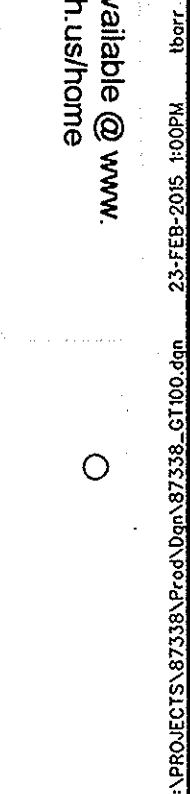


HAS - US 22-15.25
150508 PID - 87338
Dist 11 9/10/2015

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

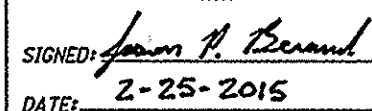


LATITUDE: 40° 16' 55" N LONGITUDE: 81° 00' 25" W



PLAN PREPARED BY:
ODOT DISTRICT II

ENGINEER'S SEAL:



TITLE SHEET	1
SCHEMATIC PLAN	2-3
TYPICAL SECTIONS	4-5
GENERAL NOTES	6
MAINTENANCE OF TRAFFIC	7-8
GENERAL SUMMARY	9
ESTIMATED QUANTITIES	10-14
PLAN	15
INTERCHANGE DETAILS	16-17
MISCELLANEOUS DETAILS	18-23
TRAFFIC CONTROL QUANTITIES	24
STRUCTURE DETAIL	25

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)

THE 2013 STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF 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 _____

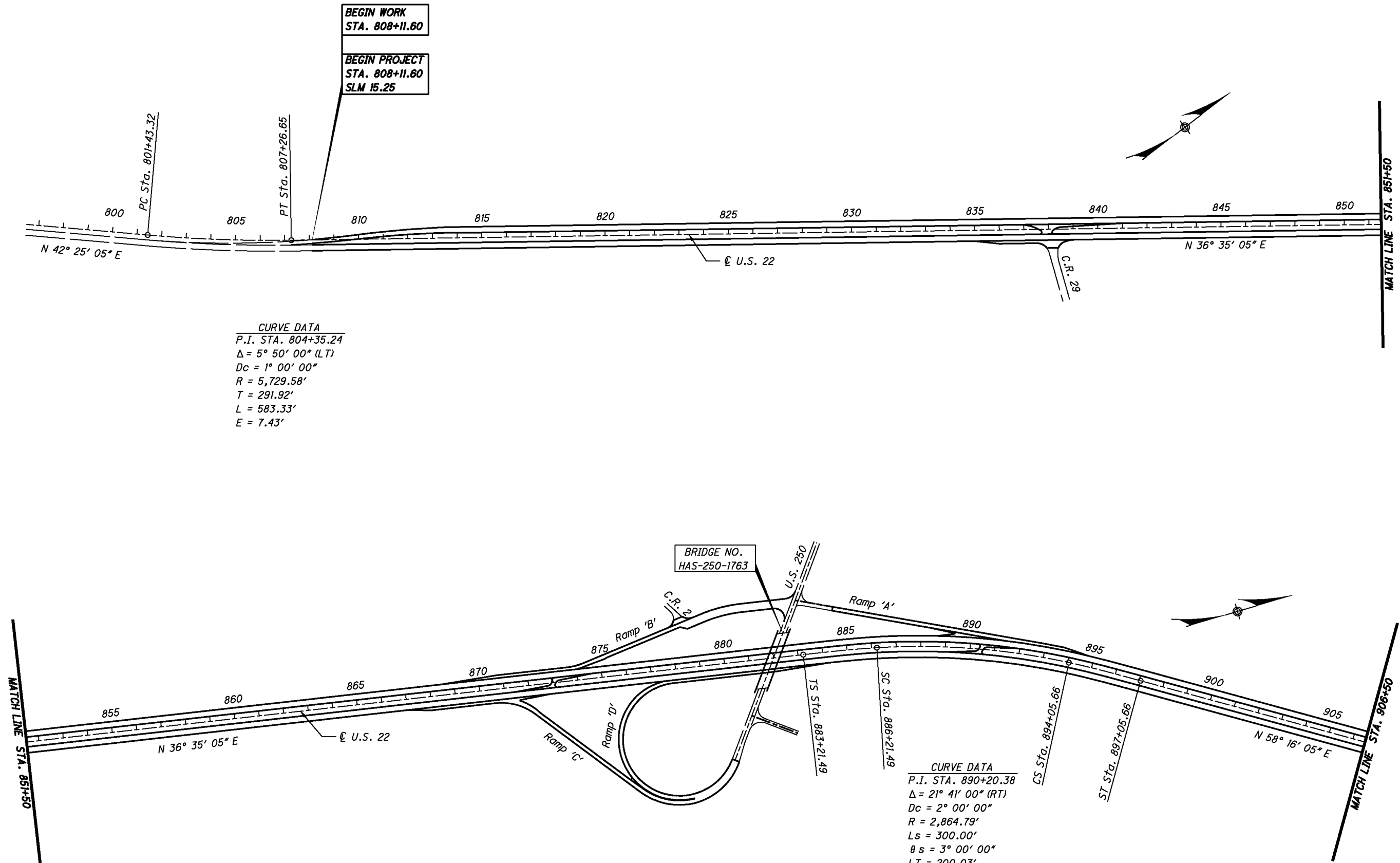
2/25/15

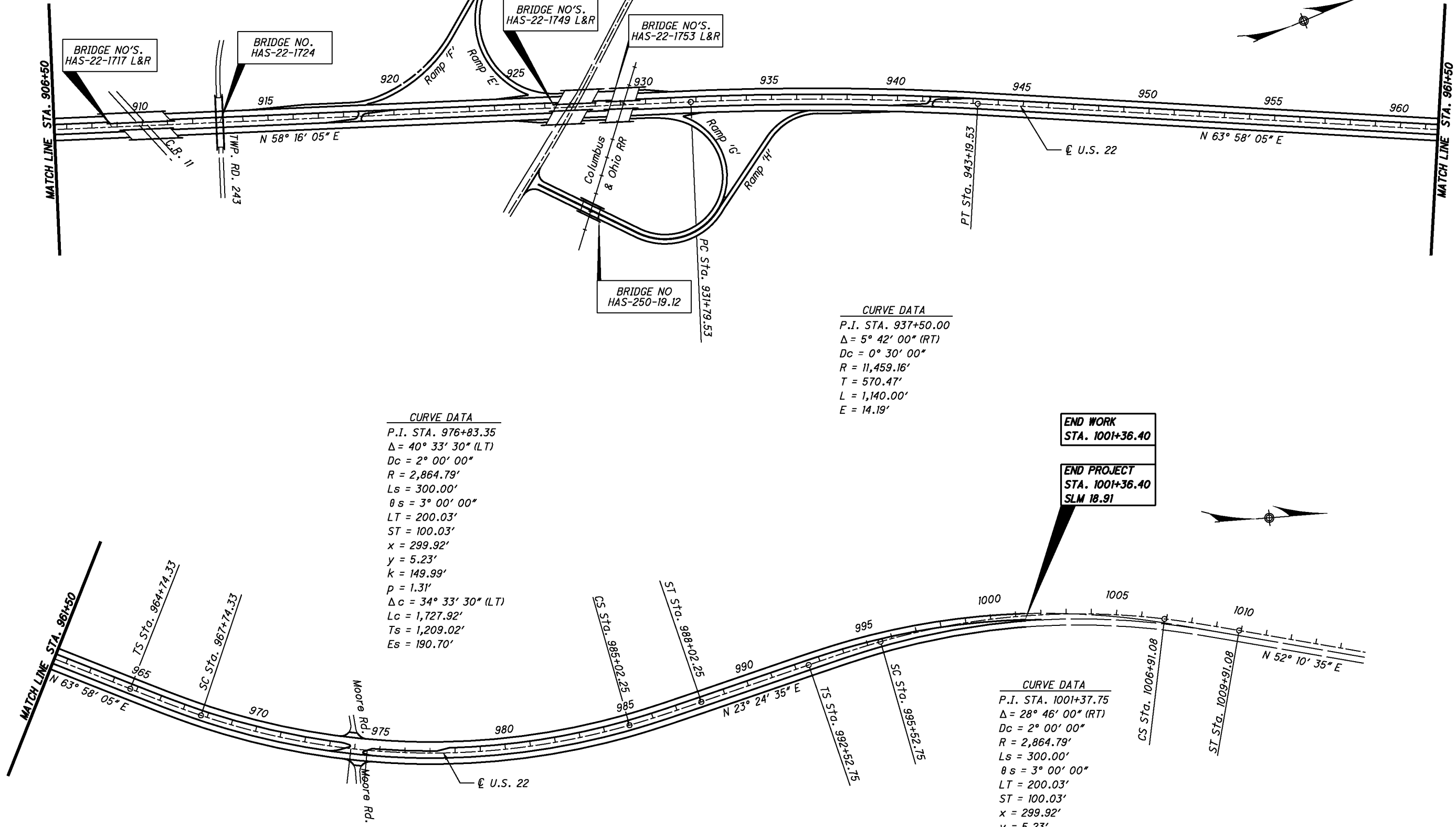
Royce V. MacDonell, P.E., P.S.
DISTRICT DEPUTY DIRECTOR

APPROVED
DATE _____

6-19-15

Ferry Worrell
DIRECTOR, DEPARTMENT OF TRANSPORTATION





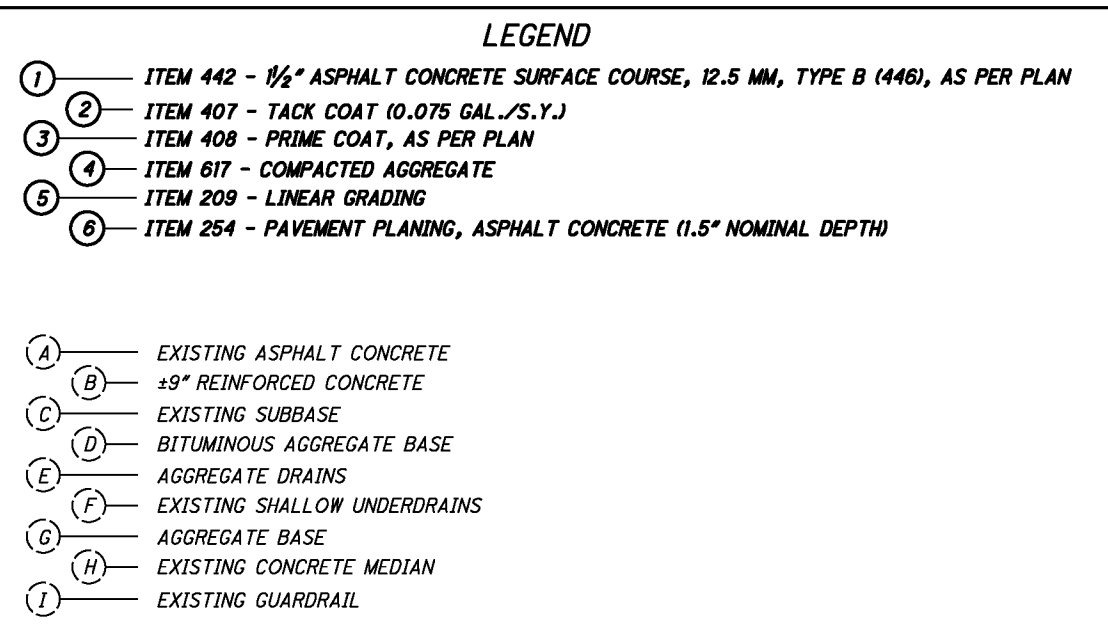
CURVE DATA
P.I. STA. 976+83.35
 $\Delta = 40^\circ 33' 30''$ (LT)
 $Dc = 2^\circ 00' 00''$
 $R = 2,864.79'$
 $Ls = 300.00'$
 $\theta s = 3^\circ 00' 00''$
 $LT = 200.03'$
 $ST = 100.03'$
 $x = 299.92'$
 $y = 5.23'$
 $k = 149.99'$
 $p = 1.31'$
 $\Delta c = 34^\circ 33' 30''$ (LT)
 $Lc = 1,727.92'$
 $Ts = 1,209.02'$
 $Es = 190.70'$

CURVE DATA
P.I. STA. 937+50.00
 $\Delta = 5^\circ 42' 00''$ (RT)
 $Dc = 0^\circ 30' 00''$
 $R = 11,459.16'$
 $T = 570.47'$
 $L = 1,140.00'$
 $E = 14.19'$

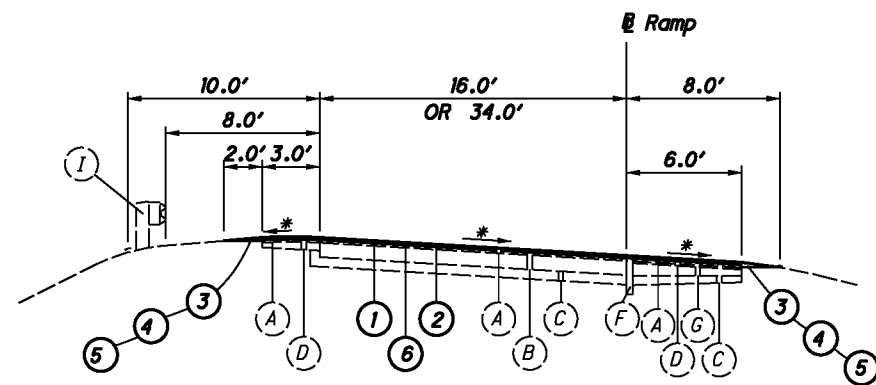
CURVE DATA
P.I. STA. 1001+37.75
 $\Delta = 28^\circ 46' 00''$ (RT)
 $Dc = 2^\circ 00' 00''$
 $R = 2,864.79'$
 $Ls = 300.00'$
 $\theta s = 3^\circ 00' 00''$
 $LT = 200.03'$
 $ST = 100.03'$
 $x = 299.92'$
 $y = 5.23'$
 $k = 149.99'$
 $p = 1.31'$
 $\Delta c = 22^\circ 46' 00''$ (RT)
 $Lc = 1,138.33'$
 $Ts = 885.00'$
 $Es = 94.05'$

