TOWN OF WEST HARTFORD INFRASTRUCTURE RULES AND SPECIFICATIONS

STANDARD CONSTRUCTION DETAILS

Department of Community Development Division of Engineering

JULY 2022
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EXHIBIT: C-1
INFRASTRUCTURE RULES & SPECIFICATIONS
STRAIGHT GRANITE CURB DETAIL
NOT TO SCALE
REV: 1/2018
TOWN OF WEST HARTFORD
DIVISION OF ENGINEERING

TYPICAL STRAIGHT GRANITE CURB CROSS SECTION

TYPICAL STRAIGHT GRANITE CURB ELEVATION VIEW

SAWCUT EX. PAVEMENT

EX. ROADWAY STRUCTURE
MIN. 3” BIT. CONC. ON 9” PROCESSED AGG. BASE

PROCESSED AGGREGATE BASE
(RECYCLED P.A.B. SHALL NOT BE USED)

5" X 16" OR 6" X 18" GRANITE STONE CURB (TYP.) OR AS DIRECTED

1/2" PREMOULDED JOINT FILLER AT SIDEWALK

CONCRETE, PAVER SIDEWALK OR 4" LOAM AND SEED

Curb Backfill
Bank Run Gravel Up To 4" Below Finished Grade

Class 'A' Or Class 'F'
Concrete At Each Joint

Joint Filler To Be Used Between Curb Pieces

6" Reveal

Class 'A' Or Class 'F' Concrete
2 C.F. Min.

Processed Aggregate Base

6" Curb Reveal (TYP.)
2' Limit

12"
18"

1/2" (TYP.)
**TOWN OF WEST HARTFORD**
**DIVISION OF ENGINEERING**

**INFRASTRUCTURE RULES & SPECIFICATIONS**

**EXHIBIT: C-2**

**CURVED GRANITE CURB DETAIL**

**NOT TO SCALE**

**REV: 1/2018**

**TYPICAL CURVED GRANITE CURB CROSS SECTION**

- **SAWCUT EX. PAVEMENT**
- **EX. ROADWAY STRUCTURE**
  - MIN. 3" BIT. CONC. ON 9" PROCESSED AGG. BASE
- **PROCESSSED AGGREGATE BASE**
  - (RECYCLED P.A.B. SHALL NOT BE USED)

**PAVEMENT**

**CLASS 'A' OR CLASS 'F' CONCRETE**

**PROCESSSED AGGREGATE BASE**

**JOINT FILLER TO BE USED BETWEEN CURB PIECES**

- **1/2" (TYP.)**
- **6" REVEAL**

**TYPICAL CURVED GRANITE CURB ELEVATION VIEW**

- **5" X 16" OR 6" X 18" GRANITE STONE CURB (TYP.) OR AS DIRECTED**
- **1/2" PREMOULDED JOINT FILLER AT SIDEWALK**
- **CONCRETE, PAVER SIDEWALK OR 4" LOAM AND SEED**

**CURB BACKFILL**

- BANK RUN GRAVEL UP TO 4" BELOW FINISHED GRADE
- **CLASS 'A' CONCRETE OR CLASS 'F' CONCRETE ENCASEMENT**

**EX. ROADWAY STRUCTURE**

- MIN. 3" BIT. CONC. ON 9" PROCESSED AGG. BASE

**BANK RUN GRAVEL UP TO 4"**

**6" CURB REVEAL (TYP.)**

**12"**

**18"**
NOTES:
1) CONCRETE SHALL BE 8000 PSI
2) BASE SHALL BE INSTALLED SAME AS FOR GRANITE CURB
3) WEIGHT IS APPROXIMATELY 140 LBS/LF
4) NYLON STRAPS SHALL BE USED TO MOVE CONCRETE SECTIONS
5) DETAILS OF CURVED SECTIONS SHALL BE APPROVED PRIOR TO INSTALLATION
NOTES:
1) CONCRETE SHALL BE 8000 PSI
2) BASE SHALL BE INSTALLED SAME AS FOR GRANITE CURB
3) WEIGHT IS APPROXIMATELY 140 LBS/LF
4) NYLON STRAPS SHALL BE USED TO MOVE CONCRETE SECTIONS
5) DETAILS OF CURVED SECTIONS SHALL BE APPROVED PRIOR TO INSTALLATION
EXISTING PAVEMENT

EDGE OF PAVEMENT

ADHESIVE

R = 3/8"

1 1/2"

6"

