

**MUS-345-0.00**  
**PER-345 / 383-0.00**

**NEWTON, CLAYTON, PIKE  
AND READING TOWNSHIPS**

**MUSKINGUM AND PERRY COUNTIES**

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



RMC = RURAL MAJOR COLLECTOR

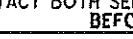
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LOCATION	PLAN SPLIT	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/ VILLAGE
1A	1	MUS	345	0.00	1.60	1.60	
1B	2	MUS	345	1.60	2.52	0.92	
2	1	PER	345	0.00	9.22	9.22	NEW LEXINGTON
3	3	PER	383	0.00	1.50	1.50	

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

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

NONE

<h2 style="text-align: center;">UNDERGROUND UTILITIES</h2> <p style="text-align: center;"><b>CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.</b></p>	
 <p><b>OHIO Utilities Protection SERVICE</b></p> <p><i>(Non-members must be called directly)</i></p>	<p><i>Call Before You Dig</i> <b>1-800-362-2764</b></p>
<p style="text-align: center;"><b>OIL &amp; GAS PRODUCERS UNDERGROUND PROTECTION SERVICE</b></p> <p style="text-align: center;"><b>1-800-925-0988</b></p>	

PLAN PREPARED BY:  
OHIO DEPARTMENT OF TRANSPORTATION  
DISTRICT 5 PLANNING & ENGINEERING

[illegible]

APPROVED:   
DATE: 2/23/17 DISTRICT DEPUTY DIRECTOR

APPROVED: [Signature]  
DATE 3-7-17 DIRECTOR, DEPARTMENT OF  
TRANSPORTATION

FEDERAL PROJECT NO.  
E130(883)

PID NO.  
92988

**CONSTRUCTION PROJECT NO.**

**RAILROAD INVOLVEMENT**  
**NONE**

**MUS-345-0.00**  
**PER-345 / 383-0.00**

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MUS - /PER-SR 345/SR 383-00.00/00.0	Conformed Set
170389 PID - 92988	
Dist 5 6/2/2017	Contract Proposal Available @ <a href="http://www.Contracts.dot.state.oh.us/home">www. Contracts.dot.state.oh.us/home</a>

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UTILITIES

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

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

PAVEMENT MARKINGS

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. THE CONTRACTOR SHALL DOCUMENT ALL OF THE EXISTING PAVEMENT MARKING LOCATIONS THAT WILL BE REMOVED/OBLITERATED DURING THIS PROJECT. THE CONTRACTOR SHALL PLACE NEW PAVEMENT MARKINGS AT THE LOCATION OF THE EXISTING MARKINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. DOCUMENTATION OF PAVEMENT MARKING SHALL BE SUPPLIED TO THE ENGINEER BEFORE COMMENCEMENT OF ANY OPERATION WHICH WILL REMOVE/OBLITERATE MARKINGS. THE METHOD OF DOCUMENTATION SHALL BE APPROVED BY THE ENGINEER IN ORDER TO PROVIDE AN ACCEPTABLE TOLERANCE BETWEEN THE EXISTING AND PROPOSED PAVMENT MARKINGS.

ITEM 209. PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN

PRIOR TO PLACEMENT OF THE SURFACE COURSE AND SAFETY EDGE, WHILE PERFORMING LINEAR GRADING, THE CONTRACTOR SHALL EXCAVATE AN AREA 2 FEET WIDE BY 1 / 1.5 INCH DEEP OUTSIDE THE EXISTING PAVED SHOULDER TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE AND PLACEMENT OF ITEM 617, COMPACTED AGGREGATE.

DURING LINEAR GRADING, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. AN ADDITIONAL ATTACHMENT TO THE GRADER (AT THE DIMENSIONS DESCRIBED ABOVE) SHALL BE USED TO EXCAVATE THE AREA FOR THE SAFETY EDGE. THE ATTACHMENT SHALL BE APPROVED BY THE ENGINEER PRIOR TO PERFORMING LINEAR GRADING. ALL EXCESS MATERIAL REMAINING AFTER THE GRADER WORK IS COMPLETED THAT HAS NOT BEEN DISPOSED OF ON-SITE, SHALL BE REMOVED AND DISPOSED OFF-SITE BY THE CONTRACTOR PRIOR TO MILLING OPERATIONS.

THE CONTRACTOR MAY REMOVE THE EXCAVATED AREA ABOVE DURING MILLING OPERATIONS IF DESIRED ALTHOUGH LINEAR GRADING SHALL STILL BE PERFORMED WHERE NECESSARY.

DUE TO VARYING SHOULDER WIDTHS, THE 2 FEET WIDE GRADED AREA MAY NOT BE OBTAINABLE AND SHALL BE REDUCED IF NECESSARY, AT THE APPROVAL OF THE ENGINEER. GRADED SHOULDERS OF 12 INCHES OR LESS WHERE THE SAFETY EDGE CAN BE OMITTED, THE PREPARING SUBGRADE FOR SHOULDER PAVING CAN ALSO BE OMITTED. THE CONTRACTOR WILL ONLY BE PAID FOR AREAS WHERE THE ABOVE WORK IS BEING PREFORMED.

ALL EQUIPMENT, LABOR, AND INCIDENTALS REQUIRED TO PERFORM LINEAR GRADING AND EXCAVATION OF SHOULDER SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN.

ITEM 253. PAVEMENT REPAIR

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO THE PAVEMENT PLANING OPERATION.

THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". THE MINIMUM WIDTH OF THE REPAIRS SHALL BE 4'.

AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22.

REPAIR QUANTITIES MAY BE USED ON MAINLINE PAVEMENT OR ON PAVED SHOULDERS. ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253, PAVEMENT REPAIR  
LOCATION 1A - 160 CU.YD.  
LOCATION 1B - 65 CU.YD.  
LOCATION 2 - 1500 CU.YD.  
LOCATION 3 - 780 CU.YD.

ITEM 254. PAVEMENT PLANING. ASPHALT CONCRETE, 1.5"

DEPTH OF PLANING ON MUS-345 AND PER-383 SHALL BE 1.5" AS SHOWN ON THE ASPHALT CONCRETE DATA SHEET. PLANING SHALL BE FULL WIDTH OF PAVEMENT, INCLUDING PAVED SHOULDERS.

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 897. PAVEMENT PLANING. ASPHALT CONCRETE, CLASS A, 1.0"

DEPTH OF PLANING ON PER-345-(0.00-0.48) SHALL BE 1.0" AS SHOWN ON THE ASPHALT CONCRETE DATA SHEET. PLANING SHALL BE FULL WIDTH OF PAVEMENT, INCLUDING PAVED SHOULDERS.

THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS AND SHALL FOLLOW EXISTING SUPERELEVATIONS WHERE APPLICABLE. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

ITEM 407. NON-TRACKING TACK COAT

THE RATE OF APPLICATION OF THE ITEM 407, NON-TRACKING TACK COAT SHALL BE PER CMS TABLE 407.06-1 AND SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.08 GAL/SY FOR TACK COAT UNDER THE SURFACE COURSE, (FOR ESTIMATING PURPOSES ONLY).

ITEM 408. PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GAL/SY TO THE COMPLETED AGGREGATE SHOULD (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS.

ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN

THE CONTRACTOR SHALL PLACE A 1" x 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) AT THE LOCATIONS SHOWN IN PLANS. THE CONTRACTOR SHALL SAW CUT A CHANNEL FOR THE JOINT SEALER. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516, 2" DEEP JOINT SEALER, AS PER PLAN.

ITEM 617. COMPACTED AGGREGATE, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE SHALL BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO PERMITTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

AREAS WHERE ITEM 209, PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN IS OMITTED, THE COMPACTED AGGREGATE MAY ALSO BE OMITTED AT THE APPROVAL OF THE ENGINEER.

BEFORE PLACING COMPACTED AGGREGATE, THE EXISTING SURFACE SHALL BE LOOSE AND FREE OF VEGETATION. IF NOT, THE CONTRACTOR SHALL PERFORM SHOULDER PREPARATION AS PER 617.04. PAYMENT FOR SHOULDER PREPARATION SHALL BE INCLUDED IN THE COST OF ITEM 617, COMPACTED AGGREGATE, AS PER PLAN.

ITEM 621. RAISED PAVEMENT MARKER REMOVED

RPM REMOVAL SHALL NOT OCCUR SOONER THAN 10 DAYS PRIOR TO RESURFACING OF THE ROADWAY. ALL RPM'S REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CALCULATED	LIME	CHECKED	JSL
GENERAL NOTES			
MUS-345-0.00 PER-345/ 383-0.00			2 29



RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 441, ASPHALT CONCRETE, HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL EXTEND AN AVERAGE OF 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THE ENGINEER MAY EXTEND PAVING DISTANCE FOR ASPHALT DRIVEWAYS IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED, THEREFORE, A QUANTITY OF ITEM 304, AGGREGATE BASE HAS BEEN PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO PROVIDE A SMOOTH TRANSITION FOR AGGREGATE DRIVES.

FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK AN AVERAGE OF 4' WITHOUT CREATING A BUTT JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CREATE A BUTT JOINT FOR EXISTING ASPHALT/CONCRETE DRIVES/APRONS. GRAVEL DRIVES WITH ASPHALT APRONS SHALL NOT HAVE BUTT JOINTS, BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. ALL GRADING, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

BUTT JOINT AT THE END OF DRIVEWAYS SHALL BE **1.0" FOR LOCATION 2 AND 1.25" FOR ALL OTHERS**. NO WORK SHALL BE PERFORMED ON DRIVEWAYS LOCATED IN CURB SECTIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ITEM 202, WEARING COURSE REMOVED  
LOCATION 1A: 40 SY      LOCATION 1B: 100 SY  
LOCATION 3: 100 SY

ITEM 304, AGGREGATE BASE  
LOCATION 1B: 1 CY      LOCATION 2: 5 CY  
LOCATION 3: 1 CY

ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B  
LOCATION 2: 35 CY

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M  
LOCATION 1A: 2 CY      LOCATION 1B: 4 CY  
LOCATION 3: 4 CY      LOCATION 2: 43 CY (ALTERNATE)

ITEM 897, PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A  
LOCATION 2: 1230 SY

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, 1.25"  
LOCATION 2: 1230 SY (ALTERNATE)

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN-OUTS. TURN-OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1. ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ITEMS LISTED BELOW.

ITEM 202, WEARING COURSE REMOVED  
LOCATION 1B: 30 SQ.YD.      LOCATION 3: 60 SQ.YD.

ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B  
LOCATION 2: 20 CU.YD.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M  
LOCATION 1B: 2 CU.YD.      LOCATION 3: 3 CY  
LOCATION 2: 25 CY (ALTERNATE)

TRAFFIC SIGNAL WORK

THE REMOVAL OF CROSSWALKS AT BROADWAY/CARROLL ST. AND BROADWAY/LINCOLN PARK SHALL ALSO INCLUDE THE REMOVAL OF PEDESTRIAN SIGNAL HEAD, PEDESTRIAN PUSH BUTTON, AND INSTALLATION OF NO PEDESTRIAN CROSSING SIGNS AS SHOWN ON SHEET 21.

THE FOLLOWING QUANTITIES ARE BEING CARRIED TO THE LOCATION 2 SUB-SUMMARY:

BROADWAY/CARROLL ST.  
ITEM 632, REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN SIGNAL HEAD)  
LOCATION 2: 2 EACH

ITEM 632, REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN PUSH BUTTON)  
LOCATION 2: 1 EACH

ITEM 630, SIGN, FLAT SHEET  
LOCATION 2: 4.5 SQ. FT.

BROADWAY/LINCOLN PARK  
ITEM 632, REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN SIGNAL HEAD)  
LOCATION 2: 4 EACH

ITEM 632, REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN PUSH BUTTON)  
LOCATION 2: 2 EACH

ITEM 630, SIGN, FLAT SHEET  
LOCATION 2: 9.0 SQ. FT.

SAFETY EDGE PLAN NOTE

IN ADDITION TO THE REQUIREMENTS OF 401.12, ATTACH A DEVICE TO THE SCREED OF THE PAVER THAT CONFINES THE MATERIAL AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A COMPACTED WEDGE SHAPE PAVEMENT EDGE OF APPROXIMATELY 30 DEGREES (NOT STEEPER THAN 40 DEGREES). ENSURE THE DEVICE MAINTAINS CONTACT WITH THE EXISTING SURFACE, AND ALLOW FOR AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. DO NOT USE CONVENTIONAL SINGLE PLATE STRIKE OFF.

CONSTRUCTION OF SAFETY EDGE CAN BE OMITTED AT LOCATIONS WHERE EXISTING WIDTH OF GRADED SHOULDER OR BERM IS LESS THAN 12". PROJECTS WITH VARYING CONDITIONS SHOULD USE SAFETY EDGE WHERE POSSIBLE. PLAN PREPARATION HAS MADE EVERY REASONABLE ATTEMPT TO IDENTIFY POSSIBLE SAFETY EDGE LOCATIONS.

USE THE TRANS TECH SHOULDER WEDGE MAKER, THE CARLSON SAFETY EDGE END GATE, THE ADVANT-EDGER, THE TROXLER SAFETSLOPE OR A SIMILAR APPROVED-EQUAL DEVICE THAT PRODUCES THE SAME WEDGE CONSOLIDATION RESULTS. CONTACT INFORMATION FOR THESE WEDGE SHAPE COMPACTION DEVICES IS THE FOLLOWING:

TransTech Systems, Inc. 1594 State Street Schenectady, NY 12304 1-800-724-6306 <a href="http://www.transtechsys.com">www.transtechsys.com</a>	Advant-Edge Paving Equipment, LLC. P.O. Box 9163 Niskayuna, NY 12309-0163 518-280-6090 <a href="http://www.advantaedgepaving.com">www.advantaedgepaving.com</a>
Carlson Safety Edge End Gate 18425 50 <sup>th</sup> Avenue East Tacoma, WA 98446 253-875-8000	Troxler Electronics Laboratories, Inc. 3008 E. Cornwallis Rd. Research Triangle Park, NC 27709 1-877-TROXLER <a href="http://www.troxlerlabs.com">www.troxlerlabs.com</a>

IF ELECTING TO USE A SIMILAR DEVICE, PROVIDE PROOF THAT THE DEVICE HAS BEEN USED ON PREVIOUS PROJECTS WITH ACCEPTABLE RESULTS OR CONSTRUCT A TEST SECTION PRIOR TO THE BEGINNING OF WORK AND DEMONSTRATE WEDGE COMPACTION TO THE SATISFACTION OF THE ENGINEER. SHORT SECTIONS OF HANDWORK WILL BE ALLOWED WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS OR OTHERWISE AUTHORIZED BY THE ENGINEER.

IN ADDITION TO THE REQUIREMENTS OF 401.16, MAKE THE FIRST ROLLER PASS 8 TO 12 INCHES (200 TO 300 mm) AWAY FROM TAPERED EDGE. DO NOT ROLL THE TAPER.

SEE SAFETY EDGE DETAIL ON **SHEET 5** FOR ADDITIONAL INFORMATION.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 70-22M  
LOCATION 1A: 23 CU.YD.  
LOCATION 1B: 13 CU.YD.  
LOCATION 2: 40 CU.YD. (ALTERNATE)  
LOCATION 3: 21 CU.YD.

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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON **S.R. 345 AND S.R. 383** BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWINGS MT-97.10 OR MT-97.12

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 INCLUDING REPAIRS.

AT NO TIME SHALL TRAFFIC BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC. THIS RULE DOES NOT APPLY TO PLANING AT BRIDGES OR ACROSS BRIDGES UNLESS THE BRIDGE IS BEING TREATED THE SAME AS THE ADJACENT ROADWAY.

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

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

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF TWENTY ONE (21) DAYS PRIOR TO THE FOLLOWING: THE START OF CONSTRUCTION ACTIVITIES, LANE RESTRICTIONS, LANE CLOSURES, AND OR ROAD CLOSURES. THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (614) 887-4510 OR EMAIL AT [D05.PIO@DOT.STATE.OH.US](mailto:D05.PIO@DOT.STATE.OH.US)

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT [BRIAN.BOSCH@DOT.STATE.OH.US](mailto:BRIAN.BOSCH@DOT.STATE.OH.US)

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT [HAULING.PERMITS@DOT.STATE.OH.US](mailto:HAULING.PERMITS@DOT.STATE.OH.US)

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

DROPOFFS IN WORK ZONES

DROPOFFS THAT DEVELOP DURING CONSTRUCTION OPERATIONS AND THAT ARE NOT OTHERWISE PROVIDED FOR IN THE PLANS SHALL BE TREATED AS SHOWN ON STANDARD DRAWING MT-101.90. WHERE THE PLANS DO NOT PROVIDE SPECIFIC ITEMS FOR LABOR, EQUIPMENT, OR MATERIALS TO IMPLEMENT THE DROP-OFF TREATMENTS SPECIFIED, THEY SHALL BE INCLUDED FOR PAYMENT IN THE **LUMP SUM** BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614, WORK ZONE MARKING SIGNS

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGN TO BE USED AS DIRECTED BY THE ENGINEER:

W8-H12a (NO EDGE LINES):  
LOC. 1A: 6 EACH LOC. 1B: 3 EACH  
LOC. 2: 24 EACH LOC. 3: 8 EACH

R4-1 (DO NOT PASS):  
LOC. 1A: 6 EACH LOC. 1B: 4 EACH  
LOC. 2: 32 EACH LOC. 3: 9 EACH

R4-2 (PASS WITH CARE):  
LOC. 1A: 6 EACH LOC. 1B: 1 EACH  
LOC. 2: 7 EACH LOC. 3: 3 EACH

IN ADDITION, THE CONTRACTOR SHALL ERECT A "GROOVED PAVEMENT" SIGN 250 FEET IN ADVANCE OF ANY SECTION OF ROADWAY WHERE TRAFFIC MUST TRAVEL ON A PLANED SURFACE. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

ITEM 614, WORK ZONE MARKING SIGN

LOCATION 1A: 18 EACH  
LOCATION 1B: 8 EACH  
LOCATION 2: 63 EACH  
LOCATION 3: 20 EACH

ITEM 614, WORK ZONE PAVEMENT MARKINGS

THE CONTRACTOR SHALL PLACE ALL WORK ZONE PAVEMENT MARKINGS IN ACCORDANCE WITH **CMS 614.11** AND STANDARD DRAWING **MT-99.20** UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE QUANTITIES BELOW ARE FOR PLACEMENT OF TEMPORARY MARKINGS ON BOTH THE SURFACE AND INTERMEDIATE COURSES.

ITEM 614, WORK ZONE CENTER LINE, CLASS II, 642 PAINT

LOCATION 1A: 1.60 MILE LOCATION 2: 9.22 MILE  
LOCATION 1B: 0.92 MILE LOCATION 3: 1.50 MILE

ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS II, 642 PAINT

LOCATION 2: 130 FT

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (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) SHOULD BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS, **AS DIRECTED BY THE ENGINEER**:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

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

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

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

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

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

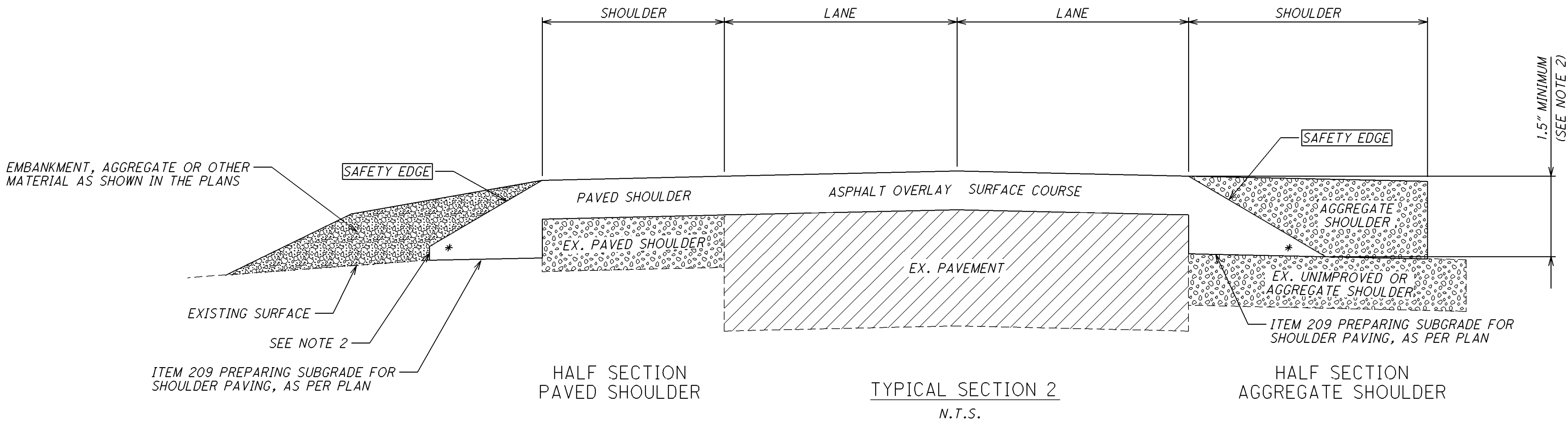
ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

LOCATION 2: 16 HOUR

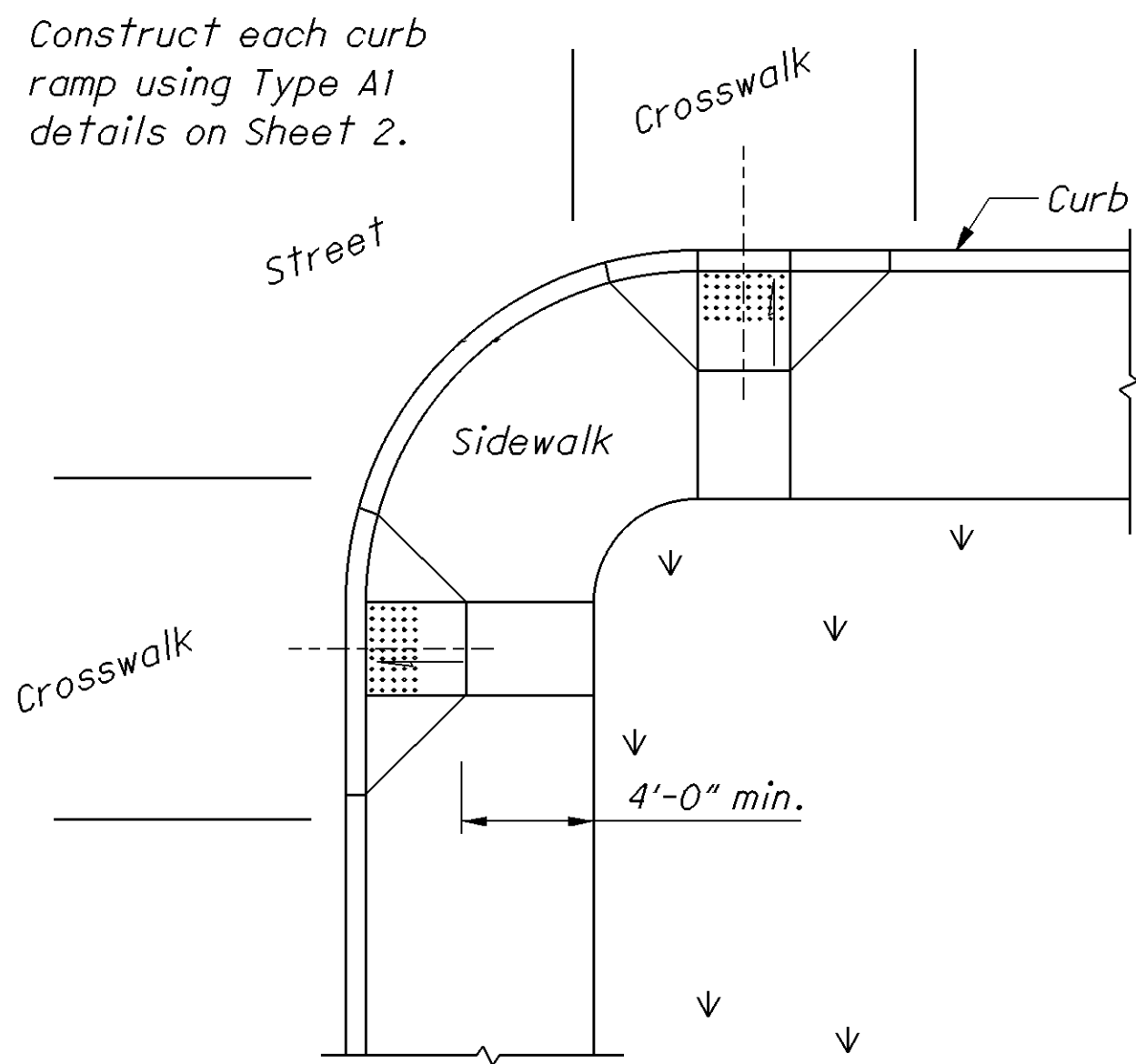
NOTES:

- 1.) SAFETY EDGES ARE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER).
  - 2.) CONSTRUCT THE SAFETY EDGE THE FULL ASPHALT CONCRETE OVERLAY THICKNESS OF 1.5". THE SAFETY EDGE IS NOT NEEDED WHEN OVERLAY THICKNESS IS LESS THAN 1.5".
  - 3.) BLADE AND SHAPE EXISTING SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE SAFETY EDGE PRIOR TO PLACEMENT OF THE ASPHALT CONCRETE OVERLAY.
  - 4.) FOR NEW PAVEMENT CONSTRUCT THE SAFETY EDGE THE FULL THICKNESS OF THE SURFACE AND INTERMEDIATE COURSES, NOT TO EXCEED 3.25" (82 MM).
- \* 40° MAX

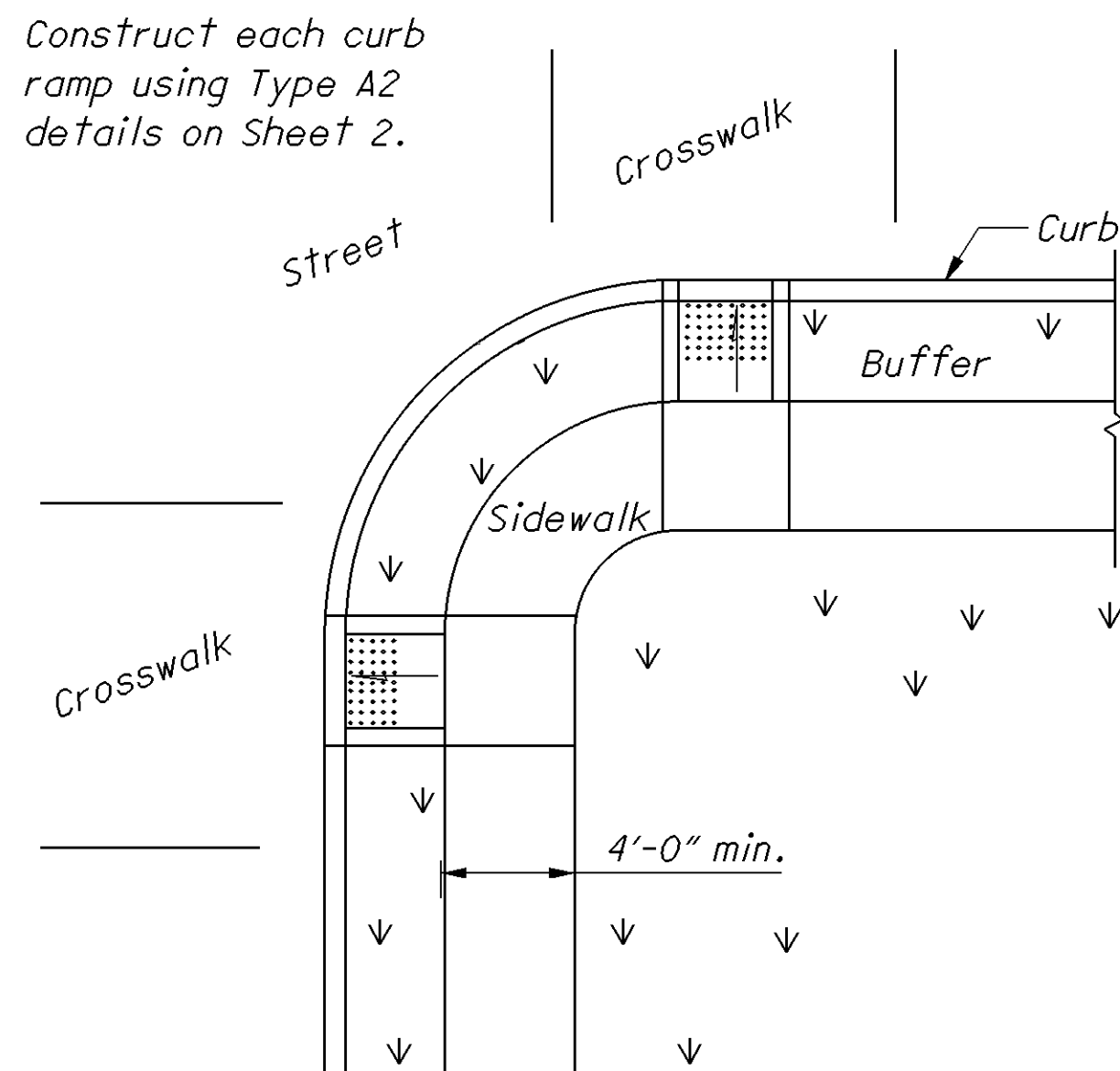




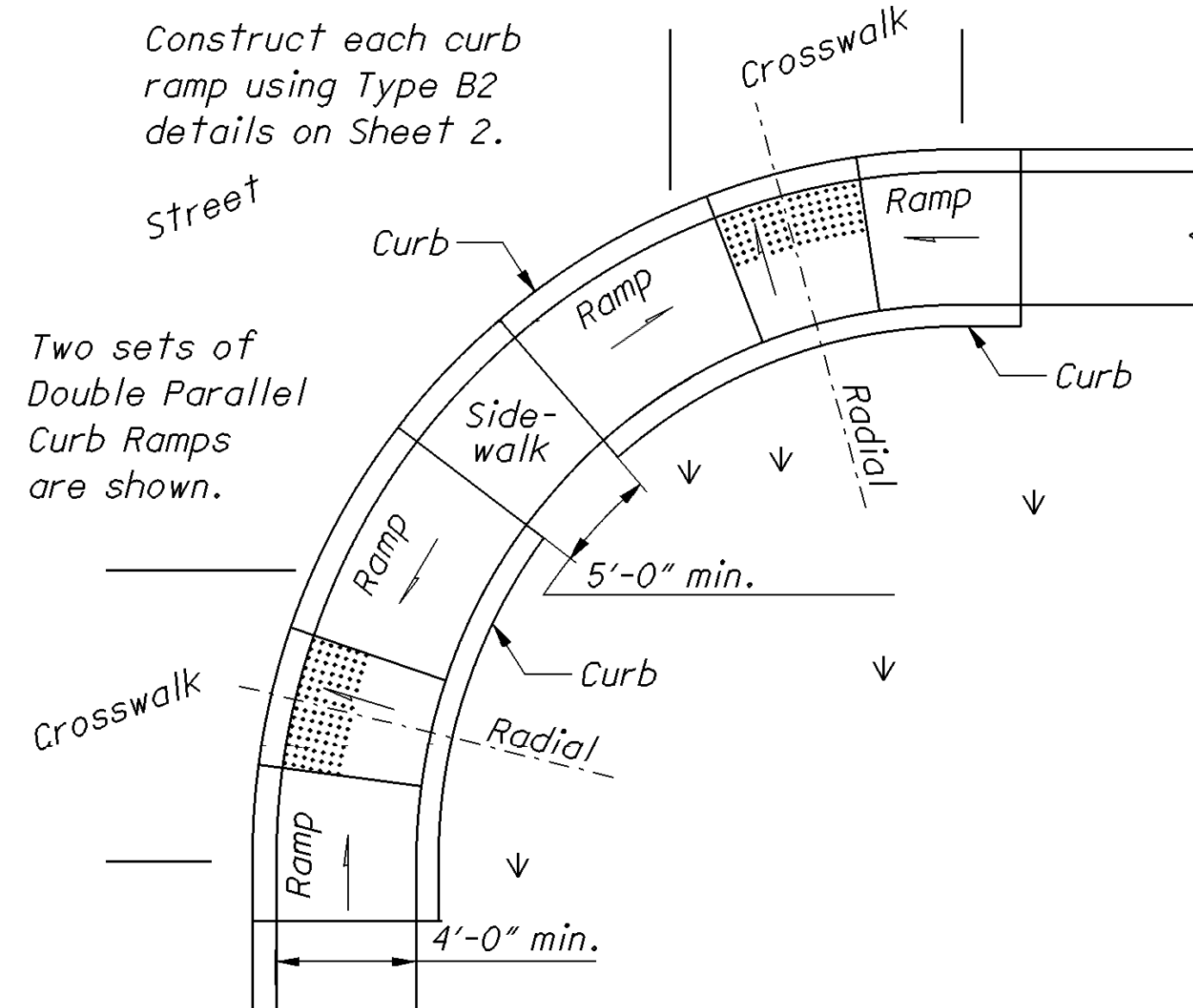
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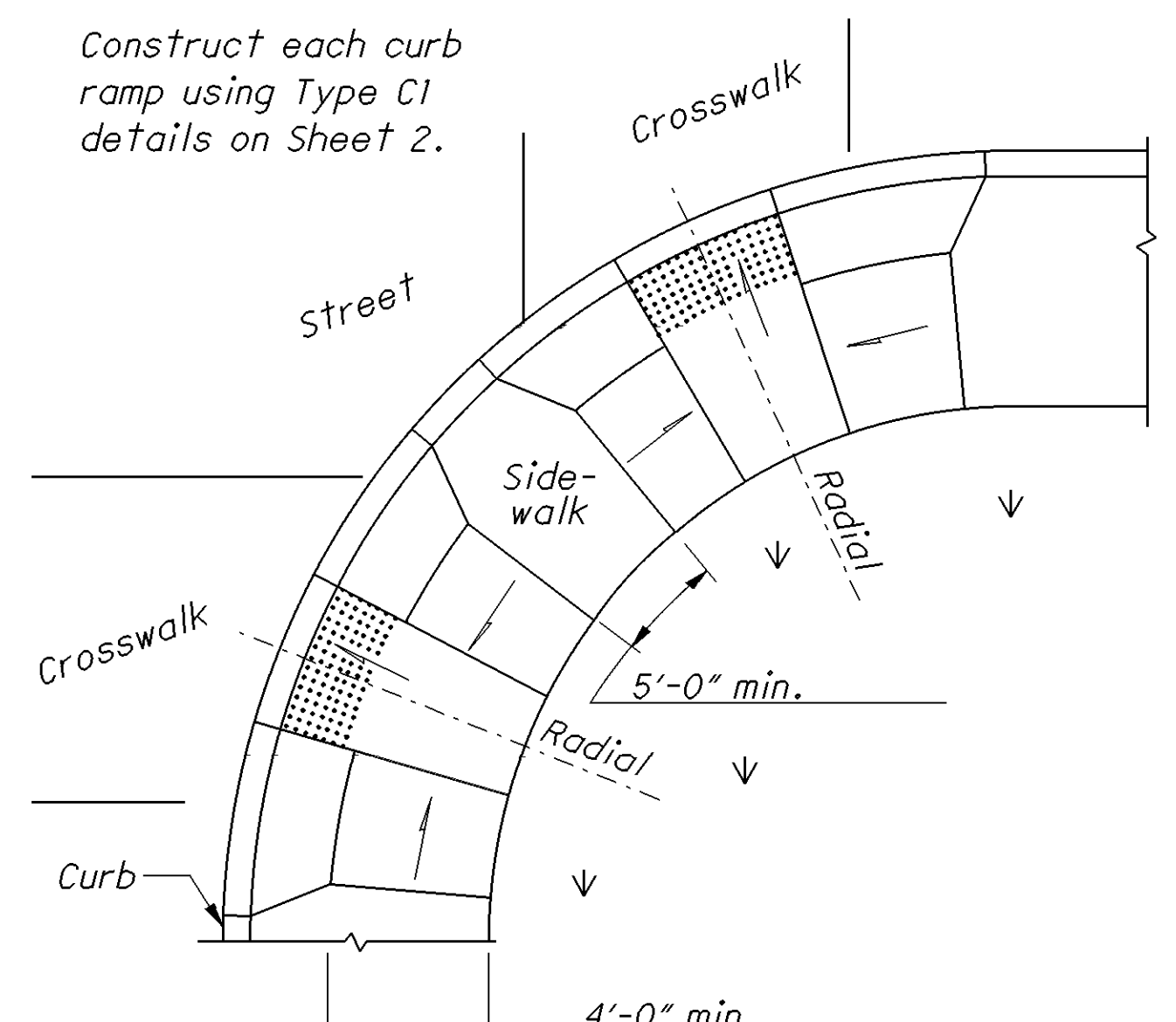
Use curb ramps with flared sides at locations with wide sidewalks.



Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.



Place on streets having wide turning radius and where sidewalks are narrow.

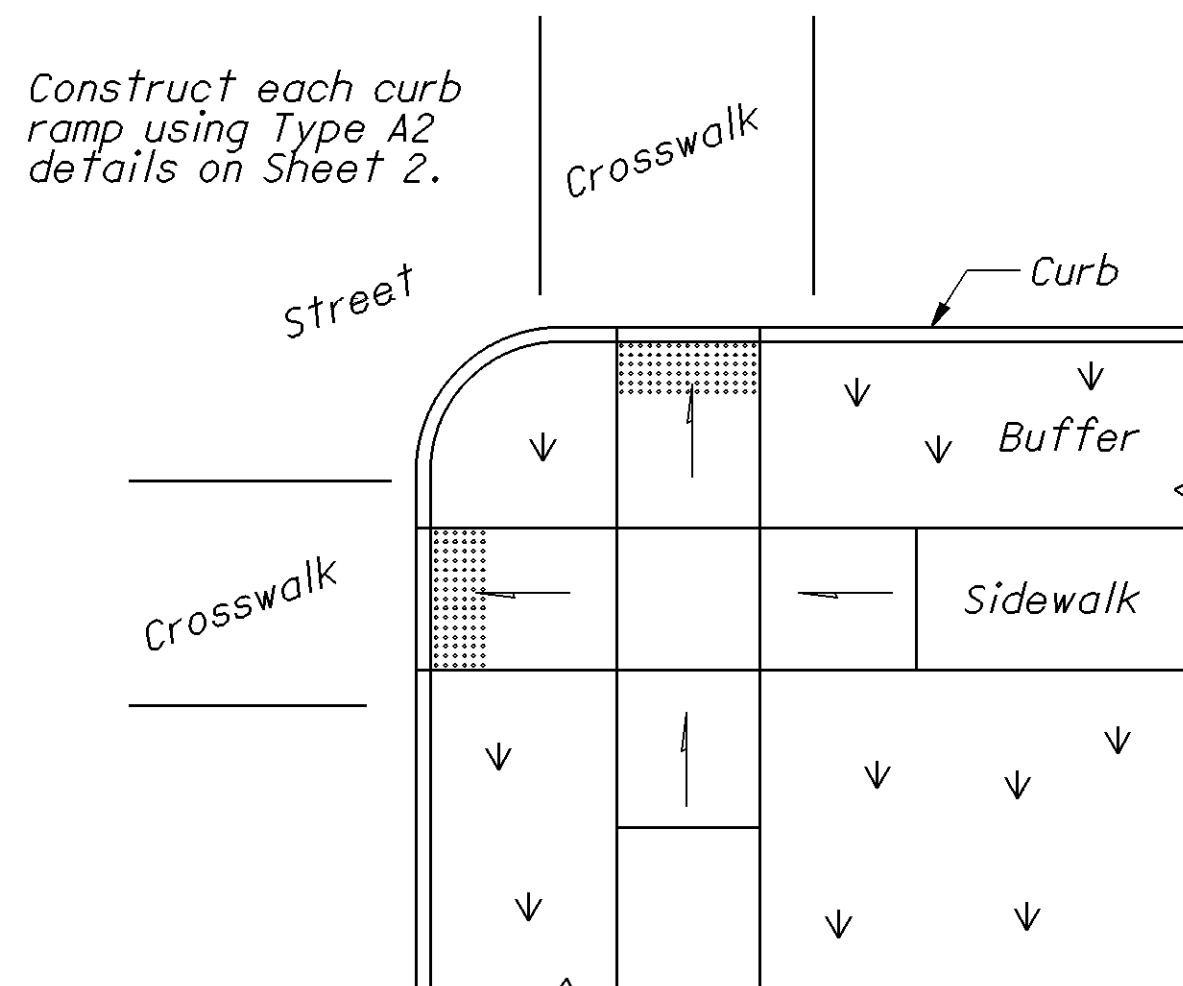


Curb ramp placement where streets have wide turning radius, and sufficient sidewalks width.

### PERPENDICULAR CURB RAMPS

### PARALLEL CURB RAMPS

### COMBINATION CURB RAMPS



### LEGEND

- 1 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

### NOTES

**GENERAL:** This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 2 and include Perpendicular, Parallel, and Combined types as specified in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to assure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

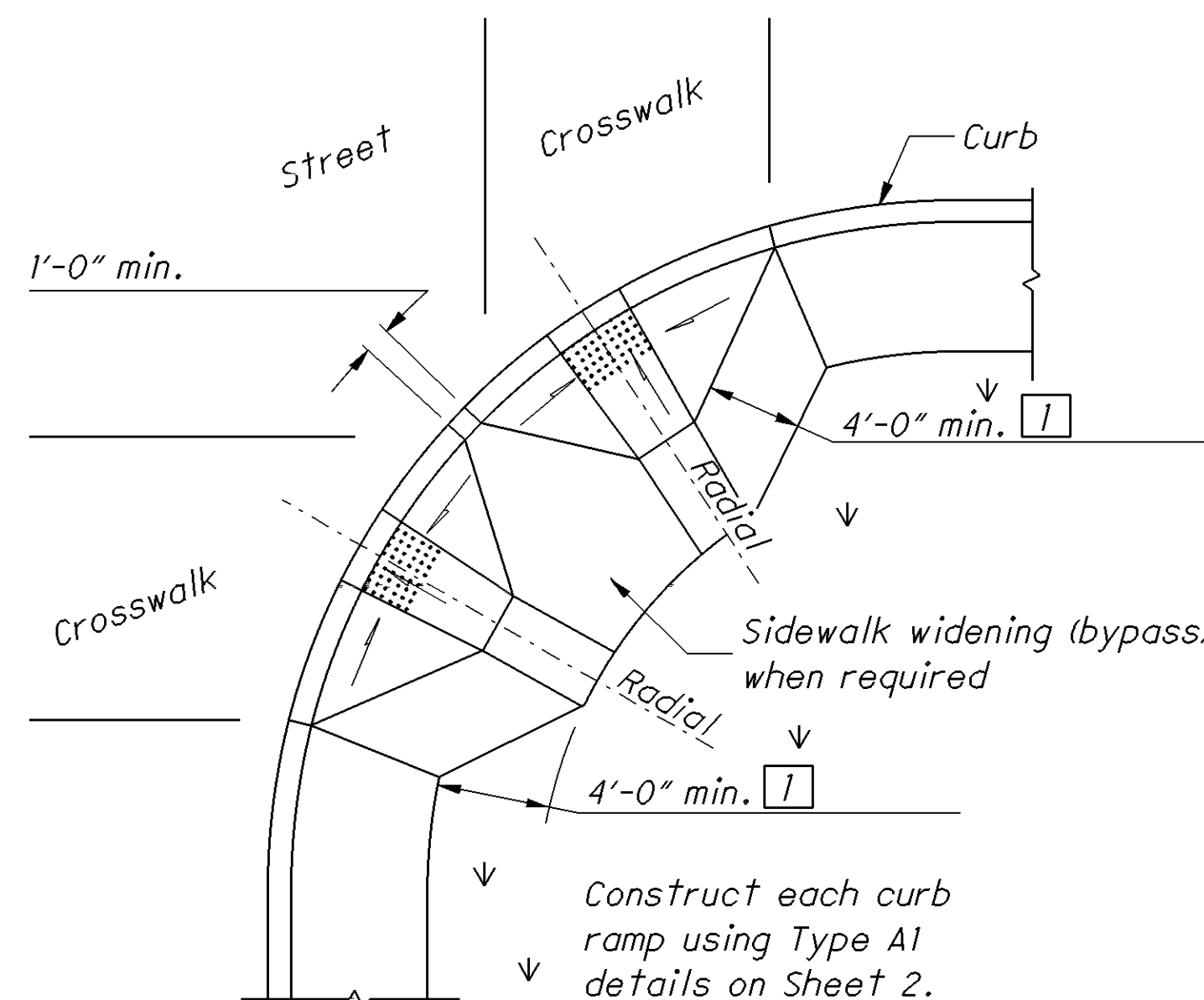
**METHOD OF MEASUREMENT:** The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.

Concrete Walk and Curb, Item 608 and 609, will be measured through out the curb ramp area and paid for under their respective Items.

**METHOD OF PAYMENT:** New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type -- (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

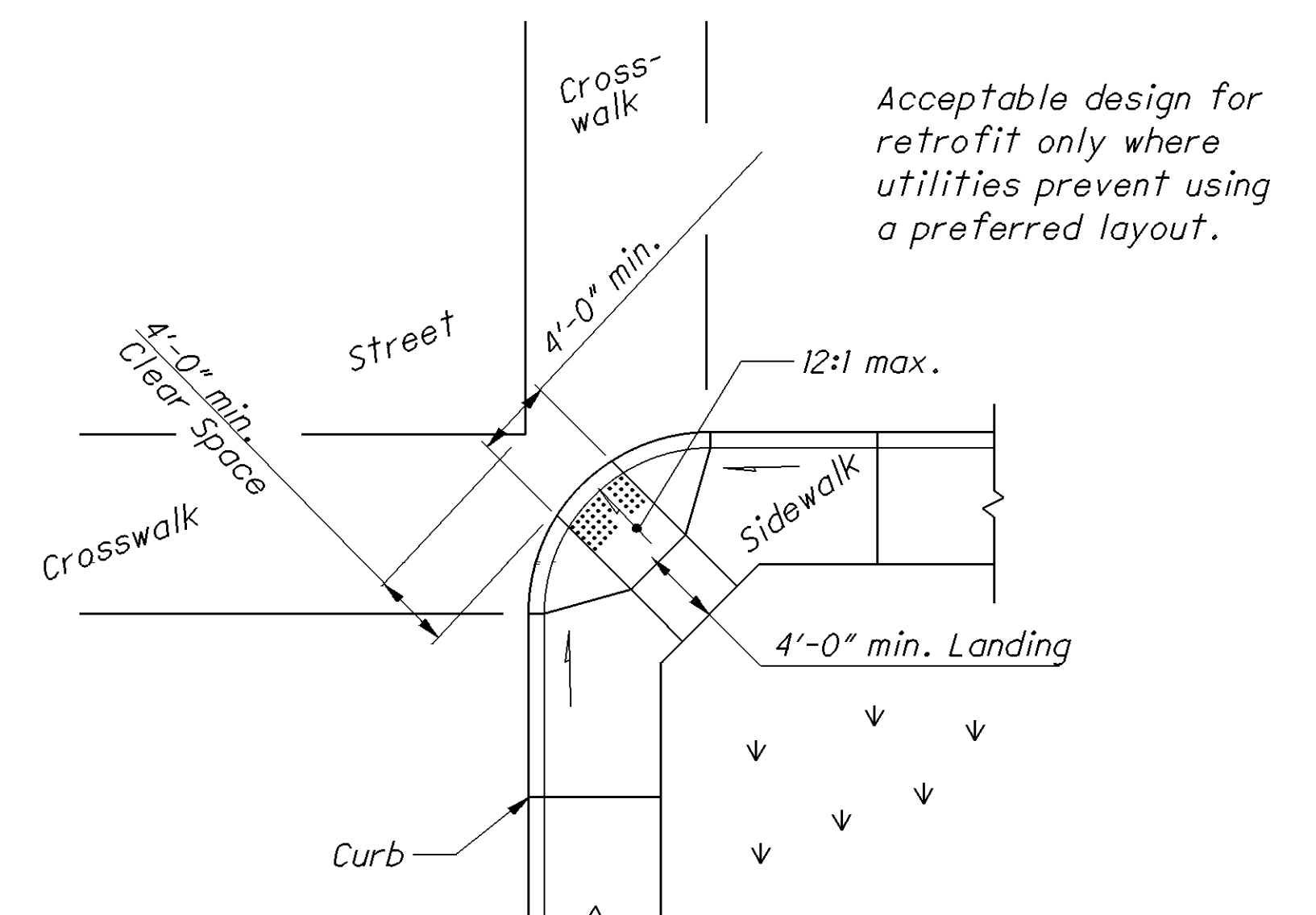
Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materials, and any incidentals required to complete the installation as specified. The work to cast the tiles in place will also require removal of existing pavement or sidewalk (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.