END WORK
STA. 1001+36.40

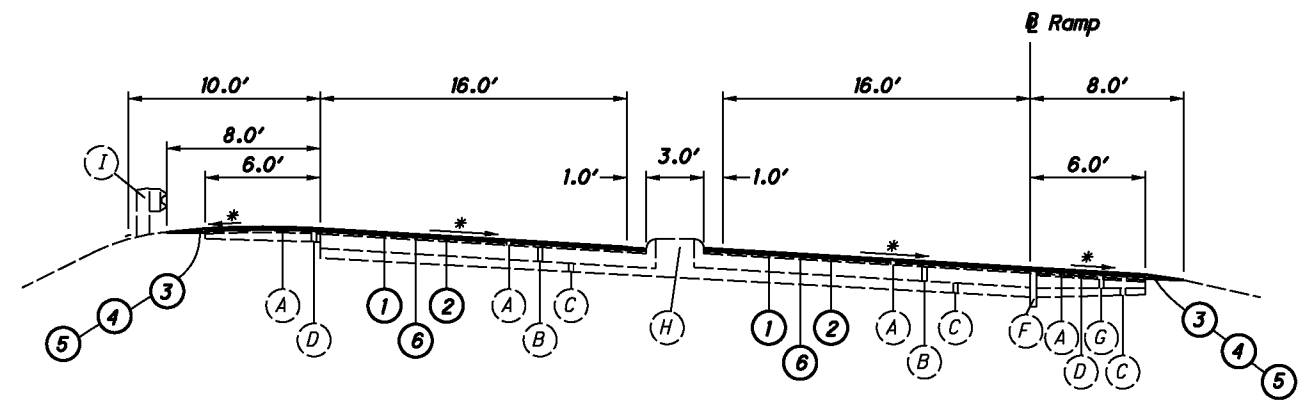
END PROJECT
STA. 1001+36.40
SLM 18.91



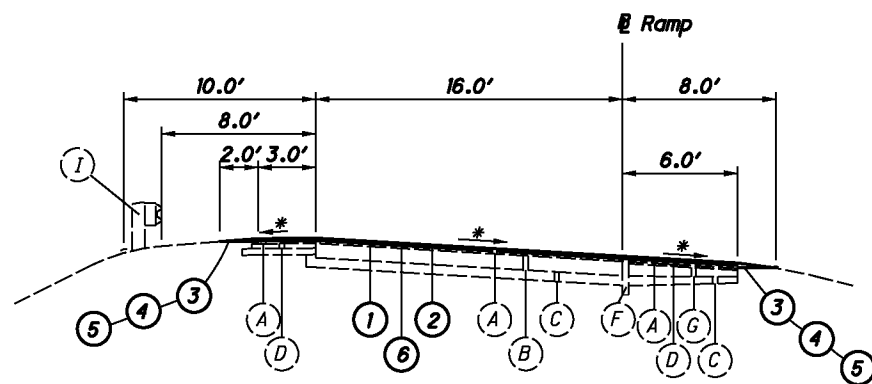
* SAME SLOPE AS EXISTING
FOR LEGEND SEE SHEET 4.



STANDARD RAMPS



TWO-WAY RAMPS



U.S. 250 INTERCHANGE RAMP 'D'
STA. 4+86.20 TO STA. 8+18.89 = 332.69 FT.

I:\PROJECTS\87338\Prod\Dgn\gn100.dgn 26-FEB-2015 10:34AM tbarr

UTILITIES

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

THE HONORABLE KEN ZITKO
ATTN: TOM CARTER, WATER SUPT.
VILLAGE OF CADIZ
128 COURT STREET
CADIZ, OHIO 43907 PHONE: 740-942-8844

CONSOLIDATION COAL COMPANY
ATTN: ELECTRIC SUPERINTENDENT
79285 CADIZ-NEW ATHENS ROAD
CADIZ, OHIO 43907 PHONE: 740-942-4392

MARKWEST LIBERTY MIDSTREAM, LLC.
ATTN: JEFFEREY W. BREEN
LAND PERMIT SUPERVISOR
4600 J. BARRY CT., SUITE 500
CANNONSBURG, PA 15317 PHONE: 724-873-3632

FRONTIER COMMUNICATIONS
ATTN: ASHLEY MORAN
NETWORK COMMUNICATIONS
9444 CAMPBELL STREET
CAMBRIDGE, OHIO 43725 PHONE: 740-432-6961

COMCAST
ATTN: GENE HELMS
SPECL 2, CONSTRUCTION
100 WELDAY DRIVE, SUITE A
WINTERSVILLE, OHIO 43953 PHONE: 740-314-5397

AEP OHIO POWER COMPANY
ATTN: GREG KING
SUPERVISOR
120 JOHN SCOTT HIGHWAY
STUEBENVILLE, OHIO 43952 PHONE: 740-266-3025

HARRISON COUNTY ENGINEER
ATTN: ROBERT STERLING
100 WEST MARKET STREET
CADIZ, OHIO 43907 PHONE: 740-942-8867

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.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS AND PAVEMENT DATA SHEETS.

PREVIOUS CONSTRUCTION PLANS

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

HAS-22-15.09 ORIGINAL CONSTRUCTION PLAN, 1959
HAS-22-15.03 RESURFACING AND UPGRADING PLAN, 1978
HAS-22-15.03 RESURFACING, 1991
HAS-22-15.25 RESURFACING, 2000
HAS-22-17.48 BRIDGE REDECKING, 2000

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.

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 FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 621 - RAISED PAVEMENT MARKER REMOVED - 673 EACH

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B (446), 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.

SAME SEASON COMPLETION OF SURFACE COURSE

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

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR IS HEREBY ADVISED THAT PROJECT HAS-22-17.24, PID 88923 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 AFFECTS OF THIS CONTRACT UPON THE HAS-22-17.24 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.

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 442 SURFACE COURSE RESURFACING 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 SHOULDERS, AND THAT SOME QUANTITIES ARE TO BE DELIVERED BY THE CONTRACTOR AT HIS EXPENSE, AS NOTED IN THE PLAN NOTE FOR ITEM 254. PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

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

THIS ITEM SHALL INCLUDE HAULING THE GRINDINGS FROM THE PAVEMENT PLANING OPERATION TO THE ADDRESS LISTED BELOW AND STOCKPILING THE MATERIAL IN A MANNER ACCEPTABLE TO THE ENGINEER. CONTINUOUS END DUMPING WILL NOT BE PERMITTED. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY
TOTAL - 4000 TONS = 48,000 S.Y.

DELIVERED TO:
ODOT HARRISON COUNTY GARAGE
43041 SOUTH INDUSTRIAL PARK RD.
CADIZ, OHIO 43907

ALL LABOR, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE SQUARE YARD BID PRICE FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN. FOR ADDITIONAL INFORMATION CONTACT THE HARRISON COUNTY MANAGER AT (740) 942-3274.

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.

ITEM 605 - AGGREGATE DRAINS, AS PER PLAN

THIS ITEM SHALL BE USED TO CONSTRUCT AGGREGATE DRAINS IN CONJUNCTION WITH ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QCI, AS PER PLAN, AND SHALL MEET THE REQUIREMENTS OF ITEM 605, AGGREGATE DRAINS, EXCEPT THAT AGGREGATE SHALL BE NO. 57 SIZE GRAVEL.

IN ADDITION, WHERE INSTALLATION OF AGGREGATE DRAINS REQUIRES TRENCHING THROUGH THE EXISTING ASPHALT SHOULDERS, THE TOP 6" OF THE TRENCH THROUGH THE SHOULDER SHALL BE BACKFILLED WITH COMPACTED ITEM 301 ASPHALT BASE. THIS WORK SHALL BE COMPLETED BEFORE RESURFACING BEGINS. PAYMENT FOR TRENCHING THROUGH THE EXISTING SHOULDER AND ITEM 301 ASPHALT BASE SHALL BE INCIDENTAL TO THIS ITEM. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 605 - AGGREGATE DRAINS, AS PER PLAN.....1440 FT.

CENTERLINE REFERENCE MONUMENTS

EXISTING CENTERLINE MONUMENTS ARE LOCATED AT THE STATIONS SHOWN BELOW. THE CONTRACTOR SHALL TAKE CARE NOT TO DISTURB ANY OF THESE CENTERLINE REFERENCE MONUMENTS.

STATION	
P.O.T.	782+00
P.C.	801+43.32
P.I.	804+35.24
P.I.	807+26.65
P.O.T.	810+76.79
P.O.T.	825+79.25
P.O.T.	829+67.82
P.O.T.	842+50
P.O.T.	854+39.75
P.O.T.	870+72.08
T.S.	883+21.49
P.I.	890+20.38
C.S.	894+05.66
S.T.	897+05.66
P.O.T.	901+42.22
P.O.T.	914+12.95
P.O.T.	921+08.03
P.C.	931+79.53
P.I.	937+50
P.T.	943+18.53
P.O.T.	952+50
T.S.	965+74.33
S.C.	967+74.33
P.I.	976+83.35
P.O.C.	978+50
C.S.	985+02.25
S.T.	988+02.25
T.S.	992+52.75
S.C.	995+52.75
P.I.	1001+37.75
P.O.C.	1004+50

DESIGN DESIGNATION

	(SLM 13.18-16.64)	(SLM 16.64-17.49)	(SLM 17.49-21.88)
CURRENT ADT (2015)	3,700	7,600	7,400
DESIGN YEAR ADT (2027)	4,700	9,200	8,800
DESIGN HOURLY VOLUME (2027)	470	920	880
DIRECTIONAL DISTRIBUTION	53%	53%	53%
TRUCKS (24 HOUR B&C)	15%	20%	18%
DESIGN SPEED	55 MPH	55 MPH	55 MPH
LEGAL SPEED	55 MPH	55 MPH	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:			
SLM 15.25-18.91 - PRINCIPAL ARTERIAL - (RURAL)			
NHS PROJECT	YES		

I:\PROJECTS\87338\Prod\Dgn\gn100.dgn 23-FEB-2015 1:07PM tbarr

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.

THE SHOULDERS SHALL HAVE THE EXISTING RUMBLE STRIPS REMOVED BEFORE TRAFFIC IS PERMITTED TO BE MAINTAINED ON IT, PER THE NOTE TITLED "EXISTING RUMBLE STRIPS" ON THIS SHEET.

ANY OPEN PAVEMENT TRENCH OR DROPOFF SHALL BE ADEQUATELY MAINTAINED AND PROTECTED. THE PROTECTION USED SHALL MEET THE REQUIREMENTS OF STANDARD CONSTRUCTION DRAWING 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, PORTABLE CONCRETE BARRIER, BARRIER REFLECTORS, OBJECT MARKERS, WORK ZONE IMPACT ATTENUATORS, SPECIAL LIGHTING, FLOODLIGHTING WORK ZONE PAVEMENT MARKINGS, WORK ZONE RAISED PAVEMENT MARKERS, ECT., 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.

MAINTAINING TRAFFIC, AS PER PLAN CONT.

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 AND EVENTS:

MEMORIAL DAY	FOURTH OF JULY	HARRISON COUNTY FAIR
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 FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

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.

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.

NOTIFICATION OF WORK ZONE LANE RESTRICTIONS

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST EIGHTEEN (18) DAYS PRIOR TO IMPLEMENTING ANY WORK ZONE RESTRICTION THAT WILL REDUCE THE WIDTH OR VERTICAL CLEARANCE OF ANY LANE ON WHICH TRAFFIC WILL BE MAINTAINED DURING CONSTRUCTION.

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.

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 STATE 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.

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 ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 614, REPLACEMENT DRUM - - - - - 10 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.

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:

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 20 CU. YD.

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 AT LEAST 2 INCHES; THE MILLED SURFACE AND THE SIDES NEED TO 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.

ITEM 614 - 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 SHUT-DOWNS.

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 REFLECTORIZED 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 RE-ERECTED 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.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN - 14 EACH

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.

WORK ZONE RAISED PAVEMENT MARKERS CANNOT BE USED TO SIMULATE (REPLACE) ANY TYPE OF WORK ZONE PAVEMENT MARKING. FOR WORK ZONE PAVEMENT MARKING QUANTITIES SEE SHEET 24.

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

ITEM 614, WORK ZONE MARKING SIGN (W8-11-36) - - - - 14 EACH
ITEM 614, REPLACEMENT SIGN - - - - - 3 EACH

ITEM 614, WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (45 MPH SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE(S). THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK THAT CAUSES THE WARRANTING CONDITION(S) TO OCCUR. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING REMOVAL OF THE WARRANTING CONDITION(S), OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY REMOVAL OF WARRANTING CONDITION(S) SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE.

CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT THE 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 REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED REDUCTION IN THE OPPOSITE DIRECTION. A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF THE WARRANTING CONDITION, AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF THE LANE REDUCTION, SHIFT TAPER, OR OTHER ROADWAY OR SHOULDER RESTRICTION THAT WARRANTED THE WORK ZONE SPEED ZONE. ON UNDIVIDED HIGHWAYS THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, APPROXIMATELY 250 FEET IN ADVANCE OF SUCH RESTRICTIONS. THE SIGN SHALL BE REPEATED EVERY 1 MILE FOR 60 AND 55 MPH ZONES AND EVERY ONE-HALF MILE FOR 50 MPH AND 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE.

THE SPEED LIMIT REDUCTION SHALL BE LIMITED TO ONLY THE PORTION OF THE PROJECT AND THE WORK THAT WARRANTED THE WORK ZONE SPEED LIMIT REDUCTION.

SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1250 FEET ON MULTI-LANE HIGHWAYS AND 500 FEET ON TWO-LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. 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 SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC. SHALL BE PER THE OMUTCD, WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR A DURATION OF MORE THAN 3 DAYS.

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

VARIABLE WORK ZONE SPEED ZONES USING DIGITAL SPEED LIMIT SIGN ASSEMBLIES SHALL NOT BE USED IN LOCATIONS WHERE A TRADITIONAL APPROVED WORK ZONE SPEED LIMIT HAS BEEN APPROVED AND/OR IMPLEMENTED.

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 REMOVING THE SIGNS AND SUPPORTS. SPEED LIMIT SIGNING FOR THE POINT OF RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE PAID FOR AS WORK ZONE SPEED LIMIT SIGNS. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, WORK ZONE SPEED LIMIT SIGN 42 EACH
ITEM 614, SPEED ZONE AHEAD SYMBOL SIGN 4 EACH

THE FOLLOWING TABLE PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT:

WZSZ REVISION NUMBER	COUNTY & ROUTE	SLM		PHASE/PART & DIRECTION	APPROVED SPEED LIMIT (MPH)
		FROM	TO		
WZ-60417	HAS-22	15.25	18.91	E.B. & W.B.	45
SPECIFIC WARRANTING CONDITIONS AND FACTORS					
LANE CLOSURE					

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.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

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

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.

