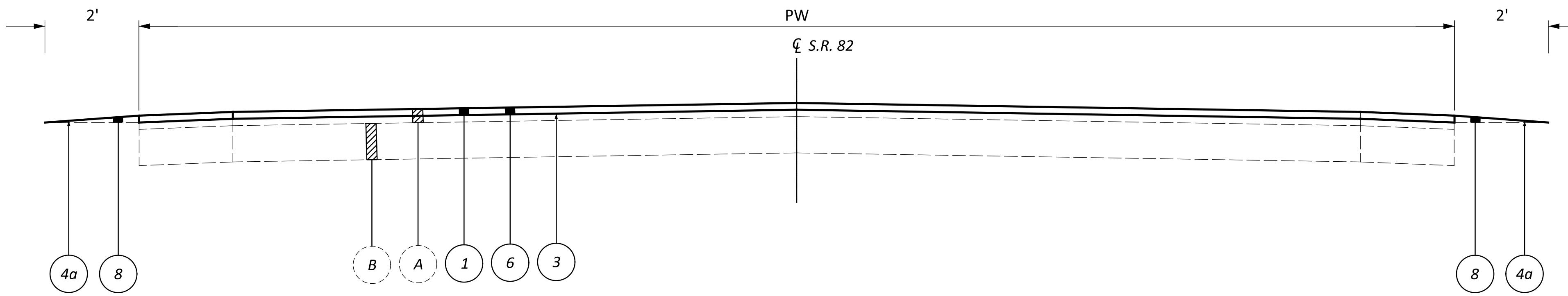
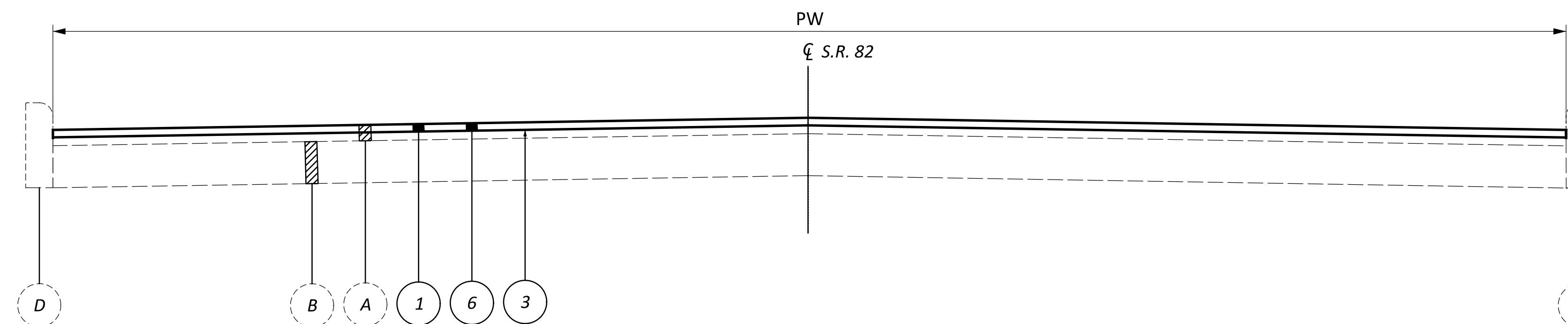


LEGEND

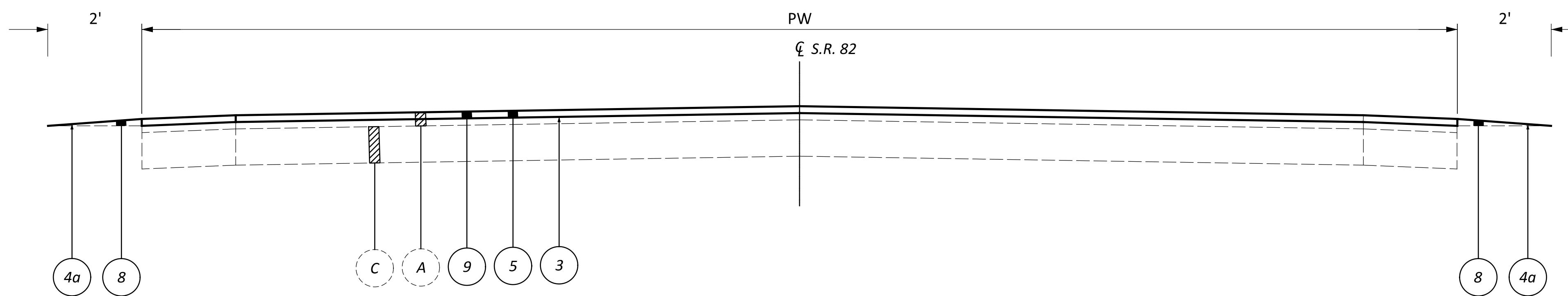
1	ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE ($T = 1.5"$)	6	ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M ($T = 1.5"$ UNLESS OTHERWISE SPECIFIED)	A	EXISTING ASPHALT CONCRETE
2	ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE ($T = 3.25"$)	7	ITEM 441, ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) ($T = 1.75"$ UNLESS OTHERWISE SPECIFIED)	B	EXISTING RIGID BASE (CONCRETE, REINFORCED CONCRETE, BRICK,
3	ITEM 407, NON-TRACKING TACK COAT @ 0.09 GAL/SY	8	ITEM 617 COMPACTED AGGREGATE, AS PER PLAN	C	EXISTING FLEXIBLE BASE (ASPHALT, MACADAM, AGGREGATE,
4	ITEM 407, NON-TRACKING TACK COAT @ 0.06 GAL/SY	9	ITEM 897 PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, ($T = 1"$ UNLESS OTHERWISE SPECIFIED)	D	EXISTING CURB
4a	ITEM 408, PRIME COAT @ 0.40 GAL/SY, AS PER PLAN	10	SAFETY EDGE - SEE BP 3.2 FOR DETAILS	E	EXISTING SIDEWALK
5	ITEM 424 FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (448), ($T = 1"$)				



TYPICAL SECTION 1 (SR 82)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	10.67	12.86	2.19	30



TYPICAL SECTION 2 (SR 82)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	12.86	13.77	0.91	26



TYPICAL SECTION 3 (SR 82)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	13.77	14.46	0.69	35
	14.46	14.56	0.1	35-46
	14.56	14.62	0.06	46
	14.62	14.72	0.1	46-35
	14.72	15.18	0.46	35
	15.2	16.06	0.86	35
	16.91	17.44	0.53	32
	17.48	17.69	0.21	30
	17.69	17.89	0.2	28

TYPICAL SECTIONS



DESIGNER

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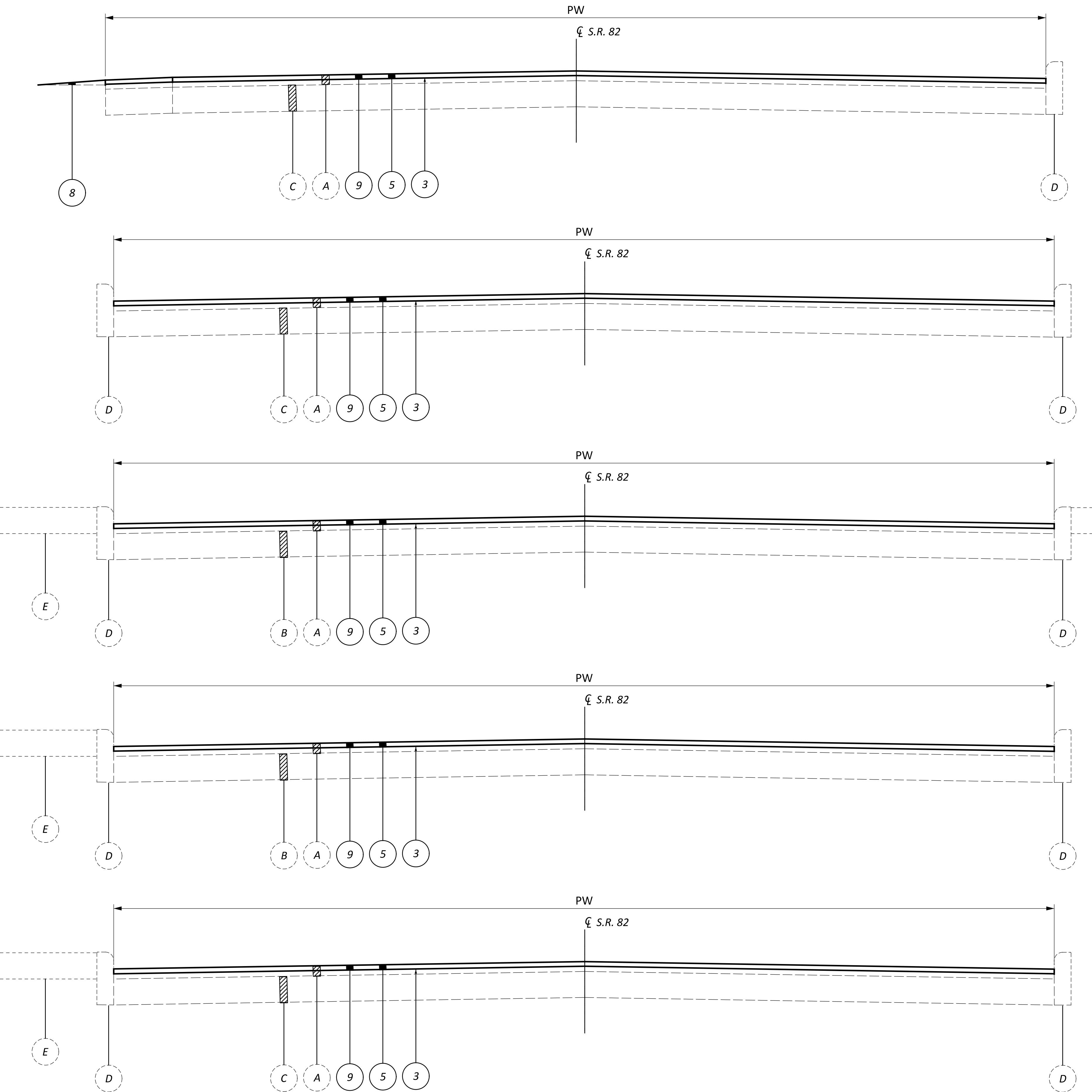
REVIEWER

PROJECT ID

11283

HEET TOT
B.2

P.2



TYPICAL SECTION 4 (SR 82)

ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	16.06	16.11	0.05	29

TYPICAL SECTION 5 (SR 82)

ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	16.11	16.5	0.39	28
	16.5	16.54	0.04	28-37
	16.54	16.67	0.13	37
	17.44	17.48	0.04	30

TYPICAL SECTION 6 (SR 82)

ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	16.67	16.80	0.13	56
	16.80	16.81	0.01	49

TYPICAL SECTION 7 (SR 82)

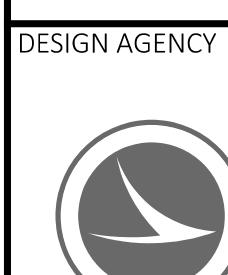
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	16.83	16.85	0.02	49

TYPICAL SECTION 8 (SR 82)

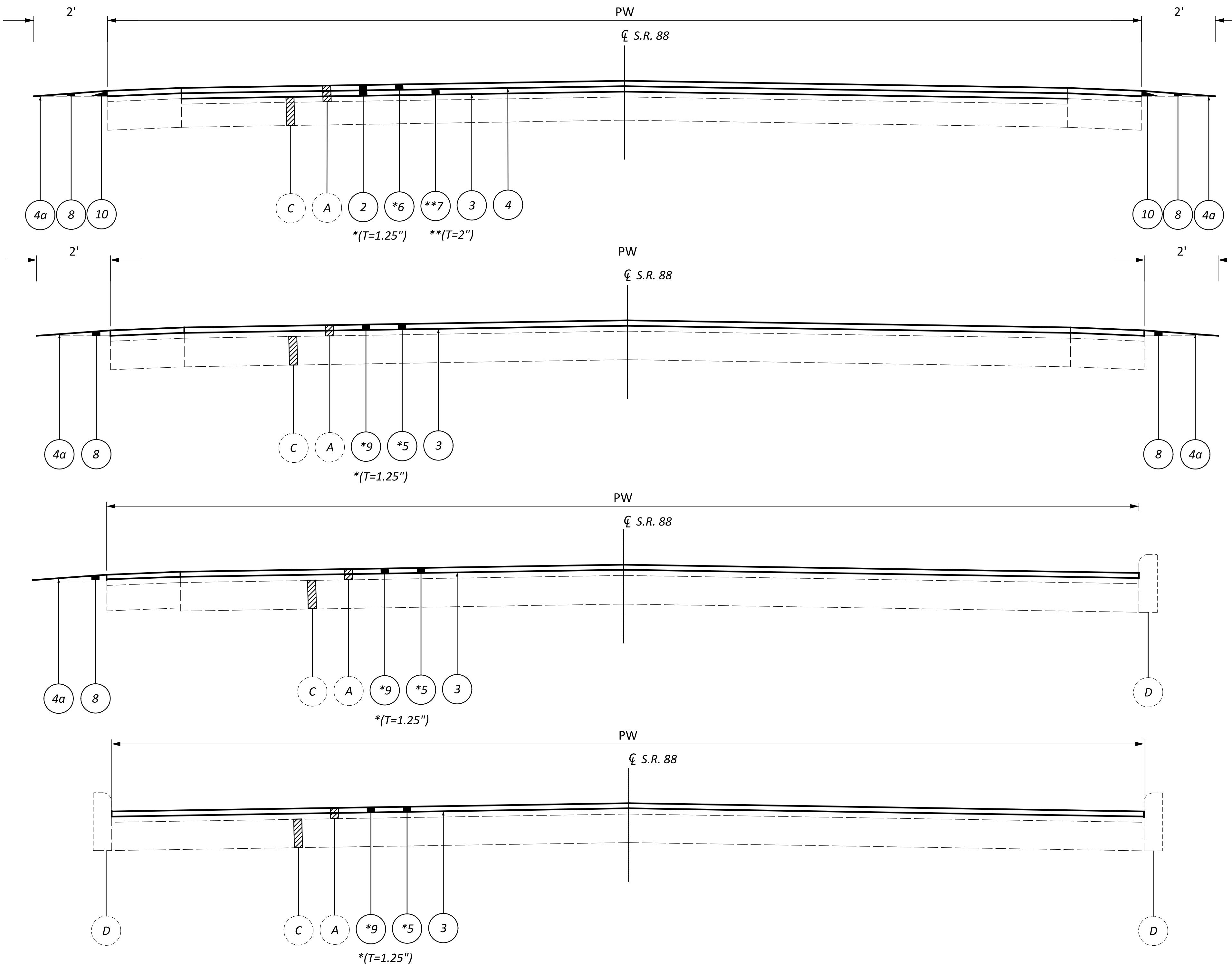
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 82	16.85	16.91	0.06	49

SEE SHEET P.2 FOR LEGEND

TYPICAL SECTIONS

DESIGNER
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112830SHEET TOTAL
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Typical Sections



SEE SHEET P.2 FOR LEGEND

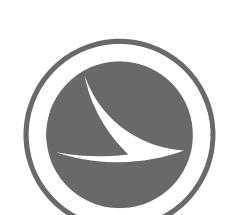
TYPICAL SECTION 1 (SR 88)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 88	7.95	11.13	3.18	25

TYPICAL SECTION 2 (SR 88)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 88	11.13	11.46	0.33	25
	11.83	11.93	0.1	25
	12.17	12.84	0.67	26
	12.84	13.7	0.86	25

TYPICAL SECTION 3 (SR 88)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 88	11.46	11.8	0.34	25
	11.8	11.83	0.03	23
	12.13	12.17	0.04	36-25

***NOTE: CURB IS ON LEFT
FOR SLM 12.13-12.17**

TYPICAL SECTION 4 (SR 88)				
ROUTE	SLM		LENGTH	PW
	FROM	TO	(MILES)	(FEET)
POR 88	11.93	11.96	0.03	25
	11.98	12	0.02	25
	12	12.13	0.13	36



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INTERSECTIONS

INTERSECTIONS WILL BE RESURFACED 10 FT. BEYOND THE EDGE LINE, OR TO THE BACK OF THE CROSSWALK WHERE CURB RAMPS ARE BEING PERFORMED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

FIELD DRIVEWAYS

THIS ITEM WILL CONSIST OF PLACING ITEM 411, STABILIZED CRUSHED AGGREGATE. THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING FIELD DRIVEWAYS. FIELD DRIVES WILL BE PLACED AFTER THE COMPLETION OF THE SURFACE COURSE AND SHALL HAVE AN AVERAGE 2 INCH THICKNESS. ALL GRADING TOOLS, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO LAYOUT AND CONSTRUCT THE FIELD DRIVES WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 411, AGGREGATE BASE. AN ESTIMATED QUANTITY OF 3 CU. YD. HAS BEEN CARRIED TO THE GENERAL SUMMARY.

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE. THE BUILDUP OF THE ASPHALT PAVEMENT SHALL MATCH THE MAINLINE PAVING. THE LIMITS OF THE PAVING SHALL MATCH THE EXISTING MAILBOX APPROACH LIMITS. PAYMENT FOR THE WORK SHALL BE INCLUDED IN THE MAINLINE PAVING QUANTITIES, SEPARATE QUANTITIES FOR THE MAILBOX APPROACHES ARE NOT PROVIDED.

ITEM 608 - CURB RAMP, AS PER PLAN

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, INSTALLATION OF THE CURB RAMPS / DETECTABLE WARNINGS WILL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

IN ADDITION TO THE CMS REQUIREMENTS OF ITEM 608 CURB RAMP, THIS ITEM SHALL INCLUDE THE RESTORATION OF THE ADJACENT AREAS DISTURBED FOR THE INSTALLATION OF CURB RAMPS AND IMMEDIATELY ADJACENT CONCRETE WALK. RESTORATION SHALL INCLUDE PLACEMENT OF ITEM 659 TOPSOIL, ITEM 659 COMMERCIAL FERTILIZER, ITEM 659 SEEDING AND MULCHING, AND ITEM 659 WATER, ALL PER CMS.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PID PRICE FOR ITEM 608 - CURB RAMP, AS PER PLAN.

ITEM 611 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN
ITEM 623 – MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
ITEM 638 – VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 611.10.D FOR MANHOLES, 623.05 FOR MONUMENT ASSEMBLY, OR 638.18 FOR VALVE BOXES, THE CONTRACTOR WILL MAKE A CLEAN CIRCULAR CUT AROUND THE CASTING (48" DIAMETER FOR STORM AND SANITARY MANHOLE CASTINGS, 24"-28" FOR VALVE BOXES AND MONUMENT ASSEMBLIES, AND 2' IN DIAMETER LARGER THAN THE CASTING DIAMETER FOR ANY CASTINGS THAT ARE LARGER THAN STANDARD MANHOLES) AND REMOVE AND DISCARD THE EXISTING CASTING. INSTALL A NEW CASTING TO GRADE (ACCORDING TO TOLERANCES AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1) AFTER THE PAVEMENT SURFACE COURSE HAS BEEN REPLACED.

CMS 499 CLASS QCMS CONCRETE (DYE THE CONCRETE SUCH THAT ITS COLOR CLOSELY MATCHES THE COLOR OF THE SURROUNDING PAVEMENT) WILL BE USED FOR BACKFILLING THE FULL PAVEMENT SECTION AND THE JOINT BETWEEN THE ASPHALT AND CONCRETE WILL BE SEALED WITH CMS 702.01 PG BINDER. EPOXY COATED REBAR SHALL BE PLACED IN THE CONCRETE AT 6" MAXIMUM ON CENTER AND A MINIMUM OF 3.5" CLEARANCE FROM THE TOP, BOTTOM AND SIDES. THE CONCRETE WILL BE VIBRATED SUFFICIENTLY TO ELIMINATE AIR POCKETS UNDER THE FRAME.

PAYMENT WILL INCLUDE REMOVAL OF THE EXISTING MATERIAL, INSTALLATION AND FURNISHING OF A NEW CASTING, AND ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THIS ITEM OF WORK AS DESCRIBED.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN, 18 EACH
ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN, 10 EACH

VALVE BOX ADJUSTED TO GRADE

A QUANTITY FOR THIS ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 638 VALVE BOX ADJUSTED TO GRADE, 13 EACH

MANHOLE RECONSTRUCTED TO GRADE

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR RECONSTRUCTING CATCH BASINS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – MANHOLE RECONSTRUCTED TO GRADE, 3 EACH
ITEM SPECIAL – MISCELLANEOUS METAL, 1350 LB

CATCH BASIN ADJUSTED TO GRADE

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR ADJUSTING CATCH BASINS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – CATCH BASIN ADJUSTED TO GRADE, 37 EACH
ITEM SPECIAL – MISCELLANEOUS METAL, 16650 LB

CATCH BASIN RECONSTRUCTED TO GRADE

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR RECONSTRUCTING CATCH BASINS TO GRADE.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – CATCH BASIN RECONSTRUCTED TO GRADE, 7 EACH
ITEM SPECIAL – MISCELLANEOUS METAL, 3150 LB

ITEM SPECIAL - AS-BUILT CONSTRUCTION PLANS

PRIOR TO FINAL ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL FURNISH THE DEPARTMENT FORMAL AS-BUILT CONSTRUCTION PLANS. THE FORMAL AS-BUILT CONSTRUCTION PLANS SHALL INCLUDE ALL RED-LINED CHANGES. RED-LINE CHANGE SHALL BE DENOTED UTILIZING CLOUDING IN MICROSTATION (OR OTHER CAD SOFTWARE) OR CLOUDING IN PDF EDITING SOFTWARE. THE AS-BUILT CONSTRUCTION PLANS SHALL HAVE A SIGNED VERIFICATION ON THE TITLE SHEET FROM THE CONTRACTOR INDICATING THAT ALL RED-LINED AND FIELD CHANGES HAVE BEEN INCORPORATED INTO AS-BUILT CONSTRUCTION PLANS.

THE CONTRACTORS VERIFICATION STATEMENT INDICATES ALL KNOWN FIELD MODIFICATIONS MADE HAVE BEEN INCLUDED IN THE FORMAL AS-BUILT CONSTRUCTION PLANS. THE CONTRACTORS VERIFICATION STATEMENT SHALL BE SIGNED BY THE CONTRACTORS PROJECT MANAGER (OR ACCEPTABLE REPRESENTATIVE).

IN ADDITION TO THE INFORMATION SHOWN ON THE CONSTRUCTION PLANS, THE AS-BUILT CONSTRUCTION PLANS SHALL SHOW THE FOLLOWING:

1. ALL DEVIATIONS FROM THE ORIGINAL APPROVED CONSTRUCTION PLANS WHICH RESULT IN A CHANGE OF LOCATION, MATERIAL, TYPE OR SIZE OF WORK.
2. ANY UTILITIES, PIPES, WELLHEADS, ABANDONED PAVEMENTS, FOUNDATIONS OR OTHER MAJOR OBSTRUCTIONS DISCOVERED AND REMAINING IN PLACE WHICH ARE NOT SHOWN, OR DO NOT CONFORM TO LOCATIONS OR DEPTHS SHOWN IN THE PLANS. UNDERGROUND FEATURES SHALL BE SHOWN AND LABELED ON THE AS-BUILT CONSTRUCTION PLANS IN TERMS OF STATION, OFFSET AND ELEVATION.
3. THE FINAL OPTION AND SPECIFICATION NUMBER SELECTED FOR THOSE ITEMS WHICH ALLOW SEVERAL MATERIAL OPTIONS UNDER THE SPECIFICATION (E.G., CONDUIT).
4. CHANGES TO THE PAY ITEMS AND FINAL QUANTITIES AS PAID SHALL BE SHOWN ON THE GENERAL SUMMARY AND SUBSUMMARIES.
5. ADDITIONAL PLAN SHEETS MAY BE NEEDED IF NECESSARY TO SHOW WORK NOT INCLUDED IN THE CONSTRUCTION PLANS. IF ADDITIONAL PLAN SHEETS ARE NEEDED, THEY ARE REQUIRED TO BE PREPARED IN CONFORMANCE WITH THE LOCATION AND DESIGN MANUAL, VOLUME 3, SECTION 1200 - PLAN PREPARATION.

NOTATION SHALL ALSO BE MADE OF LOCATIONS AND THE EXTENT OF USE OF MATERIALS, OTHER THAN SOIL, FOR EMBANKMENT CONSTRUCTION (ROCK, BROKEN CONCRETE WITHOUT REINFORCING STEEL, ETC.).

THE PLAN INDEX SHALL SHOW THE PLAN SHEETS WHICH HAVE CHANGES APPEARING ON THEM.