Acceptable design on corners with wide turning radius where user is able to maneuver within crosswalk limits so as not to encroach into adjacent traveled lanes.

### PERPENDICULAR RAMPS

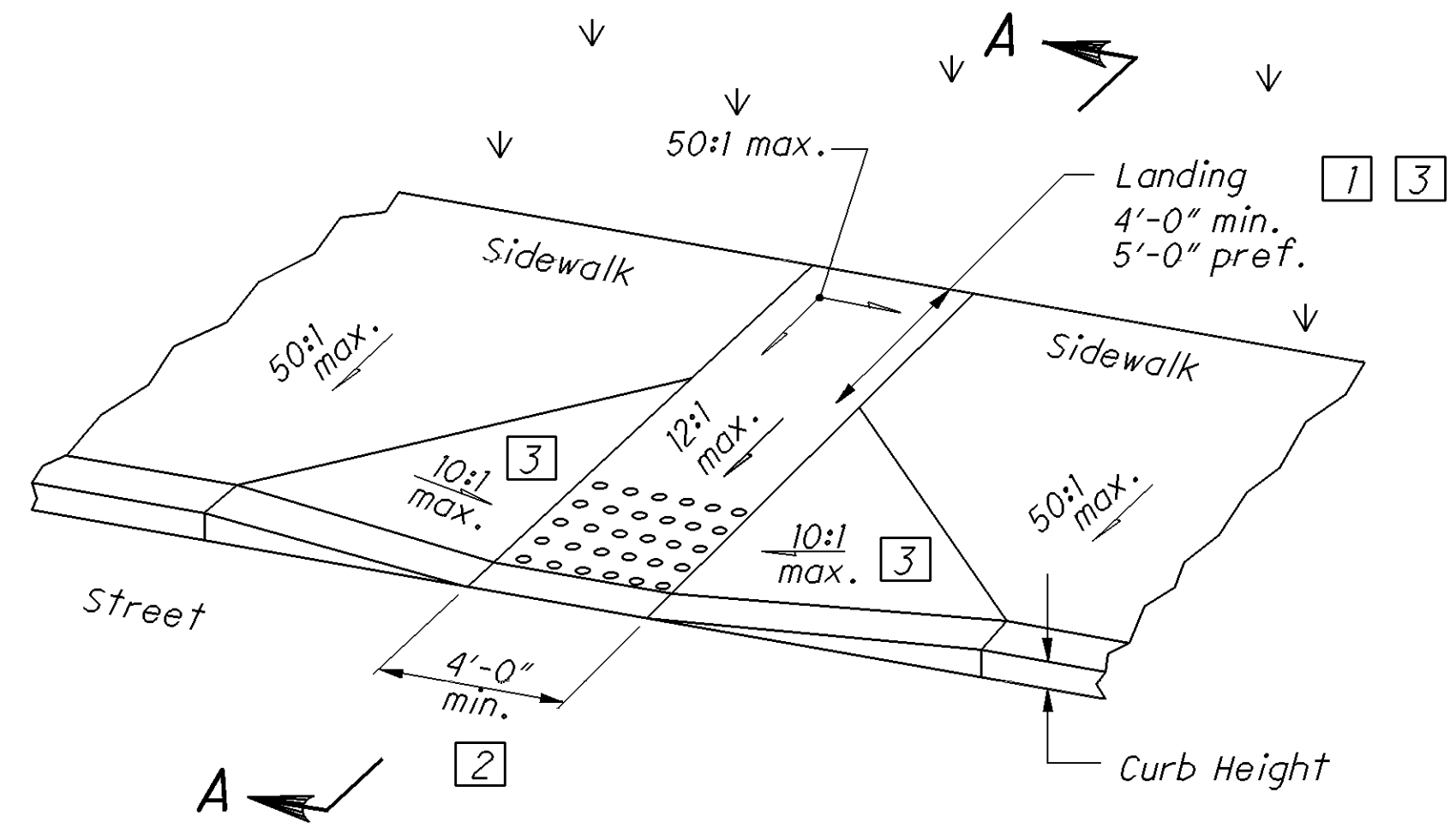


Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0" .

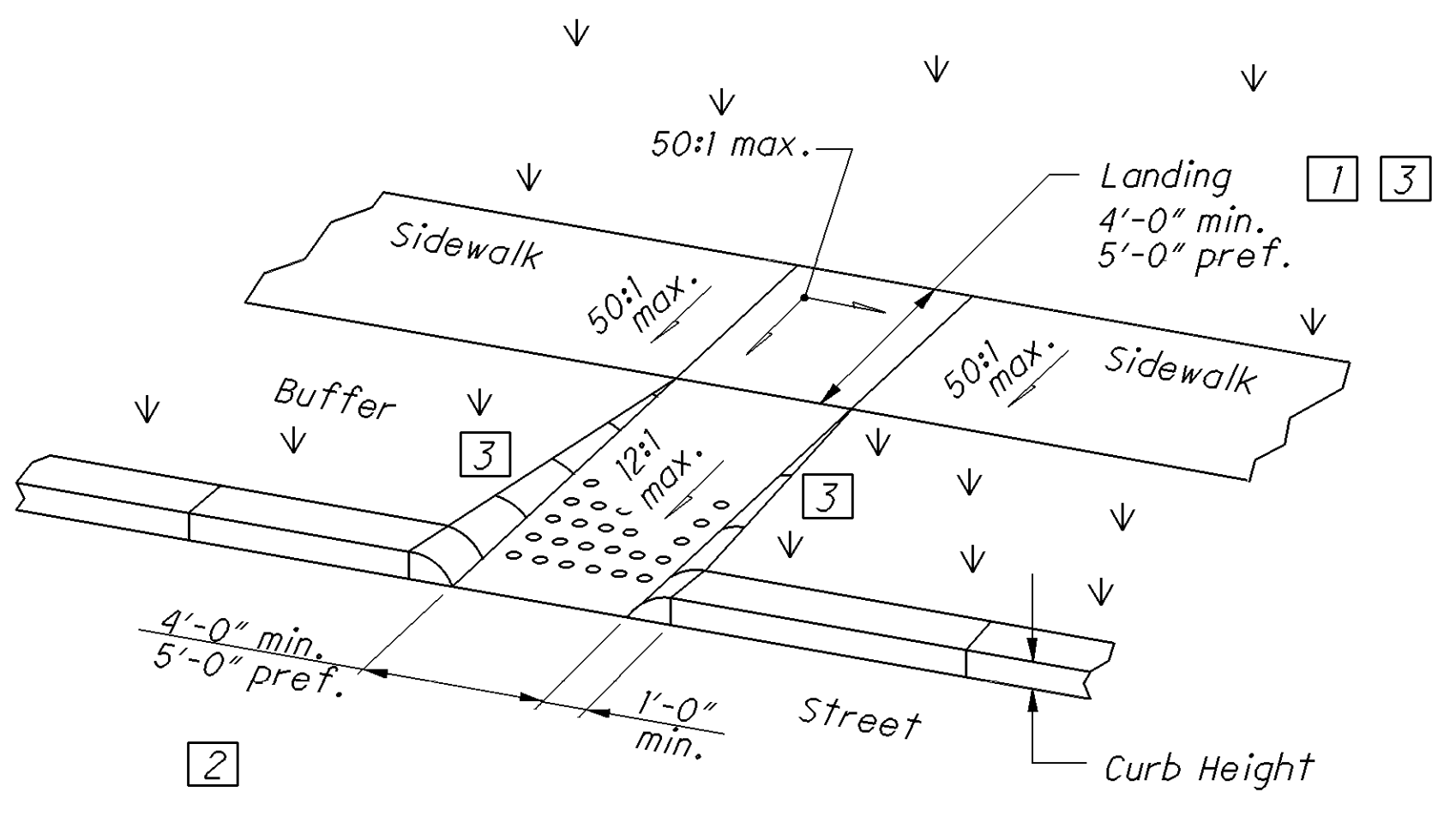
### DIAGONAL RAMP (Type D)

### ACCEPTABLE CONSTRUCTION PLACEMENT

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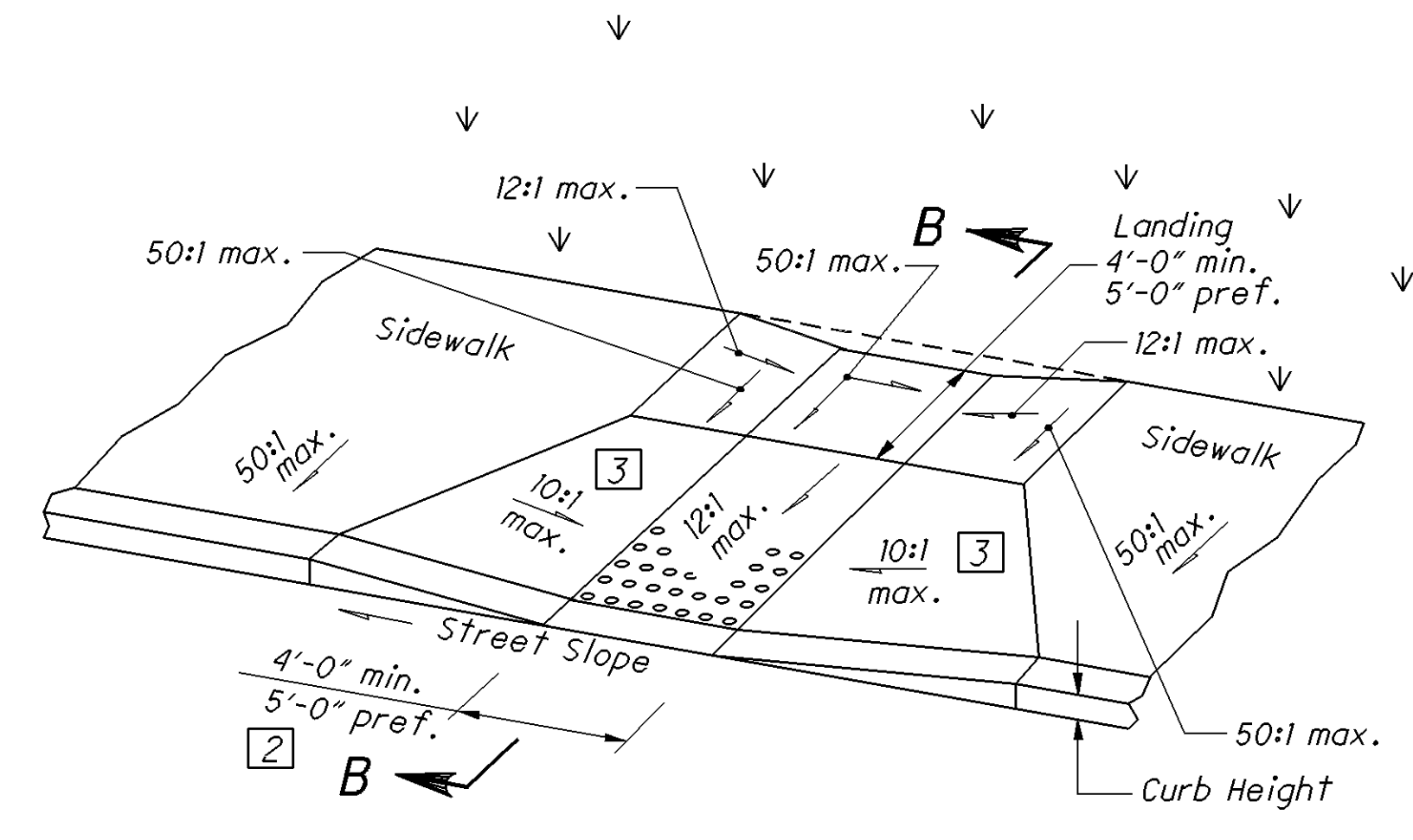


Type A1 (Perpendicular with flared sides)

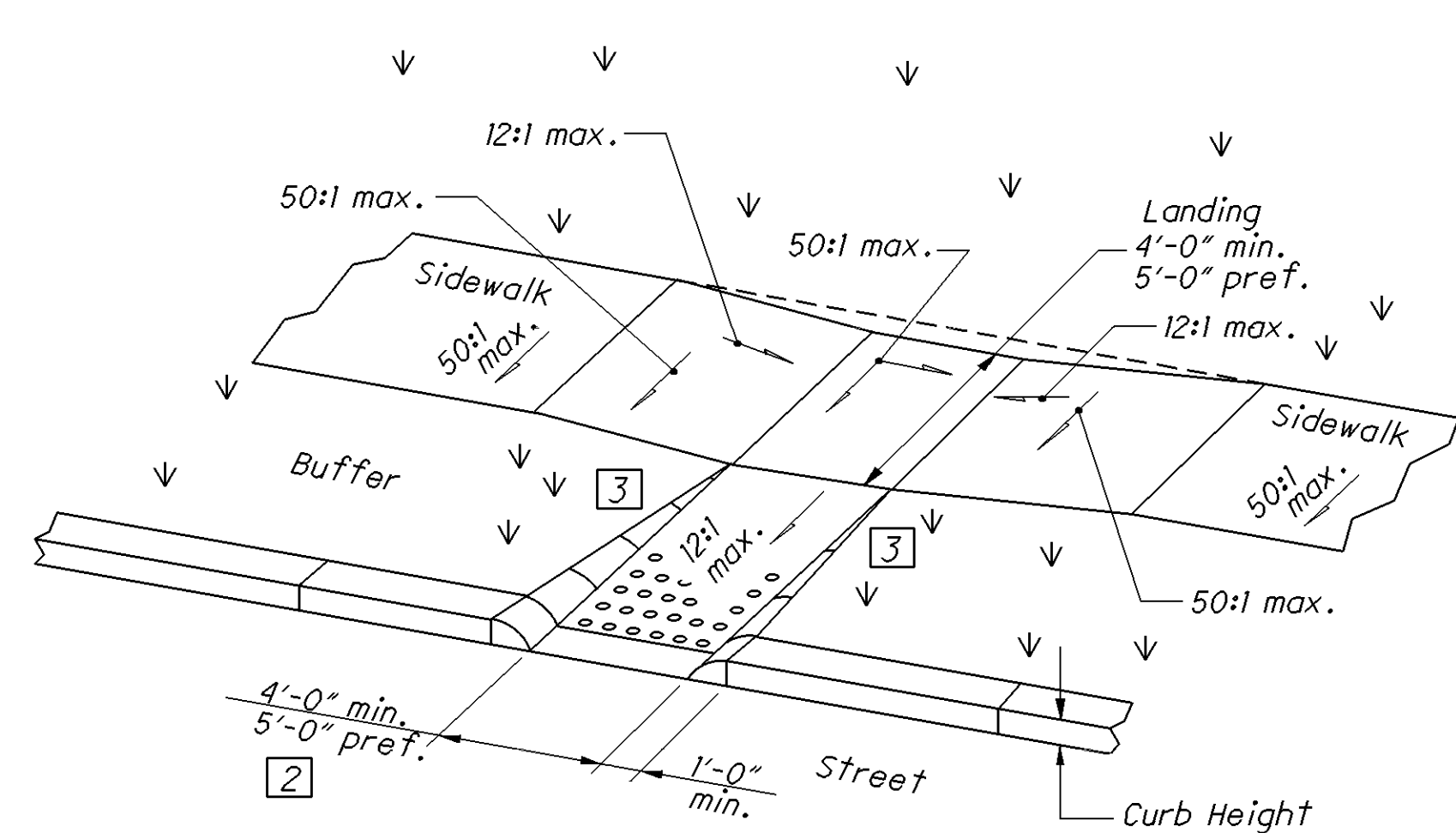


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

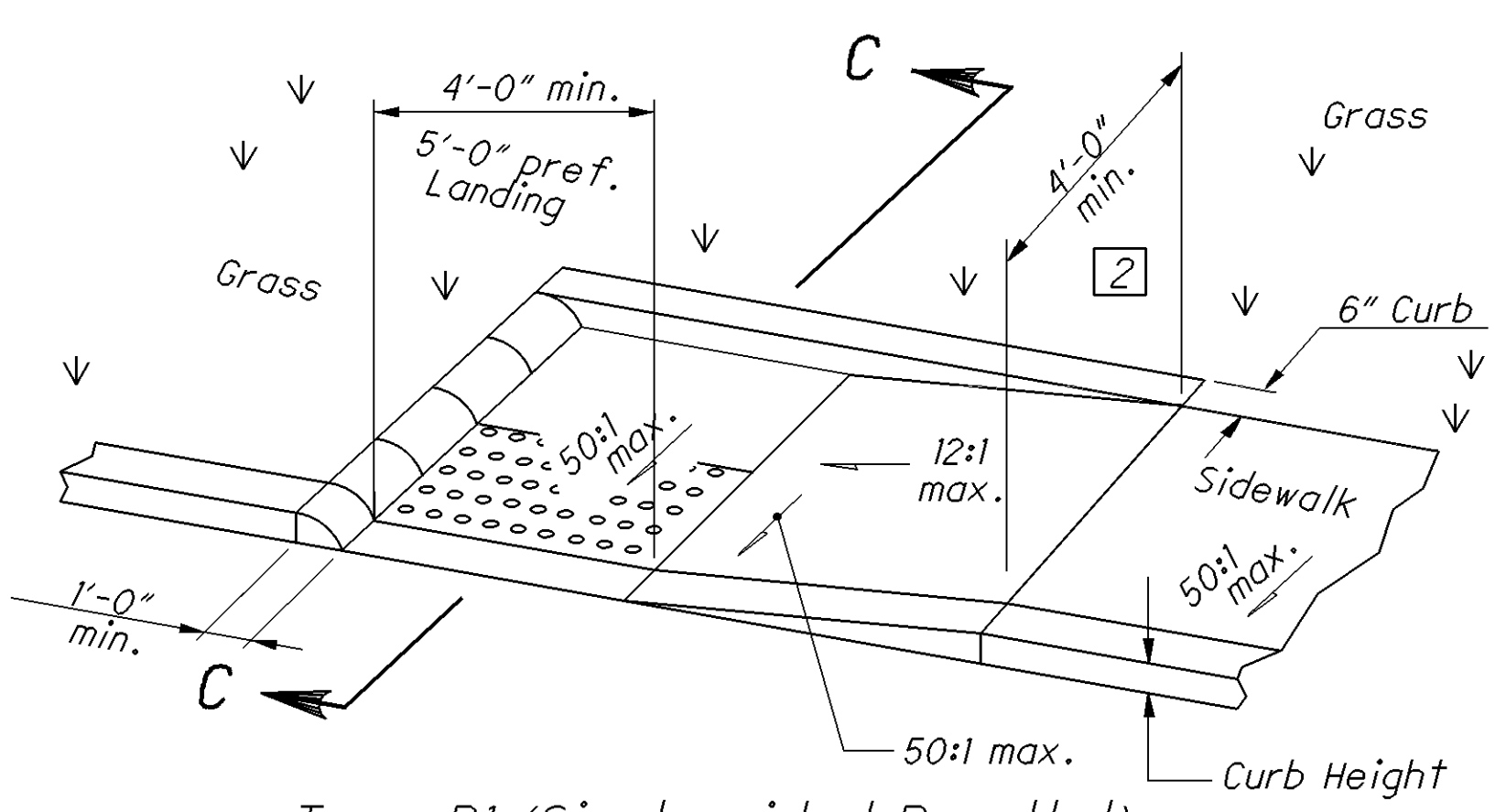


Type C1 (Combined with flared sides)

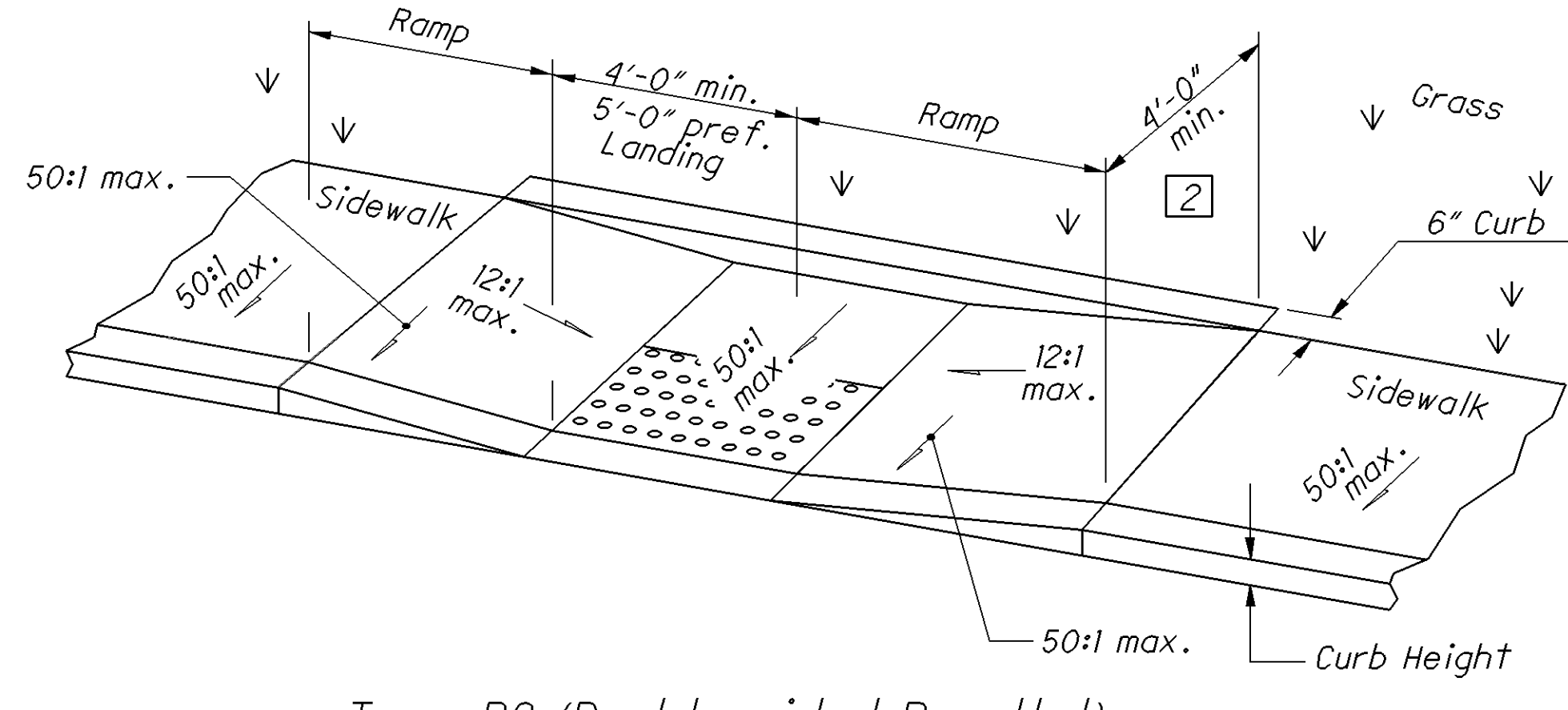


Type C2 (Combined with returned curb)

COMBINED CURB RAMP DETAILS

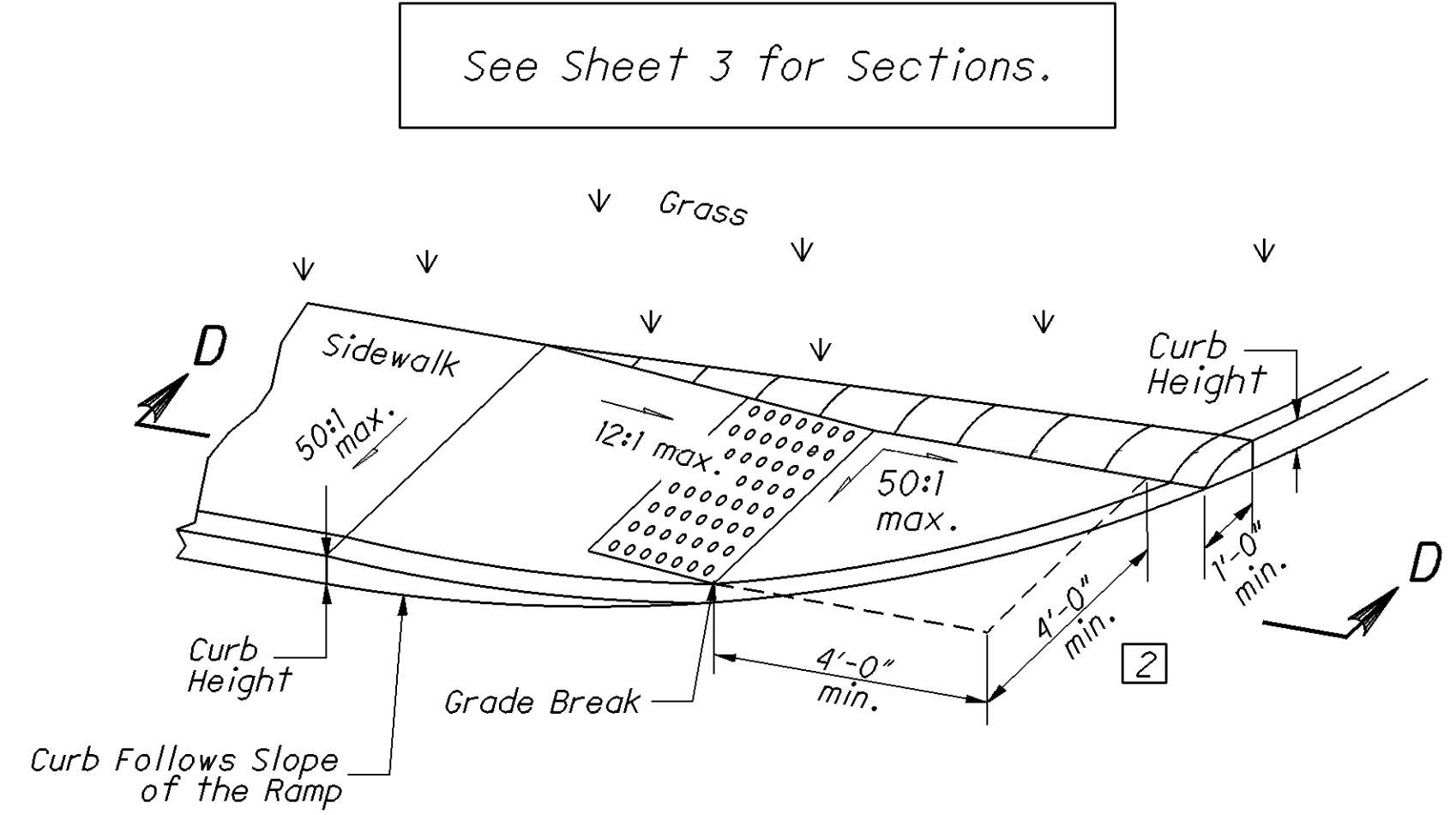


Type B1 (Single sided Parallel)



Type B2 (Double sided Parallel)

PARALLEL CURB RAMP DETAILS



Type B3 (Single sided Parallel)

NOTES CONTINUED

The running slope of the ramp is preferred to be 12:1 or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

- A) 10:1 for a max. rise of 6",
- B) 8:1 for a max. rise of 3",
- C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinitely, the transition from existing sidewalk to the curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 or flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

DETECTABLE WARNINGS: Install Detectable warnings on each curb ramp with approved materials as shown on Sheet 3. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed ramp allows for proper drainage, without exceeding allowable cross slope or ramp slope. Vertical change in level exceeding 1/8" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.

