

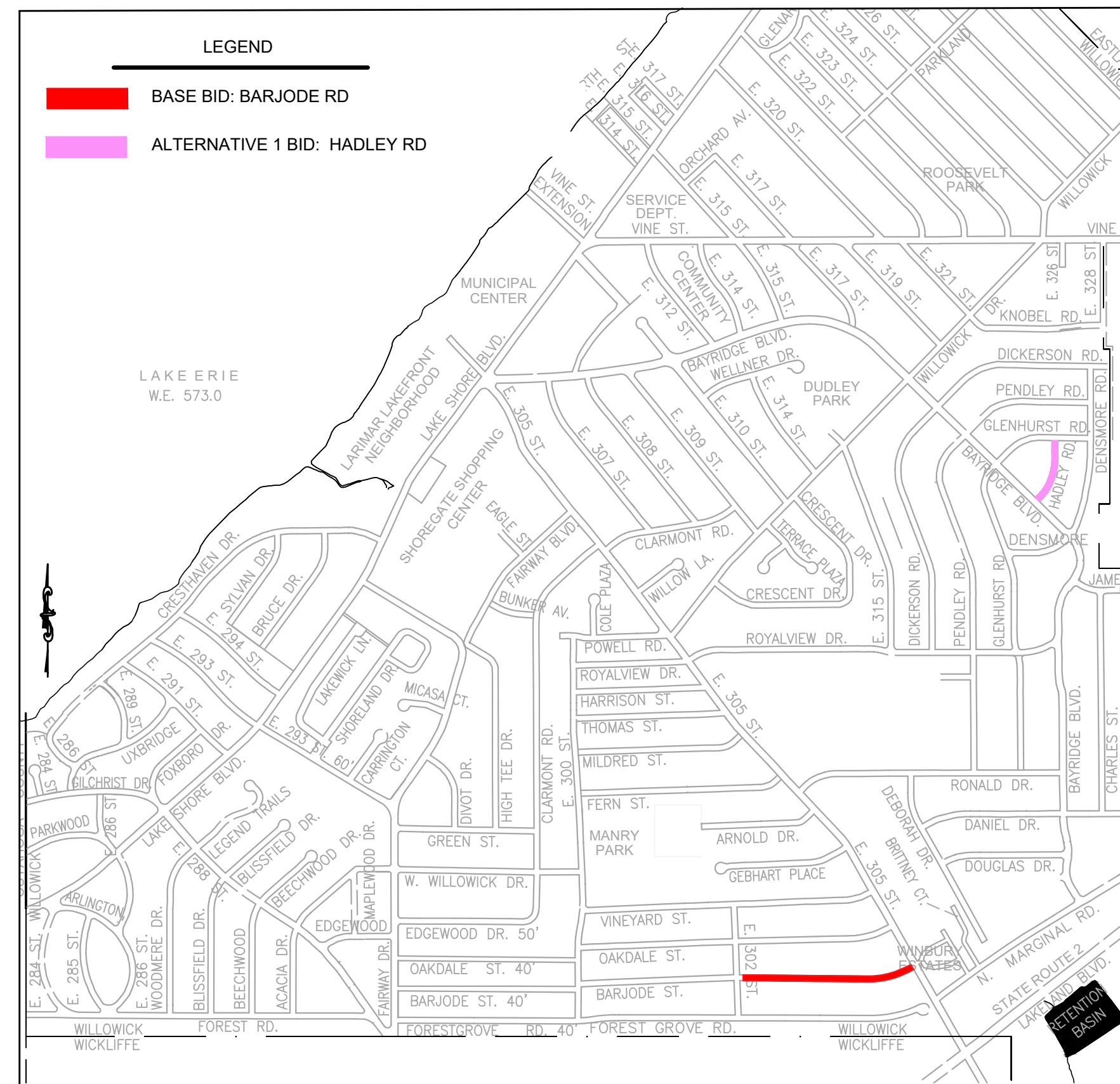
CITY OF WILLOWICK

2024 PAVEMENT REPAIR PROGRAM

LAKE COUNTY, OHIO

FEBRUARY, 2024

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LOCATION MAP
NOT TO SCALE

COUNCIL

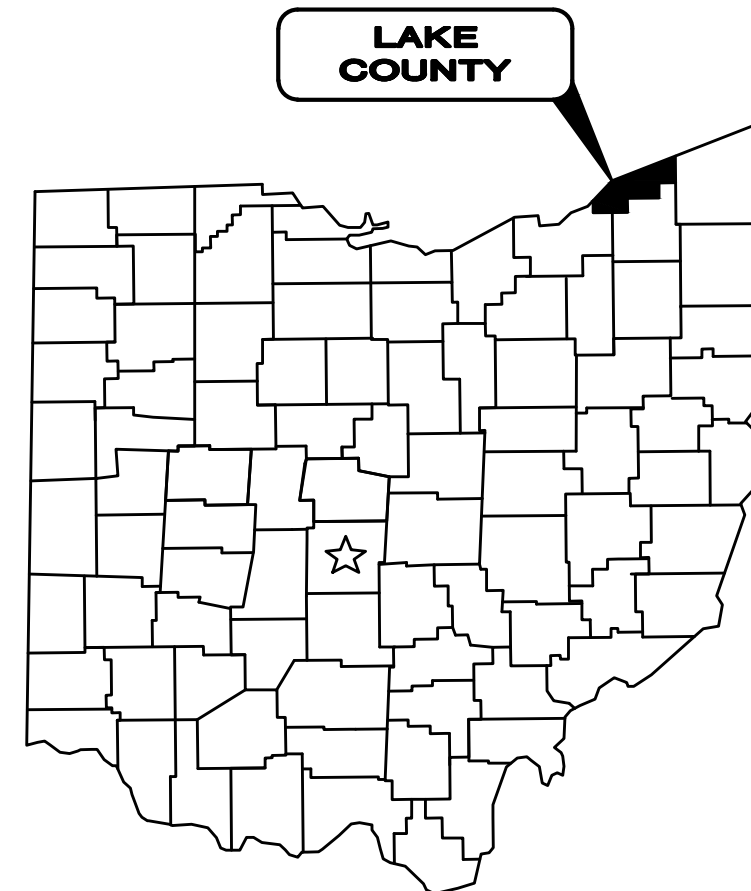
- MONICA KOUDELA COUNCIL PRESIDENT
- PATRICK MOHORCIC WARD 1
- DEVON MCFARLAND WARD 1
- NATALIE ANTOSH, WARD 2
- THERESA BISBEE WARD 2
- CHARLIE MALTA WARD 3
- DAVID PHARES WARD 3

CITY ADMINISTRATORS

- MICHAEL J. VANNI MAYOR/ SAFETY DIRECTOR
- TODD SHANNON SERVICE DIRECTOR
- CHERYL BENEDICT FINANCE DIRECTOR
- SEAN BRENNAN CHIEF HOUSING AND ZONING INSPECTOR
- JULIE KLESS RECREATION DIRECTOR
- ROB DAUBENMIRE POLICE CHIEF
- BILL MALOVRH FIRE CHIEF
- TIM MCLAUGHLIN CITY ENGINEER



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



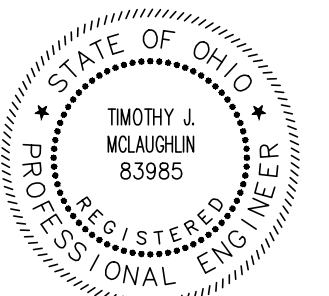
1. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.



Tim McLaughlin
TIM MCLAUGHLIN

P.E. NO. 83985

2/1/2024
DATE



GENERAL NOTES

- A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE ENGINEER SHALL BE HELD PRIOR TO ANY WORK STARTING. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE ENGINEER AND THE CITY AND PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.
- THE STANDARD SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, LATEST EDITION, INCLUDING ALL SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS, SHALL GOVERN ALL WORK NOT COVERED BY THE SPECIFICATIONS. ALL WORK COMPLETED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF THE CITY OF WILLOWICK.
- ALL WORK COMPLETED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- ANY DEFECT IN MATERIAL OR WORKMANSHIP REVEALED BY INSPECTION MUST BE CORRECTED BY THE CONTRACTOR AT NO COST TO THE CITY AND TO THE FULL SATISFACTION OF THE CITY AND ENGINEER BEFORE ACCEPTANCE OF THE WORK AND RELEASE OF FINAL ESTIMATE AND PAYMENT THEREOF.
- MATERIALS OF WORK FOR "AS DIRECTED" ITEMS SHALL NOT BE ORDERED FOR THE DELIVERY TO THE PROJECT OR WORK PERFORMED UNTIL AUTHORIZED BY THE ENGINEER.
- MANHOLES, CATCH BASINS, MONUMENT BOXES, WATER VALVE BOXES AND OTHER CASTINGS SHALL BE RAISED OR LOWERED FLUSH WITH THE FINISHED SURROUNDING SURFACE. ANY METER OR VALVE BOX ENCOUNTERED WITHIN THE WORK SITE SHALL BE EXPOSED AND ADJUSTED TO GRADE PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID.
- BEFORE THE CITY WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTEE RETAINER, THE CONTRACTOR SHALL FURNISH THE CITY A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO, NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTOR HANDLING CLAIM, HOW CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.
- THE CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION VIDEO TAPE SURVEY OF THE ENTIRE PROJECT AREA. ANY DAMAGE DEEMED TO HAVE BEEN CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THEIR OWN EXPENSE. ALL COSTS ASSOCIATED FOR THIS WORK, INCLUDING THE VIDEO TAPE SURVEY, SHALL BE INCLUDED IN THE PRECONSTRUCTION VIDEO DOCUMENTATION BID ITEM.
- MATERIAL SPECIFICATIONS CALLED FOR ON THE PLANS REPRESENT THE MINIMUM REQUIRED FOR EACH APPLICATION. THE OWNER MAY REQUEST OR THE CONTRACTOR MAY DESIRE TO SUBSTITUTE ALTERNATE MATERIALS. ANY SUCH SUBSTITUTIONS MUST BE EQUIVALENT IN QUALITY TO THE MATERIAL CALLED FOR AND MUST BE APPROVED IN WRITING BY THE ENGINEER.
- CONTRACTOR SHALL REPLACE TRAFFIC PAINT IN KIND WITHIN RESURFACE LIMITS OR WHERE NOTED ON PLANS.

ROADWAY EXCAVATION AND PAVEMENT

- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER FORTY-EIGHT (48) HOURS IN ADVANCE OF BEGINNING WORK WHICH REQUIRES PROOF ROLL TESTING AND/OR PRE-POUR INSPECTION PRIOR TO PLACEMENT OF PAVEMENT. WORK WILL NOT BEGIN UNTIL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE BARRICADE DEVICES TO PREVENT VEHICULAR TRAFFIC ON NEW CONCRETE PAVEMENT AND APRONS UNTIL THE END OF THE CURE PERIOD OR THE SPECIMEN TEST BEAMS HAVE ATTAINED A MODULUS OF RUPTURE OF 400 PSI FOR M.S. CONCRETE.
- THE EXCAVATION, EMBANKMENT AND COMPACTION OF THE NEW ROADWAY SUBGRADE IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 203. A MINIMUM OF TWO (2) PROOF ROLLINGS WILL BE REQUIRED AS DIRECTED BY THE ENGINEER BEFORE PAVING. THE FIRST PROOF ROLLING SHALL BE PERFORMED AFTER THE INSTALLATION OF ALL UNDERGROUND IMPROVEMENTS AND AFTER FINE GRADING JUST PRIOR TO PAVING. THE PROOF ROLLINGS SHALL BE COMPLETED AS FOLLOWS: EXCAVATION OR EMBANKMENT TO FINISHED SUBGRADE. EMBANKMENTS ARE COMPACTED AND TESTED FOR COMPACTION IN 6" LIFTS PER ODOT 203. THE SUBGRADE IS COMPACTED AND TESTED. THE SUBGRADE FOR THE NEW ROAD IS THEN PROOF ROLLED. AREAS EXHIBITING UNACCEPTABLE MOVEMENT UNDER PROOF ROLLING ARE UNDERCUT TO A DEPTH DIRECTED BY THE ENGINEER AND BACKFILLED WITH MATERIALS SPECIFIED IN THE PLANS. THE SUBGRADE IS RE-PROOF ROLLED TO VERIFY THE UTILITY OF THE UNDERCUT. UPON PASSING THE PROOF ROLL THE AREA IS APPROVED FOR THE INSTALLATION OF THE BASE MATERIAL. THE AGGREGATE BASE MATERIAL IS PLACED PER ODOT SPECIFICATIONS, COMPACTED, TESTED AND PROOF ROLLED. UPON PASSING THE PROOF ROLL THE SPECIFIED TOP COURSES OF RIGID PAVEMENT MAY BE INSTALLED MOISTURE CONTENT OF THE SUBGRADE AT THE TIME OF PROOF ROLLING SHALL CONFORM TO SECTION 203.11 OF THE ODOT SPECIFICATIONS. THE MINIMUM EQUIPMENT SHALL CONSIST OF A SINGLE UNIT, TANDEM AXLE DUMP TRUCK CAPABLE OF BEING LOADED TO 30,000 POUND AXLE LOAD, 60,000 POUND GVW. TIRE PRESSURE SHALL BE MAINTAINED AT 90 PSI OR AS SPECIFIED UNDER SECTION 203.14 OF ODOT SPECIFICATIONS. ANY AREA PERMITTING TIRES TO LEAVE A GROOVE OF ONE (1) INCH OR MORE SHALL BE UNACCEPTABLE FOR PAVING. ANY AREA PERMITTING THE TEST VEHICLE TIRES TO LEAVE A GROOVE OF ZERO (0) TO ONE-HALF (1/2) INCH DEEP SHALL BE ACCEPTABLE. ANY AREA PERMITTING THE TEST VEHICLE TIRES TO LEAVE A GROOVE OF ONE-HALF (1/2) INCH TO ONE (1) INCH DEEP SHALL BE AT THE ENGINEER'S DISCRETION.
- JOINT AND CRACK SEALER FOR PAVEMENT SHALL MEET THE REQUIREMENTS OF ODOT ITEM 705.04 AND ASTM D 3405. A DOUBLE BOILER SHOULD BE USED FOR HEATING THE MATERIAL.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SUFFICIENT SECURITY MEASURES AND/OR PERSONNEL TO PROTECT ALL NEW CONCRETE WORK FROM VANDALISM AT NO ADDITIONAL COST TO THE CITY. ANY VANDALIZED CONCRETE SHALL BE REPLACED IN FULL AT THE CONTRACTOR'S EXPENSE.

