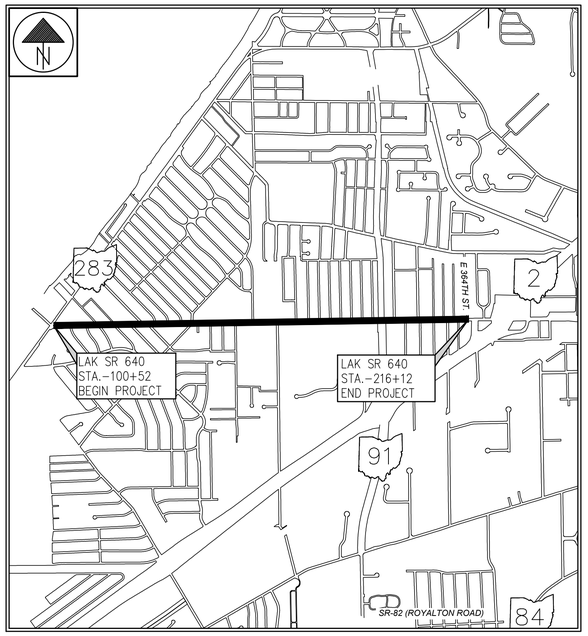

LOCATION MAP
LATITUDE: N 41°20'15" LONGITUDE: W 81°45'30"
1" = 2000'

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY (80)
STATE & FEDERAL ROUTES (2)
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

DESIGN SPEED	30 MPH
LEGAL SPEED	25 MPH
CURRENT ADT	18,920
DESIGN ADT	18,920
TRUCKS (24 HOUR B&C)	8%

DESIGN FUNCTIONAL CLASSIFICATION:
MINOR ARTERIAL

DESIGN EXCEPTIONS
NONE REQUIRED

ADA WAIVERS
REQUIRED

UNDERGROUND UTILITIES
CALL TWO WORKING DAYS BEFORE YOU DIG
OHIO811.org Before You Dig
OHIO 811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

OUPS REFERENCE NOS. A203200; 467,472,475,479,484,487,488

PLANS PREPARED BY:
your trusted advisor consultants → engineers architects planners

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

LAK - SR 640 - 00.00

VINE STREET
CITIES OF WILLOWICK, EASTLAKE, AND WILLOUGHBY
LAKE COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

THE MILLING AND RESURFACING OF APPROXIMATELY 2.20 MILES OF STATE ROUTE 640 (VINE ST.) FROM STATE ROUTE 283 (LAKESHORE BLVD.) TO JUST EAST OF E 364TH ST. IN THE CITIES OF WILLOWICK, EASTLAKE, AND WILLOUGHBY IN LAKE COUNTY ALSO INCLUDING THE REPLACEMENT OF EXISTING PAVEMENT MARKINGS.

EARTH DISTURBED AREA:

PROJECT EARTH DISTURBED AREA	N/A*
EST. CONTRACTOR EARTH DISTURBED AREA	N/A*
NOTICE OF INTENT EARTH DISTURBED AREA	N/A*

*MAINTENANCE PROJECT

2023 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 FOR TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

DISTRICT DEPUTY DIRECTOR
John Picuri, P.E., P.S.
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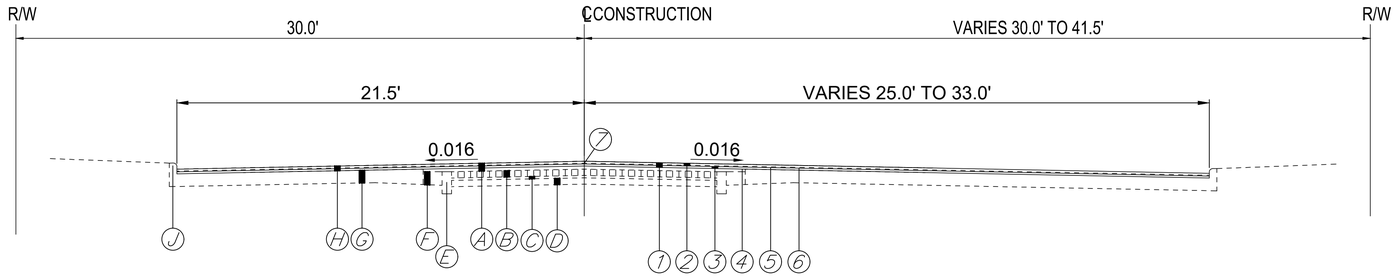
DIRECTOR, DEPARTMENT OF TRANSPORTATION
Jack Marchbanks, PhD
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS–ODOT						SUPPLEMENTAL SPECIFICATIONS	
BP–2.5	1/21/22	MT–97.10	4/19/19	TC–41.20	10/18/13	800	10/20/23
BP–3.1	1/21/22	MT–97.12	1/20/17	TC–42.20	10/18/13	821	4/20/12
BP–3.2	1/18/19	MT–101.90	7/17/20	TC–71.10	4/21/23	832	7/21/23
BP–7.1	7/21/23	MT–110.10	7/19/13	TC–74.10	1/20/23	872	1/21/21
				TC–82.10	7/19/19	921	4/20/12
DM–4.4	1/15/16						
RM–1.1	1/20/23					SPECIAL PROVISIONS	

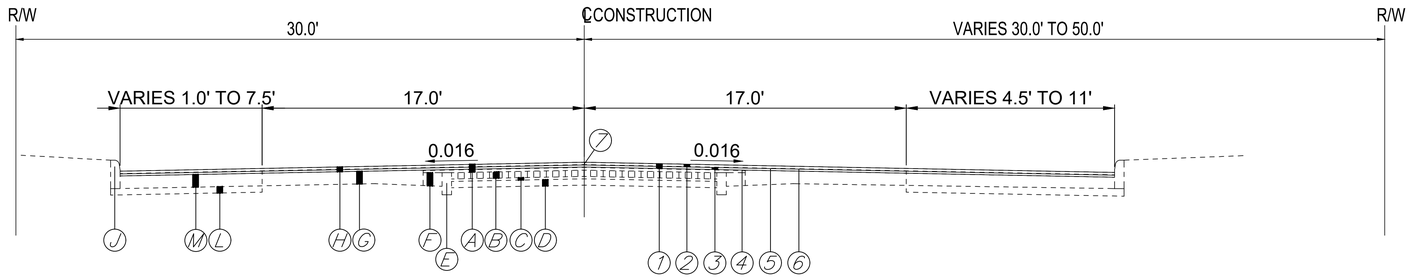
ENGINEERS SEAL:
STATE OF OHIO · WILLIAM D. BAKER · E-59412 · REGISTERED PROFESSIONAL ENGINEER

FEDERAL PROJECT NO. E200047
PID NO. 89274
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
LAK – SR 640 – 00.00
1 / 132

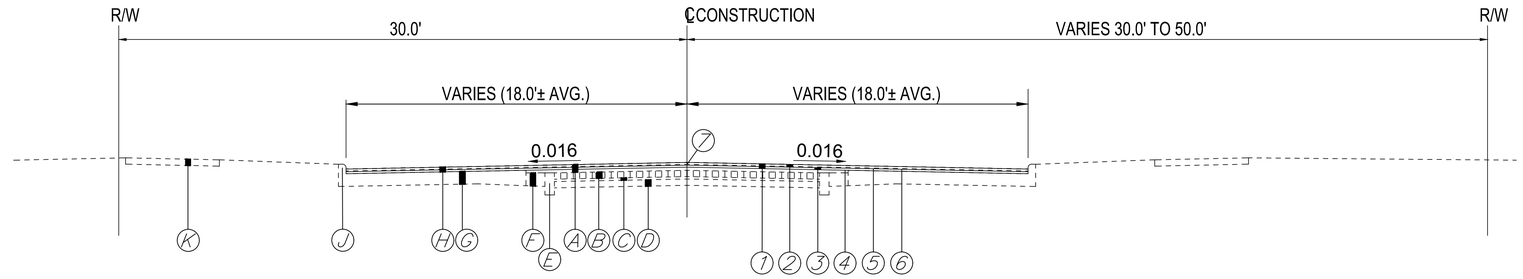
Feb 07, 2024 – 9:57am
drawing name: H:\2023\230297\DWG\Sheets\C_230297 – Cover.dwg Layout: 1 by: somogyi



TYPICAL SECTION NO. 3
STA. 159+81 TO STA. 163+07



TYPICAL SECTION NO. 2
STA. 139+00 TO STA. 159+81



TYPICAL SECTION NO. 1
STA. 100+52 TO STA. 139+00

LEGEND

- Ⓐ EXISTING BITUMINOUS PAVEMENT (4" TO 7")
- Ⓑ EXISTING 4" BRICK
- Ⓒ EXISTING 1-1/2" SAND
- Ⓓ EXISTING CONCRETE SUBBASE
- Ⓔ EXISTING 6" X 16" CONCRETE CURB
- Ⓕ EXISTING 8" CONCRETE PAVEMENT
- Ⓖ EXISTING REINFORCED CONCRETE PAVEMENT (8" TO 10")
- Ⓗ EXISTING BITUMINOUS PAVEMENT (2-5/8" TO 4")
- Ⓙ EXISTING CONCRETE CURB
- Ⓚ EXISTING 4" CONCRETE WALK
- Ⓛ EXISTING AGGREGATE BASE 4"
- Ⓜ EXISTING BITUMINOUS BASE 9"
- Ⓝ EXISTING CURB AND GUTTER

NOTE: LONGITUDINAL JOINT PREPARATION TO BE DONE AT ALL ADJOINING PAVEMENT PLACEMENT LANES

- ① ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
- ② ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M
- ③ ITEM 441 - 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
- ④ ITEM 407 - NON-TRACKING TACK COAT (0.09 GAL/SQ YD)
- ⑤ ITEM 407 - NON-TRACKING TACK COAT (0.06 GAL/SQ YD)
- ⑥ ITEM 690 - SPECIAL, PAVEMENT REINFORCING FABRIC
- ⑦ ITEM 874 - LONGITUDINAL JOINT PREPARATION