JOINTS: Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a 1/2" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes and do not necessarily indicate joint lines.

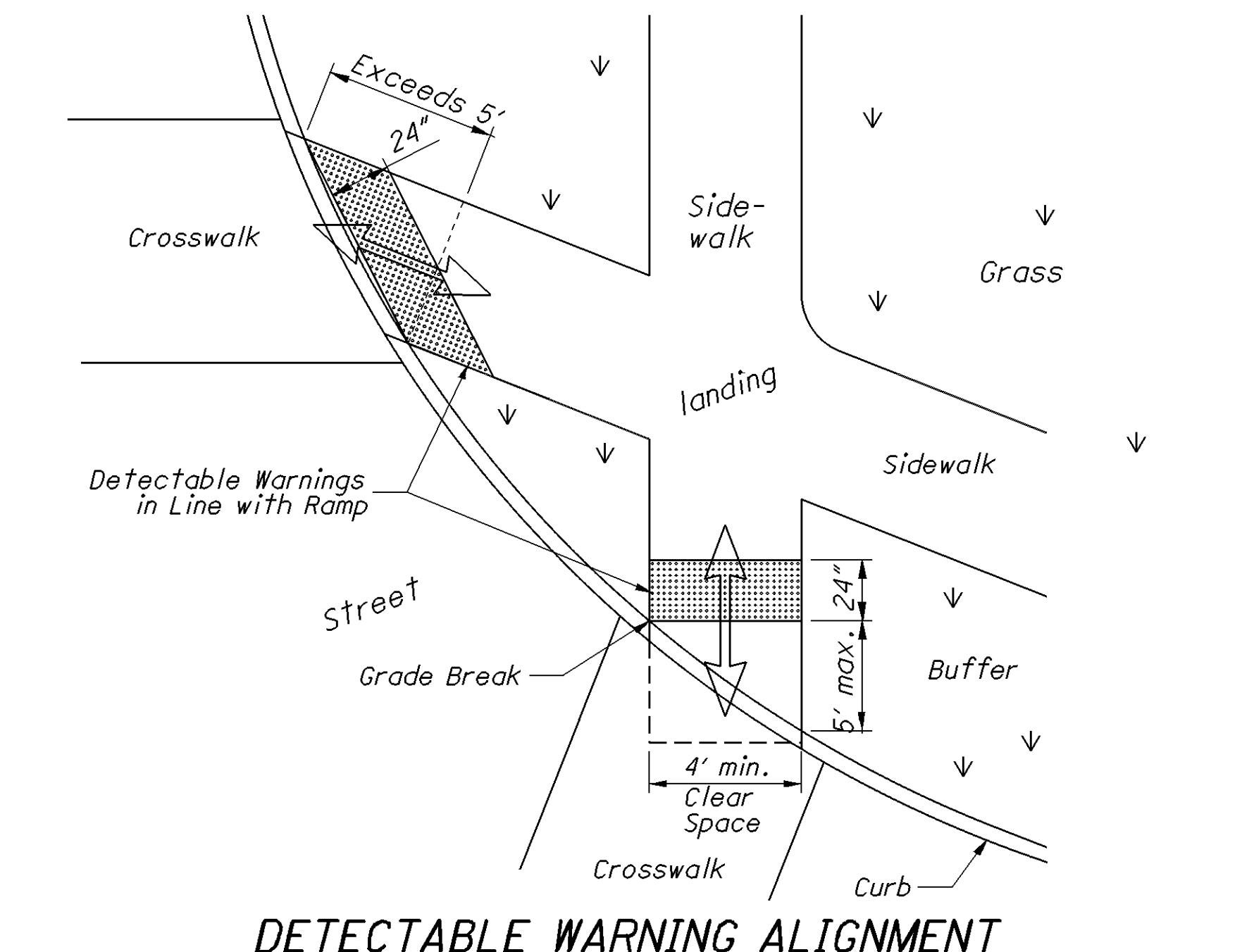
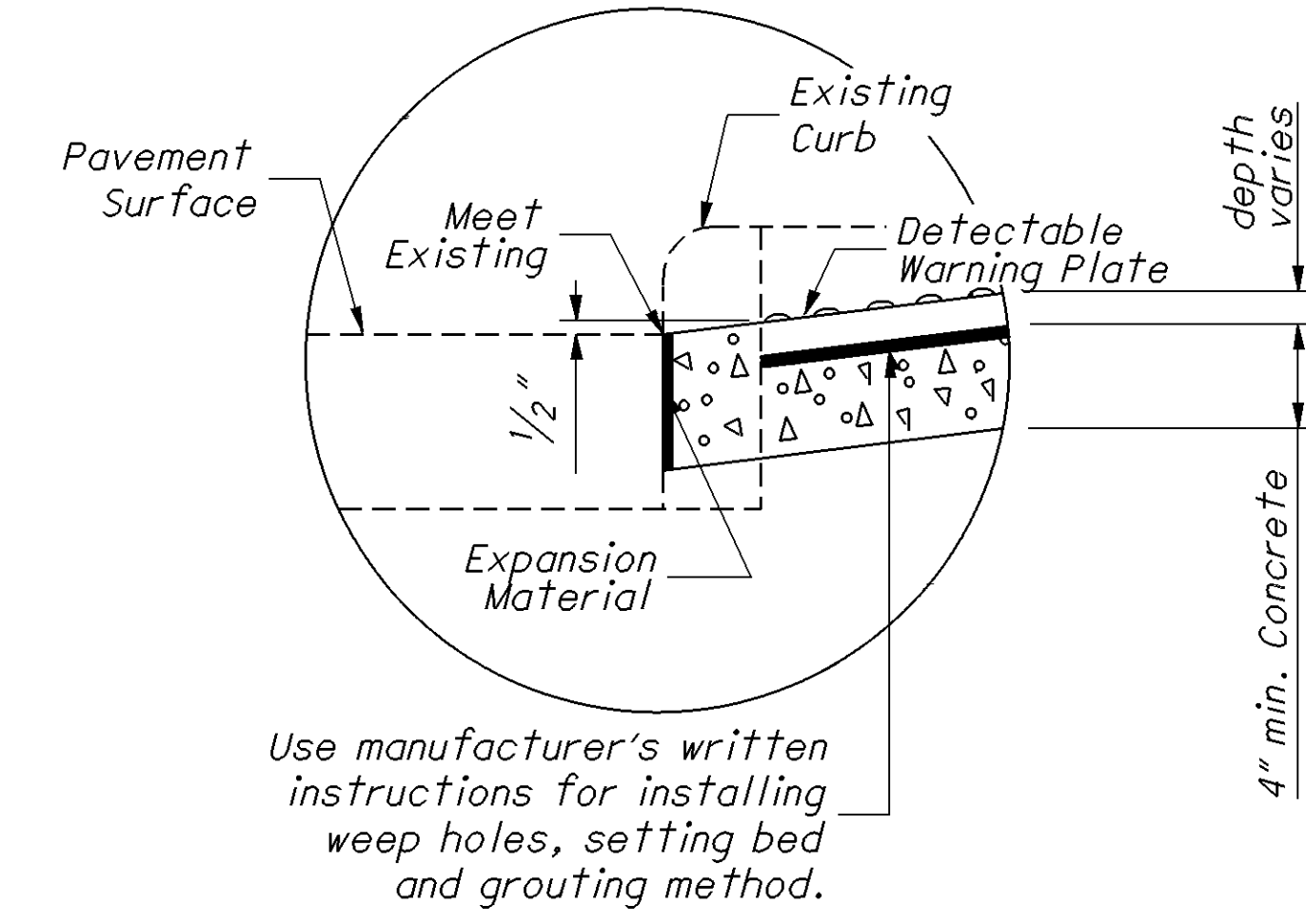
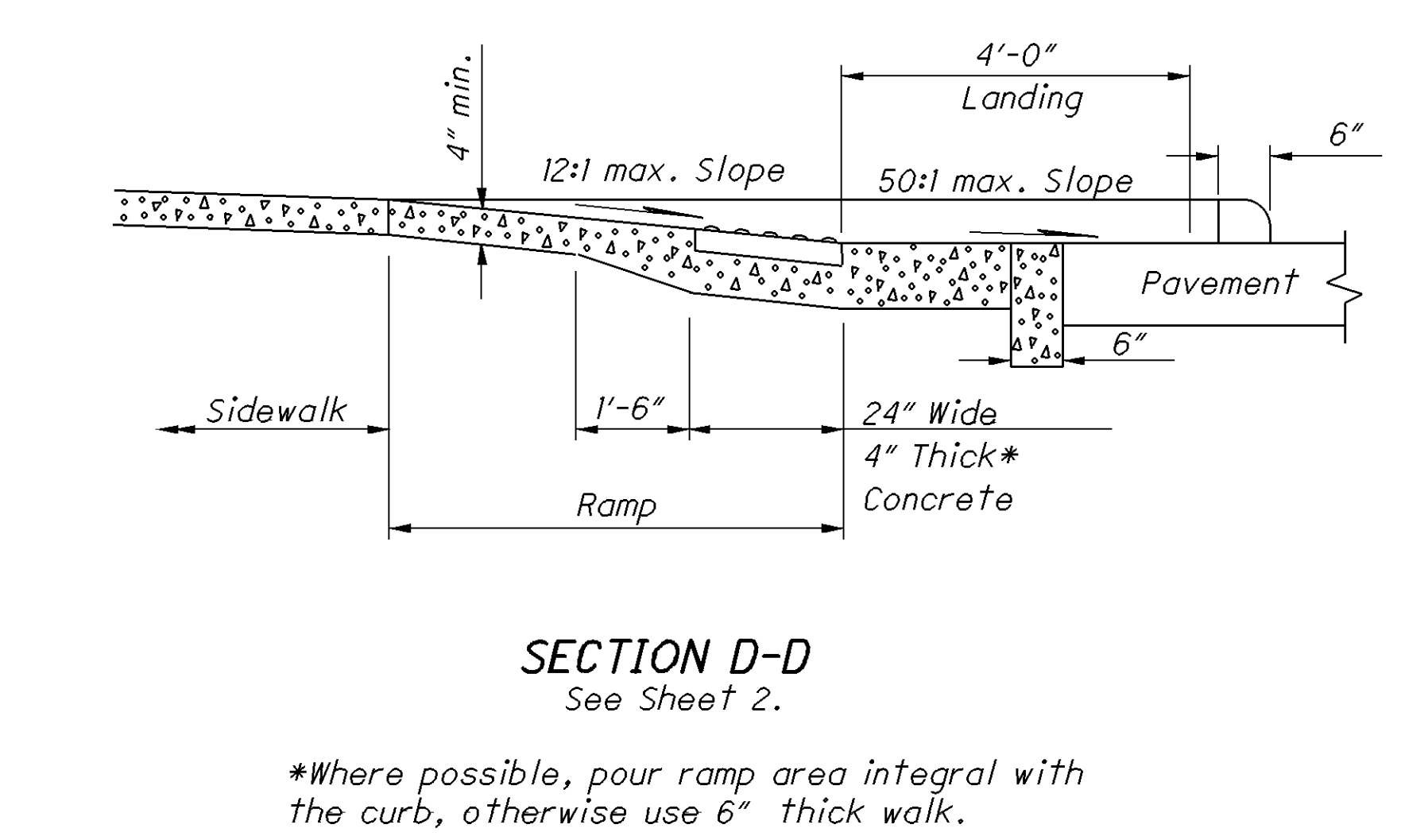
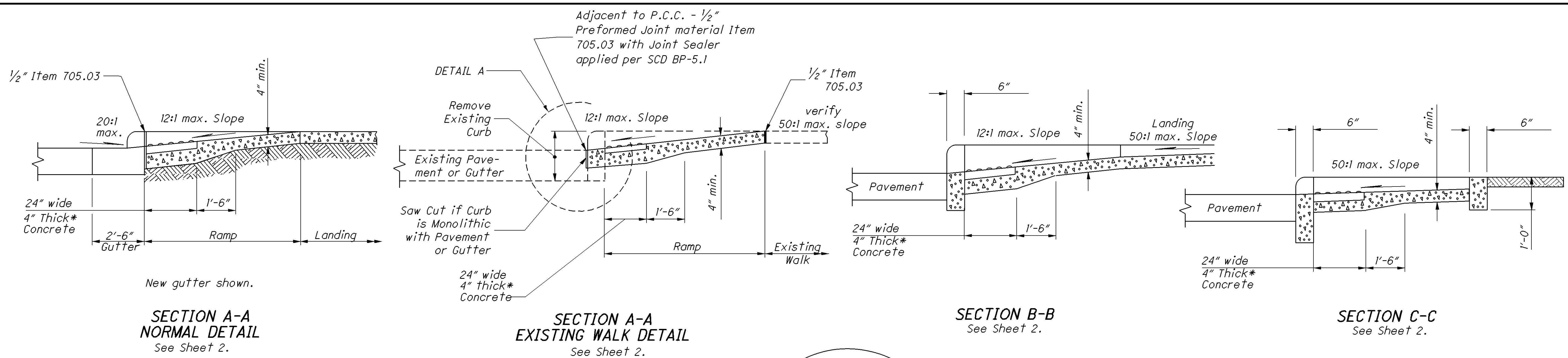
SURFACE TEXTURE: Texture concrete surfaces by coarse brooming transverse to the ramp slopes to be rougher than the adjacent walk.

LEGEND

- 1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.
- 2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- 3 Where landing width (D) has been reduced to 3'-0" the flared sides shall have a maximum slope of 12:1. Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheelchair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

See Sheet 3 for Sections.

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### DETECTABLE WARNINGS NOTES

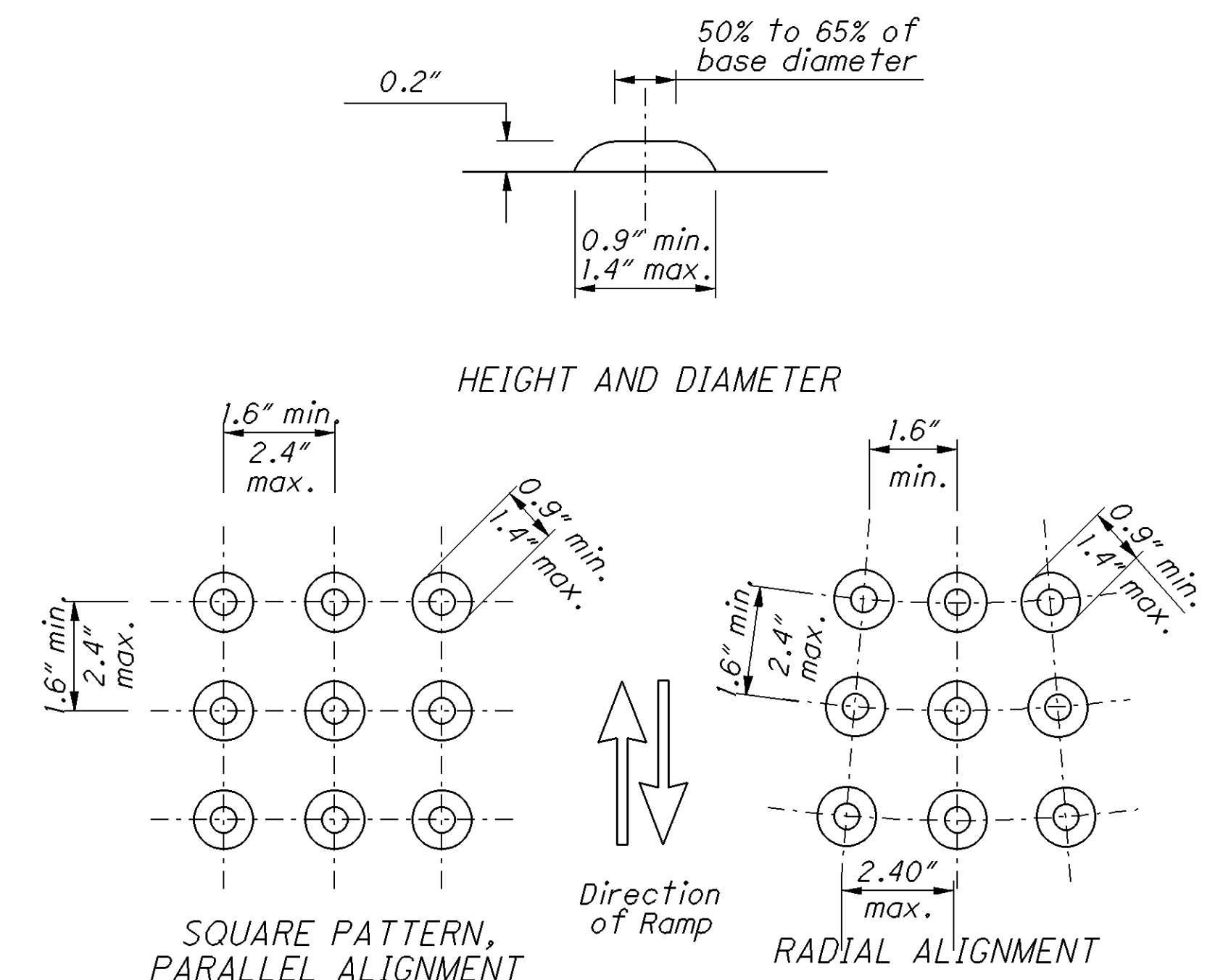
**GENERAL:** Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

**PLACEMENT:** Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 2.

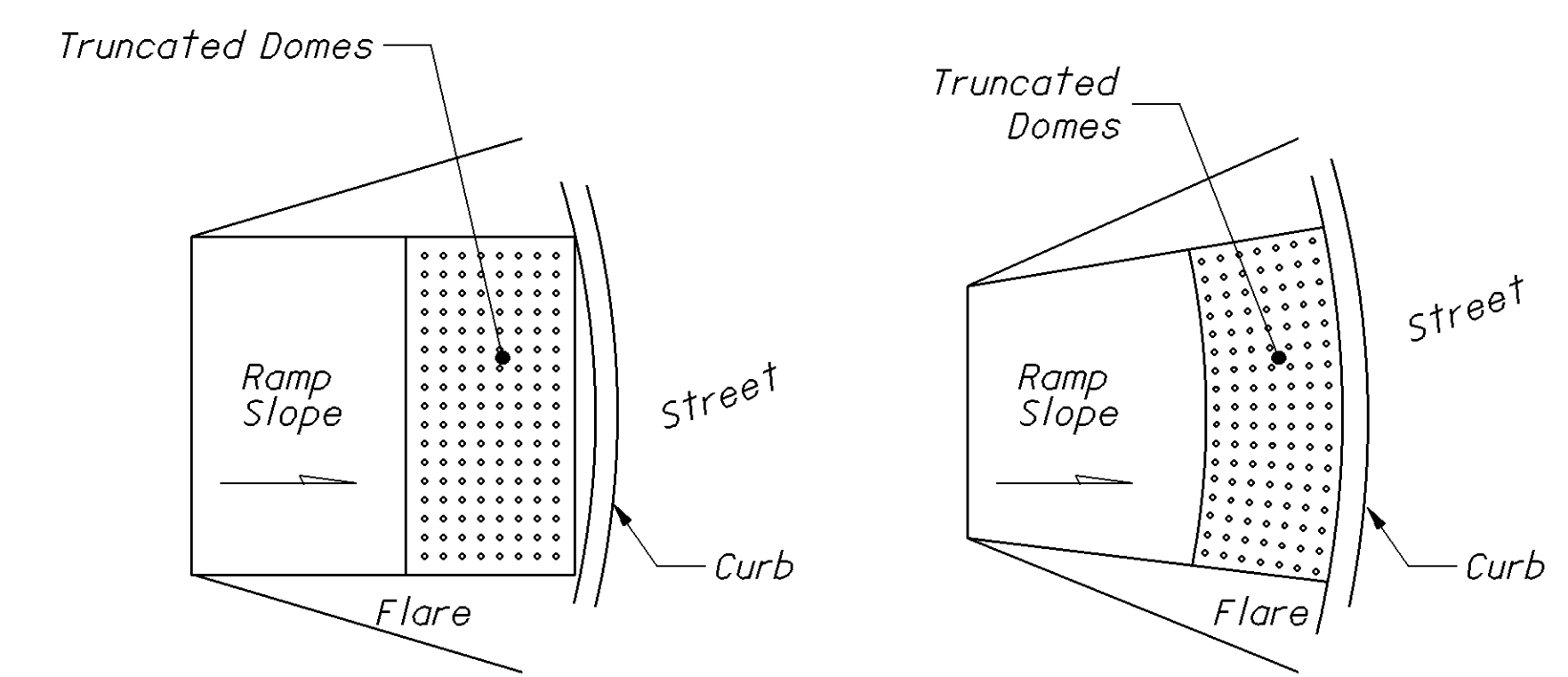
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

**ALIGNMENT:** Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions see DETECTABLE WARNING ALIGNMENT DETAIL. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

