



CITY OF ANN ARBOR ENGINEERING

PLYMOUTH ROAD RETAINING WALL REPAIRS

NOTES

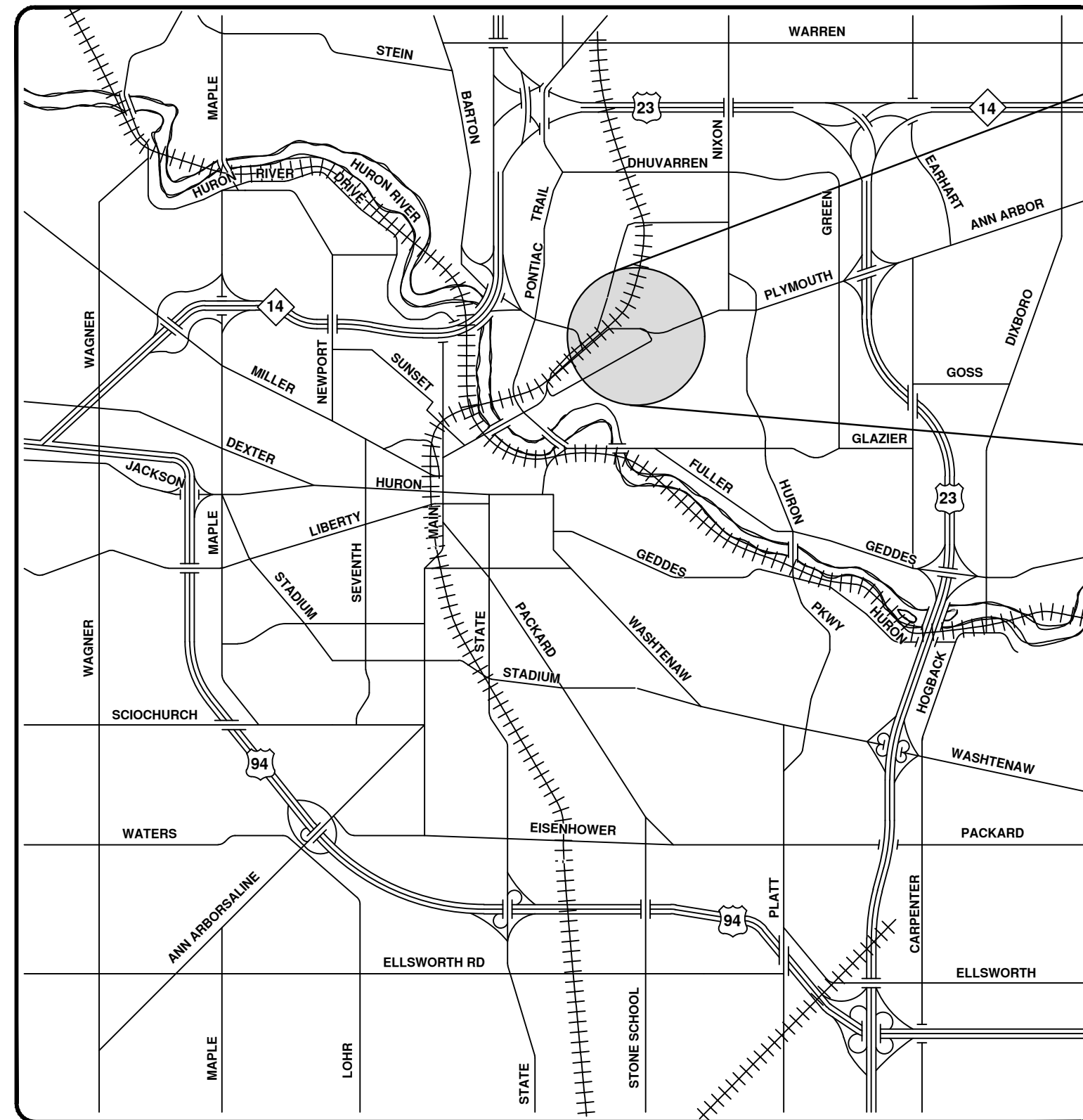
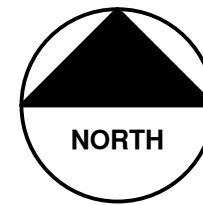
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CALL 811 OR 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

THE UNDERGROUND LOCATIONS SHOWN FOR NATURAL GAS, TELEPHONE, ELECTRICAL POWER, CABLE TV AND FIBER OPTIC LINES ARE APPROXIMATE. THE CITY OF ANN ARBOR ASSUMES NO RESPONSIBILITY FOR THEIR ACCURATE REPRESENTATION IN THIS DRAWING. MISS DIG MUST BE CONTACTED PRIOR TO CONSTRUCTION TO LOCATE THESE UTILITIES.

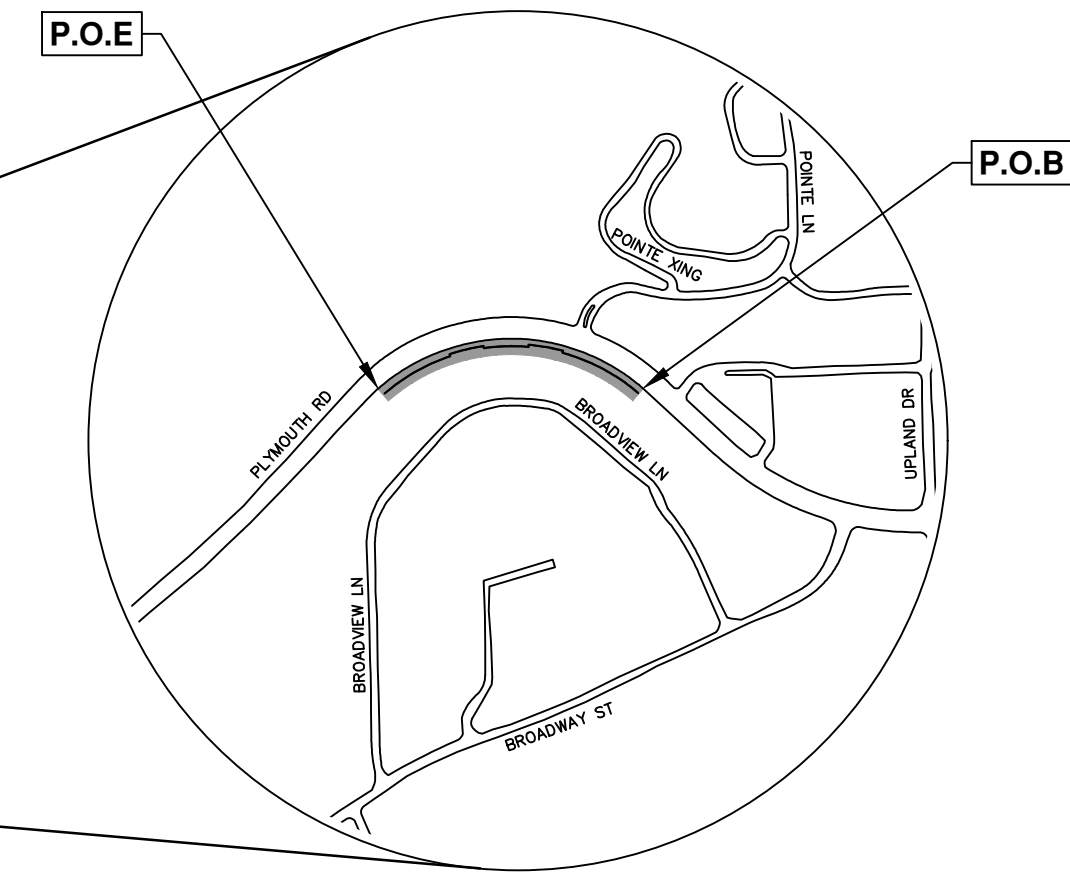
THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE 1994 EDITION OF THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS, ITS DETAILS, WHICH ARE INCLUDED BY REFERENCE, AND THIS PROJECT'S CONTRACT DOCUMENTS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR OF THIS REQUIREMENT.