CALCULATED GMS
CHECKED PJF

TYPICAL SECTION

LAK - SR 640 - 00.00

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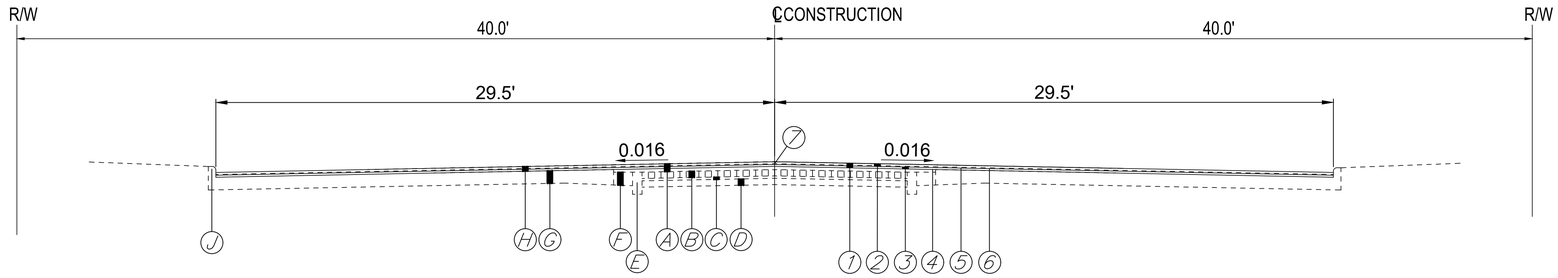
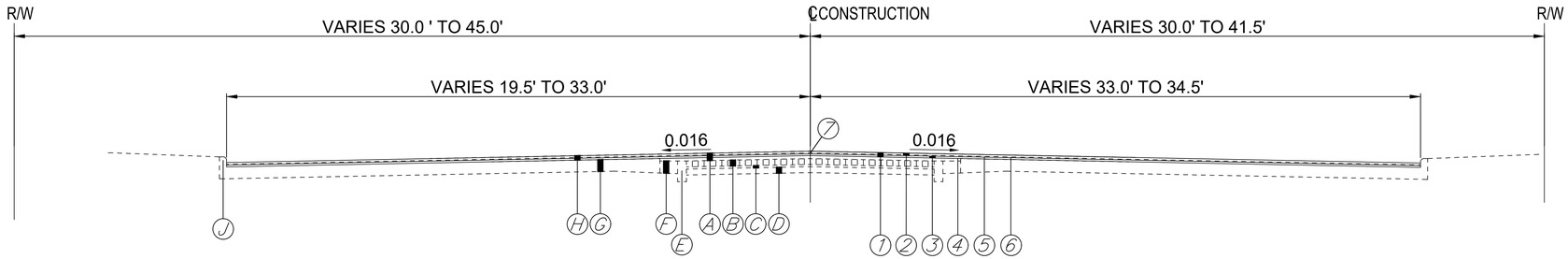


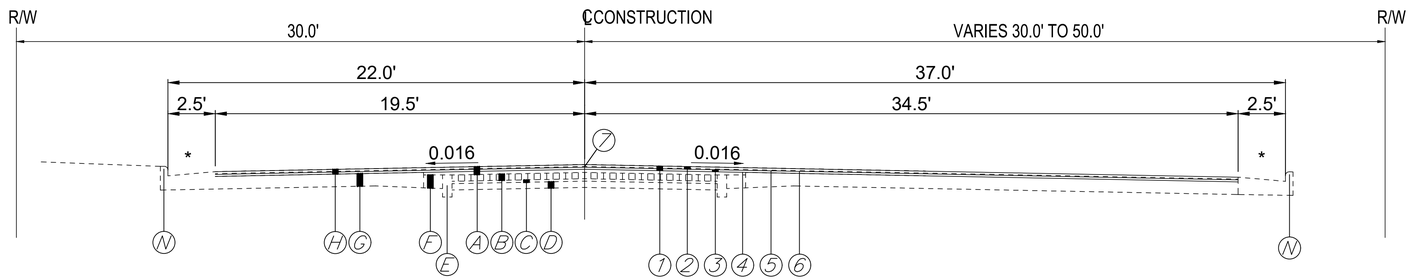
TYPICAL SECTION NO. 6

STA. 196+00 TO STA. 216+12



TYPICAL SECTION NO. 5

STA. 187+70 TO STA. 196+00



TYPICAL SECTION NO. 4

STA. 163+07 TO STA. 187+70

* CURB AND GUTTER LEFT
STA. 163+07 TO 188+89

CURB AND GUTTER RIGHT
STA. 163+51 TO 190+04

NOTE: LONGITUDINAL JOINT PREPARATION TO BE DONE AT ALL ADJOINING PAVEMENT PLACEMENT LANES

LEGEND

Ⓐ EXISTING BITUMINOUS PAVEMENT (4" TO 7")
Ⓑ EXISTING 4" BRICK
Ⓒ EXISTING 1–1/2" SAND
Ⓓ EXISTING CONCRETE SUBBASE
Ⓔ EXISTING 6" X 16" CONCRETE CURB
Ⓕ EXISTING 8" CONCRETE PAVEMENT
Ⓖ EXISTING REINFORCED CONCRETE PAVEMENT (8" TO 10")
Ⓗ EXISTING BITUMINOUS PAVEMENT (2–5/8" TO 4")
Ⓙ EXISTING CONCRETE CURB
Ⓚ EXISTING 4" CONCRETE WALK
Ⓛ EXISTING AGGREGATE BASE 4"
Ⓜ EXISTING BITUMINOUS BASE 9"
Ⓝ EXISTING CURB AND GUTTER

① ITEM 254 – 3" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
② ITEM 441 – 1–1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70–22M
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⑦ ITEM 874 – LONGITUDINAL JOINT PREPARATION

CALCULATED GMS
CHECKED PJF

TYPICAL SECTION

LAK – SR 640 – 00.00

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GENERAL

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

THE ILLUMINATING COMPANY
ATTN: TIM DENZLER (DESIGN SUPERVISOR)
6896 MILLER ROAD
BRECKSVILLE, OH 44141
PHONE: 440-546-8711
EMAIL: TJDENZLER@FIRSTENERGYCORP.COM

AT&T OHIO (COMMUNICATIONS)
ATTN: JOHN ROOK
13630 LORAIN AVENUE. 2ND FLOOR
CLEVELAND, OH 44111
PHONE: 330-401-8053 EXT. 1-216-298-1513
EMAIL: PJ8191@ATT.COM

CITY OF WILLOWICK (SERVICE DIRECTOR)
ATTN: TODD SHANNON
31230 VINE STREET
WILLOWICK, OH 44095
PHONE: 440-585-3700

CITY OF EASTLAKE (SERVICE DIRECTOR)
ATTN: KEVIN KOSTELNIK
35150 LAKE SHORE BOULEVARD
EASTLAKE, OH 44095
EMAIL: NRUBERTINO@EASTLAKEOHIO.COM

CITY OF WILLOUGHBY (SERVICE DIRECTOR)
ATTN: RICH PALMISANO
1 PUBLIC SQUARE
WILLOUGHBY, OH 44094
PHONE: 440-953-4111

LAKE COUNTY DEPARTMENT OF UTILITIES (WATER)
ATTN: RANDY ROTHLISBERGER
105 MAIN STREET
PAINESVILLE, OH 44077
PHONE: 440-350-2645
EMAIL: RANDY.ROTHLISBERGER@LAKECOUNTYOHIO.GOV

DOMINION EAST OHIO
ATTN: MICAH RISACHER
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OHIO 44333
PHONE: 330-664-2409
EMAIL: RELOCATION@DOM.COM

CHARTER COMMUNICATIONS
ATTN: DAVID SOBOTKA
578 TERNES LANE
ELYRIA, OH 44035
PHONE: 216-575-8016 EXT: 1
CELL: 440-315-6010
EMAIL: DAVID.SOBOTKA@CHARTER.COM

ORWELL NATURAL GRASS
ATTN: TIM REILLY
8470 STATION STREET
MENTOR, OH 44060
PHONE: 440-701-5100
CELL: 440-728-0575
EMAIL: TREILLY@EGAS.NET

DOMINION EAST OHIO NOTES

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION EAST OHIO'S (DEO) EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK MCDONALD (330-266-2122), OR AL HUMRICHOUSER (330-478-3757).

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:30 PM AND 7:30 AM MONDAY THROUGH FRIDAY. NO WORK SHALL BE DONE ON THE WEEKENDS OR HOLIDAYS WITHOUT WRITTEN PERMISSION. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY 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 AT THE ENGINEER'S DISCRETION SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ELEVATION DATUM

NAD83 (2011) - HORIZONTAL POSITIONING
NAVD88 - VERTICAL POSITIONING

STATION AND LOCATIONS

CENTERLINE STATIONING SHOWN WITHIN THESE PLANS IS FOR REFERENCE ONLY.

TYPICAL SECTIONS

EXISTING PAVEMENT SECTIONS AS SHOWN HAVE BEEN DEVELOPED FROM AND EXISTING PLANS AND REPRESENT THE WIDTH, DEPTH, AND COMPOSITION OF THE PAVEMENT. THE CITY OF WILLOWICK, EASTLAKE, AND WILLOUGHBY DO NOT GUARANTEE THE ACCURACY OF THE PLANS AGAINST UNFORESEEN EXISTING CONDITIONS.

