

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

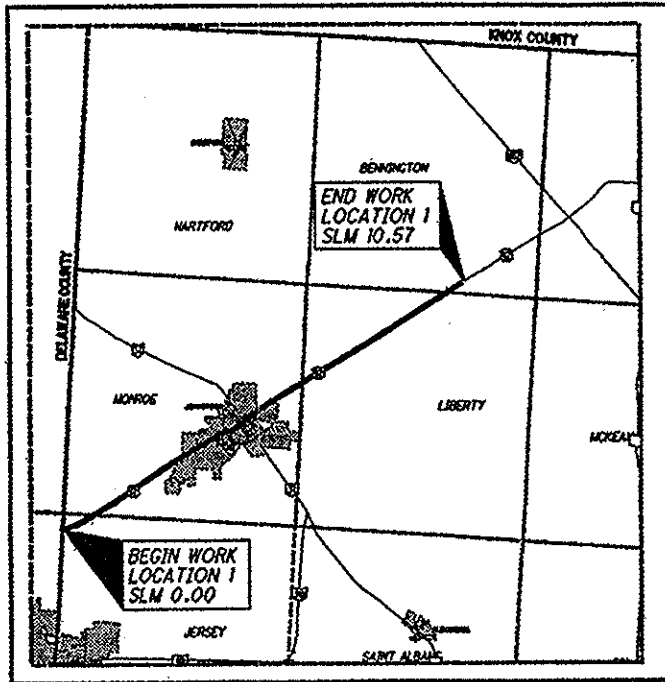
LIC-62-0.00

JERSEY, MONROE, LIBERTY
AND BENNINGTON TOWNSHIPS
LICKING COUNTY

PROJECT DESCRIPTION:

ASPHALT CONCRETE RESURFACING AND RELATED
WORK ON U.S. 62 IN LICKING 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° 09' 31" LONGITUDE: 82° 40' 34"

PORTION TO BE IMPROVED

DESIGN DESIGNATION	LOCATION 1
	U.S. 62
Functional Classification	RMA/RMC
Opening Year ADT (2013)	18,000
Design Year ADT (2025)	22,000
Design Hourly Volume (2025)	2,600
Directional Distribution	53%
Trucks (24 Hour B&C)	4%
Design Speed	55mph
Legal Speed	55mph

SLM 0.00 - SLM 4.71 - RMA = RURAL MINOR ARTERIAL
SLM 4.71 - SLM 10.57 - RMC = RURAL MAJOR COLLECTOR

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LOCATION	COUNTY	ROUTE	BEGIN SLM	END SLM	LENGTH MILES	CITY/VILLAGE
1	LIC	62	0.00	10.57	*10.42	JOHNSTOWN

*SUSPEND WORK SLM 4.63, RESUME WORK SLM 4.78 - DEDUCT 0.15 MILE

2010 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: 1-8-2013

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	4-20-12	TC-65.10	4-20-12	800	1-18-13
BP-4.1	7-16-04	TC-65.11	4-20-12	817	4-20-12
		TC-71.10	10-19-12	823	7-20-12
		TC-73.10	4-20-12	832	5-5-09
MT-97.10	7-20-12	TC-82.10	1-21-11		
MT-97.12	7-20-12				
MT-99.20	7-20-12				
MT-101.90	10-19-12				
MT-105.10	7-20-12				
				SPECIAL PROVISIONS	

APPROVED: *[Signature]*
DATE 1/8/13 DISTRICT DEPUTY DIRECTOR

APPROVED: *[Signature]*
DATE 1/31/13 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
E080(257)

PID NO.
83849

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

LIC-62-0.00

LIC - US-62-0.00
130236 PID - 83849
Dist 5 4/11/2013
Contract Proposal Available @ www.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.

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 – 19.68 MILE**

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 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 (REVIEW ALL PAVEMENT ADJACENT TO APPROACH SLABS). 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, AS PER PLAN.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 253 PAVEMENT REPAIR
LOCATION 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 516 2" DEEP JOINT SEALER, AS PER PLAN

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

ITEM 617 COMPACTED AGGREGATE, AS PER PLAN

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

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 604 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 604 – CATCH BASIN ADJUSTED TO GRADE – 1 EACH

ITEM 604 – INLET ADJUSTED TO GRADE – 2 EACH

ITEM 604 – MANHOLE ADJUSTED TO GRADE – 5 EACH

ITEM 638 – VALVE BOX ADJUSTED TO GRADE – 6 EACH

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. 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.

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 GENERAL SUMMARY FOR THE ABOVE PURPOSES.

**ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 20 CU.YD.**

**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 25 CU.YD.**

**ITEM 202 WEARING COURSE REMOVED
LOCATION 1 – 710 SQ.YD.**

L062_MGN_001.DGN 10-15-12

CALCULATED
LME
CHECKED
DNM

GENERAL NOTES

LIC-62-0.00

2
27

ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE AND SURFACE COURSES

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

ALTERNATE PRODUCTS TO BE USED MUST BE ON FILE WITH THE NEW PRODUCT ENGINEER AT THE TIME OF THE ADVERTISEMENT DATE OF THE PROJECT PLANS. PLEASE CONTACT BRAD YOUNG, ODOT NEW PRODUCT ENGINEER, 614-351-2882.

THIS WORK IS CONSIDERED AN EXPERIMENTAL CONSTRUCTION FEATURE FOR EVALUATION OF PRODUCTS THAT ARE ON FILE WITH THE NEW PRODUCT ENGINEER.

MEET ALL REQUIREMENTS OF ODOT 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

A MANUFACTURER'S REPRESENTATIVE MUST BE AT THE PROJECT SITE DURING THE FIRST TWO DAYS OF APPLICATION OF TRACKLESS TACK.

MATERIAL: IF USING BLACKLIDGE TRACKLESS TACK THE MATERIAL WILL CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	--	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	--	5
RESIDUE BY DISTILLATION, %	AASHTO T59	50	--
OIL DISTILLATE, %	AASHTO T59	--	1
SIEVE TEST, %	AASHTO T59	--	0.30
TEST ON RESIDUE			
PENETRATION, @ 25°C,	AASHTO T49	--	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	--
SOLUBILITY, %	AASHTO T44	97.5	--
ORIGINAL BINDER DSR@82°C G*/SIN δ, 10 RAD/SEC	AASHTO T315	1.00	--

FOR TRACKLESS TACK OTHER THAN BLACKLIDGE TRACKLESS TACK, THE MATERIAL WILL CONFORM TO THE PHYSICAL PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER FOR THE TESTS LISTED BELOW:

PARAMETER	TEST METHOD
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	AASHTO T59
STORAGE STABILITY, 24 HRS, %	AASHTO T59
STORAGE STABILITY, 5 DAYS, %	AASHTO T59
RESIDUE BY DISTILLATION, %	AASHTO T59
OIL DISTILLATE, %	AASHTO T59
SIEVE TEST, %	AASHTO T59
TEST ON RESIDUE	
PENETRATION, @ 25°C,	AASHTO T49
SOFTENING POINT RANGE DEG C	AASHTO T53
SOLUBILITY, %	AASHTO T44
ORIGINAL BINDER DSR@82°C G*/SIN δ, 10 RAD/SEC	AASHTO T315

NOTE: TRACKLESS TACK SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC.

ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE AND SURFACE COURSES (con't.)

ACCEPTANCE AND SAMPLING OF MATERIALS: FOR ALL TRACKLESS TACK SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LABORATORY TO THE ENGINEER AND TO THE DISTRICT LABORATORY SHOWING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS THE PROPERTIES SUPPLIED BY THE NEW PRODUCT ENGINEER.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF 2 QUARTS OF TRACKLESS TACK SAMPLED FROM THE DISTRIBUTOR ON THE FIRST DAY OF APPLICATION. CLEARLY MARK ON THE SAMPLES THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

ADDITIONAL SAMPLING OF BLACKLIDGE TRACKLESS TACK WILL FOLLOW THE REQUIREMENTS OF ITEM 407. FOR ALTERNATE TRACKLESS TACK MATERIAL, 2 QUARTS OF MATERIAL WILL BE SAMPLED EACH DAY THE MATERIAL IS USED.

EQUIPMENT: SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT 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 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACKLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180°F. DO NOT EXCEED 180°F. THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: FOR ANY TRACKLESS TACK USED SUPPLY DATA FOR SHEAR AND TENSILE BOND STRENGTH ACCORDING TO METHODS DESCRIBED IN VIRGINIA TRANSPORTATION RESEARCH COUNCIL REPORT VTRC 09-R21. RANDOMLY TAKE 6-4 INCH DIAMETER CORES FROM THE PROJECT AND PERFORM 3 SHEAR AND 3 TENSILE BOND STRENGTH TESTS. BE SURE CORES TAKEN INCLUDE BOTH AN ASPHALT LAYER ABOVE AND ASPHALT LAYER BELOW THE TRACKLESS TACK LAYER.

DETERMINE THE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DET AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORILY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY BLACKLIDGE TRACKLESS TACK FOR THE REMAINDER OF THE PROJECT AT NO COST TO THE DEPARTMENT. ANY FAILING EXPERIMENTAL TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE NEW PRODUCT ENGINEER'S LIST.

ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE AND SURFACE COURSES (con't.)

IN THE EVENT THE PRODUCT FAILS TO PERFORM TO THE SATISFACTION OF THE DEPARTMENT, THE MANUFACTURER MAY PERFORM THE FOLLOWING ITEMS IN ORDER TO BE CONSIDERED FOR FUTURE EXPERIMENTAL CONSTRUCTION FEATURE PROJECTS:

1. SUBMIT IN WRITING TO THE DEPARTMENT THE REASON(S) WHY PRODUCT FAILED TO PERFORM AND DETAIL CHANGES THAT WILL BE MADE TO ELIMINATE THE CAUSE(S) OF FAILURE, AND
2. PROPOSE CHANGES TO THE PRODUCT'S SPECIFICATIONS, AND
3. SUBMIT SAMPLES OF THE REDEVELOPED PRODUCT TO THE LABORATORY FOR TESTING TO THE NEW SPECIFICATIONS, AND
4. DEMONSTRATE TO THE DEPARTMENT SUCCESSFUL USE OF THE MATERIAL ON AT LEAST ONE NON-ODOT PROJECT.

WHEN THE ABOVE ITEMS ARE COMPLETED TO THE DEPARTMENT'S SATISFACTION, THE REDEVELOPED AND FIELD TESTED PRODUCT MAY BE PUT BACK ON FILE WITH THE NEW PRODUCT ENGINEER AND EVALUATED ON FUTURE ODOT PROJECTS USING THE EXPERIMENTAL CONSTRUCTION FEATURE PROCESS.

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.

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 QUANTITY OF PRIME COAT, AS PER PLAN HAS BEEN CARRIED TO THE GENERAL SUMMARY AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

ITEM 408 PRIME COAT, AS PER PLAN
LOCATION 1-22,587 SQ. YD. X 0.40 GAL./SQ YD = 9,035 GAL

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 – 81 CU.YD.**

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.

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 TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF PAVEMENT OR PAVED SHOULDER IF PRESENT). THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVE-WAY UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT AN ASPHALT TAPER AS POSSIBLE (PREFERRED 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 (PREFERRED 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 GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M
LOCATION 1 - 58 CU.YD.**

**ITEM 202 WEARING COURSE REMOVED
LOCATION 1 – 1,670 SQ.YD.**

ITEM 614 MAINTAINING TRAFFIC

A MINIMUM OF 1 LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON US 62 BY USE OF THE EXISTING PAVEMENT AND STANDARD DRAWINGS MT-97.10 & MT-97.12.

TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANED SURFACE, AT LEAST ONE COURSE OF ASPHALT CONCRETE SHALL BE IN PLACE BEFORE OPENING TO TRAFFIC EXCEPT FOR THE FOLLOWING:

- AT BRIDGE LIC-62-0595 WHERE TRAFFIC WILL NEED TO BE MAINTAINED ON A PLANED SURFACE IN ORDER TO MEET THE STANDARD DRAWING MT-101.90.
- SLM 3.26 TO SLM 3.53 WHERE WE ARE ONLY PLANING 1.25" AND ONLY PLACING A SURFACE COURSE.

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.

PART-WIDTH CONSTRUCTION

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

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	1.0
1	U.S. 62	BRIDGE: LIC-62-0239	2.39	2.0
1	U.S. 62	BRIDGE: LIC-62-0385	3.85	3.4
1	U.S. 62	END WORK	10.57	1.2
1	U.S. 62	TOTAL		7.6

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

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 **GENERAL SUMMARY** TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H12a (NO EDGE LINES): LOCATION 1 - 10 EACH
R4-1 (DO NOT PASS): LOCATION 1- 29 EACH
R4-2 (PASS WITH CARE): LOCATION 1 -33 EACH

ITEM 614, WORK ZONE MARKING SIGN

LOCATION 1 - 72 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.

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 GENERAL SUMMARY:

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN LOCATION 1 - 180 DAY

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

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

IN ADDITION TO THE REQUIREMENTS OF 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 DURING CONSTRUCTION OPERATIONS. (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.

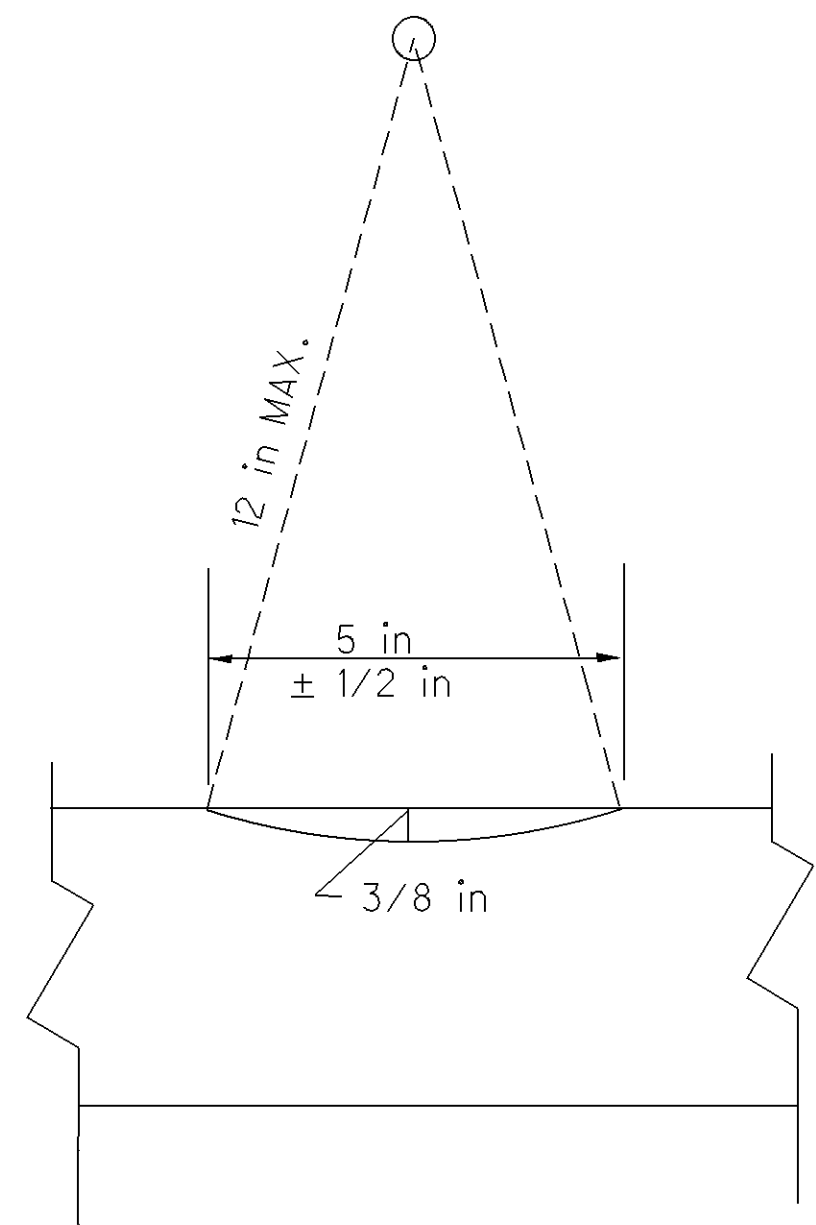
LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARY.

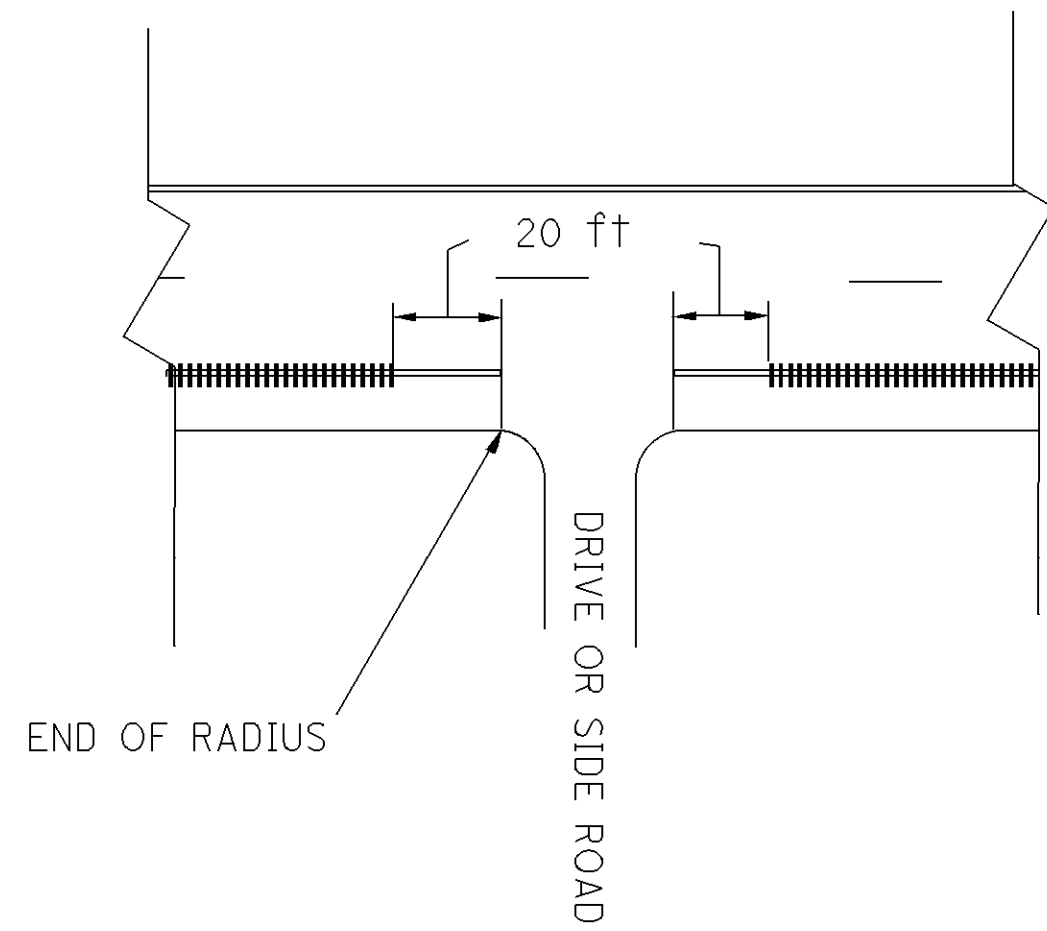
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE LOCATION 1 - 100 HOURS

COOPERATION BETWEEN CONTRACTORS

THE STATE OF OHIO HAS CONTRACTED PROJECT: **LIC-37-4.64 PID 90053**, WHICH MAY BE CONSTRUCTED CONCURRENTLY WITH THIS PROJECT. IT IS IMPERATIVE THAT THE CONTRACTORS COOPERATE FULLY WITH EACH OTHER AS OUTLINED IN SECTION 105.08 OF THE CMS. ALL MAINTENANCE OF TRAFFIC SHALL BE COORDINATED BETWEEN PROJECTS AND NOT CONFLICT WITH ONE ANOTHER.



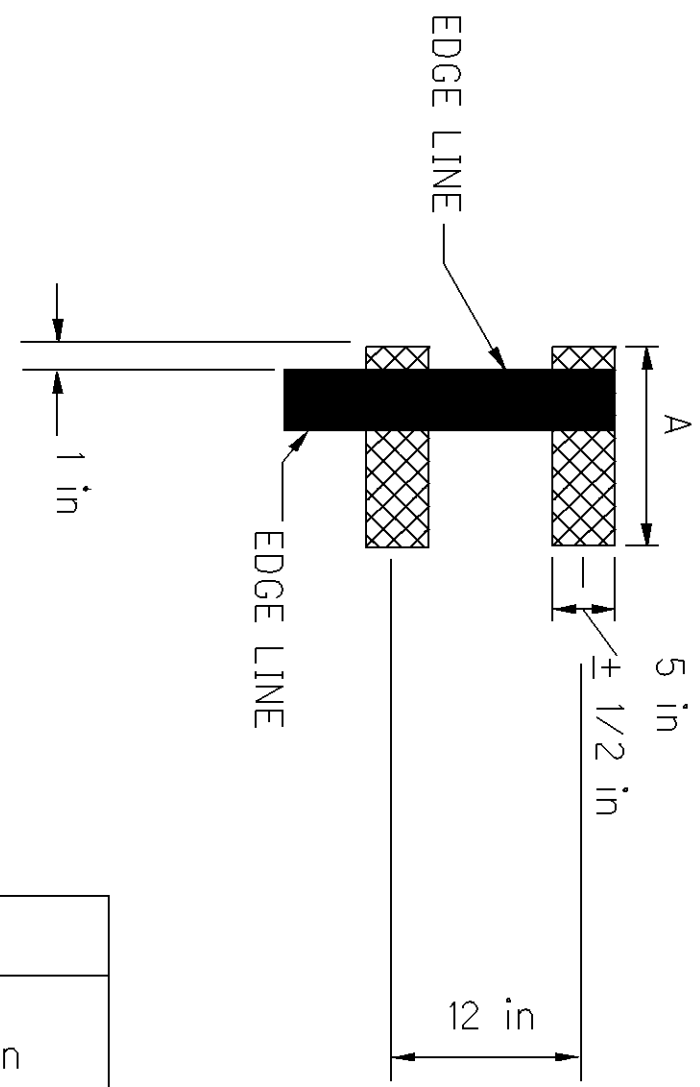
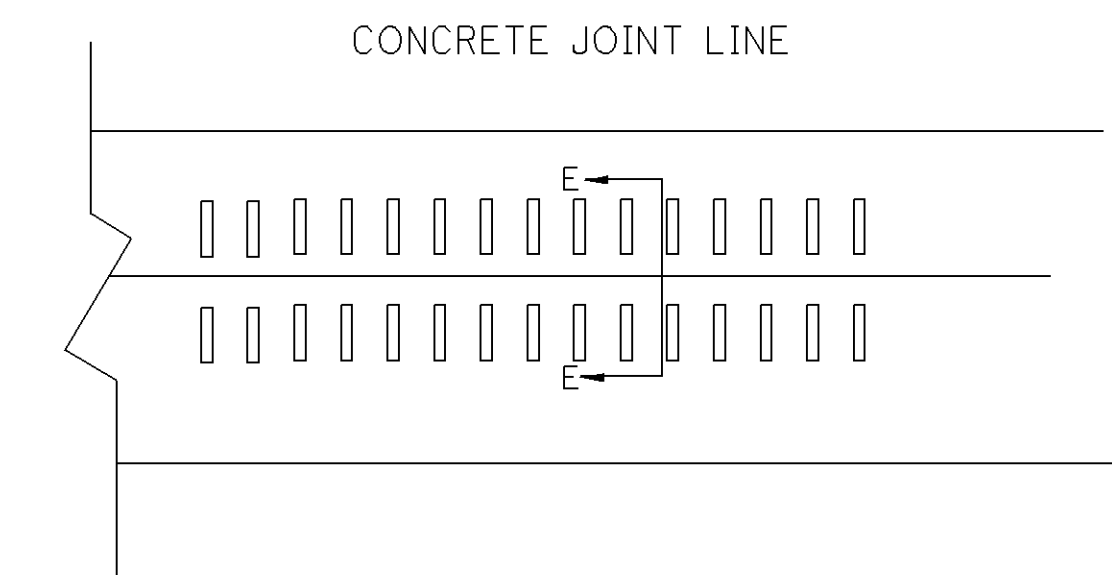
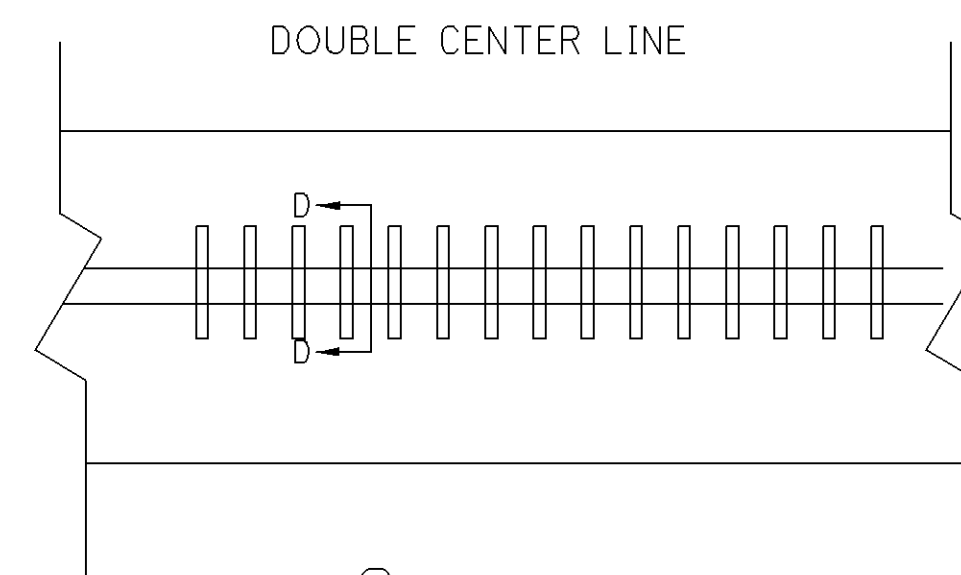
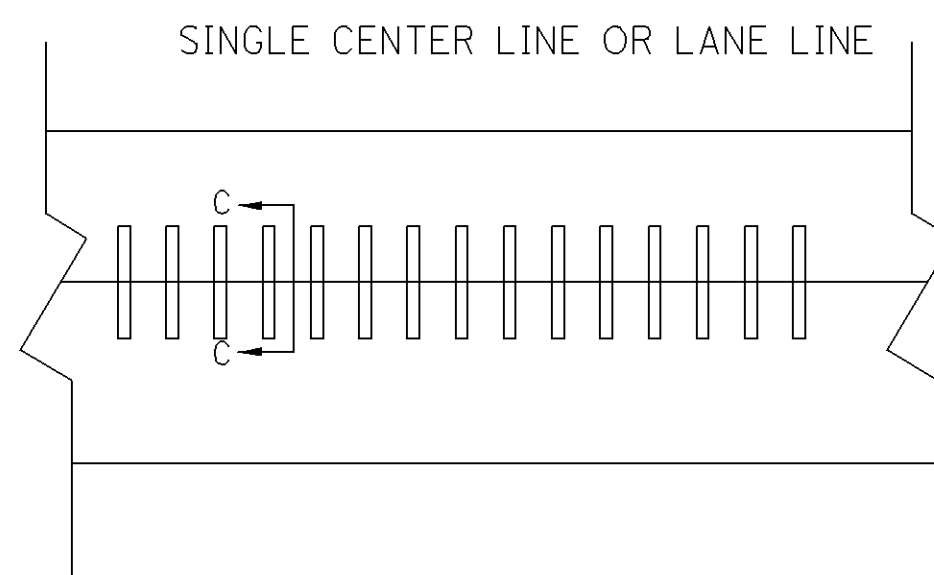
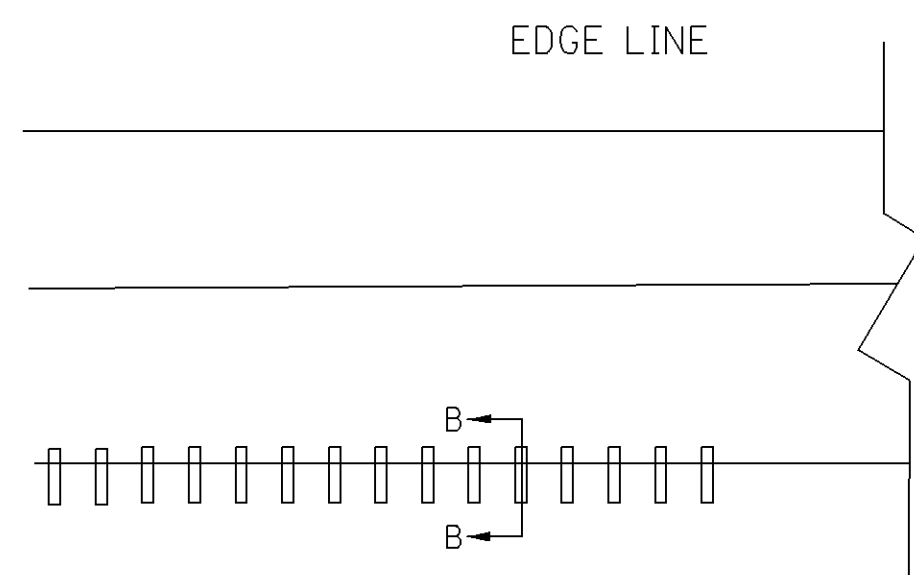
PROFILE



