COMMONWEALTH OF MASSACHUSETTS

TOWN OF DEDHAM

DESIGN AND CONSTRUCTION STANDARDS 2015

DEPARTMENT OF PUBLIC WORKS

AND

ENGINEERING DEPARTMENT

TOWN OF DEDHAM

EXISTING DETAIL SURVEY STANDARDS

All surveys shall be performed in accordance with 250 CMR 6.00 and the appropriate corresponding section. The survey shall be tied to the State Plane Massachusetts Mainland Coordinate System, NAD 1983 horizontally and NAVD 1988 vertically.

Plans shall be prepared at a scale of 1"=20' or some other scale approved by the Town. The final plan shall be submitted as a "hard copy" signed and stamped by a Registered Land Surveyor as well as an electronic file compatible with AutoCAD at a minimum release of R14. The CAD file shall be produced with Grid North coincident with the "Y" axis and no "hard rotation" of entities within the drawing. The base point of the drawing shall be (0,0,0). A view rotation for cosmetic appearances of the drawing is acceptable.

The following is a detailed list of all items to be field located and included on all final plan submittals:

BUILDINGS	**TRAVELED WAYS** **LOCATION, SIZE, SURFACE TYPE**
Building corners	Curbing
Decks/ porches	Driveways
House number	Edge of pavement
Top of foundation elevation	Foot/cart paths
Top of step elevation	Parking areas
	Pavement markings
	Sidewalks
	Signage
	Walkways

SEWER & DRAIN STRUCTURES	**UTILITIES** **WATER, GAS, ELECTRIC, TELEPHONE**
Manholes	Dig Safe markings
Catch basins	Fire alarm boxes
Rim elevations	Gates, Box valves, Box meters, hand holes, hydrants
Invert elevations	Light poles/ pole numbers
Pipe sizes	Overhead wire connections, guy wires
Flow direction	Record utility information
	Service connections
	Utility poles/ pole numbers

TOWN OF DEDHAM

EXISTING DETAIL SURVEY STANDARDS

VEGETATION/ NATURAL FEATURES	MISCELLANEOUS DETAIL
Boulders	Fencing/ type, height
Deciduous/ coniferous trees	Flagpoles
Tree sizes	Guardrails
Edge of woods	Hay bales/ silt fencing
Landscaping	Mailboxes
Ledge outcrops	Monitoring wells
Shrubs, hedges	North arrow
Water bodies	Private water wells
Wetland flags (where applicable)	Riprap slopes
	Railroad ties
	Retaining walls
	Swimming pools
	Test pits
	Yard lights

TOPOGRAPHY	PROPERTY/ RIGHT OF WAY LINES
Benchmarks (set as needed)	Abutter names/ deed references
Existing contours @ 1 foot intervals	Assessors parcel numbers
Spot elevations @ 50 foot intervals	Easements
Vertical & horizontal datum	Lot lines
	Public & private street names/ widths
	Recovered monumentation

TOWN OF DEDHAM
STANDARD DETAILS

Layer Name	***Layer Description***	***Color***	***Linetype***
Abut	Abutter Lines and Text	11	Continuous
Arrow	North Arrow	White	Continuous
Barscale	Bar Scale	White	Continuous
BD	Curves, Bearings and Distances	Red	Continuous
Control	Survey Control and Traverse Lines	White	Hidden
Control-GPS	GPS Survey Control	160	Continuous
Crowsft	Crows Feet on Property/ Lot Lines	White	Crowsft
ExBld	Existing Buildings + Text	11	Continuous
ExContours	Existing Contours - Intermediate	134	Dash4
ExConTxt	Existing Contours Text	252	Continuous
ExEase	Existing Easements	9	Easements
ExElec-rec	Existing Electric record location only	22	Hidden
ExEOW	Existing Edge of Water	12	Continuous
ExFlow	Existing Flow Lines, Ditches etc.	Red	Dash2
ExFnc	Existing Fences	240	Continuous
ExGas-rec	Existing Gas-record location only	40	Hidden
ExHicon	Existing Highlighted Contours (Index Contours)	252	Dash5
ExInv	Existing Invert Elevations	253	Continuous
ExLedge	Existing Ledge Outcrops	130	Continuous
ExPool	Existings Swimming Pools	11	Continuous
ExPrk	Existing Parking Spaces, Pavement Markings	96	Continuous

TOWN OF DEDHAM
STANDARD DETAILS

Layer Name	***Layer Description***	***Color***	***Linetype***
ExRtw	Existing Retaining Walls	241	Continuous
ExSD	Existing Sewer and Drain Lines	72	Continuous
ExSE	Existing Spot Elevations	110	Continuous
ExSW	Existing Stone Walls	241	Continuous
ExTel-rec	Existing Telephone record location only	62	Hidden
ExTree	Existing Trees, Shrubs and Tree Lines	96	Continuous
ExTrv	Existing Travelways	8	Continuous
ExTxt	Existing Text	253	Continuous
ExUtil	Existing Utilities	52	Continuous
ExWater-rec	Existing Water record location only	142	Hidden
ExWet	Existing Wetland Flag Locations & Nos.	Green	DashDot
Field	Field Survey Shots, Detail/topo	White	Continuous
Hatch	Miscellaneous Hatch Patterns	96	Continuous
Legend	Plan Legend	White	Continuous
Locus	Locus/Vacinity Map	White	Continuous
Lots	Proposed Lot Lines	10	Center2
Lottxt	Proposed Lot Line Labels - TEXT	Red	Continuous
Monuments	Boundary and Roadway Monuments	White	Continuous
NoTopo	Field Shots (not to be used for topography)	White	Continuous

TOWN OF DEDHAM
STANDARD DETAILS

Layer Name	***Layer Description***	***Color***	***Linetype***
P-All	PS, Dwg. info., WCR+Drive tables Street names, Curve tables	Magenta	Continuous
P-Basel	Proposed Baselines	Cyan	Continuous
P-Basel-t	Station Equations, Geometry	Cyan	Continuous
P-Cond	Conduit, Pull boxes	Cyan	Continuous
P-Crown	Crown Line (if different from baseline)	Red	Continuous
P-Curb	Curbs, Walks, W.C.Ramps, Back Sidewalk, Ret.Walls (0.45 PL)	Blue/Red	Continuous
P-Duct	Electrical Ducts (interconnect cable)	Cyan	Continuous
P-Ease	Temporary Construction Easements	Red	Continuous
PL	Property Lines	Green	Continuous
P-Notes	General Notes	Cyan	Continuous
PntDESC	Point Node - DESCRIPTIONS	22	Continuous
PntELEV	Point Node - ELEVATIONS	Magenta	Continuous
PntNO	Point Node - NUMBERS	White	Continuous
P-Paint	Pavement Markings	Red	Continuous
P-Paint-t	Pavement Marking Text	Cyan/Red	Continuous
P-ROW	Right of Way w/Layout Reference, Row of Way Text	Blue	Continuous
P-Sign	Signs, Mast Arms, Span Wire, Text	Cyan/Red	Continuous
P-Signal	Traffic Signals, Traffic Signal Text	Cyan/Red	Continuous
P-Slope	Top or Bottom of Slope	Magenta	Hidden2

TOWN OF DEDHAM
STANDARD DETAILS

Layer Name	***Layer Description***	***Color***	***Linetype***
P-Ties	Curb Tie Lines, Survey Ties	Cyan/White	Continuous
P-Tree	Trees, Grass, Shrub	Magenta	Continuous
ROW	Right of Way Lines	Yellow	Phantom2
ROWTXT	Right of Way TEXT	White	Continuous
SAVE	Save Layer for Property Calcs, etc. (FROZEN)	8	Continuous
Stakeout	Stakeout Information, Calcs. + Points	White	Continuous
Testpits	Testpits	Magenta	Continuous
Tmesh	Tin Lines	Magenta	Continuous
VP	ViewPorts (Paper Space)	White	Continuous
Wetbuff	Wetland Buffer Zones	14	Dash6
Wetlands	Wetland Border Lines	12	DashDot

TEMPORARY TRAFFIC CONTROL NOTES

GENERAL

1. ALL TEMPORARY TRAFFIC CONTROL MEASURES SHALL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) 2009 EDITION, SUPPLEMENTALS THERETO, THE STANDARD SPECIFICATIONS, AND THE FOLLOWING NOTES.

2. LANE RESTRICTIONS MAY NOT REMAIN OVERNIGHT OR DURING NON–WORKING HOURS. AFTER EACH WORKING DAY, TRAFFIC CONTROL DEVICES THAT ARE NOT REQUIRED SHALL BE MOVED OFF THE ROADWAY OR FULL DEPTH CONSTRUCTION AREA AND PLACED SO AS NOT TO IMPEDE PEDESTRIAN AREAS, ABUTTER ACCESS OR CAUSE CONFUSION TO MOTORISTS. IN CERTAIN CIRCUMSTANCES, AND ONLY WITH THE APPROVAL OF THE TOWN AND THE ENGINEER, CAN LANE RESTRICTIONS REMAIN OVERNIGHT.

3. CONTRACTOR SHALL PROVIDE A SAFE TEMPORARY PEDESTRIAN ACCESS WHERE EXISTING SIDEWALKS OR OTHER PEDESTRIAN AREAS ARE AFFECTED BY CONSTRUCTION WORK. CONTRACTOR SHALL MAINTAIN ABUTTER ACCESS AT ALL TIMES EXCEPT FOR SHORT PERIODS APPROVED BY THE ENGINEER.

4. CONTRACTOR SHALL PLACE ALL CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKING FOR EACH PHASE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

5. ONE (1) THRU TRAVEL LANE HAVING A MINIMUM WIDTH OF 11'–0" SHALL BE PROVIDED FOR BOTH DIRECTIONS (LANE TO BE SHARED AND DIRECTION OF TRAVEL TO ALTERNATE IN SOME SITUATIONS UNDER POLICE OFFICER CONTROL) DURING ALL PHASES OF CONSTRUCTION AS SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLANS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

6. IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE, THE TOWN MAY, WHEN WORK INFRINGES UPON THE TRAVELED WAY, RESTRICT THE CONTRACTOR'S WORKING HOURS.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TEMPORARY TRAFFIC CONTROL NOTES

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: TM.01	

ROADS & SIDEWALKS

DESCRIPTION	DETAIL NUMBER
ROADWAY & PAVEMENT	
TYPICAL ROADWAY SECTION	RS.01
TYPICAL RESIDENTIAL STREET ROADWAY SECTION (NEW SUBDIVISION)	RS.02
ROAD WIDENING & OVERLAY (LESS THAN 6' WIDE)	RS.03
ROAD WIDENING & OVERLAY (6' WIDE OR GREATER)	RS.04
PAVEMENT TRANSITION	RS.05
DRIVEWAYS	
FULL DEPTH DRIVEWAY APRON (NO SIDEWALK)	RS.06
TYPICAL CURB CUT PLAN– RESIDENTIAL DRIVEWAYS (NO SIDEWALKS)	RS.07
TYPICAL CURB CUT PLAN–COMMERCIAL DRIVEWAYS	RS.08
FULL DEPTH DRIVEWAY APRON SECTION	RS.09
SIDEWALKS	
HMA SIDEWALK THROUGH DRIVEWAY	RS.10
CEMENT CONCRETE SIDEWALK THROUGH DRIVEWAY	RS.11
CONCRETE WHEELCHAIR RAMPS	RS.12
DETECTABLE WARNING PANELS	RS.13
CURB TRANSITION LENGTHS FOR WHEELCHAIR RAMP	RS.14
ASPHALT OR CEMENT CONCRETE SIDEWALK	RS.15
PRECAST CONCRETE CURB & SIDEWALK	RS.16
CAST IN PLACE CONCRETE CURB & SIDEWALK	RS.17
SIDEWALK WITH GRASS STRIP	RS.18
CURBING	
VERTICAL GRANITE CURBING–TYPE VA4	RS.19
SLOPED GRANITE EDGING	RS.20
GRANITE CURB TO SLOPED EDGING TRANSITION	RS.21
HOT MIX ASPHALT–TYPE "A"	RS.22
HOT MIX ASPHALT–TYPE 3	RS.23

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
ROADS & SIDEWALKS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS–INDEX.01	

ROADS & SIDEWALKS

DESCRIPTION	DETAIL NUMBER
ISLANDS	
TRAFFIC ISLAND (VERTICAL CURBING)	RS.24
TRAFFIC ISLAND (SLOPED EDGING)	RS.25
RAISED PLANTING ISLAND DETAIL	RS.26
ISLAND REMOVAL	RS.27
STEEL BEAM HIGHWAY GUARD (TYPE SS)	
VERTICAL GRANITE CURB OR ASPHALT CURB	RS.28
HOT MIX ASPHALT BERM–TYPE "A"	RS.29
SLOPED GRANITE EDGING	RS.30
RIPRAP SLOPE	RS.31
SCORED CONCRETE PAVEMENT	RS.32
TRENCH REPAIRS	
SHALLOW EXCAVATION IN ASPHALT PAVEMENT (≤42")	RS.33
DEEP EXCAVATION IN ASPHALT PAVEMENT (>42")	RS.34
PAVEMENT RESTORATION FOR TRENCHING IN CRACKED PAVEMENT	RS.35
TYPICAL ROADWAY CROSS–SECTION FOR THE ACCEPTANCE OF A PRIVATE WAY AS A PUBLIC WAY	RS.36

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
ROADS & SIDEWALKS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
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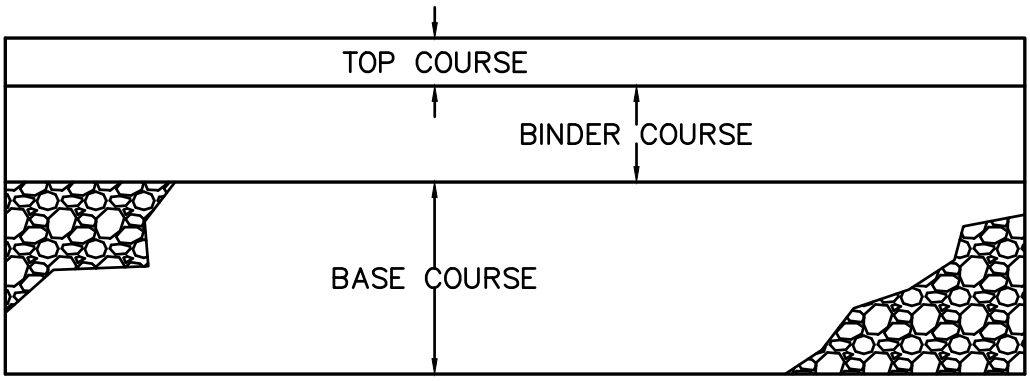
DETAIL NUMBER: RS–INDEX.02	



WARM MIX ASPHALT PAVEMENT CONSTRUCTION			
	ARTERIAL	COLLECTOR	LOCAL
TOP COURSE THICKNESS (IN):	2	2	1–1/2
BINDER COURSE THICKNESS (IN):	3	3	2
BASE COURSE THICKNESS (IN):	12	12	12

NOTES:

1) WARM MIX ASPHALT SHALL CONFORM TO THE LATEST VERSION OF THE MassDOT STANDARD SPECIFICATIONS.

2) WARM MIX ADDITIVES (WMAs) FOR FULL WIDTH ROAD CONSTRUCTION – WMAs SHALL BE ADDED TO THE JOB–MIX FORMULA UNLESS OTHERWISE DIRECTED BY THE ENGINEER. NO OTHER CHANGES SHALL BE MADE IN THE JOB–MIX FORMULA WHEN ADDING WMAs UNLESS REQUIRED BY THE ENGINEER. ONLY WMAs LISTED ON THE NEAUPG QUALIFIED WMA TECHNOLOGIES LIST WILL BE ACCEPTED, AND SHALL BE LIMITED TO CHEMICAL ADDITIVES WHICH ARE CAPABLE OF REDUCING MIXTURE COMPACTION TEMPERATURES BY A MINIMUM OF 50°F. ADDITIVES POSSESSING ANTI–STRIPPING PROPERTIES ARE PREFERRED.

3) BASE COURSE MATERIAL SHALL BE GRAVEL BORROW M1.03.0 TYPE "B" FOR NEW ROADWAY CONSTRUCTION AND SHALL BE EITHER GRAVEL BORROW M1.03.0 TYPE "B" OR RECLAIMED PAVEMENT BORROW M1.09.0.

4) A TACK COAT CONSISTING OF ASPHALT EMULSION TYPE "RS–1" SHALL BE APPLIED OVER THE BINDER COURSE AT UNIFORM RATE OF 0.05 GALLONS PER SQUARE YARD IMMEDIATELY PRIOR TO INSTALLATION OF THE TOP COURSE.

5) RECLAMATION DEPTH SHALL BE A MINIMUM OF 12 INCHES. IF BOTTOM OF RECLAMATION IS ABOVE REQUIRED SUBGRADE, THE RECLAIMED MATERIAL SHALL BE REMOVED, THE EXISTING SUBGRADE SHALL BE EXCAVATED TO THE REQUIRED SUBGRADE ELEVATION AND RECLAIMED MATERIAL SHALL THEN BE PLACED TO THE REQUIRED GRADES. EXISTING SUBGRADE MAY REMAIN IN PLACE IF IT MEETS THE SPECIFICATION FOR GRAVEL BORROW M1.03.0 TYPE "B".

6) THE DIRECTOR OF ENGINEERING AND/OR THE DIRECTOR OF PUBLIC WORKS HAVE THE RIGHT TO REQUEST THAT A ROADWAY BE DESIGNED PER THE LATEST EDITION OF THE MassDOT PROJECT DEVELOPMENT AND DESIGN GUIDEBOOK.

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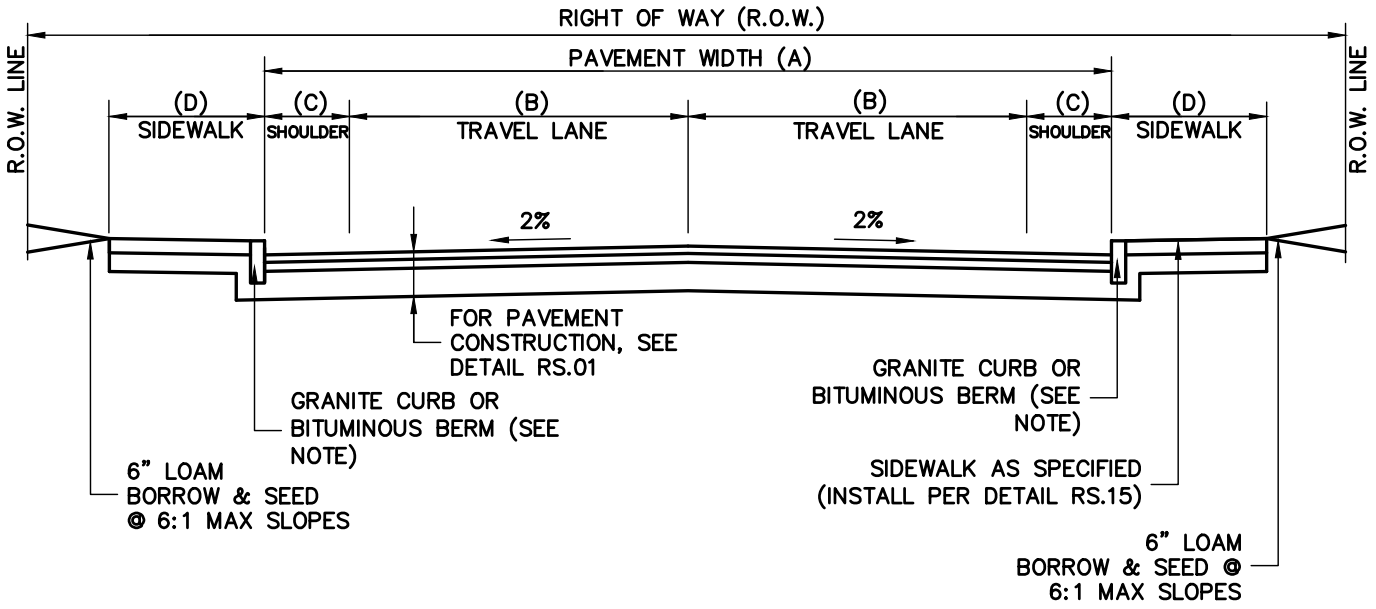
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL ROADWAY SECTION FOR VARIOUS ROAD CLASSIFICATIONS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.01



CLASSIFICATION	NO. OF LOTS SERVED	MINIMUM ROADWAY SECTION WIDTHS (FT)				
		R.O.W.	(A)	(B)	(C)	(D)
LOCAL	1–4	40	18	8	1	5
LOCAL	5–49	50	28	12	2	6
COLLECTOR	50+	60	32	12	4	6

NOTES:

1) CURB TYPE SHALL BE DETERMINED BY LOCATION IN TOWN AND CURRENT B.O.S. POLICIES.

2) SIDEWALKS SHALL INCORPORATE GRASS STRIPS WHERE FEASIBLE. MINIMUM GRASS STRIP WIDTHS SHALL BE 2 FEET. (SEE DETAIL RS.18)

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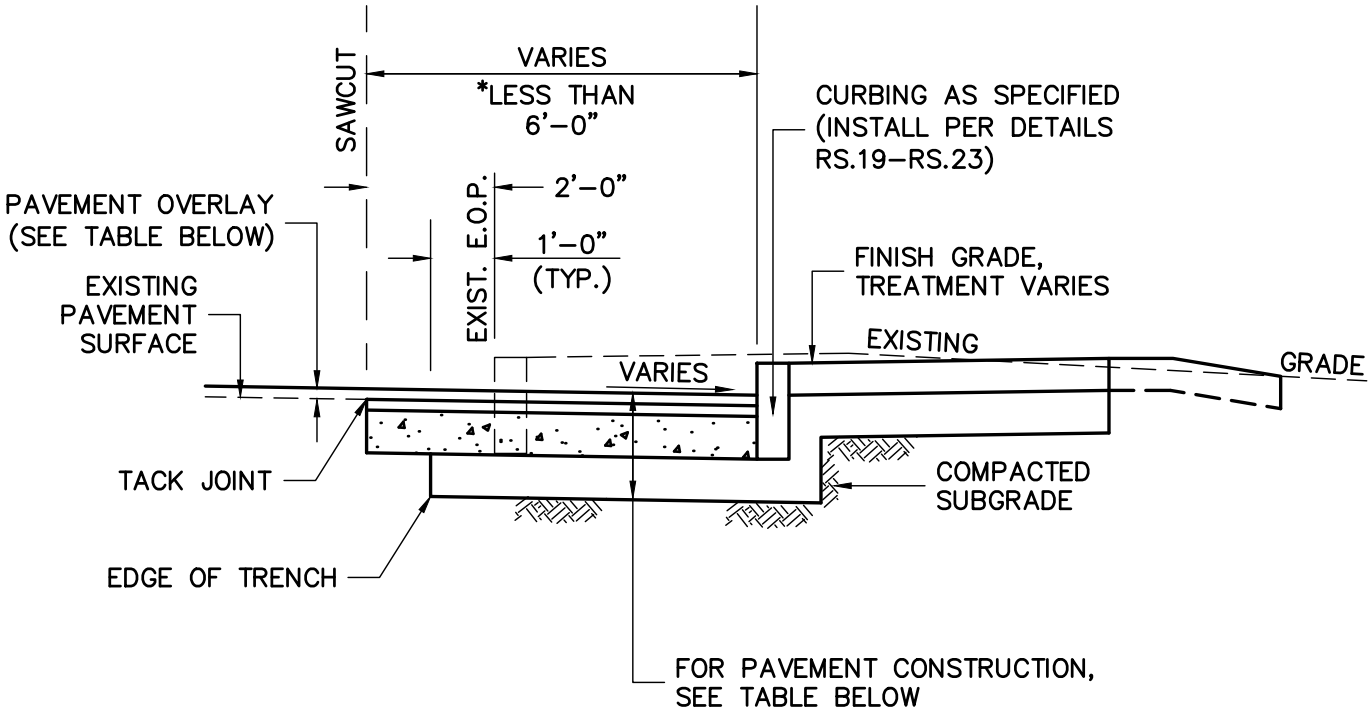
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL RESIDENTIAL STREET ROADWAY SECTION
NEW SUBDIVISION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.02



*NOTE: FOR PROPOSED WIDENING OF 6 FEET OR GREATER IN WIDTH, SEE DRAWING RS.04

PAVEMENT CONSTRUCTION		
	FULL DEPTH CONSTRUCTION	PAVEMENT OVERLAY CONSTRUCTION
SURFACE:	4" WARM MIX ASPHALT (2" TOP COURSE MATERIAL OVER 2" BINDER COURSE MATERIAL)	2" WARM MIX ASPHALT (TOP COURSE MATERIAL)
BASE:	8" HIGH-EARLY-STRENGTH CEMENT CONCRETE BASE COURSE	
BASECOURSE:	8" GRAVEL BORROW (TYPE "B")	

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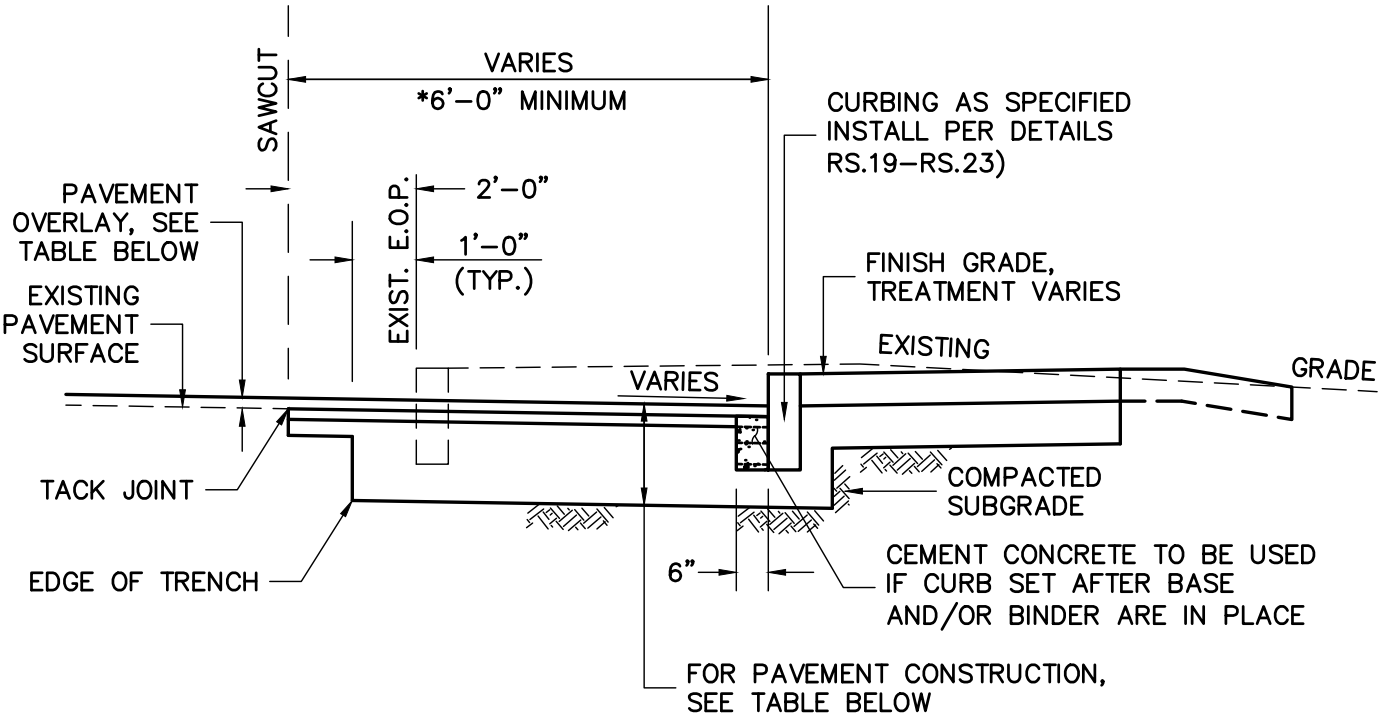
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ROAD WIDENING AND OVERLAY
LESS THAN 6' WIDE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.03



*NOTE: FOR PROPOSED WIDENING LESS THAN 6 FEET IN WIDTH, SEE DRAWING RS.03

PAVEMENT CONSTRUCTION		
	FULL DEPTH CONSTRUCTION	PAVEMENT OVERLAY CONSTRUCTION
SURFACE:	5" WARM MIX ASPHALT (2" TOP COURSE MATERIAL OVER 3" BINDER COURSE MATERIAL)	2" WARM MIX ASPHALT (TOP COURSE MATERIAL)
BASECOURSE:	12" GRAVEL BORROW (TYPE "B")	

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ROAD WIDENING AND OVERLAY
6' WIDE OR GREATER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
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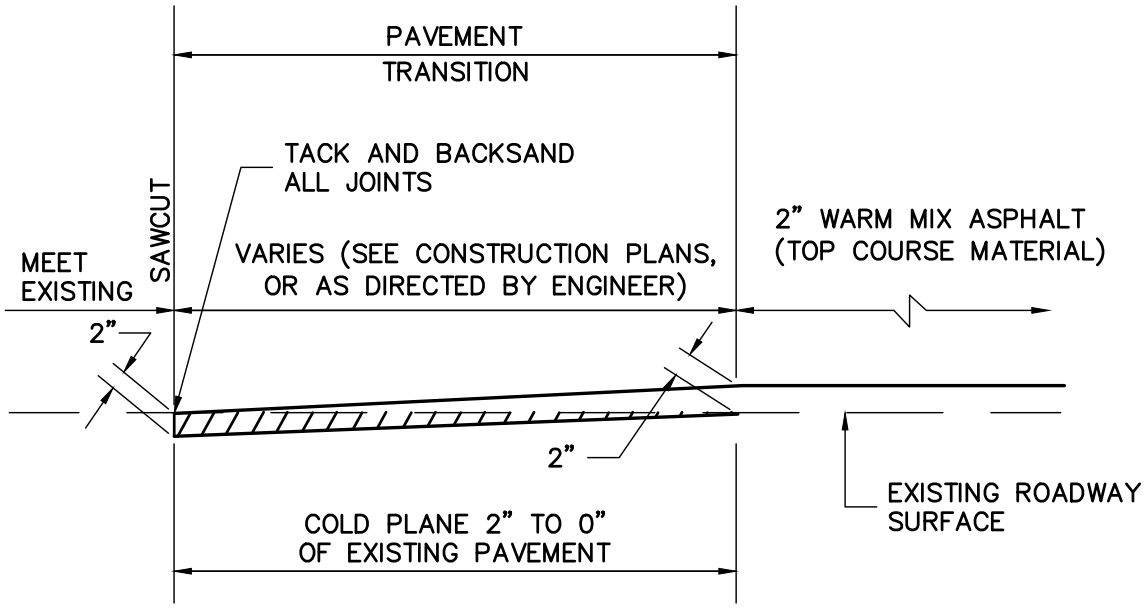
DETAIL NUMBER:	RS.04



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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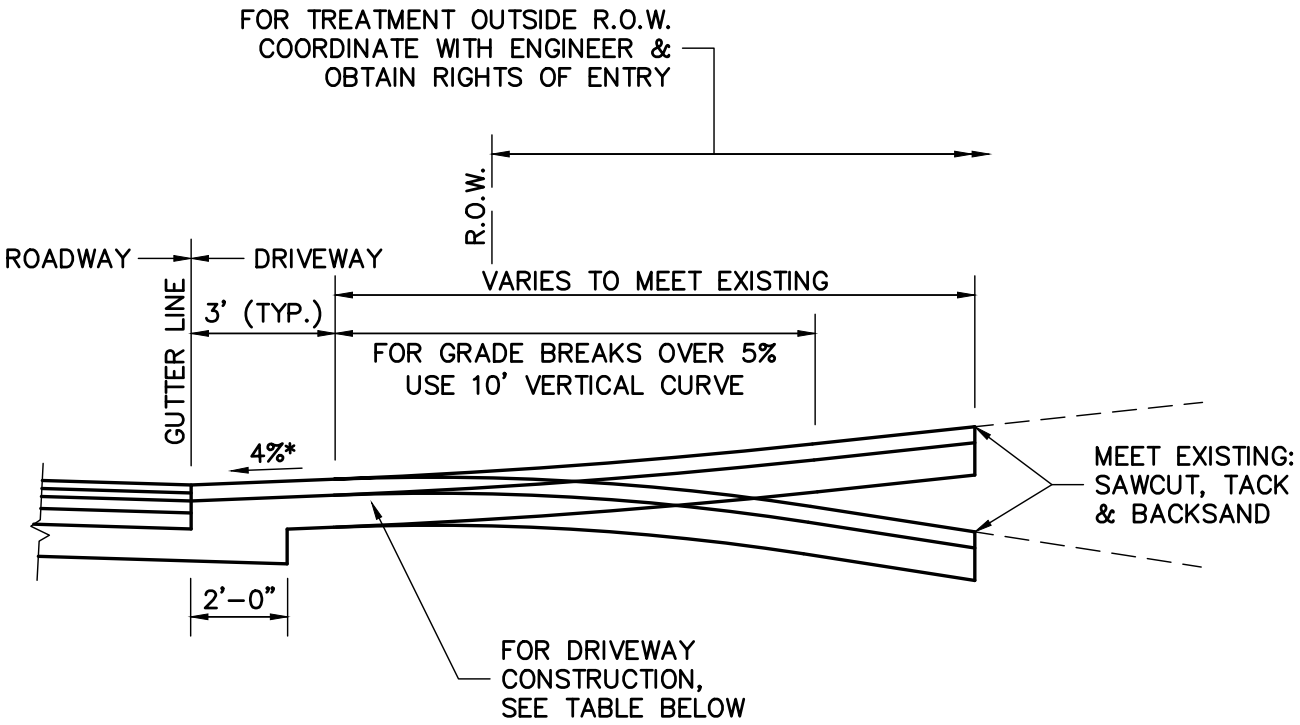
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PAVEMENT TRANSITION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.05



NOTE: FOR PLAN, SEE DRAWING RS.07

	DRIVEWAY CONSTRUCTION	
	CEMENT CONCRETE CONSTRUCTION	HOT MIX ASPHALT
SURFACE:	6" CEMENT CONCRETE (4000 PSI, 3/4", 610 WITH 6" x 6" x #10 WIRE MESH)	3-1/2" HOT MIX ASPHALT (1-1/2" TOP COURSE MATERIAL OVER 2" BINDER COURSE MATERIAL)
BASECOURSE:	8" GRAVEL BORROW (TYPE "B")	8" GRAVEL BORROW (TYPE "B")

R.O.W. = RIGHT OF WAY

* – MAY VARY TO MEET FIELD CONDITIONS; 1" LIP FOR CEMENT CONCRETE DRIVEWAYS

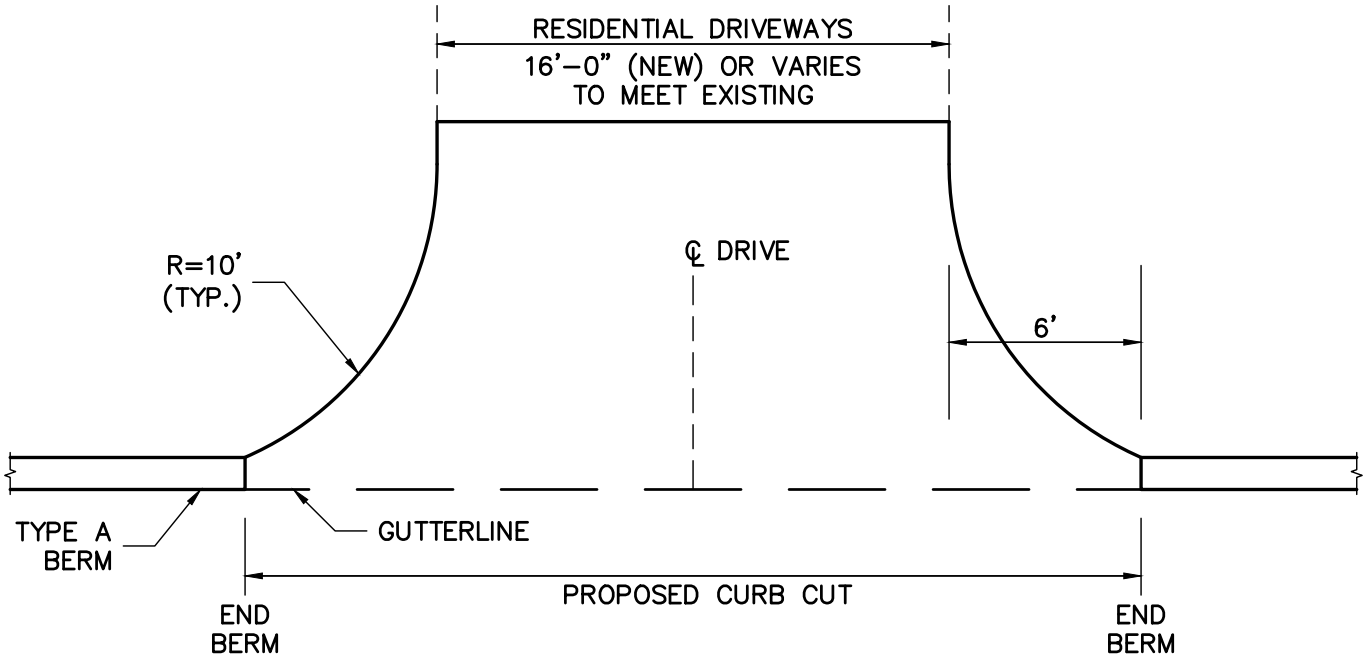
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

FULL DEPTH DRIVEWAY APRON – SECTION
NO SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.06



TYPE A BERM

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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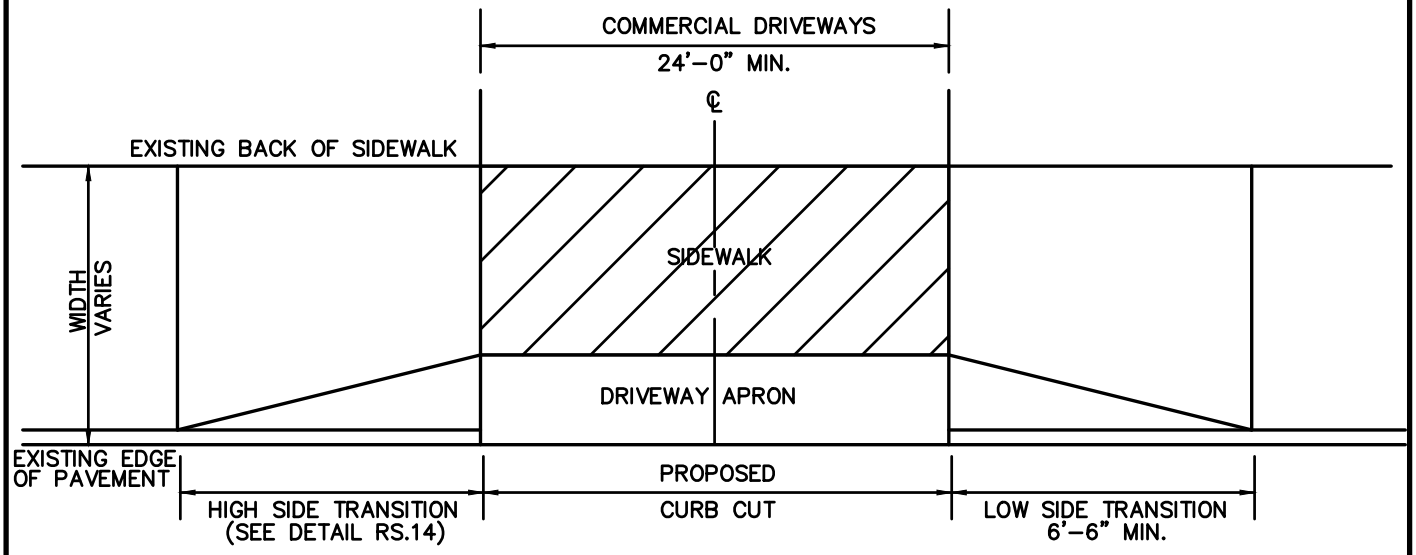
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL CURB CUT PLAN – RESIDENTIAL DRIVEWAYS
NO SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.07



CURB CUT WITH SIDEWALK

MUST MAINTAIN A 3'–0" LEVEL PATH OF TRAVEL AT 1.5% CROSS SLOPE

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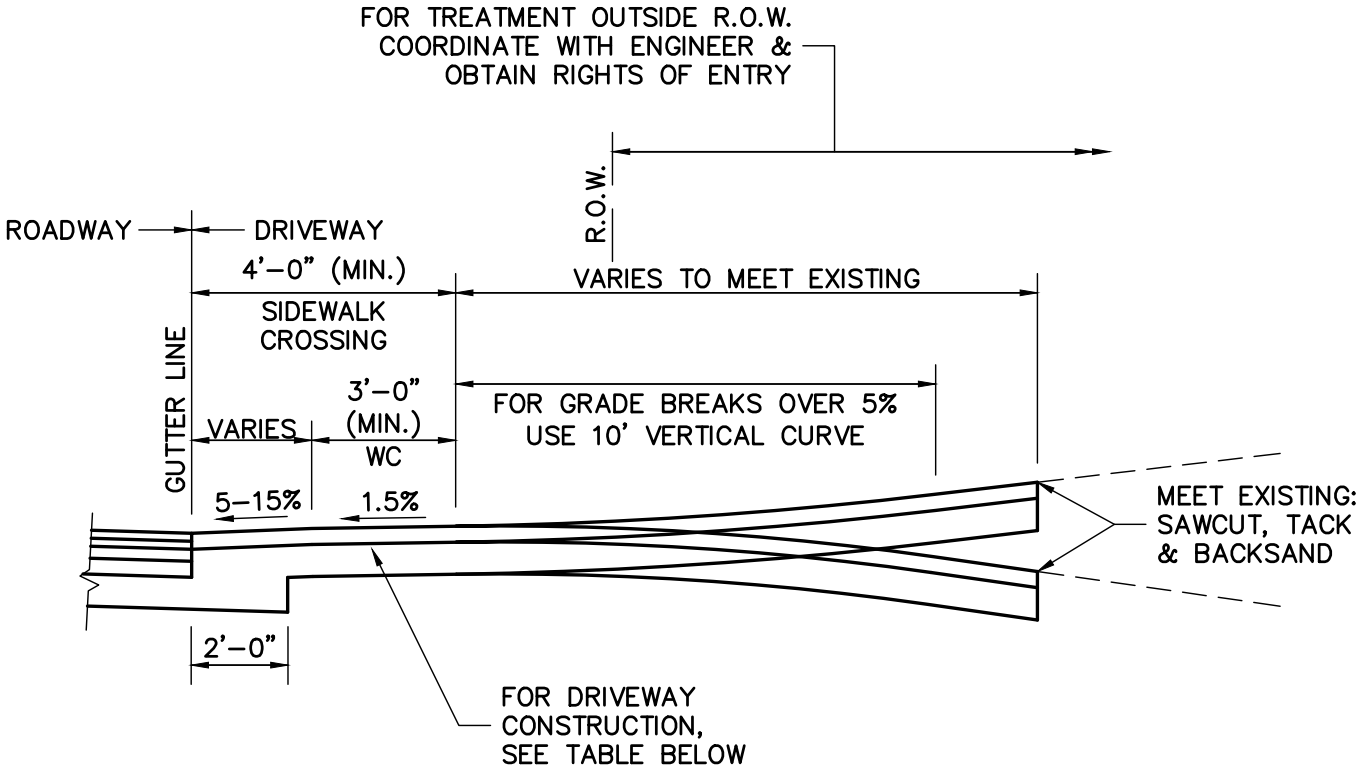
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL CURB CUT PLAN – COMMERCIAL DRIVEWAYS WITH SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.08	



NOTES:

1. FOR PLAN, SEE DRAWING RS.10.
2. FOR CEMENT CONCRETE SIDEWALK SEE DRAWING RS.11.

DRIVEWAY APRON CONSTRUCTION	
SURFACE:	3–1/2" HOT MIX ASPHALT (1–1/2" TOP COURSE MATERIAL OVER 2" BINDER COURSE MATERIAL)
SUBBASE:	8" GRAVEL BORROW (TYPE "B")

WC = WHEELCHAIR (PATHWAY)
R.O.W. = RIGHT OF WAY

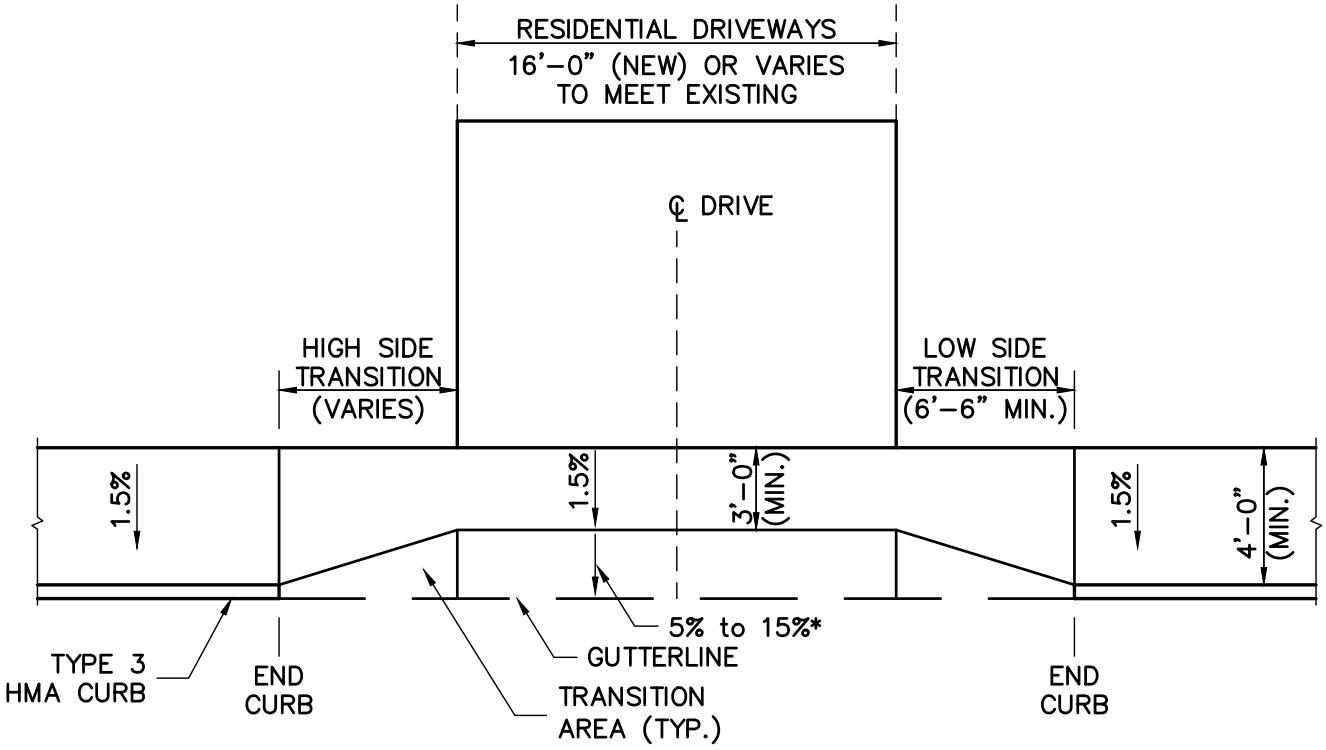
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

FULL DEPTH DRIVEWAY APRON – SECTION
HOT MIX ASPHALT SIDEWALK CROSSING

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.09



NOTES:

1. FOR SECTION, SEE DRAWING RS.09.
2. TRANSITION AREA TO BE HAND PLACED HMA, GRADED TO TRANSITION FROM CURB SECTION TO DRIVEWAY SECTION. SLOPE OF TRANSITION AREA PARALLEL TO GUTTERLINE IS NOT TO EXCEED 7.5%. SEE DETAIL RS.14.

DRIVEWAY APRON CONSTRUCTION	
SURFACE:	3–1/2" HOT MIX ASPHALT (1–1/2" TOP COURSE MATERIAL OVER 2" BINDER COURSE MATERIAL)
SUBBASE:	8" GRAVEL BORROW (TYPE "B")

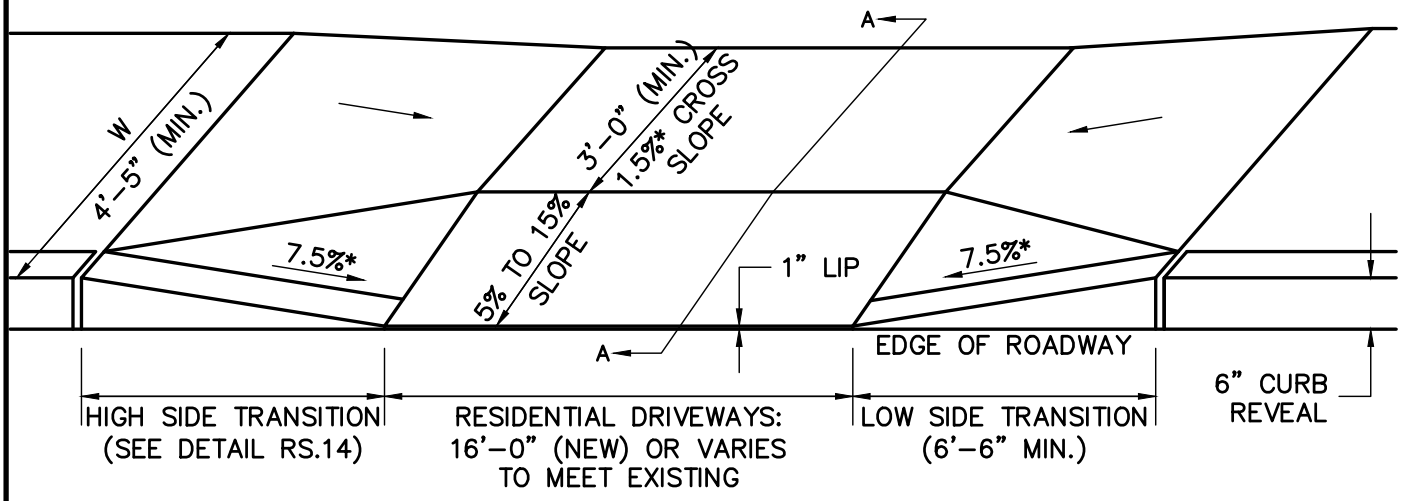
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

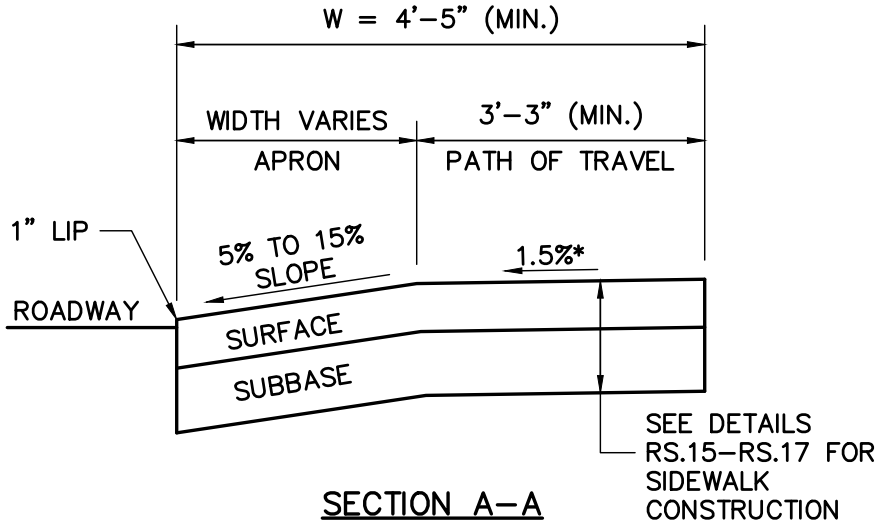
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HOT MIX ASPHALT SIDEWALK THROUGH DRIVEWAY
HOT MIX ASPHALT CURB – TYPE 3

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.10





SECTION A-A

W = SIDEWALK WIDTH

* = TOLERANCE FOR CONSTRUCTION ±0.5%

DRIVEWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD, THE AMERICANS WITH DISABILITIES ACT AND THE CURRENT MassDOT CONSTRUCTION STANDARDS.

