04-27-2018 LETTING ITEM 085

INDEX OF SHEETS

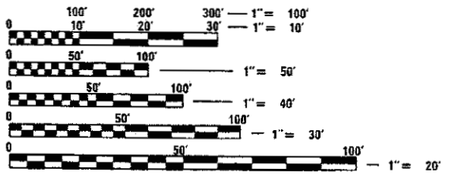
LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06	630301-08
001001-02	631031-15
280001-07	666001-01
420001-09	701301-04
420401-12	701311-03
482001-02	701901-07
515001-03	725001-01
630001-12	BLR 21-9
601101-02	

LIST OF DISTRICT 4 CADD STANDARDS

205001-D4
281001-D4
406101-D4
440001-D4
505001-D4
630101-D4
667101-D4
780001-D4

ADT = 2650 (2011)
% HCV = 10.38 (2011)
% SU = 4.72 (2011)
% MU = 5.66 (2011)
TOWNSHIP: BUSHNELL
FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL (RURAL)



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

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

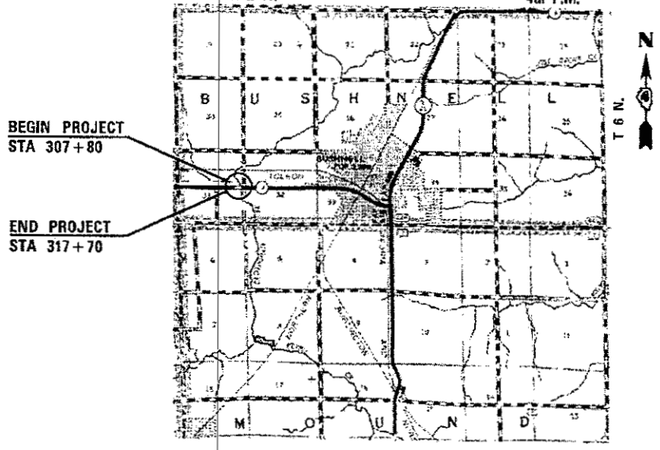
PROJECT ENGINEER: CHRISTOPHER MAUSHARD 309-671-3453
PROJECT MANAGER: CHRISTOPHER MAUSHARD 309-671-3453

CATALOG NO. 032495-00D
CONTRACT NO. 68215

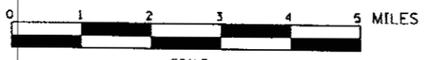
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAP 685 (IL ROUTE 9)
SECTION 120BR-1
PROJECT STP-LL0Q(886)
MCDONOUGH COUNTY
C-94-024-02



LOCATION PLAN
NET LENGTH OF PROJECT = 990.00 FEET = 0.188 MILES



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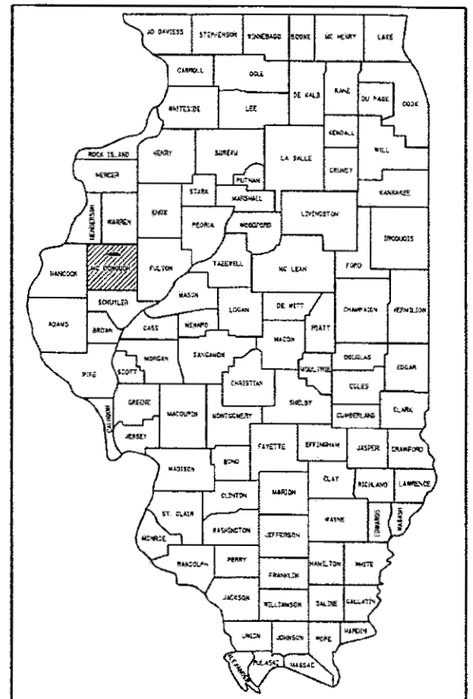
IL. Design Firm No. 184-001939

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 68215		

D-94-024-02



LOCATION OF SECTION INDICATED THUS: —

PROJECT DESCRIPTION
REMOVE & REPLACE EX STRUCTURE OVER
N. FORK LAMOINE RIVER
EX SN 055-0015
PR SN 055-0097
℄ STA 312+59

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 25 20 18
Kendall A Barnett (KSD)
REGIONAL ENGINEER
Mar 23 20 18
ENGINEER OF DESIGN AND ENVIRONMENT
Mar 23 20 18
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

Christopher P. Kohlhaus 11/26/18
EXPIRATION: 11/30/2019

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

COMMITMENTS

COMMITMENTS SHALL NOT BE ALTERED WITHOUT THE WRITTEN CONSENT OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE. NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

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

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

PLAN ELEVATIONS – U. S. G. S. MEAN SEA LEVEL DATUM

1. ALL ELEVATIONS SHOWN REFER TO U. S. G. S. DATUM AT MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

PROPERTY OWNER ACCESS REQUIREMENTS

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.

CLEARING

AT LOCATIONS WHERE CLEARING IS INDICATED ON THE PLANS BEYOND THE LIMITS OF THE PROPOSED EXCAVATION OR EMBANKMENT, THE CONTRACTOR SHALL RESTORE THE DISTURBED EARTH BY BLADING AND SHAPING TO BLEND WITH THE ADJACENT GROUND. THE CLEARING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EXCAVATION PAY ITEMS IN THE PLANS. PAYMENT FOR RESEEDING OR RESODDING WILL BE AS PROVIDED IN THE PLANS.

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.

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.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

* BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
* 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

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED 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 STATIONING 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 3/4 INCH (20MM) 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 (ENGLISH STATIONING) OR 100 METERS (METRIC STATIONING)

BOTTOM OF NUMBERS – 6 INCHES (150 MM) FROM THE INSIDE EDGE OF THE PAVEMENT MARKING

LOCATION:

* 2,3, & 5 LANE PAVEMENTS – RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
* MULTI–LANE DIVIDED ROADWAYS – OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
* RAMPS – ALONG BASELINE EDGE OF PAVEMENT

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

FORMAT – ENGLISH (METRIC) PAVEMENT STATIONS SHALL USE THIS FORMAT "XXX (XX+X00)" WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED 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.

CROSSING EXISTING STRUCTURES WITH EQUIPMENT

THE FOLLOWING STRUCTURES SN 055–0015 MAY BE CROSSED WITH MILLING MACHINE. ANY STRUCTURES NOT LISTED ABOVE SHALL BE VERIFIED BY THE RESIDENT PRIOR TO BEGINNING WORK.

RIGHT–OF–WAY MARKERS

WHEN INSTALLING RIGHT–OF–WAY MARKERS, 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.

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.

PROJECT SPECIFIC NOTES

1. THE THICKNESS OF THE HOT–MIX ASPHALT MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT–MIXED ASPHALT MIXTURES ARE PLACED.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.

3. NO TREE REMOVAL FROM APRIL 1 TO SEPTEMBER 30.

4. THE RESIDENT ENGINEER SHALL SUBMIT A FINAL COUNT OF TREES REMOVED SO THAT THEY WILL BE PROPERLY REPLACED IN THE TREE BACKING PROGRAM. PLEASE CONTACT JIM ALWILL AT 309–671–4484 FOR FINAL COUNT.

CALCULATION FACTORS

AGGREGATE SHOULDERS AND BASES: 0.05833 TON /SQ. YD /INCH
HOT MIX ASPHALT: 0.056 TON /SQ. YD /INCH
TEMPORARY EROSION CONTROL SEEDING: 100 LBS /ACRE
STONE DUMPED RIPRAP: 1.5 TON /CU YD
GUARDRAIL AGGREGATE EROSION CONTROL: 1.5 TON /CU. YD.
POLYMERIZED TACK COAT – 0.08 LB /SQ. FT. (MILLED SURFACES)
– 0.04 LB /SQ. FT. (FOG COAT)
BITUMINOUS MATERIALS (TACK COAT) ON MILLED HMA: 0.05 LB./SQ. FT.
ON HMA LIFTS: 0.025 LB./SQ. FT.

STATUS OF UTILITIES TO BE ADJUSTED

ROUTE/STREET	OFFSET	LOCATION	OWNER	TYPE OF UTILITY	TYPE OF CONFLICT	DISPOSITION
IL 9	VARIES 65' TO 66' LT. OF $\mathcal{L}$	STA. 307+80 TO STA 317+70	FRONTIER	FIBER OPTIC	NONE	NO CONFLICT
IL 9	VARIES 55' TO 100' LT. OF $\mathcal{L}$	STA. 307+32 TO STA 317+70	MCDONOUGH POWER	AERIAL POWER	NONE	NO CONFLICT
IL 9	VARIES 24' TO 55' LT. OF $\mathcal{L}$	STA. 307+32 TO STA 317+70	FRONTIER	CABLE	ROADWAY DITCH	CONFLICT

HOT–MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S)	SURFACE COURSE (1.5")	TOP BINDER COURSE (2.25") & VAR. DEPTH BINDER
AC /PC	PG 64–22	PG 64–22
DESIGN AIR VOIDS	4.0% AT N = 50	4.0% AT N = 50
MIXTURE COMPOSITION	IL 9.5	IL 19.0
FRICTION AGGREGATE	MIX D	N. A.
QUALITY MANAGEMENT PROGRAM	QCQA	QCQA

NOTE: 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 LBS.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.

V&K
Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, COMMITMENTS & PROJECT SPECIFIC NOTES

SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	3
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

CODE NO.	ITEM		UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
X2010310	TREE REMOVAL (SPECIAL)		UNIT	286.3	286.3	
20200100	EARTH EXCAVATION		CU YD	1183	1183	
20300100	CHANNEL EXCAVATION		CU YD	51		51
20400800	FURNISHED EXCAVATION		CU YD	583	583	
21101615	TOPSOIL FURNISH AND PLACE, 4"		SQ YD	7810	7810	
25000210	SEEDING, CLASS 2A		ACRE	2.0	2.0	
25000400	NITROGEN FERTILIZER NUTRIENT		POUND	180	180	
25000500	PHOSPHORUS FERTILIZER NUTRIENT		POUND	180	180	
25000600	POTASSIUM FERTILIZER NUTRIENT		POUND	180	180	
25100115	MULCH, METHOD 2		ACRE	2.0	2.0	
28000250	TEMPORARY EROSION CONTROL SEEDING		POUND	200	200	
28000305	TEMPORARY DITCH CHECKS		FOOT	84	84	
28000400	PERIMETER EROSION BARRIER		FOOT	1285	1285	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
28100109	STONE RIPRAP, CLASS A5	SQ YD	562		562
28100830	STONE DUMPED RIPRAP, CLASS B4	TON	140	140	
28200200	FILTER FABRIC	SQ YD	773	211	562
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	3070	3070	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	997	997	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	783	783	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	164	164	
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	148	148	
44000100	PAVEMENT REMOVAL	SQ YD	226	226	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	58	58	
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	447	447	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50104650	SLOPE WALL REMOVAL	SQ YD	600		600

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
50200100	STRUCTURE EXCAVATION	CU YD	162		162
50200300	COFFERDAM EXCAVATION	CU YD	443		443
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1
50300225	CONCRETE STRUCTURES	CU YD	200.8		200.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	308.7		308.7
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	716		716
50300265	SEAL COAT CONCRETE	CU YD	102.6		102.6
50300300	PROTECTIVE COAT	SQ YD	1291		1291
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	119.5		119.5
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	LSUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	4410		4410
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	129440		129440
51201600	FURNISHING STEEL PILES HP12X53	FOOT	774		774

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
	51201700	FURNISHING STEEL PILES HP12X74	FOOT	1267		1267
	51202305	DRIVING PILES	FOOT	2041		2041
	51203600	TEST PILE STEEL HP12X53	EACH	1		1
	51500100	NAME PLATES	EACH	1		1
	52100520	ANCHOR BOLTS, 1"	EACH	48		48
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	68		68
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	250	250	
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
	63200310	GUARDRAIL REMOVAL	FOOT	750	750	
*	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	10	10	
*	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
	67100100	MOBILIZATION	LSUM	1	1	

* SPECIALTY ITEM

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
	70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LSUM	1	1	
	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	160	160	
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2195	2195	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	9	9	
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	16	
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10	
•	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	53	53	
•	X5420618	PIPE CULVERTS TO BE CLEANED 18"	FOOT	48	48	
•	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	133		133
•	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	190	190	
•	Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	104	104	
•	Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
•	Z0022800	FENCE REMOVAL	FOOT	1459	1459	

• SEE SPECIAL PROVISIONS

* SPECIALTY ITEM

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 80% FEDERAL 20% STATE ROADWAY 0004 S.N. 055-0097	CONSTRUCTION CODE 80% FEDERAL 20% STATE BRIDGE 0010 S.N. 055-0097
•	Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1033		1033
•	Z0034105	MATERIAL TRANSFER DEVICE	TON	947	947	
ø	Z0076600	TRAINEES	HOUR	1,000	1,000	
•	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	144		144
ø	Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	1,000	1,000	

• SEE SPECIAL PROVISIONS

ø 0042

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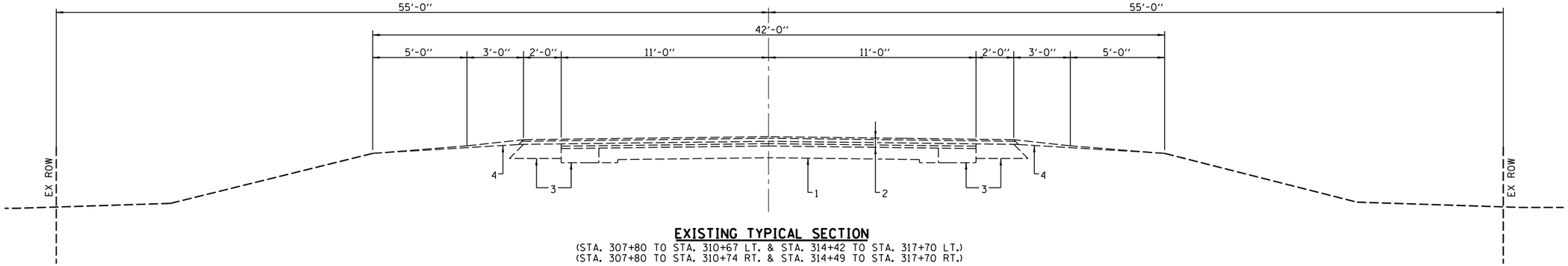
USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

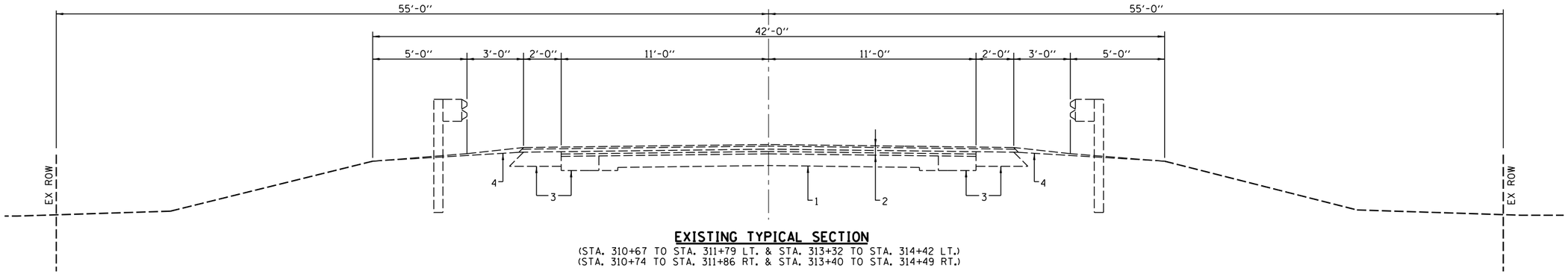
SUMMARY OF QUANTITIES

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

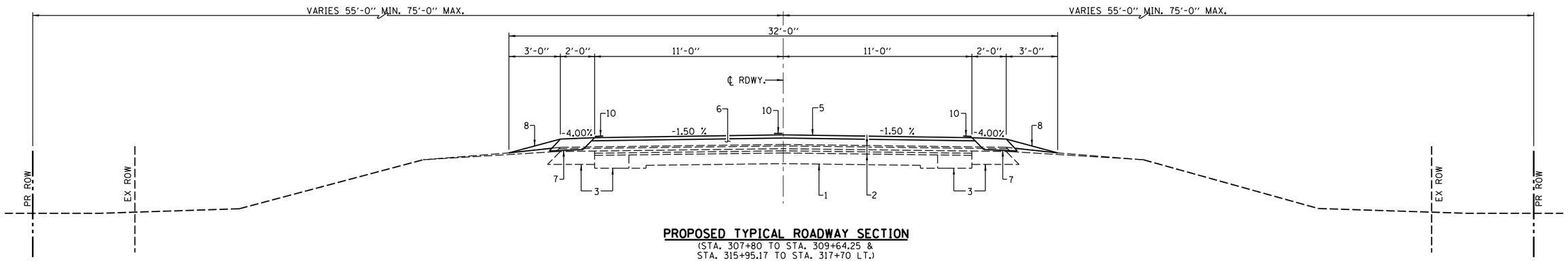
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	9
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



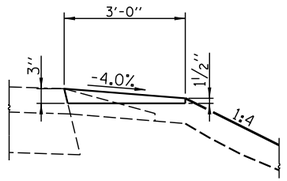
EXISTING TYPICAL SECTION
(STA. 307+80 TO STA. 310+67 LT. & STA. 314+42 TO STA. 317+70 LT.)
(STA. 307+80 TO STA. 310+74 RT. & STA. 314+49 TO STA. 317+70 RT.)



EXISTING TYPICAL SECTION
(STA. 310+67 TO STA. 311+79 LT. & STA. 313+32 TO STA. 314+42 LT.)
(STA. 310+74 TO STA. 311+86 RT. & STA. 313+40 TO STA. 314+49 RT.)



PROPOSED TYPICAL ROADWAY SECTION
(STA. 307+80 TO STA. 309+64.25 &
STA. 315+95.17 TO STA. 317+70 LT.)
(STA. 307+80 TO STA. 309+22.83 &
STA. 315+53.75 TO STA. 317+70 RT.)



AGGREGATE SHOULDER DETAIL

PAVEMENT LEGEND

1. EX PCC PVMT
2. EX HMA OVERLAYS
3. EX HMA WIDENING
4. EX AGGREGATE WEDGE
5. **PR HMA SURF CRSE, 1 1/2"**
6. **PR HMA BINDER COURSE (2 1/4" MIN.)**
7. **PR HMA SHOULDER 8"**
8. **PR AGGREGATE SHOULDER, TYPE B**
9. **PR GUARDRAIL AGGREGATE EROSION CONTROL**
10. **PR MODIFIED URETHANE MARKING LINE - 4"**
11. **PR CONC APPR SLAB (15") OR PCC CONNECTOR**
12. **PR GRAN BACKFILL**
13. **PR TOPSOIL FURNISH AND PLACE 4"**

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Springfield, IL. Phone: (217)544-8033

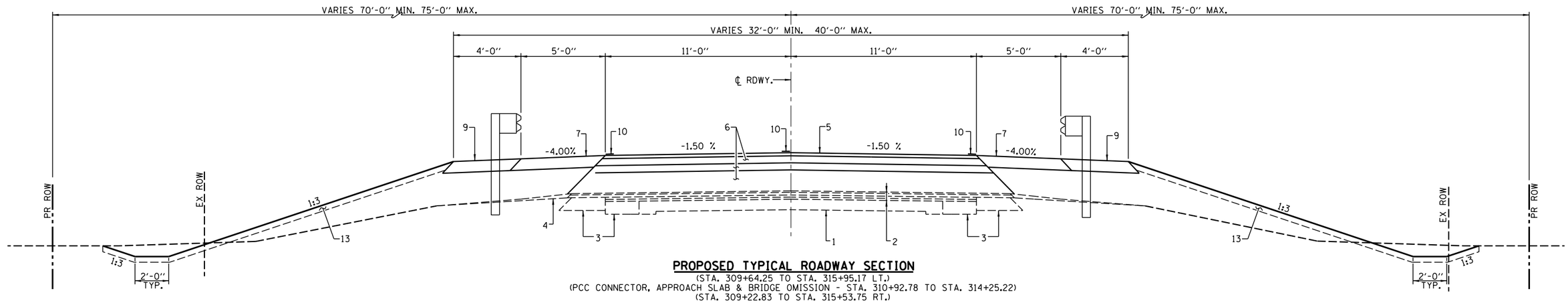
USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

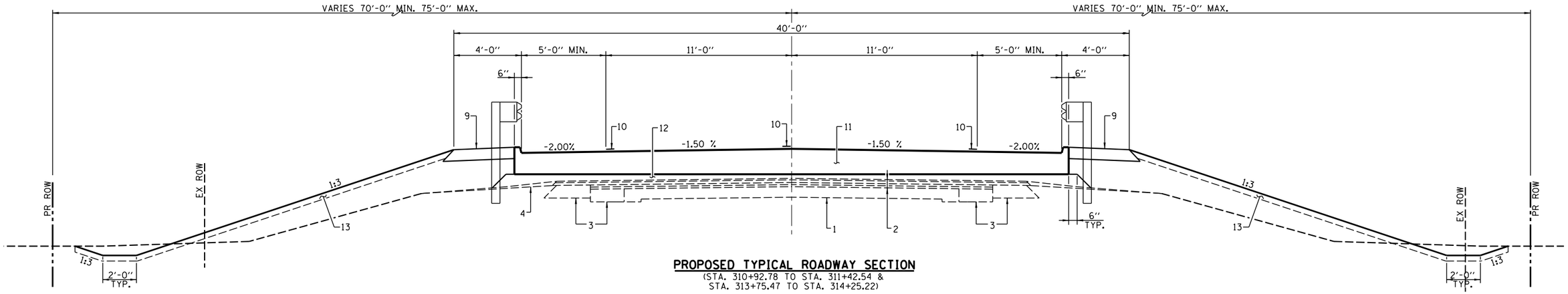
TYPICAL ROADWAY SECTIONS

SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	10
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



PROPOSED TYPICAL ROADWAY SECTION
(STA. 309+64.25 TO STA. 315+95.17 LT.)
(PCC CONNECTOR, APPROACH SLAB & BRIDGE OMISSION - STA. 310+92.78 TO STA. 314+25.22)
(STA. 309+22.83 TO STA. 315+53.75 RT.)



PROPOSED TYPICAL ROADWAY SECTION
(STA. 310+92.78 TO STA. 311+42.54 &
STA. 313+75.47 TO STA. 314+25.22)

PAVEMENT LEGEND

1. EX PCC PVMT
2. EX HMA OVERLAYS
3. EX HMA WIDENING
4. EX AGGREGATE WEDGE
5. **PR HMA SURF CRSE, 1 1/2"**
6. **PR HMA BINDER COURSE (2 1/4" MIN.)**
7. **PR HMA SHOULDER 8"**
8. **PR AGGREGATE SHOULDER, TYPE B**
9. **PR GUARDRAIL AGGREGATE EROSION CONTROL**
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL ROADWAY SECTIONS

SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	11
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		

PERMANENT SEEDING					
	SEEDING, CLASS 2A	NITROGEN FERT. NUTRIENT	PHOSPHORUS FERT. NUTRIENT	POTASSIUM FERT. NUTRIENT	MULCH, METHOD 2
	ACRE	POUND	POUND	POUND	ACRE
STA. 307+80 TO STA. 312+42 LT. R.O.W. TO R.O.W.	0.5	45	45	45	0.5
STA. 307+80 TO STA. 312+42 RT. R.O.W. TO R.O.W.	0.5	45	45	45	0.5
STA. 312+75 TO STA. 317+70 LT. R.O.W. TO R.O.W.	0.5	45	45	45	0.5
STA. 312+75 TO STA. 317+70 RT. R.O.W. TO R.O.W.	0.5	45	45	45	0.5
TOTAL	2.0	180	180	180	2.0

EARTHWORK				
LOCATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU. YD.	CU. YD.	CU. YD.	CU. YD.
STA. 307+80 TO STA. 312+42	592	444	585	-141
STA. 312+75 TO STA. 317+70	591	443	885	-442
TOTAL	1183	887	1470	-583

STONE DUMPED RIPRAP, CLASS B4 AND FILTER FABRIC		
LOCATION	STONE DUMPED RIPRAP, CLASS B4	FILTER FABRIC
	TON	SQ. YD.
STA. 317+39 30' RT. TO STA. 317+46 44' RT.	8	11
N.W. CORNER APPROACH SLAB	33	50
S.W. CORNER APPROACH SLAB	33	50
N.E. CORNER APPROACH SLAB	33	50
S.E. CORNER APPROACH SLAB	33	50
S.N. 055-0097		572
TOTAL	140	783

TEMPORARY EROSION CONTROL SEEDING	
LOCATION	TEMPORARY EROSION CONTROL SEEDING
	POUND
STA. 307+80 TO STA. 312+42 LT. R.O.W. TO R.O.W.	50
STA. 307+80 TO STA. 312+42 RT. R.O.W. TO R.O.W.	50
STA. 312+75 TO STA. 317+70 LT. R.O.W. TO R.O.W.	50
STA. 312+75 TO STA. 317+70 RT. R.O.W. TO R.O.W.	50
TOTAL	200

PERIMETER EROSION BARRIER	
LOCATION	PERIMETER EROSION BARRIER
	FOOT
STA. 309+00 70' LT. TO STA. 312+00 75' LT.	300
STA. 309+00 70' RT. TO STA. 312+00 75' RT.	300
STA. 313+50 75' LT. TO STA. 316+85 75' LT.	335
STA. 313+50 75' RT. TO STA. 316+85 75' RT.	350
TOTAL	1285

TEMPORARY DITCH CHECKS	
LOCATION	TEMPORARY DITCH CHECKS
	FOOT
STA. 309+00 53' LT. & 60' RT.	18
STA. 310+50 60' LT. & 56' RT.	16
STA. 312+00 55.5' LT. & 55' RT.	16
STA. 314+00 54' LT. & 55' RT.	16
STA. 315+50 64' LT. & 61.5' RT.	18
TOTAL	84

INLET AND PIPE PROTECTION	
LOCATION	INLET AND PIPE PROTECTION
	EACH
STA. 316+93 42' RT.	1
TOTAL	1

CONTRACT: 68215 TREE REMOVAL (Special) QUANTITIES

Below is a summary of trees that were felled by IDOT Maintenance Field personnel.

