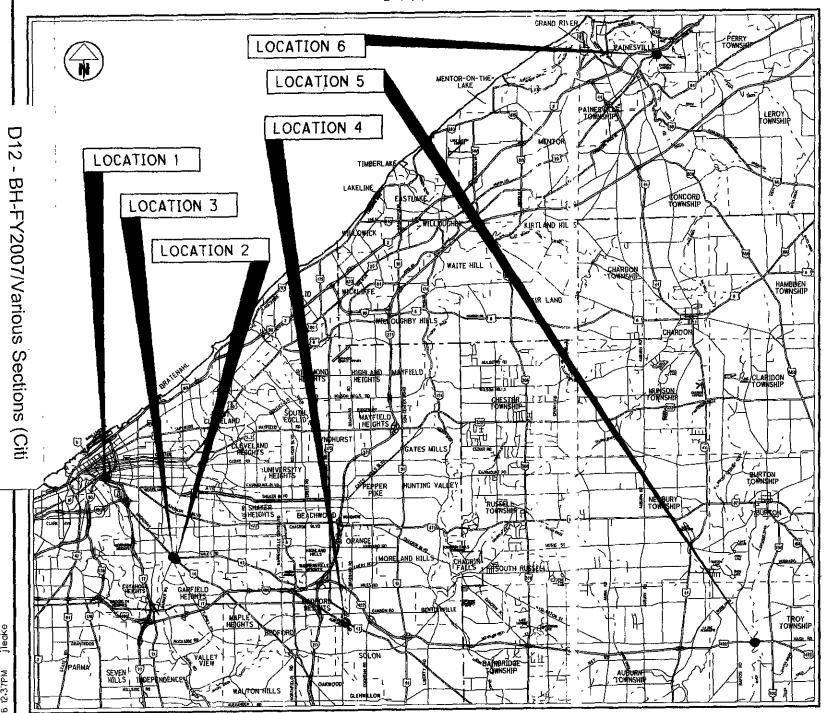
OHIO DEPARTMENT OF TRANSPORTATION

PLAN NO.



LOCATION	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	CITY	VILLAGE
1	CUY-090R-1640	1807773	CLEVELAND	
2	CUY-014D-0015	1801953	CLEVELAND	
3	CUY-014R-0538	1801651	CLEVELAND	
4	CUY-043R-0607	1803395	SOLON	
5	GEA-422R-1226	2801779		TROY TWP.
6	LAK-020R-1723	4302206		PAINESVILLE TW
				}

INDEX OF SHEETS:

TITLE SHEET	1
GENERAL NOTES	2-3
BRIDGE DATA SHEET	4
GENERAL SUMMARY	5
LOCATION 1 (CUY-090R-1640)	6
LOCATION 2 (CUY-014D-0015)	7-9
LOCATION 3 (CUY-014R-0538)	10-11
LOCATION 4 (CUY-043R-0607)	12-13
LOCATION 5 (GEA-422R-1226)	14-16
LOCATION 6 (LAK-020R-1723)	17-18
MAINTENANCE OF TRAFFIC NOTES	19-20

MAINTENANCE PROJECT: PROJECT EARTH DISTURBED AREA = N/A ESTIMATED CONTRACTOR EARTH DISTURBED AREA = N/A NOTICE OF INTENT EARTH DISTURBED AREA = N/A

PROJECT DESCRIPTION

This project will perform wearing surface improvements, expansion joint work, and minor concrete repair on various bridges throughout District 12.

2005 SPECIFICATIONS

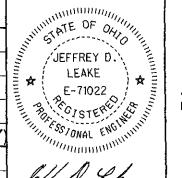
The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal, shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for maintenance and safety will be as set forth on plans and estimates.

UNDERGROUND UTILITIES

BEFORE YOU DIG CALL 1-800-362-2764 (TOLL FREE) OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY

	STANDARD	DRAWINGS		SUPPLEMENTAL SPECIFICATIONS				
A-1-69	07-19-02	MT-95.31	07-16-04	800	01-19-07	إ [
EXJ-4-87	07-19-02	MT-95.32	07-16-04	832	04-25-06			
GR-1.1	07-16-04	MT-97.10	04-19-02	843	04-18-03			
GR-2.1	01-16-04	MT-98.13	04-20-01	848	04-15-05	اِ اِ		
GR-4.1	04-18-03	MT-98.14	04-20-01	SPECIAL	(WATERWAY)	1		
BP-3.1	07-16-04	MT-102.20	04-19-02	PROVISIONS	12-7-06			
MT-35.10	04-20-01	MT-105.10	04-19-02] -		
MT-95.30	07-16-04	MT-105.11	10-18-02	TC-65,10	01-21-05			



Transportation



100%

8079

NONE

070132

PID - 80799

3/7/2007

TWO WORKING DAYS

Scope

 \bigcirc

This project will perform wearing surface replacements, expansion joint work, and minor concrete repair at 6 bridge locations throughout District 12.

Reference is Made to Standard Drawings:

Listed on the Title Sheet.

And to Proposal Notes:

512 - Patching Concrete Bridge Decks

525 – Steel Price Adjustment

And to Supplemental Specifications:

Listed on the Title Sheet.

Material Requirements

Structural Steel

All proposed structural steel shall be ASTM A709 Grade 36 or Grade 50 (minimum vield = 36ksi).

Fasteners

All bolts, washers, and nuts shall be ASTM A-325 and galvanized as per Section 711.02 of the C M.S.

Existing Structure Verification

Details and dimensions shown on these plans pertaining to the existing structure have been obtained from plans of the existing structure and from field observations and measurements. Consequently, they are indicative of the existing structure and the proposed work but shall be considered tentative and approximate. The Contractor is referred to C.M.S. Sections 102.05, 105.02, and 513.04.

Base contract bid prices upon a recognition of the uncertainties described above and upon a prebid examination of the existing structure; however, the Department will pay for all project work based upon actual details and dimensions that have been verified in the field.

Design Specifications

These structures conform to the "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway and Transportation Officials, 2002, and the O.D.O T. Bridge Design Manual.

Limits of Operations

See M.O.T. restrictions.

At Location 4 (CUY-043R-0607), no construction equipment may be placed below the high water mark of Tinkers Creek.

Cooperation Between Contractors

Cooperate and coordinate operations with the contractors on other projects that may be in force during the life of the contract. No waiver of any provisions of 105.08 of the Construction and Materials Specifications is intended

Right of Way

All work will be performed within the existing right of way.

Contingency Quantities

Do not order materials or perform work for plan items set up to be used "as directed by the Engineer" unless authorized by the Engineer

Utilities

The nature of the work required by this project will not affect any known utilities.

Item 202 - Wearing Course Removed, As Per Plan

Use this item of work to remove the existing asphalt or concrete wearing surface on the bridge deck and approach slabs as detailed in the plans.

Payment for all of the above will be at the unit bid price per square yard for Item 202 - Wearing Course Removed, As Per Plan and includes all labor, equipment, materials, and incidentals necessary to complete the above work.

Item 407 - Tack Coat

The rate of application is subject to adjustment as directed by the Engineer. Plan quantities were calculated using an average application rate of 0.10 gal./sq yd. for estimation purposes only.

Item 516 - Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, A

Obtain approval from the Engineer for replacement products and manufacturers prior to ordering material. Field verify the type of strip seal by removing a full-width portion of the seal and consulting with an approved manufacturer. Where known, the manufacturer and model of the existing strip seal extrusions are indicated in the plans. Replace the expansion joint strip seal with an identical strip seal according to the manufacturer specifications and recommendations. Prior to installing the new strip seal, clean the existing steel retainers to the satisfaction of the Engineer and in accordance with manufacturer recommendations, free of all material, debris, and residue that may interfere with the installation of the new seal.

Expansion joint gap tables are provided for informational purposes only. The values listed are based on the available record data and field observation. Field measure the actual gap at the actual temperature prior to the manufacture of joint components. If the measured values practically compare to the given values, use the strip seal size as given in the plans Otherwise, adjust these sizes as recommended by the manufacturer and approved by the Engineer. No separate payment will be made for measurement or adjustment.

Submit to the Project Engineer as-built drawings that specify the seal gland manufacturer, model number, and size that were installed under this item.

All labor, equipment, and material necessary to complete the above work is included in the unit bid price for Item 516 - Elastomeric Strip Seal Without Steel Extrusions, A.

Item 516 - Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, B

Perform work as described under "Item 516 – Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, A " Additionally, in order to gain access to the strip seal on the sidewalks, remove the cover plates. The removal length is from the curb to a point located 1" from the parapet (sidewalk side) and the width is the entire plate width. Replace the cover plate and field paint in conformance with Section 514 of the C.M S

All equipment, material, and labor required to perform the work specified in this note is paid for under Item 516 - Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, B.

Prior to the surface cleaning specified in 519.04 and within 24 hours of placing patching material, blast clean all surfaces to be patched including the exposed reinforcing steel Acceptable methods include highpressure water blasting with or without abrasives in the water, abrasive blasting with containment, or vacuum abrasive blasting.

Item 516 - Elastomeric Compression Seal

 \bigcirc

Replace the expansion joint compression seals at those locations indicated in the plans.