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.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING 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. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. 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.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 100 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 AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

[illegible]

LOCATION	STATION		LENGTH FT	WIDTH FT	PAVEMENT AREA * Denotes CADD Area SQ YD	254		407		442		209		408		617		618		REMARKS	ESTIMATED QUANTITIES				
						IN.	PAVEMENT PLANING, ASPHALT CONCRETE SQ YD	TACK COAT ● 0.075 GAL./S.Y. GAL	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN CU YD	LINEAR GRADING STA	WIDTH	PRIME COAT, AS PER PLAN GAL	COMPACTED AGGREGATE CU. YD.	RUMBLE STRIPS, (ASPHALT CONCRETE) FT										
																						CALCULATED	TKB	CHECKED	JPB
																						HAS-22-15.25			
																						10			
																						26			

LOCATION	STATION		LENGTH	WIDTH	PAVEMENT AREA * Denotes CADD Area SQ YD	254		407	442		209	408		617	618	REMARKS	CALCULATED TKB CHECKED JPB
						IN.	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT ● 0.075 GAL./S.Y.	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN	LINEAR GRADING	WIDTH	PRIME COAT, AS PER PLAN	COMPACTED AGGREGATE	RUMBLE STRIPS, (ASPHALT CONCRETE)		
EASTBOUND	FROM	TO	FT	FT	SQ YD												
U.S. 22 OUTSIDE SHOULDER																	
	808+11.60	835+00.00	2,688.40	8	2,390	1 1/2	2,390	179	1 1/2	99.58	27	2	239	100	2688.40		
DECEL. LANE - C.R. 29	835+00.00	836+00.00	100.00	7	78	1 1/2	78	6	1 1/2	3.25	1	2	9	3	100.00		
DECEL. LANE - C.R. 29	836+00.00	837+87.00	187.00	6	125	1 1/2	125	9	1 1/2	5.21	2	2	17	5	187.00		
INTERSECTION W/ C.R. 29	838+65.00	867+00.00	2,835.00	8	240	1 1/2	240	18	1 1/2	10.00	28	2	252	10	2835.00		
	867+00.00	868+00.00	100.00	7.00	78	1 1/2	78	6	1 1/2	3.25	1	2	9	3	100.00		
	868+00.00	870+57.66	257.66	6	172	1 1/2	172	13	1 1/2	7.17	3	2	23	7	257.66		
	871+60.67	877+00.00	539.33	8	479	1 1/2	479	36	1 1/2	19.96	5	2	48	20	539.33		
	877+00.00	877+28.04	28.04	6	19	1 1/2	19	1	1 1/2	0.79	1	2	2	1	28.04		
	877+84.01	882+00.00	415.99	6	277	1 1/2	277	21	1 1/2	11.54	4	2	37	12	415.99		
	882+00.00	884+25.00	225.00	7	175	1 1/2	175	13	1 1/2	7.29	2	2	20	7	225.00		
	884+25.00	909+39.91	2,514.91	8	2,235	1 1/2	2,235	168	1 1/2	93.13	25	2	224	93	2514.91		
	911+25.79	926+15.89	1,490.10	8	1,325	1 1/2	1,325	99	1 1/2	55.21	15	2	132	55	1490.10		
																STRUCTURE HAS-22-1749R & APP SLABS-NO WORK	
	929+59.58	929+65.00	5.42	8	5	1 1/2	5	0.38	1 1/2	0.2100	1	2	1	1	5.42	STRUCTURE HAS-22-1753R & APP SLABS-NO WORK	
	931+49.67	936+31.52	481.85	8	428	1 1/2	428	32	1 1/2	17.83	5	2	43	18	481.85		
	936+88.24	973+85.00	3,696.76	8	3,286	1 1/2	3,286	246	1 1/2	136.92	37	2	329	137	3696.76		
	974+50.00	1001+36.40	2,686.40	8	2,388	1 1/2	2,388	179	1 1/2	99.50	27	2	239	100	2686.40		
SUBTOTAL							13,700	1,028		571	184		1,623	572	18,251.86		
WESTBOUND																	
U.S. 22 OUTSIDE SHOULDER																	
	808+11.60	873+64.97	6,553.37	8	5,825	1 1/2	5,825	437	1 1/2	242.71	66	2	583	243	6553.37		
	874+20.94	888+70.23	1,449.29	8	1,288	1 1/2	1,288	97	1 1/2	53.67	14	2	129	54	1449.29		
	889+33.42	908+59.21	1,925.79	8	1,712	1 1/2	1,712	128	1 1/2	71.33	19	2	171	71	1925.79		
	910+99.09	918+30.63	731.54	8	650	1 1/2	650	49	1 1/2	27.08	7	2	65	27	731.54		
	918+96.00	925+33.00	637.00	8	566	1 1/2	566	42	1 1/2	23.58	6	2	57	24	637.00		
																STRUCTURE HAS-22-1749L & APP SLABS-NO WORK	
	929+79.39	973+60.00	4,380.61	8	3,894	1 1/2	3,894	292	1 1/2	162.25	44	2	389	162	4380.61	STRUCTURE HAS-22-1753L & APP SLABS-NO WORK	
	974+50.00	1001+36.40	2,686.40	8	2,388	1 1/2	2,388	179	1 1/2	99.50	27	2	239	100	2686.40		
SUBTOTAL							16,323	1,224		680	184		1,632	680	18,364.00		

23-FEB-2015 1:11PM

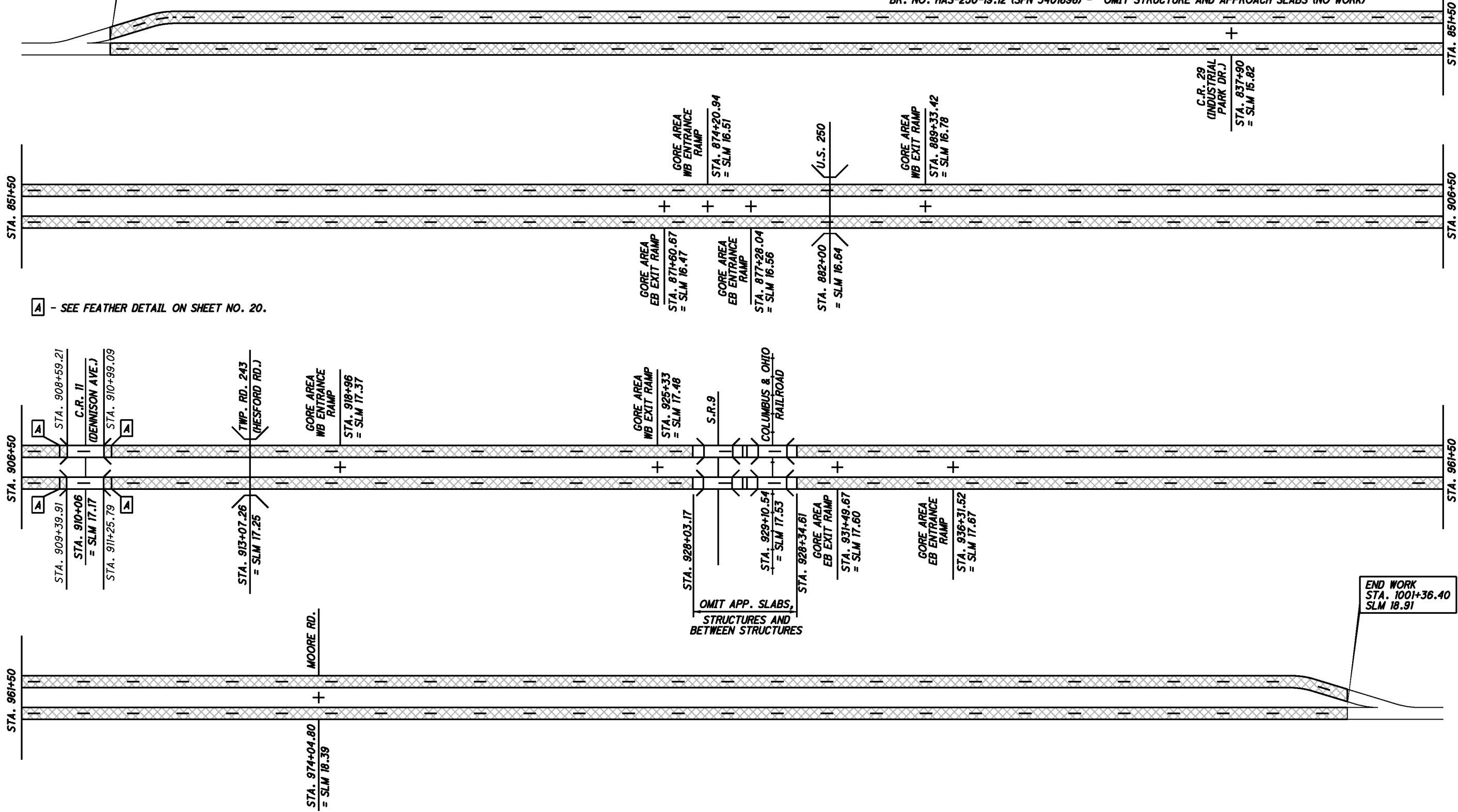
\\PROJECTS\87338\Prod\Drawings\87338.dgn

tbarr

LOCATION	STATION		LENGTH	WIDTH	PAVEMENT AREA * Denotes CADD Area SQ YD	IN.	254	407	IN.	442	209	408	617	618	REMARKS		
	* CENTERLINE U.S. 22 STATION	FROM					TO	PAYEMENT PLANING, ASPHALT CONCRETE		TACK COAT ● 0.075 GAL./S.Y.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN	LINEAR GRADING	WIDTH	PRIME COAT, AS PER PLAN		COMPACTED AGGREGATE	RUMBLE STRIPS, (ASPHALT CONCRETE)
U.S. 22 & U.S 250 INT																	
RAMP "A"	1+54.70	8+64.83	710.13	16	1,262	1 1/2	1,262	95	1 1/2	52.58							
RAMP "A"	8+64.83	10+17.31	152.48	14	237	1 1/2	237	18	1 1/2	9.88							
RAMP "A"	10+17.31	11+07.05	89.74	12	120	1 1/2	120	9	1 1/2	5.00							
RAMP "A"	11+07.05	*894+75.00	100.00	6	67	1 1/2	67	5	1 1/2	2.79							
RAMP "A" GORE AREA	5+59.49	8+64.83	305.34		*239.00	1 1/2	239	18	1 1/2	9.96							
RAMP "A" LT. SHOULDER	1+54.70	5+59.49	404.79	6	270	1 1/2	270	20	1 1/2	11.25	4.05	2	36	11			
RAMP "A" LT. SHOULDER	5+59.49	6+59.58	100.09	7	78	1 1/2	78	6	1 1/2	3.25	1.00	2	9	3			
RAMP "A" RT. SHOULDER	1+54.70	5+59.49	404.79	3	135	1 1/2	135	10	1 1/2	5.63	4.05	2	36	6			
RAMP "B"	*868+50.00	0+00	225.00	6	150	1 1/2	150	11	1 1/2	6.25							
RAMP "B"	0+00	2+89.97	289.97	12	387	1 1/2	387	29	1 1/2	16.13							
RAMP "B"	2+89.97	3+43.07	53.10	13	78	1 1/2	78	5.85	1 1/2	3.2500							
RAMP "B"	3+43.07	4+43.07	100.00	16	178	1 1/2	178	13	1 1/2	7.42							
RAMP "B"	4+43.07	4+53.07	10.00	16	18	1 1/2	18	1	1 1/2	0.75							
RAMP "B"	4+53.07	7+67.68	314.61	16	559	1 1/2	559	42	1 1/2	23.29							
RAMP "B"	7+67.68	11+71.61	403.93	34	1,526	1 1/2	1,526	114	1 1/2	63.58							
RAMP "B" AND U.S. 250	11+71.61	12+54.21	82.60		*663	1 1/2	663	50	1 1/2	27.63							
RAMP "B" GORE AREA	3+22.83	3+42.72	19.89		*4	1 1/2	4	0.30	1 1/2	0.17							
RAMP "B" LT. SHOULDER	2+89.98	3+43.07	53.09	8	47	1 1/2	47	3.53	1 1/2	2.00	0.53	2	5	2			
RAMP "B" LT. SHOULDER	3+43.07	3+83.07	40.00	7	31	1 1/2	31	2.33	1 1/2	1.00	0.40	2	4	1			
RAMP "B" LT. SHOULDER	3+83.07	7+35.00	351.93	6	235	1 1/2	235	17.63	1 1/2	10.00	3.52	2	31	10			
INTERSECTION WITH C.R. 2	7+35.00	8+25.00	90.00	20	*133	1 1/2	*133	9.98	1 1/2	5.54	0.90	2	8	6			
RAMP "B" LT. SHOULDER	8+25.00	11+71.61	346.61	15	578	1 1/2	578	43.35	1 1/2	24.08	3.47	2	31	24			
RAMP "B" RT. SHOULDER	3+42.72	7+07.68	364.96	3	122	1 1/2	122	9.15	1 1/2	5.08	3.65	2	32	5			
RAMP "B" RT. SHOULDER	7+07.68	7+67.68	60.00	13	87	1 1/2	87	6.53		0.60				4			
RAMP "B" RT. SHOULDER	7+67.68	11+71.61	403.93	16	718	1 1/2	718	53.85	1 1/2	29.92	4.04	2	36	30			
RAMP "C"	*867+00.00	0+00	100.00	6	67	1 1/2	67	5.03	1 1/2	2.79							
RAMP "C"	0+00	2+57.66	257.66	12	344	1 1/2	344	25.80	1 1/2	14.33							
RAMP "C"	2+57.66	3+54.30	96.64	16.25	174	1 1/2	174	13.05	1 1/2	7.25							
RAMP "C"	3+54.30	4+29.66	75.36	19	159	1 1/2	159	11.93	1 1/2	6.63							
RAMP "C"	4+29.66	4+39.66	10.00	16.75	19	1 1/2	19	1.43	1 1/2	0.79							
RAMP "C"	4+39.66	9+60.88	521.22	16	927	1 1/2	927	69.53	1 1/2	38.63							
RAMP "C" GORE AREA	3+17.63	3+54.49	36.86		*100	1 1/2	*100	7.50	1 1/2	4.17							
RAMP "C" RT. SHOULDER	2+57.66	4+54.30	196.64	7	153	1 1/2	153	11.48	1 1/2	6.38	1.97	2	17	6			
RAMP "C" RT. SHOULDER	4+54.30	9+60.88	506.58	6.00	338	1 1/2	338	25.35	1 1/2	14.08	5.07	2	45	14			
RAMP "C" LT. SHOULDER	3+54.49	8+56.40	501.91	3.00	167	1 1/2	167	12.53	1 1/2	6.96	5.02	2	45	7			
RAMP "D"	0+00	2+21.73	221.73	33.50	825	1 1/2	825	61.88	1 1/2	34.38							
RAMP "D"	2+21.73	4+24.00	202.27	34	764	1 1/2	764	57.30	1 1/2	31.83							
RAMP "D"	4+24.00	8+18.89	394.89	17	746	1 1/2	746	55.95	1 1/2	31.08							
RAMP "D"	8+18.89	9+18.89	100.00	16	178	1 1/2	240	13.35	1 1/2	7.42							
RAMP "D"	9+18.89	9+72.00	53.11	13.25	78	1 1/2	78	5.85	1 1/2	3.25							
RAMP "D"	9+72.00	13+87.99	415.99	12	555	1 1/2	555	41.63	1 1/2	23.13							
RAMP "D"	13+87.99	*884+25.00	225.00	6	150	1 1/2	150	11.25	1 1/2	6.25							
RAMP "D" GORE AREA	9+18.89	9+39.01	20.12		*4	1 1/2	4	0.30	1 1/2	0.16							
RAMP "D" RT. SHOULDER	0+00	8+78.89	878.89	6	586	1 1/2	586	43.95	1 1/2	24.42	8.79	2	78	24			
RAMP "D" RT. SHOULDER	8+78.89	9+72.00	93.11	7	72	1 1/2	72	5.40	1 1/2	3.00	0.93	2	8	3			
RAMP "D" LT. SHOULDER	0+00	2+21.73	221.73	6	148	1 1/2	148	11.10	1 1/2	6.17	2.22	2	20	6			
RAMP "D" LT. SHOULDER	2+21.73	4+24.00	202.27	6	135	1 1/2	135	10.13	1 1/2	5.63	2.02	2	18	6			
RAMP "D" LT. SHOULDER	4+86.20	8+18.89	332.69	3	111	1 1/2	111	8.33	1 1/2	4.63	3.33	2	30	5			

