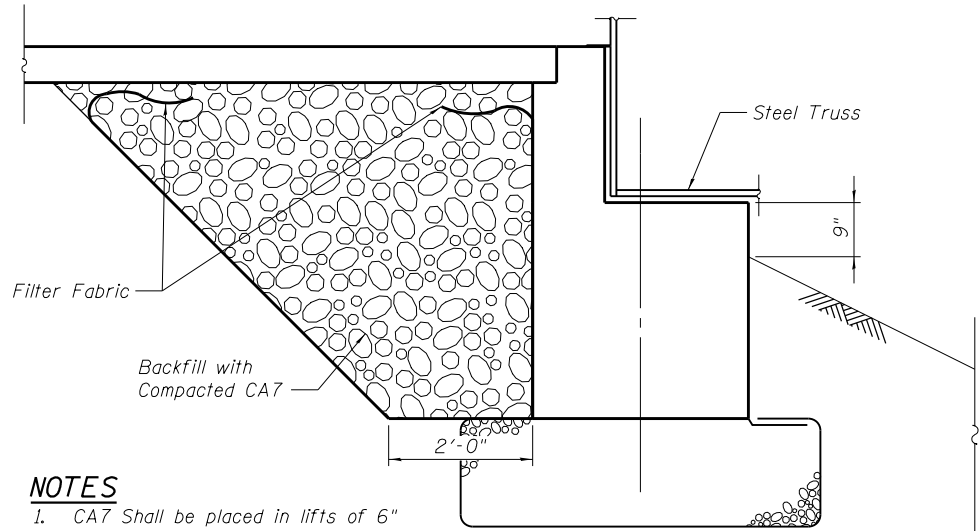


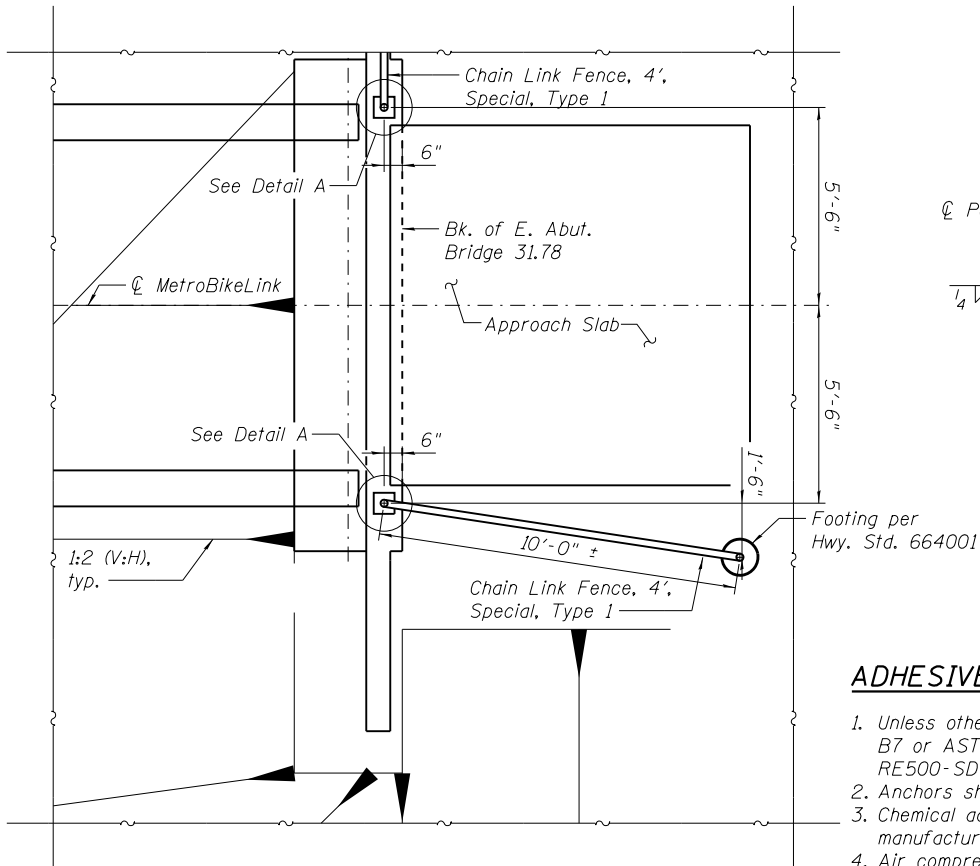


NOTES

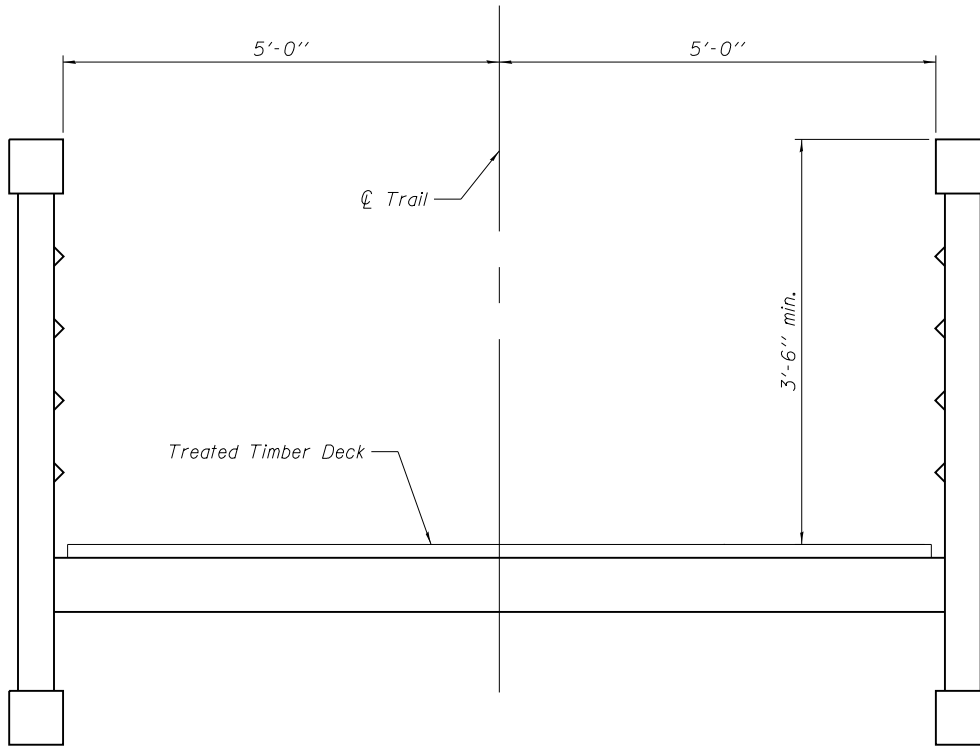
- CA7 Shall be placed in lifts of 6" maximum thickness. Each lift shall be compacted by two complete passes with walk behind vibrating compactors or with an excavator plate mounted compactor.
- Wrap all sides of CA7 to eliminate intermixing of adjacent soils.

SECTION THRU ABUTMENT

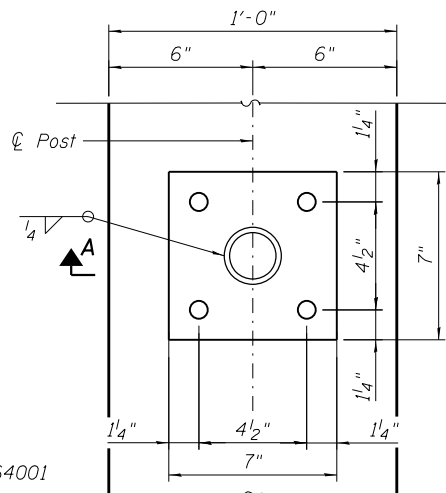
E. Abut shown
(LCCF Backfill at W. Abut.)



