JEF - /COL-SR 7-31.13/00.00
200061 PID - 81722
Dist 11 2/13/2020

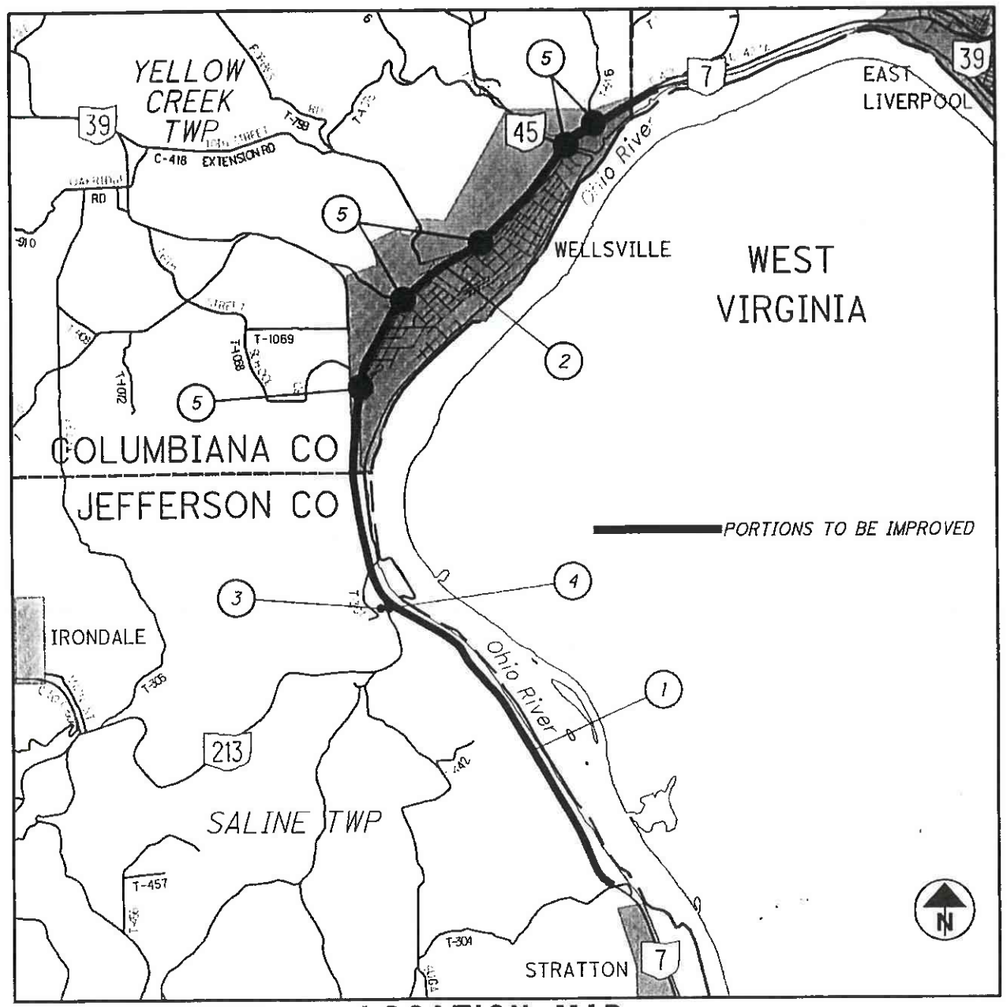
Contract Proposal Available @
www.contracts.dot.state.oh.us/home

C:\ProjectData\81722\Design\Roadway\Sheets\81722_GT001.dgn Sheet 11/8/2019 8:05:16 AM shorrisb

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CONFORMED SET

JEF/COL-7-31.13/0.00
442 4-LANE RESURFACING



LOCATION MAP

LATITUDE: N 40° 35' 00" LONGITUDE: W 80° 40' 15"

PART	COUNTY	ROUTE	SECTION	PROJECT TERMINI		NET LENGTH MILES	VILLAGE/CITY
				BEGIN	END		
1	JEF	S.R. 7	31.13	31.13	34.55	3.42	
2	COL	S.R. 7	0.00	0.00	3.56	3.56	VILLAGE OF WELLSVILLE
3	JEF	S.R. 213 PARK & RIDE	-	-	-	-	
4	JEF	S.R. 7/S.R. 213 REST AREA	-	-	-	-	

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)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

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

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

APPROVED DATE 11-13-2019 — DISTRICT DEPUTY DIRECTOR

APPROVED DATE 11/26/19 — DIRECTOR, DEPARTMENT OF TRANSPORTATION

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 11
ENGINEERING

STANDARD CONSTRUCTION DRAWINGS

BP-2.1	7/17/15	RM-4.2	10/24/19	MT-98.20	4/19/19	TC-21.50	7/15/16
BP-2.2	7/18/08	RM-4.3	7/18/14	MT-98.22	1/20/17	TC-41.20	10/18/13
BP-2.5	7/19/13	RM-4.4	7/19/19	MT-98.28	1/20/17	TC-42.20	10/18/13
BP-3.1	10/18/19	RM-4.6	7/19/13	MT-99.20	4/19/19	TC-52.10	10/18/13
BP-7.1	7/20/18	RM-6.1	7/18/14	MT-101.70	7/20/18	TC-52.20	7/20/18
BP-9.1	1/18/19			MT-101.75	7/15/16	TC-65.10	1/17/14
		HL-10.15	7/17/15	MT-101.80	1/16/15	TC-65.11	7/21/17
I-2.1	1/15/16			MT-101.90	7/21/17	TC-71.10	1/19/18
		MT-95.30	7/19/19	MT-103.10	1/19/18	TC-72.20	7/20/18
OM-1.1	7/21/17	MT-95.40	1/20/17	MT-104.10	10/16/15	TC-73.20	7/21/17
OM-4.3	1/15/16	MT-95.45	4/19/19	MT-105.10	7/19/13		
OM-4.4	1/15/16	MT-95.50	7/21/17				
		MT-98.10	1/20/17	TC-7.65	7/20/18		
RM-3.1	7/20/18	MT-98.11	4/19/19	TC-21.10	7/19/19		

SUPPLEMENTAL SPECIFICATIONS

800-2019	10/18/19
808	1/18/19
821	4/20/12
832	10/19/18
846	4/17/15
902	7/19/19
908	10/20/17
921	4/20/12

SPECIAL PROVISIONS

ENGINEER'S SEAL:

STATE OF OHIO — DAVID A. HOFFMAN E-79007 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: D.A. Hoffman

DATE: 11-13-19

INDEX OF SHEETS

FEDERAL PROJECT NO. E150(687)
PID NO. 81722
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
JEF/COL-7-31.13/0.00
1/53

UTILITIES

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

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OHIO UTILITIES PROTECTION SERVICE (OUPS) TO ASSURE THAT THERE ARE NO UTILITY CONFLICTS IN THE AREA OF THE NEW SIGN SUPPORTS. SHOULD A CONFLICT BE NOTED, THE CONTRACTOR SHALL ADJUST WORK IN ORDER TO AVOID THE CONFLICT. THE ADJUSTED LOCATION SHALL BE AT THE APPROVAL OF THE ENGINEER.

THE OHIO DEPARTMENT OF TRANSPORTATION HAS UTILITY FACILITIES (HIGHWAY LIGHTING AND/OR TRAFFIC SIGNALS) WITHIN THE LIMITS OF THIS PROJECT.

IN ADDITION TO THE INFORMATION OUTLINED IN THIS CONTRACT, THE CONTRACTOR SHALL TAKE THE FOLLOWING ACTION TO PROTECT ODOT'S FACILITIES DURING CONSTRUCTION:

HIGHWAY LIGHTING AND/OR TRAFFIC SIGNALS: EVEN THOUGH ODOT IS LISTED AS A MEMBER OF THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE CONTRACTOR IS REQUIRED TO CONTACT ODOT DIRECTLY SO THAT THE ODOT UTILITIES LOCATED WITHIN THIS PROJECT ARE MARKED. THE CONTRACTOR SHALL NOTIFY THE ODOT PROJECT ENGINEER/PROJECT SUPERVISOR, FOURTEEN (14) CALENDAR DAYS IN ADVANCE OF ANY WORK, FOR THE NEED TO MARK ODOT OWNED UTILITIES.

THE ABOVE REQUIREMENTS ARE IN addition TO SECTION 105.07 & 107.16 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY OTHER UTILITIES THROUGH OUPS OR DIRECTLY A MINIMUM OF FORTY-EIGHT HOURS IN ADVANCE OF ANY WORK.

EXISTING PLANS

THE FOLLOWING PREVIOUS CONSTRUCTION PLANS, WHICH SHOW THE ORIGINAL ALIGNMENT AND PROFILE, ARE AVAILABLE FOR INSPECTION AT THE ODOT DISTRICT 11 OFFICE:

JEF-7-(33.83-34.10) COL-7-(0.00-0.50)
- 1957 ORIGINAL DESIGN
JEF-7-(31.39-32.53) - 1961 ORIGINAL DESIGN
COL-7-0.37 & CHANGE ORDER - 1973 ORIGINAL DESIGN
JEF-7-34.29 - REST AREA - 1967 ORIGINAL DESIGN
JEF-7-30.13 - 1990 UPGRADE PLAN
COL-7-0.37 - 1990 RESURFACING PLAN
JEF/COL-7-53.620/0.000 - PID 11080 -
1998 RESURFACING (METRIC), ORIGINAL DESIGN OF PARK & RIDE
COL-7-0.57 - PID 19345 - 2002 RAMP CONSTRUCTION
JEF-7-31.13 - PID 23717 - 2005 RESURFACING PLAN
COL-7-0.37 - PID 23734 - 2007 4-LANE UPGRADE
COL-7-0.58 - PID 84005 - 2011 RAMP UPGRADE
COL-7-2.75 - PID 103067 - 2016 BRIDGE REHAB

THESE EXISTING PLANS CAN ALSO BE DOWNLOADED FROM THE FOLLOWING FTP SITE:

FTP://FTP.DOT.STATE.OH.US/PUB/CONTRACTS/ATTACH

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

PROFILE AND ALIGNMENT

THE WORK PROPOSED BY THIS PROJECT IS FOR THE GRINDING OF THE EXISTING PAVEMENT. THE ALIGNMENT AND SUPERELEVATION RATES OF THE EXISTING PAVEMENT WILL NOT BE CHANGED AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT. PREVIOUS CONSTRUCTION PLANS SHOWING THE ORIGINAL ALIGNMENT AND PROFILE ARE LISTED ON THIS SHEET.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)
ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN

FOLLOW SPECIFICATION 703.05 EXCEPT DO NOT USE COURSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

SURFACE COURSE COMPLETION REQUIREMENTS

ANY LENGTH OF RESURFACING WORK STARTED IN A CONSTRUCTION SEASON SHALL HAVE THE SURFACE COURSE PLACED THAT SAME SEASON.

COORDINATION OF RESURFACING AND PLANING OPERATIONS

THE PAVEMENT PLANING AND RESURFACING OPERATION SHALL BE COMPLETED IN A TIMELY MANNER AS DIRECTED BY THE ENGINEER. THE SURFACE COURSE SHALL BE PLACED NO MORE THAN (7) SEVEN DAYS AFTER REACHING THE FINAL MILLED SURFACE. THE GRINDINGS SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION THAT SOME GRINDINGS MAY BE UTILIZED AS NOTED IN THE PLANS FOR GRADED SHOULDER ITEMS.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR IS HEREBY ADVISED THAT PROJECT JEF-213-18.44, PID 96599 MAY BE UNDER CONSTRUCTION DURING THE SAME PERIOD THAT THIS PROJECT IS TO BE CONSTRUCTED. UPON AWARD OF THIS CONTRACT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE OTHER CONTRACTORS OF THE EFFECTS OF THIS CONTRACT UPON THE JEF-213-18.44 PROJECT. THE CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTORS IN ACCORDANCE WITH SEC. 105.08 AND ARRANGE A MUTUALLY ACCEPTABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER. ANY CONFLICTS BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREAS OR COOPERATION WILL BE RESOLVED BY THE ENGINEER.

ITEM 209 - LINEAR GRADING

GRADED SHOULDERS SHALL BE RESHAPED AS DIRECTED BY THE ENGINEER TO ENSURE A SMOOTH DRAINABLE SURFACE THAT IS FREE OF ALL IRREGULARITIES. VEGETATION, MATERIAL BUILDUP, AND COLLECTED DEBRIS ON THE SHOULDER OR WITHIN THE LINEAR GRADING LIMITS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AS SPECIFIED IN SECTION 209.01, OR WASTED OVER FILL SLOPES AT THE DIRECTION OF THE ENGINEER.

THIS ITEM SHALL MEET THE REQUIREMENTS OF ITEM 209 LINEAR GRADING EXCEPT AS FOLLOWS:

THE CONTRACTOR SHALL USE THE GRINDINGS FROM THE PROJECT IN LIEU OF ITEM - 617 COMPACTED AGGREGATE. SEE NOTE 'ITEM 617, COMPACTED AGGREGATE'.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING.

ITEM 408 - PRIME COAT, AS PER PLAN

THE CONTRACTOR WILL APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED AGGREGATE SHOULDER. A SHIELD SHALL BE PROVIDED TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 617 - COMPACTED AGGREGATE

GRADED SHOULDERS SHALL BE RESHAPED AS PER THE REQUIREMENTS OF ITEM 617, COMPACTED AGGREGATE. GRINDINGS MAY BE USED IN LIEU OF ITEM 617, COMPACTED AGGREGATE. THE COST FOR STORING THE GRINDINGS ON THE PROJECT AND PLACING THE GRINDINGS SHALL ALSO BE INCLUDED IN THIS ITEM.

DESIGN DESIGNATION	JEF SR 7 SLM 31.03-33.69	JEF SR 7 SLM 33.69-34.55	COL SR 7 SLM 0.00-0.37	COL SR 7 SLM 0.37-1.15	COL SR 7 SLM 1.15-1.44	COL SR 7 SLM 1.44-2.40	COL SR 7 SLM 2.40-2.76	COL SR 7 SLM 2.76-3.05	COL SR 7 SLM 3.05-3.53
CURRENT ADT (2020)	8,300	9,700	9,700	8,400	8,400	15,000	15,000	11,000	10,500
DESIGN YEAR ADT (2032)	8,600	11,500	11,500	8,400	8,400	17,000	16,500	12,500	10,500
DESIGN HOURLY VOLUME (2032)	850	1,200	1,200	850	750	1,500	1,500	1,100	950
DIRECTIONAL DISTRIBUTION	67%	60%	60%	60%	54%	51%	51%	51%	52%
TRUCKS (24 HOUR B&C)	20%	15%	15%	16%	16%	11%	11%	30%	15%
DESIGN SPEED	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH
LEGAL SPEED	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL	URBAN ARTERIAL
NHS PROJECT	YES	YES	YES	YES	YES	YES	YES	YES	YES

CALCULATED SAH CHECKED DAH

GENERAL NOTES

JEF/COL-7-31.13/0.00

ITEM 519 - PATCHING CONCRETE STRUCTURE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PATCHING OF CONCRETE BARRIER AT THE LOCATIONS AS DIRECTED BY THE ENGINEER. APPLY A WHITE CURING COMPOUND TO THE FINISHED PATCHES. THE PATCHING SHALL BE COMPLETED BEFORE THE ASPHALT SURFACE COURSE IS PLACED.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 519, PATCHING CONCRETE STRUCTURE AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS.

TOTAL CARRIED TO GENERAL SUMMARY:

PART 1 & 2 (01/NHS/PV)
ITEM 519 - PATCHING CONCRETE STRUCTURE 950 SQ FT

ASPHALT CONCRETE JOINT SEALER

THE CONTRACTOR SHALL APPLY LIQUID ASPHALT CONCRETE (PG64-22) TO THE VERTICAL FACE OF ALL EXISTING ASPHALT PRIOR TO THE PLACEMENT OF THE ADJOINING ASPHALT CONCRETE LIFT. PAYMENT FOR THIS SHALL BE INCIDENTAL TO EACH RESPECTIVE ASPHALT CONCRETE COURSE OR BASE BEING PLACED.

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

TOTAL CARRIED TO GENERAL SUMMARY:

PART 1 & 2 (01/NHS/PV)
SPECIAL, PIPE CLEANOUT, 24" AND UNDER 1550 FT.
SPECIAL, PIPE CLEANOUT, OVER 27" TO 48" 210 FT.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING STORM SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

SHIELD

THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF THE PAVEMENT OR EDGELINE. THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS SET FORTH IN CMS 107.10 CONCERNING THE PROTECTION AND RESTORATION OF ALL PUBLIC AND PRIVATE PROPERTY IMPACTED BY CONSTRUCTION OPERATIONS.

ITEM 607 - FENCE, MISC.: TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE

TEMPORARY ORANGE PLASTIC/NYLON CONSTRUCTION FENCE SHALL BE PLACED AROUND NEW CURB RAMPS AND WALK LOCATIONS FROM DEMOLITION, IF NOT IMMEDIATELY POURED, UNTIL ADEQUATELY CURED, OR AS DIRECTED BY THE ENGINEER TO PROTECT PEDESTRIAN TRAFFIC FROM CONSTRUCTION OPERATIONS. THE FENCING MATERIAL SHALL BE SECURELY FASTENED TO EITHER WOOD, OR METAL POSTS WITH A MAXIMUM SPACING NOT TO EXCEED 6 FEET. THE FENCING MATERIAL SHALL HAVE A NOMINAL HEIGHT OF 42 INCHES, AND THE TOP EDGE OF THE FENCING SHALL NOT BE PERMITTED TO SAG BELOW 30 INCHES. THE CONTRACTOR SHALL ENSURE THE FENCE IS IN GOOD CONDITION, PROPERLY PLACED, AND MAINTAINED AT ALL TIMES. PAYMENT FOR THE FENCING SHALL OCCUR ONCE PER LOCATION AND ANY REMOVAL OR REERECTION AT THE CONTRACTOR'S DISCRETION SHALL BE CONSIDERED INCIDENTAL AND PERFORMED AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 607 - FENCE MISC.: TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE

PART 2 (01/NHS/PV)	125 FT
PART 4 (03/NFS/PV)	150 FT
TOTAL CARRIED TO GENERAL SUMMARY	275 FT

PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE AND PIPE INSTALLATION

PROVIDE 12 INCHES OF ITEM 301 AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF EACH DRAINAGE STRUCTURE. PROVIDE 9 INCHES OF ITEM 301 AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF ITEM 611, DRAINAGE STRUCTURES AND PIPE:

PART 2 (01/NHS/PV)
ITEM 301, ASPHALT CONCRETE BASE, PG64-22 81 CU YD

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

ITEM SPECIAL - PARKING BLOCK REMOVED

PARKING BLOCKS IN THE PARK AND RIDE FACILITY SHALL BE REMOVED AND DISPOSED OF OFF-SITE PER CMS SECTION 105.17. REMOVAL AND PROPER DISPOSAL SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR ITEM SPECIAL, PARKING BLOCK REMOVED.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

PART 3 (02/NFA/PV)
ITEM SPECIAL, PARKING BLOCK REMOVED 24 EACH

ITEM SPECIAL - CONCRETE PARKING BLOCK

CONCRETE PARKING BLOCKS CONSTRUCTED PER RM-6.1 SHALL BE PLACED IN EACH PARKING SPACE IN THE PARK AND RIDE FACILITY. PARKING BLOCKS SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR ITEM SPECIAL, CONCRETE PARKING BLOCKS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

PART 3 (02/NFA/PV)
ITEM SPECIAL, CONCRETE PARKING BLOCK 24 EACH

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GENERAL NOTES

JEF/COL-7-31.13/0.00

MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES IN ACCORDANCE WITH THE REQUIREMENTS OF CMS ITEM 614, THESE MAINTENANCE OF TRAFFIC NOTES AND DETAILS, THE STANDARD CONSTRUCTION DRAWINGS, AND THE TRAFFIC CONTROL DETAILS DESCRIBED IN THESE PLANS.

THE MINIMUM LANE WIDTH FOR TRAFFIC CONTROL SHALL BE 11 FEET AT ALL TIMES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE HIS WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC.

THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE MAINTENANCE OF TRAFFIC SCHEME. THE CONTRACTOR SHALL SUBMIT, IN WRITING, THIS MAINTENANCE OF TRAFFIC SCHEME AND A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE WORK IS STARTED ON THE PROJECT.

ANY OPEN PAVEMENT TRENCH OR DROPOFF SHALL BE ADEQUATELY MAINTAINED AND PROTECTED. THE PROTECTION USED SHALL MEET THE REQUIREMENTS OF STD DWG MT-101.90.

UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE WORK ZONES WHICH ALTERNATELY CLOSE BOTH THE PASSING AND TRAVEL LANE UNLESS THE DISTANCE BETWEEN THE LANE RESTRICTIONS EXCEEDS 2 MILES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SMOOTH AND ORDERLY FLOW OF TRAFFIC THROUGH THE PROJECT AREA 24 HOURS PER DAY FOR THE DURATION OF THE PROJECT. THIS CONSISTS OF NOTIFYING THE OHIO STATE PATROL AFTER ENCOUNTERING ANY ACCIDENTS OR DISABLED VEHICLES OR OBJECTS HINDERING THE FLOW OF TRAFFIC.

THE CONTRACTOR SHALL DESIGNATE TO THE ENGINEER A PERSON RESPONSIBLE FOR MAINTENANCE OF TRAFFIC CONTROL DURING NON-WORK HOURS WHO SHALL BE AVAILABLE WITHIN (30) MINUTES AFTER NOTIFICATION.

PAYMENT FOR PROVIDING WATCHMEN, FURNISHING, ERECTING, MAINTAINING AND REMOVING SIGNS, CONES, MARKERS, SPECIAL LIGHTING, FLOODLIGHTING, WORK ZONE PAVEMENT MARKINGS, WORK ZONE RAISED PAVEMENT MARKERS, ETC., SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ALL ADDITIONAL SIGNS OR OTHER TRAFFIC CONTROL DEVICES AS REQUIRED ABOVE. ALL COSTS INVOLVED IN FURNISHING, INSTALLING AND MAINTAINING THESE DEVICES SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

UNLESS THE ENGINEER DEEMS IT PHYSICALLY IMPOSSIBLE, ALL CONSTRUCTION EQUIPMENT SHALL EXIT ALL WORK ZONES FROM THE DOWNSTREAM END OF THE WORK ZONE OR BY INTERCHANGE RAMPS. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO DIRECTLY TRANSPORT OR OPERATE ANY EQUIPMENT ACROSS THE OPEN LANES OF THE ROADWAY.

(CONTINUED...)

MAINTAINING TRAFFIC, AS PER PLAN (CONTINUED...)

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS. THE RESTRICTIONS SHALL ALSO APPLY TO WORK ON THE RAMPS.

THE PLANING AND RESURFACING WILL PROCEED CONTINUOUSLY A MINIMUM OF FIVE (5) DAYS PER WEEK, WEATHER PERMITTING, EXCEPTING HOLIDAYS AND EVENTS LISTED BELOW:

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

MEMORIAL DAY	FOURTH OF JULY
LABOR DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPENED 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 OPENED TO TRAFFIC
SUNDAY	12:00N FRI THRU 6:00 AM MON
MONDAY	12:00N FRI THRU 6:00 AM TUE
TUESDAY	12:00N MON THRU 6:00 AM WED
WEDNESDAY	12:00N TUE THRU 6:00 AM THU
THURSDAY	12:00N WED THRU 6:00 AM FRI
(THANKSGIVING ONLY)	6:00 AM WED THRU 6:00 AM MON
FRIDAY	12:00N THU THRU 6:00 AM MON
SATURDAY	12:00N FRI THRU 6:00 AM MON

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $4,200 FOR EACH HOUR THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

PEDESTRIAN WALKWAYS CONSTRUCTED BY THE CONTRACTOR SHALL BE KEPT FREE OF ANY OBSTRUCTIONS OR HAZARDS INCLUDING HOLES, DEBRIS AND MUD. OTHER WALKWAYS DAMAGED OR DIRTIED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED OR CLEANED. THE CONTRACTOR MUST TAKE PRECAUTIONS TO PROTECT PEDESTRIANS FROM EXPOSURE TO HAZARDS RESULTING FROM THE CONSTRUCTION OPERATION BY INSTALLING CONSTRUCTION FENCE AND SIGNING.

TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE HAS BEEN PROVIDED HEREIN AS A TRAFFIC CONTROL DEVICE TO DIVERT AND GUIDE PEDESTRIANS WHOSE PATH WOULD OTHERWISE ENTER THE WORK AREA. THE TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE SHALL BE PLACED AROUND THE SIDEWALK WORK AREAS. SIDEWALK CLOSED SIGN (R9-9 (30 X 18)) MOUNTED ON A TYPE 3 BARRICADE WITH TYPE A FLASHING LIGHTS SHALL BE PLACED OUTSIDE THE FENCE ON EACH SIDEWALK APPROACH AS SHOWN ON SCD MT-101.60.

(CONTINUED...)

MAINTAINING TRAFFIC, AS PER PLAN (CONTINUED...)

FOR REPAIR OR RECONSTRUCTION WORK INVOLVING SIDEWALKS ON BOTH SIDES OF THE STREET, THE WORK SHALL BE STAGED SO THAT ONE SIDE IS COMPLETED AND OPEN TO PEDESTRIAN TRAFFIC BEFORE THE OTHER IS DISRUPTED.

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

WHEN RAISED PAVEMENT MARKERS ARE TO BE INSTALLED, THE REQUIRED LANE CLOSURE SHALL REMAIN IN EFFECT UNTIL THE EPOXY IS DRY AND ALL FOREIGN MATTER OR DEBRIS CREATED BY THE INSTALLATION OF THE RPM CASTING IS REMOVED FROM THE ROADWAY.

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

SEQUENCE OF CONSTRUCTION

PHASE 1 - MEDIAN SIDE WORK

1. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS CLOSE THE MEDIAN SIDE LANE OF TRAFFIC AND PLACE PORTABLE BARRIER PER MT-95.40
2. REMOVE OVERHEAD TRUSS SIGN SUPPORT
3. REMOVE EXISTING MEDIAN BARRIER AND MEDIAN DRAINAGE STRUCTURES
4. CONSTRUCT PROPOSED MEDIAN CONCRETE BARRIER.
5. REMOUNT OVERHEAD TRUSS SIGN SUPPORT.
6. REMOVE PORTABLE BARRIER AND PLACE DRUMS PER MT-95.30
7. PERFORM FULL DEPTH AND PARTIAL DEPTH REPAIRS IN COORDINATION WITH MILLING THE MEDIAN SIDE PASSING LANE AND MEDIAN SHOULDER.
8. RESURFACE MEDIAN AND MEDIAN SIDE PASSING LANE

PHASE 2 - OUTSIDE WORK

1. PLACE DRUMS PER MT-95.30
2. PERFORM FULL DEPTH AND PARTIAL DEPTH REPAIRS IN COORDINATION WITH MILLING THE OUTSIDE LANE AND OUTSIDE SHOULDER.
3. RESURFACE DRIVING LANES, OUTSIDE SHOULDER AND RAMPS.

NOTIFICATION OF WORK ZONE LANE RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (Hauling.Permits@dot.ohio.gov) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

EXISTING RUMBLE STRIPS

IF THE CONTRACTOR CHOOSES TO MOVE TRAFFIC ONTO THE OUTSIDE SHOULDER TO MAINTAIN TWO LANES OF TRAVEL, THE EXISTING RUMBLE STRIPS WILL HAVE TO BE REMOVED. THE AREA OF THE EXISTING RUMBLE STRIPS SHALL BE MILLED TO A DEPTH OF AT LEAST 2 INCHES; THE MILLED SURFACE AND THE SIDES SHALL BE COVERED WITH ODOT APPROVED AC LIQUID AND THEN FILLED WITH ASPHALT. PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A SHALL BE USED TO FILL THE RUMBLE STRIPS. PAYMENT FOR ALL WORK ASSOCIATED WITH MILLING, AC LIQUID, TRAFFIC CONTROL AND THE FILLING OF THE RUMBLE STRIPS SHALL BE CONSIDERED INCIDENTAL TO AND INCLUDED WITH ITEM 614 MAINTAINING TRAFFIC, AS PER PLAN.

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MAINTENANCE OF TRAFFIC NOTES

JEF/COL-7-31.13/0.00

WORK ZONE PAVEMENT MARKINGS AND SIGNS

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL WORK ZONE MARKINGS AND SIGNS AT LOCATIONS IDENTIFIED BY THE ENGINEER PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

WORK ZONE PAVEMENT MARKINGS SHALL BE 642 PAINT.

PRIOR TO PLACEMENT OF ANY WORK ZONE PAVEMENT MARKINGS, THE CONTRACTOR SHALL COMPLETELY OBLITERATE, AS PER 641.10, ALL EXISTING PAVEMENT MARKINGS THAT WOULD CREATE CONFUSION OR CONFLICT WITH THE WORK ZONE PAVEMENT MARKINGS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR WORK ZONE PAVEMENT MARKINGS:

PART 1 & 2 (01/NHS/PV)
ITEM 614 -WORK ZONE LANE LINE, CLASS III, 642 PAINT — 27.92 MILE

ITEM 614 - WORK ZONE EDGE LINE, CLASS III, 642 PAINT — 65.14 MILE

ITEM 614 -WORK ZONE CHANNELIZING LINE, 8", CLASS III, 642 PAINT — 2650 FT

ITEM 614 -WORK ZONE STOP LINE, CLASS III, 642 PAINT — 510 FT

WORK ZONE RAISED PAVEMENT MARKERS CANNOT BE USED TO SIMULATE (REPLACE) ANY TYPE OF WORK ZONE PAVEMENT MARKING.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR WORK ZONE SIGNS:

PART 1 & 2 (01/NHS/PV)
ITEM 614 - WORK ZONE MARKING SIGN (W8-11-48) — 20 EACH
ITEM 614 - REPLACEMENT SIGN — 10 EACH

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

PART 1 & 2 (01/NHS/PV)
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC — 50 CU. YD.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUTDOWNS.

THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

PART 1 & 2 (01/NHS/PV)
ITEM 614, WORK ZONE INCREASED PENALTIES SIGN — 34 EACH

MOVEMENT OF DRUMS

THE ROW OF DRUMS ALONG A CLOSED LANE SHALL BE MOVED OUT OF THE OPEN LANE ONTO THE NEW PAVEMENT AS SOON AS PAVING OPERATIONS PERMIT.

