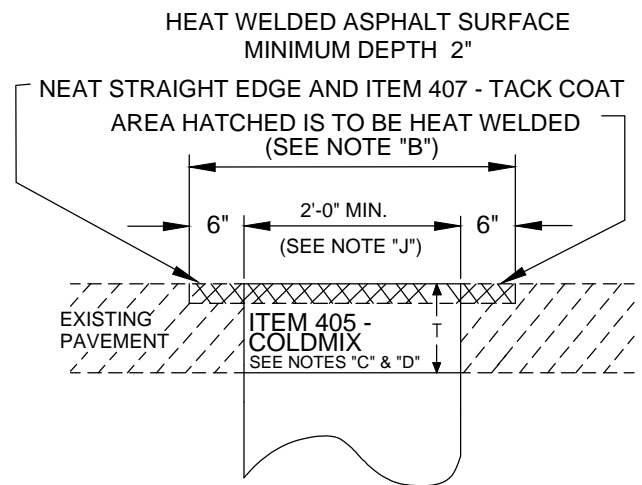
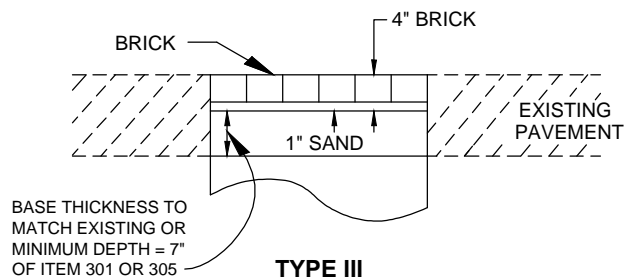


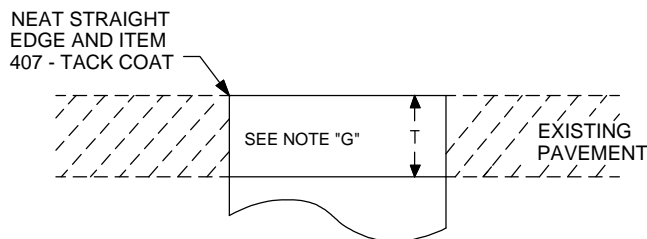
TYPE I
STANDARD FLEXIBLE ASPHALT REPAIR
WITH HEATWELD SURFACE
(SEE NOTE "B")



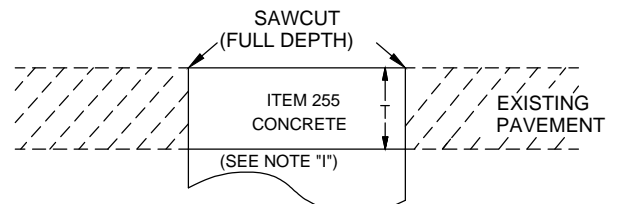
TYPE II
WINTER OPERATIONS FLEXIBLE ASPHALT
REPAIR WITH HEATWELD SURFACE
(SEE NOTE "E")



TYPE III
BRICK STREET REPAIR
(SEE NOTE "F")



TYPE IV
ALLEY REPAIR



TYPE V
CONCRETE STREET REPAIR
OR
CONCRETE BUS PAD

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
AND 6" ON ALL ALLEYS.

