

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

FOR INDEX OF SHEETS, SEE SHEET NO. 2
 FOR STATE STANDARDS, SEE SHEET NO. 2

FAP ROUTE 754 (IL 76)
SECTION (101BR)BDR
PROJECT NHPP-YSAE(963)
TYPE of IMPROVEMENT: BRIDGE REPAIR
SN 004-0016 OVER BEAVER CREEK
BOONE COUNTY

C-92-073-22

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	1
		ILLINOIS	CONTRACT NO. 64R49	

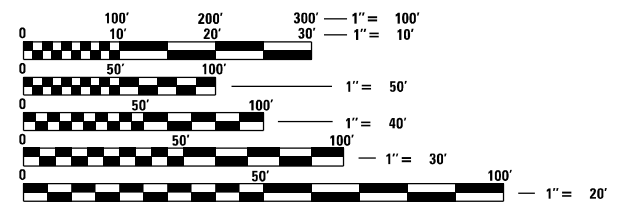
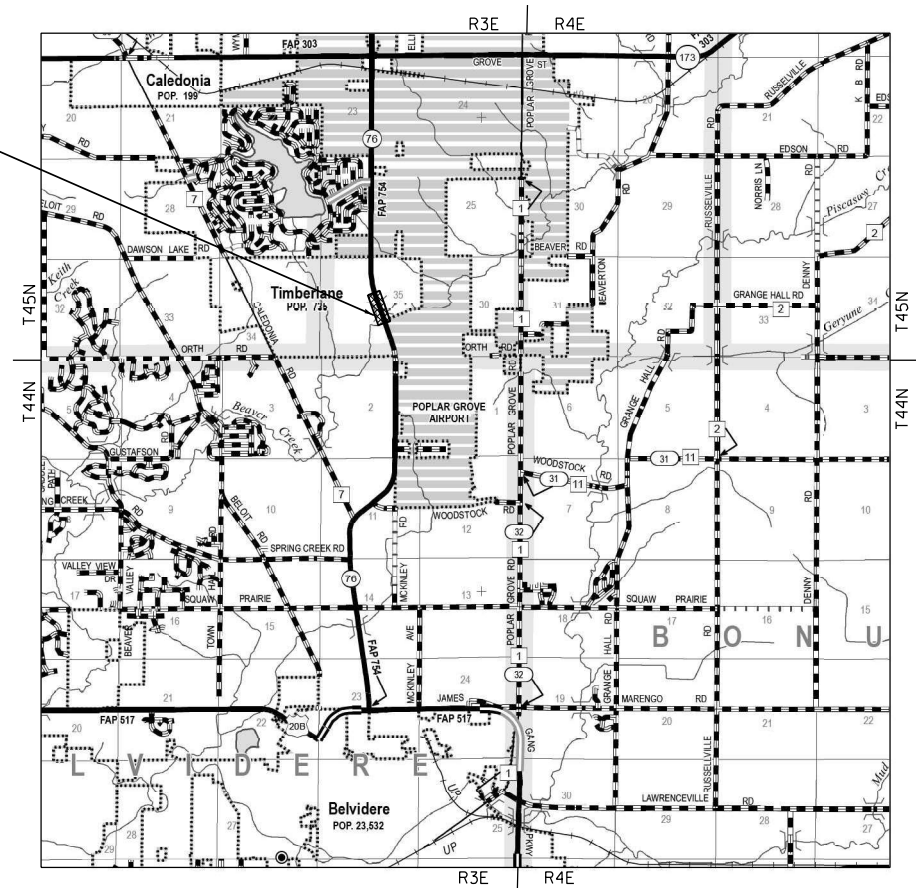
D-92-016-22



LOCATION OF SECTION INDICATED THIS: — ■ —

POPLAR GROVE TOWNSHIP
T45N R3E, SECTION 35

SN 004-0016



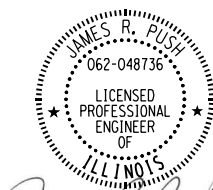
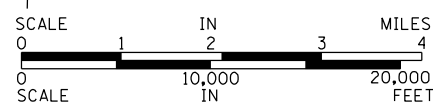
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: JAMES R. PUSH, PE (630) 930-6420
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64R49

GROSS LENGTH = 278.58 FT. = 0.053 MILE
 NET LENGTH = 278.58 FT. = 0.053 MILE



James R. Push
 JAMES R. PUSH, P.E.
 LICENSE NO.: 062-048736
 EXPIRES: NOVEMBER 30, 2023
 DATE: 05/03/2022

QUANDEL CONSULTANTS
 161 NORTH CLARK STREET
 SUITE 2975
 CHICAGO, IL 60601
 312-634-6201
 DESIGN FIRM - PROF/STRUCT ENGINEER
 IL LIC. 184.005283-0006

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED October 12, 2022

David Almond
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 9, 2022
Scott A. Etk
 ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 2022
Stephen M. Smith
 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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 OF THE STATE OF ILLINOIS**

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21	GUARDRAIL REFLECTORS, TYPE C (SPECIAL) (DISTRICT STD 55.1)

STATE STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-12	STEEL PLATE BEAM GUARDRAIL
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
642006-01	SHOULDER RUMBLE STRIPS, 8 IN.
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE THIS PROJECT IS STARTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

NO STREAM PERMITS HAVE BEEN PROCURED FOR THIS PROJECT. NONE ARE REQUIRED FROM THE REGULATORY AGENCIES IF THERE IS NO DEBRIS FALLING OR BEING PLACED INTO THE STREAM. ANY TEMPORARY FILL IN THE STREAM OR THE COMPROMISING OF THE DIKE (IF APPLICABLE) WILL NOT BE ALLOWED. IF THE CONTRACTOR CHOOSES TO USE ALTERNATE/MODIFIED CONSTRUCTION METHOD(S), THEY WILL BE RESPONSIBLE FOR OBTAINING THE PROPER PERMITS. NO RELIEF OR COMPENSATION WILL BE GIVEN FOR ANY DELAYS, WORKING DAYS CHARGED OR CALENDAR DAYS EXPIRED DUE TO THE LOSS OF TIME OR DELAY DURING THE RE-SUBMITTAL PROCESS TO PROCURE THE NECESSARY PERMIT(S) DUE TO THE CONTRACTOR CHOOSING ALTERNATE/MODIFIED CONSTRUCTION METHOD(S). ABSOLUTELY NO CONSTRUCTION ACTIVITIES WILL TAKE PLACE WITHOUT THE PROPER PERMITS BEING SECURED.

ALL ELEVATIONS SHOWN IN PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

IDOT DISTRICT 2 OPERATIONS TRAFFIC SIGNAL SECTION SHALL BE CONTACTED AT 815-284-2271 FOR CONTROLLER PROGRAMMING AND TIMING APPROVAL PRIOR TO ACTIVATING THE TEMPORARY BRIDGE TRAFFIC SIGNALS.

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

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

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S):	HMA CONC SURF CSE
PG:	PG 64 -22
DESIGN AIR VOIDS:	4.0% @ N DESIGN - 50
MIXTURE COMPOSITION:	IL 9.5
FRICTION AGGREGATE:	MIX "C"
QUALITY MANAGEMENT PROGRAM:	QC / QA
SUBLOT SIZE:	N / A

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:

BITUMINOUS MATERIALS (TACK COAT)	0.05 LBS / SQ FT (ON PAVEMENT)
BITUMINOUS MATERIALS (TACK COAT)	0.025 LBS / SQ FT (FOG)
HOT-MIX ASPHALT MATERIAL	0.056 TON / SQ YD PER 1"
AGGREGATE MATERIAL	1.60 TONS / CU YD

PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

- ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
- ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
- THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
- CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE.

- THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT.
- EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

MICROSILICA CONCRETE SHALL INCLUDE MACRO-SIZE, TYPE III, SYNTHETIC FIBERS MEETING THE 'BRIDGE DECK MICROSILICA CONCRETE OVERLAY' SPECIAL PROVISION.

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PLOT SCALE = 48.0000' / in.	CHECKED - JRP	REVISED -
PLOT DATE = 10/11/2022	DATE - 10/11/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	2
CONTRACT NO. 64R49				
ILLINOIS FED. AID PROJECT				

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CODE NO.	ITEM	UNIT	URBAN	
			TOTAL QUANTITY	CONSTRUCTION CODE BRIDGE 0047 80% FED / 20% STATE
				SN 004-0016 BOONE COUNTY
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	71	71
28200200	FILTER FABRIC	SQ YD	80	80
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	223	223
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	495	495
40600990	TEMPORARY RAMP	SQ YD	54	54
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	42	42
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	32	32
44000100	PAVEMENT REMOVAL	SQ YD	32	32
50200100	STRUCTURE EXCAVATION	CU YD	32	32
50300225	CONCRETE STRUCTURES	CU YD	5.4	5.4
50300300	PROTECTIVE COAT	SQ YD	1,031	1,031
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	740	740
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	27	27
60600605	CONCRETE CURB, TYPE B	FOOT	60	60
63200310	GUARDRAIL REMOVAL	FOOT	200	200
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4

* DENOTES SPECIALTY ITEM



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PLOT DATE = 7/19/2022	DATE - 07/18/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	3
CONTRACT NO. 64R49				
ILLINOIS FED. AID PROJECT				

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CODE NO.	ITEM	UNIT	URBAN	
			TOTAL QUANTITY	CONSTRUCTION CODE BRIDGE 0047 80% FED / 20% STATE
				SN 004-0016 BOONE COUNTY
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	224	224
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	1,110	1,110
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	42	42
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	463	463
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	2,612	2,612
70307160	TEMPORARY PAVEMENT MARKING - LINE 12" - TYPE IV TAPE	FOOT	48	48
70400100	TEMPORARY CONCRETE BARRIER	FOOT	451	451
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	451	451
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,298	1,298

* DENOTES SPECIALTY ITEM



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 CHECKED -
 DATE - 07/18/2022

REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	4
CONTRACT NO. 64R49			ILLINOIS FED. AID PROJECT	

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				URBAN	CONSTRUCTION CODE BRIDGE 0047 80% FED / 20% STATE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 004-0016 BOONE COUNTY	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2	
* 78112000	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	33	33	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	4	
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	573	573	
* X7820007	GUARDRAIL REFLECTORS, TYPE C (SPECIAL)	EACH	23	23	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	16	16	
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	907	907	
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	907	907	
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1,653	1,653	
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	1	1	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	5	5	
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	829	829	

* DENOTES SPECIALTY ITEM



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 CHECKED -
 DATE - 07/18/2022

REVISED -
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	5
CONTRACT NO. 64R49			ILLINOIS FED. AID PROJECT	

Existing Structure S.N. 004-0016 built in 1990 as a 3-Span Steel Beam Superstructure, with a R.C. Deck.
Total width out to out = 47'-2". Total length bk. to bk. abut. = 154'-7". R.C. Piers and Abuts.

Traffic to be maintained during Stage Construction.

INDEX OF SHEETS

1. General Plan & Elevation
2. Cross Section
3. Wearing Surface Plan
4. Deck Slab and Approach Slab Repair Plan
5. Plan & Elevation of South Abutment Erosion Repair
6. Detail of South Abutment Erosion Repair
7. Temporary Concrete Barrier for Stage Construction

GENERAL NOTES

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.

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.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Reinforcement bars designated (E) shall be epoxy coated.

The Contractor shall use extreme care during concrete removal so as not to damage the Steel I-beam.

Protective coat shall be applied to the top and inside face of parapets and the new overlay.

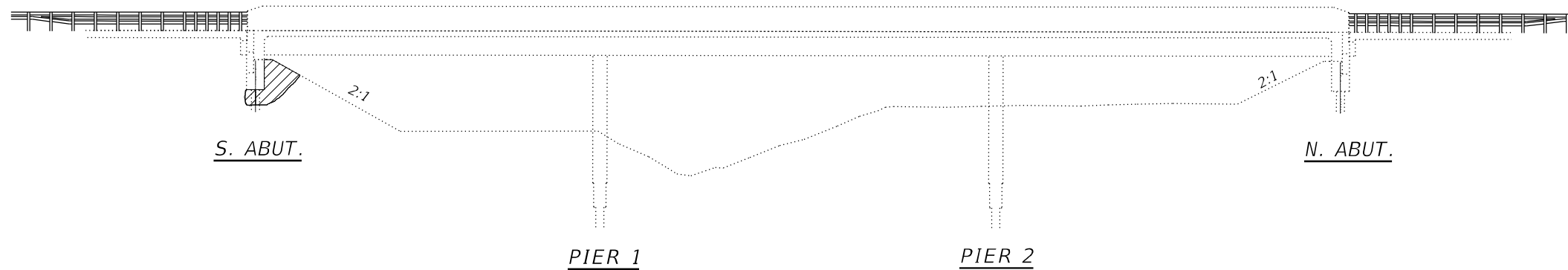
Areas of repairs shown are estimated. The Engineer shall show actual locations of the repairs on AS-BUILT PLANS.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Cost included with Deck Slab Repair.