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER(S)	CNTY-RTE-SECT(S)	DIRECTION(S)
WZ-60578	JEF-7-30.92 TO COL-7-3.77	NB & SB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRECONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THE NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

(CONTINUE...)

WORK ZONE SPEED ZONES (WZSZS)

(CONTINUED...)

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1:
WARRANTED WORK ZONE SPEED LIMITS (MPH) FOR WORK ZONES IN HIGH-SPEED (55 MPH OR GREATER) MULTI-LANE HIGHWAYS

ORIGINAL POSTED SPEED LIMIT	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

PART 1 & 2 (01/NHS/PV)
ITEM 808, DIGITAL SPEED LIMIT (DSL)
SIGN ASSEMBLY — 54 SIGN MNTH
ASSUMING 18 DSL SIGN ASSEMBLIES FOR 3 MONTH(S)

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY:

PART 1 & 2 (01/NHS/PV)
ITEM 614 - REPLACEMENT DRUM — 10 EACH

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MAINTENANCE OF TRAFFIC NOTES

JEF/COL-7-31.13/0.00

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN A NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

(CONTINUED...)

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

(CONTINUED...)

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING THE SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

PART 1 & 2 (01/NHS/PV)
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 200 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NONGATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

IN ADDITION TO THE REQUIREMENTS OF SECTION 614.03 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS THE FOLLOWING SHALL APPLY. THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. A FLAGGER SHALL BE USED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT.

EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY, THIRTY FEET (30') FROM THE EDGE OF TRAVELED HIGHWAY UNLESS BEHIND GUARDRAIL, WHEN VARIOUS OPERATIONS ARE SCHEDULED TO CONTINUE THE NEXT WORKDAY. ON WEEKENDS OR AT OTHER TIMES OF SUSPENSION OF WORK, THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA REMOVED FROM THE INTERSTATE ROUTE RIGHT OF WAY. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHT SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGHOUT THE WORKSITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AS PER PLAN.

MAINTENACE OF TRAFFIC ESTIMATED QUANTITIES

LOCATION SLM		LENGTH	622	614			COMMENTS
			PORTABLE BARRIER, 32"	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	OBJECT MARKER, ONE-WAY	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
BEGIN	END		FT	EACH	EACH	EACH	
NORTHBOUND S.R. 7							
0.23	3.52	17370	17370	347	347	4	
NORTHBOUND S.R. 7							
0.23	3.52	17370	17370	347	347	4	
TOTAL CARRIED TO GENERAL SUMMARY			**34740**	**694**	**694**	**8**	**PART 1 & 2 (01/NHS/PV)**

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MAINTENANCE OF TRAFFIC NOTES AND QUANTITIES

JEF/COL-7-31.13/0.00

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
2	3		10		26		39			01/ NHS/PV	02/ NFA/PV	03/ NFA/PV							
																		ROADWAY	
LS										LS	LS	LS		201	11000	LS		CLEARING AND GRUBBING	
					810					810				202	23010	810	SY	PAVEMENT REMOVED, ASPHALT	
							366			195		171		202	30000	366	SF	WALK REMOVED	
					14,551					14,551				202	30700	14,551	FT	CONCRETE BARRIER REMOVED	
							112			63		49		202	32000	112	FT	CURB REMOVED	
					312					312				202	35100	312	FT	PIPE REMOVED, 24" AND UNDER	
	24										24			SPECIAL	20252990	24	EACH	PARKING BLOCK REMOVED	3
					24					24				202	58200	24	EACH	INLET REMOVED	
	1,550									1,550				SPECIAL	20270110	1,550	FT	PIPE CLEANOUT, 24" AND UNDER	3
	210									210				SPECIAL	20270120	210	FT	PIPE CLEANOUT, 27" TO 48"	3
			15.63							15.53	0.1			209	60500	15.63	MILE	LINEAR GRADING	
	950									950				519	11100	950	SF	PATCHING CONCRETE STRUCTURE	
					1					1				606	60012	1	EACH	IMPACT ATTENUATOR, TYPE 1 (BIDIRECTIONAL)	
	275									125		150		607	98000	275	FT	FENCE, MISC.: TEMPORARY ORANGE PLASTIC CONSTRUCTION FENCE	3
							405			193		212		608	52000	405	SF	CURB RAMP	
			1,015							1,008	7			617	10100	1,015	CY	COMPACTED AGGREGATE	
			100,843							100,843				618	40100	100,843	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
					13,266					13,266				622	10100	13,266	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	
					8					8				622	10200	8	EACH	BARRIER TRANSITION	
					1					1				622	24850	1	EACH	CONCRETE BARRIER END SECTION, TYPE B1	
					67					67				622	25007	67	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)	34
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (B)	34
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (C)	34
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (D)	35
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (E)	35
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (F)	36
					1					1				622	25007	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (G)	36
					612					612				626	00102	612	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
	24										24			SPECIAL	69050500	24	EACH	CONCRETE PARKING BLOCK	3
																		EROSION CONTROL	
							21			15		6		659	98000	21	SY	SEEDING, MISC.: CURB RAMP GRADING RESTORATION	39
										800	100	100		832	30000	1,000	EACH	EROSION CONTROL	
																		DRAINAGE	
					216					216				611	00510	216	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
					208					208				611	04400	208	FT	12" CONDUIT, TYPE B	
					16					16				611	05900	16	FT	15" CONDUIT, TYPE B	
					24					24				611	07400	24	FT	18" CONDUIT, TYPE B	
					64					64				611	08900	64	FT	21" CONDUIT, TYPE B	
					23					23				611	99100	23	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	
					1					1				611	99101	1	EACH	INLET, NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN	35

CALCULATED SAH
CHECKED DAH

GENERAL SUMMARY

JEF/COL-7-31.13/0.00

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	10	26	27			44	45	52		01/ NHS/PV	02/ NFA/PV	03/ NFA/PV							
																		PAVEMENT	
			60							60				251	01010	60	CY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
	3,240									3,240				254	01000	3,240	SY	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES)	
	336,309									330,920	1,315	4,074		254	01000	336,309	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	
			960							960				255	10011	960	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN	27
		29,880	4,300							34,180				255	20000	34,180	FT	FULL DEPTH PAVEMENT SAWING	
81										81				301	46000	81	CY	ASPHALT CONCRETE BASE, PG64-22	
		1,108								1,108				304	20000	1,108	CY	AGGREGATE BASE	
		6,069								6,069				305	13010	6,069	SY	9" CONCRETE BASE, CLASS QC 1P	
	30,002									29,544	112	346		407	20000	30,002	GAL	NON-TRACKING TACK COAT	
	7,336									7,287	49			408	10001	7,336	GAL	PRIME COAT, AS PER PLAN	2
	225										55	170		441	50101	225	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)	2
	9,079									9,079				442	00100	9,079	CY	ANTI-SEGREGATION EQUIPMENT	
	14,697									14,697				442	10351	14,697	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (447), AS PER PLAN	2
		125								125				609	70000	125	SY	4" CONCRETE MEDIAN	
																		TRAFFIC CONTROL	
							1,304			1,304				621	00100	1,304	EACH	RPM	
							1,236			1,236				621	54000	1,236	EACH	RAISED PAVEMENT MARKER REMOVED	
						13.2					13.2			630	02100	13.2	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
								2		2				630	55000	2	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65	
								1		1				630	55001	1	EACH	CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65, AS PER PLAN	40
								3		3				630	74701	3	EACH	OVERHEAD SIGN SUPPORT MODIFICATION, AS PER PLAN	40
						2.5					2.5			630	80100	2.5	SF	SIGN, FLAT SHEET	
						1					1			630	84900	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
						1					1			630	86002	1	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
						32.84				32.84				646	10010	32.84	MILE	EDGE LINE, 6"	
						14.45				14.45				646	10110	14.45	MILE	LANE LINE, 6"	
						0.24				0.24				646	10200	0.24	MILE	CENTER LINE	
						1,325				1,325				646	10300	1,325	FT	CHANNELIZING LINE, 8"	
						5,708				5,708				646	10310	5,708	FT	CHANNELIZING LINE, 12"	
						255				255				646	10400	255	FT	STOP LINE	
						710				710				646	10600	710	FT	TRANSVERSE/DIAGONAL LINE	
						330					28	302		646	10601	330	FT	TRANSVERSE/DIAGONAL LINE, AS PER PLAN	40
						720				720				646	10620	720	FT	CHEVRON MARKING	
						550				550				646	10800	550	SF	ISLAND MARKING	
						3					1	2		646	10900	3	EACH	HANDICAP SYMBOL MARKING	
						2,007					487	1,520		646	20200	2,007	FT	PARKING LOT STALL MARKING	
						10				10				646	20300	10	EACH	LANE ARROW	
						5				5				646	20320	5	EACH	WRONG WAY ARROW	
						6,986				6,986				646	20504	6,986	FT	DOTTED LINE, 6"	

CALCULATED SAH
CHECKED DAH

GENERAL SUMMARY

JEF / COL - 7 - 31.13 / 0.00

SHEET NUM.										PART.				ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	4	5	6		29	30				01/ NHS/PV	02/ NFA/PV	03/ NFA/PV							
																		STRUCTURE OVER 20 FOOT SPAN (VARIOUS)	
					116					116				846	00111	116	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM, AS PER PLAN (A)	29
						88				88				846	00111	88	CF	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM, AS PER PLAN (B)	30
																		MAINTENANCE OF TRAFFIC	
			200							200				614	11110	200	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			8							8				614	12336	8	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
		20								20				614	12460	20	EACH	WORK ZONE MARKING SIGN	
		34								34				614	12484	34	EACH	WORK ZONE INCREASED PENALTIES SIGN	
		10								10				614	12500	10	EACH	REPLACEMENT SIGN	
		10								10				614	12600	10	EACH	REPLACEMENT DRUM	
		50								50				614	13000	50	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			694							694				614	13310	694	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
			694							694				614	13350	694	EACH	OBJECT MARKER, ONE WAY	
		27.92								27.92				614	20550	27.92	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	
		65.14								65.14				614	22350	65.14	MILE	WORK ZONE EDGE LINE, CLASS III, 4", 642 PAINT	
		2,650								2,650				614	23680	2,650	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
		510								510				614	26610	510	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
			34,740							34,740				622	41000	34,740	FT	PORTABLE BARRIER, 32"	
		54								54				808	18700	54	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																		INCIDENTALS	
										LS				108	30000	LS		CPM PROGRESS SCHEDULE SHORT DURATION PROJECTS	
	LS									LS				614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	4
										4				619	16020	4	MNTH	FIELD OFFICE, TYPE C	
										LS				623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS				624	10000	LS		MOBILIZATION	

CALCULATED SAH CHECKED DAH

GENERAL SUMMARY

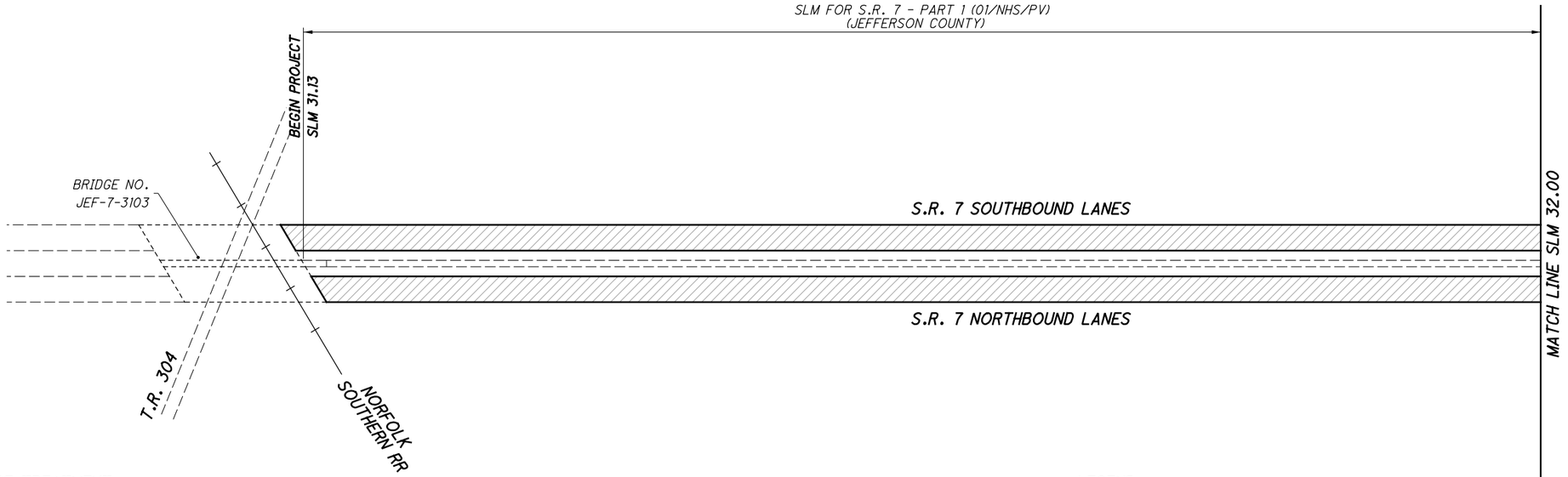
JEF/COL-7-31.13/0.00

SHEET NO	DESCRIPTION	254		407	441	442		618	209	408	617	COMMENTS
		PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES)	NON-TRACKING TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (441), AS PER PLAN	ANTI-SEGREGATION EQUIPMENT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	LINEAR GRADING	PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	2" COMPACTED AGGREGATE (2' WIDTH)	
		SQ YD	SQ YD	GAL	CU YD	CU YD	CU YD	FT	MILE	GALLON	CU YD	
19	S.R. 7 NORTHBOUND PAVEMENT	45,120	1,120	4,326		2195	2195					PART 1 (01/NHS/PV)
		56,621		4,811		2359	2359					PART 2 (01/NHS/PV)
20	S.R. 7 SOUTHBOUND PAVEMENT	45,583	1,120	4,325		2192	2192					PART 1 (01/NHS/PV)
		55,989		4,758		2333	2333					PART 2 (01/NHS/PV)
21	S.R. 7 RAMPS	25,686		2,181		1071						PART 2 (01/NHS/PV)
23	S.R. 7 NORTHBOUND SHOULDERS	17,489	500	1,720		877		18,055	3.23	1514	209	PART 1 (01/NHS/PV)
		27,920		2,375		1165		32,472	3.55	1666	228	PART 2 (01/NHS/PV)
24	S.R. 7 SOUTHBOUND SHOULDERS	17,406	500	1,703		865		17,897	3.21	1506	209	PART 1 (01/NHS/PV)
		28,196		2,397		1177		32,419	3.43	1609	224	PART 2 (01/NHS/PV)
25	S.R. 7 RAMP SHOULDERS	10,910		948		463			2.11	992	138	PART 2 (01/NHS/PV)
	MAINLINE SUBTOTAL	330,920	3,240	29,544		14,697	9,079	100,843	15.53	7,287	1,008	PART 1 & PART 2 (01/NHS/PV)
22	PARK & RIDE SUBTOTAL	1,315		112	55				0.10	49	7	PART 3 (02/NFA/PV)
	REST AREA SUBTOTAL	4,074		346	170							PART 4 (03/NFA/PV)
	TOTALS CARRIED TO GENERAL SUMMARY	336,309	3,240	30,002	225	14,697	9,079	100,843	15.63	7,336	1,015	

PAVEMENT SUB-SUMMARY

CALCULATED SAH
CHECKED DAH

JEF/COL-7-31.13/0.00

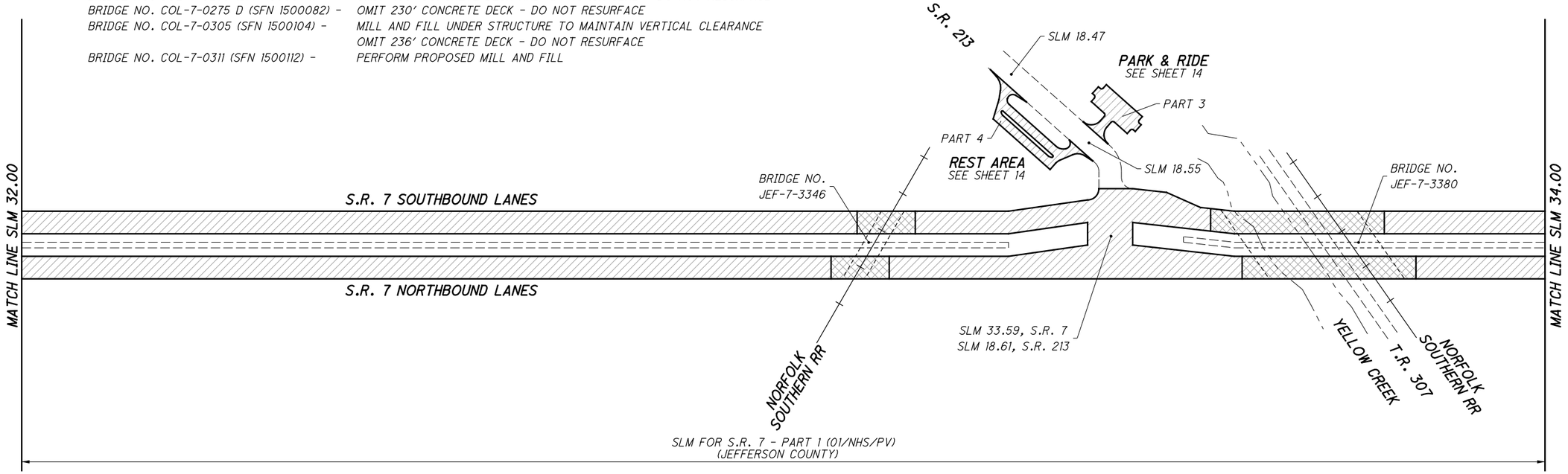


BRIDGE TREATMENT

BRIDGE NO. JEF-7-3103 (SFN 4101596) -	NO WORK
BRIDGE NO. JEF-7-3346 (SFN 4101626) -	PROVIDE 3" SURFACE COURSE ACROSS APPROACH SLAB AND CONC. DECK PROVIDE POLYMER MODIFIED EXPANSION JOINT SYSTEM (SEE SHEET 29)
BRIDGE NO. JEF-7-3380 (SFN 4101650) -	PROVIDE 3" SURFACE COURSE ACROSS APPROACH SLAB AND CONC. DECK PROVIDE POLYMER MODIFIED EXPANSION JOINT SYSTEM (SEE SHEET 30)
BRIDGE NO. COL-7-0058 (SFN 1500015) -	MILL AND FILL UNDER STRUCTURE TO MAINTAIN VERTICAL CLEARANCE OMIT 207' CONCRETE DECK AND APPROACH SLAB - DO NOT RESURFACE
BRIDGE NO. COL-7-0127 (SFN 1500023) -	OMIT 149' CONCRETE DECK - DO NOT RESURFACE
BRIDGE NO. COL-7-0193 (SFN 1500058) -	OMIT 129' CONCRETE DECK - DO NOT RESURFACE
BRIDGE NO. COL-7-0275 (SFN 1500074) -	OMIT 480' CONCRETE DECK AND APPROACH SLAB - DO NOT RESURFACE
BRIDGE NO. COL-7-0275 D (SFN 1500082) -	OMIT 230' CONCRETE DECK - DO NOT RESURFACE
BRIDGE NO. COL-7-0305 (SFN 1500104) -	MILL AND FILL UNDER STRUCTURE TO MAINTAIN VERTICAL CLEARANCE OMIT 236' CONCRETE DECK - DO NOT RESURFACE
BRIDGE NO. COL-7-0311 (SFN 1500112) -	PERFORM PROPOSED MILL AND FILL

LEGEND

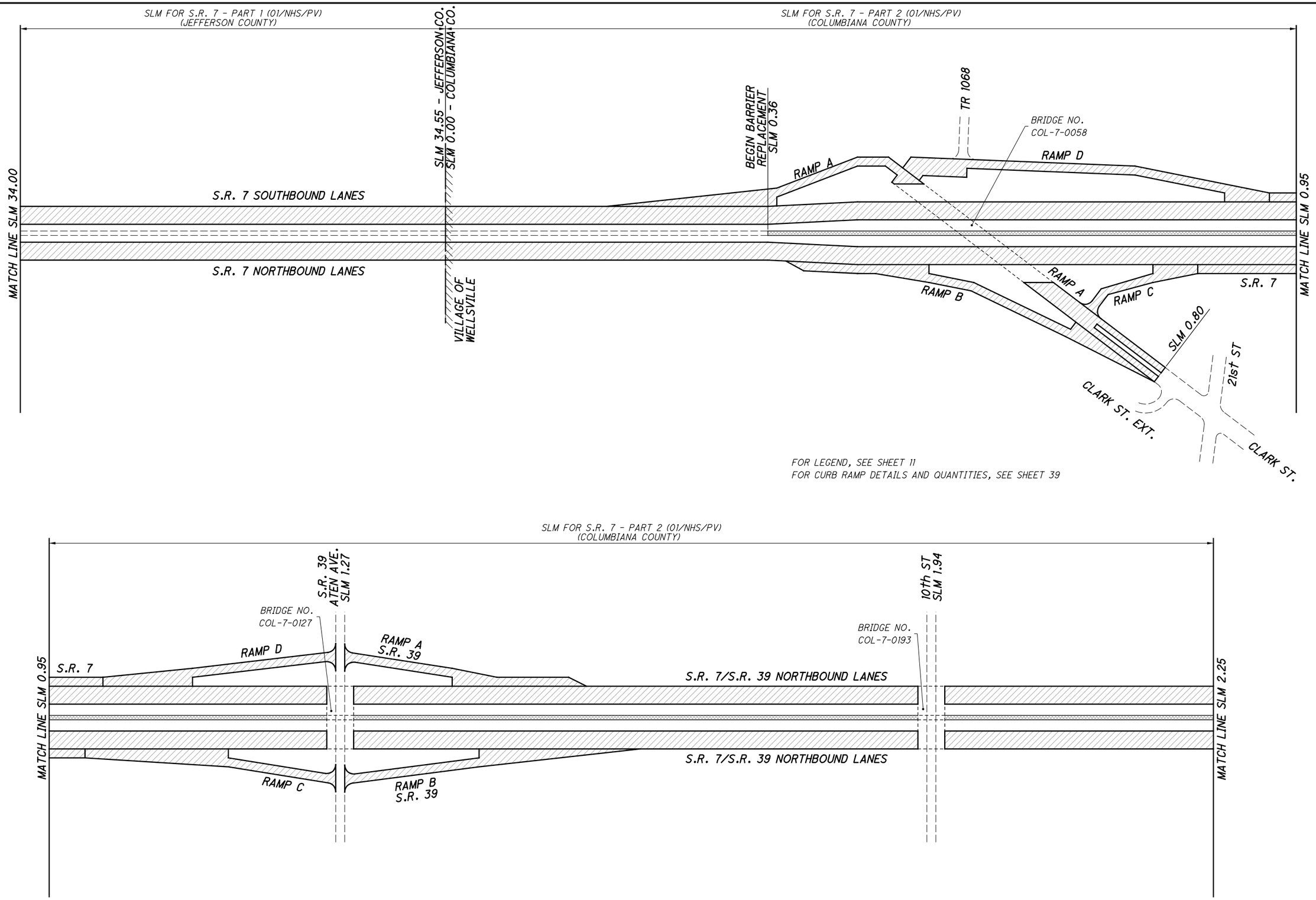
- ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (INCLUDES MAINLINE AND SHOULDERS)
- 3" SURFACE COURSE ACROSS APPROACH SLAB AND CONC. DECK (FOR FEATHER DETAIL, SEE SHEET 28 AND BP-3.1)
- REPLACE CONCRETE MEDIAN BARRIER (FOR TRANSITION DETAILS, SEE SHEET 31 - 38)



CALCULATED SAH
CHECKED DAH

S.R. 7 - PAVEMENT DETAILS

JEF/COL-7-31.13/0.00

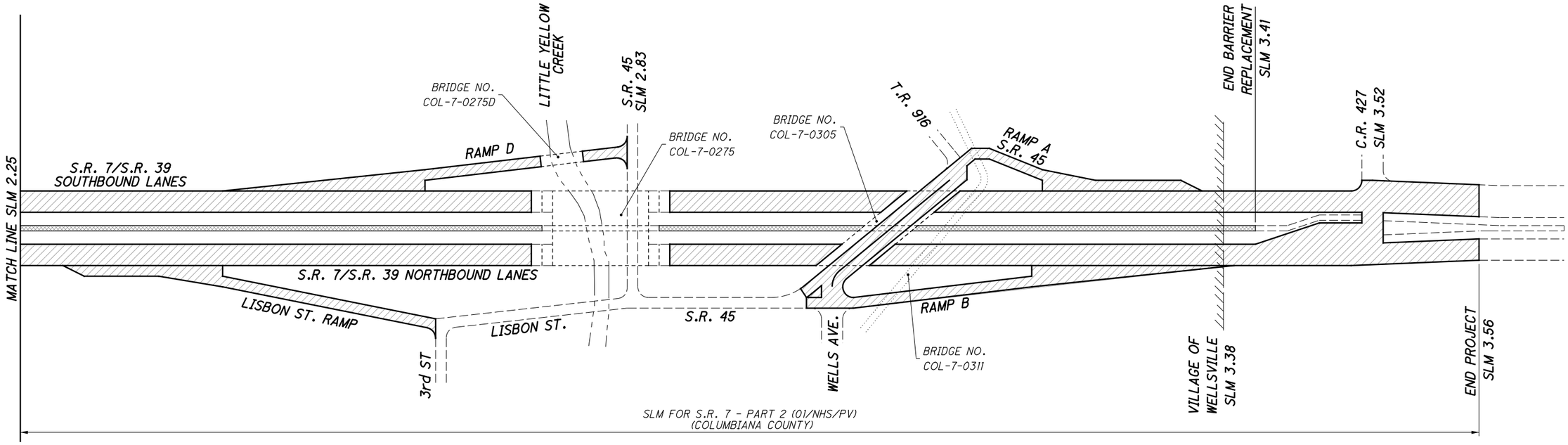


FOR LEGEND, SEE SHEET 11
FOR CURB RAMP DETAILS AND QUANTITIES, SEE SHEET 39

CALCULATED SAH
CHECKED DAH

S.R. 7 - PAVEMENT DETAILS

JEF/COL-7-31.13/0.00



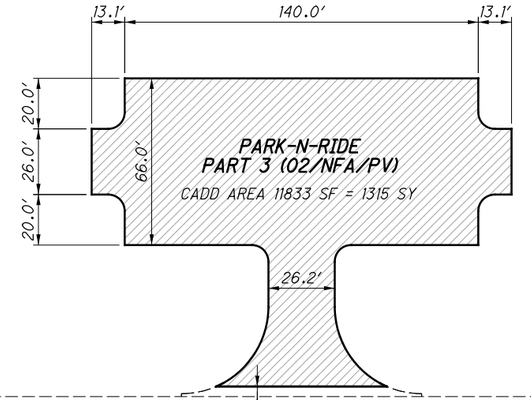
FOR LEGEND, SEE SHEET 11
FOR CURB RAMP DETAILS AND QUANTITIES, SEE SHEET 39

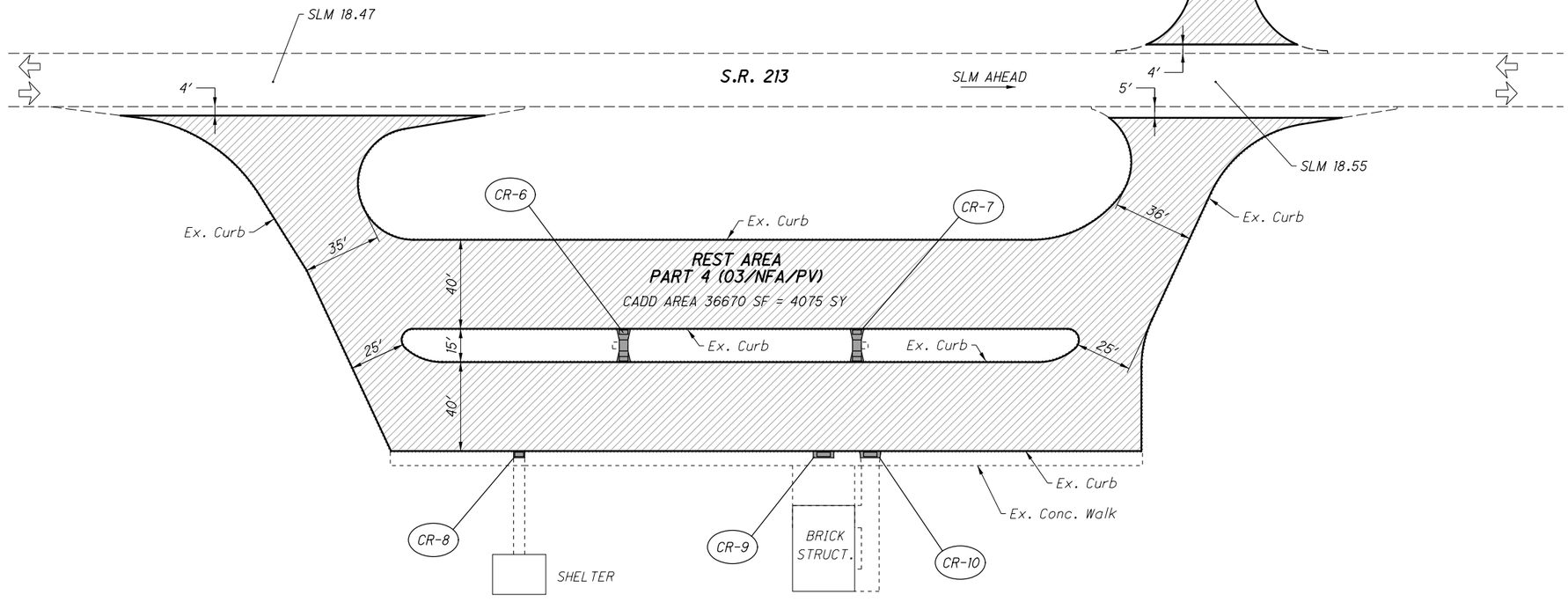
CALCULATED SAH
CHECKED DAH

S.R. 7 - PAVEMENT DETAILS

JEF/COL-7-31.13/0.00

FORE LEGEND, SEE SHEET 11
FOR CURB RAMP DETAILS AND QUANTITIES, SEE SHEET 39





HORIZONTAL SCALE IN FEET
0 15 30 60

CALCULATED SAH
CHECKED DAH

PAVEMENT DETAILS
S.R. 213 - REST AREA AND PARK-N-RIDE

JEF / COL-7-31.13 / 0.00

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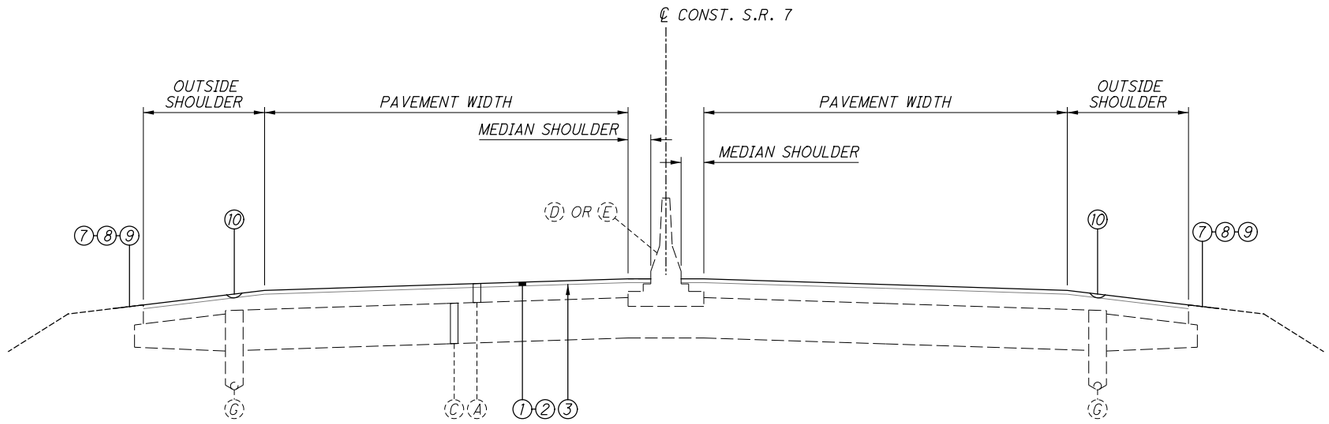
EXISTING LEGEND

