

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# BUT-122D-0.59L

CITY OF MIDDLETOWN  
BUTLER COUNTY

**PROJECT DESCRIPTION**

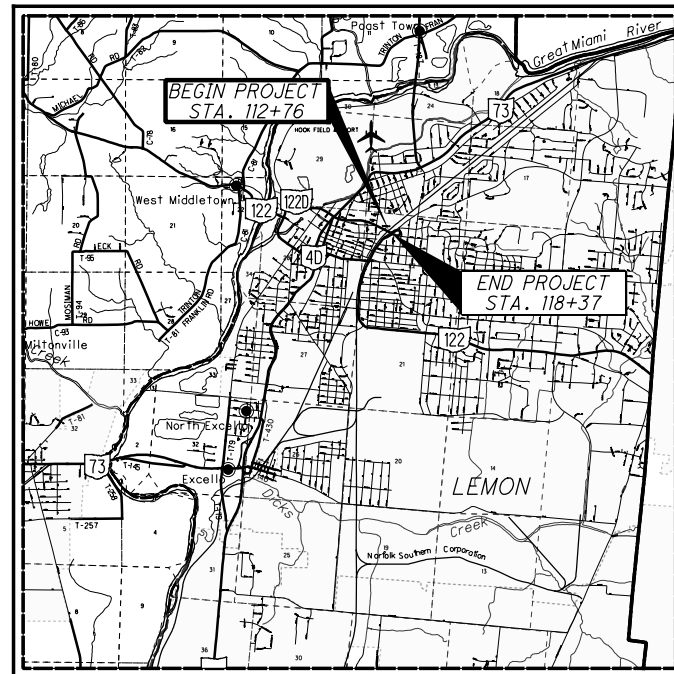
REHABILITATION OF A BRIDGE CARRYING STATE ROUTE 122D OVER UNIVERSITY BLVD. IN THE CITY OF MIDDLETOWN BY REPLACING AND REFURBISHING BEARINGS, ABUTMENT MODIFICATIONS, AND REPLACING THE EXPANSION JOINTS. THE PROJECT WILL ALSO TRIM AND PAINT THE BEAM ENDS. RESURFACING OF THE APPROACH PAVEMENT WILL BE COMPLETED AS PART OF THIS PROJECT.

**EARTH DISTURBED AREAS**

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

**2019 SPECIFICATIONS**

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.



**LOCATION MAP**

LATITUDE: N39°31'01.42" LONGITUDE: W84°23'16.88"



PORTION TO BE IMPROVED	—————
INTERSTATE HIGHWAY	—————
FEDERAL ROUTES	—————
STATE ROUTES	—————
COUNTY & TOWNSHIP ROADS	—————
OTHER ROADS	—————

**DESIGN DESIGNATION**

CURRENT ADT (2021)	4,900
DESIGN YEAR ADT (2033)	4,900
DESIGN HOURLY VOLUME (2033)	450
DIRECTIONAL DISTRIBUTION	0.50
TRUCKS (24 HOUR B&C)	0.09
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
03 PRINCIPAL ARTERIAL (URBAN)	
NHS PROJECT	NO

**DESIGN EXCEPTIONS**

NONE REQUIRED

**UNDERGROUND UTILITIES**  
Contact Two Working Days  
Before You Dig

**OHIO811.org**  
Before You Dig

**OHIO811, 8-1-1, or 1-800-362-2764**  
(Non-members must be called directly)

PLAN PREPARED BY:  
OHIO DEPARTMENT OF TRANSPORTATION  
DISTRICT 8 PRODUCTION - BRIDGE OFFICE  
505 SOUTH S.R. 741  
LEBANON, OHIO 45036