STATION	TREE COUNT	UNITS
RT 310+96	1	11.3
	1	8.4
	1	8.6
	1	11.8
RT 311+16	1	9.7
	1	12.1
RT 311+58	1	6.1
RT 311+71	1	9.5
	1	14.6
	1	14.5
RT 311+96	1	9.3
	1	9
	1	13
RT 313+00	1	13.5
	1	8.5
	1	10.4
	1	9
	1	12.5
	1	5.8
	1	6.5
	1	9.3
RT 313+40	1	8
RT 313+55	1	8
	1	12.9
	1	12.9
RT 314+06	1	8
RT 315+81	1	7.5
	1	7.4
	1	8.2
TOTAL	**29**	**286.3**

STONE DUMPED RIPRAP, CLASS B4 AND FILTER FABRIC		
LOCATION	STONE DUMPED RIPRAP, CLASS B4	FILTER FABRIC
	TON	SQ. YD.
STA. 317+39 30' RT. TO STA. 317+46 44' RT.	8	11
N.W. CORNER APPROACH SLAB	33	50
S.W. CORNER APPROACH SLAB	33	50
N.E. CORNER APPROACH SLAB	33	50
S.E. CORNER APPROACH SLAB	33	50
S.N. 055-0097		572
TOTAL	140	783

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PLOT SCALE = ____	DRAWN - ____	REVISED - ____	
PLOT DATE = ____	CHECKED - ____	REVISED - ____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

QUANTITY SCHEDULES

SCALE: NONE | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	12
		CONTRACT NO. 68215		
		ILLINOIS FED. AID PROJECT		

GUARDRAIL SCHEDULE

	SPBGR, TYPE A, 6' POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAF. BAR. TERM., TYPE 1 (SPECIAL) TANGENT	GUARDRAIL REMOVAL	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A
	FOOT	EACH	EACH	FOOT	EACH	EACH
STA. 310+06.83 TO STA. 310+94.33 RT.	87.5					
STA. 310+48.25 TO STA. 310+85.75 LT.	37.5					
STA. 314+23.67 TO STA. 315+11.17 LT.	87.5					
STA. 314+32.25 TO STA. 314+69.75 RT.	37.5					
STA. 310+94.33 TO STA. 311+31.83 RT.		1				
STA. 310+85.75 TO STA. 311+23.25 LT.		1				
STA. 313+86.17 TO STA. 314+23.67 LT.		1				
STA. 313+94.75 TO STA. 314+32.25 RT.		1				
STA. 309+56.83 TO STA. 310+06.83 RT.			1			
STA. 309+98.25 TO STA. 310+48.25 LT.			1			
STA. 315+11.17 TO STA. 315+61.17 LT.			1			
STA. 314+69.75 TO STA. 315+19.75 RT.			1			
STA. 310+67 TO STA. 314+42 LT				375		
STA. 310+74 TO STA. 314+49 RT.				375		
STA. 309+56.83 RT.					1	
STA. 309+98.25 LT.					1	
STA. 315+61.17 LT.					1	
STA. 315+19.75 RT.					1	
STA. 309+56.83 TO STA. 311+31.83 RT.						4
STA. 309+98.25 TO STA. 311+23.25 LT.						4
STA. 313+86.17 TO STA. 315+61.17 LT.						4
STA. 313+94.83 TO STA. 315+19.75 RT.						4
TOTAL	250	4	4	750	4	16

TABULATION OF RESURFACING QUANTITIES

LOCATION	LENGTH	HMA SURFACE REMOVAL-BUTT JOINT	HMA BINDER COURSE, IL-19.0, N50	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	HMA SURFACE COURSE, MIX "D", N50	MATERIAL TRANSFER DEVICE
	FOOT	SQ YD	SQ YD	POUND	TON	TON
STA. 307+80 TO STA. 308+79.6	99.6	244				
STA. 308+79.6 TO STA. 309+17.4	37.8	92				
STA. 309+17.4 TO STA. 309+46.7	29.3	72				
STA. 307+80 TO STA. 310+92.78	312.78		305	551	65	370
STA. 308+79.6 TO STA. 310+92.78 (6 APPLICATIONS)	213.78			665		
			BRIDGE OMISSION S.N. 055-0097			
STA. 314+25.22 TO STA. 317+70	344.78		478	607	71	549
STA. 314+25.22 TO STA. 317+08 (7 APPLICATIONS)	282.78			1020		
STA. 316+58.7 TO STA. 317+08.0	49.3	121				
STA. 317+08.0 TO STA. 317+61.4	53.4	131				
STA. 317+61.4 TO STA. 317+70	8.6	21				
E. 1800TH STREET (SOUTH)		99		71	9	9
E. 1800TH STREET (NORTH)		217		156	19	19
TOTAL		997	783	3070	164	947

TOPSOIL FURNISH AND PLACE, 4"

LOCATION	TOPSOIL FURNISH AND PLACE, 4"
	SQ. YD.
STA. 307+80 TO STA. 312+42 LT.	1907
STA. 307+80 TO STA. 312+42 RT.	2020
STA. 312+75 TO STA. 317+70 LT.	1874
STA. 312+75 TO STA. 317+70 RT.	2009
TOTAL	7810

PAVEMENT REMOVAL

LOCATION	PAVEMENT REMOVAL
	SQ. YD.
STA. 311+36.17 TO STA. 311+82.25	113
STA. 313+35.75 TO STA. 313+81.83	113
TOTAL	226

HOT-MIX ASPHALT SHOULDERS, 8"

LOCATION	HOT-MIX ASPHALT SHOULDERS, 8"
	SQ. YD.
STA. 307+80 TO STA. 310+92.78 LT.	113
STA. 307+80 TO STA. 310+92.78 RT.	127
STA. 314+25.22 TO STA. 316+57.90 LT.	109
STA. 314+25.22 TO STA. 316+73.70 RT.	98
TOTAL	447

AGGREGATE SHOULDERS, TYPE B

LOCATION	AGGREGATE SHOULDERS, TYPE B
	TON
STA. 307+80 TO STA. 309+64.25 LT.	9
STA. 307+80 TO STA. 309+22.83 RT.	7
STA. 315+53.75 TO STA. 316+73.70 RT.	6
STA. 315+95.17 TO STA. 316+57.90 LT.	3
E. 1800TH STREET NORTH	20
E. 1800TH STREET SOUTH	13
TOTAL	58

PAVEMENT MARKING

LOCATION	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"		
	SOLID WHITE	SOLID YELLOW	SKIP DASH (10'/30') YELLOW
	FOOT	FOOT	FOOT
STA. 307+80 TO STA. 317+70 LT.	890		
STA. 307+80 TO STA. 317+70 RT.	920		
STA. 307+80 TO STA. 317+70 C.L. LT.			260
STA. 316+45 TO STA. 317+70 C.L. RT.		125	
SUBTOTAL	1810	125	260
TOTAL	2195		

GUARDRAIL AGGREGATE EROSION CONTROL

LOCATION	GUARDRAIL AGGREGATE EROSION CONTROL
	TON
STA. 309+22.83 TO STA. 311+07 RT.	30
STA. 309+64.25 TO STA. 310+98 LT.	22
STA. 314+11 TO STA. 315+95.17 LT.	30
STA. 314+20 TO STA. 315+53.75 RT.	22
TOTAL	104

FURNISHING AND ERECTING RIGHT OF WAY MARKERS

LOCATION	RIGTH OF WAY MARKERS
	EACH
STA. 307+80 55' LT. & RT.	2
STA. 308+50 70' RT.	1
STA. 309+00 70' LT.	1
STA. 311+50 70' LT. & RT.	2
STA. 312+00 75' LT. & RT.	2
STA. 316+67.99 75' LT.	1
STA. 316+98.91 75' RT.	1
TOTAL	10

RAISED REFLECTIVE PAVEMENT MARKER

LOCATION	RAISED REFLECTIVE PAVEMENT MARKER
	EACH
STA. 308+00 TO STA. 311+11.50	4
STA. 314+06.50 TO STA. 317+70	5
TOTAL	9

FENCE REMOVAL

LOCATION	FENCE REMOVAL
	FOOT
STA. 307+89 57' LT. TO STA. 312+28 60' LT.	439
STA. 309+55 55' RT. TO STA. 312+40 56' RT.	285
STA. 312+78 58' LT. TO STA. 316+66 75' LT.	394
STA. 313+36 58' RT. TO STA. 316+77 56' RT.	341
TOTAL	1459

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

LOCATION	PAVEMENT MARKER REMOVAL
	EACH
STA. 308+-00 TO STA. 311+82.25	5
STA. 313+35.75 TO STA. 317+70	5
TOTAL	10

PERMANENT SURVEY MARKERS, TYPE I

LOCATION	PERMANENT SURVEY MARKERS, TYPE II
	EACH
TOP OF NW WINGWALL S.N. 055-0097	1
TOTAL	1

ENGINEER'S FIELD OFFICE, TYPE A

LOCATION	QUANTITY
	CAL. MO.
TO BE DETERMINED BY RESIDENT ENGINEER	6
TOTAL	6

PIPE CULVERT TO BE CLEANED 18"

LOCATION	PIPE CULVERT TO BE CLEANED 18"
	FOOT
STA. 316+93 42' RT. TO STA. 317+41 39' RT.	48
TOTAL	48

PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB

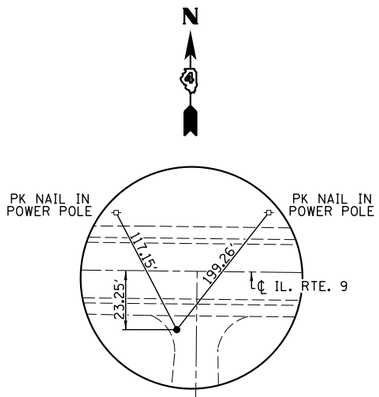
LOCATION	PAVEMENT CONNECTOR
	SQ. YD.
STA. 310+92.78 TO STA. 311+12.54	74
STA. 314+05.47 TO STA. 314+25.22	74
TOTAL	148

CHANGEABLE MESSAGE SIGN

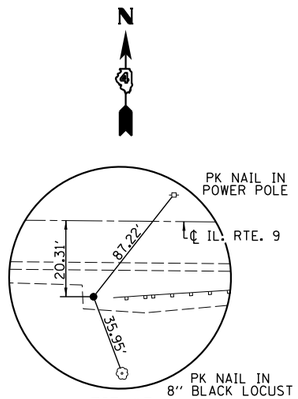
LOCATION	QUANTITY
	CAL. DAY
TO BE DETERMINED BY D-4 TRAFFIC ENGINEER	190
TOTAL	190

PAVEMENT MARKING TAPE, TYPE IV " & PAVEMENT MARKING REMOVAL - WATER BLASTING

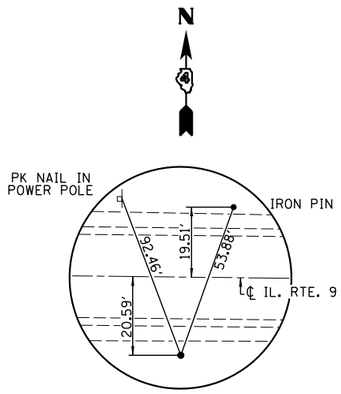
LOCATION	PAVEMENT MARKING TAPE, TYPE IV 4"	PAVEMENT MARKING REMOVAL-WATER BLASTING
	FOOT	SQ. FT.
DETOUR LOCATION F	160	53
TOTAL	160	53



TIE #2
IRON PIN WITH CAP
STA. 303+44.83
N. 1414491.009
E. 2185810.774



TIE #3
IRON PIN WITH CAP
STA. 310+68.48
N. 1414486.089
E. 2186534.448



TIE #4
IRON PIN WITH CAP
STA. 321+82.02
N. 1414473.719
E. 2187647.818

BENCH MARK: CHISELED "□" ON S.W. WINGWALL OF S.N. 055-0015
16' RT. STA. 311+81 ELEV. 632.07

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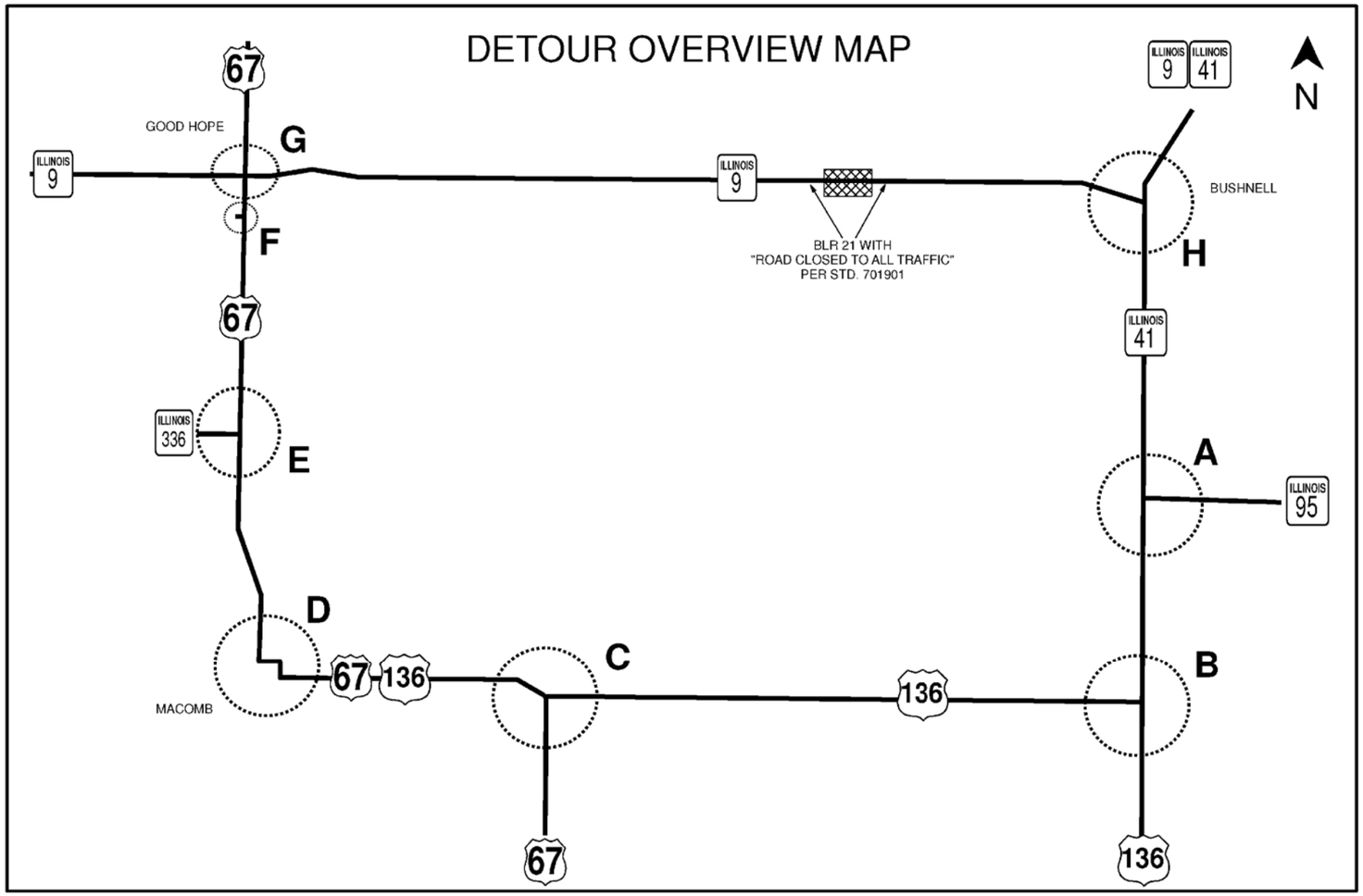
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS TIES & BENCHMARKS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	15
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		



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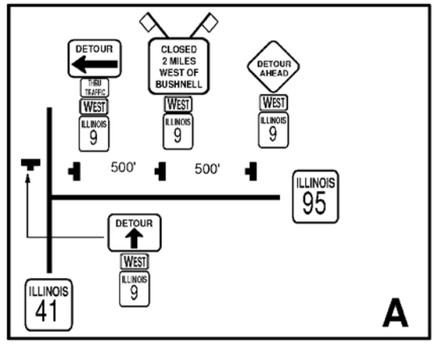
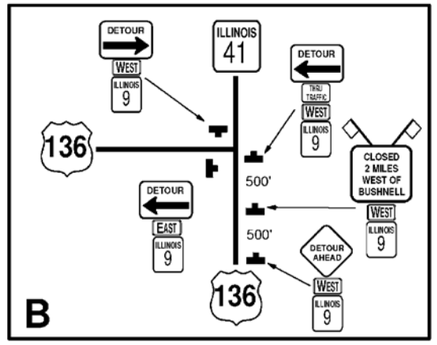
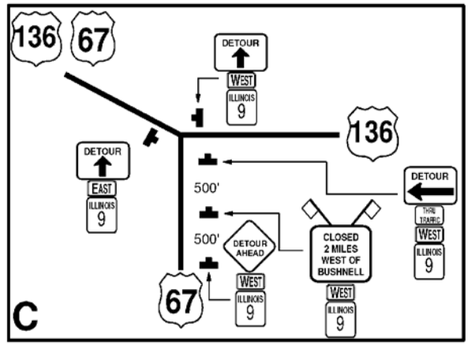
		CHECKED -	REVISED -					
	PLOT SCALE =	DRAWN -	REVISED -					
	PLOT DATE =	CHECKED -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.

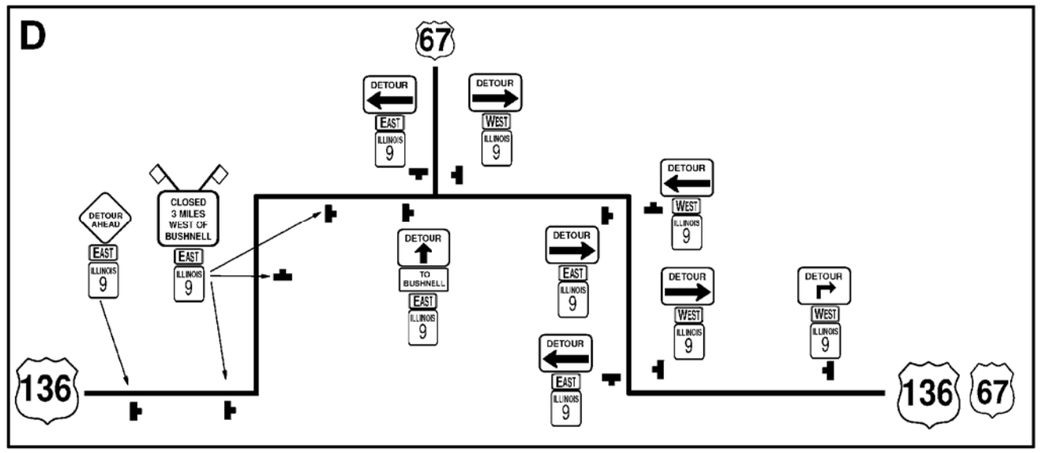
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	16
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		

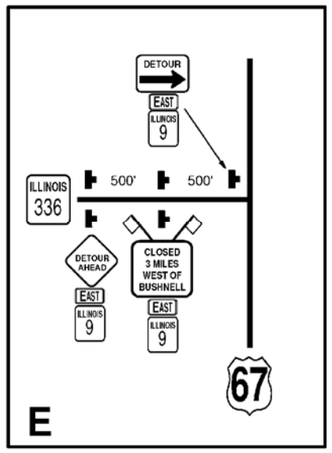
LOCATIONS A THRU E











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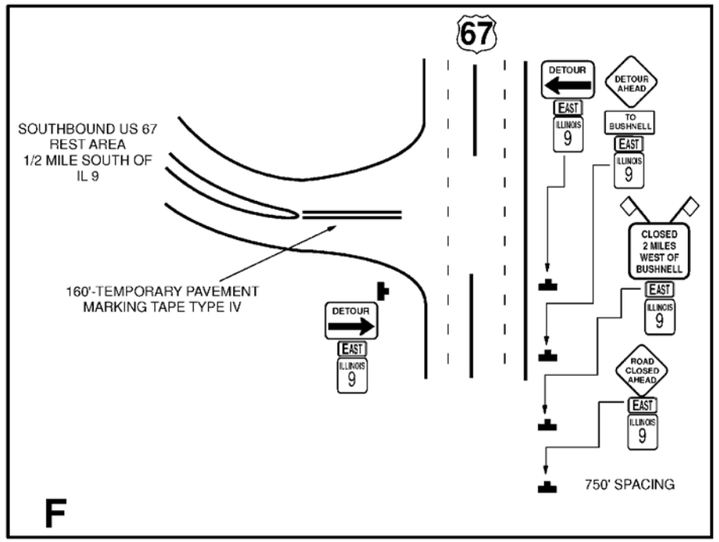
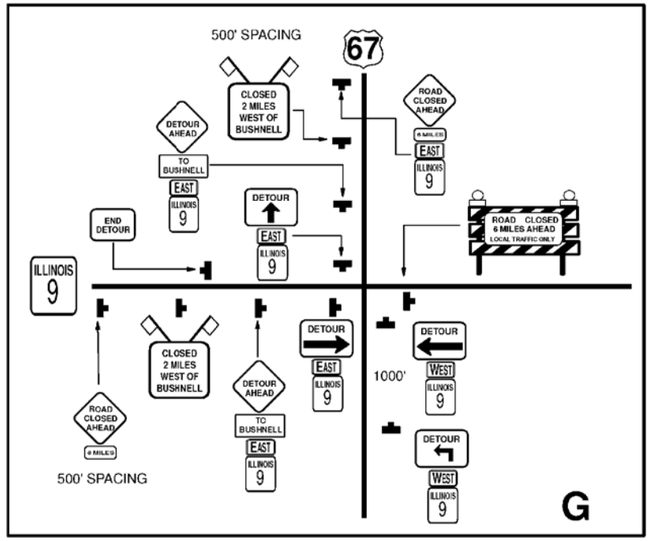
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

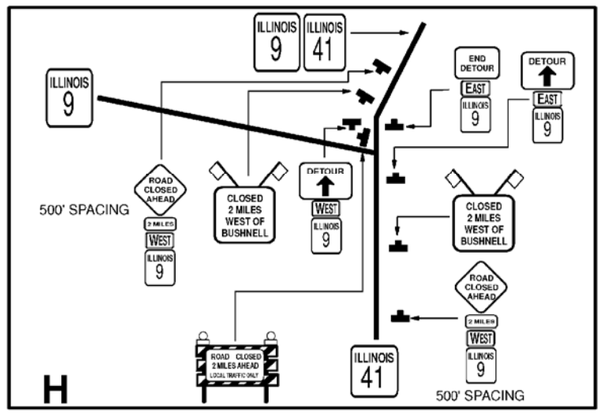
DETOUR PLAN

SCALE: NONE | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	17
			CONTRACT NO. 68215	
	ILLINOIS	FED. AID PROJECT		







LOCATIONS F THRU H

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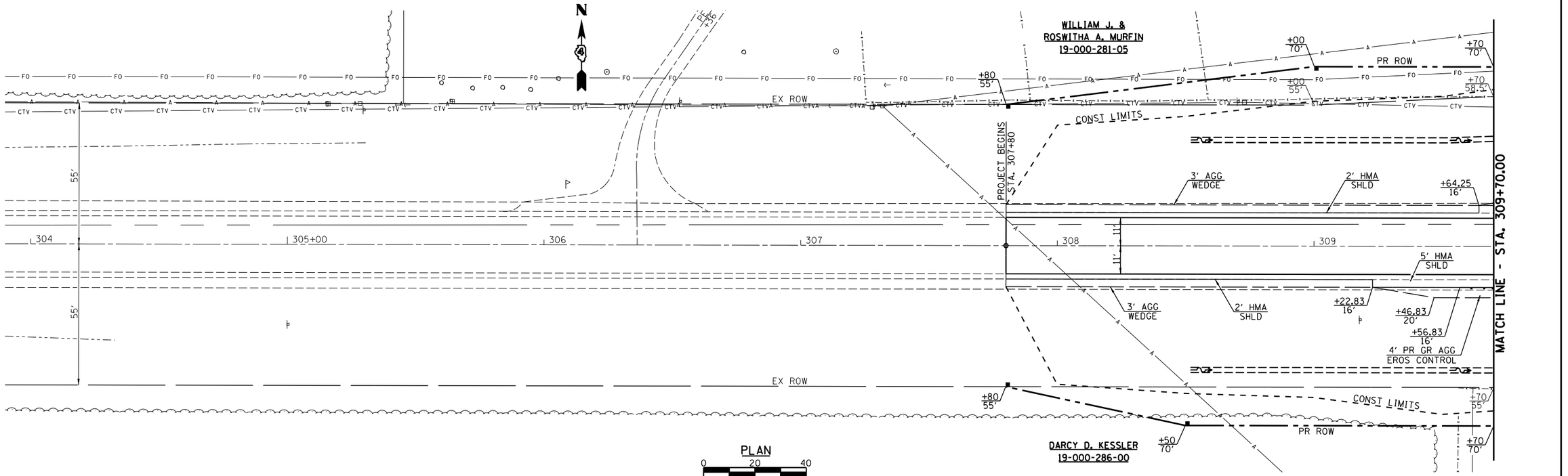
		CHECKED -	REVISED -					
	PLOT SCALE =	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.
	PLOT DATE =	CHECKED -	REVISED -					

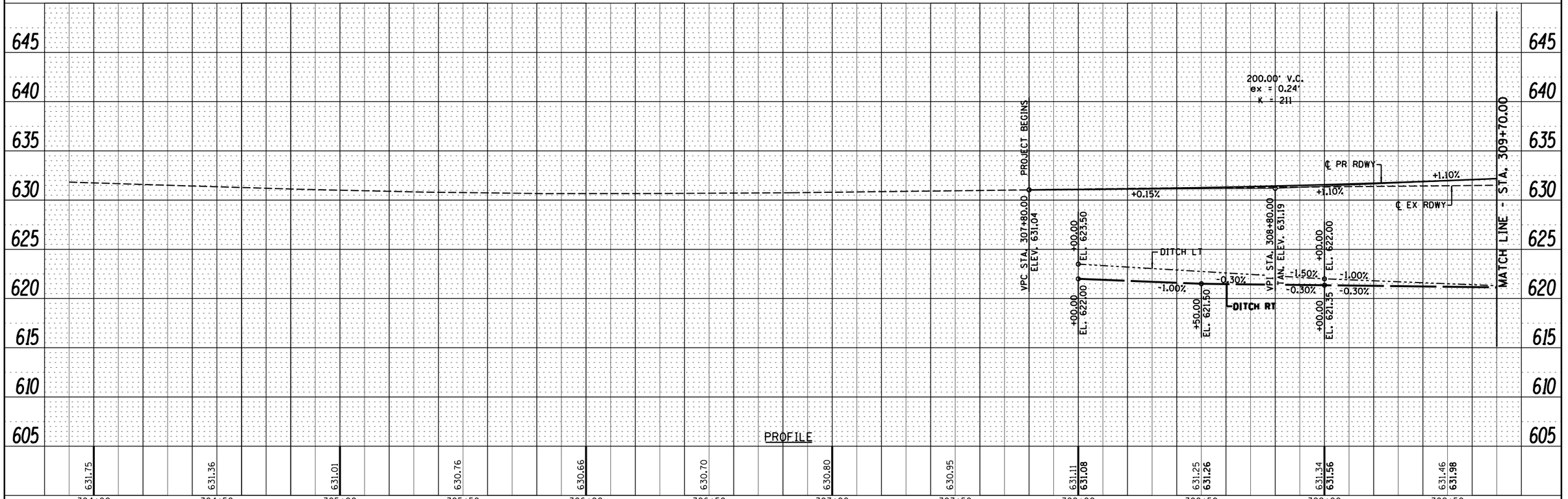
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	18
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

PLAN | SURVEYED | DATE | BY
NOTE BOOK | PLOTTED | ALIGNMENT CHECKED | RT. OF WAY CHECKED | NO. | CADD FILE NAME



PLAN
0 20 40
SCALE: 1" = 20'

PROFILE | SURVEYED | DATE | BY
NOTE BOOK | PLOTTED | CHANGES CHECKED | BM. NOTED | NO. | STRUCTURE NO(ATN'S CHKD



PROFILE | SURVEYED | DATE | BY
NOTE BOOK | PLOTTED | CHANGES CHECKED | BM. NOTED | NO. | STRUCTURE NO(ATN'S CHKD

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	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1" = 20' | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	19
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

PROP. S.N. 055-0097
℄ RDWY. AT ℄ STRUCTURE - STA. ~~312+58.00~~
PROPOSED STRUCTURE: 3 SPAN POURED CONCRETE DECK ON 36" STEEL I BEAMS, 235'-0" BK.-BK. ABUTMENTS, 32'-0" CLEAR DECK WIDTH, CONCRETE PARAPET RAIL, 15 SKEW RT. FORWARD.

WILLIAM J. & ROSWITHA A. MURFIN
19-000-281-05

DARCY D. KESSLER
19-000-286-00

MATCH LINE - STA. 309+70.00

MATCH LINE - STA. 315+50.00

PR ROW

CONST LIMITS

EX ROW

FLOW NORTH FORK LAMOINE RIVER

TBT TY 1 (SPCL) TAN

37.5' SPBGR TY A

TBT TY 6

87.5' SPBGR TY A

4' PR GR AGG EROS CONTROL

5' HMA SHLD

PLAN

SCALE: 1" = 20'

- IMPACTED WETLAND AREA - 0.02 ACRE

PROFILE

VPT STA. 309+80.00 ELEV. 632.29

VPC STA. 311+00.00 ELEV. 633.60

BK. W. ABUT. STA. 311+41.50

VPI STA. 312+55.00 TAN. ELEV. 635.30

310.00' V.C. ex = -0.74' K = 162

BK. E. ABUT. STA. 313+76.50

VPT STA. 314+10.00 ELEV. 634.03

℄ PR RDWY

℄ EX RDWY

+1.10% -0.82% -0.30% -0.50% -1.00% +0.30% +0.50% +1.50% +1.00%

50 YR. FL. EL. 627.8

100 YR. FL. EL. 628.3

DITCH RT

DITCH LT

S.B. EL. 612.8

631.56 632.51 | 631.57 633.05 | 631.50 633.60 | 631.48 634.07 | 631.49 634.39 | 631.44 634.55 | 631.45 634.56 | 631.45 634.41 | 631.40 634.11 | 631.49 633.70 | 631.61 633.29 | 631.69

310+00 310+50 311+00 311+50 312+00 312+50 313+00 313+50 314+00 314+50 315+00 315+50

645 640 635 630 625 620 615 610 605

PLAN: SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — CADD FILE NAME — NOTE BOOK — NO. — BY — DATE

PROFILE: SURVEYED — PLOTTED — DRAWN — CHECKED — BM. NOTED — STRUCTURE NO(TATN)S CHKD — NOTE BOOK — NO. — BY — DATE

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	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1" = 20' | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	20
		CONTRACT NO. 68215		
		ILLINOIS FED. AID PROJECT		

WILLIAM J. &
ROSWITHA A. MURFIN
19-000-281-05

DARCY D. KESSLER
19-000-286-00

EXISTING 16" CULVERT
(TO REMAIN IN PLACE)

EXISTING 18" CULVERT
(TO BE CLEANED)

PROJECT ENDS
STA. 317+70

MATCH LINE - STA. 315+50.00

PR ROW

EX ROW

CONST LIMITS

4" PR GR AGG
EROS CONTROL

3' AGG
WEDGE

2' HMA
SHLD

5' HMA
SHLD

±2'
AGG
SHLD

±24'

±4'
AGG
SHLD

±1'
AGG
SHLD

±11'

E. 1800 ST.
±15

+50
75'

+67.99
75'

+50
50'

+53.7
61.0

+71.17
20'

+95.17
16'

+57.9
16'

+73.7
16'

+53.75
16'

+50
55'

+74.4
55'

+98.91
75'

316

317

318

319

320+00

321

40'

40'

PLAN
0 20 40
SCALE: 1" = 20'

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

PROFILE
SURVEYED
PLOTTED
DRAWN CHECKED
BM. NOTED
STRUCTURE NO(ATN'S CHKD
NOTE BOOK
NO.
BY
DATE

180.00' V.C.
ex = 0.23'
K = 174

℄ PR RDWY

℄ EX RDWY

VPC STA. 315+90.00
ELEV. 632.54

VPI STA. 316+80.00
TAN. ELEV. 631.80

VPT STA. 317+70.00 PROJECT ENDS
ELEV. 631.99

MATCH LINE - STA. 315+50.00
EL. 621.00 W EL. 621.25

-0.82%

-0.82%

-0.82%

+0.21%

+0.50%

+1.00%

+0.50%

+1.00%

+1.00%

+1.00%

DITCH LT

DITCH RT

+00.00
EL. 621.50

+50.00
EL. 622.00

+40.00
EL. 625.90

+50.00
EL. 627.80

645
640
635
630
625
620
615
610
605

632.87
631.74 632.46
631.80 632.15
631.82 631.98
631.95 631.96
632.09
632.27
632.52
632.87
633.26
633.66
634.12

315+50
316+00
316+50
317+00
317+50
318+00
318+50
319+00
319+50
320+00
320+50
321+00