80°

6" MOUNTABLE EXTRUDED CONCRETE CURB

EXISTING PAVEMENT

EDGE OF PAVEMENT

ADHESIVE

R = 3/8"

1 1/2"

5"

5" MOUNTABLE EXTRUDED CONCRETE CURB
NOTES:
1. ENDS OF PIPES SHALL EXTEND TO AND BE CUT FLUSH WITH INSIDE FACE OF CATCH BASIN. APPLY MORTAR TO CUT EDGE OF PIPE TO COVER REINFORCING.
2. RED BRICK IS NOT BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL CATCH BASINS WHEN THE DEPTH OF THE STRUCTURE FROM THE TOPE OF FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FORM 816 SECTION M 08.02.5.
4. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR 3 4" STONE.
5. ALL PRECAST CONCRETE PRODUCTS MUST HAVE THE CASTING DATE CLEARLY LABELED ON EACH PRODUCT. NO PRECAST CONCRETE PRODUCT SHALL BE DELIVERED TO THE SITE WITHIN THE 7 DAY PERIOD FOLLOWING THE CASTING DATE.
6. ALL WEAKENED OR KNOCKOUT AREAS THAT ARE NOT USED SHALL BE BRICKED AND MORTARED TO MAINTAIN DESIGN WALL THICKNESS.
7. THE JOINTS OF PRECAST CONCRETE CATCH BASINS SHALL BE WRAPPED WITH GEOTEXTILE COVERING AT LEAST 12 INCHES ON BOTH SIDES OF THE JOINT.
8. SUMP DEPTH SHALL INCREASE TO 4' WHEN CATCH BASIN OUTLET TO A DRYWELL, AN INFILTRATOR SYSTEM, DETENTION BASIN, WETLANDS, WATERCOURSE, OR WHEN DIRECTED BY THE ENGINEER.
9. CATCH BASIN TOPS AND GRATES SHALL BE GALVANIZED AND, TO BE SET TO FINISHED GRADE, ASPHALT SHIMS TO BE PLACED BEFORE WINTER IS PAVING HAS NOT BEEN COMPLETED.
10. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
11. CATCH BASINS LOCATED WITHIN SUITABLE SOIL CONDITIONS AND A LOW WATER TABLE MAY INCLUDE INFILTRATION HOLES LOCATED ON THE SIDE AND BACK WALLS.
12. CATCH BASIN TOPS SHALL HAVE "DRAINS TO WATERCOURSE" STAMPED ON THE CONCRETE CURB TOP SECTION.
NOTES:
1. END OF PIPE SHALL EXTEND TO AND BE CUT FLUSH WITH INSIDE FACE OF CATCH BASIN WALL.
2. RED BRICK IS NOT TO BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL CATCH BASINS WHEN THE DEPTH OF THE STRUCTURE FROM THE TOP OF THE FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FORM 816 SECTION M08.02.5.
4. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR ¾" STONE.
5. WHERE CONCRETE MASONRY UNITS ARE USED, CORBELLING WILL BE ALLOWED AT A MAXIMUM OF ONE INCH PER COURSE ON THE LAST 3 COURSES. ON TYPE C BASINS, ONLY THE FRONT AND SIDE WALLS SHALL BE CORBELLED. THE TOP COURSE SHALL BE TURNED 90 DEGREES ON THE FRONT AND SIDE WALLS ONLY.
6. WHEN TOTAL EXTERIOR HEIGHT OF THE CATCH BASINS EXCEEDS 10 FEET, THE WALL THICKNESS SHALL BE INCREASED 12 INCHES.
7. THE EXTERIOR OF CONCRETE MASONRY CATCH BASINS SHALL BE WRAPPED WITH GEOTEXTILE.
8. SUMP DEPTH SHALL INCREASE TO 4' WHEN CATCH BASIN OUTLETS TO A DRYWELL, AN INFILTRATION SYSTEM, DETENTION BASIN, WETLANDS, WATERCOURSE, OR WHEN DIRECTED BY THE ENGINEER.
9. CATCH BASIN TOPS AND GRATES SHALL BE GALVANIZED AND, TO BE SET TO FINISHED GRADE, ASPHALT SHIMS TO BE PLACED BEFORE WINTER IF PAVING HAS NOT BEEN COMPLETED.
10. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
11. CATCH BASINS LOCATED WITHIN SUITABLE SOIL CONDITIONS AND A LOW WATER TABLE MAY INCLUDE INFILTRATION HOLES LOCATED ON THE SIDE AND BACK WALLS.
12. CATCH BASIN TOPS SHALL HAVE "DRAINS TO WATERCOURSE" STAMPED ON THE CONCRETE CURB TOP SECTION.
NOTES:
1. ALL DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION ONLY.
   CONTRACTOR TO SUBMIT MANUFACTURERS' SHOP DRAWINGS OF
   SPECIFIC PRODUCT FOR APPROVAL BY THE ENGINEER.
2. A GALVANIZED BICYCLE SAFE GRATE SHALL BE USED.
3. "DRAINS TO WATERCOURSE" SHALL BE IMPRINTED INTO CATCH
   BASIN CURB TOP.