**INDEX OF SHEETS:**

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ENGINEERS SEAL	STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
	MT-95.30	4/19/19	EXJ-4-87	1/19/18	800-2020	7/17/20
	MT-95.31	7/19/19	GSD-1-19	1/18/19	821	4/20/12
	MT-95.32	4/19/19	RB-1-55	7/19/13	847	1/20/17
	MT-97.10	4/19/19			921	4/20/12
	MT-98.28	1/17/20				
	MT-98.30	7/19/19				
	MT-105.10	7/19/13				
	MT-110.10	7/19/13				
	MT-125.00	1/17/20				
	TC-41.20	10/18/13				
	TC-41.30	10/18/13				
	TC-42.20	10/18/13				
	TC-52.10	10/18/13				
	TC-52.20	7/20/18				

SIGNED: \_\_\_\_\_  
DATE: \_\_\_\_\_

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET -, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES

APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ DISTRICT DEPUTY DIRECTOR

APPROVED \_\_\_\_\_  
DATE \_\_\_\_\_ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.	<b>E161 (447)</b>
CONSTRUCTION PROJECT NO.	<b>100832</b>
RAILROAD INVOLVEMENT	<b>NONE</b>
PID NO.	<b>100832</b>
BUT-122D-0.59L	<b>1</b> 30