LOCATION	STATION *CL U.S. 22 STATION		LENGTH	WIDTH	PAVEMENT AREA * Denotes CADD Area SQ YD	254		407		442		209		408		617		618		REMARKS	ESTIMATED QUANTITIES	H A S - 2 2 - 1 5 . 2 5
						IN.	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT ● 0.075 GAL./S.Y.	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN	LINEAR GRADING	WIDTH	PRIME COAT, AS PER PLAN	COMPACTED AGGREGATE	RUMBLE STRIPS, (ASPHALT CONCRETE)							
																SQ YD	GAL	CU YD	STA			
U.S. 22 & S.R. 9 INT	FROM	TO	FT	FT	SQ YD																	
RAMP 'E' AND S.R. 9	0+11.03	0+56.10			368 *	1 1/2	368	28	1 1/2	15.33												
RAMP 'E'	0+56.10	6+82.09	625.99	34	2,365	1 1/2	2,365	177	1 1/2	98.54												
RAMP 'E'	6+82.09	10+98.69	416.6	17	787	1 1/2	787	59	1 1/2	32.79												
RAMP 'E'	10+98.69	11+98.69	100	19	211	1 1/2	211	16	1 1/2	8.79												
RAMP 'E'	11+98.69	13+09.01	110.32	16	196	1 1/2	196	15	1 1/2	8.17												
HAS-22-1749 L																						
RAMP 'E'	14+98.29	15+14.43	16.14	12	22	1 1/2	22	2	1 1/2	0.92												
HAS-22-1753 L																						
RAMP 'E'	16+16.01	931+00.00 *	100	6	67	1 1/2	67	5	1 1/2	2.79												
RAMP 'E' GORE AREA	11+98.52	12+40.52	42		103 *	1 1/2	103	8	1 1/2	4.29												
RAMP 'E' LT. SHOULDER	0+56.10	10+98.69	1042.59	6	695	1 1/2	695	52	1 1/2	28.96	10	2	93	29								
RAMP 'E' LT. SHOULDER	10+98.69	11+98.52	99.83	7	78	1 1/2	78	6	1 1/2	3.25	1	2	9	3								
RAMP 'E' LT. SHOULDER	11+98.52	13+09.01	110.49	8	98	1 1/2	98	7	1 1/2	4.08	1	2	10	4								
RAMP 'E' RT. SHOULDER	0+56.10	6+82.09	625.99	6	417	1 1/2	417	31	1 1/2	17.38	6	2	56	17								
RAMP 'E' RT. SHOULDER	7+33.40	11+98.52	465.12	3	155	1 1/2	155	12	1 1/2	6.46	5	2	41	6								
RAMP 'F'	914+25.00 *	0+00	225	6.0	150	1 1/2	150	11	1 1/2	6.25												
RAMP 'F'	0+00	1+80.63	180.63	12.0	241	1 1/2	241	18	1 1/2	10.04												
RAMP 'F'	1+80.63	3+00.00	119.37	13.3	176	1 1/2	176	13	1 1/2	7.33												
RAMP 'F'	3+00.00	4+00.00	100	15.3	170	1 1/2	170	13	1 1/2	7.08												
RAMP 'F'	4+00.00	8+20.28	420.28	16.00	747	1 1/2	747	56	1 1/2	31.13												
RAMP 'F'	8+20.28	8+30.28	10	17	18	1 1/2	18	1	1 1/2	0.75												
RAMP 'F'	8+30.28	9+30.28	100	17.00	189	1 1/2	189	14	1 1/2	7.88												
RAMP 'F' GORE AREA	2+19.67	2+43.72	24.05		5 *	1 1/2	5	0	1 1/2	0.21												
RAMP 'F' LT. SHOULDER	1+80.63	2+43.72	63.09	8	56	1 1/2	56	4	1 1/2	2.33	1	2	6	2								
RAMP 'F' LT. SHOULDER	2+43.72	2+83.72	40	7	31	1 1/2	31	2	1 1/2	1.29	0.40	2	4	1								
RAMP 'F' LT. SHOULDER	2+83.72	9+30.28	646.56	6	431	1 1/2	431	32	1 1/2	17.96	6	2	57	18								
RAMP 'F' RT. SHOULDER	2+43.72	8+58.01	614.29	3	205	1 1/2	205	15	1 1/2	8.54	6	2	55	9								
RAMP 'G'	924+75.00 *	0+00	100	6.00	67	1 1/2	67	5	1 1/2	2.79												
HAS-22-1749 R						1 1/2			1 1/2													
RAMP 'G'	1+93.83	2+39.80	45.97	12	61	1 1/2	61	5	1 1/2	2.54												
HAS-22-1753 R																						
RAMP 'G'	3+84.58	5+20.94	136.36	16	246	1 1/2	246	18	1 1/2	10.25												
RAMP 'G'	5+20.94	5+69.28	48.34	20.50	110	1 1/2	110	8	1 1/2	4.58												
RAMP 'G'	5+69.28	6+69.09	99.81	19.00	211	1 1/2	211	16	1 1/2	8.79												
RAMP 'G'	6+69.09	9+95.00	325.91	17.00	616	1 1/2	616	46	1 1/2	25.67												
RAMP 'G'	9+95.00	14+72.72	477.72	34.00	1,805	1 1/2	1,805	135	1 1/2	75.21												
HAS-250-19.12																						
RAMP 'G'	15+97.28	16+79.20	81.92	34.00	309	1 1/2	309	23	1 1/2	12.88												
RAMP 'G' AND S.R. 9	16+76.20	17+88.83	112.63		730 *	1 1/2	730	55	1 1/2	30.42												
RAMP 'G' GORE AREA	5+20.94	5+69.28	48.34		76 *	1 1/2	76	6	1 1/2	3.17												
RAMP 'G' RT. SHOULDER	3+90.00	5+69.28	179.28	8.00	159	1 1/2	159	12	1 1/2	6.63	2	2	16	7								
RAMP 'G' RT. SHOULDER	5+69.28	6+69.09	99.81	7	78	1 1/2	78	6	1 1/2	3.25	1	2	9	3								
RAMP 'G' RT. SHOULDER	6+69.09	14+72.72	803.63	6	536	1 1/2	536	40	1 1/2	22.33	8	2	71	22								
HAS-250-19.12						1 1/2			1 1/2													
RAMP 'G' RT. SHOULDER	15+97.28	16+79.20	81.92	6	55	1 1/2	55	4	1 1/2	2.29	1	2	7	2								
RAMP 'G' LT. SHOULDER	5+69.28	9+21.11	351.83	3	117	1 1/2	117	9	1 1/2	4.88	4	2	31	5								
RAMP 'G' LT. SHOULDER	9+95.00	14+66.88	471.88	6.00	315	1 1/2	315	24	1 1/2	13.13	5	2	42	13								
HAS-250-19.12																						
RAMP 'G' LT. SHOULDER	15+91.44	16+79.20	87.76	6	59	1 1/2	59	4	1 1/2	2.46	2	2	8	2								

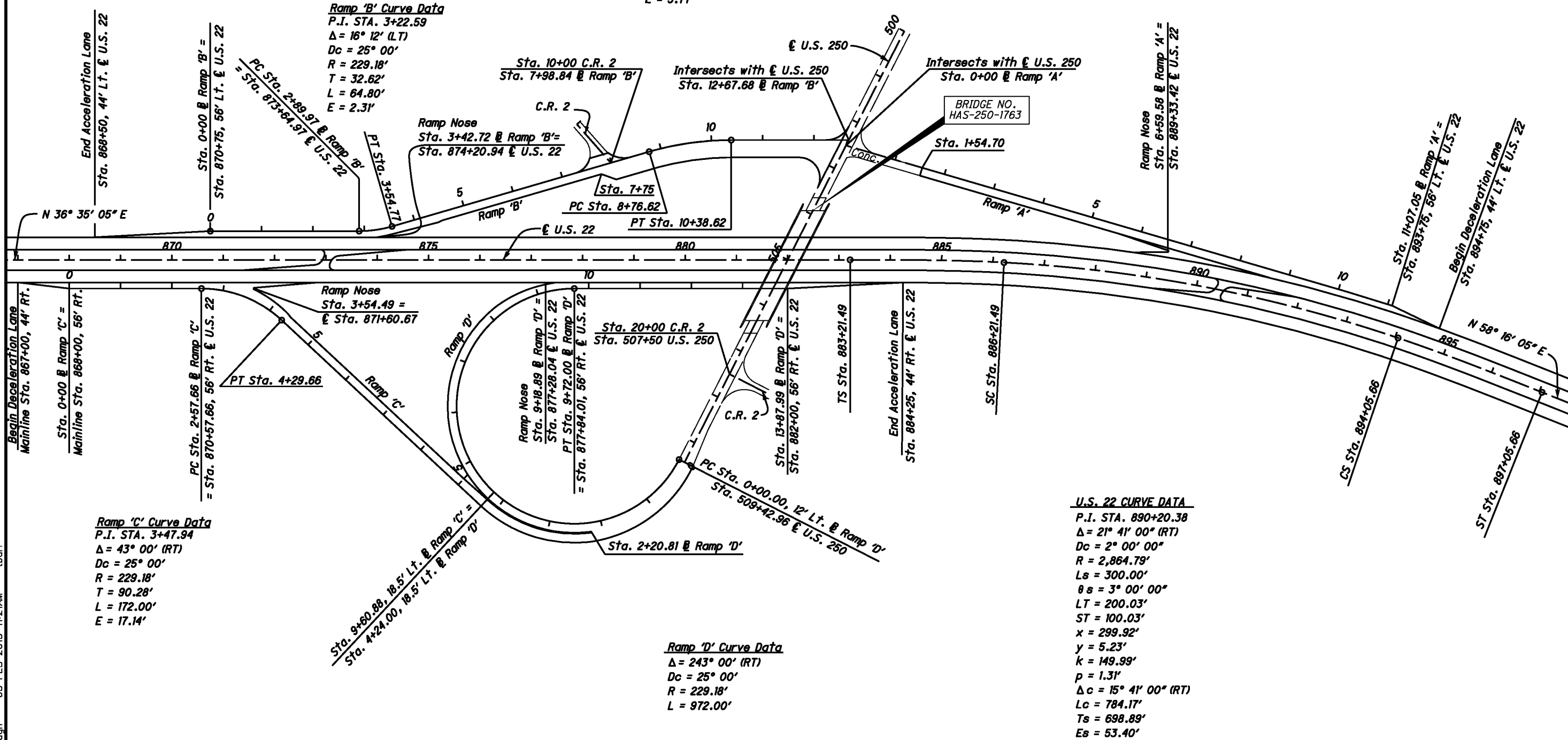
LOCATION	STATION * CENTERLINE U.S. 22 STATION		LENGTH	WIDTH	PAVEMENT AREA * Denotes CADD Area	254		407		442		209		408		617		618		REMARKS	ESTIMATED QUANTITIES	HAS-22-15.25	14 25
						IN.	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT @ 0.075 GAL./S.Y.	IN.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN	LINEAR GRADING	WIDTH	PRIME COAT, AS PER PLAN	COMPACTED AGGREGATE	RUMBLE STRIPS, (ASPHALT CONCRETE)								
																SQ YD	GAL	CU YD	STA				
	FROM	TO	FT	FT	SQ YD		SQ YD	GAL		CU YD	STA		GAL	CU. YD.	FT								
RAMP 'H'	0+00	0+78.00	78.00	17	147	1 1/2	147	11	1 1/2	6.13													
RAMP 'H'	0+78.00	3+48.49	270.49	16	481	1 1/2	481	36	1 1/2	20.04													
RAMP 'H'	3+48.49	3+58.49	10.00	17	18	1 1/2	18	1	1 1/2	0.75													
RAMP 'H'	3+58.49	5+51.24	192.75	16	343	1 1/2	343	26	1 1/2	14.29													
RAMP 'H'	5+51.24	5+83.67	32.43	13	48	1 1/2	48	4	1 1/2	2.00													
RAMP 'H'	5+83.67	6+70.01	86.34	12	115	1 1/2	115	9	1 1/2	4.79													
RAMP 'H'	6+70.01	940+00.00 *	225.00	6	150	1 1/2	150	11	1 1/2	6.25													
RAMP 'H' GORE AREA	5+30.05	5+51.24	21.19		5 *	1 1/2	5	0	1 1/2	0.21													
RAMP 'H' LT. SHOULDER	0+78.00	5+30.05	452.05	3	151	1 1/2	151	11	1 1/2	6.29	5	2	40	6									
RAMP 'H' RT. SHOULDER	0+00	4+90.05	490.50	6	327	1 1/2	327	25	1 1/2	13.63	5	2	44	14									
RAMP 'H' RT. SHOULDER	4+90.05	5+30.05	40.00	7.00	31	1 1/2	31	2	1 1/2	1.29	0.40	2	4	1									
RAMP 'H' RT. SHOULDER	5+30.05	5+83.67	53.62	8.00	48	1 1/2	48	4	1 1/2	2.00	1	2	5	2									
TOTALS FROM THIS SHEET							1,864	140		78	10		92	23									
TOTALS CARRIED FROM SHEET 10							120,545	9,182		5,207	375		2,874	695	37496.84								
TOTALS CARRIED FROM SHEET 11							30,023	2,252		1,251	368		3,255	1,252	36615.86								
TOTALS CARRIED FROM SHEET 12							14,551	1,104		610	56		488	173									
TOTALS CARRIED FROM SHEET 13							13,531	1,015		564	59		514	145									
																				</			