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
1	COVER SHEET
2 - 3	QUANTITIES, CONSTRUCTION NOTES AND MOT DETAILS
4	GENERAL PLAN OF SITE - STA. 0+00 TO STA. 4+00
5	GENERAL PLAN OF SITE - STA. 4+00 TO STA. 8+25

ITB No. 4552, FILE No. 2018-030



VICINITY MAP



PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

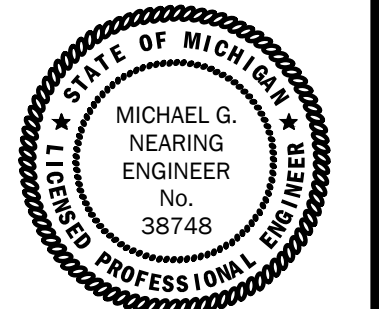
PERMIT	ISSUING AUTHORITY
LANE CLOSURE PERMIT*	CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT*	CITY OF ANN ARBOR ENGINEERING
RIGHT-OF-WAY PERMIT*	CITY OF ANN ARBOR CUSTOMER SERVICE
* NO COST TO CONTRACTOR	

CONTACT INFORMATION

PUBLIC UTILITIES	OWNER	CONTACT
WATER	CITY OF ANN ARBOR PUBLIC WORKS W.R. WHEELER SERVICE CENTER 4251 STONE SCHOOL ROAD ANN ARBOR, MI 48108	(734) 794-6350
SANITARY		
STORM		
FORESTRY		
SIGNS SIGNALS STREET LIGHTS		(734) 794-6361
PRIVATE UTILITIES	OWNER	CONTACT
GAS	DTE ENERGY 3150 E. MICHIGAN AVE, YPSILANTI TOWNSHIP, MI 48198	ROBERT CZAPIEWSKI (734) 544-7818
ELECTRIC	DTE ENERGY WESTERN WAYNE SERVICE CENTER 8001 HAGGERTY ROAD BELLEVILLE, MI 48111	CLAY COMBEE (734) 397-4112
CABLE	COMCAST 27800 FRANKLIN ROAD SOUTHFIELD, MI 48034	RON SUTHERLAND (313) 999-8300
PHONE	AT&T 550 S. MAPLE ROAD ANN ARBOR, MI 48103	(734) 996-2135
FIBER OPTIC	MCI 2800 N. GLENFILLE ROAD RICHARDSON, TX 75082	DEAN BOYERS (972) 729-6016

PREPARED UNDER THE SUPERVISION OF

Michael G. Nearing, P.E.
MICHAEL G. NEARING, P.E. - MI LICENSE No. 38748
SENIOR PROJECT MANAGER

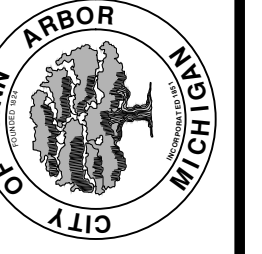


10/24/2018
DATE



NO.	DATE	DESCRIPTION	REV.
00	10-24-18	OUT FOR BID	00
			01
			02
			03
			04
			05
			06
			07
			08
			09
			10
			11
			12
			13
			14
			15
			16
			17
			18
			19
			20
			21
			22
			23
			24
			25
			26
			27
			28
			29
			30

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR, MI 48106-8647
ANN ARBOR 734-794-6410
www.a3gov.org



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PLYMOUTH ROAD RETAINING WALL REPAIRS
COVER SHEET

SCALE: NTS
DRAWING No. 2018-030-1
SHEET No. 1 OF 5

R:\2018030 Plymouth Rd Retaining Wall Repairs\Plan Production\2018030Cov.dwg - _g2 standard bw.stb - Plot Date: 10/23/2018 9:45:46 AM

© PLYMOUTH ROAD RETAINING WALL REPAIRS; BID No. 4552; 2018-030

Table with columns: Pile Number, Nominal Pile Size, Exposed Pile Length (in), Pile Width (in), Flange Thickness (in), Computed Pile Surface Area (in²), Surface Area (ft²). Includes a sub-table for Paint Quantity for buried portions of piles with columns: No. of piles, Width (in), Depth (in), Area to be Coated, Area (ft²). Grand total surface area: 581.44.

GENERAL CONSTRUCTION NOTES:

- 1. DRIVEWAYS AND ENTRANCES TO BUILDINGS, REAL PROPERTY, AND THE LIKE SHALL NOT BE BLOCKED EXCEPT FOR SHORT DURATIONS AND ONLY WITH THE APPROVAL OF THE ENGINEER... 2. AREAS DESIGNATED FOR STAGING THE CONSTRUCTION OPERATIONS MAY BE USED FOR EQUIPMENT PLACEMENT AND STORAGE DURING CONSTRUCTION... 3. THE CONTRACTOR SHALL INSTALL AND CONTINUOUSLY MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN ON THE PLANS... 4. THE WORK COVERED BY THESE PLANS INCLUDES CLEANING AND COATING THE STRUCTURAL STEEL H-PILES, SITE RESTORATION, AND MAINTAINING VEHICULAR AND PEDESTRIAN TRAFFIC... 5. ANY REFERENCE IN SECTION 715 OF THE 2012 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION TO "BRIDGE" OR "STEEL STRUCTURE" OR ANY OTHER DESCRIPTION OF AN ELEMENT TO BE CLEANED OR COATED SHALL BE CONSTRUED TO APPLY TO THE WORK OF THIS CONTRACT WITHOUT EXCEPTION.

