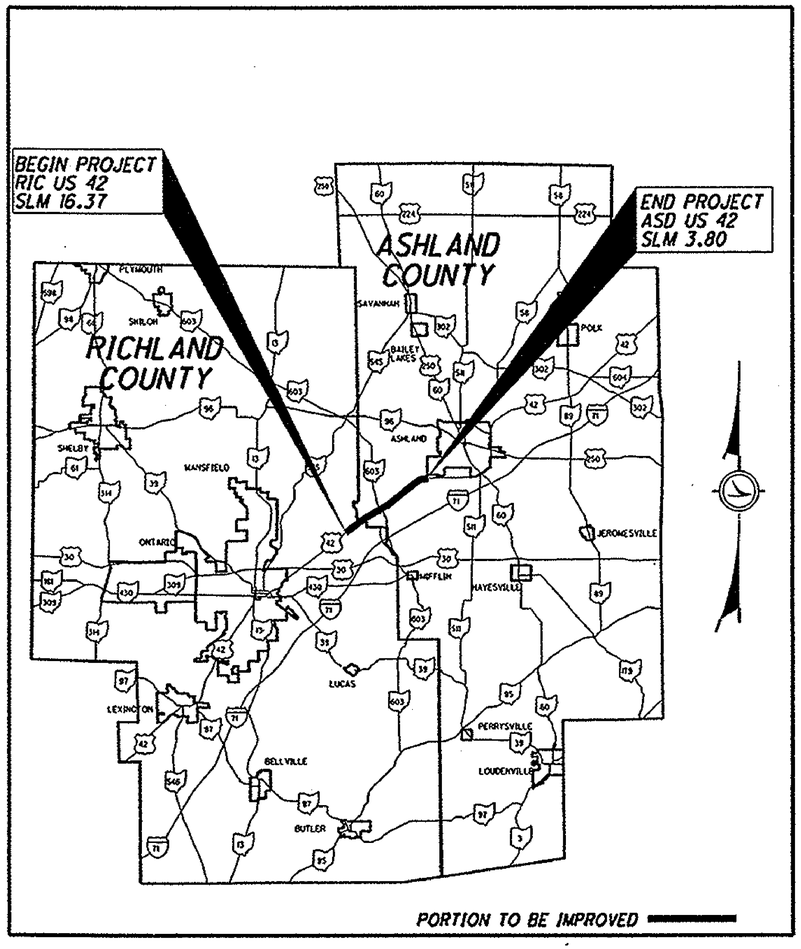
LOCATION MAP



LATITUDE: N 40° 49' 20" LONGITUDE: W 82° 23' 33"

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:

DISTRICT THREE
PRODUCTION DEPARTMENT

ROADWAY ENGINEERS SEAL:

STATE OF OHIO
BRUCE A. DALTON
E-53790
REGISTERED
PROFESSIONAL ENGINEER

SIGNED: Bruce A. Dalton
DATE: 7/10/09

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

RIC-42-16.37
ASD-42-0.00
CITY OF ASHLAND
MIFFLIN TOWNSHIP
MILTON TOWNSHIP
RICHLAND COUNTY
ASHLAND COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

THIS PROJECT WILL INCLUDE PAVEMENT PLANING, PAVEMENT REPAIR, RESURFACING WITH ASPHALT CONCRETE, GUARDRAIL, PAVEMENT MARKINGS, AND MINOR BRIDGE REHABILITATION WORK.

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

2008 SPECIFICATIONS

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

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

STANDARD CONSTRUCTION DRAWINGS

DS-1-92	07/18/03	GR-1.1	07/16/04	MT-35.10	04/20/01
		GR-2.1	01/16/04	MT-95.30	04/17/09
BP-1.1	07/28/00	GR-3.4	10/16/09	MT-96.11	01/16/09
BP-3.1	10/19/07	GR-4.2	01/19/07	MT-96.20	01/16/09
BP-4.1	07/16/04			MT-96.26	01/16/09
				MT-97.10	04/17/09
CB-2.3	07/15/05			MT-97.12	04/17/09
				MT-98.10	10/19/07
DM-1.1	04/21/06	TC-41.20	01/19/01	MT-98.11	10/19/07
DM-4.3	04/17/09	TC-52.10	01/19/07	MT-98.20	10/19/07
DM-4.4	04/17/09	TC-52.20	01/19/07	MT-98.22	10/19/07
		TC-65.10	01/21/05	MT-98.28	10/19/07
		TC-65.11	01/21/05	MT-101.70	01/16/09
		TC-71.10	01/16/09	MT-101.90	01/16/09
		TC-72.20	10/16/09	MT-105.10	01/16/09
		TC-73.10	01/19/01		

SUPPLEMENTAL SPECIFICATIONS

800	10/16/09
832	05/05/09

SPECIAL PROVISIONS

APPROVED _____
DATE 7/13/09 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE 10-20-09 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E080153
PID NO. 82298
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE

RIC/ASD-42-16.37/0.00
33

RIC - US-42-16.37;ASD-42-0.00
100064 PID - 82298
Dist 3 2/4/2010

DESIGN FILE: I:\projects\82298\82298 Title.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

End Project			
3.80 slm.			Baney Rd.
3.79 slm.			End Gross Median
●●STR. 0359 slm. SB Only			
3.50 slm.			Ramp "A" @ Claremont Gross Gore Area
3.40 slm.	SB LANES		Cross-Over
	NB LANES		
3.35 slm.			Cross-Over
3.29 slm.			Begin Grossy Median Begin Divided Highway
2.92 slm.		US 42	County Rd. 1475
Township Rd. 1536 2.78 slm.			STR. 0259
			Township Rd. 1273 2.30 slm.
			Township Rd. 1323 1.84 slm.
			Township Rd. 1323 1.68 slm.
Township Rd. 1353 1.34 slm.			
1.01 slm.			SR 603
Township Rd. 1455 0.78 slm.			
			Township Rd. 1419 0.65 slm.
Township Rd. 1688 0.41 slm.			
			STR. 0015
0.00 slm.			Ashland Co. Line
18.03 slm.			Richland Co. Line
			STR. 1787
			Bowen Rd.
17.49 slm.			
			STR. 1737
Hale Rd. 17.27 slm.			
Lakewood Rd. 16.78 slm.			
16.37 slm.			Flaming Falls Rd.
Begin Project			

DESIGN DESIGNATION (RIC-42-16.37 TO 18.03)

CURRENT ADT (2010)	12,970
DESIGN YEAR ADT (2022)	14,190
DIRECTIONAL DISTRIBUTION	0.54
TRUCKS (24 HOUR B&C)	0.05
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION: URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (ASD-42-0.00 TO 1.01)

CURRENT ADT (2010)	11,700
DESIGN YEAR ADT (2022)	12,520
DIRECTIONAL DISTRIBUTION	0.54
TRUCKS (24 HOUR B&C)	0.04
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION: RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (ASD-42-1.01 TO 3.59)

CURRENT ADT (2010)	12,400
DESIGN YEAR ADT (2022)	13,450
DIRECTIONAL DISTRIBUTION	0.53
TRUCKS (24 HOUR B&C)	0.04
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION: RURAL MINOR ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN DESIGNATION (ASD-42-3.59 TO 3.80)

CURRENT ADT (2010)	9,940
DESIGN YEAR ADT (2022)	12,490
DIRECTIONAL DISTRIBUTION	0.55
TRUCKS (24 HOUR B&C)	0.06
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION: URBAN PRINCIPAL ARTERIAL	
NHS PROJECT	NO

DESIGN EXCEPTIONS
NONE

DESIGN FILE: I:\projects\82298\82298 Schematic.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

CALCULATED CVH
CHECKED BAD

SCHEMATIC & DESIGN DESIGNATION

RIC/ASD-42-16.37/0.00

ROUTINE MAINTENANCE

BETWEEN THE TIME THAT BIDS ARE TAKEN AND THE START OF CONSTRUCTION, THE MAINTAINING AGENCY MAY ENTER UPON THE PROJECT AND PERFORM ROUTINE MAINTENANCE SUCH AS CRACK SEALING, PATCHING, AND BERM AND SHOULDER REPAIR. THE EFFECTS, IF ANY, OF THE PERFORMANCE OF ROUTINE MAINTENANCE SHALL BE CONSIDERED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE PLAN AND THE RESULTING CONDITIONS SHALL NOT BE CONSIDERED AS DIFFERING MATERIALLY FROM THOSE EXISTING AT THE TIME BIDS WERE TAKEN.

UTILITIES

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

Time Warner Cable
Dave Roush
1575 Lexington Avenue
Mansfield, Ohio 44901
419-756-6091

Armstrong Utilities
Tad Sedwick
100 East 2nd Street
Ashland, Ohio 44805
419-289-0161

Firelands Electric Co-op
Denny Marugg
One Energy Place
New London, Ohio 44851
419-929-1571

Ohio Edison Company
Mike Stoughton
1717 Ashland Road
Mansfield, Ohio 44905
419-521-6177

Columbia Gas of Ohio
Tiffany Fritchley
1120 W. 4th St
Mansfield, Ohio 44906
419-528-1137

Richland Co. Sanitary Engineer
Steve Risser
50 Park Avenue East
Mansfield, Ohio 44902
419-774-3548

Ashland County Engineer
Ed Meixner
1511 Cleveland Avenue
Ashland, Ohio 44805
419-282-4281

Columbia Gas Transmission
Russ Johnson
589 North State Road
Medina, Ohio 44256
330-721-4163

Marathon Ashland Pipeline
Dave Wisner
539 South Main Street, RM 193M
Findlay, Ohio 45840
419-421-2211

AT&T, consultant for AT&T,
Tony Lyle, Project Engineer
HLG Engineering & Surveying
5980-G Wilcox
Dublin, Ohio 43106
614-760-8320

Embarq (formerly Sprint)
Casper Schmidt
175 Ashland Road
P.O. Box 3555
Mansfield, Ohio 44907
419-755-7956

Verizon
Jim Sauber
1534 S.R. 511 South
Ashland, Ohio 44805
419-282-6551

City of Ashland
206 Claremont Avenue
Ashland, Ohio 44805
Mayor Bill Strine
419-289-8622
419-289-8331

Richland County Engineer
Thomas Beck, P.E., P.S., County Engineer
77 North Mulberry Street
Mansfield, Ohio 44903
419-774-5591

THE AFOREMENTIONED UTILITY COMPANIES AND AGENCIES HAVE VARIOUS FACILITIES IN THE AREA THAT WILL REMAIN IN PLACE DURING CONSTRUCTION.

ITEM 209 - LINEAR GRADING

THE CONTRACTOR IS REQUIRED TO PERFORM LINEAR GRADING ON THE GRADED SHOULDER. IT IS ANTICIPATED THAT THERE ARE AREAS WHERE THE GRADED SHOULDER IS AT A HIGHER ELEVATION THAN THE ADJACENT PROPOSED PAVEMENT. A 10:1 SLOPE SHALL BE ESTABLISHED, OR AS DIRECTED BY THE ENGINEER, WHEN PERFORMING ITEM 209 LINEAR GRADING. THE INTENT IS TO PROVIDE AN UNOBSTRUCTED AND POSITIVE FLOW OF STORM WATER FROM THE PAVEMENT TO THE DITCH. THE LINEAR GRADING SHALL BE PERFORMED AFTER THE INTERMEDIATE COURSE HAS BEEN COMPLETED AND BEFORE THE SURFACE COURSE IS PLACED. ALL LABOR AND EQUIPMENT NECESSARY TO PERFORM THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER MILE FOR ITEM 209 LINEAR GRADING.

ITEM 604 - CASTINGS ADJUSTED TO GRADE

THE CASTING TO BE ADJUSTED MAY OR MAY NOT HAVE AN EXISTING FRAME. THE WORK SHALL CONSIST OF ADJUSTING THE EXISTING CASTING TO THE SATISFACTION OF THE ENGINEER. IT IS NOT INTENDED TO PLACE NEW FRAMES WHERE NONE CURRENTLY EXIST. THE CONTRACTOR IS REMINDED TO FIELD CHECK ALL ADJUSTMENT TO GRADE ITEMS PRIOR TO BIDDING, AS NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR LABOR AND MATERIALS REQUIRED TO SATISFACTORILY ADJUST CASTINGS WITHOUT FRAMES.

ITEM 253, PAVEMENT REPAIR, AS PER PLAN
ITEM 253, PAVEMENT REPAIR, MISC.: PARTIAL DEPTH

THESE ITEMS OF WORK SHALL CONSIST OF THE REMOVAL OF THE EXISTING PAVEMENT OR PAVED BERM WHICH MAY BE ASPHALT, BRICK, CONCRETE, OR A COMBINATION OF EACH, IN AREAS OF EXISTING PAVEMENT FAILURE. CORING HAS BEEN PERFORMED TO HELP DETERMINE THE COMPONENTS THAT MAY BE ENCOUNTERED DURING THIS ITEM OF WORK. THE PAVEMENT CORING INFORMATION IS SHOWN ON PLAN SHEET 4.

THE ENGINEER SHALL DESIGNATE THE LOCATIONS AND LIMITS OF THE AREAS TO BE REPAIRED. PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE INTERMEDIATE AND/OR SURFACE COURSE. THE REPAIR AREAS SHALL BE SAW CUT AND EXCAVATED TO PROVIDE STRAIGHT AND VERTICAL SURFACES AROUND THE PERIMETER OF THE REPAIR AREA. PAVEMENT PLANING MAY BE USED AS AN ALTERNATIVE TO SAW CUTTING AND EXCAVATING. THE PAVEMENT SHALL BE REMOVED WITHIN THE DESIGNATED AREAS BY METHODS WHICH WILL NOT DAMAGE ADJACENT PAVEMENT. THE DEPTH OF REMOVAL SHALL BE SUFFICIENT TO REMOVE ALL DETERIORATED PAVEMENT WITH A MAXIMUM DEPTH OF 6", BASED ON THE PAVEMENT DESIGN. A DEPTH OF 3" AND AN AVERAGE WIDTH OF 5' WAS USED
FOR ESTIMATING PURPOSES. THE MATERIALS REMOVED SHALL BE DISPOSED OF IN ACCORDANCE WITH 105.16 AND 105.17.

THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS 2 FEET WIDE.

REPLACEMENT MATERIAL SHALL BE ITEM 301 PG64-22 OR ITEM 448 TYPE 2 PG64-22 MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE. ITEM 301 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 3" AND 12" WITH A MAXIMUM PAVEMENT LIFT OF 6". ITEM 448 TYPE 2 CAN BE USED WHEN THE DEPTH OF THE REPAIR IS BETWEEN 0" AND 5" WITH A MAXIMUM PAVEMENT LIFT OF 3". ALL EXISTING PAVEMENT AREAS WHICH WILL BE IN CONTACT WITH THE PAVEMENT REPAIR SHALL BE CLEANED AND COATED PER CMS 401.14, USING AN ASPHALT MATERIAL COMPLYING WITH 407.02. ALL COMPACTION SHALL BE ACHIEVED BY MECHANICAL METHODS TO THE SATISFACTION OF THE ENGINEER.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIR. FOR PAYMENT PURPOSES ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH IS TO BE A MAXIMUM OF 4" DEEP AND ITEM 253 PAVEMENT REPAIR, AS PER PLAN IS FOR DEPTHS GREATER THAN 4". PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER CUBIC YARD, (BY TICKET WEIGHT CONVERSION), OF ITEM 253, PAVEMENT REPAIR, AS PER PLAN OR ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

FED/STATE
US 42 ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 2390 CU. YD.
US 42 ITEM 253 PAVEMENT REPAIR, AS PER PLAN 230 CU. YD.

FED/CITY
US 42 ITEM 253 PAVEMENT REPAIR, MISC.: PARTIAL DEPTH 20 CU. YD.
US 42 ITEM 253 PAVEMENT REPAIR, AS PER PLAN 2 CU. YD.

COORDINATION OF WORK BETWEEN CONTRACTORS

THE CONTRACTOR SHOULD BE AWARE THAT THERE MAY BE OTHER WORK BEING PERFORMED BY A SEPARATE CONTRACT. ASD-42-3.59 PID 18221 IS A BRIDGE REHABILITATION PROJECT SCHEDULED TO BEGIN WORK IN THE 2010 CONSTRUCTION SEASON. COORDINATION OF WORK IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS INTENDED FOR RIC/ASD-42-16.37/0.00 TO SUSPEND AND RESUME AT THE PAVING LIMITS OF ASD-42-3.59 PROJECT.

ITEM 254 PATCHING PLANED SURFACE

AN ESTIMATED QUANTITY OF ITEM 254, PATCHING PLANED SURFACE HAS BEEN SET UP TO BE USED AS DIRECTED BY THE ENGINEER AS DESCRIBED IN CMS 254.04. THE LIMIT OF THE PATCHING DEPTH IS 0 TO 2 IN.

ITEM 407, TACK COAT
ITEM 407, TACK COAT FOR INTERMEDIATE COURSE

AS PER 407.06 THE APPLICATION RATES SHALL BE 0.08 GAL. PER SQ. YD. PRIOR TO THE INTERMEDIATE COURSE AND SHALL BE 0.03 GAL PER SQ. YD. PRIOR TO THE SURFACE COURSE FOR ESTIMATING PURPOSES ONLY. THE RATE OF APPLICATION SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. A COMPLETE PAVEMENT SURFACE COVERAGE SHALL BE REQUIRED. AREAS OF TACK STRIPPED BY CONSTRUCTION EQUIPMENT OR TRAFFIC SHALL BE RE-COATED PRIOR TO PLACING ASPHALT CONCRETE. ALL COSTS AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER GALLON FOR ITEM 407, TACK COAT AND ITEM 407 TACK COAT FOR INTERMEDIATE COURSE.

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE

THE INTENT OF THE PLANING IS TO MILL 3.00 INCHES OR TOP OF CONCRETE AT THE EDGE OF PAVEMENT AT BOTH CURBED AND NON-CURBED AREAS. THE PAVEMENT SLOPE SHALL BE 0.016 PREFERRED AND 0.010 MINIMUM, CONTINUOUS BETWEEN THE CROWN AND THE PROPOSED EDGELINE/SHOULDER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE EDGE OF PAVEMENT IN CONFORMANCE WITH THE ABOVE GUIDELINES.

THE CROWN OF THE PAVEMENT SHALL BE LOCATED BETWEEN THE TRAVELED LANES, OR AS DIRECTED BY THE ENGINEER. THE MILLING DEPTH SHALL BE CONTROLLED FROM THE EDGE OF PAVEMENT OR CURB, TO PRODUCE A CROSS SLOPE IN CONFORMANCE WITH THE ABOVE GUIDELINES.

SPECIAL ATTENTION SHALL BE GIVEN TO SUPERELEVATED CURVES. THE SUPERELEVATION SHALL BE MAINTAINED AND/OR RESTORED, IF NECESSARY, AS DIRECTED BY THE ENGINEER. IF THERE IS NO INFORMATION IN THE PLANS TO CHANGE THE SUPERELEVATION, THE INTENT IS TO MAINTAIN THE EXISTING SUPERELEVATION.

THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE INTO ALL CATCH BASINS AND INLETS.

THE PROGRESSION OF THE PLANING SHALL PROCEED IN SUCH A MANNER THAT NORMAL TRAFFIC WILL NOT BE REQUIRED TO RUN OVER THE PLANED ROADWAY SURFACE MORE THAN FOURTEEN (14) CALENDAR DAYS. THE 14 CALENDAR DAYS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE (SECTION 108), AND FOR EACH CALENDAR DAY BEYOND THE 14 DAYS THAT THE ROADWAY REMAINS EXPOSED TO THE PLANED SURFACE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER 108.07.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT PLANING, ASPHALT CONCRETE. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF PAVEMENT PLANING, ASPHALT CONCRETE. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR UNEXPECTED VOLUMES OF ASPHALT GRINDINGS.

ITEM 442, ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS.
MINIMUM TOTAL PG BINDER CONTENT IS 6.0 PERCENT.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 20 PERCENT.
WHEN AN AGGREGATE SOURCE IS SPECIALLY DESIGNATED WITH AN SR ON THE AGGREGATE SOURCE GROUP LIST DO NOT USE THE AGGREGATE EXCEPT AS ALLOWED FOR MEDIUM TRAFFIC IN THE GUIDELINES FOR MAINTAINING ADEQUATE PAVEMENT FRICTION IN SURFACE PAVEMENT.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

ITEM 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN

THIS ITEM SHALL BE USED FOR CORRECTION OF CROWN, PROFILE AND ANY OTHER IRREGULARITIES.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (W8-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PLACEMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

REQUIREMENTS OF 442 APPLY EXCEPT AS FOLLOWS:
MIX DESIGN: FOR Ndes USE 50 GYRATIONS, FOR Nmax USE 75 GYRATIONS.
USE A PG 64-22 BINDER.
MAXIMUM RECLAIMED ASPHALT CONCRETE PAVEMENT IS 30 PERCENT.
DO NOT APPLY TABLE 442.02-1 EXCEPT SAND EQUIVALENT OF 45 APPLIES.
APPLY 703.05 FOR COURSE AND FINE AGGREGATE EXCEPT GRADATION FOR FINE AGGREGATE DOES NOT APPLY.
QUALITY CONTROL: DO NOT PERFORM Nmax IN QUALITY CONTROL TESTING. DO NOT TAKE EXTRA ASPHALT BINDER SAMPLES AS OUTLINED IN CMS 442.05.

CALCULATED CVH CHECKED BAD

GENERAL NOTES

RIC/ASD-42-16.37/0.00

3 / 33

DESIGN FILE: I:\projects\82298\82298 Gen Notes1.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

ITEM 617, COMPACTED AGGREGATE, AS PER PLAN

THIS ITEM OF WORK SHALL CONFORM TO ITEM 617 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS BOOK WITH EXCEPTION OF 617.02 (MATERIALS).

THE MATERIAL ON THIS PROJECT SHALL BE THE ASPHALT CONCRETE GRINDINGS RESULTING FROM ITEM 254. THE GRINDINGS USED FOR THIS WORK ARE TO BE PLACED AND COMPACTED AS DESCRIBED IN 617.05 WITH SPECIAL CARE TO CREATE PROPER COMPACTION. 100% OF THIS MATERIAL SHALL PASS A 1.5 INCH SIEVE. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MEET THE TYPICAL SECTIONS SHOWN IN THE PLANS AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS REQUIRED TO APPLY THE ITEM 408 PRIME COAT WITHIN 5 CALENDAR DAYS OF PLACING THE COMPACTED AGGREGATE, AS PER PLAN.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER CU. YD. OF ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

INTERSECTIONS AND DRIVES

RURAL-INTERSECTIONS SHALL BE PLANED AND PAVED A MAXIMUM OF 6 FT OR AS DIRECTED BY THE ENGINEER. (TO PROVIDE A SMOOTH TRANSITION BETWEEN THE TWO HIGHWAYS, AND TO ELIMINATE WATER POCKETS).