THE CONTRACTOR BEARS SOLE RESPONSIBILITY TO FURTHER CHECK EXISTING CONDITIONS AGAINST THE PLANS. ROAD PAVEMENT TYPES MAY DIFFER FROM TYPICAL SECTIONS BUT PAVEMENT REMOVED WILL BE PAID UNDER ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, OR ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN.

ADA WAIVER

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES LISTED BELOW CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES:

ADA DESIGN WAIVER

ADA FEATURE	APPROVAL DATE	SHEET NUMBERS	RAMP ID
RMP0025995	11/16/2023	33,69	CR-43
RMP0025996	11/16/2023	38,78	CR-43

ROADWAY

ITEMS 202, 608, 609 ETC. - REMOVAL ITEMS, AS PER PLAN

THE COST OF REMOVING AND DISPOSING OF ITEMS PURSUANT TO ITEM 202.05 INCLUDING BUT NOT LIMITED TO PAVEMENT, CONCRETE, AGGREGATE BASE COURSE, WEARING COURSE, SIDEWALKS, CURBS AND DRIVEWAYS SHALL INCLUDE THE COST OF FULL DEPTH SAW CUTTING. NO SEPARATE PAYMENT SHALL BE MADE FOR FULL DEPTH SAW CUTTING FOR THE REMOVAL OF THESE ITEMS.

ITEMS 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
ITEMS 623 - MONUMENT ASSEMBLY RECONSTRUCTED TO GRADE, AS PER PLAN

THE CONTRACTOR AND THE ENGINEER SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT BOXES LISTED IN THE PLANS PRIOR TO BEGINNING ANY WORK ON THE MONUMENT BOXES. THE USE OF METAL DETECTION RODS MAY BE NECESSARY TO LOCATE BURIED MONUMENTATION. ANY MONUMENT BOX LISTED IN THE NOTE THAT IS IMMEDIATELY VISIBLE ON THE SURFACE OF THE EXISTING PAVEMENT, OR IS UNCOVERED DURING THE PLANING PROCESS, SHALL BE ADJUSTED TO GRADE. NO INSERTS OR ADJUSTING RINGS WILL BE PERMITTED. ANY MONUMENT BOX THAT EXHIBITS SUBSTANTIAL DETERIORATION AS DETERMINED BY THE ENGINEER REQUIRING MORE WORK THAN WOULD BE CONSIDERED NORMAL FOR ITEM 623, MONUMENT BOX ADJUSTED TO GRADE SHALL BE RECONSTRUCTED. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION OF WHETHER EACH MONUMENT BOX IS TO BE ADJUSTED OR RECONSTRUCTED. WHERE A MONUMENT BOX IS EITHER BEING ADJUSTED TO GRADE OR RECONSTRUCTED TO GRADE REQUIRES A NEW FRAME AND COVER, THE FRAME AND COVER WILL BE PAID FOR UNDER ITEM 611, MISCELLANEOUS METAL.

WHEN PERFORMING THIS ITEM, ENSURE ALL CASTINGS AND MONUMENTS ARE CLEAN AND FREE OF DEBRIS. REMOVE ANY EXISTING SECTIONS OF THE MONUMENT IDENTIFIED AS A POTENTIAL FAILURE POINT BY THE ENGINEER. USE OF SALVAGED SECTIONS OF THE MONUMENTS IS PERMITTED UPON THE APPROVAL OF THE ENGINEER.

IN ADDITION TO ADJUSTING OR RECONSTRUCTING THE CASTING VERTICALLY, THE PAY ITEMS SHALL INCLUDE MONUMENT REFERENCING AND CENTERING THE CASTING OVER THE EXISTING IRON PIN OR STONE MONUMENT.

ALL WORK RELATED TO ADJUSTING OR RECONSTRUCTING MONUMENT BOXES TO GRADE WILL BE IN ACCORDANCE WITH SPECIFICATIONS 623.04, AND 623.05 OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS.

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK IS TO BE PAID USING THE CONTRACT BID PRICE PER EACH FOR ITEM 623 - MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN OR ITEM 623 - MONUMENT BOX RECONSTRUCTED TO GRADE, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE
AS DIRECTED BY THE ENGINEER

ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	5 EACH
ITEM 623 - MONUMENT ASSEMBLY RECONSTRUCTED TO GRADE, AS PER PLAN	5 EACH

EROSION CONTROL

SEEDING AND MULCHING

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

ITEM 659 - TOPSOIL	124 CY
ITEM 659 - SEEDING AND MULCHING	1000 SY
ITEM 659 - WATER	10 MGAL

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.

DRAINAGE

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN
INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY THRU ODOT.

STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED, AS PER PLAN

ALL ADJUSTMENT, RECONSTRUCTION OR REPLACED WORK, EXCEPT FOR THOSE STRUCTURES OWNED BY PRIVATE COMPANIES, SHALL BE PERFORMED BY THE CONTRACTOR, WHERE APPLICABLE. THE TIME BETWEEN RESETTING THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

CALCULATED GMS
CHECKED PJF

GENERAL NOTES

LAK - SR 640 - 00.00

DRAINAGE (CONTINUED)

CASTINGS SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE IN ACCORDANCE WITH 611.10 USING CLAY BRICKS (704.01), CLASS QC 1 CONCRETE AND/OR CONCRETE MORTAR, OR PER 638.18 AND AS SPECIFIED BELOW FOR SERVICE BOX AND VALVE BOX ADJUSTMENTS. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2".

THE CONTRACTOR SHALL RESET EXISTING VALVE BOXES OR EXISTING CURB SHUT-OFF VALVE BOXES TO ESTABLISHED GRADE BY RAISING OR LOWERING THE EXISTING CASTINGS OR BY EITHER ADDING, DELETING OR CUTTING THE APPROPRIATE VALVE BOX STEM SECTIONS. IN RAISING OF THE CASTINGS, NO INSERTS WILL BE PERMITTED. ANY VALVE BOXES OR CURB SHUT-OFF VALVE BOXES FOUND TO BE DAMAGED OR UNSUITABLE FOR REUSE SHALL BE REPLACED BY THE CONTRACTOR AND PAID FOR UNDER ITEM SPECIAL - MISCELLANEOUS METAL. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY AS REQUIRED OR AS ORDERED TO COMPLETE THE ITEM.

ADJUST TO GRADE, RECONSTRUCT TO GRADE OR TOTAL REPLACEMENT WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT, CURB AND/OR PAVEMENT BEHIND CURB USING MODERATE-SETTING CONCRETE (CLASS MS) OR, IF APPROVED/DIRECTED BY THE ENGINEER, FAST-SETTING CONCRETE (CLASS FS). TO FACILITATE REMOVAL, THE BLOCKOUT PAVEMENTS SHALL BE SAWED FULL DEPTH ALONG THE LIMITS OF THEIR REMOVAL UNLESS OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER. ALL COSTS ASSOCIATED WITH THE BLOCKOUT REMOVALS/REPLACEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN. REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL - MISCELLANEOUS METAL.

THE ENGINEER WILL DETERMINE THE ITEM 611 WORK REQUIRED BASED ON THE GUIDELINES STIPULATED BELOW:

1. "ADJUST TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION. IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) ADJUSTED TO GRADE.

2. "RECONSTRUCT TO GRADE, AS PER PLAN" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 AND SHALL ALSO INCLUDE EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION. IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, MORE THAN SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) RECONSTRUCTED TO GRADE.

ONLY ONE (1) OF THE ABOVE PAYMENT ITEMS MAY BE USED PER STRUCTURE. "RECONSTRUCT TO GRADE, AS PER PLAN" WORK SHALL NOT BE PERFORMED UNLESS SPECIFICALLY INDICATED IN THE PLANS OR OTHERWISE ORDERED BY THE ENGINEER. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 611 - CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	5 EACH
ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	5 EACH
ITEM 611 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN	5 EACH
ITEM 611 - MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	5 EACH

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

SPECIAL - MISCELLANEOUS METAL 10,000 LBS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

PAVEMENT

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT PROFILE IS TO FOLLOW THE ALIGNMENT OF THE EXISTING PAVEMENT PROFILE.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND C&MS 401.15, THE CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES ARE EXCLUDED FROM SEALING, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- BUTT JOINT BETWEEN PAVED SHOULDER AND DRIVEWAY ASPHALT AND TAPERED EDGE WHEN FEATHERING TO AN EXISTING ASPHALT DRIVEWAY.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

PLANED SURFACES

THE DURATION OF TIME BETWEEN MILLING AND PLACEMENT OF THE INTERMEDIATE COURSE SHALL BE NO LONGER THAN FOURTEEN (14) DAYS, UNLESS MOT NOTES STATE OTHERWISE. THE TIME LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANING AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY BAD WEATHER DAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF "PAVEMENT REMOVED" THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

IN AREAS WHERE EXISTING BRICK CROSSWALK IS REMOVED, DUE TO PROPOSED CURB REPLACEMENT WORK, THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING BRICK CROSSWALK. THE CONTRACTOR SHALL MATCH THE EXISTING PATTERN IN THE FIELD. A DETAIL CAN BE FOUND ON SHEET 102 OF THE PLANS WHICH REFLECTS THE EXISTING BUILDUP OR COMPOSITION OF THE EXISTING BRICK CROSSWALK. ALL EQUIPMENT AND WORK SHALL BE INCIDENTAL TO THE ITEM 202 - PAVEMENT REMOVED, AS PER PLAN.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN 200 SY

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN

THE CONTRACTOR SHALL CLEAN THE MILLED SURFACE AND THE ENGINEER SHALL IDENTIFY AREAS REQUIRING PARTIAL DEPTH PAVEMENT REPAIR AFTER THE WEARING COURSE IS REMOVED. ALL APPLICABLE PROVISIONS OF ITEM 251, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

APPROVED REMOVAL METHODS SHALL SATISFACTORILY ESTABLISH A NEAT VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE REPAIR AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE PATCHING MATERIAL, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. REMOVAL DEPTH SHALL BE THREE (3) INCHES OR AS DIRECTED BY THE ENGINEER AND THE REPLACEMENT MATERIAL SHALL BE ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448).

