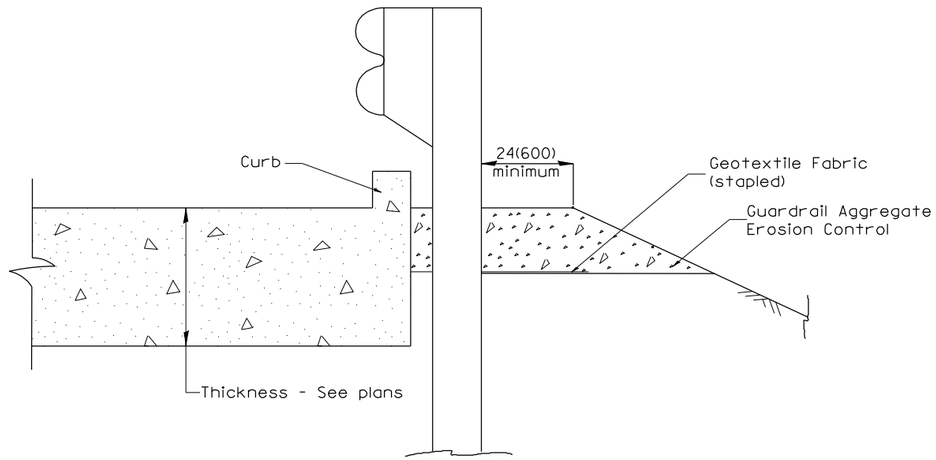
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION B-B

TYPICAL SECTION AT INLETS

TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

01-01-97	RENUM. C-22.01. NEW REVISION BOX	T.P.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-03-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

3-7-11	Added Detail showing plan view	R.D.
8-10-12	Revised curb "B" and aggregate	R.D.
7-15-15	Addressed shoulder inlet curb	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

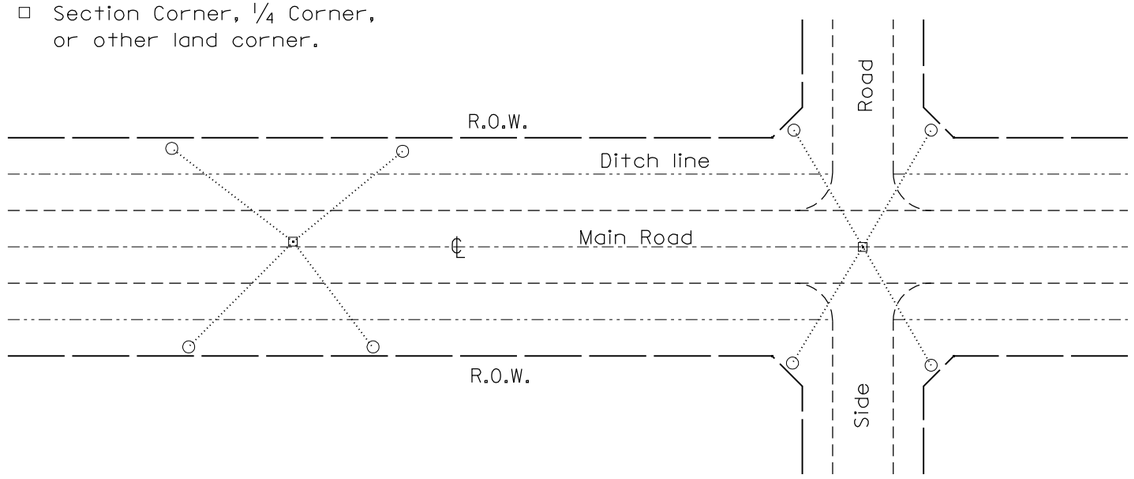
SHT. 2 OF 2

NOT TO SCALE | SHEET | OF | SHEETS | STA. | CADD STD. 630101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	73
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PERMANENT SURVEY TIES

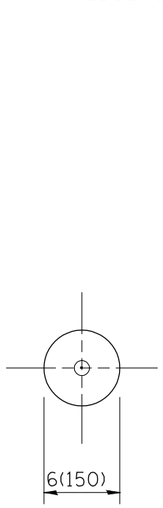
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



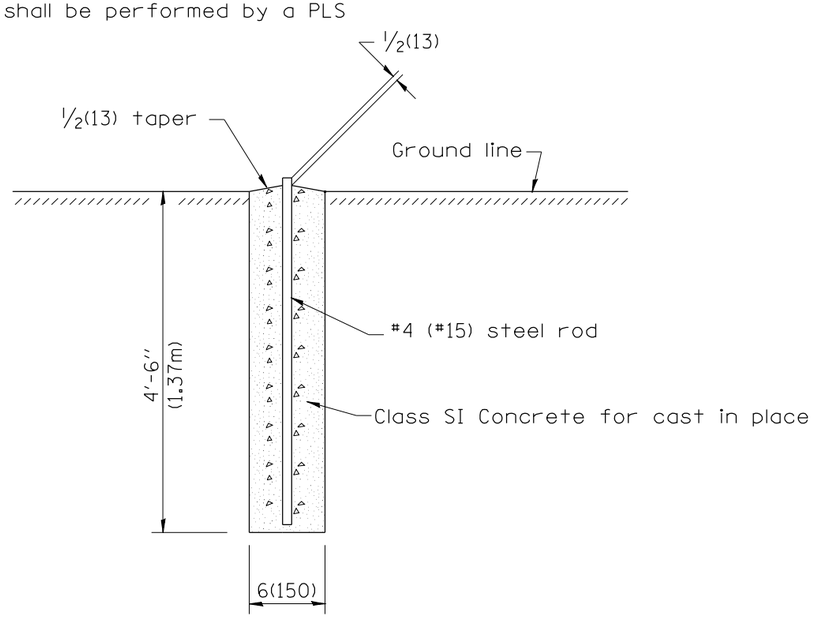
TYPICAL APPLICATION

GENERAL NOTES

1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS

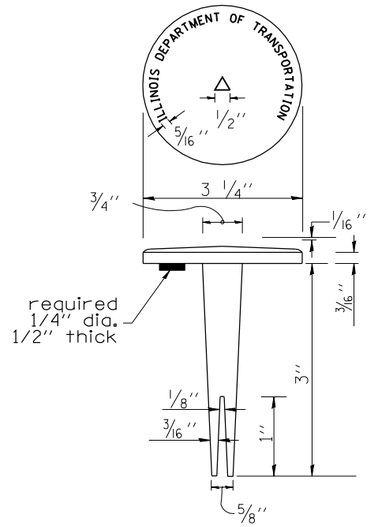


PLAN

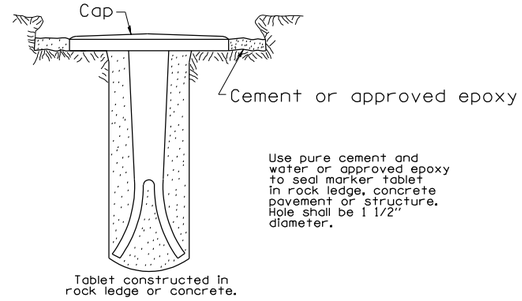


SECTION

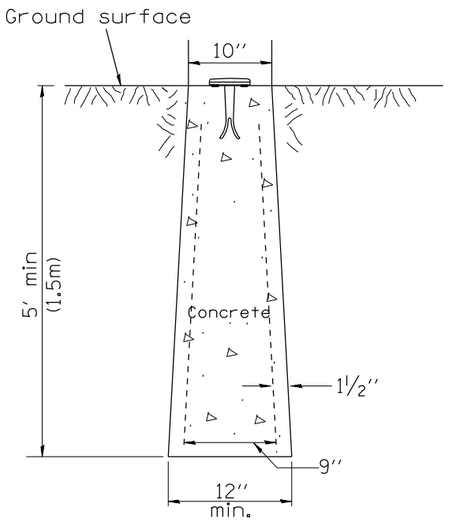
PERMANENT SURVEY MARKERS



BRASS OR ALUMINUM TABLET



TYPE II



TYPE II
CAST-IN-PLACE MARKER

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s llocated within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

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

01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.	08-21-13	CHANGED MIN. DIAMETER	R.D.
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

