CITY OF HUBER HEIGHTS, OHIO
STANDARD CONSTRUCTION DRAWINGS

ISSUED: 2017
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STREET DESIGN STANDARDS

MINOR STREETS

MINOR COLLECTORS

MAJOR COLLECTORS

MINOR ARTERIAL

MAJOR ARTERIAL

GENERAL NOTES:

1. THESE STANDARD DRAWINGS SUPPLEMENT THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIALS SPECIFICATIONS, LATEST EDITION, TO WHICH ALL ITEM NUMBERS HEREIN ARE REFERENCED.

2. ON NEW STREETS WITHIN SUBDIVISIONS, THE FINAL COURSE OF ASPHALT MAY NOT BE PLACED UNTIL AFTER THE LEVELING COURSE HAS BEEN IN PLACE FOR AT LEAST NINE MONTHS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. SPECIAL PROVISIONS FOR THE COLLECTION OF SURFACE WATER RUNOFF MAY BE REQUIRED BY THE CITY DURING THE NINE MONTH PERIOD BEFORE THE FINAL COURSE OF ASPHALT IS PLACED.

3. ALL UTILITY TRENCHES WITHIN THE STREET RIGHT-OF-WAY SHALL BE BACKFILLED WITH COMPACTED, GRANULAR MATERIAL TO SUBGRADE ELEVATION (REFER TO UTILITY TRENCH DETAIL WITHIN RIGHT-OF-WAY DETAIL).

4. MOUNTABLE CURB SHALL BE PERMITTED ONLY ON MINOR STREETS AND MINOR COLLECTOR STREETS. ALL STREETS IN INDUSTRIAL AND COMMERCIAL AREAS, AND ALL MAJOR COLLECTOR AND ARTERIAL STREETS SHALL HAVE BARRIER CURBS AND GUTTER AS DETAILED HEREIN.

5. PLANS DEPICTING WORK OR ADJUSTMENTS ON PROPERTY NOT OWNED BY THE DEVELOPER WILL NOT BE APPROVED WITHOUT WRITTEN EVIDENCE THAT SUCH WORK OR ADJUSTMENTS ARE ACCEPTABLE TO THE OWNER OF THE PROPERTY. EASEMENTS MAY BE REQUIRED FOR PERMANENT IMPROVEMENTS.

6. ALL CONCRETE SHALL BE CLASS "C" 600 (4,000 PSI) IN 21 DAYS.

7. ALL WORK REQUIRING TRAFFIC CONTROL IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

8. ALL SIGNS AND BARRICADES, OTHER THAN REGULATORY AS DEFINED IN THE MANUAL OF UNIFORM CONTROL DEVICES, SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.

TYPICAL CROSS SLOPES:

PAVEMENT: 1/4" PER FOOT
SIDewALK: 1/4" PER FOOT
LAWN: VARIES - BACK OF WALK ELEVATION EQUALS TOP OF CURB +1/2" PER FT.

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423
ASPHALT PAVEMENT ON AGGREGATE BASE

ASPHALT SEAL

1/2 STREET SECTION (BACK CURB TO BACK CURB)

SURFACE COURSE SHALL BE 1/4" ABOVE GUTTER UP.

COAT FACE OF CURB WITH ASPHALT EMULSION IN AREA OF PAVEMENT FOR BINDING.

SLOPE 1/4" PER 1'0"

SEE NOTE "1"

ITEM 304 AGGREGATE BASE UNDER CURB, 3' MINIMUM

ITEM 441 (TYPE 1) ASPHALT SURFACE COURSE

ITEM 441 (TYPE 2) ASPHALT LEVELING COURSE

MAX. 4" LIFTS

ITEM 304 AGGREGATE BASE

ITEM 408 PRIME COAT WHEN REQUIRED

ITEM 407 TACK COAT

ITEM 408 BITUMINOUS PRIME COAT MC 30 @ 0.5 GALLONS PER SQY. APPLY IMMEDIATELY AFTER ITEM 304 IS COMPLETED, IF DIRECTED BY THE CITY ENGINEER.

ITEM 407 TACK COAT TRACKLESS NT SS-1HM TRACKLESS TACK @ 0.1 GALLONS PER SQY. APPLY JUST PRIOR TO FINAL COURSE OF ITEM 441 LEVELING COURSE IF DIRECTED BY THE CITY ENGINEER.