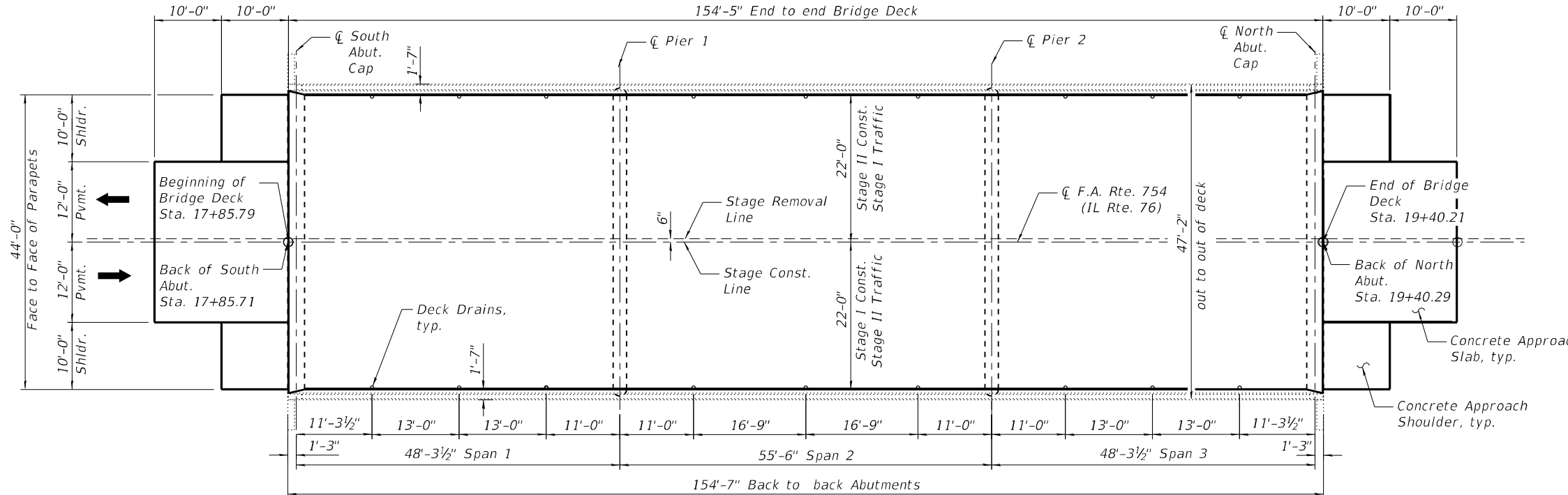
Microsilica concrete shall include macro-size, Type III, synthetic fibers meeting the 'Bridge Deck Microsilica Concrete Overlay' special provision.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	573
Protective Coat	Sq. Yd.	1,031
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	907
Bridge Deck Scarification 3/4"	Sq. Yd.	907
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	1
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5
Diamond grinding (Bridge Section)	Sq. Yd.	829
HMA Surface Removal - Butt Joint	Sq. Yd.	495
HMA Surface Course, IL 9.5 Mix "C" N50	Ton	42
Temporary Ramp	Sq. Yd.	54
Pavement Connector (HMA) For Bridge Approach Slab	Sq. Yd.	32
Traffic Barrier Terminal, Type 6	Each	4
Approach Slab Repair (Partial Depth)	Sq. Yd.	16
Stone Dumped Riprap Class A5	Ton	71
Structure Excavation	Cu. Yd.	32
Concrete Structures	Cu. Yd.	5.4
Reinforcement bars, Epoxy coated	Pound	740
Filter Fabric	Sq. Yd.	80
Controlled Low Strength Material	Cu. Yd.	27
Cleaning and Painting Steel Bridge No. 1	L Sum	1
Pavement Removal	Sq. Yd.	32
Guardrail Removal	Foot	200
Structural Steel Repair	Pound	1,653
Concrete Curb, Type B	Foot	60



ELEVATION
Looking West

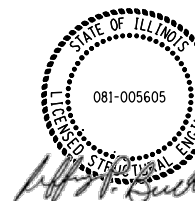


SCOPE OF WORK:

1. Complete bridge scarification, 3/4".
2. Complete full-depth deck patching.
3. Complete approach slab repair.
4. Place bridge deck microsilica concrete overlay, 2 1/2".
5. Complete diamond grinding 1/4" and bridge deck grooving (longitudinal).
6. Excavate under South Abutment, Partial clean and paint steel piles, plate steel pile.
7. Encase steel piles with concrete.
8. Fill area under South Abutment with CLSM and place new riprap.



PLAN



07/18/2022
JEFFREY P. BUCHOLC, S.E.
LICENSE NO.: 081-005605
EXPIRES: NOVEMBER 30, 2024

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
S.N. 004-0016

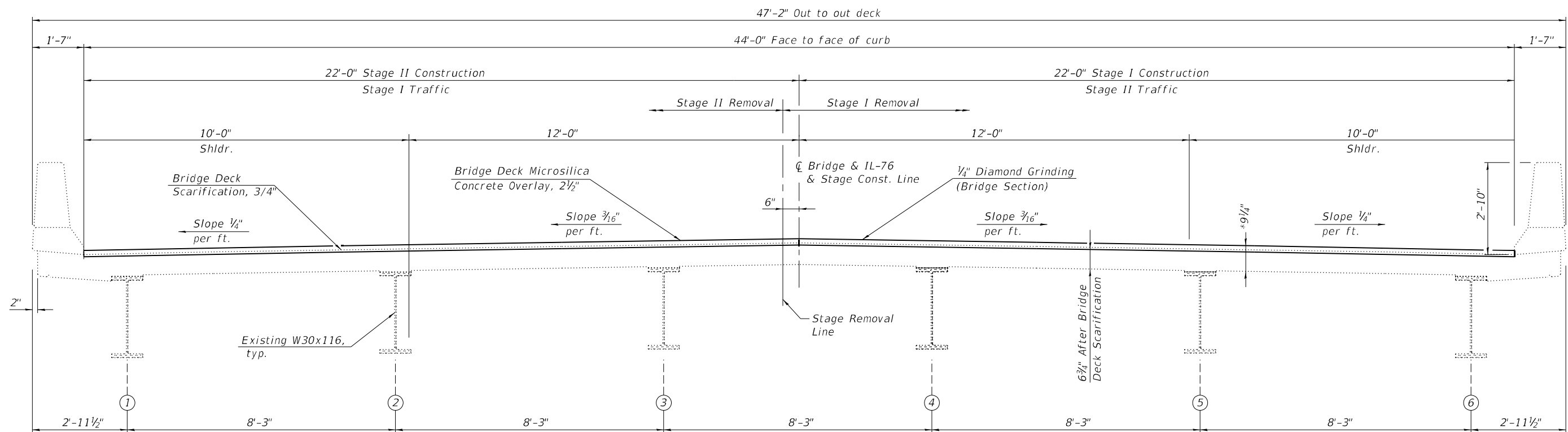
SHEET 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	7
CONTRACT NO. 64R49				

ILLINOIS FED. AID PROJECT

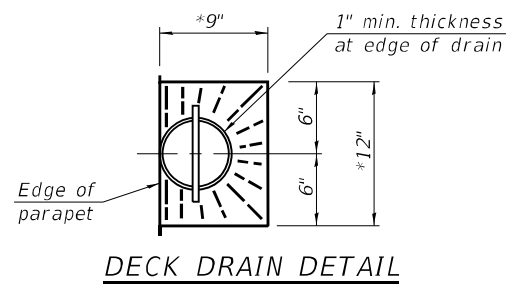
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CROSS SECTION
 (Looking North)

*Prior to grinding



DECK DRAIN DETAIL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

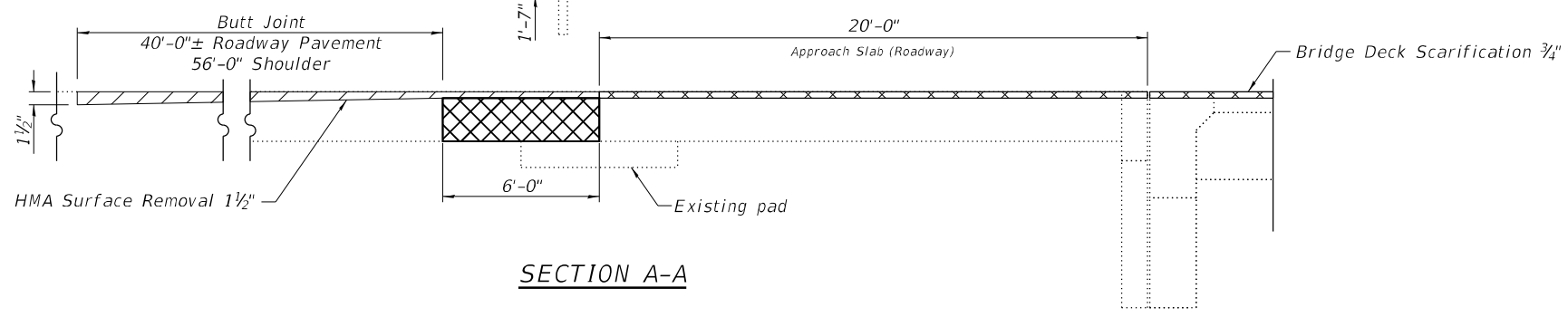
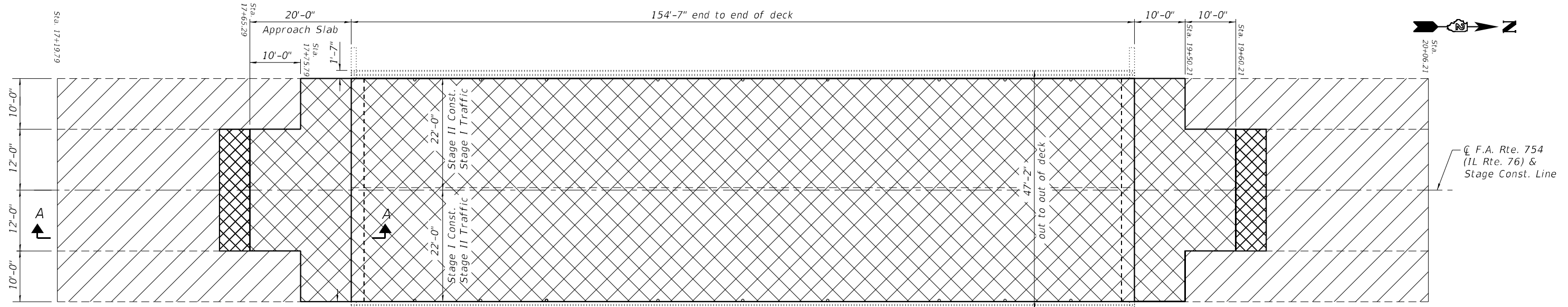
CROSS SECTION
S.N. 004-0016

SHEET 2 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	8
CONTRACT NO. 64R49				

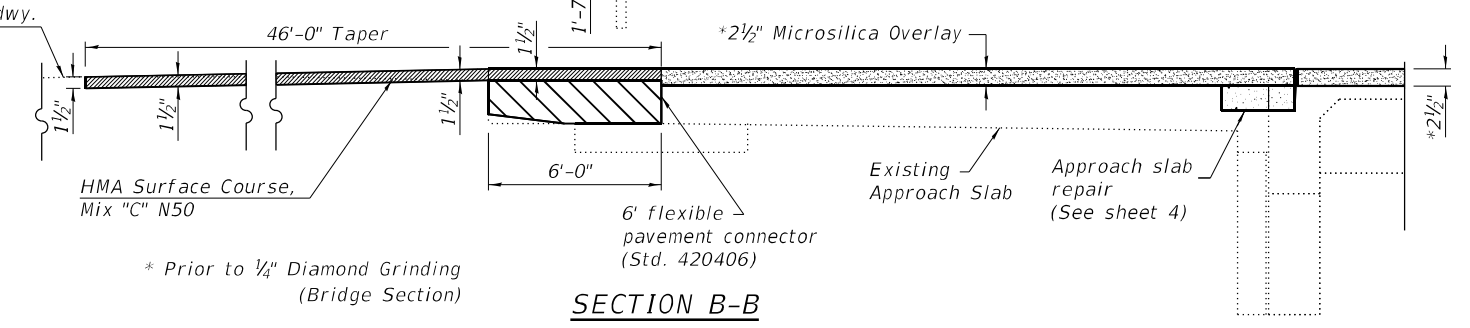
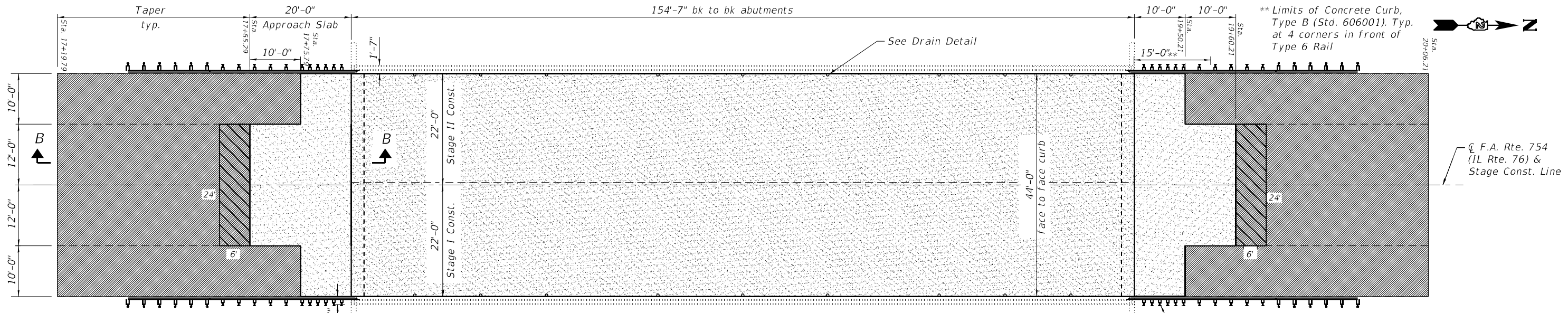
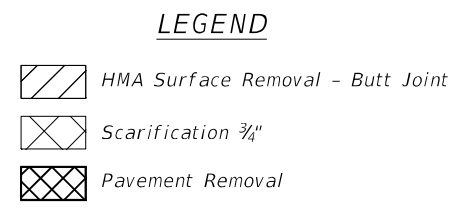
ILLINOIS FED. AID PROJECT

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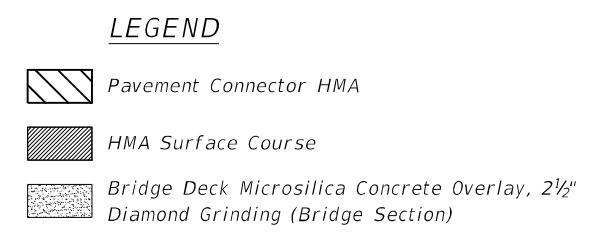
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Scarification 3/4"	Sq. Yd.	907
HMA Surface Removal - Butt Joint	Sq. Yd.	495
Pavement Removal	Sq. Yd.	32
Guardrail Removal	Foot	200



