NOTES:
1. 5' MINIMUM WIDTH ON THE SIDEWALK (OR APPROVED BY THE CITY), WITH REPLACEMENT BEING AT LEAST THE SIZE OF ADJACENT SIDEWALK.
2. SIDEWALKS SHALL BE CONSTRUCTED WITH P.C. CONCRETE AND SHALL CONTAIN 6% MIN. ENTRAINED AIR. CONCRETE MIX SHALL CONTAIN SIX 6 BAGS OF CEMENT PER CUBIC YARD, HAVE A 3" MAX. SLUMP, AND 4000 LB TEST AT 28 DAYS.
3. WHERE SIDEWALKS ABUT DRIVEWAYS OR ALLEY APPROACHES, THE CONCRETE THICKNESS OF THE WALK SHALL EQUAL THE THICKNESS OF THE APPROACH (6" MINIMUM FOR RESIDENTIAL AND 8" MINIMUM FOR COMMERCIAL) FOR A DISTANCE OF ONE (1) FULL PANEL OR MINIMUM 5 FEET. SEE STANDARD DRAWING OF THE APPLICABLE DRIVEWAY OR ALLEY.
4. ALL CONCRETE SHALL BE PLACED IN ONE COURSE AND FINISHED WITH A WOOD FLOAT, STEEL TROWEL EDGING. CONTRACTION JOINTS MAY BE TOOLED OR SAW CUT AND SHALL MATCH THE ADJACENT SIDEWALK FINISH.
5. EXPANSION JOINTS SHALL BE PLACED WHEREVER NEW CONCRETE TOUCHES EXISTING CONCRETE AND AT INTERVALS OF 30' OR LESS.
6. WATER AND UTILITY BOXES IN THE SIDEWALK AREA SHALL BE ADJUSTED FLUSH WITH FINAL SURFACE.
7. ROOF DRAINS SHALL BE EXTENDED UNDER THE SIDEWALK AND THROUGH THE CURB. SEE STD DWG STR-02.
8. EXPANSION JOINT MATERIAL SHALL BE REFLEX RUBBER OR APPROVED EQUIVALENT.
9. FORMS SHALL BE MADE OF LUMBER, 2" NOMINAL THICKNESS OR EQUALLY RIGID METAL.
10. IMMEDIATELY AFTER FINISHING, CONCRETE SHALL BE SEALED AND CURED IN AN APPROVED MANNER.
11. NO CONCRETE SHALL BE PLACED UNTIL TEMPERATURE IS 35 DEGREES AND RISING, OR IN A MANNER APPROVED BY THE CITY.
12. CONCRETE SHALL BE PROTECTED FROM FREEZING.
13. DURING CONSTRUCTION OF THE SIDEWALK WHERE A UTILITY SERVICE CROSSES THE AGGREGATE UNDER THE FUTURE CONCRETE TWO 24" # 3 REBAR SHALL BE PLACED OVER THE DRAIN TO PROVIDE REINFORCEMENT.
14. ITEM NUMBERS REFER TO THE ODOT 2019 CMS, CURRENT EDITION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE SPECIFICATIONS.
DISTANCE TO PROPERTY LINE VARIES
1'-0" MIN

WIDTH SIDEWALK VARIES

DISTANCE FROM FACE OF CURB VARIES

FACE OF CURB

PROPERTY LINE

PIECE SLOPE TO MATCH SIDEWALK SLOPE

WALK THICKNESS 8" FOR
** A DISTANCE OF 1'-0" BEYOND EACH SIDE OF PIPE

3" MAX I.D. PIPE
SCHEDULE 40 PVC
NON-PERFORATED ***

NOT TO SCALE

RESIDENTIAL ROOF DRAIN

NOTES:

1. ROOF DRAIN/SUMP PUMP PIPE SHALL BE PRIVATELY OWNED AND MAINTAINED, INCLUDING WITHIN THE RIGHT-OF-WAY.

2. DURING CONSTRUCTION OF THE SIDEWALK WHERE THE PIPE ROOF DRAIN CROSSES THE AGGREGATE UNDER THE FUTURE CONCRETE TWO 24" #3 REBAR SHALL BE PLACED OVER THE DRAIN TO PROVIDE REINFORCEMENT.

3. CURB SHALL BE CORE DRILLED ONLY FOR ROOF DRAIN OPENING.

* APPLICABLE ONLY WHERE THICKNESS OF CONCRETE OVER PIPE IS LESS THAN 4".

** PIPE SLOPE TO MATCH SIDEWALK SLOPE THROUGH THE SIDEWALK. OUTSIDE SIDEWALK AREAS, MINIMUM PIPE SLOPE SHALL BE 0.50%.

*** IF THERE IS EXISTING ROOF DRAIN PIPE, THEN MATCH EXISTING SIZE. IF EXISTING ROOF DRAIN IS LARGER THAN 3", RUN SMALLER PARALLEL PIPES TO MAINTAIN 3" PIPE AT FACE OF CURB.

Date: 1/1/20

Standard Construction Drawing

Drawing No. STR-02

Engineering
1. ANGLE HAND TAMP AT 45°

2. ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22 (ONE 3" LIFT)

3. ITEM 304 - 6" AGGREGATE BASE

4. ITEM 204 - SUBGRADE COMPACTION
NOTES:

1. RAMPS SHALL BE ADA COMPLIANT: SEE STANDARD DRAWINGS STR-16 / STR-01.

2. EXISTING CURB OR COMBINATION CURB AND GUTTER SHALL BE REMOVED AND REPLACED AS REQUIRED FOR INSTALLATION OF RAMP. INSTALL EXPANSION JOINT AT BACK OF CURB. REFERENCE STANDARD DRAWINGS STR-05 / STR-06.

3. FOR REPLACEMENT WORK, THE CURB OR CURB/GUTTER SHALL BE REMOVED TO AN EXISTING JOINT OR NO CLOSER THAN 5 FT. FROM AN EXISTING JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT ALSO SHALL BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MIN. 5 FT. SECTIONS & MAX. 10 FT. SECTIONS.

4. FILLS, IF REQUIRED, SHALL BE #57 AGGREGATE BASE.

5. RAMP SHALL BE CONSTRUCTED PER ITEM 608.

6. EXPANSION JOINTS SHALL BE PLACED TO FORM UTILITY STRIPS WHERE REQUIRED AND WHEREVER NEW CONCRETE TOUCHES EXISTING CONSTRUCTION.

Date: 1/1/20
Standard Construction Drawing

SHARED USE PATH PAVEMENT DETAIL

Drawing No.
STR-03
Sheet 2 of 2
STANDARD FLEXIBLE ASPHALT REPAIR
(SEE NOTES "A", "B" & "C")

BACKFILL FOR ALL TYPES SHALL MEET THE REQUIREMENTS SHOWN IN TYPE I ABOVE.
T: MATCH EXISTING PAVEMENT THICKNESS, HOWEVER, MINIMUM OF 9" ON ALL STREET CUTS.
ITEM 609 - CURB

COMPACTED GRANULAR MATERIAL (SEE NOTE E)

NOTE: IF THE DISTANCE FROM THE CUT TO THE NEAREST JOINT IN THE CURB IS LESS THAN 5', THE CURB/GUTTER SHALL BE REMOVED AND REPLACED TO THE JOINT. IF THE DISTANCE IS GREATER THAN 5', THE CURB MAY REMAIN.

PLAN VIEW

COMPACTED GRANULAR MATERIAL (703.11 SEE NOTE E)

BOTTOM OF EXCAVATION

ALL GRASS AREAS SHALL BE SEEDED IN ACCORDANCE WITH ITEM 659 - SEEDING AND MULCHING.

SECTION A-A

Date: 1/1/20

Standard Construction Drawing

PAVEMENT & UTILITY CUT REPAIR STANDARDS

Drawing No.

STR-04
Sheet 2 of 10
GENERAL NOTES

RIGHT-OF-WAY PERMIT REQUIRED: A CITY OF MARYSVILLE RIGHT-OF-WAY PERMIT IS REQUIRED FOR ALL EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY, AS SET FORTH IN MARYSVILLE CITY CODE CHAPTER 901.

SCOPE OF WORK

THE CONTRACTOR SHALL FULLY COMPLY WITH THE CITY OF MARYSVILLE ADA RULES AND REGULATIONS, THE CITY OF MARYSVILLE GENERAL NOTES, SPECIFICATIONS, AND STANDARD DRAWINGS. AND THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION.

THIS WORK SHALL CONSIST OF PAVEMENT REMOVAL, NECESSARY EXCAVATION, AND PAVEMENT REPLACEMENT IN ACCORDANCE WITH THE DETAILS SHOWN HEREIN. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ODOT CONSTRUCTION AND MATERIALS SPECIFICATION (ODOT).

PROCEDURES USED FOR THE PAVEMENT REMOVAL AND REPLACEMENT SHALL NOT CAUSE SPALLING OR CRACKING OF ADJACENT PAVEMENT.

WHEN THE PAVEMENT IS REMOVED AND THE CONTRACTOR IS UNABLE TO COMPLETE THE REQUIRED REPLACEMENT IN TIME FOR IT TO BE OPENED TO TRAFFIC AS INDICATED ON THE PERMIT, THE EXCAVATION SHALL BE FILLED WITH THOROUGHLY COMPACTED ITEM 465 BITUMINOUS COLD MIX WITH A DURABLE SURFACE (OR APPROVED BITUMINOUS MATERIAL) OR PROPERLY PLATED PER CHAPTER 901 AND SHEETS 9 AND 10 OF THIS STANDARD DRAWING. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THESE TEMPORARY MEASURES WHILE THEY ARE IN SERVICE. THE COST OF PLACING, MAINTAINING, REMOVING AND DISPOSING OF THE TEMPORARY PATCHES OR PLATES WILL BE AT THE CONTRACTOR'S EXPENSE.

RESTORATION OF ANY SIDEWALK, CURB, STREET PAVEMENT (INCLUDING CRACK SEALING OR HEAT WELDING), ETC., SHALL OCCUR NO LATER THAN 30 DAYS AFTER CONCLUSION OF ANY UTILITY REPAIR OR INSTALLATION ACTIVITY. CONSTRUCTION ACTIVITY COMPLETED DECEMBER THROUGH APRIL SHALL BE RESOLVED NO LATER THAN MAY 31ST. ADDITIONAL PERMITS SHALL NOT BE ISSUED UNTIL THE VIOLATIONS ARE CORRECTED TO THE SATISFACTION OF THE DEPARTMENT OF PUBLIC SERVICE.

