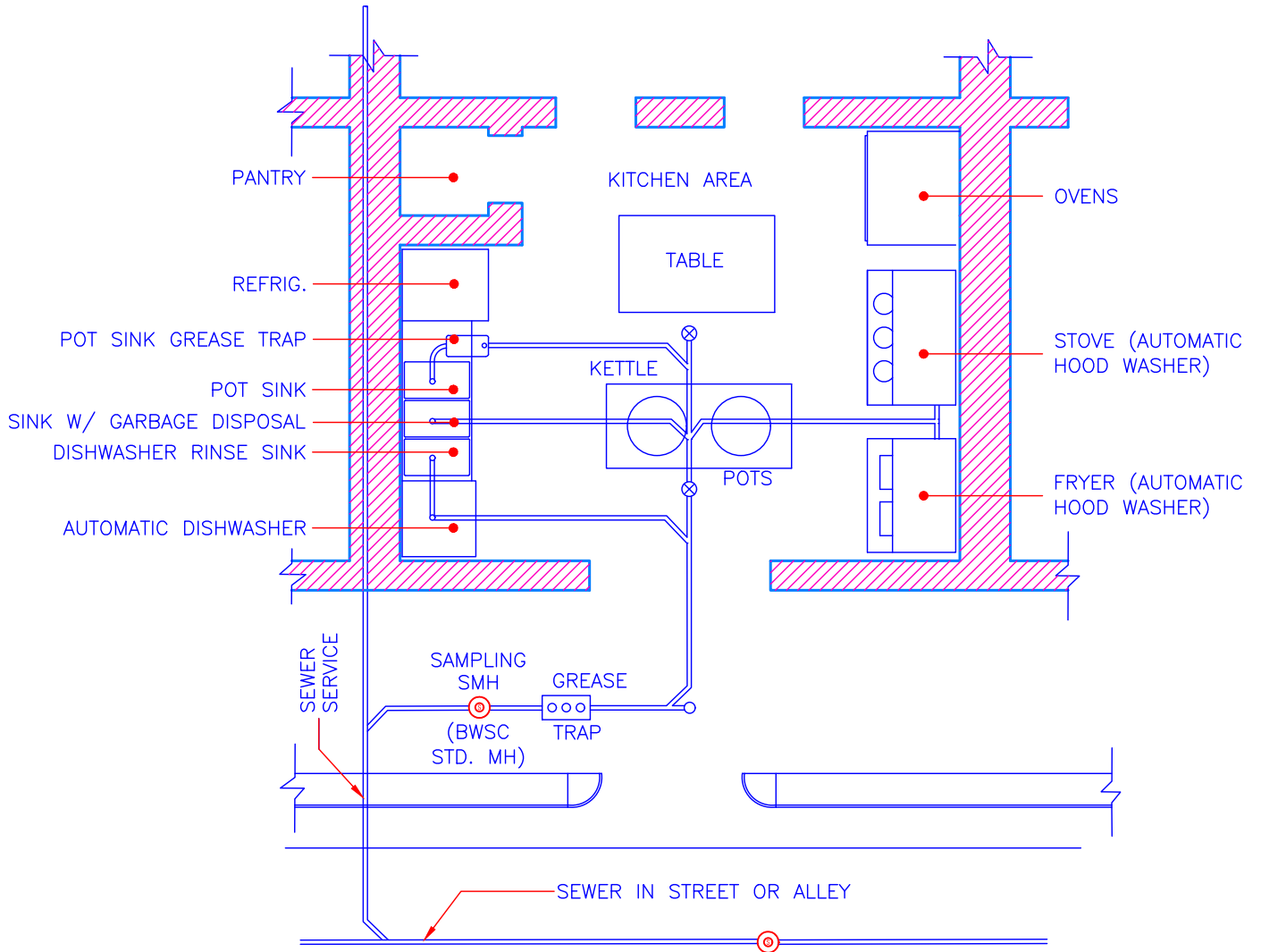


SEWER SERVICE  
FROM REST OF RESTAURANT



## TYPICAL GREASE TRAP CONNECTIONS

Location:Filename: V:\eng\ACAD\_STD\Technical Details\G - Grease Trap Details\G-02 - Grease Trap Details.dwg  
Plotted on: Wednesday, January 16, 2013 - 9:49 AM by Donohoe, William