EXISTING UTILITIES

- BEFORE ANY WORK IS STARTED THAT WILL INTERFERE WITH THE EXISTING UTILITIES, THE CONTRACTOR SHALL CALL THE "OHIO UTILITIES PROTECTION SERVICE", AT 1-800-362-2764, FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK. THE FOLLOWING REFERENCE NUMBERS HAVE BEEN ASSIGNED TO THIS PROJECT BY THE OHIO UTILITIES PROTECTION SERVICE. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY BY THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO ADDITIONAL EXPENSE TO THE CITY OF WILLOWICK, TO AVOID DAMAGE TO EXISTING UNDERGROUND AND OVERHEAD UTILITY LINES DURING THE ENTIRE PROJECT. IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL EXPENSE TO THE CITY OF EASTLAKE, INCLUDING ANY INSPECTION FEES OR MAINTENANCE CREWS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS LISTED BELOW AND THE UTILITY PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND OUTLINED IN PROJECT SPECIFICATIONS. THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

DOMINION ENERGY OHIO (GAS) 320 SPRINGDALE DRIVE, STE 320 AKRON, OHIO 44333 PHONE: (330) 664-2409 ATTN: BRYAN D. DAYON GENERAL PHONE: (800) 362-7557 RELOCATION@DOMINIONENERGY.COM	LAKE COUNTY DEPARTMENT OF UTILITIES 105 MAIN STREET PAINESVILLE, OHIO 44077 PHONE: (440) 350-2645 ATTN: RANDY ROTHLSBERGER, P.E. THE ILLUMINATING COMPANY (ELECTRIC) 1755 AUBURN ROAD PAINESVILLE, OHIO 44077 ATTN: TIM DENZLER (DESIGN SUPERVISOR) PHONE: (440) 358-4991 TIDENZLER@FIRSTENERGYCORP.COM
AT&T OHIO (COMMUNICATIONS) 13630 LORAIN ROAD, 2ND FLOOR CLEVELAND, OHIO 44111 PHONE: (330) 401-8053 ATTN: JOHN ROOK DIRECT: (212) 476-6142 GENERAL PHONE: (216) 298-1513 P8191@ATT.COM	TODD SHANNON CITY OF WILLOWICK SERVICE DIRECTOR 31230 VINE STREET WILLOWICK, OHIO 44095 PHONE: (440) 585-3700
- WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE HIS WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME WORK IS GOING ON ADJACENT TO THE POLE. THE COST AND COORDINATION FOR ANY REQUIRED PROTECTION OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL NOT BE THE RESPONSIBILITY OF THE CITY OF WILLOWICK. DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK IN CONFORMANCE TO THE UTILITY COMPANY'S SCHEDULE.
- THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION.

GRASS RESTORATION

- PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL INVENTORY TREELAWNS FOR EXISTING ORNAMENTAL LANDSCAPE FEATURES INCLUDING LAWN SPRINKLER SYSTEMS AND IRON PINS. ANY LANDSCAPE FEATURE DISTURBED OR DAMAGED BY THE CONTRACTOR'S ACTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION. COST OF INVENTORY AND RESTORATION SHALL BE INCLUDED IN THE UNIT BID PRICE FOR LAWN RESTORATION.

PROPERTY PINS AND MONUMENTS

- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EMPLOY A REGISTERED SURVEYOR TO LOCATE, RECORD, AND MARK ALL EXISTING MONUMENTS AND PROPERTY CORNERS WITHIN THE CONSTRUCTION LIMITS. THIS COST SHALL BE DISTRIBUTED AMONG THE APPROPRIATE PROJECT PAY ITEMS. A LISTING OF THE PINS AND MONUMENTS SHALL BE SUPPLIED TO THE CITY ENGINEER PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL PINS AND MONUMENTS DURING CONSTRUCTION. IF PINS AND MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL HAVE THEM REPLACED BY THE REGISTERED SURVEYOR AT NO ADDITIONAL COST TO THE CITY.

EROSION AND DUST CONTROL

- SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SEEDING AND MULCHING IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH ODOT ITEM 659 OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BEGIN THE RESTORATION PROCESS AS SOON AS CONSTRUCTION IS COMPLETED, PERMANENTLY STABILIZING EACH DISTURBED AREA WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS OR DRIVES BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.
- ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOOD PLAIN OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY WHEN NEEDED OR ORDERED BY THE OWNER WATER OR CALCIUM CHLORIDE PER ODOT 616 FOR THE ALLEVIATION OR PREVENTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL. THE COST OF DUST CONTROL SHALL BE INCLUDED IN THE UNIT BID PRICES FOR ALL ITEMS OF THE PROPOSAL.
- OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER ENTERING ACTIVE STORM DRAIN SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT POND. INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED.

EXCESS EXCAVATION

- ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A LOCATION TO BE SELECTED BY THE CONTRACTOR. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY IF THE MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS.

AIR/NOISE CONTROL

- CONSTRUCTION ACTIVITIES WILL BE LIMITED TO MONDAY- FRIDAY, 7AM-7PM, UNLESS APPROVED IN ADVANCE BY THE CITY.

TRAFFIC CONTROL

- ONE-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES. LOCAL ACCESS TO ABUTTING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES. ACCESS TO ALL DRIVEWAYS SHALL ALSO BE MAINTAINED AT ALL TIMES.
- PART WIDTH CONSTRUCTION, ONE LANE WIDTH, SHALL BE USED DURING THE PERFORMANCE OF PAVING OPERATIONS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE AND SATISFACTORY LOCAL ACCESS, VEHICULAR AND PEDESTRIAN, TO ALL ABUTTING PROPERTIES WITHIN THE PROJECT. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, BARRIERS, TEMPORARY PAVEMENT, LIGHTING, FLAGMEN, TEMPORARY GUARDRAIL, DETOUR AND CONSTRUCTION SIGNING AND OTHER TRAFFIC CONTROLS SO AS TO AVOID DAMAGE AND/OR INJURY TO AND ENSURE THE SAFETY OF VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION BOTH WITHIN AND OUTSIDE OF THE PROJECT LIMITS.
- MAINTAINING TRAFFIC SHALL BE IN ACCORDANCE WITH ODOT ITEM 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. DETOUR ROUTES & SIGNAGE SHALL MEET THE APPROVAL OF THE CITY ENGINEER.
- LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND TYPE III BARRICADES OF THE TYPE AND LOCATION AS SHOWN ON THE PLANS.
- ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.
- PAVEMENT REPLACEMENT SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF REPLACEMENT SECTION WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

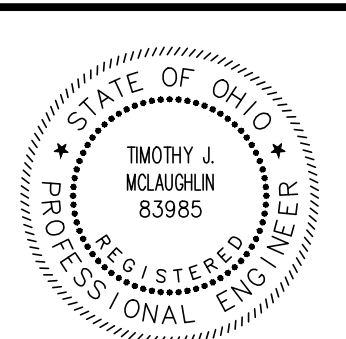
- CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC. A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY; OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE RW. THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. ALL EQUIPMENT AND STORED MATERIALS SHALL NOT CAUSE SIGNIFICANT SIGHT DISTANCE HAZARDS TO THE TRAVELING PUBLIC. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

SUSPENSION OF WORK

- IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR MAINTENANCE OF TRAFFIC AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE MANUAL, THE ENGINEER MAY SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS. NO COMPENSATION WILL BE PAID FOR SUSPENSION OF WORK.

APRON, SIDEWALK, AND RAMP REPLACEMENT

- ALL APRONS AND CURBS SHALL BE CLASS QC-MS CONCRETE WITH FIBER MESH REINFORCEMENT.
- IF THE REPLACEMENT OF AN APRON IS NECESSARY WHEN THE CITY RECONSTRUCTS OR RESURFACES A STREET, THE CITY WILL REPLACE AT ITS COST THE ENTIRE APRON FOR THOSE TREE LAWNS NARROWER THAN EIGHT FEET. THE CITY WILL REPLACE THE FIRST TWELVE FEET OF THE APRON IF THE TREE LAWN EXCEEDS EIGHT FEET IN WIDTH. IF FAULTY CONCRETE EXISTS BEYOND TWELVE FEET, THE CITY WILL REPLACE THE CONCRETE TO THE FIRST EXPANSION OR CONTROL JOINT BEYOND TWELVE FEET. THE PROPERTY OWNER MAY, AT HIS OR HER EXPENSE, HAVE THE CONTRACTOR REPLACE THE APRON BEYOND THE FIRST TWELVE FEET WHERE THE TREE LAWN EXCEEDS EIGHT FEET IN WIDTH.
- CONTRACTOR WILL REPLACE DRIVE APRONS INTGRAL WITH PAVEMENT CURB TYPE 4-A OR 3-A.
- SIDEWALKS, APRONS AND RAMPS SHALL BE SO CONSTRUCTED THAT THE TOP SURFACE SHALL BE MAGNESIUM FLOAT FINISH WITH A HAND CEMENT TROWEL TO PRODUCE A SWIRL PATTERN OR SOFT BROOM FINISH SO AS TO PREVENT THE SURFACE FROM BEING SLIPPERY WHEN COVERED WITH MOISTURE. SAID FINISH SHALL BE OF SUCH CHARACTER AS, IN THE JUDGMENT OF THE SERVICE DIRECTOR OR THE BUILDING INSPECTOR, WILL EFFECTUALLY PREVENT AT ANY TIME THE SLIPPERY CONDITION OF SUCH SIDEWALKS, APRONS AND RAMPS. UNDER NO CIRCUMSTANCES SHALL A "BAG MIX" OF CONCRETE OF ANY TYPE BE USED AS THE MATERIAL TO CONSTRUCT A SIDEWALK OR APRON IN THE PUBLIC RIGHT-OF-WAY.
- ALL OUTSIDE EDGES AND JOINTS SHALL BE EDGED WITH A ONE-QUARTER INCH RADIUS TOOL. ALL JOINTS ON SIDEWALKS, APRONS AND RAMPS (TRANSVERSE OR LONGITUDINAL) SHALL BE FORMED BY SCORING WITH THE TOOL TO A DEPTH OF NOT LESS THAN THREE-FOURTHS OF AN INCH AND SHALL BE APPROXIMATELY ONE-EIGHTH OF AN INCH WIDE. EXPANSION JOINT FILLER ONE-HALF OF AN INCH THICK SHALL BE INSTALLED BETWEEN THE SIDEWALK, APRON AND RAMP AND ANY FIXED STRUCTURE. EXTENDING THE FULL DEPTH OF THE SIDEWALK, APRON AND RAMP. THE EXPANSION JOINT FILLER SHALL BE ONE INCH THICK WHERE THE SIDEWALKS, APRONS AND RAMPS ARE INSTALLED AGAINST THE BACK OF THE CURB.
- ANY GRADING NECESSARY BETWEEN SIDEWALKS AS LAID AND THE CURB LINE, OR BETWEEN SUCH SIDEWALKS AND THE EDGE OF THE SIDEWALK SPACE AS HEREIN ESTABLISHED, SHALL BE DONE AT THE TIME OF LAYING THE SIDEWALKS SO AS TO LEAVE THE SIDEWALK SPACE AT THE GRADE HEREINAFTER DESCRIBED.
- SIDEWALKS, AS IMPROVED, SHALL COINCIDE WITH THE LINE DESCRIBED AS FOLLOWS: BEGINNING AT THE CURB LINE WITH THE ESTABLISHED CURB GRADE AS DETERMINED BY THE CITY ENGINEER, THENCE EXTENDING TO THE STREET LINE AT RIGHT ANGLES TO THE CURB LINE, WITH A RISE OF THREE-EIGHTHS OF AN INCH TO THE FOOT, PROVIDED THAT, AT STREET INTERSECTIONS, WHERE THE GRADE OF THE INTERSECTING STREET PREVENTS COMPLIANCE WITH THE ABOVE PROVISIONS, SIDEWALKS SHALL BE LAID UNDER THE DIRECTION AND TO THE ACCEPTANCE OF THE CITY ENGINEER.
- CURB RAMPS TO BE REPLACED SHALL BE INSTALLED IN ACCORDANCE WITH AMERICAN WITH DISABILITIES ACT (ADA) AND ODOT GUIDELINES REFERENCED ON SHEET 11. CONCRETE WALK SHALL BE REPLACED ONLY AS NEEDED.



NO	REVISION	DATE

CITY OF WILLOWICK

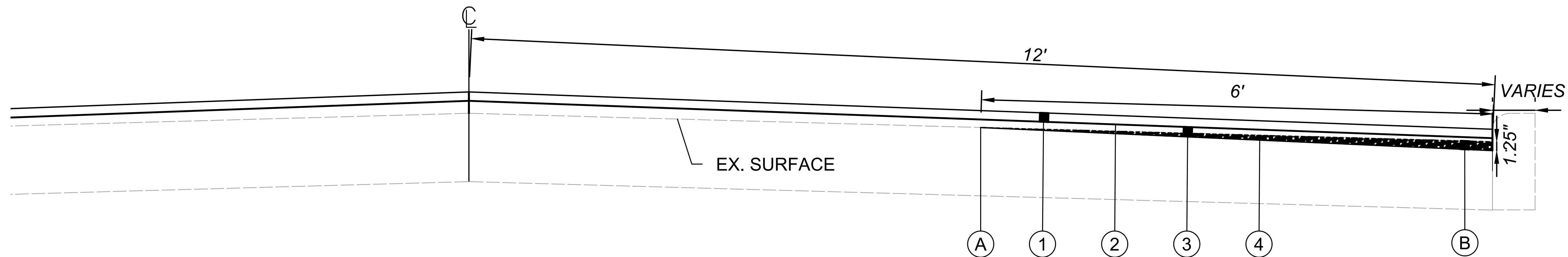
2024 PAVEMENT REPAIR PROGRAM

LAKE COUNTY, OHIO

ISSUED FOR:	BID SET
ISSUE DATE:	1/30/2024
SCALE:	AS SHOWN
DESIGNED BY:	AMM
DRAWN BY:	AMM
CHECKED BY:	TJM

GENERAL NOTES

PROJECT NO.	
232567	
DISCIPLINE	
GENERAL	
SHEET NAME	
G-1	
SHEET	OF
2	9

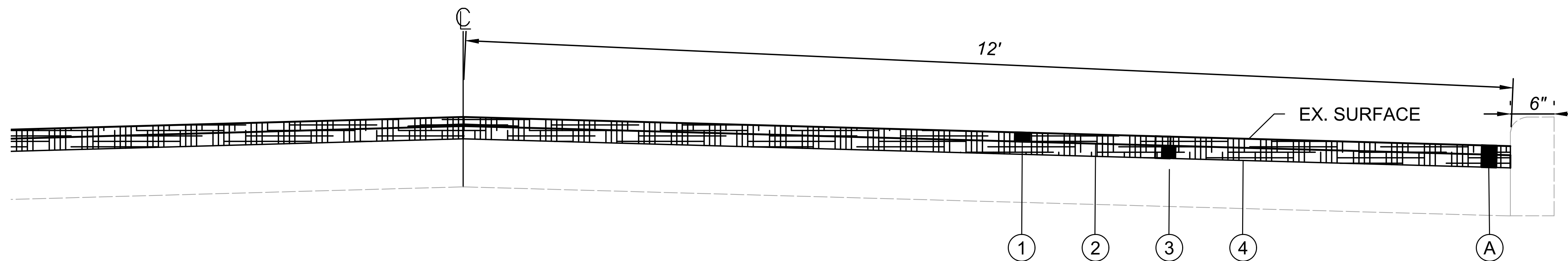


- (A) LIMIT OF PCC GUTTER GRINDING. CONTRACTOR TO ENSURE PROPER COMPACTION OF INTERMEDIATE COURSE ON EITHER SIDE OF POINT A.
- (B) PAVEMENT PLANING, PCC, GUTTER GRINDING, AS PER PLAN. DEPTH OF CUT IS 1.5" AT CURB, MEET EX. GRADE 6' FROM CURB AT CONSTANT SLOPE. CONTRACTOR TO CONFIRM TYPE OF CURB OUT IN THE FIELD BEFORE WORK.