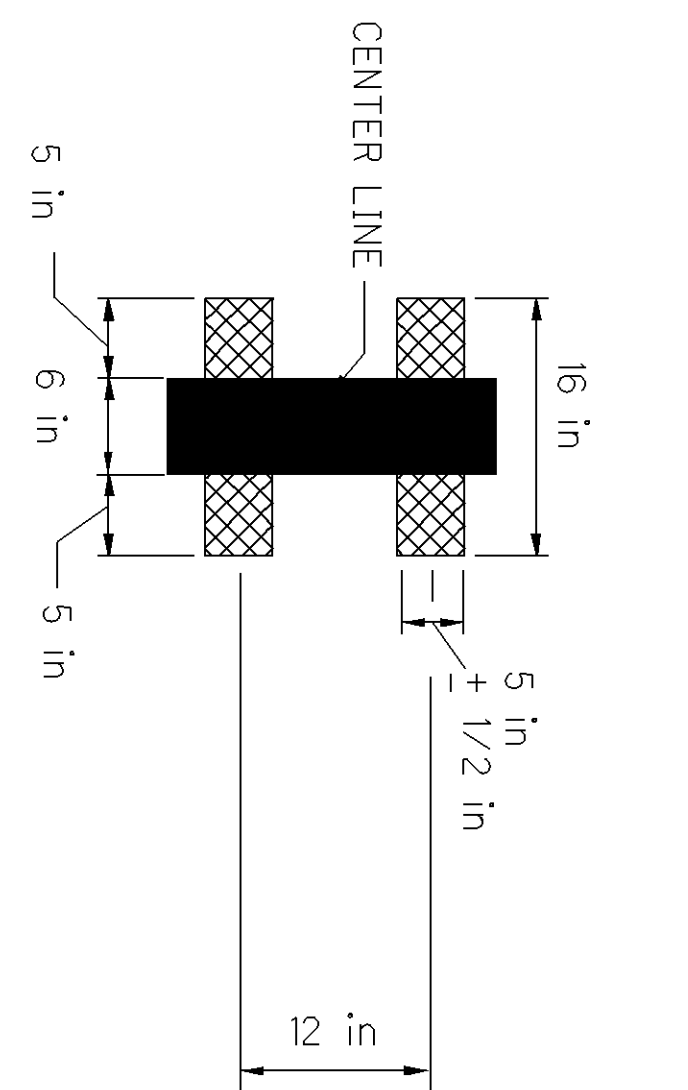
SIDE ROAD AND DRIVE RUMBLE STRIPE INSTALLATION DETAILS

NOTES

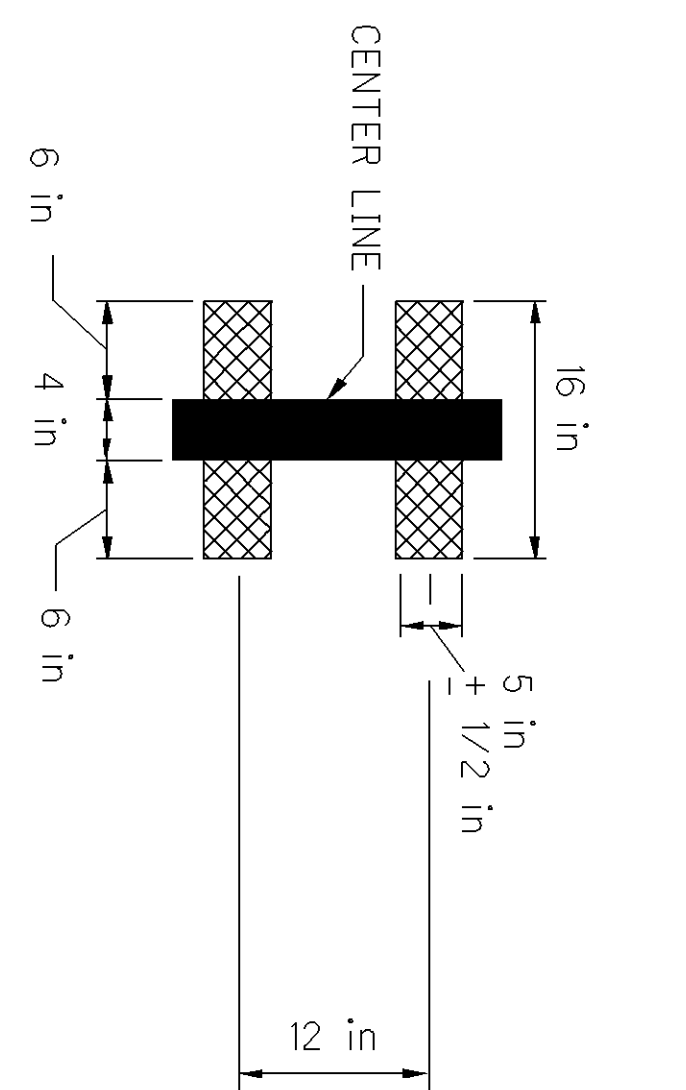
1. Rumble stripes shall be interrupted for driveways and intersections.
2. Rumble stripes shall be paid for in accordance with Item 618.
3. Rumble stripes shall be installed on a 62 foot cycle, i.e. 50 feet rumble stripes followed by a 12 foot gap.
4. Apply final pavement markings after rumble stripes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



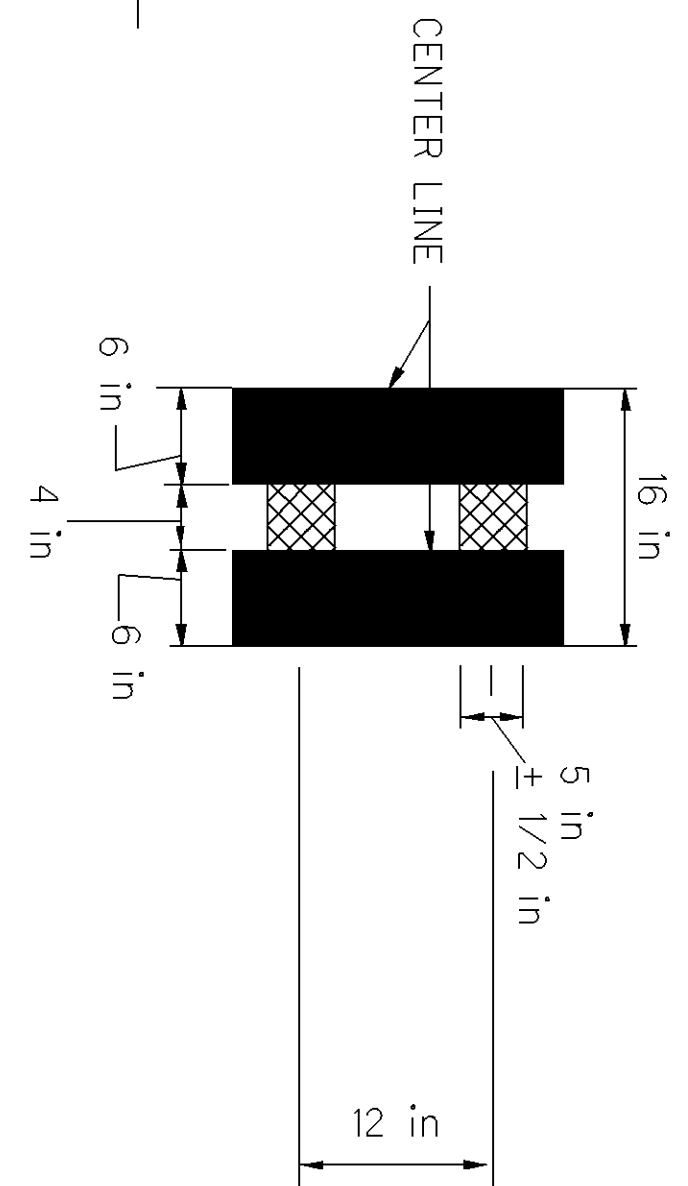
SECTION B-B
EDGE LINE RUMBLE STRIPE



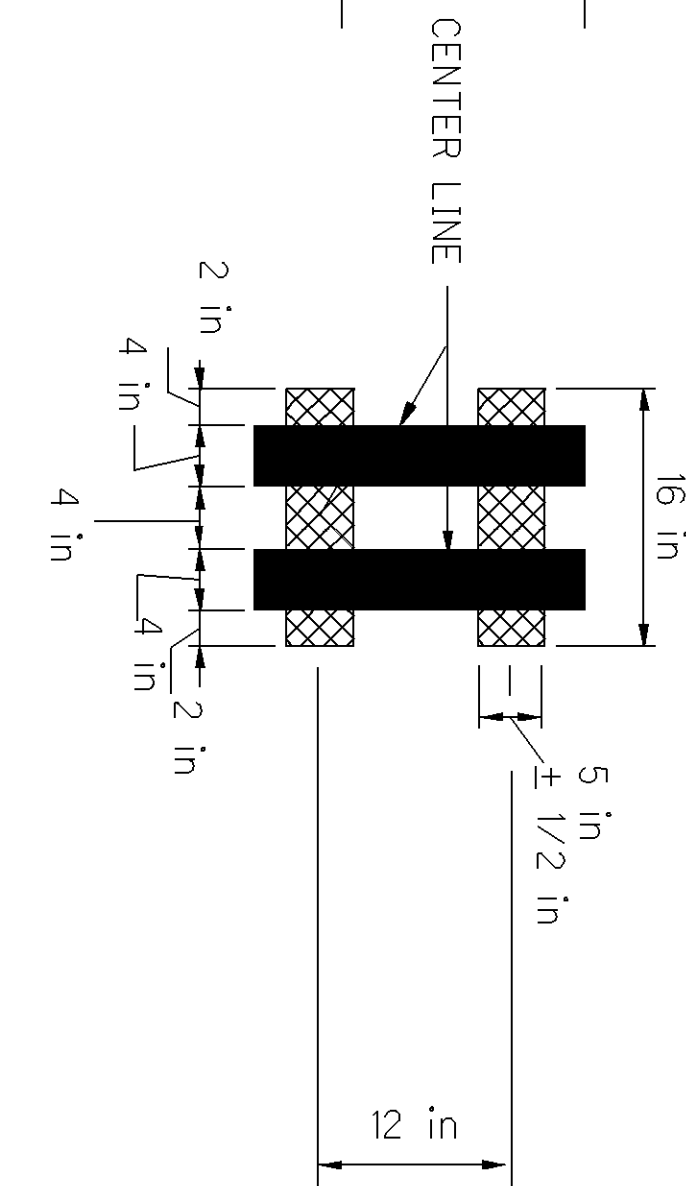
SECTION C-C
6" CENTER LINE OR LANE LINE
RUMBLE STRIPE



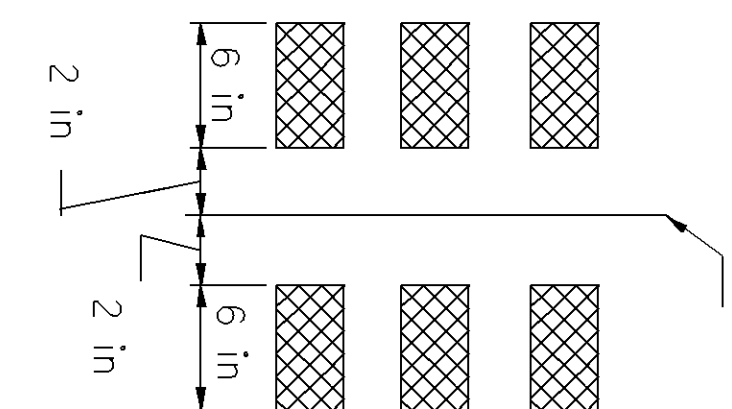
SECTION C-C
4" CENTER LINE OR LANE LINE
RUMBLE STRIPE



SECTION D-D
6" CENTER LINE RUMBLE STRIPE



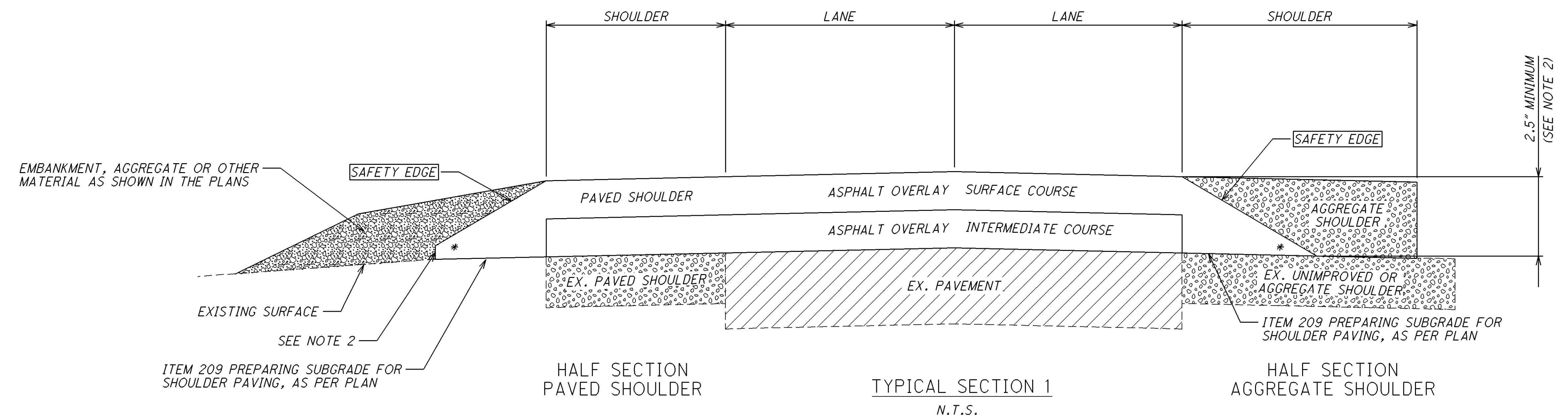
SECTION D-D
4" CENTER LINE RUMBLE STRIPE



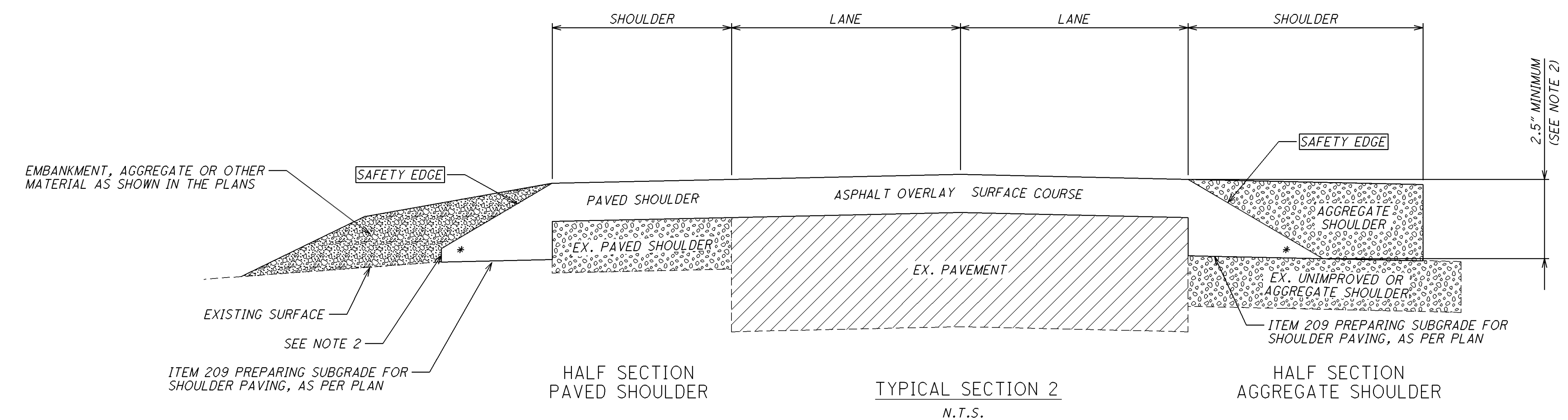
SECTION E-E
PORTLAND CEMENT CONCRETE
JOINT CENTER LINE RUMBLE STRIPE

P.C. CONCRETE
JOINT LINE

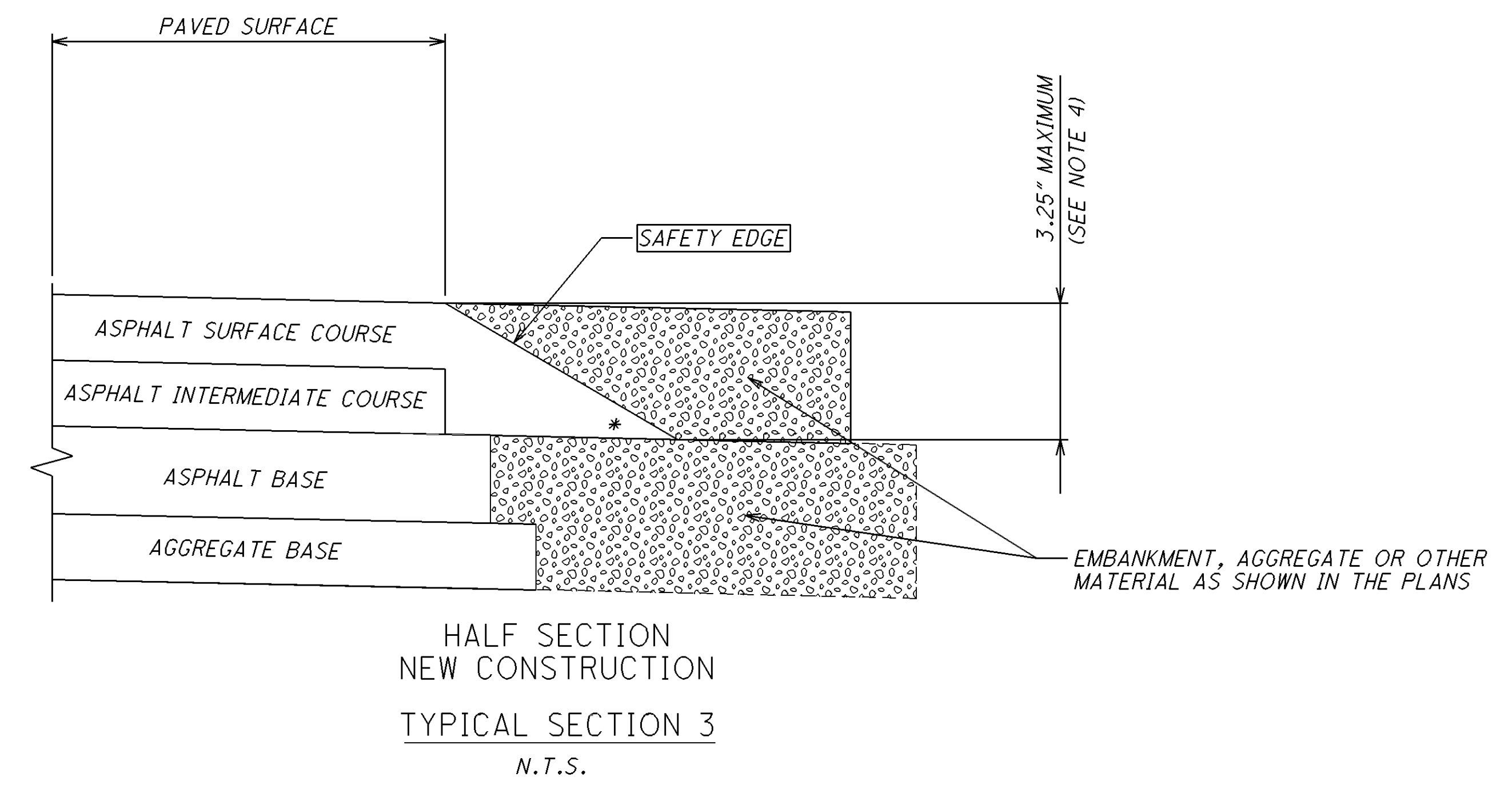
SHOULDER WIDTH	A
2-5 ft	6 in
5 ft-1 in - 8 ft	10 in
≥ 8 ft- 1 in	16 in



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

SEE SHEET 8 FOR STRAIGHT LINE DIAGRAM DATA AND TYPICALS

PAVEMENT DATA																								
LOCATION	COUNTY	ROUTE	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, INTERMEDIATE COURSE @ 0.075 GAL./S.Y.	TACK COAT, TRACKLESS TACK, SURFACE 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 CENTER LINE, CLASS II			
																						SQ. YD.	INCHES	SQ. YD.
1	LIC	U.S. 62	0.00	2.44	2.44	12,883.2	20.0	1	448	28,629.3	2.00	28,629.3			2,147.2	1,431.5	1.00	795.3	1.25	994.1	4.88			
1	LIC	U.S. 62	2.44	2.46	0.02	105.6	20.0	1	448	234.7	2.00	234.7			17.6	11.7	1.00	6.6	1.25	8.2	0.04			
1	LIC	U.S. 62	2.46	2.49	0.03	158.4	28.0 AVG	4	448	492.8	2.00	492.8			37.0	24.6	1.00	13.7	1.25	17.2	0.06			
1	LIC	U.S. 62	2.49	2.67	0.18	950.4	36.0	1	448	3,801.6	2.00	3,801.6			285.1	190.1	1.00	105.6	1.25	132.0	0.36			
1	LIC	U.S. 62	2.67	2.74	0.07	369.6	28.0 AVG	1	448	1,149.9	2.00	1,149.9			86.2	57.5	1.00	32.0	1.25	40.0	0.14			
1	LIC	U.S. 62	2.74	3.26	0.52	2,745.6	20.0	1	448	6,101.3	2.00	6,101.3			457.6	305.1	1.00	169.5	1.25	211.9	1.04			
1	LIC	U.S. 62	3.26	3.32	0.06	316.8	28.0 AVG	1	448	985.6	1.25	985.6	74.0						1.25	34.3	0.12			
1	LIC	U.S. 62	3.32	3.36	0.04	211.2	48.0	2	448	1,126.4	1.25	1,126.4	84.5						1.25	39.2	0.08			
1	LIC	U.S. 62	3.36	3.37	0.01	52.8	42.0 AVG	2	448	246.4	1.25	246.4	18.5						1.25	8.6	0.02			
1	LIC	U.S. 62	3.37	3.38	0.01	52.8	36.0	2	448	211.2	1.25	211.2	15.9						1.25	7.4	0.02			
1	LIC	U.S. 62	3.38	3.45	0.07	369.6	48.0	2	448	1,971.2	1.25	1,971.2	147.9						1.25	68.5	0.14			
1	LIC	U.S. 62	3.45	3.46	0.01	52.8	42.0 AVG	2	448	246.4	1.25	246.4	18.5						1.25	8.6	0.02			
1	LIC	U.S. 62	3.46	3.52	0.06	316.8	36.0	2	448	1,267.2	1.25	1,267.2	95.1						1.25	44.0	0.12			
1	LIC	U.S. 62	3.52	3.53	0.01	52.8	28.0 AVG	2	448	164.3	1.25	164.3	12.4						1.25	5.8	0.02			
1	LIC	U.S. 62	3.53	3.55	0.02	105.6	20.0	1	448	234.7	2.00	234.7	17.7	11.8			1.00	6.6	1.25	8.2	0.04			
1	LIC	U.S. 62	3.55	3.61	0.06	316.8	28.0 AVG	1	448	985.6	2.00	985.6	74.0	49.3			1.00	27.4	1.25	34.3	0.12			
1	LIC	U.S. 62	3.61	3.69	0.08	422.4	36.0	1	448	1,689.6	2.00	1,689.6	126.8	84.5			1.00	47.0	1.25	58.7	0.16			
1	LIC	U.S. 62	3.69	3.75	0.06	316.8	28.0 AVG	1	448	985.6	2.00	985.6	74.0	49.3			1.00	27.4	1.25	34.3	0.12			
1	LIC	U.S. 62	3.75	4.25	0.50	2,640.0	20.0	1	448	5,866.7	2.00	5,866.7	440.1	293.4			1.00	163.0	1.25	203.8	1.00			
1	LIC	U.S. 62	4.25	4.38	0.13	686.4	20.0	1	448	1,525.3	2.25	1,525.3	114.4	76.3			1.00	42.4	1.25	53.0	0.26			
1	LIC	U.S. 62	4.38	4.47	0.09	475.2	35.0 AVG	2	448	1,848.0	2.25	1,848.0	138.6	92.4			1.00	51.4	1.25	64.2	0.18			
1	LIC	U.S. 62	4.47	4.59	0.12	633.6	30.0	2	448	2,112.0	2.25	2,112.0	158.4	105.6			1.00	58.7	1.25	73.4	0.24			
1	LIC	U.S. 62	4.59	4.63	0.04	211.2	30.0	3	448	704.0	2.25	704.0	52.8	35.2			1.00	19.6	1.25	24.5	0.08			
SUSPEND WORK																								
1	LIC	U.S. 62	4.78	4.85	0.07	369.6	30.0	3	448	1,232.0	2.25	1,232.0	92.4	61.6			1.00	34.3	1.25	42.8	0.14			
1	LIC	U.S. 62	4.85	5.24	0.39	2,059.2	24.0	1	448	5,491.2	2.25	5,491.2	411.9	274.6			1.00	152.6	1.25	190.7	0.78			
1	LIC	U.S. 62	5.24	5.36	0.12	633.6	24.0	1	448	1,689.6	2.25	1,689.6			126.7	84.5	1.00	47.0	1.25	58.7	0.24			
1	LIC	U.S. 62	5.36	9.34	3.98	21,014.4	24.0	1	448	56,038.4	2.00	56,038.4			4,202.9	2,801.9	1.00	1,556.7	1.25	1,945.8	7.96			
1	LIC	U.S. 62	9.34	9.40	0.06	330.0	30.0 AVG	1	448	1,100.0	2.00	1,100.0			82.5	55.0	1.00	30.6	1.25	38.2	0.12			
1	LIC	U.S. 62	9.40	9.46	0.06	316.8	36.0	1	448	1,267.2	2.00	1,267.2			95.0	63.4	1.00	35.2	1.25	44.0	0.12			
1	LIC	U.S. 62	9.46	9.52	0.06	330.0	30.0 AVG	1	448	1,100.0	2.00	1,100.0			82.5	55.0	1.00	30.6	1.25	38.2	0.12			
1	LIC	U.S. 62	9.52	10.57	1.05	5,544.0	24.0	1	448	14,784.0	2.00	14,784.0			1,108.8	739.2	1.00	410.7	1.25	513.4	2.10			
BRIDGE DEDUCTIONS USING TRACKLESS TACK										(693.8)		(693.8)	(52.0)	(21.3)			1.00	(11.8)	1.25	(24.0)	(0.08)			
BRIDGE DEDUCTIONS USING REGULAR TACK										(257.7)		(257.7)			(19.3)	(12.9)	1.00	(7.1)	1.25	(8.9)				
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)														144,330.7	2,115.9	1,112.7	8,709.8	5,806.6			3,845.0		5,013.1	20.76