EXISTING PAVED DRIVES SHALL BE PAVED A MAXIMUM OF 4 FT SO AS TO PROVIDE A SMOOTH TRANSITION BETWEEN THE HIGHWAY AND THE DRIVE, (DISTANCE FROM EDGE OF ROADWAY MAY VARY AT EACH DRIVE) AS DIRECTED BY THE ENGINEER.

EXISTING AGGREGATE DRIVES SHALL BE PAVED WITH AN APRON AN AVERAGE WIDTH OF 2 FT. THE SLOPE OF THIS APRON SHALL BE THE SAME AS THE ADJACENT PAVEMENT SLOPE OR AS DIRECTED BY THE ENGINEER. ANY GRADING NEEDED TO PAVE THE APRON SHALL BE INCLUDED IN THE RELATED ASPHALT ITEM FOR PAYMENT. ITEM 617 COMPACTED AGGREGATE, AS PER PLAN SHALL BE PLACED ADJACENT TO THIS APRON TO PROVIDE A SMOOTH TRANSITION FROM THE APRON TO THE EXISTING DRIVE, (WIDTH OF THIS 617 APPLICATION MAY VARY) AS DIRECTED BY THE ENGINEER. AN ADDITIONAL QUANTITY OF ITEM 617 HAS BEEN ESTIMATED TO COMPLETE THIS WORK AND IS SHOWN AS AN EXTRA AREA ON THE PAVEMENT & SHOULDER DATA SHEET.

ANY HAZARD OR UNSAFE CONDITION RESULTING FROM THE ABOVE WORK MUST BE CORRECTED IMMEDIATELY, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS REMINDED OF SECTIONS 105.01, 107.07 & 614.02A OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

BUTT JOINTS

BUTT JOINTS SHALL NOT BE CUT AND LEFT OPEN TO TRAFFIC. THEY SHALL BE FILLED IN WITH A TEMPORARY ASPHALT CONCRETE WEDGE USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

CONSTRUCTION "BUMP" (W8-1-36) AND "ADVISORY SPEED" (W13-1-24) SIGNS SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THE BUTT JOINT IS LEFT OPEN. THESE SIGNS SHALL BE PAID FOR UNDER THE LUMP SUM ITEM FOR ITEM 614 MAINTAINING TRAFFIC.

PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

PAVEMENT CORING INFORMATION

CO.	RTE.	SLM	ASPHALT DEPTH (IN.)	CONCRETE DEPTH (IN.)	BRICK DEPTH (IN.)	WHEEL TRACK/ SHOULDER	DIRECTION	YEAR CORED
RIC	42	17.00	11.50	6.50		INSIDE	SB	2008
RIC	42	17.00	10.00	7.00		OUTSIDE	SB	2008
RIC	42	17.00	8.25	7.50		SHOULDER	SB	2008
ASD	42	0.50	10.50	6.00	4.00	INSIDE	SB	2008
ASD	42	0.50	11.00	6.50	4.00	OUTSIDE	SB	2008
ASD	42	0.50	11.00	6.50	3.00	SHOULDER	SB	2008
ASD	42	2.50	10.50			INSIDE	SB	2008
ASD	42	2.50	11.25			OUTSIDE	SB	2008
ASD	42	2.50	11.50			SHOULDER	SB	2008
ASD	42	3.20	5.00	9.00		INSIDE	SB	2008
ASD	42	3.20	4.50	9.00		OUTSIDE	SB	2008
ASD	42	3.20	5.00			SHOULDER	SB	2008

ITEM 614, WORK ZONE MARKING SIGN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR TEMPORARY WORK ZONE MARKING SIGNS PER THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, 614.04.

WORK ZONE MARKING SIGN: (W8-H13-36) NO EDGE LINE = 28 EACH
WORK ZONE MARKING SIGN: (R4-1-24) DO NOT PASS = 6 EACH
WORK ZONE MARKING SIGN: (R4-2-24) PASS WITH CARE = 6 EACH

TOTAL = 40 EACH

ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE (1) LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES USING FLAGGERS EXCEPT AS NOTED IN THE STRUCTURE PLAN NOTES.

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

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO CONSTRUCT A TEMPORARY ASPHALT WEDGE FROM THE EXISTING PAVEMENT TO THE PLANED SURFACE AT BUTT JOINTS AND OTHER LOCATIONS THAT RESULT IN A DROP-OFF IN EXCESS OF 1.5 INCHES, AS DIRECTED BY THE ENGINEER. THIS QUANTITY SHALL ALSO BE USED AT PLANED SURFACES WHERE A TEMPORARY ASPHALT WEDGE IS NEEDED AROUND CASTINGS, AS DIRECTED BY THE ENGINEER. BEFORE THE ASPHALT CONCRETE RESURFACING IS PLACED, THE TEMPORARY WEDGE SHALL BE REMOVED AND THE COST SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 150 CU YD

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

RAMP UNDER ASD-42-3.59 STRUCTURE

IT IS INTENDED TO MAINTAIN THE EXISTING VERTICAL CLEARANCE UNDER THIS STRUCTURE. THE GUARDRAIL LOCATED ON BOTH SIDES OF THIS RAMP AND UNDER THE STRUCTURE WILL BE ADDRESSED IN THE ASD-42-3.59 PROJECT.

ITEM 202 CATCH BASIN OR INLET ABANDONED, AS PER PLAN

ALL PORTIONS OF CMS 202 APPLY EXCEPT AS MODIFIED HEREIN.

SEAL ALL EXISTING PIPES WITHIN THESE STRUCTURES. REMOVE THE FRAME AND GRATE AND ANY LOOSE MATERIAL. FILL THE CATCH BASIN WITH CLASS C CONCRETE AND FINISH FLUSH WITH THE SURFACE.

THE FOLLOWING LOCATIONS AND DIMENSIONS APPLY:

LOCATION	LxWxD (INCHES)	PIPE SIZE (INCHES)
SLM 16.58 RT	48" X 30" X 48"	12"
SLM 16.63 RT	48" X 18" X 48"	10"
SLM 16.68 RT	48" X 18" X 48"	10"
SLM 16.73 RT	48" X 18" X 48"	10"
SLM 16.78 RT	48" X 18" X 48"	10"
SLM 16.84 RT	48" X 30" X 48"	12"

ALL LABOR, EQUIPMENT AND MATERIAL COSTS ASSOCIATED WITH MEETING THE ABOVE REQUIREMENTS ARE TO BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 202 CATCH BASIN OR INLET ABANDONED, AS PER PLAN.

ITEM 604 CATCH BASIN, NO. 6, AS PER PLAN

ALL PORTIONS OF CMS 604 AND STANDARD DRAWING CB-2.3 APPLY EXCEPT AS MODIFIED HEREIN.

THE LOCATION OF THIS WORK IS AT APPROXIMATEY SLM 16.81 ON THE RIGHT SIDE IN THE PAVED SHOULDER AREA. THERE IS AN EXISTING CATCH BASIN AT THIS LOCATION. REMOVAL AND DISPOSAL OF THE EXISTING CATCH BASIN, FRAME AND GRATE INCLUDING A PORTION OF THE EXISTING 12 INCH PIPE AND SAWCUTTING OF THE PAVEMENT TO PROVIDE A NEAT JOINT IS INCLUDED IN THE COST OF THIS ITEM. IF ADDITIONAL FULL DEPTH ASPHALT PAVEMENT IS REQUIRED TO FILL AROUND THE NEW CATCH BASIN, THE COSTS TO REPLACE THIS PAVEMENT IS ALSO TO BE INCLUDED IN THIS ITEM OF WORK. THE PAVEMENT IS TO CONSIST OF ITEM 448 TYPE 2 ASPHALT PG 64-22 EXCEPT THE TOP 1.25 INCHES TO BE THE SAME SURFACE COURSE MATERIAL AS SPECIFIED IN THIS PROJECT. COMPACTION REQUIREMENTS ARE WAIVED AND TO BE HAND TAMPED TO THE SATISFACTION OF THE ENGINEER.

THE CONCRETE APRON IS TO BE 8 INCHES THICK AND PLACED 24 INCHES ALL AROUND THE CASTING INSTEAD OF THE 18 INCHES AS SHOWN ON STANDARD CONSTRUCTION DRAWING CB-2.3. THE DEPTH, 28 INCHES, IS MEASURED FROM THE TOP OF THE GRATE TO THE FLOW LINE OF THE 12 INCH REINFORCED CONCRETE PIPE. THE CONTRACTOR SHALL PERFORM THE NECESSARY FIELD MEASUREMENTS PRIOR TO ORDERING THE UNIT.

AN ESTIMATED QUANTITY OF 6 FEET OF ITEM 603 12 INCH CONDUIT, TYPE B IS PROVIDED TO RECONNECT TO THE EXISTING PIPE. A CONCRETE MASONRY COLLAR IS TO BE PROVIDED AT THIS CONNECTION AND IS CONSIDERED INCIDENTAL IN THE COST OF ITEM 603.

ITEM 202 CURB REMOVED, AS PER PLAN

AFTER THE PLANING OPERATION HAS BEEN COMPLETED AND THE CURB REMOVED, COAT THE EXISTING PAVEMENT EDGES WITH TACK COAT MATERIAL AND THEN BACKFILL USING ITEM 301 ASPHALT CONCRETE BASE, PG 64-22 MATERIAL AND MATCH THE PLANED SURFACE. HAND TAMP TO THE SATISFACTION OF THE ENGINEER. ALL COSTS FOR LABOR MATERIAL AND EQUIPMENT TO COMPLETE THIS WORK AS MENTIONED ABOVE TO BE INCLUDED IN THE COST PER FOOT OF ITEM 202 CURB REMOVED, AS PER PLAN.

SINGLE CHIP SEAL

IT IS INTENDED TO PLACE THE CHIP SEAL AS SHOWN ON THE PAVEMENT DATA SHEET ON THE MAIN LINE AND SHOULDERS. THERE IS A CONTROL SECTION FROM SLM 2.25 TO SLM 3.29 WHERE CHIP SEAL IS NOT TO BE PLACED. WE ALSO DO NOT INTEND TO PLACE CHIP SEAL FOR MAILBOX APPROACHES, DRIVEWAYS OR INTERSECTING SIDE ROADS.

THE CONTRACTOR IS REQUIRED TO HAVE A ONE DAY WAITING PERIOD BETWEEN THE TIME THE INTERLAYER CHIP SEAL IS PLACED AND THE OVERLYING ASPHALT CONCRETE COURSE IS PLACED. AFTER THE ONE DAY WAITING PERIOD,

THE CONTRACTOR HAS A MAXIMUM OF FOUR DAYS TO COVER UP THE CHIP SEAL.

SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07.

CALCULATED CVH CHECKED BAD

GENERAL NOTES

RIC/ASD-42-16.37/0.00

DESIGN FILE: I:\projects\82298\82298 Gen Notes2.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

CITY	FED-CITY		80% FED-20% STATE													100% CITY	80% FED 20% CITY	80% FED 20% STATE	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. SHEET
3	7		3	4	7	8	12	13	14	15	16	17	18	19	20									
																							ROADWAY	
					284													284	202	32001	284	FT	CURB REMOVED, AS PER PLAN	4
							250	262.5	362.5	625	312.5	425	237.5	825				3300	202	38200	3300	FT	GUARDRAIL REMOVED FOR REUSE	
							2	2	4	2	2	4	2	3				21	202	42000	21	EACH	ANCHOR ASSEMBLY REMOVED, TYPE A	
										2	2		2	1				7	202	42040	7	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
							2	2	4									8	202	47000	8	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
				6														6	202	58601	6	EACH	CATCH BASIN OR INLET ABANDONED, AS PER PLAN	4
							100	200	200	303	250	272	139	219	18			1701	203	20001	1701	CU YD	EMBANKMENT, AS PER PLAN	
							28	4.63	7.63	8.01	5.26	6.38	4.13	10.38				74	209	15001	74	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	11
	0.56				11.03												0.56	11.03	209	60500	11.59	MILE	LINEAR GRADING	
						15												15	209	80000	15	EACH	GRADING MAILBOX APPROACHES	
							2150	50	100		62.5	12.5	50	125				2550	606	13000	2550	FT	GUARDRAIL, TYPE 5	
							250											250	606	13050	250	FT	GUARDRAIL, TYPE 5A	
							250	262.5	362.5		300	437.5	237.5	825				2675	606	16500	2675	FT	GUARDRAIL REBUILT, TYPE 5	
										625								625	606	16500	625	FT	GUARDRAIL REBUILT, TYPE 5, USING 9 FOOT POSTS	
							2	2	4	2	3	3	2	1				19	606	22010	19	EACH	ANCHOR ASSEMBLY, TYPE E-98	
										2	1	1	2	3				9	606	26500	9	EACH	ANCHOR ASSEMBLY, TYPE T	
							2	2	4									8	606	35140	8	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 4	
						1												1	SPECIAL	69050100	1	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	8
						3												3	SPECIAL	69050200	3	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	8
																							DRAINAGE	
				6														6	603	4400	6	FT	12" CONDUIT, TYPE B	
					1													1	604	02001	1	EACH	CATCH BASIN, NO. 6, AS PER PLAN	4
					3													3	604	09000	3	EACH	CATCH BASIN ADJUSTED TO GRADE	
																							PAVEMENT	
2			230													2		230	253	02001	232	CU YD	PAVEMENT REPAIR, AS PER PLAN	3
20			2390													20		2390	253	90000	2410	CU YD	PAVEMENT REPAIR, MISC.: PARTIAL DEPTH	3
	4930				125739												4930	125739	254	01000	130669	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
	49				1251												49	1251	254	01600	1300	SQ YD	PATCHING PLANED SURFACE	
	394				10057												394	10057	407	10000	10451	GALLON	TACK COAT	
	148				3791												148	3791	407	14000	3939	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
	263				5396												263	5396	408	10000	5659	GALLON	PRIME COAT	
	4930				93796												4930	93796	422	10000	98726	SQ YD	SINGLE CHIP SEAL	
	171				4389												171	4389	442	00201	4560	CU YD	**ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN**	3
	240				6142												240	6142	442	20201	6382	CU YD	**ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM TYPE A (448), AS PER PLAN**	3
	18				376	30											18	406	617	10101	424	CU YD	COMPACTED AGGREGATE, AS PER PLAN	
	658				13486												658	13486	617	20000	14144	SQ YD	SHOULDER PREPARATION	

REVISED: 8/06/09

CALCULATED CVH CHECKED BAD

GENERAL SUMMARY

RIC/ASD-42-16.37/0.00

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DESIGN FILE: I:\projects\82298\82298 Gen Sum.dgn
WORKSTATION: ksalay DATE: 8/6/2009

80% FED-20% CITY			80% FED-20% STATE													80% FED 20% CITY	80% FED 20% STATE	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	REF. SHEET
3	7	21	3	4	10	12	13	14	15	16	17	18	19	20	21								
																						TRAFFIC CONTROL	
															397		397	621	00100	397	EACH	RPM	
															397		397	621	54000	397	EACH	RAISED PAVEMENT MARKER REMOVED	
						30	12	10	10	8	10	7	13	6			106	626	00100	106	EACH	BARRIER REFLECTOR	
					3												3	632	26501	3	EACH	DETECTOR LOOP, AS PER PLAN	10
		0.64													11.88	0.64	11.88	642	00100	12.52	MILE	EDGE LINE, TYPE 1	
		0.16													1.17	0.16	1.17	642	00200	1.33	MILE	LANE LINE, TYPE 1	
															7.49		7.49	642	00300	7.49	MILE	CENTER LINE, TYPE 1	
		210													715	210	715	644	00400	925	FT	CHANNELIZING LINE	
		36													276	36	276	644	00500	312	FT	STOP LINE	
		750													1798	750	1798	644	00700	2548	FT	TRANSVERSE/DIAGONAL LINE	
		3													26	3	26	644	01300	29	EACH	LANE ARROW	
															100		100	644	01500	100	FT	DOTTED LINE, 4"	
																						MAINTENANCE OF TRAFFIC	
				40													40	614	12460	40	EACH	WORK ZONE MARKING SIGN	
				150													150	614	13000	150	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		0.64													2.58	0.64	2.58	614	20100	3.22	MILE	WORK ZONE LANE LINE, CLASS I, 642 PAINT	
															25.87		25.87	614	21500	25.87	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
		630													3105	630	3105	614	23200	3735	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	
		210													715	210	715	614	23680	925	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
		108														108		614	26200	108	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
		36														36		614	26610	36	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
		6													9	6	9	614	30200	15	FT	WORK ZONE ARROW, CLASS I, 642 PAINT	
		2													5	2	5	614	30650	7	FT	WORK ZONE ARROW, CLASS III, 642 PAINT	
																						STRUCTURE RIC-42-1788 SFN 7003072	
																						SEE SHEET 25	
																						STRUCTURE ASD-42-0015 SFN 0301027	
																						SEE SHEET 25	
																						STRUCTURE ASD-42-0259 SFN 0301078	
																						SEE SHEET 25	
																		614	11000	LUMP		MAINTAINING TRAFFIC	
																		619	16010	3	MNTH	FIELD OFFICE, TYPE B	
																		624	10000	LUMP		MOBILIZATION	
																						REVISED 7-21-09	

CALCULATED CVH CHECKED BAD

GENERAL SUMMARY

RIC/ASD-42-16.37/0.00

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DESIGN FILE: I:\projects\82298\82298 Gen Sum.dgn
WORKSTATION: cvanharn DATE: 7/21/2009

* - FOR TYPICALS, SEE SHEET 9

*** - 1" PLANING THICKNESS ON APPROACH SLABS, SEE SHEETS 25

FUNDING	COUNTY	ROUTE	LOG POINT TO LOG POINT STRAIGHT LINE MILEAGE		LENGTH MILE	LENGTH FEET	WIDTH FEET AVG.	* TYPICAL	PAVEMENT AREA	254 PAVEMENT PLANING, ASPHALT CONCRETE (*** 3.00")	254 PATCHING PLANED SURFACE	407 TACK COAT @ 0.08 GAL/SY	407 TACK COAT FOR INTERM. COURSE @ 0.03 GAL/SY	442 ASPHALT CONCRETE SURFACE COURSE, 9.5 MM, TYPE A (446), AS PER PLAN		442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (448), AS PER PLAN (0" MINIMUM)		422 SINGLE CHIP SEAL	202 CURB REMOVED, AS PER PLAN	604 CATCH BASIN ADJUSTED TO GRADE	604 CATCH BASIN, NO. 6, AS PER PLAN	AGGREGATE SHOULDERS PROPOSED WIDTH SL	AGGREGATE SHOULDERS PROPOSED WIDTH SR	AGGREGATE SHOULDERS AREA	209 LINEAR GRADING	408 PRIME COAT @ 0.40 GAL/SY	617 COMPACTED AGGREGATE, AS PER PLAN 1 INCH AVG. THICK.	617 SHOULDER PREPARATION
									SQ YD	SQ.YD	SQ.YD	GALLON	GALLON	INCH	CU.YD.	INCH (AVG)	CU.YD.	SQ.YD	FEET	EACH	EACH	FT	FT	SQ YD	MILE	GALLON	CU YD	SQ.YD
FED/STATE	RIC	US 42	16.37	16.41	0.04	211	53.0	1	1,243	1,243	12	99	37	1.25	43	1.75	60	1,243		1		2.0	2.0	94	0.08	38	3	94
FED/STATE			16.41	16.55	0.14	739	39.5	1	3,243	3,243	32	259	97	1.25	113	1.75	158	3,243				2.0	2.0	328	0.28	131	9	328
FED/STATE			16.55	18.03	1.48	7814	31.0	1	26,915	26,915	269	2,153	807	1.25	935	1.75	1,308	26,915				2.0	2.0	3,473	2.96	1,389	96	3,473
FED/STATE				16.87																	1							
FED/STATE	ASD	US 42	0.00	2.25	2.25	11880	35.0	1	46,200	46,200	462	3,696	1,386	1.25	1,604	1.75	2,246	46,200				2.0	2.0	5,280	4.50	2,112	147	5,280
FED/STATE			2.25	2.49	0.24	1267	35.0	2	4,927	4,927	49	394	148	1.25	171	1.75	240					2.0	2.0	563	0.48	225	16	563
FED/STATE			2.49	2.62	0.13	686	31.0	2	2,363	2,363	24	189	71	1.25	82	1.75	115					2.0	2.0	305	0.26	122	8	305
FED/STATE			2.62	2.80	0.18	950	41.0	3	4,328	4,328	43	346	130	1.25	150	1.75	210											
FED/STATE			2.80	2.85	0.05	264	41.0	4	1,203	1,203	12	96	36	1.25	42	1.75	58					2.0		59	0.05	23	2	59
FED/STATE			2.85	2.92	0.07	370	41.0	2	1,686	1,686	17	135	51	1.25	59	1.75	82					2.0	2.0	164	0.14	66	5	164
FED/STATE			2.92	3.02	0.10	528	53.0	2	3,109	3,109	31	249	93	1.25	108	1.75	151				2	2.0	2.0	235	0.20	94	7	235
FED/STATE			3.02	3.12	0.10	528	59.0	2	3,461	3,461	35	277	104	1.25	120	1.75	168					2.0	2.0	235	0.20	94	7	235
FED/STATE			3.12	3.19	0.07	370	58.0	4	2,384	2,384	24	191	72	1.25	83	1.75	116					2.0		82	0.07	33	2	82
FED/STATE			3.19	3.29	0.10	528	64.0	5	3,755	3,755	38	300	113	1.25	130	1.75	183						2.0	117	0.10	47	3	117
FED/STATE	NB LANES		3.29	3.36	0.07	370	30.0	6	1,233	1,233	12	99	37	1.25	43	1.75	60	1,233				2.0		82	0.07	33	2	82
FED/STATE	NB LANES		3.36	3.37	0.01	53	30.0	1	177	177	2	14	5	1.25	6	1.75	9	177				2.0	2.0	24	0.02	9	1	24
FED/STATE	NB LANES		3.37	3.63	0.26	1373	30.0	1	4,577	4,577	46	366	137	1.25	159	1.75	222	4,577				2.0	2.0	610	0.52	244	17	610
FED/CITY	NB LANES		3.63	3.79	0.16	845	30.0	1	2,817	2,817	28	225	85	1.25	98	1.75	137	2,817				2.0	2.0	376	0.32	150	10	376
FED/STATE	CROSSOVER		3.37			32	32.0	1	114	114	1	9	3	1.25	4	1.75	6					2.0	2.0	14	0.00	6	0	14
FED/STATE	CROSSOVER		3.41			32	75.0	1	267	267	3	21	8	1.25	9	1.75	13					2.0	2.0	14	0.00	6	0	14
FED/STATE	SB LANES		3.29	3.37	0.08	422	30.0	7	1,407	1,407	14	113	42	1.25	49	1.75	68	1,407					2.0	94	0.08	38	3	94
FED/STATE	SB LANES		3.37	3.53	0.16	845	30.0	1	2,817	2,817	28	225	85	1.25	98	1.75	137	2,817				2.0	2.0	376	0.32	150	10	376
FED/STATE	SB LANES		3.53	3.57	0.04	211	30.0	1	703	703	7	56	21	1.25	24	1.75	34	703	284			2.0	2.0	94	0.08	38	3	94
FED/STATE	SB LANES		3.57	3.67	0.10															SUSPEND/RESUME AT ASD-42-3.59								
FED/CITY	SB LANES		3.67	3.79	0.12	634	30.0	1	2,113	2,113	21	169	63	1.25	73	1.75	103	2,113				2.0	2.0	282	0.24	113	8	282
	RAMP A @ CLAREMONT AVE.		0.00	0.10	0.10	528	31.0	1	1,819	1,819	18	145	55	1.25	63	1.75	88	1,819				2.0	2.0	235	0.20	94	7	235
			0.10	0.15	0.05	264	38.0	1	1,115	1,115	11	89	33	1.25	39	1.75	54	1,115				2.0	2.0	117	0.10	47	3	117
			0.15	0.18	0.03	158	33.0	1	579	579	6	46	17	1.25	20	1.75	28	579				2.0	2.0	70	0.06	28	2	70
	CROSSOVER					48	25.0	1	133	133	1	11	4	1.25	5	1.75	6					2.0	2.0	21	0.00	9	1	21
	RAMP B @ CLAREMONT AVE.		0.00	0.11	0.11	581	23.0	1	1,485	1,485	15	119	45	1.25	52	1.75	72	1,485				2.0	2.0	258	0.22	103	7	258
			0.11	0.13	0.02	106	24.0	1	283	283	3	23	8	1.25	10	1.75	14	283				2.0	2.0	47	0.04	19	1	47
	EXTRA AREA FOR INTERSECTIONS								3579	3579	36	286	107	1.25	124	1.75	174											
	EXTRA AREA FOR PAVED DRIVES								324	324		26	10	1.25	11	1.75	16											
	EXTRA AREA FOR AGGREGATE DRIVES								495				15	1.25	17	1.75	24							495		198	14	495
	EXTRA AREA FOR EX. & PR. MAILBOX APPROACHES								460	310		25	14	1.25	16	1.75	22											
							FED/CITY TOTALS		4,930	49	394	148		171		240	4,930								0.56	263	18	658
							FED/STATE TOTALS		125,739	1,251	10,057	3,791		4,389		6,142	93,796	284	3	1					11.03	5,396	376	13,486
							TOTALS		130,669	1,300	10,451	3,939		4,560		6,382	98,726	284	3	1					11.59	5,659	394	14,144