PARTIALLY EMBEDDED STEEL MESH EXPOSED SHALL BE WIRE-BRUSHED OR OTHERWISE CLEANED TO REMOVE ALL LOOSE RUST. LOOSENED OR TOTALLY EXPOSED WIRE MESH REINFORCING SHALL BE CUT AND REMOVED AS REQUIRED WITHOUT DISPLACEMENT OR DISRUPTION TO THE REINFORCEMENT AND/OR PAVEMENT TO REMAIN.

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR PARTIAL DEPTH PAVEMENT REPAIRS AND ARE CARRIED TO THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN 6,500 SY

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF "PAVEMENT REPAIR" THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

IN AREAS WHERE CURB RAMP WORK IS BEING DONE AND THE WORK IS NOT WITHIN THE RESURFACING AREA, THE GUTTER LINE MAY BE DISTURBED AND OR REALIGNED. IN THAT CASE THE CONTRACTOR WILL NEED TO REMOVE AND REPAIR THE PAVEMENT ALONG THE AREA OF WORK.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 65 CU. YD

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

PLANE THE ASPHALT SURFACE PAVEMENT ACCORDING TO C&MS ITEM 254, UP TO A DEPTH OF 3", OR TO THE DEPTH OF THE EXISTING CONCRETE/BRICK MATERIAL, WHICHEVER IS LESS. DEPTH OF PLANING SHALL NOT EXCEED THE DEPTH OF THE EXISTING ASPHALT COURSE TO BE REMOVED. THE PAVEMENT PLANING DEPTH CAN VARY AT SIDE STREETS DEPENDING ON EXISTING PAVEMENT COMPOSITION. IN ADDITION TO ODOT ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING PAVEMENT FABRIC PRESENT WITHIN ASPHALT LAYERS.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL BE A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

PATCHING PLANED SURFACE

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 254 - PATCHING PLANED SURFACE 12,500 SY

ITEM SPECIAL - PAVEMENT REINFORCING FABRIC

THE WORK COVERED BY THIS SECTION SHALL CONSIST OF FURNISHING AND INSTALLING A FIBERGLASS/POLYESTER INTERLAYER OVERLAY FABRIC AS SHOWN ON THE PLANS AND AT LOCATIONS DESIGNATED BY THE ENGINEER.

THE PRODUCT GLASPAVE 25, OR APPROVED EQUAL, IS ACCEPTABLE FOR THESE REQUIREMENTS.

FIBERGLASS/POLYESTER INTERLAYER OVERLAY FABRIC SHALL BE CONSTRUCTED OF A BLEND OF FIBERGLASS, POLYESTER, AND ADHESIVE. IT SHALL MEET THE FOLLOWING PHYSICAL REQUIREMENTS:

PROPERTY	TEST METHOD	UNITS	TYPICAL VALUE
MASS PER UNIT AREA	ASTM D 5261	G/SM (OZ/SY)	136 (40)
TENSILE STRENGTH, MD X XD	ASTM D 5035	KN/M (LB/IN)	25 (142)
TENSILE ELONGATION	ASTM D 5035	PERCENT	<5
MELTING POINT	ASTM D 276	°C (°F)	>232 (450)
ASPHALT RETENTION	ASTM D 6140	L/M^2 (GAL/SY)	0.47 (0.10)

ALL MAT MANUFACTURING PROCEDURES SHALL BE ISO (INTERNATIONAL STANDARDS ORGANIZATION)-9002 CERTIFIED.

THE MAT MANUFACTURER SHALL FURNISH CERTIFIED TEST DATA COVERING PHYSICAL AND ENGINEERING PROPERTIES OF THE MAT. A LETTER OF CERTIFICATION STATING THE MAT COMPLIES WITH SPECIFICATION REQUIREMENTS SHALL BE FURNISHED WITH EACH SHIPMENT.

CALCULATED GMS | CHECKED PJF

GENERAL NOTES

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ITEM SPECIAL - PAVEMENT REINFORCING FABRIC (CONT.)

THE FABRIC SHALL BE PROTECTED FROM DEGRADATION BY SUNLIGHT AND SHALL BE PROTECTED FROM MOISTURE DURING STORAGE.

THE ASPHALT SEALANT SHALL BE PG64-22 MEETING THE REQUIREMENTS OF 702.01.

CERTIFICATION SHALL BE FURNISHED IN ACCORDANCE WITH 101.061 BEFORE THE FABRIC IS PLACED. THE ENGINEER MAY REQUIRE SAMPLING FOR TESTING PURPOSES AS DIRECTED BY THE LABORATORY.

THE CONTRACTOR SHALL PROVIDE EQUIPMENT FOR HEATING AND APPLYING BITUMINOUS MATERIAL. HEATING EQUIPMENT AND DISTRIBUTORS SHALL MEET THE REQUIREMENTS OF 407.

THE MECHANICAL LAYDOWN EQUIPMENT SHALL BE MOUNTED ON A FOUR-WHEELED VEHICLE THAT IS CAPABLE OF DRIVING OVER THE FABRIC WHILE IT IS BEING INSTALLED TO CONTROL THE TENSION ON THE MATERIAL. THE LAYDOWN MACHINE SHALL BE EQUIPPED WITH CLUTCHES TO ADJUST THE ROLL TENSION AND BROOMS TO SMOOTH OUT WRINKLES DURING INSTALLATION. MANUAL LAYDOWN MAY BE USED ONLY WITH WRITTEN PERMISSION OF THE ENGINEER AND ONLY FOR AREAS INACCESSIBLE TO THE LAYDOWN MACHINE.

INSTALLATION OF FIBERGLASS/POLYESTER INTERLAYER SHALL BE PERFORMED OR SUPERVISED DURING INSTALLATION BY A TRAINED AND EXPERIENCED INSTALLER CERTIFIED BY THE MANUFACTURER OR HIS REPRESENTATIVE.

THE CRACKS AND ENTIRE ROAD SURFACE TO BE TREATED AND AT LEAST ONE ADDITIONAL FOOT ON EACH SIDE SHALL BE CLEANED BY SWEEPING, BLOWING, OR OTHER METHODS UNTIL ALL DUST, MUD, CLAY LUMPS, VEGETATION, AND FOREIGN MATERIAL ARE REMOVED ENTIRELY FROM THE PAVEMENT BEFORE THE BITUMINOUS MATERIAL IS APPLIED. CARE SHALL BE EXERCISED TO PREVENT MATERIAL SO REMOVED FROM BECOMING MISSED WITH THE NEW SURFACE.

APPLICATION OF THE ASPHALT SEALANT SHALL CONFORM TO THE APPLICABLE PORTIONS OF 407. THE ASPHALT SEALANT SHALL BE UNIFORMLY SPRAYED OVER THE AREA TO BE COVERED BY FABRIC AT A RATE OF 0.15 TO 0.2 GALLON PER SQUARE YARD.

THE QUANTITY APPLIED WILL VARY WITH THE SURFACE CONDITION OF THE EXISTING PAVEMENT (DEGREE OF POROSITY, FOR EXAMPLE). THE FABRIC ALONE, UNDER HEAT OF THE OVERLAY, WILL ABSORB AT LEAST 0.10 GALLON PER SQUARE YARD. WITHIN INTERSECTIONS OR OTHER ZONES WHERE VEHICLE BREAKING IS COMMONPLACE, THE APPLICATION SHALL BE REDUCED 20 PERCENT. THE SEALANT SHALL BE APPLIED TO AN AREA TWO TO SIX INCHES WIDER THAN THE WIDTHS OF THE FABRIC BEING PLACED, BUT RESTRICTED TO THE AREA OF IMMEDIATE FABRIC LAYDOWN. APPLICATION SHALL BE BY DISTRIBUTOR WITH HAND SPRAYING ALLOWED ONLY WHERE THE DISTRIBUTOR CANNOT BE USED. ASPHALT SPILLS SHALL BE CLEANED FROM THE ROAD SURFACE TO AVOID FLUSHING AND POSSIBLE MOVEMENT AT THESE ASPHALT RICH AREAS.

THE ASPHALT CEMENT USED AS A SEALANT SHALL HAVE DISTRIBUTOR TANK TEMPERATURES BETWEEN 300° AND 350° F TO AVOID DAMAGE TO THE FABRIC.

THE FABRIC SHALL BE PLACED ON THE ASPHALT SEALANT AS SOON AS PRACTICAL AND BEFORE THE TACKINESS OF THE SEALANT IS LOST. THERE IS NO TOP OR BOTTOM SIDE OF THE FABRIC AND CAN BE UNROLLED IN EITHER DIRECTION. FIBERGLASS/POLYESTER INTERLAYER FABRIC IS STIFFER THAN CONVENTIONAL FABRICS. THE FABRIC SHALL BE PLACED AS SMOOTHLY AS POSSIBLE TO AVOID WRINKLES. WRINKLES SEVERE ENOUGH TO CAUSE 1/32FOLDS3/32 SHALL BE SLIT AND LAID FLAT. SMALL WRINKLES WHICH FLATTEN UNDER COMPACTION ARE NOT DETRIMENTAL TO PERFORMANCE. THE FABRIC SHALL BE BROOMED OR SQUEEGEED TO REMOVE AIR BUBBLES AND MAKE COMPLETE CONTACT WITH THE ROAD SURFACE AS RECOMMENDED BY THE FABRIC MANUFACTURER. THE FABRIC SHALL BE LAID STRAIGHT WITHIN THE SEALANT AREA. DUE TO STIFFNESS THE PRODUCT WILL NOT BEND OR STRETCH AROUND CURVES. FIBERGLASS/POLYESTER FABRIC SHOULD BE PLACED AROUND CURVES IN SHORTENED LENGTHS.