Expansion joint gap tables are provided for informational purposes only The values listed are based on the available record data and field observation. Field measure the actual gap at the actual temperature prior to the manufacture of joint components. If the measured values practically compare to the given values, use the compression seal size as given in the plans. Otherwise, adjust these sizes as recommended by the manufacturer and approved by the Engineer. No separate payment will be made for measurement or adjustment.

All equipment, material, and labor required to perform the work specified in this note and in the corresponding plan sheets will be paid for under Item 516 - Elastomeric Compression Seal.

Item 516 - Vertical Extension of Structural Expansion Joint, As Per

Use this item to raise the existing expansion joints as detailed in the plans It includes plates, retainers, and seal. The strip seal must be supplied by the same manufacturer that supplied the retainers. Refer to the plan and Standard Drawing EXJ-4-87 for additional details. This item includes any removal of existing plates, retainers, and seals.

Expansion joint gap tables are provided for informational purposes only. The values listed are based on the available record data and field observation. Field measure the actual gap at the actual temperature prior to the manufacture of joint components. If the measured values practically compare to the given values, use the retainers and strip seal size as given in the plans. Otherwise, adjust these sizes as recommended by the manufacturer and approved by the Engineer. No separate payment will be made for measurement, adjustment, welding, and steel components, including plates and retainers.

Submit to the Project Engineer as-built drawings that specify the seal gland manufacturer, model number, and size, and retainer dimensions that were installed under this item of work.

Payment for the above work is included in the unit bid price per linear foot for Item 516 - Vertical Extension of Structural Expansion Joint, As Per Plan and includes all labor, equipment, materials, and incidentals necessary to complete the above work.

Item 519 - Patching Concrete Structures, As Per Plan, B

Use C.M.S. 499.05 M.S. concrete for all concrete repairs associated with beam seats, abutments, and vertical faces of backwalls.

Prior to the surface cleaning specified in 519.04 and within 24 hours of placing patching material, blast clean all surfaces to be patched including the exposed reinforcing steel. Acceptable methods include highpressure water blasting with or without abrasives in the water, abrasive blasting with containment, or vacuum abrasive blasting

Item 646 - Edge Line, As Per Plan item 646 - Lane Line, As Per Plan Item 646 - Center Line, As Per Plan

Prior to any work which will require new pavement markings, field survey the locations of the existing pavement markings within the project limits. Use this survey to place the final pavement markings in the locations of the original pavement markings.

Install final pavement markings within one week of the completion of the structure's wearing surface replacement operation. For structures with multiple phases of construction, install the final pavement markings within one week of the completion of the final phase of the structure's wearing surface replacement operations.

All costs associated with this survey are included in the unit bid price for the appropriate items (e.g. cost associated with the survey of lane lines is included in the unit bid price for Item 646 – Lane Line, As Per Plan).

_
0
0
N
>
ш
- 1
I
M
- 1
S
_

LOCATION	BRIDGE NO. SFN DESCRIPTION	STRUCTURE TYPE	STRUCTURE LIMITS	ROADWAY WEARING WIDTH SURFACE		PROPOSED WORK
1	CUY-090R-1640 1807773 IR-90 OVER IR-77 SB MAINLINE	3 SPAN CONTINUOUS STEEL BEAM	309'	102'	CONCRETE	- PATCH BRIDGE DECK - SEAL BRIDGE DECK
2	CUY-014D-0015 1801953 SR-14 (EAST 93RD ST) OVER NSC R.R.	2 SPANS CONTINUOUS STEEL BEAM	152'	52'	CONCRETE	- OVERLAY BRIDGE DECK AND APPROACH SLAB - INSTALL EXPANSION JOINT SEAL
3	CUY-014R-0538 1801651 SR-14 (WARNER RD.) OVER NSC R R	1 SPAN SIMPLE STEEL BEAM	89'	40'	CONCRETE	- OVERLAY BRIDGE DECK AND APPROACH SLAB - INSTALL EXPANSION JOINT SEAL - REPLACE GUARDRAIL - PATCH ABUTMENT, SIDEWALK, BACKWALL, AND BEAM SEAT
4	CUY-043R-0607 1803395 SR-43 (AURORA RD.) OVER TINKERS CREEK	1 SPAN SIMPLE CONCRETE BEAM	29'	40'	ASPHALT	- OVERLAY BRIDGE DECK AND APPROACH SLAB - INSTALL EXPANSION JOINT SEAL - PATCH ABUTMENT AND BEAM SEAT
5	GEA-422R-1226 2801779 US-422 OVER CUYAHOGA RIVER	3 SPAN CONTINUOUS STEEL BEAM	166'	44'	CONCRETE	- OVERLAY BRIDGE DECK AND APPROACH SLAB - INSTALL EXPANSION JOINT SEAL
6	LAK-020R-1723 • 4302206 US-20 (NORTH RIDGE RD.) OVER GRAND RIVER	3 SPAN CONTINUOUS STEEL BEAM	399'	28'	CONCRETE	- OVERLAY BRIDGE DECK AND APPROACH - INSTALL EXPANSION JOINT SEAL