CALCULATED CVH CHECKED BAD

PAVEMENT AND SHOULDER DATA

RIC/ASD-42-16.37/0.00

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33

DESIGN FILE: i:\projects\82298\82298 Pave Data.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

ITEM SPECIAL, MAILBOX SUPPORT SYSTEM

THIS ITEM OF WORK SHALL CONSIST OF THE REMOVAL OF EXISTING NON-STANDARD MAILBOX SUPPORTS AND FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED HARDWARE IN ACCORDANCE WITH THE DETAILS SHOWN, AND ATTACHING AN OWNER SUPPLIED MAILBOX, AT LOCATIONS DETERMINED BY THE ENGINEER.

IN ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE BOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL SUPPLY ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION. SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO MAILBOXES MAY BE MOUNTED ON A SINGLE POST. (HARDWARE SHALL BE COMMERCIAL GRADE GALVANIZED STEEL.)

WOOD POSTS SHALL BE NOMINAL 4 IN. x 4 IN. (S4S) OR 4½IN. DIAMETER ROUND, AND CONFORM TO 710.14. STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 IN. I.D., AND CONFORM TO AASHTO M 181.

POSTS SHALL BE SET AS PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WORK WITH THE LOCAL POST MASTER AND NOTIFYING THE PROPERTY OWNERS PRIOR TO WORK.

GROUP MAILBOX SUPPORTS SHALL BE PLACED ON 3 FT. CENTERS AND THE TURNOUT LENGTHENED TO ACCOMMODATE THE GROUPING.

WHERE GUARDRAIL EXISTS, MAILBOXES AND THEIR SUPPORTS SHALL BE PLACED BEHIND THE GUARDRAIL. SUPPORTS MUST STILL MEET THE BREAKAWAY REQUIREMENTS LISTED ABOVE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE.

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, SINGLE
PART A - U.S. 42 1 EACH

ITEM SPECIAL-MAILBOX SUPPORT SYSTEM, DOUBLE
PART A - U.S. 42 3 EACH

MAILBOX APPROACHES

THE MAILBOX APPROACHES SHALL BE PAVED WITH 1.75" ITEM 442 INTERMEDIATE COURSE AND 1.25" ITEM 442 SURFACE COURSE. THEY SHALL CONFORM AS MUCH AS PRACTICAL TO STANDARD DRAWING BP-4.1 OR AS DIRECTED BY THE ENGINEER.

GRADING SHALL BE PERFORMED IN THESE AREAS TO OBTAIN A BASE WHICH WILL ALLOW THE FINISHED GRADE TO BE FLUSH WITH ADJACENT PAVEMENT. A QUANTITY OF ITEM 617 COMPACTED AGGREGATE, AS PER PLAN HAS BEEN PROVIDED FOR AREAS WHERE THE SHOULDER IS LOW PRIOR TO GRADING AND/OR LOW AREAS CAUSED BY THE REMOVAL OF UNSUITABLE MATERIAL. QUANTITIES TO PERFORM THIS WORK HAVE BEEN INCLUDED IN THE GENERAL SUMMARY AND ARE ESTIMATED AS FOLLOWS.

ITEM 209 - GRADING MAILBOX APPROACHES:
PART A - U.S. 42 15 EACH

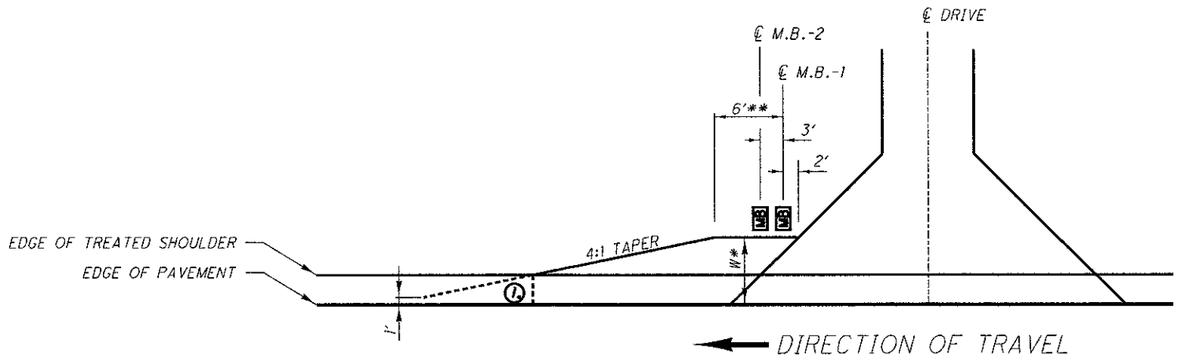
ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN
PART A - U.S. 42 30 CU YD

LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED

ADDRESSES AND/OR LOCATIONS OF MAILBOX SUPPORT SYSTEM TO BE REPLACED:

1322 - 1 SINGLE/1 DOUBLE
2600/2664 - 2 DOUBLE

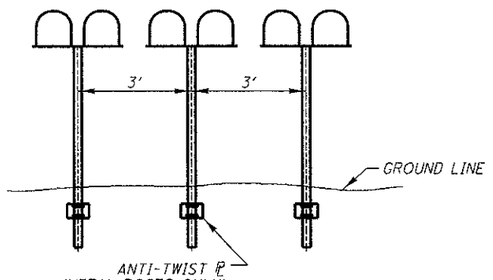
FOR DETAILS NOT SHOWN SEE STANDARD DRAWING BP-4.1



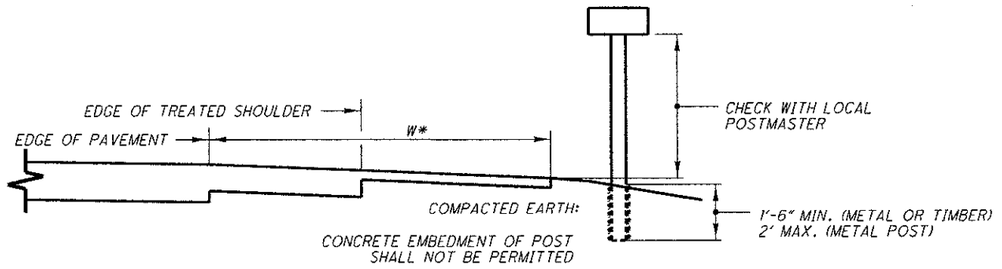
① END MAILBOX TURNOUT AT EDGE OF ASPHALT CONCRETE SHOULDER OR 1' FROM EDGE OF PAVEMENT IF TREATED SHOULDER IS AGGREGATE.

W* NOTES
1) WHERE EXISTING STANDARD MAILBOX POSTS ARE BEHIND GUARDRAIL AND ARE TO REMAIN IN PLACE, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL.
2) WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT MAXIMUM OR TO FACE OF EXISTING STANDARD MAILBOX IF IT IS LESS THAN 6 FT.
3) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL EXTEND TO FACE OF GUARDRAIL AND MAILBOX SHALL BE INSTALLED BEHIND THE GUARDRAIL.
4) IF THE MAILBOX SUPPORT IS SPECIFIED TO BE REMOVED AND REERECTED OR REPLACED, WHERE NO GUARDRAIL IS REQUIRED, TURNOUT WIDTH SHALL BE 6 FT. MAXIMUM.

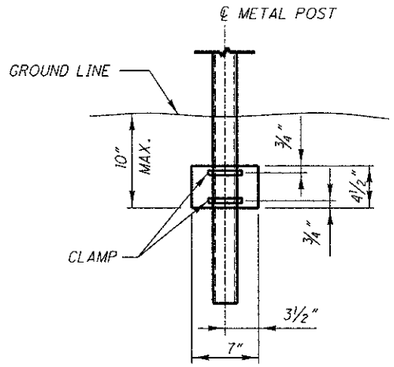
** NOTE
1) 6 FT FOR SINGLE MAILBOX SUPPORT, ADD 3 FT. FOR EACH ADDITIONAL MAILBOX.



GROUP MAILBOX INSTALLATION



CROSS SECTION / ELEVATION VIEW



ANTI-TWIST PLATE

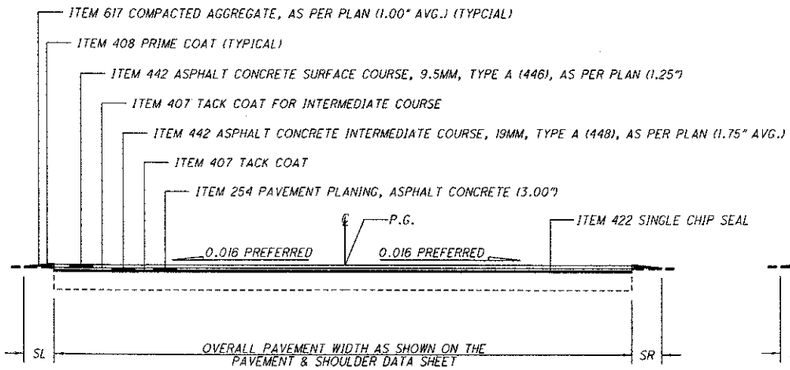
DESIGN FILE: I:\projects\82298\82298 Mailbox.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

CALCULATED CVH CHECKED BAD

MAILBOX DETAILS

RIC/ASD-42-16.37/0.00

8/33



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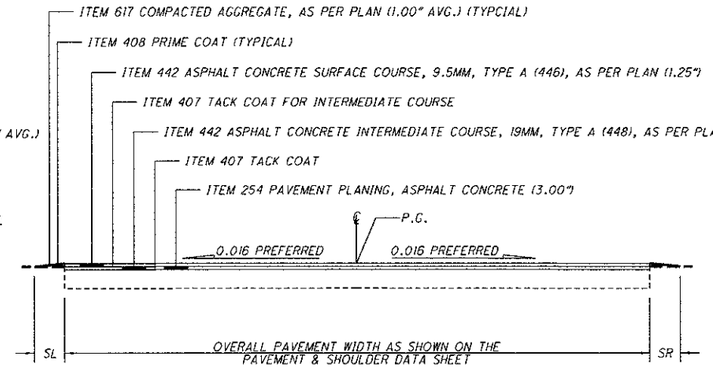
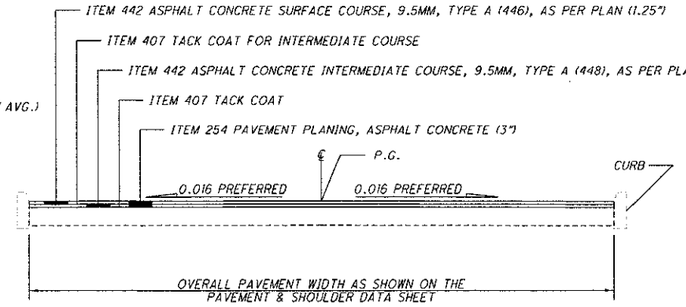
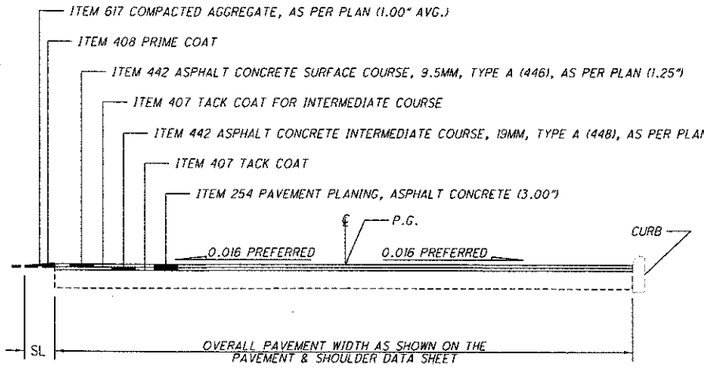


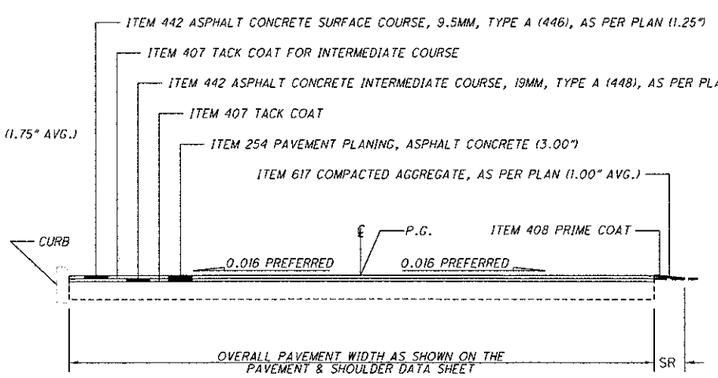
TYPICAL 2



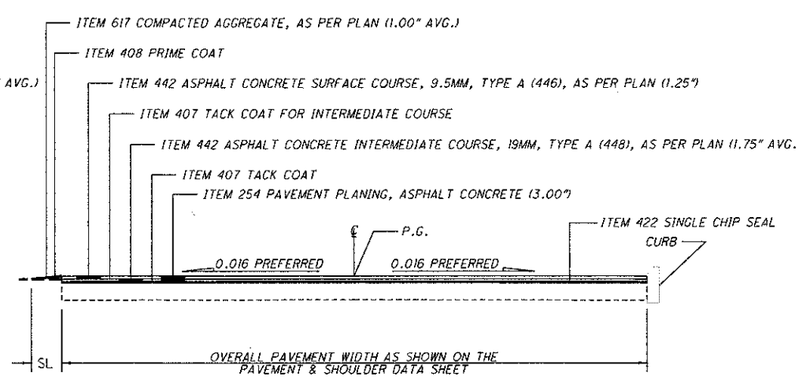
TYPICAL 3



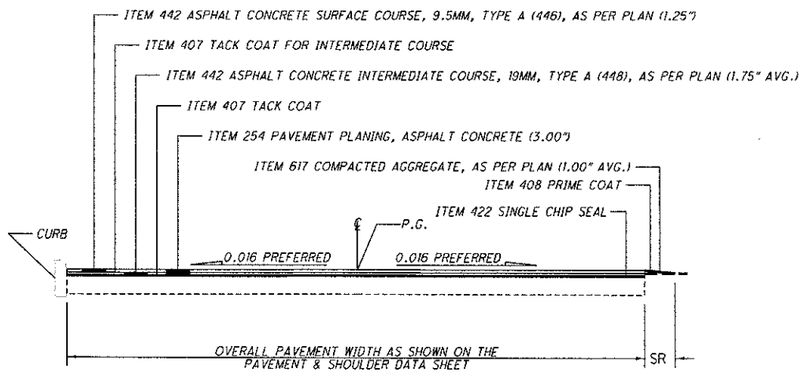
TYPICAL 4



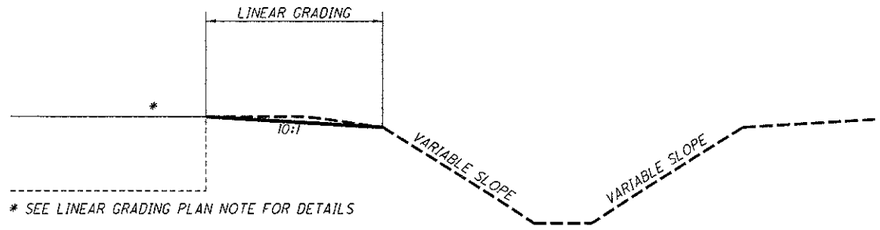
TYPICAL 5



TYPICAL 6



TYPICAL 7



LINEAR GRADING DETAIL

CALCULATED CVH
CHECKED BAD

TYPICAL SECTIONS

RIC/ASD-42-16.37/0.00

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DESIGN FILE: I:\projects\82298\82298 Typical.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

ITEM 632, DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF 632 DETECTOR LOOP, AS PER PLAN HAS BEEN PROVIDED WHEN WIRE IS CUT, BROKEN OR DESTROYED DUE TO PAVEMENT PLANING, PAVEMENT REPAIR OR BUTT JOINT OPERATIONS. THIS ITEM SHALL ALSO BE USED FOR REPLACEMENT OF DETECTOR LOOPS THAT HAVE BEEN DAMAGED DUE TO PAVEMENT FAILURE. IT IS IMPERATIVE THAT REPLACEMENT OF LOOP DETECTORS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT LOOP DETECTORS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE ORIGINAL LOOP.

THE CONTRACTOR SHALL NOTIFY DISTRICT 3 TRAFFIC DEPARTMENT, PHONE 419-207-7184) 5 WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED FOR DISTRICT 3 TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY MR. HICKEY WITHIN 2 WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT HE CAN RESCHEDULE DISTRICT CREWS TO RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES ACCORDING TO SECTION 108.07 OF THE CMS FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE NEW LOOP DETECTORS SHALL BE PLACED AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE LOOP DETECTOR AREAS. THE LOOP DETECTORS SHALL NOT BE CUT INTO THE SURFACE COURSE.

NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS AND BE THE SAME SIZE AND TYPE AS THE EXISTING, OR AS DIRECTED BY THE ENGINEER. THE LOOP DETECTOR WIRE SHALL BE REPLACED TO THE PULL BOX OR POLE, WHICHEVER IS APPLICABLE, UNDER ITEM 632 AND TC-82.10.

THIS WORK SHALL INCLUDE THE POURED EPOXY INSULATED SPLICE(S) REQUIRED TO CONNECT THE LOOP DETECTOR WIRE TO EXISTING LEAD-IN CABLE AT THE PULL BOX OR POLE. THE SPLICES SHALL BE IN ACCORDANCE WITH SECTION 725.15 OF THE CMS. PAYMENT SHALL BE MADE PER EACH LOOP DETECTOR CONNECTED TO THE LEAD-IN CABLE.

THE CONTRACTOR WILL BE PROVIDED WITH DETAILED PLANS AT THE PRE CONSTRUCTION MEETING SHOWING DETECTOR LOOP PLACEMENTS. A TABLE SHOWING DIMENSIONS AND LOCATIONS IS PROVIDED BELOW FOR THE PURPOSE OF ESTIMATING.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH OF ITEM 632 DETECTOR LOOP, AS PER PLAN.

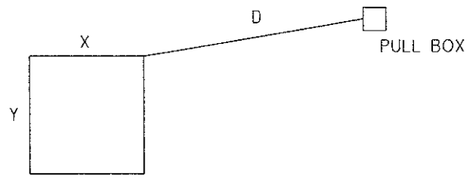
THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

ITEM 632 DETECTOR LOOP, AS PER PLAN 3 EACH

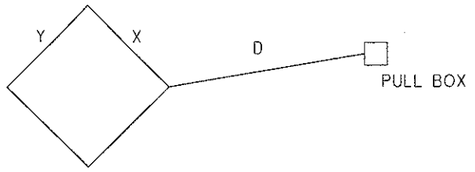
THE INTERSECTIONS INVOLVED ARE AS FOLLOWS:

ROUTE	SLM	LOCATION	TYPE	DIMENSION			
				D	X	Y	Z
US 42	3.79	US 42 & BANEY RD.	B	28	6	6	
US 42	3.79	US 42 & BANEY RD.	B	28	6	6	
US 42	3.79	US 42 & BANEY RD.	A	40	8	20	

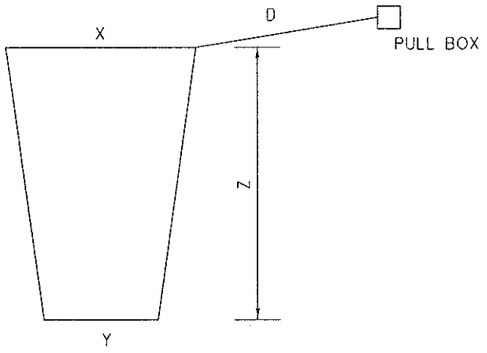
TYPE A



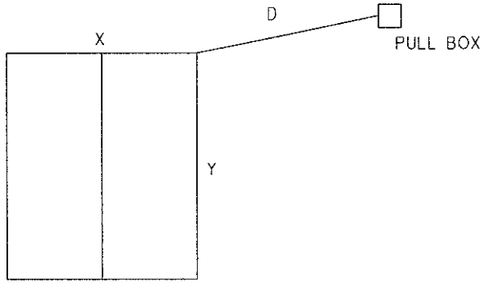
TYPE B



TYPE C



TYPE D



CALCULATED CVH
CHECKED BAD

LOOP DETECTOR NOTES & DETAILS

RIC/ASD-42-16.37/0.00

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DESIGN FILE: I:\projects\82298\82298 Loops.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

LOCATIONS OF GUARDRAIL

THE GUARDRAIL PROTECTION PROVIDED IN THIS PLAN SHALL BE LOCATED IN THE FIELD TO ASSURE THAT THE INSTALLATION WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC. THIS LOCATION SHALL BE POSITIONED AS FAR AS POSSIBLE FROM THE EDGE OF PAVEMENT WHILE MAINTAINING PROPER GRADE IN FRONT OF GUARDRAIL AS PER STANDARD DRAWINGS AND PLAN DETAILS.