CALCULATED
LME
CHECKED
DNM

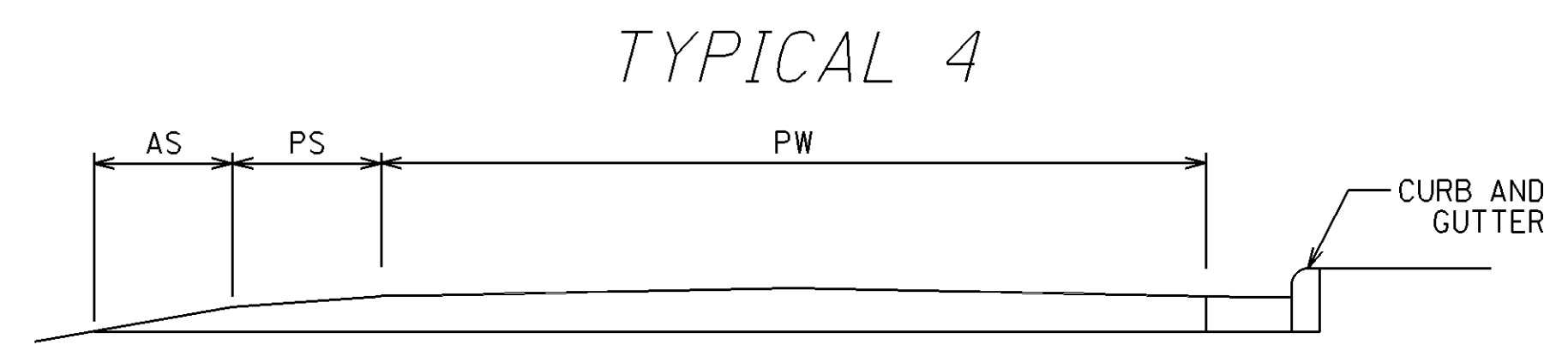
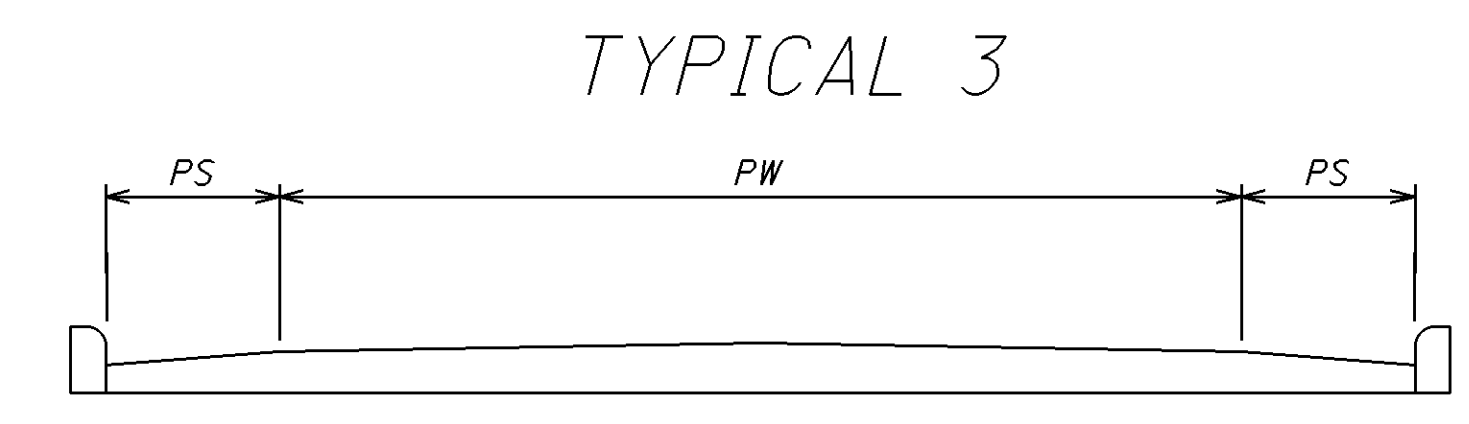
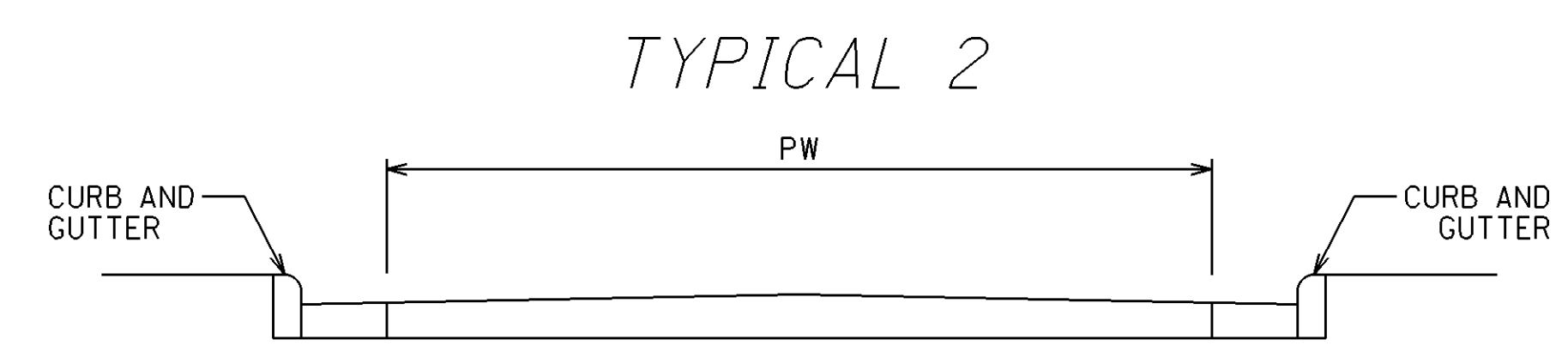
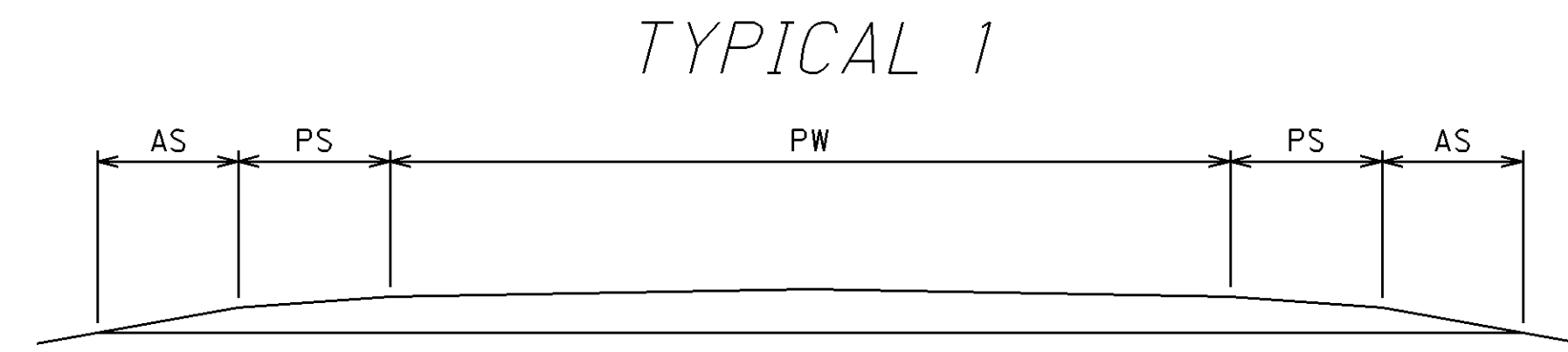
ASPHALT CONCRETE DATA

LIC-62-0.00

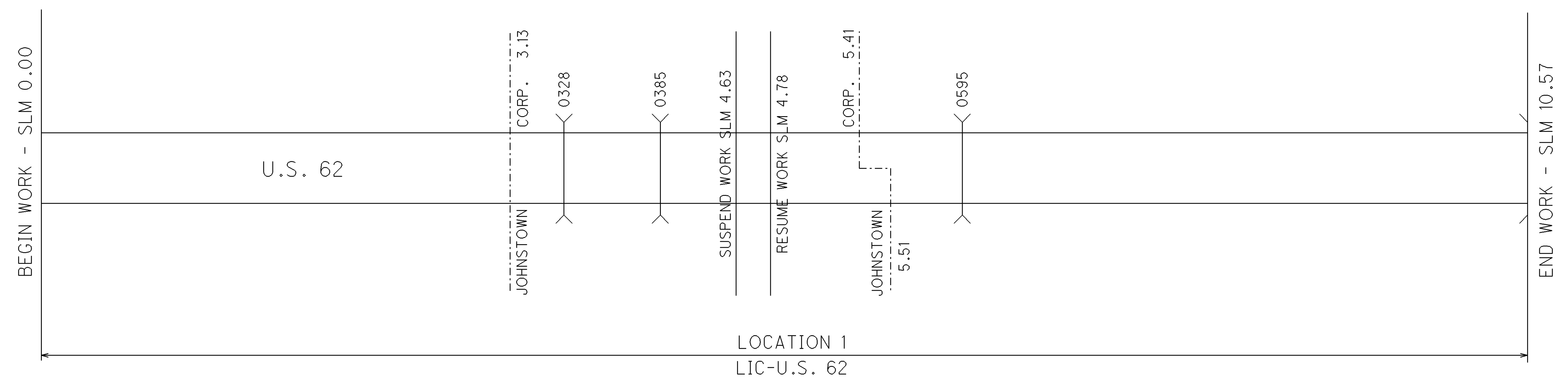
L062-MAC-001.DGN 3-19-2013

NOTE:
THE PAVEMENT WIDTHS SHOWN IN THE "PAVEMENT DATA" TABLE ON SHEET 7 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. PAVING IN CURBED ROADWAY SECTIONS SHALL BE FROM CURB TO CURB.

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



STRAIGHT LINE DIAGRAMS



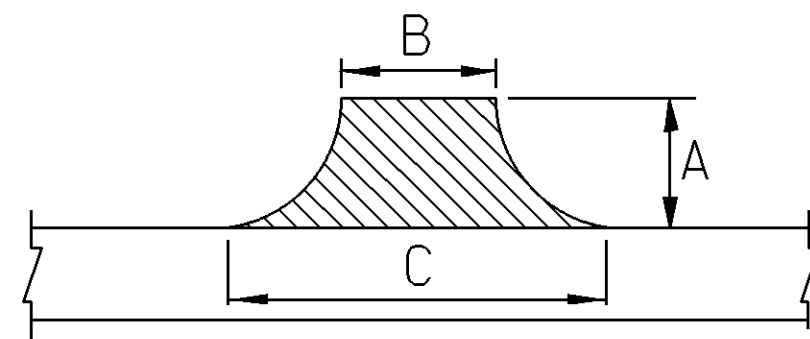
SHOULDER DATA																										
NO	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		TYPICAL SECTIONS SEE SHEET 8	PROPOSED WIDTH (FT.)		SHOULDER AREA	209		254		407			448 ASPHALT CONCRETE				617		618		
					MILES	LIN. FT.		A	B		SQ. YD.	MILE	INCHES	SQ. YD.	GAL.	GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	MILE	
																PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	DEPTH OF PAVEMENT PLANING	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.075 GAL./S.Y.	TACK COAT, TRACKLESS TACK, SURFACE COURSE @ 0.05 GAL./S.Y.	TACK COAT @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	INCHES	INTERMEDIATE COURSE, TYPE 1, PG 64-22	INCHES	SURFACE COURSE, TYPE 1, PG 70-22M
1	LIC	U.S. 62	0.00	2.44	2.44	12883.2	1	2.5	2.5	7,157.3	4.88	2.00	7,157.3					536.8	357.9	1.00	198.9	1.25	248.6	2.00	318.1	
1	LIC	U.S. 62	2.44	2.46	0.02	105.6	1	3.0 AVG	3.0 AVG	70.4	0.04	2.00	70.4					5.3	3.5	1.00	2.0	1.25	2.5	2.00	2.6	
1	LIC	U.S. 62	2.46	2.49	0.03	158.4	4	4		70.4	0.03	2.00	70.4					5.3	3.5	1.00	2.0	1.25	2.5	2.00	3.9	
1	LIC	U.S. 62	2.49	2.74	0.25	1320.0	1	4	4	1,173.3	0.50	2.00	1,173.3					88.0	58.7	1.00	32.6	1.25	40.8	2.00	32.6	
1	LIC	U.S. 62	2.74	3.26	0.52	2745.6	1	2.5	2.5	1,525.3	1.04	2.00	1,525.3					114.4	76.3	1.00	42.4	1.25	53.0	2.00	67.8	
1	LIC	U.S. 62	3.26	3.32	0.06	316.8	1	2.5	2.5	176.0	0.12	1.25	176.0	13.2								1.25	6.2	2.00	7.8	
1	LIC	U.S. 62	3.32	3.53	0.21	1108.8	2																			
1	LIC	U.S. 62	3.53	4.38	0.85	4488.0	1	2.5	2.5	2,493.3	1.70	2.00	2,493.3	187.0	124.7					1.00	69.3	1.25	86.6	2.00	110.8	
1	LIC	U.S. 62	4.38	4.59	0.21	1108.8	2																			
1	LIC	U.S. 62	4.59	4.85	0.26	1372.8	3																			
1	LIC	U.S. 62	4.85	5.24	0.39	2059.2	1	3	3	1,372.8	0.78	2.25	1,372.8	103.0	68.6					1.00	38.2	1.25	47.7	2.00	50.8	
1	LIC	U.S. 62	5.24	5.36	0.12	633.6	1	3	*	211.2	0.24	2.25	211.2					15.8	10.6	1.00	5.9	1.25	7.4	2.00	7.8	
1	LIC	U.S. 62	5.36	5.63	0.27	1425.6	1	3	3	950.4	0.54	2.00	950.4					71.3	47.5	1.00	26.4	1.25	33.0	2.00	35.2	
1	LIC	U.S. 62	5.63	10.57	4.94	26083.2	1	3	3	17,388.8	9.88	2.00	17,388.8					1,304.2	869.4	1.00	483.1	1.25	603.8	2.00	644.0	9.88
BRIDGE DEDUCTIONS USING TRACKLESS TACK										(154.2)	(0.05)		(154.2)	(11.6)	(5.3)					1.00	(3.0)	1.25	(5.3)	2.00	(6.9)	
BRIDGE DEDUCTIONS USING REGULAR TACK										(64.4)	(0.02)		(64.4)					(4.8)	(3.2)	1.00	(1.7)	1.25	(2.2)	2.00	(2.5)	(0.02)
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											19.68			32,370.6	291.6	188.0	2,136.3	1,424.2			896.1		1,124.6		1,272.0	9.86

* - BUTT JOINT AT EDGE OF PAVEMENT, DO NOT DISTURB NEW PAVEMENT CONSTRUCTED WITH PREVIOUS INTERSECTION PROJECT.

PAVED SHOULDER DATA

CALCULATED
LME
CHECKED
DNM

LIC-62-0.00



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

EXTRA AREAS

LOCATION	COUNTY	ROUTE	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ. YD.	202	407		448 ASPHALT CONCRETE				
					WEARING COURSE REMOVED SQ. YD.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT TRACKLESS TACK, INTERMEDIATE COURSE @ 0.075 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.				
													DETAIL DIMENSION			
													A	B	C	
FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.	FT.			
1	LIC	U.S. 62	LT	TIPPET RD. (T.R. 51)	35	22	68	175.0	175.0	13.2				1.25	6.1	
1	LIC	U.S. 62	RT	BEECH RD. (T.R. 88)	30	21	54	125.0	125.0	9.4				1.25	4.4	
1	LIC	U.S. 62	RT	GREEN CHAPEL RD. (T.R. 63)	40	22	57	175.6	175.6	13.2				1.25	6.1	
1	LIC	U.S. 62	LT	FANCHER RD. (T.R. 87)	40	19	63	182.3	182.3	13.7				1.25	6.4	
1	LIC	U.S. 62	LT	MILLERS CHURCH RD. (T.R. 86)	30	23	72	158.4	158.4	11.9				1.25	5.5	
1	LIC	U.S. 62	RT	CLOVER VALLEY RD. (C.R. 26)	45	19	85	260.0	260.0	19.5				1.25	9.1	
1	LIC	U.S. 62	LT	DUNCAN PLAINS RD. (C.R. 33)	45	36	175	527.5	527.5	39.6				1.25	18.4	
1	LIC	U.S. 62	RT	DUNCAN PLAINS RD. (C.R. 33)	45	36	131	417.5	417.5	31.4				1.25	14.5	
1	LIC	U.S. 62	RT	CLARK DR.	20	16	42	64.5	64.5		4.9			1.25	2.3	
1	LIC	U.S. 62	LT	CHERRY HILL DR.	20	12	32	48.9	48.9		3.7			1.25	1.7	
1	LIC	U.S. 62	RT	EXTRA AREA @ VILLAGE SQUARE	7		512	199.2	199.2		15.0			1.25	7.0	
1	LIC	U.S. 62	RT	BIGELOW DR.	30	30	117	245.0	245.0		18.4			1.25	8.6	
1	LIC	U.S. 62	RT	WESTVIEW DR.	35	34	75	212.0	212.0		15.9			1.25	7.4	
1	LIC	U.S. 62	LT	BENEDICT DR.	20	24	57	90.0	90.0		6.8			1.25	3.2	
1	LIC	U.S. 62	RT	MEADOW LANE	20	24	51	83.4	83.4		6.3			1.25	2.9	
1	LIC	U.S. 62	LT	WILLIAMS ST.	15	20	30	41.7	41.7		3.2			1.25	1.5	
1	LIC	U.S. 62	RT	WILLIAMS ST.	22	20	53	89.3	89.3		6.7			1.25	3.2	
1	LIC	U.S. 62	LT/RT	OREGON ST.	SKIP											
1	LIC	U.S. 62	LT/RT	S.R. 37	SKIP											
1	LIC	U.S. 62	LT	KASSON ST.	20	21	32	58.9	58.9		4.5			1.25	2.1	
1	LIC	U.S. 62	RT	KASSON ST.	10	19	28	26.2	26.2		2.0			1.25	1.0	
1	LIC	U.S. 62	RT	FORD ST.	20	23	46	76.7	76.7		5.8			1.25	2.7	
1	LIC	U.S. 62	RT	YARDNER ST.	20	21	27	53.4	53.4		4.1			1.25	1.9	
1	LIC	U.S. 62	RT	COMMERCE DR.	SKIP											
1	LIC	U.S. 62	RT	SPORTSMAN CLUB RD. (C.R. 16)	70	24	110	521.2	521.2	39.1				1.25	18.1	
1	LIC	U.S. 62	LT	CROUSE-WILLISON RD. (C.R. 13)	30	24	53	128.4	128.4	9.7				1.25	4.5	
1	LIC	U.S. 62	RT	DUTCH LANE RD. (C.R. 15)	45	19	79	245.0	245.0	18.4				1.25	8.6	
1	LIC	U.S. 62	LT	NICHOLS LANE RD. (C.R. 27)	40	17	55	160.0	160.0	12.0				1.25	5.6	
1	LIC	U.S. 62	RT	NICHOLS LANE RD. (C.R. 27)	35	20	55	145.9	145.9	11.0				1.25	5.1	
1	LIC	U.S. 62	LT	COOPER RD. N.W. (T.R. 60)	45	19	77	240.0	240.0	18.0				1.25	8.4	
1	LIC	U.S. 62	RT	NORTHRIDGE RD. (C.R. 21)	60	22	83	350.0	350.0	26.3				1.25	12.2	
1	LIC	U.S. 62	RT	LOUDON ST. (C.R. 10)	30	23	70	155.0	155.0	11.7				1.25	5.4	
1	LIC	U.S. 62	LT	APPLETON RD. (C.R. 10)	40	24	82	235.6	235.6	17.7				1.25	8.2	
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)									5,491.6	315.8	97.3				192.1	

CALCULATED
LME
CHECKED
DNM

EXTRA AREA DATA

LIC-62-0.00

10
27

BRIDGE TREATMENT

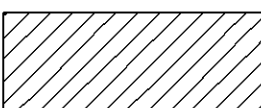
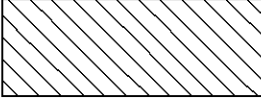
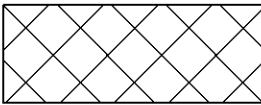
LOCATION 1

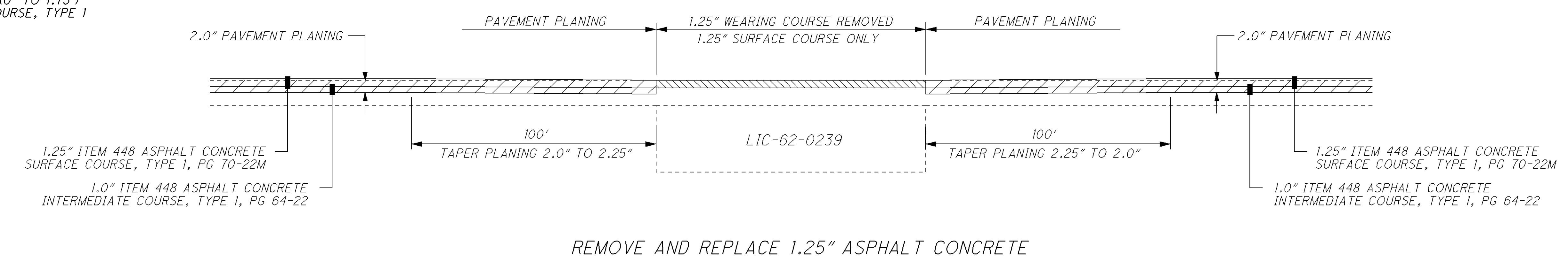
- DETAIL ① LIC-62-0239: MILL 1.25", PLACE SURFACE COURSE ONLY
 LIC-62-0328: SAME AS ROADWAY (EXCEPT WIDER SHOULDERS)
 DETAIL ② LIC-62-0385: BUTT JOINT AT APPROACH SLABS
 DETAIL ③ LIC-62-0595: REMOVE ASPHALT FROM DECK, PLACE TYPE 2 WATERPROOFING, PLACE 3" ASPHALT CONCRETE
 LIC-62-0845: SAME AS ROADWAY
 DETAIL ② LIC-62-1057: BUTT JOINT AT WEST APPROACH SLAB, END PROJECT

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 12)	MAINLINE DEDUCTIONS (CARRIED TO SHEET 7)	SHOULDER DEDUCTIONS (CARRIED TO SHEET 9)	202				407				448				512	516
											WEARING COURSE REMOVED	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.075 GAL/SQ.YD.	TACK COAT, TRACKLESS TACK, SURFACE COURSE @ 0.05 GAL/SQ.YD.	TACK COAT @ 0.075 GAL/SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL/SQ.YD.	THICKNESS	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22	THICKNESS	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 70-22M	TYPE 2 WATERPROOFING	2" DEEP JOINT SEALER, AS PER PLAN			
		SQ.YD.	GALLON	GALLON	GALLON	GALLON	INCHES	CU.YD.	INCHES	CU.YD.	SQ.YD.	FEET												
1	LIC-62-0239	20.0	30.0	66.7				1	44.4	11.1	66.7				5.0									
1	LIC-62-0328	46.6	36.3	188.0	20.0	36.3	161.3		269.4	48.1	349.3	26.2												
1	LIC-62-0385	151.0	44.0	738.3	20.0	44.0	195.6	2	424.4	106.1														88.0
1	LIC-62-0595	50.0	40.0	222.3	15.0	40.0	133.3	3	213.3	53.3	355.6					17.8	1.00	9.9	1.25	12.3	222.3			
		VARIABLE THICKNESS INTERMEDIATE COURSE													26.7		VAR.	146.8						
1	LIC-62-1057	END WORK AT WEST APPROACH SLAB																						44.0
DEDUCTIONS USING TRACKLESS TACK									693.8	154.2														
DEDUCTIONS USING REGULAR TACK									257.7	64.4														
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)											771.6	26.2				31.7	17.8		156.7		26.7	222.3	132.0	

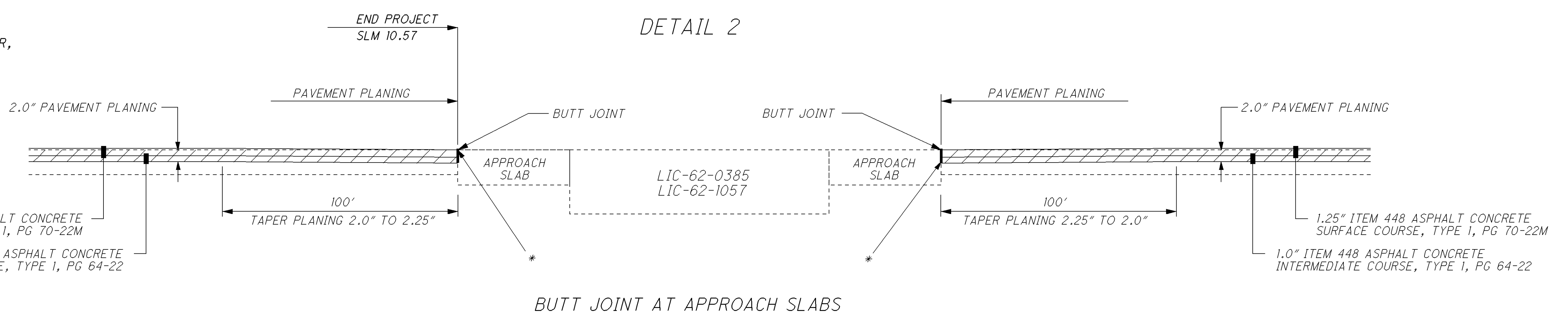
DETAIL 1

-  ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
-  ITEM 202 WEARING COURSE REMOVED
-  VARIABLE THICKNESS (0" TO 1.75")
448 INTERMEDIATE COURSE, TYPE 1
=38.9 CU.YD.



DETAIL 2

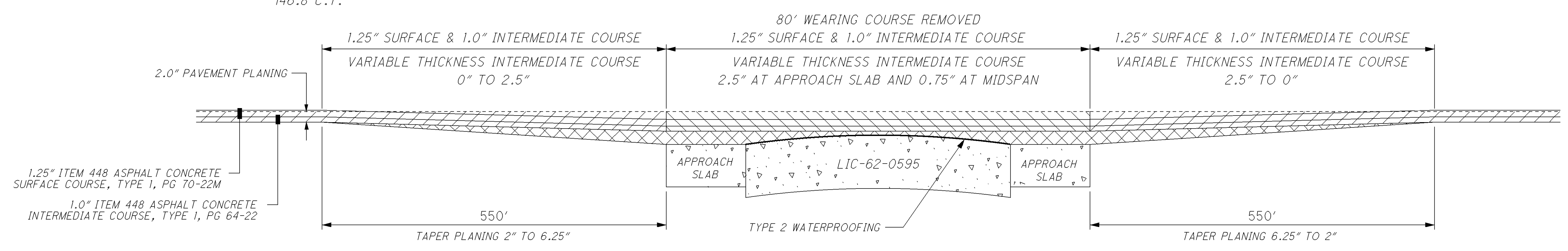
* 2.0" DEEP JOINT SEALER,
AS PER PLAN



DETAIL 3

VARIABLE INTERMEDIATE COURSE: 146.8 C.Y. CARRIED TO SHEET 11
 $(2 \times (2.5"/2/12) \times 24' \times 550')/27 = 101.9 \text{ C.Y.}$
 $(2 \times (2.5"/2/12) \times (3' + 3') \times 550')/27 = 25.5 \text{ C.Y.}$
 $(2 \times (2.5"/12) \times 40' \times 15')/27 = 9.3 \text{ C.Y.}$
 $((2.5" + 0.75"/2/12) \times 40' \times 50')/27 = 10.1 \text{ C.Y.}$
 146.8 C.Y.

NOTE: INSTALL THE VARIABLE THICKNESS INTERMEDIATE COURSE IN TWO LIFTS
WHERE NECESSARY TO MEET MAXIMUM LIFT THICKNESS OF 1.5".



REMOVE ASPHALT FROM DECK (4.5" TO 6.25"), PLACE TYPE 2 WATERPROOFING, PLACE ASPHALT CONCRETE (4.75" AT ABUTMENTS TO 3" MID-SPAN)

REFERENCE NO.	SHEET NO.	LOCATION	SIDE	202			608		690	609			COMMENTS
				CURB AND GUTTER REMOVED	WALK REMOVED	CURB REMOVED	4" CONCRETE WALK, (CURB RAMP AREA)	4" CONCRETE WALK, (EXTRA WALK AREA)	SPECIAL-MISC.: DETECTABLE WARNING	COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6	CURB, TYPE 6, AS PER PLAN	
			CL./LT./RT.	SQ. YD.	SQ. FT.	FT.	SQ. FT.	SQ. FT.	SQ. FT.	FT.	FT.	FT.	
LOCATION 1													
1-CR	14B	N. KASSON ST.	LT		24.0	4	16.0		8		4		REMOVE AND REPLACE 6' WALK
2-CR	14B	N. KASSON ST.	LT		40.0	4	16.0	16.0	8		4		REMOVE AND REPLACE 10' WALK
3-CR	14B	S. KASSON ST.	RT	4	52.0		20.0	24.0	8	4			REMOVE AND REPLACE 10' WALK TO WEST AND 6' WALK TO SOUTH
4-CR	14B	S. KASSON ST.	RT	4	28.0		20.0		8	4			REMOVE AND REPLACE 7' WALK
SUBTOTALS							72	40					
TOTAL LOCATION 1				8	144	8	112		32	8	8		
LOCATION 2													
C-1	14	STA. 250+80.00 TO KASSON ST.	LT									167	
C-2	14A,14B,14C	KASSON ST. TO STA. 259+37.70	LT									688	
C-3	14	ALLEY TO KASSON ST.	RT									141	
C-4	14A,14B,14C	KASSON ST. TO STA. 258+23.50	RT									572	
R-1	14	STA. 250+80.00 TO KASSON ST.	LT			167							
R-2	14A,14B,14C	KASSON ST. TO STA. 259+37.70	LT			688							
R-3	14	ALLEY TO STA. 251+46.00	RT			48							
R-4	14A	STA. 251+60.00 TO KASSON ST.	RT			82							
R-5	14A,14B,14C	KASSON ST. TO STA. 258+23.50	RT			572							
TOTAL LOCATION 2						1,557						1,568	

ITEM 609, CURB, TYPE 6, AS PER PLAN

IN AREAS OF CURB REMOVAL AND/OR REPLACEMENT ADJACENT TO THE EXISTING ROADWAY, THE CONTRACTOR SHALL SAW CUT THE PAVEMENT TO PROVIDE A NEAT JOINT, AS DESCRIBED IN 202.05.

LOW STRENGTH MORTAR SHALL BE USED TO BACKFILL VOIDS CREATED BETWEEN PROPOSED CURB AND EXISTING ROADWAY. LOW STRENGTH MORTAR SHALL BE CONSTRUCTED TO AN ELEVATION 3 INCHES BELOW THE FINISH GRADE OF THE PROPOSED ASPHALT OVERLAY.

ALL OF THE MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS INCLUDING THE SAW CUT AND LOW STRENGTH MORTAR NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 609, CURB, TYPE 6, AS PER PLAN.

ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING TOPSOIL ADJACENT TO CURB AND THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE REQUIRED TO SEED AND MULCH THE TOPSOIL AS PER 659 OF THE 2010 CMS.

PAYMENT FOR ITEM 653, TOPSOIL FURNISHED AND PLACED, AS PER PLAN, SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL FURNISHED AND PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659, SEEDING AND MULCHING, CLASS 1 (FROM SHEET 14G) = 500 SQ. YD.