TWO COPIES OF THE AS-BUILT CONSTRUCTION PLANS SHALL BE DELIVERED TO THE PROJECT ENGINEER FOR APPROVAL UPON COMPLETION OF THE PHYSICAL WORK BUT PRIOR TO THE REQUEST FOR FINAL PAYMENT. AFTER THE DEPARTMENT HAS APPROVED THE AS-BUILT CONSTRUCTION PLANS, THE ASSOCIATED ELECTRONIC FILES SHALL BE DELIVERED TO THE DISTRICT CAPITAL PROGRAMS ADMINISTRATOR. ACCEPTANCE OF THESE PLANS AND DELIVERY OF THE ASSOCIATED ELECTRONIC FILES IS REQUIRED PRIOR TO THE WORK BEING ACCEPTED AND THE FINAL ESTIMATE APPROVED.

PAYMENT FOR ALL THE ABOVE SHALL BE LUMP SUM UPON PROPER EXECUTION OF ALL WORK OF THIS ITEM AS DETERMINED BY THE PROJECT ENGINEER.



DESIGNER
JMW

REVIEWER
RMM 08-04-25

PROJECT ID
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REVIEW OF CURB RAMPS

PRIOR TO THE START OF WORK, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT AND CONTRACTOR OF ALL CURB RAMPS INCLUDED IN THE PROJECT LIMITS. PRIOR TO THE INSPECTION, THE CONTRACTOR SHALL MARK THE WORK LIMITS OF ALL CURB RAMPS AND ASSOCIATED WORK TO IDENTIFY ANY CONDITIONS THE CONTRACTOR CANNOT BRING INTO ADA COMPLIANCE PER BP-7.1. THE DEPARTMENT SHALL HAVE TEN (10) BUSINESS DAYS TO RESOLVE ANY SUCH ANTICIPATED NON-COMPLIANCE WITH AN ADA WAIVER, QUANTITY CHANGE OR DESIGN REVISION PRIOR TO THE START OF WORK.

IMMEDIATELY FOLLOWING INSTALLATION OF FORMWORK FOR CURB RAMP CONCRETE PLACEMENT AND PRIOR TO PLACEMENT OF CONCRETE, THE CONTRACTOR SHALL VERIFY ADA COMPLIANCE BASED UPON MEASUREMENT OF THE FORMS. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY NON-COMPLIANT ADA CONDITIONS MEASURED BY THE CONTRACTOR WITHIN THE WORK LIMITS. THE ENGINEER SHALL HAVE THREE (3) BUSINESS DAYS TO RESOLVE ANY SUCH NON-COMPLIANCE WITH A CORRECTIVE FORM LAYOUT, ADA WAIVER, QUANTITY CHANGE OR DESIGN CHANGE PRIOR TO THE PLACEMENT OF CONCRETE.

THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY ADA NON-COMPLIANCE FOR ALL ISSUES NOT REPORTED TO THE ENGINEER IN THE INITIAL INSPECTION AND/OR THE FORM INSTALLATION MEASUREMENT. MODIFICATION OF FORMS INTO A COMPLIANT CONFIGURATION AND/OR REMOVAL AND RECONSTRUCTION OF FINISHED WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 608 CURB RAMP ITEMS.

BARRIER REFLECTORS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DIRECTED BY THE ENGINEER FOR INSTALLING/REPLACING BARRIER REFLECTORS ON ALL EXISTING BARRIER RUNS WITHIN THE PROJECT LIMITS.

202, REMOVAL MISC.: BARRIER REFLECTOR, 16 EACH
626, BARRIER REFLECTOR, TYPE 2, BI-DIRECTIONAL, 65 EACH

ADA DESIGN WAIVER

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING CURB RAMPS LISTED BELOW HAVE WAIVERS APPROVED.

RAMP ID	APPROVAL DATE	LOCATION/DESCRIPTION
RMP0030412	10/02/2025	SR82 / HAYDEN ST, FR
RMP0030430	10/02/2025	SR82 / SR700, FL
RMP0030429	10/02/2025	SR82 / SR 88, RL
RMP0030427	10/02/2025	SR82 / HIGH ST, RR
RMP0030428	10/02/2025	SR88 / ZUPANIC DR N, RL
RMP0030432	10/02/2025	SR88 / WHITE ST, FL
RMP0030433	10/02/2025	SR88 / FRENCH ST, FL
RMP0030434	10/02/2025	SR88 / HARRIS DR, RL

LAKE ROCKWELL RESERVOIR & UPPER CUYAHOGA RIVER/AKRON DRINKING WATER SUPPLY AVOIDANCE:

LAKE ROCKWELL RESERVOIR, WHICH IS FED BY THE STATE SCENIC UPPER CUYAHOGA RIVER, IS A SOURCE FOR THE CITY OF AKRON DRINKING WATER SUPPLY. BECAUSE OF THIS, LAKE ROCKWELL RESERVOIR AND THE SURROUNDING AREAS (INCLUDING ECKERT DITCH) ARE HIGHLY RESTRICTED. UNDER NO CIRCUMSTANCES SHALL ANY EQUIPMENT (BACKHOE, EARTH MOVING EQUIPMENT, ETC.) AND/OR MATERIALS ENTER BELOW THE ORDINARY HIGH-WATER MARK (OHWM) OF 1052 MSL ESTABLISHED FOR LAKE ROCKWELL RESERVOIR.

SINCE THIS PROJECT CROSSES THE CUYAHOGA RIVER, THE CONTRACTOR SHALL DEVELOP A SPILL CONTAINMENT AND CLEANUP PLAN PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES AND PARTICULAR ATTENTION SHALL ALSO BE GIVEN TO DRAINAGE WAYS, DITCHES, WETLANDS, AND OPEN WATER AREAS. APPROPRIATELY DESIGNED EROSION CONTROLS SHALL BE UTILIZED, AND ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY MAINTAINED UNTIL FINAL PROJECT SITE STABILIZATION IS ACHIEVED AND ACCEPTED BY THE ENGINEER. EQUIPMENT AND MATERIAL STAGING AREAS SHALL BE KEPT AWAY FROM THE LAKE ROCKWELL RESERVOIR, WETLANDS AND OTHER WATERS OF THE UNITED STATES TO THE EXTENT PRACTICABLE. IDLE EQUIPMENT, PETROCHEMICALS AND TOXIC/HAZARDOUS MATERIALS SHOULD NOT BE STORED IN PROXIMITY OF LAKE ROCKWELL RESERVOIR, WETLANDS AND OTHER WATERS OF THE UNITED STATES. ALL PROJECT RELATED REFUELING AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER AND UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DISCHARGE ANY PETROCHEMICALS AND/OR TOXIC AND HAZARDOUS MATERIALS.

SPILLS OF FUELS, OILS, CHEMICALS OR OTHER TOXIC/HAZARDOUS MATERIALS SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR AND REPORTED TO THE PROJECT ENGINEER. IN EACH CASE WHERE THERE IS AN INCIDENT OF HAZARDOUS MATERIAL SPILL IN A REPORTABLE QUANTITY OR ANY SPILL THAT COULD POSE A RISK TO SURFACE WATER OR GROUNDWATER, THE CONTRACTOR SHALL, AS SOON AS POSSIBLE, NOTIFY THE PROJECT ENGINEER AND THE FOLLOWING AGENCIES:

CITY OF AKRON WATER SUPPLY BUREAU WATER PLANT DIVISION: 330-678-0077 PRESS "2" (24-HOUR DISPATCH)

OHIO EPA SPILL REPORTING – 24-HOUR EMERGENCY SERVICE: 800-282-9378

PROVIDE AS MUCH OF THE FOLLOWING INFORMATION AS POSSIBLE:

1. TIME OBSERVED.
2. LOCATION
3. MATERIAL RELEASED
4. PROBABLE SOURCE
5. VOLUME & DURATION
6. PRESENT & ANTICIPATED MOVEMENT OF MATERIAL
7. PERSONNEL ON SCENE
8. ACTIONS ALREADY INITIATED
9. PERSON(S) ON THE SCENE TO CONTACT

ODNR STATE SCENIC RIVER PROJECT NOTIFICATION - STATE ROUTE 82

THE PROJECT IS LOCATED WITHIN THE 1000-FOOT BUFFER ESTABLISHED FOR THE STATE SCENIC UPPER CUYAHOGA RIVER AT STATE ROUTE 82 IN PORTAGE COUNTY. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER 40 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE STATE SCENIC UPPER CUYAHOGA RIVER. THE PROJECT ENGINEER SHALL NOTIFY THE DISTRICT ENVIRONMENTAL COORDINATOR 35 DAYS PRIOR TO WORK WITHIN 1000 FEET OF THE SCENIC RIVER. THE DISTRICT ENVIRONMENTAL COORDINATOR SHALL COORDINATE WITH ODNR SCENIC RIVERS A MINIMUM OF 30 DAYS PRIOR TO ANY WORK WITHIN 1000 FEET OF STATE SCENIC UPPER CUYAHOGA RIVER.

STATE SCENIC CUYAHOGA RIVER AVOIDANCE – STATE ROUTE 82

THE PROJECT IS LOCATED WITHIN THE 1000-FOOT BUFFER ESTABLISHED FOR THE STATE SCENIC UPPER CUYAHOGA RIVER AT STATE ROUTE 82 IN PORTAGE COUNTY. THE CONTRACTOR SHALL NOT DISCHARGE TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND TO THE STATE SCENIC UPPER CUYAHOGA RIVER, ITS TRIBUTARIES, OR DRAINAGE WAYS. IF REFUELING OF IMMOBILE EQUIPMENT IS NECESSARY WITHIN THE FLOODPLAIN OR NEAR ANY TRIBUTARY DRAINAGE WAYS, DITCHES, OR STREAM, THE CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT WITH ENOUGH CAPACITY TO COMPLETELY CONTAIN AND COLLECT ALL POTENTIAL LIQUID WASTES IN THE EVENT OF A SPILL.

ANY AND ALL CONSTRUCTION DEBRIS, EARTHEN DEBRIS, EXCESS ASPHALT OR CONCRETE, WOOD DEBRIS FROM CLEARING, EXCESS FILL MATERIAL, AND TRASH SHOULD BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE FEMA 100-YEAR FLOOD ELEVATIONS. DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE STATE SCENIC UPPER CUYAHOGA RIVER IS PROHIBITED.

IN ACCORDANCE WITH ORC 3750.06, REPORTABLE SPILLS MUST BE REPORTED TO THE LOCAL FIRE DEPARTMENT (911), THE LOCAL EMERGENCY COORDINATOR (LEPC SPILLS LINE: (330) 296-0222 / AFTER HOUR: PCSO DISPATCH (330) 296-5100), AND THE OHIO SPILL LINE (1-800-282-9378).

THE CONTRACTOR SHALL KEEP ALL IDLE EQUIPMENT, FUELS, LUBRICANTS, AND ANY STORAGE FOR/OF POTENTIALLY TOXIC OR HAZARDOUS MATERIALS OUT OF THE FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA AND NOT WITHIN 1000 FEET OF THE STATE SCENIC UPPER CUYAHOGA RIVER.

THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT A SEDIMENT AND EROSION CONTROL PLAN BEFORE EARTHWORK COMMENCES. THE PLAN SHALL INCLUDE A LIST OF APPLICABLE BMPS, PER SS 832 THAT WILL BE USED THROUGHOUT THE PROJECT, SUCH AS PERIMETER CONTROLS AND/OR SEEDING AND MULCHING, AND MUST BE SUBMITTED TO THE ODOT PROJECT ENGINEER FOR REVIEW AND ACCEPTANCE. SEDIMENT AND EROSION CONTROLS SHALL BE PROPERLY INSTALLED AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. STRAW BALES SHALL NOT BE PERMITTED AS A FORM OF SEDIMENT CONTROL. ALL TEMPORARY SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED UPON STABILIZATION OF THE PROJECT AREA. PARTICULAR ATTENTION SHALL BE GIVEN TO ANY DRAINAGE WAYS, UNPROTECTED SLOPES, DITCHES, AND STREAMS THAT COULD CONVEY SEDIMENT LADEN WATERS DIRECTLY TO THE STATE SCENIC UPPER CUYAHOGA RIVER.

IF ANY PAINTING, WELDING, SAND, AND/OR WATER BLASTING (CLEANING) AT OR OVER THE STATE SCENIC UPPER CUYAHOGA RIVER, THEN THE CONTRACTOR SHALL UTILIZE APPROPRIATE APRONS TO PROVIDE FOR COMPLETE CONTAINMENT OF ALL PAINT, WELDING SLAG AND/OR SEALANT OVER SPRAY AND OTHER DEBRIS. APRONS, APPROPRIATE FALSEWORK, OR OTHER BARRIERS SHALL BE UTILIZED ON ALL DECK REPLACEMENT PROJECTS TO PREVENT THE DISCHARGE OF CONCRETE, ASPHALT, OR OTHER DEBRIS TO A DESIGNATED SCENIC RIVER. ALL DEBRIS COLLECTED SHALL BE DISPOSED OF AT AN APPROVED UPLAND SITE OR LAND FILL ABOVE FEMA 100-YEAR FLOOD ELEVATIONS. DISPOSAL OF ANY SUCH MATERIALS WITHIN 1000 FEET OF THE STATE SCENIC UPPER CUYAHOGA RIVER IS PROHIBITED.

GENERAL NOTES

DESIGNER
JMW

REVIEWER
RMM 08-04-25

PROJECT ID
112830

SHEET TOTAL
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MAINTENANCE OF TRAFFIC

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE TEN FOOT BIDIRECTIONAL LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.
2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
4. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER STANDARD CONSTRUCTION DRAWING MT-101.90.
5. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
6. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.
7. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
8. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
9. A QUANTITY OF 10 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
10. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

11. THE CONTRACTOR SHALL INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE WORK ZONE MARKING SIGNS AND THEIR SUPPORTS WITHIN THE WORK LIMITS. THESE SIGNS INCLUDE "NO EDGE LINES, DO NOT PASS AND PASS WITH CARE". ALL OTHER SIGNS WILL BE INCIDENTAL TO THE LUMP SUM PAY ITEM 614 MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED IN THE PLANS. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS AS PER CMS 614.04.

12. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE 1 MILLED SURFACE

614, WORK ZONE CENTER LINE, CLASS I, 13.45 MILE
614, WORK ZONE STOP LINE, CLASS I, 239 FT
614, WORK ZONE CHANNELIZING LINE, CLASS I, 325 FT
614, WORK ZONE MARKING SIGN, (ALL PHASES) 9 EACH

PHASE 2 INTERMEDIATE

614, WORK ZONE CENTERLINE, CLASS I, 642 PAINT 3.62 MILE
614, WORK ZONE STOP LINE, CLASS I, 642 PAINT 24 FT

PHASE 3 SURFACE COURSE

614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 13.45 MILE
614, WORK ZONE STOP LINE, CLASS III, 642 PAINT 239 FT
614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT 325 FT

TO BE USED AS DIRECTED BY THE ENGINEER

614, WORK ZONE EDGE LINE, CLASS III, 21.96 MILE

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 & OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

PAYMENT FOR ALL LABOR, EQUIPMENT & MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AND AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

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

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

NEW YEAR'S (OBSERVED)	GENERAL/REGULAR ELECTION DAY (NOV)
THANKSGIVING	CHRISTMAS (OBSERVED)
MEMORIAL DAY	GARRETTSVILLE SUMMERFEST
FOURTH OF JULY (OBSERVED)	(LAST WEEKEND OF JUNE)
LABOR DAY	

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

DAY OF HOLIDAY OR SPECIAL EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)	5:00AM TUESDAY THROUGH 12:00AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00AM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRAIN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LANE VALUE CONTRACT			
DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME UNIT
S.R. 82	AS PER MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS) NOTE ABOVE	PER LANE / PER MINUTE	\$100
S.R. 88	AS PER MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS) NOTE ABOVE	PER LANE / PER MINUTE	\$100

PROJECT RESTRICTIONS

THE CONTRACTOR IS ADVISED OF THE GARRETTSVILLE SUMMERFEST AND IS DIRECTED TO SCHEDULE THEIR OPERATIONS TO ENSURE THAT AREAS WITHIN THE GARRETTSVILLE CORPORATION LIMITS WILL NOT BE IMPACTED DURING THE GARRETTSVILLE SUMMERFEST. THE GARRETTSVILLE SUMMERFEST IS TYPICALLY HELD DURING THE LAST WEEKEND OF JUNE ALTHOUGH IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EVENT SCHEDULE.

AT THE TIME OF THE GARRETTSVILLE SUMMERFEST, AREAS WITHIN THE GARRETTSVILLE CORPORATION LIMITS SHALL EITHER BE MAINTAINED ON THE ORIGINAL SURFACE COURSE OR THE COMPLETED SURFACE COURSE. THE CONTRACTOR IS NOT PERMITTED TO LEAVE PAVEMENT WITHIN THE GARRETTSVILLE CORPORATION LIMITS IN A MILLED OR OTHERWISE INCOMPLETE CONDITION DURING GARRETTSVILLE SUMMERFEST.

DETOUR NOTIFICATION [ODOT]

THE CONTRACTOR SHALL ADVISE THE PROJECT ENGINEER EIGHTEEN (18) DAYS IN ADVANCE OF WHEN THE DETOUR ROUTE SHOULD BE IN EFFECT. ALL WORK ZONE DEVICES REQUIRED SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. PAYMENT FOR ALL WORK ASSOCIATED WITH THE DETOUR SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614, DETOUR SIGNING.

ITEM 614, MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 10. A DISINCENTIVE SHALL BE ASSESSED IN THE AMOUNT OF \$4000 PER DAY FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT.

NOTIFICATION OF TRAFFIC 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.

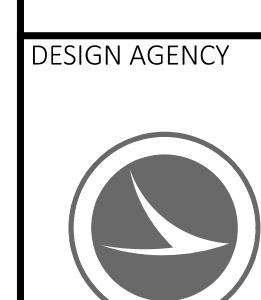
INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL 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
ROAD & RAMP 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 PATTERNS 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.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 7 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$5000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMIT.



DESIGNER
JMW
REVIEWER
RMM 08-04-25
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ASPHALT PAVING LIMITATION

THE CONTRACTOR SHALL NOT ANTICIPATE OR SCHEDULE PLACING ASPHALT (ASPHALT SURFACE COURSE, ASPHALT INTERMEDIATE COURSE, ASPHALT CONCRETE BASE, ETC.) BETWEEN NOVEMBER 1 AND APRIL 1 WHEN SUBMITTING THEIR INITIAL BAR CHART PROGRESS SCHEDULE TO THE DISTRICT CONSTRUCTION ENGINEER (DCE) AS SPECIFIED IN CMS SECTION 108.02A. THIS LIMITATION SHALL ALSO INCLUDE INITIAL BASE LINE SCHEDULES AND ALL UPDATES IF A CPM SCHEDULE IS REQUIRED.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 2 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 1 MONTH(S)**TIME LIMITATION, CURB RAMP**

THE MAXIMUM ALLOWABLE TIME FOR THE CONTRACTOR TO HAVE AN INDIVIDUAL CURB RAMP AND ASSOCIATED SIDEWALK LEADING INTO THE CURB RAMP OUT OF SERVICE FOR THE REMOVAL AND REPLACEMENT SHALL BE 14 CONSECUTIVE CALENDAR DAYS (THE TIME PERIOD INCLUDES ALL WORK LISTED IN THE BASIS OF PAYMENT PER CMS 608.09, INCLUDING ALL REMOVAL, REPLACEMENT, AND BACKFILL ASSOCIATED WITH THE CURB RAMPS, AND CURING TIME PERIOD).

AT THE CONCLUSION OF CONSTRUCTING OF THE CURB RAMP AND PRIOR TO OPENING TO PEDESTRIAN TRAFFIC THE CONTRACTOR SHALL ENSURE THAT THE REQUIREMENTS OF STANDARD CONSTRUCTION DRAWING BP-7.1 ARE MET. THE CONTRACTOR SHALL USE ASPHALT AS A WEDGE, OR SUBMIT ANOTHER METHOD APPROVED BY THE ENGINEER, TO ENSURE THE TRANSITION FROM THE CURB RAMP TO THE ROADWAY ARE PER STANDARD CONSTRUCTION DRAWING BP-7.1. ALL COSTS TO PERFORM THIS WORK SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEMS FOR THE INSTALLATION OF THE CURB RAMP.

SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$1000 PER DAY PER AFFECTED RAMP THAT THE AFFECTED CURB RAMP REMAINS OUT OF SERVICE BEYOND 14 CONSECUTIVE CALENDAR DAYS.

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 SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. 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).

DURING PERIODS WHERE TRAFFIC NEEDS TO BE DIRECTED CONTRARY TO A TRAFFIC CONTROL DEVICE (FLAGGER, SIGN [E.G. STOP SIGN, STREET OR HIGHWAY SIGNS, ETC], SIGNAL OR OTHER DEVICE USED TO REGULATE, WARN OR GUIDE TRAFFIC). TRAFFIC IN THIS INSTANCE INCLUDES VEHICULAR, PEDESTRIAN AND/OR SHARED USE PATH USERS.

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 THAT MEET ALL OF THE CRITERIA LISTED BELOW: 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).

0 CRITERIA

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND,
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION; AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

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 AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICES 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. 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. 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 THAT 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.

