ITEM 614 - MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 180 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 9 . A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF $2042 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE DETOURS SHALL BE ESABLISHED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE STATE OF OHIO. SEE SHEET 9 FOR CONTRACTOR/ ODOT SIGN LIST.

THE FIRST DAY THE DETOUR IN IN EFFECT SHALL BE CONSIDERED THE STARTING DATEOF THE 180 DAY DETOUR CLOSURE LIMITATION. THE 180TH DAY OF THE OF THE 180 DAY DETOUR/CLOSURE LIMITATION SHALL BE CONSIDERED AS AN INTERIM COMPLETEION DATE. ON OR BEFORE THE 180TH DAY, THE ROADWAY SHALL BE OPEN TO THE SAFE AND CONVENIENT USE OF THE TRAVELING PUBLIC. IF THE ROADWAY IS NOT OPENED BY THIS INTERIIM COMPLETION DATE, DISINCENTIVES SHALL BE ASSESSED AS PER THE ABOVE SPECIFICATION.

ACCESS TO ADJACENT PROPERTY WITHIN THE WORK LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES AS PER 614.02(a).

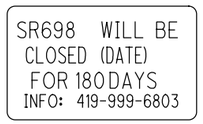
NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURE	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>= 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.



W20-H13-60

THROUGH OUT THE DURATION OF THE PRJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATOIN IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE , MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSED	>=2 WEEKS TO CLOSURE	21 CALENDAR DAYS PRIOR
	>= 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS TO CLOSURE	4 BUSINESS DAYS PRIOR
LANE CLOSURES & RE-STRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES		14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DUST CONTROL

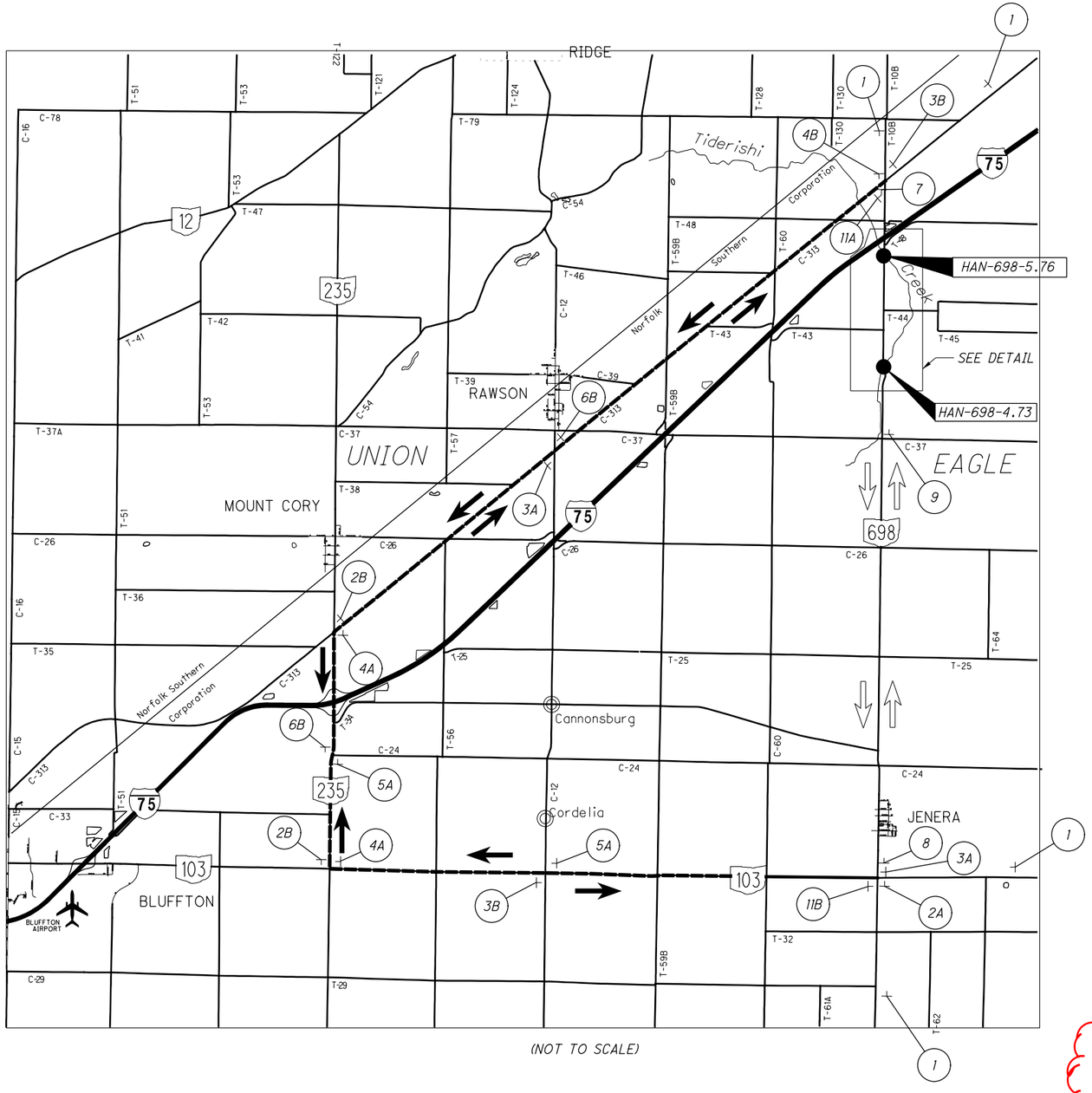
THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 1 M. GAL.

CALCULATED CEL
CHECKED JRW

MAINTENANCE OF TRAFFIC GENERAL NOTES

HAN-698-4.73/5.76



(NOT TO SCALE)

DETOUR ROUTE

DETOURED TRAFFIC

MAINTAINED TRAFFIC (LOCAL)

A — NORTH — M3-1-24

B — SOUTH — M3-3-24

1 — DETOUR AHEAD — W20-2-36

2 — DETOUR 698 ← — M4-8-24, M1-5-24-3, M6-1L-21

3 — DETOUR 698 ↑ — M4-8-24, M1-5-24-3, M6-3-21

4 — DETOUR 698 → — M4-8-24, M1-5-24-3, M6-1R-21

5 — DETOUR 698 ↱ — M4-8-24, M1-5-24-3, M5-1-21

6 — DETOUR 698 ↰ — M4-8-24, M1-5-24-3, M5-1-21

7 — ROAD CLOSED 0.75 MILES AHEAD LOCAL TRAFFIC ONLY / DETOUR → — R11-3A-60, M4-10R-48

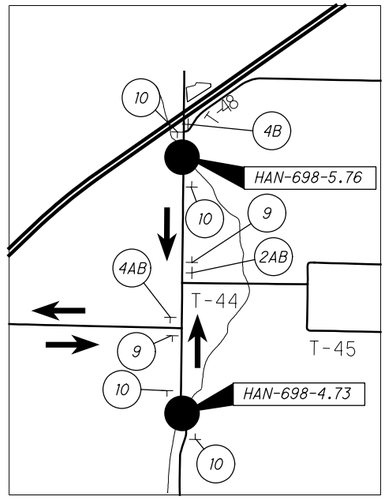
8 — ROAD CLOSED 4.75 MILES AHEAD LOCAL TRAFFIC ONLY / DETOUR ← — R11-3A-60, M4-10L-48

9 — ROAD CLOSED LOCAL TRAFFIC ONLY / DETOUR → — R11-3-66, M4-10R-48

10 — ROAD CLOSED — R11-2-48

11 — END DETOUR 698 — M4-8-24, M4-6-24, M6-3-21

NOTE:
CONTRACTOR IS RESPONSIBLE FOR PLACING, MAINTAINING, AND REMOVING ALL SIGNS SHOWN IN SMALLER "DETAIL" MAP TO THE RIGHT. ODOT WILL PLACE, MAINTAIN, AND REMOVE ALL THE DETOUR ROUTE SIGNS SHOWN IN THE LARGER MAP TO THE LEFT.