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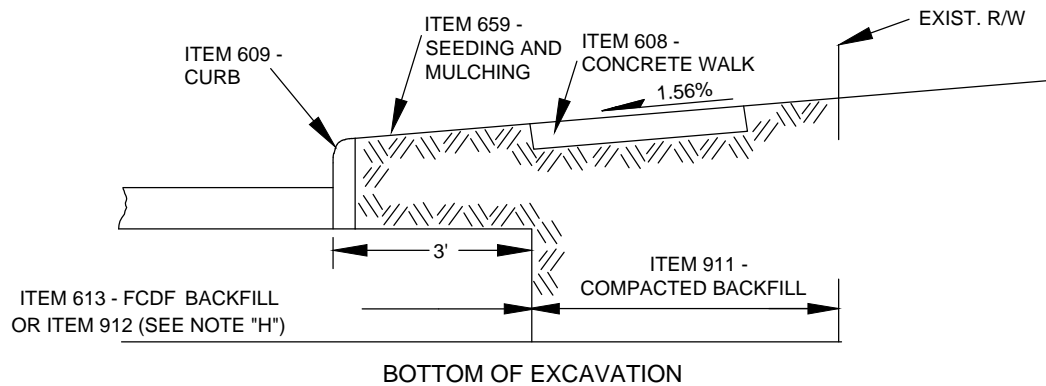
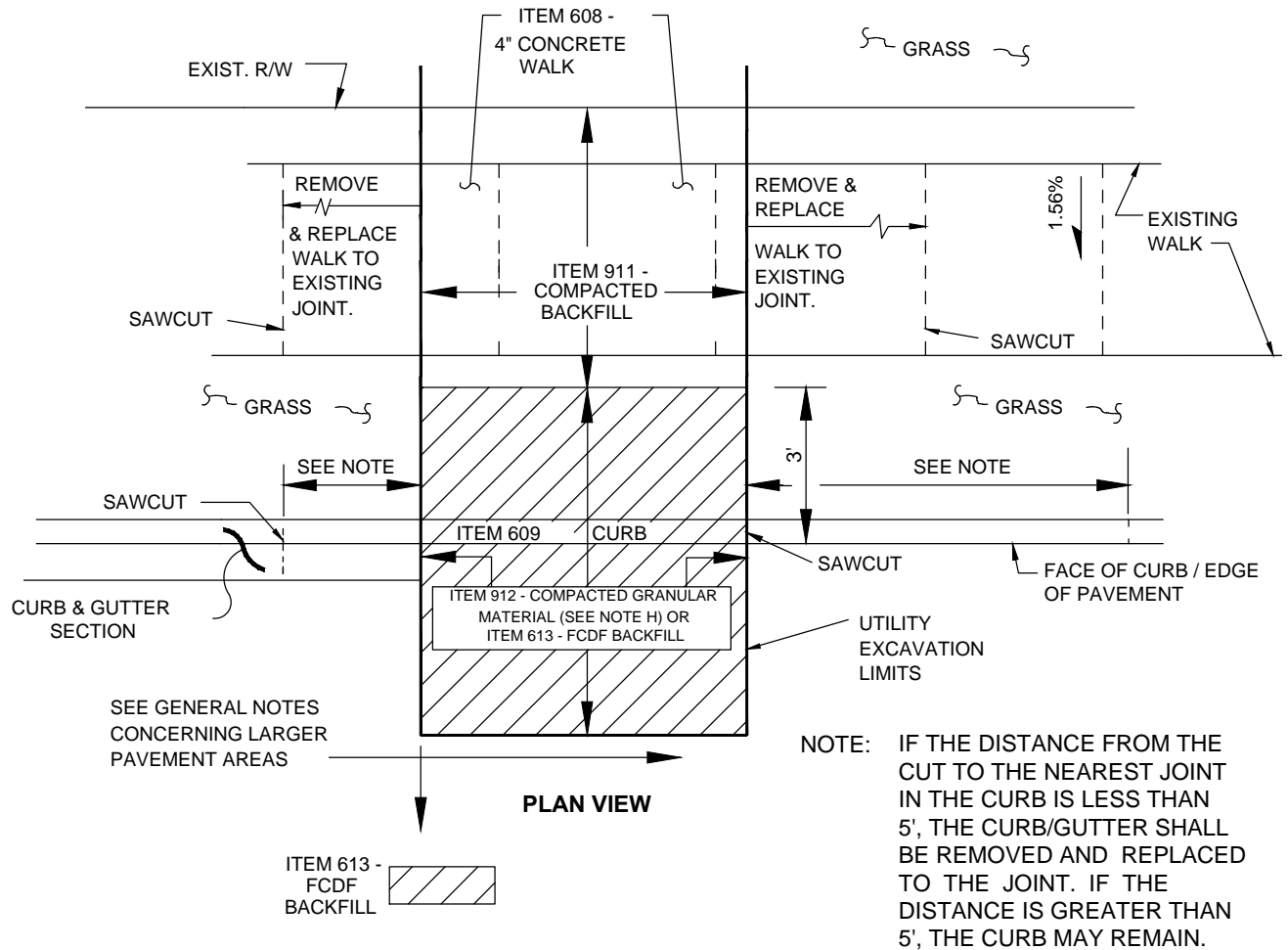
Hassan Zahran
CITY ENGINEER

