

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

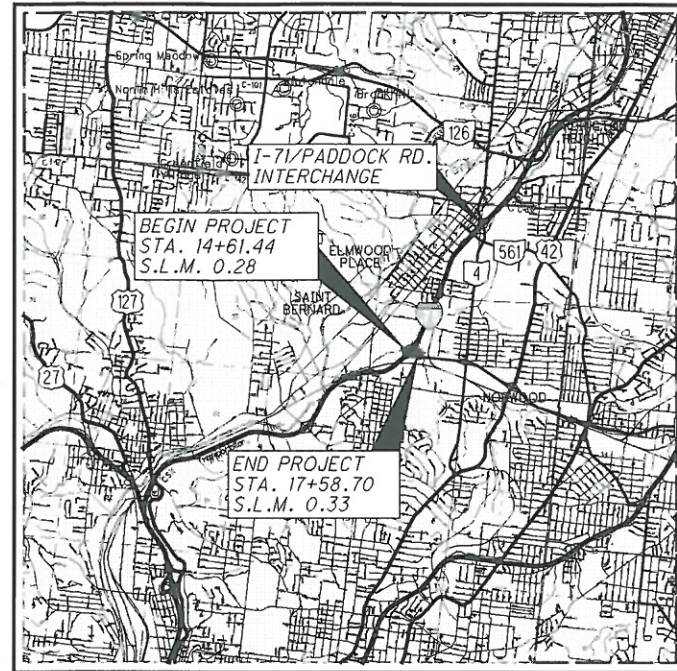
# HAM-562-0.28

CITY OF SAINT BERNARD  
HAMILTON COUNTY

**PROJECT DESCRIPTION**

IMPROVEMENT OF 0.05 MILES OF S.R. 562 BY REPLACEMENT OF EXISTING REINFORCED CONCRETE DECK WITH A COMPOSITE REINFORCED CONCRETE DECK ON THE EXISTING STEEL BEAMS. WORK INCLUDES REPLACING APPROACH SLABS AND EXPANSION JOINT, MODIFYING TOP OF BACKWALL, SEALING CONCRETE SURFACES, APPROACH RESURFACING, REPLACEMENT OF EXISTING GUARDRAIL, BRIDGE TERMINAL ASSEMBLIES, BARRIER, PAVEMENT, AND OTHER RELATED WORK.

PROJECT EARTH DISTURBED AREA: 0.360 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOT NOT REQUIRED)



LOCATION MAP

LATITUDE: 39°10'31" LONGITUDE: 84°29'19"

SCALE IN MILES



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

**DESIGN DESIGNATION**

CURRENT ADT (2010)	15,300
DESIGN YEAR ADT (2030)	15,550
DESIGN HOURLY VOLUME (2030)	0.09
DIRECTIONAL DISTRIBUTION	1.00
TRUCKS (24 HOUR B&C)	0.12
DESIGN SPEED	45
LEGAL SPEED	55
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN FREEWAY AND EXPRESSWAY	
NHS PROJECT	YES

**DESIGN EXCEPTIONS**

NONE

**UNDERGROUND UTILITIES**  
CONTACT BOTH SERVICES  
CALL TWO WORKING DAYS  
**BEFORE YOU DIG**

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**

PLAN PREPARED BY:

BARR & PREVOST  
2800 CORPORATE EXCHANGE DR., STE 240  
COLUMBUS, OH 43231  
(614) 714-0270 FAX (614) 714-0323

**INDEX OF SHEETS:**

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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 DETOURS WILL BE PROVIDED AS NOTED IN PROPOSAL AND THESE PLANS.

APPROVED *Steve Mandy*  
DATE 4/19/12 DISTRICT DEPUTY DIRECTOR

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

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	
BP-1.1	7/28/00	MT-101.60	4/17/09	A-1-69	7/19/02	800	10/21/11
BP-2.3	7/16/04	MT-105.10	1/15/09	AS-1-81	7/19/02	832	5/5/09
BP-5.1	7/28/00	TC-61.30	7/15/11	BR-1	7/19/02	878	7/15/11
		TC-65.11	1/21/05	EXJ-4-87	7/19/02		
DM-4.4	4/17/09	TC-71.10	1/21/11	GSD-1-96	7/19/02		
		TC-72.20	10/16/09				
GR-2.1	1/16/04	TC-73.10	1/21/11				
GR-3.1	10/16/09						
GR-3.2	10/16/09						
		MT-35.10	4/20/01				
		MT-95.30	7/17/09				
		MT-95.31	7/17/09				
		MT-95.32	7/17/09				
		MT-98.20	7/17/09				
		MT-98.29	7/17/09				

ENGINEERS SEAL:

SIGNED: *James E. Prevost*  
DATE: \_\_\_\_\_

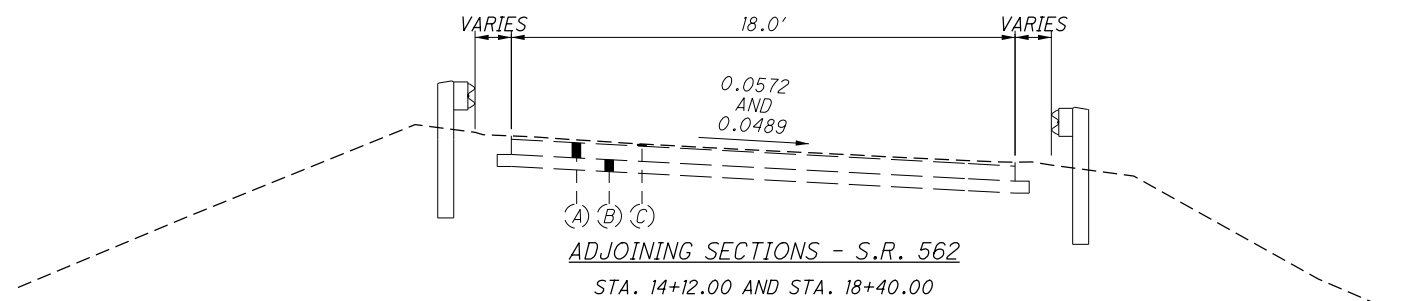
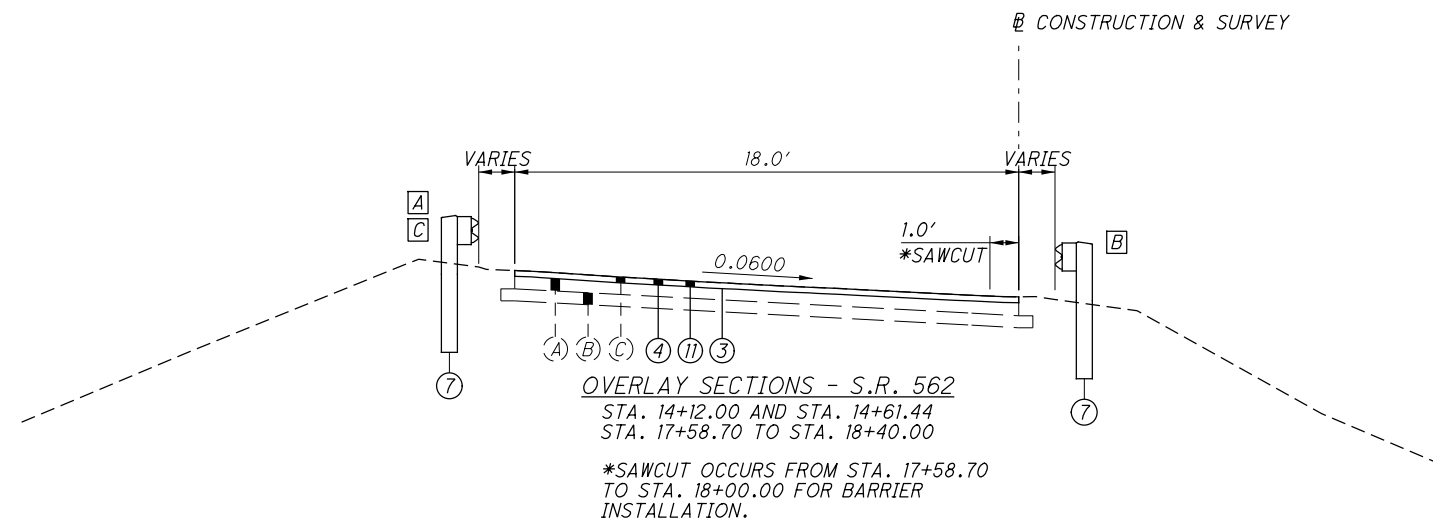
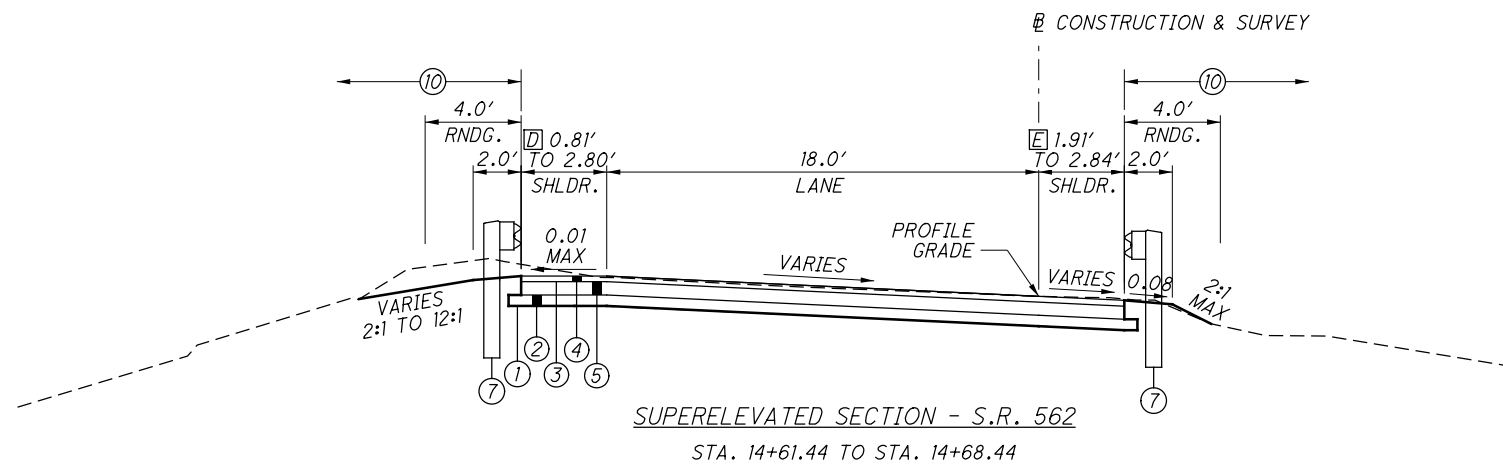
SPECIAL PROVISIONS

FEDERAL PROJECT NO. \_\_\_\_\_  
PID NO. **84444**  
CONSTRUCTION PROJECT NO. \_\_\_\_\_  
RAILROAD INVOLVEMENT **NONE**  
**HAM-562-0.28**  
1/33

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- A GUARDRAIL BEGINS AT STA. 14+33.35
- B GUARDRAIL BEGINS AT STA. 14+42.83
- C GUARDRAIL ENDS AT STA. 17+72.40
- D STA. 14+61.44 TO STA. 14+66.44
- E STA. 14+66.44 TO STA. 14+72.44
- F BARRIER ENDS AT STA. 17+75.59

NOTE:  
A PRESSURE RELIEF JOINT, TYPE A IS TO BE INSTALLED BETWEEN STA. 14+68.44 TO STA. 14+72.44 AND BETWEEN STA. 17+51.44 TO STA. 17+55.44.



EXISTING LEGEND

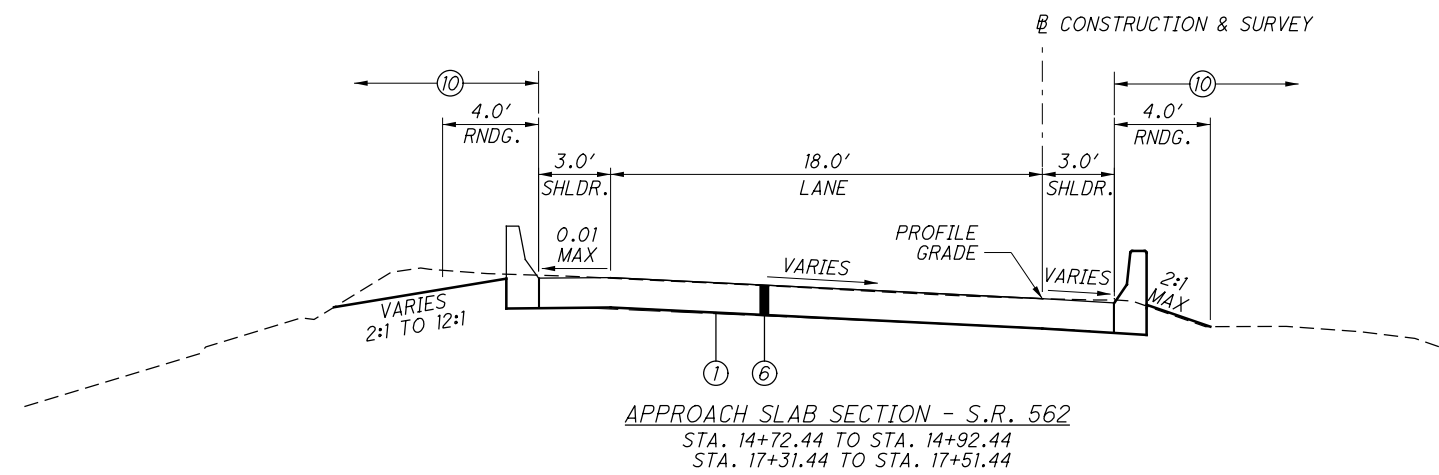
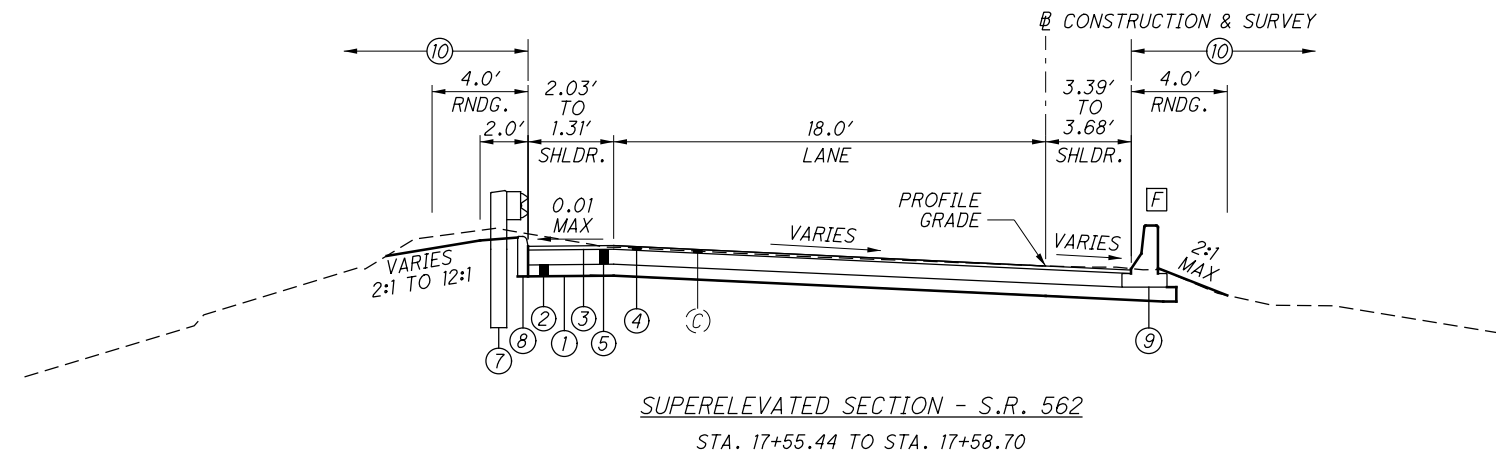
- (A) 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
- (B) 6" SUBBASE
- (C) 2" ASPHALT CONCRETE

LEGEND

- ① ITEM 204 - SUBGRADE COMPACTION
- ② ITEM 304 - 6" AGGREGATE BASE
- ③ ITEM 407 - TACK COAT (APP. RATE 0.075 GAL/SQ. YD.)
- ④ ITEM 442 - 2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448)
- ⑤ ITEM 451 - 7" REINFORCED CONCRETE PAVEMENT
- ⑥ ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=13")
- ⑦ ITEM 606 - GUARDRAIL, TYPE 5
- ⑧ ITEM 609 - CURB, TYPE 6
- ⑨ ITEM 622 - BARRIER, MISC.: JERSEY BARRIER
- ⑩ ITEM 659 - SEEDING AND MULCHING
- ⑪ ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIES 2" TO 4")

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

F BARRIER ENDS AT STA. 17+75.59



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TYPICAL SECTIONS

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3  
33

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

TIME WARNER CABLE  
11252 CORNELL PARK DRIVE  
CINCINNATI, OHIO 45242  
PHONE: 513-469-5483  
ATTN: GARY NAPIER

CINCINNATI METROPOLITAN SEWER DISTRICT  
1600 GEST STREET  
CINCINNATI, OHIO 45204  
PHONE: 513-557-7188  
ATTN: ROB FRANKLIN

QWEST - FIBER OPTIC  
8180 GREEN MEADOWS DRIVE, NORTH  
LEWIS CENTER, OHIO 43035  
PHONE: 303-886-1299  
ATTN: CHRIS STRAYER

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**CONSTRUCTION NOTIFICATION**

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE CLOSURES, AND ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) DISTRICT 8 PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (513) 932-7651 OR AT THE DISTRICT 8 PIO NOTIFICATION WEBSITE:

<http://www.dot.oh.us/districts/D08/Pages/PlanningPIOWebform.aspx>

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

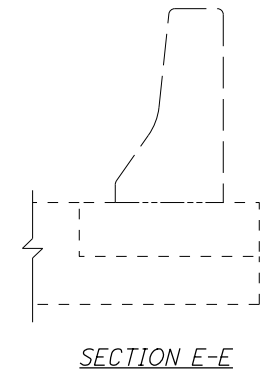
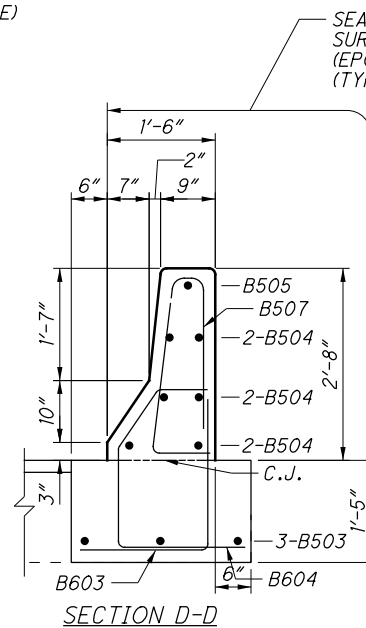
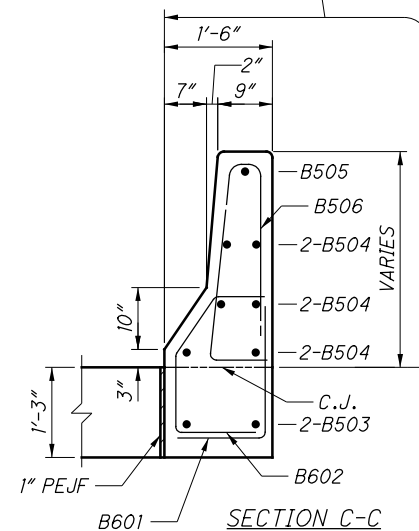
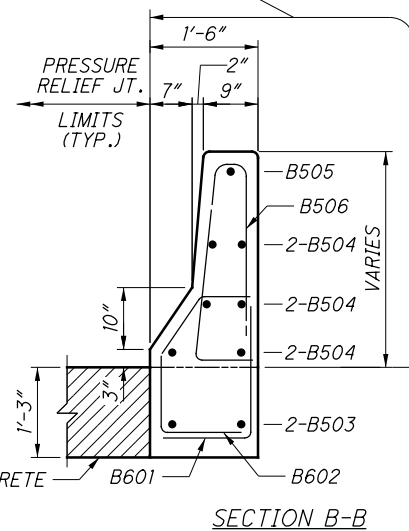
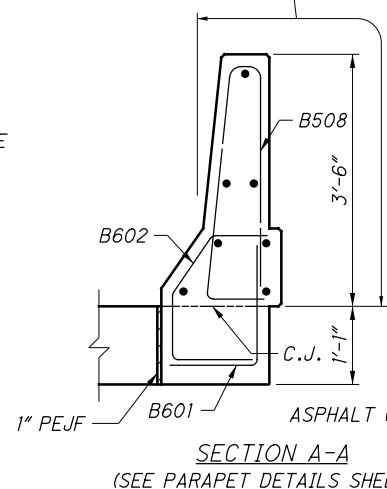
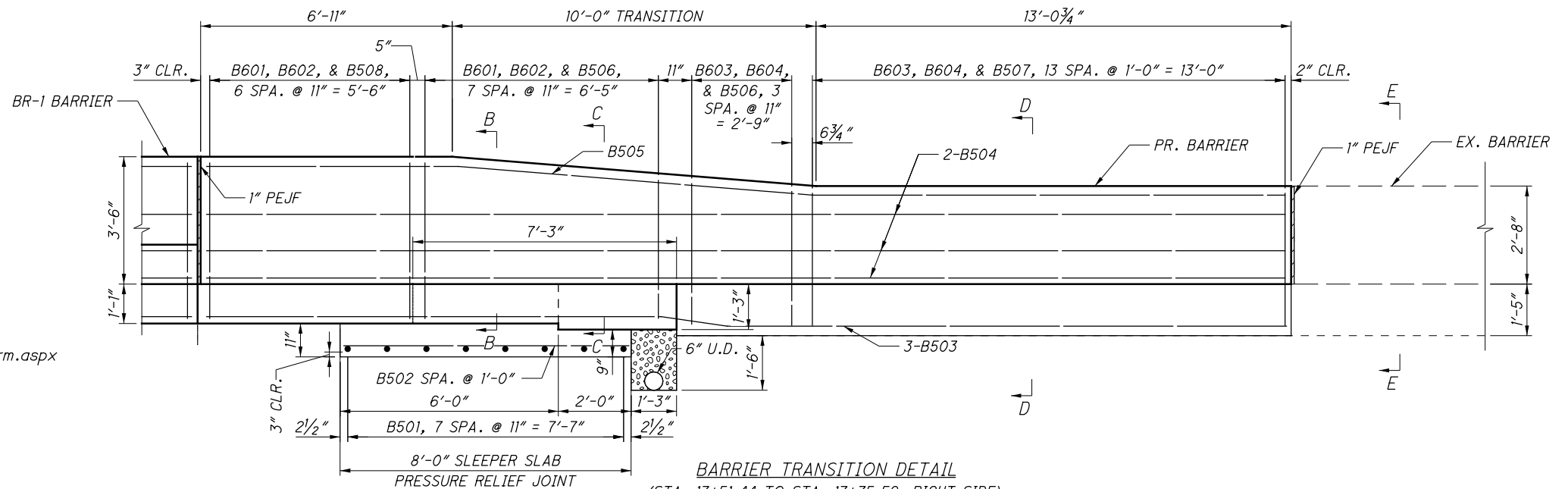
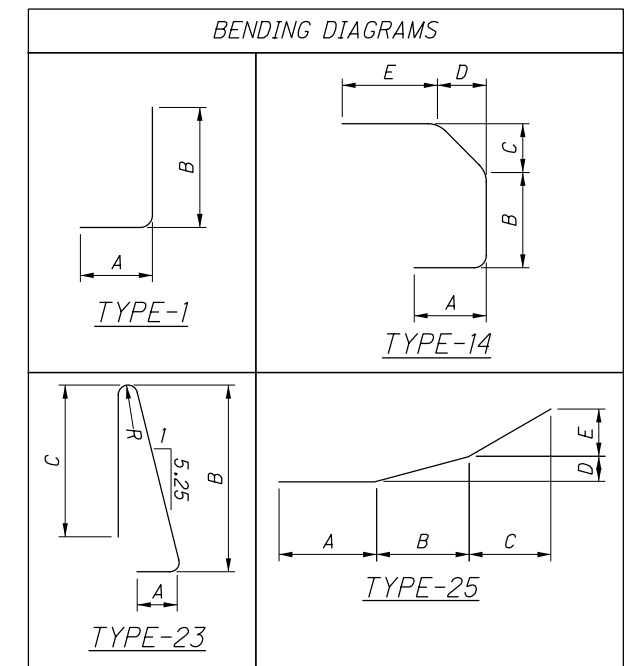
**BENCHING OF FOUNDATION SLOPES**

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS AS SET FORTH IN 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ROADWAY BARRIER (FOR INFORMATIONAL PURPOSES ONLY)												
MARK	NUMBER TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS							
					A	B	C	D	E	R	INC.	
B501	8	26'-6"	222	ST.								
B502	27	7'-6"	212	ST.								
B503	3	23'-6"	74	25	16'-6"	1'-0"	6'-0"	0'-4"	0"			
B504	6	29'-8"	186	ST.								
B505	1	29'-9"	32	25	12'-10"	10'-0"	6'-11"	0'-10"	0"			
B506	SET OF	TO	79	23	TO	TO	TO			1 1/2"	1 7/8"	
	12	5'-5"			0'-8"	2'-5"	2'-2"					
B507	14	5'-5"	80	23	0'-8"	2'-5"	2'-2"			1 1/2"		
	6	7'-1"			0'-8"	3'-3"	3'-0"			1 1/2"		
B601	15	2'-9"	62	1	0'-11"	2'-0"						
B602	15	3'-7"	81	14	0'-10 1/2"	1'-3 1/2"	0'-8 1/2"	0'-6"	0'-9"			
B603	18	3'-8"	100	1	1'-8"	2'-2"						
B604	18	4'-6"	122	14	1'-8"	1'-5 1/2"	0'-8 1/2"	0'-6"	0'-9"			
		TOTAL =	1028									



APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

GENERAL NOTES

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NOTES:

1. THE CONTRACTOR SHALL INSTALL TWO PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) ON I-71 SOUTHBOUND (LOCATION A), NORTH OF THE SR 126/I-71 INTERCHANGE, AND TWO PORTABLE CHANGEABLE MESSAGE SIGNS ON I-71 NORTHBOUND (LOCATION B), SOUTH OF THE SR 562/I-71 INTERCHANGE, ALERTING TRAFFIC OF THE RAMP CLOSURE AT THE SR 562/I-75 INTERCHANGE AND THE ALTERNATE ROUTE OF SR 126 WEST TO I-75 SOUTH. THE SIGNS WILL BE INSTALLED AND UNCOVERED WHEN THE RAMP FROM SR 562 WEST TO I-75 SOUTH IS CLOSED TO TRAFFIC. THE FOLLOWING MESSAGE, OR SIMILAR MESSAGE, SHOULD BE DISPLAYED ON THE PCMS:

SR 562 TO I-75 SOUTH CLOSED      USE I26 WEST TO I-75 SOUTH

2. ONE WEEK IN ADVANCE OF THE RAMP CLOSURE, THE CONTRACTOR SHALL PLACE A PORTABLE CHANGEABLE MESSAGE SIGN ON THE RAMP FROM SR 562 WEST TO I-75 SOUTH WITH THE MESSAGE OR SIMILAR MESSAGE:

CLOSED DATE 45 DAYS      EXPECT LONG DELAYS

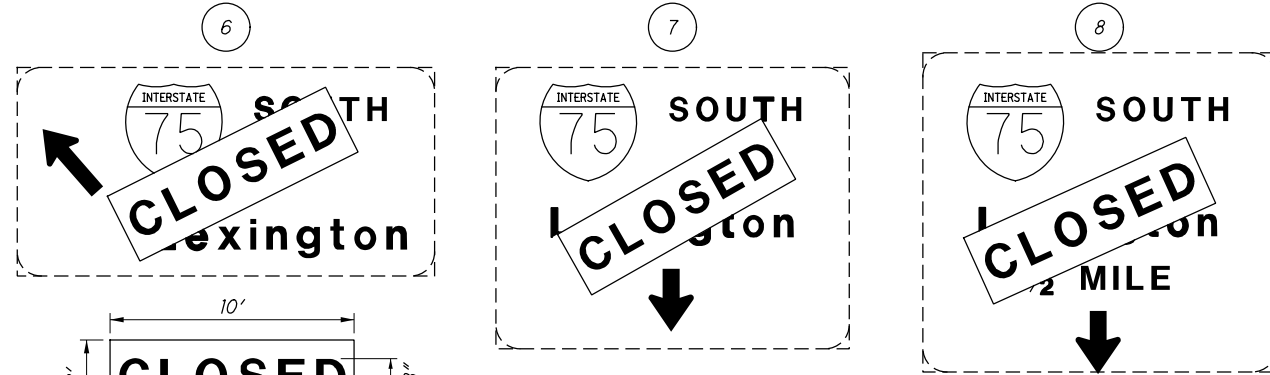
THE PCMS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF CONSTRUCTION.