NEW PAVEMENT OR REPAVEMENT

A THREE (3) YEAR MORATORIUM SHALL BE ENFORCED FOR ALL NEW PAVEMENT OR REPAVEMENT/RESURFACING. NO PERMIT SHALL BE GRANTED FOR THE PURPOSE OF OPENING SUCH PAVEMENT FOR A PERIOD OF NO LESS THAN THREE (3) YEARS AFTER COMPLETION, EXCEPT FOR THE PURPOSE OF REPAIRING LEAKING PIPES OR WORK DEEMED NECESSARY BY THE DIRECTOR OF PUBLIC SERVICE, CITY ENGINEER OR DESIGNEE. EMERGENCY REPAIRS OR PAVEMENT OPENINGS WITHIN THE THREE (3) YEAR MORATORIUM SHALL HAVE ADDITIONAL AND SPECIFIC REQUIREMENTS BEYOND THE MINIMUM REQUIREMENT OF STD DWG STR-04.

SPECIAL IMPROVED STREETS

SPECIAL IMPROVED STREETS, AS APPROVED BY THE DIRECTOR OF PUBLIC SERVICE, CITY ENGINEER OR DESIGNEE SHALL HAVE FIVE (5) YEAR MORATORIUM. NO PERMIT SHALL BE GRANTED FOR THE PURPOSE TO MAKE ANY OPENING ON ANY HARD SURFACE AREAS SUCH AS PAVEMENT, SIDEWALK, CURB, ETC., WITHIN THE RIGHT OF WAY OF SPECIAL IMPROVED STREET FOR A PERIOD OF NO LESS THAN FIVE (5) YEARS AFTER COMPLETION OF SUCH HARD SURFACE AREA. EMERGENCY REPAIRS OR PAVEMENT OPENINGS WITHIN THE FIVE (5) MORATORIUM SHALL HAVE ADDITIONAL AND SPECIFIC REQUIREMENTS BEYOND THE MINIMUM REQUIREMENTS OF STD DWG STR-04 AND APPROVED ONLY BY THE DIRECTOR OF THE PUBLIC SERVICE AND CITY ENGINEER OR DESIGNEE.

TRAFFIC CONTROL

WHEN PAVEMENT CUTS OR REPAIRS REMOVE EXISTING STRIPING OR OTHERWISE RENDER STRIPING UNSERVICEABLE AS DETERMINED BY THE ENGINEER, TEMPORARY PAVEMENT MARKINGS PER ODOT 614 SHALL APPLY. TEMPORARY CLASS II MARKINGS SHALL BE PLACED IMMEDIATELY. CLASS II MARKINGS ARE ONLY FOR LANE LINES, CENTERLINES AND GORE MARKINGS AND PLACED FOR A MAXIMUM OF 14 DAYS. ALL TEMPORARY MARKINGS PLACED FOR A PERIOD LONGER THAN 14 DAYS BUT LESS THAN 30 DAYS SHALL BE ITEM 642 CLASS III MARKINGS. PERMANENT THERMOPLASTIC SHALL BE PLACED WITHIN 30 DAYS ON A SURFACE COURSE. WHEN THERMOPLASTIC IS TO BE INSTALLED, TEMPORARY MARKINGS SHALL BE CLASS III. ALL OVER WINTER TEMPORARY MARKINGS SHALL BE TYPE 1. ALL TEMPORARY PAVEMENT MARKINGS ON CONCRETE SHALL BE AS PER 740.06, TYPE I. PERMANENT PAVEMENT MARKINGS ON CONCRETE SHALL MATCH THE EXISTING PAVEMENT MARKINGS DIRECTED BY THE ENGINEER.

Date: 1/1/20

Standard Construction Drawing

CITY OF MARYSVILLE
Engineering

PAVEMENT & UTILITY CUT
REPAIR STANDARDS

Drawing No.
STR-04
Sheet 3 of 10
NOTE 'A' : TYPE 1 PAVEMENT REPAIR SEALING
FOR TYPE 1 PAVEMENT REPAIR SEALING OPTIONS - THE FOLLOWING METHODS ARE PERMITTED:
1. CRACK SEALING METHOD: SEAL THE PERIMITER SURFACE OF THE REPAIRED AREA BY APPLYING A NOMINAL 4 INCH STRIP OF APPROVED ITEM 423 - CRACK SEALING, TYPE I OR III.

NOTE 'B' : TYPE 1 PAVEMENT REPAIR RESURFACING (SEE SHEETS 6-8)
FOR TYPE 1 PAVEMENT REPAIR APPLICATIONS, THE FOLLOWING METHODS ARE PERMITTED:
1. IF LANE WIDTH TO BE RESURFACED: USE ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (BINDER MATCHING SURFACE COURSE) PLACED IN LIFTS NOT EXCEEDING 3 INCHES TO REPAIR PAVEMENT TO THE SURFACE. DURING THE LATER MILL AND ASPHALT OVERLAY OPERATION, USE ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1. 
2. IF NO LANE WIDTH RESURFACING: USE ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PLACED IN LIFTS NOT EXCEEDING 3 INCHES AND ITEM 441 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 PLACED AT A MAXIMUM 1.5 INCH LIFT THICKNESS. THE INTERMEDIATE COURSE MATERIAL IS NOT PERMITTED AS THE FINAL SURFACE COURSE.

THE ASPHALT BINDER FOR INTERMEDIATE AND SURFACE COURSE ASPHALT SHALL BE PG 70-22 ON ARTERIAL ROADWAYS, AND WHERE SPECIFIED BY THE CITY. ALL OTHER ROADS SHALL BE PG 64-22.

TRENCHES THAT REQUIRE FULL LANE RESURFACING SHALL INCLUDE FULL LANE RESURFACING ON ALL CONNECTING TRENCHES AND ASSOCIATED VALVE OR CASTING WORK AREAS ALONG ADJACENT STREETS (UTILITY SERVICE REPAIRS SHALL BE AS PER SHEETS 6, 7 AND 8). REGARDLESS OF THE LENGTH OF THE CONNECTING TRENCH.

WHEN AN EXCAVATION EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE ITEM 254 PLANNING OF A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1- 1/2 INCHES FOR THE ENTIRE LENGTH OF THE EXCAVATION. THE RESURFACING SHALL NOT INTRODUCE ANY LONGITUDINAL PAVEMENT JOINTS. WHEN RESURFACING OUTSIDE LANES, RESURFACING SHALL EXTEND TO THE FACE OF CURB OR EDGE OF PAVEMENT. IF PAVEMENT PLANNING DOES NOT PROVIDE A UNIFORM PLANNED SURFACE DUE TO THE EXISTING PAVEMENT CONDITION, THE DEPTH OF THE PAVEMENT REMOVAL AND RESURFACING SHALL BE ADJUSTED ACCORDINGLY. WHERE THE PROPOSED RESURFACING IS IN CLOSE PROXIMITY TO AN EXISTING LONGITUDINAL JOINT, THE RESURFACING SHALL BE EXTENDED TO MEET OR OVERLAP THAT JOINT. WHEN RESURFACING ADJOIN AN AREA WITH EXISTING OVERLAID GUTTER, THE RESURFACING SHALL EXTEND THE FULL LANE WIDTH TO THE EXISTING PAVEMENT EDGE AT THE FACE OF CURB. THE PLANNED AREA SHALL BE TACKED USING ITEM 407.02 MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 -CRACK SEALING, TYPE II OR III SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

WHEN AN EXCAVATION CROSSES LANES, ALL LANES AFFECTED SHALL REQUIRE PLANNING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE AFFECTED PAVEMENT AREA. WHEN EXCAVATION WORK FOR LATERALS CROSS LANES AT A FREQUENCY OF 2 OR MORE TRENCHES WITHIN 100 FT OF ROADWAY, THE REPAIR SHALL INCLUDE THE RESURFACING OF A FULL LANE WIDTH AS DESCRIBED ABOVE FOR THE AFFECTED LANES EXTENDING A MINIMUM OF 2 FT BEYOND THE LATERAL EXCAVATIONS LOCATED FARthest APART.

FULL LANE WIDTH RESURFACING OUTSIDE TRAVEL LANES SHALL EXTEND TO THE EDGE OF PAVEMENT FACE OF CURB UNLESS A SHOULDER WIDER THAN 4 FEET IS SEPARATED BY AN EXISTING LONGITUDINAL JOINT.

WHEN 2 OR MORE PAVEMENT REPAIRS ARE LOCATED WITHIN 100 FT OF EACH OTHER IN THE SAME LANE, THE REPAIR SHALL INCLUDE THE RESURFACING OF A FULL LANE WIDTH AS DESCRIBED ABOVE OF THE AFFECTED LANES EXTENDING A MINIMUM OF 2 FT BEYOND THE PAVEMENT REPAIRS LOCATED FARthest APART.

IF APPROVED BY THE CITY OF COLUMBUS, WHEN A PAVEMENT REPAIR AREA IS GREATER THAN 5 FT IN WIDTH AND/OR GREATER THAN 100 FT IN LENGTH, THE PAVEMENT REPAIR SECTION MAY CONFORM TO 3 INCHES OF ITEM 441 ASPHALT CONCRETE ON 6 INCHES OF ITEM 301 ASPHALT CONCRETE BASE (PLACED IN 2 LIFTS). LANE WIDTH RESURFACING REQUIREMENTS STILL APPLY. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION AND APPROVED BY THE CITY OF MARYSVILLE.

