11-06-2015 LETTING ITEM 066

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 2462	12-00047 -00-BR	TAZEWELL	39	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 89653	

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES AND GENERAL NOTES
3.	TYPICAL CROSS SECTIONS
4.	SCHEDULE OF QUANTITIES
5.-6.	PLAN & PROFILE
7.	GUARDRAIL AND ENTRANCE DETAILS SHEET
8.-9.	DETOUR PLANS
10.-25.	BRIDGE PLANS
26.-34.	EXISTING BRIDGE PLANS
35.-39.	STATION CROSS SECTIONS

HIGHWAY STANDARDS:

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
631032-08	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED

SURFACE TRANSPORTATION PROGRAM – BRIDGE

PROJECT BHS–2462(105)
SECTION 12–00047–00–BR
TAZEWELL COUNTY
C.H. 11 / F.A.S. 2462 / TOWERLINE ROAD
STRUCTURE NO. 090–3029
JOB NO. C–94–011–14

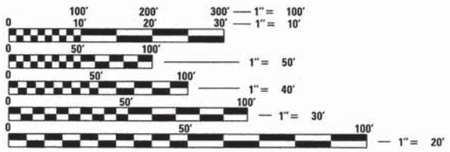
LOCATION OF SECTION INDICATED THUS: –

FUNCTIONAL CLASSIFICATION: MAJOR COLLECTOR (RURAL)
DESIGN SPEED: 50 MPH
DESIGN TRAFFIC: 1874 ADT (2013)

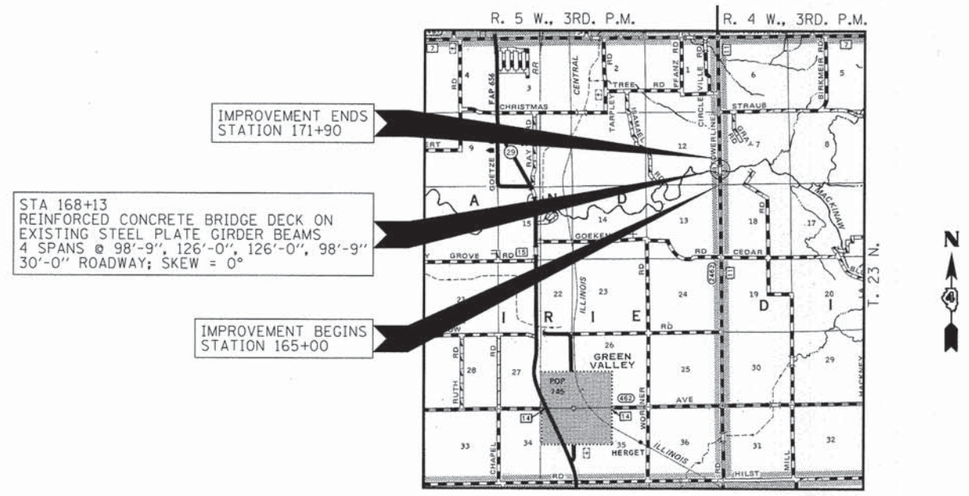
UTILITIES

FRONTIER COMMUNICATIONS
109 E MARKET ST, 2ND FLOOR
BLOOMINGTON, IL 61701

AT&T
1000 COMMERCE DRIVE, 1ST FLOOR
OAK BROOK, IL 60523



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.



LOCATION MAP

APPROXIMATE SCALE: 0 —— 1 MILE

NET LENGTH OF SECTION = 690 FEET = 0.131 MILES

WARNING

CALL JULIE TOLL FREE 1-800-892-0123

CALL 811 BEFORE YOU DIG

DIG NO: A0770587 A0770591

ILLINOIS DEPARTMENT OF TRANSPORTATION

APPROVED August 12 20 15
Craig Fuhr
COUNTY ENGINEER

PASSED August 24 20 15
DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review August 25 20 15
DEPUTY DIRECTOR OF HIGHWAYS
REGION THREE ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 89653

DATE: 08/14/2015
LICENSED PROFESSIONAL ENGINEER
JOSEPH W. JARZEE
062-54470
STATE OF ILLINOIS
EXPIRES: 11/30/2015

HAMPTON, LENZINI AND RENWICK, INC.
CIVIL ENGINEERS · STRUCTURAL ENGINEERS · LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
217.546.3400 www.hlrengineering.com
184.000959
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORPORATION

PROJECT NUMBER: 11.0323.130 DATE: 08/14/15

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	CONSTRUCTION CODE 0014 UNIT	TOTAL
^	20200100	EARTH EXCAVATION	CU YD	25
	20400800	FURNISHED EXCAVATION	CU YD	30
	25100115	MULCH, METHOD 2	ACRE	0.25
	28100207	STONE RIPRAP, CLASS A4	TON	270
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	13
	28000400	PERIMETER EROSION BARRIER	FOOT	277
	28200200	FILTER FABRIC	SQ YD	276
^	40600285	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	POUND	334
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	98
	40603210	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	TON	3
^	40603535	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	48
	48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	272
	50102400	CONCRETE REMOVAL	CU YD	9.3
	50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1
^	50157300	PROTECTIVE SHIELD	SQ YD	722
	50300225	CONCRETE STRUCTURES	CU YD	9.3
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	385.7
	50300260	BRIDGE DECK GROOVING	SQ YD	1403
	50300300	PROTECTIVE COAT	SQ YD	1637
^	50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1300
	50500505	STUD SHEAR CONNECTORS	EACH	3330
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	86390
*	50901050	STEEL RAILING, TYPE SM	FOOT	906
	51500100	NAME PLATES	EACH	1
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	60
	52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	10
	52100510	ANCHOR BOLTS, 3/4"	EACH	20
	58700300	CONCRETE SEALER	SQ FT	575
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	25
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	2
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
*	63200310	GUARDRAIL REMOVAL	FOOT	104
	67100100	MOBILIZATION	L SUM	1
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1470
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	3

^ SEE SPECIAL PROVISIONS

SUMMARY OF QUANTITIES

	CODE NO.	ITEM	CONSTRUCTION CODE 0014 UNIT	TOTAL
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	4
*	78200420	GUARDRAIL MARKERS, TYPE B	EACH	12
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2
*	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3
^	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.25
^	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	471
* ^	X6310088	TRAFFIC BARRIER TERMINAL TYPE 6A (SPECIAL)	EACH	2
^	XX008438	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	1
^	Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	10
* ^	Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1
* ^	Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1
^	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	36

^ SEE SPECIAL PROVISIONS

* SPECIALTY ITEMS

GENERAL NOTES

1) ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED JANUARY 1, 2015; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

2) ALL CLEARING AND GRUBBING, FENCE REMOVAL AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

3) THE LOCATION ON THE PLANS OF EXISTING DRAINAGE STRUCTURES, TELEPHONE LINES, ELECTRIC LINES, WATER SERVICE LINES, GAS MAINS, AND OTHER UTILITY FACILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATIONS AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.

4) WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DISTURBED BY CONSTRUCTION OPERATIONS.

5) THE REVISION NUMBER INDICATED FOR THE STANDARDS LISTED IN THE INDEX OF SHEETS SHALL BE USED IN THE CONSTRUCTION OF THIS SECTION.

6) TREES WITHIN THE RIGHT-OF-WAY WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER.

7) THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

8) THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES.

AGGREGATE SHOULDERS	2.0 TON / CU YD
STONE RIPRAP	1.75 TON / CU YD
HOX-MIX ASPHALT	112 LB / SQ YD / IN
BITUMINOUS MATERIALS (RESIDUAL RATE)	
ON PAVEMENT	0.05 LB./SQ.FT.
INTERMEDIATE LIFTS(FOG COAT)	0.025 LB./SQ.FT.
ON AGGREGATE SURFACE	0.25 LB./SQ.FT.

9) THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER.
ESTIMATED QUANTITY SEEDING, CLASS 2 (SPECIAL) = 0.25 ACRES

10) ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

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

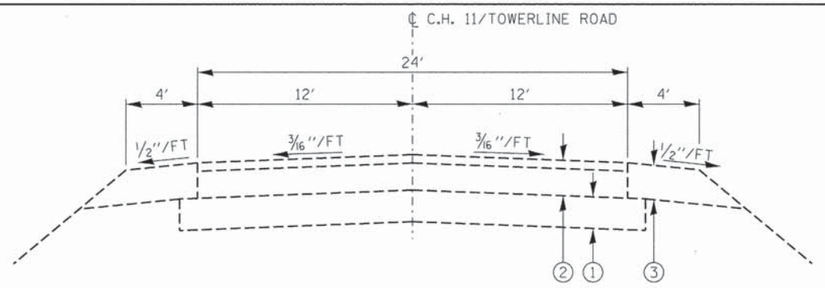
THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:
- BDE FORM 2289 (CULTURAL AND NATURAL RESOURCES REVIEW OF BORROW AREAS)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM – D4 PI0101

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

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

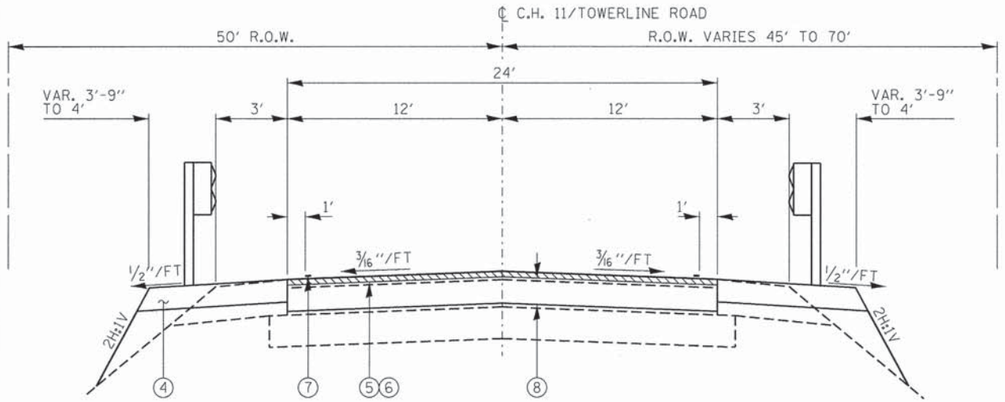
PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

12) COMMITMENTS AS OF 6/15/2015:
NONE



EXISTING TYPICAL CROSS SECTION

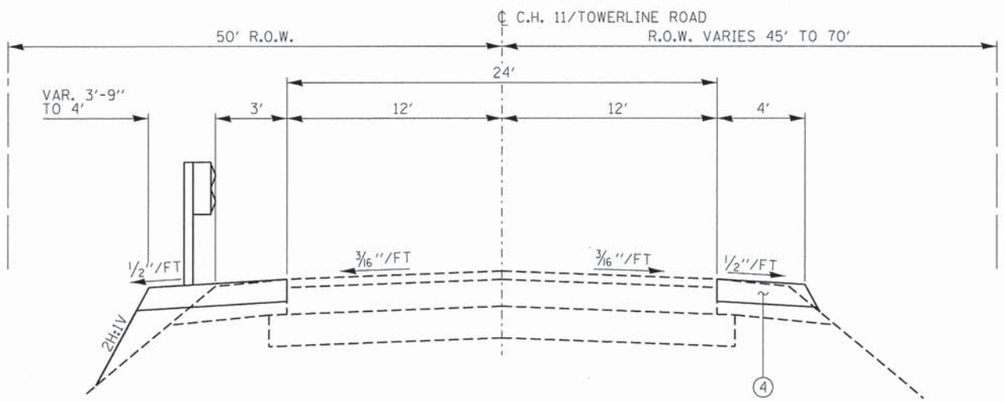
STA. 164+00 TO STA. 165+86
STA. 170+40 TO STA. 171+90



PROPOSED TYPICAL CROSS SECTION

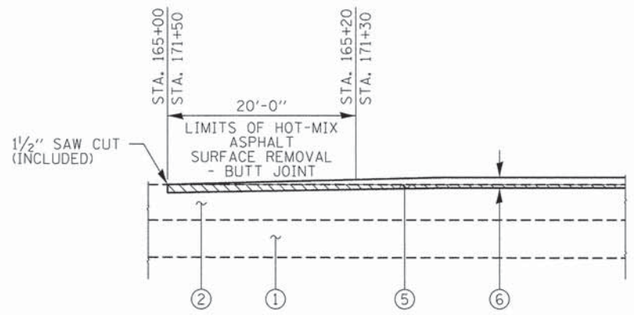
STA. 165+00 TO STA. 165+86.39
STA. 170+39.92 TO STA. 171+50

NOTE: HMA BINDER COURSE TO BE CONSTRUCTED FROM STA. 165+77.25 TO STA. 165+86.39 AND STA. 170+39.92 TO STA. 170+44.07

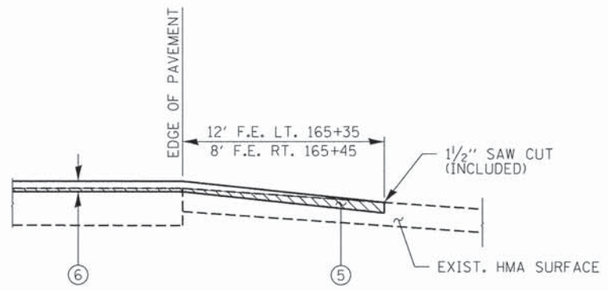


PROPOSED TYPICAL CROSS SECTION

STA. 171+50 TO STA. 171+90



BUTT JOINT DETAIL



ENTRANCE DETAIL

LEGEND

1. EXISTING AGGREGATE BASE (8.5")
2. EXISTING HMA PAVEMENT (8.5")
3. EXISTING AGGREGATE SHOULDER
4. PROPOSED AGGREGATE SHOULDERS, TYPE B 6"
5. HMA SURFACE REMOVAL VARIABLE DEPTH (1.5" MAX)
6. POLYMERIZED HMA SURFACE COURSE, MIX "D", N50 (1.5")
7. PAINT PAVEMENT MARKING LINE, (4")
8. POLYMERIZED HMA BINDER COURSE, IL-9.5 N50 (7")

HMA MIXTURE REQUIREMENTS		
LOCATIONS(S)	CH 11 / FAS 2462 / TOWERLINE ROAD	CH 11 / FAS 2462 / TOWERLINE ROAD
MIXTURE USE(S):	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE
PG:	SBS 76-22	SBS 76-22
DESIGN AIR VOIDS:	4% @ Ndes 50	4% @ Ndes 50
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL 9.5	IL 9.5
FRICTION AGGREGATE:	MIXTURE D	MIXTURE D
MIXTURE WEIGHT:	112 LBS. / SQ. YD. / INCH	112 LBS. / SQ. YD. / INCH
QUALITY CONTROL PROGRAM:	QC/QA	QC/QA

FILE NAME = 110323-sht-typsections.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3365 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		DRAWN - T.W.K.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - M.D.C.	REVISED -
	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

TYPICAL CROSS SECTIONS
C.H. 11 / TOWNLINE ROAD

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

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	3

CONTRACT NO. 89653

ILLINOIS FED. AID PROJECT

ROADWAY SCHEDULE

LOCATION	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE IL-9.5, N50 (7")	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE MIX "D", N50 (1.5")	AGGREGATE SHOULDERS TYPE B, 6"	HOT-MIX ASPHALT SURFACE REMOVAL VARIABLE DEPTH
	POUND	SQ YD	TON	TON	SQ YD	SQ YD
STA. 165+00 TO STA. 165+86.39	147	49	2	18	68	162
STA. 170+39.92 TO STA. 171+90	147	49	1	23	204	220
ENTRANCES	40			7		89
TOTAL	334	98	3	48	272	471

EARTHWORK SUMMARY

LOCATION	EARTH EXCAVATION	SHRINKAGE FACTOR	% USED	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT REQUIRED	EARTHWORK BALANCE WASTE (+) / SHORTAGE (-)
	CU YD			CU YD	CU YD	CU YD
STA. 165+00 TO STA. 165+86.39	7	25.00%	100.00%	5	2	3
STA. 170+39.92 TO STA. 171+90	17	25.00%	100.00%	13	45	-32
TOTAL	24			18	47	-29
USE	25					30

FURNISHED EXCAVATION 30 CU YD

SEEDING SCHEDULE

LOCATION	MULCH METHOD 2	TEMPORARY EROSION CONTROL SEEDING	SEEDING, CLASS 2 (SPECIAL)
	ACRE	POUND	ACRE
STA. 165+00 TO STA. 165+86.39	0.01	1.4	0.01
STA. 170+39.92 TO STA. 171+90	0.11	11.0	0.05
TOTAL	0.12	12.4	0.06
USE	0.25	13	0.25

PERIMETER EROSION BARRIER

LOCATION	FOOT
LT. STA. 170+40 TO STA. 171+90	150
RT. STA. 170+40 TO STA. 171+67	127
TOTAL	277

GUARDRAIL SCHEDULE

LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE 6A	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	GUARDRAIL REMOVAL	GUARDRAIL MARKERS TYPE A	GUARDRAIL MARKERS TYPE B	TERMINAL MARKER - DIRECT APPLIED	TRAFFIC BARRIER TERMINAL TYPE 6A (SPECIAL)
	FOOT	EACH	EACH	FOOT	EACH	EACH	EACH	EACH
LT. STA. 165+80.38 TO STA. 171+61.22	25	1	1	65	2	6	1	1
RT. STA. 165+59.37 TO STA. 171+36.22		1	1	39	2	6	1	1
TOTAL	25	2	2	104	4	12	2	2

PAVEMENT MARKING SCHEDULE

LOCATION	PAINT PAVEMENT MARKING - LINE 4"		RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
	EDGE LINE SOLID WHITE	CENTERLINE SKIP DASH YELLOW		
	FOOT	FOOT	EACH	EACH
LT. STA 165+00 TO STA 171+50	650			
CL. STA 165+00 TO STA 171+50		170	3	3
RT. STA 165+00 TO STA 171+50	650			
SUBTOTAL	1300	170	3	3
TOTAL	1470		3	3

GEORGE M. BIRKMEIER
NE¼, SE¼, SEC 12, T. 23 N., R. 5 W., 3RD P.M.

MAG NAIL IN EOP
MAG NAIL IN EOP
MAG NAIL IN EOP
P.O.T. STA. 160+25.00
MAG NAIL (SET)
N. 16025.00
E. 1000.00

CROPS

50' R.O.W.

LIMITS OF CONSTRUCTION
+35 F.E.
TBT 6A SPECIAL
7.5'R
RIPRAP

4'
12'
11'
12'
11'
4'
70' EXISTING

162 163 164 C.H. 11 / TOWERLINE ROAD 165 166 167 168
HMA SURFACE

IMPROVEMENT BEGINS
STATION 165+00

LIMITS OF CONSTRUCTION
12'
15'
15'
12'
4'
BM#2
17'R
TBT 6A SPECIAL

BM#1
36" CMP
W/FLAP GATE

+45 F.E.

RIVER
N
0 20' 40'
GRAPHIC SCALE

45' EXISTING R.O.W.

MACKINAW

EXISTING STRUCTURE NO. 090-3029
STATION 168+13 - FOUR SPAN CONTINUOUS STEEL PLATE GIRDER BRIDGE WITH POURED CONCRETE DECK AND PARAPETS ON SPILL THRU PILE BENT ABUTS AND SOLID CONCRETE PIERS.
453.53' Bk.-Bk. ABUTS; 29.5' o.-o. DECK

JOSEPHINE C. FRANKS
W½, SW¼, SEC 7, T. 23 N., R. 4 W., 3RD P.M.

CROPS

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

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

BM#1 - SPIKE NAIL IN GATE POST
57.7' RT. STA. 165+30
ELEV. 507.53

BM#2 - CHISELED "□" ON S.E. WINGWALL
16' RT., STA. 165+86.5
ELEV. 511.30

PVI STA. 165+50.00
ELEVATION 510.93

PROPOSED ℄ GRADE
0.0%
PAVEMENT TRANSITION +0.28%
EXISTING ℄ GRADE
STONE RIPRAP, CLASS A4

520 515 510 505 500 495 490 485 480

510.57 510.66 510.66 510.62 510.67 510.74 510.79 510.79 510.89 510.93 510.80 510.93 510.77 510.93 510.76 510.93 510.76 510.93 510.76 510.93

162+00 162+50 163+00 163+50 164+00 164+50 165+00 165+50 166+00 166+50 167+00 167+50 168+00

FILE NAME = 110323-sht-p&p.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LB/PE/SE CORP. 184.000959		DRAWN - L.G.C.	REVISED -	
	PLOT SCALE =	CHECKED - M.D.C.	REVISED -	
	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -	

PLAN & PROFILE
C.H. 11 / TOWERLINE ROAD

SCALE: 20H:5V | SHEET NO. 1 OF 2 SHEETS | STA. 162+00.00 TO STA. 168+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	5
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			

GEORGE M. BIRKMEIER
NE¼, SE¼, SEC 12, T. 23 N., R. 5 W., 3RD P.M.

CROPS

CHISLED "+" ON CURB
CHISLED "+" ON CURB
CHISLED "+" ON CURB
12.84
17.33
17.33

RIVER

P.O.T. STA. 168+13.00
MAG NAIL (SET)
N. 16813.00
E. 1000.00

POT STA. 168+13.00

RIPRAP

36" CMP W/FLAP GATE
BURIED CONDUIT

USGS GAGING STATION TO REMAIN SEE SPECIAL PROVISIONS

PERIMETER EROSION BARRIER

LIMITS OF CONSTRUCTION

BM#4

CONDUIT

15'
15'
12'
12'

168 169 170 171 172 173 174

4'
11'
12'
12'
11'
4'

50' R.O.W

C.H. 11 / TOWERLINE ROAD

HMA SURFACE

MAG NAILS ⌀ EOP
MAG NAILS ⌀ EOP
MAG NAILS ⌀ EOP
11.38
14.57
15.14

P.O.T. STA. 175+65.00
MAG NAIL (SET)
N. 17565.00
E. 1000.00

N

0 20' 40'
GRAPHIC SCALE

BM#3

36" CMP W/FLAP GATE
LIMITS OF CONSTRUCTION
PERIMETER EROSION BARRIER

IMPROVEMENT ENDS STATION 171+90

PAVING ENDS STATION 171+50

172+85.00
56' RT

RIPRAP

MACKINAW

STA 168+13
REINFORCED CONCRETE BRIDGE DECK ON EXISTING STEEL PLATE GIRDER BEAMS
4 SPANS @ 98'-9", 126'-0", 126'-0", 98'-9"
30'-0" ROADWAY; SKEW = 0°
STRUCTURE NO. 090-3029

TIMBER

CROPS

JOSEPHINE C. FRANKS
W½, SW¼, SEC 7, T. 23 N., R. 4 W., 3RD P.M.