**Boston Water and  
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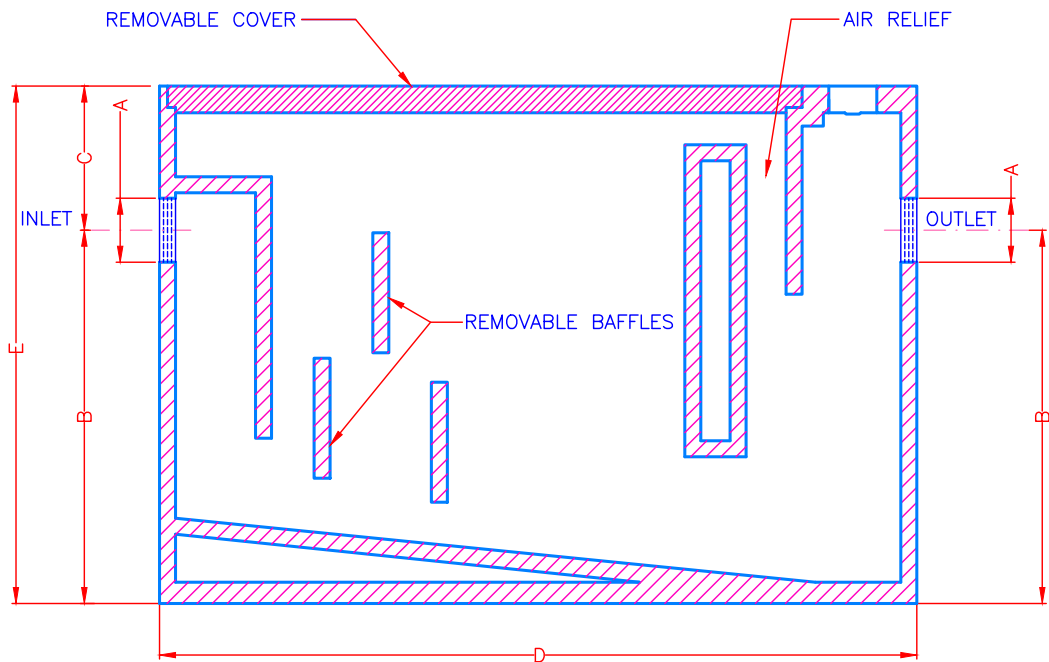
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### TYPICAL GREASE TRAP CONNECTIONS

Scale: Not To Scale

DATE:  
Sept. 30, 2012

DETAIL NO.  
**G-02a**



### POT SINK GREASE TRAP SIZING CHART

FLOW RATE IN GPM	GREASE CAPACITY IN POUNDS	INLET AND OUTLET SIZE IN INCHES A	TYPICAL DIMENSIONS IN INCHES				
			B	C	D	E	F
4	8	2	7 <sup>3</sup> / <sub>4</sub> "	3 <sup>1</sup> / <sub>4</sub> "	16 <sup>3</sup> / <sub>4</sub> "	11"	10"
7	14	2	8 <sup>1</sup> / <sub>2</sub> "	3 <sup>1</sup> / <sub>2</sub> "	19"	12"	10 <sup>3</sup> / <sub>4</sub> "
10	20	2	9 <sup>1</sup> / <sub>2</sub> "	3 <sup>3</sup> / <sub>4</sub> "	21 <sup>1</sup> / <sub>4</sub> "	13 <sup>3</sup> / <sub>4</sub> "	13"
15	30	2	12"	3 <sup>1</sup> / <sub>2</sub> "	25"	15 <sup>1</sup> / <sub>2</sub> "	14"
20	40	3	13"	4"	28 <sup>1</sup> / <sub>2</sub> "	17"	15 <sup>3</sup> / <sub>4</sub> "
25	50	3	15 <sup>1</sup> / <sub>4</sub> "	4 <sup>1</sup> / <sub>2</sub> "	30"	19 <sup>3</sup> / <sub>4</sub> "	16 <sup>3</sup> / <sub>4</sub> "
35	70	3	16"	5"	32 <sup>1</sup> / <sub>2</sub> "	21"	18 <sup>1</sup> / <sub>4</sub> "
50	100	3	17 <sup>1</sup> / <sub>2</sub> "	6 <sup>3</sup> / <sub>4</sub> "	35 <sup>1</sup> / <sub>2</sub> "	24 <sup>1</sup> / <sub>4</sub> "	20 <sup>3</sup> / <sub>4</sub> "



