

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
KNO-62-0.00

VILLAGE OF DANVILLE, VILLAGE OF GANN
VILLAGE OF MARTINSBURG

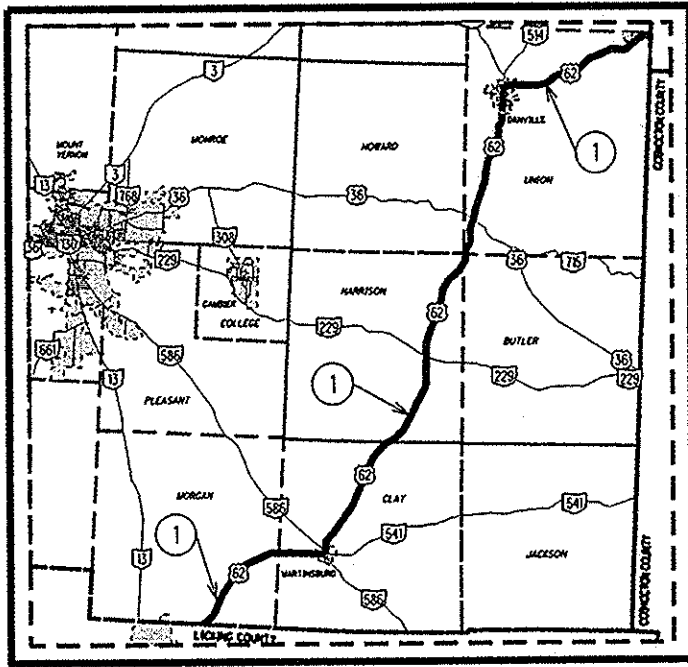
BUTLER, CLAY, HARRISON,
MORGAN AND UNION TOWNSHIPS

KNOX COUNTY

PROJECT DESCRIPTION:

ASPHALT CONCRETE RESURFACING AND RELATED WORK ON U.S. 62 IN KNOX COUNTY

Project Earth Disturbed Area = N/A (Maintenance Project)
Estimated Contractor Earth Disturbed Area = N/A (Maintenance Project)
Notice of Intent Earth Disturbed Area = N/A (Maintenance Project)



LOCATION MAP

LATITUDE: 40° 21' 29" LONGITUDE: 82° 17' 53"

PORTION TO BE IMPROVED _____

DESIGN DESIGNATION	LOCATION 1
	U.S. 62
Functional Classification	RMC
Opening Year ADT (2014)	5,400
Design Year ADT (2026)	6,100
Design Hourly Volume (2026)	730
Directional Distribution	53%
Trucks (24 Hour B&C)	6%
Design Speed	55mph
Legal Speed	55mph

RMC = RURAL MAJOR COLLECTOR

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LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1	KNO	62	0.00	22.65	22.65	MARTINSBURG, DANVILLE, GANN

2013 SPECIFICATIONS

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

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

DESIGN EXCEPTIONS: NONE

UNDERGROUND UTILITIES
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
BEFORE YOU DIG

CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: 1-800-925-0988

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

ENGINEER'S SEAL

SIGNED: *Douglas N. Morgan*
DATE: 8-15-2013

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	TC-65.10	4-20-12	800	10-18-13
BP-4.1	7-19-13	TC-65.11	4-20-12	832	5-5-09
		TC-71.10	10-19-12		
		TC-73.10	4-20-12		
MT-97.10	7-19-13	TC-82.10	1-18-13		
MT-97.12	7-19-13				
MT-99.20	7-20-12				
MT-101.90	10-19-12				
MT-105.10	7-20-12				
				SPECIAL PROVISIONS	

APPROVED *[Signature]*
DATE 8/15/13 DISTRICT DEPUTY DIRECTOR

APPROVED *[Signature]*
DATE 8-30-13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E120(588)

PID NO.
92970

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT

KNO-62-0.00

KNO - US-62-0.00
130593 PID - 92970
Dist 5 11/21/2013
Contract Proposal Available @ www.ohio.gov
contracts.dot.state.oh.us/home

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.

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

DISTRICT PERMIT SECTION BY FAX AT (614) 887-4525 OR EMAIL AT 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

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.

PAVEMENT MARKING

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 OR THE PLANS. 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

PREPARE THE SHOULDER FOR PAVING A CONSISTENT SAFETY EDGE IN BOTH THICKNESS AND WIDTH.

PRIOR TO PAVING THE SAFETY EDGE, GRADE AN AREA 10 INCHES WIDE, BEGINNING AT THE EDGE OF THE PAVED ROADWAY, TO PROVIDE A LEVEL SURFACE FREE OF VEGETATION FOR CONSTRUCTION OF THE SAFETY EDGE. IF NECESSARY, EXCAVATE THE GRADED AREA TO THE DEPTH NECESSARY TO CONSTRUCT THE SAFETY EDGE. COMPACT THE GRADED SHOULDER ACCORDING TO 617.05, OR AS DIRECTED BY THE ENGINEER.

ITEM 209 LINEAR GRADING

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ALL EQUIPMENT, LABOR, OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING.

THIS WORK MAY BE INTERMITTENT AND SPREAD THROUGHOUT THE PROJECT LIMITS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL ONLY BE PAID FOR INTERSECTIONS AND GAPS IF THEY ARE WITHIN THE LIMITS OF A SECTION MARKED BY THE ENGINEER FOR GRADING.

ALL LINEAR GRADING WORK SHALL BE DONE BEFORE PLACING THE ASPHALT SURFACE COURSE

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARY FOR THE ABOVE PURPOSES.

**ITEM 209 LINEAR GRADING
LOCATION 1 – 43.54 MILE**

SCENIC RIVER PLAN NOTES

PORTIONS OF THE PROJECT AREA ARE WITHIN 1000 FEET OF THE STATE SCENIC KOKOSING AND MOHICAN RIVERS. IN ACCORDANCE WITH THE MEMORANDUM OF AGREEMENT BETWEEN ODOT AND THE OHIO DEPARTMENT OF NATURAL RESOURCES REGARDING WORK WITHIN 1000 FEET OF SCENIC RIVERS, THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING CONDITIONS WHEN WORKING WITHIN 1000 FEET OF THE KOKOSING AND MOHICAN RIVERS:

IF ANY EARTHWORK IS PERFORMED WITHIN A PROJECT AREA, THEN A SEDIMENT AND EROSION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED BEFORE EARTHWORK COMMENCES. ALL CONTROLS SHALL BE PROPERLY MAINTAINED UNTIL FINAL SITE STABILIZATION HAS BEEN ACHIEVED. ALL DENUDED AREAS (LOCATION WHERE VEGETATION IS REMOVED) SHALL BE SEEDED AND MULCHED IMMEDIATELY UPON COMPLETION OF EARTHWORK OR WITHIN SEVEN DAYS. PROPERLY INSTALLED (FRAMED AND ENTRENCHED) SEDIMENT FENCE SHALL BE UTILIZED AROUND ANY STORM SEWER INLETS. APPROPRIATELY DESIGNED ROCK CHECK DAMS AND OTHER EROSION CONTROLS SHALL BE UTILIZED IN DITCHES AND CULVERTS. PARTICULAR ATTENTION SHALL BE GIVEN TO WATERCOURSES THAT COULD CONVEY SEDIMENT LADEN WATER DIRECTLY TO A DESIGNATED SCENIC RIVER. ANY DENUDED DITCHES SHALL BE SEEDED AND PROTECTED IMMEDIATELY WITH EROSION CONTROL MATTING OR SOD UPON COMPLETION OF EARTHWORK. STRAW BALES SHALL NOT BE UTILIZED AS A FORM OF SEDIMENT AND EROSION CONTROL. ALL SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED UPON STABILIZATION OF THE PROJECT AREA.

IF ROADSIDE DITCH MAINTENANCE IS NECESSARY WITHIN 1000 FEET OF A DESIGNATED STATE SCENIC RIVER, THEN THE DITCH SHALL BE MAINTAINED ONLY FOR THE ORIGINAL INTENDED FUNCTION AND RESTORED TO THE ORIGINAL DESIGN CONFIGURATION. ANY DENUDED DITCHES SHALL BE SEEDED AND PROTECTED IMMEDIATELY WITH EROSION CONTROL MATTING OR SOD UPON COMPLETION OF EARTHWORK. STRAW BALES SHALL NOT BE UTILIZED AS A FORM OF SEDIMENT AND EROSION CONTROL. ALL SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED UPON STABILIZATION OF THE PROJECT AREA.

SCENIC RIVER PLAN NOTES, CONT'D

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINTS, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER, FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO A SCENIC RIVER OR ANY TRIBUTARY WATER COURSES. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL BE REMOVED IMMEDIATELY FROM WITHIN 1000 FEET OF A SCENIC RIVER AND DISPOSED OF AT AN APPROPRIATE FACILITY ABOVE THE FEMA 100 YEAR FLOOD ELEVATION AND NOT WITHIN 1000 FEET OF THE SCENIC RIVER.

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 PLANING OPERATION. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUB-BASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE 7". THE MINIMUM WIDTH SHALL BE 4 FT. 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 (PLACED AND COMPACTED IN TWO LIFTS).

REPAIR QUANTITIES MAY BE USED ON THE 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 QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMAR-IES FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 253 PAVEMENT REPAIR
LOCATION 1 – 1,300 CU.YD.**

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

DEPTH OF PLANING ON U.S. 62 VARIES BETWEEN 1.25" AND 2.25" AND SHALL BE 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 TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

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CALCULATED
LME
CHECKED
DNM

GENERAL NOTES

KNO - 62 - 0.00

2
28

ITEM SPECIAL TACK COAT, TRACKLESS TACK
ITEM SPECIAL TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-1HM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	ASTM D88	15	100
STORAGE STABILITY, 24 HRS, %	ASTM D244	--	1
STORAGE STABILITY, 5 DAYS, %	ASTM D244	--	5
RESIDUE BY DISTILLATION, %	ASTM D244	50	--
OIL DISTILLATE, %	ASTM D244	--	1
SIEVE TEST, %	ASTM D244	--	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C,	ASTM D5	--	20
SOFTENING POINT RANGE DEG C	ASTM D36	65	--
SOLUBILITY, %	ASTM D2042	97.5	--
ORIGINAL BINDER DSR@82°C G*/SIN δ, 10 RAD/SEC	AASHTO T111	1.00	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC KEEP FROM FREEZING.

SUPPLY CERTIFIED TEST DATA TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED.

DILUTION IS NOT ALLOWED.

IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.08 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180° F. DO NOT EXCEED 180°F.

ITEM SPECIAL TACK COAT, TRACKLESS TACK
ITEM SPECIAL TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
(CONTINUED)

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS ±10% OF THE SPECIFIED RATE.

METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: THE DEPARTMENT WILL NOT PAY FOR NON-UNIFORMLY APPLIED MATERIALS AS DEFINED IN 407.06.

THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICES AS FOLLOWS:

ITEM	UNIT	DESCRIPTION
SPECIAL	GALLON (LITER)	TACK COAT, TRACKLESS TACK
SPECIAL	GALLON (LITER)	TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

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 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (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.

THE FOLLOWING QUANTITIES OF PRIME COAT, AS PER PLAN HAVE BEEN CARRIED TO THE SUB-SUMMARIES AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN
LOCATION 1 – (43.54 MILE x 5,280 x 2')/9 = 51,087 SQ.YD.
51,087 x 0.40 GAL./SQ YD = 20,435 GAL

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.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARY FOR THE ABOVE PURPOSES.

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 24 CU.YD.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 – 31 CU.YD.

ITEM 202 WEARING COURSE REMOVED
LOCATION 1 – 870 SQ.YD.

RESIDENTIAL AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448 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), WITH THE MAXIMUM DISTANCE TO BE DIRECTED BY THE ENGINEER, IN ORDER TO PROVIDE A SMOOTH TRANSITION AND/OR ELIMINATE SHORT DISTANCES OF UNDESIRABLE PROFILE. ABRUPT CHANGES IN DRIVEWAY PROFILE ARE NOT PERMITTED.

FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK AN AVERAGE OF 4' INTO THE DRIVEWAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (AVERAGE OF 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (AVERAGE OF 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. 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.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 – 67 CU.YD.

ITEM 202 WEARING COURSE REMOVED
LOCATION 1 – 1,920 SQ.YD.

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 611 CATCH BASIN/ MANHOLE/ INLET ADJUSTED TO GRADE
ITEM 638 VALVE BOX ADJUSTED TO GRADE

THESE ITEMS SHALL BE USED TO ADJUST CATCH BASINS, MANHOLES, INLETS AND WATER VALVE BOXES LOCATED THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW.

ANY GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE OWNERS.

LOCATION 1:

ITEM 611 – CATCH BASIN ADJUSTED TO GRADE – 5 EACH

ITEM 611 – INLET ADJUSTED TO GRADE – 7 EACH

ITEM 611 – MANHOLE ADJUSTED TO GRADE – 15 EACH

ITEM 638 – VALVE BOX ADJUSTED TO GRADE – 3 EACH

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
www.transtechsys.com

Advant-Edge Paving Equipment, LLC.
P.O. Box 9163
Niskayuna, NY 12309-0163
518-280-6090
www.advantaedgepaving.com

Carlson Safety Edge End Gate
18425 50th Avenue East
Tacoma, WA 98446
253-875-8000

Troxler Electronics Laboratories, Inc.
3008 E. Cornwallis Rd.
Research Triangle Park, NC 27709
1-877-TROXLER
www.troxlerlabs.com

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 TUENOUTRS 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.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARY TO PROVIDE EXTRA ASPHALT FOR CONSTRUCTION OF THE SAFETY EDGE:

**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 – 180 CU.YD.**

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.

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.

ITEM 614 MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON U.S. 62 BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWING 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.

TRAFFIC MAY BE MAINTAINED ON THE PLANED SURFACE FOR A MAXIMUM OF 5 DAYS IN UNCURBED AREAS BEFORE PLACING AT LEAST ONE COURSE OF ASPHALT CONCRETE.

ONLY ITEM 614 WORK ZONE CENTER LINE, CLASS II HAS BEEN ITEMIZED IN THE PLAN. ALL OTHER WORK ZONE PAVEMENT MARKINGS NECESSARY SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC.

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.

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 SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITIES OF WORK ZONE MARKING SIGN HAVE BEEN CARRIED TO THE SUB-SUMMARIES TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES): LOCATION 1 - 90 EACH
R4-1 (DO NOT PASS): LOCATION 1- 92 EACH
R4-2 (PASS WITH CARE): LOCATION 1 -70 EACH

ITEM 614, WORK ZONE MARKING SIGN

LOCATION 1 – 252 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. ENSURE THESE SIGNS ARE IN PLACE BEFORE OPENING THE ROADWAY TO TRAFFIC. ERECT THESE SIGNS AT INTERSECTIONS OF THROUGH ROUTES TO WARN TRAFFIC OF THIS SURFACE CONDITION. "GROOVED PAVEMENT" SIGNS SHALL BE INCLUDED FOR PAYMENT WITH THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC AS PER CMS SECTION 614.055.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND AT THE EXTRA AREAS WITH WEARING COURSE REMOVED.

BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS.

MINIMUM LENGTH FOR ASPHALT WEDGE AT BUTT JOINTS SHALL BE 10'.

LOCATION	ROUTE	DESCRIPTION	S.L.M.	ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD.
1	U.S. 62	BEGIN WORK	0.00	1.1
1	U.S. 62	BRIDGE: KNO-62-1028	10.28	1.6
1	U.S. 62	BRIDGE: KNO-62-1428	14.28	2.0
1	U.S. 62	BRIDGE: KNO-62-1732	17.32	2.0
1	U.S. 62	BRIDGE: KNO-62-1780	17.80	2.5
1	U.S. 62	SUSPEND	18.78	1.0
1	U.S. 62	RESUME	18.87	1.0
1	U.S. 62	BRIDGE: KNO-62-2192	21.92	1.6
1	U.S. 62	END WORK	24.42	0.8
1	U.S. 62	TOTAL		13.6

THE GRINDING FOR BUTT JOINTS SHALL BE INCLUDED WITH ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

ITEM 202, WALK REMOVED, AS PER PLAN

THIS WORK SHALL CONSIST OF REMOVING AND STORING BRICK SIDEWALK AT THE LOCATION SHOWN IN THE PLANS WHERE A CURB RAMP IS REQUIRED TO BE INSTALLED.

THE CONTRACTOR SHALL CAREFULLY REMOVE THE NECESSARY BRICKS TO THE DIMENSIONS SHOWN IN THE PLANS. THE BRICKS SHALL BECOME THE PROPERTY OF THE VILLAGE OF DANVILLE. THE CONTRACTOR SHALL CONTACT ROBERT SHIPLE, VILLAGE ADMINSTRATOR, AT (740)-599-6399 TO ARRANGE PICK UP BY THE VILLAGE FORCES.

ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE, INCLUDING CUTTING EXISTING BRICKS TO FIT AROUND THE NEW CURB RAMP, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202, WALK REMOVED, AS PER PLAN.

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GENERAL NOTES

KNO - 62 - 0.00

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 650 FT. AND 475 FT., 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. PCMS TRAILERS SHOULD BE DELINEATED ON A PERMANENT BASIS BY AFFIXING RETROREFLECTIVE MATERIAL, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. 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, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING 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.

THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 2 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.

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 UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 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

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (cont'd)

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.

A TOTAL OF 2 PCMS SHALL BE REQUIRED FOR THIS PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO SUB-SUMMARY:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN LOCATION 1 – 6 SIGN MONTH

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

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

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

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

IN ADDITION TO THE REQUIREMENT OF CMS 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:

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

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE, (CONT'D)

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

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.

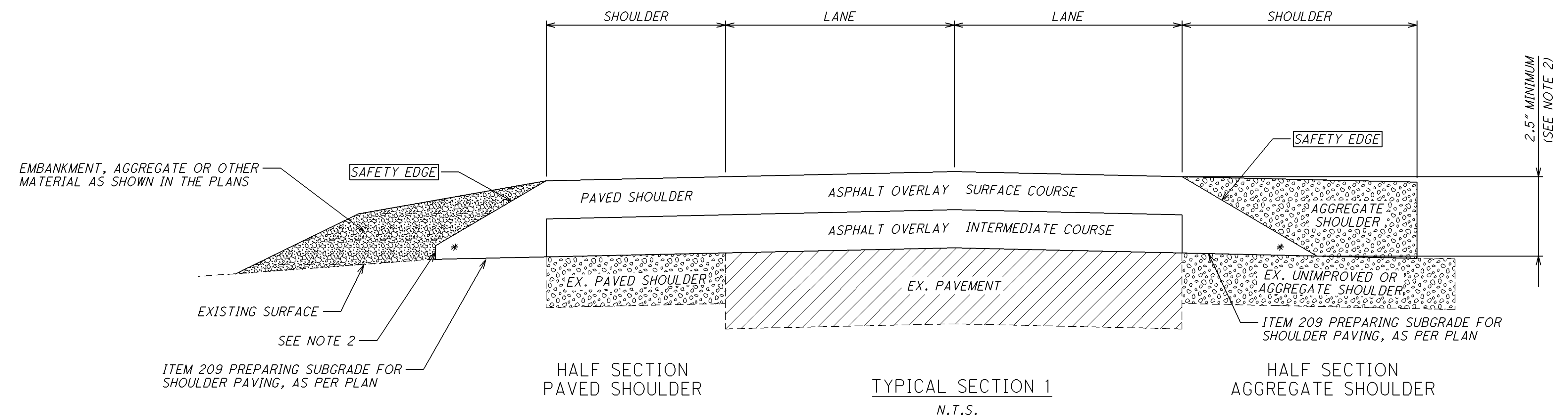
LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE SUB-SUMMARY.

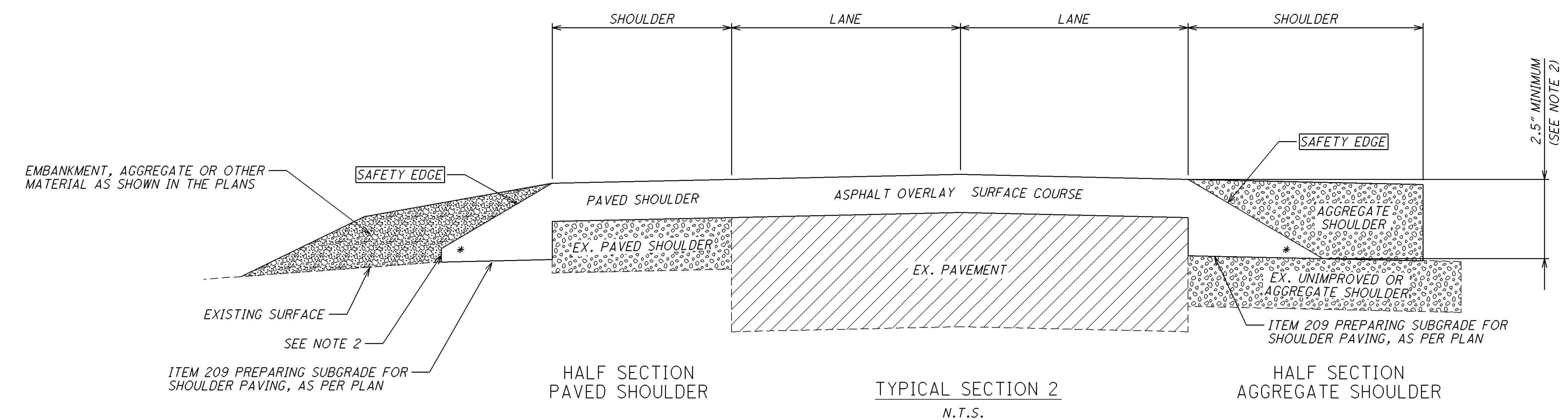
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE LOCATION 1 – 120 HOURS

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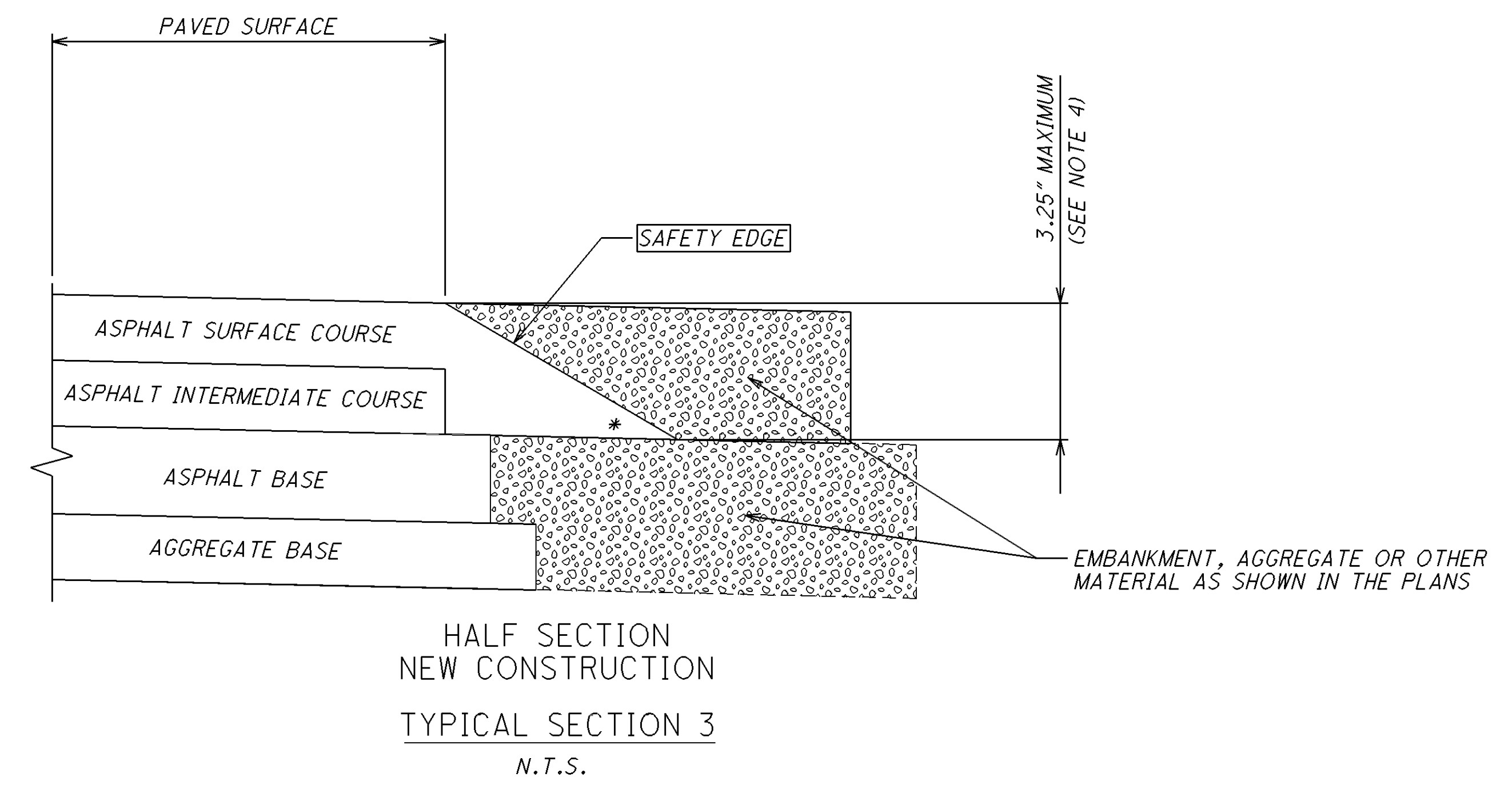
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HALF SECTION PAVED SHOULDER TYPICAL SECTION 1 HALF SECTION AGGREGATE SHOULDER
N.T.S.



HALF SECTION PAVED SHOULDER TYPICAL SECTION 2 HALF SECTION AGGREGATE SHOULDER
N.T.S.

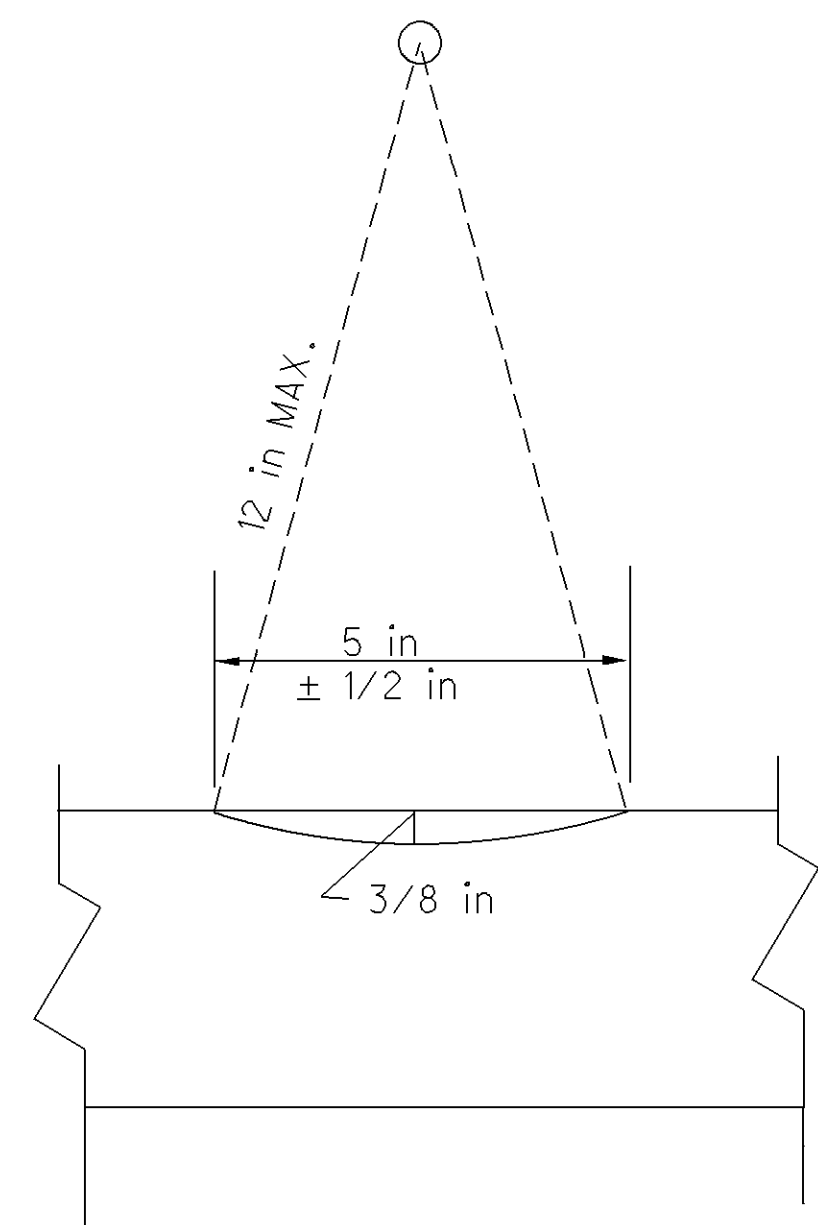


HALF SECTION NEW CONSTRUCTION
TYPICAL SECTION 3
N.T.S.