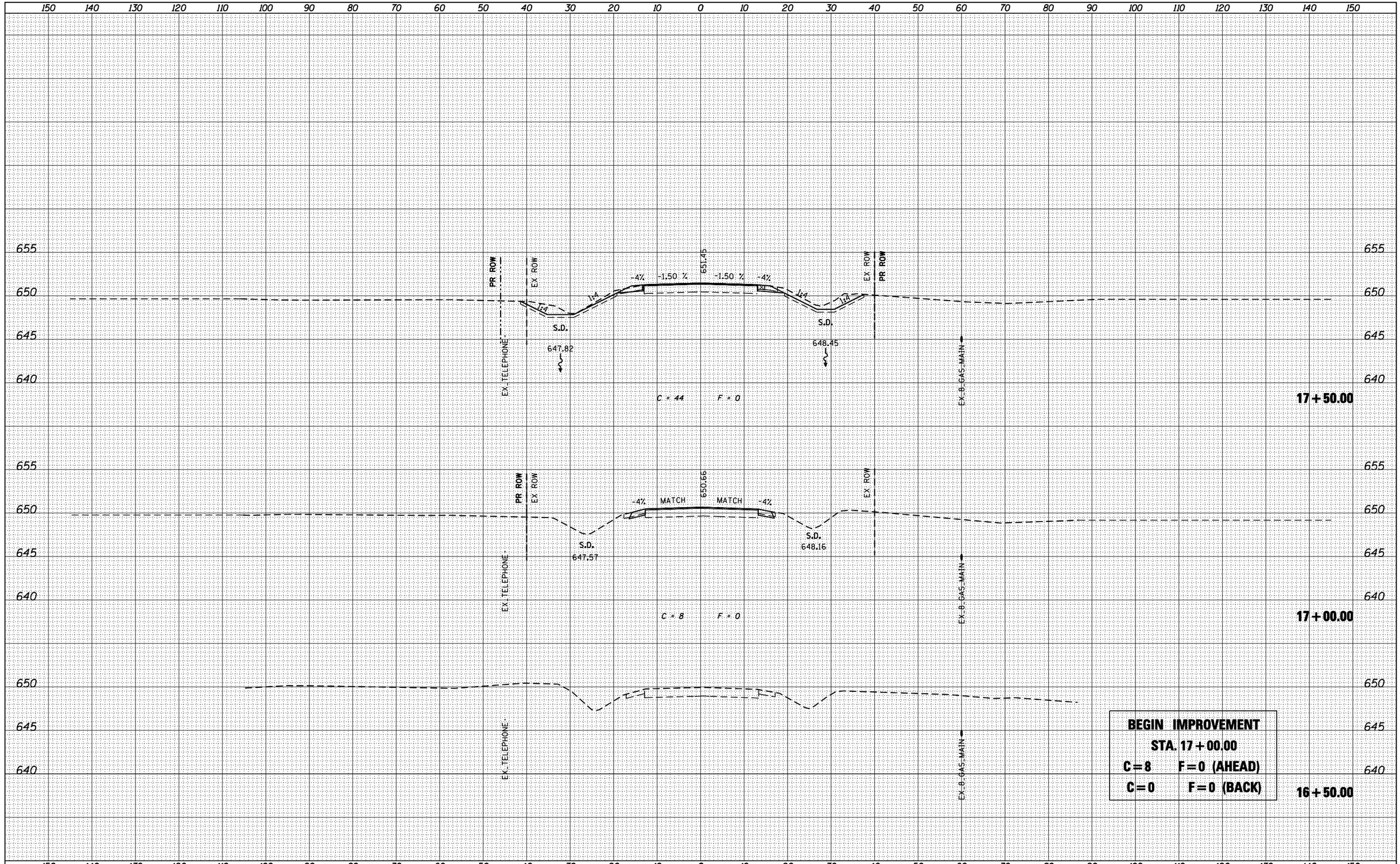
PERMANENT SURVEY TIE &
PERMANENT SURVEY MARKERS TY.I – TY.II

NOT TO SCALE — CADD STD. 667101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	McDONOUGH	95	74
		CONTRACT NO. 68689		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

BY	DATE



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

BY	DATE

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

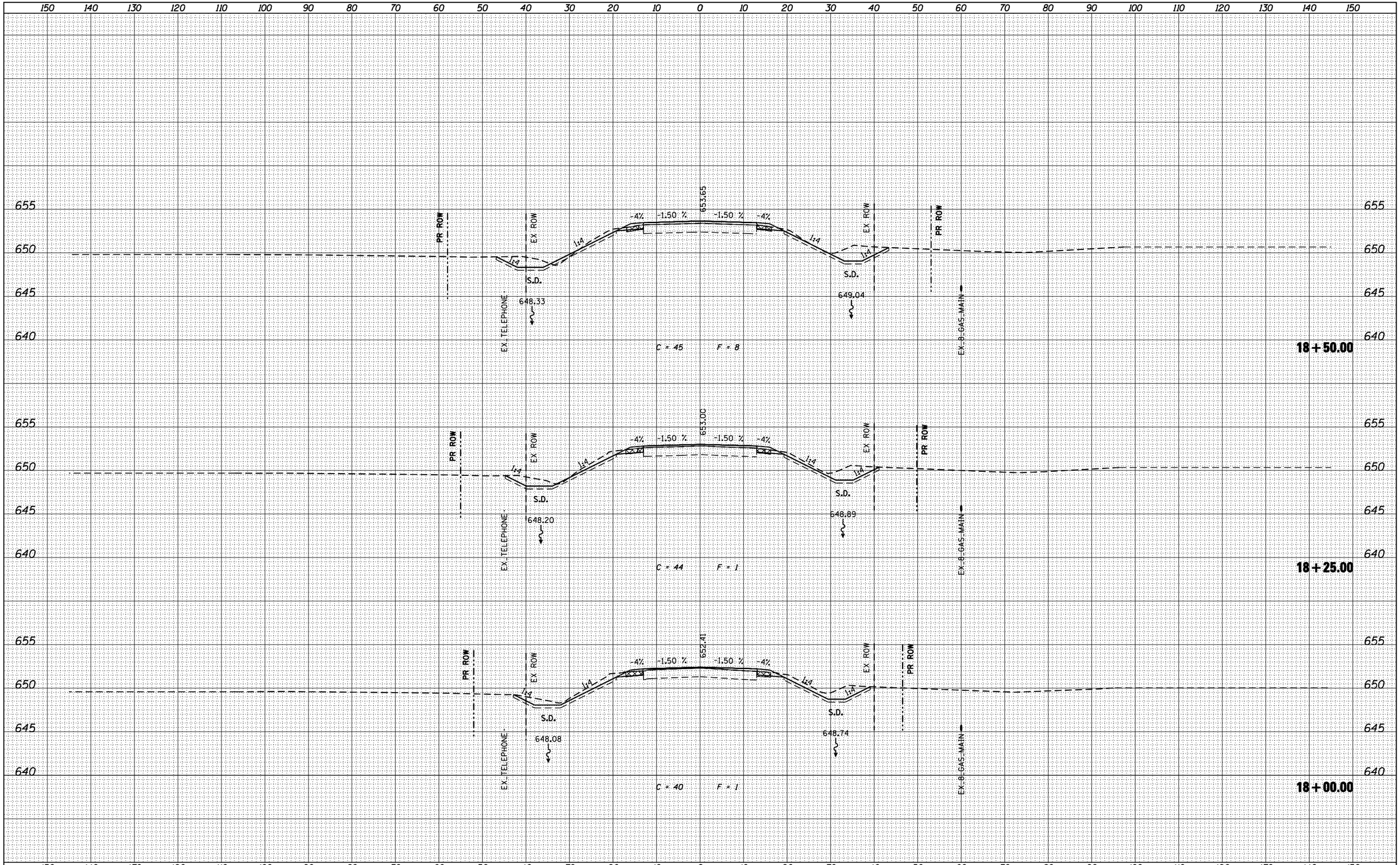
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 1 OF 21 SHEETS | STA. 16+50.00 TO STA. 17+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	75
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



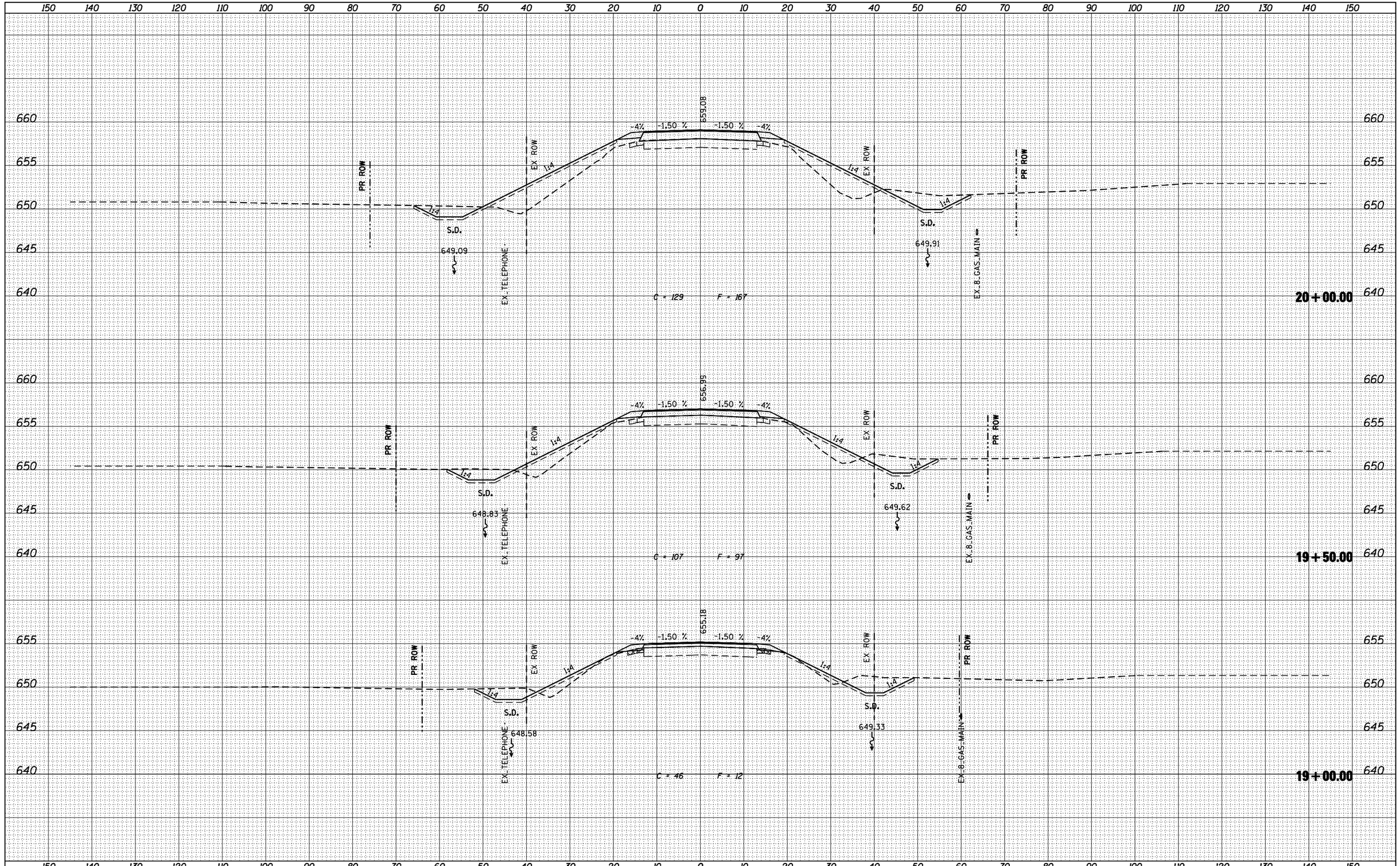
design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 2 OF 21 SHEETS | STA. 18+00.00 TO STA. 18+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	76
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		