DETAIL

MAINTENANCE OF TRAFFIC GENERAL NOTES

HAN-698-4.73/ 5.76

CALCULATED CEL
CHECKED JRW

9
68

SHEET NUM.													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	6		11	12		18	24						01/BRF/BR						
																		ROADWAY	
													LS	201	11000	LS		CLEARING AND GRUBBING	
			1,494										1,494	202	23010	1,494	SY	PAVEMENT REMOVED, ASPHALT	
			958										958	202	38000	958	FT	GUARDRAIL REMOVED	
	3												3	202	53101	3	EACH	MAILBOX REMOVED, AS PER PLAN	6
						129	225						354	203	10000	354	CY	EXCAVATION	
						76	288						364	203	20000	364	CY	EMBANKMENT	
			1,958										1,958	204	10000	1,958	SY	SUBGRADE COMPACTION	
	1												1	204	45000	1	HOUR	PROOF ROLLING	
			950										950	606	15101	950	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS, AS PER PLAN	6
			4										4	606	20050	4	EACH	ROUNDED END SECTION	
			6										6	606	26150	6	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
			4										4	606	26500	4	EACH	ANCHOR ASSEMBLY, TYPE T	
			8										8	606	35001	8	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN	6
			38										38	626	00102	38	EACH	BARRIER REFLECTOR, TYPE 1, BI-DIRECTIONAL	
																		EROSION CONTROL	
			179										179	601	32100	179	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
	2												2	659	00100	2	EACH	SOIL ANALYSIS TEST	
	147												147	659	00300	147	CY	TOPSOIL	
	1,364												1,364	659	10000	1,364	SY	SEEDING AND MULCHING	
	68												68	659	14000	68	SY	REPAIR SEEDING AND MULCHING	
	68												68	659	15000	68	SY	INTER-SEEDING	
	0.2												0.2	659	20000	0.2	TON	COMMERCIAL FERTILIZER	
	0.3												0.3	659	31000	0.3	ACRE	LIME	
	7												7	659	35000	7	MGAL	WATER	
													15,000	832	30000	15,000	EACH	EROSION CONTROL	
																		DRAINAGE	
			486										486	605	31100	486	FT	AGGREGATE DRAINS	
																		PAVEMENT	
				321									321	302	46000	321	CY	ASPHALT CONCRETE BASE, PG64-22	
				342									342	304	20000	342	CY	AGGREGATE BASE	
				103									103	407	10000	103	GAL	TACK COAT	
				67									67	441	50000	67	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
				37									37	441	50000	37	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, SAFETY EDGE	
				90									90	441	50300	90	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
																		TRAFFIC CONTROL	
				44									44	630	03100	44	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
				4									4	630	85100	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
				4									4	630	86002	4	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
				0.32									0.32	642	00104	0.32	MILE	EDGE LINE, 6", TYPE 1	
				0.16									0.16	642	00300	0.16	MILE	CENTER LINE, TYPE 1	
																		STRUCTURE OVER 20 FOOT SPAN	
																		STRUCTURE HAN-698-4.73 ESTIMATED QUANTITIES	30
																		STRUCTURE HAN-698-5.76 ESTIMATED QUANTITIES	48
																		INCIDENTALS	
													LS	614	40000	LS		MAINTAINING TRAFFIC	
													LS	614	12420	LS		DETOUR SIGNING	
													8	619	16010	8	MNTH	FIELD OFFICE, TYPE B	
													LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
													LS	624	10000	LS		MOBILIZATION	

CALCULATED CEL
CHECKED JRW

GENERAL SUMMARY

HAN-698-4.73/5.76

ESTIMATED QUANTITIES

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SHEET NO.
202	11002	LUMP		STRUCTURE REMOVED, OVER 20 FOOT SPAN				LUMP	
202	22900	132	SQ YD	APPROACH SLAB REMOVED				132	
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING				LUMP	
503	21300	LUMP		UNCLASSIFIED EXCAVATION				LUMP	
503	31100	53	CU YD	ROCK EXCAVATION	13	40			
509	10000	67460	POUND	EPOXY COATED REINFORCING STEEL	32352	8121	26987		
511	32212	129	CU YD	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			129		
511	40512	96	CU YD	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		96			
511	43512	224	CU YD	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING	224				
511	46512	58	CU YD	CLASS QC1 CONCRETE WITH QC/QA, FOOTING		58			
512	10100	218	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	42	122	54		
516	13900	113	SQ FT	2" PREFORMED EXPANSION JOINT FILLER	113				
516	14020	92	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL	92				
516	44001	70	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN			70		13/18
				(9"x9"x1.6" BEARING WITH 10"x10"x1.5" LOAD PLATE)					
517	70000	202	FT	RAILING (TWIN STEEL TUBE)			202		
518	21200	45	CU YD	POROUS BACKFILL WITH GEOTEXTILE FABRIC	45				
SPECIAL	51822300	171	FT	STEEL DRIP STRIP			171		
518	40000	120	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	120				
518	40010	60	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	60				
526	25011	178	SQ YD	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15"), AS PER PLAN				178	14A/18, 14B/18
526	90010	68	FT	TYPE A INSTALLATION				68	
846	00110	28	CU FT	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM				28	

QUANTITIES COMPUTED BY: NRP 03-19
QUANTITIES CHECKED BY: AMT 06-19

DESIGN AGENCY
LJB Inc. • 2500 Newmark Drive
Miamisburg, OH 45342
(937) 259-5000 tel • (937) 259-5100 fax • LJBinc.com

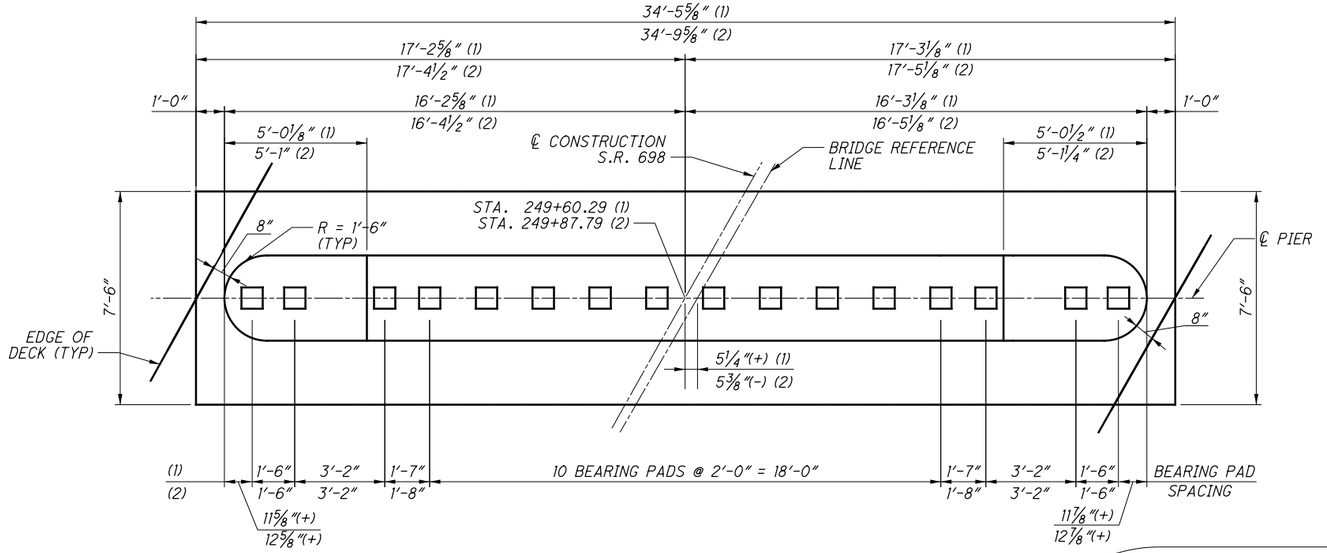
DESIGNED SJM | DRAWN SJM | REVIEWED DWS | DATE 6-19
CHECKED JLM | REVISED | STRUCTURE FILE NUMBER 3205510

