

CENTER OF CDS STRUCTURE,

FIBERGLASS SEPARATION

WATER QUALITY STRUCTURE N.T.S.

SECTION A-A

## GENERAL NOTES 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE. 2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH STORMWATER SOLUTIONS REPRESENTATIVE. www.contechstormwater.com 4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN

DATA AND INFORMATION CONTAINED IN THIS DRAWING. 5. STRUCTURE AND CASTINGS SHALL MEET AASHTO HS20 LOAD RATING.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE

INSTALLATION NOTES 1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER 2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES

3. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE. 4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. 5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CDS2020 DESIGN NOTES CDS2020 RATED TREATMENT CAPACITY IS 1.1 CFS, OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 14.0 CFS. IF THE SITE CONDITIONS EXCEED 14.0 CFS, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. THE STANDARD CDS2020 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS. (MODEL SUFFIX) CONFIGURATION DESCRIPTION GRATED INLET ONLY (NO INLET PIPE) GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE) CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION) SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

NOTE: CONTECH TO PROVIDE ANTI-FLOATATION CALCULATIONS SIGINED AND SEALED BY A LICENCE PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE.

## GENERAL NOTES FOR MANHOLES AND CATCH BASINS

CONSTRUCTION MANAGER:

Consigli

PARKING GARAGE ARCHITECT

Scott Simons Architects

SITE/CIVIL ENGINEER:

PARKING GARAGE STRUCTURAL ENGINEER:

I A R R I M A N

84 Middle Street Portland, Maine 04101 Phone 207-773-3000

Fax 207-773-2800

75 York Street

Portland, Maine 04101

Phone 207-772-4656

Fax 207-828-4656

75 York Street

Portland, Maine 04101

Phone 207-879-1838

Fax 207-879-1822

41 Hutchins Drive

Portland, Maine 04102

Phone 800-9426-4262 Fax 207-774-6635

Architects + Engir

Aubura Business Pad 46 Harriman Drive

Auburn, Maine 04210 207.784.5100 tel

207.782.3017 fix

BAYCO LLC.

BAYSIDE

PORTLAND, MAINE

HA Project No.

Key Plan

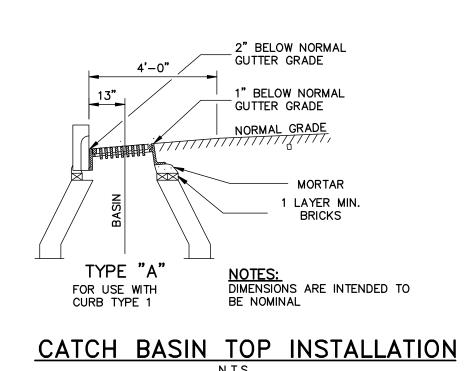
Portland, Maine 04101

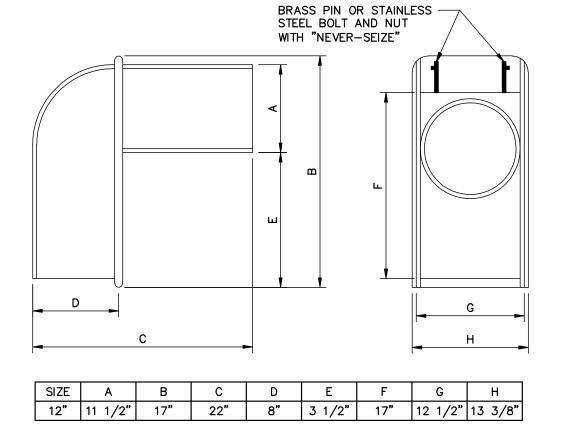
207.775.0460 ftm

- 1. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28
- DAYS, UNLESS OTHERWISE NOTED. 2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-67
- 3. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- 4. ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" THICK. AFTER THE MORTAR HAS SET. THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
- 5. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
- 6. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
- 7. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION, OFFSET, AND STRUCTURE ID PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
- 8. STORM AND SEWER MANHOLES SHALL HAVE SOLID COVERS WITH ONE DRILLED PICK HOLE.
- 9. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