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SIDEWALK AND CURB REPAIR DETAILS



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

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GENERAL NOTES

EXCAVATION PERMIT REQUIRED: A CITY OF COLUMBUS STREET EXCAVATION PERMIT IS REQUIRED FOR ALL EXCAVATIONS WITHIN THE PUBLIC RIGHT-OF-WAY, AS SET FORTH BY COLUMBUS CITY CODE, CHAPTER 903 AND ISSUED IN ACCORDANCE WITH PROVISIONS IN THE GENERAL RULES AND REGULATIONS OF THE DEPARTMENT OF PUBLIC SERVICE.

SCOPE OF WORK

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 CITY OF COLUMBUS CONSTRUCTION AND MATERIALS SPECIFICATION (CMSC).

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 A BITUMINOUS PATCH MATERIAL WITH A DURABLE SURFACE OR PROPERLY PLATED. (AS PER CITY CODE CHAPTER 903 &/OR SHEET 7 OF THIS STANDARD DRAWING) THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THESE PATCHES WHILE THEY ARE IN SERVICE. THE COST OF PLACING, MAINTAINING, AND REMOVING AND DISPOSING OF THE TEMPORARY PATCHES OR PLATES WILL BE AT THE CONTRACTOR'S EXPENSE.

WHEN ITEM 613 FCDF IS USED AS A BACKFILL, NO PAVEMENT SHALL BE PLACED UNTIL BLEED WATER HAS BEEN EVAPORATED FROM THE FCDF SURFACE OR HAS BEEN DRAINED OR REMOVED FROM THE SURFACE. ITEM 613 FCDF IS NOT PERMITTED AS A TEMPORARY DRIVING SURFACE.

THE BACKFILLING PAVEMENT REPAIR AND/OR HEAT WELDING SHALL BE DONE BY THE CONTRACTOR OR PERMITEE IN ACCORDANCE WITH CITY SPECIFICATIONS. IF DESIRED, ANY OR ALL OF THIS WORK CAN BE PERFORMED BY THE CITY OF COLUMBUS. THE CITY SHALL COLLECT APPROPRIATE FEES AT THE TIME THE PERMIT IS ISSUED FOR SAID WORK.

RESTORATION OF ANY SIDEWALK, CURB, STREET PAVEMENT, 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. IN ADDITION, EACH VIOLATION MAY BE DEALT WITH IN ACCORDANCE WITH SECTION 903.99 OF THE COLUMBUS CITY CODE.

**** PAVING STANDARDS FOR LARGE TRENCHES OR PAVING AREAS**

WHEN REPAIR AREAS EXCEED 5 FEET IN WIDTH OR 100 FEET IN LENGTH, THE PAVEMENT REPAIR SECTION SHALL CONFORM TO 3 INCHES OF ITEM 448 ASPHALT CONCRETE ON EITHER 7 INCHES OF ITEM 301 ASPHALT CONCRETE BASE OR ITEM 305 PORTLAND CEMENT CONCRETE BASE.

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WHEN A TRENCH EXCEEDS 100 FT IN LENGTH, THE REPAIR SHALL INCLUDE PLANING A FULL LANE WIDTH (OR ANY OTHER LANE WIDTH AS DIRECTED BY THE DEPARTMENT OF PUBLIC SERVICE) TO A DEPTH OF 1 ½ INCHES FOR THE ENTIRE LENGTH OF THE TRENCH. THE PLANED AREA SHALL THEN BE REPAVED WITH A PAVER IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS. ITEM 423 - CRACK SEALING, TYPE 1 SHALL BE APPLIED TO EXPOSED JOINTS ONCE THE PAVING OPERATION HAS BEEN COMPLETED.

WHEN TRENCHING WORK CROSSES LANES, ALL AFFECTED LANES SHALL REQUIRE PLANING AND RESURFACING AS DESCRIBED ABOVE. THIS WORK SHALL INCLUDE ALL OF THE AFFECTED PAVEMENT AREA.