ITEM 659, COMMERCIAL FERTILIZER 0.14 TON
(ONE TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA)
 $2 \times (500 \times 7,410) = 0.135$

ITEM 659, LIME 0.11 ACRE
(PERMANENT SEEDED AREA)
 $500 \text{ SQ. YD.} \times 9 \text{ SQ. FT./SQ.YD.} \times 43,560 \text{ SQ. FT./ACRE} = 0.11 \text{ ACRE}$

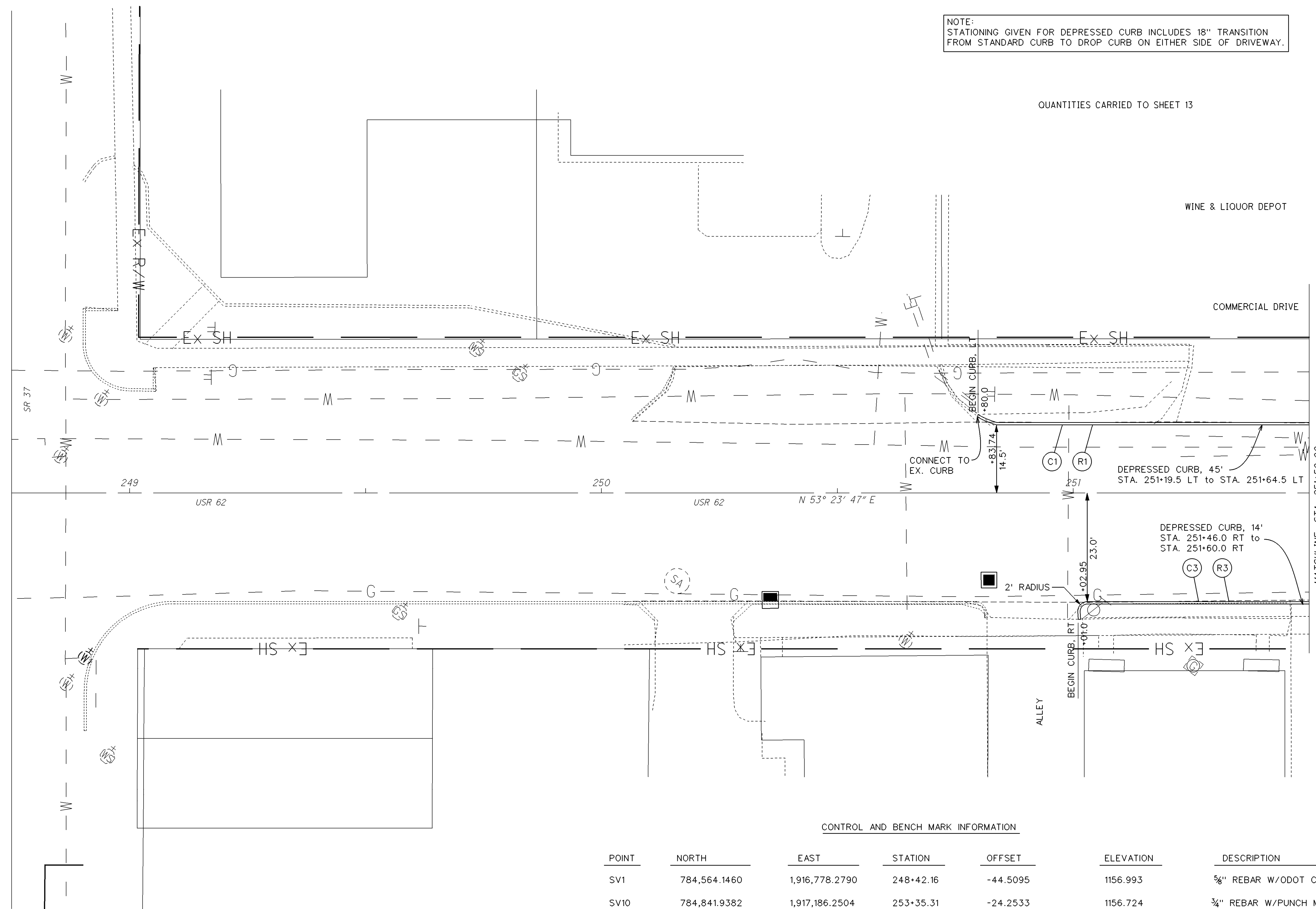
ITEM 659, WATER 4 M. GAL.
(0.0027 M. GAL. PER SQ. YD. OF THE PERMANENT SEEDED AREA)
 $3 \times (500 \times 0.0027) = 4.05$

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

CURB RAMP SUB-SUMMARY

LIC-62-0.00

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NOTE:
STATIONING GIVEN FOR DEPRESSED CURB INCLUDES 18" TRANSITION FROM STANDARD CURB TO DROP CURB ON EITHER SIDE OF DRIVEWAY.

QUANTITIES CARRIED TO SHEET 13

CALCULATED BCT CHECKED DNM

0 5 10 20
HORIZONTAL SCALE IN FEET

PLAN SHEET SR 62
STA. 248+75.00 TO STA. 251+50.00

LIC-62-0.00

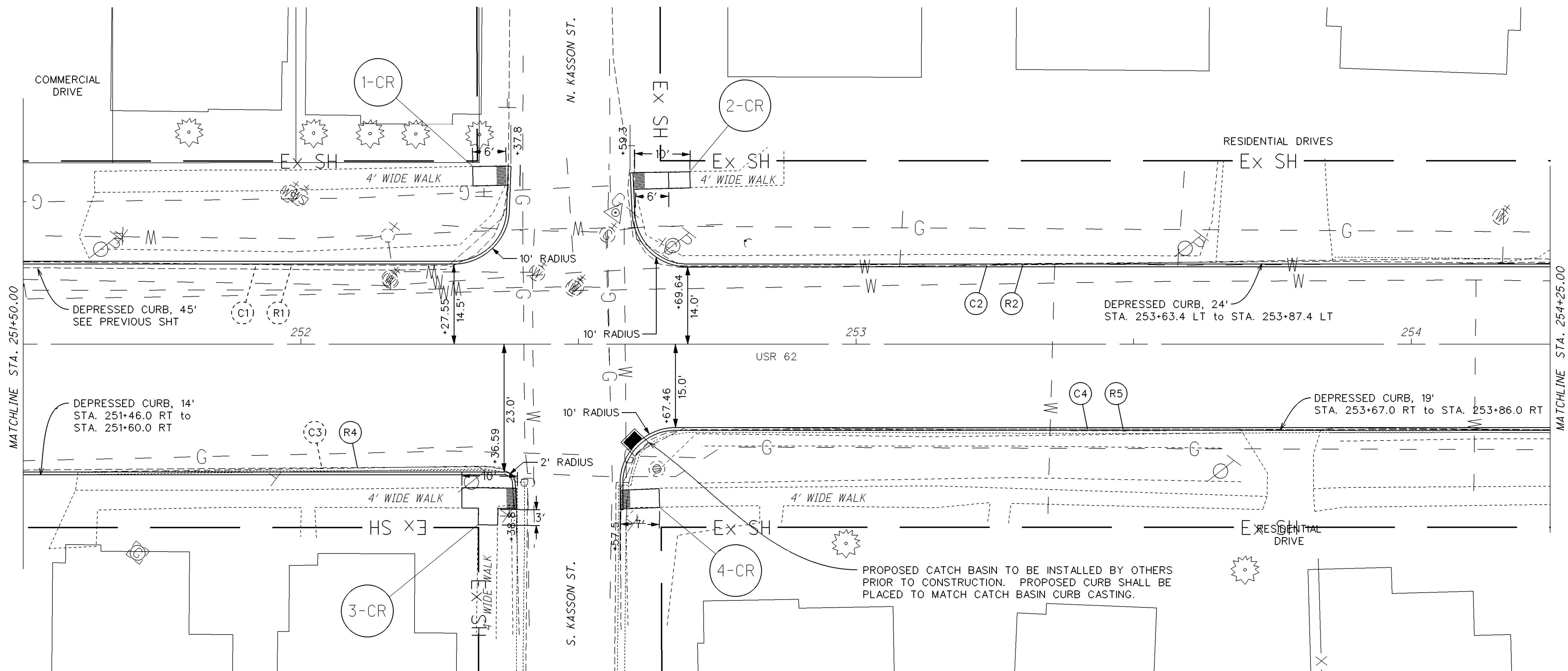
CONTROL AND BENCH MARK INFORMATION

POINT	NORTH	EAST	STATION	OFFSET	ELEVATION	DESCRIPTION
SV1	784,564.1460	1,916,778.2790	248+42.16	-44.5095	1156.993	5/8" REBAR W/ODOT CAP
SV10	784,841.9382	1,917,186.2504	253+35.31	-24.2533	1156.724	3/4" REBAR W/PUNCH MARK
SV11	785,165.4520	1,917,616.9955	258+74.00	-27.1222	1173.781	3/4" REBAR W/PUNCH MARK

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WINE & LIQUOR DEPOT

NOTE:
STATIONING GIVEN FOR DEPRESSED CURB INCLUDES 18" TRANSITION
FROM STANDARD CURB TO DROP CURB ON EITHER SIDE OF DRIVEWAY.



FOR QUANTITIES SEE SHEET 13
FOR CURB RAMP DETAILS SEE SHEETS 15-16

■ - DETECTABLE WARNING, SEE SHEET 17 FOR DETAILS



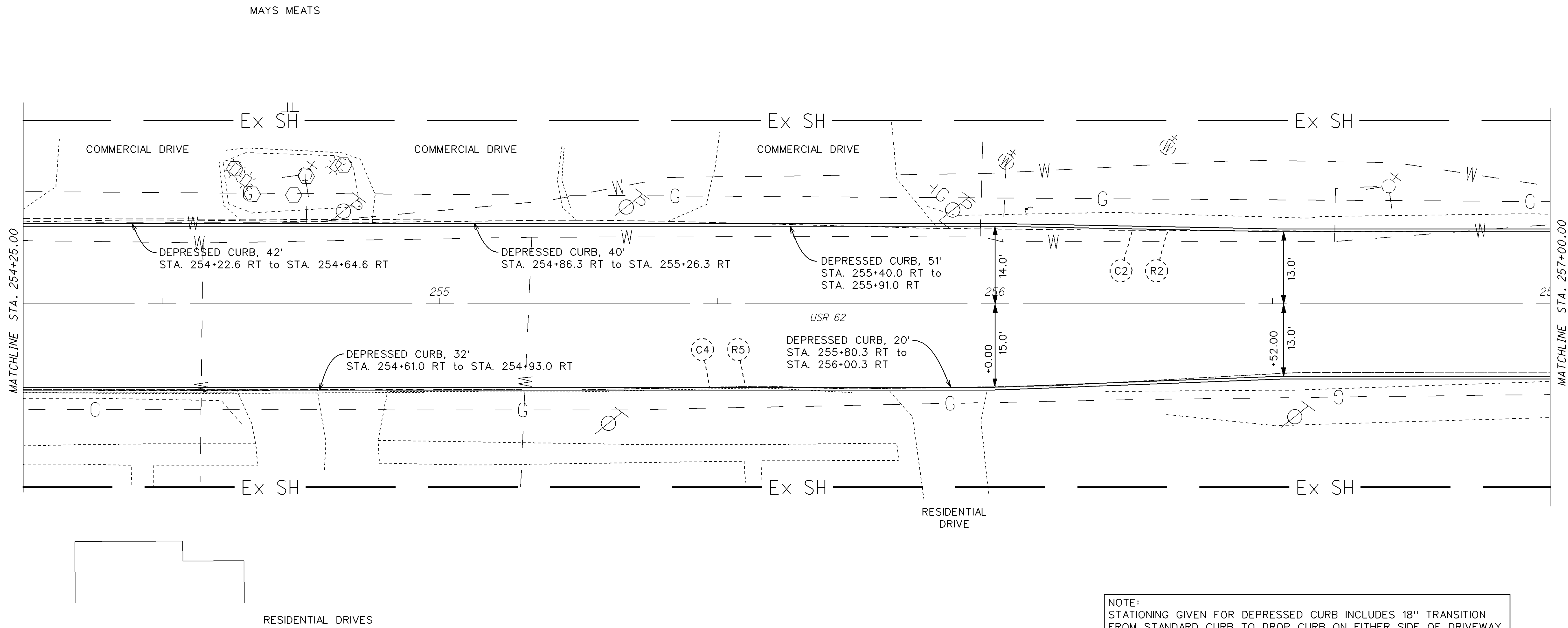
CALCULATED
BCT
CHECKED
DMM

PLAN SHEET SR 62
STA. 251+50.00 TO STA. 254+25.00

LIC-62-0.00

14A
27

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NOTE:
 STATIONING GIVEN FOR DEPRESSED CURB INCLUDES 18" TRANSITION
 FROM STANDARD CURB TO DROP CURB ON EITHER SIDE OF DRIVEWAY.

QUANTITIES CARRIED TO SHEET 13

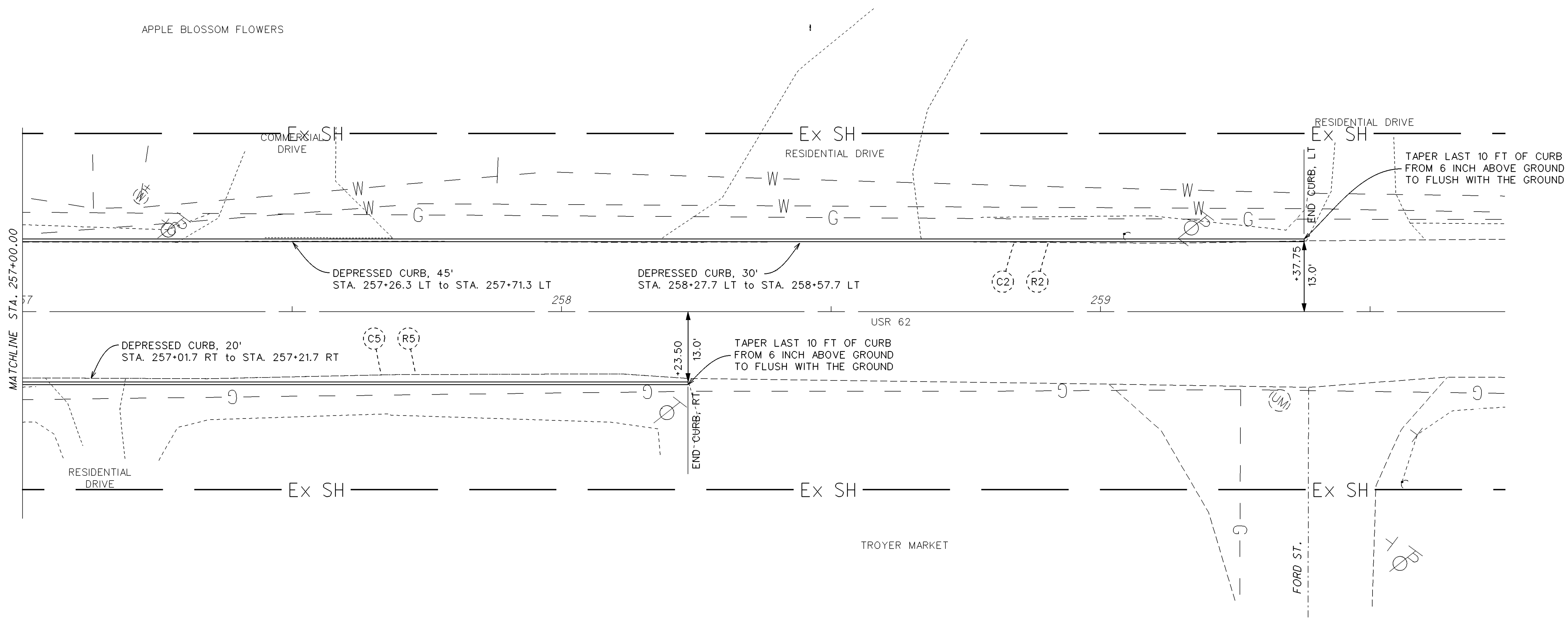
CALCULATED
 BCT
 CHECKED
 DNM

0 10 20
 HORIZONTAL
 SCALE IN FEET

PLAN SHEET SR 62
 STA. 254+25.00 TO STA. 257+00.00

LIC-62-0.00

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QUANTITIES CARRIED TO SHEET 13

NOTE:
 STATIONING GIVEN FOR DEPRESSED CURB INCLUDES 18" TRANSITION
 FROM STANDARD CURB TO DROP CURB ON EITHER SIDE OF DRIVEWAY.

CALCULATED
 BCT
 CHECKED
 DNM

0 5 10 20
 HORIZONTAL
 SCALE IN FEET

PLAN SHEET SR 62
STA. 257+00.00 TO STA. 259+75.00

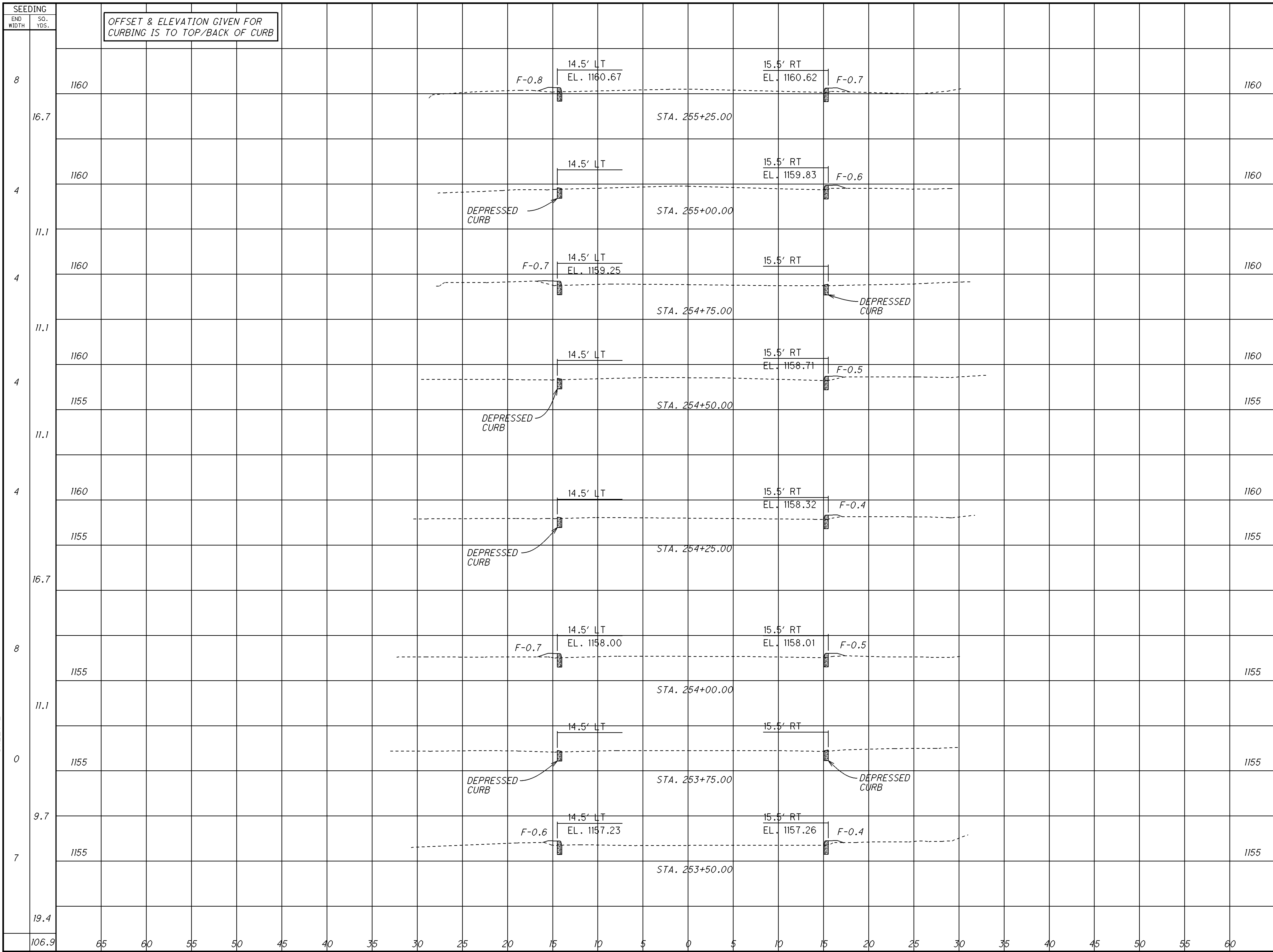
LIC-62-0.00

SEEDING			OFFSET & ELEVATION GIVEN FOR CURBING IS TO TOP/BACK OF CURB								END AREA		VOLUME		CALCULATED BCT	CHECKED DNM
END WIDTH	SO. YDS.										CUT	FILL	CUT	FILL		
7		1155									0	1.0	0	0.8		
19.4		1155									0	0.8	0	0.6		
7		1155									0	0.8	0	0.6		
18.1		1155									0	0.8	0	0.6		
6		1155									0	0.5	0	0.2		
5.5		1155	RESUME 252+59.30 LT SUSPEND 252+37.80 LT STA. 252+75.00								0	0.2	0	0.1		
5.9		1155	RESUME 252+59.30 LT SUSPEND 252+37.80 LT STA. 252+75.00								0	0.2	0	0.1		
8		1155									0	0.7	0	0.6		
22.2		1155									0	0.7	0	0.6		
8		1155									0	0.6	0	0.7		
22.2		1155									0	0.6	0	0.7		
8		1155									0	0.9	0	0.4		
11.1		1155									0	0.9	0	0.4		
0		1155									0	0	0	0.3		
7.0		1155									0	0	0	0.3		
5		1155									0	0.7	0	1.0		
19.4		1155									0	0.7	0	1.0		
9		1155									0	1.4	0	0.5		
4		1155									0	1.4	0	0.5		
4.4		1155									0	0.2	0	0.2		
0		1155	STA. 250+80.00 BEGIN CURB LT STA. 251+01.00 BEGIN CURB RT								0	0	0	0		
0		1155	STA. 250+80.00 BEGIN CURB LT STA. 251+01.00 BEGIN CURB RT								0	0	0	0		
135.2		1155									0	4.9	0	4.9		

**CROSS SECTIONS
STA. 251+00.00 TO STA. 253+25.00**

LIC-62-0.00

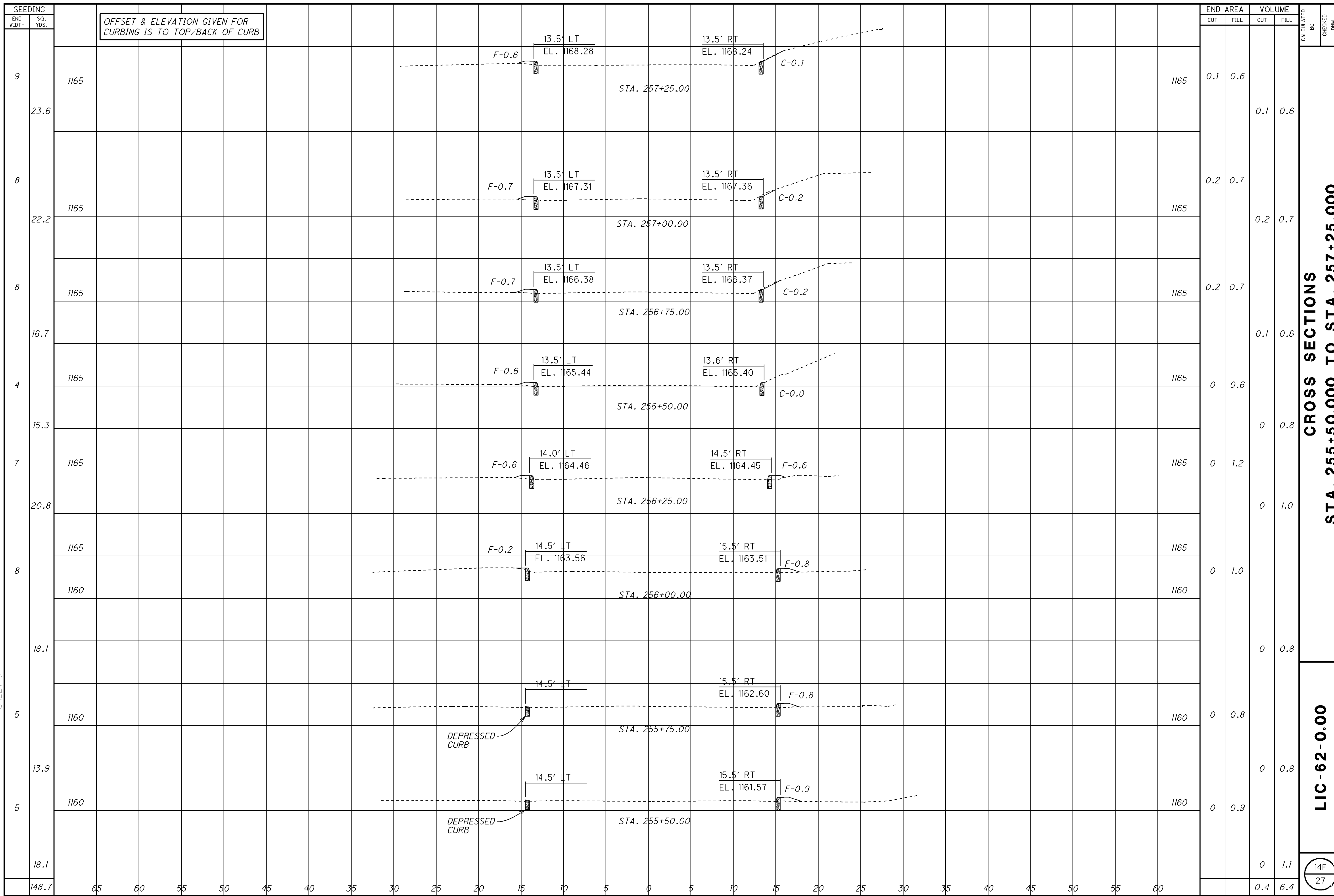
 14D
 27

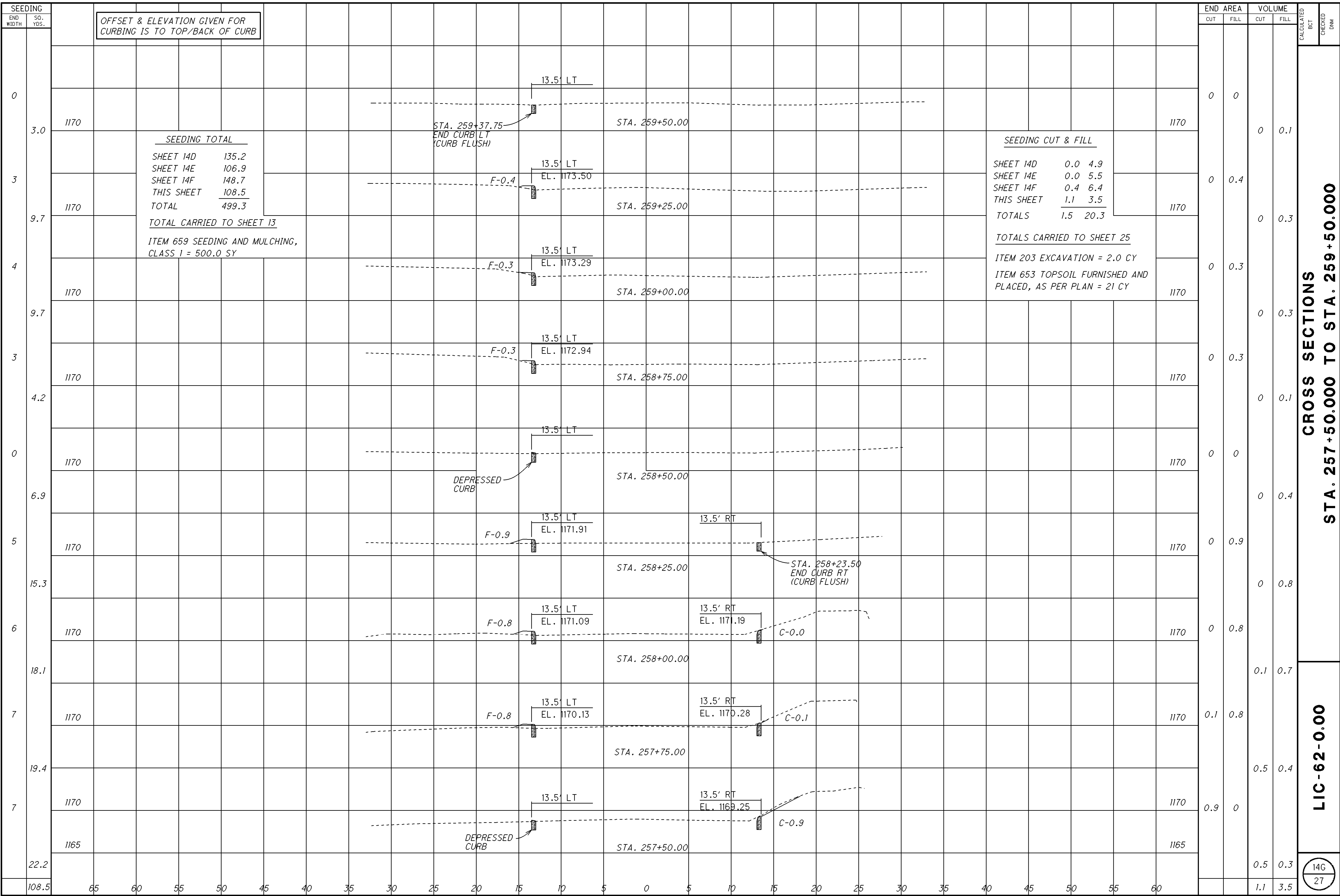


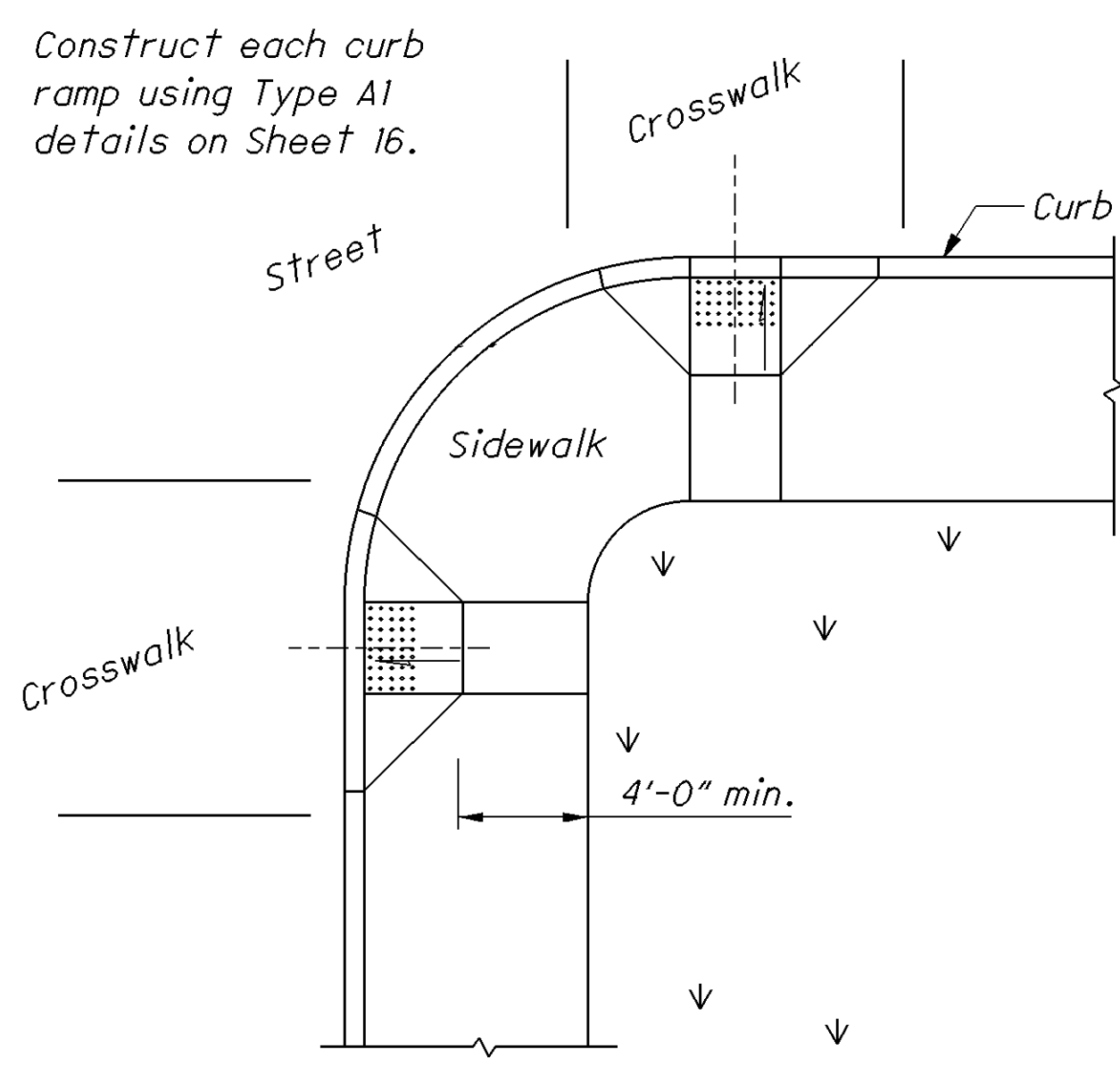
SEEDING		END AREA		VOLUME		CALCULATED BCT	CHECKED DMM
END WIDTH	SO. YDS.	CUT	FILL	CUT	FILL		
8		0	1.5				
16.7				0	1.0		
4		0	0.6				
11.1				0	0.6		
4		0	0.7				
11.1				0	0.6		
4		0	0.5				
11.1				0	0.4		
4		0	0.4				
16.7				0	0.8		
8		0	1.2				
11.1				0	0.6		
0		0	0				
9.7				0	0.5		
7		0	1.0				
19.4				0	1.0		
106.9				0	5.5		