- (1) 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN
- (2) TACK COAT, TRACKLESS TACK (407)
- (3) ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN (VARIABLE THICKNESS, 1.75" AT CURB)
- (4) SINGLE CHIP SEAL, TYPE A

**TYPICAL PORTLAND CEMENT CONCRETE
MILL AND OVERLAY WITH CHIP SEAL**

NOT TO SCALE

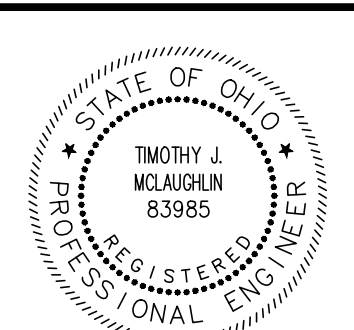


- (1) 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN
- (2) TACK COAT, TRACKLESS TACK (407)

- (3) 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN
- (4) SINGLE CHIP SEAL, TYPE A
- (A) PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

TYPICAL ASPHALT CONCRETE RESURFACING

NOT TO SCALE



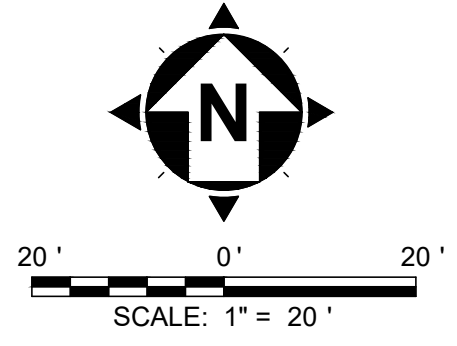
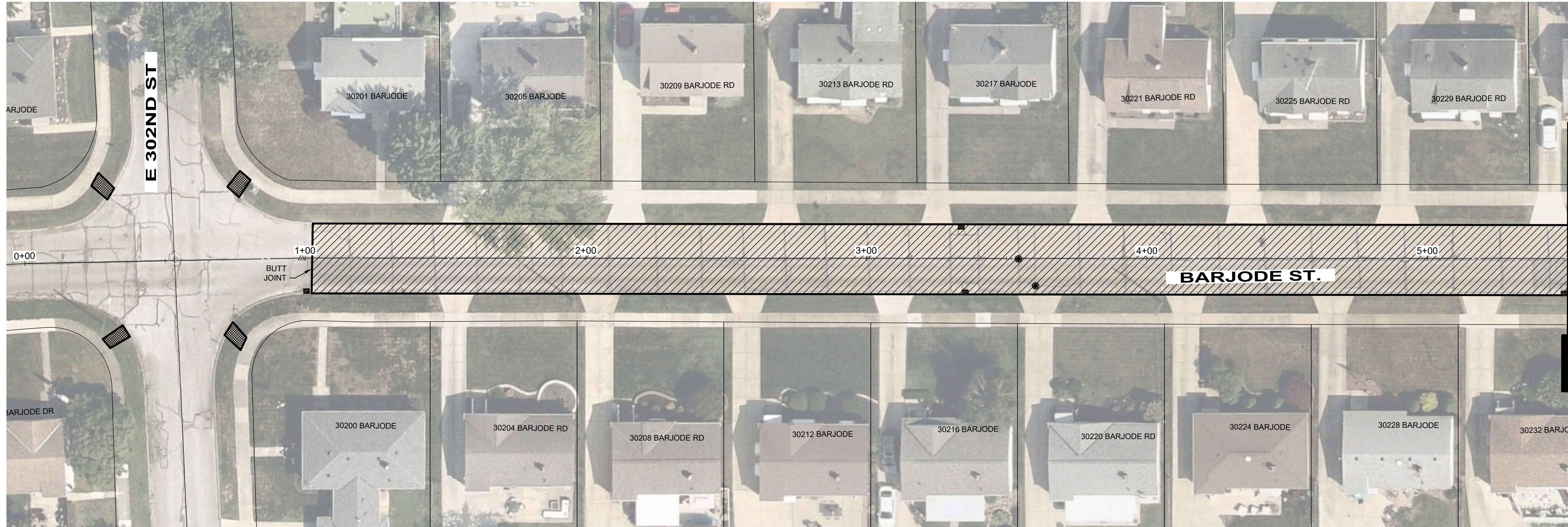
NO	REVISION	DATE

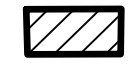



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2024 PAVEMENT REPAIR PROGRAM
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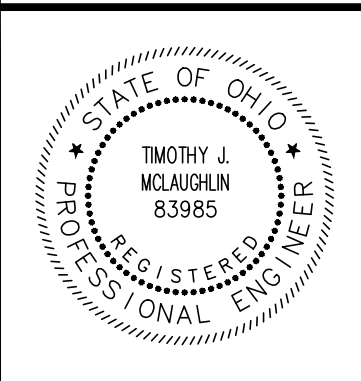
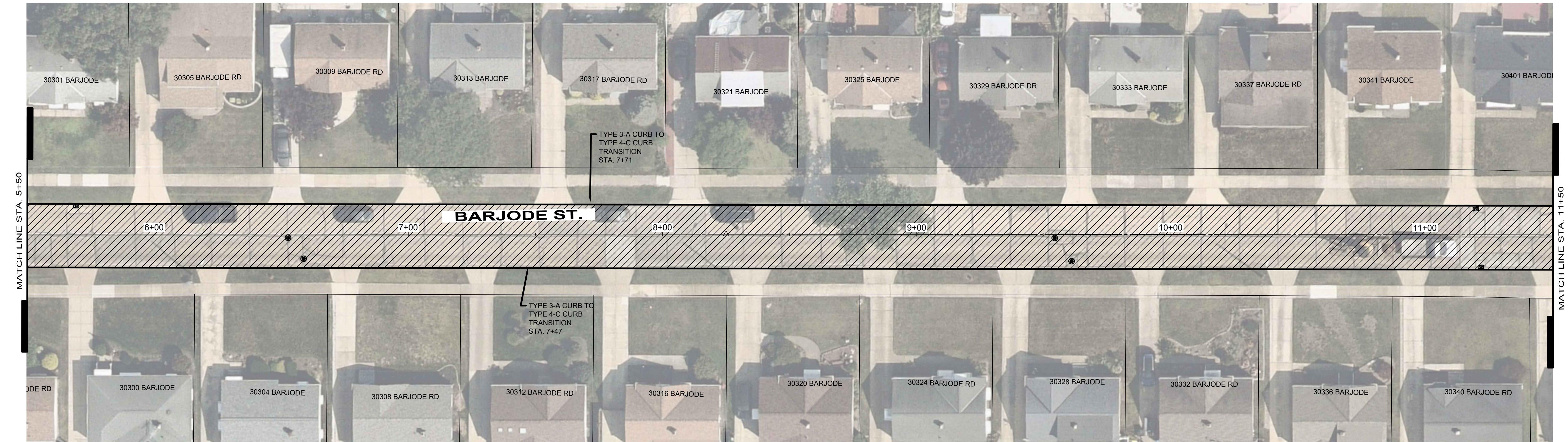
ISSUED FOR:	BID SET
ISSUE DATE:	1/30/2024
SCALE:	AS SHOWN
DESIGNED BY:	AMM
DRAWN BY:	AMM
CHECKED BY:	TJM

TYPICAL SECTION

PROJECT NO.		232567
DISCIPLINE		GENERAL
SHEET NAME		G-2
SHEET	OF	
3	9	



- LEGEND:**
-  RESURFACE LIMITS
 -  CATCH BASIN (7 TO BE ADJUSTED)
 -  MANHOLE (6 TO BE ADJUSTED)
 -  CURB RAMP REPLACEMENT (4 TO BE REPLACED)



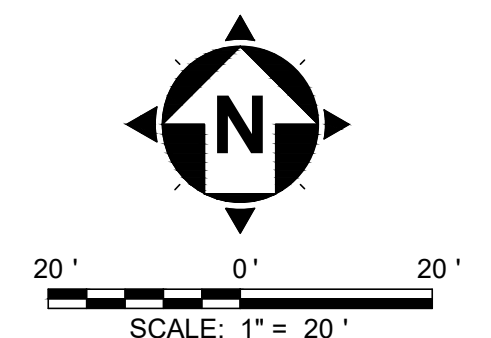
NO	REVISION	DATE






CITY OF WILLOWICK
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 LAKE COUNTY, OHIO

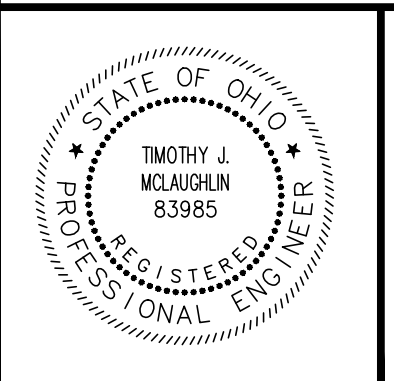
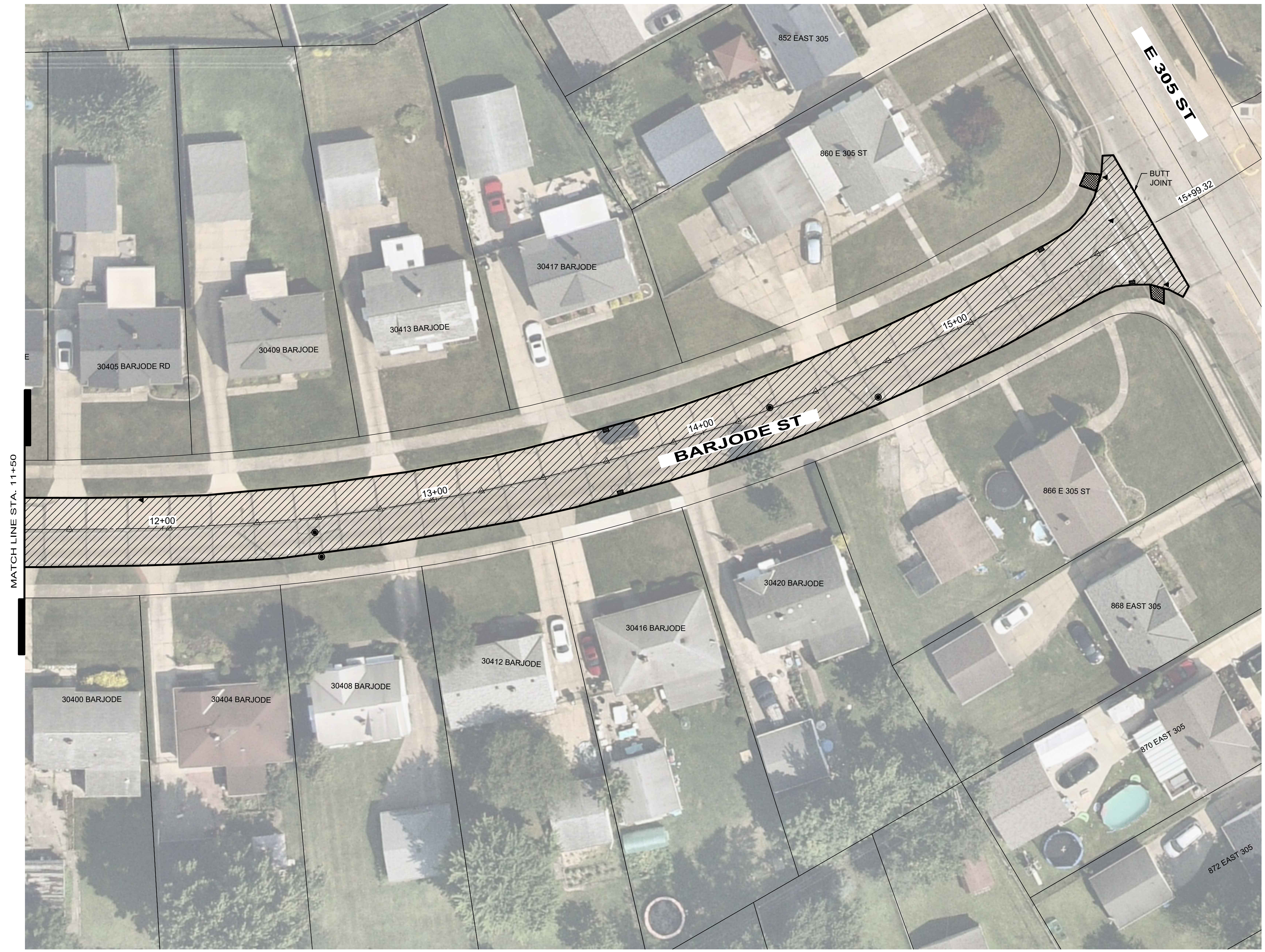
ISSUED FOR:	BID SET
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BARJODE ROAD
STA. 1+03 TO 11+50

PROJECT NO.	232567
DISCIPLINE	CIVIL
SHEET NAME	P-1
SHEET	4
OF	9



- LEGEND:**
-  RESURFACE LIMITS
 -  CATCH BASIN (4 TO BE ADJUSTED)
 -  VALVE (4 TO BE ADJUSTED)
 -  MANHOLE (3 TO BE ADJUSTED)
 -  CURB RAMP REPLACEMENT (2 TO BE REPLACED)