PROFILE

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

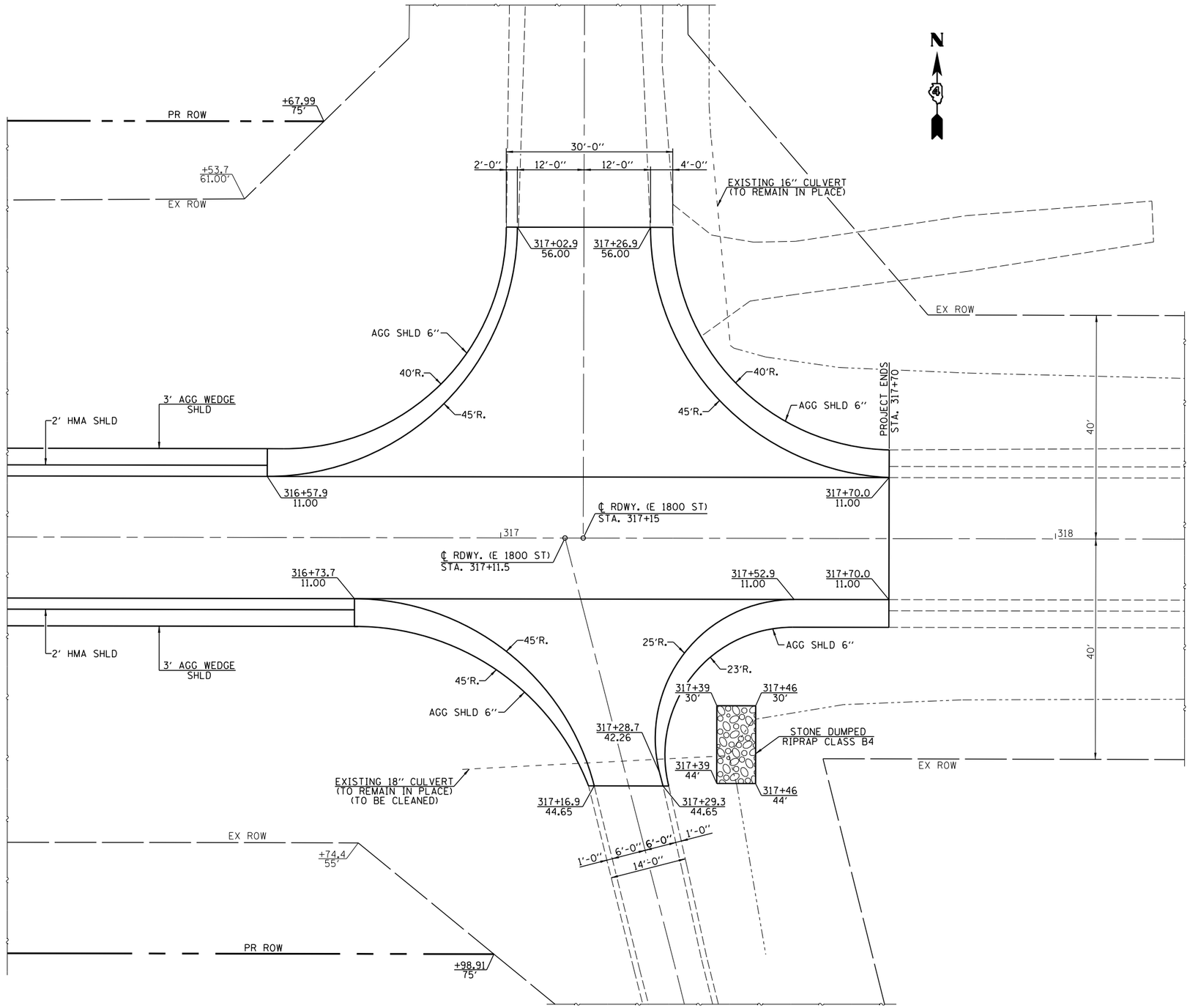
USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1" = 20' | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	21
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



PLAN

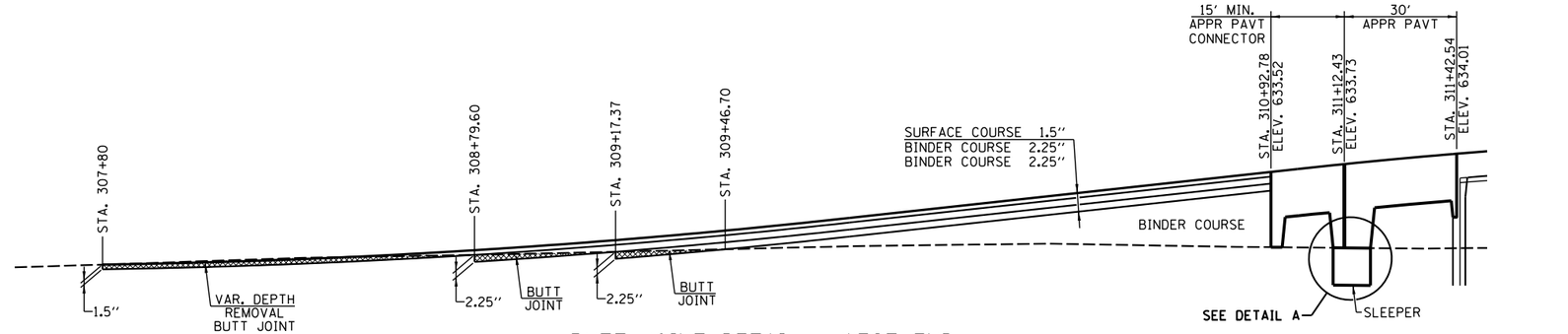
Veenstra & Kimm, Inc. Springfield, IL. Phone: (217)544-8033	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

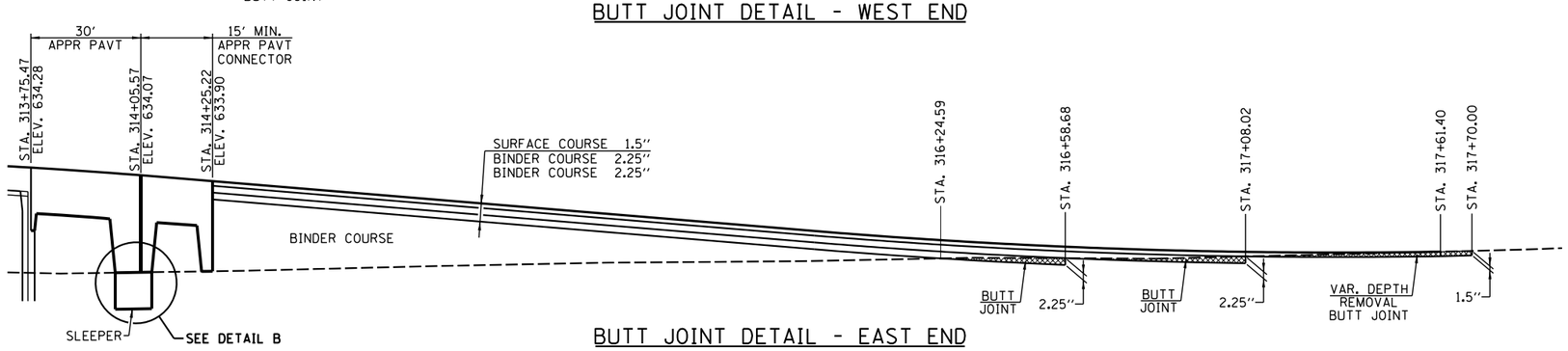
INTERSECTION & ROADWAY DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

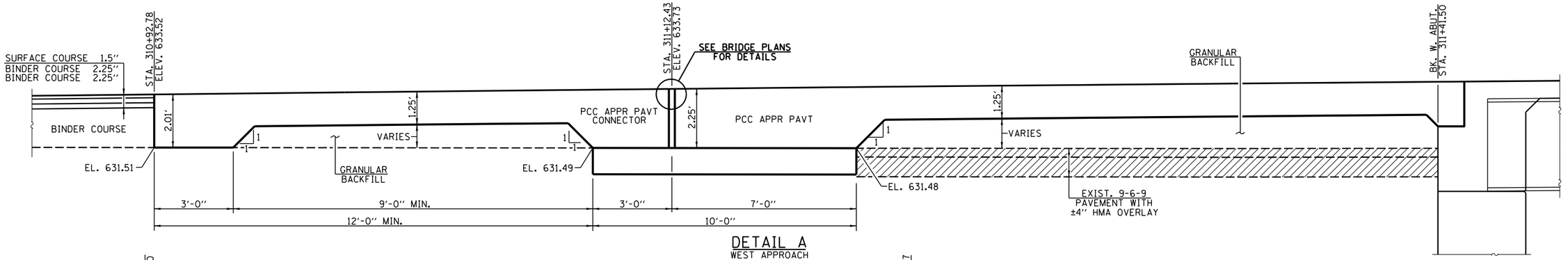
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	22
			CONTRACT NO. 68215	
	ILLINOIS	FED. AID PROJECT		



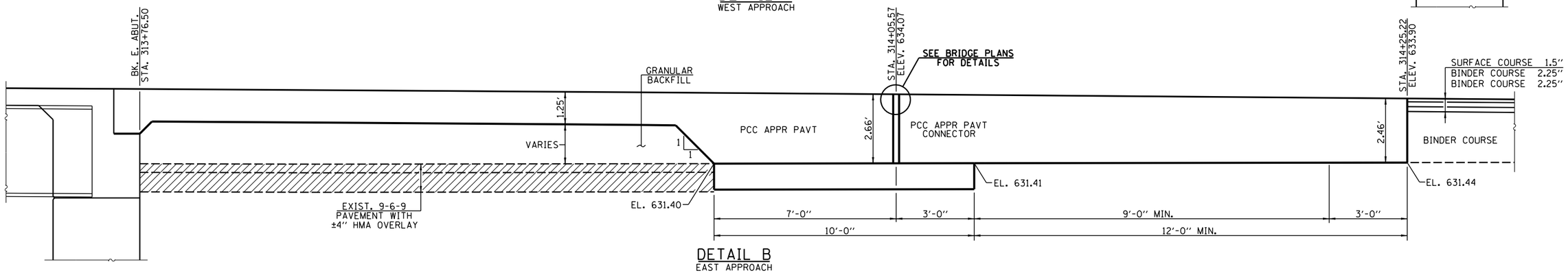
BUTT JOINT DETAIL - WEST END



BUTT JOINT DETAIL - EAST END



DETAIL A
WEST APPROACH



DETAIL B
EAST APPROACH

Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

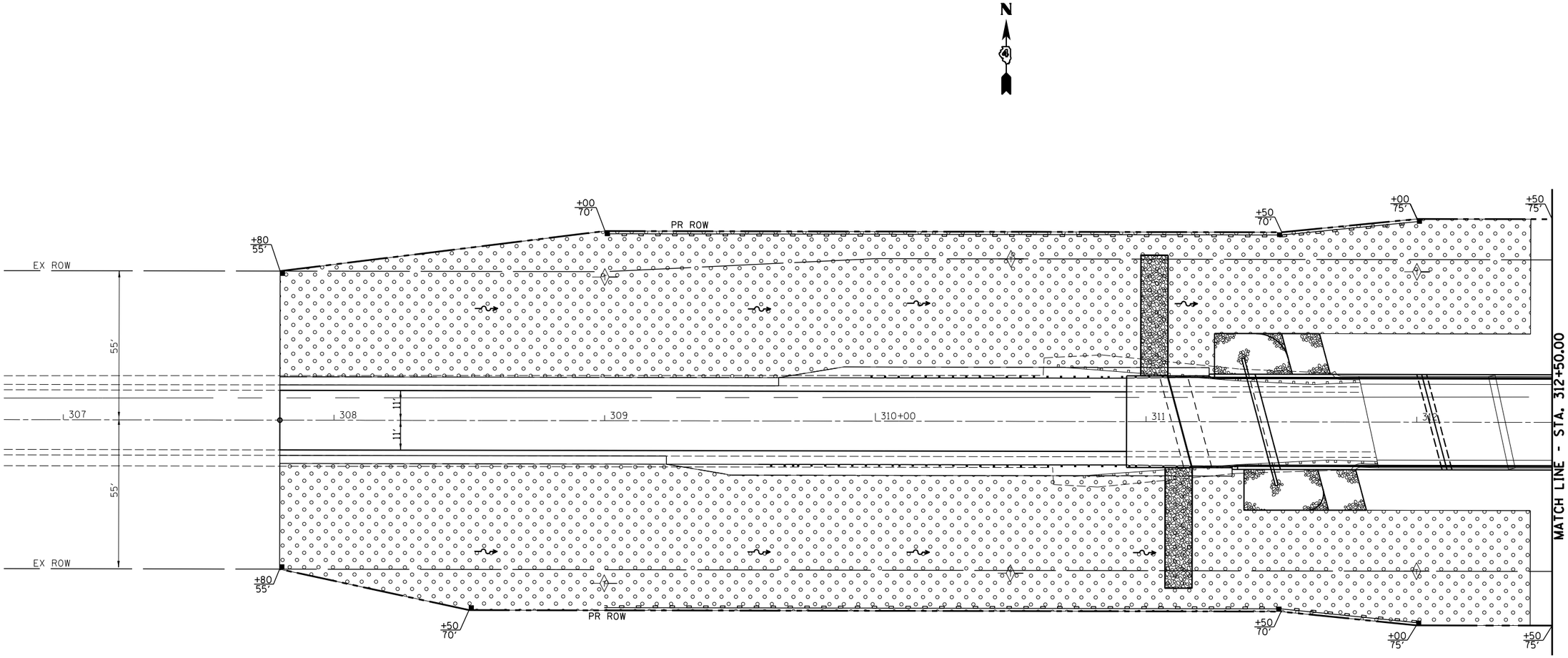
USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY DETAILS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	23
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



LEGEND

- TEMPORARY DITCH CHECK
- SEEDING CLASS 2A & TEMPORARY EROSION SEEDING
- PERIMETER EROSION BARRIER
- INLET & OUTLET PIPE PROTECTION

PLAN

0 20 40

SCALE: 1" = 20'

Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

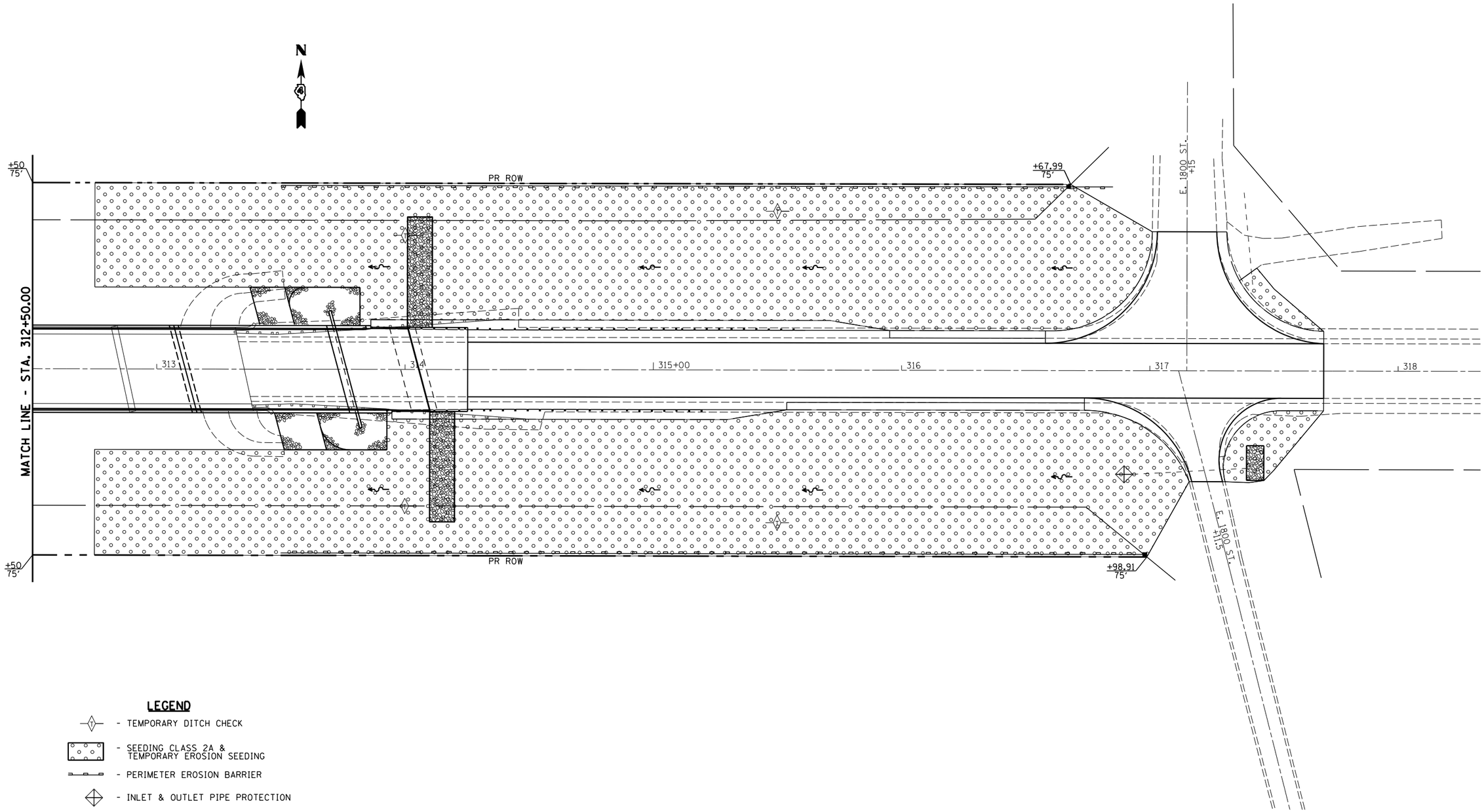
USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

SCALE: 1" = 20' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	24
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



LEGEND

- TEMPORARY DITCH CHECK
- SEEDING CLASS 2A & TEMPORARY EROSION SEEDING
- PERIMETER EROSION BARRIER
- INLET & OUTLET PIPE PROTECTION

PLAN

0 20 40

SCALE: 1" = 20'

V&K
Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

USER NAME = ___	DESIGNED - ___	REVISED - ___
	CHECKED - ___	REVISED - ___
PLOT SCALE = ___	DRAWN - ___	REVISED - ___
PLOT DATE = ___	CHECKED - ___	REVISED - ___

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

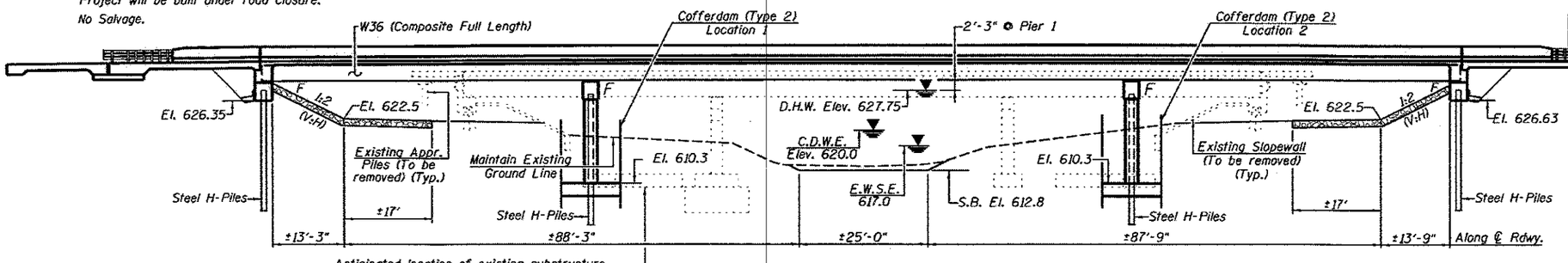
SCALE: 1" = 20' | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	25
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		

Bench Mark: Chiseled " □ " on S.W. wingwall of S.N. 055-0015. El. 632.07

Existing Structure: Structure Number 055-0015, built in 1960 as S.B.I. Route 95, Section 120 BR at Station 312+59.00. Structure consists of three span continuous wide flange beams supported on spill-thru abutments and hammer head piers. 153'-6" back-to-back abutments. 33'-8" out-to-out deck. Traffic to be detoured. Project will be built under road closure.

No Salvage.

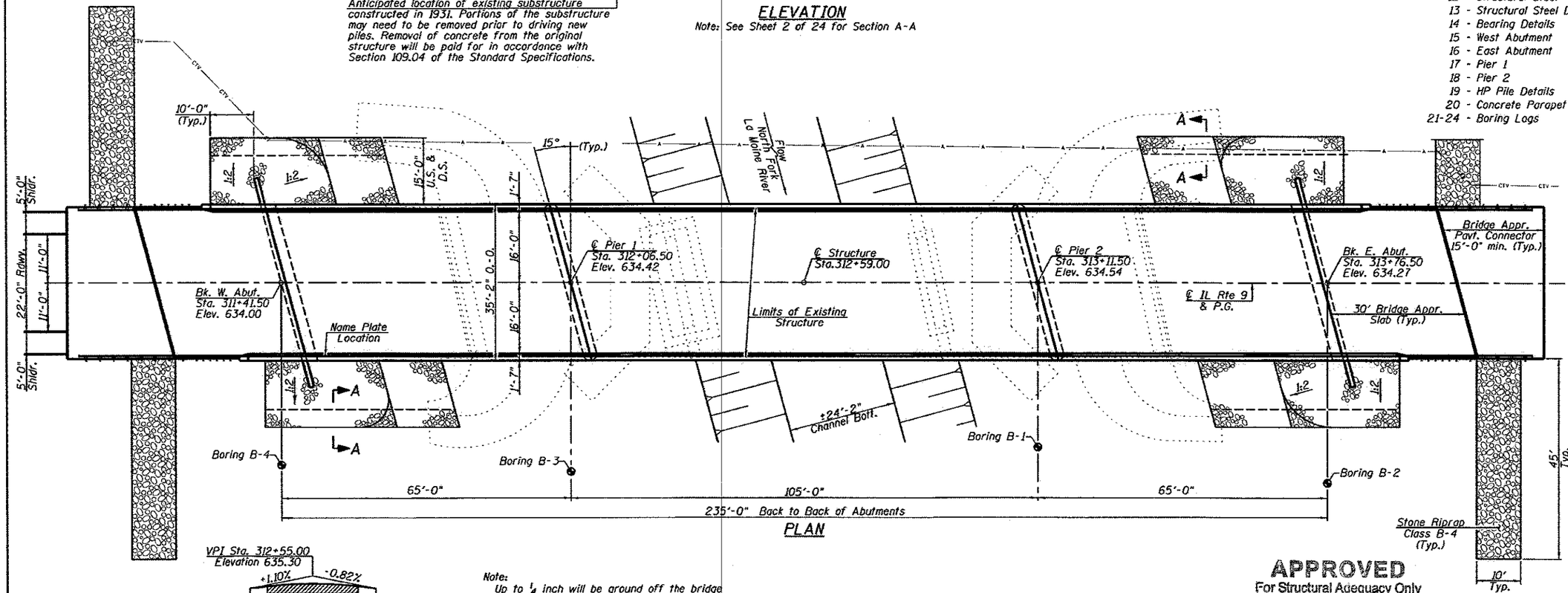


Anticipated location of existing substructure constructed in 1931. Portions of the substructure may need to be removed prior to driving new piles. Removal of concrete from the original structure will be paid for in accordance with Section 109.04 of the Standard Specifications.

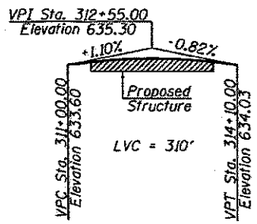
ELEVATION

Note: See Sheet 2 of 24 for Section A-A

INDEX OF SHEETS



PLAN



PROFILE GRADE

(along ℄ IL 9)

The profile grade shows the final elevations after grinding.

Note:
Up to 1/4 inch will be ground off the bridge deck and the bridge approach slabs.

STATION 312+59.00
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 685 SEC. (120BR)1
LOADING HL-93
STR. NO. 055-0097

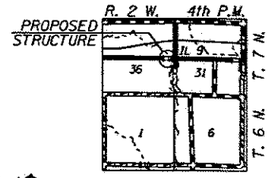
NAME PLATE

See Std. 515001

MARK A. HENDERSON 593 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

Mark A Henderson 1-26-2018

Exp. Date: 11/30/2018



LOCATION SKETCH

APPROVED
For Structural Adequacy Only

Engineer of Bridges & Structures

GENERAL PLAN & ELEVATION
IL ROUTE 9 OVER NORTH FORK LA MOINE RIVER
F.A.P. ROUTE 685 - SEC. (120-BR)1
MCDONOUGH COUNTY
STA. 312+59.00
STRUCTURE NO. 055-0097

Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

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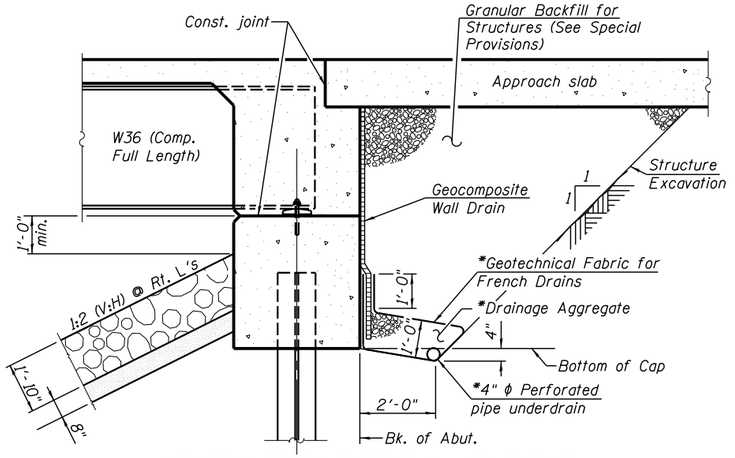
	CHECKED - MAH	REVISED -	
PLOT SCALE =	DRAWN - JRP	REVISED -	
PLOT DATE =	CHECKED - MAH	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 055-0097
SHEET NO. 1 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	26
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

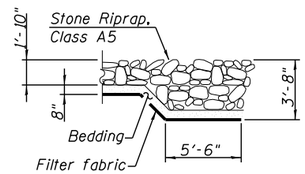


SECTION THRU INTEGRAL ABUTMENT

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

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

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).



SECTION A-A

WATERWAY INFORMATION

Drainage Area = 49.20 mi²
Exist. Low Grade Elev. 630.70 @ Sta. 306+00
Prop. Low Grade Elev. 630.70 @ Sta. 306+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	4470	972	1356	626.4	1.2	0.6	627.6	627.0
Design	50	6960	1177	1650	627.8	1.7	0.9	629.5	628.7
Base	100	8100	1207	1764	628.3	2.1	1.0	630.4	629.3
Overtop E.	150	8500	1207		628.7	2.0		630.7	
Max. Calc.	500	10800	1207	2006	629.4	2.4	1.2	631.8	630.6

10 year velocity through existing bridge = 4.6 fps
10 year velocity through prop. bridge = 3.3 fps

DESIGN SCOUR ELEVATION TABLE

	Design Scour Elevations (ft.) W. Abut.	Pier 1	Pier 2	E. Abut.	Item 113
0.100	625.82	604.45	599.50	626.16	5
0.500	625.82	601.95	594.50	626.16	
Design	625.82	604.45	599.50	626.16	
Check	625.82	601.95	594.50	626.16	

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			51
Stone Riprap, Class A5	Sq. Yd.		562	562
Filter Fabric	Sq. Yd.		562	562
Removal of Existing Structures	Each			1
Slopewall Removal	Sq. Yd.		600	600
Structure Excavation	Cu. Yd.		162	162
Cofferdam Excavation	Cu. Yd.		443	443
Cofferdam (Type 2) (Location-1)	Each		1	1
Cofferdam (Type 2) (Location-2)	Each		1	1
Concrete Structures	Cu. Yd.		200.8	200.8
Concrete Superstructure	Cu. Yd.	308.7		308.7
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	716		716
Seal Coat Concrete	Cu. Yd.		102.6	102.6
Protective Coat	Sq. Yd.	1291		1291
Concrete Superstructure (Approach Slab)	Cu. Yd.	119.5		119.5
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	4410		4410
Reinforcement Bars, Epoxy Coated	Pound	107,240	22,200	129,440
Furnishing Steel Piles HP 12x53	Foot		774	774
Furnishing Steel Piles HP 12x74	Foot		1267	1267
Driving Piles	Foot		2041	2041
Test Pile Steel HP 12x53	Each		1	1
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		48	48
Geocomposite Wall Drain	Sq. Yd.		68	68
Granular Backfill for Structures	Cu. Yd.		133	133
Diamond Grinding (Bridge Section)	Sq. Yd.	1033		1033
Pipe Underdrains for Structures 4"	Foot		144	144

GENERAL NOTES

All new structural steel shall be hot-dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel."

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $^{7}/_{8}$-in. ϕ, holes $^{15}/_{16}$-in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 286,400 lbs. (M270 Grade 50)
19,660 lbs. (M270 Grade 36)

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.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

LOADING HL 93

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

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications,
7th Edition with 2015 and 2016 Interims.

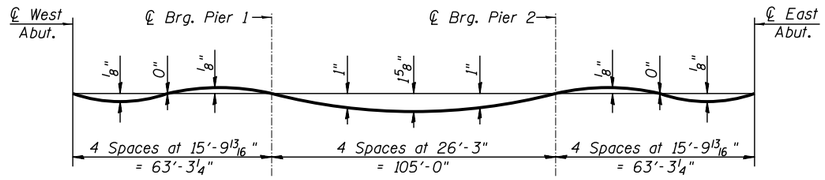
DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f'_c = 4,000 psi (superstructure)
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Grade 50) - Primary
f_y = 36,000 psi (M270 Grade 36)

SEISMIC DATA

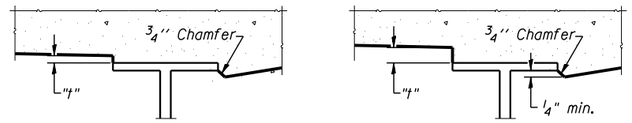
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.110g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.166g
Soil Site Class = D



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on Sheet 4 of 24.