 \circ

 \circ

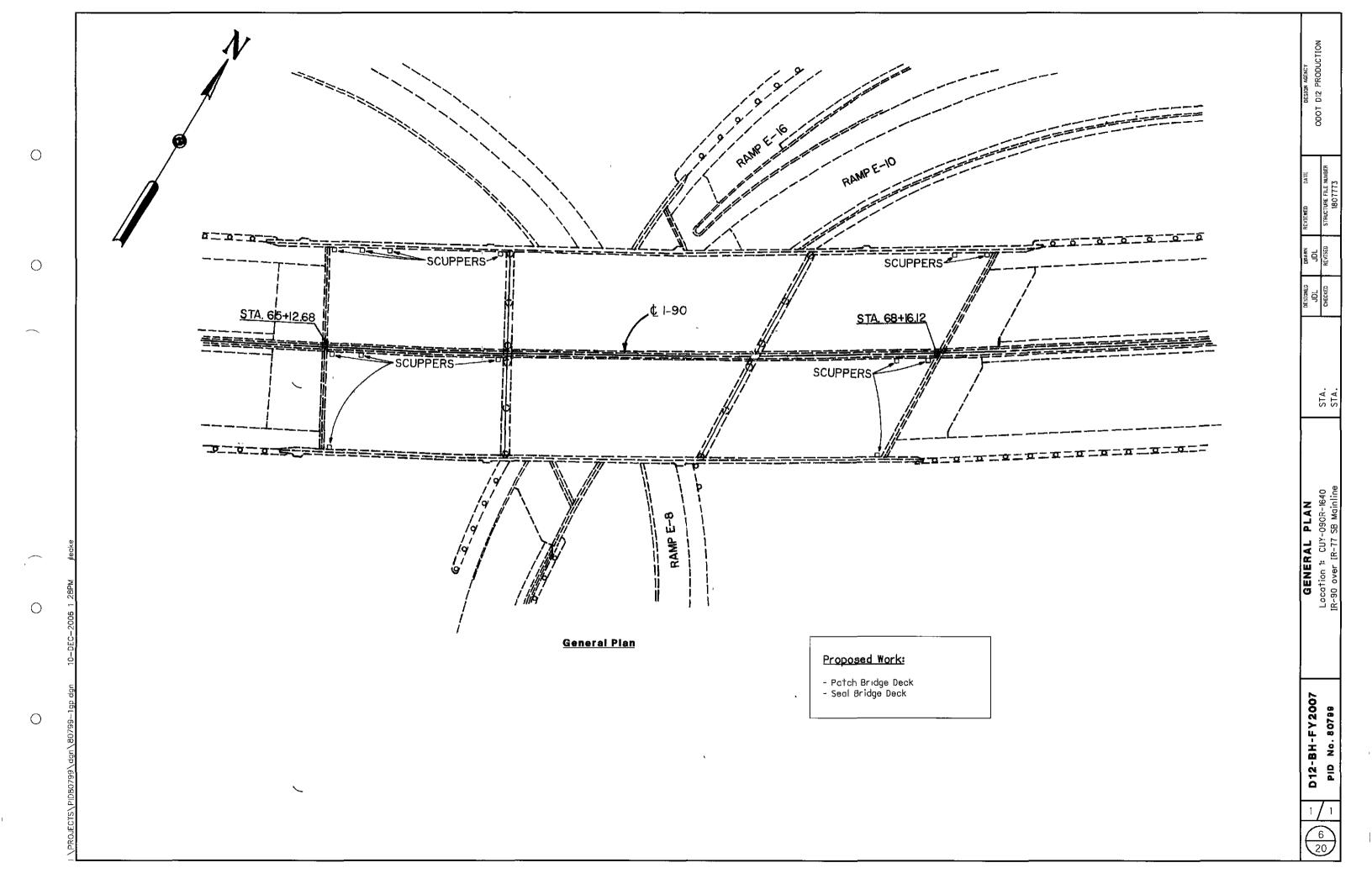
 \circ

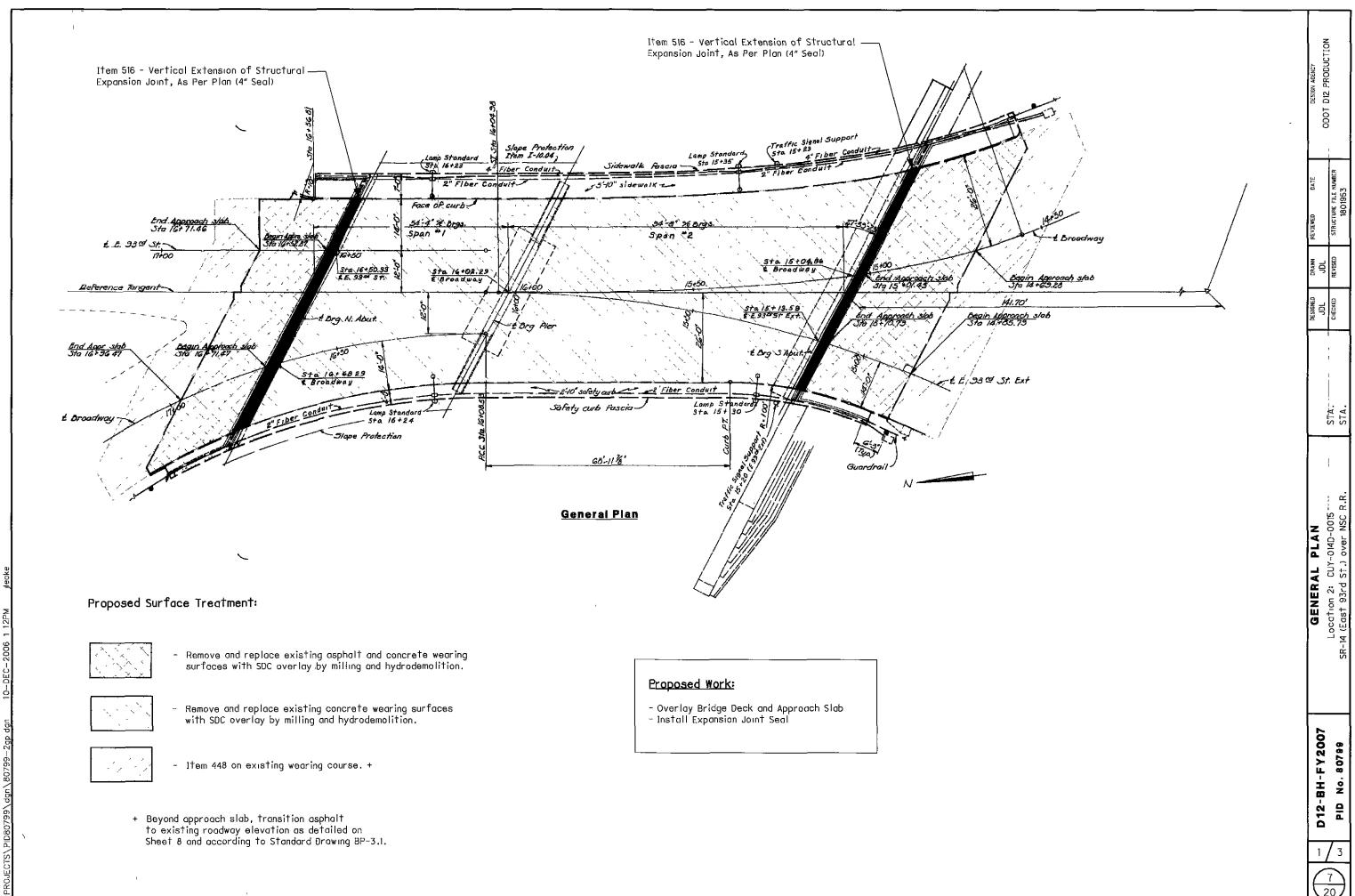
			BRIDGE LOCATION			BRIDGE LOCATION					BRIDGE LOCATION ITEM GRAND UNIT DESCRIP									BRIDGE LOCATION					BRIDGE LOCATION					DECCRIPTION	SE	EE
1	2	3	4	5	6						HEM	EXT.	TOTAL	UNII	DESCRIPTION	SHE	10.															
773	5 8	-014R-0538	CUY-043R-0607 SFN 1803395	-422R-1226	.020R - 1723 4302206			<u> </u>																								
77	4D-001	0.5	9 8	1-12	22(ļ				A L	-			ļ	 This item is to be used as directed by the Engineer. All or a portion of this quantity is subject to non-performance by the Engineer. 	-																
6	9 5	<u></u>	<u> </u>	K 0	60					<u> </u>					to non-performance by the Engineer.																	
180777	5 %	₹ ₽	6 6	22 8	20																											
z	ĮΖz	J.Z	ZZ	- Z	Jz	Í				lii C					<u></u>]																
SFN	CUY-	CUY-(Y S	EA-	LAK-											İ																
	0	ပ	ပ	5		l	ł	}		}			1			}																
		 -								_	 				ROADWAY																	
-	1294	647	308	834	1391			- -			202	23501	4474	SY	Wearing Course Removed, As Per Plan	 2	2															
	1237	60	- 300	03.7	1001						202	30700	60	FT	Concrete Barrier Removed	+	_															
	<u> </u>	62.5						 	 	+	202	38000	62.5	FT	Guardrail Removed	+-	_															
	 	1	_		ļ — 					 	202	42000	1	Each	Anchor Assembly Removed, Type A																	
		-		-						10	202	54000	10	Each	Raised Payement Marker Removed	+-	_															
		62.5									606	13000	62.5	FT	Guardrail, Type 5																	
		11					<u></u>				606	25000	1	Each	Anchor Assembly, Type A																	
	<u> </u>		ļ. <u>.</u>							<u> </u>	\ <u> </u>																					
										 	 				EROSION CONTROL	<u> </u>																
	<u> </u>	<u> </u>	_							1000	832	30000	1000	Each	Erosion Control	 - -																
	<u> </u>			<u> </u>						 -	-		 -		PAVEMENT		_															
	36	 -		60					 - -		407	10000	96	GAL	Tack Coat	┿-	_															
	3	·	-	12	1		·	 		1	448	46904	15	CY	Asphalt Concrete Surface Course, Type 1, PG 70-22M	-	_															
	 	 	 	†				-	 	 	170	10004	 		Aspirati Concrete Surface Course, Type 1, To To 22M	+-	_															
		 								 					TRAFFIC CONTROL		_															
										6	621	10000	6	Each	RPM, Low Profile, Yellow/Yellow	 	_															
										4	621	10010	4	Each	RPM, Low Profile, White		_															
										0.50	646	10001	0.50	Mile	Edge Line, As Per Plan	3	3															
										0.05	646	10101	0.05	Mile	Lane Line, As Per Plan	3	3															
										0.25	646	10201	0.25	Mile	Center Line, As Per Plan	3	3															
		<u> </u>	ļ							ļ <u>-</u>	<u> </u>		ļ																			
	<u> </u>	<u> </u>	<u></u>	ļ				ļ			 				MAINTENANCE OF TRAFFIC	┼																
	<u> </u>	ļ	ļ		<u> </u>				 	0.10	614	20000	0.10	Mile	Work Zone Lane Line, Class I *																	
	<u> </u>	ļ				-			- -	0.50	614	21000	0.50	Mile	Work Zone Center Line, Class I *	 -	_															
	ļ	 		 -	 					1.00	614	22000	1.00	Mile	Work Zone Edge Line, Class I *	+-																
_	 	 	-	 	 				+	 - -	 			-	STRUCTURES	+	_															
00	 					-			-	 -	512	10100	3300	SY	Sealing of Concrete Surfaces (Epoxy-Urethane) *	+-	_															
-	 	_			33	_			 		516	01301	33	FT	Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, A	2	2															
					13	1				<u> </u>	516	01301	13	FT	Elastomeric Strip Seal Without Steel Extrusions, As Per Plan, B	2	2															
					40						516	10900	40	FT	Elastomeric Compression Seal	3																
	151	<u> </u>		92						1	516	11801	243	FT	Vertical Extension of Structural Expansion Joint, As Per Plan	3	3															
		30									519	11101	30	SF	Patching Concrete Structures, As Per Plan, A		3															
	<u> </u>	600	300							<u> </u>	519	11101	900	SF	Patching Concrete Structures, As Per Plan, B	3	3															
0	<u> </u>	ļ								<u> </u>	SPECIAL	519E12300	100	SY	Patching Concrete Bridge Decks, Type B	-	_															
	ļ	-	105	 	170			 	 	 	-	10001				┥	_															
	├	408	195	-	170 1220					 	848	10201	605 1628	SY	Superplasticized Dense Concrete Overlay Using Hydrodemolition (1" Thick) Superplasticized Dense Concrete Overlay Using Hydrodemolition (2" Thick)																	
	1294	408	├	ļ	1220						848	10201 10201	1294	SY SY	Superplasticized Dense Concrete Overlay Using Hydrodemolition (2½" Thick)	+																
	1234		115	920		_			 - -	<u> </u>	848	10201	1035	SY	Superplasticized Dense Concrete Overlay Using Hydrodemolition (3½" Thick)	+	_															
	1294	647	308	834	1391				 , 	 -	848	20000	4474	SY	Surface Preparation Using Hydrodemolition		_															
	65	32	15	42	70			 	 	+	848	30201	224	CY	Superplasticized Dense Concrete Overlay (Variable Thickness), Material Only, As Per Plan	+																
	-	\ \ <u>\</u>	- ''-			-			 	 	 	-		<u>_</u>	Super processing some some over so, the terror strategy, more for only, the fact that	+																
	100	85	30	75	120		_				848	50000	410	SY	Handchipping *	1	_															
	LUMP	LUMP	Luar	LUMP	Lunp						848	50100	Lump	LS	Test Slab		_															
	I	1	1	1	1						848	50201	5	CY	Full Depth Repair, As Per Plan *																	
																	_															
	<u> </u>		ļ												, , ,																	
	_							 		Lump	614	11000	Lump	L,S	Maintaining Traffic	<u> </u>																
			<u> </u>		 			 		150	614	11100	150	Hour	Law Enforcement Officer With Patrol Car																	
	1	1	1	I				L.,		Lump	624	10000	Lump	LS	Mobilization																	