CLEANING AND COATING NOTES:

- 1. THE H-PILES ARE TO BE COATED WITH A ZINC-BASED COATING SYSTEM. THE COATING SYSTEM SHALL BE CHOSEN FROM THE MDOT QUALIFIED PRODUCTS LIST AND APPROVED BY THE ENGINEER... 2. THE PROTECTION OF THE WORK AND ENVIRONMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 715 OF THE 2012 MDOT STANDARD SPECIFICATION FOR CONSTRUCTION... 3. THE CLEANING AND COATING OF THE H-PILES SUPPORTING THE RETAINING WALL SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 715 OF THE 2012 MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION... 4. THE ENGINEER SHALL INSPECT THE H-PILES AND COVER PLATES THAT HAVE BEEN BLAST CLEANED FOR EVIDENCE OF CRACKS OR LOSS OF SECTION DUE TO CORROSION OF MORE THAN 25%... 5. THE ESTIMATED AREA OF H-PILES TO BE CLEANED AND COATED IS APPROXIMATELY 582 SQUARE FEET... 6. THE COLOR OF THE URETHANE PROTECTIVE COAT SHALL BE LIGHT YELLOW, AMS-STD-595 COLOR NUMBER 13591... 7. ALL EXPOSED PORTIONS OF THE H-PILES SHALL BE CLEANED AND COATED... 8. THE CONTRACTOR SHALL MASK THE IMMEDIATELY ADJACENT PRE-CAST CONCRETE WALL PANELS AND SIDEWALK AREAS... 9. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO AVOID OVERSPRAY ON THE ADJACENT PRE-CAST WALL PANELS OR EXISTING SIDEWALK...

Table: MINIMUM MERGING TAPER LENGTH "L" (FEET). Columns: OFFSET FEET, POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA). Rows: 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

THE FORMULAS FOR THE MINIMUM LENGTH OF A MERGING TAPER IN DERIVING THE "L" VALUES SHOWN IN THE ABOVE TABLES ARE AS FOLLOWS:
"L" = W X S^2 / 60 WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 40 MPH OR LESS
"L" = S X W WHERE POSTED SPEED PRIOR TO THE WORK AREA IS 45 MPH OR GREATER

MDOT TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL. TABLES FOR "L", "D" AND "B" VALUES. DRAWN BY: CON/REG/G/F. CHECKED BY: BMM. PLAN DATE: JUNE 2006. M0020a. SHEET 1 OF 2. REV: 08/21/2006.

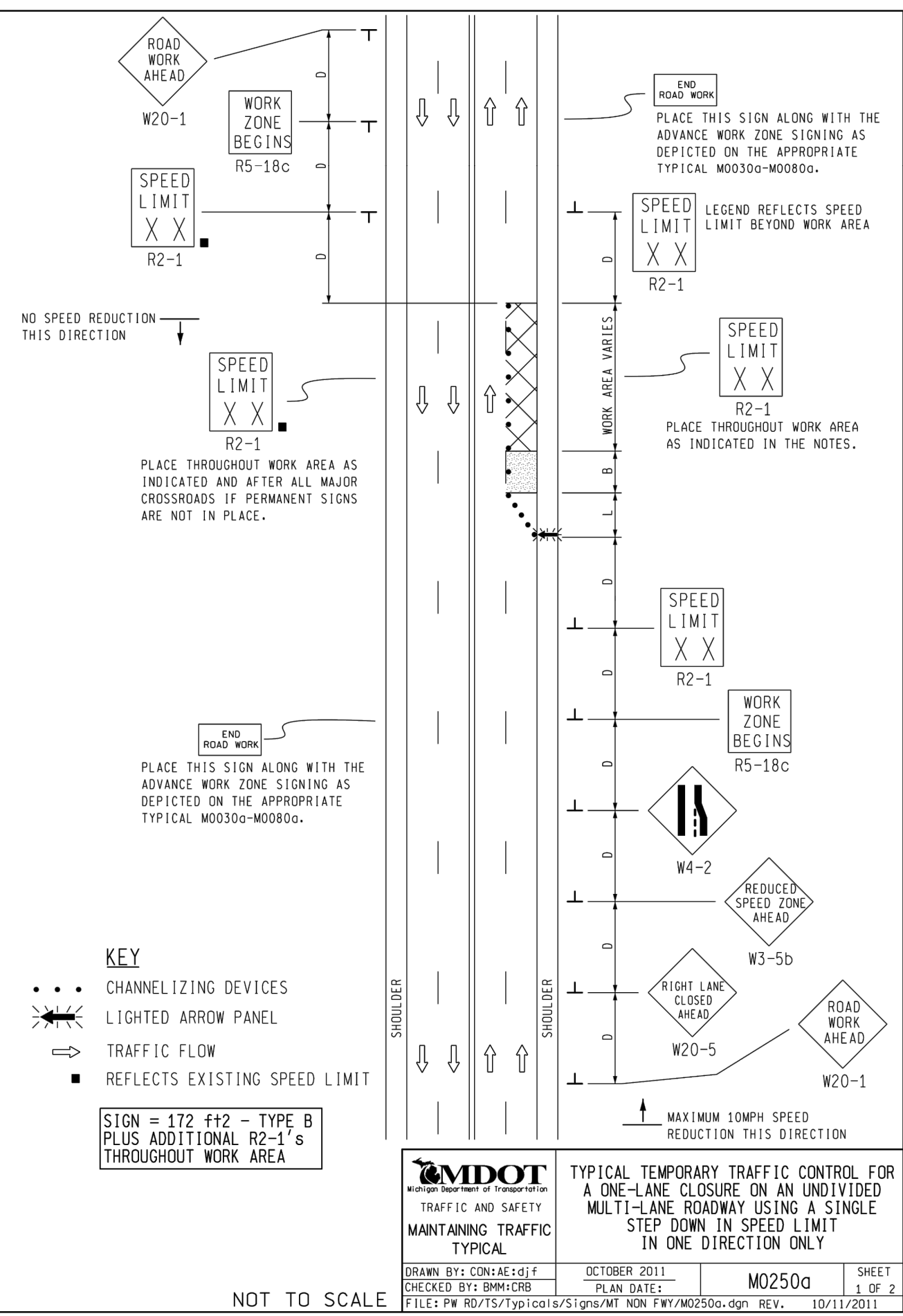
- NOTES
1B. D = DISTANCE BETWEEN TRAFFIC CONTROL DEVICES
L = MINIMUM LENGTH OF TAPER
B = LENGTH OF LONGITUDINAL BUFFER
2. ALL NON-APPLICABLE SIGNING WITHIN THE CIA SHALL BE MODIFIED TO FIT CONDITIONS...
3. THE "WORK ZONE BEGINS" (RS-18c) SIGN SHALL BE USED ONLY IN THE INITIAL SIGNING SEQUENCE...
4. THE MAXIMUM RECOMMENDED DISTANCE(S) BETWEEN CHANNELIZING DEVICES SHOULD BE EQUAL IN FEET TO THE POSTED SPEED IN MILES PER HOUR ON TAPER(S) AND TWICE THE POSTED SPEED IN THE PARALLEL AREAS(S)...
16A. ADDITIONAL SPEED LIMIT SIGNS REFLECTING THE REDUCED SPEED SHALL BE PLACED AFTER EACH MAJOR CROSSROAD THAT INTERSECTS THE WORK AREA...
16B. WHEN REDUCED SPEED LIMITS ARE UTILIZED IN THE WORK AREA, ADDITIONAL SPEED LIMIT SIGNS RETURNING TRAFFIC TO ITS NORMAL SPEED SHALL BE PLACED BEYOND THE LIMITS OF THE REDUCED SPEED AS INDICATED...