SPECIAL NOTES

NOTE 'A' : WHEN USING FLOWABLE CONTROLLED DENSITY FILL (FCDF), THE OPTIONAL FILL AREA OVER THE CONDUIT MAY BE BACKFILLED WITH SAND, GRANULAR MATERIAL, OR OTHER SUITABLE 912 MATERIAL, FOR A DISTANCE NOT TO EXCEED 1 FT. A PROTECTIVE BARRIER OF VISQUEEN OR SIMILAR MATERIAL IS PERMITTED.

NOTE 'B' : FOR TYPE I AND TYPE II CUT REPAIRS, THE AREA TO BE HEAT WELDED IS TO INCLUDE THE CUT AND EXTEND FOR 6 INCHES BEYOND EACH SIDE OF THE CUT FOR A NOMINAL DEPTH OF 2 INCHES.

NOTE 'C' : FOR TYPE I AND TYPE II PAVEMENT REPAIR, THE ITEM 448 HOT ASPHALT CONCRETE OR ITEM 405 COLD MIX SHALL BE PLACED IN LIFTS NOT EXCEEDING 3 INCHES AND COMPACTED WITH A COMBINATION VIBRATORY PLATE COMPACTOR, OR A VIBRATORY STEEL WHEELED ROLLER WITH A MINIMUM CERTIFIED FORCE OF 2000 POUNDS. IN ALL CASES THE SURFACE LIFT SHALL BE COMPACTED WITH THE VIBRATORY STEEL WHEELED ROLLER. WHEN PLACING ITEM 405 COLD MIX FULL DEPTH, MATERIAL TEMPERATURE SHALL BE 70 DEGREES OR ABOVE.

NOTE 'D' : COLD MIX SHALL BE ITEM 405 COLD MIX OR OTHER COLD MIX APPROVED BY THE CITY OF COLUMBUS. IN LIEU OF COLD MIX, THE CONTRACTOR MAY STOCKPILE ITEM 448 ASPHALT CONCRETE AND REHEAT IT TO PLACE IN CUT AS PAVEMENT REPAIR. TYPE II PAVEMENT REPLACEMENT SHALL CONSIST OF FULL DEPTH ITEM 405 COLD MIX FOR SMALL EXCAVATIONS. LARGE EXCAVATIONS SHALL REQUIRE A MINIMUM OF 7 INCHES OF FAST SETTING PORTLAND CEMENT AND 2 INCHES OF ITEM 405 COLD MIX.

NOTE 'E' : THE COLD MIX IS TO BE REPLACED WITH ITEM 448 ASPHALT CONCRETE WHICH IS TO BE HEAT WELDED AS SET FORTH IN NOTE 'B'. THIS WORK SHALL BE PERFORMED AS SOON AS ASPHALT IS AVAILABLE.

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NOTE 'F' : REPAIR OF BRICK STREETS

1. BRICKS REMOVED FROM A REPAIR AREA SHALL BE STORED IN A SAFE PLACE BY THE CONTRACTOR FOR REUSE. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY BRICKS THAT ARE STOLEN OR DAMAGED, AT NO ADDITIONAL COST TO THE CITY.
2. IF BRICKS ARE SUPPLIED BY THE CONTRACTOR, THEY MUST FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED.
3. SAW CUTTING: ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN $\frac{1}{2}$ ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAW CUTTING OF ADJACENT UNDISTURBED BRICK(S).
4. THE EXISTING BASE MATERIAL SHALL BE CUT BACK TO AS NEARLY VERTICAL AS POSSIBLE. IF SHEARING OF THE ADJACENT BASE RESULTS, THE CONTRACTOR SHALL REMOVE ADDITIONAL BASE MATERIAL UNTIL A VERTICAL FACE IS ACHIEVED.
5. THE MAXIMUM WIDTH OF A BRICK MORTAR JOINT SHALL BE $\frac{1}{2}$ 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.
6. MORTARING OF JOINTS: ALL JOINTS SHALL BE MORTARED WITH A 50/50 MIXTURE BY VOLUME OF SAND AND CEMENT SO AS TO PROVIDE A FLUSH FINISH. THIS MAY REQUIRE MORE THAN ONE APPLICATION. FURTHER, MECHANICAL VIBRATION WILL BE REQUIRED FOR CONSOLIDATION OF DRY MORTAR MIX.