 \circ

 \bigcirc

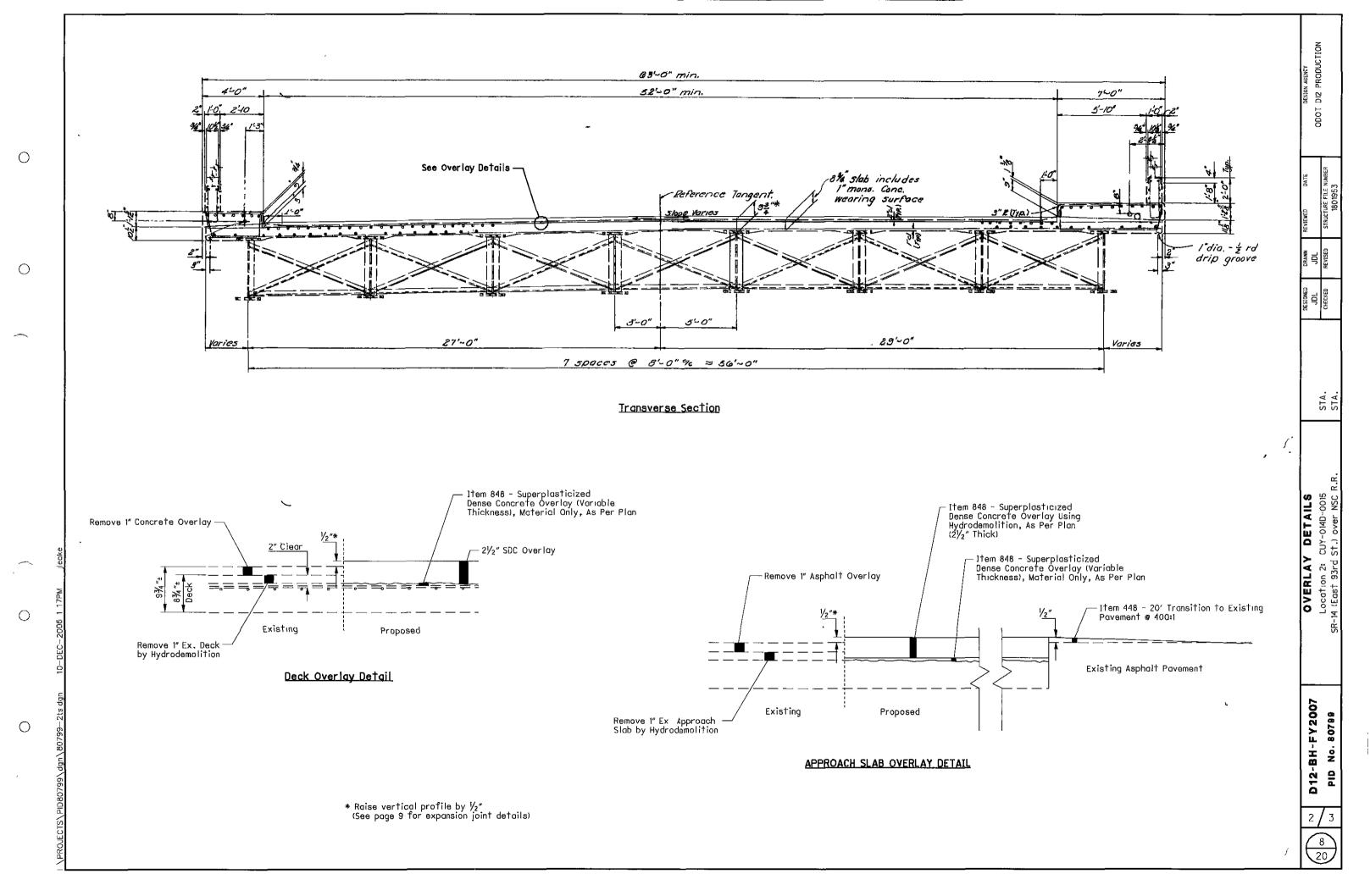
 \circ

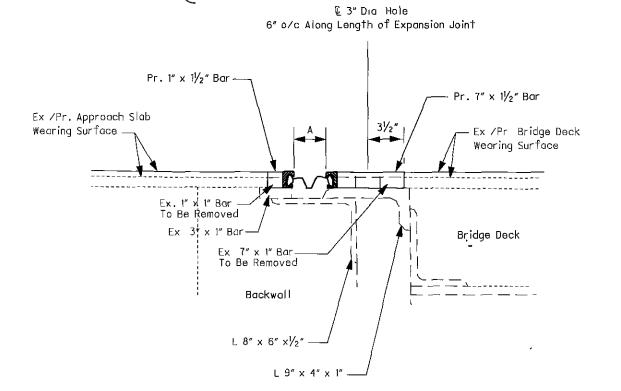




 \bigcirc

 \bigcirc



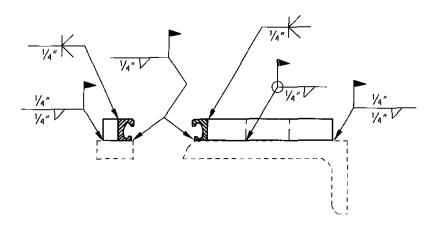


 \bigcirc

 \circ

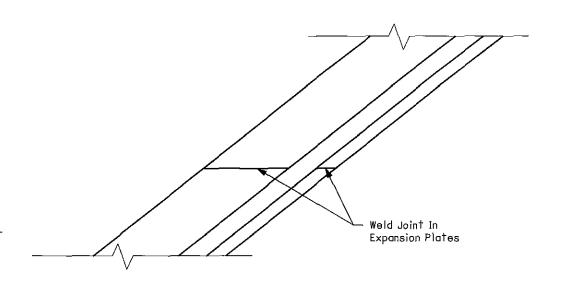
 \bigcirc

Expansion Joint Strip Seal Detail



Welding Detail

Dimensio	n "A"
	50° F
Rear Abutment	21/4"
Forward Abutment	21/4"

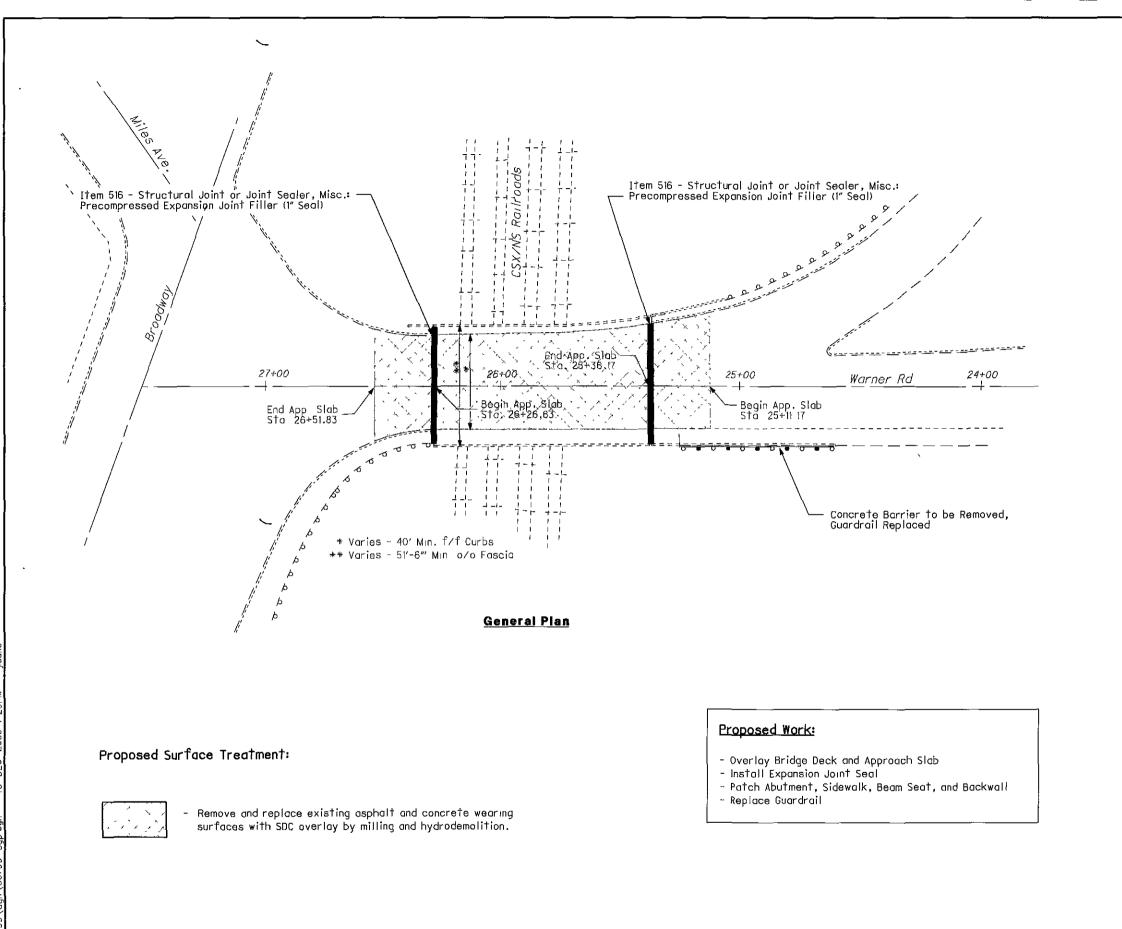


Splice Detail

D12-BH-FY2007

STA. STA.

