

30"X48" CLEAR SPACE REQUIRED

HIGH SPEED DATA LINE & MODEM LINE REQUIRED

49

FURNITURE AND EQUIPMENT PLAN

FURNITU	RE AND	$\overline{EQU}$	TIF	PMENT LEGEND
# ITEM	MANUFACTURER	ORDERED FROM	QTY.	DESCRIPTION
·				CUSTOMER AREA
2 BANQUETTE WALL BENCH	PLYMOLD	DAI	2	( )24' ( )30' ( )44' ( )48' 2 )60' ( )66' VINYL/FABRIC COVERED WALL BENCH WITH VINYL FINISHED XIDES. ( )BLACK OR ( )BROWN.
	PLYMOLD	DAI	_	30' HIGH W/ (1) VERTICAL TABLE LEG AT EACH OF THE 4 CORNERS. FONT HILL PEAR LAMINATE WITH BLACK DURA EDGE.
	PLYMOLD	DAI		30' HIGH W/ FREESTANDING 22' X 22' CROSS BASE. FONT HILL PEAR LAMINATE WITH BLACK DURA EDGE.
5A 24' ROUND BAR HEIGHT TABLE		DAI		42' HIGH W/ FREESTANDING 22' X 22' CROSS BASE. FONT HILL PEAR LAMINATE WITH BLACK DURA EDGE.
6A CHAIR	PLYMOLD	DAI		QUEST CHAIR W/ UPHOLSTERED SEAT OR DUR-A-SEAT TO BE ORDERED IN THE FOLLOWING COLORS; CROCUS, SPICE AND SLATE. FRAME COLOR IS BLACK WRINKLE.
6B BAR HEIGHT STOOL	PLYMOLD	DAI		QUEST STOOL W/ UPHOLSTERED SEAT OR DUR-A-SEAT TO BE ORDERED IN THE FOLLOWING COLORS; CROCUS, SPICE AND SLATE. FRAME COLOR IS BLACK WRINKLE.
8A TRASH RECEPTACLE	PLYMOLD	DAI	1	(X)25' X 25' SINGLE HOLE TRASH UNIT OR ( )18 5/8' X 18 5/8' SPACE SAVER TRASH UNIT. BLACK DURA EDGE TRASH RECEPTICLE W/FONT HILL PEAR LAMINATE FINISH.
9A SODA FOUNTAIN	CORNELIUS	DAI	1	DEDICATED 115V, 20 AMP DUPLEX DUTLET (NEMA 5-20R) W/IN 3 FEET, 3 INCH DR LARGER FLOOR DRAIN W/IN 3 FEET (EQUIPMENT INSTALLED BY COKE).
9B TEA/COFFEE BREWER	BUNN-U-MATIC CURP.	DAI	1	DEDICATED 120V, 15 AMP DUPLEX DUTLET (NEMA 5-15P) W/IN 3 FEET. PLUMBING: 20-90 PSI. MODEL SUPPLIED WITH 1/4' MALE FLARE FITTING. MIN. 1GPM WATER FLOW.
10 BEVERAGE DESTINATION CENTER	DUKE MANUFACTURING	DAI		(X)RH ( )LH BEVERAGE PLACEMENT ( )48" ( )60" (X)72" ( )84" ( )96" ( )108" ( )120". STAINLESS STEEL TOP, FONT HILL PEAR LAMINATE FINISH, INSTALLED BY G.C.
11 SUBWAY "OPEN" WINDOW SIGN		DAI	-	SEE MANUFACTURER FOR SPECS. 120V. INSTALLED BY G.C.
12 SODA STORAGE	COKE		-	SEE BOTTLER FOR SPECS. INSTALLED BY BOTTLER.
13A WALL ART-VERTICAL		DAI		23' X 50' WALL HUNG PRINT(S) ON STYRENE-FACED FOAMBOARD FRAMED IN BLACK METAL, MOUNTING HARDWARE INCLUDED, EIGHT DIFFERENT PRINT IMAGES AVAILABLE.
<del></del>	SUNGLO FABRICS	DAI	-	26' X 26' WALL HUNG PRINT(S) COLOR PHOTOS DOUBLE MATTED IN A BLACK WOODEN FRAME, MOUNTING HARDWARE INCLUDED, EIGHT DIFFERENT PRINT IMAGES AVAILABLE.
14 CHIP RACK	FRITO-LAY	DAI	_	( )44'W X 16 3/8'D X 68"H (X)44"W X 16 3/8"D X 54"H ( )33 1/4"W X 16 3/8"D X 68"H FLDDR RACKS. / ( )24"W X 12"D X 22"H ( )36"W X 12"D X 22"H CDUNTERTOP RACKS. THROUGH LOCAL DIST.
15 DISPLAY REFRIGERATOR		DAI	_	(X)1 DOOR FLOOR MODEL ( )2 DOOR FLOOR MODEL, DEDICATED 115V, 15 AMP DUPLEX OUTLET (NEMA 5-15R) W/IN 6 FEET.
16 WALL PLANT	GRACE DESIGNS	DAI		WALL HUNG SILK PLANT. MOUNTING BRACKET TO BE HUNG 15' BELOW THE TOP OF THE UPPER DECORATIVE MOLDING (REFER TO TUSCANY II BACK-UP SHEET #1)
17 INTERIOR DOOR	LUCAL	G.C.		SOLID CORE HARDVOOD DOOR (SLAB OR PANEL CONSTRUCTION) STAIN MINVAX #235 CHERRY & POLYURETHANE V/ MINVAX FAST DRYING SATIN. METAL FRAME (PAINT SHERVIN VILLIAMS #SV6356 COPPER MOUNTAIN) LEVER HANDLE. INSTALLED BY GC.
18 GUIDANCE SYSTEM	LAVI INDUSTRIES.	DAI	4	BELTRAC SYSTEM, BLACK POST WITH RETRACTABLE HORIZONTAL NYLON BELT.
				SERVICE AREA
19 FRONT COUNTER	DUKE MANUFACTURING	DAI	1	TOTAL LENGTH 17'2". (X)LH ( )RH 25' HOT FOOD UNIT (2) 60' COLD PAN UNIT 61' CASH UNIT. N/AHOT FOOD EXTENSION N/ACASH EXTENSION N/ABEVERAGE EXTENSION.  INSTALLED BY G.C. ULS APPROVED, ELECTRICAL CONNECTIONS AND WIRING TO LOCAL AND STATE CODE REQUIREMENTS AS DETERMINED BY G.C. OR ELECTRICIAN.
	ADVANCED DISPLAYS IN PLASTICS, INC	DAI	1	DISPLAY CASE ON TOP OF SUB-WRAP AND NAPKIN RISER. MADE OF CLEAR ACRYLIC.
23 SAFE	C.S.S./TIDEL	DAI		C STIME LOCK ( SQUICK DROP X STIDEL TACC. INSTALLED BY G.C. IN SERVICE AREA.
	MICROS SYSTEMS/DELL/IPC-POS	DAI	_	PC BASED POINT OF SALE SYSTEM, REQUIRES DEDICATED POWER SOURCE WITH ISOLATED GROUND TO BREAKER.
25 MICROWAVE	AMANA/SHARP	DAI	1	*5-20R DUTLET REQUIRED. 1200 WATT, 120V/60HZ/1PH, 20 AMP CIRCUIT. DEDICATED CIRCUIT REQUIRED.
27 BREAD OVEN	DUKE/NU-VU	DAI	1	
28A COMBI BREAD CABINET		DAI	1	
29 MENUBOARD	VGS / TRANSLITE SONOMA		4	MENUBDARD: ( 4)2' X 4' ( )2' X 2'. LIGHT FIXTURES: ( )2' ( )4' ( )8' ( )16' MOUNT TO TOP OF MENUBDARD. SINGLE DUTLET REQUIRED, INSTALLED BY G.C.
31 BACK COUNTER V/ HAND SINK		DAI	1	
32 BACK COUNTER	DUKE MANUFACTURING	DAI	1	( )24" ( )36" (X )48" ( )60" ( )72" LENGTH, STAINLESS STEEL TOP, FONT HILL PEAR LAMINATE FINISH, INSTALLED BY G.C.
33 REFRIGERATED BACK COUNTER		DAI	1	
34 RAPID COOK OVEN	TURBOCHEF/MERRYCHEF	DAI	1	(X)TURBUCHEF ( )MERRYCHEF MICRUMAVE/CUNVECTION OVEN, REFER TO TUSCANY II BACK-UP SHEET #4 FOR FURTHER SPECIFICATIONS.
				BACKROOM AREA
36 SINK	DUKE MANUFACTURING	DAI		(3) COMPARTMENT(S) (2) DRAINBOARD(S). X )18" ( )24" DRAINBOARD SIZE. INSTALLED BY G.C. ULS APPROVED.
37 MOP SINK	LOCALLY SOURCED	G.C.	_	FLOOR LEVEL SINK, 2' X 2' (PREFERRED). ACQUIRE LOCALLY, INSTALLED BY G.C.
	LOCALLY SOURCED	G.C.	_	ACQUIRE LOCALLY, INSTALLED BY G.C.
39 S.S. WORKTABLE	DUKE MANUFACTURING	DAI		( )24" ( )36" ( )48" ( )60" ( )72" ( )84" ( )96" ( )108" ( )120" X 30", X( )W/ GALVANIZED UNDERSHELF ( )WITHOUT UNDERSHELF.
	INTER METRO	DAI		SUPER ERECTA BRITE. EPDXY COATED, WALL MOUNTED SHELVES, AVAILABLE IN VARIOUS SIZES. INSTALLED BY G.C.
	DUKE MANUFACTURING	DAI		(1) COMPARTMENT(S) (-) DRAINBOARD(S). (-) 18" (-) 24" DRAINBOARD SIZE. INSTALLED BY G.C. ULS APPROVED.
43 CLEANING PRODUCT RACK		DAI		DISPENSING STATION FOR CLEANING PRODUCTS.
45 NEMCO EASY-SLICER		DAI		MANUAL SLICER MOUNTED ON STAINLESS STEEL TABLE TOP, NSF APPROVED.
	LOCKWOOD	DAI	_	(X)WALK-IN ( )REACH-IN , NSF APPROVED.
	NORLAKE	DAI		( )8' X 6' (X)6' X 8' ( )6' X 6' ( )5' X 6' ( )4' X 6' ( )3 DOOR ( )2 DOOR ( )1 DOOR ( )0THER SELF-EVAPORATING, DIRECT WIRED, INSTALLED BY G.C. NSF APPROVED.
	NORLAKE	DAI		( )8' X 6' (X)6' X 8' ( )6' X 6' ( )5' X 6' ( )4' X 6' ( )3 DOOR ( )2 DOOR ( )1 DOOR ( )0THER SELF-EVAPORATING, DIRECT WIRED, INSTALLED BY G.C. NSF APPROVED.
	INTER METRO	DAI		(2)12' X 36' (1)14' X 30' (1)14' X 36' (1)24' X 42', SUPER ERECTA BRITE.
50 SUDA STURAGE	COKE	DAI		DEDICATED 115V, 20 AMP DUPLEX DUTLET (NEMA 5-20R) W/IN 3 FEET OF BIB RACK, 96 INCHES HIGH/WATER 1/2 INCH BALL VALVE SHUTDFF W/IN 3 FEET OF BIB RACK, 96 INCHES HIGH (EQUIPMENT INSTALLED BY COKE).
51 STEREO SYSTEM	SUBWAY® RADIO/LOCAL	INAT/FIICAF	_ 1	RECEIVER AND AMPLIFIER WITH THREE SPEAKERS MOUNTED AND PROFESSIONALLY WIRED IN CEILING. OPTIONAL SUBWAY® RADIO SERVICE.

	5 (2)12° X 3	36" (1 )14" X 30" (1 )14" X 36"	1 )24" >	42", SUPER	ERECTA	BRITE	
	1 DEDICATED 115	5V, 20 AMP DUPLEX DUTLET (NEMA 5-20R	) W/IN 3 FE	ET OF BIB RACK,	, 96 INCHE	S HIGH/	VATER 1/2 INCH BALL VALVE SHUTOFF W/IN 3 FEET OF BIB RACK, 96 INCHES HIGH (EQUIPMENT INSTALLED BY COKE
AL	1 RECEIVER	AND AMPLIFIER WITH THREE SPE	AKERS MO	UNTED AND P	RUFESSI	ONALL'	Y WIRED IN CEILING, OPTIONAL SUBWAY® RADIO SERVICE.
	2' X 2' L OPTION BLONDE	LING & LIG DROP CEILING WITH WHIT AL PAINTED CEILING TILE AND E PAINT (SHERWIN WILLIAMS ) GRASS PAINT (SHERWIN WILL	TE SPLIN D SPLINE #SW 6128,	IES. COLORS (SP ) *CUSTOME	PLINES FR AREA	MUST 1 ONL	BE PAINTED THE SAME COLOR AS TILES): Y*
	SYMBOL	DESCRIPTION	MANUF.	•	DRDEREI I FROM		NOTES:
	$\boxtimes$	2'X2' RECESSED FLUORESCENT FIXTURE	LIGHTOLIER	SPECIALTY STURE LIGHTING		6	RECESSED FLUORESCENT FIXTURE (SPS2GSVA2FT120SB). USES (2) PL-L40W/35/RS BIAX 2G11 LIGHT BULBS.
		2'X2' RECESSED FLUORESCENT FIXTURE W/PARABOLIC LENS	LIGHTOLIER	SPECIALTY STURE LIGHTING	DAI	8	RECESSED FLUORESCENT FIXTURE W/PARABOLIC LENS (DPA2G9LS2FT120SB). USES (2) PL-L40W/35/RS BIAX 2G11 LIGHT BULBS.
		DOWNLIGHT (SERVICE AREA)	LIGHTOLIER	SPECIALTY STURE LIGHTING	DAI	10	RECESSED FIXTURE (1102P1/1146). USES (1) 45WPAR BULB
		4' FLUORESCENT STRIP LIGHT		SPECIALTY STURE LIGHTING	DAI	11	Model # Nuls-28. (1) F2875 Bulb. up to 10 Nuls fixtures may be connected together on a single 120v power cord feed.  Mount on 4' shelf @7'-6' a.f.f. & finish v/ 4 1/2' crown molding to conceal fixtures. Refer to back-up page 1 of 4.
		3' FLUORESCENT STRIP LIGHT	NORA LIGHTING	SPECIALTY STURE LIGHTING	DAI	6	Model # Nuls-21. (1) F2175 Bulb. up to 10 Nuls fixtures may be connected together on a single 120v pover cord feed, Mount on 4' shelf e7'-6' aff. & finish v/ 4 1/2' crown molding to conceal fixtures. Refer to back-up page 1 of 4.
		VINYL DROP-IN	$\geq$	G.C.	G.C.	RÉQ'D.	2' X 2' DROP-IN PANEL
		ACOUSTICAL DROP-IN	$\geq$	G.C.	G.C.	RÉQ, D.	2' X 2' DROP-IN PANEL
	⊠ 10	2' X 2' SURFACE MOUNTED LIGHT FIXTURE WITH SEPARATE EXHAUST FAN		G.C.	G.C.	1	STANDARD SURFACE MOUNTED FIXTURE WITH ENERGY SAVING BALLAST AND 40 WATT COOL WHITE TUBES. SEPERATE EXHAUST FAN WITH A 100 CFM AIR EXCHANGE REQUIRED.
	Ø	AMBER PENDANT LIGHT (LARGE)	TRUE TO FORM	SPECIALTY STORE LIGHTING	DAI	7	LARGE SUSPENDED PENDANT FIXTURE (SW/AST/10-PL), USES (1) 15W FLUI, LAMP (MAXLITE MLS15EA), PENDANT LIGHTS ARE PLACED AROUND THE PERIMETER OF THE RESTAURANT AND SHOULD BE INSTALLED AT A HEIGHT OF 6'-6' (198.1cm) FROM THE FLOOR TO THE BOTTOM OF THE FIXTURE, (A 'PENDANT STEM KIT' IS AVAILABLE THROUGH SPECIALTY STORE LIGHTING FOR USE WITH HIGH CEILING). **RECOMMEND INSTALLING CUSTOMER SEATING BEFORE PENDANT LIGHTS TO ALLOW FOR PRECISE PLACEMENT OF FIXTURES OVER TABLE TOPS.
	$\mathbb{R}$	CEILING FAN	VILLA LIGHTING	DAI	DAI	2	MX2-AS/52CR REGENCY MX-EXCEL WITH 5 CHERRY FINISH BLADES. CAN BE INSTALLED AS DROP STYLE (WITH 6' OR 2' STEM) OR HUGGER (FLUSH) STYLE.

SYMBOL LEGEND

→ 120V DUPLEX OUTLET

→ 220V SINGLE OUTLET

→ PHONE JACK

J − JUNCTION BOXTHERMOSTAT□ − ELECTRIC PANEL

F.M. — FLOOR MOUNTED

C.M. — CEILING MOUNTED

FLOOR DRAIN

FLOOR SINK

# RELOCATION

### GENERAL NOTES:

- CEILING HEIGHT IS 10'-0'
   ELECTRICAL DUTLET HEIGHTS MEASURED TO BOTTOM OF BOX.
   ONE ELECTRICAL JUNCTION BOX TO BE LOCATED IN CEILING ABOVE EACH WINDOW.
- ABOVE EACH WINDOW.

  CUND MODEL SW3-PLUS WATER FILTRATION SYSTEM IS REQUIRED IN ALL NEW STORES THAT DISPENSE BEVERAGES. THE RECOMMENDED PLACEMENT FOR INSTALLATION IS MOUNTED TO SODA SYRUP RACK BY COCA-COLA. SECONDARY PLACEMENT OPTION IS MOUNTED ON THE BACKROOM WALL. THIRD INSTALLATION OPTION IS MOUNTING INSIDE THE FRONT BEVERAGE COUNTER WHEN SPACE LIMITATIONS OCCUR. REQUIRED: 1/2" INCOMING WATER LINE FEED WITH 1/2" BALL VALVE SHUTOFF AND 1/2" FPT CONNECTION.
- SHUTOFF AND 1/2" FPT CONNECTION.

  MINIMUM 110 VOLT, 20 AMP ELECTRICAL SERVICE TO SUPPORT THE CARBONATOR AND WATER BOOSTER (MUST BE DEDICATED CIRCUIT).

   SMARTCURVE STAND (MFR. DISPLAY-BOX) REQUIRED IN
- CUSTOMER AREA AT POINT OF ORDER (PREFERRED PLACEMENT).
  21 3/4" X 13 1/8" BASE, 56" (WITHOUT HEADER) OVERALL HEIGHT.

   SECONDARY CHIP RACK IS REQUIRED IN THE CUSTOMER AREA. THE TWO AVAILABLE OPTIONS ARE: BASKET STYLE CHIP RACK AT THE POINT OF ORDER (PREFERRED PLACEMENT) OR PURSE RAIL MOUNTED CHIP RACK.
  (MOUNTED ON TOP OF THE PURSE RAIL.)
- (MOUNTED ON TOP OF THE PURSE RAIL.) - EXIT LIGHTS INSTALLED BY G.C. PER LOCAL CODE. - EMERGENCY LIGHTS INSTALLED BY G.C. PER LOCAL CODE.
- EXTINGUISHERS, SMOKE AND FIRE DETECTION SYSTEMS
  INSTALLED BY G.C. PER LOCAL CODE.
   LABOR & MATERIAL SUPPLIED BY G.C. UNLESS OTHERWISE NOT
- INSTALLED BY G.C. PER LUCAL CODE.

   LABOR & MATERIAL SUPPLIED BY G.C. UNLESS OTHERWISE NOTED.

   ALL DIMENSIONS TO BE VERIFIED BY G.C. ON SITE.

   DECOR SPECIFICATIONS ARE TO BE SUBWAY'S "TUSCANY II" SCHEME.

   REFRIGERATOR AND FREEZER MUST BE ADEQUATELY VENTILATED.

  REFER TO MANUFACTURER FOR DETAILS.

REVISION: A H

STORE MUST BE CONSTRUCTED AS
DESIGNED IN THESE FLOOR PLANS
SUBJECT TO FEDERAL, STATE AND
LOCAL LAWS. RECIPIENT IS
RESPONSIBLE FOR ENSURING
COMPLIANCE WITH ALL LAWS. IF
MODIFICATIONS ARE NECESSARY,
PLEASE CONTACT DAI'S STORE DESIGN
DEPARTMENT FOR WRITTEN APPROVAL
OF THE REQUIRED CHANGES.

THIS DRAWING IS FURNISHED BY DOCTORS
ASSOCIATES INC. ("DAI") D/B/A SUBWAY.
RECIPIENT MUST DETERMINE IF THIS DRAWING
MUST BE SUBMITTED TO A LICENSED ARCHITECT
OR SIMILAR PROFESSIONAL UNDER FEDERAL,
STATE OR LOCAL LAW. ANY CHANGES MUST BE

DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR AND/OR FRANCHISEE/OWNER. ANY DISCREPANCY IN DIMENSIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF DA'S AREA DEVELOPMENT AGENT OR DESIGNATED FIELD

REPRESENTATIVE.

THE GENERAL CONTRACTOR AND EACH
SUB-CONTRACTOR SHALL MAKE HIS OWN
INSPECTIONS AND MEASUREMENTS, DAI AND
SUBWAY SHALL NOT BE HELD RESPONSIBLE FO
THE ACCURACY OF DIMENSIONS AND FOR
ERRORS AND OMISSIONS IN THE DRAWINGS IF
WRITTEN CONFIRMATION HAD NOT BEEN
BECEIVED BY DAI'S STORE DESIGN DEPARTMEN

WRITTEN CONFIRMATION HAD NOT BEEN RECEIVED BY DAI'S STORE DESIGN DEPARTMENT THIS DRAWING AND THE INFORMATIONAL CONTENT HERE OF IS THE CONFIDENTIAL PROPERTY DAI OF AND IS PROVIDED SOLLELY FOF THE USE OF AUTHORIZED FRANCHISEES, THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREES NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT. IN WHOLE OR IN PART, OR TO ALLOW

SUCH ACTION BY OTHERS, FOR ANY PURPOSE,

EXCEPT WITH THE WRITTEN PERMISSION OF DAI ACTING FOR SUBWAY. RECIPIENT FURTHER AGREES TO SURRENDER THIS DRAWING AND AN PERMITTED COPIES HEREOF UPON DEMAND.

HEADQUARTERS (203) 877-4281 (800) 888-4848

WORLD H

STORE # 12710 254 FIRESTONE BLVD

MARWAHA

DATE:

JULY 12, 2011

DESIGNED BY:

DESIGNED BY:

KATHERINE MILLER

DRAWN BY: REVIEWED BY

KTM BWB

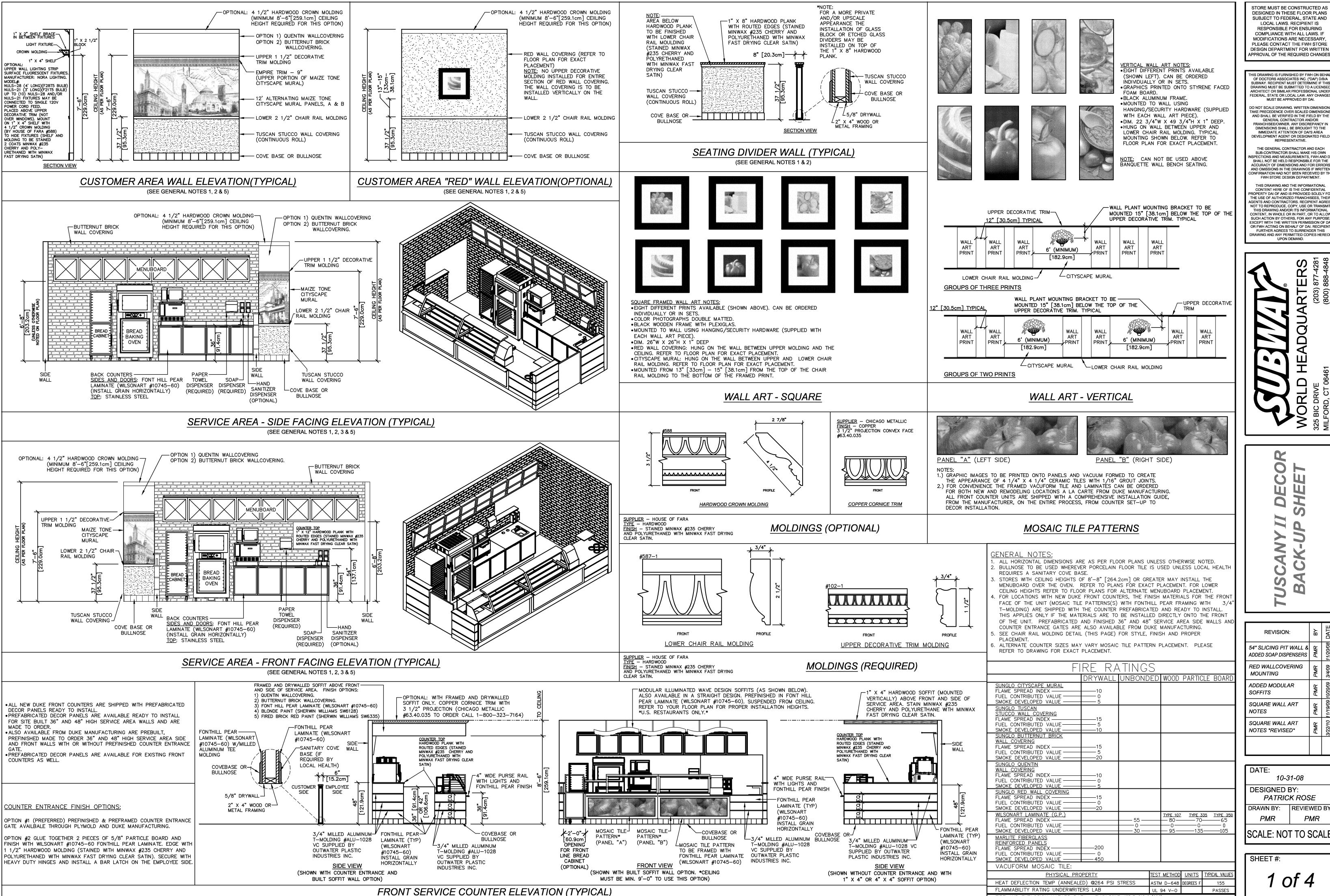
SCALE: 1/4" = 1'-0"

SHEET#:

1 OF 2

©2008 DOCTORS ASSOCIATES, INC.





(SEE GENERAL NOTES 1, 2, 4 & 6)

STORE MUST BE CONSTRUCTED AS DESIGNED IN THESE FLOOR PLANS SUBJECT TO FEDERAL, STATE AND LOCAL LAWS. RECIPIENT IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LAWS. II MODIFICATIONS ARE NECESSARY PLEASE CONTACT THE FWH STORE DESIGN DEPARTMENT FOR WRITTEN

OF DOCTORS ASSOCIATES INC. ("DAI") D/B/A UBWAY. RECIPIENT MUST DETERMINÉ IF TH RAWING MUST BE SUBMITTED TO A LICENSE

> O NOT SCALE DRAWING. WRITTEN DIMENSION TAKE PRECEDENCE OVER SCALED DIMENSION AND SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR AND/OR RANCHISEE/OWNER. ANY DISCREPANCY II DIMENSIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF DAI'S AREA EVELOPMENT AGENT OR DESIGNATED FIEL

THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR SHALL MAKE HIS OWN PECTIONS AND MEASUREMENTS, FWH AND I SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF DIMENSIONS AND FOR ERRORS AND OMISSIONS IN THE DRAWINGS IF WRITTEN ONFIRMATION HAD NOT BEEN RECEIVED BY T FWH STORE DESIGN DEPARTMENT.

CONTENT HERE OF IS THE CONFIDENTIAL ROPERTY DAI OF AND IS PROVIDED SOLELY FO THE USE OF AUTHORIZED FRANCHISEES, THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREE OT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT, IN WHOLE OR IN PART, OR TO ALLOV SUCH ACTION BY OTHERS, FOR ANY PURPOSE XCEPT WITH THE WRITTEN PERMISSION OF D OR EWH ACTING ON BEHALF OF DAL RECIPIEN

FURTHER AGREES TO SURRENDER THIS AWING AND ANY PERMITTED COPIES HEREC UPON DEMAND.

REVISION:	ВУ	DATE
54" SLICING PIT WALL & ADDED SOAP DISPENSERS	PMR	11/20/08
RED WALLCOVERING MOUNTING	PMR	3/4/09
ADDED MODULAR SOFFITS	PMR	10/20/09
SQUARE WALL ART NOTES	PMR	3/22/10 11/19/09 10/20/09
SQUARE WALL ART NOTES *REVISED*	PMR	3/22/10

10-31-08 **DESIGNED BY:** PATRICK ROSE

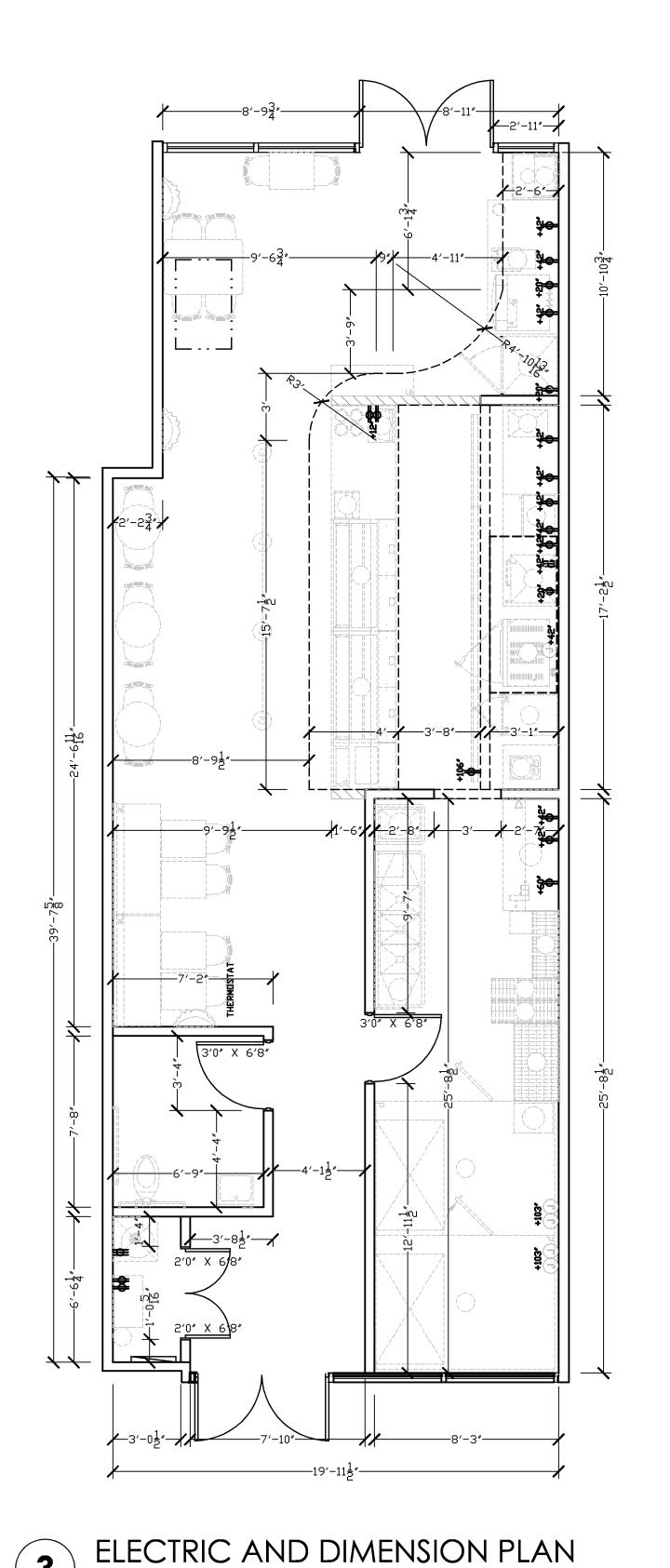
| REVIEWED BY

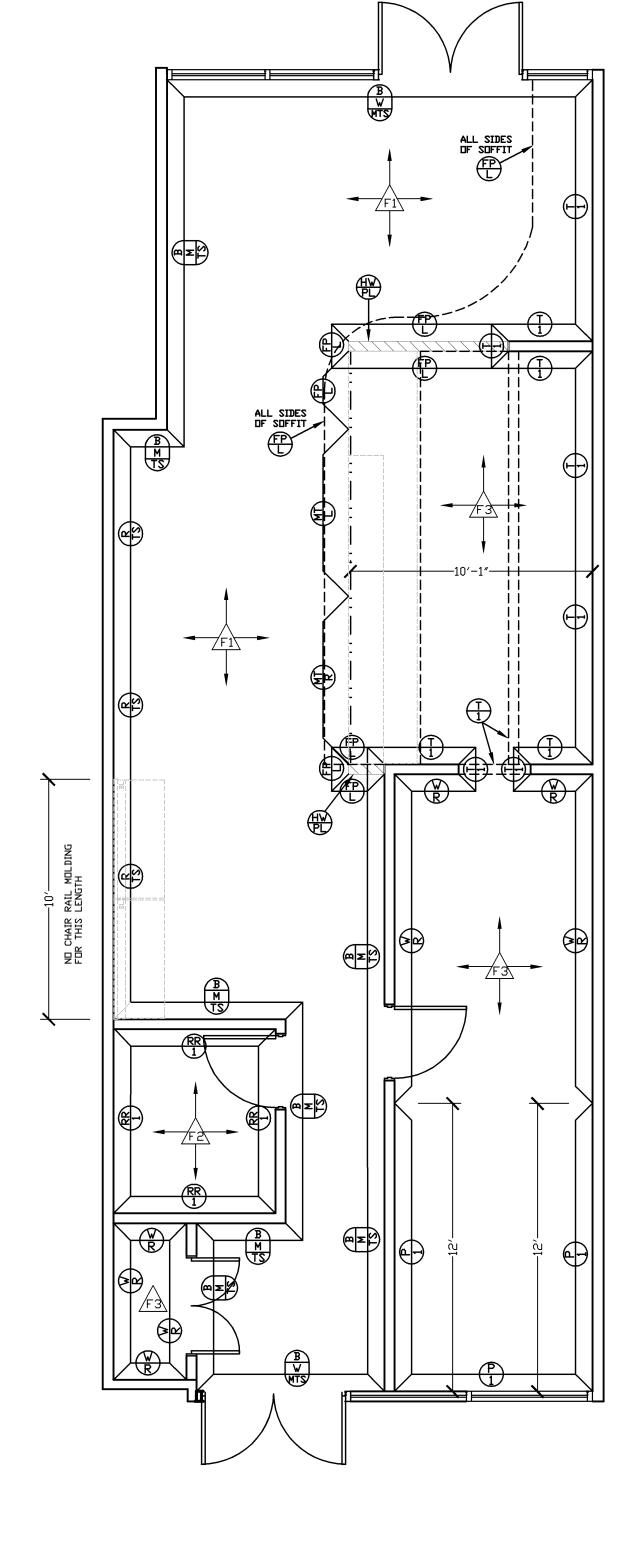
SCALE: NOT TO SCALE

FLASH POINT: 425 °F, 218 € (COC) AUTOIGNITION TEMPERATURE: NO DATA FLAMMABLE LIMITS (STP): NO DATA

FIRE AND EXPLOSION HAZARD DATA

©2010 DOCTORS ASSOCIATES, INC.





FLOOR AND WALL FINISH PLAN

SCALE: 1/4" = 1'

## TUSCANY II DECOR CALCULATIONS

<u>NOTE</u>: THE SUBWAY STORE DESIGN DEPARTMENT WILL NOT ACCEPT RESPONSIBILITY FOR ANY INACCURACIES. THE CALCULATIONS PROVIDED BELOW <u>MUST</u> BE VERIFIED BY THE G.C. AND FRANCHISE OWNER BEFORE ANY ORDER FOR THESE MATERIALS IS ACCEPTED AND PLACED.

CALCULATION WORKSHEET CUSTOMER AREA 1) Q/M/TS OR B/M/TS + S/M + 10% DIVIDED BY 3. 1) (28) YARDS CITYSCAPE MURAL 2) (38) YARDS OF TUSCAN STUCCO WALL COVERING) Q/M/TS OR B/M/TS + T/S + R/TS 10% DIVIDED BY 3 |3) (84) FEET OF UPPER DECORATIVE MOLDING |3) Q/M/TS OR B/M/TS + S/M + 10% 4) (82) FEET DF LOWER CHAIR RAIL MOLDING
5) (-) YARDS DF QUENTIN WALL COVERING (NON-TEDLAR)
ABOVE CITYSCAPE MURAL AND SOFFIT.

4) Q/M/TS DR B/M/TS + T/S + R/TS 10%
5) (CEILING HEIGHT - 7'-6") X (Q/M/TS + S/M + (Q/WC CUSTOMER AREA & SOFFIT ONLY))
+ 5% DIVIDED BY 12 ABOVE CITYSCAPE MURAL AND SOFFIT. + 5% DIVIDED BY 12
6) (20) YARDS OF BUTTERNUT BRICK WALL COVERING 6) (CEILING HEIGHT - 7'-6") X (B/M/TS + S/M + (B/T IN CUSTOMER AREA & SOFFIT ONLY))
ABOVE CITYSCAPE MURAL AND SOFFIT. + 5% DIVIDED BY 12 7) (136) (OPTIONAL)FEET OF HARDWOOD CROWN MOLDING 7) Q/M/TS OR B/M/TS + S/M + R/TS (+ W/TS IF WINDOWS NOT TO CEILING) + 10%. (AT CORNER WHERE WALL AND CEILING MEET) 8) TOTAL LENGTH OF WALLS WHERE FLUORESCENT STRIP LIGHTING TO BE INSTALLED + 10% 8) (80) FEET OF HARDWOOD CROWN MOLDING (FINISH CAP ON STRIP LIGHTING SHELF) 9) (16) YARDS OF RED WALL COVERING 9) HEIGHT FROM TOP OF TUSCAN STUCCO WALL COVERING TO CEILING (36' A.F.F.) X R/TS + 5% DIVIDED BY 12 10) ( - ) YARDS OF QUENTIN WALLCOVERING (WITH TEDLAR COATING) 10) QT/WC + 10% DIVIDED BY 3. (CUSTOMER AREA ONLY) (FOR 48" HIGH BANQUETTE WALL ONLY) 11) (2) 4' X 12' SHEETS FONT-HILL PEAR LAMINATES FP/L + 5% DIVIDED BY 12

| SERVICE AREA | 11) ( 2 ) 4' X 12' SHEETS FONT-HILL PEAR LAMINATED\* FP/L + 5% DIVIDED BY 12 | 12) ( 4 ) 12' T-MOLDING STRIPS \* | 12) (FP/L ON 36" HIGH WALLS X 2) + (FP/L ON 48" HIGH WALLS X 3) + 5% DIVIDED BY 12 | 13) ( - ) YARDS OF BUTTERNUT BRICK TEXTURED VALL COVERING (WALLS ONLY) | 13) CEILING HEIGHT X B/T + 5% DIVIDED BY 12 | 14) ( - ) YARDS OF QUENTIN WALL COVERING (WITH TEDLAR COATING) (WALLS ONLY) | 14) CEILING HEIGHT X QT/WC + 5% DIVIDED BY 12

15) ( 1 ) RIGHT (1 )LEFT VEGETABLE MOSAIC TILE
16) ( - ) (OPTIONAL) FEET OF COPPER CORNICE TRIM6) TOTAL LENGTH OF CUSTOMER SIDE OF HEADERWALL(S) OVER SERVICE AREA + 5%.
17) ( 5 ) 4' X 12' SHEETS FONT-HILL PEAR LAMINATE
(OPTIONAL: FOR SOFFIT APPLICATION)

BACKROOM

18) (14) MARLITE F.R.P. WHITE (ALMOND OPTIONAL IS) W/R + 5% DIVIDED BY 4

IF PERMITTED BY HEALTH/BUILDING CODE)

| 19) (13 ) PVC DIVISION MOLDING | 19) PANEL COUNT FROM #18\_\_\_\_ LESS 1 | 20) (6 ) PVC INSIDE CORNER | 20) COUNT ALL INSIDE CORNERS WHERE W/R MEET | 21) (-) PVC OUTSIDE CORNER | 21) COUNT ALL OUTSIDE CORNERS WHERE W/R MEET | 22) COUNT ALL EDGES WHERE W/R BEGINS & ENDS & DOORWAYS.

\* CALCULATIONS ARE FOR FONT-HILL PEAR LAMINATE AND ALUMINUM T-MOLDING APPLIED TO 36" AND 48" HIGH WALLS. LAMINATE AND T-MOLDING, WHEN AFFIXED DIRECTLY TO DUKE FRONT COUNTER, IS SHIPPED READY TO INSTALL BY DUKE MANUFACTURING.

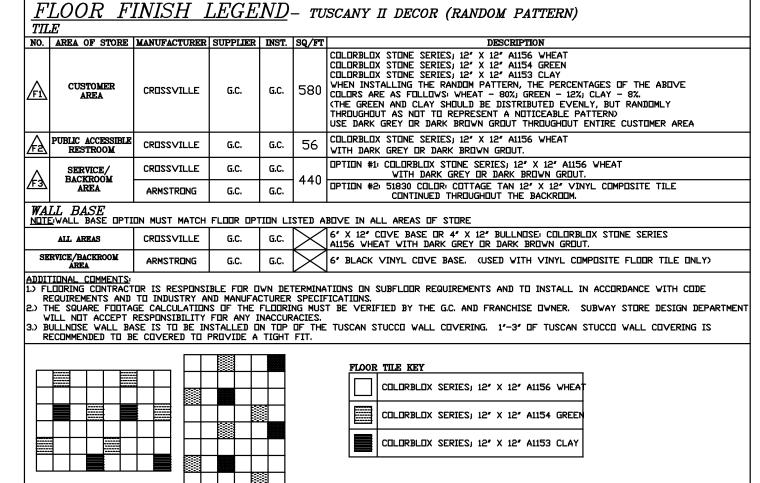
THESE CALCULATIONS DO NOT INCLUDE THE MATERIALS NEEDED TO DECOR THE AREA ABOVE OR BELOW THE WINDOWS.

YMBOL	DESCRIPTION	MANUFACTURER	SUPPLY	INST.	NOTES:
B	BUTTERNUT BRICK WALLCOVERI	KUNGLO FABRICS	D.A.I.	G.C.	VINYL WALLCOVERING
( <del>B</del> )	SUBWAY MURAL WALL COVERIN			G.C.	VINYL WALLCOVERINGWITH UPPER DECORATIVE TRIM MOLDING AS REQUIR
TS	TUSCAN STUCCO WALLCOVERING	SUNGLO FABRICS	D.A.I.	G.C.	VINYL WALLCOVERINGWITH LOWER CHAIR RAIL MOLDING AS REQUIRED)
_	BUTTERNUT BRICK WALLCOVERI	MUNGLO FABRICS	D.A.I.	G.C.	VINYL WALLCOVERING
B W WTS	WINDOW FRAME		G.C.	G.C.	PAINT SHERWIN WILLIAMS #SW6356 COPPER MOUNTAIN. (WITH CITYSCAPE MURAL & UPPER DECORATIVE TRIM MOLDING AS REQUIREI
)	TUSCAN STUCCO WALLCOVERING	SUNGLO FABRICS	D.A.I.	G.C.	VINYL WALLCOVERINGWITH LOWER CHAIR RAIL MOLDING AS REQUIRED
RS	RED WALL COVERING	SUNGLO FABRICS		G.C.	VINYL WALLCOVERING
(IS)	TUSCAN STUCCO WALLCOVERING	SUNGLO FABRICS	D.A.I.	G.C.	VINYL WALLCOVERINGVITH LOWER CHAIR RAIL MOLDING)
	CABINET/WALL LAMINATE	WILSONART	G.C.	G.C.	FONT-HILL PEAR (#10745-60)- INSTALL GRAIN HORIZONTALL
(XI)	MOSAIC TILE (RIGHT)	VACUFORM/ WILSONART	D.A.I.	G.C.	GRAPHIC IMAGES (SEE TUSCANY II BACK-UP SHEET FOR DETAILS AND OPTIONS WITH WILSONART #10745-60 FONTHILL PEAR BORDER AND 4' LIGHTED PURSE RAIL
MT L	MOSAIC TILE (LEFT)	VACUFORM/ WILSONART	D.A.I.	G.C.	GRAPHIC IMAGES (SEE TUSCANY II BACK-UP SHEET FOR DETAILS AND OPTIONS WITH WILSONART #10745-60 FONTHILL PEAR BORDER AND 4' LIGHTED PURSE RAIL
(HW)	WALL CAPS	G.C.	G.C.	G.C.	HARDWOOD PLANK (STAINED MINWAX #235 CHERRY AND POLYURETHANED WITH MINWAX FAST DRYING CLEAR SATIN)
	FRP OR PAINTED WALLS	MARLITE/G.C.	DAI/GC	G.C.	WHITE FRP PANELS  OR OFF-WHITE SEMI-GLOSS PAINT
	FIBERGLASS REINFORCED POLYESTER PANELS (FRP)	MARLITE	D.A.I.	G.C.	FRP PANELS — WATER RESISTANT COVERING, WHITE OR *AL (*ALMOND OPTION ONLY IF PERMITTED BY HEALTH/BUILDING CODE)
RR 1	RESTROOM: TILED WALLS	CROSSVILLE/ DAL-TILE	G.C.	G.C.	OPTION 1: COLORBLOX STONE FLOOR TILE MOUNTED FLOOR TO CEILING. CHOOSE 1 C MORE OF THE FOLLOWING: A1153 CLAY, A1154 GREEN, A1156 WHEA OPTION 2: DAL-TILE K165 ALMOND 4 1/4" X 4 1/4" CERAMIC TILE FLOOR TO CEILIN
	GRIMALDI CERAMIC TILE RESTROOM/SERVICE AREAS	ASSUCIATED ACC/ INTERNATIONAL LTD.	G.C.	G.C.	8' X 8' CERAMIC TILE. COLOR: CURRY (YELLOW). ITEM# C212005061. 8' X 8' CERAMIC TILE. COLOR: MUSGO (GREEN). ITEM# C212005051. GROUT COLOR: #17 BUTTER CREAM NON SANDED.