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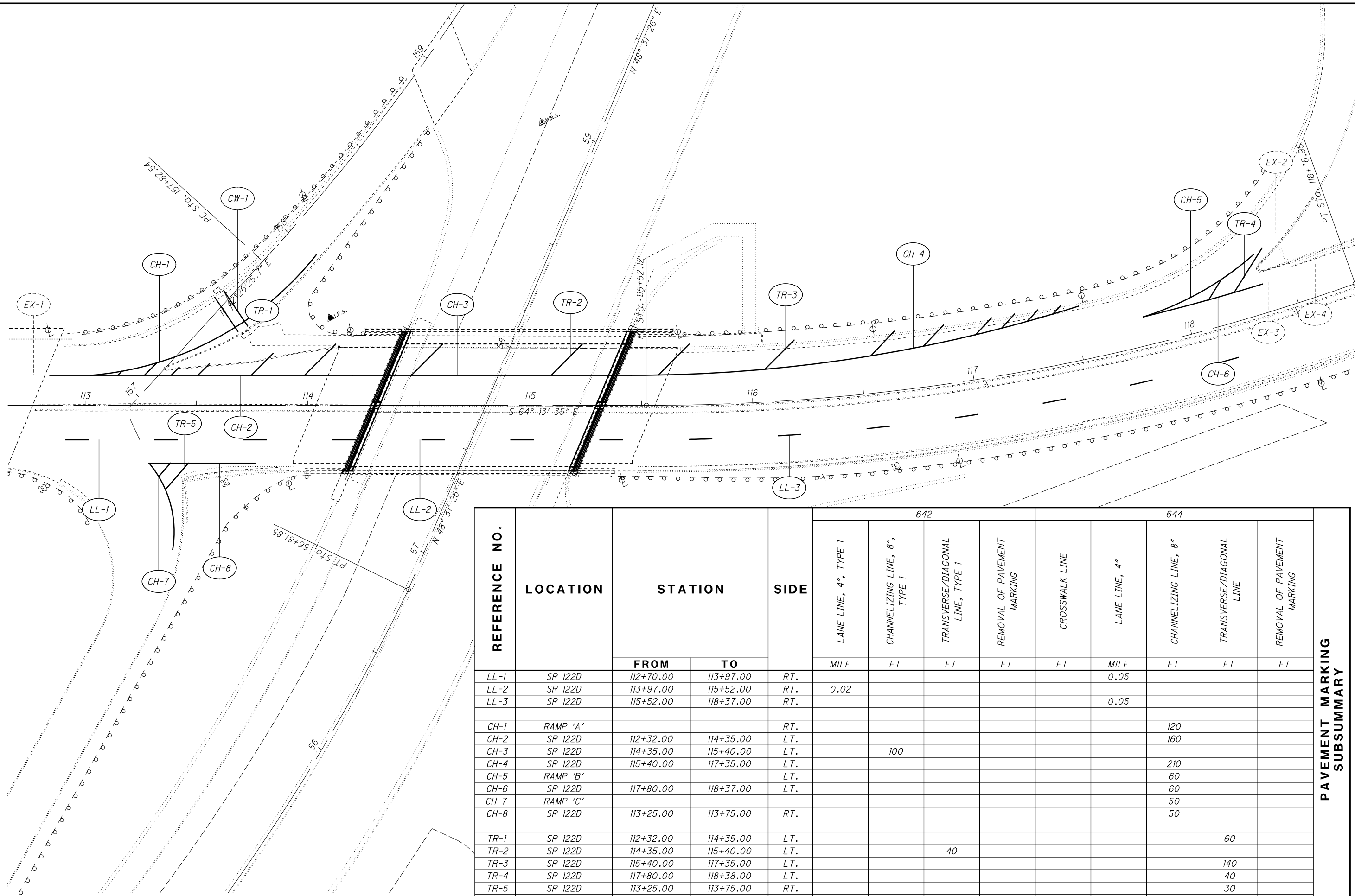
LOCATION					PAVEMENT AREA (CADD GENERATED)			QUANTITIES								REMARKS
COUNTY	ROUTE	FROM STA.	TO STA.	TYPICAL	WESTBOUND			202	202	253	254	407	441	608	609	
					PAVEMENT AREA	PAVEMENT AREA	PAVEMENT AREA	CURB AND GUTTER REMOVED	WEARING COURSE REMOVED	PAVEMENT REPAIR, AS PER PLAN	1.5" PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT	1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (446), PG64-22	CURB RAMP	COMBINATION CURB AND GUTTER, TYPE 3, AS PER PLAN	
					SQ YD	SF	SQ YD	FT	SQ YD	SQ YD	SQ YD	GAL	CU YD	SQ FT	FT	
BUT	122D	112+76	114+03	1	406	2174	242				647	59	27			WESTBOUND INCLUDES 12' LANE & SHOULDER/GORE (VARIES 0' TO 14.5')
BUT	122D	114+03	114+28	1	8						8	1	1			EASTBOUND RIGHT SHOULDER 2' WIDTH
BUT	122D	114+03	114+28	2	64	643	71		136			11	6			REAR APPROACH SLAB
BUT	122D	115+33	115+58	1	9						9	1	1			EASTBOUND RIGHT SHOULDER 2' WIDTH
BUT	122D	115+33	115+58	2	57	590	66		122			10	6			FORWARD APPROACH SLAB
BUT	122D	115+58	118+85	1	860	3670	408				1268	115	53			WESTBOUND INCLUDES 12' LANE & SHOULDER/GORE (VARIES 0' TO 12.5')
BUT	RAMP A	156+76	158+00	1		2178	242				242	22	11			RAMP INCLUDES 2' SHOULDER
BUT	RAMP A	157+45	157+67	1	-	-	-	25		10				245	25	FOR CURB RAMP INSTALLATION
BUT	RAMP B	115+58	265+48	1		3300	367				367	33	16			RAMP INCLUDES LANE (VARIES 16' TO 0') & RIGHT SHOULDER (VARIES 0' TO 14') STA. EQUATION 265+48.30 AH = 117+64.46 BK

CALCULATED  
GTF  
CHECKED  
XXX

PAVEMENT CALCULATIONS

BUT - 122D - 0059L

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CALCULATED  
GTF  
CHECKED  
TCS