**CROSS SECTIONS
STA. 253+50.00 TO STA. 255+25.00**

LIC-62-0.00

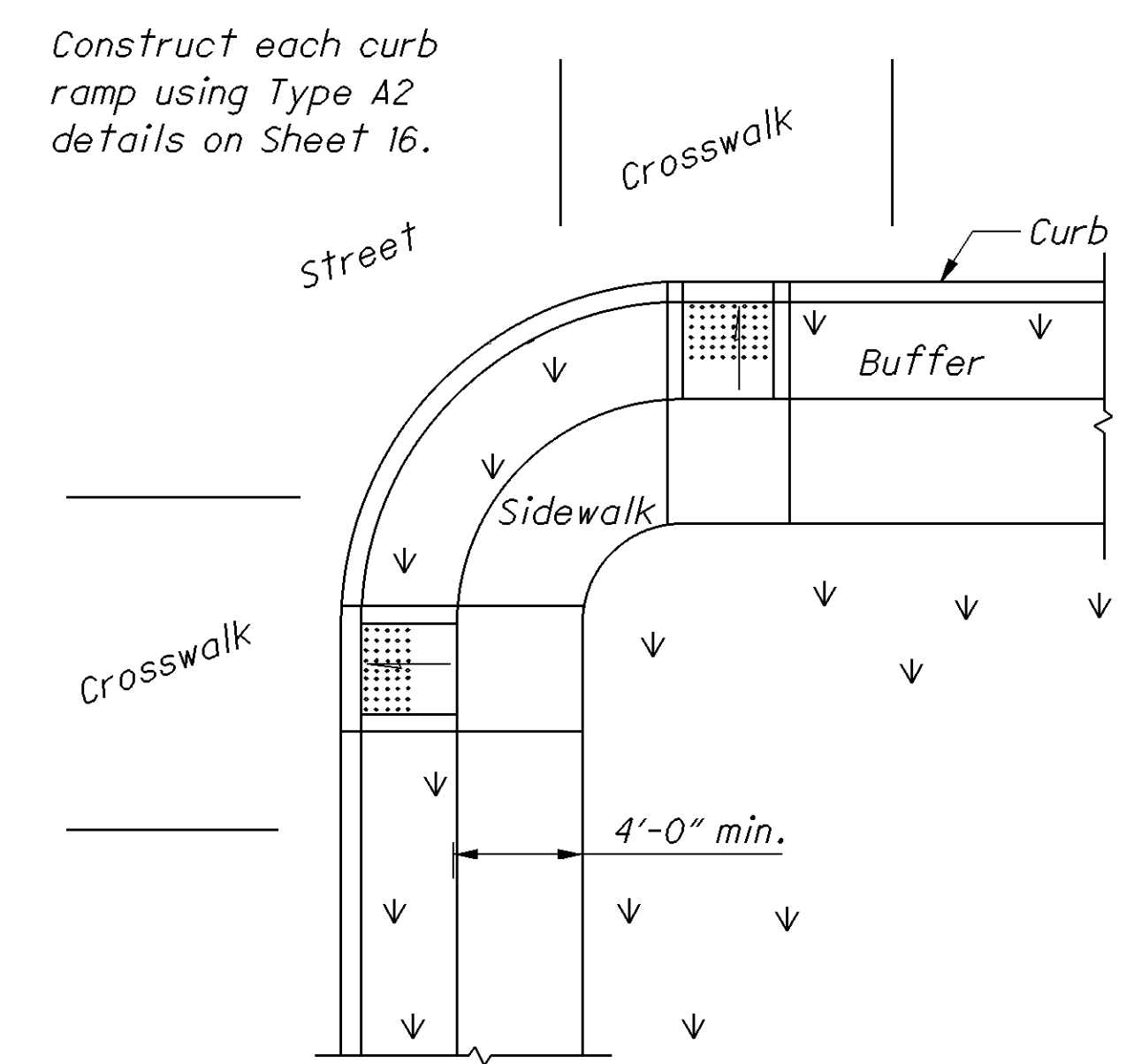






Construct each curb ramp using Type A1 details on Sheet 16.

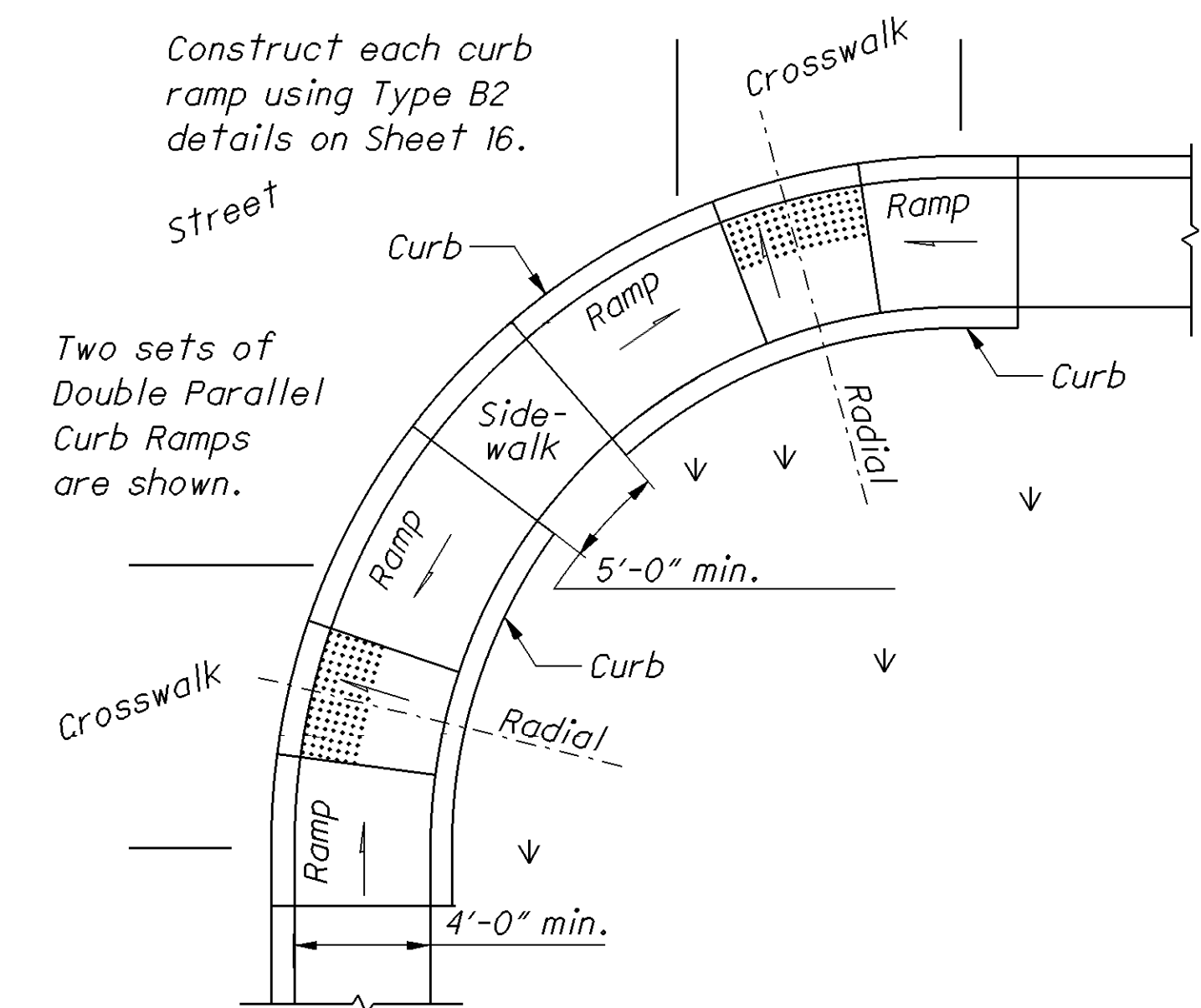
Use curb ramps with flared sides at locations with wide sidewalks.



Construct each curb ramp using Type A2 details on Sheet 16.

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

PERPENDICULAR CURB RAMPS

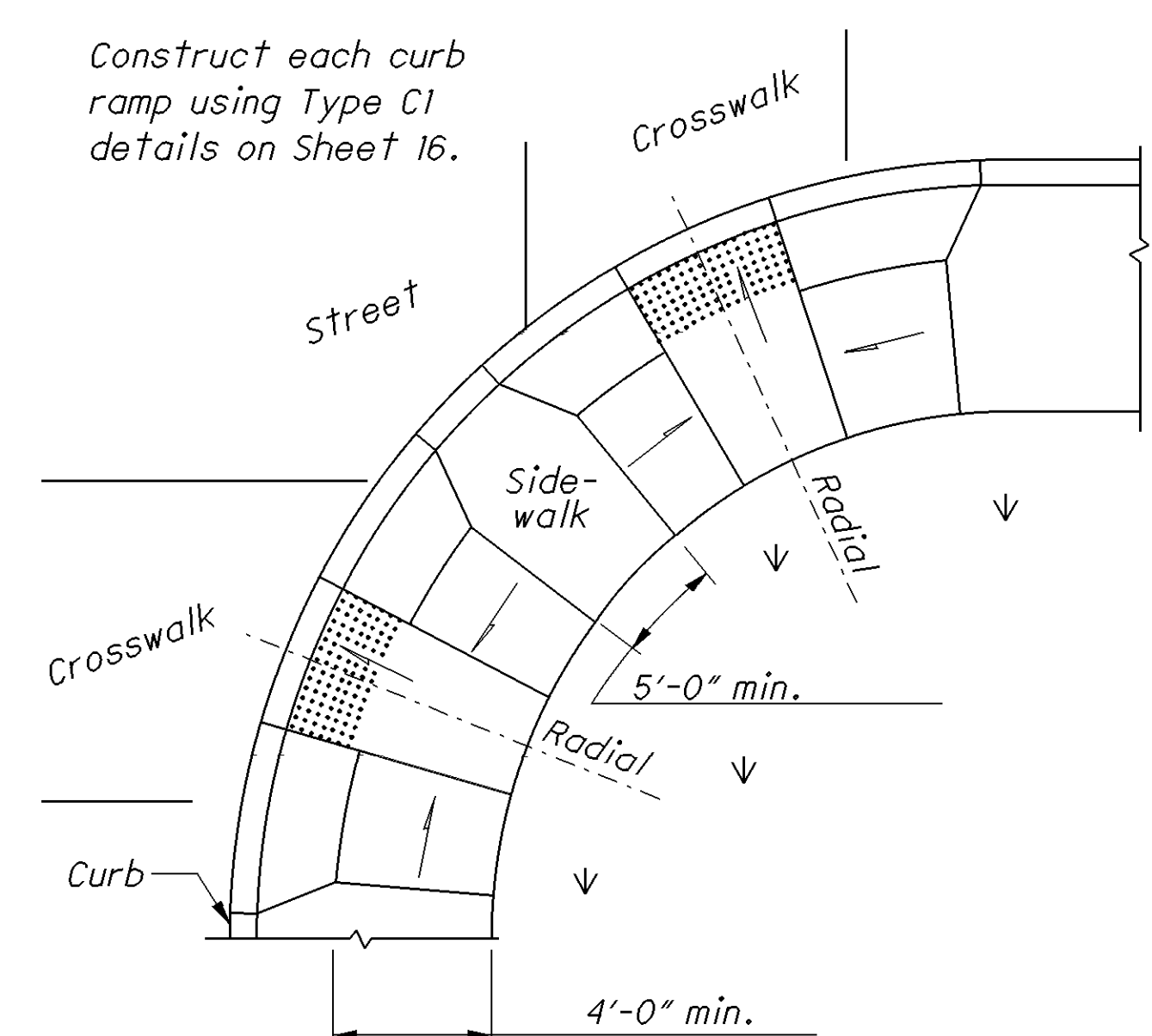


Construct each curb ramp using Type B2 details on Sheet 16.

Two sets of Double Parallel Curb Ramps are shown.

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

PARALLEL CURB RAMPS



Construct each curb ramp using Type C1 details on Sheet 16.

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 16 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 17. 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.

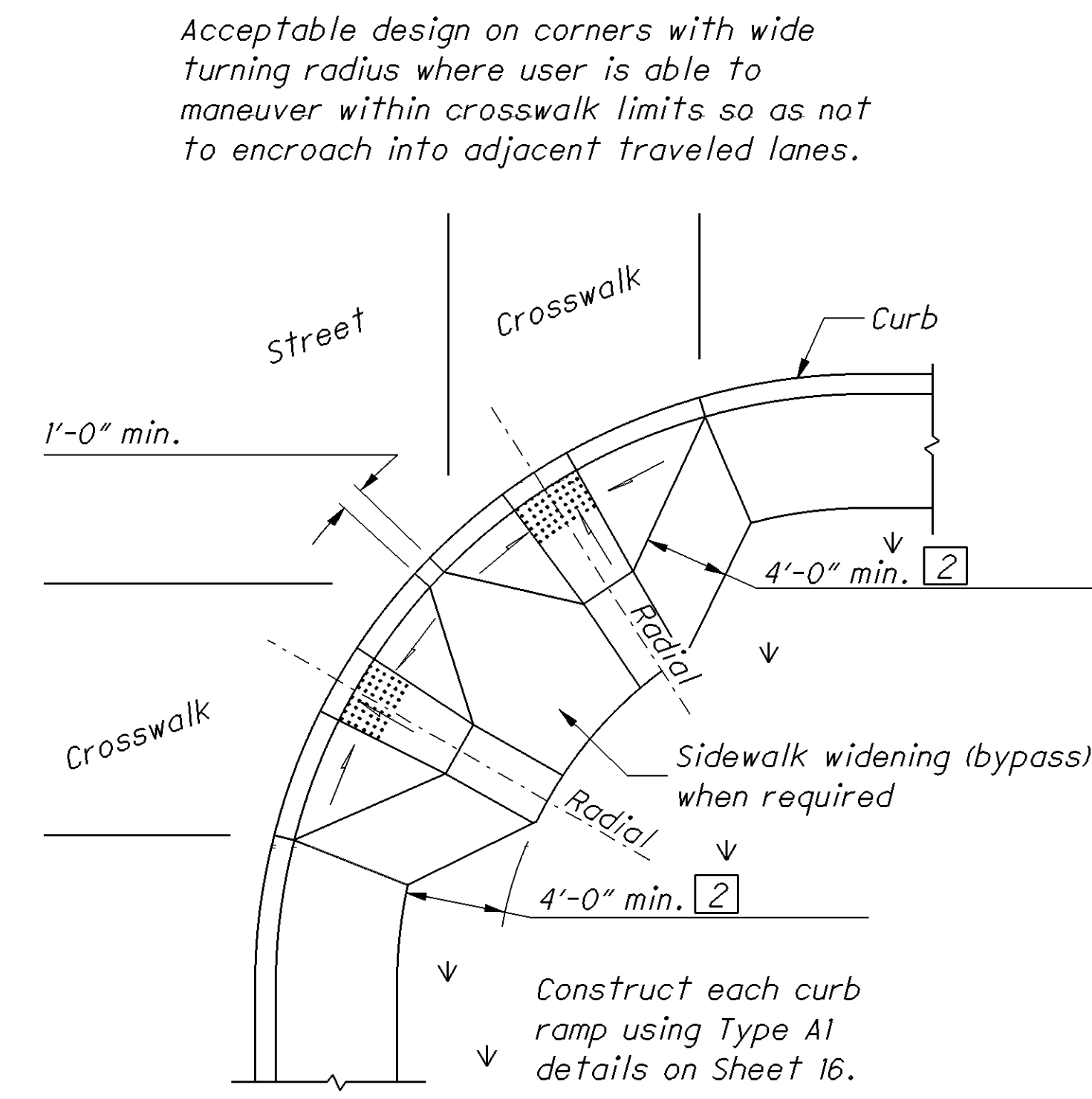
METHOD OF PAYMENT: New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type -- (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

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.

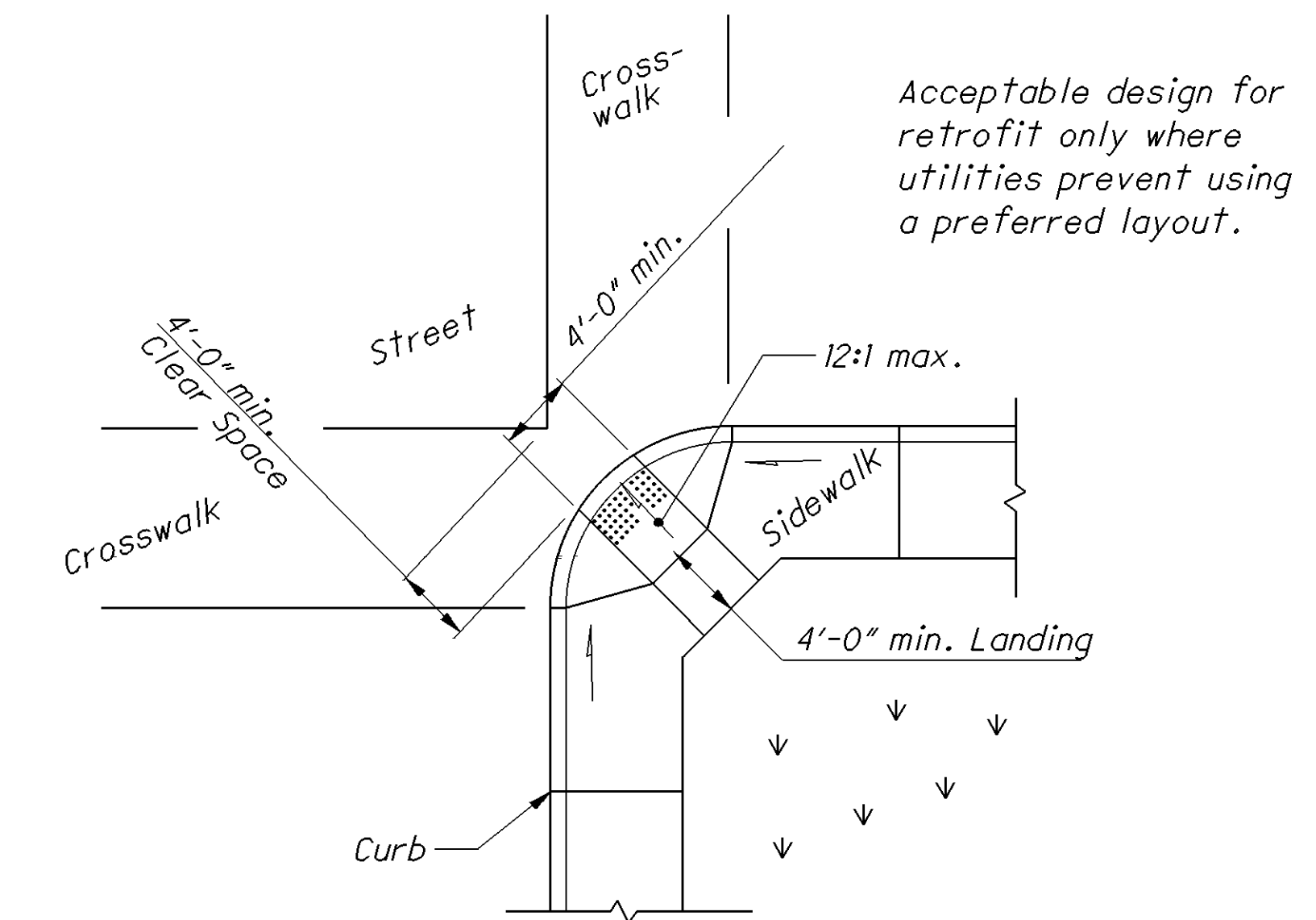
Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.

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

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.

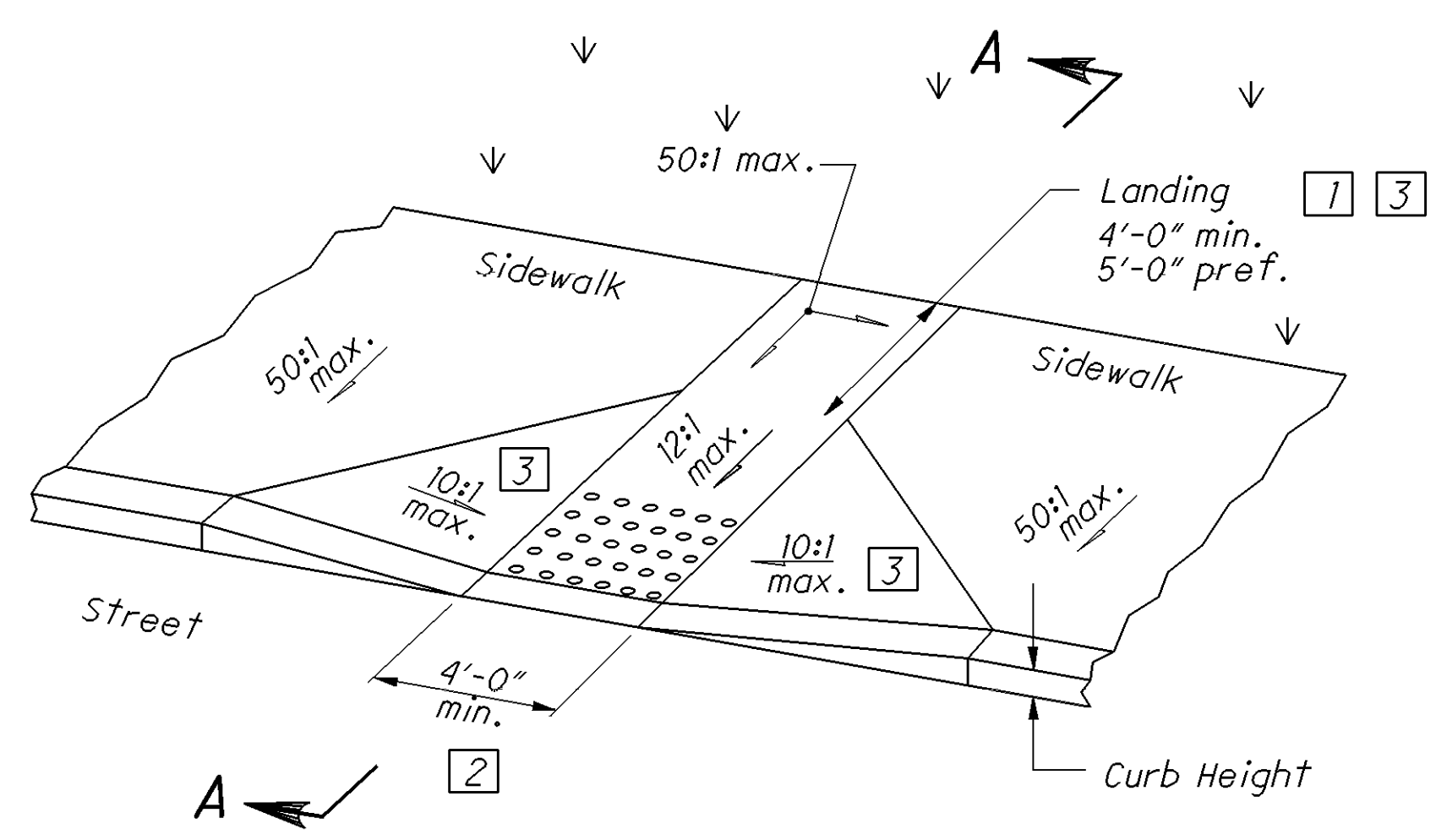
Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

LEGEND

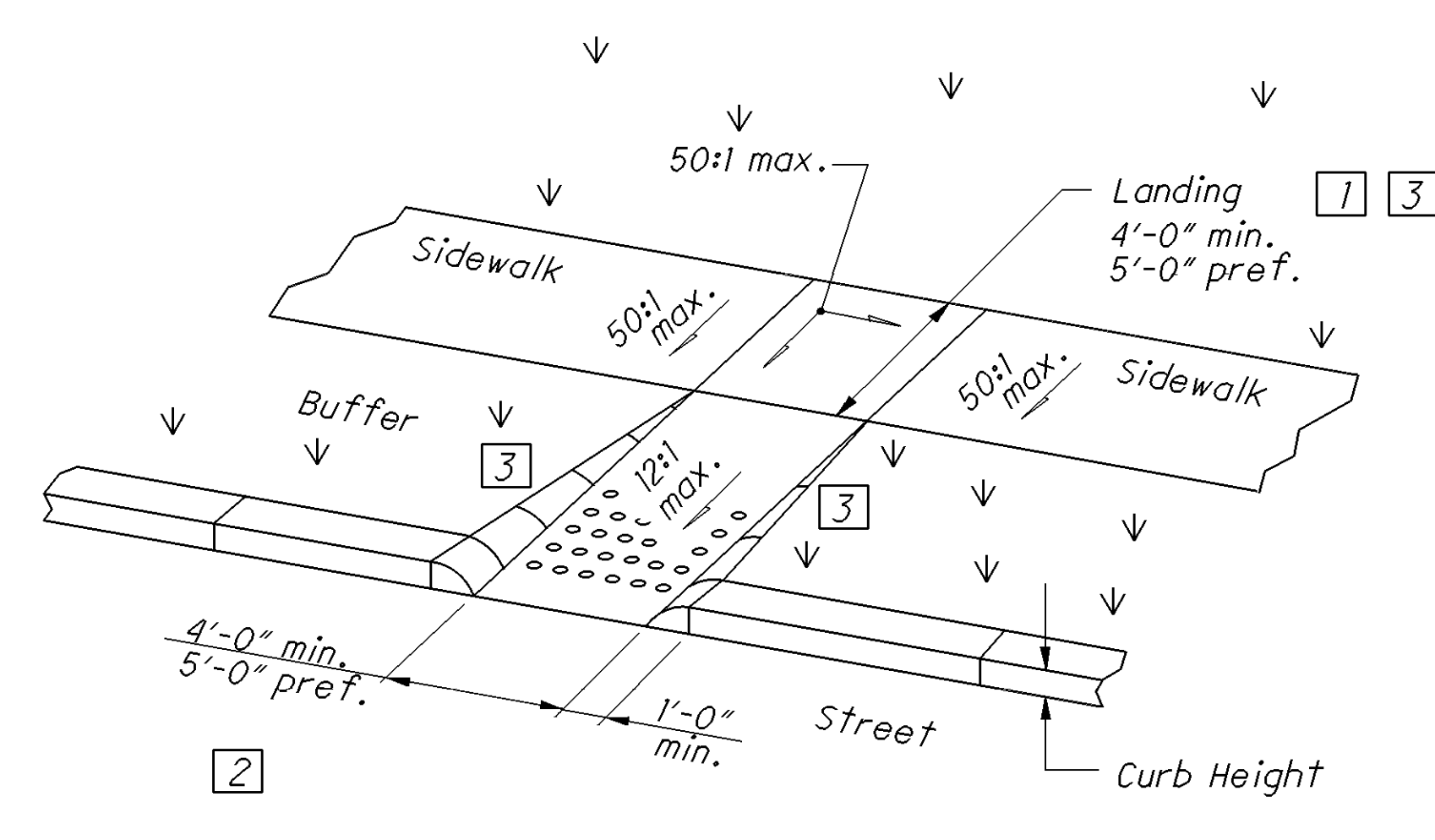
- 1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.
- 2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The 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 17 for Sections.