(A) - EXISTING ASPHALT PAVEMENT
(B) - EXISTING CONCRETE PAVEMENT
(C) - EXISTING SUBBASE
(D) - EXISTING MEDIAN BARRIER
(E) - EXISTING RAISED MEDIAN
(F) - EXISTING CONCRETE CURB
(G) - EXISTING UNDERDRAIN

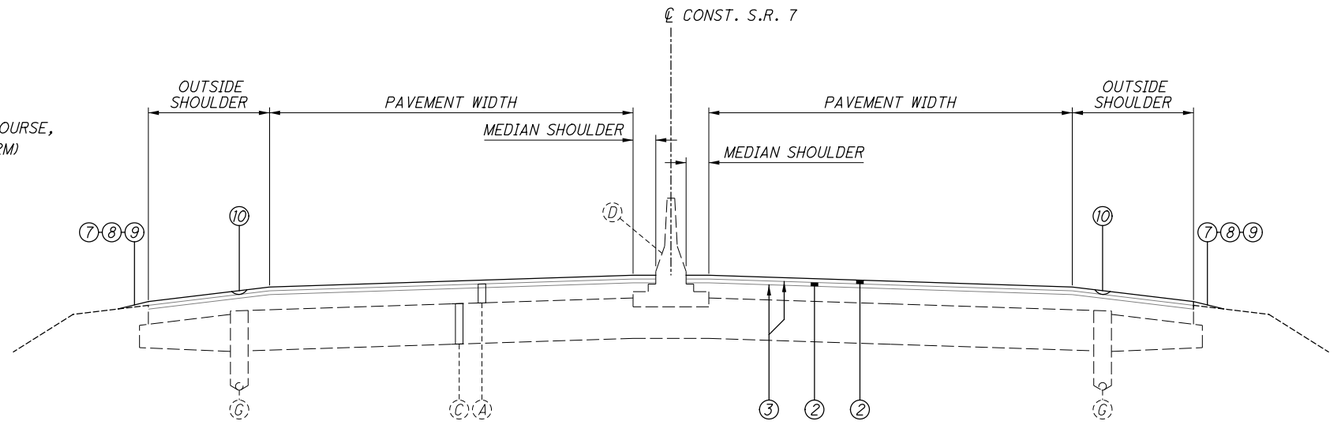
PROPOSED LEGEND

(1) - ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")
(2) - ITEM 442 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, (447), AS PER PLAN
(3) - ITEM 407 - NON-TRACKING TACK COAT
(4) - NOT USED
(5) - ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B1
(6) - ITEM 202 - CONCRETE BARRIER REMOVED
(7) - ITEM 209 - LINEAR GRADING
(8) - ITEM 408 - PRIME COAT, AS PER PLAN
(9) - ITEM 617 - 2" COMPACTED AGGREGATE (2' WIDTH)
(10) - ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE)
(11) - ITEM 304 - 6" AGGREGATE BASE
(12) - ITEM 305 - 9" CONCRETE BASE, QC 1P
(13) - ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)



TYPICAL SECTION 1

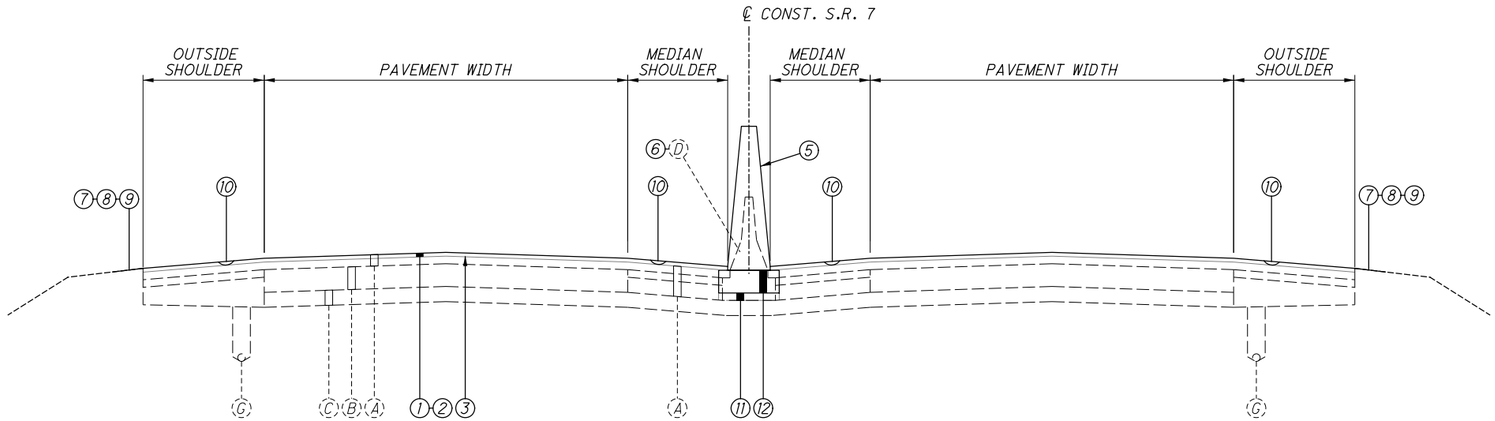
FOR MAINLINE PAVEMENT WIDTHS, SEE SHEET 19 - 20
FOR MAINLINE OUTSIDE AND MEDIAN SHOULDER WIDTHS, SEE SHEET 23 - 24



TYPICAL SECTION 2

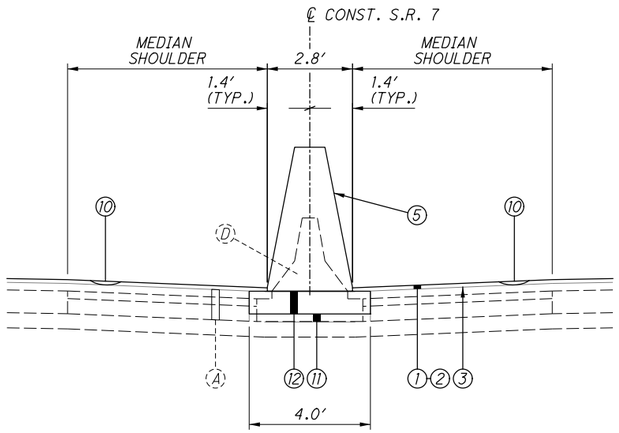
S.R. 7 - PAVEMENT DETAILS

JEF/COL-7-31.13/0.00

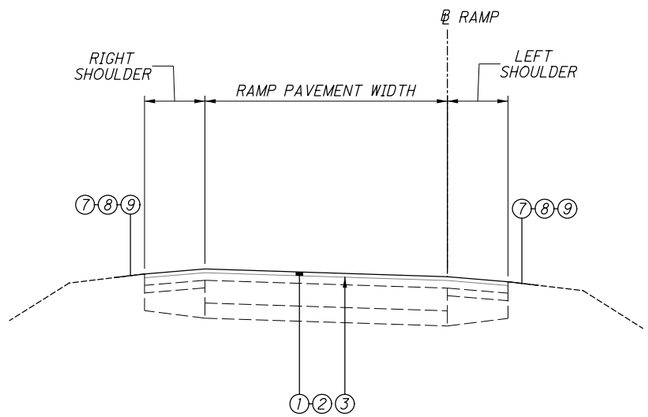


TYPICAL SECTION 3

FOR LEGEND SEE SHEET 15
FOR MAINLINE PAVEMENT WIDTHS, SEE SHEET 19 - 20
FOR MAINLINE OUTSIDE AND MEDIAN SHOULDER WIDTHS, SEE SHEET 23 - 24
FOR RAMP PAVEMENT WIDTHS, SEE SHEET 21
FOR RAMP SHOULDER WIDTHS, SEE SHEET 25



MEDIAN BARRIER DETAIL



RAMP TYPICAL

(IN DIRECTION OF TRAVEL)

S.R. 7 - PAVEMENT DETAILS

JEF/COL-7-31.13/0.00

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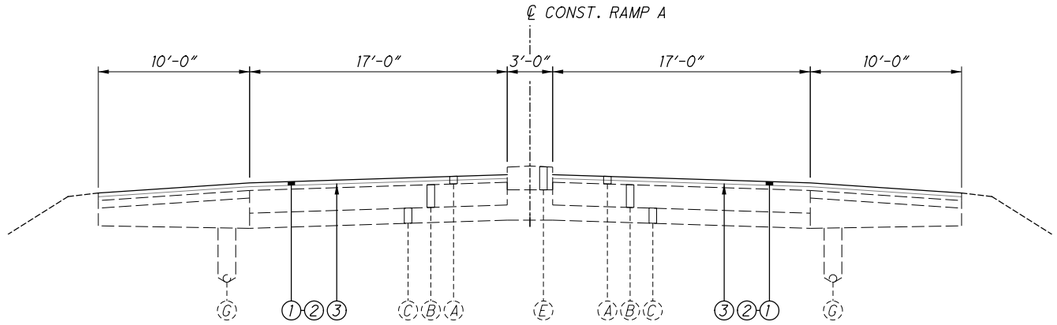


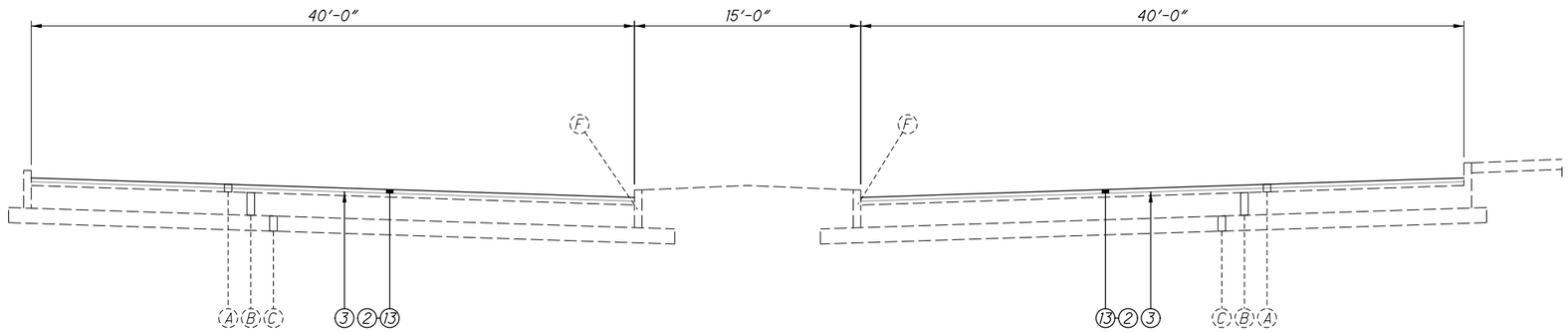
TYPICAL SECTION 6

RAMP A/CLARK ST.

FOR LEGEND SEE SHEET 15

S.R. 7 RAMP - PAVEMENT DETAILS

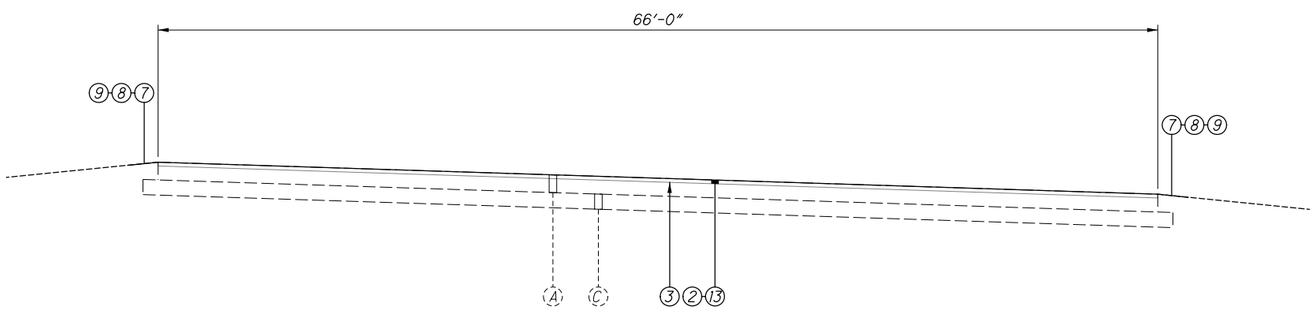
JEF/COL-7-31.13/0.00



TYPICAL SECTION 4

REST AREA

FOR LEGEND SEE SHEET 15
FOR REST AREA AND PARK AND RIDE QUANTITIES, SEE SHEET 22



TYPICAL SECTION 5

PARK AND RIDE

REST AREA & PARK AND RIDE - PAVEMENT DETAILS

JEF / COL-7-31.13 / 0.00

LOCATION	SLM		LENGTH		PAVEMENT WIDTH	TYPICAL	PAVEMENT AREA * Denotes CADD Area	254			407			442			REMARKS
											NON-TRACKING TACK COAT						
	FROM	TO	MILE	FT	FT		SQ YD	IN.	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2") SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES) SQ YD	0.085 GAL/S.Y. GAL	0.070 GAL/S.Y. GAL	0.055 GAL/S.Y. GAL	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B, (447) AS PER PLAN CU YD	ANTI-SEGREGATION EQUIPMENT CU YD	
NORTHBOUND S.R. 7																	
STRUCTURE JEF-7-3103																	BEGIN WORK AT FORWARD ABUTMENT JOINT
	31.13	33.43	2.30	12,144.00	24.00	1	32,384	1 1/2	32,384		2,753			1 1/2	1349	1349	
	33.43	33.45	0.02	105.00	24.00	2	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3346	33.45	33.50	0.05	264.00	24.00	2	704					49	39	3	59	59	ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28 - 29)
	33.50	33.52	0.02	105.00	24.00	2	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
	33.52	33.60	0.08	422.40	24.00	1	1,126	1 1/2	1,126		96			1 1/2	47	47	
	33.60	33.68	0.08	422.40	30.00	1	1,408	1 1/2	1,408		120			1 1/2	59	59	LEFT TURN LANE TAPER
S.R. 213 INTERSECTION	33.68	33.70	0.02	105.60	38.50	1	452	1 1/2	452		38			1 1/2	19	19	MEDIAN BREAK
	33.70	33.79	0.09	475.20	30.00	1	1,584	1 1/2	1,584		135			1 1/2	66	66	LANE TAPER
	33.79	33.81	0.02	105.00	24.00	2	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3380	33.81	33.95	0.14	739.20	24.00	2	1,971					138	108	3	164	164	ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28, 30)
	33.95	33.97	0.02	105.00	24.00	2	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
JEFFERSON COUNTY LINE (BACK)	33.97	34.55	0.58	3,062.40	24.00	1	8,166	1 1/2	8,166		694			1 1/2	340	340	
MAINLINE PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**45,120**	**1,120**	**3,932**	**187**	**207**		**2,195**	**2,195**	**PART 1 (01/NHS/PV)**
COLUMBIANA COUNTY LINE (AHEAD)	0.00	0.82	0.82	4,329.60	24.00	1 & 3	11,546	1 1/2	11,546		981			1 1/2	481	481	
NB RAMP 'B' DECELERATION LANE					VARIES	RAMP	1,337.00*	1 1/2	1,337		114			1 1/2	56	56	
NB RAMP 'C' ACCELERATION LANE					VARIES	RAMP	675.46*	1 1/2	675		57			1 1/2	28	28	
	0.82	1.01	0.19	1,003.20	36.00	3	4,013	1 1/2	4,013		341			1 1/2	167	167	
	1.01	1.27	0.26	1,372.80	24.00	3	3,661	1 1/2	3,661		311			1 1/2	153	153	
NB RAMP 'C' DECELERATION LANE					VARIES	RAMP	779.20*	1 1/2	779		66			1 1/2	32	32	
STRUCTURE COL-7-0127																	BUTT JOINT & OMIT PAVING ON STRUCTURE
NB RAMP 'B' ACCELERATION LANE					VARIES	RAMP	1,556.00*	1 1/2	1,556		132			1 1/2	65	65	
	1.29	1.94	0.65	3,432.00	24.00	3	9,152	1 1/2	9,152		778			1 1/2	381	381	
STRUCTURE COL-7-0193																	BUTT JOINT & OMIT PAVING ON STRUCTURE
	1.95	2.73	0.78	4,118.40	24.00	3	10,982	1 1/2	10,982		933			1 1/2	458	458	BUTT JOINT AT CONCRETE
NB LISBON ST. RAMP DECEL. LANE					VARIES	RAMP	1,329.50*	1 1/2	1,330		113			1 1/2	55	55	
STRUCTURE COL-7-0275																	OMIT PAVING ON STRUCTURE & APPROACH SLABS
	2.85	3.06	0.21	1,108.80	24.00	3	2,957	1 1/2	2,957		251			1 1/2	123	123	BUTT JOINT AT CONCRETE
STRUCTURE COL-7-0305																	BUTT JOINT & OMIT PAVING ON STRUCTURE
	3.09	3.41	0.32	1,689.60	24.00	3	4,506	1 1/2	4,506		383			1 1/2	188	188	N. CORP. WELLSVILLE @ SLM 3.38
NB RAMP 'B' ACCELERATION LANE					VARIES	RAMP	1,389.78*	1 1/2	1,390		118			1 1/2	58	58	
	3.41	3.48	0.07	369.60	30.00	3	1,232	1 1/2	1,232		105			1 1/2	51	51	
	3.48	3.51	0.03	158.40	36.00	3	634	1 1/2	634		54			1 1/2	26	26	
C.R. 427 INTERSECTION	3.51	3.53	0.02	105.60	38.23	3	449	1 1/2	449		38			1 1/2	19	19	
	3.53	3.56	0.03	158.40	24.00	3	422	1 1/2	422		36			1 1/2	18	18	END AT JOINT
MAINLINE PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**56,621**		**4,811**				**2,359**	**2,359**	**PART 2 (01/NHS/PV)**

CALCULATED SAH CHECKED DAH

NORTHBOUND PAVEMENT DATA

S.R. 7 - NO

JEF/COL-7-31.13/0.00

LOCATION	SLM		LENGTH		PAVEMENT WIDTH	TYPICAL	PAVEMENT AREA * Denotes CADD Area	254			407			442			REMARKS
											NON-TRACKING TACK COAT						
	FROM	TO	MILE	FT	FT		SQ YD	IN.	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2") SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES) SQ YD	0.085 GAL/S.Y. GAL	0.070 GAL/S.Y. GAL	0.055 GAL/S.Y. GAL	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN CU YD	ANTI-SEGREGATION EQUIPMENT CU YD	
SOUTHBOUND S.R. 7																	
STRUCTURE JEF-7-3106																	BEGIN WORK AT FORWARD ABUTMENT JOINT
	31.13	33.44	2.31	12,196.80	24.00	1	32,525	1 1/2	32,525		2,765			1 1/2	1355	1355	
	33.44	33.46	0.02	105.00	24.00	3	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3346	33.46	33.51	0.05	264.00	24.00	3	704					49	39	3	59	59	ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28 - 29)
	33.51	33.53	0.02	105.00	24.00	3	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
	33.53	33.68	0.15	792.00	24.00	1	2,112	1 1/2	2,112		180			1 1/2	88	88	
S.R. 213 INTERSECTION	33.68	33.70	0.02	105.60	36.00	1	422	1 1/2	422		36			1 1/2	18	18	MEDIAN BREAK
	33.70	33.74	0.04	211.20	36.00	1	845	1 1/2	845		72			1 1/2	35	35	RIGHT TURN LANE
	33.74	33.77	0.03	158.40	30.00	1	528	1 1/2	528		45			1 1/2	22	22	RIGHT TURN TRANSITION
	33.77	33.78	0.01	52.80	24.00	1	141	1 1/2	141		12			1 1/2	6	6	
	33.78	33.80	0.02	105.00	24.00	3	280	VAR	280	280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3380	33.80	33.93	0.13	686.40	24.00	3	1,830					128	101	3	153	153	ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28, 30)
	33.93	33.95	0.02	105.00	24.00	3	280	VAR		280	24		15	3	23	23	TRANSITION TO STRUCTURE (SEE SHEET 28)
JEFFERSON COUNTY LINE (BACK)	33.93	34.55	0.62	3,273.60	24.00	1	8,730	1 1/2	8,730		742			1 1/2	364	364	
MAINLINE PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**45,583**	**1,120**	**3,948**	**177**	**200**		**2,192**	**2,192**	**PART 1 (01/NHS/PV)**
COLUMBIANA COUNTY LINE (AHEAD)	0.00	0.92	0.92	4,857.60	24.00	1 & 3	12,954	1 1/2	12,954		1,101			1 1/2	540	540	
SB RAMP 'A' ACCELERATION LANE					VARIES	RAMP	1,405.17*	1 1/2	1,405		119			1 1/2	59	59	
SB RAMP 'D' DECELERATION LANE					VARIES	RAMP	650.64*	1 1/2	651		55			1 1/2	27	27	
	0.92	1.02	0.10	528.00	36.00	1	2,112	1 1/2	2,112		180			1 1/2	88	88	
	1.02	1.27	0.25	1,320.00	24.00	1	3,520	1 1/2	3,520		299			1 1/2	147	147	
SB RAMP 'D' ACCELERATION LANE					VARIES	RAMP	1,127.60*	1 1/2	1,128		96			1 1/2	47	47	
STRUCTURE COL-7-0127																	BUTT JOINT & OMIT PAVING ON STRUCTURE
SB RAMP 'A' DECELERATION LANE					VARIES	RAMP	1,304.56*	1 1/2	1,305		111			1 1/2	54	54	
	1.29	1.94	0.65	3,432.00	24.00	1	9,152	1 1/2	9,152		778			1 1/2	381	381	
STRUCTURE COL-7-0193																	BUTT JOINT & OMIT PAVING ON STRUCTURE
	1.95	2.73	0.78	4,118.40	24.00	1	10,982	1 1/2	10,982		933			1 1/2	458	458	BUTT JOINT AT CONCRETE
SB RAMP 'D' ACCELERATION LANE					VARIES	RAMP	1,464.44*	1 1/2	1,464		124			1 1/2	61	61	
STRUCTURE COL-7-0275																	OMIT PAVING ON STRUCTURE & APPROACH SLABS
	2.85	3.06	0.21	1,108.80	24.00	1	2,957	1 1/2	2,957		251			1 1/2	123	123	BUTT JOINT AT CONCRETE
STRUCTURE COL-7-0305																	BUTT JOINT & OMIT PAVING ON STRUCTURE
SB RAMP 'A' DECELERATION LANE					VARIES	RAMP	1,389.78*	1 1/2	1,390		118			1 1/2	58	58	
	3.09	3.51	0.42	2,217.60	24.00	1	5,914	1 1/2	5,914		503			1 1/2	246	246	END AT N. CORP. WELLSVILLE @ SLM 3.38
C.R. 427 INTERSECTION	3.51	3.53	0.02	105.60	36.00	1	422	1 1/2	422		36			1 1/2	18	18	END AT JOINT
	3.53	3.56	0.03	158.40	36.00	1	634	1 1/2	634		54			1 1/2	26	26	END AT JOINT
MAINLINE PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**55,989**		**4,758**				**2,333**	**2,333**	**PART 2 (01/NHS/PV)**

CALCULATED SAH CHECKED DAH

SOUTHBOUND PAVEMENT DATA

S.R. 7 - SOUTHBOUND

JEF/COL-7-31.13/0.00

	LOCATION	SLM FROM	SLM TO	LENGTH MILE	LENGTH FT	PAVEMENT WIDTH FT	TYPICAL	PAVEMENT AREA * Denotes CADD Area SQ YD	254 IN.	254 PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2") SQ YD	407 NON-TRACKING TACK COAT @ 0.085 GAL./S.Y. GAL			442 IN.	442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN CU YD		REMARKS
CLARK ST. INTERCHANGE	SB RAMP 'A'	0.37	0.58		1,067.77	16.00	RAMP	1,898.26	1 1/2	1,898	161			1 1/2	79		
	SB RAMP 'A' TO STRUCTURE	0.58				VARIES	RAMP	119.95*	1 1/2	120	10			1 1/2	5		INCLUDE SHOULDER
	STRUCTURE COL-7-0058																
	SB RAMP 'A' TO MEDIAN ISLAND	0.63	0.70		347.30	37.00	RAMP	1,427.79	1 1/2	1,428	121			1 1/2	59		
	NB RAMP 'B' ACCELERATION LANE (RAMP A)	0.68	0.79			VARIES	RAMP	673.36*	1 1/2	673	57			1 1/2	28		
	SB RAMP 'A' WITH MEDIAN ISLAND	0.70	0.80		570.00	34.00	RAMP	2,153.33	1 1/2	2,153	183			1 1/2	90		
	NB RAMP 'B'	0.54	0.66		624.58	16.00	RAMP	1,110.36	1 1/2	1,110	94			1 1/2	46		
	NB RAMP 'C' RETURNS	0.67	0.70			VARIES	RAMP	508.37*	1 1/2	508	43			1 1/2	21		
	NB RAMP 'C'	0.70	0.74		231.00	16.00	RAMP	410.67	1 1/2	411	35			1 1/2	17		
	SB RAMP 'D' RETURNS	0.56	0.57			VARIES	RAMP	240.87*	1 1/2	241	20			1 1/2	10		INCLUDE SHOULDER
	SB RAMP 'D'	0.57	0.66		503.02	24.00	RAMP	1,341.39	1 1/2	1,341	114			1 1/2	56		
	SB RAMP 'D'	0.66	0.87		1,093.00	16.00	RAMP	1,943.11	1 1/2	1,943	165			1 1/2	81		
S.R. 39 INTERCHANGE	SB RAMP 'A' RETURNS	1.26	1.27			VARIES	RAMP	209.12*	1 1/2	209	18			1 1/2	9		
	SB RAMP 'A'	1.27	1.40		699.14	16.00	RAMP	1,242.92	1 1/2	1,243	106			1 1/2	52		
	NB RAMP 'B' RETURNS	1.28	1.29			VARIES	RAMP	201.19*	1 1/2	201	17			1 1/2	8		
	NB RAMP 'B'	1.29	1.43		726.43	16.00	RAMP	1,291.43	1 1/2	1,291	110			1 1/2	54		
	NB RAMP 'C'	1.16	1.27		573.71	16.00	RAMP	1,019.93	1 1/2	1,020	87			1 1/2	42		
	NB RAMP 'C' RETURNS	1.27	1.28			VARIES	RAMP	246.67*	1 1/2	247	21			1 1/2	10		
	SB RAMP 'D'	1.12	1.26		716.97	16.00	RAMP	1,274.61	1 1/2	1,275	108			1 1/2	53		
	SB RAMP 'D' RETURNS	1.26	1.27			VARIES	RAMP	349.05*	1 1/2	349	30			1 1/2	15		
S.R. 45 INTERCHANGE	SB RAMP 'A' TO WELLS AVE.	3.01	3.03		153.17	12.00	RAMP	204.23	1 1/2	204	17			1 1/2	9		
	SB RAMP 'A' SPLIT	3.03	3.05			VARIES	RAMP	227.21*	1 1/2	227	19			1 1/2	9		INCLUDE SHOULDER
	SB RAMP 'A' RIGHT DROP OUT LANE	3.05	3.08		193.76	24.00	RAMP	516.69	1 1/2	517	44			1 1/2	22		INCLUDE SHOULDER
	SB RAMP 'A'	3.08	3.21		670.76	16.00	RAMP	1,192.46	1 1/2	1,192	101			1 1/2	50		
	TR 916 ACCESS RETURN					VARIES	RAMP	132.48*	1 1/2	132	11			1 1/2	6		INCLUDE SHOULDER
	TR 916 ACCESS UNDER SR 7				165.03	16.00	RAMP	293.39	1 1/2	293	25			1 1/2	12		
	TR 916 CROSSING RETURN					VARIES	RAMP	150.78*	1 1/2	151	13			1 1/2	6		INCLUDE SHOULDER
	NB RAMP 'B' BIDIRECTIONAL	3.02	3.06		145.58	26.00	RAMP	420.56	1 1/2	421	36			1 1/2	18		
	NB RAMP 'B'	3.06	3.20		802.80	16.00	RAMP	1,427.20	1 1/2	1,427	121			1 1/2	59		
	NB LISBON ST. RAMP	2.45	2.63		974.29	16.00	RAMP	1,732.07	1 1/2	1,732	147			1 1/2	72		
	NB LISBON ST. RETURNS	2.63	2.65			VARIES	RAMP	229.74*	1 1/2	230	20			1 1/2	10		
	SB RAMP 'D'	2.63	2.74		533.71	16.00	RAMP	948.82	1 1/2	949	81			1 1/2	40		
	STRUCTURE COL-7-0275 D																BUTT JOINT & OMIT PAVING ON STRUCTURE
	SB RAMP 'D'	2.78	2.80		80.39	16.00	RAMP	142.92	1 1/2	143	12			1 1/2	6		
	SB RAMP 'D' RETURNS	2.80	2.81			VARIES	RAMP	405.39*	1 1/2	405	34			1 1/2	17		
RAMP PAVEMENT SUBTOTAL CARRIED TO SHEET NO. 10										**25,686**	**2,181**				**1,071**		**PART 2 (01/NHS/PV)**

