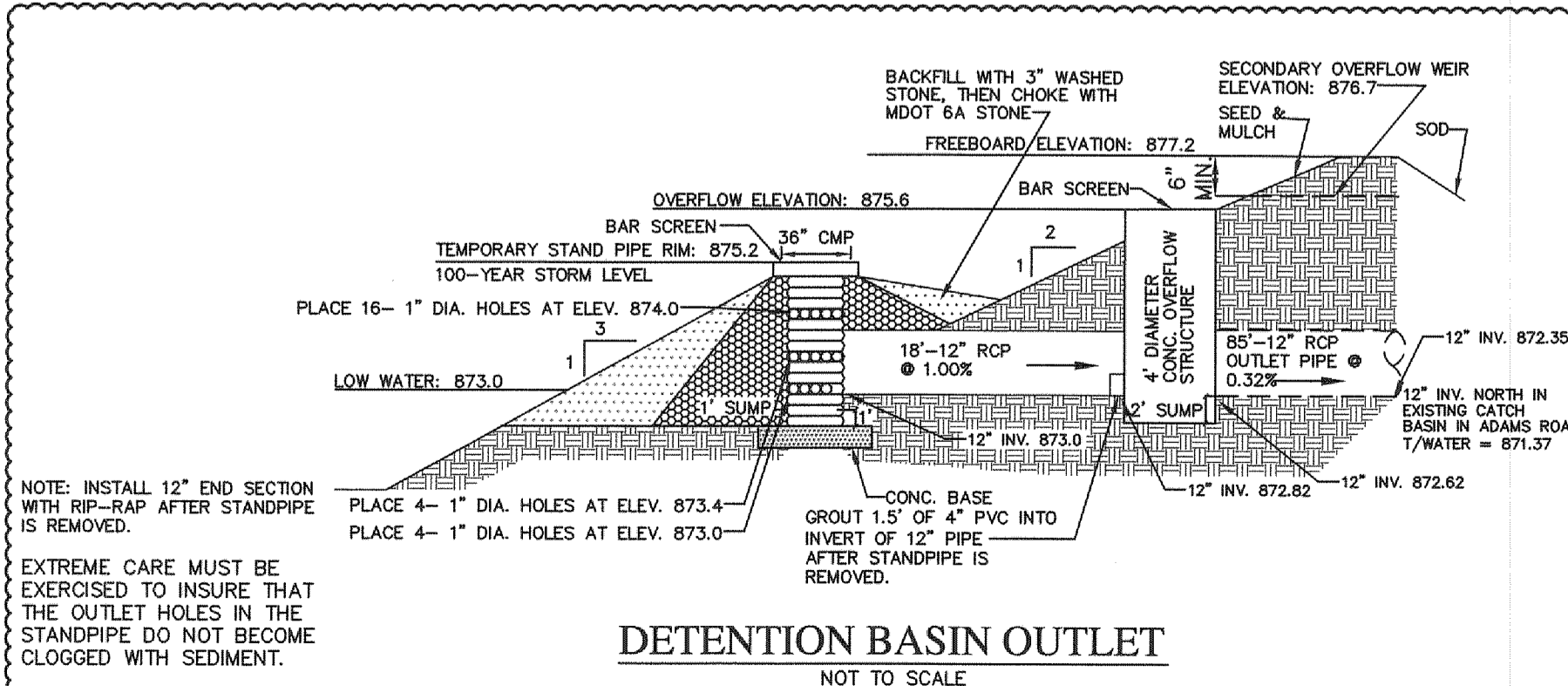
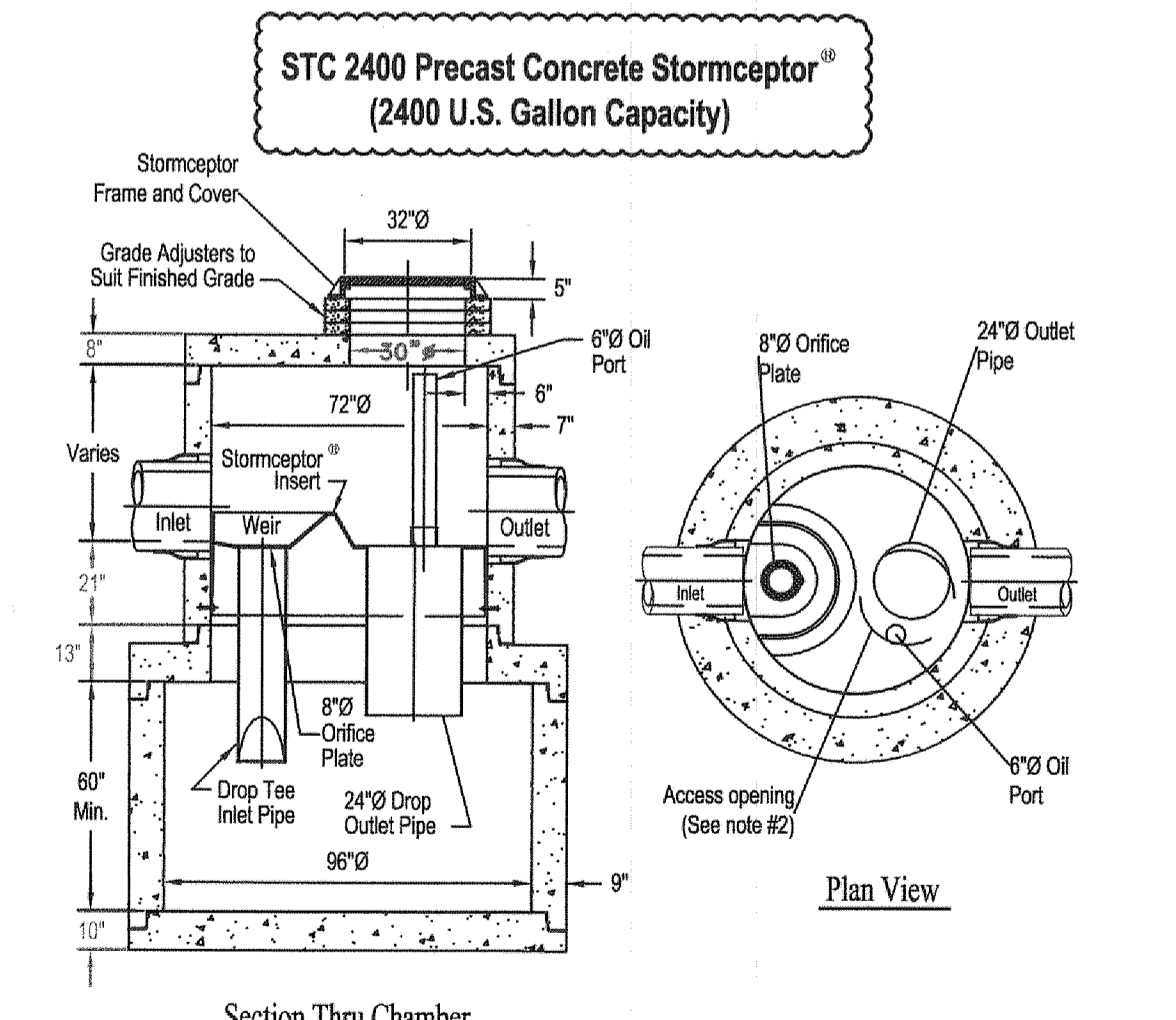


OVERFLOW STRUCTURE DETAIL
NOT TO SCALE



DETENTION BASIN OUTLET
NOT TO SCALE

Rinker Concrete Pipe Division



- Notes:
1. The Use of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
 2. The Cover Should be Positioned Over The Outlet Drop Pipe and The Oil Port.
 3. The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

Rinker 031

Preliminary Detention Sizing for Tim Horton's and Future Building

ENTIRE PARCEL

Size for 100-year storm using OCDC equation:

$A = 3.39$ acres (contributing)
 $Q_A = 0.20$ cfs/acre = $0.2 \times 3.39 = 0.678$ cfs

C:	Building/Pavement	1.33 acre @ 0.95	=	1.26
	Open Water	0.26 acre @ 1.00	=	0.26
	Open space/Lawn	1.80 acre @ 0.30	=	0.54
		3.39 acre	=	2.06

$C = 2.06(3.39) = 0.61$ Use $C = 0.65$

$Q_0 = Q_A / (A \times C) = 0.678 / (3.39 \times 0.65) = 0.31$ cfs/ac-imp.

$T_{100} = -25 + \sqrt{10312.5 / Q_0} = 157.4$ minutes

$V_{S100} = 16500 T_{100} (25 + T_{100}) - 40 (Q_0) (T_{100}) = 12,286.7$ cf-ac-imp.

$V_{T100} = V_{S100} \times A \times C = 27,074$ cf required

add 10% for construction = 29,781 cf

FIRST FLUSH VOLUME:

$V_{ff} = 1815 \times A \times C = 3,999$ cf required

(Note: in lieu of a forebay, a mechanical grit separation chamber shall be installed upstream of the basin)

BANKFULL VOLUME:

$V_{bf} = 5160 \times A \times C = 11,370$ cf required

VOLUME PROVIDED:

Elev.	Area (sf)	Avg. Area (sf)	Depth (ft)	Volume (cf)	Cum. Vol. (cf)
876	19963	18371	1.0	18371	46126
875	16779	15302	1.0	15302	27755
874	13826	12453	1.0	12453	12453
873	11080				

By interpolation, the 100-year storage elevation is 875.2 (V = 31,429 cf).

By interpolation, the First flush storage elevation is 873.4 (V = 4,981 cf).

By interpolation, the Bankfull storage elevation is 874.0 (V = 12,453 cf).

SIZE OUTLET:

FIRST FLUSH:

$Q_{ff} = V_{ff} / T_{24} = 3999 / (24 \times 3600) = 0.046$ cfs

$H_{ave} = 2/3 (873.4 - 873.0) = 0.27$

$A = Q_{ff} / 0.62 \sqrt{2gH_{ave}} = 0.046 / [0.62 \sqrt{64.4 (0.27)}] = 0.01779$ sf

A 1" dia. hole has an area of 0.0055 sf
 No. of 1" holes = $0.01779 / 0.0055 = 3.2$
 Use 4 - 1" dia. holes in stand pipe at elevation 873.0

BANKFULL:

$Q_{bf} = V_{bf} / T_{24} = 11370 / (24 \times 3600) = 0.0658$ cfs

$H_{ave} = 2/3 (874.0 - 873.4) = 0.40$

$A = Q_{bf} / 0.62 \sqrt{2gH_{ave}} = 0.0658 / [0.62 \sqrt{64.4 (0.40)}] = 0.0209$ sf

A 1" dia. hole has an area of 0.0055 sf
 No. of 1" holes = $0.0209 / 0.0055 = 3.8$
 Use 4 - 1" dia. holes in stand pipe at elevation 873.4

100-YEAR:

$Q_{100} = 0.678$ cfs (maximum allowable)

Area of orifice to pass 0.678 cfs:

$H = 875.2 - 873.0 = 2.2'$

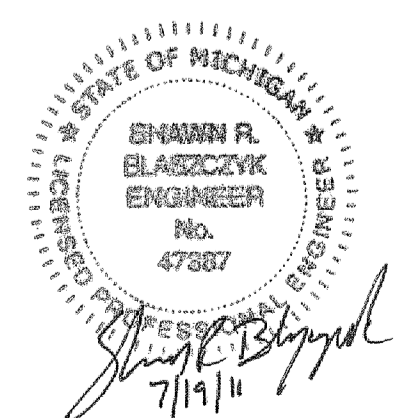
$A = Q_{100} / 0.62 \sqrt{2gH} = 0.678 / [0.62 \sqrt{64.4 (2.2)}] = 0.0919$ sf

A 1" dia. hole has an area of 0.0055 sf
 No. of 1" holes = $0.0919 / 0.0055 = 16.7$
 Use 16 - 1" dia. holes in stand pipe at elevation 874.0

SIZE PERMANENT OUTLET RESTRICTOR:

$A = 0.0919$ sf, this equates to a 4.10" dia. orifice

Use 1.5" of 4" PVC grouted into the downstream invert of a 12" outlet pipe.



NOT FOR CONSTRUCTION
CITY FILE NO. 11-002

REVISIONS	DATE	BY	REVISIONS	DATE	BY	REVISIONS	DATE	BY	REVISIONS	DATE	BY
PER CITY REVIEW											

ZEIMET WOZNAK & ASSOCIATES
Civil Engineers & Land Surveyors
5800 GRAND RIVER AVE., SUITE 100
NEW HUDSON, MICHIGAN 48165
P: (248) 437-5099 F: (248) 437-5222 www.zeimetwoznak.com

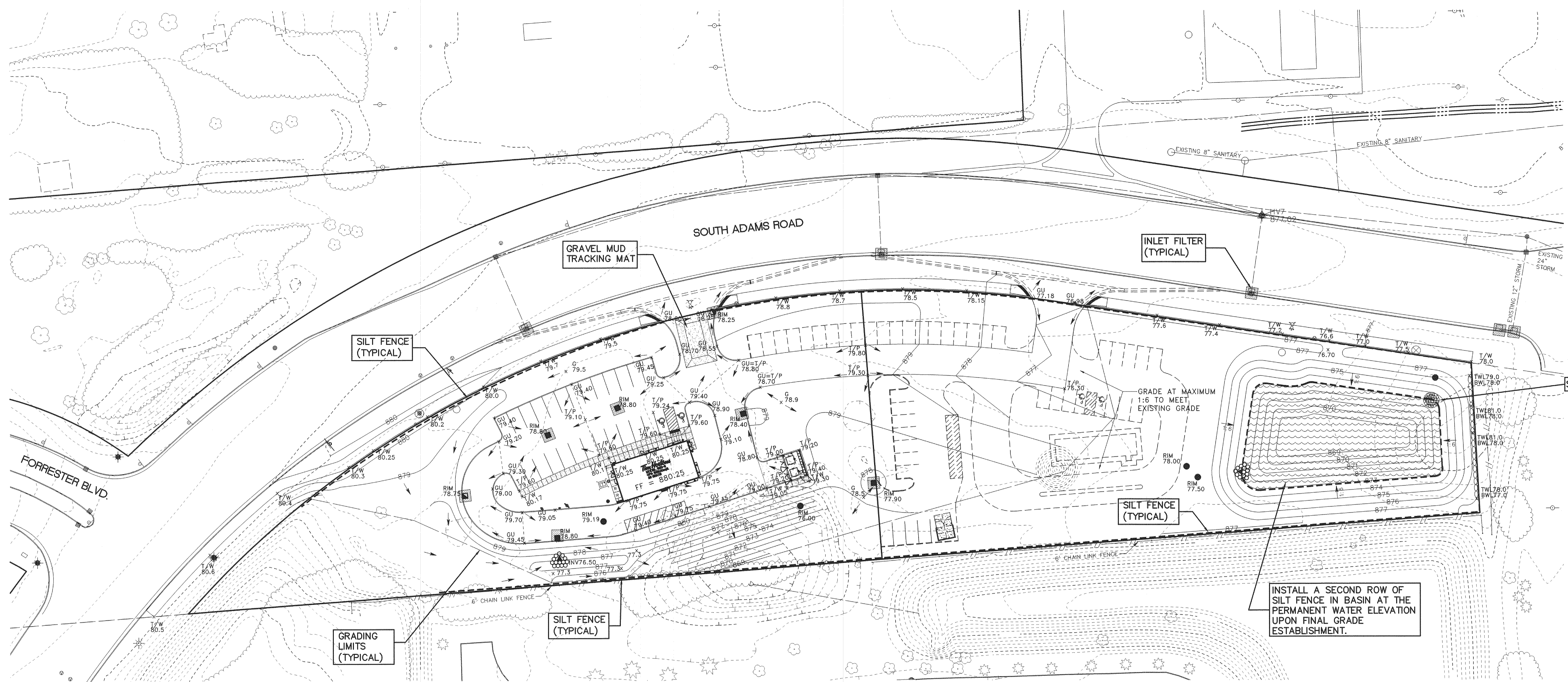
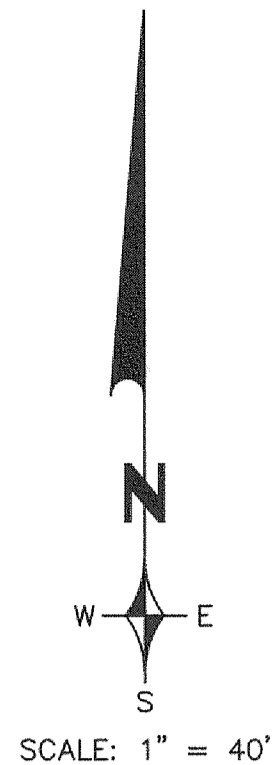
MISS DIG SYSTEM, INC.
1-800-482-7171
THREE FULL WORKING DAYS BEFORE YOU DIG, CALL THE MISS DIG SYSTEM