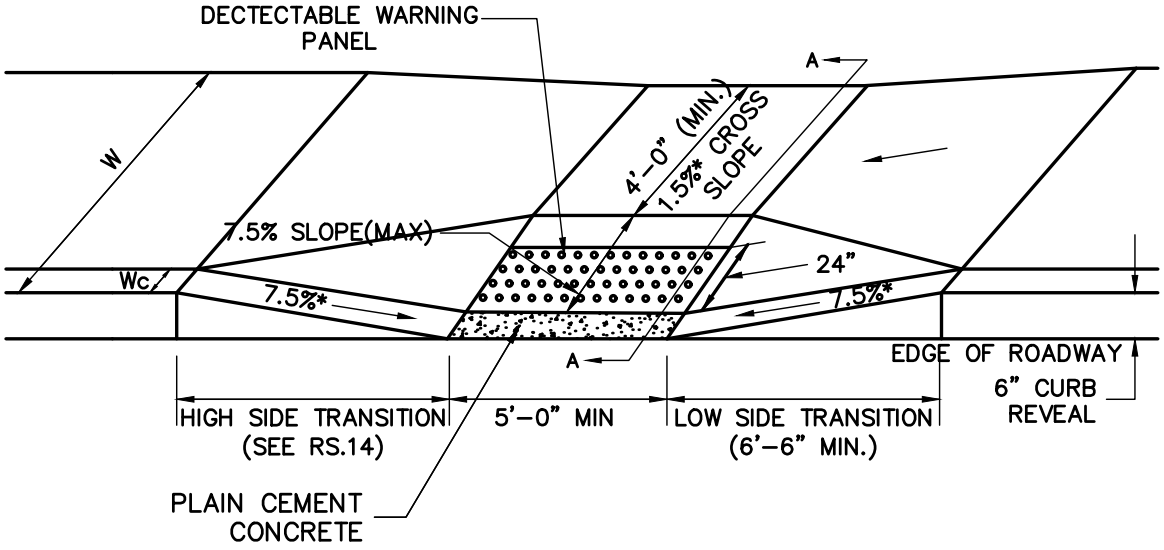
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

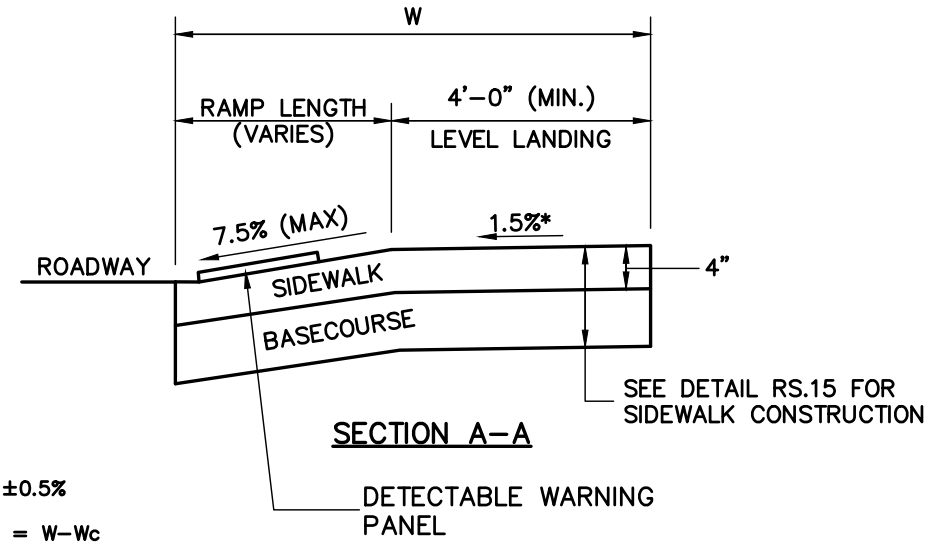
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CEMENT CONCRETE SIDEWALK THROUGH DRIVEWAYS
NO CURB RETURNS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.11





LEGEND

W = SIDEWALK WIDTH
Wc = CURB WIDTH
* = TOLERANCE FOR CONSTRUCTION ±0.5%

– USABLE SIDEWALK WIDTH PER AAB = W–Wc
– USABLE SIDEWALK WIDTH PER AAB IS NOT TO BE LESS THAN 4'–0"

SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT REGULATIONS OF THE ARCHITECTURAL ACCESS BOARD, THE AMERICANS WITH DISABILITIES ACT AND THE CURRENT MassDOT CONSTRUCTION STANDARDS.

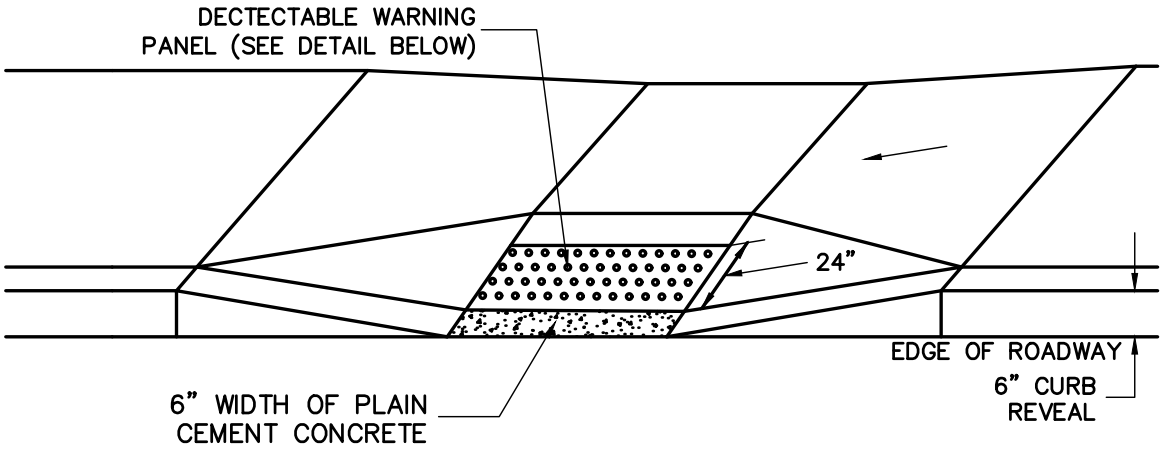
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

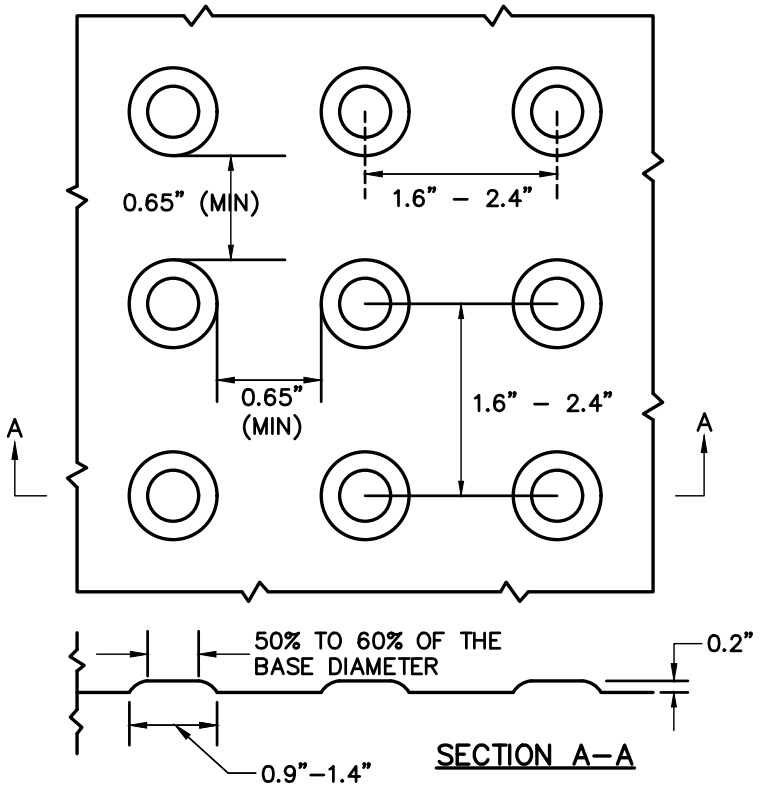
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CONCRETE WHEELCHAIR RAMPS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.12





PANELS MAY BE CONCRETE PRECAST OR CAST IN PLACE OR OTHER SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT–ON–DARK OR DARK–ON–LIGHT.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETECTABLE WARNING PANELS
FOR WHEELCHAIR RAMPS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.13

ROADWAY PROFILE GRADE (%)	*HIGH SIDE TRANSITION LENGTH
0	6'–6"
>0 TO 1	7'–8"
>1 TO 2	9'–0"
>2 TO 3	11'–0"
>3 TO 4	14'–0"
>4	15'–0" (MAX)

NOTE:

* BASED ON DESIGN SLOPE OF 7.5% AND A CURB REVEAL OF 6"

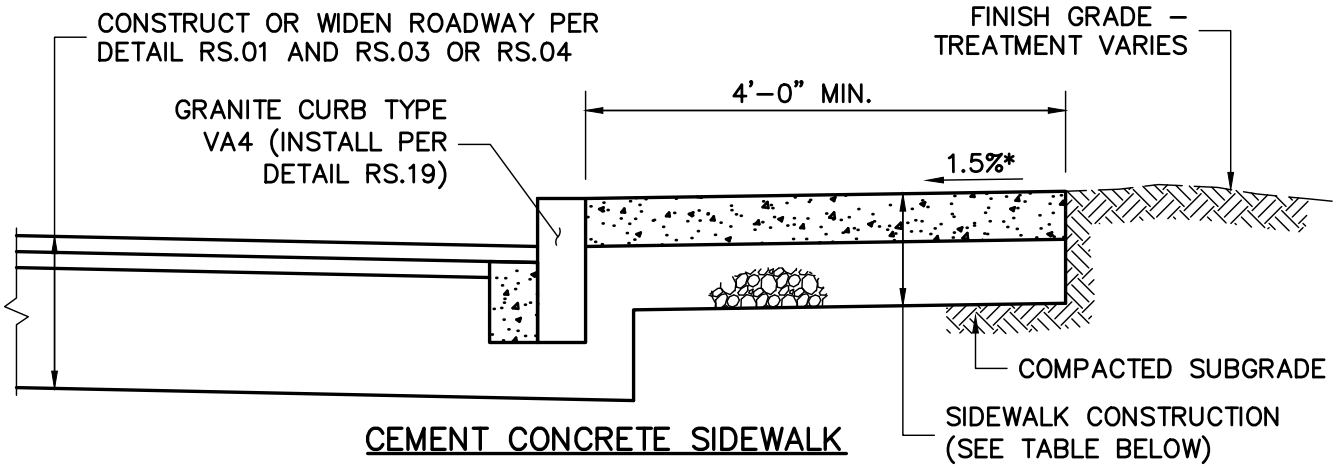
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

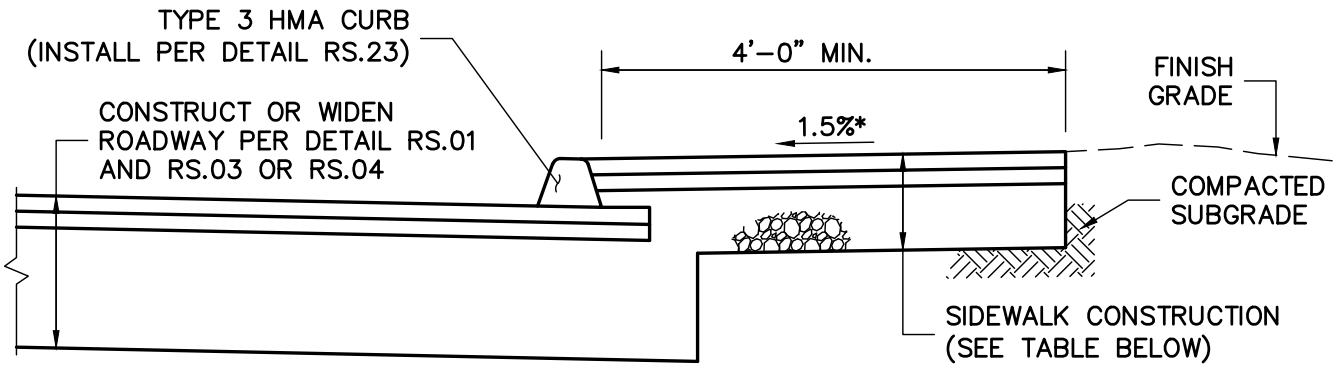
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CURB TRANSITION LENGTH
FOR WHEELCHAIR RAMPS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.14



CEMENT CONCRETE SIDEWALK



NOTE: GRANITE CURB MAY BE USED WITH HMA SIDEWALK

HOT MIX ASPHALT SIDEWALK

SIDEWALK CONSTRUCTION		
	CEMENT CONCRETE CONSTRUCTION	HOT MIX ASPHALT CONSTRUCTION
SURFACE:	4" CEMENT CONCRETE (6" AT DRIVEWAYS) (4000 PSI, 3/4", 610)	2.5" HOT MIX ASPHALT (1.25" TOP COURSE MATERIAL OVER 1.25" BINDER COURSE MATERIAL)
SUBBASE:	8" GRAVEL BORROW (TYPE "B")	8" GRAVEL BORROW (TYPE "B")

* – TOLERANCE FOR CONSTRUCTION ±0.5%

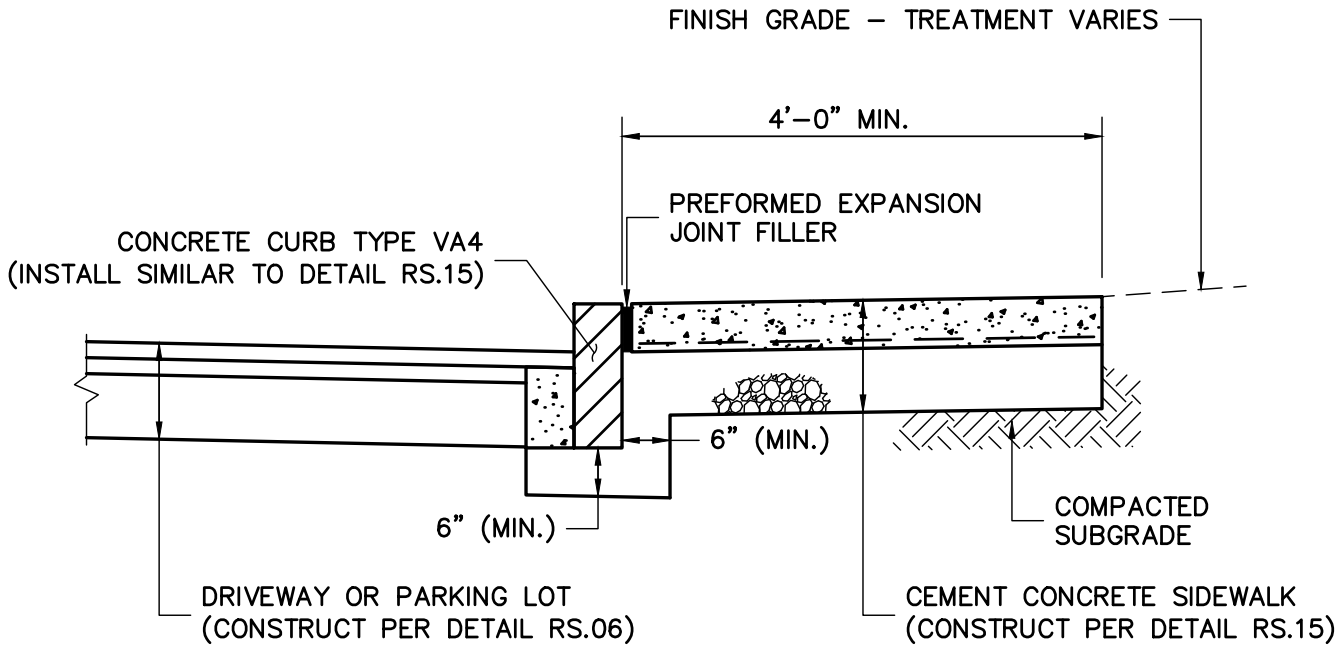
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HOT MIX ASPHALT OR CEMENT CONCRETE SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.15	



NOTE: PRECAST CONCRETE CURB SHALL NOT BE USED ON ANY PUBLIC STREET OR WAY. PRECAST CONCRETE CURB MAY BE USED ON PRIVATE WAYS, DRIVEWAYS AND IN PARKING LOTS.

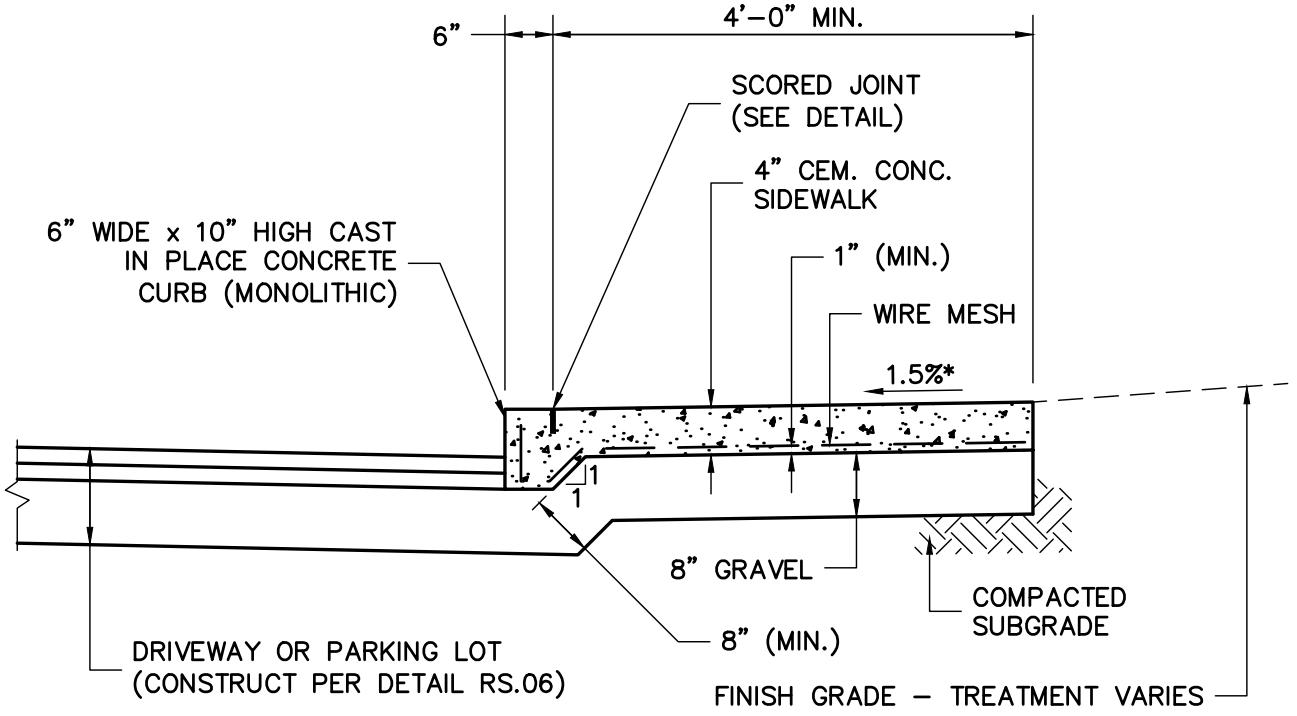
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

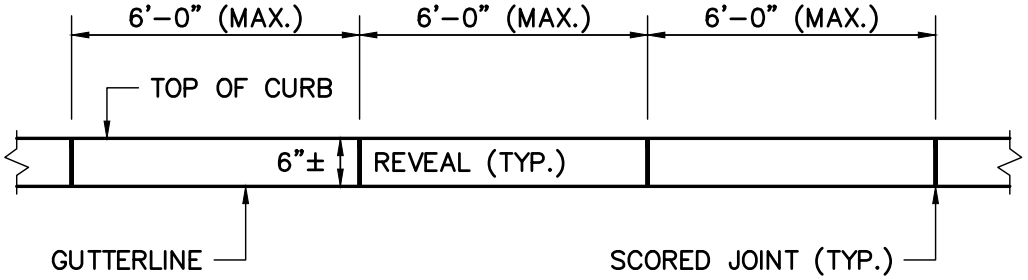
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PRECAST CONCRETE CURB & SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.16	



SECTION VIEW



SCORED JOINT DETAIL FRONT VIEW

NOTE: MONOLITHIC CONCRETE CURB SHALL NOT BE USED ON ANY PUBLIC STREET OR WAY. MONOLITHIC CONCRETE CURB MAY BE USED ON PRIVATE WAYS, DRIVEWAYS AND IN PARKING LOTS.

* – TOLERANCE FOR CONSTRUCTION ±0.5%

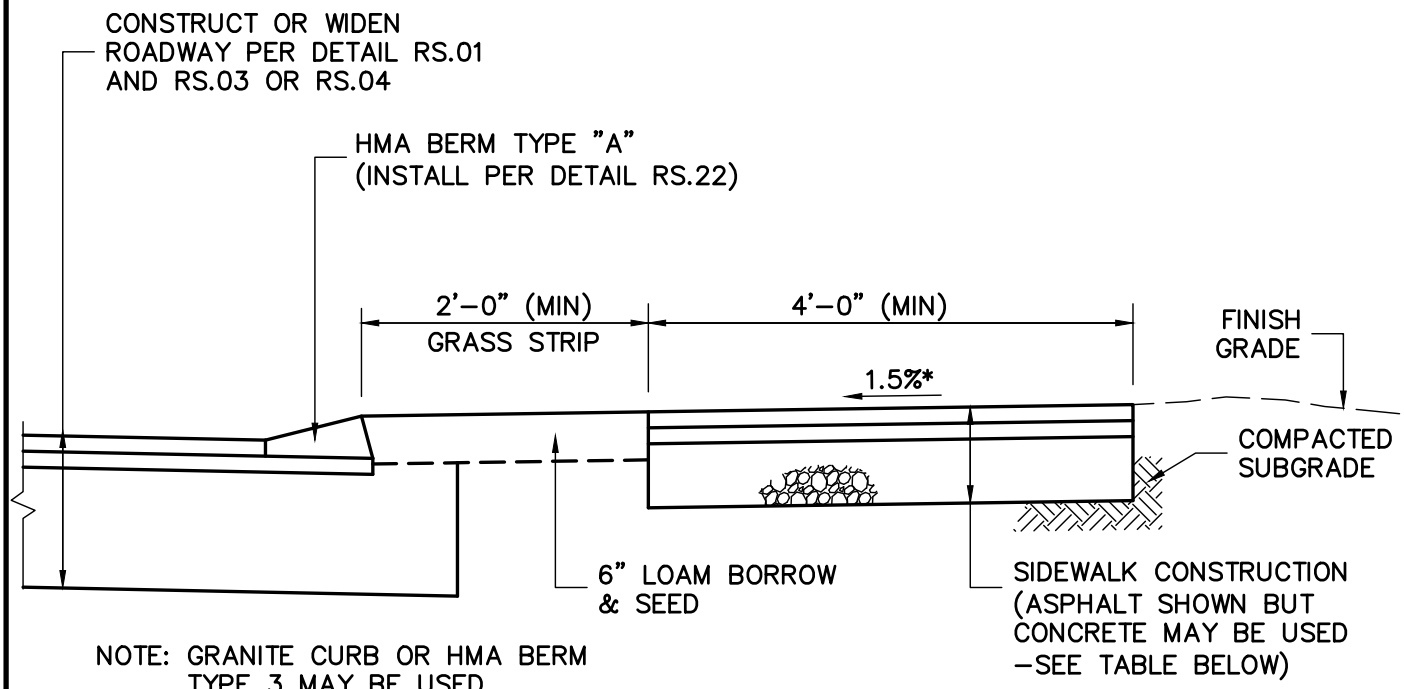
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CAST IN PLACE CONCRETE CURB & SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.17



NOTE: GRANITE CURB OR HMA BERM TYPE 3 MAY BE USED (INSTALL PER DETAIL RS.19, RS.20, OR RS.23)

	CEMENT CONCRETE CONSTRUCTION	HOT MIX ASPHALT CONSTRUCTION
SURFACE:	4" CEMENT CONCRETE (4000 PSI, 3/4", 610)	2.5" HOT MIX ASPHALT (1.25" TOP COURSE MATERIAL OVER 1.25" BINDER COURSE MATERIAL)
BASECOURSE:	8" GRAVEL BORROW (TYPE "B")	8" GRAVEL BORROW (TYPE "B")

* – TOLERANCE FOR CONSTRUCTION ±0.5%

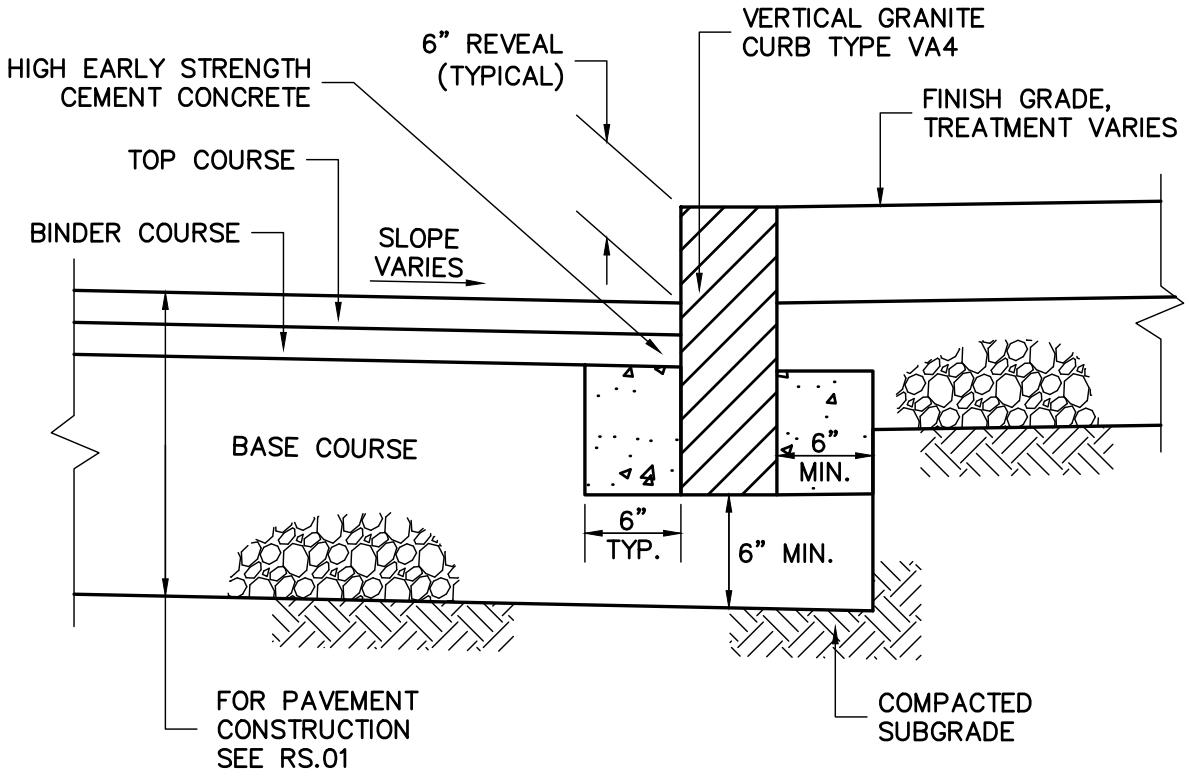
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SIDEWALK WITH GRASS STRIP

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.18	



NOTES:

1. CEMENT CONCRETE TO BE USED IF CURB IS SET AFTER BASE AND/OR BINDER IS IN PLACE. PAYMENT FOR CEMENT CONCRETE SHALL BE INCLUDED IN THE PRICE PER LINEAR FOOT OF CURB.
2. JOINTS SHALL BE FILLED AND POINTED IN ACCORDANCE WITH MASSDOT SPECS.

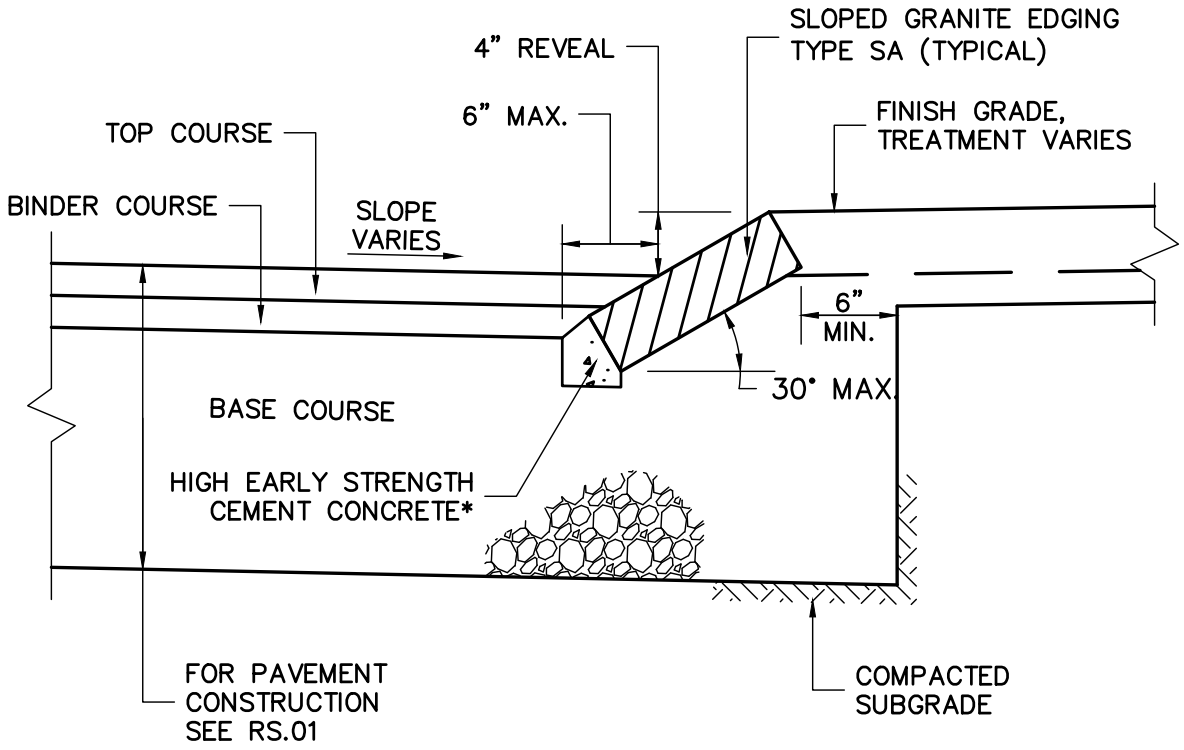
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

VERTICAL GRANITE CURB
TYPE VA4

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED: JANUARY 2017	
DETAIL NUMBER: RS.19	



* – GRAVEL BASECOURSE TO BE PLACED PRIOR TO SETTING EDGING. PAYMENT FOR CEMENT CONCRETE SHALL BE INCLUDED IN THE PRICE PER LINEAR FOOT OF EDGING.

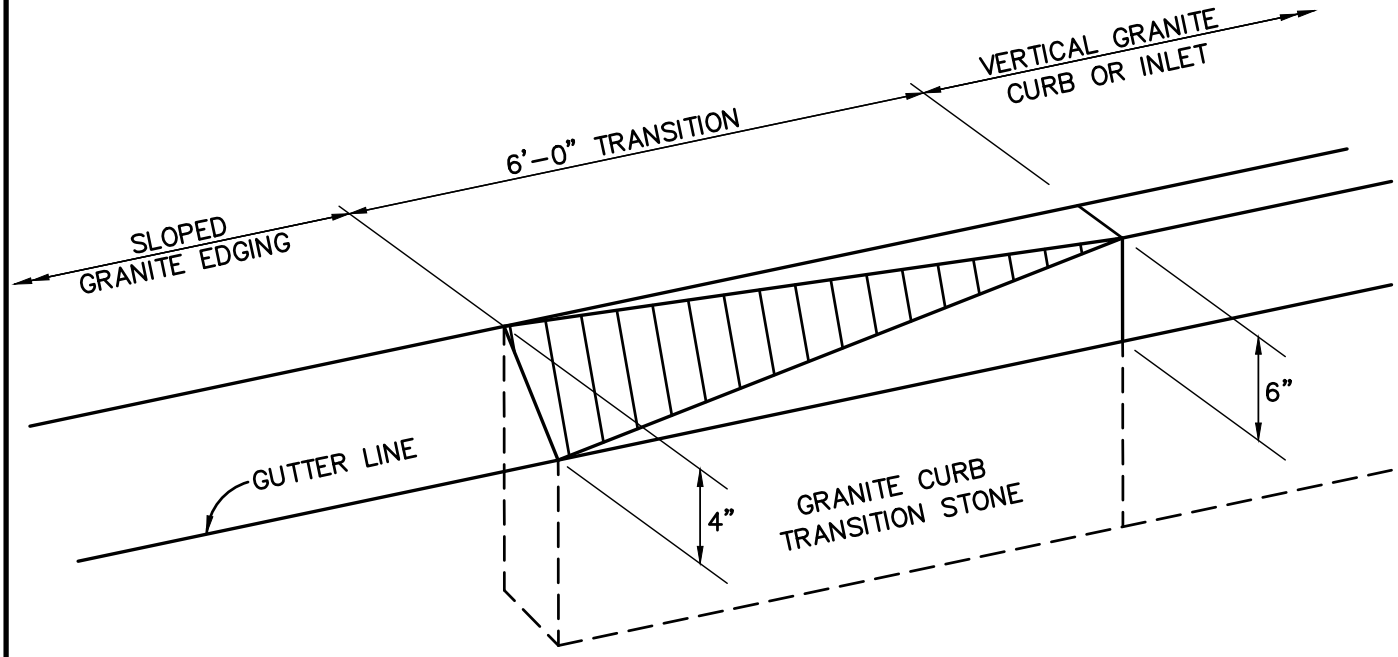
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SLOPED GRANITE EDGING

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED: JANUARY 2017	
DETAIL NUMBER: RS.20	



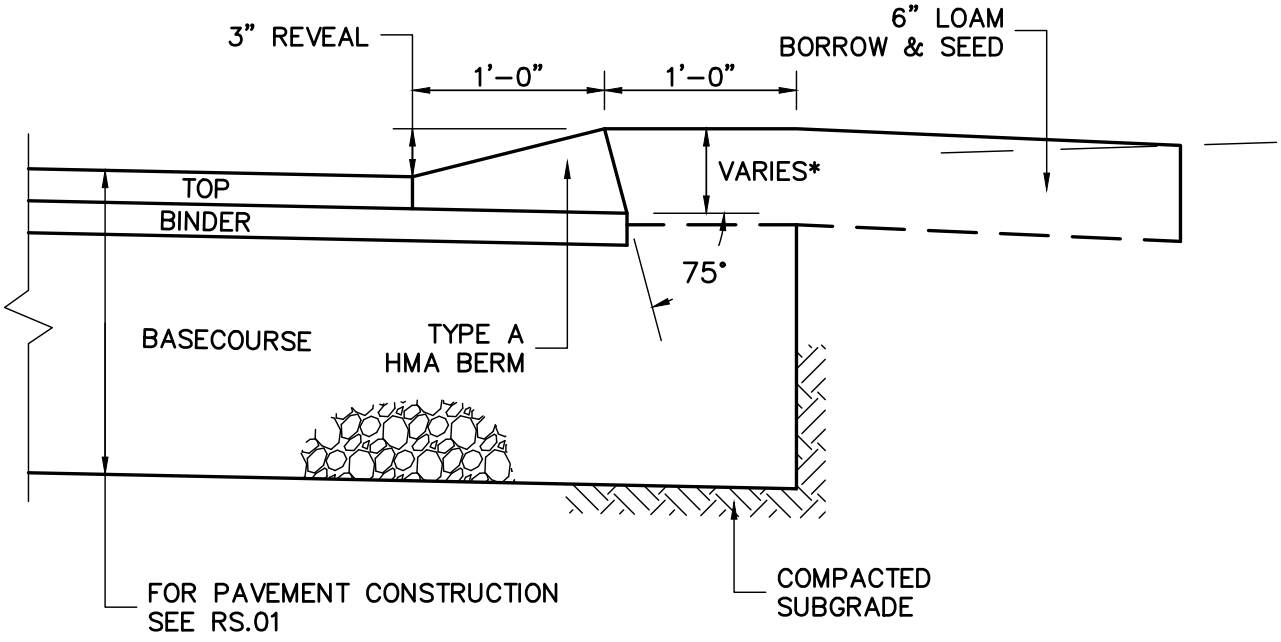
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

GRANITE CURB TO SLOPED EDGING TRANSITION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.21



* – DEPTH VARIES WITH TOP COURSE THICKNESS AND ROADWAY CROSS SLOPE

NOTE: HOT MIX ASPHALT BERM – TYPE "A" NOT ACCEPTABLE ABUTTING SIDEWALKS.

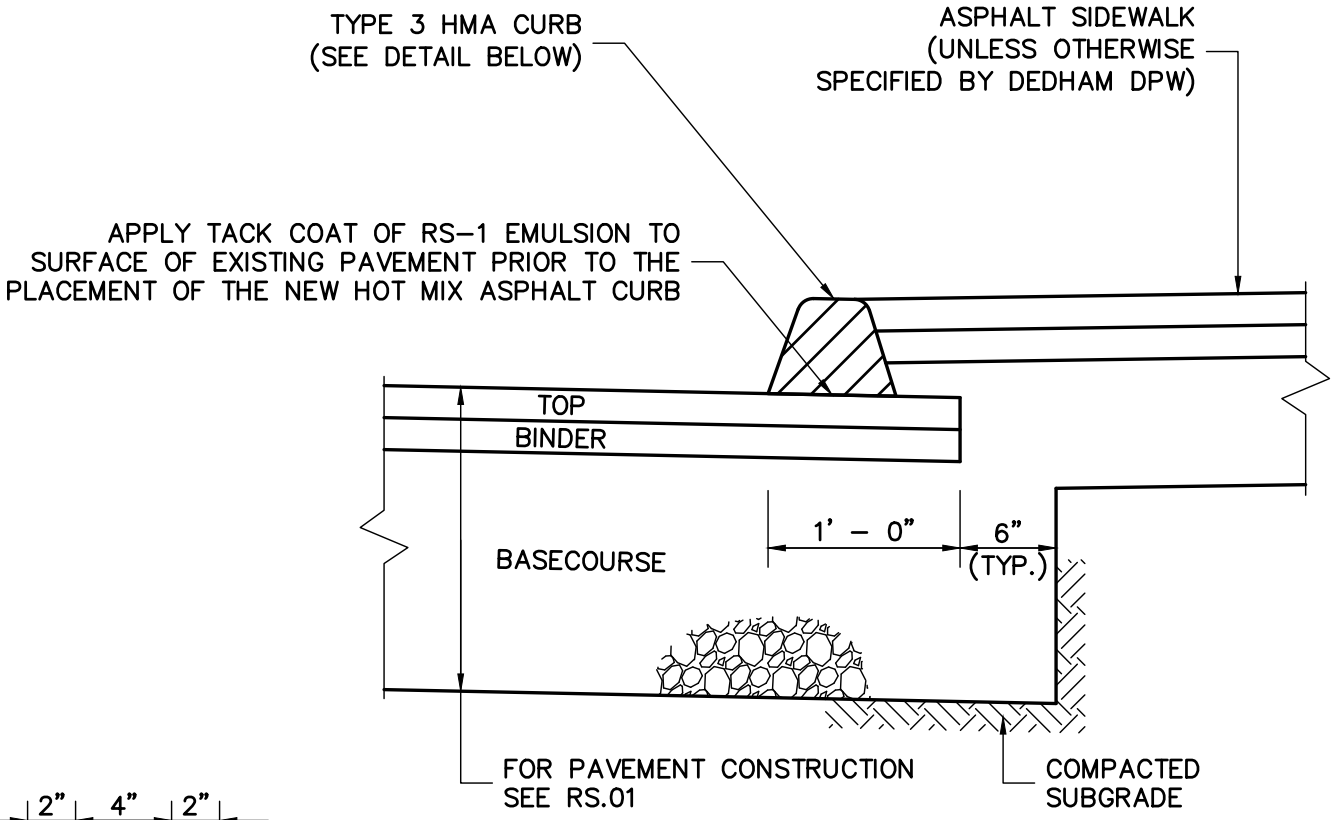
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

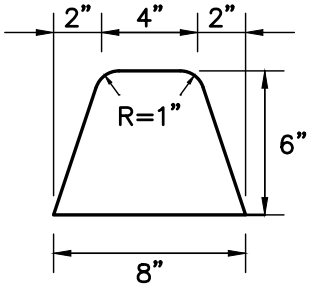
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HOT MIX ASPHALT BERM – TYPE "A"

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.22





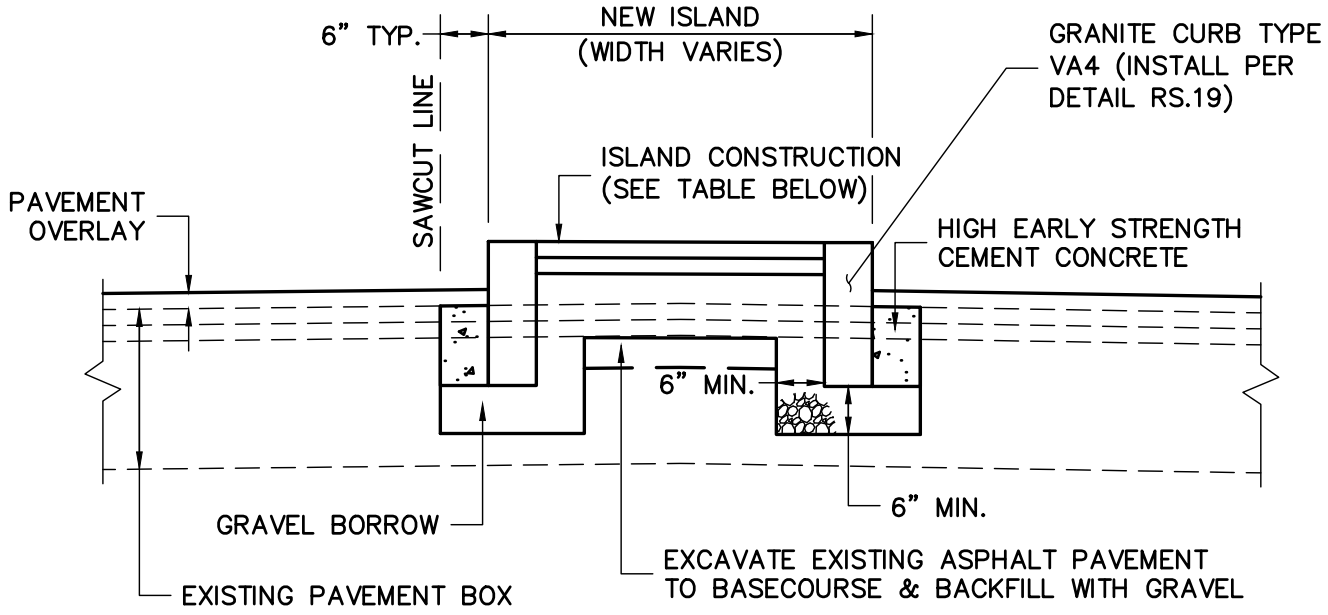
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HOT MIX ASPHALT CURB – TYPE 3

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.23



ISLAND CONSTRUCTION		
	CEMENT CONCRETE CONSTRUCTION	HOT MIX ASPHALT
SURFACE:	4" CEMENT CONCRETE (4000 PSI, 3/4", 610)	2.5" HOT MIX ASPHALT (1.25" TOP COURSE MATERIAL OVER 1.25" BINDER COURSE MATERIAL)
BASECOURSE:	8" GRAVEL BORROW (TYPE "B")	8" GRAVEL BORROW (TYPE "B")

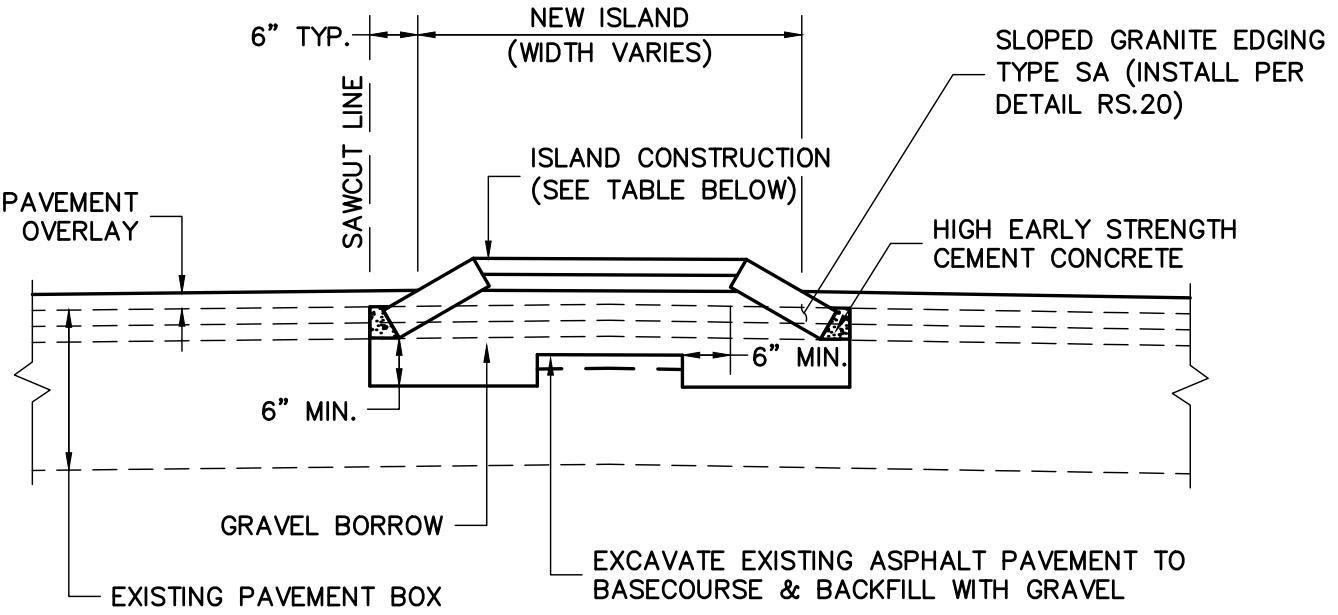
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TRAFFIC ISLAND – VERTICAL CURBING

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.24	



ISLAND CONSTRUCTION		
	CEMENT CONCRETE CONSTRUCTION	HOT MIX ASPHALT
SURFACE:	4" CEMENT CONCRETE (4000 PSI, 3/4", 610)	2.5" HOT MIX ASPHALT (1.25" TOP COURSE MATERIAL OVER 1.25" BINDER COURSE MATERIAL)
BASECOURSE:	8" GRAVEL BORROW (TYPE "B")	8" GRAVEL BORROW (TYPE "B")