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

PROFILE
SURVEYED
PLOTTED
PROFILE CHECKED
R.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

BM#3 - CHISELED "□" ON N.E. WINGWALL
15' RT., STA. 170+39.7
ELEV. 511.26

BM#4 - N.W. COR. WOOD PLATFORM (U.S.G.S.)
17.5' LT., STA. 170+59.4
ELEV. 511.14

PROPOSED ℄ GRADE
0.0%
VPI STA. 171+00.00
ELEVATION 510.93
PAVEMENT TRANSITION +0.14%
EXISTING ℄ GRADE

STONE RIPRAP, CLASS A4

520 515 510 505 500 495 490 485 480

510.76 510.93 | 510.76 510.93 | 510.76 510.93 | 510.77 510.93 | 510.83 510.93 | 510.82 510.93 | 510.83 510.93 | 511.00 511.00 | 511.18 | 511.24 | 511.35 | 511.43 | 511.49

168+00 168+50 169+00 169+50 170+00 170+50 171+00 171+50 172+00 172+50 173+00 173+50 174+00

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		DRAWN - L.G.C.	REVISED -
	PLOT SCALE =	CHECKED - M.D.C.	REVISED -
	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -

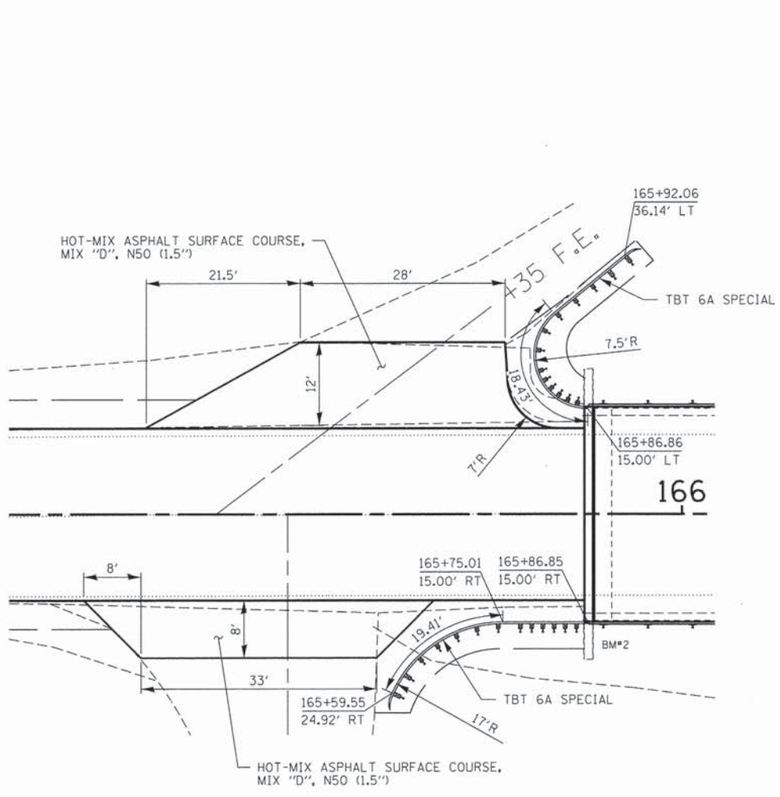
HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000859

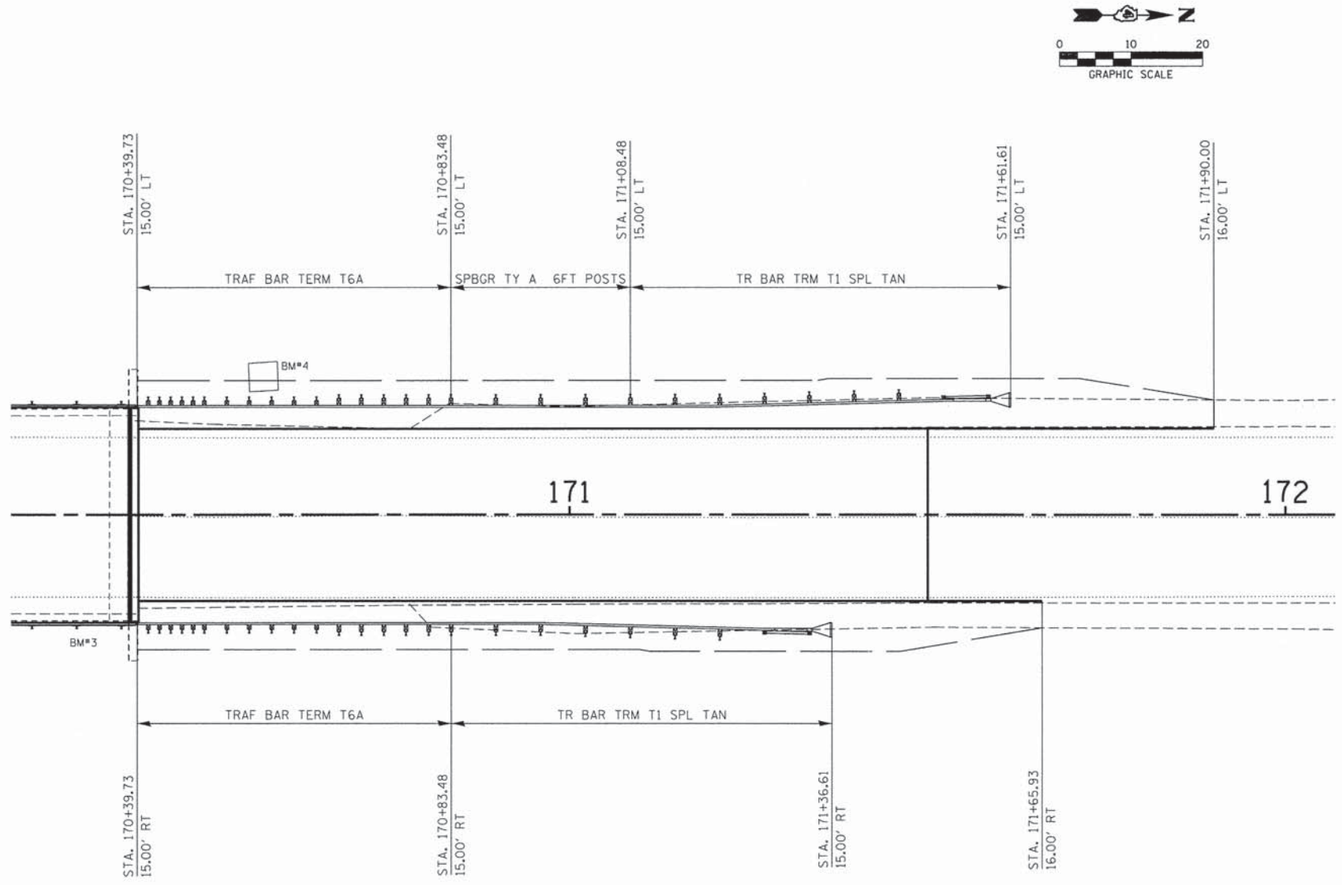
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

PLAN & PROFILE
C.H. 11 / TOWERLINE ROAD

SCALE: 20H:5V | SHEET NO. 2 OF 2 SHEETS | STA. 168+00.00 TO STA. 174+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	6
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			





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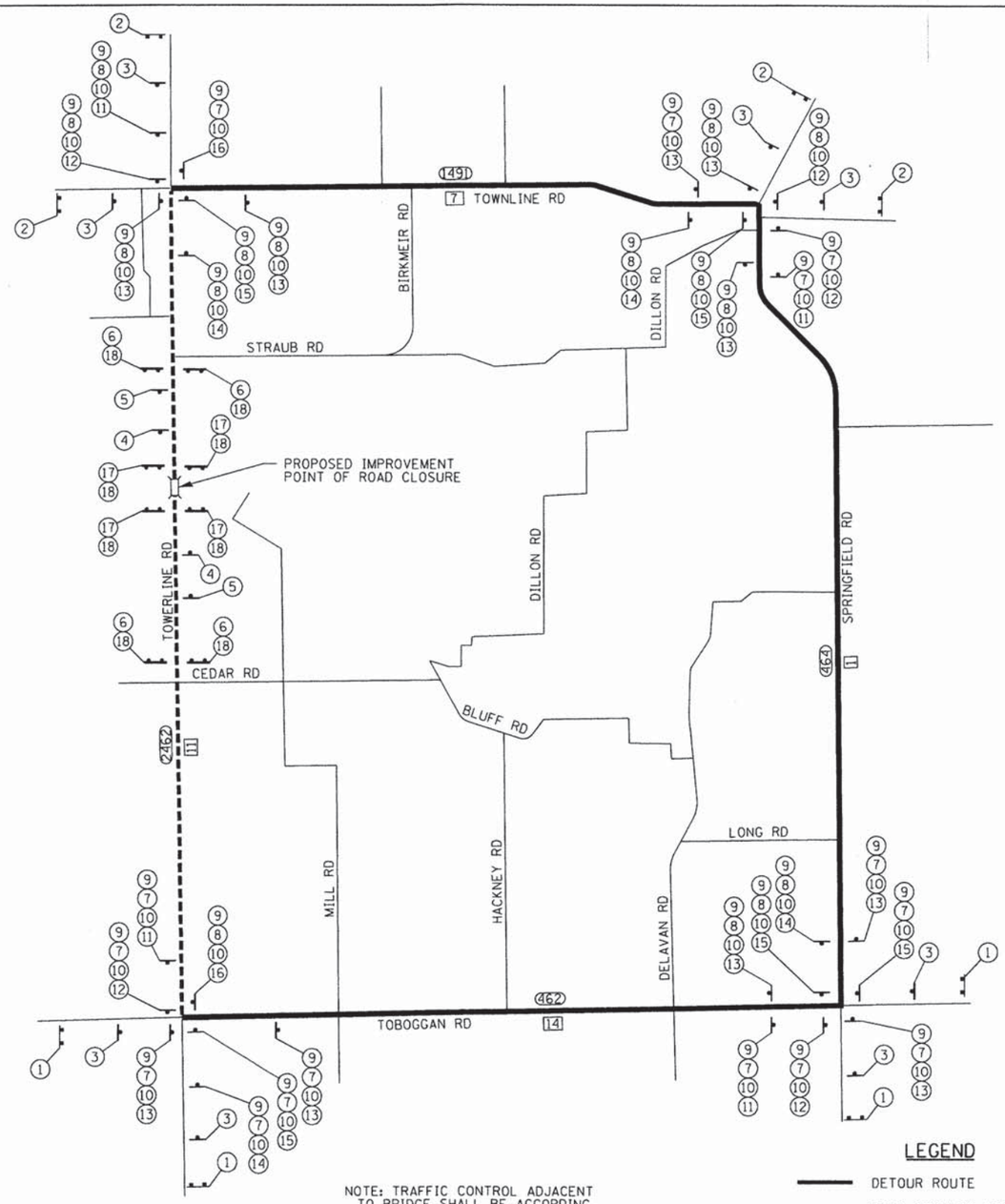
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		DRAWN - T.W.K.	REVISED -
	PLOT SCALE =	CHECKED - M.D.C.	REVISED -
	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

GUARDRAIL AND ENTRANCE DETAILS
C.H. 11 / TOWERLINE ROAD

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

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	7
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			



NOTE: TRAFFIC CONTROL ADJACENT TO BRIDGE SHALL BE ACCORDING TO STANDARD BLR 21.

LEGEND

- DETOUR ROUTE
- ROAD OPEN TO LOCAL TRAFFIC ONLY
- TYPE III BARRICADE W/AMBER FLASHING LIGHTS

SIGN LEGEND

1	TOWERLINE RD NORTH CLOSED TO THRU TRAFFIC	R11-3 60" x 30" WITH 2 AMBER FLASHING LIGHTS. (4 REQ'D)
2	TOWERLINE RD SOUTH CLOSED TO THRU TRAFFIC	R11-3 60" x 30" WITH 2 AMBER FLASHING LIGHTS. (4 REQ'D)
3	DETOUR AHEAD	W20-2, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (8 REQ'D)
4	ROAD CLOSED 500 FT	W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)
5	ROAD CLOSED AHEAD	W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)
6	ROAD CLOSED TO THRU TRAFFIC	R11-4 60" x 30" (4 REQ'D)
7	NORTH	M3-1 24" x 12" (15 REQ'D)
8	SOUTH	M3-3 24" x 12" (15 REQ'D)
9	DETOUR	M4-8 24" x 12" (30 REQ'D)
10	TOWERLINE RD	M1-1100 24" x 12" (30 REQ'D)
11		M5-1 L 21" x 15" (4 REQ'D)
12		M6-1 21" x 15" (5 REQ'D)
13		M6-3 21" x 15" (10 REQ'D)
14		M5-1 R 21" x 15" (4 REQ'D)
15		M6-1 21" x 15" (5 REQ'D)
16	END DETOUR	M4-8A 24" x 18" (2 REQ'D)
17	ROAD CLOSED	R11-2 48" x 30" (4 REQ'D)
18		TYPE III BARRICADES WITH TWO FLASHING LIGHTS EACH. HIGHWAY STD. 701901 (8 REQ'D)

FILE NAME = 110323-sht-detour.dgn | USER NAME = | DESIGNED - J.W.F. | REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3310 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE CORP. 184.001969 | | DRAWN - T.W.K. | REVISED -
PLOT SCALE = | CHECKED - M.D.C. | REVISED -
PLOT DATE = 8/20/2015 | DATE - 08/14/15 | REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

DETOUR PLAN
C.H. 11 / TOWERLINE ROAD
SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	8
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

DETOUR GENERAL NOTES

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 1, 2012", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2010", THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", AND THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION.

2. THE CONTRACTOR SHALL SCHEDULE ALL WORK IN AN EXPEDIENT MANNER TO REDUCE THE LENGTH OF TIME THAT THE DETOUR NEEDS TO BE IN EFFECT.

3. THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES FOR APPROVAL OF SUCH DATE.

4. IF REQUESTED BY THE ENGINEER A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.

5. THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK. THE TAZEWELL COUNTY HIGHWAY DEPARTMENT REPRESENTATIVE FOR THE DETOUR IS:

   CRAIG FINK
   TAZEWELL COUNTY HIGHWAY DEPARTMENT
   21308 IL RTE 9
   TREMONT, IL 61568
   309-925-5532

6. THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.

7. LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

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

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

10. THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR".

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

12. ALL DETOUR SIGNING SHALL BE POST MOUNTED.

13. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1106.01 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION AND ACCEPTANCE OF THE SIGNS.

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

15. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1106.02 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.

16. THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THE PLANS ARE 18" BY 18".

17. ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8'-0" IN WIDTH EACH, FOR A SINGLE APPROACH LANE.

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

19. THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" BY VARIABLE OR A 12" BY VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.

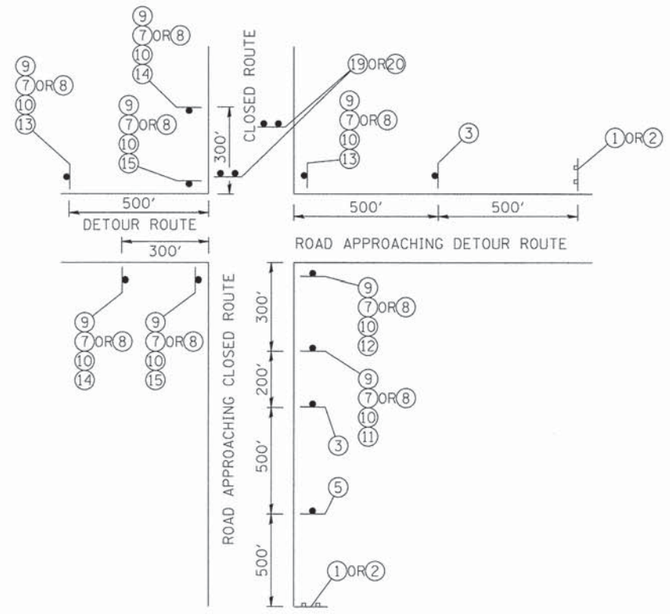
20. DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.

21. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.11 OF THE STANDARD SPECIFICATIONS SHALL APPLY.

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

23. THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARDS ARE APPLICABLE FOR THIS WORK: STANDARD 701901, BLR 21

24. THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) DAYS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.



TYPICAL INTERSECTION
AT POINT OF DETOUR

FILE NAME = 110323-sht-detour.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LB / PE / SE CORP. 184.000959		DRAWN - T.W.K.	REVISED -
	PLOT SCALE =	CHECKED - S.W.M.	REVISED -
	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

DETOUR PLAN
C.H. 11 / TOWERLINE ROAD

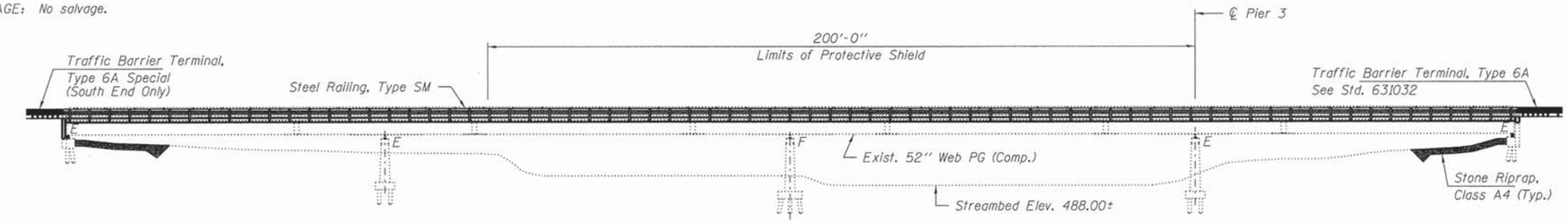
SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	9
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			

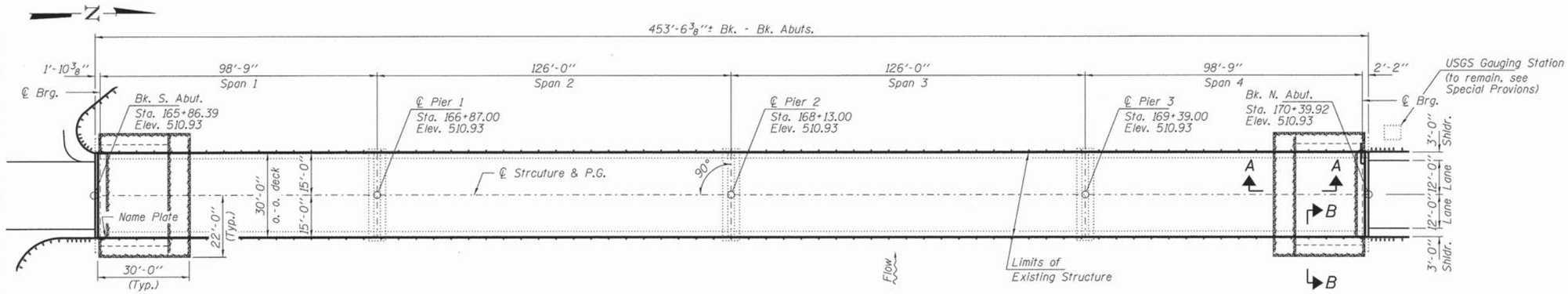
BENCHMARK: B.M. #2 - Chiseled "□" on S.E. Wingwall. 16' Rt., Sta. 165+86.5, Elev. 511.30

EXISTING STRUCTURE: SN 090-3029 built in 1967 as C.H. 11 Section 47-1B. Structure consists of a four span continuous steel plate girder on solid wall piers and spill through abutments. 453'-6 3/8" bk.-bk. and 29.5' o.-o. Existing deck to be removed and replaced using road closure. Traffic to be maintained using a detour route.

SALVAGE: No salvage.



ELEVATION



PLAN

See sheet 2 of 25 for SECTION A-A and SECTION B-B.

INDEX OF STRUCTURE SHEETS

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges (New Construction)

LOADING HS-20 (NEW CONSTRUCTION)

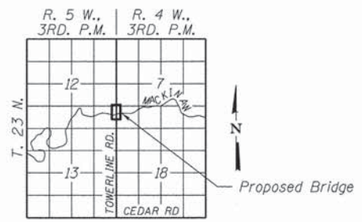
50 psf future wearing surface.

DESIGN STRESSES

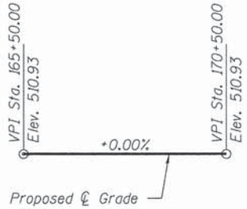
f'c = 5,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinf.)
fy = 36,000 psi (Existing Structural Steel)
36,000 psi (New Structural Steel M270 GR. 36)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.043g
Site Coefficient (S) = 1.0



LOCATION SKETCH



PROFILE GRADE
(along ℄ roadway)

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

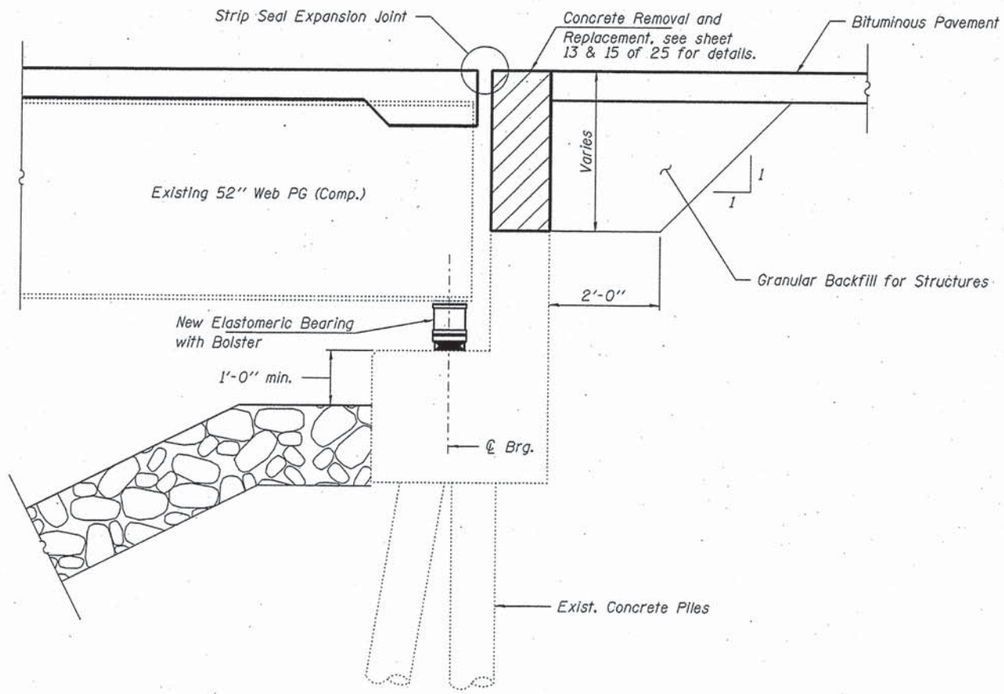
Michael D. Cima 06/17/2015
ILLINOIS STRUCTURAL NO. 081-5984

LICENSED STRUCTURAL ENGINEER
MICHAEL D. CIMA
081-5984
SPRINGFIELD, IL
STATE OF ILLINOIS

Expires 11-30-2016

GENERAL PLAN & ELEVATION
C.H. 11 OVER
MACKINAW RIVER
FAS 2462 - SECTION 12-00047-00-BR
TAZEWELL COUNTY
STATION 168+13
STRUCTURE NO. 090-3029

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	GENERAL PLAN & ELEVATION STRUCTURE NO. 090-3029	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	10
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -						CONTRACT NO. 89653	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		SHEET NO. 1 OF 25 SHEETS			ILLINOIS	FED. AID PROJECT	



SECTION THRU ABUTMENT

(Horiz. Dimensions @ Rt. L's)

MACKINAW RIVER
RE-BUILT 201_ BY
TAZEWELL COUNTY
SEC. 12-00047-00-BR
F.A.S. 2462 STA. 168+13
STR. NO. 090-3029 LOADING HS-20

NAME PLATE

See Std. 515001

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

GENERAL NOTES

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$"ϕ, holes $\frac{15}{16}$"ϕ, unless otherwise noted.

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

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Engineer of Record for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Concrete Sealer shall be applied to the designated areas of the abutments.

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

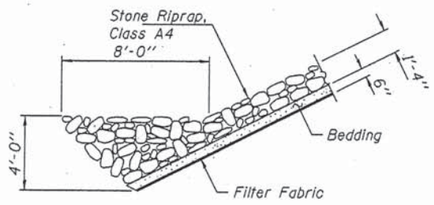
The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1.

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

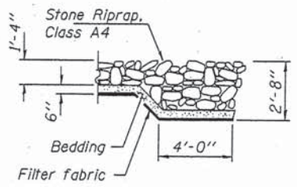
Cleaning and painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures" and as specified below.

a) All existing structural steel within 10 ft (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC-SP15.

b) All existing steel shall be painted according to the requirements of Paint System I - OZ/E/U. The color of the final finish coat for all steel surfaces shall be Gray Munsell No 5B 7/1.