PROJECT SPONSOR:
TIM HORTON'S USA, INC.
565 EAST GRAND RIVER, SUITE 101
BRIGHTON, MI 48116
(810) 844-2747

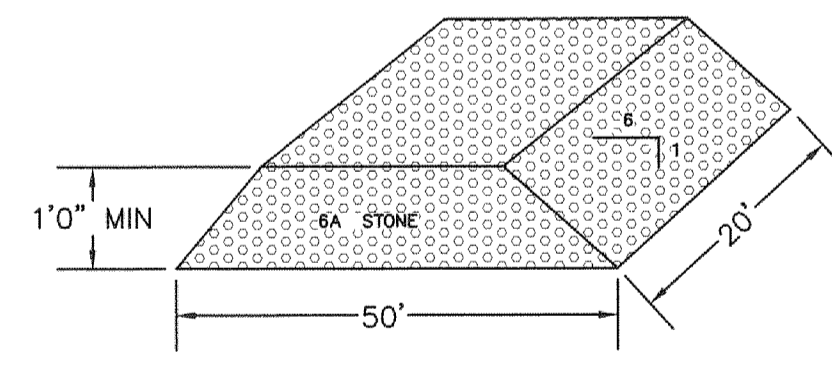
STORMWATER MANAGEMENT PLAN
TIM HORTON'S
ROCHESTER HILLS, MICHIGAN

DATE	4/25/11	SCALE	HOR: 1" = 40'
DESIGNED BY	SRB	JOB NO.	11108
DRAWN BY	SRB	SHEET	SP-4

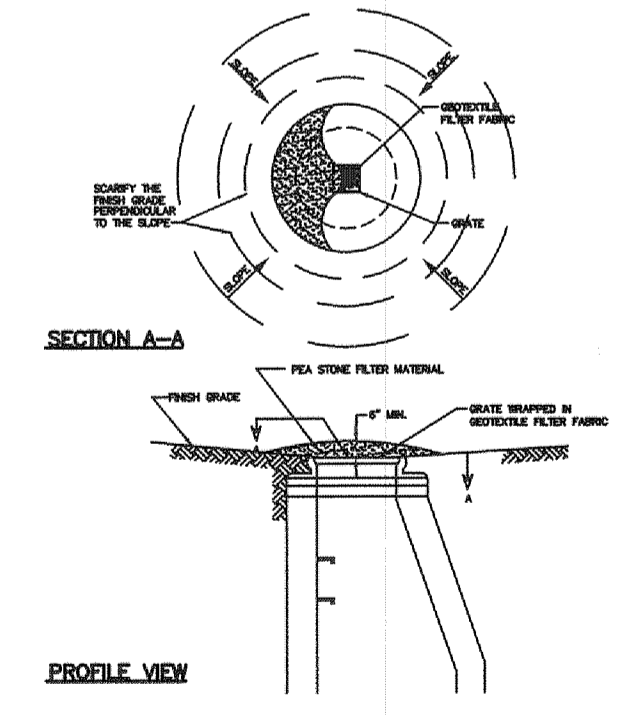
© COPYRIGHT 2007



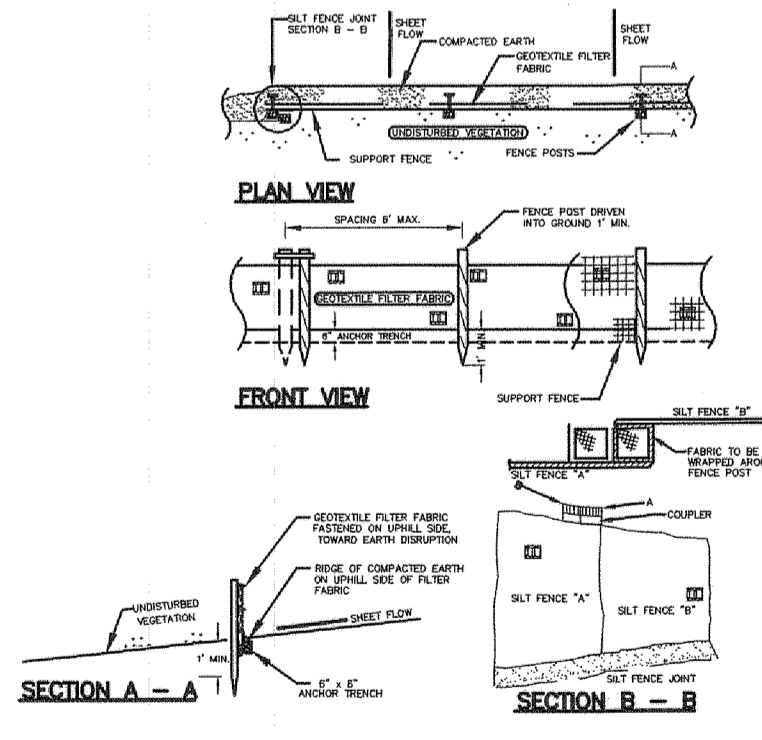
GRAVEL MUD TRACKING MAT DETAIL



LOW POINT INLET FILTER



SILT FENCE



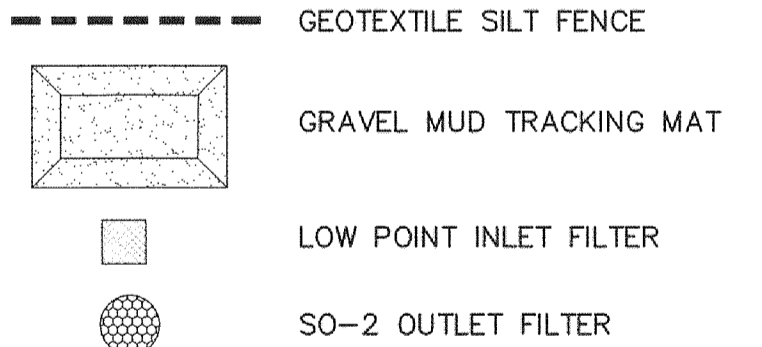
CONSTRUCTION AND SOIL EROSION WORK SCHEDULE:

1. PLACE SILT FENCE AROUND PROPOSED CONSTRUCTION AREA AS SHOWN ON THIS PLAN.
2. INSTALL GRAVEL MUD TRACKING MAT NEAR ENTRANCE WHERE INDICATED.
3. MASS GRADE BUILDING PAD AND PARKING AREA.
4. INSTALL SANITARY, STORM AND WATERMAIN COMPLETE. INSTALL LOW POINT INLET FILTERS ON ALL DRAINAGE STRUCTURES AND RIP-RAP AT ALL END SECTIONS.
5. INSTALL PAVEMENT. REPAIR OR REPLACE LOW POINT INLET FILTERS AS REQUIRED. SEED & MULCH ALL AREAS DISTURBED BY CONSTRUCTION.
6. UPON STABILIZATION OF SITE. REMOVE ACCUMULATED SEDIMENT FROM BASIN AND TEMPORARY STANDPIPE. SEED AND MULCH ANY DISTURBED AREA.
7. IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO INSURE THAT ALL EROSION CONTROL DEVICES ARE MAINTAINED AS REQUIRED THROUGHOUT THE CONSTRUCTION AND THAT THE STREETS ARE KEPT FREE OF MUD AND CONSTRUCTION DEBRIS. THE ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE SEDIMENT BASINS PERIODICALLY THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

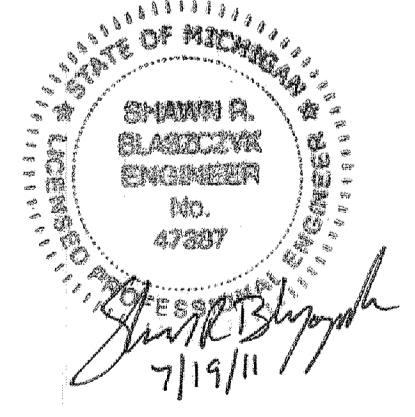
CITY OF ROCHESTER HILLS SESC NOTES:

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE OAKLAND COUNTY DRAIN COMMISSIONER.
2. ALL TEMPORARY AND PERMANENT (POST CONSTRUCTION) SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE CITY OF ROCHESTER HILLS CURRENT MS4 PERMIT. ANY CONFLICT BETWEEN THESE STANDARDS AND THE MS4 PERMIT, THE PERMIT'S CONDITIONS SHALL TAKE PRECEDENCE.
3. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
4. ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS.
5. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED. THIS WOULD INCLUDE TEMPORARY SEDIMENTATION PONDING AND TEMPORARY SO2 FILTERS.
6. STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
7. SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN THE EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.

EROSION CONTROL LEGEND:



NOTE: THIS PLAN ILLUSTRATES THE MINIMUM EROSION CONTROLS NEEDED TO PREVENT SILTS FROM LEAVING THE SITE AND IS SUBJECT TO CHANGE AS CONDITIONS IN THE FIELD WARRANT.



REVISIONS	DATE	BY	REVISIONS	DATE	BY	REVISIONS	DATE	BY	REVISIONS	DATE	BY
PER CITY REVIEW	7/19/11	SRB									

ZEMET WOZNAK & ASSOCIATES
Civil Engineers & Land Surveyors
5580 GRAND RIVER AVE., SUITE 100
NEW HUDSON, MICHIGAN 48165
P: (248) 437-5099 F: (248) 437-5222 www.zemetwozniak.com

MISS DIG SYSTEM, INC.
1-800-482-7171
THREE FULL WORKING DAYS BEFORE YOU DIG, CALL THE MISS DIG SYSTEM

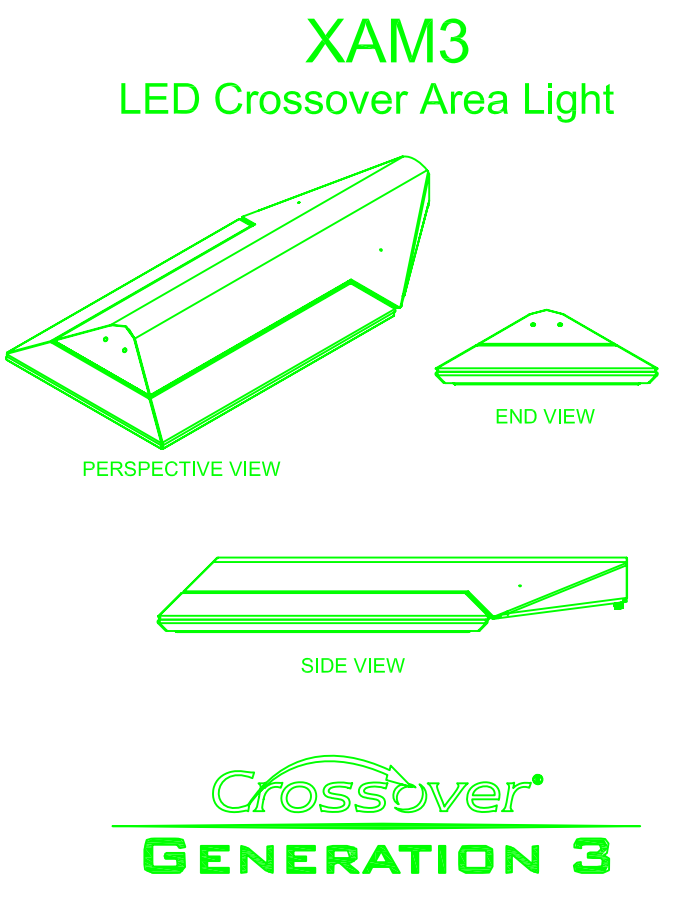
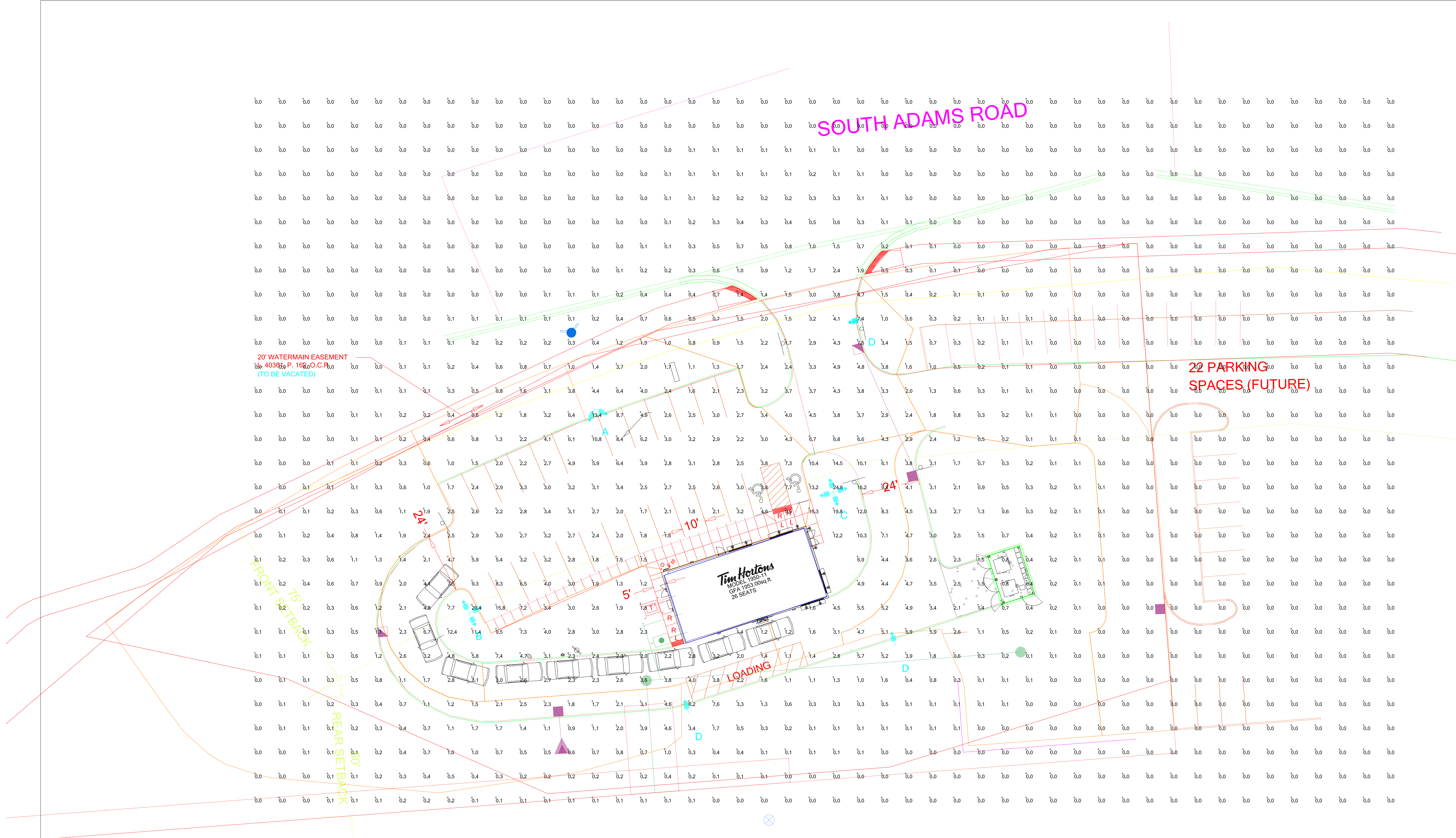
PROJECT SPONSOR:
TIM HORTON'S USA, INC.
565 EAST GRAND RIVER, SUITE 101
BRIGHTON, MI 48116 (810) 844-2747

SOIL EROSION CONTROL PLAN
TIM HORTON'S
ROCHESTER HILLS, MICHIGAN

DATE: 4/25/11 SCALE: HOR: 1" = 40' VER: 1" = N/A
DESIGNED BY: SRB JOB NO.: 11108
DRAWN BY: SRB SHEET: SP-5

NOT FOR CONSTRUCTION
CITY FILE NO. 11-002

H:\Projects\11108\cwp\11108_005\plan2.dwg, SESC SP, 7/19/2011 10:17:31 AM, SBlaszczak



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS	Illuminance	Fc	0.97	24.6	0.0	N.A.	N.A.
PARKING SUMMARY	Illuminance	Fc	4.42	24.6	1.1	4.02	22.36

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	1	B	3 @ 90 DEGREES	XAM3-FT-LED-119-450-CW-UE T90 ON 20' POLE	1.000	N.A.	37029	552
	1	A	2 @ 90 DEGREES	XAM3-FT-LED-119-450-CW-UE D90 ON 20' POLE	1.000	N.A.	24686	368
	1	C	4 @ 90 DEGREES	XAM3-FT-LED-119-450-CW-UE Q90 ON 20' POLE	1.000	N.A.	49372	736
	3	D	SINGLE	XAM3-FT-LED-119-450-CW-UE SINGLE ON 20' POLE	1.000	N.A.	12343	184