PLACEMENT OF ASPHALT CONCRETE

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

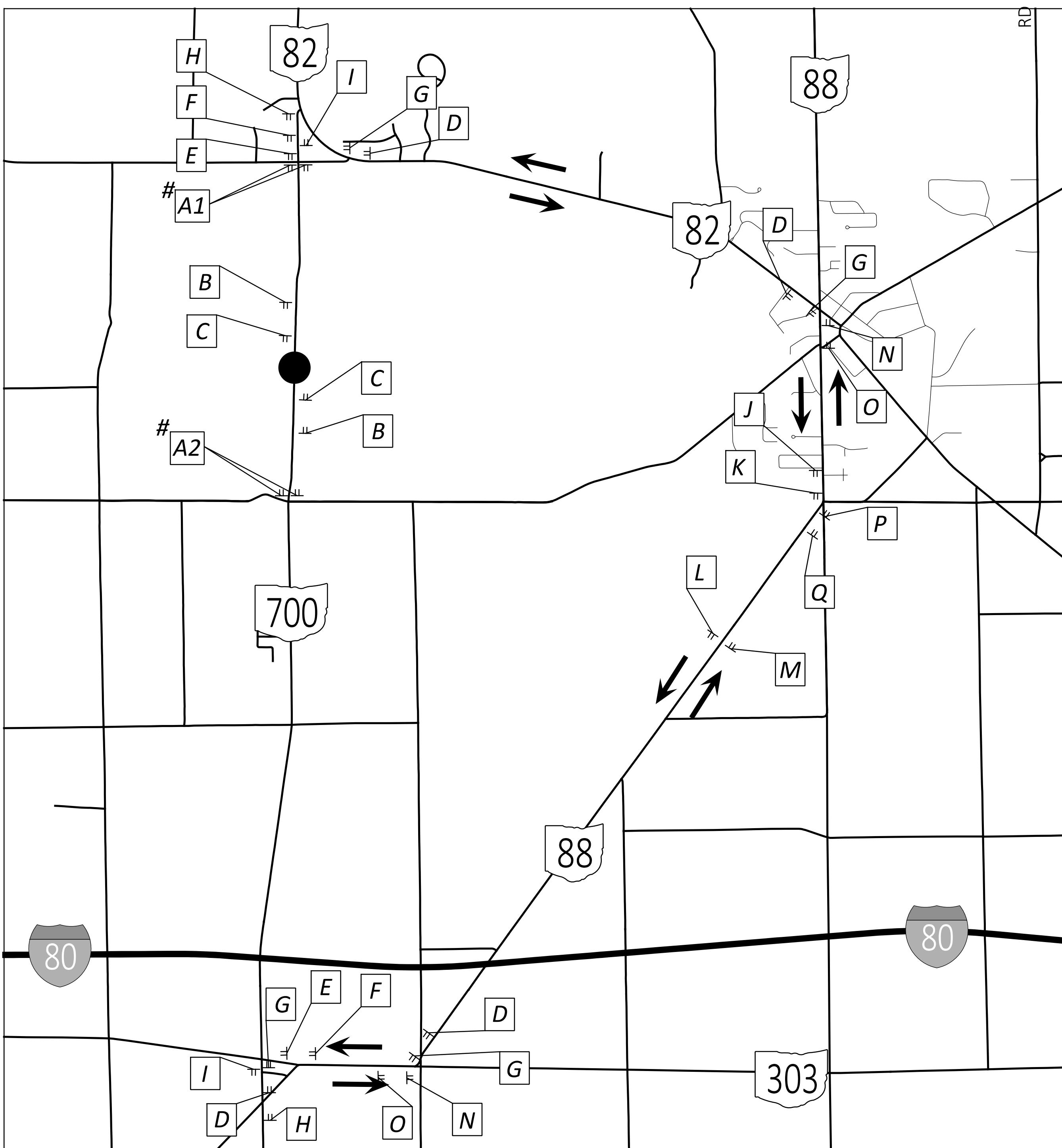


DESIGNER
JMW

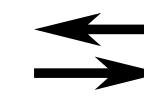
REVIEWER
RMM 08-04-25

PROJECT ID
112830

SHEET TOTAL
P.9 34



DETOUR ROUTE FOR: POR-700-3.36



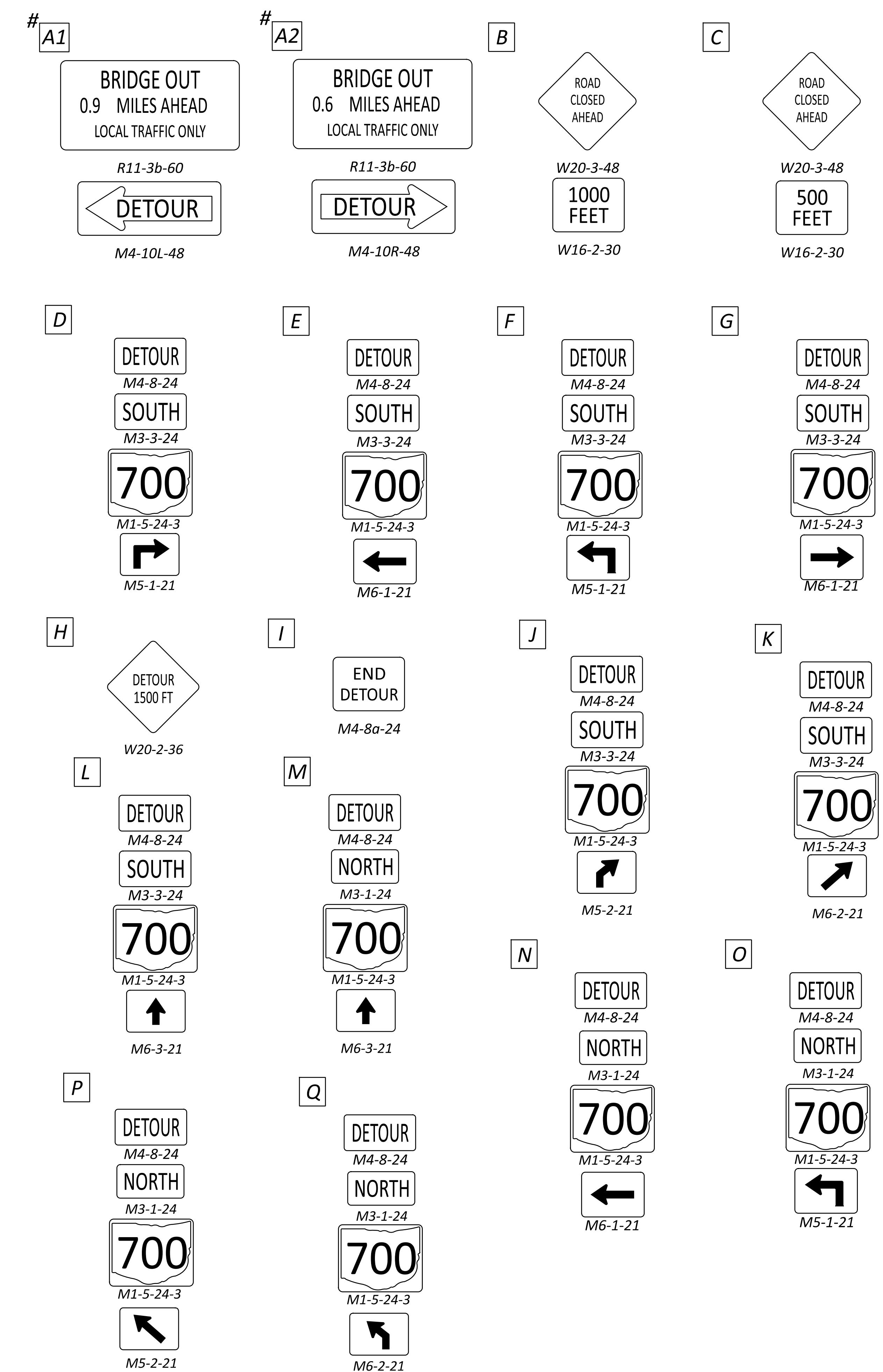
 DETOUR ROUTE: FOLLOW SR-82



● CLOSE SR-700 PER STANDARD CONSTRUCTION DRAWING MT-101.60

ON TYPE III BARRICADE WITH TYPE B FLASHERS MOUNTED PER SCD MT-101.60

REFER TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 6H-8 (TYPICAL APPLICATION 8), FOR SIGN SPACING.



MAINTENANCE OF TRAFFIC DETOUR ROUTE

SHEET NUMBER												PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
P.5	P.6	P.7	P.8	P.9	P.13	P.14	P.15	P.16	P.17	P.21	P.22	P.23	01/STR	02/STR	03/STR						
												1	1			646	10900	1	EACH	HANDICAP SYMBOL MARKING	
												2	2			646	20110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
												1,678	1,678			646	20200	1,678	FT	PARKING LOT STALL MARKING	
												19	19			646	20300	19	EACH	LANE ARROW	
												25	25			646	20600	25	EACH	BIKE LANE SYMBOL MARKING	
																				STRUCTURE REPAIRS	
																				FOR POR-82-10640 ESTIMATED QUANTITIES	P.25
																				FOR POR-82-15190 ESTIMATED QUANTITIES	P.25
																				FOR POR-82-16802 ESTIMATED QUANTITIES	P.25
																				FOR POR-88-11956 ESTIMATED QUANTITIES	P.25
																				FOR POR-700-03359 ESTIMATED QUANTITIES	P.31
																				MAINTENANCE OF TRAFFIC	
												100				614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
												LS				614	12420	LS		DETOUR SIGNING	
												9				614	12460	9	EACH	WORK ZONE MARKING SIGN, (ALL PHASES)	P.9
												2				614	18601	2	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.9
												17.07				614	21000	17.07	MILE	WORK ZONE CENTER LINE, CLASS I	
																				13.45	
																614	21550	13.45	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
																614	22360	21.96	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
																614	23000	325	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8"	
																614	23680	325	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
																614	26000	263	FT	WORK ZONE STOP LINE, CLASS I	
																614	26610	239	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																				INCIDENTALS	
																614	11000	LS		MAINTAINING TRAFFIC	
																619	16010	6	MNTH	FIELD OFFICE, TYPE B	
																623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
																624	10000	LS		MOBILIZATION	



DESIGNER

JMW

REVIEWER

RMM

08-05-25

PROJECT ID

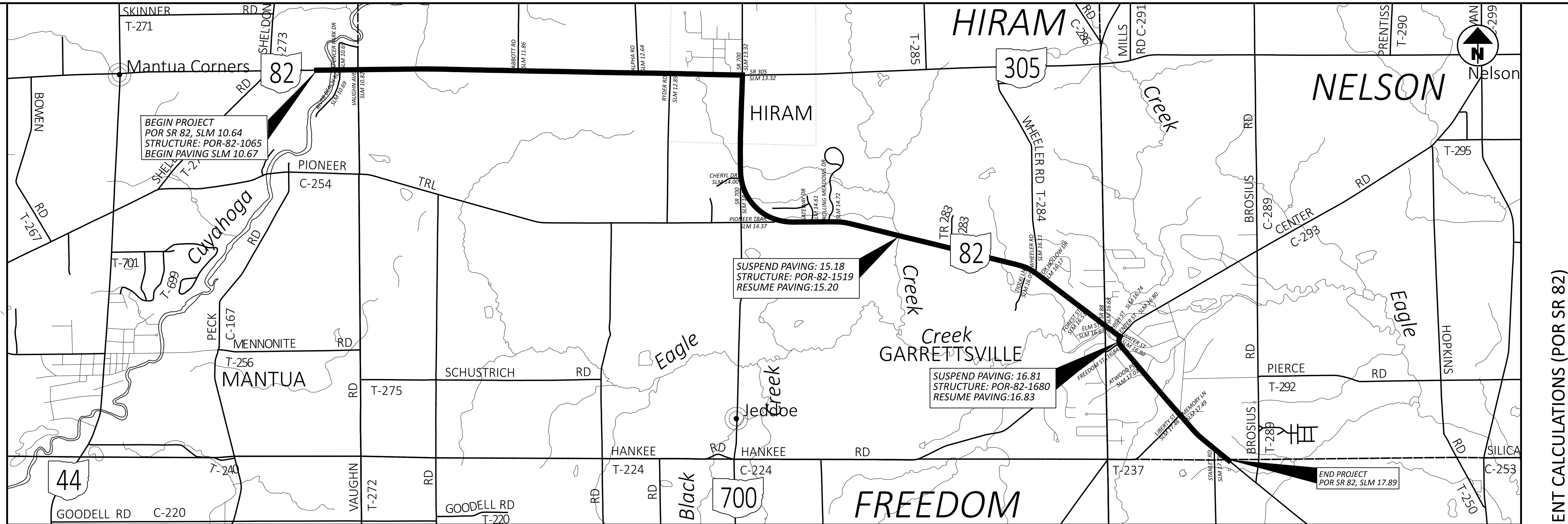
112830

SHEET

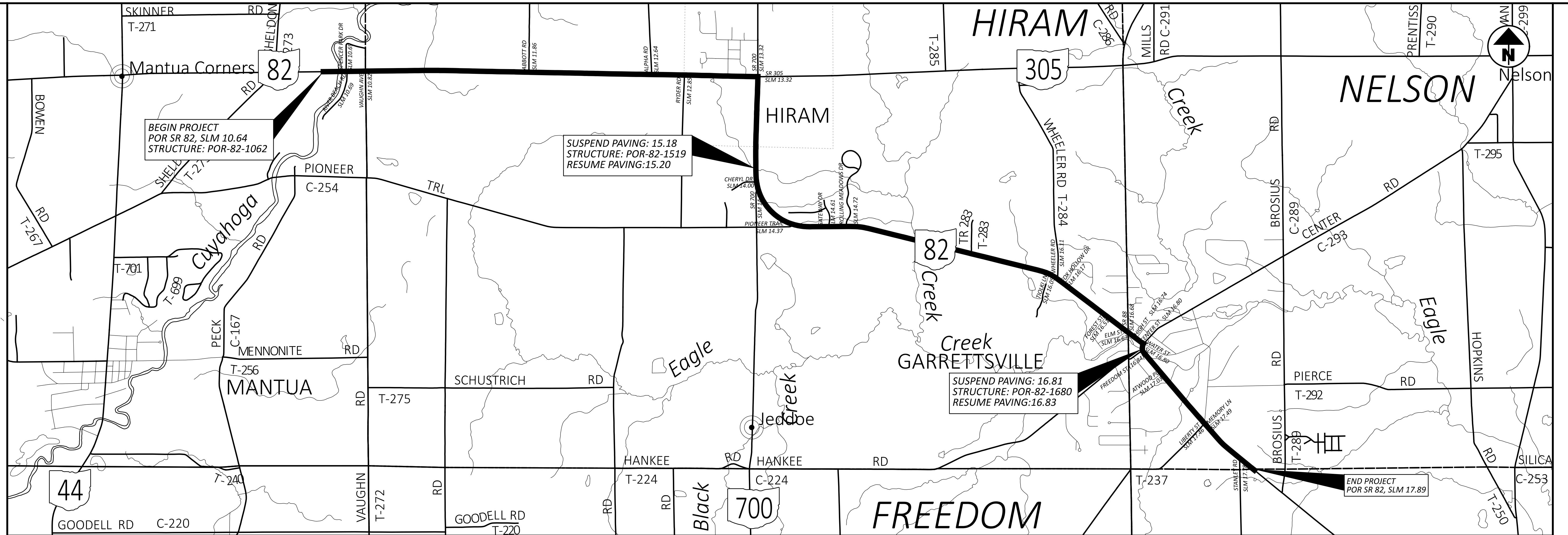
TOTAL

P.12

34



PAVEMENT CALCULATIONS (POR SR 82)



SLM RANGE

TYPICAL SECTION

SIDE

DISTANCE (D)

AVERAGE WIDTH (W)

SURFACE AREA (A)

A=DW/9

CADD GENERATED AREA

WEARING COURSE REMOVED

PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3.25")

PAVEMENT PLANING, ASPHALT CONCRETE, @ 0.09 GAL/SY

FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (448) (T=1")

ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M (T=1.5")

ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448) (T=1.75")

COMPACTED AGGREGATE

PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1")

SY

SY

SY

SY

SY

INTERSECTIONS

10.64	TO	17.89	VARIABLES	10.00	2062.16	2062.16		185.59	85.92

DRIVEWAYS

10.64	TO	17.89	VARIABLES	2.00	650.40	650.40		58.54	27.10

SUBTOTALS 2712.56 244.13 113.02

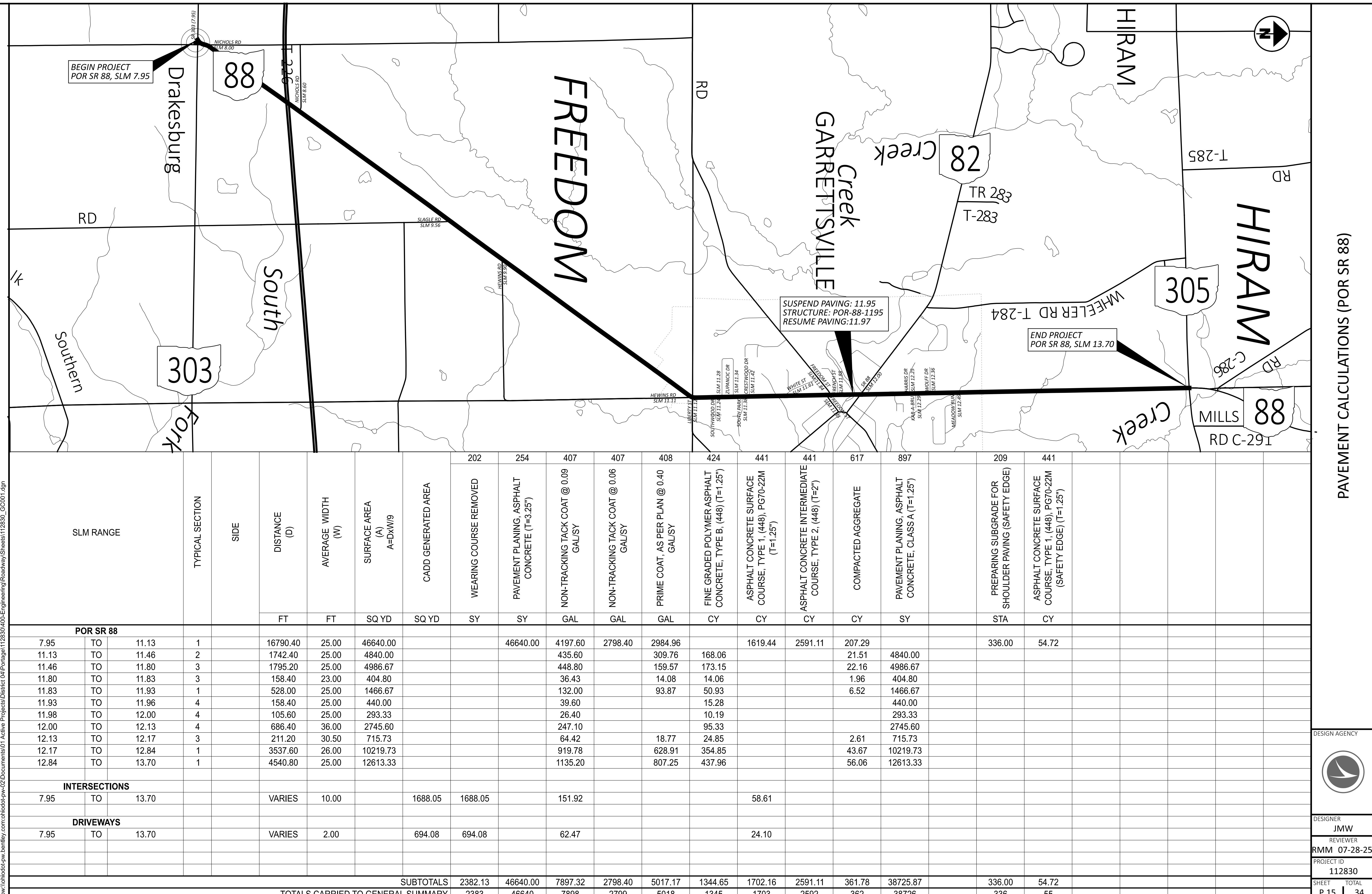
TOTALS CARRIED TO GENERAL SUMMARY 2713 245 114

PAVEMENT CALCULATIONS (POR SR 82)



DESIGNER JMW
REVIEWER RMM 07-28-25
PROJECT ID 112830

SHEET TOTAL
P.14 34

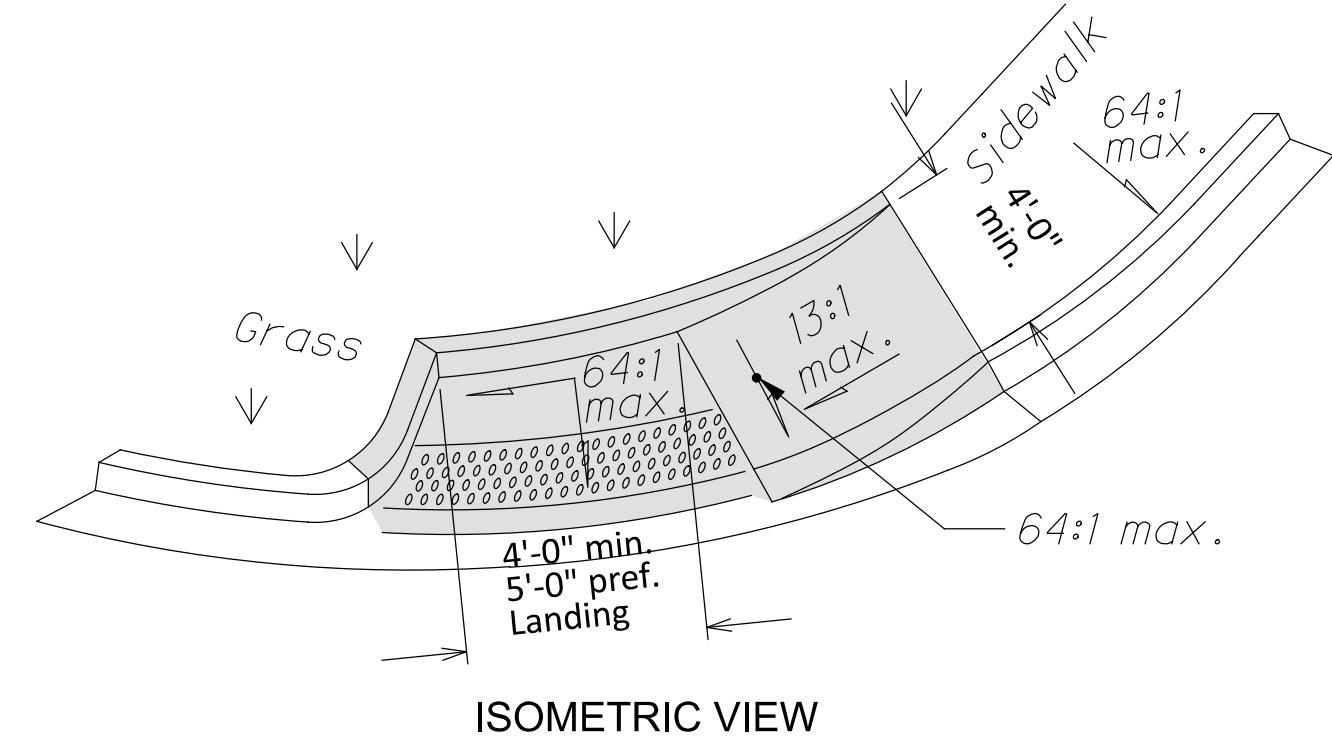


MAIN ROUTE	INTERSECTING ROUTE	DESIGN SHEET	CURB RAMP SUBSUMMARY											
			QUADRANT			EXCAVATION (FOR WALK OR CURB RAMP INSTALLATION)			CURB, TYPE 6			COMBINATION CURB AND GUTTER, TYPE 2		
			RL=REAR LT, RR=REAR RT FL=FWD LT, FR=FWD RT (LOOKING UPSTATION)	WALK REMOVED	CURB AND GUTTER REMOVED	CURB REMOVED	4" CONCRETE WALK	CURB RAMP	DETECTABLE WARNING	609	609			
SR 82	PECKHAM AVE	RL A2	80.00	6.00			80.00		5.00					
SR 82	PECKHAM AVE	FL A2	50.00		5.00		50.00		5.00					
SR 82	HAYDEN ST	RL A2	79.50		8.50		79.50		5.00					
SR 82	HAYDEN ST	FL A2	66.00		5.50		66.00		5.00					NOT FLUSH WITH PAVEMENT WAIVER - HILL TOO STEEP
SR 82	SR 700	RR A2	90.00		6.00		90.00		5.00					
SR 82	SR 700	FL A2	35.00	6.00			35.00		5.00					WAIVER - CROSS SLOPE TOO STEEP
SR 82	SR 700	FR A2	85.00	10.00			85.00		5.00					
SR 82	MUNICIPAL DR	RR A2	101.00	13.00			16.00	85.00		5.00				
SR 82	MUNICIPAL DR	FR A2	52.00	5.00			16.00	36.00		5.00				
SR 82	WHEELER RD	RL					40.00		5.00					NO RAMP THERE NOW - NEEDS ONE
SR 82	WHEELER RD	FL A2	100.00		7.00		100.00		5.00					
SR 82	FOX HOLLOW DR	RL A2	99.00				99.00							
SR 82	FOX HOLLOW DR	FL A2	80.00	10.00			80.00		5.00					
SR 82	PLAZA DR	RL A2	36.00	5.00			36.00		5.00					
SR 82	PLAZA DR	FL A2	44.00	5.00			44.00		5.00					
SR 82	FOREST ST	RR												COMPLIANT
SR 82	FOREST ST	FR A2	72.00		5.00		72.00		5.00					
SR 82	ELM ST	RR A1	62.00		5.00		62.00		5.00					COMPLIANT
SR 82	ELM ST	FR												
SR 82	SR 88	RL A2	65.00		6.50		65.00		5.00					WAIVER - LANDING TOO STEEP
SR 82	SR 88	RR B2	63.25		11.50		63.25		5.00					
SR 82	SR 88	RR A2	98.00	9.50			98.00		5.00					
SR 82	SR 88	FL C1	108.00		10.00		48.00	108.00		5.00				WAIVER
SR 82	SR 88	FR A1	66.00		9.00		66.00		5.00					
SR 82	HIGH ST	RL A1	95.00		19.50		95.00		5.00					
SR 82	HIGH ST	RR B2	32.00		6.00		32.00		5.00					WAIVER - MEET PROPERTY ENTRANCES
SR 82	HIGH ST	FL A1	132.00		23.00		132.00		5.00					
SR 82	SLM 16.77 MIDBLOCK	LT B2	72.75		7.00		72.75		5.00					NOT FLUSH WITH PAVEMENT
SR 82	SLM 16.77 MIDBLOCK	RT B2	112.00		6.00		112.00		5.00					
SR 82	CENTER ST	RL A1	89.25		19.00		89.25		5.00					
SR 82	CENTER ST	RR B2	87.50		17.50		87.50		5.00					
SR 82	CENTER ST	RR B2	75.00		15.00		75.00		5.00					
SR 82	CENTER ST	FL A2	42.00		5.00		42.00		5.00					
SR 82	CENTER ST	FL A2	62.00		5.00		62.00		5.00					
SR 82	CENTER ST	FR C1	103.25		14.00		103.25		5.00					
SR 82	CENTER ST	FR C1	42.50		8.50		42.50		5.00					
SR 82	FREEDOM ST	RR B2	44.00		11.00		44.00		5.00					
SR 82	FREEDOM ST	FL C1	52.25		5.00		52.25		5.00					
SR 82	FREEDOM ST	FR A1	66.00		5.00		66.00		5.00					
SR 82	FREEDOM ST	FR												STAIRS
SUBTOTALS			2639.25	69.50	245.50	0.00	80.00	2647.25	0.00	135.00	45.00	0.00	0.00	0.00
TOTALS CARRIED TO GENERAL SUMMARY			2640	70	246	0	80	2648	0	135	45	0	0	0