NO	REVISION	DATE

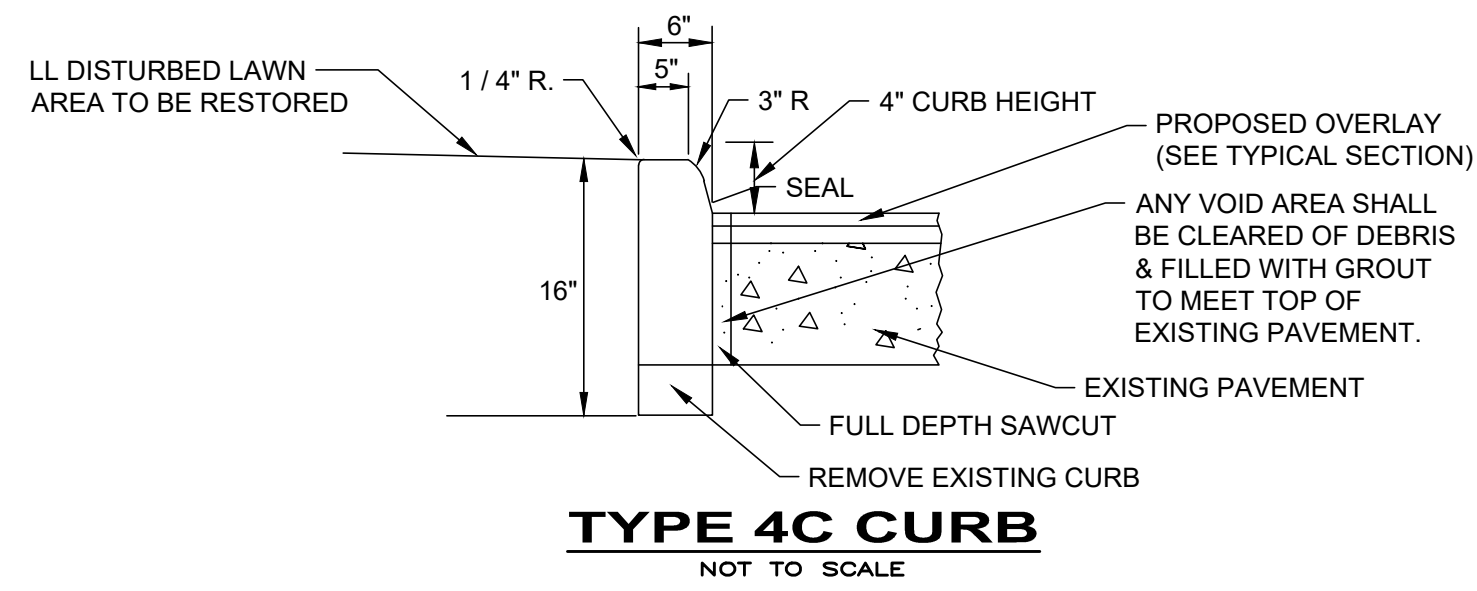
CITY OF WILLOWICK
2024 PAVEMENT REPAIR PROGRAM
 LAKE COUNTY, OHIO

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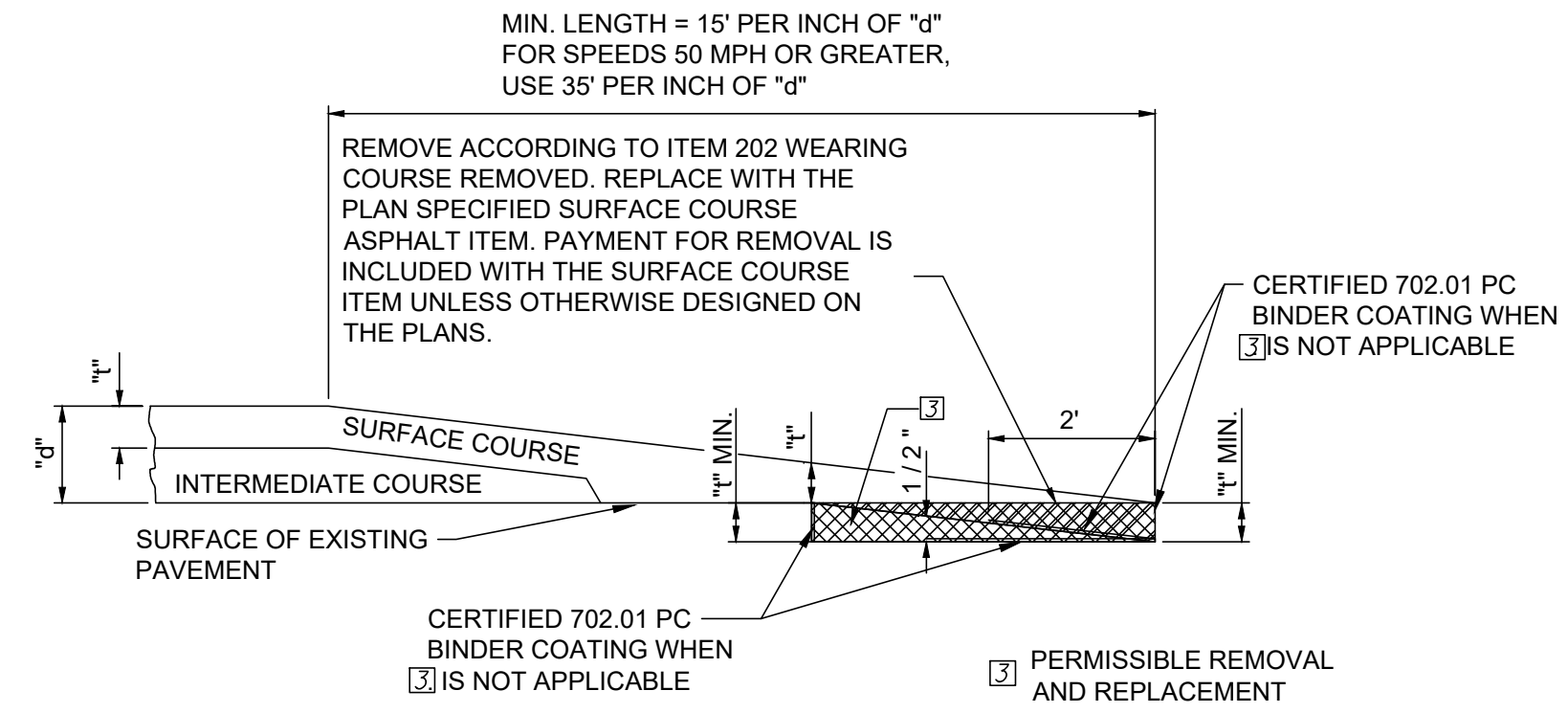
BARJODE ROAD
STA. 11+50 TO
15+80

PROJECT NO.		232567
DISCIPLINE		CIVIL
SHEET NAME		P-2
SHEET	OF	
5	9	

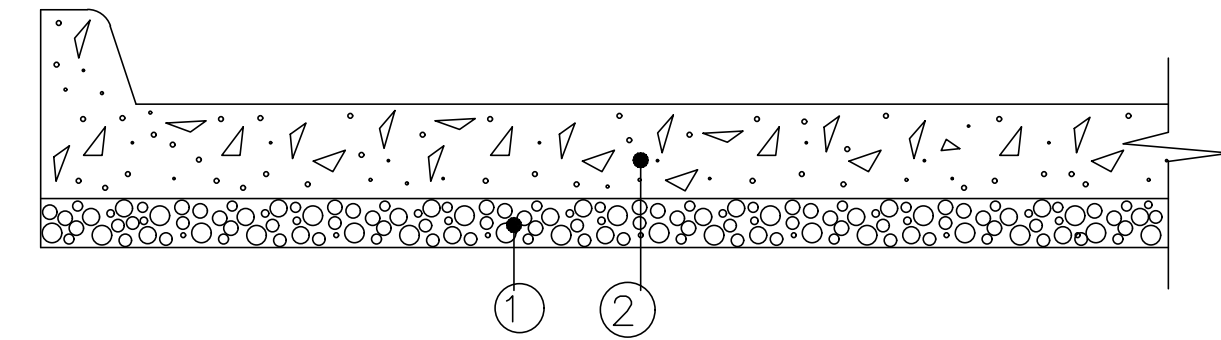
H:\2023\232567\DWG\SHETS\C_232567 - PLAN.DWG - P-2 - 1/30/2024 4:26:58 PM - ASHLEIGH MSHO



TYPE 4C CURB
NOT TO SCALE



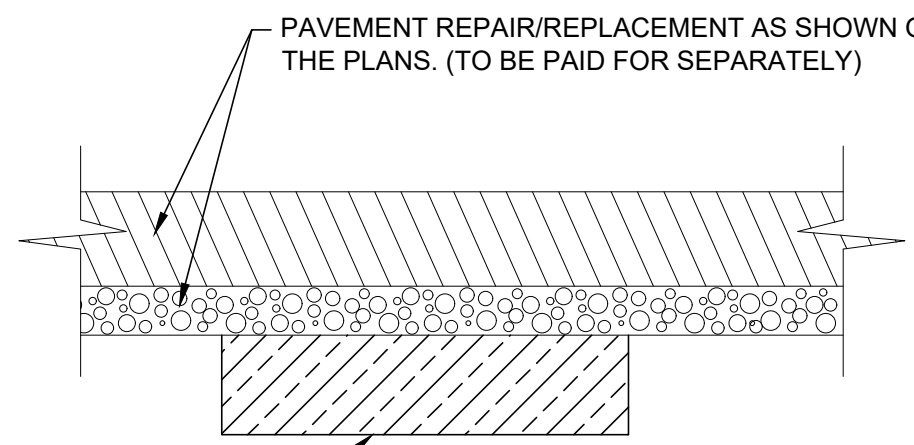
BUTT JOINT DETAIL
NOT TO SCALE



- ① 3" ODOT ITEM 304 COMPACTED LIMESTONE AGGREGATE BASE (IF EXISTING IS NOT PRESENT)
- ② 8" MIN. ODOT ITEM 255 INCLUDING INTEGRAL CURB, DOWEL/HOOK BOLT INSTALLATION, AND MACRO SYNTHETIC FIBER REINFORCEMENT "TUF-STRAND SF" AT 3 LBS/CY OR APPROVED EQUAL MEETING REQUIREMENTS OF ASTM C1116.

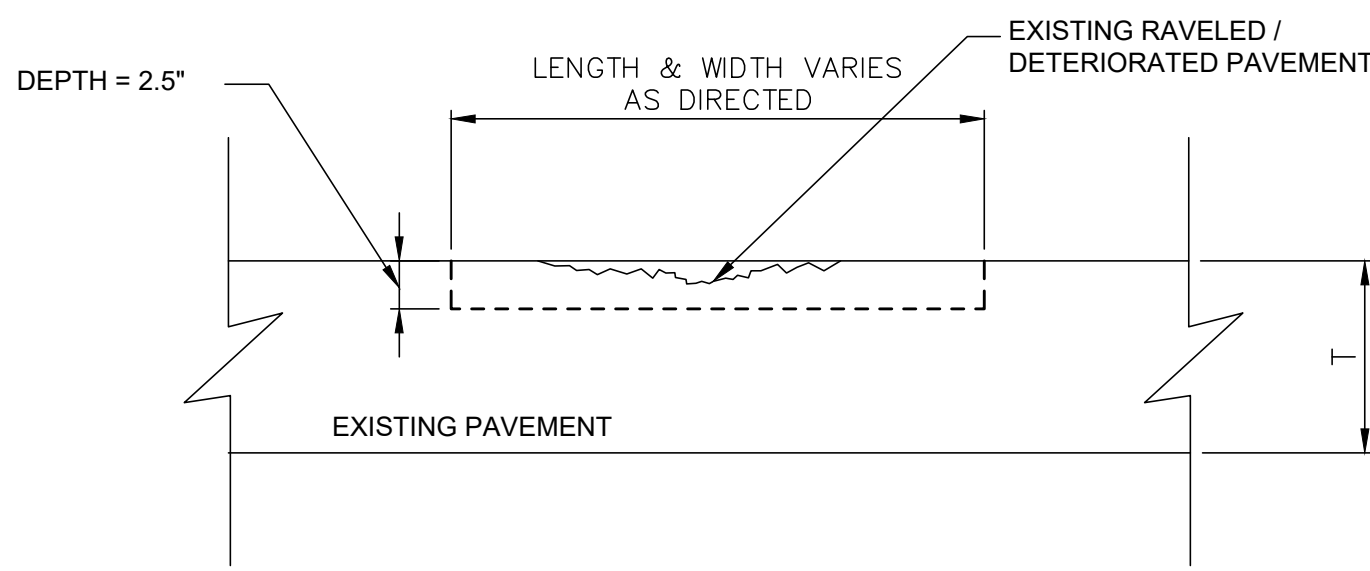
- NOTES:
- EXCAVATION AND REMOVAL OF EXISTING PAVEMENT AND 3" OF SUBGRADE SHALL BE INCLUDED IN THE UNIT PRICE OF ITEM 255.
 - PREP, INSTALLATION, AND COMPACTION OF 3" OF ODOT ITEM 304 SHALL BE INCLUDED IN THE PRICE OF ITEM 255.
 - CONCRETE SHALL BE CLASS QC MS.
 - FOR ALL PAVEMENT REPAIRS, ASPHALT AND/OR CONCRETE PAVEMENT SHALL BE FULL DEPTH SAWCUT.
 - ALL JOINTS SHALL BE SEALED WITH HOT APPLIED SEALER - ASTM D3405.
 - HOOK BOLTS SHALL BE INSTALLED AT 18" O/C ALONG ALL LONGITUDINAL JOINTS.
 - DOWELS SHALL BE INSTALLED AT 12" O/C ALONG ALL TRANSVERSE JOINTS.

FULL DEPTH REPLACEMENT DETAIL
(ITEM 255)
NOT TO SCALE



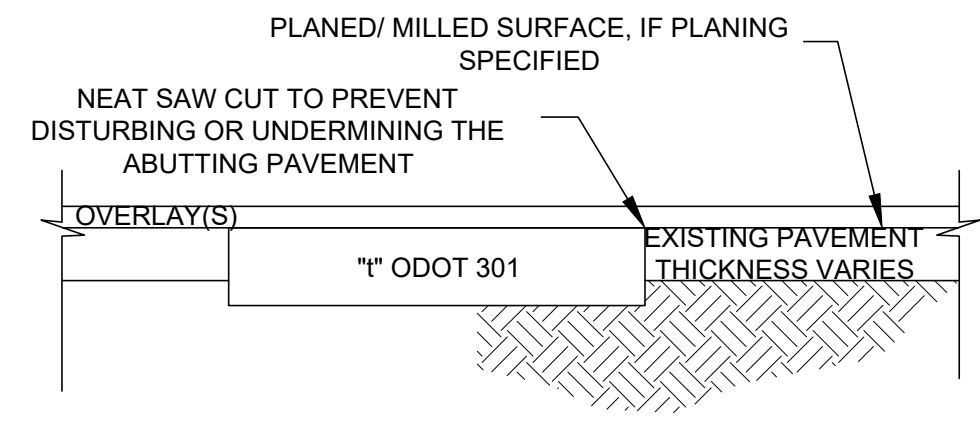
COMPACTED ODOT 304 STONE. DEPTH OF UNDERCUT AND AREA SHALL BE AS DIRECTED BY THE ENGINEER IN ORDER TO REPLACE UNSTABLE MATERIAL. NOTE: ITEM SHALL BE USED AS DIRECTED