ESTIMATED QUANTITIES
BRIDGE NO. HAN-698-0473
S.R. 698 OVER TIDERISHI CREEK

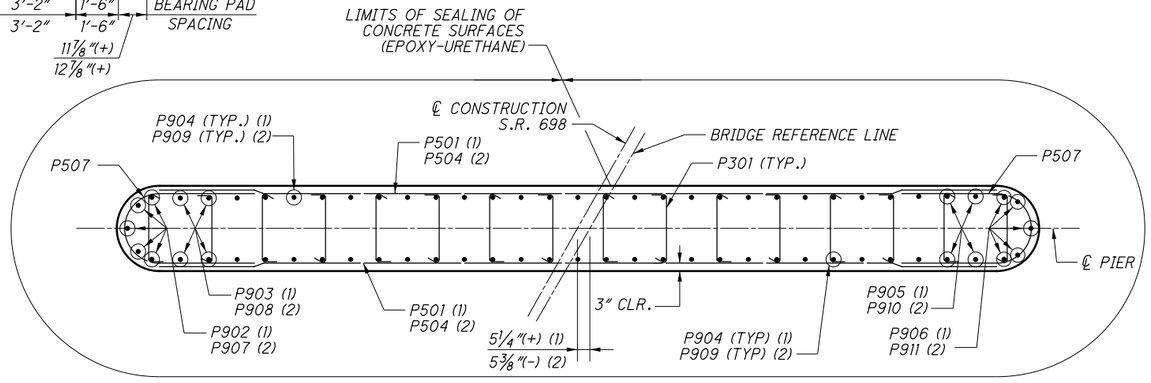
HAN-698-4.73
PID No. 101193

3 / 18

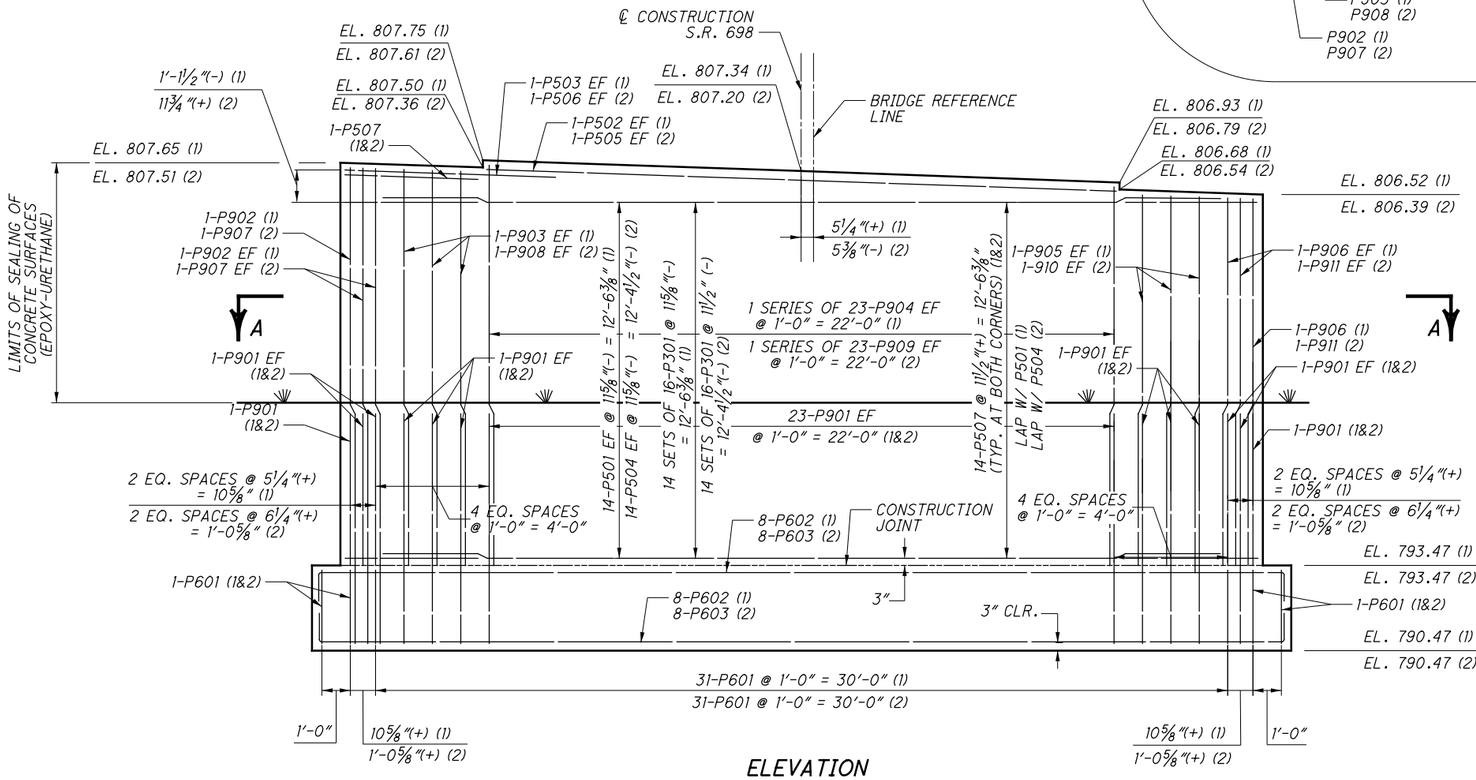
30
68



PLAN



SECTION A-A



ELEVATION

MINIMUM LAP LENGTHS

NO. 5 BAR = 2′-5″
NO. 6 BAR= 3′-7″
NO. 9 BAR= 5′-4″

LEGEND

EF = EACH FACE
(1) = PIER 1
(2) = PIER 2

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 18 .
2. FOR REINFORCING STEEL LIST, SEE SHEETS 15 / 18 THRU 18 / 18 .
3. FOR BEARING DETAILS, SEE SHEET 12 / 18 .
4. THE CONTRACTOR SHALL USE STANDARD REMOVABLE FORMWORK TO FORM THE CONCRETE DECK SLAB ABOVE THE PIER BEARINGS. AFTER CONSTRUCTION IS COMPLETE, THE PIER BEARINGS SHALL BE VISIBLE FOR INSPECTIONS. STAY-IN-PLACE EXPANDED POLYSTYRENE JOINT FILLER OR OTHER FORMWORK THAT IS LEFT IN PLACE AFTER CONSTRUCTION SHALL NOT BE USED.