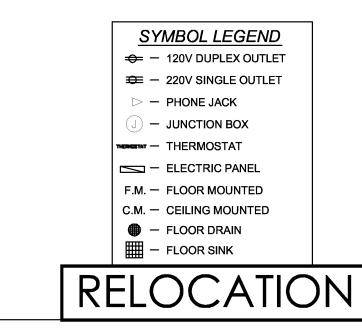
NOTE: ALL WOOD INTERIOR DOORS, UPPER & LOWER MOLDING & CROWN MOLDING TO BE STAINED W/ MINWAX #235 CHERRY AND POLYURETHANED W/ MINWAX FAST DRYING CLEAR SATIN.

NOTE: PREFINISHED AND PREFRAMED COUNTER ENTRANCE IS AVAILABLE THROUGH PLYMOLD OR GLUE 2 PIECES OF 5/8" PARTICLE BOARD TOGETHER. SEE TUSCANY II BACK-UP SHEET #1 FOR FINISH OPTIONS.

NOTE: F.R.P. SHOULD BE TO CEILING HEIGHT IN BACKROOM, BUT MUST BE A MINIMUM OF 8'-0"
ABOVE FINISHED FLOOR. F.R.P. IN RESTROOMS MUST BE FLOOR TO CEILING.



RANDOM FLOOR TILE PLACEMENT EXAMPLE



GENERAL NOTES:

- CEILING HEIGHT IS 10'-0'
- ELECTRICAL DUTLET HEIGHTS MEASURED TO BOTTOM OF BOX.
- ONE ELECTRICAL JUNCTION BOX TO BE LOCATED IN CEILING

ABOVE EACH WINDOW.

- CUND MODEL SW3-PLUS WATER FILTRATION SYSTEM IS REQUIRED
IN ALL NEW STORES THAT DISPENSE BEVERAGES. THE RECOMMENDED
PLACEMENT FOR INSTALLATION IS MOUNTED TO SODA SYRUP RACK
BY COCA-COLA. SECONDARY PLACEMENT OPTION IS MOUNTED ON THE
BACKROOM WALL. THIRD INSTALLATION OPTION IS MOUNTING INSIDE
THE FRONT BEVERAGE COUNTER WHEN SPACE LIMITATIONS OCCUR.
REQUIRED: 1/2" INCOMING WATER LINE FEED WITH 1/2" BALL VALVE
SHUTTEF AND 1/2" FET CONNECTION

SHUTUFF AND 1/2" FPT CUNNECTION.
MINIMUM 110 VOLT, 20 AMP ELECTRICAL SERVICE TO SUPPORT THE
CARBONATOR AND WATER BOOSTER (MUST BE DEDICATED CIRCUIT).

- SMARTCURVE STAND (MFR. DISPLAY-BOX) REQUIRED IN
CUSTOMER AREA AT POINT OF ORDER (PREFERRED PLACEMENT).

CUSTOMER AREA AT POINT OF ORDER (PREFERRED PLACEMENT).
21 3/4" X 13 1/8" BASE, 56" (WITHOUT HEADER) OVERALL HEIGHT.
SECONDARY CHIP RACK IS REQUIRED IN THE CUSTOMER AREA. THE TWO
AVAILABLE OPTIONS ARE: BASKET STYLE CHIP RACK AT THE POINT OF
ORDER (PREFERRED PLACEMENT) OR PURSE RAIL MOUNTED CHIP RACK.
(MOUNTED ON TOP OF THE PURSE RAIL.)

- EXIT LIGHTS INSTALLED BY G.C. PER LOCAL CODE.
- EMERGENCY LIGHTS INSTALLED BY G.C. PER LOCAL CODE.
- EXTINGUISHERS, SMOKE AND FIRE DETECTION SYSTEMS

REFER TO MANUFACTURER FOR DETAILS.

INSTALLED BY G.C. PER LOCAL CODE.

- LABOR & MATERIAL SUPPLIED BY G.C. UNLESS OTHERWISE NOTED.

- ALL DIMENSIONS TO BE VERIFIED BY G.C. ON SITE.

- DECOR SPECIFICATIONS ARE TO BE SUBWAY'S "TUSCANY II" SCHEME.

- REFRIGERATOR AND FREEZER MUST BE ADEQUATELY VENTILATED.

REVISION: A H

STORE MUST BE CONSTRUCTED AS DESIGNED IN THESE FLOOR PLANS SUBJECT TO FEDERAL, STATE AND LOCAL LAWS. RECIPIENT IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LAWS. IF MODIFICATIONS ARE NECESSARY, PLEASE CONTACT DAI'S STORE DESIGN DEPARTMENT FOR WRITTEN APPROVAL OF THE REQUIRED CHANGES.

THIS DRAWING IS FURNISHED BY DOCTORS
ASSOCIATES INC. ("DAI") D/B/A SUBWAY.
RECIPIENT MUST DETERMINE IF THIS DRAWING
MUST BE SUBMITTED TO A LICENSED ARCHITECT
OR SIMILAR PROFESSIONAL UNDER FEDERAL,
STATE OR LOCAL LAW. ANY CHANGES MUST BE

DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. AND SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR AND/OR FRANCHISEE/OWNER. ANY DISCREPANCY IN DIMENSIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF DAYS AREA DEVELOPMENT AGENT OR DESIGNATED FIELD REPRESENTATIVE.

THE GENERAL CONTRACTOR AND EACH

SUB-CONTRACTOR SHALL MAKE HIS OWN
INSPECTIONS AND MEASUREMENTS, DAI AND
SUBWAY SHALL NOT BE HELD RESPONSIBLE FOR
THE ACCURACY OF DIMENSIONS AND FOR
ERRORS AND OMISSIONS IN THE DRAWINGS IF
WRITTEN CONFIRMATION HAD NOT BEEN
RECEIVED BY DAI'S STORE DESIGN DEPARTMENT.

THIS DRAWING AND THE INFORMATIONAL CONTENT HERE OF IS THE CONFIDENTIAL PROPERTY DAI OF AND IS PROVIDED SOLELY FOR THE USE OF AUTHORIZED FRANCHISEES, THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREES NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT, IN WHOLE OR IN PART, OR TO ALLOW SUCH ACTION BY OTHERS, FOR ANY PURPOSE, EXCEPT WITH THE WRITTEN PERMISSION OF DAI ACTING FOR SUBWAY. RECIPIENT FURTHER AGREES TO SURRENDER THIS DRAWING AND ANY

PERMITTED COPIES HEREOF UPON DEMAND

WORLD HEADQUARTERS
325 BIC DRIVE
(203) 877-4281

STORE # 12710
8254 FIRESTONE BLVD

MARWAHA

DEVELOPMENT AGENT:

GREWAI

DATE:

JULY 12, 2011

DESIGNED BY:

KATHERINE MILLE

DESIGNED BY:

KATHERINE MILLER

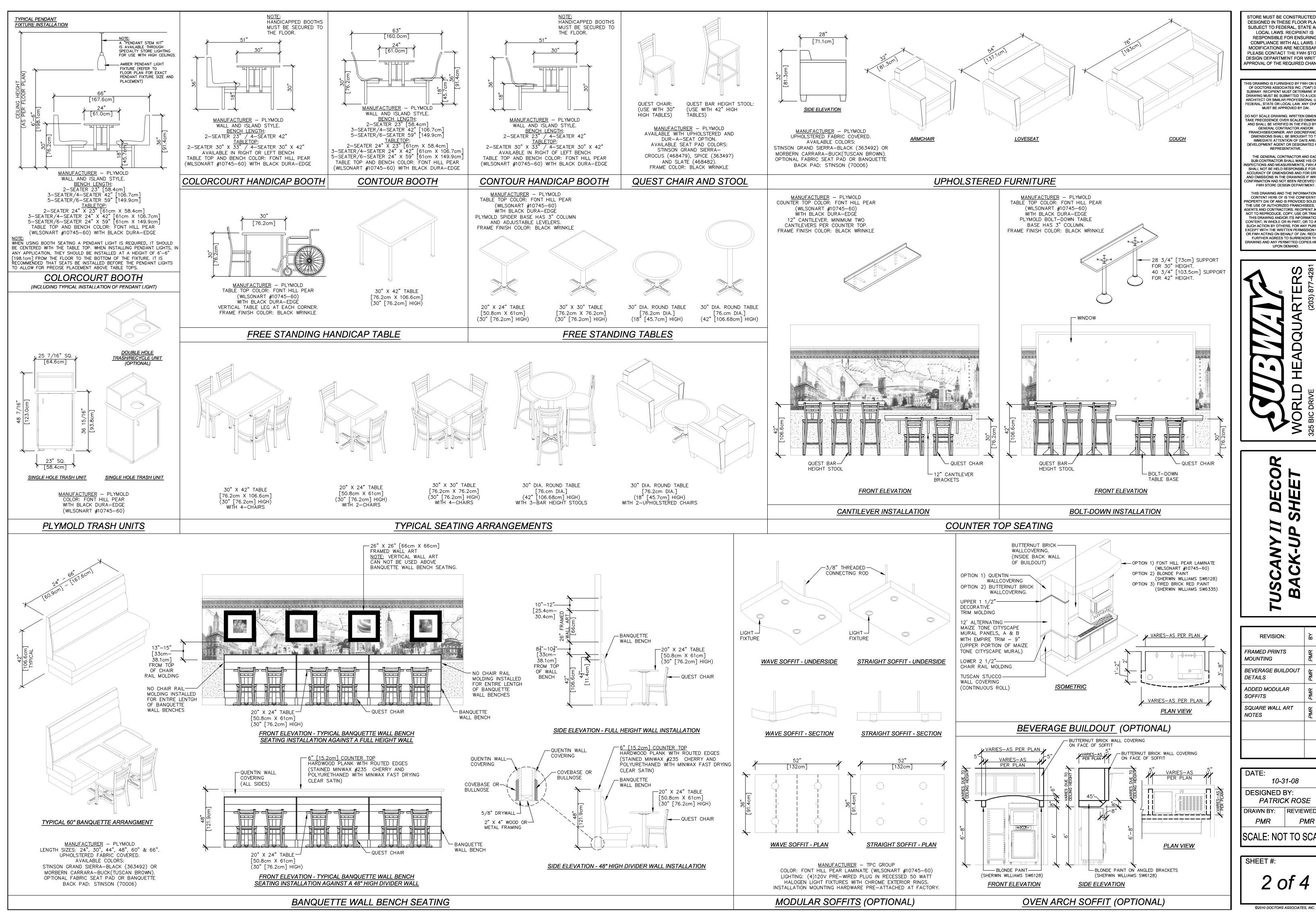
DRAWN BY: REVIEWED BY

KTM BWB

SCALE: 1/4" = 1'-0"

SHEET #: 2 OF 2

©2008 DOCTORS ASSOCIATES, INC.



STORE MUST BE CONSTRUCTED AS DESIGNED IN THESE FLOOR PLANS SUBJECT TO FEDERAL, STATE AND LOCAL LAWS. RECIPIENT IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LAWS. IF MODIFICATIONS ARE NECESSARY PLEASE CONTACT THE FWH STORE DESIGN DEPARTMENT FOR WRITTEN APPROVAL OF THE REQUIRED CHANGES

THIS DRAWING IS FURNISHED BY FWH ON BEHA OF DOCTORS ASSOCIATES INC. ("DAI") D/B/A SUBWAY. RECIPIENT MUST DETERMINE IF THIS DRAWING MUST BE SUBMITTED TO A LICENSE ARCHITECT OR SIMILAR PROFESSIONAL UNDEF FEDERAL, STATE OR LOCAL LAW, ANY CHANGE MUST BE APPROVED BY DAI.

OO NOT SCALE DRAWING. WRITTEN DIMENSION TAKE PRECEDENCE OVER SCALED DIMENSION AND SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR AND/OR FRANCHISEE/OWNER. ANY DISCREPANCY IN DIMENSIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF DAI'S AREA DEVELOPMENT AGENT OR DESIGNATED FIELD REPRESENTATIVE.

THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR SHALL MAKE HIS OWN NSPECTIONS AND MEASUREMENTS, FWH AND D SHALL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF DIMENSIONS AND FOR ERRORS CONFIRMATION HAD NOT BEEN RECEIVED BY TH FWH STORE DESIGN DEPARTMENT.

THIS DRAWING AND THE INFORMATIONAL FURTHER AGREES TO SURRENDER THIS

CONTENT HERE OF IS THE CONFIDENTIAL PROPERTY DAI OF AND IS PROVIDED SOLELY FO THE USE OF AUTHORIZED FRANCHISEES, THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREES NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT, IN WHOLE OR IN PART, OR TO ALLOV SUCH ACTION BY OTHERS, FOR ANY PURPOSE EXCEPT WITH THE WRITTEN PERMISSION OF DA OR FWH ACTING ON BEHALF OF DAI, RECIPIEN RAWING AND ANY PERMITTED COPIES HEREC UPON DEMAND.

0 1 HEE EC S C 4

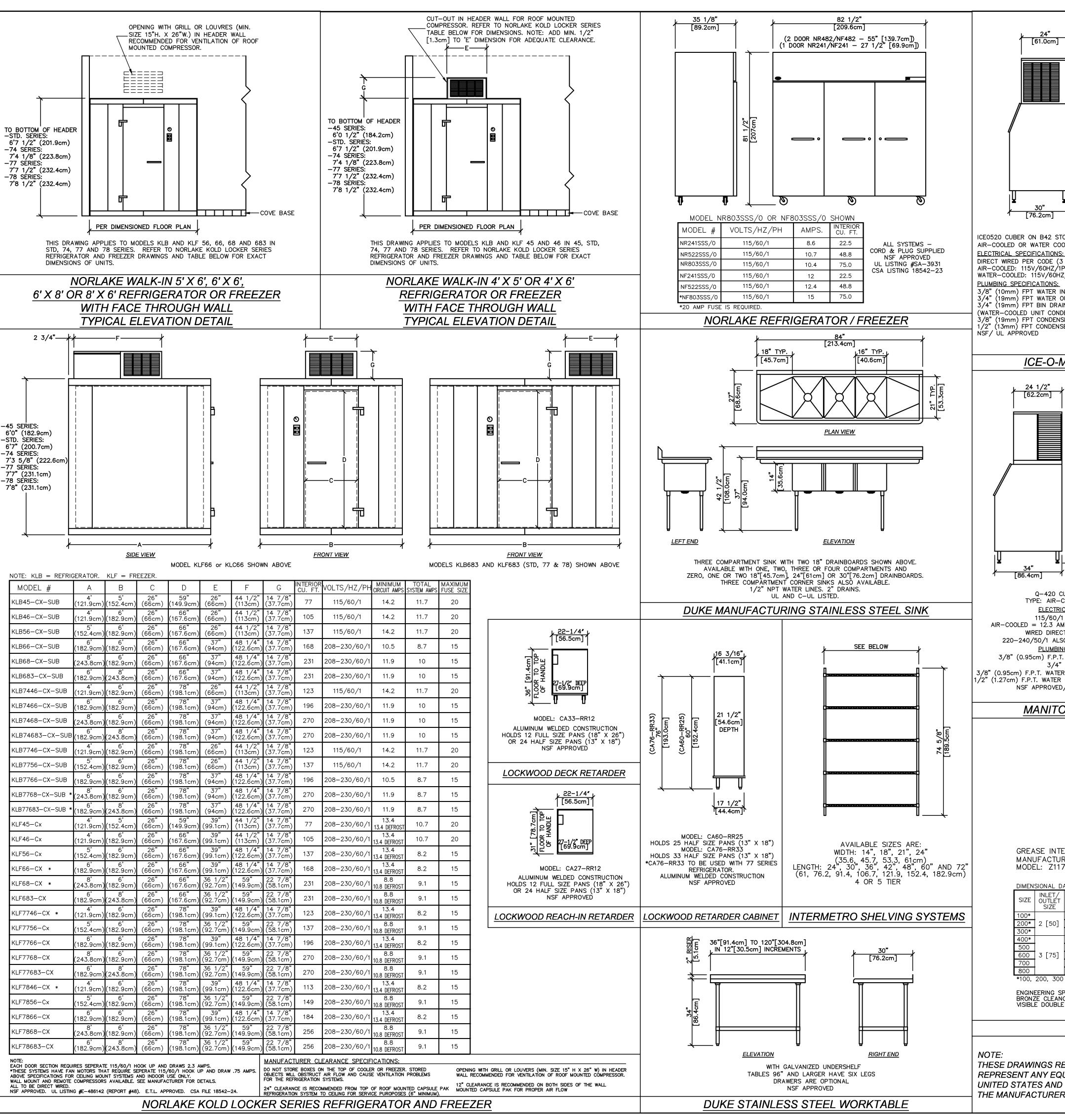
**REVISION:** FRAMED PRINTS **BEVERAGE BUILDOUT** ADDED MODULAR SQUARE WALL ART

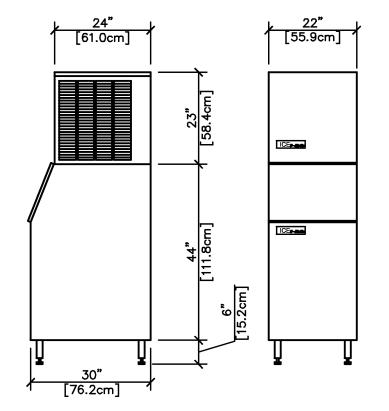
0

10-31-08 **DESIGNED BY:** PATRICK ROSE DRAWN BY: REVIEWED BY

SCALE: NOT TO SCALE

2 of 4





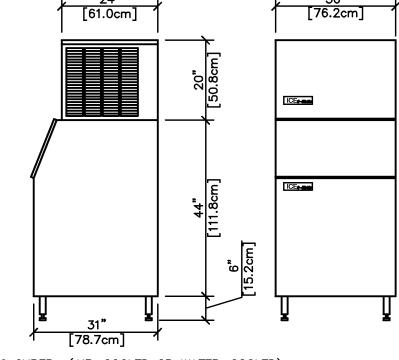
ICE0520 CUBER ON B42 STORAGE BIN (374 LBS. STORAGE CAPACITY) AIR-COOLED OR WATER COOLED. **ELECTRICAL SPECIFICATIONS:** 

ICE-O-MATIC ICE CUBER

DIRECT WIRED PER CODE (3 WIRES) AIR-COOLED: 115V/60HZ/1PH 18.3 AMPS (20 MAX FUSE) 8441 BTUH. WATER-COOLED: 115V/60HZ/1PH 13.5 AMPS (15 MAX FUSE) 8356 BTUH. | ICE0606: PLUMBING SPECIFICATIONS:

3/4" (19mm) FPT WATER OUT 3/4" (19mm) FPT BIN DRAIN (WATER-COOLED UNIT CONDENSER LINES): 3/8" (19mm) FPT CONDENSER WATER IN 1/2" (13mm) FPT CONDENSER WATER OUT

24 1/2" [62.2cm]



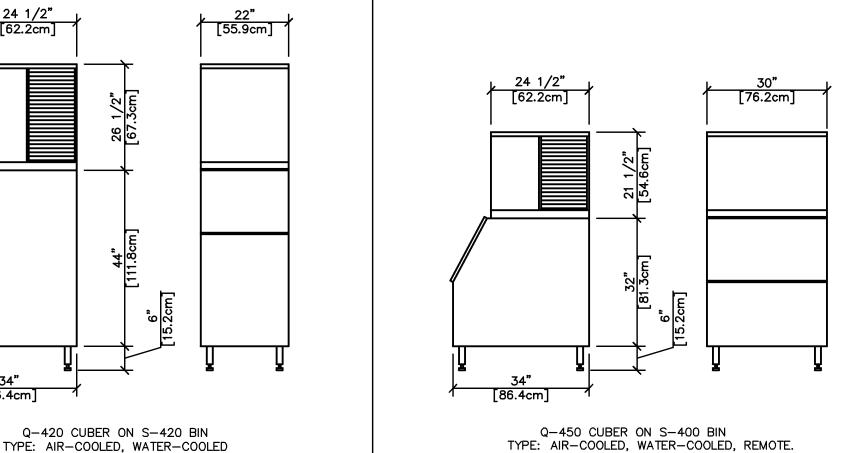
ICE0400 CUBER (AIR-COOLED OR WATER-COOLED) ICE0500 CUBER (AIR-COOLED, WATER-COOLED OR REMOTE CONDENSER) ICEO606 CUBER (AIR-COOLED, WATER-COOLED OR REMOTE CONDENSER) ON B55 STORAGE BIN (556 LBS. STORAGE CAPACITY) **ELECTRICAL SPECIFICATIONS:** 

DIRECT WIRED PER CODE (3 WIRES) ICE0400: (AIR-COOLED) 115V/60HZ/1PH 14.4 AMPS (15 MAX FUSE) 8064 BTUH. (WATER-COOLED) 115V/60HZ/1PH 13.4 AMPS (20 MAX FUSE) 8388 BTUH. ICE0500: (AIR-COOLED) 115V/60HZ/1PH 19.9 AMPS (20 MAX FUSE) 10843 BTUH. (WATER-COOLED) 115V/60HZ/1PH 13.7 AMPS (20 MAXFUSE) 10242 BTUH. (REMOTE) 115V/60HZ/1PH 18.7 AMPS (20 MAX FUSE) 10881 BTUH. (AIR-COOLED) 208-230V/60HZ/1PH 12 AMPS (15 MAX FUSE)11538 BTUH.

(WATER-COOLED) 208-230V/60HZ/1PH 9.5 AMPS (15 MAX FUSE) 11473 BTUH (REMOTE) 208-230V/60HZ/1PH 13 AMPS (15 MAX FUSE) 12269 BTUH. <u>PLUMBING SPECIFICATIONS:</u> 3/8" (10mm) FPT WATER IN

3/4" (19mm) FPT WATER OUT 3/4" (19mm) FPT BIN DRAIN (WATER-COOLED UNIT CONDENSER LINES) 3/8" (19mm) FPT CONDENSER WATER IN 1/2" (13mm) FPT CONDENSER WATER OUT NSF/ UL APPROVED

ICE-O-MATIC ICE CUBER



115/60/1 20 AMP FUSE MIN. AIR-COOLED = 12.8 AMPS, WATER-COOLED = 11.9 AMPS AIR-COOLED = 12.3 AMPS, WATER-COOLED = 11.4 AMPS WIRED DIRECT OR PER LOCAL CODE 220-240/50/1 ALSO AVAILABLE, SEE MANUFACTURER. PLUMBING SPECIFICATIONS 3/8" (0.95cm) F.P.T. INLET, 1/2" (1.27cm) F.P.T. DRAIN

3/4" (1.91cm) BIN DRAIN 3/8" (0.95cm) F.P.T. WATER CONDENSER INLET (WATER-COOLED UNIT) 1/2" (1.27cm) F.P.T. WATER CONDENSER OUTLET (WATER-COOLED UNIT) NSF APPROVED/U.L. #SA-4027/CSA LISTED

PLUMBING SPECIFICATIONS 3/8" (0.95cm) F.P.T. INLET, 1/2" (1.27cm) F.P.T. DRAIN 3/4" (1.91cm) BIN DRAIN 3/8" (0.95cm) F.P.T. WATER CONDENSER INLET (WATER-COOLED UNIT) 1/2" (1.27cm) F.P.T. WATER CONDENSER OUTLET (WATER-COOLED UNIT) NSF APPROVED/U.L. #SA-4027/CSA LISTED

**ELECTRICAL SPECIFICATIONS** 

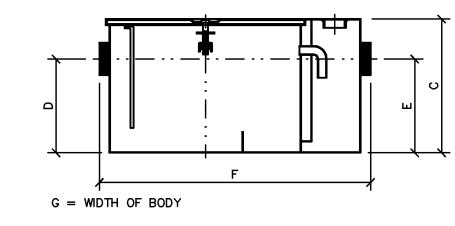
115/60/1 20 AMP FUSE MIN.

REMOTE = 9.6 AMPS

WIRED DIRECT OR PER LOCAL CODE

220-240/50/1 ALSO AVAILABLE, SEE MANUFACTURER.

MANITOWOC ICE CUBER MANITOWOC ICE CUBER



GREASE INTERCEPTOR MANUFACTURER: ZURN INDUSTRIES MODEL: Z1170

DIMEN	SIONAL DA	ATA IN INCHI	ES [mm]							
	INLET/	FLOW RATE CAPACITY			APPROX.	DIMENSIONS IN INCHES [mm]				
SIZE	OUTLÉT SIZE	G.P.M. [L.P.M.]	WATER GAL. [L]	GREASE LBS. [KG]	WT. LBS. [KG]	С	C/E	F	G	
100*		4 [15]	3 [11]	8 [4]	42 [19]	10 [254]	7 1/4 [184]	20 3/8 [518]	9 7/8 [251]	
200*	2 [50]	7 [26]	5 [19]	14 [6]	53 [24]	11 1/4 [286]	8 1/8 [206]	21 3/4 [552]	11 7/8 [302]	
300*		10 [38]	6 [23]	20 [9]	66 [30]	11 3/4 [298]	8 1/4 [210]	25 1/8 [638]	14 [356]	
400*		15 [57]	10 [38]	30 [14]	83 [38]	13 3/8 [340]	9 3/8 [238]	27 1/8 [689]	16 3/4 [425]	
500		20 [76]	16 [60]	40 [18]	99 [45]	15 [381]	11 3/4 [298]	30 [762]	17 1/4 [438]	
600	<b>]</b> 3 [75]	25 [94]	21 [79]	50 [23]	124 [56]	17 [432]	12 1/2 [318]	32 1/4 [819]	19 7/8 [505]	
700		35 [132]	30 [113]	70 [32]	151 [68]	18 3/4 [476]	14 1/4 [362]	34 1/8 [867]	22 1/2 [572]	
800		50 [189]	40 [151]	100 [45]	180 [82]	21 1/2 [546]	16 [406]	36 [914]	24 1/2 [622]	
*100.	200, 300	AND 400 A	RE STANDAF	RD SUBWAY	MODEL SIZES			_		

ENGINEERING SPECIFICATIONS: ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL. INTERNAL AIR RELIEF BYPASS. BRONZE CLEANOUT PLUG. REMOVABLE PRESSURE EQUALIZING/FLOW DIFFUSING INLET BAFFLE. FIXED BOTTOM OUTLET BAFFLE. VISIBLE DOUBLE WALL TRAP SEAL.

### **ZURN GREASE INTERCEPTOR**

THESE DRAWINGS REPRESENT TYPICAL EQUIPMENT PURCHASED THROUGH DOCTOR'S ASSOCIATES INC. AND DOES NOT REPRESENT ANY EQUIPMENT PURCHASED LOCALLY BY THE FRANCHISEE/OWNER. OWNERS OF STORES OUTSIDE THE UNITED STATES AND CANADA MAY NEED ALTERNATE ELECTRICAL REQUIREMENTS. CONTACT YOUR DAI COORDINATOR OR THE MANUFACTURER FOR THE MODIFIED ELECTRICAL SPECIFICATIONS.

STORE MUST BE CONSTRUCTED AS DESIGNED IN THESE FLOOR PLANS SUBJECT TO FEDERAL, STATE AND LOCAL LAWS RECIPIENT IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LAWS. IF MODIFICATIONS ARE NECESSARY PLEASE CONTACT THE FWH STORE DESIGN DEPARTMENT FOR WRITTEN

APPROVAL OF THE REQUIRED CHANGES

OF DOCTORS ASSOCIATES INC. ("DAI") D/B/A UBWAY. RECIPIENT MUST DETERMINÉ IF TH RAWING MUST BE SUBMITTED TO A LICENSE ARCHITECT OR SIMILAR PROFESSIONAL UNDE FEDERAL, STATE OR LOCAL LAW, ANY CHANGE MUST BE APPROVED BY DAI.

O NOT SCALE DRAWING. WRITTEN DIMENSIO AKE PRECEDENCE OVER SCALED DIMENSION AND SHALL BE VERIFIED IN THE FIELD BY TH GENERAL CONTRACTOR AND/OR RANCHISEE/OWNER. ANY DISCREPANCY II IMMEDIATE ATTENTION OF DAI'S AREA

REPRESENTATIVE. THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR SHALL MAKE HIS OWN SPECTIONS AND MEASUREMENTS, FWH AND I ACCURACY OF DIMENSIONS AND FOR ERRORS AND OMISSIONS IN THE DRAWINGS IF WRITTEN CONFIRMATION HAD NOT BEEN RECEIVED BY T

FWH STORE DESIGN DEPARTMENT. CONTENT HERE OF IS THE CONFIDENTIAL ROPERTY DAI OF AND IS PROVIDED SOLELY FO THE USE OF AUTHORIZED FRANCHISEES, THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREE NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT, IN WHOLE OR IN PART, OR TO ALLO SUCH ACTION BY OTHERS, FOR ANY PURPOSE XCEPT WITH THE WRITTEN PERMISSION OF D OR FWH ACTING ON BEHALF OF DAI, RECIPIEN

AWING AND ANY PERMITTED COPIES HEREC

UPON DEMAND.

6

ı			
	REVISION:	ΑВ	DATE
	UPDATED ELECTRICAL SPECS ON REACH-INS	PMR	6/10/09

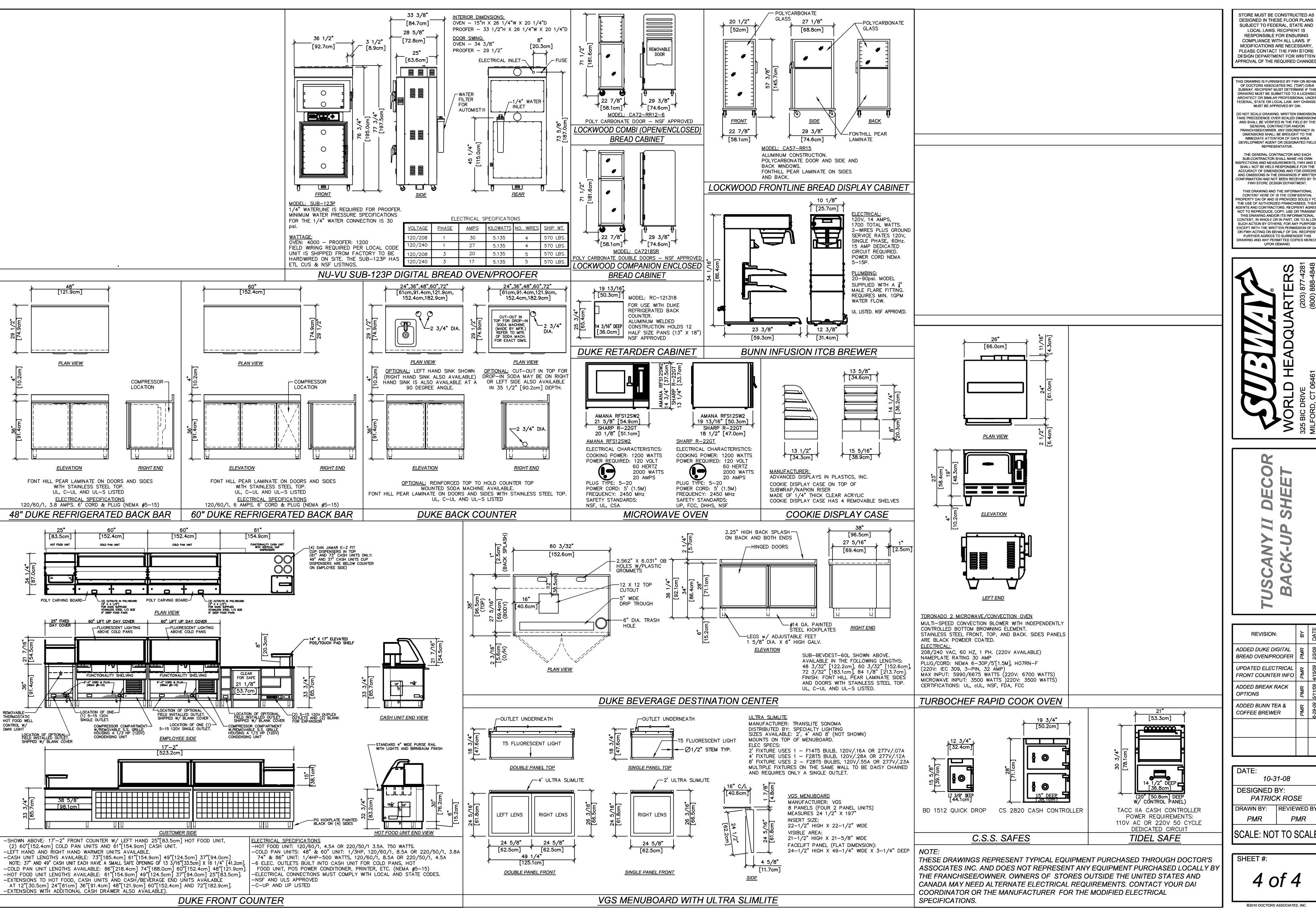
10-31-08 **DESIGNED BY:** PATRICK ROSE

DRAWN BY: | REVIEWED BY

SCALE: NOT TO SCALE

SHEET #:

©2010 DOCTORS ASSOCIATES, INC.



STORE MUST BE CONSTRUCTED AS DESIGNED IN THESE FLOOR PLANS SUBJECT TO FEDERAL, STATE AND LOCAL LAWS RECIPIENT IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH ALL LAWS. II MODIFICATIONS ARE NECESSARY PLEASE CONTACT THE FWH STORE DESIGN DEPARTMENT FOR WRITTEN

OF DOCTORS ASSOCIATES INC. ("DAI") D/B/A DRAWING MUST BE SUBMITTED TO A LICENSE ARCHITECT OR SIMILAR PROFESSIONAL UNDEF FEDERAL, STATE OR LOCAL LAW, ANY CHANGE MUST BE APPROVED BY DAIL

OO NOT SCALE DRAWING. WRITTEN DIMENSION AKE PRECEDENCE OVER SCALED DIMENSION AND SHALL BE VERIFIED IN THE FIELD BY TH GENERAL CONTRACTOR AND/OR FRANCHISEE/OWNER. ANY DISCREPANCY II DIMENSIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF DAI'S AREA DEVELOPMENT AGENT OR DESIGNATED FIEL REPRESENTATIVE.

THE GENERAL CONTRACTOR AND EACH SPECTIONS AND MEASUREMENTS, FWH AND I ACCURACY OF DIMENSIONS AND FOR ERRORS CONFIRMATION HAD NOT BEEN RECEIVED BY T FWH STORE DESIGN DEPARTMENT.

CONTENT HERE OF IS THE CONFIDENTIAL PROPERTY DAI OF AND IS PROVIDED SOLELY FO THE USE OF AUTHORIZED FRANCHISEES. THEIR AGENTS AND CONTRACTORS. RECIPIENT AGREE NOT TO REPRODUCE, COPY, USE OR TRANSMIT THIS DRAWING AND/OR ITS INFORMATIONAL CONTENT, IN WHOLE OR IN PART, OR TO ALLO SUCH ACTION BY OTHERS, FOR ANY PURPOSE EXCEPT WITH THE WRITTEN PERMISSION OF D OR FWH ACTING ON BEHALF OF DAI, RECIPIEN FURTHER AGREES TO SURRENDER THIS

UPON DEMAND.

T O 

REVISION:	ВУ	DATE
ADDED DUKE DIGITAL BREAD OVEN/PROOFER	<b>PMR</b>	2/2/09
UPDATED ELECTRICAL FRONT COUNTER INFO	<i>BMR</i>	4/15/09
ADDED BREAK RACK OPTIONS	<i>BMA</i>	5-29-09 5/11/09 4/15/09
ADDED BUNN TEA & COFFEE BREWER	<i>PMR</i>	6-53-09

10-31-08 **DESIGNED BY:** PATRICK ROSE

REVIEWED BY DRAWN BY:

SCALE: NOT TO SCALE

©2010 DOCTORS ASSOCIATES, INC.

ALL WORK SHALL BE IN COMPLIANCE WITH ALL GOVERNING CODES AND ORDINANCES, INCLUDING THE UNIFORM BUILDING CODE, NATIONAL ELECTRIC CODE, UNIFORM PLUMBING CODE, OSHA, CITY, COUNTY, STATE, AND NATIONAL STADDARDS AND SAFETY CODES. NOTHING IN THESE DRAWINGS SHALL BE CONSTRUED TO PERMIT INSTALLATION IN VIOLATION OF THESE CODES OR RESTRICTIONS. THESE NOTES ARE PROVIDED TO SHOW BASIC AREAS OF RESPONSIBILITY, AND ANY ITEMS NOT SPECIFICALLY INCLUDED BUT NECESSARY FOR PROPER COMPLETION OF THE WORK SHALL BE INCLUDED AS A PART OF THE WORK. WHERE DETAILS ARE NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE SIMILAR TO OTHER COMPARABLE WORK. WORKMANSHIP THROUGHOUT SHALL BE OF THE BEST QUALITY OF THE TRADE INVOLVED. EACH SUB—CONTRACTOR IS CONSIDERED A SPECIALIST IN HIS RESPECTIVE FIELD AND SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY WORK IN HIS TRADE THAT CANNOT BE FULLY GUARANTEED PRIOR TO SUBMITTING HIS BID, AND SHALL SUPPLY ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO COMPLETE THEIR WORK PROPERLY.

ALL GRADING TO CONFORM TO LOCAL ORDINANCE, APPENDIX J OF THE CBC, AND STANDARDS PERTAINING THERETO. ON-SITE DIMENSIONS AND CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUB-CONTRACTOR. NOTED DIMENSIONS TAKE PRECEDENCE OVER SCALE. ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS ARE TO BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGNER, OWNER, AND CONTRACTOR BOTH VERBALLY AND IN WRITING.

ALL TRADES SHALL AT ALL TIMES KEEP THE PROJECT FREE FROM WASTE MATERIALS AND SHALL LEAVE THE JOB BROOM CLEAN UPON THE COMPLETION OF THEIR WORK.

BORED HOLES. A HOLE NOT GREATER IN DIAMETER THAN 40% OF THE STUD WIDTH MAY BE BORED IN ANY WOOD STUD. BORED HOLES NOT GREATER THAN 60% OF THE WIDTH OF THE STUD ARE PERMITTED IN NON-BEARING PARTITIONS OR ANY WALL IN WHERE EACH BORED STUD IS DOUBLED, PROVIDED NOT MORE THAN 2 SUCH SUCCESSIVE DOUBLE STUDS ARE SO BORED. IN NO CASE SHALL THE EDGE OF BORED HOLE BE NEARER THAN 5/8" TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTIONS OF STUD AS A CUT OR NOTCH.

MATERIAL FROM FOOTING EXCAVATIONS.

PROVISIONS SHALL BE MADE FOR THE CONTROL OF DRAINAGE OF SURFACE WATER AROUND THE BUILDING. CBC APPENDIX J

CONCRETE AND FOUNDATION

ALL FOOTING TO BE ON FIRM, UNDISTURBED SOIL. FOOTING TO EXTEND BELOW ALL PLYWOOD "SIDING" EXPOSED TO THE WEATHER IS TO BE EXTERIOR GLUE, EXTERIOR GRADE.

CONTRACTOR TO LAYOUT ALL BUILDING LINES, LEVELS, AND GRADES. IF BUILDING OR GRADE LINES DO NOT CONFORM TO DRAWINGS THE DESIGNER AND/OR BUILDING DIVISION IS TO BE CONTACTED.

WALLS AND SOFFITS OR ENCLOSED USEABLE SPACES UNDER STAIRS SHALL BE PROTECTED WITH 1 HOUR FIRE-RATED MATERIALS ON THE ENCLOSED SIDE. PROVIDE MINIMUM 5/8" TYPE "X" GYPSUM BOARD. WALLS BETWEEN DWELLING AND ATTACHED GARAGES SHALL HAVE 5/8" TYPE "X" GYPSUM BOARD OR 3/4" PLASTER AS FINISH ON GARAGE SIDE, WITH A 1 3/8" SOLID CORE WOOD, SELF—CLOSING DOOR. NO DOOR MAY BE LOCATED BETWEEN A GARAGE AND A ROOM USED FOR SLEEPING PURPOSES.

ALL UNDERFLOOR AREAS ARE TO BE ACCESSIBLE THROUGH AN OPENING OF NO LESS THAN 24" WIDE BY 18" HIGH, SCREENED AND COVERED, AND UNOBSTRUCTED BY PIPES, DUCTS, AND SIMILAR CONSTRUCTION.

CODES AND STANDARDS

THESE GENERAL NOTES AND ACCOMPANYING PLANS ARE COMPLIMENTARY AND ALL CONSTRUCTION IS TO BE AS HEREIN OUTLINED AND SHOWN ON DRAWINGS. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH:
A. STATE AND LOCAL CODES
B. UNIFORM BUILDING CODES THE BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON DRAWINGS AND IN THE FIELD AND SHALL BE RESPONSIBLE FOR ANY NECESSARY ADJUSTMENTS AND/OR CORRECTIONS.

THE BUILDER IS TO PROVIDE ALL NECESSARY TEMPORARY SUPPORT FOR WALLS AND FLOORS PRIOR TO COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. CONTRACTORS SHALL VERIFY ALL GRADES, CONDITIONS, AND DIMENSIONS PRIOR TO COMMENCING WORK.

IN ACCORDANCE WITH THE CALIFORNIA ENERGY CODE, TITLE 20, THE FOLLOWING INFORMATION SHALL BE INCORPORATED INTO THE BUILDING PLANS SUBMITTED TO PLAN CHECK.

1403(d) (1) ALL MANUFACTURED WINDOWS AND SLIDING GLASS DOORS SHALL MEET THE AIR INFILTRATION STANDARDS OF THE A.N.S.I. WHEN TESTED IN ACCORDANCE WITH ASTM E282-73 AND SHALL BE CERTIFIED AND LABELED. 1403(d) (2) ALL FAN SYSTEMS EXHAUSTING AIR FROM THE BUILDING ENVELOPE TO THE OUTSIDE SHALL BE PROVIDED WITH BACKDRAFT DAMPERS OF AUTOMATIC DAMPERS. 1404(d) (1) ALL TRANSVERSE DUCT, PLENUM, AND FILLED JOINTS SHALL BE SEALED WITH PRESSURE SENSITIVE TAPE OR MASTIC TO PREVENT AIR LOSS. 1406(a) INDICATE THE MAKE AND MODEL NUMBER OF THE HOT WATER HEATER ON THE PLANS. THE UNIT MUST BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION. (AMERICAN APPLIANCE G.V.F. 433-T).

1406(f) SHOWER HEADS, LAVATORY, AND SINK FAUCETS MUST BE OF A MAKE AND MODEL NUMBER CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION.

BATHROOMS, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS, ETC., SHALL BE PROVIDED WITH NATURAL VENTILATION BY MEANS OF OPENABLE EXTERIOR OPENINGS WITH AN AREA NOT LESS THAN 1/20 OF THE FLOOR AREA WITH A MINIMUM OF 1 1/2 SQ. FT. OR MECHANICAL VENTILATION SYSTEMS MUST SUPPLY FIVE CHANGES PER HOUR IN BATHROOMS AND LAUNDRY ROOMS, TWO CHANGES PER HOUR IN OTHER HABITABLE ROOMS. HABITABLE ROOMS OTHER THAN KITCHENS SHALL HAVE AN AREA NOT LESS THAN 70 SQ.