DRAINS TO WATERCOURSE

TOWN OF WEST HARTFORD
DIVISION OF ENGINEERING
INFRASTRUCTURE RULES & SPECIFICATIONS
NOT TO SCALE  REV: 1/2018  EXHIBIT: D-3
TYPE 'C' PRECAST CATCH BASIN TOP
NOTES:
1. ENDS OF PIPES SHALL EXTEND TO AND BE CUT FLUSH WITH INSIDE FACE OF CATCH BASIN. APPLY MORTAR TO CUT EDGE OF PIPE TO COVER REINFORCING.
2. RED BRICK IS NOT TO BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL CATCH BASINS WHEN THE DEPTH OF THE STRUCTURE FROM THE TOP OF FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FOR, 816 SECTION M08.02.5.
4. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR \( \frac{3}{4} \)" STONE.
5. ALL PRECAST CONCRETE PRODUCTS MUST HAVE THE CASTING DATE CLEARLY LABELED ON EACH PRODUCT. NO PRECAST CONCRETE PRODUCT SHALL BE DELIVERED TO THE SITE WITHIN THE 7 DAY PERIOD FOLLOWING THE CASTING DATE.
6. ALL WEAKENED OR KNOCKOUT AREAS THAT ARE NOT USED SHALL BE BRICKED AND MORTARED TO MAINTAIN DESIGN WALL THICKNESS.
7. THE JOINTS OF PRECAST CONCRETE CATCH BASINS SHALL BE WRAPPED WITH GEOTEXTILE COVERING AT LEAST 12 INCHES ON BOTH SIDES OF THE JOINT.
8. SUMP DEPTH SHALL INCREASE TO 4' WHEN CATCH BASIN OUTLETS TO A DRYWELL. AN INFILTRATOR SYSTEM, DETENTION BASIN, WETLANDS, WATERCOURSE, OR WHEN DIRECTED BY THE ENGINEER.
9. CATCH BASIN TOPS AND GRATES SHALL BE GALVANIZED AND, TO BE SET TO FINISHED GRADE. ASPHALT SHIMS TO BE PLACED BEFORE WINTER IF PAVING HAS NOT BEEN COMPLETED.
10. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
11. CATCH BASINS LOCATED WITHIN SUITABLE SOIL CONDITIONS AND A LOW WATER TABLE MAY INCLUDE INFILTRATION HOLES LOCATED ON THE SIDE AND BACK WALLS.
NOTES:
1. ENDS OF PIPES SHALL EXTEND TO AND BE CUT FLUSH WITH INSIDE FACE OF CATCH BASIN.
2. RED BRICK IS NOT TO BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL CATCH BASINS WHEN THE DEPTH OF THE STRUCTURE FROM THE TOP OF FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FOR, 816 SECTION M08.02.5.
4. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR 3/4" STONE.
5. WHERE CONCRETE MASONRY UNITS ARE USED, CORBELLING WILL BE ALLOWED AT A MAXIMUM OF ONE INCH PER COURSE ON THE LAST 3 COURSES. ON TYPE "CL" BASINS, ALL 4 SIDES SHALL BE CORBELLED AND THE TOP COURSE SHALL BE TURNED 90 DEGREES.
6. WHEN TOTAL EXTERIOR DEPTH OF THE CATCH BASIN EXCEEDS 10 FEET, THE WALL THICKNESS SHALL BE INCREASED TO 12 INCHES.
7. THE EXTERIOR OF THE CONCRETE MASONRY CATCH BASINS SHALL BE WRAPPED WITH GEOTEXTILE.
8. SUMP DEPTH SHALL INCREASE TO 4' WHEN CATCH BASIN OUTLETS TO A DRYWELL, AN INFILTRATOR SYSTEM, DETENTION BASIN, WETLANDS, WATERCOURSE, OR WHEN DIRECTED BY THE ENGINEER.
9. CATCH BASIN TOPS AND GRATES TO BE SET TO FINISHED GRADE. ASPHALT SHIMS TO BE PLACED BEFORE WINTER IF PAVING HAS NOT BEEN COMPLETED.
10. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
11. CATCH BASINS LOCATED WITHIN SUITABLE SOIL CONDITIONS AND A LOW WATER TABLE MAY INCLUDE INFILTRATION HOLES LOCATED ON THE SIDE AND BACK WALLS.
NOTES:
1. ALL DIMENSIONS SHOWN ARE FOR GENERAL INFORMATION ONLY.