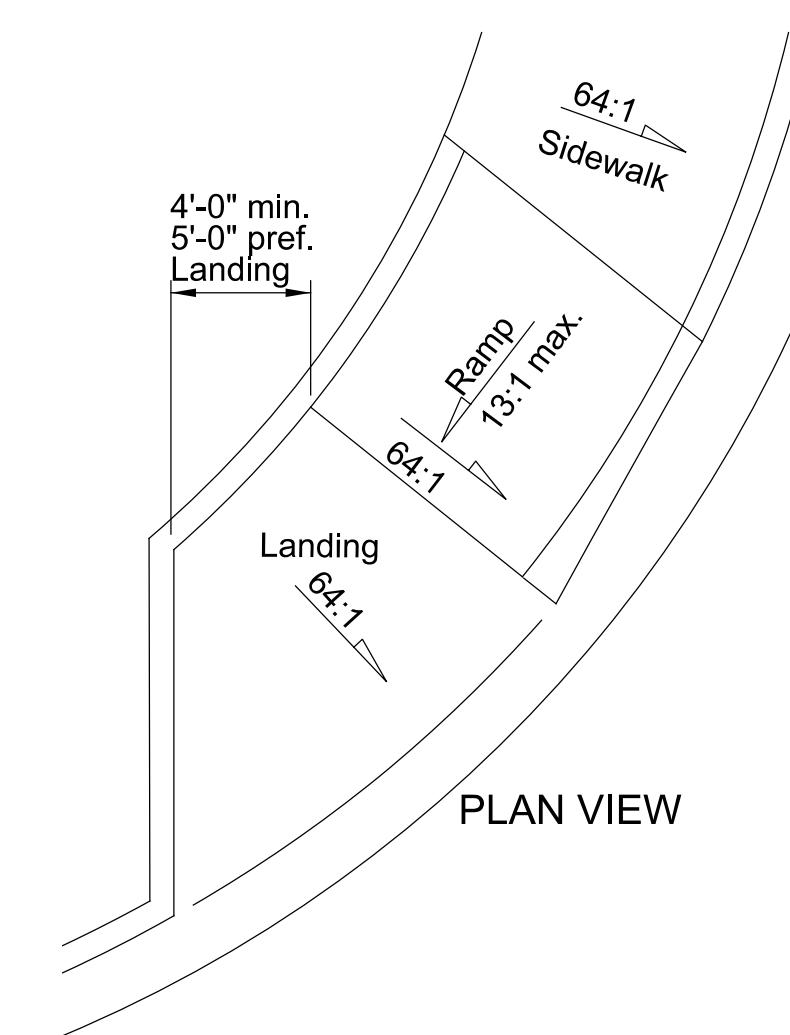
MAIN ROUTE	INTERSECTION ROUTE	DESIGN SHEET	QUADRANT	CURB RAMP TYPE	DIMENSIONS (FEET)							MAIN ROUTE	INTERSECTION ROUTE	DESIGN SHEET	QUADRANT	CURB RAMP TYPE	DIMENSIONS (FEET)						
					RAMP LENGTH	RAMP WIDTH	LANDING LENGTH	LANDING WIDTH	10:1 MAX FLARE?	SIDEWALK LENGTH	SIDEWALK WIDTH						RAMP LENGTH	RAMP WIDTH	LANDING LENGTH	LANDING WIDTH	10:1 MAX FLARE?	SIDEWALK LENGTH	SIDEWALK WIDTH
SR 82	PECKHAM AVE		RL	A2	5.0	5.0	5.0	5.0				SR 88	SLM 11.25 MIDBLOCK		LT	A2	10.5	4.0	4.0	4.0		4.5	4.0
SR 82	PECKHAM AVE		FL	A2	10.0	5.0						SR 88	SLM 11.25 MIDBLOCK		RT	A2	5.0	4.0	6.0	4.0			
SR 82	HAYDEN ST		RL	A2	8.5	7.0	4.0	5.0				SR 88	ZUPANCIC DR SOUTH		RL								
SR 82	HAYDEN ST		FL	A2	7.5	5.5	4.5	5.5				SR 88	ZUPANCIC DR SOUTH		FL								
SR 82	SR 700		RR	A2	4.0	6.0	6.0	11.0				SR 88	ZUPANCIC DR NORTH		RL	A2	12.0	4.0	4.0	4.0			
SR 82	SR 700		FL	A2	5.0	7.0						SR 88	ZUPANCIC DR NORTH		FL	A2	12.0	4.0	4.0	4.0			
SR 82	SR 700		FR	A2	17.0	5.0						SR 88	SOUTH PARK		RR								
SR 82	MUNICIPAL DR		RR	A2	5.0	5.0	5 & 4	8 & 5		4.0	4.0	SR 88	SOUTH PARK		FR	A2	7.5	4.0	5.0	4.0			
SR 82	MUNICIPAL DR		FR	A2	9.0	4.0	4.0	4.0				SR 88	CRESTWOOD DR		RL	A2	5.0	4.0	4.0	4.0			
SR 82	WHEELER RD		RL									SR 88	CRESTWOOD DR		FL	A2	4.0	5.0					
SR 82	WHEELER RD		FL	A2	12.0	4.0	13.0	4.0				SR 88	SLM 11.46 MIDBLOCK		LT								
SR 82	FOX HOLLOW DR		RL	A2	9.0	4.0	9.0	11.0				SR 88	SLM 11.46 MIDBLOCK		RT								
SR 82	FOX HOLLOW DR		FL	A2	10.0	8.0						SR 88	WHITE ST		RL	A2	5.5	4.0	5.0	4.0			
SR 82	PLAZA DR		RL	A2	5.0	4.0	4.0	4.0				SR 88	WHITE ST		FL	A2	6.0	4.0	5.0	4.0			
SR 82	PLAZA DR		FL	A2	7.0	4.0	4.0	4.0				SR 88	SLM 11.75 HEADWATERS TRAIL		LT								
SR 82	FOREST ST		RR									SR 88	SLM 11.75 HEADWATERS TRAIL		RT	A2	9.0	8.0	5.0	8.0			
SR 82	FOREST ST		FR	A2	10.0	4.0	4 & 4	4 & 4				SR 88	FREEDOM ST		RR	A2	8.0	4.0	4.0	4.0			
SR 82	ELM ST		RR	A1	6.0	4.0	4 & 5	4.5 & 4				SR 88	FREEDOM ST		FR								
SR 82	ELM ST		FR									SR 88	FREEDOM ST		RL	A2	4.0	8.0	2.0	8.0			
SR 82	SR 88		RL	A2	6.0	6.5	4.0	6.5				SR 88	FREEDOM ST		FL	A2	5.5	5.0	4.0	5.0			
SR 82	SR 88		RR	B2	5.5	6.5	5.5	5.0				SR 88	SLM 12.08 MIDBLOCK		LT								
SR 82	SR 88		RR	A2	8.0	9.0	4.0	6.5				SR 88	SLM 12.08 MIDBLOCK		RT	A2	4.0	4.0	4.0	4.0			
SR 82	SR 88		FL	C1	6.0	10.0			4 & 4	7 & 5		SR 88	POST OFFICE CROSSING										
SR 82	SR 88		FR	A1	6.0	9.0	3.0	4.0				SR 88	MAPLE AVE		RR	A2	3.0	10.0	5.5 & 3	4 & 4			
SR 82	HIGH ST		RL	A1	10.0	9.5						SR 88	MAPLE AVE		FR	A2	10.0	6.0	5.0	6.0			
SR 82	HIGH ST		RR	B2	4.0	4.0	4.0	4.0				SR 88	HARRIS DR		RL	A2	5.0	4.0	5.0	4.0			
SR 82	HIGH ST		FL	A1	12.0	11.0						SR 88	HARRIS DR		FL	A2	5.0	4.0	4.0	4.0			
SR 82	SLM 16.77 MIDBLOCK		LT	B2	5.5	5.5	5.0	8.5				SR 88	KAR A BRU		RR	A2	5.0	4.0	7.5	4.0			
SR 82	SLM 16.77 MIDBLOCK		RT	B2	8.0	6.0	8.0	8.0				SR 88	KAR A BRU		FR	A2	6.0	4.0					
SR 82	CENTER ST		RL	A1	10.5	8.5						SR 88	WOLFF DR		RL								
SR 82	CENTER ST		RR	B2	6.0	17.5						SR 88	WOLFF DR		FL	C2	8.0	12.5	5.0	4.0			
SR 82	CENTER ST		RR	B2	5.0	15.0						SR 88	MEADOW RUN		RR								
SR 82	CENTER ST		FL	A2	10.5	4.0	4.0	6.5				SR 88	MEADOW RUN		FR	A2	8.0	4.0					
SR 82	CENTER ST		FL	A2	9.0	4.0	6.5	4.0				SR 88	MEADOW RUN		RR								
SR 82	CENTER ST		FR	C1	8.5	14.0						SR 88	MEADOW RUN		FR								
SR 82	CENTER ST		FR	C1	5.0	8.5						SR 88	MEADOW RUN		RR								
SR 82	FREEDOM ST		RR	B2	4.0	11.0						SR 88	MEADOW RUN		FR	A2	8.0	4.0					
SR 82	FREEDOM ST		FL	C1	5.5	9.5						SR 88	MEADOW RUN		RR								
SR 82	FREEDOM ST		FR	A1	11.5	4.0	5.0	4.0				SR 88	MEADOW RUN		FR								
SR 82	ATWOOD PL		RR	A2	5.5	4.0	5.5	4.0				SR 88	MEADOW RUN		RR								
SR 82	ATWOOD PL		FR	A2	4.0	4.0	4.0	4.0				SR 88	MEADOW RUN		FR								
SR 82	SLM 17.24 TRAIL CROSSING		LT	A2	14.5	5.5						SR 88	MEADOW RUN		RR								
SR 82	SLM 17.24 TRAIL CROSSING		RT	A2	17.0	6.0						SR 88	MEADOW RUN		FR								