SIGN SIZES. DIAMOND WARNING - 48" x 48". RECTANGULAR REGULATORY - 48" x 60". RS-18c REGULATORY - 48" x 48". TYPICAL TEMPORARY TRAFFIC CONTROL FOR A ONE-LANE CLOSURE ON AN UNDIVIDED MULTI-LANE ROADWAY USING A SINGLE STEP DOWN IN SPEED LIMIT IN ONE DIRECTION ONLY. M0250a. SHEET 2 OF 2. 10/11/2011.

Table: DISTANCE BETWEEN TRAFFIC CONTROL DEVICES "D" AND LENGTH OF LONGITUDINAL BUFFER SPACE ON "WHERE WORKERS PRESENT" SEQUENCES. Columns: POSTED SPEED LIMIT, MPH (PRIOR TO WORK AREA). Rows: 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

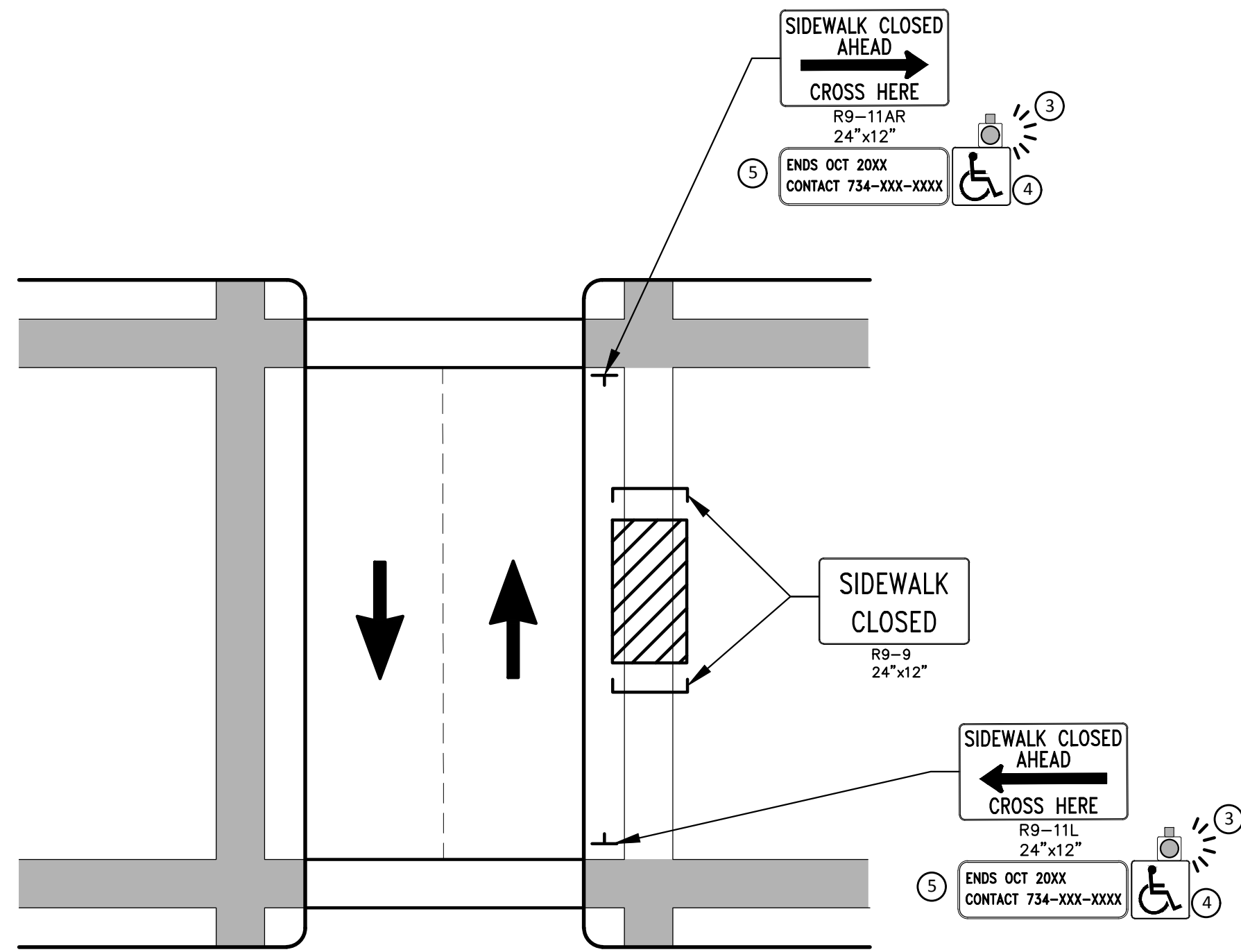
Table: GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE "B". Columns: SPEED MPH, LENGTH FEET. Rows: 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70.

MDOT TRAFFIC AND SAFETY MAINTAINING TRAFFIC TYPICAL. TABLES FOR "L", "D" AND "B" VALUES. DRAWN BY: CON/REG/G/F. CHECKED BY: BMM. PLAN DATE: JUNE 2006. M0020a. SHEET 2 OF 2. REV: 08/21/2006.



CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING. PLYMOUTH ROAD RETAINING WALL REPAIRS. QUANTITIES, CONSTRUCTION NOTES AND MOT DETAILS. SCALE: NTS. DRAWING No.: 2018-030-2. SHEET No.: 2 OF 5.