3. MAINTENANCE OF TRAFFIC STANDARD DRAWINGS MT-95.30 AND MT-98.20 ARE TO BE USED WHEN PERFORMING NIGHT CLOSURES ON I-75.

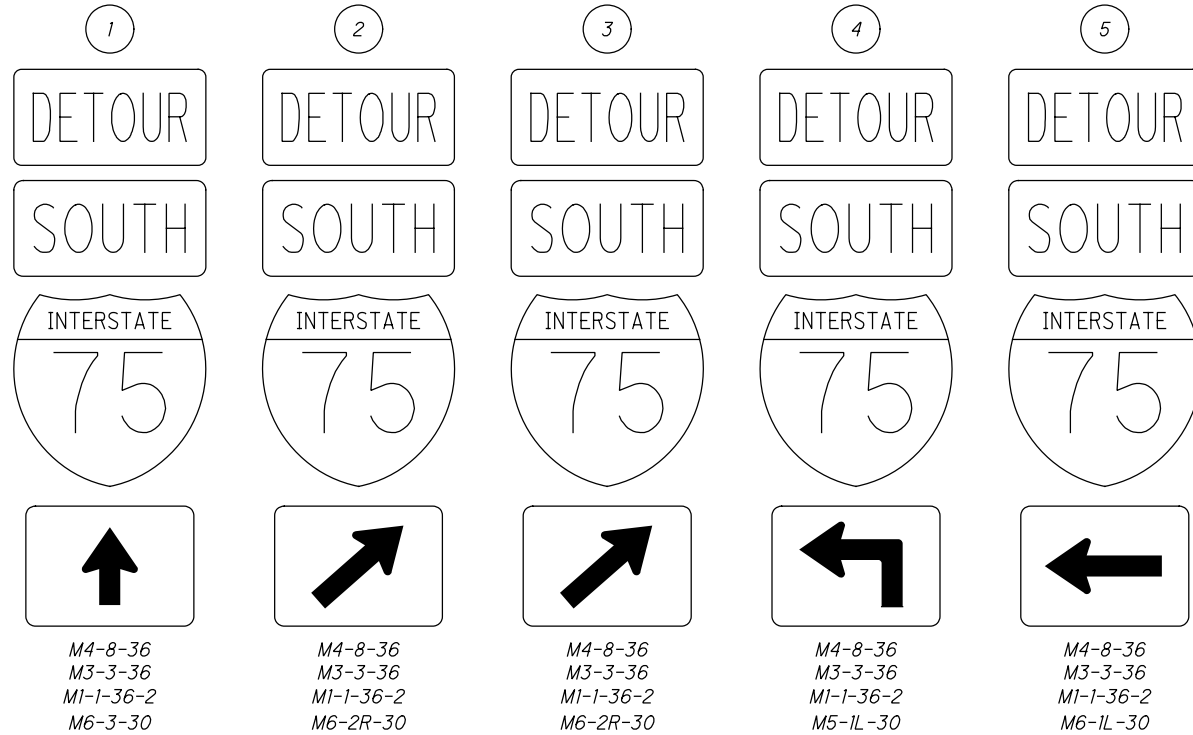
4. LANE CLOSURES CAN BE PERFORMED ON I-75 DURING THE PRESCRIBED HOURS LISTED ON THE FOLLOWING PERMITTED LANE CLOSURES WEBSITE: <http://plcm.dot.state.oh.us/>

LANE VALUE CONTRACT TABLE

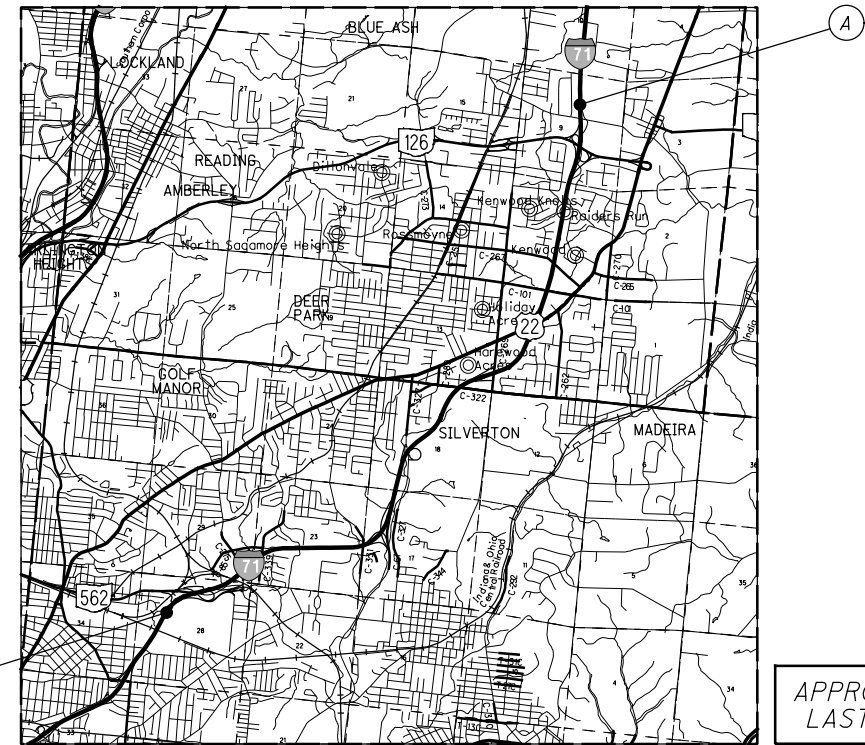
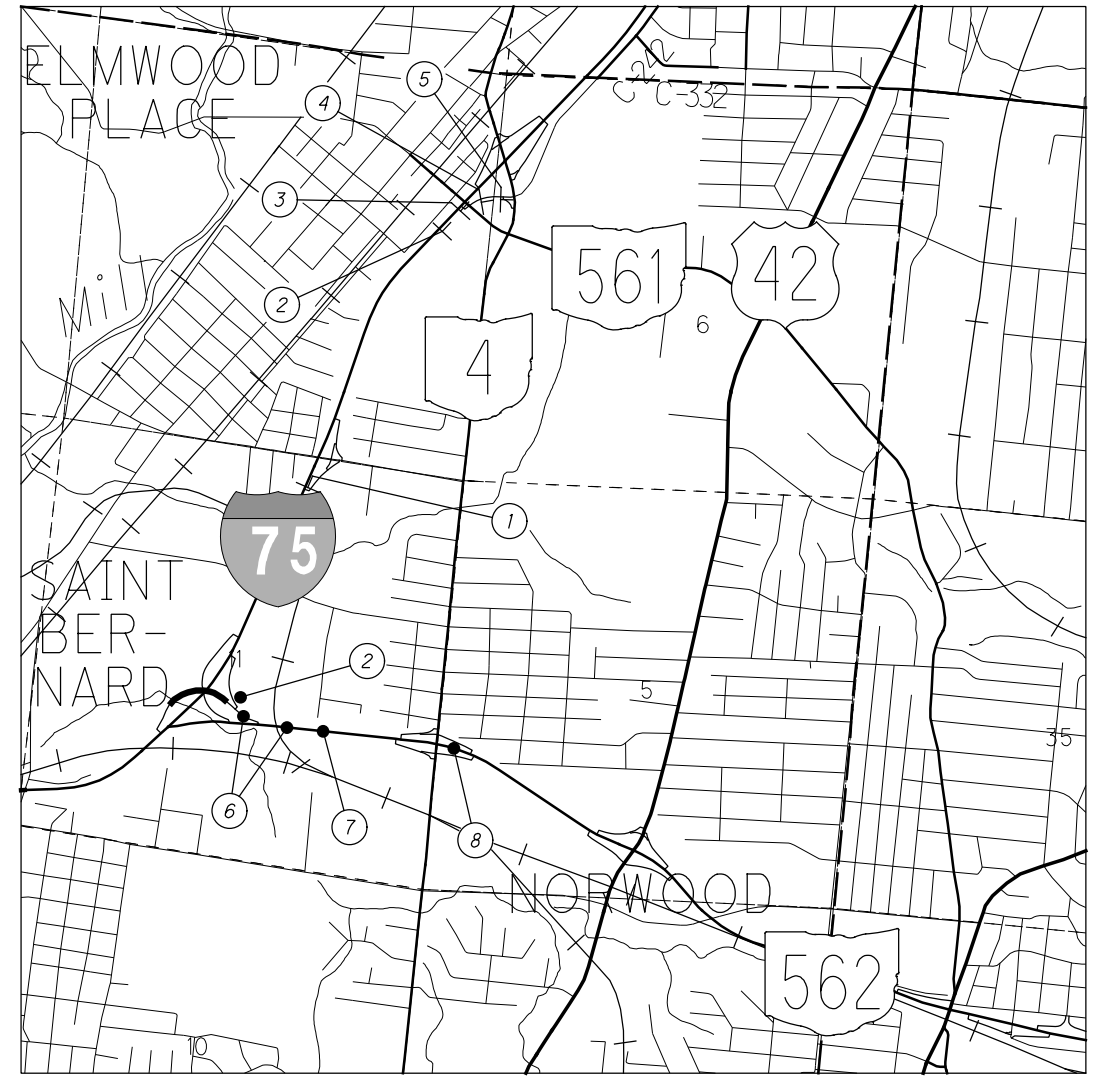
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT DISINCENTIVE \$ TIME UNIT
ALL LANES OPEN TO TRAFFIC ON I-75	SEE THE PERMITTED LANE CLOSURE SCHEDULE	\$2000 PER 15 MINUTE PERIOD
ALL LANES OPEN TO TRAFFIC ON PADDOCK ROAD	9:00 PM THROUGH MIDNIGHT AND MIDNIGHT THROUGH 5:00 AM	\$500.00 PER 15 MINUTE PERIOD
ALL LANES OPEN TO TRAFFIC ON THE RAMPS AT THE I-75/PADDOCK RD. INTERCHANGE	9:00 PM THROUGH MIDNIGHT AND MIDNIGHT THROUGH 5:00 AM	\$500.00 PER 15 MINUTE PERIOD



BLACK ON ORANGE OVERLAY "CLOSED" SIGN



- M4-8-36  
M3-3-36  
M1-1-36-2  
M6-3-30
- M4-8-36  
M3-3-36  
M1-1-36-2  
M6-2R-30
- M4-8-36  
M3-3-36  
M1-1-36-2  
M6-2R-30
- M4-8-36  
M3-3-36  
M1-1-36-2  
M5-1L-30
- M4-8-36  
M3-3-36  
M1-1-36-2  
M6-1L-30



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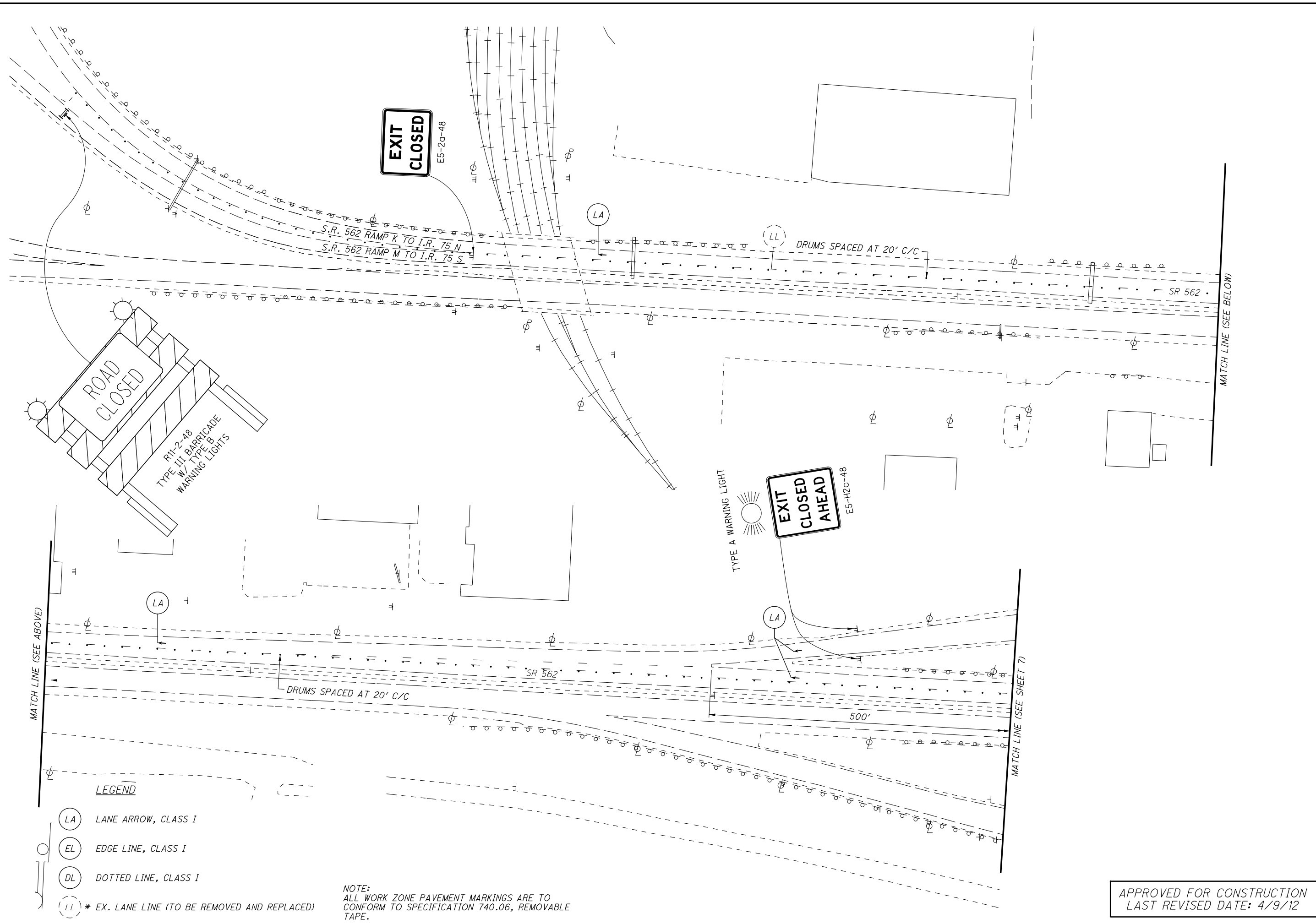
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CALCULATED JDC  
CHECKED JEP

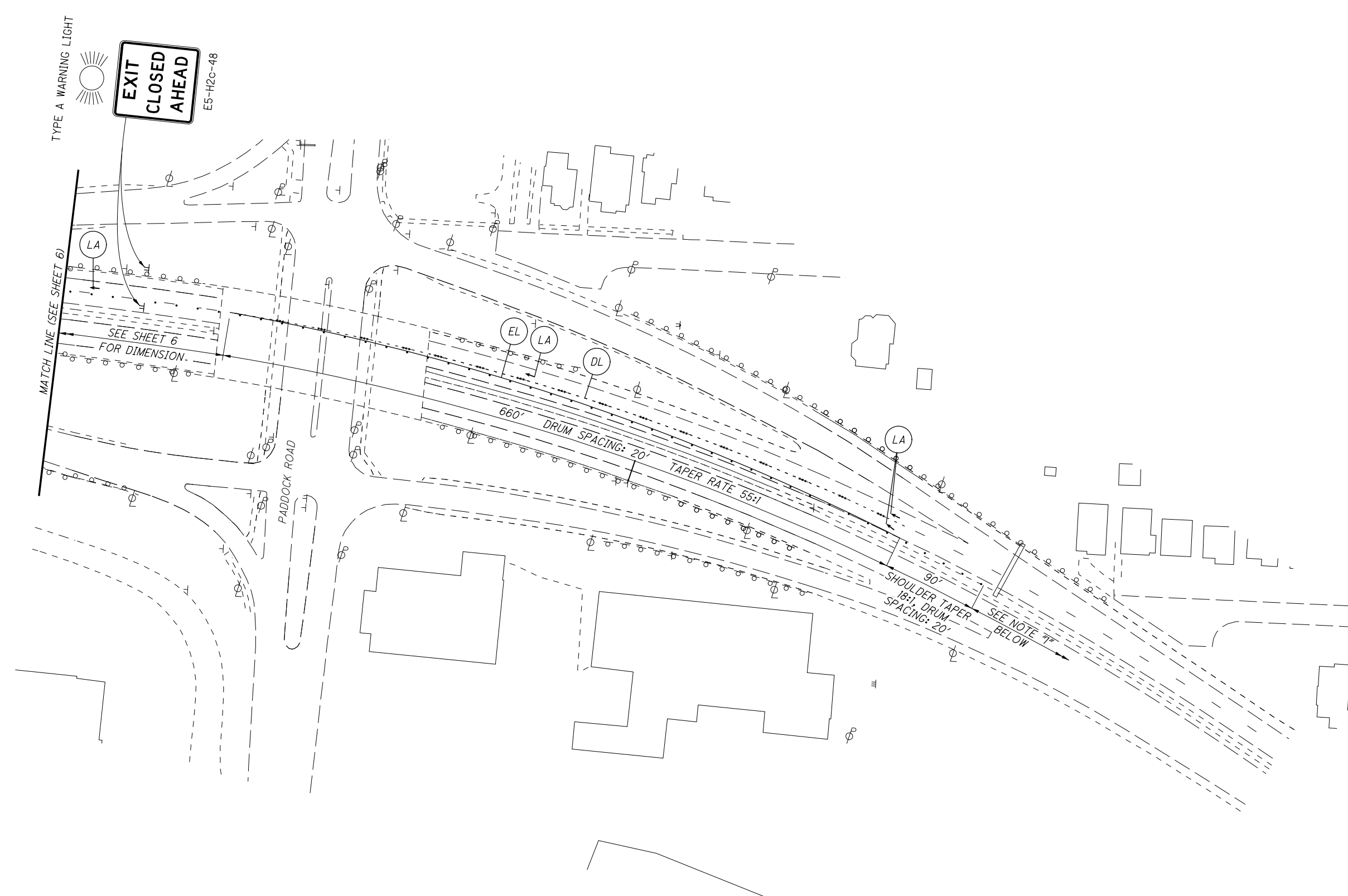
0 25 50 100  
HORIZONTAL SCALE IN FEET

**MAINTENANCE OF TRAFFIC  
NORWOOD LATERAL**

**HAM-562-0.28**



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LAST REVISED DATE: 4/9/12



**LEGEND**

- (LA) LANE ARROW, CLASS I
- (EL) EDGE LINE, CLASS I
- (DL) DOTTED LINE, CLASS I
- (LL) \* EX. LANE LINE (TO BE REMOVED AND REPLACED)

**NOTE:**

1. FOR ADVANCED WARNING SIGNS AND PLACEMENT, SEE SCD MT-95.30.
2. ALL WORK ZONE PAVEMENT MARKINGS ARE TO CONFORM TO SPECIFICATION 740.06, REMOVABLE TAPE.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 4/9/12

CALCULATED JDC  
CHECKED JEP

0 50 100  
HORIZONTAL SCALE IN FEET

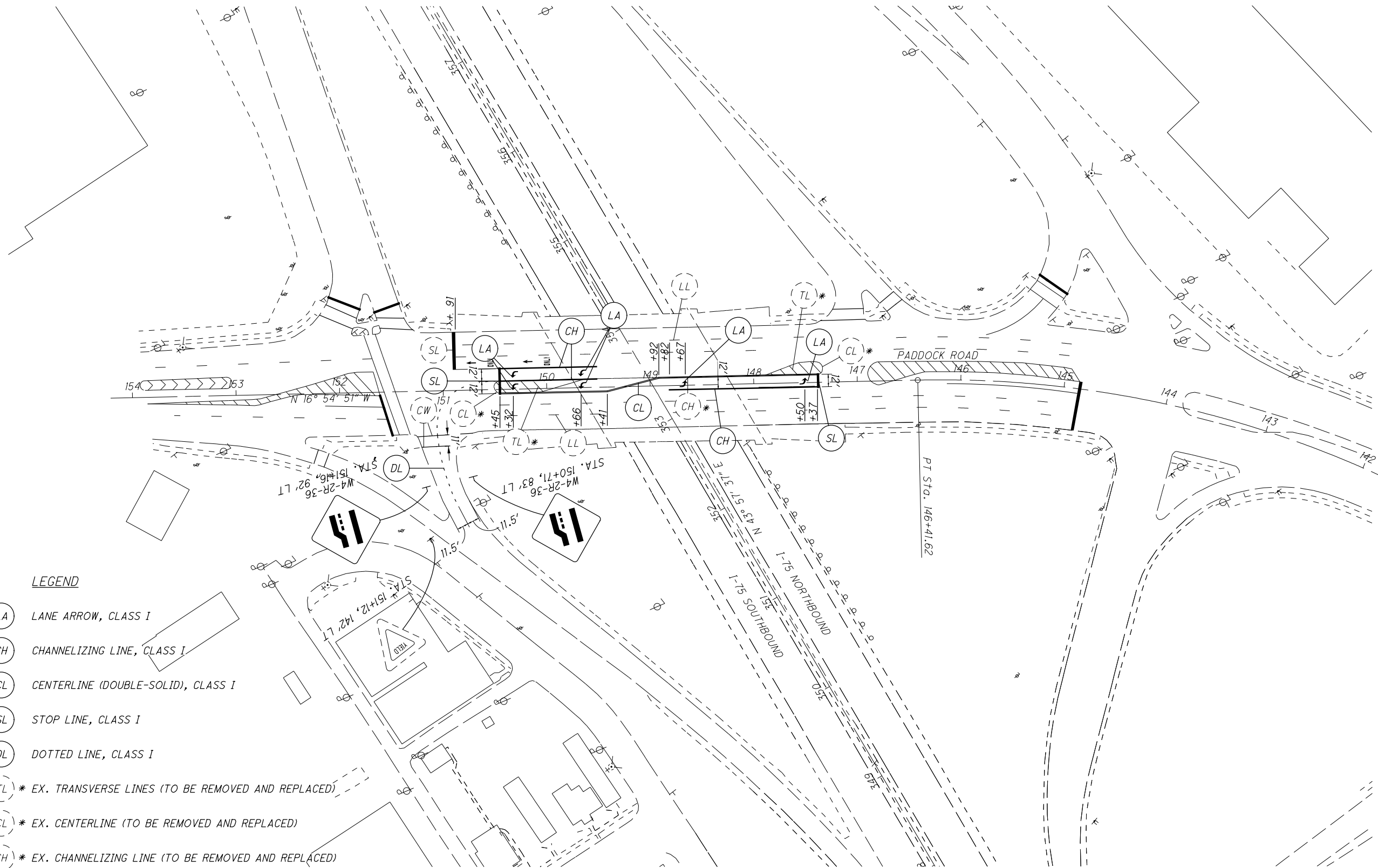
**MAINTENANCE OF TRAFFIC  
NORWOOD LATERAL**

**HAM-562-0.28**

- LEGEND**
- (LA) LANE ARROW, CLASS I
  - (CH) CHANNELIZING LINE, CLASS I
  - (CL) CENTERLINE (DOUBLE-SOLID), CLASS I
  - (SL) STOP LINE, CLASS I
  - (DL) DOTTED LINE, CLASS I
  - (TL) \* EX. TRANSVERSE LINES (TO BE REMOVED AND REPLACED)
  - (CL) \* EX. CENTERLINE (TO BE REMOVED AND REPLACED)
  - (CH) \* EX. CHANNELIZING LINE (TO BE REMOVED AND REPLACED)
  - (SL) EX. STOP LINE
  - (CW) EX. CROSSWALK LINE
  - (LL) EX. LANE LINE

**NOTE**

1. STANDARD DRAWINGS MT 95.31 AND MT 95.32 WILL BE USED FOR LANE CLOSURES ON PADDOCK ROAD TO INSTALL AND REMOVE TEMPORARY STRIPING.
2. ALL WORK ZONE PAVEMENT MARKINGS ARE TO CONFORM TO SPECIFICATION 740.06, REMOVABLE TAPE.