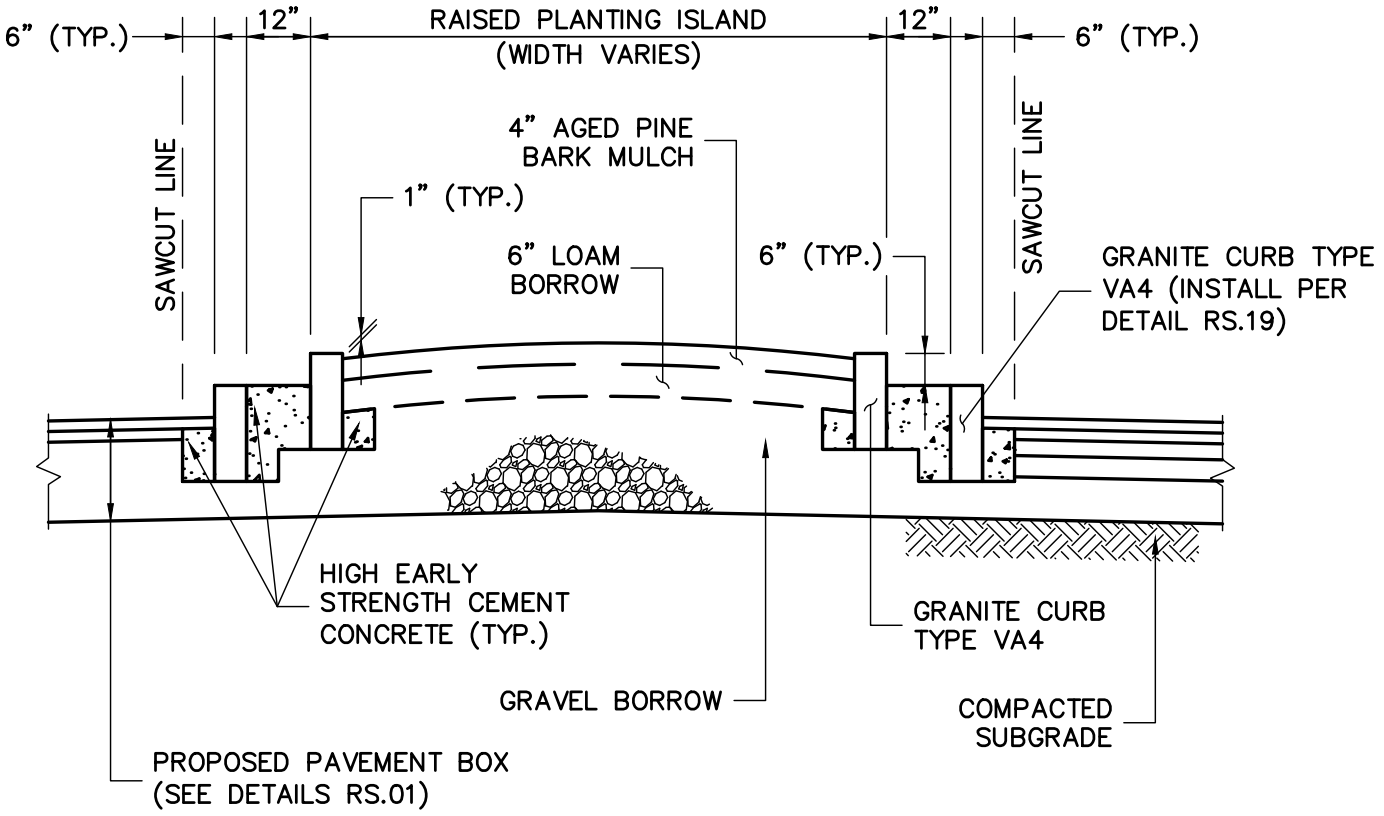
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TRAFFIC ISLAND – SLOPED EDGING

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.25	



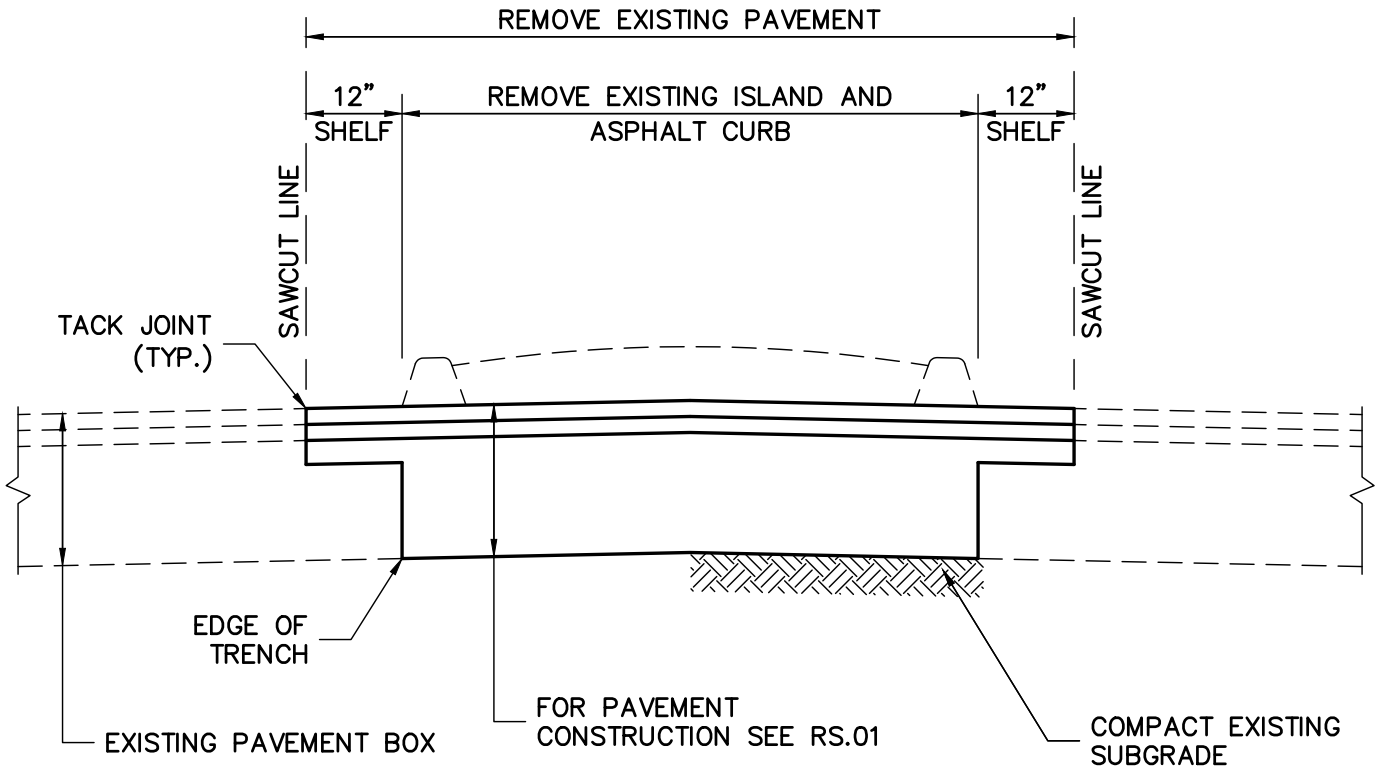
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

RAISED PLANTING ISLAND

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.26



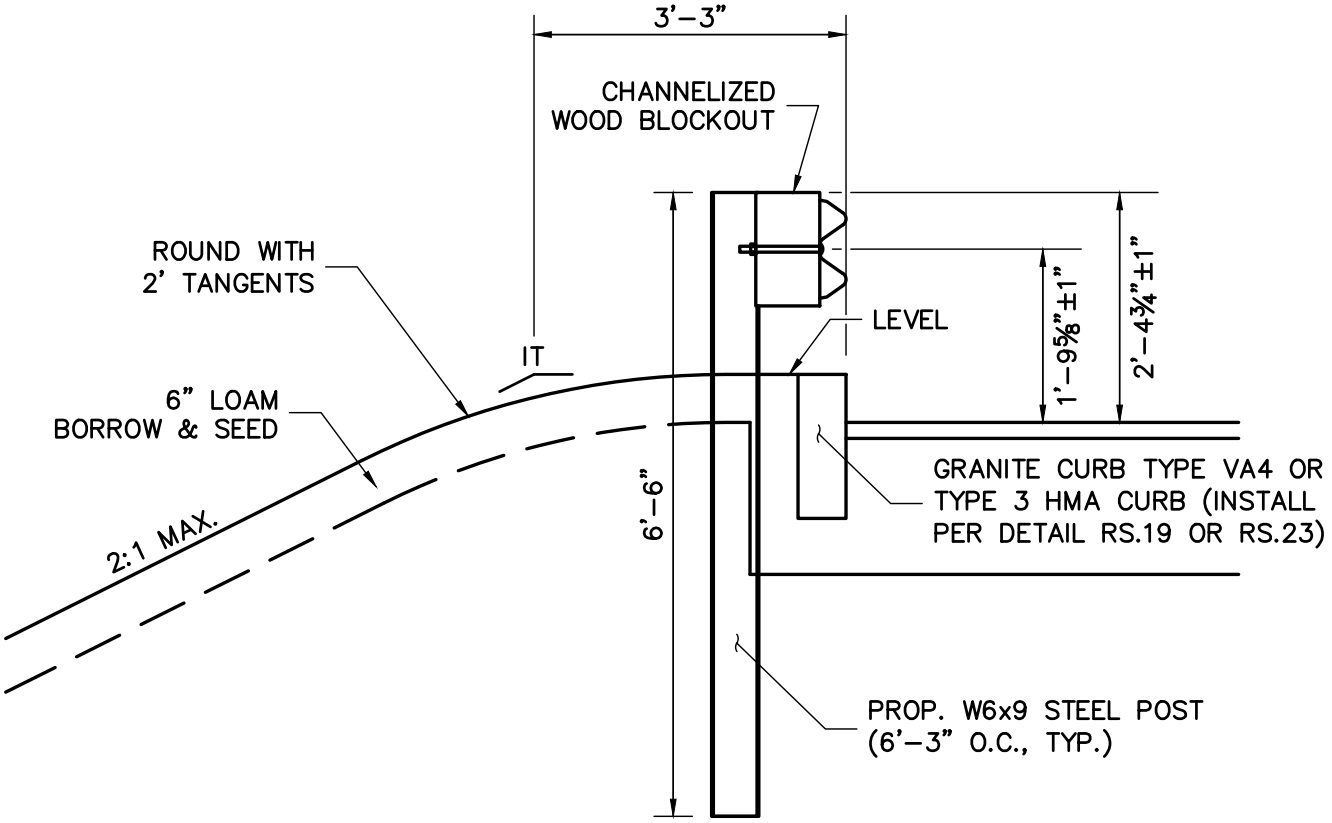
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ISLAND REMOVAL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.27



STEEL POST SHOWN

NOTES:

1. ALL GUARDRAIL SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST MassDOT CONSTRUCTION STANDARDS.

2. GUARDRAIL SHALL BE GALVANIZED STEEL 'W' BEAM HIGHWAY GUARD WITH GALVANIZED STEEL POSTS OR COR–TEN WEATHERING STEEL BEAM HIGHWAY GUARD WITH TREATED WOOD POSTS. THE TYPE OF GUARDRAIL TO BE USED WILL BE SPECIFIED BY THE DEDHAM DPW.

3. REGARDLESS OF POST TYPE USED, WHERE FULL 3'–3" OFFSET TO THE INTERSECTION OF TANGENTS (IT) IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, THE POST LENGTH SHALL BE INCREASED TO 8'–0".

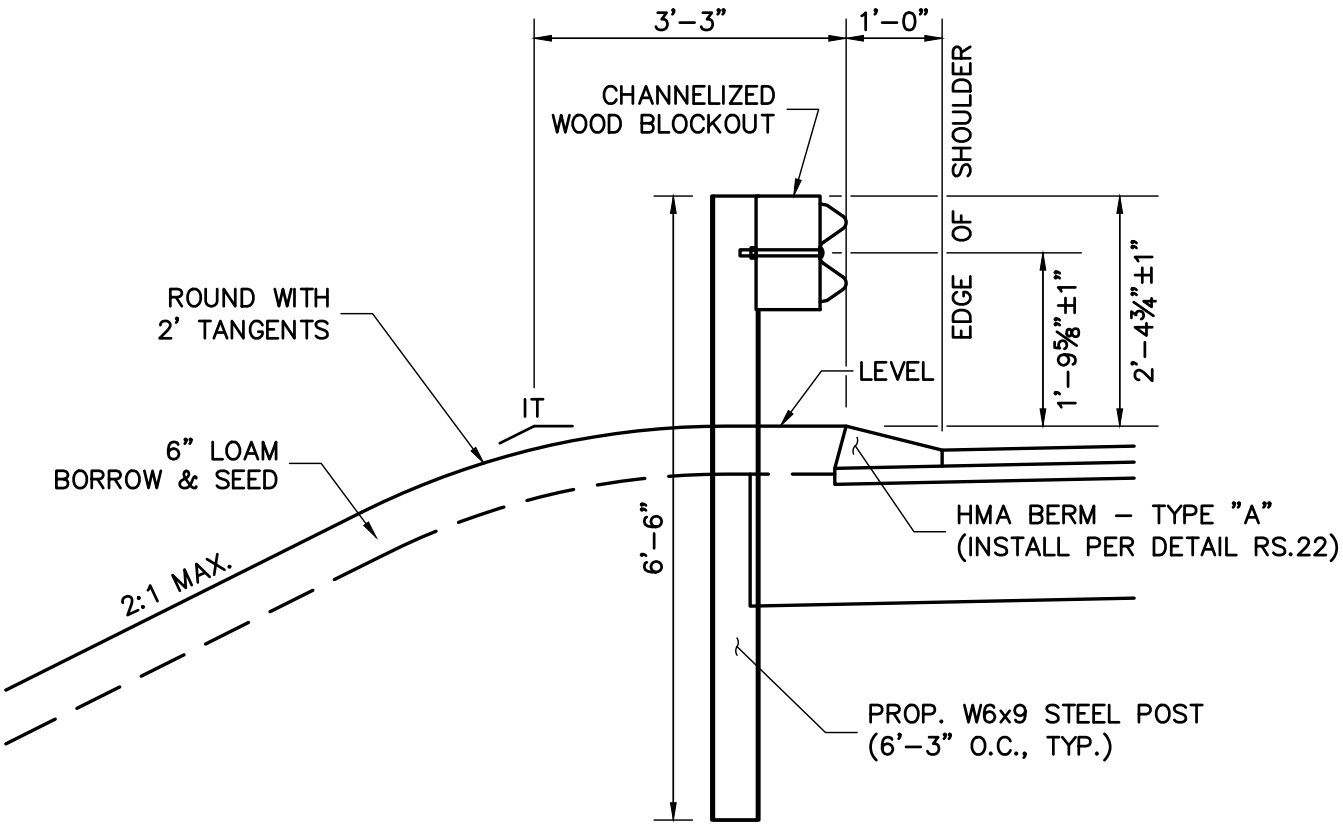
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STEEL 'W' BEAM HIGHWAY GUARD (SINGLE FACED)
VERTICAL GRAN. CURB OR ASPHALT CURB

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.28



STEEL POST SHOWN

NOTES:

1. ALL GUARDRAIL SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST MassDOT CONSTRUCTION STANDARDS.
2. GUARDRAIL SHALL BE GALVANIZED STEEL 'W' BEAM HIGHWAY GUARD WITH GALVANIZED STEEL POSTS OR COR–TEN WEATHERING STEEL BEAM HIGHWAY GUARD WITH TREATED WOOD POSTS. THE TYPE OF GUARDRAIL TO BE USED WILL BE SPECIFIED BY THE DEDHAM DPW.
3. REGARDLESS OF POST TYPE USED, WHERE FULL 3'–3" OFFSET TO THE INTERSECTION OF TANGENTS (IT) IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, THE POST LENGTH SHALL BE INCREASED TO 8'–0".

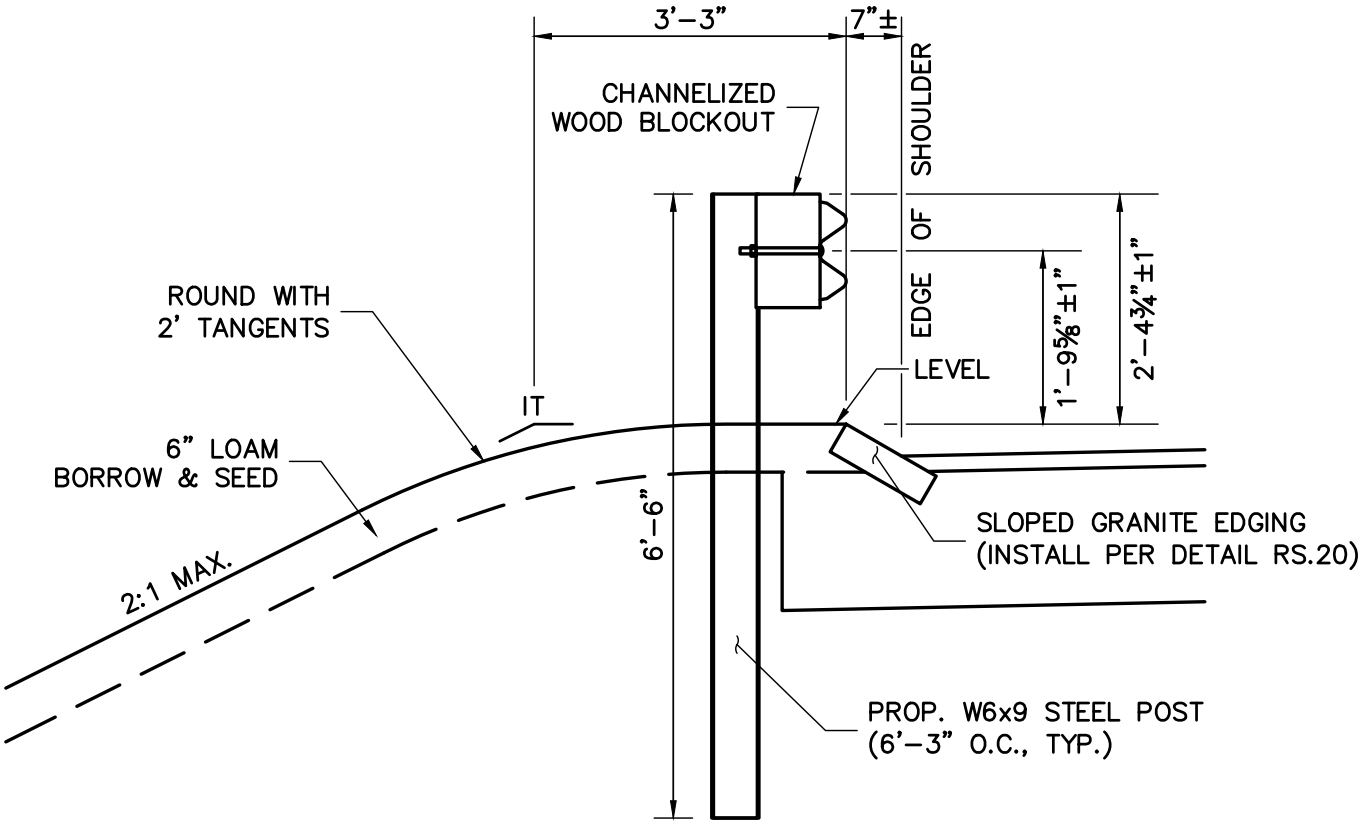
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STEEL 'W' BEAM HIGHWAY GUARD (SINGLE FACED)
HOT MIX ASPHALT BERM – TYPE "A"

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.29



STEEL POST SHOWN

NOTES:

1. ALL GUARDRAIL SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST MassDOT CONSTRUCTION STANDARDS.
2. GUARDRAIL SHALL BE GALVANIZED STEEL 'W' BEAM HIGHWAY GUARD WITH GALVANIZED STEEL POSTS OR COR–TEN WEATHERING STEEL BEAM HIGHWAY GUARD WITH TREATED WOOD POSTS. THE TYPE OF GUARDRAIL TO BE USED WILL BE SPECIFIED BY THE DEDHAM DPW.
3. REGARDLESS OF POST TYPE USED, WHERE FULL 3'–3" OFFSET TO THE INTERSECTION OF TANGENTS (IT) IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, THE POST LENGTH SHALL BE INCREASED TO 8'–0".

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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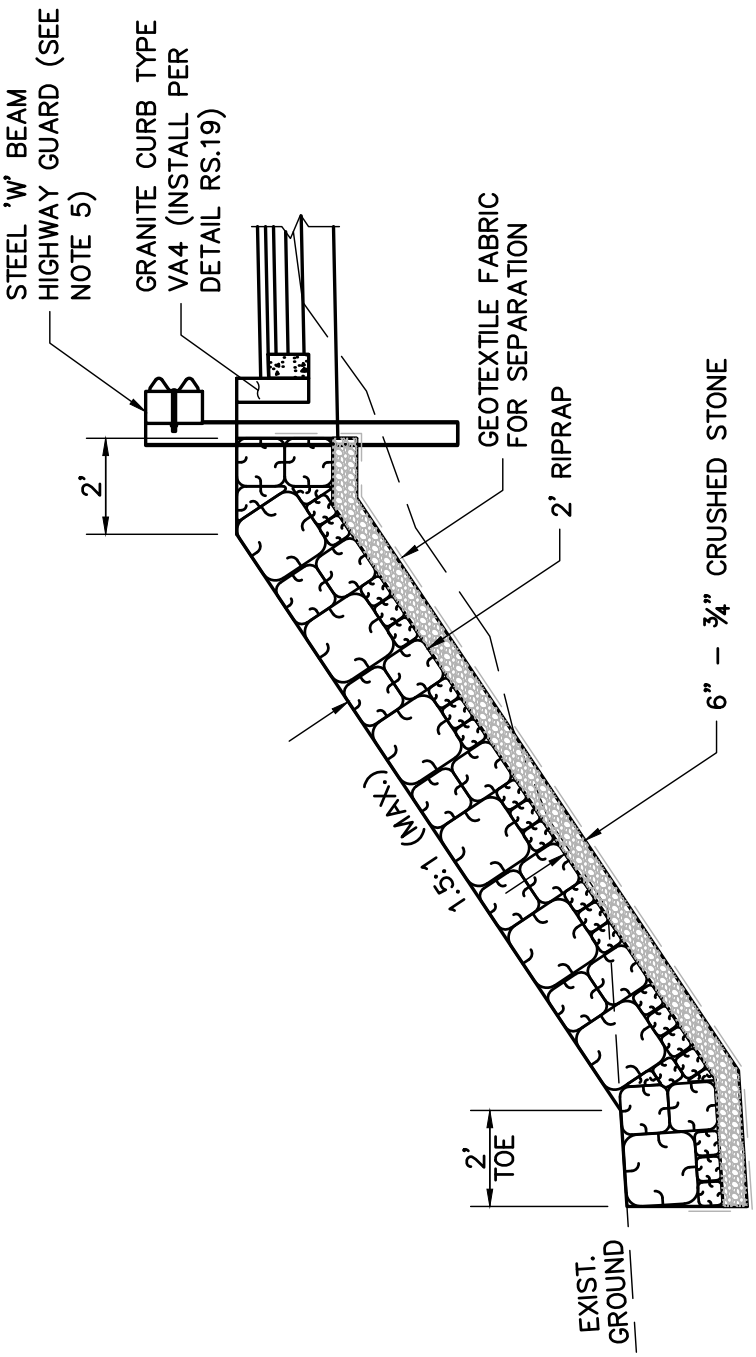
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STEEL 'W' BEAM HIGHWAY GUARD (SINGLE FACED)
SLOPED GRANITE EDGING

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.30



NOTES:

1. SLOPES STEEPER THAN 1.5:1 REQUIRE DESIGN BY GEOTECHNICAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS.
2. GEOTEXTILE FABRIC TO CONFORM TO AASHTO M 288.
3. CRUSHED STONE TO CONFORM TO MASSHIGHWAY M.2.01.4.
4. RIPRAP TO CONFORM TO MASSHIGHWAY M2.02.0.
5. GUARDRAIL IS REQUIRED FOR ALL RIPRAP SLOPES ADJACENT TO TO ROADWAY. DEPENDING ON PRESENCE AND TYPE OF CURBING, INSTALL GUARDRAIL PER DETAIL RS.28, RS.29 RS.30.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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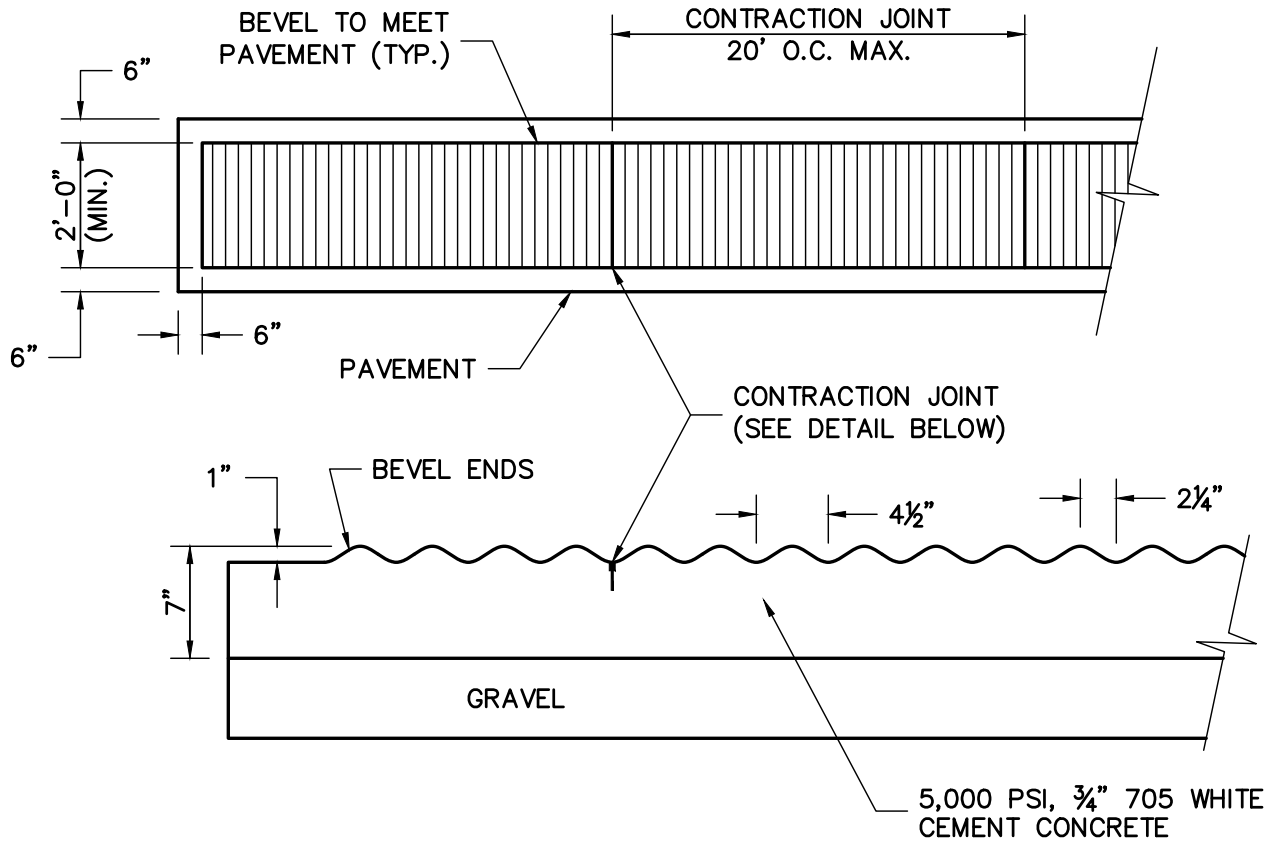
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

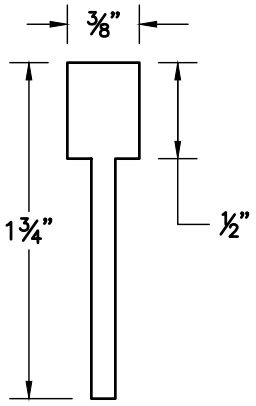
RIPRAP SLOPE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.31	



NOTES:

1. CONTRACTION JOINTS ARE TO BE PLACED AT A MAXIMUM OF 20 FEET APART.
2. JOINTS SHALL BE SAWN IN THE DEPRESSIONS AS SHOWN IN THE DETAIL AND IN ACCORDANCE WITH THE LATEST MassDOT SPECIFICATIONS.
3. END OF CORRUGATED RIDGES TO BE BEVELED WITH APPROPRIATE TOOL FOR UNIFORM SIZE AND SHAPE. HAND SCORING IS NOT ACCEPTABLE.
4. DEPTH OF GRAVEL TO BE SUCH THAT ITS BOTTOM LINE MEETS THE BOTTOM OF THE GRAVEL OF THE CONTIGUOUS PAVEMENT.



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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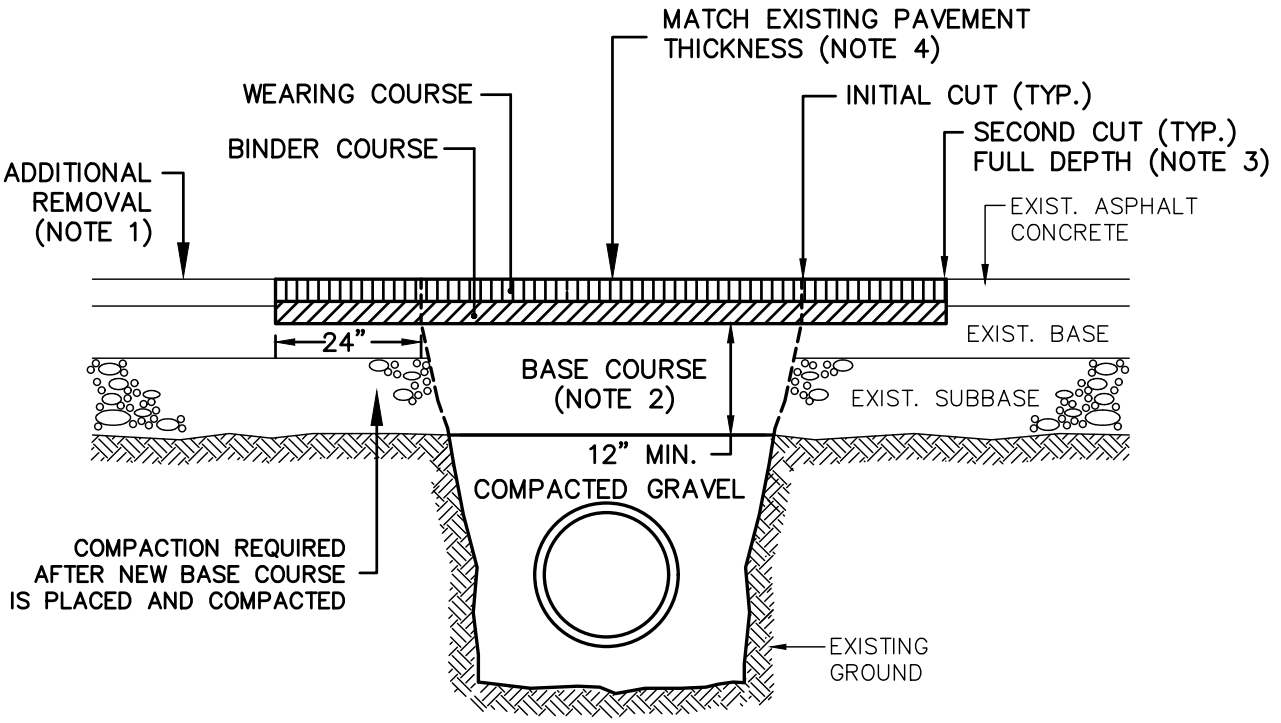
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SCORED CONCRETE PAVEMENT

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: RS.32	



NOTES:

1. ADDITIONAL PAVEMENT REMOVAL – REMOVE ADDITIONAL PAVEMENT TO A PAINTED LANE STRIPE, A LIP OF GUTTER, A CURB, AN EXISTING PAVEMENT PATCH, OR AN EDGE OF THE PAVEMENT IF SUCH STREET FEATURE IS WITHIN 2' OF THE SECOND SAW CUT.

2. NEW BASE COURSE – PROVIDE BASE COURSE MATERIAL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT TO A MODIFIED PROCTOR DENSITY OF 95% OR GREATER.

3. TACK COAT – PROVIDE FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.

4. NEW ASPHALT PAVEMENT – THICKNESS SHALL EITHER BE EQUIVALENT TO EXISTING CONDITION OR MEET DETAIL RS.01, WHICHEVER IS GREATER. COMPACT THE NEW PAVEMENT TO 96% OF LABORATORY DENSITY OR 94% OF MAXIMUM THEORETICAL DENSITY. INSTALL ASPHALT IN 2" LIFTS, MAXIMUM.

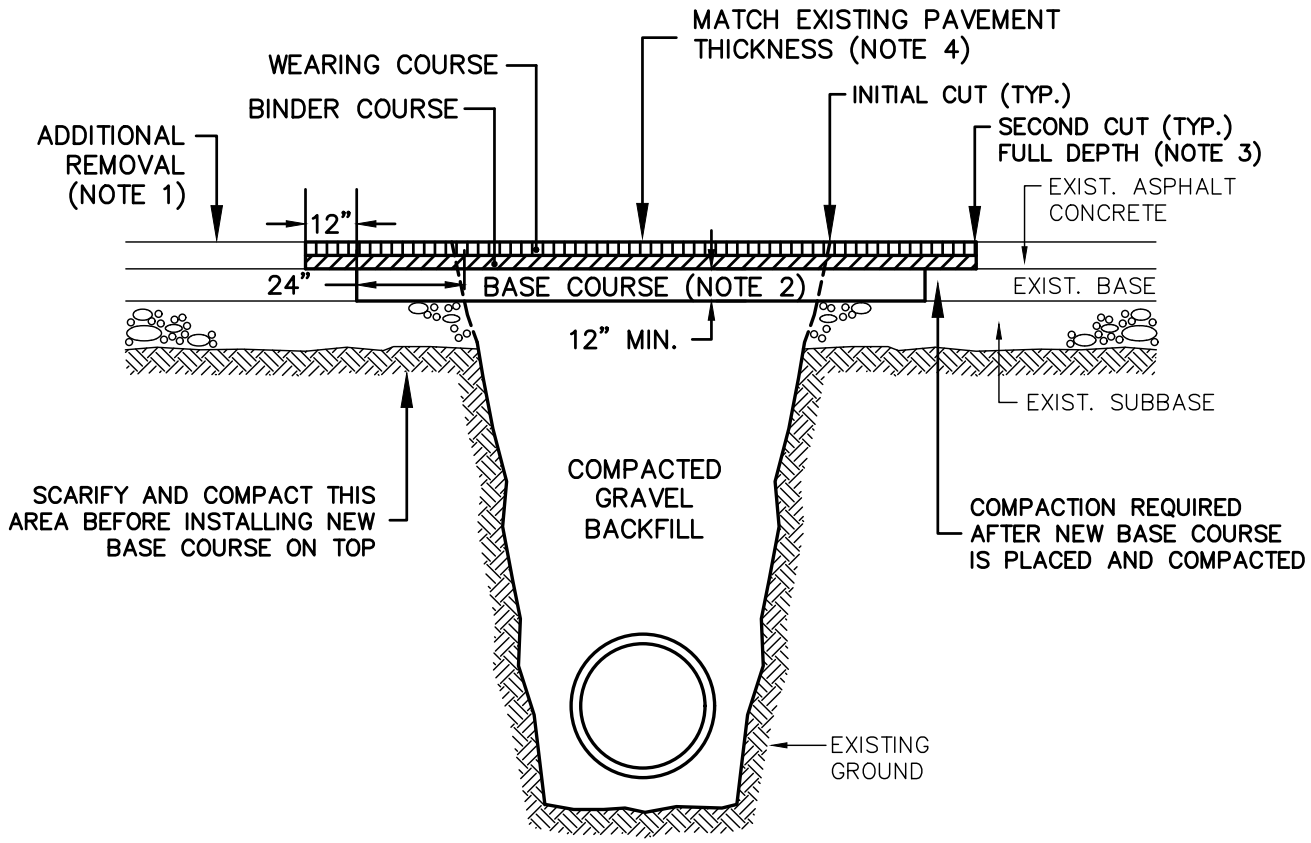
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SHALLOW EXCAVATION IN ASPHALT PAVEMENT
42" DEPTH OR LESS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.33



NOTES:

1. ADDITIONAL PAVEMENT REMOVAL – REMOVE ADDITIONAL PAVEMENT TO A PAINTED LANE STRIPE, A LIP OF GUTTER, A CURB, AN EXISTING PAVEMENT PATCH, OR AN EDGE OF THE PAVEMENT IF SUCH STREET FEATURE IS WITHIN 2' OF THE SECOND SAW CUT.

2. NEW BASE COURSE – PROVIDE BASE COURSE MATERIAL IN LIFTS NOT EXCEEDING 6" AFTER COMPACTION. COMPACT TO A MODIFIED PROCTOR DENSITY OF 95% OR GREATER.

3. TACK COAT – PROVIDE FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.

4. NEW ASPHALT PAVEMENT – THICKNESS SHALL EITHER BE EQUIVALENT TO EXISTING CONDITION OR MEET DETAIL RS.01, WHICHEVER IS GREATER. COMPACT THE NEW PAVEMENT TO 96% OF LABORATORY DENSITY OR 94% OF MAXIMUM THEORETICAL DENSITY. INSTALL ASPHALT IN 2" LIFTS, MAXIMUM.

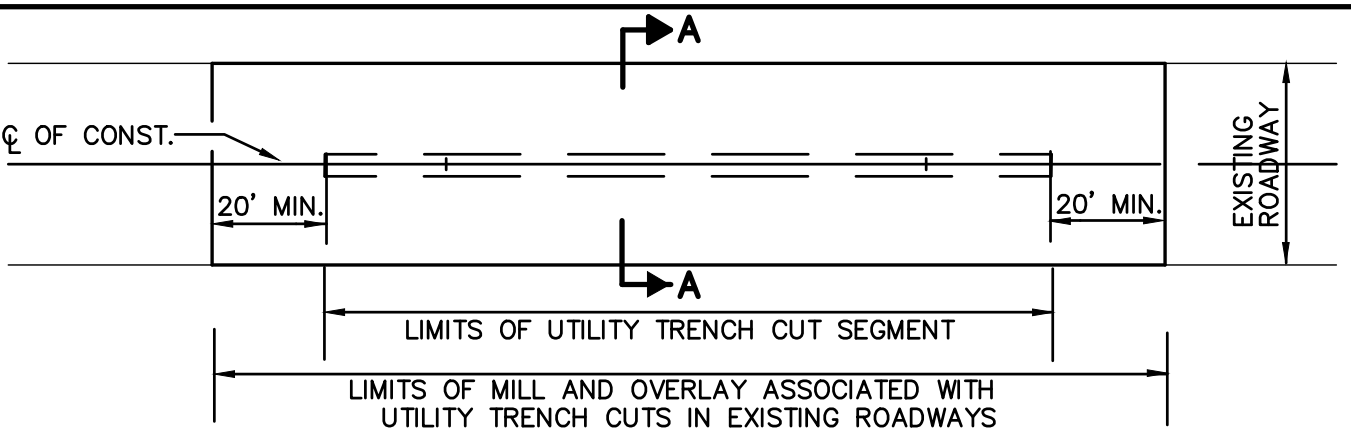
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

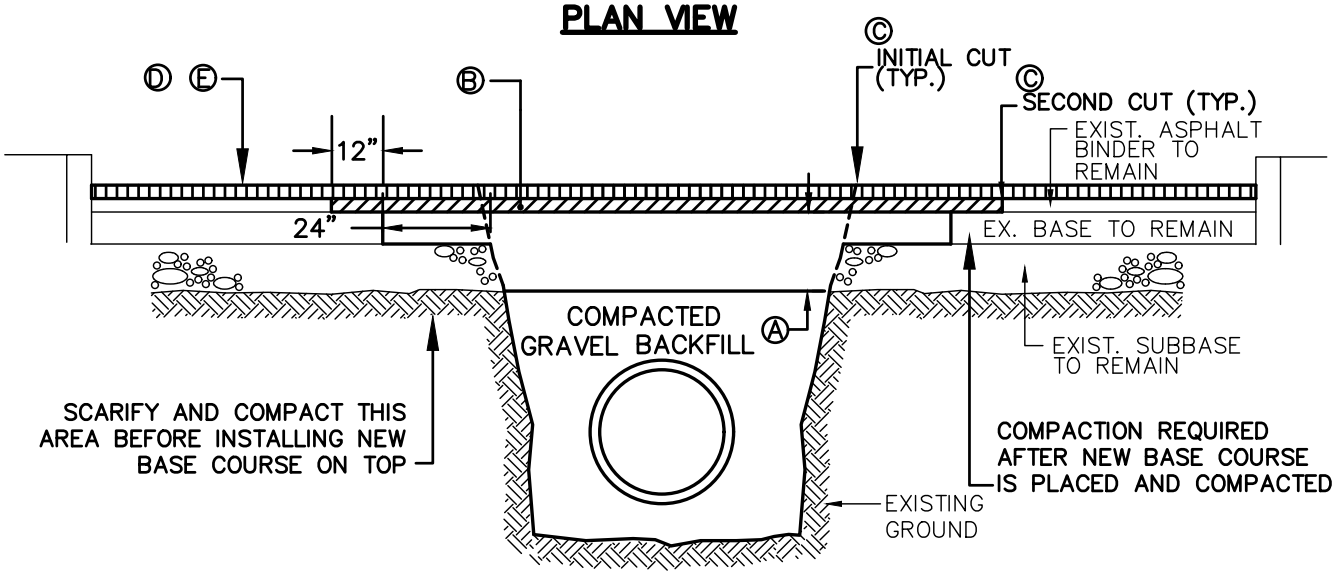
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DEEP EXCAVATION IN ASPHALT PAVEMENT
GREATER THAN 42" IN DEPTH

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.34



PLAN VIEW



SECTION A–A

Ⓐ ADD 12" COMPACTED GRAVEL BASE COURSE TO LIMITS SHOWN.

Ⓑ INSTALL NOT LESS THAN A 2" COMPACTED BITUMINOUS CONCRETE BINDER TO LIMITS SHOWN.

Ⓒ SEAL ALL CUT PAVEMENT JOINTS AND EDGES WITH HOT–POURED LIQUID ASPHALT.

Ⓓ FINAL OVERLAY OVER THE GRINDED FULL WIDTH ROADWAY TO LIMITS SHOWN IN PLAN ABOVE. TYPICAL 2" COMPACTED TYPE I–1 BITUMINOUS CONCRETE ROLLED CURB TO CURB WITHOUT SURFACE BUMPS OR DEPRESSIONS AND FLUSH WITH FACE OF CURBS OR EXISTING EDGES.

Ⓔ RE–ESTABLISH ALL DISTURBED CENTERLINE AND GUTTERLINE THERMOPLASTIC MARKINGS.

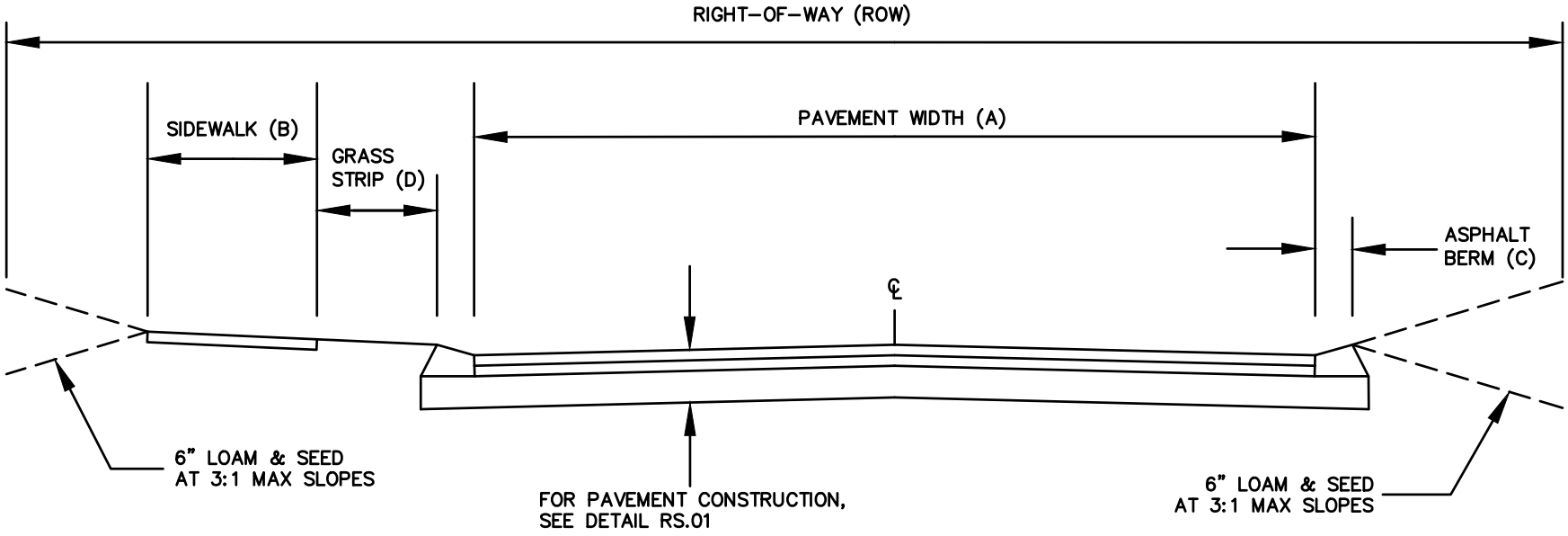
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PAVEMENT RESTORATION FOR UTILITY TRENCHING IN CRACKED PAVEMENT AREAS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	RS.35



TYPICAL ROADWAY CROSS-SECTION

ROADWAY CROSS-SECTION	MINIMUM ROADWAY SECTION WIDTHS (FT)				
	ROW	(A)	(B)	(C)	(D)
CROSS-SECTION #1	35	22	5*	1	–
CROSS-SECTION #2	40	28	5*	1	–
CROSS-SECTION #3	40	24	5*	1	3
CROSS-SECTION #4	30	24	–	1	–

* SIDEWALKS WILL BE REQUIRED; IF THE PRIVATE WAY LEADS TO A PUBLIC FACILITY, IF THE PRIVATE WAY INTERSECTS A PUBLIC WAY THAT HAS AN EXISTING SIDEWALK OR WHERE A SIDEWALK CURRENTLY EXISTS ON THE PRIVATE WAY.

NOTES:

1. ALL PRIVATE WAYS PETITIONING TO BECOME A PUBLIC WAY WILL BE CONSTRUCTED HAVING A CROSS-SECTIONAL DETAIL AS DESCRIBED IN THE TYPICAL ROADWAY CROSS-SECTION TABLE. THE CROSS-SECTION UTILIZED WILL BE DETERMINED BY THE ENGINEERING DEPARTMENT.
2. PARKING WILL ONLY BE ALLOWED ALONG ONE SIDE OF THE ROADWAY FOR CROSS-SECTIONS #1, #3 AND #4.
3. PARKING WILL BE ALLOWED ON BOTH SIDES OF THE ROADWAY FOR CROSS-SECTION #2. THE PARKING WILL BE STRUCTURED ALONG BOTH SIDES OF THE ROADWAY TO ALLOW EMERGENCY RESPONSE VEHICLES THE NECESSARY OPEN LANE WIDTH TO SAFELY AND EFFICIENTLY NEGOTIATE THE ROADWAY.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL ROADWAY CROSS-SECTION FOR THE ACCEPTANCE OF A PRIVATE WAY AS A PUBLIC WAY

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
DETAIL NUMBER: RS.36	

STORM DRAIN & STORMWATER MANAGEMENT

DESCRIPTION	DETAIL NUMBER
CATCH BASIN	
FRAME & GRATE	SDSW.01
PRECAST CONCRETE CATCH BASIN	SDSW.02
OIL & DEBRIS TRAP – SNOUT 18R INSTALLATION DETAILS	SDSW.02A
ALTERNATE TYPE CATCH BASIN (SECTION)	SDSW.03
ALTERNATE TYPE CATCH BASIN (PLAN)	SDSW.03A
ALTERNATE TYPE CATCH BASIN (NOTES)	SDSW.03B
GRANITE CURB INLET	SDSW.04
CONCRETE BLOCK GUTTER INLET	SDSW.05
LEACHING BASIN	SDSW.06
ENVIRONMENTAL PLACARD	
DRAINS TO CHARLES RIVER	SDSW.07
DRAINS TO NEPONSET RIVER	SDSW.08
PRECAST DRAIN MANHOLE	SDSW.09
MANHOLE FRAME & COVER MARKED "DRAIN"	SDSW.10
DRAINAGE END & SLOPE TREATMENTS	
CONCRETE OR FIELD STONE MASONRY ENDS	SDSW.11
REINFORCED CONCRETE FLARED END SECTION	SDSW.12
RIPRAP VELOCITY DISSIPATOR	SDSW.13
STONE OUTLET PROTECTION	SDSW.14
OUTLET PROTECTION TABLE FOR LOW TAILWATER	SDSW.14A
OUTLET PROTECTION TABLE FOR HIGH TAILWATER	SDSW.14B
RIPRAP DITCH	SDSW.15
TRENCHES	
DRAINAGE TRENCH	SDSW.16
ANTI–SEEP COLLAR	SDSW.17

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
STORM DRAIN & STORMWATER MANAGEMENT

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SDSW–INDEX.01	

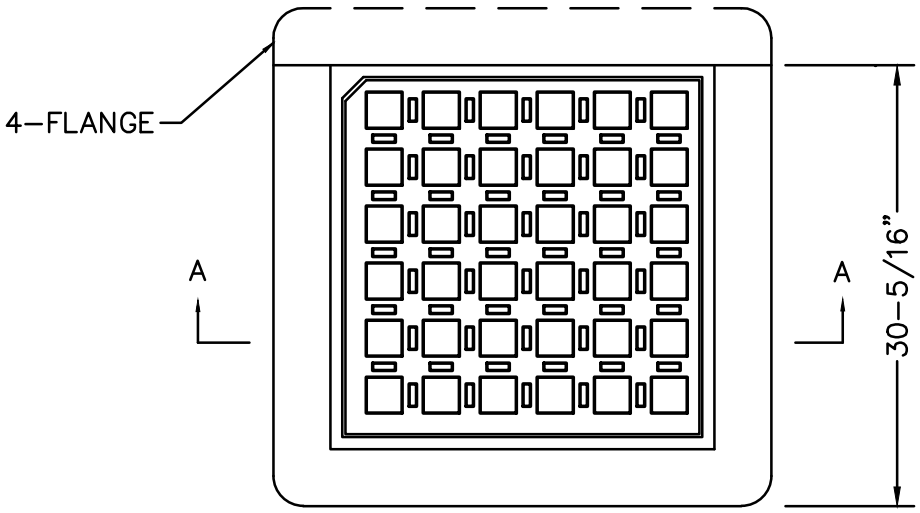
STORM DRAIN & STORMWATER MANAGEMENT CONTINUED

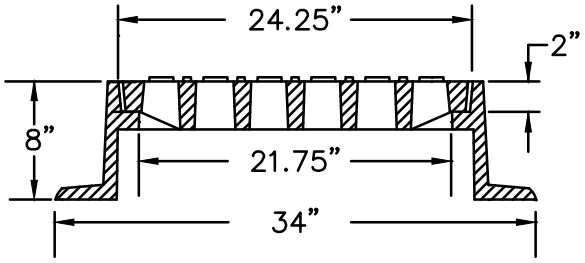
DESCRIPTION	DETAIL NUMBER
EROSION CONTROL PROTECTION	
SILT FENCE	SDSW.18
BALES OF HAY & SILT FENCE	SDSW.19
DRAIN INLET PROTECTION	SDSW.20

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
STORM DRAIN & STORMWATER MANAGEMENT

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW–INDEX.02





SECTION A–A

NOTE:

FRAME AND GRATE SHALL BE EAST JORDAN IRON WORKS CATALOG NOS. 5520M5 & 5524Z FOR THE 4–FLANGE AND CATALOG NOS. 5520M5 & 5523Z FOR THE 3–FLANGE, OR APPROVED EQUAL.