CALCULATED SAH
CHECKED DAH

S.R. 7 - RAMP PAVEMENT DATA

JEF/COL-7-31.13/0.00

LOCATION	SLM		LENGTH		PAVEMENT WIDTH	TYPICAL	PAVEMENT AREA * Denotes CADD Area	254		407			441		209	408	617	REMARKS
								IN.	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	NON-TRACKING TACK COAT @ 0.085 GAL./S.Y.			IN.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN (PG70-22M)	LINEAR GRADING	PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	2" COMPACTED AGGREGATE (2' WIDTH)	
	FROM	TO	MILE	FT	FT		SQ YD		SQ YD	GAL				CU YD	MILE	GALLON	CU YD	
PARK AND RIDE - S.R. 213																		
PAVEMENT AREA						5	1,315*	1 1/2	1,315	112			1 1/2	55	0.10	49	7	
PARK AND RIDE PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**1,315**	**112**				**55**	**0.10**	**49**	**7**	**PART 3 (02/NFA/PV)**
REST AREA - S.R. 213																		
PAVEMENT AREA						4	4,074*	1 1/2	4,074	346			1 1/2	170				
REST AREA PAVEMENT SUBTOTAL CARRIED TO SHEET 10									**4,074**	**346**				**170**				**PART 4 (03/NFA/PV)**

CALCULATED SAH CHECKED DAH

PARK AND RIDE & REST AREA PAVEMENT DATA

JEF/COL-7-31.13/0.00

LOCATION	SLM		LENGTH		SHOULDER WIDTH		TYPICAL	PAVEMENT AREA * Denotes CADD Area	254			407			442		618	209	408	617	REMARKS
					OUTSIDE SHOULDER	MEDIAN SHOULDER			IN.	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES)	NON-TRACKING TACK COAT 0.085 GAL/S.Y.	NON-TRACKING TACK COAT 0.070 GAL/S.Y.	NON-TRACKING TACK COAT 0.055 GAL/S.Y.	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	LINEAR GRADING	PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	2" COMPACTED AGGREGATE (2" WIDTH)	
	FROM	TO	MILE	FT	FT	FT		SQ YD		SQ YD	SQ YD	GAL	GAL	GAL		CU YD	FT	MILE	GALLON	CU YD	
NORTHBOUND S.R. 7																					
	31.13	33.43	2.30	12,144.00	8.00	1.50	1	12,819	1 1/2	12,819		1,090			1 1/2	534	12144.00	2.30	1079	150	RUMBLE STRIPS OUTSIDE
	33.43	33.45	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3346	33.45	33.50	0.05	264.00	10.50	1.00	2	337					24	19	3	28	264.00				ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28 - 29)
	33.50	33.52	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
	33.52	33.60	0.08	422.40	8.00	1.50	1	446	1 1/2	446		38			1 1/2	19	422.40	0.08	38	5	RUMBLE STRIPS OUTSIDE
	33.60	33.68	0.08	422.40	8.00	1.00	1	422	1 1/2	422		36			1 1/2	18	422.40	0.08	38	5	RUMBLE STRIPS OUTSIDE
S.R. 213 INTERSECTION	33.68	33.70	0.02	105.60	8.00		1	94	1 1/2	94		8			1 1/2	4	105.60	0.02	9	1	RUMBLE STRIPS OUTSIDE
	33.70	33.79	0.09	475.20	8.00	1.00	1	475	1 1/2	475		40			1 1/2	20	475.20	0.09	42	6	RUMBLE STRIPS OUTSIDE
	33.79	33.81	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3380	33.81	33.95	0.14	739.20	10.50	1.00	2	945					66	52	3	79	739.20				ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28, 30)
	33.95	33.97	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
JEFFERSON CO. LINE (BACK)	33.97	34.55	0.58	3,062.40	8.00	1.50	1	3,233	1 1/2	3,233		275			1 1/2	135	3062.40	0.58	272	38	RUMBLE STRIPS OUTSIDE
SHOULDER PAVEMENT SUBTOTAL CARRIED TO SHEET 10										**17,489**	**500**	**1,531**	**90**	**99**		**877**	**18,055**	**3.23**	**1,514**	**209**	**PART 1 (01/NHS/PV)**
COLUMBIANA CO. LINE (AHD)	0.00	0.36	0.36	1,900.80	8.00	1.50	1	2,006	1 1/2	2,006		171			1 1/2	84	1900.80	0.36	169	23	RUMBLE STRIPS OUTSIDE
	0.36	0.38	0.02	105.60	8.00		3	94	1 1/2	94		8			1 1/2	4	105.60	0.02	9	1	RUMBLE STRIPS OUTSIDE
RAMP B TERMINAL	0.38	0.54	0.16	844.80	8.00		3	751	1 1/2	751		64			1 1/2	31	844.80	0.16	75	10	RUMBLE STRIPS OUTSIDE
MEDIAN SIDE	0.36	0.46	0.10	495.07		4.13	3	227	1 1/2	227		19			1 1/2	9		0.09	44	6	RUMBLE STRIPS OUTSIDE
	0.46	0.54	0.08	422.40		6.75	3	317	1 1/2	317		27			1 1/2	13	422.40	0.08	38	5	RUMBLE STRIPS BOTH SIDES
	0.54	0.59	0.05	264.00	8.00	6.75	3	433	1 1/2	433		37			1 1/2	18	528.00	0.05	23	3	RUMBLE STRIPS BOTH SIDES
	0.59	0.61	0.02	105.60	10.00	6.75	3	197	1 1/2	197		17			1 1/2	8	211.20	0.02	9	1	RUMBLE STRIPS BOTH SIDES
	0.61	0.74	0.13	686.40	8.00	6.75	3	1,125	1 1/2	1,125		96			1 1/2	47	1372.80	0.13	61	8	RUMBLE STRIPS BOTH SIDES
RAMP C TERMINAL	0.74	0.82	0.08	422.40	8.00	6.75	3	692	1 1/2	692		59			1 1/2	29	844.80	0.08	38	5	RUMBLE STRIPS BOTH SIDES
	0.82	1.01	0.19	1,003.20	10.00	6.75	3	1,867	1 1/2	1,867		159			1 1/2	78	2006.40	0.19	89	12	RUMBLE STRIPS BOTH SIDES
	1.01	1.09	0.08	422.40	8.00	6.75	3	692	1 1/2	692		59			1 1/2	29	844.80	0.08	38	5	RUMBLE STRIPS BOTH SIDES
RAMP C TERMINAL	1.09	1.15	0.06	316.80	8.00	6.75	3	519	1 1/2	519		44			1 1/2	22	633.60	0.06	28	4	RUMBLE STRIPS BOTH SIDES
	1.15	1.27	0.12	633.60	8.00	6.75	3	1,038	1 1/2	1,038		88			1 1/2	43	1267.20	0.12	56	8	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0127																					
	1.29	1.43	0.14	739.20	8.00	6.75	3	1,211	1 1/2	1,211		103			1 1/2	50	1478.40	0.14	66	9	RUMBLE STRIPS BOTH SIDES
RAMP B TERMINAL	1.43	1.61	0.18	950.40	8.00	6.75	3	1,558	1 1/2	1,558		132			1 1/2	65	1900.80	0.18	84	12	RUMBLE STRIPS BOTH SIDES
	1.61	1.94	0.33	1,742.40	8.00	6.75	3	2,856	1 1/2	2,856		243			1 1/2	119	3484.80	0.33	155	22	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0193																					
	1.95	2.29	0.34	1,795.20	8.00	6.75	3	2,942	1 1/2	2,942		250			1 1/2	123	3590.40	0.34	160	22	RUMBLE STRIPS BOTH SIDES
LISBON ST RAMP TERMINAL	2.29	2.44	0.15	792.00	8.00	6.75	3	1,298	1 1/2	1,298		110			1 1/2	54	1584.00	0.15	70	10	RUMBLE STRIPS BOTH SIDES
	2.44	2.73	0.29	1,531.20	8.00	6.75	3	2,509	1 1/2	2,509		213			1 1/2	105	3062.40	0.29	136	19	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0275																					
	2.85	3.06	0.21	1,108.80	8.00	6.75	3	1,817	1 1/2	1,817		154			1 1/2	76	2217.60	0.21	99	14	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0305																					
	3.09	3.20	0.11	580.80	8.00	6.75	3	952	1 1/2	952		81			1 1/2	40	1161.60	0.11	52	7	RUMBLE STRIPS BOTH SIDES
RAMP B TERMINAL	3.20	3.39	0.19	1,003.20	8.00	6.75	3	1,644	1 1/2	1,644		140			1 1/2	69	2006.40	0.19	89	12	RUMBLE STRIPS BOTH SIDES
	3.39	3.41	0.02	105.60	8.00	6.75	3	173	1 1/2	173		15			1 1/2	7	211.20	0.02	9	1	RUMBLE STRIPS BOTH SIDES
	3.41	3.43	0.02	105.60	8.00	7.69	3	184	1 1/2	184		16			1 1/2	8	105.60	0.02	9	1	RUMBLE STRIPS OUTSIDE ONLY
	3.43	3.48	0.05	264.00	8.00	4.69	3	372	1 1/2	372		32			1 1/2	16	264.00	0.05	23	3	RUMBLE STRIPS OUTSIDE ONLY
	3.48	3.51	0.03	158.40	8.00	2.00	3	176	1 1/2	176		15			1 1/2	7	158.40	0.03	14	2	RUMBLE STRIPS OUTSIDE ONLY
C.R. 427 INTERSECTION	3.51	3.53	0.02	105.60	8.00		3	94	1 1/2	94		8			1 1/2	4	105.60	0.02	9	1	RUMBLE STRIPS OUTSIDE ONLY
	3.53	3.56	0.03	158.40	8.00	2.00	3	176	1 1/2	176		15			1 1/2	7	158.40	0.03	14	2	RUMBLE STRIPS OUTSIDE ONLY
SHOULDER PAVEMENT SUBTOTAL CARRIED TO SHEET 10										**27,920**		**2,375**				**1,165**	**32,472**	**3.55**	**1,666**	**228**	**PART 2 (01/NHS/PV)**

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CALCULATED SAH CHECKED DAH

S.R. 7 - NORTHBOUND SHOULDER DATA

JEF/COL-7-31.13/0.00

LOCATION	SLM		LENGTH		SHOULDER WIDTH		TYPICAL	PAVEMENT AREA * Denotes CADD Area	254			407			442			618	209	408	617	REMARKS
					OUTSIDE SHOULDER	MEDIAN SHOULDER			IN.	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	PAVEMENT PLANING, ASPHALT CONCRETE (VARIES)	NON-TRACKING TACK COAT 0.085 GAL/S.Y.	NON-TRACKING TACK COAT 0.070 GAL/S.Y.	NON-TRACKING TACK COAT 0.055 GAL/S.Y.	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	LINEAR GRADING	PRIME COAT, AS PER PLAN @ 0.40 GAL/SY	2" COMPACTED AGGREGATE (2' WIDTH)	
	FROM	TO	MILE	FT	FT	FT		SQ YD		SQ YD	SQ YD	GAL	GAL	GAL		CU YD	FT	MILE	GALLON	CU YD	
SOUTHBOUND S.R. 7																						
	31.13	33.44	2.31	12,196.80	8.00	1.50	1	12,874	1 1/2	12,874		1,094			1 1/2	536	12196.80	2.31	1084	151	RUMBLE STRIPS OUTSIDE
	33.44	33.46	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3346	33.46	33.51	0.05	264.00	10.50	1.00	2	337					24	19	3	28	264.00				ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28 - 29)
	33.51	33.53	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
	33.53	33.60	0.07	369.60	8.00	1.50	1	390	1 1/2	390		33			1 1/2	16	369.60	0.07	33	5	RUMBLE STRIPS OUTSIDE
	33.60	33.67	0.07	369.60	8.00	1.00	1	370	1 1/2	370		31			1 1/2	15	369.60	0.07	33	5	RUMBLE STRIPS OUTSIDE
	33.67	33.68	0.01	52.80		1.00	1	6	1 1/2	6		1									
S.R. 213 INTERSECTION																					
	33.70	33.78	0.08	422.40	8.00	1.00	1	422	1 1/2	422		36			1 1/2	18	422.40	0.08	38	5	RUMBLE STRIPS OUTSIDE
	33.78	33.80	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
STRUCTURE JEF-7-3380	33.80	33.93	0.13	686.40	10.50	1.00	2	877					61	48	3	73	686.40				ASPHALT TREATMENT OVER STRUCTURE (SEE SHEET 28, 30)
	33.93	33.95	0.02	105.00	9.25	1.50	2	125	VAR		125	11		7	3	10	105.00	0.02	9	1	TRANSITION TO STRUCTURE (SEE SHEET 28)
JEFFERSON CO. LINE (BACK)	33.95	34.55	0.60	3,168.00	8.00	1.50	1	3,344	1 1/2	3,344		284			1 1/2	139	3168.00	0.60	282	39	RUMBLE STRIPS OUTSIDE
SHOULDER PAVEMENT SUBTOTAL CARRIED TO SHEET 10										**17,406**	**500**	**1,523**	**85**	**95**		**865**	**17,897**	**3.21**	**1,506**	**209**	**PART 1 (01/NHS/PV)**
COLUMBIANA CO. LINE (AHD)	0.00	0.18	0.18	950.40	8.00	1.50	1	1,003	1 1/2	1,003		85			1 1/2	42	950.40	0.18	84	12	RUMBLE STRIPS OUTSIDE
	0.18	0.36	0.18	950.40		1.50	3	158	1 1/2	158		13			1 1/2	7		0.18	84	12	
RAMP A TERMINAL	0.18	0.37	0.19	1,003.20	8.00		3	892	1 1/2	892		76			1 1/2	37	1003.20	0.19	89	12	RUMBLE STRIPS OUTSIDE
MEDIAN SHOULDER	0.36	0.46	0.10	495.07		4.13	3	227	1 1/2	227		19			1 1/2	9		0.09	44	6	
OUTSIDE SHOULDER	0.37	0.46	0.09	475.20	8.00		3	422	1 1/2	422		36			1 1/2	18	475.20	0.09	42	6	RUMBLE STRIPS OUTSIDE
	0.46	0.56	0.10	528.00	8.00	6.75	3	865	1 1/2	865		74			1 1/2	36	1056.00	0.10	47	7	RUMBLE STRIPS BOTH SIDES
	0.56	0.59	0.03	158.40	10.00	6.75	3	295	1 1/2	295		25			1 1/2	12	316.80				RUMBLE STRIPS BOTH SIDES
	0.59	0.60	0.01	52.80	12.00	6.75	3	110	1 1/2	110		9			1 1/2	5	105.60	0.01	5	1	RUMBLE STRIPS BOTH SIDES
	0.60	0.74	0.14	739.20	14.00	6.75	3	1,704	1 1/2	1,704		145			1 1/2	71	1478.40				RUMBLE STRIPS BOTH SIDES
	0.74	0.87	0.13	686.40	10.00	6.75	3	1,277	1 1/2	1,277		109			1 1/2	53	1372.80	0.13	61	8	RUMBLE STRIPS BOTH SIDES
RAMP D TERMINAL	0.87	0.92	0.05	264.00	8.00	6.75	3	433	1 1/2	433		37			1 1/2	18	528.00	0.05	23	3	RUMBLE STRIPS BOTH SIDES
	0.92	1.02	0.10	528.00	8.00	6.75	3	865	1 1/2	865		74			1 1/2	36	1056.00	0.10	47	7	RUMBLE STRIPS BOTH SIDES
RAMP D TERMINAL	1.02	1.11	0.09	475.20	8.00	6.75	3	779	1 1/2	779		66			1 1/2	32	950.40	0.09	42	6	RUMBLE STRIPS BOTH SIDES
	1.11	1.27	0.16	844.80	8.00	6.75	3	1,385	1 1/2	1,385		118			1 1/2	58	1689.60	0.16	75	10	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0127																					
	1.29	1.40	0.11	580.80	8.00	6.75	3	952	1 1/2	952		81			1 1/2	40	1161.60	0.11	52	7	RUMBLE STRIPS BOTH SIDES
RAMP A TERMINAL	1.40	1.56	0.16	844.80	8.00	6.75	3	1,385	1 1/2	1,385		118			1 1/2	58	1689.60	0.16	75	10	RUMBLE STRIPS BOTH SIDES
	1.56	1.94	0.38	2,006.40	8.00	6.75	3	3,288	1 1/2	3,288		279			1 1/2	137	4012.80	0.38	178	25	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0193																					
	1.95	2.44	0.49	2,587.20	8.00	6.75	3	4,240	1 1/2	4,240		360			1 1/2	177	5174.40	0.49	230	32	RUMBLE STRIPS BOTH SIDES
RAMP D TERMINAL	2.44	2.63	0.19	1,003.20	8.00	6.75	3	1,644	1 1/2	1,644		140			1 1/2	69	2006.40	0.19	89	12	RUMBLE STRIPS BOTH SIDES
	2.63	2.73	0.10	528.00	8.00	6.75	3	865	1 1/2	865		74			1 1/2	36	1056.00	0.10	47	7	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0275																					
	2.85	3.06	0.21	1,108.80	8.00	6.75	3	1,817	1 1/2	1,817		154			1 1/2	76	2217.60	0.21	99	14	RUMBLE STRIPS BOTH SIDES
STRUCTURE COL-7-0305																					
	3.09	3.21	0.12	633.60	8.00	6.75	3	1,038	1 1/2	1,038		88			1 1/2	43	1267.20	0.12	56	8	RUMBLE STRIPS BOTH SIDES
RAMP A TERMINAL	3.21	3.36	0.15	792.00	8.00	6.75	3	1,298	1 1/2	1,298		110			1 1/2	54	1584.00	0.15	70	10	RUMBLE STRIPS BOTH SIDES
	3.36	3.41	0.05	264.00	8.00	6.75	3	433	1 1/2	433		37			1 1/2	18	528.00	0.05	23	3	RUMBLE STRIPS BOTH SIDES
	3.41	3.43	0.02	105.60	8.00	2.00	3	117	1 1/2	117		10			1 1/2	5	105.60	0.02	9	1	RUMBLE STRIPS OUTSIDE ONLY
	3.43	3.51	0.08	422.40	8.00	2.00	3	469	1 1/2	469		40			1 1/2	20	422.40	0.08	38	5	RUMBLE STRIPS OUTSIDE ONLY
C.R. 427 INTERSECTION																					
	3.52	3.56	0.04	211.20	8.00	2.00	3	235	1 1/2	235		20			1 1/2	10	211.20				RUMBLE STRIPS OUTSIDE ONLY
SHOULDER PAVEMENT SUBTOTAL CARRIED TO SHEET 10										**28,196**		**2,397**				**1,177**	**32,419**	**3.43**	**1,609**	**224**	**PART 2 (01/NHS/PV)**

CALCULATED SAH CHECKED DAH

S.R. 7 - SOUTHBOUND SHOULDER DATA

JEF/COL-7-31.13/0.00

	LOCATION	SLM FROM	SLM TO	LENGTH MILE	LENGTH FT	SHOULDER WIDTH (In Direction of Travel) OUTSIDE SHOULDER FT	SHOULDER WIDTH (In Direction of Travel) MEDIAN SHOULDER FT	TYPICAL	PAVEMENT AREA * Denotes CADD Area SQ YD	254 IN.	254 PAVEMENT PLANING, ASPHALT CONCRETE SQ YD	407 NON-TRACKING TACK COAT @ 0.085 GAL./S.Y. GAL			442 IN.	442 ASPHALT CONCRETE SURFACE COURSE, (2.5MM, TYPE B (447), AS PER PLAN CU YD	209 LINEAR GRADING MILE	408 PRIME COAT, AS PER PLAN @ 0.40 GAL/SY GALLON	617 2" COMPACTED AGGREGATE (2" WIDTH) CU YD	REMARKS
CLARK ST. INTERCHANGE	SB RAMP 'A'	0.37	0.58	0.21	1,093.74	6	3	RAMP	1,094	1 1/2	1,094	93			1 1/2	46	0.21	97	14	
	STRUCTURE COL-7-0059																			
	SB RAMP 'A'	0.63	0.68	0.05	269.23	6	6	RAMP	359	1 1/2	359	31			1 1/2	15	0.05	24	3	
	NB RAMP 'B' TERMINAL	0.68	0.79	0.11	600.00	6	6	RAMP	800	1 1/2	800	68			1 1/2	33	0.11	53	7	
	SB RAMP 'A'	0.63	0.80	0.17	48.50	6	6	RAMP	65	1 1/2	65	6			1 1/2	3	0.01	4	1	
	NB RAMP 'B'	0.54	0.66	0.12	273.99	6	3	RAMP	274	1 1/2	274	23			1 1/2	11	0.05	24	3	
	NB RAMP 'C' LT RETURN				53.30		3	RAMP	18	1 1/2	18	2			1 1/2	1	0.01	5	1	
	NB RAMP 'C' RT RETURN				78.55	6		RAMP	52	1 1/2	52	4			1 1/2	2	0.01	7	1	
	NB RAMP 'C' LT				157.16		3	RAMP	52	1 1/2	52	4			1 1/2	2	0.03	14	2	
	NB RAMP 'C' RT				147.47	6		RAMP	98	1 1/2	98	8			1 1/2	4	0.03	13	2	
	NB RAMP 'C'	0.70	0.74	0.04	231.00	6	3	RAMP	231	1 1/2	231	20			1 1/2	10	0.04	21	3	
	SB RAMP 'D'	0.57	0.66	0.09	503.02	6	6	RAMP	671	1 1/2	671	57			1 1/2	28	0.10	45	6	
	SB RAMP 'D'	0.66	0.87	0.21	1,093.00	6	3	RAMP	1,093	1 1/2	1,093	93			1 1/2	46	0.21	97	13	
S.R. 39 INTERCHANGE																				
	SB RAMP 'A'	1.27	1.40	0.13	699.14	6	3	RAMP	699	1 1/2	699	59			1 1/2	29	0.13	62	9	
	NB RAMP 'B'	1.29	1.43	0.14	741.40	6	3	RAMP	741	1 1/2	741	63			1 1/2	31	0.14	66	9	
	NB RAMP 'C'	1.15	1.26	0.11	573.71	6	3	RAMP	574	1 1/2	574	49			1 1/2	24	0.11	51	7	
	SB RAMP 'D'	1.11	1.25	0.14	716.97	6	3	RAMP	717	1 1/2	717	61			1 1/2	30	0.14	64	9	
S.R. 45 INTERCHANGE	SB RAMP 'A' TO WELLS AVE.	3.01	3.03	0.02	151.17	3.75	5	RAMP	147	1 1/2	147	12			1 1/2	6	0.03	13	2	
	SB Ramp 'A' SPLIT	3.03	3.05	0.02	66.61	6	3	RAMP	67	1 1/2	67	6			1 1/2	3	0.01	6	1	
	SB RAMP 'A' UNDERPASS	3.05	3.08	0.03	164.45	6	3	RAMP	164	1 1/2	164	14			1 1/2	7	0.03	15	2	
	SB RAMP 'A'	3.08	3.21	0.13	681.48	6	3	RAMP	681	1 1/2	681	58			1 1/2	28	0.13	61	8	
	TR 916 ACCESS UNDER SR 7				165.03	2	1	RAMP	55			5					0.03	15	2	
	NB RAMP 'B'	3.06	3.20	0.14	755.93	6	3	RAMP	756	1 1/2	756	64			1 1/2	32	0.14	67	9	
	NB LISBON ST. RAMP	2.44	2.62	0.18	974.29	6	3	RAMP	974	1 1/2	974	83			1 1/2	41	0.18	87	12	
	SB RAMP 'D'	2.63	2.74	0.11	533.71	6	3	RAMP	534	1 1/2	534	45			1 1/2	22	0.10	47	7	
	STRUCTURE COL-7-0275 D																			
	SB RAMP 'D'	2.78	2.80	0.02	80.39	6	3	RAMP	80	1 1/2		7			1 1/2	3	0.02	7	1	
	SB RAMP 'D' LT. RETURN				158.48	6		RAMP	106	1 1/2		9			1 1/2	4	0.03	14	2	
	SB RAMP 'D' RT. RETURN				146.68		3	RAMP	49	1 1/2	49	4			1 1/2	2	0.03	13	2	
RAMP SHOULDER PAVEMENT SUBTOTAL CARRIED TO SHEET NO. 10											**10,910**	**948**				**463**	**2.11**	**992**	**138**	**PART 2 (01/NHS/PV)**

CALCULATED SAH CHECKED DAH

S.R. 7 - RAMP SHOULDER DATA

JEF/COL-7-31.13/0.00

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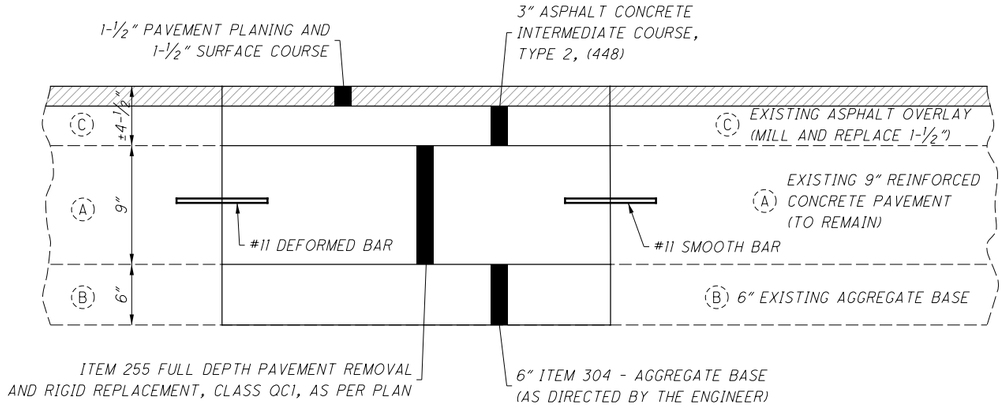
S.R. 7 SLM		LENGTH	202				255	304	305	606	609	611						622										626	COMMENTS
			CONCRETE BARRIER REMOVED	PIPE REMOVE 24" AND UNDER	PAVEMENT REMOVED, ASPHALT	INLET REMOVED	FULL DEPTH PAVEMENT SAWING	6" AGGREGATE BASE	9" CONCRETE BASE, QC 1P	IMPACT ATTENUATOR, TYPE 1, (BIDIRECTIONAL)	4" CONCRETE MEDIAN	INLET NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1	INLET NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	12" CONDUIT, TYPE B	15" CONDUIT, TYPE B	18" CONDUIT, TYPE B	21" CONDUIT, TYPE B	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1	BARRIER TRANSITION	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (B)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (C)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (D)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (E)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (F)	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (G)	CONCRETE BARRIER END SECTION, TYPE B1	BARRIER REFLECTOR, TYPE 1, ONE-WAY (WHITE)	
FROM	TO	FT	FT	FT	SQ YD	EACH	FT	CU YD	SQ YD	EACH	SQ YD	EACH	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
COLUMBIANA CO.																													
0.36	1.27	4724	4554		253		9108	340	1851										4164	1	20	1	1	1	1	1		190	FOR DETAILS SHEETS 31 - 37
0.47		20		16		1						1		8			16												
0.49		20		24		1						1		16	8	8	8												
0.5		20		8		1						1			8														
0.62		20		8		1						1		8	8														
0.71		20		8		1						1		8	8														
0.89		20		8		1							1	8	8														FOR DETAILS SEE SHEET 35
1.25		20		8		1						1		8	8														
STRUCTURE COL-7-0127																													
1.28	1.92	3370	3270		182		6540	242	1320										2970	2	16					1		136	FOR DETAILS SHEET 31, 34, 36-37
1.5		20		8		1						1		8	8														
1.65		20		8		1						1		8	8														
1.67		20		32		1						1		16	16			16											
1.69		20		8		1						1		8	8														
1.91		20		8		1						1		8	8														
STRUCTURE COL-7-0193																													
1.95	2.74	4231	4131		230		8262	306	1725										3881	2	14							172	FOR DETAILS SHEET NO 31, 34, 37
2.2		20		8		1						1		8	8														
2.22		20		32		1						1		16	16			16											
2.24		20		8		1						1		8	8														
2.38		20		16		1						1						16											
2.73		20		16		1						1		8	16														
STRUCTURE COL-7-0275																													
2.84	3.04	1027	947		53		1894	70	336										757	2	10							44	FOR DETAILS SHEET NO 31, 34, 37
2.87		20		16		1						1		8	16														
2.88		20		16		1						1		16	16														
2.9		20		8		1						1		8	8														
3.02		20		8		1						1		8	8														
STRUCTURE COL-7-0305																													
3.08	3.41	1709	1649		92		3298	122	664										1494	1	7						1	70	FOR DETAILS SHEET 31, 34, 37-38
3.19		20		16		1						1		8	8	8													
3.22		20		16		1						1		16				16											
3.24		20		8		1						1		8	8														
3.41	3.48	389					778	28	173	1	125																		TOTAL CARRIED FROM SHT 38
TOTALS CARRIED TO GENERAL SUMMARY		**14551**	**312**	**810**	**24**	**29880**	**1108**	**6069**	**1**	**125**	**23**	**1**	**216**	**208**	**16**	**24**	**64**	**13266**	**8**	**67**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**612**	**PART 2 (01/NHS/PV)**

CALCULATED SAH
CHECKED DAH

ROADWAY AND DRAINAGE QUANTITIES

JEF/COL-7-31.13/0.00



RIGID PAVEMENT REPAIR TYPICAL

FOR DETAILS NOT SHOWN SEE STANDARD CONSTRUCTION DRAWING BP-2.5 FOR TRANSVERSE JOINT REPAIR DETAILS AND BP-2.1 FOR LONGITUDINAL JOINT DETAILS

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN

THE ESTIMATED QUANTITIES ARE TO BE CONSIDERED APPROXIMATE. IN ADDITION TO LOCATIONS IDENTIFIED BELOW, A FINAL FIELD REVIEW WILL BE PERFORMED BY ODOT PRIOR TO CONSTRUCTION AND FINAL LOCATIONS WILL BE GIVEN TO THE CONTRACTOR PRIOR TO CONSTRUCTION.