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CALCULATED JDC  
CHECKED JEP

0 50 100  
25  
HORIZONTAL SCALE IN FEET

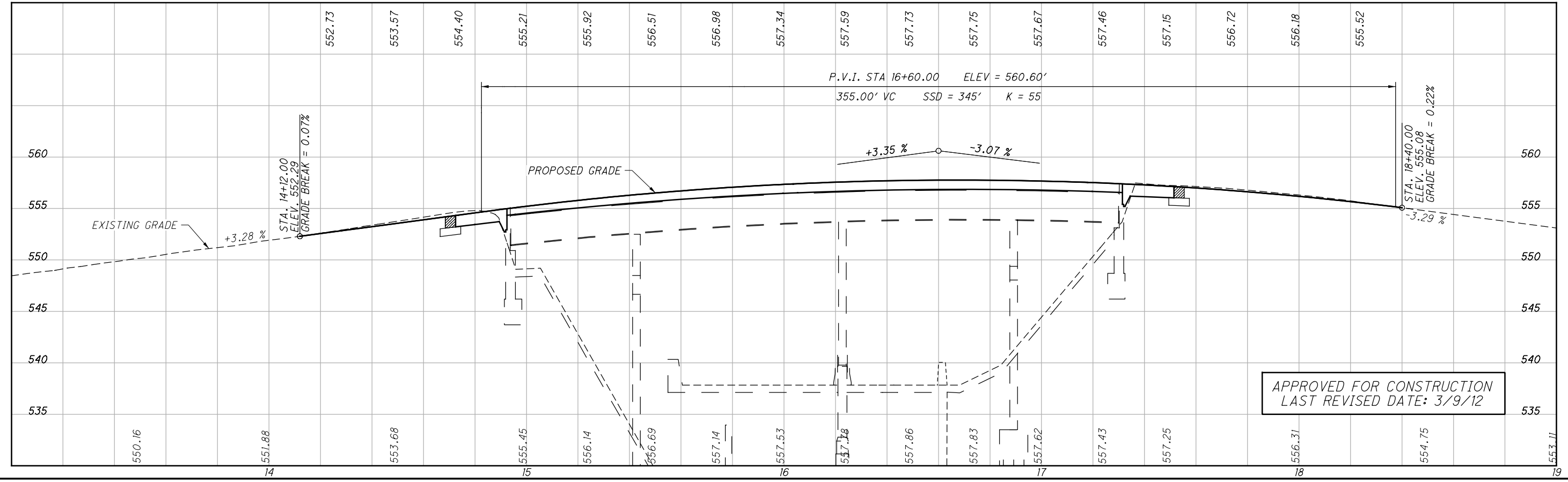
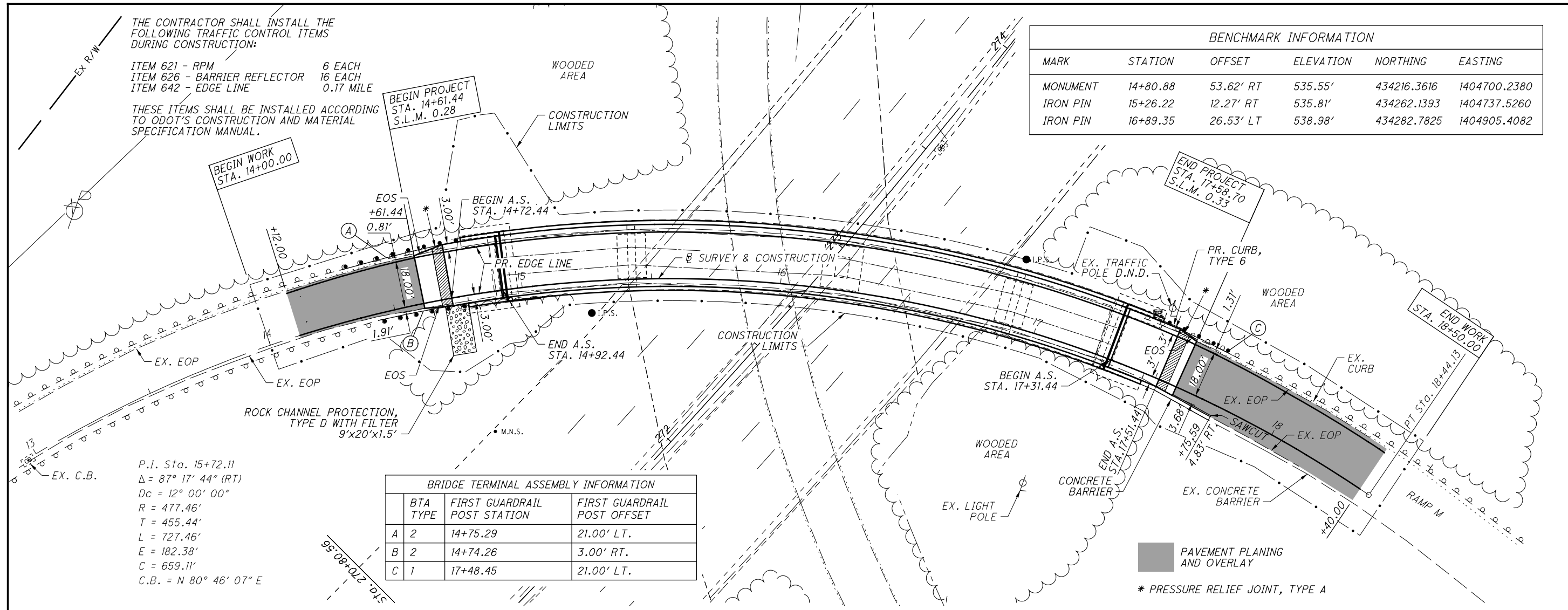
**MAINTENANCE OF TRAFFIC PLAN  
PADDOCK ROAD INTERCHANGE**

**HAM-562-0.28**



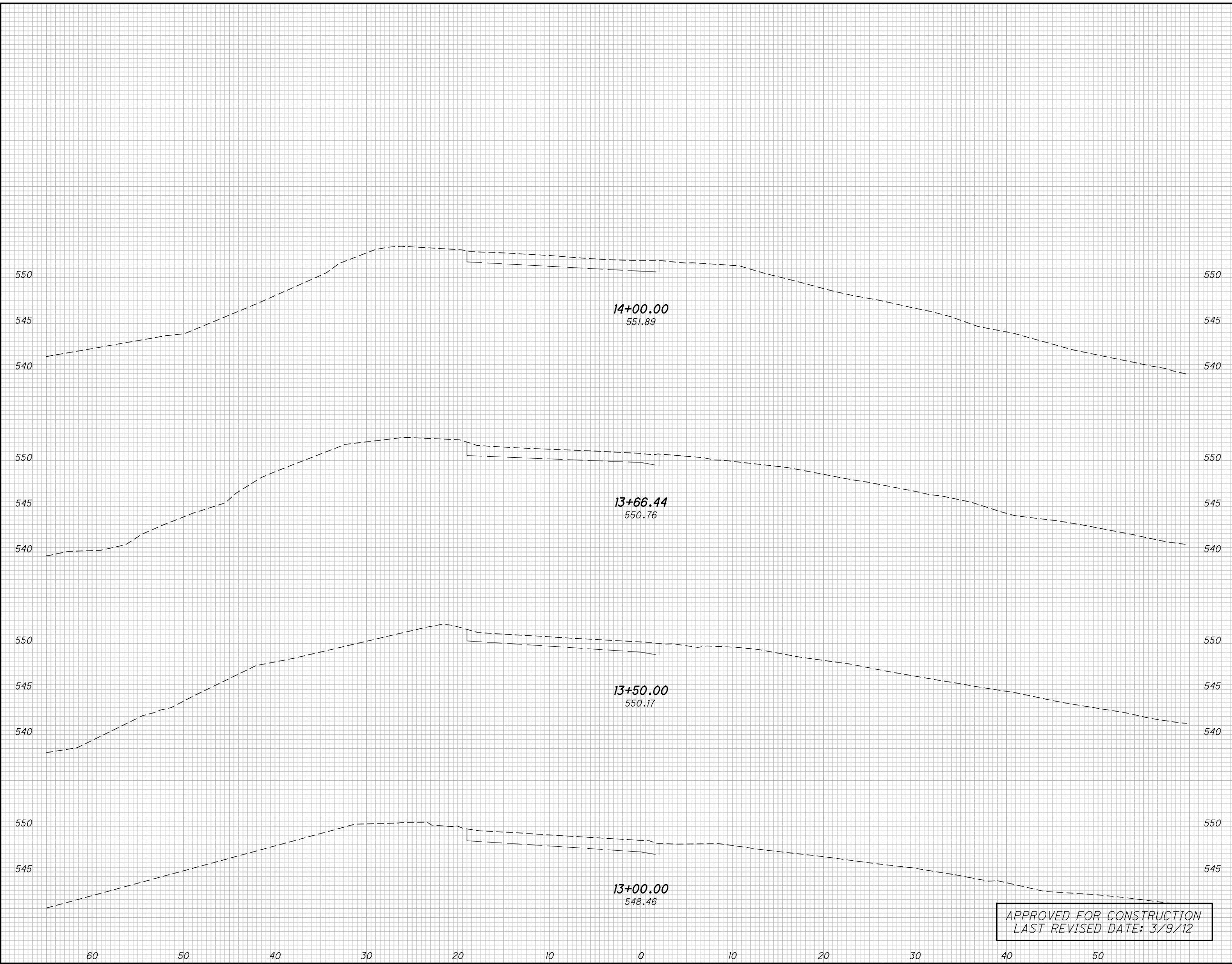
BENCHMARK INFORMATION					
MARK	STATION	OFFSET	ELEVATION	NORTHING	EASTING
MONUMENT	14+80.88	53.62' RT	535.55'	434216.3616	1404700.2380
IRON PIN	15+26.22	12.27' RT	535.81'	434262.1393	1404737.5260
IRON PIN	16+89.35	26.53' LT	538.98'	434282.7825	1404905.4082

THE CONTRACTOR SHALL INSTALL THE FOLLOWING TRAFFIC CONTROL ITEMS DURING CONSTRUCTION:  
 ITEM 621 - RPM 6 EACH  
 ITEM 626 - BARRIER REFLECTOR 16 EACH  
 ITEM 642 - EDGE LINE 0.17 MILE  
 THESE ITEMS SHALL BE INSTALLED ACCORDING TO ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATION MANUAL.



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SEEDING  
END SO.  
WIDTH YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED	CHECKED
LAB	JEP

CROSS SECTIONS RAMP M  
STA. 13+00.00 TO STA. 14+00.00

HAM-562-0.28

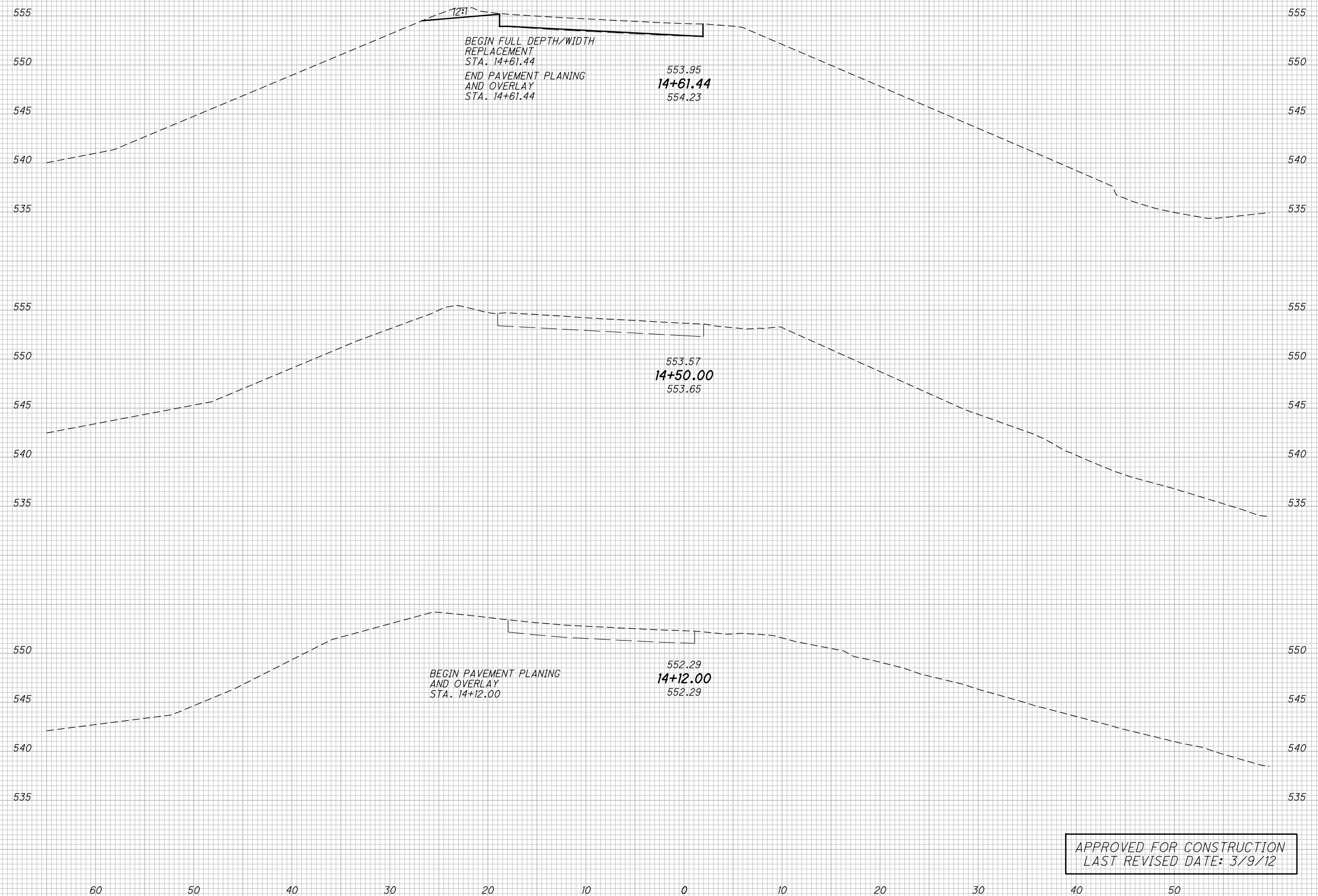
APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

10  
33

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SEEDING  
END SO.  
WIDTH YDS.

END AREA VOLUME  
CUT FILL CUT FILL  
CALCULATED LAB CHECKED  
JEP



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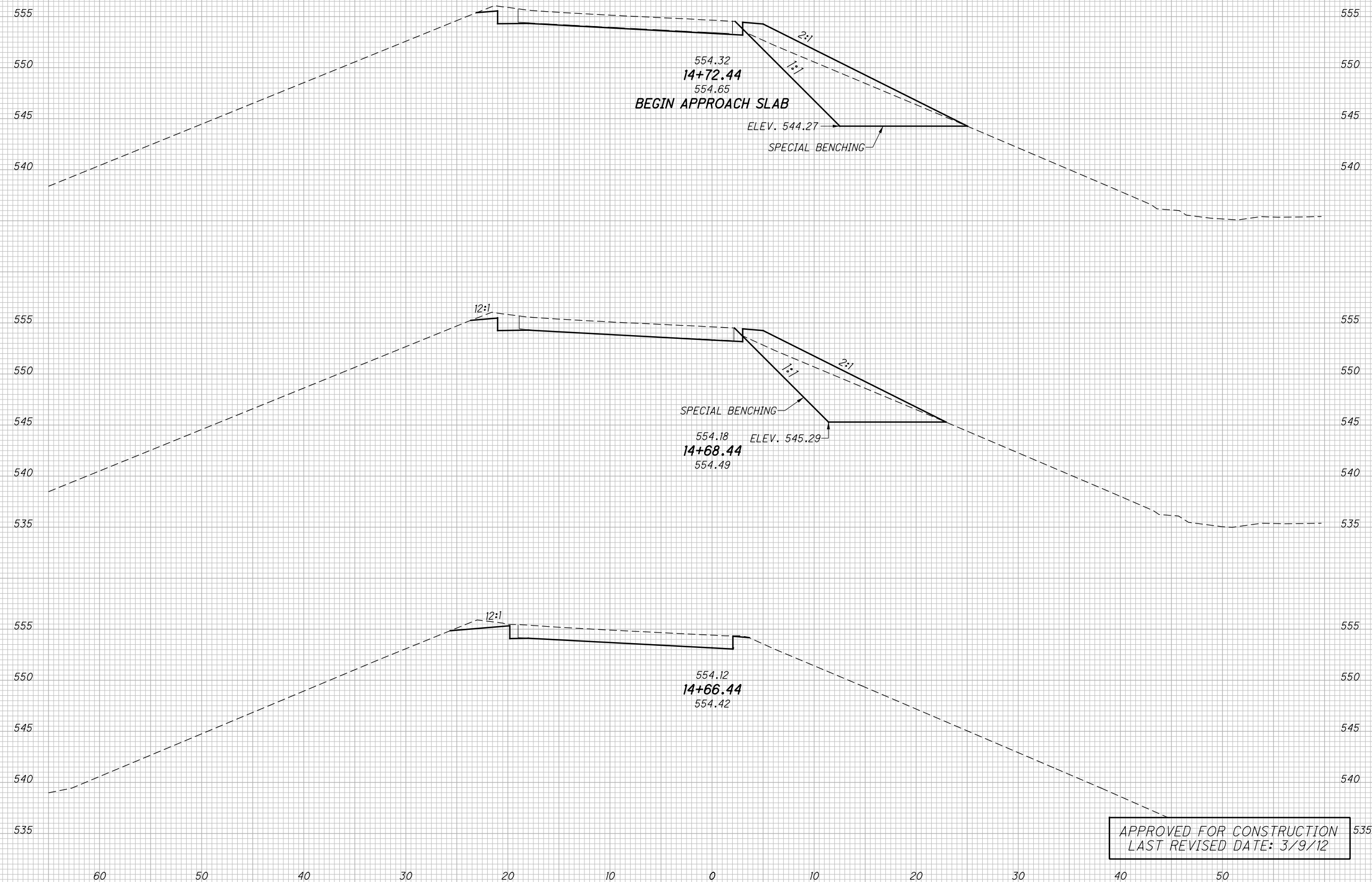
CROSS SECTIONS RAMP M  
 STA. 14+12.00 TO STA. 14+61.44

HAM-562-0.28

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SEEDING  
END SO.  
WIDTH YDS.

END AREA		VOLUME		CALCULATED LAB	CHECKED JEP
CUT	FILL	CUT	FILL		



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**CROSS SECTIONS RAMP M**  
**STA. 14+66.44 TO STA. 14+72.44**

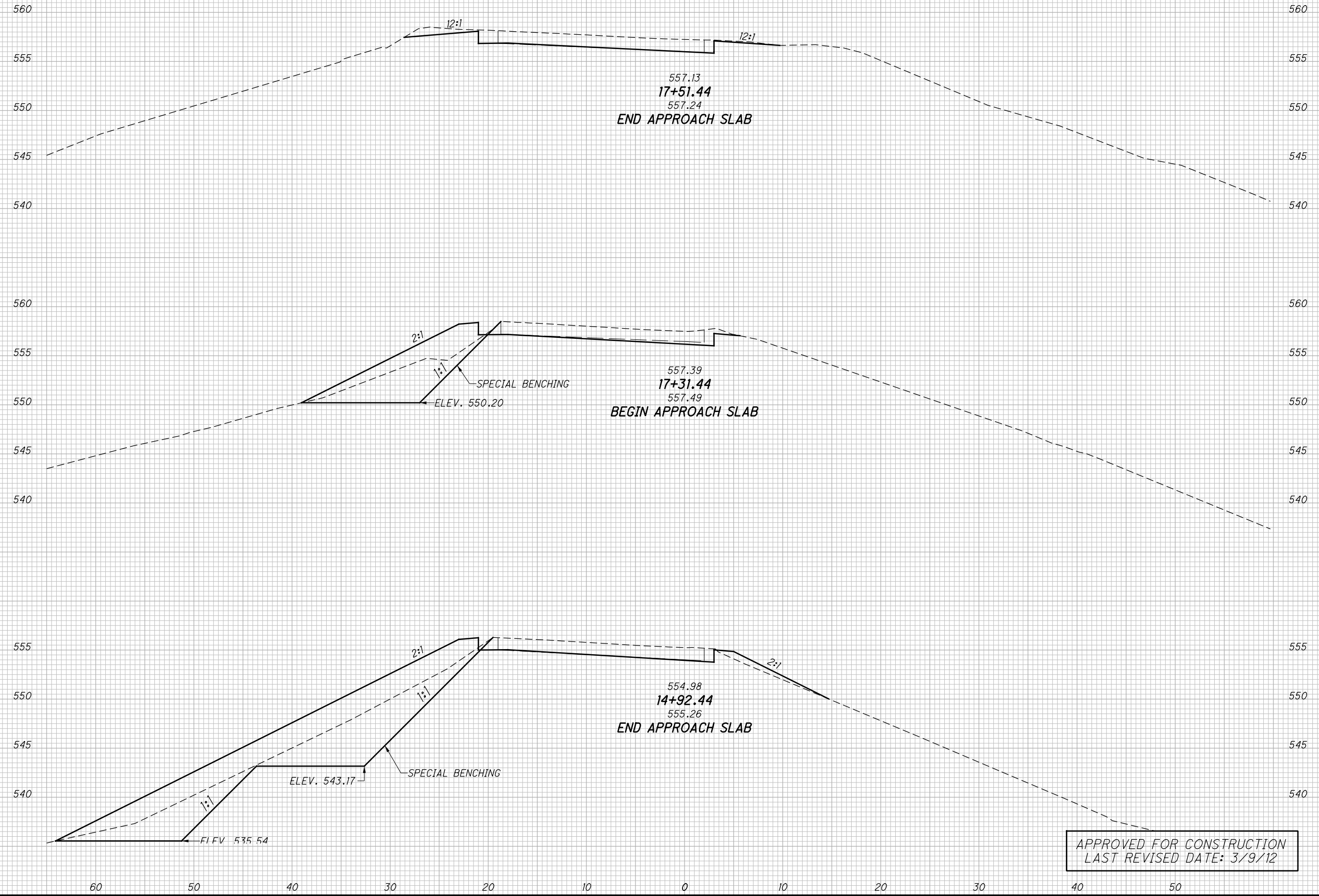
**HAM-562-0.28**

12  
33

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SEEDING  
END SO.  
WIDTH YDS.

END AREA		VOLUME		CALCULATED LAB	CHECKED JEP
CUT	FILL	CUT	FILL		



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LAST REVISED DATE: 3/9/12

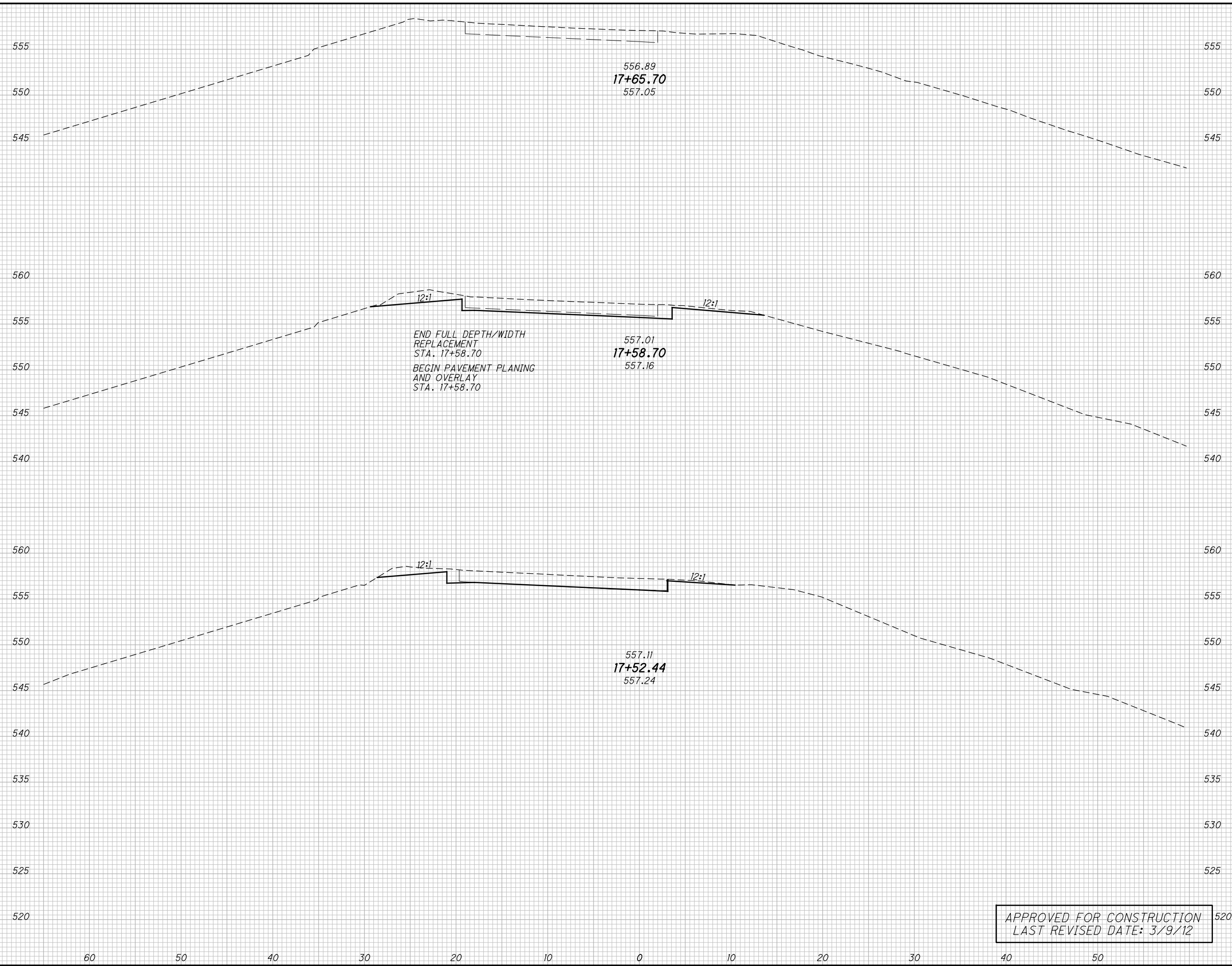
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HAM-562-0.28

13  
33

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SEEDING	
END WIDTH	SO. YDS.



END AREA	VOLUME	CALCULATED LAB	CHECKED JEP

**CROSS SECTIONS RAMP M  
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**HAM-562-0.28**

14 33
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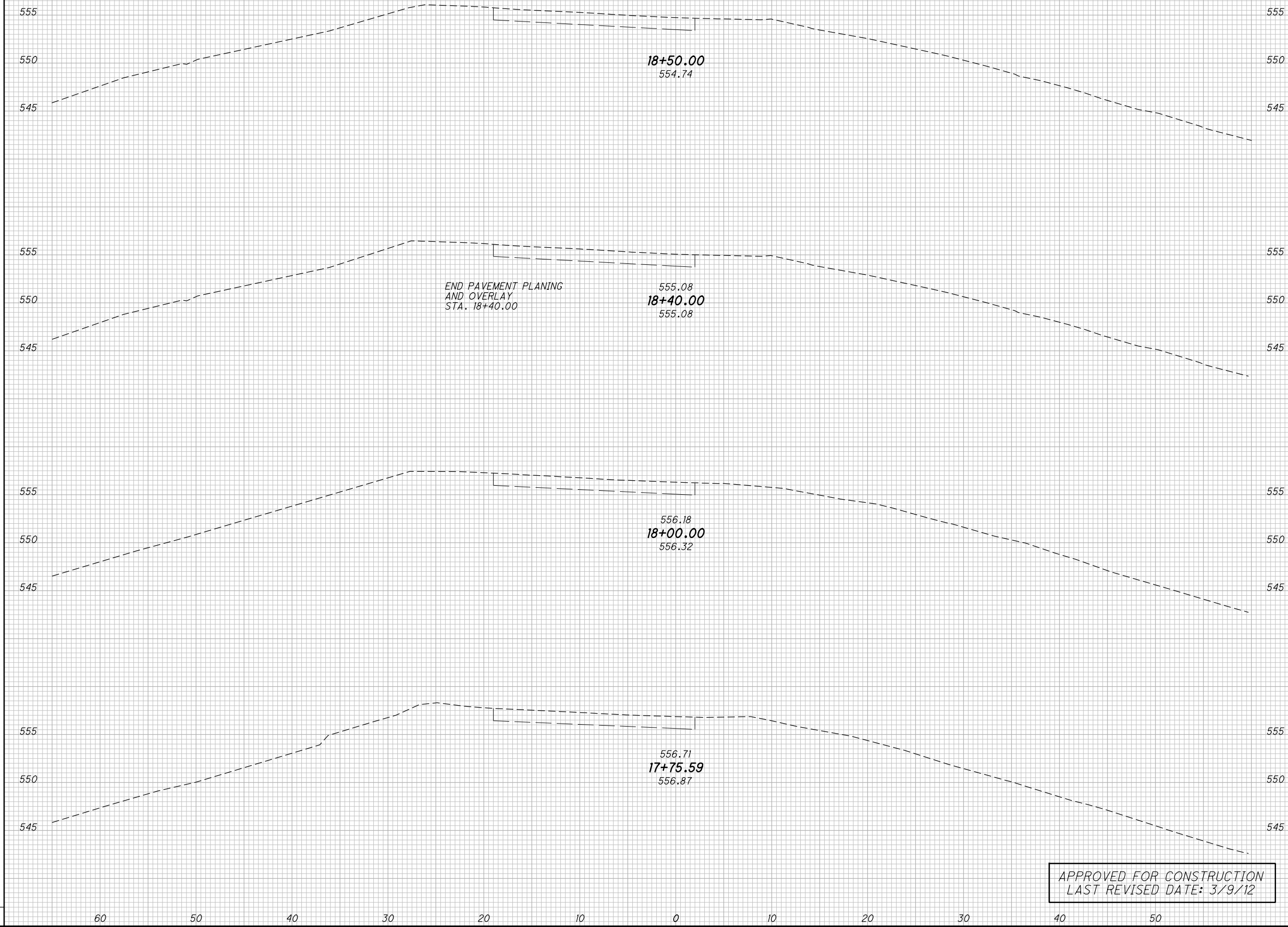
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SEEDING

END SO.  
WIDTH YDS.