ADDITIONAL SUBGRADE REPLACEMENT DETAIL
(ITEM 204)
NOT TO SCALE



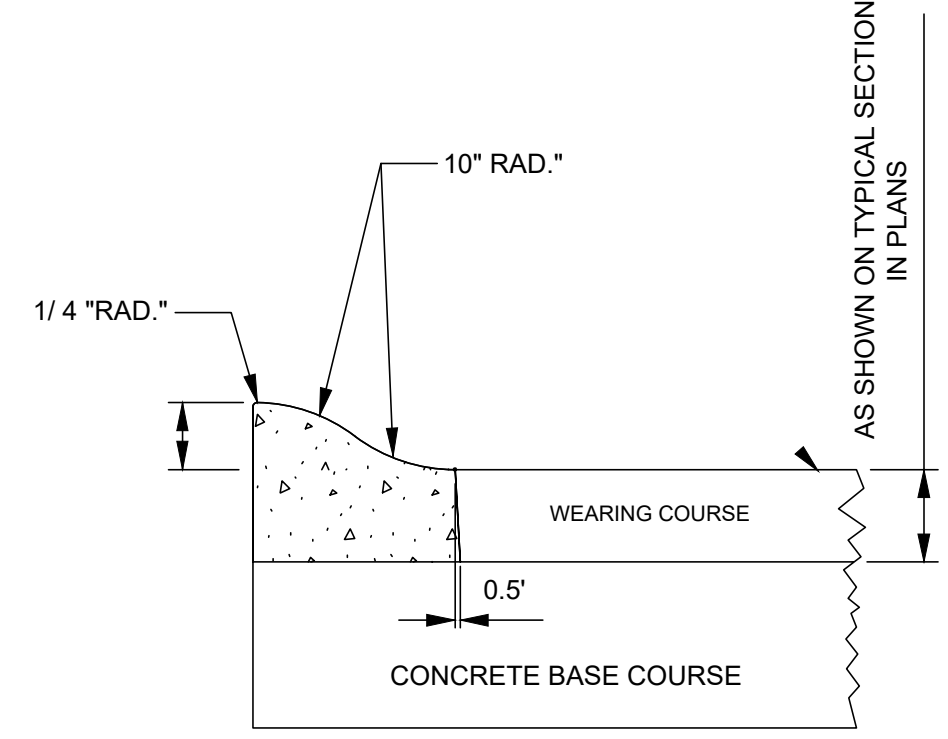
NOTE: ALL LOOSE AND DETERIORATED MATERIAL SHALL BE MILLED OUT UNTIL STABLE PAVEMENT IS FOUND. THE RESULTING EDGE SHALL BE REASONABLY VERTICAL AND SQUARE TO THE BOTTOM AND SHALL BE TACK COATED PRIOR TO THE PLACEMENT AND COMPACTION OF ODOT ASPHALT CONCRETE SURFACE COURSE, TYPE I, (448), PG64-22

PARTIAL DEPTH PAVEMENT REPAIR
(ITEM 251)
NOT TO SCALE

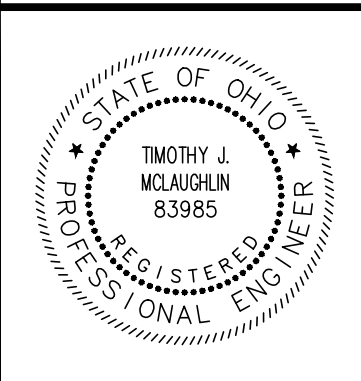


NOTE: ITEM SHALL BE USED AS DIRECTED

PAVEMENT REPAIR DETAIL
(ITEM 253)
NOT TO SCALE



TYPE 3 CURB
NOT TO SCALE



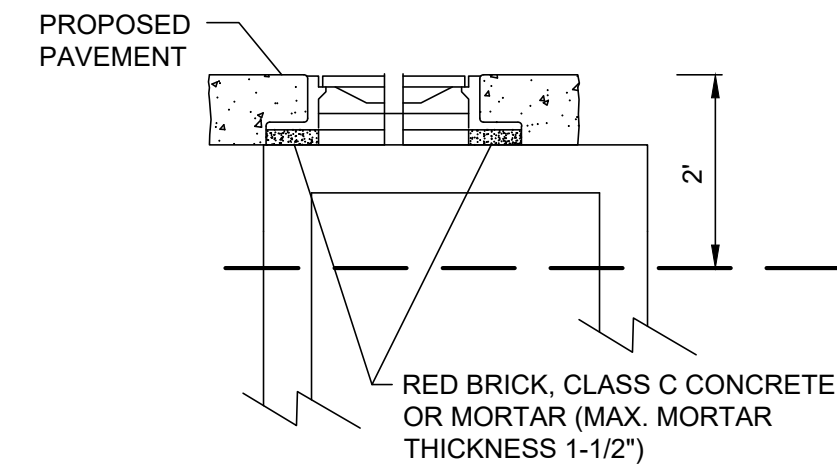
NO	REVISION	DATE

CITY OF WILLOWICK
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CONSTRUCTION DETAILS - 1

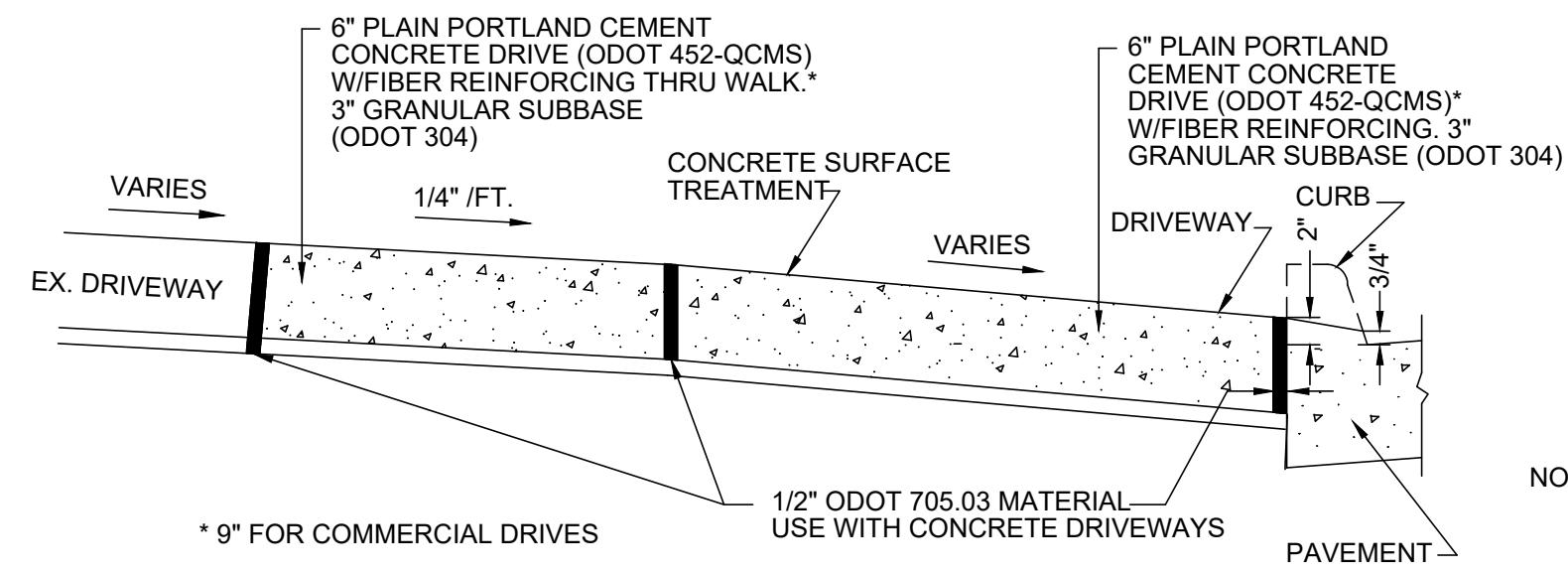
PROJECT NO.	
232567	
DISCIPLINE	
CIVIL	
SHEET NAME	
C-1	
SHEET	OF
7	9



WORK SHALL INCLUDE RECONSTRUCTION OF MANHOLE/BASIN FOR UP TO 2' FROM PROPOSED RIM ELEVATION OR GUTTER GRADE ELEVATION

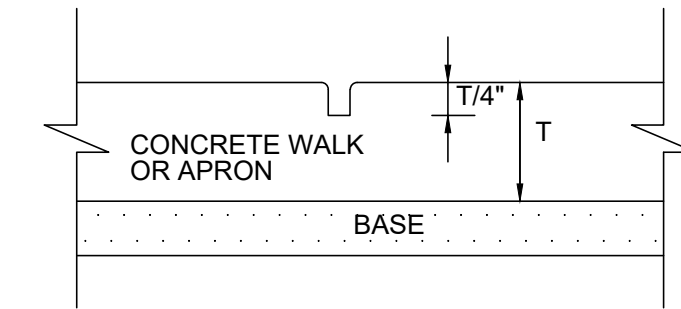
RECONSTRUCTION OF MANHOLE/BASIN BELOW 2' FROM PROPOSED RIM ELEVATION OR GUTTER GRADE ELEVATION SHALL BE PAID FOR UNDER MANHOLE/BASIN PARTIALLY RECONSTRUCTED TO GRADE

M.H./I.B. ADJUSTED TO GRADE
NOT TO SCALE

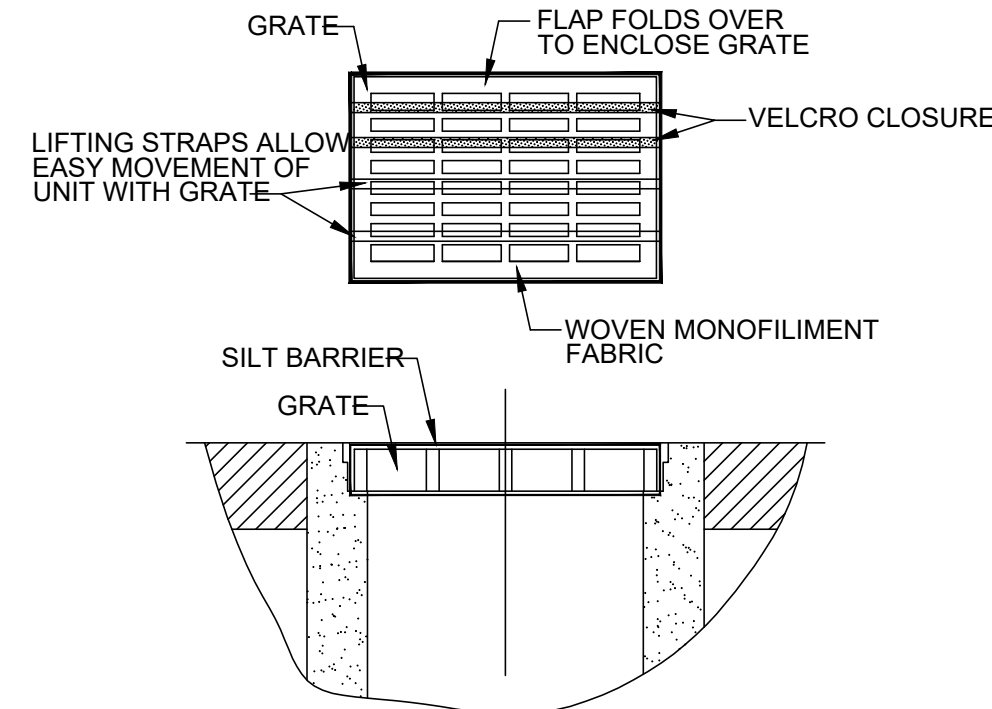


NOTE: WIRE MESH REINFORCING SHALL BE FURNISHED & INSTALLED IN-KIND IF FOUND IN THE EXISTING APRON.