THIS WORK CONSISTS OF REMOVING THE EXISTING ASPHALT CONCRETE COURSE, THE EXISTING REINFORCED CONCRETE, AND THE EXISTING AGGREGATE BASE COURSES; SHAPING AND COMPACTING THE EXPOSED MATERIAL; PLACING ITEM 304 AGGREGATE BASE; THEN INSTALLING DOWEL RODS FOLLOWED BY CONCRETE PAVEMENT, CLASS QC1. FINALLY, PLACE ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) UP TO THE LEVEL OF THE EXISTING ASPHALT SURFACE.

ALL OTHER PROVISIONS OF STANDARD CONSTRUCTION DRAWINGS BP-2.1 AND BP-2.5 APPLY.

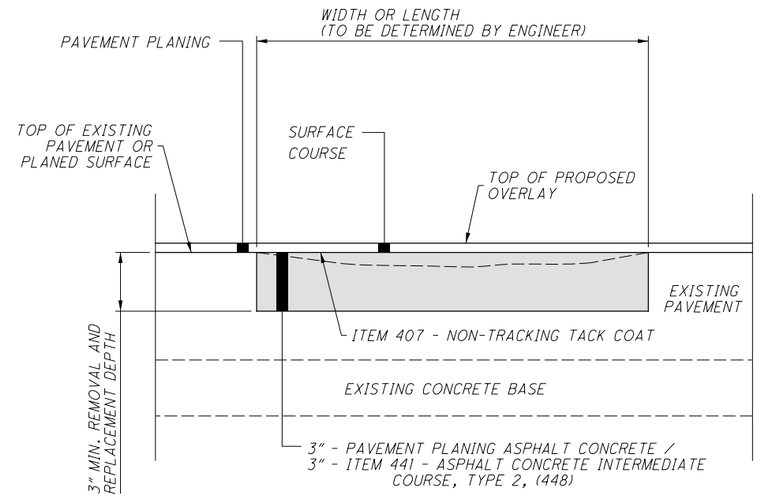
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED FOR INFORMATION ONLY.

9" CONCRETE, CLASS QC1	960 SQ. YD.
ITEM 304 - AGGREGATE BASE	160 CU. YD.
ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)	80 CU. YD.
ITEM 509 - EPOXY COATED REINFORCING	14900 POUNDS
ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	2400 EACH

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. FINAL PAYMENT FOR THESE ITEMS SHALL BE FOR THE ACCEPTED QUANTITY COMPLETED IN PLACE.

PART 1 & 2 (01/NHS/PV)

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN -	960 SQ. YD.
ITEM 255 - FULL DEPTH PAVEMENT SAWING -	4300 FT.



PARTIAL DEPTH PAVEMENT REPAIR TYPICAL

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

PARTIAL DEPTH PAVEMENT REPAIRS SHALL BE 3 INCHES DEEP AND FILLED WITH ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448). THE ESTIMATED QUANTITY IS TO BE CONSIDERED APPROXIMATE. A FINAL FIELD REVIEW WILL BE PERFORMED BY ODOT AND FINAL LOCATIONS WILL BE GIVEN TO THE CONTRACTOR PRIOR TO CONSTRUCTION.

ALL PARTIAL DEPTH REPAIRS ARE TO BE COMPLETED PRIOR TO THE PAVING OPERATIONS.

THE ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DETERMINE THE SIZE AND LOCATION OF EACH PAVEMENT REPAIR. FINAL PAYMENT FOR THE ABOVE ITEMS SHALL BE FOR THE ACCEPTED QUANTITY COMPLETED IN PLACE.

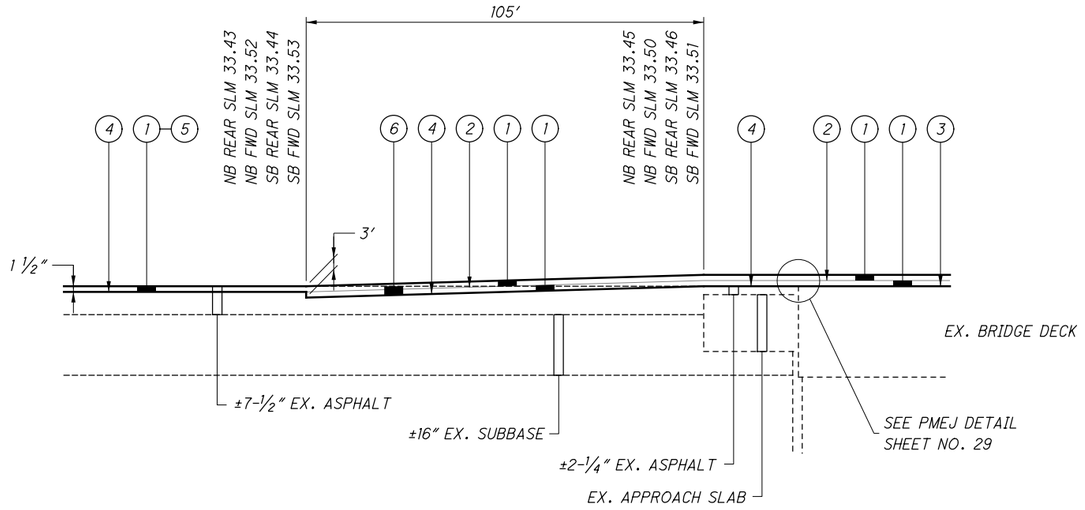
PART 1 & 2 (01/NHS/PV)

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)	60 CU YD

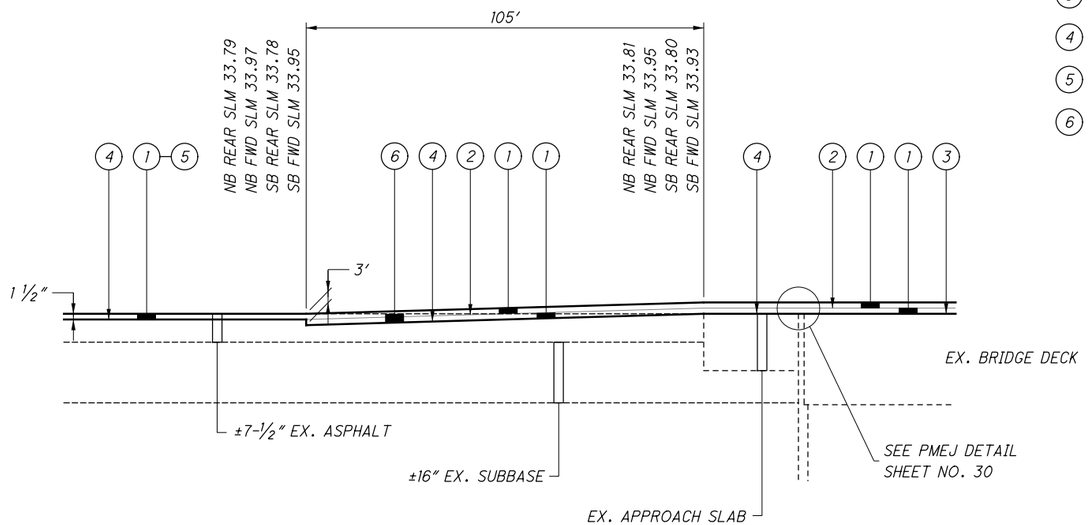
CALCULATED SAH CHECKED DAH

PAVEMENT REPAIR DETAILS

JEF/COL-7-31.13/0.00



PAVEMENT TRANSITION BRIDGE NO. JEF-7-3346
(PART 1)



PAVEMENT TRANSITION BRIDGE NO. JEF-7-3380
(PART 1)

LEGEND

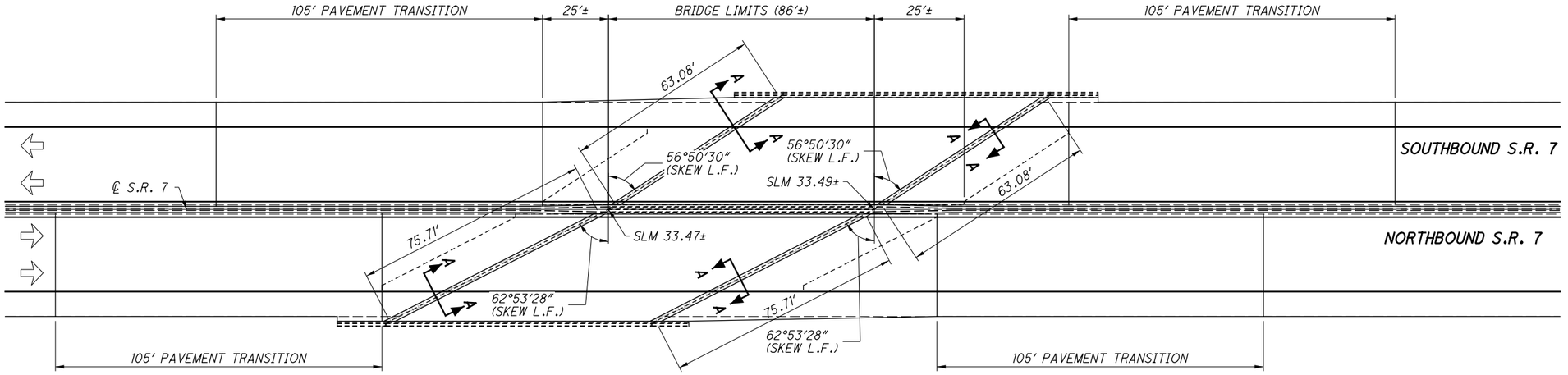
(1) 1-½" ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (447), AS PER PLAN
(2) ITEM 407 - NON-TRACKING TACK COAT @ 0.055 GAL/SY
(3) ITEM 407 - NON-TRACKING TACK COAT @ 0.070 GAL/SY
(4) ITEM 407 - NON-TRACKING TACK COAT @ 0.085 GAL/SY
(5) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")
(6) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (VARIES)

FOR PMEJ DETAIL, SEE SHEET NO. 29 - 30

CALCULATED SAH
CHECKED DAH

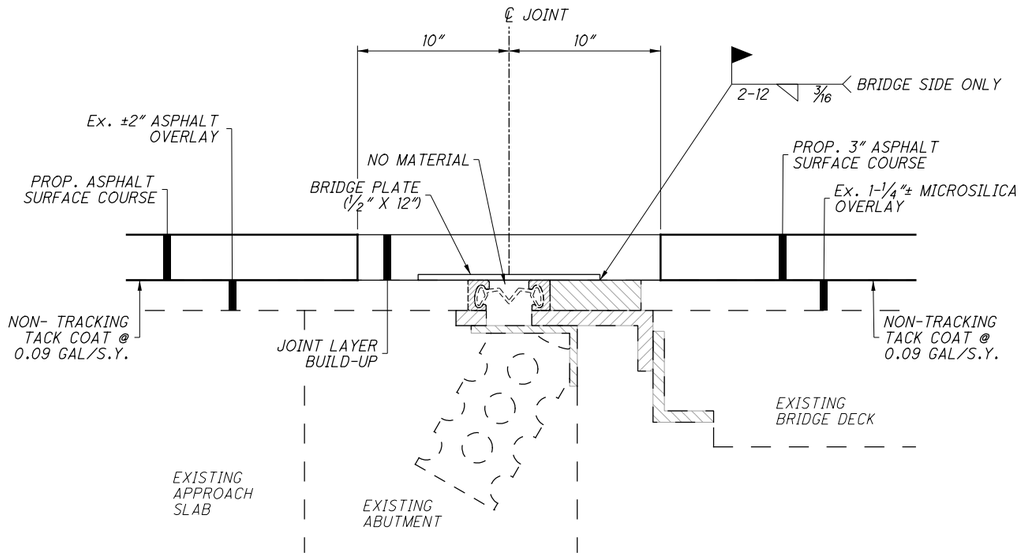
PAVEMENT TRANSITION DETAILS

JEF/COL-7-31.13/0.00



JEF-7-3346 (SFN 4101626)

FOR PAVEMENT TRANSITION DETAIL, SEE SHEET NO. 28



SECTION A-A

STRUCTURE:
JEF-7-3346 (SFN 4101626)
SLM 33.47 - 33.49

ESTIMATED QUANTITIES

ITEM 846 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM, AS PER PLAN (A)

SLM 33.47±	NB REAR JOINT (10"+10")/12 x 3"/12 x 76' = 31.7	32 CU. FT.
SLM 33.47±	SB REAR JOINT (10"+10")/12 x 3"/12 x 63' = 26.3	26 CU. FT.
SLM 33.49±	NB FORWARD JOINT (10"+10")/12 x 3"/12 x 76' = 31.7	32 CU. FT.
SLM 33.49±	SB FORWARD JOINT (10"+10")/12 x 3"/12 x 63' = 26.3	26 CU. FT.

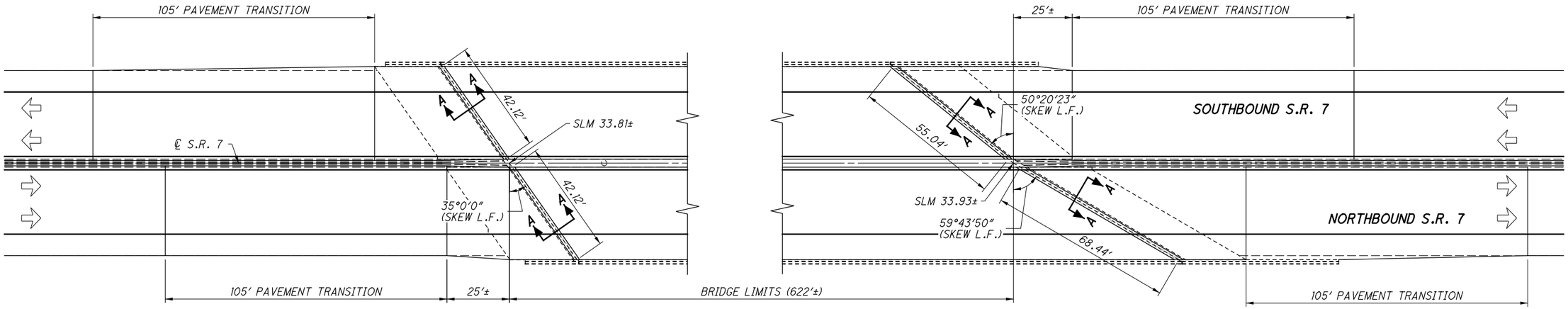
PART 1 (01/NHS/PV)
TOTAL CARRIED TO GENERAL SUMMARY - 116 CU. FT.

NOTE: IN LEIU OF BACKER ROD AND LOCATION PINS, PROVIDE TACK WELD AS SHOWN IN SECTION A-A

CALCULATED SAH
CHECKED DAH

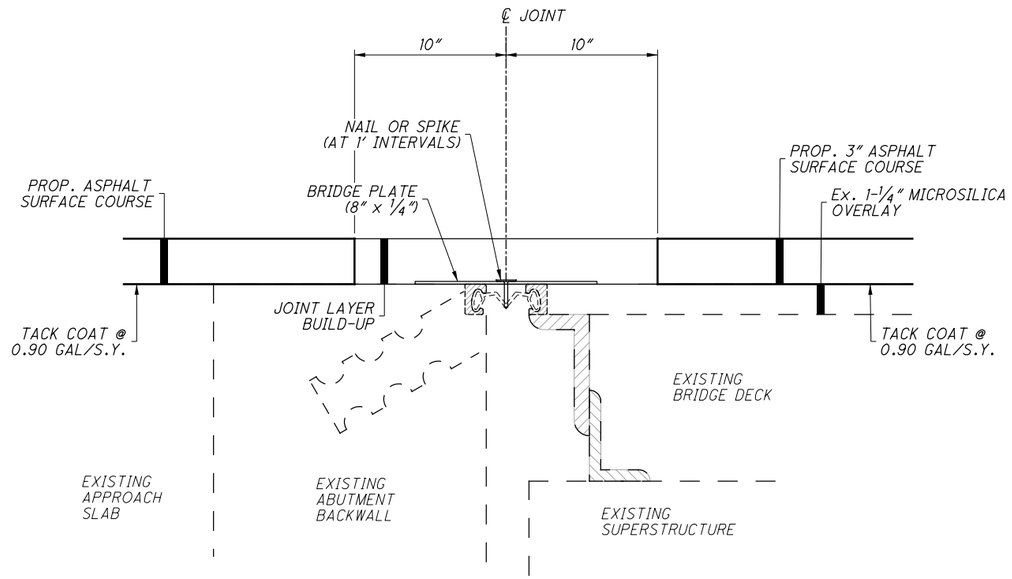
STRUCTURE JEF-7-3346 - POLYMER MODIFIED EXPANSION JOINT SYSTEM, AS PER PLAN (A)

JEF/COL-7-31.13/0.00



JEF-7-3380 (SFN 4101650)

FOR PAVEMENT TRANSITION DETAIL, SEE SHEET NO. 28



SECTION A-A

STRUCTURE:
JEF-7-3380 (SFN 4101650)
SLM 33.81 - 33.93

ESTIMATED QUANTITIES

ITEM 846 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM, AS PER PLAN (B)

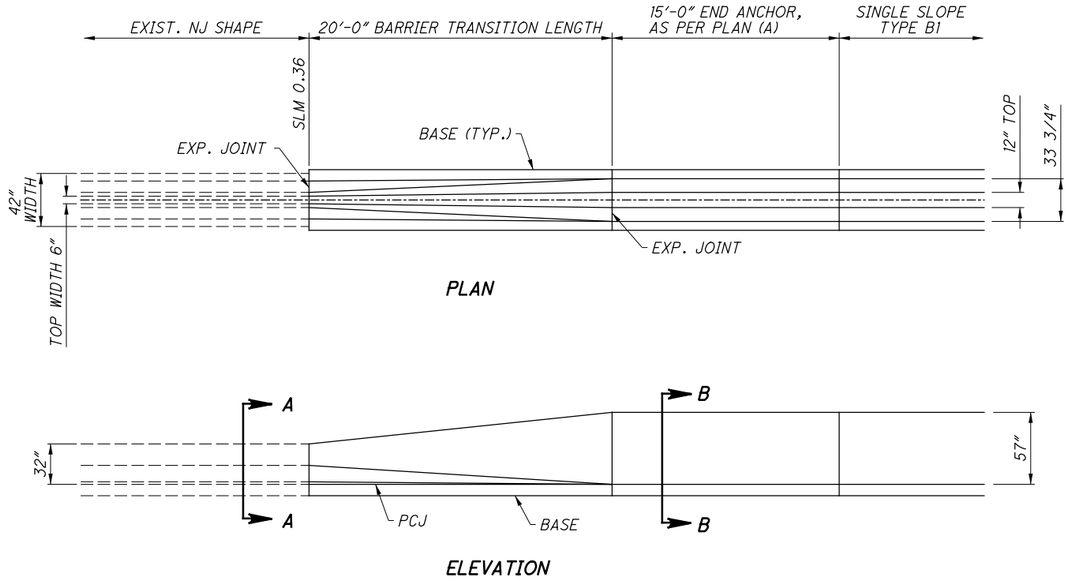
SLM 33.81±	NB REAR JOINT (10″+10″)/12 x 3″/12 x 42′ = 17.50	18 CU. FT.
SLM 33.81±	SB REAR JOINT (10″+10″)/12 x 3″/12 x 42′ = 17.50	18 CU. FT.
SLM 33.93±	NB FORWARD JOINT (10″+10″)/12 x 3″/12 x 69′ = 28.75	29 CU. FT.
SLM 33.93±	SB FORWARD JOINT (10″+10″)/12 x 3″/12 x 55′ = 22.92	23 CU. FT.

PART 1 (01/NHS/PV)
TOTAL CARRIED TO GENERAL SUMMARY - 88 CU. FT.

CALCULATED SAH
CHECKED DAH

STRUCTURE JEF-7-3380 - POLYMER MODIFIED EXPANSION JOINT SYSTEM, AS PER PLAN (B)

JEF / COL-7-31.13 / 0.00



NOTES

GENERAL: THIS INSERT DETAILS THE BARRIER TRANSITION, TO CONNECT EXISTING NJ CONCRETE BARRIER (SAFETY SHAPE) TO A NEW RUN OF SINGLE SLOPE CONCRETE BARRIER AT LOCATIONS SHOWN ON THE PLANS. FOR NJ BARRIER SHAPE AND OTHER DETAILS SEE THE RESPECTIVE PLAN INSERT SHEETS. FOR SINGLE SLOPE BARRIER DETAILS, SEE SCD RM-4.3 (RM-4.5 FOR TYPE D).

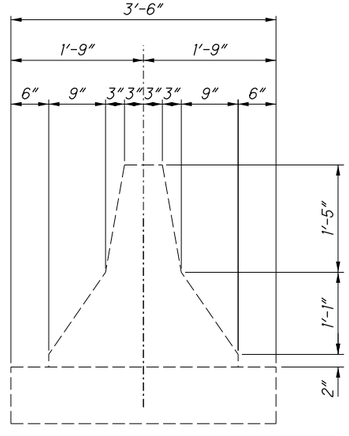
BARRIER FACE TRANSITION: TO PREVENT VEHICLE SNAGGING, A SMOOTH TRANSITION FROM THE SAFETY SHAPE FACE TO THE SINGLE SLOPE FACE IS MADE OVER A 20' LENGTH. THE ACTUAL SHAPE OF THE TRANSITION IS DEPENDENT ON BOTH THE ADJACENT NJ BARRIER AND THE SINGLE SLOPE BARRIER TYPES, AS DETAILED ON THE PLANS.

MATERIALS: MATERIALS ARE SAME FOR THOSE SHOWN ON RM-4.3 AND RM-4.5, EXCEPT THAT CAST-IN-PLACE IS THE ONLY ACCEPTABLE METHOD. EDGES MAY BE CHAMFERED OR RADIUSED AS SHOWN ON THOSE DRAWINGS.

CONCRETE BASE: CONSTRUCT BASE AS SHOWN ON STD DWG RM-4.3, INCLUDING THE METHODS DETAILING THE FOOTING JOINT, PERMISSIBLE CONSTRUCTION JOINT (PCJ), AND DOWELLING REQUIREMENTS.

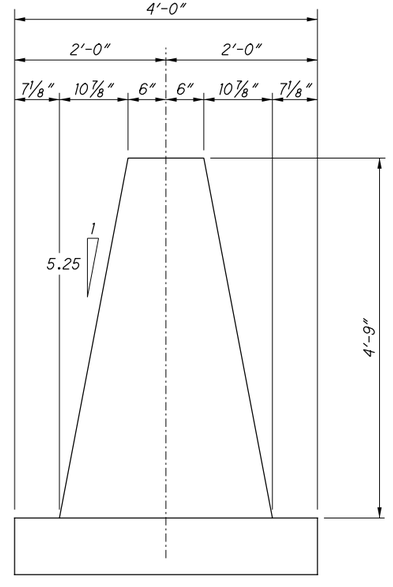
JOINTS: CONSTRUCT JOINTS AS SHOWN ON RESPECTIVE BARRIER DRAWINGS.

PAYMENT: THIS BARRIER TRANSITON SHALL INCLUDE ALL MATERIAL AND LABOR NEEDED TO CONSTRUCT THIS 20' SECTION, INCLUDING ANY RACEWAYS, REINFORCING STEEL, DOWELS AND OTHER NECESSARY INCIDENTALS. PAYMENT SHALL BE MADE AT THE UNIT PRICE FOR ITEM 622 - BARRIER TRANSITION, EACH.



SECTION A-A

EXISTING NJ SHAPE



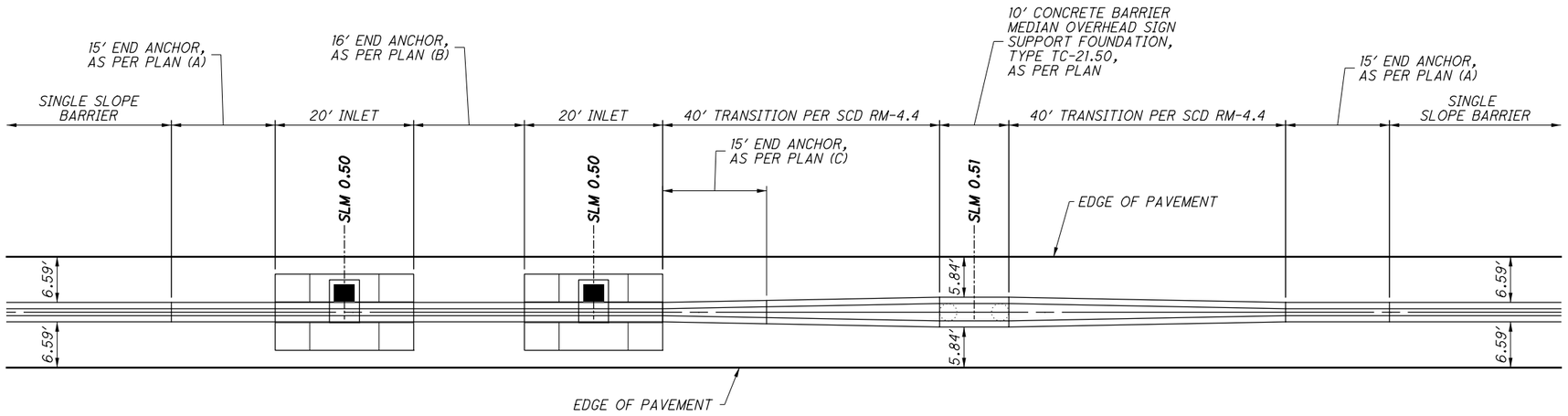
SECTION B-B

PROPSED SINGLE SLOPE SHAPE

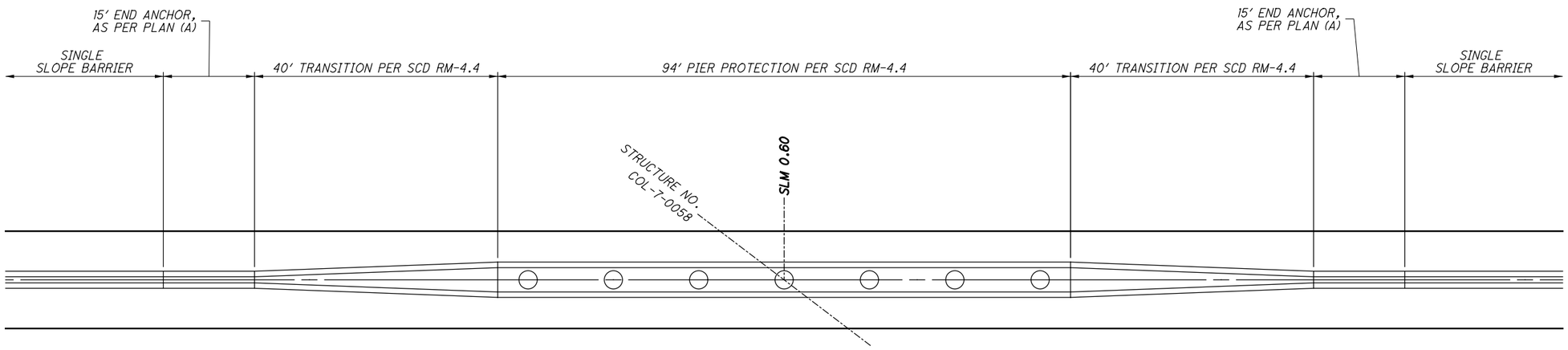
CALCULATED SAH
CHECKED DAH

MISCELLANEOUS DETAILS - BARRIER TRANSITION

JEF / COL - 7 - 31.13 / 0.00



MEDIAN BARRIER TRANSITION AT SIGN SUPPORT (PART 2)

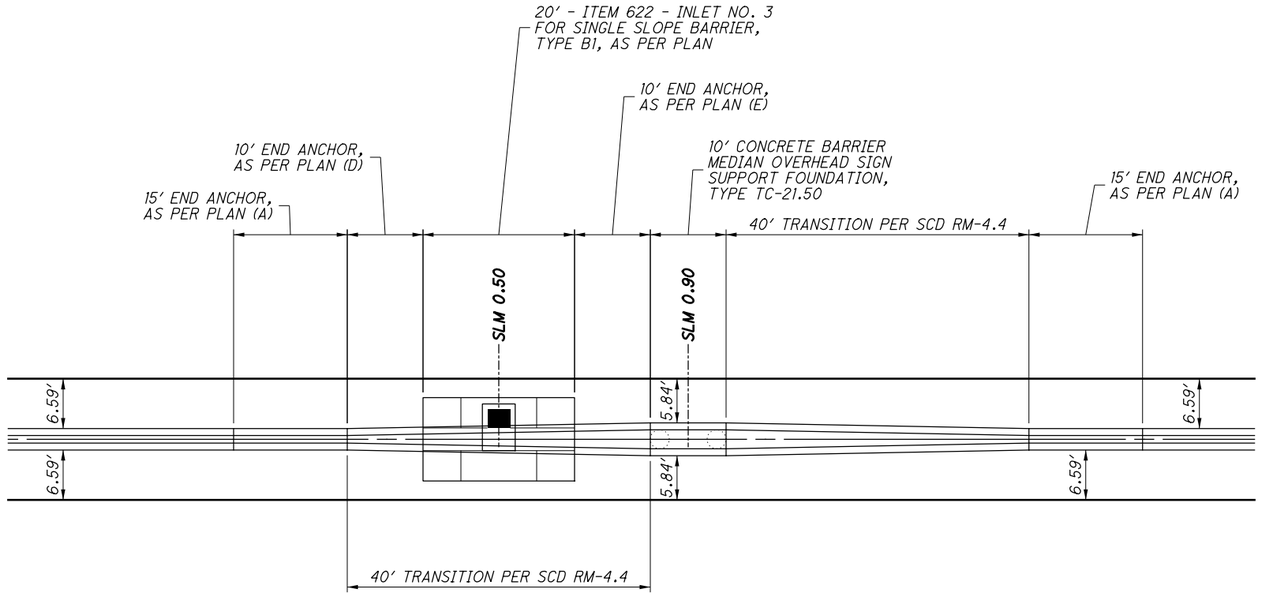


MEDIAN BARRIER PIER PROTECTION AT STRUCTURE NO. COL-7-0058 (PART 2)