FOR RESIDENTIAL STREETS, ITEM 441, SURFACE COURSE SHALL NOT BE APPLIED UNTIL 441 LEVELING COURSE HAS BEEN IN PLACE AT LEAST NINE MONTHS, ANY ITEM 441 LEVELING COURSE DETERIORATION OR SETTLEMENT THAT HAS DEVELOPED DURING THIS PERIOD SHALL BE REMOVED AND REPLACED BEFORE THE SURFACE COURSE IS APPLIED.

ASPHALT PAVEMENT ON BITUMINOUS BASE

ASPHALT SEAL

1/2 STREET SECTION (BACK CURB TO BACK CURB)

SURFACE COURSE SHALL BE 1/4" ABOVE GUTTER UP.

COAT FACE OF CURB WITH ASPHALT EMULSION IN AREA OF PAVEMENT FOR BINDING.

SLOPE 1/4" PER 1'0"

SEE NOTE "1"

ITEM 304 AGGREGATE BASE UNDER CURB, 3' MINIMUM

ITEM 442 (TYPE A) ASPHALT SURFACE COURSE

ITEM 442 (TYPE A) ASPHALT LEVELING COURSE

ITEM 301 BITUMINOUS BASE IN TWO COURSES

PAVEMENT DESIGN STANDARDS

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<thead>
<tr>
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<th>ASPHALT SURFACE ON AGGREGATE BASE</th>
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<table>
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<tr>
<td>301</td>
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GENERAL NOTES:

1. ALL SUBGRADE TO BE COMPACTED TO 95% OF THE MATERIALS MAXIMUM DENSITY BASED ON OPTIMUM WATER CONTENT OF THE SOIL (ASHTO DESIGNATION T-180-57 METHOD "C") TO THE REQUIRED CROWN BEFORE PLACING THE BASE OR ASPHALT COURSES.

2. ALL UTILITY TRENCHES WITHIN THE STREET RIGHT-OF-WAY SHALL BE BACKFILLED WITH COMPACTED, GRANULAR MATERIAL TO SUBGRADE ELEVATION (REFER TO UTILITY TRENCH DETAIL WITHIN RIGHT-OF-WAY DETAIL)

3. THE CITY ENGINEER RESERVES THE RIGHT TO INCREASE THE MATERIAL THICKNESS SHOWN ABOVE OR REQUIRE SOIL STABILIZATION OR OTHER MEASURES IF, IN THE OPINION OF THE CITY ENGINEER, SUBGRADE CONDITIONS WARRANT SUCH ACTION.

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423

TITLE OF DRAWING:

STREET PAVEMENT SECTIONS

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
ISSUE DATE: 2017

DWG. No.
PV-2.0
GENERAL NOTES:

1. ALL BARRIER TYPE SHALL BE DEPRESSED AT DRIVE APPROACHES. SEE CONCRETE DRIVEWAY DETAIL.

2. ALL CURB AND COMBINATION CURB AND GUTTER SHALL HAVE 1/4" CONTRACTION JOINTS CONSTRUCTED AT 5' INTERVALS. THE DEPTH SHALL AVERAGE 2" OR MORE FOR COMBINATION CURB AND GUTTER, AND FOR CURB SHALL AVERAGE 1/5 OR MORE OF THE CURB HEIGHT. ALL CONTRACTION JOINTS SHALL BE TOOLED RATHER THAN BEING SAWS AFTER BROOM FINISHING.

3. ALL CURB AND COMBINATION CURB AND GUTTER SHALL HAVE 1/2" NON-EXTRUDING EXPANSION JOINTS AT FORTY (40) FOOT INTERVALS UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

4. PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.

5. PROVIDE A MINIMUM 3" OF COMPACTED AGGREGATE - ITEM 104 BELOW CURB AND EXTENDED 12" FROM BACK OF CURB ON THE COMPACTED SUBGRADE. SEE STREET PAVEMENT SECTIONS.
Curb ramp detail with construction joints and materials specification.

**Section A-A**
- Curb ramp constructed on barrier curb.
- Construction joint.
- MAX SLOPE 1" per ft.
- Class C Concrete.
- 3" compacted item 304.

**Section B-B**
- Curb ramp constructed on combined barrier curb & gutter.
- Construction joint.
- MAX SLOPE 1" per ft.
- Class C Concrete.
- 3" compacted item 304.

Details include:
- Barrier curb.
- 1" rad.
- 1/2" expansion joint.
- Pavement.
- 24"x48" armor-tile brick red color.
- Warp surface in this section, both sides.
- Warp sidewalk to meet wheelchair ramp.
- Match walk grade at R/W.