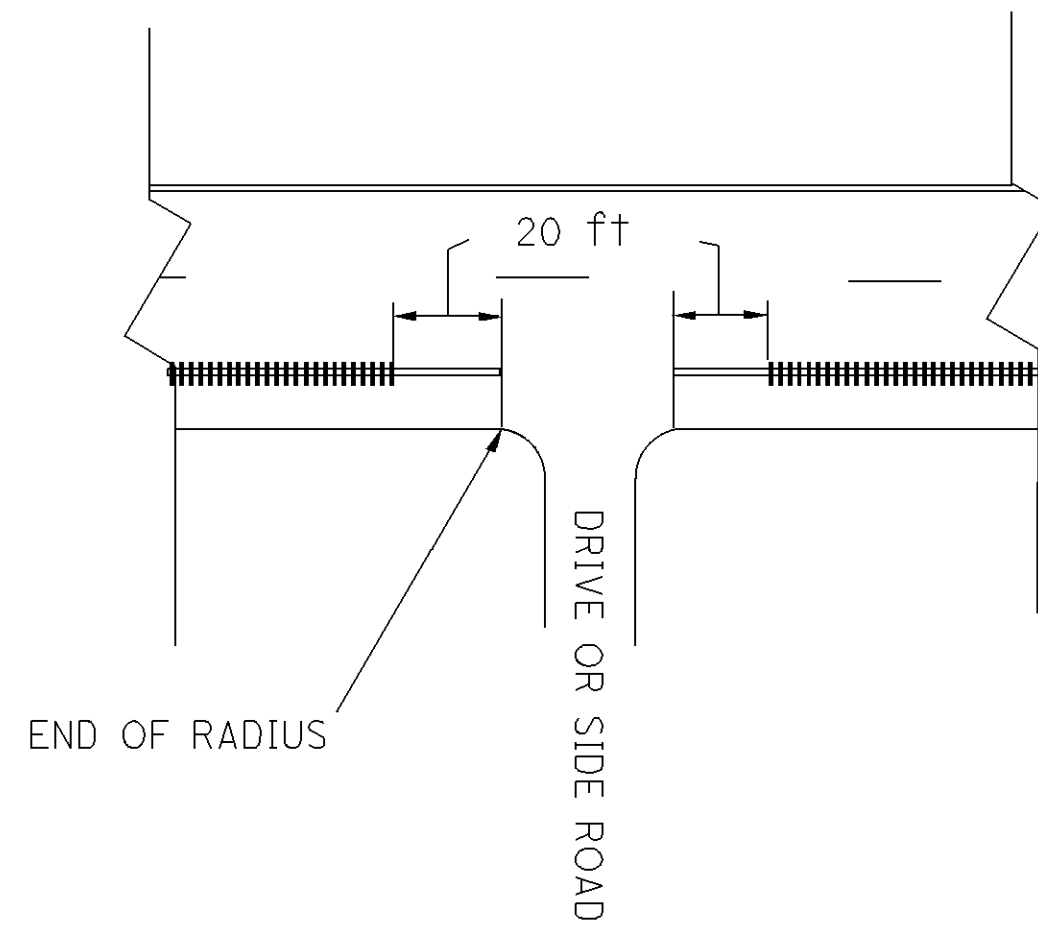
NOTES:

- 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 OR 2.5" (63MM) WHICHEVER IS GREATER, NOT TO EXCEED THE MAXIMUM SAFETY EDGE THICKNESS OF 6" (150MM). CONSTRUCT A NEAR-VERTICAL FACE BELOW THE SAFETY EDGE FOR THICKNESS GREATER THAN 6" (150 MM).
 - 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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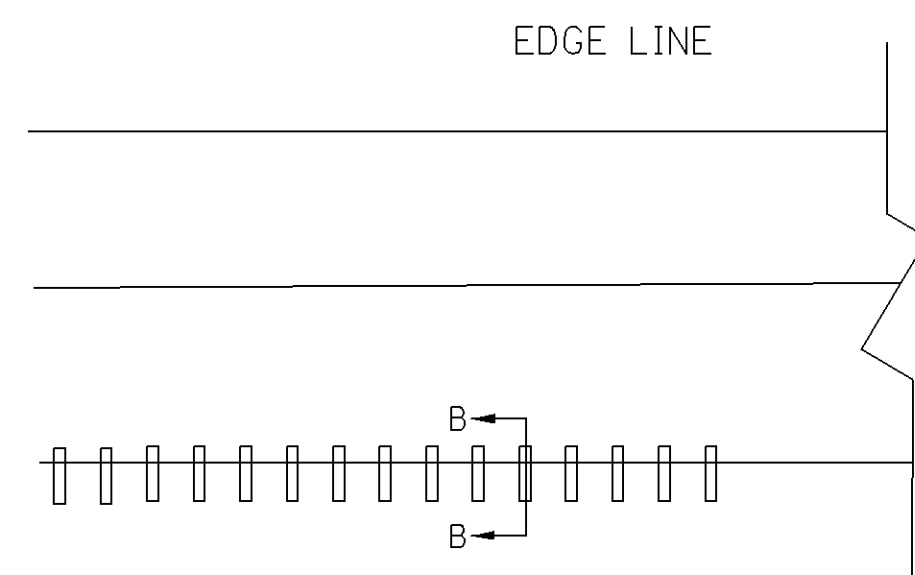
PROFILE



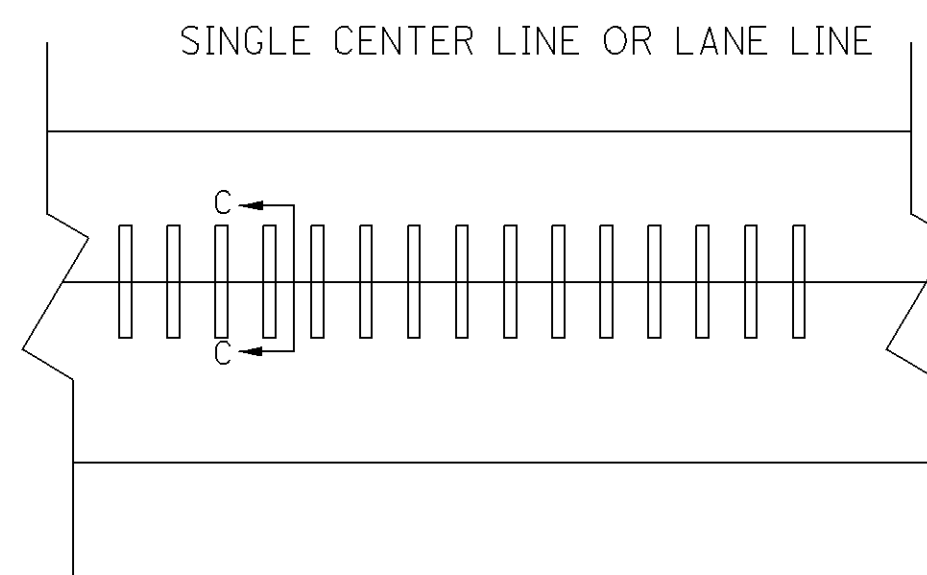
SIDE ROAD AND DRIVE RUMBLE STRIPE INSTALLATION DETAILS

NOTES

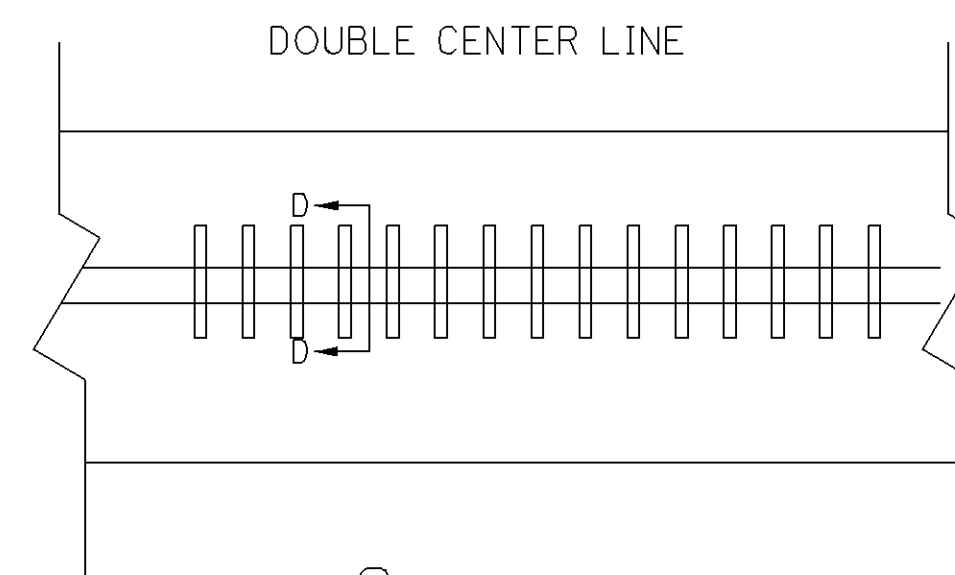
1. Rumble stripes shall be interrupted for driveways and intersections.
2. Rumble stripes shall be paid for in accordance with Item 618.
3. Rumble stripes shall be installed on a 62 foot cycle, i.e. 50 feet rumble stripes followed by a 12 foot gap.
4. Apply final pavement markings after rumble stripes are completed.
5. Location of the construction joint shall be verified in the field.



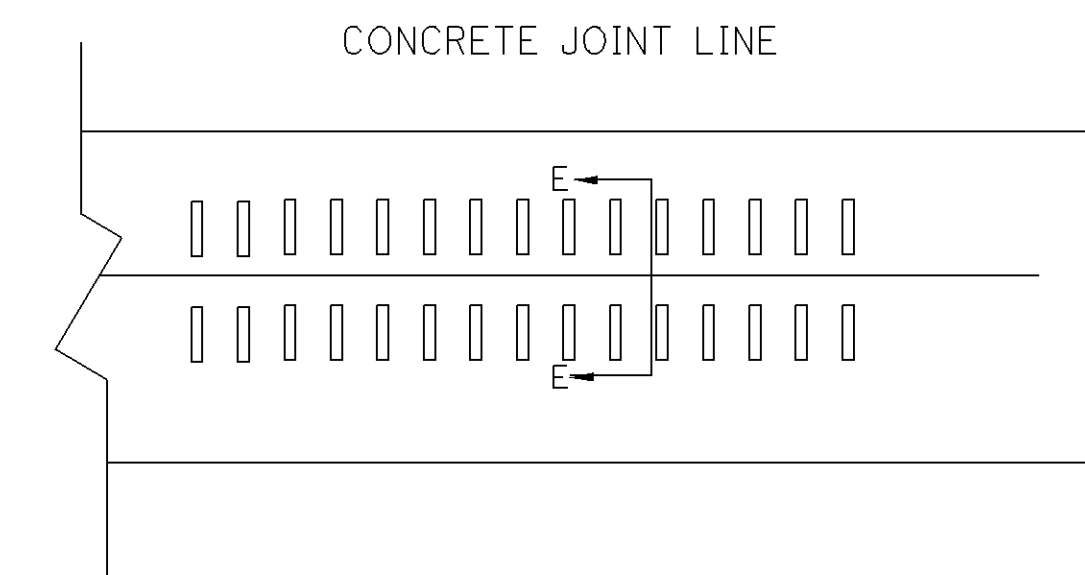
EDGE LINE



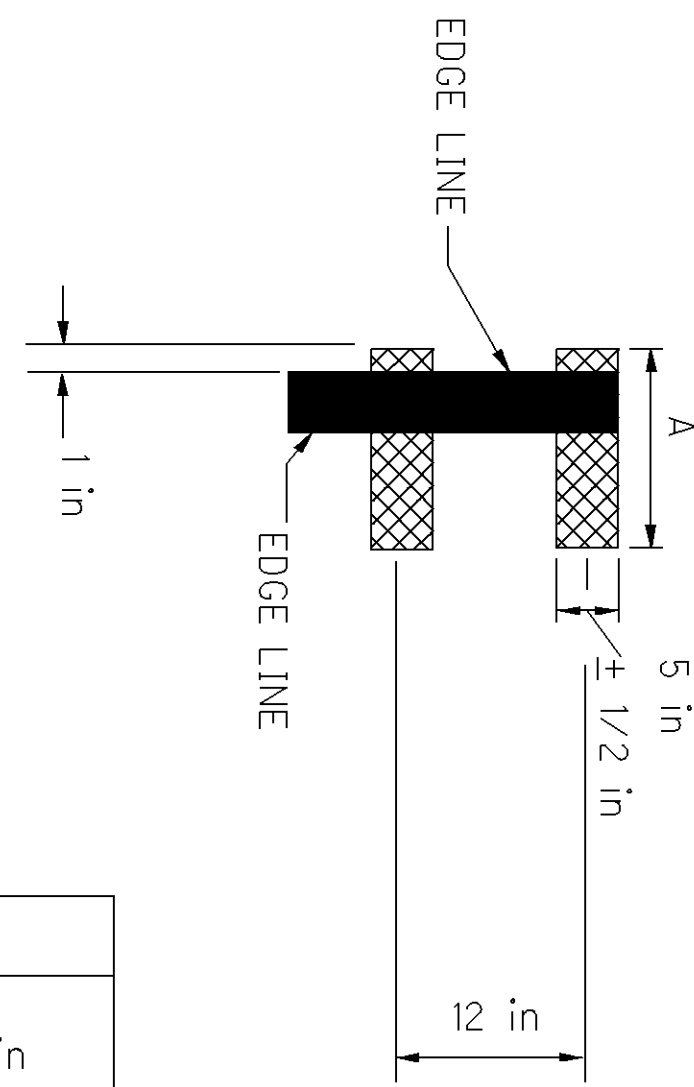
SINGLE CENTER LINE OR LANE LINE



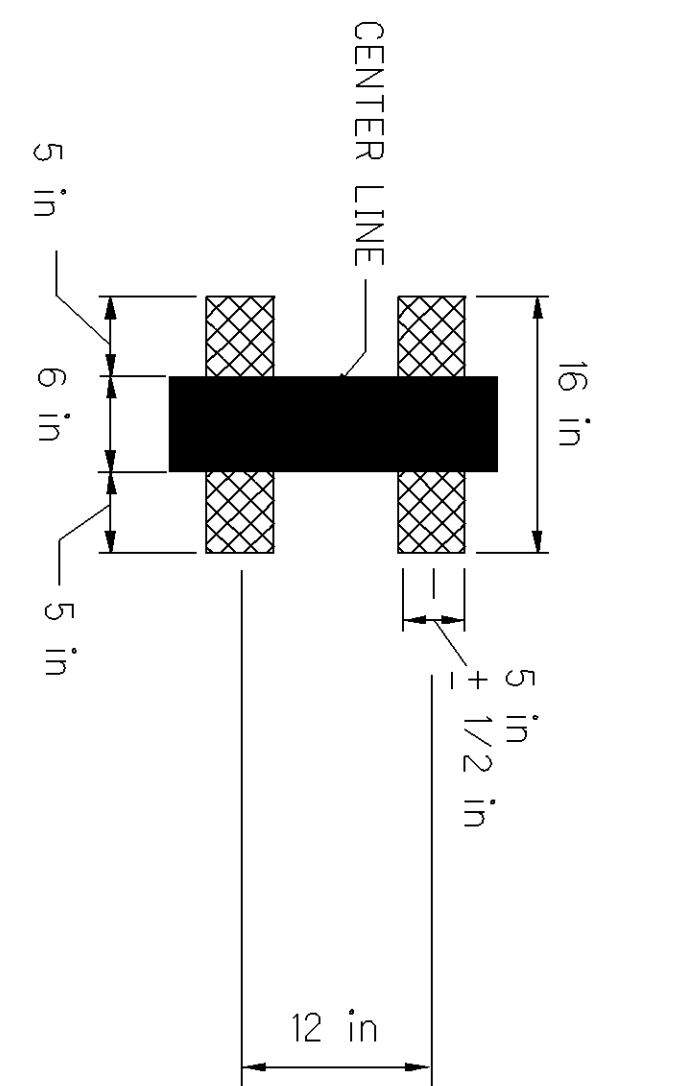
DOUBLE CENTER LINE



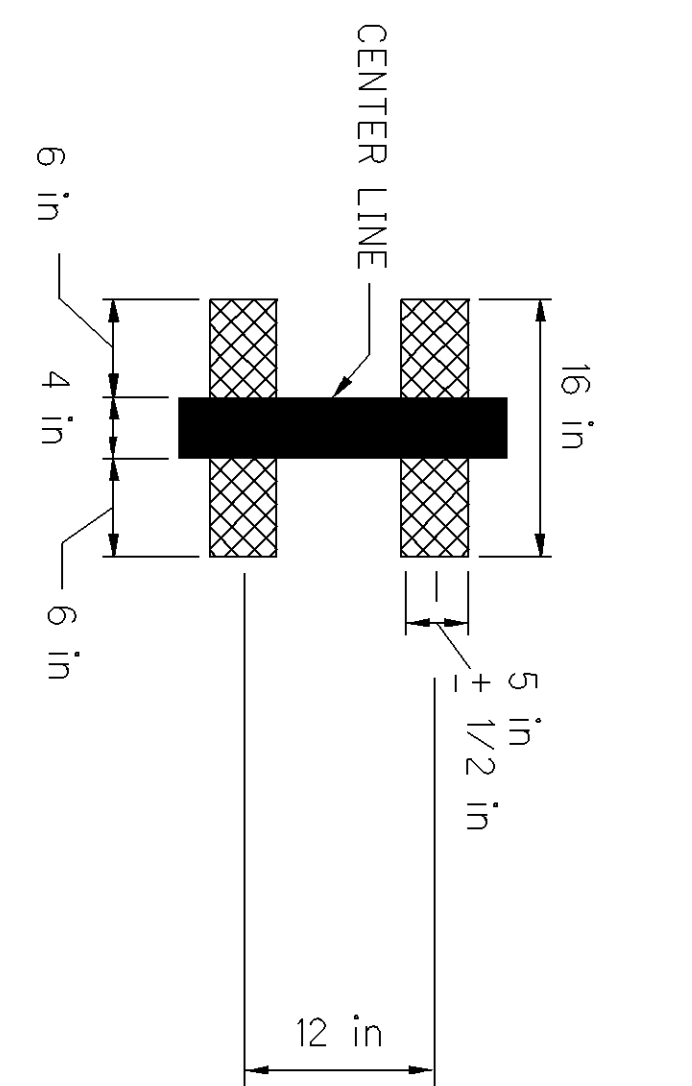
CONCRETE JOINT LINE



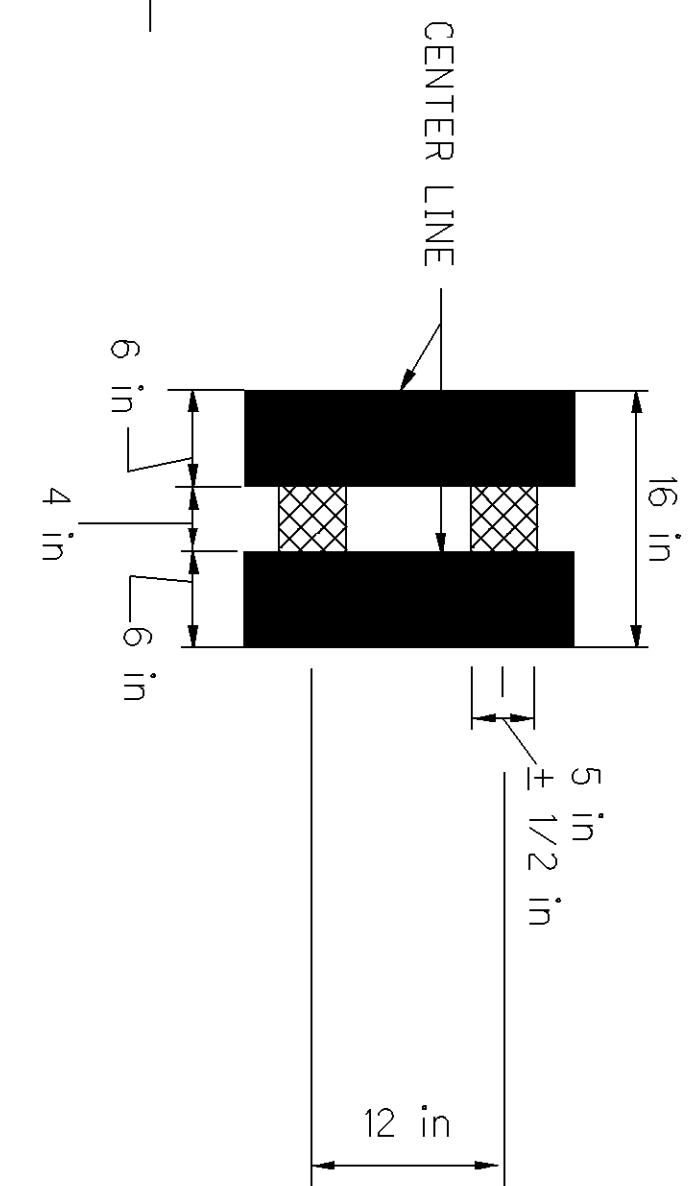
SECTION B-B
EDGE LINE RUMBLE STRIPE



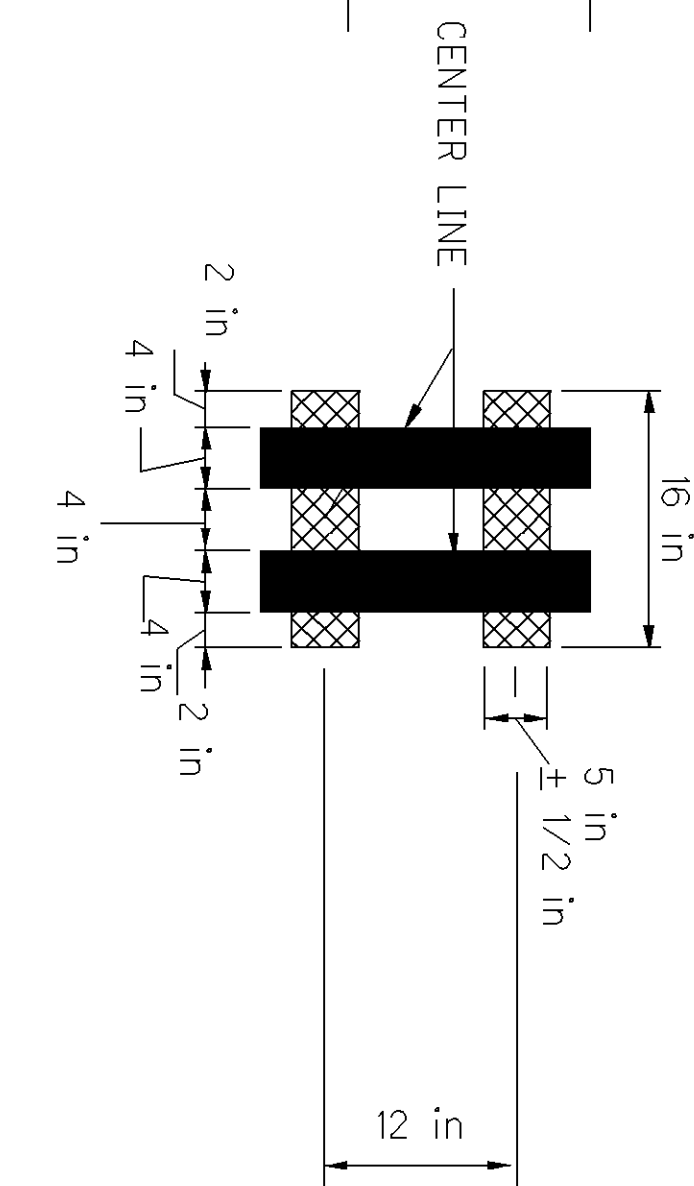
SECTION C-C
6" CENTER LINE OR LANE LINE
RUMBLE STRIPE



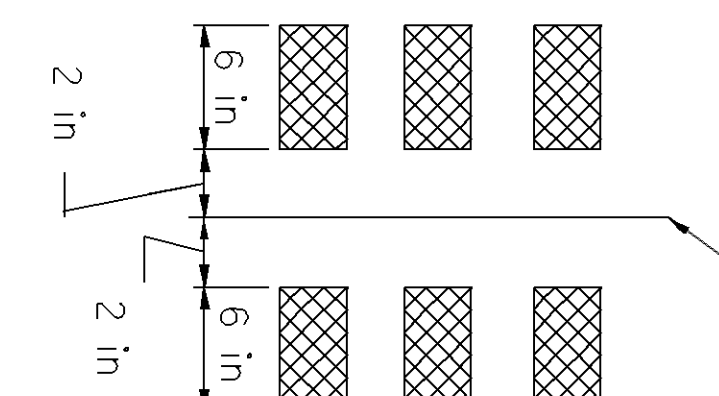
SECTION C-C
4" CENTER LINE OR LANE LINE
RUMBLE STRIPE



SECTION D-D
6" CENTER LINE RUMBLE STRIPE



SECTION D-D
4" CENTER LINE RUMBLE STRIPE

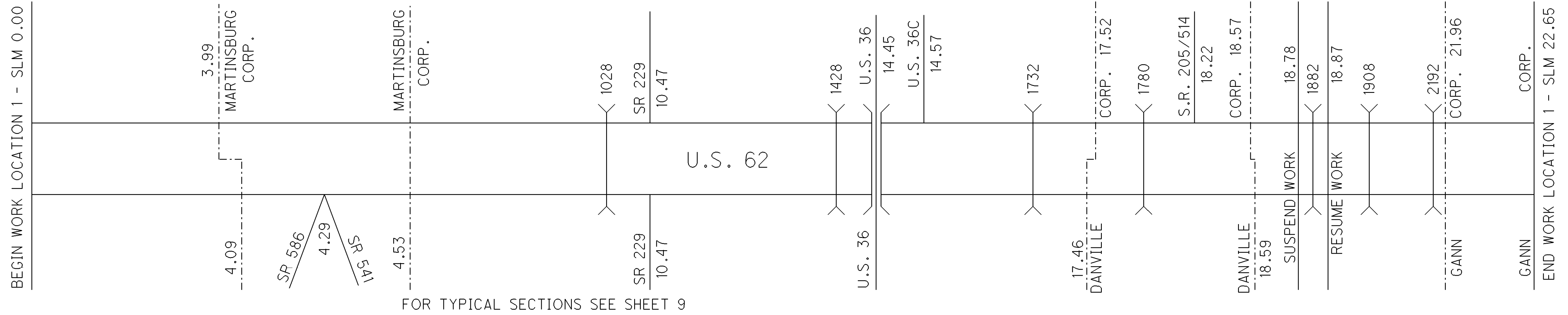


SECTION E-E
PORTLAND CEMENT CONCRETE
JOINT CENTER LINE RUMBLE STRIPE

P.C. CONCRETE
JOINT LINE

SHOULDER WIDTH	A
2-5 ft	6 in
5 ft-1 in - 8 ft	10 in
≥ 8 ft- 1 in	16 in

NOTE: THE PAVEMENT WIDTHS SHOWN IN THE "PAVEMENT DATA" TABLE ARE THE WIDTHS WHICH HAVE BEEN DETERMINED TO HAVE SUFFICIENT ROADWAY BASE FOR PAVING. IF ACTUAL ROADWAY WIDTHS DIFFER, THE ROADWAY SHALL BE PAVED ONLY THE WIDTH SHOWN IN THE AFOREMENTIONED TABLE. IF THE EXISTING ROADWAY IS WIDER THAN THAT WHICH IS SHOWN IN THE TABLE, PAVING SHALL BE CENTERED ABOUT THE FULL WIDTH OF THE ROADWAY AND ANY EXCESS EXISTING PAVEMENT ON THE EDGES SHALL BE COVERED WITH ITEM 617 COMPACTED AGGREGATE. THIS DOES NOT APPLY TO CURVES WHERE PAVEMENT HAS BEEN WIDENED TO ACCOUNT FOR TRAVELED WAY. THE WIDTH OF PAVING AROUND CURVES SHALL MATCH THE EXISTING PAVEMENT WIDTH THAT REMAINS AFTER THE PAVEMENT PLANING HAS BEEN PERFORMED. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.