SECTION A-A



SECTION B-B

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Stone Riprap, Class A4	Ton		270	270
	Filter Fabric	Sq. Yd.		276	276
	Concrete Removal	Cu. Yd.		9.3	9.3
*	Removal of Existing Concrete Deck	Each	1		1
	Protective Shield	Sq. Yd.	722		722
	Concrete Structures	Cu. Yd.		9.3	9.3
	Concrete Superstructure	Cu. Yd.	385.7		385.7
	Bridge Deck Grooving	Sq. Yd.	1,403		1,403
	Protective Coat	Sq. Yd.	1,637		1,637
	Furnishing and Erecting Structural Steel	Pound	1,300		1,300
	Stud Shear Connectors	Each	3,330		3,330
	Reinforcement Bars, Epoxy Coated	Pound	85,120	1,270	86,390
	Steel Railing, Type SM	Foot	906		906
	Name Plates	Each	1		1
	Preformed Joint Strip Seal	Foot	60		60
	Elastomeric Bearing Assembly, Type II	Each	10		10
	Anchor Bolts, $\frac{3}{4}$"	Each		20	20
	Concrete Sealer	Sq. Ft.		575	575
	Jack and Remove Existing Bearings	Each	10		10
	Containment and Disposal of Lead Paint Cleaning Residues	L. Sum			1
	Cleaning and Painting Steel Bridge No. 1	L. Sum			1
	Granular Backfill for Structures	Cu. Yd.			36

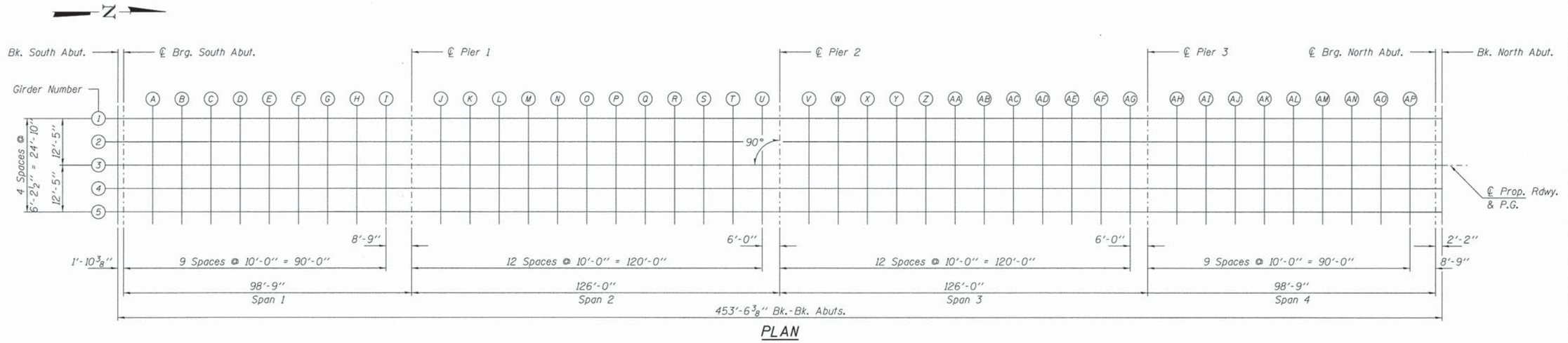
*Includes removal of existing parapet, railing and transverse joints.

FILE NAME = 110323-sht-bridge.dgn	USER NAME = *USER*	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3883 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LD / PE / SE CORP. 184.000958		CHECKED - S.M.S	REVISED -	
	PLOT SCALE = *SCALE*	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 9/8/2015	CHECKED - M.D.C.	REVISED -	

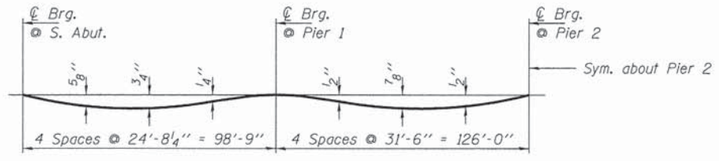
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

GENERAL DETAILS
STRUCTURE NO. 090-3029
SHEET NO. 2 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	11
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			



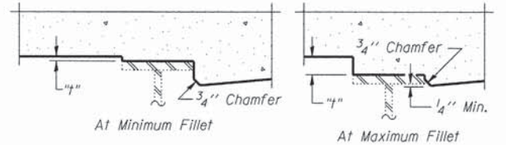
PLAN



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 as shown on sheets 4 & 5 of 25.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets 4 & 5 of 25. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 4 & 5 of 25, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	TOP OF SLAB ELEVATIONS STRUCTURE NO. 090-3029 SHEET NO. 3 OF 25 SHEETS	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3080 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000969		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	12
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -					CONTRACT NO. 89653		
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -					ILLINOIS FED. AID PROJECT		

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	165+86.39	-12.42	510.74	510.74
℄ Brg. S. Abut.	165+88.25	-12.42	510.74	510.74
A	165+98.25	-12.42	510.74	510.76
B	166+08.25	-12.42	510.74	510.78
C	166+18.25	-12.42	510.74	510.79
D	166+28.25	-12.42	510.74	510.80
E	166+38.25	-12.42	510.74	510.79
F	166+48.25	-12.42	510.74	510.78
G	166+58.25	-12.42	510.74	510.77
H	166+68.25	-12.42	510.74	510.75
I	166+78.25	-12.42	510.74	510.74
℄ Pier 1	166+87.00	-12.42	510.74	510.74
J	166+97.00	-12.42	510.74	510.74
K	167+07.00	-12.42	510.74	510.76
L	167+17.00	-12.42	510.74	510.77
M	167+27.00	-12.42	510.74	510.79
N	167+37.00	-12.42	510.74	510.80
O	167+47.00	-12.42	510.74	510.81
P	167+57.00	-12.42	510.74	510.81
Q	167+67.00	-12.42	510.74	510.80
R	167+77.00	-12.42	510.74	510.78
S	167+87.00	-12.42	510.74	510.76
T	167+97.00	-12.42	510.74	510.75
U	168+07.00	-12.42	510.74	510.74
℄ Pier 2	168+13.00	-12.42	510.74	510.74
V	168+23.00	-12.42	510.74	510.74
W	168+33.00	-12.42	510.74	510.75
X	168+43.00	-12.42	510.74	510.77
Y	168+53.00	-12.42	510.74	510.79
Z	168+63.00	-12.42	510.74	510.80
AA	168+73.00	-12.42	510.74	510.81
AB	168+83.00	-12.42	510.74	510.81
AC	168+93.00	-12.42	510.74	510.80
AD	169+03.00	-12.42	510.74	510.79
AE	169+13.00	-12.42	510.74	510.77
AF	169+23.00	-12.42	510.74	510.75
AG	169+33.00	-12.42	510.74	510.74
℄ Pier 3	169+39.00	-12.42	510.74	510.74
AH	169+49.00	-12.42	510.74	510.74
AI	169+59.00	-12.42	510.74	510.75
AJ	169+69.00	-12.42	510.74	510.77
AK	169+79.00	-12.42	510.74	510.78
AL	169+89.00	-12.42	510.74	510.79
AM	169+99.00	-12.42	510.74	510.80
AN	170+09.00	-12.42	510.74	510.79
AO	170+19.00	-12.42	510.74	510.78
AP	170+29.00	-12.42	510.74	510.76
℄ Brg. N. Abut.	170+37.75	-12.42	510.74	510.74
Bk. N. Abut.	170+39.92	-12.42	510.74	510.74

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	165+86.39	-6.21	510.83	510.83
℄ Brg. S. Abut.	165+88.25	-6.21	510.83	510.83
A	165+98.25	-6.21	510.83	510.86
B	166+08.25	-6.21	510.83	510.88
C	166+18.25	-6.21	510.83	510.89
D	166+28.25	-6.21	510.83	510.89
E	166+38.25	-6.21	510.83	510.89
F	166+48.25	-6.21	510.83	510.88
G	166+58.25	-6.21	510.83	510.86
H	166+68.25	-6.21	510.83	510.85
I	166+78.25	-6.21	510.83	510.84
℄ Pier 1	166+87.00	-6.21	510.83	510.83
J	166+97.00	-6.21	510.83	510.84
K	167+07.00	-6.21	510.83	510.85
L	167+17.00	-6.21	510.83	510.87
M	167+27.00	-6.21	510.83	510.89
N	167+37.00	-6.21	510.83	510.90
O	167+47.00	-6.21	510.83	510.91
P	167+57.00	-6.21	510.83	510.90
Q	167+67.00	-6.21	510.83	510.90
R	167+77.00	-6.21	510.83	510.88
S	167+87.00	-6.21	510.83	510.86
T	167+97.00	-6.21	510.83	510.84
U	168+07.00	-6.21	510.83	510.83
℄ Pier 2	168+13.00	-6.21	510.83	510.83
V	168+23.00	-6.21	510.83	510.84
W	168+33.00	-6.21	510.83	510.85
X	168+43.00	-6.21	510.83	510.87
Y	168+53.00	-6.21	510.83	510.89
Z	168+63.00	-6.21	510.83	510.90
AA	168+73.00	-6.21	510.83	510.91
AB	168+83.00	-6.21	510.83	510.91
AC	168+93.00	-6.21	510.83	510.90
AD	169+03.00	-6.21	510.83	510.88
AE	169+13.00	-6.21	510.83	510.86
AF	169+23.00	-6.21	510.83	510.85
AG	169+33.00	-6.21	510.83	510.84
℄ Pier 3	169+39.00	-6.21	510.83	510.83
AH	169+49.00	-6.21	510.83	510.84
AI	169+59.00	-6.21	510.83	510.85
AJ	169+69.00	-6.21	510.83	510.87
AK	169+79.00	-6.21	510.83	510.88
AL	169+89.00	-6.21	510.83	510.89
AM	169+99.00	-6.21	510.83	510.89
AN	170+09.00	-6.21	510.83	510.89
AO	170+19.00	-6.21	510.83	510.87
AP	170+29.00	-6.21	510.83	510.85
℄ Brg. N. Abut.	170+37.75	-6.21	510.83	510.83
Bk. N. Abut.	170+39.92	-6.21	510.83	510.83

GIRDER 3, ℄ STRUCTURE, RDWY., & P.G.

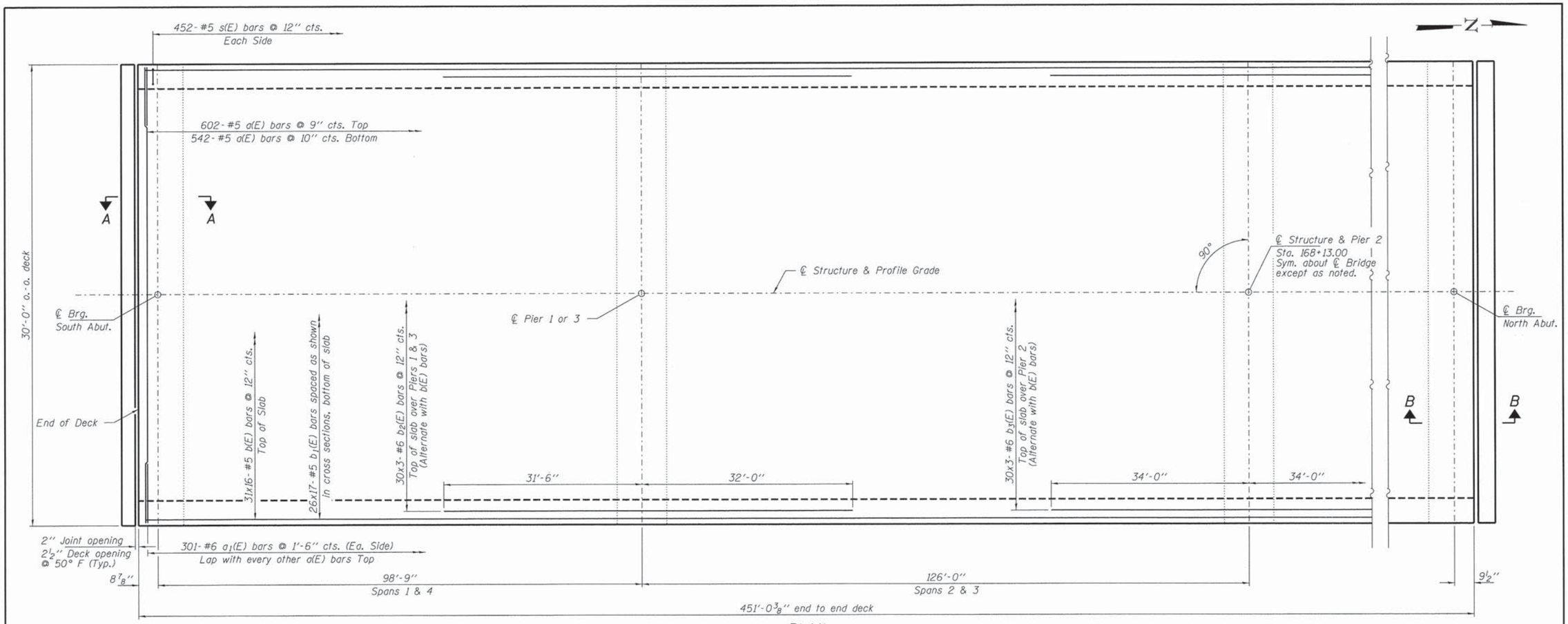
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	165+86.39	0.00	510.93	510.93
℄ Brg. S. Abut.	165+88.25	0.00	510.93	510.93
A	165+98.25	0.00	510.93	510.95
B	166+08.25	0.00	510.93	510.97
C	166+18.25	0.00	510.93	510.99
D	166+28.25	0.00	510.93	510.99
E	166+38.25	0.00	510.93	510.99
F	166+48.25	0.00	510.93	510.98
G	166+58.25	0.00	510.93	510.96
H	166+68.25	0.00	510.93	510.94
I	166+78.25	0.00	510.93	510.93
℄ Pier 1	166+87.00	0.00	510.93	510.93
J	166+97.00	0.00	510.93	510.94
K	167+07.00	0.00	510.93	510.95
L	167+17.00	0.00	510.93	510.97
M	167+27.00	0.00	510.93	510.99
N	167+37.00	0.00	510.93	511.00
O	167+47.00	0.00	510.93	511.00
P	167+57.00	0.00	510.93	511.00
Q	167+67.00	0.00	510.93	510.99
R	167+77.00	0.00	510.93	510.98
S	167+87.00	0.00	510.93	510.96
T	167+97.00	0.00	510.93	510.94
U	168+07.00	0.00	510.93	510.93
℄ Pier 2	168+13.00	0.00	510.93	510.93
V	168+23.00	0.00	510.93	510.94
W	168+33.00	0.00	510.93	510.95
X	168+43.00	0.00	510.93	510.97
Y	168+53.00	0.00	510.93	510.98
Z	168+63.00	0.00	510.93	511.00
AA	168+73.00	0.00	510.93	511.00
AB	168+83.00	0.00	510.93	511.00
AC	168+93.00	0.00	510.93	510.99
AD	169+03.00	0.00	510.93	510.98
AE	169+13.00	0.00	510.93	510.96
AF	169+23.00	0.00	510.93	510.94
AG	169+33.00	0.00	510.93	510.93
℄ Pier 3	169+39.00	0.00	510.93	510.93
AH	169+49.00	0.00	510.93	510.93
AI	169+59.00	0.00	510.93	510.95
AJ	169+69.00	0.00	510.93	510.96
AK	169+79.00	0.00	510.93	510.98
AL	169+89.00	0.00	510.93	510.99
AM	169+99.00	0.00	510.93	510.99
AN	170+09.00	0.00	510.93	510.99
AO	170+19.00	0.00	510.93	510.97
AP	170+29.00	0.00	510.93	510.95
℄ Brg. N. Abut.	170+37.75	0.00	510.93	510.93
Bk. N. Abut.	170+39.92	0.00	510.93	510.93

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	165+86.39	6.21	510.83	510.83
℄ Brg. S. Abut.	165+88.25	6.21	510.83	510.83
A	165+98.25	6.21	510.83	510.86
B	166+08.25	6.21	510.83	510.88
C	166+18.25	6.21	510.83	510.89
D	166+28.25	6.21	510.83	510.89
E	166+38.25	6.21	510.83	510.89
F	166+48.25	6.21	510.83	510.88
G	166+58.25	6.21	510.83	510.86
H	166+68.25	6.21	510.83	510.85
I	166+78.25	6.21	510.83	510.84
℄ Pier 1	166+87.00	6.21	510.83	510.83
J	166+97.00	6.21	510.83	510.84
K	167+07.00	6.21	510.83	510.85
L	167+17.00	6.21	510.83	510.87
M	167+27.00	6.21	510.83	510.89
N	167+37.00	6.21	510.83	510.90
O	167+47.00	6.21	510.83	510.91
P	167+57.00	6.21	510.83	510.90
Q	167+67.00	6.21	510.83	510.90
R	167+77.00	6.21	510.83	510.88
S	167+87.00	6.21	510.83	510.86
T	167+97.00	6.21	510.83	510.84
U	168+07.00	6.21	510.83	510.83
℄ Pier 2	168+13.00	6.21	510.83	510.83
V	168+23.00	6.21	510.83	510.84
W	168+33.00	6.21	510.83	510.85
X	168+43.00	6.21	510.83	510.87
Y	168+53.00	6.21	510.83	510.89
Z	168+63.00	6.21	510.83	510.90
AA	168+73.00	6.21	510.83	510.91
AB	168+83.00	6.21	510.83	510.91
AC	168+93.00	6.21	510.83	510.90
AD	169+03.00	6.21	510.83	510.88
AE	169+13.00	6.21	510.83	510.86
AF	169+23.00	6.21	510.83	510.85
AG	169+33.00	6.21	510.83	510.84
℄ Pier 3	169+39.00	6.21	510.83	510.83
AH	169+49.00	6.21	510.83	510.84
AI	169+59.00	6.21	510.83	510.85
AJ	169+69.00	6.21	510.83	510.87
AK	169+79.00	6.21	510.83	510.88
AL	169+89.00	6.21	510.83	510.89
AM	169+99.00	6.21	510.83	510.89
AN	170+09.00	6.21	510.83	510.89
AO	170+19.00	6.21	510.83	510.87
AP	170+29.00	6.21	510.83	510.85
℄ Brg. N. Abut.	170+37.75	6.21	510.83	510.83
Bk. N. Abut.	170+39.92	6.21	510.83	510.83

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	165+86.39	12.42	510.74	510.74
℄ Brg. S. Abut.	165+88.25	12.42	510.74	510.74
A	165+98.25	12.42	510.74	510.76
B	166+08.25	12.42	510.74	510.78
C	166+18.25	12.42	510.74	510.79
D	166+28.25	12.42	510.74	510.80
E	166+38.25	12.42	510.74	510.79
F	166+48.25	12.42	510.74	510.78
G	166+58.25	12.42	510.74	510.77
H	166+68.25	12.42	510.74	510.75
I	166+78.25	12.42	510.74	510.74
℄ Pier 1	166+87.00	12.42	510.74	510.74
J	166+97.00	12.42	510.74	510.74
K	167+07.00	12.42	510.74	510.76
L	167+17.00	12.42	510.74	510.77
M	167+27.00	12.42	510.74	510.79
N	167+37.00	12.42	510.74	510.80
O	167+47.00	12.42	510.74	510.81
P	167+57.00	12.42	510.74	510.81
Q	167+67.00	12.42	510.74	510.80
R	167+77.00	12.42	510.74	510.78
S	167+87.00	12.42	510.74	510.76
T	167+97.00	12.42	510.74	510.75
U	168+07.00	12.42	510.74	510.74
℄ Pier 2	168+13.00	12.42	510.74	510.74
V	168+23.00	12.42	510.74	510.74
W	168+33.00	12.42	510.74	510.75
X	168+43.00	12.42	510.74	510.77
Y	168+53.00	12.42	510.74	510.79
Z	168+63.00	12.42	510.74	510.80
AA	168+73.00	12.42	510.74	510.81
AB	168+83.00	12.42	510.74	510.81
AC	168+93.00	12.42	510.74	510.80
AD	169+03.00	12.42	510.74	510.79
AE	169+13.00	12.42	510.74	510.77
AF	169+23.00	12.42	510.74	510.75
AG	169+33.00	12.42	510.74	510.74
℄ Pier 3	169+39.00	12.42	510.74	510.74
AH	169+49.00	12.42	510.74	510.74
AI	169+59.00	12.42	510.74	510.75
AJ	169+69.00	12.42	510.74	510.77
AK	169+79.00	12.42	510.74	510.78
AL	169+89.00	12.42	510.74	510.79
AM	169+99.00	12.42	510.74	510.80
AN	170+09.00	12.42	510.74	510.79
AO	170+19.00	12.42	510.74	510.78
AP	170+29.00	12.42	510.74	510.76
℄ Brg. N. Abut.	170+37.75	12.42	510.74	510.74
Bk. N. Abut.	170+39.92	12.42	510.74	510.74



MIN. BAR LAPS

#5 bars = 2'-7"
#6 bars = 3'-1"

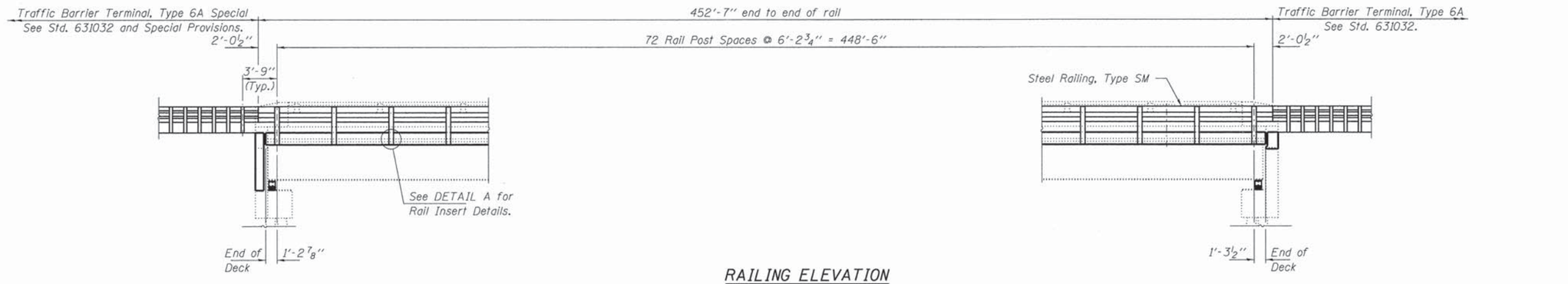
Notes:
See sheet 7 of 25 for superstructure details and Bill of Material.
Bars indicated thus 31x16-#5 etc. indicates 31 lines of bars with 16 lengths per line.
See sheet 7 of 25 for SECTION A-A and SECTION B-B.

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

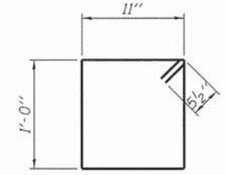
SUPERSTRUCTURE
STRUCTURE NO. 090-3029
SHEET NO. 6 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	15
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		



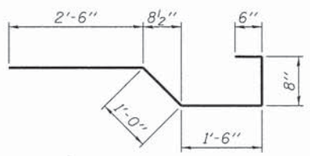
RAILING ELEVATION
Showing Rail Post Spaces

Notes:
See sheets 14 and 16 of 25 for abutment backwall details.
See sheet 8 of 25 for Railing Details.