LONGITUDINAL JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC TWO TO FOUR INCHES. TRANSVERSE JOINTS SHALL BE MADE BY OVERLAPPING THE FABRIC FOUR TO SIX INCHES. ADDITIONAL SEALANT (ABOUT 0.20 GAL. PER SQ. YD.) SHALL BE ADDED TO THE JOINTS AS REQUIRED. THE ADDITIONAL SEALANT FOR TRANSVERSE JOINTS MAY BE APPLIED BY HAND SPRAYING OR WITH MOP AND BUCKET IF EXTREME CARE IS TAKEN TO NOT EXCEED THE SPECIFIED RATE.

TO ENHANCE THE BOND OF THE FABRIC WITH THE EXISTING PAVEMENT AND TO SMOOTH OUT ANY WRINKLES OR FOLDS IN THE FABRIC, THE CONTRACTOR SHALL BE REQUIRED TO PNEUMATICALLY ROLL THE FABRIC AFTER IT IS PLACED.

AMBIENT TEMPERATURE FOR INSTALLATION SHOULD BE 40°F AND RISING.

IT IS UNNECESSARY TO TACK COAT THE FABRIC PRIOR TO PLACEMENT OF THE OVERLAY UNLESS THERE ARE CIRCUMSTANCES SUCH AS DELAY OF OVERLAY, DUST ACCUMULATION, OR UNDER APPLICATION OF SEALANT WHICH WOULD MAKE TACK COATING DESIRABLE. IF A TACK COAT IS REQUIRED, EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE OF 0.02 TO 0.05 GAL. PER SQ. YD. RESIDUAL ASPHALT. PLACEMENT OF THE ASPHALT CONCRETE OVERLAY SHALL CLOSELY FOLLOW FABRIC LAYDOWN. IN THE EVENT THAT THE SEALANT BLEEDS THROUGH THE FABRIC BEFORE THE ASPHALT CONCRETE IS PLACED IT MAY BE NECESSARY TO BLOT THE SEALANT BY SPREADING SAND OR ASPHALT CONCRETE OVER THE AFFECTED AREAS. THIS WILL PREVENT ANY TENDENCY FOR CONSTRUCTION EQUIPMENT TO PICK UP THE FABRIC WHEN DRIVING OVER IT.

TURNING OF THE PAVER AND OTHER VEHICLES SHALL BE GRADUAL TO AVOID MOVEMENT OR DAMAGE TO THE MEMBRANE. IF IT IS NECESSARY TO OPEN THE ROAD TO TRAFFIC AFTER FABRIC PLACEMENT BUT PRIOR TO PAVING, IT IS ADVISABLE TO SPREAD A SMALL AMOUNT OF SAND OVER THE MEMBRANE TO PREVENT TIRES FROM STICKING TO THE SEALANT OR PULING UP THE FABRIC. THIS PRACTICE IS TO BE AVOIDED IF POSSIBLE TO PREVENT DAMAGE TO THE MEMBRANE.

IF RAIN PRIOR TO THE OVERLAY SHOULD CAUSE A BLISTERED APPEARANCE AND SOME BOND LOSS THROUGHOUT THE MEMBRANE. IT SHOULD BE CORRECTED BY PNEUMATIC ROLLING UNTIL ADHESION IS RESTORED.

THE ASPHALT CONCRETE OVERLAY SHALL CONFORM TO 401 EXCEPT THAT THE MIXTURE SHALL BE DELIVERED TO THE PAVER AT A TEMPERATURE OF 275°F TO 335°F.

WATER WORKS

ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

ITEM 638 - SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF "STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED, AS PER PLAN" THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

RAISE VALVE COVERS TO GRADE FOR ALL REQUIRED VALVE & SERVICE BOX ADJUSTMENTS.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	5 EACH
ITEM 638 - SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	5 EACH

TRAFFIC CONTROL

ITEM 632 - DETECTOR LOOP, AS PER PLAN

ALL TRAFFIC SIGNAL DETECTOR LOOPS ARE TO BE INSTALLED AT THE END OF CONSTRUCTION. A PLAN SHOWING THE SIZE AND LOCATION OF THE VARIOUS LOOPS HAS NOT BEEN INCLUDED IN THE CONTRACT PLANS. IN LIEU OF A TRAFFIC SIGNAL PLAN, THE CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PREPARE AN INVENTORY AND LOG OF ANY AND ALL EXISTING DETECTOR LOOPS, FOR USE IN RESTORING THEM AT THE END OF CONSTRUCTION. HE SHALL DELIVER TWO COPIES OF THE INVENTORY AND LOG TO THE ENGINEER BEFORE BEGINNING ANY PAVEMENT REMOVALS. THE DETECTOR LOOPS ARE TO BE INSTALLED IN THE SURFACE COURSE.

THE CONTRACTOR WILL COORDINATE THE INSTALLATION OF THE DETECTOR LOOPS WITH THE CITIES OF WILLOUGHBY, WILLOWICK, AND EASTLAKE SERVICE DEPARTMENTS.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, ALL LOOPS TO BE INSTALLED SHALL BE 6' BY 30' POWERHEAD DESIGN.

THE INSTALLATION OF POURED EPOXY INSULATED SPLICES BETWEEN THE LOOP DETECTOR WIRES AND THE EXISTING LOOP DETECTOR LEAD IN CABLE SHALL BE CONSIDERED AS INCIDENTAL TO THIS ITEM OF WORK . NO SEPARATE PAYMENT FOR THESE SPLICES WILL BE MADE.

THE FOLLOWING CONTINGENCY QUANTITY IS CARRIED TO THE GENERAL SUMMARY, WHICH IS INCLUDED FOR USE ONLY AND IN AMOUNTS AS DIRECTED BY THE ENGINEER. THE PROVISIONS OF SECTION 104.02 WILL APPLY TO THIS ITEM. THE AMOUNT OF THIS ITEM AND THE LOCATIONS WHERE USED SHALL BE RECORDED AS USED, AND PAYMENT WILL BE BASED ON FINAL MEASUREMENTS.

ITEM 632 - DETECTOR LOOP, AS PER PLAN	44 EACH

INSTALLATION OF PAVEMENT MARKINGS

THE CONTRACTOR MAY REDUCE THE NUMBER OF THROUGH TRAFFIC LANES BY 50%, AS DIRECTED BY THE ENGINEER, IN ORDER TO REMOVE PAVEMENT MARKINGS, OR TO INSTALL WORK ZONE OR PERMANENT PAVEMENT MARKINGS. HE SHALL LIMIT THE AFOREMENTIONED CLOSURE TO BETWEEN THE HOURS OF 9:00 AM. AND 3:30 P.M., UNLESS OTHERWISE APPROVED BY THE CITY OF WILLOUGHBY.

THE FINAL 644 PAVEMENT MARKINGS SHALL BE PLACED WITHIN 72 HOURS AFTER THE FINAL SURFACE COURSE IS COMPLETE.

TRAFFIC SIGNALS

ITEM 625 - PULL BOX, MISC.: PULL BOX REMOVED AND REPLACED TO GRADE

IN ADDITION TO THE REQUIREMENTS OF "PULL BOX REMOVED" THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

IN AREAS WHERE CURB RAMP WORK IS BEING DONE, IF A PULL BOX IS PRESENT, THE CONTRACTOR SHALL REMOVE THE PULL BOX AND REPLACE IT WITH A NEW BOX AND A NON-SLIP LID TO GRADE.

ENVIRONMENTAL

THE CONTRACTOR SHALL NOT PERFORM ANY WORK WITHIN THE JURISDICTIONAL BOUNDARIES OF ANY WATERWAY, INCLUDING WETLANDS, AND/OR POLLINATOR INITIATIVE SITES. THIS INCLUDES THE PLACEMENT OF ANY TEMPORARY OR PERMANENT FILLS

TO ENSURE IMPACTS TO THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT ARE AVOIDED NO TREE REMOVAL WILL BE CONDUCTED FOR THE PROJECT. FOR THE PURPOSES OF THIS COMMITMENT, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 1

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 2

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 2

IN AREAS WHERE EXISTING WALK IS DISTURBED DUE TO DRAINAGE STRUCTURE REPAIRS, ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 1, 2, AND 3 WILL BE USED. TYPE 1 SHALL PERTAIN TO ANY AREAS THAT HAVE TYPICAL SIDEWALK WITHIN THE DISTURBED AREA, TYPE 2 SHALL BE ANY AREA HAVING STAMPED CONCRETE WITHIN THE DISTURBED AREA AND TYPE 3 SHALL BE ANY AREA HAVING BRICK PAVERS WITHIN THE DISTURBED AREA. ALL WORK DONE TO REMOVE AND REPLACE THE DISTURBED AREAS SHALL BE CONSIDERED INCIDENTAL TO THE CORRESPONDING TYPE. THE CONTRACTOR SHALL MATCH ALL PATTERNS AND COLORS OF EXISTING PAVERS/STAMPED CONCRETE AREAS.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 1	1,920 SF
ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 2	350 SF
ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, TYPE 3	400 SF

ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2

PROPOSED CURB RAMP REPLACEMENT WORK MAY IMPACT EXISTING CURB AND GUTTER.

THE FOLLOWING ESTIMATED CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO REPLACE THE CURB AND GUTTER.