**PRODUCTS & COLORS:** Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.

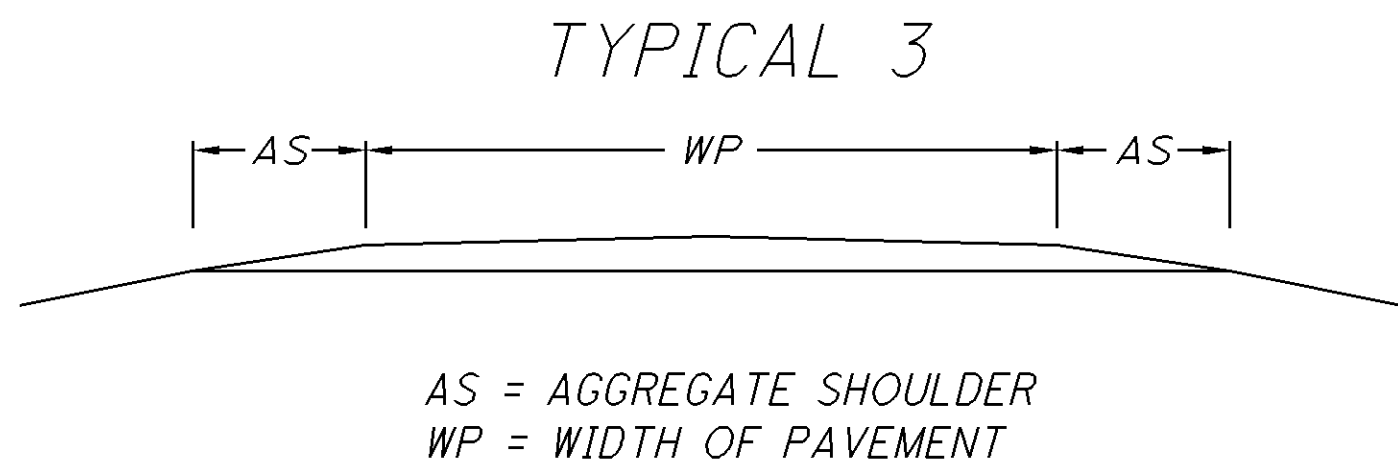
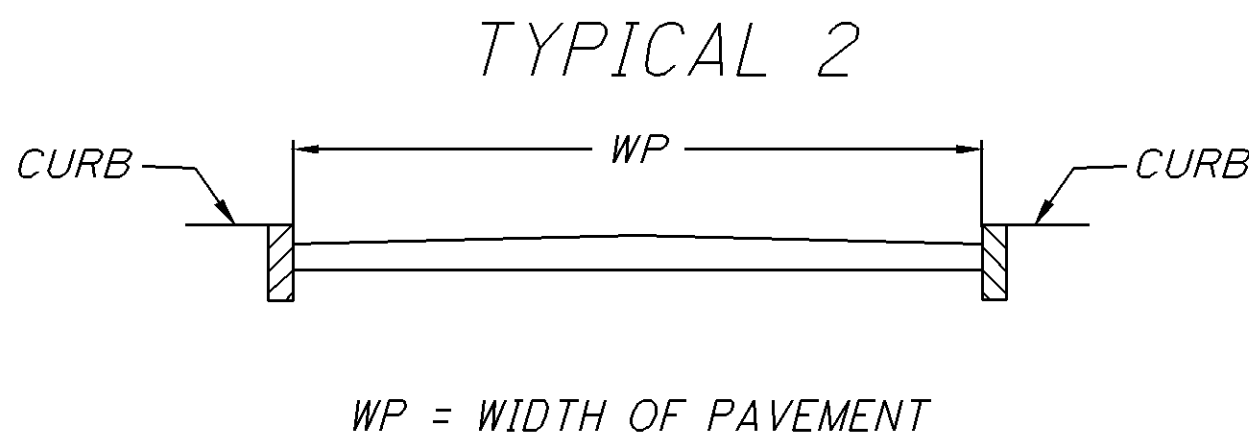
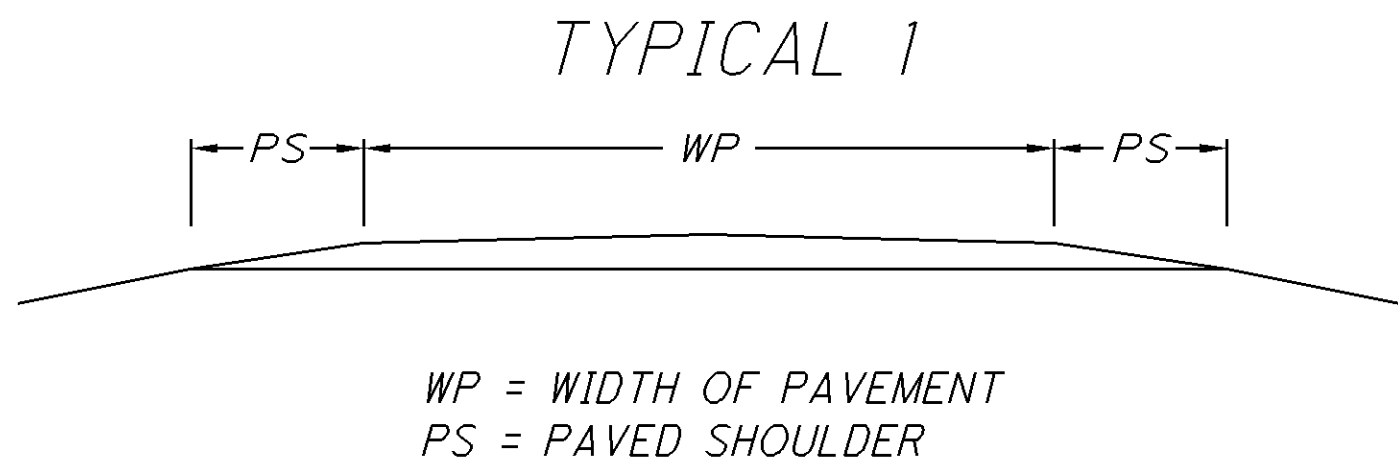


### TRUNCATED DOMES DETAILS

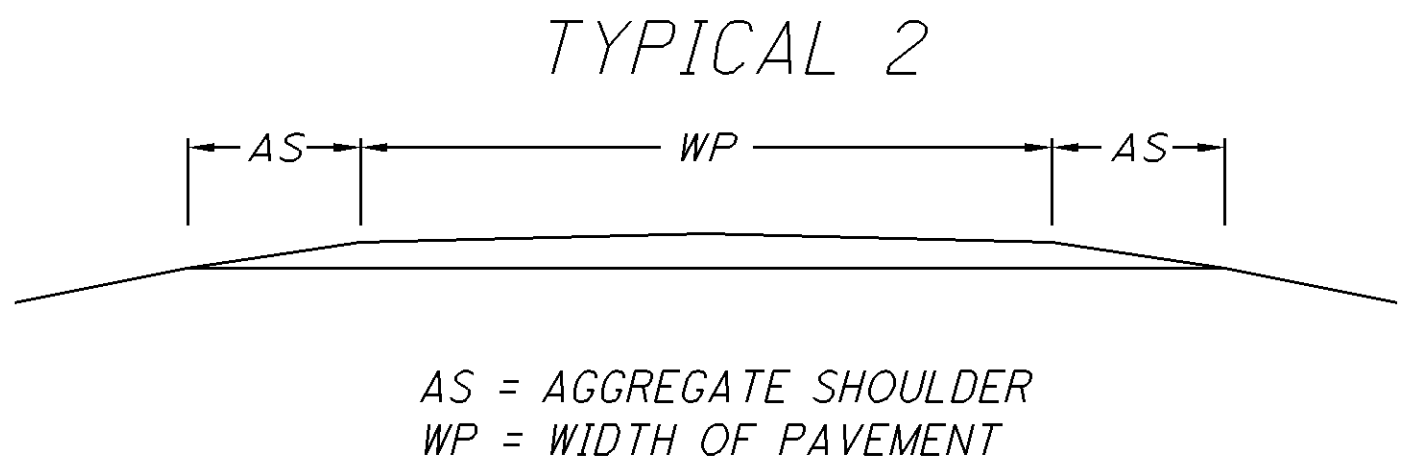
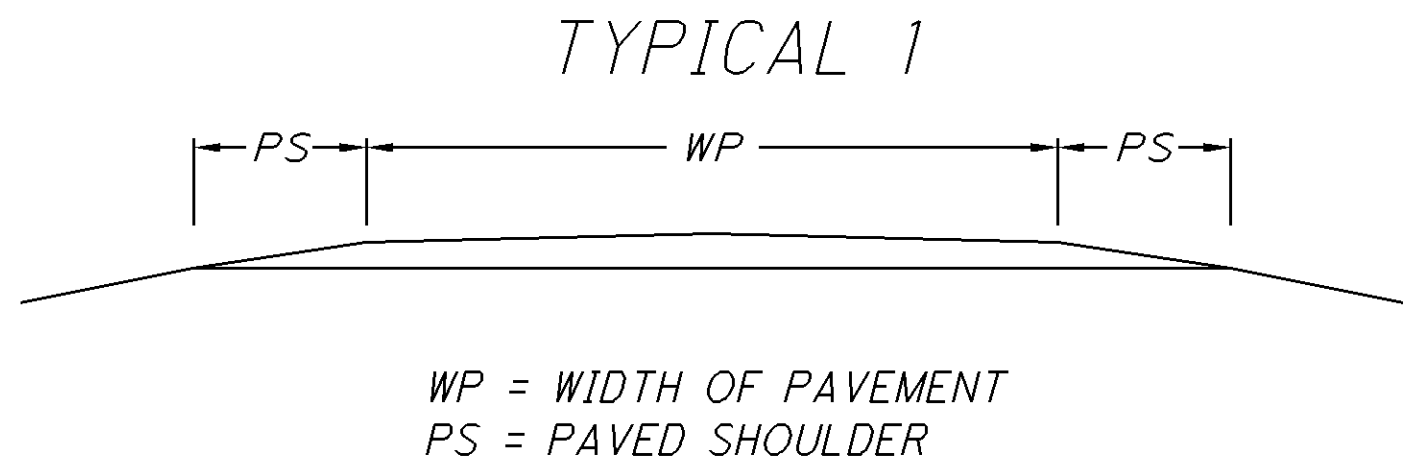




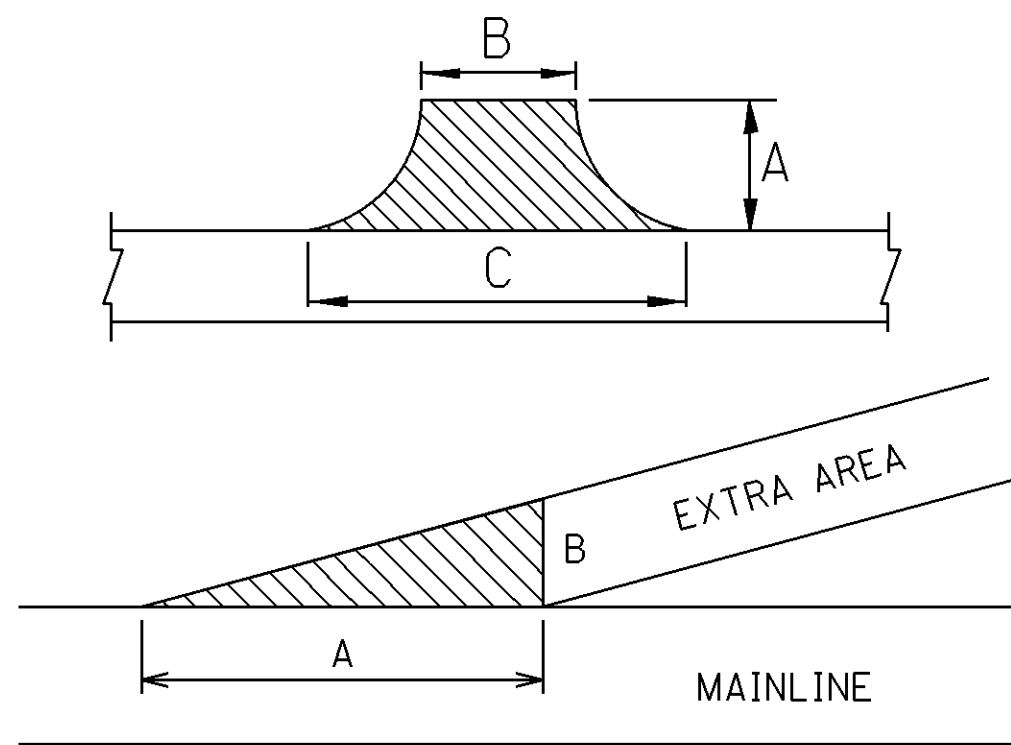
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PAVEMENT DATA																				
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	PAVEMENT AREA	254		897		407	424		441		441	
										PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" (ALTERNATE)	THICKNESS	PAVEMENT PLANING, ASPHALT CONCRETE, TYPE A	NON-TRACKING TACK COAT @ 0.08 GAL/S.Y.	THICKNESS	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M (ALTERNATE)	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M
					MILES	LIN. FT.			SQ. YD.	SQ. YD.	SQ. YD.	INCHES	SQ. YD.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.
1A	MUS	SR 345	0.00	1.60	1.60	8,448.00	20.0	1	18,773.3	18,773.4				1,501.9					1.50	782.3
			DEDUCT FOR BRIDGES (FROM SHEET 10)						(567.8)	(567.8)				(42.6)					1.50	(23.7)
			TOTALS (CARRIED TO LOCATION 1A SUB-SUMMARY)							18,205.6				1,459.3						758.6
1B	MUS	SR 345	1.60	2.52	0.92	4,857.60	20.0	1	10,794.7	10,794.7				863.6					1.50	449.8
			TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)							10,794.7				863.6						449.8
2	PER	SR 345	0.00	0.27	0.27	1,425.60	30.0	2	4,752.0		4,752.0	1.0	4,752.0	380.2	1.00	132.0	1.25	165.0		
2	PER	SR 345	0.27	0.38	0.11	580.80	36.0	2	2,323.2		2,323.2	1.0	2,323.2	185.9	1.00	64.5	1.25	80.7		
2	PER	SR 345	0.38	0.48	0.10	528.00	22.0	1	1,290.7		1,290.7	1.0	1,290.7	103.3	1.00	35.9	1.25	44.8		
2	PER	SR 345	0.48	7.18	6.70	35,376.00	20.0	1	78,613.3					6,289.1	1.00	2,183.7	1.25	2,729.6		
2	PER	SR 345	7.18	9.22	2.04	10,771.20	20.0	1	23,936.0					1,914.9	1.00	664.9	1.25	831.1		
			DEDUCT FOR BRIDGES (FROM SHEET 10)						(379.0)						1.00	(10.5)	1.25	(13.2)		
			TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)								8,365.9		8,365.9	8,873.4		3,070.5		3,838.1		
3	PER	SR 383	0.00	1.32	1.32	6,969.60	20.0	3	15,488.0	15,488.0	15,488.0			1,239.1					1.50	645.4
3	PER	SR 383	1.32	1.50	0.18	950.40	20.0	3	2,112.0	2,112.0	2,112.0			169.0					1.50	88.0
			TOTALS (CARRIED TO LOCATION 3 SUB-SUMMARY)							17,600.0	17,600.0			1,408.1						733.4



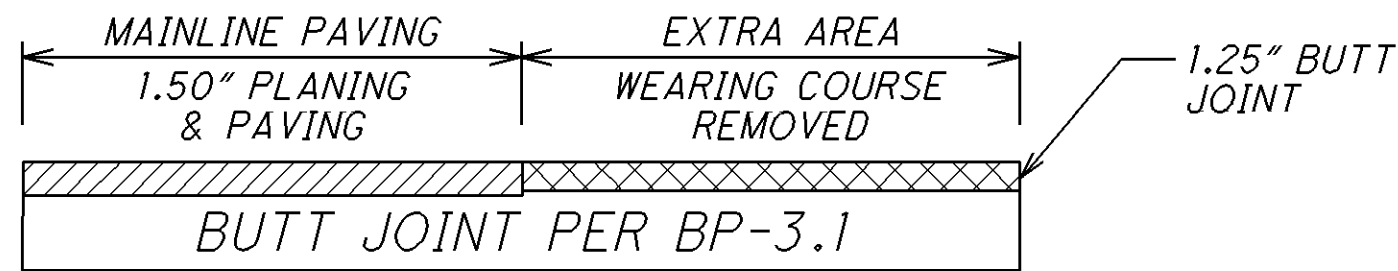
SHOULDER DATA																						
LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)		SHOULDER AREA	209	254	407	408	424		441		441		617	
											PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	PRIME COAT, AS PER PLAN (@ 0.40 Gal/SY)	SEMI-GRANULAR FILL	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	SEMI-GRANULAR FILL	SURFACE COURSE, TYPE 1, PG 70-22M (ALTERNATE)	SEMI-GRANULAR FILL	SURFACE COURSE, TYPE 1, PG 70-22M	SEMI-GRANULAR FILL	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)
					MILES	LIN. FT.		A	B		SQ. YD.	MILE	SQ. YD.	GAL.	GAL	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES
1A	MUS	SR 345	0.00	1.60	1.60	8448.0	1	2	2	3,754.7	3.20	3,754.7	300.4	1,501.9					1.50	156.4	2.00	208.6
	DEDUCT FOR BRIDGES (FROM SHEET 10)									(113.6)	(0.05)	(113.6)	(9.1)	(45.4)					1.50	(4.7)	2.00	(6.3)
	TOTALS (CARRIED TO LOCATION 1A SUB-SUMMARY)										3.15	3,641.1	291.3	1,456.4					151.7		202.3	
1B	MUS	SR 345	1.60	2.52	0.92	4857.6	1	2	2	2,158.9	1.84	2,158.9	172.7	863.6					1.50	90.0	2.00	119.9
	TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)										1.84	2,158.9	172.7	863.6					90.0		119.9	
2	PER	SR 345	0.48	9.22	8.74	46147.2	1	2	2	20,509.9			1,640.8	8,203.9	1.00	569.7	1.25	712.1			2.00	1,139.4
	DEDUCT FOR BRIDGES (FROM SHEET 10)									(84.2)			(6.7)	(33.7)	1.00	(2.3)	1.25	(2.9)			2.00	(4.7)
	TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)												1,634.1	8,170.3		567.4		709.2				1,134.8
3	PER	SR 383	0.00	1.50	1.50	7920.0	2	2	2	3,520.0	3.00			1,408.0							2.00	195.6
	TOTALS (CARRIED TO LOCATION 3 SUB-SUMMARY)										3.00			1,408.0								195.6



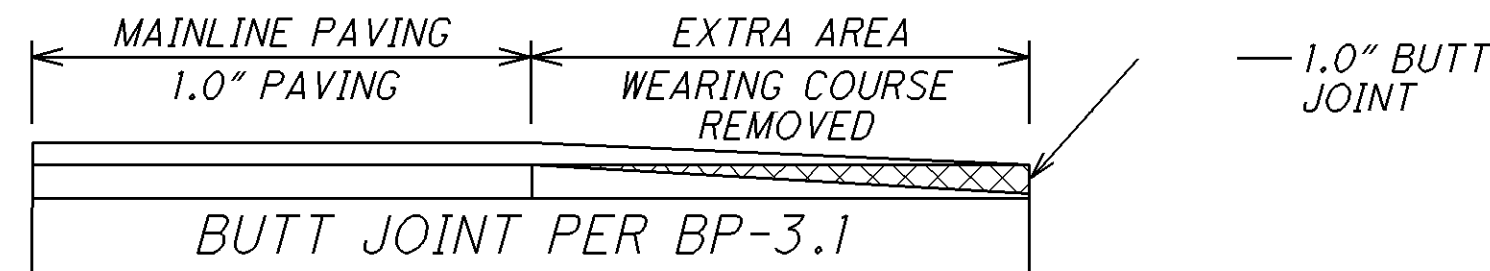
$$AREA = \left[ A \left( \frac{B + C}{2} \right) \right] / 9$$

IF C=0 THEN:

$$AREA = \left[ \frac{A \times B}{2} \right] / 9$$



LOCATIONS 1A, 1B, 3



LOCATION 2

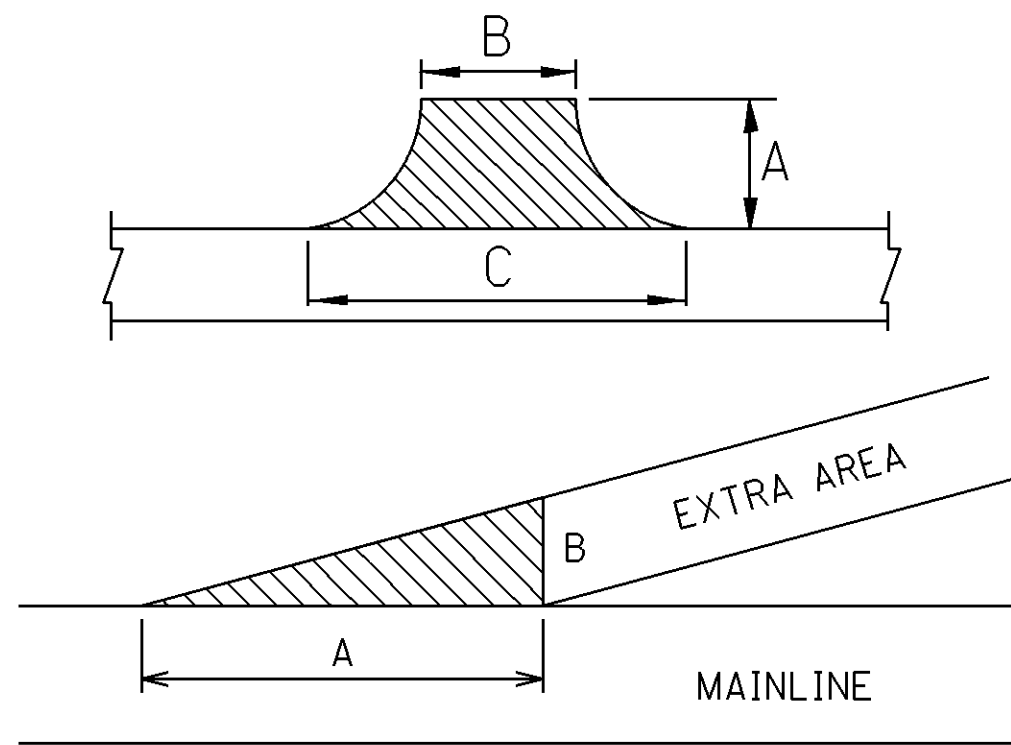
EXTRA AREAS												
L O C A T I O N	C O U N T Y	R O U T E	S I D E	D E S C R I P T I O N	I N T E R S E C T I O N S			A R E A	202	407	441	
					D E T A I L D I M E N S I O N				W E A R I N G C O U R S E  R E M O V E D	N O N - T R A C K I N G  T A C K C O A T @  0.08 G A L /SQ. Y D.	T H I C K N E S S	S U R F A C E C O U R S E,  T Y P E 1, P G 64-22
					A	B	C					
										A	B	C
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	IN.	CU. YD.
1A	MUS	SR 345	LT	BUTCHERKNIFE RD	33	20	63	152.2	152.2	12.2	1.25	5.3
1A	MUS	SR 345	RT	FLETCHER RD	38	20	93	238.6	238.6	19.1	1.25	8.3
1A	MUS	SR 345	LT	PORTER RUN RD	22	18	58	92.9	92.9	7.5	1.25	3.3
TOTALS (CARRIED TO LOCATION 1A SUB-SUMMARY)									483.7	38.8		16.9
1B	MUS	SR 345	RT	HOOVER ST	37	37	130	343.3	343.3	27.5	1.25	12.0
TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)									343.3	27.5		12.0
2	PER	SR 345	RT	CENTER ST	20	20	25	50.0	50.0	4.0	1.00	1.4
2	PER	SR 345	LT	CENTER ST	20	20	25	50.0	50.0	4.0	1.00	1.4
2	PER	SR 345	RT	CARROLL ST	15	34	50	70.0	70.0	5.6	1.00	2.0
2	PER	SR 345	LT	E. LINCOLN ST	55	25	50	229.2	229.2	18.4	1.00	6.4
2	PER	SR 345	LT	VALENTINE DR	20	18	28	51.2	51.2	4.1	1.00	1.5
2	PER	SR 345	RT	LINCOLN PARK DR	30	40	74	190.0	190.0	15.2	1.00	5.3
2	PER	SR 345	LT	PANTHER DR	35	26	82	210.0	210.0	16.8	1.00	5.9
2	PER	SR 345	RT	HUNTER DR	25	17	55	100.0	100.0	8.0	1.00	2.8
2	PER	SR 345	RT	MONSANTO RD	75	26	106	550.0	550.0	44.0	1.00	15.3
2	PER	SR 345	RT	ALLEY (REHOBOTH)	15	12	36	40.0	40.0	3.2	1.00	1.2
2	PER	SR 345	LT	ALLEY (REHOBOTH)	15	10	30	33.4	33.4	2.7	1.00	1.0
2	PER	SR 345	RT	ALLEY (REHOBOTH)	15	12	35	39.2	39.2	3.2	1.00	1.1
2	PER	SR 345	LT	ALLEY (REHOBOTH)	15	10	26	30.0	30.0	2.4	1.00	0.9
2	PER	SR 345	RT	HOLLOW RD	25	18	63	112.5	112.5	9.0	1.00	3.2
2	PER	SR 345	LT	HOLLOW RD	36	18	72	180.0	180.0	14.4	1.00	5.0
2	PER	SR 345	RT	ALLEY (REHOBOTH)	15	10	20	25.0	25.0	2.0	1.00	0.7
2	PER	SR 345	LT	ALLEY (REHOBOTH)	15	10	20	25.0	25.0	2.0	1.00	0.7
2	PER	SR 345	RT	ALLEY (REHOBOTH)	15	10	20	25.0	25.0	2.0	1.00	0.7
2	PER	SR 345	LT	ALLEY (REHOBOTH)	20	12	50	68.9	68.9	5.6	1.00	2.0
TOTALS (CARRIED TO NEXT SHEET)									2,079.4	166.6		58.5