ITEM 202 - ANCHOR ASSEMBLY REMOVED, TYPE A

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING TYPE A, ANCHOR ASSEMBLY INCLUDING ALL POSTS, HARDWARE, RAIL ELEMENTS, AND CONCRETE ANCHORS. ALL ITEMS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALLBE PROPERLY DISPOSED OF.

THE EXISTING CONCRETE ANCHOR AND CONCRETE AT POSTS SHALL BE REMOVED ENTIRELY. ALL HOLES REMAINING AFTER REMOVAL SHALL BE FILLED WITH GRANULAR MATERIAL OR EXCESS MATERIAL RESULTING FROM GUARDRAIL CONSTRUCTION. ALL FILL MATERIAL SHALL BE THOROUGHLY COMPACTED AND LEVELED, AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 202, ANCHOR ASSEMBLY REMOVED, TYPE A.

ITEM 203 - EMBANKMENT, AS PER PLAN

AT SPECIFIED LOCATIONS AND LOCATIONS AS DIRECTED BY THE ENGINEER, EMBANKMENT SHALL BE PLACED AS TO PROVIDE A SUITABLE AREA TO CONSTRUCT GUARDRAIL AND TO PROVIDE STRUCTURAL INTEGRITY OF THE ROADWAY SHOULDER.

EMBANKMENT MATERIAL SHALL BE LIMITED TO CMS ITEM 304 LIMESTONE.

AREAS WHERE EMBANKMENT MATERIAL IS TO BE PLACED SHALL BE SCALPED. THE REQUIREMENTS FOR BENCHING SHALL BE WAIVED. THE DEPTH OF LAYERS IN WHICH THE EMBANKMENT IS PLACED SHALL BE LIMITED TO EIGHT (8) INCHES IN THICKNESS. THE METHOD OF COMPACTION AND EQUIPMENT USED SHALL BE SUFFICIENT TO COMPACT 95% OF STANDARD PROCTOR TO THE SATISFACTION OF THE ENGINEER.

THE METHOD OF MEASUREMENT FOR EMBANKMENT MATERIAL SHALL BE BY THE NUMBER OF CUBIC YARDS CONVERTED BY TICKET WEIGHT IN THE CARRIER AT THE WORK SITE, IN LIEU OF THE REQUIREMENTS OF 203.09. PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT BID PRICE PER CUBIC YARD FOR ITEM 203 - EMBANKMENT, AS PER PLAN AND SHALL INCLUDE ALL WORK DESCRIBED ABOVE.

ITEM 606 - GUARDRAIL POST, 9 FOOT

THIS ITEM SHALL BE USED IN CONJUNCTION WITH ITEM 606 - GUARDRAIL, MISC.: ADJUST HEIGHT, EXISTING TYPE 5 GUARDRAIL, AND AS DIRECTED BY THE ENGINEER. IT SHALL CONSIST OF REPLACING EXISTING GUARDRAIL POSTS DEEMED BY THE ENGINEER TO BE INSUFFICIENT. THE POSTS SHALL BE OF THE SAME TYPE, SIZE, AND SPACING OF THE EXISTING GUARDRAIL RUN. THEY SHALL BE PLACED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING GR-1.1.

ITEM 209 - RESHAPING UNDER GUARDRAIL, AS PER PLAN

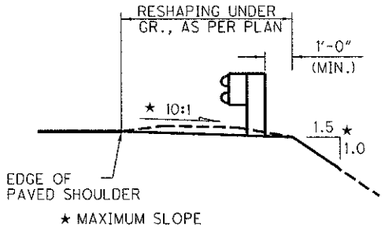
THIS ITEM SHALL BE USED AT LOCATIONS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED AT LOCATIONS SPECIFIED FOR WORK AS WELL AS PER CMS 209.05 AND AS DESCRIBED HEREIN, AND SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER.

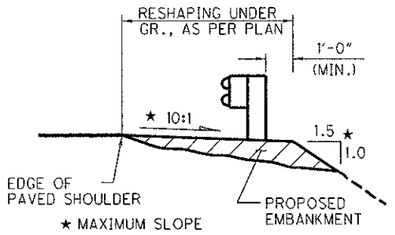
THE AREA IN FRONT OF, UNDER, AND BEHIND THE GUARDRAIL SHALL BE GRADED AND RESHAPED TO PROVIDE AN AREA THAT HAS A SLOPE OF 10:1 MAXIMUM (SEE DETAIL BELOW AS WELL AS THE GUARDRAIL DETAIL SHEETS FOR FURTHER DETAILS AND INFORMATION OF THE LIMITS OF THIS WORK).

EXCESS MATERIAL RESULTING SHALL BE USED ELSEWHERE FOR THIS ITEM IF SO DIRECTED OR DISPOSED OF PROPERLY. IF EXTRA MATERIAL IS REQUIRED IT SHALL BE PAID FOR WITH ITEM 203 - EMBANKMENT, AS PER PLAN. THIS WORK SHALL NOT BE STARTED UNTIL AFTER THE RESURFACING AND BERM WORK HAS BEEN COMPLETED.

THE ABOVE WORK SHALL BE PAID FOR PER STATION WITH ITEM 209, RESHAPING UNDER GUARDRAIL, AS PER PLAN WITH THE EXCEPTION OF ANY EXTRA MATERIAL REQUIRED TO MEET THE SLOPE REQUIREMENTS WHICH SHALL BE PAID BY ITEM 203 - EMBANKMENT, AS PER PLAN.



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE ET-2000 (1997) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE ST., GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50 FEET (15.24 m), INCLUSIVE OF TWO 25 FOOT (7.62 m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS265M	ET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98
SS142	ET2000 PLUS 50'-0" PLAN, ELEVATION AND SECTION 25'-0" RAIL, SLEEVE W/PL POSTS 1-4	4/12/00	7/31/00
SS141	ET-2000 PLUS PLAN, ELEVATION & SECTION 25'-0" RAIL, HBA POSTS 1-4	2/29/00	7/31/00
SS158	ET-2000 PLUS 50'-0" WITH 12'-6" PANELS & HBA POSTS 1-4 PLAN, ELEVATION & SECTION	5/22/00	7/31/00

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 2516 MALLORY LANE, STOW, OHIO 44224 (TELEPHONE: 330-346-0721)

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0" (15.24 m), INCLUSIVE OF FOUR 12'-6" (3.81m) LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" x 18" (450mm X 450mm).

THE CONTRACTOR MAY USE A SALVAGED EXTRUDER WHEN ASSEMBLING THE ITEM 606 ANCHOR ASSEMBLY, TYPE E-98. ALL WELDS ON THE EXTERIOR OF THE SALVAGED EXTRUDER SHALL NOT BE DAMAGED AND THE FEEDER SHUTE SHALL NOT BE BENT.

REFER TO THE MANUFACTURER'S INSTRUCTION REGARDING THE INSTALLATION OF, AND THE GRADING AROUND, THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES (100mm) ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 27¾ INCHES (706mm) FROM THE EDGE OF THE SHOULDER.

ON SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES NOT PROJECT MORE THAN 4 INCHES (100mm) ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CALCULATED CVH
CHECKED BAD

GUARDRAIL NOTES

RIC/ASD-42-16.37/0.00

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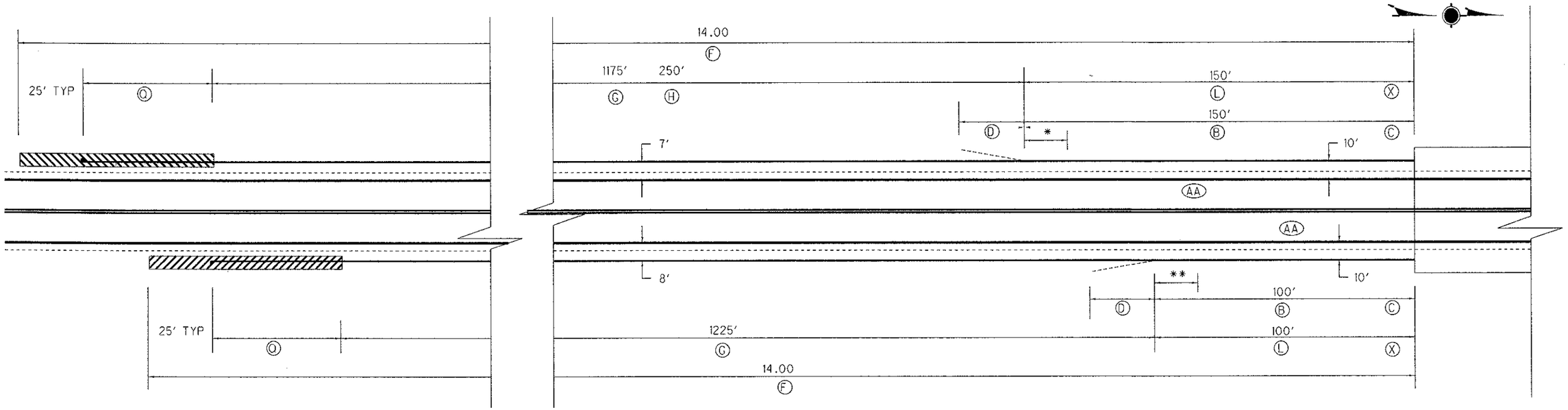
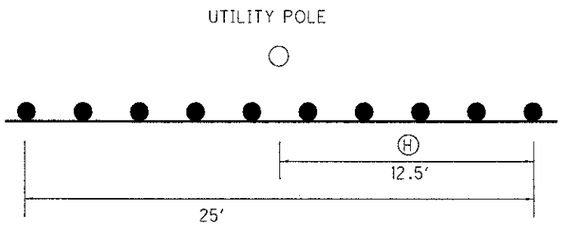
DESIGN FILE: I:\projects\82298\82298 Grail Notes.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009





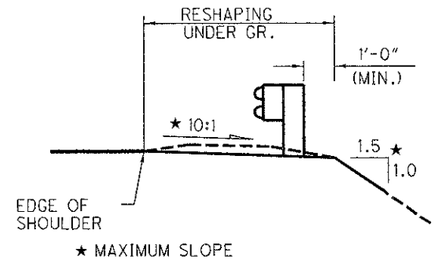
TYPE 5A AT UTILITY POLES
THERE ARE 10 LOCATIONS ON THE LEFT SIDE

NOTE:
1.) * TRANSITION GUARDRAIL FROM 10' TO 7' OFFSET IN 37.5'
** TRANSITION GUARDRAIL FROM 10' TO 8' OFFSET IN 37.5'

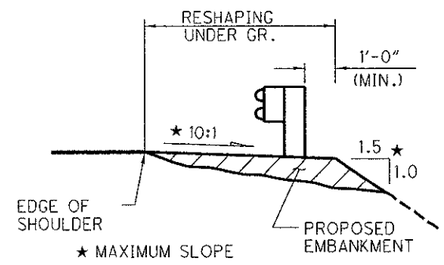
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
Ⓑ	202	GUARDRAIL REMOVED FOR REUSE	FT	150	100	250
Ⓒ	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	1	1	2
Ⓓ	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
	203	EMBANKMENT, AS PER PLAN	CU YD	50	50	100
Ⓕ	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	14.00	14.00	28.00
Ⓖ	606	GUARDRAIL, TYPE 5	FT	925	1225	2150
Ⓗ	606	GUARDRAIL, TYPE 5A	FT	250		250
Ⓛ	606	GUARDRAIL REBUILT, TYPE 5	FT	150	100	250
Ⓠ	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1	1	2
Ⓧ	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	1	1	2
Ⓐⓐ	626	BARRIER REFLECTOR, TYPE A	EACH	15	15	30

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

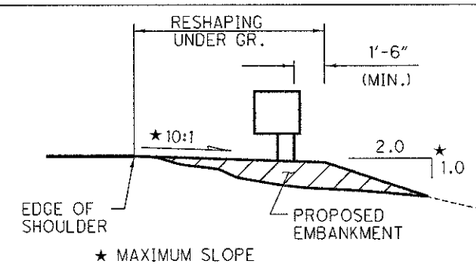
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



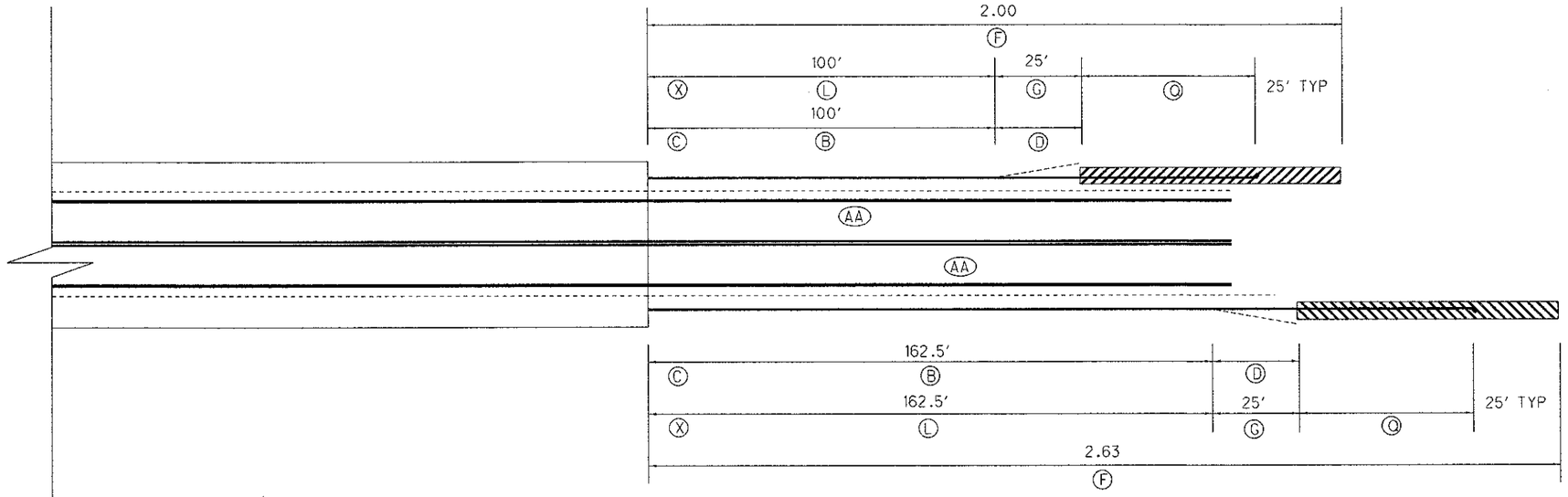
CALCULATED CVH
CHECKED BAD

GUARDRAIL DETAIL
RIC-42-1787 S.L.M. 17.87

RIC/ASD-42-16.37/0.00

12
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

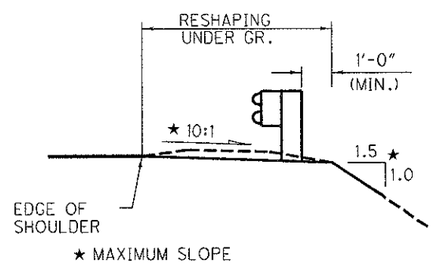


NOTE:
1.) MAINTAIN PRESENT OFFSET.
2.) BARIER REFLECTORS ON THE BRIDGE ARE INCLUDED IN THE QUANTITY BELOW.

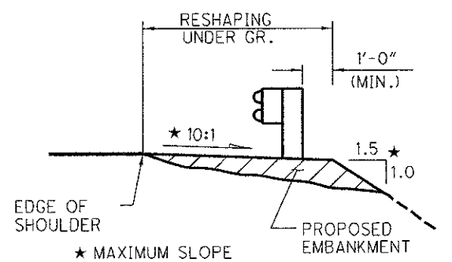
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
B	202	GUARDRAIL REMOVED FOR REUSE	FT	100	162.5	262.5
C	202	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	1	1	2
D	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
	203	EMBANKMENT, AS PER PLAN	CU YD	100	100	200
F	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	2.00	2.63	4.63
G	606	GUARDRAIL, TYPE 5	FT	25	25	50
L	606	GUARDRAIL REBUILT, TYPE 5	FT	100	162.5	262.5
Q	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1	1	2
X	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	1	1	2
AA	626	BARRIER REFLECTOR, TYPE A	EACH	6	6	12

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

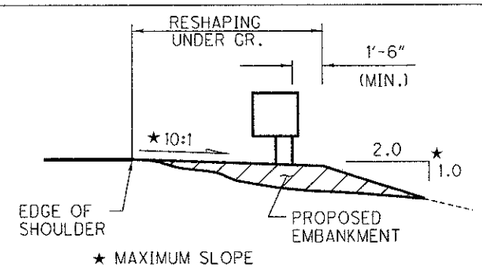
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



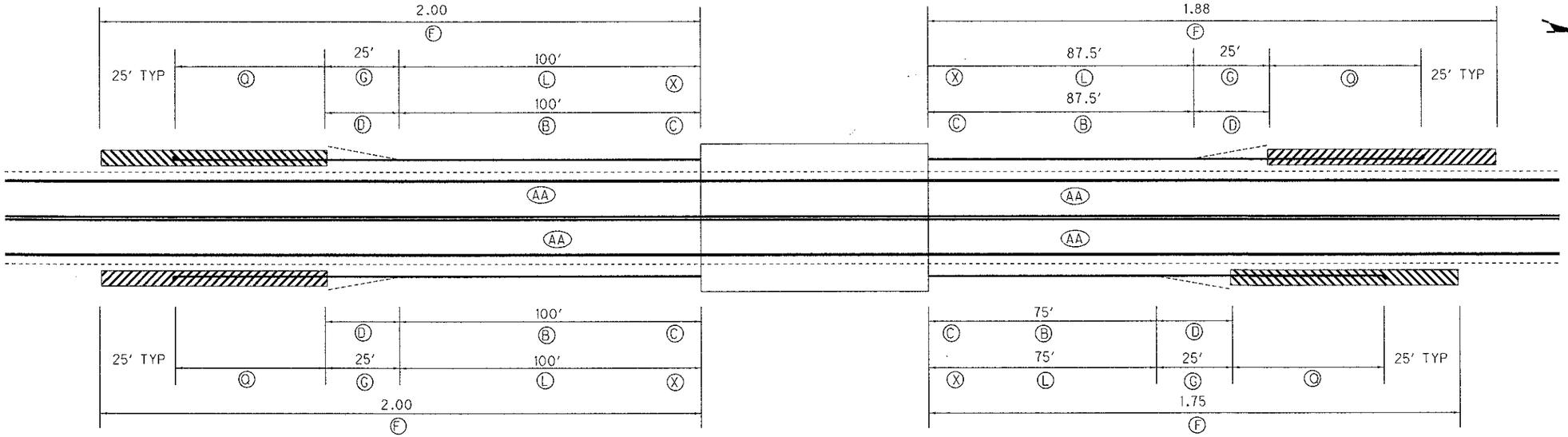
CALCULATED CVH
CHECKED BAD

GUARDRAIL DETAIL
RIC-42-1787 S.L.M. 17.87

RIC/ASD-42-16.37/0.00

13
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

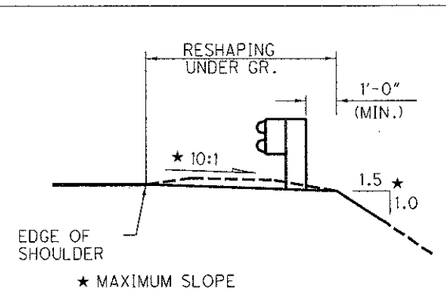


NOTE:
1.) MAINTAIN PRESENT OFFSET

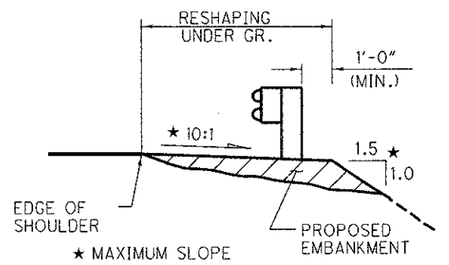
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
Ⓑ	202	GUARDRAIL REMOVED FOR REUSE	FT	187.5	175	362.5
Ⓒ	606	BRIDGE TERMINAL ASSEMBLY REMOVED	EACH	2	2	4
Ⓓ	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2	2	4
▨	203	EMBANKMENT, AS PER PLAN	CU YD	100	100	200
Ⓕ	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	3.88	3.75	7.63
Ⓖ	606	GUARDRAIL, TYPE 5	FT	50	50	100
Ⓛ	606	GUARDRAIL REBUILT, TYPE 5	FT	187.5	175	362.5
Ⓠ	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	2	2	4
Ⓧ	606	BRIDGE TERMINAL ASSEMBLY, TYPE 4	EACH	2	2	4
AA	626	BARRIER REFLECTOR, TYPE A	EACH	5	5	10

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

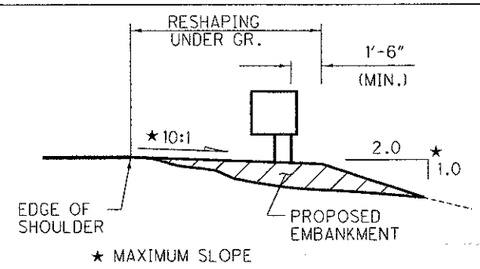
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