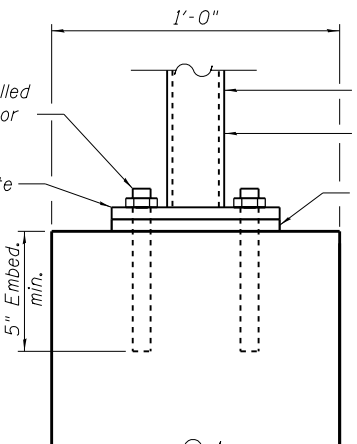
FENCE DETAIL AT BRIDGE 31.78 EAST ABUTMENT



SECTION THRU BRIDGE



DETAIL A



SECTION A-A

ADHESIVE ANCHOR NOTES

- Unless otherwise noted anchors shall be 3/4" ϕ ASTM A 193 grade B7 or ASTM F1554 Grade 36, 55 or 105. Adhesive shall be Hilti RE500-SD or Simpson SET-XP.
- Anchors shall be Hot-Dipped Galvanized
- Chemical adhesives shall be installed in accordance with the manufacturer's installation instructions.
- Air compressors shall be oil free or fitted with a filter to remove oil. Line pressure shall be as recommended by adhesive manufacturer. Blow guns shall be fitted with an extension tube that will reach within one inch of hole bottoms.
- Brushes for cleaning holes shall be wire, shall be of the diameter recommended by the adhesive manufacturer, and shall be long enough to reach the hole bottoms.
- Adhesive temperatures and concrete temperatures shall be within the ranges specified by the manufacturer. Adhesive expiration dates shall be checked, do not use expired adhesives.

GENERAL NOTES

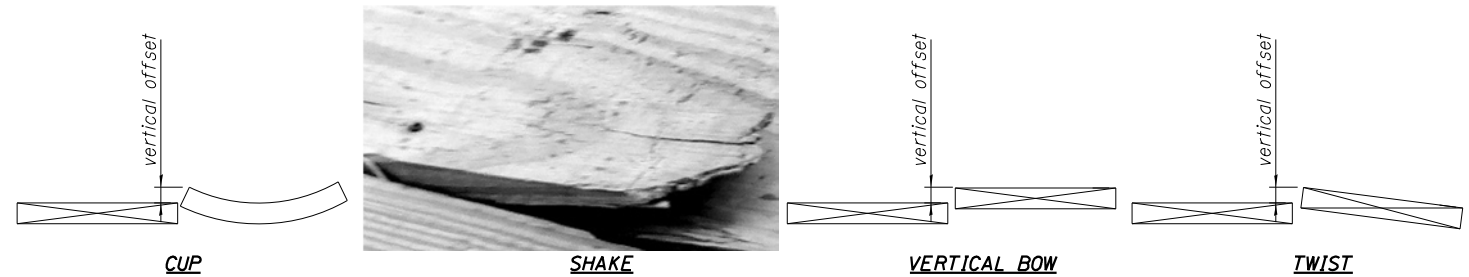
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
 - Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 - The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
 - The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number as shown in the contract plans.
 - For approach details, see Bridge Approach Slab Details, sheet 3.
 - The Pedestrian Truss Superstructure shall meet the requirements of the Special Provisions
- Bearings: The bearings shall be specified by the bridge manufacturer.
Camber: The truss shall be cambered for Dead Load.
The Organic Zinc Rich Primer/Epoxy/Urethane paint system shall be used for painting the stringers and floor beams of the Pedestrian Truss Superstructure. The entire system shall be shop applied prior to installing the deck. The color of the final finish coat shall match the Federal Color Standard 595a 20045. See Section 506 of the Standard Specifications.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Pedestrian Truss Superstructure	Sq. Ft.	1110		1110
Structure Excavation	Cu. Yd.		18	18
Concrete Structures	Cu. Yd.	5.7	10.0	15.7
Reinforcement Bars	Pound	600	920	1520
Compacted CA-7 Backfill	Cu. Yd.		11	11
Settlement Platforms	Each		1	1