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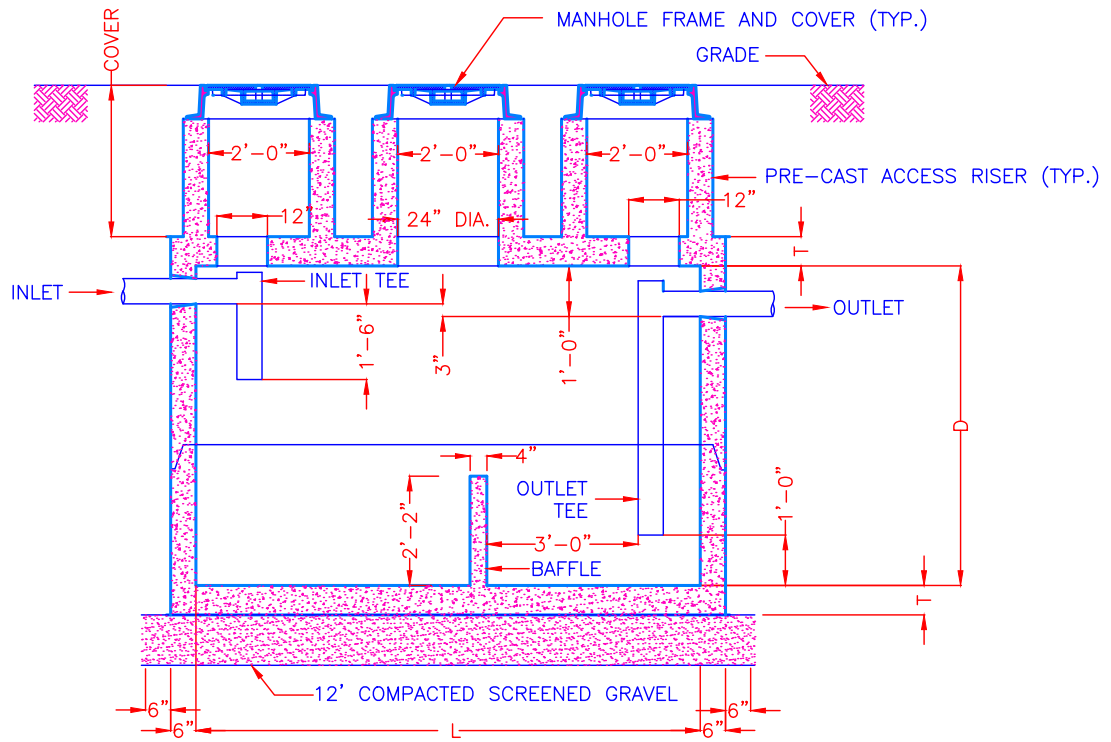
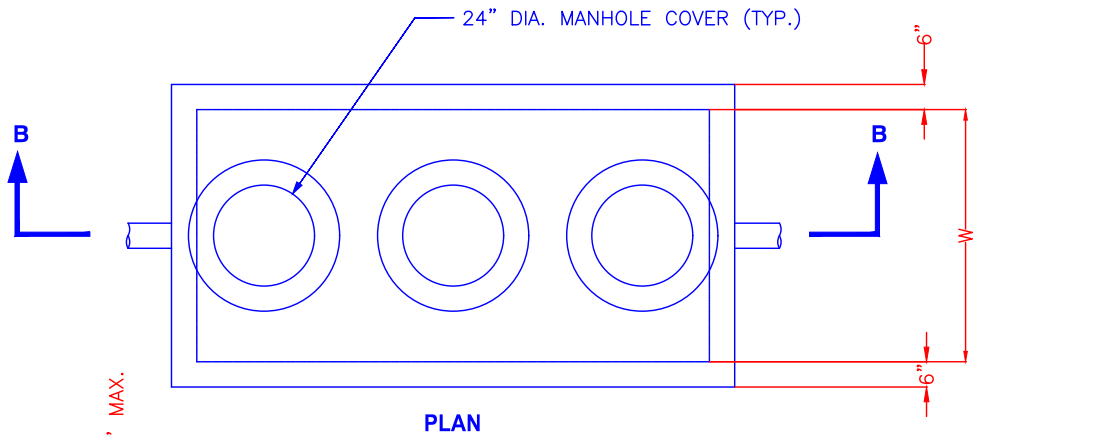
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### POT SINK GREASE TRAP

Scale: Not To Scale

DATE:  
Sept. 30, 2012

DETAIL NO.  
**G-02b**



**NOTE:**

COVER IN EXCESS OF 3'-0" WILL REQUIRE SUBMITTAL STAMPED, SIGNED, AND DATED BY A PROFESSIONAL ENGINEER REGISTERED IN MASSACHUSETTS WITH DESIGN THAT PREVENTS BUOYANCY FORCES FROM PUSHING EMPTY GREASE TRAP OUT OF THE GROUND.