ITEM 202 - CURB AND GUTTER REMOVED	150 FT
ITEM 609 - COMBINATION CURB AND GUTTER, TYPE 2	150 FT

CALCULATED GMS
CHECKED PJF

GENERAL NOTES

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MAINTENANCE OF TRAFFIC

MAINTENANCE OF TRAFFIC RESTRICTIONS - COORDINATION BETWEEN PROJECTS

THE CONTRACTOR WILL NOT BE ALLOWED TO BEGIN WORK ON THE SECTION 4 OF THE PROJECT UNTIL AFTER JUNE 1, 2025. THIS IS THE SECTION OF THE PROJECT FROM STATE ROUTE 91 TO THE WILLOUGHBY CORP LINE. THE LAKE COUNTY DEPARTMENT OF UTILITIES HAS A WATERLINE REPLACEMENT PROJECT WITHIN THIS SECTION OF THE PROJECT WHICH SHOULD BE COMPLETE BY THE END OF MARCH, 2025. THE CONTRACTOR WILL BE REQUIRED TO HAVE WRITTEN APPROVAL BY THE ENGINEER TO START ANY WORK IN SECTION 4 OF THE PROJECT.

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

A MINIMUM OF ONE ELEVEN (11') FOOT LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT AND TEMPORARY SURFACES USING ITEMS 410 AND 614.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AT ALL TIMES. THE CONTRACTOR SHALL ALSO MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS AND ALONG ONE SIDE OF THE STREET AFFECTED BY THE CONSTRUCTION, AS DIRECTED BY THE ENGINEER.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS, SUPPORTS, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, LIGHTING, FLAGGERS, DRUMS, ETC. SHALL BE PROVIDED SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE OMUTCD, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

NO ROAD SHALL BE CLOSED UNTIL DEEMED NECESSARY BY THE ENGINEER. THE PLACEMENT OF THE SIGNS AND THE DRUMS SHALL BE MADE SIMULTANEOUSLY. NO DRUMS SHALL BE PLACED WITHOUT PROPER SIGNAGE IN PLACE. SIGNS SHALL BE COVERED OR REMOVED FROM THE VIEW OF TRAFFIC WHENEVER THEY ARE NOT APPLICABLE.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY THE USE OF PLASTIC DRUMS, FLASHING ARROW PANELS COMPLYING WITH ODOT MT-97.10 OR MT-97.11 AND TRAFFIC SIGNS AND PAVEMENT MARKINGS.

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

MERGING TAPER LENGTHS AND SHIFTING TAPER LENGTHS SHALL BE CALCULATED USING THE EQUATIONS SHOWN IN THE OMUTCD SECTION 6C.08.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	100 CU. YD

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 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, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

CONSTRUCTION NOTIFICATION

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS. INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME RESTRICTION, DURATION OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
RAMP & ROAD CLOSURES	>=2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & <2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

NOTIFICATION

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST SEVENTY-TWO (72) HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGES IN TRAFFIC PATTERNS OR CLOSING OF ANY STREET TO TRAFFIC:

CITY OF WILLOUGHBY:	
SERVICE DEPARTMENT	(440) 953-4111
FIRE DEPARTMENT	(440) 953-4343
POLICE DEPARTMENT	(440) 953-4212
WILLOUGHBY-EASTLAKE CITY SCHOOL DISTRICT	(440) 946-5000
LAKETRAN	(888) 525-3872

THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ANY TEMPORARY BUS STOPS WITH LAKETRAN.

COORDINATION

THE ENGINEER AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS AND RESIDENTS TO ENSURE ACCESS TO ALL PROPERTIES AT ALL TIMES. HOWEVER, SOME INCONVENIENCES MAY OCCUR. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE COORDINATION OR PROVIDING ACCESS TO THE BUSINESSES AND RESIDENCES.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

TRAFFIC SIGNING

ADVANCE TRAFFIC SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS ON BARRICADES BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.

TEMPORARY RAMPING

IN ORDER TO PROVIDE FOR LOCAL ACCESS, LONGITUDINAL VERTICAL FACES ABUTTING DRIVES SHALL BE TEMPORARILY RAMPED. TRANSVERSE VERTICAL FACES SHALL BE TEMPORARILY RAMPED A MINIMUM OF TEN (10) FEET IN LENGTH AND BE WARNED WITH "BUMP" (W8-1) SIGNS IN ADVANCE OF THE RAMPED AREAS.

ALL CASTINGS ENCOUNTERED SHALL BE SET TO GRADE AND PAID FOR UNDER VARIOUS ITEMS DESCRIBED ELSEWHERE IN THE GENERAL NOTES OR SPECIFICATIONS. THE CASTING ELEVATION DIFFERENTIAL SHALL NOT BE GREATER THAN ONE (1) INCH WHEN EXPOSED TO TRAFFIC.

CASTINGS MAY BE REQUIRED TO BE ADJUSTED MORE THAN ONCE. BUT PAYMENT FOR ADJUSTING WILL ONLY BE PAID ONCE. WHEN CONSTRUCTION IS ADJACENT TO DRIVES MAINTAIN ACCESS TO DRIVES BY ONLY CONSTRUCTING THE PORTIONS OF THE ROADWAY NOT IN CONFLICT OF THE DRIVES. ADDITIONAL CONSTRUCTION JOINTS SHALL BE ALLOWED BY THE ENGINEER.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO COMPLETE THE ABOVE NOTED WORK SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

EXISTING PAVEMENT DISPOSAL/CASTING ADJUSTMENT

THE EXISTING ASPHALT PAVEMENT WEARING COURSE AND CONCRETE BASE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ONCE THEY ARE REMOVED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DELINEATE ANY CASTINGS THAT MAY PROTRUDE ABOVE THE EXISTING CONCRETE BASE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT MATERIAL IN THE VICINITY OF THESE CASTINGS TO PROVIDE AN ADEQUATE RAMP AROUND THE CASTINGS. IN NO CASE SHALL THE CASTING REMAIN EXPOSED WITHOUT PROPER PROTECTION.

PLACEMENT OF ASPHALT CONCRETE

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

REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE REPLACEMENT SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF CMS 614.11.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR USE AFTER THE MILLING OPERATION AND AFTER PLACEMENT OF THE INTERMEDIATE COURSE:

ITEM 614 - WORK ZONE CENTER LINE, CLASS I, 642 PAINT	7.24 MILE
ITEM 614 - WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	6.00 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	2,588 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT	1,306 FT

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR USE AFTER PLACEMENT OF THE SURFACE COURSE:

ITEM 614 - WORK ZONE CENTER LINE, CLASS III, 642 PAINT	3.62 MILE
ITEM 614 - WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	3.00 MILE
ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	1,294 FT
ITEM 614 - WORK ZONE STOP LINE, CLASS III, 642 PAINT	653 FT

CALCULATED GMS
CHECKED PJF

MAINTENANCE OF TRAFFIC NOTES

LAK - SR 640 - 00.00

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MAINTENANCE OF TRAFFIC SIGNAL/FLASHER INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

1. EXISTING SIGNAL/FLASHER INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED OR MODIFIED AND THE WORK IS ACCEPTED.

2. NEW OR REUSED SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MAINTAINING AGENCY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE. THE CONTRACTOR SHALL ARRANGE FOR FULL TRAFFIC CONTROL UNTIL THE SIGNAL IS BACK IN OPERATION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO, OR CANNOT RESPOND TO, AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, AT THESE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE CITY OF WILLOUGHBY FOR POLICE SERVICES AND MAINTENANCE SERVICES BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 4 HOURS AND SHALL NOT INCLUDE THE HOURS OF 6:00 TO 8:00 AM AND 4:00 TO 6:00 PM. ANY SIGNALIZED INTERSECTION, WHERE THE SIGNAL IS OUT OF SERVICE DUE TO CONSTRUCTION PROCEDURES, OR DUE TO AN OUTAGE OR MALFUNCTION OF EQUIPMENT AS DESCRIBED ABOVE, SHALL BE PROTECTED, BY THE CONTRACTOR, BY THE INSTALLATION OF TEMPORARY "STOP" SIGNS

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.25.
THE CONTRACTOR SHALL MAINTAIN COMPLETE RECORDS OF MALFUNCTIONS INCLUDING:

1. TIME OF NOTIFICATION OF MALFUNCTION;
2. TIME OF WORK CREWS ARRIVAL TO CORRECT THE MALFUNCTION;
3. ACTIONS TAKEN TO CORRECT THE MALFUNCTION, INCLUDING A LIST OF PARTS REPAIRED OR REPLACED;
4. A DIAGNOSIS OF REASON FOR THE MALFUNCTION AND PROBABILITY OF REOCCURRENCE;
5. TIME OF COMPLETION OF THE REPAIR AND SYSTEM RESTORED TO FULL SERVICE.

A COPY OF THESE RECORDS SHALL BE PROVIDED TO THE ENGINEER WITHIN THREE (3) WORKING DAYS FOLLOWING COMPLETION OF EACH REPAIR.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC

DRIVEWAY ACCESS

THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC, AS PER PLAN. NO ADDITIONAL PAYMENTS WILL BE MADE. ACCESS TO ALL PROPERTY OWNERS, INCLUDING RESIDENCES AND BUSINESSES, SHALL BE MADE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL MAKE AVAILABLE DURING CONSTRUCTION, STEEL PLATES, BRIDGES OR OTHER MEANS APPROVED BY THE ENGINEER TO BRIDGE ACROSS THE HALF WIDTH ROADWAY CONSTRUCTION, TO PROVIDE FULL TIME (TWENTY-FOUR (24) HOURS, SEVEN (7) DAYS A WEEK) ACCESS TO DRIVEWAYS THAT REQUIRE IT. ALL DRIVEWAY CLOSURES AND/OR APRON WORK SHALL BE CONSTRUCTED IN ALTERNATING INTERVALS IN ORDER TO ELIMINATE ABUTTING PROPERTY OWNERS HAVING BOTH OF THEIR DRIVEWAYS CLOSED.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, AT THE PRE-CONSTRUCTION MEETING, HIS PROPOSAL FOR PROVIDING ACCESS TO THE DRIVEWAYS.

FOR ESTIMATING PURPOSES, THE NUMBER OF DRIVE APRONS TO BE MAINTAINED SHOULD BE THE NUMBER OF DRIVEWAYS IN EACH CONSTRUCTION PHASE.