TREATED TIMBER NOTES

- Treated timber construction shall be in accordance with Section 507 of the Standard Specification except as modified by these plans.
- All lumber shall be No. 1 Pressure Treated Southern Pine. Pressure Treatment shall be Micronized Copper Azole with a minimum retentive of 0.23 pcf.
- The neoprene rubber barrier shall meet the material requirements of section 1052.02 (a) of the Standard Specifications. Material and labor cost for rubber barrier shall be included in Treated Timber.
- Submit pressure treatment specifications prior to ordering timber. Pressure treatment specifications shall include type of treatment and retention level.
- Screws shall be driven such that boards are tightly clamped. Where screw threads in the top board push the boards apart, screws shall be backed out and re-driven until the boards are tightly clamped. If re-driving does not tightly clamp boards other methods such as pre-drilling top boards shall be used.
- Deck vertical offset defects can occur within a board or between adjacent boards due to shake, cupping vertical bowing twisting or a combination of these (See offset defect examples). Planks with vertical offset defects exceeding 1/4" shall be removed and replaced at the Contractor's expense. The warranty period for the timber deck shall be 2 years.



OFFSET DEFECT EXAMPLES

FILE NAME = F:\090678\4-CADD - DWG\4.3-S1\Bridg. 31.78\B31.78-002-General Data.dgn

THOUVENOT,
WADE &
MOERCHEN, INC.