   CONTRACTOR TO SUBMIT MANUFACTURERS' SHOP DRAWINGS OF
   SPECIFIC PRODUCT FOR APPROVAL BY THE ENGINEER.
2. A GALVANIZED BICYCLE SAFE GRATE SHALL BE USED.
NOTES:
1. ENDS OF PIPES SHALL EXTEND TO AND BE CUT FLUSH WITH INSIDE FACE OF MANHOLE. APPLY MORTAR TO CUT EDGE OF PIPE TO COVER REINFORCING.
2. RED BRICK IS NOT TO BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL MANHOLES WHEN THE DEPTH OF THE STRUCTURE FROM THE TOP OF FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FORM 816 SECTION M08.02.5.
4. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR 3/4" STONE.
5. ALL PRECAST CONCRETE PRODUCTS MUST HAVE THE CASTING DATE CLEARLY LABELED ON EACH PRODUCT. NO PRECAST CONCRETE PRODUCT SHALL BE DELIVERED TO THE SITE WITHIN THE 7 DAY PERIOD FOLLOWING THE CASTING DATE.
6. ALL WEAKENED OR KNOCKOUT AREAS THAT ARE NOT USED SHALL BE BRICKED AND MORTARED TO MAINTAIN DESIGN WALL THICKNESS.
7. THE JOINTS OF PRECAST CONCRETE MANHOLES SHALL BE WRAPPED WITH GEOTEXTILE COVERING AT LEAST 12 INCHES ON BOTH SIDES OF THE JOINT.
8. MANHOLE FRAME AND COVER TO BE SET TO FINISHED GRADE. ASPHALT SHIMS TO BE PLACED BEFORE WINTER IF PAVING HAS NOT BEEN COMPLETED.
9. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
10. MANHOLE COVER SHALL HAVE "STORM" WRITTEN ON TOP.
NOTES:
1. CONCRETE MASONRY UNITS TO BE LAID IN CEMENT SAND MORTAR 1:2 MIX. JOINTS NOT BE OVER \( \frac{3}{4} \)" THICK ON INSIDE FACE OF WALL.
2. RED BRICK IS NOT TO BE USED.
3. LADDER RUNGS SHALL BE INSTALLED IN ALL MANHOLES WHEN THE DEPTH OF THE STRUCTURE FROM THE TOP OF FRAME TO THE LOWEST FLOW LINE EXCEEDS 4 FEET. RUNGS SHALL CONFORM TO FORM 816 SECTION M08.02.5.
4. FRAME AND COVER TO BE SET TO FINISHED GRADE. ASPHALT SHIMS TO BE PLACED BEFORE WINTER IN PAVING HAS NOT BEEN COMPLETED.
5. ALL EXTERIOR MANHOLE WALLS SHALL BE WRAPPED WITH GEOTEXTILE WITH 6" OVERLAP ON ALL SEAMS.
6. ANY OVER EXCAVATION SHALL BE REPLACED WITH PROCESSED AGGREGATE BASE, MEDIUM GRADATION, OR \( \frac{3}{4} \)" STONE.
7. BACKFILL WITH SUITABLE MATERIAL APPROVED BY THE ENGINEER.
8. MANHOLE SHALL HAVE "STORM" WRITTEN ON TOP.
NOTES:
1. MINIMUM DEPTH OF YARD DRAIN 42".
2. THE INSTALLATION OF THIS YARD DRAIN IS INTENDED FOR USE IN SMALL LAWN AREAS.
NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE TEMPORARY PATCH AND ADDRESS ANY SIGNIFICANT SETTLEMENTS IN A TIMELY MANNER.
2. THE TEMPORARY PATCH SHOULD REMAIN FOR A MINIMUM OF 90 DAYS TO ALLOW TIME FOR SETTLEMENT BEFORE THE FINAL PAVEMENT RESTORATION WORK IS PERFORMED.
3. THE FINAL RESTORATION WORK REQUIRES THE CONTRACTOR TO SAWCUT A ONE-FOOT CUT BACK ON ALL SIDES OF THE TEMPORARY PATCH, REMOVE THE ASPHALT, PLACE ASPHALT OVER THE TRENCH, AND JOINT SEAL THE TRENCH PERIMETER FOR THE FINAL RESTORATION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
CONSTRUCTION:
The lighting post shall be of a fully cast aluminum construction. The shaft shall have a Ø7" to Ø4 1/2" taper with 14 flutes. There shall be (1) access door in the base openings 4"x 5"h minimum for wiring and anchorage access. All hardware shall be stainless steel.