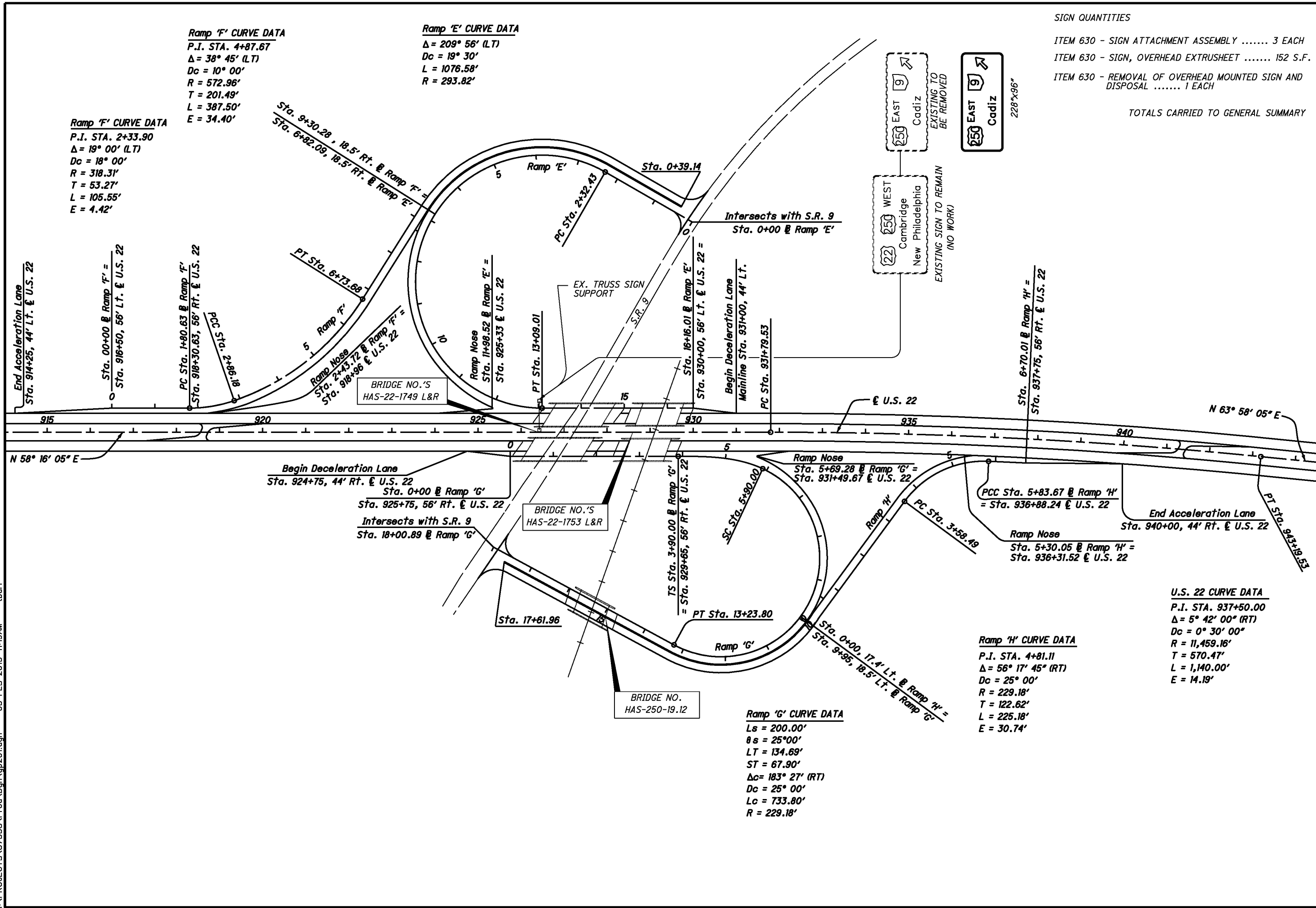


A - SEE FEATHER DETAIL ON SHEET NO. 20.

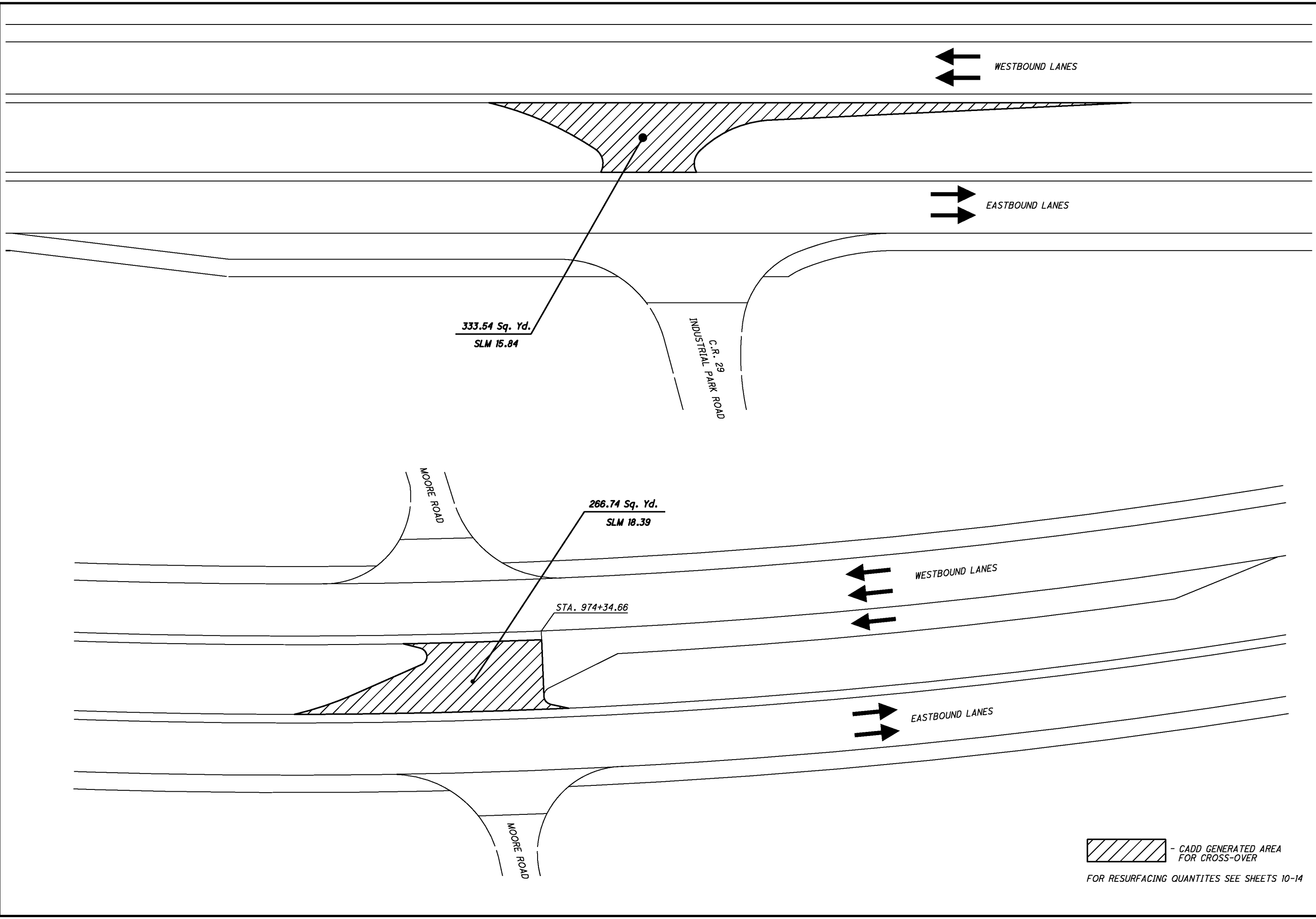
BRIDGE TREATMENT:
BR. NO. HAS-22-1717L (SFN 3400875) - PLANE APPROACH SLABS AND PROVIDE PROPOSED TREATMENT ACROSS APP. SLABS AND BRIDGE.
PROVIDE POLYMER MODIFIED EXPANSION JOINTS.
BR. NO. HAS-22-1717R (SFN 3400905) - PLANE APPROACH SLABS AND PROVIDE PROPOSED TREATMENT ACROSS APP. SLABS AND BRIDGE.
PROVIDE POLYMER MODIFIED EXPANSION JOINTS.

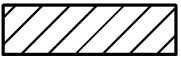
BR. NO. HAS-22-1724 (SFN 3400964) - OVERHEAD STRUCTURE TO BE REMOVED IN 2016 (NO WORK)
BR. NO. HAS-22-1749 L (SFN 3401081) - OMIT STRUCTURE AND APPROACH SLABS (NO WORK)
BR. NO. HAS-22-1749 R (SFN 3401111) - OMIT STRUCTURE AND APPROACH SLABS (NO WORK)
BR. NO. HAS-22-1753 L (SFN 3401146) - OMIT STRUCTURE AND APPROACH SLABS (NO WORK)
BR. NO. HAS-22-1753 R (SFN 3401170) - OMIT STRUCTURE AND APPROACH SLABS (NO WORK)
BR. NO. HAS-250-19.12 (SFN 3401898) - OMIT STRUCTURE AND APPROACH SLABS (NO WORK)



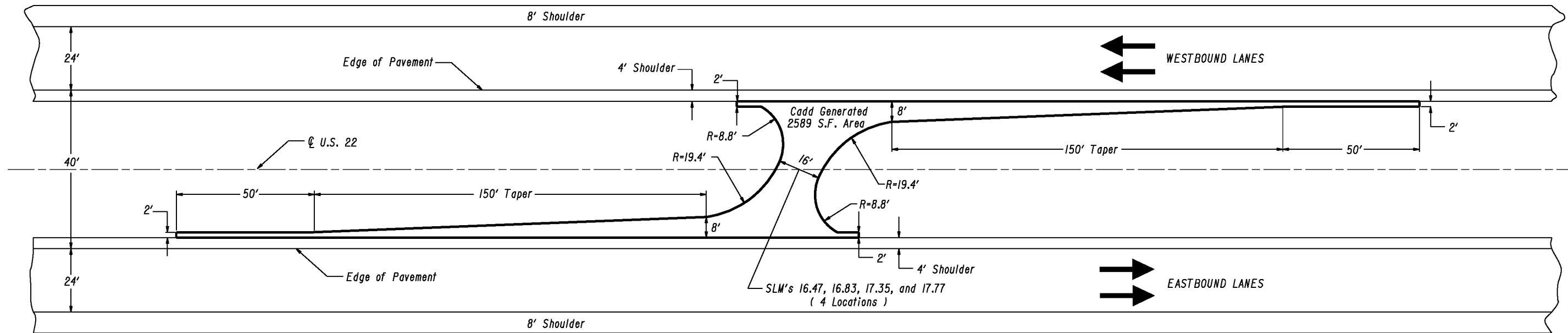


I:\PROJECTS\87338\Prod\Dgn\gd104.dgn 05-FEB-2015 11:18AM tbarr



 - CADD GENERATED AREA FOR CROSS-OVER
FOR RESURFACING QUANTITIES SEE SHEETS 10-14

I:\PROJECTS\87338\Prod\Dgn\gd103.dgn 05-FEB-2015 11:14AM tbarr



CALCULATIONS

ITEM 442 - 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN

2589 Sq. Ft. x 1/2" ÷ 12 ÷ 27 x 4 locations = 47.94 Cu. Yd. (Use 48 Cu. Yd.)

ITEM 407 - TACK COAT

2589 Sq. Ft. ÷ 9 x 0.075 Gal./Sq. Yd. x 4 locations = 86.3 Gallon (Use 86 Gallon)

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1/2" NOMINAL DEPTH)

2589 Sq. Ft. ÷ 9 x 4 locations = 1150.67 Sq. Yd. (Use 1151 Sq. Yd.)

(QUANTITIES CARRIED TO GENERAL SUMMARY)

I:\PROJECTS\87338\Prod\Dgn\87338GM002.dgn 05-FEB-2015 11:13AM tbarr

ITEM 442 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (446)