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DESIGNED	DRAWN	REVIEWED	DATE
JLM	NRP	DWS	6-19
CHECKED	REVISED	STRUCTURE FILE NUMBER	
NRP		3205510	

PIER DETAILS
BRIDGE NO. HAN-698-0473
S.R. 698 OVER TIDERISHI CREEK

HAN-698-4.73
PID No. 101193

9 / 18

36 / 68

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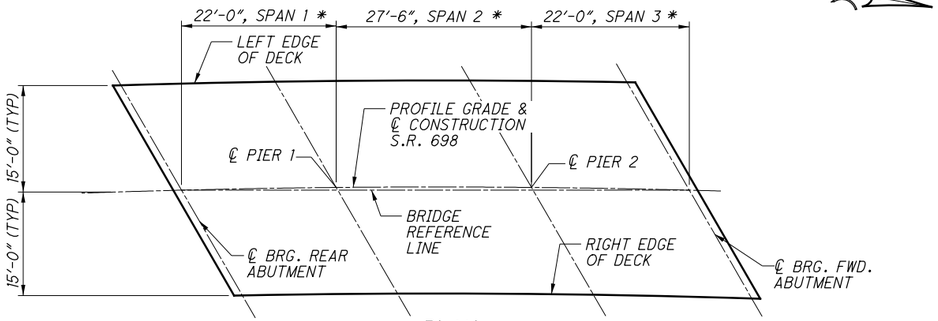
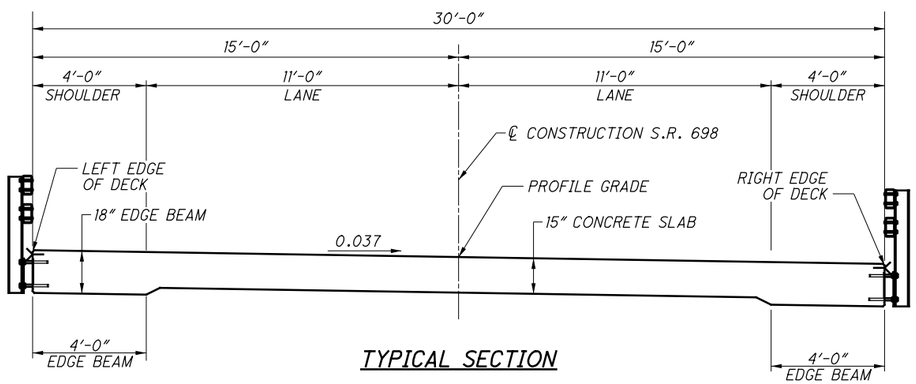
FINAL DECK SURFACE STATIONS AND ELEVATIONS			
LOCATION	LEFT EDGE OF DECK	PROFILE GRADE AND ℄ CONSTRUCTION	RIGHT EDGE OF DECK
℄ BRG. REAR ABUT.	249+30.44 809.61	249+38.51 809.02	249+46.77 808.42
1/4	249+35.81 809.59	249+43.96 808.99	249+52.29 808.39
1/2	249+41.19 809.56	249+49.40 808.96	249+57.82 808.37
3/4	249+46.56 809.53	249+54.85 808.94	249+63.34 808.34
℄ PIER 1	249+51.93 809.50	249+60.29 808.91	249+68.86 808.31
1/4	249+58.71 809.47	249+67.17 808.87	249+75.83 808.28
1/2	249+65.49 809.44	249+74.04 808.84	249+82.81 808.24
3/4	249+72.27 809.40	249+80.92 808.81	249+89.78 808.21
℄ PIER 2	249+79.05 809.37	249+87.79 808.77	249+96.75 808.17
1/4	249+84.53 809.34	249+93.35 808.74	250+02.39 808.14
1/2	249+90.01 809.31	249+98.91 808.72	250+08.03 808.11
3/4	249+95.48 809.29	250+04.46 808.69	250+13.66 808.09
℄ BRG. FWD. ABUT.	250+00.96 809.26	250+10.02 808.66	250+19.30 808.06

NOTE: FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

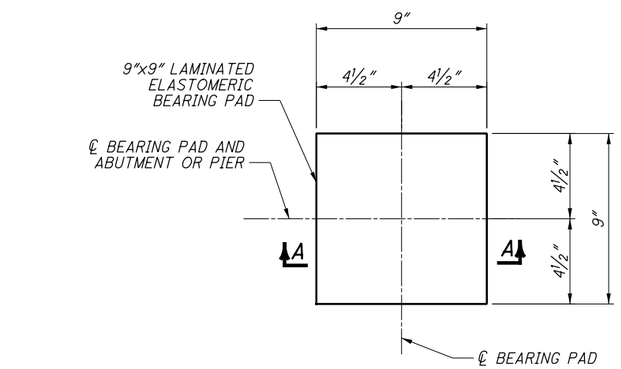


PLAN

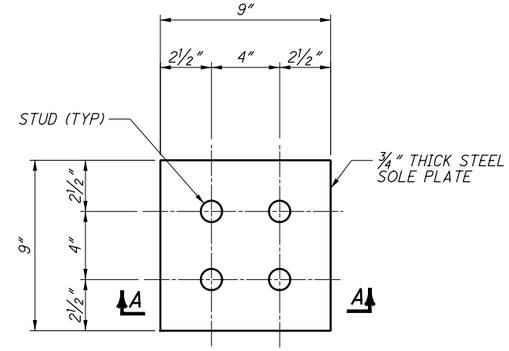
* MEASURED ALONG BRIDGE REFERENCE LINE



TYPICAL SECTION

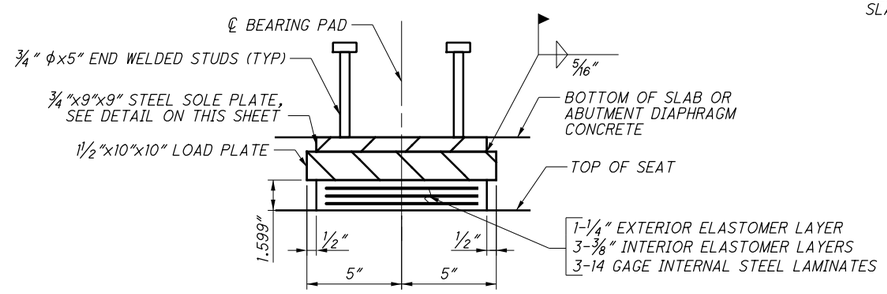


PLAN



SOLE PLATE PLAN

(BEARING PAD, LOAD PLATE AND SLAB OR ABUTMENT DIAPHRAGM CONCRETE, NOT SHOWN)



SECTION A-A

LAMINATED ELASTOMERIC BEARING DETAILS

ABUTMENTS:
LIVE LOAD REACTION (W/O IMPACT): 10.74 KIPS
DEAD LOAD REACTION: 12.11 KIPS
MAXIMUM DESIGN LOAD: 22.85 KIPS

PIER 1:
LIVE LOAD REACTION (W/O IMPACT): 21.09 KIPS
DEAD LOAD REACTION: 18.24 KIPS
MAXIMUM DESIGN LOAD: 39.33 KIPS

PIER 2:
LIVE LOAD REACTION (W/O IMPACT): 21.96 KIPS
DEAD LOAD REACTION: 18.99 KIPS
MAXIMUM DESIGN LOAD: 40.95 KIPS

LEGEND

BRG. = BEARING
FWD. = FORWARD

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 18.
2. FOR APPROACH SLAB DETAILS, SEE SHEET 14 / 18.
3. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
4. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
5. THE STEEL LOAD PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50 AND SHALL BE BONDED TO THE ELASTOMER BY VULCANIZATION DURING THE MOLDING PROCESS. TOP OF LOAD PLATES SHALL BE SHOP MARKED WITH PAINT INDICATING LOCATION ON THE BRIDGE AND FORWARD DIRECTION.
6. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL ELASTOMERIC BEARINGS. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN, AS LISTED UNDER THE ESTIMATED QUANTITIES.
7. ALL STEEL LOAD PLATES AND STEEL SOLE PLATES OF THE ELASTOMERIC BEARINGS SHALL BE GALVANIZED ACCORDING TO CMS 711.02.