CURB RAMP DIM

For Types A1, A2, B1, and B2, see SCD BP-7.1

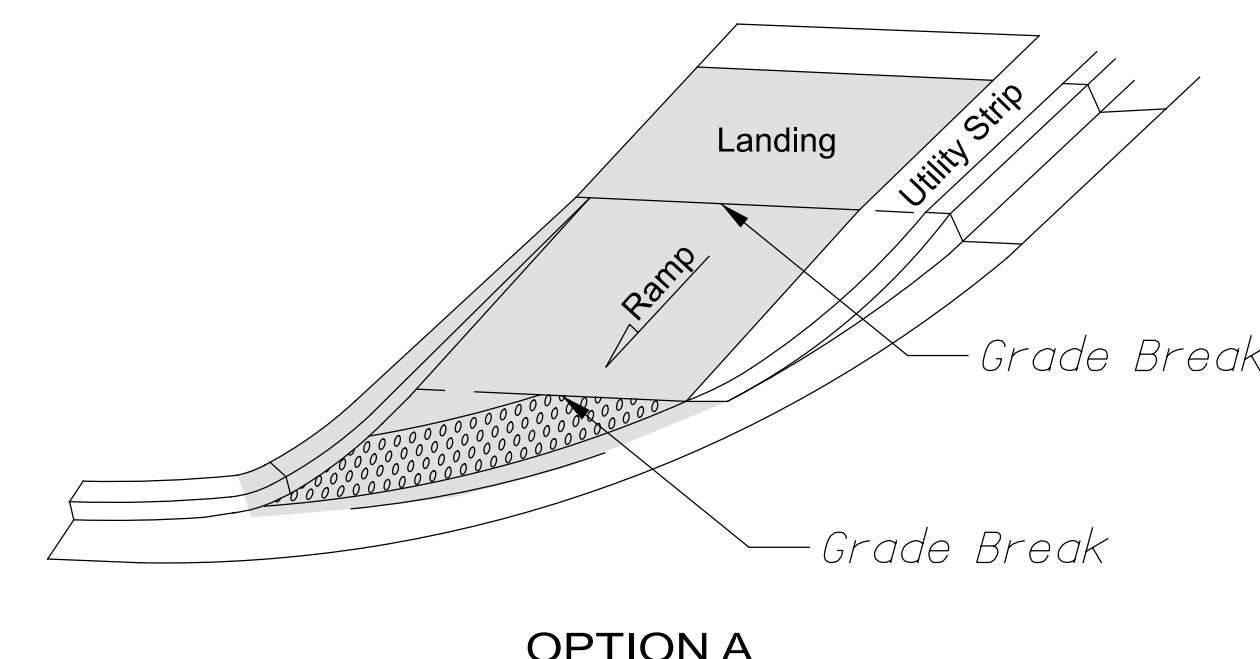


ISOMETRIC VIEW

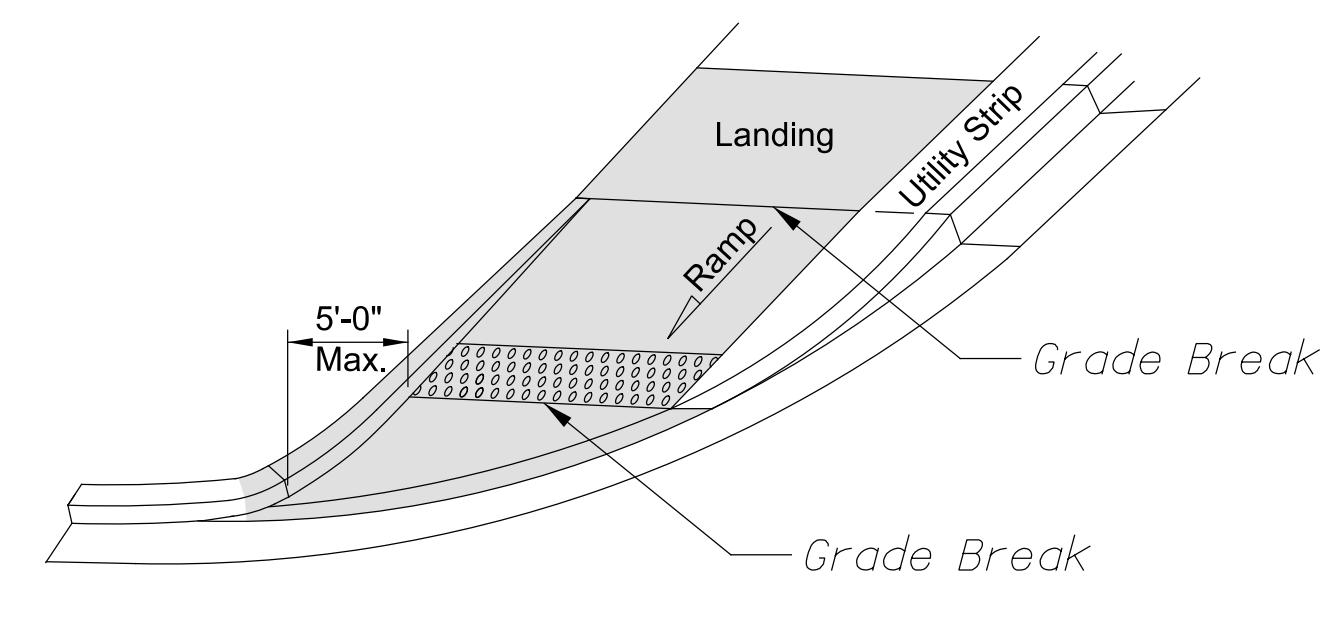


PLAN VIEW

Type B4

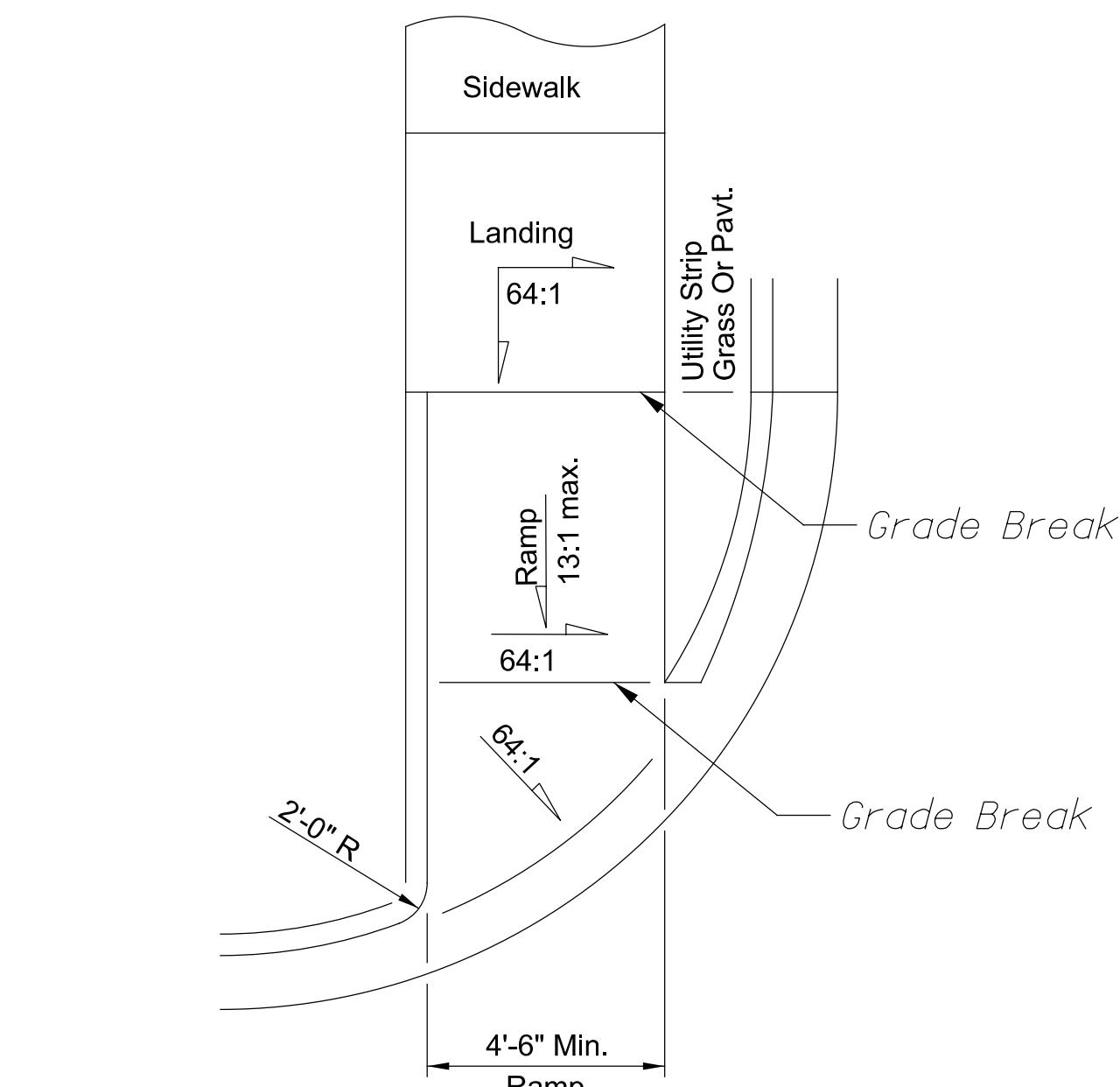


OPTION A



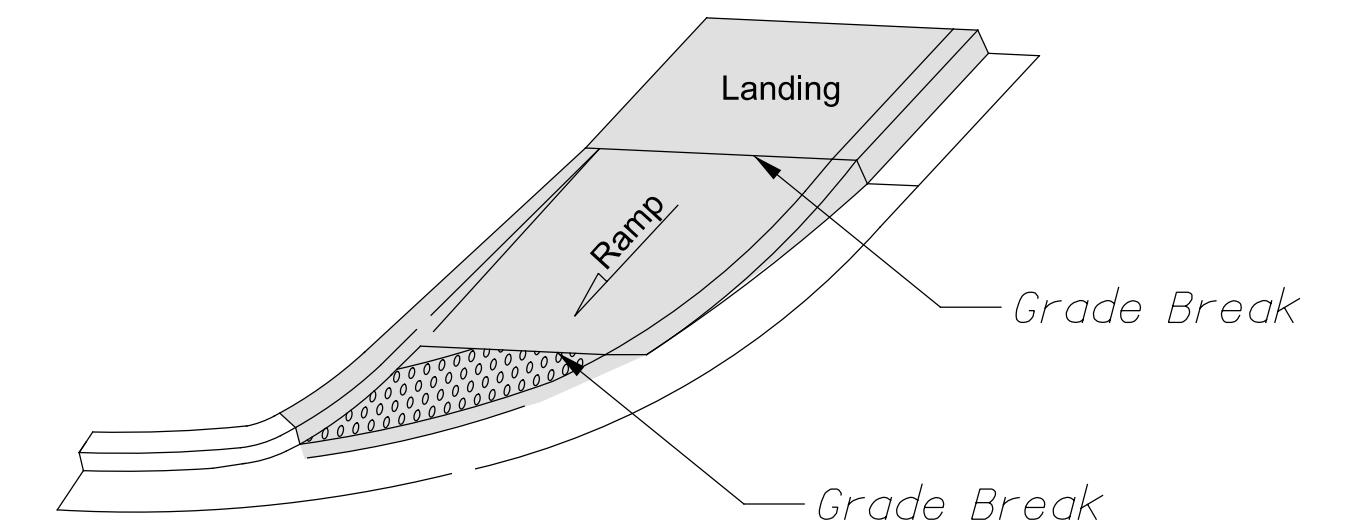
OPTION B

ISOMETRIC VIEW

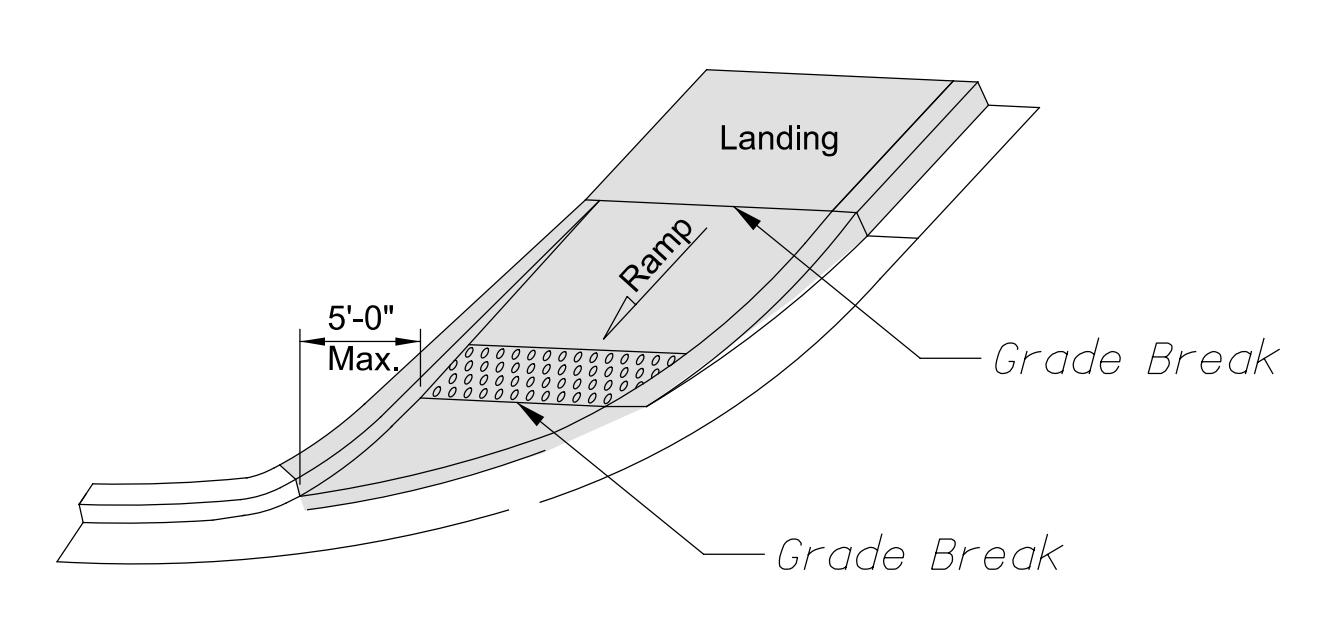


PLAN VIEW

Type A3

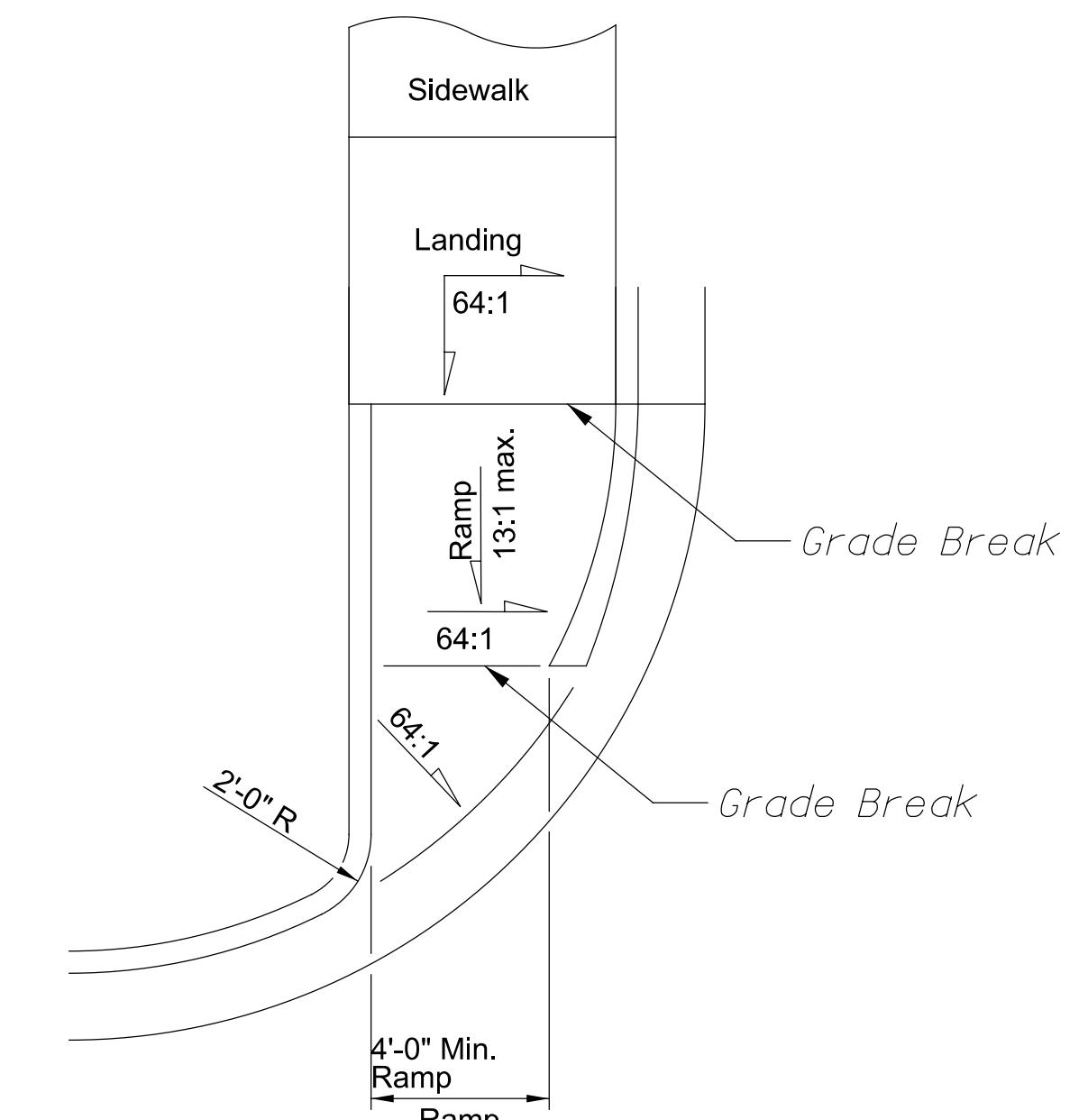


OPTION A



OPTION B

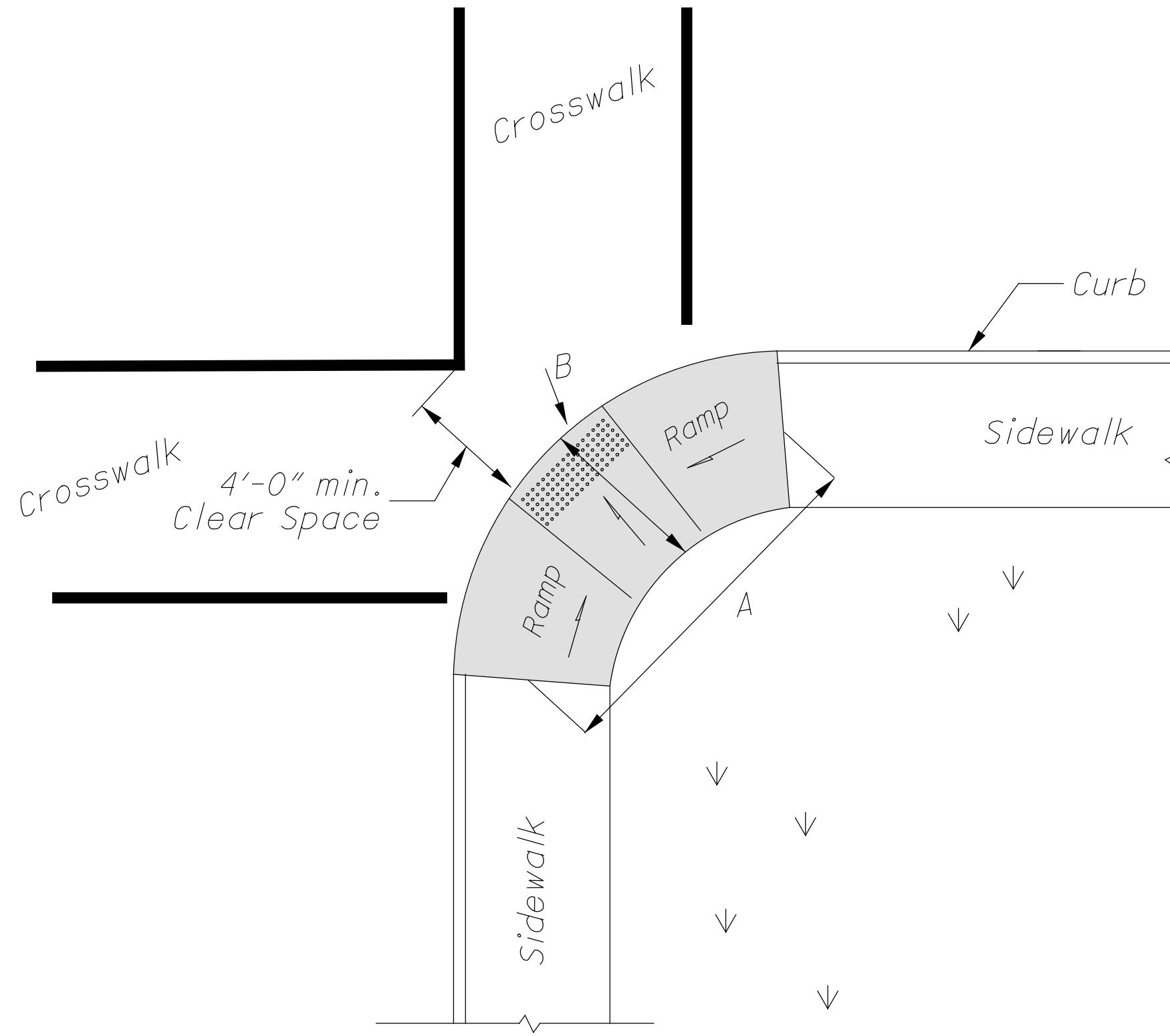
ISOMETRIC VIEW



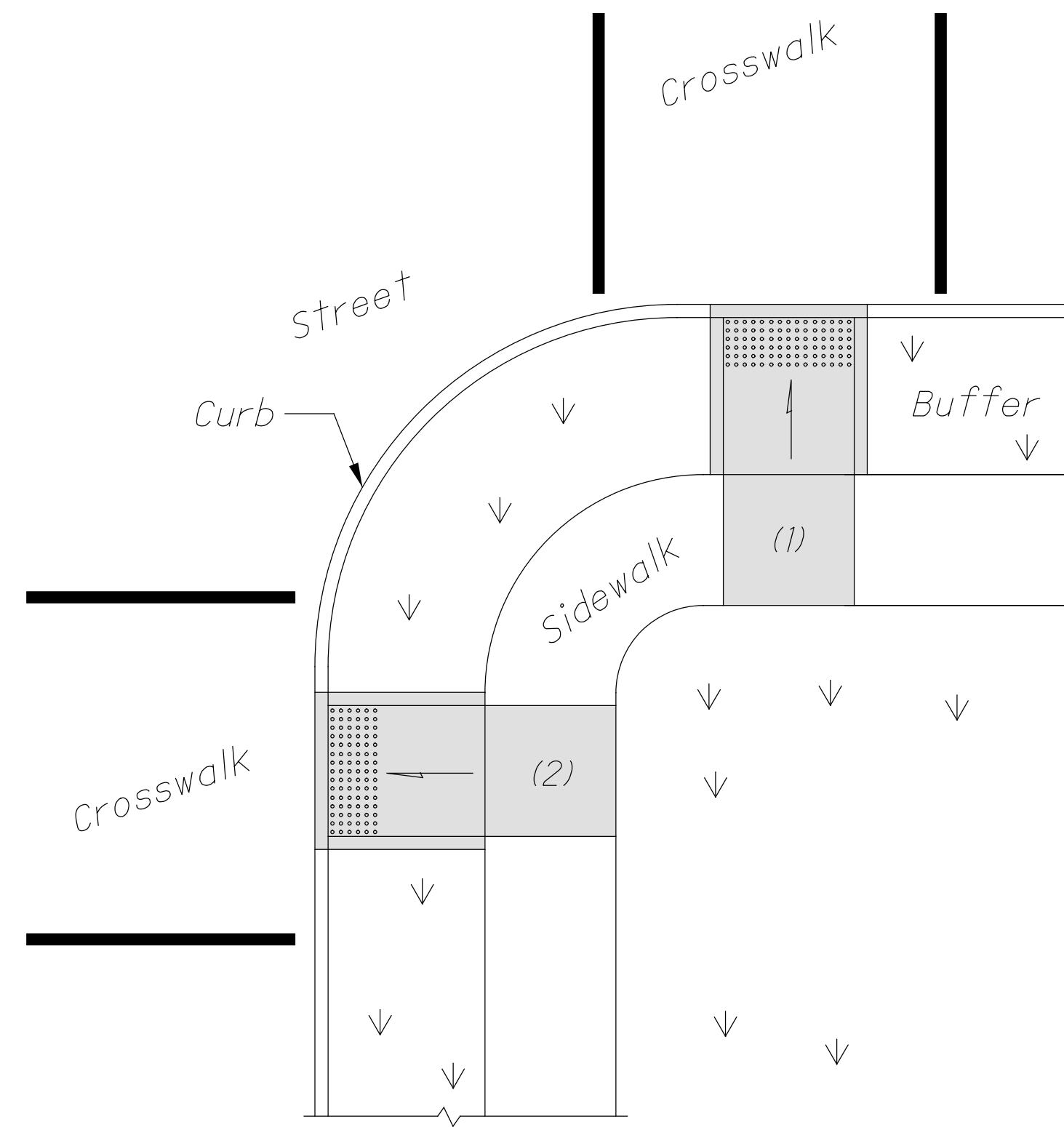
PLAN VIEW

Type A4

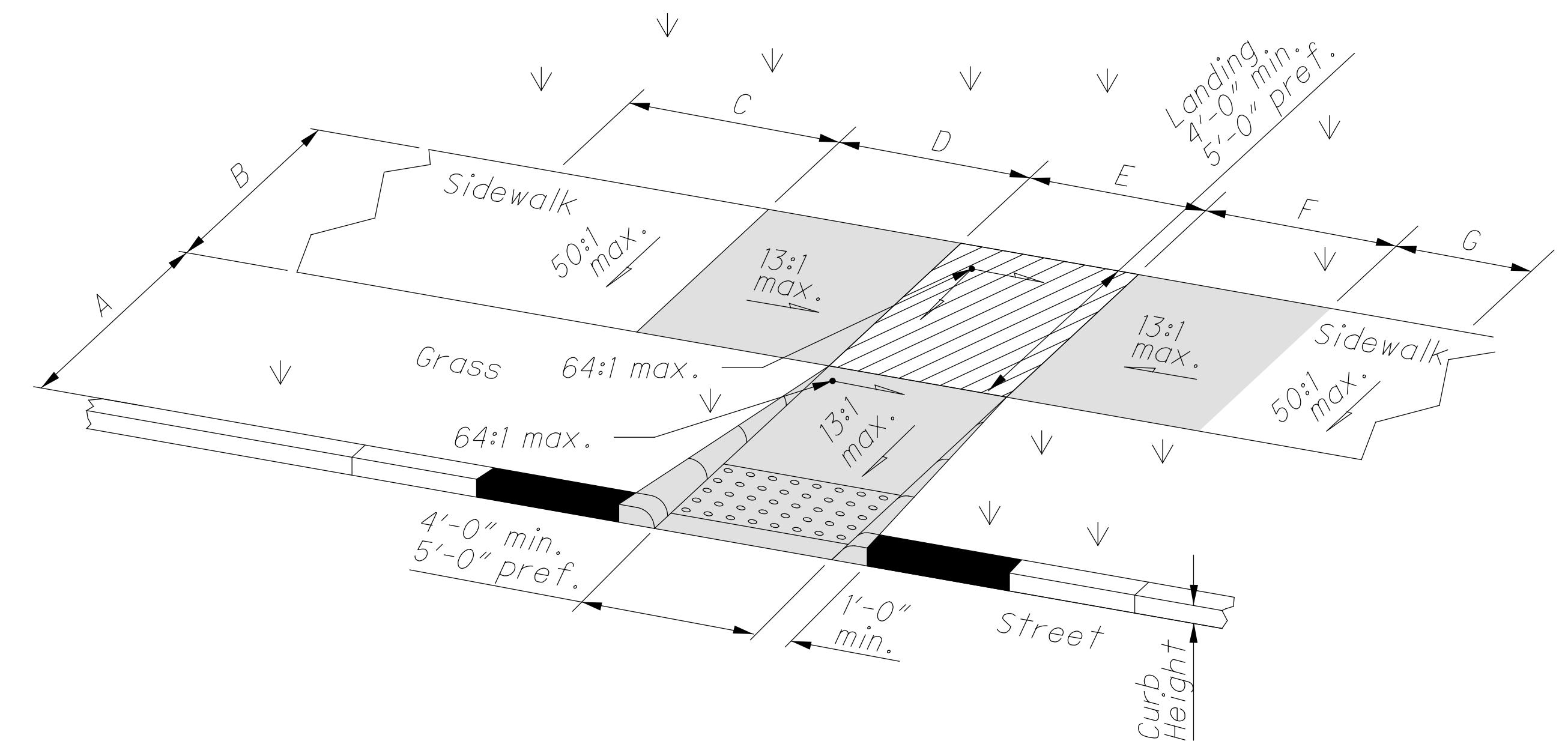




Type D - PARALLEL CURB RAMP (TYPE B2)



TYPE A2/C2 - PERPENDICULAR CURB RAMPS



Type A2/C2

CURB RAMP DETAILS

DESIGN AGENCY

SIGNER

JMW
REVIEWER

MM MM-DD

OBJECT ID
112830

STREET TOTAL

34

COUNTY	ROUTE	LOCATION										REMARKS	
		SECTION (S.L.M.)											
		FROM	TO			EACH	EACH	EACH	EACH	EACH	EACH		
POR	SR 82	10.64	12.80			143						115 VILLAGE OF HIRAM LIMITS: 12.80-13.78	
		13.78	14.76			35	4					32 GATEWAY DR	
		14.76	16.04			85						68 VILLAGE OF GARRETTSVILLE LIMIT	
POR	SR 88	7.95	10.88			194						156 VILLAGE OF GARRETTSVILLE LIMITS: 10.88-12.62	
		12.62	13.54			61						49 VILLAGE OF GARRETTSVILLE LIMIT	
		13.54	13.70			11	16					22 SR 305 SOUTH APPROACH	
TOTALS CARRIED TO GENERAL SUMMARY													
529 4 16 442													

RAISED PAVEMENT MARKING SUBSUMMARY

DESIGNER
JMWREVIEWER
RMM MM-DD-YPROJECT ID
112830SHEET TOTAL
P.21 34

EDGE LINE															GENERAL SPEC: 640	MATERIAL TYPE: 646			
CTY	ROUTE	TRUE LOG	FROM			TRUE LOG	TO			WHITE EDGE LINE, 6"			YELLOW EDGE LINE, 6"			COMMENTS			
										TOTAL	HIGHWAY	RAMP	TOTAL	HIGHWAY	RAMP				
POR	SR 82	10.64	STRUCTURE POR-82-1062		12.86	HIRAM WEST CORP LIMIT		4.52											
		13.77	HIRAM EAST CORP LIMIT		16.08	GARRETTSVILLE CORP LIMIT		4.66											
		16.90	0.05 MILE WEST OF FREEDOM ST		17.89	0.12 MILE EAST OF STANLEY RD		1.73											
POR	SR 88	7.95	STATE ROUTE 303		12.00	STATE ROUTE 82		8.14											
		12.15	SARCHIONE CHEVROLET DRIVEWAY		13.70	STATE ROUTE 305		3.10											
TOTAL							22.15		0										
LANE LINE																			
CTY	ROUTE	TRUE LOG	FROM			TRUE LOG	TO			TOTAL MILES	6" LANE LINE DASHED	6" LANE LINE SOLID	COMMENTS						
TOTAL																			
CENTER LINE																			
CTY	ROUTE	TRUE LOG	FROM			TRUE LOG	TO			TOTAL MILES	EQUIVALENT SOLID LINE		COMMENTS						
POR	SR 82	10.64			17.89					7.55	12.63								
POR	SR 88	7.95			13.70					5.89	10.02								
TOTAL							13.45		22.65										
*24" HIGH VISIBILITY																			
CTY	ROUTE LOCATION		TRUE LOG	CHANNEL LINE, 8"	CHANNEL LINE, 12"	STOP LINE	*CROSS WALK LINES	TRANSVERSE DIAGONAL LINES		ISLAND MARKING	SYMBOL MARKINGS		LANE ARROWS		BIKE LANE	PARKING LOT STALL MARKINGS	HANDICAP SYMBOL MARKINGS	COMMENTS	
								WHITE	YELLOW		RxR	SCHOOL		TURN	TURN				
POR	SR 82 @ SLM 13.26 CROSSING		13.260			50													
	SR 82 @ SR 700		13.330			29	84												
	SR 82 @ VILLAGE WAY DR		14.760	145						48			2			25	BIKE LANE MARKINGS: SLM 13.8-16 STAGGERED EVERY 0.1 MILE		
	SR 82 - TWTL		16.500							48			4						
	SR 82 @ SR 88		16.679	170		90	222						6						
	SR 82 @ HIGH ST		16.682				96									1224	1		
	SR 82 @ CENTER ST		16.803				150									454			
	SR 82 @ FREEDOM ST		16.843				42												
	SR 82 @ TRAIL CROSSING		17.240				50										USE 10' BARS FOR MID-BLOCK		
	SR 88 @ SR 303		7.950			30											CROSSINGS		
POR	SR 88 @ GARFIELD HS		10.708										1						
	SR 88 @ GARFIELD HS		11.200										1						
	SR 88 @ SOUTHWOOD DR		11.250				50										USE 10' BARS FOR MID-BLOCK		
	SR 88 @ VILLAGE PARK		11.461				50										CROSSINGS		
	SR 88 @ HEADWATERS TRAIL		11.750				50										USE 10' BARS FOR MID-BLOCK		
	SR 88 @ FREEDOM STREET		11.835				104												
	SR 88 - TWTL		12.055										5						
	SR 88 @ MAPLE AVE		12.086				102						2						
	SR 88 - TWTL		12.111																
	SR 88 @ SR 305		13.700				77												
TOTAL				315		226	1050		96		2	19				25	1678	1	



RRFB SIGNING PLAN

630 SIGNING MISC.: SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY

THIS WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY. THE FLASHING UNIT SHALL BE SOLAR POWERED, PEDESTRIAN ACTIVATED, AND 2-SIDED WITH TWO LED ARRAY BASED YELLOW INDICATIONS ON EACH SIDE. MULTIPLE UNITS SHALL BE WIRELESSLY CONTROLLED AND SYNCHRONIZED. THE UNIT SHALL BE COMPLIANT WITH THE MOST CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) AND FHWA INTERIM APPROVAL FOR RRFBs (IA-21).

GENERAL REQUIREMENTS -

EACH RRFB SHALL CONSIST OF TWO RAPIDLY FLASHED RECTANGULAR-SHAPED YELLOW INDICATIONS HAVING LED ARRAY BASED LIGHT SOURCE.

EACH RRFB SHALL BE A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO, SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS AND ELECTRICAL COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.).

EACH RRFB SHALL CONTAIN A PEDESTRIAN INDICATION LIGHT VISIBLE BY THE PEDESTRIAN IN THE DIRECTION OF TRAVEL.

FUNCTIONAL REQUIREMENTS -

EACH RRFB SHALL UTILIZE SOLAR POWER.

EACH RRFB SHALL BE ACTIVATED BY ADA COMPLIANT ACCESSIBLE PEDESTRIAN PUSHBUTTONS.

THE RRFB SHALL BE NORMALLY DARK, SHALL INITIATE OPERATION ONLY UPON PEDESTRIAN ACTUATION, AND SHALL CEASE OPERATION AFTER A PREDETERMINED TIME LIMIT (BASED ON OMUTCD PROCEDURES).

EACH REMOTE RRFB SHALL BE WIRELESSLY ACTIVATED.

ALL RRFB LIGHT INDICATIONS SHALL BE WIRELESSLY SYNCHRONIZED (ALL LIGHTS WILL TURN ON WITHIN 120 MSEC & REMAIN SYNCHRONIZED THROUGHOUT THE DURATION OF THE FLASHING CYCLE).

THE UNIT SHALL BE CAPABLE OF RUNNING 14 DAYS WITHOUT SUNLIGHT.

MATERIALS -

FURNISH A COMPLETE ASSEMBLY, CONSISTING OF BUT NOT LIMITED TO SIGNAGE, SIGN MOUNTING HARDWARE, INDICATIONS & ELECTRICAL

COMPONENTS (WIRING, SOLID-STATE CIRCUIT BOARDS, ETC.). THE RRFB ASSEMBLY INCLUDES THE FOLLOWING ITEMS:

1. RRFB INDICATIONS

A. EACH RRFB INDICATION LENS SHALL BE A MINIMUM SIZE OF APPROXIMATELY 5" WIDE X 2" HIGH.

B. THE RRFB INDICATIONS SHALL BE ALIGNED HORIZONTALLY, WITH THE LONGER DIMENSION OF THE INDICATION HORIZONTAL. THERE SHALL BE TWO INDICATIONS ON THE FRONT AND TWO INDICATIONS ON THE BACK.

C. EACH RRFB SHALL BE SUPPLIED WITH ALL REQUIRED HARDWARE TO INSTALL ASSEMBLY. ALL EXPOSED HARDWARE SHALL BE ANTI-VANDAL.

D. EACH RRFB SHALL BE LOCATED BETWEEN THE BOTTOM OF THE CROSSING WARNING SIGN AND THE TOP OF THE SUPPLEMENTAL DOWNWARD DIAGONAL ARROW PLAQUE.

E. THE LIGHT INTENSITY OF THE YELLOW INDICATIONS SHALL MEET THE MINIMUM CLASS 1 SPECIFICATIONS OF SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) STANDARD J595 (DIRECTIONAL FLASHING OPTICAL WARNING DEVICES FOR AUTHORIZED EMERGENCY, MAINTENANCE & SERVICE VEHICLES) DATED JANUARY, 2005.

F. TO MINIMIZE EXCESSIVE GLARE DURING NIGHTTIME CONDITIONS, AN AUTOMATIC SIGNAL DIMMING DEVICE SHALL BE USED TO REDUCE THE BRILLIANCE OF THE RRFB INDICATIONS.

G. An LED PEDESTRIAN CONFIRMATION LIGHT DIRECTED AT AND VISIBLE TO PEDESTRIANS IN THE CROSSWALK SHALL BE INSTALLED INTEGRAL TO THE RRFB OR PUSHBUTTON TO GIVE CONFIRMATION THAT THE RRFB IS IN OPERATION.

H. THE PEDESTRIAN CONFIRMATION LIGHT SHALL HAVE A MINIMUM AREA OF 0.5 SQUARE INCHES & BE CONSPICUOUS EDESTRIANS AT ALL DISTANCES FROM THE BEGINNING OF THE CONTROLLED CROSSWALK TO A POINT 10 FEET FROM THE END OF THE CONTROLLED CROSSWALK DURING BOTH DAY & NIGHT.

2. SIGNS

A. ALL SIGN ASSEMBLIES SHALL USE ANTI-VANDAL FASTENERS TO MOUNT COMPONENTS TO SIGN AND SIGN TO FIXTURE.

B. ACCESSIBLE PEDESTRIAN PUSHBUTTONS SIGNS SHALL BE PROVIDED AND INCLUDE THE LEGEND "PUSH BUTTON FOR WARNING LIGHTS/WAIT FOR GAP IN TRAFFIC". SIGNS SHOULD BE MOUNTED ADJACENT TO OR INTEGRAL WITH EACH PEDESTRIAN PUSHBUTTON.