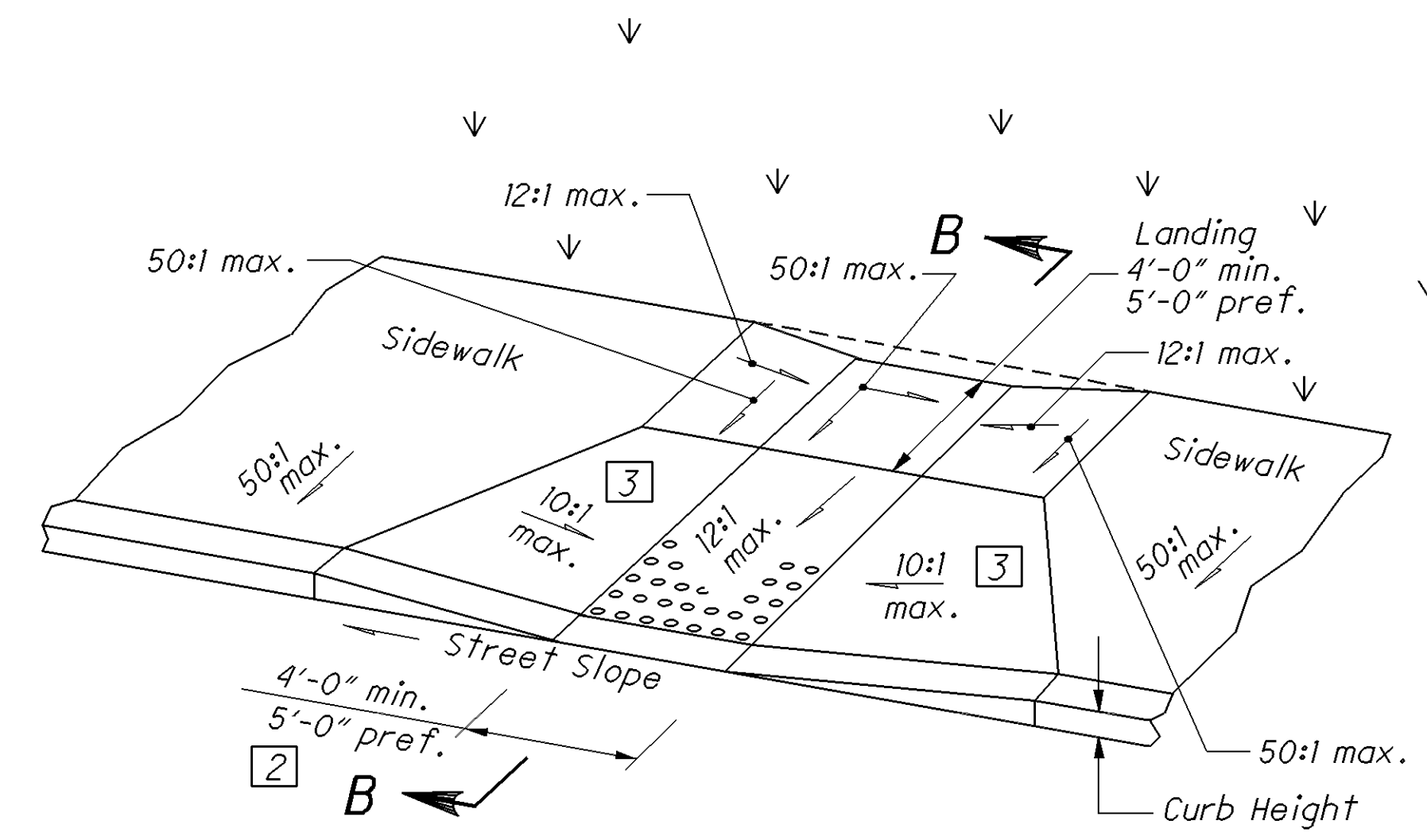


Type A1 (Perpendicular with flared sides)

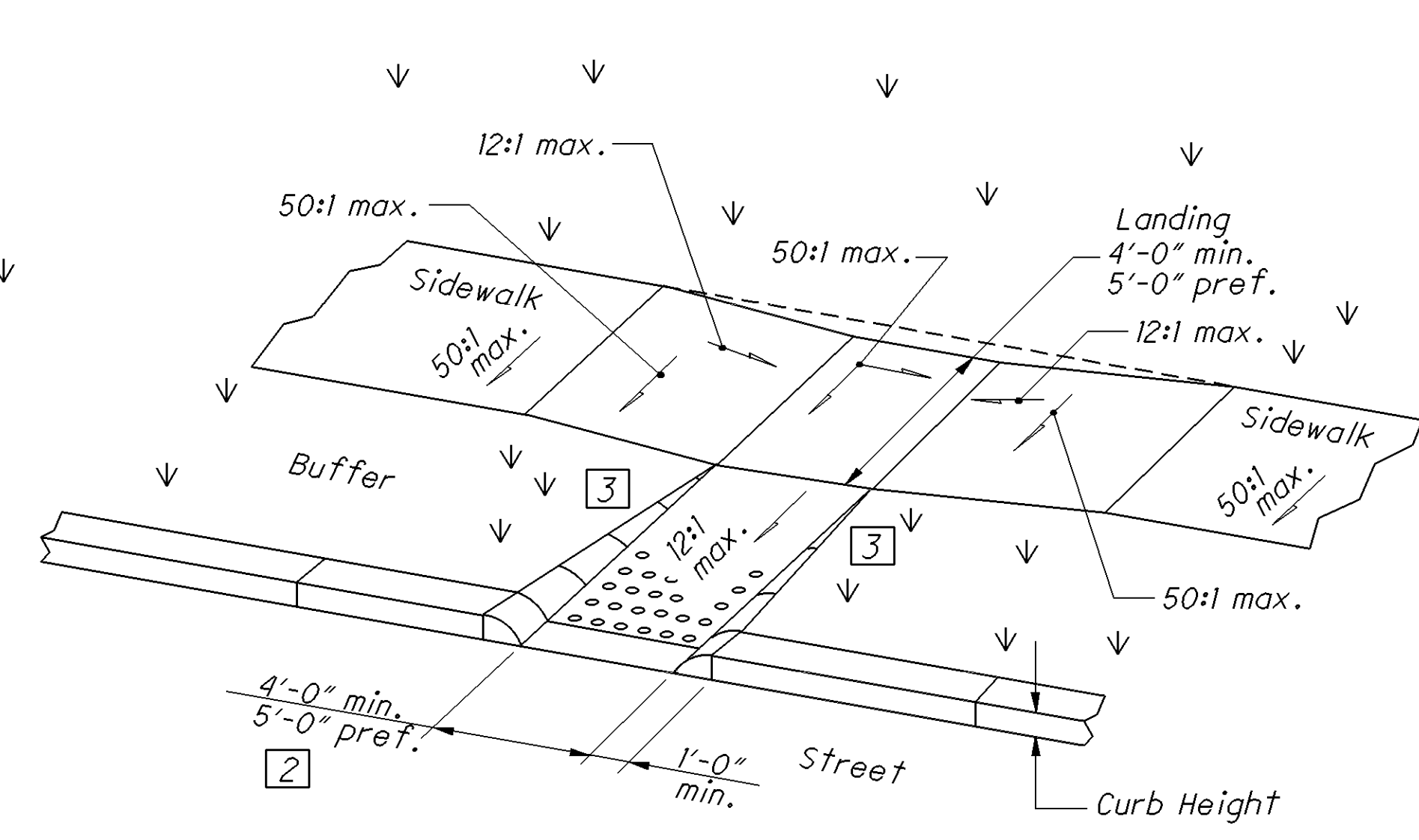


Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

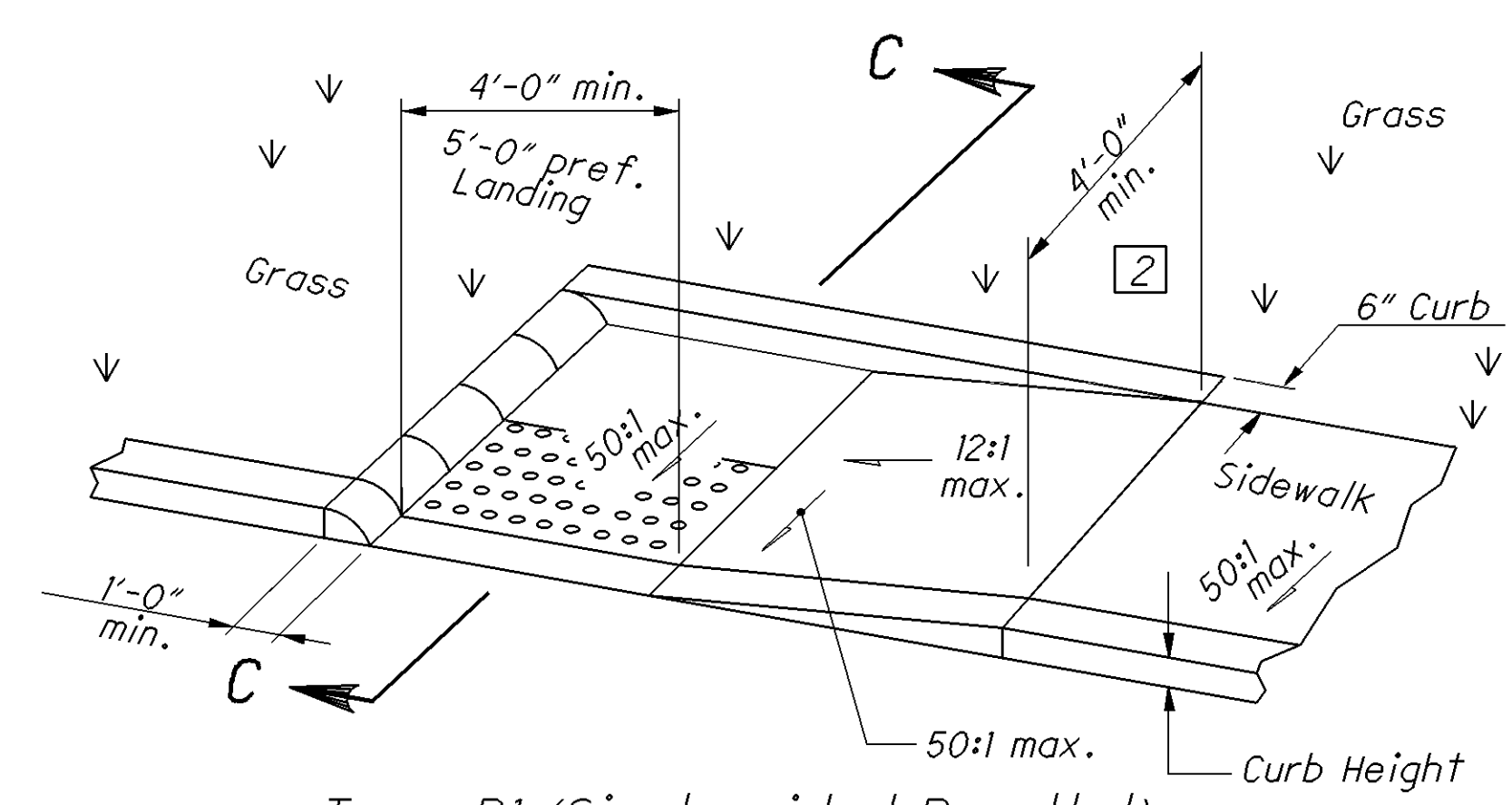


Type C1 (Combined with flared sides)

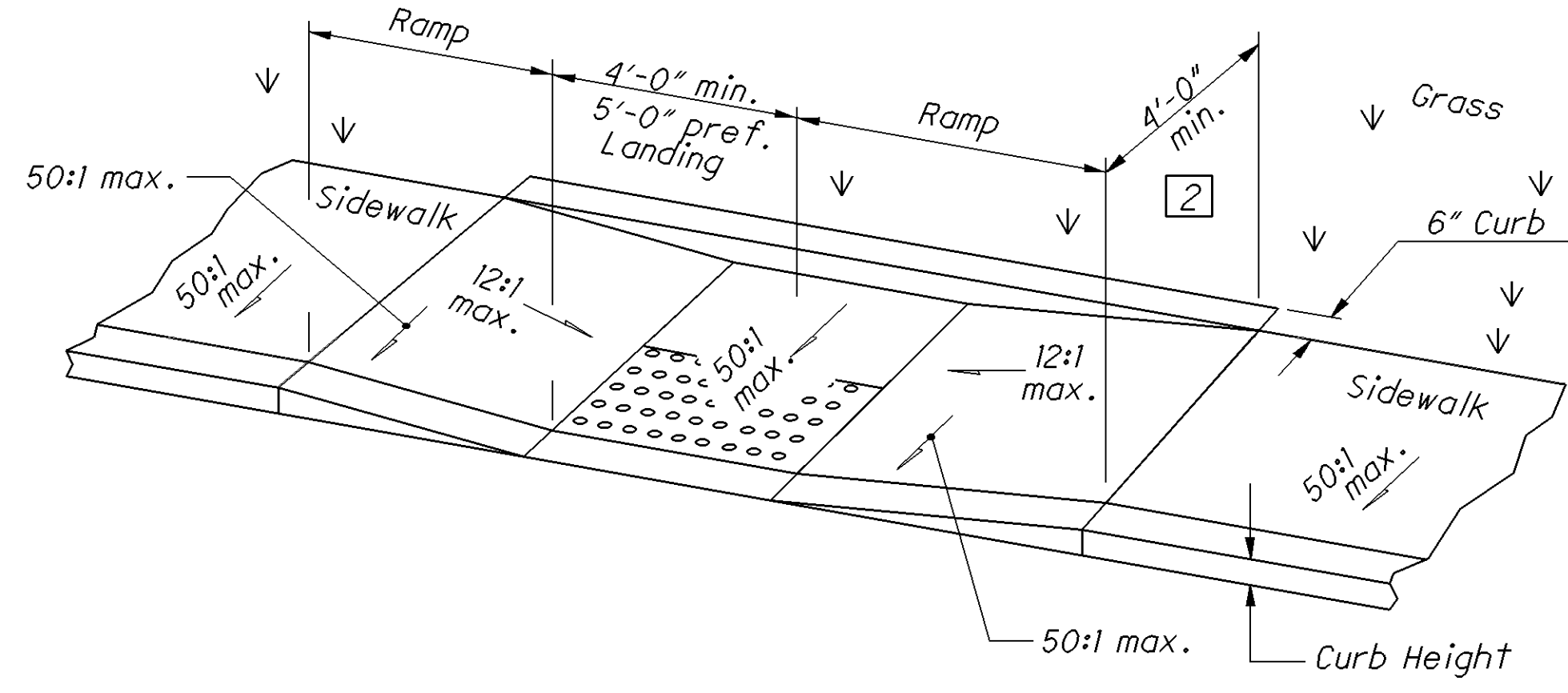


Type C2 (Combined with returned curb)

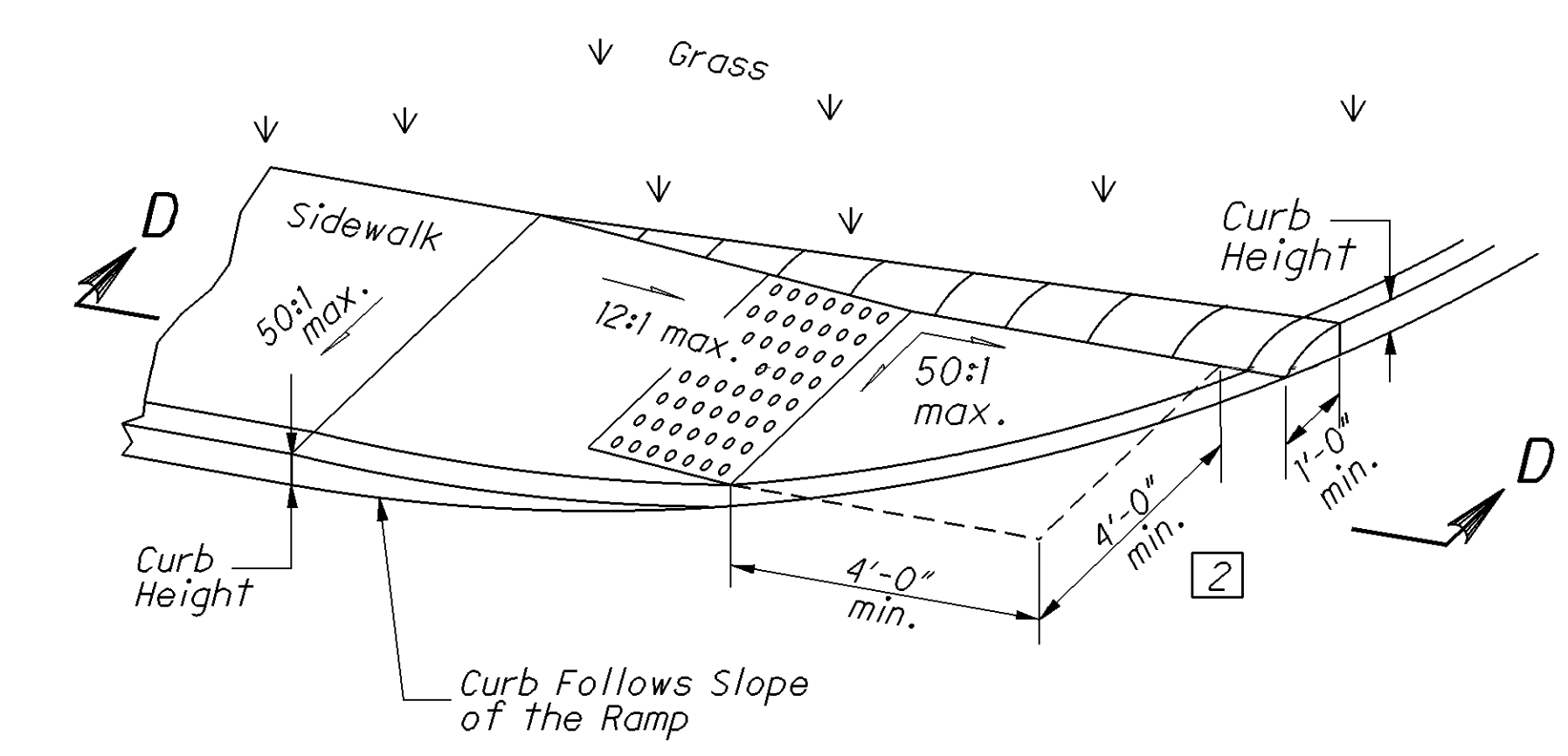
COMBINED CURB RAMP DETAILS



Type B1 (Single sided Parallel)



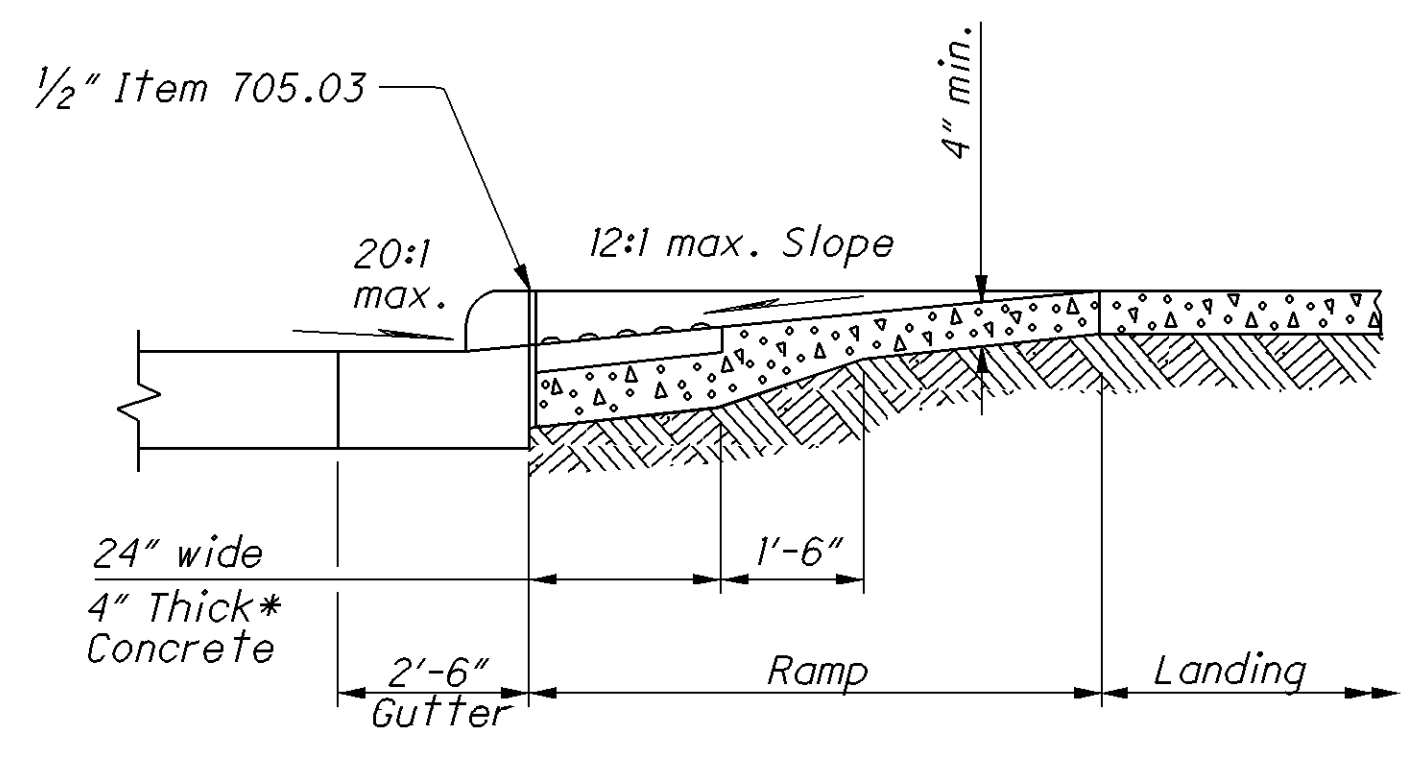
Type B2 (Double sided Parallel)



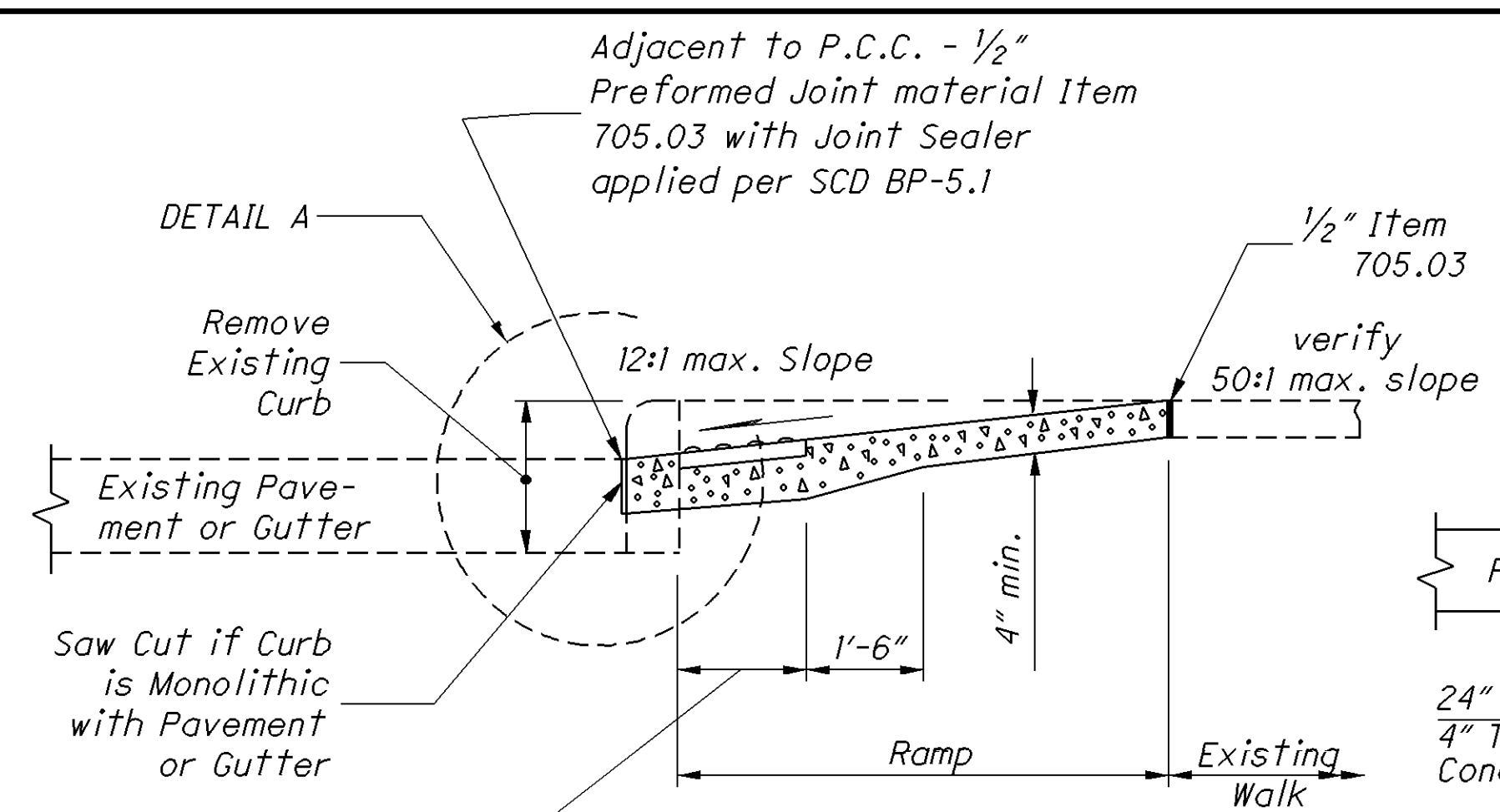
Type B3 (Single sided Parallel)