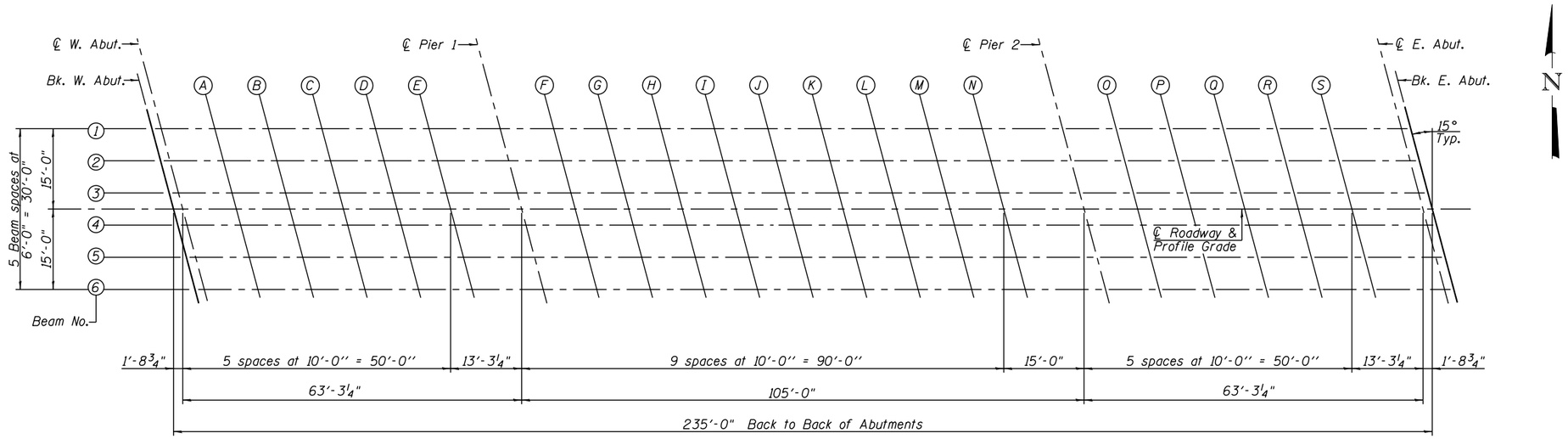
At Minimum Fillet

At Maximum Fillet

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 and Grinding" shown on Sheet 4 of 24, minus 8 1/4" deck thickness, equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on Sheet 4 of 24. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



PLAN

Veenstra & Kimm, Inc.
Springfield, IL. Phone: (217)544-8033

USER NAME =	DESIGNED - KES	REVISED -	
	CHECKED - MAH	REVISED -	
PLOT SCALE =	DRAWN - JRP	REVISED -	
PLOT DATE =	CHECKED - MAH	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 055-0097
SHEET NO. 3 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	28
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

BEAM 1

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+37.48	-15.00	633.72	633.75
℄ W. Abut.	311+39.21	-15.00	633.74	633.76
A	311+49.21	-15.00	633.82	633.85
B	311+59.21	-15.00	633.90	633.93
C	311+69.21	-15.00	633.97	633.99
D	311+79.21	-15.00	634.03	634.05
E	311+89.21	-15.00	634.09	634.10
℄ Pier 1	312+02.48	-15.00	634.16	634.18
F	312+12.48	-15.00	634.20	634.25
G	312+22.48	-15.00	634.24	634.33
H	312+32.48	-15.00	634.27	634.40
I	312+42.48	-15.00	634.29	634.45
J	312+52.48	-15.00	634.31	634.49
K	312+62.48	-15.00	634.33	634.49
L	312+72.48	-15.00	634.33	634.48
M	312+82.48	-15.00	634.33	634.44
N	312+92.48	-15.00	634.33	634.39
℄ Pier 2	313+07.48	-15.00	634.30	634.33
O	313+17.48	-15.00	634.28	634.30
P	313+27.48	-15.00	634.26	634.27
Q	313+37.48	-15.00	634.22	634.24
R	313+47.48	-15.00	634.18	634.21
S	313+57.48	-15.00	634.13	634.16
℄ E. Abut.	313+70.75	-15.00	634.06	634.08
Bk. E. Abut.	313+72.48	-15.00	634.05	634.07

BEAM 2

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+39.09	-9.00	633.85	633.87
℄ W. Abut.	311+40.82	-9.00	633.86	633.88
A	311+50.82	-9.00	633.94	633.97
B	311+60.82	-9.00	634.02	634.05
C	311+70.82	-9.00	634.09	634.11
D	311+80.82	-9.00	634.15	634.17
E	311+90.82	-9.00	634.21	634.22
℄ Pier 1	312+04.09	-9.00	634.27	634.30
F	312+14.09	-9.00	634.32	634.37
G	312+24.09	-9.00	634.35	634.44
H	312+34.09	-9.00	634.38	634.51
I	312+44.09	-9.00	634.41	634.57
J	312+54.09	-9.00	634.43	634.60
K	312+64.09	-9.00	634.44	634.61
L	312+74.09	-9.00	634.44	634.59
M	312+84.09	-9.00	634.44	634.55
N	312+94.09	-9.00	634.43	634.50
℄ Pier 2	313+09.09	-9.00	634.41	634.43
O	313+19.09	-9.00	634.39	634.40
P	313+29.09	-9.00	634.36	634.38
Q	313+39.09	-9.00	634.33	634.35
R	313+49.09	-9.00	634.28	634.31
S	313+59.09	-9.00	634.24	634.27
℄ E. Abut.	313+72.36	-9.00	634.16	634.19
Bk. E. Abut.	313+74.09	-9.00	634.15	634.18

BEAM 3

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+40.70	-3.00	633.95	633.97
℄ W. Abut.	311+42.43	-3.00	633.97	633.99
A	311+52.43	-3.00	634.05	634.07
B	311+62.43	-3.00	634.12	634.15
C	311+72.43	-3.00	634.19	634.21
D	311+82.43	-3.00	634.25	634.27
E	311+92.43	-3.00	634.31	634.32
℄ Pier 1	312+05.70	-3.00	634.37	634.39
F	312+15.70	-3.00	634.41	634.46
G	312+25.70	-3.00	634.45	634.54
H	312+35.70	-3.00	634.48	634.61
I	312+45.70	-3.00	634.50	634.66
J	312+55.70	-3.00	634.52	634.69
K	312+65.70	-3.00	634.53	634.70
L	312+75.70	-3.00	634.53	634.68
M	312+85.70	-3.00	634.53	634.64
N	312+95.70	-3.00	634.52	634.59
℄ Pier 2	313+10.70	-3.00	634.50	634.52
O	313+20.70	-3.00	634.47	634.49
P	313+30.70	-3.00	634.45	634.46
Q	313+40.70	-3.00	634.41	634.43
R	313+50.70	-3.00	634.37	634.39
S	313+60.70	-3.00	634.32	634.35
℄ E. Abut.	313+73.97	-3.00	634.24	634.27
Bk. E. Abut.	313+75.70	-3.00	634.23	634.26

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+41.50	0.00	634.00	634.02
℄ W. Abut.	311+43.23	0.00	634.02	634.04
A	311+53.23	0.00	634.10	634.13
B	311+63.23	0.00	634.17	634.20
C	311+73.23	0.00	634.24	634.26
D	311+83.23	0.00	634.30	634.32
E	311+93.23	0.00	634.36	634.37
℄ Pier 1	312+06.50	0.00	634.42	634.44
F	312+16.50	0.00	634.46	634.51
G	312+26.50	0.00	634.50	634.59
H	312+36.50	0.00	634.53	634.65
I	312+46.50	0.00	634.55	634.71
J	312+56.50	0.00	634.56	634.74
K	312+66.50	0.00	634.57	634.74
L	312+76.50	0.00	634.58	634.72
M	312+86.50	0.00	634.57	634.68
N	312+96.50	0.00	634.57	634.64
℄ Pier 2	313+11.50	0.00	634.54	634.56
O	313+21.50	0.00	634.52	634.53
P	313+31.50	0.00	634.49	634.50
Q	313+41.50	0.00	634.45	634.47
R	313+51.50	0.00	634.41	634.44
S	313+61.50	0.00	634.36	634.39
℄ E. Abut.	313+74.77	0.00	634.28	634.31
Bk. E. Abut.	313+76.50	0.00	634.27	634.30

BEAM 4

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+42.30	3.00	633.97	633.99
℄ W. Abut.	311+44.03	3.00	633.98	634.00
A	311+54.03	3.00	634.06	634.09
B	311+64.03	3.00	634.13	634.16
C	311+74.03	3.00	634.20	634.23
D	311+84.03	3.00	634.26	634.28
E	311+94.03	3.00	634.32	634.33
℄ Pier 1	312+07.30	3.00	634.38	634.40
F	312+17.30	3.00	634.42	634.47
G	312+27.30	3.00	634.45	634.54
H	312+37.30	3.00	634.48	634.61
I	312+47.30	3.00	634.50	634.66
J	312+57.30	3.00	634.52	634.69
K	312+67.30	3.00	634.53	634.70
L	312+77.30	3.00	634.53	634.68
M	312+87.30	3.00	634.53	634.64
N	312+97.30	3.00	634.52	634.59
℄ Pier 2	313+12.30	3.00	634.50	634.52
O	313+22.30	3.00	634.47	634.48
P	313+32.30	3.00	634.44	634.45
Q	313+42.30	3.00	634.40	634.42
R	313+52.30	3.00	634.36	634.39
S	313+62.30	3.00	634.31	634.34
℄ E. Abut.	313+75.57	3.00	634.24	634.26
Bk. E. Abut.	313+77.30	3.00	634.22	634.25

BEAM 5

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+43.91	9.00	633.89	633.91
℄ W. Abut.	311+45.64	9.00	633.90	633.92
A	311+55.64	9.00	633.98	634.01
B	311+65.64	9.00	634.05	634.08
C	311+75.64	9.00	634.12	634.15
D	311+85.64	9.00	634.18	634.20
E	311+95.64	9.00	634.23	634.25
℄ Pier 1	312+08.91	9.00	634.30	634.32
F	312+18.91	9.00	634.34	634.39
G	312+28.91	9.00	634.37	634.46
H	312+38.91	9.00	634.40	634.52
I	312+48.91	9.00	634.42	634.58
J	312+58.91	9.00	634.43	634.60
K	312+68.91	9.00	634.44	634.61
L	312+78.91	9.00	634.44	634.59
M	312+88.91	9.00	634.44	634.55
N	312+98.91	9.00	634.43	634.50
℄ Pier 2	313+13.91	9.00	634.40	634.42
O	313+23.91	9.00	634.38	634.39
P	313+33.91	9.00	634.34	634.36
Q	313+43.91	9.00	634.31	634.33
R	313+53.91	9.00	634.26	634.29
S	313+63.91	9.00	634.21	634.24
℄ E. Abut.	313+77.18	9.00	634.14	634.16
Bk. E. Abut.	313+78.91	9.00	634.12	634.15

BEAM 6

Location	Station	Offset	Theoretical Top of Slab Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection & Grinding
Bk. W. Abut.	311+45.52	15.00	633.79	633.81
℄ W. Abut.	311+47.25	15.00	633.81	633.83
A	311+57.25	15.00	633.88	633.91
B	311+67.25	15.00	633.96	633.98
C	311+77.25	15.00	634.02	634.05
D	311+87.25	15.00	634.08	634.10
E	311+97.25	15.00	634.13	634.14
℄ Pier 1	312+10.52	15.00	634.19	634.21
F	312+20.52	15.00	634.23	634.28
G	312+30.52	15.00	634.26	634.35
H	312+40.52	15.00	634.29	634.42
I	312+50.52	15.00	634.31	634.47
J	312+60.52	15.00	634.32	634.50
K	312+70.52	15.00	634.33	634.50
L	312+80.52	15.00	634.33	634.48
M	312+90.52	15.00	634.33	634.44
N	313+00.52	15.00	634.32	634.39
℄ Pier 2	313+15.52	15.00	634.29	634.31
O	313+25.52	15.00	634.26	634.27
P	313+35.52	15.00	634.23	634.24
Q	313+45.52	15.00	634.19	634.21
R	313+55.52	15.00	634.14	634.17
S	313+65.52	15.00	634.09	634.12
℄ E. Abut.	313+78.79	15.00	634.02	634.04
Bk. E. Abut.	313+80.52	15.00	634.00	634.03

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 055-0097
SHEET NO. 4 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	29
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SHOULDER

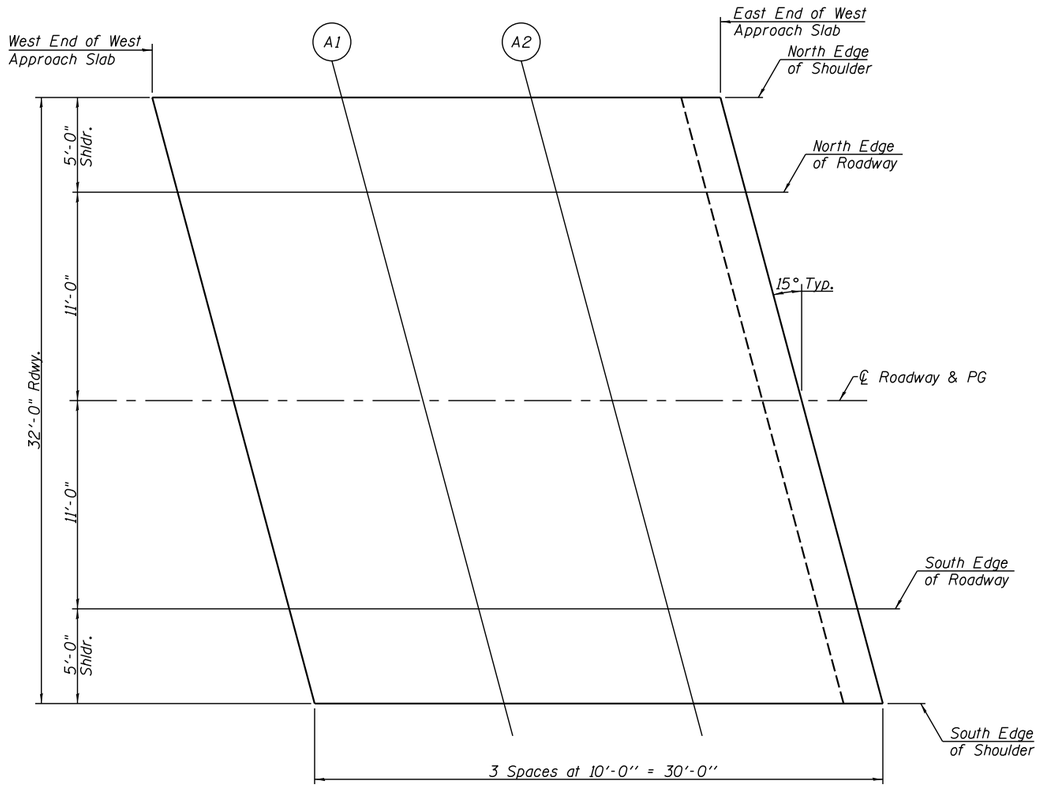
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr.	311+08.25	- 16.00	633.42	633.44
A1	311+18.25	- 16.00	633.53	633.55
A2	311+28.25	- 16.00	633.62	633.64
E. End of W. Appr.	311+38.25	- 16.00	633.71	633.73

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr.	311+09.59	- 11.00	633.54	633.56
A1	311+19.59	- 11.00	633.64	633.66
A2	311+29.59	- 11.00	633.73	633.75
E. End of W. Appr.	311+39.59	- 11.00	633.82	633.84

℄ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr.	311+12.54	0.00	633.73	633.75
A1	311+22.54	0.00	633.83	633.85
A2	311+32.54	0.00	633.93	633.95
E. End of W. Appr.	311+42.54	0.00	634.01	634.03



PLAN

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr.	311+15.49	11.00	633.60	633.62
A1	311+25.49	11.00	633.70	633.72
A2	311+35.49	11.00	633.79	633.81
E. End of W. Appr.	311+45.49	11.00	633.87	633.89

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of W. Appr.	311+16.83	16.00	633.51	633.53
A1	311+26.83	16.00	633.61	633.63
A2	311+36.83	16.00	633.70	633.72
E. End of W. Appr.	311+46.83	16.00	633.78	633.80

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 055-0097
SHEET NO. 5 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	30
			CONTRACT NO. 68215	
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SHOULDER

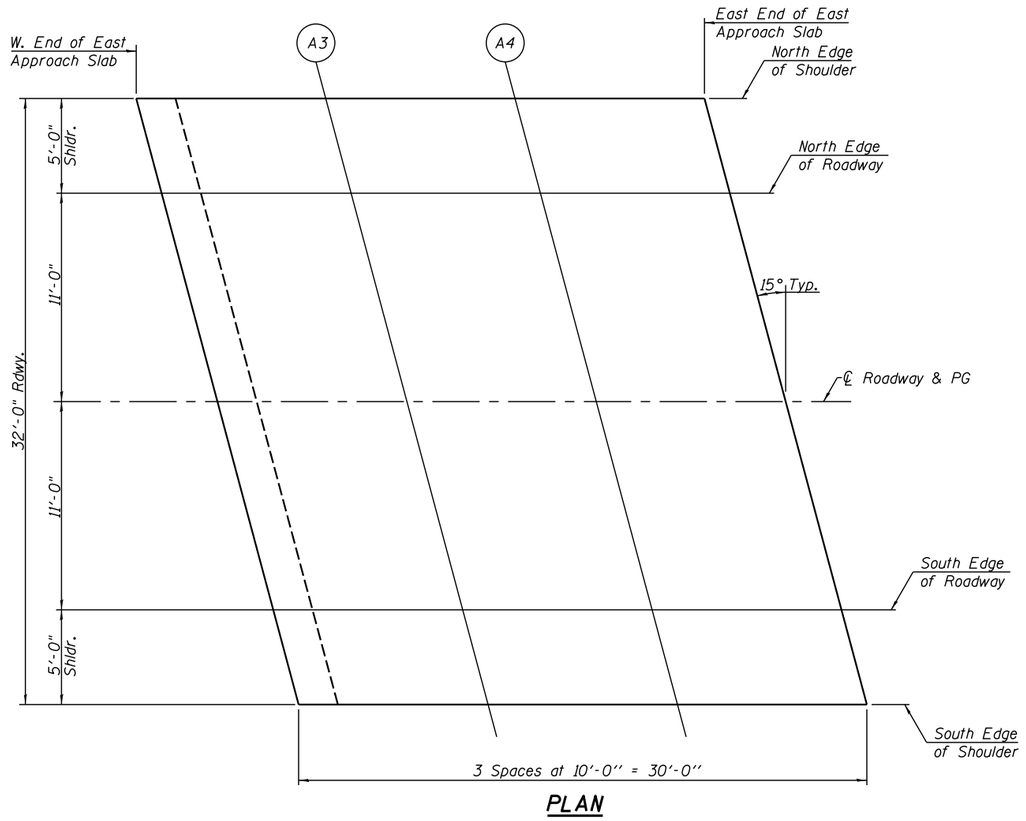
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr.	313+71.18	-16.00	634.04	634.06
A3	313+81.18	-16.00	633.98	634.00
A4	313+91.18	-16.00	633.91	633.93
E. End of E. Appr.	314+01.18	-16.00	633.84	633.86

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr.	313+72.52	-11.00	634.13	634.15
A3	313+82.52	-11.00	634.07	634.09
A4	313+92.52	-11.00	634.00	634.02
E. End of E. Appr.	314+02.52	-11.00	633.93	633.95

℄ ROADWAY & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr.	313+75.47	0.00	634.28	634.30
A3	313+85.47	0.00	634.22	634.24
A4	313+95.47	0.00	634.15	634.17
E. End of E. Appr.	314+05.47	0.00	634.07	634.09



PLAN

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr.	313+78.42	11.00	634.10	634.12
A3	313+88.42	11.00	634.03	634.05
A4	313+98.42	11.00	633.96	633.98
E. End of E. Appr.	314+08.42	11.00	633.88	633.90

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of E. Appr.	313+79.76	16.00	633.99	634.01
A3	313+89.76	16.00	633.92	633.94
A4	313+99.76	16.00	633.85	633.87
E. End of E. Appr.	314+09.76	16.00	633.77	633.79

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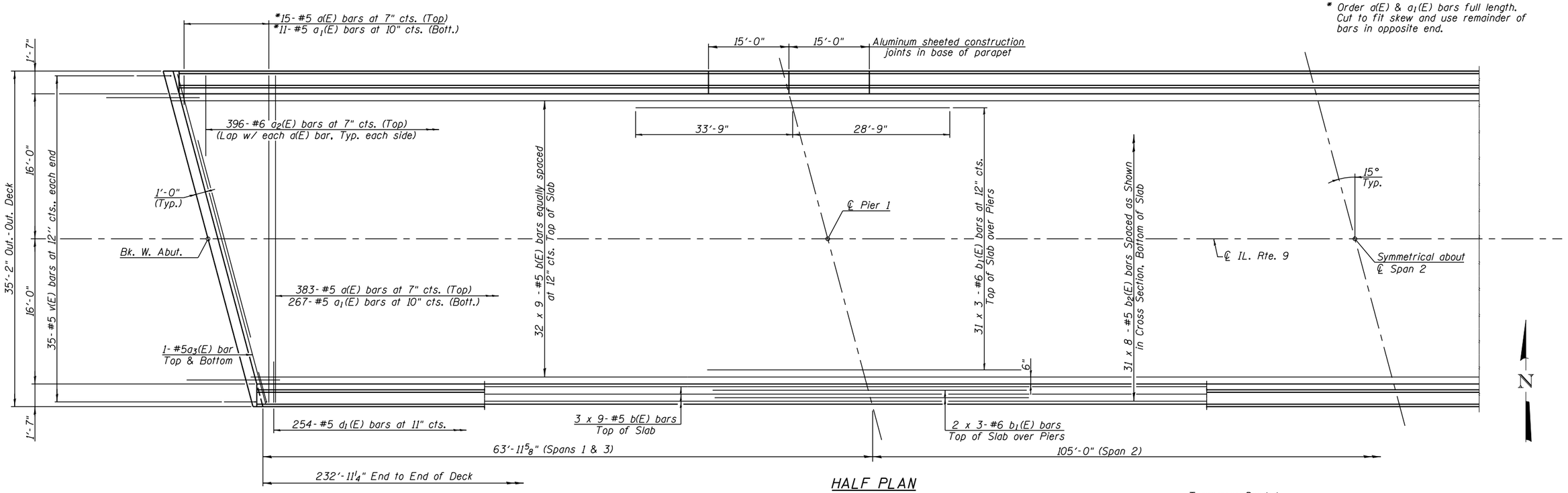
PLOT DATE =	CHECKED - MAH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 055-0097
SHEET NO. 6 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	31
			CONTRACT NO. 68215	
	ILLINOIS	FED. AID PROJECT		



HALF PLAN

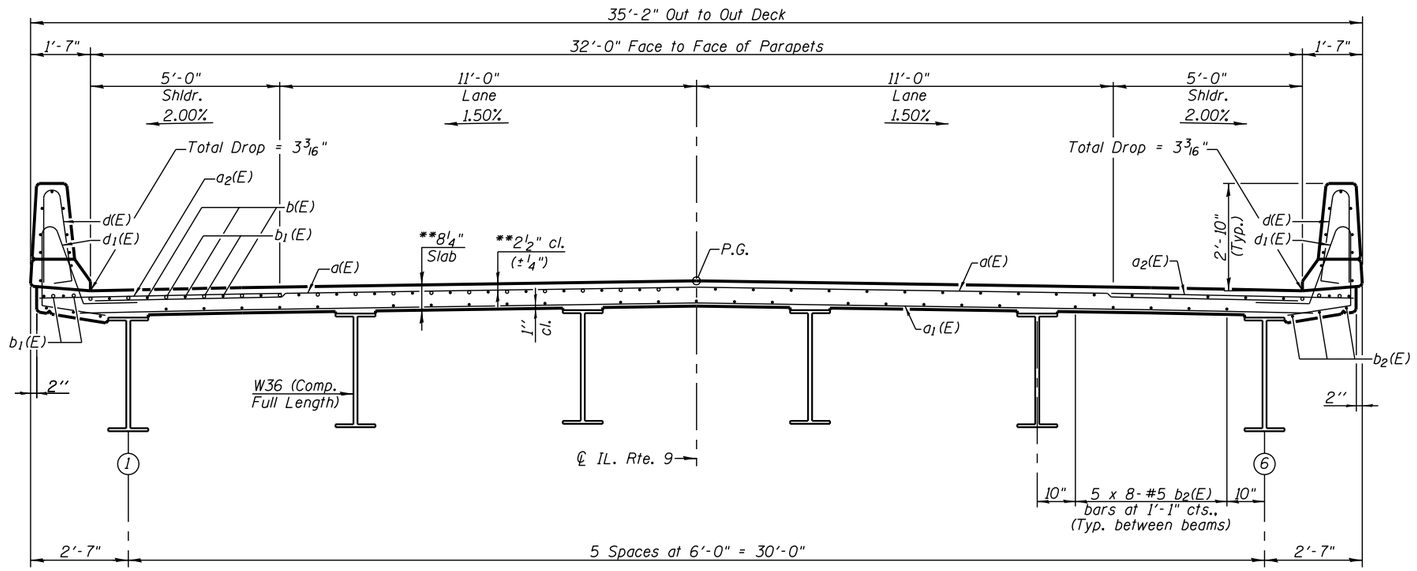
MINIMUM BAR LAP

(Slab)

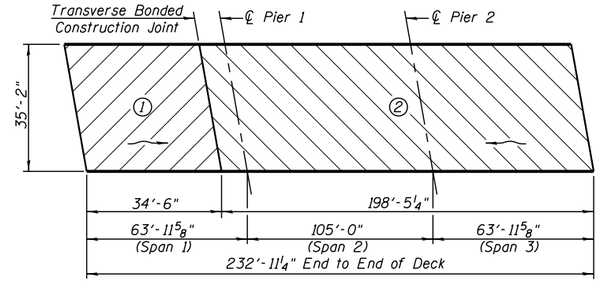
#5 bar = 3'-6"

#6 bar = 4'-10"

** Prior to Grinding.



NEAR PIER — CROSS SECTION (Looking East) — NEAR MIDSPAN



DECK POURING SEQUENCE PLAN

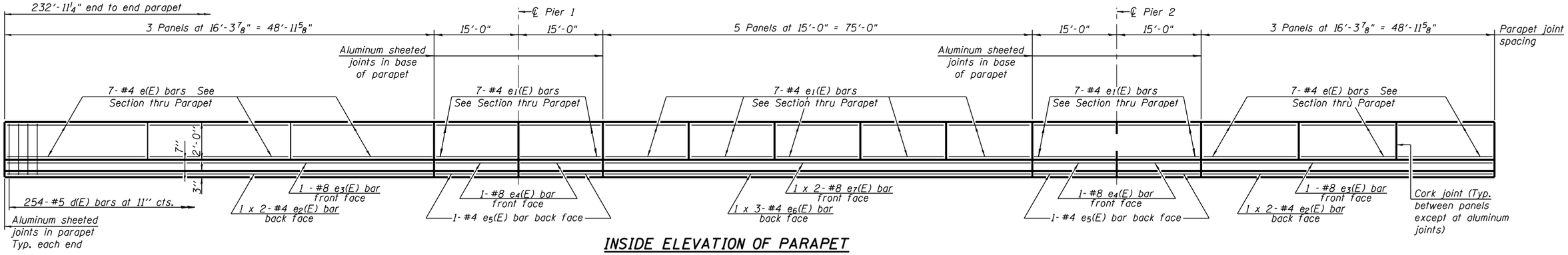
Notes: 1.) The concrete deck segments shall be poured in the numerical order and the directions shown above to avoid uplift at an abutment.

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

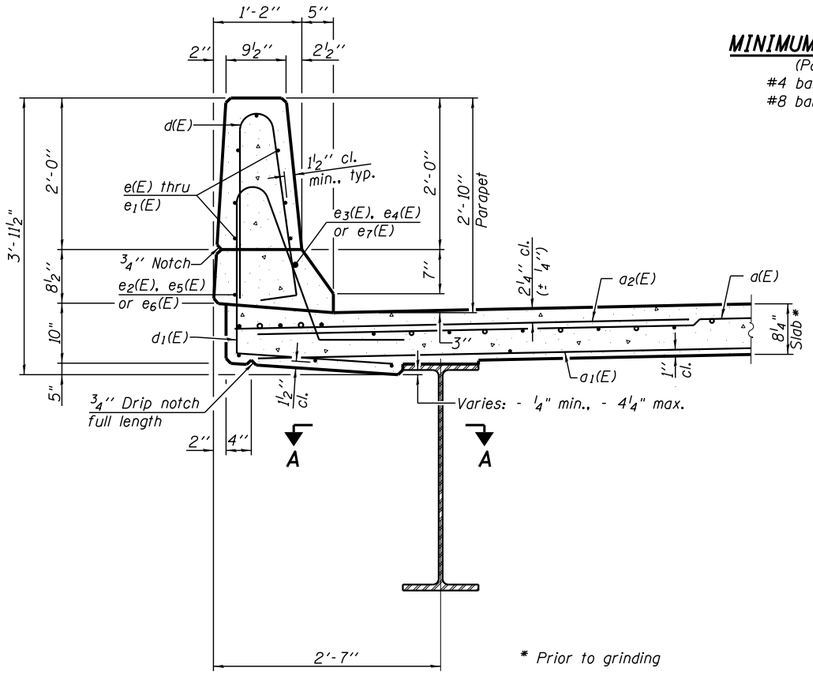
1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 750 psi or a minimum compressive strength of 4000 psi.

3.) The Contractor may pour the deck starting at an abutment location and proceed to the opposite abutment without stopping. However, the Contractor shall provide counterweights, or other measures, at the opposite abutment to resist uplift forces. The counterweights or other measures shall be designed for the following LRFD Strength I uplift force: 6.84 kips per beam (or a total of 41.0 kips at the opposite abutment).

Notes:
See sheet 8 of 24 for superstructure details and Bill of Material.
Bars indicated thus 32 x 9-#5 etc. indicates 32 lines of bars with 9 lengths per line.