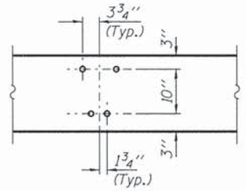


BAR s(E)

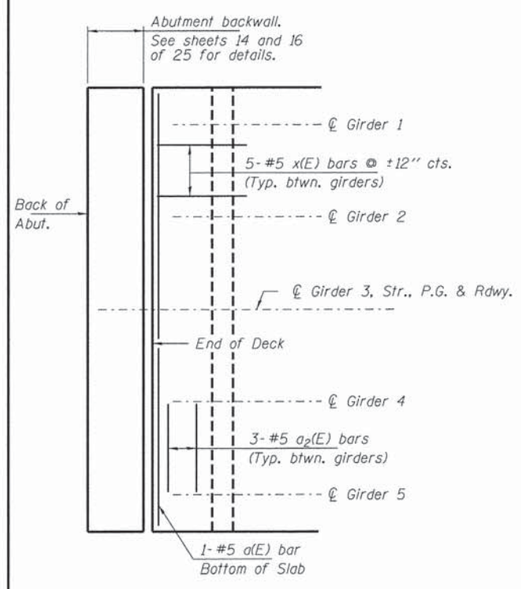
BAR a_2(E)



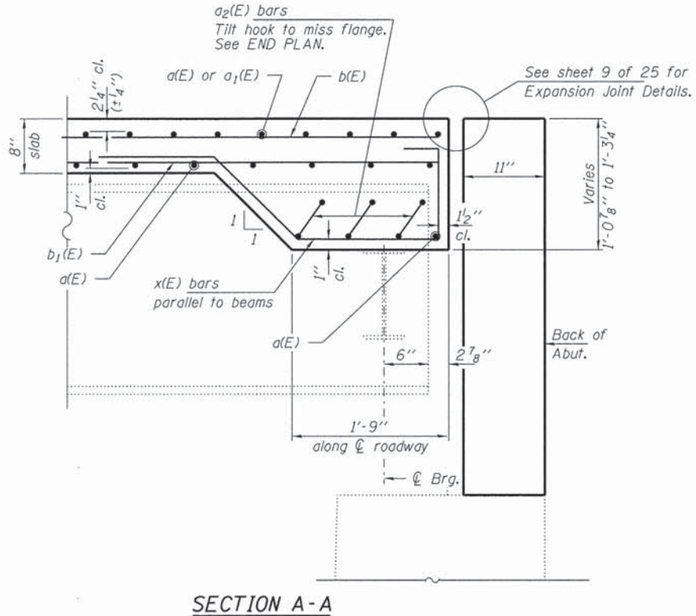
BAR x(E)



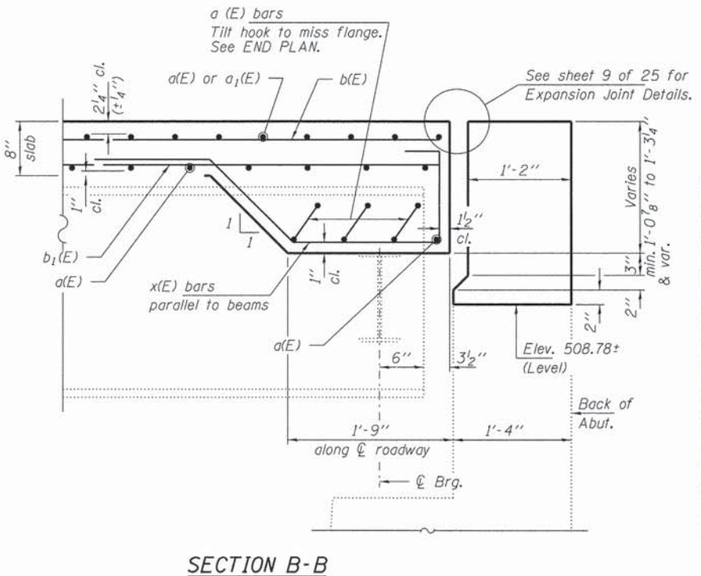
DETAIL A



END PLAN
(Typ. Each End of Deck)



SECTION A-A
(South Abut.)



SECTION B-B
(North Abut.)

SUPERSTRUCTURE BILL OF MATERIAL

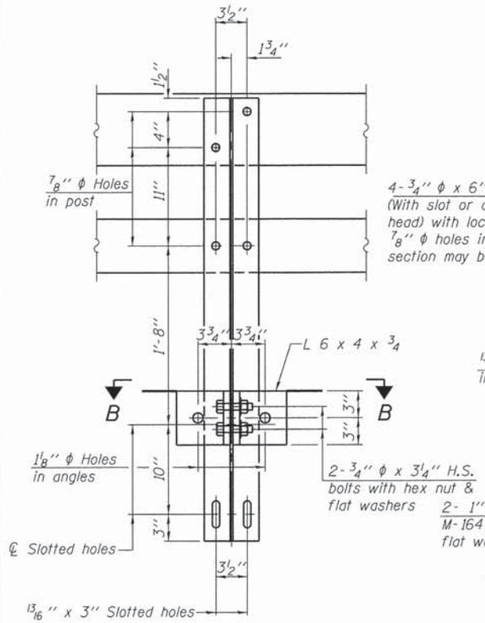
BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	1,146	#5	29'-8"	
a_1(E)	602	#6	6'-6"	
a_2(E)	24	#5	7'-1"	
b(E)	496	#5	30'-8"	
b_1(E)	442	#5	29'-0"	
b_2(E)	180	#6	23'-3"	
b_3(E)	90	#6	24'-9"	
s(E)	904	#5	4'-9"	
x(E)	40	#5	6'-2"	
Concrete Superstructure		Cu. Yd.	385.7	
Bridge Deck Grooving		Sq. Yd.	1,403	
Protective Coat		Sq. Yd.	1,637	
Reinforcment Bars, Epoxy Coated		Pound	85,120	

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.M.S	REVISED -
3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

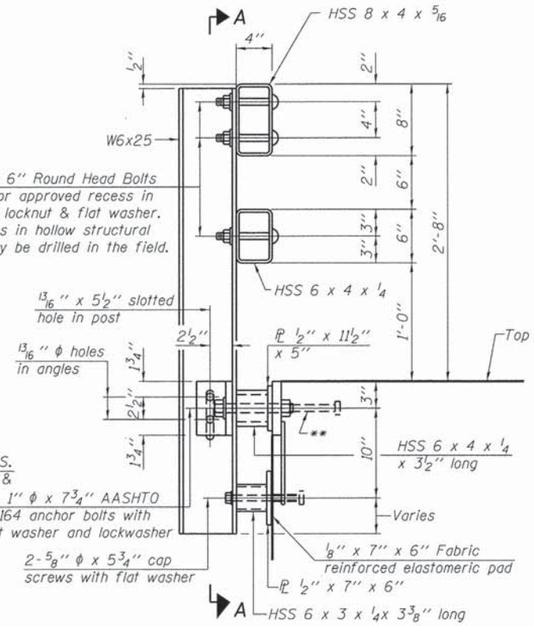
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 090-3029
SHEET NO. 7 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	16
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			

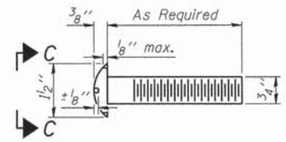


SECTION A-A

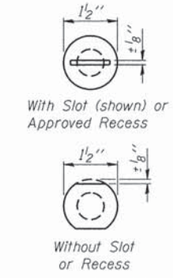


SECTION AT RAIL POST

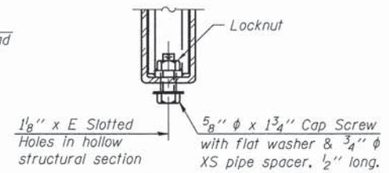
Reinforcement bars in the top of the slab may be placed with a 1½" minimum clearance in the area of the rail post anchor devices. The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



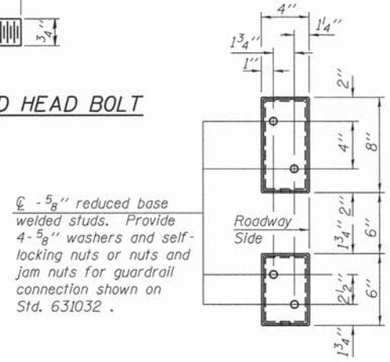
DETAIL OF ¾" ϕ ROUND HEAD BOLT



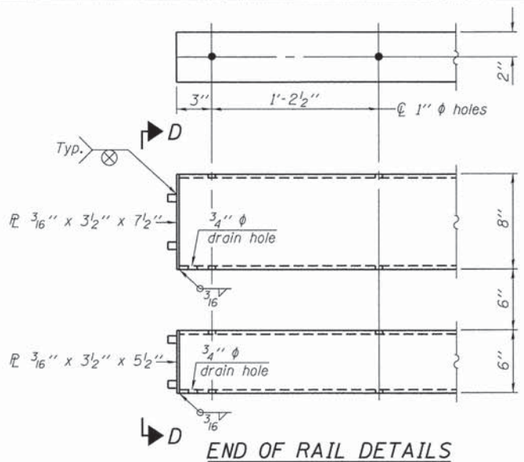
VIEW C-C



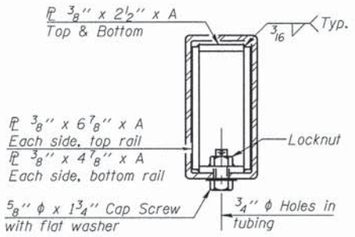
RAIL SPLICE CONNECTION AT EXPANSION JT.



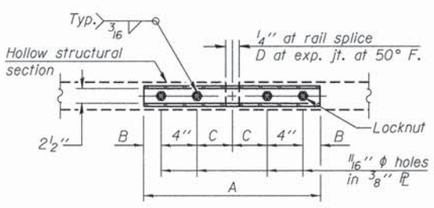
VIEW D-D



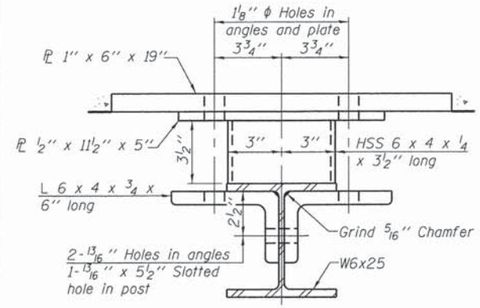
END OF RAIL DETAILS



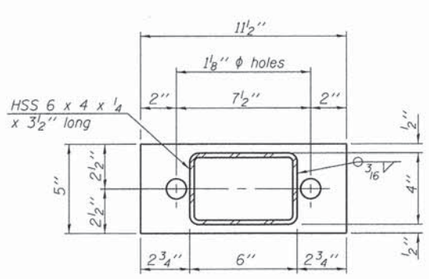
SECTION AT RAIL SPLICE



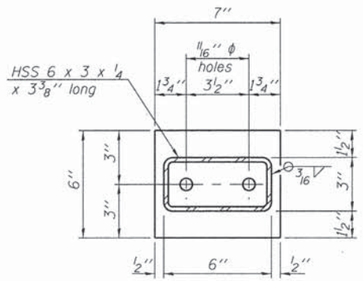
PLAN-BOTT. SPLICE PL TYPICAL



SECTION B-B

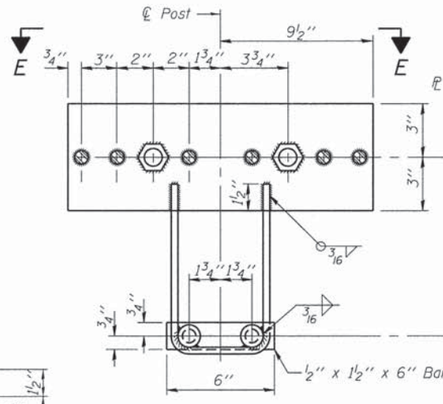


PL ½" x 11½" x 5"



PL ½" x 7" x 6"

(6'-3" Maximum Post Spacing)



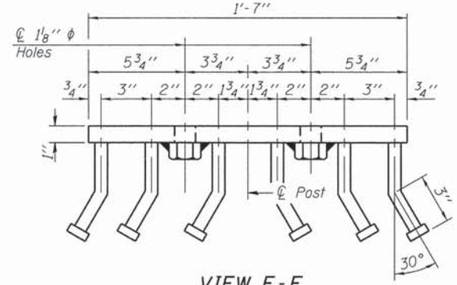
ANCHOR DEVICE

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

SPLICE DIMENSIONS

T	D	A	B	C	E
≤4"	2½"	1'-8"	2"	4"	2½"
>4" ≤6½"	3¾"	2'-0"	2½"	5½"	3½"
>6½" ≤9"	5"	2'-4"	3½"	6½"	9"
>9" ≤13"	7"	2'-10"	4½"	8½"	11"
Rail Splice	¼"	1'-8"	2"	4"	——

T = Total movement at expansion joint as shown on the design plans.



VIEW E-E

Notes:

For multi-span bridges, sufficient ¼" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.

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

** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	906

FILE NAME = 118323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE SM
STRUCTURE NO. 090-3029
SHEET NO. 8 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	17
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$''. The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

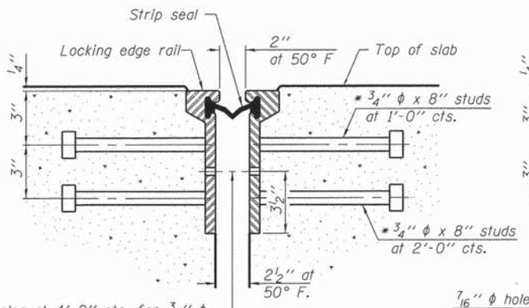
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

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

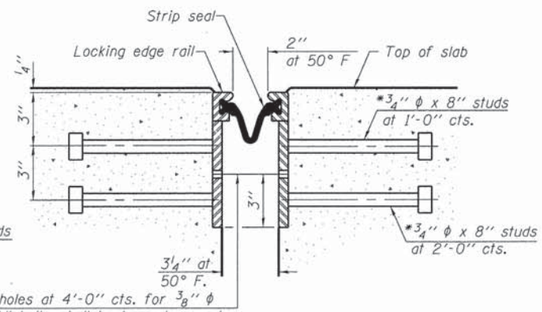
Maximum space between rail segments shall be $\frac{3}{16}$'', sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



7/16'' ϕ holes at 4'-0'' cts. for 3/8'' ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

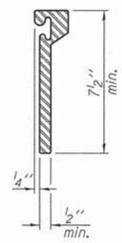
SECTION THRU ROLLED RAIL JOINT



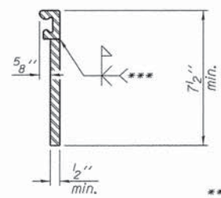
7/16'' ϕ holes at 4'-0'' cts. for 3/8'' ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

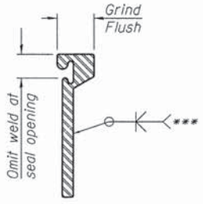
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



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

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

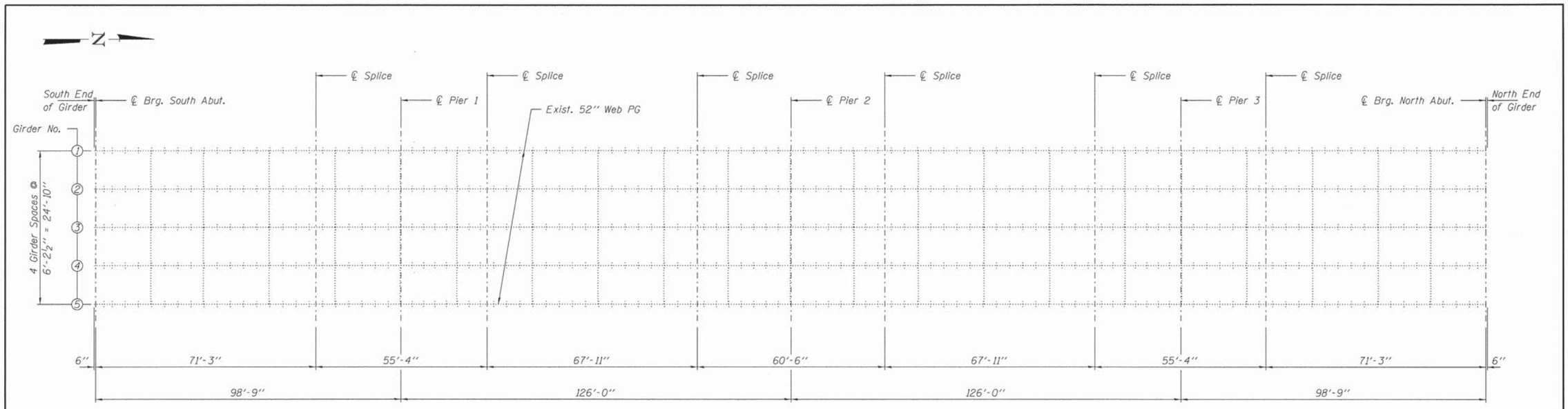
Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

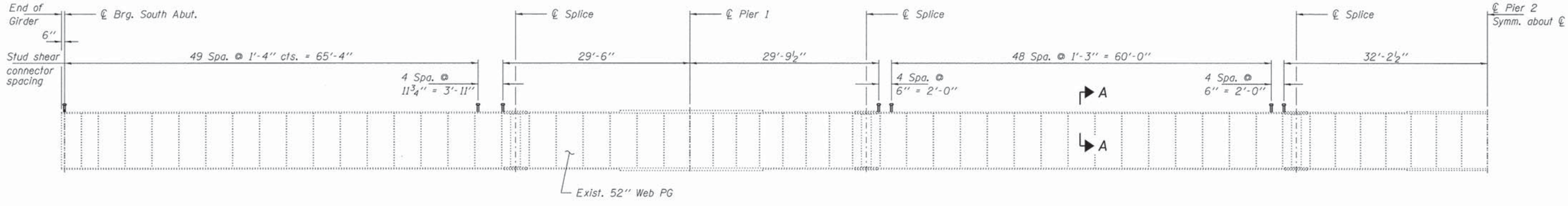
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	60

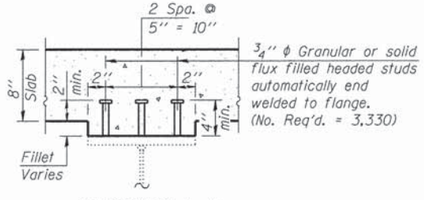
FILE NAME = 118323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	PREFORMED JOINT STRIP SEAL STRUCTURE NO. 090-3029	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	18
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -						CONTRACT NO. 89653	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		SHEET NO. 9 OF 25 SHEETS			ILLINOIS	FED. AID PROJECT	



EXISTING FRAMING PLAN



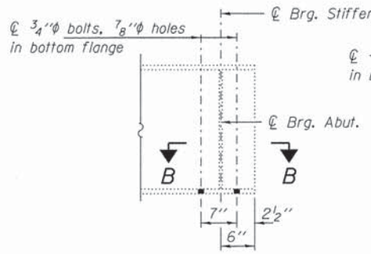
EXISTING GIRDER ELEVATION



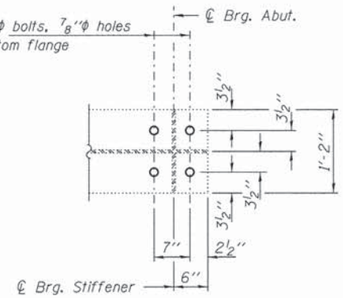
SECTION A-A

Note: For additional structural steel details see sheets 11 of 25.

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	STRUCTURAL STEEL STRUCTURE NO. 090-3029 SHEET NO. 10 OF 25 SHEETS	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LB / PE / SE CORP. 184.005959		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	19
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -						CONTRACT NO. 89653	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -					ILLINOIS FED. AID PROJECT		



TYP. END OF
GIRDER ELEVATION



SECTION B-B

INTERIOR GIRDER MOMENT TABLE					
		0.4 Sp. 1 or 0.6 Sp. 4	Pier 1 or Pier 3	0.5 Sp. 2 or Sp. 3	Pier 2
I_s	(in^4)	24,059	35,781	24,059	39,797
$I_c(n)$	(in^4)	53,652	-	53,652	-
$I_c(3n)$	(in^4)	40,630	-	40,630	-
S_s	(in^3)	891	1,298	891	1,434
$S_c(n)$	(in^3)	1,156	-	1,156	-
$S_c(3n)$	(in^3)	1,072	-	1,072	-
ℓ	(k/')	0.83	0.90	0.83	0.92
$M\ell$	('k)	526	1,119	494	1,201
$s\ell$	(k/')	0.32	0.32	0.32	0.32
$M_s\ell$	('k)	229	394	239	440
M_L	('k)	709	645	773	737
M_I	('k)	159	136	154	147
$\frac{5}{3}[M_L + I]$	('k)	1,447	1,302	1,545	1,473
M_a	('k)	2,862	3,659	2,961	4,049
M_u	('k)	4,602	-	4,602	-
f_s ℓ non-comp	(ksi)	7.1	10.3	6.7	10.1
f_s ℓ (comp)	(ksi)	2.6	3.6	2.7	3.7
f_s $\frac{5}{3}[M_L + M_I]$	(ksi)	15.0	12.0	16.0	12.3
f_s (Overload)	(ksi)	24.7	26.0	25.4	26.1
f_s (Total)	(ksi)	-	33.8	-	33.9
VR	(k)	48.5	-	48.0	-

INTERIOR GIRDER REACTION TABLE				
		Abut.	Pier 1 or 3	Pier 2
$R\ell$	(k)	42.0	146.3	150.5
R_L	(k)	35.9	61.9	65.1
R_I	(k)	8.0	13.1	13.0
R_{Total}	(k)	85.9	221.3	228.6

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads (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 and Overload) 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 and Overload) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

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

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

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

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

M_L: Un-factored live load moment (kip-ft.).

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

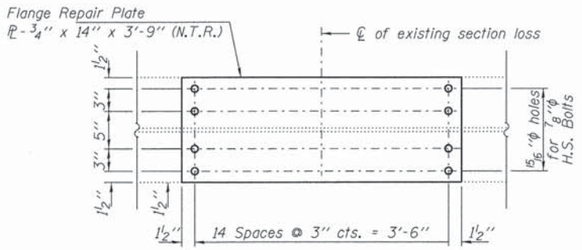
M_a: Factored design moment (kip-ft.).
$1.3\ [M\ell + M_s\ell + \frac{5}{3}(M_L + M_I)]$

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

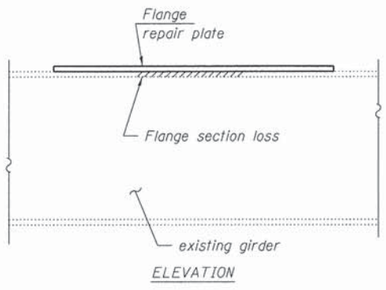
f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M\ell + M_s\ell + \frac{5}{3}(M_L + M_I)$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M\ell + M_s\ell + \frac{5}{3}(M_L + M_I)]$

VR: Maximum L + impact shear range within the composite portion of the span for stud shear connector design (kips).



PLAN



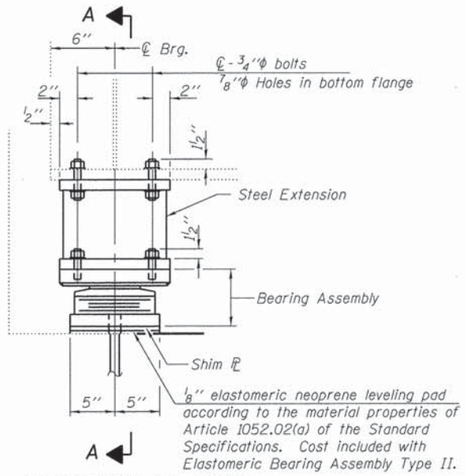
ELEVATION

FLANGE REPAIR PLATE DETAIL

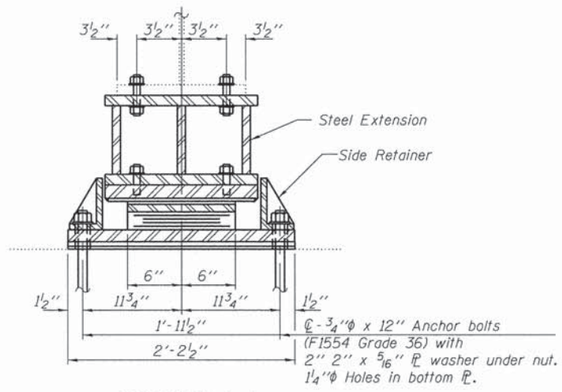
6 locations assumed in quantities (See Special Provision)

Notes:
For possible use at flange section loss locations as directed by the Engineer, See Special Provision.
HS bolts shall be ⅞"ϕ ASTM A325.
If transverse stiffeners interfere with bolt placement, one row of bolts may be omitted from the repair plate.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	STRUCTURAL STEEL DETAILS STRUCTURE NO. 090-3029	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	20
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -					CONTRACT NO. 89653		
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		SHEET NO. 11 OF 25 SHEETS			ILLINOIS FED. AID PROJECT		



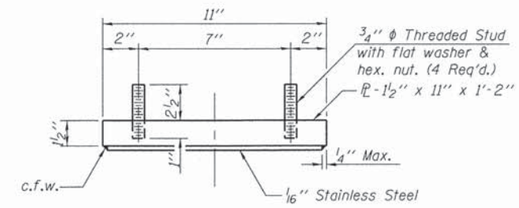
ELEVATION AT ABUT.