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

Total Project Watts
Total Watts = 2208

KITCHEN EQUIPMENT SCHEDULE

NO.	SUPPL'D	INSL'D	DESCRIPTION	QTY.	MANUFACTURER	MODEL	NOTES	NO.	SUPPL'D	INSL'D	DESCRIPTION	QTY.	MANUFACTURER	MODEL	NOTES
1.1	G.C.	G.C.	MIRROR	1	BOBRICK		24" horiz. x 42" vert.	69.3	T.D.	G.C.	SUGAR DISPENSER - ELECTRIC	2	SURE SHOT	AC6E	GC to provide water shut-off at backbar for each
2	T.D.	G.C.	TOILET PAPER HOLDER	1			Surface Mounted (Consult with Tim Hortons field engineer)	70	T.D.	G.C.	WALK-IN FREEZER	1	ICS	PDT 819	
3.3	G.C.	G.C.	ELECTRIC HAND DRYER	1	SEE NOTES	COMAC ONE TDL	Architectural School Products	71.14	T.D.	G.C.	WORK TABLE S/S	1	S & G		(36" Long)
4A	G.C.	G.C.	42" GRAB BAR	1	BOBRICK	B-6806x42	Supplied by finished carpentry section	72.2	T.D.	G.C.	EXHAUSTHOOD (OVEN #55.4)	1	AEROLATOR		See Mechanical & Electrical drawings
4B	G.C.	G.C.	36" GRAB BAR	1	BOBRICK	B-6806x36	Supplied by finished carpentry section	72.3	T.D.	G.C.	EXHAUST HOOD (BAGEL TOASTER)	1	AEROLATOR		See Mechanical & Electrical drawings
5	T.D.	G.C.	SOAP DISPENSER - HAND SINK AREA	3				72.4	T.D.	G.C.	EXHAUST HOOD (SOUP WARMERS)	1	AEROLATOR		See Mechanical & Electrical drawings
5.1	T.D.	G.C.	SOAP DISPENSER - WALL MOUNTED	2	BOBRICK	B-2111	Liquid Soap Surface mounted	73.1	T.D.	G.C.	HAND SINKS - COUNTER MOUNTED	3	POLAR	1734	
6	T.D.	T.D.	RECEIVER (MIZUK)	1	PANASONIC	SAT60K	On shelf - electrician to supply & connect speakers	73.2	T.D.	G.C.	HAND SINKS - WALL MOUNTED	1	AMTEKO	DH17	
8.2	T.D.	T.D.	BAG-IN-BOX W/ CARBONATOR	1	COKE		43"	74	T.D.	G.C.	WALK-IN COOLER	1	ICS	PDT 819	
16.3	T.D.	T.D.	IN-STORE CAMERA	5	PANASONIC	WV-BP140	Location to suit Tim Hortons' field engineer	77.1	T.D.	G.C.	SOUP WARMERS (BUILT-IN) STND.	1	WELLS / WYOTT	MOD-200TD	Plumbing contractor to provide separate ball valve drain for each soup well.
20.12	T.D.	G.C.	3 COMPARTMENT SINK	1	S & G		(72" Long)	81.3	T.D.	G.C.	UNDERCOUNTER REFRIGERATOR	2	BEVERAGE AIR	UCR27	
22.1	G.C.	G.C.	FIRE EXTINGUISHER WITH RECESSED CABINET	1	JL INDUSTRIES	#1816F10	AMEREX #B402 (5LB 340BC)	82	T.D.	G.C.	DEPOSIT BOX SAFE	3	PERMAVAULT	PRO-500	One at P.U.W. one at front register.
22.2	G.C.	G.C.	FIRE EXTINGUISHER WALL SURFACE MTD.	1	AMEREX	#B260	(6 LITRE CLASS K) w/ #810 HEAVY DUTY WALL BRACKET	83.2	T.D.	G.C.	VEGETABLE SINK	1	S&G		
24.2	T.D.	T.D.	POWER WHISK MIXER	1F	DYNAMIC	FT97	OPTIONAL (TYPICAL)	85	T.D.	T.D.	SECURITY SYSTEM MONITOR	1	ADT		G.C. to provide power.
25	T.D.	T.D.	REGULAR KEEPER	1	ASTRON	RA-70 AR15 M15		86.1	G.C.	G.C.	EMPLOYEE LOCKER WITH HANGING STORAGE	1	HADRIAN		
26.8	S.F.C.	G.C.	ALWAYS FRESH FINISHING TABLE	1	S & G			87	T.D.	G.C.	CAPPUCCINO ICER MACHINE	1	CRATHCO	5311	
27.1	T.D.	T.D.	DRIVE-THRU MONITOR (WALL MOUNTED)	1	PANASONIC		C/W Monitor Bracket #VMB-9 by CBM Metal	87.5	T.D.	G.C.	ICE CAPPUCCINO	1	TAYLOR	M390	
27.3	T.D.	T.D.	SANDWICH MONITOR (WALL MOUNTED)	1, 1F	PANASONIC			88	G.C.	G.C.	SHELVING ABOVE 3-COMPARTMENT SINK	1	CARI-ALL		
28	T.D.	G.C.	HOT WATER MACHINE	1	BUNN - O-MATIC	HW2		90	T.D.	T.D.	WINDOW BLINDS	5			G.C. to verify quantity and locations for blinds w/ owner
29.1	T.D.	G.C.	PAPER TOWEL DISPENSER ROLL	3	FROST	126		91.1	T.D.	T.D.	CASH LOCK UP/TELEPHONE STAND	1	S & G		
29.2	T.D.	G.C.	PAPER TOWEL DISPENSER	1	FROST	101		92	T.D.	T.D.	DRIVE-THRU TIMER	1	HME	SYSTEM 30	
31	T.D.	T.D.	WIRELESS BASE STATION	1	HME/3M/PANASONIC			92.1	T.D.	T.D.	DRIVE-THRU LANE-TIMER JOURNAL PRINTER	1			
32	T.D.	T.D.	BATTERY CHARGER	1	HME/3M/PANASONIC			93	T.D.	S.F.C.	CAMP PICTURE FRAME	1			
33	T.D.	T.D.	HARDWARE RECEIVER	1	HME/3M/PANASONIC			94	T.D.	S.F.C.	POP PICTURE FRAME	1			
37.10	T.D.	T.D.	CASH REGISTERS	3	PANASONIC	7500	Insulated, isolation outlet	95.1	T.D.	T.D.	WALL CLOCK (NEW WOOD STYLE)	1			
38.7	S.F.C.	S.F.C.	SANDWICH UNIT (5'-0")	1	S & G		SC-60	99.1	T.D.	G.C.	TEA / WATER COMBO UNIT	1F			
40.1	S.F.C.	S.F.C.	LID DISPENSER - HOT	3	S & G	HOT		100	T.D.	G.C.	PLANTS				Verify exact location with Tim Hortons' field engineer
40.3	S.F.C.	S.F.C.	ICED CAPPUCCINO LID DISPENSER	2	S & G	COLD		102	T.D.	G.C.	ALWAYS FRESH OVEN	1	MERRYCHEF	MEALSTREAM 501TH	
42.4	T.D.	T.D.	MICROWAVE OVEN (STANDARD)	2	PANASONIC	NE 1054	On shelf (D17)	104	T.D.	G.C.	HOT PLATE STAND FOR ITEM #60.3	2			
43	T.D.	G.C.	WALL SHELVING 12" DEEP	1	ISS	VARES	Consult Tim Hortons' field engineer - See plan	107.2	T.D.	T.D.	SAFE	1			
44.1	T.D.	T.D.	BEVERAGE FOUNTAIN W/ ICE BIN	1	CORNELIUS			108	T.D.	G.C.	BAGEL CUTTER	1			Optional equipment in lie of item 108
46.3	T.D.	T.D.	BAGEL TOASTER - TURBO	1	STAR MFG.	DCS3-1600B		108.1	T.D.	T.D.	ELECTRIC BAGEL SLICER	1F	OLIVER	702N	
47.7	S.F.C.	G.C.	SEATING PACKAGE WATERFALL (FREE)	--	PETER ANTHONY		Waterfall Freestanding	109	T.D.	G.C.	TABLE TOP GLAZER	1	S & G		
49	T.D.	G.C.	WALK-IN SHELVING	6	ISS		See plan	111	T.D.	G.C.	ALWAYS FRESH DOUBLE OVEN CABINET	1	S & G		
50.2	T.D.	T.D.	FAX MACHINE - STANDARD	1	PANASONIC		Connect to incoming line before any phone	116.1	T.D.	T.D.	EDGE LIGHT MENUBOARD	2	EDGELIGHT		
52.6	T.D.	T.D.	FASCO SIGN	3	CUSTOM SIGNS		Verify w/ Tim Hortons' field engineer	118	T.D.	T.D.	PORTAL COMPUTER	1	S & G		
53.1	G.C.	G.C.	VANITY SINGLE BOWL	1	CORIAN			118.1	T.D.	T.D.	PRINTER	1			
55.4	T.D.	G.C.	MOISTURE PLUS - 1/2 SIZE ELECT. OVEN	1	GARLAND	MPOE5L	Oven with drain and vent kit	122	T.D.	G.C.	WIRE SHELF - WALL BRACKET	2	S & G		
57.1	T.D.	T.D.	MINI FONDANT WARMER	1	GARLAND	EFW-400		123	T.D.	T.D.	MEDIA STORAGE CABINET	1	APC NET SHELTER	AR100	
60.3	T.D.	G.C.	HOT PLATE - ELECTRIC	2	GARLAND	ED-15THSE		124	T.D.	T.D.	LCD MONITOR	1			G.C. to pre-wire between menu boards
62.4	T.D.	G.C.	ICE MACHINE	1	HOSHIZAKI	F-450MAH		126	T.D.	T.D.	SOUP SHELF	1			
63	T.D.	G.C.	SUSPENDED STORAGE SHELVING (METAL)	9	ISS	VARES	Height above floor varies - See I.S.S. drawings	127	T.D.	T.D.	SANDWICH SHELF	1	S & G		
64	T.D.	G.C.	DRY STORAGE SHELVING (METAL)	4	ISS	VARES	See plan	128	T.D.	G.C.	FLAVOR DISPENSER FOR COFFEE	2	SURE SHOT	AC-F55	
66.3	T.D.	G.C.	ICER CREAMER-DUAL VOLUME (STANDARD)	2	SURE SHOT	AC10		129	T.D.	G.C.	OUTLETY BIN HOLDER	1	S & G		
66.7	T.D.	G.C.	LIQUID DISPENSER	1F	KAN PAK	CDG211		130.1	T.D.	G.C.	ICED COFFEE DISPENSER	1	BUNN	T00-4	
67.4	T.D.	G.C.	HOT POWERED DRINK MACHINE (STANDARD)	1	BUNN	FMD DB3-3		130.3	T.D.	G.C.	ADVANCE CHILLER UNIT	1	SURE SHOT	AC-LC1	
68.1	T.D.	G.C.	COFFEE BREWER	4	BUNN-O-MATIC	STS 35		132	T.D.	G.C.	DONUT SHOWCASE 4-WIDE HIGHBOY	1	S & G		
68.5	T.D.	T.D.	D/T DUAL COFFEE BREWER	1F	NEWCO	DB2A		134	T.D.	T.D.	HIGH CHAIR AND TRAY	2	RUBBERMAID	7805/7815	

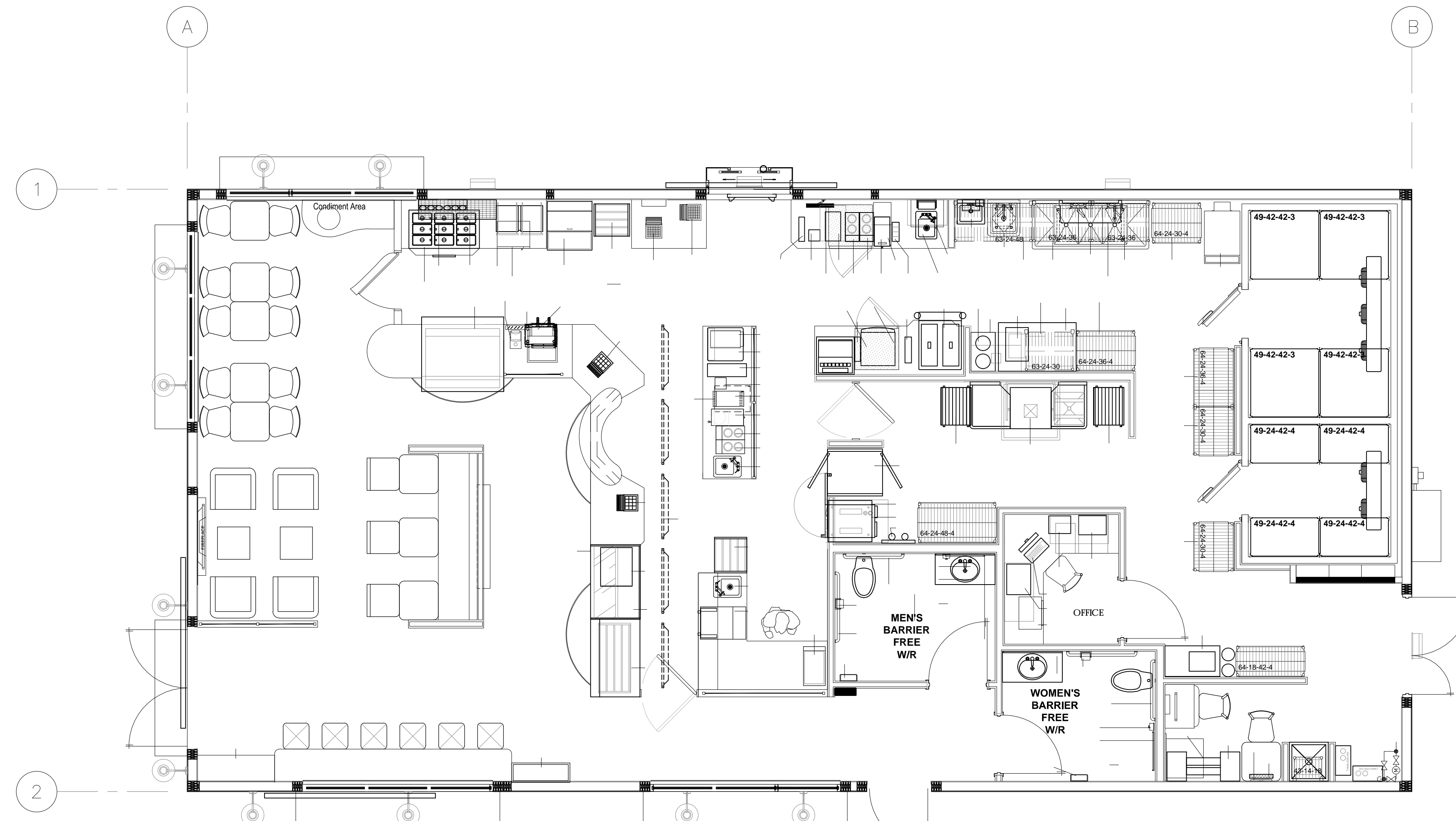
STORE FIXTURE SCHEDULE

NO.	SUPPL'D	INSL'D	DESCRIPTION	QTY.	MANUFACTURER	MODEL	NOTES
D1	S.F.C.	S.F.C.	MAIN COFFEE STATION	1	S & G		
D4	S.F.C.	S.F.C.	GLASS GUARD	2	S & G		
D9	S.F.C.	S.F.C.	DRIVE-THRU CASH COUNTER	1	S & G		
D10	S.F.C.	S.F.C.	DRIVE-THRU BACK BAR	1	S & G		
D11	S.F.C.	S.F.C.	BACK BAR	1	S & G		
D17	S.F.C.	S.F.C.	MICROWAVE SHELF	1	S & G		
D17.1	S.F.C.	S.F.C.	MICROWAVE SHELF - WHITE MELAMINE	2	S & G		
D22	S.F.C.	S.F.C.	LOW PARTITION	1	S & G		
D23	S.F.C.	S.F.C.	WAINSCOTING	--	S & G		
D24	S.F.C.	S.F.C.	WINDOW SILL	5	S & G		
D27	S.F.C.	S.F.C.	TRAINING CABINET	1	S & G		
D34.4	S.F.C.	S.F.C.	GARBAGE UNIT W/TRAY STORAGE	1	S & G		
D41	S.F.C.	S.F.C.	PASS THRU SHELF	1	S & G		
D46.4	S.F.C.	S.F.C.	DOUBLE OVERHEAD CABINET	1	S & G		
D53	S.F.C.	S.F.C.	MERCHANDISER	1	S & G		

REVISION/UPLOAD DATE		
REV.	DATE	DESCRIPTION
--		

LAST DESIGN BULLETIN		
NUM	DATE	DESCRIPTION

DATE ISSUED:		
NUM	DATE	DESCRIPTION



EQUIPMENT PLAN
1/4" = 1'-0"

GENERAL NOTES

- COORDINATE EQUIPMENT PACKAGE W/ TDL REPRESENTATIVE
- G.C. RESPONSIBLE FOR UNLOADING AND PLACING EQUIPMENT IN STORE.
- G.C. TO PROVIDE SOLID WOOD BLOCKING IN WALLS FOR ALL WALL MOUNTED EQUIPMENT AND ACCESSORIES.
- G.C. TO PROVIDE BLOCKING BETWEEN TRUSSES AS REQUIRED FOR OVERHEAD SUSPENDED SHELVING
- QUANTITY AND LOCATION OF SECURITY CAMERAS TO BE DETERMINED BY TIM HORTONS.

FLOOR PLAN NOTE LEGEND

- ROUGH-IN FOR FUTURE HOT BUTTUN. SEE ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.
- WATER HEATER, SUPPLIED BY T.D. AND INSTALLED BY G.C. SEE PLUMBING PLAN FOR MANUFACTURER AND MODEL NUMBER.
- MOP SINK, PROVIDED AND INSTALLED BY CONTRACTOR. SEE PLUMBING SHEETS. CO2 TANK, PROVIDE SAFETY CHAIN. ATTACHED TO WALL.
- SWING GATE BT S.F.C. MIN. CLEAR OPENING TO BE 34" WITH DOOR @ 90°.
- 10# TYPE ABC PORTABLE FIRE EXTINGUISHER.
- 10# TYPE K PORTABLE FIRE EXTINGUISHER.

STORAGE SHELVING LEGEND

SHELVING TYPE	ITEM-DEPTH-LENGTH-TIERS	QUANTITY
OVERHEAD SHELVING #43	43-12-48	1
OVERHEAD SHELVING #88	88-12-36	1
OVERHEAD SHELVING #63	63-24-24	1
	63-24-30	2
	63-24-36	2
	63-24-42	1
FLOOR SHELVING #64	64-24-30-4	4
	64-24-36-4	3
WALK-IN SHELVING #49	49-24-42-4	4
	49-42-42-3	4

- NOTES:
- PROVIDE METAL SHELVING AS INDICATED ON DRAWINGS.
 - REFER TO INTERIOR ELEV. SHEET A9 FOR SHELVING HEIGHTS.
 - PROVIDE BLOCK/BACKING IN WALLS & CEILING AS REQUIRED FOR SHELF SUPPORT.

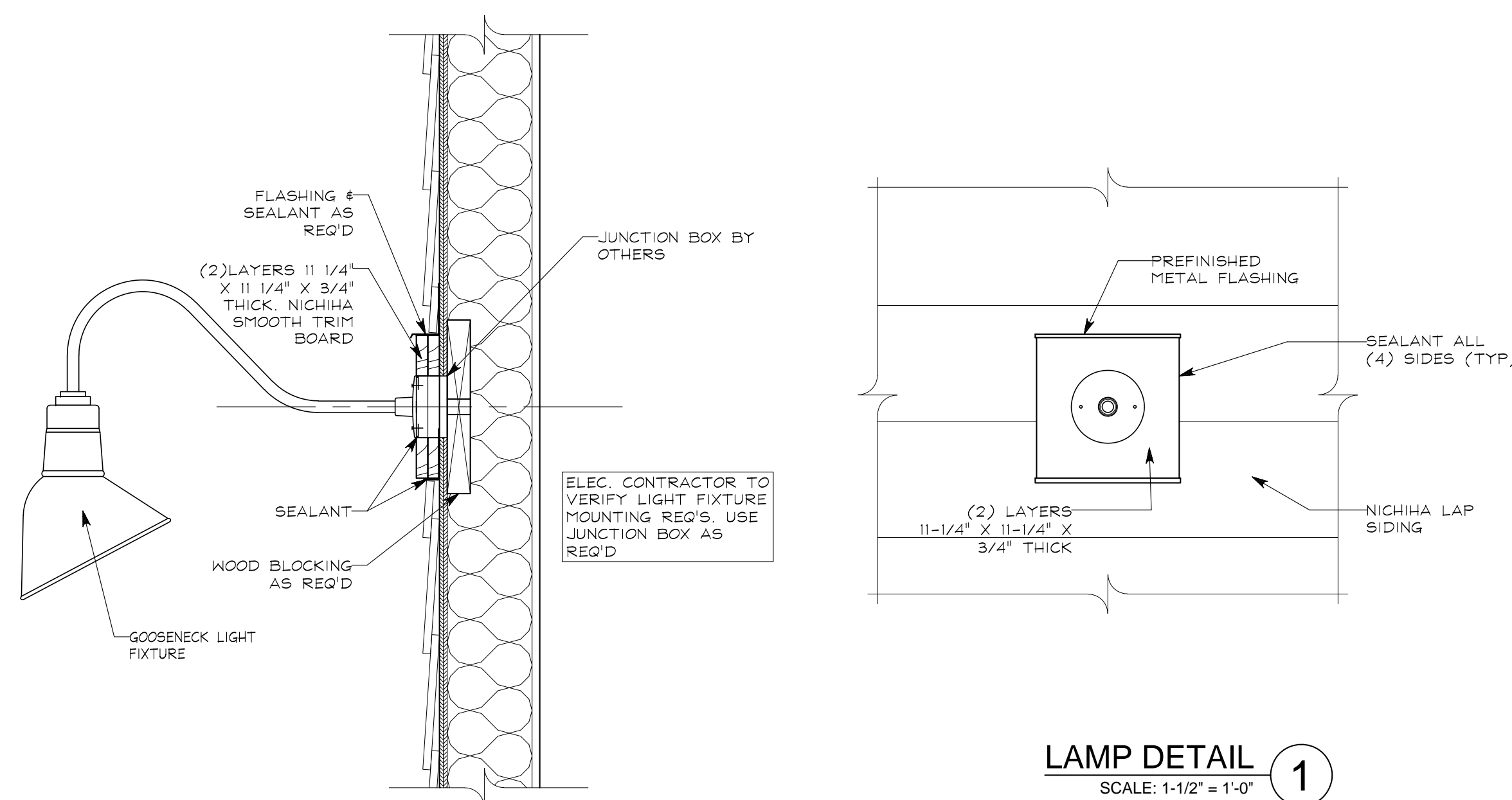
Tim Hortons
MODEL 1950-10
(U.S.) STRAT PLAN

EQUIPMENT PLAN
DRAWN BY: D.D.S., P.J.S. CHECKED BY: MLL

© 2009 BREMENSHOCK ENGINEERING, INC.
PROHIBITION OF REUSE: THESE DRAWINGS AND SPECS ARE NOT INTENDED FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. REUSE OF THESE DRAWINGS AND SPECS OR ANY REPRODUCTION THEREOF ON ANOTHER PROJECT IS PROHIBITED AND CONTRARY TO LAW UNLESS EXPRESSLY AUTHORIZED IN WRITING BY BREMENSHOCK ENGINEERING, INC.