END AREA		VOLUME		CALCULATED LAB	CHECKED JEP
CUT	FILL	CUT	FILL		



APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

**CROSS SECTIONS RAMP M**  
**STA. 17+75.59 TO STA. 18+50.00**

**HAM-562-0.28**





**ITEM 1314.03, MAINTAINING TRAFFIC, AS PER PLAN**

THE CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT ITEM 614 AND THE CITY OF CINCINNATI ITEM 1314. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.

PROCEDURES FOR MAINTAINING TRAFFIC SHALL BE IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION AND STANDARD CONSTRUCTION DRAWING MT-95.31, MT-95.32 AND MT-97.10. WORK ON OR BEYOND THE SHOULDER SHALL BE IN ACCORDANCE WITH TYPICAL APPLICATIONS TA-1 THRU TA-6.

ALL ADVANCE WARNING SIGNS FOR ANY CONDITION WHICH RESTRICTS TRAFFIC SHALL BE ERECTED BEFORE ANY SUCH RESTRICTION IS PUT INTO EFFECT. ALL SUCH SIGNS SHALL BE COVERED OR REMOVED FROM VIEW OF TRAFFIC WHEN THEY ARE NOT APPLICABLE, AS DETERMINED BY THE ENGINEER.

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE ODOTCD, AND SUCH FAILURE RESULTS IN A CONDITION AT THE WORK SITE WHICH IS UNSAFE FOR TRAFFIC, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

THE CONTRACTOR MAY CLOSE APPROACHES AT THE INTERSECTION FOR A PERIOD NOT TO EXCEED 10 MINUTES BY THE USE OF FLAGGERS. NO LANE CLOSURES WILL BE PERMITTED BETWEEN THE HOURS OF 7:00-9:00 AM AND 4:00-6:00 PM, MON.- FRI. COST OF THIS ITEM SHALL BE INCLUDED IN 614, MAINTAINING TRAFFIC.

**MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATIONS**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNALS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

- A) EXISTING SIGNAL INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT THE INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL MAINTAIN THE EXISTING TRAFFIC SIGNAL INSTALLATION AT ALL TIMES UNTIL THE PROPOSED SIGNAL INSTALLATION IS TURNED ON.

IF AT ANY TIME THIS REQUIREMENT CAN NOT BE MET, THE CONTRACTOR SHALL HIRE AN OFF DUTY POLICE OFFICER (AT CONTRACTOR'S EXPENSE) TO DIRECT TRAFFIC.

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE TO MAKE REQUIRED TIMING CHANGES TO THE TRAFFIC CONTROLLERS AS DIRECTED BY THE CITY/ODOT TO IMPROVE FLOW OF TRAFFIC. IF TIMING CHANGES ARE REQUIRED, THEY WILL BE SUPPLIED BY THE CITY/ODOT, AND THE CONTRACTOR SHALL IMPLEMENT THEM IN THE FIELD.

- B) NEW OR REUSED SIGNAL INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE CITY SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED 24 HOURS A DAY, 7 DAYS A WEEK.

THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK.

ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON AS POSSIBLE THEREAFTER.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHEN MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE CITY MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE CITY FOR POLICE SERVICES AND MAINTENANCE SERVICES BY THE CITY SHALL BE DEDUCTED FROM MONEYS DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

WHEN THE TRAFFIC SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT FOR MORE THAN 10 MINUTES, INTERSECTION SHALL BE PROTECTED BY OFF DUTY POLICE OFFICER, HIRED BY THE CONTRACTOR. THIS WORK SHALL BE PERFORMED ANY TIME ON MONDAY THROUGH FRIDAY AFTER 8:00 PM WITH TRAFFIC SIGNAL BACK IN OPERATION BY 6:00 AM THE NEXT DAY OR SATURDAY THROUGH SUNDAY WITH THE TRAFFIC SIGNAL BACK IN OPERATION BY 6:00 AM ON MONDAY MORNING.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.

PAYMENT FOR THIS ITEM SHALL INCLUDE ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

**TRAFFIC SIGNAL MODIFICATIONS:**

IN ADDITION TO THE PLAN NOTE FOR MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATIONS, THE CONTRACTOR SHALL MAINTAIN AND KEEP OPERATIONAL THE EXISTING TRAFFIC SIGNAL UNTIL ALL OTHER NEW EQUIPMENT HAS BEEN INSTALLED AND IS FUNCTIONAL.

WORK SHALL INCLUDE ANY MODIFICATIONS TO EXISTING OR TEMPORARY TRAFFIC SIGNAL INSTALLATIONS AS REQUIRED BY CHANGES IN CONSTRUCTION OR OPERATIONAL CONDITIONS IN THE PROJECT AREA THROUGHOUT THE CONTRACT PERIOD.

THIS SHALL INCLUDE RELOCATIONS, REMOVALS, AND COVERING OF VEHICULAR/ PEDESTRIAN SIGNAL HEADS; COVERING OF ILLUMINATED/REFLECTORIZED SIGNS; TIMING ADJUSTMENTS, AND THE INSTALLATION OF ANY TEMPORARY SIGNAL EQUIPMENT AND TEMPORARY DETECTION TO SATISFY THE SAFETY AND OPERATIONAL CONDITIONS THROUGHOUT THE PROJECT.

THE USE OF EXISTING SIGNAL POLES OR INSTALLATION OF TEMPORARY OR PROPOSED SIGNAL POLES WILL BE PERMITTED TO MAINTAIN THE SIGNAL. ANY NECESSARY POLE GUYS SHALL BE INSTALLED. WHEN INSTALLING FOUNDATIONS IN CLOSE PROXIMITY TO EXISTING POLES OR PEDESTALS, PROVIDE SHORING AND OR BRACING, AS MAY BE REQUIRED TO PREVENT MOVEMENT OF THE EXISTING POLE.

THIS WORK SHALL BE PERFORMED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PAYMENT FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

**NOTICE OF CONSTRUCTION**

THE CONTRACTOR SHALL NOTIFY THE CITY OF CINCINNATI TRAFFIC DEPARTMENT AT 513-352-2366, TWO (2) WEEKS IN ADVANCE TO THE START OF CONSTRUCTION OF THE TEMPORARY DUAL LEFT TURN MOVEMENT ON PADDOCK ROAD ONTO THE I-75 RAMP.

**ITEM 632, VEHICULAR SIGNAL HEAD, (LED), BLACK, BY TYPE, POLYCARBONATE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF THE ODOT CMS 632 AND 732, AND THE CITY OF CINCINNATI STANDARD 1327 THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY FOR SPAN WIRE MOUNTED SIGNALS:

**LAMPS:**

LED, LIGHT EMITTING DIODE, SIGNAL LAMP UNITS SHALL MEET THE REQUIREMENTS OF CMS 732.04-C. ALL LAMP UNITS SHALL BE THE 12 INCH SIZE. LED SIGNAL LAMP UNITS SHALL BE PROVIDED FOR ALL SIGNAL LENS TYPES.

**SIGNAL SECTION:**

1. SPAN WIRE MOUNTED SIGNAL HEADS SHALL BE CONSTRUCTED BLACK OF POLYCARBONATE PLASTIC WITH BLACK VISORS AND MEET ITE SPECIFICATIONS.
2. PIPE SPACERS AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC MAY USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM.
3. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

**MOUNTING HARDWARE:**

1. WHEN SIGNAL HEADS ARE SUSPENDED FROM SPAN WIRE AND ARE NOT RIGIDLY MOUNTED THEY SHALL BE PROVIDED WITH A PIVOT AND LOCK BALANCE ADJUSTER. ALL BALANCE ADJUSTERS SHALL HAVE A MINIMUM THREE QUARTER INCH (19 MM) EYE BOLT AND A THREE QUARTER INCH (19 MM) WIDE SLOT. EYE BOLTS ARE CAST FROM 316 STAINLESS STEEL AND PROVIDED WITH A SATIN FINISH. THREE QUARTER INCH (19 MM) BODY HALVES ARE CAST FROM A MINIMUM 65-45-12 DUCTILE IRON AND PROVIDED WITH A BRIGHT ZINC FINISH (ZNI). BALANCE ADJUSTERS SHALL ONLY BE USED WHERE NECESSARY. BALANCE ADJUSTERS SHALL BE USED ON ONE WAY HEADS.
2. ALL UPPER SIGNAL SUPPORT HARDWARE AND PIPING UP TO AND INCLUDING THE WIRE INLET FITTING SHALL BE FERROUS METAL FOR SIGNAL DISPLAYS OF TWO OR MORE SECTIONS.
3. THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT BID PRICE PER EACH NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, DISCONNECT HANGERS, CLOSURE CAPS, DIMMERS, AND LAMPS AS SPECIFIED.

**ITEM 632 DETECTOR LOOP, AS PER PLAN**

IN ACCORDANCE WITH ODOT ITEM 632 DETECTOR LOOP, AS PER PLAN, AND SCD TC-82.10, INSTALL LOOP DETECTOR, IN THE PROPOSED, TEMPORARY WEST BOUND LEFT TURN LANE.

LOOP DETECTORS SHALL BE MARKED IN THE FIELD AS PER PLAN PRIOR TO CUTTING THE PAVEMENT, PER TRAFFIC SIGNAL MODIFICATION PLAN.

UPON COMPLETION OF THE DECK REPLACEMENT ON BRIDGE HAM 562-0004L HAS BEEN COMPLETED, THE DETECTOR SHALL BE DISCONNECTED AND ABANDONED IN THE PAVEMENT.

PAYMENT FOR THIS ITEM SHALL BE PER EACH DETECTOR INSTALLED AND WILL INCLUDE ALL SUPPORT AND INCIDENTALS.

**ITEM 632 SIGNALIZATION, MISC.: REMOVAL OF VEHICULAR SIGNAL HEAD FOR STORAGE AND REUSE**

IN ACCORDANCE WITH ODOT ITEM 632, SIGNALIZATION, MISC.: REMOVAL OF VEHICULAR SIGNAL HEAD FOR STORAGE AND REUSE, THE EXISTING NORTHBOUND 5 SECTION SIGNAL HEAD, AT THE INTERSECTION OF PADDOCK ROAD AND RAMPS B/C SHALL BE REMOVED FOR STORAGE, UNTIL THE DECK REPLACEMENT ON BRIDGE HAM 562-0004L HAS BEEN COMPLETED. ONCE THE DECK REPLACEMENT IS COMPLETE, THE 5-SECTION VEHICULAR SIGNAL HEAD OR APPROVED EQUIVALANT SHALL BE REERECTED TO THE PRE-CONSTRUCTION CONFIGURATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STORAGE OF THE VEHICULAR SIGNAL HEAD AND ANY ACCESSORIES ASSOCIATED WITH THE REMOVAL AND SHALL REMAIN IN THE CONTRACTORS YARD UNTIL REERECTION OCCURS. A SURVEY OF THE CONDITION OF THE 5-SECTION SIGNAL HEAD SHALL BE DOCUMENTED BY THE CONTRACTOR AND GIVEN TO THE CITY PRIOR TO THE REMOVAL AND STORAGE OF SIGNAL HEAD. ONCE SIGNAL HEAD IS TO BE REERECTED, THE CONDITIONAL SHALL ONCE AGAIN BE SURVEYED BY THE CONTRACTOR AND GIVEN TO THE CITY IN WRITING.

INCLUDE ALL MOUNTING HARDWARE, INCIDENTALS AND ACCESSORIES SUPPORTING OR PART OF THE EQUIPMENT, WHICH THE CONTRACT DOES NOT SPECIFY TO BE RETAINED IN EQUIPMENT TO BE REMOVED. INCLUDED WITH THIS ITEM OF WORK IS THE REQUIRED MODIFICATION OF EXISTING HARDWARE, WIRING OR REWIRING TO MAINTAIN THE EXISTING EQUIPMENT THE CONTRACT DOES NOT SPECIFY TO BE REMOVED, INTACT AND OPERATIONAL.

WHERE REMOVING EQUIPMENT AS PART OF AN ELECTRICAL ASSEMBLY, ALSO REMOVE ALL EXISTING DEBRIS AND DIRT.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT BID PRICE PER EACH NUMBER OF COMPLETE UNITS REMOVED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, AND INCIDENTALS.

**ITEM 632 SIGNALIZATION, MISC.: TEMPORARY INSTALLATION OF VEHICULAR SIGNAL HEAD**

IN ACCORDANCE WITH ODOT ITEM 632, SIGNALIZATION, MISC.: TEMPORARY INSTALLATION OF VEHICULAR SIGNAL HEADS AND THE CITY OF CINCINNATI ITEM 1315 TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE MODIFICATION OF THE TRAFFIC SIGNAL AT PADDOCK ROAD AND RAMPS B/C IS PART OF THE MAINTENANCE OF TRAFFIC DETOUR AND IS TO BE CONSIDERED AS A TEMPORARY SIGNAL SYSTEM.

THE OPERATION OF THE TEMPORARY VEHICULAR SIGNAL HEADS SHALL FOLLOW THE PHASING SEQUENCE DETAILED ON THE TRAFFIC SIGNAL PLAN SHEET AND THE TIMING, AS PROVIDED BY THE CITY OF CINCINNATI.

ONCE THE DECK REPLACEMENT IS COMPLETE AND THE DETOUR HAS BEEN REMOVED, THE TRAFFIC SIGNAL WILL BE RESTORED TO ITS PRE-CONSTRUCTION DESIGN.

PAYMENT FOR ITEM 632, SIGNALIZATION, MISC.: TEMPORARY INSTALLATION OF VEHICULAR SIGNAL HEADS SHALL BE AS A COMPLETE INSTALLATION AT A UNIT PRICE BID PER EACH INTERSECTION.

INSTALL ALL EQUIPMENT AND MATERIALS THE PLANS SHOW AND DETAIL, AND FURNISH ALL ITEMS EXCEPT THOSE SPECIFIED "INSTALLATION ONLY" OR AS ITEM 1308.01 SPECIFIES. FURNISH MATERIALS AND EQUIPMENT IN ACCORDANCE WITH ALL OF THE PROVISIONS AND SPECIFICATIONS FOR PERMANENT SIGNAL SYSTEMS AS INDICATED HEREIN.

LAST REVISED DATE: 4/9/12

**ITEM 632 SIGNALIZATION, MISC.: RECONFIGURE DETECTOR LOOP**

IN ACCORDANCE WITH ODOT ITEM 632, SIGNALIZATION, MISC.: RECONFIGURE DETECTOR LOOP, THE EXISTING LOOP DETECTOR IN THE WEST BOUND LEFT TURN LANE SHALL BE RECONFIGURED IN THE CONTROLLER, CHANGING THE SETTING FROM PULSE TO MEMORY. BY CITY FORCES.

ONCE THE THE DECK REPLACEMENT ON BRIDGE HAM 562-0004L HAS BEEN COMPLETED THE LOOP DETECTOR SHALL BE SET BACK TO ITS PRE-CONSTRUCTION SETTING.

PAYMENT FOR ITEM 632, SIGNALIZATION, MISC.: RECONFIGURE DETECTOR LOOP SHALL BE AT A UNIT PRICE BID PER EACH LOOP.

FURNISH MATERIALS AND EQUIPMENT IN ACCORDANCE WITH ALL OF THE PROVISIONS AND SPECIFICATIONS FOR PERMANENT SIGNAL SYSTEMS AS INDICATED HEREIN.

**ITEM 632 DOWN GUY, AS PER PLAN**

IN ACCORDANCE WITH ODOT ITEM 632,DOWN GUY, AS PER PLAN, INSTALL A DOWN GUY AT SIGNAL POLES T2 AND T3 TO ACCOMODATE ADDITIONAL (TEMPORARY) SIGNAL HEADS AND REGULATORY SIGNS. THESE DOWN GUYS SHALL REMAIN AS PERMANENT FIXTURES TO THE TRAFFIC SIGNAL POLES AFTER THE TEMPORARY SIGNAL HEADS AND SIGNS HAVE BEEN REMOVED.

PAYMENT FOR THIS ITEM SHALL BE PER EACH DOWN GUY INSTALLED AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, AND INCIDENTALS.

**ITEM 632 SIGNALIZATION, MISC.: REMOVAL OF SIGNAL HEAD DROP PIPE**

IN ACCORDANCE WITH ODOT ITEM 632.22, SIGNALIZATION, MISC.: REMOVAL OF SIGNAL DROP PIPE AND SECTION 450-7 AND FIGURE 498-14 IN THE TRAFFIC ENGINEERS MANUAL, THE MINIMUM DISTANCE FROM THE BOTTOM OF THE SIGNAL HEAD TO EXISTING PAVEMENT SHALL BE NO LESS THAN SIXTEEN (16) FEET AND NO MORE THAN EIGHTEEN (18) FEET FROM THE EXISTING PAVEMENT.

SIGNAL HEADS S5 AND S6 FALL BELOW THE MINIMUM REQUIRED CLEAR DISTANCE. REMOVAL OF THE SIGNAL HEAD DROP PIPE AND ATTACHMENT OF THE SIGNAL HEAD TO THE EXISTING SPAN WIRE WILL PROVIDE ENOUGH CLEARANCE TO FULFILL THIS REQUIRED HEIGHT FROM THE BOTTOM OF THE SIGNAL HEADS.

PAYMENT FOR THIS ITEM SHALL BE AT THE CONTRACT UNIT BID PRICE LUMP, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, AND INCIDENTALS.

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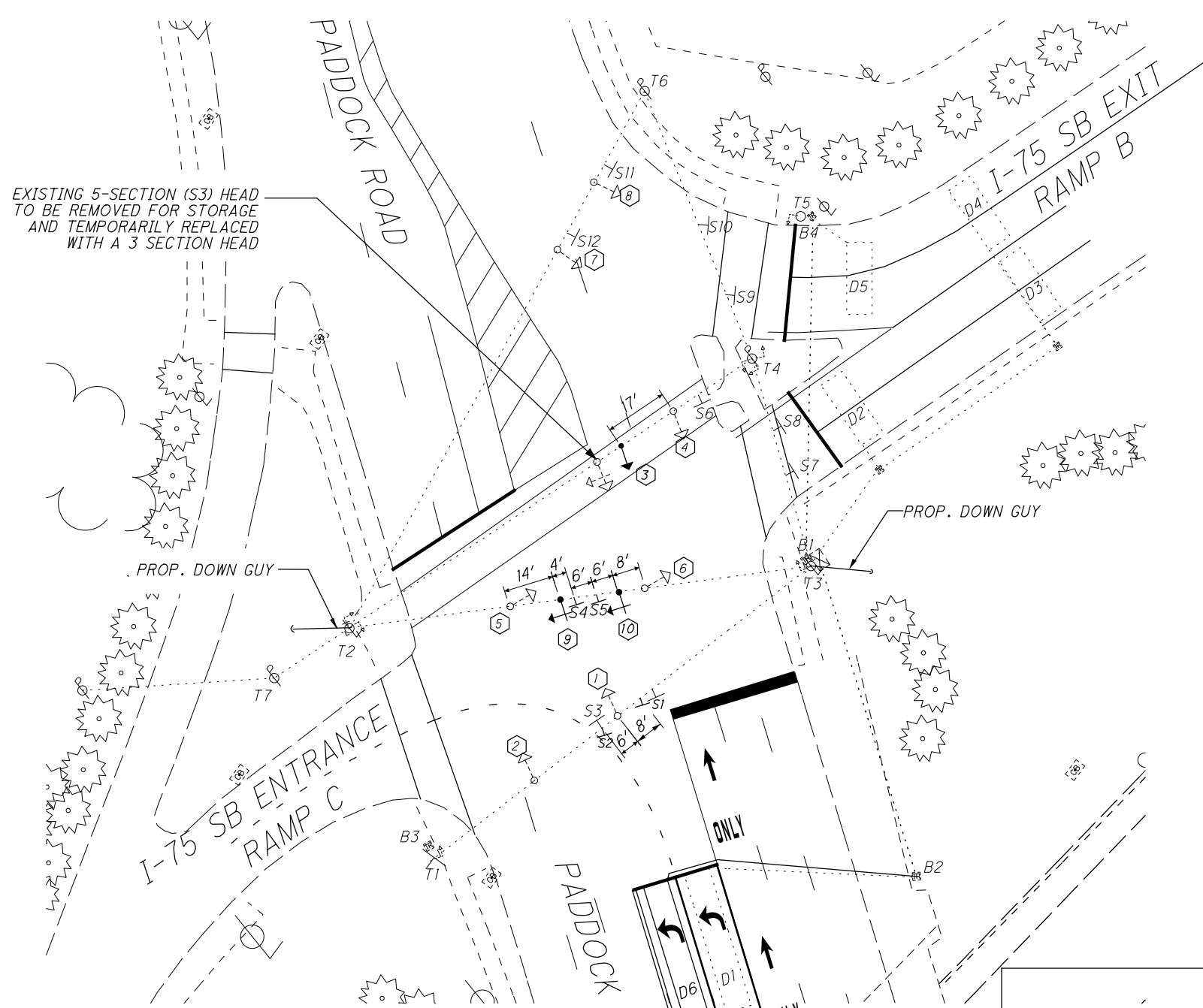
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TRAFFIC SIGNAL GENERAL NOTES

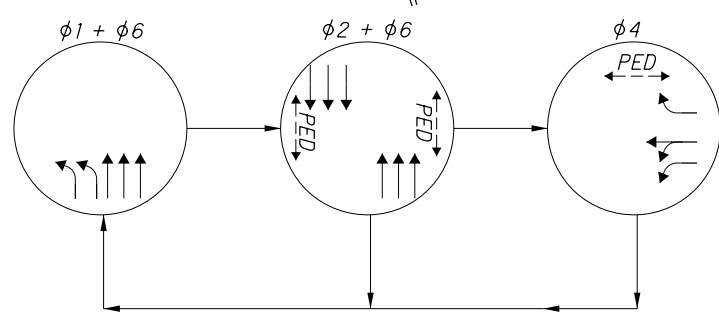
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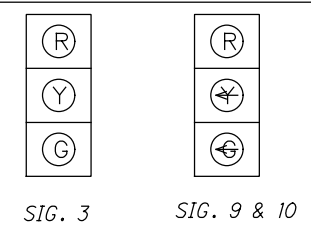


- LEGEND**
- 3-SECTION VEHICLE SIGNAL HEAD
  - ⊕ 3-SECTION VEHICLE SIGNAL HEAD WITH TURN ARROW
  - ⊕ EXISTING 3-SECTION VEHICLE SIGNAL HEAD
  - ⊕ EXISTING 5-SECTION VEHICLE SIGNAL HEAD
  - ⊗ EXISTING CONTROLLER
  - ⊥ PROPOSED SIGN
  - ⊕ EXISTING PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON
  - ▭ PROP. LOOP DETECTOR
  - ⋯ EX. LOOP DETECTOR
  - ⊕ EX. PULL BOX

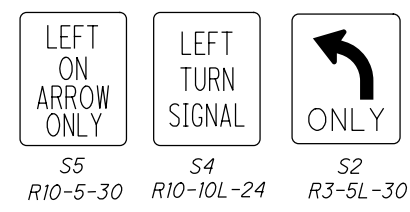


PROPOSED PHASING DIAGRAM

PROP. VEHICULAR SIGNAL HEADS, (LED), 3-SECTION, 12" LENS, 1-WAY (ODOT ITEM 632)



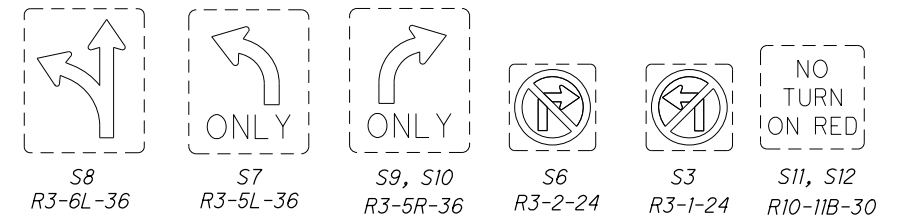
PROPOSED TEMPORARY SIGNS



EXISTING SIGN TO BE RELOCATED



EXISTING SIGNS (TO REMAIN)



**DETECTOR SCHEDULE**

LOOP NO.	SIZE	TURNS	TYPE	DELAY OR EXTENSION (SEC.)	CONNECT TO DETECTOR UNIT NO.	ASSOCIATED CONTROLLER PHASE
D1	EXISTING	EXISTING	PULSE	3	1	1
D2	EXISTING	EXISTING	PULSE	0	2	4
D3	EXISTING	EXISTING	PULSE	0	3	4
D4	EXISTING	EXISTING	PULSE	0	3	4
D5	EXISTING	EXISTING	PULSE	0	3	4
D6	7'x40'	3	PULSE	3	1	1