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
HMA Surface Course, IL 9.5 Mix "C" N50	Ton	42
Bridge Deck Microsilica Conc. Ovly. 2 1/2"	Sq. Yd.	907
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	573
Diamond Grinding (Bridge Section)	Sq. Yd.	829
Pavement Connector (HMA)	Sq. Yd.	32
Traffic Barrier Terminal, Type 6	Each	4
Concrete Curb, Type B	Foot	60
Protective Coat	Sq. Yd.	1,031



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEARING SURFACE PLAN
S.N. 004-0016

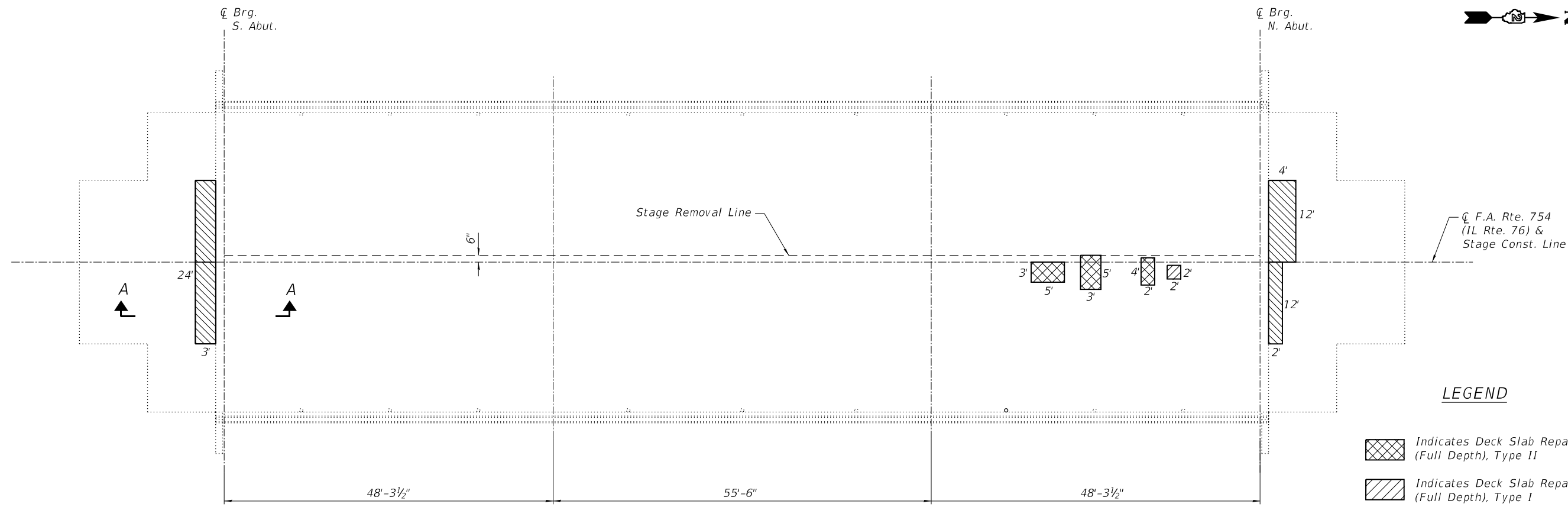
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	9

CONTRACT NO. 64R49

SHEET 3 OF 7 SHEETS

ILLINOIS FED. AID PROJECT

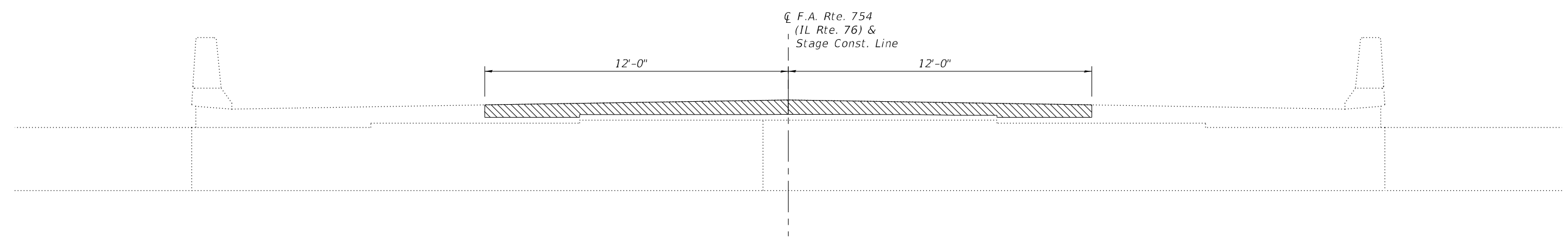
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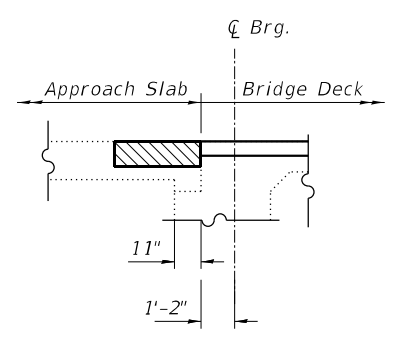
PLAN

LEGEND

- Indicates Deck Slab Repair (Full Depth), Type II
- Indicates Deck Slab Repair (Full Depth), Type I
- Indicates Approach Slab Repair (Partial Depth) - See Note



ABUTMENT ELEVATION



SECTION A-A

Notes:
 Areas of deck slab repair shown are estimated. The Engineer shall show actual locations of the repairs on AS-BUILT PLANS.
 Approach Slab Repair (Partial Depth) may vary, with a maximum depth of 7 inches.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	1
Approach Slab Repair (Partial Depth)	Sq. Yd.	16

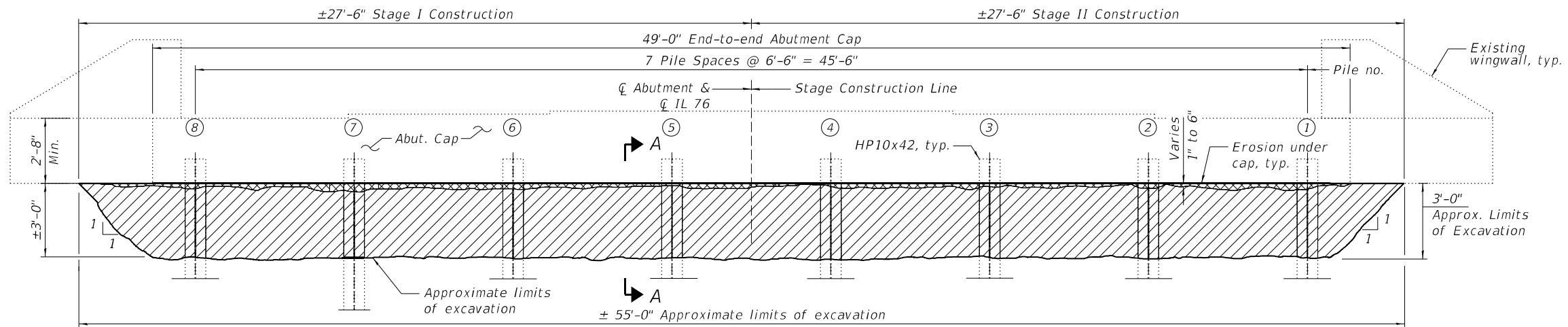
Prairie Engineers, P.C.
 22484 Grossbach Road
 Washington, IL 61571
 (217) 605-0403
 www.prairieengineers.com
 professional design firm no. 1544-05965
 ENGINEERS SURVEYORS SCIENTISTS
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USER NAME =	jippett	DESIGNED -	-	REVISED -	-
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PLOT DATE =	7/18/2022	DRAWN -	JLM	REVISED -	-
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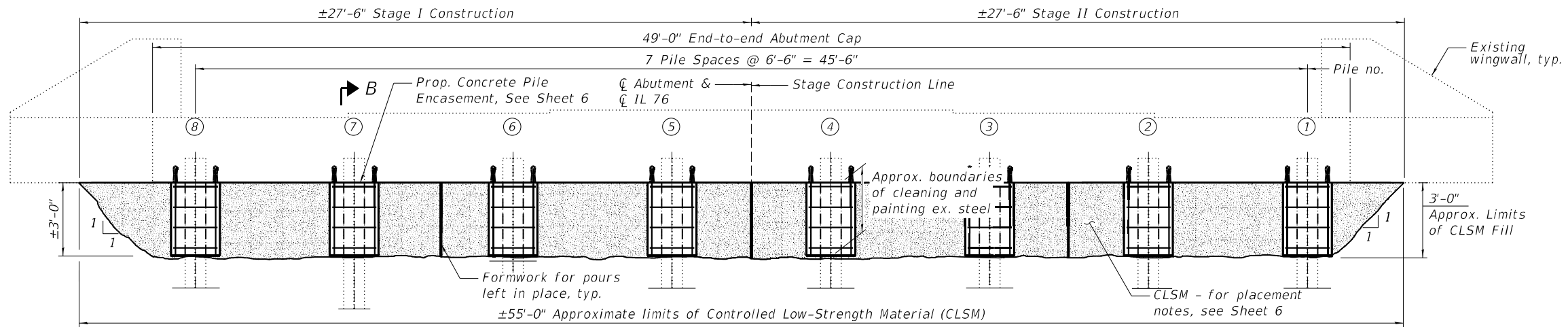
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK SLAB AND APPROACH SLAB REPAIR PLAN
S.N. 004-0016
 SHEET 4 OF 7 SHEETS

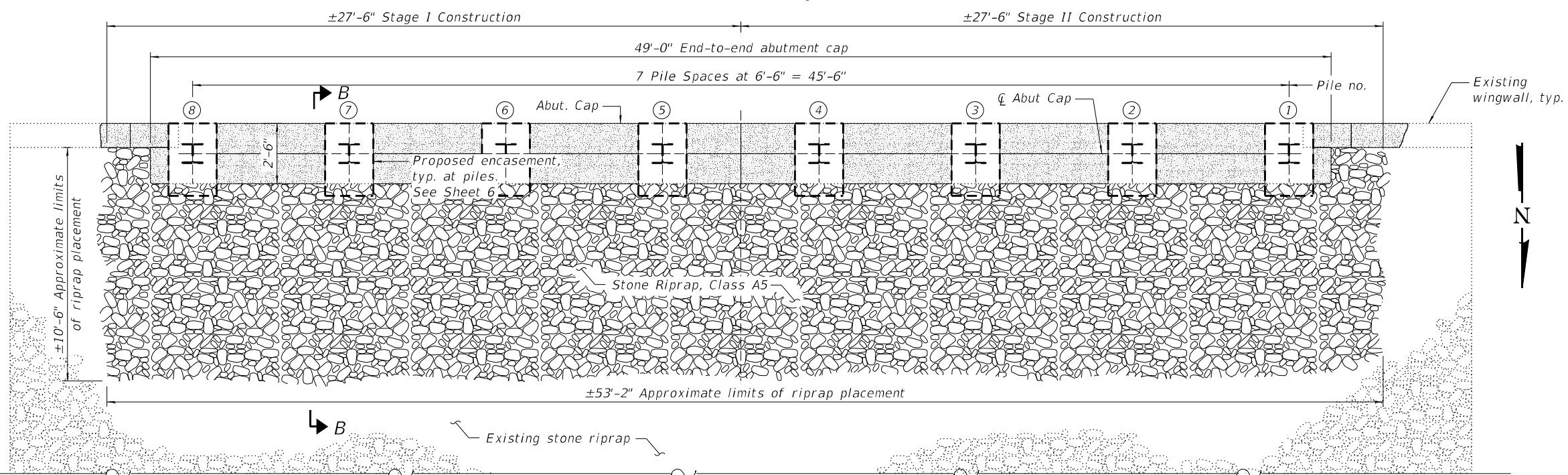
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754	(101BR)BDR	BOONE	21	10
CONTRACT NO. 64R49				
		ILLINOIS	FED. AID PROJECT	



EXCAVATION UNDER SOUTH ABUTMENT
(Elevation View Looking South)



PROPOSED REPAIR UNDER SOUTH ABUTMENT
(Elevation View Looking South)



PLAN VIEW - SOUTH ABUTMENT

LEGEND

- Existing erosion below abutment cap.
- Proposed excavation below cap.
- Controlled Low-Strength Material (CLSM)

NOTES
See Sheet 6 for excavation, repair, & placement procedure.
See Sheet 6 for Sect. A-A, and B-B

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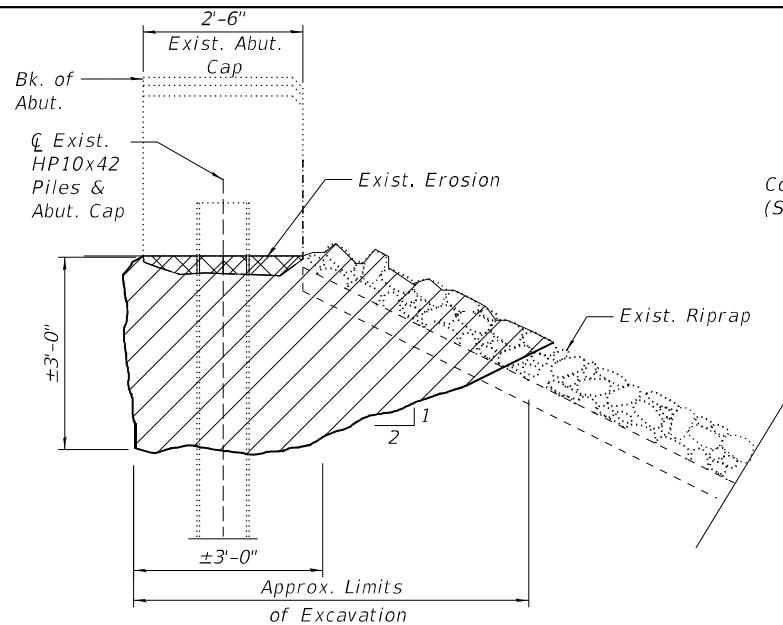


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	CHECKED - JRT	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