DESIGN AGENCY
LJB Inc. - 2500 Newmark Drive
Miamisburg, OH 45342
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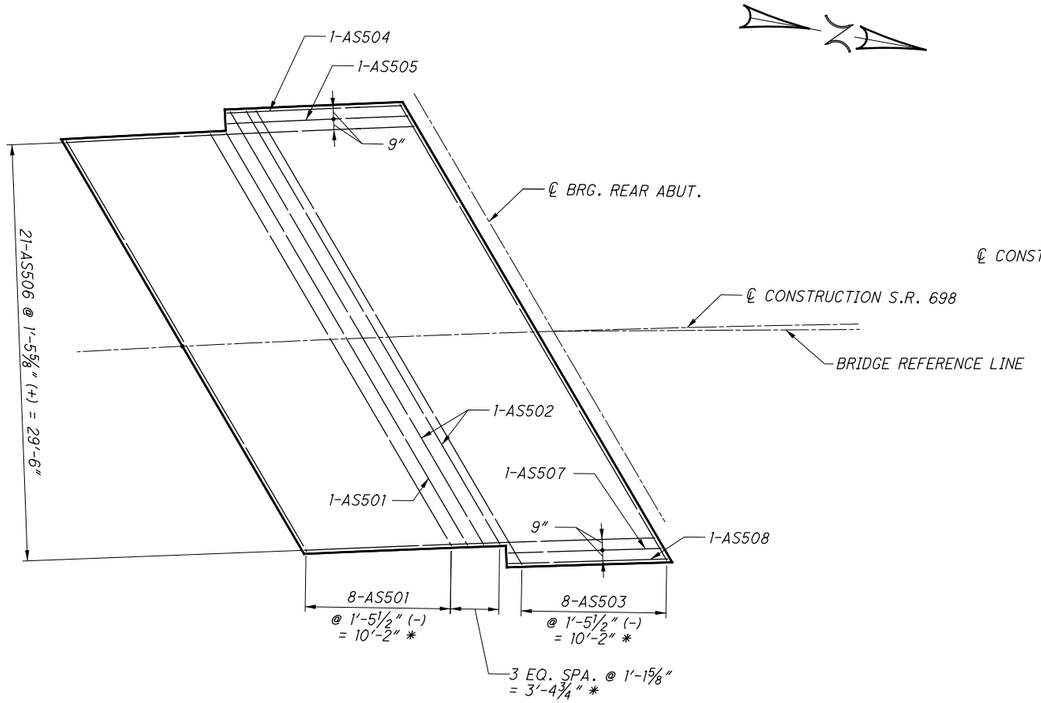
DESIGNED	DRAWN	REVIEWED	DATE
SJM	SJM	DWS	6-19
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JLM		3205510	

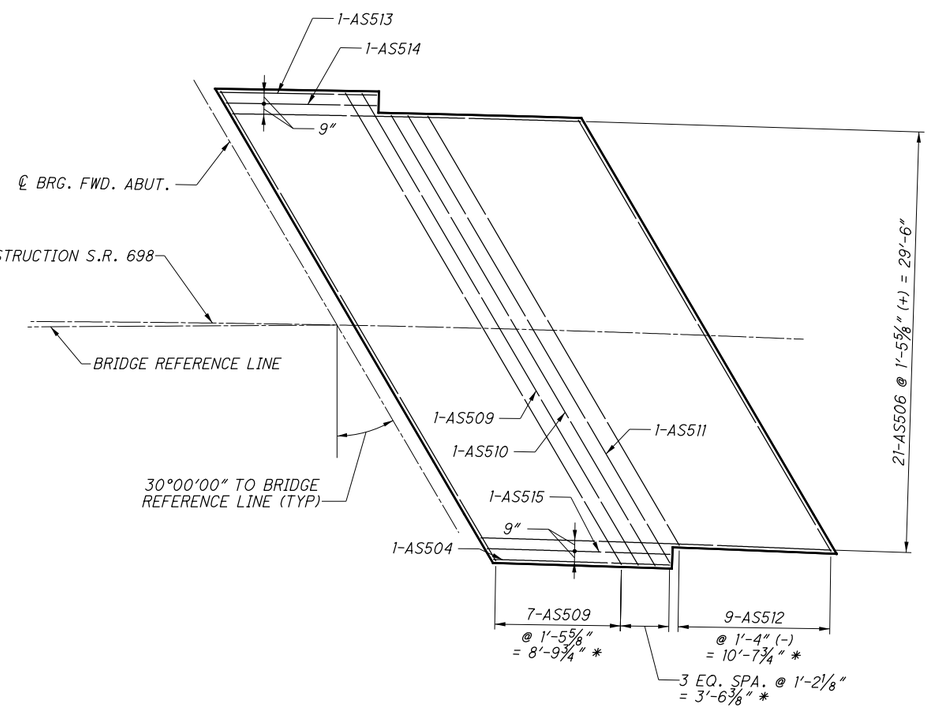
SUPERSTRUCTURE DETAILS
BRIDGE NO. HAN-698-0473
S.R. 698 OVER TIDERISHI CREEK

HAN-698-4.73
PID No. 101193



REAR APPROACH SLAB REINFORCING PLAN (TOP)

SLEEPER SLABS AND GUARDRAIL
SUPPORTS NOT SHOWN FOR CLARITY
* MEASURED ALONG ℄ CONSTRUCTION S.R. 698



FORWARD APPROACH SLAB REINFORCING PLAN (TOP)

SLEEPER SLABS AND GUARDRAIL
SUPPORTS NOT SHOWN FOR CLARITY
* MEASURED ALONG ℄ CONSTRUCTION S.R. 698

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS											
	REAR	FWD.	TOTAL				A	B	C	D	E	F	G	H	K	O	R	INC
APPROACH SLABS (TOP) - FOR INFORMATION ONLY																		
AS501	9		9	33'-6"	314	STR.												
AS502	2		2	35'-4"	74	STR.												
AS503	8		8	37'-1"	309	STR.												
AS504	1	1	2	12'-4"	26	STR.												
AS505	1		1	12'-9"	13	STR.												
AS506	21	21	42	24'-7"	1077	STR.												
AS507	1		1	10'-9"	11	STR.												
AS508	1		1	11'-2"	12	STR.												
AS509		8	8	38'-4"	320	STR.												
AS510		1	1	36'-9"	38	STR.												
AS511		1	1	36'-6"	38	STR.												
AS512		9	9	35'-1"	329	STR.												
AS513		1	1	11'-0"	11	STR.												
AS514		1	1	10'-7"	11	STR.												
AS515		1	1	12'-10"	13	STR.												

NOTE: THIS TABLE IS FOR INFORMATION ONLY. REINFORCING STEEL FOR APPROACH SLABS IS PAID FOR UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=15"), AS PER PLAN.

LEGEND

EQ. = EQUAL
SPA. = SPACING
TYP = TYPICAL
BRG. = BEARING
ABUT. = ABUTMENT
FWD. = FORWARD

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 18 .
2. FOR ADDITIONAL DETAILS, SEE STANDARD DRAWINGS AS-1-15 AND AS-2-15.
3. FIELD BEND OR FABRICATE BARS AS NECESSARY TO FIT RADIUS.
4. FIELD CUT BARS AS NEEDED TO ACHIEVE PROPER END COVER FROM EDGE OF APPROACH SLABS.