HABITABLE ROOMS SHALL BE A MINIMUM CEILING HEIGHT OF 7'6". KITCHENS, HALLWAYS, BATHROOMS, AND CORRIDORS MAY BE 7'0". WHERE SLOPING CEILINGS OCCUR, THE REQUIRED CEILING HEIGHT SHALL BE PROVIDED IN AT LEAST 50% OF THE ROOM AND NO PORTION OF ANY ROOM HAVING A CEILING HEIGHT OF LESS TH/5'0" SHALL BE CONSIDERED AS CONTRIBUTING TO THE MINIMUM REQUIRED AREAS. AT LEAST ONE ROOM SHALL HAVE AN AREA NOT LESS THAN 120 SQ. FT. MINIMUM HABITABLE ROOM WIDTH IS 7'0", EXCEPT FOR KITCHEN UNLESS AN EXTERIOR DOOR IS PROVIDED, ONE WINDOW SILL IN EACH BEDROOM SHALL HAVE A FINISHED HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR. SUCH WINDOW SHALL HAVE A NET CLEAR OPENABLE AREA OF NOT LESS THAN 5.7 SQ. FT. WITH NO NET CLEAR DIMENSION LESS THAN 24" IN HEIGHT OR 20" IN WIDTH. NO WATER CLOSET SPACE SHALL BE LESS THAN 30" WIDE AND 24" CLEAR IN FRONT OF THE WATER CLOSET. WATER CLOSET TO BE MINIMUM OF 15" CENTERED FROM SIDE WALLS. NO SHOWER STALL FIXTURE SHALL HAVE A FINISHED CLEAR INSIDE NET DIMENSION OF LESS THAN 2'6" SQUARE.

DESIGN CRITERIA & ASSUMPTIONS IN THE ABSENCE OF ANY SPECIFIC DESIGN CRITERIA TO THE CONTRARY PROVIDED BY THE CLIENT, THE FOLLOWING DESIGN ASSUMPTIONS WERE USED FOR THIS PROJECT UNLESS SPECIFIC DATA STATING OTHERWISE WAS PROVIDED TO THE ENGINEER/CONTRACTOR OR

THE ALLOWABLE SOIL BEARING PRESSURE IS 1500 PSF ASSUMED UNLESS A PRELIMINARY SOILS REPORT IS PROVIDED BY THE CLIENT TO THE ENGINEER. THE CLIENT ACCEPTS FULL AND COMPLETE RESPONSIBILTY FOR THIS ASSUMPTION OR THE CLIENT AGREES TO PROVIDE A COMPLETE SOILS INVESTIGATION PRIOR TO COMMENCEMENT OF CONSTRUCTION.

3) ANY GRADING WORK PERFORMED ON THIS WAS DONE IN ACCORDANCE WITH ALL CODE REQUIREMENTS AND WORKMANSHIP WAS PERFORMED IN A FIRST CLASS MANNER. 4) THE LOADING DEAD, LIVE, WIND, SEISMIC, AND DEFLECTION CRITERIA IS APPROPRIATE FOR THIS PROJECT AND THE CLIENT HAS REVIEWED AND APPROVED THEM PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

5) THE PLANS WERE PREPARED TO MEET MINIMUM REQUIREMENTS ACCEPTANCE OF THE ABOVE DESIGN ASSUMPTIONS BY THE LOCAL BUILDING OFFICIAL AND THE LOCAL BUILDING OFFICIAL'S APPROVAL OF THESE PLANS INDICATES THAT THIS DESIGN MEETS THE STANDARD OF PRACTICE FOR THE AREA ESTABLISHED BY THE LOCAL BUILDING OFFICIAL THE USE OF THESE PLANS BY THE CLIENT INDICATES FULL ACCEPTANCE AND UNDERSTANDING BY THE CLIENT OF THE PROCEEDING CRITERIA AND THAT THE CLIENT WILL NOTIFY THE ENGINEER IN WRITING PRIOR TO COMMENCEMENT OF CONSTRUCTION IF THE CLIENT IS AWARE OF ANY ADVERSE CONDITIONS WITH THIS SITE OR IF ANY OTHER CRITERIA IS NOT ACCEPTABLE TO THE CLIENT OR APPROPRIATE FOR THIS PROJECT

THE FOLLOWING IS A LIST OF ADDITIONAL ITEMS THAT ARE NOT NORMALLY REQUIRED TO MEET MINIMUM BUILDING CODE REQUIREMENTS BUT THE OWNER MAY WISH TO HAVE THESE PREFORMED AT AN ADDITIONAL EXPENSE TO THE OWNER:

SOILS INVESTIGATION.
SPECIALIZED CONCRETE, GROUT, MORTAR MIX DESIGNS.
SPECIAL CONCRETE, GROUT, MORTAR INSPECTIONS.
STEEL/WELDING INSPECTIONS.
STRUCTURAL OBSERVATIONS BY ENGINEER OF RECORD.
PRIVATE INSPECTIONS, SUCH AS, STRUCTURAL, MECHANICAL,
ELECTRICAL, AND PLUMBING, ETC.
SHOP DRAWNIGS FOR ALL SPECIALLY FABRICATED ITEMS FOR THIS PROJECT.
ANY OTHER SPECIFIC ITEMS OR INSPECTIONS THE CLIENT MIGHT
WISH TO HAVE DONE.

THE CLIENT AGREES TO LIMIT THE ENGINEER'S LIABILITY TO THE CLIENT AND TO ALL CONTRACTORS AND SCBCONTRACTORS ON THIS PROJECT, DUE TO PROFESSIONAL NEGLIGENT ACTS, ERRORS OR OMISSIONS OF THE ENGINEER TO THE SUM OF THE ENGINEER'S FEE.

EXPANSION JOINTS SHALL BE SAW CUT EVERY 12', OR AT OWNER/CONTRACTOR OPTION REINFORCING STEEL SHALL BE SPLICED WITH A MINIMUM LAP OF 30 BAR DIAMETERS OR 18" EXCEPT WHERE NOTED, AND SHALL HAVE A MINIMUM COVER AS FOLLOWS: FOOTINGS - 3", WALLS - 1 1/2" (EXPOSED), 2" AGAINST EARTH, COLUMNS 1 1/2". CAST IN PLACE CONCRETE SHALL BE 2500 PSI MINIMUM IN 28 DAYS UNLESS OTHERWISE NOTED, AND SHALL HAVE 5 SACKS PER YARD MINIMUM AND 7 1/2 GALLONS OF WATER PER SACK MAXIMUM, WITH A 4" MAXIMUM SLUMP. TRANSIT—MIX CONCRETE SHALL BE MEASURED, MIXED, AND DELIVERED IN ACCORDANCE WITH REQUIREMENTS SET FOURTH IN TENTATIVE SPECIFICATIONS FOR TRANSIT—MIX CONCRETE (ASTM C-94).

ALL EXTERIOR SLABS TO HAVE A LIGHT BROOM FINISH, UNLESS OTHERWISE INDICATED, AND SHALL BE SLOPED TO DRAIN AWAY. EXCAVATION AND GRADING

DESIGN SOIL PRESSURE TO 1500 P.S.F. IF MASONRY, 1500 P.S.F. FOR FIREPLACE AND FOUNDATION WALLS. CUT SLOPES FOR PERMANENT EXCAVATIONS AND FILLS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL. EXCAVATE FOR FOOTINGS BELOW ALL ORGANIC MATERIAL AND REMOVE ALL LOOSE MATERIAL FROM FOOTING EXCAVATIONS.

ALL FOOTING TO BE ON FIRM, UNDISTURBED SOIL. FOOTING TO EXTEND BELOW FROSTLINE. FOUNDATIONS SUPPORTING WOOD TO EXTEND AT LEAST 6" ABOVE ADJACENT FINISH GRADE. EXTEND PIERS AND FOUNDATION 6" BELOW INSIDE EXCAVATED GRADE. CBC TABLE 29A.

MINIMUM THICKNESS FOR SLAB FLOORS TO BE 3-1/2". CBC 1910. PROVIDE KEYED CONTROL JOINTS IN ALL SLABS ON GRADE AT  $12^{\circ}-0^{\circ}$  O.C. EACH WAY MAXIMUM. PROVIDE HEAVY  $(3/4^{\circ})$  TOOLED JOINTS AT  $5^{\circ}0^{\circ}$  O.C. AND  $1/2^{\circ}$  PRE-MOLDED EXPANSION JOINTS AT  $30^{\circ}0^{\circ}$  O.C. IN ALL EXTERIOR WALKS AND SLABS. PLACE ALL REINFORCING AS PER ACI CODES AND STANDARDS. GROUND COVER IN CRAWL SPACES TO BE 6MIL, BLACK POLYETHYLENE. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY TO BE FOUNDATION GRADE REDWOOD OR PRESSURE—TREATED WOOD. (MUDSILL) CBC 2304.11.4.

VENT CRAWL SPACES 1.5 SQ. FT. FOR EACH 25 LINEAR FEET OF WALL WITH CLOSEABLE SCREENED VENTS, OR 1/150 OF THE AREA. VAPOR BARRIERS UNDER CONCRETE SLABS ON GRADE TO 6MIL MINIMUM. VISQUEEN OR

BEAM POCKETS IN CONCRETE WALLS TO HAVE 1/2" AIR SPACE AROUND BEAM SIDES AND END. POSTS AND BEAMS TO REST ON ASPHALT SHINGLE OR METAL BEARING PLATE. ENDS OF GIRDERS SUPPORTED ON CONCRETE OR MASONRY SHALL HAVE NO LESS THAN 3" BEARING. GARAGE FOUNDATIONS MUST MEET REQUIREMENTS FOR ONE-STORY BUILDINGS. CBC 2308.6 AND CHAPTER 18 ANCHOR BOLTS TO BE A-307. IN PRESSURE TREATED WOOD SILLS, ANCHOR BOLTS TO BE 1/2" DIAMETER, EMBEDDED AT LEAST 7" INTO CONCRETE, 15" INTO UNREINFORCED MASONRY AND PLACED 6" O.C. UNLESS OTHERWISE SHOWN ON THE PLANS, AND 12" FROM ENDS OF SILLS AND CORNERS. CBC 2907(f) OR SPECIFY TYPE, MANUFACTURE, AND LOCATION OF ANCHORS.

BUILDER TO PROVIDE A CRAWL SPACE ACCESS PANEL A MINIMUM OF 18"X24" LOCATED IN AN ACCESSIBLE PLACE IN CLOSET, 20" MAXIMUM FROM PLUMBING CLEANOUTS. CBC 1209 WATERPROOF BASEMENT WALLS BEFORE BACKFILLING, AND ALSO PLACE FOOTING DRAIN TILE IF REQUIRED. MINIMUM VERTICAL AND HORIZONTAL REINFORCEMENT FOR CONCRETE WALLS AND FOUNDATIONS SHALL CONFORM TO CBC 19.

WOOD AND PLASTICS

ALL FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH AND CONFORM TO THE LATEST RULES, GRADE MARKED AS FOLLOWS UNLESS OTHERWISE NOTED:

STUDS SHALL BE STUD GRADE OR BETTER \$4\$
BLOCKING MAY BE UTILITY GRADE \$4\$
PLATES MAY BE MIXED SPECIES \$4\$
HEADERS, POSTS AND 2x HORIZONTAL MEMBERS NO. 2 \$4\$ AND BETTER
BEAMS AND STRINGERS SHALL BE NO. 2 OR BETTER, \$4\$ OR ROUGH OR RESAWN
AS NOTED ALL WOOD BASE SHEATHING SHALL BE DOUGLAS FIR EXTERIOR GLUE CONFORMING TO P.S. 1—66 AND U.S. COMMERCIAL STANDARD CS-45-66 AND STAMPED WITH THE D.F.P.A. TRADEMARK.

VERTICAL DIAPHRAGMS TO BE STRUCT I OR AS NOTED. HORIZONTAL DIAPHRAGMS TO BE II OR AS NOTED. EXPOSED SHEATHING — RESAWN OR A—C EXT. GRADE. SIDING EXT. GRADE AS NOTED OVER 15# FELT. PROVIDE 1/8" GAP AT ALL WOOD BASE SHEATHING SHEARWALL JOINTS.

ALL SILL PLATE SHALL BE CONNECTED TO THE CONCRETE AS FOLLOWS: ANCHOR BOLTS - 1/2" BY 10" AT 6'O.C. 12" FROM ENDS, 7" MIN. IMBEDMENT UNLESS NOTED OTHERWISE SEE PLANS (2 BOLTS PER PLATE MIN.)
 SIMPSON MUD ANCHORS - SAME AS ABOVE.
 SHOT PINS - (AFTER CONCRETE HAS SET FOR 7 DAYS). NOT PERMITTED ON SUEL BURNEY.

HEARWALLS.

LEXTERIOR OR LOAD BEARING INTERIOR WALLS — 7/32" "RAMSET" #3348 PER ICBU REPORT #1147 OR APPROVED EQUAL, AT 36" O.C. WITH THE FIRST 2 PINS 6" AND 10" FROM EACH CUT END OF THE SILLS SHOOT STRAIGHT DOWN NO CLOSER THAN 2" FROM EDGE OF ELAD B. INTERIOR OR NONBEARING WALLS — SAME FASTENER AS A. BUT AT 48" O.C. WITH ONE 6" FROM ENDS.

BOLTS SHALL HAVE STEEL PLATES OR M. I. WASHERS UNDER ALL NUTS BEARING ON WOOD WITH BOLT HOLES DRILLED 1/16" OVER DIAMETER LOCATED 7 DIAMS FROM ENDS AND 4 DIAMS FROM EDGES OF WOOD. PLYWOOD PANELS AT FLOOR AND ROOFS TO BE STAGGERED A MINIMUM OF 2 SUPPORT SPANS AND FACE GRAIN LAID PERPENDICULAR TO SUPPORTS. ALL PLYWOOD FLOORING SHALL BE GLUED OVER EACH SUPPORT WITH ELMERS WILHOLD OR EQUAL. PROVIDE 2X BLOCKING FULL DEPTH OF FLOOR JOISTS AND RAFTERS 2 X 12 OR DEEPER AT 8' O.C. FOR F.J. 10' O.C. FOR RAFTERS AND AT SUPPORTS AND PARTITIONS. USE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS. PROVIDE NECESSARY BLOCKING FOR DRYWALL EDGES AND HARDWARE BACKING. PROVIDE FIREBLOCKING AT MID-HEIGHT ON ALL WALLS OVER 10' IN HEIGHT AND/OR TO F.H.A. REQUIREMENTS FOR STUCCO WALLS. TOP PLATES OF ALL STUD WALLS SHALL BE DOUBLED, SAME SIZE AT STUDS. LAP PLATES 48" MINIMUM WITH AT LEAST 16-16D NAILS AT 4" O.C. MINIMUM. UNLESS NOTED OTHERWISE. FOUNDATION PLATES OR SILLS SHALL BE P.T.D.F. OR FOUNDATION GRADE REDWOOD (CBC SEC. 23 ).

CUTTING, NOTCHING, OR DRILLING OF BEAMS OR JOISTS TO BE PERMITTED ONLY AS DETAILED OR APPROVED BY THE GOVERNING INSPECTION AGENCY. PROVIDE LET IN BRACES AT ENDS AND EVERY 25' OF EXTERIOR STUD WALLS AND NAIL CROSS PARTITIONS (SEC. 2518—E). EXCEPT THEY MAYBE OMITTED WHERE PLYWOOD SIDING IS USED. ALL EXTERIOR WALL FRAMING TO RECEIVE 15 LB. WATER PROOF BUILDING PAPER UNDER EXTERIOR WALL MATERIAL. PROVIDE 2 LAYERS TYPE "D" PAPER BETWEEN WOOD BASE SHEARWALLS AND STUCCO. ALL EXPOSED BEAMS, FACIAS, AND TRIM SHALL BE RESAWN/S4S U.O.N.

AN A.I.T.C. OR APPROVED FABRICATION CERTIFICATE OR CONFORMANCE SHALL BE SUBMITTED TO THE BUILDING INSPECTOR PRIOR TO INSULATION OF ANY STRUCTURAL GLU—LAM MEMBER. GLU—LAM BEAM SHALL BE DOUGLAS FIR (COAST REGION). PROVIDE ALL LABOR AND MATERIALS NECESSARY TO INSTALL BASE, DOORS AND WINDOW TRIM, CLOSET RODS AND SHELVES, FINISH HARDWARE AND TOILET ACCESSORIES, SPECIAL SHELVING BRACKETS FOR DECORATIVE TRIM AND PANELING AS REQUIRED, IN ACCORDANCE WITH W.I.C. STANDARDS. ALL WOOD TO BE IN CONTACT WITH CONCRETE OR EARTH SHALL BE PRESSURE TREATED BY AN APPROVED TREATMENT PLANT, OR BE FOUNDATION GRADE REDWOOD.

TRIM AND WOODWORK SHALL BE INSTALLED BY QUALIFIED AND COMPETENT CRAFTSMAN AS SHOWN IN THE DRAWNGS. PRE-MANUFACTURED STRUCTURAL PLASTICS SHALL BE SUPPLIED BY APPROVED FABRICATORS. I.A.W. CBC REQUIREMENTS. SKYLIGHTS SHALL BE ICBO APPROVED AND INSTALLED ON THE CURBS, PROPERLY FLASHED AND IN A METAL FRAMED OR SELF-FLASHING — CONTRACTORS CHOICE UNLESS OTHERWISE DETAILED.

**FRAMING** ALL WOOD FRAMED CONSTRUCTION SHALL CONFORM TO CBC. ALL LUMBER SHALL BE GRADE MARKED AND SHALL CONFORM WITH THE LATEST STANDARD GRADING AND DRESSING RULES OF THE WEST COAST LUMBER INSPECTION BUREAU. ALL PLYWOOD SHALL BEAR THE APA GRADE STAMP AND PANEL INDEX.

ALL MUDSILLS AND ALL LUMBER IN CONTACT WITH CONCRETE AND MASONRY OR WITHIN 6" OF GRADE SHALL BE PRESSURE TREATED DOUGLAS FIR OR REDWOOD. ALL VERTICAL FRAMING SHALL BE MINIMUM STANDARD GRADE DOUGLAS FIR OR BETTER. ALL HORIZONTAL FRAMING SHALL BE DOUGLAS FIR #2 GRADE OR BETTER. ALL BLOCKING AND FURRING SHALL BE CONSTRUCTION GRADE OR BETTER. ALL STRUCTURAL PLYWOOD SHEATHING SHALL BE C-D EXT.-APA (STANDARD) GRADE WITH INTERMEDIATE GLUE UNLESS NOTED OTHERWISE. ALLOWABLE SPANS SHALL CONFORM TO CBC TABLE 2308.9.3. ALL PLYWOOD SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS.

WALL FRAMING FOR EXTERIOR OR BEARING WALLS SHALL BE 2 X 4 STUDS AT 16 O.C., UNLESS OTHERWISE NOTED AND DOUBLE 2X TOP PLATE WITH THE MINIMUM 48 LAP SPLICE. PROVIDE MAXIMUM 12 GA. BY 1 1/2" WIDE METAL STRAP TIES WHERE TOP OR BOTTOM PLATES ARE INTERRUPTED AND BROKEN. PROVIDE MID-HEIGHT FIREBLOCKING AT FLOOR, CEILING, SOFFIT, AND AT EACH STUD SPACE THAT EXCEEDS 10'-0" IN HEIGHT. PROVIDE TEMPORARY DIAGONAL BRACING AS REQUIRED FOR ERECTION.

PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS IN SOLID BLOCKING AT 48" O.C. MINIMUM BETWEEN JOISTS UNDER PARTITIONS PERPENDICULAR TO JOISTS. ALL EXTERIOR WALLS AND MAIN CROSS STUD PARTITIONS SHALL BE BRACED AT EACH END, OR AS NEAR THERETO AS POSSIBLE AND AT EVERY 25' — 0" OF LINEAL WALL. IF 1 X 6 BRACING IS SHOWN IT SHALL RUN DIAGONALLY IN A STRAIGHT LINE FROM THE TOP PLATE TO THE BOTTOM PLATE AND AT AN ANGLE AS NEAR AS PRACTICAL TO 45 DEGREES BUT ALWAYS AT SUFFICIENT ANGLE TO INCLUDE FOUR STUD SPACES.

GLUE LAMINATED BEAMS SHALL BE AS REQUIRED BY ENGINEER'S CALCULATIONS OR PLANS. MANUFACTURER'S CERTIFICATION OF GLU—LAM BEAMS SHALL BE PROVIDED AT THE TIME OF INSPECTION WHICH PROPERLY INDICATES THE FIBER BENDING AND GRADE SPECIFICATIONS (COMBINATION NUMBER). ALL WOOD TO BE 2" MINIMUM HORIZONTAL DISTANCE FROM CHIMNEY OR FLUE. PROVIDE CROSS BRIDGING OR BLOCKING AT FLOOR JOISTS AND RAFTERS 12" OR MORE IN DEPTH. RAFTERS OR JOISTS SHALL BE SUPPORTED LATERALLY BY BRIDGING AT INTERVALS NOT EXCEEDING 8'-0", UNLESS BOTH EDGES ARE HELD IN LINE. EXTERIOR WOOD SIDING TO BE INSTALLED OVER 15# BUILDING PAPER. FOR VERTICAL SIDING PROVIDE HORIZONTAL BLOCKING SPACED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION OR LISTING, BUT NOT TO EXCEED 32"O.C. UNDER FLOOR VENTS TO BE ON A LEAST 2 APPROXIMATELY OPPOSITE SIDES OF CRAWL SPACE AND EQUAL TO 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDER FLOOR AREA. 1 VENT TO BE LOCATED WITHIN 3' OF EACH CORNER. SCREEN OPENING WITH 1/4" GALVANIZED MESH.

WOOD JOISTS FOR THE BOTTOM OF WOOD FLOORS CLOSER THAN 18", OR WOOD GIRDERS CLOSER THAN 12" TO THE GROUND UNDERFLOOR AREA AND THEIR SUPPORTS SHALL BE PRESSURE TREATED WOOD OR REDWOOD. ALL WOOD COLUMNS AND POSTS SHALL BE FRAMED TRUE, STRAIGHT, AND PLUMB. SUPPORT SHALL BE DESIGNED TO HOLD THE COLUMN OR POST SECURELY IN POSITION AND TO PROTECT ITS BASE FROM DETERIORATION IN AREAS EXPOSED TO WATER SPLASH AND IN EXTERIOR LOCATIONS, WOOD COLUMNS, AND POSTS SHALL BE SUPPORTED BY PIERS PROJECTING AT LEAST 2" ABOVE THE FINISH FLOOR AND SHALL BEAR ON A METAL BASE PLATE OR FOUNDATION PLATE OR SILL. POSTS OR COLUMNS OF TREATED WOOD OR OF FOUNDATION GRADE REDWOOD OR CEDAR MAY BE PLACED SIDEOUS OF CONCRETE SOLID MASONRY OR GROUTED MASONRY.

ROOF SHEATHING SHALL BE 1/2" PLYWOOD OR EQUAL, STRUCTURAL II, NAILED WITH 8d COMMON NAILS AT 6"O.C. AT ALL U.N.O. DIAPHRAGM WALL BOUNDARIES AND PANEL EDGES AND 8d COMMON NAILS AT 12"O.C. TO INTERMEDIATE SUPPORTS (U.N.O.).

FLOOR JOISTS:

A. BEARING: EXCEPT WHERE JOISTS ARE SUPPORTED ON A 1"X4" RIBBON STRIP AND NAILED TO THE ADJOINING STUD, THE ENDS OF EACH JOIST SHALL HAVE NOT LESS THAN 1-1/2" OF BEARING ON WOOD OR METAL, NOR LESS THAN 3" ON

LESS THAN 1-1/2 OF BEARING ON WOULD OR METAL, NOR LESS THAN 3 ON MASONRY.

B. BLOCKING: JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOISTS ARE NAILED TO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD OR BY OTHER APPROVED MEANS. SOLID BLOCKING SHALL NOT BE LESS THAN 2" IN THICKNESS AND THE HAS DEPTH OF JOIST.

C. NOTCHING: NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED ONE—FORTH OF THE JOIST DEPTH. HOLES IN JOISTS SHALL NOT BE WITHIN 2" OF THE TOP OR BOTTOM OF THE JOISTS AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE—THIRD THE DEPTH OF THE JOIST. NOTCHES IN THE TOP OR THE BOTTOM OF JOISTS SHALL NOT EXCEED ONE—SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN.

D. LAP JOISTS: FRAMING FROM OPPOSITE SIDES OF A BEAM, GRDER, OR PARTITION SHALL BE LAPPED AT LEAST 4" OR THE OPPOSING JOISTS AND SHALL BE TIED TOGETHER AS PER TABLE 25—Q OR OTHER APPROVED MANNER.

E. FRAMING ANCHORS: JOISTS FRAMING INTO THE SIDE OF A WOOD GRDER SHALL BE SUPPORTED BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2"X2".

2"X2".
FRAMING AROUND OPENINGS: TRIMMER AND HEADER JOISTS WHEN FRAMED AROUND OPENINGS SHALL BE DOUBLED, OR LUMBER OF EQUIVALENT CROSS SECTION.
WHEN THE SPAN OF THE HEADER EXCEEDS 4 FEET. THE ENDS OF ON A BEAM, PARTITION, OR WALL. TALL JOISTS OVER 12' LONG SHALL BE SUPPORTED AT HEADER BY FRAMING ANCHORS OR ON LEDGER STRIPS NOT LESS THAN 2"X2".
SUPPORTING BEARING PARTITIONS PERPENDICULAR TO JOISTS, SHALL NOT BE OFFSET FROM SUPPORTING GIRDERS, WALLS, OR PARTITIONS MORE THAN THE JOIST DEPTH.

ROOF AND CEILING FRAMING:

A. RAFTER SHALL BE FRAMED DIRECTLY OPPOSING EACH OTHER AT THE RIDGE.
THERE SHALL BE A RIDGE AT LEAST 2" NOMINAL THICKNESS AT ALL RIDGES AND
NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. AT ALL VALLEYS AND
HIPS THERE SHALL BE A SINGLE VALLEY OR HIP RAFTER NO LESS THAN 2"
NOMINAL THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER.

B. RAFTER TIES: RAFTERS SHALL BE NAILED TO ADJACENT CEILING JOISTS TO
FORM A CONTINUOUS TIE BETWEEN EXTERIOR WALLS WHEN SUCH JOISTS ARE
PARALLEL TO THE RAFTERS. WHERE NOT PARALLEL, RAFTERS SHALL BE TIED TO
1"X4" (NOMINAL) MINIMUM SIZED CROSS TIES. RAFTER TIES SHALL BE PLACED
NOT MORE THAN 4 FOOT ON CENTER.

WALL FRAMING:

A. STUDS IN EXTERIOR WALLS AND INTERIOR BEARING WALLS OF BUILDINGS NOT MORE THAN TWO STORIES IN HEIGHT SHALL BE NOT LESS THAN 2"X4" IN SIZE.

B. CRIPPLE WALLS: CRIPPLE WALLS SHALL BE FRAMED OF STUDS NOT LESS IN SIZE THAN THE STUDDING ABOVE WITH A MINIMUM LENGTH OF 24", OR SHALL B FRAMED OF SOLID BACKING. WHEN EXCEEDING 4' IN HEIGHT, SUCH WALLS SHALL BE FRAMED OF SURDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY.

SHALL BE FRAMED OF SURDS HAVING THE SIZE REQUIRED FOR AN ADDITIONAL STORY.

C. HEADERS: FOR ALL OPENINGS 4' WIDE OR LESS IN BEARING WALLS SHALL BE PROVIDED WITH HEADERS CONSISTING OF EITHER TWO PIECES OF 2" FRAMING LUMBER PLACED ON EDGE AND SECURELY FASTENED TOGETHER OR 4" LUMBER OF EQUIVALENT CROSS SECTION. ALL OPENINGS MORE THAN 4' WIDE SHALL BE PROVIDED WITH HEADERS OR JUNTELS. SUCH HEADERS OR LINTELS SHALL HAVE NOT LESS THAN 1-1/2" SOLID BEARING AT EACH END TO THE FLOOR OR BOTTOM PLATE, UNLESS OTHER APPROVED FRAMING METHODS OR JOINT DEVICES ARE USED.

D. PIPES IN WALLS: STUD PARTITIONS CONTAINING PLUMBING, HEATING, OR OTHER PIPES SHALL BE SO FRAMED, AND THE JOISTS UNDERNEATH SO SPACED, AS TO GIVE PROPER CLEARANCE FOR THE PIPING WHERE A PARTITION CONTAINING SUCH PIPING RUNS PARALLEL TO THE FLOOR JOISTS. THE JOISTS UNDERNEATH SUCH PARTITIONS SHALL BE BRIDGED WHERE PLUMBING, HEATING, OR OTHER PIPES ARE PLACED IN OR PARTLY IN A PARTITION, NECESSITATING THE CUTTING OF THE SOLES OR PLATES, A METAL TIE NOT LESS THAN 1/8" THICK AND 1-1/2" WIDE SHALL BE FASTENED TO THE PLATE ACROSS AND TO EACH SIDE OF THE OPENING WITH NOT LESS THAN FOUR 16d NAILS EACH SIDE.

BRIDGING: UNLESS COVERED BY INTERIOR OR EXTERIOR WALL COVERING OR SHEATHING MEETING THE MINIMUM REQUIREMENTS OF THE 2007 CBC. ALL STUD PARTITIONS OR WALLS WITH STUDS HAVING A HEIGHT TO LEAST THICKNESS RATIO EXCEEDING NAILED THERETO TO PROVIDE ADEQUATE LATERAL SUPPORT.

NAILING NOTES

ALL NAILS TO BE COMMON WIRE (16d "SINKERS" O.K.). WHERE BOX NAILS ARE USED, THEIR NUMBER SHALL BE INCREASED BY 33%. PRE-DRILL FOR 30d OR LARGER WHERE SPLITTING IS CAUSED. USE CORROSION RESISTANT NAILS FOR ALL EXTERIOR, EXPOSED WOOD SIDING, FASCIAS AND TRIM.

WHERE 2X MEMBER DETAILED, USE THE NUMBER 16d SHOWN

STRUCTURAL LAMINATED WOOD BEAM 2200 P.S.I. 1,800,000 P.S.I. OR AS SHOWN BY GRADE AND SPECIES. DESIGN LOADS. ROOFS—— ASPHALT SHINGLES SHAKES LIVE LOAD BUILT-OF 9 10 34
FLOORS—
WOOD/CARPET/RESILIENT 10 40 50
CERAMIC TILE/SLATE 25 40 65
BALCONIES—
SPACED WOOD 7 60 67
SHOULD WEATHER CONDITIONS CAUSE LOADS OTHER THAN THAT INDICATED, SUCH AS SNOW, EARTHQUAKE, HURRICANE, ETC., IT IS RECOMMENDED THAT YOU CHECK WITH YOUR LOCAL BUILDING OFFICIAL OR CONSULT A LOCAL STRUCTURAL ENGINEER TO PROVIDE FOR ALTERNATE MEMBER SIZES.

WOOD FRAMING MEMBERS TO BE AS FOLLOWS OR EQUAL EXCEPT AS SHOWN ON DRAWINGS:

A. POSTS
UTILITY GRADE DOUGLAS FIR

B. COLLUMNS
C. JOISTS, BEAMS, AND STRINGERS
D. BLOCKING, BRIDGING, ETC.
E. STUDS 2X4 AND LARGER
F. STUDS 12X4 AND LARGER
F. STUDS 11X5 AND VOOD FRAMING MEMBERS TO BE AS FOLLO.
POSTS
COLUMNS
JOISTS, BEAMS, AND STRINGERS
JOISTS, BEAMS, AND STRINGERS
SILOS 2X4 AND LARGER
SILLS, SLEEPERS, PLATES, AND
NAILING BLOCKS ON OR EMBEDDED
IN CONCRETE
DECKING (NOT EXPOSED)
CRAFTERS
HEADERS (INTERIOR)
HEADERS (EXTERIOR)
OTHER SIZES AS NOTED ON PLANS. PRESSURE TREATED DOUGLAS FIR UTILITY GRADE DOUGLAS FIR NO. 2 DOUGLAS FIR NO. 2 DOUGLAS FIR NO. 2 DOUGLAS FIR

ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL BOLTS TO BE A-307.

ALL MISCELLANEOUS STEEL TO BE A-36, FABRICATED IN ACCORDANCE WITH AISC. ALL WELDING TO BE WITH E60XX OR E70XX ELECTRODES IN ACCORDANCE WITH AWS. (CERTIFIED WELDER).

BLOCK SOLID BETWEEN JOISTS AND RAFTERS AT BEARING WALLS. CROSSBRIDGE SOLID BLOCKING AT 8'0" O.C. MAXIMUM WHEN IN DEPTH TO THICKNESS RATIO IS 6 TO 1. ALL PLYWOOD TO BE STANDARD GRADE WITH EXTERIOR GLUE. MINIMUM PLYWOOD NAILING TO BE 8d COMMON AT 6" O.C. AT EDGES AND 10" O.C. AT INTERMEDIATE BEARINGS. STAGGER JOINTS 1/2" PLYWOOD INDEX I.D. FOR FLOORS AND ROOF 32/16.

DOUBLE FLOOR JOISTS UNDER BEARING PARTITIONS. CBC 2308.8.4. BUILDER SHALL PROVIDE A MINIMUM OF 20"X30" ACCESS READILY ACCESSIBLE TO ATTIC SPACES AND A MINIMUM OF 30"X30" ACCESS WITH ATTIC MOUNTED FURNACE. 30" HEADSPACE IS REQUIRED. CMC. MINIMUM CEILING HEIGHT IN HABITABLE AREAS TO BE 7'6". HALLS MAY BE REDUCED TO 7'0". MINIMUM WIDTH FOR A CORRIDOR IS 44". CBC 1017.2. ALL EXTERIOR DOORS OR DOORS TO UNHEATED SPACES TO BE WEATHER-STRIPPED AND HAVE A SOLID CORE. BUILDER TO PROVIDE VAPOR BARRIERS FOR FLOORS AND CEILINGS OF 15 Ib. BUILDING PAPER OR DRAFT PAPER, FOIL BACK OR KRAFT BACK INSULATION AND 4MIL POLYETHYLENE ON WARM SIDE OF INSULATION. REQUIRED TO 1 PERM. SUPPORTING COLUMNS AND OTHER SUPPORTING ELEMENTS IN GARAGE(S) AND CARPORT(S) BENEATH ANOTHER STORY SHALL BE 1—HOUR FIRE RESISTIVE CONSTRUCTION AND ARE JACKETED. CBC 714 PROVIDE FIREBLOCKING AT FLOOR, CEILING COVES, AND SOFFITS. CBC 717. INSTALL TRUSS TIEDOWNS AT EACH RAFTER TAIL, "SIMPSON" H-1 CLIPS. DECK AND BALCONY GUARDRAILS TO MINIMUM OF 42" HIGH AND OPEN GUARDRAILS AND STAIR RAILING SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL DESIGN SUCH THAT NO OBJECT 4" IN DIAMETER CAN PASS THROUGH. CBC 1013.

STAIRWAY TO HAVE MAXIMUM RISE 7" AND MINIMUM RUN 11". CBC 1009.3). PROVIDE HANDRAIL FOR STAIRS, GRIP PORTION OF HANDRAIL SHALL BE GREATER THAN 1-1/4" AND LESS THAN OR EQUAL TO 2" IN CROSS SECTIONAL DIMENSION. CBC 1012. GUARDRAILS ARE REQUIRED FOR STAIRS AND PORCHES OVER 30" ABOVE GRADE. CBC 1013. MINIMUM HEADROOM 6'8". CBC 1009.2. MINIMUM WIDTH 44". CBC 1009.1. GUARDRAILS, STAIR HANDRAILS, OR BALCONY RAILING SHALL BE DESIGNED TO RESIST A FORCE OF 50 lbs. PER LINEAL FOOT APPLIED AT THE TOP OF THE RAILING. CBC 1607.7 THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF A DOOR. SUCH FLOOR OR LANDING SHALL BE AT THE SAME ELEVATION ON EACH SIDE OF THE DOOR LANDINGS SHALL BE LEVEL EXCEPT FOR EXTERIOR LANDINGS WHICH ARE PERMITTED TO HAVE A SLOPE NOT TO EXCEED A 2% SLOPE. CBC 1008.1.4. SILLS OF NON-BEARING PARTITIONS OR NON-SHEAR PARTITIONS MAY BE ATTACHED CONCRETE SLAB WITH RAMSET PINS #3320 OR #3348 AT 3'0" O.C. CHARGE TO BE USED SHALL BE DETERMINED BY DENSITY OF SLAB. MEMBERS SUPPORTING EXTERIOR DECKS AND/OR STAIRS SHALL COMPLY TO CBC CHAPTER 23

BEARING WALLS SHALL BE BRACED AT EACH END OF OR AS NEAR AS POSSIBLE, AT EVERY 25'0" LINEAL WALLS. THIS 1X6 NOTCHED BRACING TO RUN DIAGONALLY IN A STRAIGHT LINE FROM TOP PLATE TO THE BOTTOM PLATE AT AN ANGLE AS NEAR AS POSSIBLE TO 45 DEGREES, BUT ALWAYS AT SUFFICIENT ANGLES TO INCLUDE 4 STUD PROVIDE LATERAL CROSS-BRACE AT PLATE LINE OF GARAGE. CBC 2308 PROVIDE BRACING FOR EXTERIOR AND MAIN CROSS-STUD PARTITIONS. CBC 2308 MANUFACTURERS CERTIFICATION OF GLU-LAM BEAMS SHALL BE PROPERLY IDENTIFIED FOR THE LOCATION AND SPECIFIC JOB SITE AT THE TIME OF INSPECTION. CBC 1704.6.2. ALL PLUMBING WALLS TO BE OF 2X4 MATERIALS EXCEPT WHERE NECESSARY, 2X6. ALL NAILING SHALL BE IN COMPLIANCE WITH CBC TABLE 2304.9.1. ALL LUMBER SHALL HAVE A GRADE MARKED WITH A STAMP OF THE ASSOCIATION COVERING THE SPECIES AND UNDER WHOSE GRADING RULES IT WAS PRODUCED. TRUSSES TO BE FABRICATED IN A SHOP OF AN I.C.C. APPROVED FABRICATOR IN ACCORDANCE WITH CBC 2303.4. LAP ALL DOUBLE TOP PLATES 4'0" MINIMUM AT SPLICES. SILLS TO BE DF PRESSURE—TREATED AT CONCRETE. FOUNDATION VENTS EQUAL TO 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDERFLOOR AREA. CBC 1203.3.1.

RAFTER SPANS SHALL COMPLY WITH TABLE 2308.10.3 CBC FLOOR JOISTS SHALL COMPLY WITH SPAN TABLE 2308.8 CBC PROVIDE DRAFT STOPS AT ALL DUCTS, VENTS, FIREPLACE FLUES, AND VERTICAL FRAMED SHAFTS AS PER CBC CHAPTER 7).

SPECIES AND GRADE OF MEMBERS SUPPORTING PORCH ROOF SHALL COMPLY TO CBC

NAILING SCHEDULE MINIMUM:

A. JOISTS OR RAFTERS TO SIDE OF STUDS, 8" JOISTS OR LESS 3—16d. ADD FOR EACH ADDITIONAL 4" OF DEPTH 1—16d.

B. JOISTS FOR RAFTERS TO ALL BEARINGS, TOENAILS, 2—16d OR 3—8d.

C. STUD TO SILL OR SOLE PLATE, END NAIL 2—16d OR TOENAIL 4—8d.

D. BLOCKING BETWEEN JOISTS OR RAFTERS TOENAIL EACH SIDE EACH END 2—8d.

E. BLOCKING BETWEEN STUDS, EACH END, 2—16d.

F. 1" SHEATHING (OR LET—IN BRACE):

AT EACH END, EACH BOARD 1X6, 3—8d

1X8, 2—8d

INTERMEDIATE BEARINGS 1X6, 2—8d

1X8, 3—8d

G. 2" SHEATHING OR DECKING: SAME AS ABOVE, BUT WITH 16d NAILS.

H. CROSS BRIDGING TOENAIL AT EACH END, 2—8d.

I. 2X3 STRIPPING TO JOISTS AT 24", ONE STRAIGHT, ONE SLANTED, 2—16d.

J. RIBBON TO STUDS, 1" RIBBON, 2—8d.

K. DOUBLE TOP PLATE:

LOWER PLATE TO TOP OF STUD

LAPS AND INTERSECTIONS

LAPS AND INTERSECTIONS

L BUILT—UP BEAMS OR POSTS:

10" OR LESS IN DEPTH, STAGGERED

MORE THAN 10" DEPTH, STAGGERED

BLOCK

WHERE NOT BLOCKED, STAGGERED

16d©12"

N. BOTTOM OF END (OR RIM) JOIST, EACH
BLOCK

WHERE NOT BLOCKED, STAGGERED

BLOCKING TO TOP PLATE, TOENAIL, 16d©8".

D. BLOCKING TO TOP PLATE, TOENAIL, 16d©8".

D. BLOCKING TO TOP PLATE, TOENAIL, 16d©8".

P. SOLE PLATE THROUGH PLY TO BLOCKING OR FRAMING, 16d©8".

D. BLOCKING TO TOP PLATE, TOENAIL, 16d©8".

P. SOLE PLATE THROUGH PLY TO BLOCKING OR FRAMING, 16d©8".

Q. JOIST (2X10 MAX.) TO RIM JOIST, END NAIL, 2—16d.

R. 1/2" ROOF SHEATHING 6" ON EDGES AND 12" FIELD AS PER CBC 23. SPECIES AND GRADE OF MEMBERS SUPPORTING PORCH ROOF SHALL COMPLY TO CBC 23.

ALL ELECTRICAL WRING AND INSTALLATION SHALL BE AS REQUIRED BY STATE AND LOCAL ELECTRICAL CODES.  $\label{eq:codes} % \begin{array}{c} \text{ ALL ELECTRICAL PROPERTY } \\ \text{ AND LOCAL ELECTRICAL CODES.} \\ \end{array}$ 

ELECTRICAL CONTRACTOR SHALL VISIT THE PROJECT SITE AND MAKE A SURVEY OF THE EXISTING CONDITIONS WHICH MAY AFFECT OR MAY BE AFFECTED BY THE WORK UNDER THIS SECTION BEFORE BID. REFERENCES MADE ON THE DRAWINGS TO EXISTING WORK OR CONDITIONS OR CORRECTIONS OF WAYS AND MEANS OF PERFORMING THE ELECTRICAL WORK IN CONJUNCTION WITH EXISTING CONDITIONS SHALL BE SUBJECT TO VERIFICATION BY THE CONTRACTOR IN HIS SURVEY AND IN THE PROGRESS OF THE WORK.

THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT, DEVICES, WRING MATERIALS AND AUXILIARIES NECESSARY OR REQUIRED TO COMPLETE THE ENTIRE ELECTRICAL INSTALLATION FOR SATISFACTORY FUNCTION AND OPERATION WHETHER SHOWN ON PLANS OR NOT AND SHALL INCLUDE ALL COSTS OF JOB IN HIS BID.

ALL EQUIPMENT SHALL BE LABELED WITH WHITE ENAMEL STENCILED LETTERS OR WITH PHENOLIC NAME PLATES SECURED WITH SCREWS OR EPOXY CEMENT. TYPEWRITTEN DIRECTORIES SHALL BE INSTALLED IN ALL DISTRIBUTION PANELS AND LOAD CENTERS. 4. CONDUIT RUNS ON PLANS ARE SHOWN DIAGRAMATICALLY AND SHALL BE RUN TO SUIT CONDITIONS IN THE FIELD IN A NEAT AND WORKMANLIKE MANNER.

5. IT IS THE INTENT OF THESE DRAWINGS THAT THIS BE A COMPLETE ELECTRICAL INSTALLATION. ANY APPARENT ERRORS OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THIS ENGINEER OR ARCHITECT AS SOON AS IT IS DETECTED. THESE PLANS SHALL ONLY BE USED FOR CONSTRUCTION AFTER APPROVAL HAS BEEN OBTAINED FROM AGENCIES HAVING JURISDICTION REGARDING THIS PROJECT.