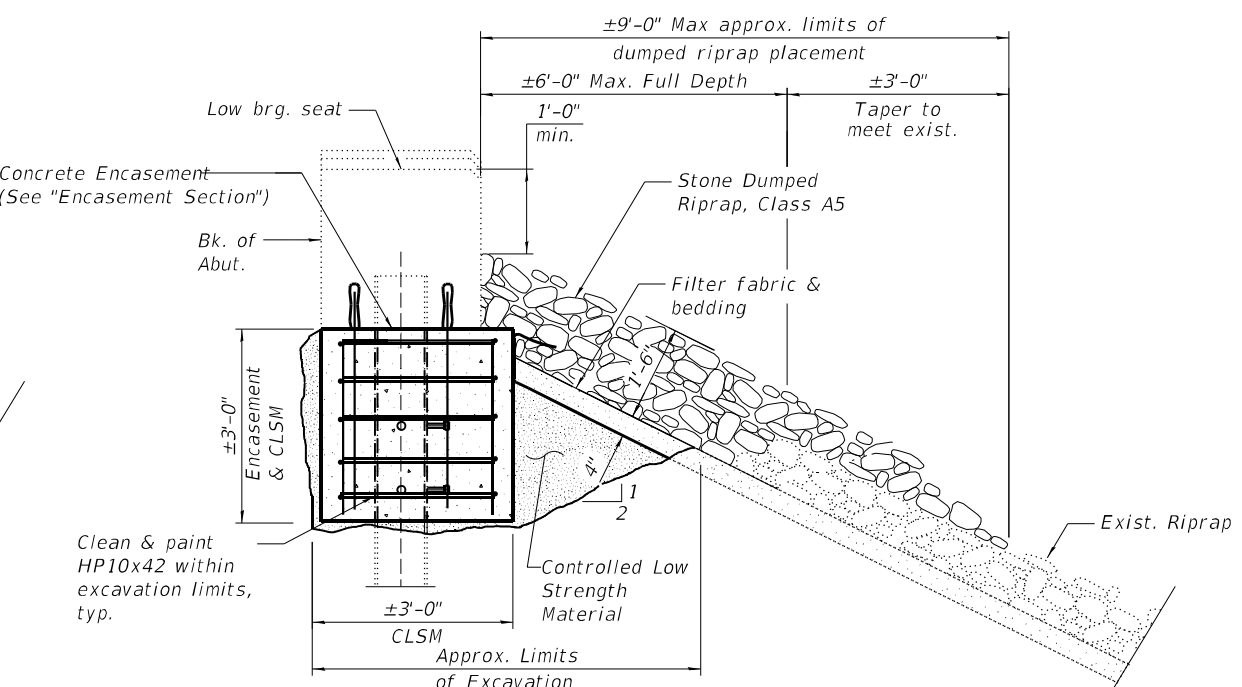
**PLAN AND ELEVATION OF SOUTH ABUTMENT EROSION REPAIR
S.N. 004-0016**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64R49				
ILLINOIS FED. AID PROJECT				



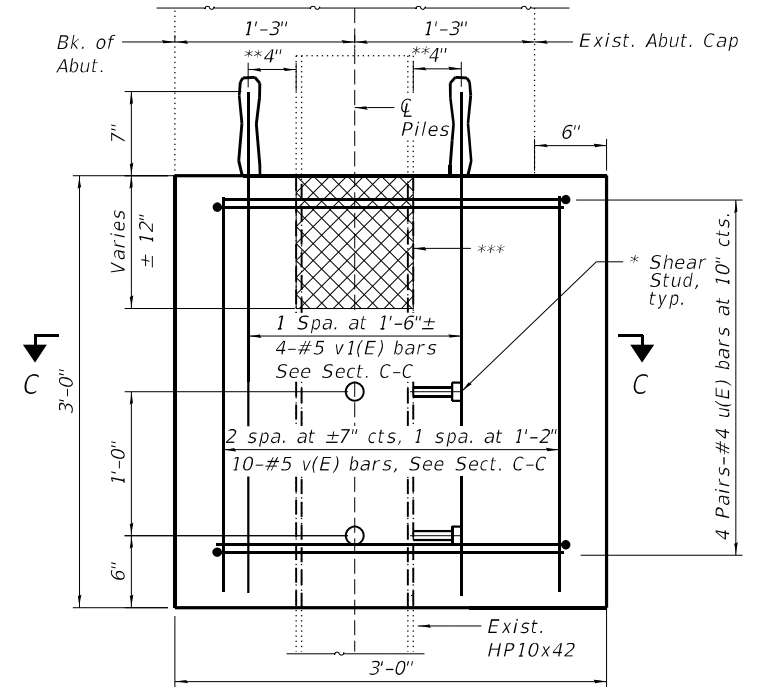
SECTION A-A

(Exist. Cond. and Prop. Excavation)



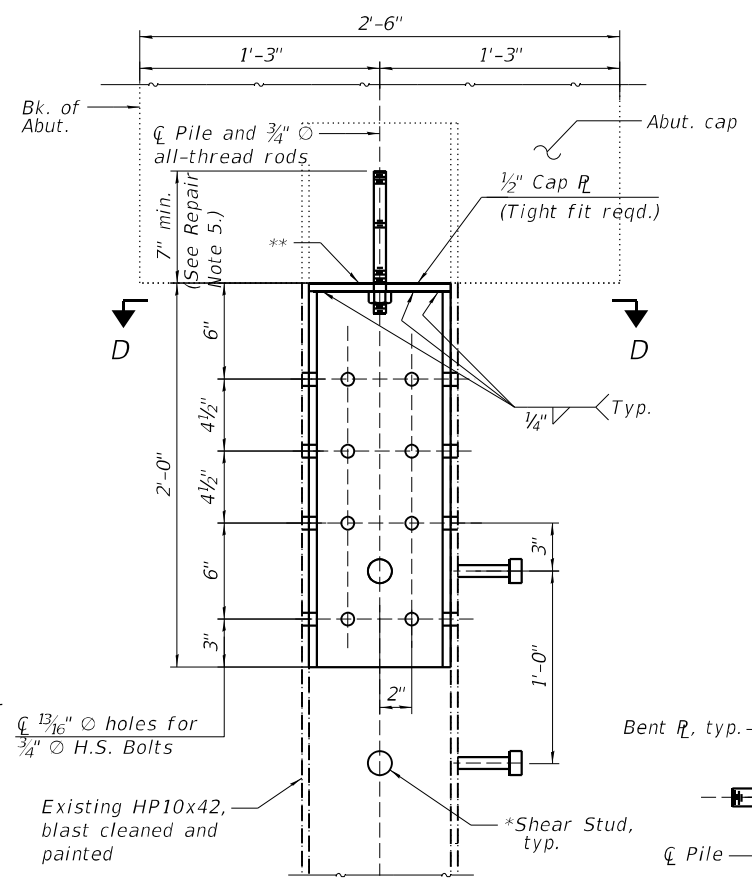
SECTION B-B

(Prop. Section thru CLSM Fill, Granular Backfill, and Prop. Riprap)



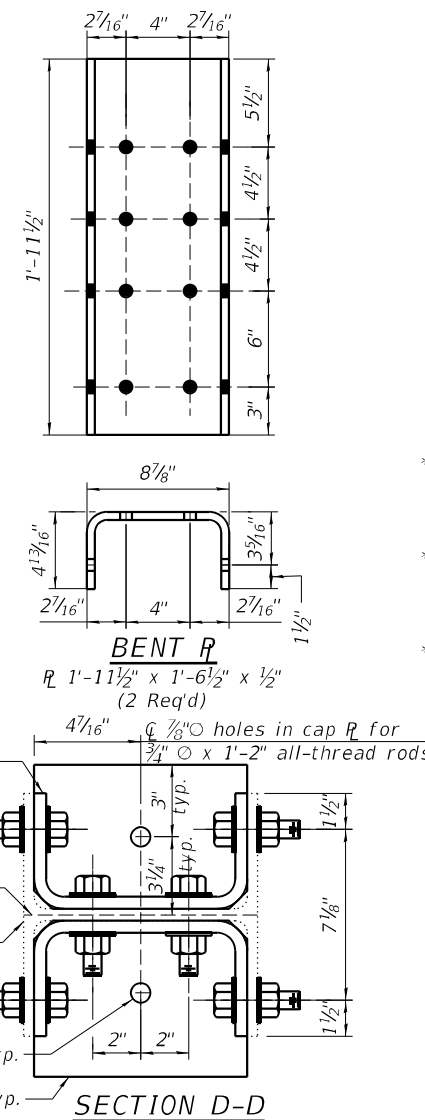
ENCASEMENT SECTION

(Looking transversely under Abut. Cap)



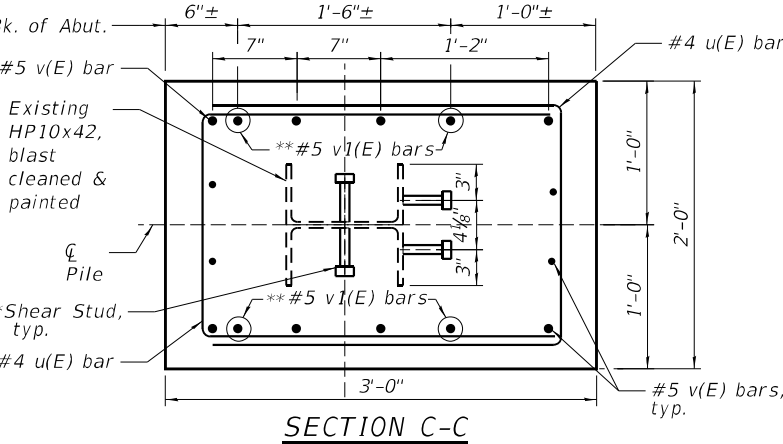
PILE REPAIR

Pile 7, looking transversely under Abut. Cap



BENT R

R 1'-11 1/2" x 1'-6 1/2" x 1/2" (2 Req'd)



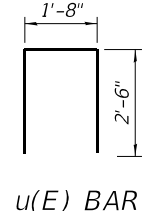
SECTION C-C

NOTES:

1. Excavate below abutment to the approximate limits shown. The excavations and proposed repair shall be performed in multiple sections. The contractor shall not have more than 2 piles fully exposed within each excavation and repair section, at the same time.
2. Contractor to schedule the excavation sections in coordination with the staged construction above such that traffic is not driving over the excavated sections until after placement of the CLSM.
3. Once the piles are exposed, the contractor shall clean the exposed pile and abutment within encasement limits before installing the concrete encasement. Concrete surfaces shall be either power washed, blast cleaned, or wire wheel cleaned. The exposed surface of the steel piles shall receive abrasive blast cleaning to SSPC-SP6 Commercial Blast Cleaning. The piles should be examined for significant section loss and/or corrosion holes within the cleaning limits, and any found should be brought to the attention of the Engineer. All cost for this work included with Cleaning and Painting Steel Bridge.
4. The piles shall be then painted with an organic zinc-rich primer coat and epoxy intermediate coat per System 1 of the GBSP for Cleaning and Painting Existing Steel Structures. The piles will not receive the urethane final coat.
5. Previous inspection indicated significant corrosion holes in Pile 7 below the concrete cap. The pile will be plated per the detail shown in Pile Repair. Grind the bottom of abutment cap to provide a level bearing surface for the cap R. Epoxy grout any voids to ensure uniform bearing. Cost included with Structural Steel Repair. Drill and set all-thread rods into 7" min. drilled holes into the bottom of the exist. abutment cap according to Article 521.06 of the Standard Specifications. Cost included with Structural Steel Repair.
6. A Controlled Low-Strength Material (CLSM) will be placed within the limits of the excavation underneath the abutment. The Contractor shall use formwork for closing off the side face for the next section to be repaired.
7. Once the excavated areas have been restored, the Contractor shall place filter fabric and restore the riprap placement to approximately the original elevations as shown within the limits of the plans.

LEGEND:

⊗ Deteriorated Pile Section



u(E) BAR

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
v(E)	4	#5	2'-8"	—
v1(E)	4	#5	3'-8"	—
u(E)	10	#4	5'-0"	⊏
Pay Item	Unit	Qty		
Structure Excavation	Cu. Yd.	32		
Concrete Structures	Cu. Yd.	5.4		
Reinforcement Bars, Epoxy Coated	Pound	740		
Stone Dumped Riprap, Class A5	Tons	71		
Filter Fabric	Sq. Yd.	80		
Structural Steel Repair	Pound	1,653		
Controlled Low Strength Material	Cu. Yd.	27		
Cleaning and Painting Steel Bridge No. 1	LSUM	1		

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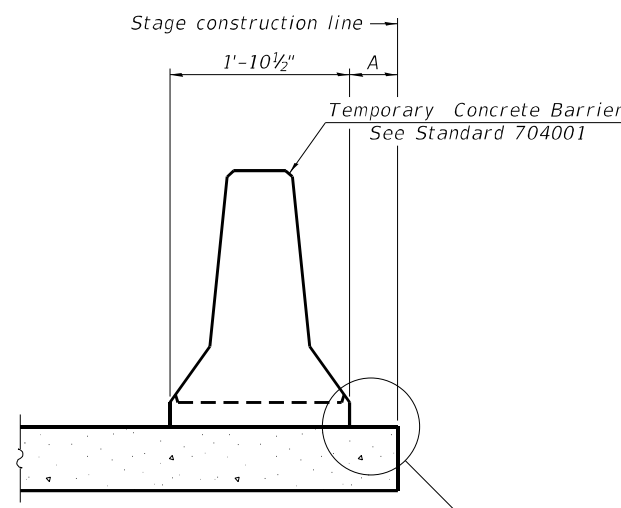
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF SOUTH ABUTMENT EROSION REPAIR
S.N. 004-0016