NOTE 'C' : WINTER OPERATIONS FLEXIBLE ASPHALT REPAIR
COLD MIX SHALL BE ITEM 405 BITUMINOUS COLD MIX OR OTHER COLD MIX APPROVED BY THE CITY OF MARYSVILLE. IN LIEU OF COLD MIX, THE CONTRACTOR MAY USE STOCKPILED ITEM 441 ASPHALT CONCRETE AND REHEAT IT TO PLACE IN CUT AS TEMPORARY PAVEMENT REPAIR. TYPE II PAVEMENT REPLACEMENT SHALL CONSIST OF FULL DEPTH ITEM 405 COLD MIX FOR SMALL EXCAVATIONS. THE TEMPORARY COLD MIX IS TO BE REPLACED WITH ITEM 441 ASPHALT CONCRETE FOLLOWING PAVEMENT REPAIR PROCEDURES. THIS WORK SHALL BE PERFORMED AS SOON AS ASPHALT IS AVAILABLE.
NOTE 'D' :  TYPE III REPAIR OF BRICK STREETS
1. WHEN EXCAVATING AND REPAIRING BRICK STREETS, THE MATERIAL USED FOR REPLACEMENT SHALL MATCH THE EXISTING.
2. BRICKS OR PAVERS REMOVED FROM A REPAIR AREA SHALL BE STORED IN A SAFE PLACE BY THE CONTRACTOR FOR REUSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY BRICKS OR PAVERS THAT ARE STOLEN OR DAMAGED, AT NO ADDITIONAL COST TO THE CITY.
3. IF BRICKS OR PAVERS ARE SUPPLIED BY THE CONTRACTOR, THEY MUST CLOSELY MATCH THE EXISTING BRICKS OR PAVERS AND FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED.
4. SAW CUTTING: ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN 1/2 ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAWCUTTING OF ADJACENT UNDISTURBED BRICK(S).
5. DURING REMOVAL OF THE EXISTING BASE MATERIAL, IT SHALL BE CUT BACK TO AS NEARLY VERTICAL AS POSSIBLE. IF SHEARING TO A LENGTH LESS THAN 1/2 ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAWCUTTING OF ADJACENT UNDISTURBED BRICK(S).
6. DURING INSTALLATION, THE BRICK IS TO BE RESET IN REASONABLY CLOSE CONFORMITY TO THE PATTERN OF THE EXISTING BRICK PAVEMENT ON ASETTING BED OVER ITEM 305 CONCRETE BASE. THE SETTING BED SHALL CONSIST OF 1 INCH OF SAND; WHEREAS, 3/4-INCH BITUMINOUS SETTING BED FOR NEWER STYLE ROADWAY PAVERS. THE CONCRETE BASE THICKNESS SHALL MATCH THE EXISTING BASE OR A MINIMUM OF 7 INCHES.
6A. BRICKS WITHOUT SPACING LUGS: THE MAXIMUM WIDTH OF A BRICK JOINT SHALL BE 1/2 INCH. THIS RESTRICTION SHALL ALSO APPLY TO THE JOINT FORMED ADJACENT TO THE PERIMETER OF A REPAIR AREA, WHERE THE ROWS MAY NOT BE PARALLEL TO ONE ANOTHER. ALL JOINTS SHALL BE FILLED WITH POLYMERIC SAND FROM THE APPROVED MATERIALS LIST FOLLOWING MANUFACTURER'S INSTRUCTIONS. THIS MAY REQUIRE MORE THAN ONE APPLICATION. FURTHER, MECHANICAL VIBRATION WILL BE REQUIRED FOR CONSOLIDATION OF DRY MORTAR MIX.

NOTE 'E' :  COMPACTED GRANULAR MATERIAL (703.11)
THIS METHOD OF BACKFILL CAN ONLY BE USED WITH FULL TIME CITY INSPECTION. AN INSPECTION FEE MUST BE POSTED WHEN THE PERMIT IS ISSUED.

NOTE F' :  CONCRETE BASE PAVEMENT PAVEMENT WITH A CONCRETE BASE
THE NEW CONCRETE BASE THICKNESS SHALL MATCH THE EXISTING (7 INCHES MINIMUM) AND IT SHALL BE PLACED TO THE LEVEL OF THE ADJACENT CONCRETE BASE WITH 3 INCHES OF ITEM 441 ASPHALT CONCRETE OVERLAY. LANE WIDTH RESURFACING REQUIREMENTS OF TYPE 1 STILL APPLY.

NOTE 'G' :  MINIMUM PAVEMENT RESTORATION WIDTH
THE TRENCH WIDTH FOR SMALL PIPES, CONDUITS AND CURB SHALL BE OF SUFFICIENT WIDTH TO ALLOW FOR THE PROPER PLACEMENT OF THE BACKFILL MATERIAL. THE PAVEMENT PORTION OF THE TRENCH SHALL BE A MINIMUM OF 2 FT IN WIDTH. THIS IS TO ALLOW FOR THE PROPER COMPACTION OF THE ASPHALT PAVEMENT. IF THE TRENCH FOR PLACING CONDUIT IS NARROWER THAN 2 FT THEN THE PAVEMENT PORTION SHALL BE CUT BACK TO PROVIDE THE 2 FT MINIMUM FOR PAVING OPERATIONS.

NOTE 'H' :  TEMPORARY CONCRETE PAVEMENT
CONCRETE MAY BE USED AS A PAVEMENT REPAIR OPTION AND A TEMPORARY PAVEMENT SURFACE FOR TYPE 1 PAVEMENT REPAIR IF APPROVED BY THE CITY. THE CONCRETE SHALL BE PLACED PER CMSC Item 255 AND FOLLOW THE REQUIREMENTS OF TYPE V PAVEMENT REPAIR. 2 INCHES OF ITEM 441 ASPHALT OVERLAY WILL BE REQUIRED OVER THE CONCRETE WHEN WORK IS COMPLETED. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION APPROVED BY THE CITY OF COLUMBUS.

NOTE 'I' :  SURFACE REPAIR SHAPE (SEE SHEET 8)
The surface repair of all irregular-shaped excavations shall always be a rectangle with parallel sides that are perpendicular to the direction of travel of the roadway.
ACCEPTABLE UTILITY CUT REPAIRS

EXCAVATION EXCEEDING 100’ IN LENGTH LOCATED WITHIN LANE

WHEN AN EXCAVATION EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE ITEM 254 PAVEMENT PLANING OF A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1-1/2 INCHES FOR THE ENTIRE LENGTH OF THE EXCAVATION. THE PLANED AREA SHALL BE THOROUGHLY CLEANED AND DRY, THEN TACKED USING ITEM 407 TACK COAT MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 CRACK SEALING, TYPE II OR III, SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

SEE NOTE "B"

FOR AN EXCAVATION IN A SINGLE LANE, PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR.

EXCAVATION EXCEEDING 100’ IN LENGTH BETWEEN OR CROSSING LANES

WHEN AN EXCAVATION CROSSES LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE PAVEMENT AREA WITHIN THE AFFECTED LANES FOR THE LIMITS OF THE EXCAVATION.

SEE NOTE "B"

FOR AN EXCAVATION IN MULTIPLE LANES, PERFORM A FULL-LANE-WIDTH PLANE AND REPAIR FOR ALL IMPACTED LANES.

LEGEND

EXISTING PAVEMENT

NEW PAVEMENT REPAIR

NOTE: EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

NOT TO SCALE

Date: 1/1/20

Standard Construction Drawing

Drawing No.

STR-04

Sheet 6 of 10
ACCEPTABLE UTILITY CUT REPAIRS

UTILITY EXCAVATIONS CROSSING ONE LANE WITHIN 100'

WHEN EXCAVATION WORK FOR LATERALS CROSSES A LANE AT A FREQUENCY OF 2 OR MORE LATERAL EXCAVATIONS WITHIN 100 FEET OF EACH OTHER, THE REPAIR SHALL INCLUDE ITEM 254 PAVEMENT PLANING FOR THE FULL LANE WIDTH TO A DEPTH OF 1-1/2 INCHES AND FOR A MINIMUM OF 2 FEET BEYOND THE FURTHEST LATERAL EXCAVATIONS. THE PLANED AREA SHALL BE THOROUGHLY CLEANED AND DRY, THEN TACKED USING ITEM 407 TACK COAT MATERIAL PRIOR TO PLACING AND COMPACTING APPROVED ASPHALT CONCRETE WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 CRACK SEALING, TYPE II OR III, SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

NOT ACCEPTABLE

SEE NOTE "B"

ACCEPTABLE

FOR MULTIPLE EXCAVATIONS WITHIN 100', PERFORM A FULL-LANE-WIDTH PLANING AND REPAIR.

UTILITY EXCAVATIONS CROSSING MULTIPLE LANES WITHIN 100'

WHEN EXCAVATION WORK CROSSES MULTIPLE LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE PAVEMENT AREA WITHIN THE AFFECTED LANES FOR THE LIMITS OF THE LATERAL EXCAVATIONS.

NOT ACCEPTABLE

SEE NOTE "B"

ACCEPTABLE

FOR MULTIPLE EXCAVATIONS WITHIN 100' IN MULTIPLE LANES, PERFORM A FULL-LANE-WIDTH PLANING AND REPAIR FOR ALL IMPACTED LANES.

LEGEND

EXISTING PAVEMENT

NEW PAVEMENT REPAIR

NOTE:
EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.
NOTE: EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

LEGEND

EXISTING PAVEMENT
NEW PAVEMENT REPAIR

NOTE: EXCAVATIONS ARE CONCEPTUAL ONLY. SEE DETAILED CROSS SECTION AND PROFILE SHEETS FOR CONSTRUCTION PROCEDURES AND WIDTHS.

NOT TO SCALE

Date: 1/1/20
Standard Construction Drawing

PAVEMENT & UTILITY CUT REPAIR STANDARDS

Drawing No.
STR-04
Sheet 8 of 10
STEEL PLATE

EXCAVATION CUT

STREET SURFACE

12" MIN. OVERLAP REQUIRED (ALL SIDES) FROM EDGE OF EXCAVATION CUT TO EDGE OF PLATE.

ALL STEEL PLATES MUST HAVE THE FOLLOWING INFORMATION CLEARLY AND LEGIBLY 'ETCHED' INTO THEIR TOP SURFACE:
1. OWNER'S NAME.
2. A 24 HOUR EMERGENCY CONTACT PHONE NUMBER.

NOTE:
STEEL PLATE INSTALLATION DURATION SHALL BE APPROVED ON A PER PROJECT BASIS BY THE CITY ENGINEER. CONTACT CITY OF MARYSVILLE PUBLIC SERVICE DEPT. TO REPORT LOCATION OF STEEL PLATE (937) 645-7350.

MINIMUM THICKNESS OF STEEL PLATES

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<th>SIZE OF PLATE</th>
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<td>4' x 4'</td>
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<td>4' x 6'</td>
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<td>LARGER</td>
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NO STEEL PINS ARE PERMITTED.
SIGNAGE REQUIRED PER APPROVED MOT PLANS

NOT TO SCALE

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<td>REPAIR STANDARDS</td>
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SIGNS ARE TO BE 36"x36" FOR RESIDENTIAL AND DOWNTOWN AREAS AND 48"x48" ON MULTI-LANE, HIGH SPEED (45 MPH OR GREATER) ROADWAYS.