EXTRA AREA DATA

MUS-345-0.00  
PER-345/ 383-0.00



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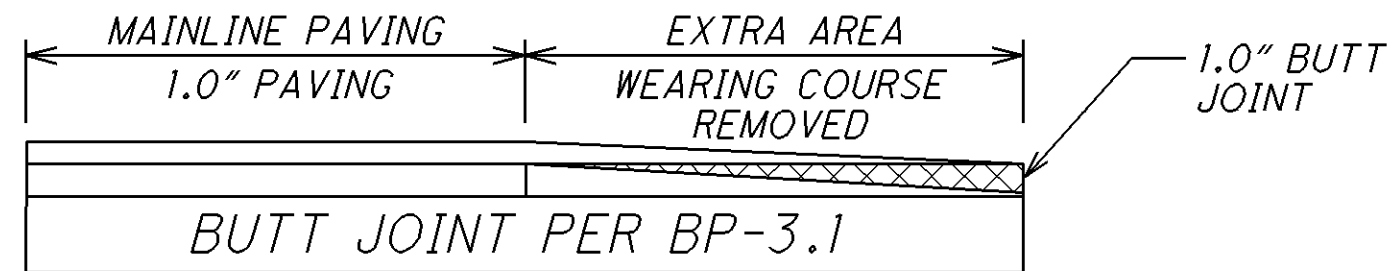
$$AREA = \left[ A \left( \frac{B + C}{2} \right) \right] / 9$$

IF C=0 THEN:

$$AREA = \left[ \frac{A}{2} \times B \right] / 9$$



LOCATIONS 1A, 1B, 3



LOCATION 2

EXTRA AREAS												
L O C A T I O N	C O U N T Y	R O U T E	S I D E	D E S C R I P T I O N	I N T E R S E C T I O N S			A R E A	202	407	441	
					D E T A I L D I M E N S I O N				W E A R I N G C O U R S E  R E M O V E D	N O N- T R A C K I N G  T A C K C O A T @  0.08 G A L./S Q. Y D.	T H I C K N E S S	S U R F A C E C O U R S E,  T Y P E 1, P G 64-22
					A	B	C					
					FT.	FT.	FT.	SQ. YD.	SQ. YD.	GAL.	IN.	CU. YD.
TOTALS (CARRIED FROM PREVIOUS SHEET)									2,079.4	166.6		58.5
2	PER	SR 345	RT	NATURAL RESOURCES 3	50	25	114	386.2	386.2	30.9	1.00	10.8
2	PER	SR 345	LT	NATURAL RESOURCES 3	50	22	94	322.3	322.3	25.8	1.00	9.0
2	PER	SR 345	RT	POLE CAT RD	25	20	50	97.3	97.3	7.8	1.00	2.8
2	PER	SR 345	LT	TWP RD 154	68	39		147.4	147.4	11.8	1.00	4.1
2	PER	SR 345	LT	TWP RD 154	20	21	55	84.5	84.5	6.8	1.00	2.4
2	PER	SR 345	RT	TWP RD 162	40	16	88	231.2	231.2	18.5	1.00	6.5
2	PER	SR 345	LT	S.R. 669	80	23	158	804.5	804.5	64.4	1.00	22.4
2	PER	SR 345	RT	TWP RD 169	30	21	63	140.0	140.0	11.2	1.00	3.9
2	PER	SR 345	LT	TWP RD 114	25	14	50	88.9	88.9	7.2	1.00	2.5
2	PER	SR 345	RT	S.R. 669	50	22	95	325.0	325.0	26.0	1.00	9.1
2	PER	SR 345	RT	CO RD 3	45	19	90	272.5	272.5	21.8	1.00	7.6
2	PER	SR 345	RT	TWP RD 141	25	15	45	83.4	83.4	6.7	1.00	2.4
TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)									5,062.6	405.5		142.0
3	PER	SR 383	LT	CO RD 45	36	19	65	168.0	168.0	13.5	1.25	5.9
3	PER	SR 383	RT	TWP RD 121	25	16	44	83.4	83.4	6.7	1.25	2.9
3	PER	SR 383	RT	TWP RD 52	16	18	45	56.0	56.0	4.5	1.25	2.0
3	PER	SR 383	LT	TWP RD 104	43	22	101	293.9	293.9	23.6	1.25	10.3
3	PER	SR 383		AT S.R. 13	43	22	101	198.3	198.3	15.9	1.50	8.3
TOTALS (CARRIED TO LOCATION 3 SUB-SUMMARY)									799.6	64.2		29.4

EXTRA AREA DATA

MUS-345-0.00  
PER-345 / 383-0.00

BRIDGE DECK TREATMENT

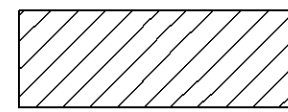
LOCATION 1A:  
MUS-345-0020 - BRIDGE, BUTT JOINT AT APPROACH SLABS  
MUS-345-0088 - CULVERT, MILL AND FILL SAME AS ROADWAY  
MUS-345-0160 - BRIDGE, BUTT JOINT AT APPROACH SLABS

LOCATION 2:  
PER-345-0192 - BRIDGE, REMOVE AND REPLACE 1.0" ASPHALT CONCRETE  
PER-345-0649 - BRIDGE, REMOVE 1.5" AND PLACE 1.0" ASPHALT CONCRETE, JOINT REPAIR  
PER-345-0711 - CULVERT, PAVE SAME AS ROADWAY

BRIDGE DEDUCTIONS = ROADWAY/SHOULDER WIDTH X (BRIDGE LENGTH + APPROACH LENGTH)

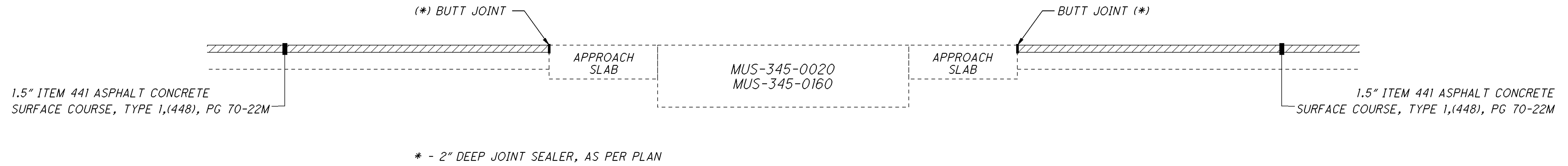
BRIDGE TREATMENT DATA																			
LOCATION	BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAILS (SHEET 14)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 9)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 10)	254 PAVEMENT PLANING, ASPHALT CONCRETE, 1.25" (ALTERNATE)	897		407 NON-TRACKING TACK COAT @ 0.08 GAL./S.Y.	424		441		516
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		SQ. YD.	SQ. YD.	SQ. YD.	INCHES	SQ. YD.	GAL	INCHES	CU. YD.	INCHES	CU. YD.	FT
1A	MUS-345-0020	92.5	32.5	334.1	25	32.5	180.6	1	316.7	63.3									48
1A	MUS-345-0160	73	40	324.5	20	40.0	177.8	1	251.1	50.2									48
	TOTALS (CARRIED TO LOCATION 1A SUB-SUMMARY)								567.8	113.6									96.0
2	PER-345-0192	56	35	217.8	20	35.0	155.6	2	192.0	42.7	373.4	1.00	373.4	30.0	1.0	10.4	1.25	13.0	
2	PER-345-0649	53.5	32	190.3	20	32.0	142.3	3	187.0	41.6	332.6	1.50	332.6	27.0	1.0	9.2	1.25	11.5	128
	SUB-TOTALS																		
	TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)								379.0	84.2	706.0		706.0	57.0		19.6		24.5	128.0

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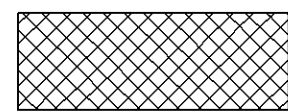


ITEM 254 PAVEMENT PLANING,  
ASPHALT CONCRETE

### DETAIL 1

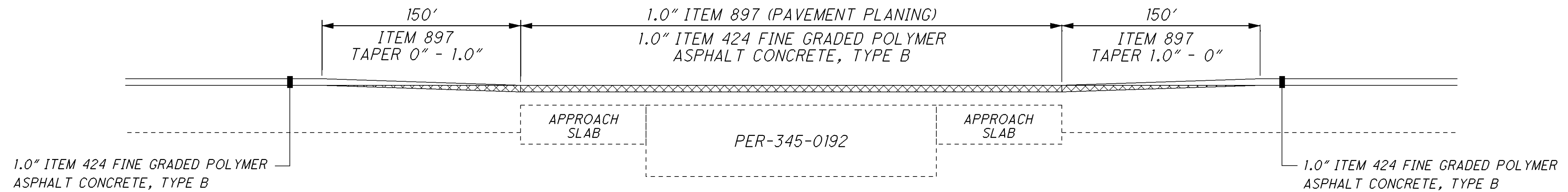


BUTT JOINT AT APPROACH SLABS

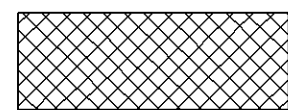


ITEM 897 ASPHALT CONCRETE,  
PAVEMENT PLANING, CLASS A

### DETAIL 2

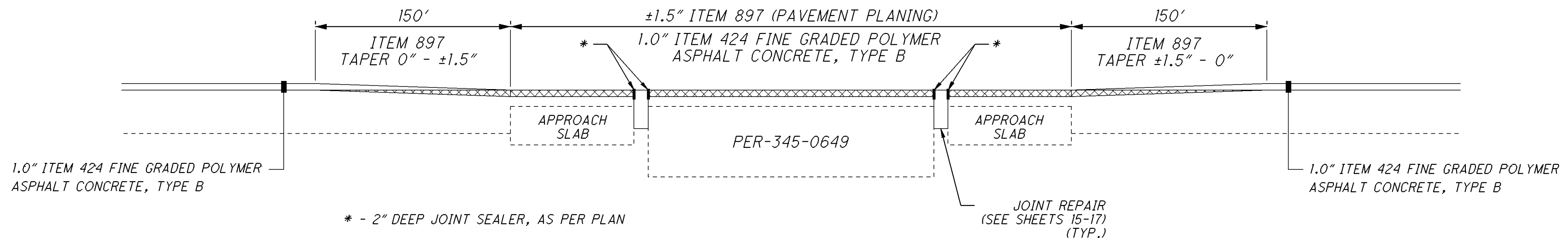


REMOVE AND REPLACE 1.0" ASPHALT CONCRETE



ITEM 897 ASPHALT CONCRETE,  
PAVEMENT PLANING, CLASS A

### DETAIL 3



REMOVE 1.5" AND PLACE 1.0" ASPHALT CONCRETE  
BUTT JOINT CONCRETE

CALCULATED  
LME  
CHECKED  
JSL

BRIDGE TREATMENT DETAILS

MUS-345-0.00  
PER-345/ 383-0.00

14  
29



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**ITEM 202 - PORTION OF STRUCTURE REMOVED, AS PER PLAN**  
ALL CONCRETE REMOVED SHALL BE REMOVED BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

EXISTING NUMBER 4 BARS MARKED FOR REMOVAL SHALL BE INCLUDED FOR PAYMENT WITH ITEM 202 PORTION OF STRUCTURE REMOVED, AS PER PLAN. ALL OTHER REINFORCING STEEL ENCOUNTERED SHALL BE PRESERVED.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 202 PORTION OF STRUCTURE REMOVED, AS PER PLAN

4.0 CU.YD. HAS BEEN CARRIED TO GENERAL SUMMARY

**ITEM 202 - WEARING COURSE REMOVED, AS PER PLAN**

ALL ASPHALT LABELED FOR REMOVAL IN THE EXISTING BRIDGE REMOVAL DETAILS SHALL BE REMOVED PRIOR TO THE REMOVAL OF THE EXISTING CONCRETE. THIS INCLUDES ALL ASPHALT LOCATED ON THE EXISTING STEEL ANGLES OF THE EXPANSION JOINTS.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 202 WEARING COURSE REMOVED, AS PER PLAN.

17.0 SQ.YD. HAS BEEN CARRIED TO GENERAL SUMMARY

**ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE**

TO EXPEDITE WORK, CLASS QC2 CONCRETE WITH AN ACCELERATING ADMIXTURE SIKA RAPID-1 OR ANY APPROVED EQUIVALENT ADMIXTURE SHALL BE USED TO ACHIEVE 3,000 PSI COMPRESSVE STRENGTH IN 12 HRS. USE A NON-CHLORIDE ACCELERATING ADMIXTURE AND PROVIDE DOCUMENTATION THAT THE MIX WILL PROVIDE THE STRENGTH IN THE SPECIFIED TIME.

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

AT LEAST 5 DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SCHEDULE OF REPAIR WORK ITEMS TO BE COMPLETED. THE SCHEDULE SHALL INCLUDE A BREAKDOWN OF ALL MAJOR WORK ACTIVITIES ON AN HOURLY BASIS. REPAIR WORK SHALL NOT BEGIN UNTIL THE SCHEDULE IS APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTINUE THE WET CURE FOR THE MAXIMUM NUMBER OF HOURS POSSIBLE DURING THE PERMITTED LANE CLOSURE. THE CLOCK STARTS FOR THE WET CURE WHEN THE CONCRETE PLACEMENT IS COMPLETE.

TRAFFIC WILL NOT BE PERMITTED ON THE FINISHED CONCRETE SURFACE UNTIL AFTER COMPLETION OF A 12 HOUR MINIMUM WET CURE AND AFTER TWO TEST BEAMS HAVE ATTAINED AN AVERAGE MODULUS OF RUPTURE OF 400 PSI.

THE CONTRACTOR MAY AFTER THE INTIAL 2 HOUR SET-UP OF THE CONCRETE, PLACE A STEEL PLATE OVER THE CONCRETE REPAIR IN ORDER TO OPEN TRAFFIC UP TO UNRESTRICTED TRAFFIC. WET BURLAP BEDDING MUST BE PLACES BETWEEN THE STEEL PLATE AND FRESH CONCRETE PATCHED SURFACE. THE CONTRACTOR WILL STILL BE REQUIRED TO PROVIDE A WET CURE FOR THE DURATION OF THE CURE TIME.

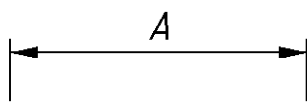
PROPOSED NUMBER 4 BARS SHALL BE PLACED AS SHOWN AND SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE SEE THE REINFORCING SCHEDULE PROVIDED BELOW FOR QUANTITIES/LENGTHS.

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 511 - CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE

4.0 CU.YD. HAS BEEN CARRIED TO THE GENERAL SUMMARY

REINFORCING STEEL SCHEDULE

MARK	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS	
					A	B
A401 (ABUTMENT)	8	9'-6"	51	STR.	9'-6"	
S401 (DECK)	8	16'-3"	87	STR.	16'-3"	
TOTAL			138 LBS.			



TYPE-STR

**ITEM 516 - STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE UV FOAM SEAL**

THIS ITEM CONSISTS OF PLACING OF EVAZOTE UV FOAM SEAL IN THE REAR AND FORWARD EXPANSION JOINTS AT THE FOLLOWING BRIDGE LOCATION:

PER-345-0649C

THE EVAZOTE UV FOAM SEAL SHALL BE:

WABO® EVAZOTE UV  
WATSON AND BOWMAN ACME CORP.  
95 PINVIEW DRIVE  
AMHERST, NY 14228  
1-800-677-4922

OR AN APPROVED EQUAL.

AT THE REAR AND FORWARD EXPANSION JOINTS REMOVE ALL EXISTING EXPANSION JOINT MATERIAL BEFORE PLACING THE EVAZOTE UV FOAM SEAL. THE CONTRACTOR SHALL FOLLOW ALL MANUFACTURER INSTALLATION PROCEDURES AND SPECIFICATIONS.

THE SEAL AS SHOWN IN THE PROPOSED BRIDGE REPAIR DETAILS SHALL BE 2.8125" (WIDTH) x 2.500" (HEIGHT). TWO SEALS SHALL BE PLACED, ONE ON TOP OF THE OTHER, AT EACH LOCATION AS SHOWN IN THE PROPOSED BRIDGE DETAILS.

FOR APPROVED EQUAL:

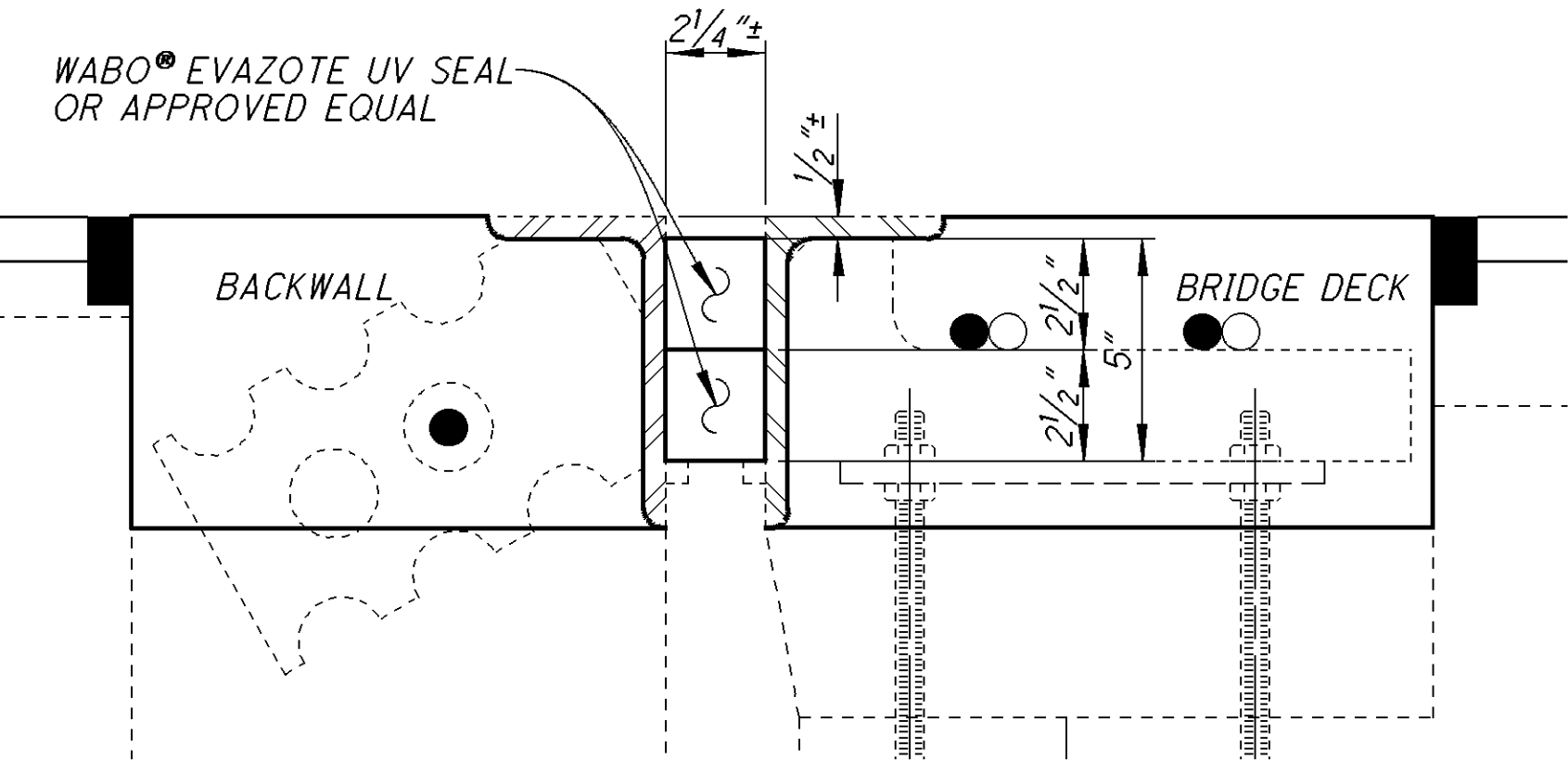
THE CONTRACTOR SHALL SUBMIT PRODUCT INFORMATION AFTER THE AWARD OF THE CONTRACT. THE MANUFACTURER WILL BE REQUIRED TO FURNISH A REPRESENTATIVE SAMPLE OF MATERIAL TO BE SUPPLIED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

THE MANUFACTURER SHALL PROVIDE INSTRUCTIONS FOR THE PROPER INSTALLATION OF THE EVAZOTE UV FOAM. EVAZOTE UV FOAM SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER

PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS SHALL BE INCLUDED IN THE CONTRACT PER LINEAR FOOT UNIT PRICE FOR ITEM 516 SPECIAL - EVAZOTE UV FOAM SEAL

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

ITEM 516 SPECIAL - EVAZOTE UV SEAL = 142 FT TOTAL



LOCATION	QUANTITY	WIDTH	HEIGHT	LENGTH	TOTAL LENGTH
REAR EXP. JOINT	2	2.8125"	2.500"	35'-6"	71'-0"
FWD. EXP. JOINT	2	2.8125"	2.500"	35'-6"	71'-0"
TOTAL	4				142'-0"

JOINT SEAL DETAIL  
SEE SHEET 3/3 FOR LOCATIONS

**ITEM 518 SPECIAL - STEEL DRIP STRIP**

THE STEEL DRIP STRIP SHALL BE PLACED AT THE LOCATIONS SHOWN IN THE PROPOSED BRIDGE REPAIR DETAILS OF THIS PLAN. THE INSTALLATION OF THE STEEL DRIP STRIP SHALL BE AS PER STANDARD CONSTRUCTION DRAWING DS-1-92. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM SPECIAL - STEEL DRIP STRIP.

7 FT HAS BEEN CARRIED TO THE GENERAL SUMMARY

**ITEM 518 - STRUCTURE DRAINAGE, MISC.: STEEL DEFLECTOR**

THIS ITEM CONSISTS OF PLACING STEEL DEFLECTORS AS SHOWN IN THE PROPOSED BRIDGE REPAIR DETAILS AND STANDARD DRAWING EXJ-3-92. STEEL DEFLECTORS SHALL BE PLACED AT ALL FOUR CORNERS OF THE THE BRIDGE AS SHOWN IN THE DETAILS.