**CABLE SCHEDULE**

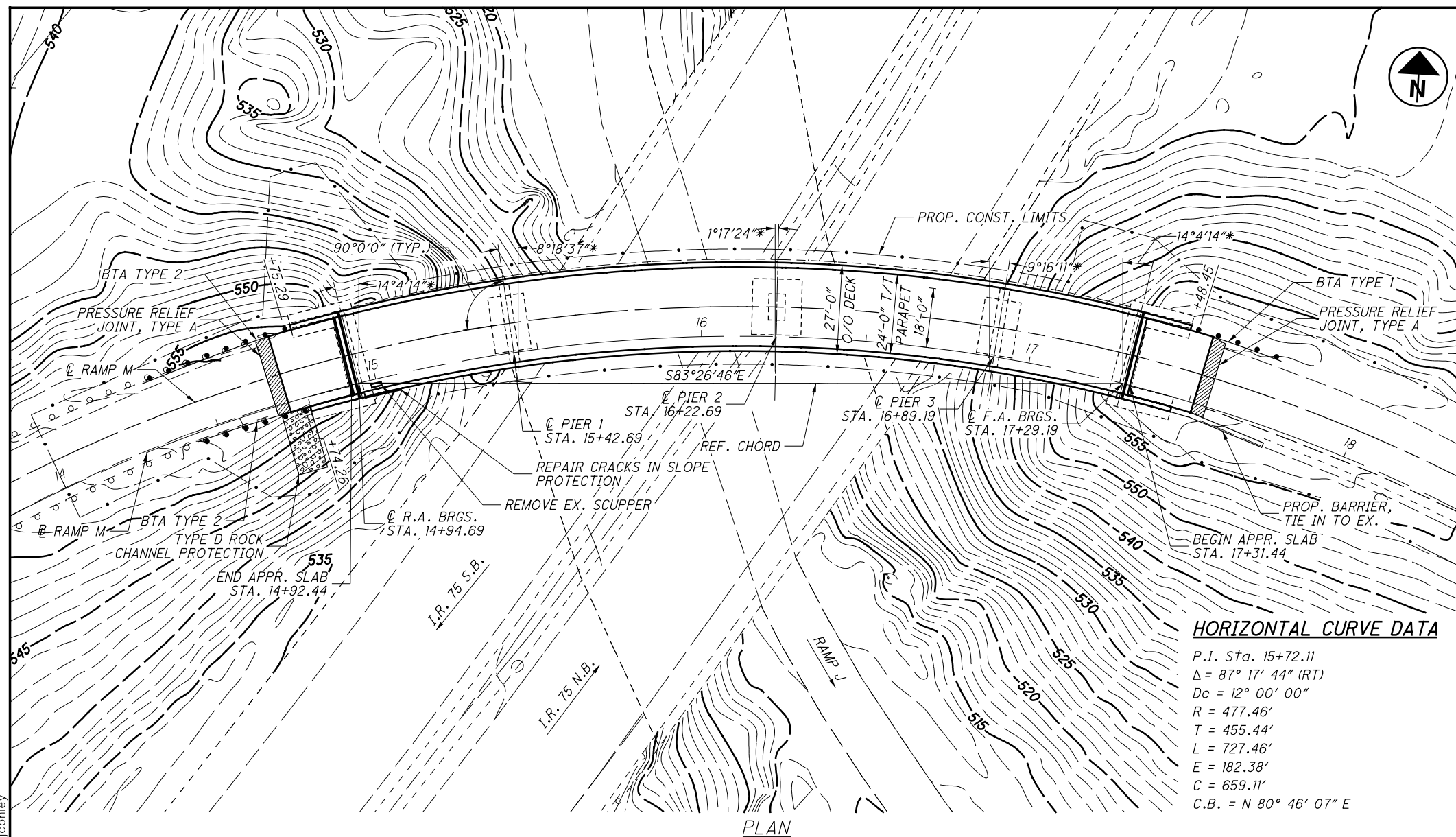
ITEM	CABLE NO.	CONNECTING DEVICES	CABLE TYPE	CABLE ROUTING	FT.
632	1	TRAFFIC SIGNAL 3	7C#14	S3-T4-T3-CONTROLLER	160
632	2	TRAFFIC SIGNAL 9 & 10	7C#14	S9-S10-T3-CONTROLLER	130

**MATERIAL SCHEDULE**

NO.	VEHICULAR SIGNAL HEADS										PEDESTRIAN SIGNAL HEADS									
	1	2	3	4	5	6	7	8	9	10	P1	P2	P3	P4	P5	P6	P7	P8		
T1	EX. STEEL POLE W/GUIDE SIGN	CITY OF CINCINNATI STANDARD DRAWING ES-10-1									CITY OF CINCINNATI STANDARD DRAWING ES-10-1									
T2	EX. STEEL POLE W/LIGHT BRACKET	CITY DESIGN NO. 52028									CITY DESIGN NO. 52028									
T3	EX. STEEL POLE W/LIGHT BRACKET	CITY DESIGN NO. 52028									CITY DESIGN NO. 52028									
T4	EX. STEEL STRAIN POLE	CITY DESIGN NO. 30845									CITY DESIGN NO. 30845									
T5	EX. PEDESTAL	CITY DESIGN NO. 1145									CITY DESIGN NO. 1145									
T6	EX. STEEL STRAIN POLE	CITY DESIGN NO. 30845									CITY DESIGN NO. 30845									
T7	DUKE WOOD POLE	CITY DESIGN NO. N/A									CITY DESIGN NO. N/A									

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PLAN

**HORIZONTAL CURVE DATA**

P.I. Sta. 15+72.11  
 $\Delta = 87^\circ 17' 44''$  (RT)  
 $D_c = 12^\circ 00' 00''$   
 $R = 477.46'$   
 $T = 455.44'$   
 $L = 727.46'$   
 $E = 182.38'$   
 $C = 659.11'$   
 $C.B. = N 80^\circ 46' 07'' E$

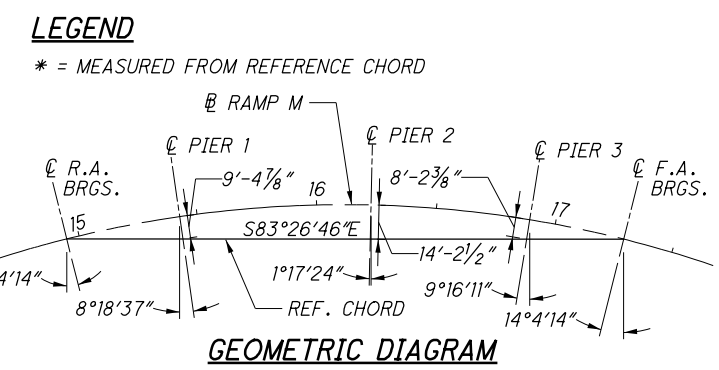
**BENCHMARK DATA**

BM #1 STA. 14+80.88,	ELEV. 535.55',	OFFSET 53.62' RT, MON.
BM #2 STA. 15+26.22,	ELEV. 535.81',	OFFSET 12.27' RT, IPS
BM #3 STA. 16+89.35,	ELEV. 538.98',	OFFSET 26.53' LT, IPS

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 9/33

**NOTES**  
 EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

**DESIGN TRAFFIC:**  
 2010 ADT = 15,300      2030 ADT = 15,550  
 2010 ADTT = 1,836      2030 ADTT = 1,866



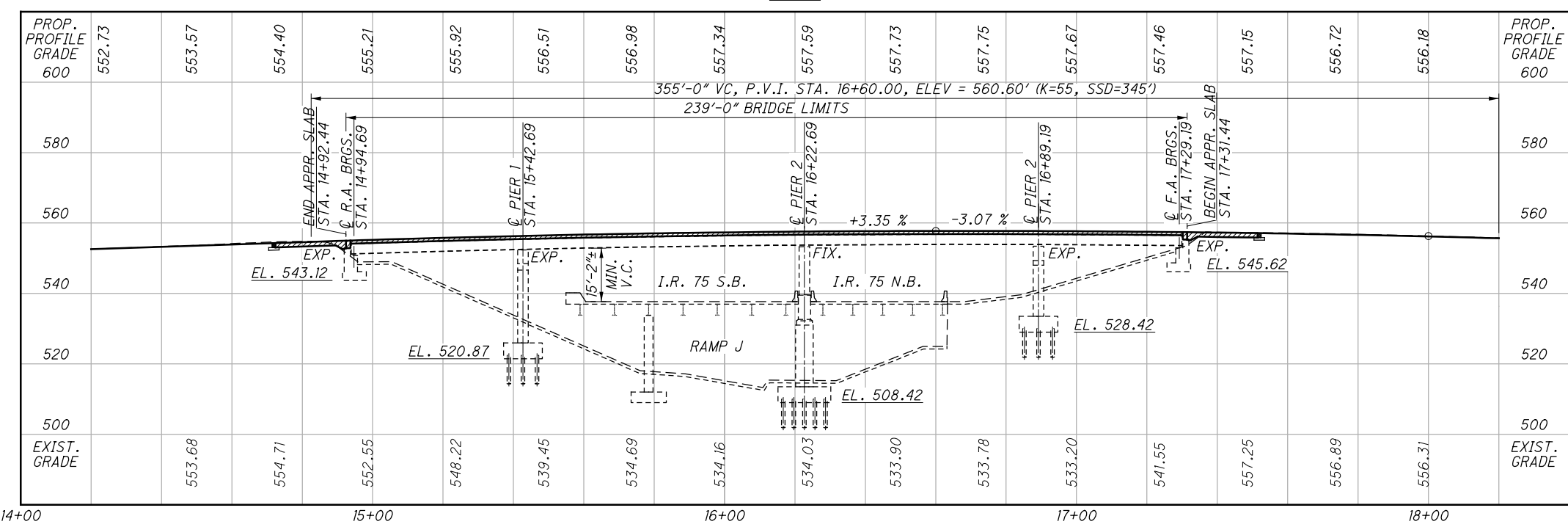
**EXISTING STRUCTURE**

TYPE: CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.  
 SPANS: 48'-0", 80'-0", 66'-6", 40'-0" = 234'-6" C/C BRGS. ALONG RAMP M  
 ROADWAY: 20'-0" WITH TWO 2'-1" F/F SAFETY CURBS  
 LOADING: CF 2000-51  
 SKEW: ALL BEARINGS SET RADIALLY  
 APPROACH SLABS: AS-1-81 (20' LONG)  
 ALIGNMENT: 12° CURVE  
 CROWN: 0.060 FT/FT SUPERELEVATION  
 STRUCTURAL FILE NUMBER: 3113779  
 DATE BUILT: 1962  
 WEARING SURFACE: 2" ASPHALT

**PROPOSED STRUCTURE**

PROPOSED WORK: REPLACEMENT OF EXISTING REINFORCED CONCRETE DECK WITH A COMPOSITE REINFORCED CONCRETE DECK ON THE EXISTING STEEL BEAMS. WORK INCLUDES REPLACING APPROACH SLABS AND EXPANSION JOINT, MODIFYING TOP OF BACKWALL, SEALING CONCRETE SURFACES, AND RETROFITTING THE TOP COVER PLATES WELDED TO THE EXISTING BEAMS.

TYPE: CONTINUOUS STEEL BEAMS WITH COMPOSITE REINFORCED CONCRETE DECK AND SUBSTRUCTURE.  
 SPANS: 48'-0", 80'-0", 66'-6", 40'-0" = 234'-6" C/C BRGS. ALONG RAMP M  
 ROADWAY: 24'-0" F/F PARAPET  
 LOADING: HS20, ALTERNATE MILITARY LOADING, AND FWS = 60 PSF  
 SKEW: RADIAL  
 APPROACH SLABS: AS-1-81 (20' LONG)  
 ALIGNMENT: 12° CURVE  
 CROWN: 0.060 FT/FT SUPERELEVATION  
 LATITUDE: 39° 10' 30" N  
 LONGITUDE: 84° 29' 19" W  
 WEARING SURFACE: 1" MONOLITHIC CONCRETE



PROFILE  
 (SHOWN ALONG RAMP M)

APPROVED FOR CONSTRUCTION  
 LAST REVISED DATE: 3/9/12

DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 714-0270 FAX (614) 714-0323	DATE 1/2012	DESIGNED T.M.L.	CHECKED J.W.E.	HAMILTON COUNTY STA. 14+92.44 STA. 17+31.44	SITE PLAN BRIDGE NO. HAM-562-0004 RAMP M OVER IR-75	HAM-562-00.28 PID No. 84444	1/14 20/33
REVIEWED J.E.P.	STRUCTURE FILE NUMBER 3113779	DRAWN T.M.L.	REVISED	DESIGNED T.M.L.			

**REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):**

AS-1-81 REVISED 07-19-02  
BR-1 REVISED 07-19-02  
EXJ-4-87 REVISED 07-19-02  
GSD-1-96 REVISED 07-19-02

**AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS(S):**

800-2008 DATED 01-15-10  
843 DATED 04-18-03

**DESIGN SPECIFICATIONS:**

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

**DESIGN LOADING:**

HS20, CASE I AND THE ALTERNATE MILITARY LOADING FUTURE WEARING SURFACE OF 60 PSF

**DESIGN STRESSES:**

CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE, PARAPET, AND APPROACH SLAB)

CONCRETE CLASS QSC1 - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996 GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI

STRUCTURAL STEEL - ASTM A36 GRADE 36 - YIELD STRENGTH 36,000 PSI, ASTM A709 GRADE 50 - YIELD STRENGTH = 50,000 PSI

**DECK PROTECTION METHOD:**

EPOXY COATED REINFORCING STEEL

1" MONOLITHIC WEARING SURFACE

2½" CONCRETE COVER

**DECK PLACEMENT DESIGN ASSUMPTIONS**

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMETERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 1 KIPS FOR A TOTAL MACHINE LOAD OF 8 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103".

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65".

**DECK SLAB CONCRETE QUANTITY:**

THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM/GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 2 INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM/GIRDER FLANGE IS ±3 INCHES.

THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM/GIRDER, FROM THE SURFACE OF THE DECK TO THE BOTTOM OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED STEEL PLATES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.

**ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN:**

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING SIDEWALKS, PARAPETS, RAILINGS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

**PROTECTION OF STEEL SUPPORT SYSTEMS:**

BEFORE DECK SLAB CUTTING IS PERMITTED, THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK SHALL BE DRAWN ON THE SURFACE OF DECK. SMALL DIAMETER PILOT HOLES SHALL BE DRILLED 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. DURING CUTTING OF THE DECK SLAB, CARE SHALL BE TAKEN NOT TO DAMAGE STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE.

**DECK REMOVALS:**

DUE TO THE POSSIBLE PRESENCE OF WELDED ATTACHMENTS TO EXISTING STRUCTURAL STEEL (FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.), CARE SHALL BE TAKEN DURING DECK REMOVAL TO AVOID DAMAGING STRINGERS WHICH ARE TO REMAIN. STRINGERS DAMAGED BY THE CONTRACTOR'S REMOVAL OPERATIONS SHALL, AT NO COST TO THE PROJECT, BE REPLACED OR REPAIRED. PROPOSED REPAIRS, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, SHALL BE SUBMITTED IN WRITING FOR REVIEW AND APPROVAL BY THE DIRECTOR.

**EXTRANEOUS MEMBERS:**

EXISTING EXTRANEOUS MEMBERS (I.E., FINISHING MACHINE AND FORM SUPPORTS, ETC.), AND THE SUPPORT FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) ATTACHED BY WELDED CONNECTION TO THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS SHALL BE REMOVED AND THE FLANGE SURFACES GROUND SMOOTH. GRINDING SHALL BE CAREFULLY DONE AND PARALLEL TO THE FLANGES.

**REMOVAL METHODS:**

CONCRETE MAY BE REMOVED BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER BRIDGE MEMBERS (PRESTRESSED BOX BEAM, I-BEAM, STEEL BEAM, STEEL GIRDER, OR ETC), A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS MAY BE USED AT THE APPROVAL OF THE ENGINEER. REMOVAL METHODS OVER BRIDGE MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STEEL MEMBERS.

**SUBSTRUCTURE CONCRETE REMOVAL:**

REMOVAL SHALL BE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, HAMMERS NOT EXCEEDING 90 POUNDS MAY BE USED UPON THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

**UTILITY LINES:**

THE UTILIT(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

**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 THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS 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 AND THAT HAVE BEEN VERIFIED IN THE FIELD.

**CUT LINE CONSTRUCTION JOINT PREPARATION:**

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, SHALL BE LEFT IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THE JOINT SURFACE AND EXPOSED REINFORCEMENT SHALL BE THOROUGHLY CLEANED 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 ALL PACK AND LOOSE RUST SHALL BE REMOVED. EXISTING CONCRETE SURFACES WHICH NEW CONCRETE WILL BE PLACED AGAINST SHALL BE WET, BUT WITHOUT FREE WATER, AT THE TIME OF CONCRETE PLACEMENT.

**INSPECTION OF EXISTING STRUCTURAL STEEL:**

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES AND/OR TOP FLANGE COVER PLATE FILLET WELDS TO ENSURE THAT THE WELDS, PLATES AND BEAMS OR GIRDERS ARE FREE OF DEFECTS AND CRACKS. IF THE DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS INTERFERE WITH THE ENGINEER'S INSPECTION, THEY SHALL BE REMOVED OR NOT BE ERECTED UNTIL AFTER THE INSPECTION. THE INSPECTION SHALL NOT TAKE PLACE UNTIL AFTER THE TOP FLANGES ARE CLEANED AS SPECIFIED IN SS 842.08, BUT IT SHALL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED. ANY CRACKS FOUND SHOULD BE REPORTED TO THE OFFICE OF STRUCTURAL ENGINEERING, STRUCTURE MAINTENANCE ENGINEER, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

**PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 202, AND TO THE SATISFACTION OF THE ENGINEER.

**ITEM SPECIAL, SUBSTRUCTURE REINFORCING STEEL:**

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

EXISTING REINFORCING STEEL FOUND TO BE CORRODED OR DAMAGED CAN BE REPLACED BY DOWELING IN A NEW BAR OF EQUAL SIZE TO SUCH A LENGTH THAT THE DEVELOPMENT LENGTH REQUIREMENTS OF THE REINFORCING STEEL ARE SATISFIED.

DOWEL BARS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET SPECIFICATIONS WITH RESPECT TO COLOR, CONTINUITY, AND UNIFORMITY MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY MAY BE REPLACED BY MATERIAL WHICH MEET THE SPECIFICATIONS.

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

**ITEM SPECIAL, CONCRETE SLOPE PROTECTION REPAIR:**

SEAL CRACKS IN THE CONCRETE SLOPE PROTECTION WITH AN ODOT APPROVED ALL WEATHER CAULK MEETING ASTM C920, TYPE M.

**ITEM SPECIAL, SEALING OF CONCRETE:**

EPOXY-URETHANE SEALER SHALL BE APPLIED TO THE SURFACES OF THE PARAPET, DECK, AND SUBSTRUCTURE AS SHOWN IN THESE PLANS. THE COLOR OF THE FINISH COAT SHALL BE FEDERAL COLOR STANDARD NUMBER 595B-17778 (LIGHT NEUTRAL, SEMI-GLOSS). PAYMENT SHALL BE INCLUDED IN ITEM SPECIAL - SEALING OF CONCRETE.

**ITEM SPECIAL, REHABILITATE EXISTING BEARINGS:**

REFURBISH ALL EXISTING ABUTMENT BEARINGS. REFURBISHMENT SHALL INCLUDE ALL WORK NECESSARY TO CLEAN, PAINT, AND REALIGN THE EXISTING BEARINGS AND REHABILITATION AT THE ENGINEER'S DISCRETION. REHABILITATION SHALL CONSIST OF REMOVING THE WELDS BY GRINDING AND REPLACING IN KIND IF THE WELDS ARE CRACKED.

REPLACE ANY EXISTING PLATES THAT CANNOT BE SALVAGED BY GRINDING AND REPAINTING. ANY SHIM PLATES, NEW OR EXISTING, SHALL BE WELDED AROUND THE ENTIRE PERIMETER OF THE PLATE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THOROUGH FIELD MEASUREMENTS AND ADJUSTING AS REQUIRED TO ENSURE ALL BEARING SURFACES ARE IN FULL CONTACT. ADJUSTMENTS REQUIRED TO ACHIEVE FULL BEARINGS SHALL NOT CAUSE OTHER BEARINGS TO "FLOAT". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER.

**ITEM SPECIAL, STEEL PAINTING:**

REPAIR ANY DAMAGE TO THE EXISTING PAINT CAUSED BY CONTRACTOR OPERATIONS. REPAIRED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH 514 SPECIFICATIONS. THE COLOR SHALL MATCH THE EXISTING THE EXISTING FASCIA BEAMS.

**ABBREVIATIONS:**

APPR. - APPROACH  
A.S. - APPROACH SLAB  
BRG. - BEARING  
BTW. - BETWEEN  
CLR. - CLEAR  
C.J. - CONSTRUCTION JOINT  
CONST.- CONSTRUCTION  
DIA - DIAMETER  
EL. - ELEVATION  
EX. - EXISTING  
EXP. - EXPANSION  
F.A. - FORWARD ABUTMENT  
F/F - FACE TO FACE  
F.S. - FAR SIDE  
INCR. - INCREMENT  
MAX. - MAXIMUM  
MIN. - MINIMUM  
N.S. - NEAR SIDE  
PEJF - PREFORMED EXPANSION JOINT FILLER  
PROP. - PROPOSED  
R.A. - REAR ABUTMENT  
REF. - REFERENCE  
REQ'D - REQUIRED  
SPA. - SPACED  
T/T - TOE TO TOE  
TYP. - TYPICAL  
VC - VERTICAL CLEARANCE

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DESIGNED T.M.L. CHECKED J.W.E.	DRAWN T.M.L. REVISED	REVIEWED J.E.P.	DATE 1/2012	DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323
		STRUCTURE FILE NUMBER 3113779		
GENERAL NOTES				
BRIDGE NO. - HAM-562-0004 RAMP M OVER IR-75				
HAM - 562 - 0.28 PID No. 84444				
2 / 14				
APPROVED FOR CONSTRUCTION LAST REVISED DATE: 3/9/12				
21 33				

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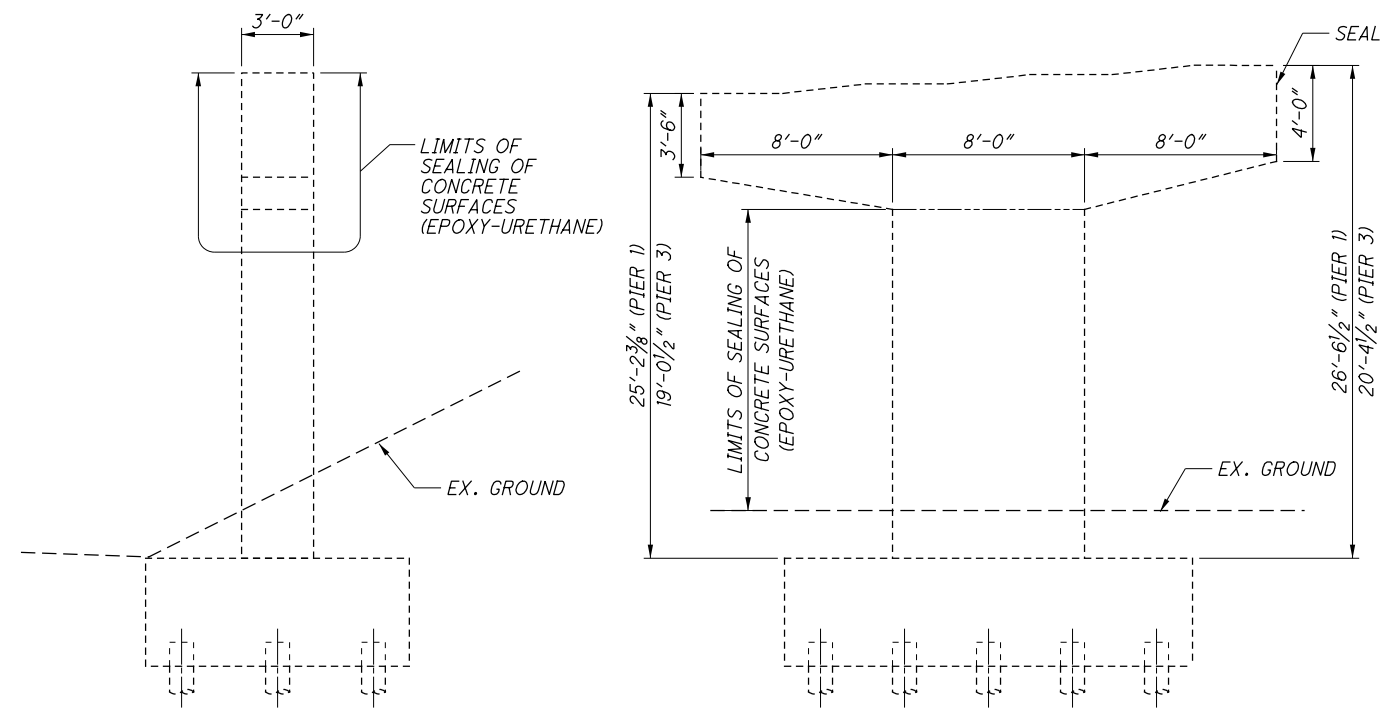
ESTIMATED QUANTITIES								DATE: 2/23/2012
								CALC BY: TML
								CHECKED BY: JWE
ITEM	QUANTITY	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GEN.	SHEET NO.
202	1	LUMP	PORTIONS OF STRUCTURE REMOVED				LUMP	
202	89	SQ YD	APPROACH SLAB REMOVED				89	
451	54	FT	SPECIAL - PRESSURE RELIEF JOINT, TYPE A				54	
509	68,986	POUND	EPOXY COATED REINFORCING STEEL	864		68,122		
510	240	EACH	DOWEL HOLES WITH CEMENT GROUT	240				
512	1,023	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	107	169	747		
512	1	LUMP	SPECIAL - WATERPROOFING, MISC.: REPAIR CONCRETE CRACKS WITH ALL WEATHER CAULK				LUMP	
513	2,450	EACH	WELDED SHEAR CONNECTORS			2,450		
513	2,264	POUNDS	STRUCTURAL STEEL FOR REHABILITATION, AS PER PLAN			2,264		7
514	1	LUMP	FIELD PAINTING OF DAMAGED STEEL				LUMP	
516	54	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	54				
516	65	SQ FT	1" PREFORMED EXPANSION JOINT FILLER				65	
516	8	EACH	REFURBISH BEARING DEVICE				8	
516	1	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE				LUMP	
526	107	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=13")				107	
898	200	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)		200			
898	69	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)		69			
898	10	CU YD	QC/QA CONCRETE, CLASS QSC1, SUBSTRUCTURE (ABUTMENT)		10			

THE ABOVE PAY ITEMS AND QUANTITIES ARE PROVIDED BY THE CONTRACTOR'S CONSULTANT TO THE CONTRACTOR FOR HIS INFORMATIONAL USE. THE ACTUAL PAYMENTS FOR THE ABOVE WORK WILL FALL UNDER REFERENCE ITEMS #10 THROUGH #14 IN THE PROPOSAL.

DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323	DATE 1/2012	REVIEWED JEP	DRAWN TML	DESIGNED TML
STRUCTURE FILE NUMBER 3113779			REVISED	CHECKED JWE
<b>ESTIMATED QUANTITIES</b>				
BRIDGE NO. - HAM-562-0004				
RAMP M OVER IR-75				
<b>HAM-562-0.28</b>				
PID No. 84444				
3 / 14				
22 33				

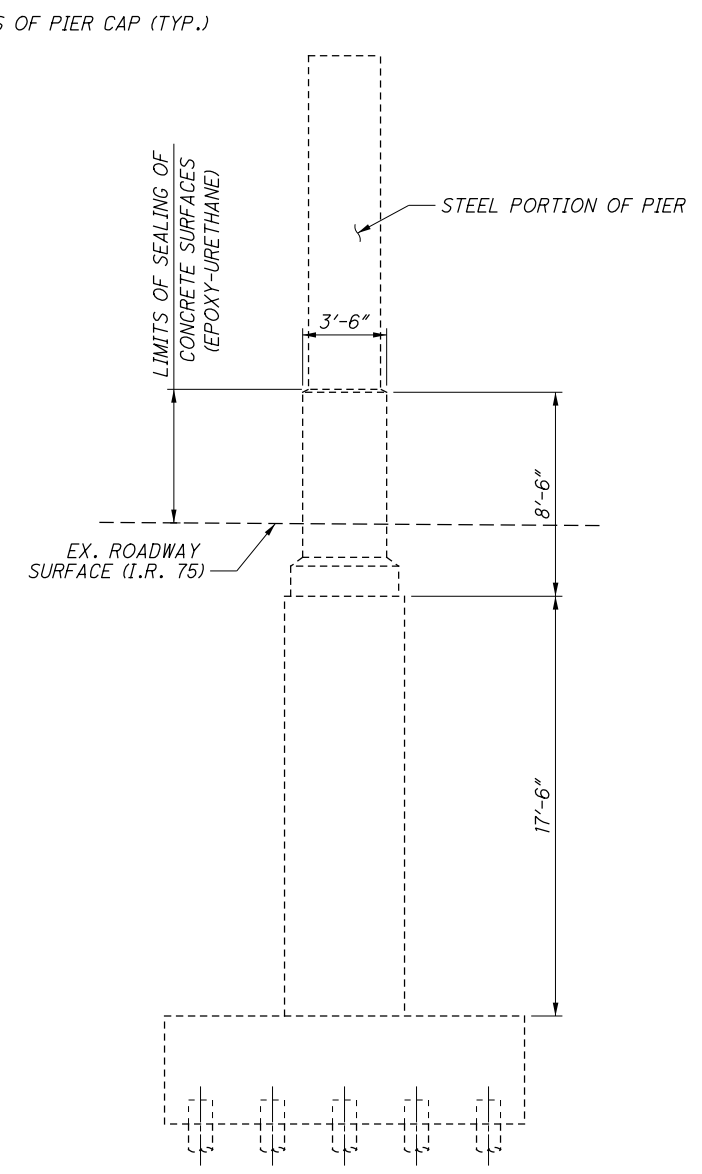
APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12



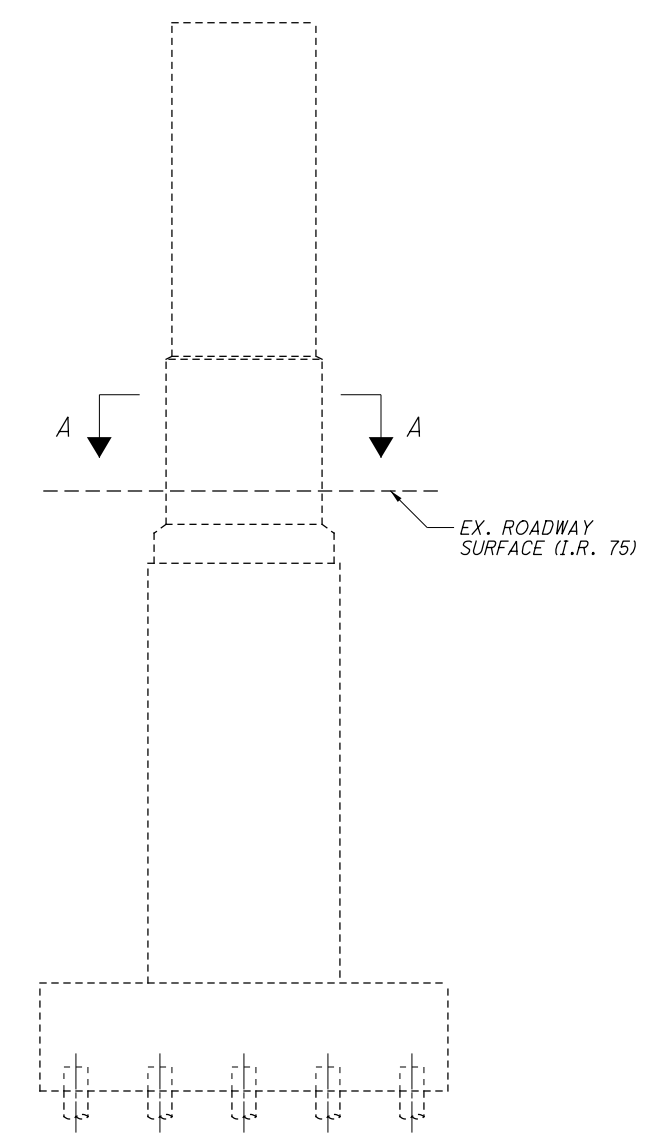


PROFILE - PIERS 1 & 3  
(PIER 1 STA. 15+42.69, PIER 3 STA. 16+89.19)

ELEVATION - PIERS 1 & 3



PROFILE - PIER 2  
(PIER 2 STA. 16+22.69)



ELEVATION - PIER 2

SECTION A-A

**NOTES:**

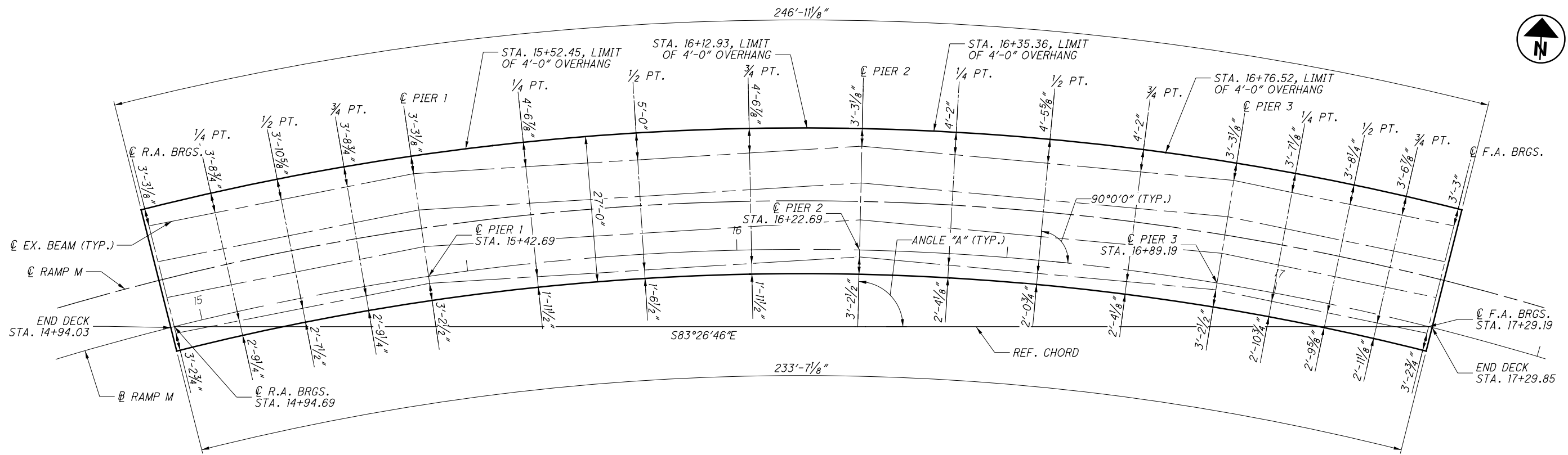
1. REMOVE ANY EXISTING SEALANT REMAINING ON CONCRETE PRIOR TO COATING WITH NEW SEALANT.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

DESIGNED TML CHECKED JWE		DRAWN TML REVISED		REVIEWED JEP	DATE 1/2012	DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 714-0270 FAX (614) 714-0323
PIER DETAILS				STRUCTURE FILE NUMBER 3113779		
BRIDGE NO. - HAM-562-0004				RAMP M OVER IR-75		
HAM-562-0.28				PID No. 84444		
5 / 14				24		33



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FRAMING AND OVERHANG PLAN

LOCATION	R.A. BRGS.	SPAN 1			PIER 1	SPAN 2			PIER 2	SPAN 3			PIER 3	SPAN 4			F.A. BRGS.
		1/4 PT.	1/2 PT.	3/4 PT.		1/4 PT.	1/2 PT.	3/4 PT.		1/4 PT.	1/2 PT.	3/4 PT.		1/4 PT.	1/2 PT.	3/4 PT.	
STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19
ANGLE "A"	104°04'14"	102°37'49"	101°11'25"	99°45'01"	98°18'37"	95°54'37"	93°30'37"	91°06'36"	88°42'36"	86°42'54"	84°43'12"	82°43'31"	80°43'49"	79°27'45"	78°11'42"	77°03'44"	75°55'46"

HORIZONTAL CURVE DATA

P.I. Sta. 15+72.11  
 $\Delta = 87^\circ 17' 44''$  (RT)  
 $D_c = 12^\circ 00' 00''$   
 $R = 477.46'$   
 $T = 455.44'$   
 $L = 727.46'$   
 $E = 182.38'$   
 $C = 659.11'$   
 $C.B. = N 80^\circ 46' 07'' E$

NOTES:

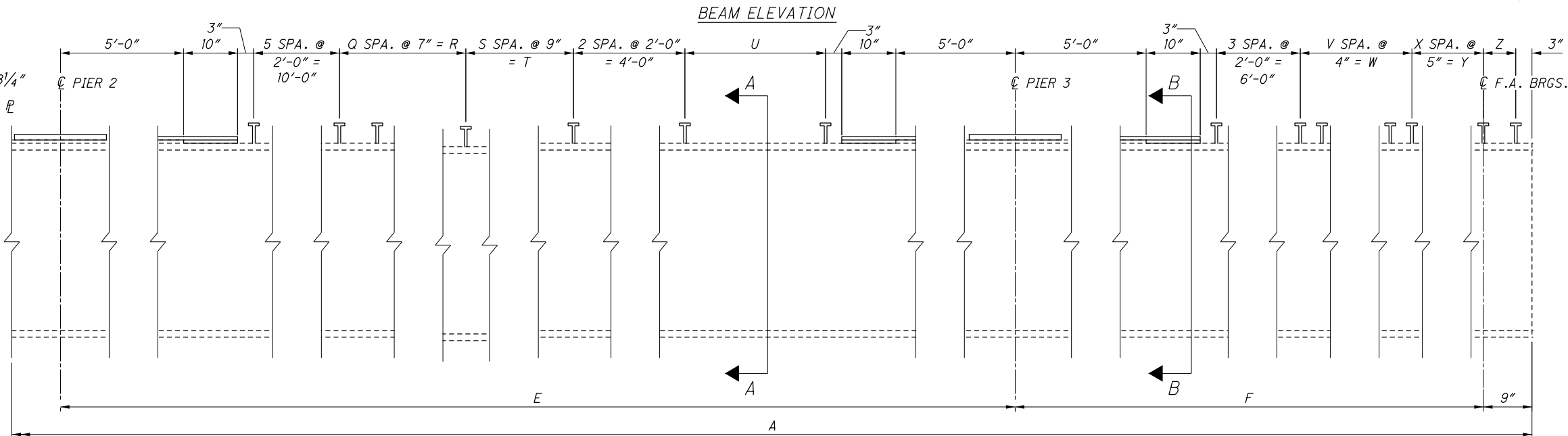
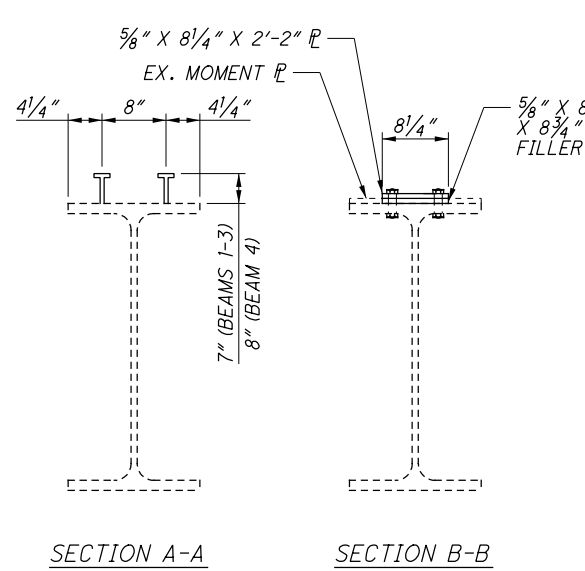
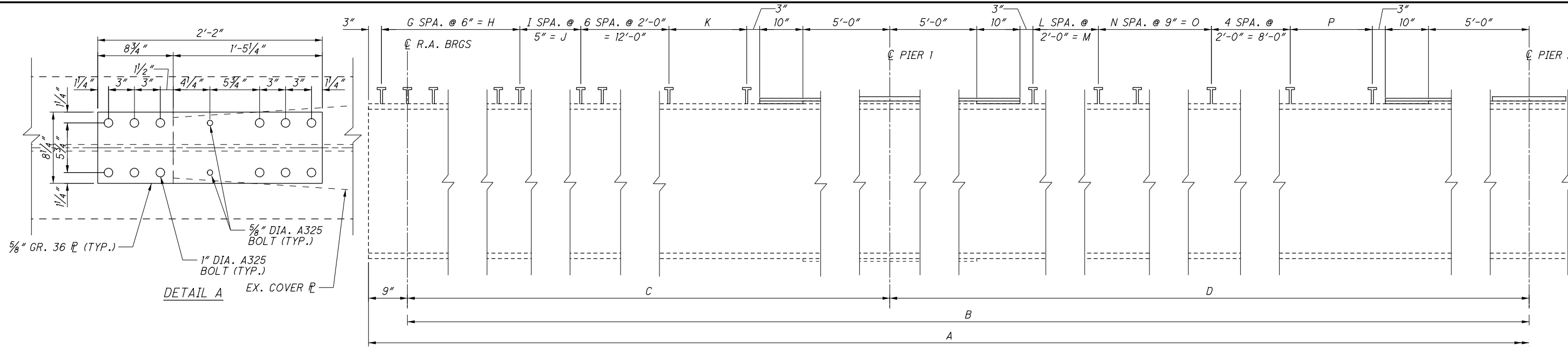
1. ALL DIMENSIONS ARE MEASURED RADIALLY FROM THE  $\odot$ .

APPROVED FOR CONSTRUCTION  
 LAST REVISED DATE: 3/9/12

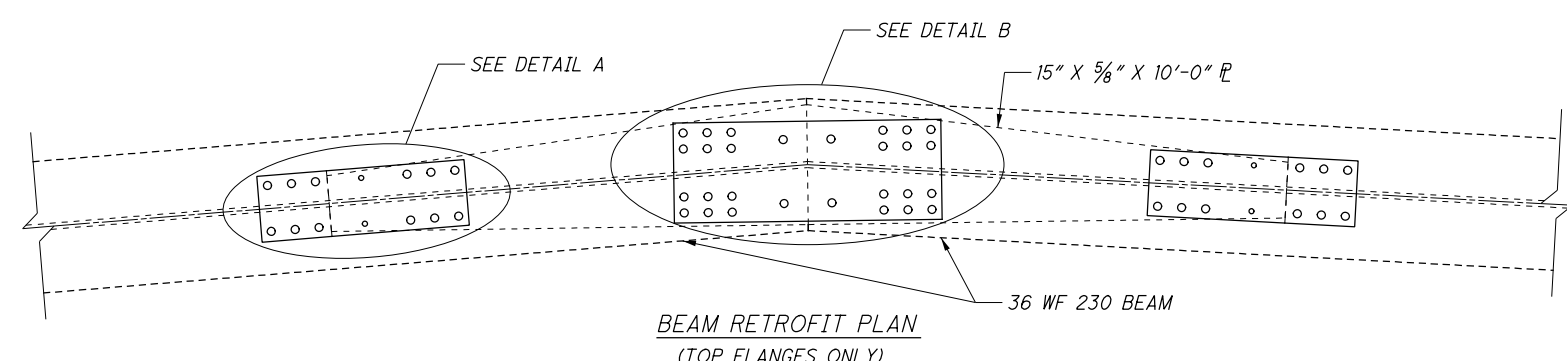


DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323	DATE 1/2012
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	DRAWN TML
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DECK OVERHANG PLAN BRIDGE NO. - HAM-562-0004 RAMP M OVER IR-75	
HAM-562-0.28 PID No. 84444	
6 / 14	
25 33	

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BEAM DIMENSIONS																										
BEAM	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	245'-3 3/16"	243'-9 3/16"	49'-10 15/16"	83'-1 9/16"	69'-1 7/16"	41'-7 1/4"	40	20'-0"	26	10'-10"	1'-5 15/16"	4	8'-0"	71	53'-3"	1'-8 9/16"	32	18'-8"	31	23'-3"	1'-0 7/16"	39	13'-0"	40	16'-8"	0'-4 1/4"
2	241'-11 1/16"	240'-5 1/16"	49'-2 3/4"	81'-11 7/8"	68'-2 1/16"	41'-0 3/8"	40	20'-0"	25	10'-5"	1'-2 3/4"	4	8'-0"	70	52'-6"	1'-3 7/8"	31	18'-1"	31	23'-3"	0'-8 1/16"	38	12'-8"	40	16'-8"	0'-1 3/8"
3	238'-6 3/4"	237'-0 3/4"	48'-6 1/2"	80'-10 1/8"	67'-2 5/8"	40'-5 1/2"	39	19'-6"	25	10'-5"	1'-0 1/2"	3	6'-0"	72	54'-0"	0'-8 1/8"	32	18'-8"	29	21'-9"	0'-7 5/8"	37	12'-4"	39	16'-3"	0'-3 1/2"
4	235'-2 3/8"	233'-8 3/8"	47'-10 3/16"	79'-8 5/16"	66'-3 3/16"	39'-10 5/8"	39	19'-6"	24	10'-0"	0'-9 3/16"	3	6'-0"	71	53'-3"	0'-3 5/16"	31	18'-1"	29	21'-9"	0'-3 3/16"	36	12'-0"	38	15'-10"	0'-5 5/8"



- NOTES:**
1. DIMENSIONS ARE GIVEN ALONG THE CENTERLINE OF BEAMS.
  2. ALL PLATES SHALL BE THERMALLY CUT PER THE AISC STEEL CONSTRUCTION MANUAL SECTION M2.2.
  3. MINIMUM EDGE DISTANCE OF 1/4" IS TAKEN FROM AASHTO TABLE 6.13.2.6.6-1, FOR GAS CUT EDGES.
  4. SEE SHEET 8/1A FOR DETAIL B.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 4/2/12

DESIGN AGENCY: BARR & PREVOST  
2800 CORPORATE EXCHANGE DR., STE 240  
COLUMBUS, OH 43231  
(614) 74-0270 FAX (614) 74-0323

DATE: 1/2012  
REVIEWED: JEP  
DRAWN: TML  
DESIGNED: TML  
CHECKED: JWE

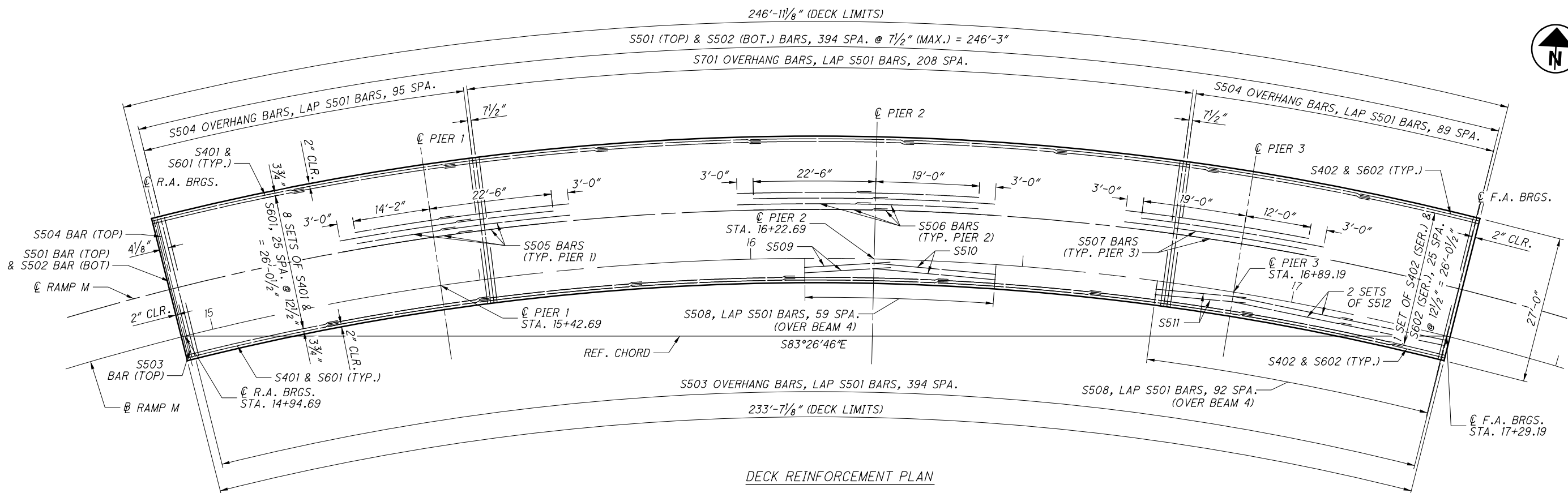
STRUCTURE FILE NUMBER: 3113779

BRIDGE NO. - HAM-562-0004  
RAMP M OVER IR-75

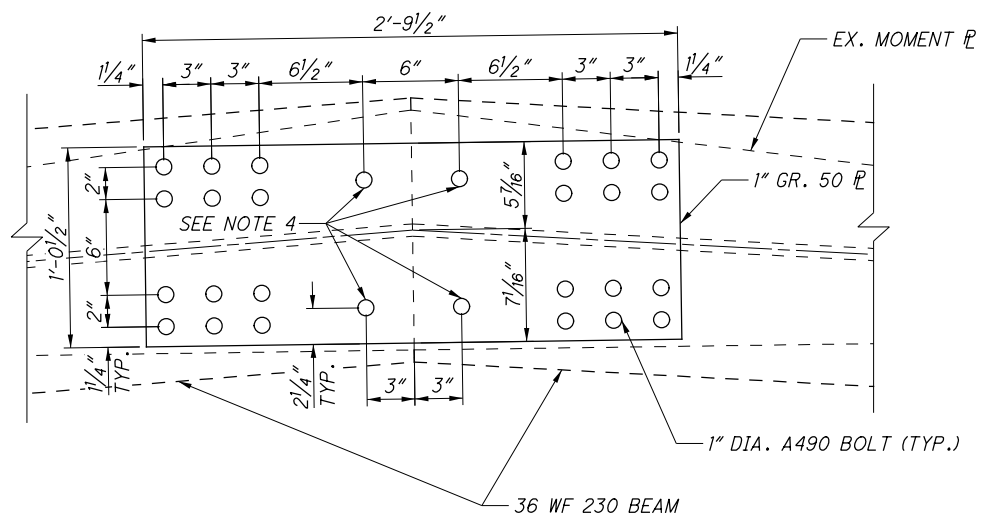
HAM-562-0.28  
PID No. 84444

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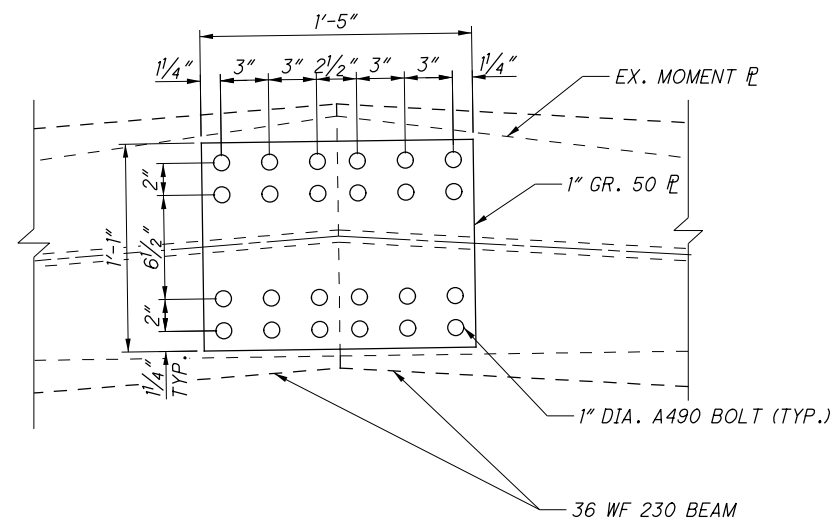


DECK REINFORCEMENT PLAN



PIER 2

DETAIL B



PIER 1 & 3

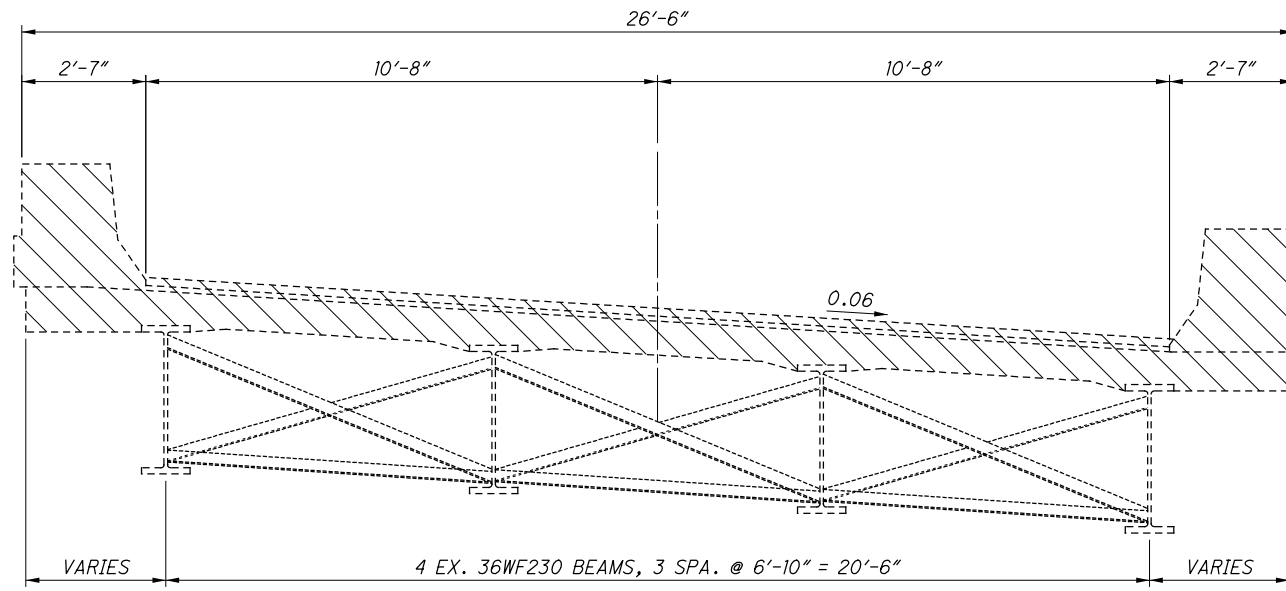
NOTES:

1. ALL TRANSVERSE STEEL TO BE SET RADIALLY.
2. LAP LENGTHS SHALL BE AS FOLLOWS:  
 #4 = 1'-11"  
 #5 = 2'-5"  
 #6 = 2'-11"  
 #7 = 3'-8"
3. DETAIL B SHALL COMPLY WITH THE NOTES SHOWN ON SHEET 7/14.
4. BOLTS SHALL BE 1" DIA. (A325) BOLT WITH FIELD TAP HOLE INTO EXISTING FILL PLATE.