DRAWING NUMBER:
A2

EXTERIOR FINISH SCHEDULE					
TAG	PRODUCT	MFG.	PATTERN & COLOR	COMMENTS	SUPPLIER/CONTACT
FC-1	LAP SIDING	NICHHA FIBER CEMENT PRODUCTS	SIERRA PREMIUM SMOOTH 8-3/4" LAP SIDING, PREFINISHED		NICHHA CONTACT: CHRIS TATE PHONE: (404) 538-1261, EMAIL: CTATE@NICHHA.COM
FC-2	ARCHITECTURAL BLOCK	NICHHA FIBER CEMENT PRODUCTS	ARCHITECTURAL BLOCK PANELS, PREFINISHED		
FC-3	KURASTONE	NICHHA FIBER CEMENT PRODUCTS	KURASTONE WALL PANELS. COLOR: MOUNTAIN ITEM: AT-1118-US BORDER PIECES (LG) COLOR: MOUNTAIN ITEM: ATB-1118-US CORNER PIECES COLOR: MOUNTAIN ITEM: ATD-1118-US		
FC-4	TRIM	NICHHA FIBER CEMENT PRODUCTS	11 1/4" X 3/4" SMOOTH TRIM BOARDS PREFINISHED		
FC-5	TRIM	NICHHA FIBER CEMENT PRODUCTS	3 1/2" X 3/4" SMOOTH TRIM BOARDS PREFINISHED		
EP-1	PAINT	NICHHA	COLOR: TDL 5K6069 FRENCH ROAST AS MFG. BY PPG.	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 44211	
EP-2	PAINT	NICHHA	COLOR: TDL 5K6108 LATTE AS MFG. BY PPG.	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 46431	
EP-3	PAINT	NICHHA	COLOR: TDL 5K6062 RUGGED BROWN AS MFG. BY PPG.	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 49861	
EP-4	PAINT	NICHHA	COLOR: TDL 5K6990 CAVIER AS MFG. BY PPG.		
CR-1	CORNICE	CANAMOULD	CANAMOULD CORNICE #N5008		
	SILL	NICHHA	COLOR: TDL AZ1-6930 HISTORIC SILL AS MFG. BY PPG.		



- GENERAL NOTES**
- SEALANT AROUND DOOR/WINDOW FRAMES COLOR TO MATCH ADJACENT MATERIAL.
 - ALL EXTERIOR FIBER CEMENT SHALL BE PREFINISHED BY THE MANUFACTURER WHEREVER POSSIBLE.
 - ALL SEALANTS USED SHALL BE COLOR MATCHED TO THE ADJACENT MATERIAL OR AS LISTED.

- EXTERIOR ELEVATION KEYED NOTES:**
- PREFINISHED METAL COPING W/ DRIP EDGE.
 - GAS METER. VERIFY EXACT LOCATION W/ UTILITY COMPANY, CIVIL DRAWINGS AND TDL REPRESENTATIVE.
 - CLEAR ANODIZED ALUMINUM STOREFRONT W/ INSULATED GLAZING. SEE WINDOW SCHEDULE ON SHEET A11 AND EXTERIOR FINISH SCHEDULE ON SHEET AS.
 - FOUNDATION. (SEE STRUCTURAL)
 - INTERNALLY ILLUMINATED BUILDING SIGNAGE PROVIDED AND INSTALLED BY TDL. G.C. TO PROVIDE ALL REQUIRED BLOCKING AND FINAL ELECTRICAL CONNECTION. SIGN MANUFACTURER SHALL OBTAIN SIGNAGE PERMITS FROM THE CITY BASED ON LOCAL REQUIREMENTS. G.C. SHALL VERIFY ACTUAL LOCATION AND SIZE OF SIGNS WITH SIGN MANUFACTURER. APPROVED DRAWINGS AND COORDINATE LOCATIONS FOR BLOCKING AND UTILITIES.
 - CONTINUOUS CONCRETE FOOTING. (SEE STRUCTURAL)
 - PROVIDE 4" DIA. CONCRETE FILLED STEEL PIPE BOLLARDS AROUND GAS METER AND C/T CABINET PER LOCAL CODES & UTILITY COMPANY REQUIREMENTS. PAINT BOLLARDS COLOR: TBD.
 - CELLULAR PVC SILL CONTINUOUS AROUND BUILDING. SEE FINISH SCHEDULE & SECTIONS.
 - AUTOMATIC BIPARTING DRIVE THRU WINDOW FURNISHED BY TDL AND INSTALLED BY G.C. VERIFY MANUFACTURER & DELIVERY W/ TDL REPRESENTATIVE.
 - LINE OF ROOF BEHIND.
 - CARD READER.
 - GOOSENECK LIGHT FIXTURE ABOVE AWNINGS MOUNT J-BOX @ 11'-0" A.F.F.
 - GOOSENECK LIGHT FIXTURES ABOVE SIGNAGE BAND MOUNT J-BOX @ 12'-4" A.F.F.
 - HOLLOW METAL DOOR & FRAME. PAINT: PAINT REAR DOOR AND FRAME EP-2.
 - C/T CABINET AND METER AS REQ'D. VERIFY WITH LOCAL ELECTRICAL COMPANY.
 - FABRIC AWNING AND SUPPORT STRUCTURE PROVIDED AND INSTALLED BY OWNER. COLOR & SIGNAGE T.B.D. G.C. TO PROVIDE BLOCKING IN WALL AS REQUIRED.
 - GENERAL PURPOSE LIGHT FIXTURE AS SPECIFIED ON SHEET E1 MOUNT FIXTURE @ 12'-4" A.F.F.
 - G.C. TO PROVIDE & INSTALL 6" DIA. CONC. FILLED PIPE BOLLARD @ DRIVE-THRU WINDOW. SEE PLACEMENT DETAIL ON SHEET SD-1.
 - (2) LAYERS 11 1/4" X 3/4" THICK NICHHA SMOOTH TRIM BOARD. SEE DETAILS ON A7.1.
 - OUTSIDE CORNERS TO RECEIVE (2) LAYERS 3/4" X 3 1/2" PREFINISHED FIBER CEMENT TRIM BOARDS RIP BACKER BOARD AS REQ'D TO CREATE SINGLE THICKNESS LAP JOINT. TYP. U.N.O.
 - PROVIDE NICHHA IX TRIM AT PARAPET END. COLOR TO MATCH ADJACENT TRIM.
 - DASHED LINE INDICATES EXTENT OF WINDOW FRAME ON UNDERSIDE OF CANOPY.
 - WATER HEATER FLUE.
 - LINE OF PARAPET BEYOND.
 - SIGN COMPANY TO PROVIDE & INSTALL TRANSLUCENT WINDOW FILM (FROSTING) FROM MULLION TO 36" A.F.F.

REVISION/UPLOAD DATE		
REV.	DATE	DESCRIPTION
RFP#1	01/31/11	GENERIC UPLOAD
RFP#2	03/17/11	GENERIC UPLOAD
RFP#3	04/20/11	GENERIC UPLOAD

LAST DESIGN BULLETIN

NUM.	DATE	DESCRIPTION

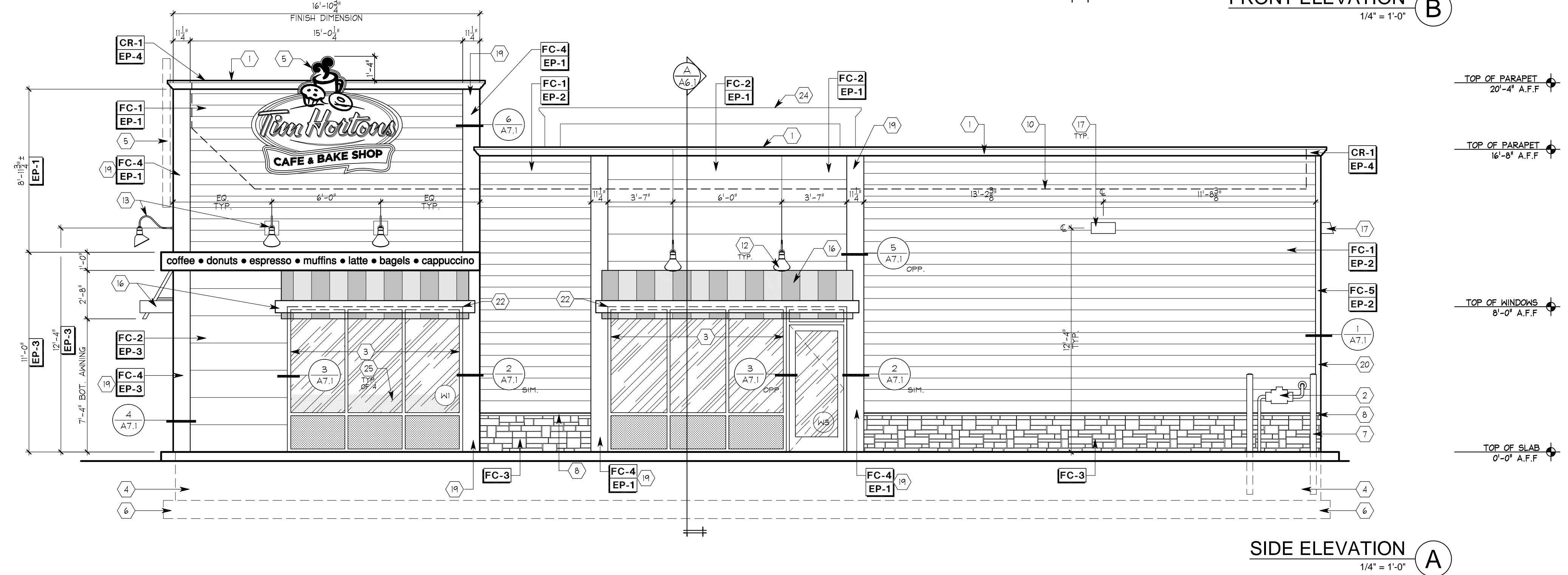
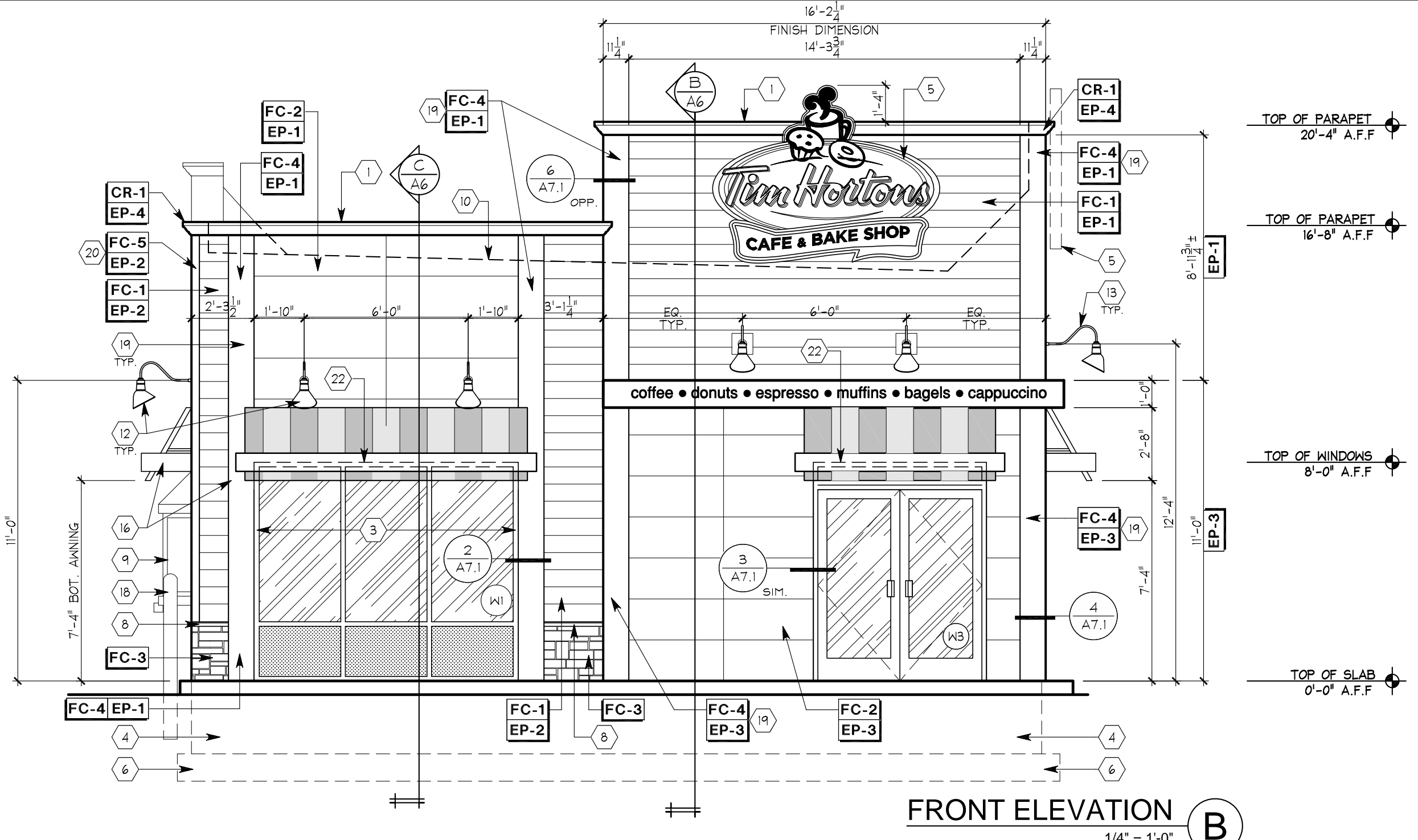
DATE ISSUED: 03/14/2011

SHREMSHOCK
 Shremshock Architects, Inc.
 6930 S. Buryway Rd., Westerville, OH 43081
 Tel: 614-242-0255
 Fax: 614-242-0255
 www.shremshock.com

Tim Hortons
 MODEL 1950-11 (U.S.)
 NOT FOR CONSTRUCTION
 ANYWHERE USA

EXTERIOR ELEVATIONS
 DRAWN BY: DDS
 CHECKED BY: MLL

DESIGN DEVELOPMENT NOT FOR CONSTRUCTION
 © 2011 SHREMSHOCK ARCHITECTS, INC.
 PROHIBITION OF REUSE: THESE DRAWINGS AND SPECS WERE PREPARED FOR USE ON A SPECIFIC SITE. THEY ARE NOT INTENDED FOR USE ON A DIFFERENT PROJECT OR FOR ANY OTHER PURPOSE. ANY REUSE OF THESE DRAWINGS AND SPECS ON ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF SHREMSHOCK ARCHITECTS, INC. IS STRICTLY PROHIBITED AND CONSIDERED A VIOLATION OF THE PROFESSIONAL ETHICS OF ARCHITECTS.
 SAI # 11002
 DRAWING NUMBER: **A5**



SIGNAGE SHOWN IS REPRESENTATIVE. OWNER SHALL SUBMIT DETAILED INFORMATION ON SIGNAGE FOR APPROVAL.

EXTERIOR FINISH SCHEDULE					
TAG	PRODUCT	MFG.	PATTERN & COLOR	COMMENTS	SUPPLIER/CONTACT
FC-1	LAP SIDING	NICHHA FIBER CEMENT PRODUCTS	SIERA PREMIUM SMOOTH 8-3/4" LAP SIDING. PREFINISHED		NICHHA CONTACT: CHRIS TATE PHONE: (404) 538-1261, EMAIL: CTATE@NICHHA.COM
FC-2	ARCHITECTURAL BLOCK	NICHHA FIBER CEMENT PRODUCTS	ARCHITECTURAL BLOCK PANELS. PREFINISHED		
FC-3	KURASTONE	NICHHA FIBER CEMENT PRODUCTS	KURASTONE WALL PANELS. COLOR: MOUNTAIN ITEM: AT-1118-US BORDER PIECES (LG) COLOR: MOUNTAIN ITEM: ATB-1118-US CORNER PIECES COLOR: MOUNTAIN ITEM: ATD-1118-US		
FC-4	TRIM	NICHHA FIBER CEMENT PRODUCTS	11 1/4" X 3/4" SMOOTH TRIM BOARDS PREFINISHED		
FC-5	TRIM	NICHHA FIBER CEMENT PRODUCTS	3 1/2" X 3/4" SMOOTH TRIM BOARDS PREFINISHED		
EP-1	PAINT	NICHHA	COLOR: TDL SW6069 FRENCH ROAST AS MFG. BY PPG	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 44211	
EP-2	PAINT	NICHHA	COLOR: TDL SW6108 LATTE AS MFG. BY PPG	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 46431	
EP-3	PAINT	NICHHA	COLOR: TDL SW6062 RUGGED BROWN AS MFG. BY PPG	SEALANT: TITEBOND WEATHER MASTER SEALANT COLOR: 49861	
EP-4	PAINT	NICHHA	COLOR: TDL SW6990 CAVIER AS MFG. BY PPG		
CR-1	CORNICE	CANAMOULD	CANAMOULD CORNICE #N5008		
	SILL	NICHHA	COLOR: TDL AZM-6930 HISTORIC SILL AS MFG. BY PPG		

- GENERAL NOTES**
- SEALANT AROUND DOOR/WINDOW FRAMES COLOR TO MATCH ADJACENT MATERIAL.
 - ALL EXTERIOR FIBER CEMENT SHALL BE PREFINISHED BY THE MANUFACTURER WHEREVER POSSIBLE.
 - ALL SEALANTS USED SHALL BE COLOR MATCHED TO THE ADJACENT MATERIAL OR AS LISTED.