C. TWO SETS OF SIGNS SHALL BE REQUIRED PER UNIT FOR VIEW FROM EACH APPROACH.

D. ENSURE THE ASSURE SIGN MEETS THE REQUIREMENTS OF C&MS 630.

3. CONTROL CIRCUIT

A. THE CONTROL CIRCUIT SHALL HAVE THE CAPABILITY OF INDEPENDENTLY FLASHING UP TO TWO INDEPENDENT OUTPUTS. THE LED LIGHT OUTPUTS AND FLASH PATTERN SHALL BE COMPLETELY PROGRAMMABLE.

B. THE CONTROL CIRCUIT SHALL BE SEALED WATERTIGHT TO ELIMINATE DIRT CONTAMINATION AND ALLOW FOR SAFE HANDLING IN ALL WEATHER CONDITIONS.

C. THE LEDS SHALL BE SEALED AGAINST DUST AND MOISTURE INTRUSION AS PER THE REQUIREMENTS OF NEMA STANDARD 250-1991 FOR TYPE 4 ENCLOSURE AND TO PROTECT ALL INTERNAL LED AND ELECTRICAL COMPONENTS.

4. BATTERY AND SOLAR PANELS

A. BATTERY UNIT SHALL BE A 12VDC, 35 AHR MINIMUM, SEALED GEL OR AGM LEAD ACID BATTERY. BATTERIES SHALL HAVE A WRITTEN TWO YEAR FULL REPLACEMENT WARRANTY.

B. THE SOLAR PANEL SHALL PROVIDE A MINIMUM OF 40 WATTS PEAK TOTAL OUTPUT.

C. THE SOLAR PANEL SHALL BE MOUNTED TO AN ALUMINUM PLATE AND BRACKET AT AN ANGLE OF 45 DEGREES - 60 DEGREES TO PROVIDE MAXIMUM CONTROLLED CROSSWALK TO A POINT 10 FEET FROM THE END OUTPUT.

D. ALL FASTENERS USED SHALL BE ANTI-VANDAL.

5. WIRELESS RADIO

A. RADIO CONTROL SHALL OPERATE ON A 900 MHZ FREQUENCY HOPPING SPREAD SPECTRUM NETWORK, WI-FI OR APPROVED EQUAL.

B. RADIO SHALL INTEGRATE COMMUNICATION OF RRFB CONTROL CIRCUIT TO ACTIVATE SIGN FROM PUSHBUTTON INPUT.

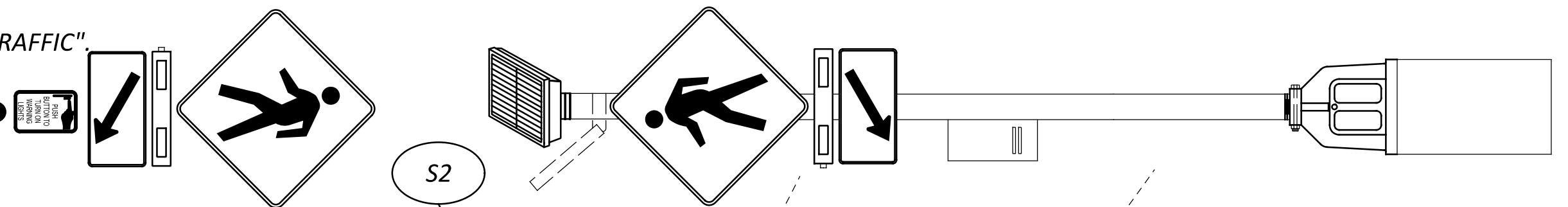
C. THE RADIO SHALL BE SYNCHRONIZED SO ALL OF THE REMOTE RRFB LIGHT INDICATIONS WILL TURN ON WITHIN 120 MSEC OF EACH OTHER AND REMAIN SYNCHRONIZED THROUGH-OUT THE DURATION OF THE FLASHING CYCLE.

6. ACCESSIBLE PEDESTRIAN PUSHBUTTON

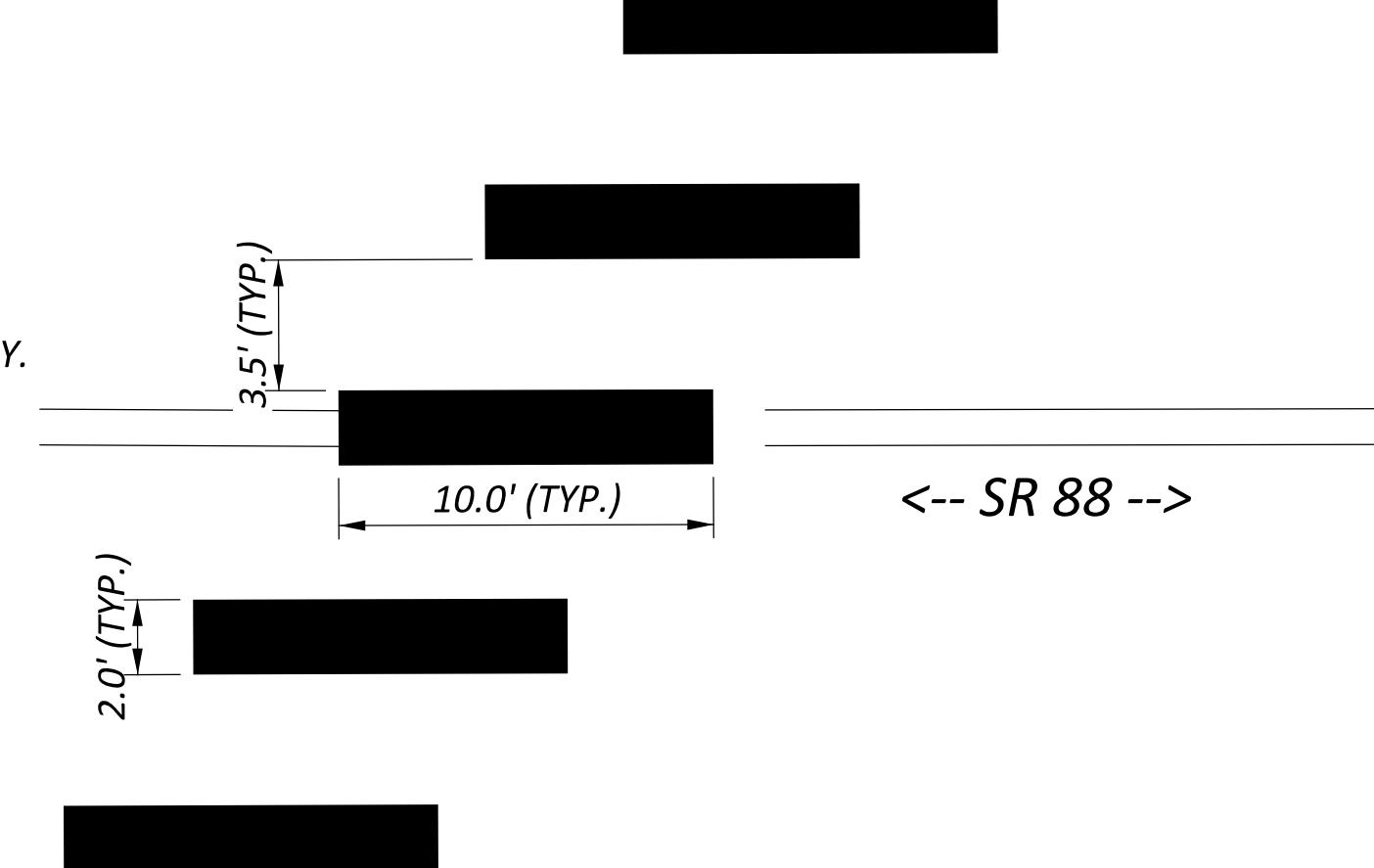
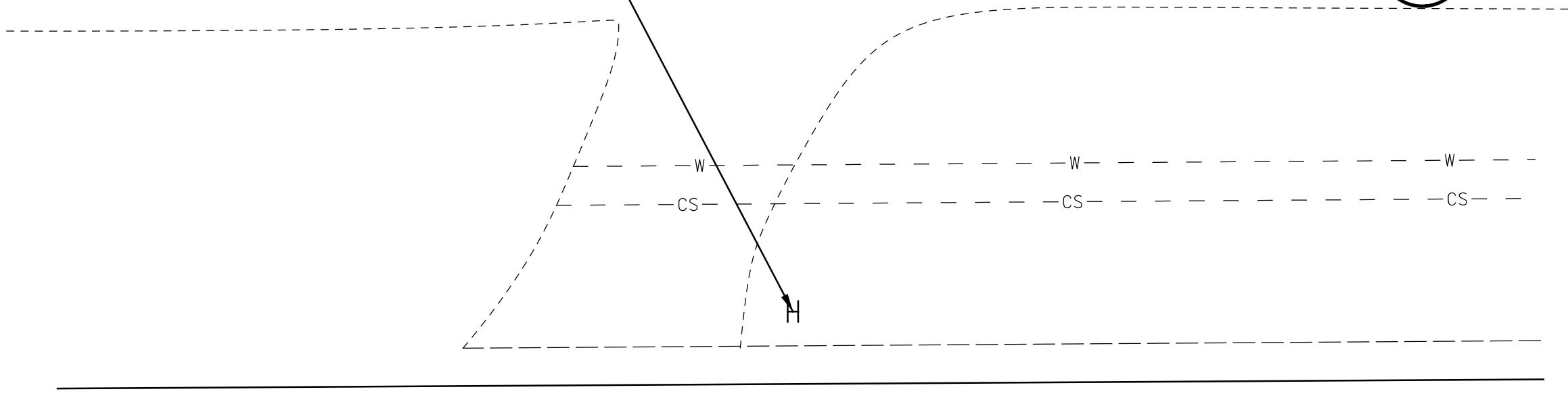
A. THE PUSHBUTTON SHALL BE CAPABLE OF CONTINUOUS OPERATION OVER A TEMPERATURE RANGE OF -30 DEGREES F TO +165 DEGREES F.

B. PUSHBUTTON SHALL BE ADA COMPLIANT.

SOLAR POWERED RRFB



NOTE: OWNERSHIP/MAINTENANCE OF RRFB IS THE VILLAGE OF GARRETTSVILLE. VILLAGE SHOULD BE CONTACTED WITH ANY QUESTIONS AND FOR FINAL INSPECTION.



7. PEDESTAL SHAFT AND BASE - MOUNT ON A STANDARD 4.5-INCH OD ALUMINUM PEDESTAL POLE WITH BREAKAWAY BASE. A 14 FOOT POLE SHALL BE PROVIDED AND FIELD ADJUSTED AND CAPPED TO MAINTAIN THE PROPER SIGN MOUNTING HEIGHTS, UNLESS SPECIFIED OTHERWISE IN THE PLANS. POLE AND BASE MANUFACTURER SHALL BE LISTED ON ODOT'S QUALIFIED PRODUCTS LIST.

CONSTRUCTION -

THE RRFB SHALL BE ASSEMBLED AND CONSTRUCTED BY THE CONTRACTOR AS SHOWN AND SPECIFIED ON THE PLANS.

WARRANTY -

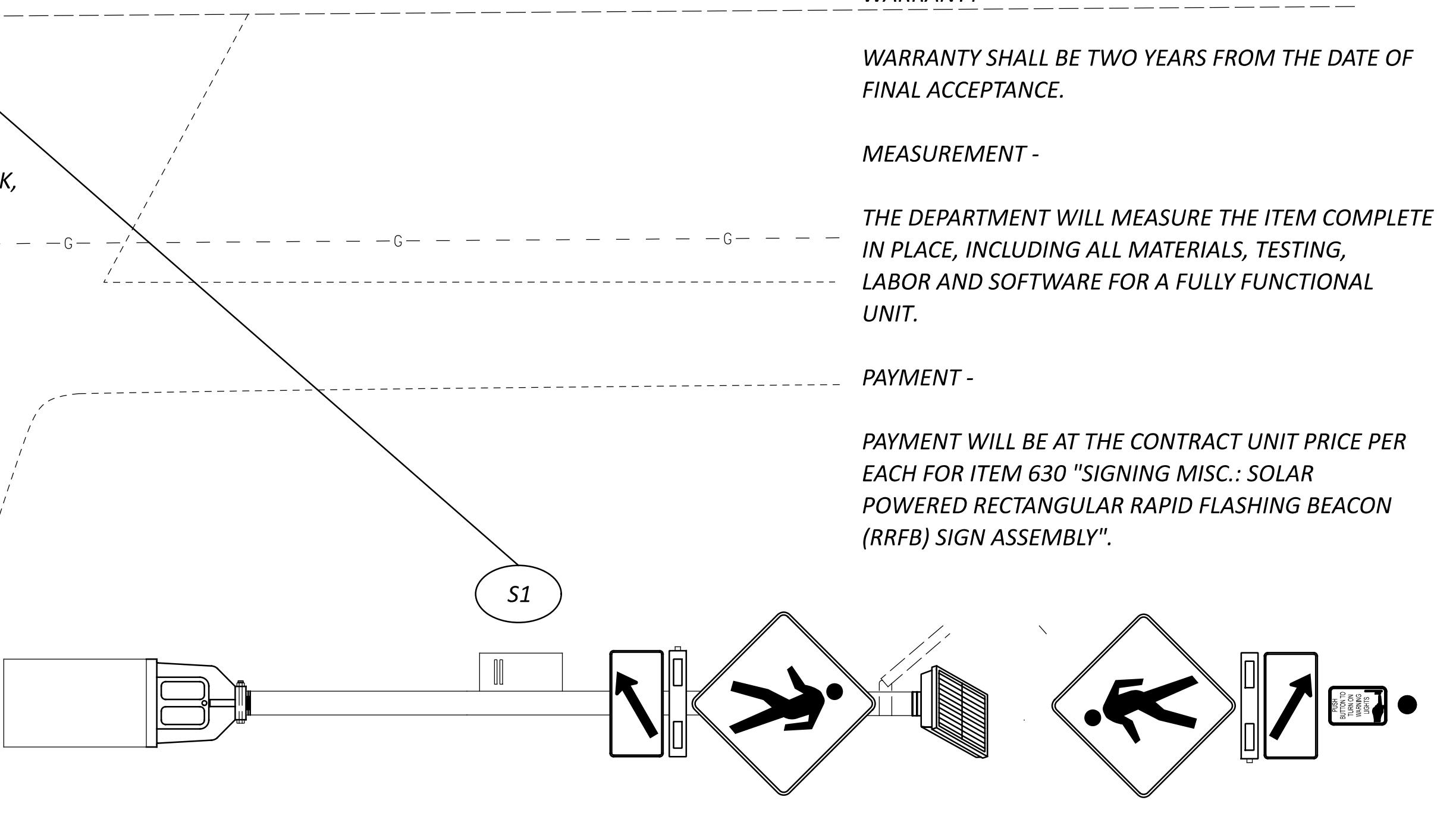
WARRANTY SHALL BE TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE.

MEASUREMENT -

THE DEPARTMENT WILL MEASURE THE ITEM COMPLETE IN PLACE, INCLUDING ALL MATERIALS, TESTING, LABOR AND SOFTWARE FOR A FULLY FUNCTIONAL UNIT.

PAYMENT -

PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH FOR ITEM 630 "SIGNING MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY".



SOLAR POWERED RRFB

REF NO.	ROUTE	SLM	SIDE	CODE *PLYWOOD # YELLO/GREEN ## WHITE ON BROWN	SIZE (INCHES)	630 646 630 630			
						CROSSWALK LINE, 24" HIGH VISIBILITY	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL
S1	88	11.75	RT.	RRFB	EACH	1	50	3	1
S2	88	11.75	LT.	RRFB	FT			3	1



DESIGN AGENCY

DESIGNER

JMW

REVIEWER

RMM MM-DD-Y

PROJECT ID

112830

SHEET TOTAL

P.23 34

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10th EDITION* OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS, SECTIONS 102.05, 105.02, AND 513.04*. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

PROPOSED WORK:

POR-82-10640, SFN:6703364, (CUYAHOGA RIVER)

- SEAL THE EXISTING WEARING SURFACE AND APPROACH WITH GRAVITY FED RESIN

POR-82-15190, SFN:6703402, (SILVER CREEK)

- SEAL THE EXISTING WEARING SURFACE AND APPROACH WITH GRAVITY FED RESIN

POR-82-16802, SFN: 6703437, (EAGLE CREEK)

- SEAL THE EXISTING WEARING SURFACE AND APPROACH WITH GRAVITY FED RESIN
- RE-SEAL THE CONCRETE RAILING WITH AN EPOXY URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE CLEAR.

POR-88-11956, SFN: 6703607, (EAGLE CREEK)

- SEAL THE EXISTING WEARING SURFACE AND APPROACH WITH GRAVITY FED RESIN

STREAM/WETLANDS IMPACT AVOIDANCE

NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PERFORMED BELOW THE ORDINARY HIGH WATER MARK OF ANY STREAM, RIVER AND/OR WITHIN ANY WETLANDS OR OTHER JURISDICTIONAL WATERS OF THE UNITED STATES. ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS SECTION 107.10 (PROTECTION AND RESTORATION OF PROPERTY) PROHIBIT THE CONTRACTOR FROM CREATING STAGING AREAS NEAR STREAMS, WETLANDS AND FEMA MAPPED 100 YEAR FLOODPLAINS.

STRUCTURE GENERAL NOTES
BRIDGE NO. POR-82-10640, 15190, 16802
BRIDGE NO. POR-88-11956

SFN
VARIOUS
DESIGN AGENCY



DESIGNER JRM	CHECKER MJA
REVIEWER	
RMM MM-DD-Y	
PROJECT ID 112830	
SUBSET P.1	TOTAL P.3
SHEET P.24	
TOTAL 34	

CALC: DATE:
CKED: DATE:

ESTIMATED QUANTITIES

STRUCTURE ESTIMATED QUANTITIES
BRIDGE NO. POR-82-10640, 15190, 16802
BRIDGE NO. POR-88-11956

SFN
VARIOUS
DESIGN AGENCY

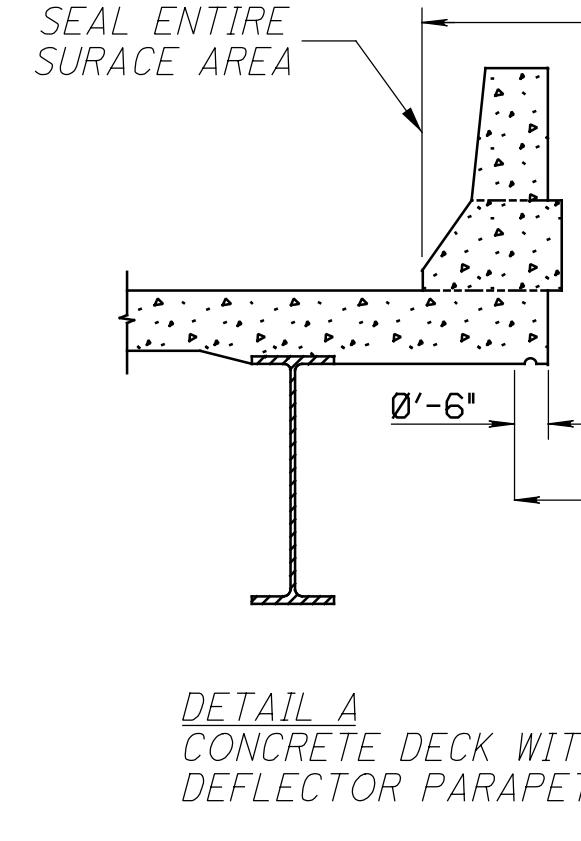


DESIGNER JRM CHECKER MJA

REVIEWER
RMM MM-DD-Y
PROJECT ID

112830
SUBSET TOTAL
B 2 B 2

P.2	P.3
SHEET	TOTAL



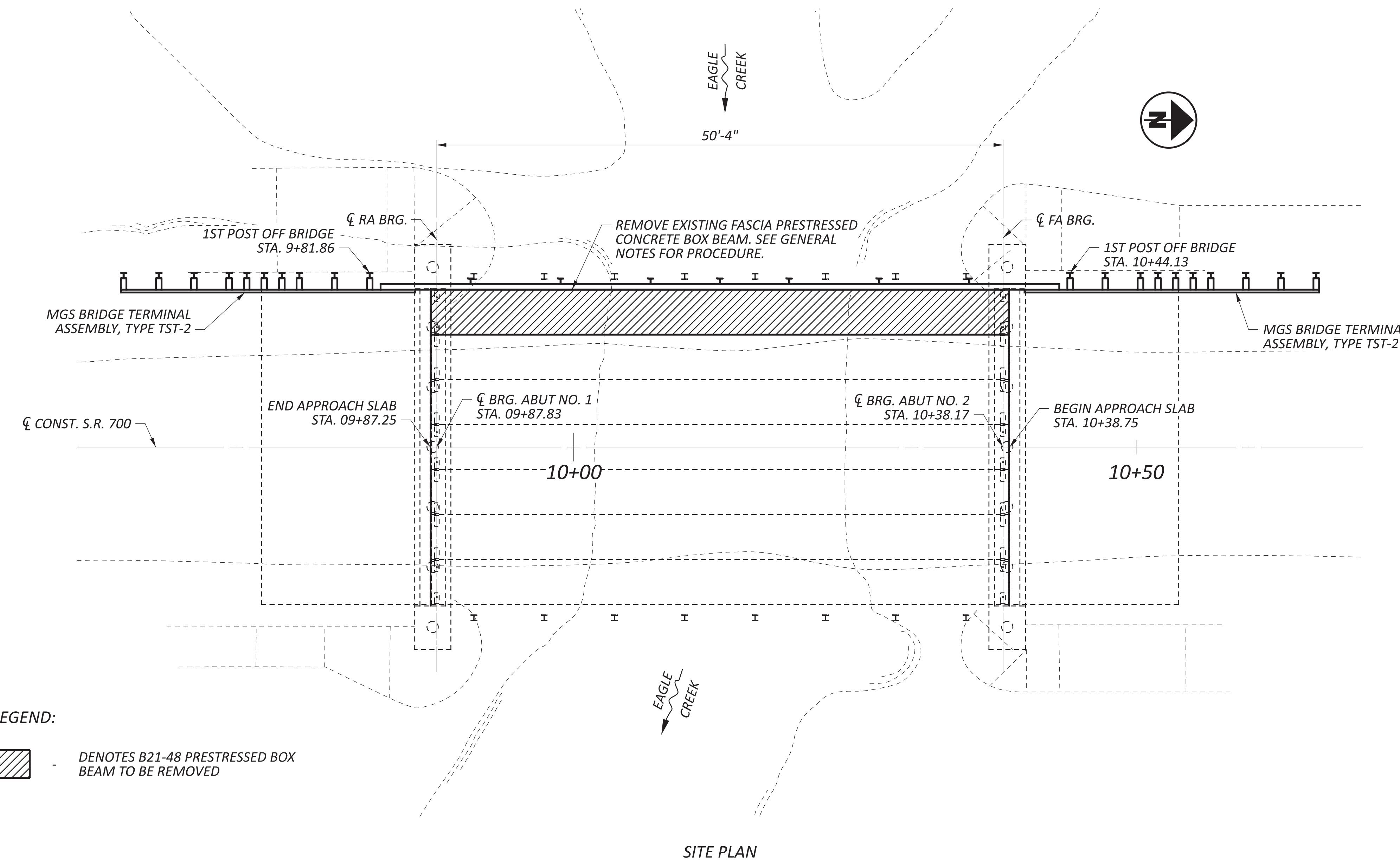
ESTIMATED QUANTITIES									
BRIDGE NUMBER	SEALING PAY ITEM	STRUCTURE TYPE	PROPOSED SEALING	FEDERAL COLOR NUMBER OF TOP COAT	ABUT (SQ YD)	PIER (SQ YD)	SUPER (SQ YD)	GENERAL (SQ YD)	TOTAL (SQ YD)
POR-82-1680	ITEM 512 – SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	STEEL MULTIBEAM	RE-SEAL THE CONCRETE RAILING	MATCH EXISTING				294	294

BRIDGE NUMBER	BRIDGE DECK						APPROACH SLABS					
	LENGTH (BRIDGE LIMITS)			DECK AREA			LENGTH (APPROACH SLABS)			APPROACH SLAB WIDTH		
	FT	FT	SQ YD	SY	512	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	FT	FT	SQ YD	512	TREATING CONCRETE BRIDGE DECKS WITH GRAVITY FED RESIN	
POR-82-1064	173.50	32.00	616.89	616.89			18.00	32.00	64.00	FWD	64.00	
							20.00	32.00	71.11	REAR	71.11	
POR-82-1519	70.00	42.00	326.67	326.67			25.00	42.00	116.67	FWD	116.67	
							25.00	42.00	116.67	REAR	116.67	
POR-82-1680	82.00	40.00	364.44	364.44			30.00	40.00	133.33	FWD	133.33	
							30.00	40.00	133.33	REAR	133.33	
POR-88-1195	99.00	28.00	308.00	308.00			15.00	28.00	46.67	FWD	46.67	
							15.00	28.00	46.67	REAR	46.67	