7. THE CONTRACTOR SHALL CONSULT WITH THE UTILITY COMPANIES AND GET APPROVAL FOR HIS PROPOSED SERVICE EQUIPMENT AND THE CONTRACTOR SHALL CONSULT WITH AND OBTAIN THE APPROVAL OF THE ENGINEER OR ARCHITECT PRIOR TO MAKING CHANGES THAT WILL SIGNIFICANTLY EFFECT THE ELECTRICAL SYSTEM AS TO LOAD CHANGES OR COSTS.

THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND COORDINATING HIS WORK WITH THE MECHANICAL PLANS AND SPECIFICATIONS FOR WORK REQUIRED BY HIM. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE STATE FIRE MARSHALL, CALIFORNIA ADMINISTRATIVE CODE TITLE 24, OSHA, NEC, UTILITY COMPANIES, AND OTHER APPLICABLE STATE AND LOCAL CODES, LAWS, ORDINANCES AND REGULATIONS. NOTHING IN THESE PLANS IS TO BE CONSTRUED SO AS TO PERMIT WORK NOT CONFORMING TO THESE CODES.

MECHANICAL EQUIPMENT

ALL EQUIPMENT SUBJECT TO CERTIFICATION LISTED IN THE BUILDING ENERGY EFFICIENCY STANDARDS, TABLE 2-53G SUCH AS FURNACES, WALL HEATERS, WATER HEATERS, PLUMBING FITTINGS, SHOWERHEADS, FAUCETS, AND FLUORESCENT LAMP BALLAST'S SHALL BE CERTIFIED TO THE CALIFORNIA ENERGY COMMISSION BY THE MANUFACTURER PRIOR TO INSTALLATION. WHEN REQUIRED BY THE OWNER OR BUILDING OFFICIAL THE MANUFACTURER OR BUILDER SHALL PROVIDE DOCUMENTATION SHOWING EQUIPMENT IS CERTIFIED.

THE BUILDER SHALL PROVIDE THE BUILDING OWNER, MANAGER, AND THE ORIGINAL OCCUPANTS A LIST OF THE HEATING, COOLING, WATER HEATING, AND LIGHTING SYSTEMS AND FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES CONSERVATION OR SOLAR DEVICES INSTALLED IN THE BUILDING, AND INSTRUCTIONS ON HOW TO USE THEM EFFICIENTLY. ALL GAS FIRED FAN TYPE CENTRAL OR WALL FURNACES, CLOTHES DRYERS, COOKIN APPLIANCES, AND POOL HEATERS SHALL BE EQUIPPED WITH INTERMITTENT IGNITION DEVICES.

ALL AIR HANDLING DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED, SECURED, AND INSULATED AS PROVIDED IN CHAPTER 10 ON THE UNIFORM MECHANICAL CODE.

HEATING AND AIR CONDITIONING: SPECIFY HEATING TYPES AND FUEL AS SELECTED BY OWNER. BUILDER TO MAKE NECESSARY CHANGES TO PLANS TO ACCOMMODATE CHIMNEYS, VENTS, ETC. TO BE LOCATED AND INSTALLED AS REQUIRED. ALL DUCTS TO BE INSTALLED WITHOUT IMPINGEMENT ON BUILDING SURFACES. PROVIDE FURNACE ACCESS AND CLEARANCE AS REQUIRED BY UMC 703. BUILDER SHALL PROVIDE ORIGINAL OCCUPANT WITH A LIST OF THE HEATING, COOLING, WATER HEATING AND LIGHTING SYSTEMS, AND CONSERVATION OR SOLAR DEVICES INSTALLED IN THE BUILDING ALONG WITH INSTRUCTION ON EFFICIENT USAGE. HEATING SYSTEM TO PROVIDE 70° F AT 3'-0" ABOVE FLOOR IN EACH HABITABLE ROOM. CBC 1211 GAS FIRED WATER HEATERS AND FORCED AIR OR GRAVITY CENTRAL HEATING FURNACES ARE NOT PERMITTED IN BATHROOMS, BEDROOMS, CLOTHES CLOSETS, OR IN ANY CONFINED SPACE WITH ACCESS ONLY FROM THE ABOVE LOCATIONS, NOR SHALL ANY GAS FIRED WATER HEATER BE ALLOWED UNDER A STAIRWAY OR LANDING, UNLESS OF APPROVED SEALED COMBUSTION TYPE.

THERMOSTATICALLY CONTROLLED HEATING OR COOLING SYSTEMS (EXCEPT HEAT PUMPS) SHALL HAVE AN AUTOMATIC THERMOSTAT WITH A CLOCK MECHANISM IN WHICH THE BUILDING OCCUPANT CAN MANUALLY PROGRAM TO AUTOMATICALLY SET BACK THE THERMOSTAT SET POINTS FOR AT LEAST TWO PERIODS WITHIN 24 HOURS.

24 HOURS.

FOR FURNACE AND WATER HEATERS LOCATED IN ATTIC OR UNDERFLOOR SPACE PROVIDE THE FOLLOWING:

A. AN ACCESS OPENING AND PASSAGEWAY OF SUFFICIENT SIZE TO PERMIT REMOVAL OF THE LARGEST PIECE OF THE FURNACE AND WATER HEATER (30"X30"MIN). ACCESS OPENING WITHIN 20' OF UNIT.

B. ATTIC PASSAGEWAY TO HAVE CONTINUOUS FLOORING, 24" WIDE MINIMUM.

C. A LEVEL WORKING PLATFORM NOT LESS THAN 30" IN DEPTH IN FRONT OF FIREBOX OR IF FURNACE TEMPERATURE LIMIT CONTROL, VENT COLLAR, AIR FILTER, FUEL CONTROL VALVE, OR AIR HANDLING UNIT IS NOT SERVICEABLE FROM FIREBOX SIDE, A CONTINUOUS FLOOR NOT LESS THAN 24" IN WIDTH SHALL BE PROVIDED FROM THE PLATFORM, FIREBOX SIDE, TO AND IN FRONT OF THIS EQUIPMENT.

D. UNDERFLOOR FURNACE SUPPORTED FROM THE GROUND SHALL REST ON A CONCRETE SLAB 3" MINIMUM ABOVE ADJOINING GROUND LEVEL.

E. SUSPENDED FURNACES MUST HAVE 6" CLEARANCE TO GROUND. UPC 1311(5). UMC 708 AND 709.

F. FURNACE ROOM SHALL BE 12" WIDER THAN FURNACE.

G. MINIMUM CLEAR WORKING SPACE TO BE 3" ON SIDES, BACK AND TOP.

H. A 30" DEEP WORKING SPACE SHALL BE PROVIDED ALONG ENTIRE FRONT OF FIREBOX SIDE OF FURNACE WHEN DOOR IS OPEN.

I. AN OBSTRUCTED ACCESS WORKING SPACE NOT LESS THAN 24" IN WIDTH AND 30" IN HEIGHT SHALL BE PROVIDED. AIR FILTERS, FUEL CONTROL VALVES, VENT COLLARS, AIR HANDLING UNITS AND EXTERNALLY MOUNTED CONTROLS (15" IN AT LEAST DIMENSION, IF EQUIPMENT CAN BE SERVICED FROM OPENING WITHOUT REMOVING PERMANENT CONSTRUCTION). HEAT PUMPS SHALL BE INSTALLED WITH A CONTROL TO PREVENT SUPPLEMENTARY HEATER OPERATION WHEN HEATING LOAD CAN BE MET BY THE HEAT PUMP ALONE. SUPPLEMENTARY HEATER OPERATION IS PERMITTED DURING TRANSIENT PERIODS, SUCH AS START-UPS, FOLLOWING ROOM THERMOSTAT SET-POINT ADVANCE, AND DURING DEFROST. SUPPLEMENTARY HEAT MAY BE DERIVED FROM ANY SOURCE OF ELECTRIC RESISTANCE HEATING OR COMBUSTION HEATING.

AFTER INSTALLING WALL, CEILING, OR FLOOR INSULATION, THE INSTALLER SHALL POST CONSPICUOUS LOCATION IN THE BUILDING A CERTIFICATE SIGNED BY THE INSTALLER STATING THE INSTALLATION IS CONSISTENT WITH PLANS AND SPECIFICATIONS DESCRIBED IN THE CERTIFICATE OF COMPLIANCE AND FOR WHICH THE BUILDING PERMIT WAS ISSUED AND CONFORMS WITH THE REQUIREMENTS OF CHAPTER 2-53. THE CERTIFICATE SHALL ALSO STATE THE MANUFACTURE'S NAME AND MATERIAL IDENTIFICATION, THE INSTALLED "R" VALUE, AND (IN APPLICATION OF LOOSE FILL INSULATION) THE MINIMUM INSTALLED WEIGHT PER SQUARE FOOT CONSISTENT WITH THE MANUFACTURE'S LABELED INSTALLED DESIGN DENSITY FOR THE DESIRED "R" VALUE. THIS CERTIFICATE SHALL BE IN PLACE PRIOR TO FINAL INSPECTION.

SURFACE BURNING CHARACTERISTICS INTENDED FOR EXPOSED APPLICATIONS SHALL NOT EXCEED A FLAME-SPREAD RATING OF 25 AND A SMOKE DENSITY NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH CBC STANDARD 42-1. PIPING SHALL BE INSULATED IN ACCORDANCE WITH THE BUILDING ENERGY EFFICIENCY STANDARDS, TITLE—24, SECTION 2—5312, TABLE 2—53E. HOT AND COLD WATER PIPING IN UNCONDITIONED SPACES IN BUILDINGS OCCUPANCY R (EXCEPT APARTMENTS OR HOTELS WITH FOUR OR MORE STORIES) SHALL BE INSULATED THERMAL RESISTANCE OF A LEAST R—3 FOR THE FIRST FIVE FEET OF PIPE CLOSEST TO THE WATER HEATER, OR WHATEVER SHORTER LENGTH IS IN UNCONDITIONED SPACE. RECIRCULATING HOT WATER LINES CONVEYING WATER GREATER THAN 105 DEGREES FAHRENHEIT SHALL BE COMPLETELY INSULATED WITH AN INSTALLED RESISTANCE OF R-4 (ONE INCH MINIMUM WALL THICKNESS) FOR PIPING SIZES LESS THAN ON INCH IN DIAMETER. SEE TABLE 2-55E IF BUILDING ENERGY EFFICIENCY STANDARDS FOR RUNOUTS AND LARGER PIPING INSULATION DEPOLIEDEMENTS.

STORAGE TYPE WATER HEATERS AND STORAGE AND BACKUP TANKS FOR SOLAR WATER HEATING SYSTEMS SHALL BE EXTERNALLY WRAPPED WITH INSULATION HAVING INSTALLED THERMAL RESISTANCE OF R-12 OR GREATER. ALTERNATIVELY, TANKS MAY BE INSULATED TO A COMBINED LEVEL OF R-16, WHEN BOTH INTERNAL INSULATION AND EXTERNAL WRAP INSULATION ARE CONSIDERED INTERNAL INSULATION CAN BE INCLUDED IN THE COMBINATION INSULATION LEVEL ONLY WHERE THE R-VALUE OF SUCH INSULATION HAS BEEN LABELED ON THE TANK EXTERIOR BY THE MANUFACTURE. WHEN EXTERNAL INSULATION IS APPLIED TO WATER HEATERS AND STORAGE AND BACKUP TANKS FOR SOLAR WATER HEATING SYSTEMS, IT SHALL HAVE A THERMAL RESISTANCE OF AT LEAST R-5.

CEILING SHALL BE INSTALLED BETWEEN FRAMING MEMBERS WITH INSULATION HAVING AN INSTALLED THERMAL RESISTANCE OF R-19 OR GREATER AS INDICATED ON DIANG. WALLS BETWEEN CONDITIONED AND UNCONDITIONED AREAS SHALL BE INSULATED BETWEEN FRAMING MEMBERS WITH INSULATION HAVING INSTALLED THERMAL RESISTANCE OF AT LEAST R-13 OR AS INDICATED ON THE PLANS.

<u>LIGHTING SYSTEM MEASURES</u> ALL LIGHTING SHALL COMPLY WITH TITLE 24, PARTS 1 & 6 OF THE CALIFORNIA CODE OF REGULATIONS. IF THE PROPER COMPLIANCE FORMS HAVE NOT BEEN PREPARED AND SUBMITTED, A LICENSED CONTRACTOR WHO HAS CONTRACTED TO PERFORM THE WORK, SHALL PREPARE AND SUBMIT THE PROPER DOCUMENTATION, TO MEET THE REQUIREMENTS.

MANUFACTURED DOORS AND WINDOWS SHALL HAVE AIR INFILTRATION RATES CERTIFIED BY THE MANUFACTURER AS NOT EXCEEDING 0.33 CFM/SQUARE FOOT FOR SLIDING AND SWINGING SINGLE DOORS, 1.0 CFM/SQUARE FEET FOR SWINGING DOUBLE DOORS AND 0.33 CFM/FOOT OF OPERABLE SASH CRACK USING ASTM STANDARD SPECIFICATIONS E283-73.

**ENVELOPE MEASURES** 

SITE CONSTRUCTION DOORS AND WINDOWS, EXTERIOR JOINTS, AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE OBSERVABLE SOURCES OF SIR LEAKAGE SHALL BE CAULKED, GASKET, OR OTHERWISE SEALED. FIRE RATED DOORS AND WINDOWS, UNFRAMED GLASS DOORS AND EXTERIOR ELEVATOR SHAFTS ARE EXEMPT FROM THIS REQUIREMENT. OBSERVABLE SOURCES OF AIR LEAKAGE INCLUDE:

A. EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALL—PLATES AND FLOOR, AND BETWEEN EXTERIOR WALL PANELS.

B. OPENINGS FOR PLUMBING, ELECTRICITY, AND GAS LINES IN WALLS, CEILINGS, AND FLOORS.

C. OPENINGS IN THE ATTIC, FLOOR, SUCH AS WHERE CEILING PANELS MEET INTERIOR AND EXTERIOR WALLS AND MASONRY.

D. ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE.

THERMAL AND MOISTURE PROTECTION WATERPROOFING SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURE'S WRITTEN RECOMMENDATIONS, BY APPROVED INSTALLERS, IN

PROTECT ALL MEMBRANES FROM PUNCTURE OR DAMAGE DURING CONSTRUCTION. WATERPROOFED WALLS TO BE BACKFILLED, PROTECT FULLY WITH SHEETS OF GYPBOARD, OR SAND BACKFILL. ALL INSULATION SHALL MEET MINIMUM ENERGY INSULATION STANDARDS AS ESTABLISHED BY CALIFORNIA ADMINISTRATIVE CODE, TITLE—25, CHAPTER 1, SUB—CHAPTER 1, ARTICLE 5. INSTALL 3 1/2" THICK FULL BAT INSULATION IN ALL EXTERIOR WALLS 6" THICK FULL BAT INSULATION IN ALL CELIANGS. THE INSULATION SHALL HAVE A MINIMUM VALUE OF R—11 IN WALLS AND R—19 IN CELIANGS.

PROVIDE WEATHER-STRIPPING AND THRESHOLDS AT ALL EXTERIOR DOORS. SHINGLES AND ROOFING TILES SHALL BE INSTALLED I.A.W. CBC SECTION 3203 AND PER MANUFACTURER'S REQUIREMENTS. AND CBC SECTION 3203. ALL BUILT-UP ROOFING SHALL BE JOHNS MANVILLE 400-P OR EQUAL U.O.N. ROOF SHEATHING SHALL BE DRY, SMOOTH, AND WELL NAILED, COVER LARGE CRACKS OR KNOTHOLES WITH METAL AND SWEEP SURFACE CLEAN. PROPERLY GRADE ALL INCLINED SURFACES TO OUTLETS WITH FITTINGS IN PLACE READY FOR ROOFING APPLICATOR TO ATTACH TO HIS WORK.

FLASHING SHALL BE INSTALLED AS DETAILED IN ACCORDANCE WITH CURRENT SPECIFICATIONS FOR TYPE OF FLASHING REQUIRED. METAL FLASHING, DOWN SPOUTS, SCUPPERS TO BE 24 GAUGE GALVANIZED SHEET METAL AS REQUIRED. ALL EXTERIOR OPENINGS SHALL BE FLASHED WITH SISALKRAFT PAPER, PAPER SHALL EXTEND A MINIMUM OF  $6^{\prime\prime}$  BEYOND OPENING (OR EQUAL). GRAVEL STOPS TO BE SUPPLIED BY SHEET METAL SUB-CONTRACTOR.

ALL GLASS DUAL GLAZE, EXCEPT IN GARAGE ALL SKYLIGHTS WITHIN DWELLING TO BE DOUBLE GLAZED. IF JOB BUILT A 1/16" PLASTIC PANEL, MAY BE APPLIED TO INSIDE. ALL GLASS IN SKYLIGHTS SHALL BE WRE GLASS OR TEMPERED GLASS, MINIMUM THICKNESS 7/32". APPROVED PLASTICS MAY BE USED.

WINDOWS AND DOORS:

SKYLIGHTS SHALL COMPLY WITH CBC CHAPTER 34 SKYLIGHTS SHALL NOT BE INSTALLED WITHIN THAT PORTION OF ROOF LOCATED WITHIN A DISTANCE TO PROPERTY LINE OF PUBLIC WAY WHERE OPENINGS IN EXTERIOR WALLS ARE PROHIBITED OR REQUIRED TO BE PROTECTED, WHICHEVER IS MOST RESTRICTIVE. ALL GLAZING WITHIN 18" OF THE FLOOR OR WITHIN 24" OF A DOOR TO BE TEMPERED GLASS OR PROTECTED BY MEANS OF A SOLID BARRIER RAILING, 36" FROM FLOOR.

SLIDING GLASS DOORS TO BE TEMPERED. SHOWER DOORS AND BATH ENCLOSURES NOT TO BE LESS THAN 3/16" FULLY TEMPERED SAFETY GLASS. GLAZING IN AREAS SUBJECT TO HUMAN IMPACT AND IN A HAZARDOUS LOCATION SHALL BE OF SAFETY GLAZING MATERIALS, SUCH AS LAMINATED GLASS, TEMPERED GLASS, AND SAFETY PLASTIC.

WOOD DOORS:
A. DOOR FRAMES SHALL BE KILN DRIED VERTICAL GRAIN DOUGLAS FIR OR BETTER.

EXTERIOR DOORS TO BE MINIMUM 1-3/8" THICK SOLID CORE AND ARE TO CONFORM TO ALL APPLICABLE LOCAL SECURITY PROVISIONS.

INTERIOR DOORS TO BY 1-3/8" THICK HOLLOW CORE, TYPICAL.

THERE SHALL BE A TIGHT-FITTING DOOR FROM A ROOM IN WHICH A WATER CLOSET IS LOCATED, INTO A ROOM IN WHICH FOOD IS PREPARED OR STORED. PROVIDE COMBUSTION AIR TO WATER HEATER IN SUCH CASE.

SLIDING DOORS:

A. SHALL COMPLY WITH CERTIFICATION AND LABELING REQUIREMENTS OF ANSI A 134.4 AIR FILTRATION STANDARDS. PROVIDE ALUMINUM FRAMED FIBERGLASS SCREEN AT EACH OPEN VENT. PROVIDE LOCKING DEVICE THAT ENGAGES A STRIKE IN MANNER THAT PREVENTS IF FROM BEING DISENGAGED BY POSSIBLE MOVEMENTS. BOLT AND STRIKE SHALL BE REINFORCED SO THAT NO SEPARATION OCCURS. THE INTERIOR FUNCTION MUST PROVIDE QUICK OPENING DURING AN EMERGENCY.

ALL MANUFACTURED WINDOWS AND SLIDING GLASS DOORS SHALL MEET THE AIR FILTRATION STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE ASTM #283-73 WITH PRESSURE DIFFERENTIAL OF 1.57 POUNDS PER SQUARE FOOT AND SHALL BE CERTIFIED AND LABELED.

ONE EXIT DOOR 3'-0" IN WIDTH AND 6'-8" IN HEIGHT, CAPABLE OF OPENING AT LEAST 90' SHALL BE PROVIDED.

EXTERIOR AND INTERIOR FINISH

LATH AND PLASTER SHALL CONFORM TO THE APPLICABLE PORTIONS OF ALL INTERIOR AND EXTERIOR IN PLACE LATH MUST BE INSPECTED PRIOR TO APPLYING ANY PLASTER. EXTERIOR CEMENT PLASTER SHALL BE APPLIED OVER ASPHALT BUILDING PAPER BACK LATH ON WOOD STUD FRAMING. ALL STUCCO WORK SHALL CONSIST OF A BASE COAT, BROWN COAT, AND A FINISH STUCCO COLOR COAT.

PROVIDE EXTERIOR CORNER BEADS AND INTERNAL CORNER REINFORCEMENT FOR STUCCO WALLS. PROVIDE GALVANIZED METAL WEEP—SCREED WITH A MINIMUM 3-1/2" ATTACHMENT FLANGE AT FOUNDATION PLATE LINE AT ALL EXTERIOR STUD WALLS TO ALLOW TRAPPED WATER TO DRAIN TO OUTSIDE. MINIMUM 4" FROM EARTH. ALL SOLID SHEATHED WALLS SHALL HAVE TWO LAYERS OF GRADE D PAPER OVER WOOD BASE SHEATHING.

OVER WOOD BASE SHEATHING.

GYPSUM WALL BOARD SHALL CONFORM TO CBC CHAPTER 47, SECTION 471.1

AND TABLE 47—G FOR SINGLE APPLICATION.

ALL DRYWALL NAILING MUST BE INSPECTED PRIOR TO TAPING JOINTS:

A. PROVIDE 1/2" THICK TYPICAL EXCEPT WHERE NOTED OTHERWISE.

B. TREAT JOINTS WITH PERFORATED TAPE, BEDDING AND TAPING COMPOUND, UNLESS NOTED OTHERWISE.

C. GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSULATION IS PROVIDED.

D. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING MEMBERS, EXCEPT THOSE EDGES AND ENDS WHICH ARE PERFENDICULAR TO THE FRAMING MEMBERS. ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE—RESISTIVE CONSTRUCTION OR DIAPHRAGM ACTION IS NOT REQUIRED.

E. THE SIZE AND SPACING OF FASTENERS SHALL COMPLY WITH CBC APPLICABLE EDITION, STATE AND LOCAL CODES. FASTENERS SHALL BE SPACED NOT LESS THAN 3/8" FROM EDGES AND ENDS OF GYPSUM WALLBOARD. FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSEMBLIES, OR EDGES AND ENDS OF HORIZONTAL ASSEMBLIES PERPENDICULAR TO SUPPORTS, AND ALL THE WALL LINE MAY BE OMITTED EXCEPT ON SHEAR—RESISTING ELEMENTS, OR FIRE—RESISTIVE ASSEMBLIES. FASTENERS SHALL BE APPLIED IN SUCH A MANNER AS NOT TO FRACTURE THE FACE PAPER WITH THE FASTENER HEAD.

LAME—SPREAD REQUIREMENT. ALL INTERIOR CEILING AND WALL FINISHES

FLAME—SPREAD REQUIREMENT. ALL INTERIOR CEILING AND WALL FINISHES, EXCEPT TRIM OR WALL FABRICS SHALL HAVE A FLAME SPREAD CLASSIFICATION OF CLASS III OR BETTER AS DETERMINED BY THE CBC TUNNEL TEST STANDARD ALL EXTERIOR SIDING, CORNICES, CASING, SILLS AND OTHER ARCHITECTURAL DETAILED MEMBERS SHALL BE BACK-PRIMED AND END-SEALED WITH A QUALITY SEALER.

WALL SURFACES BEHIND CERAMIC TILE OR OTHER FINISH WALL MATERIAL SHALL BE CONSTRUCTED OF MATERIAL NOT ADVERSELY AFFECTED BY WATER. (IF GYPSUM BOARD IS USED, IT MUST BE APPROVED WR BOARD AND INSTALLED ACCORDING TO CBC STANDARDS.) GREEN BOARD IS NOT PERMITTED ON BATHROOM

EAVES OVER REQUIRED WINDOWS SHALL BE NOT LESS THAN 30" FROM THE SIDE AND REAR PROPERTY LINES. PROJECTIONS SHALL NOT EXTEND MORE THAN 12" INTO THE AREA WHERE OPENINGS ARE PROHIBITED. PROJECTIONS, WHERE OPENINGS ARE PROHIBITED (3 FEET) MUST BE NONCOMBUSTIBLE OF 1—HOUR FIRE RESISTIVE OR HEAVY CONSTRUCTION (CBC, SEC. 504 & 1710). ALL UTILITY AREAS CONTAINING LAUNDRY FACILITIES SHALL BE FINISHED ON WALLS AND CEILING WITH WATERPROOF GYPSUM BOARD OR OTHER APPROVED WATER RESISTANT MATERIAL. FLASHING AND SHEET METAL

ALL SHEET METAL SHALL BE 26 GA. GALVANIZED, UNLESS OTHERWISE NOTED. FLASH ALL INTERSECTIONS BETWEEN ROOFS AND VERTICAL WALLS IN ACCORDANCE WITH CBC SECTION 1707. FLASH ALL EXTERIOR OPENINGS WITH THE APPROVED WATERPROOF BUILDING PAPER OR EQUAL. CHIMNEY TOP IS TO BE PROVIDED WITH A SPARK ARRESTOR HAVING A MESH NOT EXCEEDING 1/2". BEAMS AND OUTLOOKERS PROJECTING THROUGH EXTERIOR WALLS OF ROOF SURFACES.

ROOF VALLEY FLASHING SHALL BE PROVIDED OF NOT LESS THAN NO. 28 GALVANIZED SHEET GAUGE CORROSION RESISTANT METAL AND SHALL EXCEED AT LEAST 11" FROM THE CENTERLINE EACH WAY AND SHALL HAVE A SPLASH DIVERTER RIB NOT LESS THAN 1" HIGH AT THE FLOW LINE FORMED AS PART OF THE FLASHING. SECTIONS OF FLASHING SHALL HAVE AN END LAP OF NOT LESS THAN 4". HANGERS, FRAMING ANCHORS, AND STRAP CONNECTORS SHALL BE LISTED AND APPROVED WITH MANUFACTURER'S ITEM NUMBERS AS INDICATED ON PLANS. SUCH CONNECTORS SHALL BE GALVANIZED OR RUST INHIBITIVE PAINTED. NAILS OR BOLTS FOR CONNECTORS SHALL BE AS SPECIFIED OR PROVIDED BY MANUFACTURER. SIMPSON OR APPROVED EQUAL.

PROVIDE FLASHING FOR ALL WINDOW HEAD CORNICES AND ALL WATER TABLE MOLDINGS.

NAILING SHALL BE IN ACCORDANCE TO CBC TABLE 25—0.
FLASH AND COUNTERFLASH AT ALL ROOF TO WALL CONNECTIONS. FLASH AND CAULK WOOD ALL EXTERIOR NAILS SHALL BE GALVANIZED. PLYWOOD SHALL BE NAILED WITH COMMON NAILS. ALL POSTS CONTAINED IN STUD WALLS THAT BEAR ON 2X SILL PLATE TO BE TOE—NAILED WITH 4—8d NAILS, UNLESS OTHERWISE NOTED. FREE—STANDING POSTS SHALL BE SET IN ICBO APPROVED POST BASES OR COLUMN BASES.

MORTAR SHALL BE "TYPE S" IN ACCORDANCE WITH CBC STD NO. 24—20 AND TABLE 24—A WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI IN 28 DAYS WITH 1 PART CEMENT; 1/4 TO 1/2 PART LIME; 2 1/4 TO 3 PARTS SAND. GROUT SHALL HAVE 1 PART PORTLANS CEMENT, 3 PARTS SAND. 2 PARTS PER GRAVEL WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS. FURNISH ALL METAL SUPPORTS ANGLES, PLATES, ATTACHMENTS, SLEEVES AND ACCESSORIES INCLUDING REQUIRED REINFORCING. VENEER ANCHOR TIES SHALL E 22 GA. G.I.X 1" OR NO. 9 GA. WIRE © 16" O.C. HORIZ. AND 20" O.C. VERT. FOR MAXIMUM SUPPORT OF 2 SQ. FT. UNIT MASONRY SHALL BE GRADE "A" LIGHTWEIGHT UNITS IN ACCORDANCE WITH ASTM C-90. BRICK SHALL CONFORM TO ASTM C-62-53. REINFORCING STEEL SHALL BE GRADE 40 DEFORMED BARS, U.O.N., CONFORMING TO ASTM A-615., AND SHALL BE WELL SECURED PRIOR TO PLACING GROUT, LAP ALL REARS 40 DIAMETERS OR 18" MINIMUM U.O.N. ALL VERTICAL CELLS SHALL BE SOLID GROUTED IN WALLS BELOW GRADE, AND RETAINING WALLS. ALL BOND BEAM BLOCKS SHALL BE "DEEP CUT" UNITS.

KEEP MASONRY DAMP FOR AT LEAST 4 DAYS AFTER INSTALLATION IF HOT OR DRYING WEATHER PREVAILS. MASONRY CLEANING SHALL USE AN ACID COMPOUND WHICH IS 100 % SOLUBLE IN WATER AND IS NOT INJURIOUS TO THE HANDS, SUCH AS SURE—CLEAN, MURAMIC ACID SHALL NOT BE USED. **METALS** 

STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE CBC AND A.I.S.C. MANUAL FOR THE DESIGN, FABRICATION AND ERECTION IN WORKMANSHIP AND MATERIALS (ASTM A-36). STEEL PIPE SHALL CONFORM TO ASTM A-53 GRADE "B" MACHINE BOLTS AND ANCHOR BOLTS SHALL BE ASTM A-307 GRADE "A". U.N.O. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS USING THE SHIELDED ARC PROCESS WITH APPROVED ELECTRODES FOR AWS SPECS (E70XX), EXPOSED WELDS SHALL BE GROUND SMOOTH AND SHOP PRIMED. MISCELLANEOUS METAL SHALL BE NEW MATERIAL FROM STANDARD, COLD—ROLLED SECTIONS CONFORMING TO ASTM—A—36 OR A—7. FABRICATED ITEMS TO BE WELDED SHALL BE ASTM—A—36 STEEL ONLY. MILD STEEL, WHERE SPECIFIED, SHALL BE ASTM-A-283. GALVANIZED STEEL SHEETS SHALL BE FED. SPEC. 00-1-716. CAST IRON SHAPES - ASTM A-43.

ZINC FOR GALVANIZING, ASTM B-6. PRIMER — THEMAC NO. 99G, GREEN METAL PRIMER OF FED. SPEC. TT—P—86A, TYPE II FOR STEEL OF FED. SPEC. TT—P—641B, FOR GALVANIZED. ANCHOR BOLTS AND ANCHORS SHALL BE PROPERLY LOCATED AND BUILT INTO CONNECTION WORK, USING TEMPLATES OR OTHER METHODS TO INSURE ACCURATE LOCATION OF HARDWARE. PAINT ALL EXPOSED SURFACES WITH APPROPRIATE PAINT AFTER CLEANING AND PRIMING PROPERLY.

PLUMBING WORK SHALL BE IN CONFORMANCE WITH THE UNIFORM PLUME CODE, LATEST EDITION, AND ALL LOCAL AND STATE REGULATIONS.

1 INSULATE ALL HOT & COLD WATER LINES & CONDENSATE LINES, 1' FOIL FACE FIBERGLASS WRAP WITH FIRE RETARDANT JACKET.

2 ALL COLD & HOT WATER LINES TO BE COPPER, TYPE L SOLDER TO BE 95-5 TIN ANTIMONY. 3 CONDENSATE DRAIN LINES TO BE COPPER TYPE M.

4 ALL SOIL, WASTE, VENT, DRAINAGE LINES TO BE CAST IRON OR PVC.

TEST TO BE PERFORMED IN COOPERATION WITH REPRESENTATIVE OF THE LOCAL HEALTH DEPARTMENT HAVING JURISDICTION & WITHESSED BY A REPRESENTATIVE OF AN APPROVED LABORATORY OR THE ARCHITECT. DURING PERIOD OF TEST, SIGNS SHALL BE POSTED AT EACH WATER OUTLET STATING "CHLORINATION — DO NOT DRINK".

PROCEDURE: SYSTEMS TO BE THOROUGHLY FLUSHED WITH WATER AT CITY PRESSURE. AFTER FLUSHING, ALL OUTLETS SHALL BE OPENED TO ALLOW A SLOW TRICKLE OF WATER. CHLORINE SOLUTION SHALL BE NEAR CITY CONNECTION. PUMPING TO CONTINUE UNTIL AN ORTHOTOLIDINE TEST AT EACH OUTLET SHOWS CHLORINE CONCENTRATION 50 PPM. SHUT ALL OUTLETS AND CITY SERVICE, MAINTAINING CHLORINE IN SYSTEM FOR 24 HOUR PERIOD.

OBTAIN CERTIFICATE OF BACTERIOLOGICAL PURITY FORM HEALTH DEPARTMENT AND THE TESTING LABORATORY AND DELIVER TO OWNER THROUGH ARCHITECT. 6 WATER LINES OUTSIDE OF BUILDING TO BE SCHEDULE 80 PVC INSTALL A 12 GAUGE COPPER WIRE MAKER LINE ON PVC PIPE.

7 ACCESS DOORS TO BE J.R. SMITH #4760, #4730 IN TILE WALLS. 8 GAS LINES TO BE SCHEDULE 40 BLACK STEEL PIPE.

9 TEST ALL SOIL, WASTE, VENT, DRAINAGE, WATER & GAS LINES PER INSPECTORS ORDERS.

10 ALL WATER LINES OUTSIDE TO BE BURIED BELOW VERIFIED FROST LINE.

11 PIPE HANGER #104 GRINNEL CO. HANGER RODS #243 GRINNEL CO. PROVIDE SEMCO TRISOLATOR AT EACH SUPPORT POINT ON ALL PIPING. 12 ALL PLUMBING FIXTURES TO BE SUPPLIED COMPLETE INCLUDING ALL "P" TRAPS, ANGLE OR STRAIGHT STOPS, ETC.

13 SEWER PIPE 5 FEET FROM BUILDING TO BE VITREOUS TILE, BELL & SPIGOT PIPE & FITTING. 14 CLEANOUTS TO BE SMITH #4043 FINISHED FLOORS WITH NON-SKID BRONZE TOP. WALL CLEANOUTS SMITH #4470. EXTERIOR CLEANOUTS #4253. SURFACE AREAS, USE #4425 ON NON-SURFACE AREA PROVIDE 16" X 16" X 6" CAST CONCRETE RING AT TOP OF BOX AND FLUSH WITH GRADE.

15 HANGERS & SUPPORTS: INSTALL PIPE THAT IT MAY EXPAND OR CONTRACT FREELY. HORIZONTAL STEEL OR COPPER PIPING SHALL HAVE HANGERS OR SUPPORTS EVERY 6' FOR 1/2" PIPE, 8' FOR 3/4" AND 1" PIPE & 10' FOR 1 1/4" AND LARGER PIPE. HORIZONTAL CAST IRON SHALL HAVE HANGERS FOR EACH LENGTH OF PIPE VERTICAL PIPING AND SHALL BE SUPPORTED AT FLOOR AND AT CEILING WITH WROUGHT IRON PIPE CLAMPS. BRANCHES FROM ALL LINES SHALL HAVE SPARATE SUPPORTS. PROVIDE SOUND AND ELECTROLYSIS ISOLATORS AT ALL HANGERS AND SUPPORTS FOR HOT AND COLD WATER LINES

16 ALL FLOOR TYPE WATER CLOSETS SHALL BE SET ON SMITH SLOTTED CAST IRON FLOOR FLANGE.

ALL SOIL AND WASTE LINES TO SLOP 2% MINIMUM, VERIFY INVERTS BEFORE STARTING WORK.

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DATE

DWG. BY	L.H.
CHK'D BY	
DATE	10-18-10
JOB NO.	
FILE NO.	

	ELECTRICAL S	SYMBOL	_S	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	
	FLUORESCENT FIXTURE, RECESSED	<b>–</b> –	BRANCH PANELBOARD, SURFACE, FLUSH	SECTION 16100  BASIC ELECTRICAL REQUIREMENTS PART 1 — GENERAL
0	FLUORESCENT FIXTURE, SURFACE	<i>ama _ama_</i>	DISTRIBUTION PANELBOARD; SURFACE, FLUSH	1.1 RELATED DOCUMENTS A. REFER TO DRAWINGS AND CONTRACT FOR MATERIALS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR OR FURNISHED AND INSTALLED BY OWNER.
⊢Ю	FLUORESCENT FIXTURE, OPEN STRIP		TELEPHONE TERM. CABINET; SURFACE, FLUSH	1.2 SUMMARY A. FURNISH ALL LABOR, SUPERVISION AND EQUIPMENT (UNLESS EQUIPMENT IS SPECIFICALLY NOTED AS 'OWNER FURNISHED') FOR THE COMPLETE INSTALLATION OF A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM WITH ALL NECESSARY AUXILIARIES AND APPURTENANCES.
0	INCANDESCENT OR HID FIXTURE, SURFACE/PENDANT		DISCONNECT SWITCH; FUSED	B. NATIONAL ELECTRICAL PACKAGES  1. THE OWNER THROUGH A DESIGNATED NATIONAL ELECTRICAL PACKAGE VENDOR MAY PROVIDE SWITCHGEAR, PANELBOARDS, AND SPECIFIC LIGHTING FIXTURES. SEE DRAWINGS FOR DETAILS. 2. FURNISH ALL NECESSARY LABOR AND EQUIPMENT TO COMPLETELY INSTALL THE NATIONAL ELECTRICAL
	INCANDESCENT OR HID FIXTURE, RECESSED		DISCONNECT SWITCH; UNFUSED	PACKAGE AS INDICATED IN THE DRAWINGS.  C. PROVIDE ALL EXCAVATION AND TAMP BACKFILL AS REQUIRED TO COMPLETE WORK. CORRECT ANY SETTLING DURING
О	INCANDESCENT OR HID FIXTURE, WALL MOUNTED		MOTOR STARTER; MAGNETIC	QUARANTINE PERIOD TO OWNER'S SATISFACTION.  1.3 QUALITY ASSURANCE A. MANUFACTURER'S QUALIFICATIONS ELECTRICAL EQUIPMENT, AS INDICATED IN THE DRAWINGS, IN
□⊷	PARKING LUMINAIRE	T	TRANSFORMER; DISTRIBUTION	ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND REQUIREMENT. PROVIDE RELATED PRODUCTS AND ACCESSORIES PROTECTING FROM DIRT, MOISTURE, CONTAMINANTS AND WEATHER FROM ONE MANUFACTURER. STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. COMPANY EQUIPMENT MANUFACTURER'S, OTHER THAN THOSE LISTED, WILL BE ACCEPTABLE UPON WRITTEN APPROVAL OF CONSTRUCTION MANAGER, ALL ELECTRICAL MATERIALS SHALL BE LISTED AND LABELS BY UL AND SHALL CONFORM TO NEMA AND
$\triangleright\!$	SPOT OR FLOODLIGHT	M	MOTOR OUTLET & CONNECTION	OTHER INDUSTRY STANDARDS.  B. CODES AND STANDARDS: ELECTRICAL SYSTEM SHALL CONFORM TO REQUIREMENTS OF NATIONAL, STATE AND LOCAL ELECTRIC CODES, LOCAL AUTHORITIES AND UTILITY COMPANY.
<b>&gt;</b> -0	ROADWAY LUMINAIRE		CONDUIT, CONCEALED; WALL OR CEILING	C. WORKMANSHIP: EXPERIENCED, WELL—TRAINED WORKERS COMPETENT TO COMPLETE THE WORK AS SPECIFIED SHALL PERFORM LABOR IN CONFORMANCE WITH GENERALLY ACCEPTED TRADE STANDARDS. INTALL ALL EQUIPMENT SQUARE AND PLUMB ALLOWING ACCESS FOR PROPER OPERATION AND SERVICE.
0	POST OR WALKWAY LUMINAIRE		CONDUIT, CONCEALED; FLOOR OR UNDERGROUND	1.4 STRUCTURAL AND SPACE CONDITIONS     A. ALL WORK SHALL AVOID ABSTRUCTIONS AND INTERFERENCE WITH OTHER TRADES, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR AND FREE.
⊗1⊗	EXIT LIGHT; CEILING, WALL; ARROW INDICATES DIRECTION		CONDUIT, EXPOSED	1.5 DRAWINGS
(L)	KEYLESS PORCELAIN LAMPHOLDER RATED 550W, 250V, GE #GE5740-7 OR EQUAL WITH 150W LAMP	—т—	CONDUIT, TELEPHONE	A. CONTRACTOR IS RESPONSIBLE FOR EXAMINING THE DRAWINGS, SPECIFICATIONS, SITE AND OTHER BID DOCUMENTS PRIOR TO SUBMITTING A PROPOSAL  B. THE DRAWINGS AS PREPARED ARE DIAGRAMMATIC. THE WORK SHALL FOLLOW AS CLOSELY AS ACTUAL
■ NL	LIGHT FIXTURE CONNECTED TO SECURITY "NL" LIGHTING CIRCUIT		CONDUIT, UP	CONSTRUCTION OF THE PROJECT AND THE WORK OF ALL TRADES PERMIT.  1.6 CUTTING AND PATCHING  A. CUTTING OR PATCHING NECESSARY TO PERMIT THE INSTALLATION OF ANY WORK UNDER THIS CONTRACT IS THE
(E)	EMERGENCY LIGHTING UNIT		CONDUIT, DOWN	RESPONSIBILITY OF THIS TRADE. CUTTING AND PATCHING SHALL BE COORDINATED WITH OTHER TRADES SO AS NOT TO IMPACT OTHER WORK.  1.7 TESTING
F1 140	LETTER ADJACENT SUYMBOL INDICATES FIXTURE TYPE, NUMBER INDICATES INPUT WATTS	A-5	BRANCH CIRCUIT HOMERUN, CROSS HATCHING INDICATES NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO, PANEL A, CIRCUIT NO. 5	A. TESTS: ENTIRE ELECTRICAL SYSTEM SHALL BE FULLY TESTED AND CORRECTED OF ANY SHORT CIRCUITS, OPEN GROUNDS, FAULTY WIRING AND INCORRECT CONNECTIONS. VERIFY FAN MOTOR SPEED AND DIRECTION.  PART 2 — EXECUTION
\$	LIGHT SWITCH S.P.S.T.; +48" U.O.N.	3	INDICATES NUMBER OF DETAIL NOTE	2.1 ELECTRICAL SYSTEM INSTALLATION, GENERAL  A SECURENCE COORDINATE AND INTECRATE THE VARIOUS ELEMENTS OF ELECTRICAL SYSTEMS MATERIALS AND
\$ 2	LIGHT SWITCH 2 P.S.T.; +48" U.O.N.	EF 1	MECHANICAL EQUIPMENT DESIGNATION	A. SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF ELECTRICAL SYSTEMS, MATERIALS, AND COMPONENTS.      1. COORDINATE ELECTRICAL SYSTEMS, EQUIPMENT, AND MATERIALS INSTALLATION WITH OTHER BUILDING COMPONENTS.
\$ 3	LIGHT SWITCH 3-WAY; +48" U.O.N.	○ \$ D	SUBSCRIPT LETTER ADJACENT SYMBOL INDICATES CONTROL	VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.  3. ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDINGS COMPONENTS DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR ELECTRICAL INSTALLATIONS.
\$.	LIGHT SWITCH 4-WAY; +48" U.O.N.	$\Rightarrow_2 \bigcirc_5$	NUMBER ADJACENT SUMBOL INDICATES CIRCUIT NO. ON PANELBOARD	CONSTRUCTION, TO ALLOW FOR ELECTRICAL INSTALLATIONS.  4. COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES AND SLEEVES TO BE SET IN POURED—IN—PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
\$	SWITCH, DIMMING, SIZED TO SERVE THE CONNECTED LOAD	+24"	INDICATES MOUNTING HEIGHT TO CENTER OUTLET A.F.F.	5. SEQUENCE, COORDINATE, AND INTEGRATE INSTALLATIONS OF ELECTRICAL MATERIALS AND EQUIPMENT FOR EFFICIENT FLOW OF THE WORK. GIVE PARTICULAR ATTENTION TO LARGE EQUIPMENT REQUIRING POSITIONING PRIOR TO CLOSING IN THE BUILDING.
\$ •	SWITCH W/ PILOT LIGHT	U.O.N.	UNLESS OTHERWISE NOTED	6. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL SYSTEMS, MATERIALS,     AND EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.  7. COORDINATE CONNECTION OF ELECTRICAL SYSTEMS WITH EXTERIOR UNDERGROUND AND OVERHEAD
\$ a	THERMAL OVERLOAD SWITCH	A.F.F.	ABOVE FINISHED FLOOR	UTILITIES AND SERVICES. COMPLY WITH REQUIREMENTS OF GOVERNING REGULATIONS, FRANCHISED SERVICE COMPANIES, AND CONTROLLING AGENCIES. PROVIDE REQUIRED CONNECTION FOR EACH SERVICE.  8. INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT TO CONFORM WITH DRAWINGS AND SPECS, TO GREATEST FOR THE CONTRACT DOCUMENTS. PERCONNITING
\$ AB	TWO SWITCHES AT LOCATION	A.F.G.	ABOVE FINISHED GRADE	EXTENT POSSIBLE. CONFORM TO ARRANGEMENTS INDICATED BY THE CONTRACT DOCUMENTS, RECOGNIZING THAT PORTIONS OF THE WORK ARE SHOWN ONLY IN DIAGRAMMATIC FORM. WHERE COORDINATION REQUIREMENTS CONFLICT WITH INDIVIDUAL SYSTEM REQUIREMENTS, REFER CONFLICT TO THE CONSTRUCTION MANAGER FOR RESOLUTION PRIOR TO INSTALLATION.
\$ w	HP RATED SWITCH OR MANUAL MOTOR STARTER	N.I.C.	NOT IN CONTRACT	9. INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, WHERE INSTALLED EXPOSED IN FINISHED SPACES.  10. INSTALL ELECTRICAL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF
<del>-</del>	OUTLET, DUPLEX CONVENIENCE, 20A, 125V; 15" A.F.F. U.O.N.	W.P.	ADJACENT TO SYMBOL INDICATES WEATHERPROOF OUTLET OR DEVICE	EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.  11. INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT GIVING RIGHT—OF—WAY PRIORITY TO SYSTEMS REQUIRED TO
<b>→</b>	OUTLET, DUPLEX CONVENIENCE MOUNTED ON COUNTER, SEE ARCHITECT FOR MOUNTING HEIGHT	G.F.I.	GROUND FAULT INTERRUPTER	BE INSTALLED AT A SPECIFIED SLOPE.  2.2 IDENTIFICATION  A. PANELBOARD SCHEDULES—INTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND COMPLY
⊕ و	OUTLET, DUPLEX CONVENIENCE, DEDICATED EQUIPMENT	BP	BATTERY PACK	WITH FOLLOWING REQUIREMENTS. PROVIDE TYPEWRITTEN DIRECTORIES IN BRANCH PANELBOARDS WITH CLEAR PLASTIC SHIELDS.  B. EQUIPMENT LABELS—PROVIDE ENGRAVED PLASTIC NAME PLATES ON ALL DISCONNECT SWITCHES, MOTOR
IG	OUTLET, DUPLEX CONVENIENCE, ISOLATED FOR COMPUTERS WITH SEPARATE GROUND	***	LIGHT SWITCH & OUTLET COMBINATION	STARTERS. CONTROL DEVICES, AND SWITCHES IN SERVICE ENTRANCE EQUIPMENTS.  END OF SECTION
#	OUTLET, FOURPLEX CONVENIENCE; +12" U.O.N.	<u></u>	CLOCK OUTLET, +7'-0" U.O.N.	
<b>⊕</b> 20A	OUTLET, SINGLE, 250V, 3W, CURRENT RATING INDICATED ADJACENT SYMBOL; +12" U.O.N.	3 1/2	PULLBOX, STATE SPEC. NO. AS NOTED	
<b>(</b> H	OUTLET, THERMOSTAT; +60" U.O.N.	BP H	BYPASS TIMER	
0Ю	JUNCTION BOX; CEILING, WALL	N	COMB. OUTLET, CAT 5 DATA/PHONE,+12" U.O.N.	
	OUTLET, FLOOR POWER	SD	DUCT SMOKE DETECTOR	
<b>©</b>	OCCUPANCY SENSOR, WATTSTOPPER OR EQUM	M	OUTLET, TELEVISION, AT+12" U.O.N.	
$\otimes$	JUNCTION BOX FOR OVERHEAD MEDICAL LIGHT; SWITCH PROVIDED IN FIXTURE; FIXTURE PROVIDED BY OWNER.			