REVISION/UPLOAD DATE		
REV.	DATE	DESCRIPTION
RFP#1	01/31/11	GENERIC UPLOAD
RFP#2	03/17/11	GENERIC UPLOAD
RFP#3	04/20/11	GENERIC UPLOAD

- EXTERIOR ELEVATION KEYED NOTES:**
- PREFINISHED METAL COPING W/ DRIP EDGE.
 - GAS METER. VERIFY EXACT LOCATION W/ UTILITY COMPANY, CIVIL DRAWINGS AND TDL REPRESENTATIVE.
 - CLEAR ANODIZED ALUMINUM STOREFRONT W/ INSULATED GLAZING. SEE WINDOW SCHEDULE ON SHEET A11 AND EXTERIOR FINISH SCHEDULE ON SHEET A5.
 - FOUNDATION. (SEE STRUCTURAL)
 - INTERNALLY ILLUMINATED BUILDING SIGNAGE PROVIDED AND INSTALLED BY TDL. G.C. TO PROVIDE ALL REQUIRED BLOCKING AND FINAL ELECTRICAL CONNECTION. SIGN MANUFACTURER SHALL OBTAIN SIGNAGE PERMITS FROM THE CITY BASED ON LOCAL REQUIREMENTS. G.C. SHALL VERIFY ACTUAL LOCATION AND SIZE OF SIGNS WITH SIGN MANUFACTURER. APPROVED DRAWINGS AND COORDINATE LOCATIONS FOR BLOCKING AND UTILITIES.
 - CONTINUOUS CONCRETE FOOTING. (SEE STRUCTURAL)
 - PROVIDE & INSTALL 4" DIA. CONCRETE FILLED STEEL PIPE BOLLARDS AROUND GAS METER AND CT CABINET PER LOCAL CODES & UTILITY COMPANY REQUIREMENTS. PAINT BOLLARDS COLOR: TBD.
 - CELLULAR PVC SILL CONTINUOUS AROUND BUILDING. SEE FINISH SCHEDULE & SECTIONS.
 - AUTOMATIC BIPARTING DRIVE THRU WINDOW FURNISHED BY TDL AND INSTALLED BY G.C. VERIFY MANUFACTURER & DELIVERY W/ TDL REPRESENTATIVE.
 - LINE OF ROOF BEHIND.
 - CARD READER.
 - GOOSENECK LIGHT FIXTURE ABOVE AWNINGS MOUNT J-BOX @ 11'-0" A.F.F.
 - GOOSENECK LIGHT FIXTURES ABOVE SIGNAGE BAND MOUNT J-BOX @ 12'-4" A.F.F.
 - HOLLOW METAL DOOR & FRAME. PAINT: PAINT REAR DOOR AND FRAME EP-2.
 - C/T CABINET AND METER AS REQ'D. VERIFY WITH LOCAL ELECTRICAL COMPANY.
 - FABRIC AWNING AND SUPPORT STRUCTURE PROVIDED AND INSTALLED BY OWNER. COLOR & SIGNAGE T.B.D. G.C. TO PROVIDE BLOCKING IN WALL AS REQUIRED.
 - GENERAL PURPOSE LIGHT FIXTURE AS SPECIFIED ON SHEET E1 MOUNT FIXTURE @ 12'-4" A.F.F.
 - G.C. TO PROVIDE & INSTALL 6" DIA. CONC. FILLED PIPE BOLLARD @ DRIVE-THRU WINDOW. SEE PLACEMENT DETAIL ON SHEET 50-
 - (2) LAYERS 11 1/4" X 3/4" THICK NICHHA SMOOTH TRIM BOARD. SEE DETAILS ON A7.1.
 - OUTSIDE CORNERS TO RECEIVE (2) LAYERS 3/4" X 3 1/2" PREFINISHED FIBER CEMENT TRIM BOARDS R/P BACKER BOARD AS REQ'D TO CREATE SINGLE THICKNESS LAP JOINT. TYP. U.N.O.
 - PROVIDE NICHHA IX TRIM AT PARAPET END. COLOR TO MATCH ADJACENT TRIM.
 - DASHED LINE INDICATES EXTENT OF WINDOW FRAME ON UNDERSIDE OF CANOPY.
 - WATER HEATER FLUE.
 - LINE OF PARAPET BEYOND.
 - SIGN COMPANY TO PROVIDE & INSTALL TRANSLUCENT WINDOW FILM (FROSTING) FROM MULLION TO 36" A.F.F.

LAST DESIGN BULLETIN		
NUM.	DATE	DESCRIPTION

DATE ISSUED: 03/14/2011

SHREMSHOCK
 Shremshock Architects, Inc.
 6930 S. Buxton Rd., Westerville, OH 43081
 Tel: 614-242-0255
 www.shremshock.com

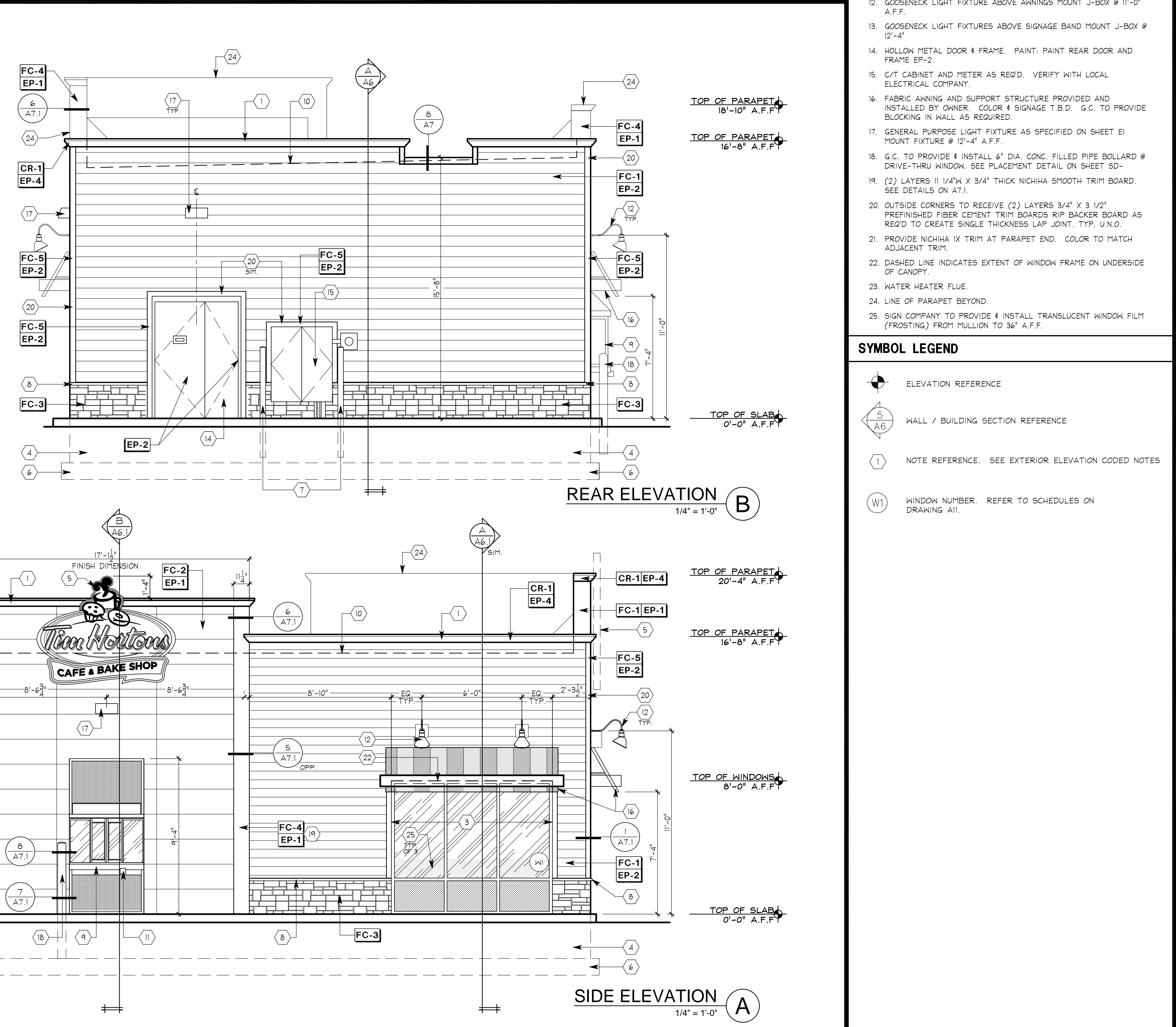
Tim Hortons
 MODEL 1950-11 (U.S.)
 NOT FOR CONSTRUCTION
 ANYWHERE USA

EXTERIOR ELEVATIONS
 DRAWN BY: DDS
 CHECKED BY: MLL

DESIGN DEVELOPMENT NOT FOR CONSTRUCTION

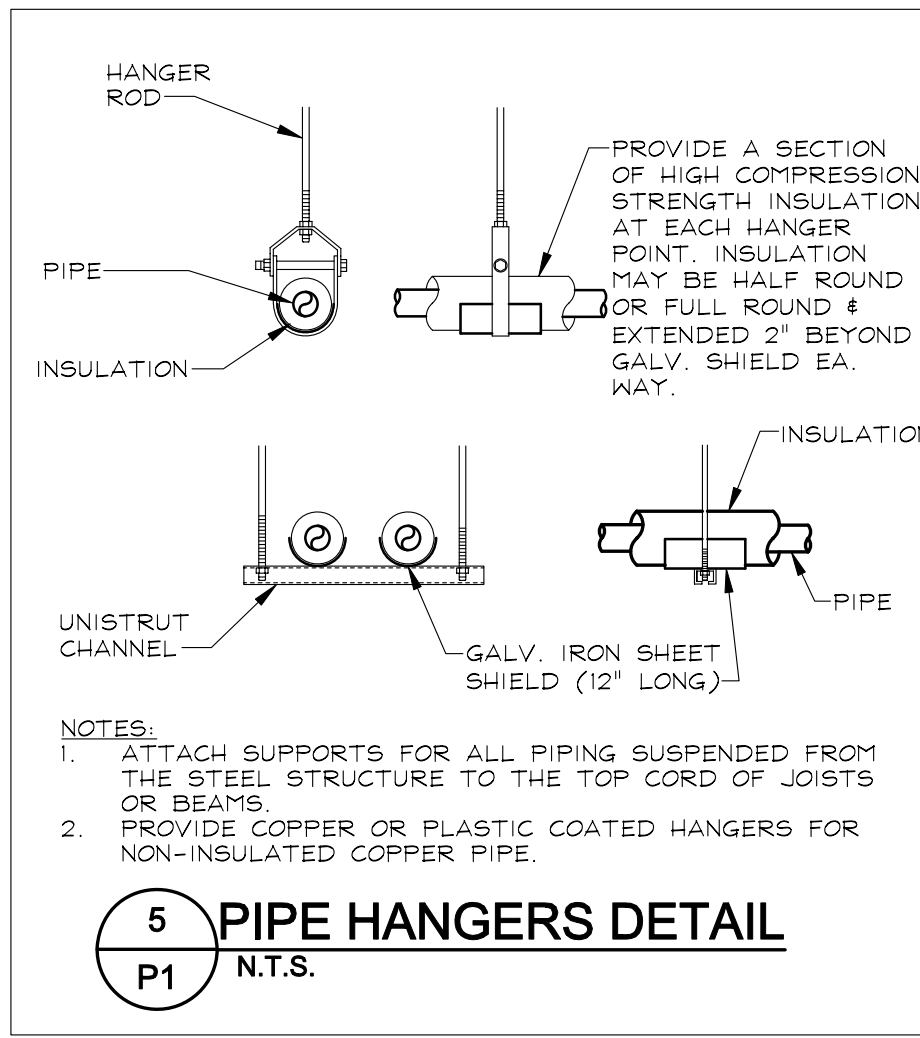
© 2011 SHREMSHOCK ARCHITECTS, INC.
 PROHIBITION OF REUSE: THESE DRAWINGS AND SPECS WERE PREPARED FOR USE ON A SPECIFIC SITE. THEY ARE NOT INTENDED FOR USE ON A DIFFERENT PROJECT OR AT A LATER TIME. REUSE OF THESE DRAWINGS AND SPECS OR ANY REPRODUCTION THEREOF ON ANOTHER PROJECT IS PROHIBITED AND CONTRARY TO LAW UNLESS EXPRESSLY AUTHORIZED IN WRITING BY SHREMSHOCK ARCHITECTS, INC.

SAI # 11002
 DRAWING NUMBER: **A5.1**



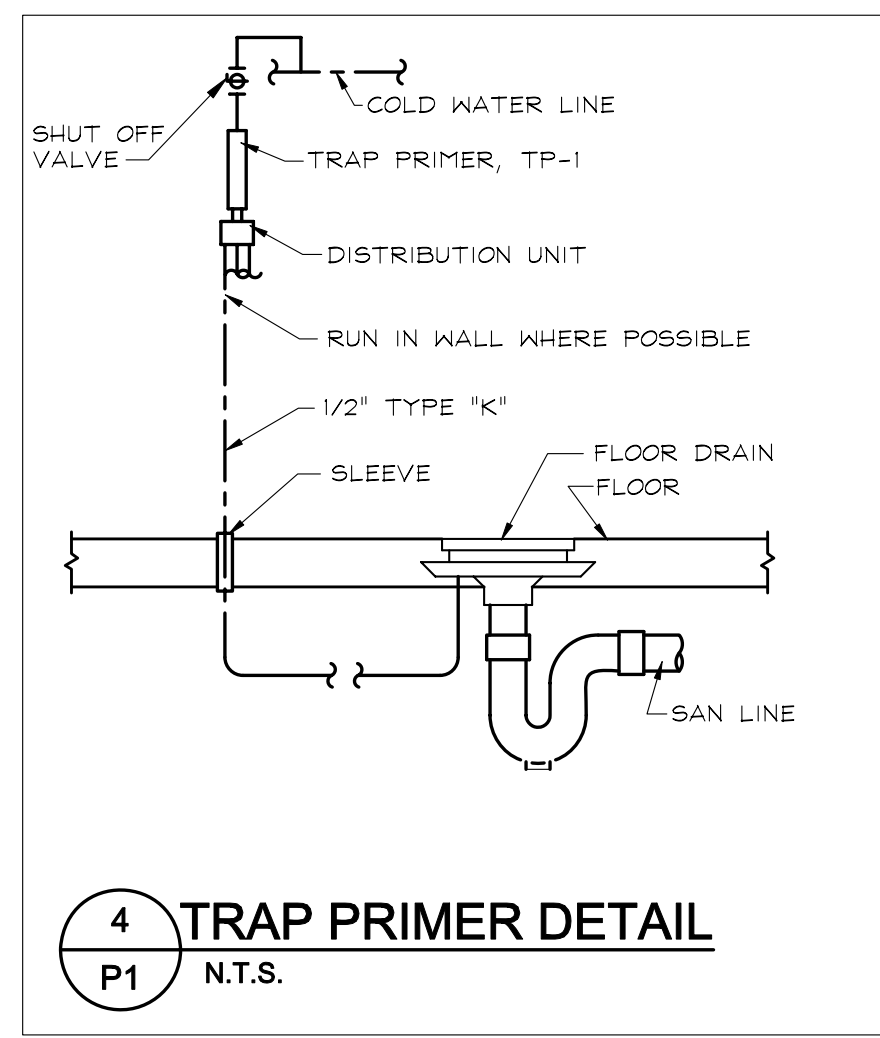
SIGNAGE SHOWN IS REPRESENTATIVE. OWNER SHALL SUBMIT DETAILED INFORMATION ON SIGNAGE FOR APPROVAL.

TDL STORE NUMBER

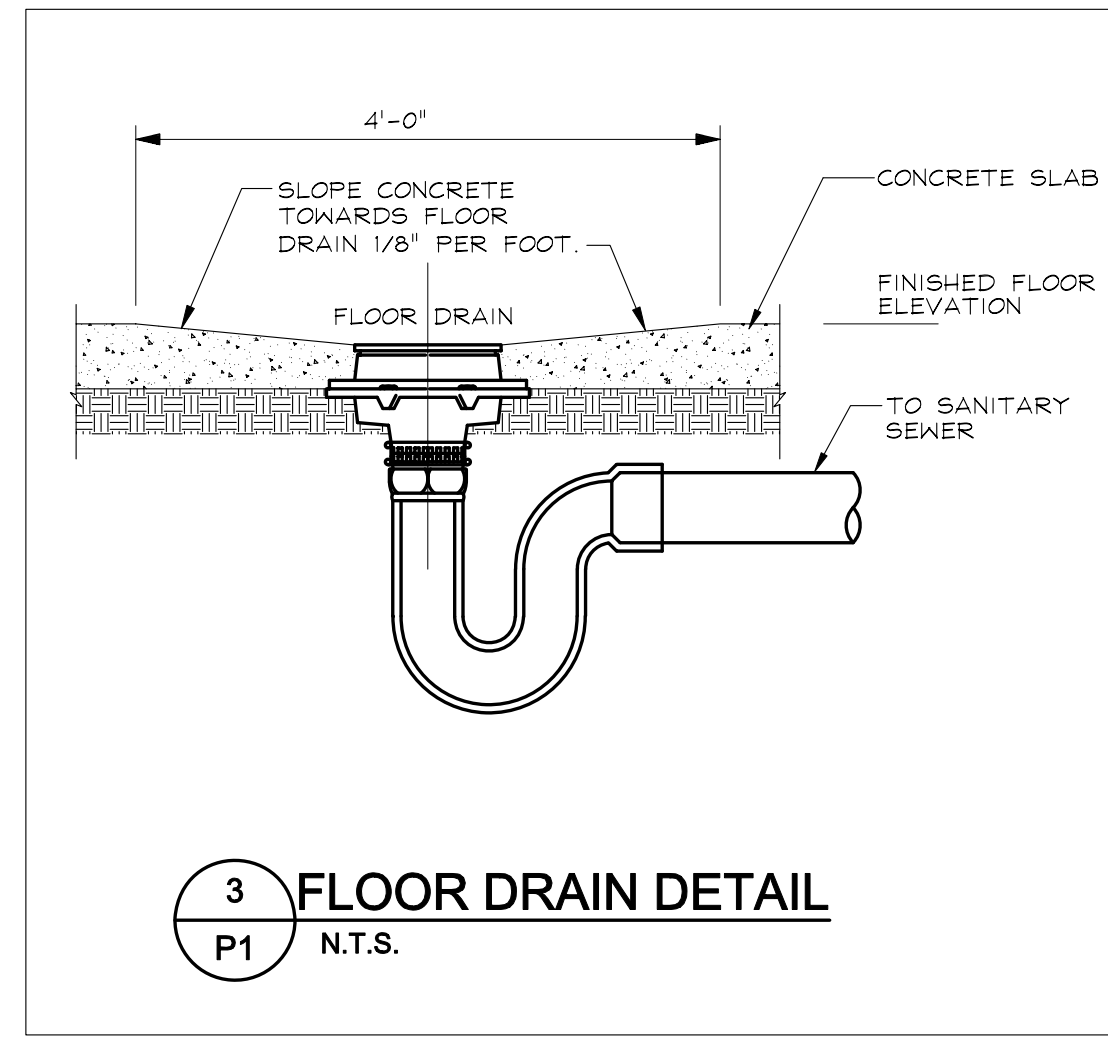


- NOTES:**
- ATTACH SUPPORTS FOR ALL PIPING SUSPENDED FROM THE STEEL STRUCTURE TO THE TOP CORD OF JOISTS OR BEAMS.
 - PROVIDE COPPER OR PLASTIC COATED HANGERS FOR NON-INSULATED COPPER PIPE.