City of Huber Heights Engineering Department

CITY OF HUBER HEIGHTS
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NOTE: WHERE DISTANCE FROM FACE OF CURB TO FRONT FACE OF WALK EXCEEDS 18' A 2" TRANSVERSE DUMMY JOINT SHALL BE PLACED AT THE RADIUS POINT, OR AS DIRECTED BY THE CITY ENGINEER.

PERSPECTIVE VIEW

NOTE: MINIMUM WIDTH FOR ONE-WAY TRAFFIC IS 16'-0". MAXIMUM WIDTH FOR TWO-WAY TRAFFIC IS 25'-0". WIDTHS OVER 25'-0" SHALL BE APPROVED BY THE CITY ENGINEER.

PLAN VIEW

GENERAL NOTES:

1. JOINTS SHALL BE CLEANED AND EDGED BY A 1/4" RADIUS EDGER. LONGITUDINAL JOINTS SHALL BE AS DIRECTED BY THE ENGINEER. EXPANSION JOINTS SHALL BE OF SUCH DIMENSIONS AS SHOWN ON STANDARD DRAWINGS FOR CONSTRUCTION JOINTS.
2. MATERIAL SHALL MEET THE REQUIREMENTS OF THESE SPECIFICATIONS.

CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423

COMMERCIAL SERVICE DRIVE APPROACH

CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT
ISSUE DATE: 2017

DWG. No.
PV-6.0
GENERAL NOTES:

1. DRIVEWAYS SHALL BE CONSTRUCTED A MINIMUM OF 8'-0" IN WIDTH AND 6" IN THICKNESS.
2. RESIDENTIAL DRIVE APPROACH SHALL BE 6" THICK & COMMERCIAL DRIVE APPROACH SHALL BE 7" THICK.
3. FOR DRIVEWAYS 15'-0" OR OVER IN WIDTH, A CONTRACTION JOINT SHALL BE CONSTRUCTED IN THE CENTER FOR THE FULL LENGTH OF THE DRIVEWAY.
GENERAL NOTES:

1. DRIVEWAYS SHALL BE CONSTRUCTED A MINIMUM OF 8'-0" IN WIDTH.
2. RESIDENTIAL DRIVE APPROACH SHALL BE 6" THICK & COMMERCIAL DRIVE APPROACH SHALL BE 7" THICK.
3. DRIVEWAYS 15'-0" OR OVER IN WIDTH SHALL HAVE A CONTRACTION JOINT CONSTRUCTED IN THE CENTER FOR THE LENGTH OF THE DRIVEWAY.
4. WHEN ADDING DRIVES TO EXISTING CURB, THE ENTIRE EXISTING CURB MUST BE REMOVED. NO BREAKING OFF OF THE TOP PORTION OF THE CURB WILL BE ALLOWED.
NOTE:
POST SHALL BE LOCATED AT THE INTERSECTION SO AS TO PROVIDE GOOD VISIBILITY OF STREET NAME SIGN FROM ALL APPROACHES.

SUITEALUMINUMBRACKETS
SIGN BLADES

ODOT #3 POST

MIN. 2'-0"

10" DIA.

SUITEALUMINUMBRACKETS
SIGN BLADES

ODOT #3 POST

MIN. 2'-0"

10" DIA.

GENERAL NOTES:
1. THE SIGN FACES SHALL BE MADE OF REFLECTORIZED WHITE LETTERS ON REFLECTORIZED BLUE BACKGROUND.
2. TYPE "C" SERIES LETTERS ARE RECOMMENDED, HOWEVER, TYPE "B" SERIES LETTERS WILL BE PERMITTED. REFERENCE: ODOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
3. LETTERING SIZES: 4'-STREET NAME, 2'-Dr/Rd, ETC.
4. LOGO 4.25" TALL X 4.75" WIDE.
5. NO OUTLET SYMBOL 3.5" X 3.5".
6. THE 6" SIGN BLADES SHALL HAVE A NOMINAL THICKNESS OF 0.080 INCHES AND SHALL BE OF 6061-T6 ALUMINUM ALLOY.
7. THE BLADE SHALL BE MADE OF EXTRUDED ALUMINUM.
8. ALL BLADES SHALL BE BONDERIZED OR ANODIZED PRIOR TO APPLYING THE REFLECTIVE SHEETING.
9. 7" MINIMUM HEIGHT FROM TOP BACK OF CURB TO BOTTOM OF SIGN (STREET SIGN, STOP SIGN, ETC.)

CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT 6131 TAYLORSVILLE RD. HUBER HEIGHTS, OH 45424 (937) 233-1423

STREET SIGN

CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT ISSUE DATE: 2017

DWG. No.
PV-9.0
MANHOLE No. 3

FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423

CLEVELAND, OH 44144

TITLE OF DRAWING:
MANHOLE No. 3

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT

ISSUE DATE: 2017

DWG. No.
MH-1.2
**CATCH BASIN No. 2-2B**

**CONCRETE:** USE 4000 PSI COMPRESSIVE STRENGTH FOR CAST-IN-PLACE CONCRETE.
MEET THE REQUIREMENTS OF CMS 705.13 FOR ALL PRECAST CONCRETE AND MARK WITH CATCH BASIN NUMBER.

**CONSTRUCTION INFORMATION**
- MIN. WEIGHT OF GRATE, 120 lbs.
- CATCH BASIN OUTLET PIPE SIZE
  - 2-2B: 12" TO 21"

**FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS**

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**SECTION A-A**
- BOTTOM SLAB MAY BE PRECAST SEPARATELY AND THE OUTLET PIPE PLACED ON TOP OF IT WITH THE BOTTOM SHAPED TO DRAIN.
- ALL GRATE EDGES TO BE ROUNDED 1/4" RADIUS

**SECTION B-B**
- PERMISSIBLE CONST. JOINT

**SECTION C-C**
- PERMISSIBLE CONST. JOINT

**PLAN**
CATCH BASIN No. 3A MODIFIED

FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS

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(937) 233-1423

TITLE OF DRAWING:
CATCH BASIN No. 3A MODIFIED

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
ISSUE DATE: 2017

DWG. No.
CB-2.2
ELEVATION
CENTERLINE OF CULVERT NORMAL TO CENTERLINE OF ROADWAY. HEADWALL IS SYMMETRICAL ABOUT CENTERLINE
LINE "K"

PLAN "A"
HORIZONTAL #5 AT 18" C.C.
VERTICAL #5 AT 9" C.C.
BENT BAR "8" AT 9" C.C.
#5 AT 18" C.C.

SECTION C-C
3"x6" CONSTR.-JOINT KEY

FULL HEIGHT HEADWALL
FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS

SECTION D-D
2:1 SLOPE FROM POINT "K"

FULL HEIGHT HEADWALL

<table>
<thead>
<tr>
<th>PIPE DIA.</th>
<th>H</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>BAR #</th>
<th>L2</th>
<th>h2</th>
<th>CONC CMP (CY)</th>
<th>CONC RCP (CY)</th>
<th>STEEL (LBS)</th>
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<td>2'-6&quot;</td>
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<td>793</td>
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CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423

TITLE OF DRAWING:
FULL HEIGHT HEADWALL

CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT
ISSUE DATE: 2017

DWG. No.
HW-1.1
**FULL HEIGHT HEADWALL**

(for sewers 36" or less in diameter)

**FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS**

<table>
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<tr>
<th>DIAMETER</th>
<th>H</th>
<th>L</th>
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HALF-HEIGHT HEADWALL FOR CORRUGATED PLASTIC PIPE

FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS
CONCRETE PIPE PROFILE

CONCRETE PIPE

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<tr>
<td>D</td>
</tr>
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HALF-HEIGHT HEADWALL FOR CONCRETE PIPE

FOR ADDITIONAL NOTES REFER TO THE LATEST EDITION OF THE ODOT HYDRAULIC STANDARD CONSTRUCTION DRAWINGS
GENERAL NOTES:

1. NO NATURAL OR MAN-MADE BARRIERS SUCH AS WALLS, FENCES, POSTS, CURBS, SHRUBBERY, OR TREES SHALL BE INSTALLED SO AS TO IMPED THE USE, ACCESS, OR OPERATION OF HYDRANTS. MINIMUM CLEAR DISTANCE TO HYDRANT SHALL BE THREE (3) FEET.

2. IN AREAS WHERE HYDRANT INSTALLATION IS TO BE IN ROADWAY, PARKING LOT OR OTHER AREAS WHERE VEHICULAR TRAFFIC MAY CAUSE DAMAGE TO THE HYDRANT, PROTECTIVE BARRIERS ARE TO BE INSTALLED, AS DIRECTED BY THE ENGINEER.