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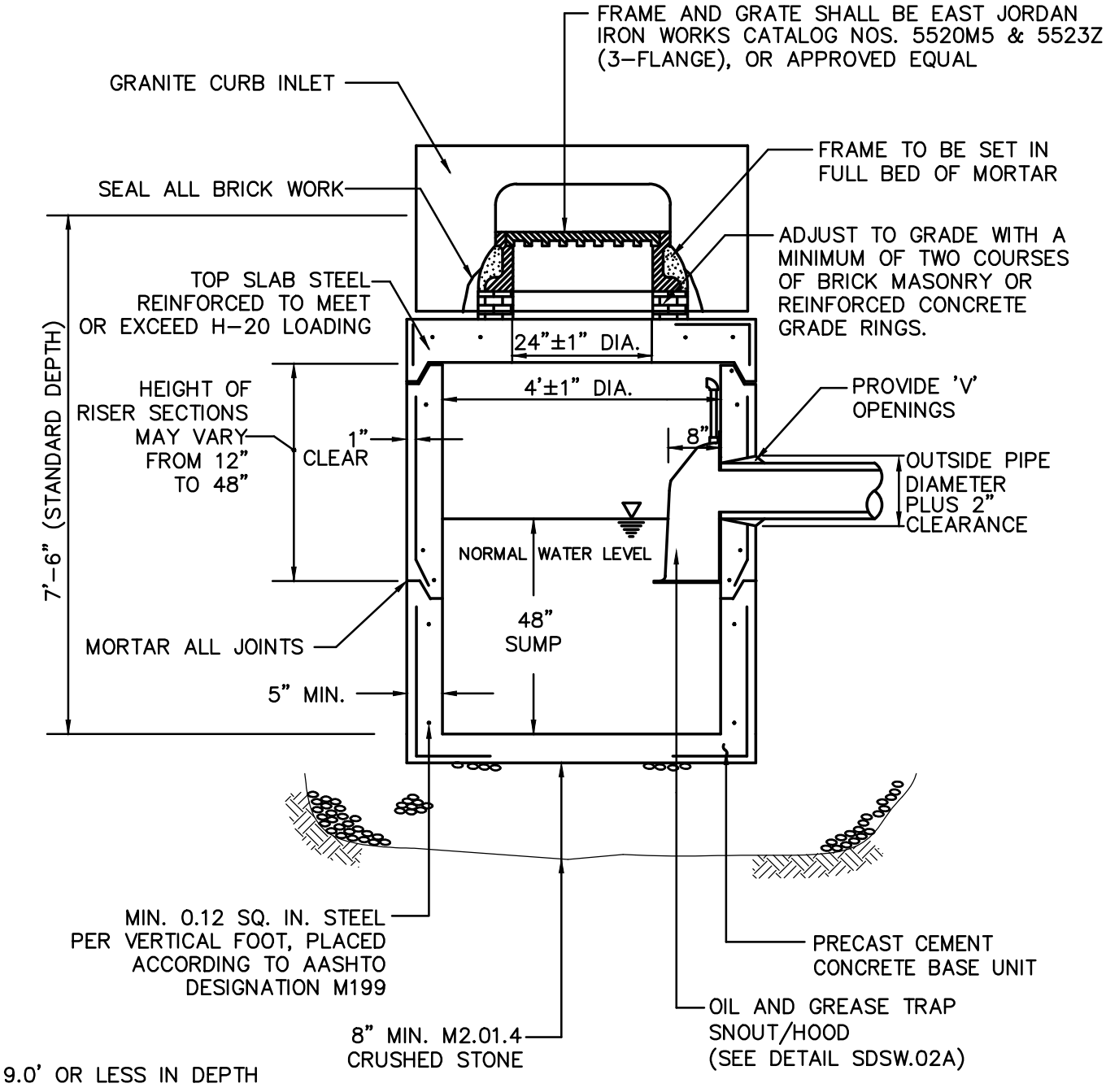
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CATCH BASIN FRAME & GRATE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.01



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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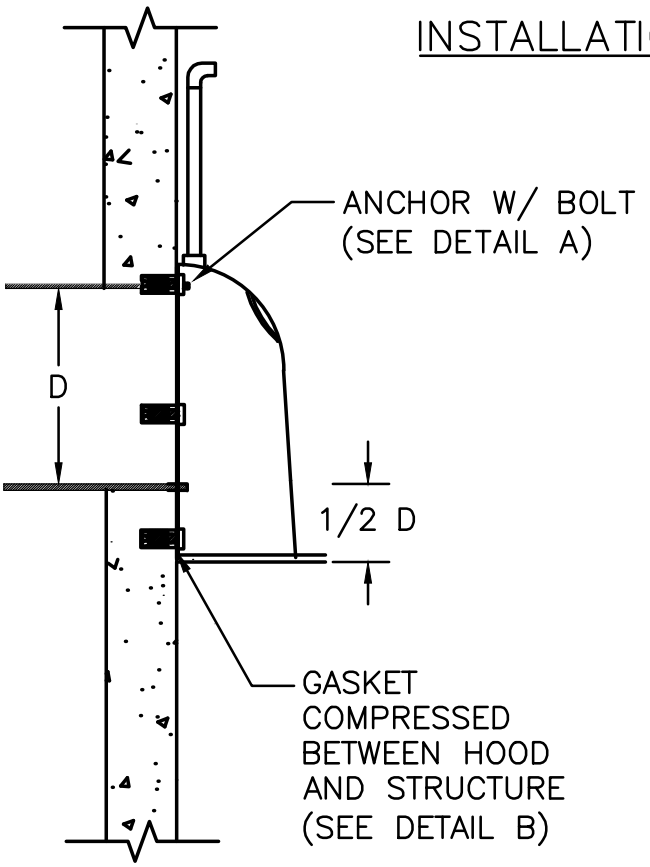
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

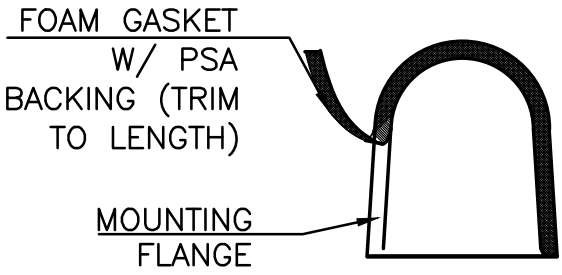
PRECAST CONCRETE CATCH BASIN

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.02

INSTALLATION DETAIL



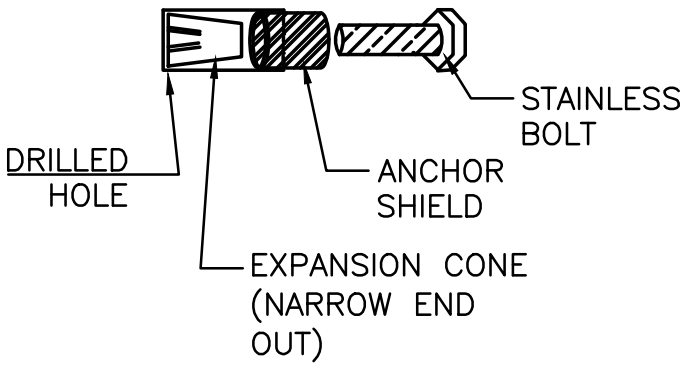
DETAIL B



INSTALLATION NOTE:

POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

DETAIL A



NOTE:
SNOUT/HOOD SHALL BE BMP, INC. 18R (SHOWN), GROUND WATER RESCUE, INC. ELIMINATOR, OR APPROVED EQUAL

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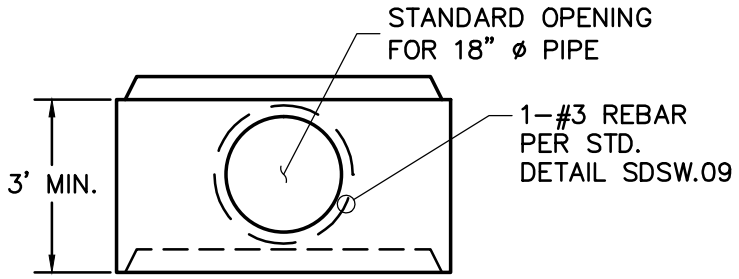
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

OIL AND DEBRIS TRAP
SNOUT 18R INSTALLATION DETAILS

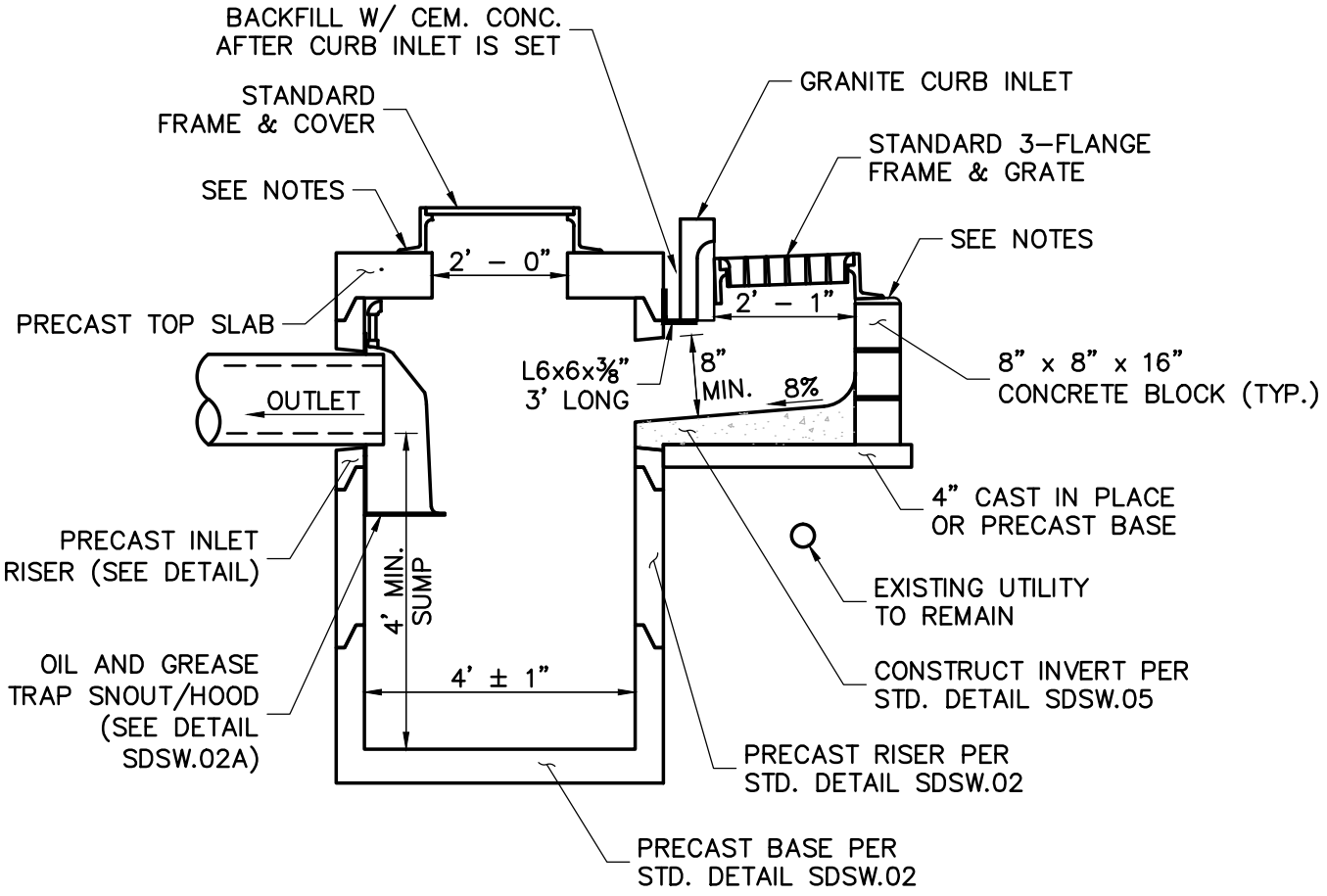
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.02A

NOTE:

1. FRAMES AND GRATES/COVERS SHALL BE ADJUSTED TO GRADE WITH A MINIMUM OF TWO COURSES OF BRICK MASONRY OR REINFORCED CONCRETE GRADE RINGS (NOT SHOWN).
2. ALL EXTERIOR SURFACES OF MANHOLE GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.



INLET RISER



SECTION

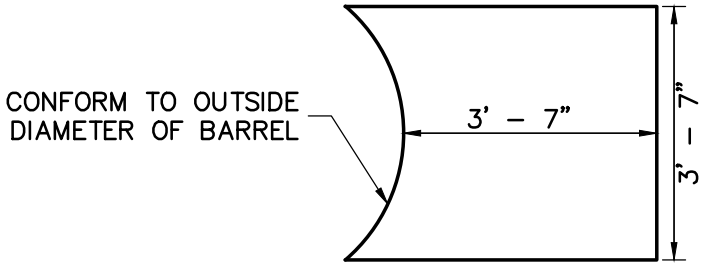
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

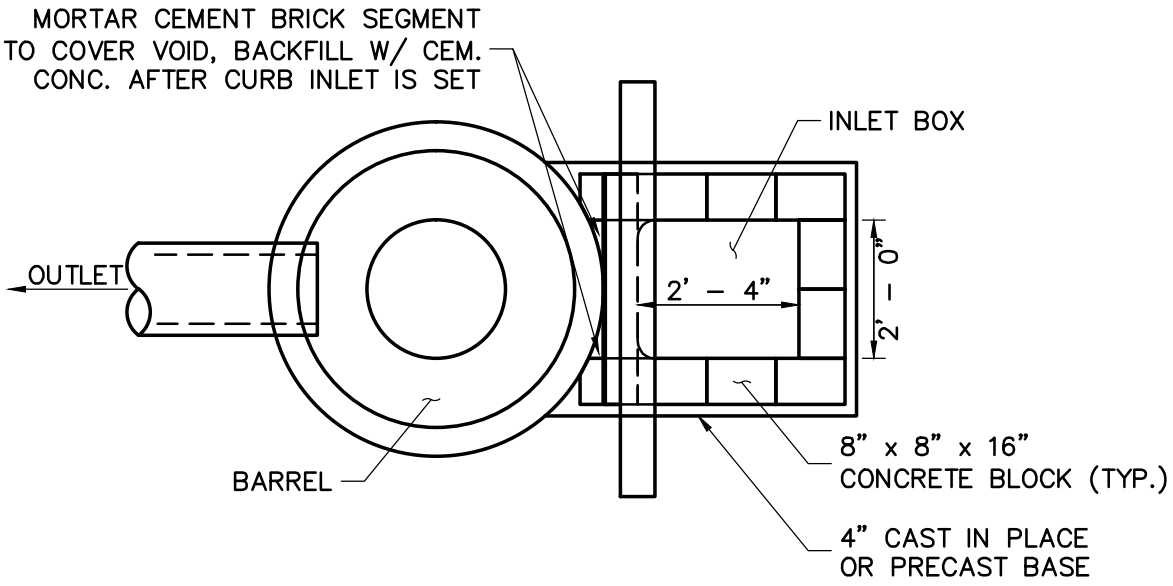
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ALTERNATE TYPE CATCH BASIN
SECTION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.03



BASE DIMENSIONS



PLAN

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ALTERNATE TYPE CATCH BASIN
PLAN

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.03A

ALTERNATE TYPE CATCH BASIN NOTES:

1. ALTERNATE TYPE CATCH BASINS ARE TO BE USED AT LOCATIONS WHERE A STANDARD CATCH BASIN WOULD REQUIRE THE RELOCATION OF AN EXISTING UTILITY.

2. REINFORCEMENT IN BARREL SECTIONS SHALL BE AS SHOWN IN STANDARD DETAIL SDSW.02.

3. THE 6x6x⅜ INCH ANGLE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M111.

4. BRICKS MAY BE USED TO ADJUST THE GRADE OF THE FRAMES.

5. THE CURB INLET SHALL BE SET IN A FULL BED OF MORTAR ON THE STEEL ANGLE. THE MINIMUM WIDTH OF BEARING OF THE CURB INLET ON THE STEEL ANGLE SHALL BE 3 INCHES.

6. THE OUTLET IS NOT NECESSARILY LOCATED WITHIN THE INLET RISER AND IS NOT NECESSARILY LOCATED OPPOSITE FROM THE INLET. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE RELATIVE LOCATIONS OF THE INLET AND OUTLET PRIOR TO ORDERING.

7. THE OUTLET PIPE SHALL NOT PROJECT MORE THAN 4 INCHES FROM THE FACE OF THE INTERIOR WALL ALONG THE CENTERLINE OF THE PIPE.

8. CONCRETE BLOCKS IN THE INLET BOX SHALL BE SET IN A FULL BED OF MORTAR. ALL HORIZONTAL AND VERTICAL JOINTS SHALL BE FLUSHED FULL OF MORTAR.

9. A MINIMUM CLEARANCE BETWEEN THE TOP OF THE 18–INCH OPENING IN THE INLET RISER AND THE INVERT OF THE INLET BOX IS 8 INCHES. THE NUMBER OF ROWS OF CONCRETE BLOCKS IN THE INLET BOX MAY BE MODIFIED DEPENDING ON THE ELEVATION OF THE UTILITY TO BE MAINTAINED.

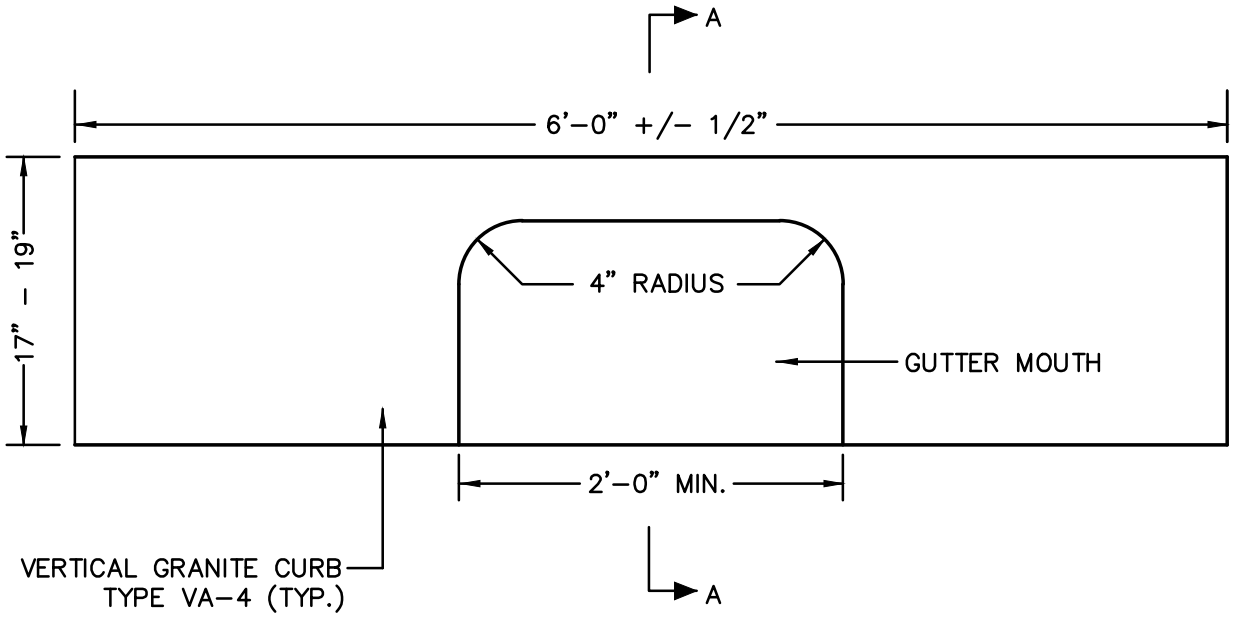
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

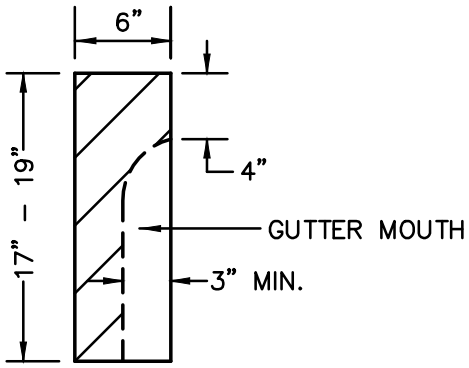
ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ALTERNATE TYPE CATCH BASIN NOTES

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.03B





SECTION A–A

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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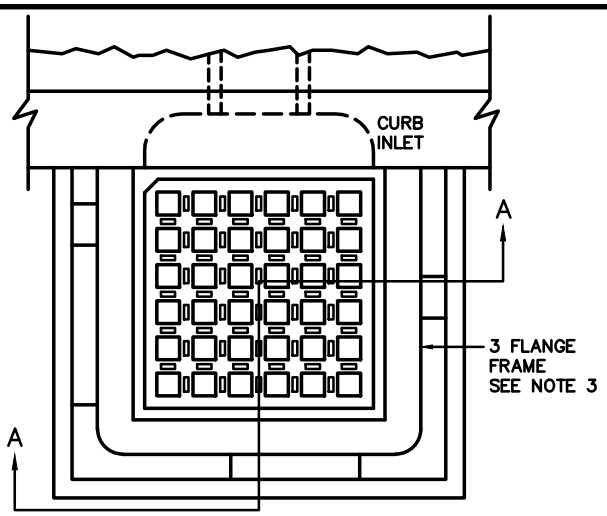
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

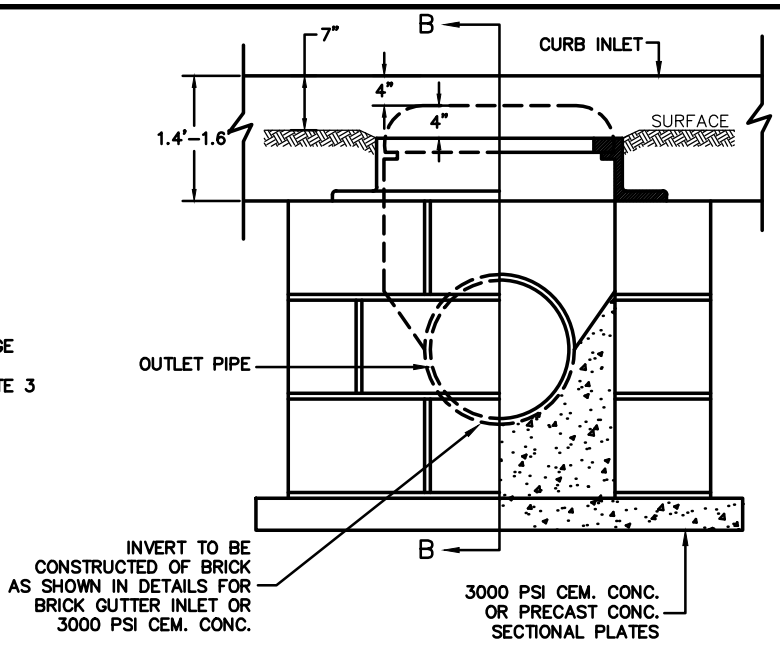
GRANITE CURB INLET

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.04

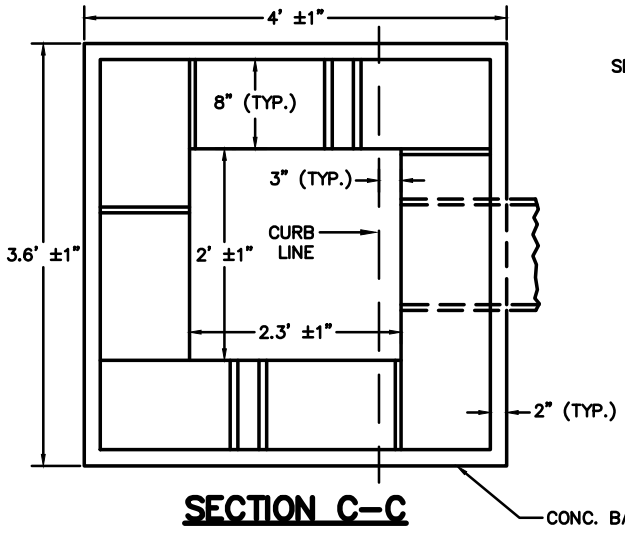


PLAN VIEW

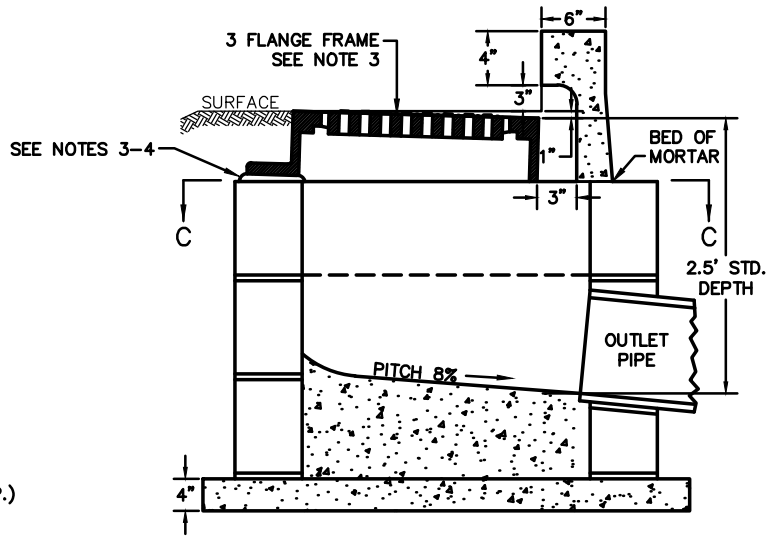
NOTES:
1. WHERE CURB INLET IS NOT USED THE INSIDE HORIZONTAL DIMENSIONS OF GUTTER INLET TO BE 2 FEET±1" X 2 FEET±1" IN WHICH CASE AND UNLESS OTHERWISE DIRECTED, A STANDARD 4-FLANGE FRAME IS TO BE USED.
2. FRAME AND GRATE SHALL BE EAST JORDAN IRON WORKS CATALOG NOS. 5520M5 & 5523Z (3 FLANGE) OR EQUAL.
3. ADJUST TO GRADE WITH A MINIMUM OF TWO COURSES OF BRICK MASONRY OR REINFORCED CONCRETE GRADE RINGS (NOT SHOWN).
4. ALL EXTERIOR SURFACES OF MANHOLE GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.



SECTION A-A



SECTION C-C



SECTION B-B

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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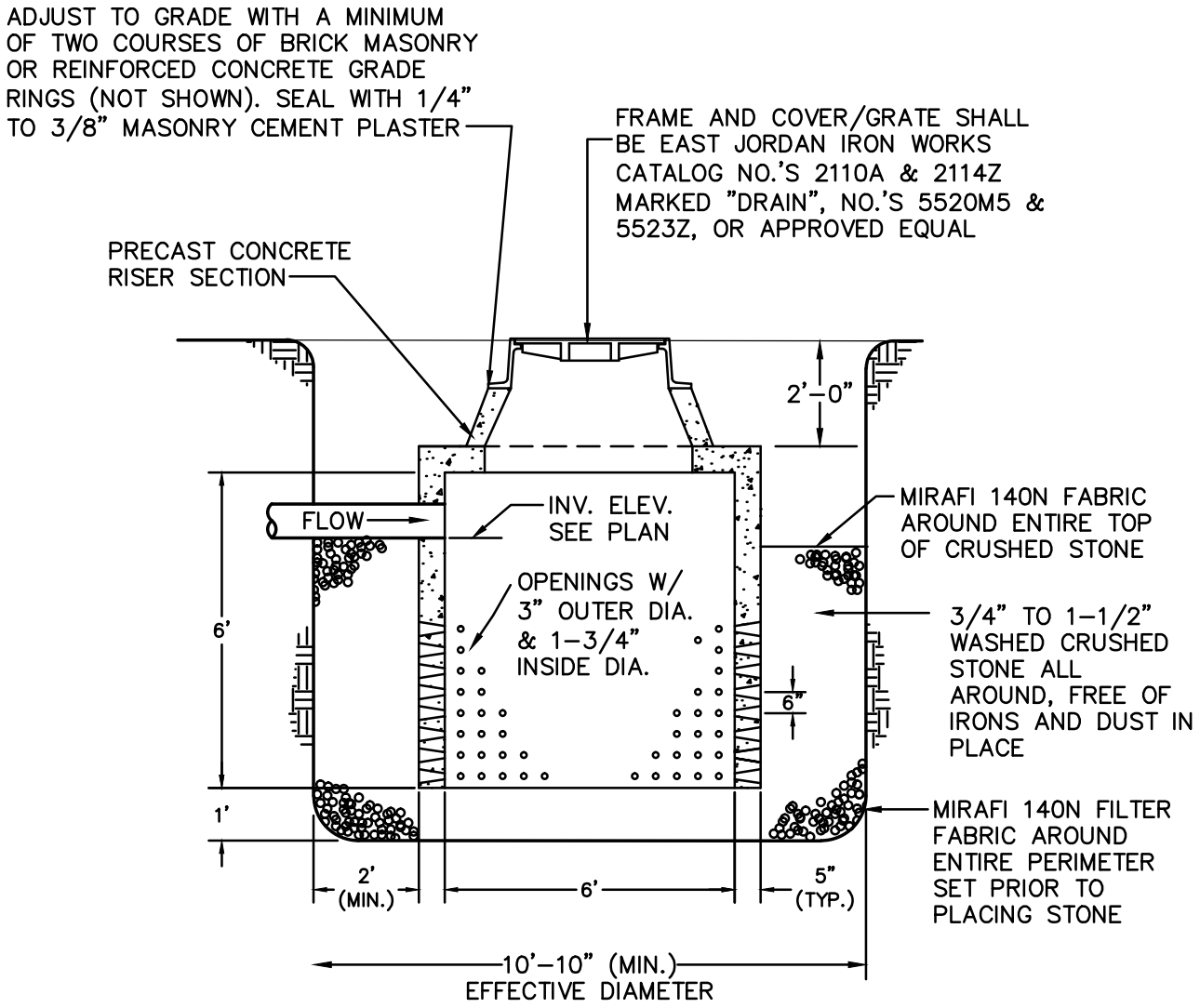
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CONCRETE BLOCK GUTTER INLET

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.05



STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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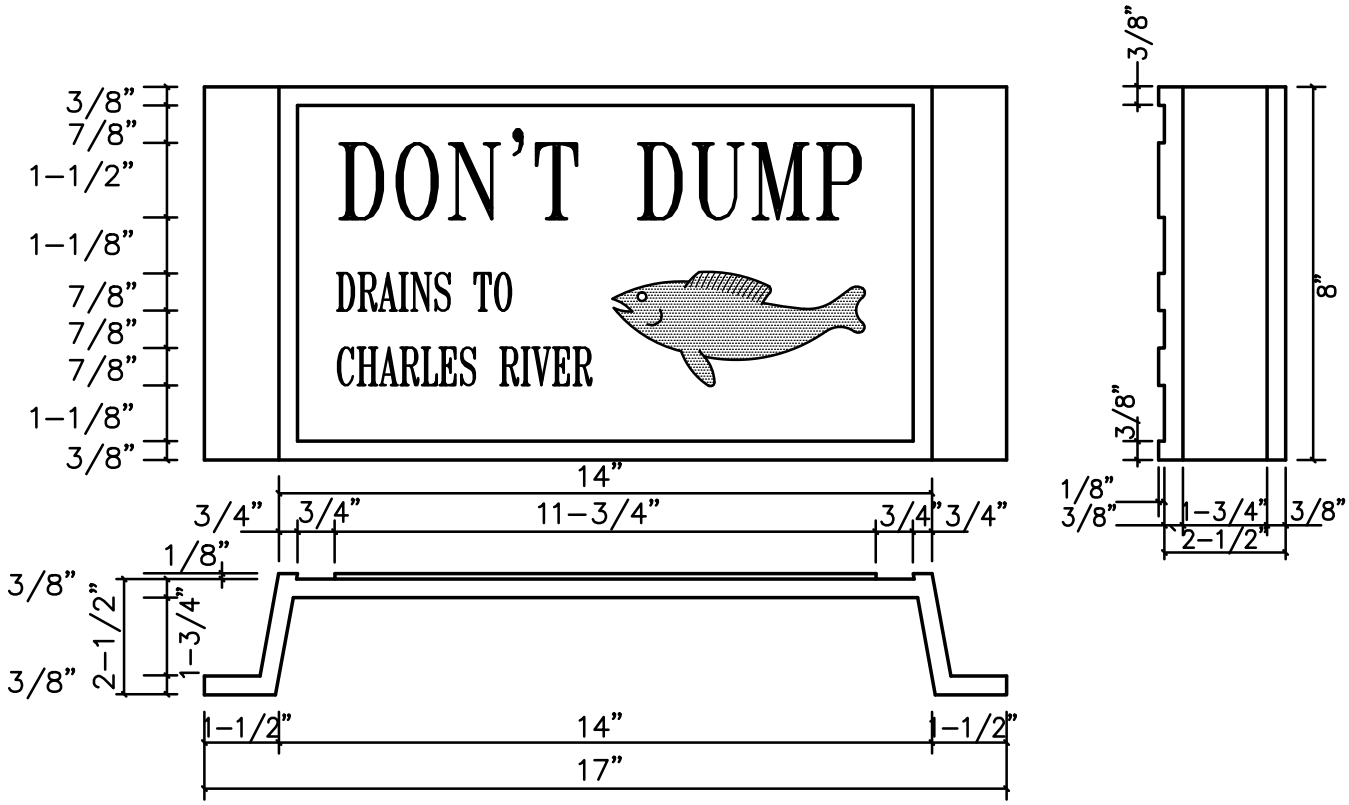
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

LEACHING BASIN

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.06



NOTES:

1. LETTERING SYMBOLS AND BORDER ALL CUT AT 1/8 HEIGHT.
2. THE SIZE OF THE FISH SHALL BE TO THE SCALE SHOWN ON THE DRAWING.
3. MINIMUM WEIGHT 18 LBS. PER CASTING.
4. CASTING TO BE MADE OF CAST IRON.

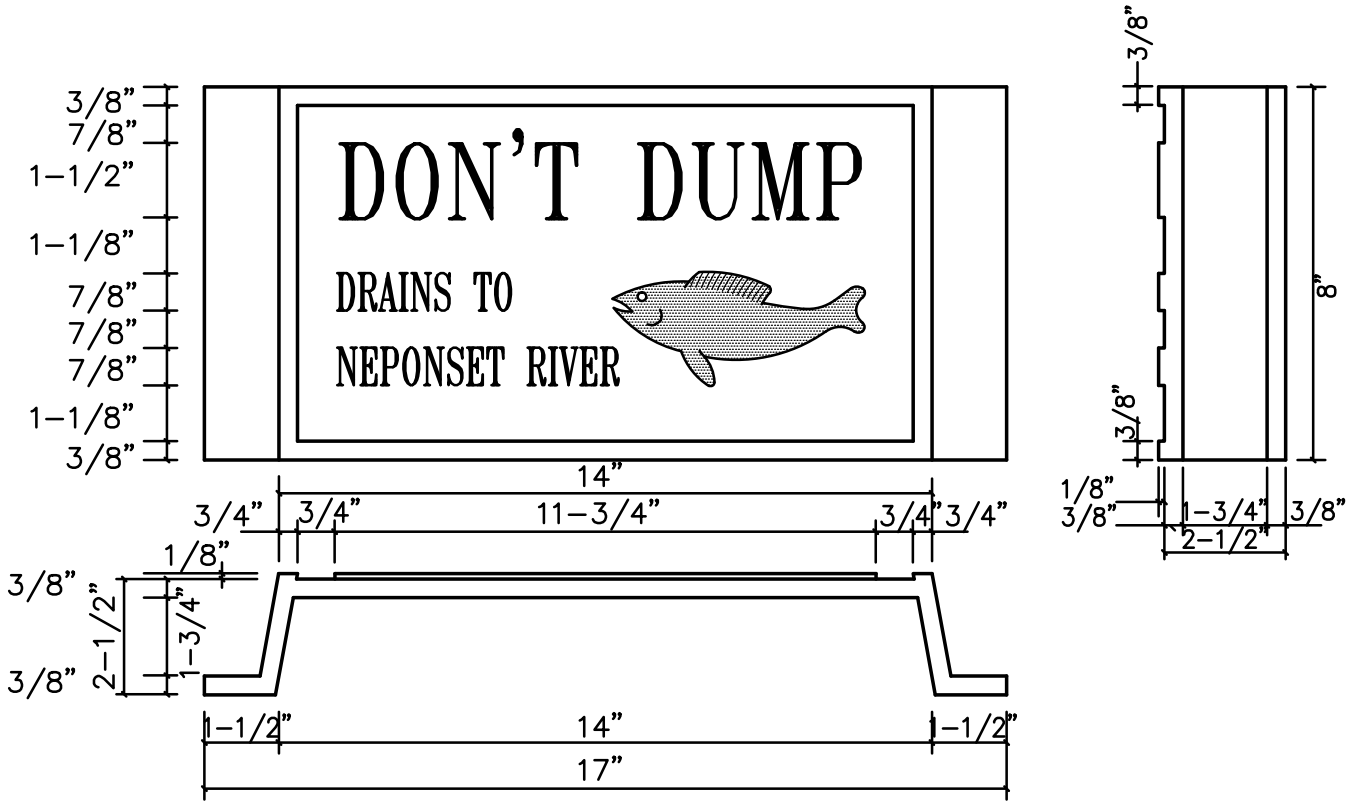
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ENVIRONMENTAL CATCH BASIN PLACARD
DRAINS TO CHARLES RIVER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.07



NOTES:

1. LETTERING SYMBOLS AND BORDER ALL CUT AT 1/8 HEIGHT.
2. THE SIZE OF THE FISH SHALL BE TO THE SCALE SHOWN ON THE DRAWING.
3. MINIMUM WEIGHT 18 LBS. PER CASTING.
4. CASTING TO BE MADE OF CAST IRON.

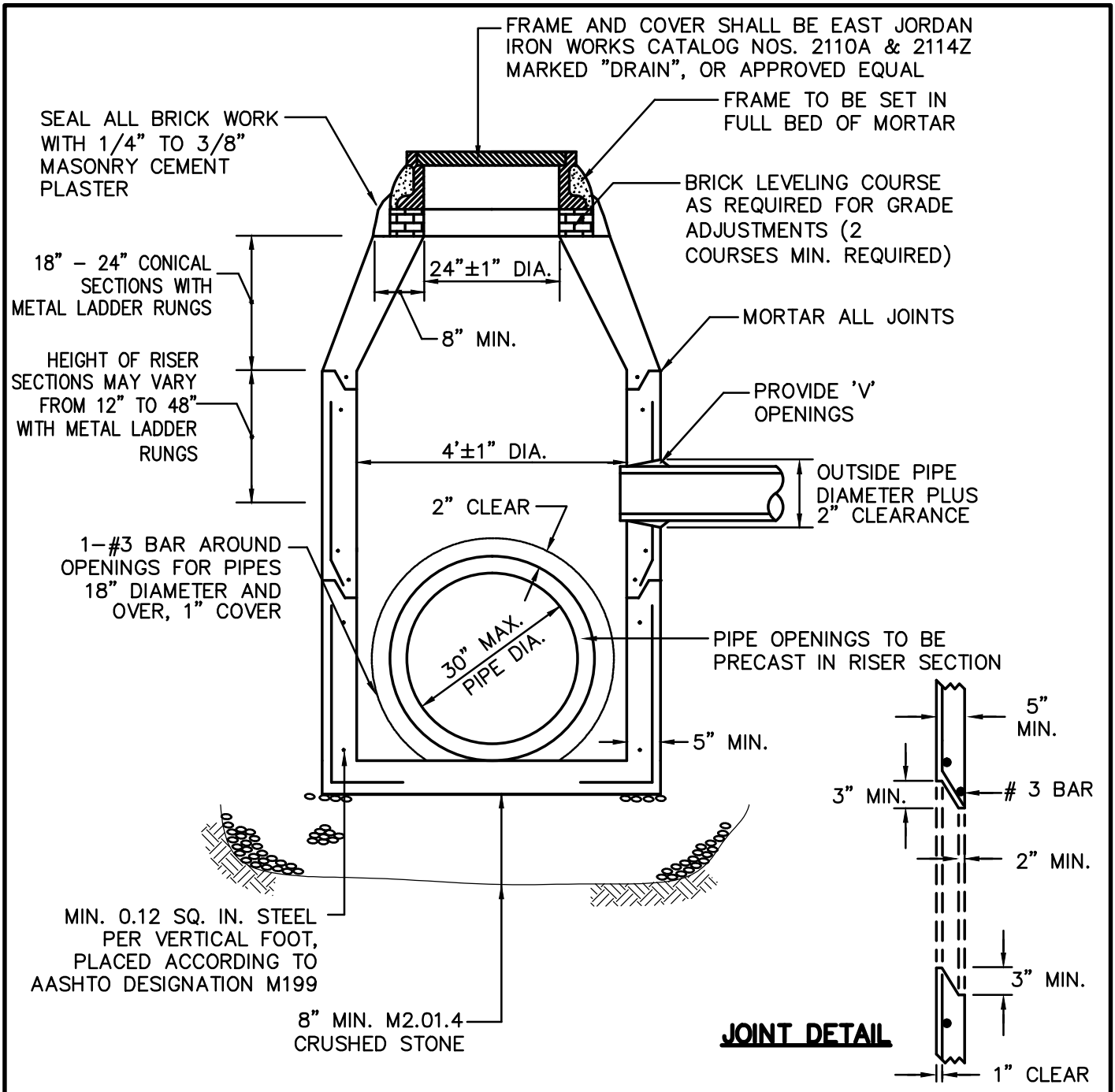
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ENVIRONMENTAL CATCH BASIN PLACARD
DRAINS TO NEPONSET RIVER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.08



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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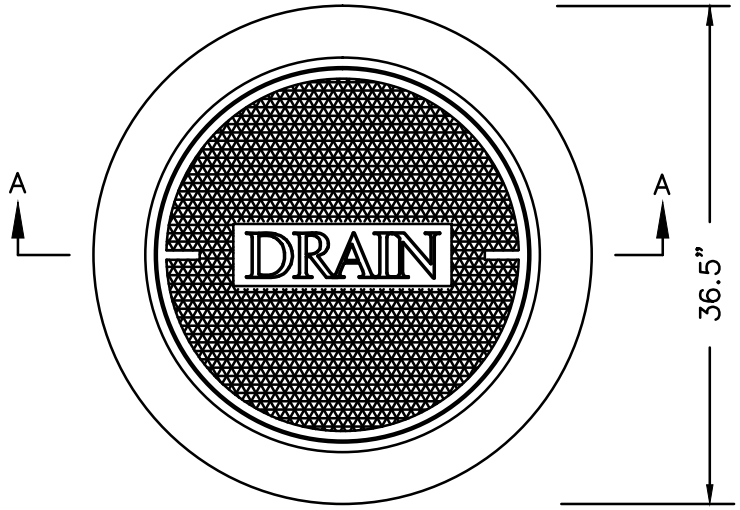
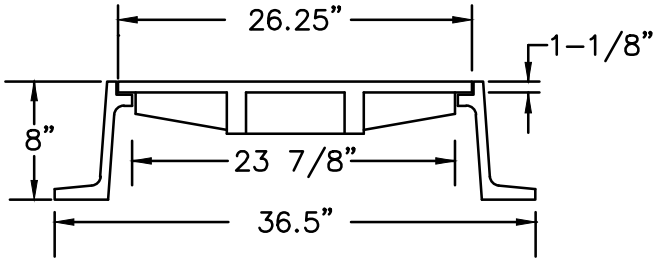
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PRECAST DRAIN MANHOLE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.09





SECTION A-A

NOTE:

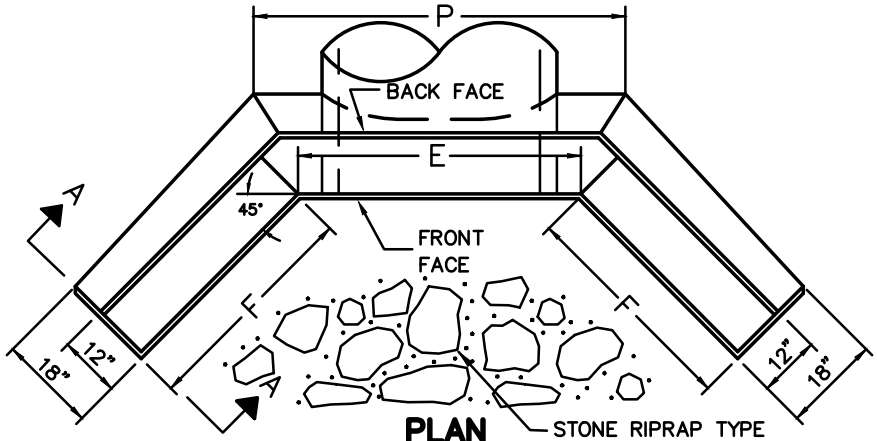
FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS CATALOG NOS. 2110A & 2114Z MARKED "DRAIN", OR APPROVED EQUAL.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** MANHOLE FRAME & COVER MARKED "DRAIN"	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
		DETAIL NUMBER: SDSW.10	

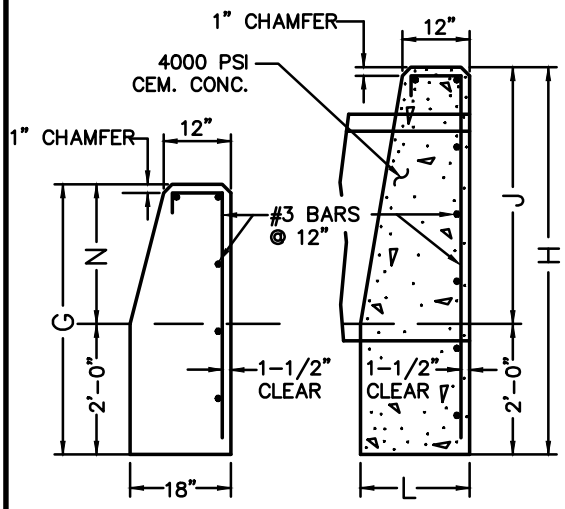
1V:1.5H AND 1V:2H SLOPES								1V:1.5H SLOPES			1V:2H SLOPES			TRENCH EXCAV. FOR 1:2 SLOPE FOR 1'-0" DEPTH CF
D	E	G	H	J	L	N	P	F	CONC MASONRY CY	STEEL LBS	F	CONC MASONRY CY	STEEL LBS	
30	4'-0"	4'-0"	5'-6"	3'-6"	1'-6"	2'-0"	5'-3"	3'-0"	2.60	45	4'-3"	3.16	54	55.16
36	4'-6"	4'-3"	6'-0"	4'-0"	1'-8"	2'-3"	5'-11"	3'-6"	3.35	54	5'-0"	4.15	64	64.36
42	5'-0"	4'-6"	6'-6"	4'-6"	1'-1"	2'-6"	6'-6"	4'-0"	4.20	59	5'-9"	5.25	70	73.70
48	5'-6"	4'-9"	7'-0"	5'-0"	2'-0"	2'-9"	7'-2"	4'-6"	5.19	65	6'-6"	6.50	83	83.96
54	6'-0"	5'-0"	7'-6"	5'-6"	2'-2"	3'-0"	7'-1"	5'-0"	6.26	73	7'-3"	7.88	93	94.46
60	6'-6"	5'-3"	8'-0"	6'-0"	2'-4"	3'-3"	8'-5"	5'-6"	7.43	85	8'-0"	9.37	106	105.30
72	7'-6"	5'-9"	9'-0"	7'-0"	2'-8"	3'-9"	9'-9"	6'-6"	10.25	98	9'-6"	12.99	128	128.92
84	8'-6"	6'-3"	10'-0"	8'-0"	3'-0"	4'-3"	11'-0"	7'-6"	13.49	120	11'-0"	17.32	154	153.86



PLAN

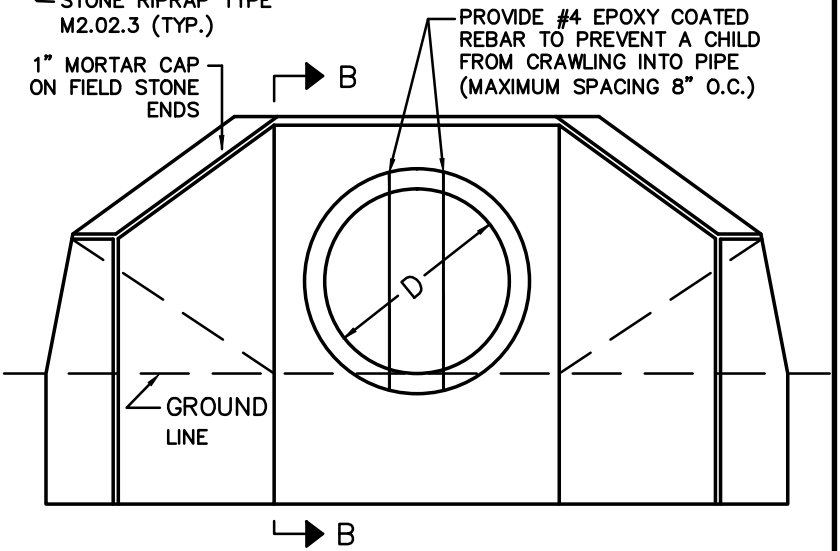
STONE RIPRAP TYPE M2.02.3 (TYP.)

NOTES:
ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM.