FOR TYPICAL SECTIONS SEE SHEET 9

PAVEMENT DATA

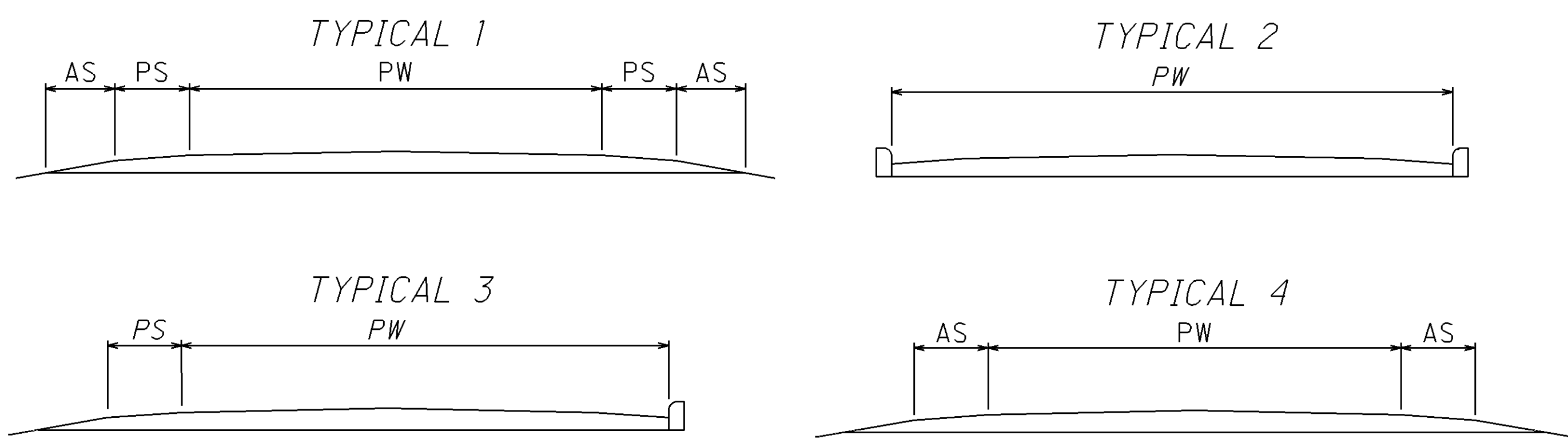
NO	COUNTY	RTH COR	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		PAVEMENT WIDTH (FEET)	TYPICAL	EXISTING PAVEMENT TYPE	PAVEMENT AREA	254		407				448 ASPHALT CONCRETE				614
					MILES	LIN. FT.					DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT, TRACKLESS TACK, @ 0.075 GAL./S.Y.	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M	WORK ZONE CENTERLINE, CLASS II
1	KNO	U.S. 62	0.00	3.99	3.99	21,067.2	24.0	1	448	56,179.2	1.25	56,179.2			4,213.5	2,809.0	1.00	1,560.6	1.25	1,950.7	7.98
1	KNO	U.S. 62	3.99	4.53	0.54	2,851.2	22.0	1	448	6,969.6	2.25	6,969.6			522.8	348.5	1.00	193.6	1.25	242.0	1.08
1	KNO	U.S. 62	4.53	11.41	6.88	36,326.4	20.0	1	448	80,725.3	1.25	80,725.3			6,054.4	4,036.3	1.00	2,242.4	1.25	2,803.0	13.76
1	KNO	U.S. 62	11.41	14.13	2.72	14,361.6	20.0	1	448	31,914.7	1.25	31,914.7			2,393.7	1,595.8	1.00	886.6	1.25	1,108.2	5.44
1	KNO	U.S. 62	14.13	14.35	0.22	1,161.6	24.0	1	448	3,097.6	1.25	3,097.6			232.4	154.9	1.00	86.1	1.25	107.6	0.44
1	KNO	U.S. 62	14.35	14.50	0.15	792.0	24.0	1	448	2,112.0	2.25	2,112.0			158.4	105.6	1.00	58.7	1.25	73.4	0.30
1	KNO	U.S. 62	14.50	17.32	2.82	14,889.6	24.0	1	448	39,705.6	1.25	39,705.6			2,978.0	1,985.3	1.00	1,103.0	1.25	1,378.7	5.64
1	KNO	U.S. 62	17.32	17.56	0.24	1,267.2	24.0	1	448	3,379.2	1.25	3,379.2	253.5	169.0			1.00	93.9	1.25	117.4	0.48
1	KNO	U.S. 62	17.56	17.68	0.12	633.6	24.0	1	448	1,689.6	2.25	1,689.6	126.8	84.5			1.00	47.0	1.25	58.7	0.24
1	KNO	U.S. 62	17.68	17.98	0.30	1,584.0	36.0	2	448	6,336.0	2.25	6,336.0	475.2	316.8			1.00	176.0	1.25	220.0	0.60
1	KNO	U.S. 62	17.98	18.16	0.18	950.4	30.0	2	448	3,168.0	2.25	3,168.0	237.6	158.4			1.00	88.0	1.25	110.0	0.36
1	KNO	U.S. 62	18.16	18.19	0.03	158.4	40.0 AVG	2	448	704.0	2.25	704.0	52.8	35.2			1.00	19.6	1.25	24.5	0.06
1	KNO	U.S. 62	18.19	18.22	0.03	158.4	52.0 AVG	2	448	915.2	2.25	915.2	68.7	45.8			1.00	25.5	1.25	31.8	0.06
1	KNO	U.S. 62	18.22	18.32	0.10	528.0	48.0	3	448	2,816.0	2.25	2,816.0	211.2	140.8			1.00	78.3	1.25	97.8	0.20
1	KNO	U.S. 62	18.32	18.78	0.46	2,428.8	24.0	4	448	6,476.8	2.25	6,476.8	485.8	323.9			1.00	180.0	1.25	224.9	0.92
SUSPEND/RESUME AT NEW BRIDGE PAVEMENT																					
1	KNO	U.S. 62	18.87	19.06	0.19	1,003.2	24.0	4	448	2,675.2	1.25	2,675.2			200.7	133.8	1.00	74.4	1.25	92.9	0.38
1	KNO	U.S. 62	19.06	19.22	0.16	844.8	24.0	4	448	2,252.8	1.25	2,252.8			169.0	112.7	1.00	62.6	1.25	78.3	0.32
1	KNO	U.S. 62	19.22	22.65	3.43	18,110.4	24.0	4	448	48,294.4	1.25	48,294.4			3,622.1	2,414.8	1.00	1,341.6	1.25	1,676.9	6.86
BRIDGE DEDUCTIONS										(2,819.8)		(2,819.8)			(211.5)	(141.0)	1.00	(78.4)	1.25	(98.0)	(0.13)
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)												296,591.4	1,911.6	1,274.4	20,333.5	13,555.7		8,239.5		10,298.8	44.99

CALCULATED
LME
CHECKED
DNM

ASPHALT CONCRETE DATA

KNO - 62 - 0.00

PW = PAVEMENT WIDTH
PS = PAVED SHOULDER
AS = AGGREGATE SHOULDER



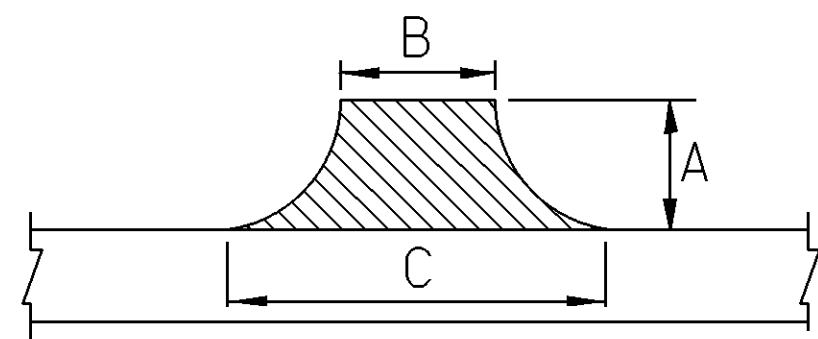
NOTE: EDGE LINE RUMBLE STRIPES SHALL BE DISCONTINUED 650 FEET IN ADVANCE OF VILLAGE OR CITY CORP. LIMITS. QUANTITIES HAVE BEEN ADJUSTED TO REFLECT THIS REQUIREMENT.

SHOULDER DATA

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)		SHOULDER AREA SQ. YD.	209		254		407			448 ASPHALT CONCRETE				617		618
					MILES	LIN. FT.		A	B		PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT, TRACKLESS TACK, @ 0.075 GAL./S.Y.	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	SURFACE COURSE, TYPE 1, PG 70-22M	THICKNESS	COMPACTED AGGREGATE, AS PER PLAN (2' WIDTH)	EDGE LINE, RUMBLE STRIPES (ASPHALT CONCRETE)
1	KNO	U.S. 62	0.00	3.99	3.99	21067.2	1	4	4	18,726.4	7.98	1.25	18,726.4			1,404.5	936.4	1.00	520.2	1.25	650.3	3.00	780.3	7.73
1	KNO	U.S. 62	3.99	4.28	0.29	1531.2	1	1	1	340.3	0.58	2.25	340.3			25.6	17.1	1.00	9.5	1.25	11.9	3.00	56.8	
1	KNO	U.S. 62	4.28	4.53	0.25	1320.0	1	2	2	586.7	0.50	2.25	586.7			44.1	29.4	1.00	16.3	1.25	20.4	3.00	48.9	
1	KNO	U.S. 62	4.53	7.00	2.47	715.0	1	2	2	317.8	4.94	1.25	317.8			23.9	15.9	1.00	8.9	1.25	11.1	3.00	26.5	
1	KNO	U.S. 62	7.00	7.06	0.06	316.8	1	7	7	492.8	0.12	1.25	492.8			37.0	24.7	1.00	13.7	1.25	17.2	3.00	11.8	
1	KNO	U.S. 62	7.06	7.98	0.92	4857.6	1	2	2	2,158.9	1.84	1.25	2,158.9			162.0	108.0	1.00	60.0	1.25	75.0	3.00	180.0	
1	KNO	U.S. 62	7.98	8.04	0.06	316.8	1	6	6	422.4	0.12	1.25	422.4			31.7	21.2	1.00	11.8	1.25	14.7	3.00	11.8	
1	KNO	U.S. 62	8.04	10.20	2.16	11404.8	1	2	2	5,068.8	4.32	1.25	5,068.8			380.2	253.5	1.00	140.8	1.25	176.0	3.00	422.4	
1	KNO	U.S. 62	10.20	10.35	0.15	792.0	1	6	6	1,056.0	0.30	1.25	1,056.0			79.2	52.8	1.00	29.4	1.25	36.7	3.00	29.4	
1	KNO	U.S. 62	10.35	11.41	1.06	5596.8	1	2	2	2,487.5	2.12	1.25	2,487.5			186.6	124.4	1.00	69.1	1.25	86.4	3.00	207.3	
1	KNO	U.S. 62	11.41	14.13	2.72	14361.6	1	2	2	6,382.9	5.44	1.25	6,382.9			478.8	319.2	1.00	177.4	1.25	221.7	3.00	532.0	
1	KNO	U.S. 62	14.13	14.35	0.22	1161.6	1	2	2	516.3	0.44	1.25	516.3			38.8	25.9	1.00	14.4	1.25	18.0	3.00	43.1	0.44
1	KNO	U.S. 62	14.35	14.50	0.15	792.0	1	2	2	352.0	0.30	2.25	352.0			26.4	17.6	1.00	9.8	1.25	12.3	3.00	29.4	0.30
1	KNO	U.S. 62	14.50	17.32	2.82	14889.6	1	2	2	6,617.6	5.64	1.25	6,617.6			496.4	330.9	1.00	183.9	1.25	229.8	3.00	551.5	5.64
1	KNO	U.S. 62	17.32	17.56	0.24	1267.2	1	2	2	563.2	0.48	1.25	563.2	42.3	28.2			1.00	15.7	1.25	19.6	3.00	47.0	
1	KNO	U.S. 62	17.56	17.62	0.06	316.8	1	4	2	211.2	0.12	2.25	211.2	15.9	10.6			1.00	5.9	1.25	7.4	3.00	11.8	
1	KNO	U.S. 62	17.62	17.68	0.06	316.8	1	6	12	633.6	0.12	2.25	633.6	47.6	31.7			1.00	17.6	1.25	22.0	3.00	11.8	
1	KNO	U.S. 62	18.29	18.32	0.03	158.4	3	2		35.2	0.06	2.25	35.2	2.7	1.8			1.00	1.0	1.25	1.3	3.00	5.9	
1	KNO	U.S. 62	18.32	18.78	0.46	2428.8	4				0.92											3.00	90.0	
SUSPEND/RESUME AT NEW BRIDGE PAVEMENT																								
1	KNO	U.S. 62	18.87	19.06	0.19	1003.2	4				0.38											3.00	37.2	
1	KNO	U.S. 62	19.06	19.22	0.16	844.8	4				0.32											3.00	31.3	
1	KNO	U.S. 62	19.22	22.65	3.43	18110.4	4				6.86											3.00	670.8	
BRIDGE DEDUCTIONS										(230.5)	(0.36)	(230.5)			(17.3)	(11.6)	1.00	(6.5)	1.25	(8.1)	3.00	(40.7)		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											43.54		46,739.1	108.5	72.3	3,397.9	2,265.4		1,298.9		1,623.7		3,796.3	14.11

PAVED SHOULDER DATA

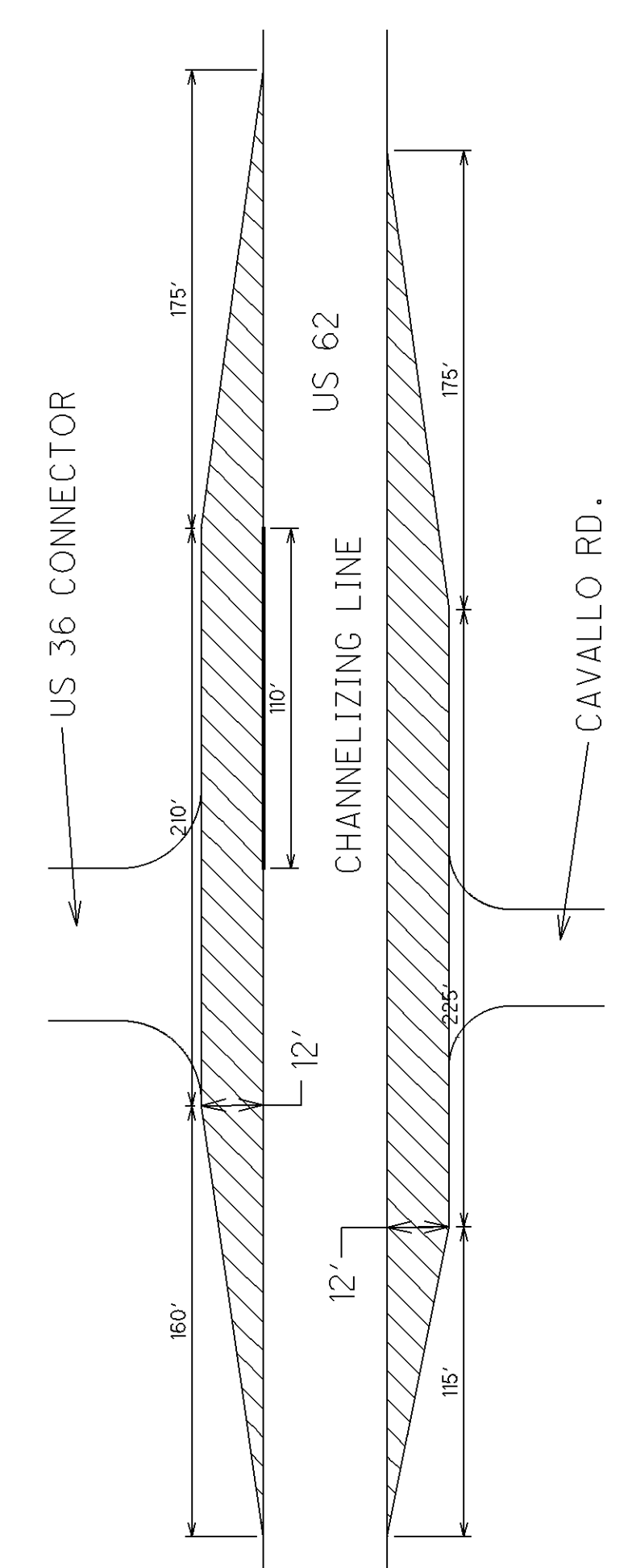
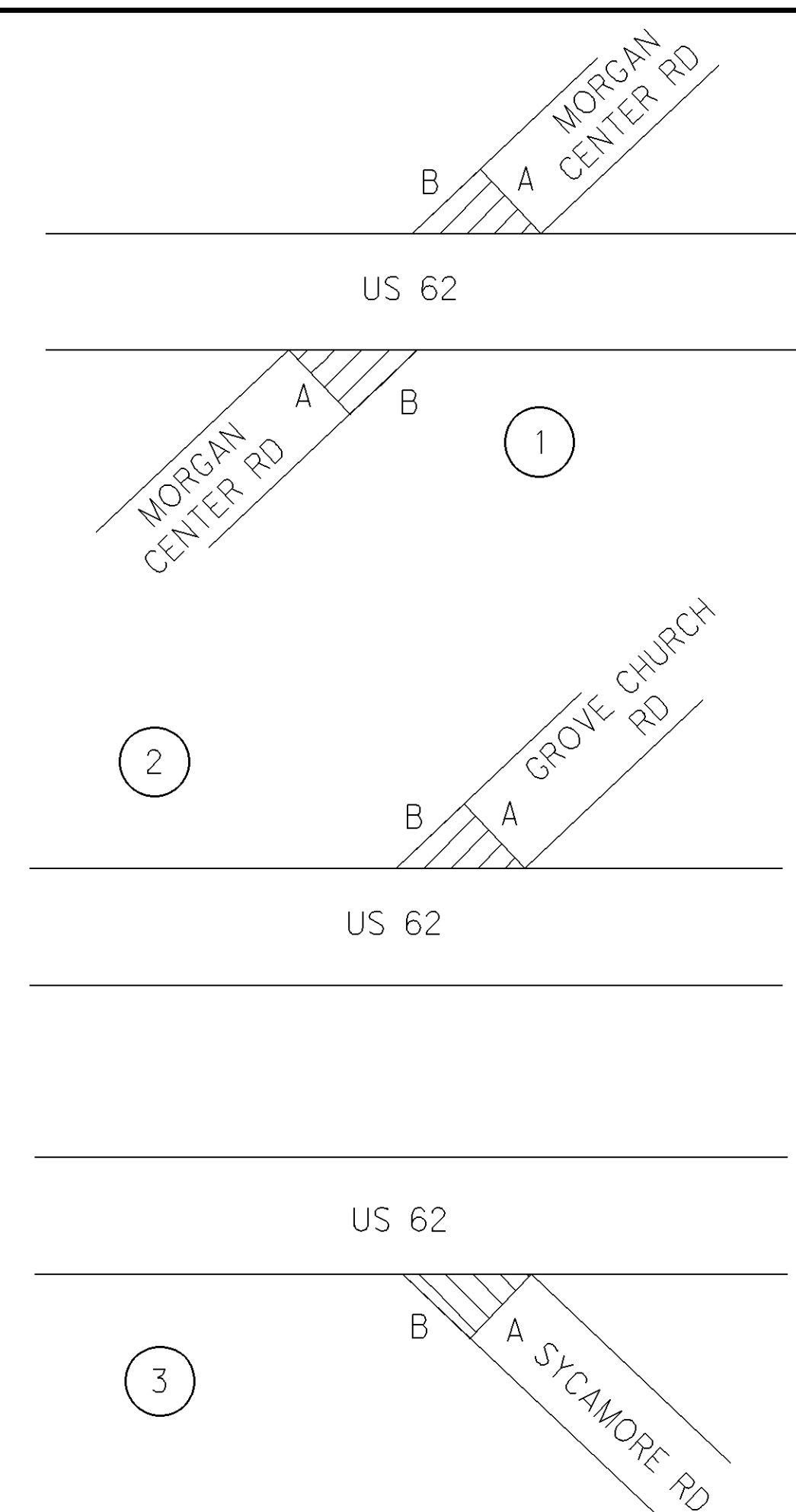
KNO - 62 - 0.00



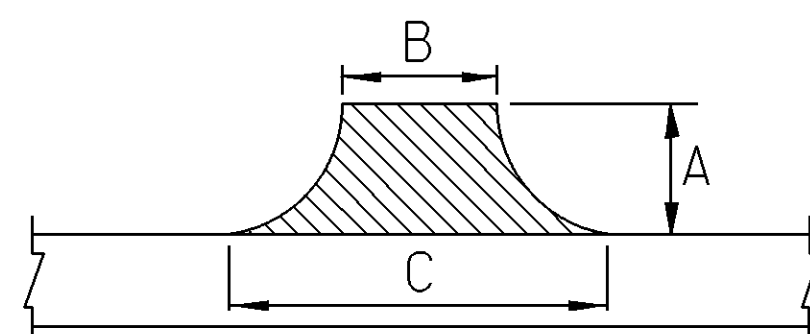
$$AREA = \left[A \frac{(B + C)}{2} \right] / 9$$

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ. YD.	202		407		448 ASPHALT CONCRETE			
					DETAIL DIMENSION				WEARING COURSE REMOVED SQ. YD.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y. GAL.	THICKNESS IN.	INTERMEDIATE COURSE, TYPE 1, PG 64-22 CU. YD.	THICKNESS IN.	SURFACE COURSE, TYPE 1, PG 64-22 CU. YD.	
					A	B	C									
					FT.	FT.	FT.									
1	KNO	U.S. 62	RT	MORGAN CENTER RD (1)	26	85		122.8	122.8	9.3	6.2	1.00	3.5	1.25	4.3	
1	KNO	U.S. 62	LT	MORGAN CENTER RD (1)	28	103		160.3	160.3	12.1	8.1	1.00	4.5	1.25	5.6	
1	KNO	U.S. 62	LT	CLUTTER RD	50	24	92	322.3	322.3	24.2	16.2	1.00	9.0	1.25	11.2	
1	KNO	U.S. 62	RT	CLUTTER RD	45	21	91	280.0	280.0	21.0	14.0	1.00	7.8	1.25	9.8	
1	KNO	U.S. 62	LT	WHITE OAK RD	35	14	48	120.6	120.6	9.1	6.1	1.00	3.4	1.25	4.2	
1	KNO	U.S. 62	LT	HOSS RD	53	22	77	291.5	291.5	21.9	14.6	1.00	8.1	1.25	10.2	
1	KNO	U.S. 62	LT	HOSS RD	27	23	64	130.5	130.5	9.8	6.6	1.00	3.7	1.25	4.6	
1	KNO	U.S. 62	LT	ARRINGTON RD	65	18	79	350.3	350.3	26.3	17.6	1.00	9.8	1.25	12.2	
1	KNO	U.S. 62	RT	WEST ST	20	15	33	53.4	53.4	4.1	2.7	1.00	1.5	1.25	1.9	
1	KNO	U.S. 62	LT	WEST ST	17	17	44	57.7	57.7	4.4	2.9	1.00	1.7	1.25	2.1	
1	KNO	U.S. 62	RT	ALLEY	15	10	20	25.0	25.0	1.9	1.3	1.00	0.7	1.25	0.9	
1	KNO	U.S. 62	LT	ALLEY	15	10	20	25.0	25.0	1.9	1.3	1.00	0.7	1.25	0.9	
1	KNO	U.S. 62	RT	SR 586	31	28	67	163.7	163.7	12.3	8.2	1.00	4.6	1.25	5.7	
1	KNO	U.S. 62	RT	SR 541	31	20	67	149.9	149.9	11.3	7.5	1.00	4.2	1.25	5.3	
1	KNO	U.S. 62	LT	EXTRA PAVEMENT	14		158	245.8	245.8	18.5	12.3	1.00	6.9	1.25	8.6	
1	KNO	U.S. 62	RT	EXTRA PAVEMENT	14		136	211.6	211.6	15.9	10.6	1.00	5.9	1.25	7.4	
1	KNO	U.S. 62	RT	PLEASANT ST	28	14	36	77.8	77.8	5.9	3.9	1.00	2.2	1.25	2.8	
1	KNO	U.S. 62	LT	PLEASANT ST	22	14	28	51.4	51.4	3.9	2.6	1.00	1.5	1.25	1.8	
1	KNO	U.S. 62	LT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	SR 586	31	24	54	134.4	134.4	10.1	6.8	1.00	3.8	1.25	4.7	
1	KNO	U.S. 62	RT	MECHANIC ST	22	10	29	47.7	47.7	3.6	2.4	1.00	1.4	1.25	1.7	
1	KNO	U.S. 62	RT	NORTH ST	21	12	28	46.7	46.7	3.6	2.4	1.00	1.3	1.25	1.7	
1	KNO	U.S. 62	LT	GROVE CHURCH RD (2)	43	21		50.2	50.2	3.8	2.6	1.00	1.4	1.25	1.8	
1	KNO	U.S. 62	RT	DEAL RD	25	17	49	91.7	91.7	6.9	4.6	1.00	2.6	1.25	3.2	
1	KNO	U.S. 62	LT	DEAL RD	43	17	58	179.2	179.2	13.5	9.0	1.00	5.0	1.25	6.3	
1	KNO	U.S. 62	LT	SYCAMORE RD	29	28	44	116.0	116.0	8.7	5.8	1.00	3.3	1.25	4.1	
1	KNO	U.S. 62	LT	SYCAMORE RD (3)	30	79		263.4	263.4	19.8	13.2	1.00	7.4	1.25	9.2	
1	KNO	U.S. 62	RT	SYCAMORE RD	58	20	85	338.4	338.4	25.4	17.0	1.00	9.4	1.25	11.8	
1	KNO	U.S. 62	RT	HOPEWELL RD	32	23	72	168.9	168.9	12.7	8.5	1.00	4.7	1.25	5.9	
1	KNO	U.S. 62	LT	HOPEWELL RD	29	18	46	103.2	103.2	7.8	5.2	1.00	2.9	1.25	3.6	
1	KNO	U.S. 62	RT	DENNIS CHURCH RD	33	18	51	126.5	126.5	9.5	6.4	1.00	3.6	1.25	4.4	
1	KNO	U.S. 62	RT	BILLMAN RD	32	18	61	140.5	140.5	10.6	7.1	1.00	4.0	1.25	4.9	
1	KNO	U.S. 62	LT	CHADWICK RD	26	16	44	86.7	86.7	6.6	4.4	1.00	2.5	1.25	3.1	
1	KNO	U.S. 62	RT	SR 229	125	18	150	1,166.7	1,166.7	87.6	58.4	1.00	32.5	1.25	40.6	
1	KNO	U.S. 62	LT	SR 229	75	22	150	716.7	716.7	53.8	35.9	1.00	20.0	1.25	24.9	
1	KNO	U.S. 62	RT	LEPLEY RD	21	21	62	96.9	96.9	7.3	4.9	1.00	2.7	1.25	3.4	
1	KNO	U.S. 62	LT	LEPLEY RD	24	17	46	84.0	84.0	6.3	4.2	1.00	2.4	1.25	3.0	
1	KNO	U.S. 62	LT	CAVES RD	32	20	65	151.2	151.2	11.4	7.6	1.00	4.2	1.25	5.3	
1	KNO	U.S. 62	RT	HAZEL DELL RD	45	24	105	322.5	322.5	24.2	16.2	1.00	9.0	1.25	11.2	
1	KNO	U.S. 62	LT	MILLWOOD RD	36	25	93	236.0	236.0	17.7	11.8	1.00	6.6	1.25	8.2	
1	KNO	U.S. 62	CL	WDENING ON US 62 @ US 36	SEE DETAIL RIGHT			996.0	996.0	74.7	49.8	1.00	27.7	1.25	34.6	
1	KNO	U.S. 62	RT	CAVALLO RD	30	23	78	168.4	168.4	12.7	8.5	1.00	4.7	1.25	5.9	
1	KNO	U.S. 62	LT	BOESHART RD	25	18	60	108.4	108.4	8.2	5.5	1.00	3.1	1.25	3.8	
1	KNO	U.S. 62	RT	BOESHART RD	25	17	39	77.8	77.8	5.9	3.9	1.00	2.2	1.25	2.8	
LOCATION 1 TOTALS (CARRIED TO NEXT SHEET)									8,874.4	667.5	445.7		248.6		310.2	