3. HYDRANTS ALONG STREETS SHALL BE LOCATED IN THE TREE LAWN AREA OF THE RIGHT-OF-WAY, NOT LESS THAN 2' FROM THE BACK OF CURB AND NOT MORE THAN 5'.
FIRE HYDRANT ASSEMBLY PARALLEL TO WATER MAIN
GENERAL NOTES:

1. INSPECTION BY THE CITY OF HUBER HEIGHTS IS REQUIRED TO TAP IN TO THE WATER MAIN, INSTALL WATER METER AND METER PIT.
2. INSPECTION BY MONTGOMERY COUNTY IS REQUIRED TO INSTALL THE SERVICE FROM THE METER TO THE RESIDENCE.
3. FOR RESIDENTIAL USE WATER METER PIT SHOULD BE 21 1/2" TO 24" BEHIND CURB.
4. IRRIGATION METER SHOULD ALWAYS BE INSTALLED IN A SEPARATE PIT ON THE LEFT SIDE OF THE MAIN METER.
5. DO NOT INSTALL IN ANY STREET, ALLEY, PARKING AREA, DRIVEWAY, SIDEWALK, DRAINAGE DITCH OR DETENTION BASIN.
6. NO LANDSCAPING (SHRUBS, BOULDERS, ETC.) OR STRUCTURES TO BE WITHIN 4" OF THE METER BOX, OR NO TREES WITHIN 10' OF METER BOX.
7. SLOPE GROUND SURROUNDING METER BOX AWAY FROM LID AT 2% MINIMUM GRADE.
8. MULTI FAMILY HOMES SHALL BE AT LEAST 1" WITH 24" PIT MINIMUM.
9. ALL TEES AND CONNECTION FITTINGS TO BE A MINIMUM OF 5" FROM METER BOX WALL ON OUTLET SIDE.
10. GRADE ACCEPTANCE AFTER METER BOX INSTALLATION REQUIRES THAT THE OWNER ADJUST METER BOX COVER TO 1/2" ABOVE FINAL GRADE.
11. IF A PRESSURE REDUCING VALVE IS REQUIRED BY PLUMBING CODE, INSTALL VALVE INSIDE THE BUILDING, IMMEDIATELY FOLLOWING THE MAIN SHUT-OFF VALVE.

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
6131 TAYLORSVILLE RD.
HUBER HEIGHTS, OH 45424
(937) 233-1423

CITY OF HUBER HEIGHTS
ENGINEERING DEPARTMENT
ISSUE DATE: 2017

STANDARD EXTERIOR SETTING FOR
5/8" x 3/4" & 1" RESIDENTIAL WATER METER

DWG. No. WT-3.0
GENERAL NOTES:
1. TYPE "K" COPPER TUBING MEETING FEDERAL REQUIREMENTS WW-T-799.
2. TAP, CORPORATION STOP & CURB STOP SHALL BE MUELLER TYPE.
3. WATER SERVICES SHALL BE A MINIMUM OF 10' MEASURED HORIZONTALLY FROM SEWER SERVICE AND SHALL BE A MINIMUM OF 18" ABOVE CROWN OF THE SANITARY SEWER MAIN WHERE THE WATER SERVICE CROSSES THE SEWER MAIN. WATER SERVICES MAY BE LAID ON BENCH IN SEWER LATERAL TRENCH IF CROWN OF SEWER IS AT LEAST 18" BELOW INVERT OF WATER SERVICE.
4. ALL FITTINGS SHALL BE COMPRESSION FITTINGS ONLY.
5. INSPECTION BY THE CITY OF HUBER HEIGHTS IS REQUIRED TO TAP-IN TO THE WATER MAIN, INSTALL WATER METER AND METER PIT.
6. INSPECTION BY MONTGOMERY COUNTY IS REQUIRED TO INSTALL THE SERVICE FROM THE METER TO THE RESIDENCE.
7. FOR RESIDENTIAL USE WATER METER PIT SHOULD BE 21 1/2" TO 24" BEHIND CURB.
8. IRRIGATION METER SHOULD BE ALWAYS INSTALLED IN A SEPARATE PIT ON THE LEFT SIDE OF THE MAIN METER.
9. DO NOT INSTALL IN ANY STREET, ALLEY, PARKING AREA, DRIVEWAY, SIDEWALK, DRAINAGE DITCH OR DETENTION BASIN.
10. NO LANDSCAPING (SHRUBS, BOULDERS, ETC.) OR STRUCTURES TO BE WITHIN 4' OF THE METER BOX, OR NO TREES WITHIN 10' OF METER BOX.
11. SLOPE GROUND SURROUNDING METER BOX AWAY FROM LID AT 2% MINIMUM GRADE.
12. MULTI FAMILY HOMES SHALL BE AT LEAST 1' WITH 24" PIT MINIMUM.
13. ALL TEES AND CONNECTION FITTINGS TO BE A MINIMUM OF 6" FROM METER BOX WALL ON OUTLET SIDE.
14. GRADE ACCEPTANCE AFTER METER BOX INSTALLATION REQUIRES THAT THE OWNER ADJUST METER BOX COVER TO 1/2" ABOVE FINAL GRADE.
15. IF A PRESSURE REDUCING VALVE IS REQUIRED BY PLUMBING CODE, INSTALL VALVE INSIDE THE BUILDING, IMMEDIATELY FOLLOWING THE MAIN SHUT-OFF VALVE.
3-PC CAST IRON ADJUSTABLE WATER SERVICE BOX WITH LID AND FRAME PER SPEC. CENTER PLUMB OVER CURB STOP VALVE. LOCATE BETWEEN CURB AND SIDEWALK