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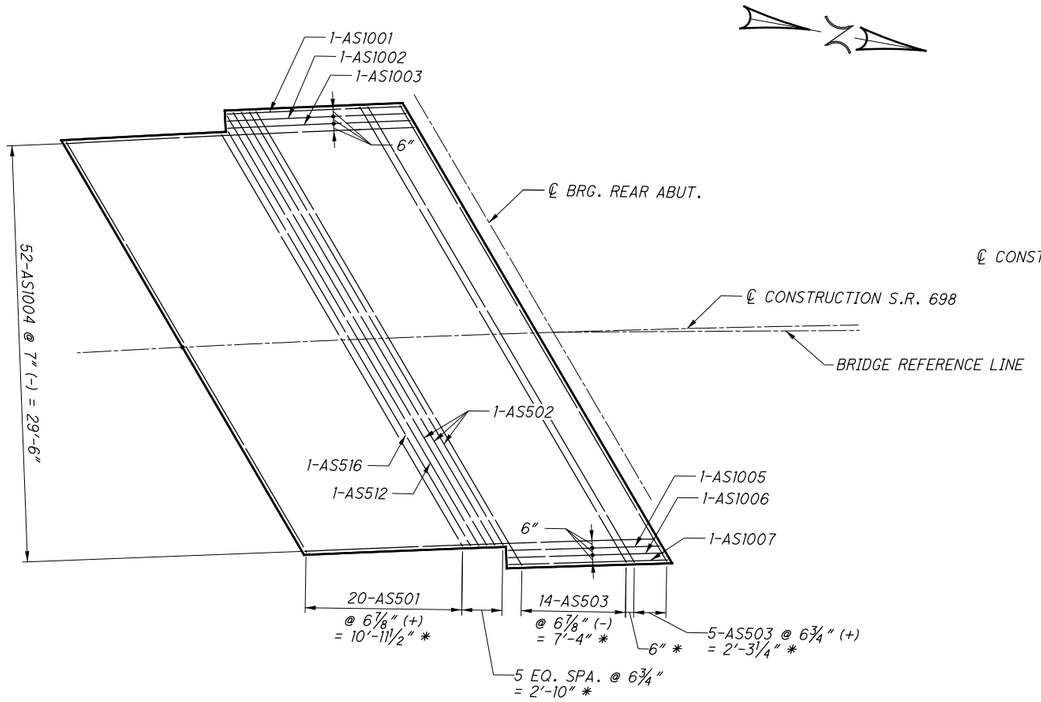
DESIGNED SJM | DRAWN SJM | REVIEWED DWS | DATE 10-2020
CHECKED DWS | REVISED | STRUCTURE FILE NUMBER 3205510

APPROACH SLAB REINFORCING (TOP)
BRIDGE NO. HAN-698-0473
S.R. 698 OVER TIDERISHI CREEK

HAN-698-4.73
PID No. 101193

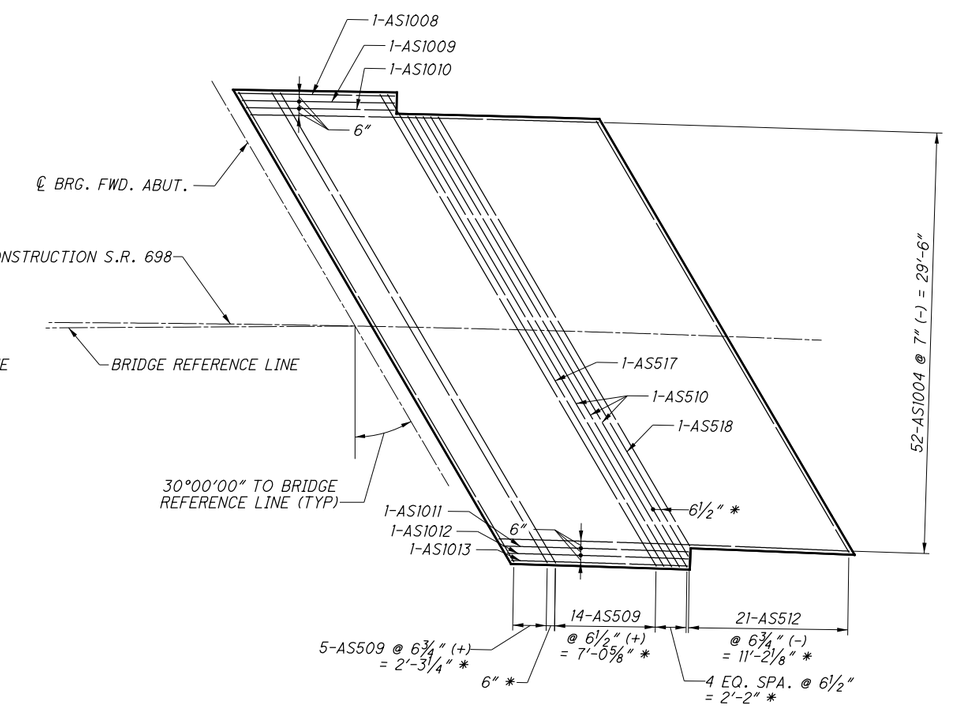
14A / 18

41A
68



REAR APPROACH SLAB REINFORCING PLAN (BOTTOM)

SLEEPER SLABS AND GUARDRAIL
SUPPORTS NOT SHOWN FOR CLARITY
* MEASURED ALONG ℄ CONSTRUCTION S.R. 698



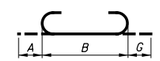
FORWARD APPROACH SLAB REINFORCING PLAN (BOTTOM)

SLEEPER SLABS AND GUARDRAIL
SUPPORTS NOT SHOWN FOR CLARITY
* MEASURED ALONG ℄ CONSTRUCTION S.R. 698

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS											
	REAR	FWD.	TOTAL				A	B	C	D	E	F	G	H	K	O	R	INC
APPROACH SLABS (BOTTOM) - FOR INFORMATION ONLY																		
AS501	20		20	33′-6″	699	STR.												
AS502	3		3	35′-4″	111	STR.												
AS503	19		19	37′-1″	735	STR.												
AS509		19	19	38′-4″	760	STR.												
AS510		3	3	36′-9″	115	STR.												
AS512	1	21	22	35′-1″	805	STR.												
AS516	1		1	33′-9″	35	STR.												
AS517		1	1	38′-6″	40	STR.												
AS518		1	1	35′-10″	37	STR.												
AS1001	1		1	13′-9″	59	1	1′-5″	12′-4″										
AS1002	1		1	14′-0″	60	1	1′-5″	12′-7″										
AS1003	1		1	14′-3″	61	1	1′-5″	12′-10″										
AS1004	52	52	104	26′-0″	11635	1	1′-5″	24′-7″										
AS1005	1		1	12′-0″	52	1	1′-5″	10′-7″										
AS1006	1		1	12′-4″	53	1	1′-5″	10′-11″										
AS1007	1		1	12′-7″	54	1	1′-5″	11′-2″										
AS1008		1	1	12′-5″	53	1	1′-5″	11′-0″										
AS1009		1	1	12′-1″	52	1	1′-5″	10′-8″										
AS1010		1	1	11′-10″	51	1	1′-5″	10′-5″										
AS1011		1	1	14′-5″	62	1	1′-5″	13′-0″										
AS1012		1	1	14′-2″	61	1	1′-5″	12′-9″										
AS1013		1	1	13′-10″	60	1	1′-5″	12′-5″										

NOTE: THIS TABLE IS FOR INFORMATION ONLY. REINFORCING STEEL FOR APPROACH SLABS IS PAID FOR UNDER ITEM 526 - REINFORCED CONCRETE APPROACH SLAB WITH QC/QA (T=15"), AS PER PLAN.

BENDING DIAGRAMS



TYPE 1

LEGEND

EQ. = EQUAL
SPA. = SPACING
TYP = TYPICAL
BRG. = BEARING
ABUT. = ABUTMENT
FWD. = FORWARD

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 18 .
2. FOR ADDITIONAL DETAILS, SEE STANDARD DRAWINGS AS-1-15 AND AS-2-15.
3. FIELD BEND OR FABRICATE BARS AS NECESSARY TO FIT RADIUS.
4. FIELD CUT BARS AS NEEDED TO ACHIEVE PROPER END COVER FROM EDGE OF APPROACH SLABS.