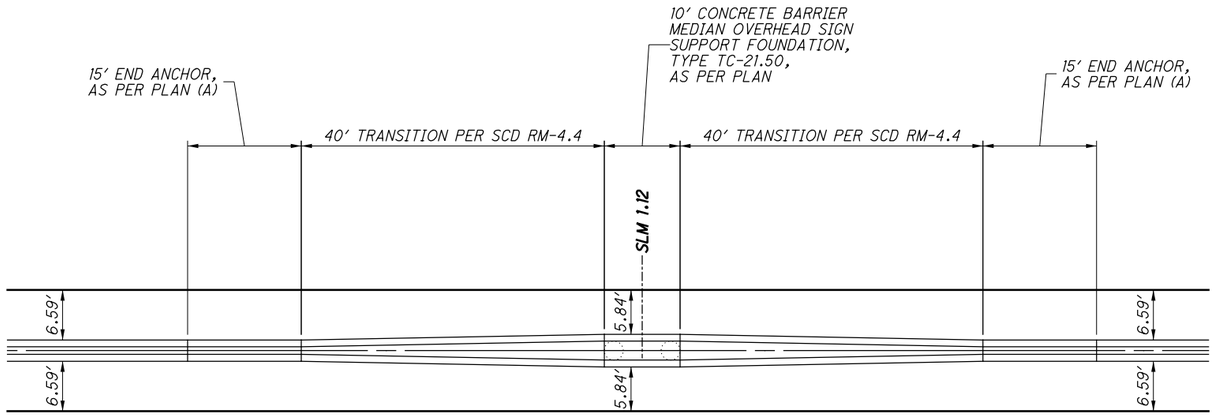
CALCULATED SAH
CHECKED DAH

MEDIAN BARRIER TRANSITION DETAILS

JEF / COL-7-31.13 / 0.00



MEDIAN BARRIER TRANSITION AT SIGN SUPPORT
(PART 2)



MEDIAN BARRIER TRANSITION AT SIGN SUPPORT
(PART 2)

CALCULATED SAH
CHECKED DAH

MEDIAN BARRIER TRANSITION DETAILS

JEF / COL-7-31.13 / 0.00

33
53

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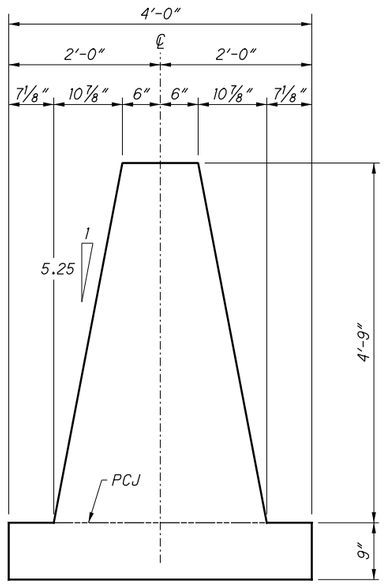
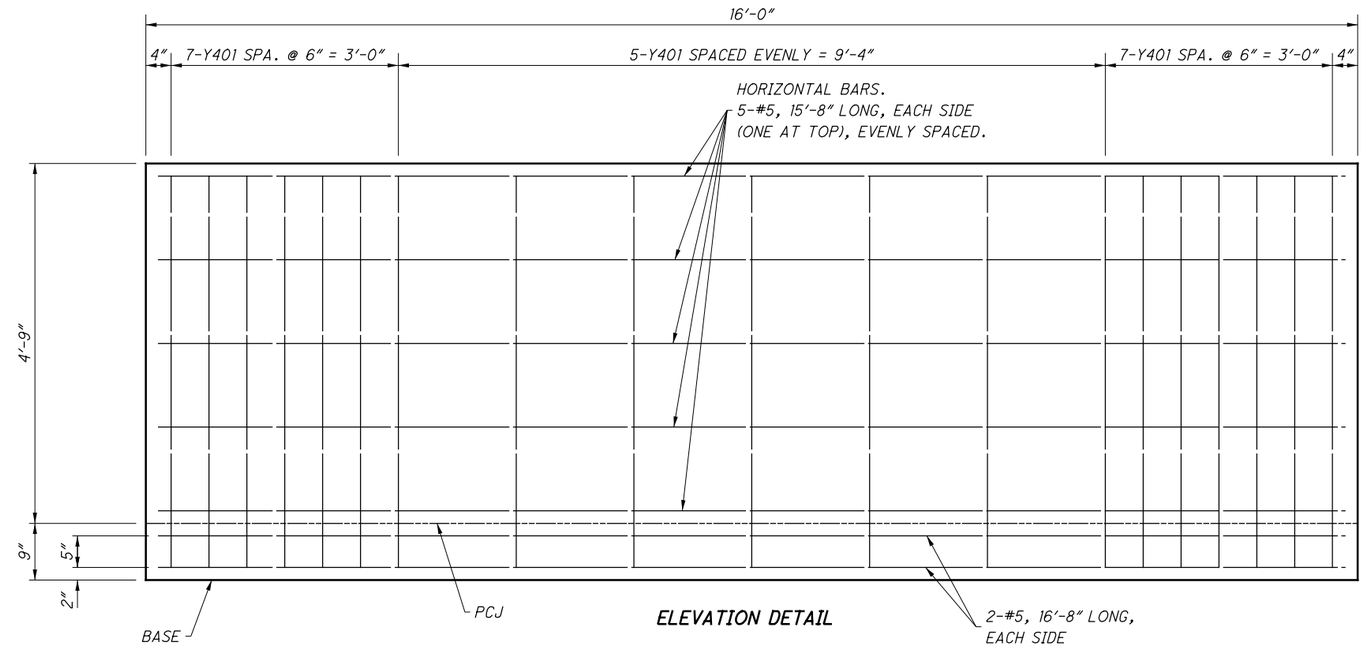
ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)



SECTION DETAIL

FOR ADDITIONAL DETAILS, SEE RM-4.3

ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (B)



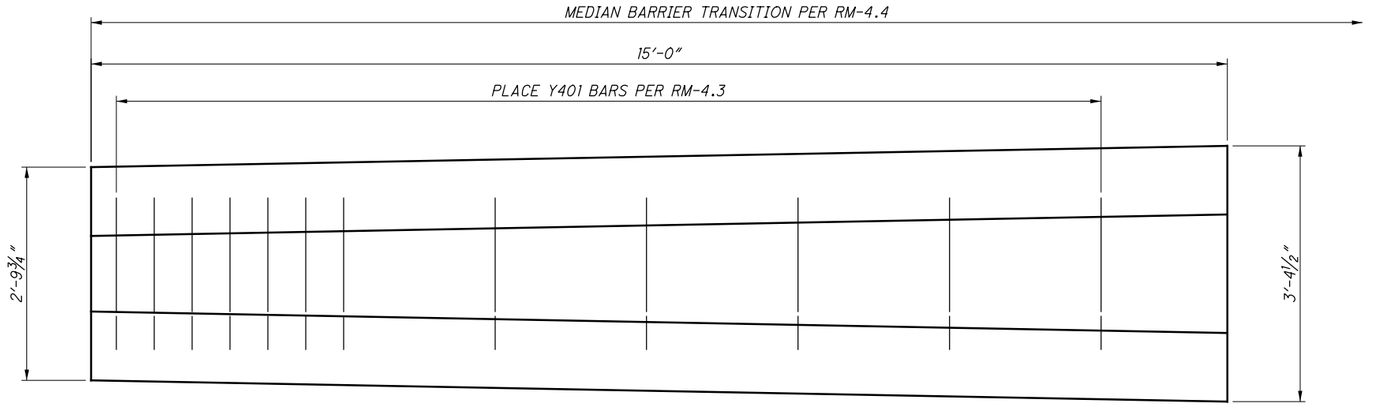
ELEVATION DETAIL

FOR SECTION DETAIL SEE 'CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)' DETAIL
FOR ADDITIONAL DETAILS, SEE RM-4.3

MARK	NUMBER	LENGTH	X	Y	Z
Y401	19	SEE Y401 #4 RM-4.3			

FOR INFORMATION ONLY

ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (C)



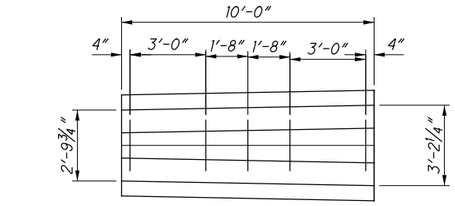
FOR SECTION DETAIL SEE 'CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)' DETAIL
FOR ADDITIONAL DETAILS, SEE RM-4.3

CALCULATED SAH
CHECKED DAH

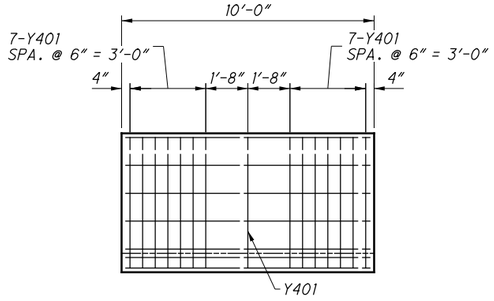
MISCELLANEOUS DETAILS - BARRIER DETAILS

JEF / COL-7-31.13 / 0.00

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (D)



PLAN

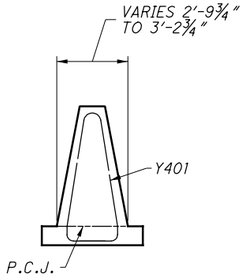


ELEVATION

FOR ADDITIONAL DETAILS, SEE RM-4.3

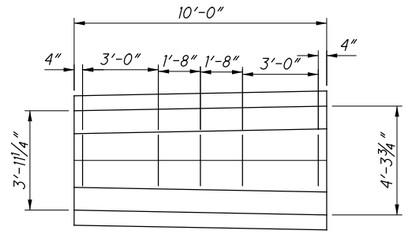
MARK	NUMBER	LENGTH	X	Y	Z
Y401	15	SEE Y401 #4 RM-4.3			

FOR INFORMATION ONLY

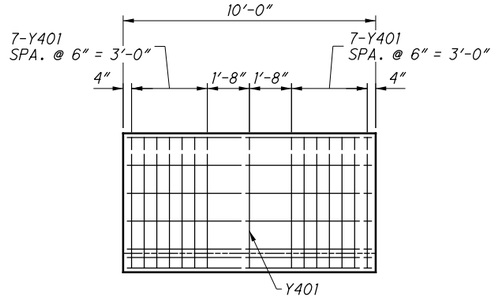


SECTION

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (E)



PLAN

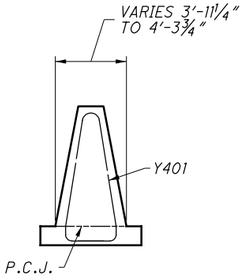


ELEVATION

FOR ADDITIONAL DETAILS, SEE RM-4.3

MARK	NUMBER	LENGTH	X	Y	Z
Y401	15	SEE Y401 #4 RM-4.3			

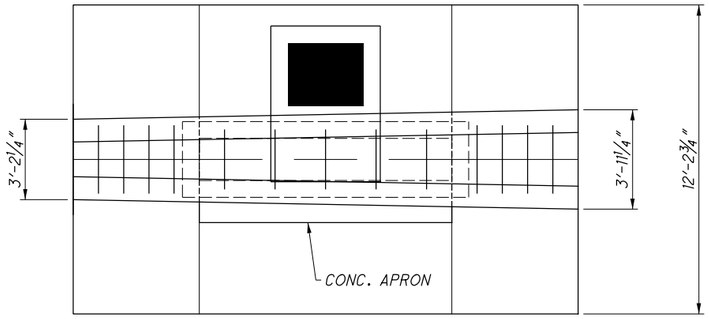
FOR INFORMATION ONLY



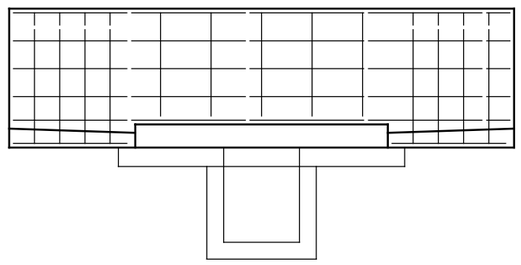
SECTION

ITEM 611 - INLET NO. 3 FOR SINGLE SLOPE BARRIER, TYPE B1, AS PER PLAN

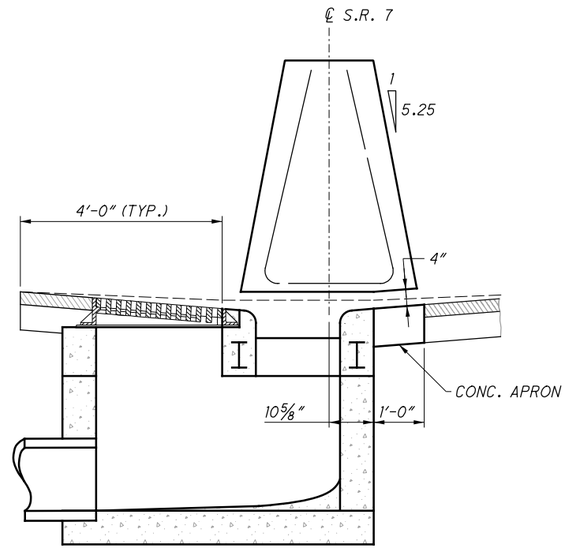
NOTE: LONGITUDINAL BARS ARE NOT SHOWN (TYP.)



PLAN



ELEVATION



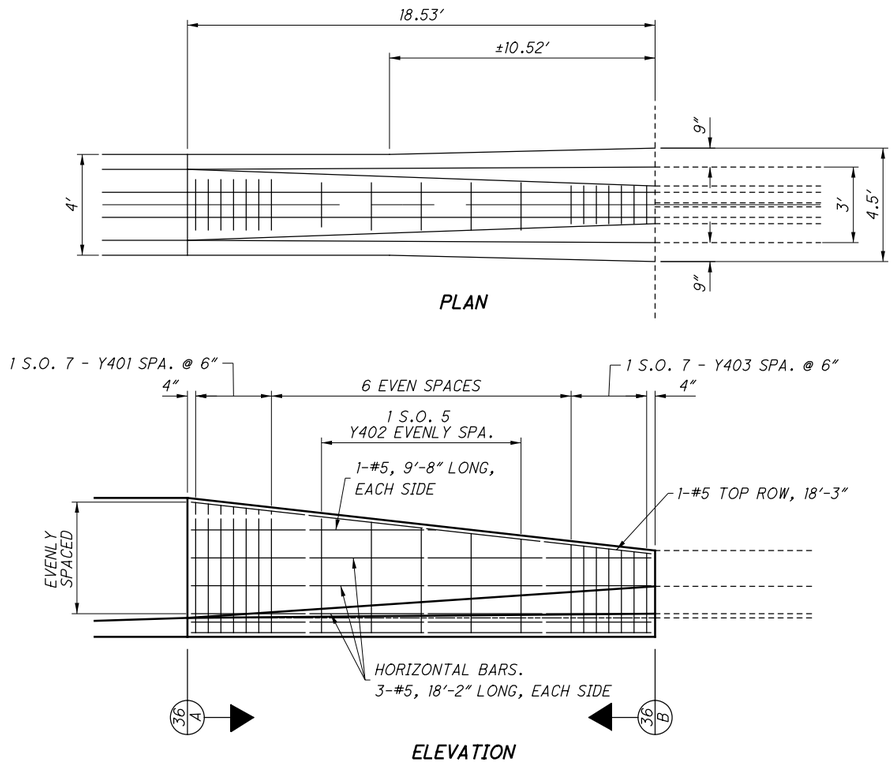
SECTION

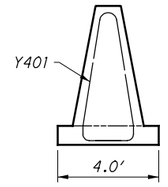
CALCULATED SAH CHECKED DAH

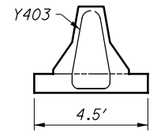
MISCELLANEOUS DETAILS - BARRIER AND DRAINAGE DETAILS

JEF/COL-7-31.13/0.00

ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (F)







FOR ADDITIONAL DETAILS, SEE RM-4.3

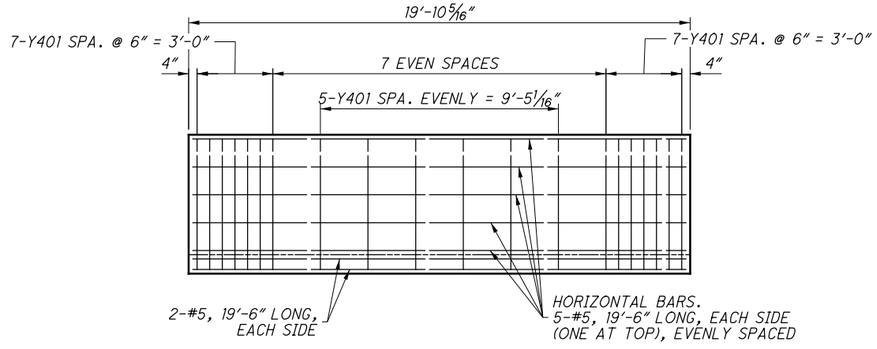
MARK	NUMBER	LENGTH	X	Y	Z
Y401	1 S.O. 7	13′-3″ TO 12′-6″	4′-3″ TO 3′-11″	2′-0″	8″
Y402	1 S.O. 5	12′-0″ TO 10′-2″	3′-8″ TO 2′-9″	1′-9″	8″
Y403	1 S.O. 7	10′-0″ TO 9′-4″	2′-7″ TO 2′-3″	1′-6″	8″

FOR INFORMATION ONLY

NOTE: LONGITUDINAL BARS ARE NOT SHOWN (TYP.)

ITEM 622 - CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (G)

FOR SECTION DETAIL SEE 'CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)' NOTE
FOR ADDITIONAL DETAILS, SEE RM-4.3



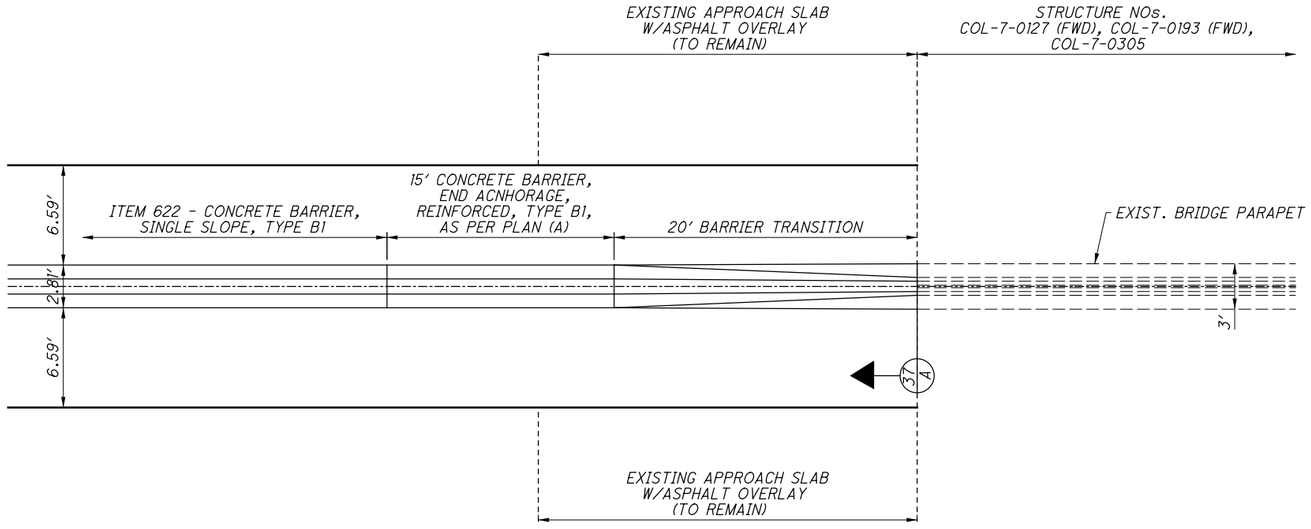
MARK	NUMBER	LENGTH	X	Y	Z
Y401	19	SEE Y401 #4 RM-4.3			

FOR INFORMATION ONLY

CALCULATED SAH CHECKED DAH

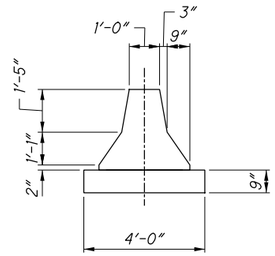
MISCELLANEOUS DETAILS - BARRIER DETAILS

JEF/COL-7-31.13/0.00

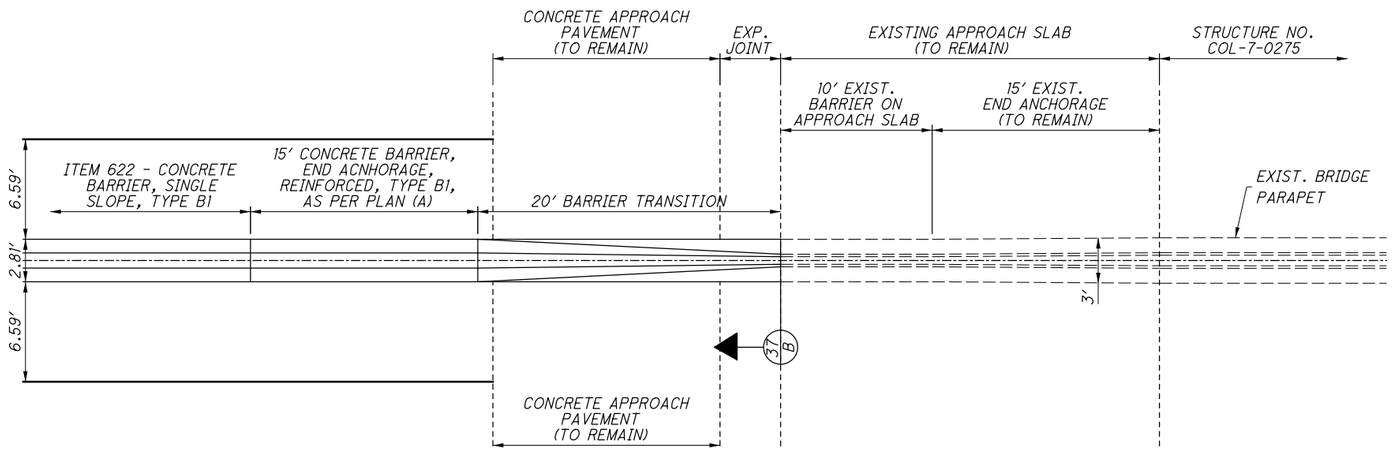


MEDIAN BARRIER TRANSITION AT STRUCTURE
DETAIL 1

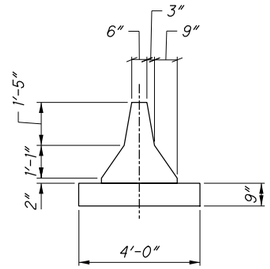
FOR SECTION DETAIL SEE 'CONCRETE BARRIER END ANCHORAGE, REINFORCED, TYPE B1, AS PER PLAN (A)' NOTE
FOR ADDITIONAL DETAILS, SEE RM-4.3



SECTION A-A
MATCH BRIDGE PARAPET SHAPE



MEDIAN BARRIER TRANSITION AT STRUCTURE
DETAIL 2

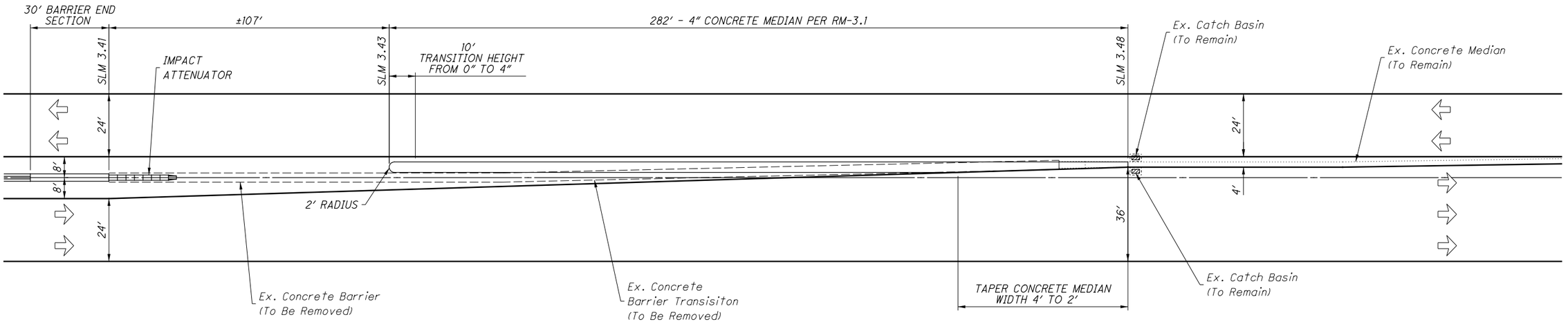


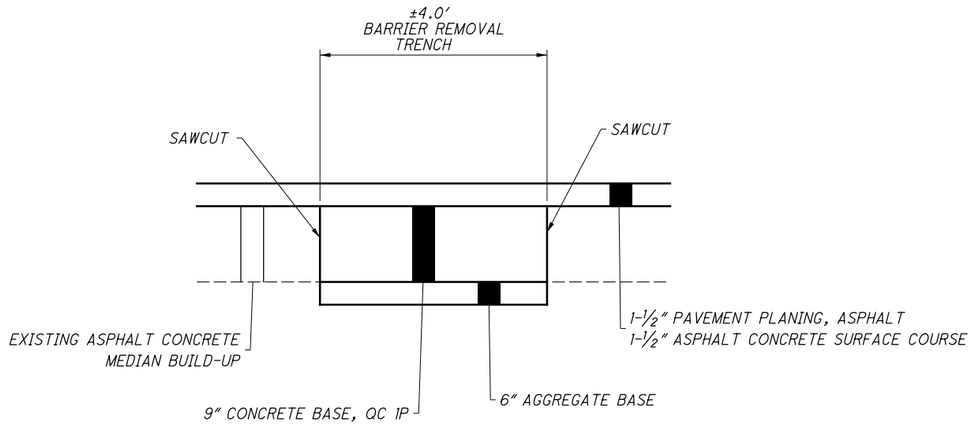
SECTION B-B
MATCH BRIDGE PARAPET SHAPE

CALCULATED SAH
CHECKED DAH

MISCELLANEOUS DETAILS - BARRIER TRANSITION DETAILS

JEF / COL-7-31.13 / 0.00





ESTIMATED QUANTITIES

ITEM 252	FULL DEPTH PAVEMENT SAWING	778 FT
ITEM 304	6" AGGREGATE BASE	28 CU YD
ITEM 305	9" CONCRETE BASE, QC 1P	173 SQ YD
ITEM 606	IMPACT ATTENUATOR, BIDIRECTIONAL	1 EACH
ITEM 609	4" CONCRETE MEDIAN	125 SQ YD

TOTALS CARRIED TO SHEET 26

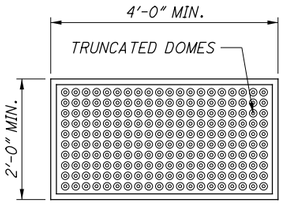
CALCULATED SAH
CHECKED DAH

MISCELLANEOUS DETAILS - BARRIER TRANSITION DETAILS

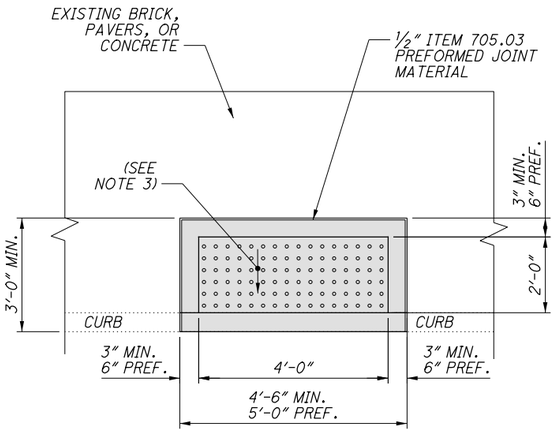
JEF/COL-7-31.13/0.00

LEGEND

LIMITS OF PAYMENT FOR
ITEM 608 - CURB RAMP, OR
ITEM 608 - CURB RAMP, AS PER PLAN
(TYP. ALL DETAIL SHEETS)



DETECTABLE WARNING INSERT DETAIL



TYPE D11-B

NOTES:

1. SEE SCD BP-7.1 FOR ADDITIONAL DETAILS, SECTIONS, NOTES, AND OTHER CURB RAMP DESIGNS NOT PROVIDED ON THIS SHEET.

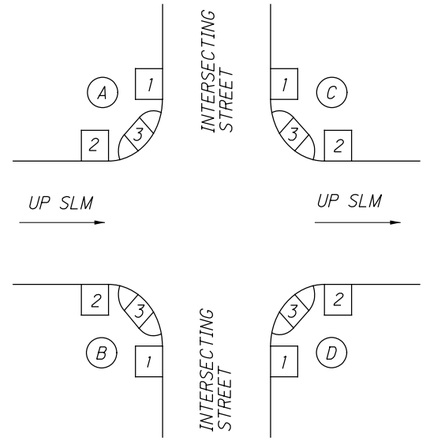
2. THE CURB RAMP TYPE D11-B DESIGN IS USED TO PROVIDE THE REQUIRED MISSING DETECTABLE WARNING INSERT ON EXISTING CURB RAMPS WITHOUT REMOVING THE ENTIRE RAMP.

   THE CURB RAMP TYPE D11-B IS TO BE CONSTRUCTED WITHIN EXISTING CURB RAMPS WHICH ARE COMPLIANT WITH STD. DWG. BP-7.1, AND MEET CURRENT ADA REQUIREMENTS, BUT ARE EITHER LACKING A DETECTABLE WARNING INSERT, OR POSSESS AN INSERT WHICH DOES NOT MEET CURRENT STANDARDS.

   THE TYPE D11-B RAMP SHALL MATCH THE SLOPE OF THE EXISTING RAMP.