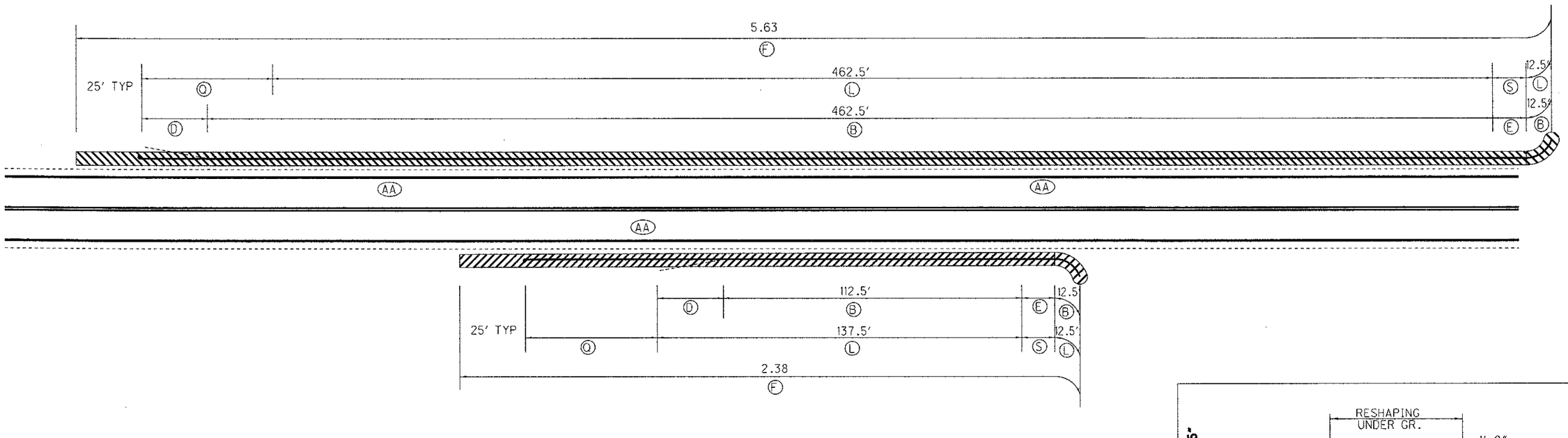
CALCULATED CVH
CHECKED BAD

GUARDRAIL DETAIL
ASD-42-0015 S.L.M. 0.15

RIC/ASD-42-16.37/0.00

14
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

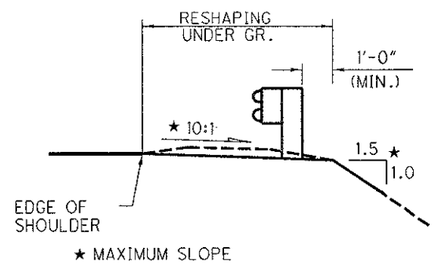


NOTE:
1.) OFFSET GUARDRAIL 6' FROM EDGE OF PAVEMENT ON BOTH SIDES
2.) 25' OF GUARDRAIL REMOVED FROM THE LEFT SIDE SHALL BE USED ON THE RIGHT SIDE

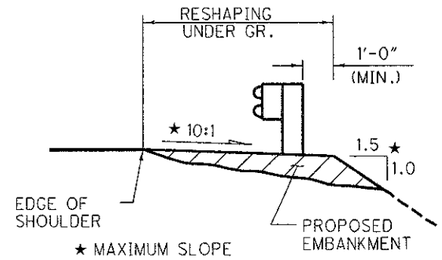
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	500	125	625
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
(E)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1	1	2
▨	203	EMBANKMENT, AS PER PLAN	CU YD	250	53	303
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	5.63	2.38	8.01
(L)	606	GUARDRAIL REBUILT, TYPE 5, USING 9' POSTS	FT	475	150	625
(Q)	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1	1	2
(S)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1	1	2
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	7	3	10

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

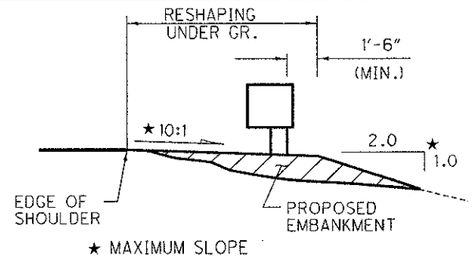
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



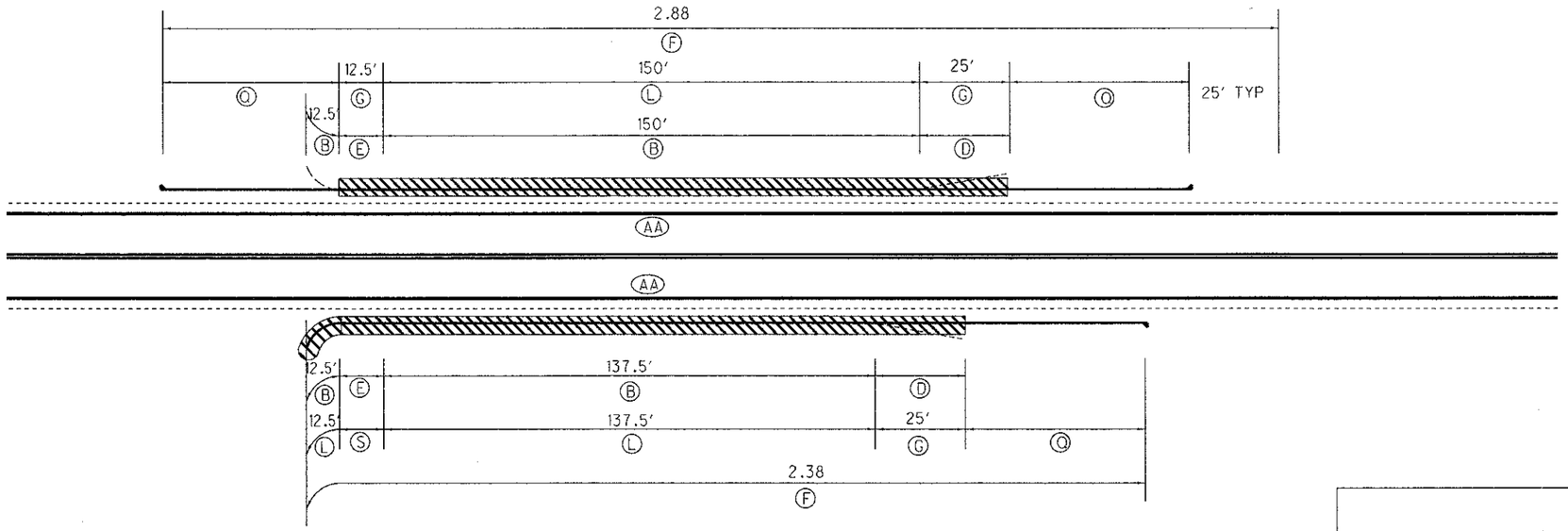
CALCULATED CVH
CHECKED BAD

GUARDRAIL DETAIL
ASD-42-1.40 S.L.M.

RIC/ASD-42-16.37/0.00

15
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

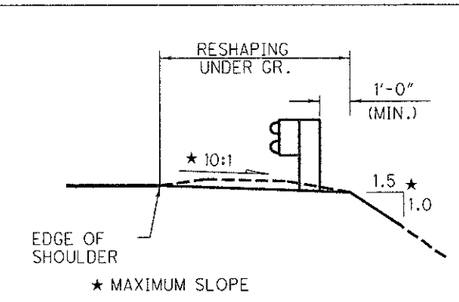


NOTE:
1. OFFSET GUARDRAIL 6' FROM EDGE OF PAVEMENT ON BOTH SIDES
2. THE RADIUS PANEL REMOVED SHALL BE USED AT ASD-42-1.77 LOCATION

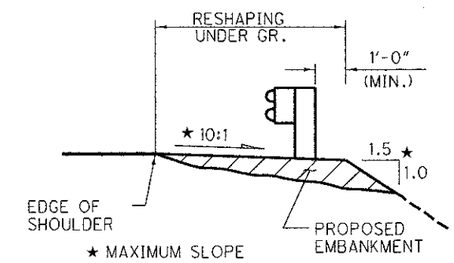
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	162.5	150	312.5
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
(E)	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1	1	2
	203	EMBANKMENT, AS PER PLAN	CU YD	125	125	250
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	2.88	2.38	5.26
(G)	606	GUARDRAIL, TYPE 5	FT	37.5	25	62.5
(L)	606	GUARDRAIL REBUILT, TYPE 5	FT	150	150	300
(Q)	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	2	1	3
(S)	606	ANCHOR ASSEMBLY, TYPE T	EACH		1	1
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	4	4	8

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

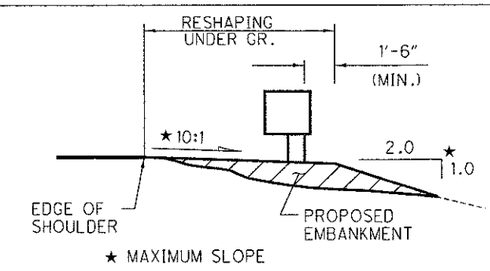
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



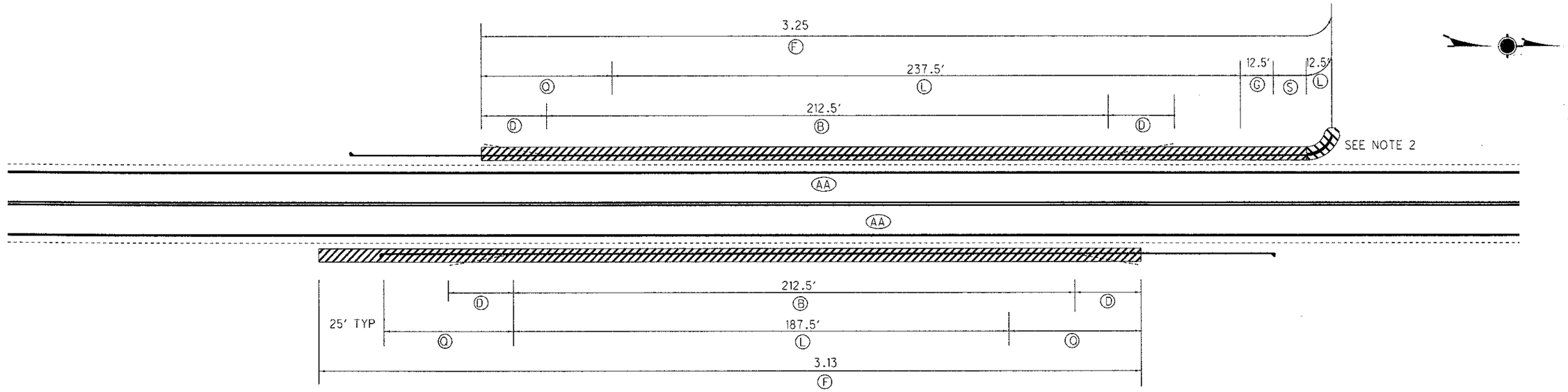
GUARDRAIL DETAIL
ASD-42-1.60 S.L.M.

RIC/ASD-42-16.37/0.00

16/33

CALCULATED CVH
CHECKED BAD

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

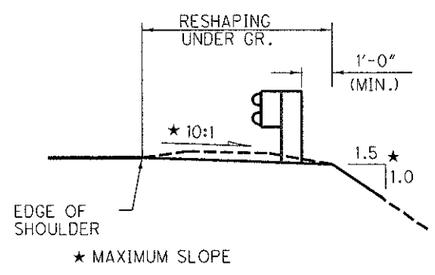


NOTE:
1. OFFSET GUARDRAIL 6' FROM EDGE OF PAVEMENT ON BOTH SIDES
2. THE RADIUS PANEL REMOVED FROM ASD-42-1.60 SHALL BE USED AT THIS LOCATION
3. 25' OF GUARDRAIL REMOVED FOR REUSE ON THE RIGHT SIDE SHALL BE USED TO REBUILD THE GUARDRAIL ON THE LEFT SIDE.

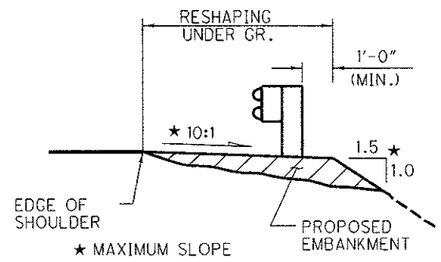
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
(B)	202	GUARDRAIL REMOVED FOR REUSE	FT	212.5	212.5	425
(D)	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2	2	4
	203	EMBANKMENT, AS PER PLAN	CU YD	144	128	272
(F)	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	3.25	3.13	6.38
(G)	606	GUARDRAIL, TYPE 5	FT	12.5		12.5
(L)	606	GUARDRAIL REBUILT, TYPE 5	FT	250	187.5	437.5
(Q)	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1	2	3
(S)	606	ANCHOR ASSEMBLY, TYPE T	EACH	1		1
(AA)	626	BARRIER REFLECTOR, TYPE A	EACH	5	5	10

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

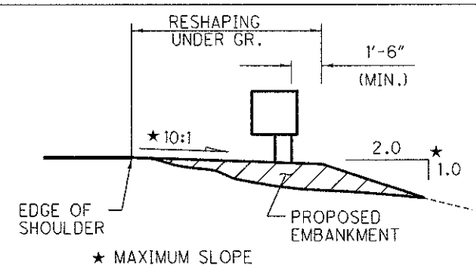
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



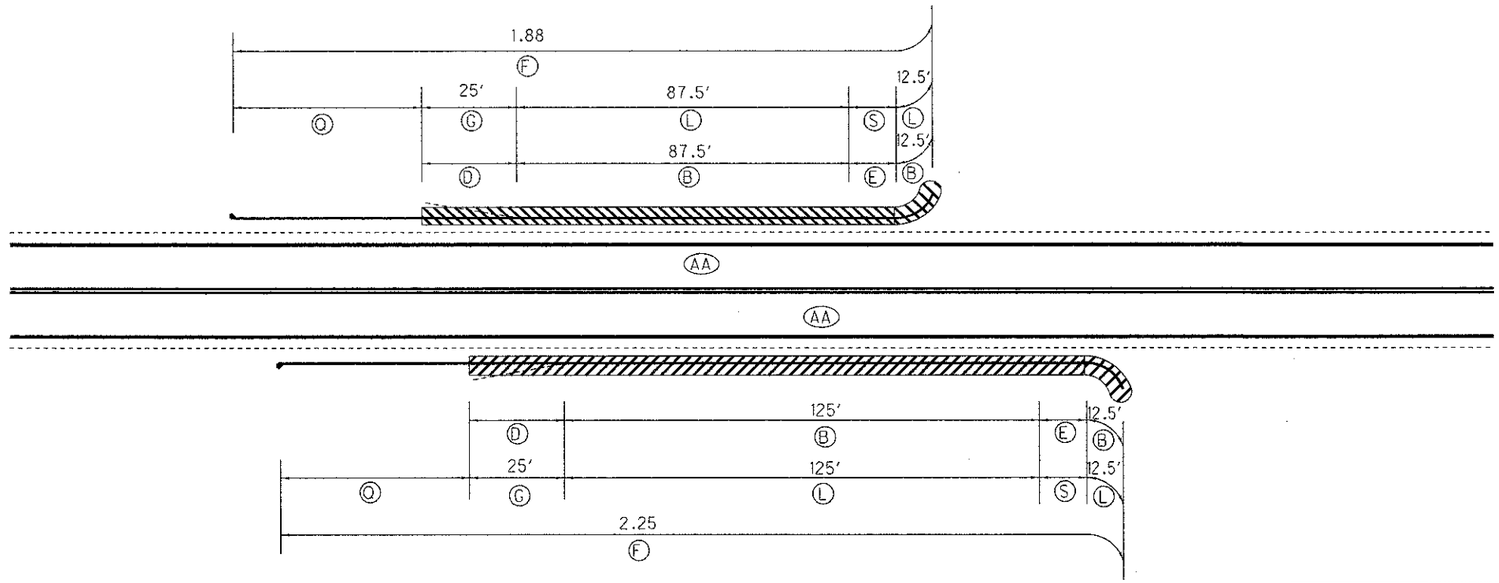
CALCULATED CVH
CHECKED BAD

GUARDRAIL DETAIL
ASD-42-1.77 S.L.M.

RIC/ASD-42-16.37/0.00

17
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

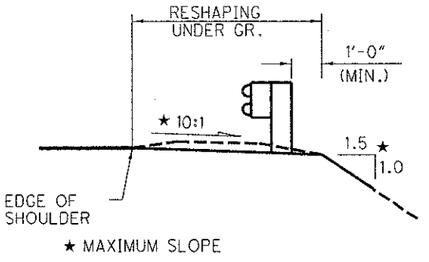


NOTE:
1. OFFSET GUARDRAIL 6' FROM EDGE OF PAVEMENT ON BOTH SIDES

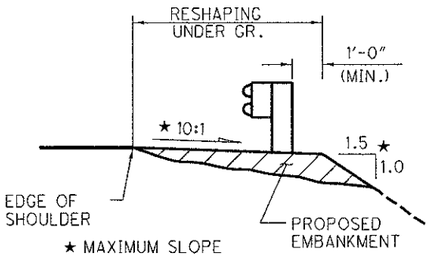
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
Ⓑ	202	GUARDRAIL REMOVED FOR REUSE	FT	100	137.5	237.5
Ⓓ	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	1	1	2
Ⓔ	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH	1	1	2
	203	EMBANKMENT, AS PER PLAN	CU YD	61	78	139
Ⓕ	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	1.88	2.25	4.13
Ⓖ	606	GUARDRAIL, TYPE 5	FT	25	25	50
Ⓛ	606	GUARDRAIL REBUILT, TYPE 5	FT	100	137.5	237.5
Ⓠ	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1	1	2
Ⓢ	606	ANCHOR ASSEMBLY, TYPE T	EACH	1	1	2
Ⓐⓐ	626	BARRIER REFLECTOR, TYPE A	EACH	3	4	7

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

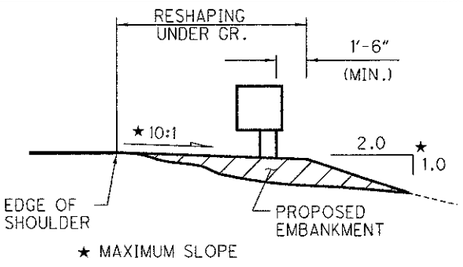
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



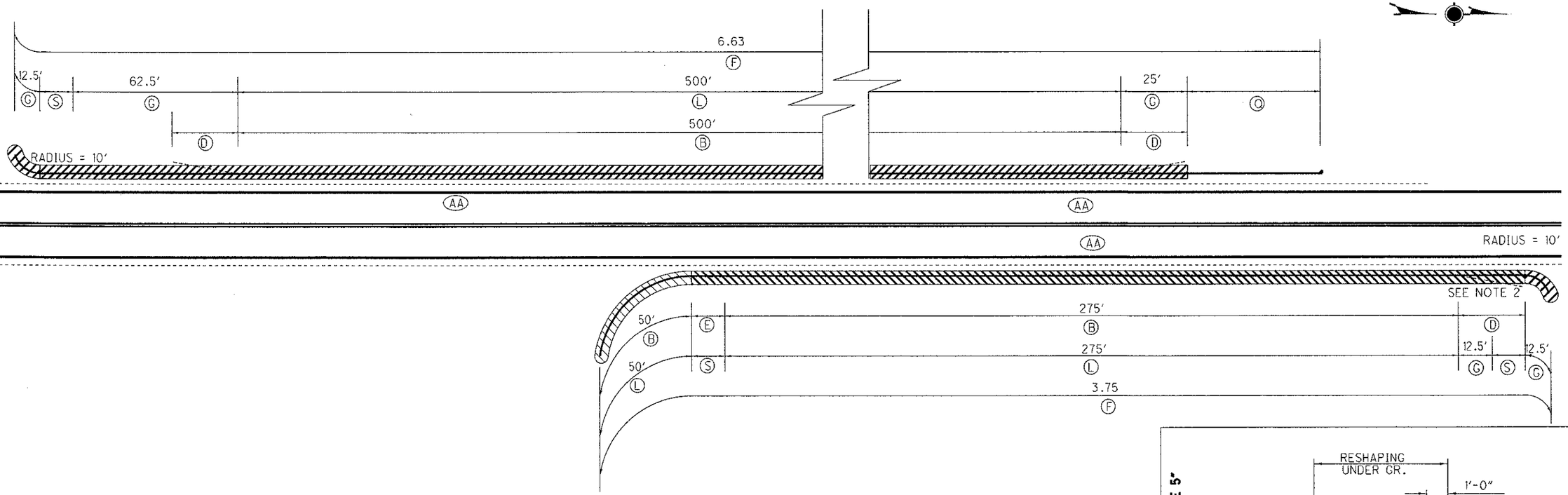
GUARDRAIL DETAIL
ASD-42-1.90 S.L.M.

CALCULATED CVH
CHECKED BAD

RIC/ASD-42-16.37/0.00

18
33

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

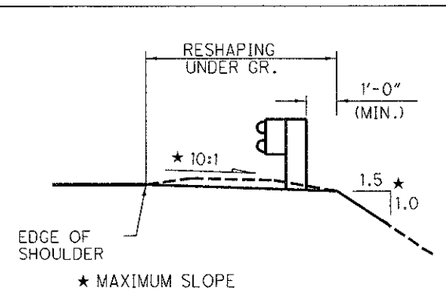


NOTE:
1. OFFSET GUARDRAIL 6′ FROM EDGE OF PAVEMENT ON BOTH SIDES.
2. TAPER GUARDRAIL AT 12:1 RATE AWAY FROM THE PAVEMENT TO AVOID EXISTING CURB AND CASTING.

