

UNDIVIDED STATE & FEDERAL ROUTES.\_\_\_\_\_ OTHER ROADS

STRUCTURE/CULVERT ENGINEERS SEAL:

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

WAY-83-10.81 WAY-3-14.73 **WOOSTER TOWNSHIP** 

CITY OF WOOSTER

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# PROJECT DESCRIPTION

THIS PROJECT WILL INCLUDE PAVEMENT REPAIRS, DIAMOND GRINDING, STRUCTURE MAINTENANCE, AND PAVEMENT MARKINGS.

PROJECT EARTH DISTURBED AREA: N/A ACRES ESTIMATED CONTRACTOR EARTH DISTRUBED AREA: N/A ACRES NOTICE OF INTENT EARTH DISTURBED AREA;

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NO

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#### 2010 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 REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DATE 12-18-13 DIRECTOR OF ARTMENT OF TRANSPORTATION

PLANS PREPARED BY:



SUPPLEMENTAL

CALL 1-800-362-2764 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY OIL & GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-925-0988



TE OF OHOU DAVID C. MOLLENSHOTT E-50210

DATE: 12/20/12

ROADWAY ENGINEERS SEAL:

SPECIFICATIONS BP-2.4 BP-2.5 7/15/04 417-95.30 7/20/12 TC-41.20 1/19/01 55800 01/10/13 7/18/08 MT-95.31 7/20/12 TC-11.50 1/19/07 1/20/12 MT-95.32 7/20/12 TC-42.20 1/21/11 4/20/12 10/15/10 MT-98.10 7/20/12 TC-52.10 1/19/07 55832 5/5/09 011-1.1 7/20/12 MT-98.11 7/20/12 TC-52.20 1/19/07 55848 10/21/11 7/15/11 MT-98.20 7/20/12 TC-65.10 1/20/12 55902 1/20/12 4/20/12 DH-4.3 7/20/12 55921 4/20/12 MT-98.29 7/20/12 TC-71.10 OH-4.4 7/20/12 10/19/12 MT-99.20 7/20/12 TC-72.20 7/20/12 MT-101.60 7/20/12 TC-73.10 4/20/12 SPECIAL GR-2.1 7/20/12 **PROVISIONS** 4/16/10 WATERWAY PERMIT CONDITIONS 11/29/12

STANDARD CONSTRUCTION DRAWINGS

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### REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

848

DATED

10/21/11

### **EXISTING STRUCTURE VERIFICATION:**

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATION AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURES AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

### **DESIGN SPECIFICATIONS:**

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, INCLUDING THE 2003, 2004, 2005 AND 2006 SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL.

#### **DESIGN DATA**

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4,500 PSI CONCRETE CLASS C - COMPRESSIVE STRENGTH 4,000 PSI

### **DECK PROTECTION METHOD:**

SUPERPLASTICIZED DENSE CONCRETE OVERLAY SEALING DECK WITH HMWM RESIN

### **UTILITIES**

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT WILL NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

STRUCTURE WAY-250-1218L SHALL INCLUDE PIER CAP AND COLUMN SEALING AS SHOWN IN THE PLANS. THERE IS EXISTING ELECTRICAL ALONG THE PIER CAP WHICH WILL REMAIN IN PLACE. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN PERFORMING THE SEALING NEAR THE EXISTING ELECTRICAL.

### PLACING ASPHALT CONCRETE ON APPROACHES TO BRIDGES:

SPECIAL CARE SHALL BE TAKEN WHEN PLACING THE ASPHALT CONCRETE BUTT JOINT TO EFFECT A SMOOTH TRANSITION FROM THE EXISTING APPROACH PAVEMENT TO THE BRIDGE DECK. THE CONTRACTOR'S ATTENTION IS CALLED TO STANDARD DRAWING BP-3.1 FOR REQUIRED TOLERANCES.

### **EXISTING PLANS:**

THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OH.