INSIDE ELEVATION OF PARAPET

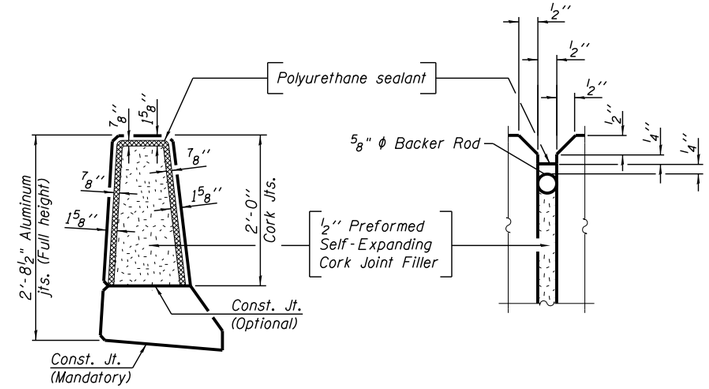


* Prior to grinding

SECTION THRU PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-5"
#8 bar = 5'-11"



PARAPET JOINT DETAILS

Notes:

The ⅛" Aluminium sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-290, Type S, Grade NS, Class 25. Use T with a ⅝" backer rod.

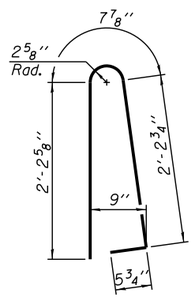
The ½" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

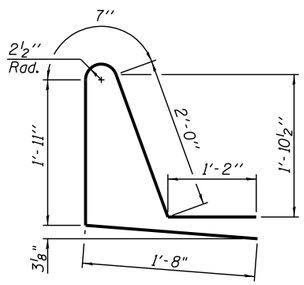
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	398	#5	34'-6"	
a1(E)	278	#5	33'-10"	
a2(E)	792	#6	6'-6"	
a3(E)	4	#5	35'-8"	
b(E)	342	#5	29'-0"	
b1(E)	210	#6	24'-1"	
b2(E)	248	#5	32'-3"	
d(E)	508	#5	5'-7"	
d1(E)	508	#5	7'-4"	
e(E)	84	#4	16'-0"	
e1(E)	126	#4	14'-9"	
e2(E)	8	#4	25'-8"	
e3(E)	4	#8	48'-8"	
e4(E)	8	#8	14'-9"	
e5(E)	8	#4	14'-9"	
e6(E)	6	#4	26'-9"	
e7(E)	4	#8	40'-4"	
m(E)	8	#6	36'-1"	
m1(E)	30	#6	5'-10"	
m2(E)	12	#6	2'-3"	
m3(E)	36	#5	4'-0"	
s(E)	72	#5	7'-3"	
s1(E)	72	#5	10'-3"	
v(E)	74	#5	3'-1"	
Reinforcement Bars, Epoxy Coated		Pound	71,310	
Concrete Superstructure		Cu. Yds.	302.0	

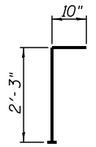
Bars indicated thus 1 x 2- #8 etc. indicates 1 line of bars with 2 lengths per line.



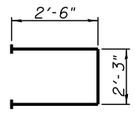
BAR d(E)



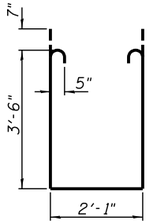
BAR d1(E)



BAR v(E)
(Headed)



BAR s(E)
(Headed)



BAR s1(E)

SDI-SB-2 2-17-2017

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	CHECKED - MAH	REVISED -	
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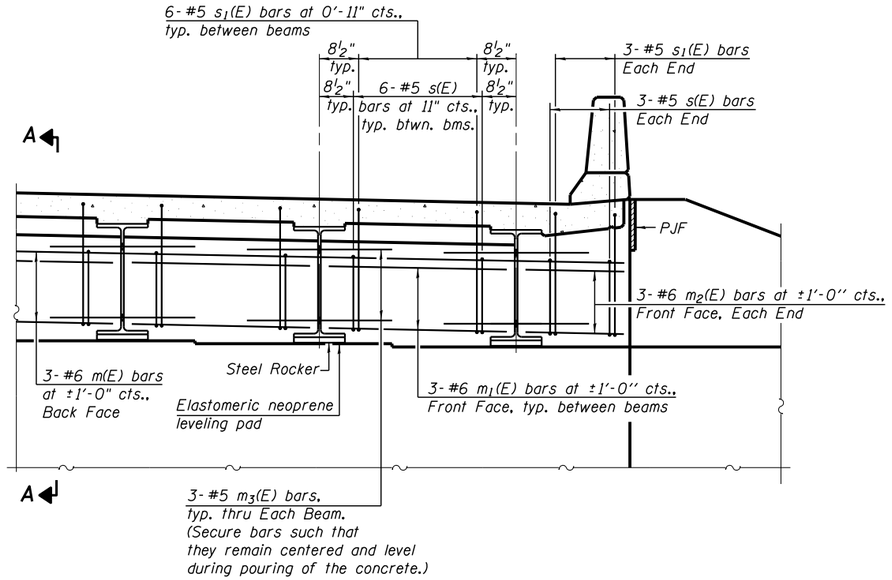
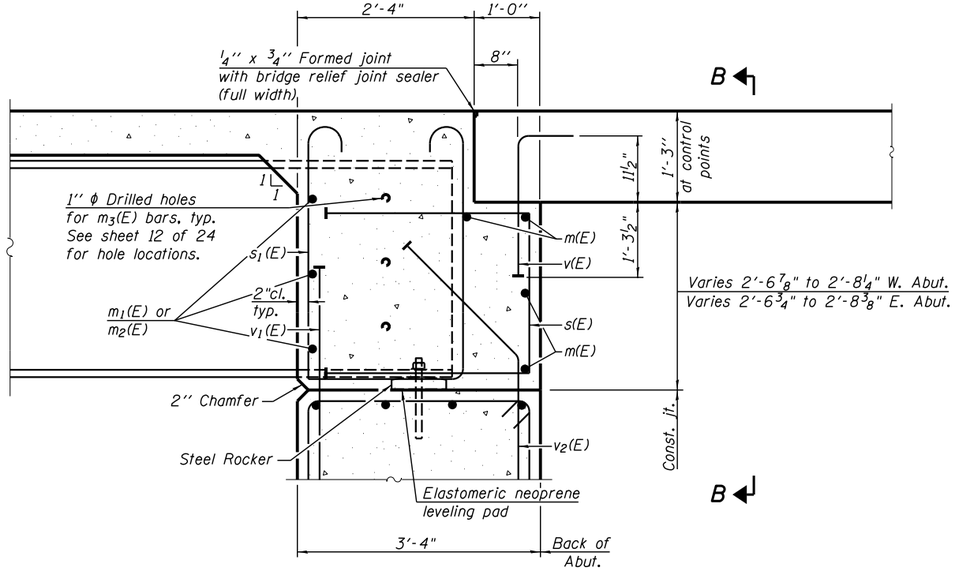
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 8 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	33
		CONTRACT NO. 68215		
		ILLINOIS FED. AID PROJECT		

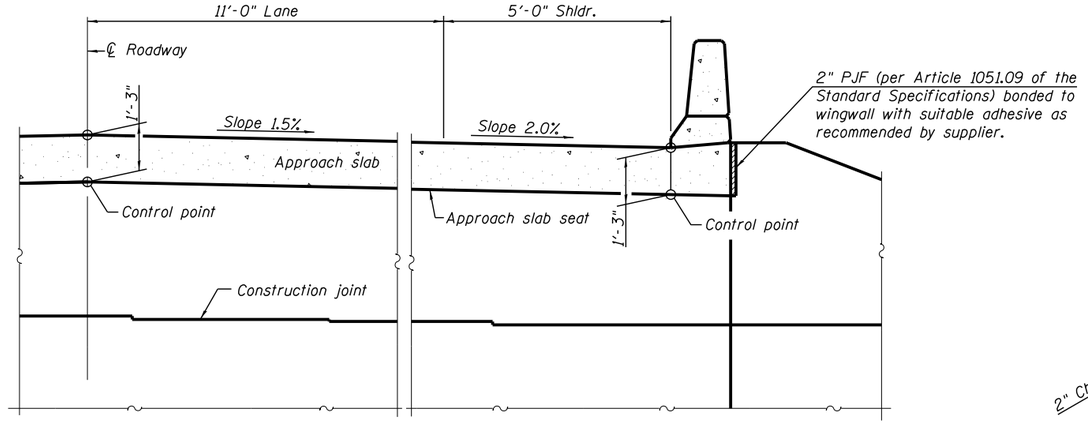


DIAPHRAGM AT ABUTMENT

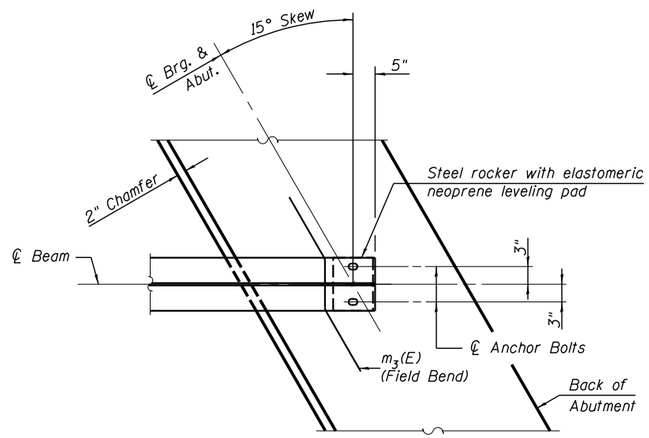


SECTION A-A

(at Rt. L's)



SECTION B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 24.

Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 24.

For details of bars s(E), s_1(E) and v(E) see sheet 8 of 24.

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.

The approach slab seat shall have a constant slope determined from the control points shown.

For bearing details see sheet 14 of 24.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

DIA-SB2448-R 2-17-2017

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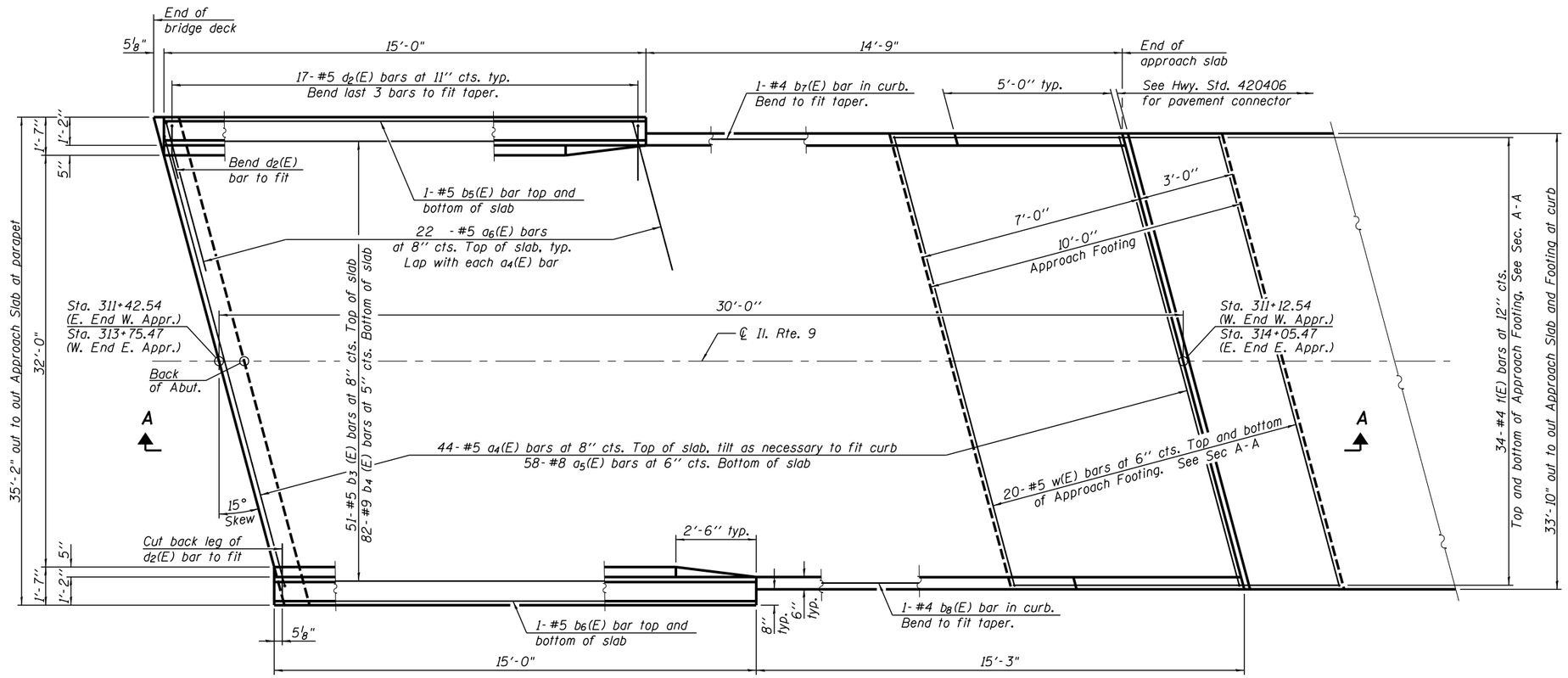
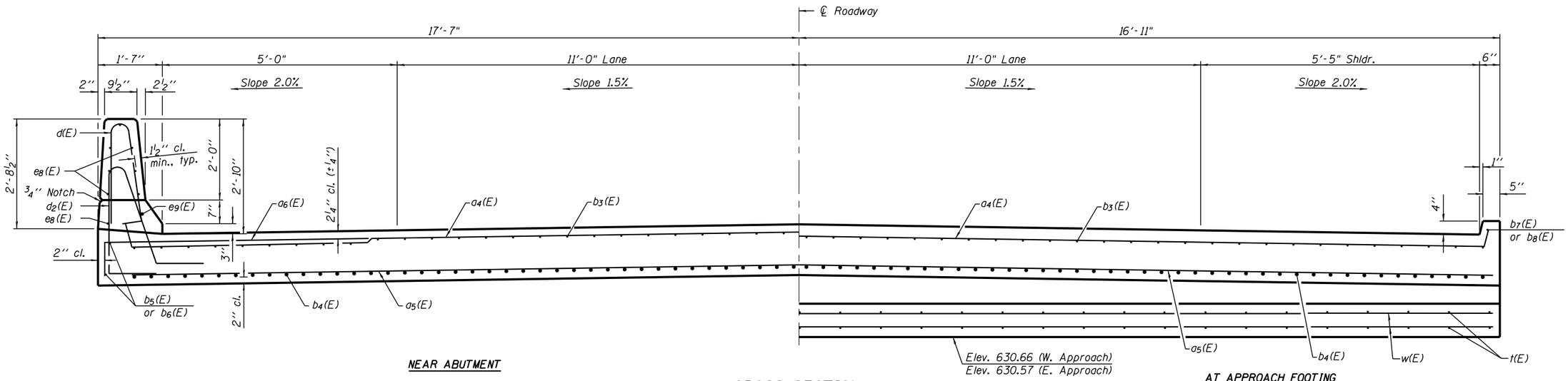
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 9 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	34
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		



PLAN



NEAR ABUTMENT

AT APPROACH FOOTING

CROSS SECTION

(Looking East)

BAIA-CIP-34FS-R(≤30°) 2-17-2017

(Sheet 1 of 2)

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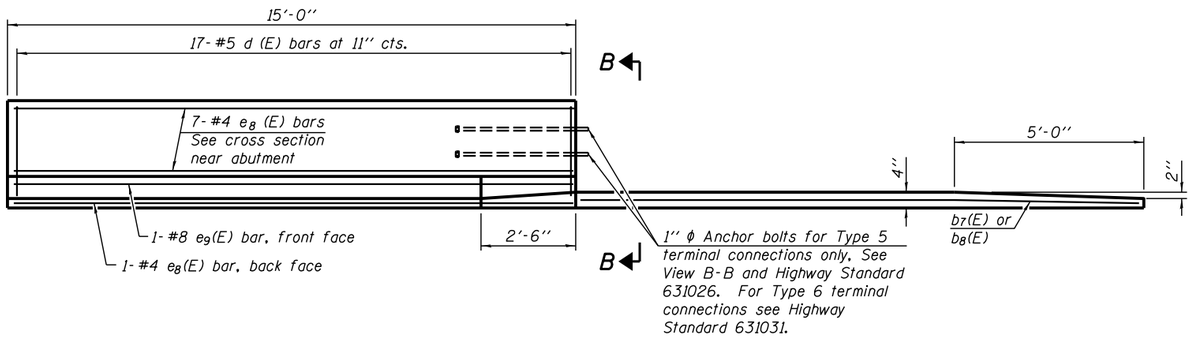
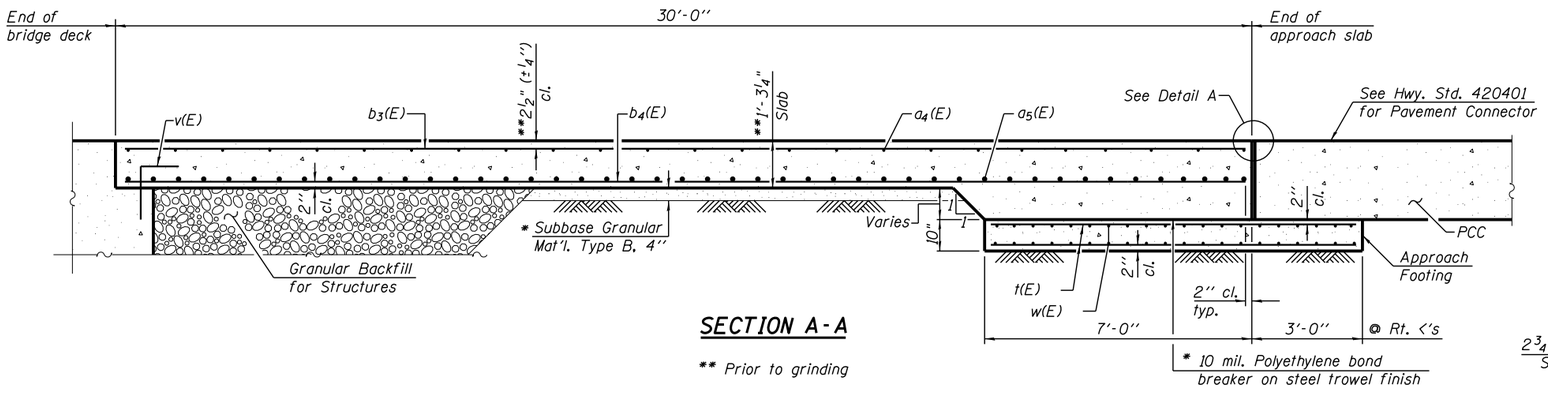
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 10 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	35
			CONTRACT NO. 68215	
		ILLINOIS	FED. AID PROJECT	

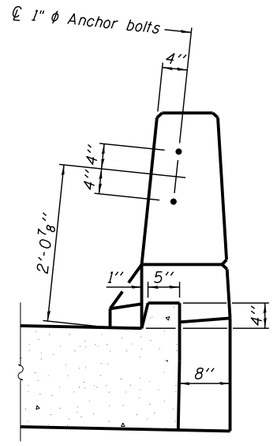


INSIDE ELEVATION OF PARAPET AND CURB

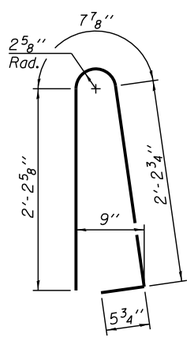


SECTION A-A

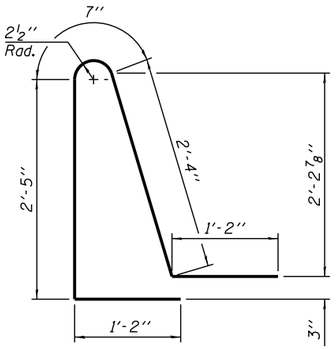
** Prior to grinding



VIEW B-B



BAR d(E)



BAR d2(E)

* Cost included with Concrete Superstructure (Approach Slab).

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach pavement.

Parapet concrete shall be paid for as Concrete Superstructure.

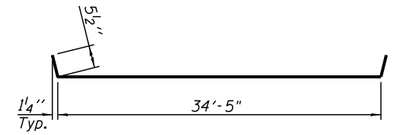
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

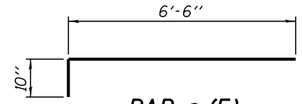
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

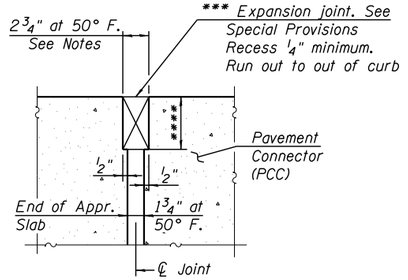
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 24.



BAR a4(E)



BAR a6(E)

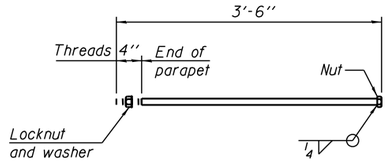


DETAIL A

(@ Rt. L's)

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

**** Per manufacturer recommendations



*1" ϕ ANCHOR BOLT

(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a4(E)	88	#5	35'-4"	
a5(E)	116	#8	34'-8"	
a6(E)	88	#5	7'-4"	
b3(E)	102	#5	29'-8"	
b4(E)	164	#9	29'-8"	
b5(E)	4	#5	15'-0"	
b6(E)	4	#5	14'-3"	
b7(E)	2	#4	14'-6"	
b8(E)	2	#4	14'-11"	
d(E)	68	#5	5'-7"	
d2(E)	68	#5	7'-8"	
e8(E)	32	#4	14'-8"	
e9(E)	4	#8	14'-8"	
t(E)	136	#4	10'-0"	
w(E)	80	#5	34'-8"	
Concrete Superstructure		Cu. Yd.	6.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	119.5	
Concrete Structures		Cu. Yd.	21.6	
Reinforcement Bars, Epoxy Coated		Pound	39730	

BAIA-CIP-34FS-R(≤30°) 2-17-2017

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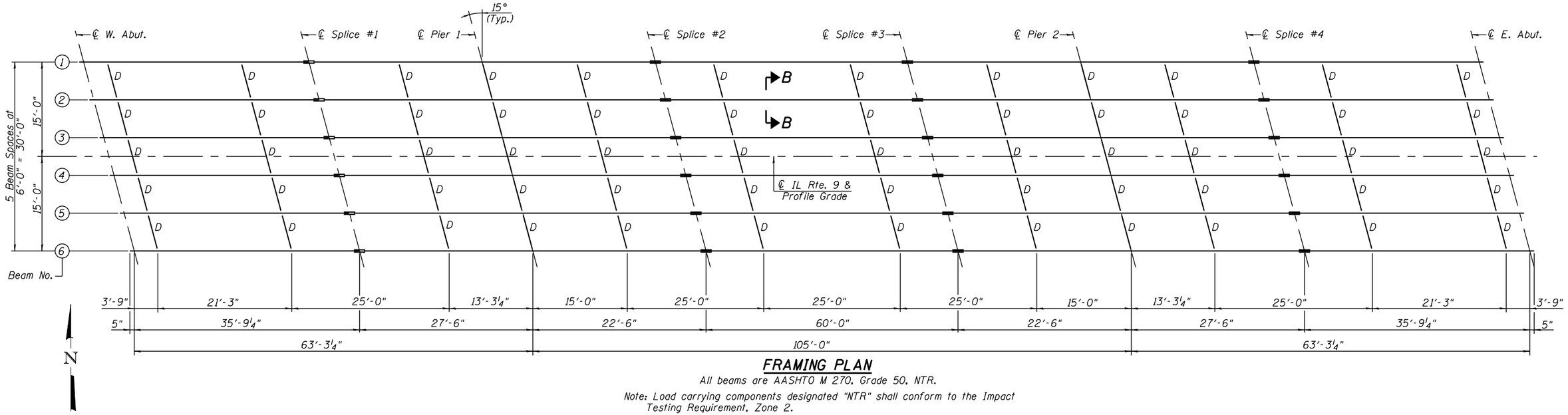
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 11 OF 24 SHEETS

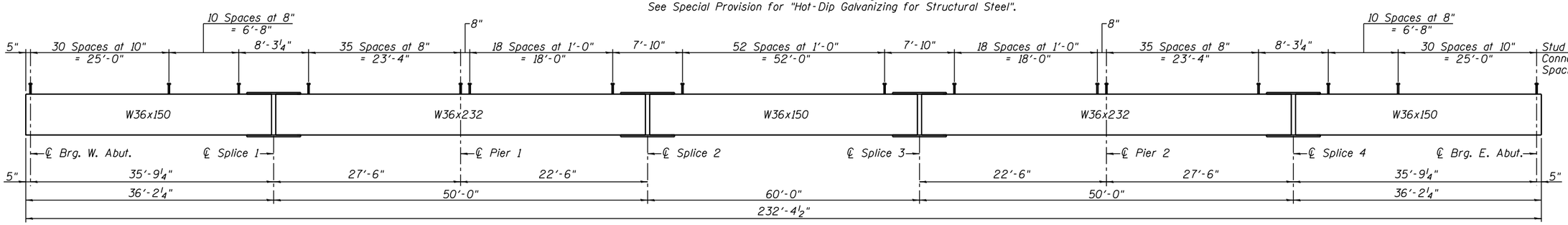
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	36
		CONTRACT NO. 68215		
		ILLINOIS FED. AID PROJECT		



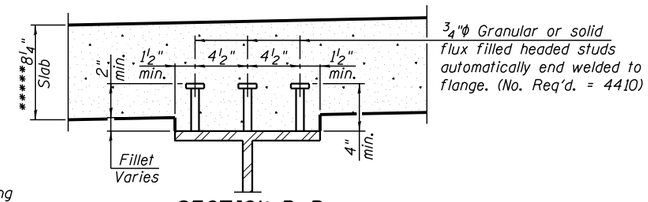
FRAMING PLAN

All beams are AASHTO M 270, Grade 50, NTR.

Note: Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
All new structural steel shall be hot-dip galvanized.
See Special Provision for "Hot-Dip Galvanizing for Structural Steel".



ELEVATION



¾"ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 4410)

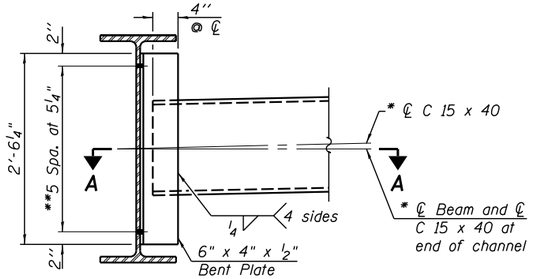
***** - Prior to grinding

SECTION B-B

*** TOP OF BEAM ELEVATIONS

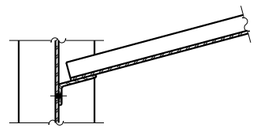
	℄ W. Abut.	℄ Splice 1 ****	℄ Pier 1	℄ Splice 2 ****	℄ Splice 3 ****	℄ Pier 2	℄ Splice 4 ****	℄ E. Abut.
Beam 1	633.02	633.22	633.35	633.46	633.54	633.49	633.44	633.34
Beam 2	633.14	633.34	633.47	633.57	633.65	633.60	633.54	633.44
Beam 3	633.25	633.44	633.57	633.67	633.74	633.69	633.63	633.52
Beam 4	633.25	633.45	633.57	633.67	633.74	633.69	633.62	633.52
Beam 5	633.18	633.37	633.49	633.59	633.65	633.60	633.53	633.42
Beam 6	633.09	633.27	633.38	633.48	633.53	633.48	633.41	633.30

*** For Fabrication Only
**** Elevations are given at top of W36x232

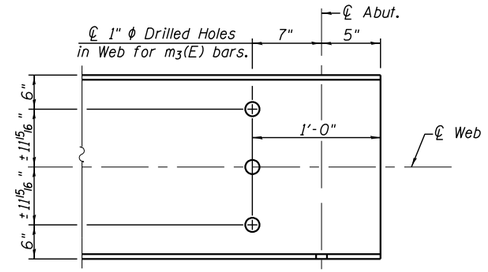


INTERIOR DIAPHRAGM D

(60 Required)



SECTION A-A



TYP. END OF BEAM ELEVATION

Note:
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.
Two hardened washers required for each set of oversized holes.
*Alternate channels C 15 x 50 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.
**¾" ϕ HS bolts, 15/16" ϕ holes

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL
STRUCTURE NO. 055-0097
SHEET NO. 12 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	37
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

BEAM MOMENT TABLE				
		0.4 Span 1 or 3 0.6 Span 3	Pier 1 or 2	0.5 Span 2
		Interior	Interior	Interior
I_s	(in^4)	9040	15000	9040
$I_c(n)$	(in^4)	22695	33180	22695
$I_c(3n)$	(in^4)	16707	21452	16707
$I_c(cr)$	(in^4)	-	17842	-
S_s	(in^3)	504	809	504
$S_c(n)$	(in^3)	718	872	718
$S_c(3n)$	(in^3)	650	872	650
$S_c(cr)$	(in^3)	-	872	-
DC1	(k/')	0.811	0.909	0.811
M_{DC1}	('k)	104.2	-765	410.7
DC2	(k/')	0.150	0.150	0.150
M_{DC2}	('k)	20.1	-130.0	76.8
DW	(k/')	0.270	0.270	0.270
M_{DW}	('k)	35.8	-231.3	136.6
LLDF		0.558	0.532	0.512
$M_{L} \cdot IM$	('k)	678.7	-1002.3	814.9
M_u (Strength I)	('k)	1397	-3220	2240
$\phi_f M_n$	('k)	3695	-	3565
f_s DC1	(ksi)	2.5	-11.4	9.8
f_s DC2	(ksi)	0.4	-1.8	1.4
f_s DW	(ksi)	0.7	-3.2	2.5
f_s (L+IM)	(ksi)	11.3	-13.8	13.6
f_s (Service II)	(ksi)	18.3	-34.3	31.4
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.5
f_s (Total)(Strength I)	(ksi)	24.5	-45.4	41.6
$\phi_f F_n$	(ksi)	-	50	-
V_f	(k)	24.9	27.8	27.8

BEAM REACTION TABLE					
		Abutments		Piers	
		Interior	Exterior	Interior	Exterior
LLDF		0.671	0.470	0.671	0.470
OCF		-	1.05	-	-
R_{DC1}	(k)	14.8	14.5	85.3	84.6
R_{DC2}	(k)	2.7	2.7	14.1	14.1
R_{DW}	(k)	4.9	4.9	25.3	25.3
R_{L}	(k)	52.3	38.4	107.3	75.2
R_{Im}	(k)	13.1	9.6	21.0	14.7
R_{Total}	(k)	87.8	70.1	253.0	213.9

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.).