R:\2018030 Plymouth Rd Retaining Wall Repairs\Plan Production\2018030Det.dwg Dwg Created: 19-Jun-18 - _a2 standard bw.stb - Plot Date: 23-Oct-18



PEDESTRIAN DETOUR USING OPPOSITE SIDE OF STREET

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED BY THE CITY OF ANN ARBOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN THE ENGINEER DETERMINES THAT THE CONTRACTOR'S OPERATIONS OR PLACEMENT OF TRAFFIC CONTROL DEVICES HAS CAUSED A SITUATION THAT THE VISIBILITY OF A TRAFFIC CONTROL DEVICE IS REDUCED ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

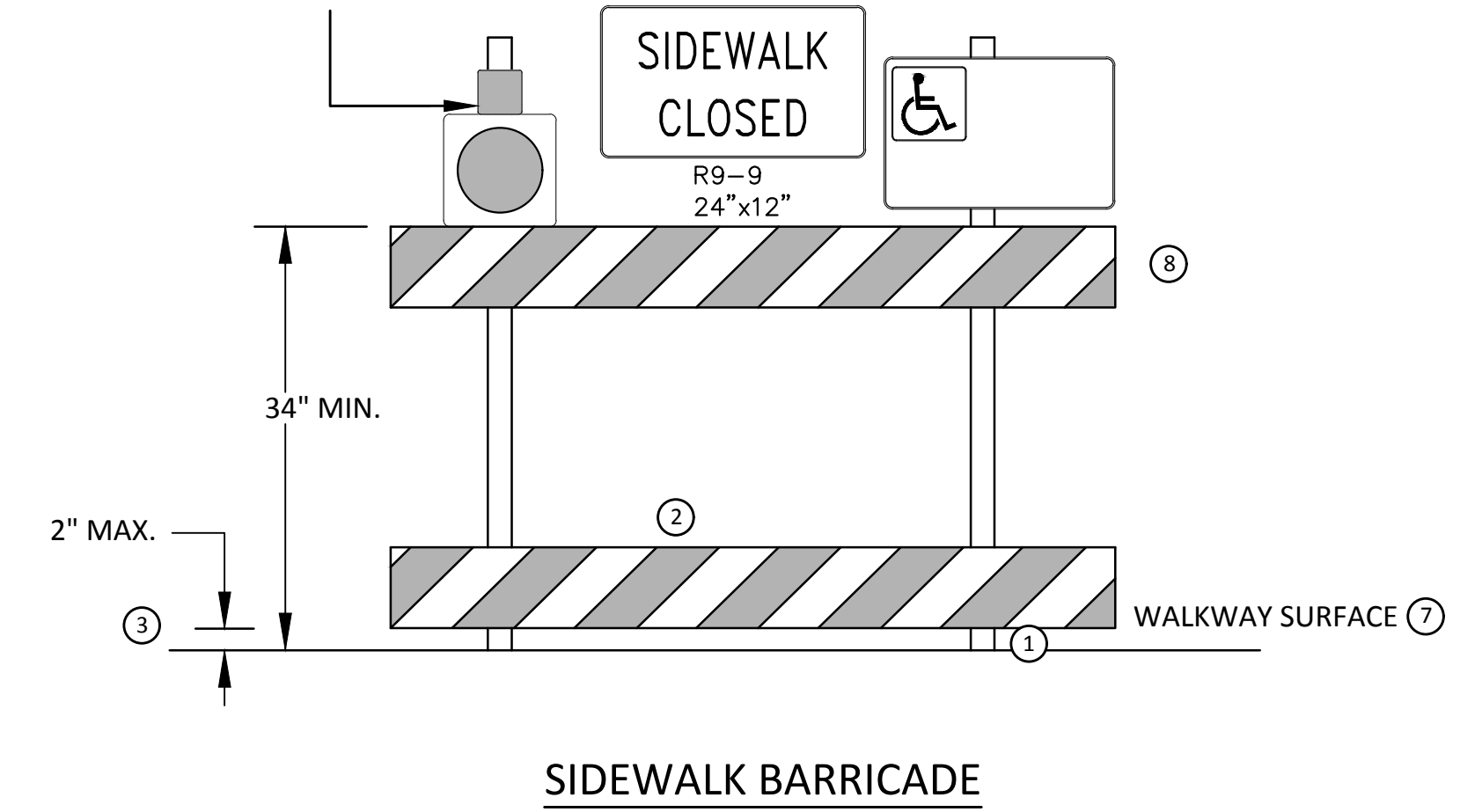
SPECIFIC NOTES

1. TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
2. TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
3. AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHALL BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
4. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHOULD BE POSTED AND AN ALTERNATE ROUTE SHOULD BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
5. TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHALL INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
6. PEDESTRIAN DETOUR TRAILBLAZING SIGNS SHALL BE USED IF THE PEDESTRIAN DETOUR IS IN A LOCATION OTHER THAN ACROSS THE STREET FROM THE SIDEWALK CLOSURE.