ELEV. A–A

SECTION B–B



FRONT ELEVATION

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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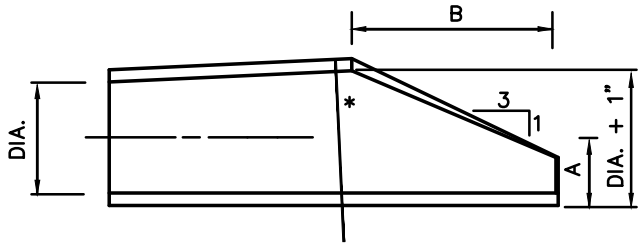
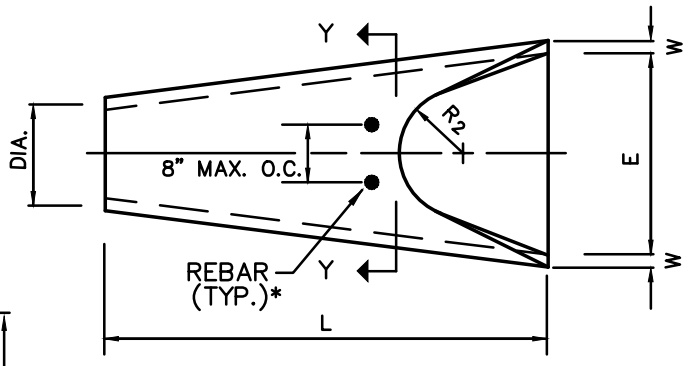
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CONCRETE OR FIELD STONE MASONRY ENDS

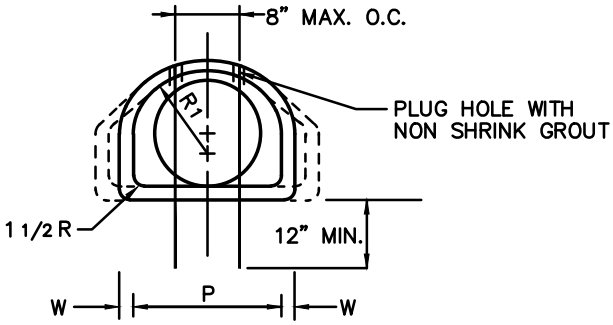
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.11



SECTION



PLAN



SECTION Y–Y

NOTES:
1. JOINT TYPE SHALL BE COMPATIBLE WITH MAIN RUN OF PIPE.
2. SEE OUTLET EROSION PROTECTION DETAIL FOR INSTALLATION OF RIPRAP AT FLARED END SECTION.

DIAMETER INCHES	W	A	B	D	E	P	DIA. +1"	R1	R2
12"	2"	4"	2'-0"	6'-0"	2'-0"	19 15/16"	13"	10 1/8"	9"
15"	2 1/4"	6"	2'-3"	6'-0"	2'-6"	24 5/16"	16"	12 1/2"	11"
18"	2 1/2"	9"	2'-3"	6'-0"	3'-0"	29"	19"	15 1/2"	12"
21"	2 3/4"	9"	2'-11"	6'-0"	3'-6"	31 5/8"	22"	16 1/8"	13"
24"	3"	9 1/2"	3'-7 1/4"	6'-0"	4'-0"	33 3/16"	25"	16 13/16"	14"
27"	3 1/4"	10 1/2"	4'-0"	6'-0"	4'-6"	36"	28"	18 9/16"	14 1/2"
30"	3 1/2"	12"	4'-6"	6'-0"	5'-0"	37"	31"	18 1/2"	15"
36"	4"	15"	5'-3"	8'-0"	6'-0"	47 13/16"	37"	24 5/16"	20"
42"	4 1/2"	21"	5'-3"	8'-0"	6'-6"	53 7/8"	43"	27 1/2"	22"
48"	5"	24"	6'-0"	8'-0"	7'-0"	56 1/2"	49"	28 1/2"	22"

* PROVIDE #4 EPOXY COATED REBAR TO PREVENT A CHILD FROM CRAWLING INTO PIPE (MAXIMUM SPACING 8" O.C.)

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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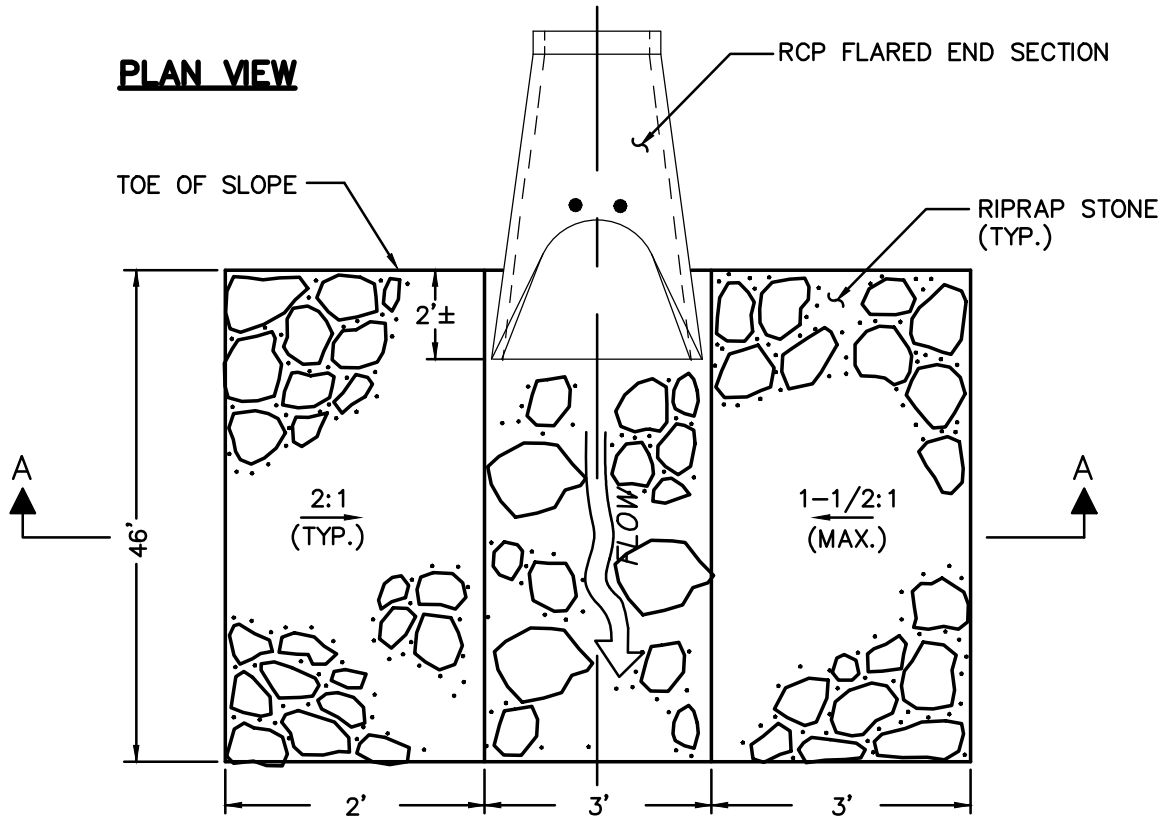
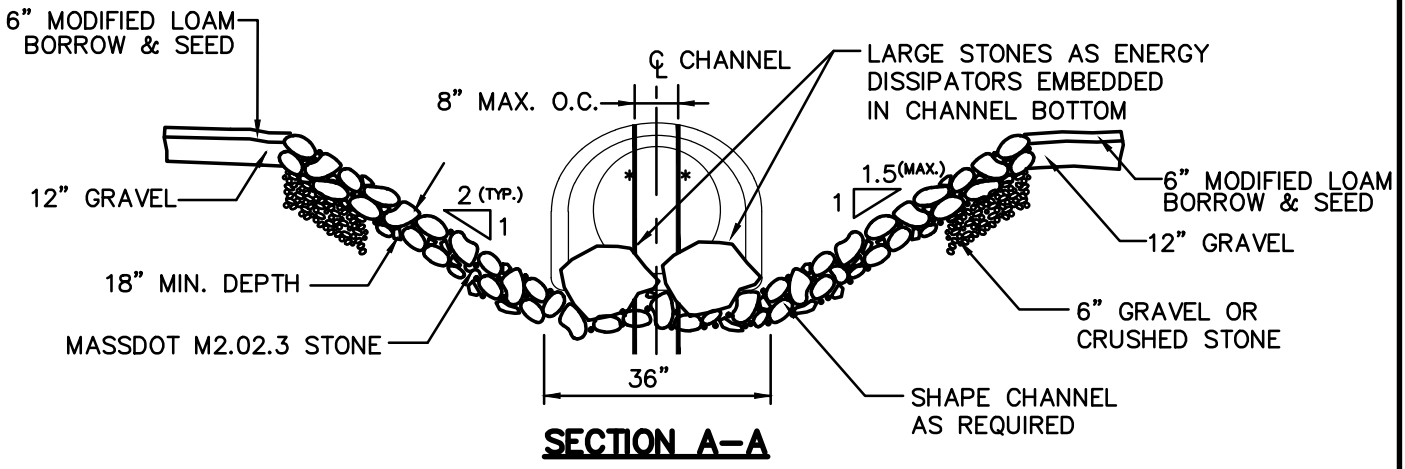
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

REINFORCED CONCRETE FLARED END SECTION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.12

PLAN VIEW





SECTION A–A

* PROVIDE #4 EPOXY COATED REBAR TO PREVENT A CHILD FROM CRAWLING INTO PIPE (MAXIMUM SPACING 8" O.C.)

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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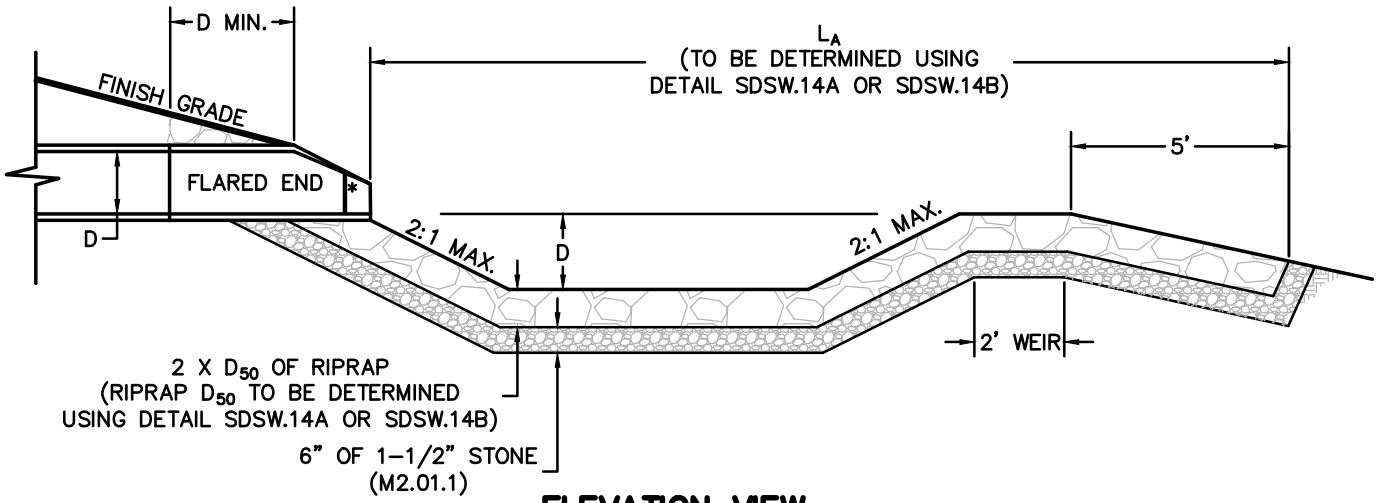
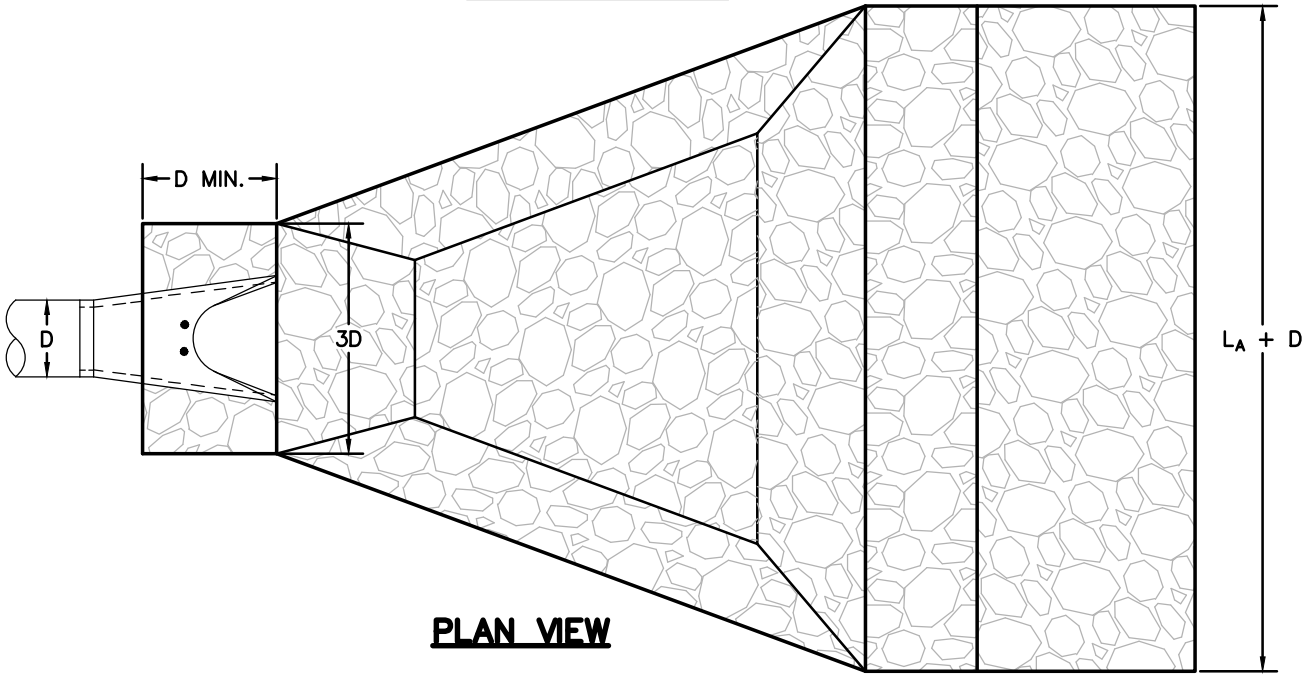
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

RIPRAP VELOCITY DISSIPATOR

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.13



ELEVATION VIEW



PLAN VIEW

NOTES:

* PROVIDE #4 EPOXY COATED REBAR TO PREVENT A CHILD FROM CRAWLING INTO PIPE (MAXIMUM SPACING 8" O.C.)

1. THE TABLES IN THE FOLLOWING DETAILS ASSUME PIPE IS FLOWING FULL. FOR PARTIAL FLOW OR USE WITH OPEN CHANNELS, USE VELOCITY AND REFER TO CURVES PROVIDED IN "DESIGN GUIDE MD #6, RIPRAP DESIGN METHODS" (NRCS, JAN 2004).

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STONE OUTLET PROTECTION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.14

OUTLET PROTECTION FOR PIPE FLOWING FLOW UNDER LOW TAILWATER CONDITION (T_W < 0.5 PIPE DIAM.)

DISCHARGE (CUBIC FEET PER SECOND, CFS)	MEDIAN RIPRAP SIZE, D_{50} (INCHES) — PIPE DIAMETER (INCHES)											
	12	15	18	21	24	27	30	36	42	48	54	60
3	6											
5	6											
8	6	6										
12	8	6	6									
15	8	6	8	6								
20		10	10	6	6							
25		12	12	6	6							
30				8	8	6						
40				12	10	8	6					
50				16	12	10	8	6				
60				18	16	12	10	8				
70					18	15	12	8				
80					20	16	15	10	8			
100						20	18	12	10			
125						24	20	16	12	10		
150							24	20	16	12	10	
200								24	20	18	15	12

SOURCES:
- USDA–SCS
- MAINE DEP

DISCHARGE (CUBIC FEET PER SECOND, CFS)	MINIMUM LENGTH OF APRON, L_A (FEET) — PIPE DIAMETER (INCHES)											
	12	15	18	21	24	27	30	36	42	48	54	60
3	8											
5	8											
8	11	10										
10	14	12	10									
15	18	16	14	12								
20		18	18	16	12							
30			22	20	18	16						
40			26	24	24	20	18					
50				26	26	24	22	18				
70					30	30	28	25				
100						36	36	33	27			
150						42	42	42	38	33	28	
200								48	45	42	37	32

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

OUTLET PROTECTION TABLE FOR LOW TAILWATER CONDITION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.14A

OUTLET PROTECTION FOR PIPE FLOWING FLOW UNDER HIGH TAILWATER CONDITION ($T_W \geq 0.5$ PIPE DIAM.)

DISCHARGE (CUBIC FEET PER SECOND, CFS)	MEDIAN RIPRAP SIZE, D_{50} (INCHES)											
	PIPE DIAMETER (INCHES)											
	12	15	18	21	24	27	30	36	42	48	54	60
4	6											
6	6											
8	6	6										
10	6	6										
14	8	6	6									
20		8	6	6								
25		10	8	6								
35			10	8	6							
50				12	9	6	6					
60				15	12	9	6					
80					18	12	10	6				
100						15	12	8	6			
125							18	12	6			
150								15	10	6		
200								21	15	10	6	6
300									24	18	15	9
400										24	21	15

SOURCES:
- USDA–SCS
- MAINE DEP

DISCHARGE (CUBIC FEET PER SECOND, CFS)	MINIMUM LENGTH OF APRON, L_A (FEET)											
	PIPE DIAMETER (INCHES)											
	12	15	18	21	24	27	30	36	42	48	54	60
4	8											
6	18											
8	26	13										
10	32	20	9									
15		33	22	10								
20		42	34	22	8							
40			60	54	44	32	20					
50				64	55	45	34					
70					74	65	55	30				
100						86	80	58	32			
150								90	70	45		
200								112	96	74	50	22
300										116	98	74
400												110

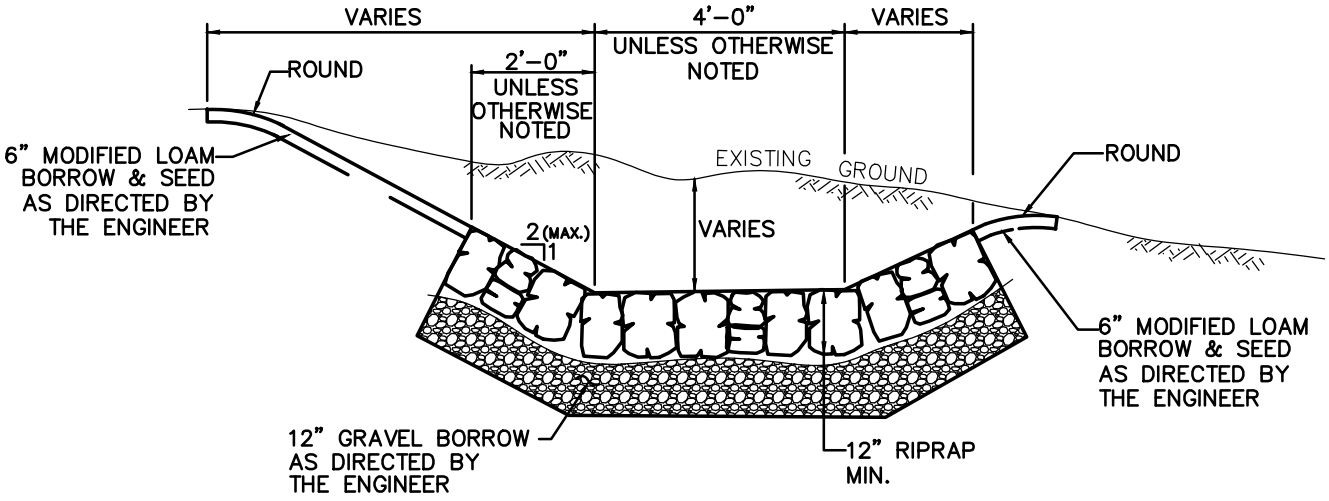
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

OUTLET PROTECTION TABLE FOR HIGH TAILWATER CONDITION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.14B



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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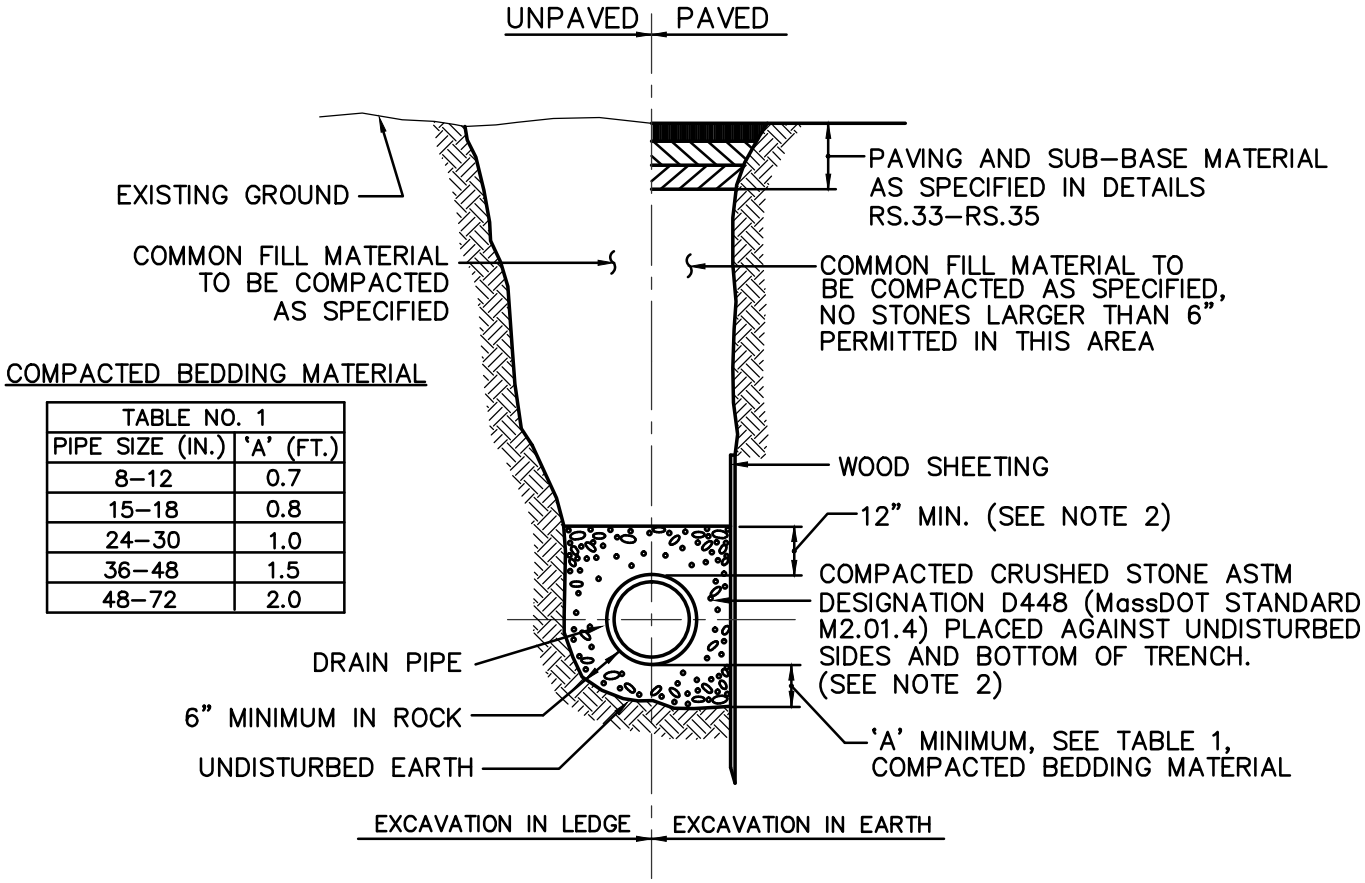
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

RIPRAP DITCH

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SDSW.15	



COMPACTED BEDDING MATERIAL

TABLE NO. 1	
PIPE SIZE (IN.)	'A' (FT.)
8–12	0.7
15–18	0.8
24–30	1.0
36–48	1.5
48–72	2.0

NOTES:

1. SHEETING, WHEN REQUIRED, TO BE CUT OFF AT LEAST 5 FEET BELOW STREET AND A MINIMUM OF 1 FOOT ABOVE TOP OF PIPE. WOOD SHEETING DRIVEN BELOW MID-DIAMETER OF THE PIPE SHALL BE LEFT IN PLACE. STEEL SHEETING DRIVEN BELOW MID-DIAMETER MAY BE WITHDRAWN IF APPROVED IN WRITING BY THE ENGINEER. FOR PVC PIPE ALL SHEETING DRIVEN BELOW MID-DIAMETER SHALL BE LEFT IN PLACE.
2. WHEN APPROVED BY THE ENGINEER FOR NON-PLASTIC PIPES, SELECTED GRAVEL FILL MATERIAL MAY BE USED FROM SPRINGLINE OF PIPE TO 12" ABOVE TOP OF PIPE. NO STONES LARGER THAN 2 INCHES IN ANY DIMENSION WILL BE PERMITTED IN THIS AREA – MassDOT MATERIAL STANDARD M1.03.0 TYPE C.
3. TRENCHES LOCATED ON THE ROAD SHOULDER SHALL BE TREATED THE SAME AS OFF-ROAD EXCEPT FOR PAVING. (SEE TRENCH RESTORATION DETAILS RS.33-35).
4. PROVIDE AT LEAST ONE ANTI-SEEP COLLAR IN GRAVEL BEDDING BETWEEN EACH MANHOLE WHERE DIRECTED, OR EVERY 300 FEET, WHICHEVER IS LESS. SEE ANTI-SEEP COLLAR DETAIL SDSW.17.
5. BEDDING MATERIAL FOR PLASTIC PIPE SHALL MEET THE REQUIREMENTS OF ASTM D2321 CLASS I OR CLASS II EMBEDMENT MATERIALS.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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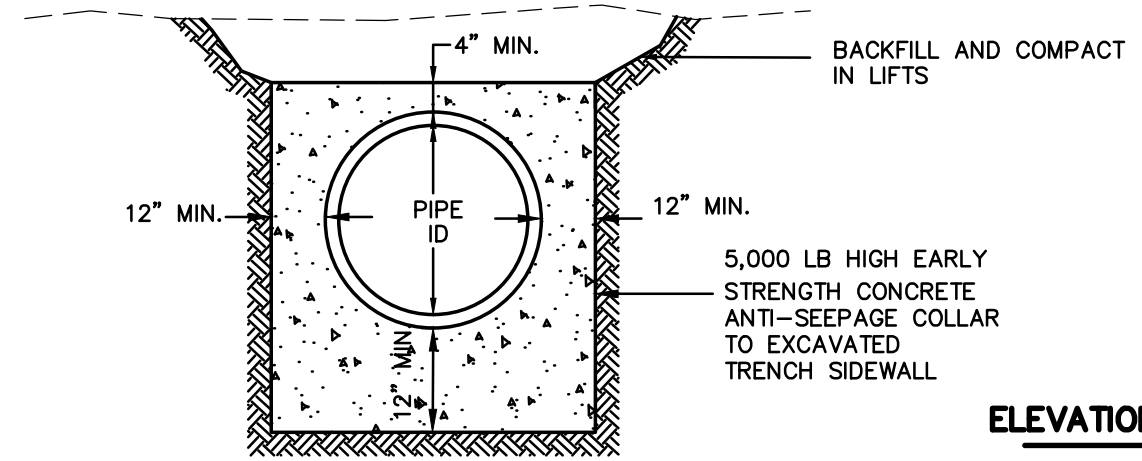
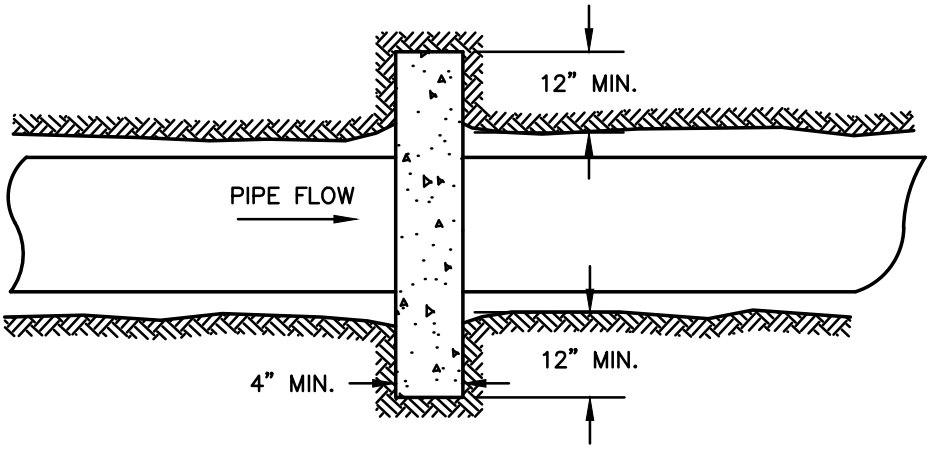
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DRAINAGE TRENCH
PVC, HDPE, OR RCP

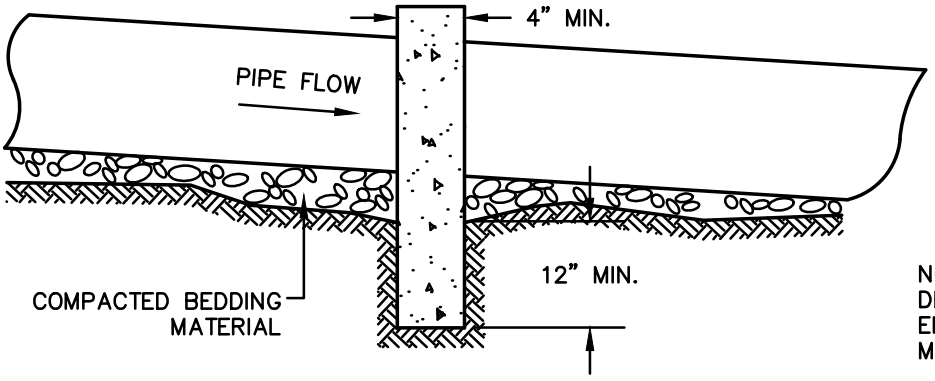
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.16



ELEVATION VIEW



PLAN VIEW



PROFILE VIEW

NOTE: STRUCTURE MUST BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN MASSACHUSETTS

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STORM DRAIN ANTI-SEEP COLLAR

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.17

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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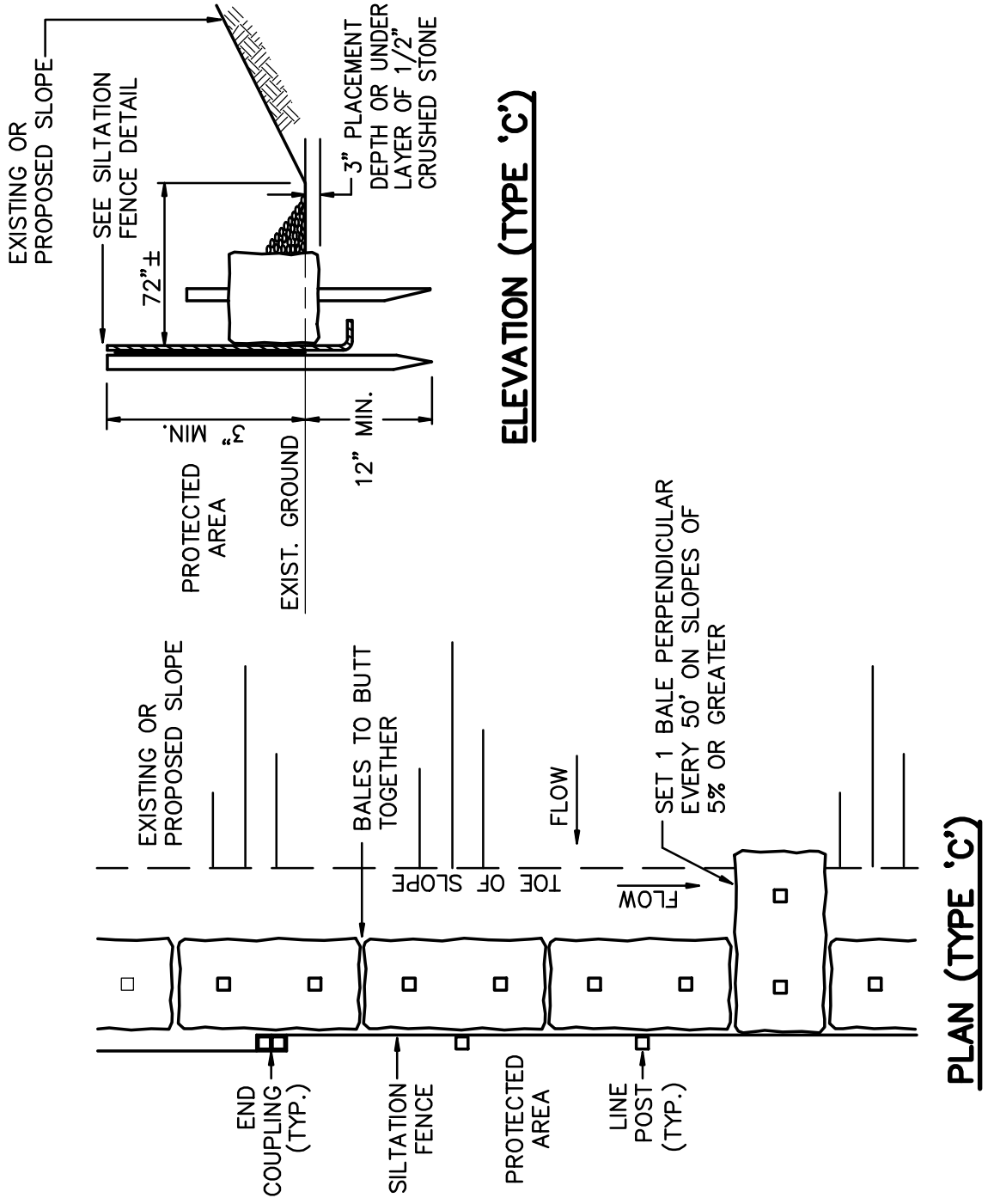
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SILT FENCE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.18



UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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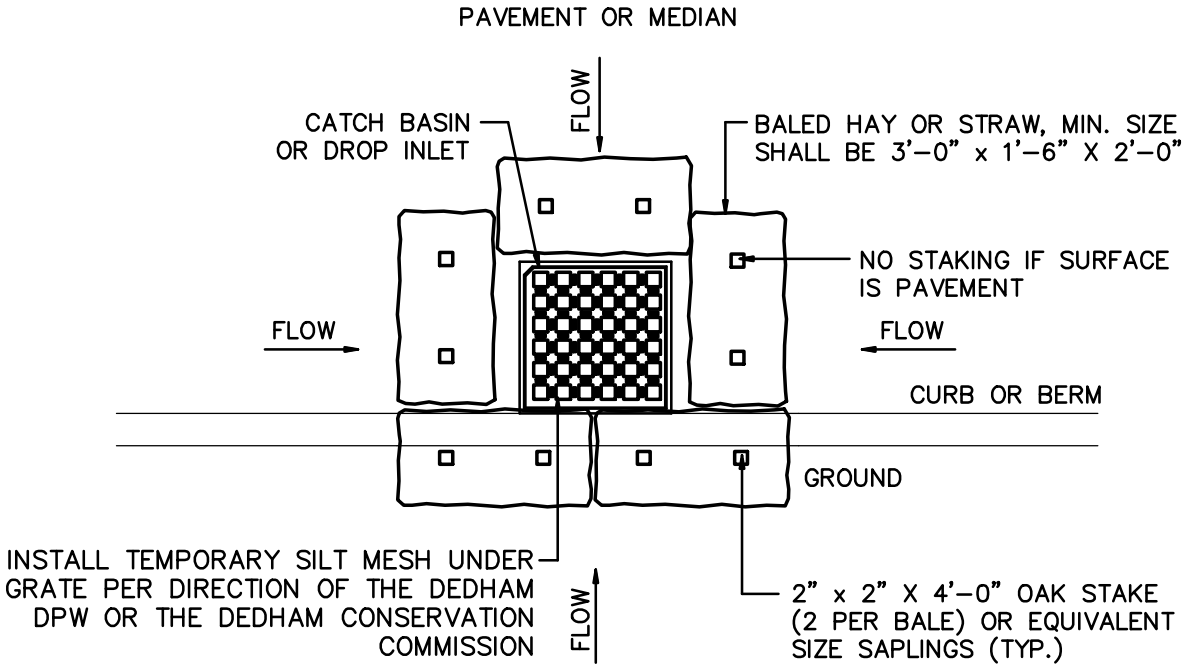
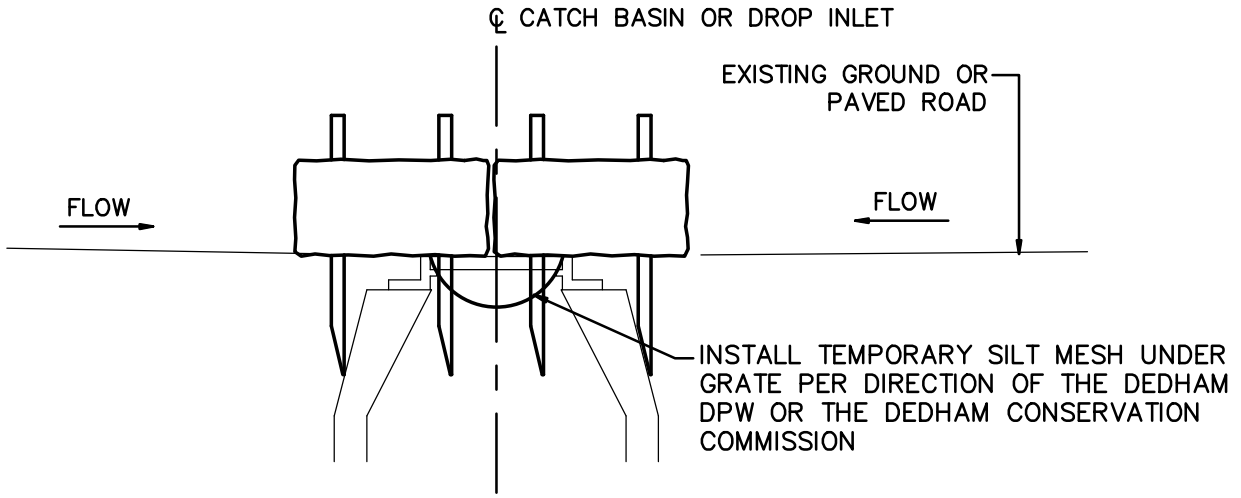
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

BALES OF HAY & SILT FENCE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SDSW.19



PLAN



SECTION

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** DRAIN INLET PROTECTION	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
		DETAIL NUMBER: SDSW.20	

SANITARY SEWER

DESCRIPTION	DETAIL NUMBER
GENERAL NOTES FOR PIPE TRENCHES	SS.01
TRENCH SECTION FOR SEWER PIPE (18-INCH DIAMETER AND SMALLER)	SS.02
TRENCH SECTION IN UNSUITABLE MATERIAL	SS.03
MANHOLE RISER WITH ECCENTRIC CONE TOP	SS.04
PRECAST REINFORCED CONCRETE MANHOLE BASE FOR SEWERS	SS.05
MANHOLE FRAME & COVER MARKED "SEWER"	SS.06
WATERTIGHT RESILIENT CONNECTOR FOR CONNECTING PIPES TO PRECAST CONCRETE MANHOLES	SS.07
NON-SHRINK MORTAR JOINTS FOR CONNECTING PIPES TO BRICK OR BLOCK MASONRY MANHOLES	SS.08
PRECAST REINFORCED CONCRETE SEWER CHIMNEY	SS.09
TYPICAL SONOTUBE CAST-IN-PLACE SEWER CHIMNEY	SS.10
RECONSTRUCTED BUILDING CONNECTION	SS.11
ABANDON EXISTING MANHOLES/CESSPOOLS	SS.12
TYPICAL SEWER CLEANOUT DETAIL	SS.13
SEWER CLEANOUT DETAIL WITHIN 10' OF BUILDING FOUNDATION	SS.14

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
SANITARY SEWER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
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DETAIL NUMBER: SS–INDEX.01	

SANITARY SEWER
CONTINUED

DESCRIPTION	DETAIL NUMBER
TYPICAL OUTSIDE DROP MANHOLE DETAIL	SS.15
INSIDE DROP INLETS FOR PVC PIPE SEWERS (12-INCH DIAMETER AND SMALLER)	SS.16
PIPE TRENCH DAM DETAIL	SS.17
WYE-SADDLE DETAIL FOR SERVICE CONNECTION ON R.C. OR V.C. MAIN	SS.18
P.V.C. WYE INSERTED ON EXISTING MAIN	SS.19
TYPICAL UTILITY CROSSINGS	SS.20
SANITARY SEWER PROTECTION DURING SEWER EXTENSION CONSTRUCTION	SS.21
FORCE MAIN CLEANOUT MANHOLE DETAIL	SS.22
LOW PRESSURE SEWER SERVICE VALVE BOX	SS.23
THRUST BLOCKS	SS.24
COMBINATION AIR RELEASE VALVE	SS.25
HIGH VELOCITY MANHOLE INVERT	SS.26
STANDARD GREASE TRAP	SS.27
TYPICAL SEWER PLAN	SS.28
TYPICAL SEWER PROFILE	SS.29

GENERAL NOTES FOR PIPE TRENCHES

1. PIPE TRENCHES MAY BE EXCAVATED WIDER THAN TRENCH WIDTH Ws (SHEETED) OR Wu (UNSHEETED) ABOVE THE TOP OF PIPE ZONE.

2. TRENCHES SHALL NOT BE EXCAVATED BEYOND THE TRENCH WIDTH Wu BELOW THE TOP OF PIPE ZONE.

3. SHEETING MUST BE USED IF EXCAVATION AND BACKFILL, BELOW NORMAL DEPTH, IS REQUIRED. SHEETING SHALL BE LEFT IN PLACE AS SPECIFIED.

4. ALL ROCK WITHIN 3'–0" HORIZONTALLY OF THE ENDS OF BUILDING CONNECTIONS, BRANCHES OR STUBS AND DOWN TO A HORIZONTAL PLANE 6" BELOW THE BOTTOMS OF SUCH CONNECTIONS, BRANCHES OR STUBS, SHALL BE EXCAVATED.

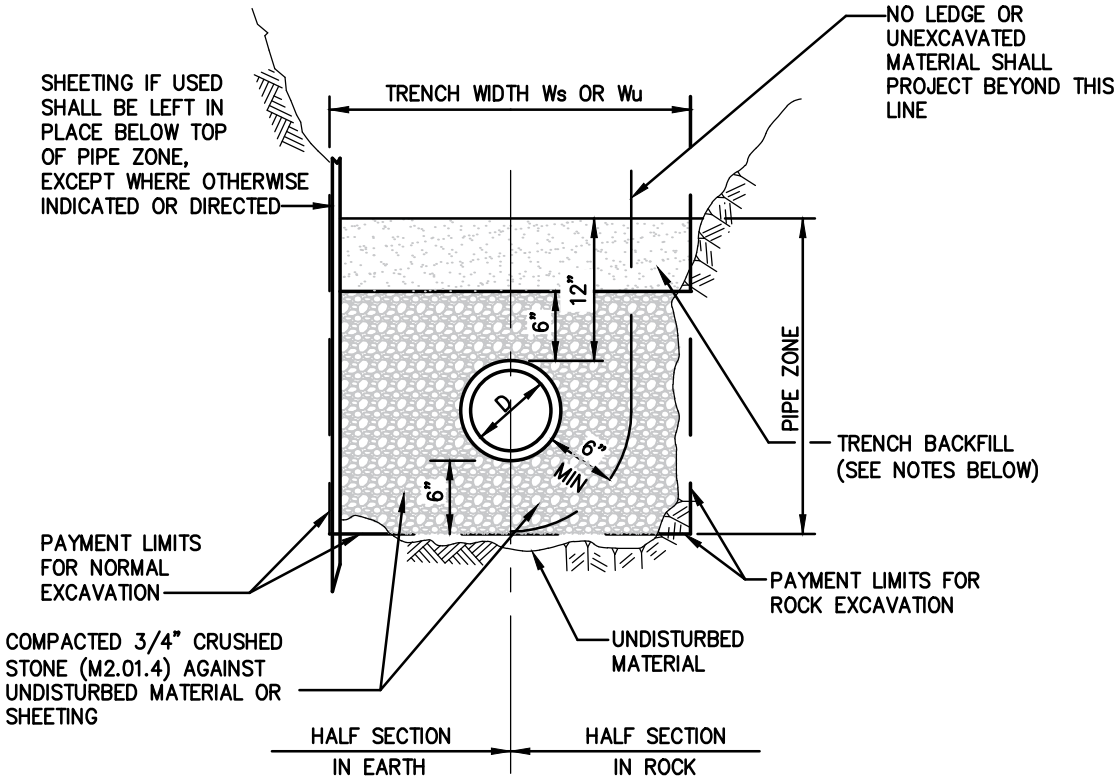
5. WHERE INDICATED ON THE DRAWINGS, GEOTEXTILE FILTER FABRIC SHALL BE PROVIDED FOR SEWER AND BUILDING CONNECTION FOUNDATIONS. OVERLAP FABRIC ABOVE THE PIPE CROWN AND PROVIDE A MINIMUM OF 12" FABRIC OVERLAP.