P:\KNO\92970\Design\Roadway\Plan_Sheets\General\92970_MEA_001.dgn 15-AUG-2013 10:20AM dmorgon



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

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	EXTRA AREAS											
					INTERSECTIONS			AREA	202 WEARING COURSE REMOVED	407		448 ASPHALT CONCRETE				
					DETAIL DIMENSION					TACK COAT, TRACKLESS TACK, @ 0.075 GAL./S.Y.	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICKNESS	INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	SURFACE COURSE, TYPE 1, PG 64-22	
					A	B	C	FT.	FT.							FT.
LOCATION 1 TOTALS (FROM PREVIOUS SHEET)										8874.4	667.5	445.7		248.6		310.2
1	KNO	U.S. 62	RT	FLAT RUN RD	73	21	128	604.3	604.3	45.4	30.3	1.00	16.8	1.25	21.0	
1	KNO	U.S. 62	RT	TOUGH ST	18	22	26	48.0	48.0	3.6	2.4	1.00	1.4	1.25	1.7	
1	KNO	U.S. 62	LT	WASHINGTON ST	15	21	30	42.5	42.5	3.2	2.2	1.00	1.2	1.25	1.5	
1	KNO	U.S. 62	RT	WASHINGTON ST	20	22	37	65.6	65.6	5.0	3.3	1.00	1.9	1.25	2.3	
1	KNO	U.S. 62	RT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	W ROSS ST	15	22	31	44.2	44.2	3.4	2.3	1.00	1.3	1.25	1.6	
1	KNO	U.S. 62	RT	E ROSS ST	15	38	50	73.4	73.4	5.6	3.7	1.00	2.1	1.25	2.6	
1	KNO	U.S. 62	LT	ORCHARD ST	15	24	40	53.4	53.4	4.1	2.7	1.00	1.5	1.25	1.9	
1	KNO	U.S. 62	RT	DRIVE/ALLEY	18	21	32	53.0	53.0	4.0	2.7	1.00	1.5	1.25	1.9	
1	KNO	U.S. 62	RT	DRIVE/ALLEY	20	21	28	54.5	54.5	4.1	2.8	1.00	1.6	1.25	1.9	
1	KNO	U.S. 62	RT	DRIVE/ALLEY	15	22	30	43.4	43.4	3.3	2.2	1.00	1.3	1.25	1.6	
1	KNO	U.S. 62	RT	DRIVE/ALLEY	18	21	28	49.0	49.0	3.7	2.5	1.00	1.4	1.25	1.8	
1	KNO	U.S. 62	LT	TILTON ST	15	32	39	59.2	59.2	4.5	3.0	1.00	1.7	1.25	2.1	
1	KNO	U.S. 62	LT	W RAMBO ST	20	35	47	91.2	91.2	6.9	4.6	1.00	2.6	1.25	3.2	
1	KNO	U.S. 62	RT	E RAMBO ST	20	24	35	65.6	65.6	5.0	3.3	1.00	1.9	1.25	2.3	
1	KNO	U.S. 62	LT	FR SNOKE ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	RT	FR SNOKE ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	W CHURCH ST	20	20	33	58.9	58.9	4.5	3.0	1.00	1.7	1.25	2.1	
1	KNO	U.S. 62	RT	E CHURCH ST	20	20	30	55.6	55.6	4.2	2.8	1.00	1.6	1.25	2.0	
1	KNO	U.S. 62	LT	OAK ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	W WALNUT ST	20	22	32	60.0	60.0	4.5	3.0	1.00	1.7	1.25	2.1	
1	KNO	U.S. 62	RT	E WALNUT ST	20	21	35	62.3	62.3	4.7	3.2	1.00	1.8	1.25	2.2	
1	KNO	U.S. 62	LT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	RT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	W SOUTH ST	15	22	31	44.2	44.2	3.4	2.3	1.00	1.3	1.25	1.6	
1	KNO	U.S. 62	RT	E SOUTH ST	15	21	32	44.2	44.2	3.4	2.3	1.00	1.3	1.25	1.6	
1	KNO	U.S. 62	LT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	RT	ALLEY	10	10	20	16.7	16.7	1.3	0.9	1.00	0.5	1.25	0.6	
1	KNO	U.S. 62	LT	W MAIN ST	54	23		138.0	138.0	10.4	6.9	1.00	3.9	1.25	4.8	
1	KNO	U.S. 62	LT	SR 205	65	45		325.0	325.0	24.4	16.3	1.00	9.1	1.25	11.3	
1	KNO	U.S. 62		EXTRA AREAS FROM SHEET 17				1,150.0	1,150.0	86.3	57.5	1.00	32.0	1.25	40.0	
1	KNO	U.S. 62	LT	CEDAR ST	15	22	30	43.4	43.4	3.3	2.2	1.00	1.3	1.25	1.6	
1	KNO	U.S. 62	RT	S CEDAR ST	15	33	36	57.5	57.5	4.4	2.9	1.00	1.6	1.25	2.0	
1	KNO	U.S. 62	LT	LINWOOD ST	20	19	42	67.8	67.8	5.1	3.4	1.00	1.9	1.25	2.4	
1	KNO	U.S. 62	RT	S LINWOOD ST	20	23	48	78.9	78.9	6.0	4.0	1.00	2.2	1.25	2.8	
1	KNO	U.S. 62	LT	BLACK RD	40	28	91	264.5	264.5	19.9	13.3	1.00	7.4	1.25	9.2	
1	KNO	U.S. 62	RT	HILLCREST DR	20	18	38	62.3	62.3	4.7	3.2	1.00	1.8	1.25	2.2	
1	KNO	U.S. 62	LT	BODY RD	30	22	61	138.4	138.4	10.4	7.0	1.00	3.9	1.25	4.9	
1	KNO	U.S. 62	RT	BUCKEYE RD	50	22	98	333.4	333.4	25.1	16.7	1.00	9.3	1.25	11.6	
1	KNO	U.S. 62	RT	MICKLEY RD	40	24	120	320.0	320.0	24.0	16.0	1.00	8.9	1.25	11.2	
1	KNO	U.S. 62	LT	MICKLEY RD	60	25	115	466.7	466.7	35.1	23.4	1.00	13.0	1.25	16.3	
1	KNO	U.S. 62	RT	MICKLEY RD	85	21	115	642.3	642.3	48.2	32.2	1.00	17.9	1.25	22.4	
1	KNO	U.S. 62	LT	PRITCHARD RD	45	31	120	377.5	377.5	28.4	18.9	1.00	10.5	1.25	13.2	
1	KNO	U.S. 62	LT	BRINKHAVEN RD	40	28	105	295.6	295.6	22.2	14.8	1.00	8.3	1.25	10.3	
1	KNO	U.S. 62	RT	ROAD ACROSS FROM BRINKHAVEN RD	42	27	110	319.7	319.7	24.0	16.0	1.00	8.9	1.25	11.2	
1	KNO	U.S. 62	LT	MAIN ST	40	23	85	240.0	240.0	18.0	12.0	1.00	6.7	1.25	8.4	
1	KNO	U.S. 62	RT	HUNTER RD	40	19	80	220.0	220.0	16.5	11.0	1.00	6.2	1.25	7.7	
1	KNO	U.S. 62	LT	STATE ST	45	25	103	320.0	320.0	24.0	16.0	1.00	8.9	1.25	11.2	
1	KNO	U.S. 62	LT	STATE ST	40	26	90	257.8	257.8	19.4	12.9	1.00	7.2	1.25	9.0	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)										16,799.3	1,264.2	844.1		471.1		587.7

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CALCULATED LME CHECKED DNM
EXTRA AREA DATA
KNO-62-0.00
11/28

BRIDGE TREATMENT

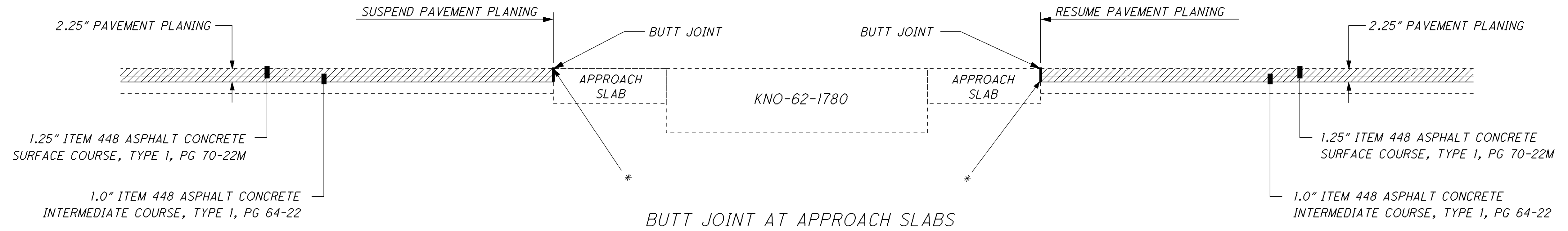
- LOCATION 1
- DETAIL ② KNO-62-1038: BUTT JOINT AT APPROACH SLABS
- DETAIL ② KNO-62-1428: BUTT JOINT AT APPROACH SLABS
KNO-62-1445: OVERHEAD, MILL AND FILL ROADWAY 2.25"
- DETAIL ③ KNO-62-1732: BUTT JOINT AT BRIDGE DECK
- DETAIL ① KNO-62-1780: BUTT JOINT AT APPROACH SLABS
KNO-62-1882: BUTT JOINT AT NEW PAVEMENT ON EITHER SIDE OF BRIDGE
- DETAIL ④ KNO-62-1908: SAME AS ROADWAY
- DETAIL ② KNO-62-2192: BUTT JOINT AT APPROACH SLABS

DEDUCTIONS = PAVEMENT/SHOULDER WIDTHS X (BRIDGE LENGTH + APPROACH SLABS)

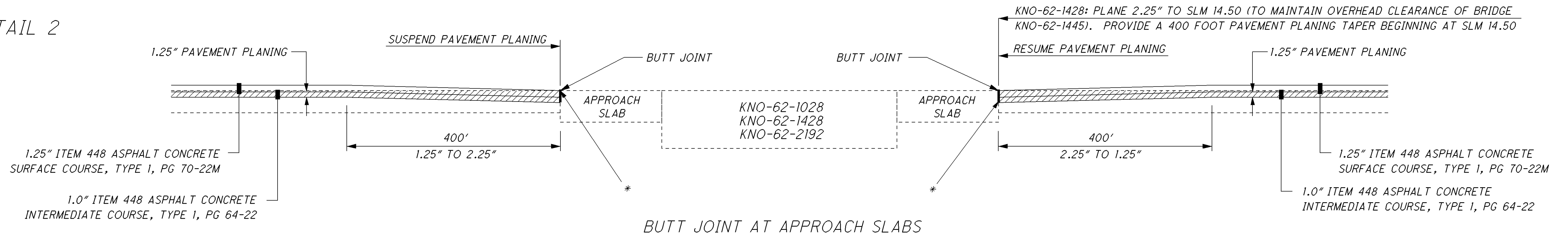
BRIDGE DATA																				
NO	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	AREA	APPROACH SLAB LENGTH	APPROACH SLAB WIDTH	APPROACH SLAB AREA (INCLUDES BOTH APPROACH SLABS)	DETAILS (SHEET 13)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 8)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 9)	254		407		448			516		
		LIN. FT.	LIN. FT.	SQ. YD.	LIN. FT.	LIN. FT.	SQ. YD.		SQ.YD.	SQ.YD.	DEPTH OF PAVEMENT PLANING INCHES	PAVEMENT PLANING, ASPHALT CONCRETE SQ.YD.	TACK COAT @ 0.075 GAL/SQ.YD. GALLON	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL/SQ.YD. GALLON	THICKNESS INCHES	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22 CU.YD.	THICKNESS INCHES	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M CU.YD.	2" DEEP JOINT SEALER, AS PER PLAN FEET	
1	KNO-62-1028	50.0	40.0	222.3	20.0	40.0	177.8	2	200.0	40.0									48.0	
1	KNO-62-1428	326.5	34.5	1,251.6	25.0	34.5	191.7	2	1,004.0	167.3									56.0	
1	KNO-62-1445	OVERHEAD ON U.S. 36																		
1	KNO-62-1732	30.0	30.0	100.0				3	80.0	13.3									56.0	
1	KNO-62-1780	50.0	36.0	200.0	20.0	36.0	160.0	1	360.0										72.0	
1	KNO-62-1882	79.5	40.0	353.4	15.0	40.0	133.3		BUTT JOINT AT NEW PAVEMENT ON EITHER SIDE OF BRIDGE											
1	KNO-62-1908	22.3	30.0	74.4				4	54.5	9.9	1.25	74.4	5.6	3.7	1.00	2.1	1.25	2.6		
1	KNO-62-2192	370.5	34.0	1,399.7	25.0	34.0	188.9	2	1,121.3										68.0	
		928.8				210.0														
		BRIDGE DEDUCTIONS								2,819.8	230.5									
		LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											74.4	5.6	3.7		2.1		2.6	300.0

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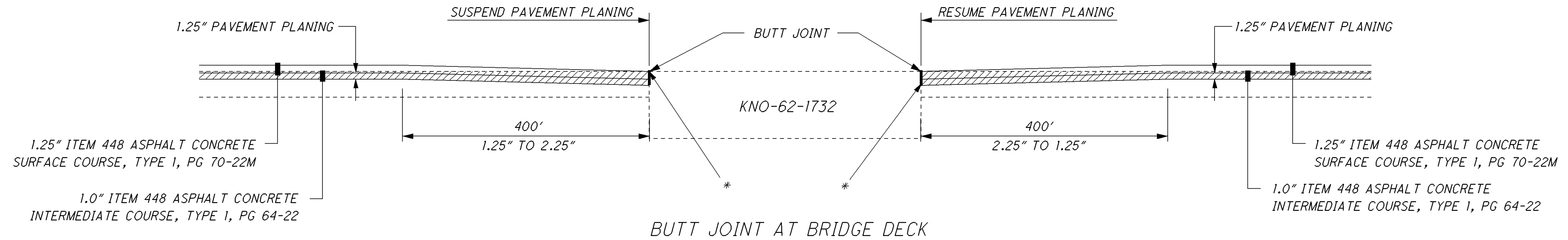
DETAIL 1



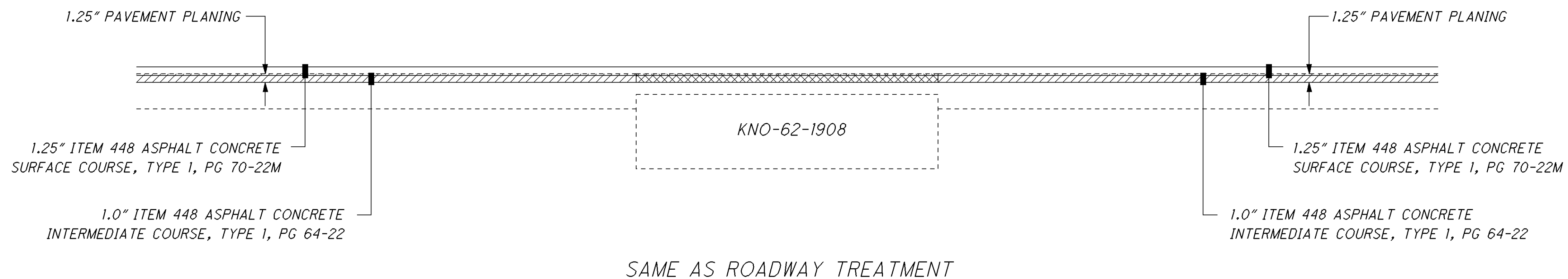
DETAIL 2



DETAIL 3



DETAIL 4



 ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE

 ITEM 202 WEARING COURSE REMOVED

* 2.0" DEEP JOINT SEALER, AS PER PLAN

DETAILS NOT TO SCALE

BRIDGE DECK TREATMENT DATA

KNO-62-0.00

CALCULATED
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CHECKED
DNM

13
28

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CURB RAMP CALCULATIONS

REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202			608		690 SPECIAL-MISC.:			609	COMMENTS
				WALK REMOVED	WALK REMOVED, AS PER PLAN	CURB REMOVED	4" CONCRETE WALK, (CURB RAMP AREA)	4" CONCRETE WALK, (EXTRA WALK AREA)	DETECTABLE WARNING	CURB RAMPS,		CURB, TYPE 6	
										TYPE A2			
CL./LT./RT.	SQ. FT.	SQ. FT.	FT.	SQ. FT.	SQ. FT.	SQ. FT.		EACH		FT.			
U.S. 62 -MARTINSBURG													
1-CR	14	WEST ST	LT	20			12		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
2-CR	14	WEST ST	LT	16			8		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
3-CR	14	WEST ST	RT	32			8	16	8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
4-CR	14	WEST ST	RT	44			8	28	8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
5-CR	14	BEFORE INTERSECTION S.R. 586/541	LT	32			32		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
6-CR	14	BEFORE INTERSECTION S.R. 586/541	RT	32			24		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
	14	BEFORE INTERSECTION S.R. 586/541	RT	24			16		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
7-CR	14	AFTER INTERSECTION S.R. 541	RT	64			8		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
U.S. 62 -DANVILLE													
8-CR	15	W. WASHINGTON ST	LT	20			12		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
9-CR	15	ORCHARD ST.	LT	72		7	48	16	8			13	ADD DETECTABLE WARNING, NO RAMP REQUIRED
10-CR	15	ORCHARD ST.	LT	28			28			1		18	RAMP INCLUDES DETECTABLE WARNING
11-CR	15	TILTON ST.	LT	56			48		8			5	ADD DETECTABLE WARNING, NO RAMP REQUIRED
12-CR	15	W. RAMBO ST.	LT	90		10	28	34	8			20	ADD DETECTABLE WARNING, NO RAMP REQUIRED
	15	W. RAMBO ST.	LT		10		8		ADD DETECTABLE WARNING, NO RAMP REQUIRED				
13-CR	15	E. RAMBO ST.	RT		72	9	72			1		25	RAMP INCLUDES DETECTABLE WARNING
14-CR	16	HICKORY ALLEY	LT	21			13		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
15-CR	16	W. SOUTH ST.	LT	25			17		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
16-CR	16	E. SOUTH ST.	RT	27		6	19		8			6	ADD DETECTABLE WARNING, NO RAMP REQUIRED
17-CR	16	S. CEDAR ST.	RT	30			22		8				ADD DETECTABLE WARNING, NO RAMP REQUIRED
18-CR	16	S. CEDAR ST.	RT	28		12	28			1		16	RAMP INCLUDES DETECTABLE WARNING
SUB-TOTALS							461	94					
TOTALS (CARRIED TO LOCATION 1 SUB-SUMMARY)				661	72	44	555		136		3		103

CALCULATED
LME
CHECKED
DNM

CURB RAMP SUB-SUMMARY

KNO-62-0.00

SEE SHEET 14 FOR CURB RAMP/WALK QUANTITIES

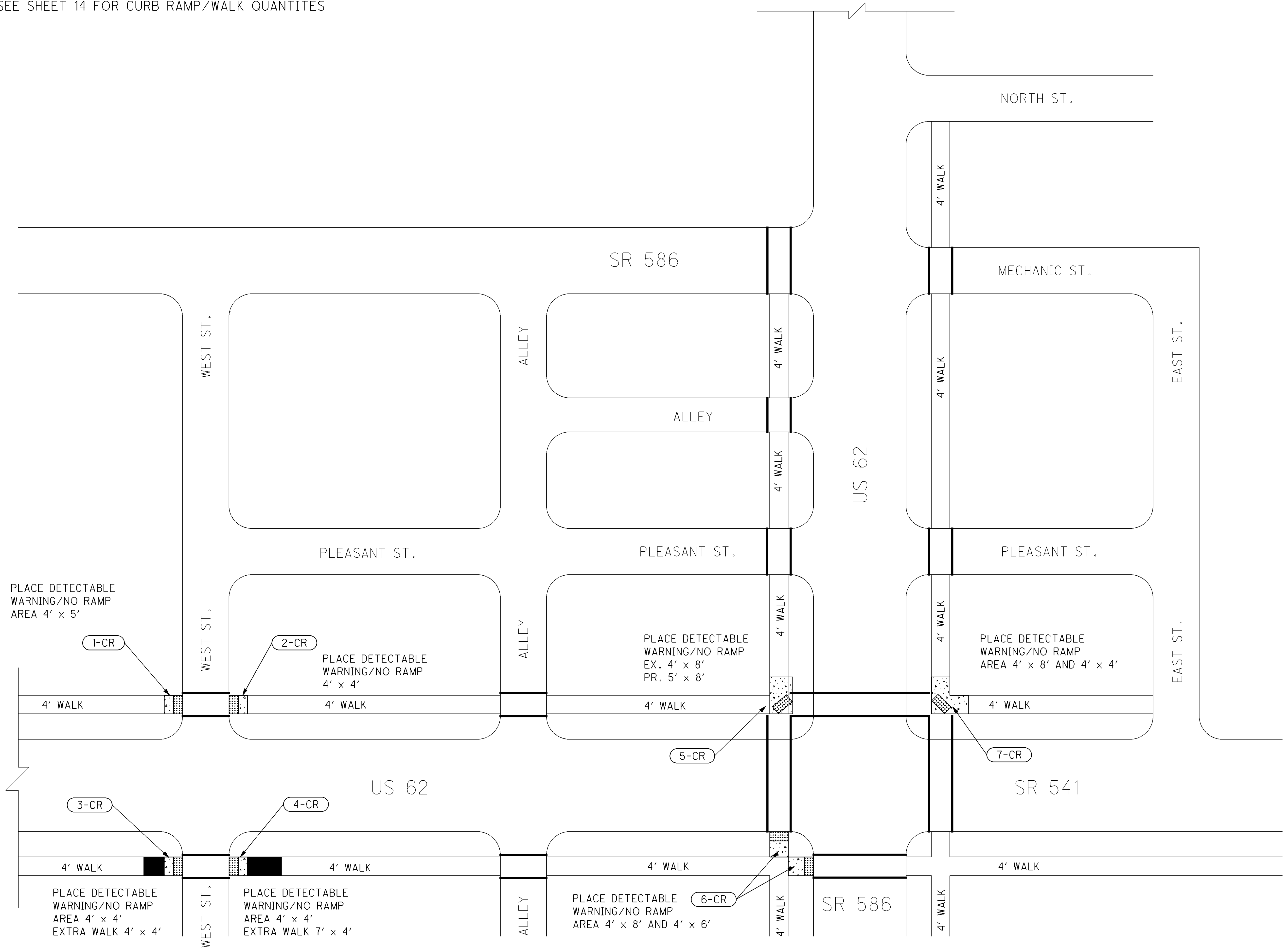


DRAWING
NOT TO SCALE

CALCULATED
LIVE
CHECKED
DNM

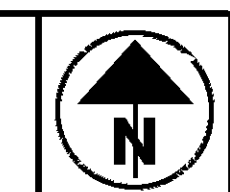
PLAN SHEET
U.S. 62 - MARTINSBURG

KNO-62-0.00



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SEE SHEET 14 FOR CURB RAMP/WALK QUANTITIES



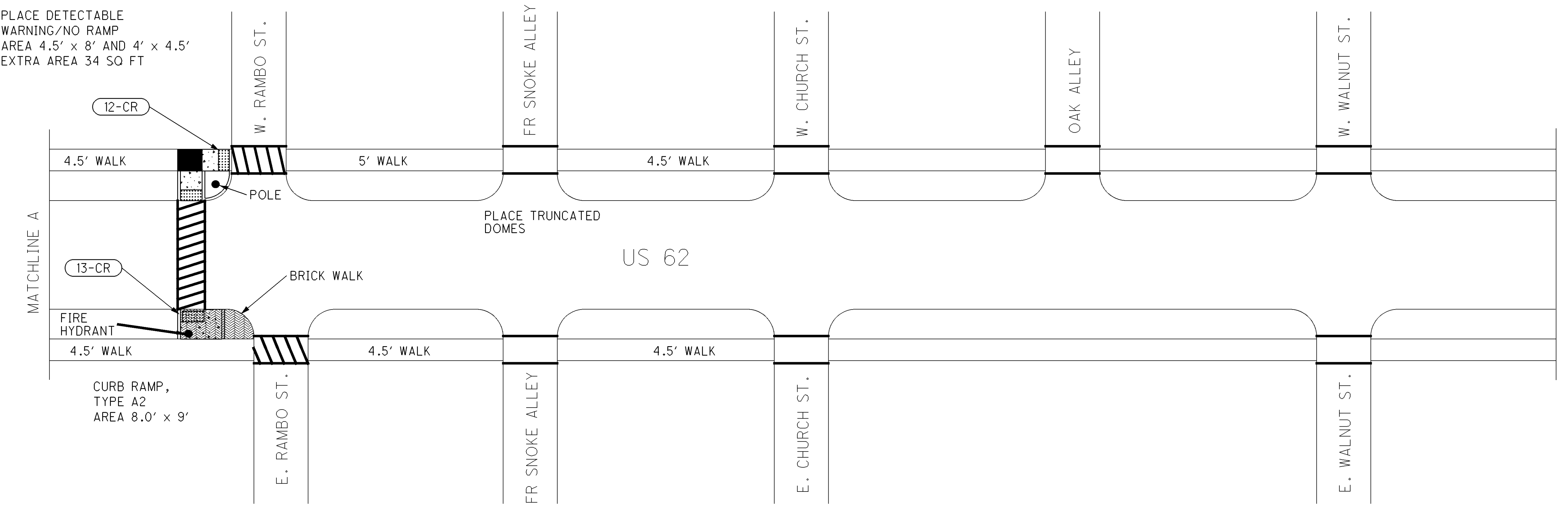
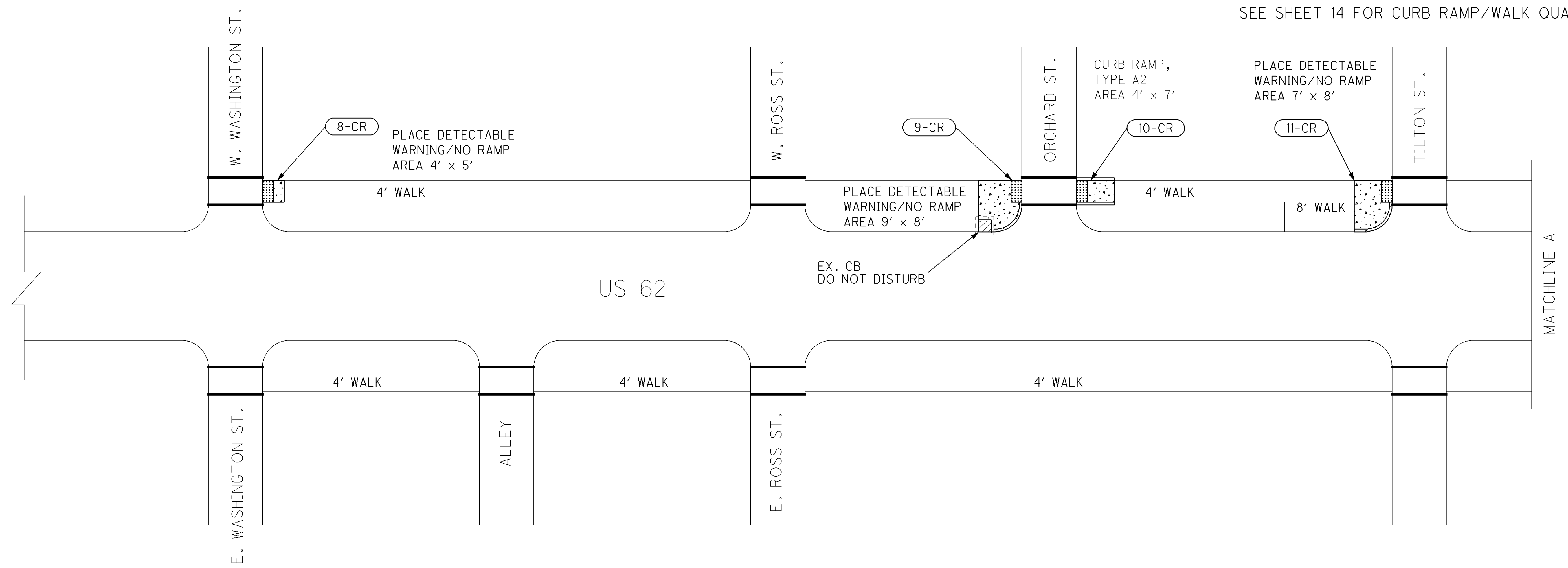
DRAWING
NOT TO SCALE