3" PLASTIC METER BOX (CONCRETE METER BOX REQUIRED IF LOCATED IN DRIVEWAY)

NO PACK JOINT FITTINGS ALLOWED

COMPRESS OR FLARE TEE

6" LAYER OF 3/4"-1 1/2" GRAVEL UNDER METER BOX

REFER TO MONTGOMERY COUNTY ENVIRONMENTAL SERVICES STANDARD CONSTRUCTION DRAWINGS FOR WATER METER PITS LARGER THEN ONE(1) INCH

NOTES:

1. INSPECTION BY THE CITY OF HUBER HEIGHTS IS REQUIRED TO TAP-IN TO THE WATER MAIN. INSTALL WATER METER AND METER PIT.
2. INSPECTION BY MONTGOMERY COUNTY IS REQUIRED TO INSTALL THE SERVICE FROM THE METER TO THE RESIDENCE.
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5. DO NOT INSTALL IN ANY STREET, ALLEY, PARKING AREA, DRIVEWAY, SIDEWALK, DRAINAGE DITCH OR DETENTION BASIN.
6. NO LANDSCAPING (SHRUBS, BOULDERS, ETC.) OR STRUCTURES TO BE WITHIN 4' OF THE METER BOX, OR NO TREES WITHIN 10' OF METER BOX.
7. SLOPE GROUND SURROUNDING METER BOX AWAY FROM LID AT 2% MINIMUM GRADE.
8. MULTI-FAMILY HOMES SHALL BE AT LEAST 1" WITH 24" PIT MINIMUM.
9. ALL TEE'S AND CONNECTION FITTINGS TO BE A MINIMUM OF 5" FROM METER BOX WALL ON OUTLET SIDE.
10. GRADE ACCEPTANCE AFTER METER BOX INSTALLATION REQUIRES THAT THE OWNER ADJUST METER BOX COVER TO 1/2" ABOVE FINAL GRADE.
11. IF A PRESSURE REDUCING VALVE IS REQUIRED BY PLUMBING CODE, INSTALL VALVE INSIDE THE BUILDING, IMMEDIATELY FOLLOWING THE MAIN SHUT-OFF VALVE.

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CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT
ISSUE DATE: 2017