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

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

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

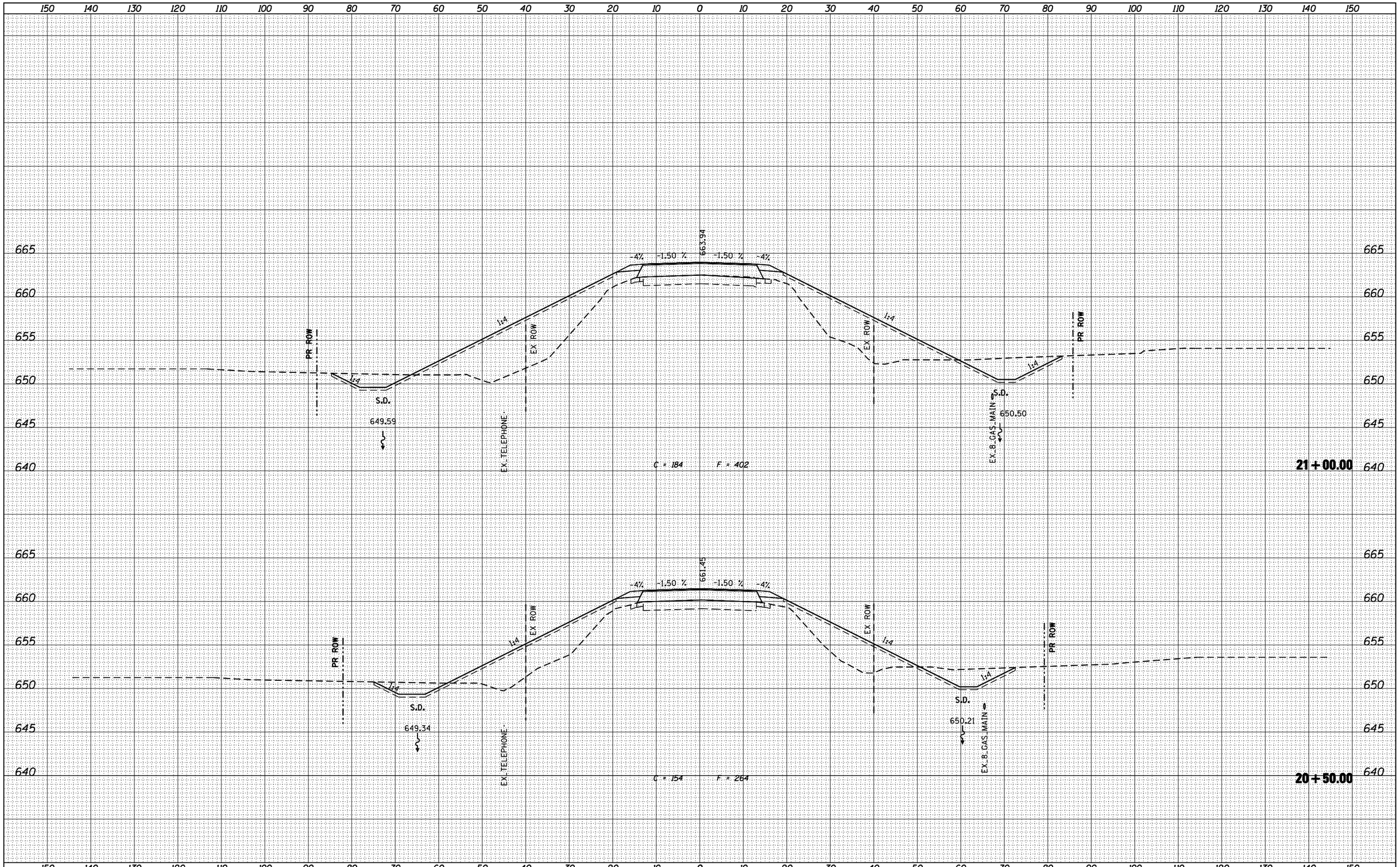
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 3 OF 21 SHEETS | STA. 19+00.00 TO STA. 20+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	77
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

BY	DATE



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

BY	DATE

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

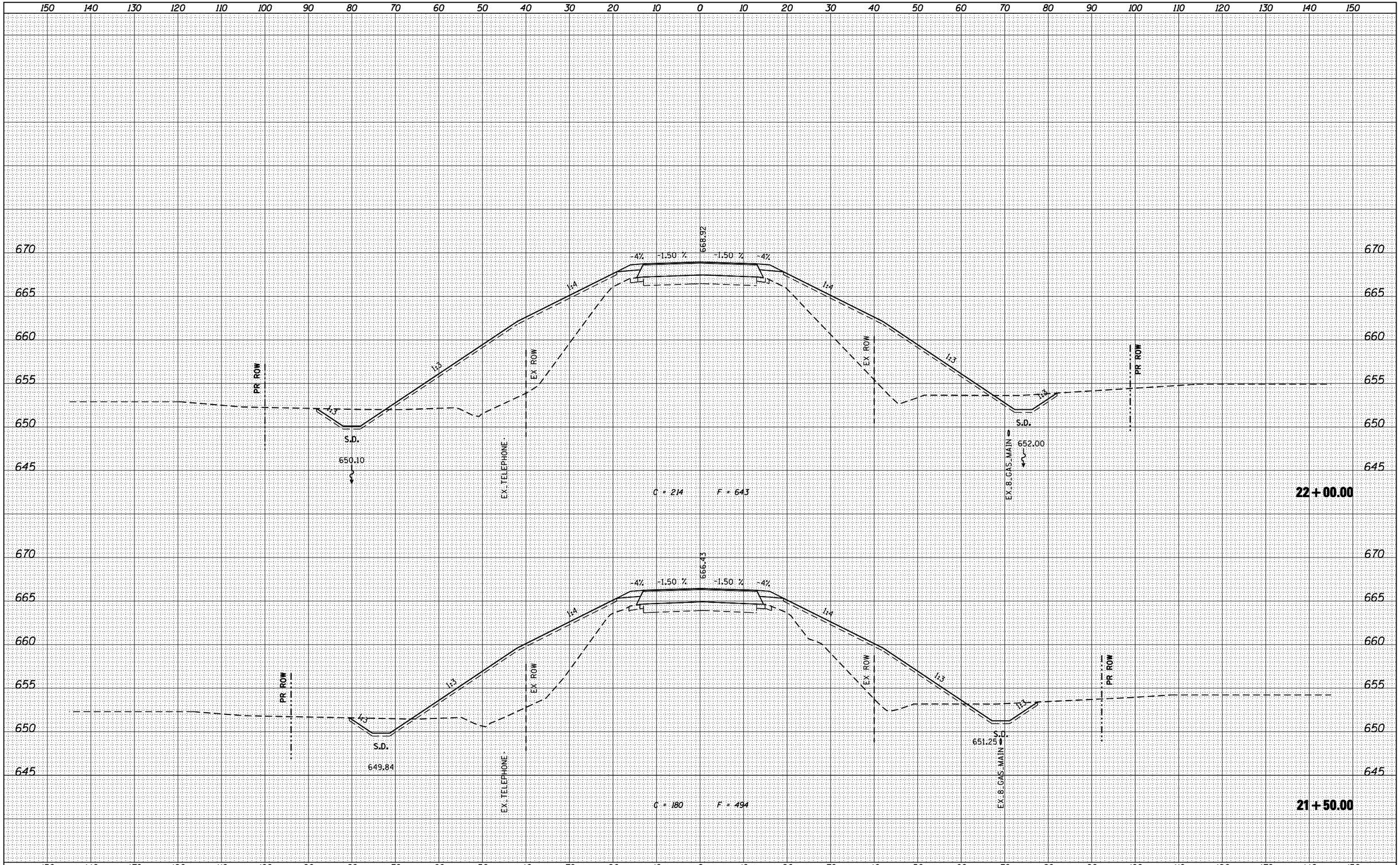
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 4 OF 21 SHEETS | STA. 20+50.00 TO STA. 21+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	78
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

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



design firm no. 184001036				
whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

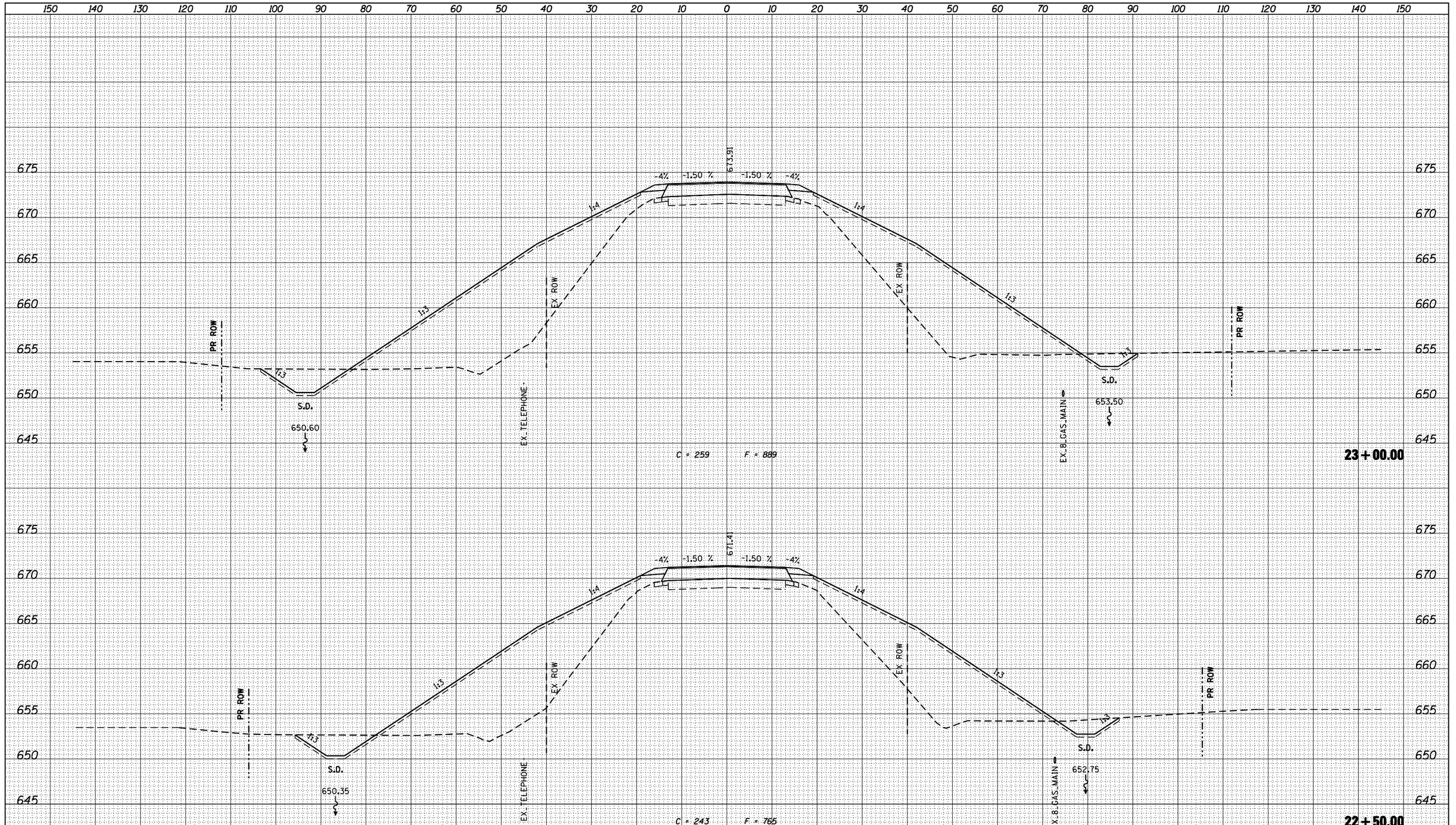
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 5 OF 21 SHEETS | STA. 21+50.00 | TO STA. 22+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	79
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