CALCULATED
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PLAN SHEET
U.S. 62 - DANVILLE

KNO-62-0.00

16
28



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SEE SHEET 14 FOR CURB RAMP/WALK QUANTITIES

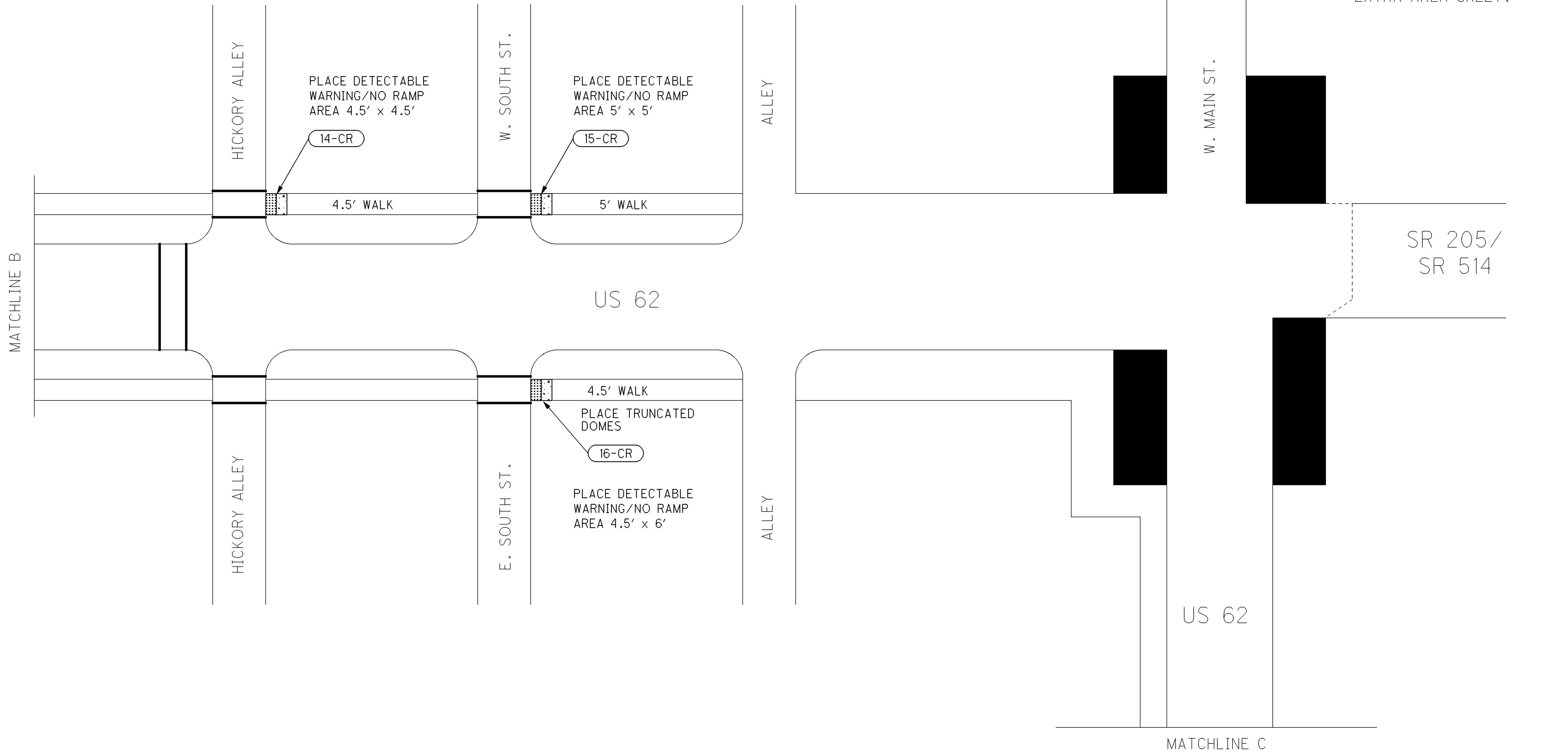


DRAWING
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CALCULATED
LIVE
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DNM

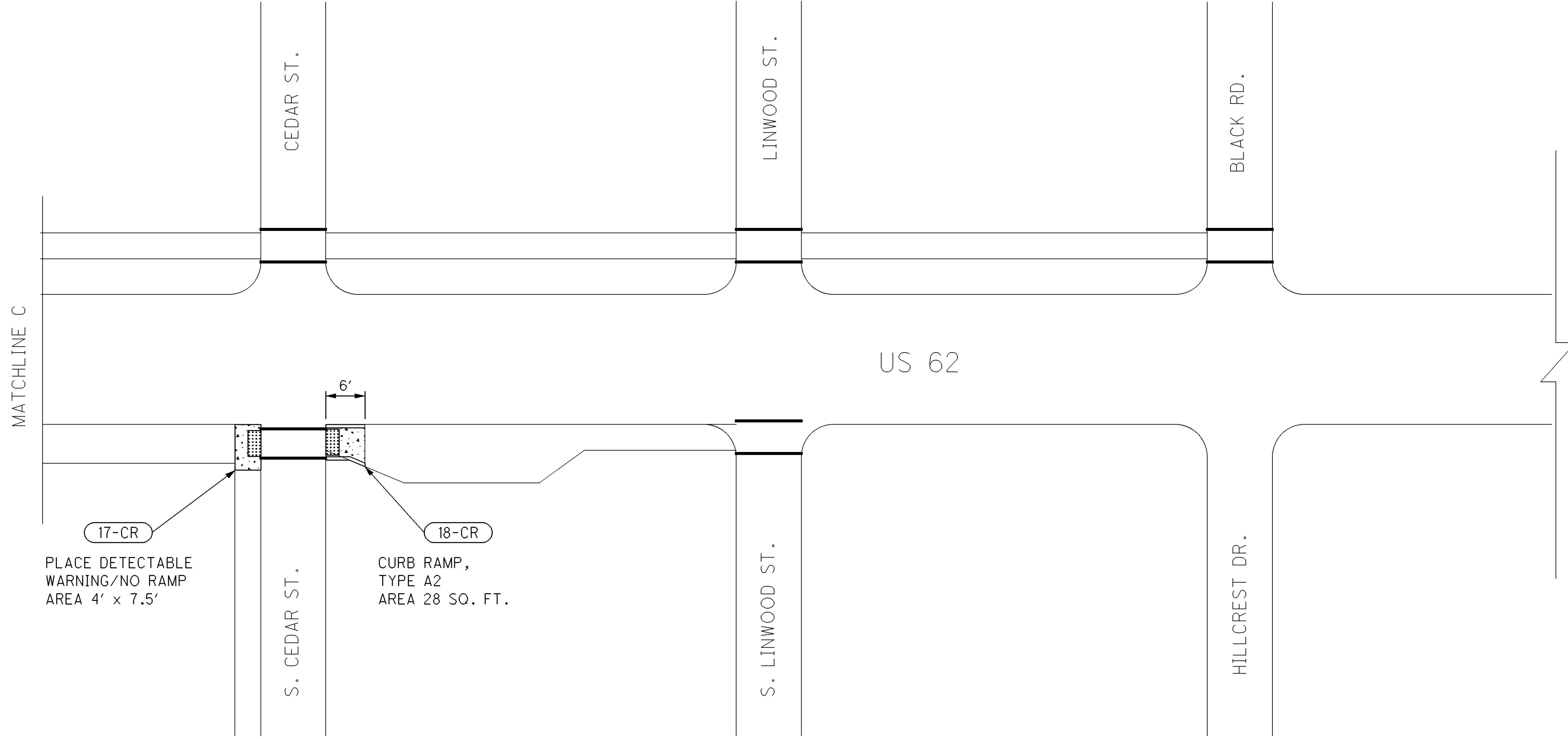
PLAN SHEET
U.S. 62 - DANVILLE

KNO-62-0.00



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SEE SHEET 14 FOR CURB RAMP/WALK QUANTITIES



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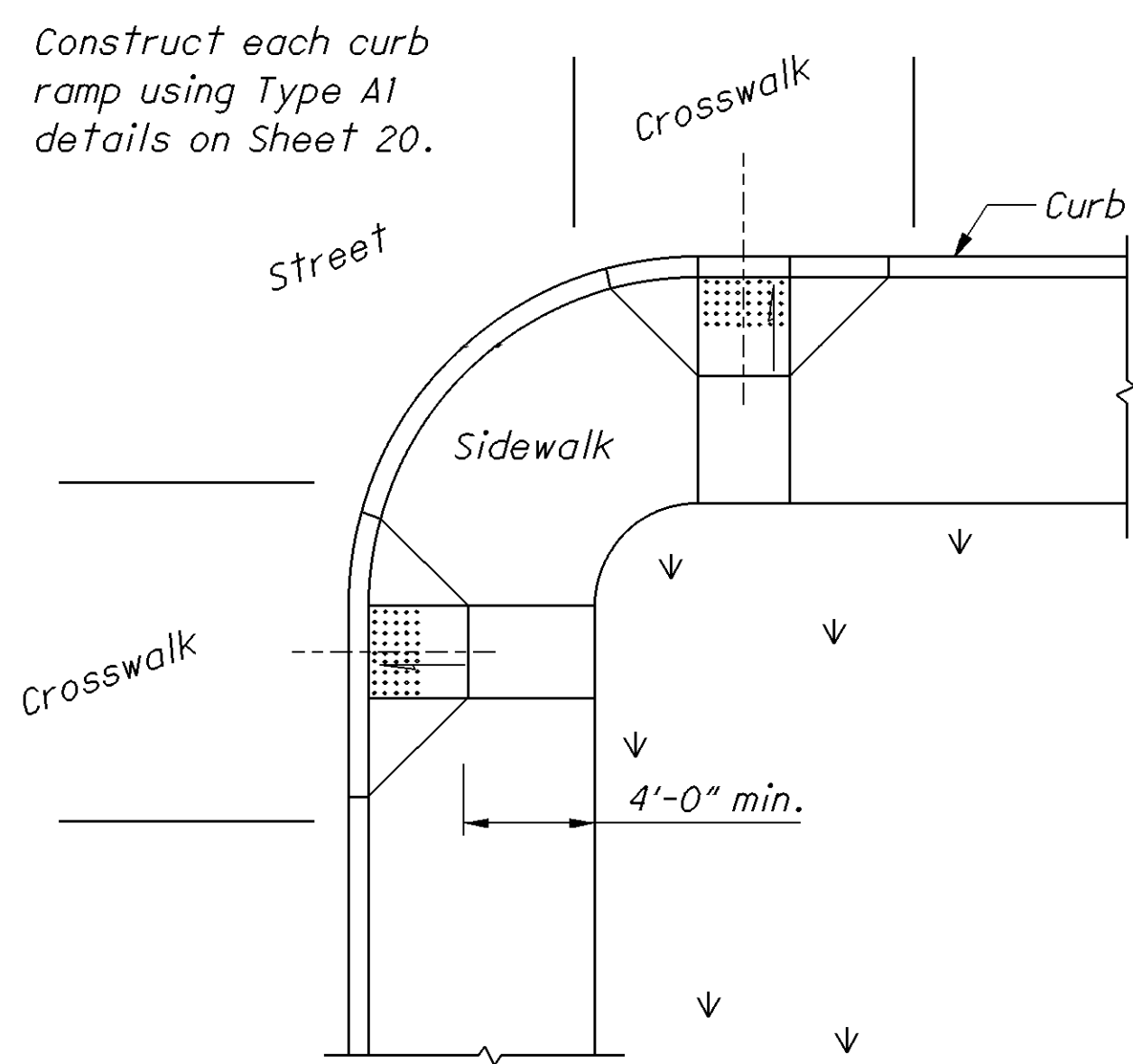
DRAWING
NOT TO SCALE

CALCULATED	LIVE
CHECKED	DNM

PLAN SHEET
U.S. 62 - DANVILLE

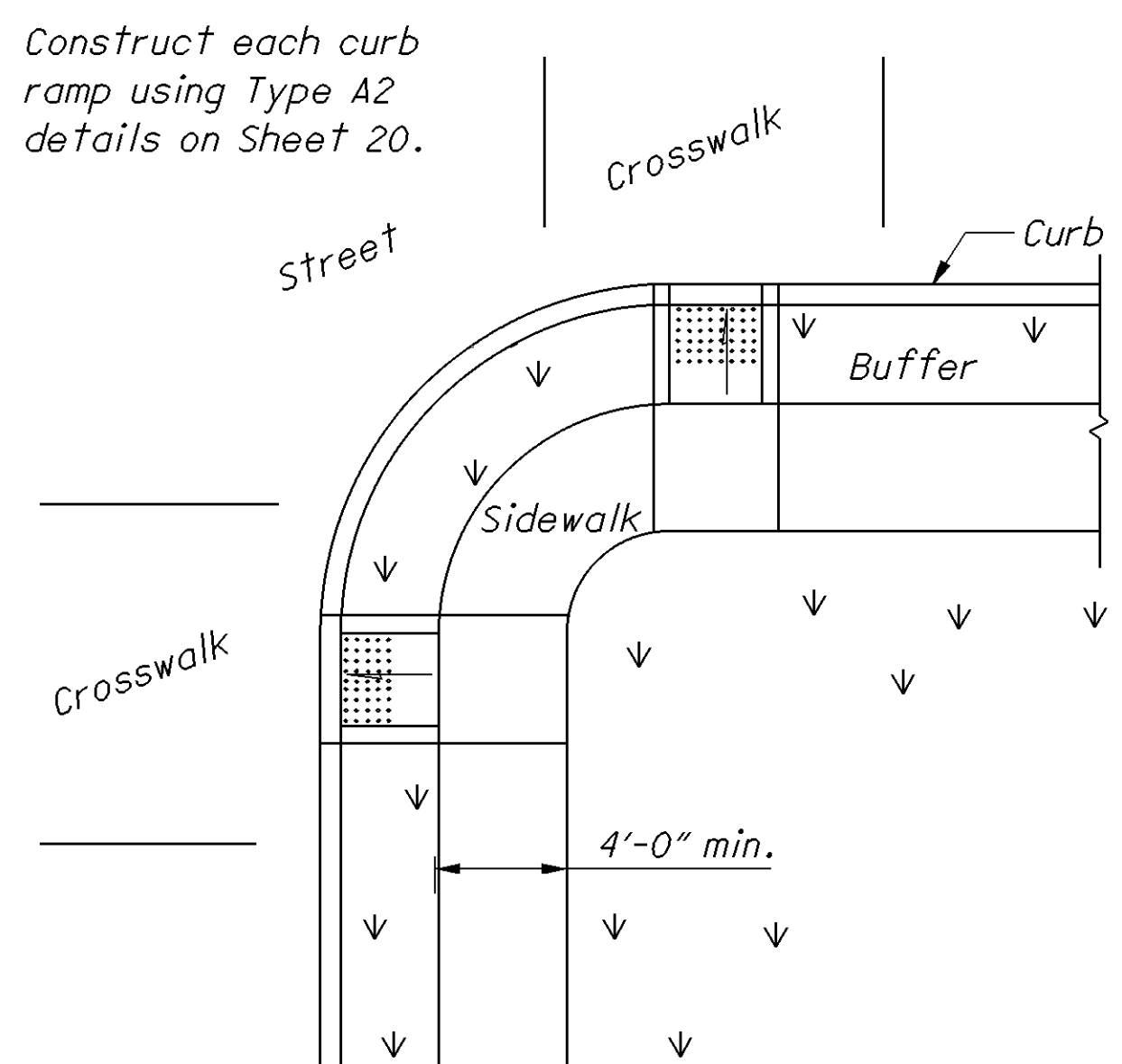
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18
28

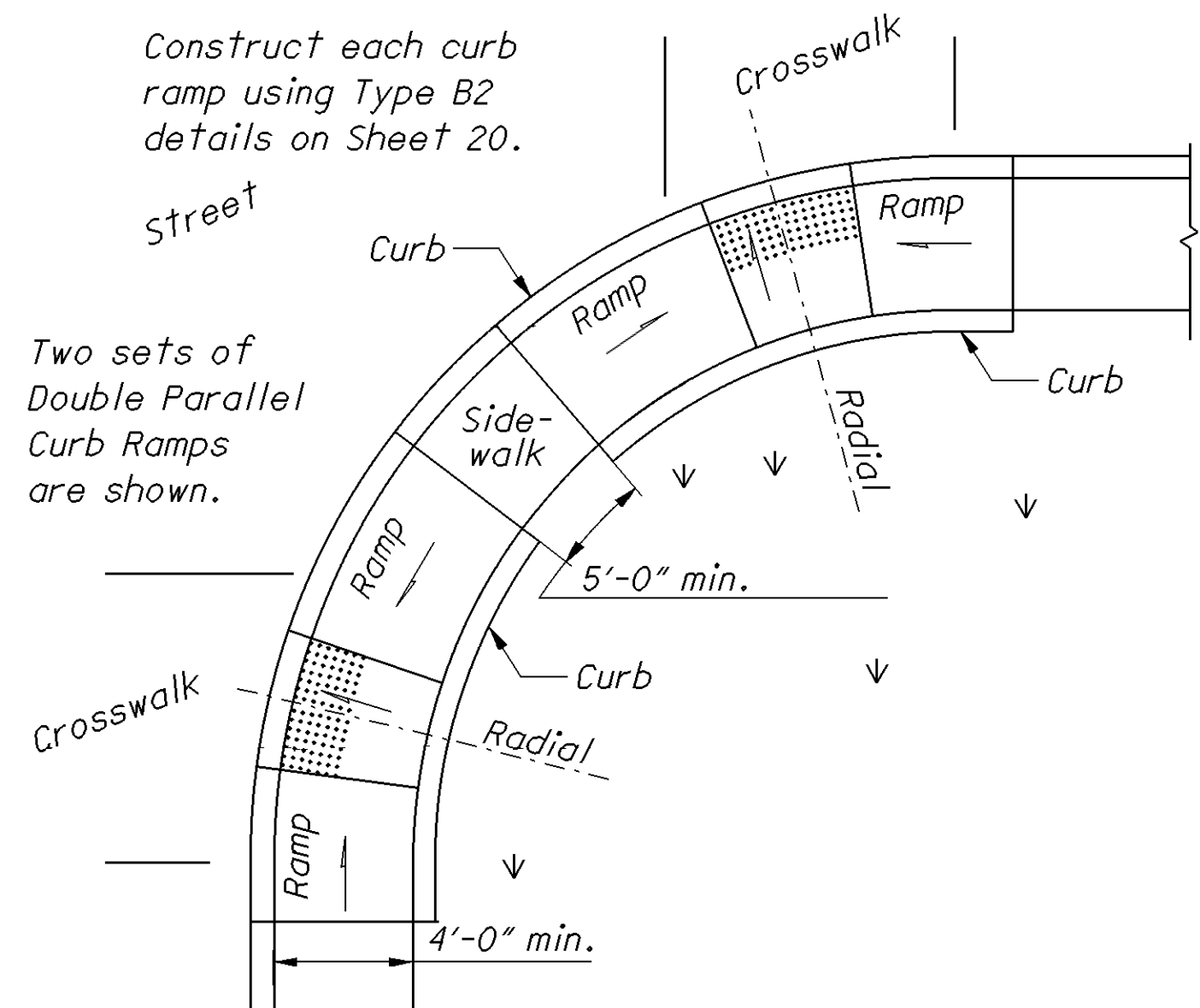


Use curb ramps with flared sides at locations with wide sidewalks.

PERPENDICULAR CURB RAMPS

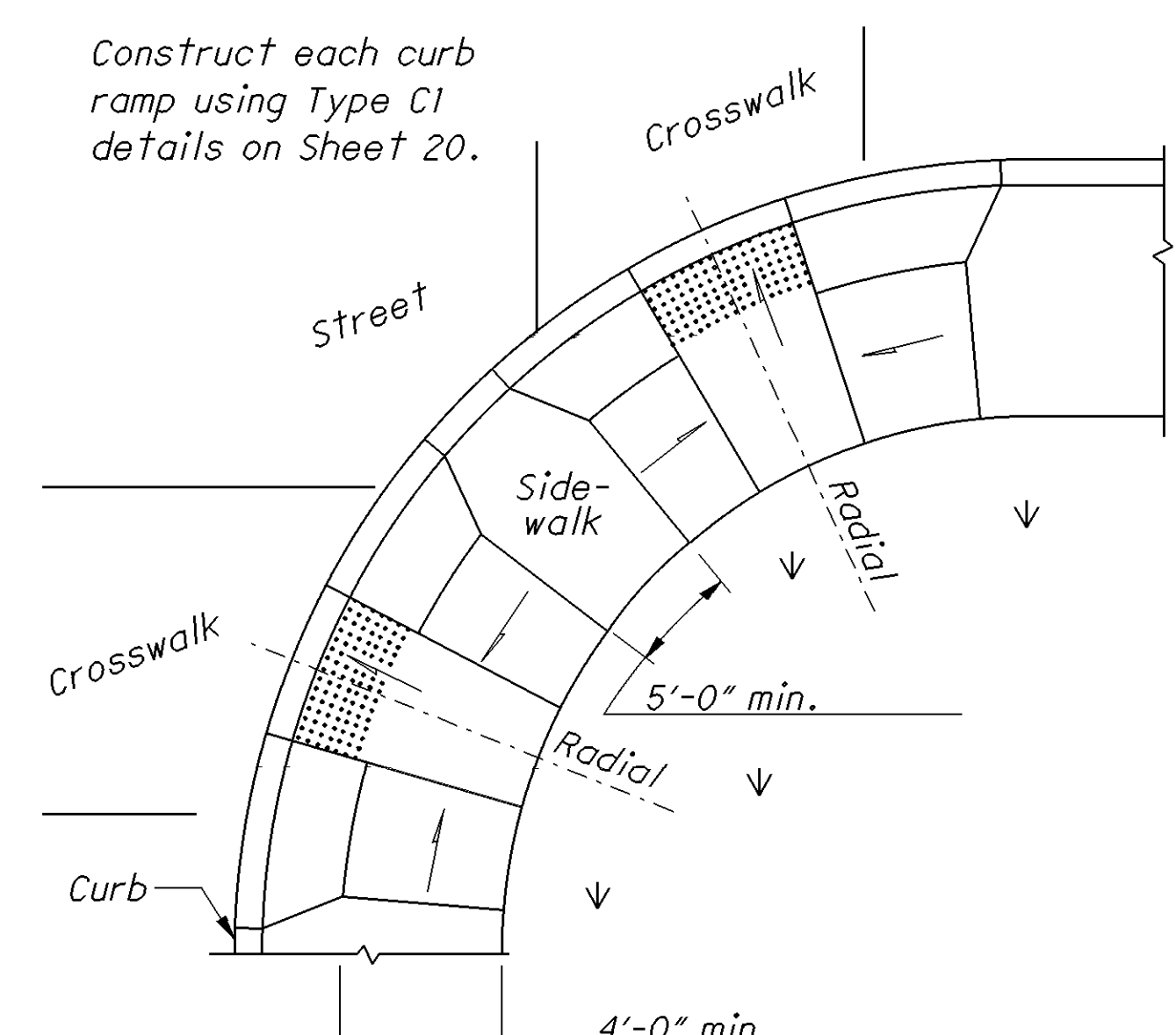


Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.



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

PARALLEL CURB RAMPS



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

COMBINATION CURB RAMPS

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 20 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown in the project plans.

The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

Excavate, form, place, finish, and cure according to 608.03.A, 608.03.B, 608.03.C, and 608.03.E.

DETECTABLE WARNINGS: Install Detectable Warnings on each curb ramp with approved materials, as shown on Sheet 21. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. 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.

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.

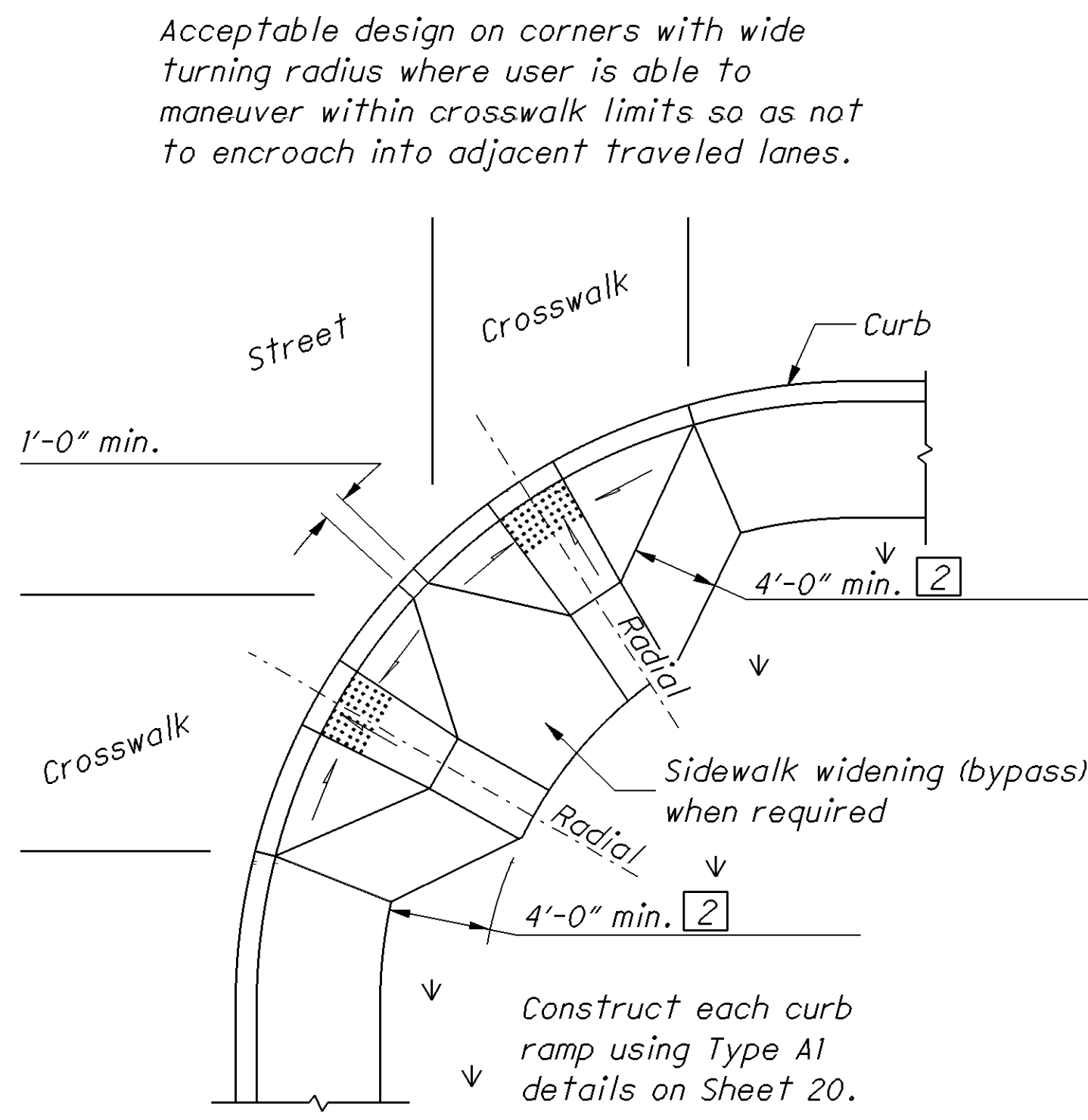
METHOD OF PAYMENT: New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type -- (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

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.