## **GENERAL ELECTRICAL NOTES**

BASIC MATERIALS AND METHODS

PART 1 — GENERAL

1.1 RELATED DOCUMENTS

A. REFER TO DRAWINGS AND CONTRACT FOR MATERIALS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR OR FURNISHED AND INSTALLED BY OWNER.

1.2 SCOPE OF WORK

A. SECTION 16200 APPLIES TO ALL WORK HERE UNDER AND SHALL INCLUDE CONDUIT, BOXES, WIRE, WIRING DEVICES, MOTOR STARTERS, LIGHTING FIXTURES, HEAT TRACE AND RELATED MATERIALS

PART 2 - PRODUCTS 2.1 RACE WAY

A. SHALL BE AS INDICATED ON THE DRAWINGS

C. RIGID CONDUIT: RIGID GALVANIZED THREADED THICKWALL CONDUIT WITH THREADED FITTINGS SHALL BE PROVIDED IN SLABS ON GRADE. CONDUITS BELOW SLABS ON GRADE OR IN EARTH OUTSIDE OF BUILDINGS SHALL BE SCHEDULE 40 PVC WITH SEPARATE GROUNDING CONDUCTOR PER NEC, WHERE ACCEPTABLE BY LOCAL CODES. WHERE THE USE OF PVC CONFLICTS WITH LOCAL CODES, SUBSTITUTE RIGID GALVANIZED THREADED THICKWALL CONDUIT PAINTED WITH 2 COATS OF ASPHALTUM AND WITH 2 COATS APPLIED AT JOINTS AFTER INSTALLATION.

D. ELECTRIC METALLIC TUBING: ALL OTHER CONDUIT SHALL BE ELECTRIC METALLIC TUBING WITH COMPRESSION TYPE

E. CONCEALED BOXES SHALL BE 4' SQUARE GALVANIZED STEEL WITH GALVANIZIED EXTENSION RINGS, TOTAL DEPTH OF NOT LESS THAN 2-1/2'. SURFACE MOUNTED BOXES SHALL BE CAST WEATHERPROOF ALUMINUM.

A. WIRING: CONDUCTORS SHALL BE 98% CONDUCTIVITY COPPER OF #12 AWG-MINIMUM SIZE.

B. FLEXIBLE CONDUIT: UL LISTED LIQUID TIGHT CONDUIT WITH LIQUID TIGHT CONDUCTORS.

B. INSULATION SHALL BE COLOR CODED, AND RATED FOR 600 VOLTS MINIMUM. TYPE THHN OR THWN SHALL BE USED WHERE CONDUIT SIZES ARE LIMITED. AT OTHER LOCATIONS, TYPE TW MAY BE USED IN SIZES #10 AND #12 AWG AND TYPE THW FOR LARGER SIZES.

C. WIRE CONNECTORS FOR SIZES #10 AWG AND LESS SHALL BE BUCHANAN "PRESS—SHURE", IDEAL "WRAP—CAP", T&B "STAKONS" OR 3M "SCOTCHLOK". CONNECTORS FOR WIRE SIZE #8 AND LARGER SHALL BE T&B OR BURNDY METHODS USING HYDRAULIC PRESSES.

2.3 WIRING DEVICES

A. WALL SWITCHES SHALL BE COLOR PER ARCH AND SHALL BE AS FOLLOWS OR APPROVED EQUAL.

20 A SP, 125/277 V.—A &H #1991W, BRYANT #4901W, OR HUBBELL #1221W.
TO A: 3W, 125/277 V —— A&H #1993W, BRYANT #4903W, OR HUBBELL #1223W.
20 A 4W, 125/277 V ——A&H #1994W, BRYANT #4904W, OR HUBBELL #1224W.
20 A: SP, 125/277V WITH PILOT LIGHT—— ARROW—HART #1991—PL, BRYANT #4901—PL, OR HUBBELL #1221—PL
20 A, SP, 125//277v, WEATHERPROOF—— ARROW HART #1991/2881—C OR HUBBELL #1281/1795.

B. RECEPTACLES SHALL BE WHITE AND SHALL BE AS FOLLOWS OR APPROVED EQUAL. PROVIDE OTHER RECEPTACLES AS INDICATED ON THE DRAWINGS.

20A, 125V DUPLEX -- A&H #5362W (1), BRYANT #5362W 20A, 125V TWISTLOCK -- HUBBELL 2310

30A, 250V, 3W - G --- A & H #5700, BRYANT 9630FR OR HUBBELL #9430 50A, 250V, 3P, 4W - G --- A & H, P & S OR HUBBELL 8450 WITH 8452 PLUG & 4/C #8 SO CORD. GROUND FAULT -- A & H #53GF62, BRYANT #53GF62 OR HUBBEL #GF 5362. PROVIDE SPRING LOADED WEATHERPROOF COYERS WHERE REQUIRED BY CODE. CLOCK & SIGN HANGER --- A & H #5708, BRYANT #2828-GS OR HUBBELL #5235.

C. PROVIDE FACE PLATES FOR ALL DEVICES INCLUDING WALL SWITCHES, RECEPTACLES, AND TELEPHONE OUTLETS AND ALL WALL OUTLETS. FACEPLATES SHALL BE WHITE SATIN FINISHED STAINLESS STEEL.

D. DIMMERS SHALL BE WHITE --- #D-18P.

E. PHOTO CELLS SHALL BE RATED 16.6 AMPS 120 VOLTS. LIGHTS SHALL BE 1.5 FOOTCANDLES FOR TURN ON AND 10 FOOTCANDLES FOR TURN OFF. SUITABLE FOR TEMPERATURE RANGES FOR -30 DEGREE'S F TO +140 DEGREES F AND WEATHERPROOF ENCLOSED. LOAD TO REMAIN ON IN CASE OF CELL FAILURE. SHALL HAVE A MINIMUM TIME DELAY OF 15 SECONDS. PROVIDE PARAGON CATALOG #CW201-00 OF EQUAL.

2.4 LIGHTING

A. LIGHTING FIXTURES SHALL BE FURNISHED BY CONTRACTOR AS SCHEDULED ON DRAWINGS EXCEPT FOR THOSE INDICATED TO BE FURNISHED BY OWNER. CONTRACTOR SHALL INSTALLALL LIGHTING FIXTURES AND PROVIDE NECESSARY MOUNTING HARDWARE. ALL RECESSED LIGHTING FIXTURES SHALL BE THERMALLY PROTECTED AND IC RATED AS REQUIRED BY CODE.

B. CONTRACTOR SHALL FURNISH AND INSTALL ONE COMPLETE SET OF LAMPS FOR ALL LIGHTING FIXTURES SUPPLIED BY THE CONTRACTOR. FIXTURES SUPPLIED BY THE OWNER OR OTHERS SHALL BE FURNISHED WITH LAMPS BY EACH RESPECTIVE FIXTURE SUPPLIER. PROVIDE LABEL IN EACH FIXTURE INDICATING SIZE AND TYPE OF LAMP CORRESPONDING WITH SCHEDULE ON DRAWING.

C. FLUORESCENT LAMPS SHALL BE COLOR SHOWN IN SCHEDULE, ENERGY EFFICIENT, MANUFACTURED BY GENERAL

D. INCANDESCENT LAMPS SHALL BE INSIDE FROSTED WITH 2500-HOUR LAMP LIFE RATED 130 VOLTS.

E. FLUORESCENT BALLAST'S SHALL BE ENERGY EFFICIENT. MANUFACTURED BY GENERAL ELECTRIC. MAXI—MISER II 2.5 STARTERS

A. STARTERS: THREE-PHASE UNITS SHALL BE SQUARE D TYPE 8536 WITH 120 VOLTS COIL, N.O. AUXILIARY CONTACT, AND WITH RED PILOT (IN COVER)

2.6 TIME CLOCK A. PROVIDE TIME CLOCK AS SHOWN ON DRAWINGS.

PART 3 — EXECUTION 3.1 INSTALLATION, GENERAL

A. RACEWAY SYSTEM SHALL BE INSTALLED TO MAINTAIN THE MAXIMUM HEADROOM. COMMON SUPPORTS MAY BE USED FOR MECHANICAL AND ELECTRICAL EQUIPMENT BY COORDINATING THE WORK WITH ALL TRADES.

B. USE ONLY TYPE WIRE PULLING LUBRICANTS FOR WIRE #4 AWG OR LARGER. SPLICE WIRE ONLY IN ACCESSIBLE BOXES. MAKE WIRE JOINTS MECHANICALLY STRONG BEFORE APPLYING THE CONNECTOR, AND WHERE TAPE IS USED, WRAP EACH JOINT TO THE THICKNESS OF THE ORIGINAL INSULATION CLEAN AND PÓLISH METALLIC SURFACES BEFORE INSTALLING CONDUCTORS. APPLY PRESSURE TYPE LUGS ON STANDARD CONDUCTORS CONNECTED TO SCREW OR BOLT TYPE CONNECTIONS.

C. ALL WIRE SHALL BE INSTALLED IN A CONDUIT AND SHALL BE CONCEALED. IF UNFORESEEN CONDITION REQUIRES WIRE TO BE EXPOSED TO RACEWAY SHALL BE INSTALLED AS INCONSPICUOUSLY AS POSSIBLE, CUT RACEWAY SQUARES; REAM SMOOTH AND MAKE UP TIGHT. PLUG ENDS OF RACEWAYS DURING CONSTRUCTION AND SWAB CLEAN BEFORE PULLING WIRE OF CABLE.

D. ALL ELECTRICAL BOXES SHALL BE SUPPORTED FROM BUILDING STRUCTURAL MEMBERS INDEPENDENTLY OF THE CONDUIT RACEWAY. MECHANICAL SYSTEMS OF SUSPENDED CEILING SUPPORTS. RECESSED BOXES SHALL BE FLUSH WITH SURROUNDING SURFACES. ALL BOXES AND CABINETS SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE CLEANED BEFORE PULLING WIRE AND INSTALLING DEVICES.

E. UNLESS NOTED OTHERWISE, RECEPTACLES SHALL BE INSTALLED 18" ABOVE THE FINISHED FLOOR AND SWITCHES SHALL BE 48" ABOVE FINISH FLOOR. RECEPTACLES NOTED ABOVE WORK COUNTER AND CABINETS SHALL BE MOUNTED ABOVE THE BACKSPLASH. WEATHERPROOF RECEPTACLES SHALL BE INSTALLED SO THAT THE COVER PROTECTS THE DEVICE IN THE OPEN POSITION. RECEPTACLES SHALL BE BONDED TO METALLIC BOXES OR TO SEPARATE GROUND CONDUCTOR PER NEC.

F. EQUIPMENT CONNECTIONS: PROVIDE ALL NECESSARY MOTOR STARTERS, DISCONNECT SWITCHES, CONTROLS, CONDUIT, BOXES WIRE, ETC. AND CONNECT COMPLETE TO EACH PIECE OF EQUIPMENT REQUIRING CONNECTIONS INDICATED ON THE DRAWINGS. WHERE EQUIPMENT RATINGS DIFFER FROM THAT INDICATED, CONSULT CONSTRUCTION MANAGER, WHERE EQUIPMENT IS NOTED AS FUTURE, TERMINATE CIRCUIT IN JUNCTION BOX AND TAPE ENDS OF THE CONDUCTORS.

G. LIGHTING FIXTURES: FIXTURES SUPPORTED IN EXPOSED GRID CEILINGS SHALL BE PROVIDED WITH CLIPS. FIXTURES MOUNTED IN OR ON TILE CEILINGS SHALL BE ALIGNED WITH TILES. LIGHTING FIXTURES SHALL BE SUPPORTING WIRE SHALL BE PROVIDED AT EACH FIXTURE CORNER. SURFACE MOUNTED LIGHT FIXTURES SHALL BE SECURED PER MANUFACTURER'S RECOMMENDATIONS.

H. CLEANING: ALL EQUIPMENT INCLUDING PANELBOARDS, SWITCHES, WIRING DEVICES, LIGHTING FIXTURES, WALL PLATES, ETC. SHALL BE FREE OF CORROSION, DIRT, POINT SPATTER OR DAMAGE OF ANY SORT AT FINAL ACCEPTANCE OF THE WORK. CONTRACTOR SHALL CLEAN, REPAIR OR REPLACE SOME AS INSTRUCTED BY THE CONSTRUCTION

I. CONNECTIONS TO EQUIPMENT SHALL BE MADE WITH A 3'-0" FLEXIBLE LIQUID TIGHT CONDUIT WITH LIQUID TIGHT

J. CONNECTIONS TO RECESSED LIGHTING FIXTURES SHALL BE MADE WITH 6'-0" OF FLEXIBLE CONDUIT FROM A BOX WITHIN 2'-0" OF THE FIXTURE.

3.2 INSTALLATION, HEAT TRACE - NOT USED

3.3 INSTALLATION, TIME CLOCK

A. PROVIDE 7 DAY CALENDAR DIAL TIME CLOCK WITH BYPASS PROVISIONS FOR EXTERIOR LIGHTS.

B. UPON COMPLETION OF THE INSTALLATION, SET THE TIME CONTROLS PER THE OWNERS REPRESENTATIVE'S

3.4 INSTALLATION, TELEPHONE SYSTEM

A. FURNISH AND INSTALL THE TELEPHONE EMPTY CONDUIT, PULL WIRE, TERMINAL BOXES, JUNCTION BOXES, AND OUTLET BOXES, IN BUILDING WHERE INDICATED ON THE DRAWINGS. 3.5 INSTALLATION, SOUND SYSTEM - NOT USED

3.6 INSTALLATION, COMPUTER CASH REGISTER SYSTEM - NOT USED

SECTION 16400 SERVICE AND DISTRIBUTION

PART 1 - GENERAL 1.1 RELATED DOCUMENTS

A. REFER TO DRAWINGS AND CONTRACT FOR MATERIALS FURNISHED AND INSTALLED BY CONTRACTOR OR FURNISHED AND INSTALLED BY OWNER.

1.2 SCOPE OF WORK

A. SECTION 16400 APPLIES TO ALL WORK HERE UNDER AND SHALL INCLUDE WORK REQUIRED FOR METERING, GROUND RODS, PANEL BOARDS, DISCONNECT SWITCHES AND RELATED MATERIALS.

PART 2 - PRODUCTS

2.1 SERVICE ENTRANCE

A. CONTRACTOR SHALL VERIFY SERVICE VOLTAGE AND TYPE OF TERMINATION WITH LOCAL UTILITY COMPANY AND SHALL PROVIDE NECESSARY REVISIONS AND MODIFICATIONS REQUIRED. SERVICE TERMINATION'S MAY EITHER BE UNDERGROUND OR OVERHEAD DEPENDING ON THE UTILITY COMPANIES REQUIREMENT AND APPROVAL BY CONSTRUCTION MANAGER.

2.2 UTILITY COMPANY METERING

A. CONTRACTOR SHALL PROVIDE NECESSARY METERING FACILITIES INCLUDING METER SOCKET, CURRENT TRANSFORMER CABINET, CONDUIT AND OTHER WORK FOR METERING REQUIRED BY THE LOCAL UTILITY COMPANY.

A. ALL EXPOSED NON CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, METALLIC RACEME SYSTEMS,

GROUNDING CONDUCTOR IN RACEWAYS AND NEUTRAL CONDUCTOR OF THE WIRING SYSTEM SHALL BE GROUNDED THE GROUND CONNECTION SHALL EXTEND TO THE POINT OF ENTRANCE OF THE METALLIC WATER SERVICE SHALL BE GROUNDED AS DESCRIBED BY NFPA 70 WHERE THERE ARE NO METALLIC WATER SERVICES TO THE BUILDINGS GROUND CONNECTIONS SHALL BE MADE TO DRIVEN GROUND RODS ON THE EXTERIOR OF THE BUILDING.

B. GROUND RODS SHALL BE OF ZINC-COATED COPPER CLAD STEEL NOT LESS THAN 3/4: IN DIAMETER, 8' LONG DRIVEN FULL LENGTH INTO THE EARTH. THE MAXIMUM RESISTANCE OF A DRIVEN GROUND ROD SHALL NOT EXCEED 25 OHMS UNDER NORMALLY DRY CONDITIONS. IF THIS RESISTANCE CANNOT BE OBTAINED WITH A SIGNAL ROD, ADDITIONAL RODS MAY BE COUPLED AND DRIVEN WITH THE FIRST ROD.

B. BRANCH PANELBOARDS WILL BE FURNISHED TO THE CONTRACTOR, UNLESS NOTED AS SUPPLIED BY OWNER, FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR UNLESS INDICATED OTHER ON DRAWINGS. THEY WILL BE UNASSEMBLED BOLT ON CIRCUIT BREAKER TYPE, MINIMUM OF 14" WIDE AND 5 3/4: DEEP, RECESSED OR SURFACE MOUNTED AS INDICATED. PROVIDE TYPEWRITTEN CIRCUIT DIRECTORY ON ÍNSIDE DOOR PROTECTED WITH CLEAR PLASTIC SHIELD IN A CARDHOLDER CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC FULL SIZE, COMMON TRIP ON 2 AND 3 POLE WITH TRIP FREE HANDLES, RATED NOT LESS THAN 10,000 RMS AMPERES.

2.5 DISCONNECT SWITCHES

A. HVAC DISCONNECT SWITCHES SHALL BE FURNISHED BY THE CONTRACTOR, UNLESS NOTED AS SUPPLIED BY OWNER, FOR INSTALLATION BY THE ELECTRICAL CONTRACTOR UNLESS INDICATED OTHERWISE ON DRAWINGS. ALL DISCONNECT SWITCHES WILL BE NORMAL DUTY TYPE NEMA ND, FUSED UNLESS NOTED OTHERWISE, WAND WITH OPERATOR INTERLOCKED WITH THE DOOR SO DOOR CAN BE OPENED ONLY IN THE "OFF" POSITION.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. PANELBOARDS SHALL BE INSTALLED AT HEIGHT INDICATED. DISCONNECT SWITCHES SHALL BE INSTALLED 4'-0" ABOVE FINISHED FLOOR WHERE POSSIBLE, ALL CABINETS SHALL BE VACUUM CLEANED BEFORE PULLING WIRE.

END OF SECTION

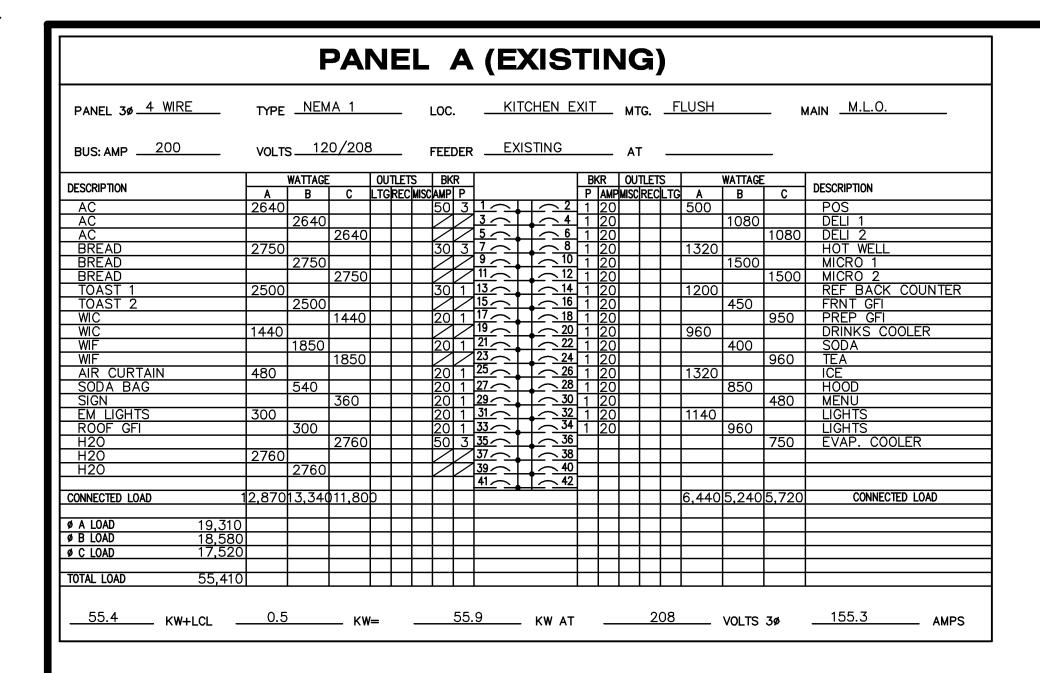
ASQUINI KINKERING

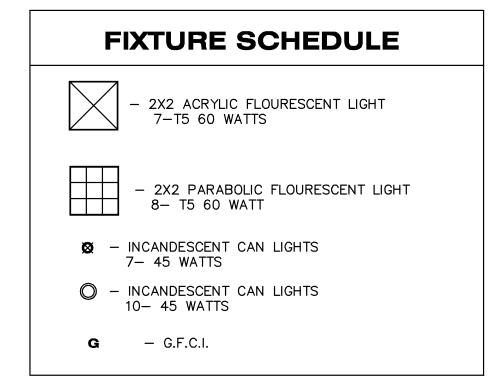
DATE

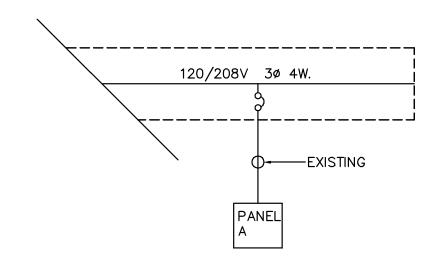
10 **m** 0 0 TO TO WARE S S S

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.
CHK'D BY	
DATE	6/13/2011
JOB NO.	6364
FILE NO.	636422

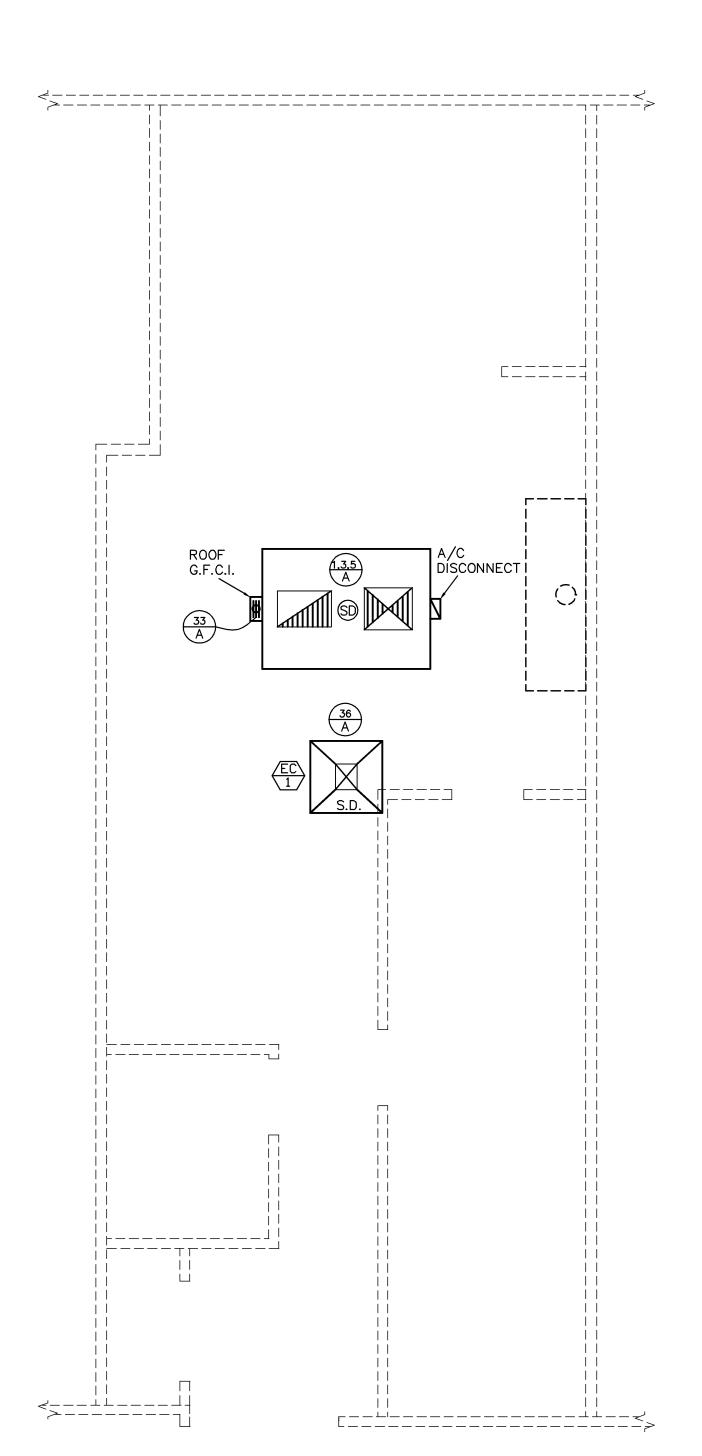






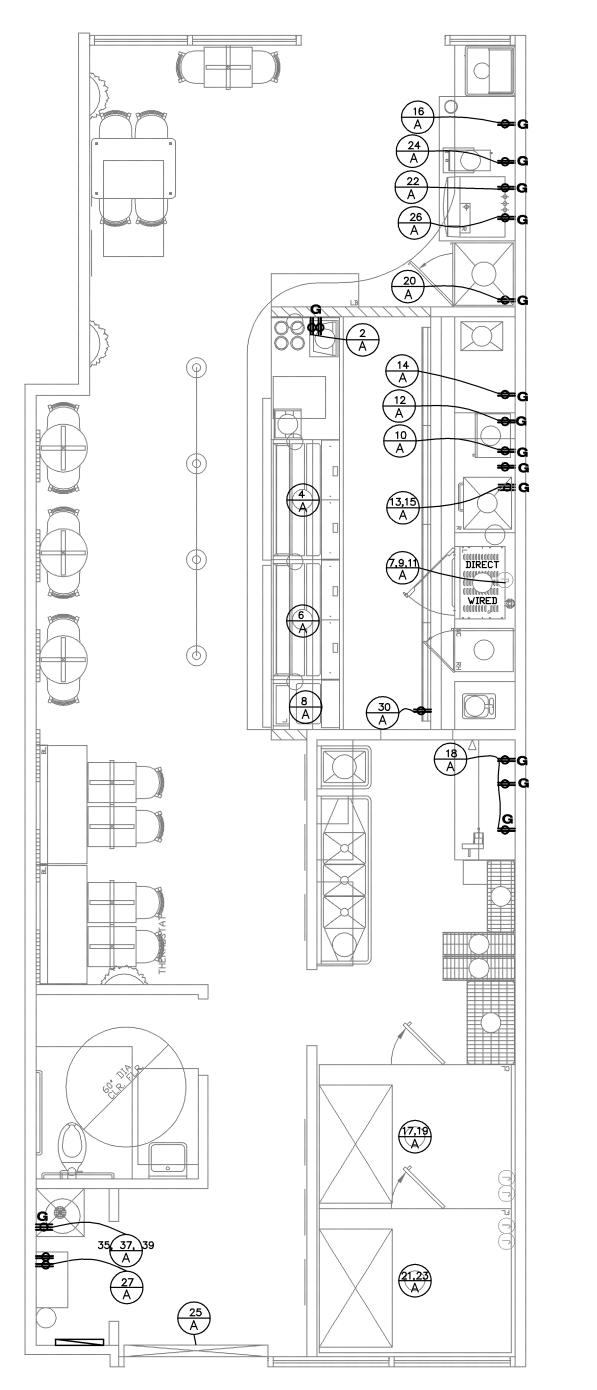
## SINGLE LINE DIAGRAM

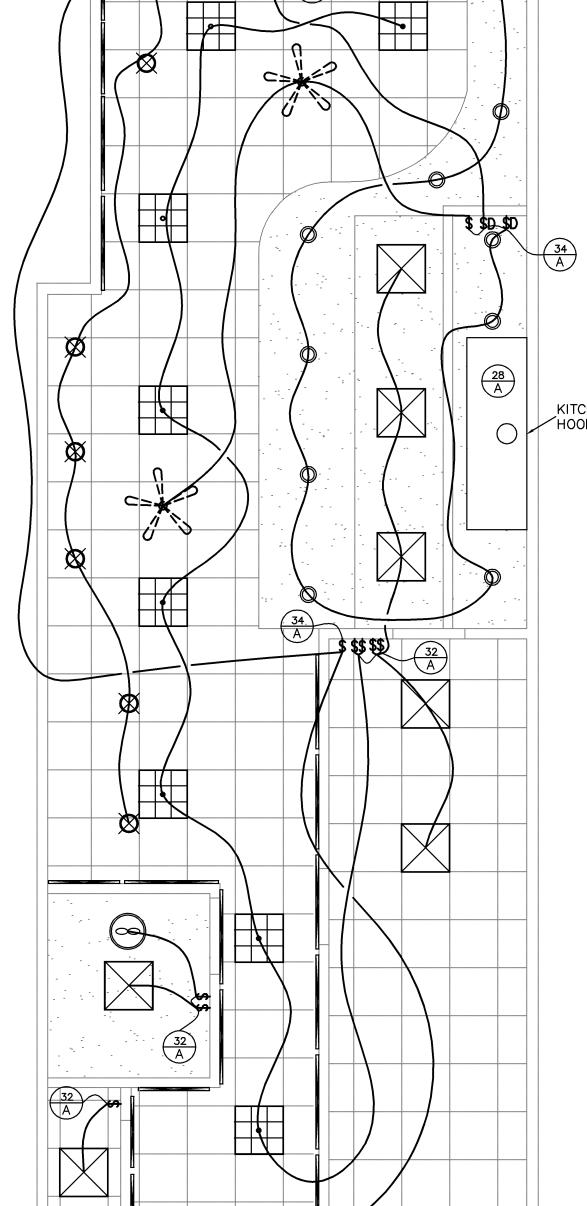
ALL ITEMS ARE EXISTING



**ELECTRICAL ROOF PLAN** 

SCALE: 1/4" = 1'-0"





THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.			
CHK'D BY				
DATE	6/13/2011			
JOB NO.	6364			
FILE NO.	636422			

EXP. 12/31/12

**ELECTRICAL PLAN** 

SCALE: 1/4" = 1'-0"

**ELECTRICAL LIGHTING PLAN** 

SCALE: 1/4" = 1'-0"

FLOOR

(114268)
 FLOOR SURFACES IN ALL AREAS SHALL BE SMOOTH, DURABLE, NONABSORBENT AND EASILY CLEANABLE. FLOORING MUST CONTINUE UP THE WALL, CURBS, (OR TOE-KICKS ON CABINETS) FOUR (4) INCHES, IN A SEAMLESS MANNER, FORMING A  $\frac{3}{8}$  INCH MINIMUM RADIUS COVE AS AN INTEGRAL UNIT. EXCEPTION; NO COVERING IS REQUIRED IN THE FOLLOWING AREAS: 1) DINING AREAS, 2) AREAS WHERE FOOD IS STORED IN UNOPENED BOTTLES, CANS, CARTONS, SACKS, OR OTHER ORIGINAL SHIPPING CONTAINERS (3) SALES AREAS, 4) GUESTROOM AND PRIVATE ACCOMMODATIONS OF OWNERS AND OPERATORS IN RESTRICTED FOOD SERVICE TRANSIENT OCCUPANCY ESTABLISHMENTS.

(11269)
FLOOR DRAINS ARE REQUIRED IN FLOORS THAT ARE WATER FLUSHED FOR CLEANING AND WHERE
PRESSURE SPRAY METHODS FOR CLEANING EQUIPMENT ARE USED. (SLOPE 1:50)

WALLS & CEILINGS:

(114271)
THE WALLS AND CEILINGS OF ALL ROOMS SHALL BE OF A DURABLE, SMOOTH, NONABSORBENT AND WASHABLE SURFACE (SUBMIT SAMPLE).

\*\* BRICK, CINDERBLOCK OR TEXTURED SURFACES ARE UNACCEPTABLE.
EXCEPTIONS: (1) WALLS AND CEILINGS OF BAR AREAS WHERE ALCOHOLIC BEVERAGES ARE SOLD
OR SERVED DIRECTLY TO THE PUBLIC, EXCEPT WALL AREAS ADJACENT TO BAR SINKS AND WHERE FOOD
IS PREPARED. (2) AREAS WHERE FOOD IS STORED IN UNOPENED BOTTLES, CANS, CARTONS, SACKS, OR
OTHER ORIGINAL SHIPPING CONTAINERS. (3) DINING AND SALES AREAS. (4) OFFICES. (5) RESTROOMS
USED EXCLUSIVELY BY PATRONS; PROVIDED, HOWEVER, THAT THE WALLS AND CEILINGS OF SUCH
RESTROOMS ARE NONABSORBENT AND WASHABLE.

(114271B1)

WALL AREAS ADJACENT TO BAR SINKS OR WHERE FOOD IS PREPARED SHALL BE SMOOTH,
NONABSORBENT, AND WASHABLE.

NONABSORBENT, AND WASHABLE.

(114271C)

APPROVED NONABSORBENT ACOUSTICAL PANELING MAY BE UTILIZED AT LEAST SIX (6) FEET ABOVE

WALLS SHALL BE OF A DURABLE WATERPROOF MATERIAL TO EXTEND FORM THE TOP OF THE COVED BASE TO AT LEAST 12" ABOVE THE BACKSPLASH.

CONDUITS

CONDUITS OF ALL TYPES. (I.E. PLUMBING, ELECTRICAL, GAS AND BEVERAGE DISPENSING LINES)
SHALL BE INSTALLED WITHIN WALLS. BEVERAGE DISPENSING LINES MAY BE ENCLOSEDS WITHIN WALLS
OR FLOORS, OR BE FURRED IN OR ENCASED IN AN APPROVED RUNWAY OR OTHER APPROVED SEALED
ENCLOSURE. WHERE LINES ENTER A WALL OR OTHER ENCLOSURE, THE OPENING AROUND THE LINES
MUST BE TIGHTLY SEALED. THEY SHALL BE MOUNTED OR ENCLOSED AS TO FACILITATE CLEANING (AT
LEAST FROM THE WALL AND 6" ABOVE THE FLOOR). A CHASE OR RUNWAY WHICH ENCLOSES LINES IN
THE FLOOR SHALL PROTRUDE AT LEAST SIX INCHES FROM FLOOR AND BE COVED AT THE BASE OF THE

#### GENERAL EQUIPMENT INSTALLATION:

(114130.1)

MATERIALS THAT ARE USED IN THE CONSTRUCTION OF UTENSILS AND FOOD-CONTRACT SURFACES
OF EQUIPMENT SHALL NOT ALLOW THE MIGRATION OF DELETERIOUS SUBSTANCES OR IMPART COLORS,
ODORS, OR TASTE TO FOOD AND UNDER NORMAL USE CONDITIONS SHALL BE SAFE, DURABLE,
CORROSION-RESISTANT, AND NONABSORBANT, SUFFICIENT IN WEIGHT AND THICKNESS TO WITHSTAND
REPEATED WAREWASHING, FINISHED TO HAVE A SMOOTH, EASILY CLEANABLE SURFACE, AND RESISTANT
TO PITTING, CHIPPING, CRAZING, SCRATCHING, SCORING, DISTORTION, AND DECOMPOSITION.

(114169a)

EQUIPMENT THAT IS FIXED BECAUSE IT IS NOT EASILY MOVABLE SHALL BE INSTALLED SO THAT IT IS:

(1) SPACED TO ALLOW ACCESS FOR CLEANING ALONG THE SIDES, BEHIND, AND ABOVE THE

EQUIPMENT.

(2) SPACED FROM ADJOINING EQUIPMENT, WALLS, AND CEILINGS A

DISTANCE OF NOT MORE
THAN (32) ONE THIRTY-SECOND INCH.

(3) SEALED TO ADJOINING EQUIPMENT OR WALLS, IF THE EQUIPMENT IS EXPOSED TO SPILLAGE OR SEEPAGE.

(B) EXCEPT AS SPECIFIED IN SUBDIVISIONS (C) AND (D), FLOOR MOUNTED EQUIPMENT THAT IS NOT EASILY MOVABLE SHALL BE SEALED TO THE FLOOR (ON A 4" CURB) OR ELEVATED ON (CASTORS OR LEGS) THAT PROVIDE AT LEAST A SIX INCH CLEARANCE BETWEEN THE FLOOR AND THE EQUIPMENT.

(C) NOTWITHSTANDING SUBDIVISION (B), THIS SECTION SHALL NOT APPLY TO DISPLAY SHELVING UNITS, DISPLAY REFRIGERATION UNITS, AND DISPLAY FREEZER UNITS LOCATED IN THE CONSUMER SHOPPING AREAS OF A FOOD FACILITY IF THE FLOOR UNDER THE UNITS IS MAINTAINED CLEAN.

(D) TABLE-MOUNTED EQUIPMENT THAT IS NOT EASILY MOVABLE SHALL BE INSTALLED TO ALLOW CLEANING OF THE EQUIPMENT AND AREAS UNDERNEATH AND AROUND THE EQUIPMENT BY BEING SEALED TO THE TABLE OR ELEVATED ON LEGS THAT PROVIDE AT LEAST A FOUR-INCH CLEARANCE BETWEEN THE TABLE AND THE EQUIPMENT.

(114180C)

NO FOGGING DEVICES INSTALLED AFTER JULY 1, 2007 SHALL USE A RESERVOIR FOR HOLDING
WATER FOR FOGGING OR MISTING OF FOODS. PRODUCE FOGGERS SHALL BE MAINTAINED IN
ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND CLEANED IN ACCORDANCE WITH
MANUFACTURER'S SPECIFICATIONS OR ACCORDING TO THE PROCEDURES SPECIFIED IN SUBDIVISION (B)

ALL EQUIPMENT MUST BE CERTIFIED OR CLASSIFIED FOR SNITATION BT AN AMERICAN NATIONAL STANDARDS STANDARRDS INSTITUTE (ANSI) ACCREDITED CERTIFICATION PROGRAM. EQUIPMENT CERTIFIED BY THE NATIONAL SANITATION FOUNDATION (NSF) MEETS THIS REQUIREMENT AND MUST COMPLY WITH NSF INSTALLATION REQUIREMENTS OR THEIR EQUIVALENT. ALL EQUIPMENT MUST BE ON SIX-INCH HIGH GROUND, WASHABLE, WATERPROOF LEGS, OR PLACED ON CASTERS AND BE EASILY MOVABLE OR SEALED TO THE FLOOR AND COVED WITH A 3/8-INCH RADIUS FOUR-INCH HIGH COVE.

FOOD ON DISPLAY SHALL BE PROTECTED FROM CONTAMINATION BY THE USE OF CONTAINERS WITH TIGHT FITTING SECURELY ATTACHED LIDS, DISPLAY CASES, MECHANICAL DISPENSERS, PACKAGING, COUNTER, SERVICE LINE, OR SNEEZEGUARDS THAT INTERCEPT A DIRECT LINE BETWEEN THE CUSTOMER'S MOUTH AND THE FOOD BEING DISPLAYED. DETAILED ELEVATIONS FOR SNEEZEGUARDS AND THE RATED EQUIPMENT SHALL BE SUBMITTED.

(114153)
EQUIPTMENT FOR COOLING AND HEATING FOOD AND FOR HOLDING COLD AND HOT FOOD SHALL BE SUFFICIENT IN NUMBER AND CAPACITY TO ENSURE PROPER FOOD TEMPERATURE CONTROL DURING TRANSPORTATION AND OPERATION AS SPECIFIED IN SECTION 113996.

(114167)
COLD-PLATES MUST BE CONSTRUCTED INTEGRALLY WITH AN ICE STORAGE BIN. BEVERAGE TUBING AND COLD-PLATE BEVERAGE COOLING DEVICES SHALL NOT BE INSTALLED IN CONTACT WITH STORED ICE INTENDED TO BE USED FOR FOOD OR BEVERAGES.

UTENSIL WASHING FACILITIES:

OF THE ABOVE SECTION OF CALCODE.

(114099 / 114103)
A THREE (3) COMPARTMENT SINK WITH DUAL INTEGRAL, SLOPED METAL DRAIN BOARDS, SOUND METAL LEGS AND METAL BACKSPLASH CERTIFIED OR CLASSIFIED FOR SANITATION BY AN AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ACCREDITED CERTIFICATION PROGRAM.