ALL STEEL DEFLECTORS SHALL BE 22 GAGE STAINLESS STEEL CONFORMING TO ASTM A240, TYPE 304 OR EQUIVALENT, WITH A NO. 1 FINISH

PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR, EQUIPMENT, AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 518 - STRUCTURAL DRAINAGE, MISC.: STEEL DEFLECTOR

4 EACH HAS BEEN CARRIED TO GENERAL SUMMARY

**BRIDGE NOTES**

BRIDGE NO. PER-345-0649C  
OVER BUCKEYE FORK

**MUS-345-0.00**  
**PER-345/383-0.00**  
**PID No. 92988**

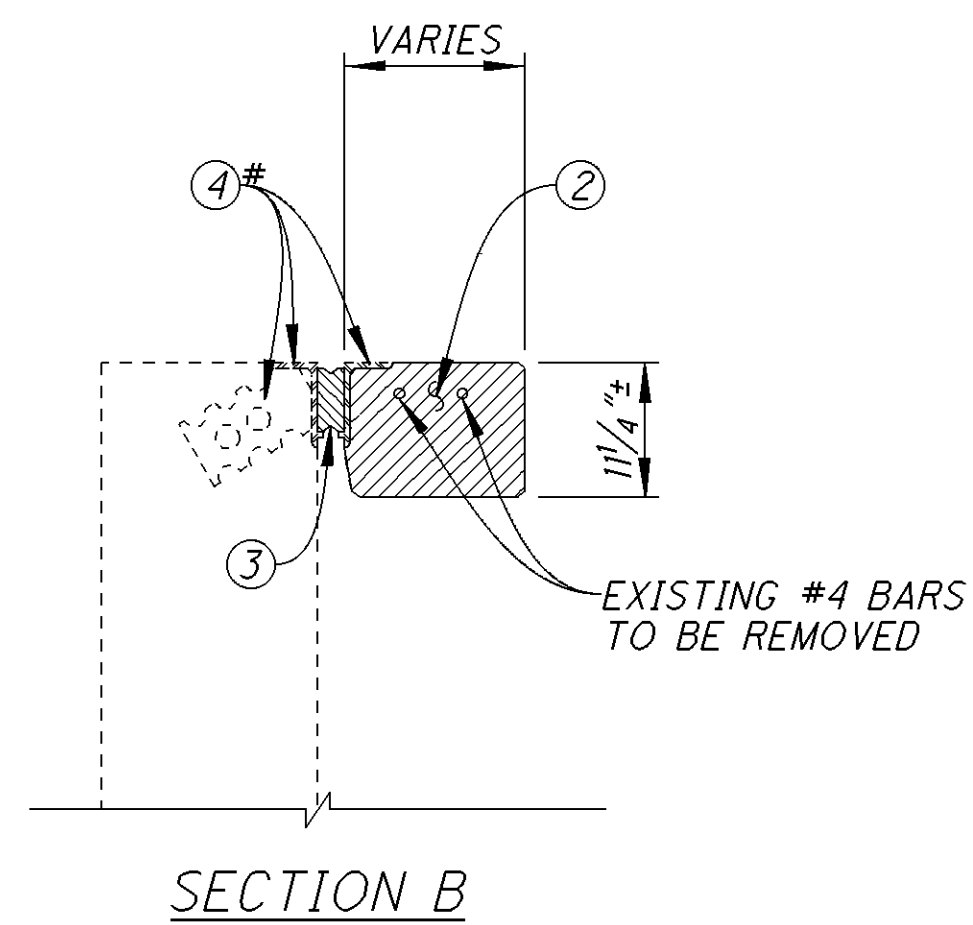
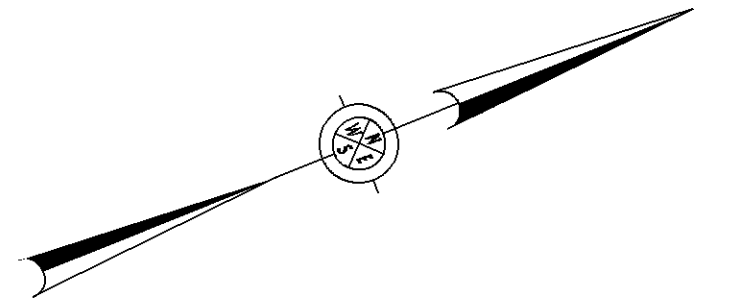
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DESIGN AGENCY  
OHIO DEPARTMENT OF  
TRANSPORTATION, DISTRICT 5

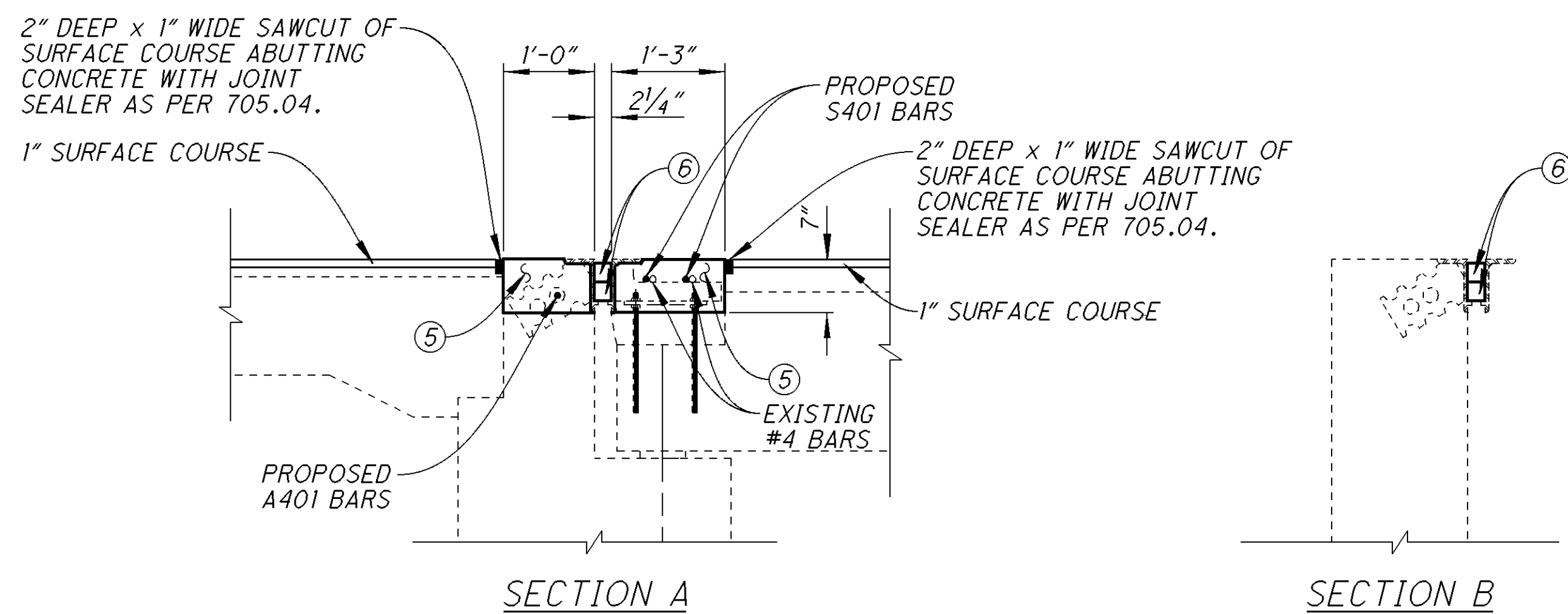
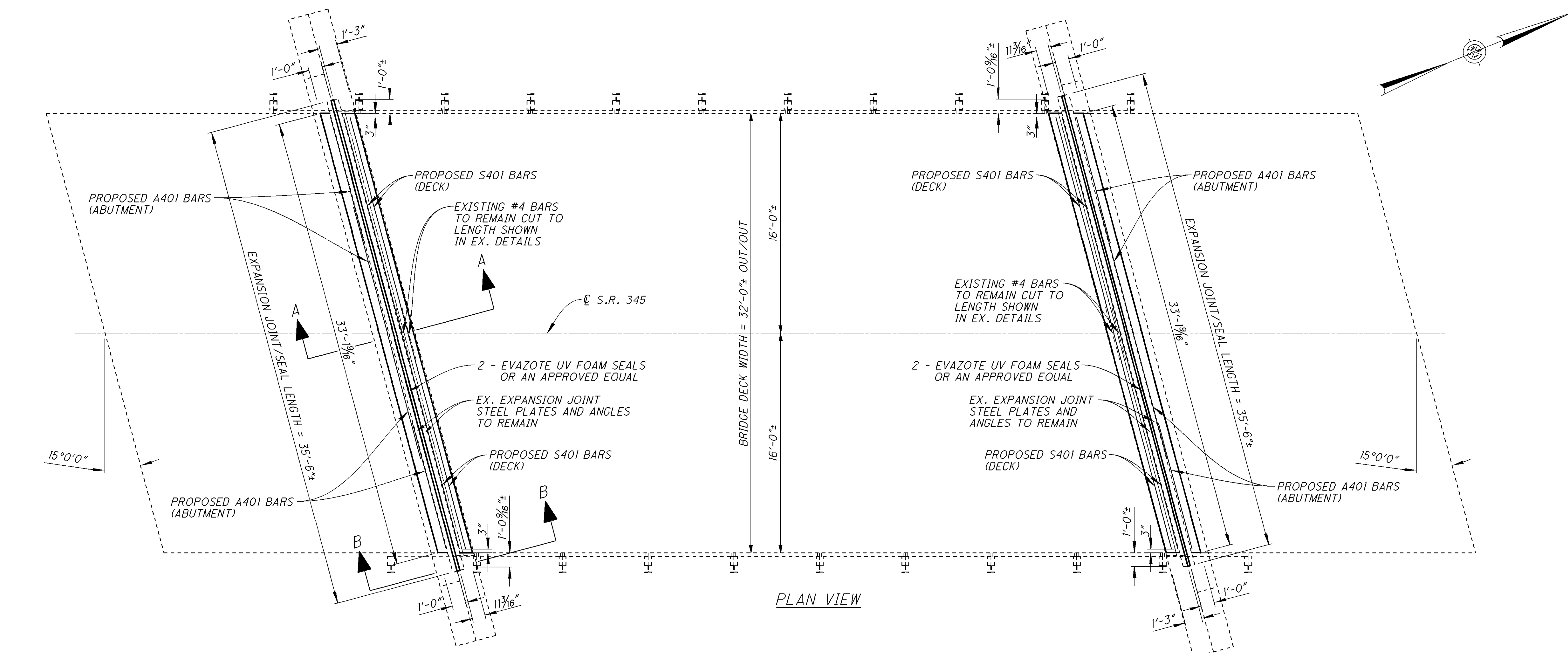
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02/20/17  
TAG  
STRUCTURE FILE NUMBER  
6402666

DRAWN  
CPS  
DESIGNED  
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JDR



- NOTE: UNLESS OTHERWISE MARKED ALL EXISTING  
REINFORCING STEEL SHALL BE PRESERVED

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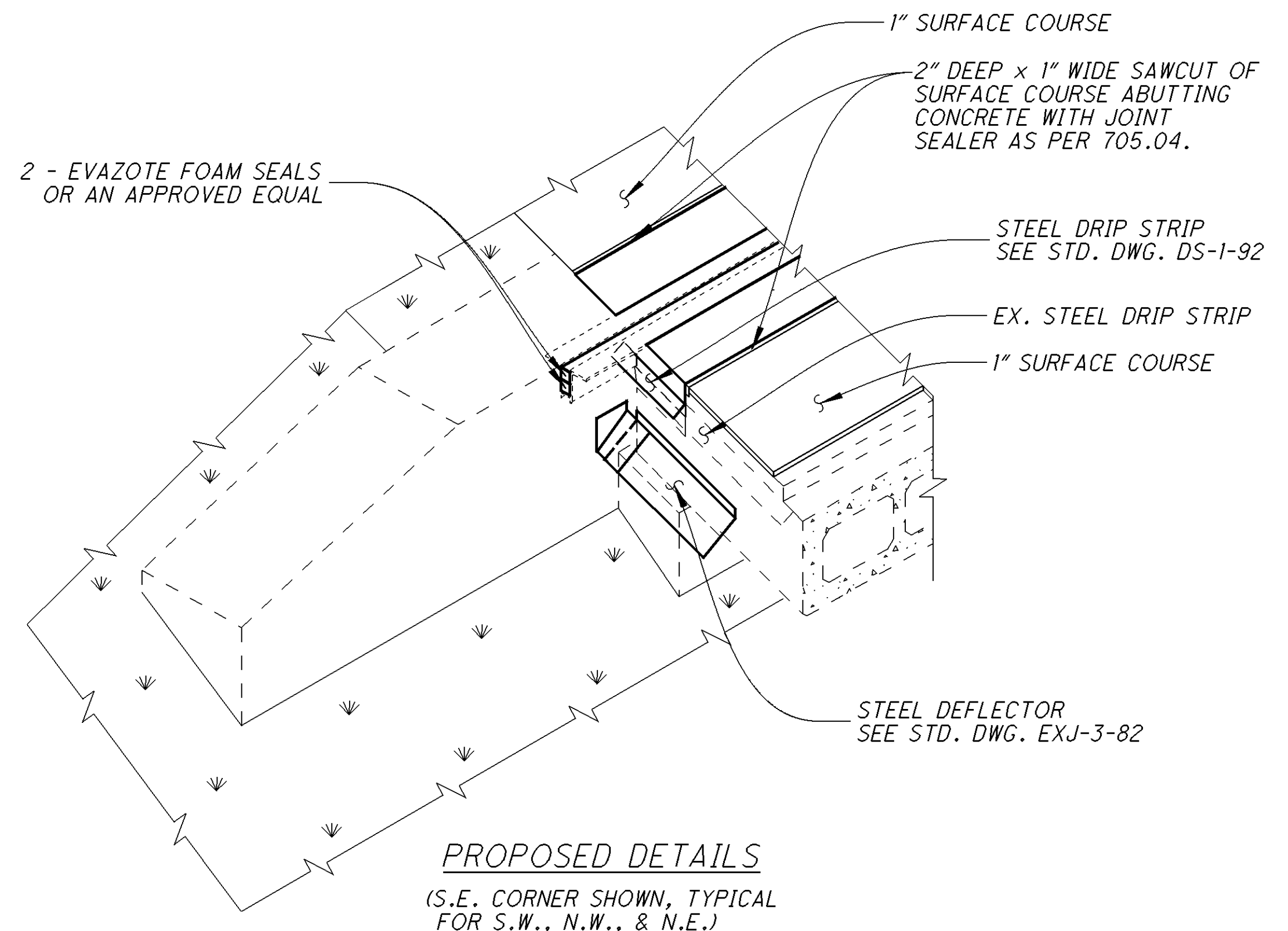


PROPOSED DETAILS  
(S.E. CORNER SHOWN, TYPICAL  
FOR S.W., N.W., & N.E.)

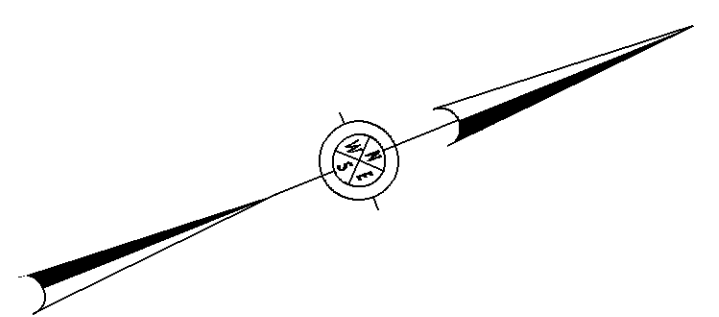
LEGEND

- ⑤ - ITEM 511 CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE
- ⑥ - ITEM 516 STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE UV FOAM SEAL (2 PLACED AT EACH JOINT AS SHOWN)

\* NOTE: THE CONTRACTOR IS TO ENSURE THAT THE JOINT ARMOR IS LEVEL/FLUSH AND MAINTAINS THE EXISTING ELEVATIONS.



PROPOSED DETAILS  
(S.E. CORNER SHOWN, TYPICAL  
FOR S.W., N.W., & N.E.)



<div>17 29</div>		3 / 3		MUS-345-0.00 PER-345 / 383-0.00 PID No. 92988		PROPOSED BRIDGE DETAILS		DESIGNED CPS CHECKED JDR		DRAWN CPS REVISED		REVIEWED TAG STRUCTURE FILE NUMBER 6402666		DATE 02/20/17		DESIGN AGENCY OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5	



CURB RAMP DATA														
REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202			608		609	690 SPECIAL-MISC.:			COMMENTS	
				CURB AND GUTTER REMOVED	WALK REMOVED	CURB REMOVED	4" CONCRETE WALK, (CURB RAMP AREA)	4" CONCRETE WALK, (EXTRA WALK AREA)	CURB, TYPE 6	DETECTABLE WARNING	CURB RAMPS,			
											TYPE A1	TYPE B3		TYPE D
											SQ. YD.	SQ. FT.		FT.
1-CR	21	CENTER ST.	LT		16		8			8				
2-CR	21	CENTER ST.	LT				12			8			ADD LANDING AND TRUNCATED DOMES	
3-CR	21	ON BROADWAY (S.R. 345) BEFORE CARROLL ST.	LT			14	62		14		1			
4-CR	21	ON BROADWAY (S.R. 345) BEFORE CARROLL ST.	RT		160	28	117	60	28		2			
5-CR	21	ON CARROLL ST. BEFORE BROADWAY (S.R. 345)	RT			14	62		14		1			
SUB-TOTALS							261	60						
TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)					176	56	321		56	16	4			

EDGE LINE, 6"												
L O C A T I O N	C O U N T Y	R O U T E	S.L.M.		T O T A L L E N G T H (MILES)	I N F O R M A T I O N O N L Y			T O T A L E D G E L I N E  M I L E S			R E M A R K S
						W H I T E E D G E L I N E Q U A N T I T I E S						
			F R O M	T O		T O T A L  M I L E S	H I G H W A Y  M I L E S	R A M P  M I L E S				
									642	644	648	
1A	MUS	SR 345	0.00	1.60	1.60	3.20	3.20				3.20	
TOTAL (CARRIED TO LOCATION 1A SUB-SUMMARY)											3.20	
1B	MUS	SR 345	1.60	2.52	0.92	1.84	1.84				1.84	
TOTAL (CARRIED TO LOCATION 1B SUB-SUMMARY)											1.84	
2	PER	SR 345	0.38	3.27	2.89	5.78	5.78				5.78	LINCOLN PARK TO SLM (SPRAY)
	PER	SR 345	3.27	5.27	2.00	4.00	4.00		4.00			SLM TO SLM (FAST DRY)**
	PER	SR 345	5.27	7.27	2.00	4.00	4.00			4.00		SLM TO SR 669 (THERMO)**
	PER	SR 345	7.27	9.22	1.95	3.90	3.90				3.90	SR 669 TO MUS CO LINE (SPRAY)
TOTAL (CARRIED TO LOCATION 2 SUB-SUMMARY)									4.00	4.00	9.68	
3	PER	SR 383	0.00	1.50	1.50	3.00	3.00				3.00	
TOTAL (CARRIED TO LOCATION 3 SUB-SUMMARY)											3.00	

\*\*TEST SECTIONS TO COMPARE AGAINST SPRAY THERMOPLASTIC PAVEMENT MARKINGS

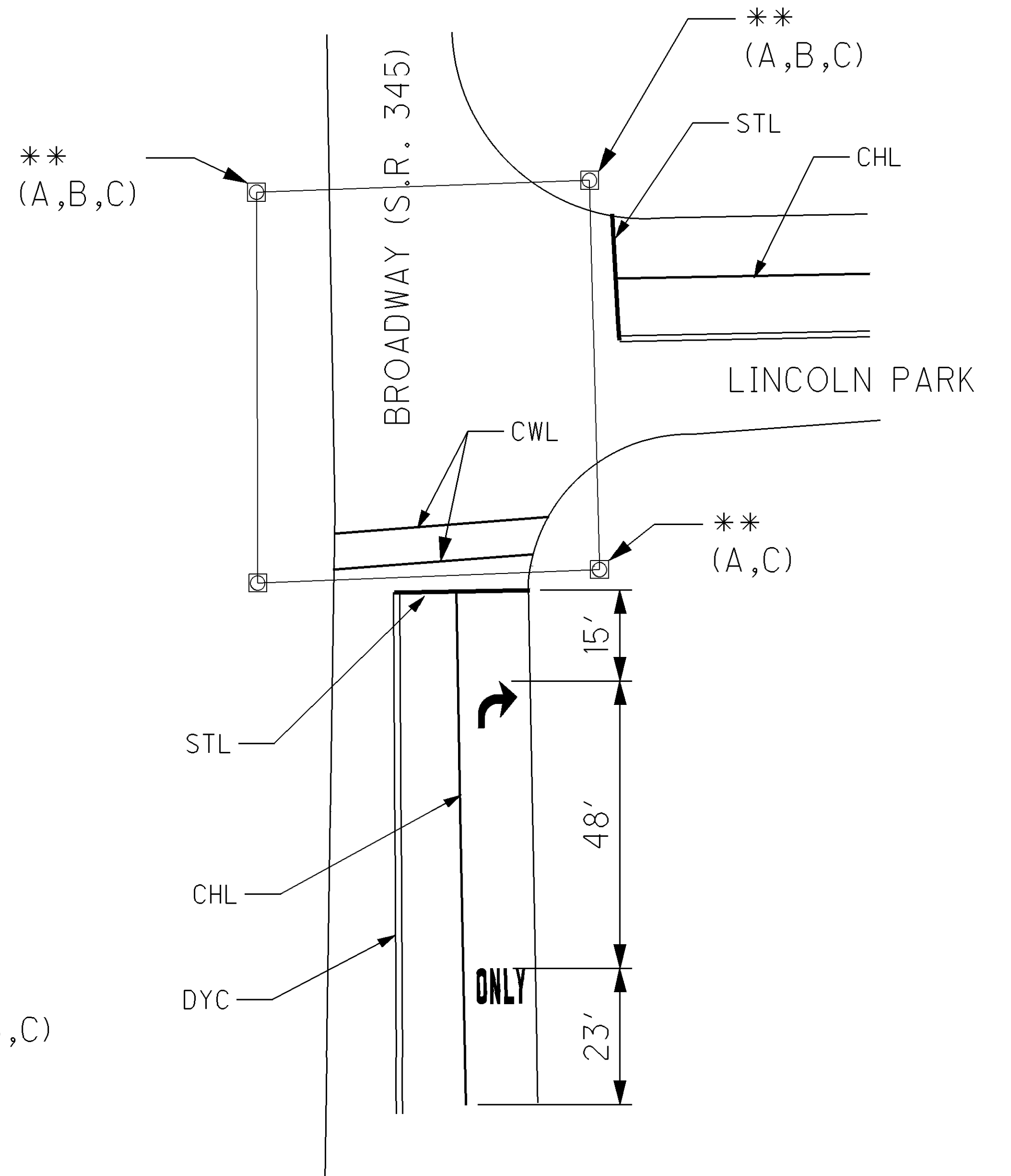
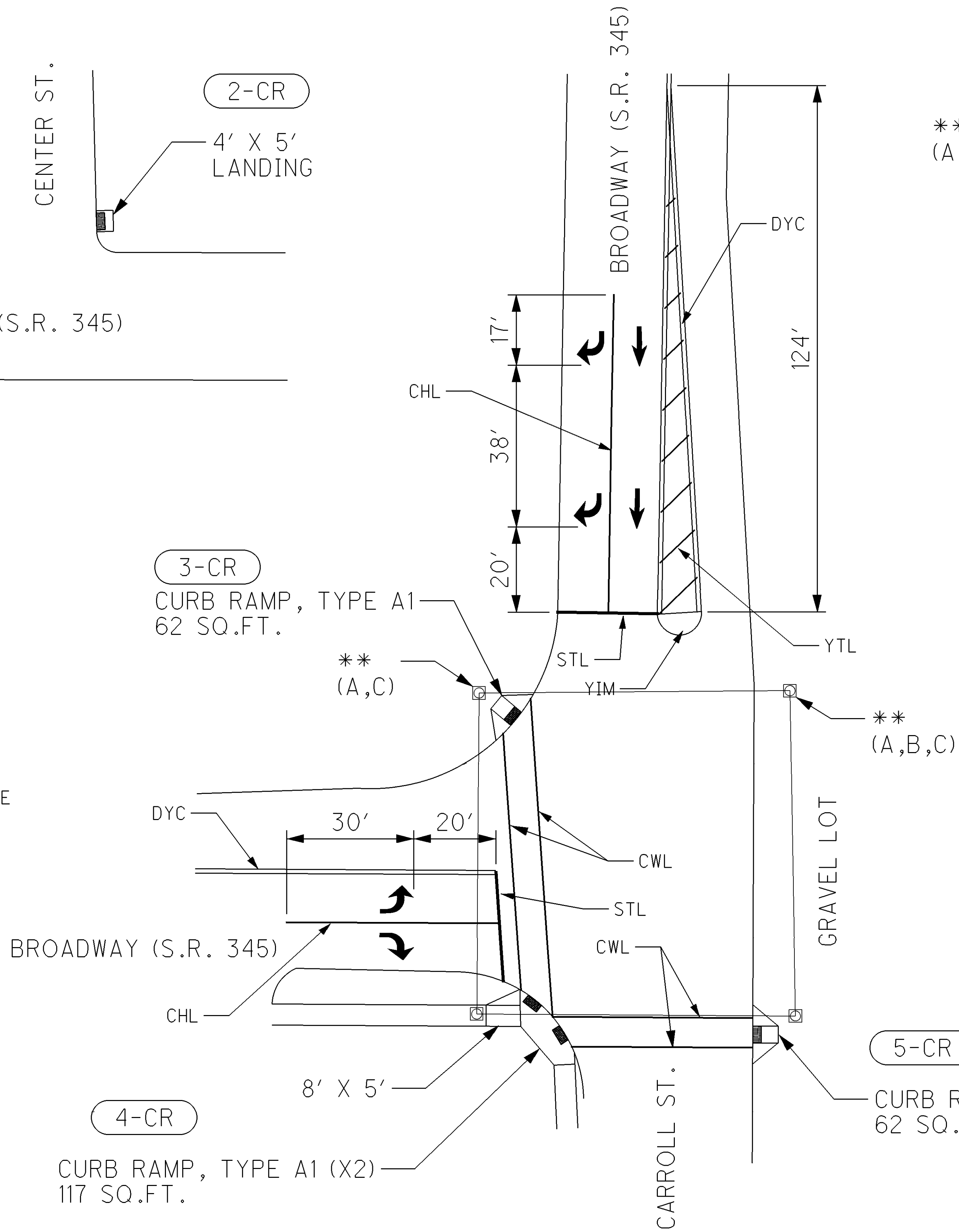
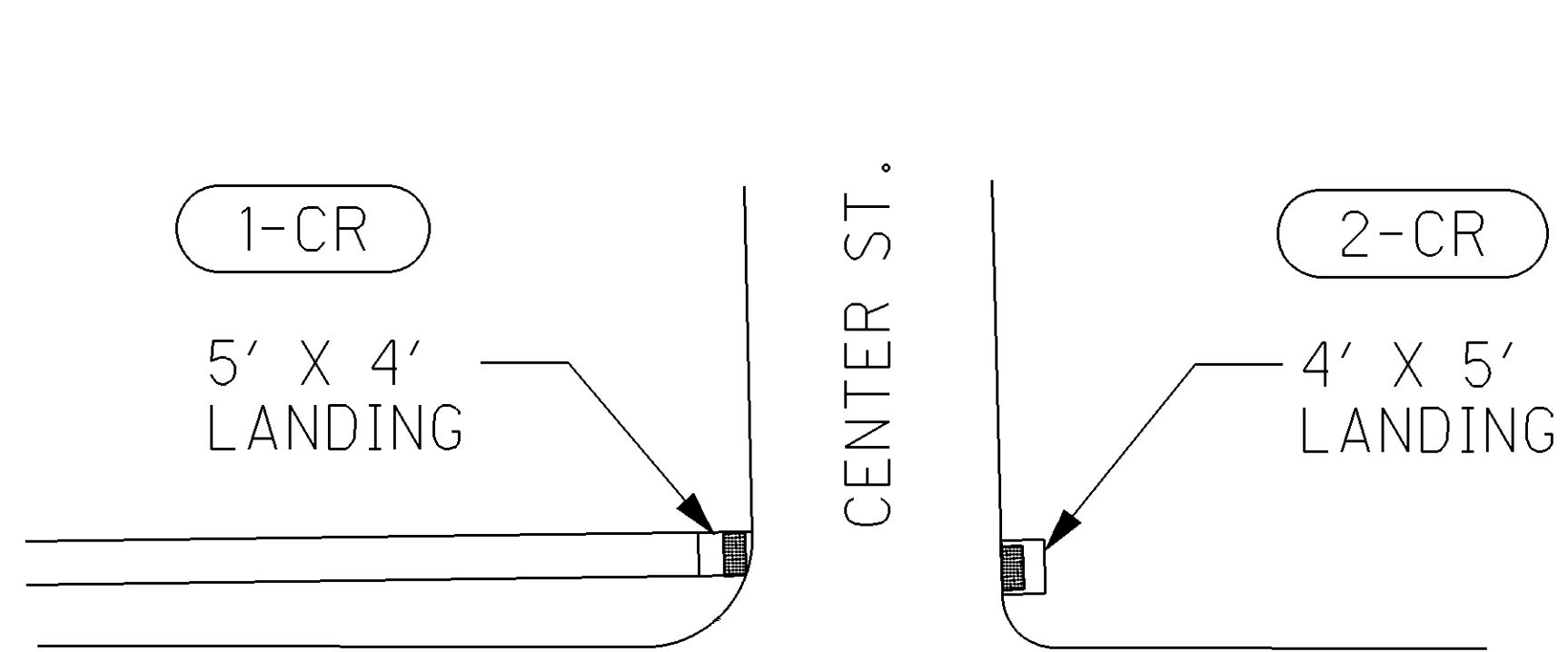
ITEM 648 CENTER LINE									
L O C A T I O N	C O U N T Y	R O U T E	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY		TOTAL CENTER LINE MILES	REMARKS
						CENTER LINE QUANTITIES			
			FROM	TO		TOTAL MILES	EQUIVALENT SOLID LINE		
1A	MUS	SR 345	0.00	1.60	1.60	1.60	1.041	1.60	
TOTAL (CARRIED TO LOCATION 1A SUB-SUMMARY)								1.60	
1B	MUS	SR 345	1.60	2.52	0.92	0.92	1.462	0.92	
TOTAL (CARRIED TO LOCATION 1B SUB-SUMMARY)								0.92	
2	PER	SR 345	0.00	9.22	9.22	9.22	17.147	9.22	
TOTAL (CARRIED TO LOCATION 2 SUB-SUMMARY)								11.06	
3	PER	SR 383	0.00	1.50	1.50	1.50	2.790	1.50	
TOTAL (CARRIED TO LOCATION 3 SUB-SUMMARY)								1.50	