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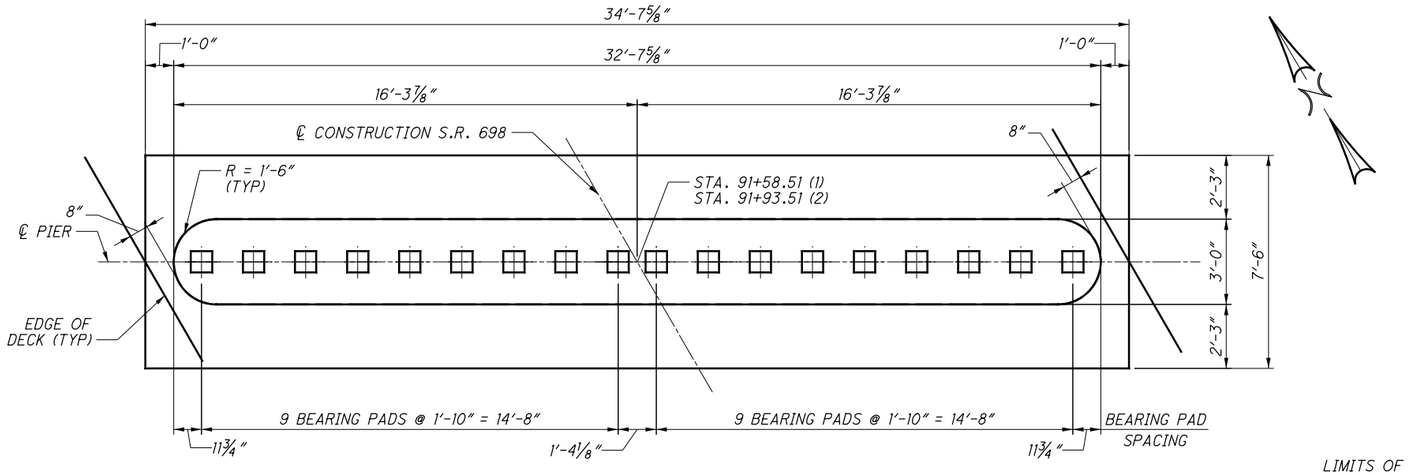
APPROACH SLAB REINFORCING (BOTTOM)
BRIDGE NO. HAN-698-0473
S.R. 698 OVER TIDERISHI CREEK

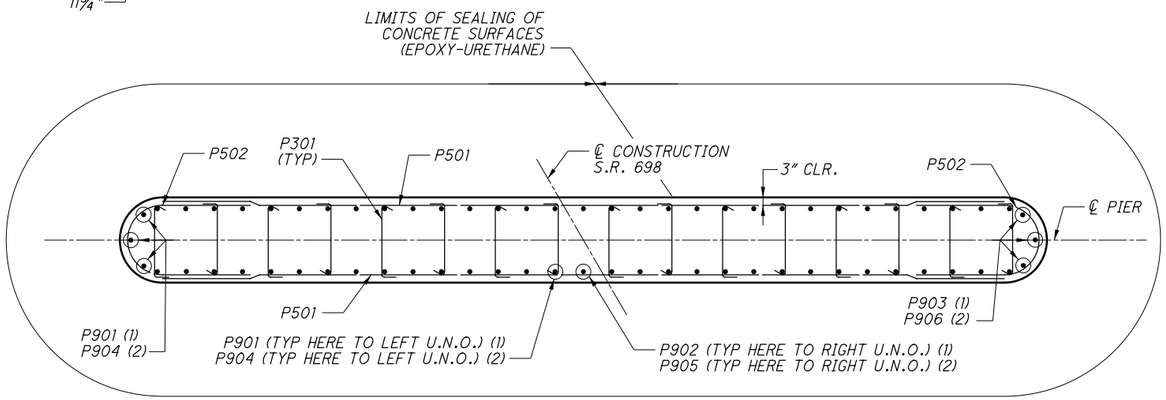
HAN-698-4.73
PID No. 101193

14B / 18

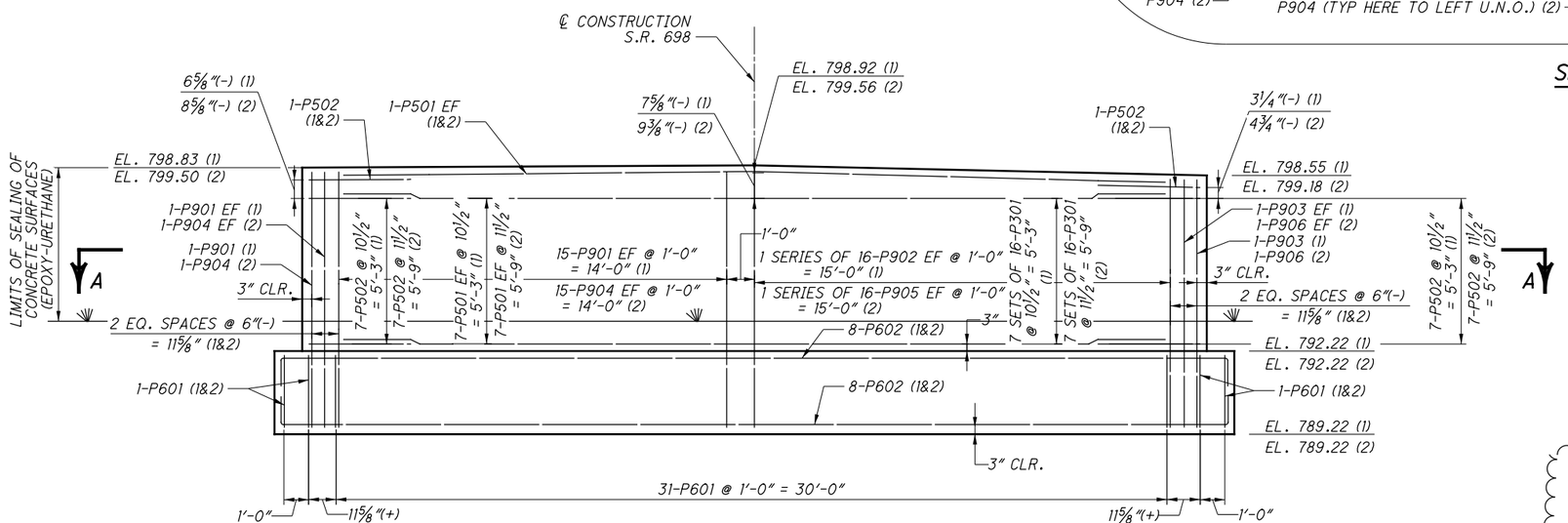
41B
68



PLAN



SECTION A-A



ELEVATION

MINIMUM LAP LENGTH

NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-8"
NO. 9 BAR = 5'-4"

LEGEND

EF = EACH FACE
(1) = PIER 1
(2) = PIER 2
U.N.O. = UNLESS NOTED OTHERWISE

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 15.
2. FOR REINFORCING STEEL LIST, SEE SHEETS 13/15 THRU 15/15.
3. FOR BEARING DETAILS, SEE SHEET 11 / 15.
4. FIELD BEND HORIZONTAL BARS AT TOP OF PIER TO MATCH CROSS SLOPE.
5. THE CONTRACTOR SHALL USE STANDARD REMOVABLE FORMWORK TO FORM THE CONCRETE DECK SLAB ABOVE THE PIER BEARINGS. AFTER CONSTRUCTION IS COMPLETE, THE PIER BEARINGS SHALL BE VISIBLE FOR INSPECTIONS. STAY-IN-PLACE EXPANDED POLYSTYRENE JOINT FILLER OR OTHER FORMWORK THAT IS LEFT IN PLACE AFTER CONSTRUCTION SHALL NOT BE USED.