AN ANSI APPROVED THREE (3) COMPARTMENT SINK IS REQUIRED IN ADDITION TO ANY DISHMACHINE WHICH IS INSTALLED

MECHANICAL MACHINE WAREWASHING SHALL BE ACCOMPLISHED BY USING AN APPROVED MACHINE INSTALLED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. A WAREWASHING MACHINE SHALL BE PROVIDED WITH AN EASILY CLEANABLE ACCESSIBLE AND READABLE DATA PLATE AFFIXED TO THE MACHINE BY THE MANUFACTURER THAT INDICATED THE MACHINE'S DESIGN AND OPPERATING SPECIFICATIONS INCLUDING THE TEMPERATURES REQUIRED FOR WASHING, RINSING, AND SANATIZING THE PRESSURE REQUIRED FOR THE FRESH WATER SANITIZING RINSE, AND THE CONVEYER SPEED FOR CONVEYER MACHINES OR CYCLE TIMES FOR SANITARY RACK MACHINES. IT SHALL ALSO BE EQUIPED WITH A TEMPERATURE MEASURING DEVICE THAT INDICATES THE TEMPERATURE OF THE WATER AS THE WATER ENTERS THE HOT WATER SANITIZING FINAL RINSE MANIFOLD OR IN THE CHEMICAL SANITIZING SOLUTION TANK.

(114163)
AT LEAST ONE FOOD PREPARATION SINK SHALL BE PROVIDED WITH HOT AND COLD WATER
THROUGH A MIXING VALVE IN THE FOOD PREPARATION AREAS OF ALL PERMANENT FOOD FACILITIES FOR
THE WASHING , RINSING, SOAKING, THAWING, OR SIMILAR PREPARATION OF FOODS. THE SINK SHALL
MEASURE AT LEAST 18" LONG BY 18" WIDE AND 12" DEEP WITH INTEGRAL DRAINBOARD OR ADJACENT
TABLE MEASURING AT LEAST 18" x 18". THIS SINK MUST DRAIN DIRECTLY TO A FLOOR SINK WITH A
MINIMUM ONE INCH AIR GAP.

DUAL INTEGRAL METAL DRAINBOARDS SHALL BE PROVIDED ON MANUAL WAREWASHING SINKS AND THEY SHALL BE SLOPED AND DRAINED TO AN APPROVED LIQUID WASTE RECEPTOR. EXCEPTION: UNDERCOUNTER WAREWASHING MACHINES. WATERPROOF MATERIAL (FPR OR TILE) FROM COVING FULL HEIGHT OF HEIGHT OF WALL BEHIND ALL DISH MACHINES AND INTEGRAL DRAIN BOARDS.

(114149(A) / 114149.2(B))
HIGH TEMPERATURE WAREWASHINGMACHINES MUST MEET THE UMC REQUIREMENTS FOR
VENTILLATION

IF DIPPING MOIST FOODS SUCH AS ICE CREAM OR MASHED POTATOES, THE SERVING UTENSILS MUST BE STORED IN RUNNING WATER OF SUFFICIENT VELOCITY TO FLUSH PARTICULATES TO THE DRAIN, SUCH AS A DIPPER WELL, WHICH IS INDIRECTLY CONNECTED TO A FLOOR SINK WITH A MINIMUM ONE INCH AIR GAP.

HANDWASHING FACILITIES:

(113953B1)

HANDWASHING SINKS IN THE FOOD PREPARATION AND WAREWASHING AREAS CERTIFIED BY AN AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ACCREDITED CERTIFICATION PROGRAM.

HANDWASHING FACILITIES SHALL BE SUFFICIENT IN NUMBER AND CONVENIENTLY LOCATED SO AS TO BE ACCESSIBLE AT ALL TIMES FOR USE BY FOOD HANDLERS. HANDSINKS REQUIRED IN BOTH THE WAREWASH AND PREPARATION AREAS.

(113953B2)
INSTALL A MINIMUM 6" HIGH METAL SPLASHGUARD BETWEEN THE HANDWASH SINK AND THE WAREWASHING SINK THAT EXTENDS THE FULL LENGTH OF THE DRAINBOARD, UNLESS THE DISTANCE BETWEEN THE SINKS IS AT LEAST 24"

(113953A) A HANDWASH BASIN WITHIN OR ADJACENT TO THE RESTROOM PROVIDED.

(113953.2)
PERMANENTLY INSTALLED, SINGLE-SERVICE HAND TOWELS OR HOT AIR BLOWER DISPENSERS AT ALL HANDWASH BASINS PROVIDED. SINGLE-SERVICE DETERGENT OR SOAP SHALL ALSO BE PROVIDED.

(113953.5)
HANDWASHING SIGNAGE REQUIRED

PERMANENTLY INSTALLED TOILET TISSUE DISPENSERS MUST BE INSTALLED AT EACH TOILET.

PLUMBING AND WATER SUPPLY:

ADEQUATE CAPACITY AND LOCATION OF THE PROPOSED OR EXISTING WATER HEATER. INDICATE BTU OR kW. OBTAIN EHS APPROVAL BEFORE INSTALLING WATER HEATER.

ALL SINKS MUST BE EQUIPPED WITH HOT AND COLD WATER DISPENSED FROM MIXING FAUCETS. A BACK FLOW PREVENTION DEVICE MAY BE REQUIRED ON WATERSUPPLY LINES TO FAUCETS WITH THREAD SPIGOTS AND OTHER EQUIPMENT. (MINIMUM 120°F WATER TEMPERATURE MEASURED FROM THE FAUCET) APPROVED BACKFLOW PREVENTION DEVICES SHALL BE PROPERLY INSTALLED UPSTREAM OF ANY POTENTAIL HAZARD BETWEEN THE POTABLE WATER SUPPLY AND A SOURCE OF CONTAMINATION. HOSES SHALL NOT BE ATTACHED TO A FAUCET OR HOSE BIB UNLESS AN APPORVED BACKFLOW PREVENTION DEVICE IS PROVIDED. WATER SUPPLY TO CARBONATORS SHALL BE PROTECTED BY AN APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE. THE RELIEF VALVE SHALL DRAIN INDIRECTLY TO A SEWER WITH A LEGAL AIR GAP.

(114201)

IF PROVIDED, A GREASE TRAP OR GREASE INTERCEPTOR SHALL NOT BE LOCATED IN A FOOD OR

UTENSIL HANDLING AREA UNLESS SPECIFICALLY APPROVED BY THE ENFORCEMENT AGENCY. THE TRAP

OR INTERCEPTOR SHALL BE EASILY ACCESSIBLE FOR SERVICING.

HORIZONTAL RUNS OF DRAIN LINES SHOULD BE AT LEAST  $^{3}$ " FROM THE WALL AND 6" OFF THE FLOOR AND SHOULD TERMINATE AT LEAST 1" ABOVE THE OVERFLOW RIM OF THE FLOOR SINK.

FLOOR SINKS

ALL EQUIPMENT WHICH GENERATES CONDENSATE AND LIQUID WASTES FROM STEAM TABLES, ICE MACHINES AND BINS, UTINSIL WASH SINKS, FOOD PREPARATION SINKS, DISPLAY CASES, ETC., SHALL BE DRAINED BY MEANS OF INDIRECT WASTE PIPES INTO A FLOOR SINK OR OTHER APPROVED INDIRECT WASTE RECEPTOR. FLOOR DRAINS ARE NOT TO BE USED IN LIEU OF FLOOR SINKS.

(114190)
ALL PLUMBING AND PLUMBING FIXTURES SHALL BE INSTALLED IN COMPLIANCE WITH APPLICABLE LOCAL PLUMBING ORDINANCES, SHALL BE MAINTAINED SO AS TO PREVENT ANY CONTAMINATION, AND SHALL BE KEPT CLEAN, FULLY OPERATIVE AND IN GOOD REPAIR. NO FLEX TUBING OR FLEX LINES WILL BE APPROVED. ALL WASTE LINES MUST BE HARD PIPED FROM THE TOP OF COUNTER TO FLOOR SINK.

(114193C)
ALL FLOOR SINKS SHALL BE AT LEAST HALF EXPOSED OR OTHERWISE READILY ACCESSIBLE FOR INSPECTION AND CLEANING. FLOOR SINK SHALL BE FLUSH WITH THE FLOOR AND SHALL NOT POSE A TRIPPING HAZARD.

(114197) LIQUID WASTE SHALL BE DISPOSED OF THROUGH THE APPROVED PLUMBING SYSTEM AND SHALL DISCHARGE INTO THE PUBLIC SEWERAGE OR INTO AN APPROVED PRIVATE SEWAGE DISPOSAL SYSTEM.

GENERAL ELECTRICAL/LIGHTING REQUIRMENTS:
(114182)
ELECTRICAL POWER SHALL BE SUPPLIED AT ALL TIMES TO OPERATE THE APPROVED EXHAUST,

LIGHTING, ELECTRIC WATER HEATERS, AND REFRIGERATION UNITS, AND ANY OTHER ACCESSORIES AND APPLIANCES THAT MAY BE INSTALLED IN A FOOD FACILITY.

(114252)

SUFFICIENT NATURAL OR ARTIFICIAL LIGHTING REQUIRED: FIFTY (50) FOOT-CANDLES IN FOOD

PREPARATION, UTENSIL WASH AREAS, BARS, STORAGE AREAS AND RESTROOMS.

(114252.1)
SHATTERPROOF SHIELDS ON LIGHTS REQUIRES ABOVE FOOD PREPARATION, OPEN FOOD STORAGE,

UTENSIL CLEANIG AREAS AND HOODS.

VENTIL ATION:

(114149.1(A))

MECHANICAL EXHAUST VENTILATION SHALL BE REQUIRED AT OR ABOVE ALL EQUIPMENT TO EFFECTIVELY REMOVE GASES, ODERS, STEAM, HEAT GREASE, VAPORS AND SMOKE. HOODS AND MECHANICAL VENTILATION SHALL COMPLY WITH ALL REQUIREMENTS SET FORTH IN THE CURRENT EDITION OF THE UNIFORM MECHANICAL CODE (UMC) AS ADOPTED BY THE LOCAL BUILDING DEPARTMENT. (SEE MECHANICAL EXHAUST VENTILATION SYSTEM PLAN CHECK DATA FORM) (UNIFORM MECHANICAL CODE) CANOPY HOODS SHALL EXTEND AT LEAST SIX (6) INCHES BEYOND ALL SIDES OF THE COOKING EQUIPMENT, AS MEASURED FROM THE INSIDE EDGE OF THE GREASE TROUGH IF PROVIDED.

(114149.1(D))

MAKE-UP AIR SHALL BE PROVIDED AT THE RATE OF THAT EXHAUSTED AND SHALL BE ELECTRICALLY INTERCONNECTED WITH THE HOOD VENTILATION SYSTEM.

(114149.2)
EVERY HOOD SHALL BE INSTALLED TO PROVIDE FOR THOROUGH CLEANING OF ALL INTERIOR AND EXTERIOR SURFACES, INCLUDING, BUT NOT LIMITED TO, THE HOOD, FILTERS, PIPING, LIGHTS, TROUGHS,

WALK-IN REFRIGERATOR UNITS:

(113885 / 114130D)
SHALL BE CERTIFIED OR CLASSIFIED FOR SANITATION BY AN AMERICAN NATIONAL STANDARDS INSTITUE (ANSI) ACCREDITED CERTIFICATION PROGRAM.

INFORMATION REGARDING THE INTERIOR AND EXTERIOR CONSTRUCTION AND FINISH PROVIDED.

(114271)
APPROVED WALL AND CEILING MATERIAL FINISH.

HANGERS, FLANGES, AND EXHAUST DUCTS.

(114268)
AN APPROVED FLOORING MATERIAL WITH INTEGRAL FOUR (4) INCH HIGH CONTINUOUSLY COVED BASE AT THE FLOOR/WALL JUNCTURE PROVIDED. THE BASE MUST BE \$\frac{3}{8}\$-INCH RADIUS COVE.

(114252.1)
AT LEAST 10 FOOT-CANDLES OF KIGHTING SHALL BE PROVIDED AT A DISTANCE OF 30" ABOVE THE FLOOR WITH PROTECTIVE SHIELDING.

DRAIN LINES AND ELECTRICAL CONDUIT SHALL BE MOUNTED 1" AWAY FROM THE WALLS SO AS TO FACILITATE CLEANING.

(114266)
ALL WALK-IN REFRIGERATION UNITS SHALL OPEN INTO AN APPROVED FOOD HANDLING AREA

(UNIFORM PLUMBING CODE SEC. 604)

FLOOR SINKS ARE NOT TO BE LOCATED IN WALK-IN REFRIGERATORS.

RESTROOM FACILIT

(114250 / 114276(A))

RESTROOM FACILITIES:

(114250 / 114276(A))

RESTROOMS FOR USE BY EMPLOYEES SHALL BE PROVIDED WITHIN EACH FOOD FACILITY. THE

NUMBER OF FACILITIES SHALL BE IN ACCORDANCE WITH LOCAL BUILDING DEPARTMENT CODES

AND ORDINANCES.
RESTROOMS WHICH ARE PROVIDED FOR USE BY PATRONS SHALL BE SO SITUATED THAT PATRONS DO NOT PASS THROUGH ANY FOOD PREPARATION, FOOD STORAGE, UTENSIL WASHING, SERVICE OR JANITORIAL AREAS.
(114250.1)

AMUSEMENT PARKS, STADIUMS. ARENAS, FOOD COURTS AND FAIRGROUNDS WHICH INCLUDE FOOD FACILITIES AND TOILET FACILITIES WITHIN THEIR BOUNDARIES ARE NOT REQUIRED TO PROVIDE TOILET FACILITIES FOR EMPLOYEE USE WITHIN EACH FOOD ESTABLISHMENT. RESTROOM FACILITIES MUST BE LOCATED WITHIN 200 FEET OF THE FOOD FACILITY AND READILY AVAILABLE FOR USE BY THE EMPLOYEES. FOOD FACILITIES SUBJECT TO THIS SECTION SHALL BE PROVIDED WITH APPROVED HANDWASHING FACILITIES FOR EMPLOYEE USE.

(114276(C1))
THE RESTROOM DOORS SHALL BE TIGHT FITTING AND EQUIPPED WITH SELF-CLOSING DEVICES AND SHALL BE KEPT CLOSED EXCEPT DURING CLEANING AND MAINTENANCE OPERATIONS.

(114149(B))
ALL RESTROOMS SHALL BE PROVIDED WITH VENTILATION TO THE OUTSIDE. IF SCREENED WINDOW OPENING OR AIRSHAFT CANNOT PROVIDE ADEQUATE VENTILATION, MECHANICAL VENTILATION IS THEN REQUIRED TO BE INTERCONNECTED WITH THE LIGHT SWITCH.

A PERMANENT FOOD FACILITY SHALL PROVIDE CLEAN TOILET FACILITIES IN GOOD REPAIR FOR PATRONS, GUESTS, OR INVITEES WHEN THERE IS ONSITE CONSUMPTION OF FOODS OR WHEN THE FOOD FACILITY WAS COSTRUCTED AFTER JULY 1, 1984, AND HAS MORE THAN 20,000 SQ. FEET OF FLOOR SPACE. IF THE FACILITY HAS MORE THAN 20,000 SQ. FEET OF FLOOR SPACE, THERE SHALL BE PROVIDED AT LEAST ONE SEPARATE TOILET FACILITY FOR WOMEN. FOR BUILDINGS LESS THAN 20,000 SQ. FEET AND CONSTRUCTED BEFORE JANUARY 1, 2004 TOILET FACILITIES SHALL BE PROVIDED PROMINENTLY POST A SIGN WITHIN THE ESTABLISHMENT IN A PUBLIC AREA STATING THAT TOILET FACILITIES ARE NOT PROVIDED.

CLOTHING CHANGE/STORAGE ENCLOSURES:

A ROOM, ENCLOSURE, OR DESIGNATED AREA, SEPARATED FROM TOILETS, FOOD STORAGE, FOOD PREPARATION AREAS, AND UTENSIL WASHING AREAS, SHALL BE PROVIDED WHERE EMPLOYEES MAY CHANGE AND STORE CLOTHES.

JANITORIAL FACILITIES:

(114279)

JANITORIAL FACILITIES WITH HOT AND COLD WATER PROVIDED WITH BACKFLOW PROTECTION, IN AREA WITH APPROVED FLOOR, WALL AND CEILING FINISHES.

(114165B)
A ONE (1) COMPARTMENT, NONPOROUS JANITORIAL SINK (I.E., STAINLESS STE STEEL OR CAST IRON/PORCELAIN) OR SLAB, BASIN OR FLOOR CONSTRUCTED OF CONCRETE OR EQUIVALENT MATERIAL, CURBED AND SLOPED TO A DRAIN SHALL BE PROVIDED. FIBERGLASS OR PLASTIC SINKS ARE NOT ACCEPTABLE. WASTE LINE IS A DIREST-CONNECT TO THE SANITARY SEWER. NOTE THAT THE BUILDING DEPARTMENT MAY REQUIRE IT TO BE PLUMBED DIRECTLY TO THE GREASE TRAP.

A RACK, ROOM, AREA OR CABINET FOR THE STORAGE OF MOPS AND BROOMS AND CLEANING COMPOUNDS SEPERATE FROM ANY FOOD PREPARATION, OR STORAGE AREA OR UTENSIL WASHING AREA PROVIDED.

LINENS AND LAUNDERING

(114185)
ADEQUATE STORAGE FOR CLEAN LINENS, INCLUDING APPAREL, TOWLES AND CLEANING CLOTHS.

(114185.3)
PROVIDE LAUNDERING SCHEDULE FOR LINENS AS REQUIRED BY CODE.

VERMIN EXCLUSION:

(114259)
ALL BUILDINGS SHALL BE CONSTRUCTED SO AS TO PREVENT ENTRANCE OF INSECTS AND RODENTS

AIR CURTAINS DEVICES PROVIDED AT DELIVERY DOORS, SHALL BE PERMANENTLY WIRED AND INSTALLED SO THAT THE DEVICE WILL AUTOMATICALLY OPERATE WHENEVER THE DOOR OPENS AND SHALL MEET ANSI PERFORMANCE STANDARDS.

SELF-CLOSING DEVICES ON ALL DOORS OPENING TO THE OUTSIDE ARE REQUIRED.

ALL OPERABLE WINDOWS SHALL BE SCREENED WITH NOT LESS THAN 16-MESH SCREENING.

DRY FOOD STORAGE:

LOCATION OF THE AIR CURTAIN ON A REVISED FLOOR PLAN.

ADEQUATE SIZED ROOM OR AREA FOR DRY FOOD STORAGE. FLOOR SPACE SHOULD BE EQUAL TO 25% OF FOOD AREA, MINIMUM 100 SQ. FT.

OUTDOOR WASTE STORAGE:

REQUIREMENT HANDOUT.

(114244-114245.7) CLEANABLE AREA (CONCRETE, ASPHALT) FOR BIN OR TRASH CONTAINER STORAGE

(114245.8)
CLEANABLE AREA AND STORAGE CONTAINER (BARREL) FOR WASTE COOKING OIL.

(114244)
FACILITIES AND EQUIPMENT NECESSARY TO STORE OR DISPOSE OF ALL WASTE MATERIAL.

MISCELLANEOS
ALL DELIVERY DOORS LEADING TO THE OUTSIDE SHALL BE SELF-CLOSING AND SHALL BE PROVIDED WITH AN OVERHEAD AIR CURTAIN. SUBMIT SPECIFICATIONS FOR THE AIR CURTAIN TO BE INSTALLED ABOVE THE DOOR WHICH OPENS TO THE OUTSIDE IN THE BACKROOM AREA. ALSO, IDENTIFY THE

WITHIN 60 DAYS FROM THE COMMENCEMENT OF OPERATION, THE OWNER OR EMPLOYEES MUST HAVE SUCCESSFULLY PASSED AN APPROVED AND ACCREDITED FOOD SAFETY CERTIFICATION EXAMINATION. THE FOOD SAFETY CERTIFICATION SHALL BE RETAINED ON FILE AT THE FOOD FACILITY AT ALL TIMES, AND SHALL BE MADE AVAILABLE FOR INSPECTION. THE RESPONSIBILITY OF THE CERTIFIED OWNER OR EMPLOYEE SHALL INCLUDE THE SAFETY OF FOOD PREPARATION AND SERVICE.

GENERAL REQUIREMENTS 4380) COMPLETE AND LEGIBLE PLANS THAT ARE DRAWN TO SCALE AS PER PLAN SUBMISSION

(114130B)
ALL NEW AND REPLACEMENT FOOD-RELATED AND UTENSIL-RELATED EQIPMENT SHALL BE
CERTIFIED OR CLASSIFIED FOR SANITATION BY AN AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
ACCREDITED CERTIFICATION PROGRAM. MANUFACTURER'S SPECIFICATIONS SHEETS FOR THE PROPOSED

(114381C)
A PERMIT, ONCE ISSUED, IS NONTRANSFERABLE. A PERMIT SHALL BE VALID ONLY FOR THE PERSON, LOCATION, TYPE OF FOOD SALES, OR DISTRIBUTION ACTIVITY AND, UNLESS SUSPENDED OR REVOKED FOR CAUSE. FOR THE TIME PERIOD INDICATED.

EACH PERMANENT FOOD FACILITY SHALL BE FULLY ENCLOSED IN A BUILDING CONSISTING OF PERMANENT FLOORS, WALLS AND AN OVERHEAD STRUCTURE. EXCEPTION: OUTDOOR BBQ'S, OUTDOOR DINING AREAS, PRODUCE STANDS AND SWAP MEET PREPACKAGED FOOD STANDS.

Environmental Health Notes

1. A concrete slab is provided for trash, garbage, and grease container. If walls enclose area, the interior wall surfaces will be smooth, sealed and washable (e.g., plastered smooth and painted, etc.).

2. All food-related and utensil-related equipment shall meet or be equivalent to sanitation standards established by an American National Standards Institute (ANSI) accredited program.

 3. All floor mounted equipment will be installed on minimum 6" sanitary legs, castors, or completely sealed in

position on a 4 " high curb with continuously coved base. Countertop equipment will be on 4-inch sanitary legs or sealed to the counter unless readily movable.

4. If soft drink, ice or other dispensers are self-service, or if refills are provided they must be push button types, or lever types where the lever contacts the container at least one inch below the rim.
5. Any openable windows vent openings or other similar openings must be provided with tight fitting screens of minimum 16-mesh to the inch. Windows to be fixed at food prep, utensil-washing, open food and utensil

6. All exterior doors open outward and are self-closing and tight fitting.7. Bi-fold, French, accordion style and roll-up doors cannot open into the food prep, utensil washing or

unpackaged food service areas.

8. Toilet room and dressing room doors must be self-closing, tight fitting.

8. Tollet room and dressing room doors must be self-closing, tight fitting.9. Delivery doors to have air curtain fans that span the width over the door. The fan must activate via a microswitch providing a minimum velocity of 1600 fpm measured 3 feet above the ground.

10. A minimum of 10 foot-candles of light measured 30" off floor is provided in walk-in refrigerated storage and dry storage rooms and at least 20-foot candles is provided where food is provided for consumer self-service, where fresh produce or prepackaged foods are sold or offered for consumption; inside equipment such as reach-in and under-counter refrigerators; in areas used for handwashing, warewashing, equipment and utensil storage, and in toilet rooms.

11. A minimum of 50 foot-candles of light measured 30" off floor is provided when working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor and in all areas during periods of cleaning.

12. Shattershields for all lights above food preparation, work, and storage areas will be provided.
13. All warewashing sinks to have 3 compartments that are a minimum size of at least 18"x18"x12" deep (or 16"x20"x12" deep) with a minimum 18" drainboard at each end. If against a wall, it must have an 8" integral backsplash. However, it must be capable of accommodating the largest utensil to be washed. A warewashing machine does not substitute for the sink requirement.

14. Sinks to have spout(s) capable of reaching each compartment.15. Food prep sink compartment(s) to be at least 18"x18"x12" deep (or 16"x20"x12" deep) with a minimum 18"

drainboard. Separate food prep sinks to be provided for meats and produce.

16. The 3 or 4 compartment bar sink to be at least 12"x12"x10" deep (or 10"x14"x10" deep) with a minimum 18" drainboard at each and

17. A separate wet waste dump fixture shall be provided for disposal of drink or waste ice or coffee waste.18. Each handwashing sink must have permanently mounted single-service soap and paper towel dispensers.

19. The hot water heater will be a commercial type capable of constantly supplying hot water at a temperature of 120°F to all sinks. In sizing the water heater, the peak hourly demand for all sinks, etc., are added together to determine the minimum required recovery rate.
20. All lavatories or hand sinks will have a combination faucet or premixing faucet capable of supplying water

tempered to 100°F. Self-closing or metered faucet to provide at least 15 seconds of water without reactivation.

21. All plumbing, electrical and gas lines shall be concealed within the building structure to as great an extent as possible. All exposed conduits, plumbing, etc. shall be installed at least 6" off floor and 3/4" from walls

using standoff brackets.

22. Conduits, plumbing or piping cannot be installed across any aisle way, traffic area or door opening.

23. Multiple runs or clusters of conduit or pipelines shall be furred in or encased in an approved sealed enclosure.24. All liquid waste shall be drained by means of indirect waste pipes into a floor sink. Floor sinks are to be

installed flush with the finished floor surface and have suitable easily removable safety cover grates.

25. Floor sink to be 50% exposed when no access is provided for cleaning or be in line with the front face of

elevated freestanding equipment.

26. Approved backflow prevention devices shall be properly installed upstream of any potential hazard between the potable water supply and a source of contamination. Hoses shall not be attached to a faucet or hose

bibb unless an approved backflow preventer is provided.

27. Water supply to carbonators shall be protected by an approved reduced pressure principle backflow preventer. The relief valve shall drain indirectly to sewer with a legal air gap.

28. For cleaning floor mats, the janitorial sink to be a minimum 24" by 36" floor-mounted type. Mops shall be placed in a position that allows them to air-dry without soiling walls, equipment, or supplies.

29. The janitorial sink faucet will have a threaded outer lip for hose attachment and an approved backflow prevention device. No chemical dispensing systems or shutoff valves to be attached to mop sink faucet outlet (unless a "sidekick" plumbing device is installed).
30. No condensate or wastewater including HVAC will drain into the janitorial sink.

31. Grease trap to be located outside the food service activity area, flush with the finished floor when indoors.Local wastewater district or building department to be contacted for grease removal requirements.32. Floor drains shall be installed in floors that are water-flushed for cleaning and in areas where pressure

spray methods for cleaning equipment are used, in restrooms, janitorial rooms, sculleries, and at bars with warewashing. Floor surfaces in areas pursuant to this shall be sloped 1:50 to the floor drains.

33. Adequate ventilation is to be provided to all toilet rooms, janitor closets with mop sinks, and indoor trash

rooms and in dressing/change room(s).
34. The floor finish will have a smooth surface under all equipment and walkways will have a light texture only.
35. The paint used on walls and ceilings of all kitchen, food preparation, work, and storage areas will be a gloss

or semi-gloss enamel. Finish material shall be a light color in food prep areas for easy cleaning.

36. Prior to installation, samples of finishes to be submitted to Environmental Health for approval as needed.

37. Cold storage rooms shall be provided with a section of shelving installed to hold shallow cool down pans

-not to exceed 4" in height. Space between shelving to be at least 8" high.
38. Backup dry storage shelving shall be a minimum of 96 linear feet (measured with tiers) or 25% of kitchen, food prep, and work areas, whichever is greater. Shelving shall be at least 18 inches deep and start a

minimum six inches off the floor surface.

39. Shelving over wet areas (sinks, mop sinks etc.) and food prep surfaces will be metal.

40. All seams, gaps, openings to be properly sealed.

DATE

QUIN GERING SESSING

SUBWAY
STORE 12710
8254 FIRESTONE BLVD.

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY J.P.

CHK'D BY

DATE 6/13/2011

JOB NO. 6364

FILE NO. 636422

EXP. 12/31/12

EHS

ME	CHANICAL AB	BRE	<b>VIATIONS</b>		SYMBOLS	
<u> </u>	AND	НВ	HOSE BIBB	SYMBOL	DESCRIPTION	SECTION 1 BASIC MECHANICAL MATERIALS AND METHODS
~ 	ANGLE AT	HC HD	HANDICAPPED HEAD		AIR CONDITION UNIT	PART 1 — GENERAL
- -	CENTER LINE PROPERTY LINE DIAMETER or ROUND	HDWE HI. HORIZ	HARDWARE HIGH HORIZONTAL			1.1 SUMMARY A. Labor, materials, tools, and services for a complete installation of equipment and system contain
, E) N)	EXISTING NEW	HP HW	HORIZONTAL HORSEPOWER HOT WATER	(6)	SUPPLY AIR CEILING DIFFUSER	in the Contract Documents.  B. Principal features of the work included are:
Ĺ	PERPENDICULAR POUND or NUMBER	HWR HWS	HOT WATER RETURN HOT WATER SUPPLY			1. Heating, ventilating, air conditioning systems, controls, and mechanical system insulation. 2. Roof curbs for HVAC systems, intake hoods, louvers, supply fans, and relief vents furnished
)	THERMOSTAT	HVAC	HEATING, VENTILATING, AIR CONDITIONING	SIZEX	SUPPLY AIR CEILING DIFFUSER	and set under this Division.  3. Refrigerant piping, connections, refrigerant and refrigerant charges.  4. Excavating and backfilling for mechanical work: coordinate with appropriate trade
C N	AIR CONDITIONING ACCESS PANEL ABOVE	ID INSUL	INSIDE DIAMETER (DIM.) INSULATION			3. Refrigerant piping, connections, refrigerant and refrigerant charges. 4. Excavating and backfilling for mechanical work; coordinate with appropriate trade. 5. Anchor bolts, sleeves. supports and similar items to be built into concrete or masonry. 6. Preparation for testing and balance of mechanical systems and correcting deficiencies. 7. Preparation and submittal of shop drawing and product data. 8. Maintaining a record set of blue line prints and making them to indicate locations of concealed items, and deviations made to suit conditions and production of mechanical as—
BV DJ FF	ADJUSTABLE ABOVE FINISH FLOOR	INT	INTERIOR	SIZE	SUPPLY VARIBLE AIR CEILING DIFFUSER HEAT & COOL	7. Preparation and submittal of shop drawing and product data. 8. Maintaining a record set of blue line prints and making them to indicate locations of
E GGR	ADJUSTABLE EXTRACTOR AGGREGATE	LAV	LAVATORY		DIFFOSER HEAT & COOL	built (record) drawings.
LUM PPROX	ALUMINUM APPROXIMATE	LBS LPG	POUNDS LIQUID PETROLEUM GAS	SIZE	RETURN AIR CEILING REGISTER	1.2 JOB CONDITIONS.  A. Submittal of bid implies bidder has read applicable paragraphs of the specifications and will be
.PPT .RCH. .RI	APPOINTMENTS ARCHITECTURAL AMERICAN REFRIGERATION INSTITUTE	MACH	MACHINE			bound by their conditions.
SPH SST	ASPHALT ASSISTANT	MATL MAX. MBH	MATERIAL MAXIMUM BTU PER HOUR (THOUSANDS)	SIZE	EXHAUST AIR CEILING REGISTER	1.3 LOCAL CONDITIONS  A. Conform with local conditions. Coordinate with local utilities on size of utility service.
JTO.	AUTOMATIC	MCA MECH	MINIMUM CIRCUT AMPS MECHANICAL	CFM E		1.4 INTENT A. The contract documents (drawings and specifications) describe the mechanical work of this pro
D DD	BALANCING DAMPER BACKDDRAFT DAMPER	MTL MFGR	METAL MANUFACTURER	SIZE T	SUPPLY AIR WALL DIFFUSER	any items mentioned in one part shall be as binding as though mentioned in both.  B. The contract documents form a guide for a complete mechanical installation. Where an item is
3F) 3G)	BELOW FINISH FLOOR BELOW FINISH GRADE	MH MIN	MANHOLE MINIMUM	CFM JJ		A. The contract documents (drawings and specifications) describe the mechanical work of this pro any items mentioned in one part shall be as binding as though mentioned in both.  B. The contract documents form a guide for a complete mechanical installation. Where an item is reasonably necessary but not specifically mentioned, such as duct hangers or transitions, piping offsets, drains, etc., for a complete system, provide same.  C. Mechanical layouts indicated on drawings are diagrammatic only. Exact locations of ducts,
LDG LKG	BUILDING BLOCKING	MISC MUA	MISCELLANEOUS MAKE UP AIR	SIZE	RETURN AIR WALL REGISTER	and equipment shall be governed by the drawings of related trades.
M TUH OT	BEAM BRITISH THERMAL UNIT/ HOUR BOTTOM	(N)	NEW	CFM		1.5 DEVIATIONS  A. No deviations from specifications and drawings shall be made without full knowledge and writte
P	BY-PASS TIMER	(N) NIC NO. or #	NOT IN CONTRACT NUMBER	SIZE	EXHAUST AIR WALL REGISTER	consent of Construction Manager.  B. Should Contractor find, during progress of work, conditions which dictate a modification of any particular requirements, report such item promptly for decision of instructions.
Ą	COMBUSTION AIR	NOM NTS	NOMINAL NOT TO SCALE	CFM		1.6 QUALITY ASSURANCE
AP D FD	CAPACITY CONDENSATE DRAIN	OA	OVERALL	SIZE	TRANSFER GRILLE	A. Comply with applicable local, state and federal codes.  B. Comply with applicable requirements of recognized industry associations with promulgate standards for the various trades. ( see individual sections of division 15 )
FM HW	CEILING FIRE DAMPER CUBIC FEET PER MINUTE CHILLED WATER	OBD OC	OPPOSED BLADE DAMPER ON CENTER		TOWNS EN STREET	C. Employ only qualified journeymen for this work. Employ competent, qualified mechanics to supervise the work.
HWR HWS	CHILLED WATER RETURN CHILLED WATER SUPPLY	OSA OVHD	OUTSIDE AIR OVERHEAD		DUCTWORK (RECTANGULAR)	1.7 CODES AND STANDARDS
J _G	CONTROL JOINT CEILING	PTN	PARTITION		DOCTWORK (RECTANGULAR)	A. Perform work specified in Division 15 in accordance with the applicable codes and standards leading, and such standards that may be specified in other sections, when these specifications are
LKG LR O	CAULKING CLEAR CLEANOUT	PHYS PR	PHYSICAL PRESSURE RELIEF		DUOTWODIZ (DOUND)	more stringent, they take precedence in case of conflict, obtain a decision from the Mechanical Engineer.  1. NFPA 54: National Fuel and Gas Code.
OL OMP	COLUMN COMPRESSED	PVC PLAS	POLY-VINYL CLORIDE PIPE PLASTER	ك ك	DUCTWORK (ROUND)	2. NFPA 90A: Air Conditioning and Ventilation Systems.
ONC ONF	CONCRETE CONFERENCE	PLYWD POC PREFAB	PLYWOOD POINT OF CONNECTION PREFABRICATED			4. Applicable State Building Code. 5. Applicable state Mechanical Code. 6. Handicapped Code ANSI A117.1 and ADA
ONN ONST ONT	CONNECTION CONSTRUCTION CONTINUOUS	PREP PSI	PREPARATION POUNDS PER SQUARE INCH		LINED DUCTWORK	7. Applicable State Energy Code. 8. AGA: American Gas Association.
ORR SE	CORRIDOR CALIFORNIA SEASONAL EFFICIENCY	PW	PROCESSED WATER			<ul> <li>9. ANSI: American National Standards Institute.</li> <li>10. ARI: American Refrigeration Institute.</li> <li>11. ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineers.</li> </ul>
KS TR	COUNTERSUNK CENTER	R RA	RISER RETURN AIR		TURNIG VANE	1 12. ASME: American Society for Mechanical Engineers.
V	CHECK VALVE	RAD. RAG	RADIUS RETURN AIR GRILLE		FI EVIDI E DIJOTNODIZ	<ul> <li>13. ASTM: American Society for Testing and materials.</li> <li>14. MSS: Manufacturer's Standardization Society of the Valve and Fitting Industry.</li> <li>15. NFPA: National Fire Protection Association.</li> </ul>
BL B	DOUBLE DRY BULD (TEMPERATURE)	REF REINF	REFERENCE REINFORCED		FLEXIBLE DUCTWORK	<ul><li>16. SMACNA: Sheet Metal and Air Conditioning Contractor's National Association.</li><li>17. UL: Underwriters' Laboratories. Inc.</li></ul>
EPT ET	DEPARTMENT DETAIL	REQD RM RND	REQUIRED ROOM ROUND		FLEXIBLE CONNECTION	1.8 COORDINATION A. Carefully examine specifications and drawings to be thoroughly familiar with items which require
F HW HWR	DRINKING FOUNTAIN DOMESTIC HOT WATER DOMESTIC HOT WATER RETURN	KIND	KOOND		PLEXIBLE CONNECTION	HVAC connections and coordination.  B. Coordinate with other Divisions to leave proper chases and openings, place outlets, anchors,
A or ø R		S SA	SOUTH SUPPLY AIR		MANUAL AID VOLUME DAMPED	sleeves, and supports prior to pouring concrete of installation of masonry work.
N R	DOWN DOOR	SAD SAG SAR	SUPPLY AIR DIFFUSER SUPPLY AIR GRILLE SUPPLY AIR REGISTER		MANUAL AIR VOLUME DAMPER	1.9 SUBMITTALS  A. Submittals are only required for specific items of equipment or material listed in individual second of these specifications.
S SP TR	DOWNSPOUT DRY STANDPIPE DUCT THRU ROOF	SCHD SD	SCHEDULE SMOKE DETECTOR		FIRE DAYER	B. Within 15 days after award of contract for this work, submit a list of proposed manufacturers equipment or material to be used) for approval. Submit this list before submittal of shop drawings
TW WG	DUCT THRU WALL DRAWING	SEER SECT.	SEASONAL ENERGY EFFICIENCY SECTION		FIRE DAMPER	and product data, and obtain approval before submitting required items.  C. Shop Drawings (not required for Owner furnished equipment).
		SHT SIM SQ	SHEET SIMILAR SQUARE	SFD		1.10 DELIVERY AND STORAGE  A Insofar as possible deliver items in manufacturer's original unopened packaging. Where that is
A AG	EAST EXHAUST AIR EXHAUST AIR GRILLE	SPEC SP	SPECIFICATION STATIC PRESSURE		SMOKE FIRE DAMPER	A. Insofar as possible, deliver items in manufacturer's original unopened packaging. Where that is practical, cover items with protective materials to keep them from being damaged. Use care in loading, transport, unloading, and storage to keep items from being damaged.
DB ER	ENTERING DRY BUBL ENERGY EFFICIENCY RATIO	SOV SS	SHUT-OFF VALVE SERVICE SINK			1.11 FIRE RATINGS
LEC LEV	ELECTRICAL ELEVATION	SST STD STL	STAINLESS STEEL STANDARD STEEL	OAI 500	OUTSIDE AIR INTAKE MIN. CFM	A. Materials used anywhere in the work must have NFPA ratings as following:  1. flame spread — not over 25  2. smoke developed — not over 50
MER NCL P	EMERGENCY ENCLOSURE ELECTRICAL PANEL	STOR STRUCT	STORAGE STRUCTURAL			3. fuel contributed — not over 25 B. Materials shall be "self Extinguishing".
:Q :QUIP	EQUAL EQUIPMENT	SUPV SUSP	SUPERVISOR SUSPENDED	① A/C-1	ROOM THERMOSTAT — SUBSCRIPT INDICATES UNIT CONTROL	1.12 PERMITS AND FEES  A Obtain pay for and deliver permits certification of inspection and other such items required.
E) SP	EXISTING EXTERNAL STATIC PRESSURE	S&W	SOIL & WASTE			A. Obtain, pay for, and deliver permits, certification of inspection, and other such items required authorities having jurisdiction. Deliver certification to the Construction Manager prior to Final Acceptance of the work. An inspection certificate for each class of work requiring inspection must
WB XPO. XT	ENTERING WET BULB EXPOSED EXTERIOR	TC TEL	TOP OF CURB TELEPHONE	ВТ	BYPASS TIMER	be submitted prior to or with the final payment invoice. The responsible Trade Contractor must make application for the inspection, coordinate same and pay the required inspection fee.
		TER TG	TERRAZZO TRANSFER GRILLE			1.13 EXTENDED WARRANTIES  A. Work furnished under the Contract shall be warranted against defects in workmanship and
A C D	FIRE ALARM FLEXIBLE CONNECTION	THK TOC TP	THICK TOP OF CONCRETE TRAP PRIMER	ТС	TIME CLOCK	A. Work furnished under the Contract shall be warranted against defects in workmanship and (Contractor furnished) materials for a period of not less that one (1) year, or as otherwise specified, from the date of final acceptance of the installation, Defects of workmanship developing during this period shall be remedied, and defective material replaced, without additional cost.
DN E	FIRE DAMPER FOUNDATION FIRE EXTINGUISHER	TRANS TREAT.	TRANSCRIPTION TREATMENT			during this period shall be remedied, and defective material replaced, without additional cost.  When defects in a Trade Contractor's work causes damage to the work of the other Trade Contracto such damage shall be repaired by the Trade Contractor causing damage and work restored to its
EC HC	FIRE EXTINGUISHER CABINET FIRE HOSE CAB.	TYP TV	TYPICAL TEMPERING VALVE	\$	ON/OFF SWITCH	original condition, at the expense of the Trade Contractor that caused the damage.
HMS N. -A	FLAT HEAD METAL SCREW FINISH FULL LOAD AMPS	UL	UNDERWRITERS LABORATORIES			
ASH. /	FLASHING FIRE MAIN	UON UR	UNLESS OTHERWISE NOTED URINAL	FSC	FAN SPEED CONTROL	
C F	FACE OF CONCRETE FACE OF FINISH	V	VENT			
M PF C	FEET PER MINUTE FIREPROOFING FAN SPEED CONTROL	V VD VTR	VENT VOLUME DAMPER VENT THRU ROOF	SD	DUCT SMOKE DETECTOR	
D L	FAN SPEED CONTROL FIRE/SMOKE DAMPER FIRE SPRINKLER LINE	VSAD	VARIBLE SUPPLY AIR DIFFUSER			
R JNC	FLUE THRU ROOF FUNCTION	W	WASTE LINE	<b></b>	POINT OF CONNECTION	
JRR JT	FURRING FUTURE	W/ WB WFD	WITH WET BULB TEMPERATURE WALL FIRE DAMPER			
	GAUGE OR GAGE	WH WHA	WATER HEATER WATER HAMMER ARRESTOR		CEILING EXHAUST FAN	
A ALV EN	GAUGE OR GAGE GALVANIZED GENERAL	W/O WMF	WITHOUT WASHING MACHINE FITTING			
l L	GALVANIZED IRON GLASS	WP WT	WATERPROOF WEIGHT		FURNACE (VERTICAL)	
PM R	GALLONS PER MINUTE GRADE	YD	YARD	<b>V</b>	(	
RD	GROUND GAS LLINE		<del>.</del>		FURNACE (HORIZONTAL)	
				الللب اللا	TORRANCE (HOMIZONIAL)	
					CONDENSING LIMIT	
					CONDENSING UNIT	

## **GENERAL MECHANICAL NOTES**

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT A. Within the Contract Documents relating to mechanical work, manufacturer's names, catalog numbers, and other proprietary references to materials and equipment are made. Such references are made to establish the standards of quality and type required, and not to limit competition. Acceptable manufacturer's of competitive products are listed in applicable sections as "approved equals". Reasonable requests for substitution or additions to "approved equals" will be considered, but the Mechanical Engineer will be the sole judge of acceptability of items proposed as

B. materials and equipment used in carrying out these specifications shall bear UL or other recognized testing laboratory label when such labels are available. PART 3 - EXECUTION

3.1 LOCATIONS

A. Mechanical layouts indicated on drawings are diagrammatic. Exact locations of duct, and equipment may vary because of conflicts with work of other trades. Work out conflicts where relocation's will not affect operation or appearance of systems. B. Locate equipment requiring periodic servicing so that it is readily accessible. Do not back up service sides to walls, nor place it too close to other equipment to make service impractical. Equipment service clearance shall meet minimum acceptable distance as recommended by

3.2 UTILITIES EXCAVATING AND BACKFILLING

A. Perform trenching, excavating, backfilling for mechanical work in accordance with the appropriate sections and as set forth below

1. perform work necessary for installation of mechanical utilities.
2. Depth of excavation to provide a minimum of 3' above top of pipe. Excavation to be carried to a depth of at least 6" below bottom of pipe elevation. Fill below pipe (6"), around pipe, and a minimum of 12" above pipe wit sand or class "B" crushed stone tamped firm and even.

Separate topsoil during excavation. Final layer or dirt (12" minimum) to be topsoil. Trenches to be at least 18" wider than pipe with batter boards placed every 25'. Backfilling shall be done to exclude use of rock or stone above sand or crushed stone.

3.3 CUTTING AND PATCHING

equipment manufacturer.

A. Repair or replace routine damage caused by cutting in performance of contract.

B. Correct unnecessary damage caused due to installation of mechanical work. C. Perform repairs with materials which match existing and install in accordance with the appropriate section of these specifications or the best standards of the industry.