0 20 40  
HORIZONTAL  
SCALE IN FEET

REFERENCE NO.	LOCATION	STATION		SIDE	642					644					PAVEMENT MARKING SUBSUMMARY
		FROM	TO		LANE LINE, 4", TYPE 1	CHANNELIZING LINE, 8", TYPE 1	TRANSVERSE/DIAGONAL LINE, TYPE 1	REMOVAL OF PAVEMENT MARKING	CROSSWALK LINE	LANE LINE, 4"	CHANNELIZING LINE, 8"	TRANSVERSE/DIAGONAL LINE	REMOVAL OF PAVEMENT MARKING		
					MILE	FT	FT	FT	FT	MILE	FT	FT	FT		
LL-1	SR 122D	112+70.00	113+97.00	RT.						0.05					
LL-2	SR 122D	113+97.00	115+52.00	RT.	0.02										
LL-3	SR 122D	115+52.00	118+37.00	RT.					0.05						
CH-1	RAMP 'A'			RT.							120				
CH-2	SR 122D	112+32.00	114+35.00	LT.							160				
CH-3	SR 122D	114+35.00	115+40.00	LT.		100									
CH-4	SR 122D	115+40.00	117+35.00	LT.							210				
CH-5	RAMP 'B'			LT.							60				
CH-6	SR 122D	117+80.00	118+37.00	LT.							60				
CH-7	RAMP 'C'										50				
CH-8	SR 122D	113+25.00	113+75.00	RT.							50				
TR-1	SR 122D	112+32.00	114+35.00	LT.								60			
TR-2	SR 122D	114+35.00	115+40.00	LT.								140			
TR-3	SR 122D	115+40.00	117+35.00	LT.			40					40			
TR-4	SR 122D	117+80.00	118+38.00	LT.								30			
TR-5	SR 122D	113+25.00	113+75.00	RT.									30		
CW-1	RAMP 'A'								40						
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>					0.02	100	40	245	40	0.10	710	270	1240		

PAVEMENT MARKING PLAN

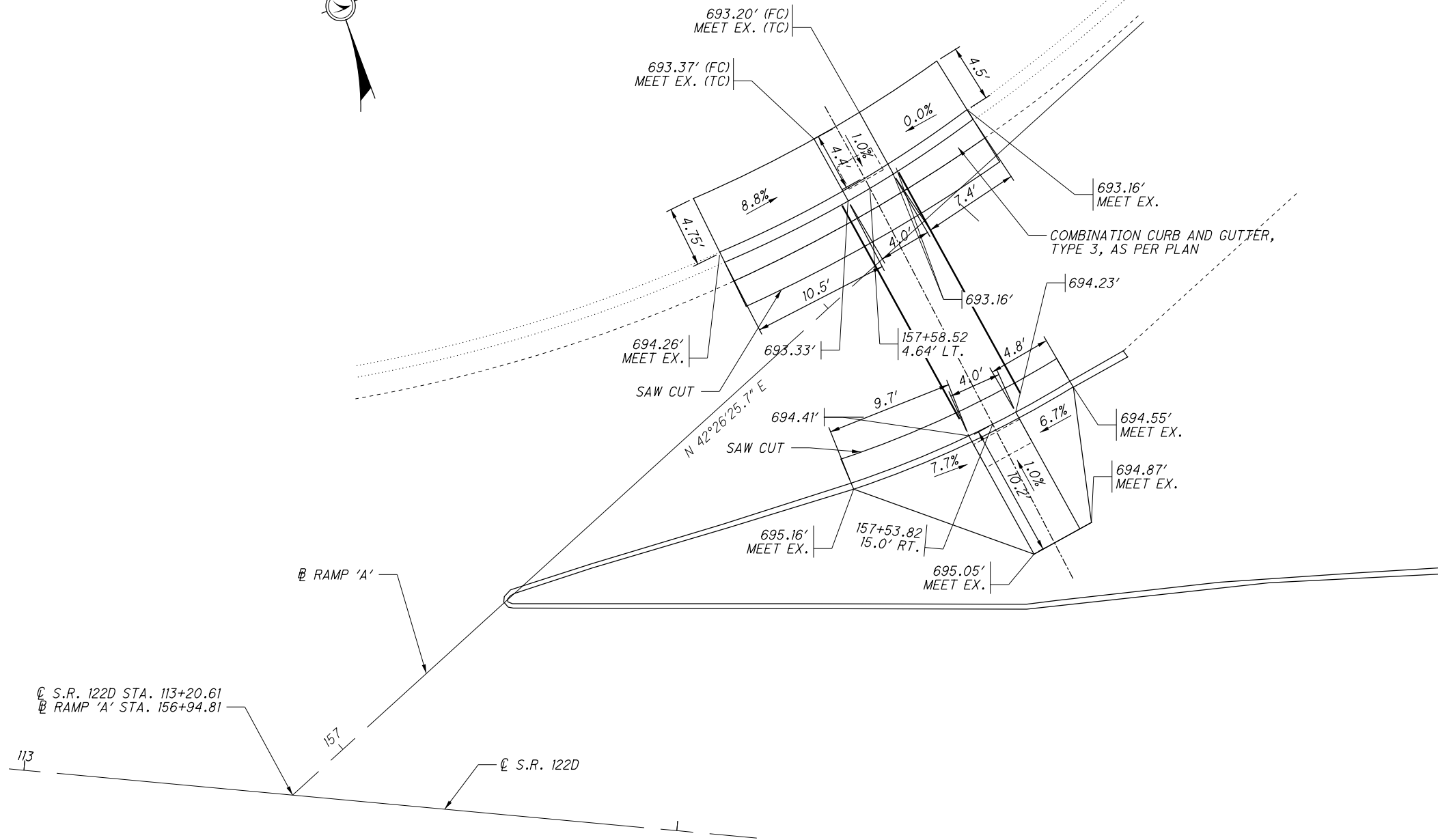
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**NOTES**