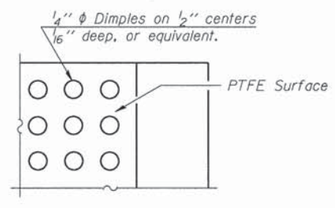
SECTION A-A

TYPE II ELASTOMERIC EXP. BRG.

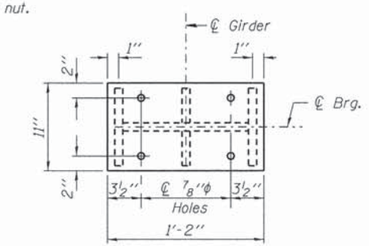
(Typ. Both Abuts.)



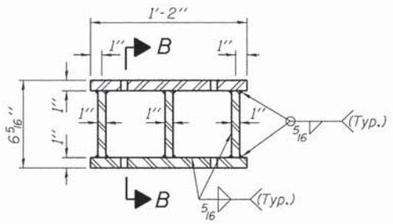
TOP BEARING ASSEMBLY



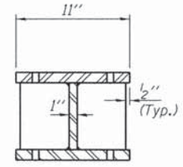
PLAN-PTFE SURFACE



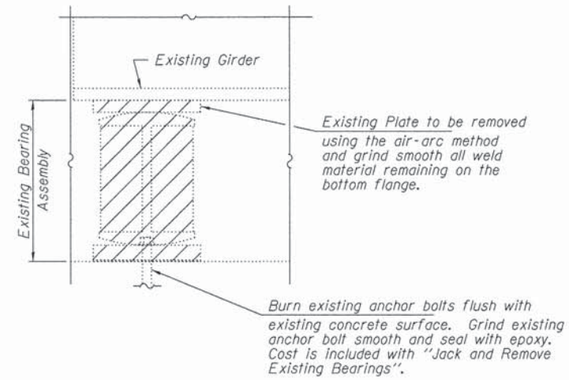
PLAN STEEL EXTENSION



ELEVATION STEEL EXTENSION

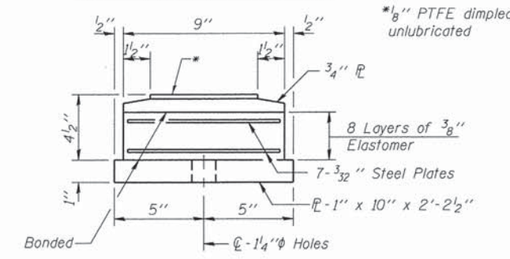


SECTION B-B

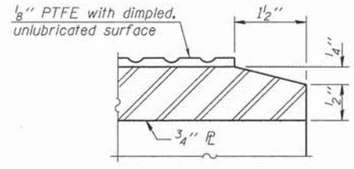


EXISTING BEARING REMOVAL DETAIL (BOTH ABUTMENTS)

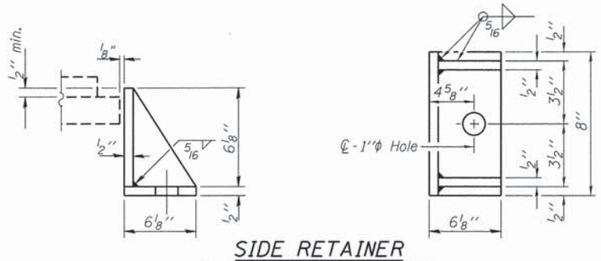
(Cost is included with Jack and Remove Existing Bearings)



BOTTOM BEARING ASSEMBLY

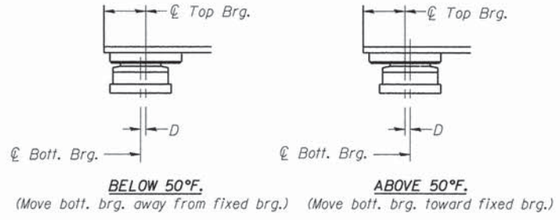


SECTION THRU PTFE



SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Provide 3/8" shim plate under bearing assembly at Girder 3. Cost included with Elastomeric Bearing Assembly.

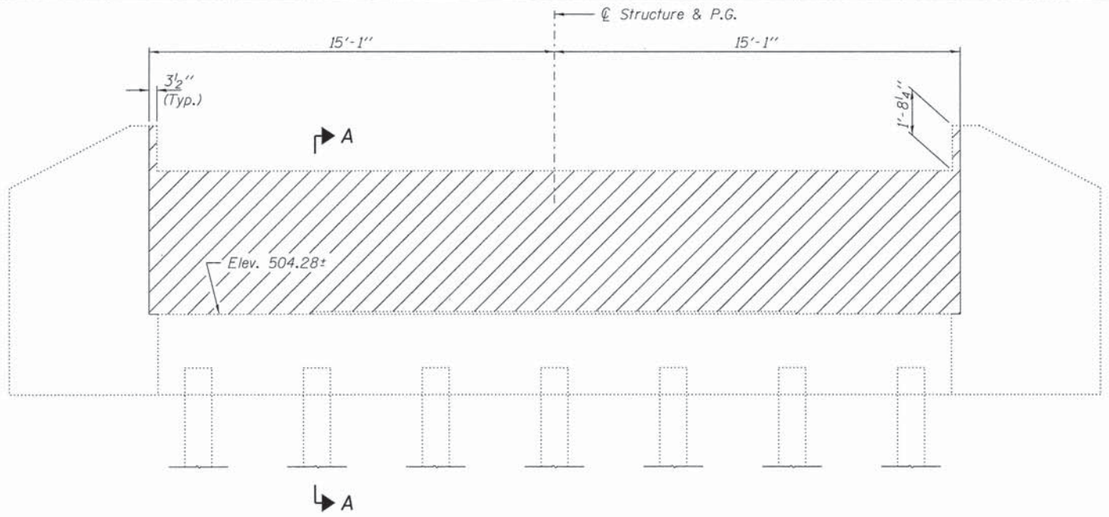
Cost of Steel Extension is included with Elastomeric Bearing Assembly, Type II.

BILL OF MATERIAL

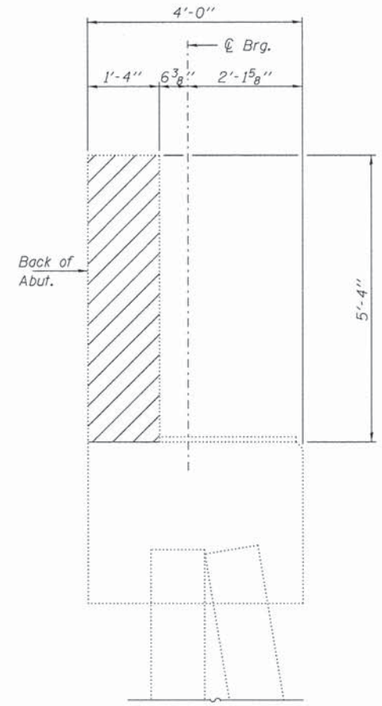
Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	10
Anchor Bolts, 3/4"	Each	20
Jack and Remove Existing Bearings	Each	10

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	BEARING DETAILS STRUCTURE NO. 090-3029 SHEET NO. 12 OF 25 SHEETS
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.005959		CHECKED - S.M.S	REVISED -		
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -		
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		

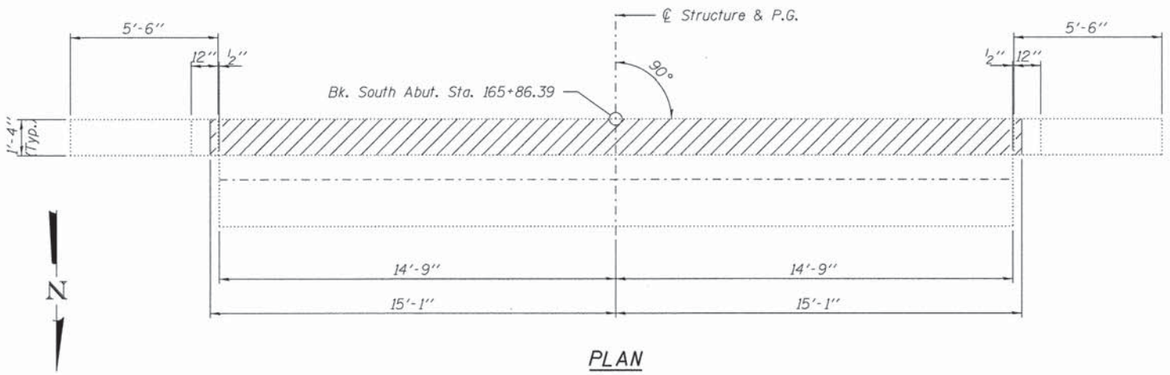
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	21
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			



ELEVATION



SECTION A-A



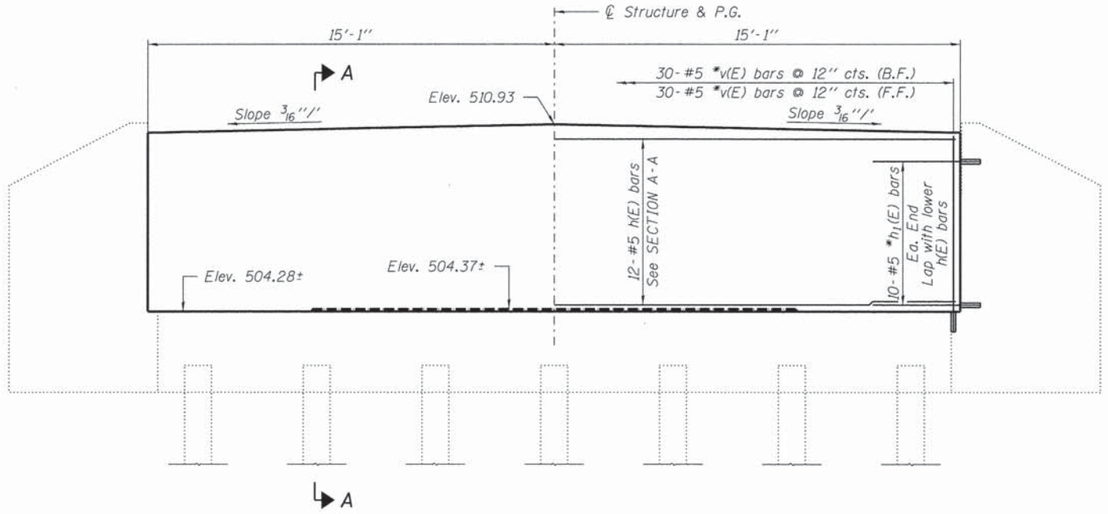
PLAN

Note:
Hatched areas indicate Concrete Removal.

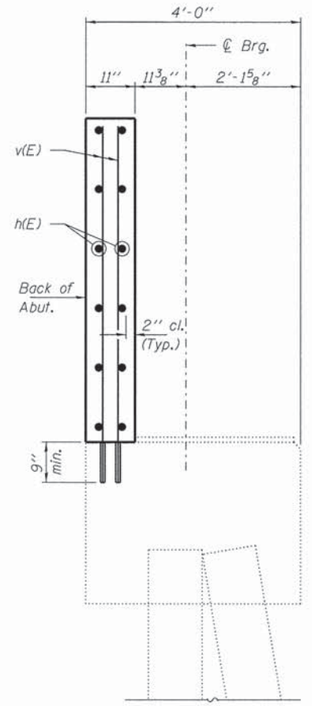
BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	8.0

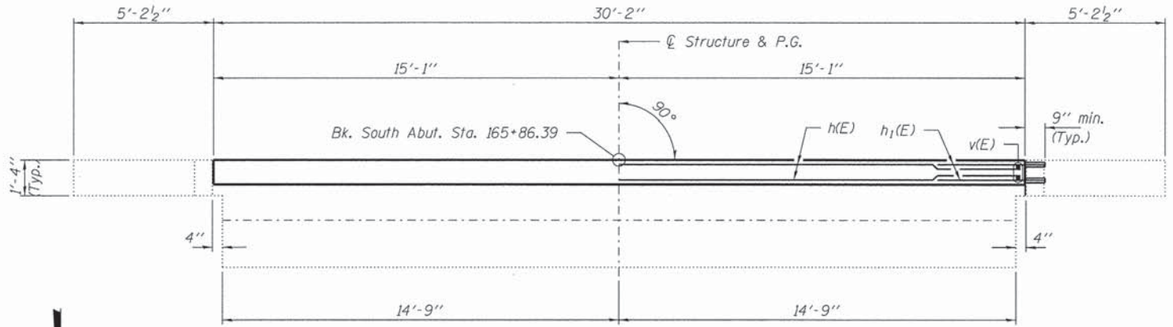
FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	SOUTH ABUTMENT REMOVAL DETAILS STRUCTURE NO. 090-3029	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3285 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -			11	12-00047-00-BR	TAZEWELL	39	22
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -						CONTRACT NO. 89653	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		SHEET NO. 13 OF 25 SHEETS			ILLINOIS	FED. AID PROJECT	



ELEVATION



SECTION A-A



PLAN

*Epoxy grout v(E) and h_1(E) bars in 9" min. drilled holes according to Section 584 of the Standard Specifications. Cost included with Concrete Structures.

Notes:
Existing reinforcement not used in new construction shall be cut off, ground smooth and sealed with epoxy. Cost is included in Concrete Removal.
Concrete Sealer shall be applied to the bearing seat surface and inside face of the back of the abutment.

BILL OF MATERIAL
SOUTH ABUTMENT

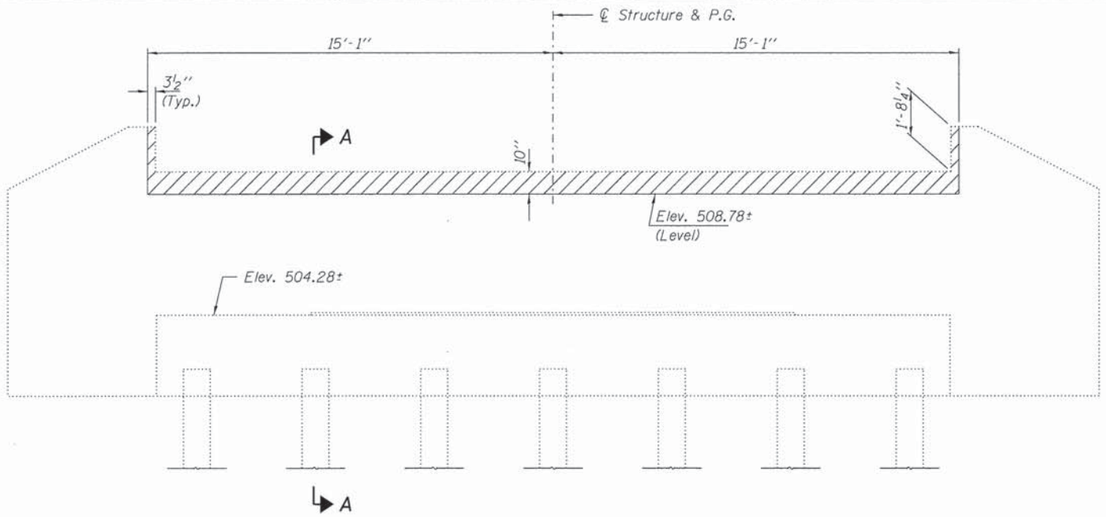
Bar	No.	Size	Length	Shape
h(E)	12	#5	29'-8"	——
h_1(E)	20	#5	4'-0"	——
v(E)	60	#5	7'-0"	——
Concrete Structures			Cu. Yd.	6.6
Reinforcement Bars, Epoxy Coated			Pound	890
Concrete Sealer			Sq. Ft.	291

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3080 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

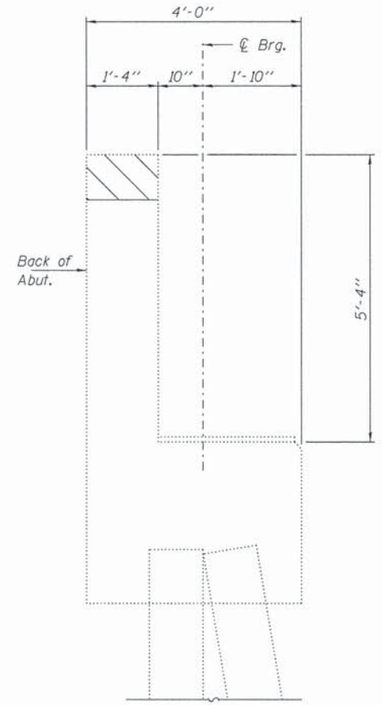
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

SOUTH ABUTMENT
STRUCTURE NO. 090-3029
SHEET NO. 14 OF 25 SHEETS

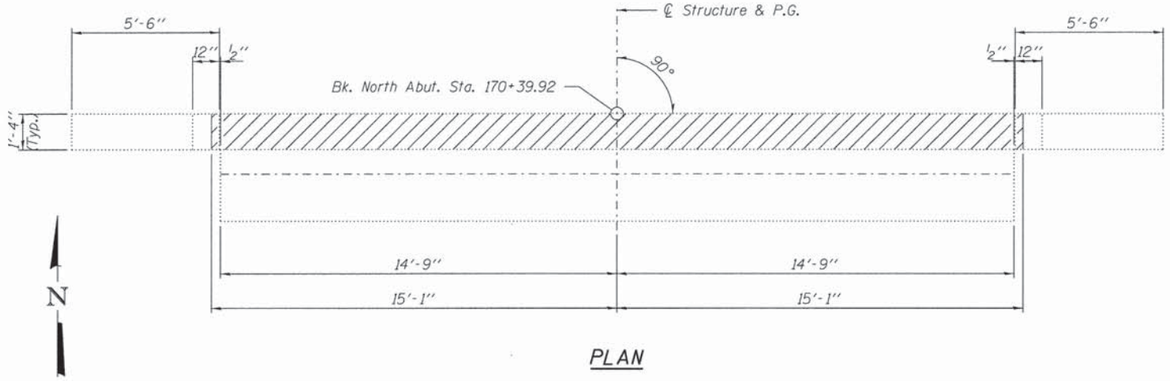
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	23
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		



ELEVATION



SECTION A-A



PLAN

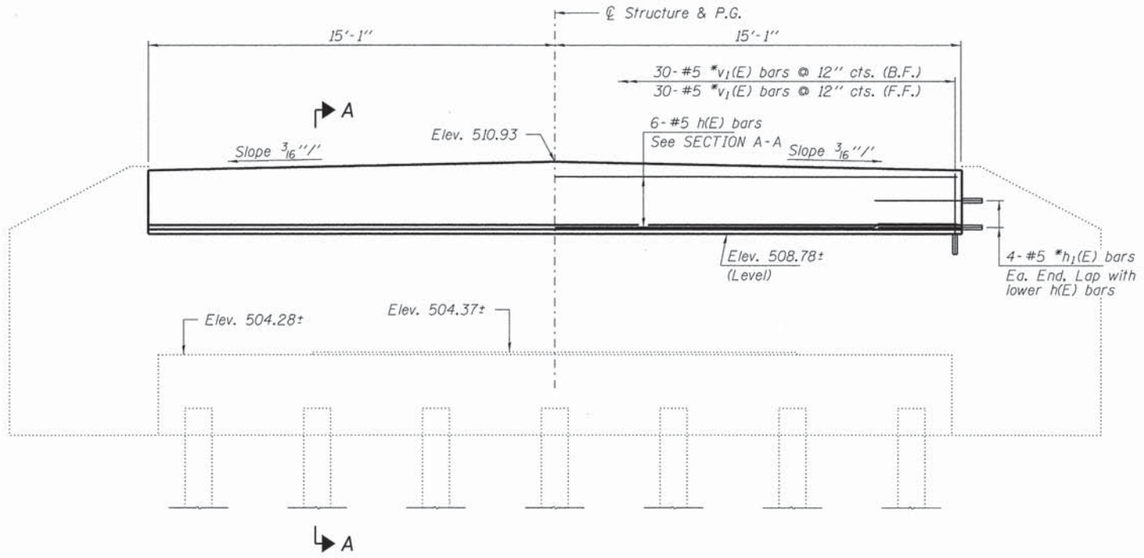
Note:
Hatched areas indicate Concrete Removal.

BILL OF MATERIAL

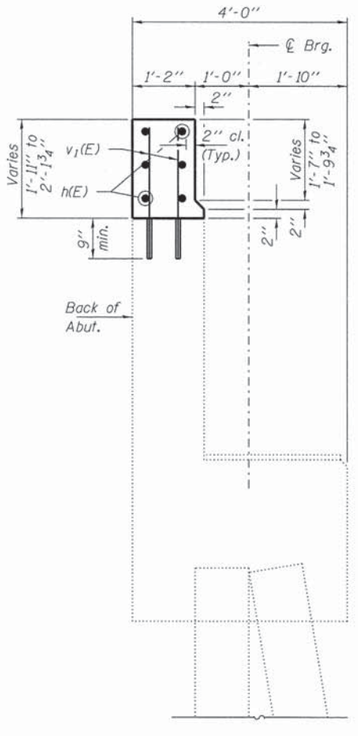
Item	Unit	Quantity
Concrete Removal	Cu. Yd.	1.3

FILE NAME = 118323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	NORTH ABUTMENT REMOVAL DETAILS STRUCTURE NO. 090-3029
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -		
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -		
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -		SHEET NO. 15 OF 25 SHEETS

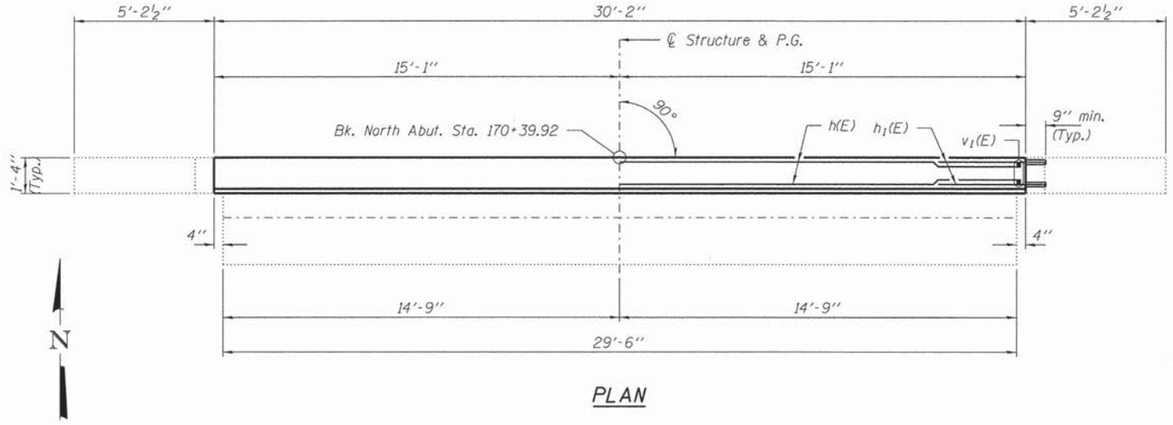
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	24
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		



ELEVATION



SECTION A-A



PLAN

*Epoxy grout $v_1(E)$ and $h_1(E)$ bars in 9" min. drilled holes according to Section 584 of the Standard Specifications. Cost included with Concrete Structures.