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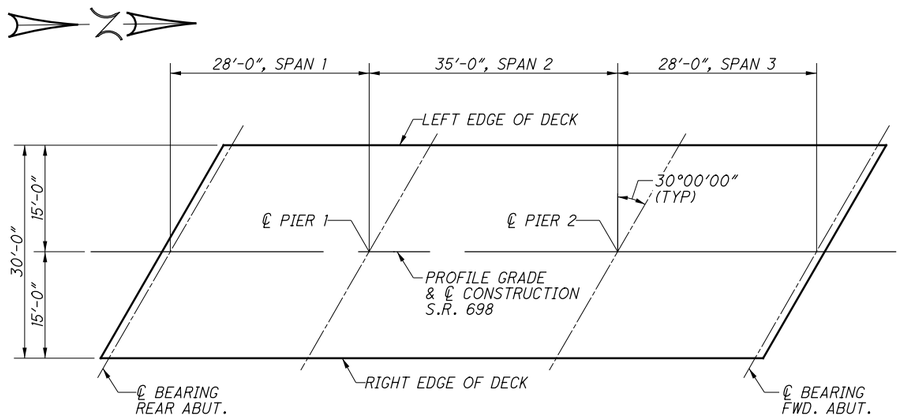
DESIGNED	DRAWN	REVIEWED	DATE
JLM	NRP	DWS	6-19
CHECKED	REVISED	STRUCTURE FILE NUMBER	
NRP		3205526	

PIER DETAILS
BRIDGE NO. HAN-698-0576
S.R. 698 OVER TIDERISHI CREEK

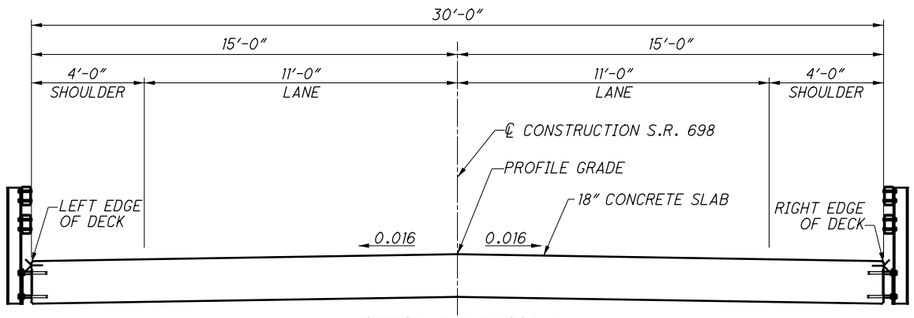
HAN-698-5.76
PID No. 101193

FINAL DECK SURFACE STATIONS AND ELEVATIONS			
LOCATION	LEFT EDGE OF DECK	PROFILE GRADE AND ℄ CONSTRUCTION	RIGHT EDGE OF DECK
℄ BRG. REAR ABUT.	91+39.17 800.18	91+30.51 800.29	91+21.85 799.93
1/4	91+46.17 800.29	91+37.51 800.40	91+28.85 800.03
1/2	91+53.17 800.41	91+44.51 800.51	91+35.85 800.13
3/4	91+60.17 800.53	91+51.51 800.62	91+42.85 800.24
℄ PIER 1	91+67.17 800.65	91+58.51 800.74	91+49.85 800.35
1/4	91+75.92 800.81	91+67.26 800.89	91+58.60 800.50
1/2	91+84.67 800.97	91+76.01 801.05	91+67.35 800.65
3/4	91+93.42 801.14	91+84.76 801.21	91+76.10 800.81
℄ PIER 2	92+02.17 801.32	91+93.51 801.39	91+84.85 800.98
1/4	92+09.17 801.47	92+00.51 801.53	91+91.85 801.11
1/2	92+16.17 801.62	92+07.51 801.67	91+98.85 801.25
3/4	92+23.17 801.77	92+14.51 801.82	92+05.85 801.40
℄ BRG. FWD. ABUT.	92+30.17 801.93	92+21.51 801.98	92+12.85 801.55

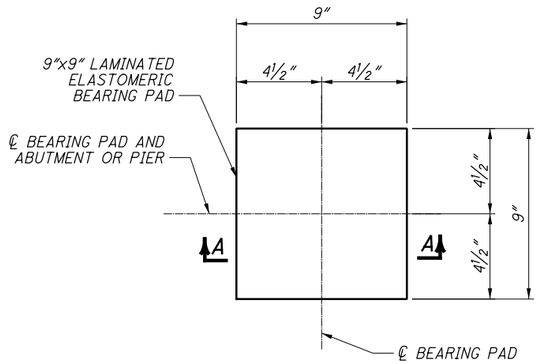
NOTE: FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.



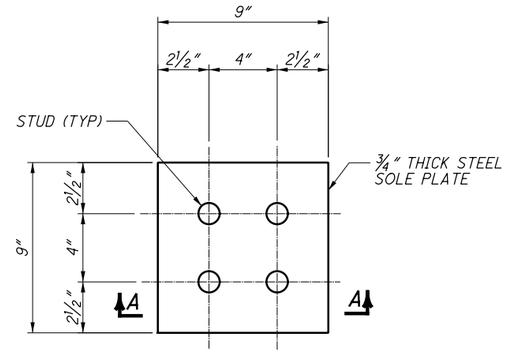
PLAN



TYPICAL SECTION

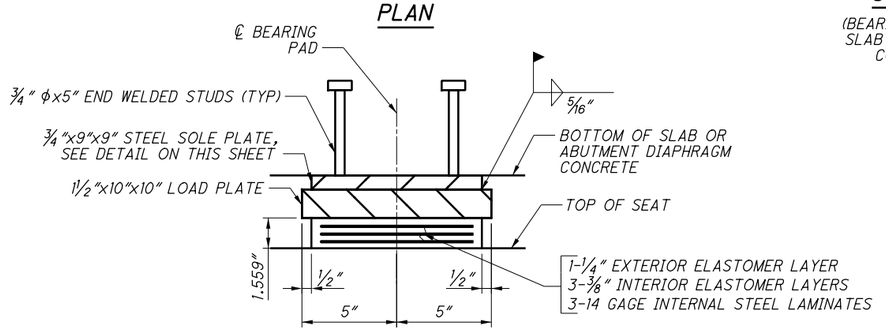


PLAN



SOLE PLATE PLAN

(BEARING PAD, LOAD PLATE AND SLAB OR ABUTMENT DIAPHRAGM CONCRETE, NOT SHOWN)



SECTION A-A

LAMINATED ELASTOMERIC BEARING DETAILS

ABUTMENTS:
LIVE LOAD REACTION (W/O IMPACT): 10.36 KIPS
DEAD LOAD REACTION: 13.00 KIPS
MAXIMUM DESIGN LOAD: 23.36 KIPS

PIERS:
LIVE LOAD REACTION (W/O IMPACT): 16.56 KIPS
DEAD LOAD REACTION: 18.73 KIPS
MAXIMUM DESIGN LOAD: 35.29 KIPS

NOTES

1. FOR GENERAL NOTES, SEE SHEET 2 / 15.
2. FOR APPROACH SLAB DETAILS, SEE SHEET 12 / 15.
3. ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED IN ACCORDANCE WITH SECTION 14.7.6 (METHOD A) OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. THE LONG-TERM COMPRESSION PROOF LOAD TEST (AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DIVISION II, SECTION 18.7.2.6) IS NOT REQUIRED.
4. ALL BEARINGS SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE, AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
5. THE STEEL LOAD PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50 AND SHALL BE BONDED TO THE ELASTOMER BY VULCANIZATION DURING THE MOLDING PROCESS. TOP OF LOAD PLATES SHALL BE SHOP MARKED WITH PAINT INDICATING LOCATION ON THE BRIDGE AND FORWARD DIRECTION.
6. BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL ELASTOMERIC BEARINGS. PAYMENT WILL BE AT THE CONTRACT PRICE FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN, AS LISTED UNDER THE ESTIMATED QUANTITIES.
7. ALL STEEL LOAD PLATES AND STEEL SOLE PLATES OF THE ELASTOMERIC BEARINGS SHALL BE GALVANIZED ACCORDING TO CMS 711.02.

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SUPERSTRUCTURE DETAILS
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