SIGN W8-1 IS REQUIRED AT ALL PLATE LOCATIONS. SIGN W8-24 IS REQUIRED WHEN POSTED SPEED IS 35 MPH OR GREATER.

SIGNS SHOULD BE PLACED IN ALL DIRECTIONS THAT ARE AFFECTED. SIGN SPACING SHALL INCREASE TO 250' WHEN SPEED EXCEEDS 45 MPH.

SIGNS SHOULD BE DUAL MOUNTED ON MULTI-LANE, ONE-WAY ROADWAYS.

ALL SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD).

SIGNS SHALL NOT BE PLACED IN A MANNER THAT WOULD BLOCK PARKING, BIKE LANES, OR RESTRICT A PEDESTRIAN FROM USING ANY SIDEWALK INCLUDING CURB RAMPS. PAR SHALL BE MAINTAINED AT ALL TIMES.
Curb and gutter aggregate course—where the roadway pavement has aggregate base, match the bottom of the curb and gutter aggregate course to the top of subgrade. Ensure roadway sub base meets underdrain aggregate.

At curb ramp locations, the gutter slope shall not exceed 4.7%. Transition gutter over 3’ to match existing curb & gutter slope. The pavement shall be flush at the gutter in front of curb ramps.

Notes:
1. Immediately after finishing, concrete shall be cured in an approved manner.
2. No concrete shall be placed until temperature is 35 degrees and rising, or in a manner approved by the city.
3. Concrete shall be protected from freezing.
4. Expansion joint material shall be reflex rubber or approved equivalent.
5. All exposed surfaces of concrete curb shall have a brush finish.
6. Combined curb and gutter shall be constructed using ODOT Class C concrete. The mix design shall conform to ODOT 499, and shall not contain fly ash or slag.
7. Construct contraction joints at 10 foot intervals to a minimum depth of 2 inches. Expansion joints are to be constructed at a maximum of 200 feet intervals.
8. If the top of the subgrade is below the bottom of the curb, the underdrain shall be adjusted to keep the top of the underdrain at least 8" below the top of the subgrade; aggregate depth between bottom of curb and top of underdrain may vary if this occurs.
9. Subgrade compaction shall be completed before underdrain installation.
10. When a curb and gutter inlet is installed, the top of the casting shall be the same as the top of curb elevation. The edge of pavement shall be 3/8” higher than the grate wherever they meet.
11. For replacement work, the curb shall be removed at an existing joint or no closer than 5 feet from an existing joint.
12. An expansion joint shall be installed no more than 5 feet away from an installed curb and gutter inlet.
13. 1/2” expansion material will be installed behind the curb when a concrete walk, drive, or other item is adjoining it.
14. When connecting to an existing combination curb and gutter, transition the gutter pan as required, over a distance of 10 feet maximum, to maintain positive drainage.
15. Concrete quantity: 1.59 C.F. concrete per l.f.
NOTES:

1. IMMEDIATELY AFTER FINISHING, CONCRETE SHALL BE CURED IN AN APPROVED MANNER.
2. NO CONCRETE SHALL BE PLACED UNTIL TEMPERATURE IS 35 DEGREES AND RISING, OR IN A MANNER APPROVED BY THE CITY.
3. CONCRETE SHALL BE PROTECTED FROM FREEZING.
4. EXPANSION JOINT MATERIAL SHALL BE REFLEX RUBBER OR APPROVED EQUIVALENT.
5. ALL EXPOSED SURFACES OF CONCRETE CURB SHALL HAVE A BRUSH FINISH.
6. CURB SHALL BE CONSTRUCTED USING ODOT CLASS C CONCRETE. THE MIX DESIGN SHALL CONFORM TO ODOT 499, AND SHALL NOT CONTAIN FLY ASH OR SLAG.
7. CONSTRUCT CONTRACTION JOINTS AT 10 FOOT INTERVALS TO A MINIMUM DEPTH OF 2 INCHES. EXPANSION JOINTS ARE TO BE CONSTRUCTED AT A MAXIMUM OF 200 FEET INTERVALS.
9. SUBGRADE COMPACTION SHALL BE COMPLETED BEFORE UNDERDRAIN INSTALLATION.
11. FOR REPLACEMENT WORK, THE CURB SHALL BE REMOVED AT AN EXISTING JOINT OR NO CLOSER THAN 5 FEET FROM AN EXISTING JOINT.
12. AN EXPANSION JOINT SHALL BE INSTALLED NO MORE THAN 5 FEET AWAY FROM AN INSTALLED CURB AND GUTTER INLET.
13. 1/2" EXPANSION MATERIAL WILL BE INSTALLED BEHIND THE CURB WHEN A CONCRETE WALK, DRIVE, OR OTHER CONCRETE ITEM IS ADJOINING IT.
14. UNDERDRAIN IS NOT REQUIRED WHEN CURB IS ALONG CONCRETE MEDIAN.
15. CONCRETE QUANTITY: 0.74 C.F. CONCRETE PER L.F.

Date: 1/1/20

Standard Construction Drawing

TYPE 6 18 IN. STRAIGHT CURB

Drawing No.

STR-06
CONCRETE SIDEWALK

1.56% MAX.

6' ITEM - 608

UTILITY STRIP

10% MAX.

6' ITEM - 452

CONCRETE SIDEWALK

1/2" EXPANSION JOINT

SEPARATE CURB/CURB & GUTTER

CURBED ROADWAY

FOR USE ON A PARCEL WITH A SINGLE DWELLING

* CURB OR COMBINED CURB AND GUTTER SHALL BE TAKEN OUT AND REPLACED WITH CONCRETE, SEPARATED FROM THE DRIVE BY 1/2" PREMOLDED EXPANSION JOINT. WHEN LESS THAN 5 FT. OF A CURB SECTION REMAINS AFTER THE CURB CUT IS LOCATED, IT SHALL ALSO BE REMOVED AND REPLACED. CURB SHALL BE CONSTRUCTED IN MINIMUM 5 FT. SECTIONS AND MAXIMUM 10 FT. SECTIONS.

** SIDEWALK WIDTH SHALL BE PER STANDARD DRAWING STR.01. SIDEWALK THICKNESS SHALL BE 6" CONCRETE TO ONE FULL PANEL (MIN. 5 FT.) BEYOND THE EDGE OF THE FULL WIDTH SECTION OF THE DRIVE.

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH. MATCH ADJACENT WALK WIDTH (5' MIN).

NOTES:
1. IMMEDIATELY AFTER FINISHING, CONCRETE SHALL BE CURED IN AN APPROVED MANNER.
2. NO CONCRETE SHALL BE PLACED UNTIL TEMPERATURE IS 35 DEGREES AND RISING, OR IN A MANNER APPROVED BY THE CITY.
3. CONCRETE SHALL BE PROTECTED FROM FREEZING.
4. EXPANSION JOINT MATERIAL SHALL BE REFLEX RUBBER OR APPROVED EQUIVALENT.
5. LOCATE EXPANSION JOINT (EJ) AT EDGE OF WALK WHEN CURB, GUTTER, AND APPROACH ARE POURED AT THE SAME TIME WITHOUT SIDEWALK.
6. LOCATE EXPANSION JOINT (EJ) AT BACK OF CURB WHEN APPROACH IS POURED SEPARATE FROM CURB & GUTTER.
7. NO EXPANSION JOINT (EJ) IS TO BE USED WHEN GUTTER, APPROACH, AND SIDEWALK ARE POURED AT THE SAME TIME.
8. EXPANSION JOINT (EJ) MATERIAL SHALL BE SPONGE RUBBER AND CONFORM TO ODOT 705.03.
9. UNDERDRAIN SHALL BE MAINTAINED OR REPLACED IF DAMAGED.
**SEPARATE CURB/CURB & GUTTER**

1.56% MAX.

**CURB SECTION**

SECTION A-A

**CURBED ROADWAY, WITH FLARES**

**ITEM 609 - CURB (DROP)**

1/2" EXPANSION JOINT

**ITEM 608 - CURBED ROADWAY, WITH FLARES**

1'-0" MIN.

**SECTION B-B**

**ITEM 605 - 4" UNDERDRAIN**

#57 AGGREGATE BASE (T=2")

**ITEM 608 - CURBED ROADWAY, WITH FLARES**

A

5'-0" MIN.

**B**

5'-0" MIN.

PAR ACROSS DRIVE

A

B

5'-0" MIN.

PAR ACROSS DRIVE

**Notes:**

1. IMMEDIATELY AFTER FINISHING, CONCRETE SHALL BE CURED IN AN APPROVED MANNER.
2. NO CONCRETE SHALL BE PLACED UNTIL TEMPERATURE IS 35 DEGREES AND RISING, OR IN A MANNER APPROVED BY THE CITY.
3. CONCRETE SHALL BE PROTECTED FROM FREEZING.
4. EXPANSION JOINT (EJ) MATERIAL SHALL BE REFLEX RUBBER OR APPROVED EQUIVALENT.
5. LOCATE EXPANSION JOINT (EJ) AT EDGE OF WALK WHEN CURB, GUTTER, AND APPROACH ARE POURED AT THE SAME TIME WITHOUT SIDEWALK.
6. LOCATE EXPANSION JOINT (EJ) AT BACK OF CURB WHEN APPROACH IS POURED SEPARATE FROM CURB & GUTTER.
7. NO EXPANSION JOINT (EJ) IS TO BE USED WHEN GUTTER, APPROACH, AND SIDEWALK ARE POURED AT THE SAME TIME.
8. UNDERDRAIN SHALL BE MAINTAINED OR REPLACED IF DAMAGED.

**Standard Construction Drawing**

Date: 1/1/20

**STR-08**
** MINIMUM 20' R.

5' MIN. PAR TANGENT

1.56% 8% MAX.