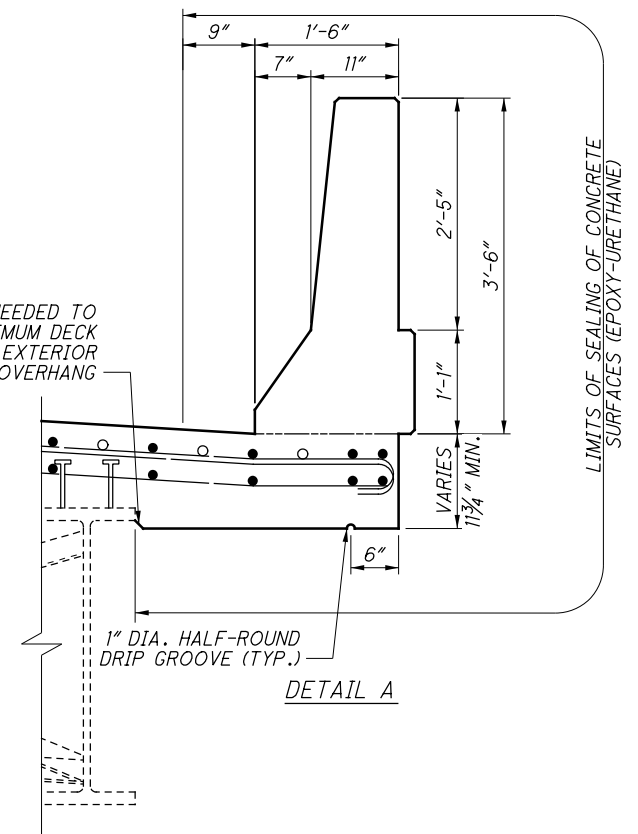
APPROVED FOR CONSTRUCTION  
 LAST REVISED DATE: 4/2/12

DESIGN AGENCY <b>BARR &amp; PREVOST</b> 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323	DATE 1/2012	DESIGNED T.M.L.	DRAWN T.M.L.	REVIEWED J.E.P.	STRUCTURE FILE NUMBER 3113779
<b>DECK REINFORCING PLAN</b>					
BRIDGE NO. - HAM-562-0004 RAMP M OVER IR-75					
<b>HAM-562-0.28</b>		<b>PID No. 84444</b>			
8 / 14					
27 33					

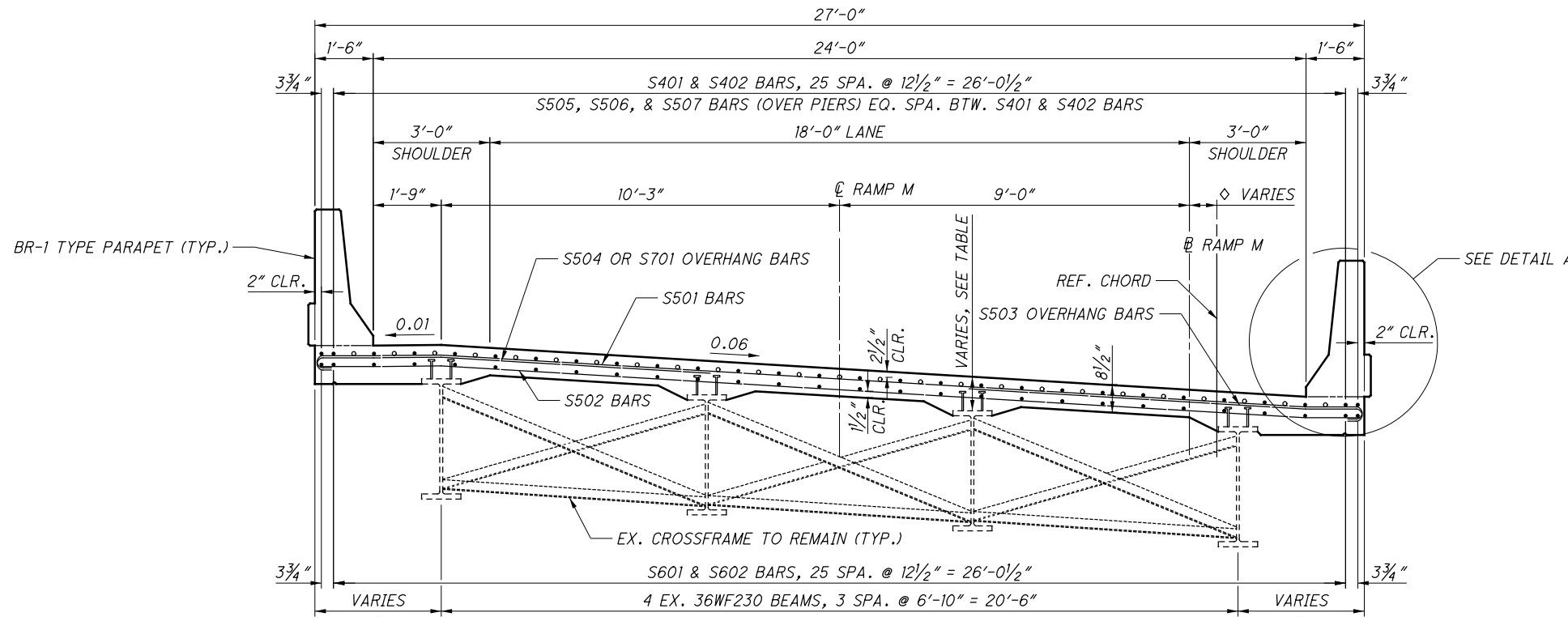
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EXISTING TRANSVERSE SECTION

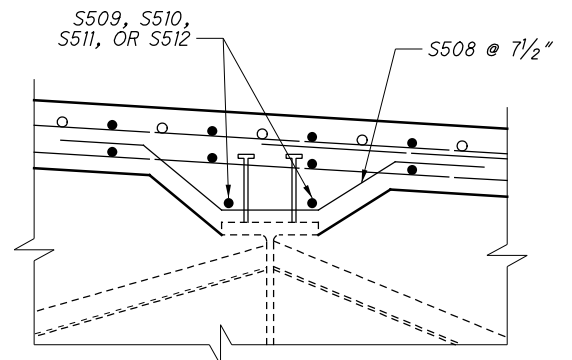


DETAIL A



PROPOSED TRANSVERSE SECTION

◇ DIMENSION VARIES ALONG SKEW  
 SPAN 1, 0'-0" (R.A.) TO 9'-4 1/8" (PIER 1)  
 SPAN 2, 9'-4 1/8" (PIER 1) TO 14'-2 1/2" (PIER 2)  
 SPAN 3, 14'-2 1/2" (PIER 2) TO 8'-2 3/8" (PIER 3)  
 SPAN 4, 8'-2 3/8" (PIER 3) TO 0'-0" (F.A.)



ADDITIONAL HAUNCH REINFORCEMENT  
 (BEAM 4, STA. 16+10.00 TO STA. 16+45.00),  
 (BEAM 4, STA. 16+75.00 TO STA. 17+29.19)

LOCATION	R.A. BRGS.	VARIABLE HAUNCH DEPTH																F.A. BRGS.			
		SPAN 1				PIER 1	SPAN 2				PIER 2	SPAN 3				PIER 3	SPAN 4				
		1/4 SPAN	1/2 SPAN	3/4 SPAN			1/4 SPAN	1/2 SPAN	3/4 SPAN			1/4 SPAN	1/2 SPAN	3/4 SPAN			1/4 SPAN		1/2 SPAN	3/4 SPAN	
BEAM 1	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19			
	HAUNCH THICKNESS	3 15/16"	3 7/8"	3 11/16"	3 9/16"	4 3/16"	2 15/16"	2 3/16"	3 1/8"	4 13/16"	3 13/16"	4 9/16"	2 7/16"	3 3/16"	4 5/8"	4 1/4"	3 3/4"				
BEAM 2	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19			
	HAUNCH THICKNESS	3"	2 7/8"	2 9/16"	2 5/16"	2 7/8"	2 1/16"	2 1/4"	3 1/4"	3 1/16"	2 3/4"	2 1/16"	2 3/16"	3 1/4"	3 11/16"	4 5/16"	3 5/8"				
BEAM 3	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19			
	HAUNCH THICKNESS	2 15/16"	2 11/16"	2 1/2"	2 3/16"	2 7/16"	2"	3"	2 15/16"	3 3/8"	3 13/16"	2 1/4"	2 1/8"	2 7/8"	2 11/16"	3 1/8"	3 5/8"	3 11/16"			
BEAM 4	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19			
	HAUNCH THICKNESS	4 15/16"	4 13/16"	4 13/16"	4 11/16"	5"	4 5/8"	3 3/4"	4 1/8"	5 9/16"	5 15/16"	3 11/16"	4 7/16"	5 9/16"	5 1/4"	5 7/8"	5 7/8"	5 13/16"			

LEGEND:



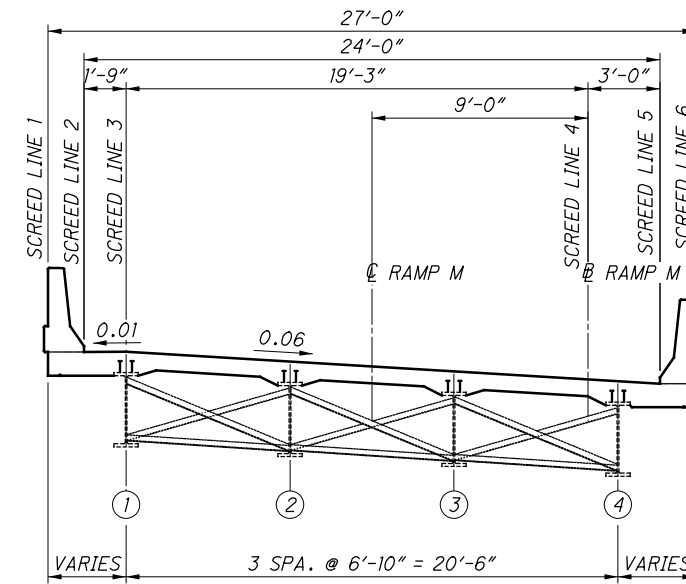
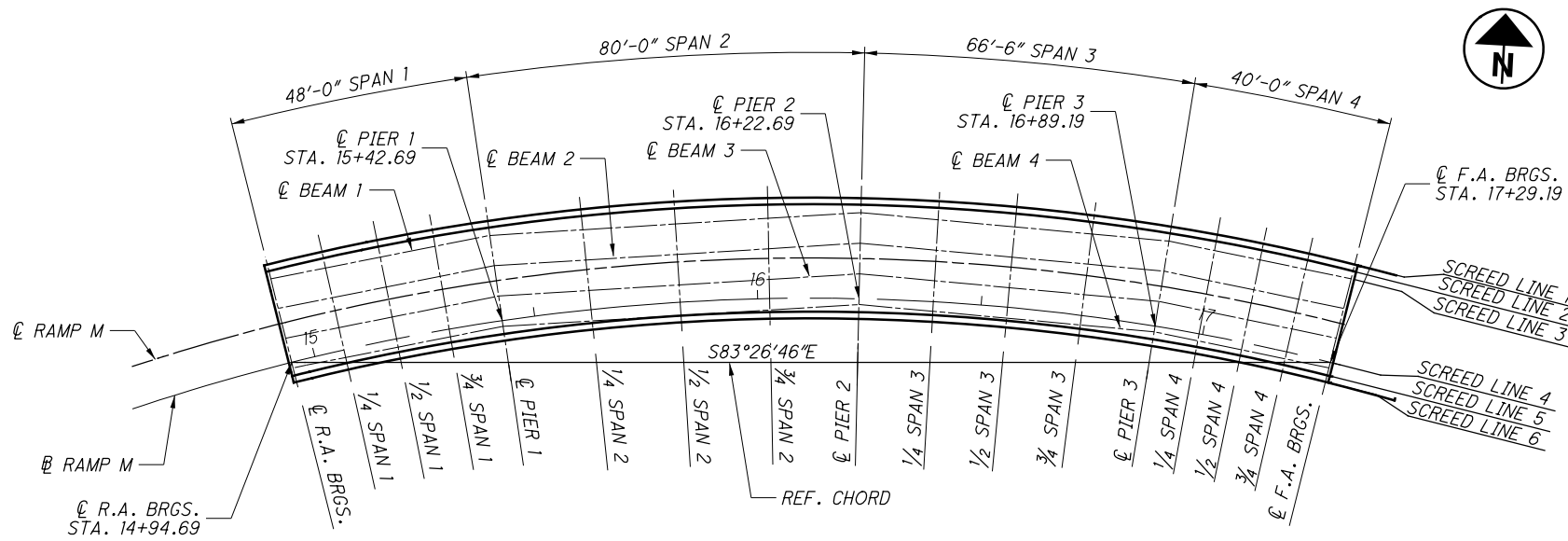
NOTES:

- SEE PARAPET DETAILS SHEET AND STD DRAWING BR-1 FOR ADDITIONAL PARAPET DETAILS.

APPROVED FOR CONSTRUCTION  
 LAST REVISED DATE: 3/9/12

DESIGNED T.M.L.	CHECKED J.W.E.	DRAWN T.M.L.	REVISED REVISED	REVIEWED J.E.P.	DATE 1/2012	DESIGN AGENCY BARR & PREVOST 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323
TRANSVERSE SECTION BRIDGE NO. - HAM-562-0004 RAMP M OVER IR-75						PID No. 84444
HAM-562-0.28						9 / 14
						28
						33

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LOCATION		R. A. BRGS.	SPAN 1			PIER 1	SPAN 2			PIER 2	SPAN 3			PIER 3	SPAN 4			F.A. BRGS.	
			1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		
LEFT EDGE OF DECK SCREED LINE 1	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	556.19	556.55	556.89	557.20	557.48	557.90	558.24	558.51	558.71	558.82	558.88	558.89	558.85	558.80	558.74	558.65	558.55	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.073	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	556.19	556.55	556.89	557.19	557.48	557.94	558.31	558.56	558.71	558.83	558.90	558.91	558.85	558.80	558.74	558.66	558.55	
LEFT CURB SCREED LINE 2	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	556.19	556.55	556.89	557.20	557.48	557.90	558.24	558.51	558.71	558.82	558.88	558.89	558.85	558.80	558.74	558.65	558.55	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.073	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	556.19	556.55	556.89	557.19	557.48	557.94	558.31	558.56	558.71	558.83	558.90	558.91	558.85	558.80	558.74	558.66	558.55	
GRADE BREAK SCREED LINE 3	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	556.20	556.57	556.90	557.21	557.50	557.91	558.26	558.53	558.73	558.84	558.90	558.91	558.87	558.82	558.76	558.67	558.57	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.073	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	556.20	556.57	556.90	557.21	557.50	557.96	558.33	558.57	558.73	558.85	558.92	558.92	558.87	558.82	558.76	558.68	558.57	
PROFILE GRADE SCREED LINE 4	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	555.05	555.41	555.75	556.06	556.34	556.76	557.10	557.37	557.57	557.68	557.74	557.75	557.71	557.67	557.60	557.52	557.42	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.074	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	555.05	555.42	555.75	556.05	556.34	556.81	557.18	557.42	557.57	557.69	557.76	557.77	557.71	557.67	557.60	557.52	557.42	
RIGHT CURB SCREED LINE 5	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	554.87	555.23	555.57	555.88	556.16	556.58	556.92	557.19	557.39	557.50	557.56	557.57	557.53	557.49	557.42	557.34	557.24	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.073	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	554.87	555.24	555.57	555.87	556.16	556.63	557.00	557.24	557.39	557.51	557.58	557.59	557.53	557.49	557.42	557.34	557.24	
RIGHT EDGE OF DECK SCREED LINE 6	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	FINAL DECK ELEVATION	554.87	555.23	555.57	555.88	556.16	556.58	556.92	557.19	557.39	557.50	557.56	557.57	557.53	557.49	557.42	557.34	557.24	
	DEAD LOAD DEFLECTION	0.000	0.004	0.002	-0.004	0.000	0.047	0.073	0.044	0.000	0.007	0.021	0.015	0.000	0.000	0.003	0.004	0.000	
	SCREED ELEVATION	554.87	555.24	555.57	555.87	556.16	556.63	557.00	557.24	557.39	557.51	557.58	557.59	557.53	557.49	557.42	557.34	557.24	

LOCATION		R. A. BRGS.	SPAN 1			PIER 1	SPAN 2			PIER 2	SPAN 3			PIER 3	SPAN 4			F.A. BRGS.	
			1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		1/4 SPAN	1/2 SPAN	3/4 SPAN		
BEAM 1	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	TOP OF HAUNCH ELEVATION	555.50	555.83	556.16	556.48	556.79	557.13	557.44	557.74	558.02	558.08	558.12	558.15	558.16	558.09	558.02	557.94	557.86	
BEAM 2	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	TOP OF HAUNCH ELEVATION	555.08	555.42	555.75	556.07	556.38	556.72	557.04	557.33	557.61	557.67	557.71	557.74	557.75	557.68	557.61	557.53	557.45	
BEAM 3	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	TOP OF HAUNCH ELEVATION	554.67	555.01	555.34	555.66	555.97	556.31	556.63	556.92	557.20	557.26	557.30	557.33	557.34	557.28	557.20	557.12	557.04	
BEAM 4	STATION	14+94.69	15+06.69	15+18.69	15+30.69	15+42.69	15+62.69	15+82.69	16+02.69	16+22.69	16+39.32	16+55.94	16+72.57	16+89.19	16+99.19	17+09.19	17+19.19	17+29.19	
	TOP OF HAUNCH ELEVATION	554.26	554.60	554.93	555.25	555.56	555.90	556.22	556.51	556.79	556.85	556.89	556.92	556.93	556.86	556.79	556.71	556.63	

**NOTES:**

- SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
- TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE BEAM/GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.
- FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

DESIGN AGENCY  
**BARR & PREVOST**  
2800 CORPORATE EXCHANGE DR., STE 240  
COLUMBUS, OH 43231  
(614) 74-0270 FAX (614) 74-0323

DATE  
1/2012

REVISION  
JEP  
STRUCTURE FILE NUMBER  
3113779

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DESIGNED  
TML

BRIDGE NO. - HAM-562-0004

DRAWN  
TML

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CHECKED  
JWE

**HAM - 562 - 0.28**

REVISED

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TOP OF HAUNCH AND SCREED ELEVATIONS

RAMP M OVER IR-75

REVISION

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DESIGNED

PID No. 84444

DRAWN

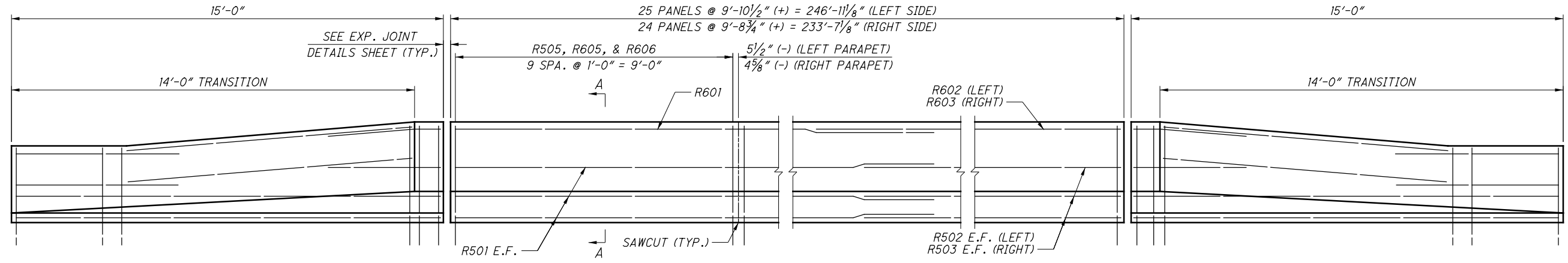
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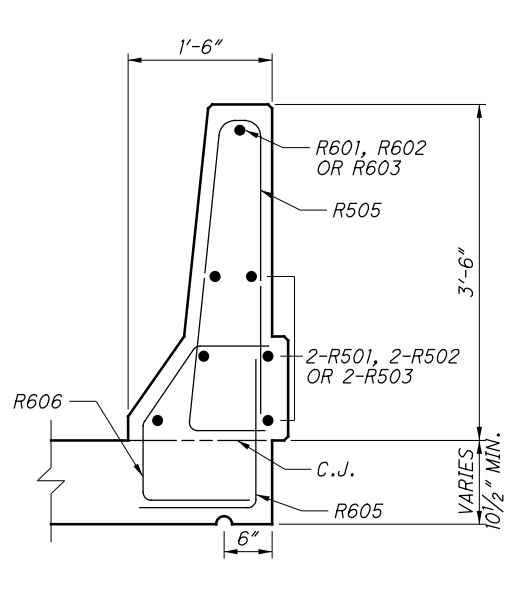
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REVISION

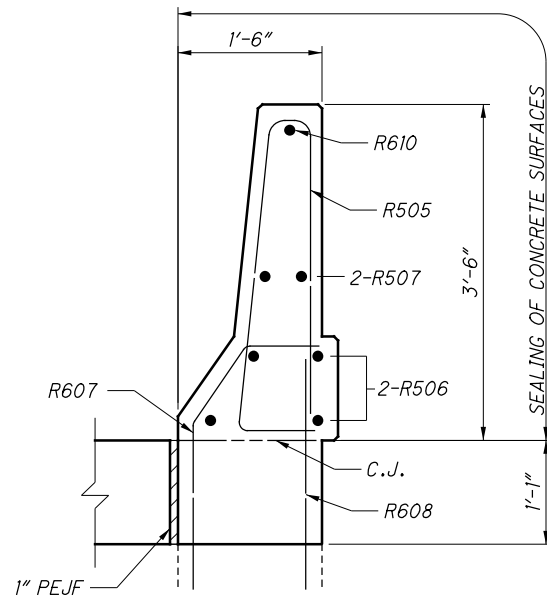
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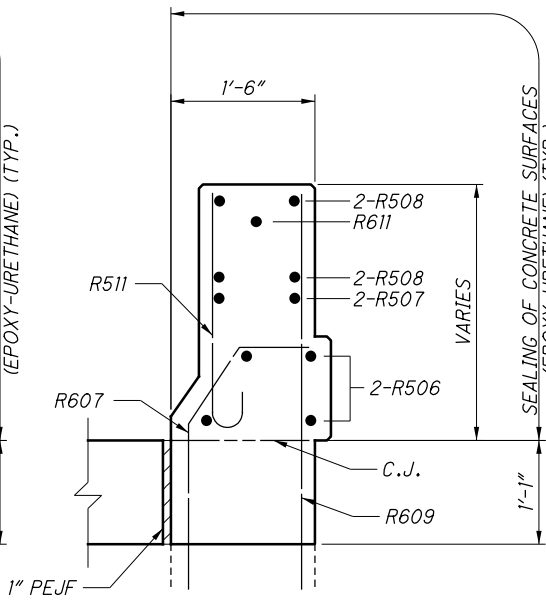
**PARAPET REINFORCING DETAIL**  
(DIMENSIONS ARE GIVEN ALONG THE BACK FACE OF PARAPET)



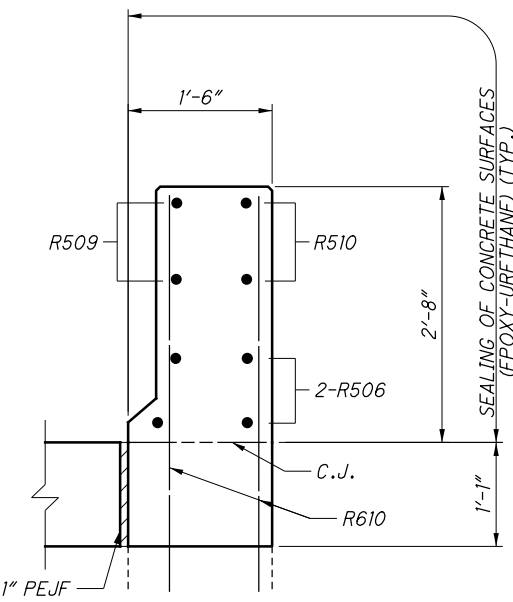
**SECTION A-A**  
(SEE TRANSVERSE SECTION FOR SEALING LIMITS)