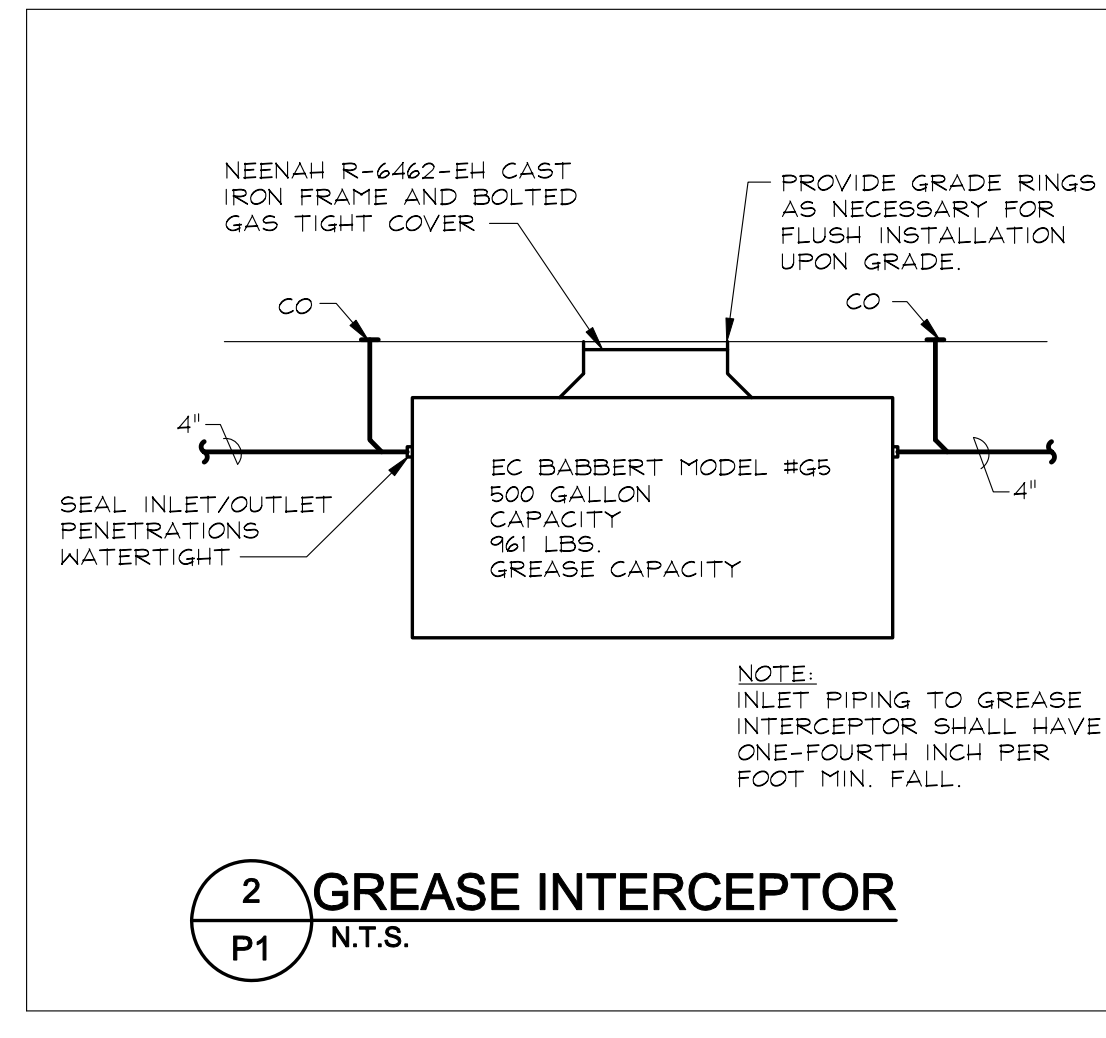
5 PIPE HANGERS DETAIL
P1 N.T.S.



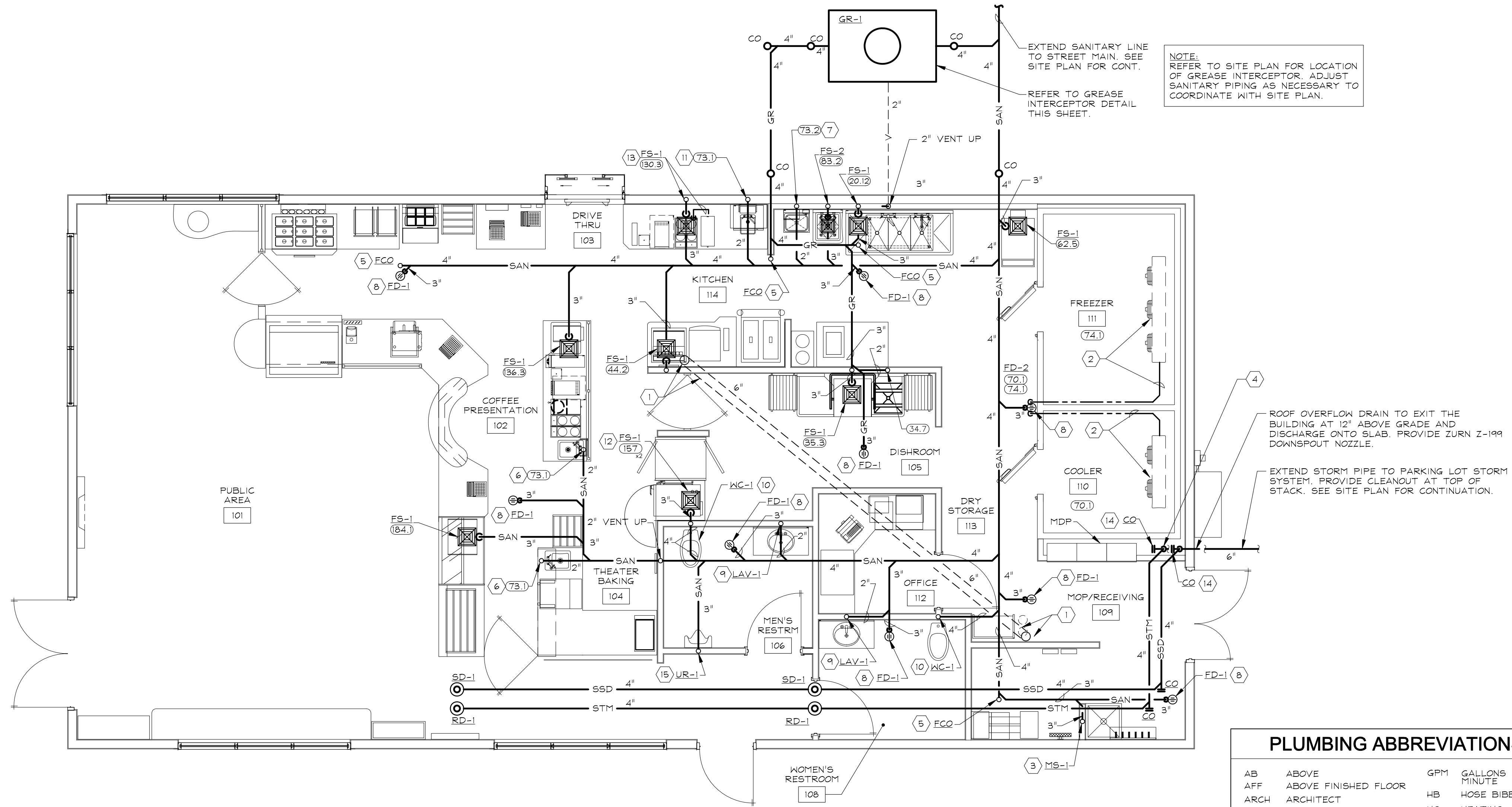
4 TRAP PRIMER DETAIL
P1 N.T.S.



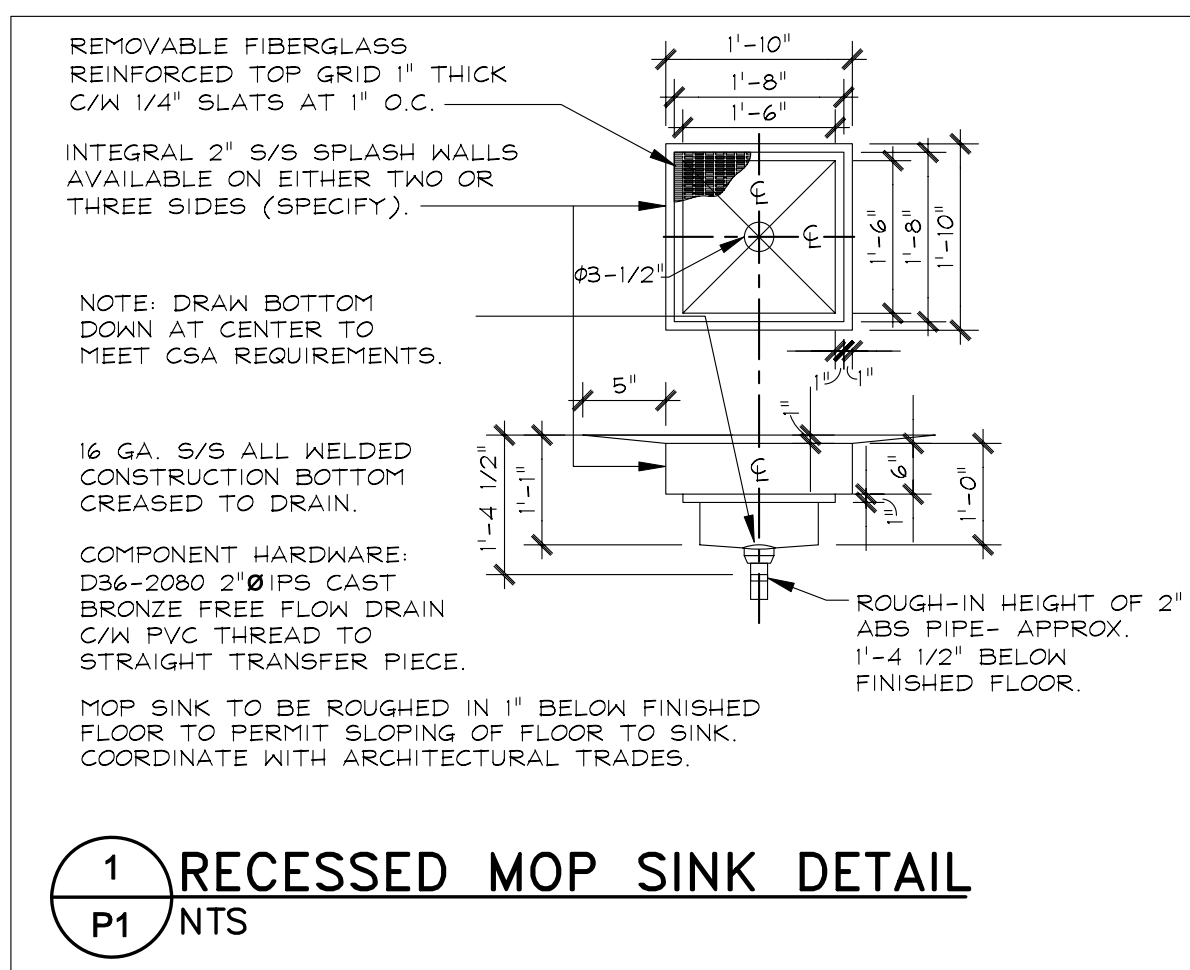
3 FLOOR DRAIN DETAIL
P1 N.T.S.



2 GREASE INTERCEPTOR
P1 N.T.S.



PLUMBING PLAN-SANITARY
1/4"=1'-0"



- NOTE:** DRAW BOTTOM DOWN AT CENTER TO MEET CSA REQUIREMENTS.
- 16 GA. S/S ALL WELDED CONSTRUCTION BOTTOM GREASED TO DRAIN.
- COMPONENT HARDWARE: D36-2080 2\"/>

1 RECESSED MOP SINK DETAIL
P1 N.T.S.

PLUMBING ABBREVIATIONS

AB	ABOVE FINISHED FLOOR	GPM	GALLONS PER MINUTE
AFF	ARCHITECT	HB	HOSE BIBB
ARCH	BELOW	HC	HEATING CONTRACTOR
BEL	BUILDING	HP	HORSEPOWER
BLDG	CEILING	HW	HOT WATER
CLG	CLEAN OUT	HKR	HOT WATER RETURN
CO	CONTINUATION	INV	INVERT
CONT	COLD WATER	LAV	LAVATORY
CW	CONTRACTOR	MAX	MAXIMUM
COORD	COORDINATE	MFR	MANUFACTURER
DISC	DISCONNECT	MT	MOUNT
DN	DOWN	NTS	NOT TO SCALE
EA	EACH	PC	PLUMBING CONTRACTOR
EC	ELECTRICAL CONTRACTOR	PLBG	PLUMBING
EX	EXISTING	RD	ROOF DRAIN
ENC	ELECTRIC WATER COOLER	RTU	ROOFTOP UNIT
FCO	FLOOR CLEAN OUT	SAN	SANITARY
FD	FLOOR DRAIN	SS	SERVICE SINK
FIXT	FIXTURE	TP	TYPICAL
FLR	FLOOR	TW	TEMPERED WATER
FPC	FIRE PROTECTION CONTRACTOR	UR	URINAL
FURN	FURNISH	V	VENT
FV	FLUSH VALVE	VTR	VENT THRU ROOF
G	GAS	WC	WATER CLOSET
GAL	GALLON	WCO	WALL CLEAN OUT
GC	GALLON	WH	WATER HEATER
GPH	GALLONS PER HOUR	W/	WITH

PLUMBING SYMBOLS

—CW—	DOMESTIC WATER PIPE	—V—	SANITARY VENT PIPE
—110°HW—	DOMESTIC HOT WATER 110°F	—STM—	STORM PIPE
—140°HW—	DOMESTIC HOT WATER 140°F	—SSD—	SECONDARY STORM PIPE
—HWR—	DOMESTIC HOT WATER RETURN	—GR—	GREASE SANITARY PIPE
—F—	SPRINKLER PIPE	—FW—	FILTER WATER PIPE
—G—	GAS PIPE	—(E)XX—	EXISTING PIPE OR EQUIPMENT
—SAN—	SANITARY PIPE	(XX)	KITCHEN EQUIPMENT DESIGNATION, REFER TO KITCHEN EQUIPMENT CONNECTION SCHEDULE.
—V—	SANITARY VENT PIPE	⊕	PIPE - UP
—STM—	STORM PIPE	⊖	PIPE - DOWN
—SSD—	SECONDARY STORM PIPE	⊕	THERMOMETER
—GR—	GREASE SANITARY PIPE	⊕	PRESSURE GAGE
—FW—	FILTER WATER PIPE	⊕	INLINE PUMP
—(E)XX—	EXISTING PIPE OR EQUIPMENT	⊕	BACK FLOW PREV.
(XX)	KITCHEN EQUIPMENT DESIGNATION, REFER TO KITCHEN EQUIPMENT CONNECTION SCHEDULE.	⊕	P & T RELIEF VALVE
⊕	PIPE - UP	⊕	ACCESS DOOR
⊖	PIPE - DOWN	⊕	COMBINATION BALANCE /SHUT-OFF
⊕	THERMOMETER	⊕	GLOBE VALVE
⊕	PRESSURE GAGE	⊕	DRAIN VALVE
⊕	INLINE PUMP	⊕	CONNECT TO EXISTING
⊕	BACK FLOW PREV.	⊕	CHECK VALVE
⊕	P & T RELIEF VALVE	⊕	UNION
⊕	ACCESS DOOR	⊕	GAGE COCK
⊕	COMBINATION BALANCE /SHUT-OFF	⊕	CHECK VALVE
⊕	GLOBE VALVE	⊕	BALANCE VALVE OR GAS VALVE
⊕	DRAIN VALVE	⊕	BALL VALVE
⊕	CONNECT TO EXISTING	⊕	FLOOR OR AREA DRAIN
		⊕	HOSE BIBB
		⊕	CAPPED LINE
		⊕	CONCENTRIC REDUCERS
		⊕	ECCENTRIC REDUCER

REVISION/UPLOAD DATE

REV	DATE	DESCRIPTION
RFFH1	01/31/11	GENERIC'S UPLOAD
RFFH2	03/17/11	GENERIC'S UPLOAD

LAST DESIGN BULLETIN

NUM.	DATE	DESCRIPTION
------	------	-------------

DATE ISSUED: 03/14/2011

SHREMSHOCK
Shremshock Engineering, Inc.
10101 W. 103rd
T: 614-545-4500 F: 614-545-4555
www.shremshock.com

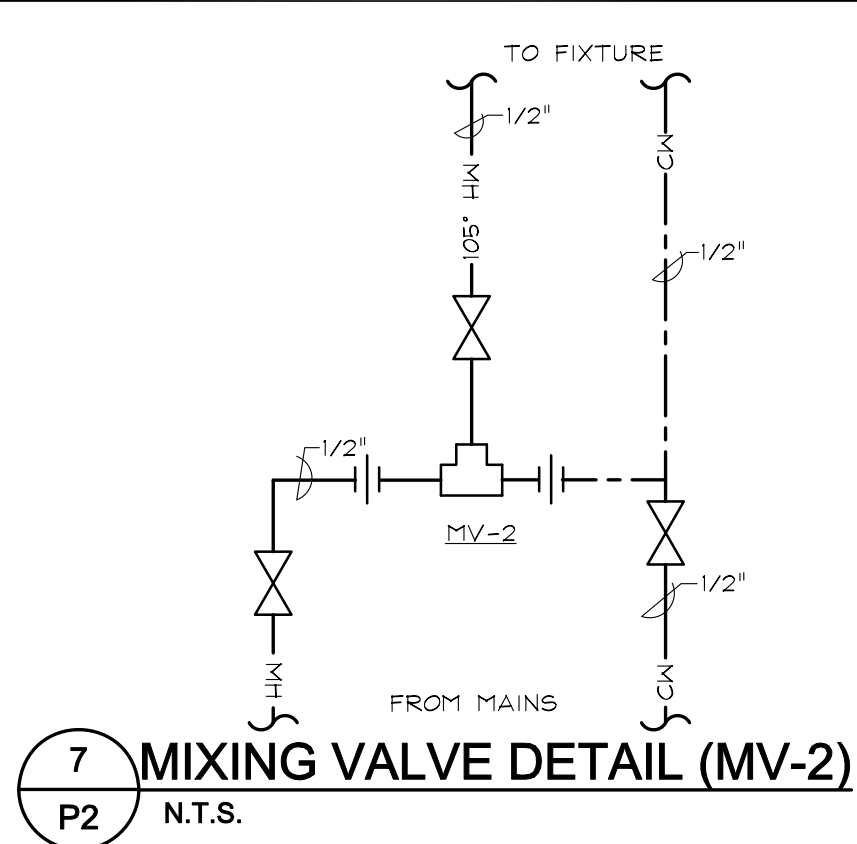
Tim Hortons
MODEL 190-II (U.S.)
NOT FOR CONSTRUCTION ANYWHERE U.S.A.
TDL STORE NUMBER