SHEET 6 OF 7 SHEETS

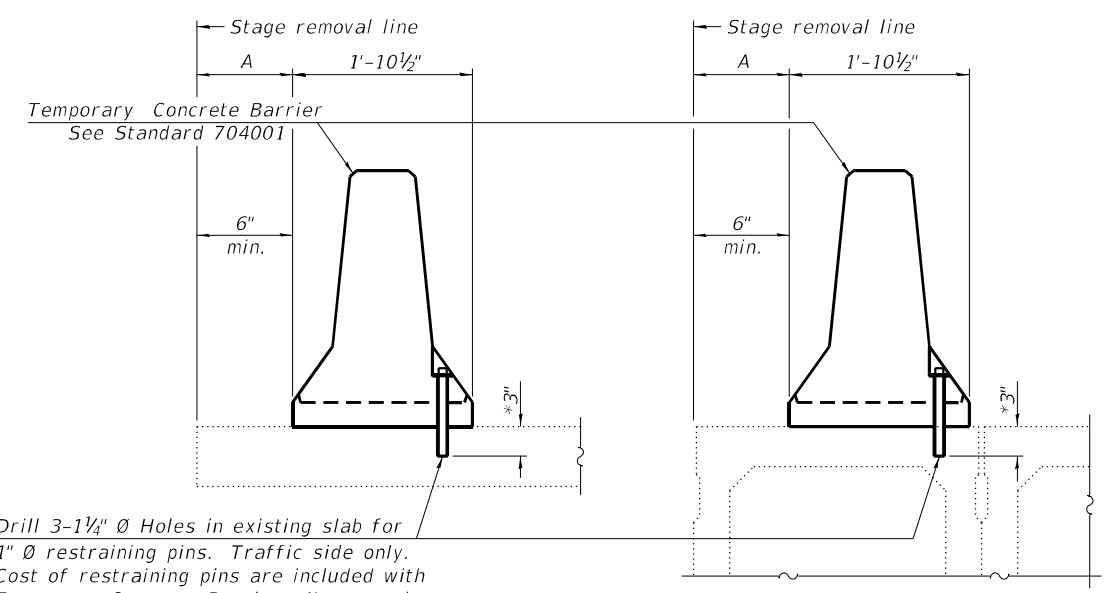
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754	(101BR)BDR	BOONE	21	12
CONTRACT NO. 64R49				
ILLINOIS FED. AID PROJECT				

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 7/18/2022 11:13:24 AM



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

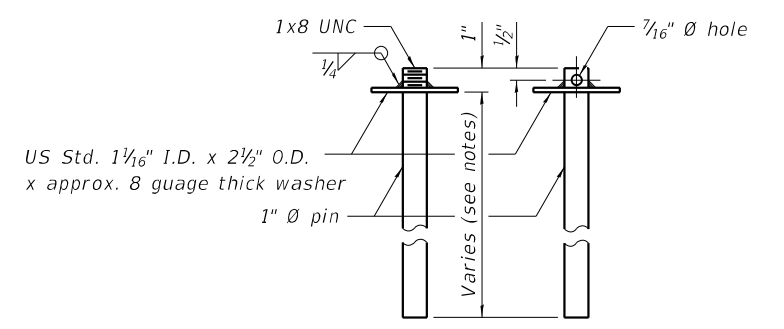
NEW SLAB OR NEW DECK BEAM



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

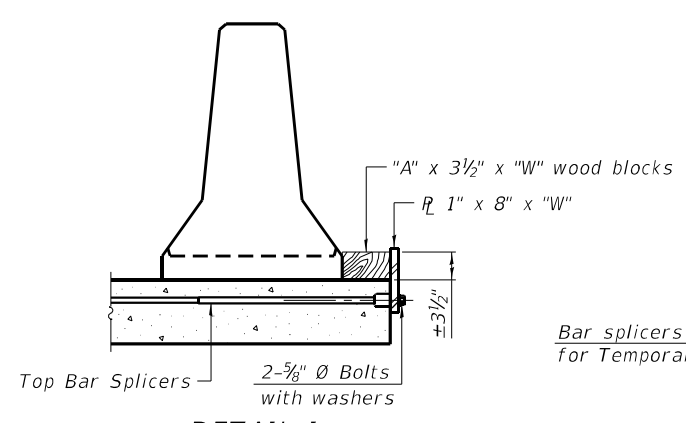
EXISTING SLAB **EXISTING DECK BEAM**

SECTIONS THRU SLAB OR DECK BEAM



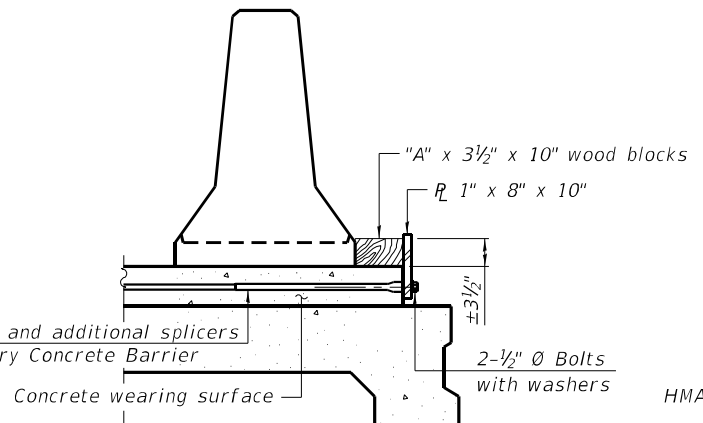
RESTRAINING PIN

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

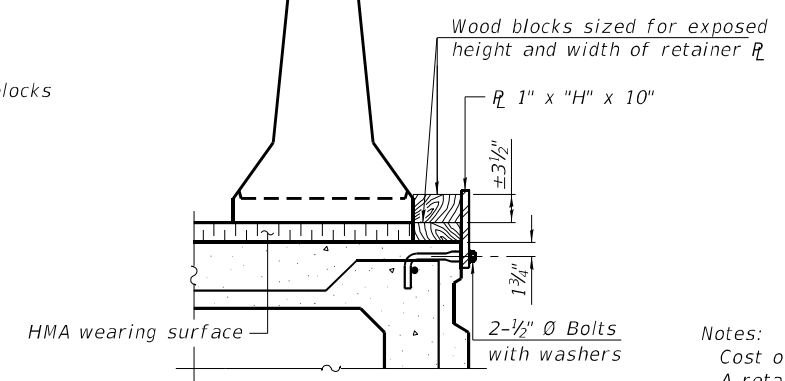


DETAIL I

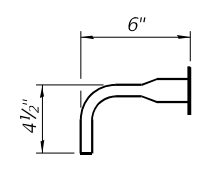
Bar splicers and additional splicers for Temporary Concrete Barrier



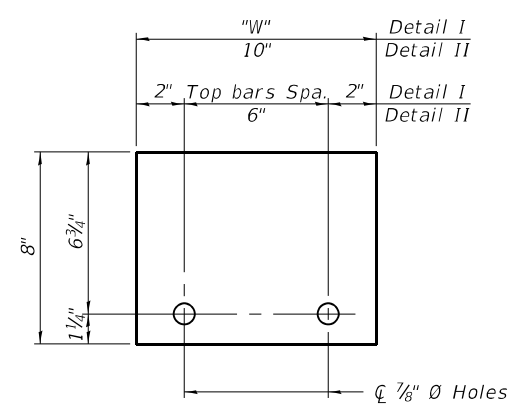
DETAIL II



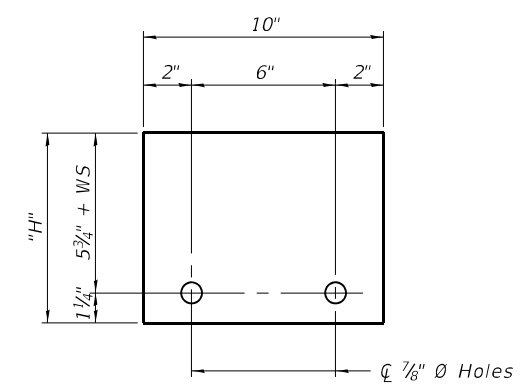
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



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

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate center of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.
Detail I - Installation for a new bridge deck or bridge slab.
Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

2-17-2017



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PLOT DATE =	DRAWN - JRT	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

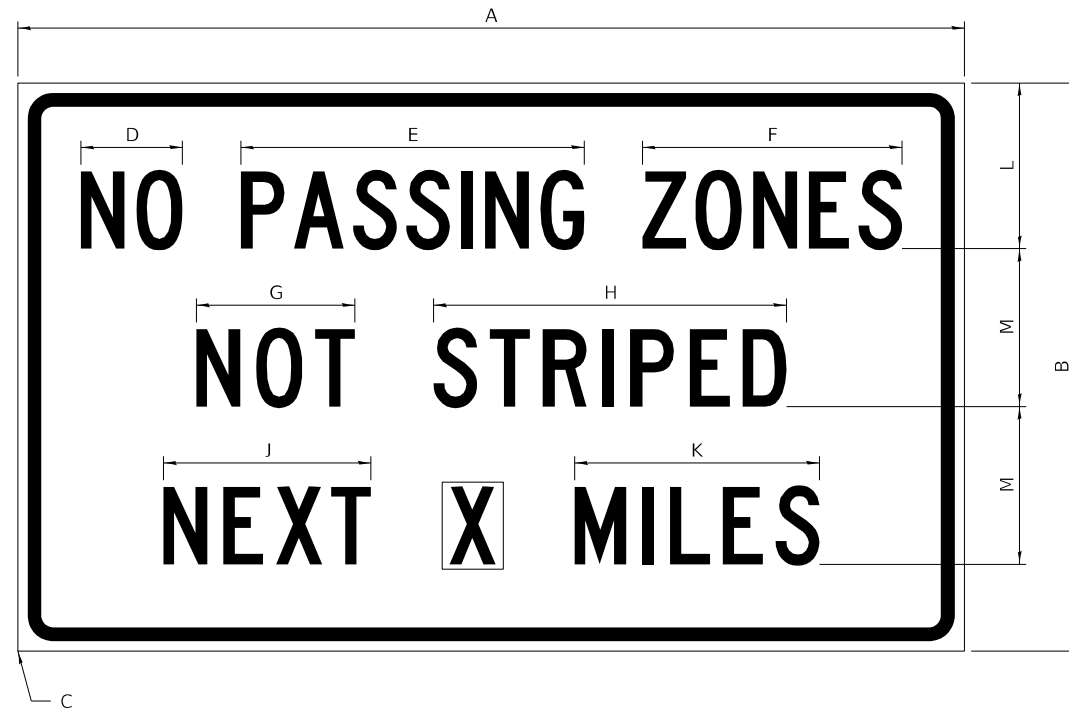
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 004-0016

SHEET 7 OF 7 SHEETS

F.A.P. RTE. 754	SECTION (101BR)BDR	COUNTY BOONE	TOTAL SHEETS 21	SHEET NO. 13
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64R49	

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD G20-I100



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

GENERAL NOTES

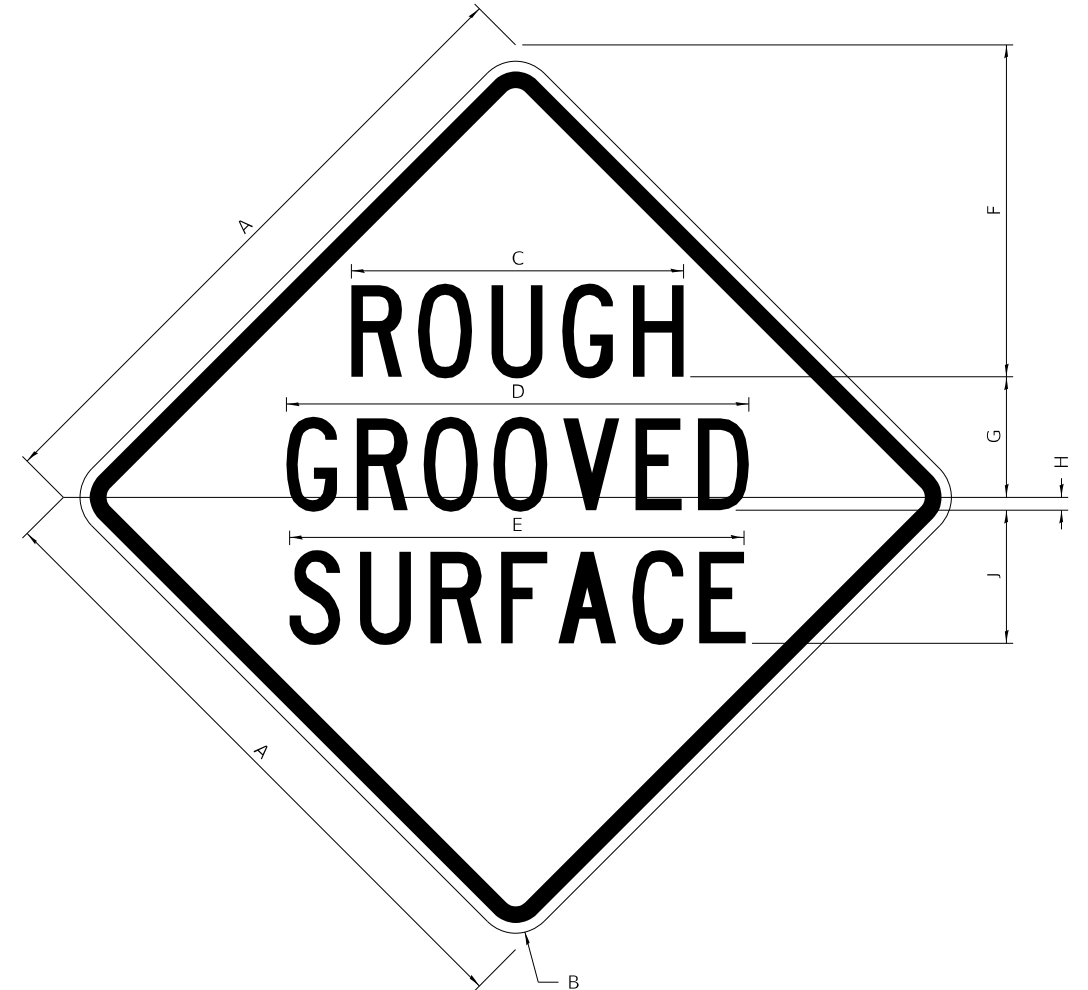
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

ILLINOIS STANDARD W8-I107



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS								
	A	B	C	D	E	F	G	H	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