TRENCH WIDTH Ws OR Wu		
NOMINAL PIPE DIAMETER D	DEPTH OF PIPE INVERT BELOW GROUND SURFACE	
	0 TO 12'	12' TO 20'
24" AND SMALLER	5'–0"	7'–0"
OVER 24"	D + 3'–0"	D + 5'–0"

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

GENERAL NOTES FOR PIPE TRENCHES

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.01	



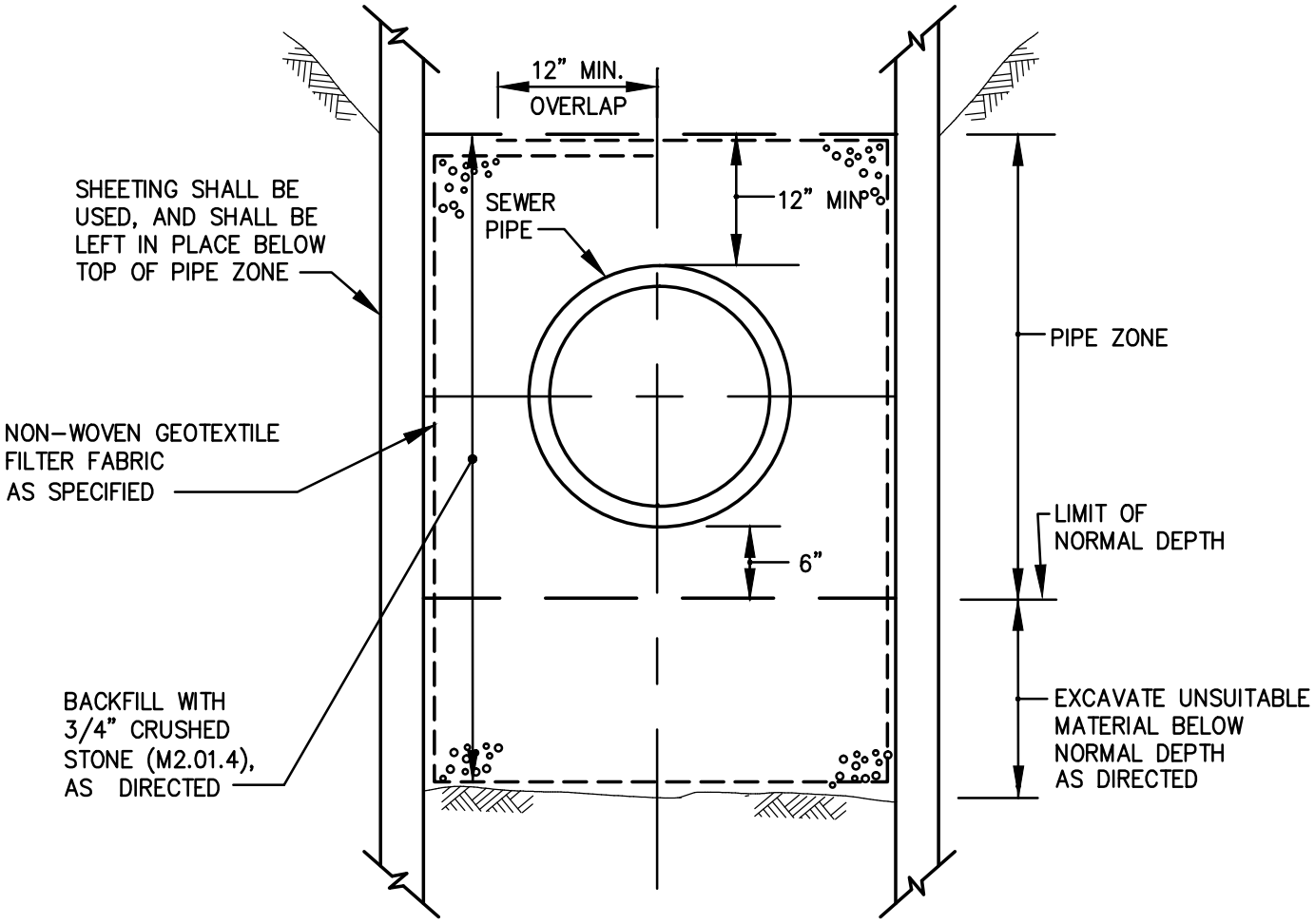
NOTES:

1. TRENCH BACKFILL TO BE USED WITHIN THE RIGHT-OF-WAY SHALL CONSIST OF EITHER GRAVEL BORROW MEETING MassDOT SPECIFICATION M1.03.0, TYPE "B" OR PROCESSED GRAVEL BORROW FOR SUBBASE MEETING MassDOT SPECIFICATION M1.03.1.
2. WHERE THE REMOVAL OF 100 SQUARE FEET OR LESS OF ASPHALT IS REQUIRED WITHIN THE RIGHT-OF-WAY, THEN THE TRENCH BACKFILL MATERIAL SHALL CONSIST OF CONTROLLED DENSITY FILL MEETING MassDOT SPECIFICATION M4.08.0, TYPE "1E" OR "2E".
3. TRENCH BACKFILL MATERIAL TO BE USED OUTSIDE OF THE RIGHT-OF-WAY MAY CONSIST OF MATERIAL GENERATED DURING EXCAVATIONS PROVIDED ALL STONES GREATER THAN 4" ARE REMOVED PRIOR TO PLACEMENT AND COMPACTION.
4. GRANULAR TRENCH BACKFILL MATERIAL USED WITHIN THE RIGHT-OF-WAY SHALL BE PLACED IN MAXIMUM 6" LIFTS AND MECHANICALLY COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY AND TO 90% ELSEWHERE AS DETERMINED BY ASTM D 1557.
5. REFER TO DETAILS RS.33-RS.35 FOR ASPHALT REPAIR REQUIREMENTS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TRENCH SECTION FOR SEWER PIPE
18-INCH DIAMETER AND SMALLER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SS.02

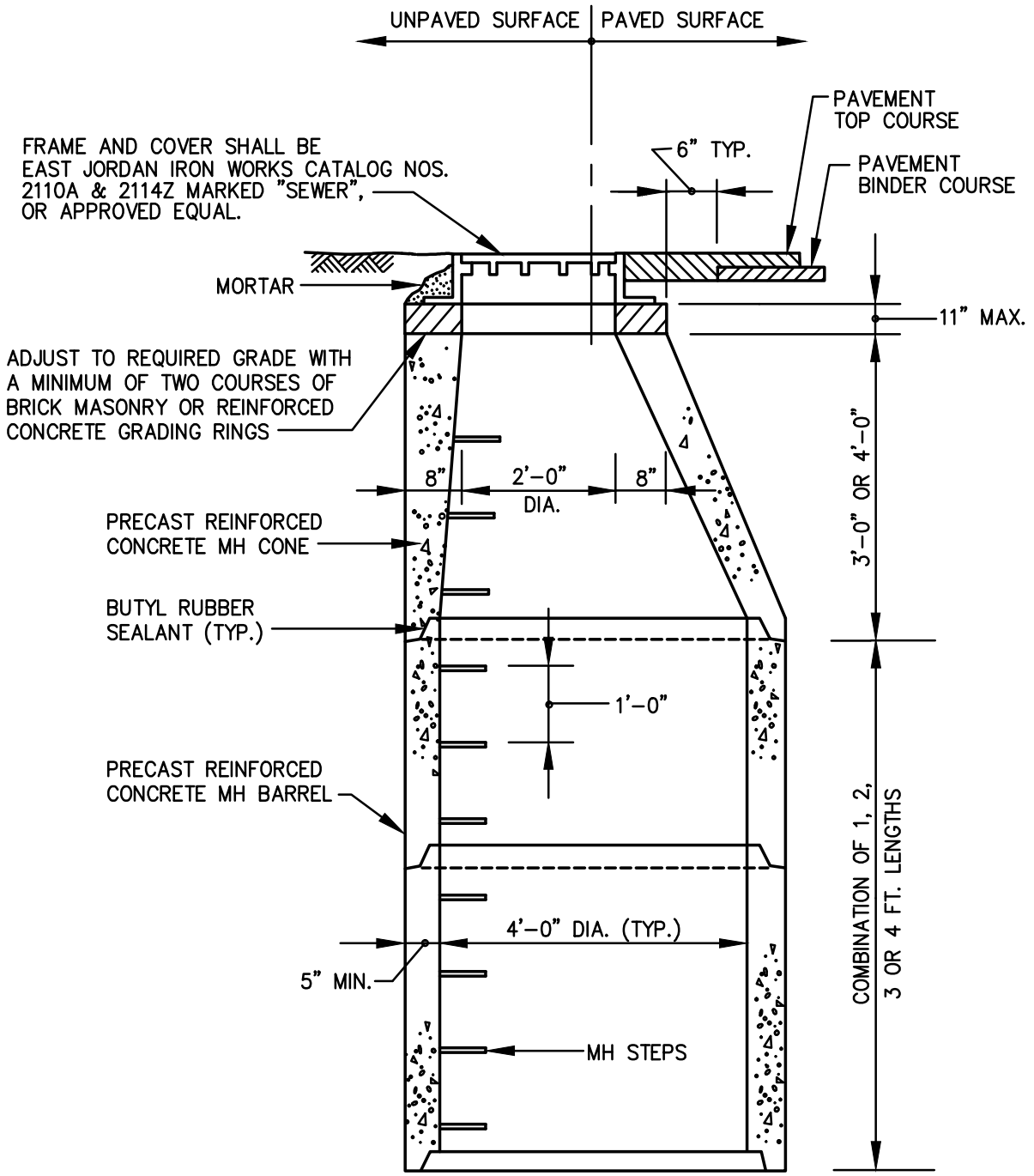


DETAILS NOT SHOWN ARE SAME AS TRENCH SECTIONS SHOWN ELSEWHERE

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TRENCH SECTION IN UNSUITABLE MATERIAL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.03	

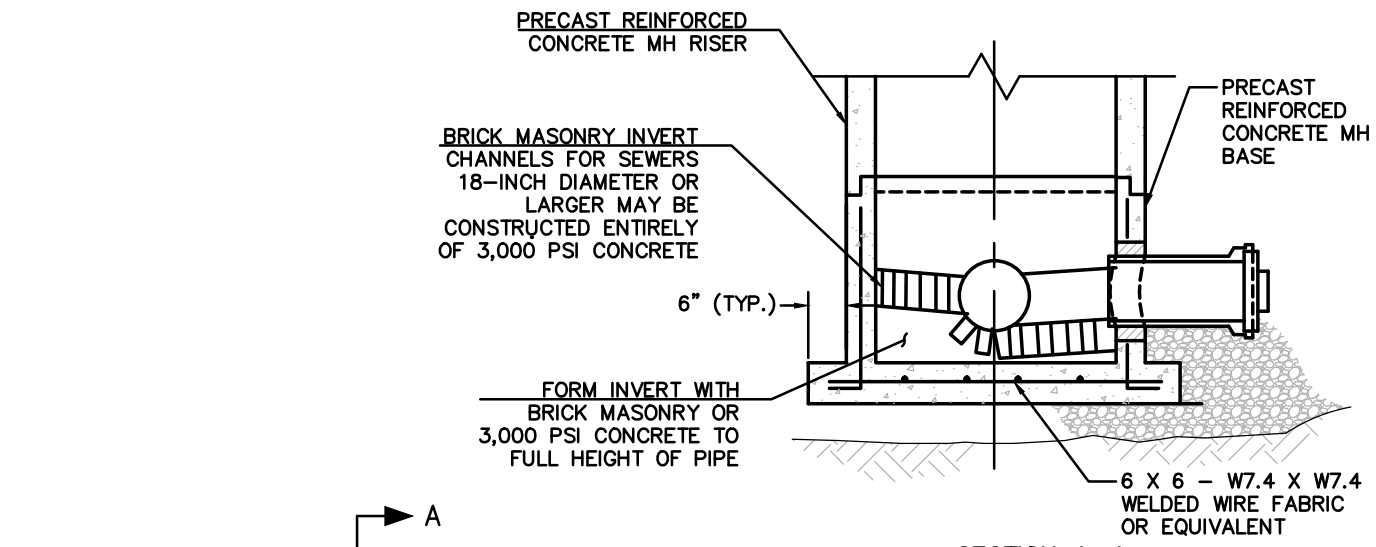


NOTE:
ALL EXTERIOR SURFACES OF MANHOLE GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.

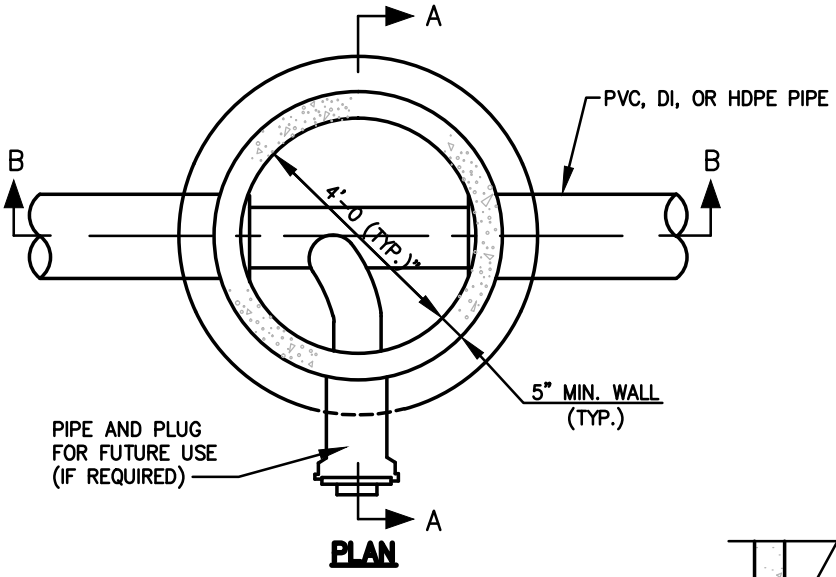
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

MANHOLE RISER WITH ECCENTRIC CONE TOP

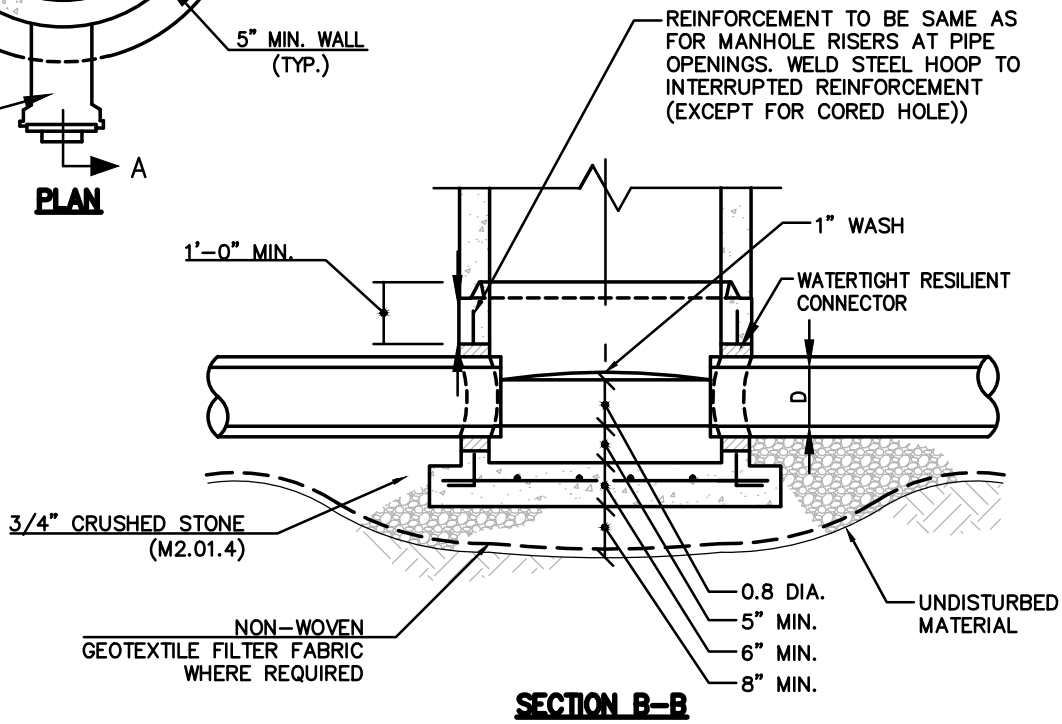
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.04	



SECTION A–A



PLAN

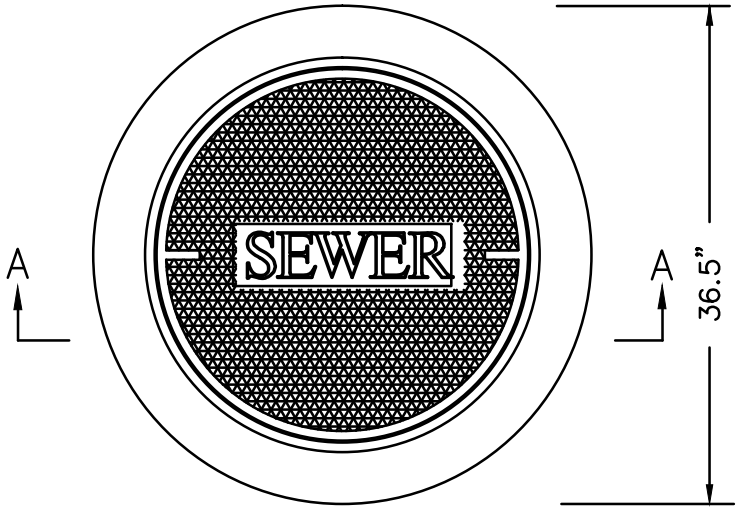


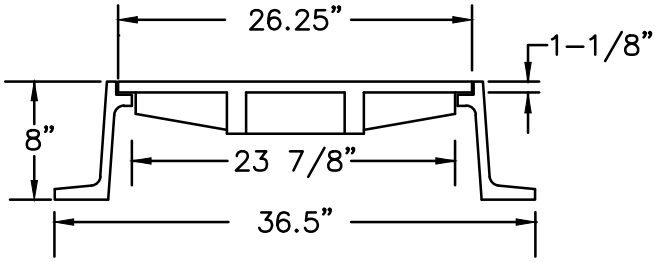
SECTION B–B

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PRECAST REINFORCED CONCRETE
MANHOLE BASE FOR SEWERS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SS.05



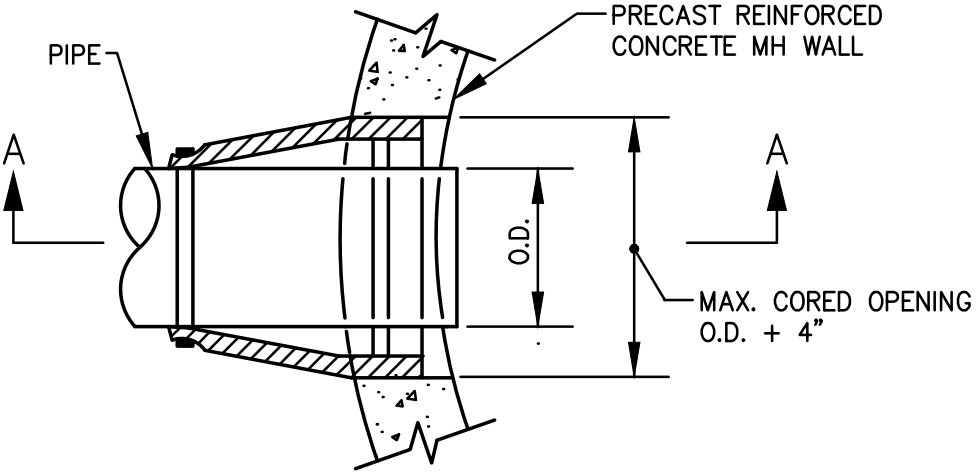


SECTION A–A

NOTE:

FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS CATALOG NOS. 2110A & 2114Z MARKED "SEWER", OR APPROVED EQUAL.

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** MANHOLE FRAME & COVER MARKED "SEWER"	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
		DETAIL NUMBER: SS.06	



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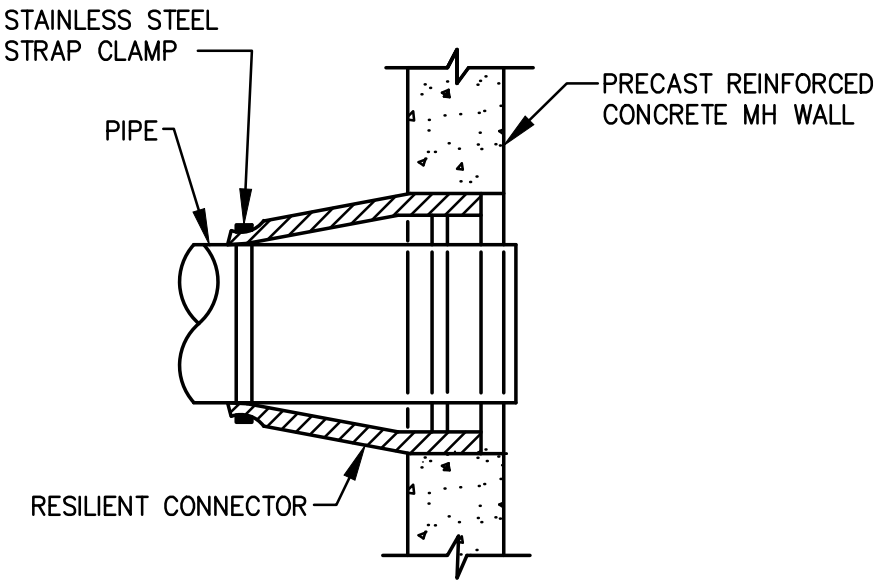
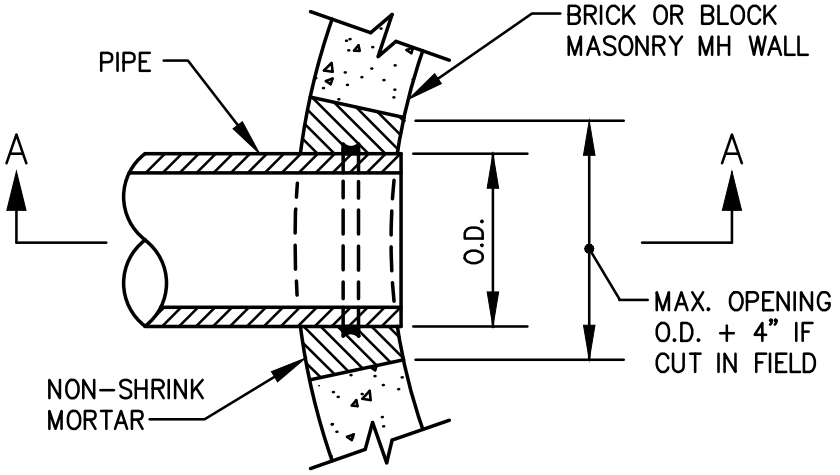
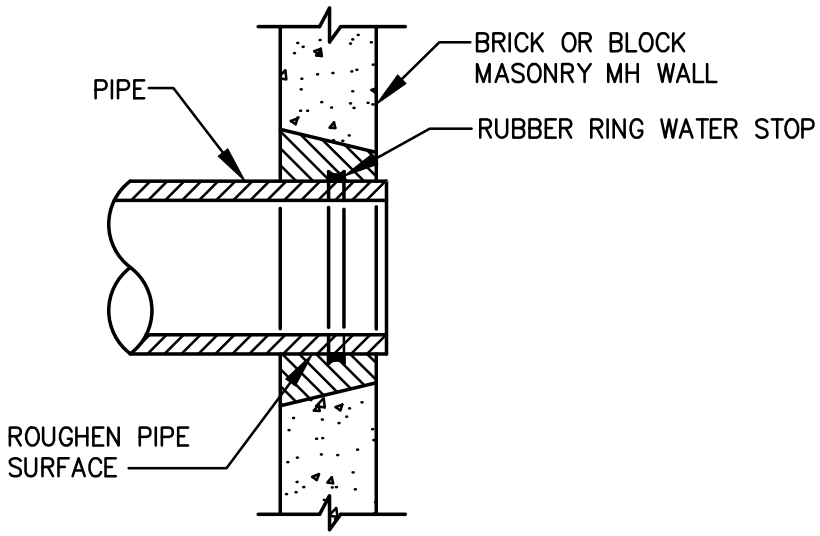


SECTION A–A

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** WATERTIGHT RESILIENT CONNECTOR FOR CONNECTING PIPES TO PRECAST CONCRETE MANHOLES	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
		DETAIL NUMBER: SS.07	



PLAN

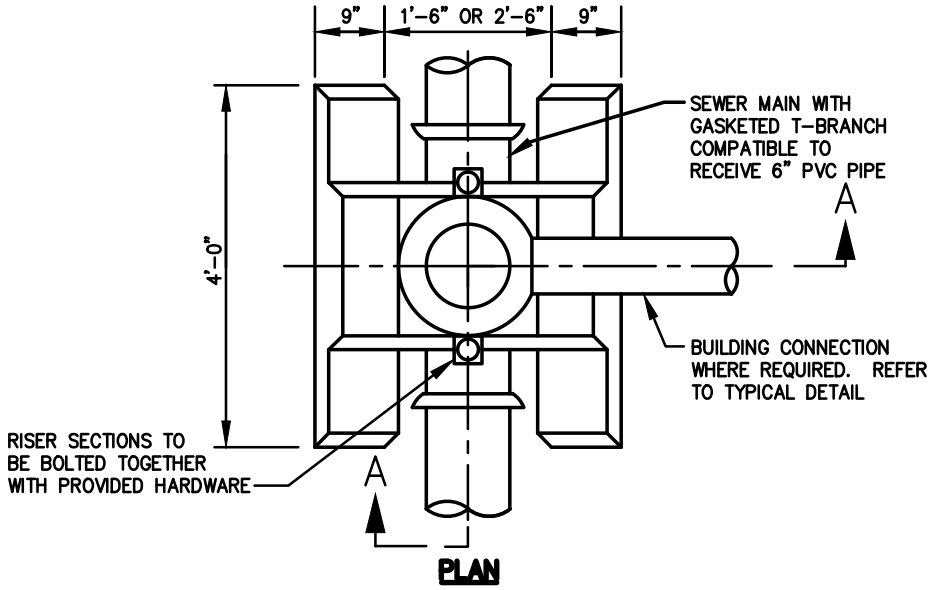


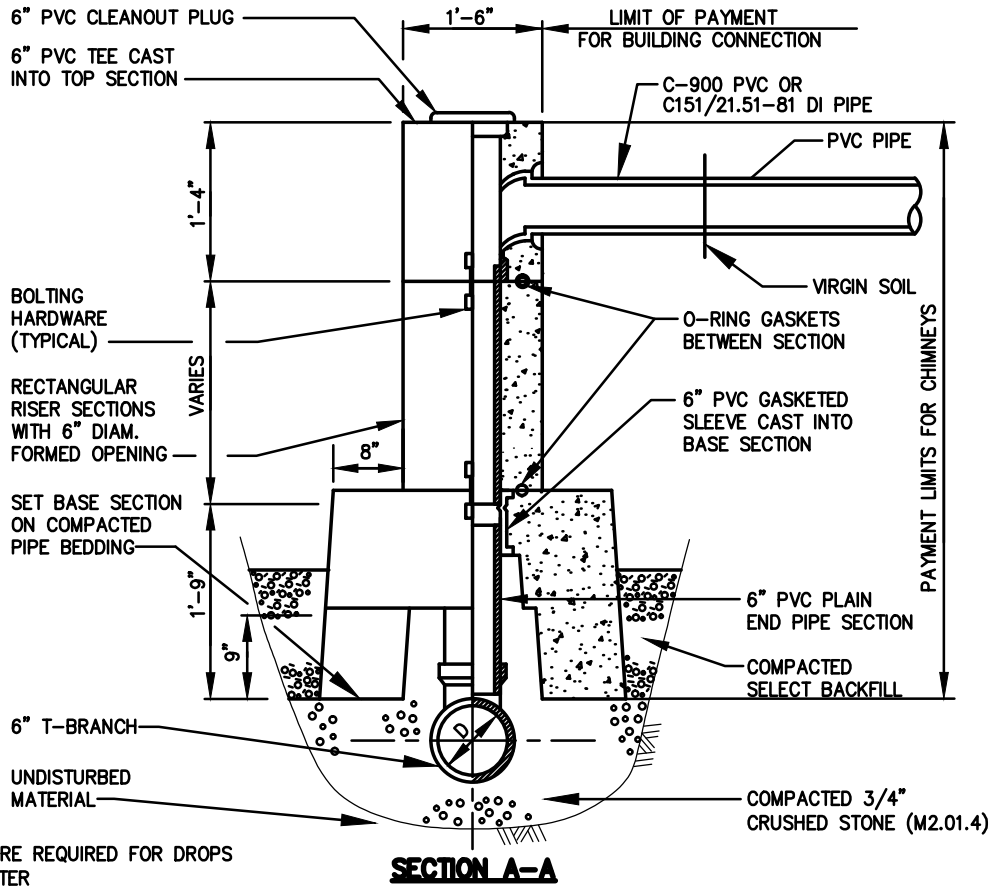
SECTION A-A

NOTES:

1. THIS METHOD ONLY TO BE USED UNDER SPECIAL CIRCUMSTANCES AND WITH PRIOR APPROVAL FROM THE DIRECTOR OF ENGINEERING. THE WATERTIGHT RESILIENT CONNECTOR IS THE PREFERRED CONNECTION METHOD.

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS**	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
	NON-SHRINK MORTAR JOINTS FOR CONNECTING PIPES TO BRICK OR BLOCK MASONRY MANHOLES	DETAIL NUMBER: SS.08	



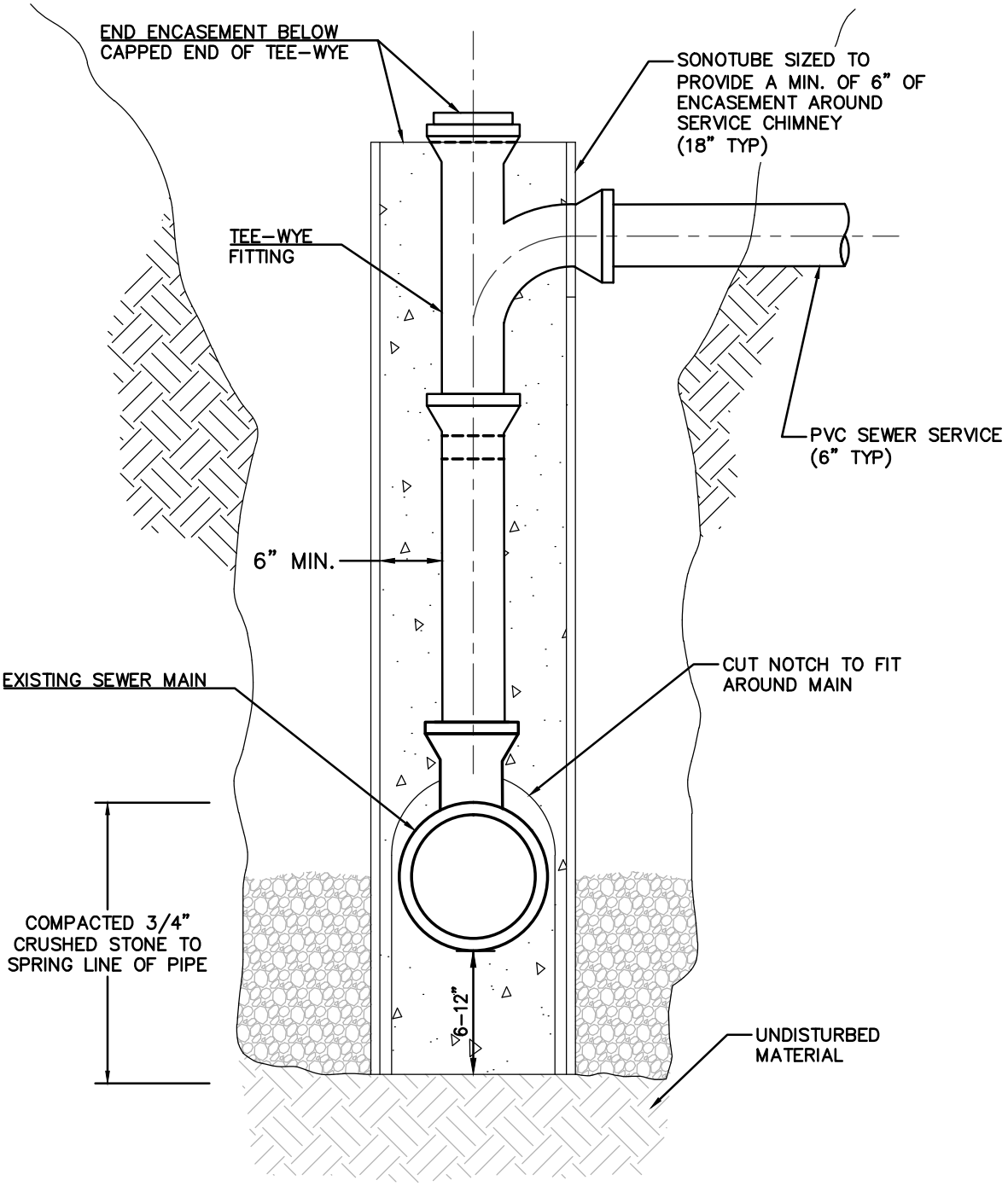


* CHIMNEYS ARE REQUIRED FOR DROPS 3' OR GREATER

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PRECAST REINFORCED CONCRETE SEWER CHIMNEY

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SS.09

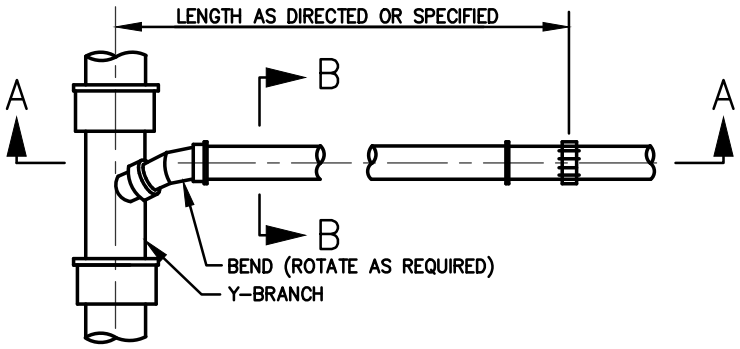


* CHIMNEYS ARE REQUIRED
FOR DROPS 3' OR GREATER

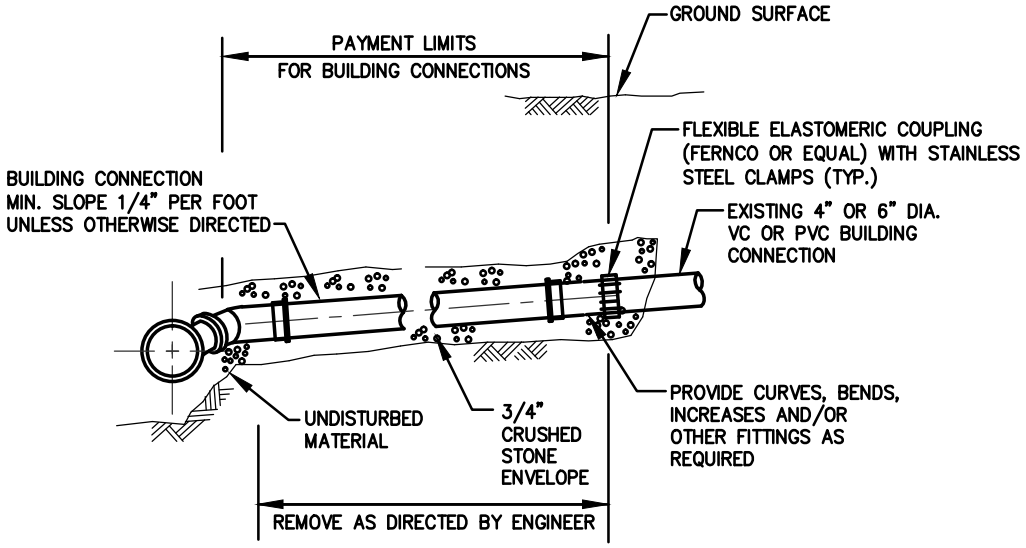
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL SONOTUBE
CAST–IN–PLACE SEWER CHIMNEY

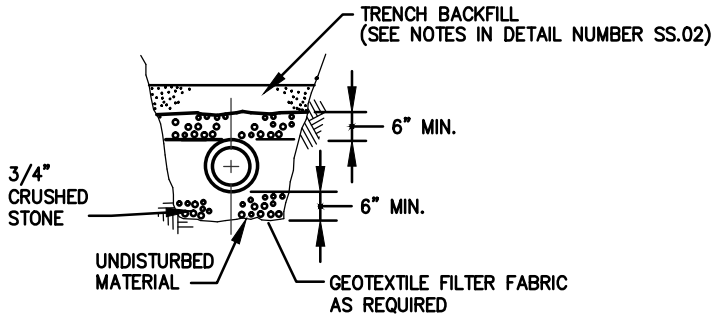
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.10	



PLAN



SECTION A-A

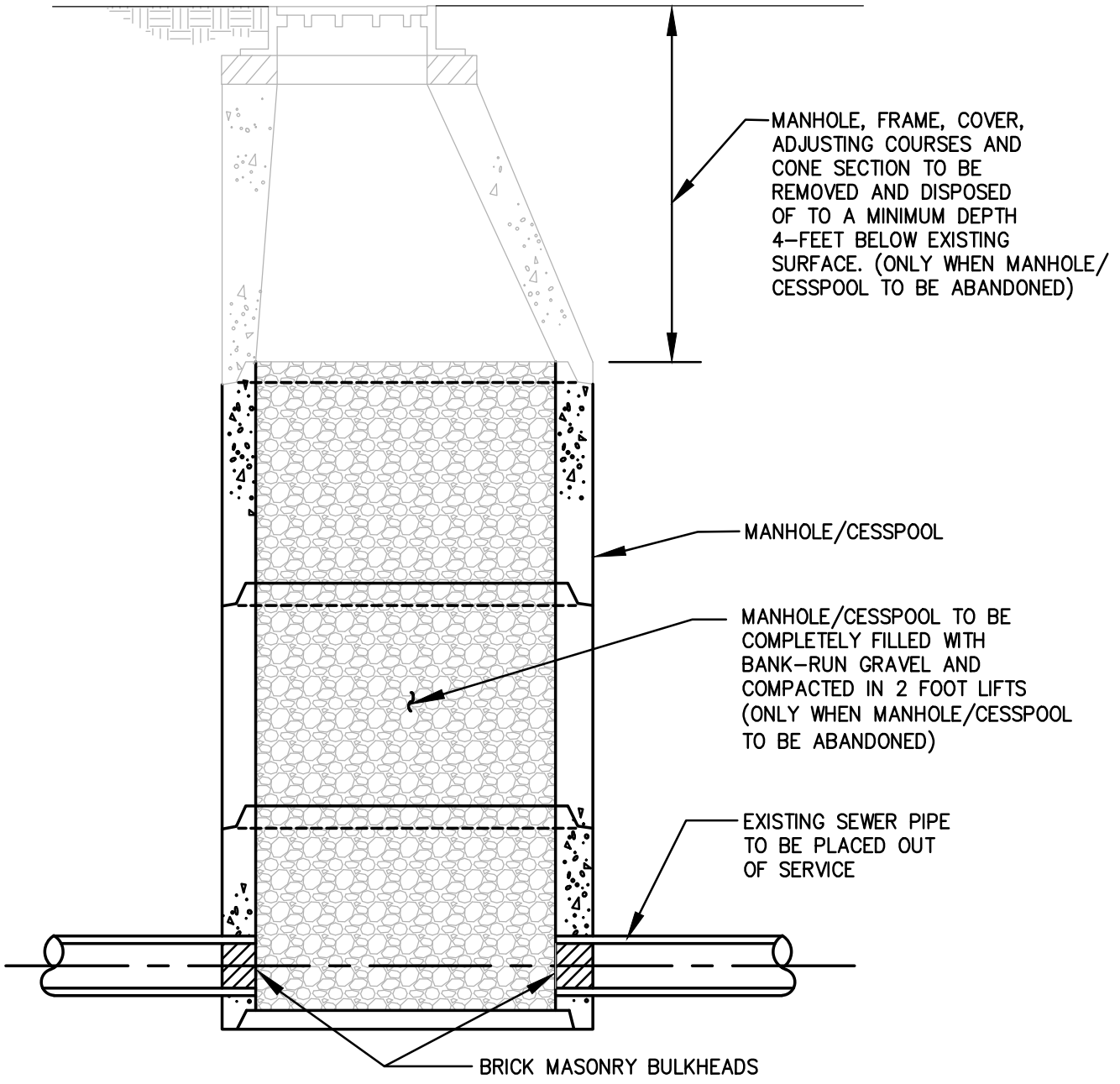


SECTION B-B

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

RECONSTRUCTED BUILDING CONNECTION

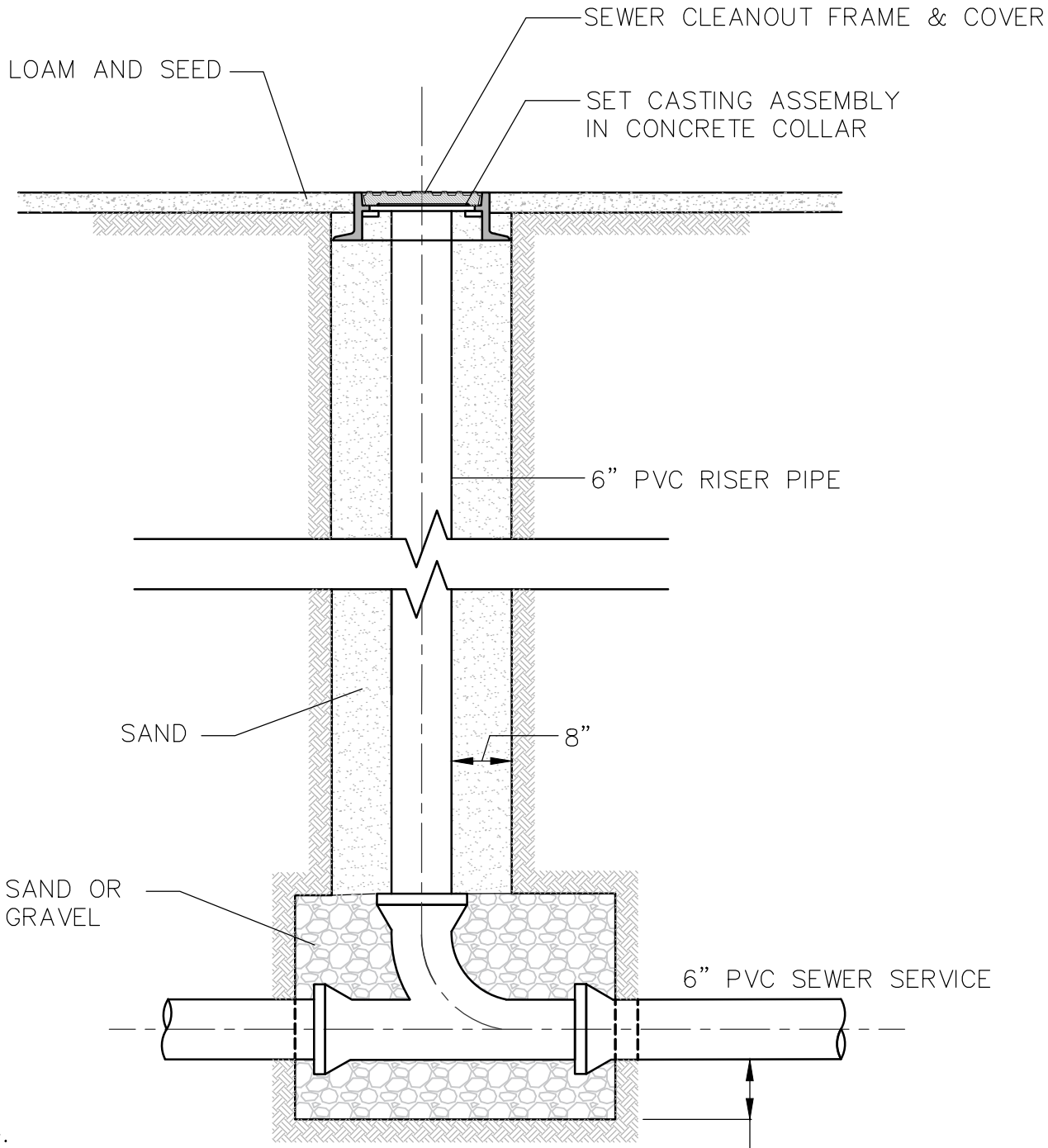
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.11	



DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

ABANDON EXISTING MANHOLES/CESSPOOLS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.12	

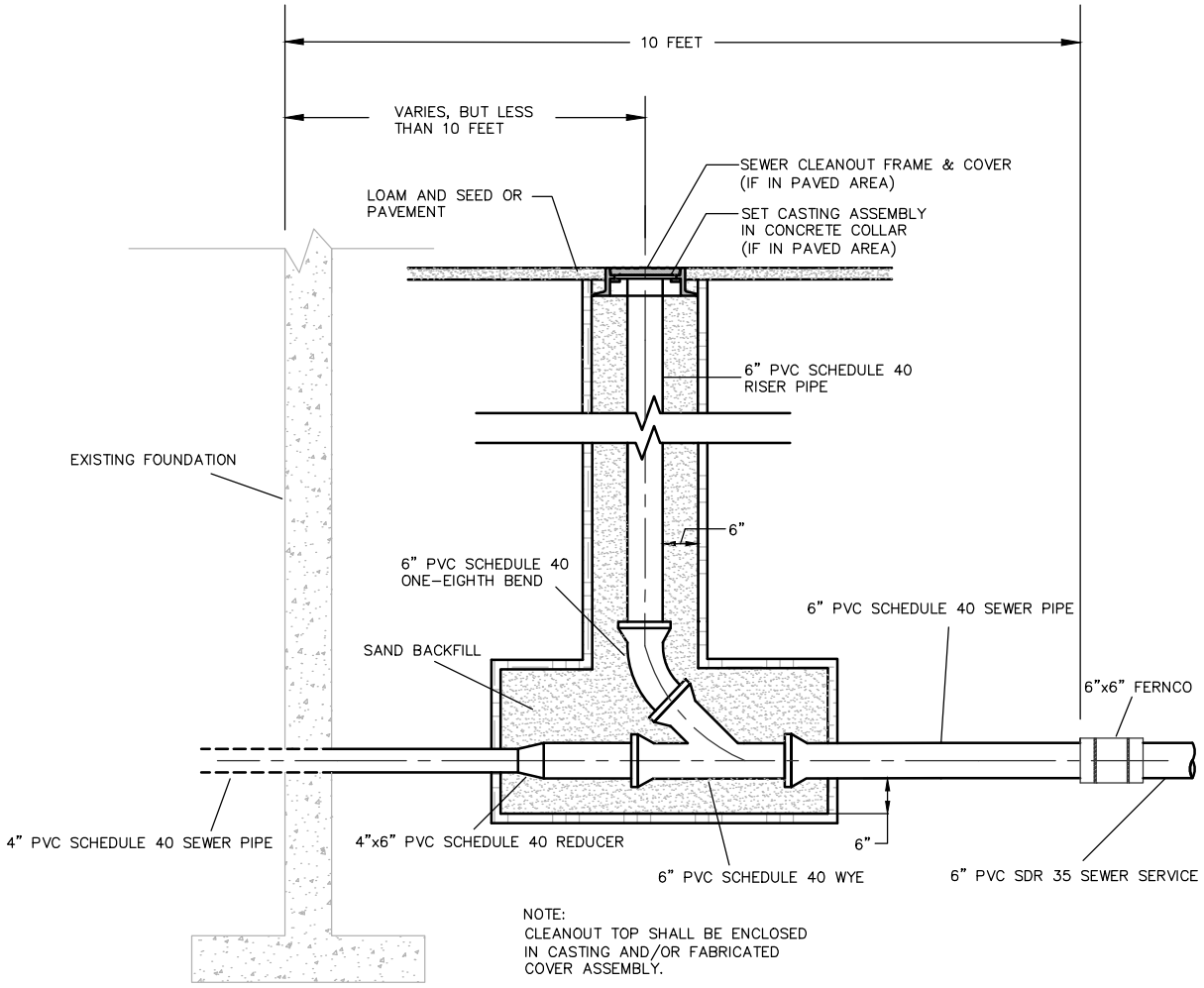


NOTE:
CLEANOUT TOP SHALL BE ENCLOSED IN CASTING AND/OR FABRICATED COVER ASSEMBLY.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL SEWER CLEANOUT DETAIL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.13	



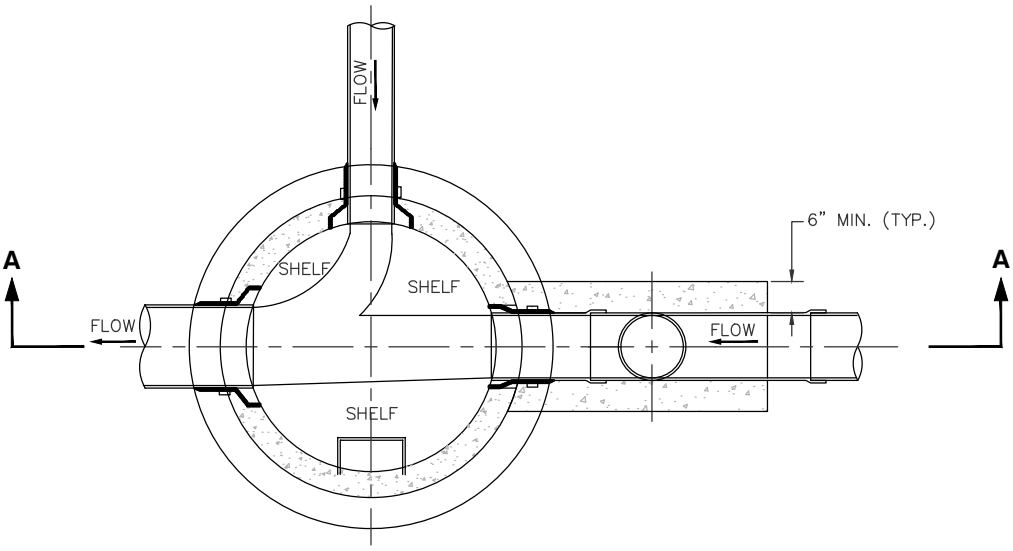
NOTES:

1. SEWER CLEANOUTS SHALL TYPICALLY BE LOCATED A MINIMUM OF 10' FROM THE FOUNDATION. HOWEVER, IN SPECIAL CIRCUMSTANCES THE CLEANOUT MAY BE LOCATED WITHIN 10' OF THE FOUNDATION WITH PERMISSION FROM THE ENGINEERING DEPARTMENT. THE 10' ZONE SHALL BE CONSIDERED THE DISTANCE FROM THE INSIDE FACE OF THE FOUNDATION TO A DISTANCE OF 10' OUTSIDE OF THE FOUNDATION, PERPENDICULAR TO THE INSIDE FACE OF THE FOUNDATION.
2. ALL WORK TO BE CONDUCTED WITHIN THE 10' ZONE SHALL BE PERFORMED BY A PLUMBER LICENSED IN THE STATE OF MASSACHUSETTS AND SHALL CONFORM TO 248 CMR 2.00 AND 248 CMR 10.00.