3. THE NEW CURB RAMP SHALL BE 4'-6" MINIMUM (5'-0" PREFERRED) WIDE. THE DETECTABLE WARNING INSERT SHALL HAVE A THREE INCH MINIMUM BORDER ON THE SIDES. IF THE EXISTING SIDEWALK IS LESS THAN 4'-6" WIDE THE RAMP SHALL TAPER TO MEET THE EXISTING SIDEWALK WIDTH BEGINNING A MINIMUM OF SIX INCHES BEYOND THE BACKSIDE OF THE DETECTABLE WARNING INSERT.

4. INSTALL A NEW RAMP WITH A CAST-IN-PLACE DETECTABLE WARNING INSERT IN THESE LOCATIONS AS PER SCD BP-7.1, DETAILS ON THIS SHEET, OR AS DIRECTED BY THE ENGINEER.



RAMP LOCATION DETAIL

ITEM 659 - SEEDING MISC.: CURB RAMP GRADING RESTORATION

THIS ITEM OF WORK CONSISTS OF REWORKING, OR RESHAPING THE GRADING ADJACENT TO THE NEW CURB RAMPS AND/OR WALK. THE CONTRACTOR SHALL SEED AND MULCH AS PER ITEM 659, AND PROVIDE ALL ADDITIONAL MATERIALS AND EQUIPMENT NECESSARY TO RESTORE THE GRADING TO THE SATISFACTION OF THE ENGINEER.

A QUANTITY OF ONE SQUARE FOOT PER LINEAR FOOT, PER SIDE WITH ACCOMPANYING GRADED BORDER, OF NEW RAMP, AND/OR WALK SHALL BE CALCULATED FOR THIS ITEM OF WORK. FINAL CONVERSION OF QUANTITIES FROM SQUARE FOOT TO SQUARE YARDS SHALL BE PERFOMED IN THE SUMMARY LEVEL. PAYMENT FOR THE AFOREMENTIONED WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 659, SEEDING MISC.: CURB RAMP GRADING RESTORATION, SQ. YD., AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER.

ESTIMATED QUANTITIES

REFERENCE NO.	SHEET NO	PART	COUNTY	ROUTE	SLM	INTERSECTION PUBLIC ROAD	CURB RAMP LOCATION	CURB RAMP TYPE	DIMENSION A, OR LANDING LENGTH	DIMENSION B	AVG. WIDTH OF SIDEWALK OR LANDING	202		608	659	COMMENTS
												CURB REMOVED	WALK REMOVED	CURB RAMP	SEEDING MISC.: CURB RAMP GRADING RESTORATION	
									FT	FT	FT	FT	SQ FT	SQ FT	SQ YD	
CR-1	48	2	COL	RAMP C	1.26	S.R. 39	A2	B3	12		4	9	41	40	3	
CR-2	48	2	COL	RAMP C	1.26	S.R. 39	B2	B3	12.5		4	14	33	33	3	
CR-3	48	2	COL	RAMP D	1.26	S.R. 39	A2	B3	11		4	14	37	36	3	
CR-4	48	2	COL	RAMP D	1.26	S.R. 39	B2	B3	10		5.5	12	39	39	3	
CR-5	49	2	COL	RAMP B	3.06	WELLS AVE EXT.	C3	B3	11		4.5	14	45	45	3	
SUBTOTAL PART 2												**63**	**195**	**193**	**15**	**PART 2 (01/NHS/PV)**
CR-6	14	4	JEF	REST AREA				A2/A2	4.5		4	12	56	71	3	INCLUDE 5' WALK BTWN RAMPS
CR-7	14	4	JEF	REST AREA				A2/A2	4.5		4	12	56	71	3	INCLUDE 5' WALK BTWN RAMPS
CR-8	14	4	JEF	REST AREA				D11-B	3		5	5	13	15		INSTALL TRUNCATED DOMES
CR-9	14	4	JEF	REST AREA				D11-B	3		10	10	23	28		INSTALL TRUNCATED DOMES
CR-10	14	4	JEF	REST AREA				D11-B	3		10	10	23	27		INSTALL TRUNCATED DOMES
SUBTOTAL PART 4												**49**	**171**	**212**	**6**	**PART 4 (03/NFA/PV)**
TOTALS CARRIED TO GENERAL SUMMARY												**112**	**366**	**405**	**21**	

CALCULATED SAH
CHECKED DAH

CURB RAMP DETAILS AND ESTIMATED QUANTITIES

JEF/COL-7-31.13/0.00

ITEM 621 - RAISED PAVEMENT MARKER REMOVED

EXISTING RAISED PAVEMENT MARKERS SHALL BECOME THE PROPERTY OF THE CONTRACTOR FOR DISPOSAL OFF THE PROJECT. THE REQUIREMENT TO FILL THE DEPRESSIONS SHALL BE WAIVED. THE QUANTITY TO REMOVE THE EXISTING RAISED PAVEMENT MARKERS HAS BEEN CARRIED WITH THE TRAFFIC CONTROL QUANTITIES ON SHEET 45.

ITEM 646 - TRANSVERSE/DIAGONAL LINE, AS PER PLAN

WORK FOR THIS ITEM SHALL COMPLY WITH ITEM 646 AND STD DWG. TC-71.10 EXCEPT THE LINE WIDTH SHALL BE 4" AND SPACING SHALL BE 6'.

ITEM 646 - EPOXY PAVEMENT MARKINGS

THE CONTRACTOR SHALL REPLACE THE EXISTING PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS WITH NEW PAVEMENT MARKINGS AT THE SAME LOCATIONS AS PER CMS 641.06. SEE STANDARD DRAWING TC-71.10 FOR PAVEMENT MARKING DETAILS.

ITEM 630 - OVERHEAD SIGN SUPPORT MODIFICATION, AS PER PLAN

OVERHEAD EXISTING TRUSS SIGN SUPPORTS SHALL BE MODIFIED AS SHOWN IN THE PLANS. THE MODIFICATION SHALL CONSIST OF REPLACING THE EXISTING TRUSS END FRAME POLES AS SHOWN ON THE SIGN ELEVATION DETAILS ON SHEET 52. THE END FRAME SHALL BE PER THE STANDARD DRAWING TC-7.65.

WORK FOR THIS ITEM SHALL INCLUDE THE REMOVAL AND RE-ERECTION OF THE EXISITNG OVERHEAD TRUSS AND SIGNS.

IT WILL BE THE CONTRACTORS RESPONSIBILITY TO CONFIRM THE EXISTING FOUNDATION ELEVATIONS, AND BOLT PATTERNS PRIOR TO ORDERING THE NEW END FRAME POLES.

PAYMENT FOR ALL MATERIAL, PARTS, EQUIPMENT AND LABOR, NECESSARY TO PERFORM THE ABOVE DESCRIBE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FOR ITEM 630, OVERHEAD SIGN SUPPORT MODIFICATION, AS PER PLAN

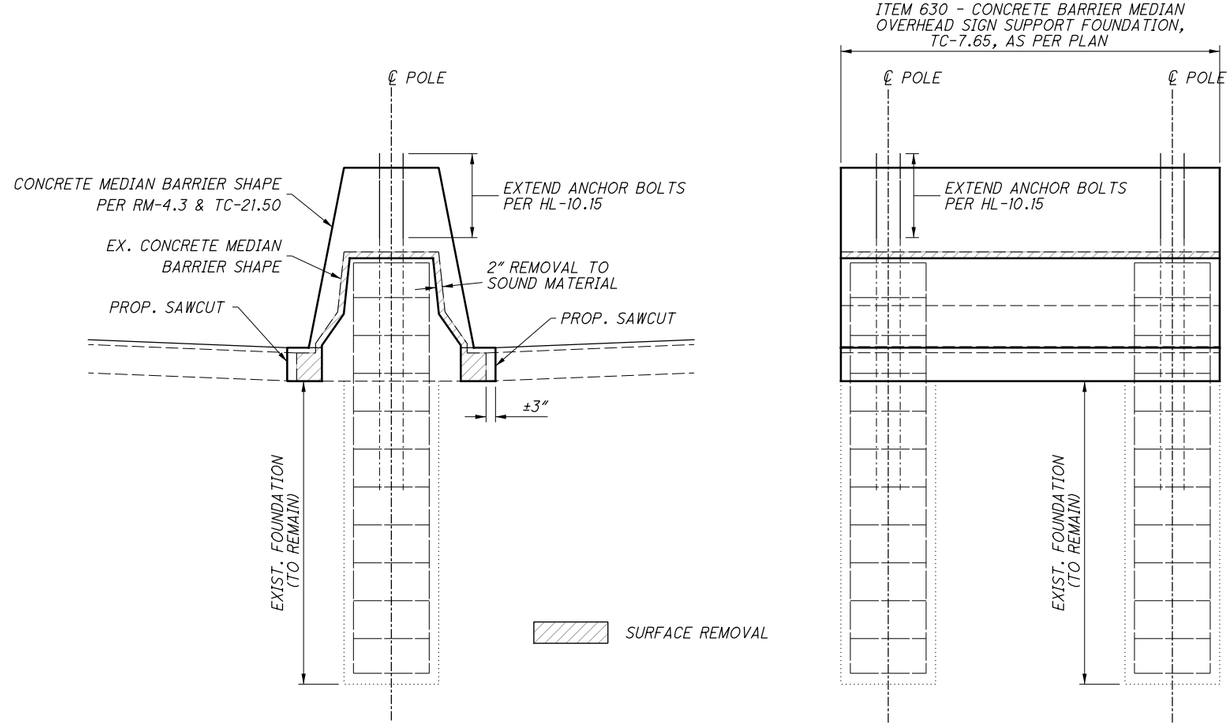
REFER TO THE SIGNING ELEVATION DETAILS FOR LOCATIONS.

ITEM 630 - CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65, AS PER PLAN

THE EXISTING MEDIAN BARRIER OVERHEAD SIGN SUPPORT FOUNDATIONS SHALL REMAIN IN PLACE. THE EXISTING CONCRETE BARRIER SHAPE SHALL BE MODIFIED TO MATCH THE PROPOSED CONCRETE MEDIAN BARRIER TYPE B1 SHAPE AS SHOWN AS SHOWN IN THE FOUNDATION MODIFICATION DETAIL. WORK FOR THIS ITEM SHALL CONSIST OF REMOVAL OF 2" OF THE EXISTING MEDIAN BARRIER SURFACE TO SOUND MATERIAL, REMOVAL OF THE FOOTER TO SOUND MATERIAL, AND RESHAPING THE EXISTING MEDIAN BARRIER TO A SINGLE SLOPE BARRIER PER RM-4.3.

PAYMENT FOR ALL MATERIAL, PARTS, EQUIPMENT AND LABOR, NECESSARY TO PERFORM THE ABOVE DESCRIBE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FOR ITEM 614, CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65, AS PER PLAN.

FOR LOCATIONS, SEE SHEET 52.



FOUNDATION SECTION

FOUNDATION PROFILE

FOUNDATION MODIFICATION DETAIL

CALCULATED SAH
CHECKED DAH

TRAFFIC CONTROL NOTES

JEF/COL-7-31.13/0.00

CALL-OUT	SLM FROM	SLM TO	LOCATION	DETAIL SHEET	646 12" CHANNELIZING LINE FT	646 8" CHANNELIZING LINE (WHITE) FT	646 8" CHANNELIZING LINE (YELLOW) FT	646 STOP LINE FT	646 6" DOTTED LINE (WHITE) FT	646 TRANSVERSE/ DIAGONAL LINE (WHITE) FT	646 TRANSVERSE/ DIAGONAL LINE (YELLOW) FT	646 CHEVRON MARKING (WHITE) FT	646 ISLAND MARKING (YELLOW) SQ FT	646	646 LANE ARROW EACH	646	646 CENTER LINE, DOUBLE SOLID MILE	646 EDGE LINE, 6" (WHITE) MILE	646 EDGE LINE, 6" (YELLOW) MILE	646 LANE LINE MILE	646	COMMENTS
	31.13	34.55	NB SR 7															3.42	3.42	3.42		
	31.13	34.55	SB SR 7															3.42	3.42	3.42		
TD-1	33.6	33.68	NB SR 7	46							136											
DL-1	33.65	33.66	NB SR 7	46					72													
CH-1	33.66	33.68	NB SR 7	46		72																
LA-1	33.66		NB SR 7	46											1							
LA-2	33.68		NB SR 7	46											1							
IP-1	33.68		SR 7	46									29									
DL-2	33.68	33.7	SB SR 7	46					118													
IP-2	33.7		SR 7	46																		
CH-2	33.7	33.74	SB SR 7	46		243																
TD-2	33.7	33.8	SB SR 7	46							461											
LA-3	33.7		SB SR 7	46											1							
LA-4	33.72		SB SR 7	46											1							
LA-5	33.73		SB SR 7	46											1							
DL-3	33.74	33.77	SB SR 7	46					154													
SUBTOTAL PART 1 - CARRIED TO SHEET 44					**0**	**315**	**0**	**0**	**344**	**0**	**597**	**0**	**29**		**5**		**0**	**6.84**	**6.84**	**6.84**		**PART 1 (01/NHS/PV)**
	0.00	3.56	NB SR 7															3.56	3.56	3.56		
	0.00	3.56	SB SR 7															3.56	3.56	3.56		
	0.79	1.07	NB SR 7																	0.28		
	0.9	1.11	SB SR 7																	0.21		
	CLARK AVE. INTERCHANGE																					
	TERMINAL AND GORE		RAMP A @ CLARK AVE. INT.		340				830													
	0.37	0.58																0.21	0.21			
	0.58	0.66															0.08	0.08	0.08			
TD-3	0.66	0.68		47							48											
CH-3	0.66	0.68		47			226															
IP-3	0.68			47									10									
	0.7	0.8																0.2	0.2			
IP-4	0.7			47									48									
IP-5	0.8			47									48									
	TERMINAL & GORE (S.R. 7)		RAMP B @ CLARK AVE. INT.		384				512			120										
	0.54	0.66																0.12	0.12			
	TERMINAL & GORE (RAMP A)			47		310			590	65												
	0.66	0.74	RAMP C @ CLARK AVE. INT.															0.16	0.16			
	TERMINAL AND GORE				260																	
	0.55	0.66															0.11	0.11	0.11			
SL-1	0.56		RAMP D @ CLARK AVE. INT.	47				25														
	0.66	0.87																0.21	0.21			
SL-2	0.66			47				14														
	TERMINAL AND GORE				350							120										
SUBTOTAL PART 2 - CARRIED TO SHEET 44					**1334**	**310**	**226**	**39**	**1932**	**65**	**48**	**240**	**106**		**0**		**0.19**	**8.21**	**8.21**	**7.61**		**PART 2 (01/NHS/PV)**

CALCULATED SAH
CHECKED DAH

TRAFFIC CONTROL QUANTITIES

JEF/COL-7-31.13/0.00

CALL-OUT	SLM FROM	SLM TO	LOCATION	DETAIL SHEET	646 12" CHANNELIZING LINE FT			STOP LINE FT	6" DOTTED LINE (WHITE) FT			CHEVRON MARKING (WHITE) FT			WRONG WAY ARROW EACH		EDGE LINE, 6" (WHITE) MILE	EDGE LINE, 6" (YELLOW) MILE				COMMENTS
	S.R. 39 INTERCHANGE																					
	1.25	1.4															0.15	0.15				
SL-3	1.26		RAMP A @ SR 39	48				43														
LA-6	1.26			48											1							
	TERMINAL AND GORE				440				600			120										
	1.28	1.43	RAMP B @ SR 39														0.15	0.15				
	TERMINAL AND GORE				500				900													
	TERMINAL AND GORE				654							120										
	1.15	1.27	RAMP C @ SR 39														0.12	0.12				
LA-7	1.26			48											1							
SL-4	1.26			48				48														
	TERMINAL AND GORE		RAMP D @ SR 39		500																	
	1.11	1.26															0.15	0.15				
SUBTOTAL PART 2 - CARRIED TO SHEET 44					2094			91	1500			240			2		0.57	0.57				PART 2 (01/NHS/PV)

CALCULATED SAH
CHECKED DAH

TRAFFIC CONTROL QUANTITIES

JEF/COL-7-31.13/0.00

CALL-OUT	SLM FROM	SLM TO	LOCATION	DETAIL SHEET	646 12" CHANNELIZING LINE FT	646 8" CHANNELIZING LINE (WHITE) FT		646 STOP LINE FT	646 6" DOTTED LINE (WHITE) FT			646 CHEVRON MARKING (WHITE) FT	646 ISLAND MARKING (YELLOW) SQ FT	646 LANE ARROW EACH	646 WRONG WAY ARROW EACH	646 CENTER LINE, DOUBLE SOLID MILE	646 EDGE LINE, 6" (WHITE) MILE	646 EDGE LINE, 6" (YELLOW) MILE				COMMENTS
	S.R. 45 INTERCHANGE																					
	TERMINAL AND GORE				590				520			120										
	2.44	2.64	LISBON ST. RAMP														0.2	0.2				
LA-8	2.62			49											1							
SL-5	2.62			49				16														
	TERMINAL AND GORE		RAMP D @ SR 45		320				950													
	2.63	2.82															0.19	0.19				
	3.01	3.03															0.02	0.02				
IP-7	3.01			49									42									
	3.03	3.08															0.05	0.05				
IP-8	3.03		RAMP A @ SR 45	49									54									
CH-5	3.03	3.06		49		147																
	3.08	3.21															0.13	0.13				
LA-10	3.08			49											1							
	TERMINAL AND GORE				750				420			120										
	3.02	3.03															0.01	0.01				
SL-6	3.02		RAMP A TO WELLS EXT.	49				12														
LA-9	3.02			49											1							
CH-6	3.03	3.06		49		67																
IP-9	3.02			49									46									
	3.02	3.08															0.06	0.06				
SL-7	3.08		TR 966 ACCESS	49				33														
IP-10	3.08			49									49									
	3.02	3.06														0.04						
IP-11	3.06			49									100									
SL-8	3.06		RAMP B @ SR 45	49				44														
	3.06	3.2															0.14	0.14				
	TERMINAL AND GORE				620				930													
	WELLS AVE. EXT.			49												0.01						
DL-5	3.41	3.48	NB SR 7	50					390													
IP-12	3.43		NB SR 7	50									39									
CH-7	3.48	3.51	NB SR 7	50		134																
LA-12	3.48		NB SR 7	50										1								
LA-13	3.49		NB SR 7	50										1								
LA-14	3.5		NB SR 7	50										1								
IP-13	3.51		NB SR 7	50									18									
SL-9	C.R. 427 - KOUTZ AVE.			50				20														
IP-14	3.53		NB SR 7	50									67									
CH-8	3.53	3.56	SB SR 7	50		126																
LA-15	3.53		SB SR 7	50										1								
LA-16	3.56		SB SR 7	50										1								
SUBTOTAL PART 2 - CARRIED TO SHEET 44					2280	474		125	3210			240	415	5	3	0.05	0.80	0.80				PART 2 (01/NHS/PV)

CALCULATED SAH
CHECKED DAH

TRAFFIC CONTROL QUANTITIES

JEF/COL-7-31.13/0.00

43
53

I:\ProjectData\81722\Design\Roadway\Sheets\81722_T0003.dgn Sheet 2/6/2020 4:52:44 PM shorrisb

CALL-OUT	SLM		LOCATION	DETAIL SHEET	630				646																	COMMENTS
					REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	GROUND MOUNTED SUPPORT, NO. 2 POST	SIGN, FLAT SHEET	12" CHANNELIZING LINE	8" CHANNELIZING LINE (WHITE)	8" CHANNELIZING LINE (YELLOW)	STOP LINE	6" DOTTED LINE (WHITE)	TRANSVERSE/ DIAGONAL LINE (WHITE)	TRANSVERSE/ DIAGONAL LINE (YELLOW)	TRANSVERSE/ DIAGONAL LINE, AS PER PLAN (WHITE)	CHEVRON MARKING (WHITE)	ISLAND MARKING (YELLOW)	LANE ARROW	WRONG WAY ARROW	CENTER LINE, DOUBLE SOLID	EDGE LINE, 6" (WHITE)	EDGE LINE, 6" (YELLOW)	LANE LINE	PARKING LOT STALL MARKING	HANDICAP SYMBOL MARKING	
					EACH	EACH	FT	SQ FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	SQ FT	EACH	EACH	MILE	MILE	MILE	MILE	FT	EACH	
	PARK AND RIDE																										
PL-1				51																					487		
SY-1				51																						1	
TD-4				51												28											
	SIGN CODE	SIZE (INCHES)																									
S-1	REMOVAL			51	1	1																					
	R7-8-12	12 x 18					13.2	1.5																			
	R7-8a-12	12 x 6						0.5																			
	R7-H8bP-12	12 x 6						0.5																			
SUBTOTAL PART 3					1	1	13.2	2.5								28									487	1	PART 3 (02/NFA/PV)
	REST AREA																										
PL-2				51																					360		
PL-3				51																					360		
PL-4				51																					800		
TD-5				51												37											
TD-6				51												28											
TD-7				51												88											
TD-8				51												41											
TD-9				51												108											
SY-3				51																						1	
SY-4				51																						1	
SUBTOTAL PART 4																302									1520	2	PART 4 (03/NFA/PV)
PART 1 SUBTOTAL CARRIED FROM SHEET 41					0	0	0	0	0	315	0	0	344	0	597	0	0	29	5	0	0	6.84	6.84	6.84	0	0	PART 1 (01/NHS/PV)
PART 2 SUBTOTAL CARRIED FROM SHEET 41					0	0	0	0	1334	310	226	39	1932	65	48	0	240	106	0	0	0.19	8.21	8.21	7.61	0	0	PART 2 (01/NHS/PV)
PART 2 SUBTOTAL CARRIED FROM SHEET 42					0	0	0	0	2094	0	0	91	1500	0	0	0	240	0	0	2	0	0.57	0.57	0	0	0	PART 2 (01/NHS/PV)
PART 2 SUBTOTAL CARRIED FROM SHEET 43					0	0	0	0	2280	474	0	125	3210	0	0	0	240	415	5	3	0.05	0.80	0.80	0	0	0	PART 2 (01/NHS/PV)
SUBTOTAL PART 1 & PART 2					0	0	0	0	5708	1325		255	6986	710		0	720	550	10	5	0.24	32.84		14.45	0	0	PART 1 & PART 2 (01/NHS/PV)
TOTALS CARIED TO GENERAL SUMMARY					1	1	13.2	2.5	5708	1325		255	6986	710		330	720	550	10	5	0.24	32.84		14.45	2007	3	

CALCULATED SAH CHECKED DAH

TRAFFIC CONTROL QUANTITIES

JEF/COL-7-31.13/0.00

LOCATION	SLM FROM	SLM TO	621 SPACING	621 RPM 2 - WAY, YELLOW/YELLOW EACH	621 RPM 2 - WAY, WHITE/RED EACH	621 RPM 2 - WAY, YELLOW/RED EACH	621 RAISED PAVEMENT MARKER REMOVED EACH	COMMENTS
JEFFERSON CO. - PART 1 (01/NHS/PV)								
	S.R. 7 - NORTHBOUND							
MAINLINE	31.13	34.55	80		227		227	
TURN LANE TRANSITION	33.6	33.68	80/40			9		
S.R. 213 LEFT TURN	33.66	33.68	40		3		3	
TURN LANE TRANSITION	33.7	33.8	80/40			10		
	S.R. 7 - SOUTHBOUND							
MAINLINE	31.13	34.55	80		227		227	
S.R. 213 RIGHT TURN	33.7	33.75	40		7		7	
SUBTOTAL CARRIED TO COLUMN B				**0**	**464**	**19**	**464**	**PART 1 (01/NSA/PV)**
COLUMBIANA CO. - PART 2 (01/NHS/PV)								
	S.R. 7 - NORTHBOUND							
MAINLINE	0	3.56	80		235		235	
	0.79	1.07	80		19		19	
C.R. 427 - LEFT TURN	3.48	3.51	40		4		4	
	S.R. 7 SOUTHBOUND							
MAINLINE	0	3.56	80		235		235	
	0.9	1.11	80		14		14	
C.R. 427 - RIGHT TURN	3.53	3.56	40		5		5	
	RAMP A - CLARK AVE.							
TERMINAL AT SR 7			40		5		5	
	0.37	0.58	80			14	14	
	0.58	0.69	80	8			8	
	RAMP B - CLARK AVE.							
TERMINAL AT SR 7			40		11		11	
	0.54	0.66	80			8	8	
TERMINAL AT RAMP A			40		4		4	
	RAMP C - CLARK AVE.							
	0.66	0.74	80			6	6	
TERMINAL AT SR 7			40		4		4	
	RAMP D - CLARK AVE.							
	0.55	0.66	80	8			8	
	0.66	0.83	80			12	12	
	0.83	0.87	40		6	6	3	
TERMINAL AT SR 7			40		9		9	
SUBTOTAL CARRIED TO COLUMN B				**16**	**551**	**46**	**604**	**PART 2 (01/NSA/PV)**

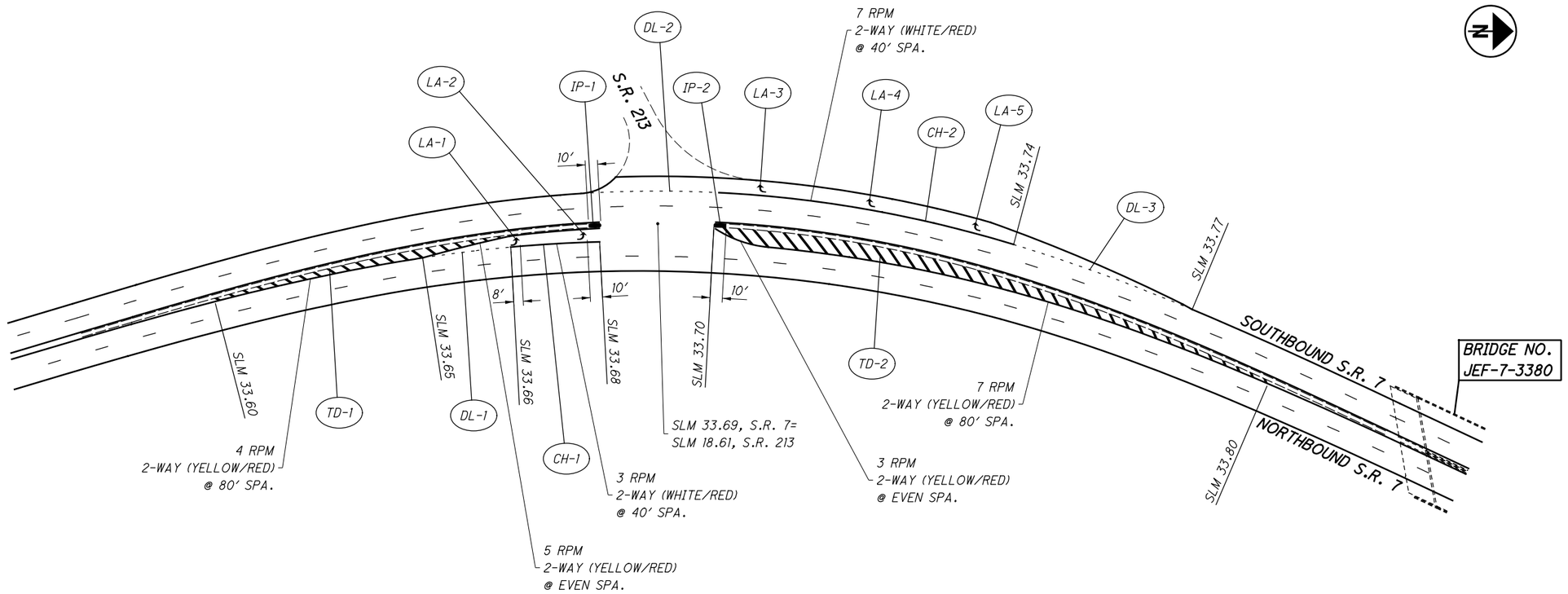
LOCATION	SLM FROM	SLM TO	621 SPACING	621 RPM 2 - WAY, YELLOW/YELLOW EACH	621 RPM 2 - WAY, WHITE/RED EACH	621 RPM 2 - WAY, YELLOW/RED EACH	621 RAISED PAVEMENT MARKER REMOVED EACH	COMMENTS
COLUMBIANA CO.								
	RAMP A - S.R. 39							
	1.25	1.33	80		6	6	3	
	1.33	1.4	80			5	5	
TERMINAL AT SR 7			40		11		11	
	RAMP B - S.R. 39							
	1.28	1.43	80			10	10	
TERMINAL AT SR 7			40		7		7	
	RAMP C - S.R. 39							
TERMINAL AT SR 7			40		18		18	
	1.15	1.19	80			3	3	
	1.19	1.27	80		6	6	3	
	RAMP D - S.R. 39							
TERMINAL AT SR 7			40		7		7	
	1.11	1.26	80			10	10	
	LISBON ST. RAMP - S.R. 45							
TERMINAL AT SR 7			40		15		15	
	2.44	2.54	80			7	7	
	2.54	2.62	80		6	6	3	
	RAMP A - S.R. 45							
	3.08	3.13	40		7	7	4	
	3.13	3.21	80			6	6	
TERMINAL AT SR 7			40		20		20	
	RAMP B - S.R. 45							
	3.02	3.06	80	3				
	3.06	3.2	80			10	10	
TERMINAL AT SR 7			40		8		8	
	RAMP D - S.R. 45							
TERMINAL AT SR 7			40		5		5	
	2.63	2.82	80			13	13	
SUBTOTAL - COLUMN B				**3**	**116**	**89**	**168**	**PART 2 (01/NSA/PV)**
PART 1 - CARRIED FROM COLUMN A				**0**	**464**	**19**	**464**	**PART 1 (01/NSA/PV)**
PART 2 - CARRIED FROM COLUMN A				**16**	**551**	**46**	**604**	**PART 2 (01/NSA/PV)**
TOTALS CARRIED TO GENERAL SUMMARY				**1304**			**1236**	**PART 1 & 2 (01/NSA/PV)**