Notes:
Existing reinforcement not used in new construction shall be cut off, ground smooth and sealed with epoxy. Cost is included in Concrete Removal.
Concrete Sealer shall be applied to the bearing seat surface and inside face of the back of the abutment.

BILL OF MATERIAL
NORTH ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	6	#5	29'-8"	——
$h_1(E)$	8	#5	4'-0"	——
$v_1(E)$	60	#5	2'-6"	——
Concrete Structures			Cu. Yd.	2.7
Reinforcement Bars, Epoxy Coated			Pound	380
Concrete Sealer			Sq. Ft.	284

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

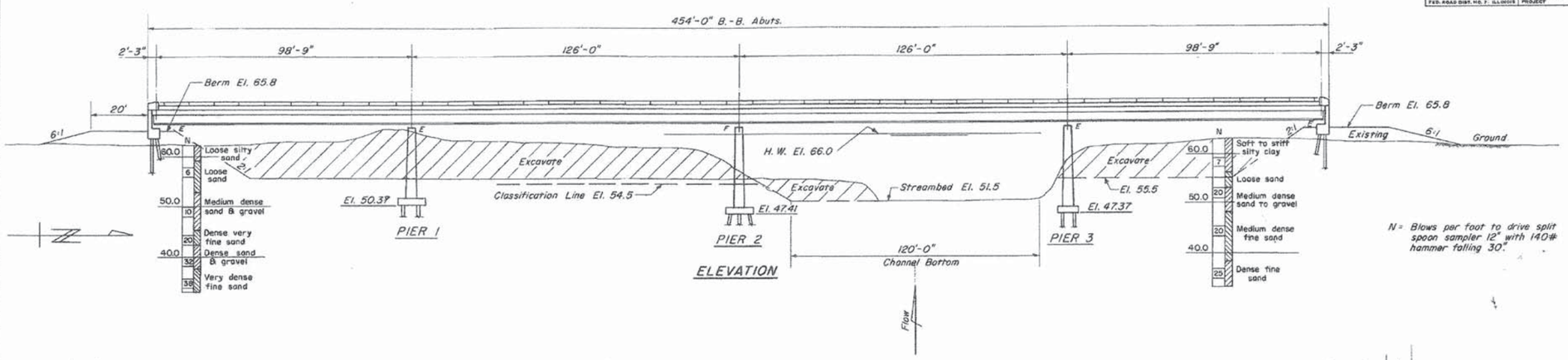
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

NORTH ABUTMENT
STRUCTURE NO. 090-3029
SHEET NO. 16 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	25
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			

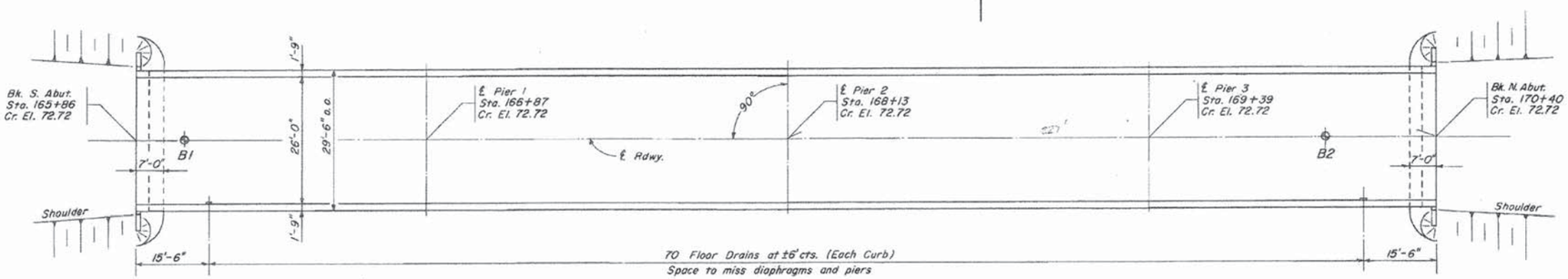
C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-1B	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

B.M. in tree Rt. Sta. 167+70
El. 65.68.



ELEVATION

N = Blows per foot to drive split spoon sampler 12" with 140# hammer falling 30".



PLAN

GENERAL NOTES

Class X Concrete shall be used throughout except in Piers.
Class A Concrete shall be used in Piers.
Coarse aggregate to be used in parapet handrails and end posts must be free of chert, flint, limonite, lignite and soft sandstone.
The concrete floor slab shall be poured in one continuous operation within limits of construction joints shown and shall be finished in accordance with Article 51.19 of the Standard Specifications.
Structural Steel shall conform to ASTM Designation A-36.
Rivets ⅞" open holes 13/16"ø unless otherwise noted.
All bearing material including lead plates and anchor bolts shall be furnished and installed in accordance with Article 51.15 of the Standard Specifications.
Anchor bolts shall be set before riveting cross frames over supports.
All structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Art. 56.1 to 56.5 inclusive of the Standard Specifications.
Shop inspection of structural steel by Illinois Division of Highways before painting.
Permanent forms will not be permitted in forming the concrete floor.
The Contractor shall drive one (1) test pile each of the type specified in permanent location at each Abutment and Pier 2, as directed by the Engineer before ordering the remainder of the piles.
Embankment at the abutments shall be constructed to the lines shown before driving abutment piles.
The Contractor shall excavate the channel to the lines shown within R.O.W. limits.

MACKINAW RIVER
BUILT 1967 BY
TAZEWELL COUNTY
SEC. 47-1B M.F.T.
LOADING HS-15

NAME PLATE
See Standard 2113-1

WATERWAY INFORMATION

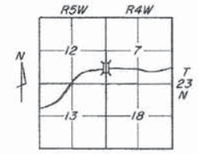
Drainage Area	697,000 Acres
Character	Rolling, Wooded, Cultivated
Required Opening (20 Year)	4800 S.F.
Opening Provided	4800 S.F.

DESIGN STRESSES

fc = 1,400 psi.
fs = 20,000 psi. (Reinf.)
fs = 20,000 psi. (Struct.)
v = 75 psi. (Ftg.)
n = 10
Allowable L.L. deflection $\frac{L}{1000}$

TOTAL BILL OF MATERIAL

Item		Super.	Substr.	Total
Class X Concrete	C.Y.	404.3	51.6	455.9
Class A Concrete	C.Y.		200.1	200.1
Structural Steel	Lbs.	466,590		466,590
Reinforcement Bars	Lbs.	86,400	12,940	99,340
Aluminum Handrail	L.F.	892		892
Protective Coat	S.Y.	1685		1685
Untreated Piles	L.F.		820	820
Concrete Piles	L.F.		360	360
Test Piles, Timber	Each		1	1
Test Piles, Concrete	Each		2	2
Channel Excavation	C.Y.			8190
Class A Excavation for Structures	C.Y.		44	44
Class B Excavation for Structures	C.Y.		266	266
Name Plates	Each		1	1



LOCATION PLAN

LOADING HS15-44

MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-1B M.F.T.
TAZEWELL COUNTY
STA. 168+13

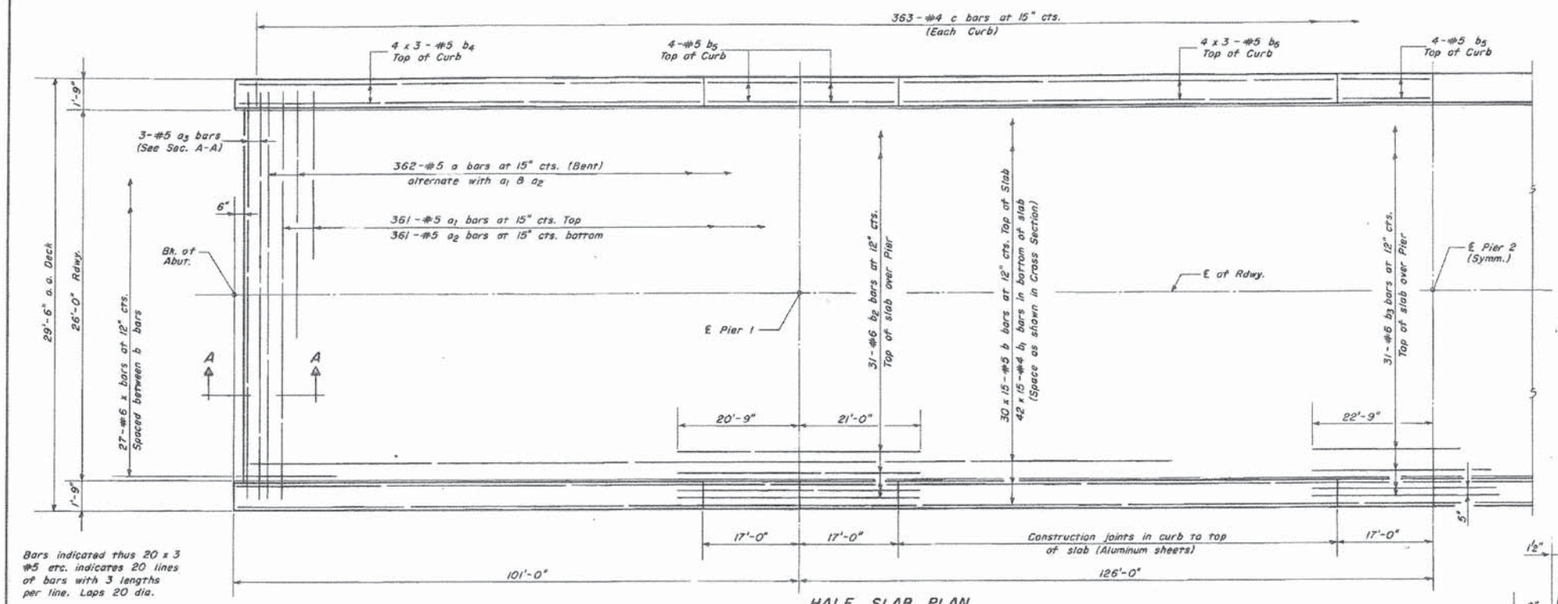
FILE NAME = 118323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 17 OF 25 SHEETS

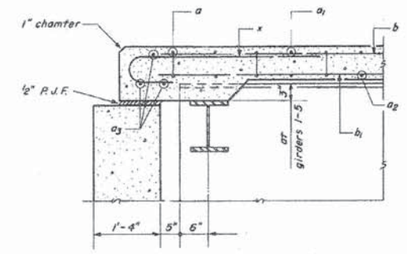
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	26
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-1B	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

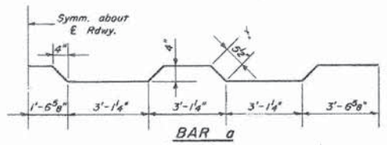


Bars indicated thus 20 x 3 #5 etc. indicates 20 lines of bars with 3 lengths per line. Laps 20 dia.

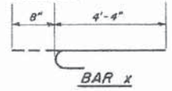
HALF SLAB PLAN



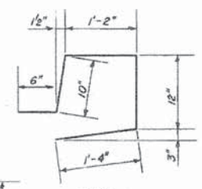
SECTION A-A



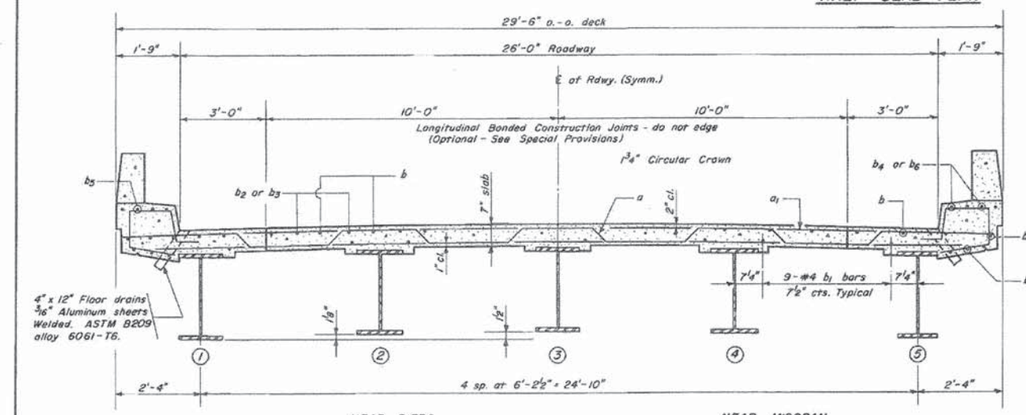
BAR a



BAR x

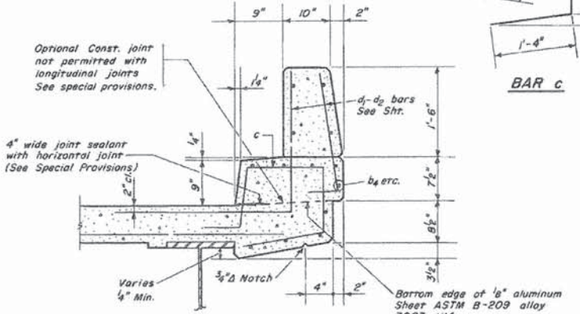


BAR c



NEAR PIERS NEAR MIDSPAN

CROSS SECTION

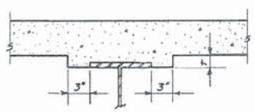


CURB SECTION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	362	#5	29'-10"	
a1	361	5	28'-10"	
a2	361	5	27'-8"	
a3	6	5	26'-0"	
b	450	5	31'-2"	
b1	630	4	31'-0"	
b2	62	6	41'-9"	
b3	31	6	45'-6"	
b4	60	5	28'-7"	
b5	60	5	16'-8"	
b6	60	5	31'-5"	
c	726	4	4'-10"	
x	54	6	5'-0"	
Class X Concrete			C.Y.	357.2
Reinforcement Bars			Lbs.	73,870
Structural Steel			Lbs.	466,590

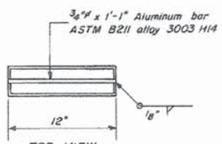
The length and quantities of longitudinal reinforcement and Class X Concrete in parapets are not included in super. quantities. See Sheet



FILLET DETAIL

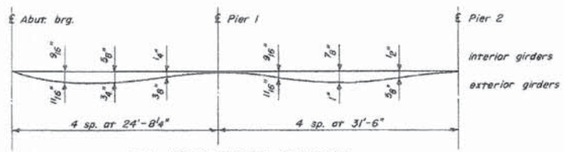
Dimension "t" equal distance between bottom of slab and girder flange plus flange thickness and D.L. increment.

END VIEW



TOP VIEW

FLOOR DRAIN



D.L. DEFLECTION DIAGRAM

(Includes Weight of concrete only)

MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-1B M.F.T.
TAZEWELL COUNTY
STA. 168+13

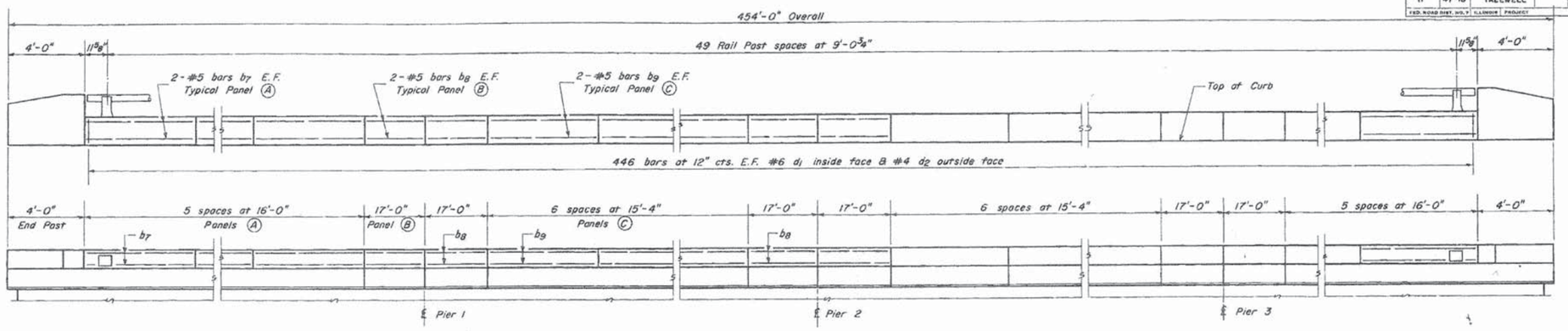
FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3065 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000969		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

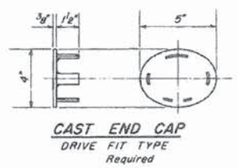
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 18 OF 25 SHEETS

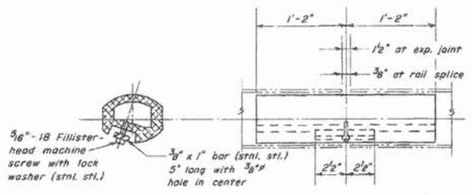
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	27
			CONTRACT NO. 89653	
		ILLINOIS FED. AID PROJECT		

C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 9	ILLINOIS	PROJECT		

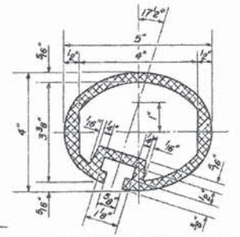




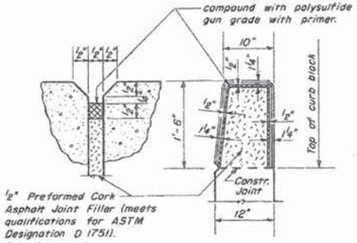
CAST END CAP
DRIVE FIT TYPE
Required



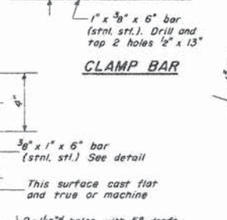
RAIL SPLICE



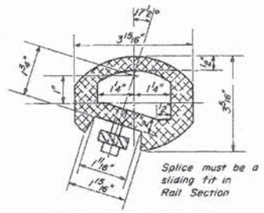
SEC. THRU ELLIPTICAL RAIL SECTION



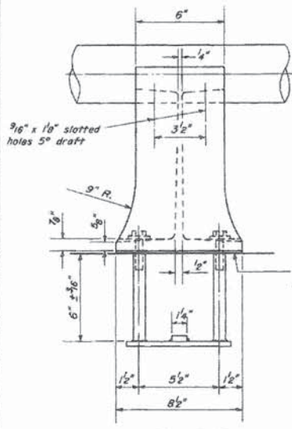
PARAPET JOINT DETAIL



CLAMP BAR

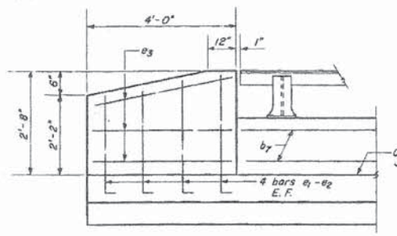


SEC. THRU SPLICE

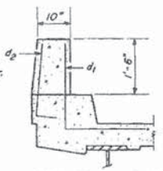


VIEW B-B

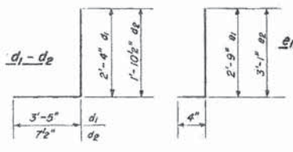
RAIL POST DETAILS



END POST



SEC. THRU CURB



e1 - e2

NOTES

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM Specification B-221 alloy 6061-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications: Cast Aluminum Alloy Bridge Post - Alloy A344-T4 Stainless Steel Bars, Cap Screws, Washers, Lockwashers and Fabric Bearing Pads.

METHOD of MEASUREMENT Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, and caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Seal perimeter of base of post to parapet with two component non-staining grey sealing compound with polysulfide liquid polymers gun grade with primer.

Provide 1-⅛" and 2-1/16" Aluminum shims for 25% of the Posts. Rail element shall be parallel to grade - high spots shall be ground and low spots shimmed.

HANDRAIL BILL OF MATERIAL

Bar	No.	Size	Length
b7	80	# 5	15'-8"
b8	48	5	16'-8"
b9	96	5	15'-0"
d1	892	6	5'-9"
d2	892	4	2'-6"
e1	16	5	3'-1"
e2	16	5	3'-5"
e3	24	5	3'-8"
Class X Concrete		C.Y.	47.0
Reinforcement Bars		Lbs.	13,040
Aluminum Handrail		L.F.	892

MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-18 M.F.T.
TAZEWELL COUNTY
STA. 168+13

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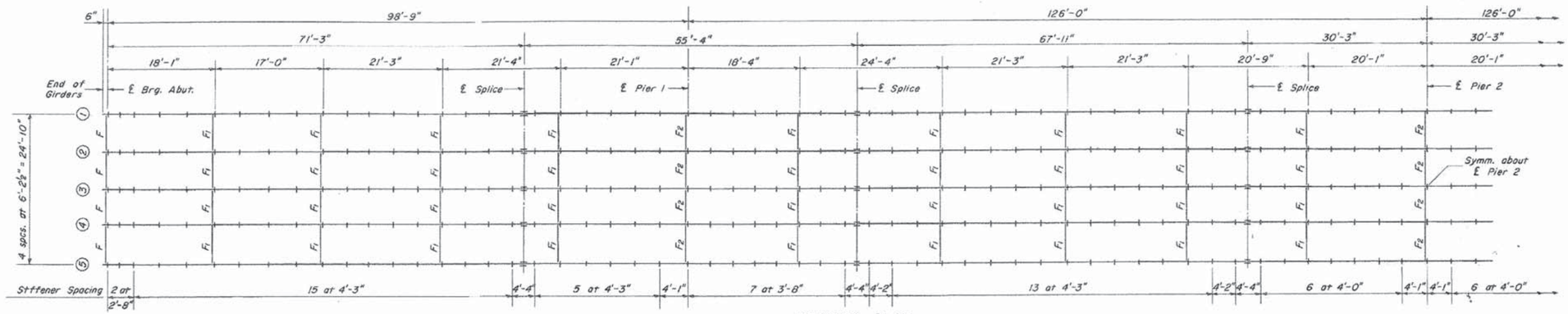
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

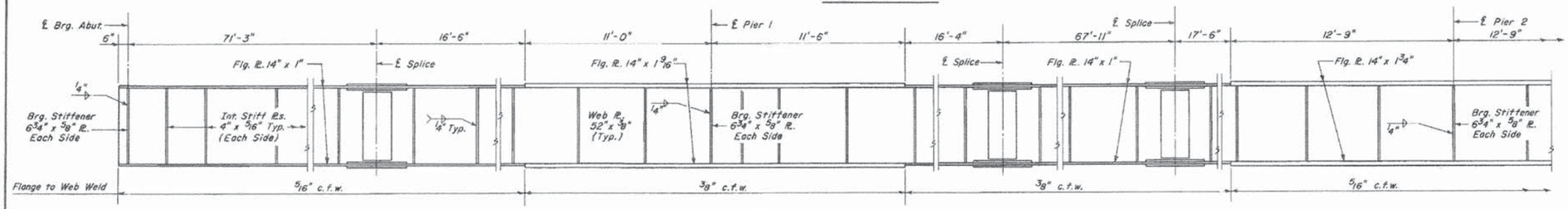
EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 19 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	28
		CONTRACT NO. 89653		
	ILLINOIS	FED. AID PROJECT		

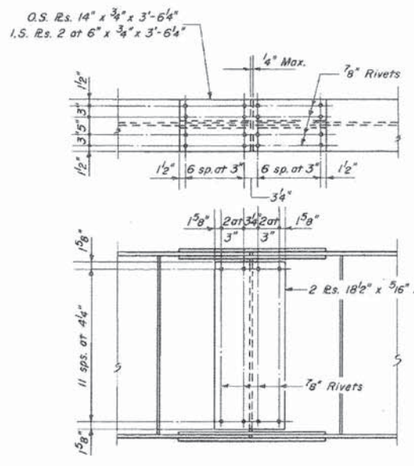
C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



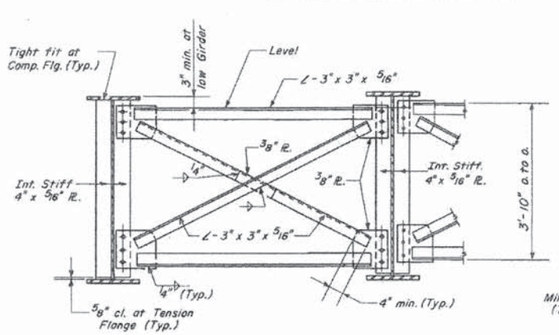
FRAMING PLAN



HALF GIRDER ELEVATION



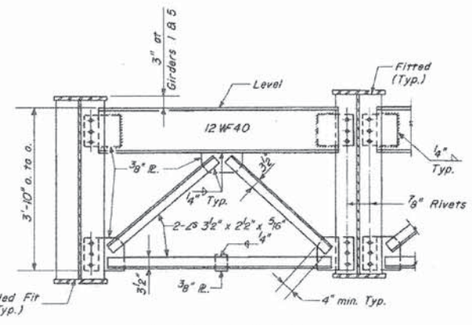
FIELD SPLICE DETAIL



CROSS FRAME F1

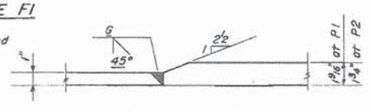
72 Required
12-F2 Required

Cross Frame F2 similar to F1 Stiffeners at Piers shall be similar to stiffeners shown in Cross Frame F detail.