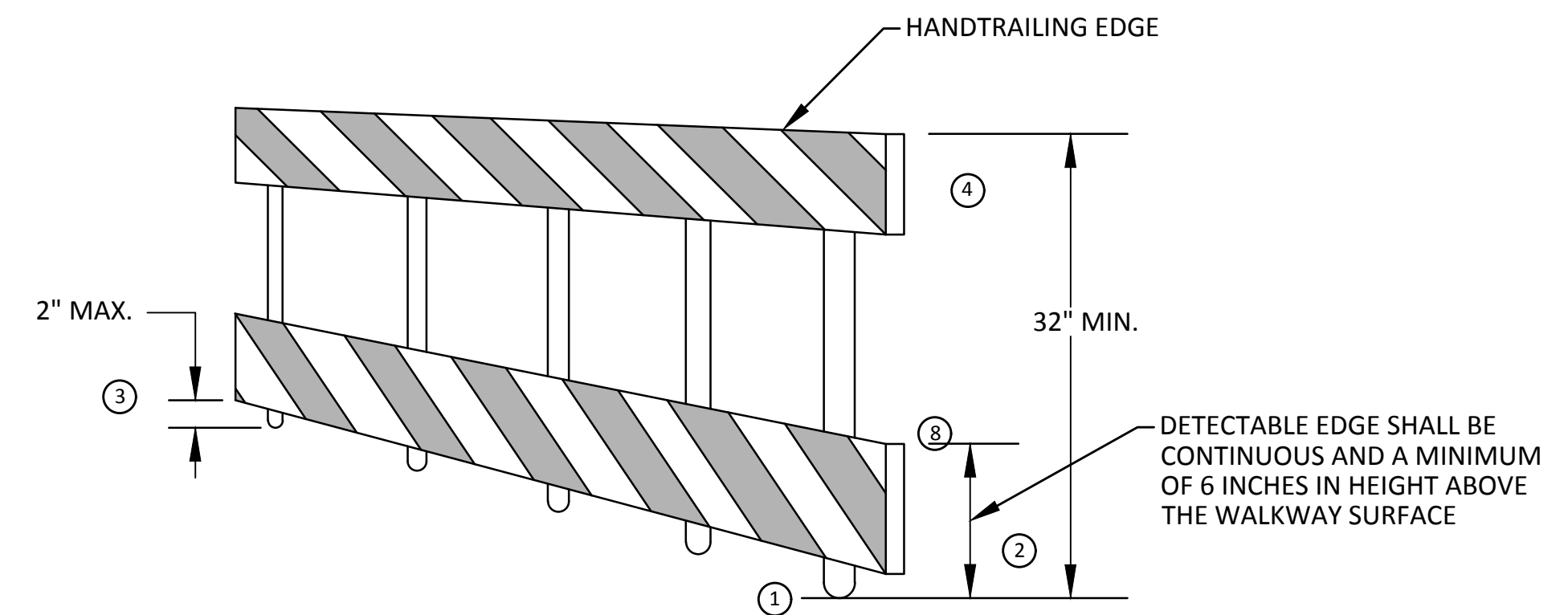
PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN THROUGH MOVEMENTS FROM ONE END OF THE CONSTRUCTION AREA TO THE OTHER, ON AT LEAST ONE SIDE OF THE STREET DURING CONSTRUCTION. ANY SIDEWALK CLOSURES SHALL MEET THE REQUIREMENTS OF THE MMUTCD, PART 6.
2. PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY INCLUDE TEMPORARY WALKWAYS SPANNING THE CONSTRUCTION AREA.
3. IF SIDEWALKS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE PROVIDED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, IF POSSIBLE. SIGNS AND BARRICADES SHALL BE USED TO PROVIDE ADVANCE NOTICE OF THE CLOSURE AND THE ROUTE OF ANY PEDESTRIAN DETOURS. THE TPAR SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4 FEET. IF THE TPAR IS LESS THAN 5 FEET IN WIDTH, A 5 FOOT BY 5 FOOT PASSING SPACE SHALL BE PROVIDED AT LEAST EVERY 200 FEET. THE SURFACE OF THE TPAR SHALL BE SMOOTH AND CONTINUOUS FOR THE LENGTH OF THE TPAR. THE TPAR SHALL MAINTAIN THE SAME LEVEL OF ACCESSIBILITY AND DETECTABILITY AS THE FACILITY THAT IS BEING CLOSED. THE TPAR SHALL NOT LEAD PEDESTRIANS INTO CONFLICTS WITH VEHICLES, EQUIPMENT, OR CONSTRUCTION OPERATIONS.
4. IF THE TPAR IS ADJACENT TO MOVING TRAFFIC, CONSTRUCTION OPERATIONS/EQUIPMENT, OR DROP-OFFS, THEN CRASH WORTHY CHANNELIZING DEVICES THAT MEET THE REQUIREMENTS OF NCHRP 350 AND THE MMUTCD SHALL BE USED.
5. THE CONTRACTOR SHALL NOT STORE OR PLACE ANY CONSTRUCTION MATERIALS, EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.
6. THE CONTRACTOR'S OPERATIONS SHALL NOT OCCUPY SIDEWALKS EXCEPT WHERE PROPER PROTECTION AND A TPAR HAVE BEEN PROVIDED.
7. WHEN DIRECTED BY THE ENGINEER, OR STATED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE A TEMPORARY PEDESTRIAN TRAFFIC CONTROL PLAN FOR REVIEW AND WRITTEN APPROVAL BY THE ENGINEER A MINIMUM OF THREE WEEKS BEFORE SUCH PLAN IS IMPLEMENTED. THIS PLAN SHALL DETAIL THE CONSTRUCTION PHASING AND SCHEDULE AND THE SPECIFIC METHODS OF MAINTAINING SAFE PEDESTRIAN ACCESS THROUGHOUT THE CONSTRUCTION AREA. THIS PLAN SHALL PROVIDE THE LOCATION AND DETAILS OF TEMPORARY CONSTRUCTION SIGNING, MARKINGS, BARRICADES, CHANNELIZING DEVICES, TPARS AND METHODS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES, BUSINESSES, RESIDENCES, ETC. NO WORK SHALL BE ALLOWED TO BEGIN UNTIL THIS PLAN IS APPROVED BY THE ENGINEER IN WRITING.
8. PROVISION OF THE TPAR AND ALL OF ITS ELEMENTS, INCLUDING BUT NOT LIMITED TO, CREATION OF THE TEMPORARY PEDESTRIAN CONTROL PLAN, SIGNS, CHANNELIZING DEVICES, BARRICADES, TEMPORARY PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "MINOR TRAF DEVICES."

TYPICAL AUDIBLE MESSAGE DEVICE LOCATION WHEN USED



SIDEWALK BARRICADE



PEDESTRIAN CHANNELIZER (MINIMUM REQUIREMENTS)

GENERAL NOTES

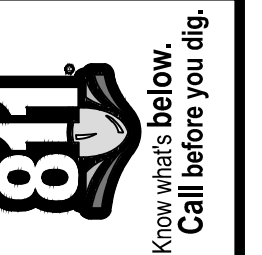
RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIER'S APPLICATION.

BARRICADES SHALL BE PLACED CONTINUOUSLY ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE BEING CLOSED.

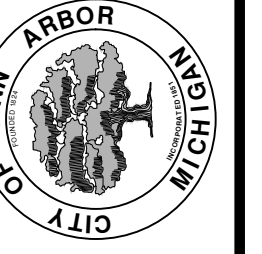
SPECIFIC NOTES

1. ANY TRIPPING HAZARD IN THE WALKWAY NEEDS A DETECTABLE EDGE. BALLAST SHALL BE LOCATED BEHIND OR INTERNAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHALL NOT EXTEND INTO THE 48 INCH MINIMUM WALKWAY CLEAR SPACE AND SHALL NOT EXCEED 0.5 INCHES IN HEIGHT ABOVE THE WALKWAY SURFACE.
2. DETECTABLE EDGES SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES IN HEIGHT ABOVE WALKWAY SURFACE AND HAVE COLOR MARKINGS CONTRASTING WITH THE WALKWAY SURFACE.
3. DEVICES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2 INCHES IS ALLOWED FOR DRAINAGE PURPOSES.
4. WHEN HAND GUIDANCE IS REQUIRED, THE TOP RAIL OR TOP SURFACE SHALL:
 - BE IN A VERTICAL PLANE PERPENDICULAR TO THE WALKWAY ABOVE THE DETECTABLE EDGE.
 - BE CONTINUOUS AT A HEIGHT OF 34 TO 38 INCHES ABOVE THE WALKWAY SURFACE, AND
 - BE SUPPORTED WITH MINIMAL INTERFERENCE TO THE PEDESTRIAN'S HANDS OR FINGERS.
5. ALL DEVICES SHALL BE FREE OF SHARP OR ROUGH EDGES, AND FASTENERS (BOLTS) SHALL BE ROUNDED TO PREVENT HARM TO HANDS, ARMS OR CLOTHING OF PEDESTRIANS.
6. ALL DEVICES USED TO CHANNELIZE PEDESTRIAN FLOW SHOULD INTERLOCK SUCH THAT GAPS DO NOT ALLOW PEDESTRIANS TO STRAY FROM THE INTENDED CHANNELIZED PATH.
7. A WALKWAY SURFACE SHALL BE FIRM, STABLE, AND SLIP RESISTANT. COMPACTED GRAVEL, AGGREGATE, OR SLAG MATERIALS ARE NOT ALLOWED.
8. LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS SHALL BE 32 INCHES IN HEIGHT OR GREATER.