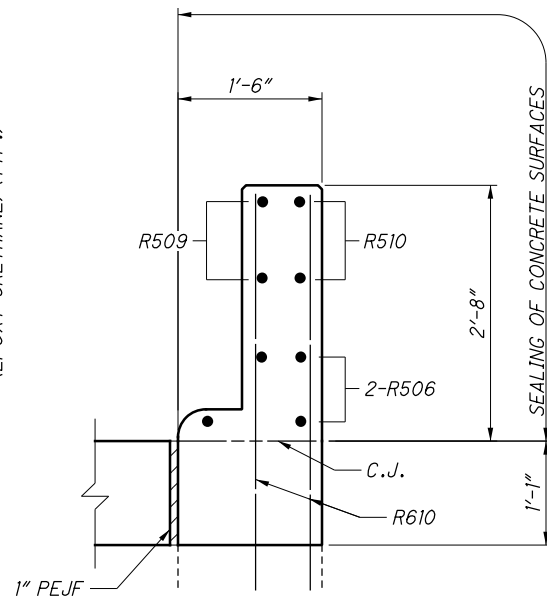
**SECTION B-B**



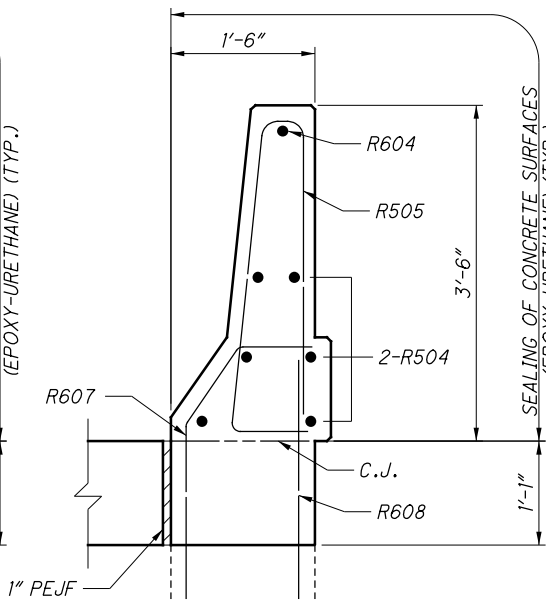
**SECTION C-C**



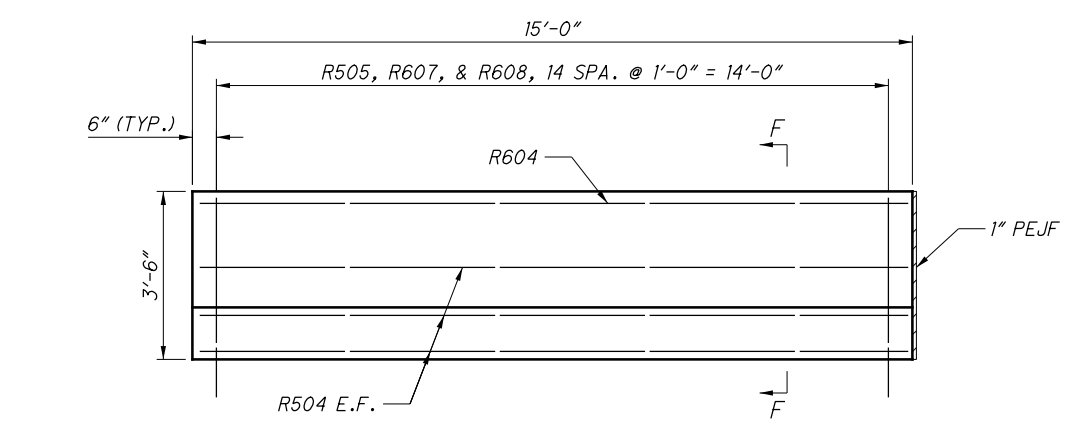
**SECTION D-D**



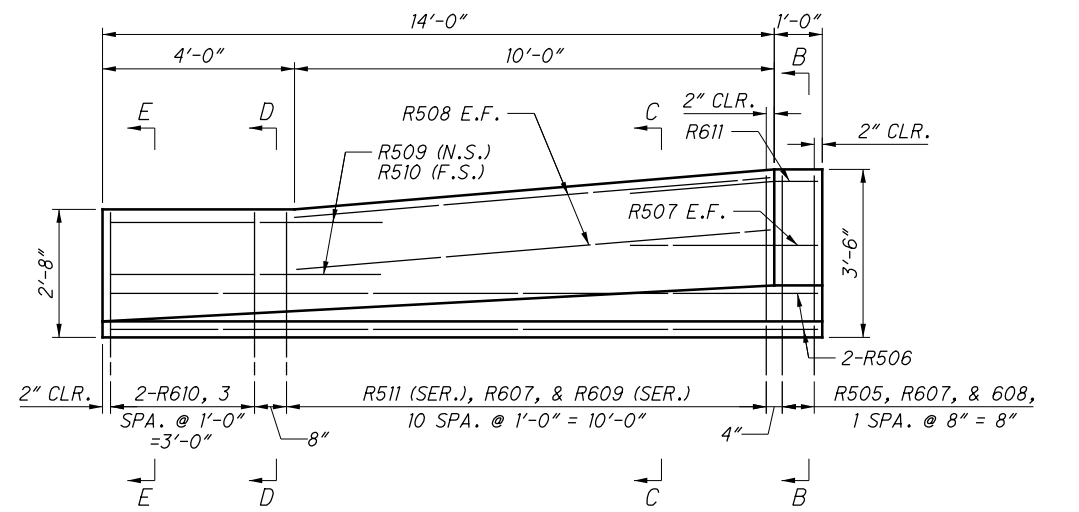
**SECTION E-E**



**SECTION F-F**



**PARAPET REINFORCING DETAIL (F.A. RIGHT SIDE)**  
(DIMENSIONS ARE GIVEN ALONG THE BACK FACE OF PARAPET)



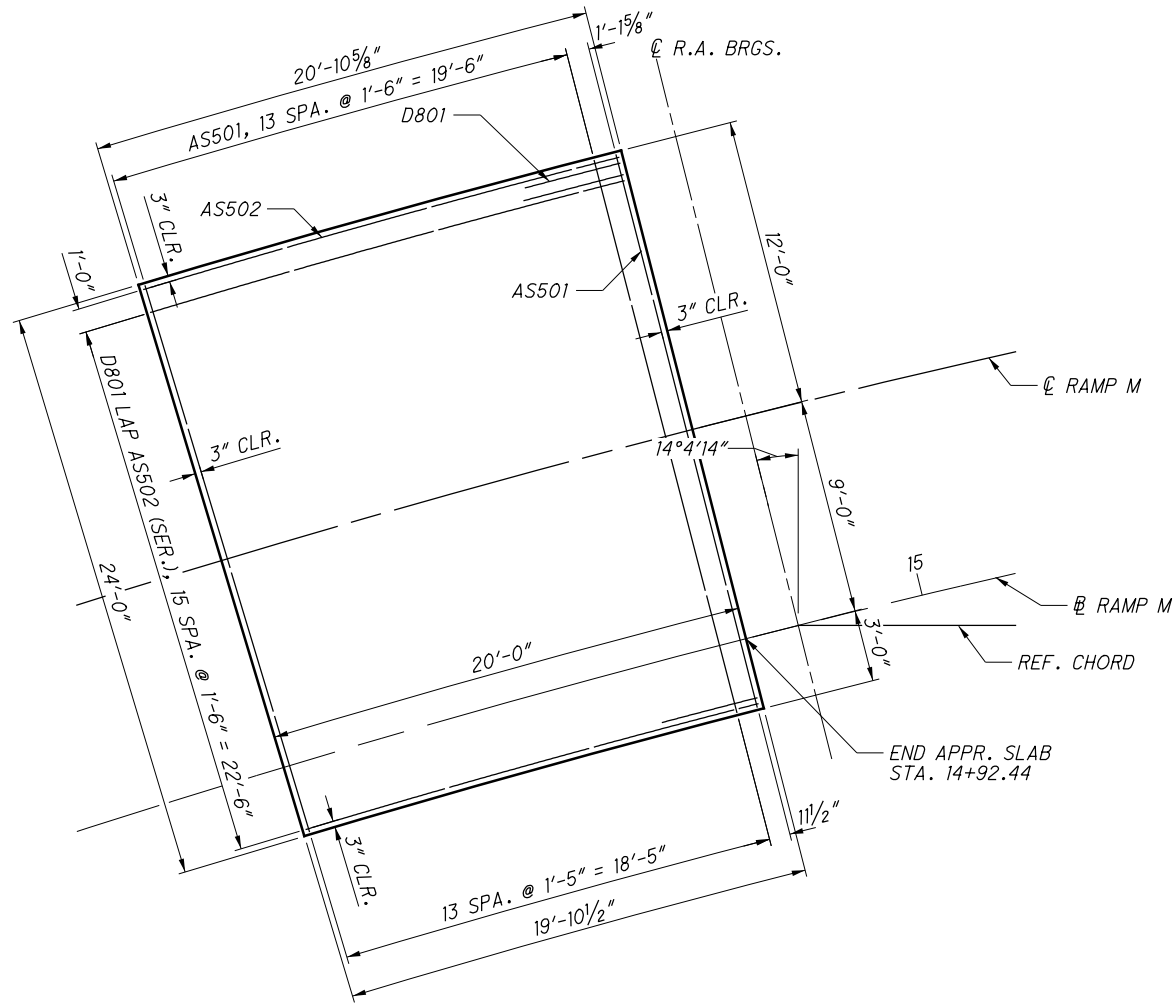
**TRANSITION DETAIL**

**NOTES:**

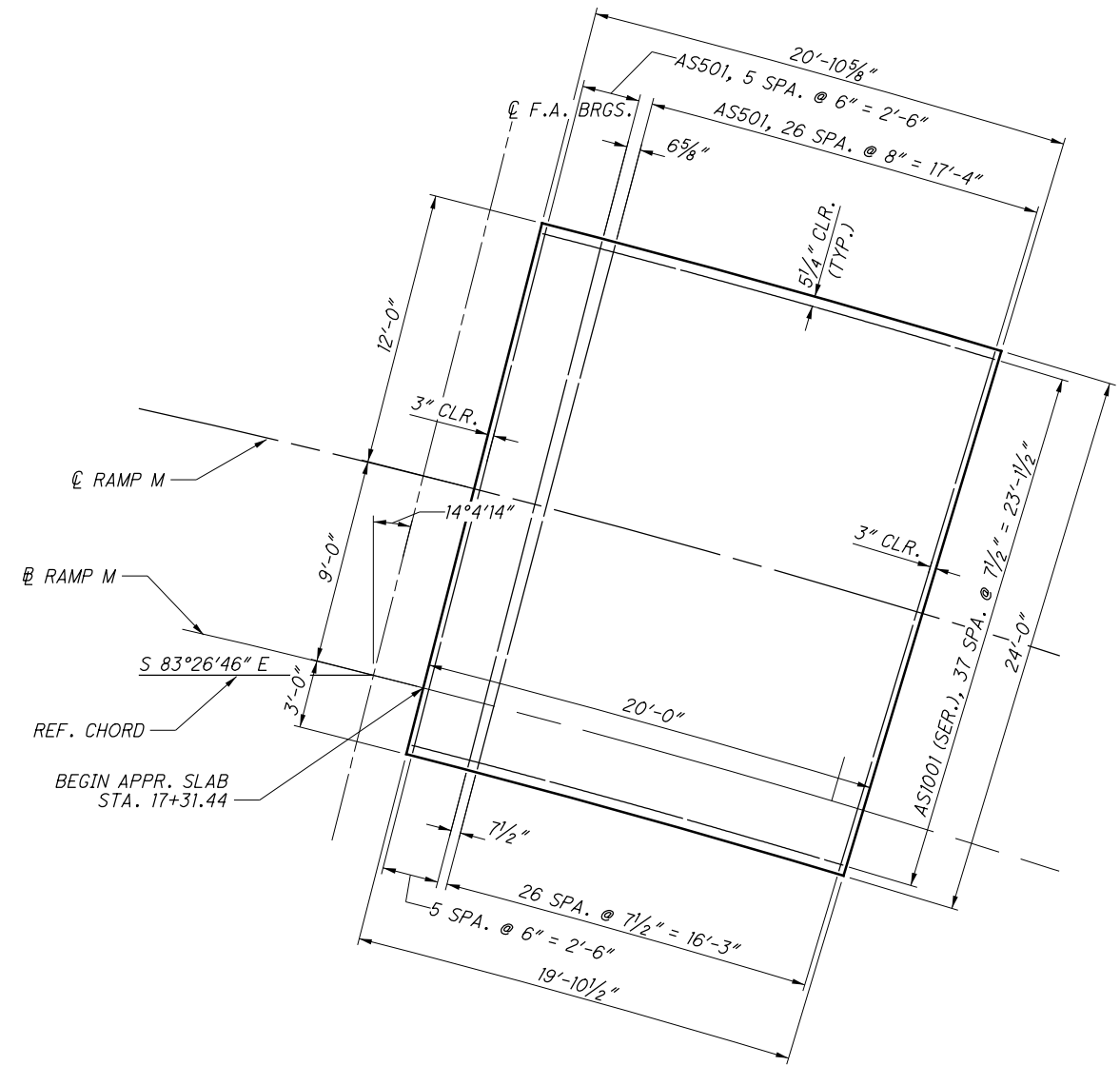
- SEE STD DRAWING BR-1 FOR ADDITIONAL PARAPET DETAILS.
- MINIMUM LAP LENGTHS:  
 #5 = 2'-5"  
 #6 = 2'-11"  
 #6 TOP BAR = 4'-1"
- DOWEL R607, R608, R609, & R610 BARS 1'-9" INTO EXISTING WINGWALL.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

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REINFORCING PLAN - TOP  
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



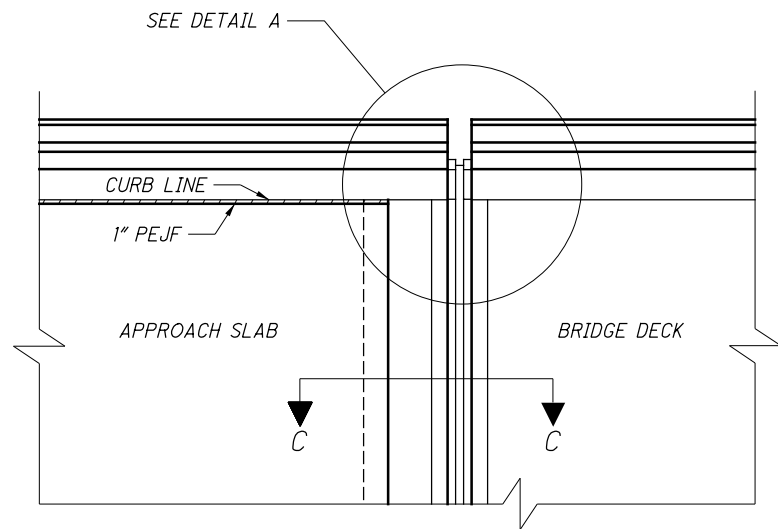
REINFORCING PLAN - BOTTOM  
(FORWARD ABUTMENT SHOWN, REAR ABUTMENT SIMILAR)

- NOTES:
1. SEE STD DRAWING AS-1-81 FOR ADDITIONAL APPROACH SLAB DETAILS.
  2. REINFORCING BARS TO BE LAID RADIALLY.

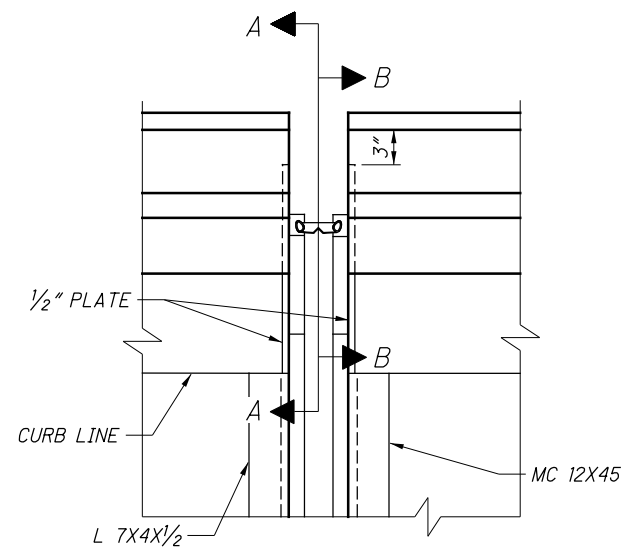
APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

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DESIGNED TML CHECKED JWE		DRAWN TML REVISED		REVIEWED JEP STRUCTURE FILE NUMBER 3113779	DATE 1/2012	DESIGN AGENCY <b>BARR &amp; PREVOST</b> 2800 CORPORATE EXCHANGE DR., STE 240 COLUMBUS, OH 43231 (614) 74-0270 FAX (614) 74-0323
<b>APPROACH SLAB DETAILS</b>						
BRIDGE NO. - HAM-562-0004						
RAMP M OVER IR-75						
HAM-562-0.28						
PID No. 84444						
12 / 14						
31						
33						

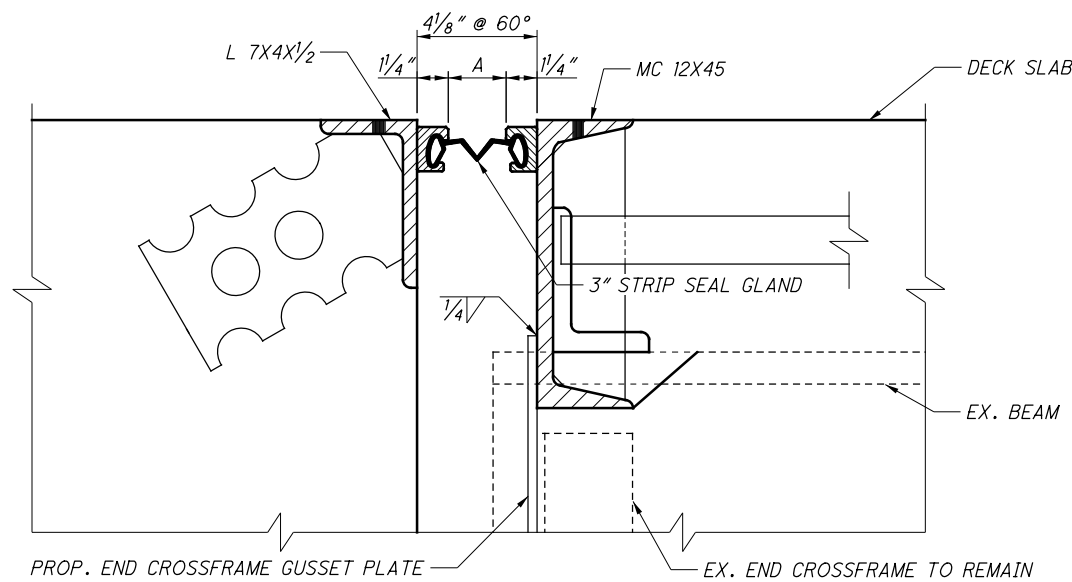
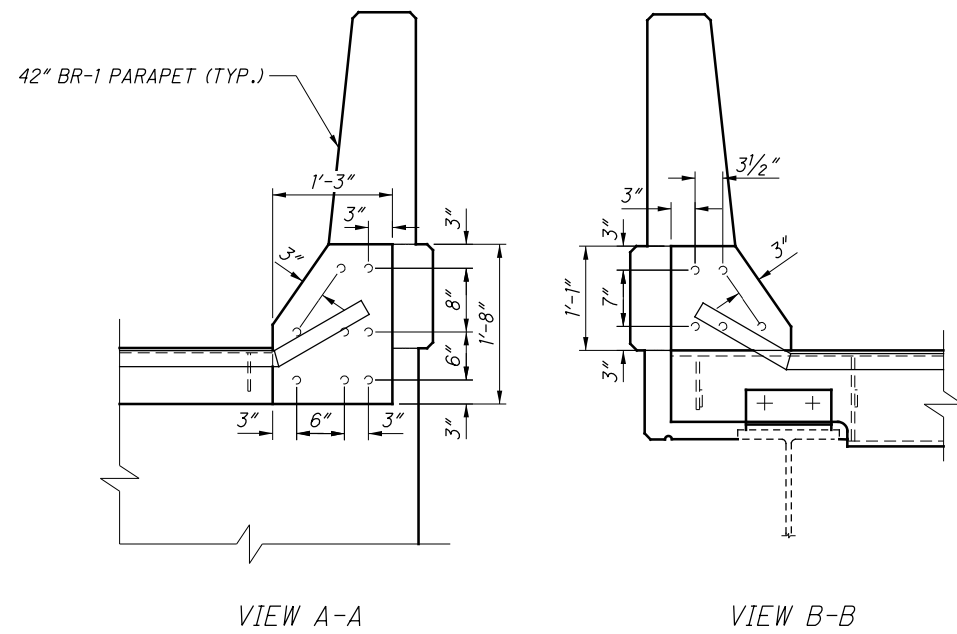


PARTIAL DECK PLAN AT ABUTMENT JOINT



DETAIL A

STRIP SEAL JOINT OPENING		
TEMPERATURE (°F)	REAR ABUTMENT DIMENSION "A" (INCHES)	FORWARD ABUTMENT DIMENSION "A" (INCHES)
30	1 7/8"	1 7/8"
40	1 3/16"	1 3/16"
50	1 1/16"	1 1/16"
60	1 5/8"	1 5/8"
70	1 1/4"	1 3/8"
80	1 3/8"	1 1/16"
90	1 5/16"	1 3/8"



SECTION C-C

NOTES:

- SEE STD. DRAWING EXJ-4-87 FOR ADDITIONAL EXPANSION JOINT DETAILS.
- THE MINIMUM JOINT OPENING (DIMENSION "A") AT TIME OF SEAL GLAND INSTALLATION SHALL NOT BE LESS THAN 1/2". IF JOINT OPENING IS LESS, INSTALLATION SHALL BE POSTPONED UNTIL THE TEMPERATURE DROPS A SUFFICIENT AMOUNT TO ALLOW THE 1/2" OPENING.

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

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EXPANSION JOINT DETAILS

BRIDGE NO. HAM-562-0004  
RAMP M OVER IR-75

HAM-562-0.28  
PID No. 84444

13/14

32  
33

DESIGN AGENCY  
BARR & PREVOST  
2800 CORPORATE EXCHANGE DR., STE 240  
COLUMBUS, OH 43231  
(614) 74-0270 FAX (614) 74-0323

DATE  
1/2012  
REVIEWED  
JEP  
STRUCTURE FILE NUMBER  
3113779

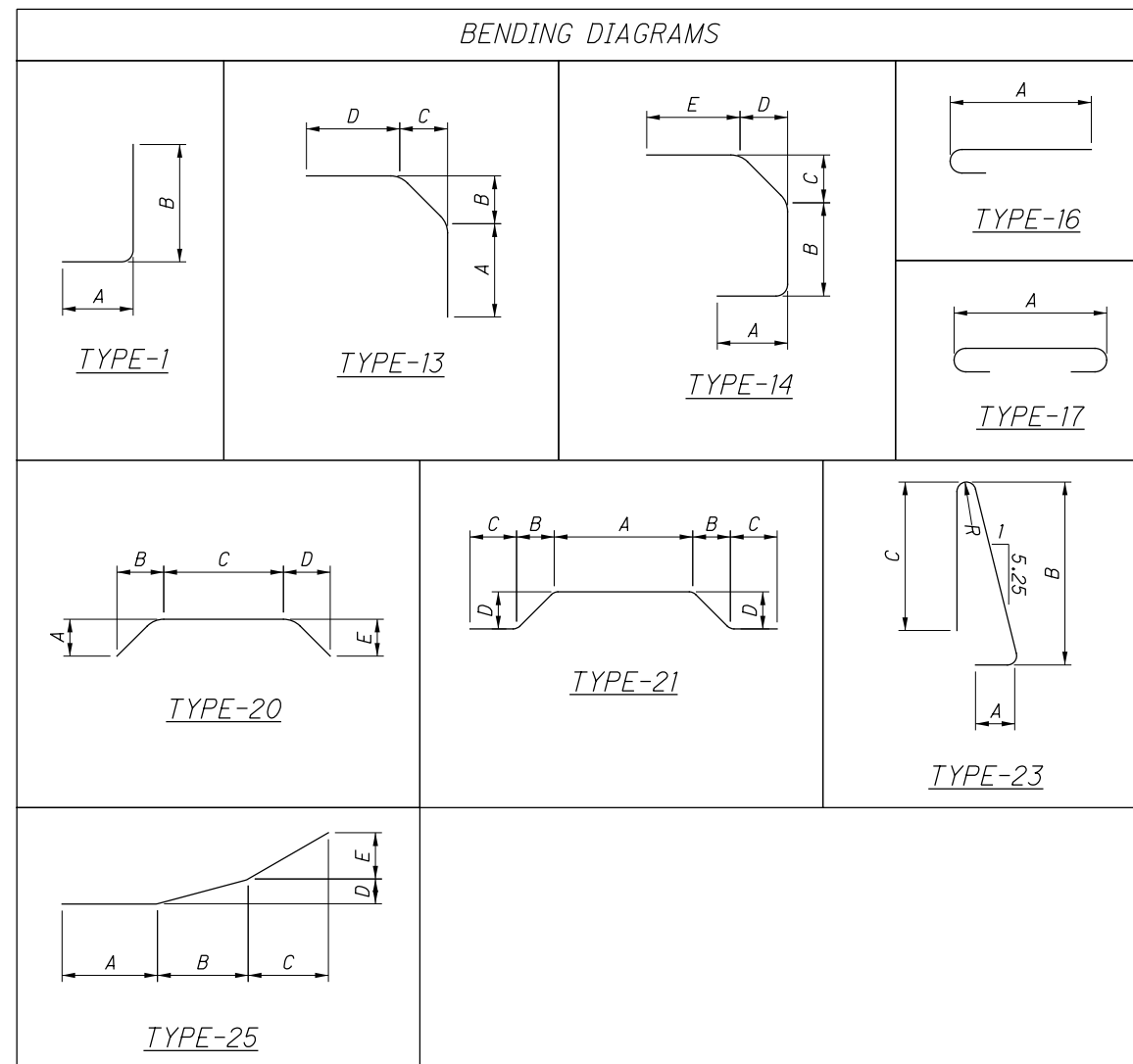
DRAWN  
TML  
REVISED

DESIGNED  
TML  
CHECKED  
JWE



MARK	SUPERSTRUCTURE											
	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS							
					A	B	C	D	E	R	INC.	
S401	224	30'-0"	4489	ST.								
	1	8'-7"										
S402	SER. OF	TO	286	ST.								6 3/8"
	28	21'-11"										
S501	396	27'-10"	11496	17	26'-8"							
S502	396	26'-8"	11015	ST.								
S503	396	9'-10"	4062	16								
S504	187	10'-7"	2065	16								
S505	50	21'-1"	1100	ST.								
S506	50	23'-5"	1222	ST.								
S507	25	34'-0"	887	ST.								
S508	153	4'-10"	772	21	1'-2"	0'-9"	1'-0"	0'-6"				
S509	2	15'-2"	32	ST.								
S510	2	22'-6"	47	ST.								
S511	2	16'-8"	35	ST.								
S512	4	21'-2"	89	ST.								
S601	224	30'-0"	10094	ST.								
	1	16'-7"										
S602	SETS OF	TO	978	ST.								6 3/8"
	28	29'-11"										
S703	209	13'-8"	5839	16	12'-10"							
		TOTAL =	54508									

MARK	RAILING											
	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS							
					A	B	C	D	E	R	INC.	
R501	96	30'-0"	3004	ST.								
R502	6	12'-7"	79	ST.								
R503	6	25'-11"	163	ST.								
R504	6	14'-8"	92	ST.								
R505	511	7'-1"	3776	23	0'-8"	3'-3"	3'-0"				1 1/2"	
R506	12	14'-8"	184	ST.								
R507	6	3'-3"	21	ST.								
R508	12	10'-0"	126	ST.								
R509	6	5'-8"	36	25	1'-10"	2'-5"	1'-4 1/4"	0'-1 1/2"	0'-5"			
R510	6	5'-8"	36	ST.								
	3	2'-11"			2'-4"							
R511	SETS OF	TO	115	16	TO							1"
	11	3'-9"			3'-2"							
R601	18	30'-0"	812	ST.								
R602	1	13'-4"	21	ST.								
R603	1	25'-11"	39	ST.								
R604	1	14'-8"	23	ST.								
R605	490	2'-7"	1902	1	0'-11"	1'-10"						
R606	490	3'-3"	2392	14	0'-10 1/2"	1'-1 1/2"	0'-8 1/2"	0'-6"	0'-9"			
R607	54	4'-7"	372	13	3'-0 1/2"	0'-8 1/2"	0'-6"	0'-9"				
R608	21	3'-9"	119	ST.								
	3	5'-4"										
R609	SETS OF	TO	286	ST.								1"
	11	6'-2"										
R610	24	5'-4"	193	ST.								
R611	3	4'-11"	23	ST.								
		TOTAL =	13814									



MARK	ABUTMENT											
	NUMBER			LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS					
	REAR	FORWARD	TOTAL				A	B	C	D	E	R
A601	2	2	4	26'-8"	161	ST.	26'-8"					
D601	54	54	108	4'-4"	703	1	3'-7"	0'-11"				
				TOTAL =	864							

MARK	APPROACH SLABS (FOR INFORMATIONAL PURPOSES ONLY)											
	NUMBER			LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS					
	REAR	FORWARD	TOTAL				A	B	C	D	E	R
AS501	48	48	96	23'-8"	2370	ST.						
	1	1	2	19'-6"								
AS502			SETS OF	TO	710	ST.						3/4"
	17	17	17	20'-6"								
D801	17	17	34	5'-7"	507	20	1'-0"	1'-0"	2'-10"	1'-0"	1'-0"	
	1	1	2	20'-11"			19'-6"					
AS1001			SETS OF	TO	7004	16	TO					5/16"
	38	38	38	21'-11"			20'-6"					
				TOTAL =	10591							

**NOTES:**

1. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL IS TO BE EPOXY COATED.
3. STRAIGHT BARS ARE INDICATED BY "ST".

APPROVED FOR CONSTRUCTION  
LAST REVISED DATE: 3/9/12

**REINFORCING STEEL LIST**

BRIDGE NO. - HAM-562-0004  
RAMP M OVER IR-75

HAM-562-0.28  
PID No. 84444