CROSS FRAME F

8 Required



FLANGE PLATE WELD

MACKINAW RIVER BRIDGE
C. H. #11 SEC. 47-1B M.F.T.
TAZEWELL COUNTY
STA. 168+13

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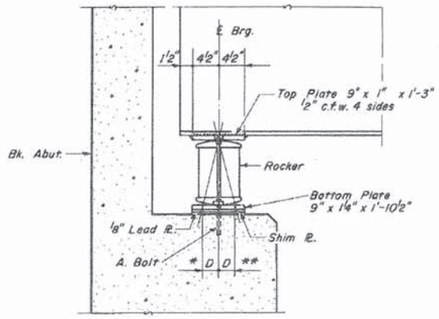
ILLINOIS PROFESSIONAL DESIGN FIRM LB / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

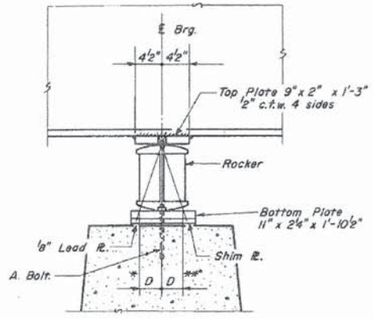
EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 20 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	29
		CONTRACT NO. 89653		
	ILLINOIS	FED. AID PROJECT		

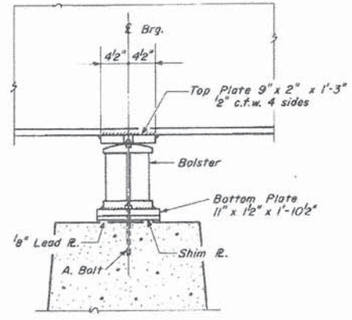
C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



SEC. AT ABUT.



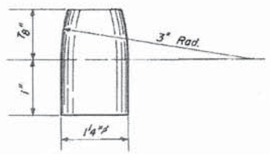
PIERS 1 & 3



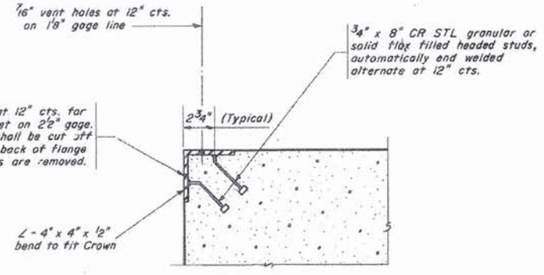
PIER 2

* D = 1'8"/100 ft. of expansion for every 15° below the normal temp. of 50° F.

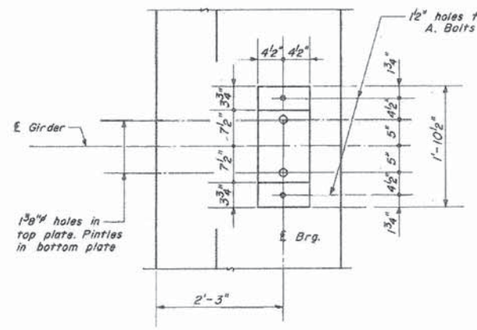
** D = 1'8"/100 ft. of expansion for every 15° above the normal temp. of 50° F.



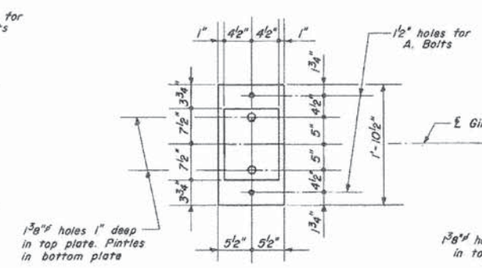
PINTLE DETAIL



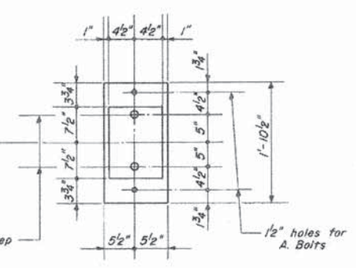
DETAIL AT END OF SLAB



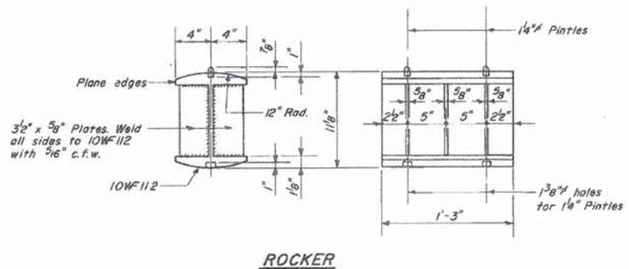
PLAN



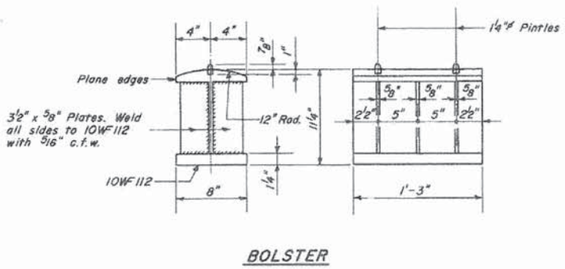
PLAN



PLAN



ROCKER



BOLSTER

NOTES

Field splices shall be punched 11'16" and reamed to size with all Girders at a unit assembled and match marked.

All Anchor Bolts 1"ø x 12" Provide 2'2" x 2'2" x 5'16" plate washer under nut.

Pintles may be threaded or press fit into rockers, bolsters and bearing plates.

Provide 3'8" shim plate under bearing assembly at all bearings of beam 3.

Anchor Bolts to be grouted into drilled holes after beams are in place. At fixed pier Anchor Bolts may be built into the masonry.

All bearing material including Anchor Bolts and lead plates included for payment as Structural Steel. Est. Wt. 9790 Lbs.

MACKINAW RIVER BRIDGE
C. H. #11 SEC. 47-18 M.F.T.
TAZEWELL COUNTY
STA. 168+13

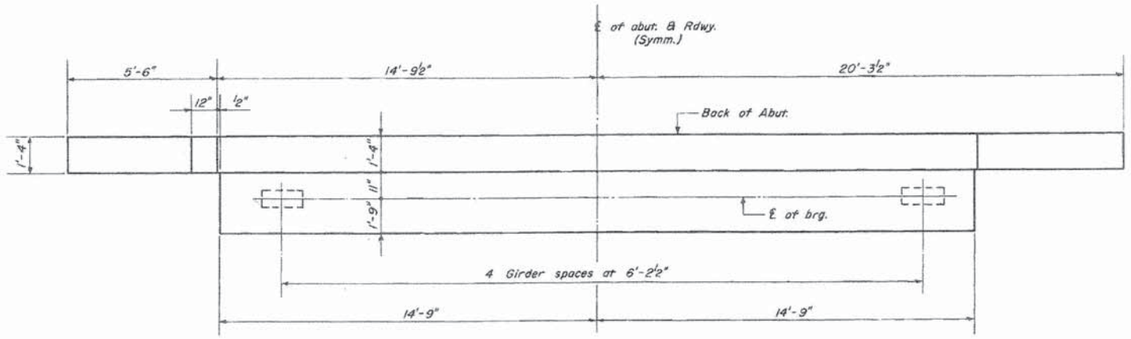
FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LB / PE / SE CORP. 184.002959		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

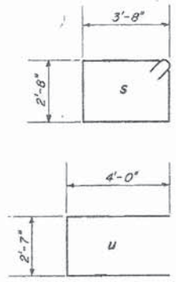
EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 21 OF 25 SHEETS

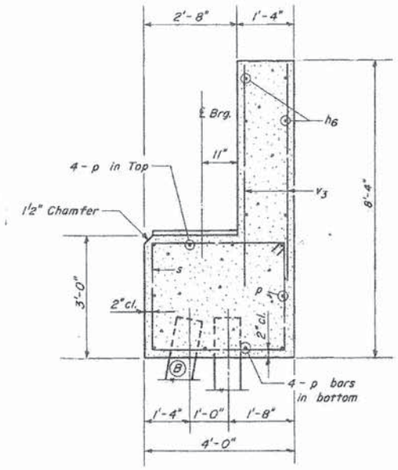
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	30
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-1B	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

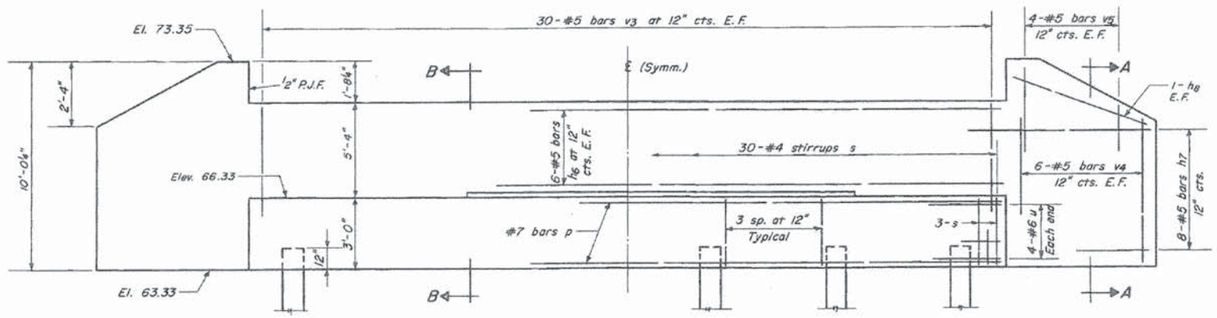


PLAN

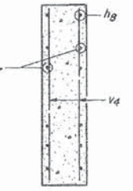




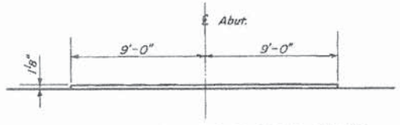
SECTION B-B



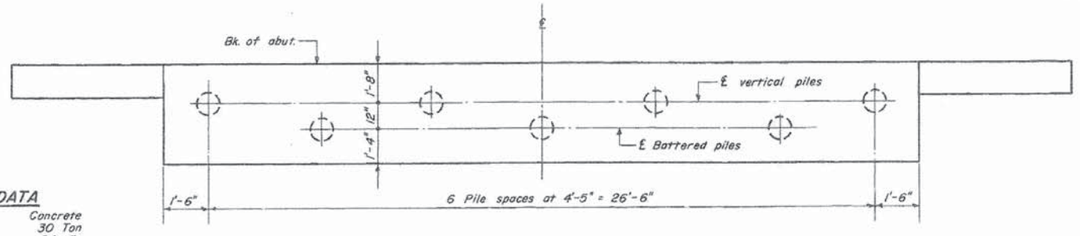
ELEVATION



SEC. A-A



BRIDGE SEAT STEP DETAIL



PILE LAYOUT

PILE DATA

Type	Concrete
Capacity	30 Ton
Est. Length	30 Ft.
No. Req'd. (2 abuts.)	14
Includes 2 Test piles	

NOTES

Batter piles in Front row 2" in 12".
Minimum concrete cover over reinforcement bars 1½" except as noted.
Dimensions on bar bending details are out - out.

BILL OF MATERIAL
TWO ABUTMENTS

Bar	No.	Size	Length	Shape
h6	24	#5	29'-6"	——
h7	64	5	6'-9"	——
h8	8	5	5'-6"	——
p	20	7	29'-3"	——
s	60	4	13'-5"	□
u	16	6	10'-7"	⊏
v3	120	5	6'-6"	——
v4	48	5	7'-6"	——
v5	32	5	3'-0"	——
Class X Concrete			C.Y.	51.6
Reinforcement Bars			Lbs.	4510
Concrete Piles			L.F.	360
Test Piles			Each	2

MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-1B M.F.T.
TAZEWELL COUNTY
STA. 168+13

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
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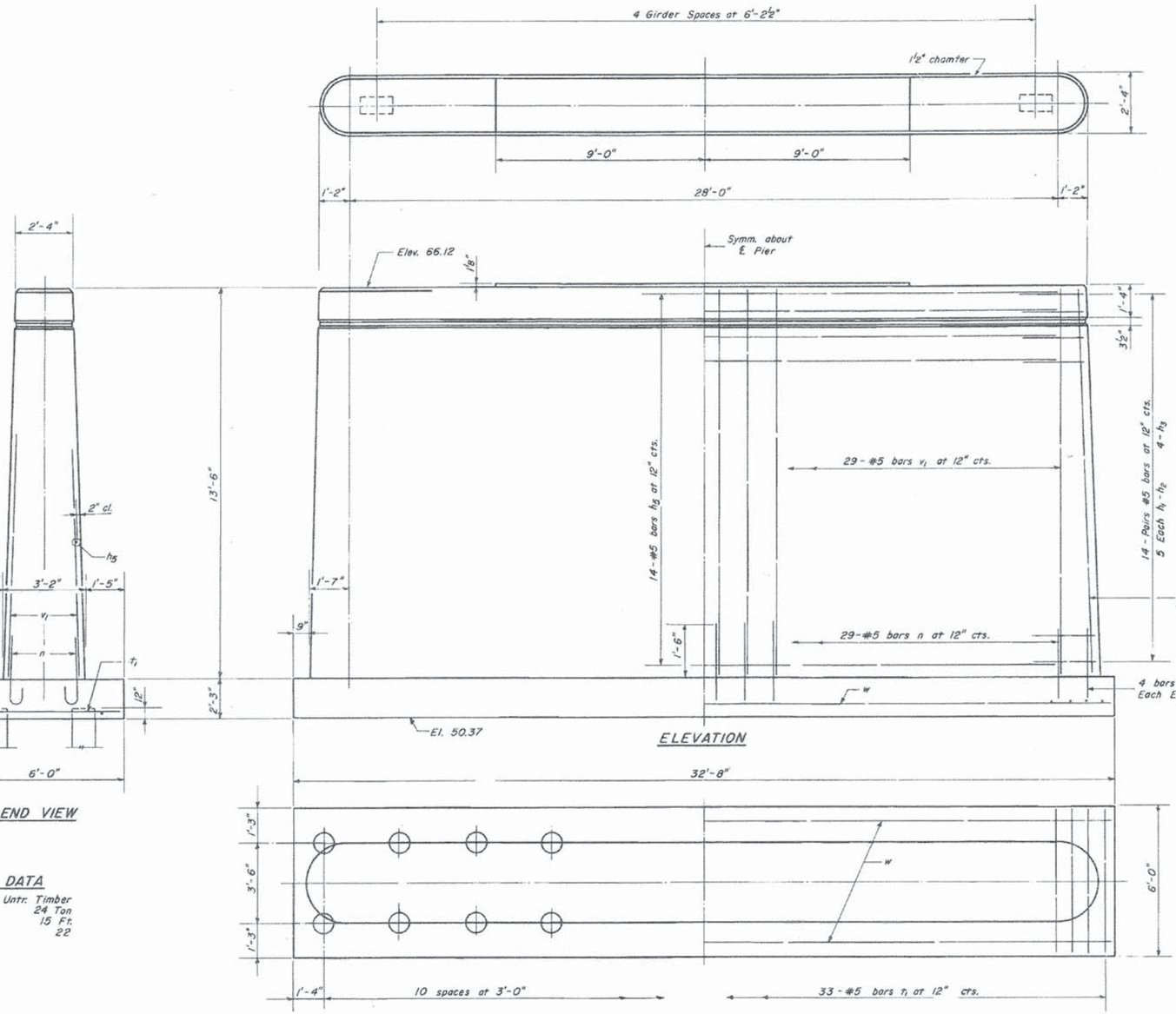
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

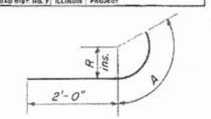
STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 22 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	31
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

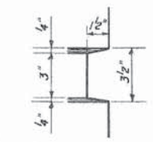
C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		





Bar	R	A
h_1	1'-0"	2'-0"
h_2	1'-2½"	2'-7"
h_3	1'-4"	3'-0"

BARS $h_1 - h_2 - h_3$



NOTCH DETAIL

BAR n

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h_1	20	#5	4'-0"	
h_2	20	5	4'-7"	
h_3	16	5	5'-0"	
h_5	28	5	28'-0"	
n	66	5	3'-10"	
t_1	33	5	5'-8"	
v_1	66	5	13'-3"	
w	4	4	17'-0"	
Class A Concrete		C.Y.	58.0	
Reinforcement Bars		Lbs.	2500	
Untreated Piles		L.F.	330	

PILE DATA

Type	Untr. Timber
Capacity	24 Ton
Est. Length	15 Ft.
No. Required	22

PIER 1
MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-18 M.F.T.
TAZEWELL COUNTY
STA. 168+13

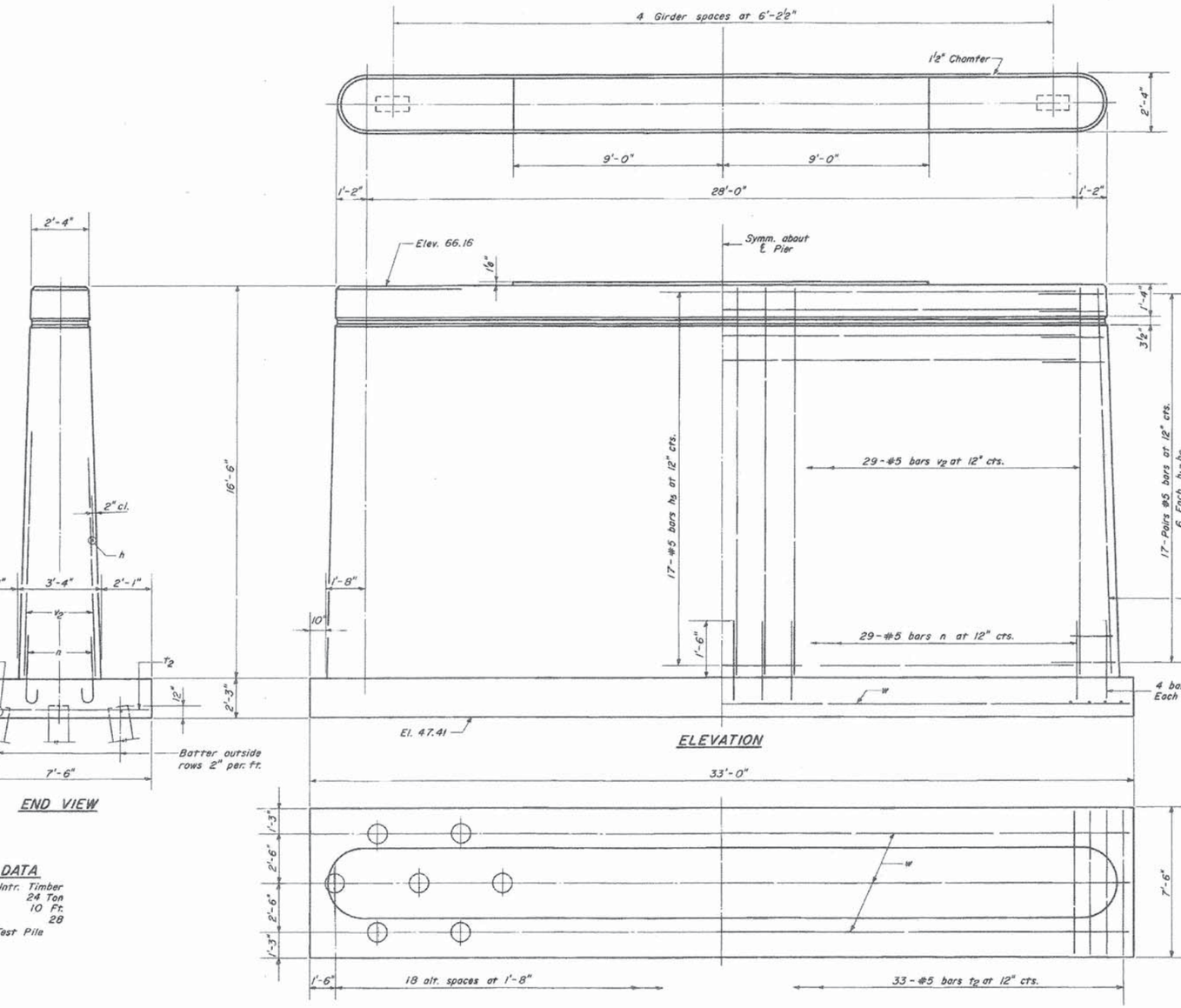
FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703		CHECKED - S.M.S	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 23 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	32
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		

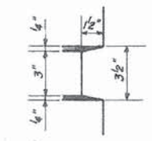
C.H. ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



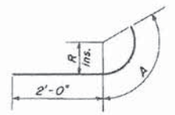
ELEVATION

END VIEW

FOOTING PLAN

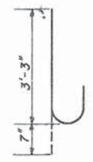


NOTCH DETAIL



Bar	R	A
h_1	1'-0"	2'-0"
h_2	1'-2½"	2'-7"
h_4	1'-5"	3'-2"

BARS $h_1 - h_2 - h_4$



BAR n

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1	24	#5	4'-0"	⌒
h_2	24	5	4'-7"	⌒
h_4	20	5	5'-2"	⌒
h_5	34	5	28'-0"	—
n	66	5	3'-10"	⊂
t_2	33	5	7'-2"	—
½	66	5	16'-3"	—
w	6	4	17'-0"	—
Class A Concrete			C.Y.	73.1
Reinforcement Bars			Lbs.	2990
Untreated Piles			L.F.	270
Test Pile			Each	1

PILE DATA

Type	Untr. Timber
Capacity	24 Ton
Est. Length	10 Ft.
No. Required	28

Includes 1 Test Pile

PIER 2
MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-18 M.F.T.
TAZEWELL COUNTY
STA. 168+13

FILE NAME = 118323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -
		CHECKED - S.M.S	REVISED -
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -

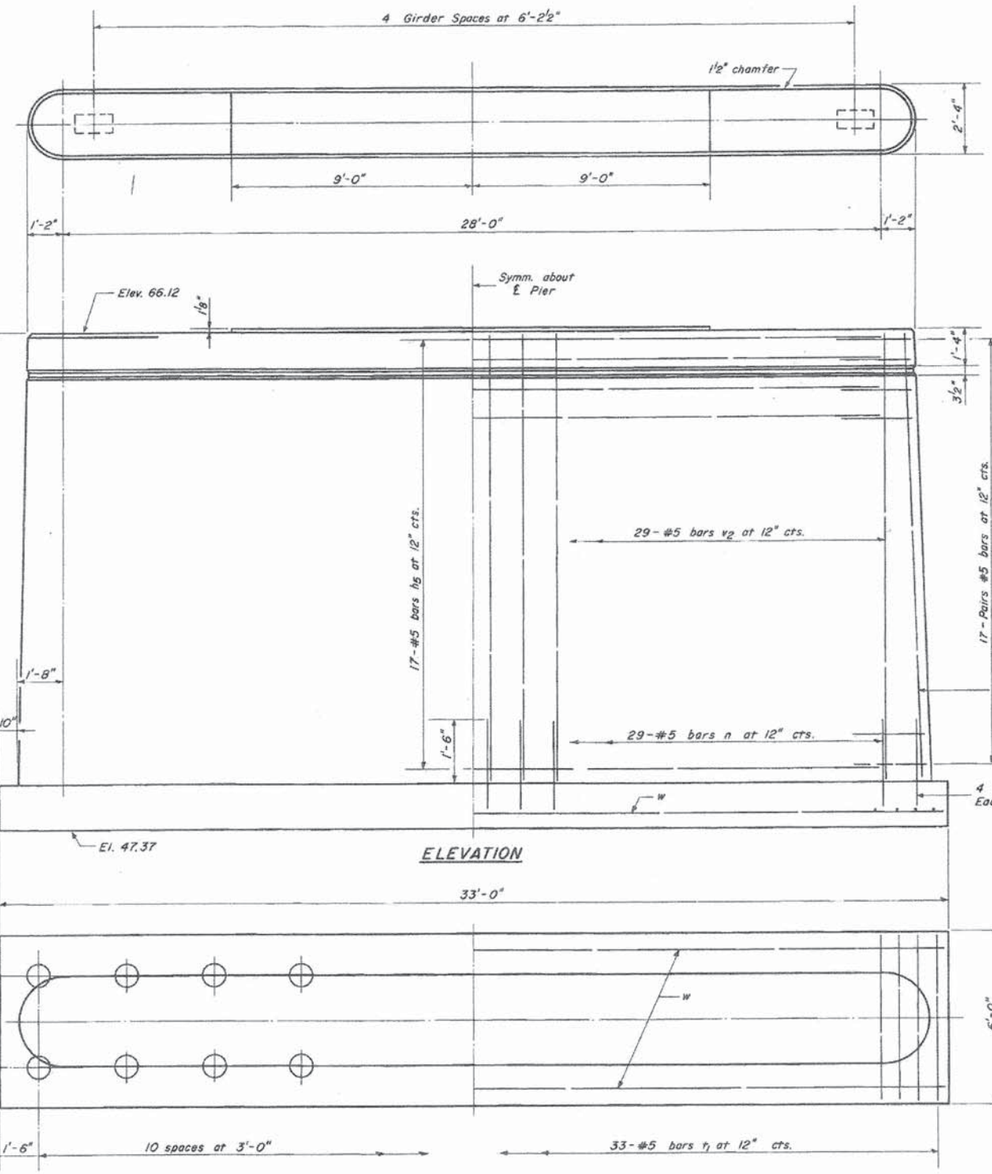
HAMPTON, LENZINI AND RENWICK, INC.
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
ILLINOIS PROFESSIONAL DESIGN FIRM
LS / PE / SE CORP. 184.000959

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 24 OF 25 SHEETS

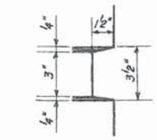
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	33
			CONTRACT NO. 89653	
		ILLINOIS FED. AID PROJECT		

C.H. PROPS. NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
11	47-18	TAZEWELL		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

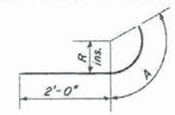


ELEVATION

END VIEW

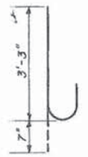


NOTCH DETAIL



Bar	R	A
h_1	1'-0"	2'-0"
h_2	1'-2½"	2'-7"
h_4	1'-5"	3'-2"

BARS $h_1 - h_2 - h_4$



BAR n

PILE DATA

Type	Untr. Timber
Capacity	24 Ton
Est. Length	Ft.
No. Required	22

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h_1	24	#5	4'-0"	
h_2	24	5	4'-7"	
h_4	20	5	5'-2"	
h_5	34	5	28'-0"	
n	66	5	3'-10"	
t_1	33	5	5'-8"	
v_2	66	5	16'-3"	
w	4	4	17'-0"	
Class A Concrete			C.Y.	69.0
Reinforcement Bars			Lbs.	2940
Untreated Piles			L.F.	220

PIER 3
MACKINAW RIVER BRIDGE
C.H. #11 SEC. 47-1B M.F.T.
TAZEWELL COUNTY
STA. 168+13

FILE NAME = 110323-sht-bridge.dgn	USER NAME =	DESIGNED - J.R.T.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC. 3085 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184.000959		CHECKED - S.M.S	REVISED -	
	PLOT SCALE =	DRAWN - D.A.B.	REVISED -	
	PLOT DATE = 8/18/2015	CHECKED - M.D.C.	REVISED -	

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

EXISTING PLANS
STRUCTURE NO. 090-3029
SHEET NO. 25 OF 25 SHEETS

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11	12-00047-00-BR	TAZEWELL	39	34
			CONTRACT NO. 89653	
		ILLINOIS	FED. AID PROJECT	

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

IMPROVEMENT BEGINS

AHEAD C = 4 F = 0
BACK C = 0 F = 0

510.79
510.79

EXIST. R.O.W.

EXIST. R.O.W.

165 + 00.00

510.74

1:3

1:3

EXIST. R.O.W.

EXIST. R.O.W.

164 + 50.00

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

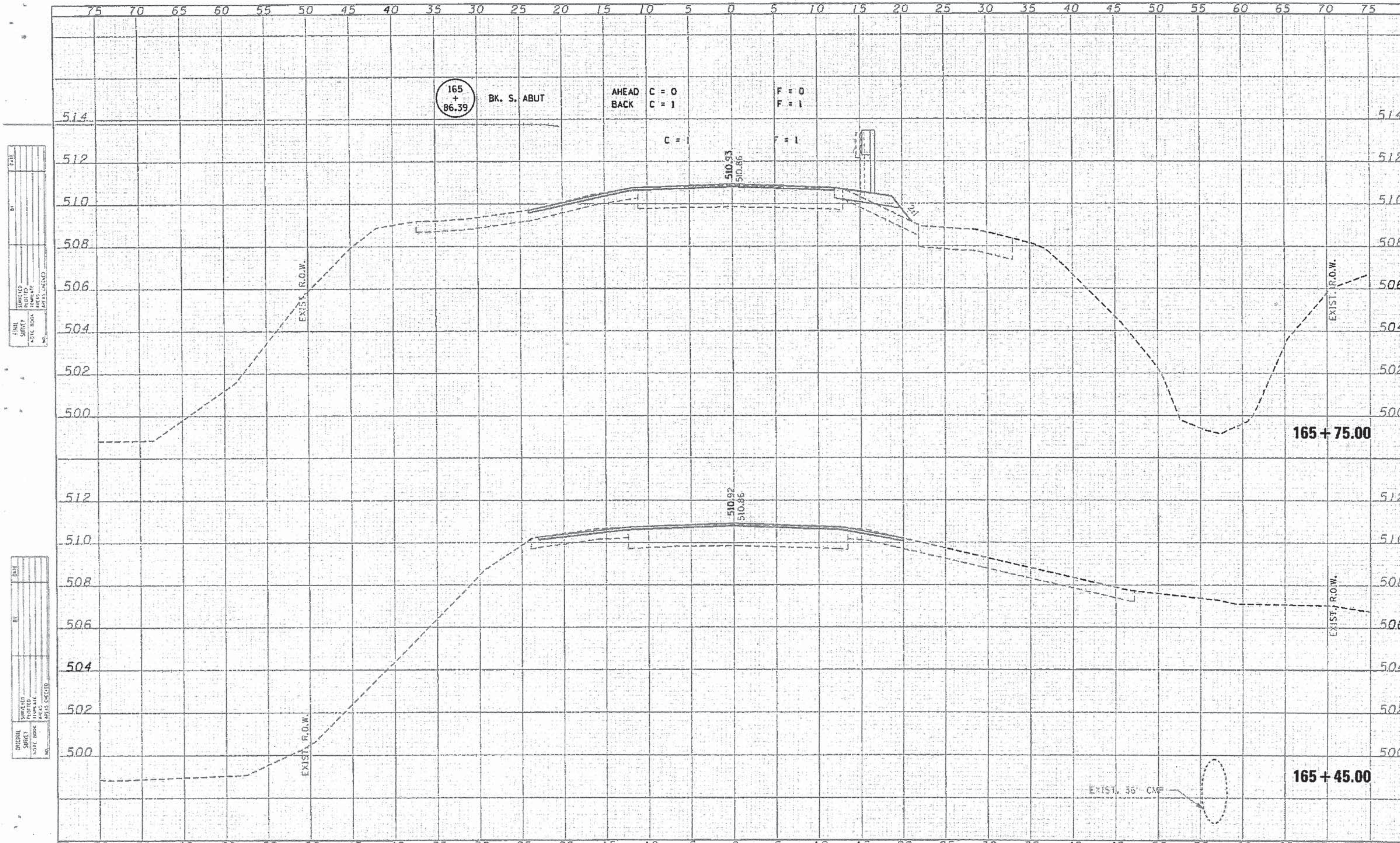
FILE NAME = 110323-sht-sxs.dgn	USER NAME =	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
3595 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - M.D.C.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM L.S / P.E / S.E CORP. 184.000959	PLOT DATE = 8/18/2015	DATE - 08/14/15	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

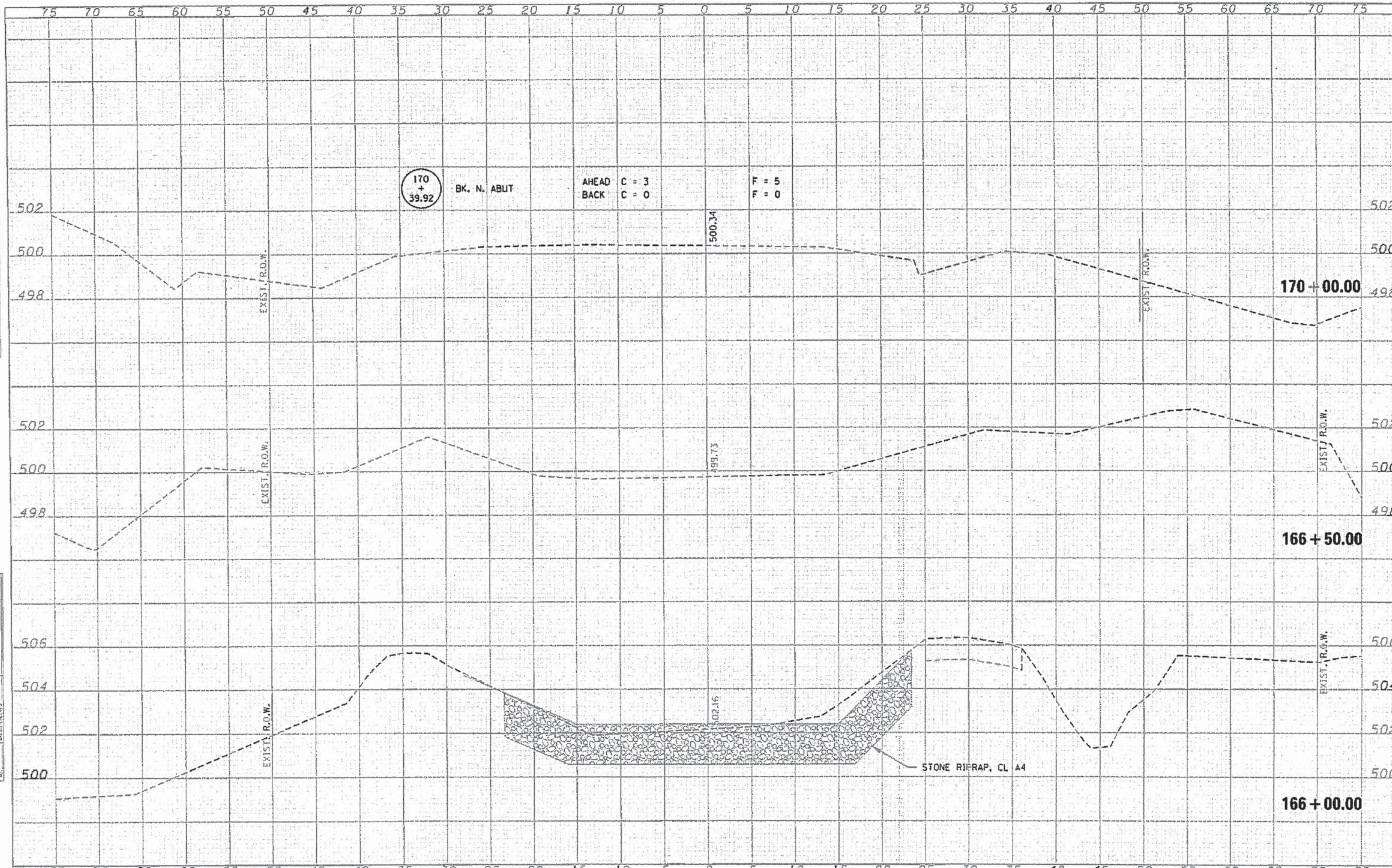
CROSS SECTIONS
C.H. 11 / TOWERLINE ROAD

SCALE: | SHEET NO. OF SHEETS | STA. 164+50.00 TO STA. 165+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	35
		CONTRACT NO. 89653		
	ILLINOIS FED. AID PROJECT			



HAMPTON, LENZINI AND RENWICK, INC.	PLOT SCALE	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	CROSS SECTIONS C.H. 11 / TOWERLINE ROAD	F.A.S. 2462	SECTION 12-00047-00-BR
	PLOT DATE = 8-14-2015	DRAWN - T.W.E.	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. 165+45.00 TO STA. 165+75.00
		CHECKED - M.D.C.	REVISED -			COUNTY TAZEWELL	TOTAL SHEETS 39 / SHEET NO. 36
		DATE - 08/14/15	REVISED -			CONTRACT NO. 89653	ILLINOIS FED. AID PROJECT



FILE NAME = 110323-sht-xsec.dgn	USER NAME = BUSERK	DESIGNED - J.W.F.	REVISED -	
HAMPTON, LENZINI AND RENWICK, INC.	PLOT SCALE = 4SCALE4	DRAWN - T.W.K.	REVISED -	
	PLOT DATE = 8/14/2015	CHECKED - M.O.C.	REVISED -	
		DATE - 08/14/15	REVISED -	

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

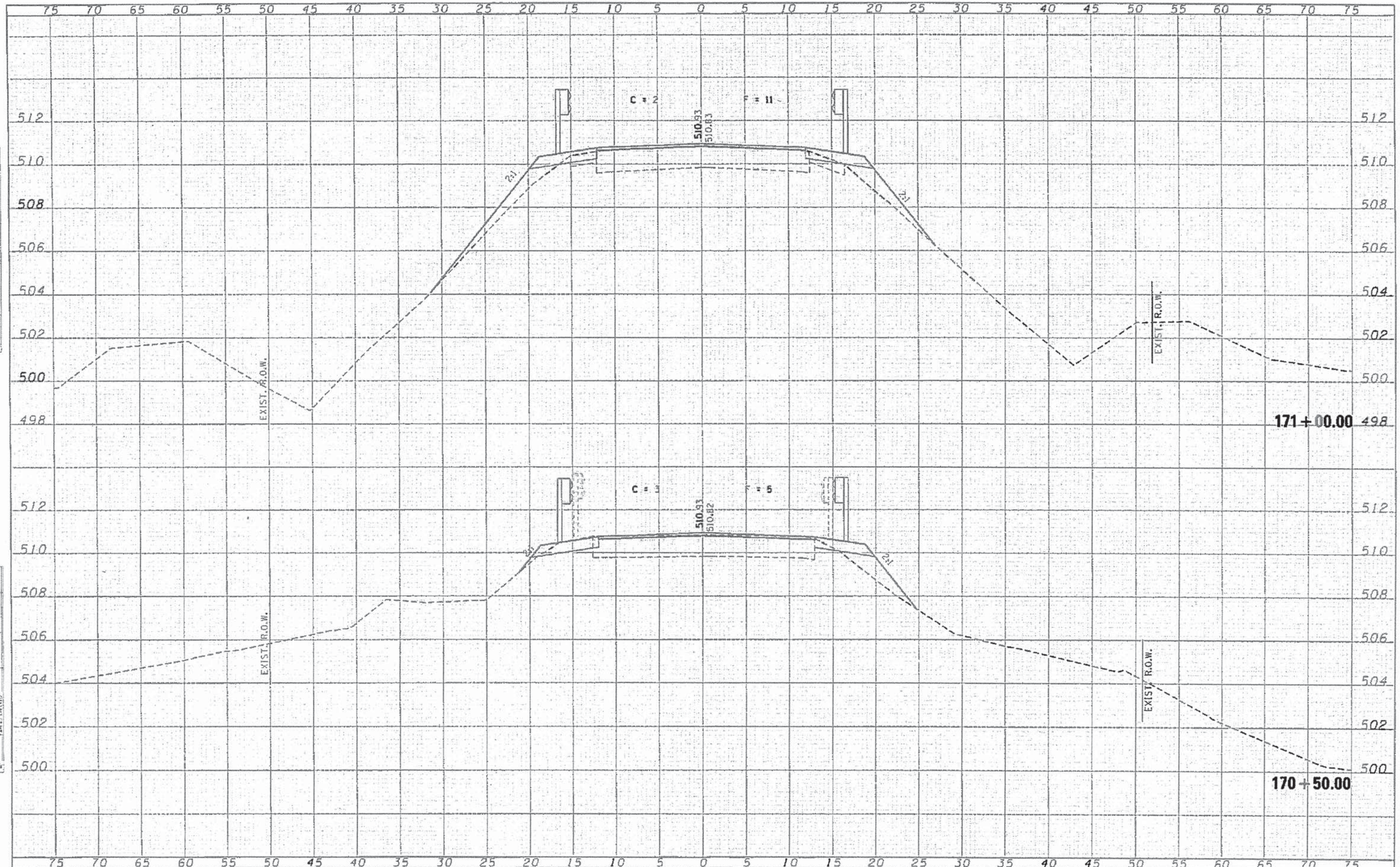
CROSS SECTIONS
C.H. 11 / TOWERLINE ROAD

SCALE: | SHEET NO. OF SHEETS | STA. 166+00.00 TO STA. 170+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	37

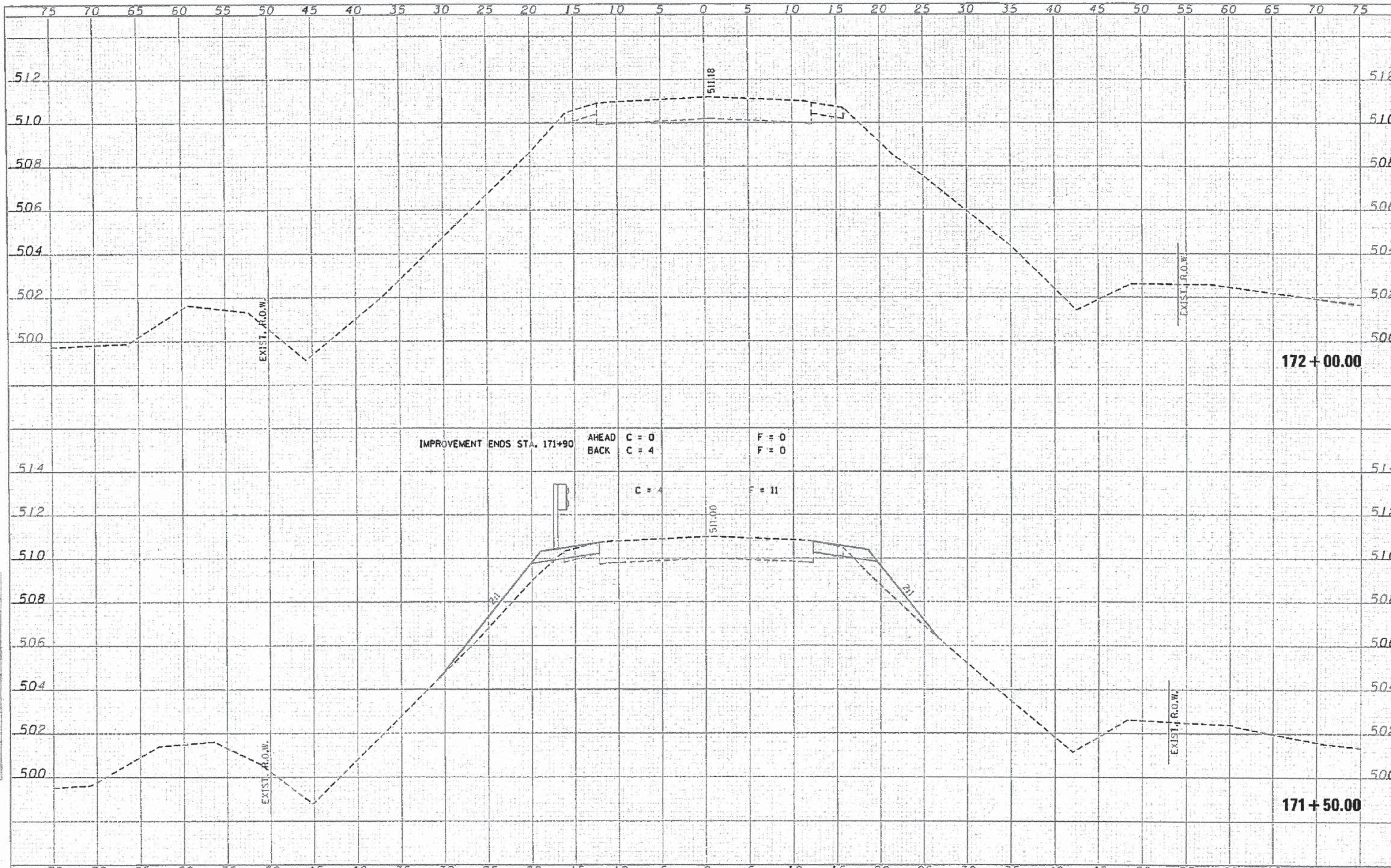
CONTRACT NO. 89653

ILLINOIS FED. AID PROJECT



FILE NAME : 100320-sht-x-s.dgn	USER NAME : RUSER	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS TAZEWELL COUNTY HIGHWAY DEPARTMENT	CROSS SECTIONS C.H. 11 / TOWERLINE ROAD
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN T.W.K.	REVISED -		
	PLOT SCALE = 1.0000 ' / INCH	CHECKED - M.D.C.	REVISED -		SCALE: SHEET NO. OF SHEETS STA. 170+50.00 TO STA. 171+00.00
	PLOT DATE = 8/14/2015	DATE 08/14/15	REVISED -		

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	38
		CONTRACT NO. 89653		
		ILLINOIS FED. AID PROJECT		



FILE NAME : 110333	USER NAME : $USER$	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		DRAWN - T.W.K.	REVISED -
	PLOT SCALE : $SCALE$	CHECKED - M.D.C.	REVISED -
	PLOT DATE : 8-14-2015	DATE - 08/14/15	REVISED -

STATE OF ILLINOIS
TAZEWELL COUNTY HIGHWAY DEPARTMENT

CROSS SECTIONS
C.H. 11 / TOWERLINE ROAD

SCALE: | SHEET NO. OF SHEETS | STA. 171+50.00 TO STA. 172+00.00

F.A.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2462	12-00047-00-BR	TAZEWELL	39	39
		CONTRACT NO. 89653		

ILLINOIS FED. AID PROJECT