SIDEWALK

CONTROL JOINT

UNDERDRAIN, IF APPLICABLE

FACE OF CURB

5' MIN. & 10' MAX. CURB SECTIONS

SIDEWALK

8" ITEM - 608

A-A SEE SHEET 2

SEE SCD 2171

TRANSITION OR ADA RAMP PER STD DWG STR-16

NOTES:

1. IMMEDIATELY AFTER FINISHING, CONCRETE SHALL BE CURED IN AN APPROVED MANNER.
2. NO CONCRETE SHALL BE PLACED UNTIL TEMPERATURE IS 35 DEGREES AND RISING, OR IN A MANNER APPROVED BY THE CITY.
3. CONCRETE SHALL BE PROTECTED FROM FREEZING.
4. EXPANSION JOINT (EJ) MATERIAL SHALL BE REFLEX RUBBER OR APPROVED EQUIVALENT.
5. LOCATE EXPANSION JOINT (EJ) AT EDGE OF WALK WHEN CURB, GUTTER, AND APPROACH ARE POURED AT THE SAME TIME WITHOUT SIDEWALK.
6. LOCATE EXPANSION JOINT (EJ) AT BACK OF CURB WHEN APPROACH IS POURED SEPARATE FROM CURB & GUTTER.
7. NO EXPANSION JOINT (EJ) IS TO BE USED WHEN GUTTER, APPROACH, AND SIDEWALK ARE POURED AT THE SAME TIME.
8. UNDERDRAIN SHALL BE MAINTAINED OR REPLACED IF DAMAGED.
9. NO DOWELS REQUIRED ON DRIVES.
SECTION A-A WITH STRAIGHT CURB

VARIABLE SLOPE
8% MAX.

5'-0" MIN.
PAR ACROSS DRIVE
1.56%

MAINTAIN 6" CURB HEIGHT OR TAPER CURB HEIGHT TO 0" FROM STREET TO PAR
8% MAX.

1/2" EXPANSION JOINT

#57 AGGREGATE BASE (T=2")

ITEM 609 - CURB (DROP)
CONC. APPROACH MAY BE POURED INTEGRAL WITH CURB WITH PRIOR CITY APPROVAL

18" STRAIGHT CURB STR-06

SECTION A-A WITH CURB AND GUTTER

VARIABLE SLOPE
8% MAX.

5'-0" MIN.
PAR ACROSS DRIVE
1.56%

3'-0" MIN.
8% MAX.

1/2" EXPANSION JOINT

#57 AGGREGATE BASE (T=2")

ITEM 609 - CURB & GUTTER (DROP)

CURB & GUTTER STR-05

PAR = PEDESTRIAN ACCESS ROUTE. SET PAR THROUGH APPROACH AT SIDEWALK GRADE TO AVOID RAMP OR TRANSITION. IF NOT POSSIBLE, THEN MINIMIZE TRANSITION FROM SIDEWALK TO APPROACH.

NOT TO SCALE
A minimum 7ft wide pedestrian access route (PAR) shall be provided between opposing ramps and shall have a cross-slope (the longitudinal street slope) no greater than 1.56%.

Date: 1/1/20
Standard Construction Drawing

29'-0" STREET PAVEMENT SECTION

NOT TO SCALE

Drawing No.
STR-10
A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%. 

NOT TO SCALE

35'-0" STREET PAVEMENT SECTION
A MINIMUM 7FT WIDE PEDESTRIAN ACCESS ROUTE (PAR) SHALL BE PROVIDED BETWEEN OPPOSING RAMPS AND SHALL HAVE A CROSS-SLOPE (THE LONGITUDINAL STREET SLOPE) NO GREATER THAN 1.56%.

NOT TO SCALE
OPTION A  
ASPHALT PAVEMENT

OPTION B  
COMPOSITE PAVEMENT

PAVEMENT SECTION ITEMS

1. MARYSVILLE ITEM 1540- ASPHALT REJUVENATING AGENT (RECLAIMITE)
2. ITEM 441 ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (448), PG70-22 1.5" 1.5"
3. ITEM 441 ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (448), PG64-22 1.5" 2"
4. ITEM 407 - NON-TRACKING TACK COAT PER 407.06 PER 407.06
5. ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 4" 6"
6. ITEM 304 - AGGREGATE BASE 4" 4"
7. ITEM 305 - PORTLAND CEMENT CONCRETE BASE, RCC 6" 7"
8. ITEM 204 - COMPACTED SUBGRADE

NOT TO SCALE

Date: 1/1/20  
Standard Construction Drawing

STREET PAVEMENT SECTIONS  
Drawing No.  
STR-13
PAVEMENT RELIEF JOINTS SHALL BE A MINIMUM 400' APART, NOT TO EXCEED MAXIMUM OF 800', WHEN DISTANCE BETWEEN INTERSECTIONS OR END OF CUL-DE-SAC EXCEEDS 800' AND WHEN DISTANCE IS BETWEEN INTERSECTIONS OR END OF CUL-DE-SAC EXCEEDS 800'.

ONE RELIEF JOINT BETWEEN ALL INTERSECTIONS

PAVEMENT RELIEF JOINTS SHALL BE A MINIMUM 400' APART, NOT TO EXCEED MAXIMUM OF 800', WHEN DISTANCE BETWEEN INTERSECTIONS OR END OF CUL-DE-SAC EXCEEDS 800' AND WHEN DISTANCE IS BETWEEN INTERSECTIONS OR END OF CUL-DE-SAC EXCEEDS 800'.

END OF EXISTING CONCRETE PAVEMENT

RELIEF JOINT AT END OF EXISTING PAVEMENT AND AT END OF BASE POUR.

TYPICAL LOCATION PLAN

48"

RCC BASE OR PORTLAND CEMENT CONCRETE BASE, AS SPECIFIED

T/3 - ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE

T/3 - ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE

T/3 - ITEM 441 - ASPHALT CONCRETE, INTERMEDIATE COURSE

NOTES:

1. 2" EXPANSION MATERIAL SHALL BE PLACED AT ALL PAVEMENT RELIEF JOINTS IN THE STRAIGHT CURB, OR CURB AND GUTTER AND CENTERED ON THE PAVEMENT RELIEF JOINT.

2. ALL RESIDENTIAL RELIEF JOINTS SHOULD BE LOCATED OR RELOCATED AWAY FROM DRIVEWAYS, IF POSSIBLE.

★ USE ITEM 441 - ASPHALT CONCRETE, SURFACE COURSE IF LAYER IS TO BE A SURFACE COURSE USE TYPE 2 FOR THE INTERMEDIATE COURSE ASPHALT.

NOT TO SCALE

Date: 1/1/20

Standard Construction Drawing

RIGID PAVEMENT RELIEF JOINT

Drawing No.

STR-14
EDGE OF PAVEMENT OR FACE OF CURB

ROAD PAVEMENT

1'-0"

INFLUENCE LINE

PIPE INSIDE OF THIS LINE SHALL BE INSTALLED USING STRUCTURAL BACKFILL ODOT ITEM 304 PER 703.11

COMPACTED GRANULAR MATERIAL ODOT ITEM 304 PER 703.11

COMPACTED BACKFILL (703.16)

NOT TO SCALE

BACKFILL WITHIN RIGHT-OF-WAY

Date: 1/1/20

Drawing No. STR-15
ALL NUMBERING BEGINS FROM THE NORTHWEST CORNER AND GOES CLOCKWISE. EACH CORNER HAS ITS SPECIFIC NUMBER THAT SHALL BE USED IF CURB RAMPS ARE IN THESE LOCATIONS.

* MEDIAN RAMPS ON THE WEST AND/OR EAST LEGS WOULD BE M1, M8, AND M4, M5 RESPECTIVELY.

NOT TO SCALE

Date: 1/1/20

Standard Construction Drawing

CURB RAMP NUMBERING SYSTEM

Drawing No.

STR-16
Sheet 1 of 14
1. CURB RAMPS SHALL BE INSTALLED PER STD DWGS STR-01, STR-16, ODOT 608, AND DPS ADA RULES AND REGULATIONS.
2. MATERIAL: THE RAMP PANEL AND FLARED SIDES SHALL BE CONCRETE.
3. RAMPS TYPES ARE CATEGORIZED BELOW IN TIERS BY REQUIRED ORDER OF USE. LOCATING THE RAMP AS CLOSE AS POSSIBLE TO THE INTERSECTION FOLLOWING THE CURB RAMP DESIGN BOUNDARY CONTAINED IN THE ADA RULES AND REGULATIONS IS THE FIRST PRIORITY. THE DESIGNER SHALL NOT USE A LOWER TIERED RAMP WITHOUT FIRST DETERMINING AND HAVING JUSTIFICATION THAT THE UPPER TIER RAMPS ARE NOT CONSTRUCTIBLE.

CITY OF MARYSVILLE RAMP TYPE HIERARCHY
TIER 1 (THESE RAMPS SHOULD BE UTILIZED WHENEVER POSSIBLE.)
- TYPE H
TIER 2 (THESE PERPENDICULAR RAMPS SHOULD BE UTILIZED WHENEVER TIER 1 RAMPS CANNOT BE USED.)
- TYPE A
- TYPE C
- TYPE D
TIER 3 (PARALLEL RAMPS SHOULD ONLY BE USED DUE TO RIGHT OF WAY (ROW) OR OTHER SPACE CONSTRAINTS WHERE A TIER 1 OR 2 RAMP CANNOT BE USED.)
- TYPE P-4 (4' OF ROW AVAILABLE)
- TYPE P-5 (5' OF ROW AVAILABLE)
- TYPE P-7 (7' OF ROW AVAILABLE)
- TYPE P-6 (6' OF ROW AVAILABLE)
TIER 4 (TIER 4 RAMPS CAN ONLY BE USED WITH WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE. TIER 3 RAMPS SHALL BE IDENTIFIED IN THE DESIGN SCOPE OR APPROVAL REQUESTED BY THE DESIGNER JUSTIFYING THAT THIS RAMP TYPE IS NECESSARY.)
- RADIAL RAMPS
- SINGLE SHARED RAMPS

SPECIALTY RAMPS (SHALL ONLY BE USED FOR THE LISTED SITUATION, OR WRITTEN APPROVAL BY THE CITY ENGINEER OR DESIGNEE.)
- TYPE L-1 - ONLY FOR MEDIAN CROSSINGS
- TYPE L-2 - ONLY FOR MEDIAN CROSSINGS