USER NAME = a-utz
PLOT SCALE = 0:2.0000 '1' / 1"
PLOT DATE = 11/12/2015

DESIGNED - TJP
CHECKED - DJH
DRAWN - TJP
CHECKED - DJH

REVISED
REVISED
REVISED
REVISED



St Clair
County
Transit
District



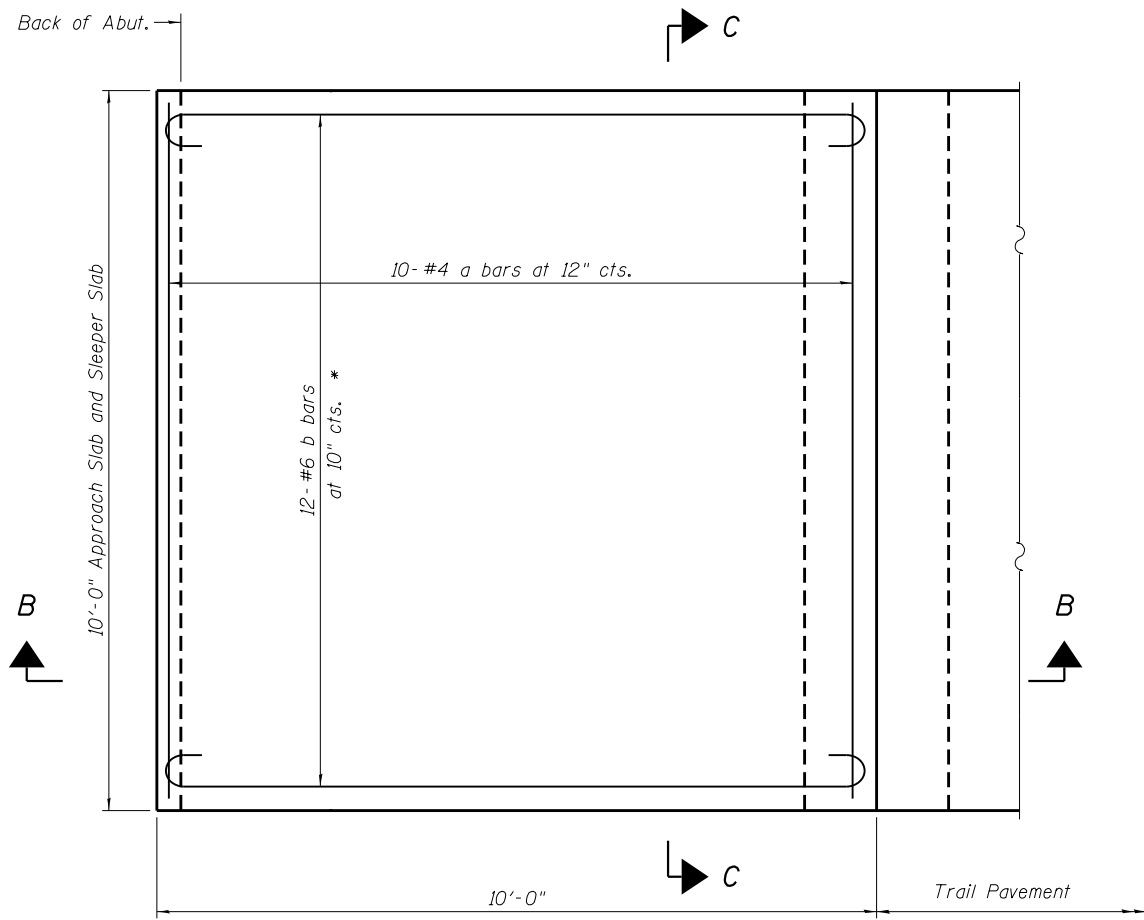
Bi-State
Development
Agency

GENERAL DATA
STRUCTURE B31.78

SHEET NO. 2 OF 5 SHEETS