NOTE 'G' : FOR ALLEY REPAIRS, THE PAVEMENT REPLACEMENT SHALL CONFORM TO THE TYPE AND THICKNESS OF THE EXISTING PAVEMENT. CHIP AND SEAL TYPE ALLEYS SHALL REQUIRE MATCHING THE EXISTING THICKNESS OF PAVEMENT WITH THE APPROPRIATE COMBINATION OF MATERIALS BASED ON THE SIZE OF THE EXCAVATION. THE MINIMUM SHALL CONSIST OF 6" OF ITEM 448 ASPHALT CONCRETE. FINISHED CONCRETE PAVEMENT IS NOT PERMITTED. MATERIALS USED SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CMSC.

IF MORE THAN $\frac{1}{3}$ OF THE WIDTH OF AN ALLEY IS REMOVED, THE PAVEMENT SHALL BE REPLACED AS PER TYPE 1 AND THEN OVERLAYED OVER THE TOTAL WIDTH OF PAVEMENT AND LENGTH OF TRENCH.

NOTE 'H' : ITEM 912 - COMPACTED GRANULAR MATERIAL:

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 'I' : CONCRETE BASE OR PAVEMENT

IF PAVING REQUIREMENTS ALLOW FOR SUFFICIENT CURING TIME SO THAT FAST SETTING CONCRETE IS NOT NEEDED, STANDARD CONCRETE BASE OR PAVEMENT MAY BE PLACED AS PER THE CMSC. THIS OPTION MUST BE NOTED ON THE PERMIT APPLICATION AND APPROVED BY THE CITY OF COLUMBUS.

NOTE 'J' : THE TRENCH WIDTH FOR SMALL PIPES AND CONDUITS 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.

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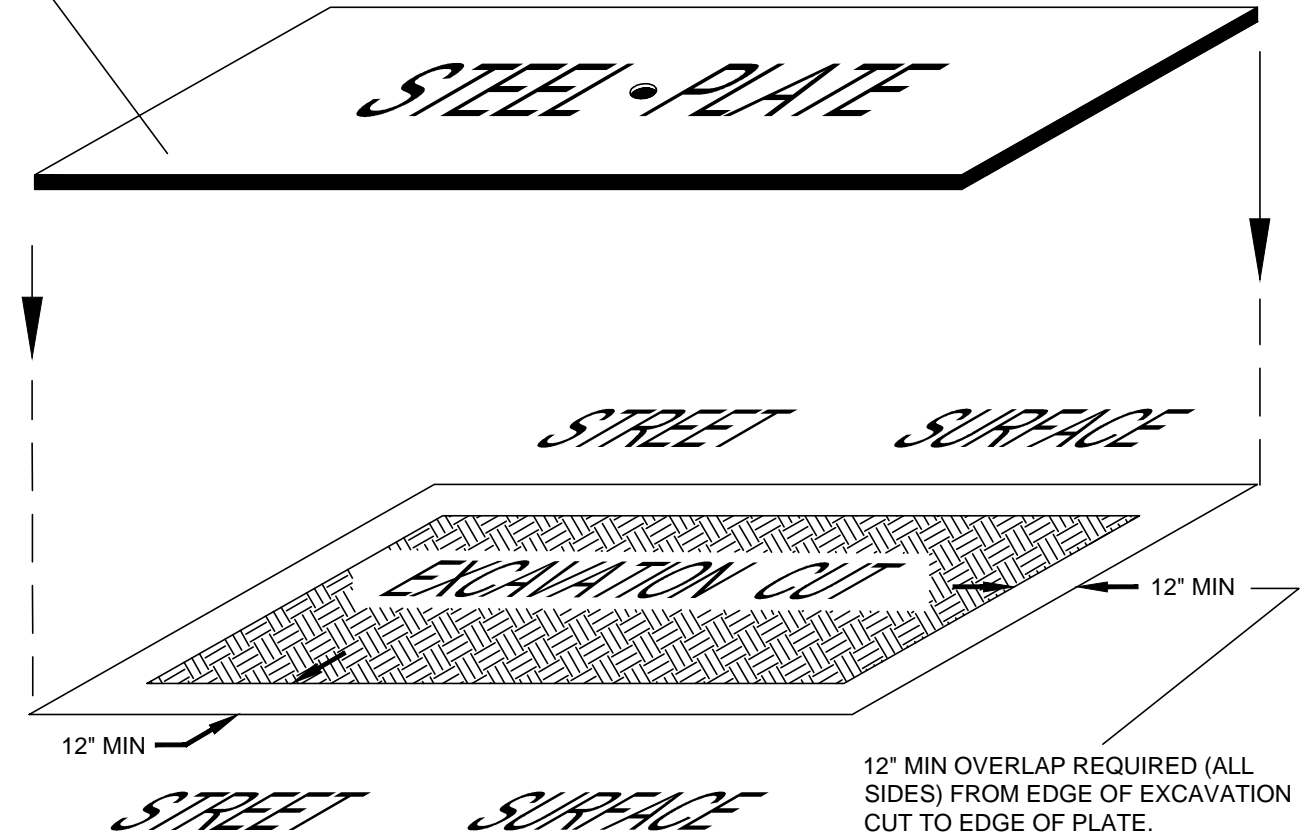
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- 1 OWNER'S NAME
- 2 A 24 HOUR EMERGENCY CONTACT PHONE NUMBER