PARALLEL CURB RAMP DETAILS

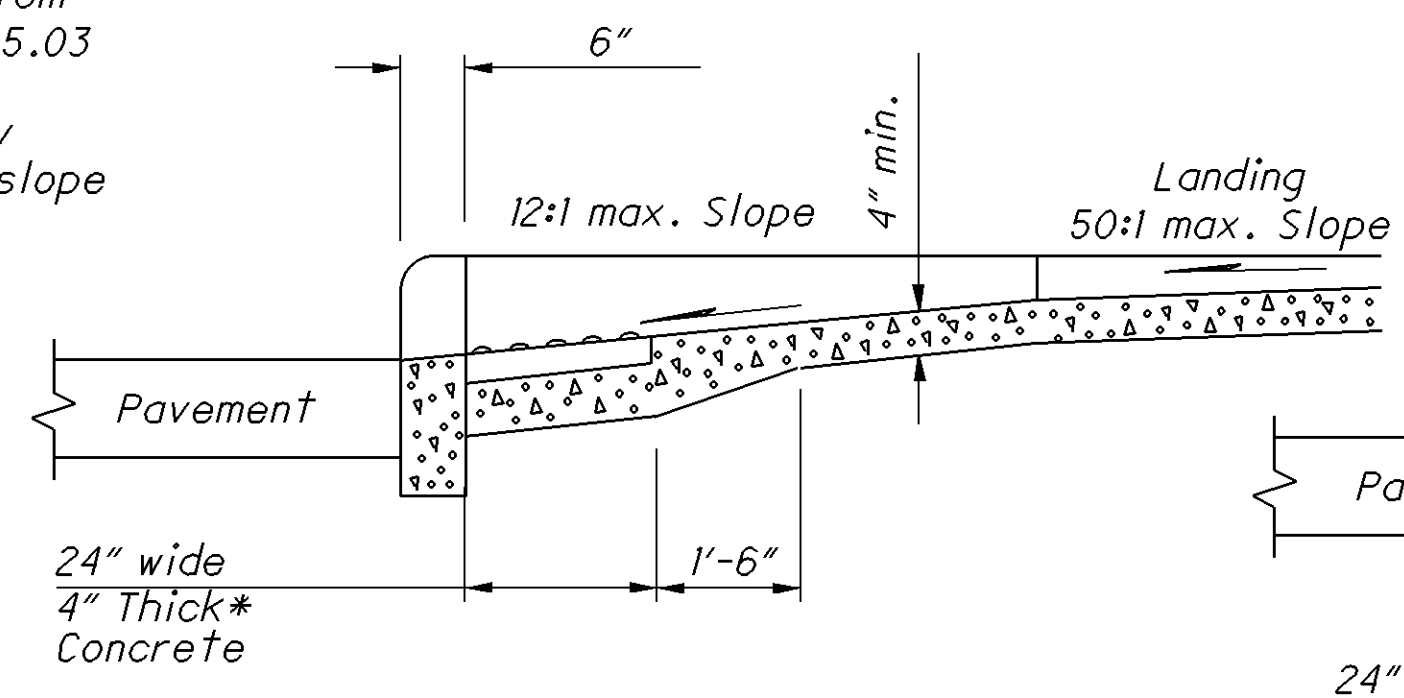
83849_CRD_002.DGN 12-5-12



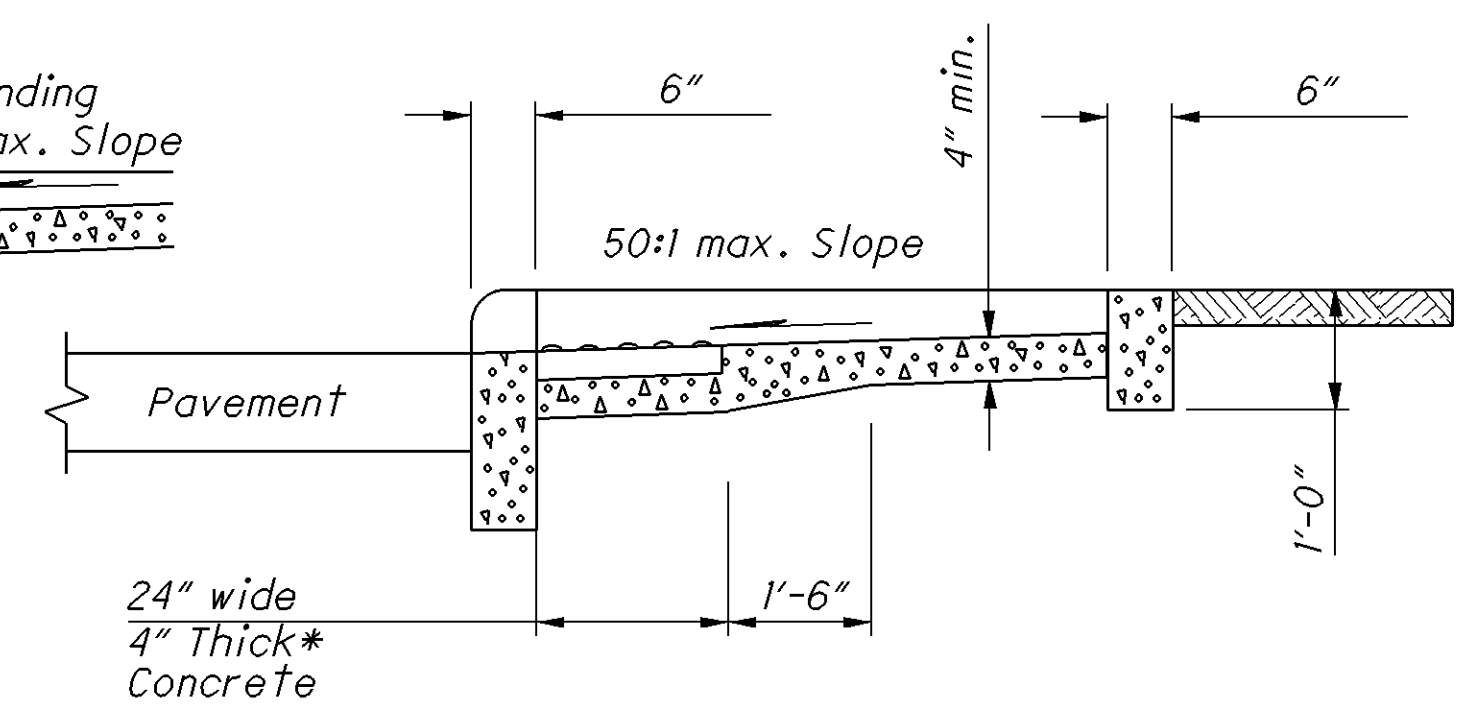
New gutter shown.
**SECTION A-A
NORMAL DETAIL**
See Sheet 16.



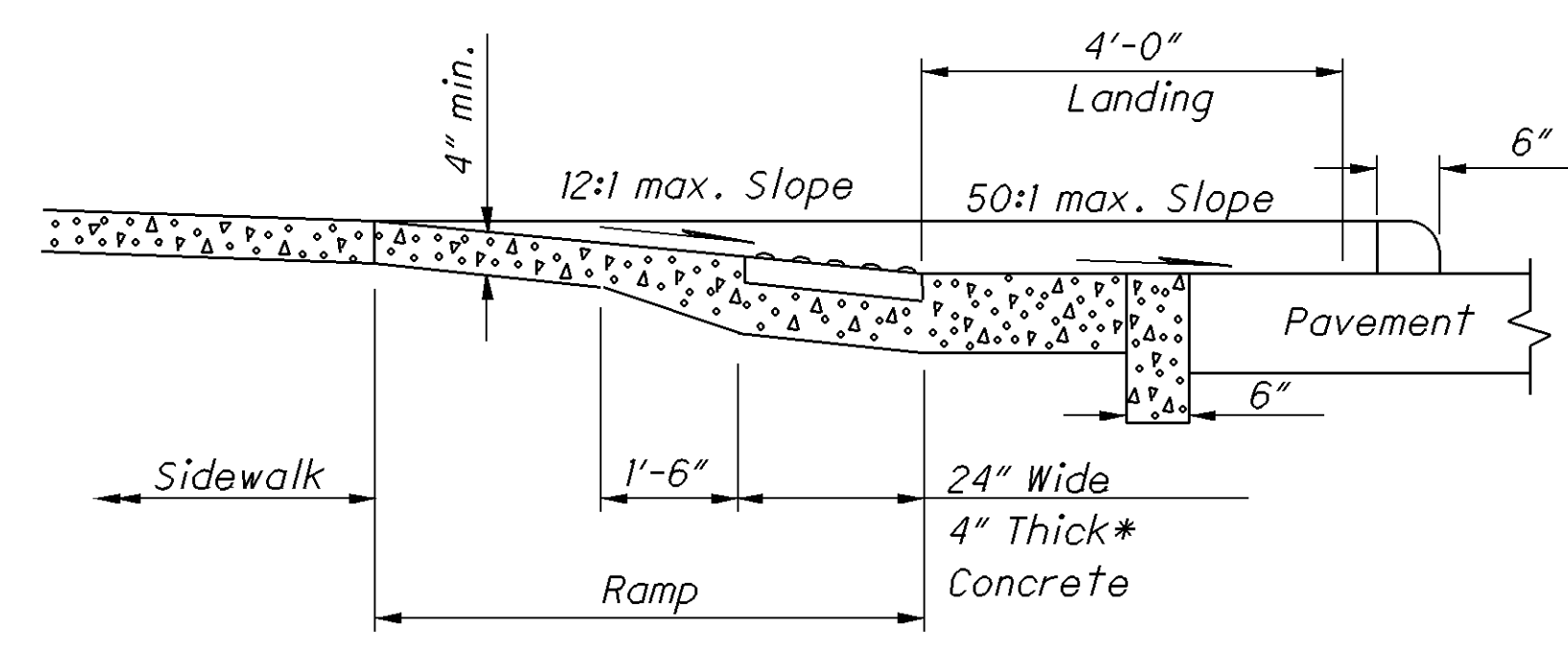
**SECTION A-A
EXISTING WALK DETAIL**
See Sheet 16.



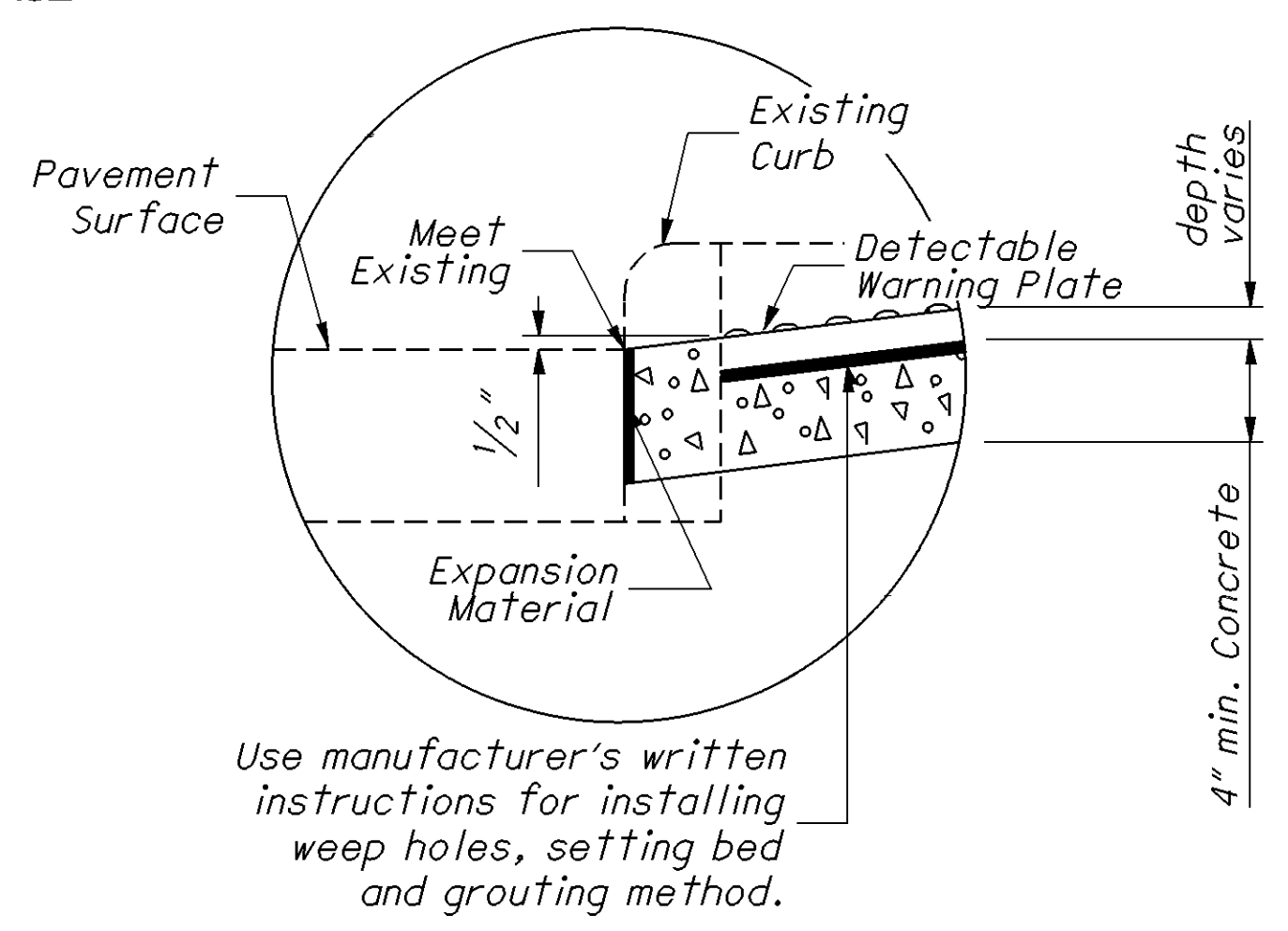
SECTION B-B
See Sheet 16.



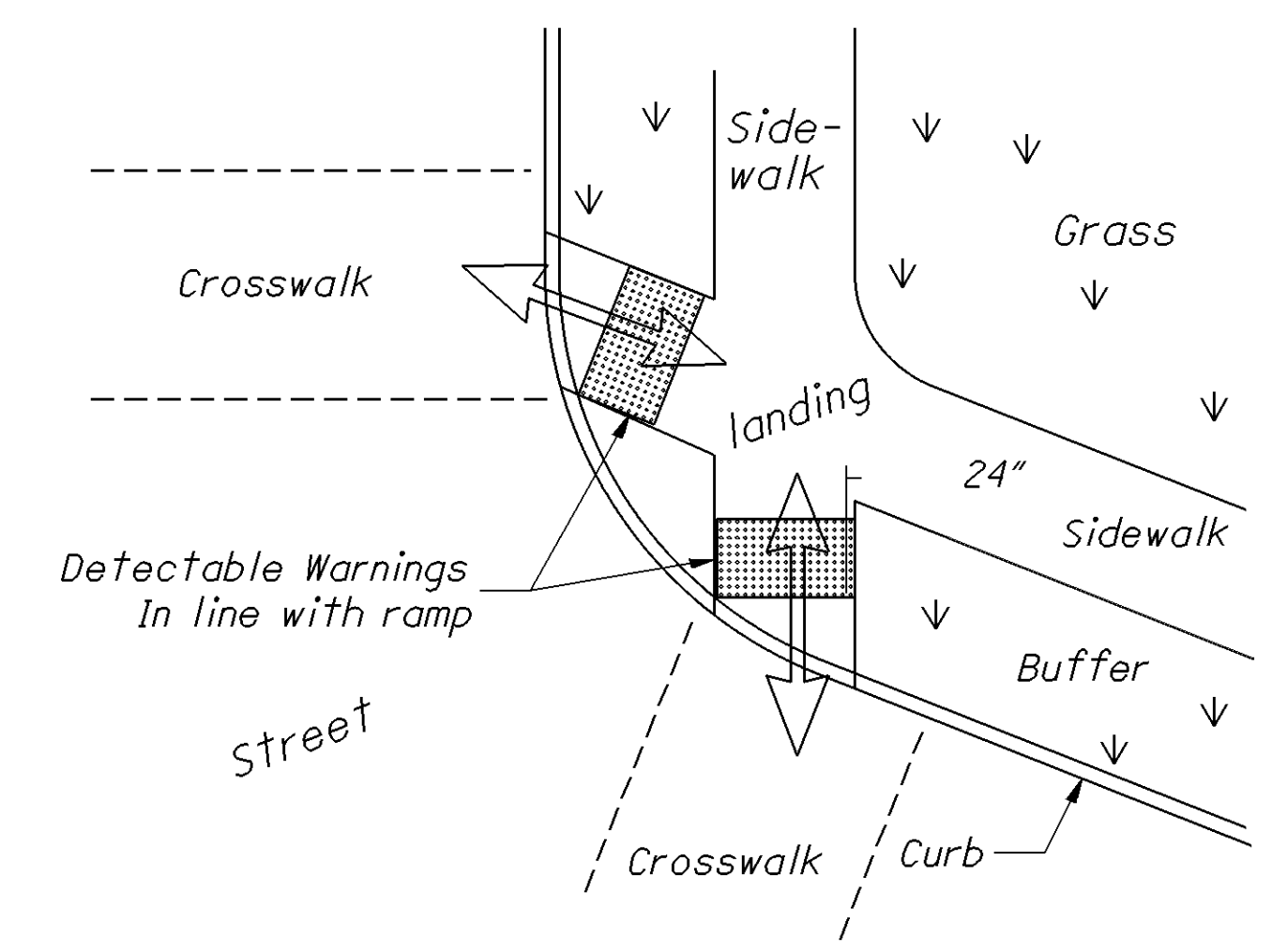
SECTION C-C
See Sheet 16.



SECTION D-D
See Sheet 16.



DETAIL A



DETECTABLE WARNING ALIGNMENT

DETECTABLE WARNINGS NOTES

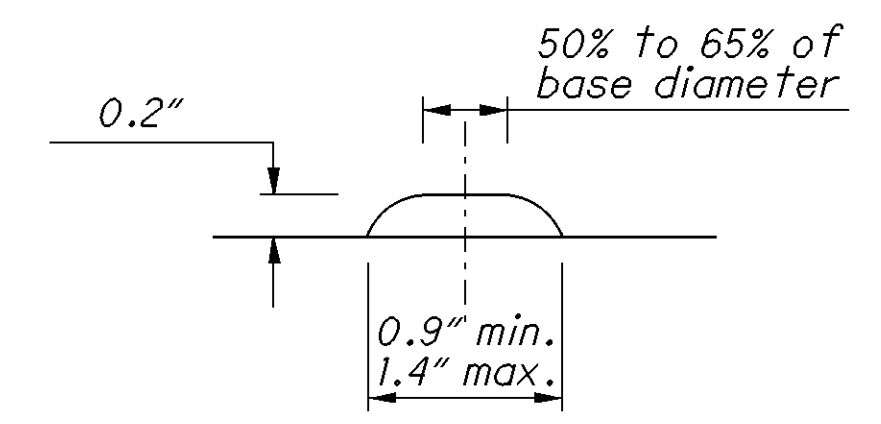
GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

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 15.

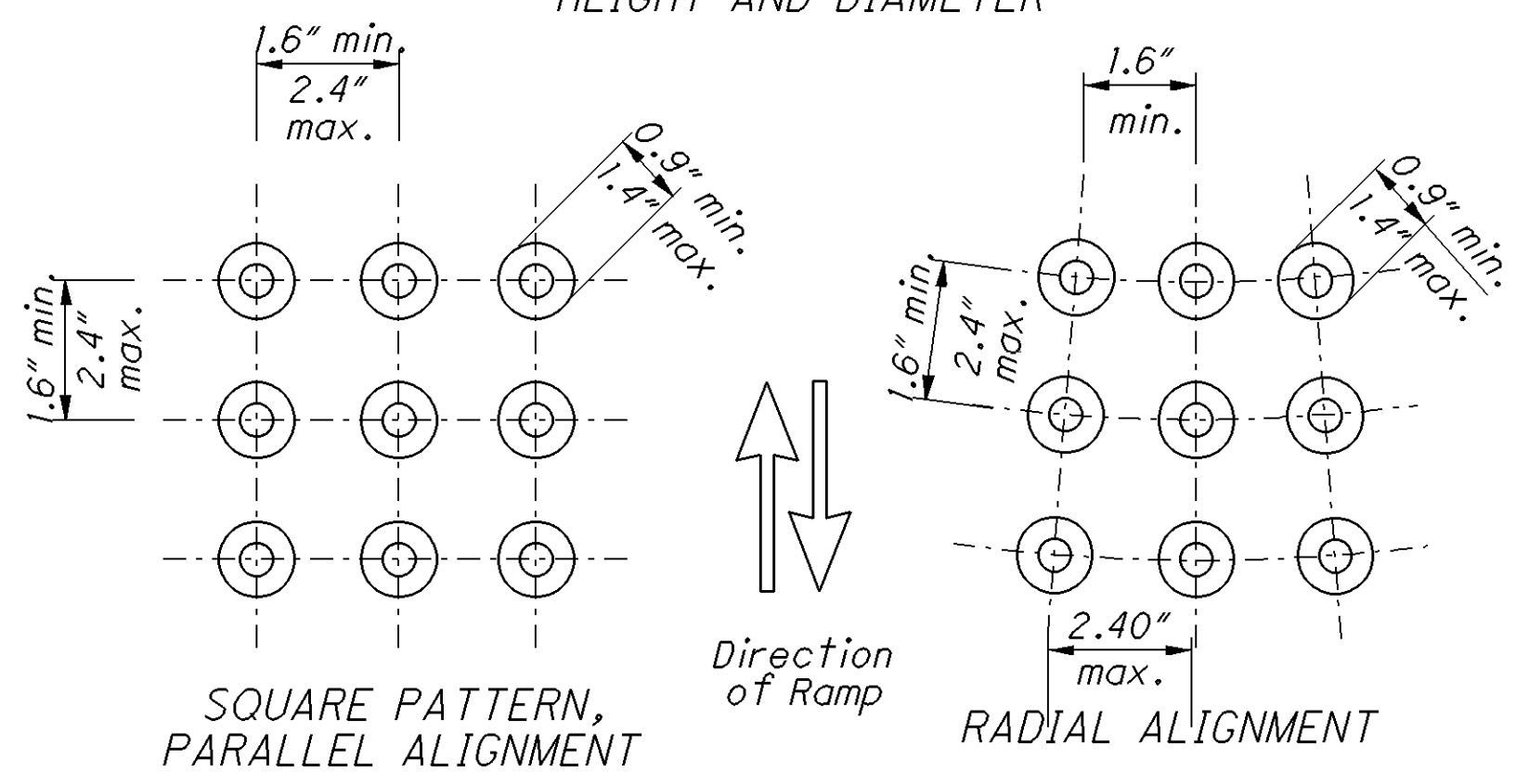
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

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.

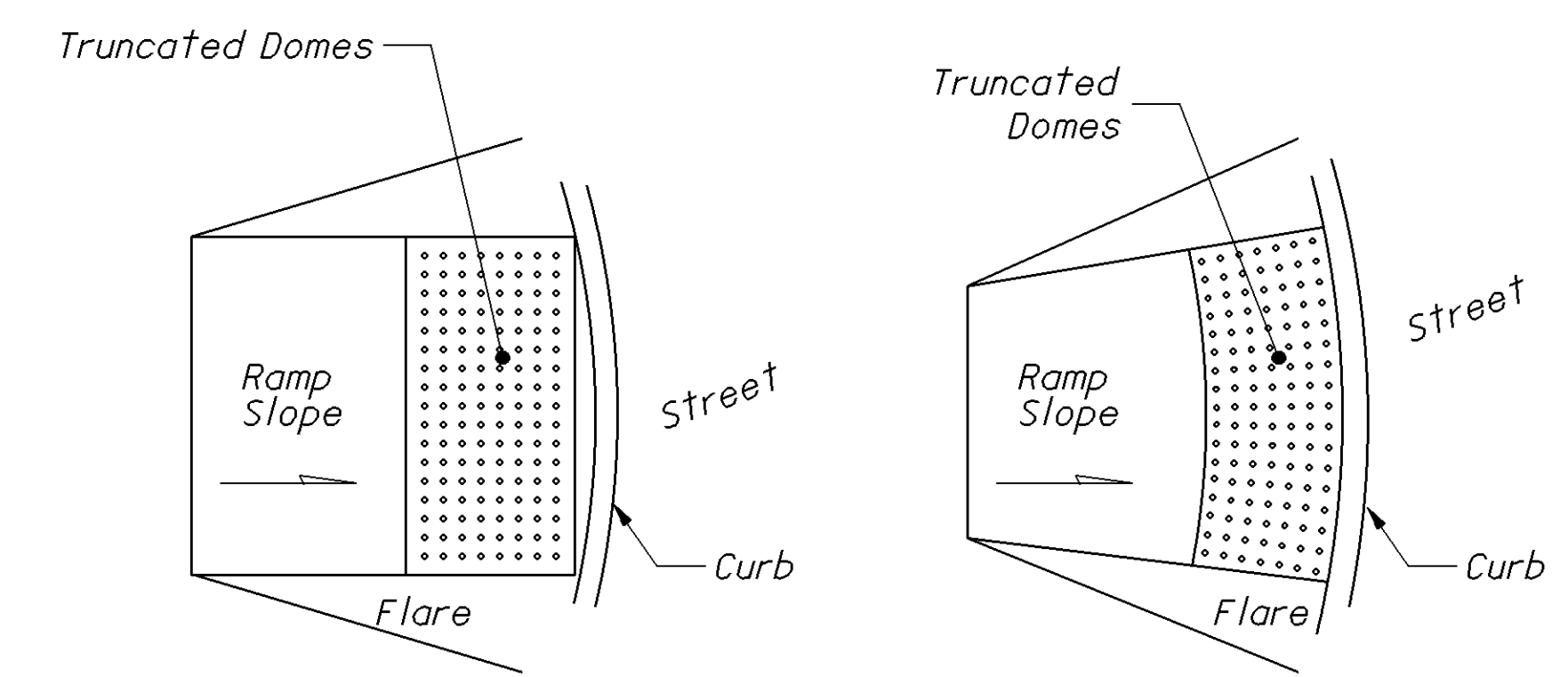
PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per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



HEIGHT AND DIAMETER

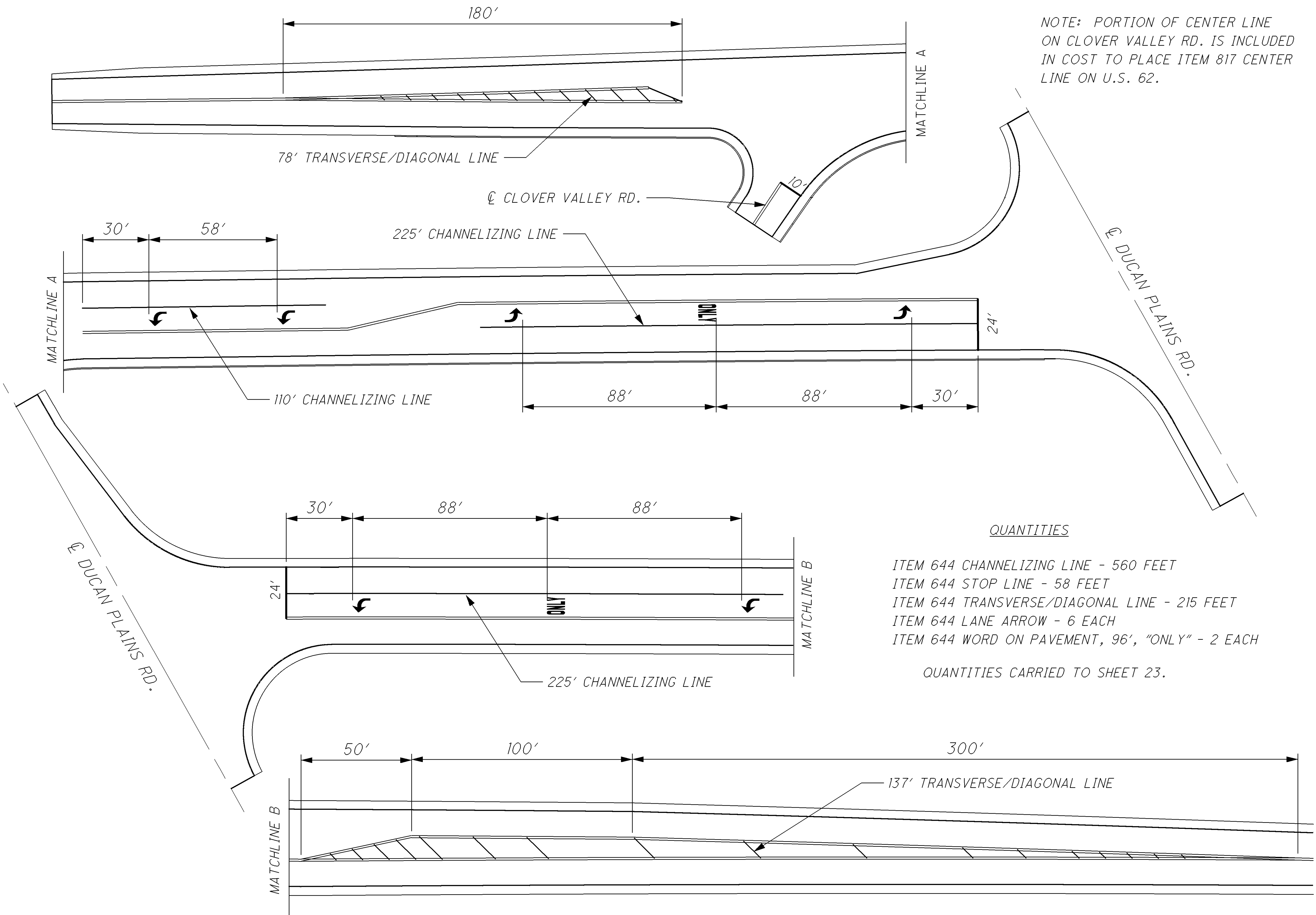


TRUNCATED DOMES DETAILS



DOME ALIGNMENT ON RADIUS CURB

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NOTE: PORTION OF CENTER LINE ON CLOVER VALLEY RD. IS INCLUDED IN COST TO PLACE ITEM 817 CENTER LINE ON U.S. 62.