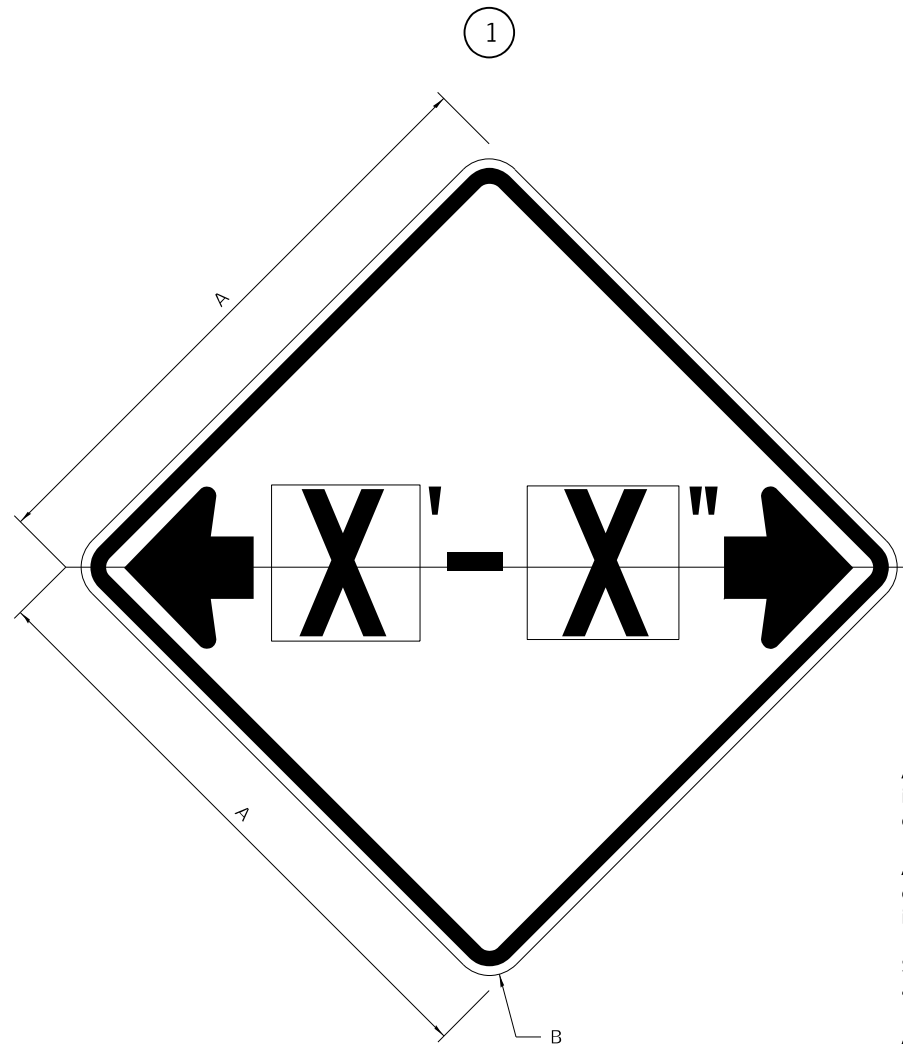
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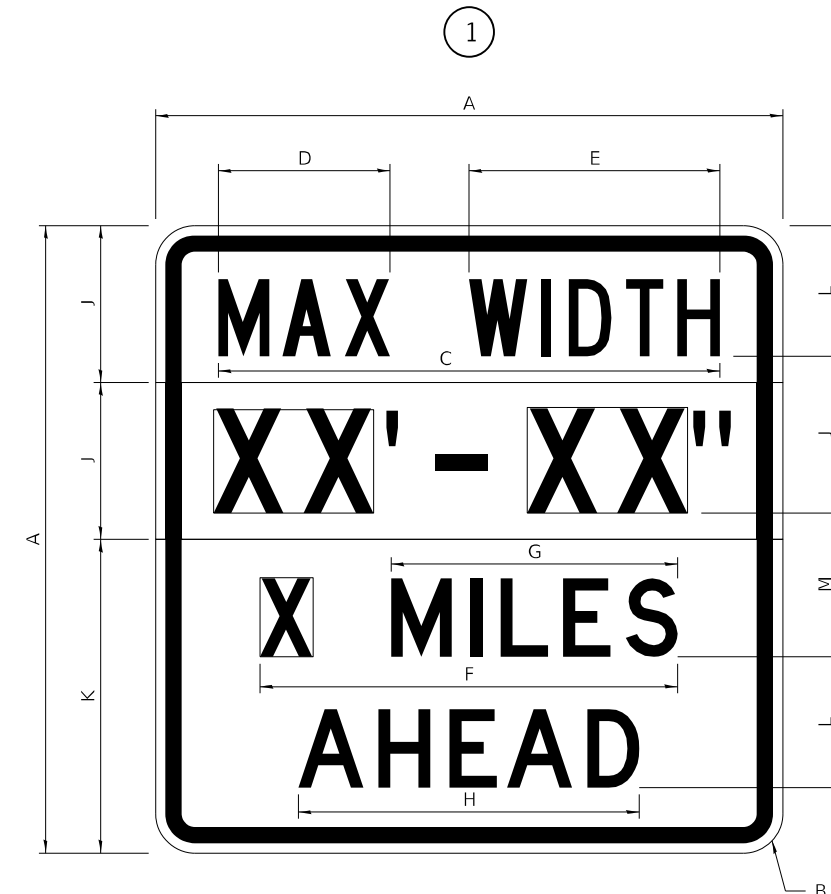
SCALE: N.T.S. SHEET 1 OF 4 SHEETS STA. TO STA.

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD W12-I102



ILLINOIS STANDARD W12-I103



GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR LEGEND AND BORDER BACKGROUND BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

① Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

COLOR LEGEND AND BORDER BACKGROUND BLACK WHITE FL ORANGE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

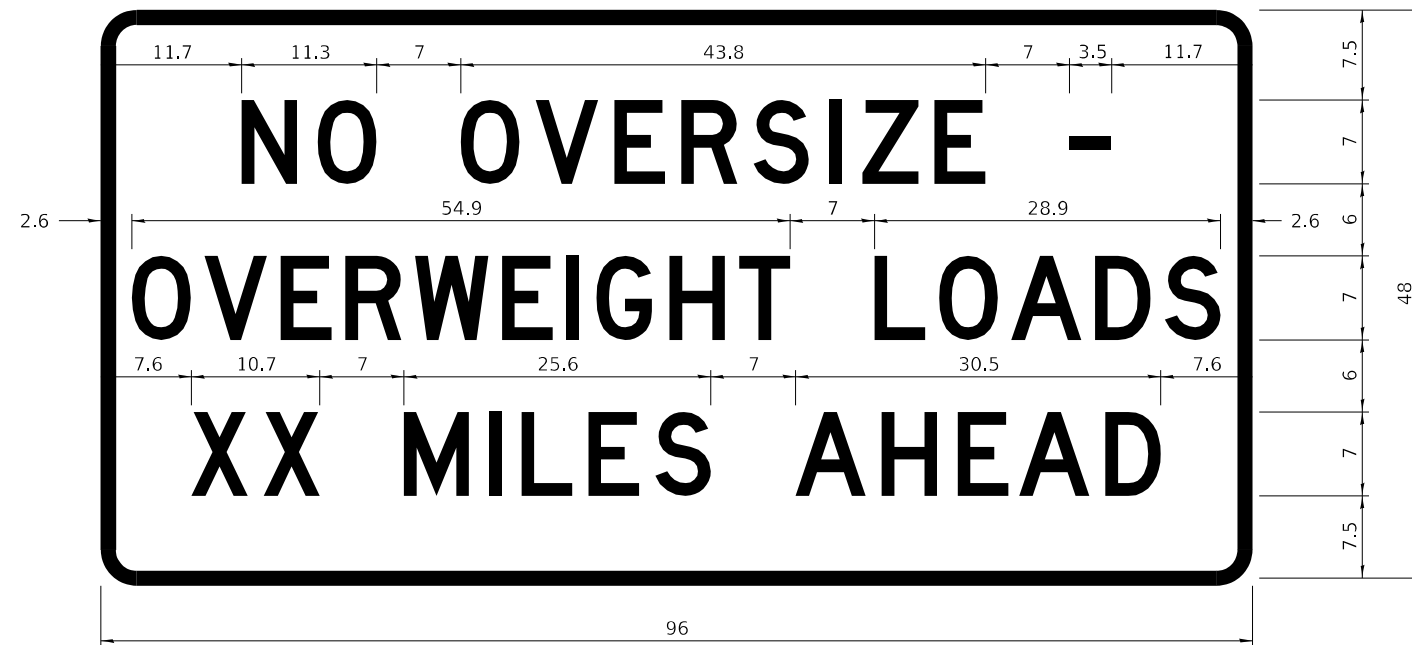
XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

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PLOT DATE = 5/3/2022	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS

STOP LINE SIGN FOR TEMPORARY SIGNALS



COLOR	LEGEND AND BORDER BACKGROUND	BLACK ORANGE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	--------------	---------------------------------

COLOR	LEGEND AND BORDER BACKGROUND	BLACK WHITE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	-------------	---------------------------------

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;
 [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;
 Table of letter and object lefts.

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

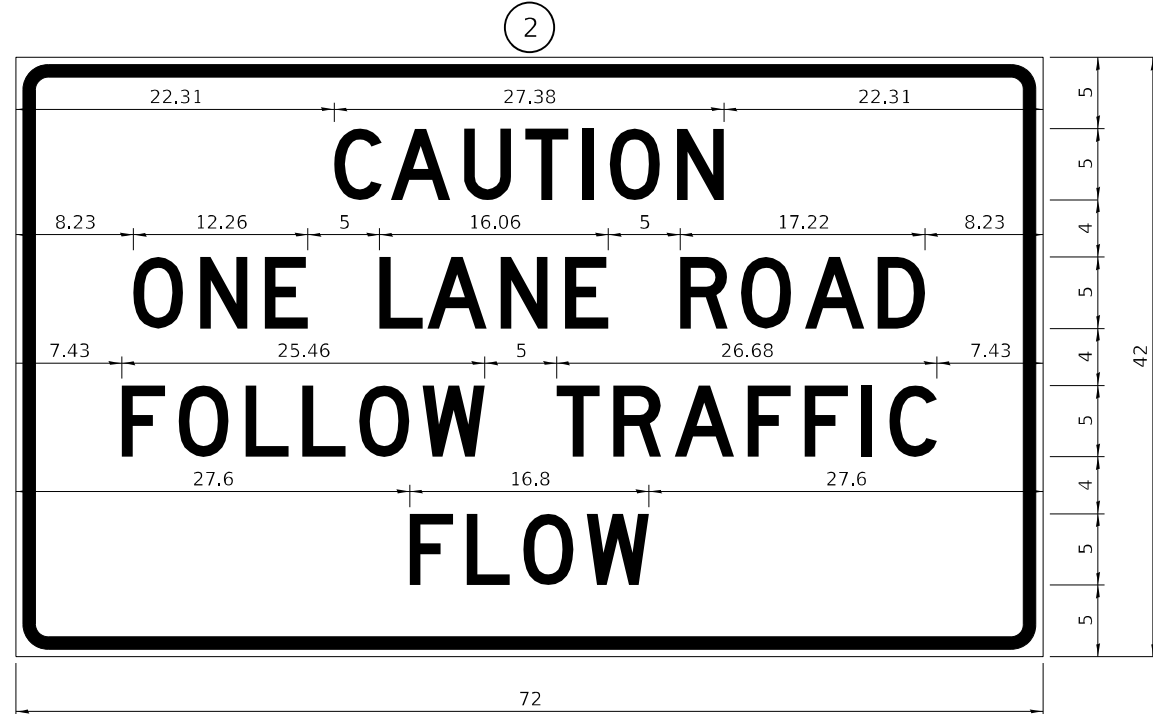
Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

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PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -	754					(101BR)BDR	BOONE	21	16	
PLOT DATE = 5/3/2022	DATE -	REVISED -	CONTRACT NO. 64R49									
				SCALE: N.T.S.	SHEET 3	OF 4	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

**ENTRANCE SIGN FOR USE
WITH TEMPORARY SIGNALS**

WORK ZONE SIGN DETAILS



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

② This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

22.31	C	3.36	0.62	A	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
-------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	-------

8.23	O	3.51	1.17	N	3.36	1.18	E	3.04
------	---	------	------	---	------	------	---	------

5.00	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05
------	---	------	------	---	------	------	---	------	------	---	------

5.00	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23
------	---	------	------	---	------	------	---	------	------	---	------	------

7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------

5.00	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------

27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60
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Sign not to scale