DIMENSIONS:
The post shall have a luminaire mounting height of 12'. The base shall have a Ø20".

LUMINAIRE MOUNTING:
A Ø3" by 3" tall tenon shall be an integral part of the pole provided for post top mounting of luminaire.

INSTALLATION: (see drawing for details)
The lighting pole shall be provided with (4) Ø3/4" x 24" long "L-type" anchor bolts. Each anchor bolt shall be supplied assembled with (1) nut, (1) flat washer and (1) split lock washer. The pole shall have a Ø15" bolt circle and requires a 3" anchor bolt projection. All anchorage hardware shall be fully galvanized.

FINISH:
The pole shall be finished with high gloss Super Durable polyester powder coat paint to be applied utilizing a multi-stage process that includes phosphate pretreatment, electrostatic powder application, and convection curing. Color to be specified.

Color: BLACK
WHEN GROUNDING REQUIRED:
5/8" X 10' GROUND ROD
EXTEND 2" ABOVE TOP OF FOUNDATION
#8 GROUND WIRE CONNECTION TO
GROUND ROD AND FOUNDATION

CLASS 'F' CONCRETE
SUITABLE BACKFILL

GRADE LINE

24" MAX.

GRADE LINE

24"

12"

4"

4"

#8 BARE COPPER GROUNDING CONDUCTOR TO BE CONTAINED WITHIN CONDUIT OR OUTSIDE CABLE IN DUCT.

CONDUIT OR CABLE IN DUCT, QUANTITY TO BE SHOWN ON PLANS.

SAND

DETECTABLE WARNING TAPE

TOWN OF WEST HARTFORD
DIVISION OF ENGINEERING
INFRASTRUCTURE RULES & SPECIFICATIONS
NOT TO SCALE | REV: 9/2019 | EXHIBIT: L-3
LIGHTING CONDUIT
NOTES:
1) SIDEWALKS PITCH TO STREET AT 1/4" PER FOOT.
2) RESTORE ADJACENT GRASS AREAS OR BITUMINOUS CONCRETE.
3) MINIMUM 6" OVERLAP REQUIRED BETWEEN SHEETS OF WIRE MESH REINFORCEMENT.
4) NO MORE THAN TWO (2) SHEETS OF WIRE MESH REINFORCEMENT SHALL BE USED IN ANY 10' LENGTH OF SIDEWALK.
5) PROCESSED AGGREGATE BASE TO BE PLACED IN 2 EVEN LIFTS.
TYPICAL CONCRETE SIDEWALK JOINT PLAN

**CONTRACTION JOINT DETAIL**

- **Substrate:** Portland cement concrete sidewalk
- **Radius:** 1/4" radius
- **Expansion Joint Material:** Tooled or sawcut joint, 1/8"-1/4" depth
- **Aggregate Base:** Processed aggregate base

**NOTES:**
- Contraction joint shall be 1.25" deep for 5" slabs and 2" deep for 8" slabs

**EXPANSION JOINT DETAIL**

- **Substrate:** Portland cement concrete sidewalk
- **Radius:** 1/4"
- **Expansion Joint Filler Material:** Preformed expansion joint filler material
- **Wire Mesh Reinforcement:** 6x6 #8 wire mesh
- **Aggregate Base:** Processed aggregate base

**NOTES:**
- 1/2 slab thickness
- Dowel sleeve or grease

**ADJACENT STRUCTURE**

- **(Sidewalk/Ramp/Wall/Foundation/etc.)**

**CONDITIONS:**

- **Expansion Joint Material:** 1/4"
- **Contraction Joint:** 1'-1.5' (typ.)
- **4' or 5'**
- **15' max.**
- **1'-1.5' (typ.)**