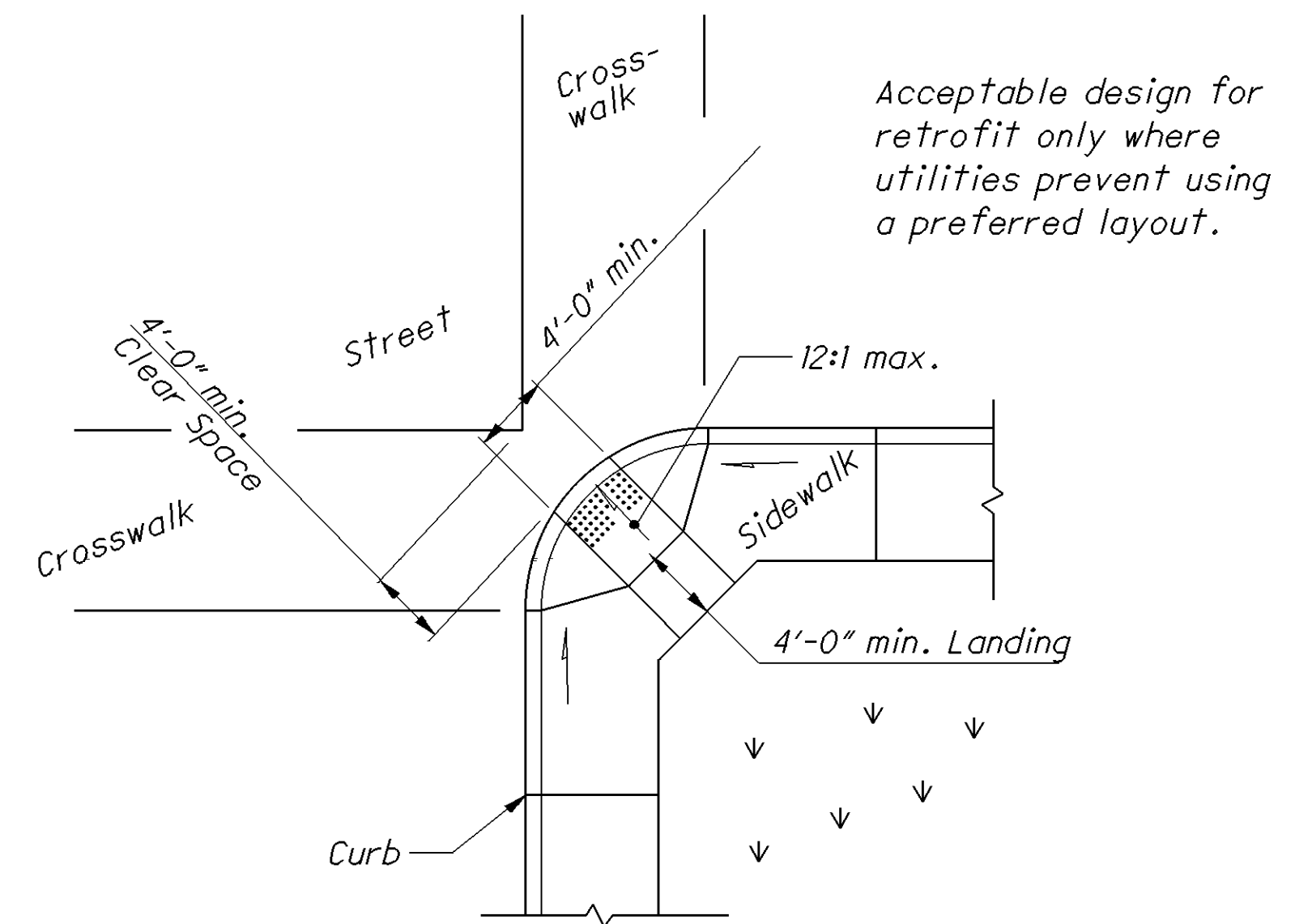
Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.

LEGEND

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.



PERPENDICULAR RAMPS



DIAGONAL RAMP (Type D)

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" .

ACCEPTABLE CONSTRUCTION PLACEMENT

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NOTES

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.

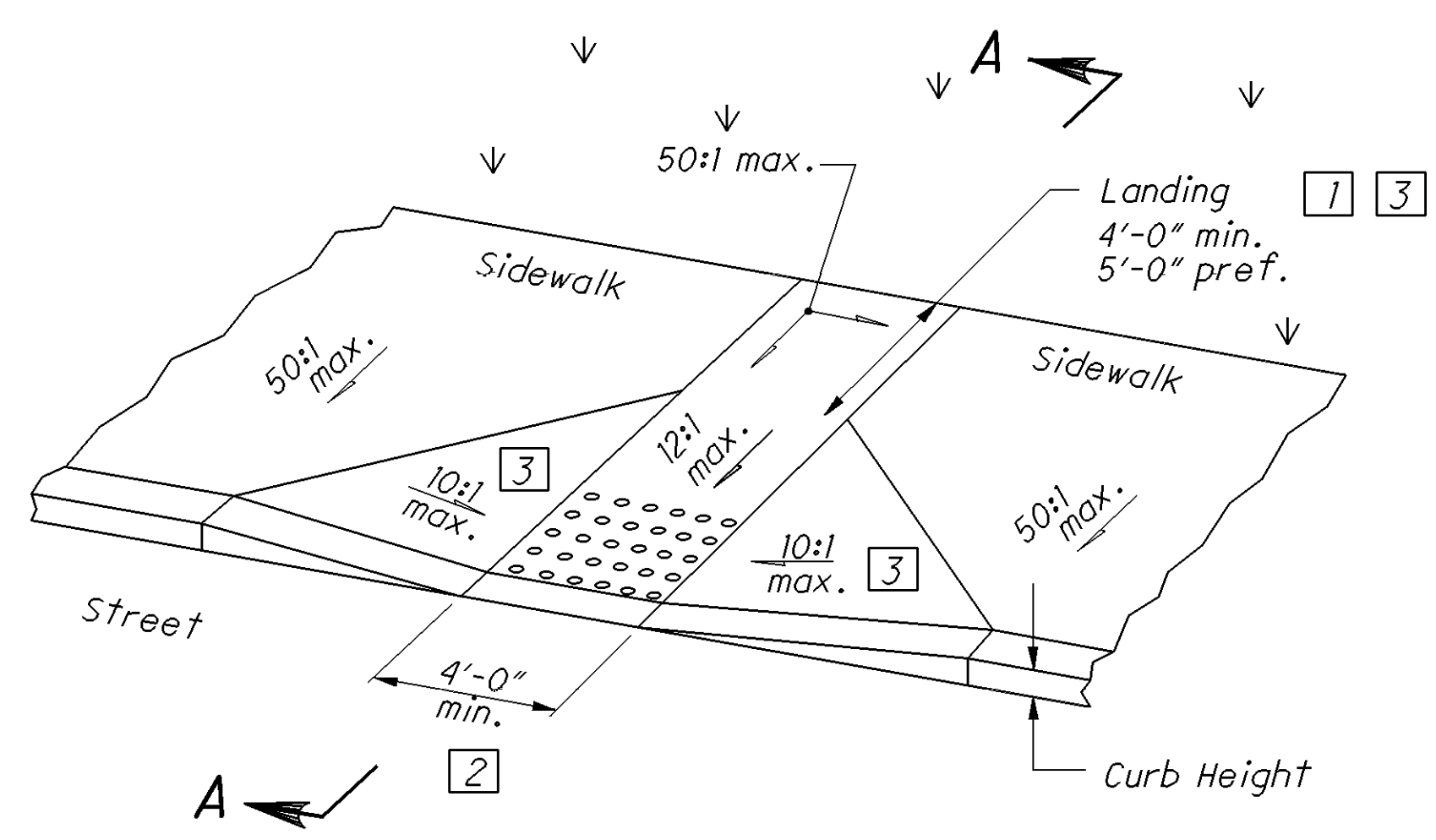
Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

LEGEND

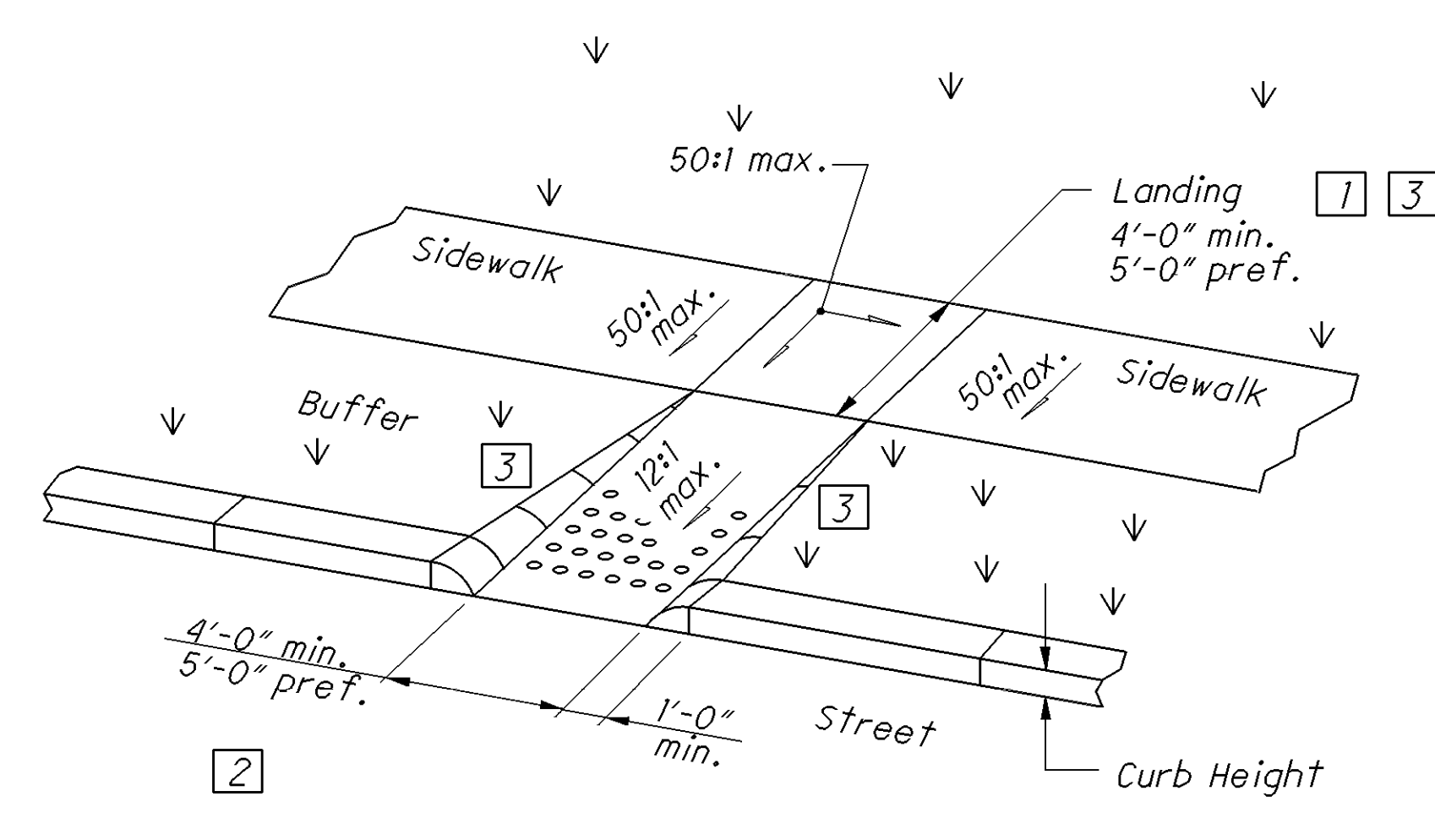
- 1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.
- 2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The 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 21 for Sections.

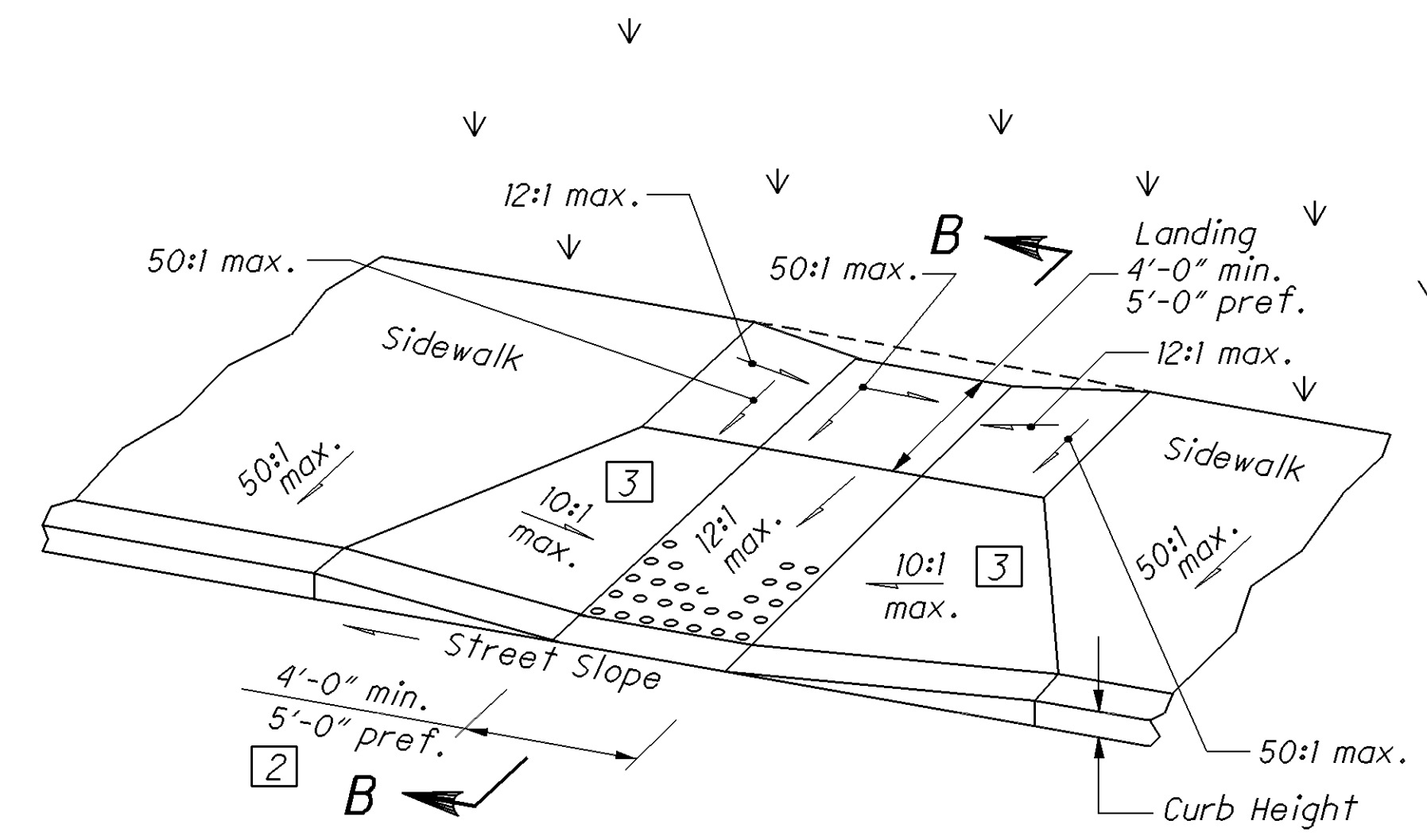


Type A1 (Perpendicular with flared sides)

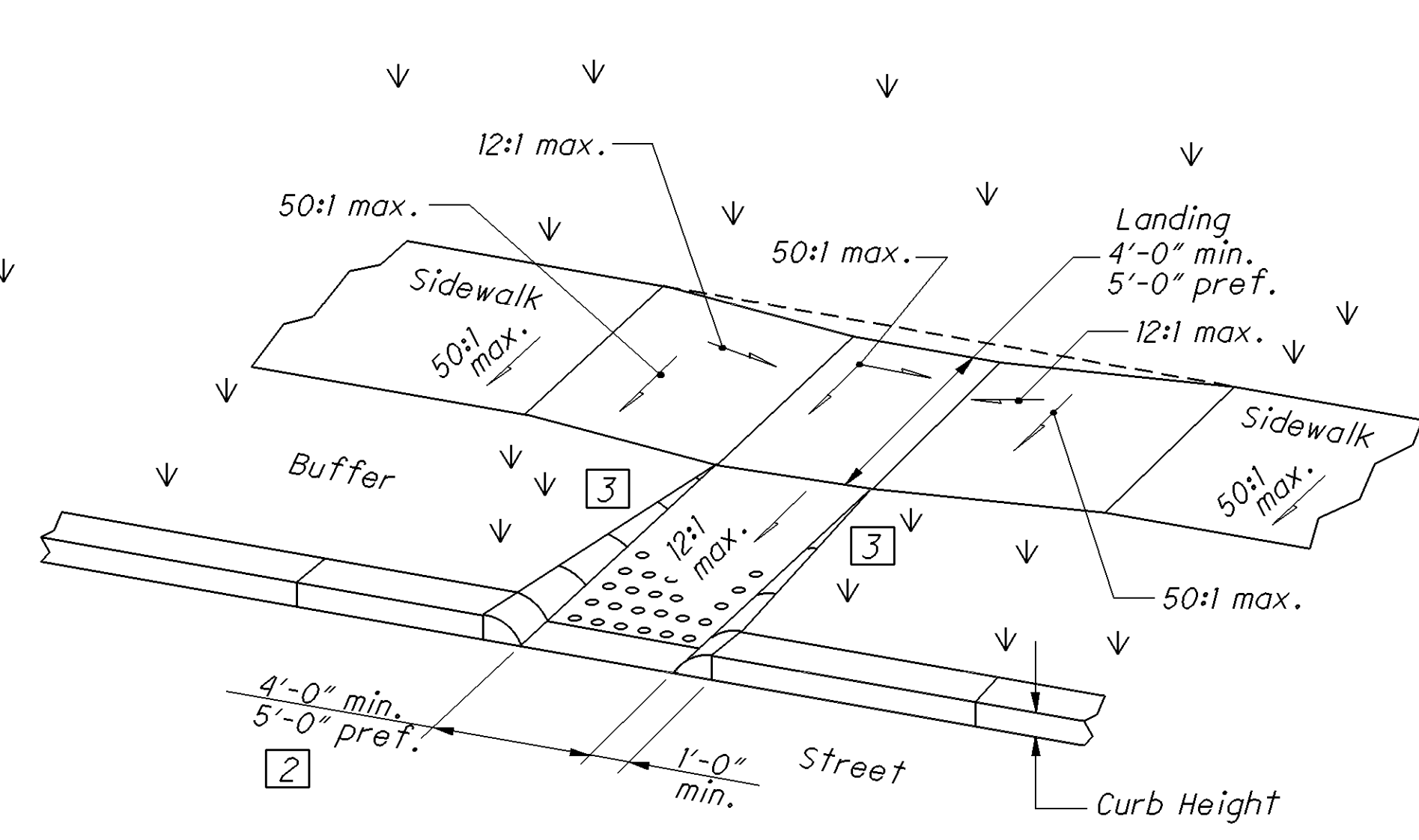


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

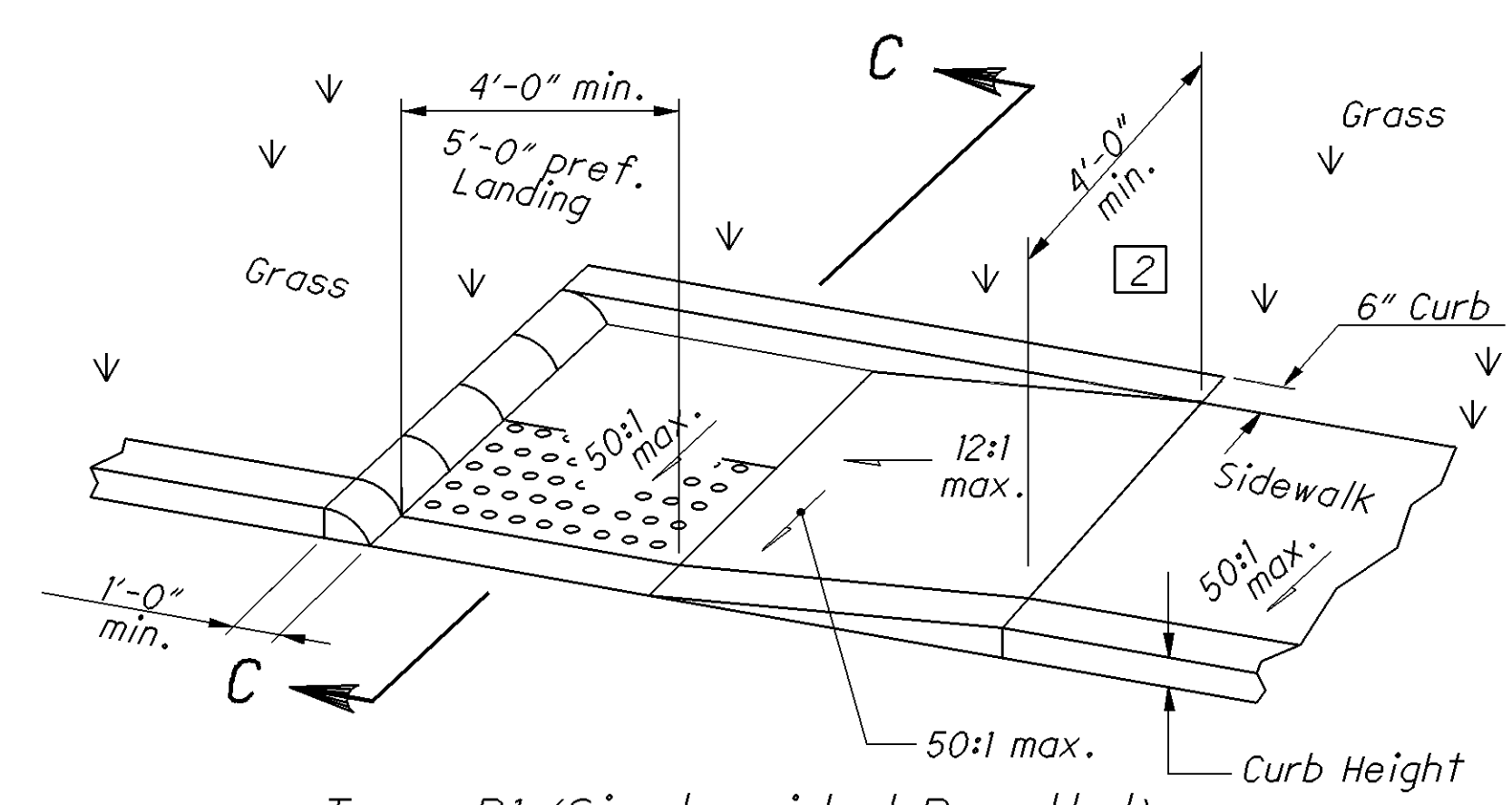


Type C1 (Combined with flared sides)

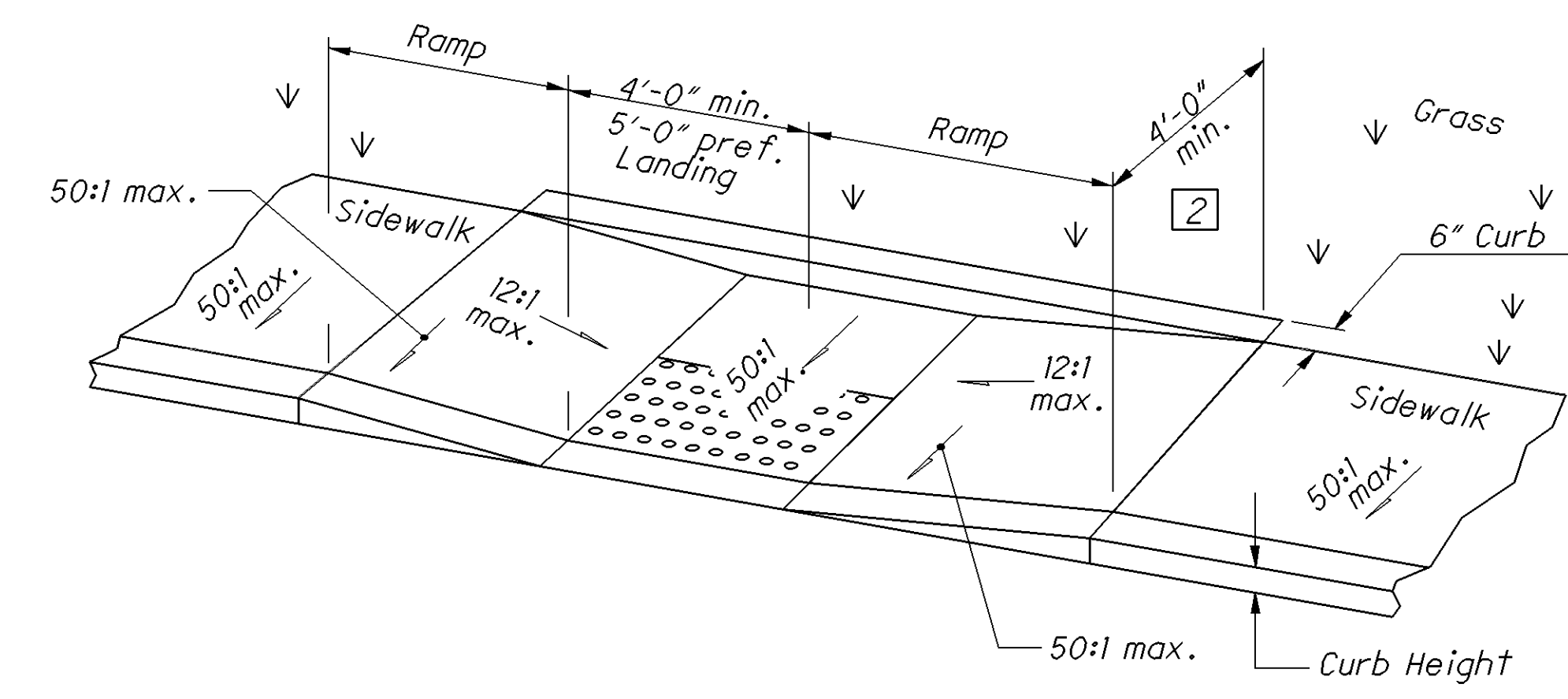


Type C2 (Combined with returned curb)