STANDARD 5/8" - 1" IRRIGATION WATER METER

DWG. No. WT-5.0
**HUER Heights**

**HEIGHTS COME GROW WITH US!**

**TITLE OF DRAWING:** 1 1/2" & 2" WATER METER PIT (1 1/2" & 2" SERVICE LINE) (FOR OFF ROAD USE ONLY)

**DWG. No.** WT-6.0

**CITY OF HUBER HEIGHTS ENGINEERING DEPARTMENT**

**6131 TAYLORSVILLE RD.**

**HUBER HEIGHTS, OH 45424**

**(937) 233-1423**

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**NOTES:**

1. ALTERNATE PIT DESIGN MAY BE SUBMITTED FOR REVIEW.
2. FORD V876-105 (OR 150) X 13 1/4" (1 1/2") OR V877-188 (OR 150) X 17 1/4" (2") COPPERSETTERS OR EQUAL MAY BE SUBSTITUTED. COPPERSETTER MUST HAVE 1" MIN. DIAMETER BYPASS.
3. BACKFLOW PREVENTION DEVICE SPECIFIED BY MONTGOMERY COUNTY WATER SERVICES WILL BE REQUIRED AT SERVICE ENTRANCE.
NOTE:
1. DIMENSIONS SHOWN ARE INSIDE MEASUREMENTS OF PIT.
2. ALL PIPE SHALL BE FLANGED END DUCTILE CAST IRON (CL-51).
3. ALL VALVES SHALL BE FLANGED END, HANDWHEEL OPERATED, RISING STEM, OS&Y
   RESILIENT WEDGE - ALL MUST OPERATE IN THE SAME DIRECTION.
4. PIT WORKING HEIGHT INSIDE - 6' MINIMUM.
5. ALL PIPE MUST HAVE MINIMUM 48" COVER AND 10" MINIMUM FROM FLOOR
6. WALLS TO BE FORMED CONCRETE OR PRE-CAST
7. FLOOR TO BE CONCRETE WITH 2"x2"x2" SUMP PIT AND PERMANENT SUMP PUMP WITH MINIMUM
   DISCHARGE OF 500 G.P.H.
8. PIPING AND METER MUST BE ADEQUATELY SUPPORTED WITH CONCRETE PIPE SUPPORTS.
9. ALTERNATE DESIGN MAY BE SUBMITTED FOR REVIEW.
10. METER FLANGED END MUST BE UNI-FLANGED
11. 1/2" HOLE REQUIRED IN METER PIT ACCESS DOOR /LID FOR HAZARDOUS GAS TESTING. PROVIDE 1 7/8" DIA.
    HOLE IN DOOR FOR INSTALLATION OF REMOTE READ PAD.
12. METER ONE SIZE SMALLER THAN PIPING MAY BE INSTALLED USING REDUCERS BEFORE AND AFTER METER
13. METER SHALL BE SUPPLIED BY COUNTY TO CONTRACTOR TO BE INSTALLED WITH OTHER PIPING FOR PROPER ALIGNMENT.
    METER TO BE INSTALLED IN CENTER OF METER SPREAD.
14. IF A 3" DIA. SERVICE LINE AND A 2" METER IS DESIRED,
    METER SPREAD MUST BE 46" ON THE 3" DIA. SERVICE PRIOR
    TO THE 3"x2" REDUCERS. CONTRACTOR MUST SUPPLY REDUCERS,
    PIPING AND FLANGES FOR THE 2" METER SPREAD OF 17 1/4".

**BACKFLOW PREVENTION DEVICE AS SPECIFIED BY MONTGOMERY COUNTY
WATER SERVICES WILL BE REQUIRED AT SERVICE ENTRANCE.
**NO* CLEARANCE BETWEEN BY-PASS LINE AND WALL IS ACCEPTABLE IN
SECTION OF BY-PASS ALONG THE WALL IF IT CONTAINS NO VALVES,
METERS, ETC.; 18" CLEARANCE REQUIRED IF SECTION CONTAINS ANY
VALVES, METERS, ETC.
SANITARY MANHOLE TYPE A

GENERAL NOTES:
1. FLEXIBLE JOINT SHOWN ABOVE PIPES LESS THAN OR EQUAL TO 24"Ø SHALL BE THE "PRESS WEDGE II", MANUFACTURED BY PRESS SEAL GASKET CORP., OR APPROVED EQUAL.
2. GASKETED JOINT SHALL BE FLEXIBLE TO ACCOMMODATE UP TO 9" DEFLECTION OF PIPE IN ANY DIRECTION.
3. FOR LARGER DIAMETER SEWER REFER TO LARGE MANHOLE STANDARD.
4. MANHOLES IN PAVED AREAS SHALL BE INITIALLY SET AT A LOWER THAN FINISHED BASE GRADE AND ADJUSTED TO FINAL GRADE PRIOR TO PLACING OF THE FINAL SURFACE.
5. IN PAVED AREAS MANHOLE FRAME AND LID SHALL BE EQUAL OF EAST JORDAN IRON WORKS NO. 1600, AS DIRECTED BY ENGINEER.
6. OUTSIDE OF PAVED AREA, MANHOLE FRAME AND LID MAY BE EQUAL OF EAST JORDAN IRON WORKS NO. 1610, AS DIRECTED BY ENGINEER.
TABLE 1: PAVEMENT DESIGN STANDARDS