PLUMBING PLAN - SANITARY
DRAWN BY: KRO CHECKED BY: JTP

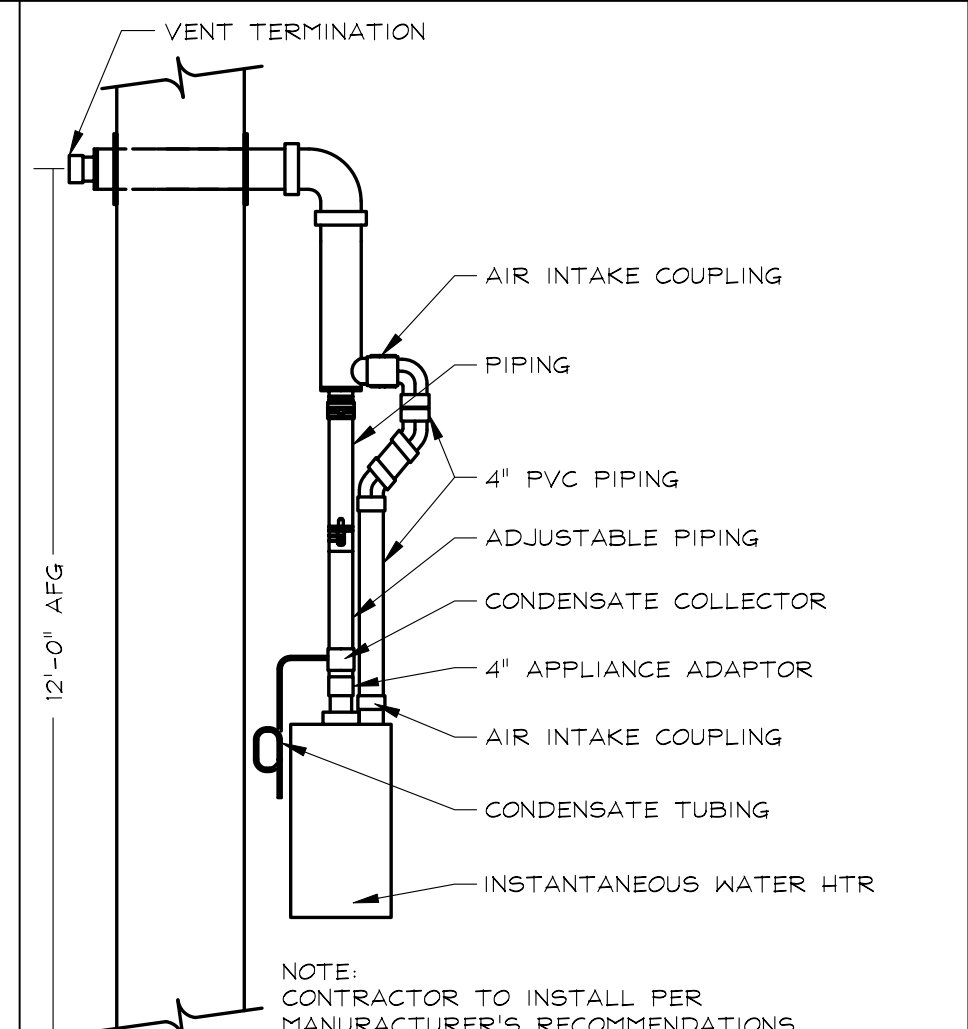
DESIGN DEVELOPMENT NOT FOR CONSTRUCTION

© 2009 SHREMSHOCK ENGINEERING, INC. PERMISSION TO REPRODUCE THESE DRAWINGS AND SPECS ARE PREPARED FOR USE ON A SPECIFIC SITE. CONTEMPORARILY BY THEIR ISSUE DATE. THEY ARE NOT INTENDED FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. REUSE OF THESE DRAWINGS AND SPECS. OR ANY REPRODUCTION THEREOF, ON ANY OTHER PROJECT IS PROHIBITED AND CONTRARY TO SHREMSHOCK ENGINEERING, INC.

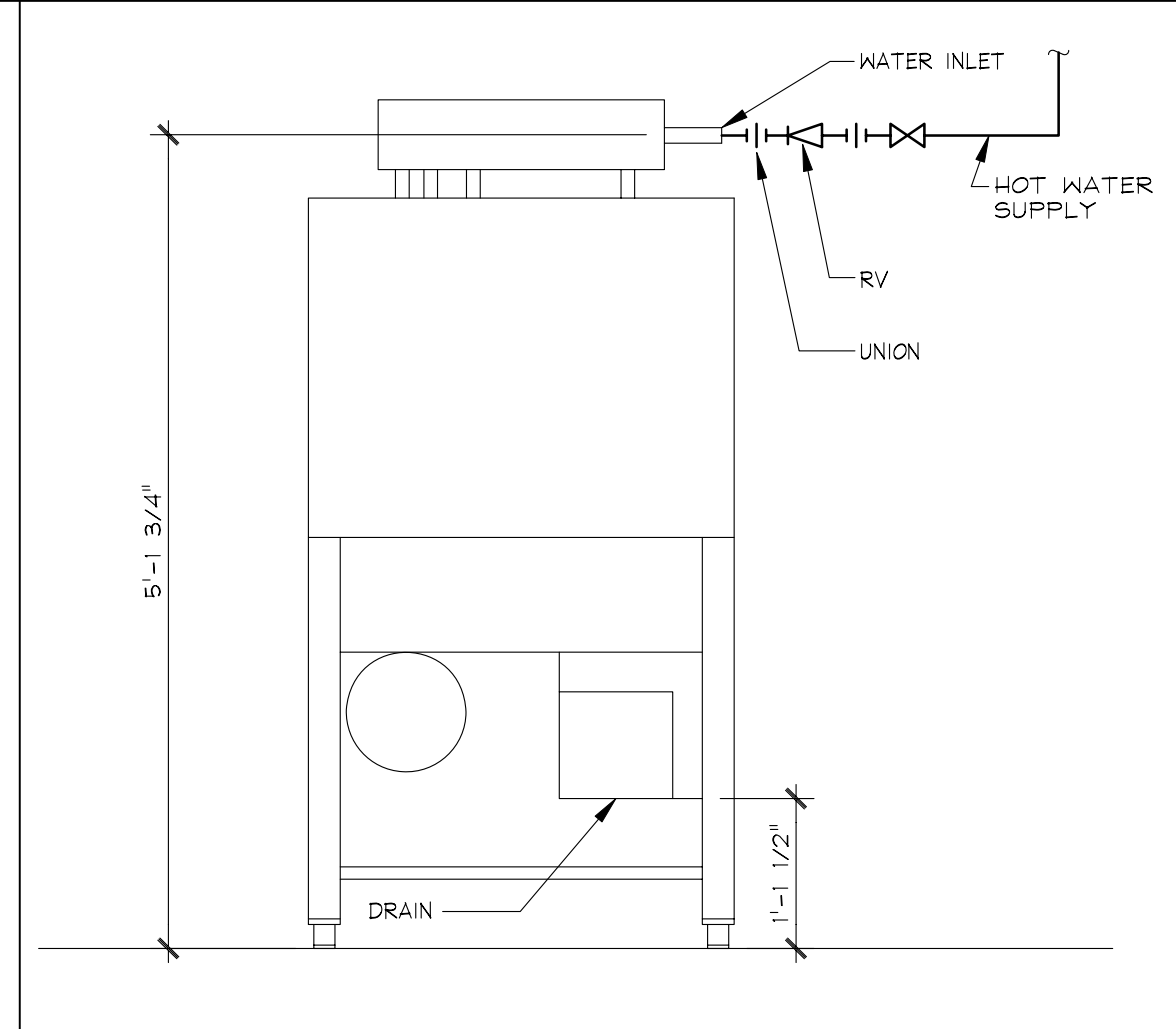
SAI # 11002
DRAWING NUMBER: P1



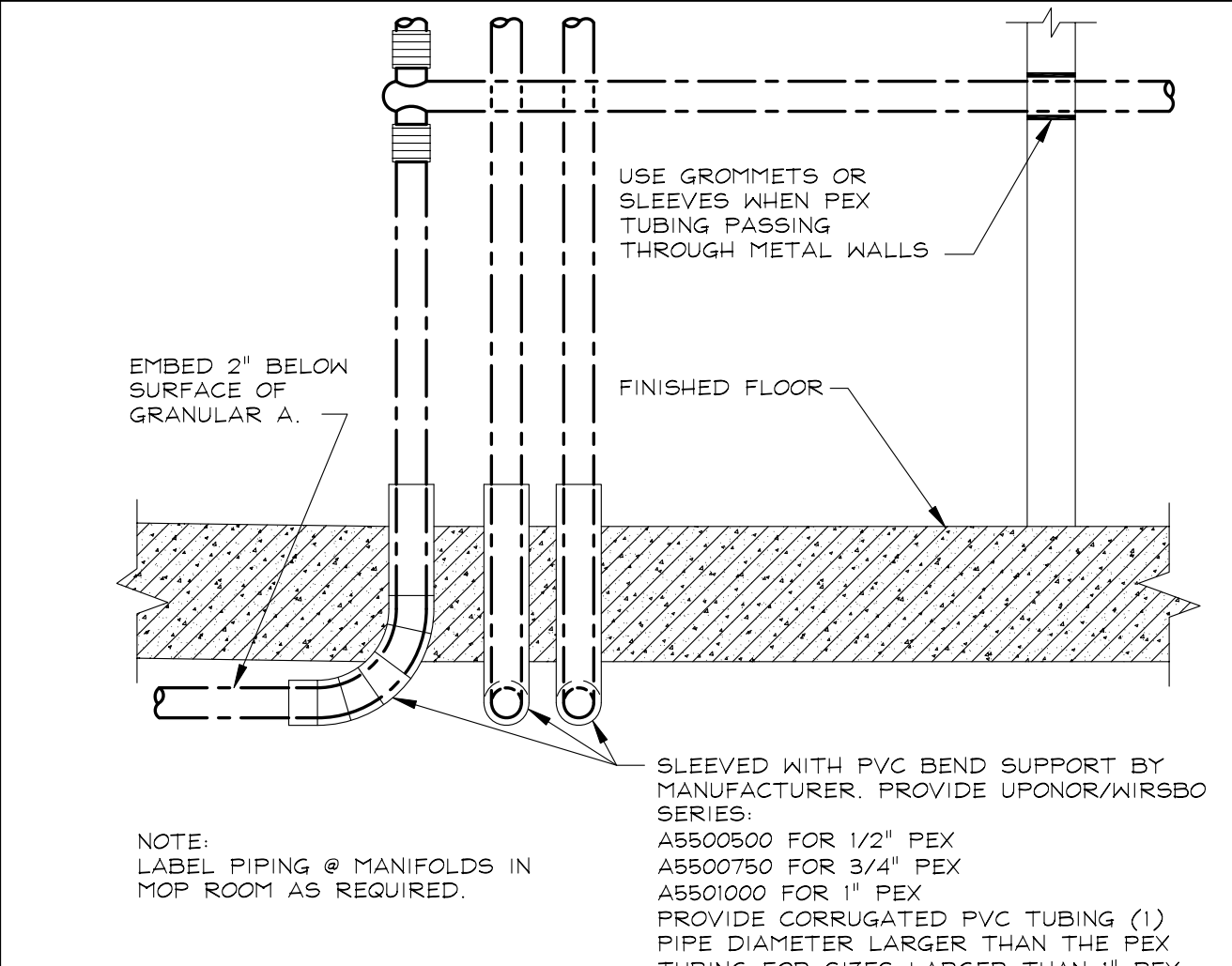
7 MIXING VALVE DETAIL (MV-2)
P2 N.T.S.



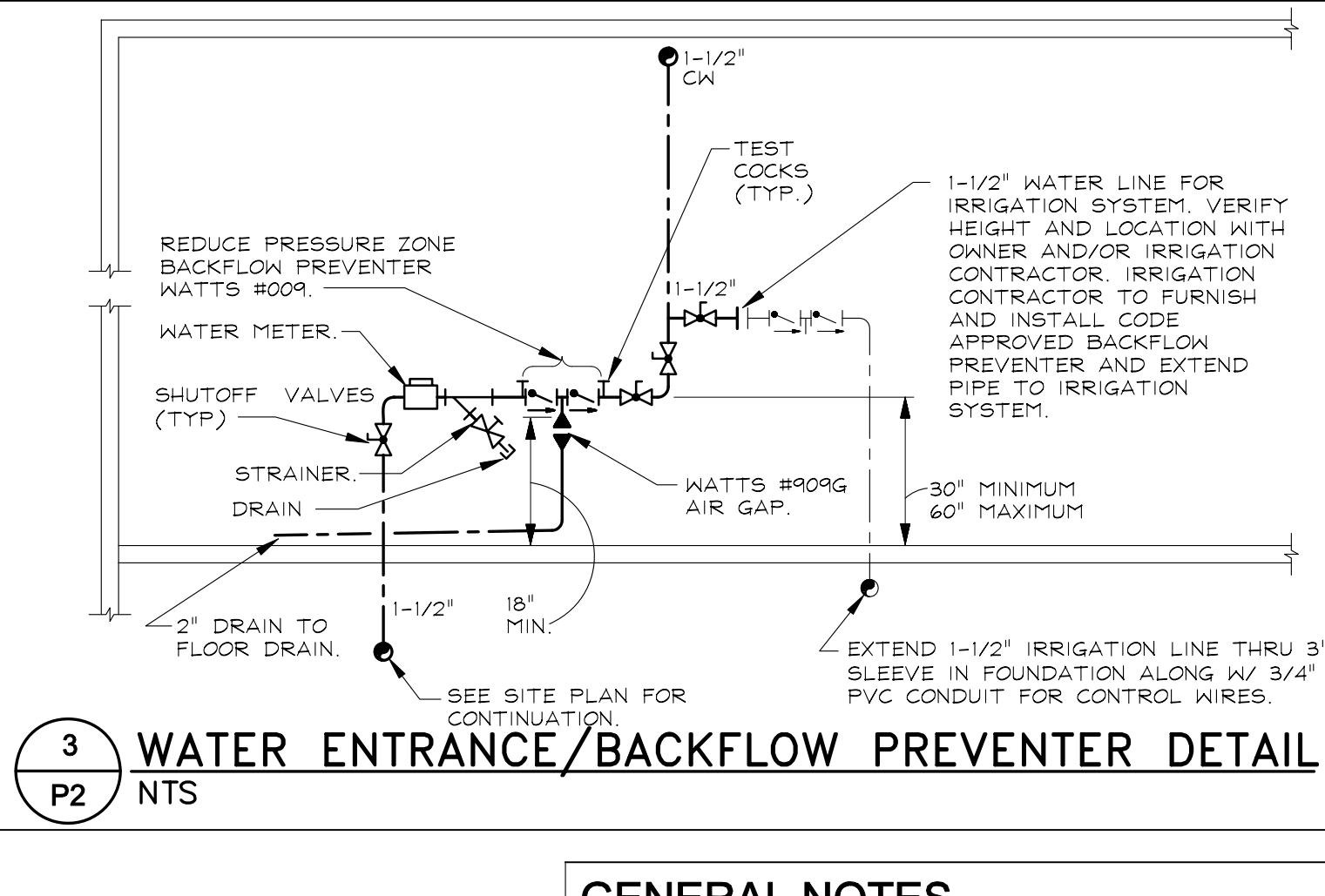
6 WATER HEATER VENT DETAIL
P2 N.T.S.



5 DOOR TYPE DISHWASHER DETAIL
P2 N.T.S.



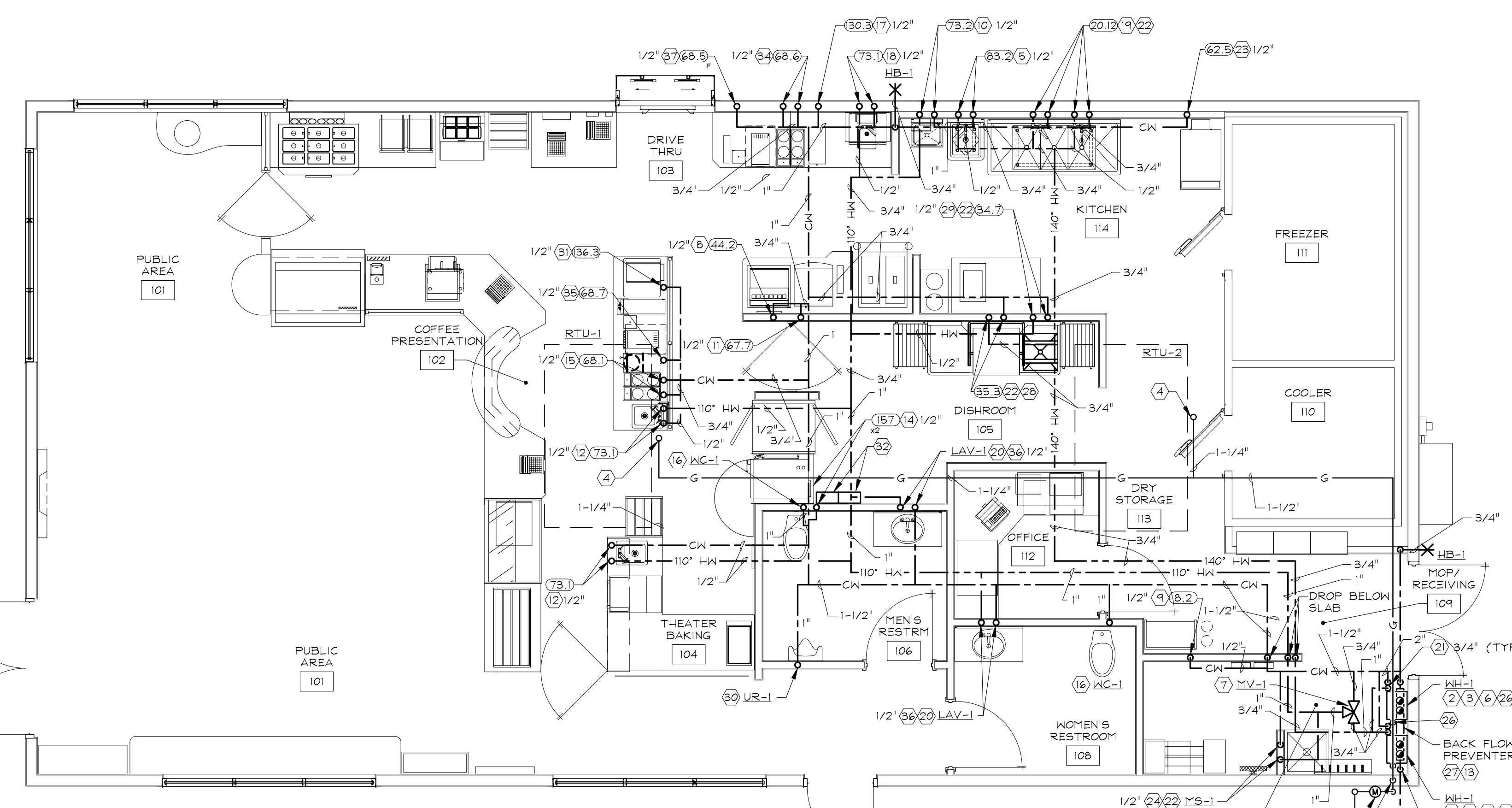
4 PEX PIPING INSTALLATION DETAIL (TYP)
P2 N.T.S.