PEDESTRIAN ACCESS

DURING TEMPORARY CLOSURE OR RELOCATION OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES, TEMPORARY FACILITIES SHALL BE PROVIDED. THESE FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY. PEDESTRIAN SIDEWALK CLOSURES, CROSSWALK CLOSURES, AND PEDESTRIAN DETOURS OR BYPASSES SHALL BE INSTALLED ACCORDING TO O.M.U.T.C.D. TYPICAL APPLICATIONS TA-28 AND TA-29.

INSTALLATION OF PAVEMENT MARKINGS

ALL WORK ZONE PAVEMENT MARKINGS AND SIGNS REQUIRED FOR A PARTICULAR LANE CLOSURE OR TRAFFIC PATTERN SHALL BE INSTALLED ON A SINGLE WORK DAY, AND THE CORRESPONDING TRAFFIC PATTERN SHALL BE IMPLEMENTED IMMEDIATELY. IN ADDITION, THE REQUIREMENTS OF ODOT 614.11 SHALL APPLY.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO (2) CHANGEABLE MESSAGE SIGNS (PCMS). THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE (OFFICE OF MATERIALS MANAGEMENT WEB PAGE). THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

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

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

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

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 4 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 SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

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

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 36 SIGN MONTH
ASSUMING 2 PCMS SIGNS FOR 18 MONTHS

CALCULATED GMS
CHECKED PJF

MAINTENANCE OF TRAFFIC NOTES

LAK - SR 640 - 00.00

Feb 07, 2024 - 9:49am
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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 C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT (AGANCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

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

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT (AGANCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

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

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

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

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC),THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
- THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
- OTHER LOCATION AS APPROVED BY THE ENGINEER.

THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

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

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

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

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

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

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

SHEET NUM.													PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	12	13	19	23	108							01/S>2/05	02/NFP/05						
																			ROADWAY	
	200													200	202	23001	200	SY	PAVEMENT REMOVED, AS PER PLAN	11
					13,618									13,618	202	30000	13,618	SF	WALK REMOVED	
					2,126									2,126	202	32000	2,126	FT	CURB REMOVED	
		150											150		202	32000	150	FT	CURB AND GUTTER REMOVED	
					4,200									4,200	608	10000	4,200	SF	4" CONCRETE WALK	
		1,920											1,920		608	10001	1,920	SF	4" CONCRETE WALK, AS PER PLAN, TYPE 1	12
		350											350		608	10001	350	SF	4" CONCRETE WALK, AS PER PLAN, TYPE 2	12
		400											400		608	10001	400	SF	4" CONCRETE WALK, AS PER PLAN, TYPE 3	12
					8,834									8,834	608	52000	8,834	SF	CURB RAMP	
5				13									18		623	39501	18	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	10
5													5		623	39601	5	EACH	MONUMENT ASSEMBLY RECONSTRUCTED TO GRADE, AS PER PLAN	10
																			EROSION CONTROL	
124														124	659	00300	124	CY	TOPSOIL	
1,000														1,000	659	10000	1,000	SY	SEEDING AND MULCHING	
10														10	659	35000	10	MGAL	WATER	
													20,000		832	30000	20,000	EACH	EROSION CONTROL	
																			DRAINAGE	
	5			88									93		611	98631	93	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	10
	5												5		611	98635	5	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	10
	5			62									67		611	99655	67	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	10
	5												5		611	99661	5	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN	10
	10,000												10,000		SPECIAL	61199820	10,000	LB	MISCELLANEOUS METAL	11
																			PAVEMENT	
	6,500												6,500		251	01001	6,500	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN	11
					2,113									2,113	252	01500	2,113	FT	FULL DEPTH PAVEMENT SAWING	
	65													65	253	02001	65	CY	PAVEMENT REPAIR, AS PER PLAN	11
					64,270								64,270		254	01001	64,270	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, T=3"	11
	12,500												12,500		254	01600	12,500	SY	PATCHING PLANED SURFACE	
					9,641								9,641		407	20000	9,641	GAL	NON-TRACKING TACK COAT	
					2,678								2,678		441	50101	2,678	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M	11
					2,678								2,678		441	50200	2,678	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
		150											150		609	12001	150	FT	COMBINATION CURB AND GUTTER, TYPE 2	12
					1,063									1,063	609	26000	1,063	FT	CURB, TYPE 6	
					61,984									61,984	SPECIAL	69012030	61,984	SY	PAVEMENT REINFORCING FABRIC	11
					40,311									40,311	874	20000	40,311	FT	LONGITUDINAL JOINT PREPARATION	
																			WATER WORK	
		5		117									122		638	10801	122	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	10
		5											5		638	10901	5	EACH	SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	10
																			SANITARY SEWER	
				31									31		611	99655	31	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	10
																			TRAFFIC CONTROL	
		44											44		632	26501	44	EACH	DETECTOR LOOP, AS PER PLAN	12
						3							3		646	10100	3	MILE	LANE LINE, 4"	
						3.62							3.62		646	10200	3.62	MILE	CENTER LINE	
						1,294							1,294		646	10300	1,294	FT	CHANNELIZING LINE, 8"	
						653							653		646	10400	653	FT	STOP LINE	

CALCULATED GMS
CHECKED PJF

GENERAL SUMMARY

LAK – SR 640 – 00.00

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Feb 12, 2024 – 12:25pm
drawing name: H:\2023\230297\DWG\Sheets\C_230297 – GENERALSUMMARY.dwg Layout: 17 by: somogyi

SHEET NUM.													PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
13	14	14A	19	108									01/S>2/05	02/NFP/05						
																			TRAFFIC CONTROL (CONT.)	
				6,455									6,455		646	10510	6,455	FT	CROSSWALK LINE, 12"	
				814									814		646	10600	814	FT	TRANSVERSE/DIAGONAL LINE	
				213									213		646	10800	213	SF	ISLAND MARKING	
				29									29		646	20300	29	EACH	LANE ARROW	
				29									29		646	20370	29	EACH	TWO WAY LEFT TURN ARROW	
																			TRAFFIC SIGNALS	
			8										8		625	31600	8	EACH	PULL BOX, MISC.: PULL BOX REMOVED AND REPLACED TO GRADE	12
																			MAINTENANCE OF TRAFFIC	
		100											100		614	11110	100	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
100													100		614	13000	100	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
	36												36		614	18601	36	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	14
7.24													7.24		614	21100	7.24	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
3.62													3.62		614	21550	3.62	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
6													6		614	20100	6	MILE	WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	
3													3		614	20550	3	MILE	WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	
2,588													2,588		614	23200	2,588	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	
1,294													1,294		614	23680	1,294	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	
1,306													1,306		614	26200	1,306	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
653													653		614	26610	653	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																			INCIDENTALS	
															108	30000	LS		CPM PROGRESS SCHEDULE SHORT DURATION PROJECTS	
															614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	13
															619	16010	8	MNTH	FIELD OFFICE, TYPE B	
															623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
															624	10000	LS		MOBILIZATION	

CALCULATED GMS
CHECKED PJF

GENERAL SUMMARY

LAK – SR 640 – 00.00

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Feb 07, 2024 – 1:32pm
drawing name: H:\2023\230297\DWG\Sheets\C_230297 – GENERALSUMMARY.dwg Layout: 18 by: somogyi

STA. RANGE			SIDE	LENGTH	AVERAGE WIDTH	CALCULATED SURFACE AREA	CADD GENERATED SURFACE AREA	202 CURB REMOVED	252 FULL DEPTH PAVEMENT SAWING	254 3" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	407 NON-TRACKING TACK COAT (0.09 GAL/SQ YD)	407 NON-TRACKING TACK COAT (0.06GAL/SQ YD)	441 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M	441 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) PG 70-22M	609 CURB, TYPE 6	690 SPECIAL, PAVEMENT REINFORCING FABRIC	874 LONGITUDINAL JOINT PREPARATION
				FT	FT	SY	SY	FT	FT	SY	GAL	GAL	CY	CY	FT	SY	FT
100+52.00	TO	139+37.30	LT/RT	3885.3	36.0		15920.3			15920.3	1432.827	955.2	663.3	663.3		15920.3	11655.9
100+32.61	TO	100+65.53	RT	32.92				33.0							26.0		
100+81.57	TO	100+93.24	LT	11.67				23.0							16.0		
109+26.38	TO	109+57.88	RT	31.50											31.0		
139+37.30	TO	159+81.30	LT/RT	2044.00	46.0		10423.1			10423.1	938	625	434.30	434.30		10423.1	6132
159+81.30	TO	196+00.00	LT/RT	3618.70	59.0		22461.6			22461.6	2022	1348	935.90	935.90		22461.6	14475
196+00.00	TO	216+12.05	LT/RT	2012.05	59.0		13179.3			13179.3	1186	791	549.14	549.14		13179.3	8048
208+65.12	TO	208+95.41	RT	30.29				31.0							13.0		
210+36.35	TO	210+53.85	LT	17.50				12.0							14.0		
215+41.86	TO	215+58.34	RT	16.48				17.0									
215+88.89	TO	216+12.81	RT	23.92				24.0							8.0		
LAKE SHORE BLVD.			LT/RT														
EAST 312TH ST.			RT				28.0	40.0	61.0	28.0	3	2	1.17	1.17	10.0		
EAST 314TH ST.			RT				30.0	55.0	69.0	30	3	2	1.25	1.25	45.0		
EAST 315TH ST. (NORTH)			LT				21	44.0	57.0	21	2	1	0.88	0.88	36.0		
EAST 315TH ST. (SOUTH)			RT				155.0	30.0	94.0	155	14	9	6.46	6.46	22.0		
EAST 317TH ST. (NORTH)			LT				18.0	21.0	52.0	18	2	1	0.75	0.75	15.0		
EAST 317TH ST. (SOUTH)			RT				28.0	42.0	103.0	28	3	2	1.17	1.17	22.0		
EAST 319TH ST.			RT				37.0	40.0	76.0	37	3	2	1.54	1.54	20.0		
EAST 320TH ST.			LT				28.0	39.0	63.0	28	3	2	1.17	1.17	21.0		
EAST 321ST ST.			RT				99.0	29.0	67.0	99	9	6	4.13	4.13	15.0		
EAST 322ND ST.			LT				31.0	33.0	58.0	31	3	2	1.29	1.29	18.0		
EAST 323RD ST.			LT				27.0	33.0	57.0	27	2	2	1.13	1.13	19.0		
EAST 324TH ST.			LT				24.0	35.0	58.0	24	2	1	1.00	1.00	22.0		
WILLOWICK DR. (NORTH)			LT				50.0	58.0	44.0	50	5	3	2.08	2.08	34.0		
WILLOWICK DR. (SOUTH)			RT					38.0							17.0		
EAST 326TH ST.			RT				72.0	27.0	51.0	72	6	4	3.00	3.00	13.0		
EAST 328TH ST.			RT				55.0	42.0	38.0	55	5	3	2.29	2.29	12.0		
EAST 330TH ST.			RT				61.0	52.0	39.0	61	5	4	2.54	2.54	11.0		
EAST 332ND ST.			RT				59.0	35.0	40.0	59	5	4	2.46	2.46	1.0		
EAST 334TH ST.			LT				73.0	60.0	52.0	73	7	4	3.04	3.04	18.0		
EAST 337TH ST.			RT				101.0	92.0	72.0	101	9	6	4.21	4.21	60.0		
EAST 340TH ST.			LT				47.0		31.0	47	4	3	1.96	1.96			
EAST 342ND ST.			LT				52.0	45.0	35.0	52	5	3	2.17	2.17	9.0		
EAST 343RD ST.			LT				48.0	63.0	32.0	48	4	3	2.00	2.00	12.0		
TOTALS CARRIED TO SHEET 23								1093	1249	63128	5682	3788	2630	2630	560	61984	40311