CALCULATED LIME CHECKED DNM

0 20 40

HORIZONTAL SCALE IN FEET

**DUNCAN PLAINS RD.
PAVEMENT MARKING DETAIL**

QUANTITIES

ITEM 644 CHANNELIZING LINE - 560 FEET
 ITEM 644 STOP LINE - 58 FEET
 ITEM 644 TRANSVERSE/DIAGONAL LINE - 215 FEET
 ITEM 644 LANE ARROW - 6 EACH
 ITEM 644 WORD ON PAVEMENT, 96', "ONLY" - 2 EACH

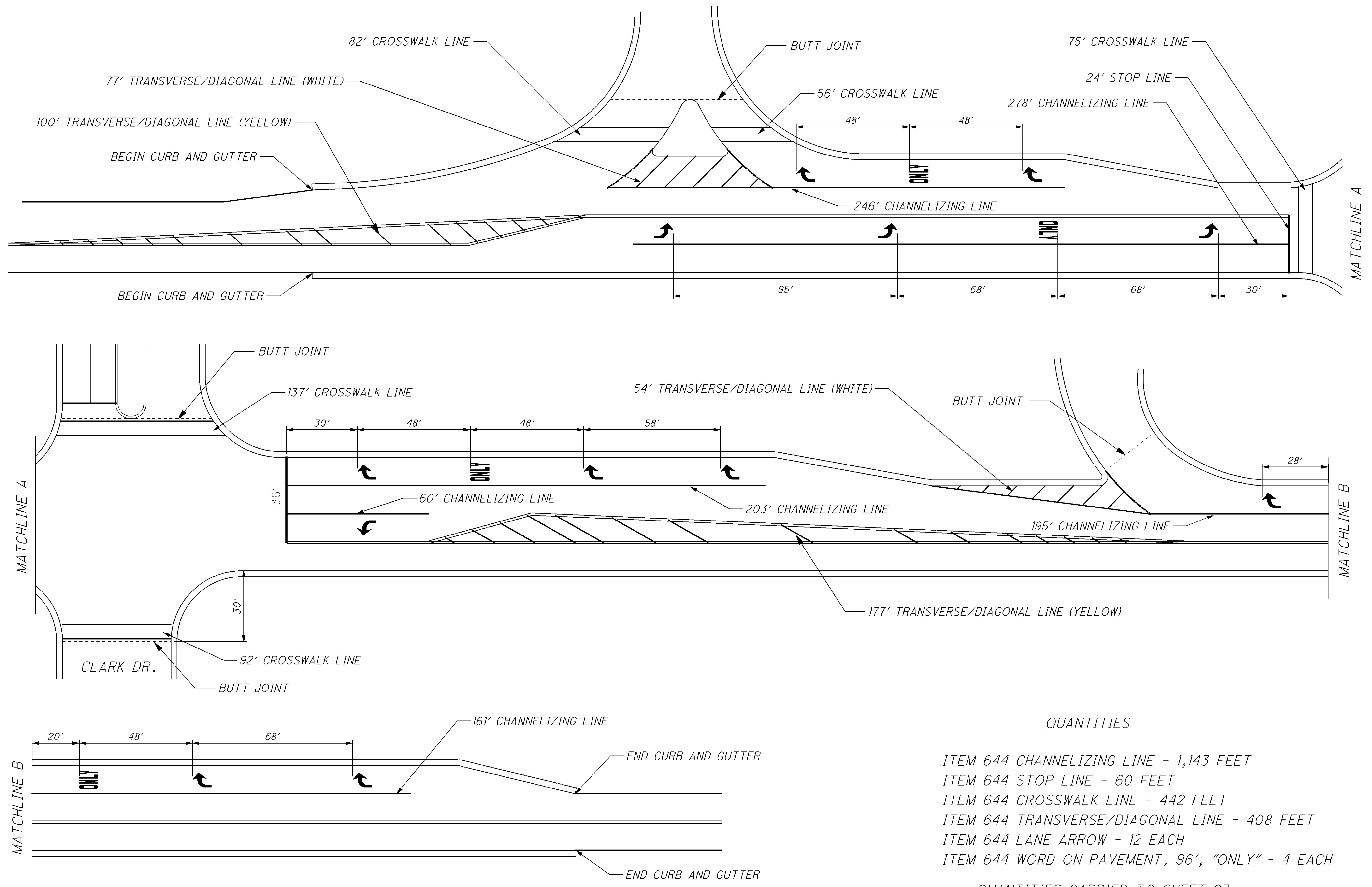
QUANTITIES CARRIED TO SHEET 23.



CALCULATED LIME CHECKED DNM

**U.S. 62 AT KROGERS IN JOHNSTOWN
PAVEMENT MARKING DETAIL**

LIC-62-0.00



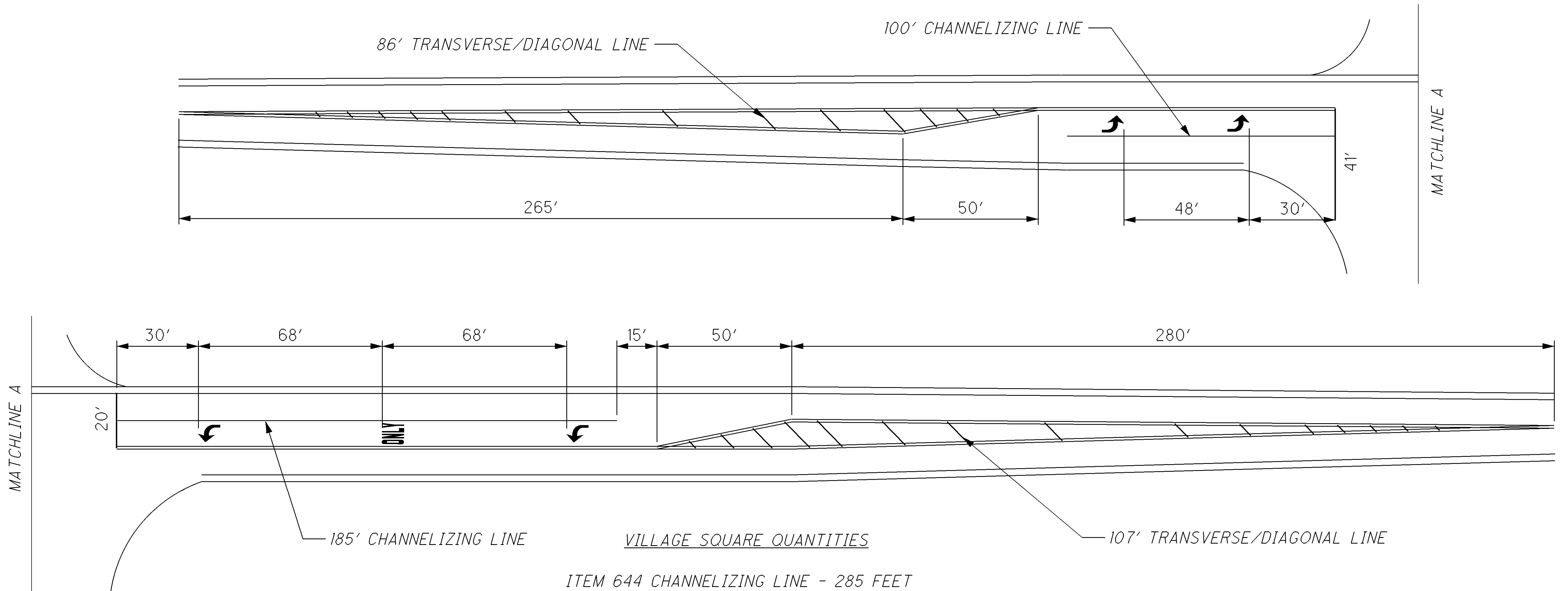
QUANTITIES

- ITEM 644 CHANNELIZING LINE - 1,143 FEET
- ITEM 644 STOP LINE - 60 FEET
- ITEM 644 CROSSWALK LINE - 442 FEET
- ITEM 644 TRANSVERSE/DIAGONAL LINE - 408 FEET
- ITEM 644 LANE ARROW - 12 EACH
- ITEM 644 WORD ON PAVEMENT, 96', "ONLY" - 4 EACH

QUANTITIES CARRIED TO SHEET 23.

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VILLAGE SQUARE QUANTITIES

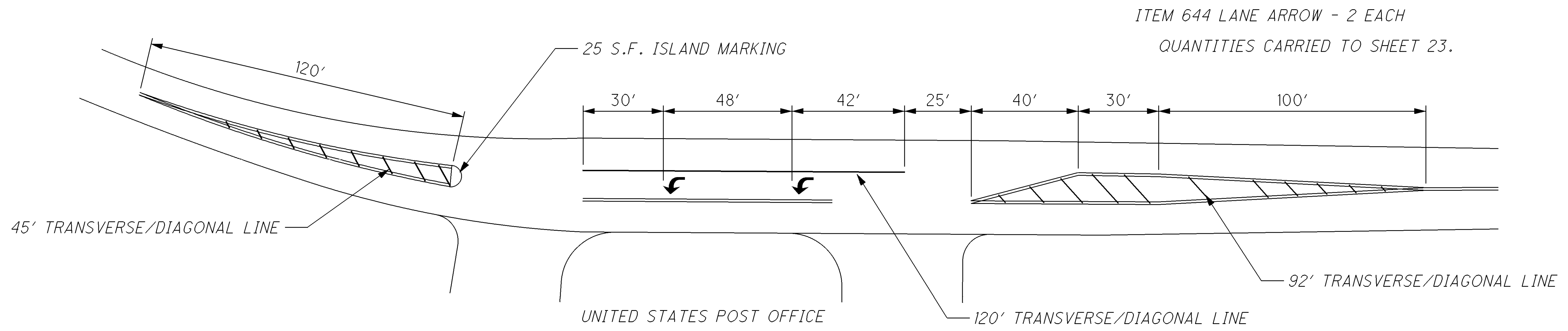
- ITEM 644 CHANNELIZING LINE - 285 FEET
- ITEM 644 STOP LINE - 61 FEET
- ITEM 644 TRANSVERSE/DIAGONAL LINE - 193 FEET
- ITEM 644 LANE ARROW - 4 EACH
- ITEM 644 WORD ON PAVEMENT, 96', "ONLY" - 1 EACH

QUANTITIES CARRIED TO SHEET 23.

POST OFFICE QUANTITIES

- ITEM 644 CHANNELIZING LINE - 120 FEET
- ITEM 644 TRANSVERSE/DIAGONAL LINE - 137 FEET
- ITEM 644 ISLAND MARKING - 25 SQ.FT.
- ITEM 644 LANE ARROW - 2 EACH

QUANTITIES CARRIED TO SHEET 23.



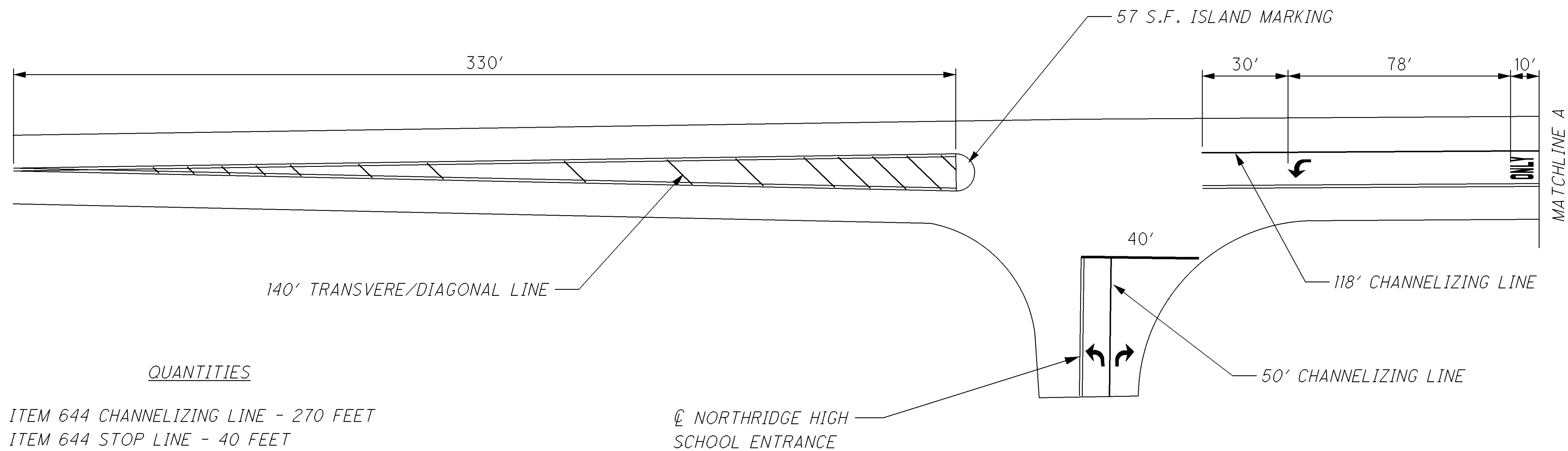
UNITED STATES POST OFFICE

CALCULATED	0	20	40
LME	HORIZONTAL SCALE IN FEET		
CHECKED			
DNM			

**JOHNSTOWN VILLAGE SQUARE & USPS
PAVEMENT MARKING DETAIL**

LIC-62-0.00

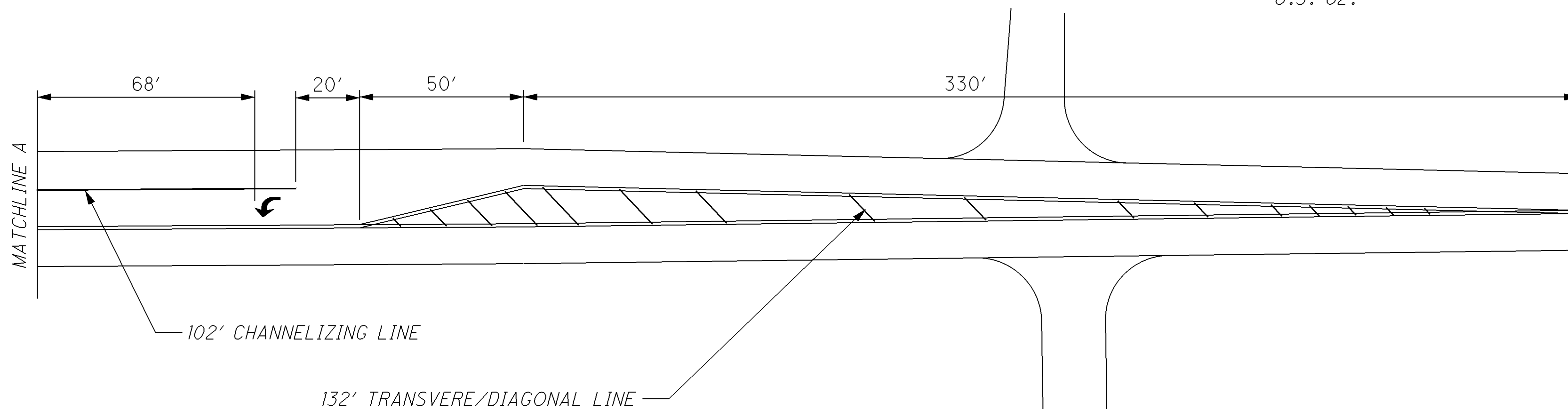
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QUANTITIES

- ITEM 644 CHANNELIZING LINE - 270 FEET
 - ITEM 644 STOP LINE - 40 FEET
 - ITEM 644 TRANSVERSE/DIAGONAL LINE - 272 FEET
 - ITEM 644 ISLAND MARKING - 57 SQ.FT.
 - ITEM 644 LANE ARROW - 4 EACH
 - ITEM 644 WORD ON PAVEMENT, 96', "ONLY" - 1 EACH
- QUANTITIES CARRIED TO SHEET 23.

NOTE: PORTION OF CENTER LINE ON NORTH RIDGE HIGH SCHOOL ENTRANCE IS INCLUDED IN THE COST TO PLACE ITEM 817 CENTER LINE ON U.S. 62.



0	20	40
HORIZONTAL SCALE IN FEET		
CALCULATED	LME	CHECKED
		DNM

**NORTHRIDGE HIGH SCHOOL
PAVEMENT MARKING DETAIL**

LIC-62-0.00

ITEM 817 EDGE LINE										
LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY			TOTAL EDGE LINE MILES	REMARKS
						WHITE EDGE LINE QUANTITIES				
			FROM	TO		TOTAL MILES	HIGHWAY MILES	RAMP MILES		
1	LIC	U.S. 62	0.00	3.32	3.32	6.64	6.64		6.64	
1	LIC	U.S. 62	3.53	4.38	0.85	1.70	1.70		1.70	
1	LIC	U.S. 62	4.85	10.57	5.72	11.44	11.44		11.44	
LOCATION 1 TOTALS									19.78	

ITEM 817 CENTER LINE										
LOCATION	COUNTY	ROUTE	S.L.M.		TOTAL LENGTH (MILES)	INFORMATION ONLY		TOTAL CENTER LINE MILES	REMARKS	
						CENTER LINE QUANTITIES				
			FROM	TO		TOTAL MILES	EQUIVALENT SOLID LINE			
1	LIC	U.S. 62	0.00	4.63	4.63	4.63	5.431	5.03	0.40 MILE ADDED TO TOTAL FOR TURN LANES	
SUSPEND WORK										
1	LIC	U.S. 62	4.78	10.57	5.79	5.79	4.150	5.92	0.13 MILE ADDED TO TOTAL FOR TURN LANES	
LOCATION 1 TOTALS									10.95	

644 THERMOPLASTIC AUXILIARY MARKING

LOCATION	COUNTY	ROUTE	DESCRIPTION	SIDE	SLM	TRANVERSE/DIAGONAL LINES (24")		STOP LINE (24")	12" CROSSWALK LINE	WORD ON PAVEMENT		SCHOOL SYMBOL MARKING		LANE ARROWS				8" CHANNELIZING LINE	ISLAND MARKING	REMARKS
						WHITE	YELLOW			ONLY		72"	96"	COMBINATION		TURN				
										72"	96"			LT./TH.	RT./TH.	LT.	RT.			
1	LIC	U.S. 62	TIPPET RD. (T.R. 51)	LT				20										PLACE 26' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	BEECH RD. (T.R. 88)	RT				13										PLACE 21' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	GREEN CHAPEL RD. (T.R. 63)	RT				22										PLACE 21' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	FANCHER RD. (T.R. 87)	LT				27										PLACE 22' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	MILLERS CHURCH RD. (T.R. 86)	LT				23										PLACE 20' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	CLOVER VALLEY RD. (C.R. 26)	RT				25										PLACE 20' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	AT DUNCAN PLAINS RD. (C.R. 33)				215	58		2					6		560	SEE DETAIL SHEET 18		
1	LIC	U.S. 62	AT KROGERS WIDENING			131	277	60	442	4					4	8	1,143	SEE DETAIL SHEET 19		
1	LIC	U.S. 62	AT VILLAGE SQUARE				193	61		1					4		265	SEE DETAIL SHEET 20		
1	LIC	U.S. 62	CHERRY HILL DR.	LT				11										PLACE 21' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	BIGELOW DR.	RT				19										PLACE 28' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	WESTVIEW DR.	RT				26										PLACE 22' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	BENEDICT DR.	LT				18										PLACE 20' FROM US 62 CENTER LINE		
1	LIC	U.S. 62	MEADOW LANE	RT					52									PLACE AS DIRECTED		
1	LIC	U.S. 62	TURN LANE AT POST OFFICE				137								2		120	25	SEE DETAIL SHEET 20	
1	LIC	U.S. 62	WILLIAMS ST.	LT					40										PLACE AS DIRECTED	
1	LIC	U.S. 62	WILLIAMS ST.	RT					44										PLACE AS DIRECTED	
1	LIC	U.S. 62	KASSON ST.	LT					42										PLACE AS DIRECTED	
1	LIC	U.S. 62	KASSON ST.	RT					38										PLACE AS DIRECTED	
1	LIC	U.S. 62	FORD ST.	RT				17											PLACE 19' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	YARDNER ST.	RT				12											PLACE 20' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	SPORTSMAN CLUB RD. (C.R. 16)	RT				44											PLACE 26' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	CROUSE-WILLISON RD. (C.R. 13)	LT				17											PLACE 21' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	DUTCH LANE RD. (C.R. 15)	RT				31											PLACE 22' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	NICHOLS LANE RD. (C.R. 27)	LT				14											PLACE 26' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	NICHOLS LANE RD. (C.R. 27)	RT				19											PLACE 23' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	COOPER RD. N.W. (T.R. 60)	LT				21											PLACE 22' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	NORTHRIDGE RD. (C.R. 21)	RT				24											PLACE 23' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	SLM 9.22									1							PLACE AS DIRECTED	
1	LIC	U.S. 62	TURN LANE AT SCHOOL				272	40		1					3	1	270	57	SEE DETAIL SHEET 21	
1	LIC	U.S. 62	SLM 9.73									1							PLACE AS DIRECTED	
1	LIC	U.S. 62	LOUDON ST. (C.R. 10)	RT				22											PLACE 24' FROM US 62 CENTER LINE	
1	LIC	U.S. 62	APPLETON RD. (C.R. 10)	LT				35											PLACE 21' FROM US 62 CENTER LINE	
SUB-TOTALS						131	1,094								19	9				
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)						1,225		679	658		8		2			28		2,378	82	

CALCULATED
LME
CHECKED
DNM

PAVEMENT MARKING DATA (AUXILIARY MARKING DATA)

LIC-62-0.00

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.

CALCULATED
LME
CHECKED
DNM

ITEM 621 RPM SUB-SUMMARY

LOCATION	COUNTY	ROUTE	BEGIN LOG POINT SLM	END LOG POINT SLM	LENGTH		DETAIL	621	621	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
								RAISED PAVEMENT MARKER REMOVED	RPM	INFORMATION ONLY					
										ONE-WAY		TWO-WAY			
										EACH	EACH	WHITE	YELLOW	YELLOW / YELLOW	
MILES	LIN.FT.														
1	LIC	U.S. 62	0.00	0.33	0.33	1,742	GAP	22	22			22			BEGIN FRANKLIN CO.
1	LIC	U.S. 62	0.33	0.35	0.02	106	11	3	3			3			PC 0.33 PT 0.35 LENGTH 106' DEG 9
1	LIC	U.S. 62	0.35	3.13	2.78	14,678	GAP	183	183			183			SUSPEND JONSTOWN W. CORP.
1	LIC	U.S. 62	5.41	10.57	5.16	27,245	GAP	341	341			341			RESUME JOHNSTOWN E. CORP
LOCATION 1 TOTALS (CARRIED TO SUB-SUMMARY)								549	549						

RAISED PAVEMENT MARKER DATA

LIC-62-0.00

CALCULATED
LME
CHECKED
DNM

LOCATION 1 SHEET TOTALS												ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION
Sht. 2	Sht. 3	Sht. 4	Sht. 5	Sht. 7	Sht. 9	Sht. 10	Sht. 11	Sht. 13	Sht. 22	Sht. 23	Sht. 24					
710		1,670				5,492	772					202	23500	8,644	SQ YD	WEARING COURSE REMOVED
								144				202	30000	144	SQ FT	WALK REMOVED
								8				202	32000	8	FT	CURB REMOVED
								8				202	32500	8	FT	CURB AND GUTTER REMOVED
19.68												209	60500	19.68	MILE	LINEAR GRADING
					19.68							209	72051	19.68	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN
300												253	01000	300	CU YD	PAVEMENT REPAIR
					144,331	32,371						254	01000	176,702	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE
		8,000										254	01600	8,000	SQ YD	PATCHING PLANED SURFACE
				8,710	2,137	316	32					407	10000	11,195	GALLON	TACK COAT
				5,807	1,425		18					407	14000	7,250	GALLON	TACK COAT FOR INTERMEDIATE COURSE
				2,116	292	98	27					407	20000	2,533	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE
				1,113	188							407	20100	1,301	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK, SURFACE COURSE
	9,035											408	10001	9,035	GALLON	PRIME COAT, AS PER PLAN
20				3,845	897		157					448	46020	4,919	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
25		139		5,014	1,125		27					448	46904	6,330	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
						193						448	47020	193	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22
							223					512	33000	223	SQ YD	TYPE 2 WATERPROOFING
							132					516	31011	132	FT	2" DEEP JOINT SEALER, AS PER PLAN
1												604	09000	1	EACH	CATCH BASIN ADJUSTED TO GRADE
2												604	20600	2	EACH	INLET ADJUSTED TO GRADE
5												604	34500	5	EACH	MANHOLE ADJUSTED TO GRADE
								112				608	10000	112	SQ FT	4" CONCRETE WALK
								8				609	12000	8	FT	COMBINATION CURB AND GUTTER, TYPE 2
								8				609	26000	8	FT	CURB, TYPE 6
				100								614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
		72										614	12460	72	EACH	WORK ZONE MARKING SIGN
		8										614	13000	8	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
			180									614	18401	180	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
				20.76								614	21400	20.76	MILE	WORK ZONE CENTER LINE, CLASS II
					1,272							617	10101	1,272	CU YD	COMPACTED AGGREGATE, AS PER PLAN
					9.86							618	41000	9.86	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)
											549	621	00100	549	EACH	RPM
											549	621	54000	549	EACH	RAISED PAVEMENT MARKER REMOVED
6												638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE
										2,378		644	00400	2,378	FT	CHANNELIZING LINE, 8"
										679		644	00500	679	FT	STOP LINE
										658		644	00600	658	FT	CROSSWALK LINE
										1,225		644	00700	1,225	FT	TRANSVERSE/DIAGONAL LINE
										82		644	00900	82	SQ FT	ISLAND MARKING
										2		644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"
										28		644	01300	28	EACH	LANE ARROW
										8		644	01410	8	EACH	WORD ON PAVEMENT, 96"
								32				690	98200	32	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING
									19.78			817	00100	19.78	MILE	EDGE LINE, 4"
									10.95			817	00300	10.95	MILE	CENTER LINE

LOCATION 1 SUB-SUMMARY

LIC-62-0.00

L062-LSS-001.DGN 3-19-2013

CALCULATED
LME
CHECKED
DNM

LOCATION FUNDING SPLITS			ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1 01/STR/PV/	LOCATION 2 SHEET 13 & 14G 02/STR/PV/JOHN							
8,644			202	23500	8,644	SQ YD	WEARING COURSE REMOVED	
144			202	30000	144	SQ FT	WALK REMOVED	
8	1,557		202	32000	1,565	FT	CURB REMOVED	
8			202	32500	8	FT	CURB AND GUTTER REMOVED	
	2		203	10000	2	CU YD	EXCAVATION	
19.68			209	60500	19.68	MILE	LINEAR GRADING	
19.68			209	72051	19.68	MILE	PREPARING SUBGRADE FOR SHOULDER PAVING, AS PER PLAN	2
300			253	02000	300	CU YD	PAVEMENT REPAIR	
176,702			254	01000	176,702	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
11,195			407	10000	11,195	GALLON	TACK COAT	
7,250			407	14000	7,250	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
2,533			407	20000	2,533	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE	
1,301			407	20100	1,301	GALLON	SPECIAL - TACK COAT, TRACKLESS TACK, SURFACE COURSE	
9,035			408	10001	9,035	GALLON	PRIME COAT, AS PER PLAN	3
4,919			448	46020	4,919	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22	
6,330			448	46904	6,330	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M	
193			448	47020	193	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22	
223			512	33000	223	SQ YD	TYPE 2 WATERPROOFING	
132			516	31011	132	FT	2" DEEP JOINT SEALER, AS PER PLAN	2
1			604	09000	1	EACH	CATCH BASIN ADJUSTED TO GRADE	
2			604	20600	2	EACH	INLET ADJUSTED TO GRADE	
5			604	34500	5	EACH	MANHOLE ADJUSTED TO GRADE	
112			608	10000	112	SQ FT	4" CONCRETE WALK	
8			609	12000	8	FT	COMBINATION CURB AND GUTTER, TYPE 2	
8			609	26000	8	FT	CURB, TYPE 6	
	1,568		609	26001	1,568	FT	CURB, TYPE 6, AS PER PLAN	13
100			614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
72			614	12460	72	EACH	WORK ZONE MARKING SIGN	
8			614	13000	8	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
180			614	18401	180	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	5
20.76			614	21400	20.76	MILE	WORK ZONE CENTER LINE, CLASS II	
1,272			617	10101	1,272	CU YD	COMPACTED AGGREGATE, AS PER PLAN	2
9.86			618	41000	9.86	MILE	EDGE LINE, RUMBLE STRIPE (ASPHALT CONCRETE)	

GENERAL SUMMARY

LIC-62-0.00

L062.MGS-001.DGN 3-19-2013

CALCULATED
LIME
CHECKED
DNM

LOCATION FUNDING SPLITS			ITEM	ITEM EXT.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET
LOCATION 1 01/STR/PV/	LOCATION 2 SHEET 13 & 14G 02/STR/PV/JOHN							
549			621	00100	549	EACH	RPM	
549			621	54000	549	EACH	RAISED PAVEMENT MARKER REMOVED	
6			638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE	
2,378			644	00400	2,378	FT	CHANNELIZING LINE, 8"	
679			644	00500	679	FT	STOP LINE	
658			644	00600	658	FT	CROSSWALK LINE	
1,225			644	00700	1,225	FT	TRANSVERSE/DIAGONAL LINE	
82			644	00900	82	SQ FT	ISLAND MARKING	
2			644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
28			644	01300	28	EACH	LANE ARROW	
8			644	01410	8	EACH	WORD ON PAVEMENT, 96"	
	21		653	10001	21	CU YD	TOPSOIL FURNISHED AND PLACED, AS PER PLAN	13
	500		659	00500	500	SQ YD	SEEDING AND MULCHING, CLASS 1	
	0.14		659	20000	0.14	TON	COMMERCIAL FERTILIZER	
	0.11		659	31000	0.11	ACRE	LIME	
	4		659	35000	4	M GAL	WATER	
32			690	98200	32	SQ FT	SPECIAL - MISC.: DETECTABLE WARNING	
19.78			817	00100	19.78	MILE	EDGE LINE, 4"	
10.95			817	00300	10.95	MILE	CENTER LINE	
			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	
			624	10000	LUMP		MOBILIZATION	
			823	10000	LUMP		CONSTRUCTION LAYOUT STAKES	

GENERAL SUMMARY

LIC-62-0.00