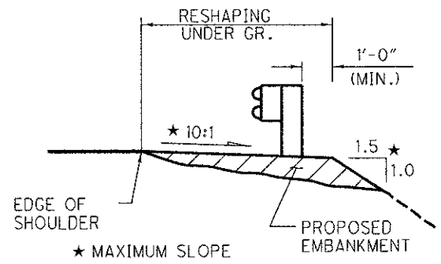
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
Ⓑ	202	GUARDRAIL REMOVED FOR REUSE	FT	500	325	825
Ⓓ	202	ANCHOR ASSEMBLY REMOVED, TYPE A	EACH	2	1	3
Ⓔ	202	ANCHOR ASSEMBLY REMOVED, TYPE T	EACH		1	1
	203	EMBANKMENT, AS PER PLAN	CU YD	136	83	219
Ⓕ	209	RESHAPING UNDER GUARDRAIL, AS PER PLAN	STA	6.63	3.75	10.38
Ⓖ	606	GUARDRAIL, TYPE 5	FT	100	25	125
Ⓛ	606	GUARDRAIL REBUILT, TYPE 5	FT	500	325	825
Ⓠ	606	ANCHOR ASSEMBLY, TYPE E-98	EACH	1		1
Ⓢ	606	ANCHOR ASSEMBLY, TYPE T	EACH	1	2	3
Ⓐⓐ	626	BARRIER REFLECTOR, TYPE A	EACH	8	5	13

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

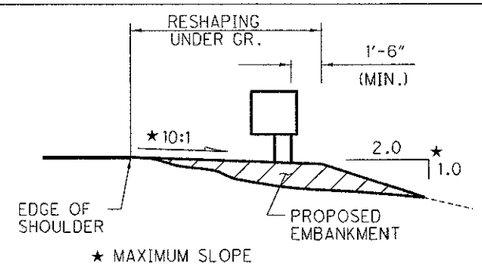
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



GUARDRAIL DETAIL

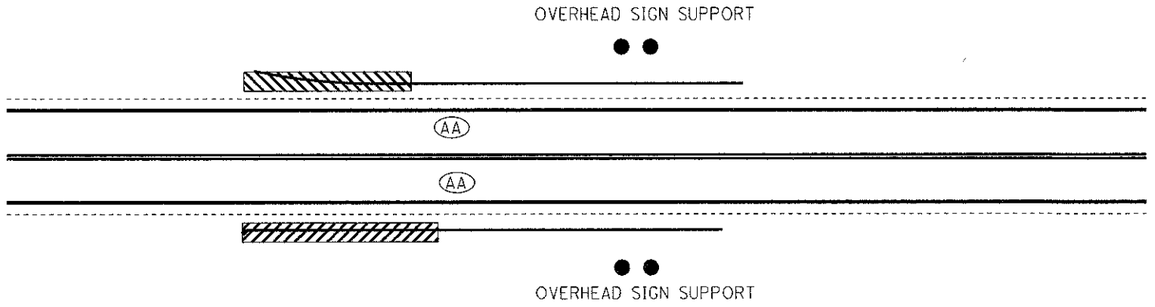
ASD-42-0259 S.L.M. 2.59

RIC/ASD-42-16.37/0.00

19/33

CALCULATED CVH
CHECKED BAD

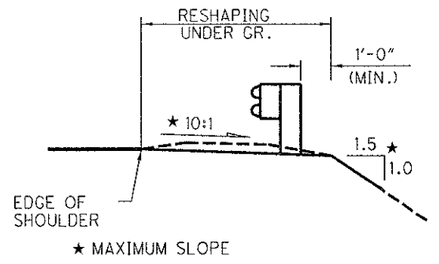
DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn **DATE:** 7/9/2009



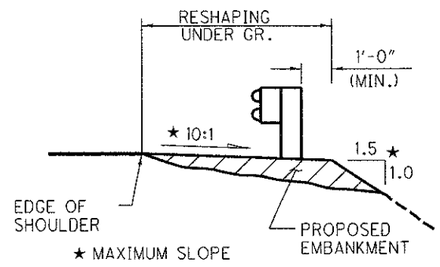
LOCATION	ITEM	DESCRIPTION	UNIT	QUANTITIY		TOTAL
				LEFT	RIGHT	
▨	203	EMBANKMENT, AS PER PLAN	CU YD	7	11	18
AA	626	BARRIER REFLECTOR, TYPE A	EACH	3	3	6

ALL QUANTITIES CARRIED TO GUARDRAIL SUB-SUMMARY SHEET, SHEET 5.

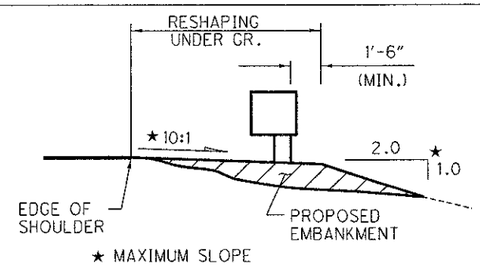
TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "TYPE 5"



TYPICAL SECTION "E-98"



GUARDRAIL DETAIL
ASD-42-3.50

RIC/ASD-42-16.37/0.00

20
33

CALCULATED CVH
CHECKED BAD

DESIGN FILE: I:\projects\82298\82298 Grail.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

AUXILIARY & LONG LINE MARKINGS

FUNDING	COUNTY	ROUTE	STATION / SLM FROM	STATION / SLM TO	HIGHWAY MILES	614 WORK ZONE LANE LINE, CLASS I, 642 PAINT	614 WORK ZONE CENTER LINE, CLASS II, 642 PAINT	614 WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	614 WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	614 WORK ZONE STOP LINE, CLASS I, 642 PAINT	614 WORK ZONE STOP LINE, CLASS III, 642 PAINT	614 WORK ZONE ARROW, CLASS I, 642 PAINT	614 WORK ZONE ARROW, CLASS III, 642 PAINT	642, TYPE 1 EDGE LINE TOTAL (PAY QUANTITY) (WHITE)	642, TYPE 1 EDGE LINE TOTAL (PAY QUANTITY) (YELLOW)	642, TYPE 1 LANE LINE	642, TYPE 1 CENTER LINE SOLID LINE EQUIVALENT	642, TYPE 1 CENTER LINE TOTAL (PAY QUANTITY)	644 AUXILIARY MARKINGS (740.04) CHANNELIZING LINE 8"	STOP LINE 24"	TRANSVERSE/ DIAGONAL LINE (WHITE) 24"	TRANSVERSE/ DIAGONAL LINE (YELLOW) 24"	LANE ARROW LEFT	LANE ARROW RIGHT	LANE ARROW THROUGH	LANE ARROW COMBINATION	DOTTED LINE, 4"	HANDICAP SYMBOL MARKING
						MILE	MILE	FT	FT	FT	FT	EACH	EACH	MILE	MILE	MILE	MILE	MILE	FT	FT	FT	FT	EACH				FT	EACH
FED/STATE	RIC	US 42	16.37	18.03	1.66		3.68	195	65			3	1	3.32			0.92	1.00	65	80		105	2					
FED/STATE	ASD	US 42	0.00	2.25	2.25		14.96	495	165			2	2	4.50			2.66	3.71	165	136		333	12					
FED/STATE	ASD	US 42	2.25	3.29	1.04	1.50	7.23	495	165			4	2	2.08		0.50	2.41	2.78	165	60	620	740	10	2			100	
FED/STATE	ASD	US 42	3.29	3.63	0.34	1.08		1,920	320					0.99	0.99	0.67			320									
FED/CITY	ASD	US 42	3.63	3.79	0.16	0.64		630	210	108	36	6	2	0.32	0.32	0.16			210	36		750	3					
		TOTAL FED/CITY				0.64		630	210	108	36	6	2	0.32	0.32	0.16			210	36		750	3					
		TOTAL FED/STATE				2.58	25.87	3,105	715			9	5	10.89	0.99	1.17	5.99	7.49	715	276	620	1,178	24	2			100	
		TOTAL			**5.45**	**3.22**	**25.87**	**3,735**	**925**	**108**	**36**	**15**	**7**	**11.21**	**1.31**	**1.33**	**5.99**	**7.49**	**925**	**312**	**620**	**1,928**	**27**	**2**			**100**	

RAISED PAVEMENT MARKERS

FUNDING	COUNTY	ROUTE	STATION/SLM FROM	STATION/SLM TO	DETAIL	621 RAISED PAVEMENT MARKER REMOVED EACH	621 RPM EACH	PRISMATIC RETRO-REFLECTOR TYPES ONE-WAY WHITE EACH	TWO-WAY YELLOW / YELLOW	TWO-WAY WHITE / RED	TWO-WAY YELLOW / RED	TWO-WAY BLUE / BLUE	REMARKS
FED/STATE	ASD	US 42	0.00	0.86	GAP	58	58		58				CONTINUOUS ROUTE TREATMENT
FED/STATE	ASD	US 42	0.86	1.36	7/13	63	63		57	6			LEFT TURN LANES @ SR 603 AND TWLTL
FED/STATE	ASD	US 42	1.36	2.65	GAP	83	83		83				COUNTINUOS ROUTE TREATMENT
FED/STATE	ASD	US 42	2.65	2.90	13	30	30		30				T.W.L.T.L. & TAPER
FED/STATE	ASD	US 42	2.90	2.95	7	13	13		7	6			LT & RT LANES @ C.R. 1475
FED/STATE	ASD	US 42	2.95	3.02	11	13	13		8	5			PART OF 2-4 LANE TRANSITION
FED/STATE	ASD	US 42	3.02	3.79	10/11	116	116	10	50	56			PART OF 2-4 LANE TRANSITION AND LANE-LINE
													AND STOP APPROACH @ BANEY RD
FED/STATE	RIC	US 42	16.37	16.53	7				17	4			L.T. LANE @ FLEMING FALLS RD.
FED/STATE	RIC	US 42	16.53	18.03	GAP	21	21		101				CONTINUOUS ROUTE TREATMENT
		FED/STATE		**TOTAL**		**397**	**397**	**10**	**411**	**77**			

NOTE 4) PAVEMENT MARKING DETAILS WILL BE PROVIDED AT THE PRECONSTRUCTION MEETING.

NOTE 5) WORK ZONE LANE ARROWS ARE TO BE PLACED IN TURN LANES

DETAIL	DESCRIPTION
1	MULTILANE UNDIVIDED TYPICAL SPACING
2	TAPERED ACCEL. LANE
3	DECELERATION LANE
4	PARALLEL ACCEL LANE
5	MULTILANE DIVIDED/EXPRESSWAY
6	STOP APPROACH
7	2 LANE APPR. WITH TURN LANE
8	THROUGH APPROACH
9	3 LANE APPR. WITH TURN LANE
10	3 LANE DIVIDED TO 2 LANE TRANSITION
11	3 LANE UNDIVIDED TO 2 LANE TRANSITION
12	TWO LNAE NARROW BRIDGE
13	TWO WAY LEFT TURN LANE
14	ONE LANE BRIDGE
15	HORIZONTAL CURVE
16	HORIZONTAL CURVE ALT.
17	STOP APPROACH ALT.
18	FIRE HYDRANT
GAP	CENTER LINE AT 80 FT. TYP.

NOTES

1) THRU LANES SHALL BE STRIPED AT 12' WIDTHS.

2) WORK ZONE STOP LINES SHALL BE INSTALLED AT BANEY RD.

3) ALL WORK ZONE CLASS III MARKINGS TO BE PLACED ON THE SURFACE COURSE ONLY

CALCULATED CVH CHECKED BAD

PAVEMENT MARKING DATA

RIC/ASD-42-16.37/0.00

21/33

DESIGN FILE: I:\projects\82298\82298 Pave Mark.dgn
WORKSTATION: cvanhorn DATE: 7/9/2009

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

DS-1-92 DATED 7/18/03

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.

DECK PROTECTION METHOD:

TYPE 3 WATERPROOFING AND ASPHALT CONCRETE OVERLAY

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
RIC-42-1788	RIC-42-17.86	1991
ASD-42-0015	RIC-42-16.85	1936
	ASD-42-0.00	1976
ASD-42-0259	ASD-42-2.53	1989

CLEARING AND GRUBBING:

ANY WEEDS, BRANCHES, OR TREES THAT NEED TO BE REMOVED IN ORDER TO PERFORM THE WORK SHALL BE INCIDENTAL TO THE WORK THAT IS TO BE PERFORMED.

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.

ITEM 202 - REMOVAL MISC.: DRIP STRIP

THIS ITEM SHALL BE USED TO REMOVE THE DRIP STRIP ALONG BOTH SIDES OF THE STRUCTURE. THE COST TO REMOVE THE UPPER SHORT PIECES OF DRIP STRIP IS INCIDENTAL TO THIS ITEM.

CARE SHALL BE TAKEN TO NOT DAMAGE THE EXISTING PRESTRESSED BEAMS. IF THE BEAMS ARE DAMAGED, THE CONTRACTOR SHALL REPAIR THE BEAMS TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

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

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN:

THIS ITEM SHALL BE USED TO PLANE THE REMAINING ASPHALT TO WITHIN 1/2" OF THE TOP OF THE BEAMS, THEN THE REMAINING 1/2" OF ASPHALT AND EXISTING WATERPROOFING SHALL BE REMOVED WITH HAND TOOLS. CARE SHALL BE TAKEN NOT TO GRIND INTO OR DAMAGE THE PRESTRESSED BEAMS. IF THE BEAMS ARE DAMAGED, THE CONTRACTOR SHALL REPAIR THE BEAMS TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

TRAFFIC SHALL NOT BE ALLOWED ON THE SURFACE OF THE BARE CONCRETE BEAMS OR ON THE WATERPROOFING.

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

ITEM SPECIAL - STEEL DRIP STRIP

SEE STANDARD DRAWING DS-1-92 FOR DETAILS AND NOTES.

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.

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN:

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

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.

DESIGN FILE: I:\projects\82298\structures\strnotes.dgn
WORKSTATION: dmellens DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3, OFFICE OF PRODUCTION
DESIGNED: DCM | DRAWN: DCM | REVIEWED: RDN | DATE: 6/09
CHECKED: DJV | REVISED:

STRUCTURE GENERAL NOTES

RIC/ASD-42-16.37/0.00

ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURE RIC-42-1788:

TWO WAY TRAFFIC ON STRUCTURE RIC-42-1788 SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THIS STRUCTURE SHALL HAVE A SIGNALIZED CLOSURE AS SHOWN ON SHEET 27 FOR A MAXIMUM OF 5 CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES). THE 5 CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 5 CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER CMS 108.07.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED OTHER THAN BEHIND THE DRUMS.

RIC-42-1788 AND ASD-42-0015 CANNOT HAVE LANE CLOSURES AT THE SAME TIME.

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

ITEM 614 - MAINTAINING TRAFFIC FOR STRUCTURE ASD-42-0015:

TWO WAY TRAFFIC ON STRUCTURE ASD-42-0015 SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT THROUGH TRAFFIC ON THIS STRUCTURE SHALL HAVE A SIGNALIZED CLOSURE AS SHOWN ON SHEET 30 FOR A MAXIMUM OF 5 CONSECUTIVE CALENDAR DAYS (TOTAL BOTH PHASES). THE 5 CONSECUTIVE DAYS SHALL BE CONSIDERED AS AN INTERIM COMPLETION DATE (SECTION 108) AND FOR EACH CALENDAR DAY BEYOND THE 5 CALENDAR DAYS THAT THE HIGHWAY REMAINS IN A SIGNALIZED CLOSURE, THE CONTRACTOR WILL BE ASSESSED LIQUIDATED DAMAGES AS PER CMS 108.07.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED OTHER THAN BEHIND THE DRUMS.

RIC-42-1788 AND ASD-42-0015 CANNOT HAVE LANE CLOSURES AT THE SAME TIME.

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

ITEM 614 - MAINTAINING TRAFFIC:

ON ALL OTHER STRUCTURES TWO WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT DURING WORKING HOURS WHEN ONE LANE MAY BE CLOSED USING FLAGGERS, AS PER STANDARD DRAWING MT-97.10.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED OTHER THAN BEHIND THE DRUMS

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH THE OMUTCD.

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO PROVIDE THESE METHODS OF TRAFFIC CONTROL SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
DCM	DCM	RDN	6/09
CHECKED	REVISED		
DJV			

TRAFFIC NOTES

MAINTAINING TRAFFIC

RIC/ ASD-42-16.37/ 0.00

23
33

DESIGN FILE: I:\projects\82298\structures\strnotes.dgn
WORKSTATION: dmollens DATE: 7/9/2009

BRIDGE DECK DATA								ROADWAY DATA		
COUNTY, ROUTE, BRIDGE NO.	LOCATION	STRUCTURE TYPE	LENGTH (BRIDGE DECK)	WIDTH	BRIDGE DECK AREA	SKEW	EXISTING WEARING SURFACE	EXISTING PAVEMENT WIDTH	EXISTING APPROACH SLAB WIDTH	EXISTING APPROACH SLAB LENGTH
			FT.	FT.	SQ.YD.			FT.	FT.	FT.
+ RIC-42-1735	OVER BRANCH OF FLEMMING FALLS CREEK	CONCRETE BOX				58° RF	ASPHALT			
+ RIC-42-1771	OVER BLACK FORK OF MOHICAN RIVER	CONCRETE BOX				0°	ASPHALT			
++ RIC-42-1788	OVER BLACK FORK OF MOHICAN RIVER	3- SPAN PRESTRESS BEAM	205'-10"±	44'±	1007	15° LF	ASPHALT	40	44	20
++ ASD-42-0015	OVER BRINDLE RUN CREEK	2- SPAN PRESTRESS BEAM	81'-7"±	40'±	363	20° LF	ASPHALT	34	30	11
++ ASD-42-0259	OVER OHLEN RUN	3-SIDED PRECAST CONCRETE ARCH				19° 30' RF	ASPHALT			

+ PLANE AND PAVE OVER STRUCTURE (NO STRUCTURE WORK). (SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES)

++ PLANE AND PAVE OVER STRUCTURE (SEE DETAILS IN PLAN FOR STRUCTURE WORK). (SEE ROADWAY PLANS FOR PLANING AND PAVING QUANTITIES)

DESIGN AGENCY DISTRICT 3 OFFICE OF PRODUCTION

REVIEWED RDN DATE 6/09

DRAWN DCM REVISED

DESIGNED DCM CHECKED DJV

BRIDGE TREATMENT

RIC/ASD-42-16.37/0.00

24/33

DESIGN FILE: I:\projects\82298\structures\brtreat.dgn
WORKSTATION: dmollens DATE: 7/9/2009

RIC-42-1788 SFN 7003072 (FEDERAL/STATE)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	98200	412	FT	REMOVAL MISC.: DRIP STRIP	22
254	01001	993	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	22
407	10000	81	GALLON	TACK COAT	3
409	30000	183	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
442	20201	30	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN	4
512	10100	191	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33010	1006	SQ YD	TYPE 3 WATERPROOFING	
SPECIAL	51822300	511	FT	STEEL DRIP STRIP	22
614	13202	32	EACH	BARRIER REFLECTOR, TYPE A2	
614	21000	.06	MILE	WORK ZONE CENTER LINE, CLASS 1 (WHITE)	
614	22000	.40	MILE	WORK ZONE EDGE LINE, CLASS 1 (WHITE)	
614	26000	24	FT	WORK ZONE STOP LINE, CLASS 1	

ASD-42-0015 SFN 0301027 (FEDERAL/STATE)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
202	98200	155	FT	REMOVAL MISC.: DRIP STRIP	22
254	01001	378	SQ YD	PAVEMENT PLANING ASPHALT CONCRETE, AS PER PLAN	22
407	10000	30	GALLON	TACK COAT	3
409	30000	64	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	
442	20201	25	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448), AS PER PLAN	4
512	10100	83	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
512	33010	378	SQ YD	TYPE 3 WATERPROOFING	
SPECIAL	51822300	191	FT	STEEL DRIP STRIP	22
519	11101	57	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	22
614	13202	14	EACH	BARRIER REFLECTOR, TYPE A2	
614	21000	.06	MILE	WORK ZONE CENTER LINE, CLASS 1 (WHITE)	
614	22000	.27	MILE	WORK ZONE EDGE LINE, CLASS 1 (WHITE)	
614	26000	24	FT	WORK ZONE STOP LINE, CLASS 1	

ASD-42-0259 SFN 0301078 (FEDERAL/STATE)

ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION	REFERENCE SHEET
512	10100	72	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	

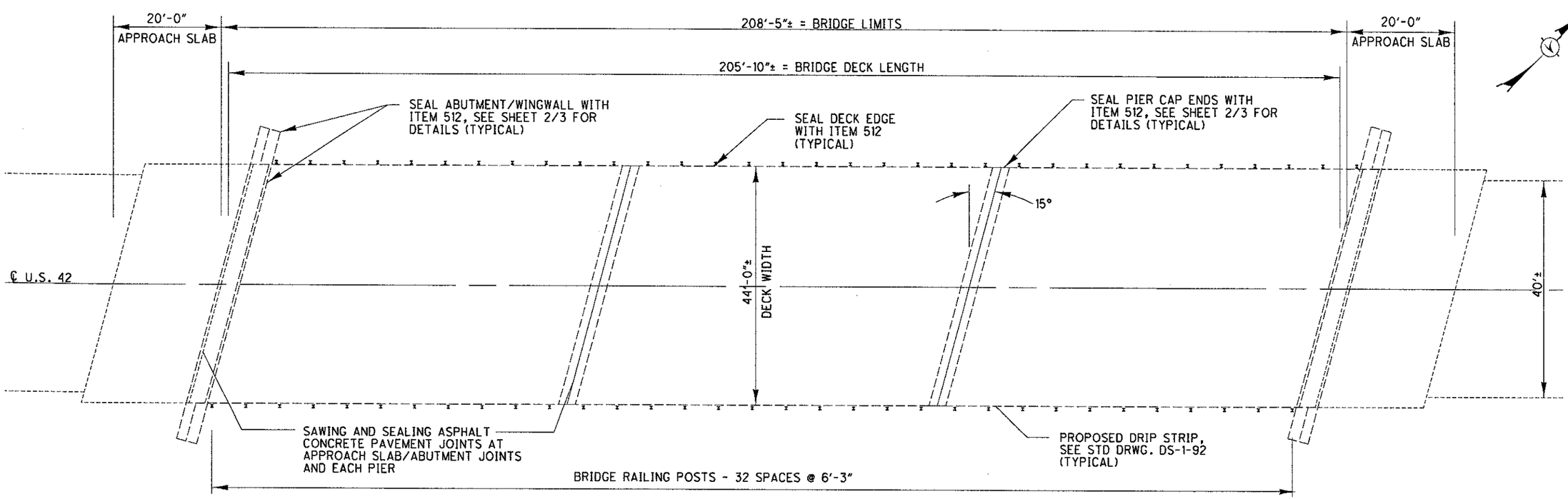
DESIGN FILE: i:\projects\82298\structures\strsum.dgn
WORKSTATION: dmollens DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION

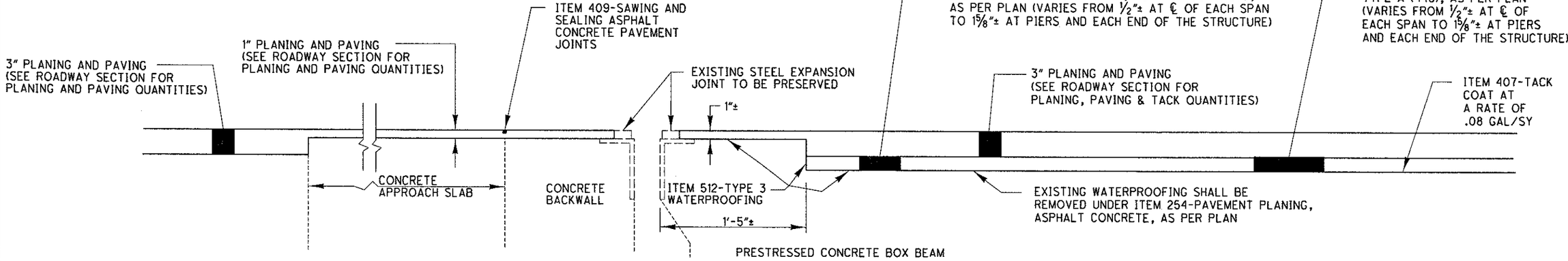
DESIGNED	DRAWN	REVIEWED	DATE
DCM	DCM	RDN	6/09
CHECKED	REVISED		
DJV			

STRUCTURE SUMMARY

RIC/ASD-42-16.37/0.00



PLAN VIEW



ASPHALT DETAILS

ITEM	QUANTITY	UNIT	DESCRIPTION
202	412	FT	REMOVAL MISC.: DRIP STRIP
254	993	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
407	81	GALLON	TACK COAT
409	183	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS
442	30	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE A (448), AS PER PLAN
512	1006	SQ YD	TYPE 3 WATERPROOFING
512	191	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
SPECIAL	511	FT	STEEL DRIP STRIP

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET.