$M_{L} \cdot IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L} \cdot IM$

$\phi_f M_n$: 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).
$M_{L} \cdot IM / S_c(n)$ or $M_{LL \cdot I} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_s(L \cdot IM)$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

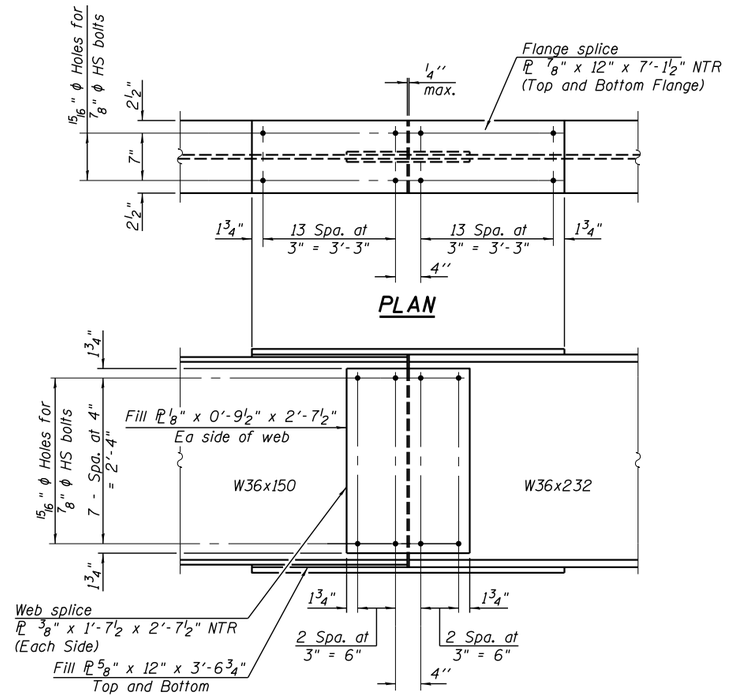
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_s(L \cdot IM)$

$\phi_f F_n$: 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.

LLDF: Live Load Distribution Factor

OCF: Obtuse Correction Factor



All splice plates shall be AASHTO M 270, Grade 50, NTR.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
All new structural steel shall be hot-dip galvanized.
See Special Provision for "Hot-Dip Galvanizing for Structural Steel".

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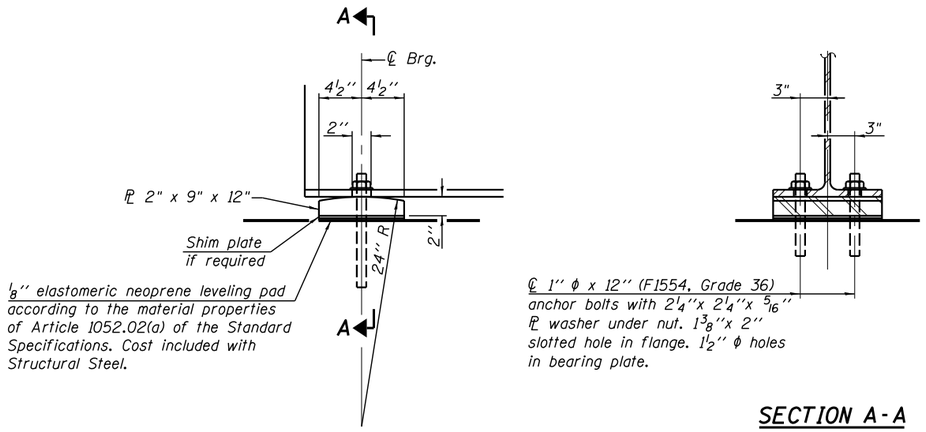
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 13 OF 24 SHEETS

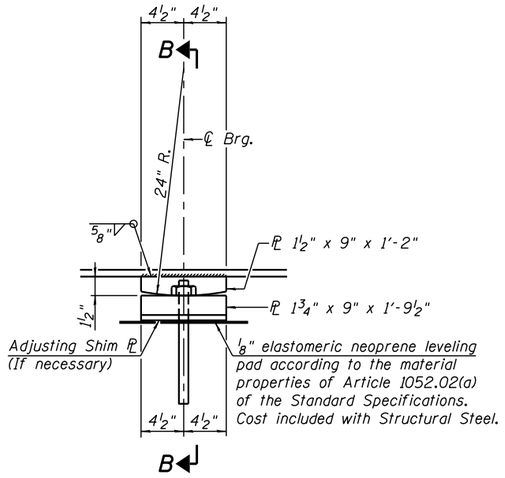
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	38
		CONTRACT NO. 68215		
	ILLINOIS	FED. AID PROJECT		



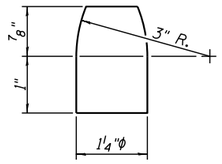
ELEVATION AT ABUTMENTS

SECTION A-A

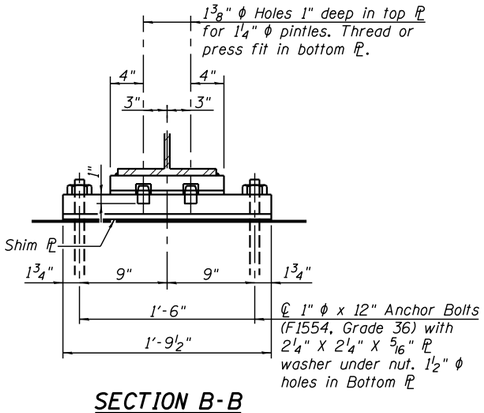
FIXED BEARING AT ABUTMENTS
(12 Required)



ELEVATION AT PIERS



PINTLE



SECTION B-B

FIXED BEARING AT PIERS
(12 Required)

Notes: Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

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.

The structural steel plates of the bearings shall conform to the requirements of AASHTO M 270, Grade 50.

All bearing plates, anchor bolts, nuts, washers and pintels shall be galvanized according to AASHTO M 111 or M 262 as applicable.

Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	48

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STATE OF ILLINOIS
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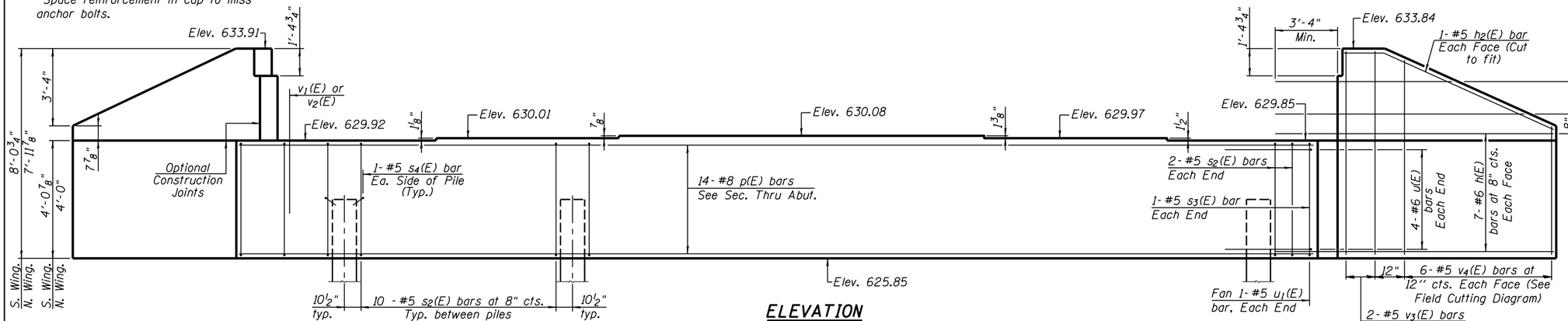
BEARING DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 14 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	39
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

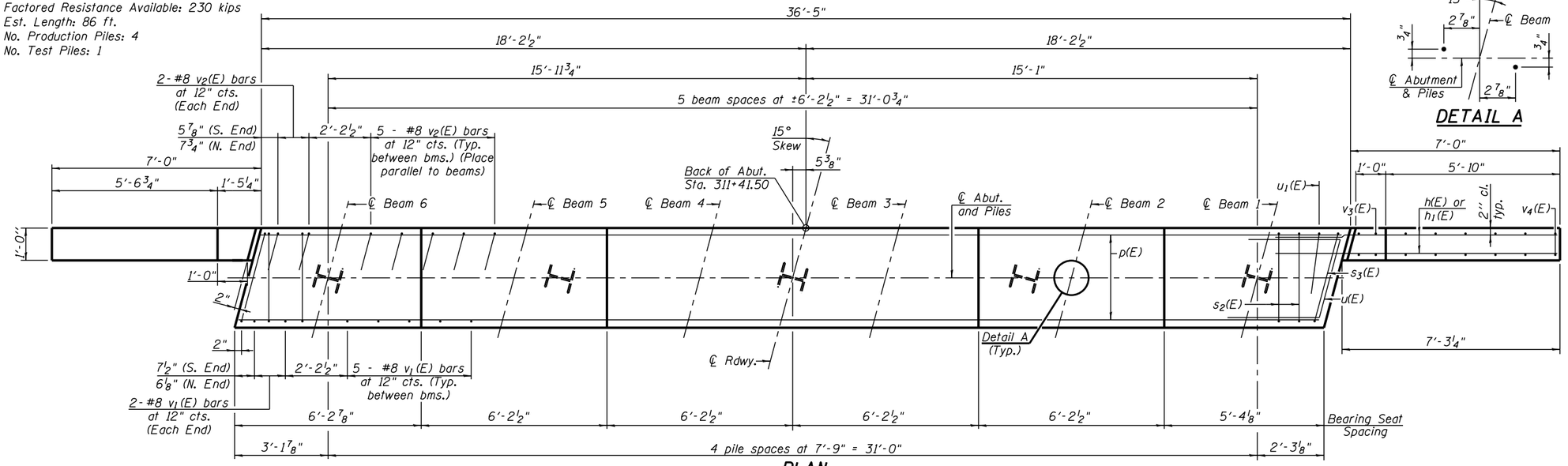
Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.



ELEVATION
(Looking West)

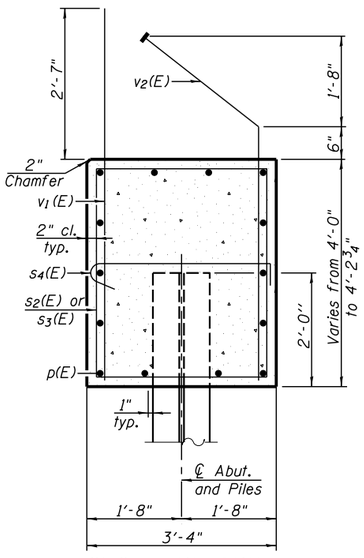
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 86 ft.
No. Production Piles: 4
No. Test Piles: 1



PLAN

DETAIL A

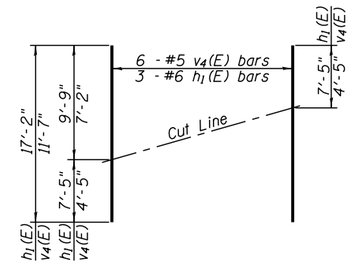


SEC. THRU ABUT.
Dimensions at right angles to abutment

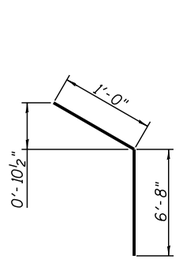
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	28	#6	10'-5"	
h1(E)	6	#6	17'-2"	
h2(E)	4	#5	7'-8"	
p(E)	14	#8	36'-1"	
s2(E)	44	#5	14'-3"	
s3(E)	2	#5	14'-6"	
s4(E)	10	#5	4'-0"	
u(E)	8	#6	10'-8"	
u1(E)	2	#5	10'-0"	
v1(E)	29	#8	6'-4"	
v2(E)	29	#8	6'-8"	
v3(E)	8	#5	7'-8"	
v4(E)	12	#5	11'-7"	
Structure Excavation		Cu. Yd.	83	
Concrete Structures		Cu. Yd.	21.9	
Reinforcement Bars, Epoxy Coated		Pound	4070	
Furnishing Steel Piles HP 12x53		Foot	344	
Driving Piles		Foot	344	
Test Pile Steel HP 12x53		Each	1	

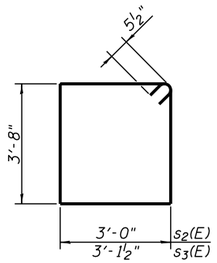
For details of piles see sheet 19 of 24.



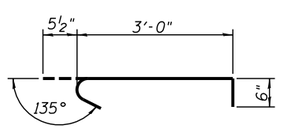
FIELD CUTTING DIAGRAM
Order h1(E) & v4(E) full length. Cut as shown and use remainder of bars in opposite face.



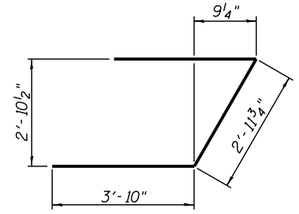
BAR h2(E)



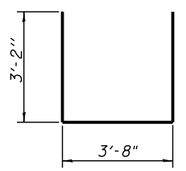
BARS s2(E) & s3(E)



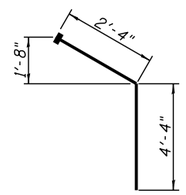
BARS s4(E)



BAR u(E)



BAR u1(E)



BAR v2(E)
(Headed)

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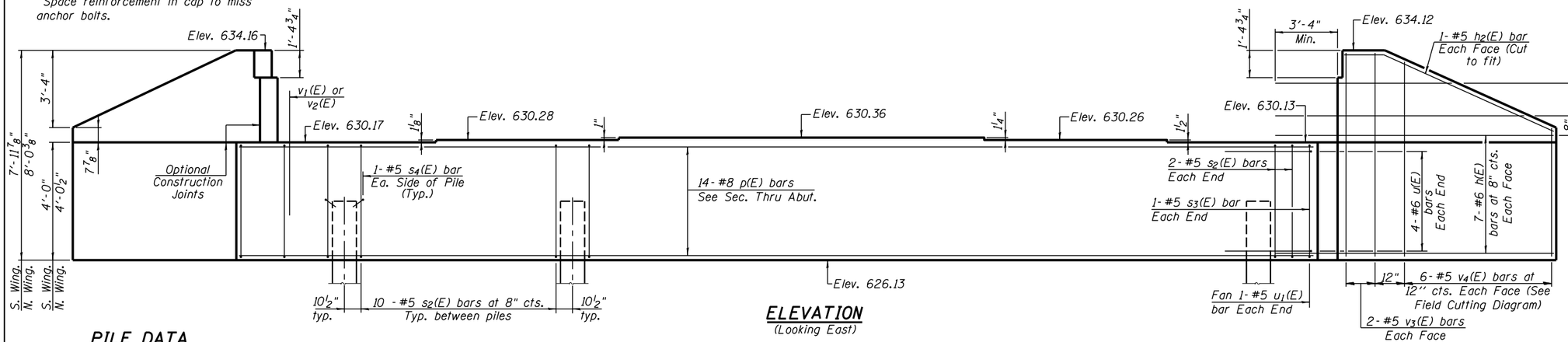
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 055-0097
SHEET NO. 15 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	40
			CONTRACT NO. 68215	
		ILLINOIS	FED. AID PROJECT	

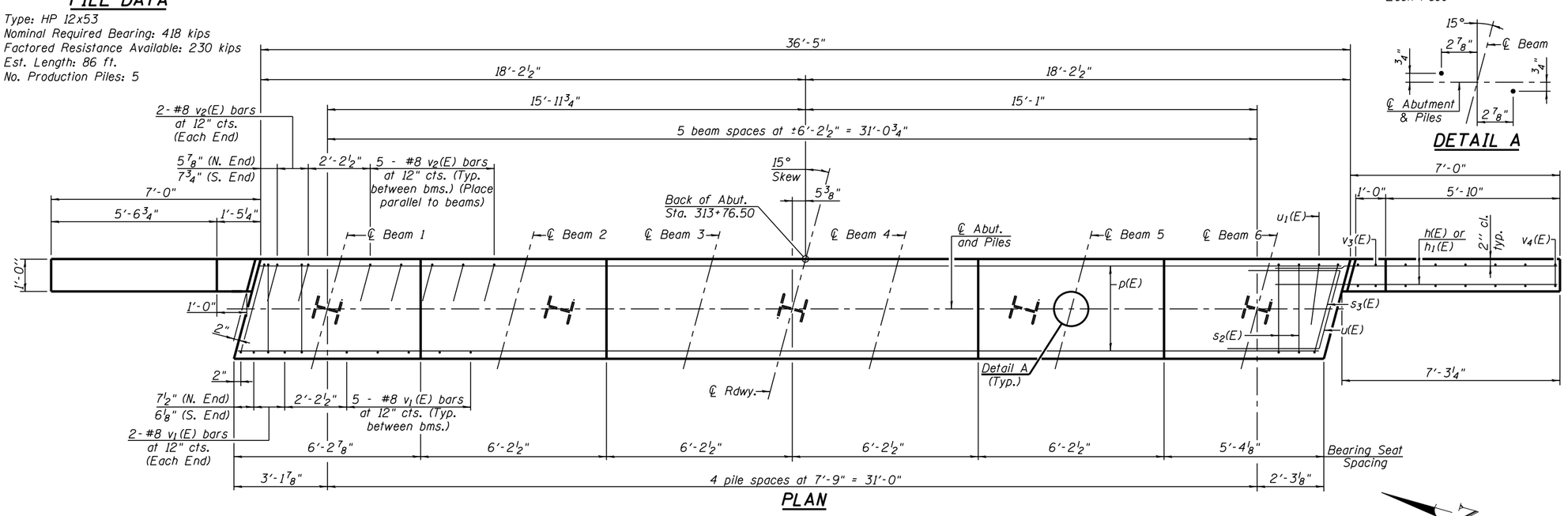
Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.



ELEVATION
(Looking East)

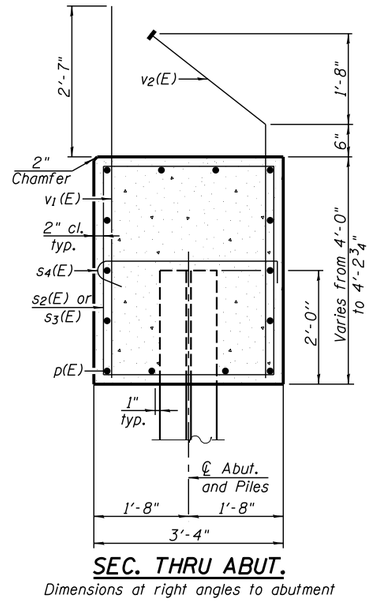
PILE DATA

Type: HP 12x53
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 86 ft.
No. Production Piles: 5

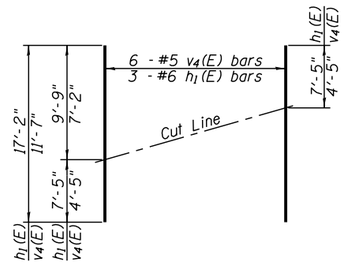


PLAN

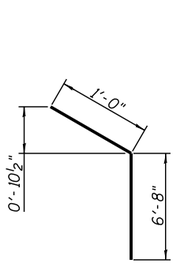
DETAIL A



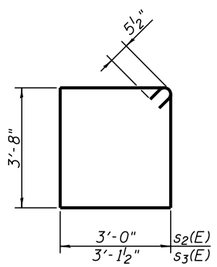
SEC. THRU ABUT.
Dimensions at right angles to abutment



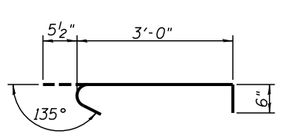
FIELD CUTTING DIAGRAM
Order $h_1(E)$ & $v_4(E)$ full length. Cut as shown and use remainder of bars in opposite face.



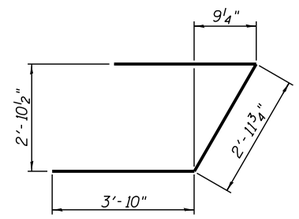
BAR $h_2(E)$



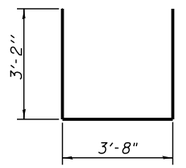
BARS $s_2(E)$ & $s_3(E)$



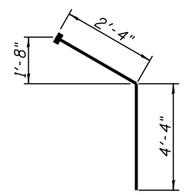
BARS $s_4(E)$



BAR u(E)



BAR $u_1(E)$



BAR $v_2(E)$
(Headed)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	28	#6	10'-5"	
$h_1(E)$	6	#6	17'-2"	
$h_2(E)$	4	#5	7'-8"	
p(E)	14	#8	36'-1"	
$s_2(E)$	44	#5	14'-3"	
$s_3(E)$	2	#5	14'-6"	
$s_4(E)$	10	#5	4'-0"	
u(E)	8	#6	10'-8"	
$u_1(E)$	2	#5	10'-0"	
$v_1(E)$	29	#8	6'-4"	
$v_2(E)$	29	#8	6'-8"	
$v_3(E)$	8	#5	7'-8"	
$v_4(E)$	12	#5	11'-7"	
Structure Excavation		Cu. Yd.	79	
Concrete Structures		Cu. Yd.	22.0	
Reinforcement Bars, Epoxy Coated		Pound	4070	
Furnishing Steel Piles HP 12x53		Foot	430	
Driving Piles		Foot	430	

For details of piles see sheet 19 of 24.

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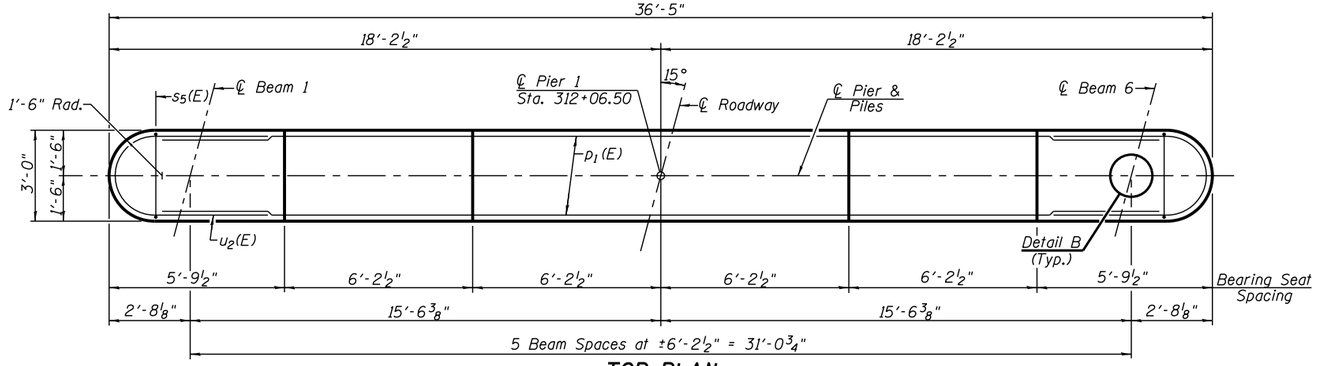
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 055-0097
SHEET NO. 16 OF 24 SHEETS

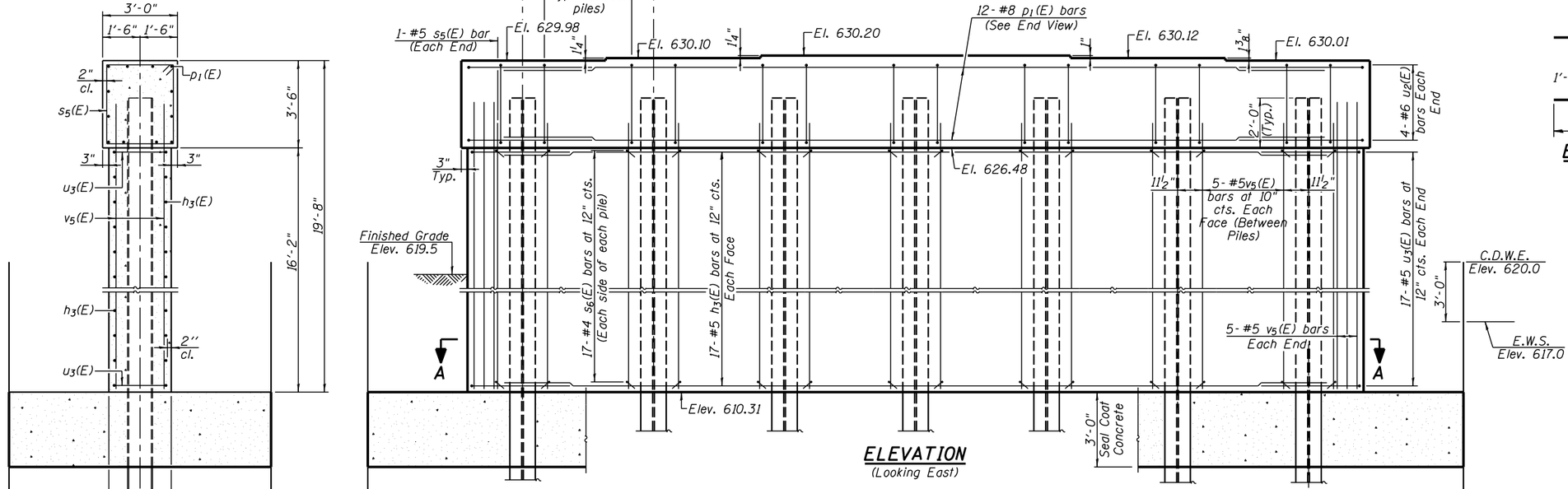
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	41
			CONTRACT NO. 68215	
		ILLINOIS	FED. AID PROJECT	

PILE DATA

Type: HP 12x74
Nominal Required Bearing: 589 kips
Factored Resistance Available: 311 kips
Est. Length: 91 ft.
No. Production Piles: 7
No. Test Piles: 0

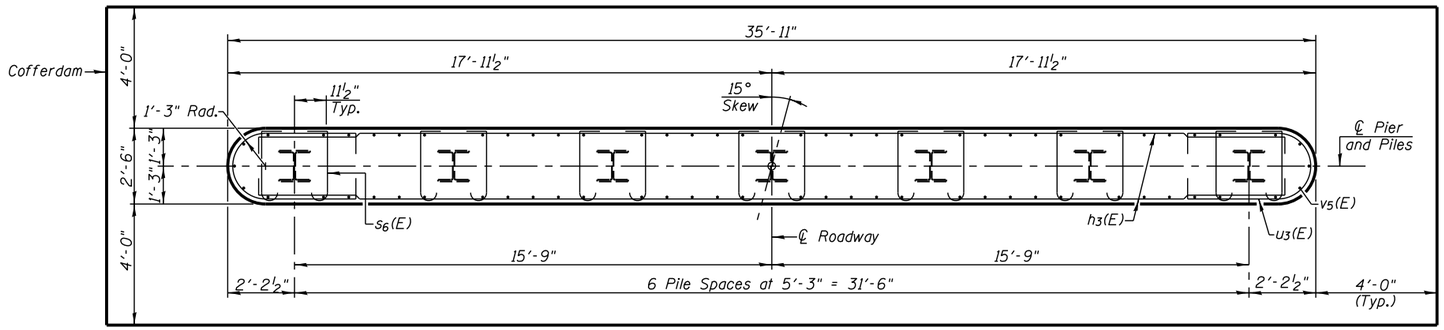


TOP PLAN

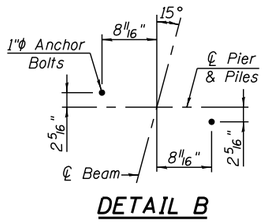


ELEVATION
(Looking East)

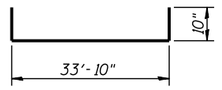
END VIEW



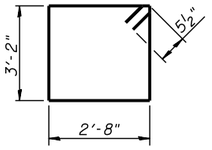
SECTION A-A



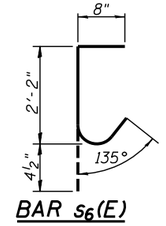
DETAIL B



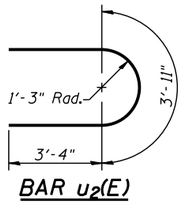
BAR h_3(E)



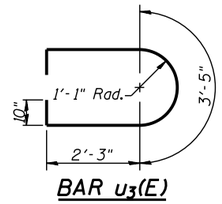
BAR s_5(E)



BAR s_6(E)



BAR u_2(E)



BAR u_3(E)

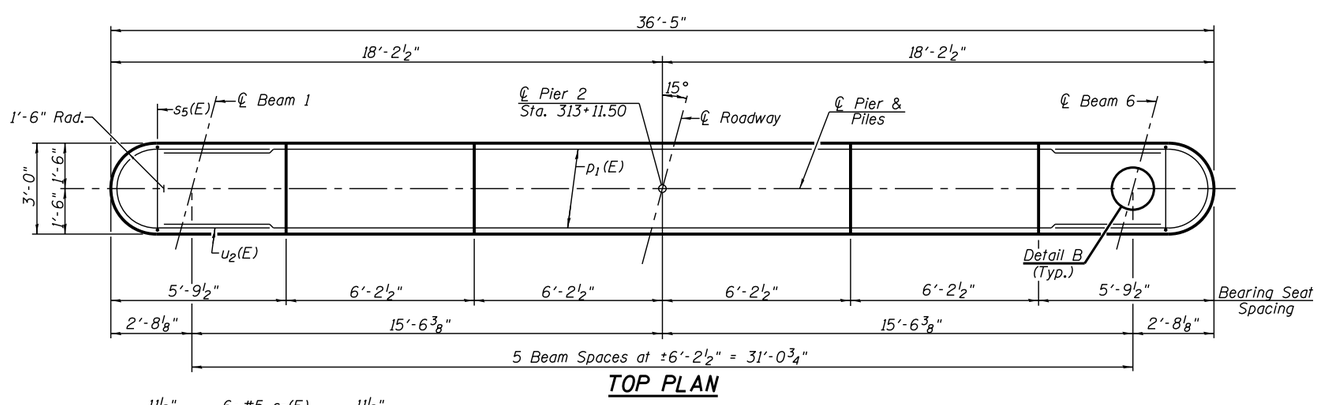
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_3(E)	34	#5	35'-6"	
p_1(E)	12	#8	33'-5"	
s_5(E)	38	#5	12'-7"	
s_6(E)	238	#4	3'-3"	
u_2(E)	8	#6	10'-7"	
u_3(E)	34	#5	9'-7"	
v_5(E)	70	#5	18'-0"	
Cofferdam Excavation		Cu. Yd.	209	
Cofferdam (Type 2) (Location 1)		Each	1	
Concrete Structures		Cu. Yd.	67.4	
Reinforcement Bars, Epoxy Coated		Pound	5130	
Furnishing Steel Piles HP 12x74		Foot	637	
Driving Piles		Foot	637	
Seal Coat Concrete		Cu. Yd.	51.3	

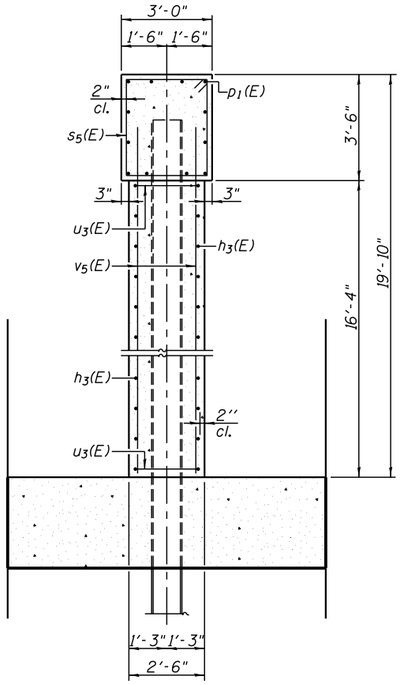
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of Piles, see sheet 19 of 24.