BY	DATE



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

BY	DATE

design firm no. 184001036	whks engineers + planners + land surveyors		
USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

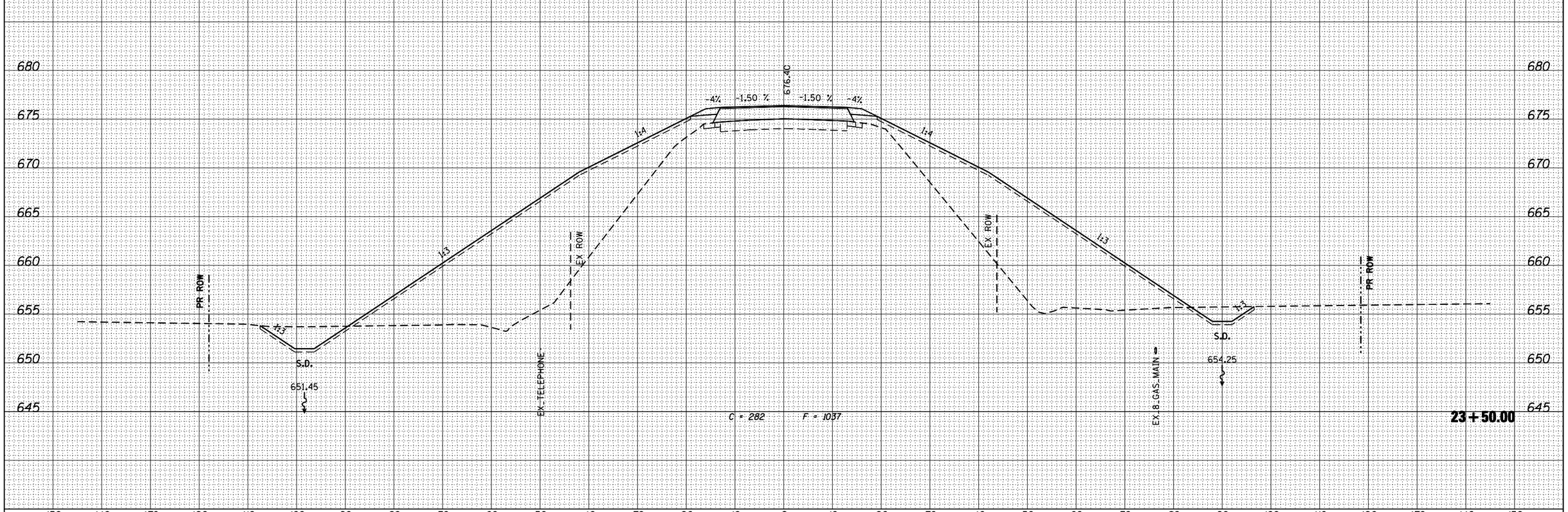
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 6 OF 21 SHEETS | STA. 22+50.00 TO STA. 23+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	80
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

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



design firm no. 184001036	USER NAME = gjameson	DESIGNED - JAC	REVISED
whks engineers + planners + land surveyors	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

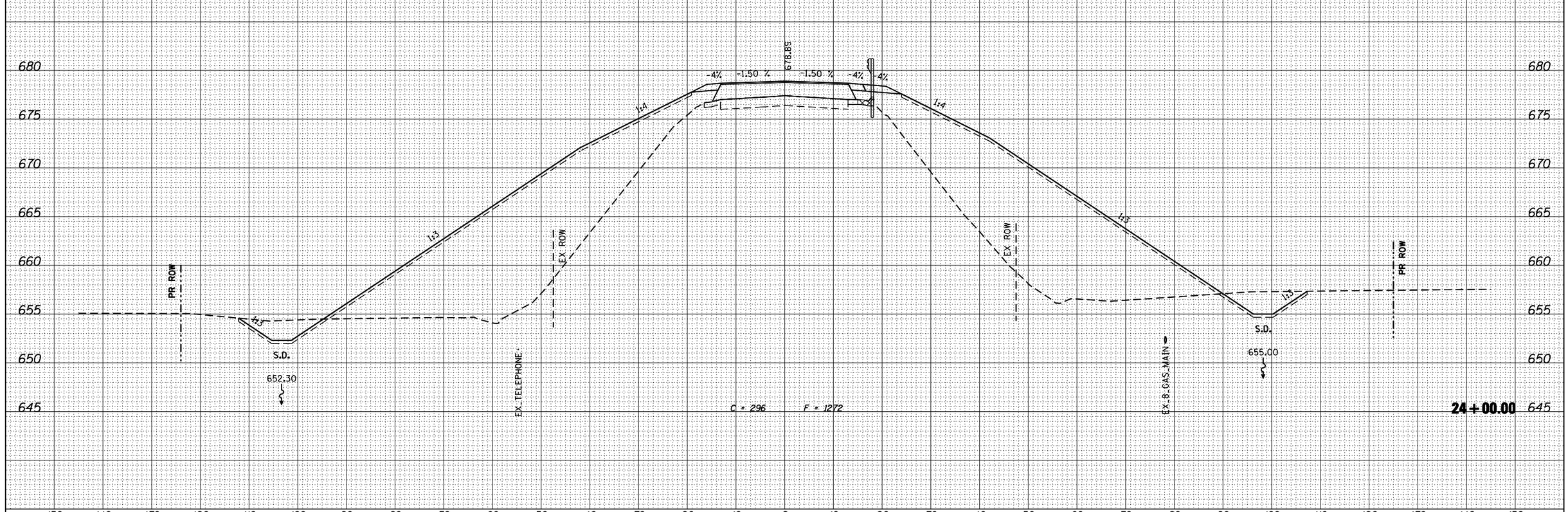
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 7 OF 21 SHEETS | STA. 23+50.00 TO STA. 23+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	81
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



design firm no. 184001036 — whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

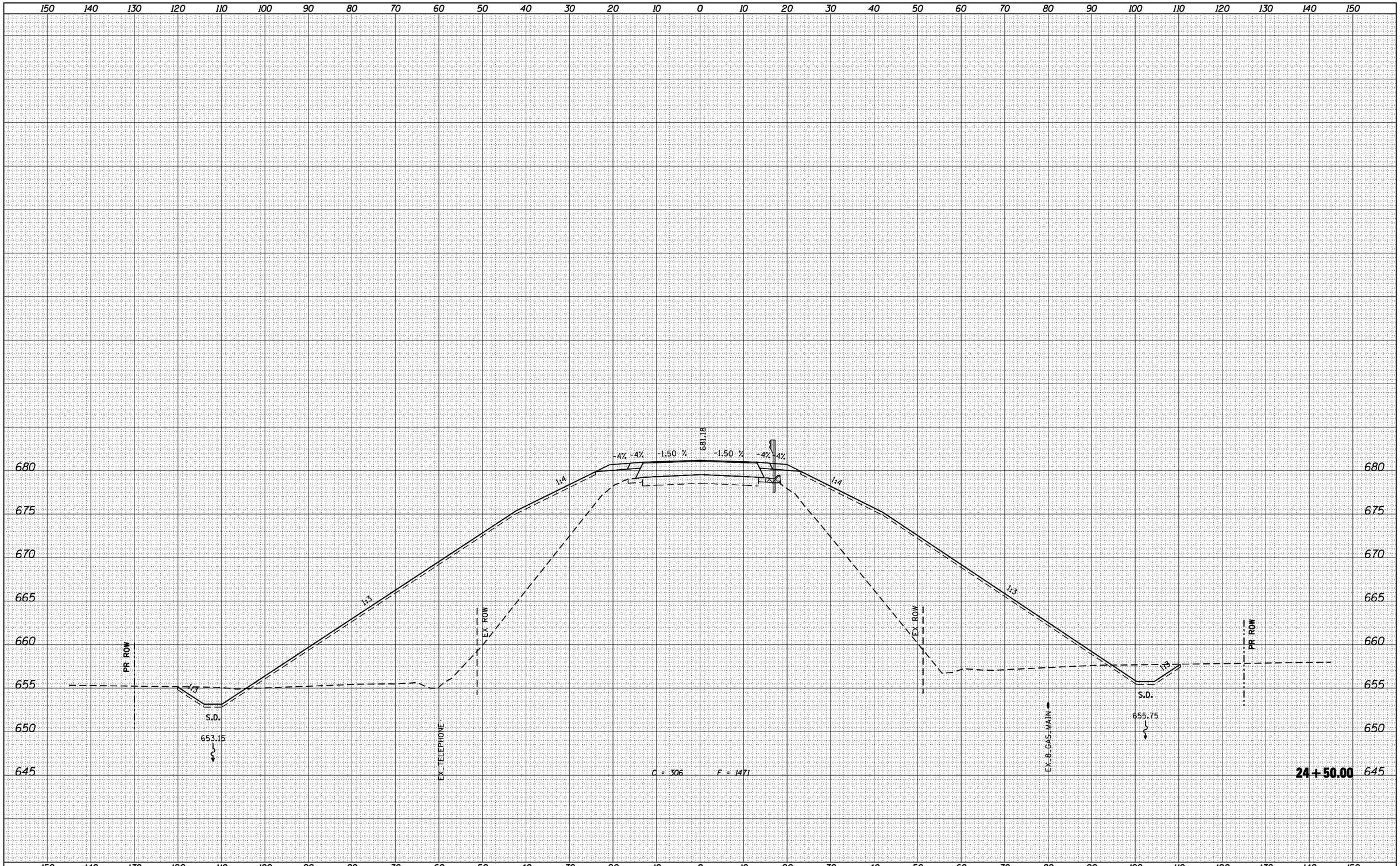
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 8 OF 21 SHEETS | STA. 24+00.00 | TO STA. 24+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	82
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