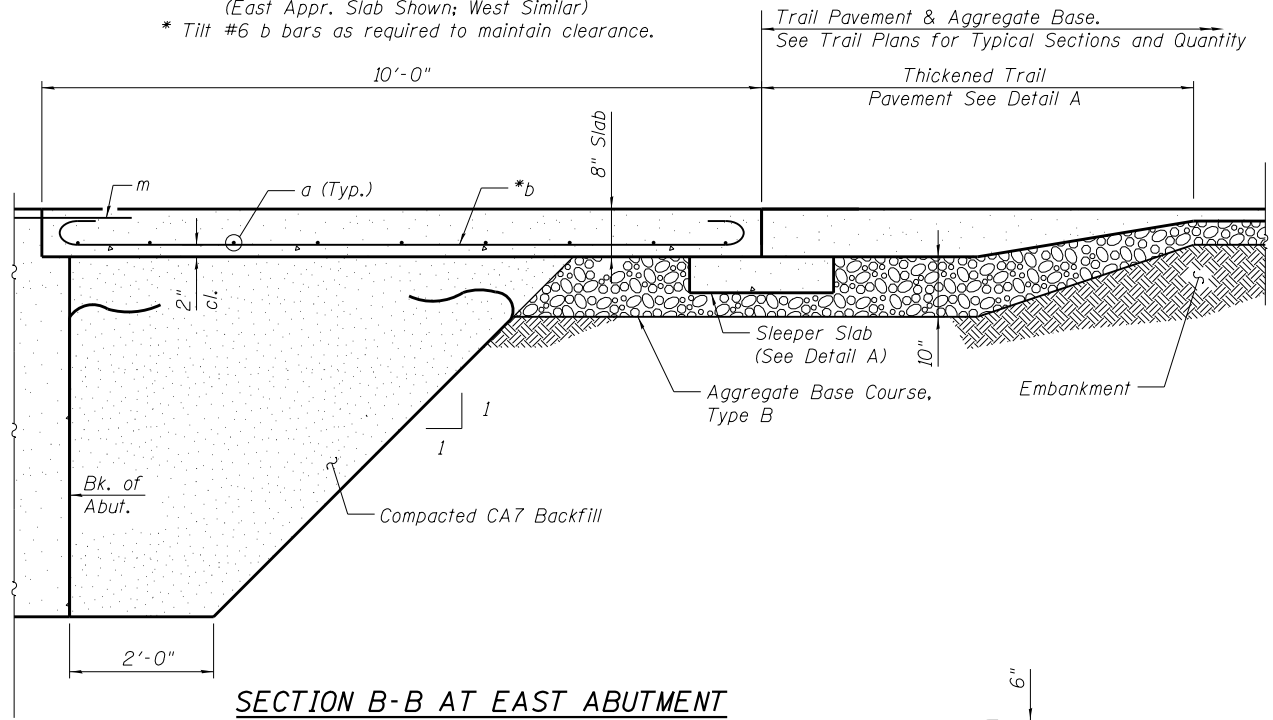
MetroBikeLink
McKinley Realignment

COUNTY	TOTAL SHEETS	SHEET NO.
ST. CLAIR	179	83

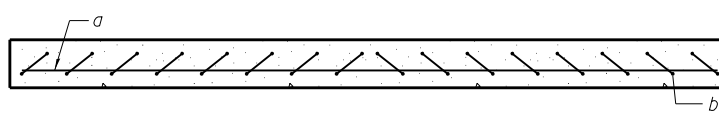


PLAN

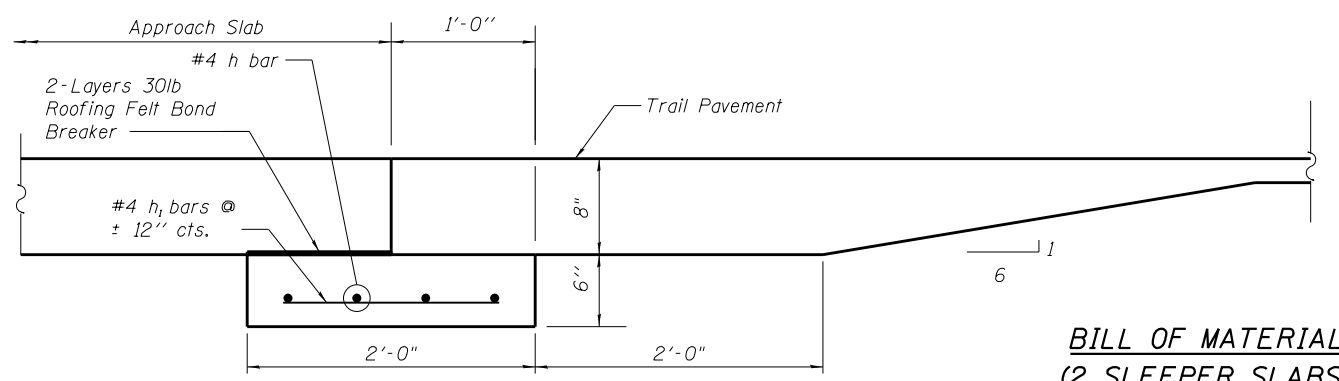
(East Appr. Slab Shown; West Similar)
* Tilt #6 b bars as required to maintain clearance.