PILE DATA

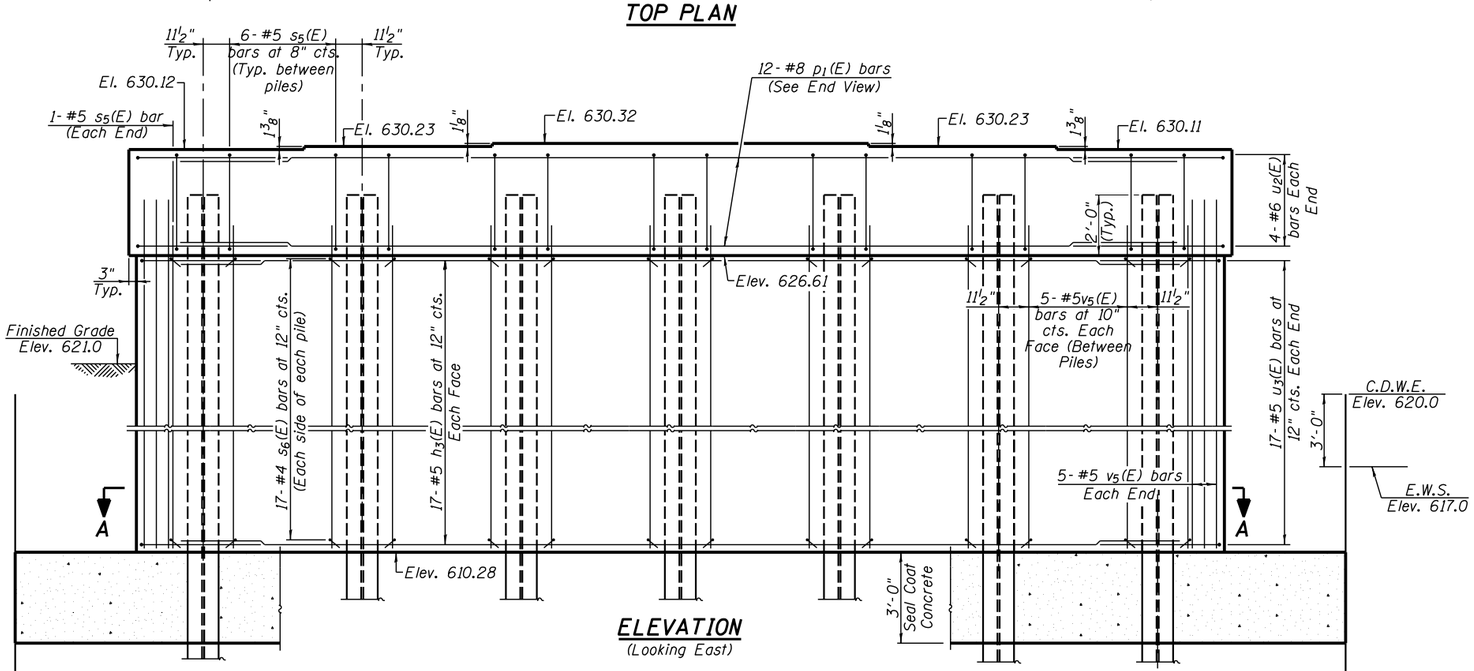
Type: HP 12x74
Nominal Required Bearing: 589 kips
Factored Resistance Available: 312 kips
Est. Length: 90 ft.
No. Production Piles: 7
No. Test Piles: 0



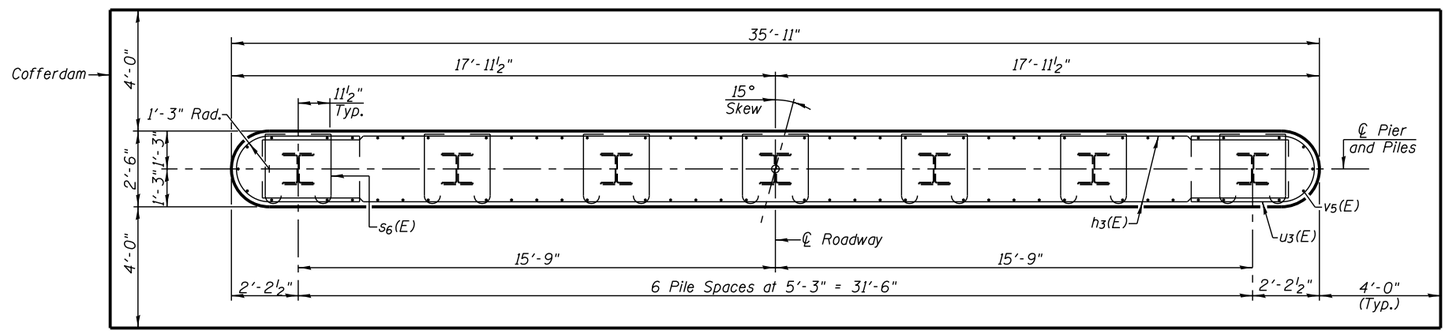
TOP PLAN



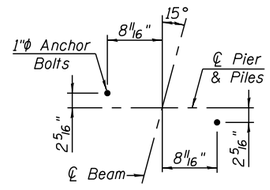
END VIEW



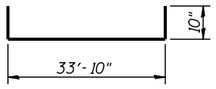
ELEVATION
(Looking East)



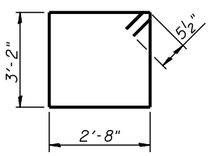
SECTION A-A



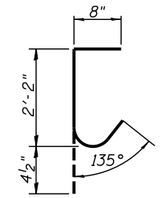
DETAIL B



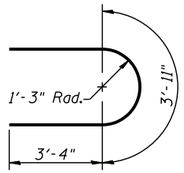
BAR h3(E)



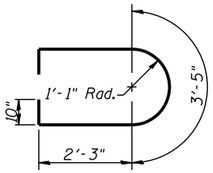
BAR s5(E)



BAR s6(E)



BAR u2(E)



BAR u3(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_3(E)$	34	#5	35'-6"	
$p_1(E)$	12	#8	33'-5"	
$s_5(E)$	38	#5	12'-7"	
$s_6(E)$	238	#4	3'-3"	
$u_2(E)$	8	#6	10'-7"	
$u_3(E)$	34	#5	9'-7"	
$v_5(E)$	70	#5	18'-0"	
Cofferdam Excavation		Cu. Yd.	234	
Cofferdam (Type 2) (Location 2)		Each	1	
Concrete Structures		Cu. Yd.	67.9	
Reinforcement Bars, Epoxy Coated		Pound	5130	
Furnishing Steel Piles HP 12x74		Foot	630	
Driving Piles		Foot	630	
Seal Coat Concrete		Cu. Yd.	51.3	

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of Piles, see sheet 19 of 24.

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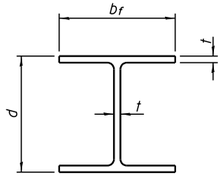
PLOT DATE =	CHECKED - MAH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

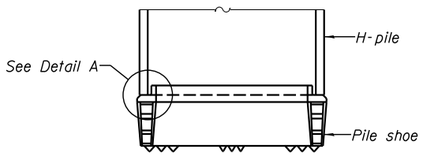
PIER 2
STRUCTURE NO. 055-0097
SHEET NO. 18 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	43
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

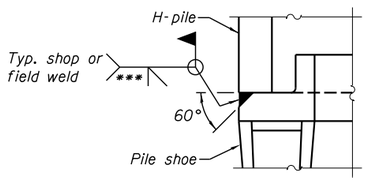


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30''
x102	14''	$14\frac{3}{4}''$	$\frac{11}{16}''$	30''
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30''
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30''
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24''
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24''
x63	12''	$12\frac{1}{8}''$	$\frac{1}{2}''$	24''
x53	$11\frac{3}{4}''$	12''	$\frac{7}{16}''$	24''
HP 10x57	10''	$10\frac{1}{4}''$	$\frac{9}{16}''$	24''
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24''
HP 8x36	8''	$8\frac{1}{8}''$	$\frac{7}{16}''$	18''



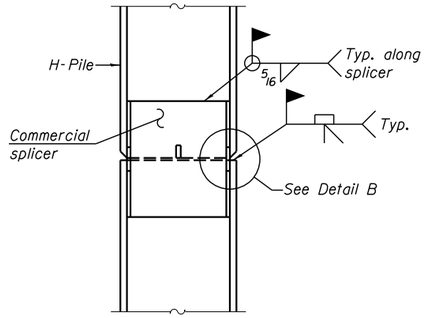
ELEVATION



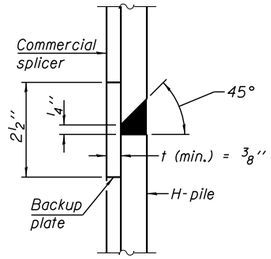
DETAIL A

SHOE ATTACHMENT

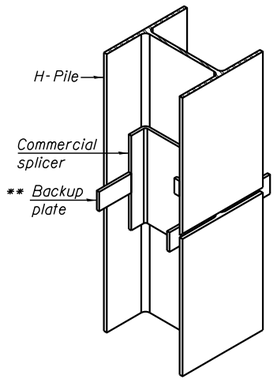
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

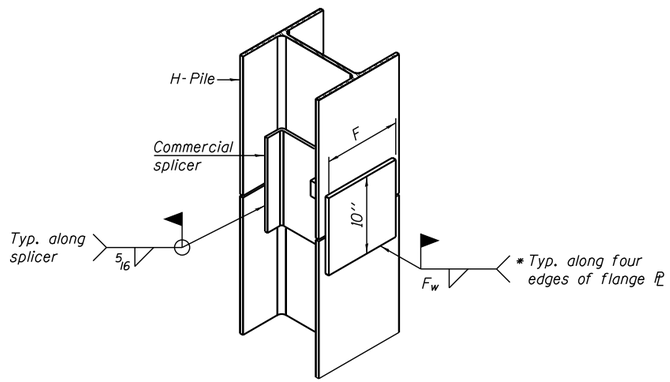


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



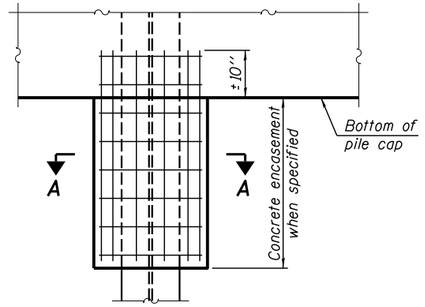
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

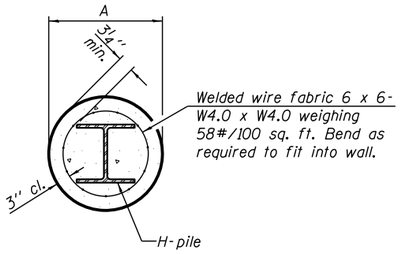
* Interrupt welds ¼'' from end of web and/or each flange.

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

*** Weld size per pile shoe manufacturer ($\frac{5}{16}''$ min.).



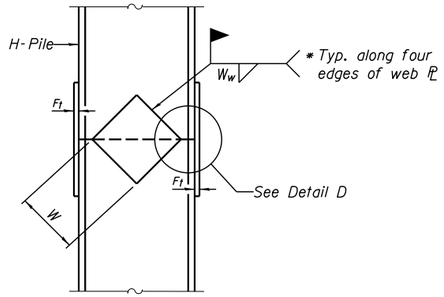
ELEVATION



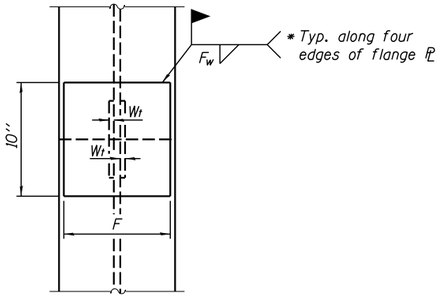
SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

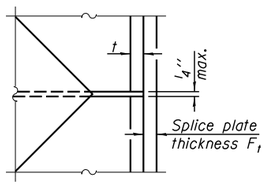
(Forms for encasement may be omitted when soil conditions permit)



ELEVATION



END VIEW



DETAIL D

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

WELDED PLATE FIELD SPLICE

F-HP 2-17-2017

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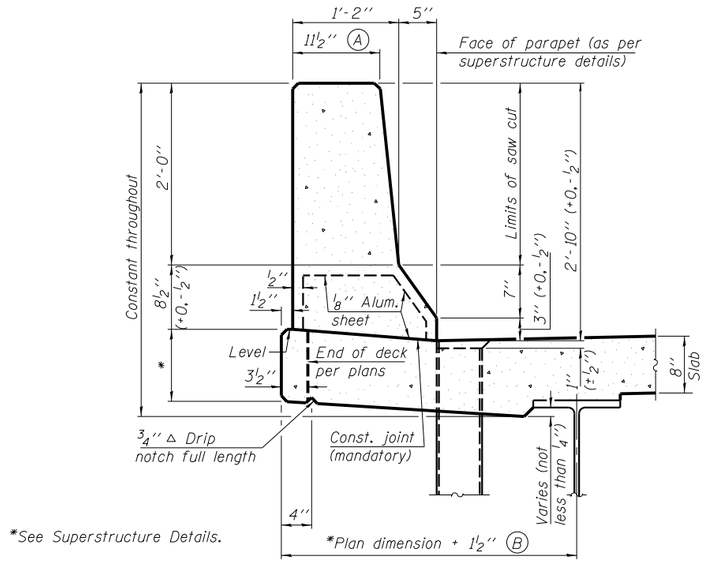
PLOT DATE =	CHECKED - MAH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 055-0097
SHEET NO. 19 OF 24 SHEETS

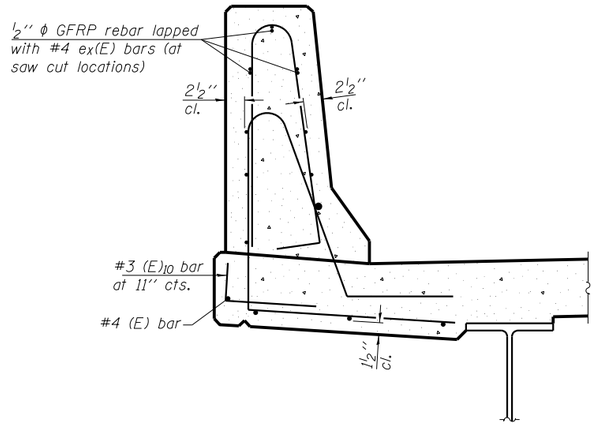
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	44
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			



*See Superstructure Details.

34" F SHAPE PARAPET SECTION

(Showing dimensions)



SECTION

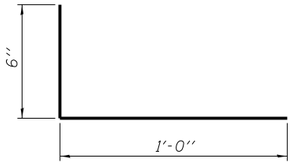
(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

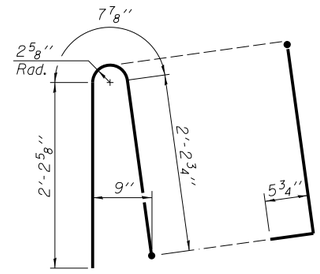
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.

Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

Steel superstructure shown. Other superstructure types similar.

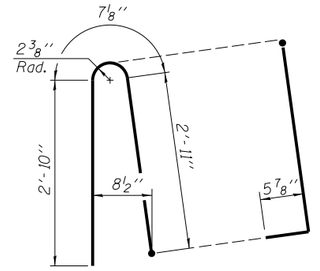


#3 (E)10 BAR



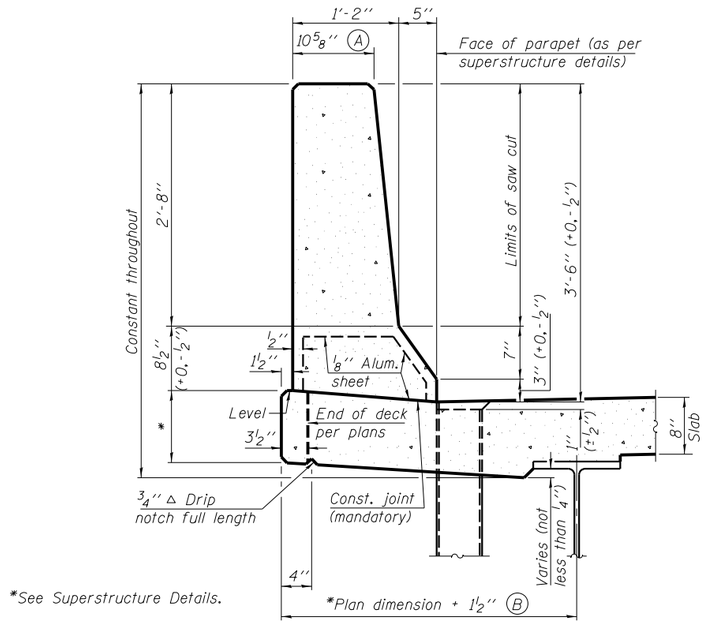
ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



ALTERNATE BAR d(E)

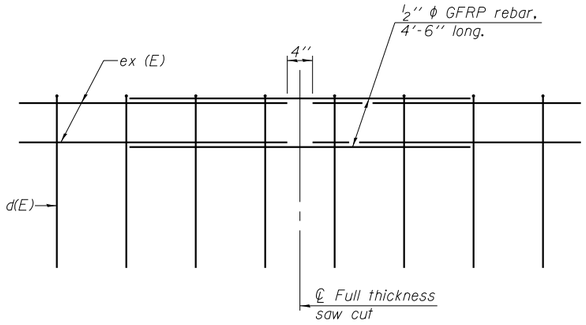
(For 42" parapet when conduit is present)



*See Superstructure Details.

42" F SHAPE PARAPET SECTION

(Showing dimensions)



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

SFP 34-42

2-17-2017

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PLOT DATE =	CHECKED - MAH	REVISED -	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 055-0097
SHEET NO. 20 OF 24 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	McDONOUGH	62	45
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/10/13

ROUTE IL Route 9 DESCRIPTION East Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 1
Station 313+11.5
Offset 37.0 ft RT
Ground Surface Elev. 622.52 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
622.02				**TOPSOIL**, approximately 6"
	1			**FILL: SANDY CLAY**, trace organics, brown
	2		19	
	3			
	2			
	3		29	
-5	2			
616.52				
	1			**FILL: SANDY LOAM**, trace organics, brown
	1		19	
614.02	1			
	1			**SAND**, gray, very loose, (possible fill)
-10	2		19	
	0			
	1		14	
	1			
	1/12"		21	
-15	1			
606.02	0			
	0	<0.5	31	**SILTY LOAM**, gray, very soft
	1	P		
604.02				
	1/12"	<0.5	32	**CLAY**, gray, soft
602.52 -20	2	P		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	2			**SANDY LOAM**, gray, medium stiff to stiff
	3	0.8	19	
	7	P		
	5			
	7		18	
-25	8			
596.52				
	3			**SAND**, gray, medium dense to dense
	5		6	
	9			
	12			
	14		17	
-30	18			
	5			
	9		20	
-35	10			
584.02				
	6			**SILTY LOAM**, gray, very stiff
	11		18	
-40	15			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/10/13

ROUTE IL Route 9 DESCRIPTION East Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 1
Station 313+11.5
Offset 37.0 ft RT
Ground Surface Elev. 622.52 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SILTY LOAM, gray, very stiff *(continued)*
581.52				**SAND**, gray, very dense
	40			
	46		11	
-45	15			
573.52	9			
	18	4.5	14	**SANDY CLAY**, greenish-brown, very stiff to hard
-50	23	P		
569.02				
	9			**CLAY**, gray, stiff to very stiff
	12	1.8	30	
-55	13	S		
	4	3.0	27	
-60	7	P		
	8			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				CLAY, gray, stiff to very stiff *(continued)*
	5			
	7	1.9	20	
-65	8	S		
	7			
	10	1.3	17	
-70	17	S		
549.02				
	7		18	**SAND**, gray, dense
	19			
-75	27			
544.02				
	50/1"		14	**WEATHERED INTERBEDDED DOLOMITE & SHALE**, gray
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/10/13

ROUTE IL Route 9 DESCRIPTION East Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 1
Station 313+11.5
Offset 37.0 ft RT
Ground Surface Elev. 622.52 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				WEATHERED INTERBEDDED DOLOMITE & SHALE, gray *(continued)*
541.52	50/0"		16	End of Boring
-85				
-90				
-95				
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/11/13

ROUTE IL Route 9 DESCRIPTION East Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 2
Station 313+76.5
Offset 45.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
622.10				**TOPSOIL**, approximately 10"
	3			**FILL: CLAY**, brown, trace organics
	4		23	
	6			
	2			
-5	2		34	
	2			
	1			
616.00	1		22	
	1			**FILL: SANDY LOAM**, gray
	1			
	1			
613.00 -10	1		24	
	1			**SANDY CLAY LOAM**, gray, medium stiff
	2			▼
	3		19	
	3			
609.50	2			**SAND**, gray, very loose
	1		18	
-15	1			Clay seam at 14.5 feet
	2			
	1		14	
	1			
604.00	2			
-20	1	<.5	24	**SANDY CLAY**, gray, soft to medium stiff
	1	P		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SANDY CLAY, gray, soft to medium stiff *(continued)*
	1			
	2	<.5	27	
	5	P		
	3			
598.50	5	1.2	24	
-25	9	S		**CLAY**, gray, stiff
	5			
	6	1.3	14	
	8	S		
594.00	3			
	5		17	**SAND**, gray, medium dense
-30	7			
589.50	7			**SANDY LOAM**, gray, medium dense
	12		19	
-35	14			
584.50	11			**SILT**, gray, dense
	15		20	
-40	16			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Date 6/11/13

ROUTE IL Route 9 DESCRIPTION East Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 2
Station 313+76.5
Offset 45.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SILT, gray, dense *(continued)*
579.50				
	4			**SAND**, gray, medium dense to very dense
	5		17	
-45	9			
	7			
	13		19	
-50	15			
	27		10	
-55	31			
564.50	8			**CLAY**, gray, stiff to very stiff
-60	11	1.3	32	
	17	S		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				CLAY, gray, stiff to very stiff *(continued)*
	3			
	4	1.1	31	
-65	5	S		
	9			
	9	1.9	19	
-70	11	S		
549.50	8			**SAND**, gray, medium dense
	12		14	
-75	20			
544.50				**FRACTURED BEDROCK**
543.50				Auger Refusal at 79.5 feet
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Date 6/11/13

ROUTE IL Route 9 DESCRIPTION East Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 2
Station 313+76.5
Offset 45.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 611.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				End of Boring
-85				
-90				
-95				
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/12/13

ROUTE IL Route 9 DESCRIPTION West Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 3
Station 312+6.5
Offset 42.5 ft RT
Ground Surface Elev. 623.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 612.4 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL, approximately 6" 622.90			
FILL: CLAY, trace organics, brown	3		
	3		25
	3		
	3		
617.40			
FILL: SANDY CLAY, trace organics, brown and gray	1		
	1		20
	1		
615.40			
SANDY CLAY, gray, soft	0		
	1		22
-10	1		
612.40 ▼			
SAND, gray, very loose to loose	1		
	1		26
	1		
	2		
608.90	3		25
CLAY, gray, stiff to very stiff -15	3		
	5		
	6	2.2	14
	8	B	
	6		
-20	7		16
	8		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY, gray, stiff to very stiff *(continued)*	6		
	6	2.2	14
	10	B	
599.90			
SANDY CLAY, gray, very stiff	10		
	11	3.0	17
-25	20	P	
597.40			
SAND, gray, medium dense to dense	9		
	11		20
	15		
	7		
	10		23
-30	17		
	7		
	10		19
-35	12		
	5		
	3		18
-40	14		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/12/13

ROUTE IL Route 9 DESCRIPTION West Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 3
Station 312+6.5
Offset 42.5 ft RT
Ground Surface Elev. 623.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 612.4 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND, gray, medium dense to dense *(continued)*			
	13		
	23		13
-45	25		
574.90			
CLAY, gray, very stiff to hard	11	1.8	20
-50	15	S	
	12		
	13	4.3	14
-55	25	B	
	10		
	13	4.5	14
-60	23	B	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY, gray, very stiff to hard *(continued)*			
559.90			
SILTY CLAY, gray, stiff to very stiff	8		
	9	1.5	27
-65	13	P	
554.40	8		
CLAY, gray, very stiff	12	2.1	16
-70	15	B	
550.40			
SAND, gray, dense to very dense	8		
	12		7
-75	25		
	8		
543.90	32		14
WEATHERED SHALE, dark gray -80	50/3"		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/12/13

ROUTE IL Route 9 DESCRIPTION West Pier Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 3
Station 312+6.5
Offset 42.5 ft RT
Ground Surface Elev. 623.40 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 612.4 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
WEATHERED SHALE, dark gray *(continued)*			
	50/1"		15
-85			
535.90			
Borehole continued with rock coring.			
-90			
-95			
-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/14/13

ROUTE IL Route 9 DESCRIPTION West Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 4
Station 311+41.5
Offset 41.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 607.0 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				TOPSOIL, approximately 12"
622.00				
	1			**FILL: CLAY**, trace organics, brown
	3		25	
	5			
619.50				
	3			**FILL: SANDY CLAY**, brown
	3		14	
-5	3			
	3			
616.00	3		27	
	4			**FILL: CLAY**, brown and gray to gray
	1			
	1		27	
-10	1			
	0			
610.00	1		42	
	1			
	1			**LOAM**, gray, soft
	1	<.5	37	
-15	1	P		
606.50 ▼	3			
	5	3.5	13	**CLAY**, gray, stiff to very stiff
	8	P		
				sand seam at 18.5 to 19 feet
	3			
	5	2.8	13	
-20	7	B		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				CLAY, gray, stiff to very stiff *(continued)*
602.00				
	15			**SILT**, gray, dense
	19		18	
	25			
600.00				
	16			**SAND**, gray, medium dense to dense
	19		20	
-25	26			
	8			
	11		21	
	17			
	5			
	6		18	
-30	7			
	8			
	10		21	
-35	16			
	10			
	12		20	
-40	15			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/14/13

ROUTE IL Route 9 DESCRIPTION West Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 4
Station 311+41.5
Offset 41.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 607.0 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				SAND, gray, medium dense to dense *(continued)*
579.00				
	10			**CLAY**, gray, very stiff to hard
	17	3.5	15	
-45	26	P		
575.00				
	13			**SANDY CLAY**, gray, hard
	15	4.0	18	
-50	27	P		
570.00				
	5			**CLAY**, gray, stiff to very stiff
	7	1.1	24	
-55	12	S		
				sand seam at 58.5 to 59 feet
	3			
	5		26	
-60	9			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				CLAY, gray, stiff to very stiff *(continued)*
560.00				
	6			**SILTY CLAY**, gray, stiff
	7	1.5	28	
-65	8	P		
	8			
	10	1.4	46	**CLAY**, gray, stiff to very stiff
-70	12	B		
550.00				
	8			**SANDY CLAY**, gray, stiff to very stiff
	8	1.5	20	
-75	13	P		
545.00				
	50/5"			**HIGHLY WEATHERED SHALE**, gray
			13	
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Terracon

SOIL BORING LOG

Date 6/14/13

ROUTE IL Route 9 DESCRIPTION West Abutment Boring LOGGED BY AF

SECTION 120-BR-1 LOCATION , SEC. , TWP. , RNG. , Latitude , Longitude

COUNTY McDonough DRILLING METHOD HSA HAMMER TYPE AUTO

STRUCT. NO. 055+0086
Station 312+59

BORING NO. 4
Station 311+41.5
Offset 41.0 ft RT
Ground Surface Elev. 623.00 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 607.0 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DESCRIPTION
				HIGHLY WEATHERED SHALE, gray *(continued)*
539.50				
	50/0"			End of Boring
-85				
-90				
-95				
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

BEGIN BINDER COURSE – STA. 308 + 79.60

631.28
C - 61
F - 0
TS - 40.5' LT, 46.1' RT

630
625
620

PR ROW
EX ROW
1:3
S.D.
622.75
℄ EX BURIED CABLE
℄ EX FIBER OPTIC
1:4
1:3
S.D.
621.50
EX ROW
PR ROW

308 + 50.00

631.11
C - 67
F - 0
TS - 36.6' LT, 42.4' RT

630
625
620

PR ROW
EX ROW
1:4
1:3
S.D.
623.50
℄ EX FIBER OPTIC
℄ EX BURIED CABLE
1:4
1:3
S.D.
622.00
EX ROW
PR ROW

308 + 00.00

PROJECT BEGINS – STA. 307 + 80.00

630
625
620

EX ROW
624.7
℄ EX FIBER OPTIC
℄ EX BURIED CABLE
EX ROW
622.2

307 + 50.00

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

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 1 OF 13 SHEETS | STA. 307+50.00 | TO STA. 308+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	50
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

TRANSITION SIDESLOPES FROM 4:1 AT STA. 310+00 TO 3:1 AT STA. 310+50 LT.