DROP CURB DETAIL AT DRIVEWAY
NOT TO SCALE

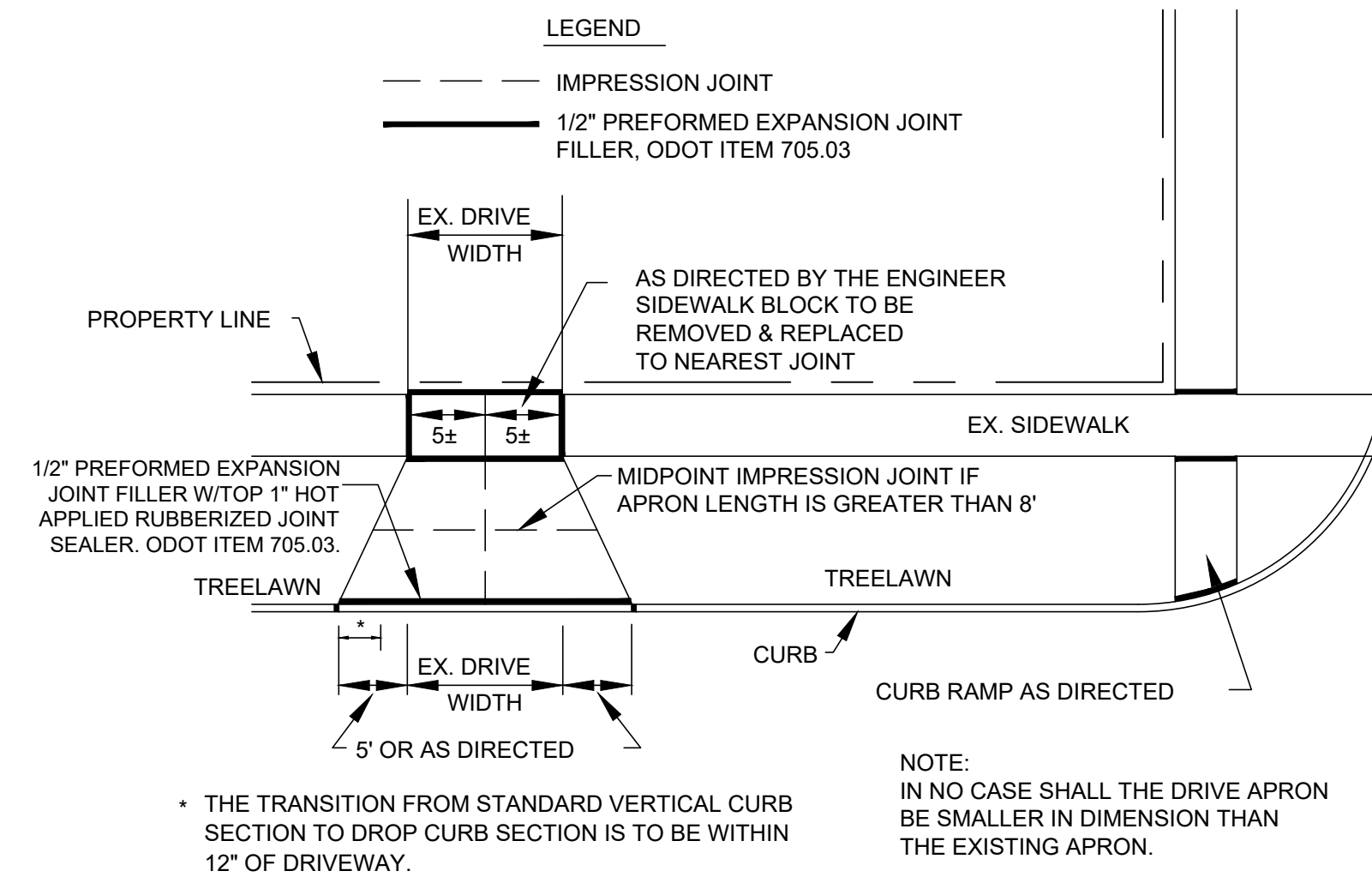


IMPRESSION JOINT FORMED
NOT TO SCALE

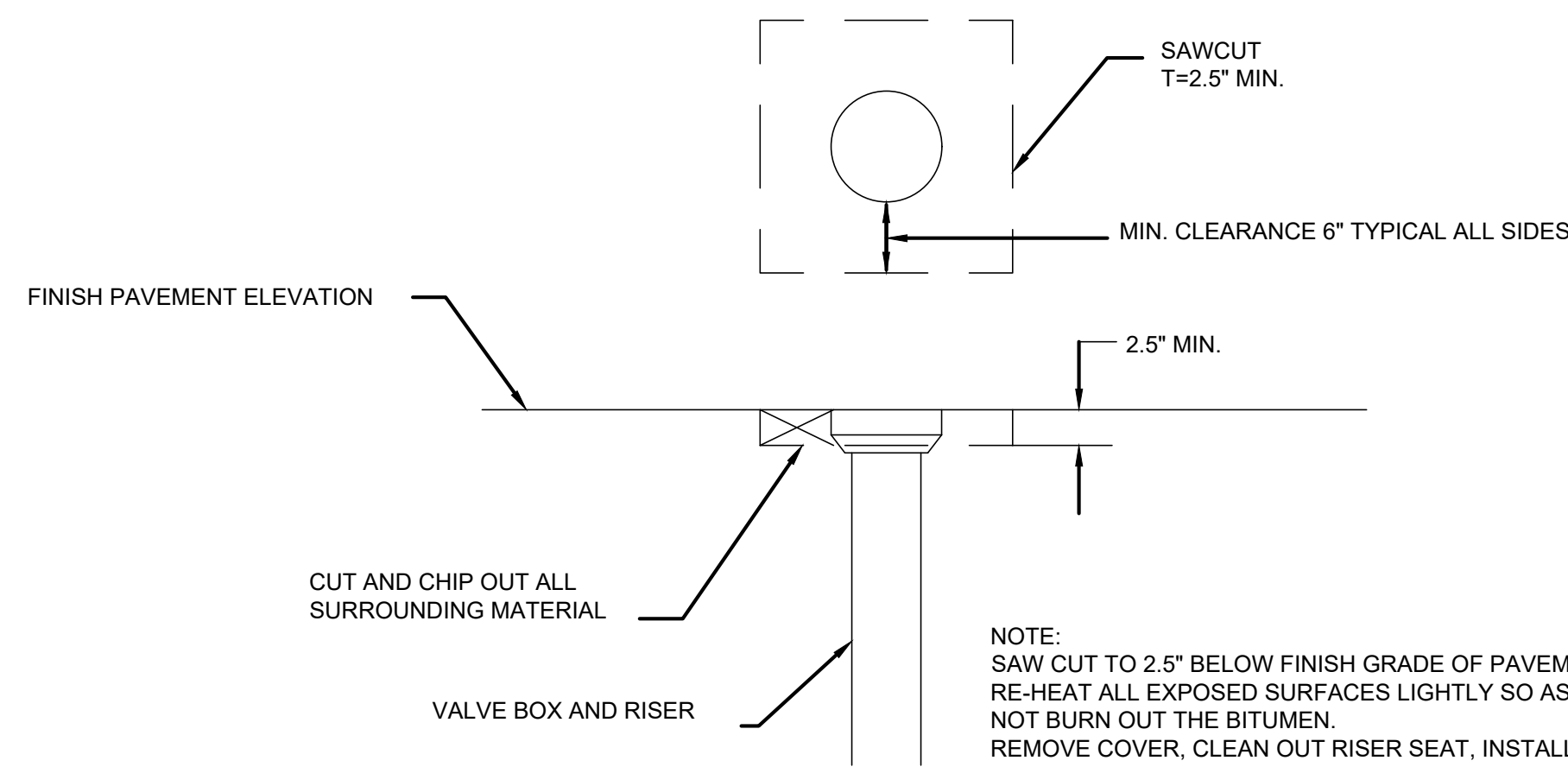


1. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT.
2. MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE SILT BARRIER AS NEEDED.
3. TO INSTALL CATCH BASIN INLET SILT BARRIER: THE EMPTY SILT BARRIER SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

INLET PROTECTION FOR CATCH BASIN IN ROADWAY
NOT TO SCALE

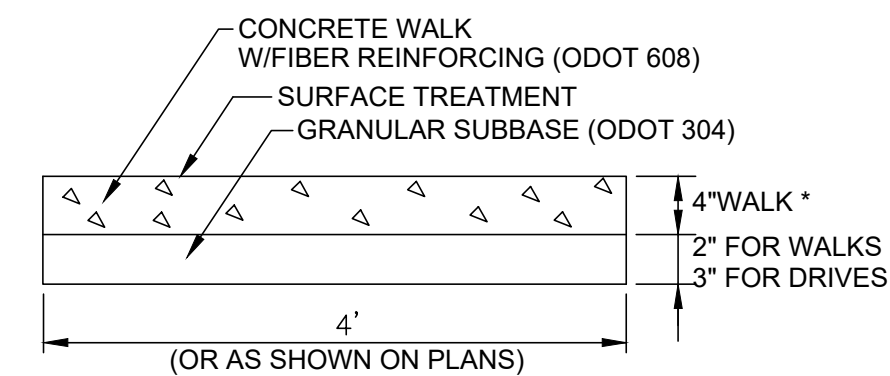


DRIVEWAY APPROACH DETAIL
NOT TO SCALE



NOTE: SEAL AROUND CASTING WITHOUT SEALING THE COVER TO THE RISER. IF THIS CANNOT BE DONE THEN DO NOT SEAL AROUND THE RISER.

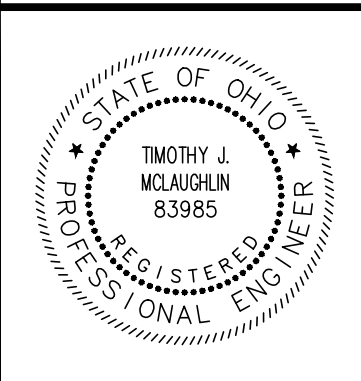
RETRO - FIT WATER VALVE BOX RISER
NOT TO SCALE



*WALK WITHIN DRIVE APRON LIMITS SHALL BE THE SAME THICKNESS AS THE DRIVE APRON (6" MIN.) AND PAID FOR SEPARATELY.