STRUCTURE #	PLAN NAME	DATE
WAY-250-1218L	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996
WAY-250-1236L	WAY-83-9.36, WAY-250-12.52	1978
WAY-30-1176L	WAY-3-14.72, WAY-76-12.04 WAY-30/250-9.18/9.98	1966 2003
WAY-3-1516	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996
WAY-3-1531	WAY-3-14.72, WAY-76-12.04	1966
WAY-585-0001	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996
WAY-3-1552WR	WAY-3-14.72, WAY-76-12.04	1966
WAY-3-1554WR	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996
WAY-3-1581	WAY-3-14.72, WAY-76-12.04	1966
WAY-3-1669	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996
WAY-83-1391	WAY-3-14.72, WAY-76-12.04 WAY-3-14.72, WAY-83-13.79	1966 1996

## ITEM SPECIAL - PATCHING CONCRETE BRIDGE DECK WITH MICRO-SILICA MODIFIED CONCRETE:

SEE PROPOSAL NOTE NUMBER 511.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR THE ABOVE ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

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### ITEM 202 - PORTIONS OF STRUCTURE REMOVED. AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. PRIOR TO CONCRETE PLACEMENT. ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF ITEM 202 - PORTIONS OF STRUCTURE REMOVED. AS PER PLAN.

ITEM 511, CLASS S CONCRETE, SUPERSTRUCTURE, AS PER PLAN (REPAIR)

ITEM 511, CLASS S CONCRETE, MISC.: APPROACH SLAB REPAIR

ITEM 511, CLASS C CONCRETE, ABUTMENT, AS PER PLAN (REPAIR)

EACH ITEM SHALL BE USED AT THE LOCATIONS INDICATED IN THE PLANS.

THE COARSE AGGREGATE SHALL BE LIMESTONE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR EACH OF THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

## ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS WORK CONSISTS OF RAISING OR REPOSITIONING EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMIT WORKING DRAWINGS AND CALCULATIONS IN ACCORDANCE WITH CMS 501.05.

IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SATISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPARATE FROM THE DECK FOR THE DISTANCE OF THE SEPARATION IN ACCORDANCE WITH CMS 512.07. THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (21/4" THICK)

ITEM 848 - SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY, AS PER PLAN

THE COARSE AGGREGATE SHALL BE LIMESTONE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID FOR EACH OF THE ABOVE ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

### ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE

QUANTITY BROUGHT	FROM STRUCTURE	SHEET 57 815 SQ YD	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 62 866 SQ YD	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 71 223 SQ YD	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 77 643 SQ YD	(02/S<2/PV)

TOTAL CARRIED TO GENERAL SUMMARY....2547 SQ YD (02/S<2/PV)

### ITEM 407 - TACK COAT, 702.13

QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	57	65 GAL	(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	62	69 GAL	(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	71	18 GAL	(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	77	52 GAL	(02/S<2/PV)

TOTAL CARRIED TO GENERAL SUMMARY....204 GAL (02/S<2/PV)

## ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (448), APP

QUANTITY	BROUGHT	FROM	STRUCTURE	SHEET	57 17 CU Y	D (	(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	62 18 CU Y	D (	(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	71 5 CU YD		(02/S<2/PV)
QUANTITY	<b>BROUGHT</b>	FROM	STRUCTURE	SHEET	77 14 CU Y	D (	(02/S<2/PV)

TOTAL CARRIED TO GENERAL SUMMARY....54 CU YD (02/S<2/PV)

### ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE C

QUANTITY BROUGHT	FROM STRUCTURE	SHEET 57 208 FT	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 62 164 FT	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 71 52 FT	(02/S<2/PV)
QUANTITY BROUGHT	FROM STRUCTURE	SHEET 77 159 FT	(02/S<2/PV)

TOTAL CARRIED TO GENERAL SUMMARY....583 FT (02/S<2/PV)