4. RAMP RUNNING SLOPE: THE RUNNING SLOPE SHALL BE NO GREATER THAN 7.69%.
5. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.
6. LANDINGS:
   - LANDINGS SHALL HAVE A MAXIMUM 1.56% SLOPE IN ALL DIRECTIONS FOR ALL CURB RAMP TYPES.
   - A PARALLEL RAMPS, CONstrained ON TWO (2) SIDES, E.G., TYPE P-7, SHALL HAVE A LANDING 5-FT WIDE BY 5-FT DEEP A PARALLEL RAMPS, CONstrained ON ONE (1) SIDE, E.G., TYPES P-4, 5, & 6, SHALL HAVE A LANDING NO LESS THAN 4-FT MINIMUM BY 5-FT. THE 5-FT DIMENSION SHALL BE PROVIDED AS SHOWN IN THESE STANDARD DRAWINGS.
   - ALL PERPENDICULAR RAMPS SHALL HAVE A LANDING NO LESS THAN 4-FT MINIMUM BY 4-FT. A PERPENDICULAR RAMPS THAT IS CONstrained AT THE BACK OF SIDEWALK SHALL HAVE A LANDING 4-FT BY 5-FT. THE 5-FT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF RAMPS RUN, AS SHOWN IN THESE STANDARD DRAWINGS.
   - LAND AT INTERSECTING SIDEWALKS - WHEREVER SIDEWALKS INTERSECT, THERE SHALL BE A LANDING.
7. STREET COUNTER SLOPE: THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 5% FOR A MINIMUM OF 2-FT.
8. CLEAR SPACE: AT MARKED CROSSINGS THE RAMP AND STREET CLEAR SPACE MUST BE FULLY CONTAINED WITHIN THE MARKED CROSSWALK. AT UNMARKED CROSSINGS THE RAMP AND CLEAR MUST BE WITHIN THE CURB RAMP DESIGN BOUNDARY.
9. SURFACES: RAMPS, FLARE, AND LANDING SURFACES MUST BE STABLE AND SLIP RESISTANT. RAMPS SHALL BE BROOM FINISHED, TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP OR LANDING.
10. DETECTABLE WARNINGS: DETECTABLE WARNINGS SHALL BE INSTALLED ACCORDING TO THESE STANDARD DRAWINGS, ODOT 608, AND ADA RULES AND REGULATIONS. DETECTABLE WARNINGS SHALL BE DARK GRAY AND CAST IN PLACE.
11. CURB WALLS MAY BE NECESSARY FOR CURB RAMP CONSTRUCTION WHERE SPACE RESTRICTION DO NOT ALLOW FOR GRADING WITHIN ROW AT A 3:1 SLOPE OR FLATTER. THE MAXIMUM HEIGHT OF 6" THICK, NON-REINFORCED CURB WALL IS 12" ABOVE THE SIDEWALK SURFACE. THE BURIED PORTION OF THE NON-REINFORCED CURB WALL SHALL BE EQUAL TO THE EXPOSED REVEAL. RETAINING EMBANKMENT TO A HEIGHT OF MORE THAN 12" ABOVE THE SIDEWALK WILL REQUIRE A DESIGNED RETAINING WALL OR CELLULAR WALL.
12. RAMPS MUST BE CONSTRUCTED TO ALLOW FOR POSITIVE DRAINAGE. THE RAMP ITSELF SHALL NOT HOLD EXCESS WATER AND THE ADJACENT PAVEMENT SHALL NOT BE ALTERED TO INHIBIT FLOW OF WATER. IF AN EXISTING CONSTRAINT PREVENTS BUILDING THE RAMP AND ADJACENT AREA WITH POSITIVE DRAINAGE IT MUST BE BROUGHT TO THE CITY'S ATTENTION PRIOR TO CONSTRUCTION AND FINAL DESIGN APPROVED BY THE CITY.
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CODED NOTES:
A SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
SECTION A - A

COODED NOTES:

A SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

NOT TO SCALE

Date: 1/1/20

CURB RAMP TYPE C

Engineering

Drawing No.
STR-16
Sheet 4 of 14
The obstruction must be 15" or closer to the face of curb.

NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

CODED NOTES:
SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

SECTION A - A

NOT TO SCALE
**CODED NOTES:**

A. SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

B. PROVIDE POSITIVE DRAINAGE ALONG CURBLINE, SHOULD BE 1.00% MINIMUM SLOPE

C. WHERE THE DISTANCE FROM EITHER END OF THE BOTTOM OF THE GRADE BREAK TO THE BACK OF CURB IS GREATER THAN 5-FT, THE DETECTABLE WARNING SHALL BE PLACED AT THE BACK OF CURB

D. FOR THE LENGTH OF THE RAMP, THE UTILITY STRIP MAY BE REMOVED AND REPLACED WITH 8" CONCRETE (ITEM 608), PROVIDED THE UTILITY STRIP IS NO WIDER THAN 2-FT

**NOTES:**

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

2. RAMP L-1 SHALL BE USED IN ALL CIRCUMSTANCES WHERE NOT PROHIBITED BY DRAINAGE ISSUES. AN L-1 RAMP SHOULD NOT BE PLACED IN A WAY THAT WOULD CONVEY THE CURB FLOW OF WATER THROUGH THE MEDIAN PASTTHROUGH. WHERE THE ROADWAY CROSS-SLOPE DIRECTS WATER TOWARDS THE MEDIAN AND FLOWS THROUGH THE GUTTER LINE ADJACENT TO THE PASTTHROUGH, USE AN L-2 RAMP.

3. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 14 OF 14, NOTE 1)
NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
2. MEDIANS / ISLANDS WITHIN COMMERCIAL DRIVES REQUIRE DETECTABLE WARNINGS ONLY WHEN OPPOSING CURB RAMPS REQUIRE DETECTABLE WARNINGS. (SEE SHEET 14 OF 14, NOTE 1).
3. TYPE L-2 RAMPS ARE ONLY TO BE INSTALLED WHEN IT IS NOT POSSIBLE TO INSTALL A TYPE L-1 RAMP DUE TO DRAINAGE ISSUES.
4. TYPE L-2 RAMPS CAN ONLY BE USED ON MEDIANS 8 FEET WIDE OR MORE.
Coded Notes:

A) SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

Notes:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
**CODED NOTES:**

A) SEE SHEET 14 FOR DETECTABLE WARNING DETAILS
B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

**NOTES:**

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.
CODED NOTES:

A) SEE SHEET 14 FOR DETECTABLE WARNING DETAILS
B) EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

NOTES:

1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

SECTION A-A

NOT TO SCALE
SECTION A-A

CODED NOTES:

A SEE SHEET 14 FOR DETECTABLE WARNING DETAILS
B EXPOSED REVEAL MUST EQUAL BURIED DEPTH; 12" MAXIMUM REVEAL; FOR ADDITIONAL DETAILS SEE CURB WALL SPECIFICATION

NOTES:
1. SEE SHEET 2 FOR ADDITIONAL DETAILED INFORMATION.

NOT TO SCALE
GENERAL NOTES:
1. WRITTEN APPROVAL FROM THE CITY ENGINEER OR AN AUTHORIZED REPRESENTATIVE SHALL BE OBTAINED PRIOR TO THE DESIGN OR CONSTRUCTION OF GRANITE OR AN ALTERNATE MATERIAL CURB RAMP.
2. ALONG WITH THE REQUIREMENT OF THIS SHEET FOR BRICK OR GRANITE CURB RAMPS, ALL OTHER APPLICABLE REQUIREMENTS OF STR-16 SHALL BE FOLLOWED.
3. BRICK OR GRANITE CURB RAMPS SHALL BE TYPED PER STR-16. TYPICALLY TYPE A OR TYPE D WILL BE USED. ALL APPLICABLE DIMENSIONS AND REQUIREMENTS FOR THE SELECTED TYPE OF RAMP SHALL BE FOLLOWED.
4. LONG FLARES WILL BE USED WHEREVER POSSIBLE. A MODIFIED FLARE SHALL BE USED WHEN AN OBSTRUCTION EXISTS.

CODED NOTES:
A SEE SHEET 14 FOR DETECTABLE WARNING DETAILS

NOT TO SCALE
NOTES:

1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY, EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.

2. DETECTABLE WARNINGS SHALL BE PROVIDED 24" IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.

3. DETECTABLE WARNINGS SHALL BE DARK GRAY AND CAST IN PLACE.

4. DETECTABLE WARNINGS SHALL BE PLACED 6" TO 8" BEHIND THE FACE OF CURB AND BEHIND THE CURB JOINT.

5. CAST IN PLACE OR ANY NON-SURFACE APPLIED DETECTABLE WARNING SHALL HAVE A MINIMUM OF 3" OF CONCRETE ON EACH SIDE OF THE WARNING.
### TABLE I: STREET NAME SIGN DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>GROUP &quot;A&quot; (POST TOP MOUNTED)</th>
<th>GROUP &quot;B&quot; ARTERIAL (POST TOP MOUNTED)</th>
<th>GROUP &quot;C&quot; SUPPORT POLL/MAST ARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (BLADE HEIGHT)</td>
<td>8&quot;</td>
<td>12&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>M (MARGIN)</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
</tr>
<tr>
<td>D (DISTANCE FROM EDGE)</td>
<td>3&quot;</td>
<td>3&quot;</td>
<td>4&quot;</td>
</tr>
<tr>
<td>MAIN TEXT HEIGHT</td>
<td>4&quot;</td>
<td>6&quot;</td>
<td>10&quot;</td>
</tr>
<tr>
<td>SUFFIX/PREFIX TEXT HEIGHT</td>
<td>2 1/2&quot;</td>
<td>3 3/4&quot;</td>
<td>6 2/3&quot;</td>
</tr>
<tr>
<td>&quot;CITY OF MARYSVILLE/YEAR&quot;</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

NOT TO SCALE

Date: 1/1/20

Standard Construction Drawing

TYPICAL STREET NAME SIGN

Drawing No. STR-17

Sheet 1 of 6
STAINLESS STEEL SET BOLTS (4)

SIGNS SHALL BE INSERTED INTO POLE TO PROVIDE ROTATIONAL SUPPORT

STAINLESS STEEL SET BOLTS (4)
(SEE NOTE 4)

STAINLESS STEEL SET BOLTS (4)
(SEE NOTE 4)

SQUARE POST BRACKET FOR FLAT BLADE STREET SIGN
(SEE NOTE 4)

SIGN BRACKET CROSS PIECE FOR FLAT BLADE STREET SIGN
(SEE NOTE 4)

12', 2 3/8" GALVANIZED CYLINDRICAL STEEL SIGN POST
(SEE NOTE 4)

12" #3 REBAR SHALL BE INSERTED INTO POLE TO PROVIDE ROTATIONAL SUPPORT

TYPICAL SLOT WIDTH = 0.140"

MACHINED COUNTER-SUNK HOLES
(SEE NOTE 4)