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<th>ITEM NO.</th>
<th>MINOR STREETS</th>
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<tr>
<td>304</td>
<td>12&quot;</td>
<td>12&quot;</td>
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**LAWN AREAS (WITHIN RIGHT-OF-WAY)**

**PAVEMENT AREAS (WITHIN RIGHT-OF-WAY)**

- ITEM 441 (TYPE 1) OR ITEM 442 (A)-ASPHALT CONCRETE (SEE TABLE)
- TACK COAT
- ITEM 441 (TYPE 2) OR ITEM 442 (A)-ASPHALT CONCRETE (SEE TABLE)
- ITEM 304 - GRANULAR BASE (2 LIFTS)
- SAWCUT AND A.C. SEAL
- EXISTING PAVEMENT

**GRANULAR BACKFILL ODOT 310 (COMPACTED IN 8" LIFTS)**

**STORM SEWER & SANITARY SEWER INSTALLATION SHALL BE COMPACTED GRANULAR BACKFILL #57's (COMPACTED IN 4" LIFTS)**

**WATER MAIN INSTALLATION SHALL BE COMPACTED GRANULAR BACKFILL ODOT 310 (COMPACTED IN 4" LIFTS FOR PAVEMENT AREAS OR 8" LIFTS FOR LAWN AREAS)**

**STORM SEWER & SANITARY SEWER PIPE EMBEDMENT SHALL BE COMPACTED GRANULAR BACKFILL #57's. WATER MAIN PIPE EMBEDMENT SHALL BE COMPACTED GRANULAR BACKFILL ODOT 310**

**UNDISTURBED EARTH**

1. THE CONTRACTOR MAY WIDEN THE TRENCH OPENING BEGINNING AT A POINT 12" ABOVE THE TOP OF PIPE
2. NO TRENCH SHALL REMAIN OPEN OVERNIGHT. THE CONTRACTOR SHALL BACKFILL THE TRENCH OR USE STEEL PLATING.
SEED & MULCH OR SOD (AS PER PLAN)

4" TOPSOIL

WELL COMPACTED EXCAVATED MATERIAL TO A DEPTH OF 10" MAX. FROM TOP OF TRENCH. USE GRANULAR BACKFILL ODOT 310 BELOW 10" DEPTH (COMPACTED IN 6" LIFTS).
NOTE: CONTRACTOR MAY USE WELL COMPACTED EXCAVATED MATERIAL IN THIS AREA ONLY IF THE EXCAVATED SOIL MEETS THE APPROVAL OF THE CITY INSPECTOR. IF THERE IS A CHANGE IN CONDITION OF THE EXCAVATED MATERIAL, THE CITY INSPECTOR CAN ALSO DIRECT THE CONTRACTOR TO SWITCH BACK TO GRANULAR MATERIAL.

STORM SEWER & SANITARY SEWER INSTALLATION SHALL BE COMPACTED GRANULAR BACKFILL #67's (COMPACTED IN 4" LIFTS).
WATER MAIN INSTALLATION SHALL BE COMPACTED GRANULAR BACKFILL ODOT 310 (COMPACTED IN 4" LIFTS FOR PAVEMENT AREAS OR 8" LIFTS FOR LAWN AREAS).

STORM SEWER & SANITARY SEWER PIPE EMBEDMENT SHALL BE COMPACTED GRANULAR BACKFILL #67's
WATER MAIN PIPE EMBEDMENT SHALL BE COMPACTED GRANULAR BACKFILL ODOT 310

UNDISTURBED EARTH

8" MIN.
8" MIN.
O.D.

NOTE:
1. THE CONTRACTOR MAY WIDEN THE TRENCH OPENING BEGINNING AT A POINT 12' ABOVE THE TOP OF PIPE
2. NO TRENCH SHALL REMAIN OPEN OVERNIGHT, THE CONTRACTOR SHALL BACKFILL THE TRENCH OR USE STEEL PLATING.
KEYED NOTES:

1. CONCRETE, MATCH PAVEMENT SPEC.
2. 6" (MIN.) AGGREGATE BASE
3. 6" DIA. CLEAN-OUT PIPE
4. CAP AND SEAL CONDUIT
5. THREADED CLEAN-OUT CAP
6. CAST-IRON MONUMENT BOX, EJW 1570
   OR APPROVED EQUAL.
7. 45° BEND
8. WYE
9. SEWER