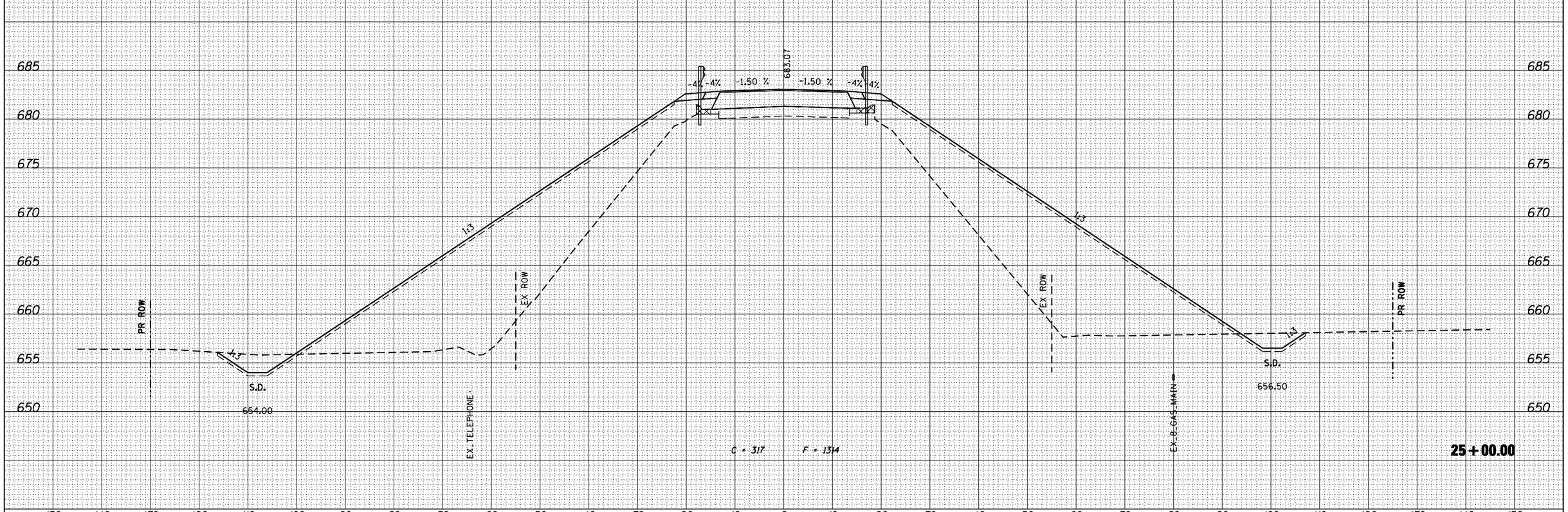
design firm no. 184001036					
whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CROSS SECTIONS IL 95 OVER BNSF RAILROAD**
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED		
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED		
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED		

SCALE: 1" = 10' | SHEET NO. 9 OF 21 SHEETS | STA. 24+50.00 | TO STA. 24+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	83
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

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



design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

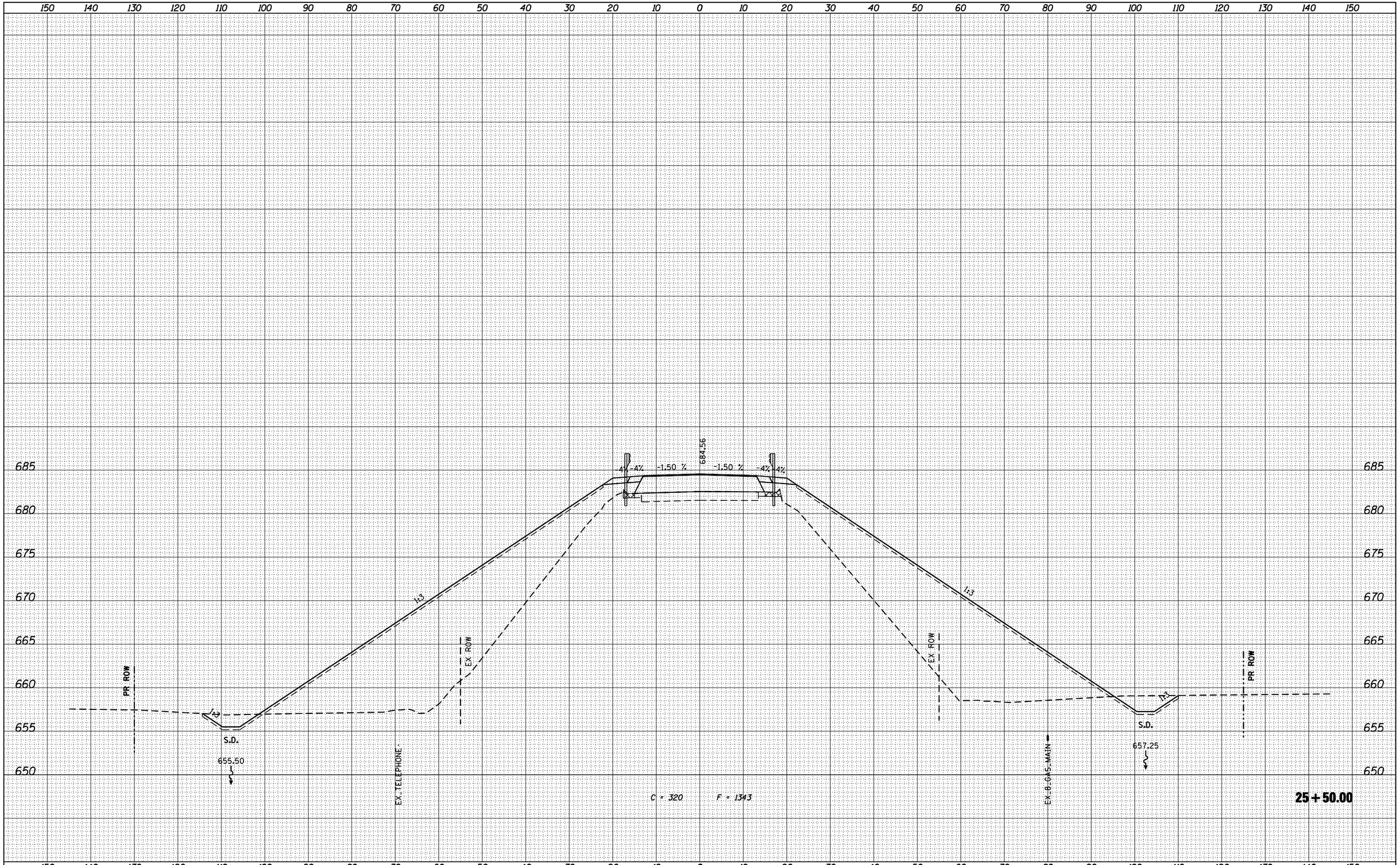
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 10 OF 21 SHEETS | STA. 25+00.00 | TO STA. 25+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	84
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



design firm no. 184001036				
whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED	
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 11 OF 21 SHEETS | STA. 25+50.00 | TO STA. 25+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	85
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

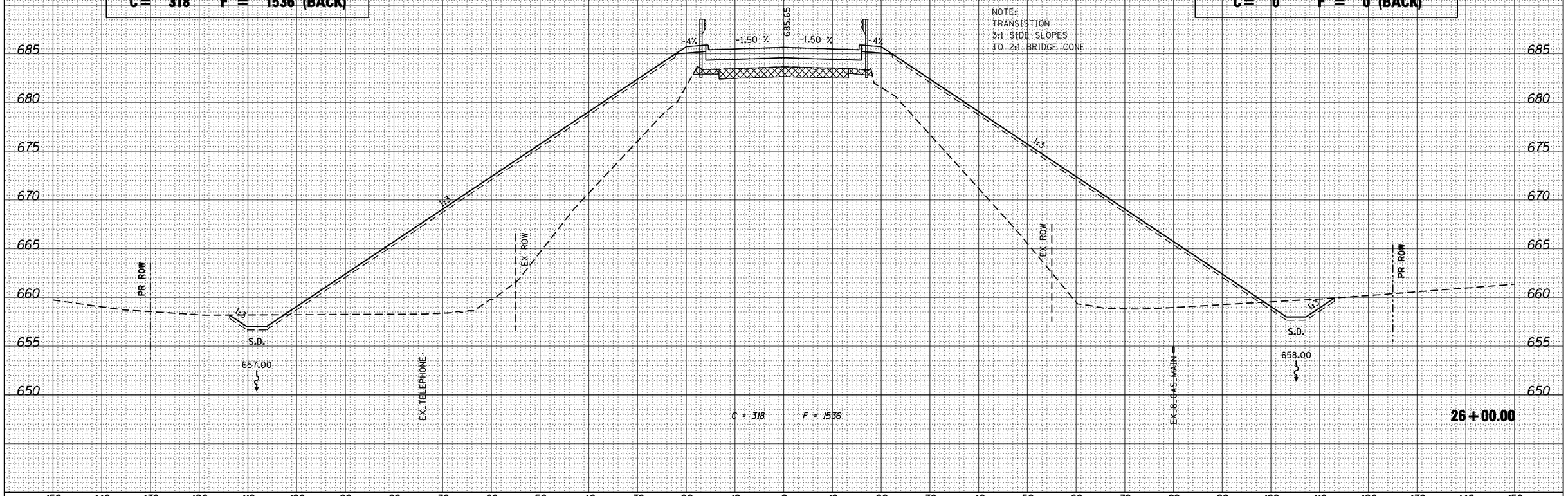
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED	DATE	

BRIDGE OMISSION
STA. 26+19.83 TO STA. 27+69.83

END EARTHWORK
STA. 26+19.83
C = 0 F = 0 (AHEAD)
C= 318 F = 1536 (BACK)

BEGIN EARTHWORK
STA. 27+69.83
C = 303 F = 1416 (AHEAD)
C= 0 F = 0 (BACK)

NOTE:
TRANSISTION
3:1 SIDE SLOPES
TO 2:1 BRIDGE CONE



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

design firm no. 184001036
whks
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