CEMENT MORTAR ON ALL SANITARY SEWER MANHOLES. BRICKS SHALL BE LAID

- 10. WHEN THE FLOW CHANGES DIRECTION IN A MANHOLE, THE CHANNEL ALIGNMENT SHALL FOLLOW A SMOOTH RADIUS. CHANNELS SHALL BE FORMED TO ACCEPT ALL INLET PIPES. 11. THE MANHOLE SHELF AND CHANNEL SHALL BE LINED WITH BRICK SET IN
- FLAT ON THE SHELF AND ON EDGE IN THE CHANNEL. 12. ON STORM DRAIN MANHOLES, THE SHELF AND CHANNEL SHALL BE FORMED BY BRICK SET IN CEMENT MORTAR OR BY FACTORY PRE-CAST CONCRETE. SUCH PRE-CAST CONCRETE SHALL BE EPOXY COATED AND THE SHELF SHALL HAVE A PERMANENT NON-SKID SURFACE.





1. BOLT AND NUT REQUIRED WHERE HOOD WILL NOT OPEN COMPLETELY.

DATA REQUIREMENTS

| PEAK FLOW RATE (CFS) | FEAT | RETURN PERIOD OF PEAK FLOW (YRS) | 2

SCREEN APERTURE (2400 OR 4700) MICRON

NLET PIPE 1 5.5 PVC 12"
NLET PIPE 2 ELEV MATERIAL DIAM

UTLET PIPE 5.3 PVC 12"

WATER QUALITY FLOW RATE (CFS)

PEAK FLOW RATE (CFS)

NOTES/SPECIAL REQUIREMENTS:

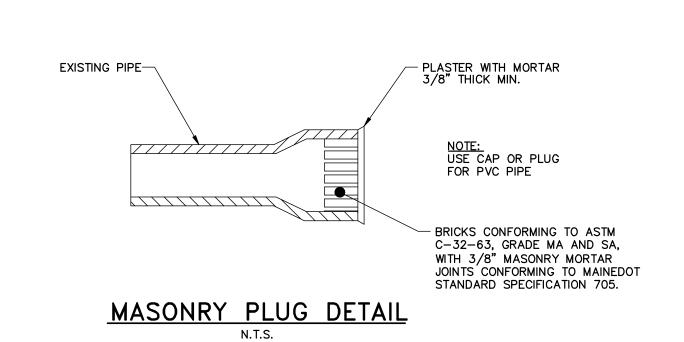
\* PER ENGINEER OF RECORD

RIM ELEVATION

2. FOR OUTLET PIPES GREATER THAN 12" USE "SNOUT" TRAP BY BEST MANAGEMENT PRODUCTS, INC. OR APPROVED EQUAL.

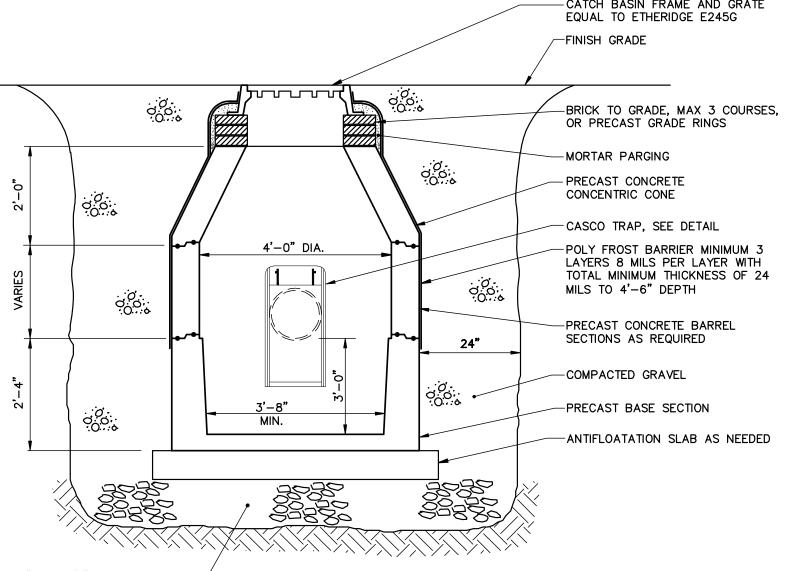
CASCO TRAP DETAIL

N.T.S.