EXPANSION JOINT DETAILS
Location 2: CUY-014D-0015
SR-14 (East 93rd St.) over NSC R.R.



 \circ

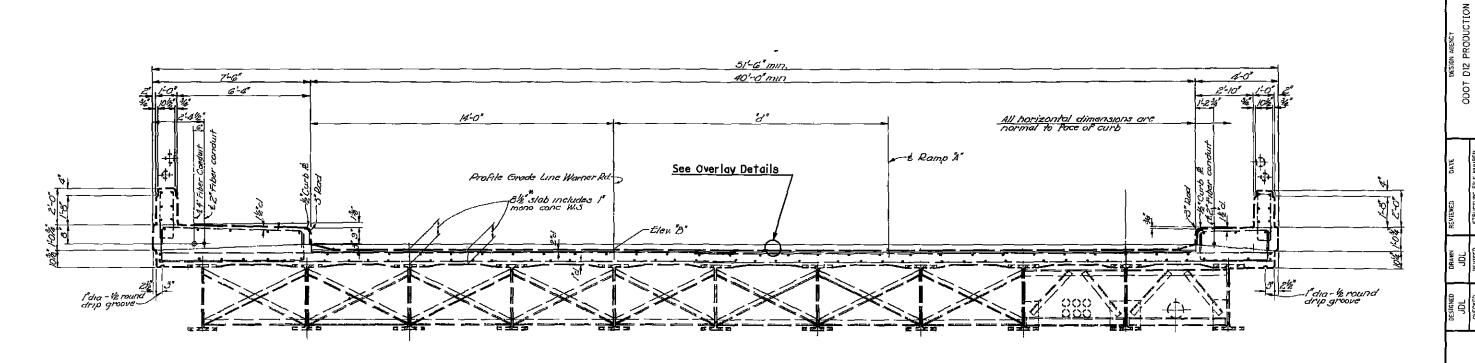
 \circ

0

D12-BH-FY2007

GENERAL PLAN Location 3: CUY-014D-0538 SR-14 (Warner Rd.) over NSC R.R.

ODOT DI2 PRODUCTION

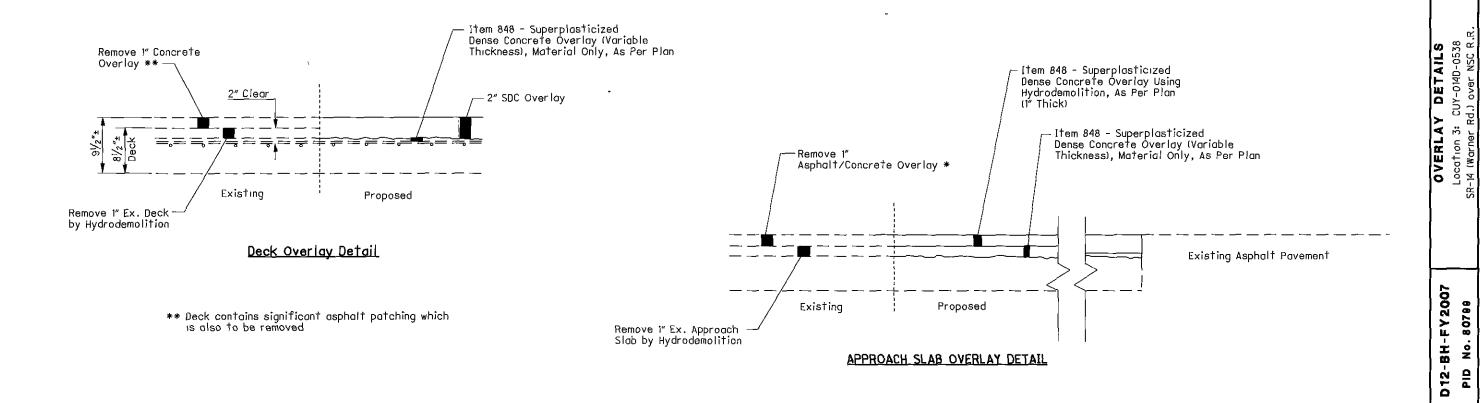


0

 \circ

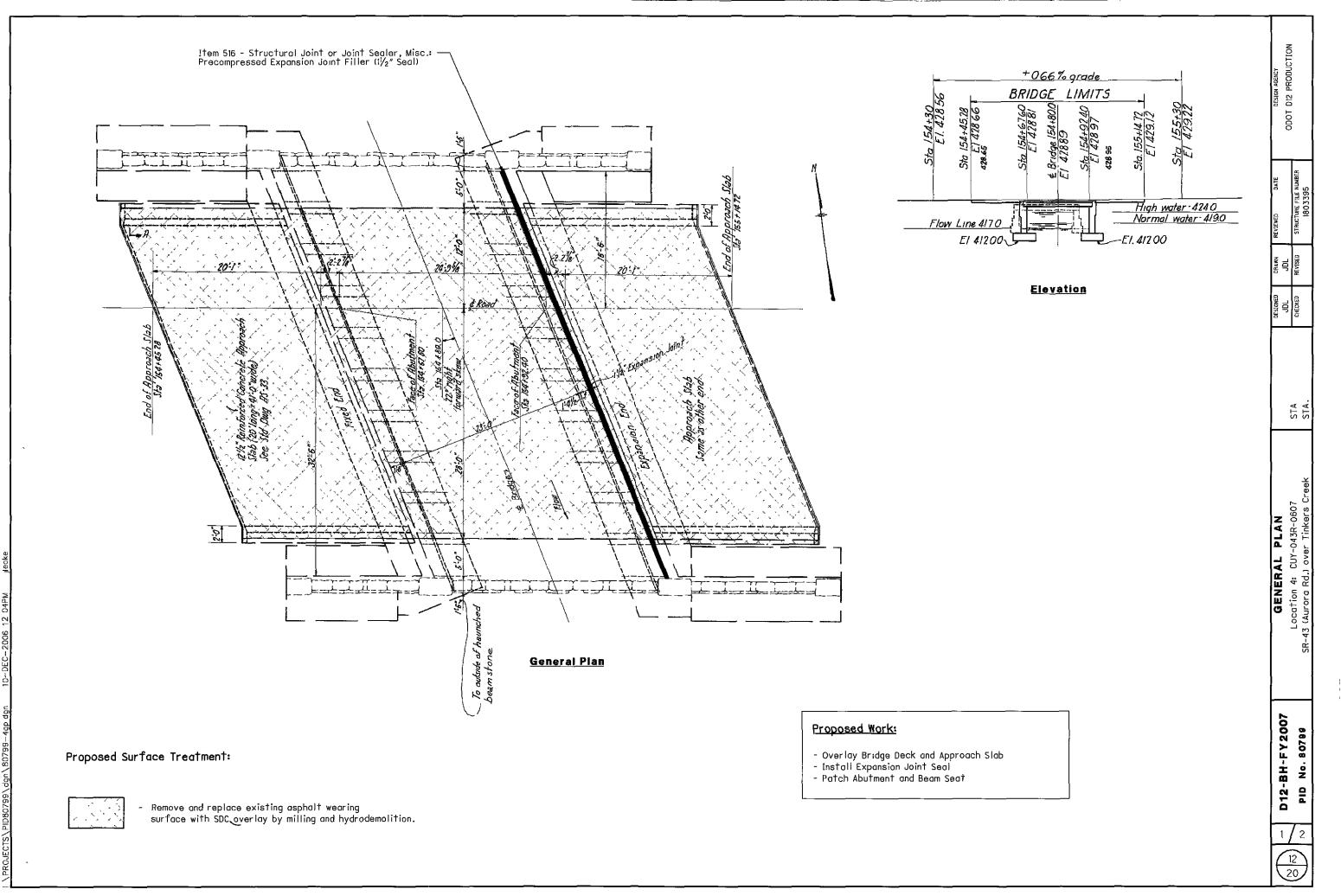
0

<u>Transverse Section</u>



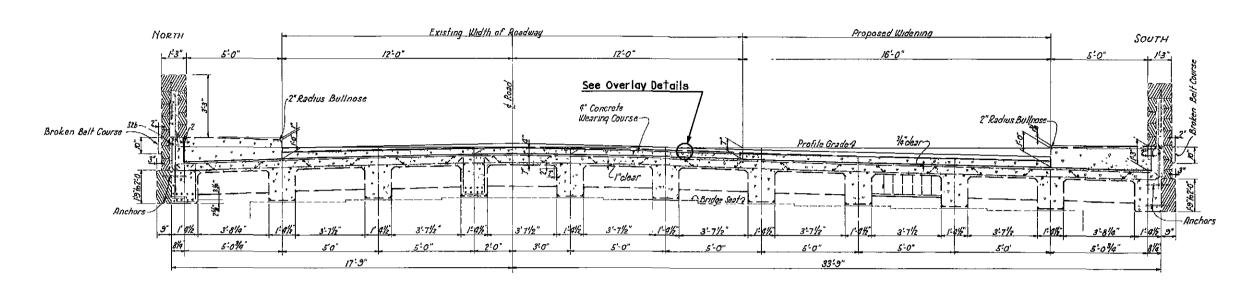
* Portions of the approach slab have a 1" asphalt wearing course, other portions have a 1" concrete wearing course

STA. STA.