3.4 CONNECTION TO EQUIPMENT A. Connect or install equipment shown on mechanical drawings that require mechanical hookups.

3.5 SERVICE OF SYSTEM A. If equipment is placed in service prior to acceptance of the project, operate equipment

strictly in accordance with manufacturer's instructions. Install new filters in equipment prior to owner

Employ competent, qualified personnel in operation of the equipment.
Provide for proper operation and cleanliness.
Open up equipment for inspection as directed by the Superintendent.

Lubricate equipment and perform such other maintenance as required to place it in first class operating condition.

END OF SECTION

SECTION 3
HEATING, VENTILATION AND AIR CONDITIONING PART 1 - GENERAL

1.1 RELATED DOCUMENTS A. Refer to drawings and Contract for materials furnished by Owner, installed by Contractor or furnished and installed by Owner.

1.2 SCOPE OF WORK A. Furnish all labor, supervision, and equipment ( unless equipment is specifically noted as 'Owner furnished' ) for the complete installation of heating, ventilation, and air conditioning system together with all necessary auxiliaries and appurtenances.

1.3 QUALITY ASSURANCE A. Manufacturer's Qualifications — install packaged units, as indicated in the Drawings, in accordance with manufacturer's instructions and requirements. Provide related products and accessories from one manufacturer. Store materials in accordance with manufacturer's recommendation protecting from dirt, moisture, contaminants, and weather.

B. Codes and standards — Perform all installation in accordance with the latest standards as recognized by ASHRAE, SMACNA and all applicable state and local codes and ordinances. C. Workmanship — Experienced, well — trained workers, competent to complete the work as specified, shall perform Labor in conformance with generally accepted trade standards. Install all equipment square and plumb allowing access for proper operation, adjustment and service.

1.4 STRUCTURAL AND SPACE CONDITIONS A. All work shall avoid obstructions and interference with other trades, preserve headroom and keep openings and passageways clear and free.

1.6 VIBRATION AND NOSE A. Install each of the various pieces of equipment to operate without objectionable vibration or noise.

1.7 CUTTING AND PATCHING
A. Cutting or patching necessary to permit the installation of any work under this contract shall be the responsibility of this trade. Cutting and patching shall be coordinated with other trades so as not to impact other work

1.8 BALANCING AND TESTING

A. Test and Balance shall be performed by a nationally qualified Test and Balance Company.

Balance caompany shall be an NEBB company.

B. Contractor shall coordinate testing with the Testing and Balance Company. All systems shall be fully operational prior to commencement of testing. Correct all deficiencies noted in the Test and Balance Report within three days or prior to acceptance of the project. C. Assume responsibility for correcting all items determined to be the result of improper or incomplete installation. Extra testing required due to such deficiencies will be at contractor's expense. D. Contractor shall be responsible for providing test reports to the local Building and Health Departments as required for Certificate of Occupancy.

PART 2 - PRODUCTS

2.1 AIR CONDITIONING UNITS, FANS AND AIR DEVICES A. Shall be as indicated on the Drawings.

2.2 DUCTWORK

A. Rectangular Duct Fabrication, General — Except as otherwise indicated, fabricate rectangular ducts with galvanized sheet steel, in accordance with SMACNA — HVAC Duct Construction Standards, Tables 1-3 through 1-19, including their associated details. Conform to the requirements in the referenced standard for metal thickness, reinforcing types and intervals, tie rod applications, and joint types and intervals.

2.3 DUCT ACCESS PANELS AND DOORS A. In sheet metal work, hollow core double construction of same or heavier gage material as duct in which installed, products by CESCO, Vent Products, Air Balance, or equivalent. 1. Provide Ventlok or approved hinges and latches on all doors; 100 series hinges and latches on low pressure system doors up to 18" maximum dimension, 200 series on larger low pressure system doors and 333 series on high pressure systems.

2. Construct doors up to 18" maximum dimension with one inch overlap fit and gasket with 3/4" by 1/8" sponge rubber, fit larger doors again 1—1/2" by 1/8" flat stock or angle frame and gasket with 3/4" by 1/8" sponge rubber or felt

3. Door swing to be opposite of airflow.

2.4 DUCTWORK SPECIALTIES
A. Volume and Splitter Dampers

1. Galvanized sheet metal blade and frame with Ventfabrice inc. Ventlok operating hardware.

2. For accessible dampers, provide #641 self — locking dial regulators and #644 self — locking dial regulators for insulated ductwork, #637 square end bearing, and #635 spring end bearing, as

3. For inaccessible dampers, provide #666 or #667 concealed locking damper regulator with bearing as above. For static pressures above 3" W.G., provide #640 HiVel dial regulator and #609 HiVel end bearing for accessible dampers. 3. Multi — Louver Volume Dampers

1. 16 - gauge galvanized steel frame. Opposed, 6" wide, 16 - gauge galvanized steel blades. Concealed linkage in frame.

2. Titus #AG - 35 - B, Ruskin #CD35/ OBD or equal

C. Flexible Connections

1. Provide flexible connectors at the discharge and inlet of fans, air handlers, rotating mechanical equipment, and where shown an the Drawings for proper vibration isolation.

2. Neoprene impregnated glass cloth with 24 — gauge galvanized metal frame. Minimum dimensions — 3" metal, 3" fabric, 3" metal.

3. Duro Dyne #MFN4, Vent fabrics #Ventglas, Q Industries, consolidated Kinetics, Elgen, or equal.
D. Backdraft Dampers

1. Provide counterweight type complete with frame, end bearing, counterbalance assembly, blades, and linkage. 2. Install at outside air intake, exhaust outlets, and where shown on Drawings. 3. Pacific Air Products #PRD — 100AL, Ruskin #CBS — 7 or equal by American Warming.

Ē. Turning Vanes

1. Provide turning vanes at all 90° and 45° square elbows. Turning vanes shall be double wall air foil type constructed and installed as per SMACNA.

A. Acceptable Manufacturers: Provide products of the following manufactures, complying with specified requirements. Equivalent products of other manufacturers will be considered. Owens — Corning Fiberglas Corp.

Certainteed Corp. B. All insulation material shall comply with applicable energy conservation regulation for Project C. Provide composite mechanical insulation (insulation, jacket, coverings, sealers, mastics, and adhesives) with flame - speed index of 25 or less, and smoke - developed index of 50 or less, as

tested by ASTM E84 (NFPA 255) method. D. Provide staples, bànds, wires, tape, anchors, corner angles and similar accessories as recommended by insulation manufacturer for applications indicated. E. Provide ceménts, adhesives, coatings, sealers, protective finishes, and similar compounds as recommended by insulation manufacturer for applications indicated.

2.6 REFRIGRANT PIPING

2. Manville Productš Corp. Č

A. Refrigrant piping to be copper seamless, vacuum packed tubing. B. All suction lines to slope back towards condensing unit.

C. All suction lines heading up towards condensing unit shall have a 'P' trap. D. Provide sight glass and filter drier on liquid lines at condensing units. E. All refrigrant piping underground to be contained in a PVC sleeve.

F. Refrigrant piping to be sized and installed as per equipment manufacturers recommendations.

2.7 HVAC CONTROLS

A. Shall be as indicated on the Drawings.

B. Electric and Electronic HVAC Controls — Components and operating features as indicated on the

PART 3 - EXECUTION

3.1 HVAC SYSTEM INSTALLATION, GENERAL

Sequence, coordinate, and integrate the various elements of mechanical systems, materials, and equipment. Comply with the following requirements . Coordinate mechanical systems, equipment, and materials with other building components.

2. Verify all dimensions by field measurements. 3. Arrange for chases, slots, and openings in other building components during progress of construction, to allow for mechanical installations

4. Coordinate the installation of required supporting devices and sleeves to be set in poured in place concrete and other structural components, as they are constructed. 5. Sequence, coordinate, and integrate installations of mechanical materials and equipment for

efficient flow of the work. Give particular attention to large equipment requiring positioning prior to closing in the building. 6. Where mounting heights are not detailed or dimensioned, install systems, materials, and

equipment to provide the maximum headroom possible. 7. Coordinate connection of mechanical systems with exterior underground and overhead

utilities and services. Comply with requirements of governing regulations, franchised service companies, and controlling agencies. Provide required connection for each service. 8. Install systems, materials, and equipment to conform with drawings and specs, to greatest extent possible. Conform to arrangements indicated by the Contract Documents, recognizing that portions of the work are shown only in diagrammatic form. Where coordination requirements conflict with individual system requirements, refer conflict to the Contractor for resolution prior to installation.

9. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces
10. install mechanical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical.

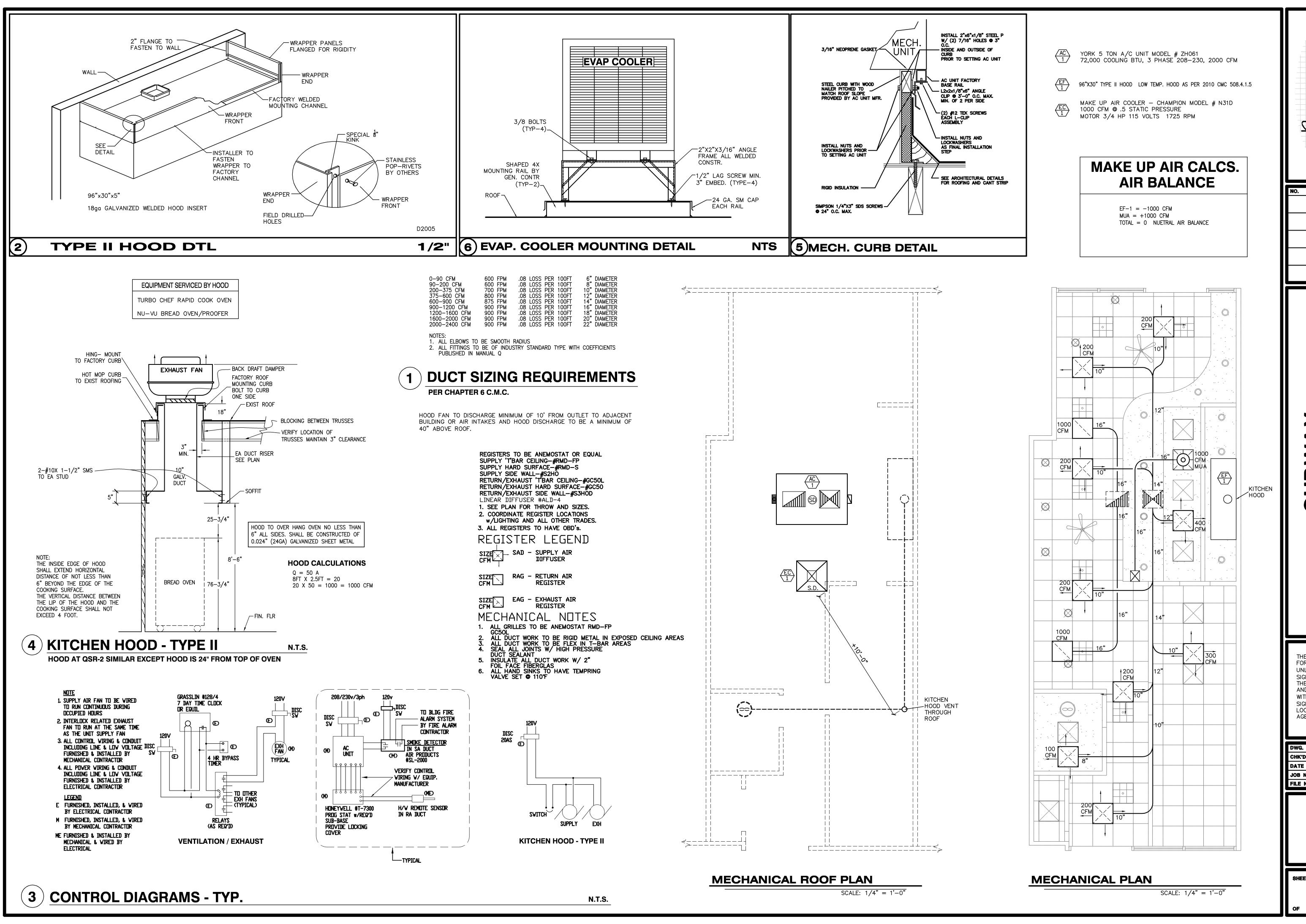
ASQUINI NGINEERING

DATE

10 BL 02 0  $\mathbf{m}$ TO FIRE **Q** 2 4 6 S

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.
CHK'D BY	
DATE	6/13/2011
JOB NO.	6364
FILE NO.	636422



PASUINIE PORTED

103 H Street Suite 300

Bakersfield, CA 93304

Fax: (661) 328-9630

DATE

SUBWAY STORE 12710 54 FIRESTONE BLVD.

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY J.P.

CHK'D BY

DATE 6/13/2011

JOB NO. 6364

FILE NO. 636422

EXP. 12/31/12

M-2

PLUMBING ABBREVIATIONS				SYMBOLS		
				SYMBOL	DESCRIPTION	
&c 	AND ANGLE	HB HC	HOSE BIBB HANDICAPPED	—ф	BALL VALVE	SECTION 1
© ¢	AT CENTER LINE	HD HDWE	HEAD HARDWARE		BRANCH TOP CONNECTION	BASIC MECHANICAL MATERIALS AND METHODS
PL Ø	PROPERTY LINE DIAMETER or ROUND	HI. HORIZ	HIGH HORIZONTAL		BRANCH BOTTOM CONNECTION	PART 1 — GENERAL
(E) (N)	EXISTING NEW	HP HR	HIGH PRESSURE HOUR			1.1 SUMMARY
<u> </u>	PERPENDICULAR POUND or NUMBER	HT HVAC	HEIGHT HEATING, VENTILATING,		CAPPED PIPE	A. LABOR, MATERIALS, TOOLS, AND SERVICES FOR A COMPLETE INSTALLATION OF EQUIPMENT AND SYSTEM CONTAINED
″ А/С	AIR CONDITIONING		AIR CONDITIONING		CHECK VALVE	IN THE CONTRACT DOCUMENTS.
A/C AP AD.	ACCESS PANEL AREA DRAIN	ID INSUL	INSIDE DIAMETER (DIM.) INSULATION	<del> </del>	CLEANOUT	B. PRINCIPAL FEATURES OF THE WORK INCLUDED ARE:
ADJ ADMIN	ADJUSTABLE ADMINISTRATION	INT IW	INTERIOR IRIGATION WATER	Φ	CLEANOUT TO GRADE	1. PLUMBING SYSTEM AND RELATED PIPING INSULATION. 2. DOMESTIC WATER PIPING, VALVES, CONNECTIONS AND RELATED PIPING INSULATION.
AGGR AL	AGGREGATE ALUMINUM				CIRCULATING PUMP	S. LIMITED AREA FIRE PROTECTION (SPRINKLER SYSTEMS)     4. EXCAVATING AND BACKFILLING FOR MECHANICAL WORK; COORDINATE WITH APPROPRIATE TRADE.      5. ALMOHAD ROLL OF THE COURSE AND CITY OF THE PROTECTION O
APPROX APPT	APPROXIMATE APPOINTMENTS	LAV LPG	LAVATORY LIQUID PETROLEUM GAS		CONDENSATE DRAIN	PLUMBING SYSTEM AND RELATED PIPING INSULATION.     DOMESTIC WATER PIPING, VALVES, CONNECTIONS AND RELATED PIPING INSULATION.     LIMITED AREA FIRE PROTECTION (SPRINKLER SYSTEMS)     EXCAVATING AND BACKFILLING FOR MECHANICAL WORK; COORDINATE WITH APPROPRIATE TRADE.     ANCHOR BOLTS, SLEEVES. SUPPORTS AND SIMILAR ITEMS TO BE BUILT INTO CONCRETE OR MASONRY.     REPARATION AND SUBMITTAL OF SHOP DRAWING AND PRODUCT DATA.      THEM TO INDICATE LOCATIONS OF
ARCH. ASB	ARCHITECTURAL ASBESTOS			е <del>••</del> -	CONDENSATE "P" TRAP	CONCEALED ITEMS, AND DEVIATIONS MADE TO SUIT CONDITIONS AND PRODUCTION OF MECHANICAL AS— BUILT (RECORD) DRAWINGS.
ASPH ASST	ASPHALT ASSISTANT	M MACH	MEN MACHINE			1.2 JOB CONDITIONS.
AUTO.	AUTOMATIC	MATL MAX.	MATERIAL MAXIMUM		DOMESTIC COLD WATER	A. SUBMITTAL OF BID IMPLIES BIDDER HAS READ APPLICABLE PARAGRAPHS OF THE SPECIFICATIONS AND WILL BE BOUND BY THEIR CONDITIONS.
BD	BOARD	MECH MS	MECHANICAL MOP SINK		DOMESTIC HOT WATER	1.3 LOCAL CONDITIONS
BD (BF) (BG) BLDG	BELOW FINISH FLOOR BELOW FINISH GRADE	MTL MFGR	METAL MANUFACTURER		DOMESTIC HOT WATER RETURN	A. CONFORM WITH LOCAL CONDITIONS. COORDINATE WITH LOCAL UTILITIES ON SIZE OF UTILITY SERVICE.
BLKG	BUILDING BLOCKING	MH MIN MISC	MANHOLE MINIMUM MISCELLANEOUS		EXISTING WASTE OR SOIL & WASTE	1.4 INTENT
BM BOT	BEAM BOTTOM	MONIT	MONITOR	44	FIRE HYDRANT	A. THE CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) DESCRIBE THE PLUMBING WORK OF THIS PROJECT ANY ITEMS MENTIONED IN ONE PART SHALL BE AS BINDING AS THOUGH MENTIONED IN BOTH.
BV	BALL VALVE	N	NORTH	Φ—	FLOOR CLEANOUT	
СВ	CATCH BASIN	NIC NO. or #	NOT IN CONTRACT		FLOOR SINK	B. THE CONTRACT DOCUMENTS FORM A GUIDE FOR A COMPLETE PLUMBING INSTALLATION. WHERE AN ITEM IS REASONABLY NECESSARY BUT NOT SPECIFICALLY MENTIONED, SUCH AS PIPING OFFSETS, DRAINS, ETC., FOR A COMPLETE SYSTEM, PROVIDE SAME.
CD CEM	CONDENSATE DRAIN CEMENT	NO. OF # NOM NTS	NOMBER NOMINAL NOT TO SCALE			
CER CI	CERAMIC CAST IRON	NIS	NOT TO SCALL	палапиянальна С паланальнальнальна	GAS	C. PLUMBING LAYOUTS INDICATED ON DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATIONS OF PIPES, AND EQUIPMENT SHALL BE GOVERNED BY THE DRAWINGS OF RELATED TRADES.
CLG CLG	CONTROL JOINT CEILING	OA OAV	OVERALL OXYGEN, AIR & VACUUM	<b>O</b> -[X]-	GAS COCK	1.5 DEVIATIONS
CLKG CLR	CAULKING CLEAR	OC OVHD	ON CENTER OVERHEAD	<del>⇔</del>	GAS PRESSURE REGULATOR	A. NO DEVIATIONS FROM SPECIFICATIONS AND DRAWINGS SHALL BE MADE WITHOUT FULL KNOWLEDGE AND WRITTEN
COL	CLEANOUT COLUMN COMPRESSED	OX.	OXYGEN	<del></del>	GATE VALVE	CONSENT OF CONSTRUCTION MANAGER.
COMP CONC CONF	CONCRETE CONFERENCE	PTN	PARTITION	O-maring Barantan	HOSE BIBB	B. SHOULD CONTRACTOR FIND, DURING PROGRESS OF WORK, CONDITIONS WHICH DICTATE A MODIFICATION OF ANY PARTICULAR REQUIREMENTS, REPORT SUCH ITEM PROMPTLY FOR DECISION OF INSTRUCTIONS.
CONF CONN CONST	CONFERENCE CONNECTION CONSTRUCTION	PHYS PR	PHYSICAL PRESSURE REGULATOR	·	PIPE RISER (ELBOW)	1.6 QUALITY ASSURANCE
CONT	CONTINUOUS CORRIDOR	PVC PLAS	POLY-VINYL CLORIDE PIPE PLASTER		, ,	A. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES.
COTG CP	CLEANOUT TO GRADE CIRCULATING PUMP	PLYWD POC	PLYWOOD POINT OF CONNECTION	Θ	PIPE DROP (ELBOW)	B. COMPLY WITH APPLICABLE REQUIREMENTS OF RECOGNIZED INDUSTRY ASSOCIATIONS WITH PROMULGATE STANDARDS FOR THE VARIOUS TRADES. ( SEE INDIVIDUAL SECTIONS OF DIVISION 15 )
CKS CTR	COUNTERSUNK CENTER	PREFAB PREP	PREFABRICATED PREPARATION	<del>_</del> <del></del>	PIPE DROP OR RISER	C. EMPLOY ONLY QUALIFIED JOURNEYMEN FOR THIS WORK, EMPLOY COMPETENT, QUALIFIED PLUMBERS TO
CV	CHECK VALVE	PT PW	PLUGGED TEE PROCESSED WATER	<del></del>	POINT OF CONNECTION	SUPERVISE THE WORK.
DBL	DOUBLE				PROCESS WASTE	1.7 CODES AND STANDARDS
DCW DEPT	DOMESTIC COLD WATER DEPARTMENT	R RAD.	RISER RADIUS		SHUT-OFF VALVE	A. PERFORM WORK SPECIFIED IN DIVISION 15 IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS LISTED BELOW, AND SUCH STANDARDS THAT MAY BE SPECIFIED IN OTHER SECTIONS. WHEN THESE SPECIFICATIONS ARE
DET DF	DETAIL DRINKING FOUNTAIN	RD REF	ROOF DRAIN REFERENCE		SHUT-OFF VALVE IN YARDBOX	MORE STRINGENT, THEY TAKE PRECEDENCE. IN CASE OF CONFLICT, OBTAIN A DECISION FROM THE PLUMBING ENGINEER.
DHW DHWR	DOMESTIC HOT WATER DOMESTIC HOT WATER RETURN	REINF REQD	REINFORCED REQUIRED	-	SOIL & WASTE	1. NFPA 54: NATIONAL FUEL AND GAS CODE.
DIR	DIAMETER DIRECTOR	RM RWL	ROOM RAINWATER LEADER	<u> </u>	TRAP PRIMER	3. NFPA 101: LIFE SAFETY CODE. 4. APPLICABLE STATE BUILDING CODE. 5. MATIONAL STANDARD BUILDING CODE.
DN DR	DOWN DOOR	S	SINK or SOUTH			5. NATIONAL STANDARD PLUMBING CODE ( OR APPLICABLE STATE PLUMBING CODE). 6. HANDICAPPED CODE ANSI A117.1 AND ADA 7. APPLICABLE STATE ENERGY CODE.
DS DSP	DOWNSPOUT DRY STANDPIPE	SA SB	WATER HAMMER ARRESTER SPLASH BLOCK		VENT	8. AGA: AMERICAN GAS ASSOCIATION. 9. ANSI: AMERICAN NATIONAL STANDARDS INSTITUTE.
DTW DWG	DOMESTIC TEMPERED WATER DRAWING	SCHD SDL	SCHEDULE STORM DRAIN LINE		VENT OFFSET	10. ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS. 11. MSS: MANUFACTURER'S STANDARDIZATION SOCIETY OF THE VALVE AND FITTING INDUSTRY.
F	FACT	SECT. SH	SECTION SHOWER	•	VENT THRU ROOF	12. NEMA: NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION 13. NFPA: NATIONAL FIRE PROTECTION ASSOCIATION.
EA EDF	EAST EACH ELECTRIC DRINKING FOUNTAIN	SHT SIM	SHEET SIMILAR	Q <sub>/</sub>	WALL CLEANOUT	14. UL: UNDERWRITERS' LABORATORIES. INC.
ELEC ELEV	ELECTRIC DRINKING FOONTAIN ELECTRICAL ELEVATION	SL SPEC	SPRINKLER LINE SPECIFICATION		WASTE	1.8 COORDINATION
EMER ENCL	EMERGENCY ENCLOSURE	SOV SS	SHUT-OFF VALVE SERVICE SINK		WATER HAMMER	A. CAREFULLY EXAMINE SPECIFICATIONS AND DRAWINGS TO BE THOROUGHLY FAMILIAR WITH ITEMS WHICH REQUIRE PLUMBING AND COORDINATION.
EO EP	ELECTRICAL OUTLET ELECTRICAL PANEL	SST STD	STAINLESS STEEL STANDARD			B. COORDINATE WITH OTHER DIVISIONS TO LEAVE PROPER CHASES AND OPENINGS. PLACE OUTLETS, ANCHORS,
EQ EQUIP	EQUAL EQUIPMENT	STL STOR	STEEL STORAGE			SLEEVES, AND SUPPORTS PRIOR TO POURING CONCRETE OF INSTALLATION OF MASONRY WORK.
(E) EXP	EXISTING EXPANSION	STRUCT SUPV	STRUCTURAL SUPERVISOR			1.9 SUBMITTALS  A. SUBMITTALS ARE ONLY REQUIRED FOR SPECIFIC ITEMS OF EQUIPMENT OR MATERIAL LISTED IN INDIVIDUAL SECTIONS
EXPO. EXT	EXPOSED EXTERIOR	SUSP S&W	SUSPENDED SOIL & WASTE			OF THESE SPECIFICATIONS.
			TOD OF 0UPD			B. WITHIN 15 DAYS AFTER AWARD OF CONTRACT FOR THIS WORK, SUBMIT A LIST OF PROPOSED MANUFACTURERS (OF EQUIPMENT OR MATERIAL TO BE USED) FOR APPROVAL. SUBMIT THIS LIST BEFORE SUBMITTAL OF SHOP DRAWINGS
FA FCO	FIRE ALARM FLOOR CLEANOUT	TC TEL TER	TOP OF CURB TELEPHONE TERRAZZO			AND PRODUCT DATA, AND OBTAIN APPROVAL BEFORE SUBMITTING REQUIRED ITEMS.
FD FDN	FLOOR DRAIN FOUNDATION	THK	THICK			C. SHOP DRAWINGS (NOT REQUIRED FOR OWNER FURNISHED EQUIPMENT).
FE FEC	FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET	TOC TP	TOP OF CONCRETE TRAP PRIMER TRANSCRIPTION			1.10 DELIVERY AND STORAGE
FH FHC	FIRE HYDRANT FIRE HOSE CAB.	TRANS TREAT.	TRANSCRIPTION TREATMENT TYPICAL			A. INSOFAR AS POSSIBLE, DELIVER ITEMS IN MANUFACTURER'S ORIGINAL UNOPENED PACKAGING. WHERE THAT IS NOT PRACTICAL. COVER ITEMS WITH PROTECTIVE MATERIALS TO KEEP THEM FROM BEING DAMAGED. USE CARE IN
FHMS FIN.	FLAT HEAD METAL SCREW FINISH	TYP TV	TEMPERING VALVE			LOADING, TRANSPORT, UNLOADING, AND STORAGE TO KEEP ITEMS FROM BEING DAMAGED.
FL FLASH.	FLOOR FLASHING	UL	UNDERWRITERS LABORATORIES			1.11 FIRE RATINGS
FM FOC	FIRE MAIN FACE OF CONCRETE	UON UR	UNLESS OTHERWISE NOTED URINAL			A. MATERIALS USED ANYWHERE IN THE WORK MUST HAVE NFPA RATINGS AS FOLLOWING:
FOF FR FRPF	FACE OF FINISH FRAME FIREPROOFING	OIV.	CINITAL			1. FLAME SPREAD — NOT OVER 25 2. SMOKE DEVELOPED — NOT OVER 50
FS FSH	FLOOR SINK FIRE SPRINKLER HEAD	V VA	VENT VALVE			3. FUEL CONTRIBUTED — NOT OVER 25
FSL	FIRE SPRINKLER HEAD FIRE SPRINKLER LINE FLUE THRU ROOF	VC VTR	VITRIFIED CLAY VENT THRU ROOF			B. MATERIALS SHALL BE "SELF EXTINGUISHING".
FTR FUNC FURR	FUNCTION FURRING	νο	VENT OFFSET			
FURK	FUTURE	W	WASTE LINE			
GA	GAUGE	₩/ WC	WITH WATER CLOSET			
GALV GC	GALVANIZED GAS COCK	WCO WH	WALL CLEANOUT WATER HEATER			
GEN GI	GENERAL GALVANIZED IRON	WHA W/O	WATER HAMMER ARRESTOR WITHOUT			
GL GR	GLASS GRADE	WMF WP	WASHING MACHINE FITTING WATERPROOF			
GRD G	GROUND GAS LLINE	WT	WEIGHT			
		YD	YARD			

**GENERAL PLUMBING NOTES** 

1.12 PERMITS AND FEES

A. OBTAIN, PAY FOR, AND DELIVER PERMITS, CERTIFICATION OF INSPECTION, AND OTHER SUCH ITEMS REQUIRED BY THE AUTHORITIES HAVING JURISDICTION. DELIVER CERTIFICATION TO THE CONSTRUCTION MANAGER PRIOR TO FINAL ACCEPTANCE OF THE WORK. AN INSPECTION CERTIFICATE FOR EACH CLASS OF WORK REQUIRING INSPECTION MUST BE SUBMITTED PRIOR TO OR WITH THE FINAL PAYMENT INVOICE. THE RESPONSIBLE TRADE CONTRACTOR MUST MAKE APPLICATION FOR THE INSPECTION, COORDINATE SAME AND PAY THE REQUIRED INSPECTION FEE.

1.13 EXTENDED WARRANTIES

A. WORK FURNISHED UNDER THE CONTRACT SHALL BE WARRANTED AGAINST DEFECTS IN WORKMANSHIP AND (CONTRACTOR FURNISHED) MATERIALS FOR A PERIOD OF NOT LESS THAT ONE (1) YEAR, OR AS OTHERWISE SPECIFIED, FROM THE DATE OF FINAL ACCEPTANCE OF THE INSTALLATION, DEFECTS OF WORKMANSHIP DEVELOPING DURING THIS PERIOD SHALL BE REMEDIED, AND DEFECTIVE MATERIAL REPLACED, WITHOUT ADDITIONAL COST. WHEN DEFECTS IN A TRADE CONTRACTOR'S WORK CAUSES DAMAGE TO THE WORK OF THE OTHER TRADE CONTRACTORS, SUCH DAMAGE SHALL BE REPAIRED BY THE TRADE CONTRACTOR CAUSING DAMAGE AND WORK RESTORED TO ITS ORIGINAL CONDITION, AT THE EXPENSE OF THE TRADE CONTRACTOR THAT CAUSED THE DAMAGE.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

A. WITHIN THE CONTRACT DOCUMENTS RELATING TO PLUMBING WORK, MANUFACTURER'S NAMES, CATALOG NUMBERS, AND OTHER PROPRIETARY REFERENCES TO MATERIALS AND EQUIPMENT ARE MADE. SUCH REFERENCES ARE MADE TO ESTABLISH THE STANDARDS OF QUALITY AND TYPE REQUIRED, AND NOT TO LIMIT COMPETITION. ACCEPTABLE MANUFACTURER'S OF COMPETITIVE PRODUCTS ARE LISTED IN APPLICABLE SECTIONS AS "APPROVED EQUALS". REASONABLE REQUESTS FOR SUBSTITUTION OR ADDITIONS TO "APPROVED EQUALS" WILL BE CONSIDERED, BUT THE MECHANICAL ENGINEER WILL BE THE SOLE JUDGE OF ACCEPTABILITY OF ITEMS PROPOSED AS

B. MATERIALS AND EQUIPMENT USED IN CARRYING OUT THESE SPECIFICATIONS SHALL BEAR UL OR OTHER RECOGNIZED TESTING LABORATORY LABEL WHEN SUCH LABELS ARE AVAILABLE.

PART 3 — EXECUTION 3.1 LOCATIONS

A. PLUMBING LAYOUTS INDICATED ON DRAWINGS ARE DIAGRAMMATIC. EXACT LOCATIONS OF PIPES, AND EQUIPMENT MAY VARY BECAUSE OF CONFLICTS WITH WORK OF OTHER TRADES. WORK OUT CONFLICTS WHERE RELOCATION'S WILL NOT AFFECT OPERATION OR APPEARANCE OF SYSTEMS.

B. LOCATE EQUIPMENT REQUIRING PERIODIC SERVICING SO THAT IT IS READILY ACCESSIBLE. DO NOT BACK UP SERVICE SIDES TO WALLS, NOR PLACE IT TOO CLOSE TO OTHER EQUIPMENT TO MAKE SERVICE IMPRACTICAL. EQUIPMENT SERVICE CLEARANCE SHALL MEET MINIMUM ACCEPTABLE DISTANCE AS RECOMMENDED BY EQUIPMENT MANUFACTURER.

3.2 UTILITIES EXCAVATING AND BACKFILLING

A. PERFORM TRENCHING, EXCAVATING, BACKFILLING FOR PLUMBING WORK IN ACCORDANCE WITH THE APPROPRIATE SECTIONS AND AS SET FORTH BELOW

1. PERFORM WORK NECESSARY FOR INSTALLATION OF PLUMBING UTILITIES.
2. DEPTH OF EXCAVATION TO PROVIDE A MINIMUM OF 3' ABOVE TOP OF PIPE. EXCAVATION TO BE CARRIED TO A DEPTH OF AT LEAST 6" BELOW BOTTOM OF PIPE ELEVATION. FILL BELOW PIPE (6"), AROUND PIPE, AND A MINIMUM OF 12" ABOVE PIPE WIT SAND OR CLASS "B" CRUSHED STOME THE TOPSON FOR SEPARATE TOPSOIL DURING EXCAVATION. FINAL LAYER OR DIRT (12" MINIMUM) TO BE TOPSOIL. TRENCHES TO BE AT LEAST 18" WIDER THAN PIPE WITH BATTER BOARDS PLACED EVERY 25'. BACKFILLING SHALL BE DONE TO EXCLUDE USE OF ROCK OR STONE ABOVE SAND OR CRUSHED STONE.

3.3 CUTTING AND PATCHING

A. REPAIR OR REPLACE ROUTINE DAMAGE CAUSED BY CUTTING IN PERFORMANCE OF CONTRACT.

B. PERFORM REPAIRS WITH MATERIALS WHICH MATCH EXISTING AND INSTALL IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THESE SPECIFICATIONS OR THE BEST STANDARDS OF THE INDUSTRY.

3.4 CONNECTION TO EQUIPMENT

A. CONNECT OR INSTALL EQUIPMENT SHOWN ON MECHANICAL DRAWINGS THAT REQUIRE PLUMBING

1. ROUGH - IN PIPING AND CONNECT EQUIPMENT 2. PROVIDE PIPING, SHUTOFF VALVES, AND UNIONS REQUIRED FOR A COMPLETE INSTALLATION,

3.5 SERVICE OF SYSTEM

A. EMPLOY COMPETENT, QUALIFIED PERSONNEL IN OPERATION OF THE EQUIPMENT.

B. PROVIDE FOR PROPER OPERATION AND CLEANLINESS. END OF SECTION

SECTION 2

PLUMBING

PART 1 — GENERAL

1.1 SCOPE OF WORK

A. FURNISHING OF ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, SERVICE, AND RELATED ITEMS NECESSARY TO COMPLETE THE INSTALLATION OF THE PLUMBING SYSTEM AS ILLUSTRATED ON THE DRAWING AND AS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. HOT & COLD WATER SYSTEM WITH COMPLETE CONNECTIONS FROM METER TO ALL PLUMBING FIXTURES & EQUIPMENT REEQUIRING WAWTER CONNECTIONS

2. SOIL, WASTE, VENT AND CONDENSATE SYSTEM LINES INSIDE AND OUTSIDE THE BUILDING.

TRENCHING AND BACKFILLING.

4. FINAL PLUMBING CONNECTIONS TO HEATING AND AIR CONDITIONING EQUIPMENT.

GAS PIPING TO HEATING, WATER HEATERS AND ALL OTHER GAS BURNING EQUIPMENT. PART 2 - PRODUCTS

2.1 DESCRIPTION

A. SOIL, WASTE, AND VENT PIPING BELOW FLOOR TO 5'-0" OUTSIDE BUILDING: STANDARD WEIGHT COATED CAST IRON SOIL PIPE AND CAST IRON/ NEOPRENE GASKET FITTINGS. YARD PIPING, PIPE AND FITTINGS. A.B.S. OR P.V.C. SCHEDULE 40 PIPE AND FITTINGS MAY BE INSTALLED, AS APPROVED BY LOCAL AUTHORITY IN CONCEALED LOCATIONS ONLY. EXCEPTION: ALL SOIL, WASTE & VENTS LOCATED WITHIN A FIRE RATED WALL SHALL BE METALLICS.(STEEL, CAST IRON ECT., NO PVC) IT SHALL BE THE RESPONIBLITY OF THE PLUMBER TO VERIFY ALL FIRE RATED WALLS & CONSTRUCTION AS SHOWN ON THE ARCHITECTURAL DRAWINGS & COORDINATE WITH THE GENERAL CONTRACTOR

B. SOIL, WASTE AND VENT PIPING ABOVE FLOOR: STANDARD WEIGHT COATED CAST IRON PIPE AND STAINLESS STEEL/ NEOPRENE GASKET FITTING, OR A.B.S. OR P.V.C. SCHEDULE 40, AS APPROVED BY LOCAL AUTHORITY IN

C. HOT & COLD WATER PIPING ABOVE FLOOR: TYPE "L" COPPER, HARD DRAWN. BELOW GROUND OUTSIDE OF BUILDING: TYPE "K" SOFT DRAWN COPPER TUBING WITH OUT JOINTS.

D. CONDENSATE DRAIN PIPING: TYPE "M" COPPER WITH 95-5 TIN ANTIMONY SOLDER AND WROUGH COPPER FITTINGS OF INDIRECT WASTE PIPING: TYPE "M" COPPER WITH 95-5 TIN ANIMONY SOLDER AND WROUGHT COPPER FITTINGS OR P.V.C. SCHEDULE 40, AS APPROVED BY LOCAL AUTHORITY.

UNDERGROUND GAS PIPING: SCHEDULE 40 BLACK STEEL PIPE WITH LONG RADIUS STEEL WELDING FITTINGS INCLUDING CATHOLIC PROTECTION OR POLYETHYLENE AS APPROVED BY LOCAL GAS COMPANY AND AUTHORITY HAVING JURISDICTION. INSTALLATION OF GAS SERVICE PIPING IN VENTED CONDUIT AND MEETING WITH THE LOCAL GAS COMPANY'S APPROVAL.

G. GAS PIPING ABOVE GROUND: SCHEDULE 40 BLACK STEEL WITH 125 POUND BLACK MALLEABLE IRON SCREWED FITTINGS. GAS PIPING COMPOUND AT JOINTS IN COMPLIANCE WITH NFPA BULLETIN #45 AND LOCAL APPLICABLE CODES AND SUITABLE FOR NATURAL GAS SERVICE. INSTALL MOISTURE TRAPS ON HVAC UNITS, WATER HEATERS, AND KITCHEN EQUIPMENT

H. STORM PIPING BELOW GROUND: STANDARD WEIGHT COATED CAST IRON PIPE AND STAINLESS STEEL/ NEOPRENE GASKET FITTING, OR A.B.S. OR P.V.C. SCHEDULE 40. AS APPROVED BY LOCAL AUTHORITY IN CONCEALED

I. STORM PIPING ABOVE GROUND: STANDARD WEIGHT COATED CAST IRON PIPE AND STAINLESS STEEL/ NEOPRENE GASKET FITTING, OR A.B.S. OR P.V.C. SCHEDULE 40, AS APPROVED BY LOCAL AUTHORITY.

J. TRAPS AND VENTS FOR SERVICE SINK: A.B.S. OR P.V.C. SCHEDULE 40, AS APPROVED BY LOCAL

2.2 INSULATION

A. INSULATE ALL HOT AND COLD WATER COPPER PIPING WITH AT LEAST 1/2" THICK FOAM RUBBER OR FOAM PLASTIC

TYPE PIPE INSULATION

A. ALL FIXTURES: AS INDICATED ON DRAWINGS WITH EQUAL PRODUCTS FURNISHED BY AMERICAN STANDARD,

KOHLER, ELJER OR EQUAL. 2.4 CLEANOUTS, FLOOR DRAINS, FLOOR SINKS, AND ROOF DRAINS.

A. ALL ACCESSORIES, AS INDICATED ON DRAWING WITH EQUAL PRODUCTS FURNISHED BY WADE, JOSAM, OR ZURN BEING ACCEPTABLE.

2.5 EQUIPMENT

A. SHUTOFF VALVES UNDERNEATH LAVATORIES, TANK TYPE WATER CLOSETS, AND KITCHEN EQUIPMENT WITH CHROME PLATED ANGLE STOP VALVES WITH CHROME PLATED ESCUTCHEON PLATES.

B. HOSE BIBBS — AS SCHEDULED ON DRAWINGS.

C. VACUUM BREAKERS — AS SCHEDULED ON DRAWINGS.

D. BACKFLOW PREVENTERS — AS SCHEDULED ON DRAWINGS.

E. GAS COCK — PLUG VALVE IRON BODY, BRONZE TAPERED PLUG, LUBRICATED, THREADED ENDS. RATED FOR 200 CWP, AGA AND UL LISTED.

PART 3 - INSTALLATION

A. RUN ALL PIPING CONCEALED EXCEPT WHERE OTHERWISE INDICATED ON DRAWINGS.

B. INSTALL VALVES TRAPS CLEANOUT AND OTHER APPARATUS IN AN EASILY ACCESSIBLE LOCATION

C. INSTALL SOIL, WASTE VENT OFFSETS AND CONDENSATE DRAINS WITH A MINIMUM UNIFORM GRADE OF ONE QUARTER INCH TO THE FOOT.

D. MAINTAIN HOT AND COLD WATER LINES AT LEAST 6 INCHES APART WHERE PIPING IS PARALLEL.

E. PROVIDE ESCUTCHEON PLATES WHERE ALL PIPES PASS THROUGH A FINISHED WALL.

3.2 PLUMBING FIXTURES

A. FURNISH AND INSTALL ALL PLUMBING FIXTURES COMPLETE WITH ALL EQUIPMENT FITTINGS, TRIMMING, AND ACCESSORIES.

B. ALL FIXTURES: GRADE A, WHITE.

C. EXPOSED PIPING TO FIXTURES: A PRODUCT OF THE FIXTURE MANUFACTURE.

D. PROVIDE STOPS AS MANUFACTURED BY THE FIXTURE MANUFACTURER, WITH METAL — TO — SEAT FOR ALL FIXTURES AND EQUIPMENT.

3.3 TEST

A. THE PLUMBING SYSTEM AND ASSOCIATED SYSTEM IS SUBJECT TO FINAL APPROVAL OF THE OWNER'S REPRESENTATIVE AND CODE AUTHORITIES HAVING JURDICTION. PERFORM ALL TESTS REQUIRED TO SHOW CODE COMPLIANCE AS DIRECTED.

3.4 CLEANING AND PROTECTION

A. AFTER THE PLUMBING PIPING HAS BEEN INSTALLED, INSPECTED, AND APPROVED, FLUSH THE PIPING SYSTEM TO REMOVED ANY FOREIGN MATTER FROM THE PIPES.