BEGIN TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT – STA. 309+98.25 LT.

632.51
C - 15
F - 89
B - 18.3
TS - 55.1' LT, 48.2' RT

310+00.00

631.98
C - 24
F - 27
B - 8.2
TS - 48.2' LT, 52.3' RT

TRANSITION SIDESLOPES FROM 1:4 AT STA. 309+75 TO 1:3 AT STA. 310+25 RT.

309+50.00

BEGIN TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT – STA. 309+56.83 RT.

631.57
C - 43
F - 0
B - 0.9
TS - 45.1' LT, 48.1' RT

309+00.00

PR ROW
EX ROW
1:4
1:3.5
1:3
S.D. 621.00
S.D. 621.05
S.D. 621.50
S.D. 621.20
S.D. 622.00
S.D. 621.35
℄ EX FIBER OPTIC
℄ EX BURIED CABLE

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

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

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 2 OF 13 SHEETS | STA. 309+00.00 TO STA. 310+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	51

CONTRACT NO. 68215

ILLINOIS FED. AID PROJECT

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

635
630
625
620

633.60
C - 24
F - 96
B - 44.9
TS - 52.1' LT, 49.2' RT

311 + 00.00

1:3
PR ROW
EX ROW
S.D.
620.50
℄ EX FIBER OPTIC
℄ EX BURIED CABLE
620.75

633.05
C - 23
F - 57
B - 31.1
TS - 48.3' LT, 50.4' RT

310 + 50.00

620.90

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

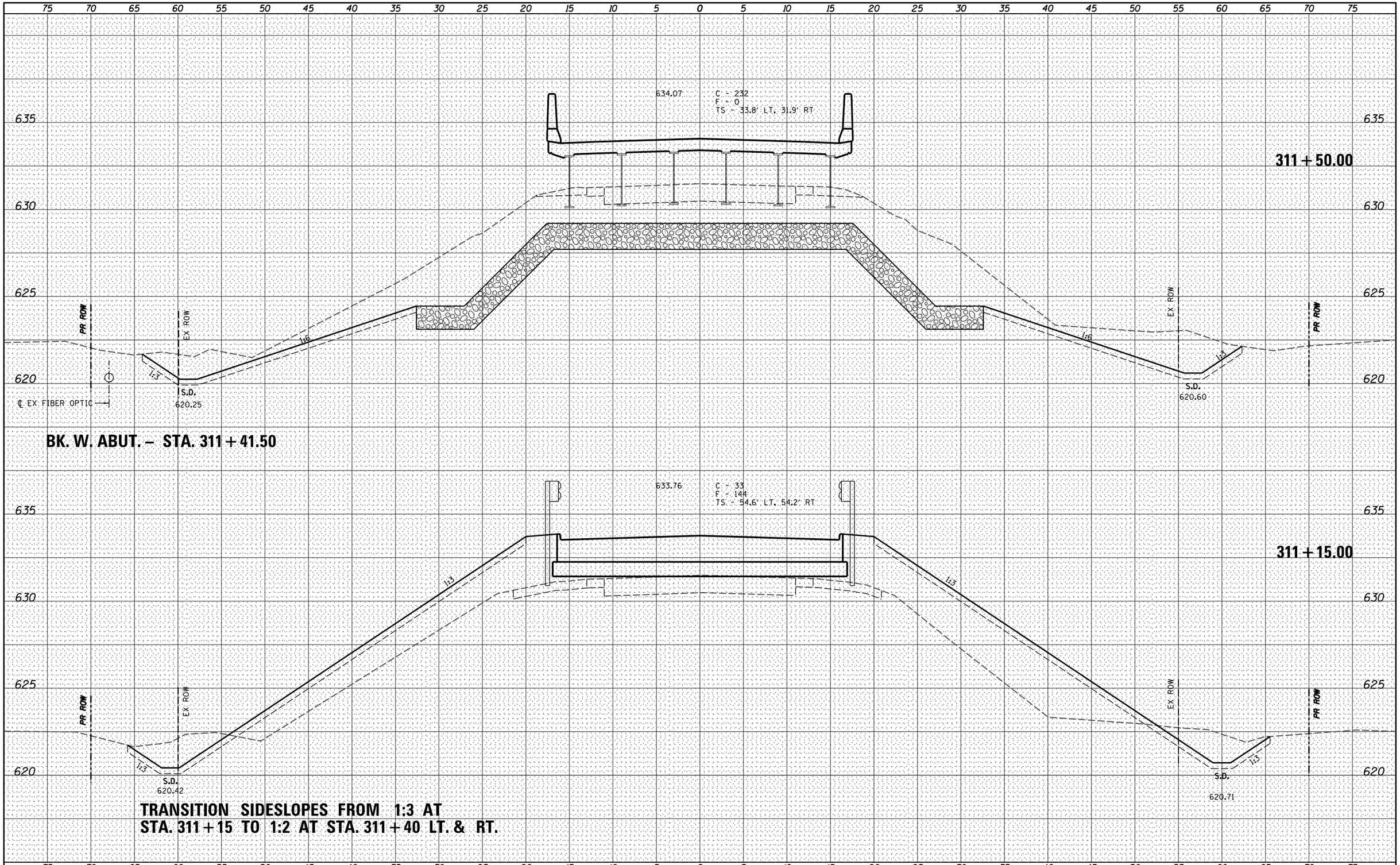
CROSS SECTIONS

SCALE: VARIES | SHEET NO. 3 OF 13 SHEETS | STA. 310+50.00 | TO STA. 311+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	52

CONTRACT NO. 68215

ILLINOIS FED. AID PROJECT



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

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

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 4 OF 13 SHEETS | STA. 311+15.00 | TO STA. 311+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	53

CONTRACT NO. 68215

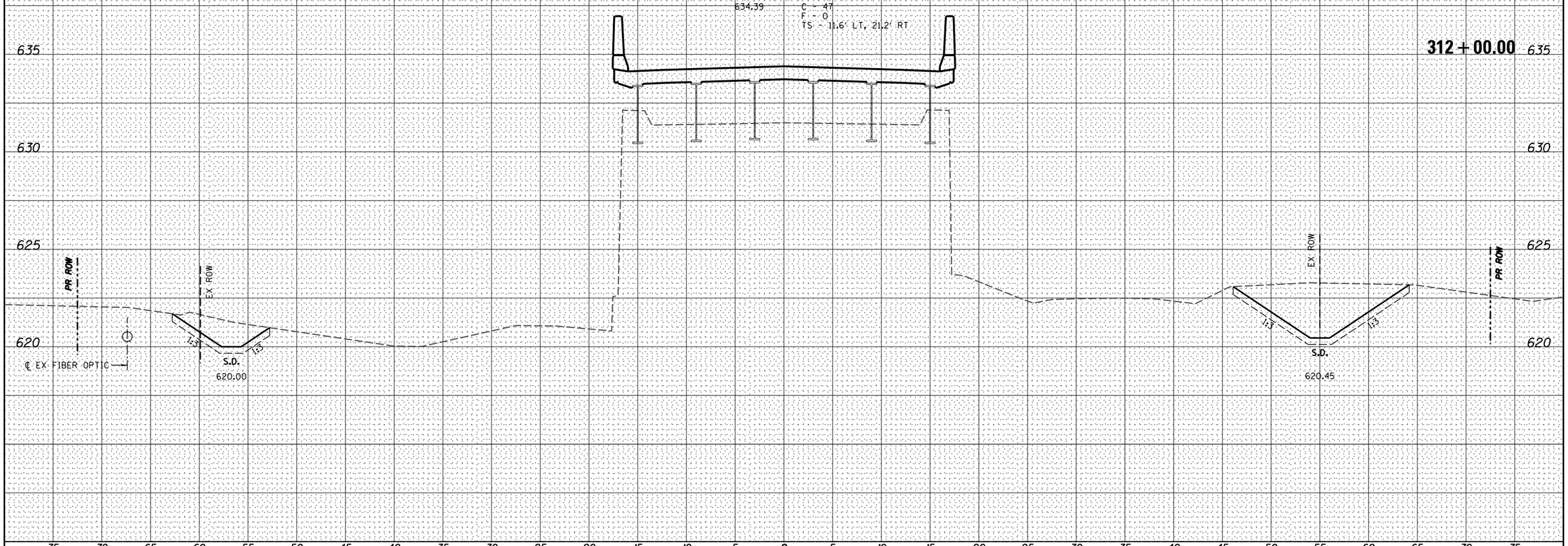
ILLINOIS FED. AID PROJECT

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



Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 5 OF 13 SHEETS | STA. 312+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	54

CONTRACT NO. 68215

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

634.55

635

630

625

620

615

PR ROW

EX ROW

EX ROW

PR ROW

℄ EX FIBER OPTIC

312 + 50.00

635

630

625

620

615

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 6 OF 13 SHEETS | STA. 312+50.00 | TO STA. 312+50.00

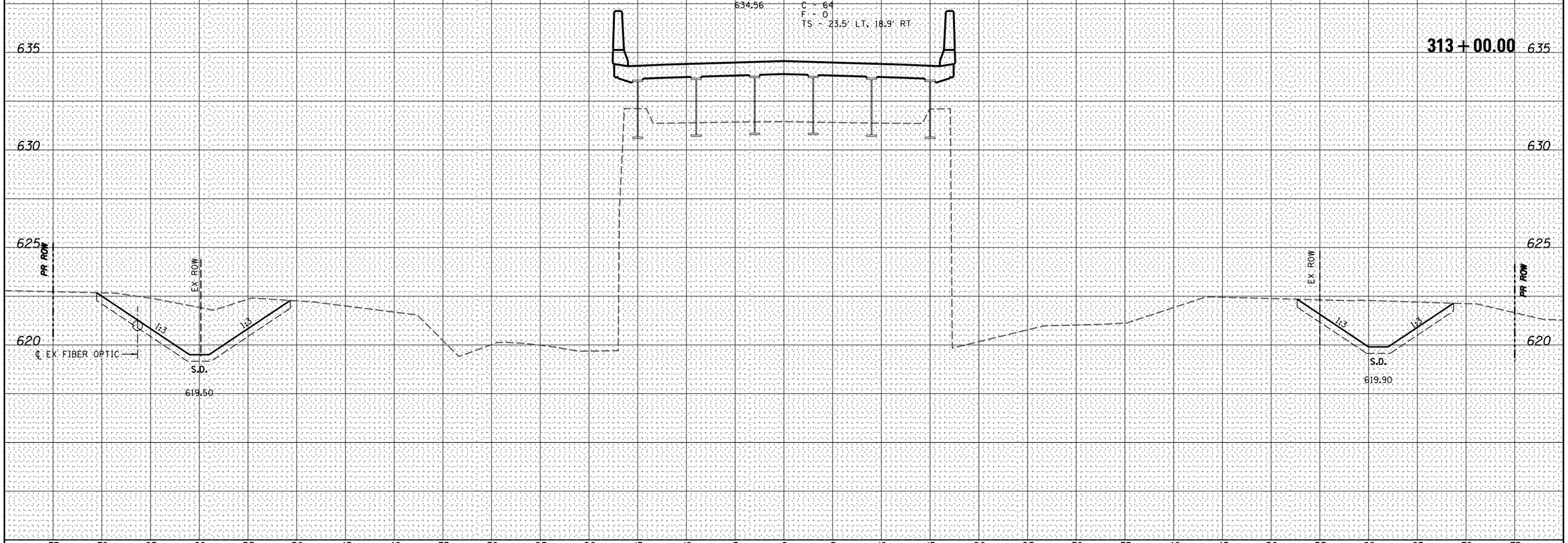
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	55
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

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



USER NAME = $USER$	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

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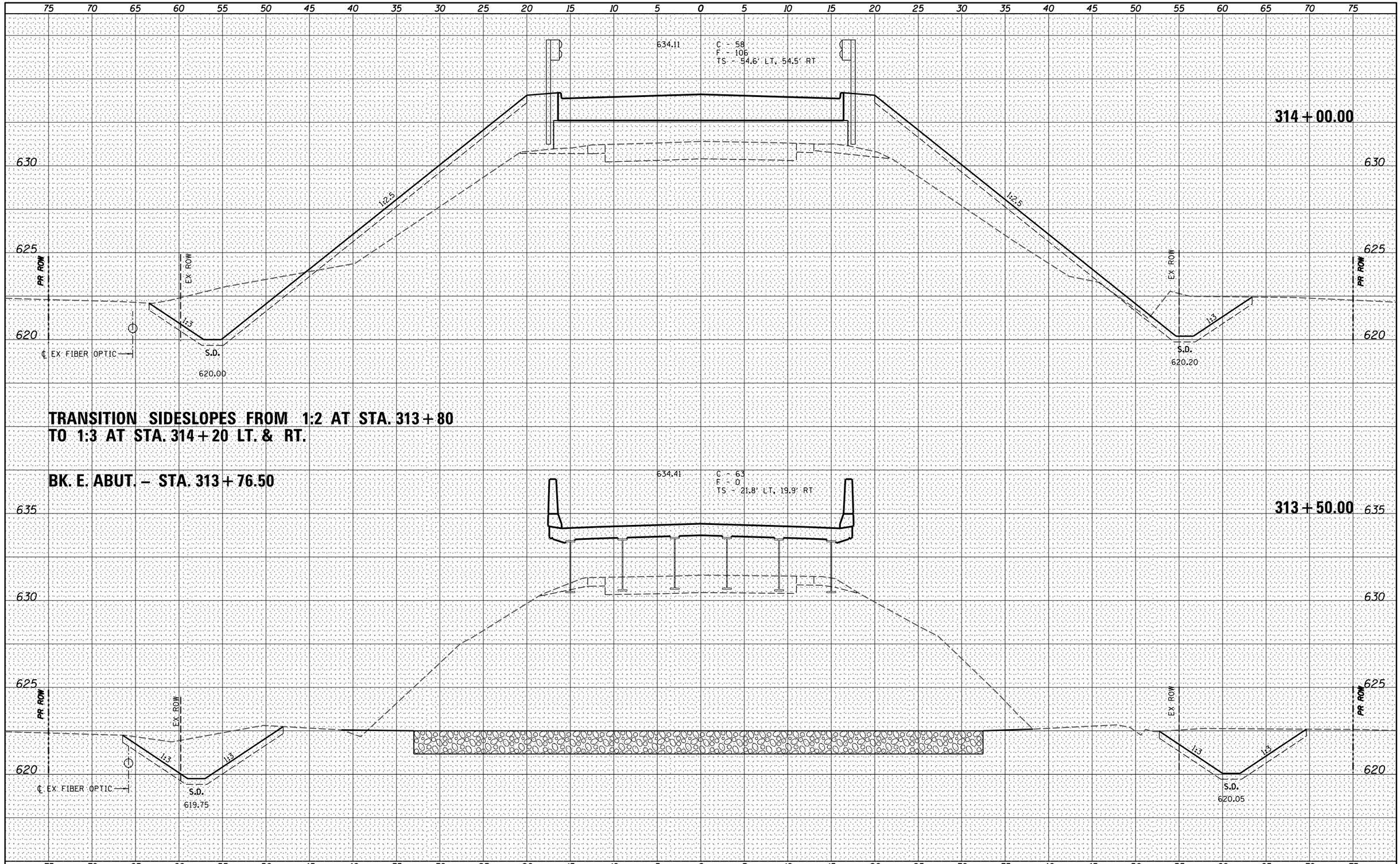
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 7 OF 13 SHEETS | STA. 313+00.00 | TO STA. 313+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	56
		CONTRACT NO. 68215		
		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	

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USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 8 OF 13 SHEETS | STA. 313+50.00 | TO STA. 314+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	57
		CONTRACT NO. 68215		
	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	

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

630

625

620

633.70
C - 50
F - 105
B - 49.3
TS - 54.6' LT, 59.4' RT

TRANSITION SIDESLOPES FROM 1:3 AT STA. 314+50 TO 1:4 AT STA. 315+00 RT.

314+50.00

PR ROW

EX ROW

1:3

℄ EX BURIED CABLE

℄ EX FIBER OPTIC

S.D.
620.25

S.D.
620.35

633.91
C - 56
F - 124
B - 56.4
TS - 56.8' LT, 58.1' RT

314+25.00

S.D.
620.13

S.D.
620.28

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

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USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

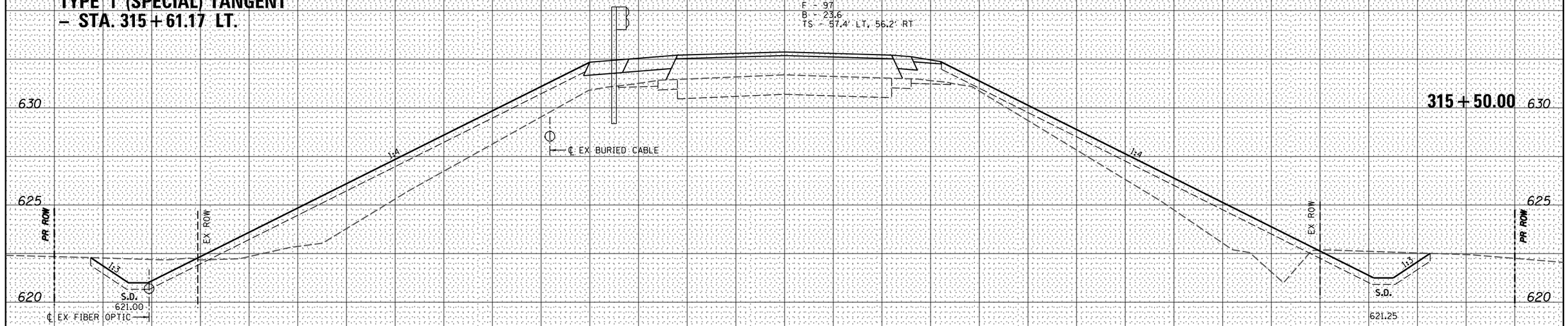
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 9 OF 13 SHEETS | STA. 314+25.00 | TO STA. 314+50.00

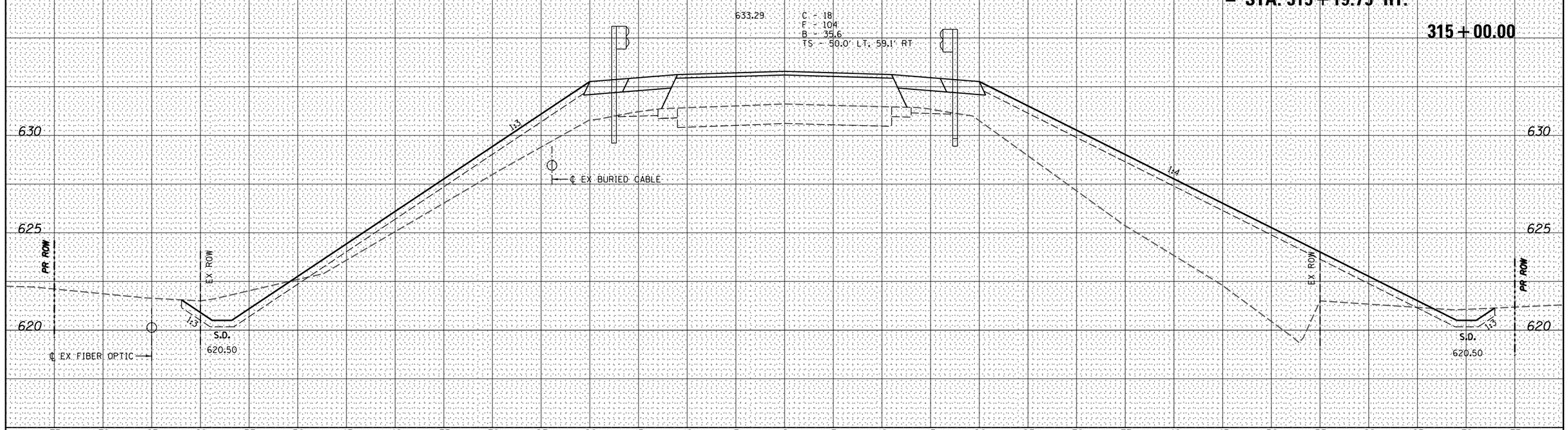
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	58
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			

END TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT – STA. 315+61.17 LT.



TRANSITION SIDESLOPES FROM 1:3 AT STA. 315+00 TO 1:4 AT STA. 315+50 LT.

END TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT – STA. 315+19.75 RT.



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

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

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

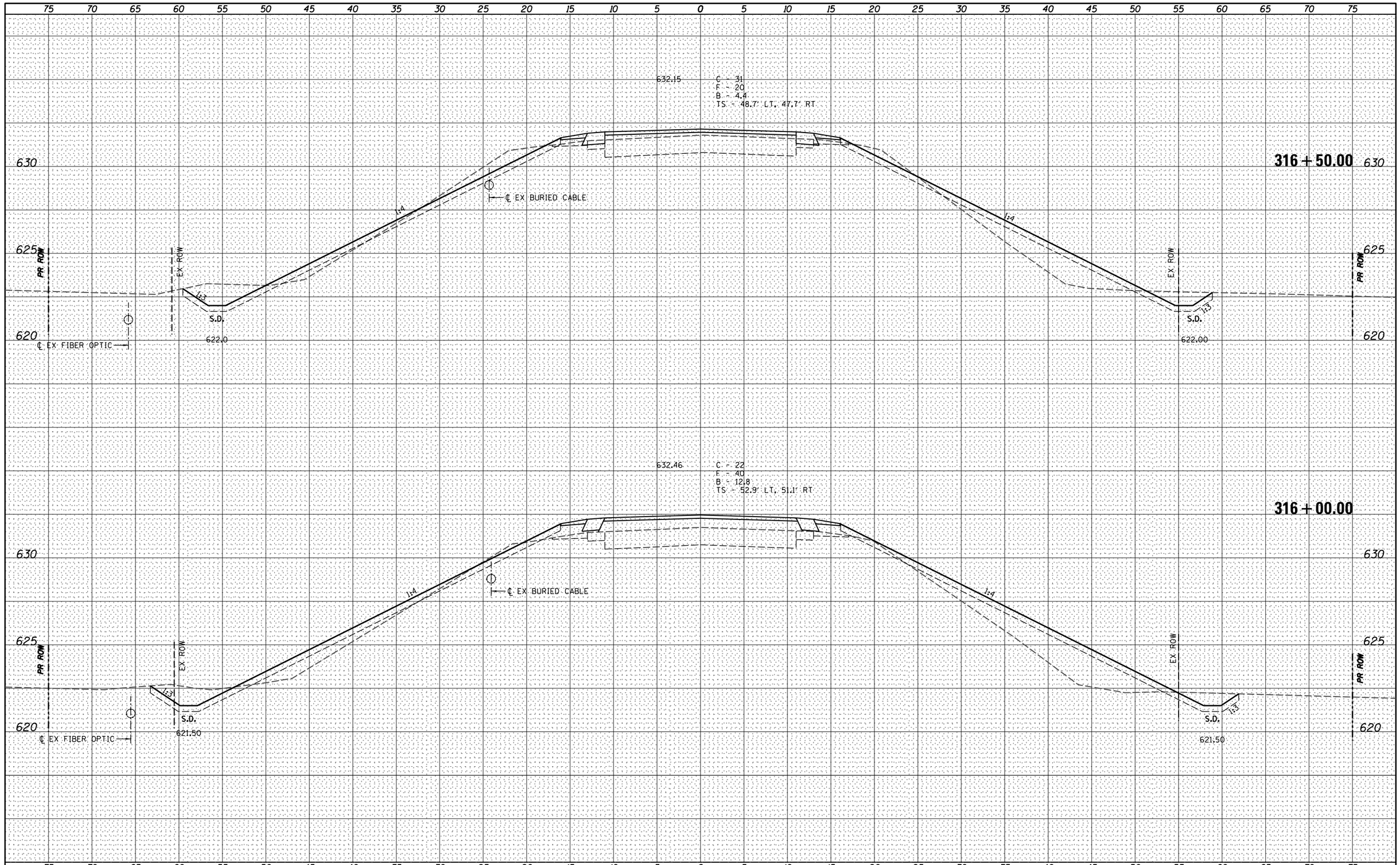
CROSS SECTIONS

SCALE: VARIES | SHEET NO. 10 OF 13 SHEETS | STA. 315+00.00 TO STA. 315+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	59
		CONTRACT NO. 68215		
	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

Veenstra & Kimm, Inc. Springfield, IL Phone: (217)544-8033	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

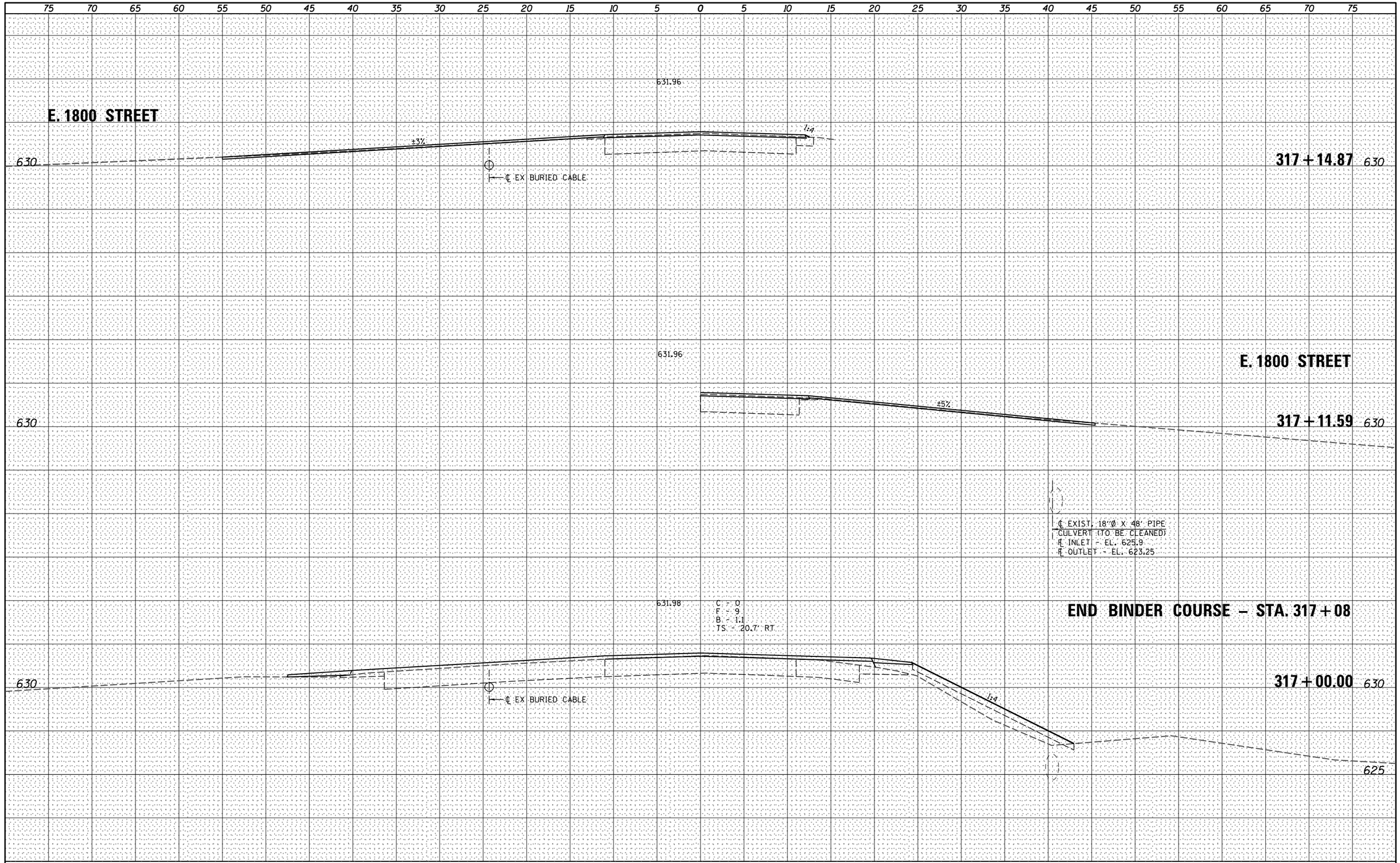
SCALE: VARIES | SHEET NO. 11 OF 13 SHEETS | STA. 316+00.00 | TO STA. 316+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	60

CONTRACT NO. 68215

ILLINOIS | FED. AID PROJECT

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



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

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 12 OF 13 SHEETS | STA. 317+00.00 | TO STA. 317+14.87

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	61

CONTRACT NO. 68215

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

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

EX ROW

630

318 + 00.00 630

EX ROW

PROJECT ENDS – STA. 317 + 70

631.96 C - 16 F - 1 TS - 25.2' RT

630

EX ROW

℄ EX BURIED CABLE

1:4

1:3

317 + 50.00 630

S.D. 627.8

625

625

631.95 C - 6 F - 0 TS - 11.4' RT

630

1:4

1:4

1:3

1:1

317 + 40.00 630

625

S.D. 625.9

625

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

Veenstra & Kimm, Inc.
Springfield, IL Phone: (217)544-8033

USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: VARIES | SHEET NO. 13 OF 13 SHEETS | STA. 317+50.00 | TO STA. 318+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
685	120BR-1	MCDONOUGH	62	62
		CONTRACT NO. 68215		
	ILLINOIS FED. AID PROJECT			