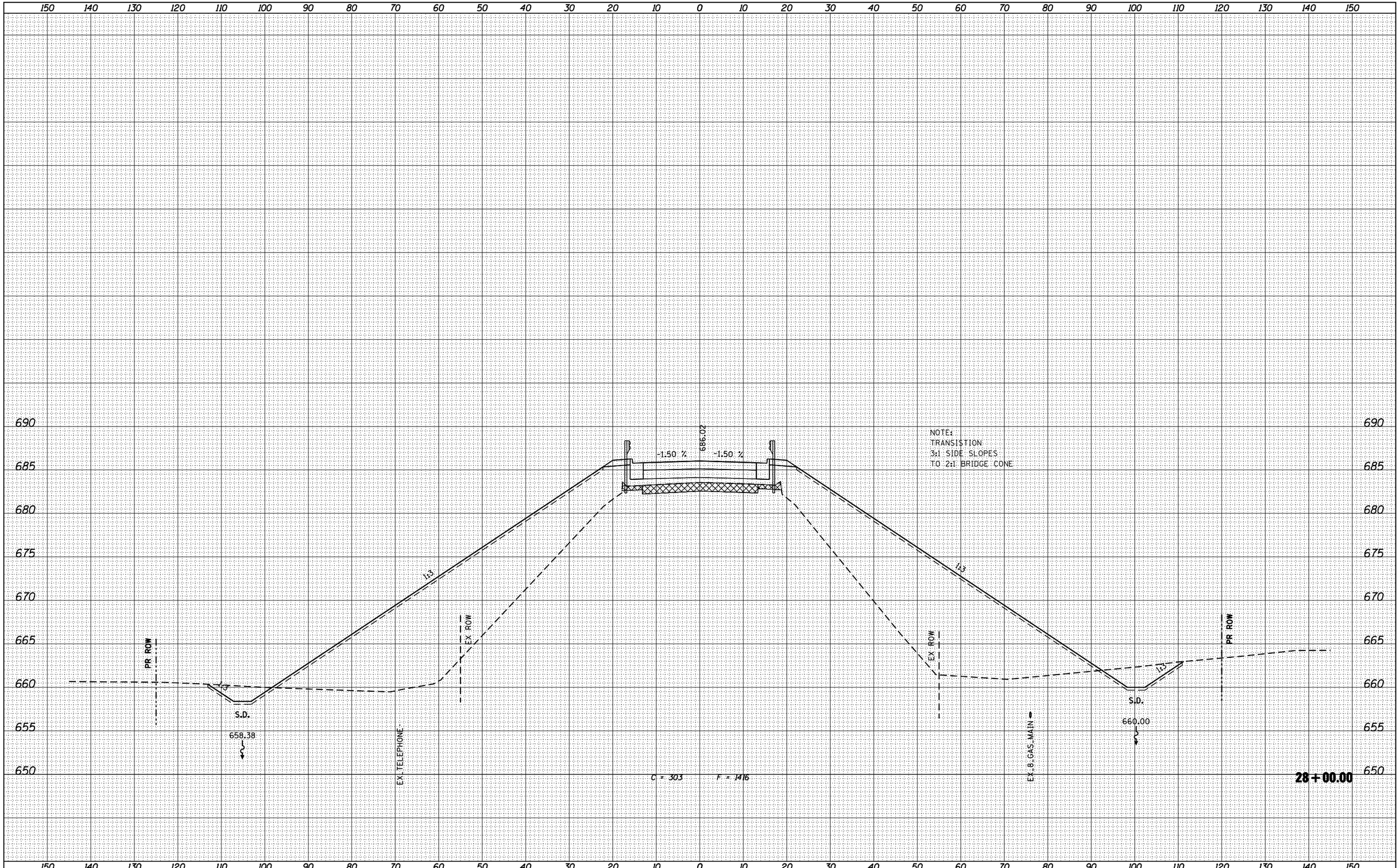
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 12 OF 21 SHEETS | STA. 26+00.00 | TO STA. 26+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	86
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

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



design firm no. 184001036	USER NAME = gjameson	DESIGNED - JAC	REVISED
whks engineers + planners + land surveyors	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

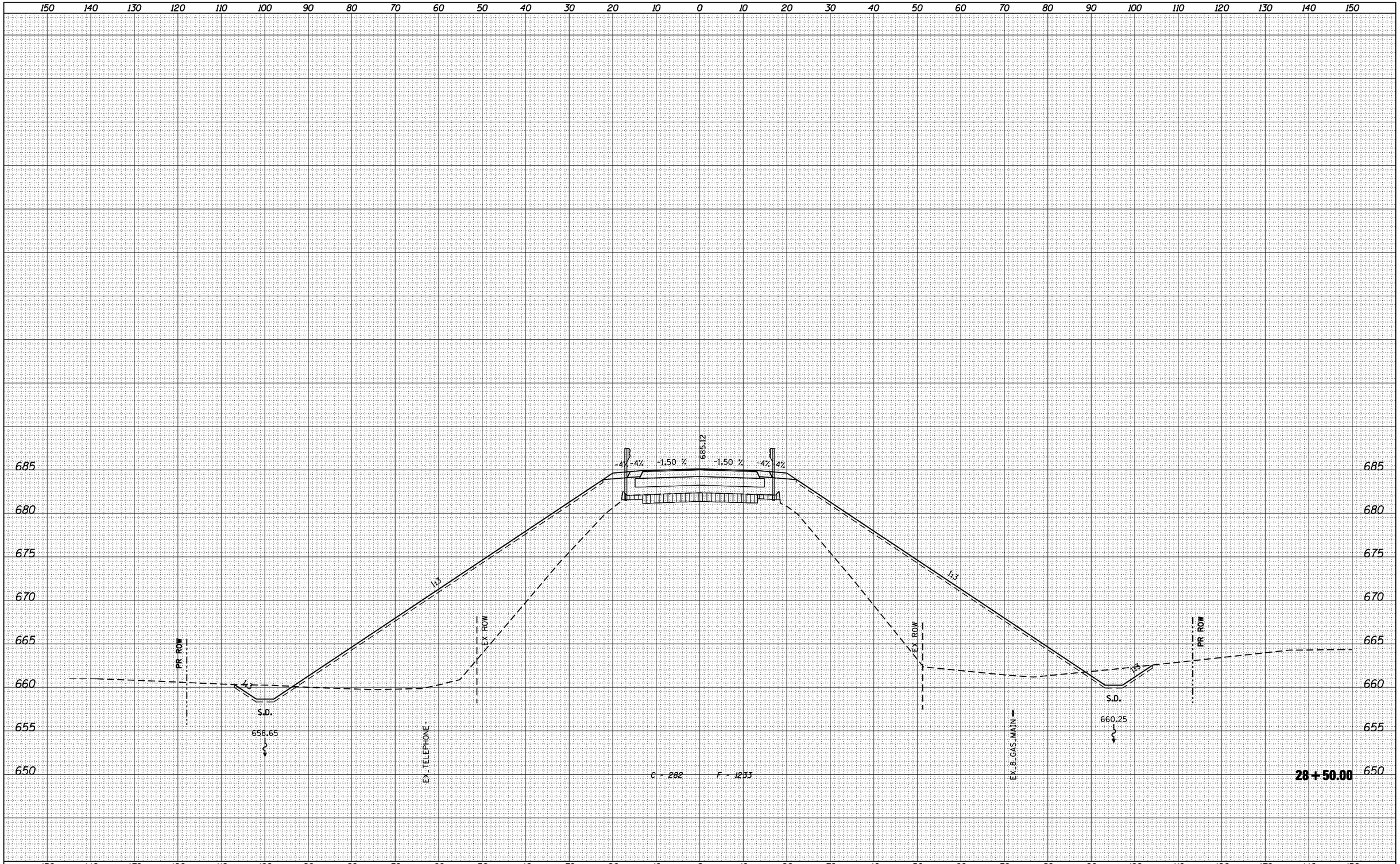
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 13 OF 21 SHEETS | STA. 28+00.00 | TO STA. 28+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	87
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



design firm no. 184001036	USER NAME = gjameson	DESIGNED - JAC	REVISED
whks engineers + planners + land surveyors	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

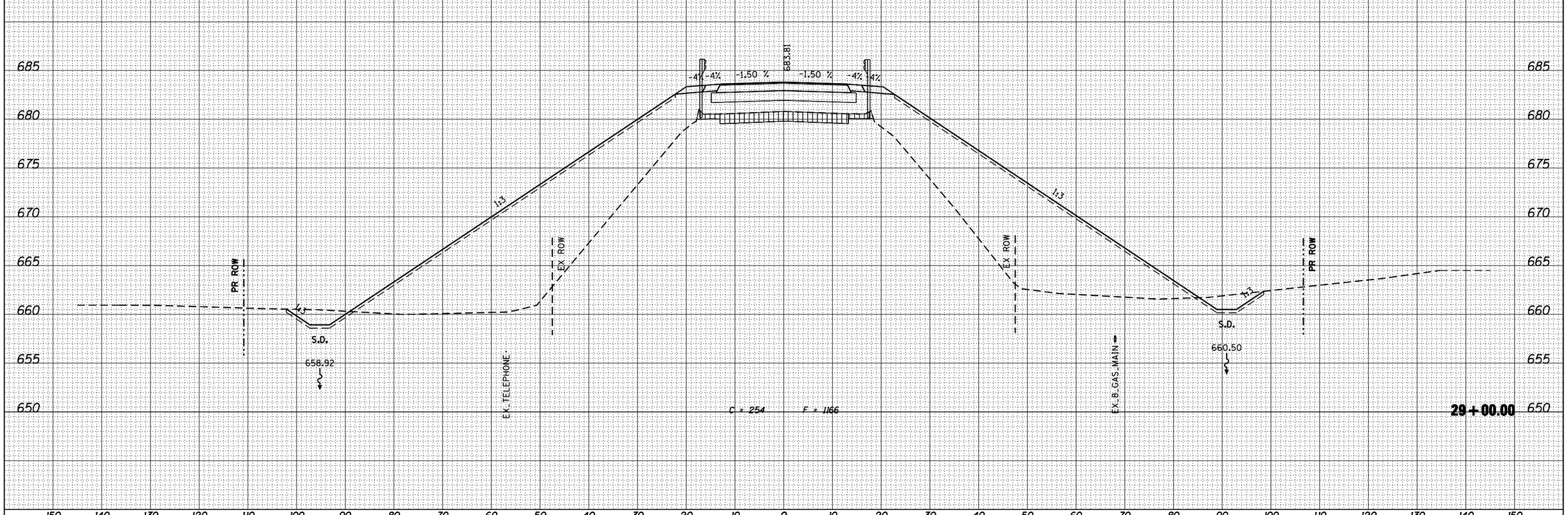
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 14 OF 21 SHEETS | STA. 28+50.00 | TO STA. 28+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	88
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