CALCULATED SAH
CHECKED DAH

TRAFFIC CONTROL QUANTITIES

JEF/COL-7-31.13/0.00

COUNTY: JEF
S.R. 7 & S.R. 213 INTERSECTION
S.R. 7 - SLM 33.70
PART 1



FOR PAVEMENT MARKING DETAILS NOT SHOWN, SEE SCD TC-65.11 AND TC-71.10

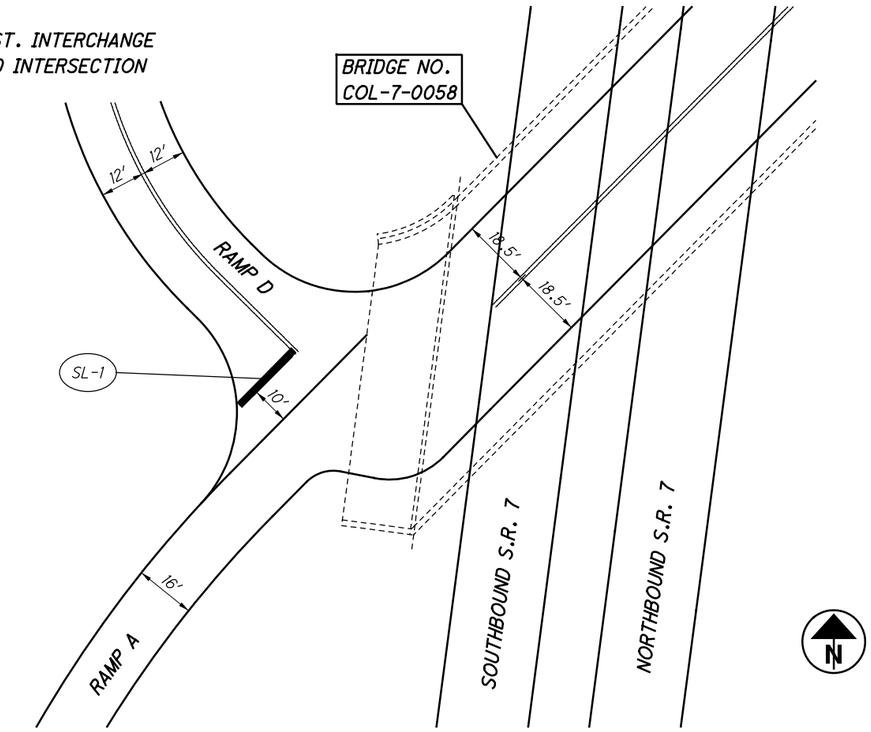
FOR PAVEMENT MARKING ESTIMATED QUANTITIES, SEE SHEET 41
FOR RPM ESTIMATED QUANTITIES, SEE SHEETS 45

CALCULATED SAH
CHECKED DAH

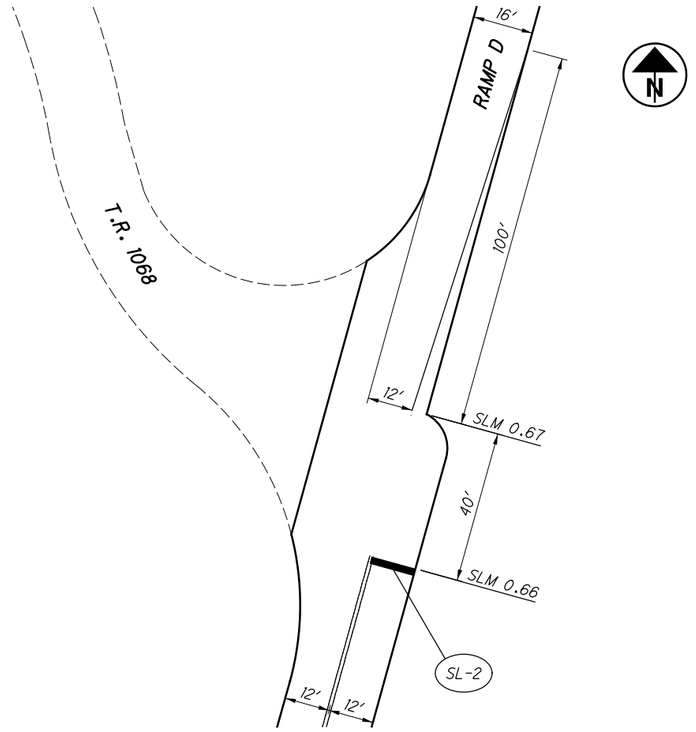
PAVEMENT MARKING DETAILS

JEF / COL-7-31.13 / 0.00

COUNTY: COL
S.R. 7 & CLARK ST. INTERCHANGE
RAMP A & RAMP D INTERSECTION
PART 2

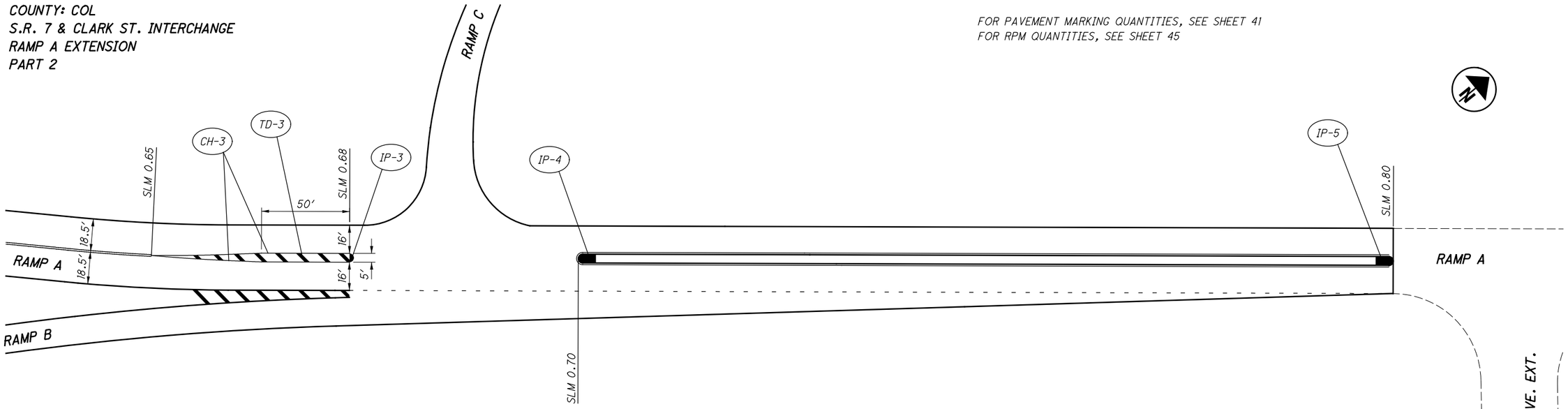


COUNTY: COL
S.R. 7 & CLARK ST. INTERCHANGE
RAMP D & T.R. 1068
PART 2



COUNTY: COL
S.R. 7 & CLARK ST. INTERCHANGE
RAMP A EXTENSION
PART 2

FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 41
FOR RPM QUANTITIES, SEE SHEET 45



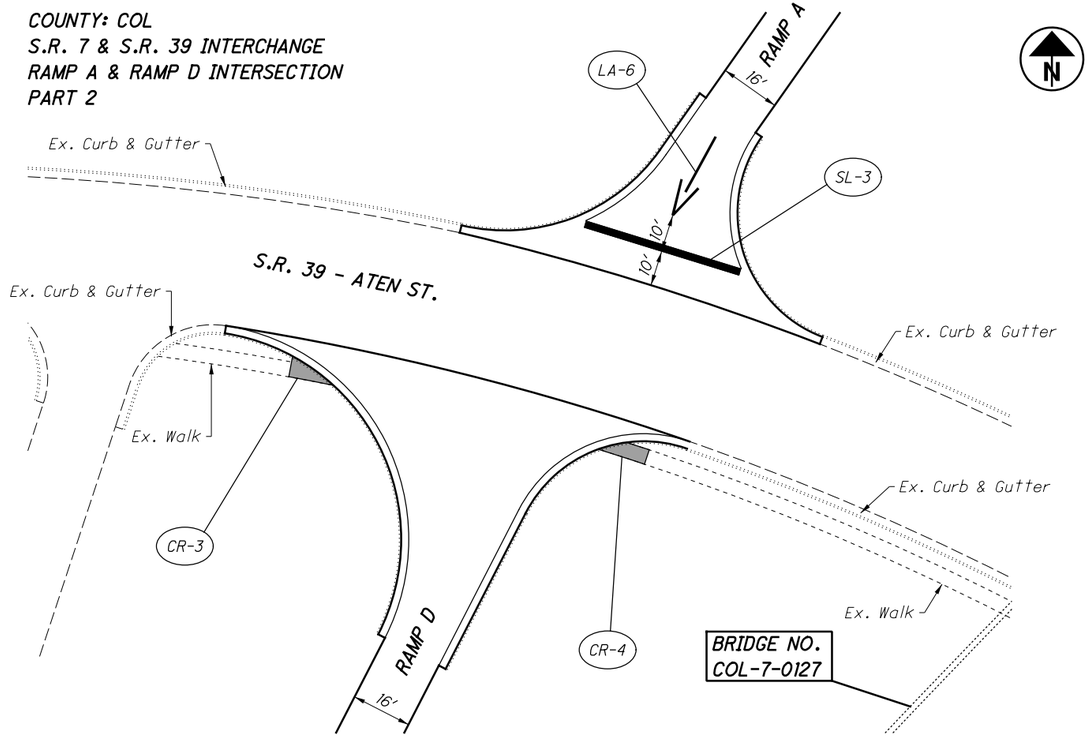
CALCULATED SAH
CHECKED DAH

PAVEMENT MARKING

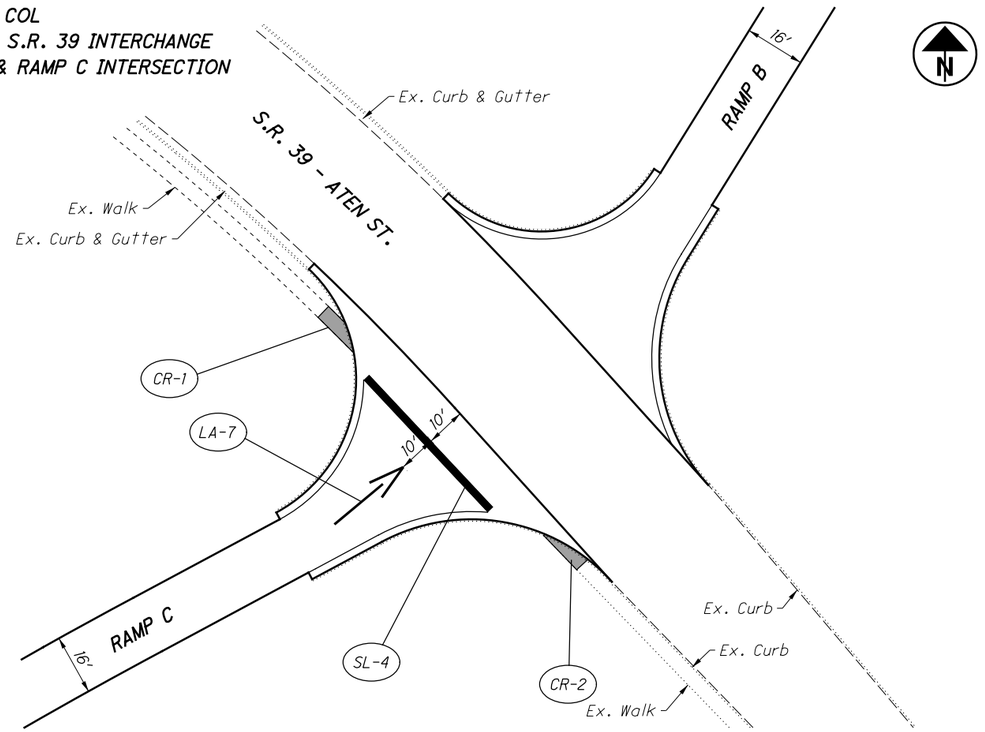
JEF/COL-7-31.13/0.00

47
53

COUNTY: COL
S.R. 7 & S.R. 39 INTERCHANGE
RAMP A & RAMP D INTERSECTION
PART 2



COUNTY: COL
S.R. 7 & S.R. 39 INTERCHANGE
RAMP B & RAMP C INTERSECTION
PART 2



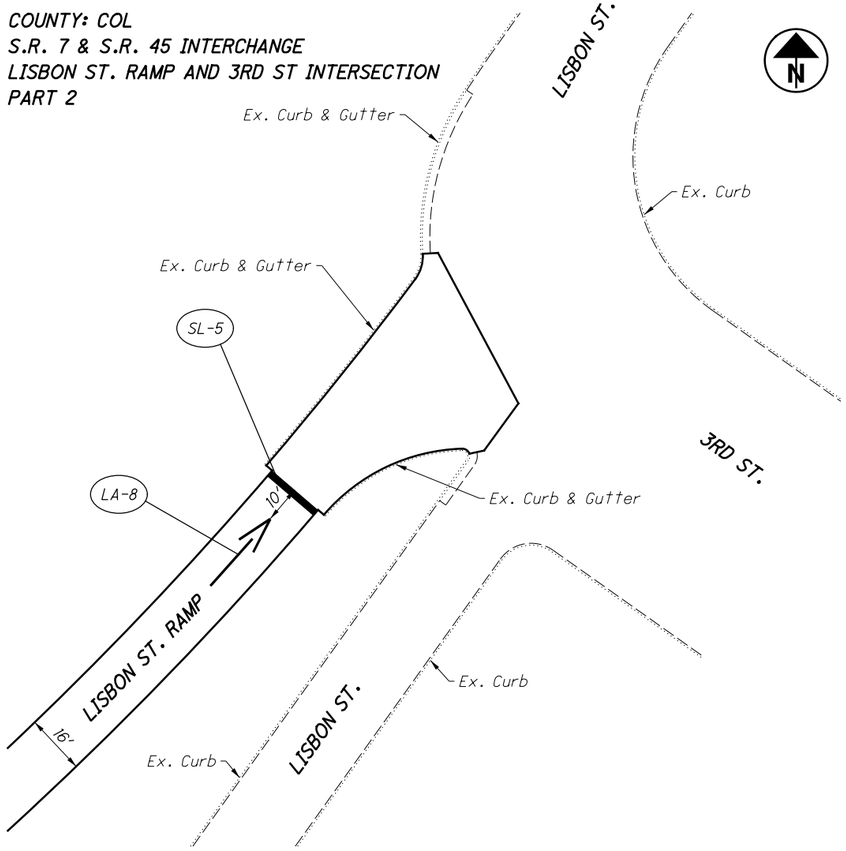
FOR CURB RAMP DETAILS AND QUANTITES, SEE SHEET 39
FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 42
FOR RPM QUANTITIES, SEE SHEET 45

CALCULATED SAH
CHECKED DAH

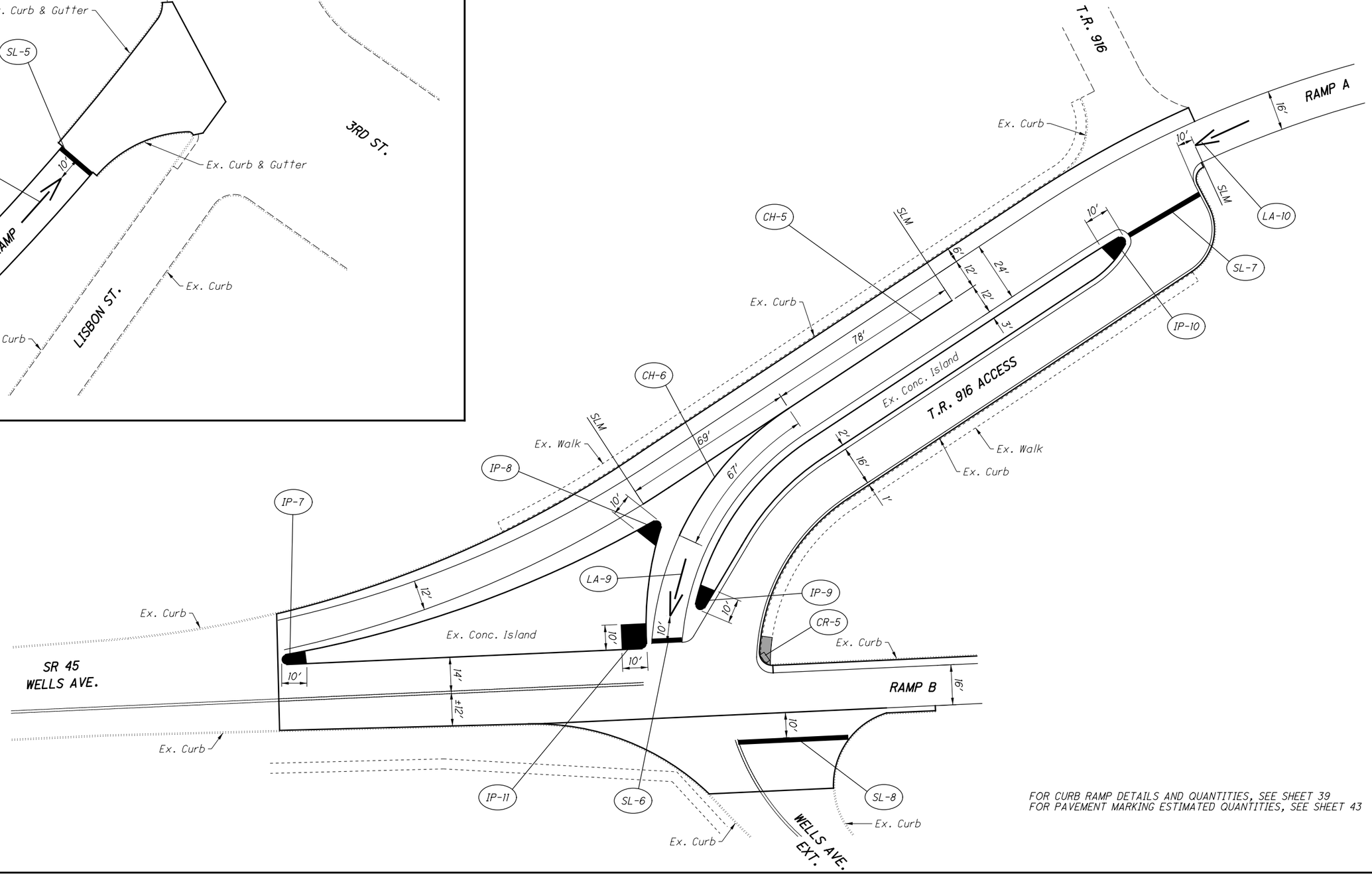
PAVEMENT MARKING AND CURB RAMP DETAILS

JEF/COL-7-31.13/0.00

COUNTY: COL
S.R. 7 & S.R. 45 INTERCHANGE
LISBON ST. RAMP AND 3RD ST INTERSECTION
PART 2



COUNTY: COL
S.R. 7 & S.R. 45 INTERCHANGE
RAMP A & RAMP B INTERSECTION
PART 2



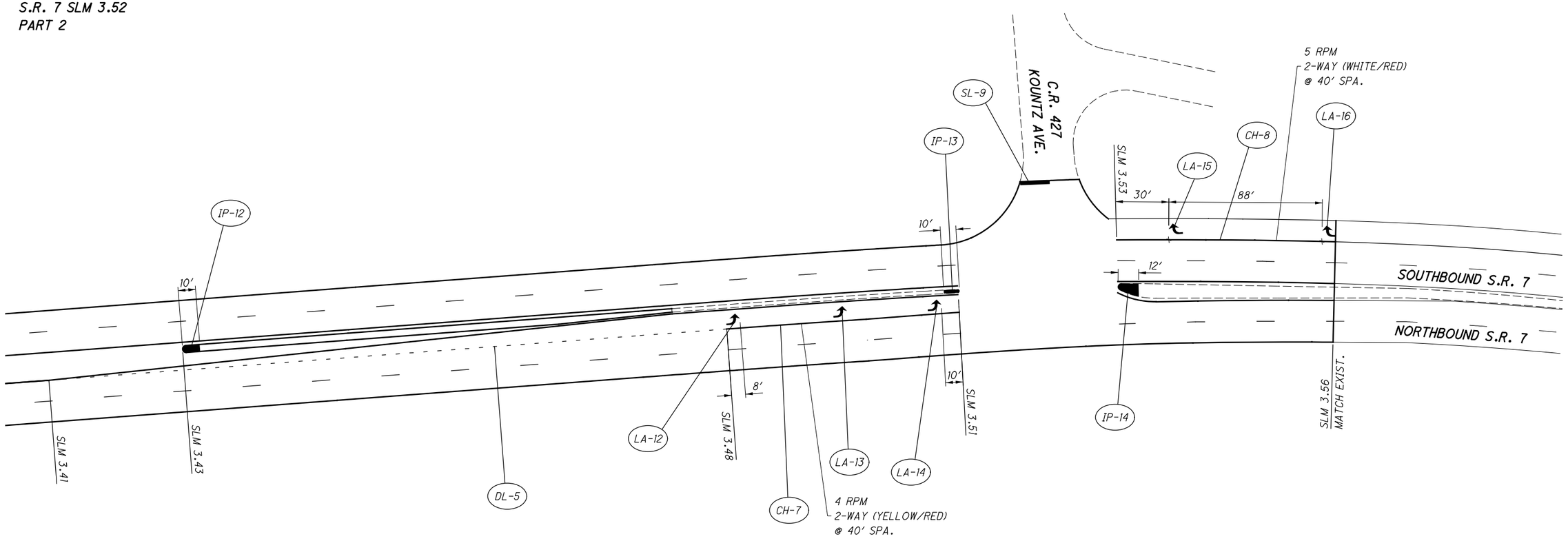
FOR CURB RAMP DETAILS AND QUANTITIES, SEE SHEET 39
FOR PAVEMENT MARKING ESTIMATED QUANTITIES, SEE SHEET 43

CALCULATED SAH
CHECKED DAH

PAVEMENT MARKING AND CURB RAMP DETAILS

JEF/COL-7-31.13/0.00

COUNTY: COL
S.R. 7 & C.R. 427 (KOUNTZ AVE.) INTERSECTION
S.R. 7 SLM 3.52
PART 2



FOR PAVEMENT MARKING QUANTITIES, SEE SHEET 43
FOR RPM QUANTITIES, SEE SHEET 45

CALCULATED SAH
CHECKED DAH

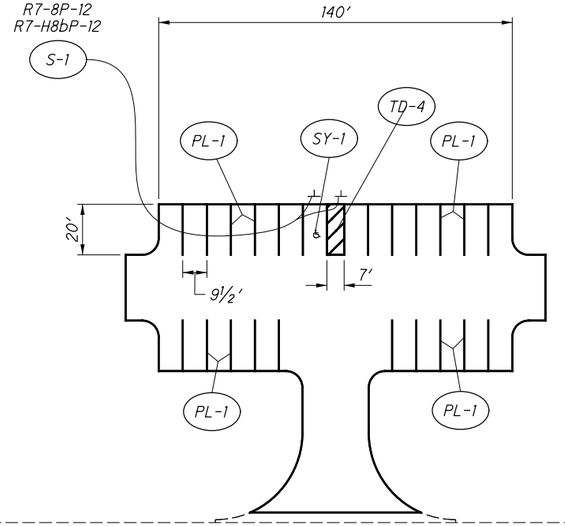
PAVEMENT MARKING DETAILS

JEF/COL-7-31.13/0.00

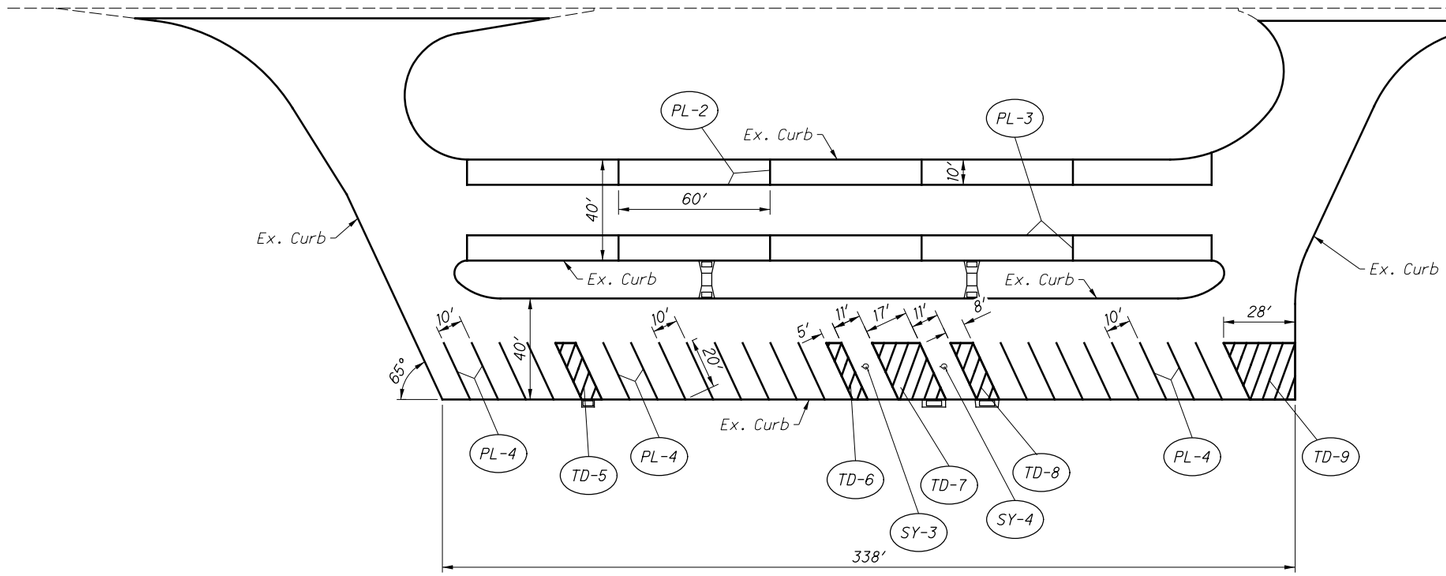
COUNTY: JEF
S.R. 7 & S.R. 213 PARK & RIDE
PART 3

COUNTY: JEF
S.R. 7 & S.R. 213 REST AREA
PART 4

S.R.7 & S.R. 213
PARK AND RIDE
PART 3 (02/NFA/PV)



S.R. 213



S.R. 7 & S.R. 213
REST AREA
PART 4 (03/NFA/PV)

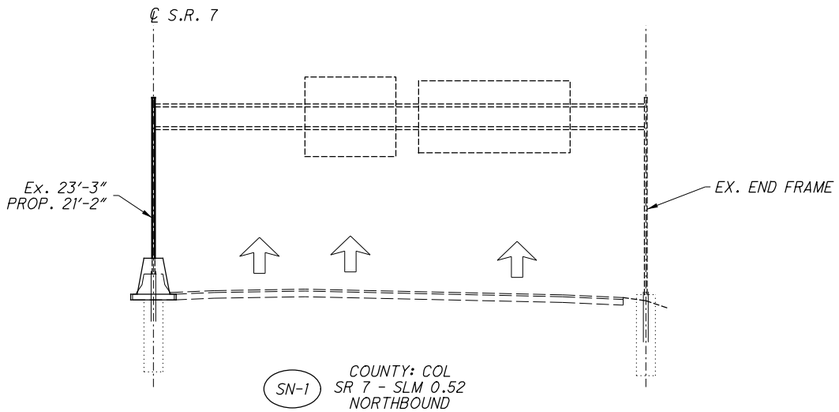
FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 44

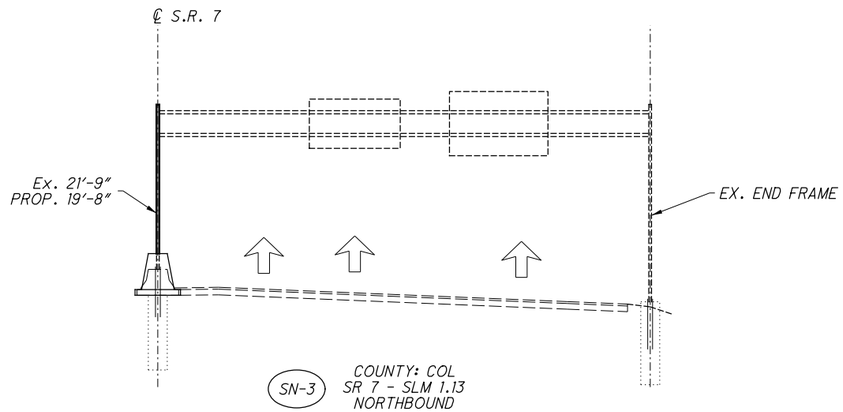
HORIZONTAL SCALE IN FEET
0 15 30 60

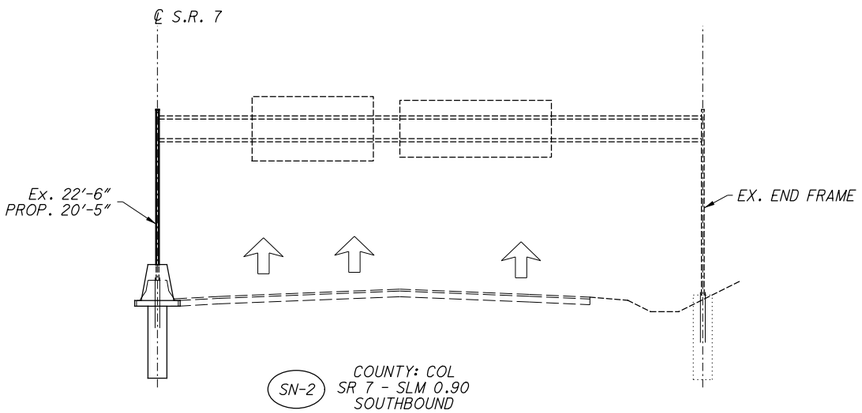
CALCULATED SAH
CHECKED DAH

PAVEMENT MARKING DETAILS
S.R. 213 - REST AREA AND PARK-N-RIDE

JEF/COL-7-31.13/0.00







SIGNING ESTIMATED QUANTITIES

CALL-OUT	SLM FROM	SLM TO	LOCATION	630 CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65 EACH	630 CONCRETE BARRIER MEDIAN OVERHEAD SIGN SUPPORT FOUNDATION, TC-7.65, AS PER PLAN EACH	630 OVERHEAD SIGN SUPPORT MODIFICATION, AS PER PLAN EACH	COMMENTS
SN-1	0.52		NB SR 7	1		1	
SN-2	0.9		SB SR 7		1	1	
SN-3	1.13		NB SR 7	1		1	
TOTALS CARRIED TO GENERAL SUMMARY				2	1	3	PART 2 (01/NHS/PV)

CALCULATED SAH
CHECKED DAH

SIGN ELEVATION DETAILS

JEF/COL-7-31.13/0.00