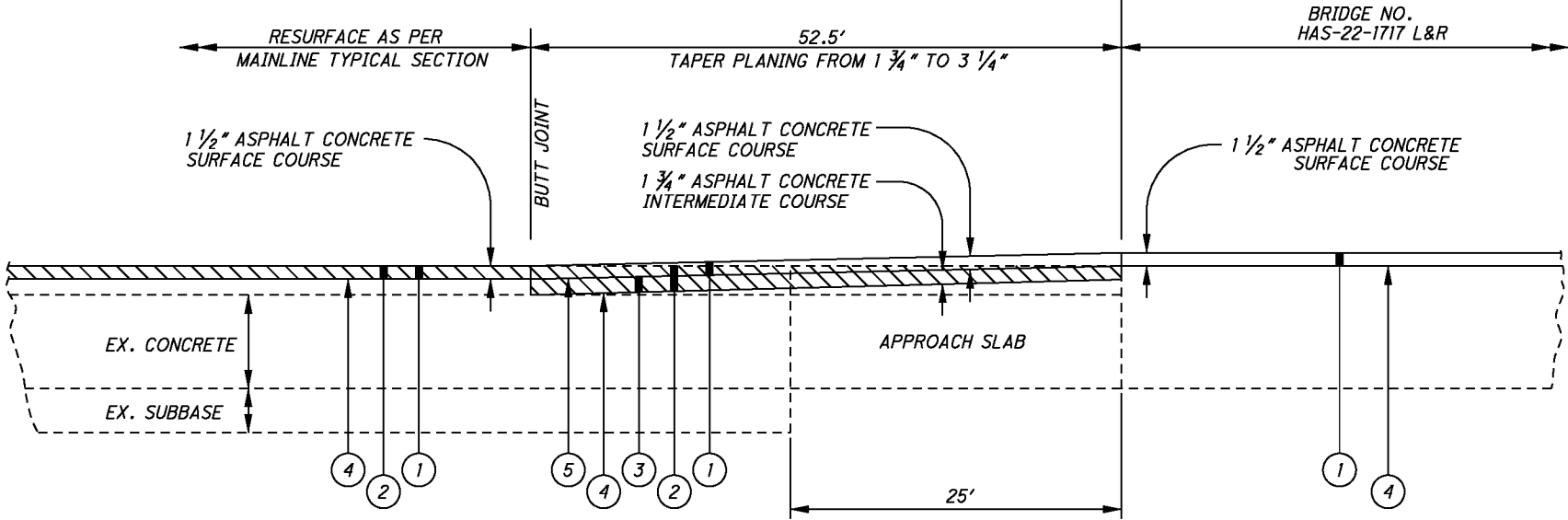
$52.5' \times 24' \times (1.75" \div 12) \div 27 = 6.81 \text{ CU. YD.} \times 4 = 27.2 \text{ CU. YD.}$

TOTAL 27 CU. YD.
(TOTAL CARRIED TO GENERAL SUMMARY)

ALL OTHER QUANTITIES ARE INCLUDED WITH PAVEMENT QUANTITY SHEETS 10-14.

HAS-22-1717 R
STA. 909+39.91 REAR
STA. 911+25.79 FORWARD

HAS-22-1717 L
STA. 908+59.21 REAR
STA. 910+99.09 FORWARD



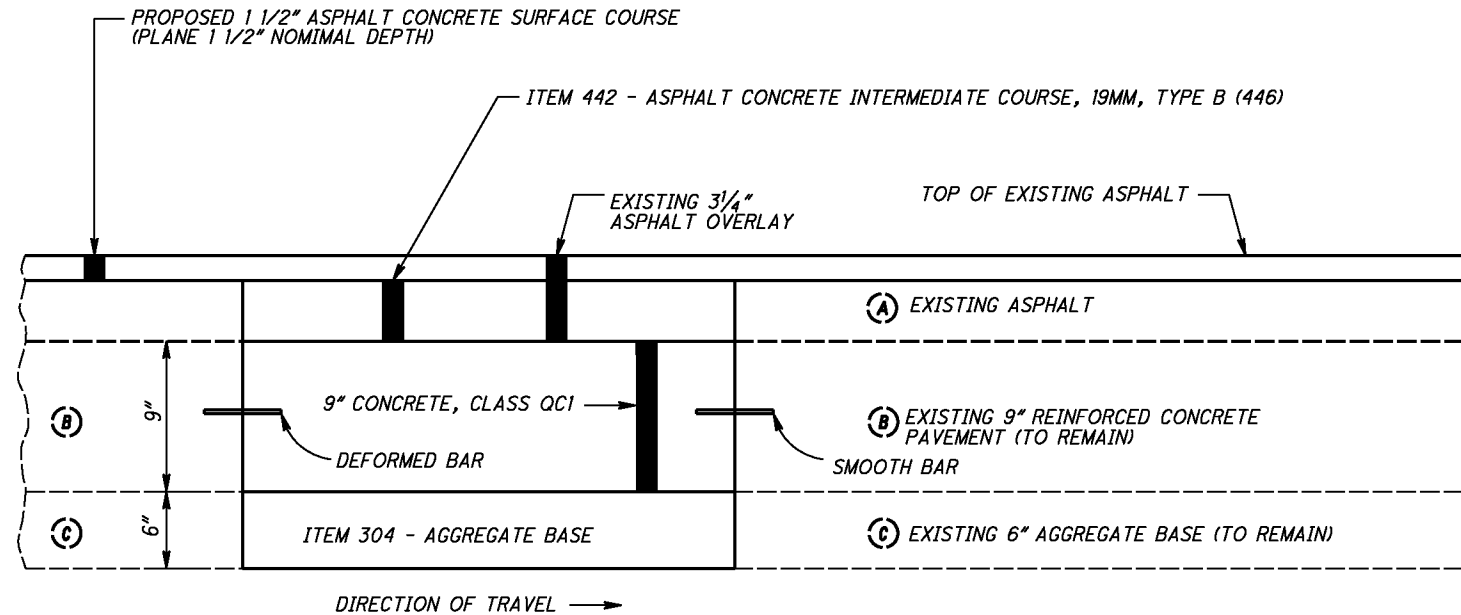
PAVEMENT TRANSITION AT BRIDGE NO. HAS-22-1717 L&R

 PAVEMENT PLANING

PROPOSED LEGEND

- ① — ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE B (446), AS PER PLAN
- ② — ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE
- ③ — ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (446)
- ④ — ITEM 407 - TACK COAT (0.075 GAL./S.Y.)
- ⑤ — ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (0.04 GAL./S.Y.)

I:\PROJECTS\087338\Prod\GnGAI00 (repair).dgn 05-FEB-2015 11:11AM tbarr



MAINLINE PAVEMENT REPAIR TYPICAL (CONCRETE)

FOR DETAILS NOT SHOWN SEE STANDARD CONSTRUCTION DRAWING BP-2.5
FOR TRANSVERSE JOINT REPAIR DETAILS AND BP-2.1 FOR LONGITUDINAL JOINT DETAILS
NOTE: INCLUDE SHOULDERS WITH THIS REPAIR WHERE CONCRETE SHOULDERS ARE PRESENT

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

THE ESTIMATED QUANTITIES ARE TO BE CONSIDERED APPROXIMATE. 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, REINFORCED CONCRETE, AND THE 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 442, ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (WITH A MAXIMUM LIFT THICKNESS OF 3 INCHES) UP TO THE LEVEL OF THE EXISTING ASPHALT CONCRETE SURFACE.

THIS WORK SHALL BE COMPLETED BEFORE RESURFACING BEGINS.

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	804 CU. YD.
ITEM 304 - AGGREGATE BASE	536 CU. YD.
ITEM 442 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE B (446)	450 CU. YD.
ITEM 509 - EPOXY COATED REINFORCING	56,638 POUNDS
ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	8492 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.

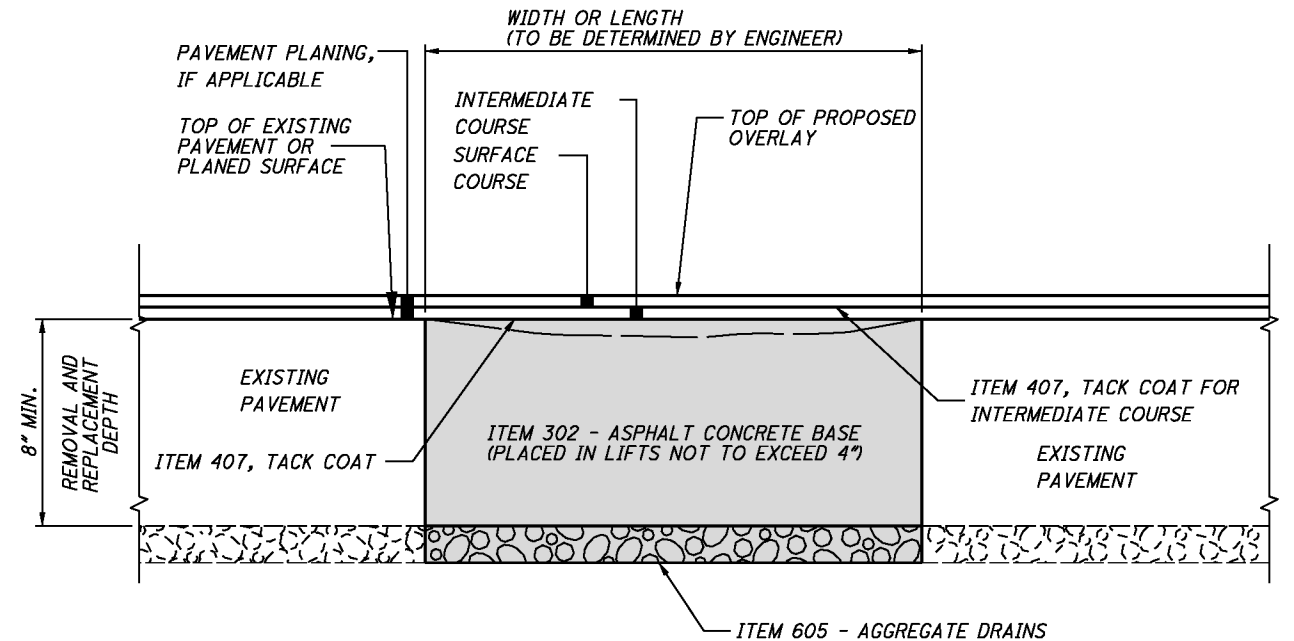
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN ____ 3088 SQ. YD.

ITEM 255 - FULL DEPTH PAVEMENT SAWING ____ 9,264 FT.

ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS FOR SPRINGS ____ 100 FT.

ITEM 611 - PRECAST REINFORCED CONCRETE OUTLET ____ 2 EACH

ITEM 601 - TIED CONCRETE BLOCK MAT, TYPE 1 ____ 6 SQ. YD.



PAVEMENT REPAIR TYPICAL

ITEM 253 - PAVEMENT REPAIR

THIS ITEM SHALL MEET THE REQUIREMENTS OF ITEM 253, PAVEMENT REPAIR AND THE ABOVE TYPICAL SECTION.

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

IF NEEDED, AN AGGREGATE DRAIN SHALL BE INSTALLED IN ACCORDANCE WITH CMS 605.07.

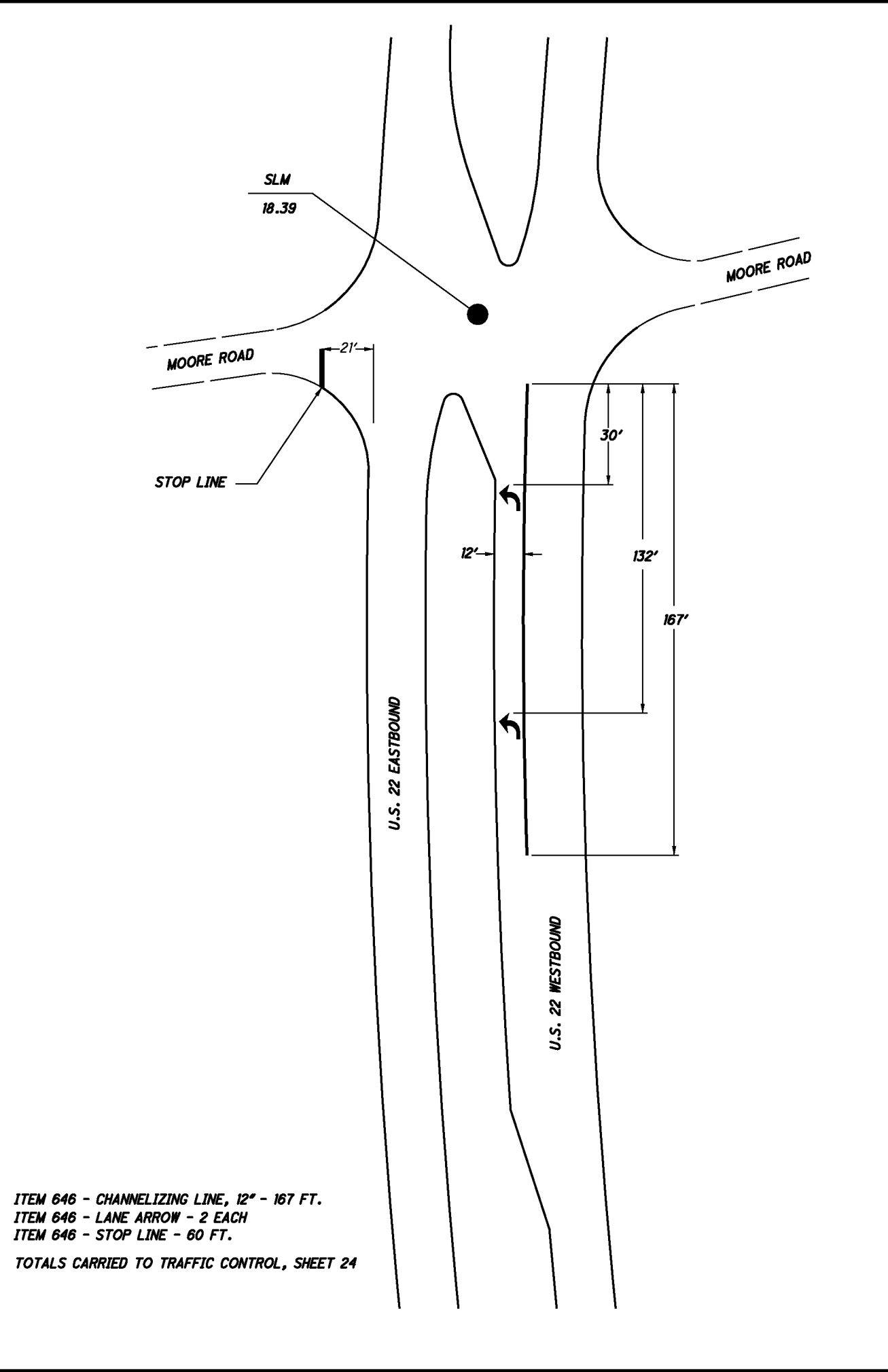
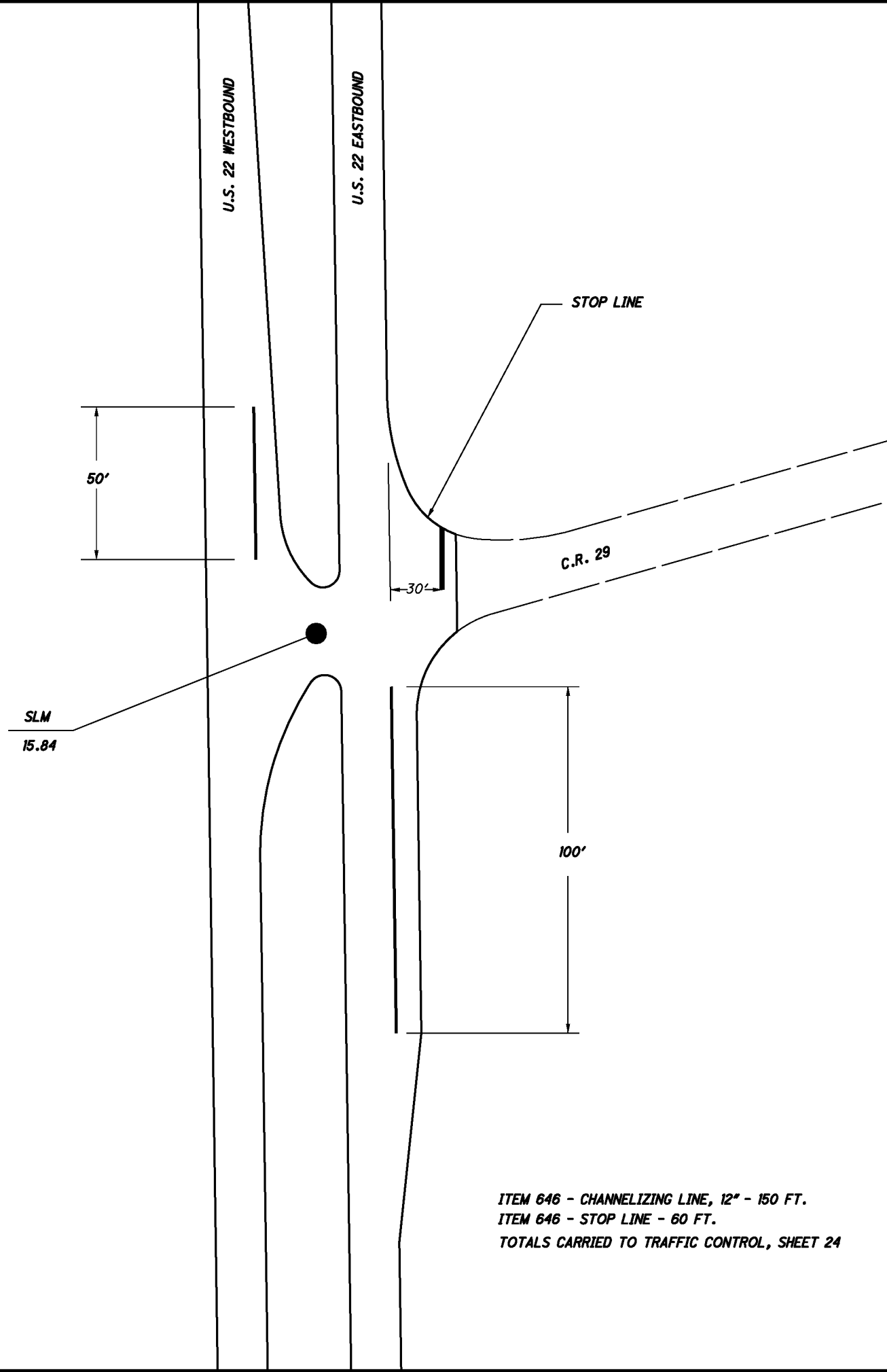
ALL PAVEMENT REPAIRS ARE TO BE COMPLETED PRIOR TO THE PAVING OPERATIONS.