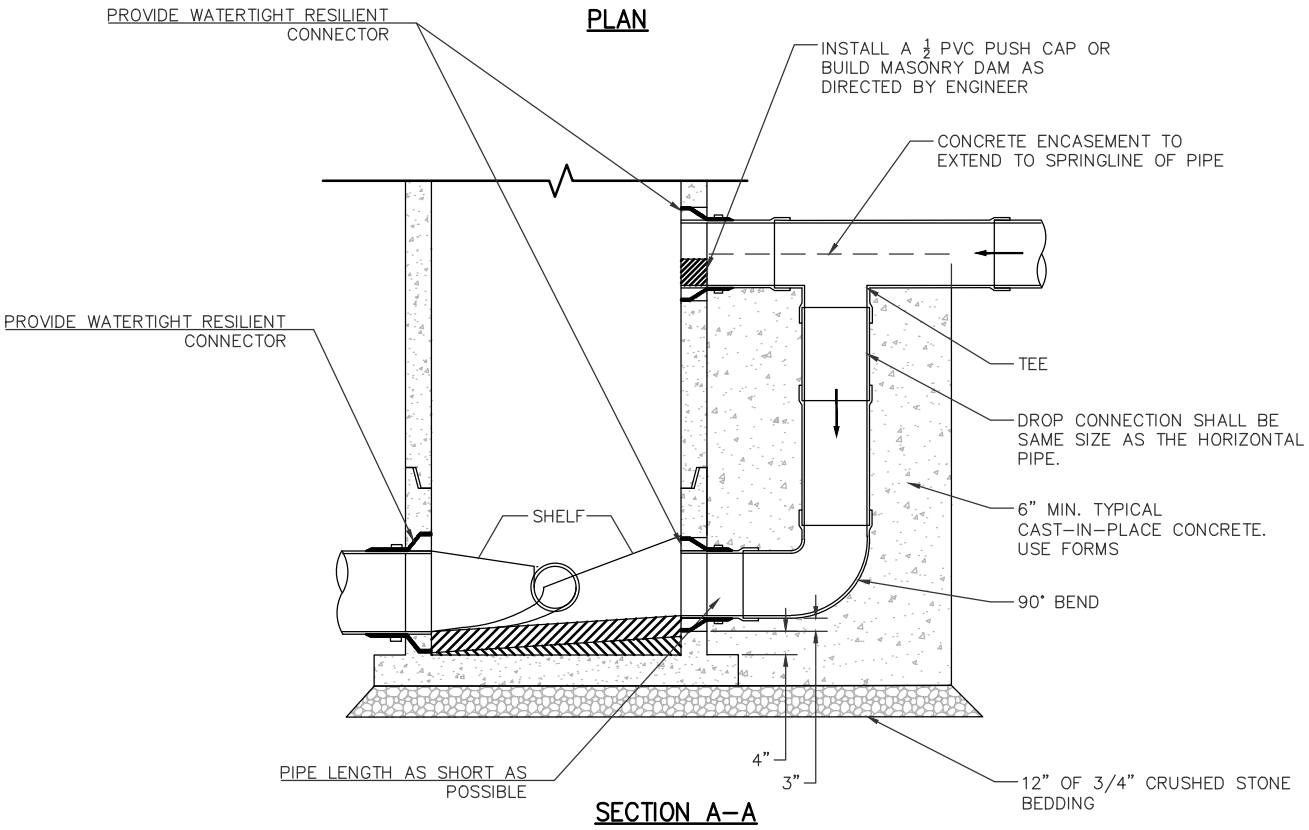
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SEWER CLEANOUT DETAIL WITHIN 10' OF BUILDING FOUNDATION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.14	



PLAN



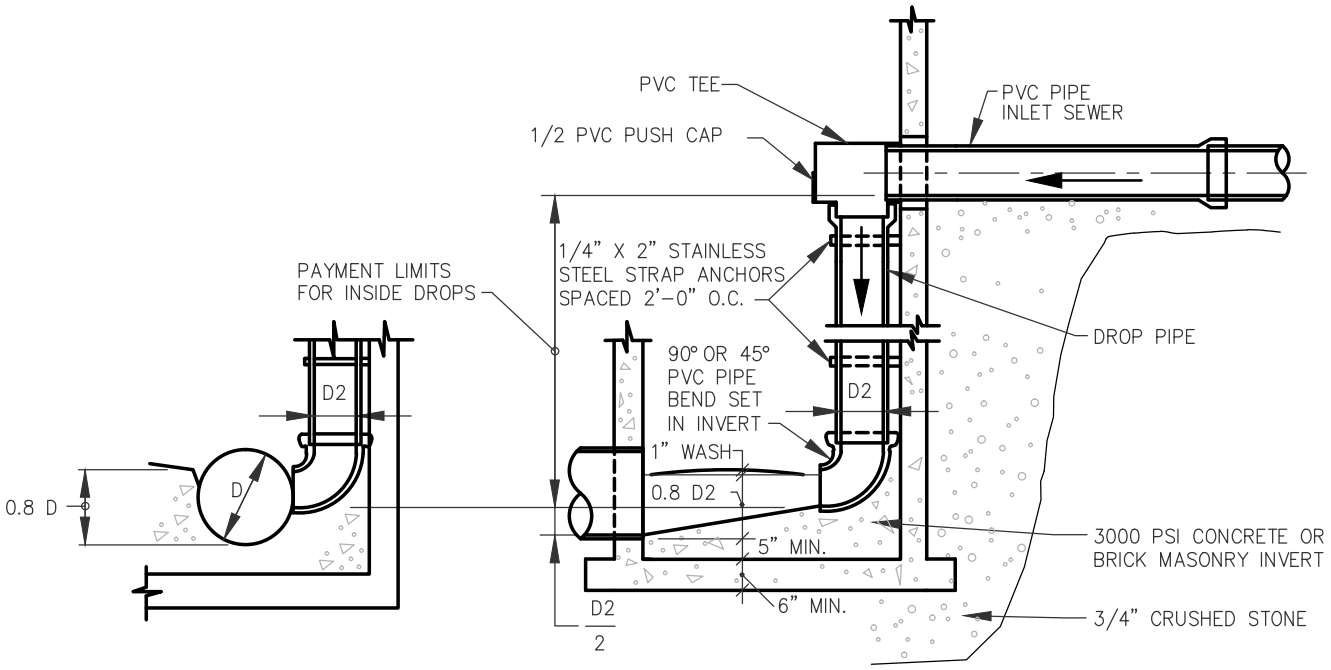
SECTION A-A

NOTES:
1. DROP MANHOLES ARE REQUIRED WHEN THE VERTICAL DROP IS 24" OR GREATER.
2. DROP PIPE AND FITTINGS SHALL BE THE SAME DIAMETER AS THE INCOMING SEWER PIPE.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL OUTSIDE DROP MANHOLE DETAIL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.15	



INVERT DETAIL
AT SIDE DROPS

INVERT DETAIL
AT MAIN RUN DROPS

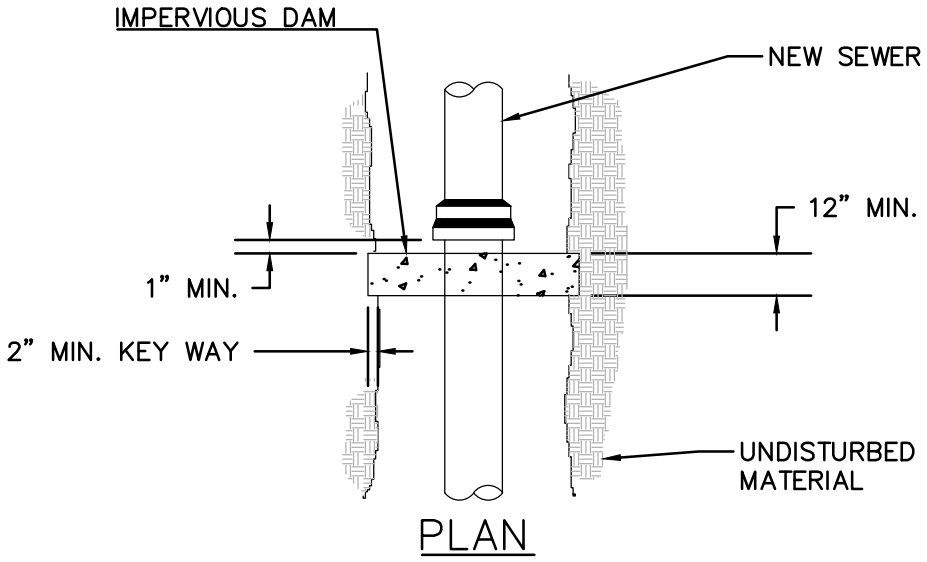
NOTES:

1. INSIDE DROPS ARE ONLY ALLOWED WHEN OUTSIDE DROPS ARE IMPRACTICAL AND ONLY WITH THE PRIOR APPROVAL OF THE DIRECTOR OF ENGINEERING.
2. DROP MANHOLES ARE REQUIRED WHEN THE VERTICAL DROP IS 24" OR GREATER.
3. DROP PIPE AND FITTINGS SHALL BE THE SAME DIAMETER AS THE INCOMING SEWER PIPE.
4. MANHOLE SHALL HAVE SUFFICIENT DIAMETER FOR ENTRY WITH DROP PIPE INSTALLED (5' TYPICAL).

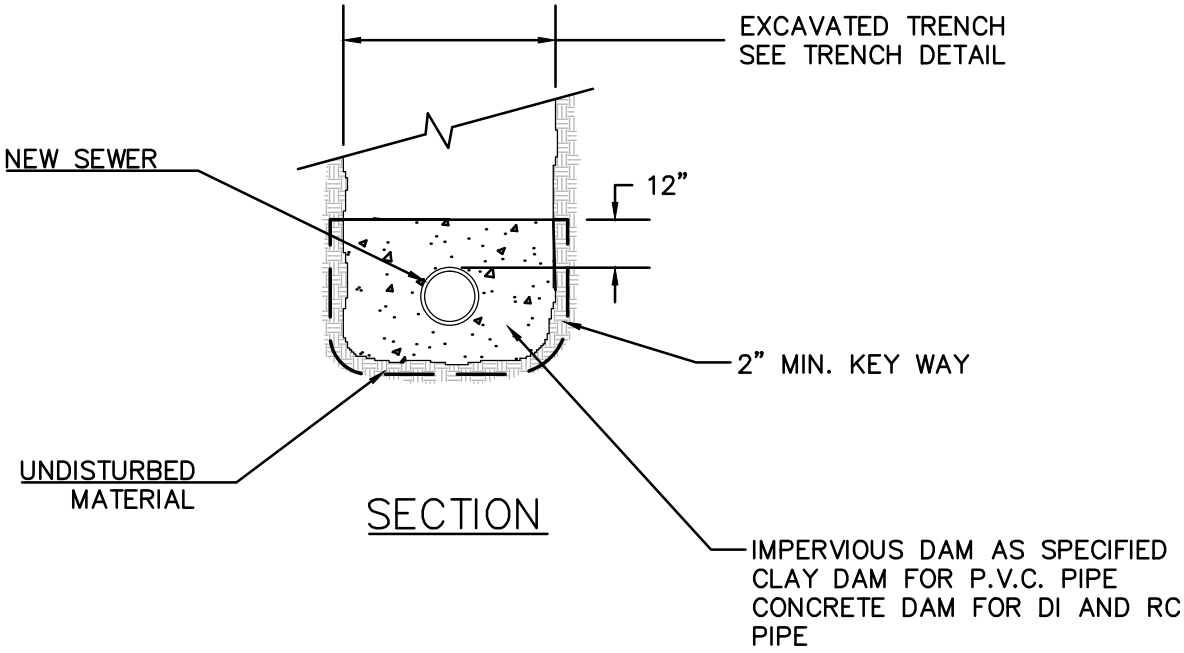
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

INSIDE DROPS FOR PVC SEWERS
12–INCH DIAMETER AND SMALLER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	SS.16



PLAN

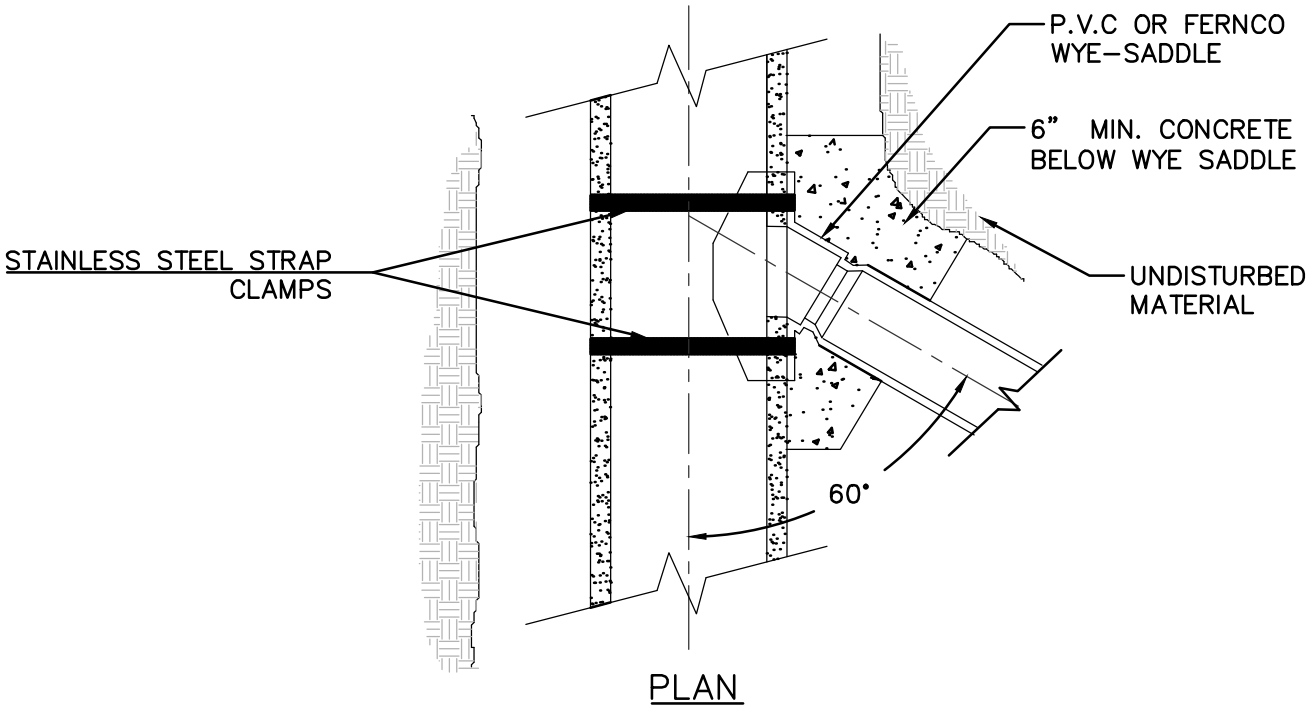


SECTION

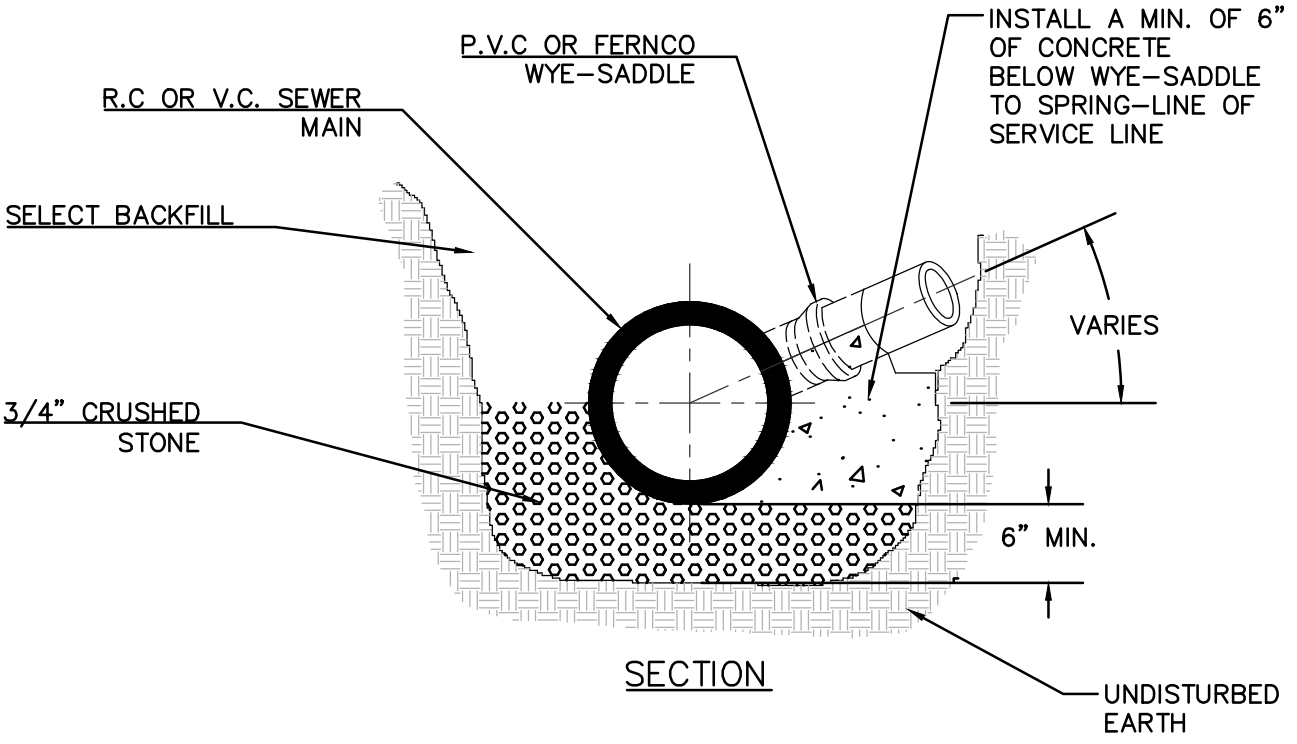
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PIPE TRENCH DAM DETAIL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.17	



PLAN

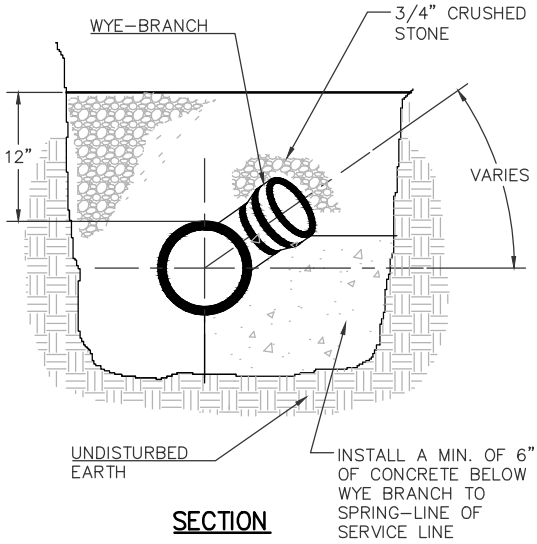


SECTION

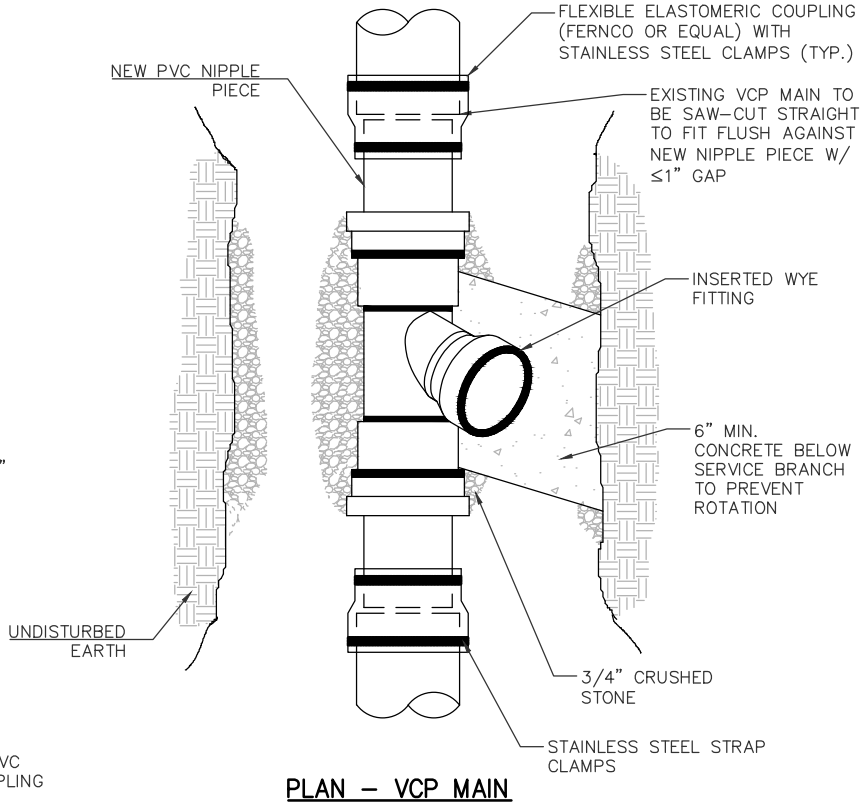
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

WYE–SADDLE DETAIL FOR SERVICE CONNECTION
ON R.C. OR V.C. MAIN

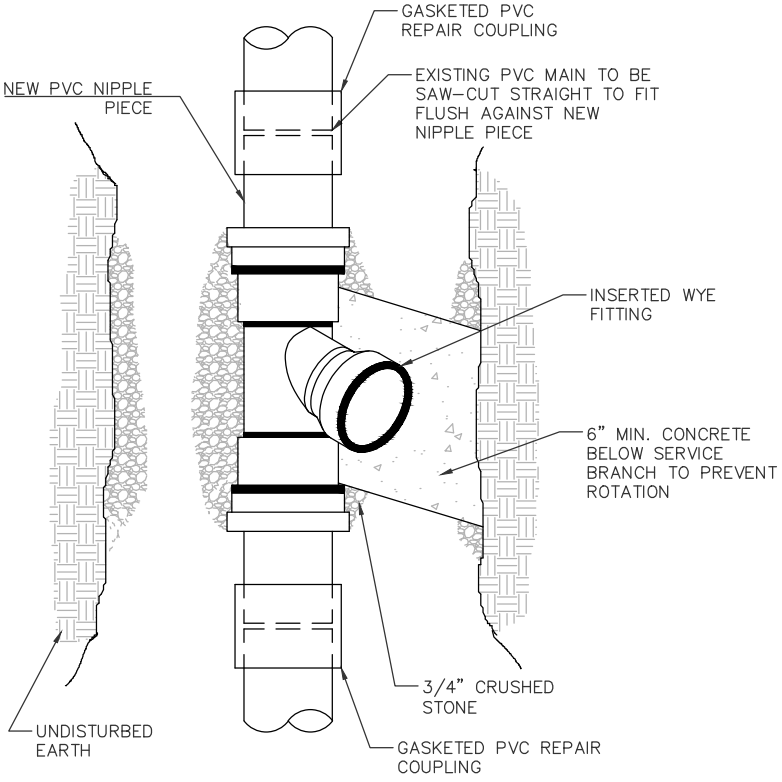
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.18	



SECTION



PLAN – VCP MAIN

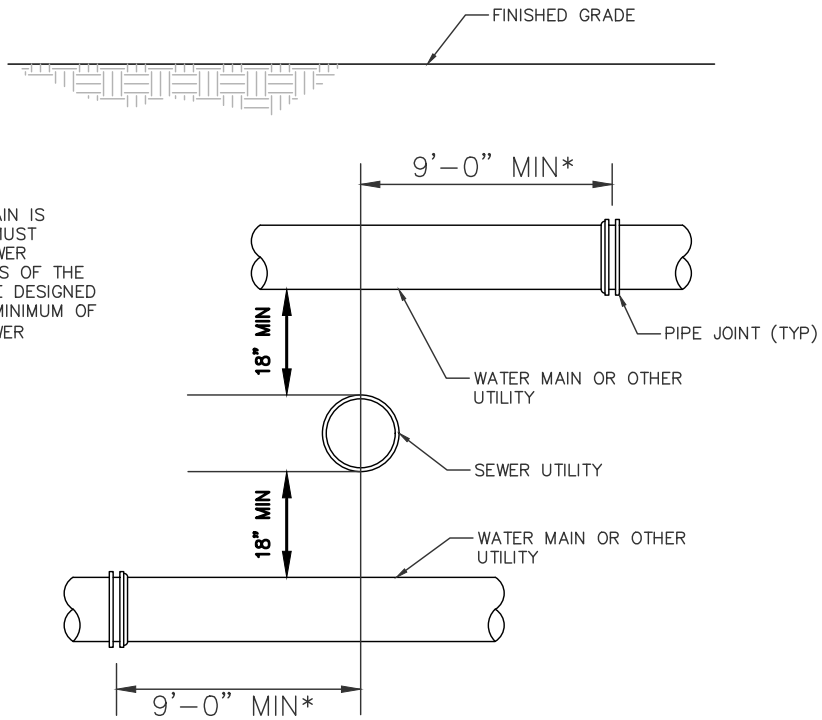


PLAN – PVC MAIN

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

P.V.C. WYE INSERTED ON EXISTING MAIN

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.19	

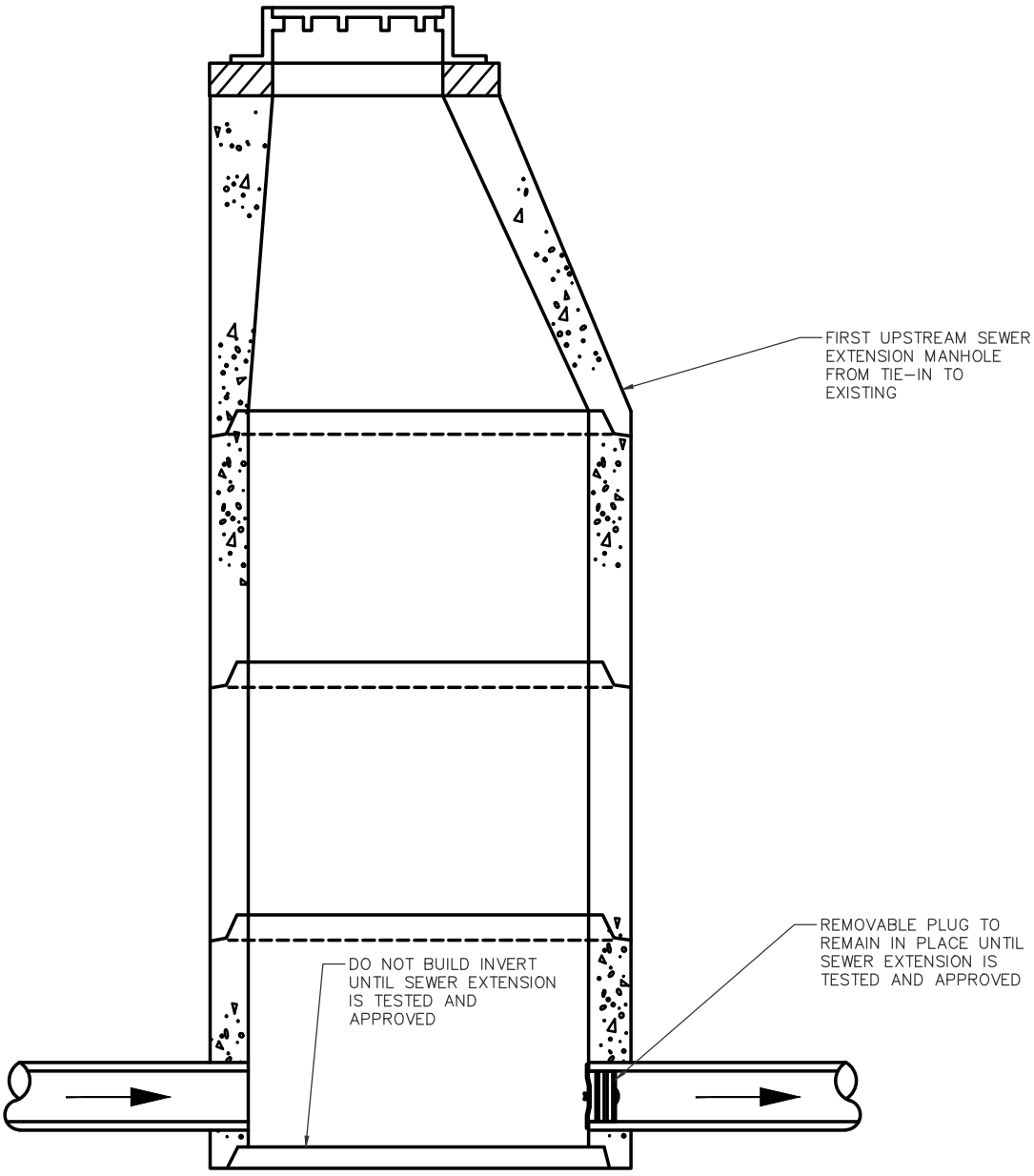


* WHEN A NEW WATER MAIN IS BEING INSTALLED AND MUST CROSS AN EXISTING SEWER UTILITY, THE PIPE JOINTS OF THE WATER MAIN SHOULD BE DESIGNED SO THAT THEY ARE A MINIMUM OF 9' AWAY FROM THE SEWER UTILITY.

NOTES:

1. ANY WATER MAIN OR OTHER UTILITY SHALL NOT BE INSTALLED WITHIN 6" ABOVE OR BELOW AN EXISTING SEWER MAIN OR LATERAL. ALL EFFORTS SHALL BE MADE TO DESIGN UTILITIES WITH THE MINIMUM 18" OF SEPARATION FROM EXISTING SEWER MAINS OR LATERALS.
2. ALL BACKFILLING OPERATIONS FOR SEWER MAINS AND LATERALS SHALL FOLLOW DETAIL NO. SS.02 UNLESS OTHERWISE STATED BELOW.
3. WHERE A WATER MAIN / UTILITY IS TO BE INSTALLED BELOW AN EXISTING VC SEWER MAIN, REGARDLESS OF SEPARATION DISTANCE, THE SEWER MAIN SHALL BE ADEQUATELY SUPPORTED. IF IN THE OPINION OF THE ENGINEER THAT THE SEWER MAIN CANNOT BE ADEQUATELY SUPPORTED, IT SHALL BE EITHER LINED USING APPROVED CIPP METHODS PRIOR TO EXCAVATION BELOW THE SEWER MAIN OR SHALL BE REPLACED WITH PVC C900. IF PVC C900 IS USED, MECHANICAL JOINTS OR AN APPROVED EQUAL THAT ARE WATERTIGHT SHALL BE USED TO FASTEN THE C900 TO THE EXISTING VC SEWER MAIN.
4. WHENEVER A WATER MAIN IS TO BE INSTALLED WITHIN 18" ABOVE AN EXISTING VC SEWER MAIN, IF THE WATER MAIN IS GREATER THAN 12" IN DIAMETER, THE SEWER MAIN SHALL BE LINED USING APPROVED CIPP METHODS PRIOR TO THE INSTALLATION OF THE WATER UTILITY.
5. WHERE A WATER MAIN IS TO BE INSTALLED BELOW AN EXISTING VC SEWER LATERAL, REGARDLESS OF SEPARATION DISTANCE, THE SEWER LATERAL SHALL BE EITHER ENCASED IN A MINIMUM OF 6" OF CONCRETE FOR A MINIMUM OF 10' ON EACH SIDE OF THE CROSSING, OR THE SEWER LATERAL SHALL BE REMOVED AND REPLACED WITH PVC SDR 35 PIPE FOR THE FULL WIDTH OF THE TRENCH. FERNCO COUPLINGS, OR APPROVED EQUALS THAT ARE WATERTIGHT SHALL BE USED TO CONNECT THE PVC PIPE TO THE EXISTING VC SEWER LATERAL.
6. WHENEVER A WATER MAIN / UTILITY IS TO BE INSTALLED WITHIN 18" ABOVE AN EXISTING VC SEWER LATERAL, IF THE WATER MAIN / UTILITY IS GREATER THAN 12" DIAMETER, THE SEWER LATERAL SHALL BE EITHER REMOVED AND REPLACED WITH PVC C900 OR DI PIPE FOR THE FULL WIDTH OF THE TRENCH OR THE SEWER LATERAL SHALL BE LINED USING APPROVED CIPP METHODS FOR A MINIMUM DISTANCE OF 10' ON EACH SIDE OF THE CROSSING.
7. WHERE A WATER MAIN / UTILITY IS INSTALLED BELOW AN EXISTING SEWER LATERAL, IF THE LATERAL IS COMPRISED OF CI, DI OR PVC MATERIAL, THE LATERAL CAN REMAIN IN PLACE PROVIDED IT IS ADEQUATELY SUPPORTED DURING EARTHWORK ACTIVITIES.

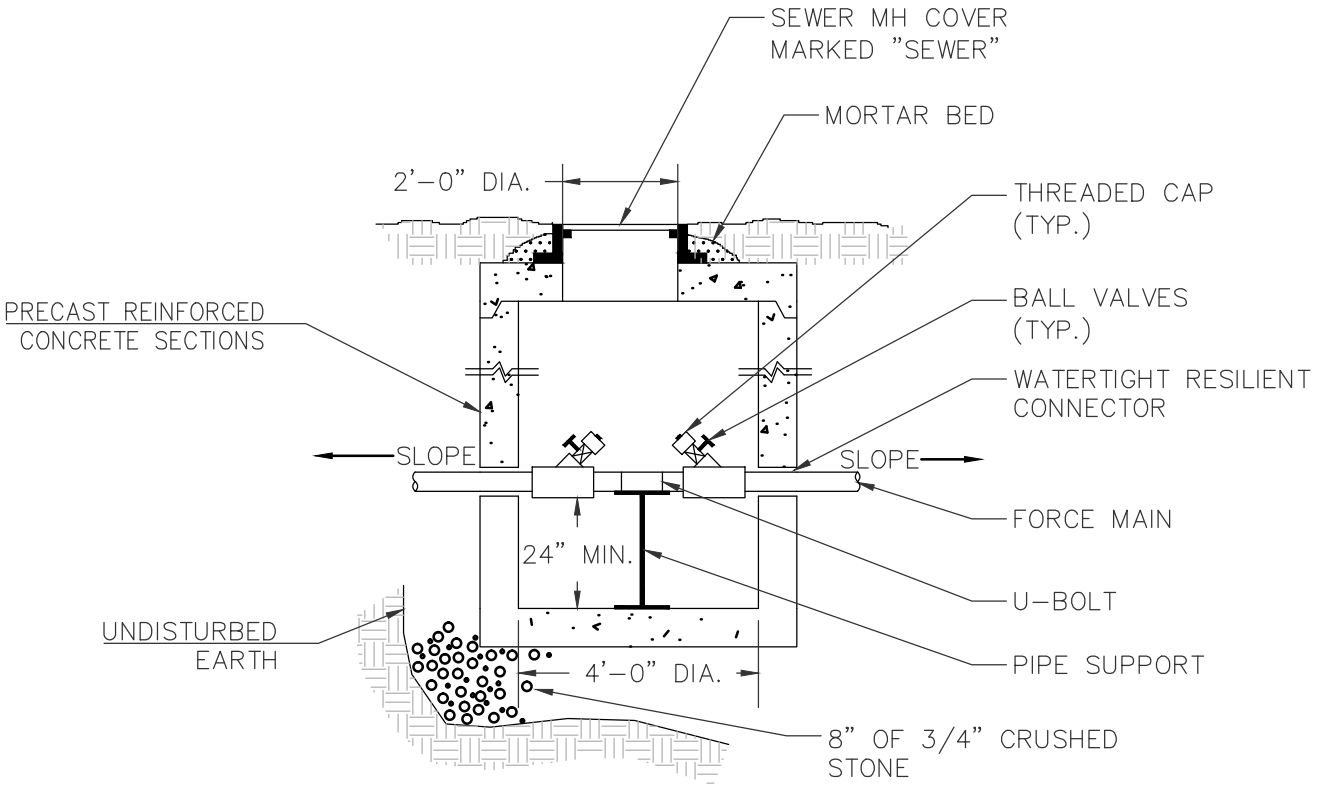
	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** TYPICAL UTILITY CROSSINGS	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED: 7/26/2018	
		DETAIL NUMBER: SS.20	



DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SANITARY SEWER PROTECTION DURING SEWER EXTENSION CONSTRUCTION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.21	



SECTION

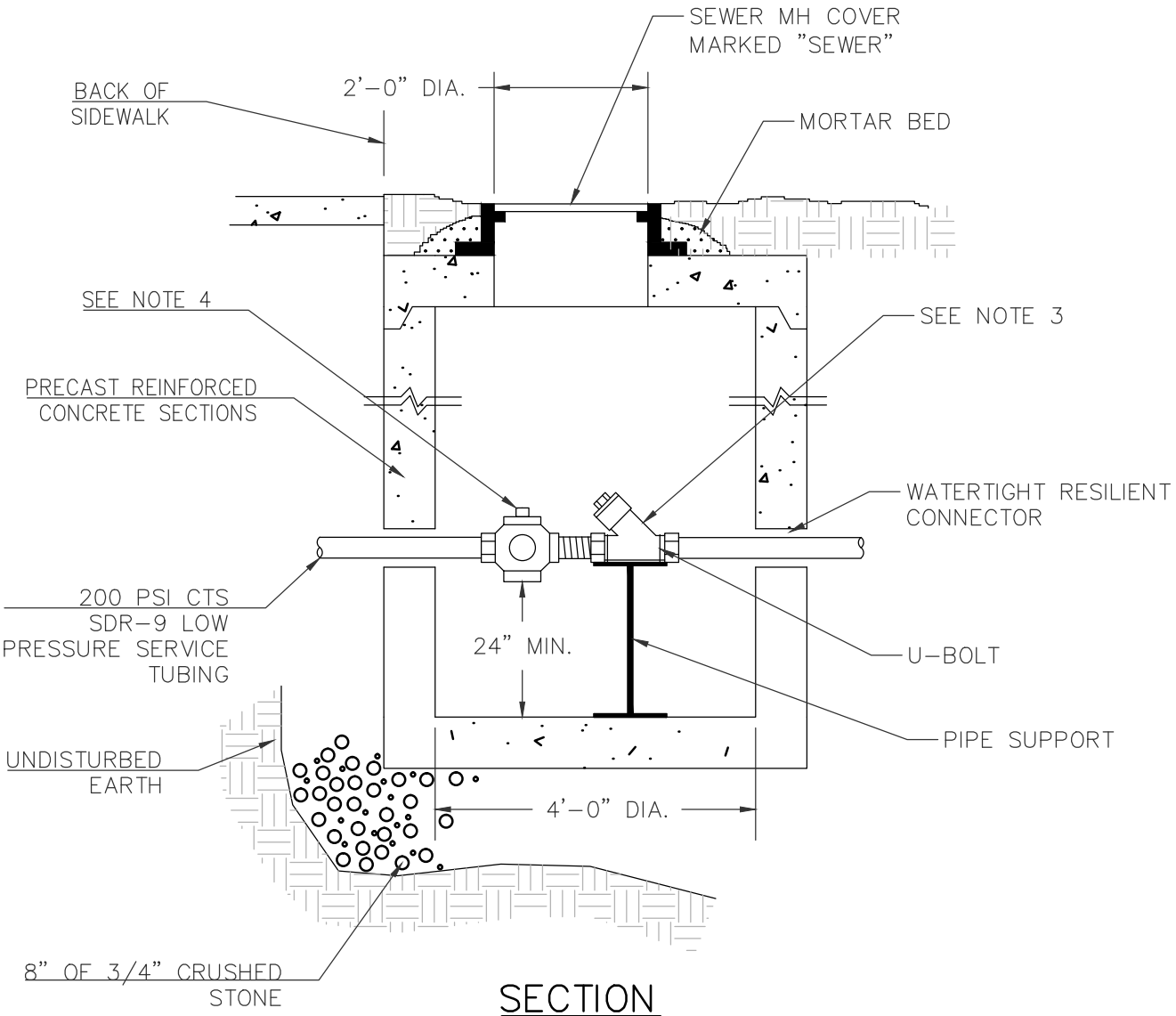
NOTES:

1. PROVIDE MANHOLE STEPS 1'-0" O.C.
2. CONTRACTOR SHALL CONFIRM ELEVATION AND ALIGNMENT OF PROPOSED FORCE MAIN AND GROUND SURFACE AT EACH MANHOLE PRIOR TO ORDERING SECTION.
3. ADJUST FRAME TO GRADE WITH A MINIMUM OF TWO COURSES OF BRICK MASONRY OR REINFORCED CONCRETE GRADE RINGS (NOT SHOWN).
4. ALL EXTERIOR SURFACES OF GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

FORCE MAIN CLEANOUT MANHOLE DETAIL

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.22	



SECTION

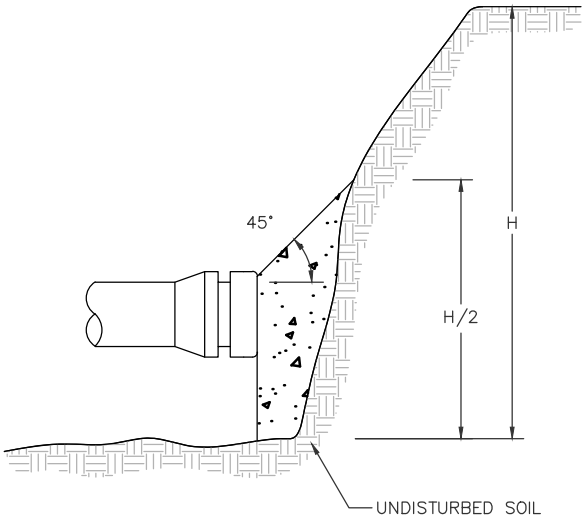
NOTES:

1. PROVIDE MANHOLE STEPS 1'-0" O.C.
2. CONTRACTOR SHALL CONFIRM ELEVATION AND ALIGNMENT OF PROPOSED LOW PRESSURE SERVICE(S) AND GROUND SURFACE AT EACH MANHOLE PRIOR TO ORDERING SECTION.
3. SINKING BALL CHECK VALVE – FEMALE IPS X IPS (FLOMATIC MODEL 208, PART NO. 2142, OR EQUAL) W/ MUELLER 110 (OR EQUAL) COMPRESSION CONNECTION.
4. SHUT-OFF VALVE – IPT MUELLER 300 BALL CURB VALVE B-25122, OR EQUAL W/ MUELLER 110 (OR EQUAL) COMPRESSION CONNECTION.
5. ADJUST FRAME TO GRADE WITH A MINIMUM OF TWO COURSES OF BRICK MASONRY OR REINFORCED CONCRETE GRADE RINGS (NOT SHOWN).
6. ALL EXTERIOR SURFACES OF GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.

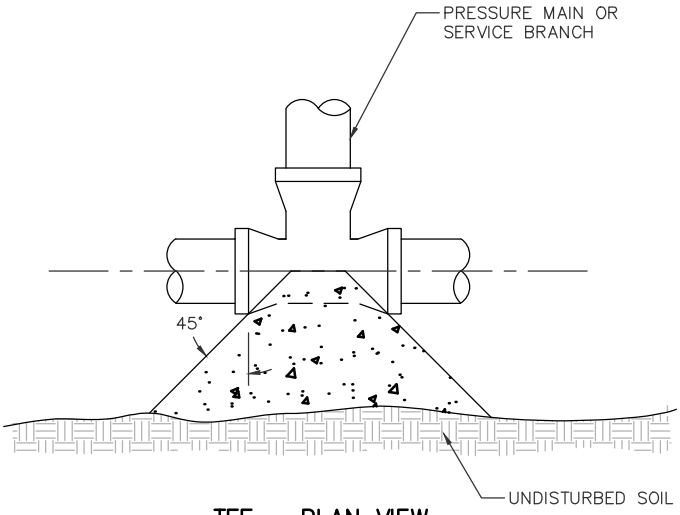
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

LOW PRESSURE SEWER SERVICE
VALVE BOX

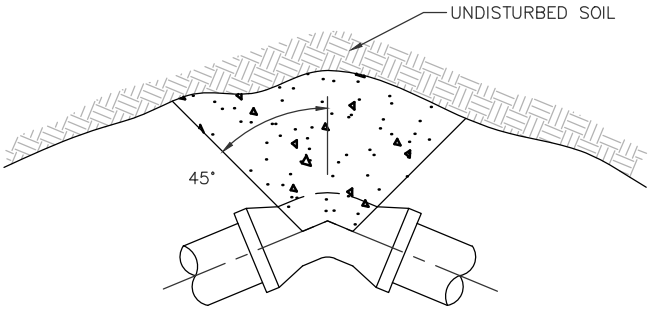
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.23	



PLUG / DEAD END – ELEVATION



TEE – PLAN VIEW



ELBOW – PLAN VIEW

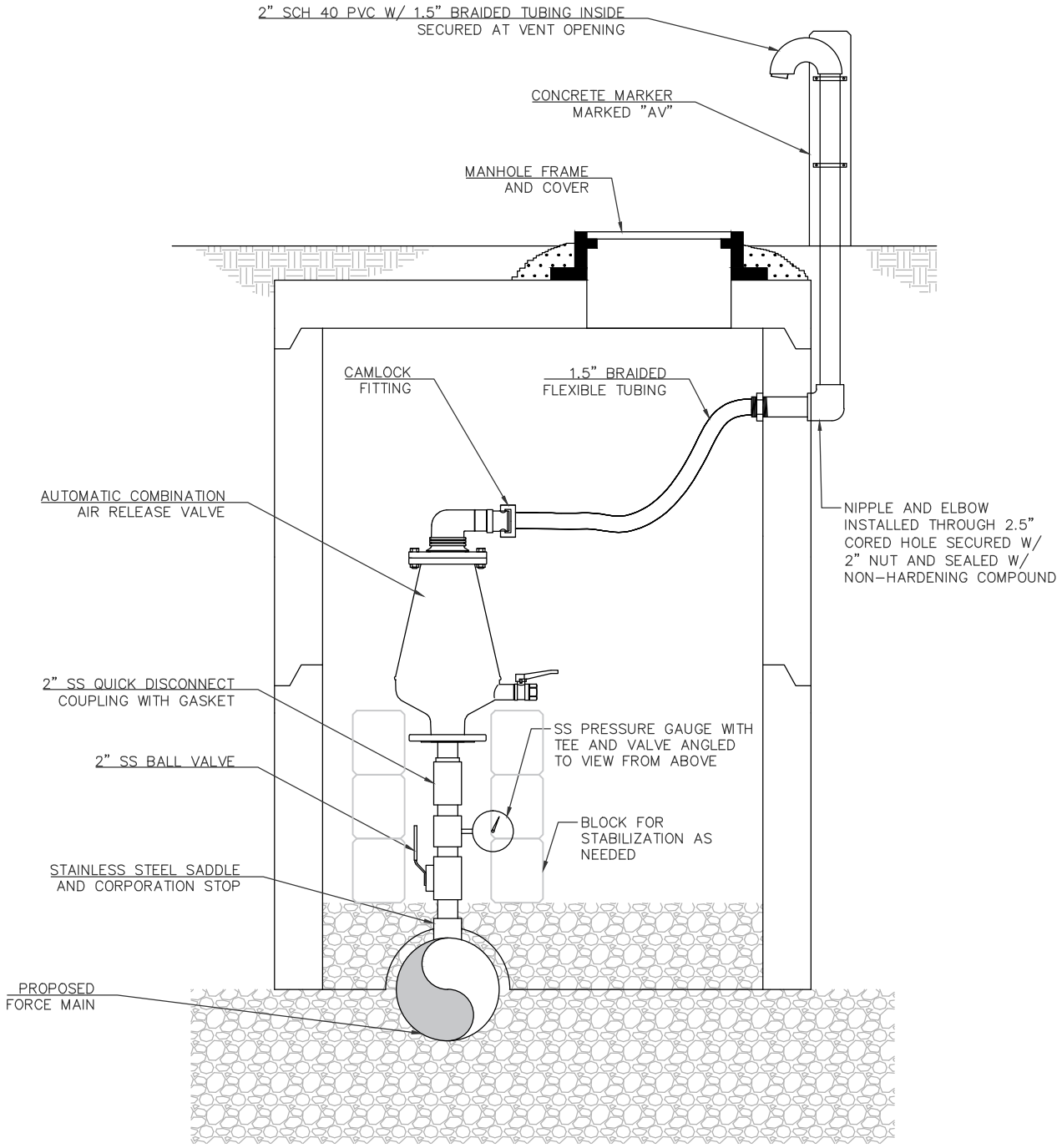
NOTES:

1. THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOILS USING FORMS AND 3,000 PSI CONCRETE.
2. CONCRETE SHALL NOT OBSTRUCT ANY BOLTS OR FLANGES.
3. THRUST AND BEARING AREA CALCULATIONS PERFORMED BY A PROFESSION ENGINEER LICENSED IN THE STATE OF MASSACHUSETTS MAY BE REQUIRED AT THE DISCRETION OF THE DIRECTOR OF ENGINEERING.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

THRUST BLOCKS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.24	



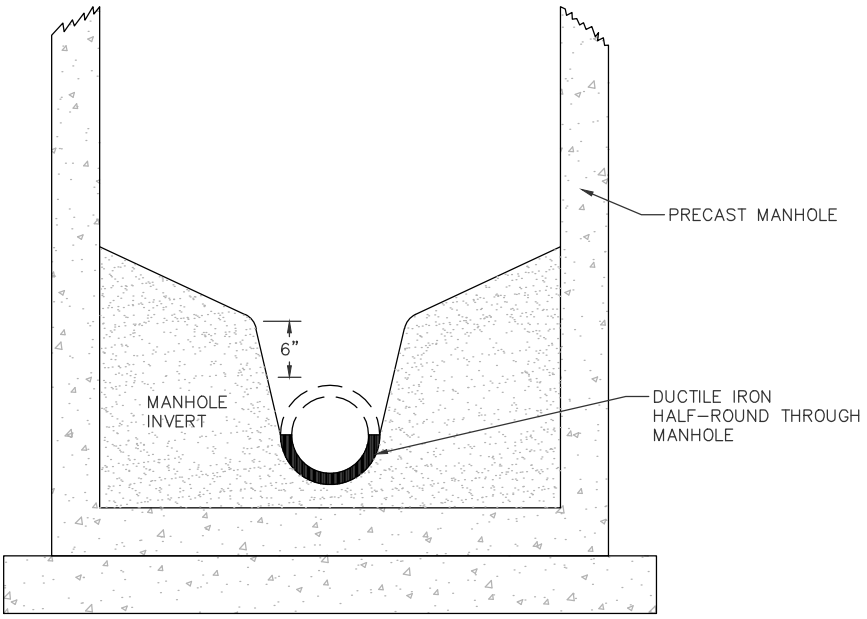
NOTES:

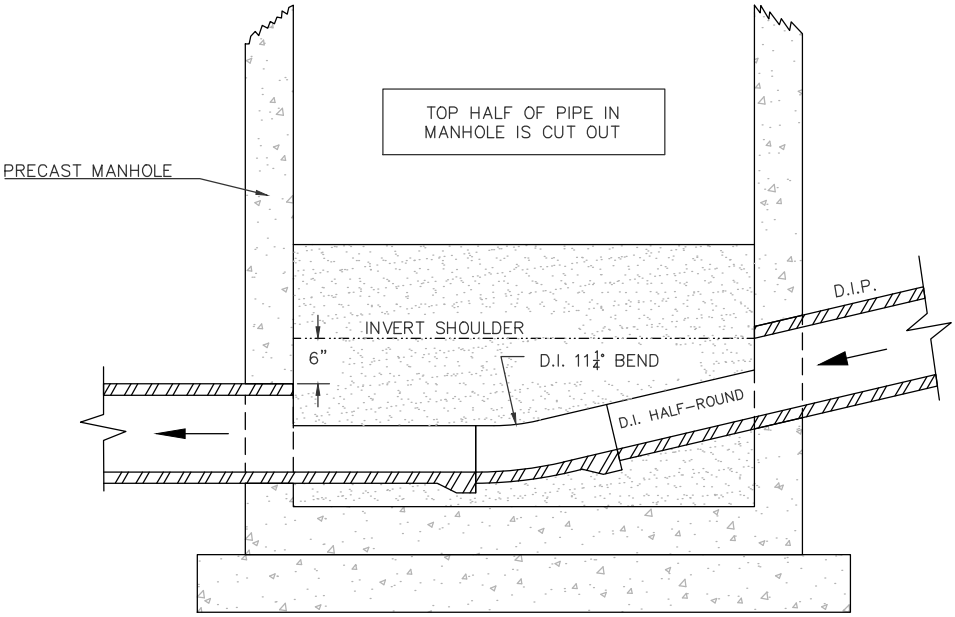
1. FORCE MAIN PROFILE AND ARV LOCATION TO BE ADJUSTED SUCH THAT ARV IS AT HIGH POINT WITH SUFFICIENT DEPTH FOR INSTALLATION AND TO PREVENT FREEZING.
3. ADJUST FRAME TO GRADE WITH A MINIMUM OF TWO COURSES OF BRICK MASONRY OR REINFORCED CONCRETE GRADE RINGS (NOT SHOWN).
4. ALL EXTERIOR SURFACES OF GRADE ADJUSTMENT COURSES SHALL BE COVERED WITH 1/4" TO 3/8" MASONRY CEMENT PLASTER.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

COMBINATION AIR RELEASE VALVE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.25	



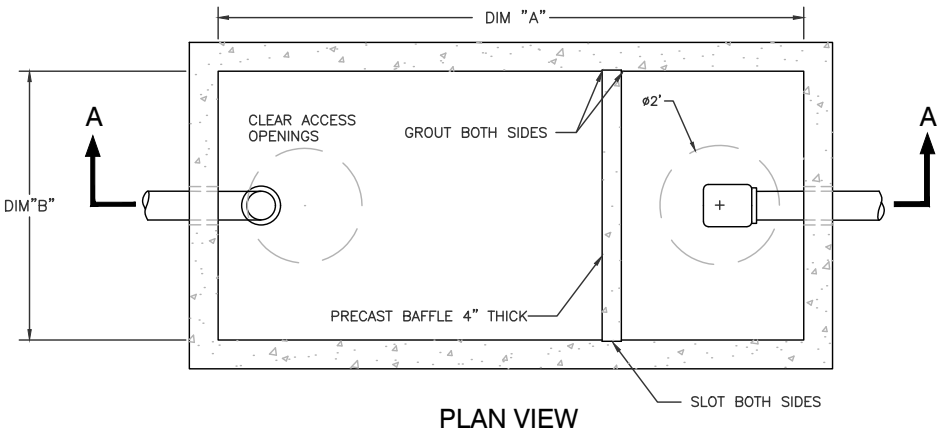


NOTES:

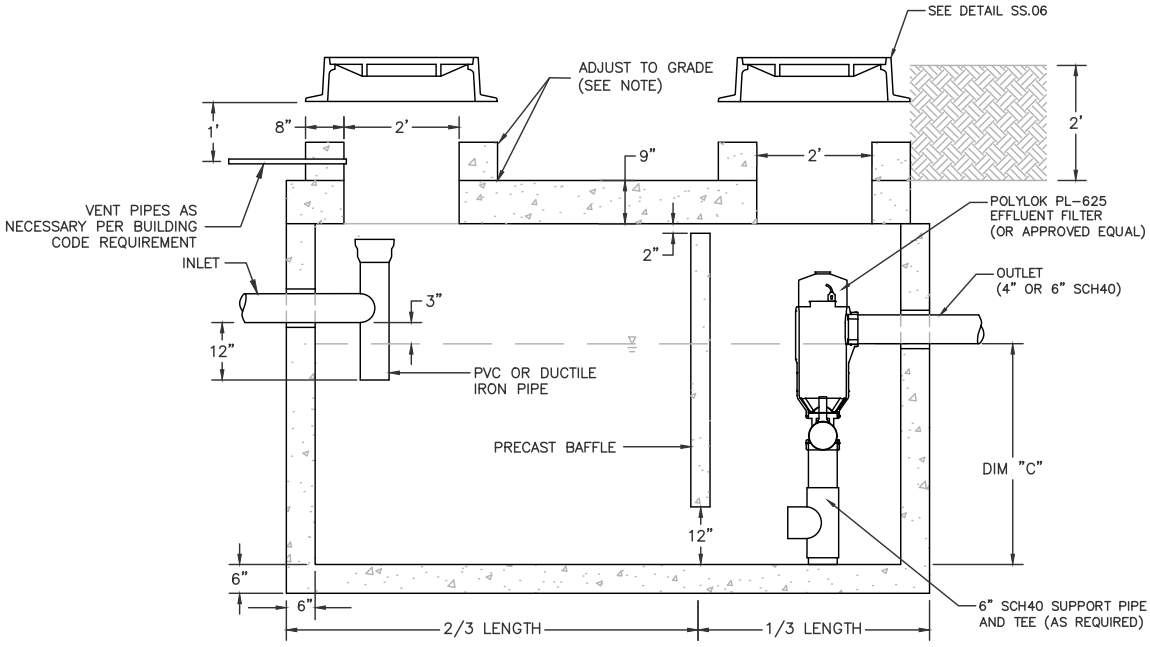
1. NO HORIZONTAL ALIGNMENT CHANGE CAN BE MADE WITHIN THIS MANHOLE TYPE. USE ON GRADES OF 10% OR GREATER.