design firm no. 184001036

whks
engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

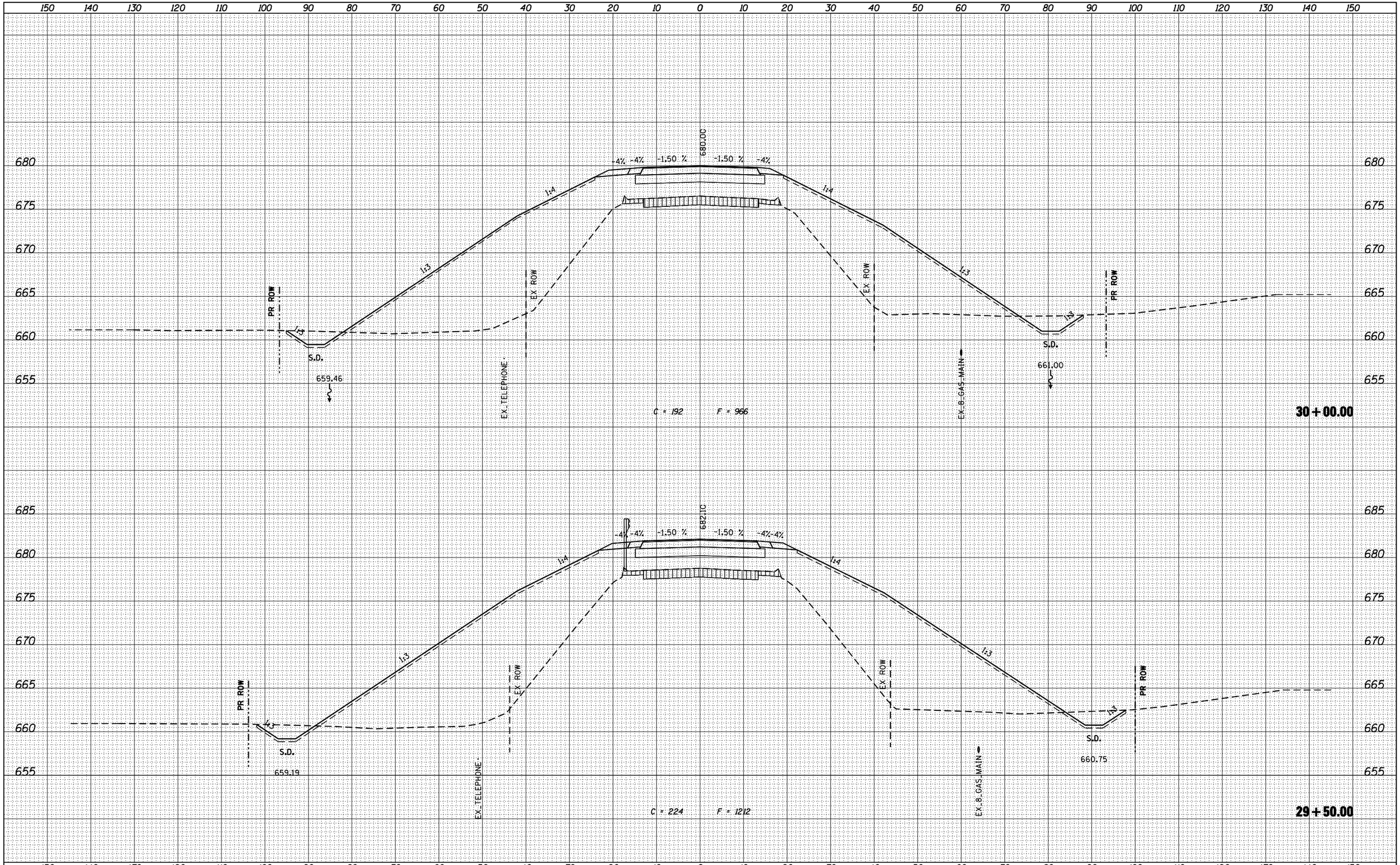
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 15 OF 21 SHEETS | STA. 29+00.00 | TO STA. 29+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	89
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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



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

design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

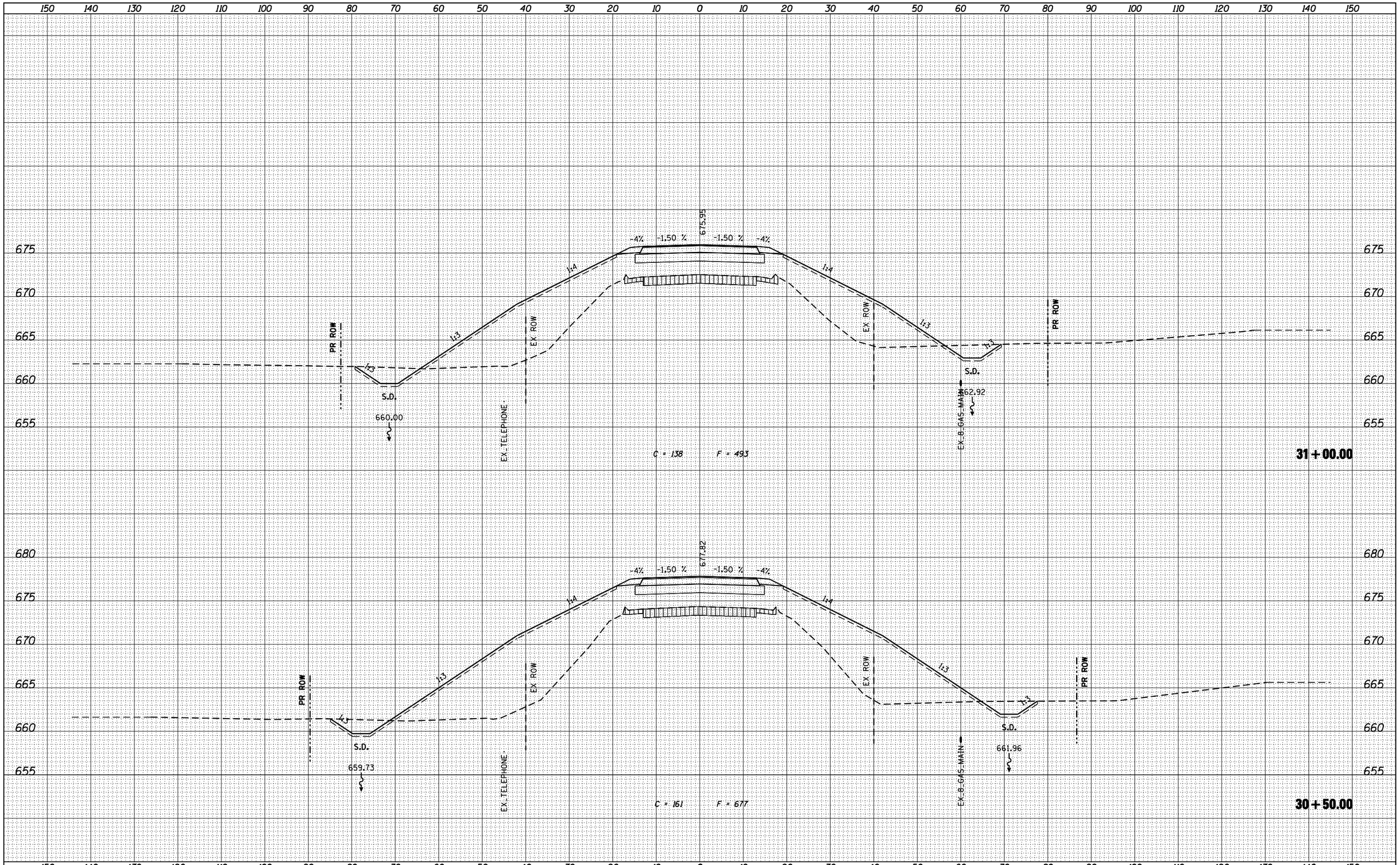
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 16 OF 21 SHEETS | STA. 29+50.00 TO STA. 30+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	90
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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



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

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 17 OF 21 SHEETS | STA. 30+50.00 | TO STA. 31+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	91
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

675 670 665 660 655

673.16

-4% -1.50 % -1.50 % -4%

1:4 1:4

PR ROW EX ROW EX ROW PR ROW

S.D. 662.67

S.D. 664.85

EX. TELEPHONE

EX. 8" GAS MAIN

C = 95 F = 205

32+00.00

675 670 665 660 655

674.39

4% -1.50 % -1.50 % -4%

1:4 1:4 1:3 1:3

PR ROW EX ROW EX ROW PR ROW

S.D. 661.33

S.D. 663.89

EX. TELEPHONE

EX. 8" GAS MAIN

C = 111 F = 326

31+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

BY	DATE

design firm no. 184001036

whks engineers + planners + land surveyors

USER NAME = gjameson	DESIGNED - JAC	REVISED	
FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED	
PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED	
PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

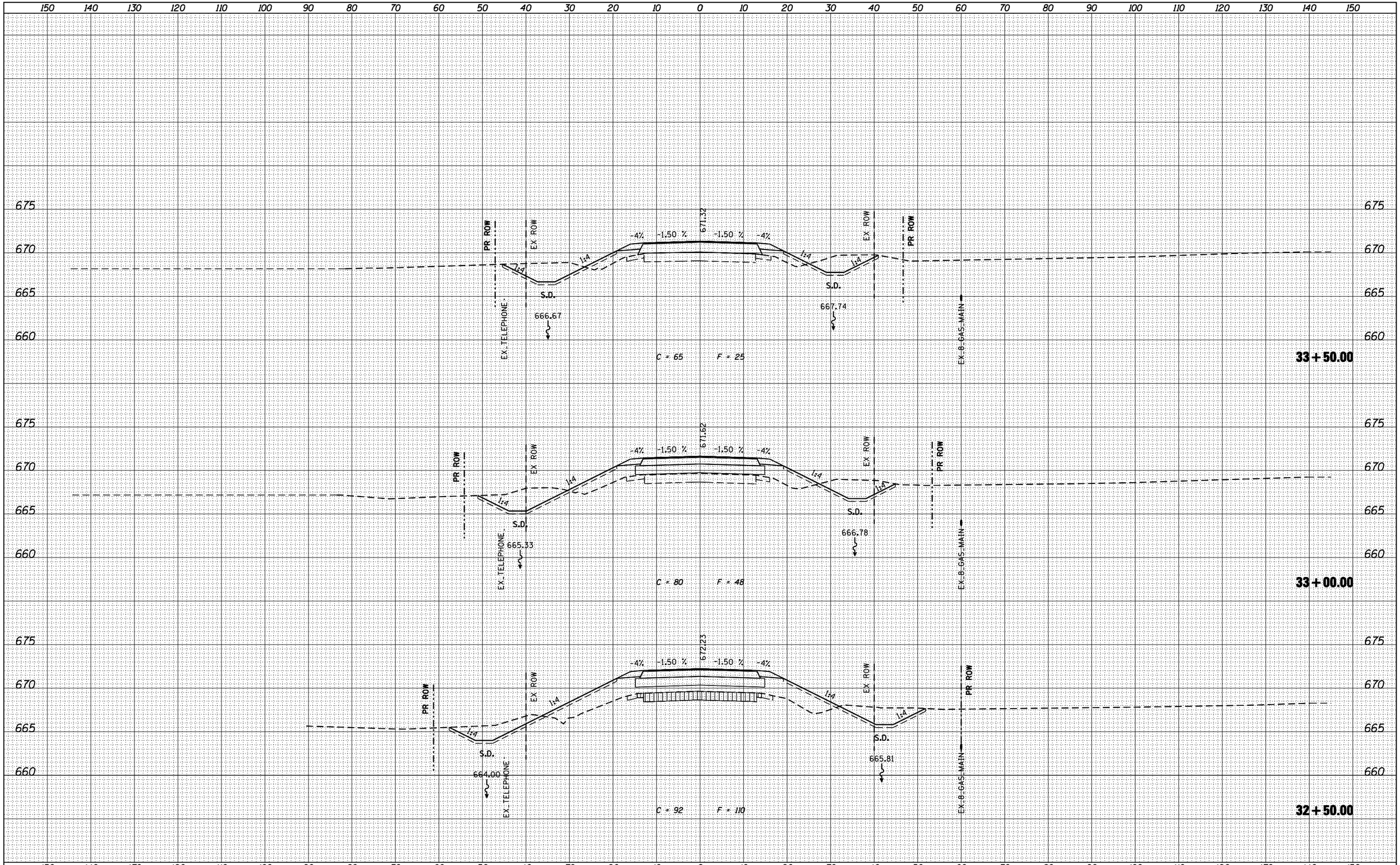
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 18 OF 21 SHEETS | STA. 31+50.00 | TO STA. 32+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	92
		CONTRACT NO. 68689		
	ILLINOIS FED. AID PROJECT			