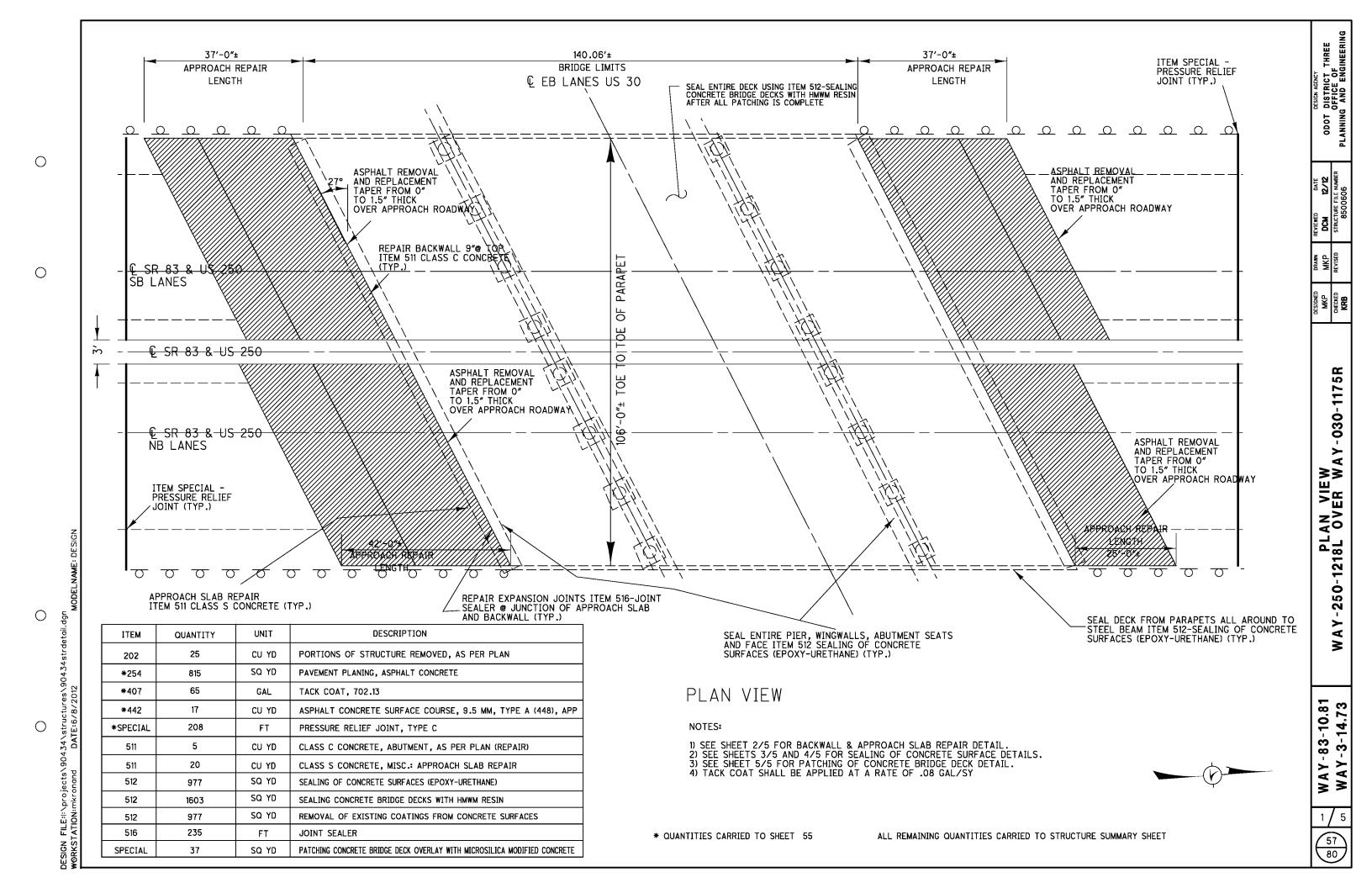
### ITEM 201 - CLEARING AND GRUBBING

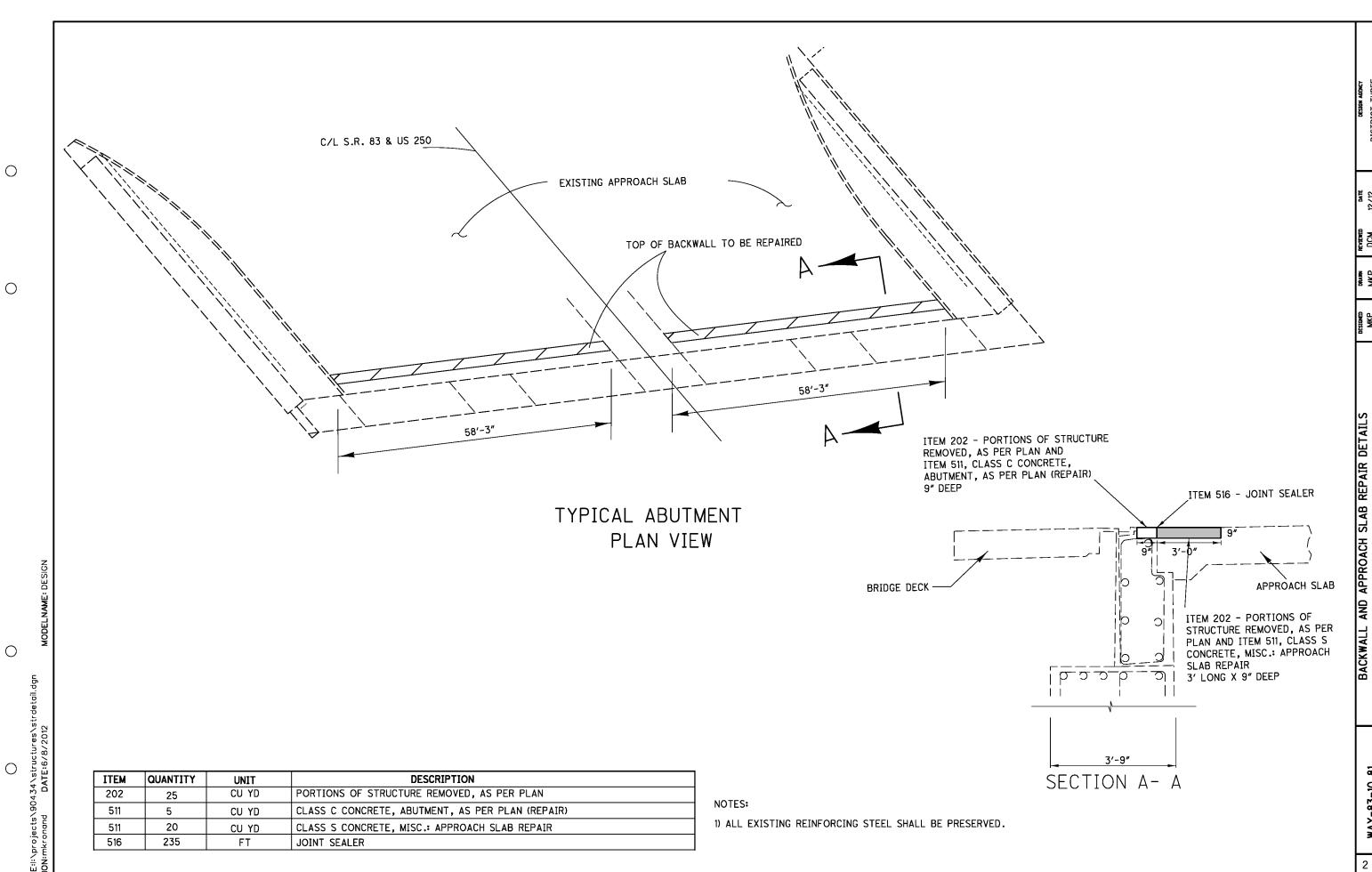
QUANTITY BROUGHT FROM STRUCTURE SHEET 69 LUMP SUM	(02/S<2/PV)
TOTAL CARRIED TO GENERAL SUMMARYLUMP SUM	(02/S<2/PV)