THE ESTIMATED QUANTITIES FROM THIS SHEET HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DETERMINE THE SIZE AND LOCATION OF EACH PAVEMENT REPAIR. FINAL PAYMENT FOR THESE ITEMS SHALL BE FOR THE ACCEPTED QUANTITY COMPLETED IN PLACE.

ESTIMATED QUANTITIES

ITEM 253 - PAVEMENT REPAIR - 50 CU YD

ITEM 605 - AGGREGATE DRAINS - 100 FT



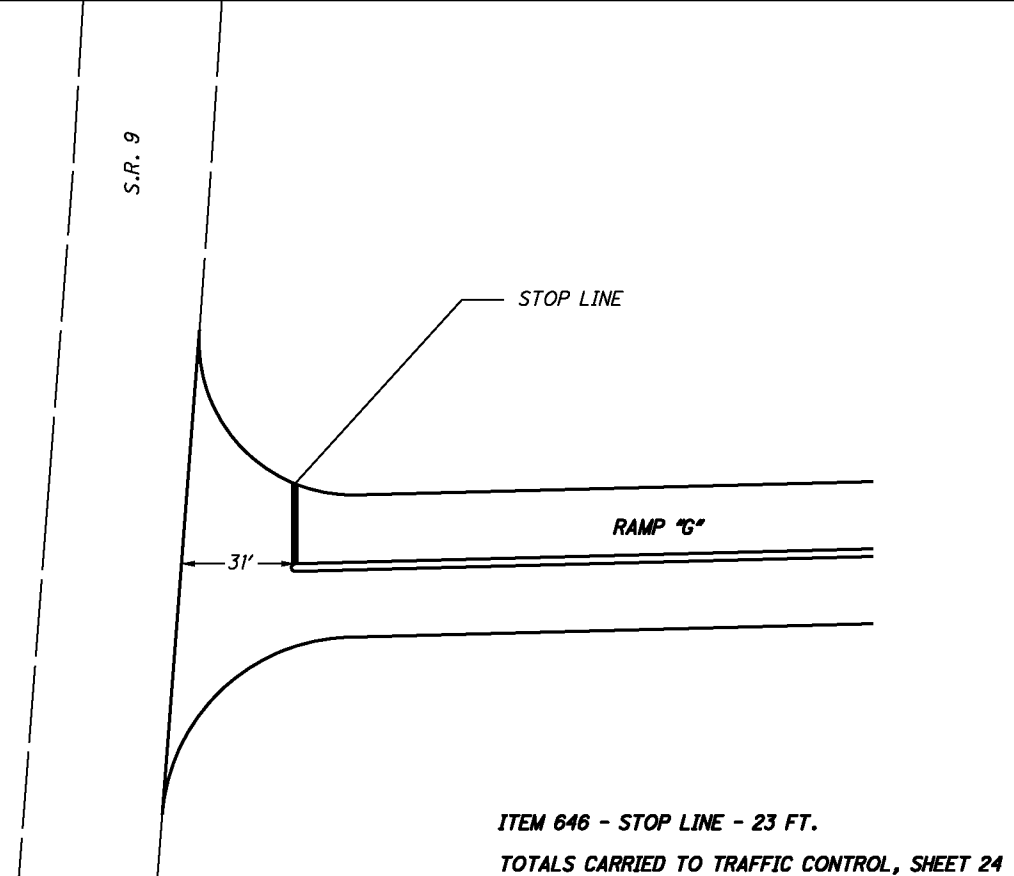
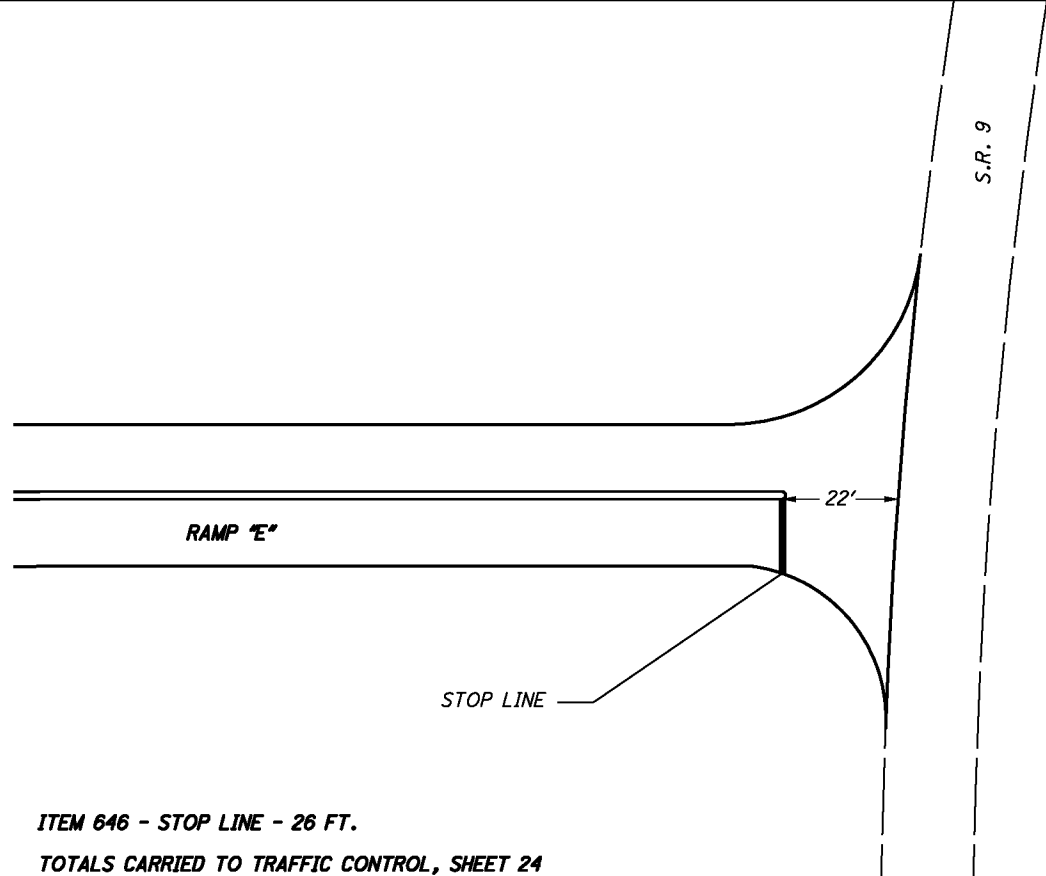
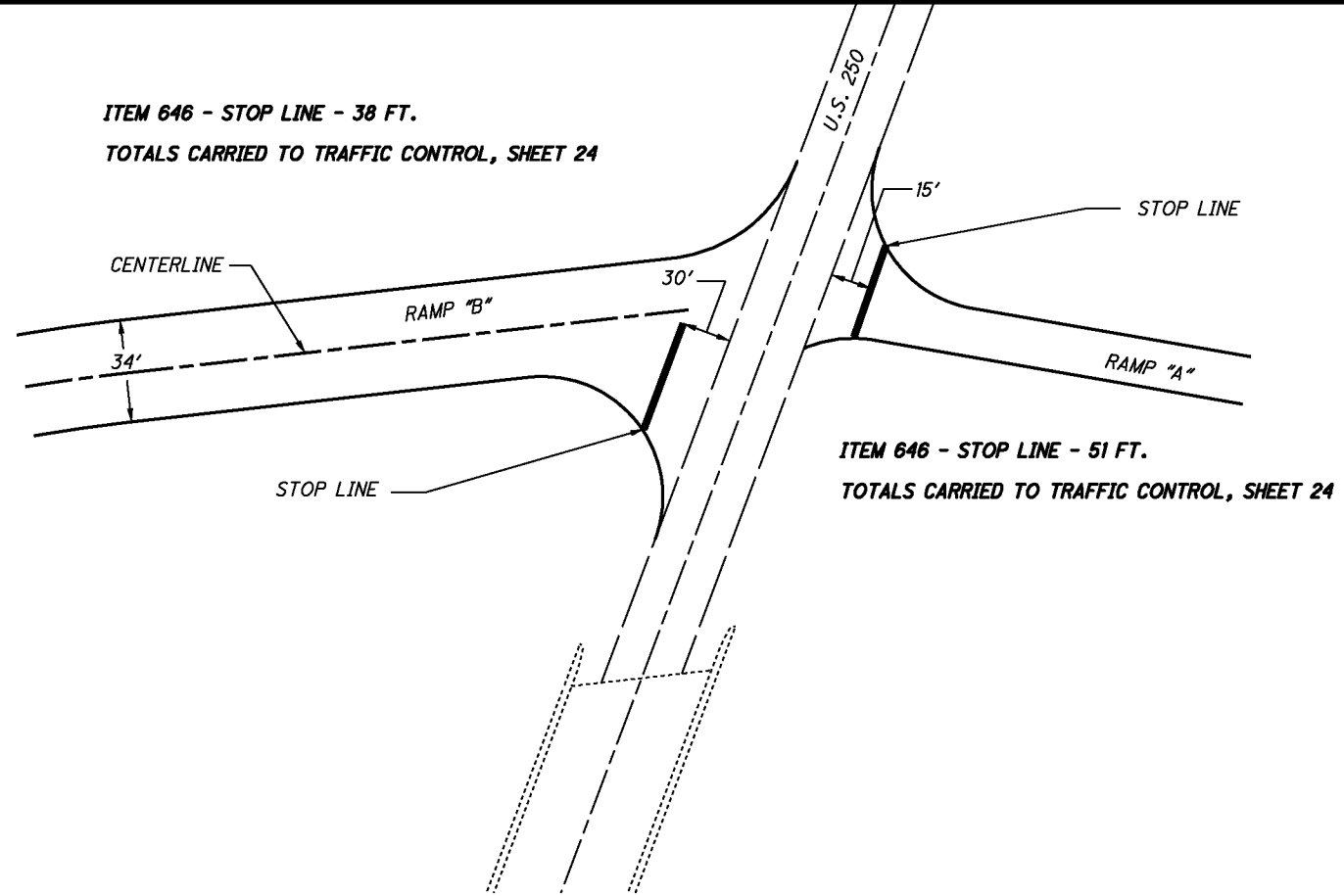
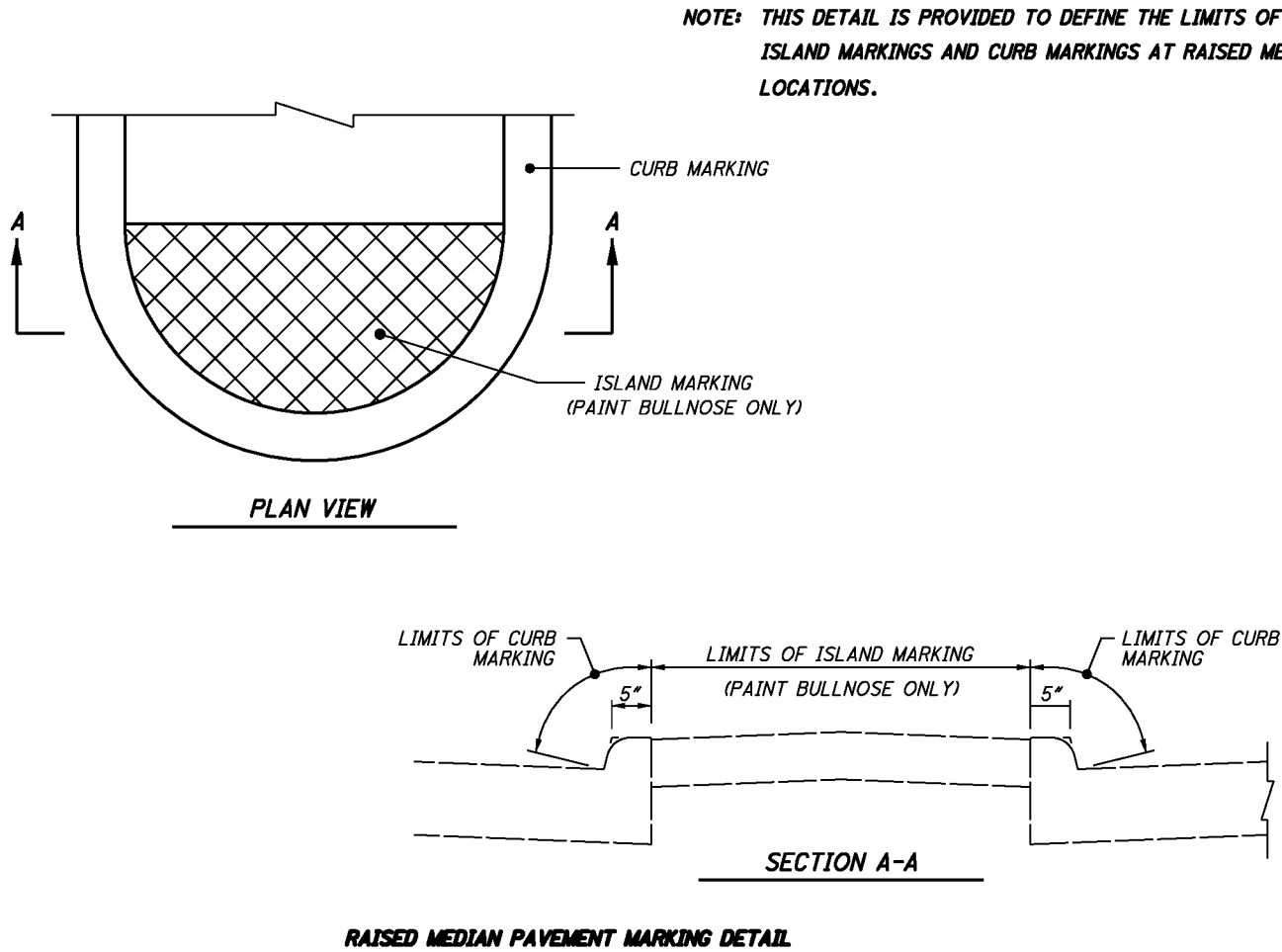
○