**IF MATCHING EXISTING:**

- Drill cavity for dowel in existing sidewalk

**MATERIALS:**

- **5/8" x 18" Smooth Dowel (typ.)**
- **Dowel Sleeve or Grease (typ.)**
- **1/4" Expansion Joint Material**
- **6x6 #8 Wire Mesh Reinforcement (for 8" slabs only)**

**SIDEWALK JOINTING AND DOWELING DETAILS**

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**TOWN OF WEST HARTFORD**

**DIVISION OF ENGINEERING**

**INFRASTRUCTURE RULES & SPECIFICATIONS**

**NOT TO SCALE**

**REV: 1/2018**

**EXHIBIT: S-2**
NOTES:
1. PAVERS ARE TO BE "PAVERS BY IDEAL, UNI-DECOR BEACON HILL BLEND".


TOWN OF WEST HARTFORD
DIVISION OF ENGINEERING
INFRASTRUCTURE RULES & SPECIFICATIONS
NOT TO SCALE  REV: 1/2018  EXHIBIT: S-3
SIDEWALK PAVER DETAILS
NOTES:
1. THE FINAL TEXTURE OF THE CONCRETE SURFACE SHALL BE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
2. CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP AND SLOPE OF SIDES TO RAMP, FREE OF SAGS AND SHORT GRADE CHANGES.
3. DRAINAGE DESIGN IN THE VICINITY OF SIDEWALK RAMPS SHALL BE CONSIDERED AN INTEGRAL PART OF THE DESIGN OF THESE RAMPS. NO DRAINAGE STRUCTURES SHALL BE WITHIN THE LIMITS OF THE SIDEWALKS AND CROSSWALKS.
4. SIDEWALK RAMPS SHALL CONFORM TO ADA REQUIREMENTS.
5. DETECTABLE WARNING STRIP SHALL BE FROM CT DOT QPL APPROVED. COLOR SHALL BE BRICK RED.
CONCRETE DRIVEWAY CROSS SECTION

CUT BITUMINOUS CONCRETE PAVEMENT

VARIES 12"

4' OR 5' SIDEWALK

VARIES 4' OR 5' SIDEWALK 2'

1/4'/FT (2%)

SAWCUT JOINTS, TACK COAT EDGE (TYP.)

12% MAX. SLOPE

SEAL JOINT WITH HOT ASPHALT AC-20 OR APPROVED EQUAL

2" BIT. CONC. ON

8" PROCESSED AGG. BASE

8" CLASS "F" CONCRETE

MAT REINFORCING 6"x6" #8 WIRE MESH

7" PROCESSED AGGREGATE BASE

COMPACT SUBGRADE

8" THICK CONCRETE

2" BITUMINOUS CONCRETE

ON 8" PROCESSED AGG. BASE

SAWCUT JOINTS, TACK COAT EDGE (TYP.)

CONCRETE DRIVEWAY DETAILS

HALF PLAN

GUTTER LINE

CURB

5" THICK CONCRETE SIDEWALK OR 2" THICK ASPHALT SIDEWALK

VARIES

8" THICK CONCRETE SIDEWALK

5/8" X 18" SMOOTH DOWEL

DOWEL SLEEVE OR GREASE

EXPANSION JOINT

CONTRACTION JOINT ALONG ℄

5" THICK CONCRETE SIDEWALK OR 2" THICK ASPHALT SIDEWALK

VARIES

8" THICK CONCRETE DRIVEWAY RAMP

2' MIN.

1" LIP

18"
NOTES:
1. ALL CURB SHALL BE TRANSITIONED PER THE FOLLOWING LENGTHS TO MEET DRIVEWAYS:
   GRANITE AND CONCRETE CURB, 3' AND 4' TRANSITION SECTION BITUMINOUS CURB, 2' TRANSITION SECTION.
2. SLOPE TO STREET AS DETERMINED BY ENGINEER (14% MAX SLOPE).
3. FROM THE FRONT EDGE OF THE SIDEWALK, DRIVEWAY APRONS SHALL BE FLARED 3' AT THE GUTTER ON BOTH
   SIDES TO MEET THE CURB TRANSITION.
NOTE:
MERESTONES IN SIDEWALK AREAS MAY REQUIRE PROTECTIVE COVER AS DIRECTED BY THE TOWN ENGINEER

WEST HARTFORD BOUNDARY MERESTONE
WITH 4 METAL RODS AND A STAMPED CAP

EXISTING GROUND

COMPACTED GRAVEL
BACKFILL (6" LIFTS)