NOTE:
- FOR OVERHEAD MAST ARM MOUNTED STREET NAME SIGNS THE ASTRO SIGN-BRAC GALAXY CABLE MOUNT MODEL AG-0144 OR APPROVED EQUAL SHALL BE USED
- MOUNTING CABLES AND CLAMP KIT COLOR SHALL MATCH THE MAST ARM POLE

<table>
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<tr>
<th>STREET NAME MAST ARM MOUNT REQUIREMENTS (INCHES)</th>
<th>2 SIGN CLAMPS</th>
<th>4 SIGN CLAMPS</th>
<th>6 SIGN CLAMPS</th>
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<tr>
<td>SIGN LENGTH</td>
<td>18 24 30 36 42 48 54 60 66 72 78 84 90 96 102 108 114</td>
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<tr>
<td>MAX. CTC</td>
<td>12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102 108</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE TO SCALE

TYPICAL STREET NAME SIGN

TYPICAL STREET NAME MAST ARM MOUNT REQUIREMENTS (INCHES)

SIGN LENGTH | 2 SIGN CLAMPS | 4 SIGN CLAMPS | 6 SIGN CLAMPS |
-------------|--------------|--------------|--------------|
18           | 24 30 36 42 48 54 60 66 72 78 84 90 96 102 108 114 |
24           | 30 36 42 48 54 60 66 72 78 84 90 96 102 108 114 |
30           | 36 42 48 54 60 66 72 78 84 90 96 102 108 114 |
36           | 42 48 54 60 66 72 78 84 90 96 102 108 114 |
42           | 48 54 60 66 72 78 84 90 96 102 108 114 |
48           | 54 60 66 72 78 84 90 96 102 108 114 |
54           | 60 66 72 78 84 90 96 102 108 114 |
60           | 66 72 78 84 90 96 102 108 114 |
66           | 72 78 84 90 96 102 108 114 |
72           | 78 84 90 96 102 108 114 |
78           | 84 90 96 102 108 114 |
84           | 90 96 102 108 114 |
90           | 96 102 108 114 |
96           | 102 108 114 |
102          | 108 114 |
108          | 114 |

NOT TO SCALE
STAINLESS STEEL SET BOLTS (2)  
(SEE NOTE 4)

8' GALVANIZED 2 POUND U-CHANNEL  
STEEL SIGN POST

STAINLESS STEEL HEX BOLTS (2)

8' GALVANIZED 3 POUND U-CHANNEL  
STEEL SIGN POST

STOP
NOTE:
AT ALL UN-SIGNALIZED ARTERIAL INTERSECTIONS STREET SIGNS SHALL BE SEPARATED ON INDIVIDUAL POLES

NOTE:
SIGNALIZED INTERSECTIONS SHALL BE MOUNTED ON MAST ARM OR SUPPORT POLE AS PER PLAN

NOTE:
AT ALL LOCAL INTERSECTIONS STREET SIGNS SHALL BE INSTALLED WITH TWO SIGNS PER POST. IF THE COMBINED SQUARE FOOTAGE OF THE TWO SIGNS EXCEEDS 10 SQUARE FEET USE THE INDIVIDUAL POSTS FOR EACH SIGN ABOVE.

NOTE:
IF EITHER OF THE ABOVE CONFIGURATIONS ARE IMPOSSIBLE THEN THE CONTRACTOR SHALL INSTALL THE SIGNS IN SUCH A MANOR AS TO MINIMIZE OBSTRUCTION OF OTHER TRAFFIC CONTROL SIGNS. CONFIGURATION IS TO BE APPROVED BY THE CITY ENGINEER.
1. ALL REGULATORY AND TRAFFIC CONTROL SIGNS SHALL COMPLY WITH THE CURRENT OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, STATE REQUIREMENTS AND LOCAL REQUIREMENTS. THE REQUIREMENTS OF THIS SPECIFICATION INCLUDING PAINTING, APPLY TO ALL PERMANENT SIGNS WHETHER THEY ARE GROUND MOUNTED ON POSTS OR POLE SUPPORTS, OR OVERHEAD MOUNTED ON MAST ARMS. THIS SPECIFICATION SHALL NOT APPLY TO TEMPORARY SIGNS.

2. ALL MOUNTING AND ASSEMBLY HARDWARE: NUTS, BOLTS, DRIVE RIVETS AND POP RIVETS SHALL BE STAINLESS STEEL.

3. ALL STREET NAME SIGNS WILL BE MOUNTED ON 2 3/8" CYLINDRICAL, 12' LONG, 16 GAUGE (OR THICKER) GALVANIZED TUBULAR STEEL SIGN POSTS. STREET NAME SIGN POSTS SHALL BE INSTALLED 3' BELOW GRADE ALL OTHER SIGNS SHALL BE INSTALLED 4' BELOW GRADE.

4. THE BRACKETS SHALL BE DIE-CAST OF HIGH STRENGTH ALUMINUM ALLOY NO. 380 UNDER 400 TONS PRESSURE, WITH A MINIMUM STRENGTH OF 45,000 P.S.I., DEGREASED, POLISHED AND TUMBLED TO A LOW-SHEEN FINISH. THE SIGN SLOT IN THE CYLINDRICAL POST BRACKET AND THE SIGN BRACKET CROSS PIECE SHALL HAVE DIMENSIONS AS SHOWN. EACH LEG OF THE MOUNT SHALL BE CAST WITH TWO (2) HOLEs COUNTER-SUNK ON OPPOSITE SIDES AND DRILLED AND TAPPED TO ACCEPT TWO HEX-HEAD STAINLESS STEEL BOLTS ON THE OPPOSITE SIDE OF THE COUNTERSUNK HOLE. THE SIDE OF EACH SLOT OPPOSITE THE SET SCREWS SHALL BE CAST OR MACHINED ACCURATELY HORIZONTAL. THE SKIRT OF THE SQUARE POST BRACKET SHALL BE DRILLED AND TAPPED FOR TWO (4) BOLTS.

5. THE POST SHALL BE SET VERTICALLY IN ALL DIRECTIONS AND THE SIGNS PARALLEL TO THEIR RESPECTIVE ROADWAYS.

6. ALL STREET SIGNS SHALL BE INSTALLED IN LOCATIONS AS SHOWN ON THE STREET PLANS, IN ACCORDANCE WITH THESE SPECIFICATIONS AND PRIOR TO ACCEPTANCE OF THE STREETS BY THE CITY.

7. THE DEVELOPER MAY MAKE ARRANGEMENTS WITH THE ENGINEER TO FURNISH AND INSTALL THE SIGNS. ALL COSTS SHALL BE PAID BY THE DEVELOPER.

8. SIGN POSTS ARE NOT TO BE INSTALLED INTO CONCRETE CURB OR SIDEWALK.

9. “U-CHANNEL” POSTS ARE NOT ACCEPTABLE FOR STREET NAME SIGNS.

10. EACH SIDE OF THE ALUMINUM STREET NAME SIGN BLANKS SHALL BE BORDERED WITH WHITE HI-INTENSITY WHITE 3M SCOTCHLITE®, OR EQUAL, PRESSURE SENSITIVE PAPER ALONG THE OUTSIDE EDGE.

11. ALL STREET SIGN LETTERING IS TO BE HIGHWAY “C” FONT USING HI-INTENSITY WHITE 3M SCOTCHLITE®, OR EQUAL, PRESSURE SENSITIVE PAPER. SEE THE TABLE 1 (SHEET 1) FOR LETTERING SIZES.

12. THE FIRST LETTER OF EACH WORD OF THE PREFIX, STREET NAME STREET TYPE, AND/OR SUFFIX IS TO BE CAPITALIZED FOLLOWED BY LOWER CASE LETTERS. STREET TYPE ABBREVIATIONS SHALL CONSIST OF THE FOLLOWING; BLVD, RD, ST, PKWY, LN.

13. NO PERIODS OR OTHER PUNCTUATION MARKS ARE TO BE USED IN THE PREFIX, SUFFIX, OR STREET NAME.

14. SIGNS SHALL NOT BE ALLOWED TO OVERLAP OTHER SIGNS.

15. STREET SIGN STYLES THAT DIFFER FROM THIS STANDARD MUST BE APPROVED IN WRITING BY THE CITY OF MARYSVILLE ENGINEER AND/OR THE PLANNING COMMISSION PRIOR TO INSTALLATION.

16. “CITY OF MARYSVILLE” & MANUFACTURED YEAR SHALL BE PRINTED IN GREEN LETTERS IN THE BOTTOM WHITE MARGIN PER THESE SPECIFICATIONS.

17. THE SHAPE OF ANY TRAFFIC SIGN IS REQUIRED TO BE VISIBLE AT ALL TIMES WHEN APPROACHING FROM THE OPPOSITE DIRECTION.

18. IN RESIDENTIAL AREAS SIGNS INDICATING "SPEED LIMIT" AND "NO PARKING" ARE TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE MEDIAN BETWEEN LOTS.
THE CITY OF MARYSVILLE SHALL BE THE SOLE ENTITY TO DETERMINE IF A TRAFFIC SIGNAL SHOULD BE DESIGNED TO URBAN OR DOWNTOWN STANDARDS.

**GENERAL**

1. SUPPORT POLES SHALL HAVE A TRUE AND CONTINUOUS TAPER. POLES HAVING A TAPERED EFFECT ACCOMPLISHED WITH THE USE OF REDUCERS SHALL NOT BE USED.
   a. URBAN SUPPORT POLES AND ARMS SHALL HAVE A CIRCULAR CROSS SECTION. MULTI-SIDED OR FLUTED POLES SHALL NOT BE USED. ARMS SHALL BE STRAIGHT.
   b. DOWNTOWN SUPPORT POLES SHALL HAVE 16 SHARP FLUTES. DOWNTOWN ARMS SHALL HAVE A CIRCULAR CROSS SECTION AND HAVE A 4’ TO 5’ CURVED UPSWEEP.

2. ARM LENGTHS FORTY FEET IN LENGTH OR LESS SHALL BE OF ONE PIECE CONSTRUCTION. ARMS MORE THAN FORTY FEET LONG MAY BE CONSTRUCTED IN NO MORE THAN TWO PIECES.

3. THE FORMED TOP OF THE FOUNDATION SHALL BE ORIENTED SQUARE TO AN ADJACENT SIDEWALK WHERE APPLICABLE. THE TOP OF THE FOUNDATION SHALL BE FLUSH WITH ANY ADJACENT SIDEWALK OR CONCRETE AREA. A MINIMUM OF TWO - 2” CONDUIT ELLS, USED OR UNUSED, SHALL BE INSTALLED IN EACH POLE FOUNDATION.