○

○

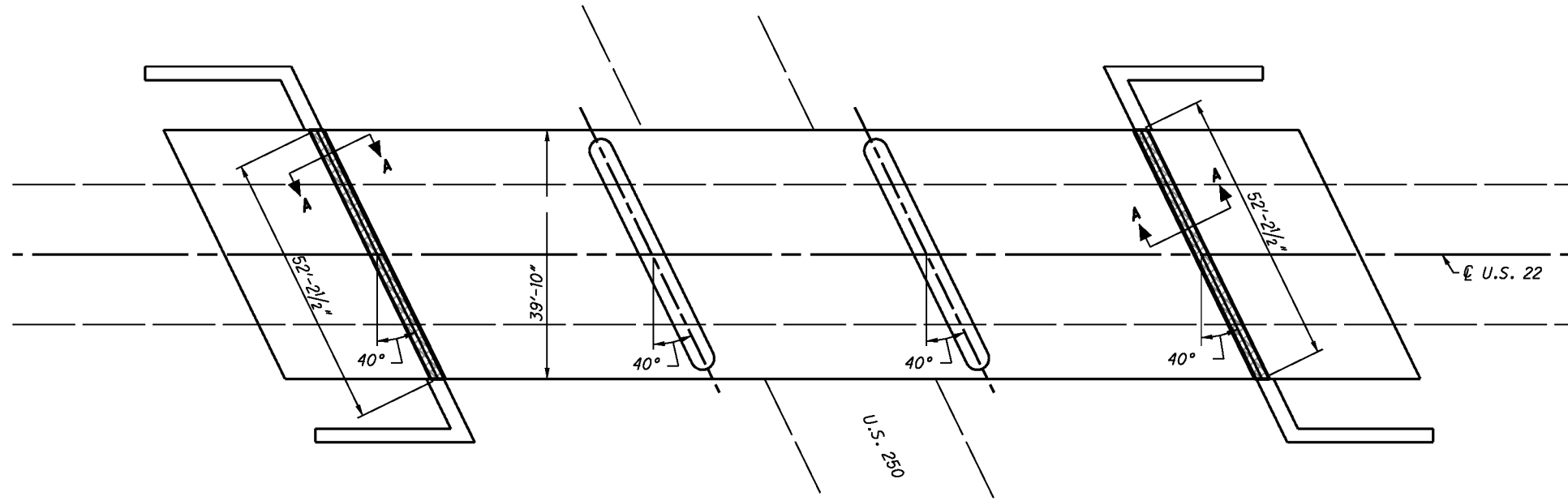
○

I:\PROJECTS\87338\Prod\Dgn\gd102.dgn 05-FEB-2015 10:46AM tbarr



NOTES: LT AND RT INDICATES SIDE IN THE DIRECTION OF TRAFFIC FLOW. LAY OUT GORE AREAS AS PER 3B-8 AND 3B-9 OF THE OMUTCD.			ITEM 646											ITEM 614						ITEM 621					CALCULATED TKB CHECKED JPB		
LOCATION	SLM OR STATION		SIDE	EDGE LINE, 6" (YELLOW)	EDGE LINE, 6" (WHITE)	LANE LINE, 6"	CENTER LINE	CHANNELIZING LINE, 12"	DOTTED LINE, 6"	STOP LINE	ISLAND MARKING	CURB MARKING	LANE ARROW	TRANSVERSE/DIAGONAL LINE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	WORK ZONE EDGE LINE, CLASS III, 642 PAINT (YELLOW)	WORK ZONE EDGE LINE, CLASS III, 642 PAINT (WHITE)	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	RPM					REMARKS	
	FROM	TO																			SPACING	2 WAY WHITE/RED	2 WAY YELLOW/RED	2 WAY YELLOW/YELLOW			
BEGIN PROJECT	TRANSITION AREA FROM 2 LANES TO 4					0.11								250							80			16	DBL. YEL. LINE		
US 22 EB	15.25	18.91	CTR			3.66									7.32						80	245			LANE LINE		
	15.25	18.91	LT	3.66												7.32											
	15.25	18.91	RT		3.66												7.32										
US 22 WB	15.25	18.91	CTR			3.66									7.32						80	245			LANE LINE		
	15.25	18.91	LT	3.66												7.32											
	15.25	18.91	RT		3.66												7.32										
CR 29	INTERSECTION							150		60								300		94							
MOORE RD.	INTERSECTION							167		60			2					334		120	40	6			CHAN. LINE		
END PROJECT	TRANSITION AREA FROM 4 LANES TO 2					0.06								283							80			8	DBL. YEL. LINE		
RAMP A	GORE AREA							500	370						0.02			1000			40	14			CHAN. LINE		
	0+12.00	6+59.58	LT	0.12												0.24					80		8		YEL. EDGE LINE		
	0+12.00	6+59.58	RT		0.12					51							0.24			102							
RAMP B	GORE AREA							164	400						0.08			328			40	6			CHAN. LINE		
	3+42.72	12+55.68	RT		0.17					38							0.34			76							
	7+75.00	12+55.68	LT		0.09												0.18										
	7+98.84	12+55.68	CTR				0.09												0.18		80			6			
	3+42.72	7+75.00	LT	0.08												0.16					80		7		YEL. EDGE LINE		
RAMP C	GORE AREA							200	400						0.06			400			40	6			CHAN. LINE		
	3+54.49	9+60.88	LT	0.11												0.22					80		9		YEL. EDGE LINE		
	3+54.49	9+60.88	RT		0.11												0.22										
RAMP D	GORE AREA							140	600						0.04			280			40	5			CHAN. LINE		
	0+00	2+20.81	CTR				0.06												0.12		80			5	DBL. YEL. LINE		
	0+00	4+24.00	LT		0.08												0.16										
	2+20.81	4+24.00	CTR	0.08							40	1250					0.16				80		7		YEL. EDGE LINE		
	0+00	9+18.89	RT		0.17												0.34										
RAMP E	4+24.00	9+18.89	LT	0.09												0.18					80		7		YEL. EDGE LINE		
	GORE AREA							340	500						0.06			680			40	10			CHAN. LINE		
	0+12.00	6+82.09	RT		0.13					26							0.26			52							
	0+12.00	6+82.09	LT		0.13												0.26										
	0+39.14	6+82.09	CTR	0.24							80	1450				0.48					80		17		YEL. EDGE LINE		
	6+82.09	11+98.52	RT		0.10												0.20										
RAMP F	6+82.09	11+98.52	LT	0.10												0.20					80		8		YEL. EDGE LINE		
	GORE AREA							200	500						0.08			400			40	6			CHAN. LINE		
	2+43.72	9+30.28	RT		0.13												0.26										
RAMP G	2+43.72	9+30.28	LT	0.13												0.26					80		10		YEL. EDGE LINE		
	GORE AREA							320	670						0.08			640			40	9			CHAN. LINE		
	5+69.28	9+95.00	RT		0.08												0.16										
	5+69.28	9+95.00	LT	0.08													0.16				80		7		YEL. EDGE LINE		
	9+95.00	17.61.96	CTR	0.29							40	1750				0.58					80		21		YEL. EDGE LINE		
	9+95.00	17+88.89	RT		0.15					23							0.30			46							
RAMP H	9+95.00	17+88.89	LT		0.15												0.30										
	GORE AREA							170	300						0.02			340			40	6			CHAN. LINE		
	0+00	5+30.05	RT		0.10												0.20										
	0+00	5+30.05	LT	0.10												0.20					80		8		YEL. EDGE LINE		
SUBTOTAL				8.7	9.0											17.5	18.1					558	109	14			
TOTALS CARRIED TO GENERAL SUMMARY				17.77	7.30	0.32	2351	3,740	258	180	4450	2	533	16	36		4,702	0.3	490			689					

I:\PROJECTS\87338\Prod\Dgn\87338_GI001 (polymer modified exp joint).dgn 05-FEB-2015 10:41AM tbarr



BR. NO. HAS-22-1717 L&R SCHEMATIC
(NOT TO SCALE)

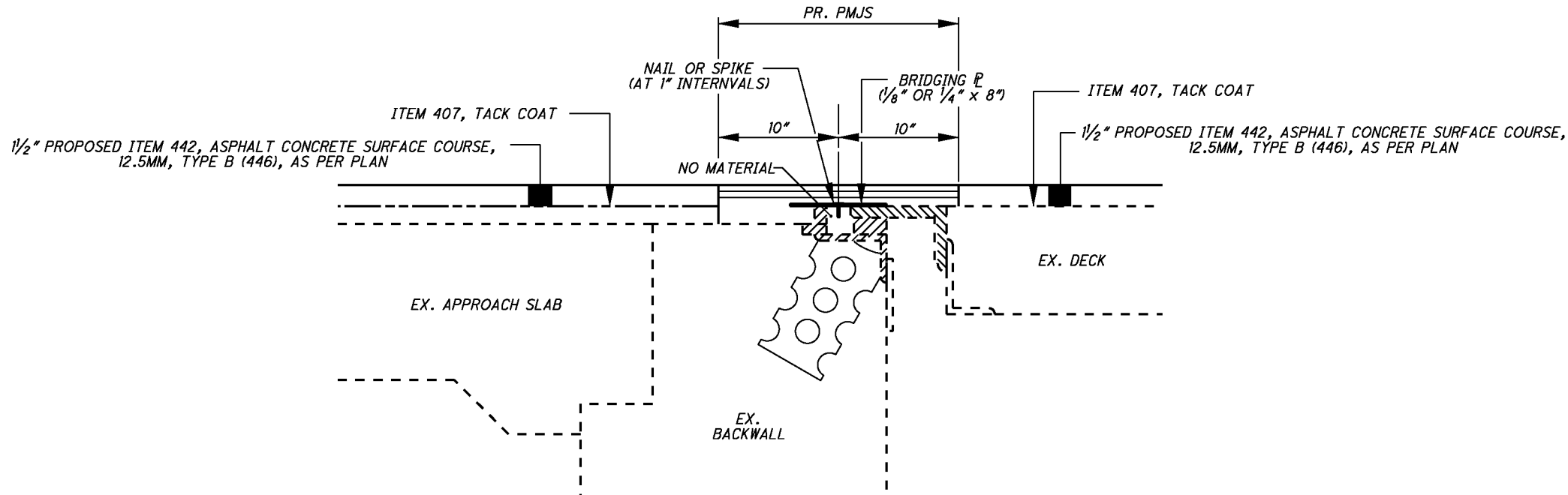
STRUCTURE:
HAS-22-1717 L (SFN 3400875)
HAS-22-1717 R (SFN 3400905)

ESTIMATED QUANTITIES

ITEM 846 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

HAS-22-1717 R		
STA. 909+39.91	REAR JOINT	52 FT.
STA. 911+25.79	FORWARD JOINT	52 FT.
HAS-22-1717 L		
STA. 908+59.21	REAR JOINT	52 FT.
STA. 910+99.09	FORWARD JOINT	52 FT.
TOTAL		208 FT.

TOTAL CARRIED TO GENERAL SUMMARY - 208 FT.



SECTION A-A
TYPICAL STEEL BEAM