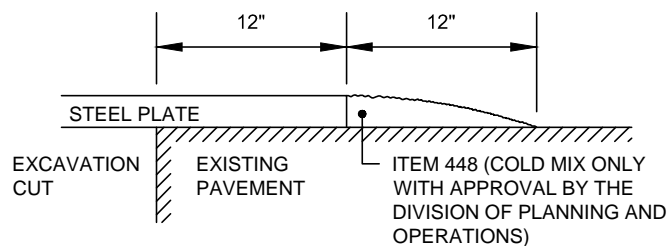


ALL STEEL PLATES MUST HAVE THE FOLLOWING INFORMATION CLEARLY AND LEGIBLY 'ETCHED' INTO THEIR TOP SURFACE:

- 1 OWNER'S NAME
- 2 A 24 HR. EMERGENCY CONTACT PHONE NUMBER.

NO STEEL PINS ARE PERMITTED.

SEE SHEET 7 FOR SIGNING REQUIREMENTS.



STEEL PLATE REQUIREMENTS

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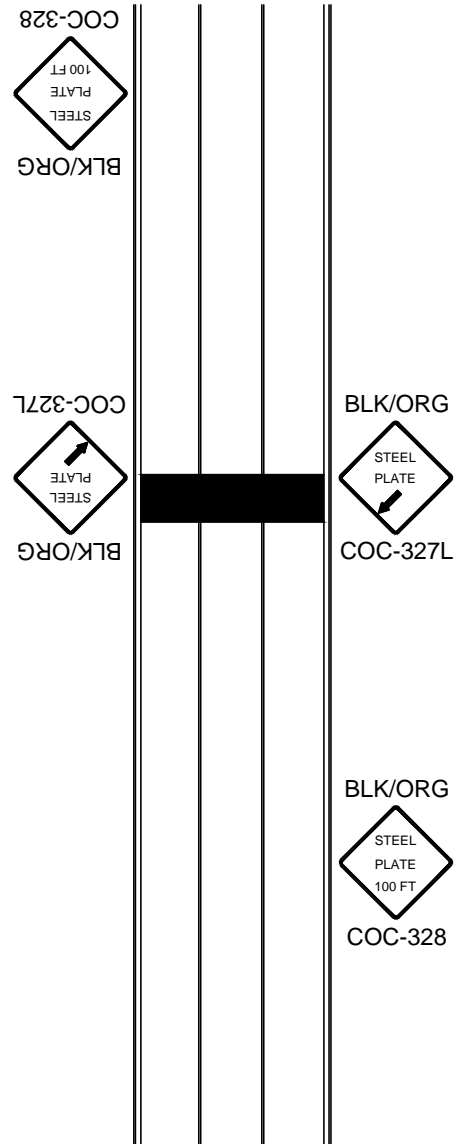
SIGNS ARE TO BE 36" x 36" FOR RESIDENTIAL AND DOWNTOWN AREAS AND 48" x 48" ON MULTI-LANE, HIGH SPEED (45 MPH OR GREATER) ROADWAYS.

SIGN COC - 327 (R/L) OR SIGN COC - 328 OR BOTH MAY BE UTILIZED.

SIGNS SHOULD BE PLACED IN ALL DIRECTIONS THAT ARE AFFECTED.

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

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



STEEL PLATE REQUIREMENTS

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