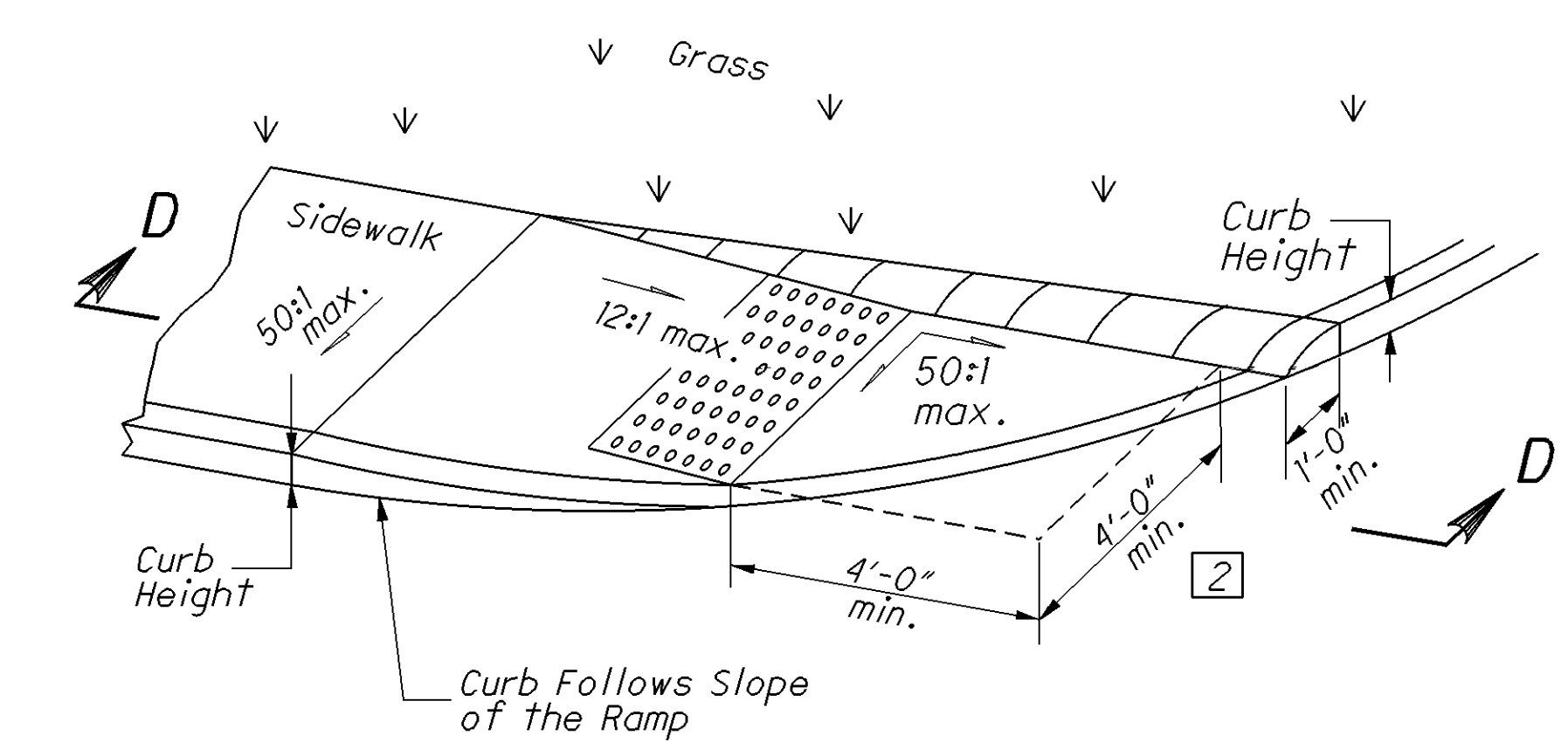
COMBINED CURB RAMP DETAILS



Type B1 (Single sided Parallel)



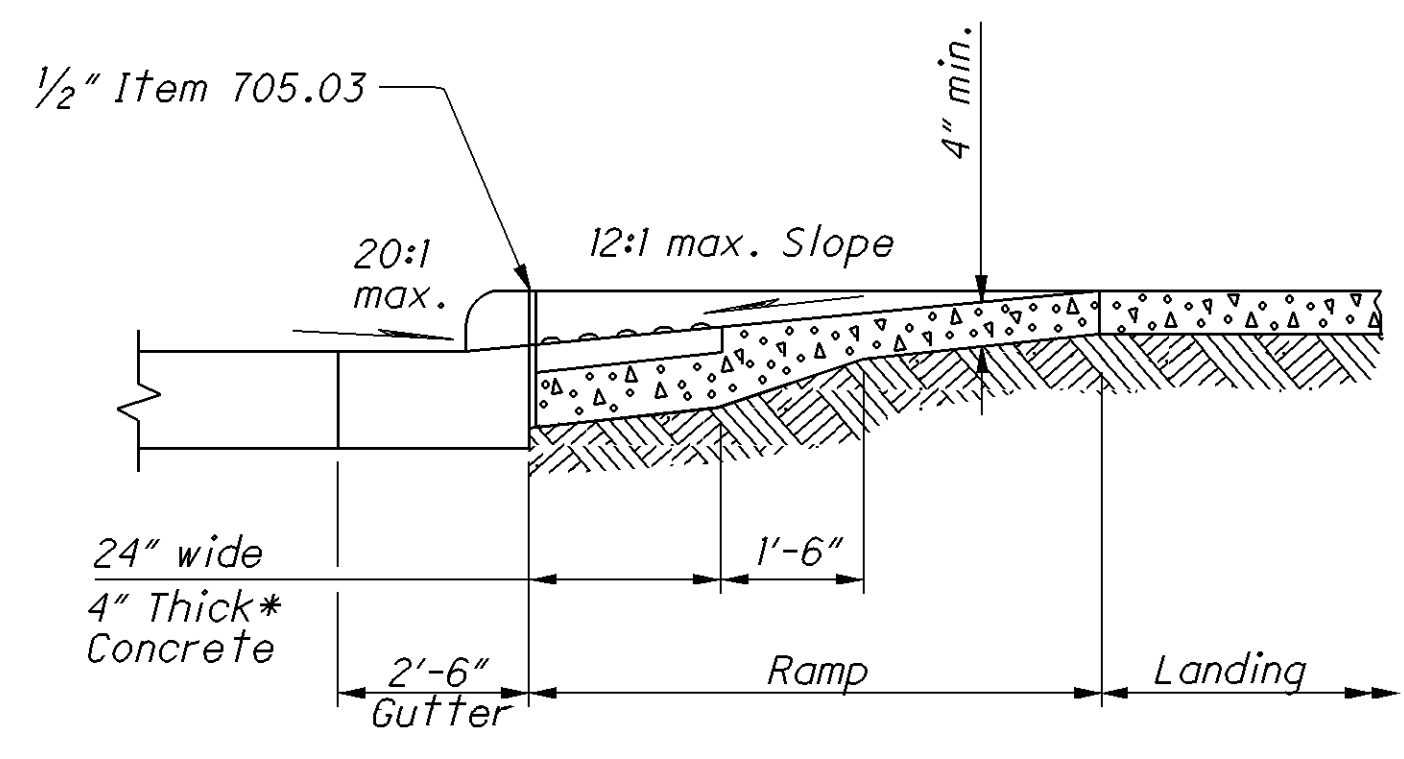
Type B2 (Double sided Parallel)



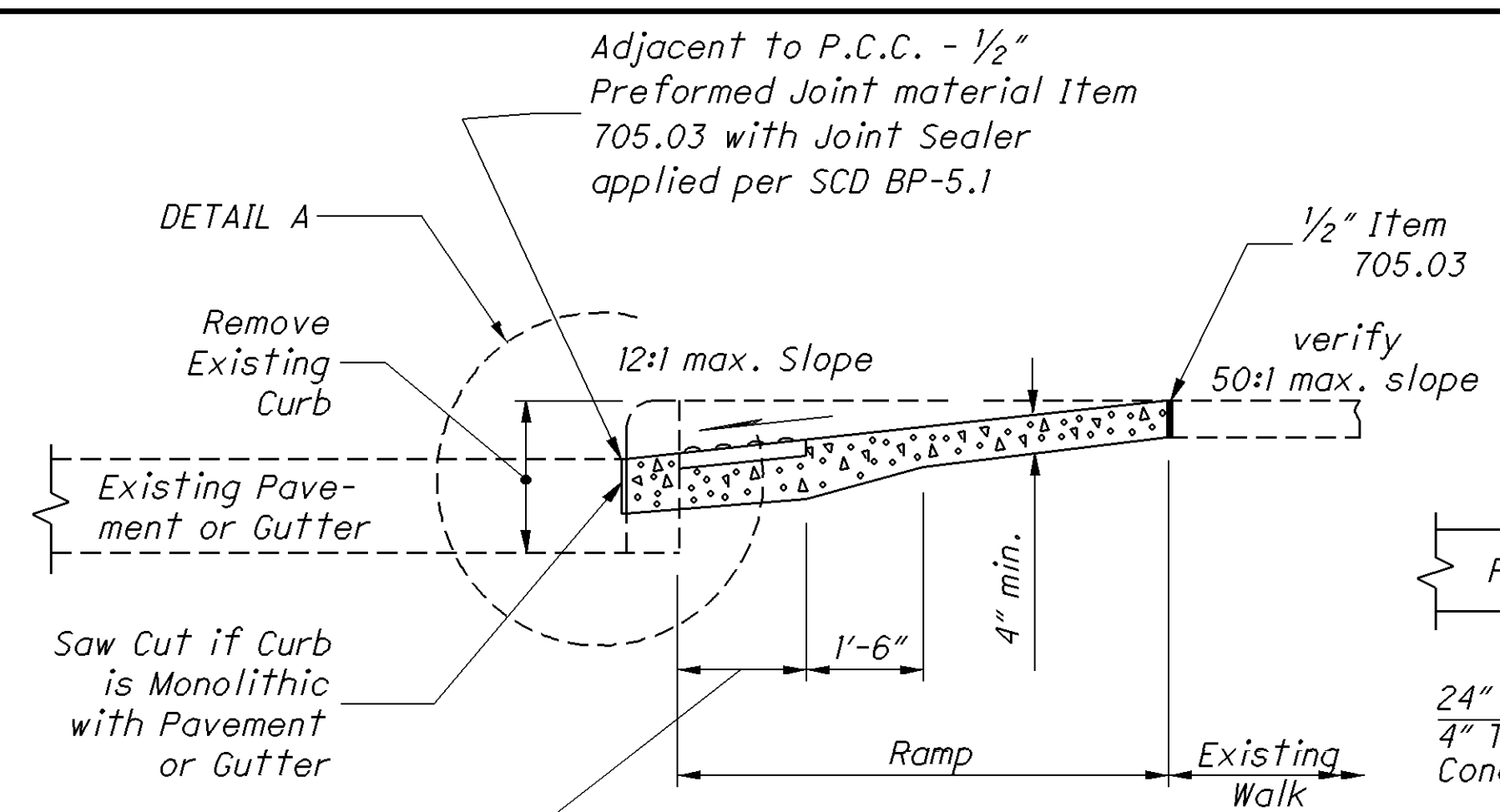
Type B3 (Single sided Parallel)

PARALLEL CURB RAMP DETAILS

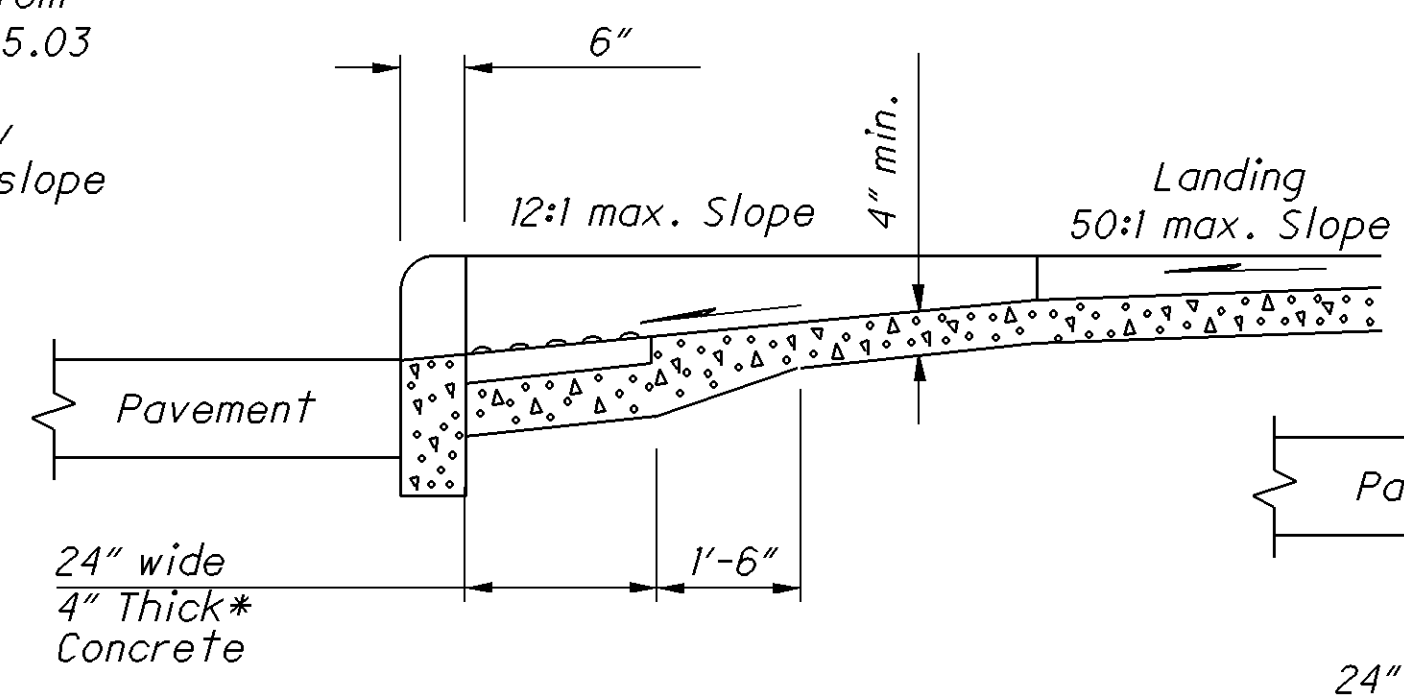
P:\KNO\92970\Design\Roadway\Plan_Sheets\General\92970_crd_002.dgn 15-AUG-2013 3:32PM dmorgan



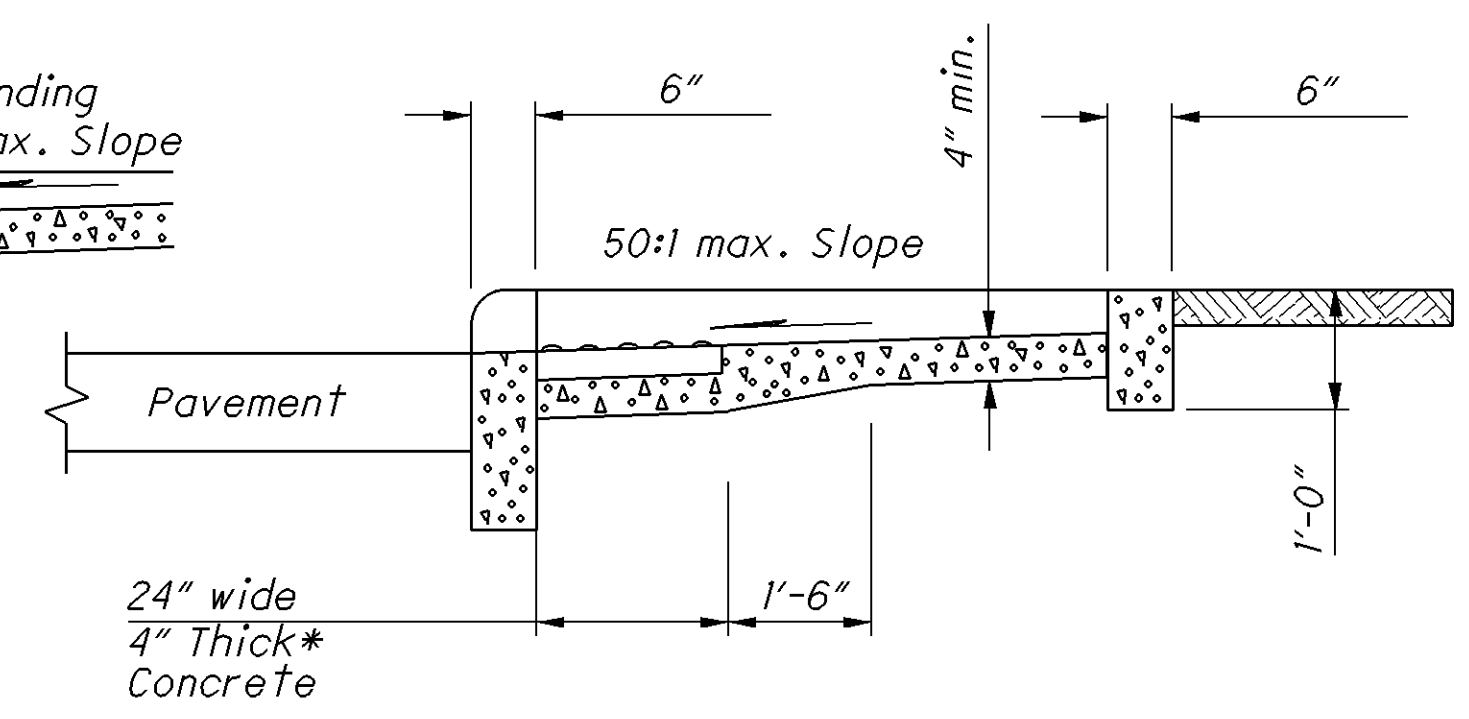
New gutter shown.
**SECTION A-A
NORMAL DETAIL**
See Sheet 20.



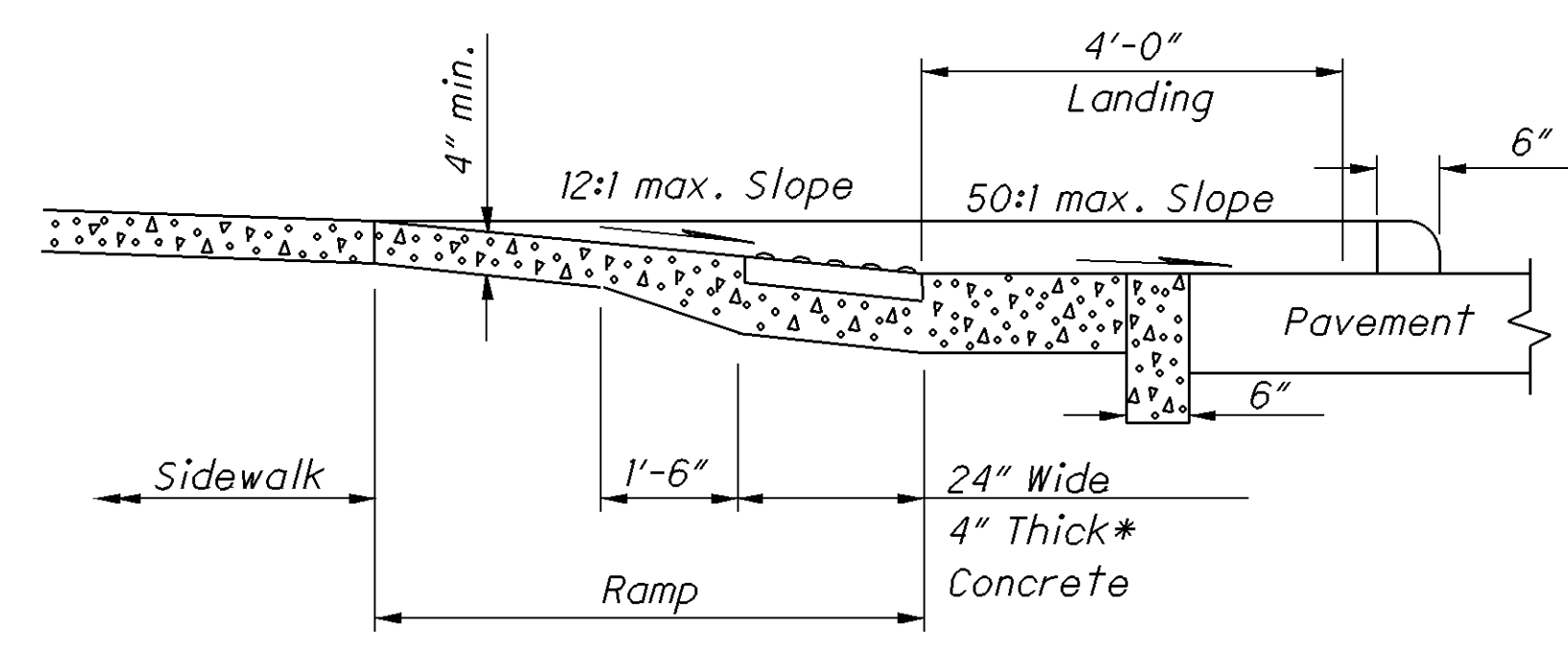
**SECTION A-A
EXISTING WALK DETAIL**
See Sheet 20.



SECTION B-B
See Sheet 20.

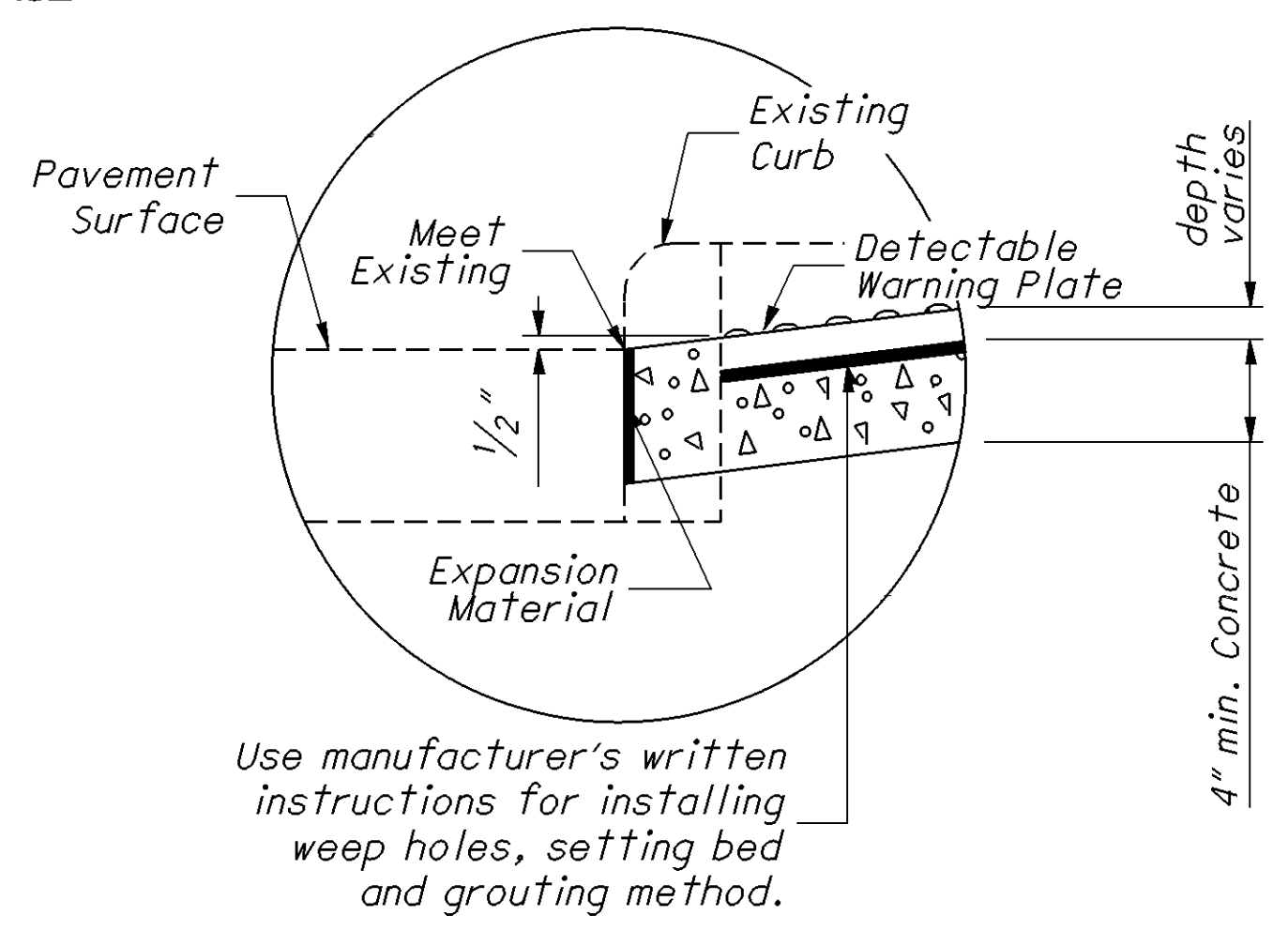


SECTION C-C
See Sheet 20.



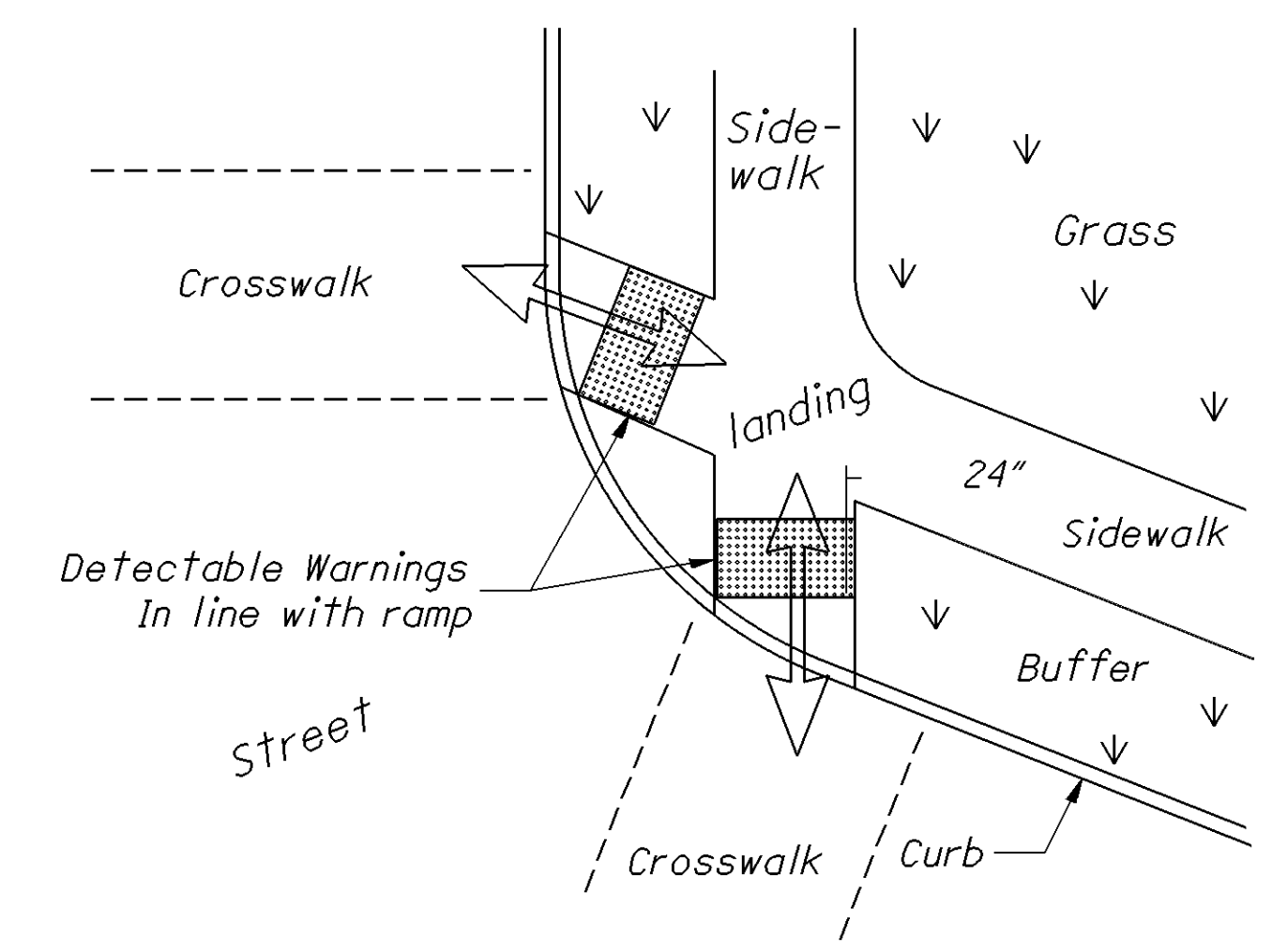
SECTION D-D
See Sheet 20.