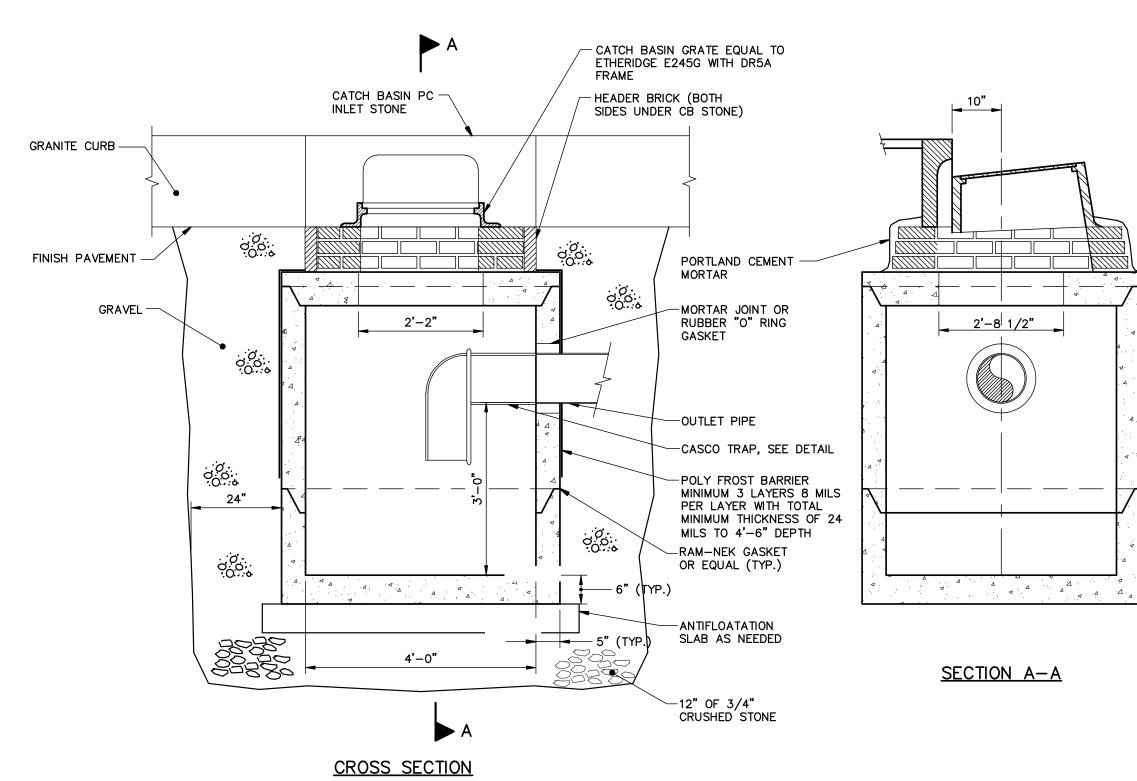


- CATCH BASIN FRAME AND GRATE EQUAL TO ETHERIDGE E245G BRICK TO GRADE, MAX 3 COURSES, OR PRECAST GRADE RINGS -MORTAR PARGING - PRECAST CONCRETE CONCENTRIC CONE — CASCO TRAP, SEE DETAIL -POLY FROST BARRIER MINIMUM 3 LAYERS 8 MILS PER LAYER WITH TOTAL MINIMUM THICKNESS OF 24 MILS TO 4'-6" DEPTH 000 -PRECAST CONCRETE BARREL SECTIONS AS REQUIRED PRECAST BASE SECTION 12" OF 3/4" CRUSHED STONE  $-\!\!\!/$ 

CURBSIDE CATCH BASIN



TYPICAL CATCH BASIN



CIVIL DETAILS Drawn By: **RJDIV** 

JANUARY 7,2009

1-7-09 | 100% SITE ENABLING PLAN

12-19-08 | 90% SITE ENABLING PLAN

PERMIT SUBMITTAL

PERMIT SUBMITTAL

PERMIT SUBMITTAL

REVISE BLDG LAYOUT & ADD BUS DROP

PERMIT SUBMITTAL

Description

11-21-08

11-13-08

10-24-08

09-26-08

Date

Drawing Status