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ITEM 644 AUXILIARY MARKINGS																						
L O C A T I O N	C O U N T Y	R O U T E	DESCRIPTION	SIDE	SLM	TRANVERSE/ DIAGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	8" CHANNELIZING LINE	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS					ISLAND MARKING	REMARKS	
						WHITE	YELLOW				ONLY				COMBINATION		TURN					
											72"	96"	72"	96"	LT./TH.	RT./TH.	LT.	RT.	THRU			
											FT.	FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH			EACH
1A	MUS	SR 345	BUTCHERKNIFE RD	LT				21														
1A	MUS	SR 345	FLETCHER RD	RT				27														
1A	MUS	SR 345	PORTER RUN RD	LT				15														
TOTALS (CARRIED TO LOCATION 1A SUB-SUMMARY)								63														
1B	MUS	SR 345	HOOVER ST	RT				31														
TOTALS (CARRIED TO LOCATION 1B SUB-SUMMARY)								31														
2	PER	SR 345	CENTER ST	RT				10														
2	PER	SR 345	CENTER ST	LT				10														
2	PER	SR 345	BEFORE CARROLL ST					22	106	50							1	1				
2	PER	SR 345	CARROLL ST	RT				23	84													
2	PER	SR 345	AFTER CARROLL ST				77	25												54		
2	PER	SR 345	E. LINCOLN ST	LT				34														
2	PER	SR 345	VALENTINE DR	LT				10														
2	PER	SR 345	BEFORE LINCOLN PARK DR					33	64	80	1							1				
2	PER	SR 345	LINCOLN PARK DR	RT				20														
2	PER	SR 345	PANTHER DR	LT				30														
2	PER	SR 345	HUNTER DR	RT				12														
2	PER	SR 345	MONSANTO RD	RT				30														
2	PER	SR 345	HOLLOW RD	RT				16														
2	PER	SR 345	HOLLOW RD	LT				21														
2	PER	SR 345	NATURAL RESOURCES 3	RT				30														
2	PER	SR 345	NATURAL RESOURCES 3	LT				30														
2	PER	SR 345	POLE CAT RD	RT				16														
2	PER	SR 345	TWP RD 154	LT				21														
2	PER	SR 345	TWP RD 154	LT				17														
2	PER	SR 345	TWP RD 162	RT				20														
2	PER	SR 345	S.R. 669	LT																		
2	PER	SR 345	TWP RD 169	RT				22														
2	PER	SR 345	TWP RD 114	LT				15														
2	PER	SR 345	S.R. 669	RT																		
2	PER	SR 345	CO RD 3	RT				25														
2	PER	SR 345	TWP RD 141	RT				20														
SUB-TOTALS																	1	2				
TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)							77	543	254	130	1							3			54	
3	PER	SR 383	AT SR 13	CL				25														
TOTALS (CARRIED TO LOCATION 3 SUB-SUMMARY)								25														



CHL=CHANNELIZING LINE  
CWL=CROSSWALK LINE  
DYC=DOUBLE YELLOW CENTER LINE  
STL=STOP LINE  
YIM=YELLOW ISLAND MARKIN  
YTL=YELLOW TRANSVERSE/DIAGONAL LINE



\*\* (A) REMOVE PEDESTRIAN SIGNAL HEAD  
(B) REMOVE PEDESTRIAN PUSH BUTTON  
(C) INSTALL NO PEDESTRIAN CROSSING SIGN (R9-3-18)  
(SEE SHEET 3 FOR QUANTITIES)



DO NOT DISTURB  
SIGNAL POLE FOUNDATION

## RAISED PAVEMENT MARKING DATA

**MUS - 345 - 0.00**  
**PER - 345 / 383 - 0.00**

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DETAIL	SEE STD. DWG. TC-65.11
1	ENTRANCE RAMP
2	EXIT RAMP
3	MULTI-LANE DIVIDED HIGHWAY

DETAIL	SEE STD. DWG. TC-65.11
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE-LANE BRIDGE
7	STOP APPROACH
8	THROUGH APPROACH
9	TWO-WAY LEFT TURN LANE

DETAIL	SEE STD. DWG. TC-65.11
10	APPROACH WTH LEFT-TURN LANE
11	HORIZONTAL CURVE 40'
12	HORIZONTAL CURVE ALT.
GAP	CENTERLINE AT 80' TYP.

ITEM 621 RPM SUB-SUMMARY															
L O C A T I O N	C O U N T Y	R O U T E	BEGIN LOG POINT SLM	END LOG POINT SLM	L E N G T H		D E T A I L	621	621	PRISMATIC RETRO-REFLECTOR COLORS					R E M A R K S
								RPM	RPM REMOVED	I N F O R M A T I O N O N L Y					
					ONE-WAY	TWO-WAY									
					MILES	LIN.FT.		EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	WHITE / RED	YELLOW / RED	
TOTALS (CARRIED FROM PREVIUOS SHEET)								525	525						
2	PER	SR 345	5.35	5.51	0.16	845	GAP	11	11			11			
2	PER	SR 345	5.51	5.72	0.21	1,109	12	32	32			32			PC 5.60   PT 5.63   L= 158' DEG 13
2	PER	SR 345	5.72	5.82	0.10	528	GAP	7	7			7			
2	PER	SR 345	5.82	5.84	0.02	106	11	3	3			3			PC 5.82   PT 5.84   L= 106' DEG 9
2	PER	SR 345	5.84	6.01	0.17	898	GAP	11	11			11			
2	PER	SR 345	6.01	6.18	0.17	898	12	29	29			29			PC 6.10   PT 6.15   L= 264' DEG 13
2	PER	SR 345	6.18	6.24	0.06	317	12	15	15			15			PC 6.18   PT 6.23   L= 264' DEG 13
2	PER	SR 345	6.24	6.35	0.11	581	12	17	17			17			PC 6.24   PT 6.26   L= 106' DEG 10
2	PER	SR 345	6.35	6.51	0.16	845	GAP	11	11			11			
2	PER	SR 345	6.51	6.74	0.23	1,214	12	37	37			37			PC 6.60   PT 6.65   L= 264' DEG 23
2	PER	SR 345	6.74	6.93	0.19	1,003	GAP	12	12			12			
2	PER	SR 345	6.93	7.14	0.21	1,109	12	32	32			32			PC 7.02   PT 7.05   L= 158' DEG 11
2	PER	SR 345	7.14	7.38	0.24	1,267	GAP	16	16			16			
2	PER	SR 345	7.38	7.58	0.20	1,056	12	29	29			29			PC 7.47   PT 7.49   L= 106' DEG 10
2	PER	SR 345	7.58	9.22	1.64	8,659	GAP	108	108			108			
	SUB-TOTALS											369			
TOTALS (CARRIED TO LOCATION 2 SUB-SUMMARY)								894	894						
3	PER	SR 383	0.00	0.12	0.12	634	12	17	17			17			PC 0.02   PT 0.03   L= 53'   DEG 19
3	PER	SR 383	0.12	1.34	1.22	6,442	GAP	81	81			81			
3	PER	SR 383	1.34	1.50	0.16	845	GAP / 7	27	27	16		11			STOP AT SR 13
	SUB-TOTALS									16		109			
TOTALS (CARRIED TO LOCATION 3 SUB-SUMMARY)								125	125						

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LOCATION 1A TOTALS										ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	9	10	11	13	19	20	22					
														ROADWAY
	40				484					202	23500	524	SY	WEARING COURSE REMOVED
				3.15						209	72051	3.15	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
														PAVEMENT
160										253	02000	160	CY	PAVEMENT REPAIR
			18,206	3,642						254	01000	21,848	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.50"
			1,460	292	39					407	20000	1,791	GAL	NON-TRACKING TACK COAT
				1,457						408	10001	1,457	GAL	PRIME COAT, AS PER PLAN
					17					441	50000	17	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	25		759	152						441	50100	936	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
						96				516	31011	96	FT	2" DEEP JOINT SEALER, AS PER PLAN
				203						617	10101	203	CY	COMPACTED AGGREGATE, AS PER PLAN
														TRAFFIC CONTROL
									106	621	00100	106	EACH	RPM
									106	621	54000	106	EACH	RAISED PAVEMENT MARKER REMOVED
								63		644	00500	63	FT	STOP LINE
							3.20			648	00104	3.20	MILE	EDGE LINE, 6"
							1.60			648	00300	1.60	MILE	CENTER LINE
														MAINTENANCE OF TRAFFIC
		18								614	12460	18	EACH	WORK ZONE MARKING SIGN
		1.60								614	21500	1.60	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT

CALCULATED  
LME

CHECKED  
JSL

LOCATION 1A SUB - SUMMARY

MUS-345-0.00  
PER-345 / 383-0.00

24  
29



LOCATION 1B TOTALS									ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	9	10	11	19	20	22					
													ROADWAY
	130				344				202	23500	474	SY	WEARING COURSE REMOVED
				1.84					209	72051	1.84	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
													PAVEMENT
65									253	02000	65	CY	PAVEMENT REPAIR
			10,795	2,159					254	01000	12,954	SY	PAVEMENT PLANING, ASPHALT CONCRETE 1.50"
	1								304	20000	1	CY	AGGREGATE BASE
			864	173	28				407	20000	1,065	GAL	NON-TRACKING TACK COAT
				864					408	10001	864	GAL	PRIME COAT, AS PER PLAN
					12				441	50000	12	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	19		450	90					441	50100	559	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
				120					617	10101	120	CY	COMPACTED AGGREGATE, AS PER PLAN
													TRAFFIC CONTROL
								87	621	00100	87	EACH	RPM
								87	621	54000	87	EACH	RAISED PAVEMENT MARKER REMOVED
							31		644	00500	31	FT	STOP LINE
						1.84			648	00104	1.84	MILE	EDGE LINE, 6"
						0.92			648	00300	0.92	MILE	CENTER LINE
													MAINTENANCE OF TRAFFIC
		8							614	12460	8	EACH	WORK ZONE MARKING SIGN
		0.92							614	21500	0.92	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT

LOCATION 2 TOTALS											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	9	10	12	13	18	19	20	23					
					5,063						202	23500	5,063	SY	ROADWAY
							176				202	30000	176	SF	WEARING COURSE REMOVED
							56				202	32000	56	FT	WALK REMOVED
															CURB REMOVED
							321				608	10000	321	SF	
															4" CONCRETE WALK
							4				690	98000	4	EACH	SPECIAL - CURB RAMP, TYPE A1
							16				690	98200	16	SF	SPECIAL - DETECTABLE WARNING
															PAVEMENT
1,500											253	02000	1,500	CY	PAVEMENT REPAIR
	5										304	20000	5	CY	AGGREGATE BASE
			8,874	1,635	406	57					407	20000	10,972	GAL	NON-TRACKING TACK COAT
				8,171							408	10001	8,171	GAL	PRIME COAT, AS PER PLAN
					142						441	50000	142	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
						128					516	31011	128	FT	2" DEEP JOINT SEALER, AS PER PLAN
							56				609	26000	56	FT	CURB, TYPE 6
				1,135							617	10101	1,135	CY	COMPACTED AGGREGATE, AS PER PLAN
															PAVEMENT ALTERNATES
	1,230		8,366			706					254	01000	10,302	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.25"
	55		3,071	568		20					424	12000	3,714	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
	108		3,838	709		25					441	50100	4,680	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
	1,230		8,366			706					897	01010	10,302	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A ,1.0"
															TRAFFIC CONTROL
										894	621	00100	894	EACH	RPM
										894	621	54000	894	EACH	RAISED PAVEMENT MARKER REMOVED
								4.00			642	00104	4.00	MILE	EDGE LINE, 6", TYPE 1
								4.00			644	00104	4.00	MILE	EDGE LINE, 6"
									130		644	00400	130	FT	CHANNELIZING LINE, 8"
									543		644	00500	543	FT	STOP LINE
									254		644	00600	254	FT	CROSSWALK LINE
									77		644	00700	77	FT	TRANSVERSE/DIAGONAL LINE
									54		644	00900	54	SF	ISLAND MARKING
									3		644	01300	3	EACH	LANE ARROW
									1		644	01400	1	EACH	WORD ON PAVEMENT, 72"
								9.68			648	00104	9.68	MILE	EDGE LINE, 6"
								11.06			648	00300	11.06	MILE	CENTER LINE
															TRAFFIC SIGNALS
	13.5										630	80100	13.5	SF	SIGN, FLAT SHEET
	6										632	90020	6	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN SIGNAL HEAD)
	3										632	90020	3	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN PUSH BUTTON)
															MAINTENANCE OF TRAFFIC
		16									614	11110	16	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		63									614	12460	63	EACH	WORK ZONE MARKING SIGN
		9.22									614	21500	9.22	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT
		130									614	23660	130	FT	WORK ZONE CHANNELIZING LINE, CLASS II, 642 PAINT

LOCATION 3 TOTALS									ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION
2	3	4	9	10	12	19	20	23					
													ROADWAY
	160				800				202	23500	960	SY	WEARING COURSE REMOVED
				3.00					209	72051	3.00	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
													PAVEMENT
780									253	02000	780	CY	PAVEMENT REPAIR
			17,600						254	01000	17,600	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.50"
	1								304	20000	1	CY	AGGREGATE BASE
			1,409		64				407	20000	1,473	GAL	NON-TRACKING TACK COAT
				1,408					408	10001	1,408	GAL	PRIME COAT, AS PER PLAN
					29				441	50000	29	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22
	28		734						441	50100	762	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M
				196									
									617	10101	196	CY	COMPACTED AGGREGATE, AS PER PLAN
													TRAFFIC CONTROL
								125	621	00100	125	EACH	RPM
								125	621	54000	125	EACH	RAISED PAVEMENT MARKER REMOVED
							25		644	00500	25	FT	STOP LINE
						3.00			648	00104	3.00	MILE	EDGE LINE, 6"
						1.50			648	00300	1.50	MILE	CENTER LINE
													MAINTENANCE OF TRAFFIC
		20							614	12460	20	EACH	WORK ZONE MARKING SIGN
		1.50							614	21500	1.50	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT

LOCATION 3 SUB-SUMMARY

MUS-345-0.00  
PER-345 / 383-0.00



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LOCATION TOTALS				PLAN SPLITS				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1A	1B	2	3	01/STR/PV (1A, 2)	02/S<2/PV (1B)	03/NFA/PV (3)	04/STR/BR						
												ROADWAY	
524	474	5,063	960	5,587	474	960		202	23500	7,021	SY	WEARING COURSE REMOVED	
		176		176				202	30000	176	SF	WALK REMOVED	
		56		56				202	32000	56	FT	CURB REMOVED	
3.15	1.84		3.00	3.15	1.84	3.00		209	72051	7.99	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
		321		321				608	10000	321	SF	4" CONCRETE WALK	
		4		4				690	98000	4	EACH	SPECIAL - CURB RAMP, TYPE A1	6,7,8
		16		16				690	98200	16	SF	SPECIAL - DETECTABLE WARNING	6,7,8
												PAVEMENT	
160	65	1,500	780	1,660	65	780		253	02000	2,505	CY	PAVEMENT REPAIR	
21,848	12,954		17,600	21,848	12,954	17,600		254	01000	52,402	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.50"	
	1	5	1	5	1	1		304	20000	7	CY	AGGREGATE BASE	
1,791	1,065	10,972	1,473	12,763	1,065	1,473		407	20000	15,301	GAL	NON-TRACKING TACK COAT	
1,457	864	8,171	1,408	9,628	864	1,408		408	10001	11,900	GAL	PRIME COAT, AS PER PLAN	2
17	12	142	29	159	12	29		441	50000	200	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
936	559		762	936	559	762		441	50100	2,257	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
96		128		224				516	31011	224	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
		56		56				609	26000	56	FT	CURB, TYPE 6	
203	120	1,135	196	1,338	120	196		617	10101	1,654	CY	COMPACTED AGGREGATE, AS PER PLAN	2
												PAVEMENT ALTERNATES	
		10,302		10,302				254	01000	10,302	SY	PAVEMENT PLANING, ASPHALT CONCRETE , 1.25"	
		3,714		3,714				424	12000	3,714	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	
		4,680		4,680				441	50100	4,680	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
		10,302		10,302				897	01010	10,302	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A , 1.0"	
												TRAFFIC CONTROL	
106	87	894	125	1,000	87	125		621	00100	1,212	EACH	RPM	
106	87	894	125	1,000	87	125		621	54000	1,212	EACH	RAISED PAVEMENT MARKER REMOVED	
		4.00		4.00				642	00104	4.00	MILE	EDGE LINE, 6", TYPE 1	
		4.00		4.00				644	00104	4.00	MILE	EDGE LINE, 6"	
		130		130				644	00400	130	FT	CHANNELIZING LINE, 8"	
63	31	543	25	606	31	25		644	00500	662	FT	STOP LINE	
		254		254				644	00600	254	FT	CROSSWALK LINE	
		77		77				644	00700	77	FT	TRANSVERSE/DIAGONAL LINE	
		54		54				644	00900	54	SF	ISLAND MARKING	
		3		3				644	01300	3	EACH	LANE ARROW	
		1		1				644	01400	1	EACH	WORD ON PAVEMENT, 72"	
3.20	1.84	9.68	3.00	12.88	1.84	3.00		648	00104	17.72	MILE	EDGE LINE, 6"	
1.60	0.92	11.06	1.50	12.66	0.92	1.50		648	00300	15.08	MILE	CENTER LINE	

CALCULATED  
LME  
CHECKED  
JSL

GENERAL SUMMARY

MUS-345-0.00  
PER-345 / 383-0.00

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LOCATION TOTALS				PLAN SPLITS				ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
1A	1B	2	3	01/STR/PV (1A, 2)	02/S<2/PV (1B)	03/NFA/PV (3)	04/STR/BR						
												TRAFFIC SIGNALS	
		13.50		13.5				630	80100	13.5	SF	SIGN, FLAT SHEET	
		6		6				632	90020	6	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN SIGNAL HEAD)	3
		3		3				632	90020	3	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM (PEDESTRIAN PUSH BUTTON)	3
												STRUCTURE REPAIR (PER-345-0649)	
							4	202	11301	4	CY	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	15
							17	202	23501	17	SY	WEARING COURSE REMOVED, AS PER PLAN	15
							4	511	53012	4	CY	CLASS QC2 CONCRETE, MISC.: ACCELERATING ADMIXTURE	15
							142	516	14600	142	FT	STRUCTURAL JOINT OR JOINT SEALER, MISC.: EVAZOTE UV FOAM SEAL	15
							7	518	22300	7	FT	SPECIAL - STEEL DRIP STRIP	15
							4	518	62200	4	EACH	STRUCTURE DRAINAGE, MISC.: STEEL DEFLECTOR	15
												MAINTENANCE OF TRAFFIC	
		16		16				614	11110	16	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
18	8	63	20	81	8	20		614	12460	109	EACH	WORK ZONE MARKING SIGN	
1.60	0.92	9.22	1.50	10.82	0.92	1.50		614	21500	13.24	MILE	WORK ZONE CENTER LINE, CLASS II, 642 PAINT	
		130		130				614	23660	130	FT	WORK ZONE CHANNELIZING LINE, CLASS II, 642 PAINT	
												INCIDENTALS	
				LS	LS	LS	LS	614	11000	LS	LS	MAINTAINING TRAFFIC	
				2				619	16000	2	MNTH	FIELD OFFICE, TYPE A	
				LS	LS	LS	LS	623	10000	LS	LS	CONSTRUCTION LAYOUT STAKES AND SURVEYING	
				LS	LS	LS	LS	624	10000	LS	LS	MOBILIZATION	