NOTES:

1) GUARDRAIL NOT SHOWN.

2) SEE ROADWAY SECTION FOR PLANING AND PAVING TOP 3".

3) PLANE REMAINING ASPHALT AND REMOVE EXISTING WATERPROOFING USING ITEM 254-PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

4) REMOVE EXISITNG DRIP STRIP AND INSTALL NEW DRIP STRIP.

5) INSTALL TYPE 3 WATERPROOFING, PAVE WITH ITEM 442 TO WITHIN 3" OF SURFACE.

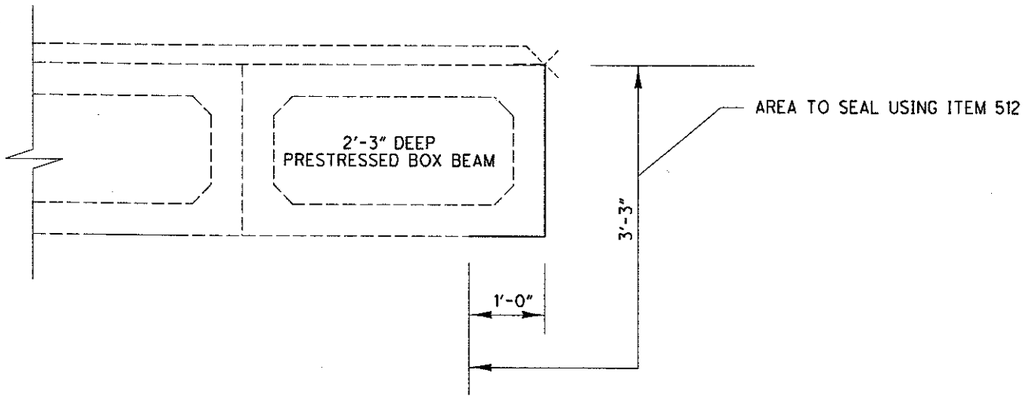
6) INSTALL ITEM 409 AT ABUTMENT/APPROACH SLAB JOINTS AND PIER JOINTS.

7) SEAL DECK EDGES, PIER CAP ENDS AND WINGWALL/ABUTMENT. SEE SHEET 2/3 FOR DETAILS.

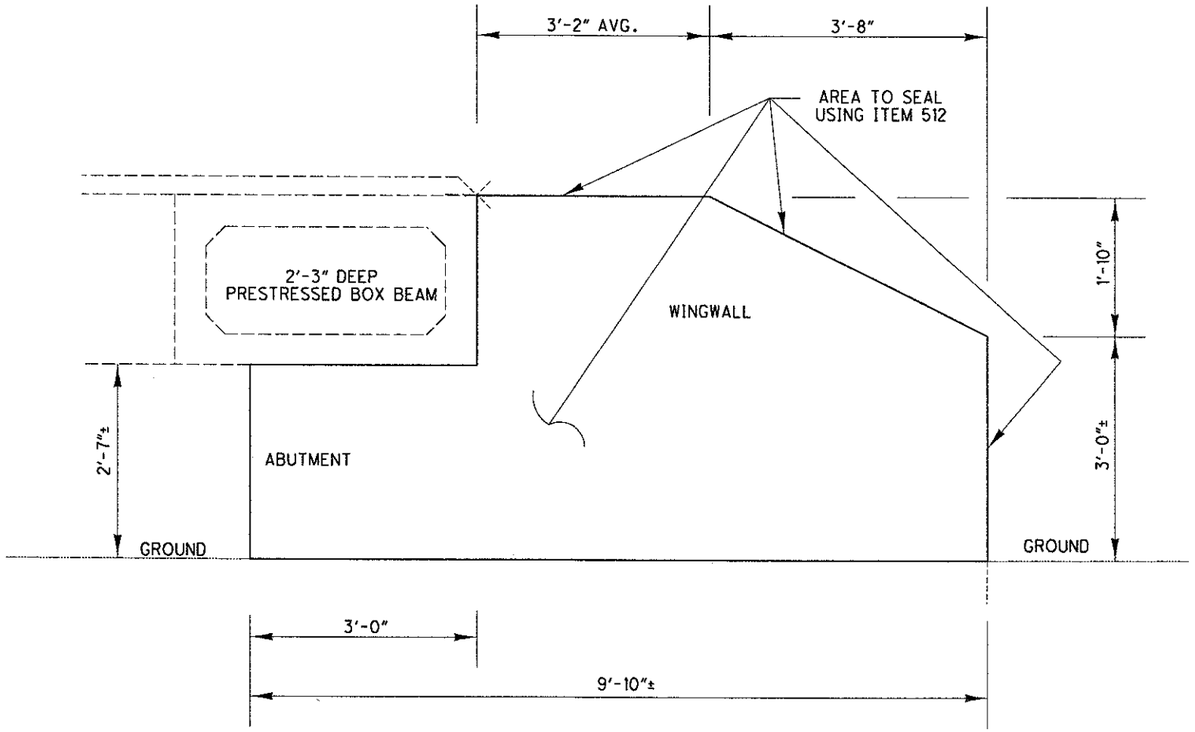
DESIGN FILE: I: \projects\82298\structures\RIC421788.dgn
WORKSTATION: dmoliens DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION
DESIGNED: DCM | DRAWN: DCM | REVIEWED: RDN | DATE: 6/09
CHECKED: DJV | REVISED: | STRUCTURE FILE NUMBER: 7003072

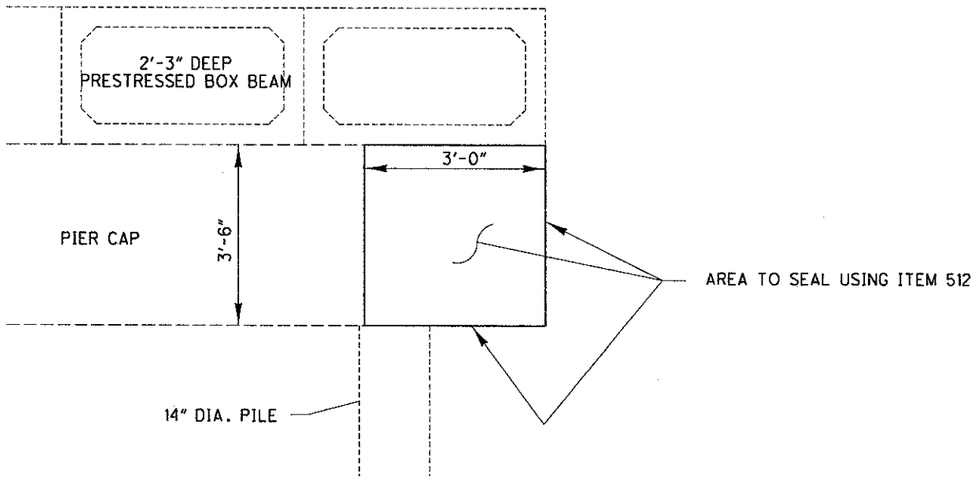
PLAN VIEW OVER BLACK FORK OF MOHICAN RIVER
RIC-42-1788
RIC/ASD-42-16.37/0.00
1 / 3
26 / 33



DECK EDGE SEALING
(SEALING LENGTH = 205'-10"±)



ABUTMENT/WINGWALL SEALING
(WINGWALL THICKNESS=1'-9")



PIER CAP END SEALING
(PIER CAP THICKNESS= 3'-0")

ITEM	QUANTITY	UNIT	DESCRIPTION
512	191	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO SHEET 1/3.

NOTE:
1) BRIDGE RAIL NOT SHOWN.

2) SEAL DECK EDGES, ENDS OF PIER CAPS AND PORTION OF WINGWALLS/ABUTMENTS.

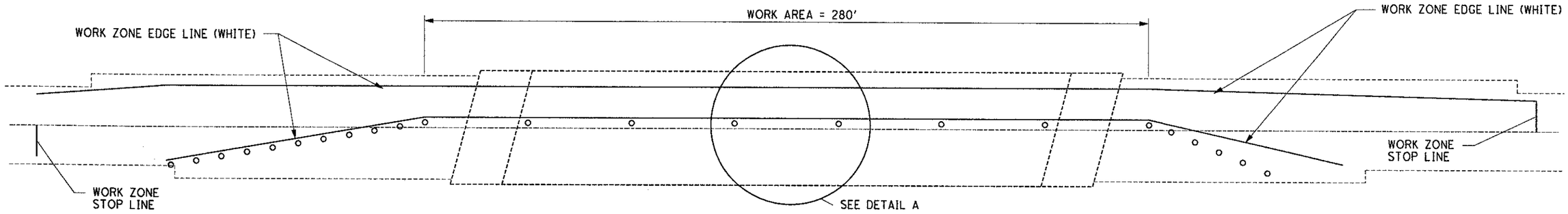
DESIGN FILE: I: \projects\82298\structures\RIC421788.dgn
WORKSTATION:dmollens DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION
DESIGNED DCM | DRAWN DCM | REVIEWED RDN 6/09 | DATE
CHECKED DJV | REVISED | STRUCTURAL FILE NUMBER 7003072

SEALING DETAILS
RIC-42-1788 OVER BLACK FORK OF MOHICAN RIVER

RIC/ASD-42-16.37/0.00

FOR DETAILS NOT SHOWN SEE STANDARD DRAWINGS
MT-96.11, MT-96.20, MT-96.26



PHASE A SHOWN
PHASE B SIMILAR

SIGNAL TIMING

A TWO PHASE CONTROLLER WITH CABINET CAPABLE OF BEING SET WITH THE FOLLOWING SPLITS SHALL BE FURNISHED

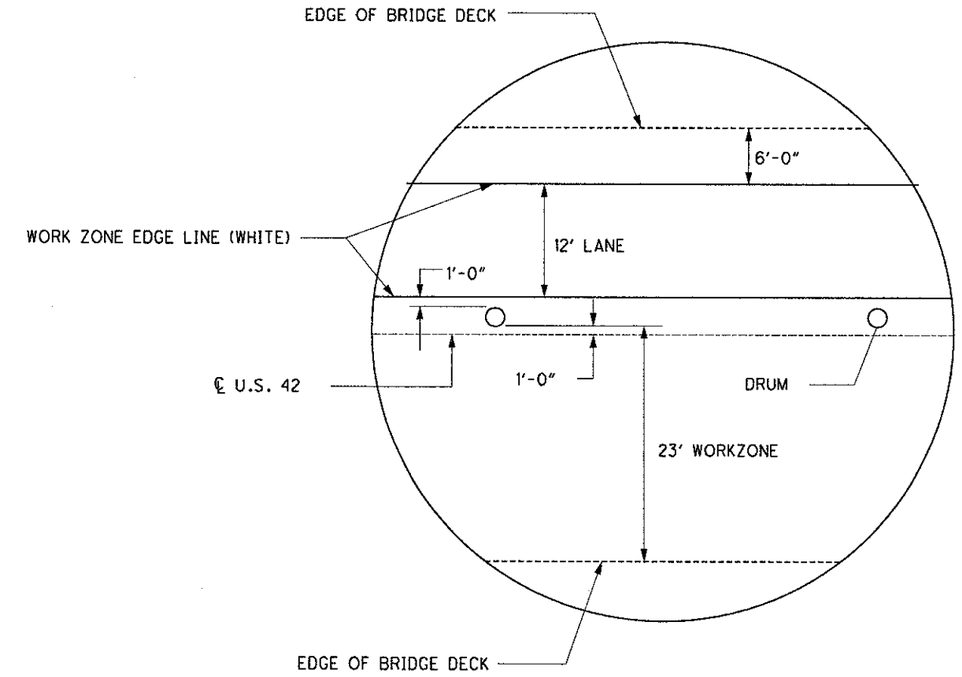
CYCLE LENGTH: 180 SECONDS

	GREEN	AMBER	RED
PHASE A	70	5	15
PHASE B	70	5	15

THE ABOVE TIMING MAYBE CHANGED WITH THE APPROVAL OF THE ENGINEER

ITEM	QUANTITY	UNIT	DESCRIPTION
614	32	EACH	BARRIER REFLECTOR, TYPE A2
614	.06	MILE	WORK ZONE CENTER LINE, CLASS 1 (SOLID DOUBLE)
614	.40	MILE	WORK ZONE EDGE LINE, CLASS 1 (WHITE)
614	24	FT.	WORK ZONE STOP LINE, CLASS 1

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET



DETAIL A

NOTES:

1) THE EXISTING BRIDGE RAILING AND GUARDRAIL ARE NOT SHOWN IN THE PLAN VIEW

DESIGN FILE: I: \projects\82298\structures\RIC421788MOT.dgn
WORKSTATION: dmollens DATE: 7/9/2009

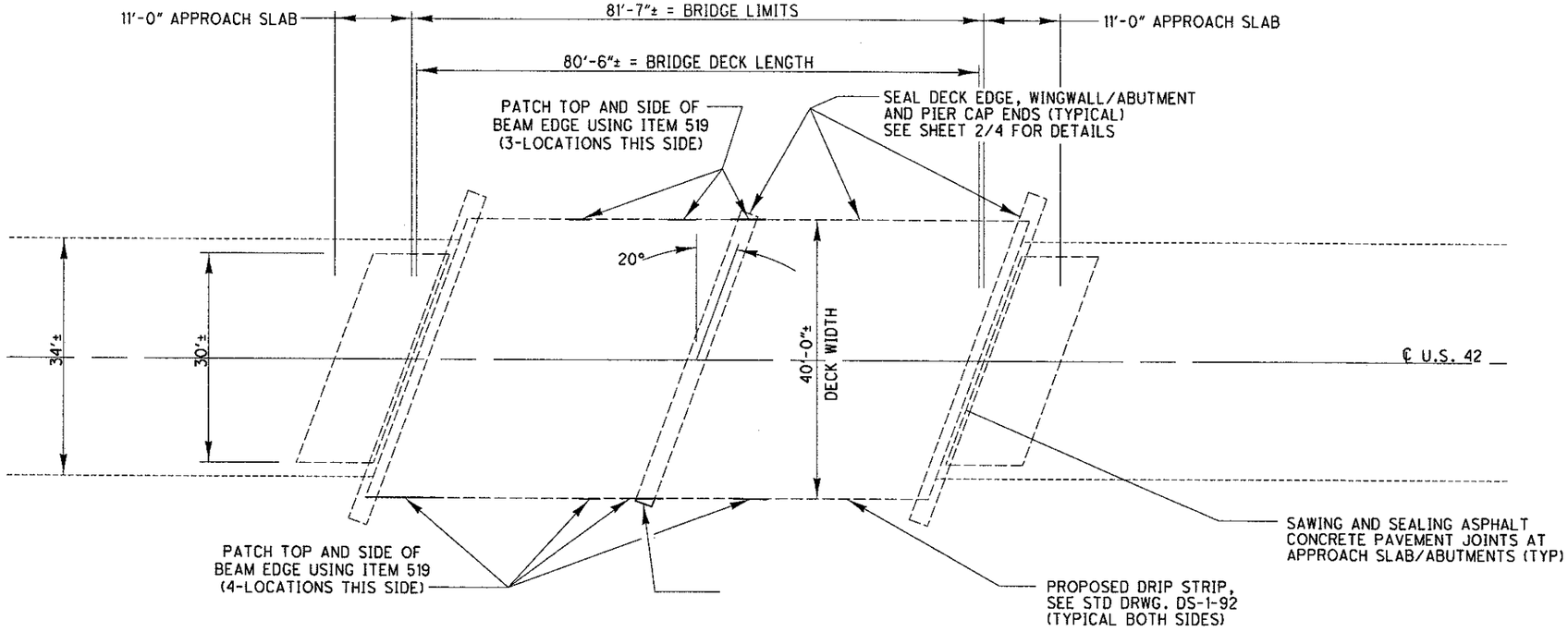
DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION
DESIGNED: DCM | DRAWN: DCM | REVIEWED: RDN | DATE: 6/09
CHECKED: DJV | REVISED: | STRUCTURAL FILE NUMBER: 7003072

MAINTENANCE OF TRAFFIC
RIC-42-1788
OVER BLACK FORK OF MOHICAN RIVER

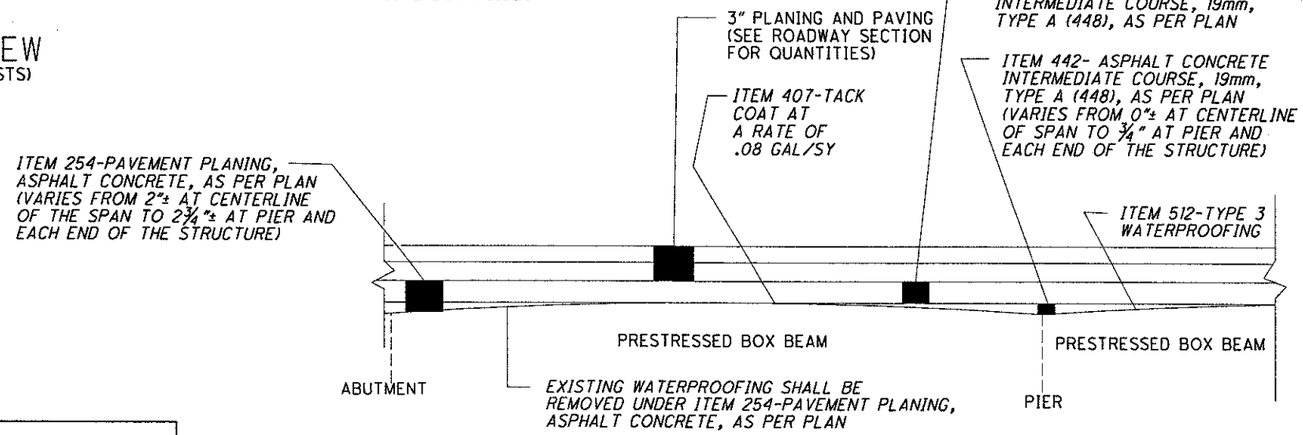
RIC/ASD-42-16.37/0.00

3/3

28/33



PLAN VIEW
(24 BRIDGE POSTS)



ASPHALT DIAGRAM

ITEM	QUANTITY	UNIT	DESCRIPTION
202	155	FT	REMOVAL MISC.: DRIP STRIP
254	378	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
407	30	GALLON	TACK COAT
409	64	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS
442	25	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE A (448), AS PER PLAN
512	378	SQ YD	TYPE 3 WATERPROOFING
512	83	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
SPECIAL	191	FT	STEEL DRIP STRIP
519	57	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET.

NOTES:

1) GUARDRAIL NOT SHOWN.

2) SEE ROADWAY SECTION FOR PLANING AND PAVING TOP 3".

3) PLANE REMAINING ASPHALT AND REMOVE EXISTING WATERPROOFING USING ITEM 254-PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

4) REMOVE EXISTING DRIP STRIP.

5) PATCH END OF PIER CAP USING ITEM 519. SEE SHEET 3/4 FOR DETAILS.

6) PATCH EDGES OF PRESTRESSED BOX BEAM WITH ITEM 519. SEE SHEET 3/4 FOR DETAILS.

7) INSTALL NEW DRIP STRIP USING ITEM SPECIAL.

8) SEAL WINGWALLS/ ABUTMENTS AND BEAM EDGES, SEE SHEET 2/4 FOR DETAILS.

9) PLACE TYPE 3 WATERPROOFING ON BRIDGE DECK AND 2'-0" ONTO APPROACH SLABS AS PER CMS 512.08 AND REPAVE.

10) INSTALL ITEM 409 AT ABUTMENT/APPROACH SLAB JOINTS.