STRUCTURE DETAILS
BRIDGE NO. POR-82-10640, 15190, 16802
BRIDGE NO. POR-88-11956



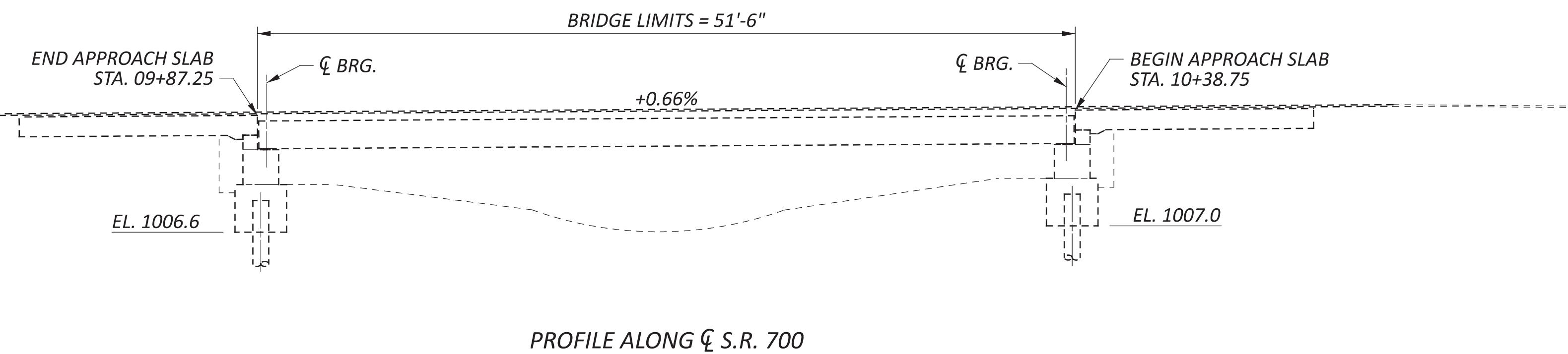
DESIGNER JRM	CHECKER MJA
REVIEWER RMM	MM-DD-Y
PROJECT ID 112830	
SUBSET P.3	TOTAL P.3
SHEET P.26	TOTAL 34



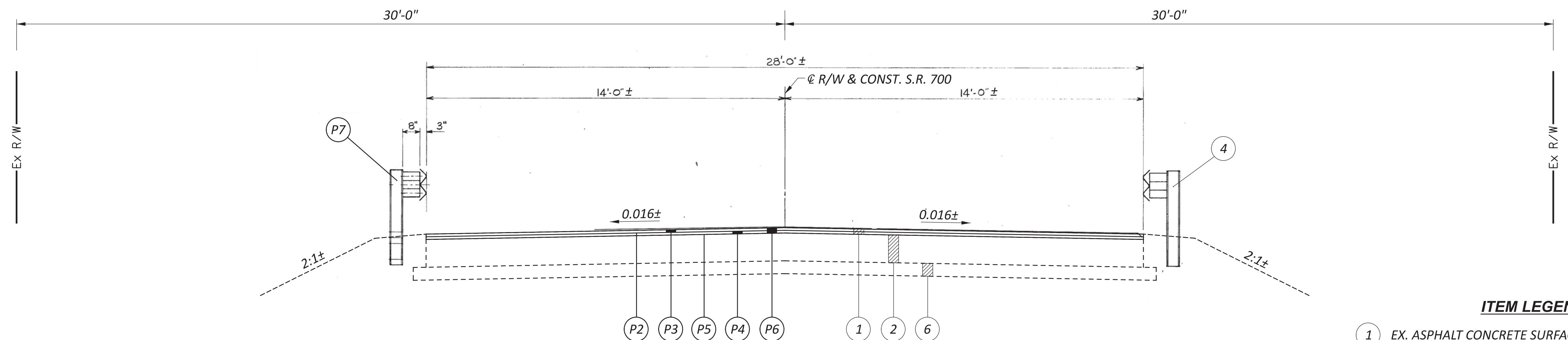
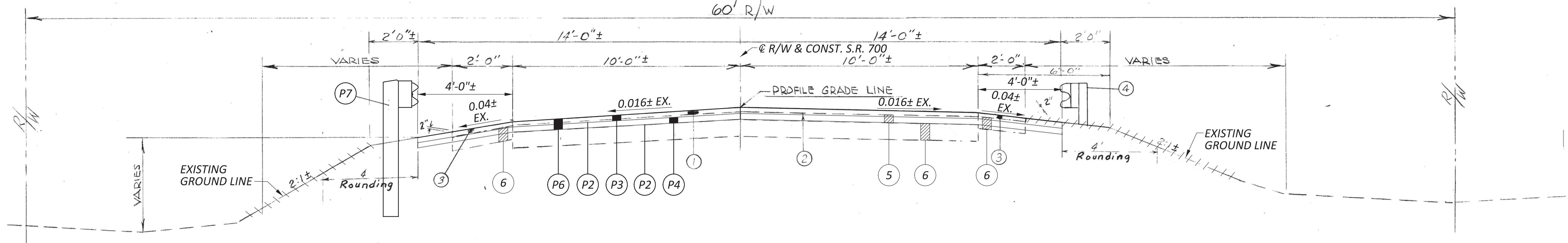
PROPOSED WORK	
1.	CLOSE STRUCTURE TO THROUGH TRAFFIC.
2.	REMOVE EXISTING BITUMINOUS WEARING SURFACE ON ENTIRE BRIDGE DECK AND APPROACHES.
3.	REMOVE PORTIONS OF STRUCTURE.
4.	REPLACE EXISTING BOX BEAM WITH NEW BEAM.
5.	REPLACE DRIP STRIP.
6.	REPLACE ASPHALT WEARING SURFACE.
7.	SAW AND SEAL BITUMINOUS JOINTS.
8.	REPLACE GUARDRAIL ON LEFT SIDE OF BRIDGE.
9.	REOPEN TO TRAFFIC.

EXISTING STRUCTURE	
TYPE:	NON-COMPOSITE PRESTRESSED CONCRETE BOX BEAM WITH REINFORCED CONCRETE CAPPED PILE ABUTMENTS
SPAN:	50'-4" (C/C BEARINGS)
ROADWAY:	28'-0" (F/F GUARDRAIL)
LOADING:	HS 20-44 & ALTERNATE MILITARY LOADING
SKEW:	0°
APPROACH SLABS:	15'-0"
ALIGNMENT:	TANGENT
CROWN:	0.66%
STRUCTURAL FILE NUMBER:	6703364
DATE BUILT:	1934 (REHABILITATION 2017)
DISPOSITION:	BRIDGE REHABILITATION
LATITUDE:	41°16'55"
LONGITUDE:	81°08'40"

SITE PLAN
S.R. 700 OVER EAGLE CREEK
POR-700-03.359



S.F.N.	
6703383	DESIGN AGENCY
Mannik Smith Group	
DESIGNER	CHECKER
JMP	RJS
REVIEWER	
JRC	9-26-25
PROJECT ID	112830
SUBSET	TOTAL
1	8
SHEET	TOTAL
P.27	34



ITEM LEGEND

- (1) EX. ASPHALT CONCRETE SURFACE COURSE
- (2) EX. 12"± REINFORCED CONCRETE APPROACH SLAB
- (3) EX. STABILIZED CRUSHED AGGREGATE
- (4) EX. GUARDRAIL, TYPE 5
- (5) EX. ASPHALT CONCRETE BASE
- (6) EX. AGGREGATE BASE
- (P1) NOT USED
- (P2) 407 - NON-TRACKING TACK COAT
- (P3) 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 70-22M
- (P4) 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 70-22M
- (P5) 407 - TACK COAT, 702.13
- (P6) 202 - WEARING COURSE REMOVED (2.5" AVG.)
- (P7) 606 - GUARDRAIL, TYPE MGS

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

DS-1-92 (REVISED) 07-15-2022
 TST-2-21 (REVISED) 01-17-2025
 PSBD-1-25 (REVISED) 07-18-2025
 AS-1-15 (REVISED) 01-20-2025

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 10th EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 10TH EDITION AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING

DESIGN LOADING: HS 20-44 AND ALTERNATE MILITARY LOADING

DESIGN DATA

CONCRETE FOR PRESTRESSED BEAMS:
 COMPRESSIVE STRENGTH (FINAL) = _ KSI
 COMPRESSIVE STRENGTH (RELEASE) = _ KSI

WELDED WIRE FABRIC:
 YIELD STRENGTH - 70 KSI

PRESTRESSING STRAND:
 AREA = _ IN²
 ULTIMATE STRENGTH = 270 KSI
 INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

CONCRETE CLASS (2):
 COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

DECK PROTECTION METHOD

WATERPROOFING (TYPE 3) AND ASPHALT CONCRETE OVERLAY
 STEEL DRIP STRIP

ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN

REMOVE ALL OF THE ASPHALT CONCRETE ON STRUCTURE POR-700-03.359. THICKNESS VARIES WITH A MINIMUM THICKNESS OF 2.5". MILLING OR OTHER MECHANICAL METHOD OF ASPHALT DECK REMOVAL MAY BE PERFORMED TO WITHIN 1/2" OF THE TOP OF THE EXISTING PRESTRESSED CONCRETE BOX BEAMS. THE LAST 1/2" OF ASPHALT CONCRETE TO BE REMOVED AND THE WATERPROOFING WILL BE REMOVED USING A NONDESTRUCTIVE METHOD SUCH AS HAND SCRAPING. THE CONTRACTOR WILL USE CAUTION IN REMOVING THE REMAINING ASPHALT AND WATERPROOFING TO ENSURE NO DAMAGE OCCURS TO THE PRESTRESSED CONCRETE BOX BEAMS. ANY DAMAGE TO THE BOX BEAMS WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD FOR ITEM 202, WEARING COURSE REMOVED, AS PER PLAN.

ASPHALT CONCRETE WEARING COURSE

ASPHALT CONCRETE WEARING COURSE SHALL CONSIST OF A VARIABLE THICKNESS OF 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), PG70-22M AND A SECOND 1-1/4" THICKNESS OF 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (449), PG70-22M. PLACE THE FIRST 441 SURFACE COURSE IN TWO OPERATIONS. THE FIRST PORTION OF THE COURSE SHALL BE OF 1-1/4" UNIFORM THICKNESS. FEATHER THE SECOND PORTION OF THE COURSE TO PLACE THE SURFACE PARALLEL TO AND 1-1/4" BELOW FINAL PAVEMENT SURFACE ELEVATION.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

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

CUT LINE CONSTRUCTION JOINT PREPARATION

PRIOR TO REMOVING THE BOX BEAM, PLACE A 1-IN (-0-IN, -1/4-IN) DEEP SAW CUT AT THE BOUNDARIES OF PROPOSED CONCRETE REMOVALS. REMOVE CONCRETE TO A ROUGH SURFACE. INSTALL DOWEL BARS. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

SUBSTRUCTURE CONCRETE REMOVAL

REMOVE CONCRETE BY MEANS OF APPROVED NEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. THE DEPARTMENT WILL NOT PERMIT HYDRAULIC HOERAM TYPE HAMMERS. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18-IN LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH CONCRETE REINFORCEMENT THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURES SCHEDULED FOR DEMOLITION AND/OR REHABILITATION; THE SURVEY DETERMINED THAT NO ASBESTOS IS THE PRESENT ON THE BRIDGE STRUCTURES.

ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM

OHIO EPA, DAPC
 P.O. BOX 1049
 COLUMBUS, OH 43216-1049

ASBESTOS PROGRAM

OHIO EPA, DAPC
 50 W. TOWN ST., SUITE 700
 COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE: 1) THE CONTRACTOR'S NAME AND COMPLETION OF THE BRIDGE REMOVAL AND 3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED. COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT THE ODOT DISTRICT 12 OFFICE, 5500 TRANSPORTATION BOULEVARD, GARFIELD HEIGHTS, OHIO 44125.

BASIS FOR PAYMENT: THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIALS NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS. SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

ITEM 515 - HIGH EARLY STRENGTH KEY-WAY GROUT

KEY-WAY GROUT WILL BE EXAMINED FOR VISIBLE DETERIORATION AFTER THE REMOVAL OF THE ASPHALT CONCRETE OVERLAY AND WATERPROOFING. ANY GROUT DETERMINED TO BE REPLACED BY THE PROJECT ENGINEER WILL BE REMOVED BY ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN AND THE GROUT WILL BE REPLACED USING ITEM 515, HIGH EARLY STRENGTH KEY-WAY GROUT. PAYMENT FOR THIS ITEM WILL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY INCIDENTALS REQUIRED TO PERFORM THIS WORK. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER FOOT FOR ITEM 515, HIGH EARLY STRENGTH KEY-WAY GROUT.

ITEM 515 - PRESTRESSED CONCRETE, NON-COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, B21-48, AS PER PLAN

ALL MILD STEEL IN THE PRESTRESSED BOX BEAMS, MODIFICATION OF STD. BEAM SHAPE, AND TIE-ROD WORK IS INCLUDED IN THIS ITEM.

PROPOSED BEAMS 1 IS TO BE CONNECTED TO EXISTING BEAMS 2. THERE IS THE POSSIBILITY THAT THE EXISTING BEAMS' TIE ROD HOLES ARE NOT AT THE DEPTH SHOWN IN THE ORIGINAL DESIGN DRAWINGS, IN WHICH CASE THE CORRESPONDING TIE ROD HOLES FOR THE NEW BEAMS CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, AND 105.02. BASE CONTRACT BID PRICES UPON A RECOGNITION MAY NEED TO BE FIELD-CORED TO LINE UP PROPERLY FOR THE CONNECTION TO BE MADE. PRIOR TO INITIATING PLACEMENT OF THE PROPOSED BEAM AND UNTIL PLACEMENT OF THE PROPOSED BEAMS IS COMPLETED, THE CONTRACTOR SHALL HAVE ONSITE ALL EQUIPMENT NECESSARY TO CORE TIE ROD HOLES IN THE NEW BOX BEAM.

PRIOR TO CORING ANY NEW HOLE, THE HOLE NOT USED SHALL BE FILLED IN WITH NONSHRINK, NONMETALLIC GROUT CONFORMING TO 705.02 OF THE CMS AND CURED AS PER 510.5.

ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE ABOVE OPTIONS AND/OR REQUIREMENTS, SHOULD SUCH BE DEEMED NECESSARY, SHALL BE PAID UNDER ITEM 515, PRESTRESSED CONCRETE NON-COMPOSITE BOX BEAM BRIDGE MEMBER, LEVEL 1, B21-48, AS PER PLAN.

SPECIAL - ITEM 518 - STEEL DRIP STRIP

REPLACE ALL DRIP STRIP REMOVED DURING STRUCTURE REMOVAL. NEW DRIP STRIP SHALL BE SPLICED INTO EXISTING DRIP STRIP PER STANDARD REQUIREMENTS.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE J, ASTM D4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016), EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

POR-700-3.359 (SFN 6704883) EAGLE CREEK AND WETLANDS AVOIDANCE

THE POR-700-03.36 BRIDGE SPANS EAGLE CREEK AND IS LOCATED IN A LARGE HIGH QUALITY WETLAND COMPLEX. WETLANDS ARE PRESENT AT THE TOE-OF-SLOPE IN ALL FOUR QUADRANTS OF THE BRIDGE. NO EXCAVATION, GRADING OR FILLING OPERATIONS SHALL BE PERFORMED BELOW THE ORDINARY HIGH WATER MARK OF EAGLE CREEK AND/OR WITHIN ANY WETLANDS OR OTHER JURISDICTIONAL WATERS OF THE UNITED STATES.

THE CONTRACTOR SHALL ADVISE THE ODOT PROJECT ENGINEER AND THE DISTRICT ENVIRONMENTAL COORDINATOR A MINIMUM OF TWENTY-ONE (21) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES AT THE POR-700-03.36 BRIDGE LOCATION. ODOT ENVIRONMENTAL SECTION PERSONNEL WILL FLAG WETLAND AREAS FOR AVOIDANCE A MINIMUM OF SEVEN (7) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES AT THE POR-700-3.359 BRIDGE LOCATION.

BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO AVOID IMPACT TO EAGLE CREEK AND WETLANDS LOCATED IN PROXIMITY OF THE PROJECT CONSTRUCTION LIMITS. A QUANTITY OF ITEM 832 PERIMETER FILTER FENCE AND A QUANTITY OF ITEM 832 PERIMETER FILTER FABRIC FENCE HAVE BEEN INCLUDED IN THE GENERAL SUMMARY. THE CONSTRUCTION FENCE AND PERIMETER FILTER FABRIC FENCE SHALL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS AT THE POR-700-3.36 BRIDGE LOCATION BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES WITHIN THE LIMITS AND ADJACENT AREA, INCLUDING ANY NECESSARY CLEARING AND GRUBBING ACTIVITIES. THE CONSTRUCTION FENCE AND PERIMETER FILTER FABRIC FENCE SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT PROJECT CONSTRUCTION AND SHALL BE REMOVED BY THE CONTRACTOR UPON PROJECT COMPLETION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR IMPACT EAGLE CREEK AND/OR THE WETLAND AREAS BEYOND THE CONSTRUCTION LIMITS APPROVED BY THE PROJECT ENGINEER. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR STORE EQUIPMENT AND/OR MATERIALS WITHIN WETLAND AREAS.

PAYMENT FOR ITEM 832 CONSTRUCTION FENCE AND ITEM 832 PERIMETER FILTER FABRIC FENCE WILL BE MADE UNDER ITEM 832, EROSION CONTROL.

GENERAL NOTES
 S.R. 700 OVER EAGLE CREEK

SFN 6703383

DESIGN AGENCY

MANIK SMITH GROUP
 1000 Main Street, Suite 1000
 Columbus, OH 43215
 (614) 228-1000

DESIGNER PRS

CHECKER RJS

REVIEWER TJF

09-26-25

PROJECT ID

112830

SUBSET TOTAL

4 8

SHEET TOTAL

P.30 34

ESTIMATED QUANTITIES (PLAN SPLIT 03/5)

CALC: RJS *DATE: 9/24/25* *CHECKED: JRC* *DATE: 9/24/25*

ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTS.	SUPER	GEN	sheet
202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN		LS		4 OF 8
202	23500	249	SY	WEARING COURSE REMOVED			249	
202	23501	161	SY	WEARING COURSE REMOVED, AS PER PLAN		161		4 OF 8
202	38000	288	FT	GUARDRAIL REMOVED			288	
407	13900	9	GAL	TACK COAT, 702.13			9	
407	20000	58	GAL	NON-TRACKING TACK COAT		29	29	
409	30000	57	FT	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT JOINTS	57			
441	70100	27	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG70-22M		9	18	
509	10000	123	LB	EPOXY COATED STEEL REINFORCEMENT	123			
510	10000	20	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	20			
511	45710	1	CY	CLASS QC1 CONCRETE, ABUTMENT	1			
512	10100	17	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	4	13		
512	33010	174	SY	TYPE 3 WATERPROOFING		174		
515	10051	1	EACH	PRESTRESSED CONCRETE NON-COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, B21-48, AS PER PLAN (51'-4" LONG)	1			4 OF 8
515	30000	113	FT	HIGH EARLY STRENGTH KEYWAY GROUT	113			4 OF 8
516	13600	19	SF	1" PREFORMED EXPANSION JOINT FILLER	19			
516	31010	57	FT	2" DEEP JOINT SEALER	57			
516	43100	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (8.00" X 10.00" X 1.00")	4			8 OF 8
517	70100	63	FT	RAILING (THREE STEEL TUBE BRIDGE RAILING)	63			
SPECIAL	518E22300	118	FT	STEEL DRIP STRIP	118			4 OF 8
606	15050	137.5	FT	GUARDRAIL, TYPE MGS			137.5	
606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E			2	
606	34600	2	EACH	MSG BRIDGE TERMINAL ASSEMBLY, TYPE TST-2			2	
621	00100	2	EACH	RPM			2	
621	54000	2	EACH	RAISED PAVEMENT MARKER REMOVED			2	
626	00110	5	EACH	BARRIER REFLECTOR, TYPE 2, (BI-DIRECTIONAL)			5	
630	02100	21.0	FT	GROUND MOUNTED SUPPORT, NO. 2 POST			21.0	
630	84900	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL			1	
630	85100	3	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERCTION			3	
630	86002	3	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL			3	
646	10010	0.04	MILE	EDGE LINE, 6"			0.04	
646	10200	0.02	MILE	CENTER LINE			0.02	