4. ALL SIGNAL CABLES SHALL BE RUN INSIDE THE POLES.

5. STAINLESS STEEL BANDING SHALL NOT BE USED ON MAST ARM TRAFFIC SIGNAL SUPPORTS.


7. THE WIRE ENTRANCE PART OF THE SIGNAL HEAD MAY BE ORIENTATED IN ANY DIRECTION TO KEEP THE CABLE DRIP LOOP FROM RUBBING ON THE SIGNAL HEAD. THE SIGNAL HEAD SHALL HANG LEVEL AND PLUMB.

8. PEDESTRIAN SIGNAL HEADS SHALL BE POLYCARBONATE, LED, COUNTDOWN. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED ON TWO-HINGED TYPE BRACKETS WHICH ARE BOLTED TO THE POLE. ALL MOUNTING HARDWARE AND THE SIGNAL HEAD HOUSING SHALL BE COATED TO MATCH THE SIGNAL SUPPORTS.

9. THE EXTERIOR HOUSING OF THE PEDESTRIAN PUSHPUTTON HOUSING SHALL BE BLACK TO MATCH THE SIGNAL SUPPORTS. THE PUSHPBUTTONS SHALL BE ADA COMPLIANT WITH VIBRATING ARROW AND AUDIBLE TONES AS APPROVED BY THE CITY OF MARYSVILLE. MOUNT THE CENTER OF THE PUSHPUTTON 42” ABOVE THE PEDESTRIAN PATHWAY SURFACE.

10. VEHICLE DETECTION SHALL BE ACCOMPLISHED VIA THE USE OF VIDEO DETECTION. VIDEO DETECTION HOUSING AND MOUNTING HARDWARE SHALL BE COATED TO MATCH THE SIGNAL SUPPORTS.

11. EMERGENCY VEHICLE PREEMPTION SHALL BE USED WHEN SPECIFIED BY THE CITY OF MARYSVILLE.

**DESIGN CRITERIA**

12. SIGNAL SUPPORT STRUCTURES SHALL BE DESIGNED AND CONSTRUCTED BY THE SUPPLIER TO SUPPORT THE LOADS CAUSED BY THE SIGNS, SIGNALS, LUMINARIES, CAMERAS AND ANY OTHER EQUIPMENT SPECIFIED. THE USE OF STANDARD DESIGN DESIGNATIONS SUCH AS THOSE DESCRIBED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S (ODOT) STANDARD CONSTRUCTION DRAWING TC-81.21(SIGNAL SUPPORTS), TC-83.20 (PEDESTAL SUPPORTS) AND ANY DETAILS PROVIDED WITHIN, ARE INTENDED TO PROMOTE UNIFORMITY OF DESIGN AND ARE NOT WARRANTED TO BE STRUCTURALLY ADEQUATE. TO THE MAXIMUM EXTENT PRACTICABLE, THE SUPPORT SHALL UTILIZE STANDARD ODOT ANCHOR BOLT SIZING AND SPACING AS DETAILED ON ODOT STANDARD CONSTRUCTION DRAWINGS TC-21.20, TC-81.21AND TC-83.20.

**FINISH**

13. ALL VISIBLE ELEMENTS OF THE SUPPORT, AND ANY OTHER PARTS REQUIRED TO BE COATED, SHALL BE GALVANIZED (IF APPLICABLE) AND THEN POWDER-COATED. THE TOP FINISH COAT OF PAINT SHALL BE SIMILAR TO:
   - FEDERAL SPECIFICATION 595-B COLOR #17038, BLACK.

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**Date:** 1/1/20

**Standard Construction Drawing**

**Drawing No.:** STR-18

**Sheet 1 of 6**
A. LED VEHICULAR SIGNAL HEADS SHALL BE POLYCARBONATE AND BE PROVIDED WITH LOUVERED BACKPLATES.

B. THE TOP AND BOTTOM OF THE SIGNAL HEAD SHALL HAVE AN OPENING TO ACCOMMODATE A STANDARD 1-1/2" PIPE BRACKET.

C. EXCEPT FOR THE INTERIOR OF THE VISOR (FLAT BLACK) THE VEHICULAR SIGNAL HEADS AND BACKPLATES SHALL HAVE A FACTORY APPLIED BLACK FINISH TO MATCH THE SIGNAL SUPPORTS.

D. SIGNAL HEAD CONDUIT BRACKETS AND CONDUIT FITTINGS SHALL BE GALVANIZED AND POWDER COATED TO MATCH THE MAST ARM STRUCTURE.

E. ALL SIGNAL HEAD ASSEMBLIES SHALL BE INSTALLED IN A PLUMB POSITION AND PERPENDICULAR TO THE APPROACH LANE.

F. THE MAST ARM CLAMP SHALL HAVE A MINIMUM STRENGTH AT YIELD TO SUPPORT A 200 POUND LOAD.

G. A MINIMUM OF 17 INCHES IS REQUIRED FOR OPTICALLY PROGRAMMED SIGNAL HEADS AND A MINIMUM OF 6 INCHES FOR STANDARD SIGNAL HEADS.

H. ALTERNATE RIGID SIGNAL HEAD MOUNTING DEVICES FOR MAST ARMS MAY BE APPROVED BY THE ENGINEER UPON DEMONSTRATION THAT THEY PROVIDE ADEQUATE RIGIDITY, EQUAL RANGE OF ADJUSTMENT AND CAN BE TIGHTENED SUFFICIENTLY TO PREVENT MOVEMENT AND LOOSENING UNDER VIBRATION.


J. CABLE ENTRANCE OPENINGS ON DISCONNECT HANGERS SHALL RIGIDLY CLAMP CABLE TO PREVENT MOVEMENT OF THE CABLE WITHIN THE ENCLOSURE.

K. SIGNAL HEAD ROTATION SHALL BE PREVENTED BY THE USE OF SERRATED RINGS, SET SCREWS OR OTHER POSITIVE DEVICES INCORPORATED IN THE SIGNAL HOUSING AND AT CRITICAL LOCATIONS IN THE SUPPORTING HARDWARE.

L. ALL CONDUCTORS SHALL HAVE ADEQUATE CLEARANCE BETWEEN HANGERS, THIMBLES, BULLRINGS, ETC. IN ORDER TO AVOID DAMAGE FROM RUBBING.
STREET NAME

8' TO 18' CLEARENCE

POLE HEIGHT

1'

ARM CAP

ARM LENGTH

VIDEO DETECTION CAMERA

MAST ARM, CIRCULAR CROSS SECTION, STRAIGHT & TAPERED AT 0.14 IN/FT

MAST ARM, CIRCULAR CROSS SECTION, STRAIGHT & TAPERED AT 0.14 IN/FT

PREEMPTION DETECTOR/CONFIRMATION LIGHT

SIGNAL HEAD WITH BACKPLATE SEE NOTE 6

RISE, 3 IN. MIN., 12 IN. MAX., AFTER ERECTION OF SIGNALS

16' TO 18' CLEARENCE

ROUND POLE TAPERED AT 0.14'/FT.

HANDHOLE 3"X5"

PEDESTRIAN SIGNAL HEAD SEE NOTE 8.

HANDHOLE 4"X8"

BOLT COVERS (TYP.)

PEDESTRIAN PUSHBUTTON SEE NOTE 9.

ROADWAY

STREET NAME

SEE STR-17 FOR MOUNTING

SEE NOTE #13 FOR FINISH REQUIREMENTS

HANDHOLE 3"X5"

SEE NOTE 8.

PEDESTRIAN SIGNAL HEAD SEE NOTE 8.

DRAWING SHEET 3 OF 6

NOT TO SCALE

Date: 1/1/20

Standard Construction Drawing

SINGLE ARM OVERHEAD SIGNAL SUPPORT

Drawing No.

STR-18

Sheet 3 of 6

CITY OF MARYSVILLE
ENGINNERING
5' PEDESTRIAN PEDESTAL URBAN

CIRCULAR CROSS-SECTION, TAPERED ALUM TUBE
SEE NOTE #13 FOR FINISH REQUIREMENT

PEDESTRIAN SIGNAL HEAD
SEE NOTE 8.

10.7' PEDESTRIAN PEDESTAL URBAN

CIRCULAR CROSS-SECTION, TAPERED ALUM TUBE
SEE NOTE #13 FOR FINISH REQUIREMENT

PEDESTRIAN PUSHBUTTON
SEE NOTE 9.

CIRCULAR CROSS-SECTION, TAPERED ALUM TUBE
SEE NOTE #13 FOR FINISH REQUIREMENT

PEDESTRIAN PUSHBUTTON
SEE NOTE 9.

CIRCULAR CROSS-SECTION, TAPERED ALUM TUBE
SEE NOTE #13 FOR FINISH REQUIREMENT

CIRCULAR CROSS-SECTION, ALUM TUBE
SEE NOTE #13 FOR FINISH REQUIREMENT

TRANSFORMER BASE

NOT TO SCALE
The decorative pole skirt shall not interfere with mounting the pedestrian pushbutton at the required mounting height. See General Note #9.

The decorative pole skirt shall be Valmont (Huntington Series), Union Metal (Columbian) or approved equal.

The decorative pole skirt shall be aligned with the handhole in the support pole.

The handhole in decorative skirt shall be aligned with the handhole in the support pole.

Foundation surface flush with surrounding pedestrian path where applicable.

*Height of decorative pole skirt shall not interfere with mounting the pedestrian pushbutton at the required mounting height. See General Note #9.
5' PEDESTRIAN PEDESTAL DOWNTOWN

POLE CAP

FLUTED, ALUM POLE

SEE NOTE #13 FOR FINISH REQUIREMENTS

10.7' PEDESTRIAN PEDESTAL DOWNTOWN

POLE CAP

PEDESTRIAN SIGNAL HEAD
SEE NOTE 8.

FLUTED, ALUM TUBE

SEE NOTE #13 FOR FINISH REQUIREMENTS

PEDESTRIAN PUSHBUTTON
SEE NOTE 9.

7" OD

COSMETIC PLATE OR BOLT COVER

TRANSFORMER BASE

12" STRAIGHT SECTION

20"

8" SHAFT

8' TAPERED SECTION

5" OD

5' PEDESTRIAN PEDESTAL DOWNTOWN

8'

10.7'