SECTION B-B AT EAST ABUTMENT



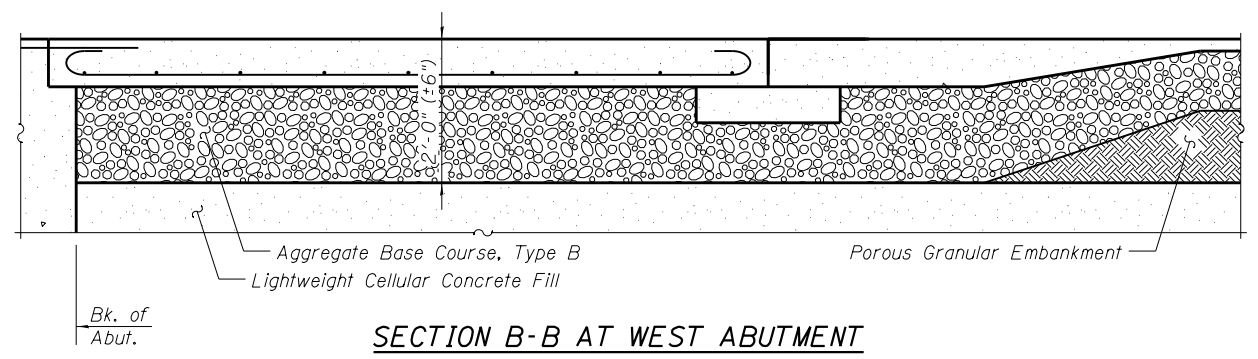
SECTION C-C



DETAIL A

BILL OF MATERIAL
(2 SLEEPER SLABS)

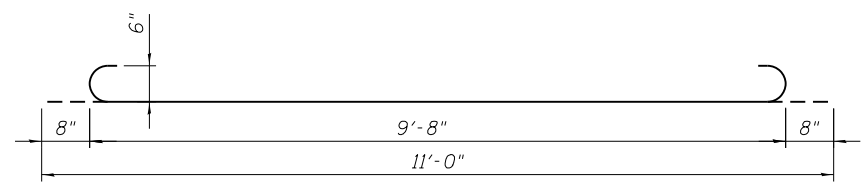
Bar	No.	Size	Length	Shape
h	8	#4	9'-8"	
h ₁	18	#4	1'-8"	
Concrete Structures			Cu. Yd.	0.7
Reinforcement Bars			Pound	70



SECTION B-B AT WEST ABUTMENT

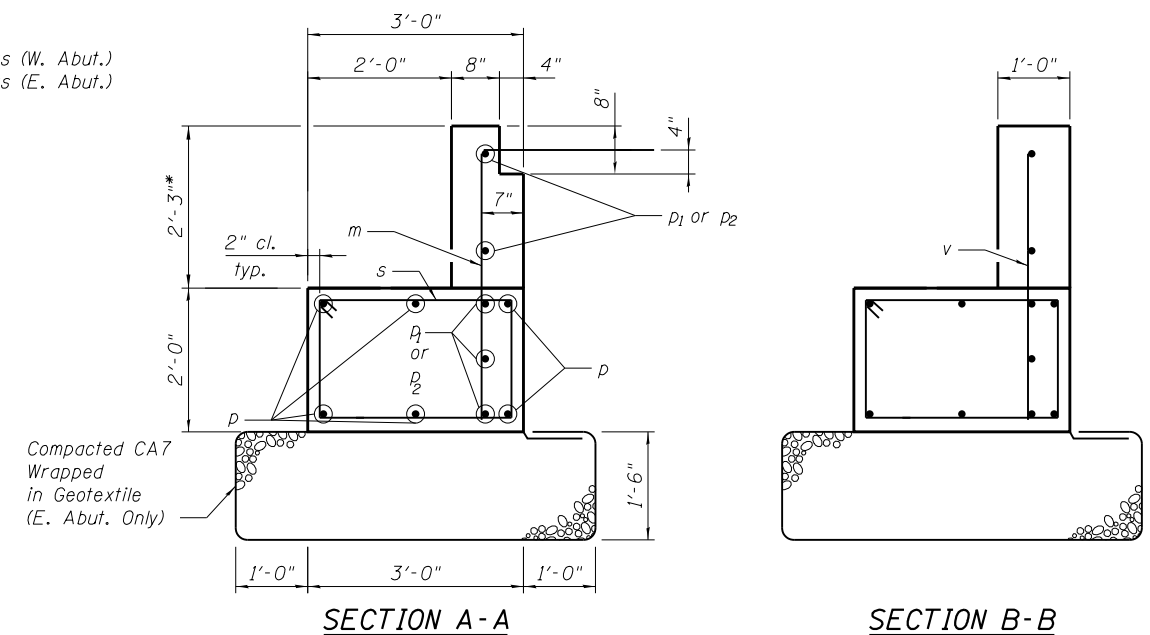
BILL OF MATERIAL
(2 APPROACHES)