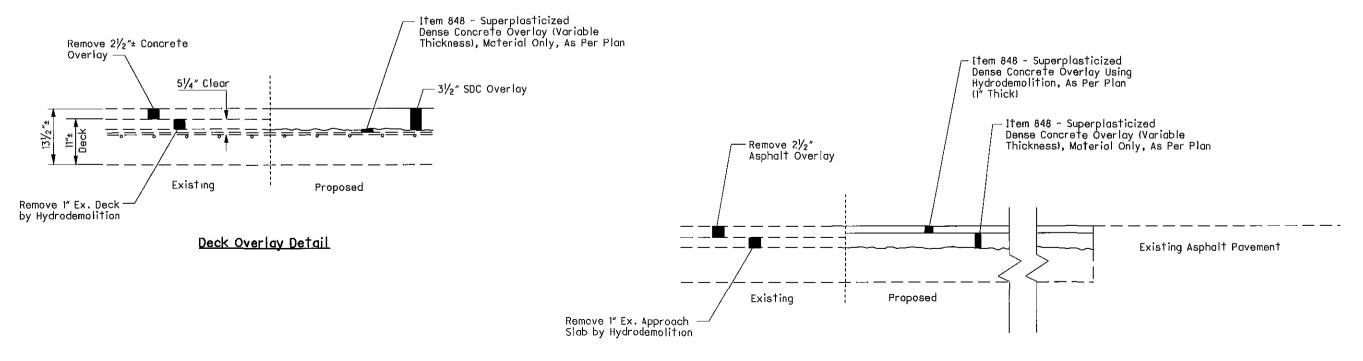


 \bigcirc

 \circ



Transverse Section



0

Approach Slab Overlay Detail

2/2

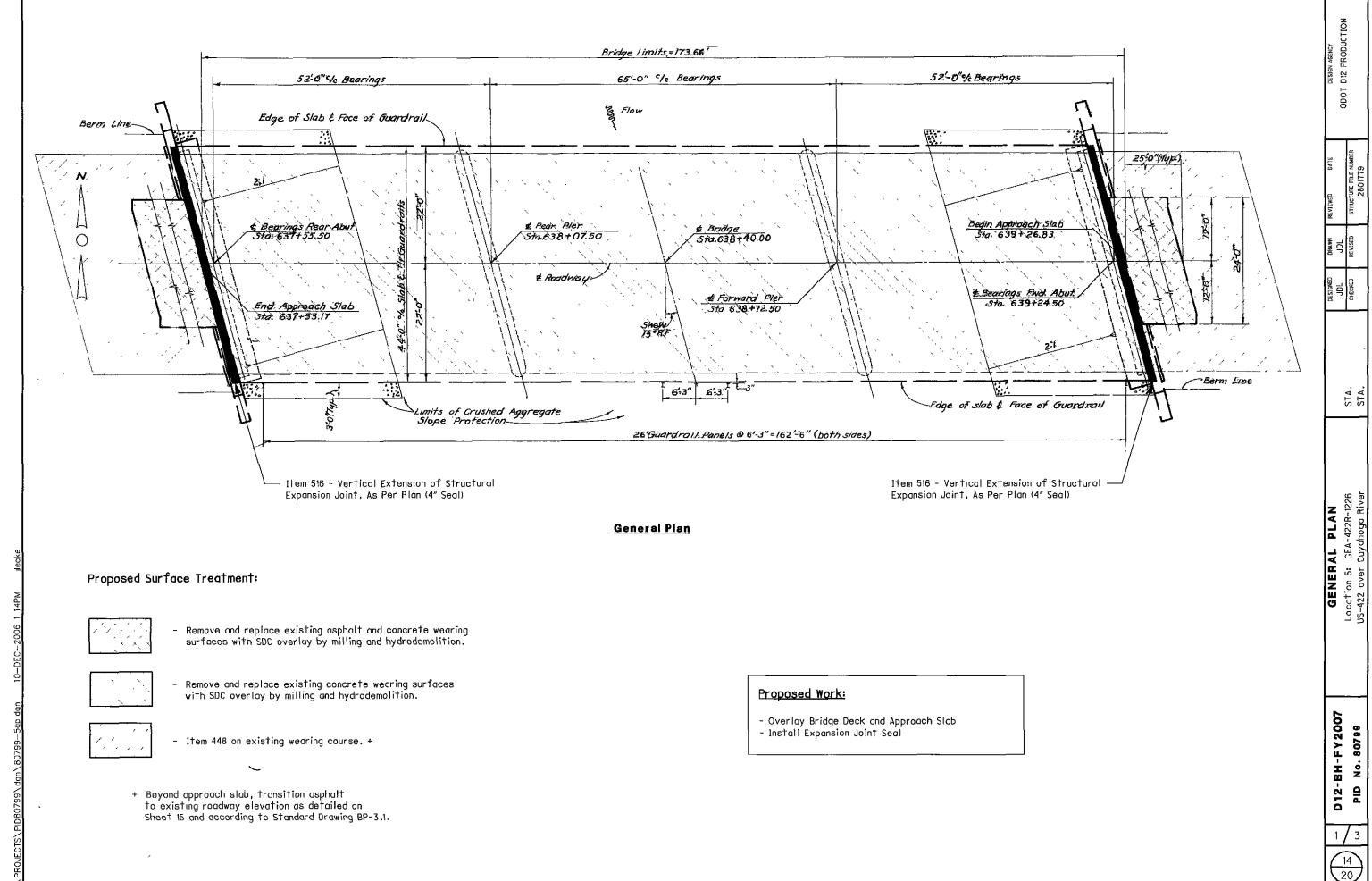
D12-BH-FY2007

80788

DESIGN AGENCY
ODOT DIZ PRODUCTION

STA.

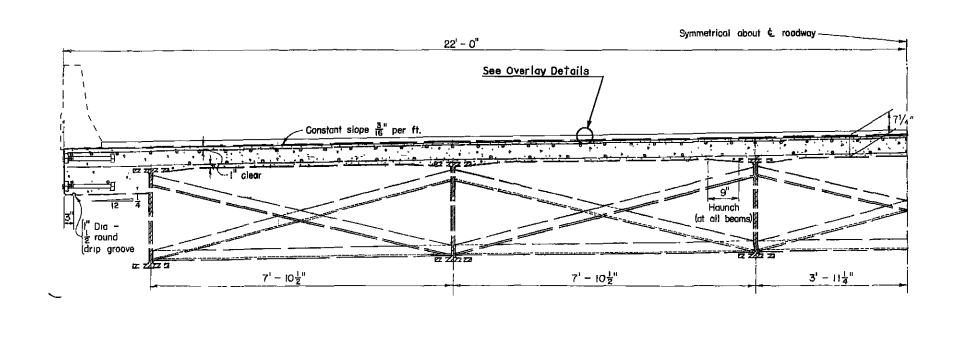
OVERLAY DETAILS
Location 4: CUY-043R-0607
43 (Aurora Rd.) over Tinkers C



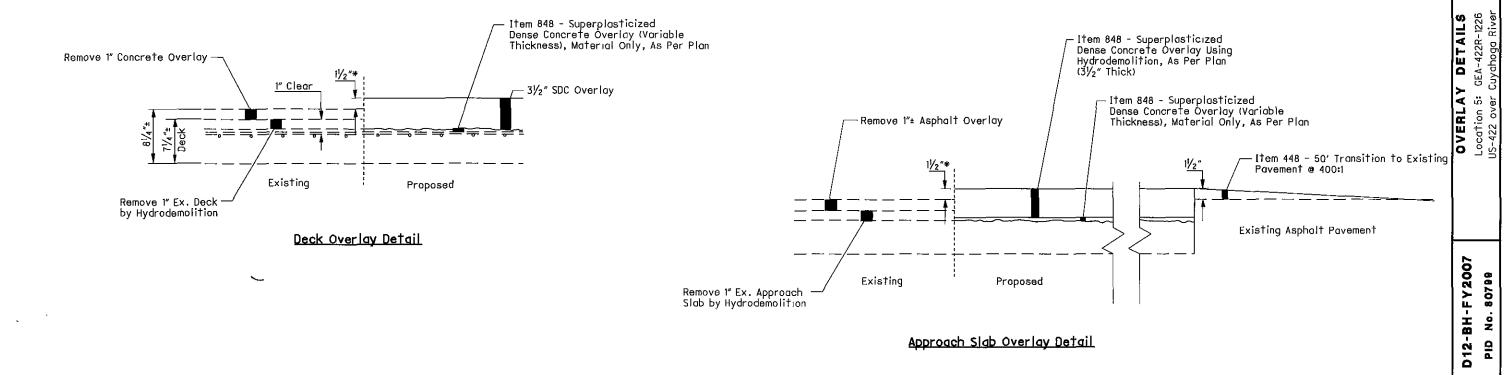
 \bigcirc

 \circ

 \bigcirc



Transverse Section



* Raise vertical profile by 1½" (See page 16 for expansion joint details)