2. EACH JOINT OF PIPE BETWEEN HIGH VELOCITY MANHOLE & MANHOLE UPGRADE SHALL HAVE A TRENCH DAM (SS.17).

	DEDHAM DPW **DESIGN & CONSTRUCTION STANDARDS** HIGH VELOCITY MANHOLE INVERT	SCALE: NTS	DATE OF ISSUE: AUGUST 2015
		REVISED:	
		DETAIL NUMBER: SS.26	



PLAN VIEW



SECTION A-A

SIZING CHART			
GALLON CAPACITY	DIM "A"	DIM "B"	DIM "C"
1500 (MIN.)	120"	60"	48"
1750	120"	60"	58"
2000	144"	68"	48"
2500	144"	72"	56"
2750	144"	72"	62"
3000	168"	84"	50"
4000	168"	84"	66"
5000	216"	96"	56"
6000	216"	96"	68"

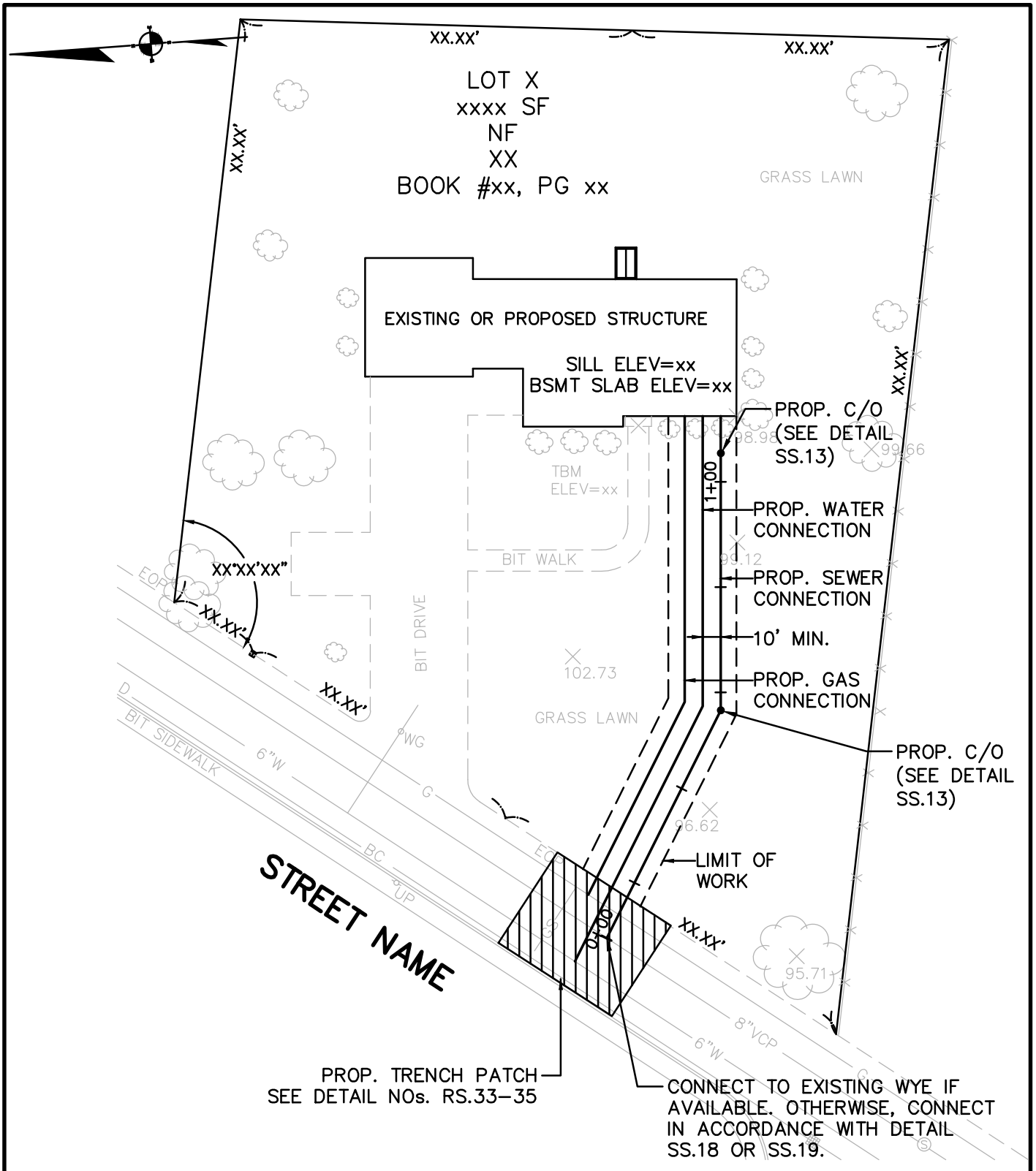
NOTES:

1. CONCRETE: 28 DAY F'c= 4500 psi
2. REBAR: ASTM A615 GRADE 60
3. MESH: ASTM A-185 GRADE 65
4. DESIGN: AC1318-83 BUILDING CODE
   ASTM C-857 MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES
5. LOADS: H-20 LOADING
6. FILL w/ CLEAN WATER PRIOR TO START UP OF SYSTEM
7. CONTRACTOR TO SUPPLY AND INSTALL ALL PIPING AND SANITARY TEES
8. GRAY WATER ONLY, BLACK WATER SHALL BE CARRIED BY SEPARATE SEWER
9. TRAP SIZE WILL BE BASED ON 15 GPD PER SEAT
10. LARGER SIZES MAY BE REQUIRED AS PER REVIEW OF FACILITY
11. WHERE COVER OVER GREASE TRAP EXCEEDS 2', 4' DIAMETER PRECAST CONE SECTIONS SHALL BE USED.
12. TOP, WALL, AND BASE THICKNESS MAY BE ADJUSTED AS NEEDED BY PRECASTER TO MEET H-20 LOADING.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STANDARD GREASE TRAP

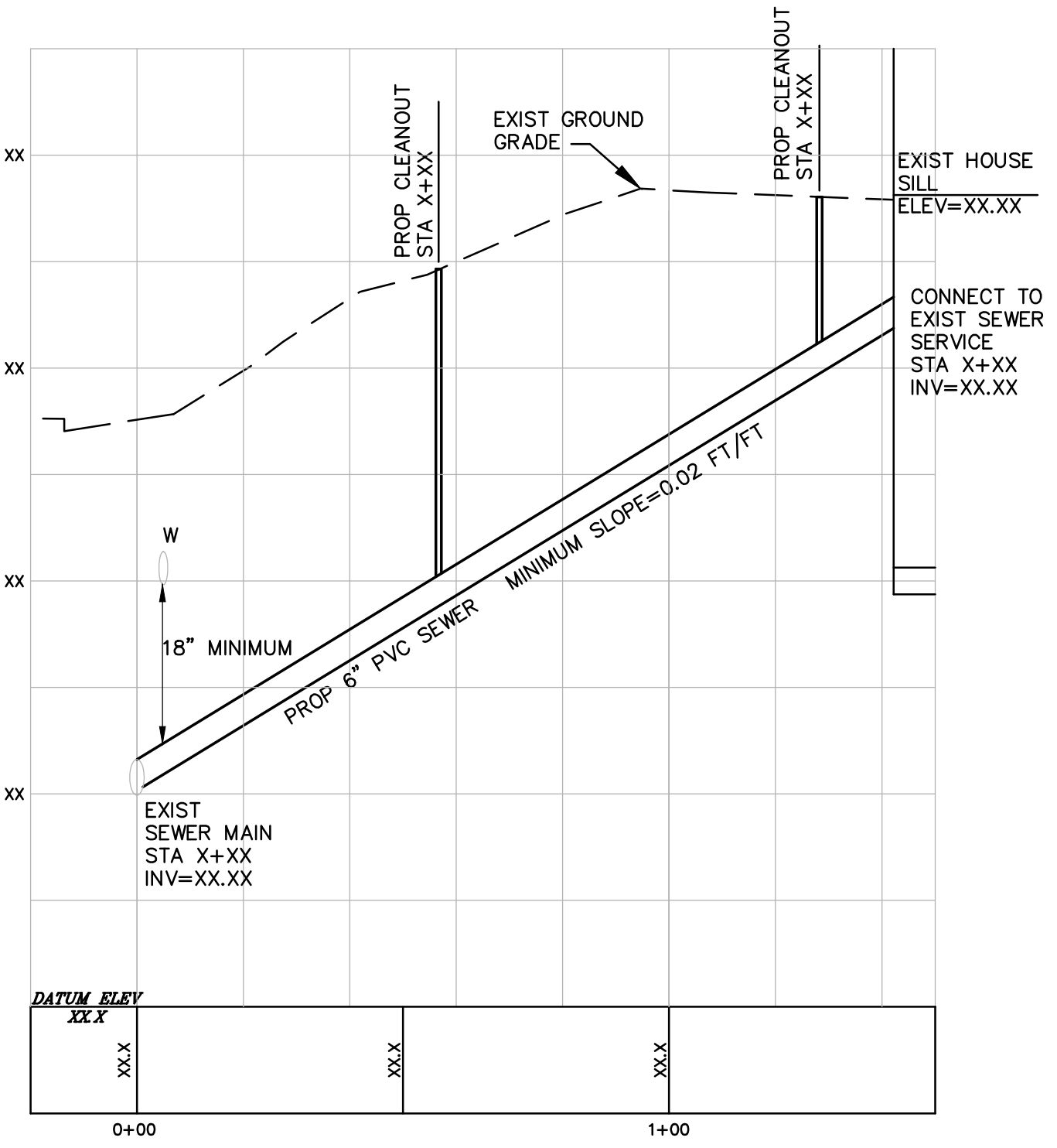
SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED: 7/26/2018	
DETAIL NUMBER: SS.27	



DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL SEWER PLAN

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.28	



DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TYPICAL SEWER PROFILE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER: SS.29	

MISCELLANEOUS

DESCRIPTION	DETAIL NUMBER
PARKING METER POST INSTALLATION	MISC.01
SIGN POST INSTALLATION	MISC.02
GRANITE BOUND AND COVER	MISC.03
CONCRETE BOUND AND COVER	MISC.04
TOWN STREET SIGNS	MISC.05
TOWN STREET SIGN INSTALLATION	MISC.06
CHAIN LINK FENCES (VARIOUS HEIGHTS)	MISC.07
HYDRANT & TAPPING SLEEVE VALVE	MISC.08
HYDRANT RELOCATION	MISC.09
STANDARD ANCHOR BASE LIGHT POLE	MISC.10
TRAFFIC SIGNAL CONDUIT TRENCH	MISC.11

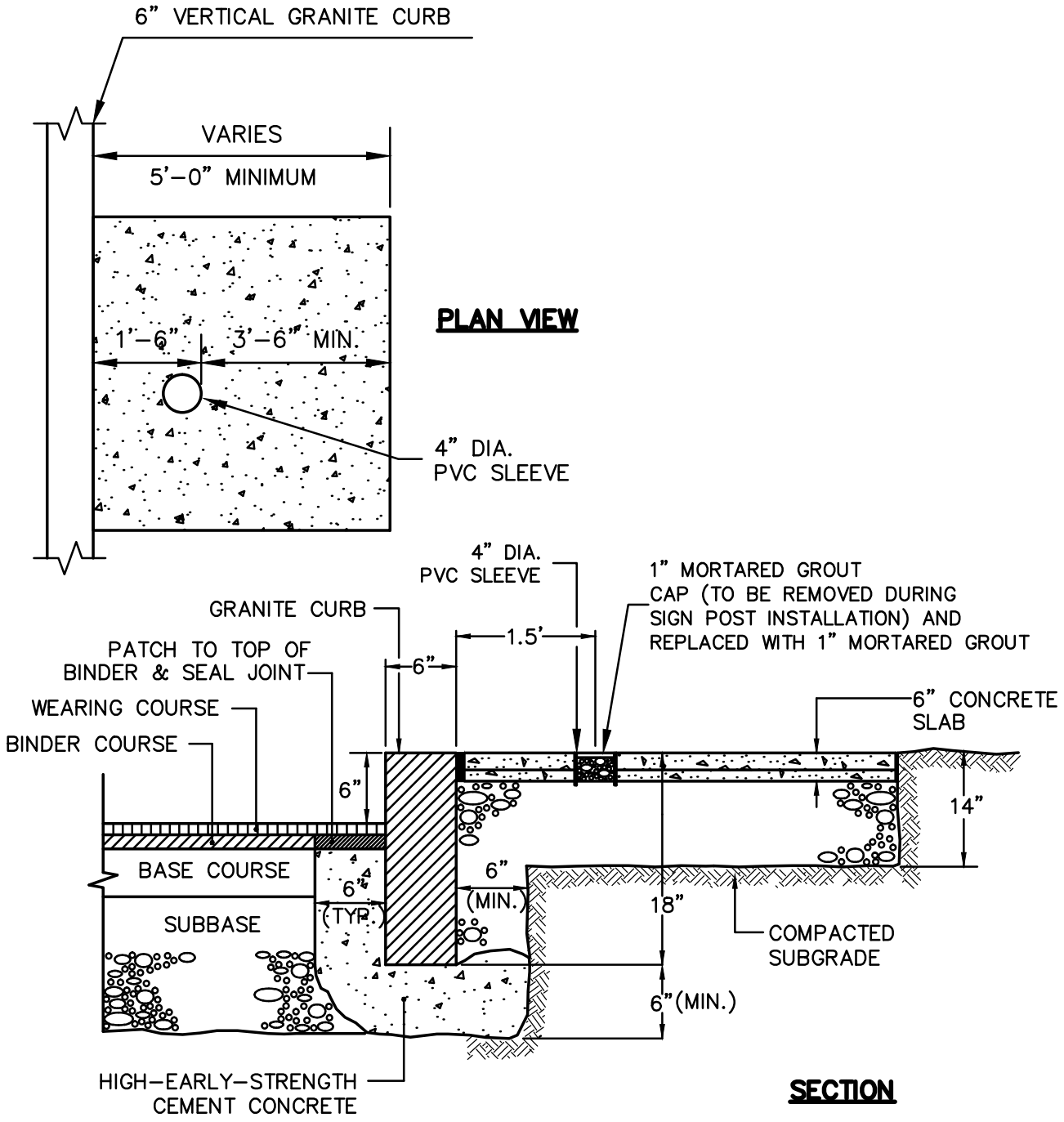
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

DETAIL INDEX
MISCELLANEOUS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC–INDEX.01



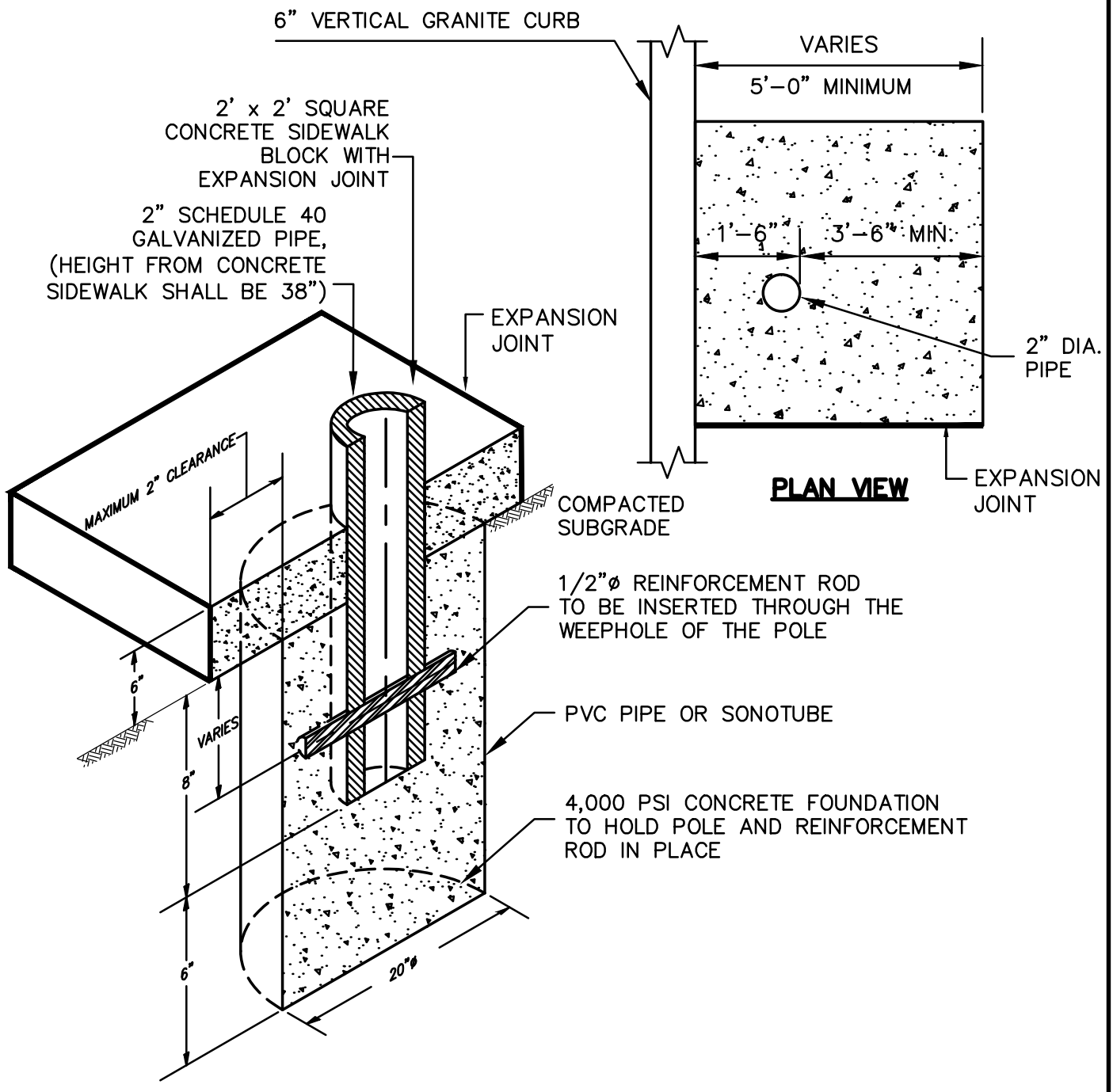
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

PARKING METER POST INSTALLATION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.01



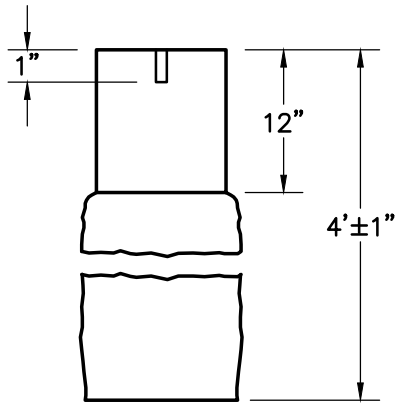
UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

ALSO REFERENCE CURRENT MassDOT CONSTRUCTION STANDARD DETAILS.

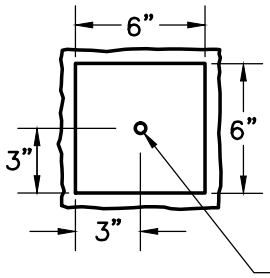
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

SIGN POST INSTALLATION IN SIDEWALK

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.02



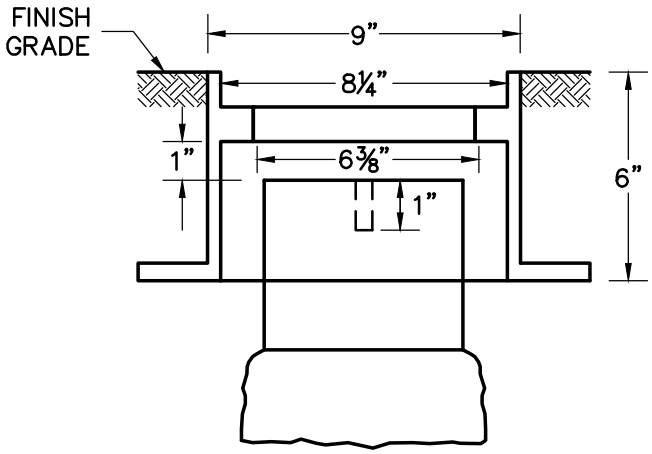
SECTION



½" DIA. HOLE IN CENTER OF TOP 1" DEEP.

PLAN

GRANITE BOUND



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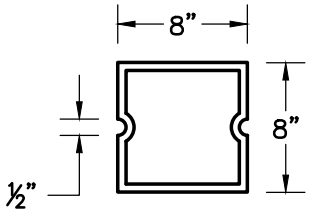

PLAN

CAST IRON GRANITE BOUND COVER

NOTES:

1. BOUNDS TO BE LOCATED IN LAWNS, SIDEWALKS OR DRIVES SHALL BE SET WITH THE TOP OF BOUND 2" BELOW GROUND SURFACE.
2. ALL BOUNDS SHALL BE SET AT THE DIRECTION OF ENGINEER. PRIOR TO COMMENCING THE WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
3. ALL BOUNDS SHALL HAVE A LEBARON STONE BOUND FRAME AND COVER NO. S208–6, OR APPROVED EQUAL (SEE DETAIL).
4. THE TOP 12" OF THE BOUND IS TO BE MACHINE FINISHED.
5. ALL BOUNDS SHALL BE SET BY A REGISTERED LAND SURVEYOR IN THE COMMONWEALTH OF MASSACHUSETTS AND TIED TO NAD83 AND NAVD88 DATUMS.
6. ALL BOUNDS SHALL BE EMBEDDED BELOW GROUND SURFACE A MINIMUM OF 4'–0".

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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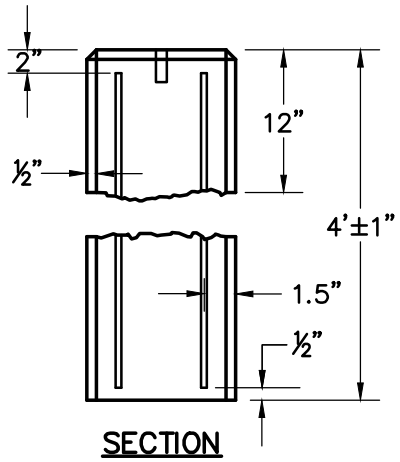
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

GRANITE BOUND AND COVER

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.03



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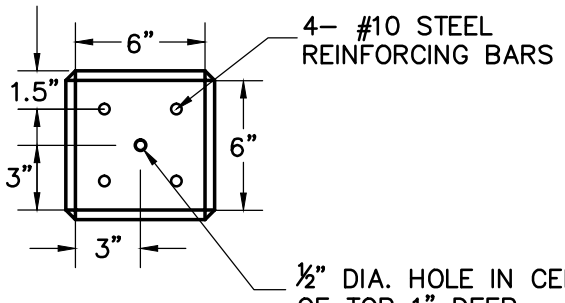
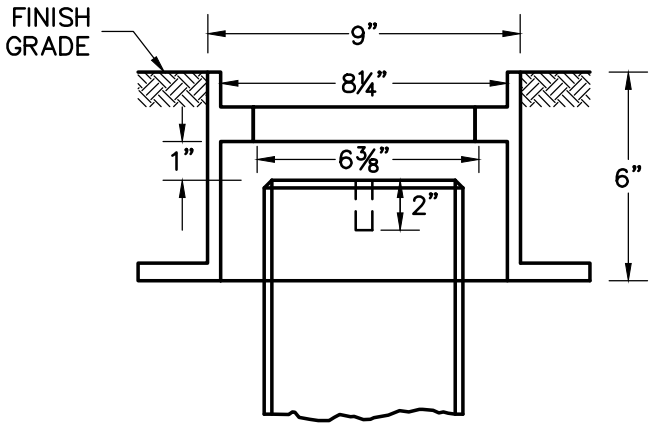


PLAN

CONCRETE BOUND



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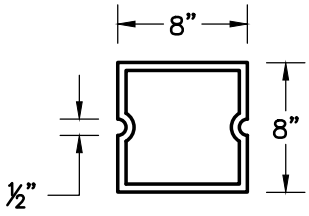

PLAN

CAST IRON CONCRETE BOUND COVER

NOTES:

1. BOUNDS TO BE LOCATED IN LAWNS, SIDEWALKS OR DRIVES SHALL BE SET WITH THE TOP OF BOUND 2" BELOW GROUND SURFACE.
2. ALL BOUNDS SHALL BE SET AT THE DIRECTION OF ENGINEER. PRIOR TO COMMENCING THE WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
3. ALL BOUNDS SHALL HAVE A LEBARON STONE BOUND FRAME AND COVER NO. S208–6, OR APPROVED EQUAL (SEE DETAIL).
4. ALL BOUNDS SHALL BE SET BY A REGISTERED LAND SURVEYOR IN THE COMMONWEALTH OF MASSACHUSETTS AND TIED TO NAD83 AND NAVD88 DATUMS.
5. ALL BOUNDS SHALL BE EMBEDDED BELOW GROUND SURFACE A MINIMUM OF 4'–0".

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CONCRETE BOUND AND COVER

SCALE:	DATE OF ISSUE:
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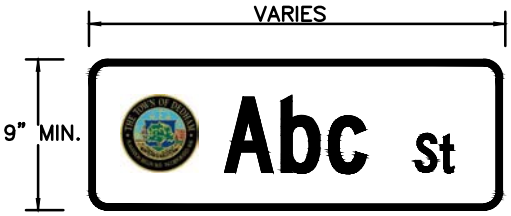
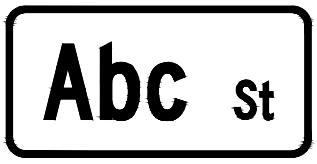
REVISED:	
DETAIL NUMBER:	MISC.04



MAIN STREET – GREEN BACKGROUND WITH WHITE LETTERING
& TOWN SEAL (6" DIA.) ON LEFT SIDE (TO BE USED ON MAIN ROADS, SIGNALIZED INTERSECTIONS OR OTHER ROADS AS DIRECTED BY THE DPW DIRECTOR).



PUBLIC WAY MINOR STREET – GREEN BACKGROUND WITH WHITE LETTERING

PRIVATE WAY – BLUE BACKGROUND WITH WHITE LETTERING

PRIVATE DRIVE – BROWN BACKGROUND WITH WHITE LETTERING

NOTES:

1. LETTERING ON SIGNS SHOULD CONSIST OF HIGHWAY B (MIN.) LETTERING WITH INITIAL UPPER–CASE LETTERS AT LEAST 6" IN HEIGHT AND LOWER–CASE LETTERS AT LEAST 4.5" IN HEIGHT.
2. SUPPLEMENTARY LETTERING (i.e., St, Rd, Dr, etc) SHOULD CONSIST OF HIGHWAY B LETTERING WITH INITIAL UPPER–CASE LETTERS AT LEAST 3" IN HEIGHT AND LOWER–CASE LETTERS AT LEAST 2.25" IN HEIGHT.
3. ABBREVIATIONS FOR PRIVATE WAYS (PVT WAY) AND PRIVATE DRIVES (PVT DR) SHOULD CONSIST OF HIGHWAY B LETTERING ALL IN UPPER–CASE LETTERS AT LEAST 3" IN HEIGHT.
4. LETTER SPACING SHOULD BE IN CONFORMANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

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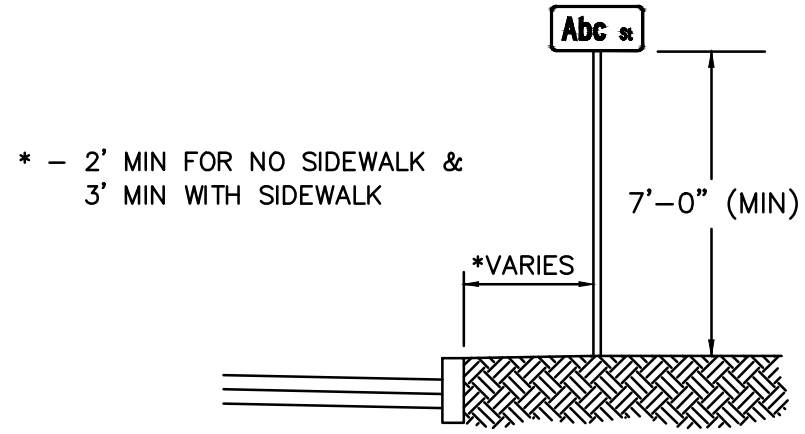
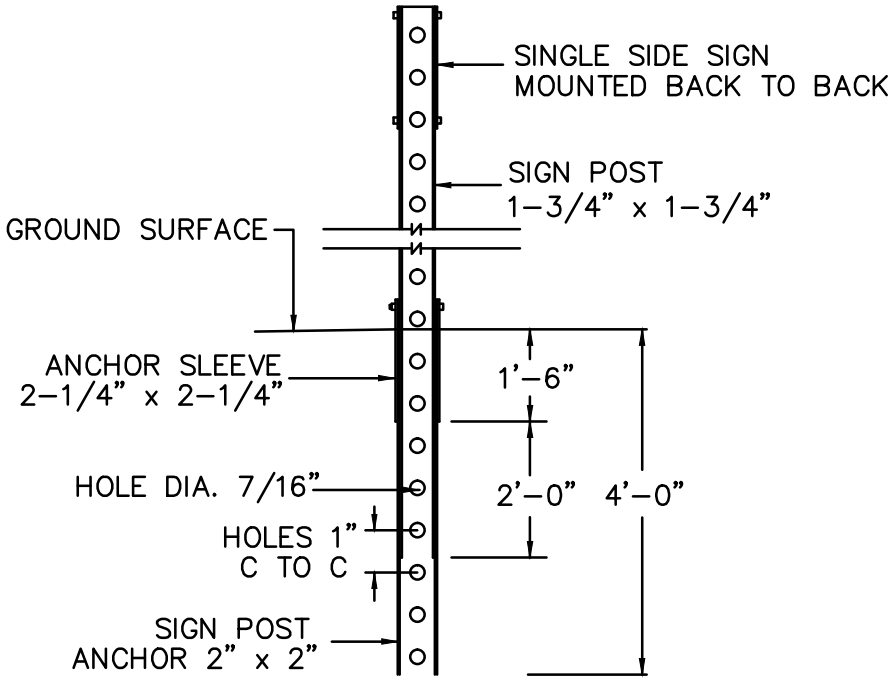
TOWN STREET SIGNS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.05



SIGN INSTALLATION



P–5 TELESCOPIC POST

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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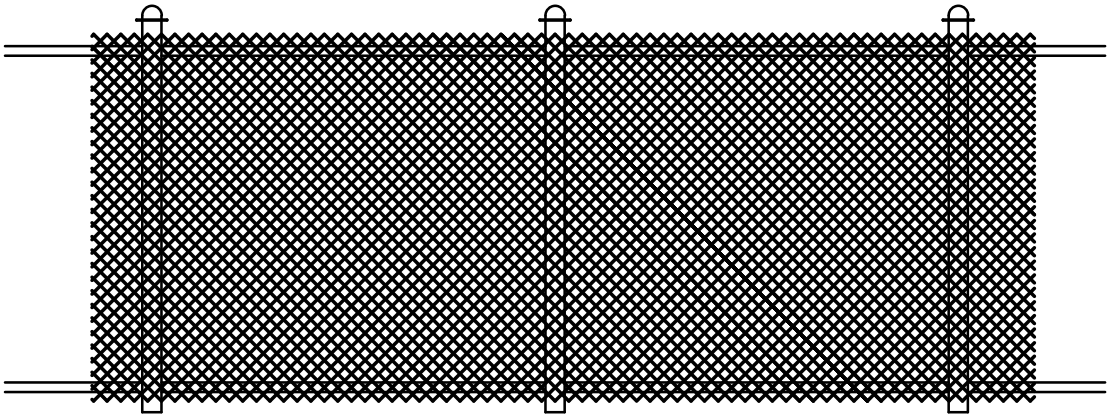
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TOWN STREET SIGN INSTALLATION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.06



NOTES:

1. ALL CHAIN LINK FENCING MATERIAL SHALL BE BLACK VINYL COATED UNLESS OTHERWISE SPECIFIED.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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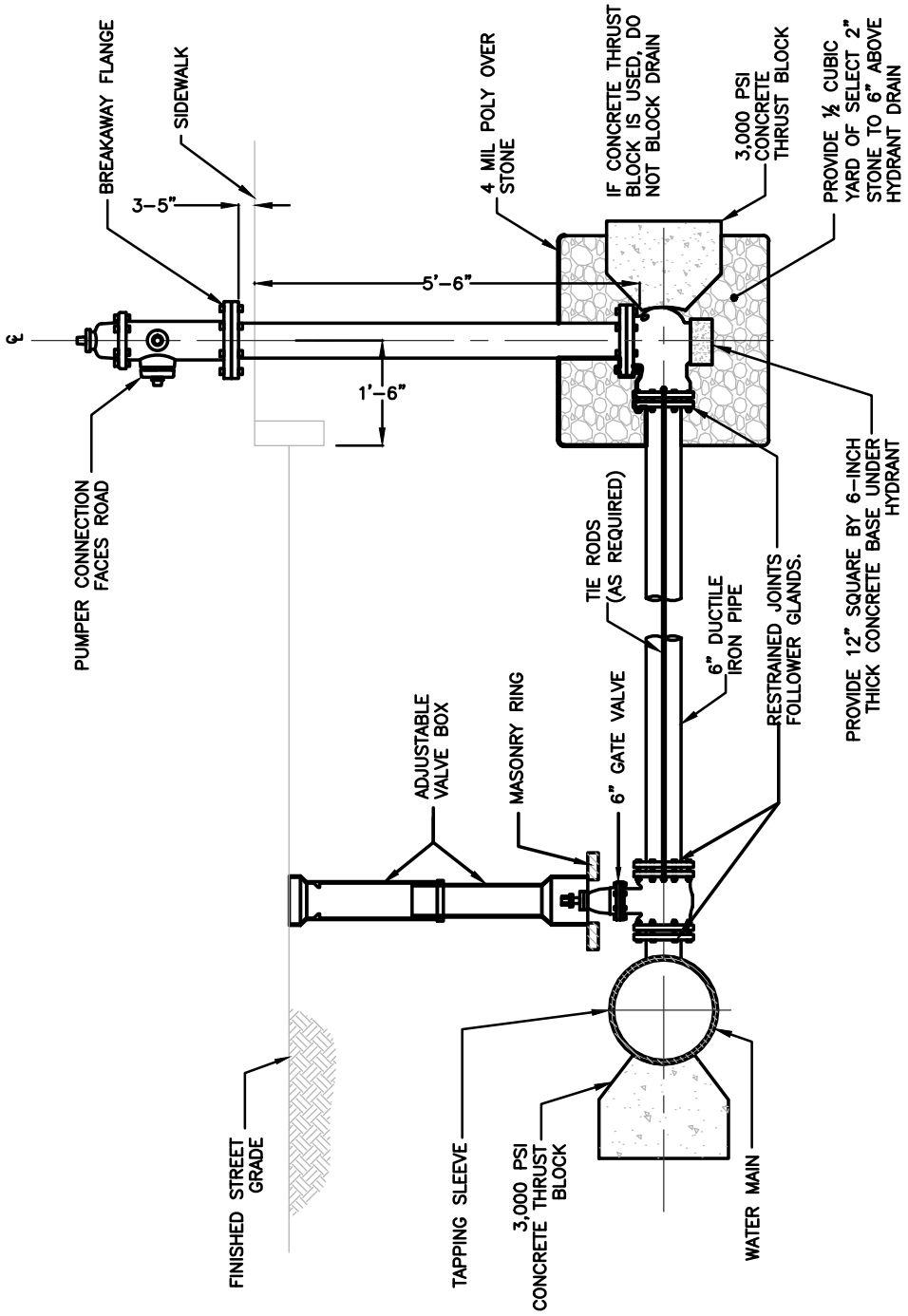
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

CHAIN LINK FENCE
VARIOUS HEIGHTS

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.07



NOTES:

- CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH.
- USE RESTRAINED JOINT FOLLOWER GLANDS, OR TIE RODS WHERE CONCRETE THRUST BLOCK IS UNACCEPTABLE.
- SIZE OF BLOCK OR FITTING TO BE DESIGNED FOR SPECIFIC CONDITIONS, OR ANY NECESSARY BENDS.
- VALVES SHALL OPEN RIGHT (CLOCKWISE)
- HYDRANTS SHALL OPEN LEFT (COUNTERCLOCKWISE)
- DEDHAM–WESTWOOD WATER DISTRICT STANDARDS SUPERCEDE THIS DETAIL.

UNLESS OTHERWISE NOTED, CONSTRUCTION METHODS, MATERIAL REQUIREMENTS AND METHOD OF MEASUREMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS.

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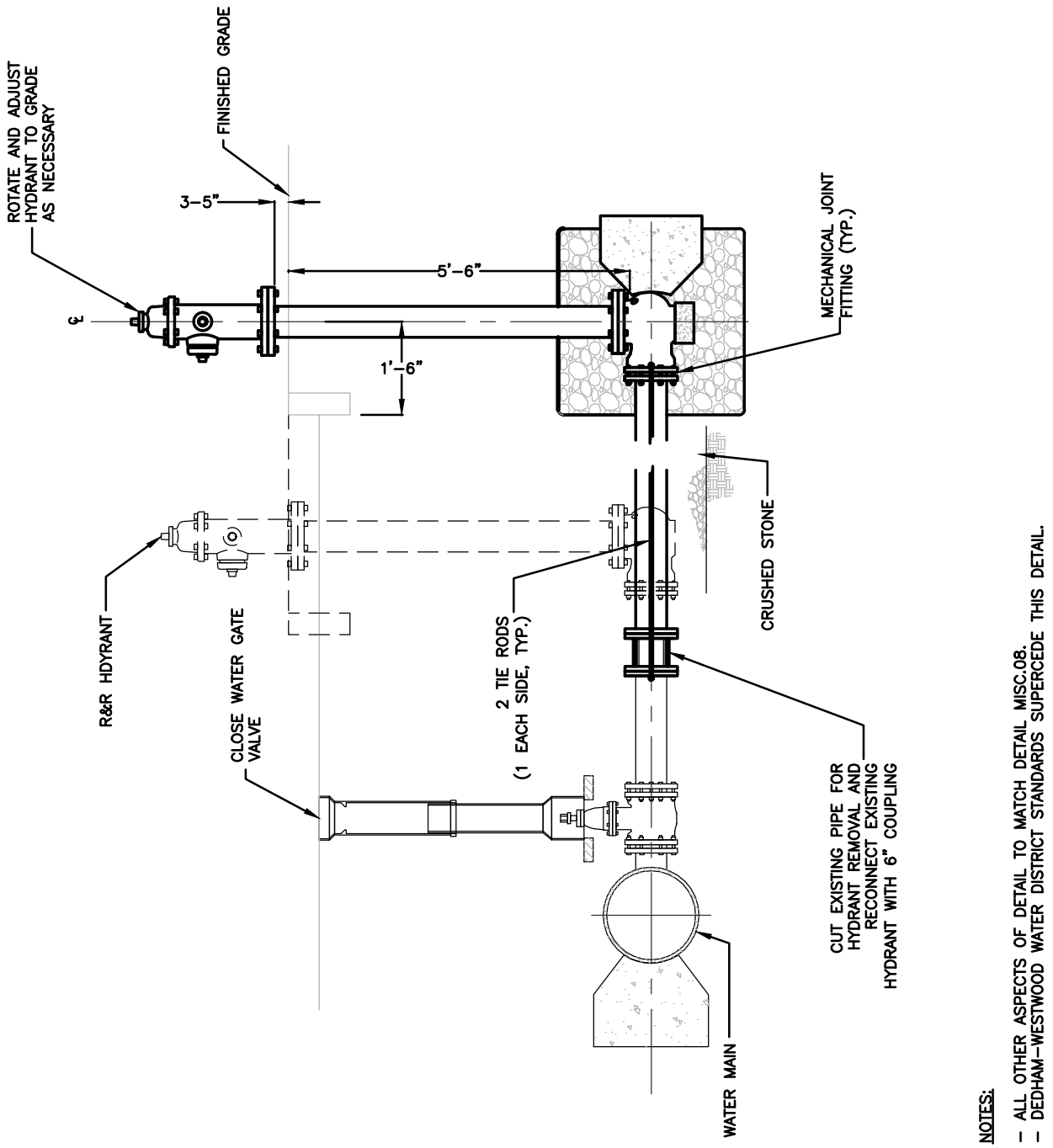
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HYDRANT & TAPPING SLEEVE VALVE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.08



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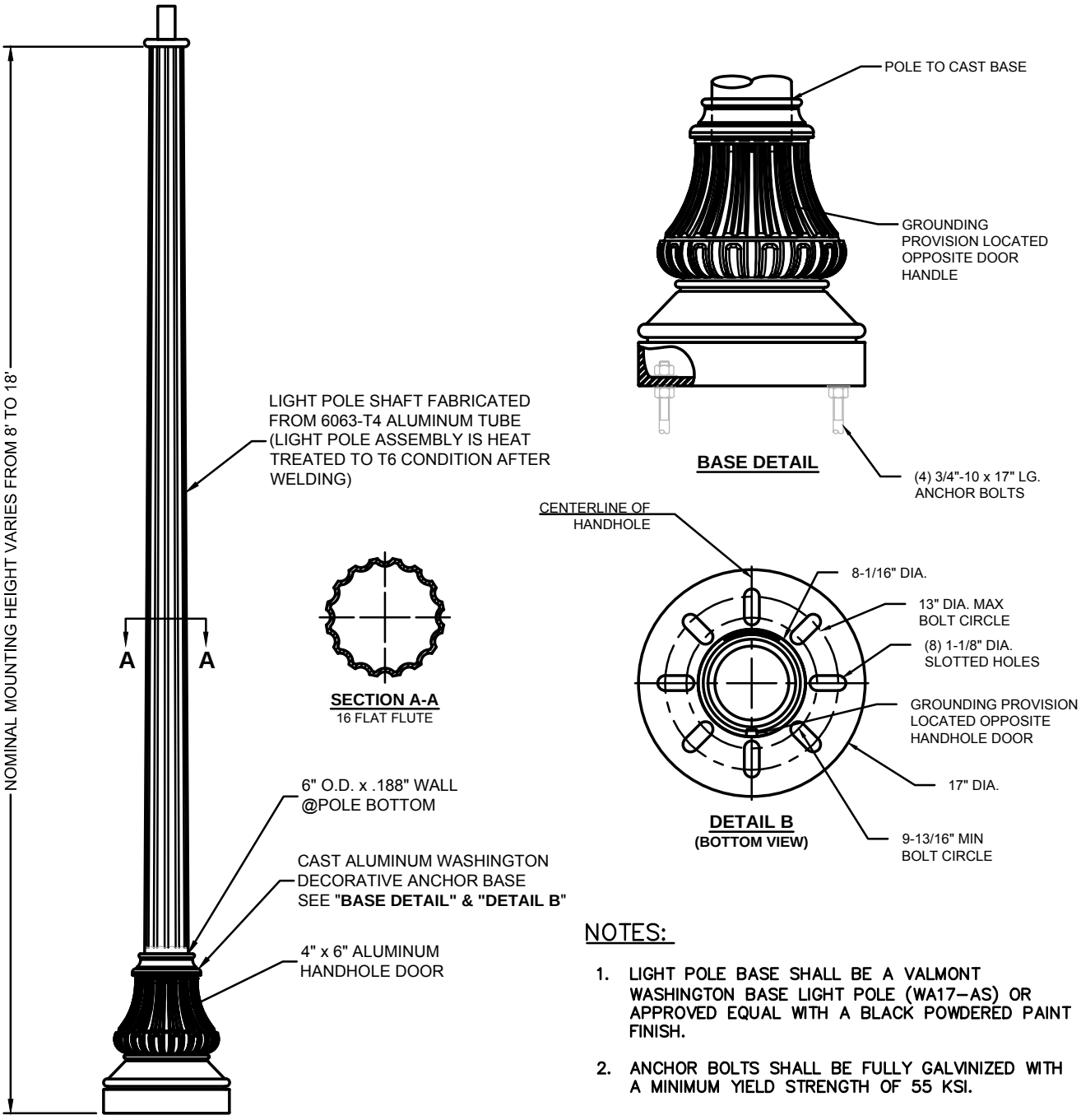
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

HYDRANT RELOCATION

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.09



NOTES:

1. LIGHT POLE BASE SHALL BE A VALMONT WASHINGTON BASE LIGHT POLE (WA17–AS) OR APPROVED EQUAL WITH A BLACK POWDERED PAINT FINISH.
2. ANCHOR BOLTS SHALL BE FULLY GALVINIZED WITH A MINIMUM YIELD STRENGTH OF 55 KSI.

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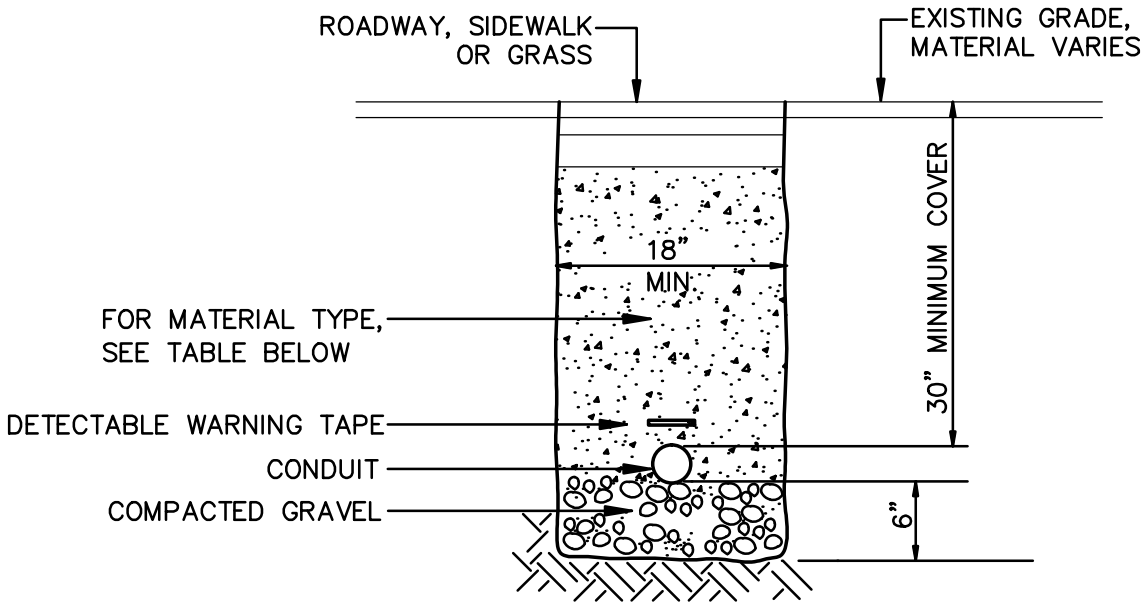
DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

STANDARD ANCHOR BASE LIGHT POLE

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.10



MATERIAL TYPE		
UNDER ROADWAY	UNDER SIDEWALK	UNDER GRASS
CONTROLLED DENSITY FILL (MassDOT SPECIFICATION M4.08.0, TYPE "1E" OR "2E", SEE SPECIAL PROVISIONS)	MassDOT COMPACTED GRAVEL BORROW M1.03.0 (TYPE "B")	MassDOT COMPACTED GRAVEL BORROW M1.03.0 (TYPE "B")

NOTE:
FLOWABLE FILL MIX TRENCH REQUIRED ONLY IN AREAS OF EXISTING ROADWAY PAVEMENT THAT DO NOT REQUIRE FULL DEPTH CONSTRUCTION

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DEDHAM DPW
DESIGN & CONSTRUCTION STANDARDS

TRAFFIC SIGNAL CONDUIT TRENCH

SCALE:	DATE OF ISSUE:
NTS	AUGUST 2015
REVISED:	
DETAIL NUMBER:	MISC.11