### ITEM 203 - EMBANKMENT, AS PER PLAN

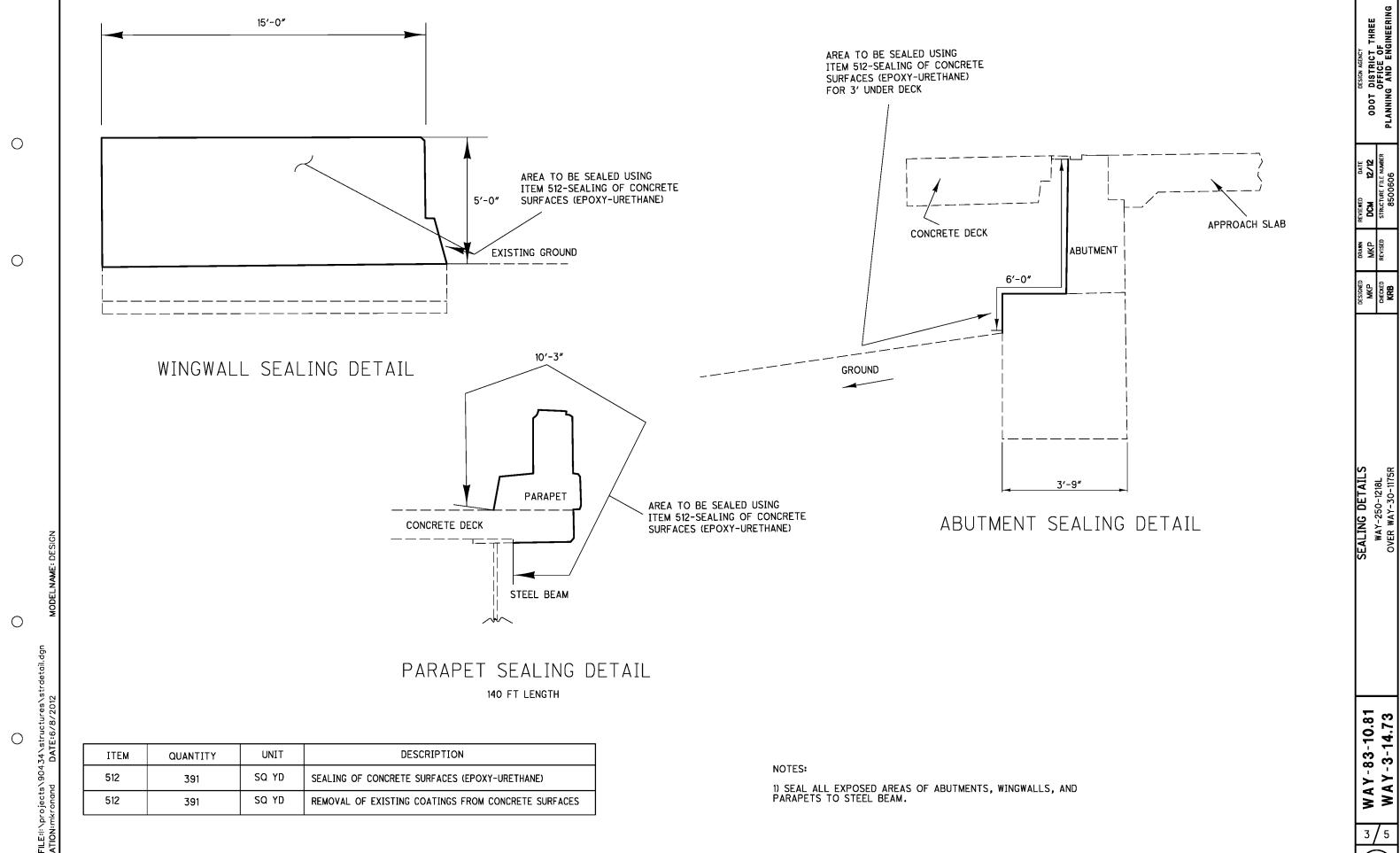
QUANTITY BROUGHT	FROM STRUCTURE S	HEET 69 80 CU YD	(02/5(2/PV)
TOTAL CARRIED TO	GENERAL SUMMARY.	80 CU YD	(02/S<2/PV)