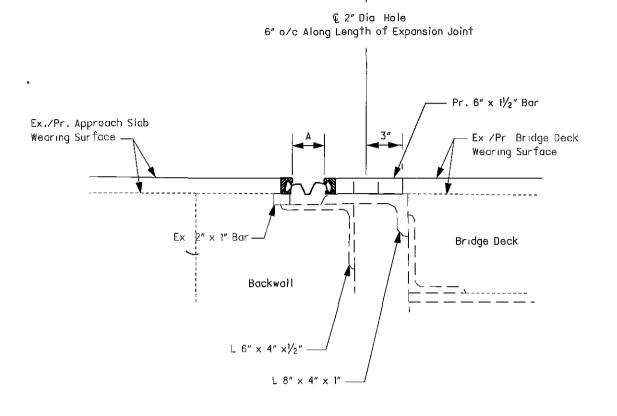
 \circ

 \circ

0

0

2/3

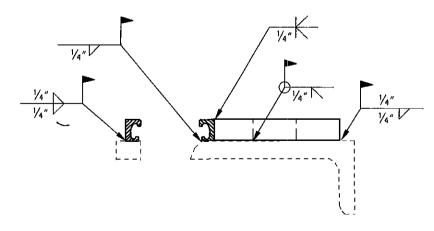


0

 \circ

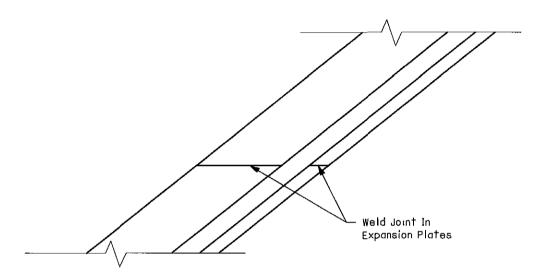
0

Expansion Joint Strip Seal Detail



<u>Welding Detail</u>

Dimension "A"							
	60° F						
	. 1						
Rear Abutment	13/4 "						
Forward Abutment	1¾"						

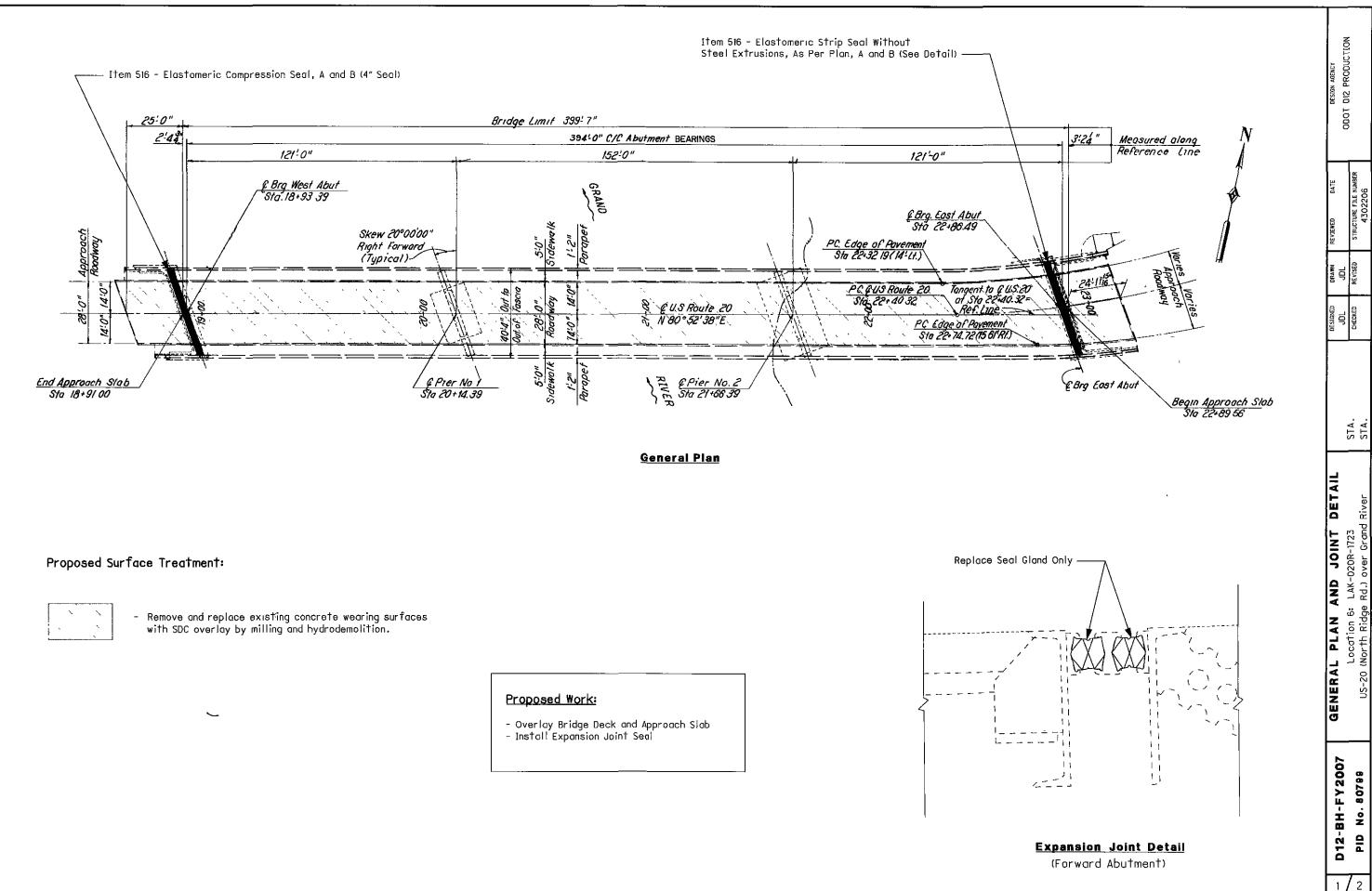


Splice Detail

D12-BH-FY2007

EXPANSION JOINT DETAILS
Location 5: GEA-422R-1226
US-422 over Cuyahoga River

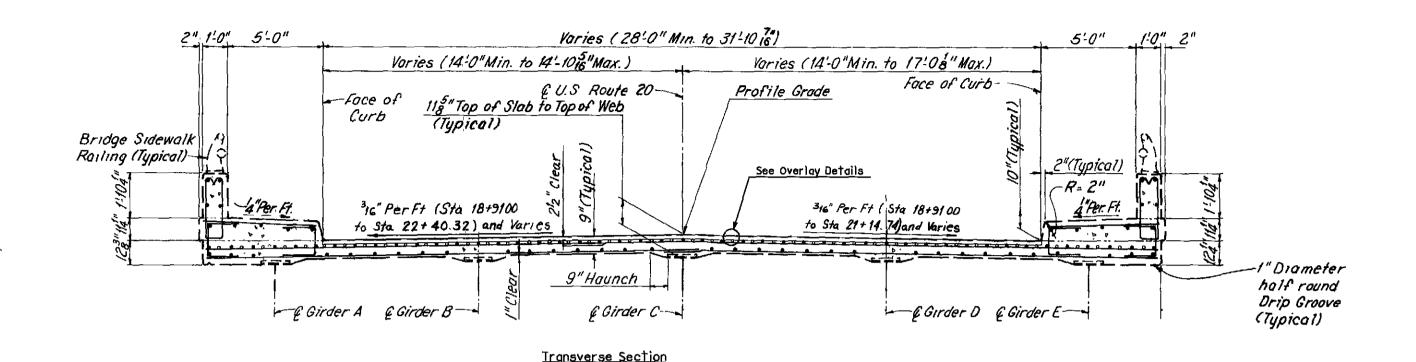
3/3



 \bigcirc

 \circ

 \circ



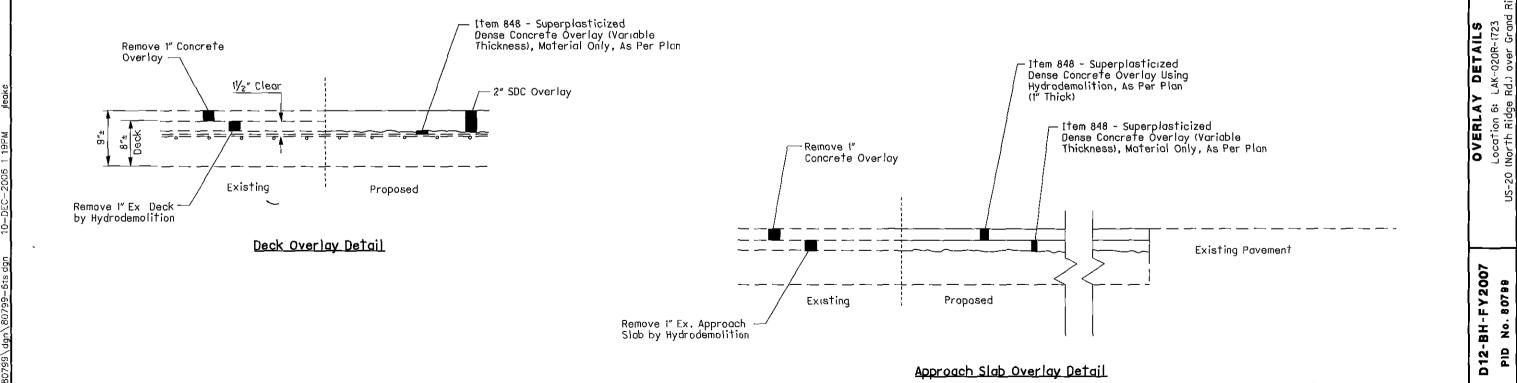
0

0

0

DESIGN AGENCY ODOT DIZ PRODUCTION

STA.