48"

24"±

30"±
NOTES:
1. IF WALL IS CONSTRUCTED WITHIN 3' OF A WALKING SURFACE, A 3' TALL GUARD SHALL BE INSTALLED ON BACKSIDE OF RETAINING WALL. GUARD TYPE SHALL BE DETERMINED BY ENGINEER.
2. CONCRETE BLOCK WALL SHALL BE DRYSET OR MORTARED (DETERMINED BY ENGINEER).
NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE TEMPORARY PATCH AND ADDRESS ANY SIGNIFICANT SETTLEMENTS IN A TIMELY MANNER.
2. THE TEMPORARY PATCH SHOULD REMAIN FOR A MINIMUM OF 90 DAYS TO ALLOW TIME FOR SETTLEMENT BEFORE THE FINAL PAVEMENT RESTORATION WORK IS PERFORMED.
3. THE FINAL RESTORATION WORK REQUIRES THE CONTRACTOR TO SAWCUT A ONE-FOOT CUT BACK ON ALL SIDES OF THE TEMPORARY PATCH, REMOVE THE ASPHALT, PLACE ASPHALT OVER THE TRENCH, AND JOINT SEAL THE TRENCH PERIMETER FOR THE FINAL RESTORATION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
NOTES:
1. PERFORATIONS TO BE PLACED DOWN.
2. HOLES ARE TO BE $\frac{1}{2}$" DIAMETER OR $\frac{3}{8}$" DIAMETER.
3. PIPE SHALL BE MIN. 6" DIAMETER (SEE SPECS).
4. SLOTTED REINFORCED CONCRETE PIPE (SRCP) CAN BE USED AS A COMBINED STORM, UNDERDRAIN, AND COLLECTOR DRAIN SYSTEM.
5. ALL UNDERDRAINS TO BE OUTLETED DIRECTLY INTO A CATCH BASIN. THE TOP OF THE UNDERDRAIN PIPE IS TO MATCH THE TOP OF THE OUTLET PIPE IN CATCH BASIN.
6. NO FLEXIBLE CORRUGATED PLASTIC PIPE IS TO BE USED UNLESS APPROVED BY THE ENGINEER.
NOTES:
1. PERFORATIONS TO BE PLACED DOWN.
2. HOLES ARE TO BE \( \frac{\frac{1}{2}}{\text{Diameter}} \) DIAMETER OR \( \frac{\frac{3}{8}}{\text{Diameter}} \).
3. PIPE SHALL BE MIN. 6" DIAMETER (SEE SPECS).
4. SLOTTED REINFORCED CONCRETE PIPE (SRCP) CAN BE USED AS A COMBINED STORM, UNDERDRAIN, AND COLLECTOR DRAIN SYSTEM.
5. ALL UNDERDRAINS TO BE OUTLETTED DIRECTLY INTO A CATCH BASIN. THE TOP OF THE UNDERDRAIN PIPE IS TO MATCH THE TOP OF THE OUTLET PIPE IN CATCH BASIN.
6. NO FLEXIBLE CORRUGATED PLASTIC PIPE IS TO BE USED UNLESS APPROVED BY THE ENGINEER.
NOTES:

1. IF DOUBLE YELLOW CENTERLINE (DYCL) IS PRESENT, GAP BETWEEN WHITE BARS SHALL BE CENTERED UPON DYCL, EVEN IF DYCL IS OFFSET FROM TRUE CENTERLINE.

2. IF NO DYCL EXISTS, GAP BETWEEN WHITE BARS SHALL BE CENTERED ON TRUE ROADWAY CENTERLINE.

3. NO PARTIAL WIDTH WHITE AREAS ALLOWED AT EDGE OF ROADWAY.

4. BRICK PATTERN AND TREATMENT COLORS SUBJECT TO APPROVAL BY ENGINEER.

NO PARTIAL WHITE BARS IN THIS AREA

12" WHITE EPOXY PAVEMENT MARKING LINE (BY OTHERS) (TYP.)

RED BRICK COLOR STAMPED TREATMENT

WHITE COLOR STAMPED TREATMENT

4" EPOXY DYCL (BY OTHERS)

MARKING ERADICATION BY OTHERS (IF NECESSARY)

4' MIN AT INTERSECTION; 2' TYP. AT MID-BLOCK

LENGTH VARIES

9" +/-
4" MIN.