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

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



design firm no. 184001036 whks engineers + planners + land surveyors	USER NAME = gjameson	DESIGNED - JAC	REVISED
	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 19 OF 21 SHEETS | STA. 32+50.00 TO STA. 33+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	93
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

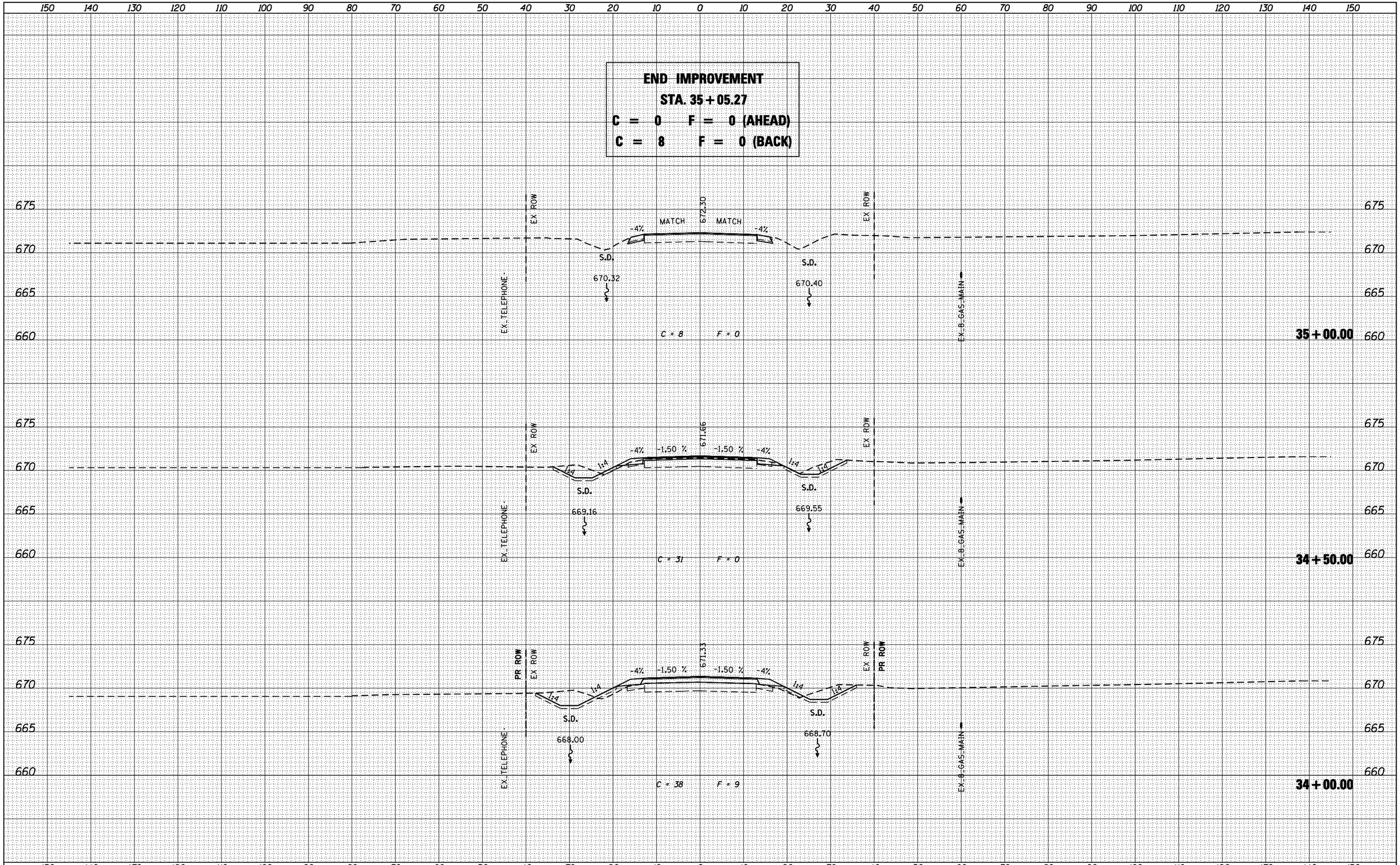
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

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

BY	DATE

END IMPROVEMENT
STA. 35+05.27
C = 0 F = 0 (AHEAD)
C = 8 F = 0 (BACK)



design firm no. 184001036	USER NAME = gjameson	DESIGNED - JAC	REVISED
whks engineers + planners + land surveyors	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

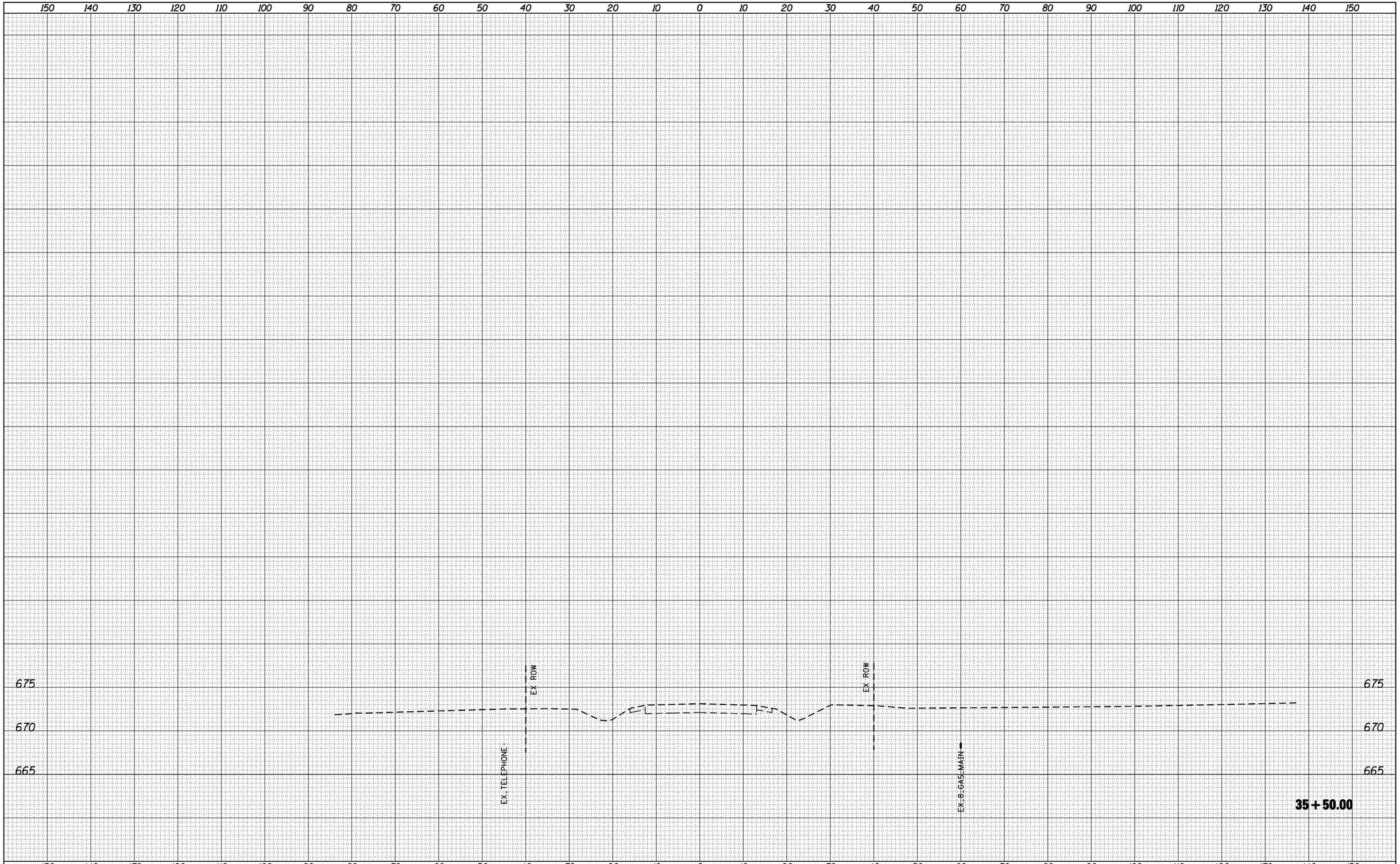
CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 20 OF 21 SHEETS | STA. 34+00.00 TO STA. 35+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	94
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		

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

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



design firm no. 184001036	USER NAME = gjameson	DESIGNED - JAC	REVISED
whks engineers + planners + land surveyors	FILE NAME = D468689-sht-xssht.dgn	CHECKED - BTM	REVISED
	PLOT SCALE = 20.0000 ' / IN.	DRAWN - GSJ	REVISED
	PLOT DATE = 8/13/2015	CHECKED - CWC	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
IL 95 OVER BNSF RAILROAD

SCALE: 1" = 10' | SHEET NO. 21 OF 21 SHEETS | STA. 35+50.00 | TO STA. 35+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	(122VB)BR-1	MCDONOUGH	95	95
		CONTRACT NO. 68689		
	ILLINOIS	FED. AID PROJECT		