Item 614 - Maintaining Traffic

General

 \bigcirc

 \bigcirc

Generally, conduct operations as to make the proposed repair with a minimum of hazard, delay, and inconvenience to the motorists using the highway. Furthermore, in addition to the Construction and Material Specifications, the following specific provisions are mandatory.

All work and traffic control devices shall be in accordance with 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 is included in the lump sum contract price for Item 614 – Maintaining Traffic, unless separately itemized in the plans.

Notification

Since functional traffic control is a major concern on this project, it is essential that the motoring public be adequately forewarned of future lane closures and traffic constrictions. Therefore, submit a schedule to the Ohio Department of Transportation, District 12 Public Information Office (Fax: 216-584-3524; Email.

d12.publicinformation@dot.state.oh.us) indicating the locations and dates of the lane closures at least three (3) days prior to the implementation of any such closures. Also notify the Engineer, local law encforcement agencies, and local municipalities of lane closures at least three (3) days prior to implementation.

Restrictions

Lane closures are only permitted as indicated by the "District 12 Permitted Lane Closure Times" list, which is located on the O.D.O.T. web site:

http://www.dot.state.oh.us/dist12/workzone/laneclo.htm

The latest revision, at 14 days prior to the bid date, is in effect for this project.

In addition to the "District 12 Permitted Lane Closure Times" list, the following restrictions apply to all locations:

Any roadway not listed in the "District 12 Permitted Lane Closure Times" shall have no closures on weekdays from 7 A.M. -9 A.M. and 3 P M. -6 P.M.

No lane or shoulder closures shall be in place when no work is being performed.

Keep one 12-foot wide lane open at all times.

Length and duration of lane closures and restrictions shall be at the approval of the Engineer. It is the intent to minimize the impact to the traveling public. Lane closures or restrictions over segments of the project in which no work is anticipated within a reasonable time frame, as determined by the Engineer, are not permitted. The level of utilization of maintenance of traffic devices shall be commensurate with the work in progress

Do not close lanes during the period beginning at 12:00 noon on the day preceding and continuing until noon on the day following legal holidays and holiday weekends such as Memorial Day, Fourth of July, and Labor Day. Furthermore, no lanes are to be closed during increased traffic volumes caused by special events or when the Engineer deems the weather conditions too hazardous.

Maintenance of Traffic Scheme (At All Locations)

Devise a simple maintenance of traffic scheme stamped by a professional engineer (scheme may be a hand sketch). Present the maintenance of traffic scheme to the District Work Zone Traffic Control Engineer and Project Engineer for acceptance at least two weeks prior to implementation.

The maintenance of traffic scheme must present, in general, the methods for maintaining traffic that the Contractor proposes to use for conducting the required work in a safe and efficient manner. The maintenance of traffic scheme must be in conformance with the Ohio Manual of Uniform Traffic Control Devices (O.M U T.C.D.), latest revision, and the referenced Standard Construction Drawings, the attached maintenance of traffic sheets, and the Specifications. Do no commence work until the maintenance of traffic scheme is accepted by the Engineer

If, during the project, the Engineer determines that the accepted maintenance of traffic plan is not performing as desired, the work shall be suspended until the problem is resolved to the satisfaction of the Engineer and the maintenance of traffic plan revised accordingly. Any costs or delays incurred as a result of the failure of the satisfaction of the Engineer will be the full responsibility of the Contractor.

Payment for all the items required to maintain traffic in accordance with these requirements is included in the lump sum bid price for Item 614 – Maintaining Traffic

Maintenance of Traffic Systems

A When Required

Whenever any part of the traveled surface is being worked upon or is otherwise not suitable for safe and convenient use by vehicles, install and maintain traffic control devices sufficient to protect such areas to assure the safe and convenient passage of vehicular traffic. Such traffic control devices and the manner in which they are used shall be consistent with these plans and the Ohio Manual of Uniform Traffic Control Devices for streets and highways (hereafter referred to as the "Manual"). The traffic control device system shall constitute the minimum provisions for traffic control for each particular situation. Whenever the Engineer deems it necessary, especially where grade, curve, or merge conditions exist, he may direct that additional or alternative devices be used

B. Conditions

During all parts of this project, locate signing, barncades, flashing arrows, etc. as indicated in the "Manual," as shown on the maintenance of traffic sheets, or as shown in the Standard Drawings

C. Advance Warning Signs

Erect all advance warning signs for any condition which restricts traffic before any such restriction is put into effect. Cover or remove from view of traffic all such signs whenever they are not applicable.

D. Flashing Arrow Requirement

Furnish flashing arrows as shown on the Standard Drawings.

E. Protection of the Public

Whenever any work is being done over a traveled lane or shoulder, supply sufficient safety equipment, as approved by the Director, to protect the traveling public from any construction debris. If traveled lanes under structures are to be closed for reasons of safety, method and time of closure must be approved prior to implementation. Do not park personal cars within the L/A.

F. Flaggers

Flaggers shall be in accordance with MT-97.10 The maintenance of traffic plans require the use of two (2) flaggers. Use additional flaggers as directed by the Engineer.

G. Law Enforcement Officer with Patrol Car

Provide and play all costs for the services of law enforcement officer with patrol car for the exclusive purpose of controlling traffic as determined by the Engineer. The number of officers and cars required for this purpose shall be determined by the Contractor and approved by the Engineer. The officers shall move their patrol cars as necessary to insure their constant presence at the point(s) of slowdown, stoppage, or back-up. The Contractor is responsible for making arrangements for scheduling and payment of law enforcement officer with patrol car.

Payment for all of the above is included in the man-hour bid price for Item 614 – Law Enforcement Officer With Patrol Car.

H. Failure to Comply

If there is any failure to comply with provisions for traffic control set out in these plans and notes, or with the provisions of the "Manual," the highway in the vicinity of the work area shall not be considered in a condition for the safe and convenient use by the traveling public Any failure to keep the highway in the vicinity of the work area in a condition for the safe an convenient use by the traveling public shall be considered a breach of this contract. Work shall be suspended until the Contractor complies with the provision of the aforementioned items.

Maintenance of Traffic Control Material

A. Signs

 \bigcirc

 \bigcirc

Sign dimensions and specifications, including letter sizes, shall be as provided in the "Manual" or in design drawings provided by the Department of Transportation. The signs shall be subject to approval of the Engineer prior to the start of this project.

B. Sign Supports

Sign supports shall be as shown on Standard Drawings MT-105.10 and MT-105.11

C. Flashing Arrows

The electric flashing arrow shall be as shown on Standard Construction Drawing MT-35 10.

D. Cones

Cones shall be located as shown in the "Manual" and the traffic control plans.

E. Drums

Drums shall be located as shown on the traffic control plans and are required for night time closures.

F. Floodlighting

Floodlighting of the work site for operations conducted during night time periods shall be accomplished so that the lights do not cause glare to the drivers on the roadway. To ensure adequacy of the floodlight placement, the Contractor and Engineer shall drive through the work site each night when the lighting is in place and operative prior to commencing any work. If glare is detected, the light placement and shielding shall be adjusted to the satisfaction of the Engineer before work proceeds.

Payment for all labor, equipment, and materials is included in the lump sum contract price for Item 614 – Maintaining Traffic.

G. Work Vehicles

All work vehicles licensed to operate on the roadway, including trucks, shall be equipped with a flashing, rotating, or oscillating amber light visible to all directions of traffic for a minimum of 1600 feet in bright sunlight and shall be operated with lighted head and tail lamps. The amber light shall be in operation at all times within the work zone and while traveling to and from the work zone whenever the vehicle speed is below 35 M.P.H. Vehicle hazard lamps do not satisfy this requirement. All other equipment shall be equipped with a flashing, rotating, or oscillating amber light visible in all directions of traffic for a minimum of 1600 feet in bright sunlight. The amber light shall be in operation while the equipment is within the work zone.

Payment

Unless separately itemized, payment for providing, erecting, maintaining, and removing temporary maintenance of traffic control devices is included under the lump sum bid price for Item 614 – Maintaining Traffic.