PIPE LINE

3" MIN.

EXCAVATED MATERIAL. IF MATERIAL IS UNSUITABLE SAND SHALL BE USED IN ITS PLACE.

6" MIN.

SAND FROM 6" ABOVE GAS MAIN TO 3" BELOW.

9" OF COMPACTED ASPHALT (CLASS 1)

MINIMUM 9" COMPACTED PROCESSED AGGREGATE BASE IN 4 X 1/2" LIFTS (OR UNLESS OTHERWISE APPROVED)

WARNING TAPE PLACED IN GRAVEL 1" BELOW BOTTOM OF ASPHALT.

#12 TRACING WIRE

MINIMUM 9" COMPACTED PROCESSED AGGREGATE BASE IN 4 X 1/2" LIFTS (OR UNLESS OTHERWISE APPROVED)

WARNING TAPE PLACED IN GRAVEL 1" BELOW BOTTOM OF ASPHALT.

EXCAVATED MATERIAL. IF MATERIAL IS UNSUITABLE SAND SHALL BE USED IN ITS PLACE.

6" MIN.

SAND FROM 6" ABOVE GAS MAIN TO 3" BELOW.

9" OF COMPACTED ASPHALT (CLASS 1)
PLAN VIEW

3' LONG 4" DIA. PVC PIPE
IMPERVIOUS SIDEWALK OR MEDIAN SURFACE
CURB

4" DIA. PVC PIPE
IMPERVIOUS SIDEWALK OR MEDIAN SURFACE

BREAKAWAY U-CHANNEL SIGN POST
U-CHANNEL SIGN POST STUB (4" MAX REVEAL ABOVE GRADE)
DIRECTION OF TRAVEL

LIGHTLY COMPACTED FILL (SAND OR APPROVED EQUAL)

36" PVC

SUB-BASE

SECTION VIEW
NOTES:

1. EXISTING PAVEMENT SHALL BE MILLED AROUND ENTIRE PERIMETER OF SPEED HUMP.
2. SPEED HUMPS SHALL BE CONSTRUCTED OF 50.375 BITUMINOUS CONCRETE.
3. TACK COAT SHALL BE APPLIED TO ALL MILL EDGES, INCLUDING EDGES, AND BELOW THE ENTIRE BASE OF THE SPEED HUMP.
4. JOINTS SHALL BE SEALED WITH HOT ASPHALT MATERIAL, AC-20 OR APPROVED EQUAL.
5. PAVEMENT MARKINGS SHALL BE 12" WHITE EPOXY RESIN PAVEMENT MARKINGS.
6. WARNING SIGN, W17-1 "SPEED HUMP" (30" X 30"), SHALL BE MOUNTED ON THE RIGHT SIDE OF THE ROADWAY 10 FEET BEFORE THE START OF THE SPEED HUMP IN BOTH DIRECTIONS.
7. SPEED HUMPS SHOULD BE INSTALLED WITH AN APPROXIMATE SPACING OF 300'-400'.
8. IF A SERIES OF SPEED HUMPS EXISTS IN CLOSE PROXIMITY, THE ADVANCE WARNING PAVEMENT MARKS SHALL BE ELIMINATED ON ALL EXCEPT THE FIRST SPEED HUMP IN THE SERIES, IN EACH DIRECTION.
NOTES:
1. PAVEMENT MARKINGS SHALL BE 12" WHITE EPOXY RESIN PAVEMENT MARKINGS.
2. SPEED HUMPS SHOULD BE INSTALLED WITH AN APPROXIMATE SPACING OF 300'-400'.
3. IF A SERIES OF TWO OR MORE SPEED HUMPS EXISTS IN CLOSE PROXIMITY, THE ADVANCE WARNING PAVEMENT MARKS SHALL BE ELIMINATED ON ALL EXCEPT THE FIRST SPEED HUMP IN THE SERIES, IN EACH DIRECTION.
BIKE HITCH - ORIENT RING PARALLEL WITH THE STREET

EXISTING CONCRETE OR PAVER SIDEWALK

COMPACTED SUBGRADE

CONCRETE FOOTING

SETBACK DIMENSIONS

INSTALLATION TIP

24"  12"  DIAMETER

TOWN OF WEST HARTFORD
DIVISION OF ENGINEERING
INFRASTRUCTURE RULES & SPECIFICATIONS
NOT TO SCALE  REV: 1/2022  EXHIBIT: M-9
BIKE HITCH - IN-GROUND MOUNT