3 WATER ENTRANCE/BACKFLOW PREVENTER DETAIL
P2 N.T.S.

GENERAL NOTES

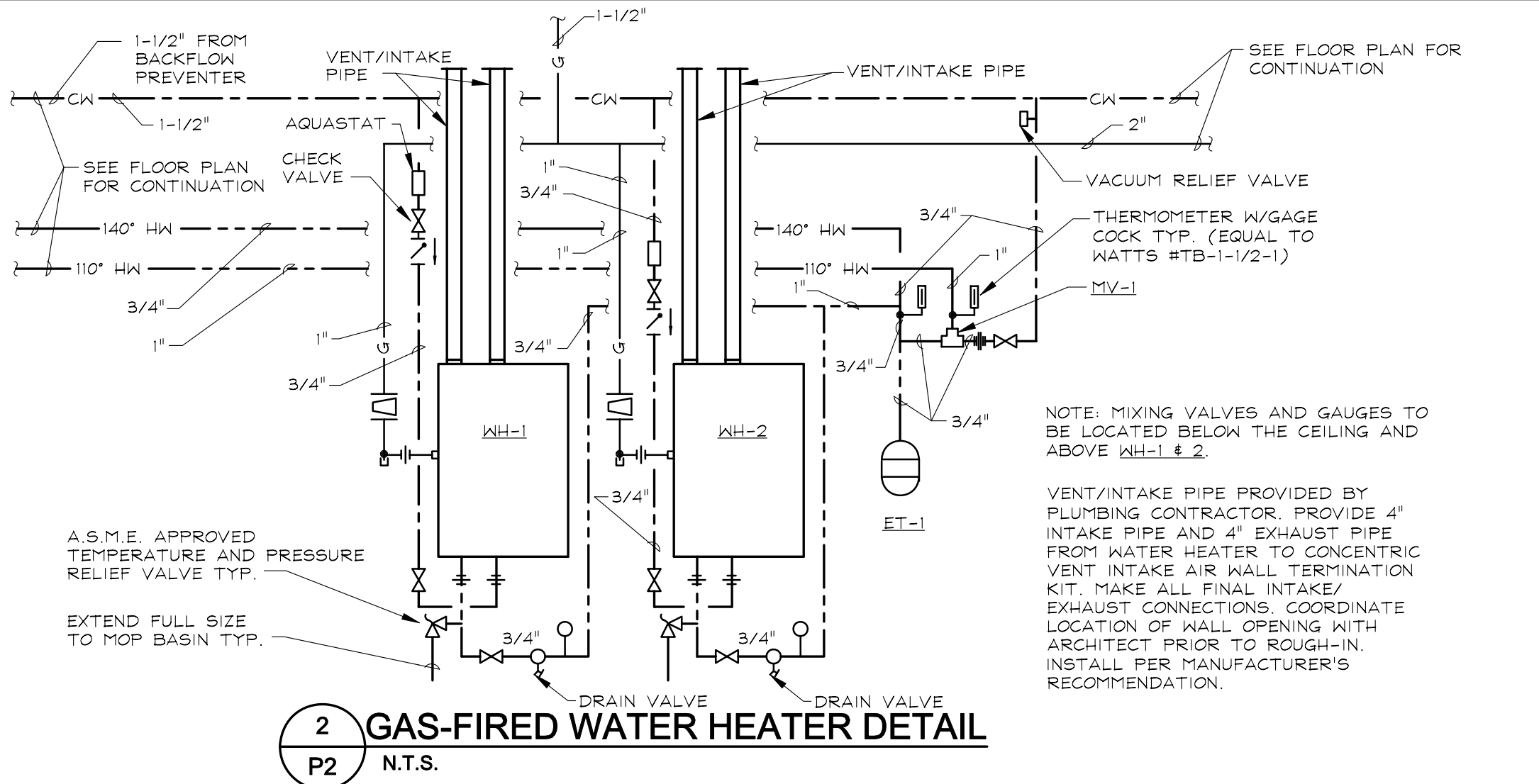
- ALL COLD AND HOT WATER LINES SHALL BE INSTALLED UNDER SLAB. COORDINATE WITH OTHER TRADES PRIOR TO ROUGH-IN OF PIPING TO PREVENT CONFLICT.
- COORDINATE LOCATION AND ROUGH-IN HEIGHT OF KITCHEN EQUIPMENT WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN.
- PLUMBING CONTRACTOR TO MAKE ALL CONNECTIONS TO KITCHEN EQUIPMENT AND MECHANICAL EQUIPMENT UNLESS OTHERWISE NOTED.
- SEE SHEET P3 FOR KITCHEN EQUIPMENT SCHEDULE, FIXTURE SCHEDULE, AND DETAILS.
- PROVIDE SHOCK ABSORBERS AT THE END RUN OF ALL WATER PIPING. SIZE AS RECOMMENDED BY PLUMBING AND DRAINAGE INSTITUTE, AND AS RECOMMENDED BY THE MANUFACTURER.
- ALL PIPING (GAS AND WATER) TO BE CONCEALED IN WALL SPACE WHEN POSSIBLE.
- ALL HOT AND COLD WATER LINES INSTALLED IN EXTERIOR WALLS ARE TO BE INSTALLED ON THE WARM SIDE OF THE INSULATION AND INSULATED TO PREVENT FREEZING.
- ALL DOMESTIC WATER PIPING BELOW SLAB SHALL BE PEX PIPE UNLESS PROHIBITED BY LOCAL CODES IN WHICH CASE COPPER SHALL BE USED. IF ALLOWED, PEX PIPING TO BE INSTALLED TO MEET ALL LOCAL CODES.



CODED NOTES

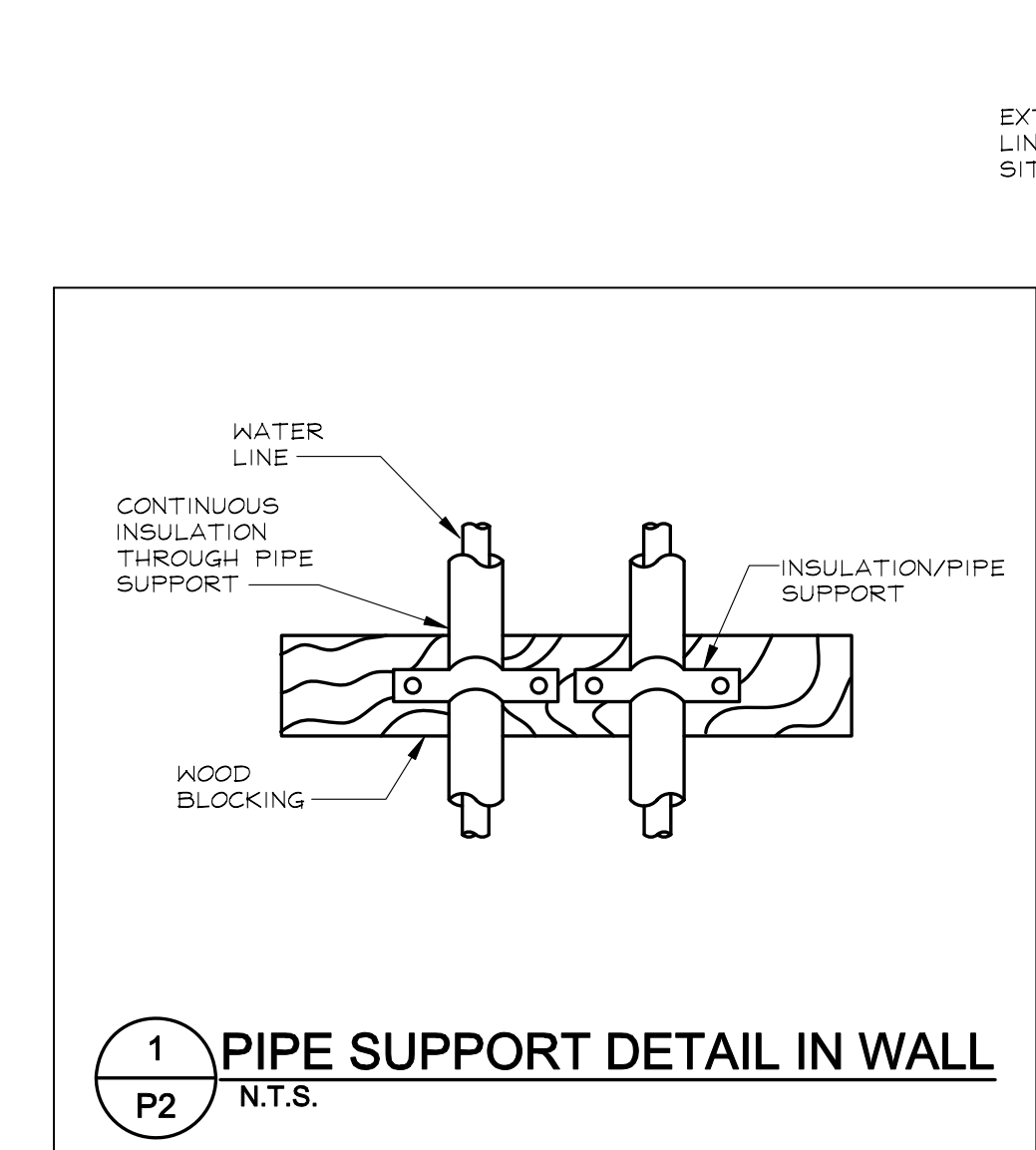
- PLUMBING CONTRACTOR TO PROVIDE GAS METER AND REGULATOR PER LOCAL GAS COMPANY. COORDINATE WITH LOCAL GAS COMPANY FOR METER AND REGULATOR STANDARDS PRIOR TO ROUGH-IN.
- PLUMBING CONTRACTOR TO PROVIDE 6" DIRT LEG AND GAS COCK AT WATER HEATER.
- PLUMBING CONTRACTOR TO PROVIDE 4" INTAKE PIPE AND 4" EXHAUST PIPE FROM WATER HEATER TO CONCENTRIC VENT AIR INTAKE WALL TERMINATION KIT. MAKE ALL FINAL INTAKE/EXHAUST CONNECTIONS. COORDINATE LOCATION OF WALL OPENING WITH ARCHITECT AND OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. VENTS TO TERMINATE 12"-0" A.F.G. TO CENTER OF VENT.
- EXTEND GAS LINE THROUGH ROOF TO ROOFTOP UNIT AND PROVIDE GAS COCK, 6" DIRT LEG, 240 CFH. PLUMBING CONTRACTOR TO MAKE FINAL CONNECTION. COORDINATE EXACT LOCATION OF EQUIPMENT WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN. SEAL ROOF PENETRATION WEATHER TIGHT.
- EXTEND 1/2" 140°F HOT AND COLD WATER LINES UP TO 18' A.F.F. TO ITEM #82. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION OF SINK WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN. PROVIDE WITH SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- SEE WATER HEATER DETAIL ON THIS SHEET FOR SIZES AND CONTINUATION OF WATER LINES.
- MIXING VALVE TO BE INSTALLED IN AN ACCESSIBLE LOCATION. SEE DETAIL THIS SHEET FOR DETAILS.
- EXTEND 1/2" COLD WATER UP TO 44" A.F.F. FOR ITEM #4.2 PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING. COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER.
- EXTEND 1/2" COLD WATER DOWN TO 60" A.F.F. FOR ITEM #6.2. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" HOT AND COLD WATER UP TO 24" A.F.F. FOR ITEM #73.2. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" COLD WATER UP TO 44" A.F.F. FOR ITEM #67.7. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" HOT AND COLD WATER LINES UP TO ITEM #73.1. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN. PROVIDE WITH SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- PLUMBING CONTRACTOR PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER. SEE WATER ENTRANCE/BACKFLOW PREVENTER DETAIL ON THIS SHEET.
- EXTEND 1/2" COLD WATER LINE UP TO 18' A.F.F. FOR ITEM #157.1. PROVIDE A SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING. EXTEND THE MAIN 1/2" LINE UP TO 44" A.F.F. FOR ITEM #157 AND PROVIDE A SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING. CONNECT TO 3/4" THREADED INLET PER MANUFACTURER'S RECOMMENDATIONS. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
- EXTEND 1/2" COLD WATER UP TO ITEM #68.1. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1" COLD WATER LINE UP TO APPROXIMATELY 30"+/- A.F.F. TO THE WATER CLOSET FLUSH VALVE. SEE SHEET A9 FOR MORE INFORMATION. COORDINATE EXACT LOCATION WITH THE MANUFACTURER'S EQUIPMENT PRIOR TO ROUGH-IN.
- EXTEND LINE UP TO 44" A.F.F. TO ITEM #130.3. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION OF EQUIPMENT WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" HOT AND COLD WATER LINES UP TO 24" A.F.F. TO ITEM #73.1. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN. PROVIDE WITH SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" HOT AND COLD WATER LINES UP TO 18' A.F.F. TO THE LAVATORY. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- DROP 3/4" CW AND HW LINES TO WATER HEATERS.
- FURNISH AND INSTALL CHECK VALVES IN THE COLD WATER AND HOT WATER SUPPLY TO PLUMBING FIXTURE/KITCHEN EQUIPMENT INDICATED. VALVES ARE TO BE LOCATED IN AN ACCESSIBLE LOCATION.
- EXTEND 1/2" COLD WATER UP TO 60" A.F.F. FOR ITEM #62.5. PROVIDE SHUT-OFF VALVE, BACKFLOW PREVENTER, AND FLEXIBLE COPPER TUBING AS REQUIRED TO MAKE FINAL CONNECTION.
- EXTEND 1/2" HOT WATER LINE AND 1/2" COLD WATER LINE DOWN TO 30" A.F.F. TO THE MOP SINK. FAUCET. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
- 2" GAS LINE TO RISE UP IN WALL TO ABOVE CEILING.
- DROP 1" GAS LINE DOWN TO EACH WATER HEATER.
- EXTEND 1-1/2" WATER LINE, STUB OUT DOWNSTREAM FROM BACKFLOW PREVENTER, FOR IRRIGATION SYSTEM. VERIFY HEIGHT AND LOCATION WITH OWNER AND/OR IRRIGATION CONTRACTOR.
- EXTEND 3/4" 140°F HOT WATER LINE UP TO 54" A.F.F. TO ITEM #95.3. EXTEND 1/2" CW UP TO 24" A.F.F. TO DRAIN QUENCH SYSTEM SUPPLIED WITH UNIT. MAKE ALL FINAL CONNECTIONS. COORDINATE EXACT LOCATION WITH KITCHEN SUPPLIER PRIOR TO ROUGH-IN. PROVIDE WITH SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 3/4" COLD WATER LINE UP TO UR-1. SEE SHEET A9 FOR URINAL RIM HEIGHT. COORDINATE EXACT LOCATION WITH THE MANUFACTURER'S EQUIPMENT PRIOR TO ROUGH-IN.
- EXTEND 1/2" COLD WATER LINES UP TO ITEM #136.3. MAKE ALL FINAL CONNECTIONS. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- MOUNT CHEMICAL/FILTRATION UNITS PER DIRECTION ON SHEET A2. UNITS ARE PROVIDED BY EQUIPMENT SUPPLIER. INSTALLED AND CONNECTED BY PLUMBING CONTRACTOR PER MANUFACTURER'S RECOMMENDATIONS.
- E.
- EXTEND 1/2" COLD WATER UP TO 44" A.F.F. FOR ITEM #68.6. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- EXTEND 1/2" COLD WATER UP TO 44" A.F.F. FOR ITEM #68.7. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.
- FURNISH AND INSTALL SINGLE POINT OF USE MIXING VALVE AT EACH ACCESSIBLE LAVATORY MEETING ASSE 106. PIPE PER DETAIL ON THIS SHEET. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- EXTEND 1/2" COLD WATER UP TO 44" A.F.F. FOR FUTURE ITEM #68.5. PROVIDE SHUT-OFF VALVE WITH 1/2" SWEAT TO 3/8" COMPRESSION FITTING.

WATER HEATER PACKAGE
WATER HEATER PACKAGE SUPPLIED BY TIM HORTON'S ON ALL COMPANY OWNED STORES. VERIFY WITH OWNER'S REPRESENTATIVE WHO IS TO SUPPLY WATER HEATER PACKAGE ON FRANCHISE STORES. INCLUDES WH-1 & 2. PLUMBING CONTRACTOR TO FURNISH AND INSTALL FLUE /COMBUSTION AIR EXHAUST/INTAKE. COORDINATE THE DELIVERY OF THIS PACKAGE WITH THE TIM HORTON'S JOB SUPERVISOR. INSTALLATION BY PLUMBING CONTRACTOR.



2 GAS-FIRED WATER HEATER DETAIL
P2 N.T.S.

PLUMBING PLAN-WATER
1/4"=1'-0"



1 PIPE SUPPORT DETAIL IN WALL
P2 N.T.S.

GAS LOADS

RTUs	480 MBH
WTR. HTR.	474 MBH
TOTAL	954 MBH

REVISION/UPLOAD DATE

REV	DATE	DESCRIPTION
RFP#1	01/31/11	GENERIC'S UPLOAD
RFP#2	03/17/11	GENERIC'S UPLOAD

LAST DESIGN BULLETIN

NUM.	DATE	DESCRIPTION

DATE ISSUED: 03/14/2011

SHREMSHOCK
Shremshock Engineering, Inc.
10000 W. 10th Ave.
T: 814-545-4550 F: 814-545-4555
www.shremshock.com

Tim Hortons
MODEL 190-II (U.S.)
NOT FOR CONSTRUCTION
ANYWHERE U.S.A.

PLUMBING PLAN - DOMESTIC WATER
TDL STORE NUMBER
DRAWN BY: KRO CHECKED BY: JTP

DESIGN DEVELOPMENT NOT FOR CONSTRUCTION
© 2009 SHREMSHOCK ENGINEERING, INC. PROHIBITION OF REUSE: THESE DRAWINGS AND SPECIFICATIONS ARE PREPARED FOR USE ON A SPECIFIC SITE. ANY REUSE OF THESE DRAWINGS OR SPECIFICATIONS ON ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF SHREMSHOCK ENGINEERING, INC. IS PROHIBITED.
SAI# 11002
DRAWING NUMBER: **P2**