CALCULATED GMS
CHECKED PJF

PAVEMENT SUBSUMMARY

LAK – SR 640 – 00.00

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STA. RANGE	SIDE	LENGTH	AVERAGE WIDTH	CALCULATED SURFACE AREA	CADD GENERATED SURFACE AREA	202 CURB REMOVED	252 FULL DEPTH PAVEMENT SAWING	254 3" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	407 NON-TRACKING TACK COAT (0.09 GAL/SQ YD)	407 NON-TRACKING TACK COAT (0.06GAL/SQ YD)	441 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M	441 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) PG 70-22M	609 CURB, TYPE 6	690 SPECIAL, PAVEMENT REINFORCING FABRIC	874 LONGITUDINAL JOINT PREPARATION
		FT	FT	SY	SY	FT	FT	SY	GAL	GAL	CY	CY	FT	SY	FT
THE VINE YARDS PLAZA (S 343)	RT					18.0							6.0		
EAST 345TH ST.	LT				46.0	53.0	32.0	46	4	3	1.92	1.92	14.0		
THE VINE YARDS PLAZA (S 345)	RT					37.0							11.0		
EAST 346TH ST.	LT				46.0	56.0	31.0	46	4	3	1.92	1.92	22.0		
EAST 348TH ST.	LT				49	49.0	32.0	49	4	3	2.04	2.04	14.0		
EAST 351ST ST.	LT				60	61.0	41.0	60	5	4	2.50	2.50	15.0		
SOM (S.R. 91) (NORTH)	LT				154	67.0	120.0	154	14	9	6.42	6.42	11.0		
SOM (S.R. 91) (SOUTH)	RT				154	73.0	121.0	154	14	9	6.42	6.42	34.0		
EAST 354TH ST.	LT				57	57.0	39.0	57	5	3	2.38	2.38	28.0		
EAST 355TH ST.	RT				23	60.0	68.0	23	2	1	0.96	0.96	20.0		
EAST 357TH ST. (NORTH)	LT				57.0	50.0	38.0	57	5	3	2.38	2.38	20.0		
EAST 357TH ST. (SOUTH)	RT				64.0	50.0	45.0	64	6	4	2.67	2.67	10		
EAST 359TH ST. (NORTH)	LT				57.0	54.0	38.0	57	5	3	2.38	2.38	6.0		
EAST 359TH ST. (SOUTH)	RT				58.0	59.0	39.0	58	5	3	2.42	2.42	51.0		
EAST 360TH ST.	LT				59.0	48.0	40.0	59	5	4	2.46	2.46	41.0		
EAST 361ST ST.	RT				94.0	43.0	69.0	94	8	6	3.92	3.92	41.0		
EAST 362ND ST.	LT				54.0	51.0	37.0	54	5	3	2.25	2.25	43.0		
EAST 363RD ST.	RT				56.0	66.0	38.0	56	5	3	2.33	2.33	43.0		
EAST 364TH ST.	LT				54.0	81.0	36.0	54	5	3	2.25	2.25	73.0		
SUBTOTALS THIS SHEET						1033	864	1142	103	69	48	48	503		
SUBTOTALS FROM SHEET 22						1093	1249	63128	5682	3788	2630	2630	560	61984	40311
TOTALS CARRIED TO GENERAL SUMMARY						2126	2113	64270	9641		2678	2678	1063	61984	40311

CALCULATED GMS
CHECKED PJF

PAVEMENT SUBSUMMARY

LAK – SR 640 – 00.00

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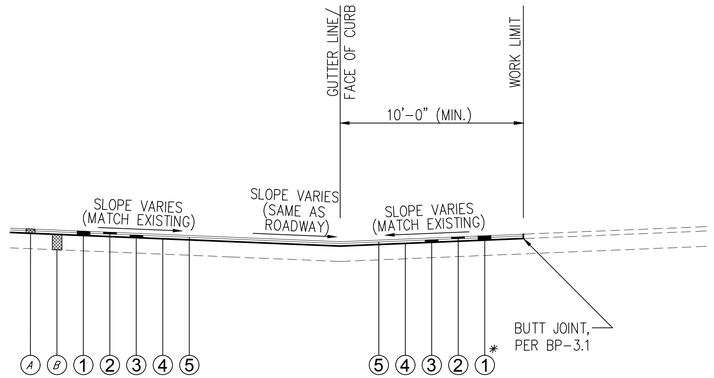


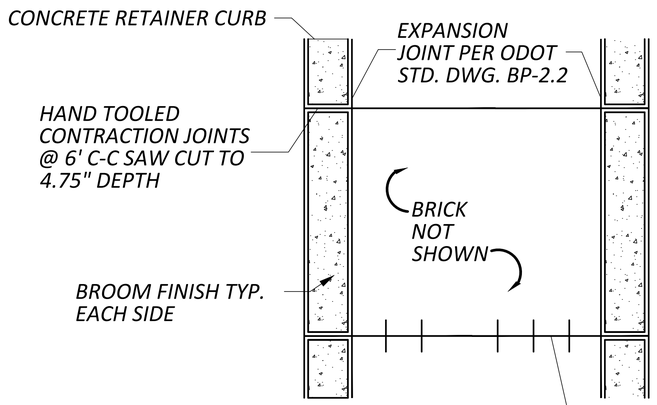
TYPICAL INTERSECTION TRANSITION DETAIL

* PAVEMENT PLANING DEPTH VARIES ON SIDE STREETS DEPENDING ON EXISTING PAVEMENT COMPOSITION

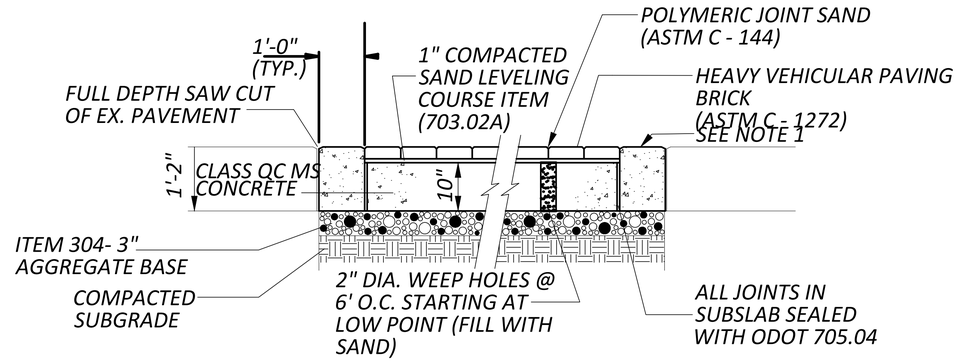
LEGEND

Ⓐ *EXISTING ASPHALT PAVEMENT (2-5/8" TO 4"THICKNESS)*
Ⓑ *EXISTING CONCRETE BASE (8" TO 10" THICKNESS)*

① ITEM 254 - 3" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
② ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG 70-22M
③ ITEM 441 - 1-1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
④ ITEM 407 - TACK COAT, 702.13
⑤ ITEM 407 - NON-TRACKING TACK COAT



PLAN
(N.T.S.)



SECTION
(N.T.S.)

NOTE:

1. *PAINT EXPOSED CONCRETE SURFACE WITH TRAFFIC PAINT PER ODOT ITEM 646. DO NOT USE CURING COMPOUND.*

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

(EXISTING BRICK CROSSWALK DETAIL)

CALCULATED GMS
CHECKED PJF

TYPICAL INTERSECTION TRANSITION DETAIL

LAK – SR 640 – 00.00

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Feb 12, 2024 – 9:51am
drawing name: H:\2023\230297\DWG\Sheets\C_230297 – BUTT_JOINT_DETAIL.dwg Layout: 102 by: somogyi