MO	OUT FOR BID	DESCRIPTION	REV.
10-24-18	DATE	10-24-18	DATE
MON	DRAWN	DPF	CHECKED

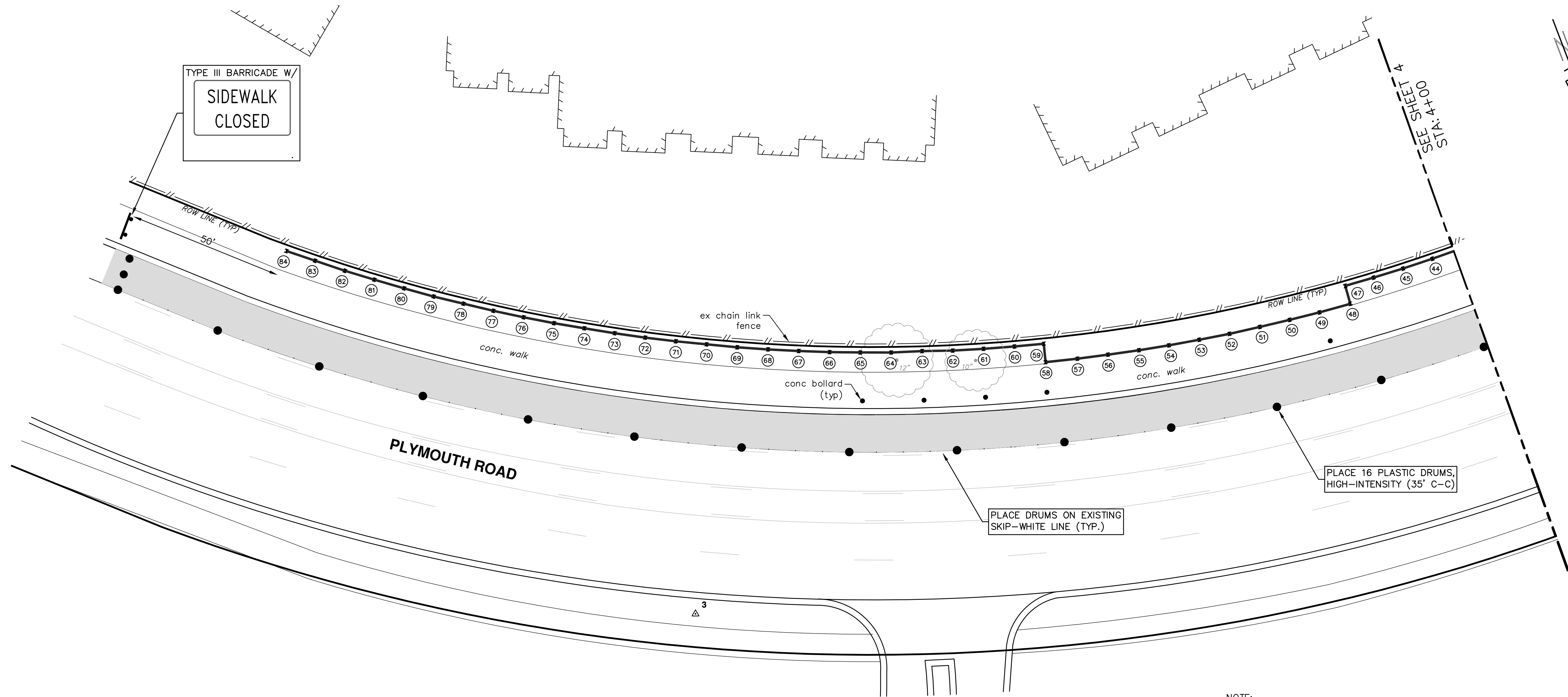
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
ANN ARBOR MI 48106-1067
www.a3gov.org



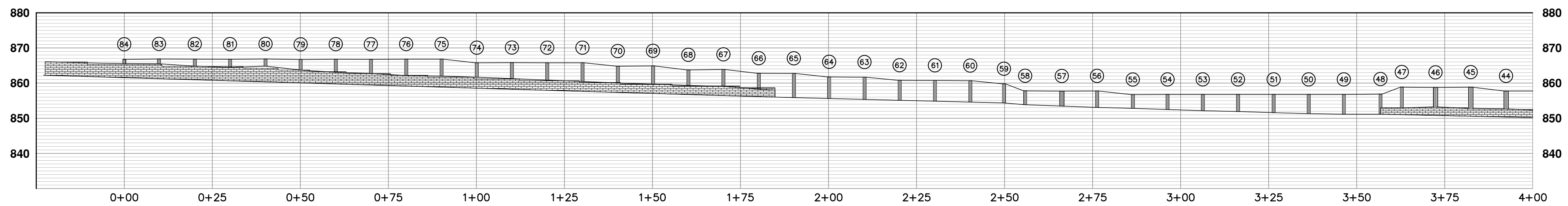
PROJECT MANAGEMENT - CITY OF ANN ARBOR
PLYMOUTH ROAD RETAINING WALL REPAIRS
PEDESTRIAN TRAFFIC MAINTENANCE DETAILS

SCALE: N.T.S.
DRAWING No. 2018-030-3

R:\2018030 Plymouth Rd Retaining Wall Repairs\Plan Production\2018030Wall.dwg Dwg Created: 19-Jun-18 -- _a2 standard bw.stb -- Plot Date: 23-Oct-18



NOTE:
 IN AREAS WHERE THE POST & PANEL RETAINING WALL IS IN FRONT OF (WHEN VIEWED FROM THE SIDEWALK) TOPSOILED AREAS, THE CONTRACTOR SHALL HAND-DIG AND EXPOSE A 6" DEEP, BY THE WIDTH OF THE H-PILE AREA AND CLEAN AND COAT THIS PORTION OF THE H-PILE AS WELL. THIS AREA HAS BEEN INCLUDED IN THE PLAN QUANTITY. THE COST OF THIS HAND-DIGGING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "STEEL H-PILE CLEANING, SPECIAL."