Bar	No.	Size	Length	Shape
a	20	#4	9'-8"	
b	24	#6	11'-0"	
Item			Unit	Quantity
Concrete Structures			Cu. Yd.	5.0
Reinforcement Bars			Pound	530



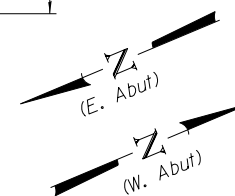
BAR b

FILE NAME = P:\090678\4-CADD - DWG\4.3-S1\Bridg 31178\B31.78-003-Bridge Approach Slab Details.dgn



SECTION A-A

SECTION B-B
(See Section A-A for
Information Not Shown)



ASSUMED TRUSS LOADING

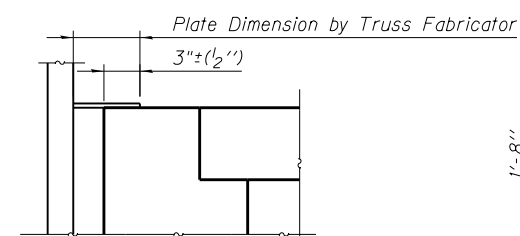
	P (kips)	H (kips)	L (kips)
Dead Load	11.75		
Uniform Live Load (Governs)	24.97		
Wind	7.11	15.75	
Wind Uplift - Windward	-8.33		
Wind Uplift - Leeward	-2.78		
Thermal			2.00
(+ Downward Load & - Upward Load)			
"P" - Vertical Load each base plate (4 per bridge)			
"H" - Horizontal Load each abutment (2 per bridge)			
"L" - Longitudinal Load each base plate (4 per bridge)			

BILL OF MATERIAL
2 ABUTMENTS

Bar	No.	Size	Length	Shape
<i>p</i>	12	#6	13'-4"	_____
<i>p</i> ₁	5	#6	21'-1"	_____
<i>p</i> ₂	5	#6	22'-4"	_____
<i>s</i>	30	#4	9'-5"	□
<i>m</i>	20	#4	6'-5"	┐
<i>v</i>	20	#5	3'-10"	_____
<i>Structure Excavation</i>			<i>Cu. Yd.</i>	<i>18</i>
<i>Concrete Structures</i>			<i>Cu. Yd.</i>	<i>10.0</i>
<i>Reinforcement Bars</i>			<i>Pound</i>	<i>920</i>

Notes:
Spacing of *s* Bars in the pile cap should be modified to avoid anchor bolts. Size, number, and location of anchor bolts are to be based on the approved shop drawings for the Pedestrian Truss Superstructure.

Geotextile for CA7 shall be included in price for Compacted CA-7 Backfill.



BAR s

BAR s_1

FILE NAME = P:\090670\4-CADD - DWG\4.3-ST\Bridg 31178\B31.78-005-Soil Borings.dgn

THOUVENOT,
WADE &
MOERCHEN, INC.



USER NAME = mjoost

DESIGNED - MJJ

CHECKED -

REVISED

PLOT SCALE = 0:2.0000 'ft' / in

DRAWN - MJJ

CHECKED -

REVISED

SWANSEA • WATERLOO • EDWARDSVILLE • ST. LOUIS • ST. CHARLES

DATE = 11/11/2015

CHECKED -

REVISED

St Clair
County
Transit
District

Bi-State
Development
Agency

BORING HA1680R
STRUCTURE B31.78

SHEET NO. 5 OF 5 SHEETS

MetroBikeLink
McKinley Realignment

COUNTY	TOTAL SHEETS	SHEET NO.
ST. CLAIR	179	86