DESIGN AGENCY: DISTRICT 3, OFFICE OF PRODUCTION
DESIGNED: DCM | DRAWN: DCM | REVIEWED: RDN | DATE: 6/09
CHECKED: DJV | REVISED: | STRUCTURE FILE NUMBER: 0301027

PLAN VIEW
ASD-42-0015 OVER BRINDLE RUN CREEK

RIC/ASD-42-16.37/0.00

1 / 4

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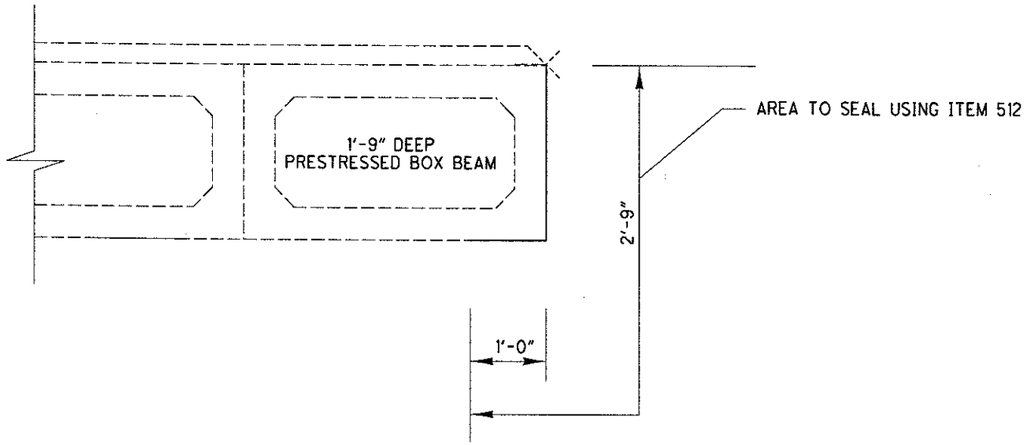
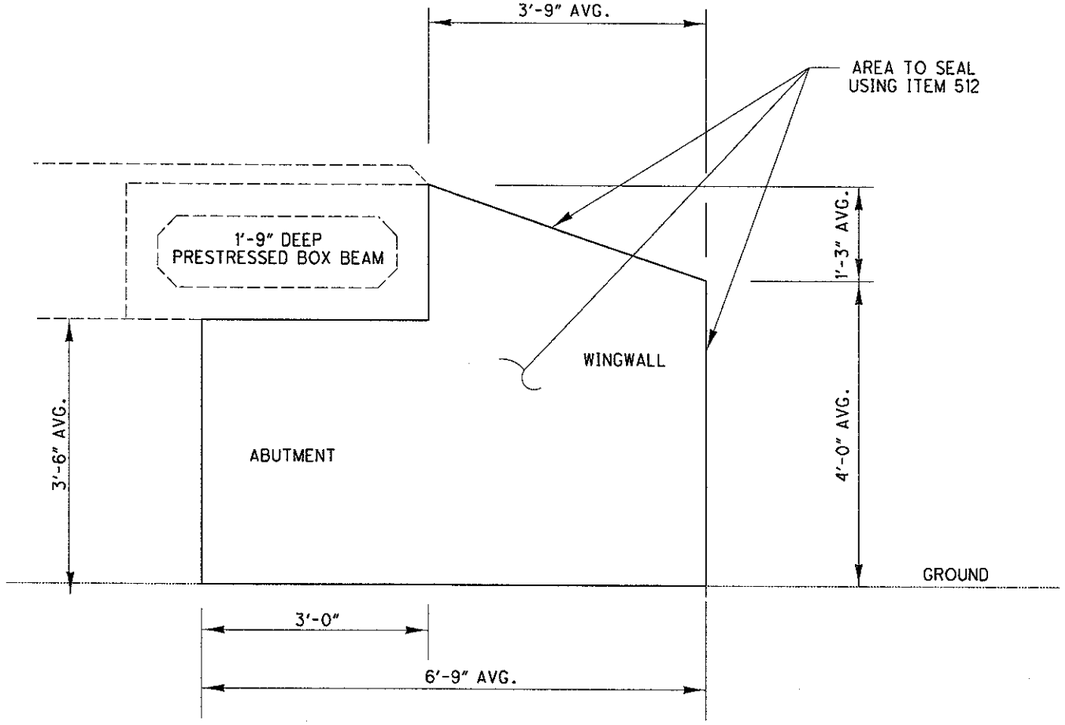
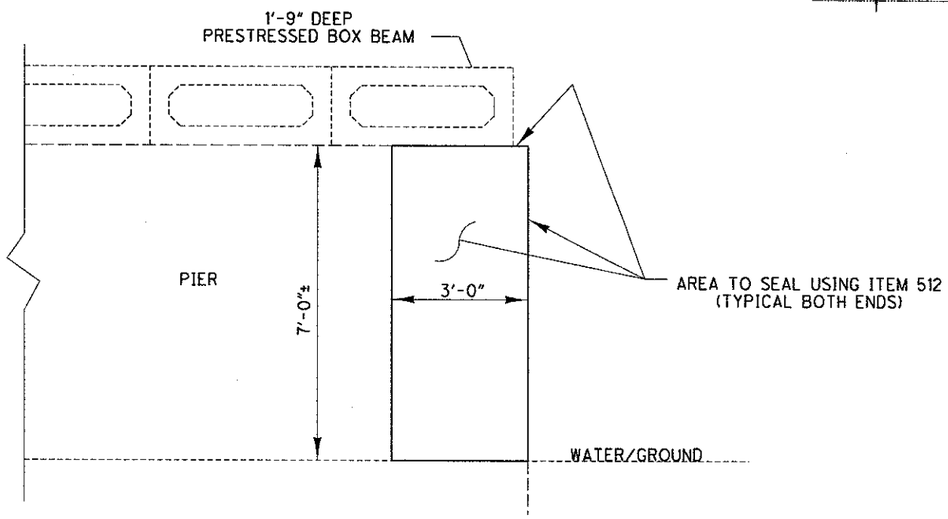
DESIGN FILE: i:\projects\82298\structures\ASD420015.dgn
WORKSTATION: dmollens DATE: 7/9/2009



DECK EDGE SEALING
(SEALING LENGTH = 77'-3"±)



ABUTMENT/WINGWALL SEALING
(WINGWALL THICKNESS=2'-9")



PIER END SEALING
(PIER THICKNESS= 2'-6")

ITEM	QUANTITY	UNIT	DESCRIPTION
512	83	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO SHEET 1/4.

NOTE:
1) BRIDGE RAIL NOT SHOWN.

2) SEAL DECK EDGES, ENDS OF PIERS AND PORTION OF WINGWALLS/ABUTMENTS.

DESIGN FILE: I:\projects\82298\structures\ASD420015.dgn
WORKSTATION:dmollens DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION
DESIGNED DCM | DRAWN DCM | REVIEWED RDN | DATE 6/09
CHECKED DJV | REVISED | STRUCTURAL FILE NUMBER 0301027

SEALING DETAILS
ASD-42-0015 OVER BRINDLE RUN CREEK

RIC/ASD-42-16.37/0.00

2/4

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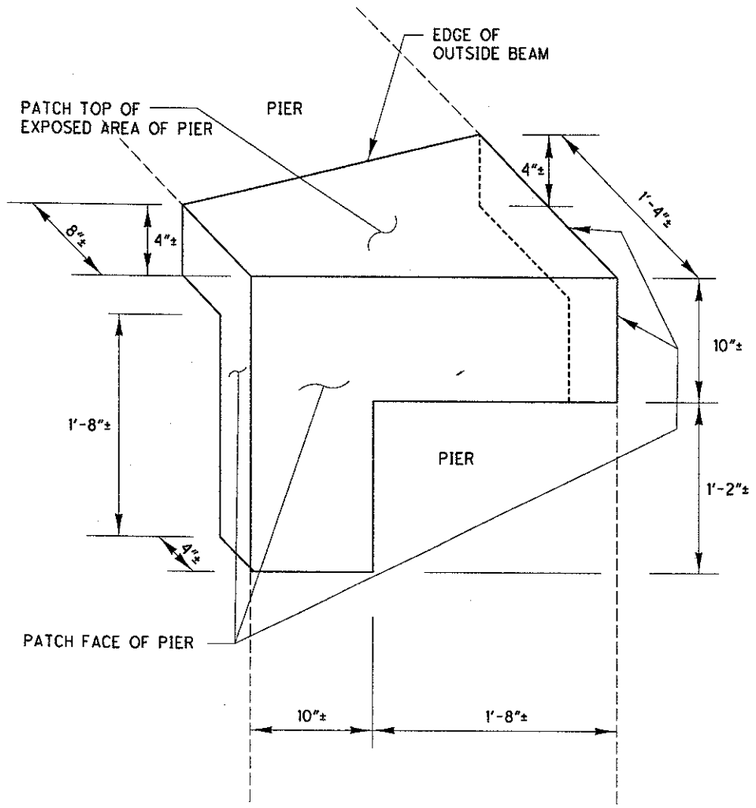
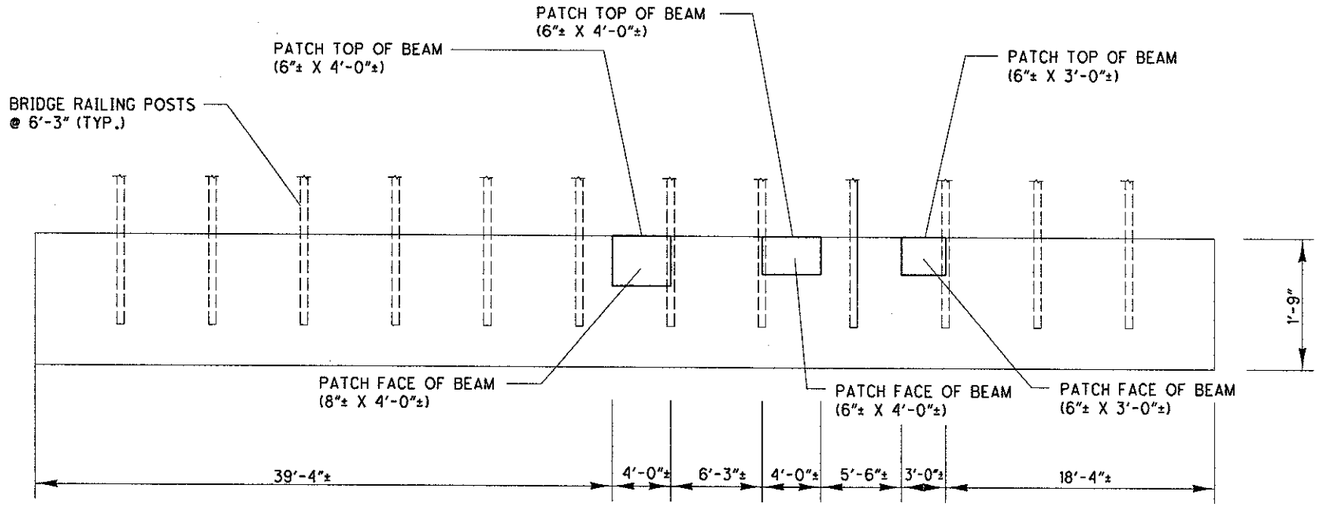
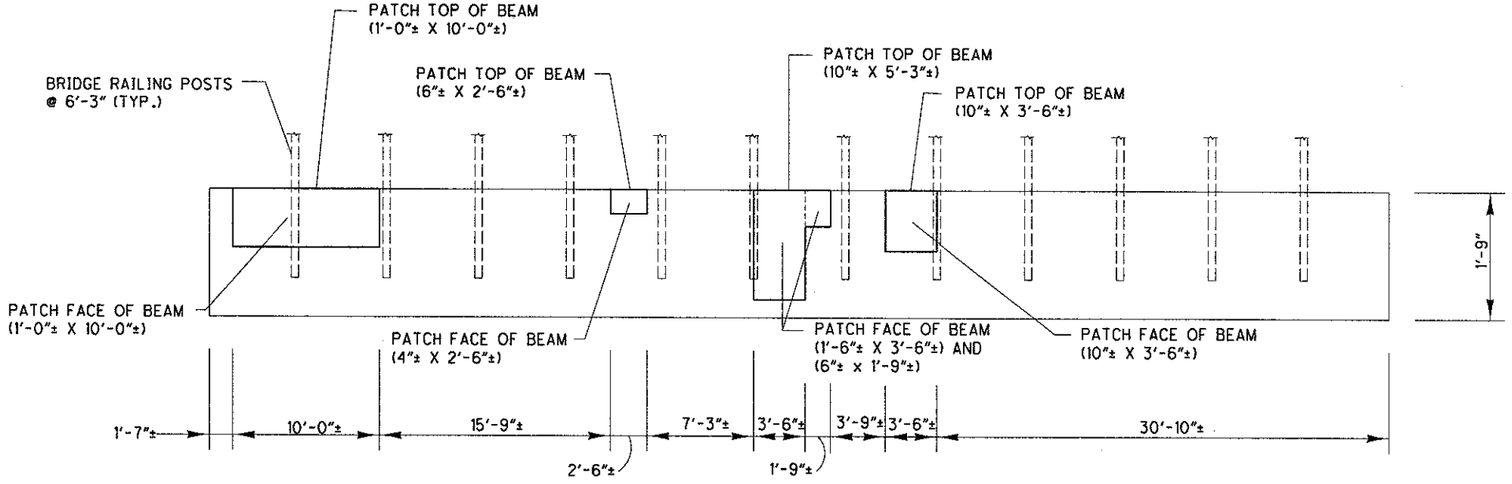


PIER ELEVATION
(RIGHT SIDE)



OUTSIDE BEAM ELEVATION VIEW
(LEFT SIDE)



OUTSIDE BEAM ELEVATION VIEW
(RIGHT SIDE)

ITEM	QUANTITY	UNIT	DESCRIPTION
519	57	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN

ALL QUANTITIES CARRIED TO SHEET 1/4.

NOTE:

1) PATCH EDGE OF OUTSIDE BEAMS AND RIGHT END OF PIER.

DESIGN FILE: I:\projects\82298\structures\ASD420015.dgn
WORKSTATION: dmollens
DATE: 7/9/2009

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION
REVIEWED: RDN DATE: 6/09
STRUCTURAL FILE NUMBER: 0301027
DRAWN: DCM REVISED:
DESIGNED: DCM CHECKED: DJV

PATCHING DETAILS
ASD-42-0015 OVER BRINDLE RUN CREEK

RIC/ASD-42-16.37/0.00

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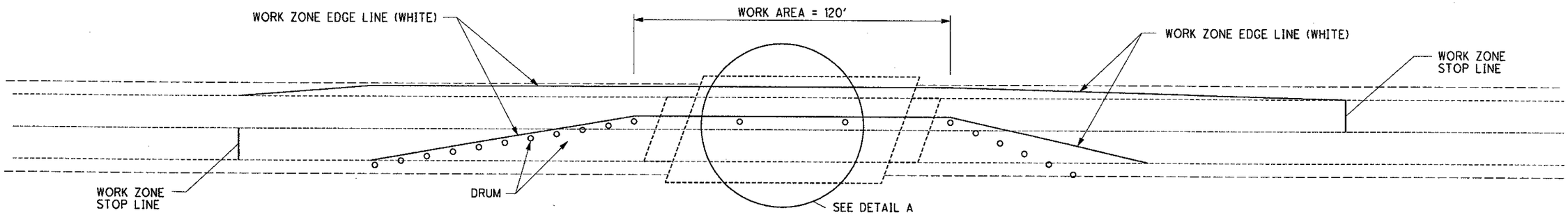
FOR DETAILS NOT SHOWN SEE STANDARD DRAWINGS
MT-96.11, MT-96.20, MT-96.26



PHASE A SHOWN
PHASE B SIMILAR

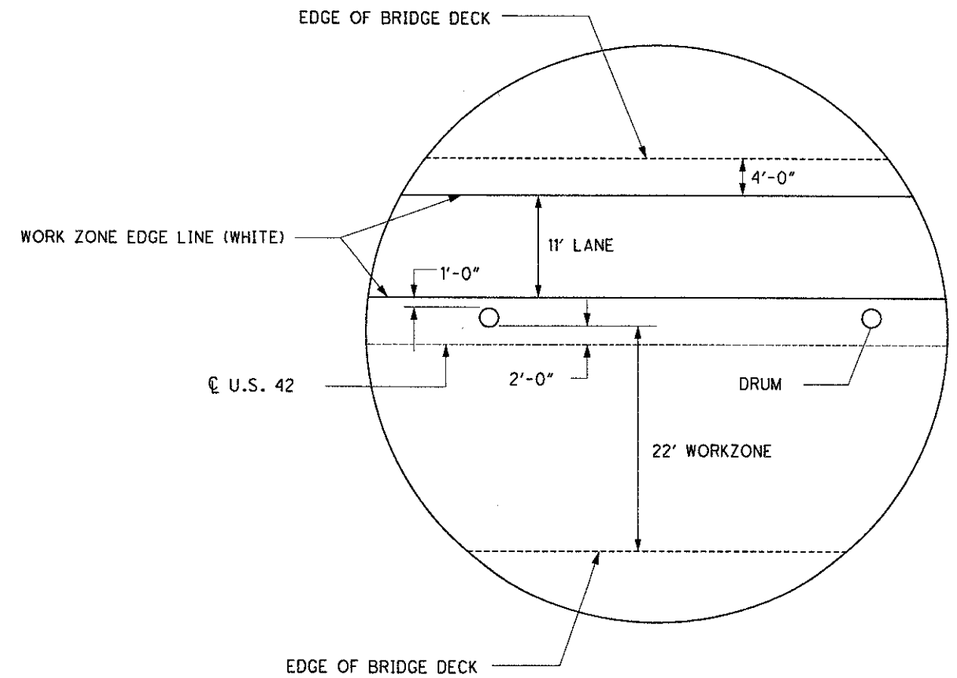
SIGNAL TIMING

A TWO PHASE CONTROLLER WITH CABINET CAPABLE OF BEING SET WITH THE FOLLOWING SPLITS SHALL BE FURNISHED

CYCLE LENGTH: 180 SECONDS

	GREEN	AMBER	RED
PHASE A	75	5	10
PHASE B	75	5	10

THE ABOVE TIMING MAYBE CHANGED WITH THE APPROVAL OF THE ENGINEER



DETAIL A

ITEM	QUANTITY	UNIT	DESCRIPTION
614	14	EACH	BARRIER REFLECTOR, TYPE A2
614	.06	MILE	WORK ZONE CENTER LINE, CLASS 1 (SOLID DOUBLE)
614	.27	MILE	WORK ZONE EDGE LINE, CLASS 1 (WHITE)
614	24	FT.	WORK ZONE STOP LINE, CLASS 1

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET

NOTES:

1) THE EXISTING BRIDGE RAILING AND GUARDRAIL ARE NOT SHOWN IN THE PLAN VIEW

DESIGN AGENCY: DISTRICT 3 OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
DCM	DCM	RDN	6/09
CHECKED	REVISED	STRUCTURAL FILE NUMBER	
DJV		0301027	

MAINTENANCE OF TRAFFIC
ASD-42-0015
OVER BRINDLE RUN CREEK

RIC/ ASD-42-16.37 / 0.00

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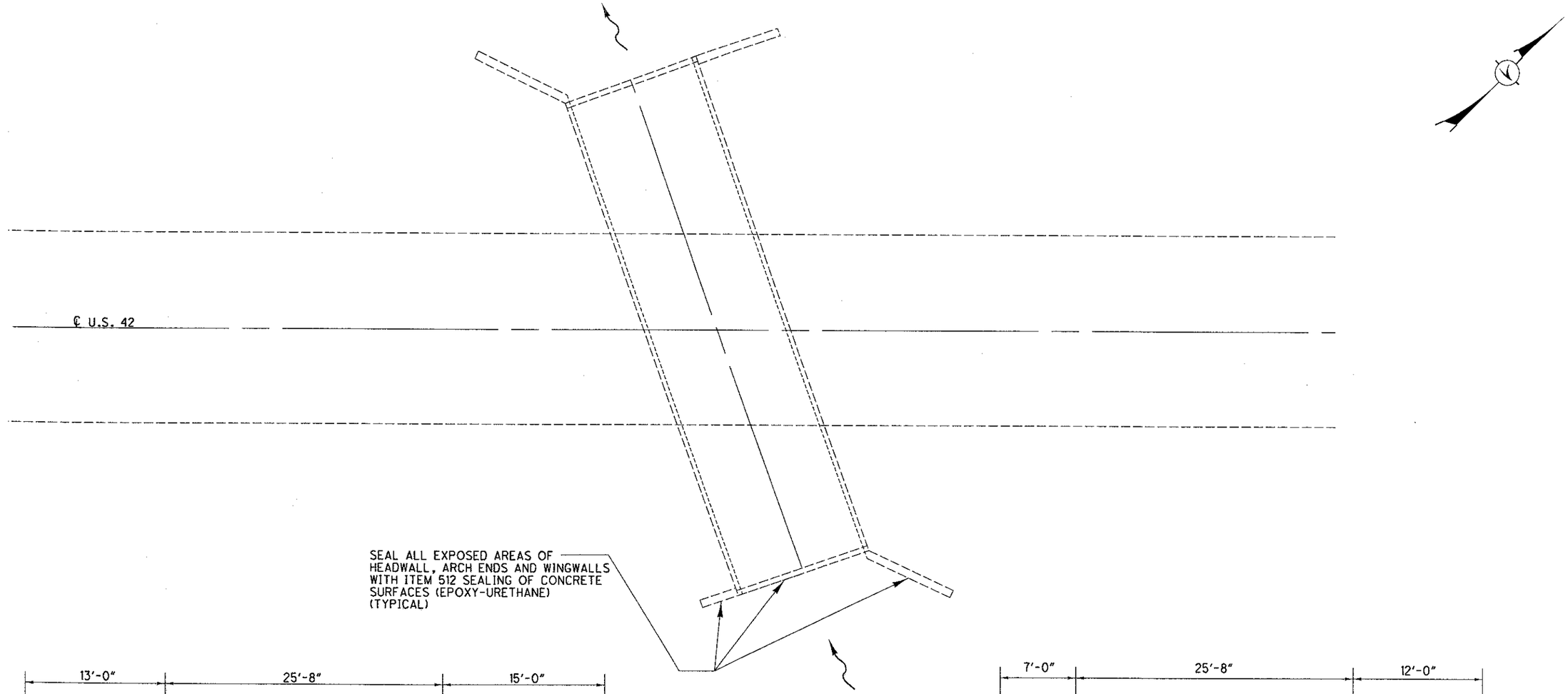
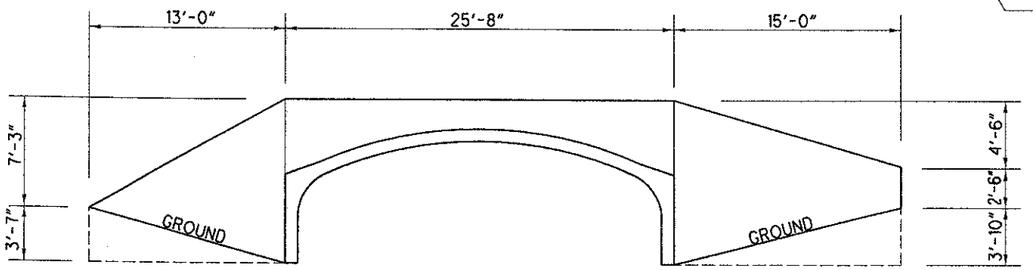
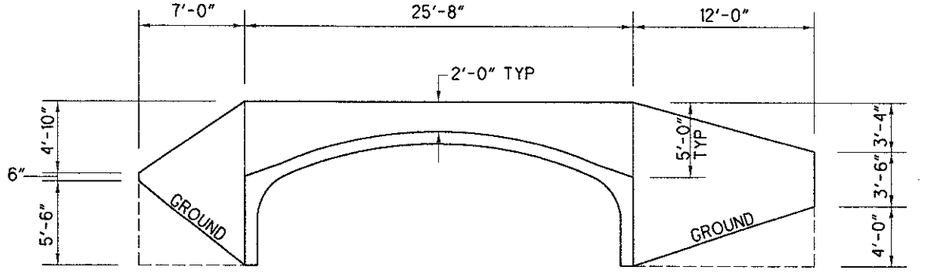
DESIGN FILE: I:\projects\82298\structures\ASD420015MOT.dgn
WORKSTATION: dmoliens DATE: 7/9/2009





OUTLET



INLET

GROUND

ITEM	QUANTITY	UNIT	DESCRIPTION
512	72	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ALL QUANTITIES CARRIED TO STRUCTURE SUMMARY SHEET.

NOTES:

1) HEADWALLS ARE 1'-0" THICK.
2) WINGWALLS ARE 1'-6" THICK.
3) ARCH WALLS ARE 10" THICK.

DESIGN FILE: i:\projects\82298\structures\ASD420259.dgn
WORKSTATION: dmollens DATE: 7/9/2009

DESIGN AGENCY
DISTRICT 3
OFFICE OF PRODUCTION

DESIGNED	DRAWN	REVIEWED	DATE
DCM	DCM	RDN	6/09
CHECKED	REVISED	STRUCTURE FILE NUMBER	
DJV		0301078	

PLAN VIEW
ASD-42-0259 OVER OHLEN RUN

RIC/ASD-42-16.37/0.00

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33