**ESTIMATED QUANTITIES
S.R. 700 OVER EAGLE CREEK
BOB-700-03 359**

POR-700-03.359

SFN
6703383

DESIGN AGENCY

110

TECHNIQUE

group.com

www.MannII

2

DESIGNER CHECK

DESIGNER CHECK
PIS PBS

REVIEWER

REVIEWER

PROJECT ID

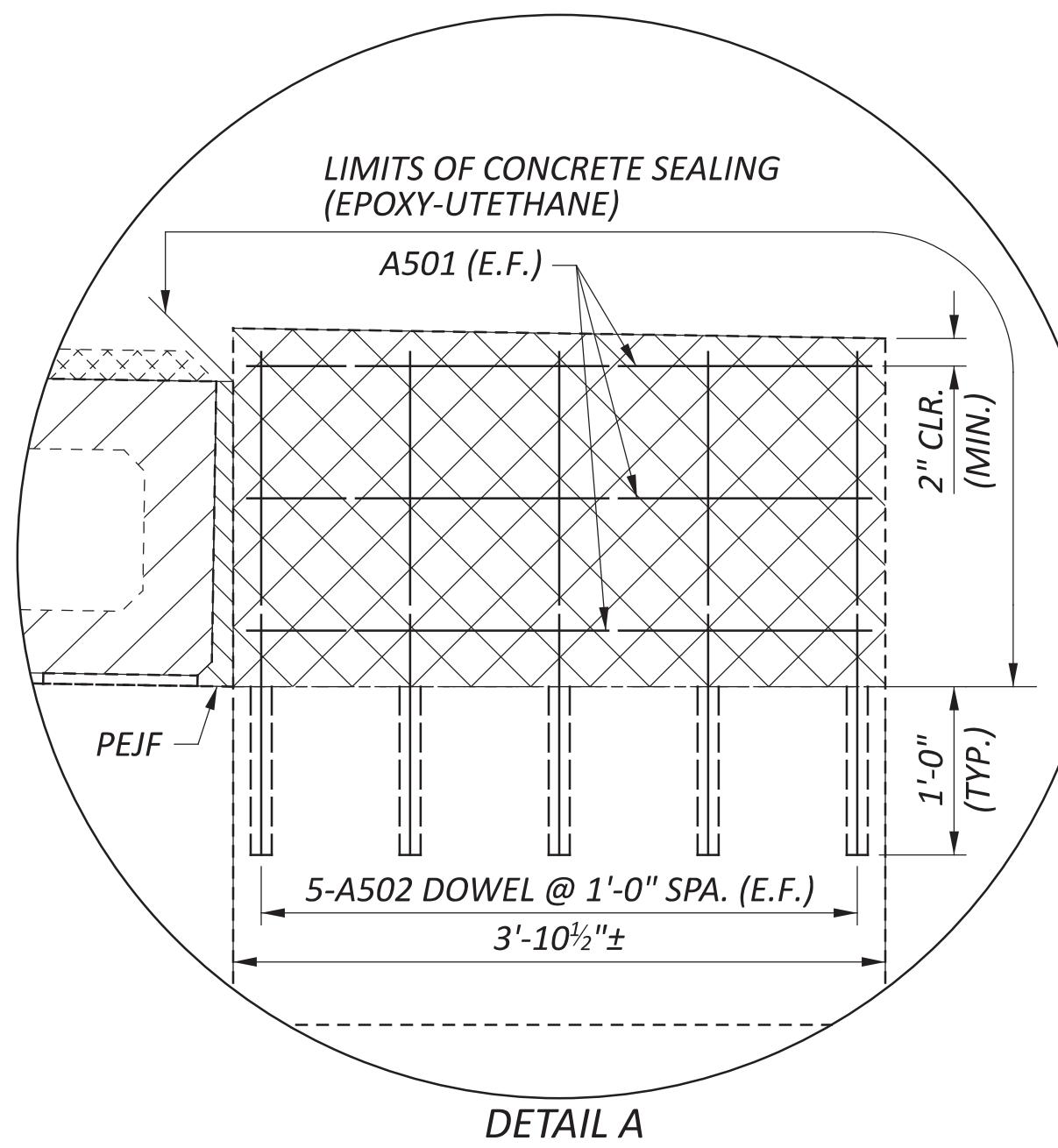
PROJECT ID
112830

SUBSET TOTAL

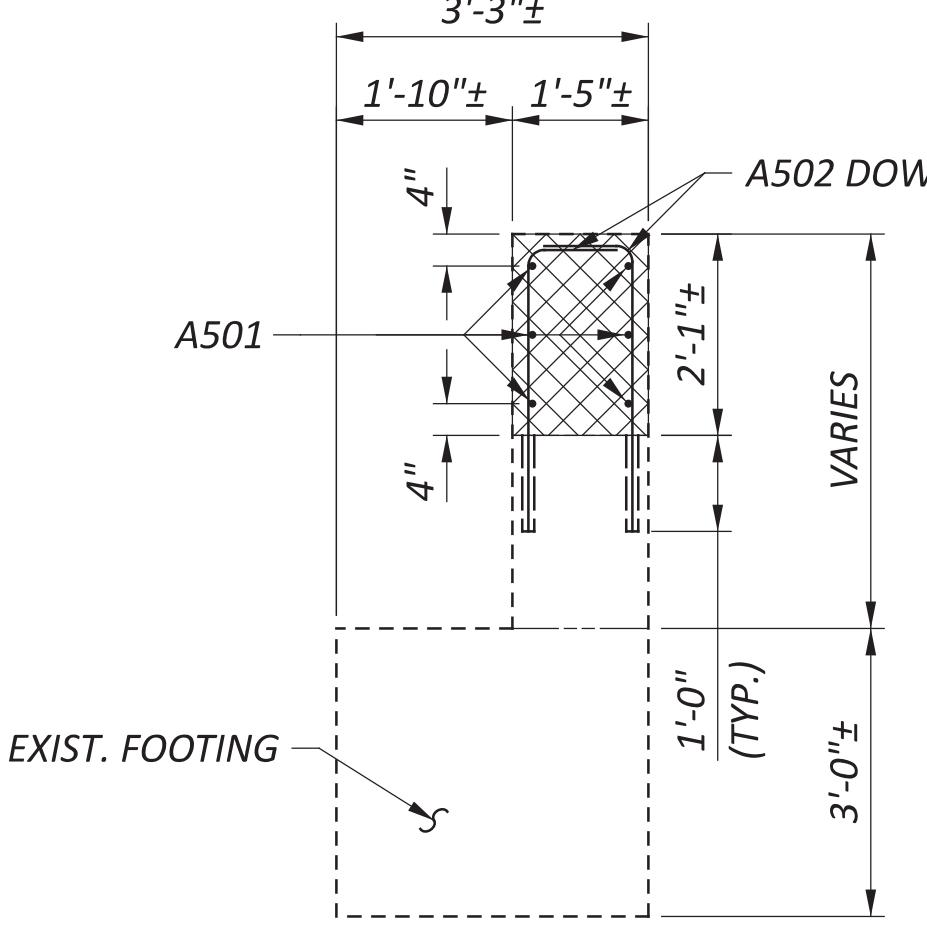
5 | 8

SHEET TOTAL

P.31 | 34



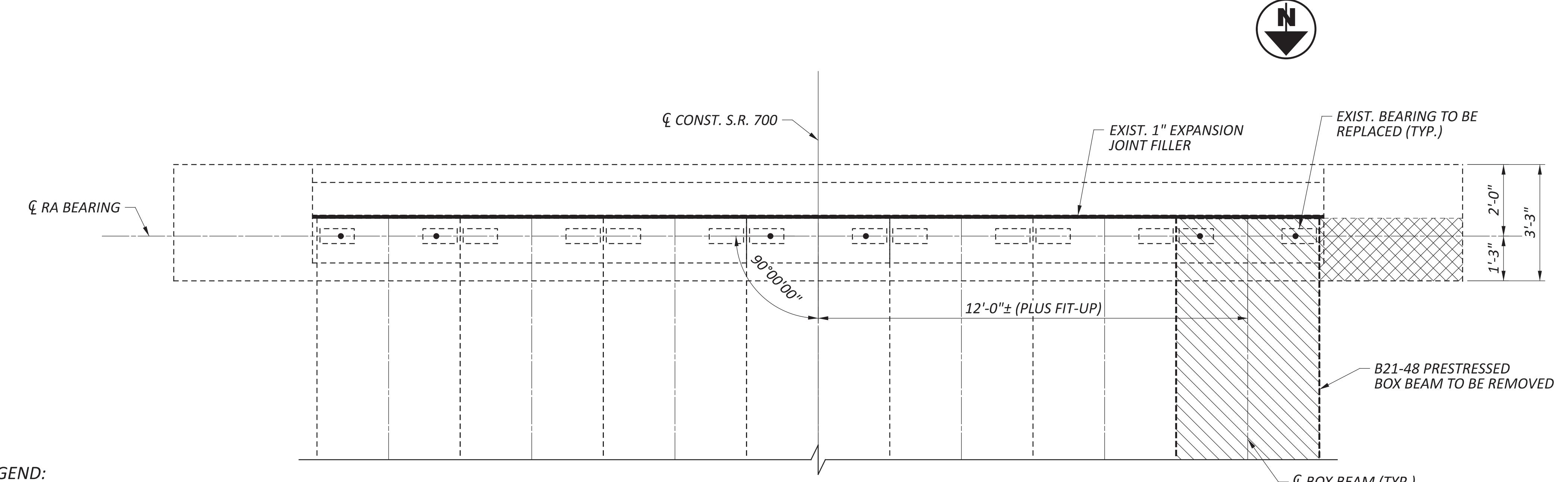
DETAIL



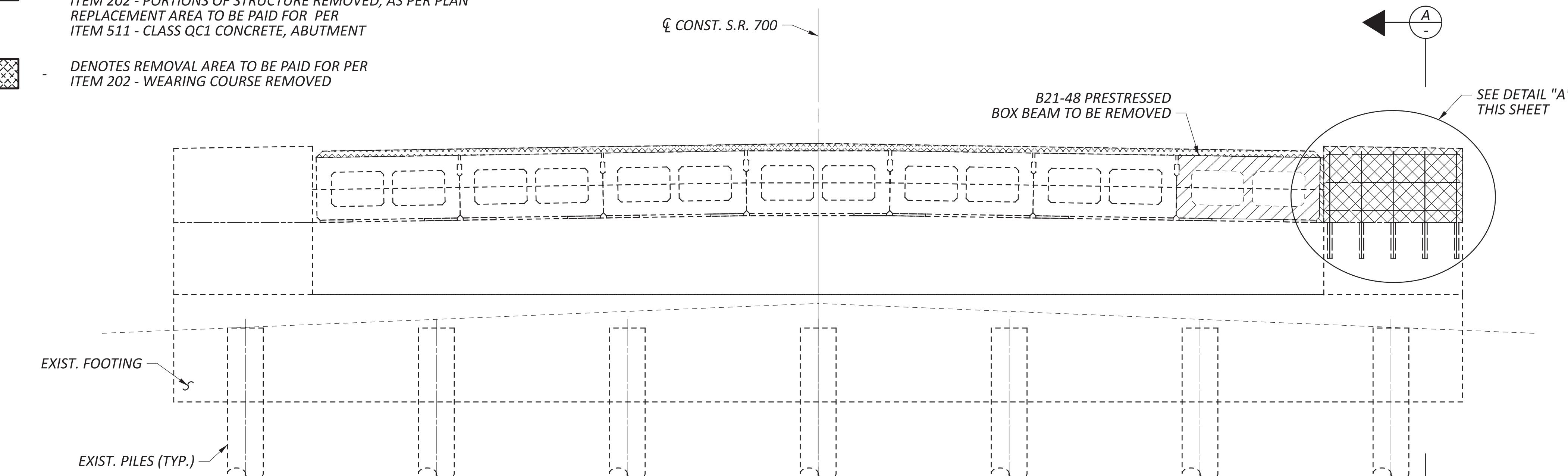
SECTION A-1

NOTES:

1. *SOME DETAILS HAVE BEEN REPRODUCED FROM ORIGINAL PLAN DRAWINGS DATED 11-30-77 AND REHABILITATION PLANS DATED 10-6-17.*
2. *ABUTMENT CONCRETE: DO NOT PLACE THE ABUTMENT CONCRETE ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE PRESTRESSED CONCRETE BOX BEAMS HAVE BEEN ERECTED.*
3. *FOR ADDITIONAL REMOVAL AND CONSTRUCTION METHODS, SEE GENERAL NOTE SHEET.*
4. *ALL #5 BAR LAP LENGTHS = 2'-5" (MIN.)*



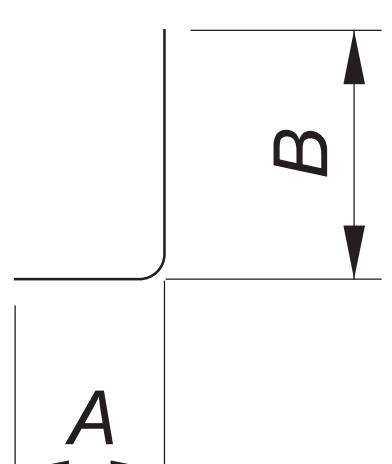
ABUTMENT PLAN



***ABUTMENT ELEVATION LOOKING SOUTH
(REAR ABUTMENT SHOWN, FORWARD ABUTMENT MIRRORED)***

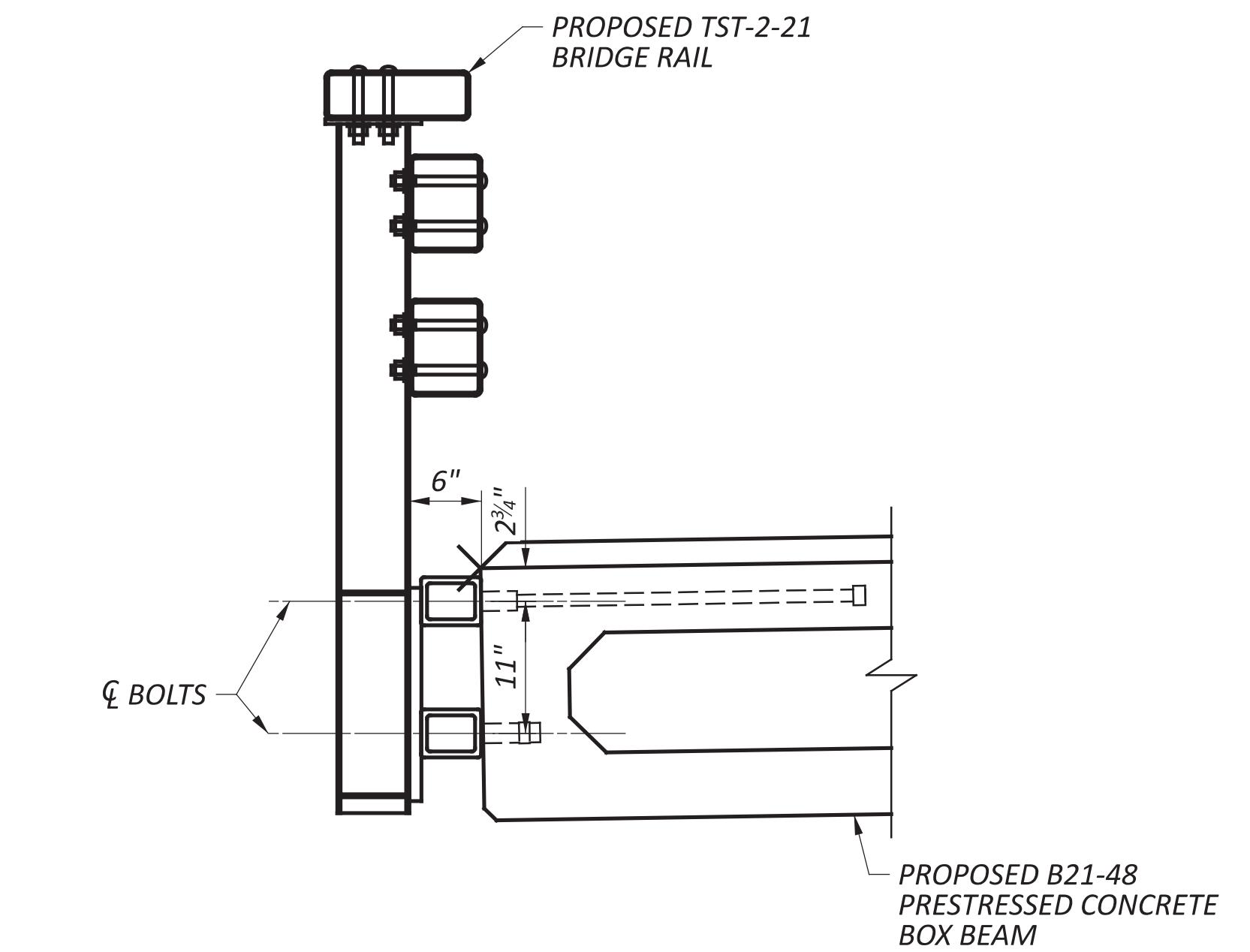
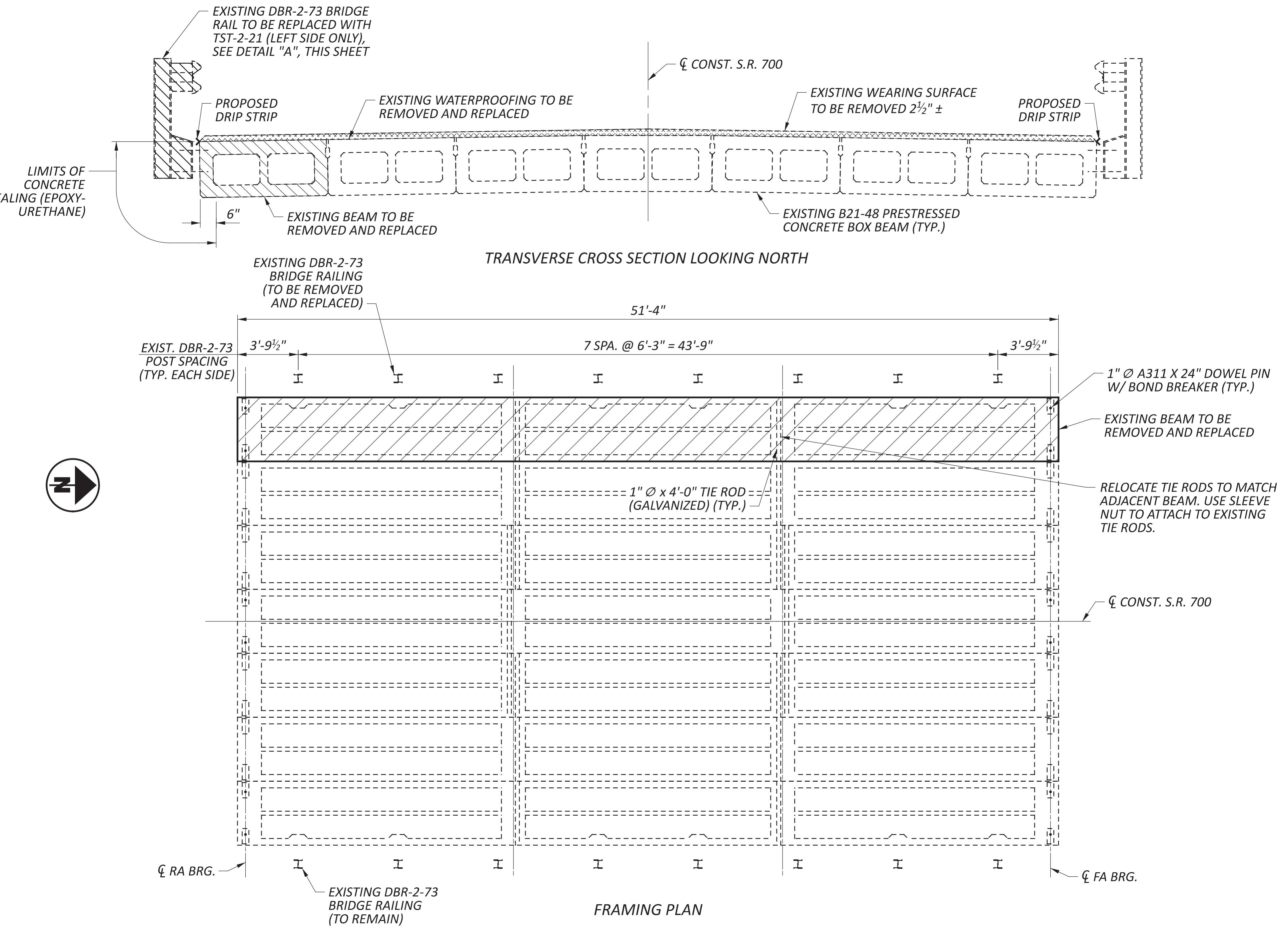
MARK	NUMBER			LENGTH	WEIGHT (LB)	TYPE	DIMENSIONS					
	REAR	FORWARD	TOTAL				A	B	C	D	E	R
ABUTMENT REINFORCING												
A501	6	6	10	3'-8"	41	STR						
A502	10	10	20	3'-7"	82	1	0'-9"	2'-10"				
SUB-TOTAL					123							

BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. "R" INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A BAR DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR. ALL REINFORCING STEEL TO BE EPOXY COATED. BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST TWO DIGITS INDICATE THE BAR SIZE NUMBER. EXAMPLE IS A501 IS A NO. 5 SIZE BAR.

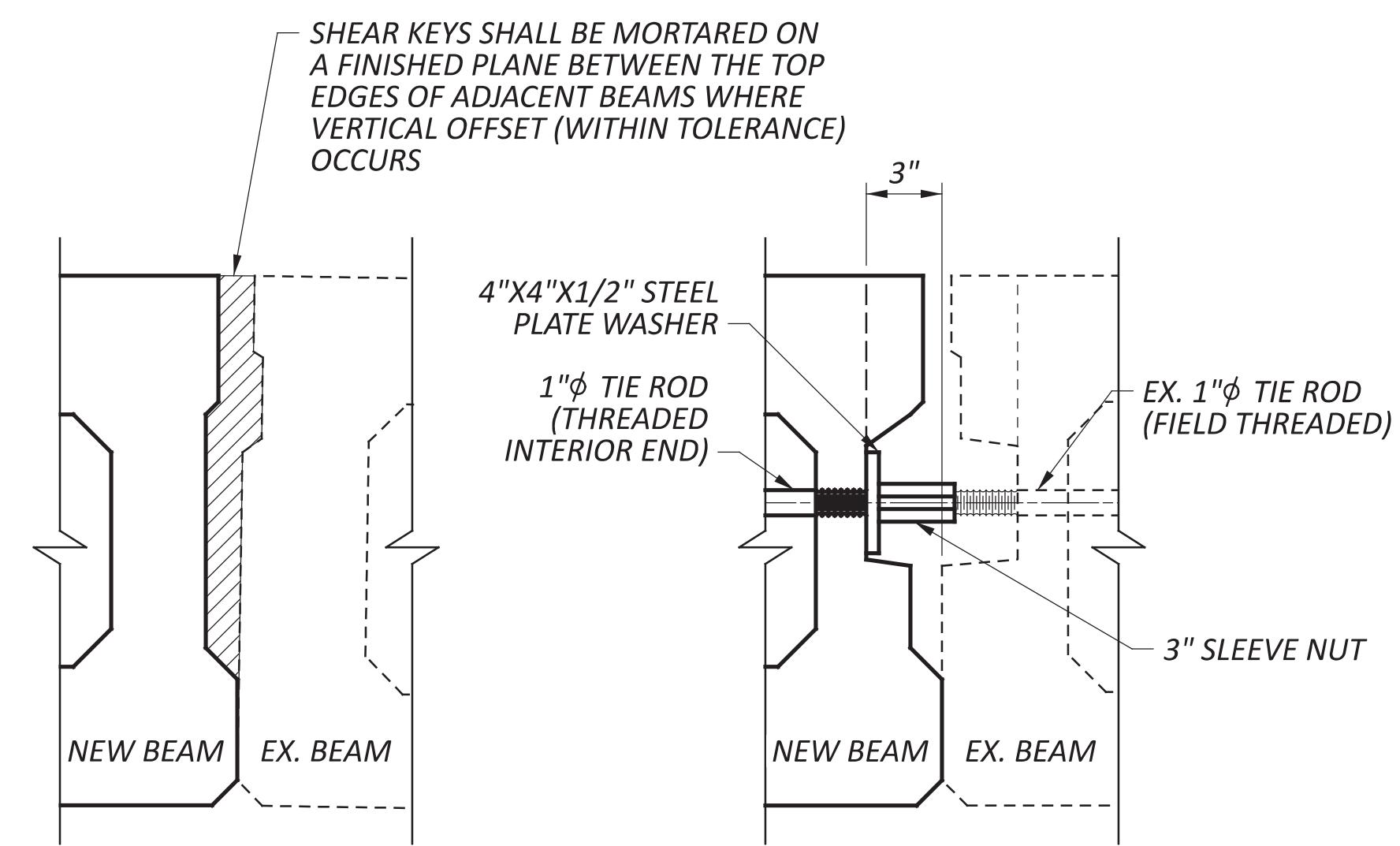


TYPE-1

SFN	
6703383	
DESIGN AGENCY	
 Mann Smith GROUP	
<small>TECHNICAL SKILL, CREATIVE SPIRIT.</small>	
www.MannSmithGroup.com	
DESIGNER	CHECKER
JMP	RJS
REVIEWER	
JRC	09-26-25
PROJECT ID	
112830	
SUBSET	TOTAL
6	8
SHEET	TOTAL
P.32	34

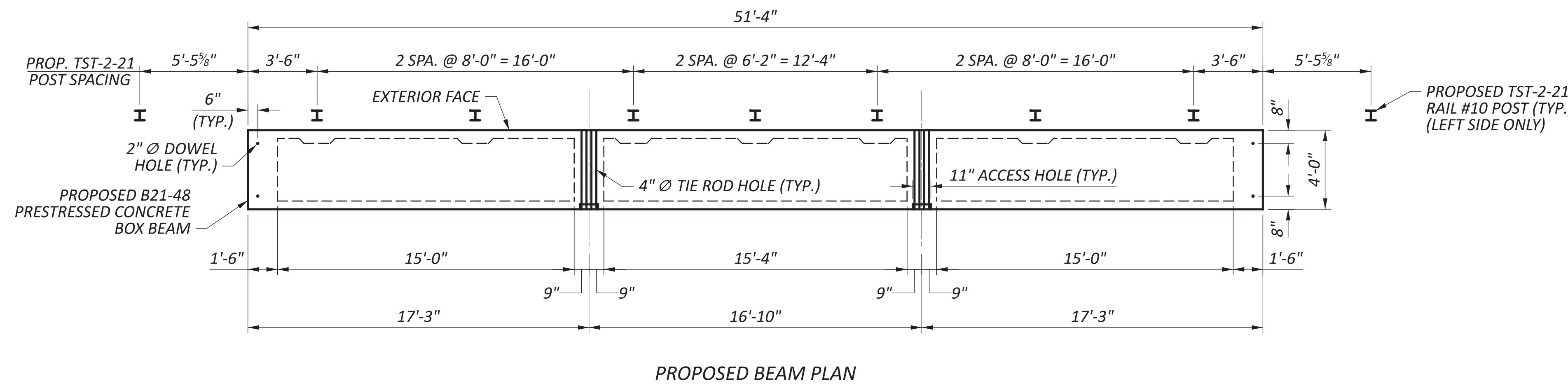


DETAIL A



SHEAR KEY DETAIL

END DETAIL AT TIE ROD ANCHORAGE



CONSTRUCTION SEQUENCE:

1. THREAD THE EXPOSED PORTION OF THE EXISTING TIE RODS ON BEAM THE TIE RODS ARE LOOSE, INJECT THE VOIDS WITH EPOXY AS PER SPECIAL CONCRETE REPAIR BY EPOXY INJECTION.
2. PLACE SLEEVE NUTS ON THE EXISTING TIE RODS.
3. IN BEAM 1, PLACE 4" TIE RODS WITH A NUT AND WASHER ON THE NORTH (EXTERIOR) FACE AND WASHER ON THE SOUTH (INTERIOR) FACE.
4. SET BEAM 1.
5. MAKE UP TIE ROD CONNECTIONS WITH THE SLEEVE NUT. TIGHTEN THE NUTS PER STD. DWG. PSBD-1-25.
6. PLACE ANCHOR DOWELS AT THE FORWARD ABUTMENT.
7. GROUT BEAM KEYWAY AND TIE ROD POCKETS AS PER STD. DWG. PSBD-1-25.

NOTES:

1. SOME DETAILS HAVE BEEN REPRODUCED FROM ORIGINAL PLAN DRAWINGS DATED 11-30-77 AND REHABILITATION PLANS DATED 10-6-77.
2. SEE STD. DWG. TST-2-21 FOR ADDITIONAL BRIDGE RAILING DETAILS.
3. SEE STD. DWG. PSBD-1-25 FOR ADDITION PRESTRESSED BOX BEAM DETAILS.