*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.



Use manufacturer's written instructions for installing weep holes, setting bed and grouting method.

DETAIL A



DETECTABLE WARNING ALIGNMENT

DETECTABLE WARNINGS NOTES

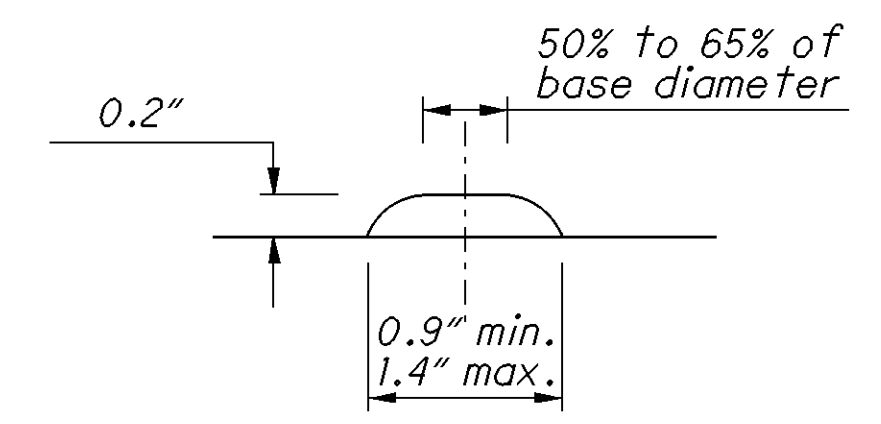
GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

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 19.

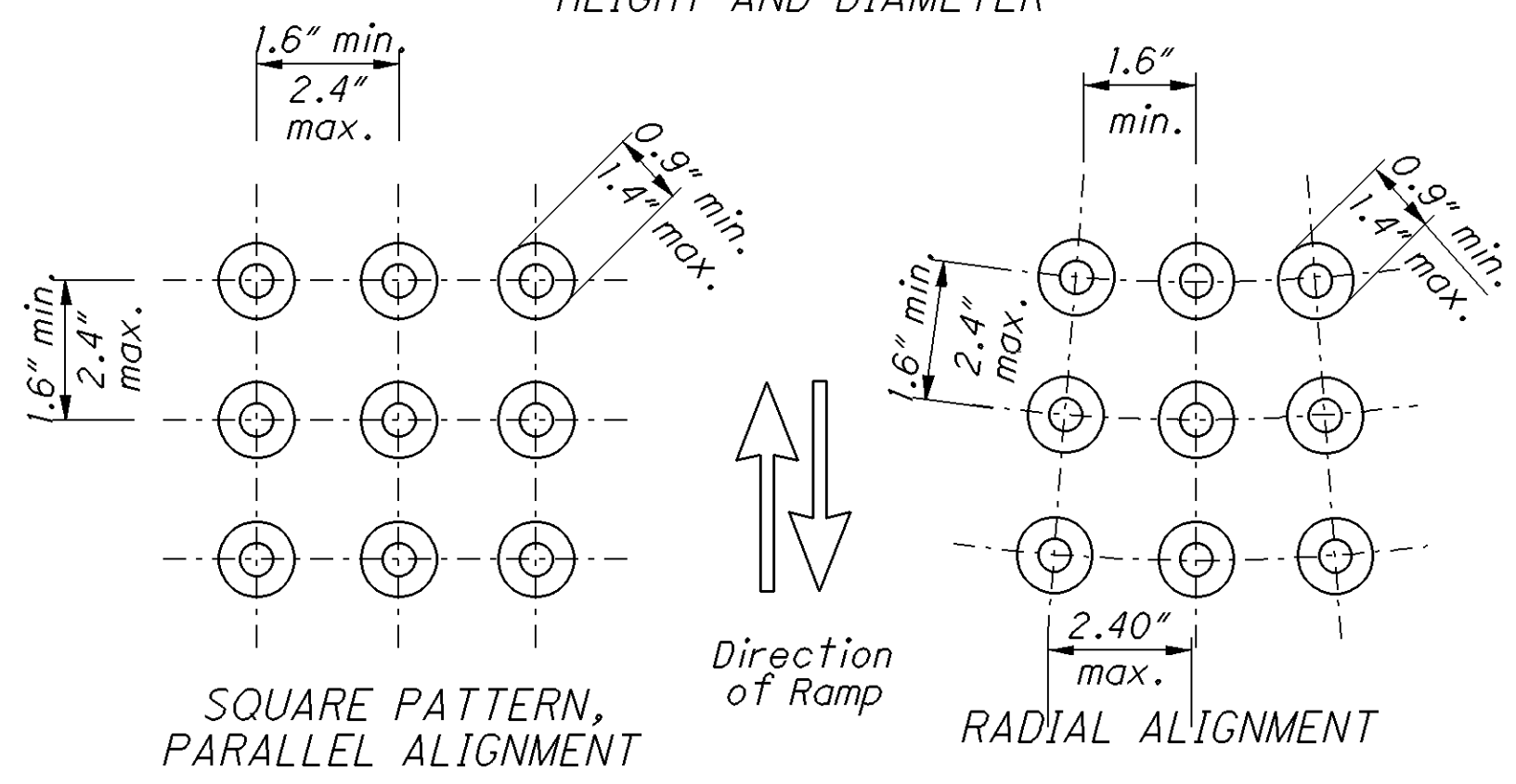
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

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 at least one corner of the 24" strip should be adjacent to the back of curb. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

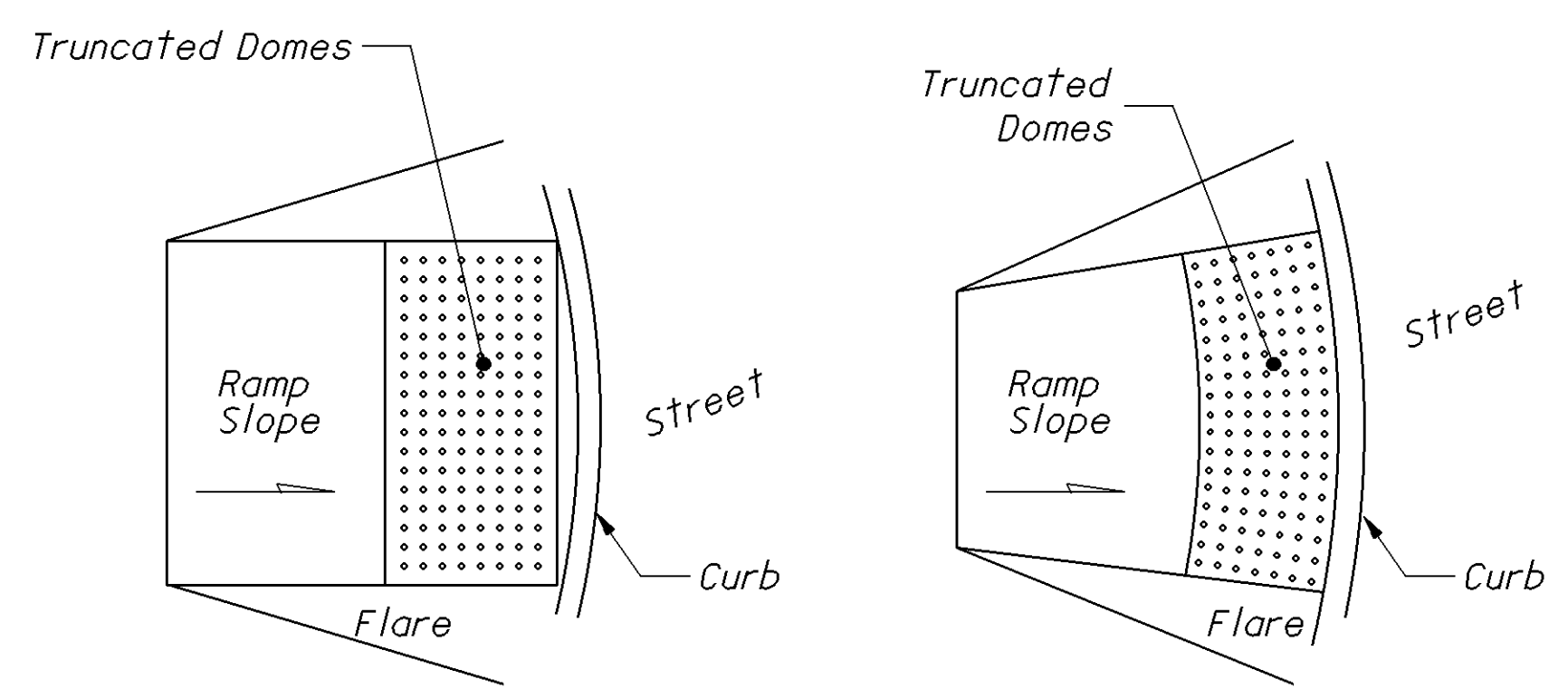
PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per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



HEIGHT AND DIAMETER



TRUNCATED DOMES DETAILS



DOME ALIGNMENT ON RADIUS CURB

P:\KNO\92970\Design\Roadway\Plan_Sheets\General\92970_crd_003.dgn 15-AUG-2013 3:50PM dmorgan

P:\KNO\92970\Design\Roadway\Plan_Sheets\General\92970_PMS_001.dgn 16-AUG-2013 8:35AM dmorgan

ITEM 648 EDGE LINE										
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 (M I L E S)	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				
			FROM	TO		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		
1	KNO	U.S. 62	0.00	17.63	17.63	35.26	35.26		35.26	
1	KNO	U.S. 62	18.27	22.65	4.38	4.38	4.38		4.38	24 FOOT OF PAVEMENT, STRIPE AS TWO 11' LANES
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)									39.64	

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.		T O T A L L E N G T H (M I L E S)	I N F O R M A T I O N O N L Y		T O T A L C E N T E R L I N E M I L E S	R E M A R K S	
						C E N T E R L I N E Q U A N T I T I E S				
			FROM	TO		T O T A L M I L E S	E Q U I V A L E N T S O L I D L I N E			
1	KNO	U.S. 62	0.00	22.65	22.65	22.65	32.116	22.65		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								22.65		

CALCULATED
LME
CHECKED
DNM

PAVEMENT MARKING DATA (EDGE / CENTER LINE)

KNO-62-0.00

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ITEM 644 AUXILIARY MARKING																
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	TRANVERSE/DIAGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS		8" CHANNELIZING LINE	REMARKS
					WHITE	YELLOW			ONLY		72"	96"	LT.	RT.		
									72"	96"						
					FT.	FT.	FT.	FT.	EACH	EACH	EACH	EACH	EACH	EACH	FEET	
1	KNO	U.S. 62	MORGAN CENTER RD	RT			8									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	MORGAN CENTER RD	LT			10									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	CLUTTER RD	LT			25									PLACE 23' FROM US 62 CL
1	KNO	U.S. 62	CLUTTER RD	RT			22									PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	WHITE OAK RD	LT			12									PLACE 25' FROM US 62 CL
1	KNO	U.S. 62	HOSS RD	LT			20									PLACE 26' FROM US 62 CL
1	KNO	U.S. 62	HOSS RD	LT			20									PLACE 26' FROM US 62 CL
1	KNO	U.S. 62	ARRINGTON RD	LT			20									PLACE 27' FROM US 62 CL
1	KNO	U.S. 62	WEST ST	RT			7	30								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	WEST ST	LT			10	46								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 AT SR 586/SR 541	CL			16	90								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SR 586	RT			12	64								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SR 541	RT			16	70								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 AFTER SR 586/SR 541	CL			13	96								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	PLEASANT ST	RT			8	28								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	PLEASANT ST	LT			9	32								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	LT			22									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SR 586	LT			14	68								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	MECHANIC ST	RT			6	24								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	NORTH ST	RT			7									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	GROVE CHURCH RD	LT			21									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	DEAL RD	RT			10									PLACE 27' FROM US 62 CL
1	KNO	U.S. 62	DEAL RD	LT			12									PLACE 38' FROM US 62 CL
1	KNO	U.S. 62	SYCAMORE RD	LT			17									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SYCAMORE RD	LT			12									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SYCAMORE RD	RT			43									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	HOPEWELL RD	RT			26									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	HOPEWELL RD	LT			12									PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	DENNIS CHURCH RD	RT			12									PLACE 24' FROM US 62 CL
1	KNO	U.S. 62	BILLMAN RD	RT			18									PLACE 25' FROM US 62 CL
1	KNO	U.S. 62	CHADWICK RD	LT			10									PLACE 25' FROM US 62 CL
1	KNO	U.S. 62	SR 229	RT			20									PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	SR 229	LT			21									PLACE 19' FROM US 62 CL
1	KNO	U.S. 62	LEPLEYRD	RT			13									PLACE 23' FROM US 62 CL
1	KNO	U.S. 62	LEPLEYRD	LT			15									PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	CAVES RD	LT			21									PLACE 24' FROM US 62 CL
1	KNO	U.S. 62	HAZEL DELL RD	RT			22									PLACE 25' FROM US 62 CL
1	KNO	U.S. 62	MILLWOOD RD	LT			20									PLACE 29' FROM US 62 CL
1	KNO	U.S. 62	CAVALLO RD	RT			23									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 AT CONNECTOR RD	CL					1				1	110		PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	BOESHART RD	LT			20									PLACE 22' FROM US 62 CL
1	KNO	U.S. 62	BOESHART RD	RT			14									PLACE 23' FROM US 62 CL
1	KNO	U.S. 62	FLAT RUN RD	RT			16									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	TOUGH ST	RT			12									PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	WASHINGTON ST	LT			10	48								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	WASHINGTON ST	RT			10	54								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	RT			15	56								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	W. ROSS ST	LT			12	52								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	E. ROSS ST	RT			17	76								PLACE AT EXISTING LOCATION
LOCATION 1 TOTALS (CARRIED TO NEXT SHEET)							729	856	1				1	110		

CALCULATED
LME
CHECKED
DNM

PAVEMENT MARKING DATA (AUXILIARY MARKING DATA)

KNO-62-0.00

23
28

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ITEM 644 AUXILIARY MARKING																		
LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	TRANVERSE/DIAGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS		8" CHANNELIZING LINE	HANDICAP SYMBOL MARKING	PARKING LOT STALL MARKING	REMARKS
					WHITE	YELLOW			ONLY		72"	96"	LT.	RT.				
									72"	96"								
LOCATION 1 TOTALS (CARRIED FROM PREVIOUS SHEET)							729	856		1				1	110			
1	KNO	U.S. 62	ORCHARD ST	LT			15	64										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	DRIVE/ALLEY	RT				42										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	DRIVE/ALLEY	RT				42										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	DRIVE/ALLEY	RT				44										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	DRIVE/ALLEY	RT				42										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	TILTON ST	LT			16	64										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 @ SLM 17.90	NB						1								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 BEFORE RAMBO ST	CL			16	144										INCLUDE DIAGONAL CROSSWALK LINES, 1' WIDE WITH 2' GAPS
1	KNO	U.S. 62	W. RAMBO ST	LT			16	134										INCLUDE DIAGONAL CROSSWALK LINES, 1' WIDE WITH 2' GAPS
1	KNO	U.S. 62	E. RAMBO ST	RT			12	100										INCLUDE DIAGONAL CROSSWALK LINES, 1' WIDE WITH 2' GAPS
1	KNO	U.S. 62	ON US 62 AFTER RAMBO ST	CL			16	60										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	FR SNOKE ALLEY	LT			7	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	FR SNOKE ALLEY	RT			6	28										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 @ SLM 18.02	SB						1								PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	W. CHURCH ST	LT			10	46										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	E. CHURCH ST	RT			10	46										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	OAK ALLEY	LT			6	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	W. WALNUT ST	LT			11	44										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	E. WALNUT ST	RT			11	50										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	LT			12	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	RT			12	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	W. SOUTH ST	LT			11	48										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	E. SOUTH ST	RT			10	48										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	LT			8	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ALLEY	RT			8	30										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 BEFORE W. MAIN ST.	CL			20											PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	W. MAIN ST	LT			15											PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	SR 205	LT			18											PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	ON US 62 AFTER SR 205	CL			20											PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	CEDAR ST	LT			12	48										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	S. CEDAR ST	RT			16	66										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	LINWOOD ST	LT			10	40										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	S. LINWOOD ST	RT			10	58										PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	BLACK RD	LT			22											PLACE AT EXISTING LOCATION
1	KNO	U.S. 62	HILLCREST DR	RT			10											PLACE 20' FROM US 62 CL
1	KNO	U.S. 62	BODY RD	LT			19											PLACE 23' FROM US 62 CL
1	KNO	U.S. 62	BUCKEYE RD	RT			28											PLACE 25' FROM US 62 CL
1	KNO	U.S. 62	MCKLEY RD	RT			32											PLACE 22' FROM US 62 CL
1	KNO	U.S. 62	MCKLEY RD	LT			24											PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	MCKLEY RD	RT			27											PLACE 18' FROM US 62 CL
1	KNO	U.S. 62	PRITCHARD RD	LT			29											PLACE 21' FROM US 62 CL
1	KNO	U.S. 62	BRINKHAVEN RD	LT			40											PLACE 18' FROM US 62 CL
1	KNO	U.S. 62	ROAD ACROSS FROM BRINKHAVEN RD	RT			24											PLACE AT EXISTING LOCATIONS
1	KNO	U.S. 62	MAIN ST	LT			26											PLACE 22' FROM US 62 CL
1	KNO	U.S. 62	HUNTER RD	RT			21											PLACE 20' FROM US 62 CL
1	KNO	U.S. 62	STATE ST	LT			36											PLACE 20' FROM US 62 CL
1	KNO	U.S. 62	STATE ST	LT			27											PLACE 20' FROM US 62 CL
1	KNO	U.S. 62	VILLAGE OF DANVILLE	LT/RT											1	1,396		PLACE AT EXISTING LOCATIONS
SUB-TOTALS																		
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)							1,428	2,294		1	2			1	110	1	1,396	

CALCULATED
LME
CHECKED
DNM

PAVEMENT MARKING DATA (AUXILIARY MARKING DATA)

KNO-62-0.00

24
28

DETAIL	SEE STD. DWG. TC-65.11
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

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	THRU APPROACH
9	TWO WAY LEFT TURN LANE

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

RAISED PAVEMENT MARKER DATA

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LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621		PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RAISED PAVEMENT MARKER REMOVED	RPM	INFORMATION ONLY					
										ONE-WAY		TWO-WAY			
										EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	
1	KNO	U.S. 62	0.00	4.09	4.09	21,595	GAP	270	270			270			LIC. CO. TO MARTINSRURG WEST CORP
1	KNO	U.S. 62	4.54	4.74	0.20	1,056	12	29	29			29			PC 4.63 PT 4.65 L=106' DEG 26
1	KNO	U.S. 62	4.74	7.23	2.49	13,147	GAP	164	164			164			
1	KNO	U.S. 62	7.23	7.27	0.04	211	11	5	5			5			PC 7.23 PT 7.27 L=211' DEG 5
1	KNO	U.S. 62	7.27	12.24	4.97	26,242	GAP	328	328			328			
1	KNO	U.S. 62	12.24	12.29	0.05	264	11	7	7			7			PC 12.24 PT 12.29 L=264' DEG 5
1	KNO	U.S. 62	12.29	12.50	0.21	1,109	GAP	14	14			14			
1	KNO	U.S. 62	12.50	12.72	0.22	1,162	12	35	35			35			PC 12.59 PT 12.63 L=211' DEG 19
1	KNO	U.S. 62	12.72	17.07	4.35	22,968	GAP	290	290	3		287			ONE WAY WHITE FOR US 36 CONNECTOR TURN LANE
1	KNO	U.S. 62	17.07	17.18	0.11	581	11	15	15			15			PC 17.07 PT 17.18 L=581' DEG 5
1	KNO	U.S. 62	17.18	17.23	0.05	264	GAP	3	3			3			
1	KNO	U.S. 62	17.23	17.29	0.06	317	11	8	8			8			PC 17.23 PT 17.29 L=317' DEG 7
1	KNO	U.S. 62	17.29	17.52	0.23	1,214	GAP	15	15			15			SLM TO DANVILLE W. CORP.
1	KNO	U.S. 62	18.57	19.32	0.75	3,960	GAP	50	50			50			DANVILLE E. CORP. TO SLM
1	KNO	U.S. 62	19.32	19.51	0.19	1,003	11	25	25			25			PC 19.32 PT 19.51 L=1003' DEG 5
1	KNO	U.S. 62	19.51	22.65	3.14	16,579	GAP	207	207			207			END HOLMES COUNTY
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								1,465	1,465						

KNO-62-0.00

SHEET NUMBERS												ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
2	3	4	5	8	9	11	12	14	22	24	25					
	2,790					16,800						202	23500	19,590	SQ YD	WEARING COURSE REMOVED
								661				202	30000	661	SQ FT	WALK REMOVED
								72				202	30001	72	SQ FT	WALK REMOVED, AS PER PLAN
								44				202	32000	44	FT	CURB REMOVED
43.54												209	60500	43.54	MILE	LINEAR GRADING
				43.54								209	72051	43.54	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
1,300												253	01000	1,300	CU YD	PAVEMENT REPAIR
				296,592	46,740		75					254	01000	343,407	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
				20,334	3,398	1,265	6					407	10000	25,003	GALLON	TACK COAT
				13,556	2,266	845	4					407	14000	16,671	GALLON	TACK COAT FOR INTERMEDIATE COURSE
				1,912	109							407	20500	2,021	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK
				1,275	73							407	20510	1,348	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE
20,435												408	10001	20,435	GALLON	PRIME COAT, AS PER PLAN
24				8,240	1,299	472	3					448	46020	10,038	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
98	180			10,299	1,624		3					448	46904	12,204	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
						588						448	47020	588	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
							300					516	31011	300	FT	2" DEEP JOINT SEALER, AS PER PLAN
								555				608	10000	555	SQ FT	4" CONCRETE WALK
								103				609	26000	103	FT	CURB, TYPE 6
5												611	98630	5	EACH	CATCH BASIN ADJUSTED TO GRADE
7												611	99150	7	EACH	INLET ADJUSTED TO GRADE
15												611	99654	15	EACH	MANHOLE ADJUSTED TO GRADE
			120									614	11110	120	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		252										614	12460	252	EACH	WORK ZONE MARKING SIGN
		14										614	13000	14	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			6									614	18601	6	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
				44.99								614	21400	44.99	MILE	WORK ZONE CENTER LINE, CLASS II
						3,797						617	10101	3,797	CU YD	COMPACTED AGGREGATE, AS PER PLAN
						14.11						618	41000	14.11	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
											1,465	621	00100	1,465	EACH	RPM
											1,465	621	54000	1,465	EACH	RAISED PAVEMENT MARKER REMOVED
3												638	53500	3	EACH	VALVE BOX ADJUSTED TO GRADE
										110		644	00400	110	FT	CHANNELIZNG LINE, 8"
										1,428		644	00500	1,428	FT	STOP LINE
										2,294		644	00600	2,294	FT	CROSSWALK LINE
										2		644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"
										1,396		644	01200	1,396	FT	PARKNG LOT STALL MARKING
										1		644	01300	1	EACH	LANE ARROW
										1		644	01410	1	EACH	WORD ON PAVEMENT, 96"
										1		644	01600	1	EACH	HANDICAP SYMBOL MARKING
									39.64			648	00100	39.64	MILE	EDGE LINE, 4"
									22.65			648	00300	22.65	MILE	CENTER LINE
								3				690	98000	3	EACH	SPECIAL - MISC.: CURB RAMPS, TYPE A2
								136				690	98200	136	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING

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LOCATION 1 SUB-SUMMARY

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LOCATION TOTALS		PARTICIPATION CODE		ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1		"01/STR/PV"	"02/STR/OT"						
19,590		19,590		202	23500	19,590	SQ YD	WEARING COURSE REMOVED	
661		661		202	30000	661	SQ FT	WALK REMOVED	
72		72		202	30001	72	SQ FT	WALK REMOVED, AS PER PLAN	4
44		44		202	32000	44	FT	CURB REMOVED	
43.54		43.54		209	60500	43.54	MILE	LINEAR GRADING	
43.54		43.54		209	72051	43.54	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
1,300		1,300		253	02000	1,300	CU YD	PAVEMENT REPAIR	
343,407		343,407		254	01000	343,407	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
25,003		25,003		407	10000	25,003	GALLON	TACK COAT	
16,671		16,671		407	14000	16,671	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
2,021		2,021		407	20500	2,021	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK	
1,348		1,348		407	20510	1,348	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK FOR INTERMEDIATE	
20,435		20,435		408	10001	20,435	GALLON	PRIME COAT, AS PER PLAN	3
10,038		10,038		448	46020	10,038	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
12,204		12,204		448	46904	12,204	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	
588		588		448	47020	588	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
300		300		516	31011	300	FT	2" DEEP JOINT SEALER, AS PER PLAN	3
555		555		608	10000	555	SQ FT	4" CONCRETE WALK	
103		103		609	26000	103	FT	CURB, TYPE 6	
5		5		611	98630	5	EACH	CATCH BASIN ADJUSTED TO GRADE	
7		7		611	99150	7	EACH	INLET ADJUSTED TO GRADE	
15		15		611	99654	15	EACH	MANHOLE ADJUSTED TO GRADE	
120		120		614	11110	120	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
252		252		614	12460	252	EACH	WORK ZONE MARKING SIGN	
14		14		614	13000	14	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
6		6		614	18601	6	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	5
44.99			44.99	614	21400	44.99	MILE	WORK ZONE CENTER LINE, CLASS II	
3,797		3,797		617	10101	3,797	CU YD	COMPACTED AGGREGATE, AS PER PLAN	4
14.11		14.11		618	41000	14.11	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)	

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GENERAL SUMMARY

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LOCATION TOTALS		PARTICIPATION CODE		ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1		"01/STR/PV"	"02/STR/OT"						
1,465			1,465	621	00100	1,465	EACH	RPM	
1,465			1,465	621	54000	1,465	EACH	RAISED PAVEMENT MARKER REMOVED	
3		3		638	53500	3	EACH	VALVE BOX ADJUSTED TO GRADE	
110			110	644	00400	110	FT	CHANNELIZING LINE, 8"	
1,428			1,428	644	00500	1,428	FT	STOP LINE	
2,294			2,294	644	00600	2,294	FT	CROSSWALK LINE	
2			2	644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"	
1,396			1,396	644	01200	1,396	FT	PARKING LOT STALL MARKING	
1			1	644	01300	1	EACH	LANE ARROW	
1			1	644	01410	1	EACH	WORD ON PAVEMENT, 96"	
1			1	644	01600	1	EACH	HANDICAP SYMBOL MARKING	
39.64			39.64	648	00100	39.64	MILE	EDGE LINE, 4"	
22.65			22.65	648	00300	22.65	MILE	CENTER LINE	
3		3		690	98000	3	EACH	SPECIAL - MISC.: CURB RAMPS, TYPE A2	
136		136		690	98200	136	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING	
				103	05000	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	
				614	11000	LUMP		MAINTAINING TRAFFIC	
				619	16000	3	MONTH	FIELD OFFICE, TYPE A	
				623	10000	LUMP		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
				624	10000	LUMP		MOBILIZATION	

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