ELEVATION VIEW OF EXISTING RETAINING WALLS
 LOOKING SOUTH



REV.	DESCRIPTION	DATE	DRAWN	CHECKED
00	OUT FOR BID	10-24-18	DPF	MCN

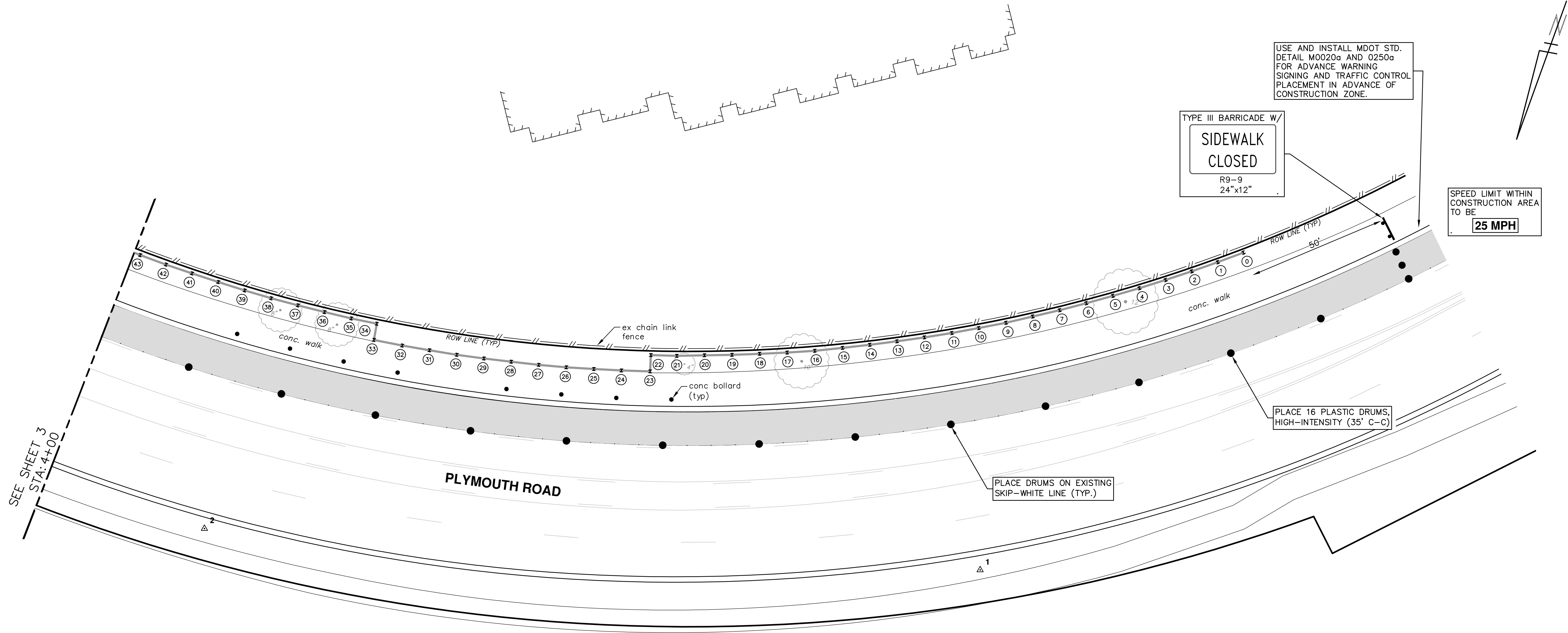
CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-8647
 www.a2gov.org



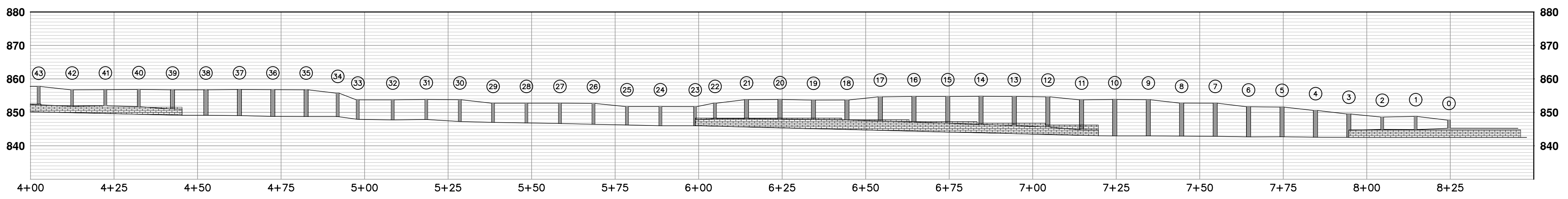
CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
 PLYMOUTH ROAD RETAINING WALL REPAIRS
 GENERAL PLAN OF SITE
 STA. 0+00 TO STA. 4+00

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 10'
 DRAWING No. 2018-030-4

R:\2018030 Plymouth Rd Retaining Wall Repairs_Plan Production\2018030Wall.dwg Dwg Created: 19-Jun-18 -- _a2 standard bw.stb -- Plot Date: 23-Oct-18



NOTE:
 IN AREAS WHERE THE POST & PANEL RETAINING WALL IS IN FRONT OF (WHEN VIEWED FROM THE SIDEWALK) TOPSOILED AREAS, THE CONTRACTOR SHALL HAND-DIG AND EXPOSE A 6" DEEP, BY THE WIDTH OF THE H-PILE AREA AND CLEAN AND COAT THIS PORTION OF THE H-PILE AS WELL. THIS AREA HAS BEEN INCLUDED IN THE PLAN QUANTITY. THE COST OF THIS HAND-DIGGING WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM OF WORK "STEEL H-PILE CLEANING, SPECIAL."



ELEVATION VIEW OF EXISTING RETAINING WALLS
 LOOKING SOUTH

811
 Know what's below. Call before you dig.

NO	OUT FOR BID	DESCRIPTION	REV.
10-24-18	DATE		
	DRAWN		
	CHECKED		
	MON		

CITY OF ANN ARBOR
 PUBLIC SERVICES
 301 EAST HURON STREET
 ANN ARBOR, MI 48106-8647
 ANN ARBOR: 734.794.4110
 WWW.A2GOV.ORG

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
PLYMOUTH ROAD RETAINING WALL REPAIRS
 GENERAL PLAN OF SITE
 STA. 4+00 TO STA. 8+25

SCALE PLAN: 1" = 20'
 PROFILE: 1" = 10'

DRAWING No. 2018-030-5

SHEET No. 5 OF 5