**IN-LINE GREASE TRAP SIZING CHART**

NUMBER OF MEALS SERVED PER DAY	REQUIRED CAPACITY IN GALLONS	DIMENSIONS			THICKNESS OF TOP AND BOTTOM SLABS T
		D	L	W	
<500	1000	5'-0"	6'-0"	6'-0"	6"
500-1000	2000	6'-4"	10'-0"	5'-0"	7"



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**IN-LINE GREASE TRAP**

Scale: Not To Scale

DATE:  
Sept. 30, 2012

DETAIL NO.  
**G-02c**

## NOTES

1. THIS DRAWING TO BE USED IN CONJUNCTION WITH BWSC "GUIDELINES FOR DEVELOPERS FOR THE INSTALLATION, OPERATION AND MAINTENANCE OF GREASE TRAPS".
2. ALL PRECAST CONCRETE STRUCTURES TO MEET THE FOLLOWING REQUIREMENTS:
  - A. CONCRETE STRENGTH  $F'_c$  5000LBS PER SQ. IN. AT 28 DAYS WITH DENSITY 150LBS PER CU. FT.
  - B. CEMENT EITHER PORTLAND TYPE I OR II PER ASTM C150.
  - C. ADMIXTURES, AIR ENTRAINMENT AND PLASTICIZERS PER ASTM C233.
  - D. REINFORCEMENT, PER ASTM A615; GRADE 40 OR 60 REQUIRED.
  - E. CONSTRUCTION JOINTS SEALED WITH ASPHALT CEMENT
  - F. DESIGN LOADING AASHTO HS20-44
  - G. TEES SUPPLIED BY CONTRACTOR AND SHALL MEET REQUIREMENTS OF MASSACHUSETTS PLUMBING CODE 248 CMR 2.09
3. ALL CAST-IN-PLACE CONCRETE TO HAVE A MINIMUM 28 DAY STRENGTH OF 3000LBS. PER SQ. IN. USING 3/4" MAXIMUM SIZE AGGREGATE.
4. IF CAST-IN-PLACE STRUCTURE SUBJECT TO TRAFFIC LOADS, THEN DESIGN LIVE LOAD TO CONFORM TO AASHTO HS20-44 (UNLESS SPECIAL CONDITIONS APPLY).
5. FOR DETAILS OF MANHOLE BASES AND RISERS SEE STANDARD BWSC DETAILS SECTION B.
6. FOR DETAILS OF MANHOLE FRAMES AND COVERS SEE STANDARD BWSC DETAILS SECTION F.
7. FOR RESTAURANTS SERVING MORE THAN 1000 MEALS PER DAY, DEVELOPER WILL BE REQUIRED TO HAVE GREASE TRAPS DESIGNED BY A MASSACHUSETTS PROFESSIONAL ENGINEER AND HAVE PLAN OF DESIGN SUBMITTED, SIGNED, STAMPED, AND DATED BY THE DESIGNER FOR REVIEW.

## FORMULA FOR DETERMINING FLOW RATE

- STEP 1 DETERMINE CU. IN. CAPACITY OF FIXTURE  
EXAMPLE: A SINK 48" LONG BY 24" WIDE BY 12" DEEP IS 48"x24"x12"  
= 13,824 CU. IN.
- STEP 2 DETERMINE CAPACITY IN GALLONS (1 GALLON = 231 CU. IN.)  
EXAMPLE: 13,824 CU. IN. x 1 GALLON/231 CU. IN. = 59.8 GALLONS
- STEP 3 DETERMINE FLOW RATE AND DRAINAGE PERIOD  
IF ACTUAL DRAINAGE PERIOD IS LESS THAN 1 MIN., USE 1 MIN. FOR DRAINAGE PERIOD.  
IF ACTUAL DRAINAGE PERIOD GREATER THAN 2 MIN., USE 2 MIN. FOR DRAINAGE PERIOD.  
IF ACTUAL DRAINAGE PERIOD BETWEEN 1 MIN. AND 2 MIN., USE ACTUAL DRAINAGE PERIOD.  
ACTUAL DRAINAGE LOAD USED IN CALCULATION IS 75% OF CAPACITY IN GALLONS.  
EXAMPLE: FLOW RATE = 0.75 x 59.8 GALLONS/1.5 MINUTES = 29.9 GPM



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### GREASE TRAPS NOTES

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DATE:  
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DETAIL NO.  
**G-02d**