GENERAL NOTES

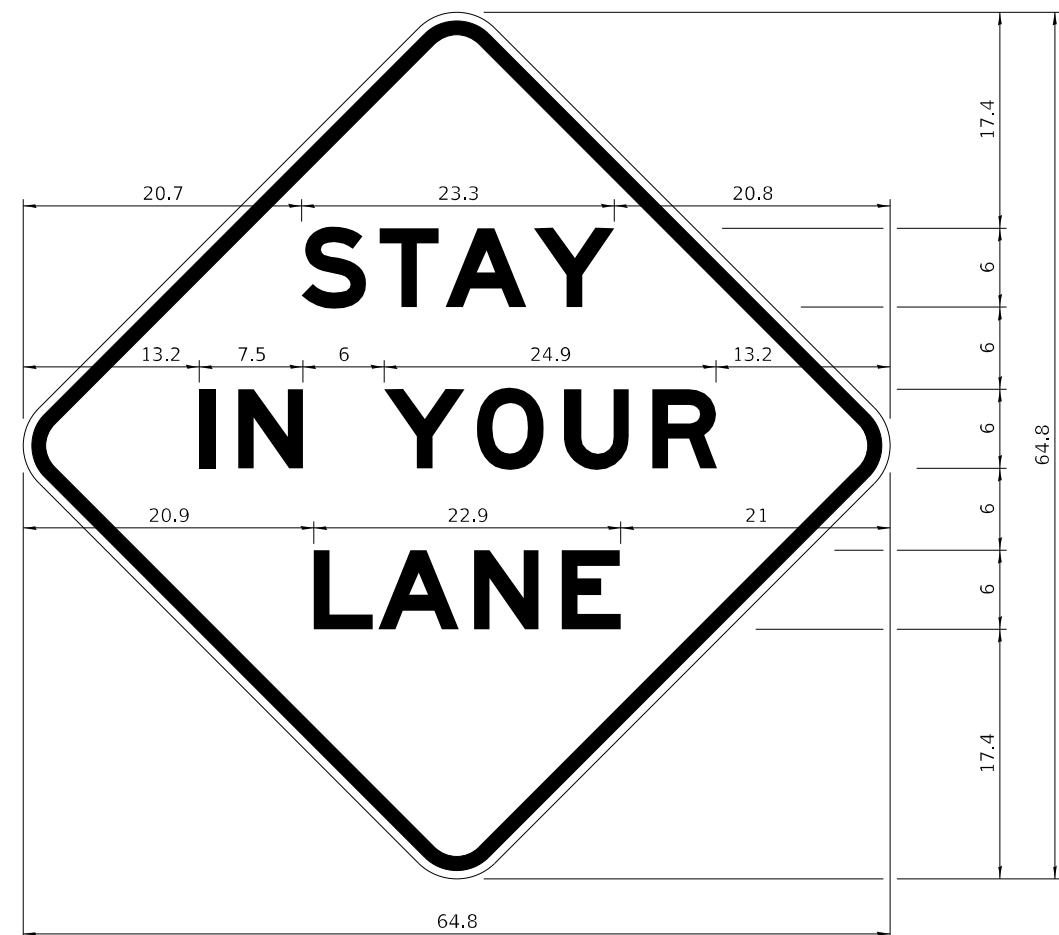
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

STAY IN YOUR LANE



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

Table of Letter and Object Lefts

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

L	A	N	E
20.9	25.8	33.1	39.4

Sign not to scale

USER NAME = jpush	DESIGNED -	REVISED - 3-02-16
FILE NAME: C:\Users\jpush\OneDrive - QEI\Documents\Projects\2112_JDOT_D2_Var-Var Bridge\400-Work\Drawings\3\410 - CADD\64R49_004-0016\264R49_004-0016\Signs\Signs.dgn	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 5/3/2022	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

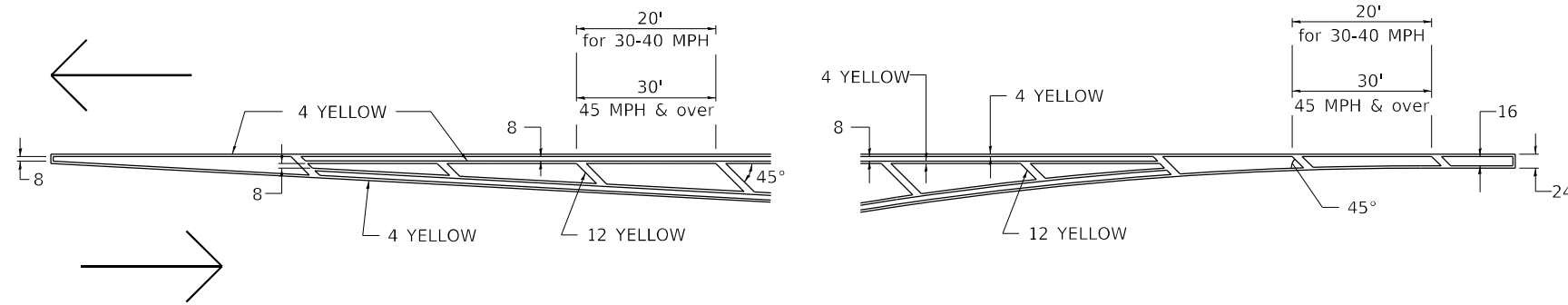
REGION 2 / DISTRICT 2 STANDARD

SCALE: N.T.S. SHEET 4 OF 4 SHEETS STA. TO STA.

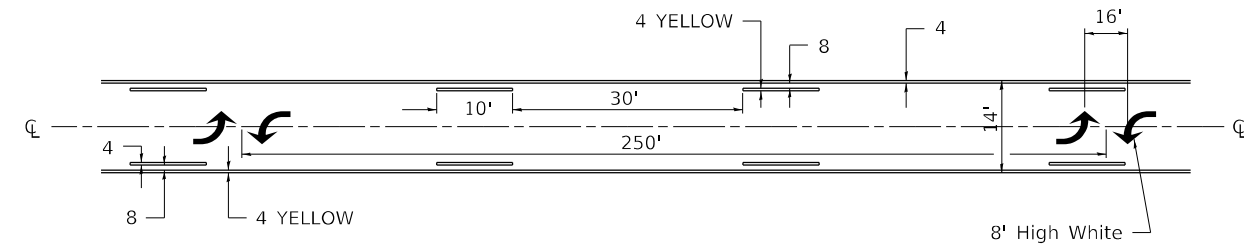
F.A.P. RTE. 754	SECTION (101BR)BDR	COUNTY BOONE	TOTAL SHEETS 21	SHEET NO. 17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64R49	

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

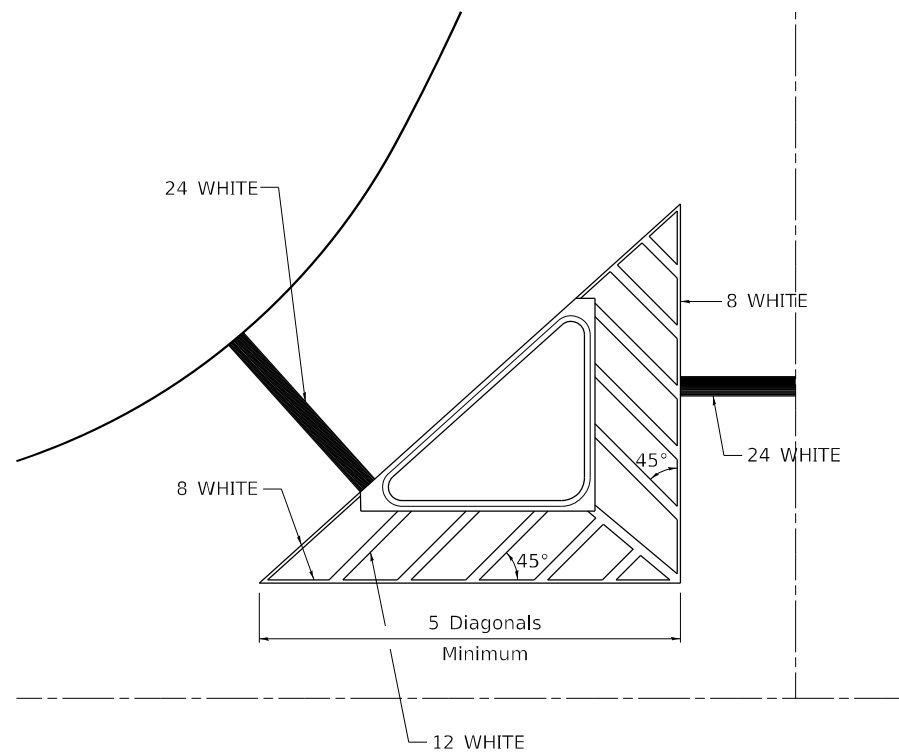


MEDIAN PAVEMENT MARKING



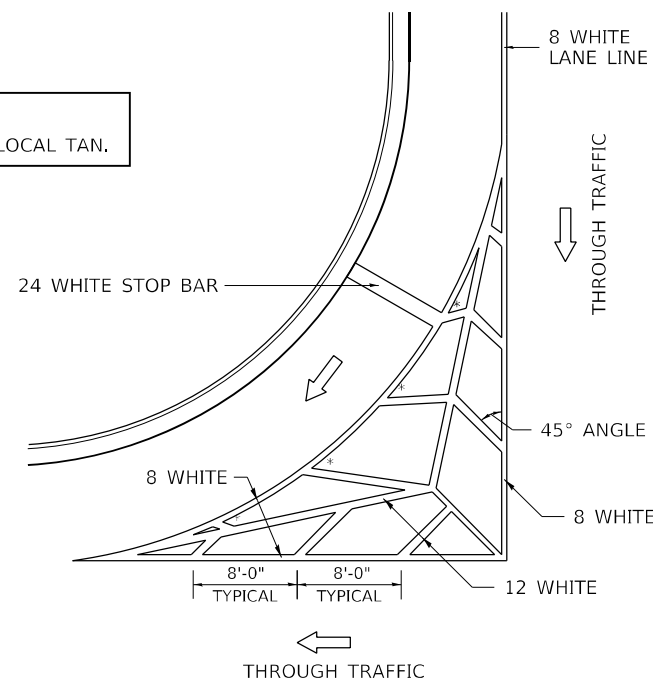
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



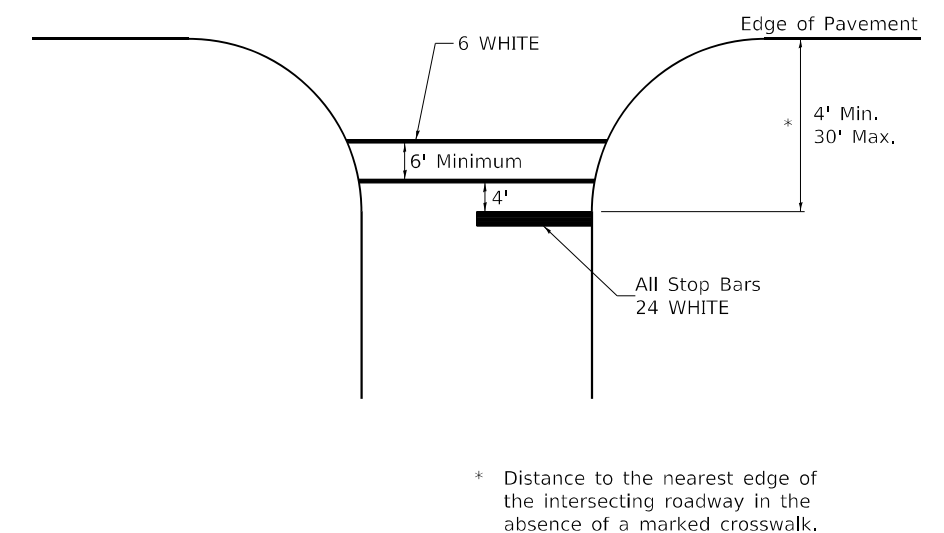
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

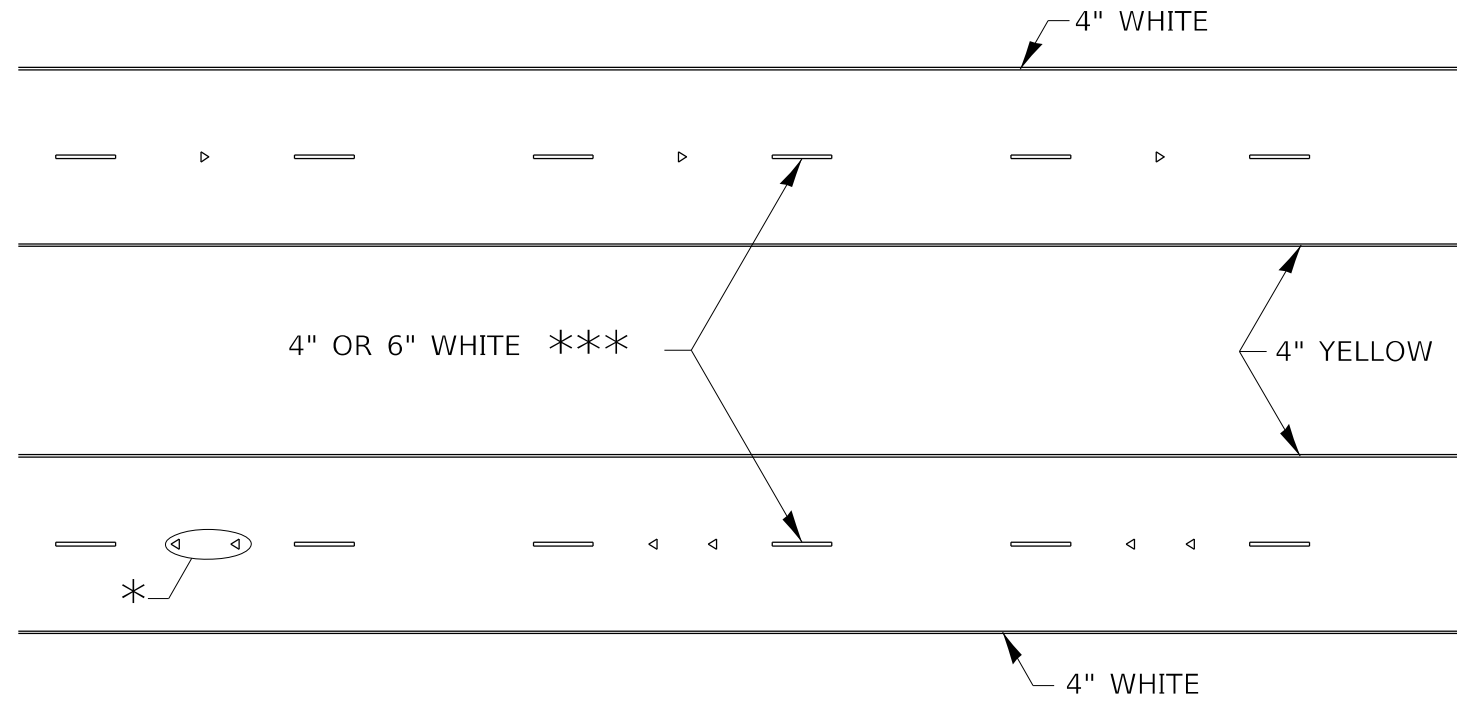
See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