STRUCTURE FILE NO.	BRIDGE NO.	LOCATION	BRIDGE TYPE	SKEW	BRIDGE LIMITS	DECK WIDTH	PROPOSED WORK
8500606	WAY-250-1218L	OVER WAY-30-1175R	3-SPAN STEEL BEAM	27° 00′ 00″	140'-0"±	106'-0"±	DECK PATCHING, DECK & SUBSTRUCTURE SEALING, BACKWALL REPAIR, APPROACH SLAB REPAIR, EXPANSION JOINT SEALING
8502056	WAY-250-1236L	UNDER WAY-C.R. 30A	4-SPAN STEEL BEAM	11° 35′ 00″	207′−6″±	44′-0″±	NO STRUCTURE WORK
8500568	WAY-30-1176L	OVER WAY-250-1214L	4-SPAN STEEL BEAM	22° 26′ 00″	238′-10″±	50′-0″±	NO STRUCTURE WORK
8500754	WAY-3-1516	OVER APPLE CREEK	3-SPAN STEEL BEAM	15° 00′ 00″	128′-2″±	84′-0″±	CONCRETE OVERLAY, DECK & SUBSTRUCTURE SEALING EXPANSION JOINT SEALING
8500819	WAY-3-1531	UNDER N&S RR	3-SPAN STEEL BEAM	19° 06′ 07″	142′-11 <b>″</b> ±	45′-8″±	NO STRUCTURE WORK
8505853	WAY-585-0000L	OVER WAY-3-1547L & LITTLE APPLE CREEK	5-SPAN STEEL BEAM	32° 19′ 00″	332′-4″±	71′-0″±	DECK & SUBSTRUCTURE SEALING
8500843	WAY-3-1552WR	OVER LITTLE APPLE CREEK	2-SPAN CONCRETE CULVERT	30° 00′ 00″			REPAIRS/RETROFIT DROP INLET USING CONCRETE
8500878	WAY-3-1554WR	OVER LITTLE APPLE CREEK	3-SPAN CONCRETE SLAB	29° 00′ 00″	86′-2″	26'-0"±	DECK & SUBSTRUCTURE SEALING, CONCRETE DECK PATCHING, APPROACH SLAB REPAIR
8500908	WAY-3-1581	OVER LITTLE APPLE CREEK	2-SPAN CONCRETE CULVERT	30° 00′ 00″			NO STRUCTURE WORK
8500932	WAY-3-1669	UNDER PORTAGE RD	5-SPAN STEEL BEAM	22° 39′ 27″	289′-9″±	48′-0″±	DECK & SUBSTRUCTURE SEALING, CURB & PARAPET REPAIR
8503699	WAY-83-1391	OVER WAY-003-1761B	4-SPAN STEEL BEAM	34° 41′ 00″	219′-6″±	73′-0″±	DECK & SUBSTRUCTURE SEALING, BEAM SEAT REPAIR
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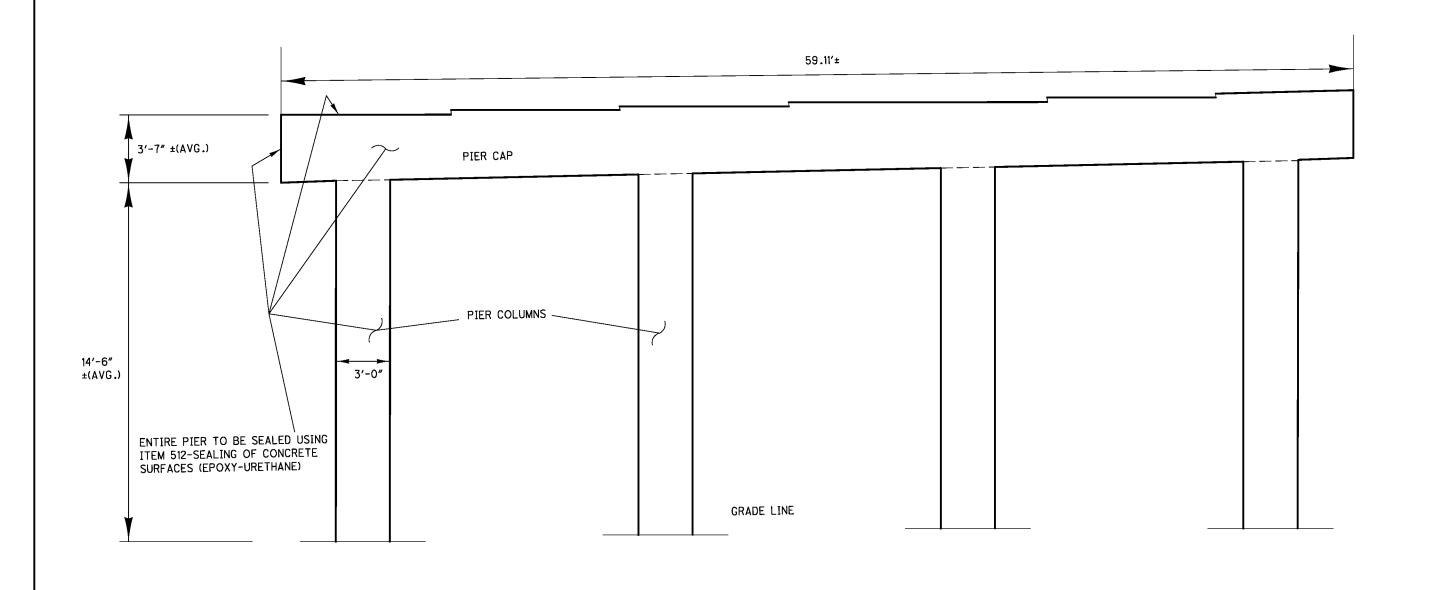


ALL QUANTITIES CARRIED TO SHEET 1/5



ALL QUANTITIES CARRIED TO SHEET 1/5

WAY-83-10.81 WAY-3-14.73



## PIER SEALING ELEVATION VIEW

PIER CAP WIDTH = 3'-0"

ITEM	QUANTITY	UNIT	DESCRIPTION
512	586	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
512	586	SQ YD	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

NOTES:

SEAL ALL EXPOSED AREAS OF ENTIRE PIER.
 CONTRACTOR SHOULD BE AWARE OF ELECTRICAL ON PIERS, USE EXTREME CAUTION NEAR EXISTING UTILITIES TO REMAIN IN PLACE.

ALL QUANTITIES CARRIED TO SHEET 1/5

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WAY-83-10.81 WAY-3-14.73

SEALING DETAILS
WAY-250-1218L
OVER WAY-30-1175R