1. REMOVAL OF EXISTING CONCRETE SHALL EXTEND TO THE NEAREST JOINT.
2. STATIONING AND OFFSETS ARE BASED ON  $\text{CL}$  OF CONSTRUCTION FOR RAMP 'A'

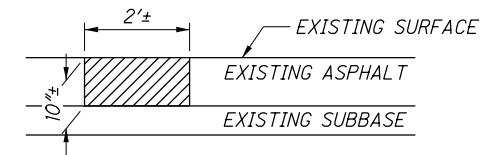
**LEGEND**

- FC - FACE OF CURB
- TC - TOP OF CURB
- FC - FACE OF CURB



**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN**

THE PAVEMENT REPAIR QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE PAVEMENT PLANING OF THE ROADWAY.



EXISTING DETERIORATED ASPHALT SHALL BE REMOVED TO A DEPTH OF  $\pm 10''$  OR TOP OF SUBBASE, OR AS DIRECTED BY THE ENGINEER AND REPLACED WITH ITEM 301, ASPHALT CONCRETE BASE. THE 301 SHALL BE COMPACTED AS PER 401.15 AND IN APPROXIMATELY EQUAL LAYERS. THE LOCATIONS AND SIZE OF THE REPAIRS SHALL BE DETERMINED BY THE ENGINEER.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:  
 ITEM 253 PAVEMENT REPAIR, AS PER PLAN  
 10 SQ YDS

**ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 3, AS PER PLAN**

THE INTENT OF THIS ITEM IS TO REPLACE THE EXISTING CURB AND GUTTER AT THE LOCATIONS OF THE PROPOSED CURB RAMPS AND OTHER AREAS SPECIFIED IN THESE PLANS WITH CURB AND GUTTER, TYPE 3, AS PER PLAN. THE WORK SHALL BE IN ACCORDANCE WITH CMS ITEM 609 AND STANDARD CONSTRUCTION DRAWING BP-5.1 WITH THE EXCEPTION OF THE DEPTH DIMENSIONS OF THE CURB AND GUTTER. THE STANDARD OVERALL DEPTH OF THE GUTTER SHALL VARY TO PROVIDE A GUTTER PLATE THAT WILL MEET THE EXISTING DEPTH DIMENSION AND TIE INTO THE EXISTING PAVEMENT. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION WHERE NECESSARY TO MATCH THE DEPTH OF THE EXISTING CURB AT EITHER END OF THE PROPOSED CURB REPLACEMENT.

ALL WORK, LABOR, MATERIAL, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE WORK ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT FOR ITEM 609, COMBINATION CURB AND GUTTER, TYPE 3, AS PER PLAN.

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**CURB RAMP DETAILS**

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