- 8" FOR COMMERCIAL DRIVES
- 6" FOR RESIDENTIAL DRIVES

CONCRETE WALK DETAIL
NOT TO SCALE



NO	REVISION	DATE

CITY OF WILLOWICK

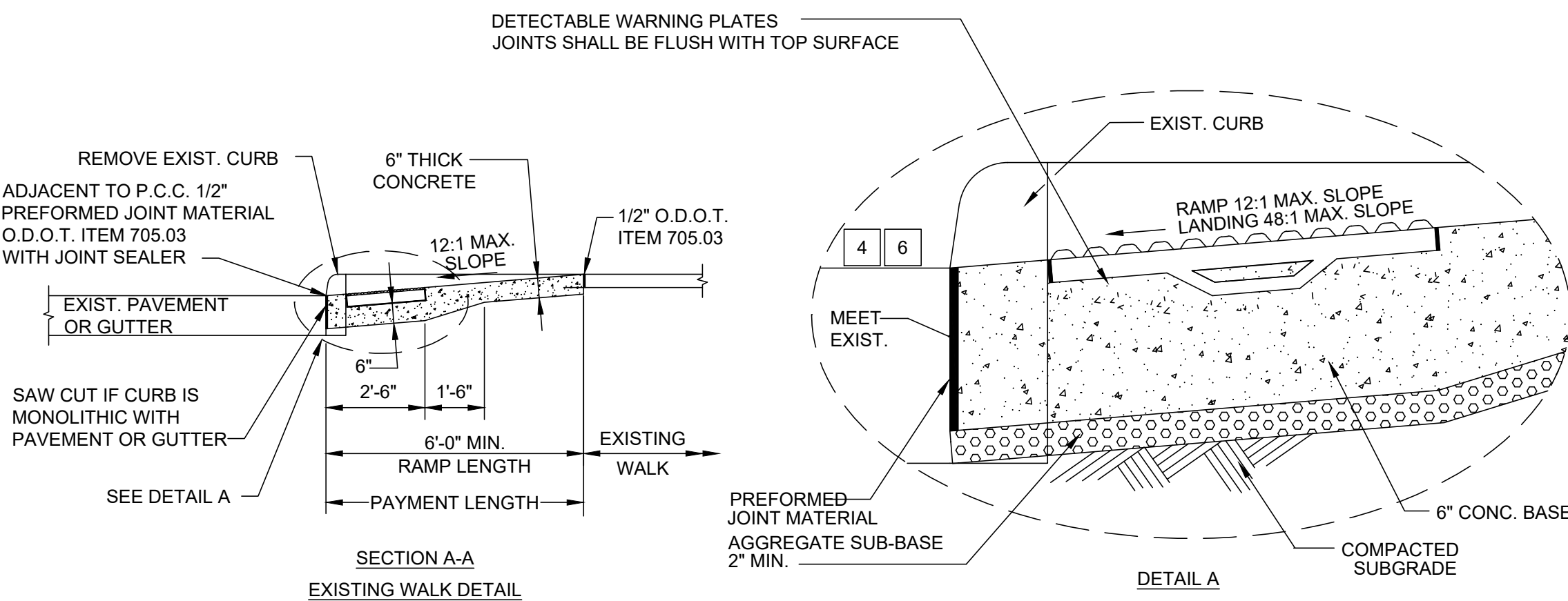
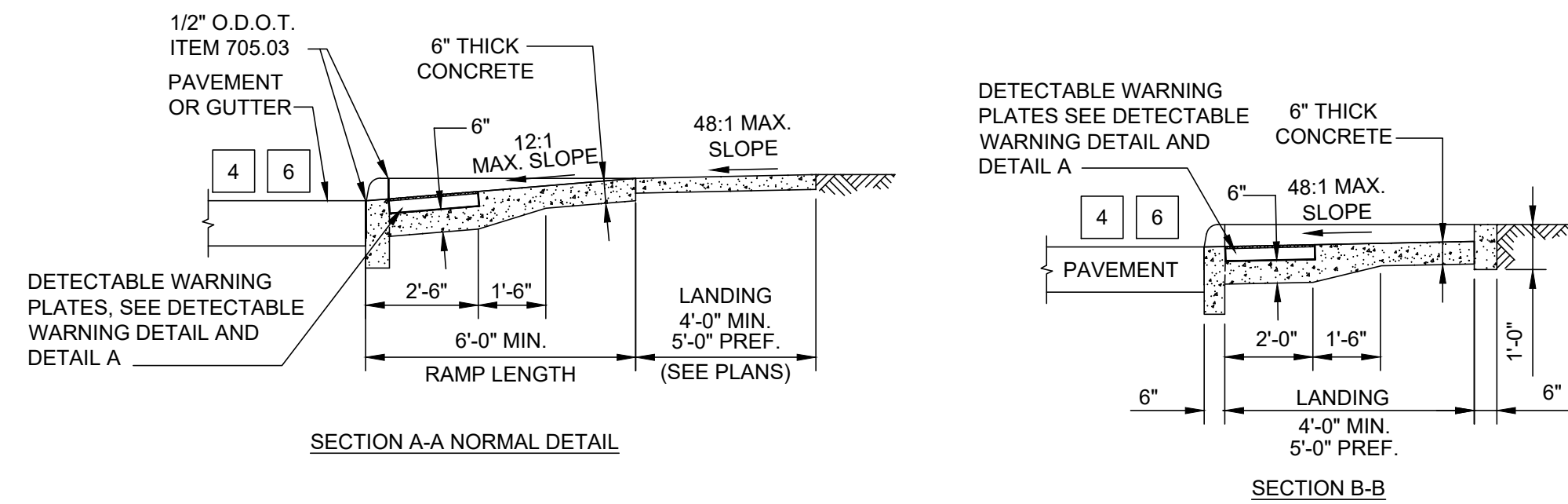
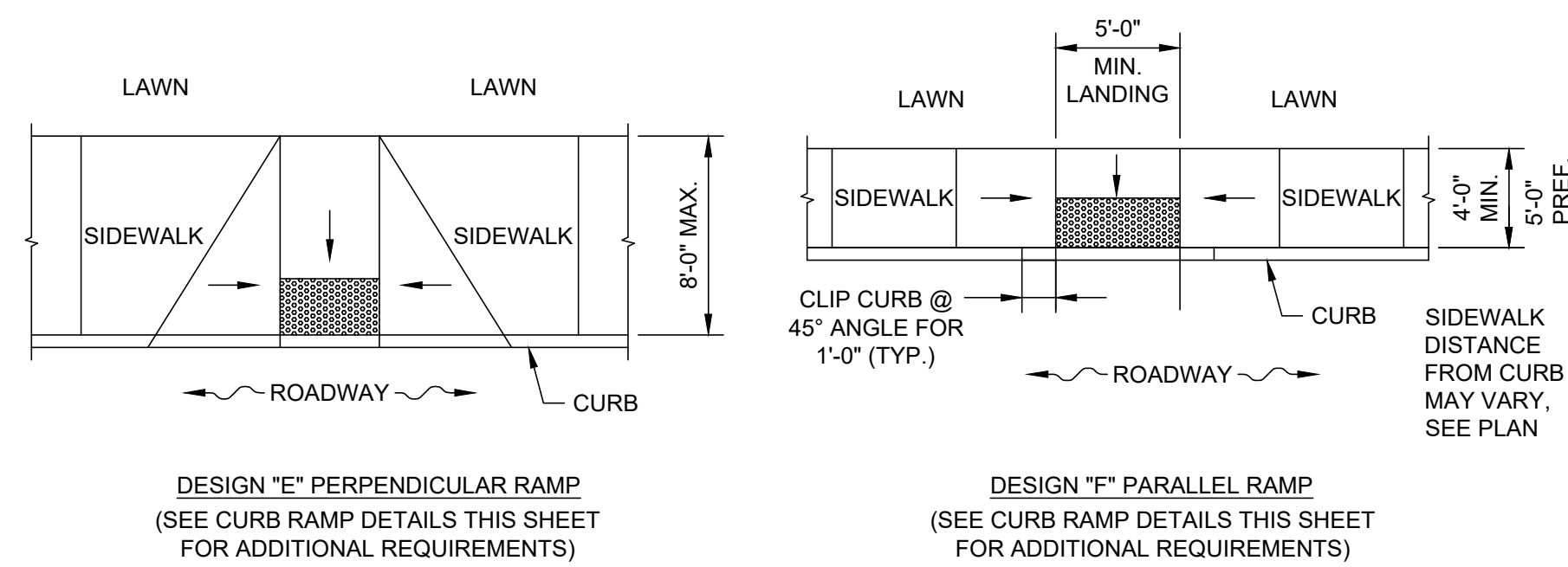
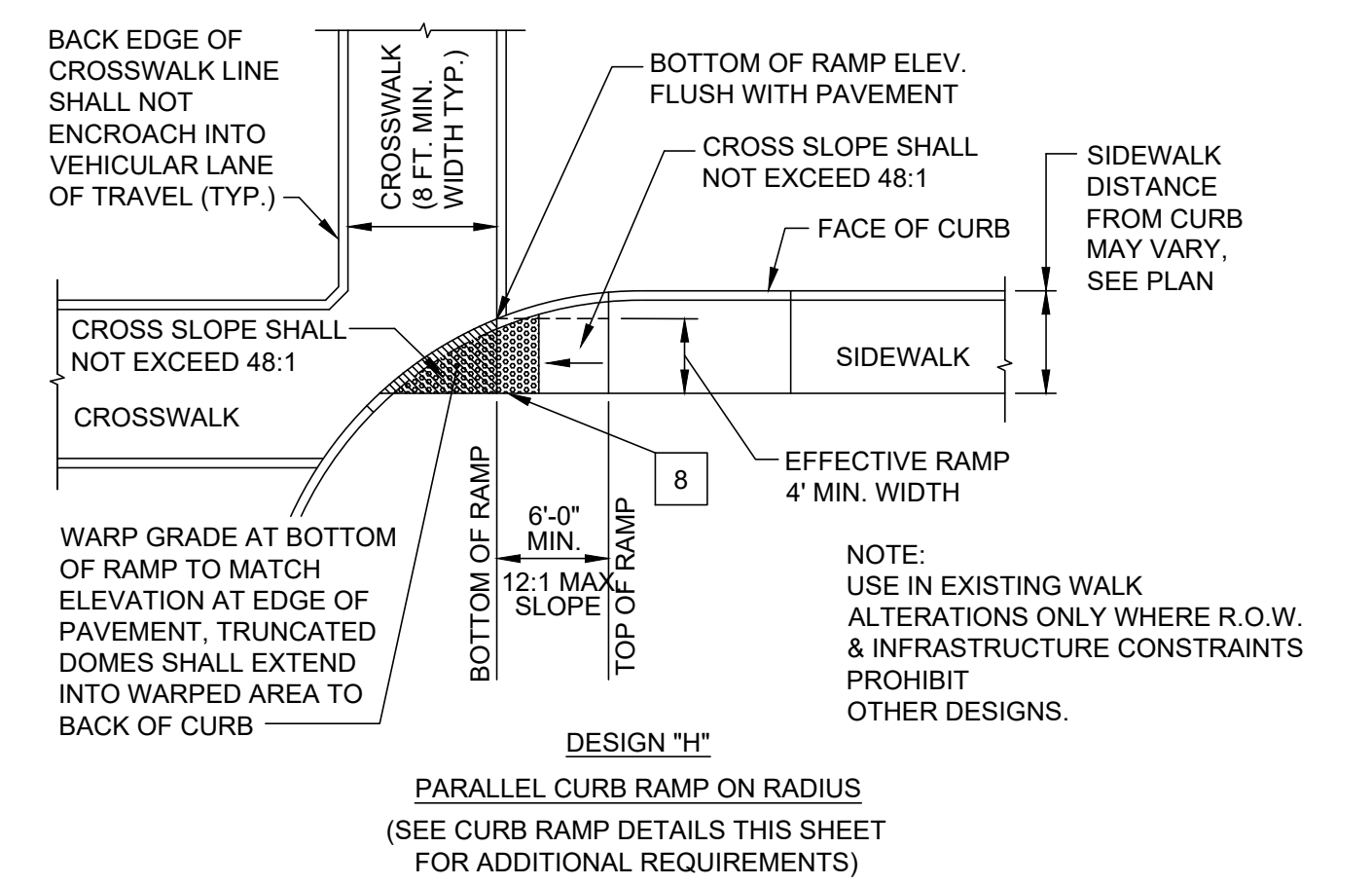
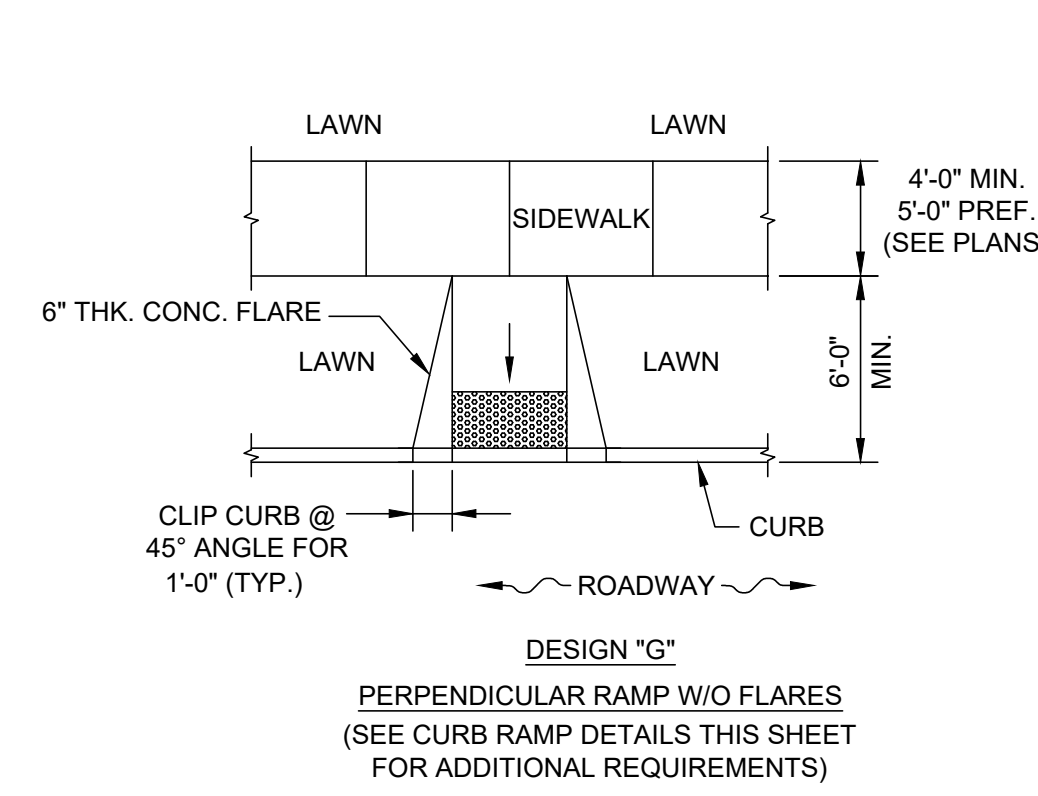
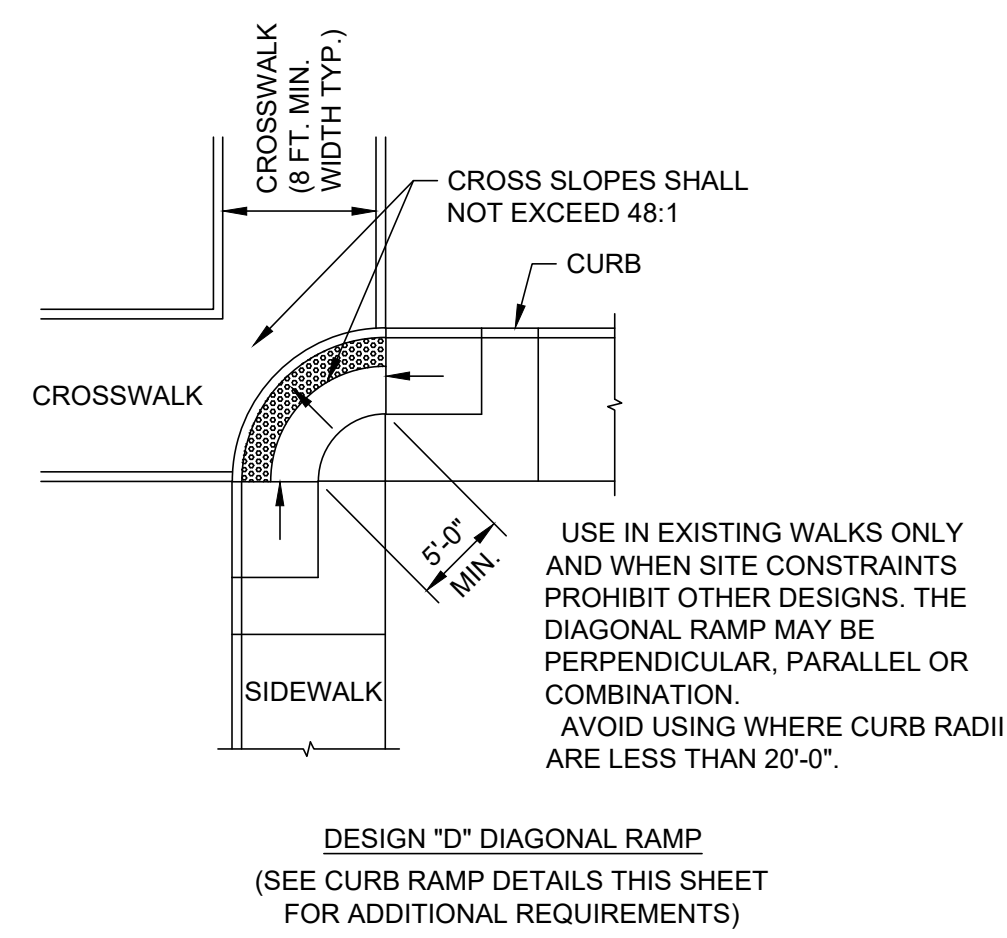
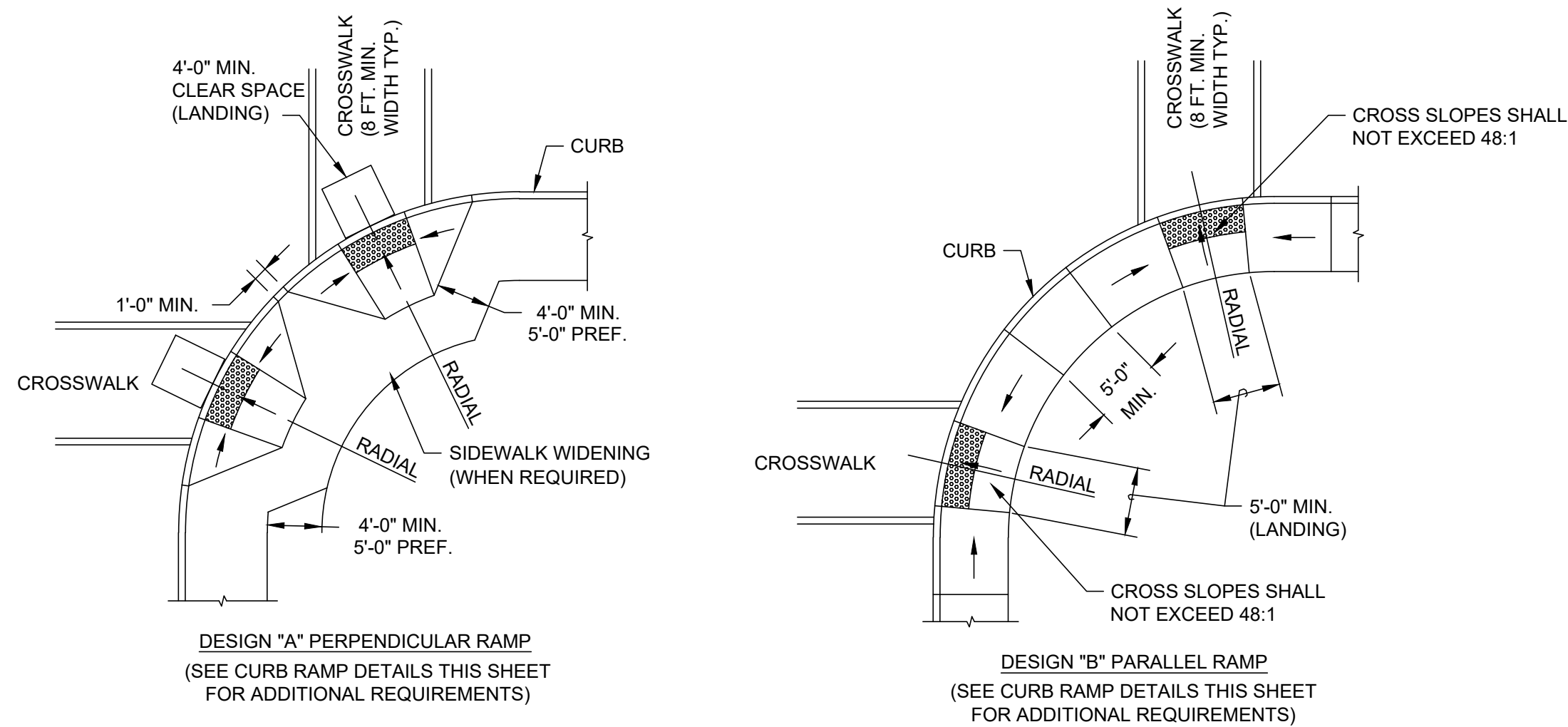
2024 PAVEMENT REPAIR PROGRAM

LAKE COUNTY, OHIO

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CONSTRUCTION DETAILS - 2

PROJECT NO.	232567
DISCIPLINE	CIVIL
SHEET NAME	C-2
SHEET	OF
8	9



DETAIL NOTES

- 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.
- IF FLARED SIDES ARE USED IN AREAS OF CROSS TRAVEL, THE MINIMUM SLOPE SHALL BE 10:1 WITH A LANDING AND 12:1 WITHOUT A DEFINED LANDING.
- THE SLOPE OF THE RAMP TOWARD THE CURB IS REQUIRED TO BE 12:1 [0.0833] OR LESS, RELATIVE TO THE HORIZONTAL, UNLESS APPROVED IN WRITING BY THE ENGINEER/ARCHITECT.

THE MINIMUM LENGTH OF A PERPENDICULAR RAMP IS 6' FROM THE BACK OF A 6" CURB AND MAY BE INCREASED WHERE FEASIBLE TO OBTAIN A FLATTER RAMP SLOPE OR TO BETTER BLEND WITH THE WALK CONFIGURATION
- THE GRADE BREAK BETWEEN THE COUNTER SLOPES OF GUTTER AND/OR ROAD SURFACES, WITHIN 24 INCHES OF THE CURB RAMP AND THE RUNNING GRADE OF THE CURB RAMP, SHALL NOT EXCEED THE ALGEBRAIC DIFFERENCE OF 11 PERCENT. IF TWO OR MORE PLANE CHANGES ARE PRESENT, THEY SHALL BE SEPARATED BY 24 INCHES.
- DIMENSIONS DERIVED FROM EQUATIONS ARE NOMINAL. CONSTRUCT RAMPS TO MEET REQUIRED SLOPES AND EXISTING CONDITIONS.
- GRADES FOR LANDING SHALL PROMOTE POSITIVE DRAINAGE, WITHIN MAXIMUM ALLOWABLE SLOPE. NO PONDING OF WATER WILL BE ACCEPTABLE.
- DETECTABLE WARNING PLATES SHALL CONSIST OF A SURFACE OF TRUNCATED DOMES ALIGNED ON A SQUARE GRID, IN THE PREDOMINANT DIRECTION OF TRAVEL, EXTENDING A DISTANCE OF 24" FROM THE BACK OF CURB AND SPANNING THE ENTIRE WIDTH OF THE RAMP OPENING.

TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9", A TOP DIAMETER OF 0.56", A HEIGHT OF 0.2" AND CENTER TO CENTER SPACING OF 2.35".

PLATES SHALL BE LAID SUCH THAT JOINTS ARE LEVEL WITH ADJOINING JOINTS SO AS TO PROVIDE A SMOOTH TRANSITION FROM PAVEMENT TO PAVEMENT AND PAVEMENT TO CONCRETE SURFACE. THE SURFACE OF ANY TWO ADJACENT UNITS SHOULD NOT DIFFER BY MORE THAN 1/8" IN HEIGHT. PLATES SHALL BE BOLTED TOGETHER IN REQUIRED LENGTH. FACE OF ALL PLATES SHALL BE CLEAN OF CEMENT AND PROTECTED SO AS TO AVOID DAMAGE DURING CONSTRUCTION.

DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT.

- WHERE PLATES ABUT LAWN, INSTALL RIGID PVC OR GALVANIZED STEEL EDGE RESTRAINT WITH MINIMUM 1 3/4" VERTICAL FACE, 1 1/4" TOE, AND 3 1/4" HEAL USING 10" X 3/8" LONG SPIKES AT 12" C-C.

DETECTABLE WARNING PLATES SHALL BE VITRIFIED POLYMER COMPOSITE FILLED WITH HIGH STRENGTH POLYMERIC CONCRETE 2'X4' PLATE AT PERPENDICULAR CURB RAMPS AND CURB RAMPS ON THE RADIUS. 20" RADIUS PLATES SHALL BE INSTALLED AT DIAGONAL CURB RAMP. ALL SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

SURFACE TEXTURE: TEXTURE SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AND SHALL BE ROUGHER THAN ADJACENT WALK. (DOES NOT APPLY TO TRUNCATED DOMES)

JOINTS: JOINTS SHALL BE PROVIDED IN THE CURB RAMP AS EXTENSIONS OF WALK JOINTS. A 1/2" O.D.O.T. ITEM 705.03 PREFORMED JOINT MATERIAL SHALL BE PROVIDED AROUND THE EDGE OF RAMPS BUILT IN EXISTING CONCRETE WALK. LINES SHOWN ON THIS DRAWING INDICATE THE RAMP EDGE AND SLOPE CHANGES AND ARE NOT NECESSARILY JOINT LINES.

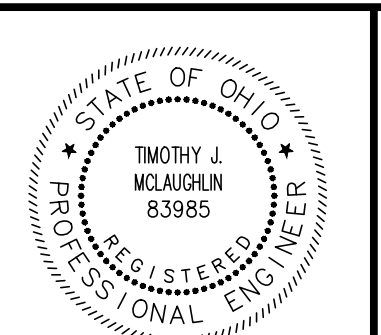
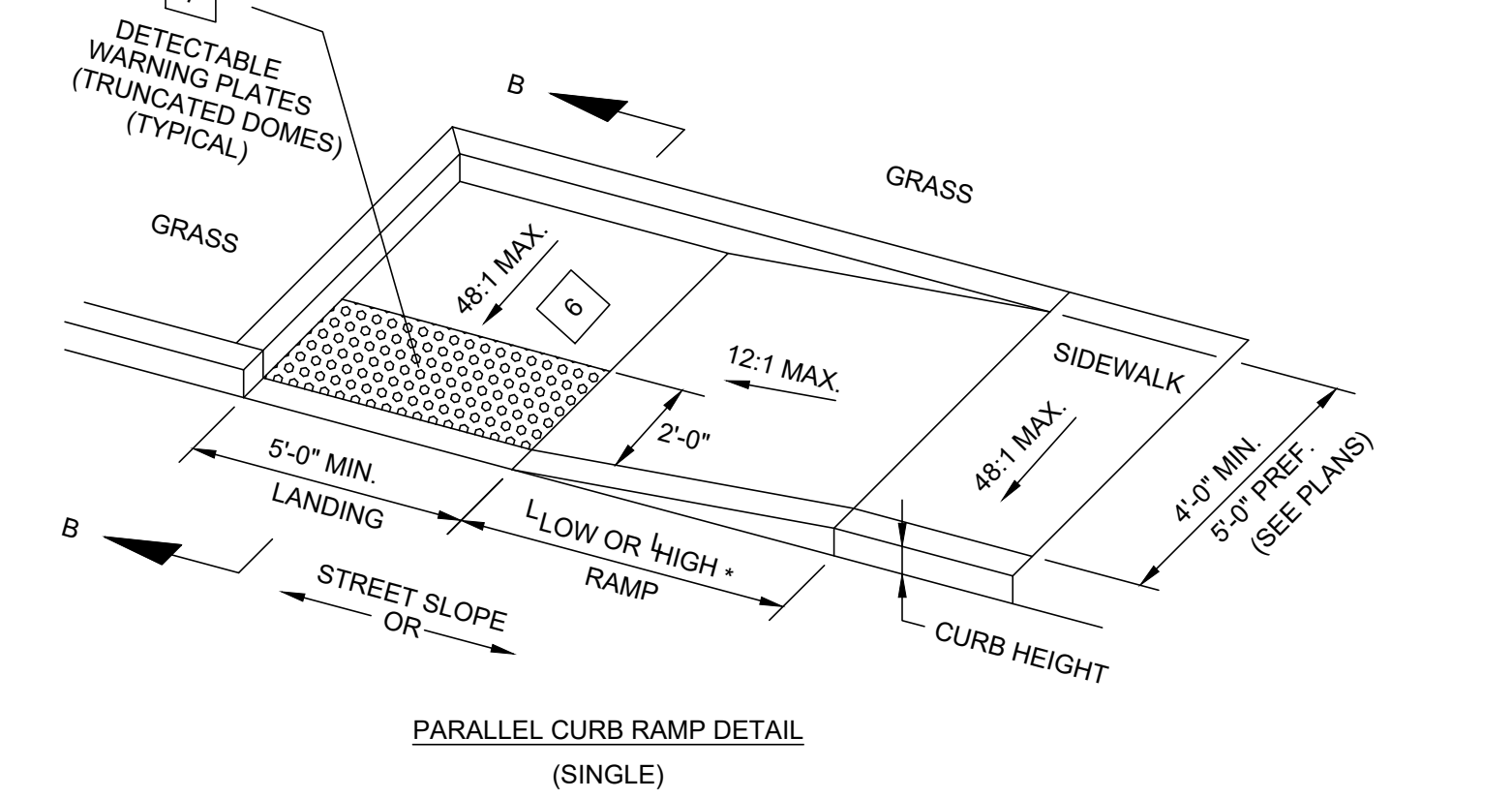
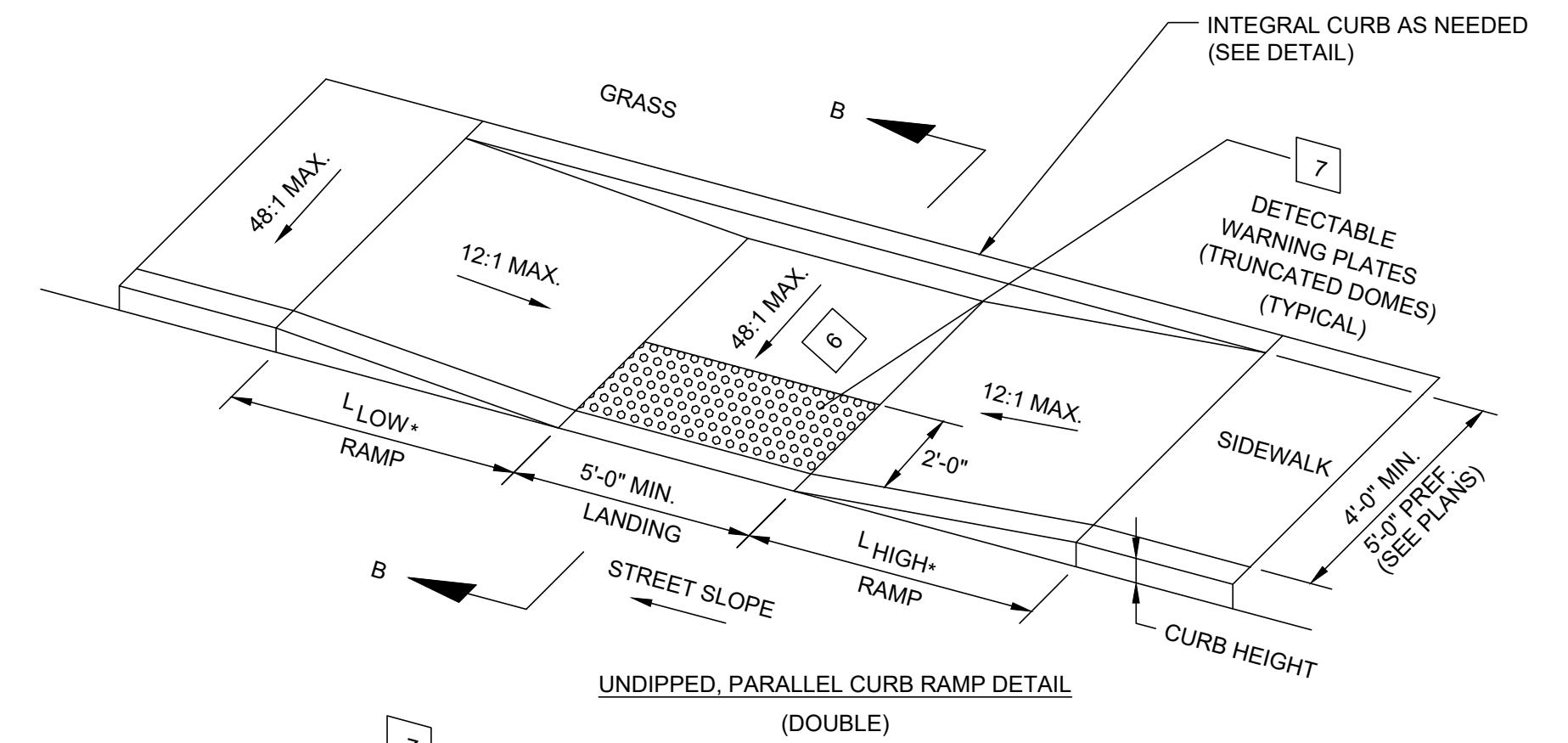
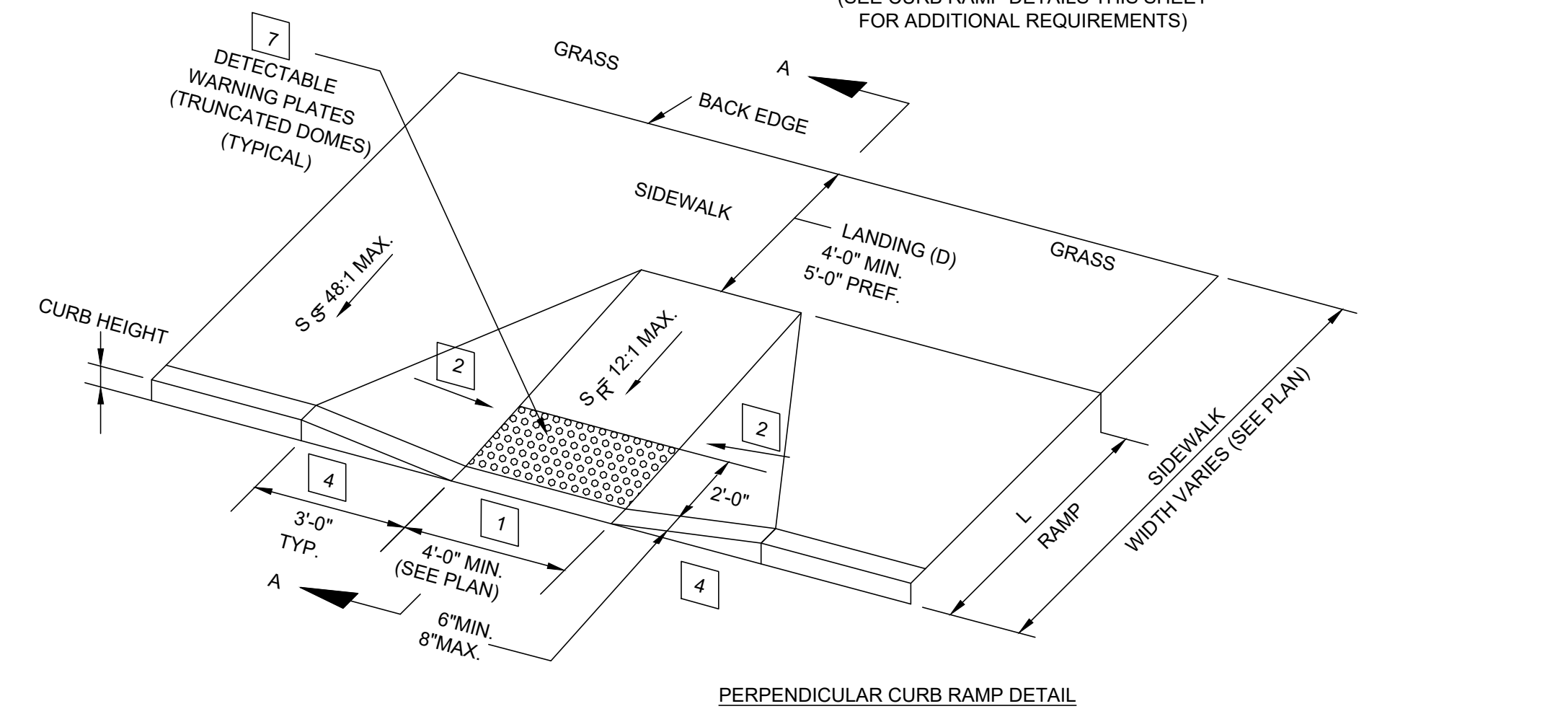
SEE NOTE 3

STREET SLOPE	RAMP LENGTH @ 1 INCH PER FOOT [0.0833]	
	L LOW SIDE*	L HIGH SIDE*
0.01	5'-5"	6'-10"
0.02	4'-10"	7'-11"
0.03	4'-5"	9'-5"
0.04	4'-1"	11'-8"
0.05	3'-9"	15'-2"

* - REFERENCE POINT FOR MEASURE IS FACE OF 6" HIGH CURB

$$L = \frac{\text{CURB HT.}}{R} = S \cdot S$$

L HIGH = 0.0833 - STREET SLOPE
L LOW = 0.0833 + STREET SLOPE



NO	REVISION	DATE

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CONSTRUCTION DETAILS - 3

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SHEET NAME	C-3
SHEET	9
OF	9