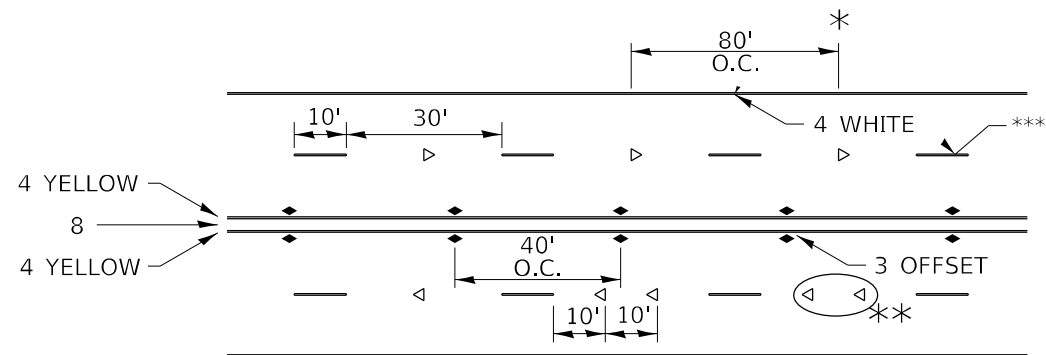
FILE NAME: C:\Users\jpush\OneDrive - QEI\OCDoc\Consult\Projects\2112_IDOT_D2_Var-Var Bridge\400-Work\Drawings\64R49_004-0016\Z64R49_004-0016.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE. = 754	SECTION (101BR)BDR	COUNTY BOONE	TOTAL SHEETS 21	SHEET NO. 18
	PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - 3-05-12		SCALE: N.T.S.	SHEET 1 OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 64R49				
PLOT DATE = 5/3/2022	DATE -	REVISED -			ILLINOIS FED. AID PROJECT							

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI-LANE / DIVIDED



* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

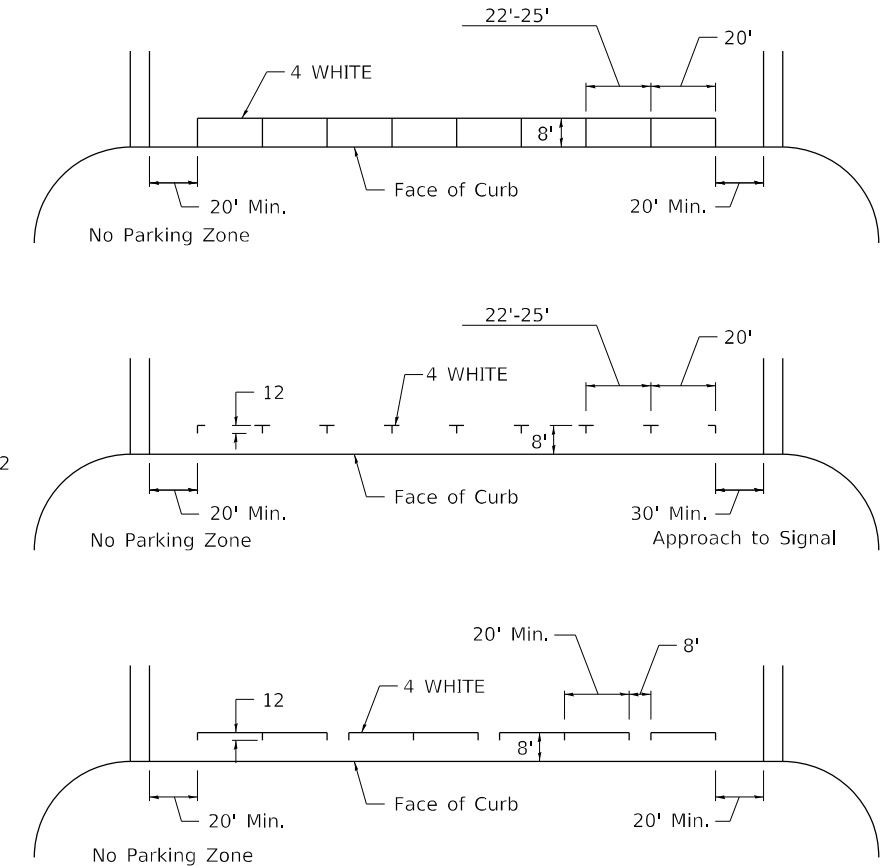
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

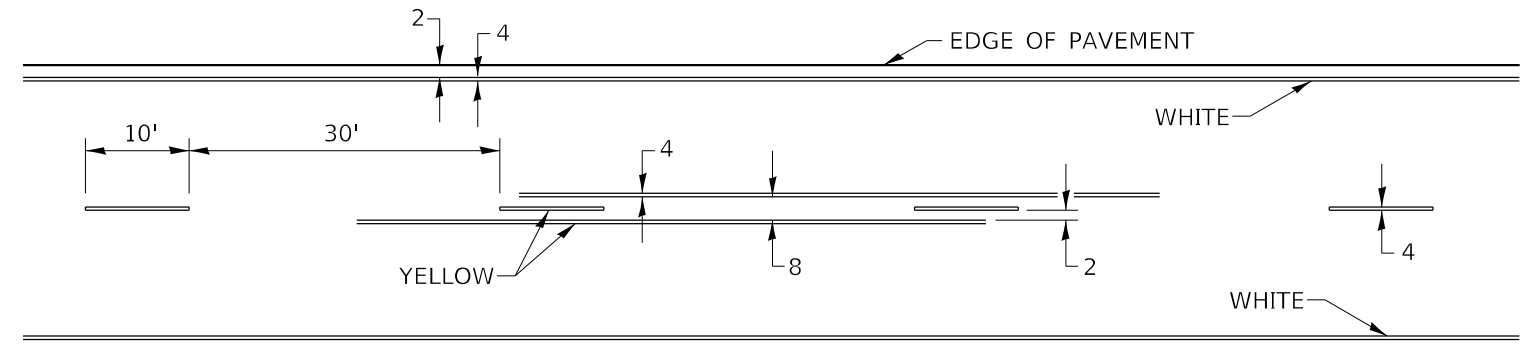
MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PARKING SPACING



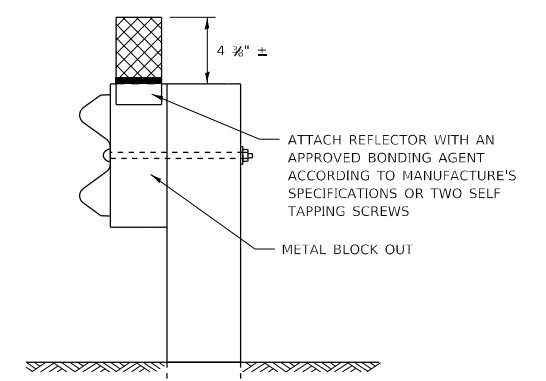
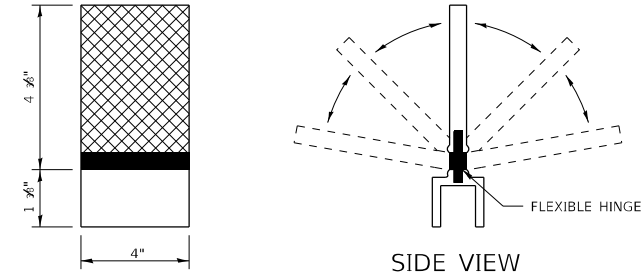
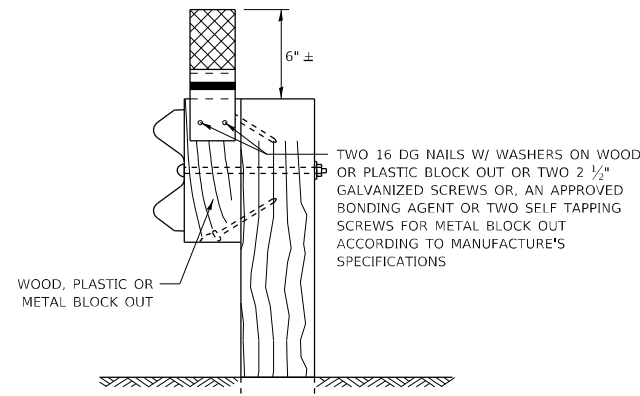
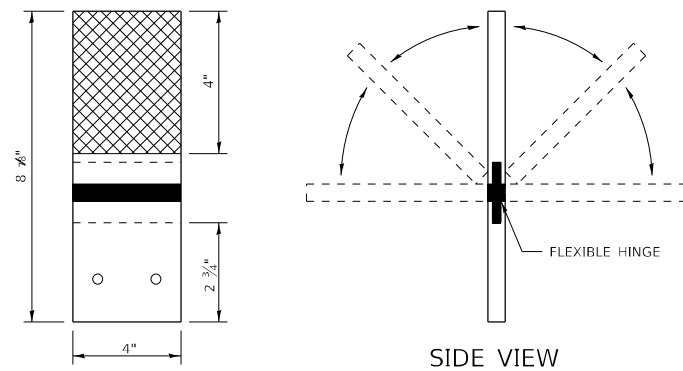
TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



SYMBOLS

FILE NAME: C:\Users\jpush\OneDrive - QEI\OCDoc\Consult\Projects\2112_IDOT_D2_Var-Var Bridge\400-Work\Drawings\3\410 - CADD\64R49_004-0016\264R49-001.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - 8-27-13					754	(101BR)BDR	BOONE	21	20
PLOT DATE = 5/3/2022	DATE -	REVISED - 11-28-12	REVISED -	SCALE: N.T.S.	SHEET 3	OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 64R49				
								ILLINOIS FED. AID PROJECT				

GUARDRAIL REFLECTORS, TYPE C (SPECIAL)



REFLECTORS SHALL BE MOUNTED DIRECTLY TO WOOD OR PLASTIC BLOCK OUTS.

REFLECTORS MOUNTED ON WOODEN OR PLASTIC BLOCK OUT SHALL BE MOUNTED USING TWO 16 DG NAILS AND TWO 3/16" WASHERS OR TWO 1/2" GALVANIZED SCREWS WITH WASHERS.

MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO METAL BLOCK OUT.

REFLECTORS MOUNTED ON METAL BLOCK OUT SHALL BE MOUNTED USING AN APPROVED BONDING AGENT PER THE MANUFACTURE'S SPECIFICATIONS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.

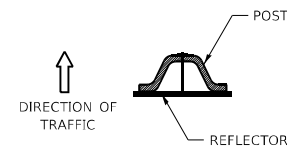
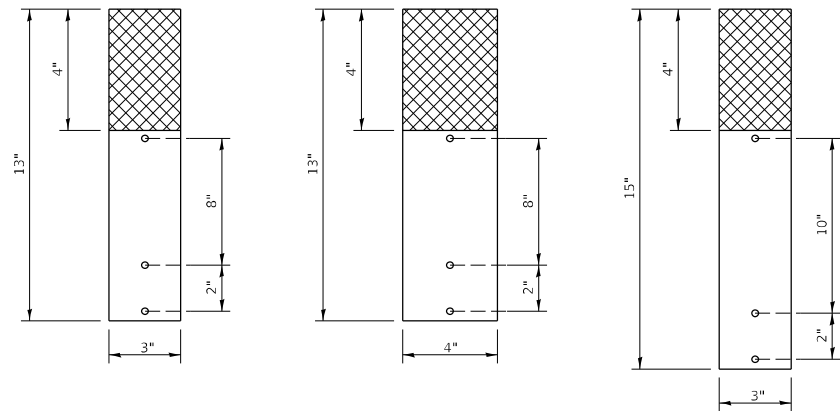
MOUNTED ON A METAL GUARDRAIL BLOCK OUT

REFLECTORS MOUNTED ON WOOD OR PLASTIC GUARDRAIL BLOCK OUT

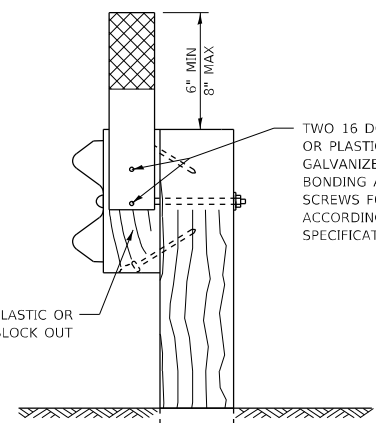
REFLECTORS MOUNTED ON METAL GUARDRAIL BLOCK OUT

STRAIGHT GUARDRAIL / DELINEATOR REFLECTOR

SIDE VIEW



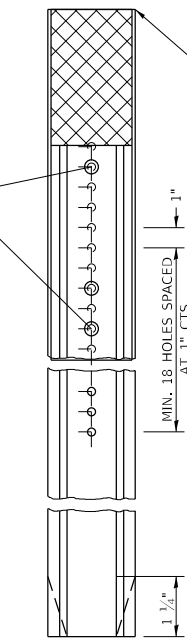
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHED AS SHOWN ABOVE.



MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

ADDITIONAL SHEETING MAY BE ADDED AS NEEDED FOR TURN AROUNDS AS SHOWN IN THE PLANS

10/24 X 1 1/2" BOLTS WITH WASHERS AND NUT (ADDITIONAL HOLES MAY BE DRILLED AS NEEDED)



TOP OF REFLECTOR PLACED FLUSH WITH TOP OF POST UNLESS DOUBLE SIDED REFLECTOR IS CALLED FOR, THEN REFLECTOR SHALL BE PLACED SUCH THAT THE REFLECTOR IS ABOVE THE TOP OF THE POST AND VISIBLE.

NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS/NAILS, WASHERS OR BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS SHALL BE SINGLE SIDED CRYSTAL.

SHEETING COLOR SHALL BE CALLED OUT IN THE PLANS.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

REFLECTORS MOUNTED ON GUARDRAIL SHALL BE 4" WIDE.

REFLECTORS MOUNTED ON DELINEATOR POST SHALL BE 3" WIDE.

USER NAME = jpush	DESIGNED -	REVISED - 6-21-21
FILE NAME: C:\Users\jpush\OneDrive - QEI\OCDoc\Consult\Projects\2112_IDOT_D2_Var-Var Bridge\400-Work\Drawings\64R49_004-0016264R49-001.dgn	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 5/3/2022	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
754	(101BR)BDR	BOONE	21	21
CONTRACT NO. 64R49				
ILLINOIS FED. AID PROJECT				