3.5 MAINTENANCE

A. MAINTAIN ALL PARTS OF THE PLUMBING FIXTURES AND ASSOCIATED EQUIPMENT THROUGHOUT THE GUARANTEE

END OF SECTION

PASQUINI NGINERRING DATE

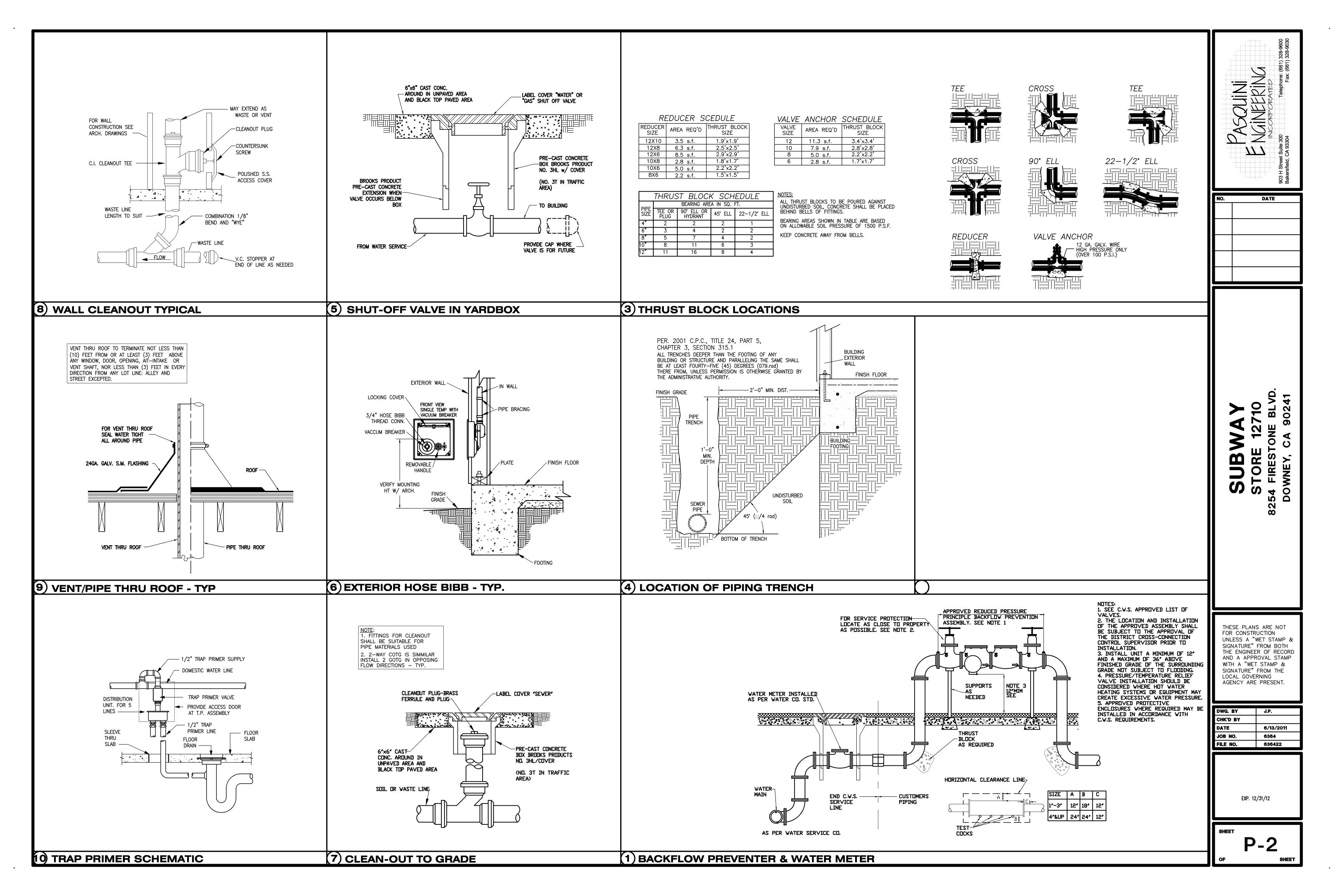
10 **m** 0 0 TO FIRE S S

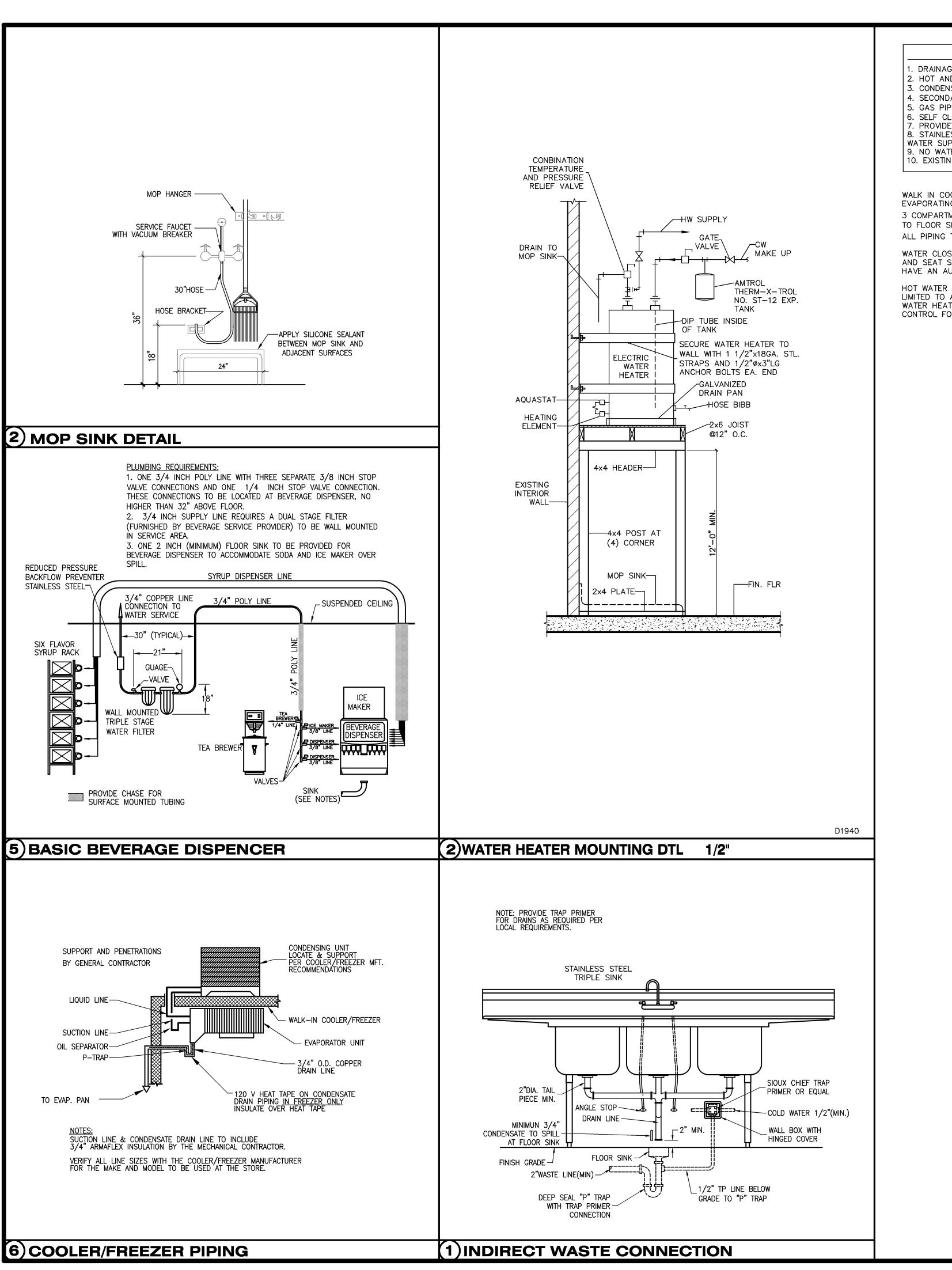
THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.
CHK'D BY	
DATE	6/13/2011
JOB NO.	6364
FILE NO.	636422

EXP. 12/31/12

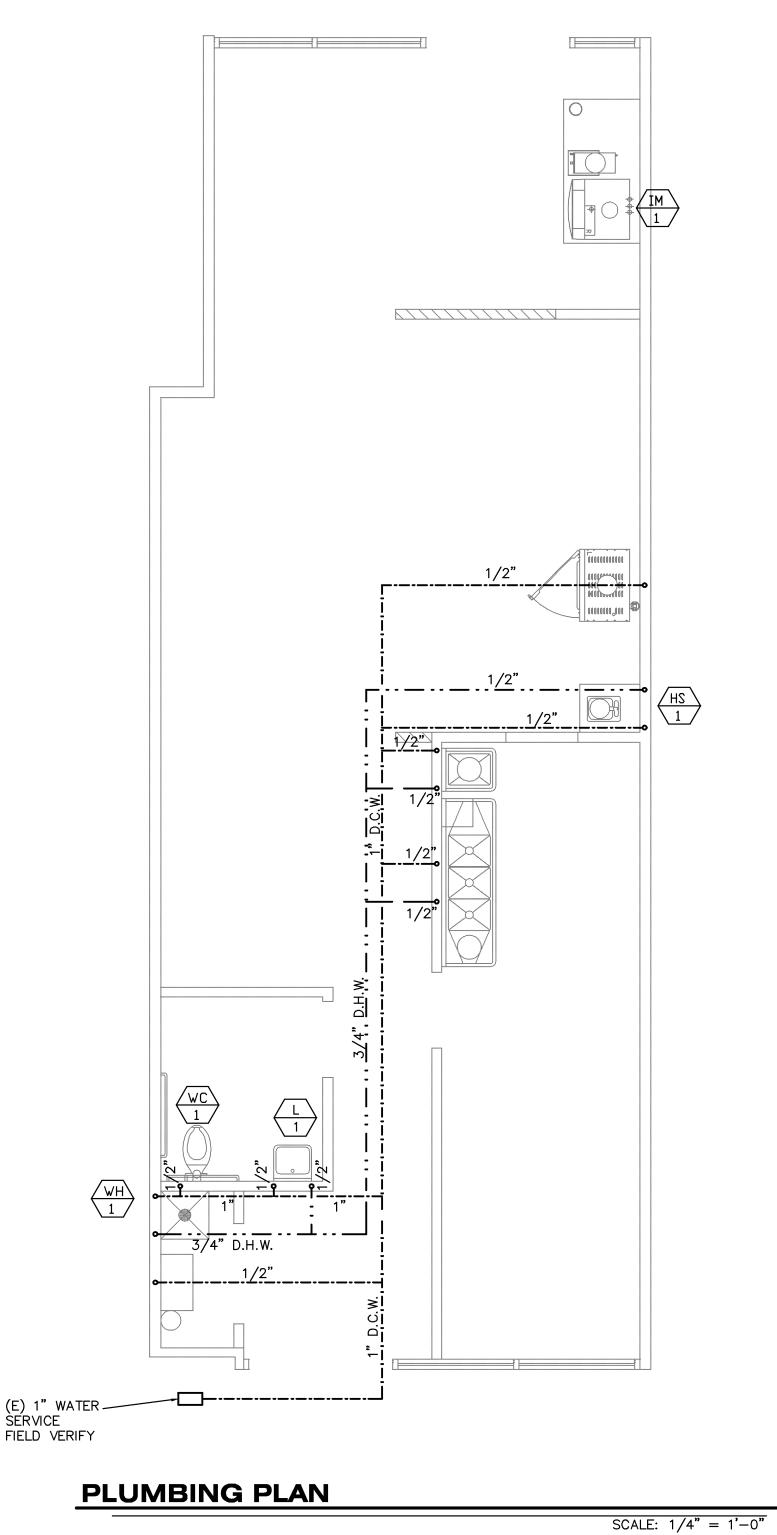
Ρ.





GENERAL PLUMBING NOTES . DRAINAGE, WASTE, AND VENT PIPING TO BE PVC—DWV 2. HOT AND COLD WATER PIPING TO BE TYPE "M" COPPER 3. CONDENSATE DRAIN PIPING TO BE TYPE "M" COPPER 4. SECONDARY DRAIN PIPING TO BE TYPE "M" COPPER 5. GAS PIPING TO BE SCHEDULE 40 BLACK STEEL W/MALLEABLE FITTINGS 6. SELF CLOSING/ METERING VALVES ON ALL LAVS EXCEPT FOR PRIVATE OFFICES 7. PROVIDE CLEÁN OUTS EVER 100 FEET 8. STAINLESS STEEL REDUCED PRESSURE; BACKFLOW PREVENTER SHALL BE USED IN THE POTABLE WATER SUPPLY TO CARBONATORS. 9. NO WATER LINES TO BE RAN UNDER CONCRETE BUILDING SLAB 10. EXISTING ROOF DRAINS ON SHELL BUILDING WALK IN COOLER AND FREEZER TO BE FITTED WITH SELF EVAPORATING DRIP PAN FROM MANUFACTURER. 3 COMPARTMENT SINK AND PREP SINK TO DRAIN INDIRECTLY TO FLOOR SINK WITH 1" AIR GAP. ALL PIPING TO BE PVC. WATER CLOSET BOWLS SHALL BE OF THE ELONGATED TYPE AND SEAT SHALL BE EITHER OF THE OPEN FRONT TYPE OR HAVE AN AUTOMATIC SEAT COVER DISPENSER

HOT WATER DELIVERED PUBLIC USE LAVATORIES SHALL BE LIMITED TO A MAXIMUM TEMPERATURE OF 120 DEGREES. THE WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED A CONTROL FOR MEETING THIS PROVISION.



		PLUMBING FIXTURE SCHEDULE
N	MARK	DESCRIPTION
$\in$	HS 1	PROVIDED BY OWNER 1/2" D.H.W. & D.C.W., 2"W., 1 1/2"V., 2" W.C.O.
$\left  \leftarrow \right $	FS 1	FLOOR SINK "CECO" 906-2C 2"W., 1 1/2"V.
$\langle$	FD 1	CAST IRON FLOOR DRAIN W/ TAP PRIMER 2" W., 1 1/2" V.
$\langle$	MS 1	FLOOR MOUNTED MOP SINK, "FLLORSTONE" MODEL #FMSR2424-2 "CHICAGO FAUCET" #897-CP FAUCET W/ VACUUM BREAKER AND TOP BRACE. 1/2"H.W./C.W., 2"W., 1 1/2"V.
	WH 1	BRADFORD WHITE ELECTRIC WATER HEATER, MODEL #LD5053-3 3/4"H.W./C.W., T&P TO MS-1 12 KW RATING. 50 GAL. RECOVERY RATE 61.6 GPH
$\left\{ \right.$		ICE MAKER BOX W/HAMMER ARRESTER 'SPECIALTY PRODUCTS' 1/2"D.C.W.
$\langle$	TP 1	TRAP PRIMER SIDUX CHIEF
$\left\{ \right.$	GT 1	ZURN Z1170-800 50 GPM 100 POUND CAPACITY SEE DETAIL ON SHEET 3 OF 4 FOR MANUFACTURE SPECIFICATIONS
$\left\{ \right.$	WC 1	FLOOR MOUNTED A.D.A. WATER CLOSET, "PRO FLO" PF 1600, 17" RIM HEIGHT "BEMIS" #1955C OPEN FRONT WHITE SEAT, BOLT CAPS, (1.0 GALLON/FLUSH) 1/2"C.W., 3"S&W, 2"V
$\langle$		WALL HUNG A.D.A. LAVATORY, "PRO FLO" #PF5504 (20"X18 3/4") "CHICAGO FAUCETS #3300" SELF CLOSING 1/2"H.W./C.W., 2"W., 1 1/2"V.O., 2"W.C.O.

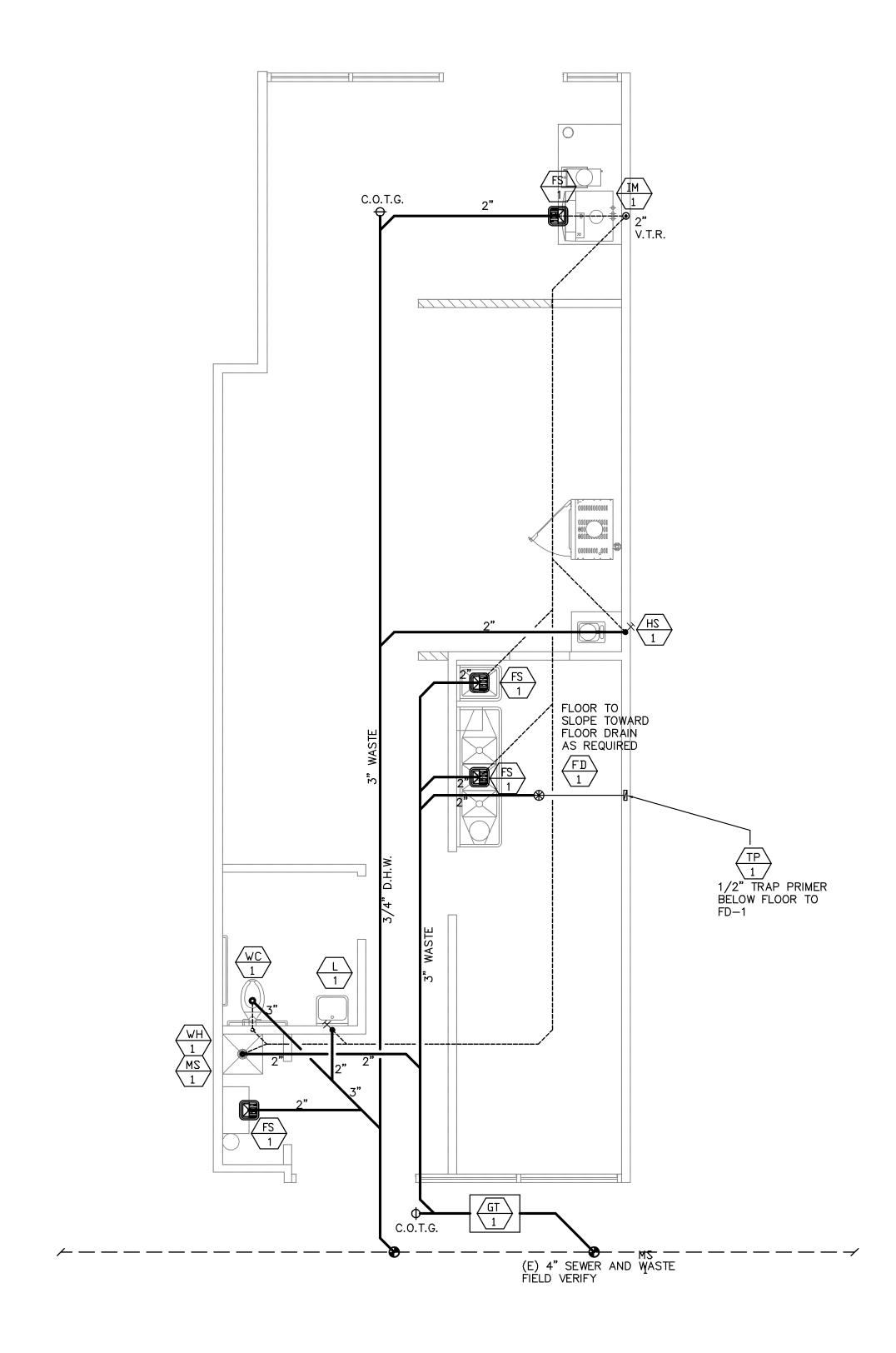
DATE

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.
CHK'D BY	
DATE	6/13/2011
JOB NO.	6364
FILE NO.	636422

EXP. 12/31/12

P-3



SCALE: 1/4" = 1'-0"

PLUMBING PLAN

	PLUMBING FIXTURE SCHEDULE
MARK	DESCRIPTION
HS 1	PROVIDED BY OWNER 1/2" D.H.W. & D.C.W., 2"W., 1 1/2"V., 2" W.C.O.
FS 1	FLOOR SINK "CECO" 906-2C 2"W., 1 1/2"V.
FD 1	CAST IRON FLOOR DRAIN W/ TAP PRIMER 2" W., 1 1/2" V.
MS 1	FLOOR MOUNTED MOP SINK, "FLLORSTONE" MODEL #FMSR2424-2 "CHICAGO FAUCET" #897-CP FAUCET W/ VACUUM BREAKER AND TOP BRACE. 1/2"H.W./C.W., 2"W., 1 1/2"V.
WH 1	BRADFORD WHITE ELECTRIC WATER HEATER, MODEL #LD5053-3 3/4"H.W./C.W., T&P TO MS-1 12 KW RATING. 50 GAL. RECOVERY RATE 61.6 GPH
	ICE MAKER BOX W/HAMMER ARRESTER "SPECIALTY PRODUCTS" 1/2"D.C.W.
TP 1	TRAP PRIMER SIDUX CHIEF
$\left\langle \begin{array}{c} GT \\ 1 \end{array} \right\rangle$	ZURN Z1170-800 50 GPM 100 POUND CAPACITY SEE DETAIL ON SHEET 3 OF 4 FOR MANUFACTURE SPECIFICATIONS
WC 1	FLOOR MOUNTED A.D.A. WATER CLOSET, "PRO FLO" PF 1600, 17" RIM HEIGHT "BEMIS" #1955C OPEN FRONT WHITE SEAT, BOLT CAPS, (1.0 GALLON/FLUSH) 1/2"C.W., 3"S&W, 2"V
L 1	WALL HUNG A.D.A. LAVATORY, "PRO FLO" #PF5504 (20"X18 3/4") "CHICAGO FAUCETS #3300" SELF CLOSING 1/2"H.W./C.W., 2"W., 1 1/2"V.O., 2"W.C.O.

NO. DATE

903 H Street Suite 300

Bakersfield, CA 93304

SUBWAY STORE 12710 8254 FIRESTONE BLY

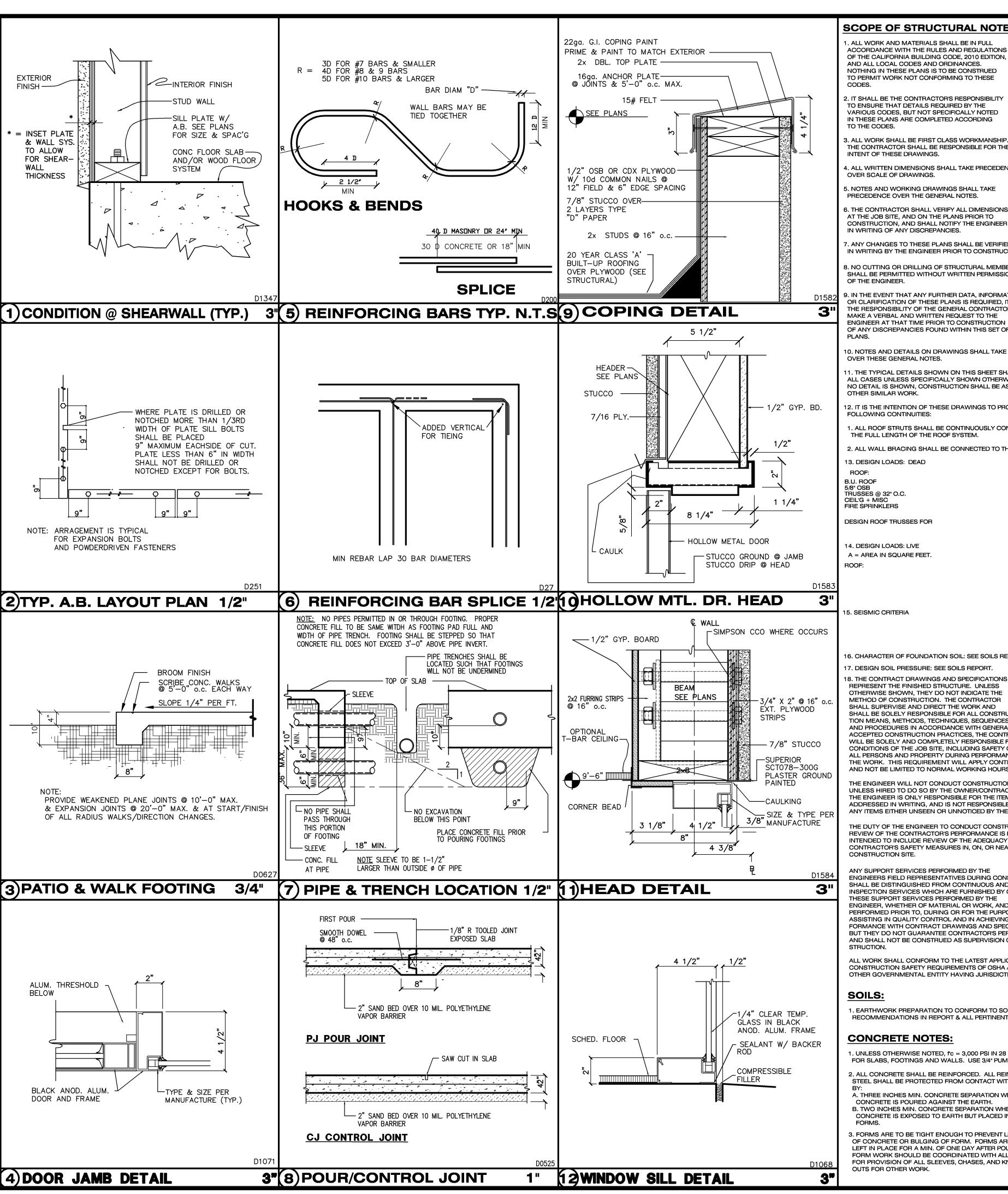
THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP & SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

DWG. BY	J.P.
CHK'D BY	
DATE	6/13/2011
JOB NO.	6364
FILE NO.	636422

EXP. 12/31/12

SHEET

P-4



**SCOPE OF STRUCTURAL NOTES:** 

. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE RULES AND REGULATIONS OF THE CALIFORNIA BUILDING CODE, 2010 EDITION, AND ALL LOCAL CODES AND ORDINANCES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT DETAILS REQUIRED BY THE VARIOUS CODES, BUT NOT SPECIFICALLY NOTED IN THESE PLANS ARE COMPLETED ACCORDING

3. ALL WORK SHALL BE FIRST CLASS WORKMANSHIF THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE

4. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE

5. NOTES AND WORKING DRAWINGS SHALL TAKE

6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE JOB SITE, AND ON THE PLANS PRIOR TO CONSTRUCTION, AND SHALL NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.

7. ANY CHANGES TO THESE PLANS SHALL BE VERIFIED IN WRITING BY THE ENGINEER PRIOR TO CONSTRUCTION.

8. NO CUTTING OR DRILLING OF STRUCTURAL MEMBERS SHALL BE PERMITTED WITHOUT WRITTEN PERMISSION

IN THE EVENT THAT ANY FURTHER DATA, INFORMATION OR CLARIFICATION OF THESE PLANS IS REQUIRED, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE A VERBAL AND WRITTEN REQUEST TO THE ENGINEER AT THAT TIME PRIOR TO CONSTRUCTION OF ANY DISCREPANCIES FOUND WITHIN THIS SET OF

10. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.

1. THE TYPICAL DETAILS SHOWN ON THIS SHEET SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY SHOWN OTHERWISE. WHERE NO DETAIL IS SHOWN, CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK.

12. IT IS THE INTENTION OF THESE DRAWINGS TO PROVIDE FOR THE FOLLOWING CONTINUITIES:

I. ALL ROOF STRUTS SHALL BE CONTINUOUSLY CONNECTED FOR THE FULL LENGTH OF THE ROOF SYSTEM.

2. ALL WALL BRACING SHALL BE CONNECTED TO THE ROOF.

DESIGN ROOF TRUSSES FOR

14. DESIGN LOADS: LIVE A = AREA IN SQUARE FEET.

16. CHARACTER OF FOUNDATION SOIL: SEE SOILS REPORT. 7. DESIGN SOIL PRESSURE: SEE SOILS REPORT.

REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUC-TION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

THE ENGINEER WILL NOT CONDUCT CONSTRUCTION REVIEW UNLESS HIRED TO DO SO BY THE OWNER/CONTRACTOR. THE ENGINEER IS ONLY RESPONSIBLE FOR THE ITEMS ADDRESSED IN WRITING, AND IS NOT RESPONSIBLE FOR ANY ITEMS EITHER UNSEEN OR UNNOTICED BY THE ENGINEER

THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE

**ENGINEERS FIELD REPRESENTATIVES DURING CONSTRUCTION** SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER, WHETHER OF MATERIAL OR WORK, AND WHETHER PERFORMED PRIOR TO, DURING OR FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CON-FORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS. BUT THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CON-

ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE CONSTRUCTION SAFETY REQUIREMENTS OF OSHA AND ANY OTHER GOVERNMENTAL ENTITY HAVING JURISDICTION.

. EARTHWORK PREPARATION TO CONFORM TO SOILS ENGINEERS RECOMMENDATIONS IN REPORT & ALL PERTINENT CODES.

. UNLESS OTHERWISE NOTED, fc = 3,000 PSI IN 28 DAYS FOR SLABS, FOOTINGS AND WALLS. USE 3/4" PUMP MIX.

2. ALL CONCRETE SHALL BE REINFORCED. ALL REINFORCING STEEL SHALL BE PROTECTED FROM CONTACT WITH EARTH A. THREE INCHES MIN. CONCRETE SEPARATION WHERE

CONCRETE IS POURED AGAINST THE EARTH. B. TWO INCHES MIN. CONCRETE SEPARATION WHERE CONCRETE IS EXPOSED TO EARTH BUT PLACED IN

3. FORMS ARE TO BE TIGHT ENOUGH TO PREVENT LEAKING OF CONCRETE OR BULGING OF FORM. FORMS ARE TO BE LEFT IN PLACE FOR A MIN. OF ONE DAY AFTER POUR. FORM WORK SHOULD BE COORDINATED WITH ALL TRADES FOR PROVISION OF ALL SLEEVES, CHASES, AND KNOCK-OUTS FOR OTHER WORK.

4. A MOISTURE BARRIER IS TO BE PLACED ON THE EARTH OR SAND, FREE OF SHARP OBJECTS, ORGANIC MATERIAL OR RUBBLE. ALL JOINTS OF MEMBRANE SHALL BE LAPPED 6", WITH JOINTS CEMENTED OR TAPED. MEMBRANE THICKNESS SHALL BE A MIN. OF .006 MIL. A MIN. OF 2" OF CLEAN SAND SHALL BE PLACED OVER BARRIER WITH ALL PENETRATIONS OF MEMBRANE TAPED.

5. ALL CONCRETE SHALL BE PLACED SUBJECT TO THE FOLLOWING TOLERANCES: LINEAR LINES: ±1/4" IN 20'-0".

PLUMB: ±1/4" IN 10'-0". SLAB DEVIATION WITH A TRUE PLANE, MULTI-DIRECTIONAL, NOT TO EXCEED  $\pm 1/8$ " IN 10'-0".

6. CONCRETE SHALL NOT BE ALLOWED TO FREE FALL FROM ANY HEIGHT WHICH WOULD TEND TO CAUSE, OR RESULT IN, SEGREGATION OF THE MIX. IN NO CASE WILL SUCH HEIGHT RESTRICTIONS BE GREATER THAN 5'. TRUCKS OR ADDITIONAL CHUTES SHALL BE PROVIDED WHERE THIS CONDITION OCCURS.

7. ALL CONCRETE WORK SHALL BE MONOLITHIC; NO TOPPING WILL BE REQUIRED OR PERMITTED UNLESS EXPRESSLY INDICATED ON THE DRAWINGS.

8. SHOULD THE CONCRETE HAVE EXCESSIVE POCKETS OR IF ANY REINFORCING STEEL IS EXPOSED, OR IF CONCRETE DOES NOT COMPLY IN ANY OTHER WAY WITH THE DRAWINGS AND SPECIFICATIONS. THE DEFECTIVE CONCRETE SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER.

9. ALL SLABS ARE TO BE FINISHED WITH A POWER DRIVEN DISC FLOAT ONLY. DUSTING OF CONCRETE WITH DRY CEMENT TO ABSORB EXCESS WATER IS PROHIBITED.

10. AFTER THE INITIAL CONCRETE SET, CONCRETE SHALL BE HAND TROWELLED TO A SMOOTH FINISH SURFACE, FREE OF ANY TOOL MARKS, EXPOSED AGGREGATE, OR OTHER

11. ALL CONCRETE WORK SHALL BE CLEANED AND PATCHED TO A UNIFORM FINISH. ALL HIGH SPOTS, SLUMPS, EDGES, ETC., SHALL BE REMOVED AS DIRECTED BY THE OWNER OR THE

12. ALL MOULDS, ORNAMENTS, GROOVES, CUPS, ANCHOR BOLTS, ETC. SHOWN ON ARCHITECTURAL DRAWINGS SHALL BE PROVIDED FOR IN THE FORM WORK BEFORE THE CONCRETE IS POURED.

13. REFER TO BOTH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SPACING OF ALL PLUMBING FIXTURES.

14. SIDES OF FOOTINGS MAY BE POURED AGAINST NEAT EXCAVATION IF CAVING DOES NOT OCCUR. SEE DETAILS.

15. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE WALLS OR SLAB UNLESS SPECIFICALLY DETAILED.

16. REINFORCING STEEL SHALL BE INTERMEDIATE GRADE DEFORMED BARS AND SHALL CONFORM TO ASTM A615-GR-40. FABRICATING DETAILS SHALL CONFORM TO ACI MANUAL OF STANDARDS OF

17. SPLICES IN REINFORCING STEEL SHALL BE LAPPED 30 DIAMS. MIN. STEEL MAY BE TIED AT SPLICES.

18. ALL WELDING OF REINFORCING STEEL SHALL BE WITH LOW HYDROGEN ELECTRODES UNLESS OTHERWISE NOTED AND BE INSPECTED BY APPROVED TESTING LAB PRIOR TO POUR.

19. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO POURING CONCRETE.

20. THE QUALITY AND DESIGN OF CONCRETE SHALL BE IN ACCORDANCE WITH THE CBC EXCEPT ITEMS NOT SPECIFICALLY COVERED THERE IN SHALL BE ALSO IN CONFORMANCE WITH ACI 318. CONCRETE SUPPLIER SHALL SUBMIT MIX DESIGN TO LAB OF RECORD FOR REVIEW.

21. ALL REINFORCING SHALL HAVE A MINIMUM CONCRETE COVER AS FOLLOWS, UNLESS OTHERWISE NOTED:

SURFACES POURED AGAINST EARTH . . . . . . . 3" FORMED SURFACES EXPOSED TO GROUND .... 2

22. NOMINAL FINISH FLOOR ELEVATION: +0'-0"

23. ALL FOOTINGS SHALL EXTEND TO FIRM BEARING IN UNDISTURBED SOIL, 1'-0" MIN. (SEE DETAILS, UNLESS OTHERWISE SPECIFIED) OR APPROVED COMPACTED FILL.

24. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF EXTERIOR WALKWAYS.

25. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF NONBEARING PARTITIONS.

26. ALL SLABS ON GRADE SHALL BE 4" THICK UNLESS OTHERWISE NOTED. REINFORCING - #3 @ 18" O/C E.W. OR #10/#10 6" X 6" UNLESS NOTED OTHERWISE.

27. SEE WALL SECTIONS FOR DOWELS PROJECTING FROM FOOTINGS.

28. FOR LOCATIONS OF CONTROL JOINTS IN FLOOR SLAB SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS. 20'-0" MIN. EACH WAY UNLESS NOTED OTHERWISE.

29. CONSTRUCTION JOINTS (CJ) AS SHOWN ON FOUNDATION PLAN, ARCHITECTURAL DRAWINGS. 30. 5 SACKS OF CEMENT ARE REQUIRED PER CUBIC YARD OF CONCRETE

PER KERN COUNTY CODE OF BUILDING REGULATIONS 17.08.170

**GLULAM:** 

FOR CAMBER USE 1200' RADIUS

1.0 GENERAL 1.1 SCOPE

THIS WORK INCLUDES THE COMPLETE FURNISHING AND INSTALLATION OF ALL STANDARD STRUCTURES INC. GLUED LAMINATED BEAMS AS SHOWN ON THE DRAWINGS HEREIN SPECIFIED AND NECESSARY TO COMPLETE THE WORK

1.2 CODE APPROVALS THESE PRODUCTS SHALL BE DESIGNED AND MANUFACTURED TO THE STANDARDS SET FORTH IN ANSI STANDARD A190.1 AND ICBO REPORT

1.3 TRADEMARKS MEMBERS SHALL BE MARKED WITH THE INDEPENDENT QUALITY AUDIT COMPANY INDICATING CONFORMANCE WITH THE MANUFACTURING, QUALITY ASSURANCE AND MARKETING PROVISIONS OF ANSI STANDARD

1.4 RELATED WORK SPECIFIED ELSEWHERE

A. CARPENTRY AND MILLWORK

 B. OPEN WEB WOOD TRUSSES C. COMPOSITE WOOD I-JOISTS

WHEN REQUESTED, SHOP DRAWINGS SHOWING LAYOUT AND DETAILS NECESSARY FOR PROPER PRODUCT PLACEMENT IN THE BUILDING MAY BE PROVIDED BY STANDARD STRUCTURES INC.

B. PRODUCTION DO NOT PROCEED WITH FABRICATION AND/OR CUTTING UNTIL SHOP DRAWINGS AND DESIGN CALCULATIONS (WHEN REQUIRED) HAVE BEEN REVIEWED BY THE ARCHITECT AND OR ENGINEER OF RECORD

2.0 GENERAL 2.1 MATERIALS

A. LUMBER: 2 INCH (NOMINAL) LAMINATIONS, MOISTURE CONTENT OF ALL LUMBER AT THE TIME OF MANUFACTURE SHALL NOT EXCEED

B. BEAMS, CONTINUOUS OR CANTILEVERED: COMBINATION 24F-V8

B. ADHESIVE: ASTM D2559: EXTERIOR TYPE

2.2 FABRICATION A. SIMPLY SUPPORTED MEMBERS: COMBINATION 24F-V4

A. INDUSTRIAL GRADE, EXCEPT USE ARCHITECTURAL APPEARANCE GRADE WHERE NOTED OR EXPOSED TO VIEW

3.0 EXECUTION

3.1 ERECTION AND INSTALLATION

A. STANDARD STRUCTURES INC GLULAM BEAMS, IF STORED PRIOR TO ERECTION, SHALL BE STORED OFF THE GROUND POSITION AND PROTECTED FROM THE WEATHER. THEY SHALL BE HANDLED WITH CARE SO THEY ARE NOT DAMAGED. THEY ARE TO BE ERECTED AND INSTALLED IN ACCORDANCE WITH THE PLANS AND ANY STANDARD STRUCTURES INC. DRAWING AND INSTALLATION SUGGESTIONS THAT MAY BE PROVIDED. TEMPORARY CONSTRUCTION LOADS THAT CAUSE STRESSES BEYOND DESIGN LIMITS ARE NOT PERMITTED. APPARENT DAMAGE TO GLULAM BEAMS IF ANY, SHALL BE REPORTED TO STANDARD STRUCTURES INC. PRIOR TO INSTALLATION.

B. GLUED- LAMINATED BEAM INSPECTION CERTIFICATES SHALL BE SUBMITTED TO THE FIELD INSPAECTOR PRIOR TO COMPLETION OF THE FRAME INSPECTION IN ACCORDANCE WITH CBC 1704.6.2

THE PRODUCT DELIVERED SHALL BE FREE FROM MANUFACTURING ERRORS OR DEFECTS IN WORKMANSHIP AND MATERIAL.

#### **EMBEDDED ITEMS:**

1. ALL REINFORCING STEEL SHALL BE CONTINUOUS. STEEL SHALL BE LAPPED 30 BAR DIAMETERS MIN. IN CONCRETE UNLESS OTHERWISE NOTED, AND BARS SHALL BE BENT WITH A MIN. BEND RADIUS EQUAL TO THREE TIMES THE BAR DIAMETER.

2. BARS SHALL NOT BE HEATED TO FACILITATE BENDING OR ANY OTHER PURPOSE.

3. ALL REINFORCING STEEL SHALL BE LOCATED ACCURATELY IN FORMS AND HELD FIRMLY IN PLACE BEFORE AND DURING CONCRETE PLACEMENT BY MEANS OF WIRE SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT DURING THE COURSE OF CONSTRUCTION AND TO KEEP AT PROPER DISTANCE FROM THE FORMS. BAR SUPPORTS ARE TO BE SUFFICIENT IN NUMBER AND SUFFICIENTLY HEAVY TO CARRY PROPERLY THE STEEL THEY SUPPORT. UNDER NO CONDITION SHALL CONCRETE BE PLACED WITHOUT ADEQUATE TIES OR SUPPORTS. SEE CONCRETE NOTES ABOVE FOR PROPER REINFORCING STEEL COVERAGE.

4. BEFORE BEING PLACED, ALL MATERIALS SHALL BE CLEANED THOROUGHLY OF ALL CONCRETE, RUST, DIRT, DUST, OIL AND ANY OTHER MATERIAL DELETERIOUS TO BONDING OF CONCRETE

5. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615-40.

6. WIRE MESH IN SLABS SHALL CONFORM TO ASTM A185. 7. FOUNDATION ANCHOR BOLTS SHALL BE 1/2" DIAMETER MIN. STEEL BOLT WITH WASHER AND NUT, WITH 7" MIN. EMBEDMENT INTO CONCRETE, UNLESS OTHERWISE NOTED. MAX. SPACING SHALL BE 6'-0" AND 12" FROM ENDS AND ALL BREAKS. ALL PLATES SHALL HAVE A MIN. OF 2 ANCHOR BOLTS AND SHALL

8. ANCHOR BOLTS LARGER THAN 1/2" DIAMETER ARE PROVIDED IN MANY SHEAR WALLS. ALL OF THESE BOLTS SHALL BE EMBEDDED TO A DEPTH EQUAL TO 15 TIMES THE BOLT DIAMETER, INTO CONCRETE. ALL BOLTS SHALL BE PREWIRED INTO FORMS PRIOR TO THE PLACEMENT OF CONCRETE.

9. BOLTS AND UPLIFT ANCHORS SHALL BE FABRICATED OF ASTM A-36 BAR STOCK AND SHALL HAVE HOOKS BENT AT A MIN. BEND RADIUS OF 4 BAR DIAMETERS. ALL BOLTS SHALL BE PREWIRED INTO FORMS PRIOR TO PLACEMENT OF CONCRETE AND AT A DEPTH AS SHOWN IN UPLIFT ANCHOR DETAILS.

#### STRUCTURAL STEEL:

BE DRILLED FOR ANCHOR BOLTS.

1. STRUCTURAL STEEL SHALL BE ASTM DESIGNATION A-36.

2. TUBE COLUMNS SHALL BE ASTM DESIGNATION A-500, GRADE B.

3. STRUCTURAL STEEL WORKMANSHIP AND DETAILING SHALL CONFORM TO LATEST AWS STANDARDS. USE E-70 ELECTRODES.

ARCHITECT'S APPROVAL OF SHOP DRAWINGS PRIOR TO FABRICATION.

4. STEEL FABRICATOR SHALL OBTAIN THE STRUCTURAL ENGINEER'S, AND/OR

5. ALL FILLET WELDS WERE DESIGNED FOR ONE-HALF OF ALLOWABLE WELD APPROVED TESTING LAB USING CODE ACCEPTED METHODS.

6. BOLTS SHALL BE ASTM A-307. U.N.O.

7. ALL WELDS TO BE PERFORMED BY A CERTIFIED WELDER.

### BOLTS, LAG SCREWS, AND THREADED RODS:

1. ALL THREADED RODS SHALL BE FABRICATED FROM ASTM A-36 BAR

2. ALL OTHER BOLTS SHALL BE ASTM A-307, UNLESS OTHERWISE SPECIFIED.

### CONCRETE BLOCK NOTES:

1. ALL CONCRETE BLOCK UNITS SHALL BE GRADE "N" TYPE 1 CONFORMING TO ASTM C-90.

2. GROUT AND MORTAR SHALL TEST 2,500 PSI MIN. AT 28 DAYS AND, SHALL BE IN COMPLIANCE WITH THE LATEST CBC

AND LOCAL CODES, ETC. 3. HORIZONTAL BARS SHALL BE PLACED IN BOND BEAM UNITS.

4. VERTICAL BARS SHALL BE PLACED 2" FROM FACE OF WALL, ALTERNATE FACES EXCEPT AS NOTED OTHERWISE AND SHALL BE HELD IN POSITION TOP AND BOTTOM AND INTERVAL NOT

EXCEEDING 192 DIAMTERS. 5. ALL CORNER CELLS AND END CELLS SHALL HAVE TWO

VERTICAL BARS EXCEPT AS SHOWN. 6. HORIZONTAL BARS AT SPLICES AND CORNERS SHALL HAVE 24" MIN. OR 40 BAR DIAMETER LAP WHICH EVER IS GREATER. VERTICAL REBARS SHALL BE FULL HEIGHT (BUT MAY BE SPLICED WITH

7. PROVIDE FOUNDATION DOWELS TO MATCH VERTICAL STEEL.

8. ALL CELLS SHALL BE GROUTED SOLIDLY UNLESS NOTED OTHERWISE ON FOUNDATION PLAN. 9. LINTEL BEAM OVER OPENING SHALL BE GROUTED COMPLETELY

IN A SINGLE CONTINUOUS OPERATION. 10. CLEAN OUT REQUIRED AT THE BOTTOM OF ALL CELLS OF EACH POUR WHEN GROUT POUR IS IN EXCESS OF 4'-0"

11. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE LATEST CBC (2010).

12. VERTICAL REINFORCING SHALL BE CENTERED IN OPEN END UNITS AND SET BEFORE BLOCK WORK COMMENCES.

13. LIGHT WEIGHT CONCRETE BLOCK SPECIFICATIONS: LIGHT WEIGHT CONCRETE BLOCK SHALL WEIGH 72 LBS. PER SQUARE FOOT AS MANUFACTURED BY CALCRETE

14. ALL BAR LAPS TO BE WIRED TOGETHER @ 8" o.c. (TYP)

15. CMU BLOCKS fm=1,500 psi

40 BAR DIAMETER LAP).

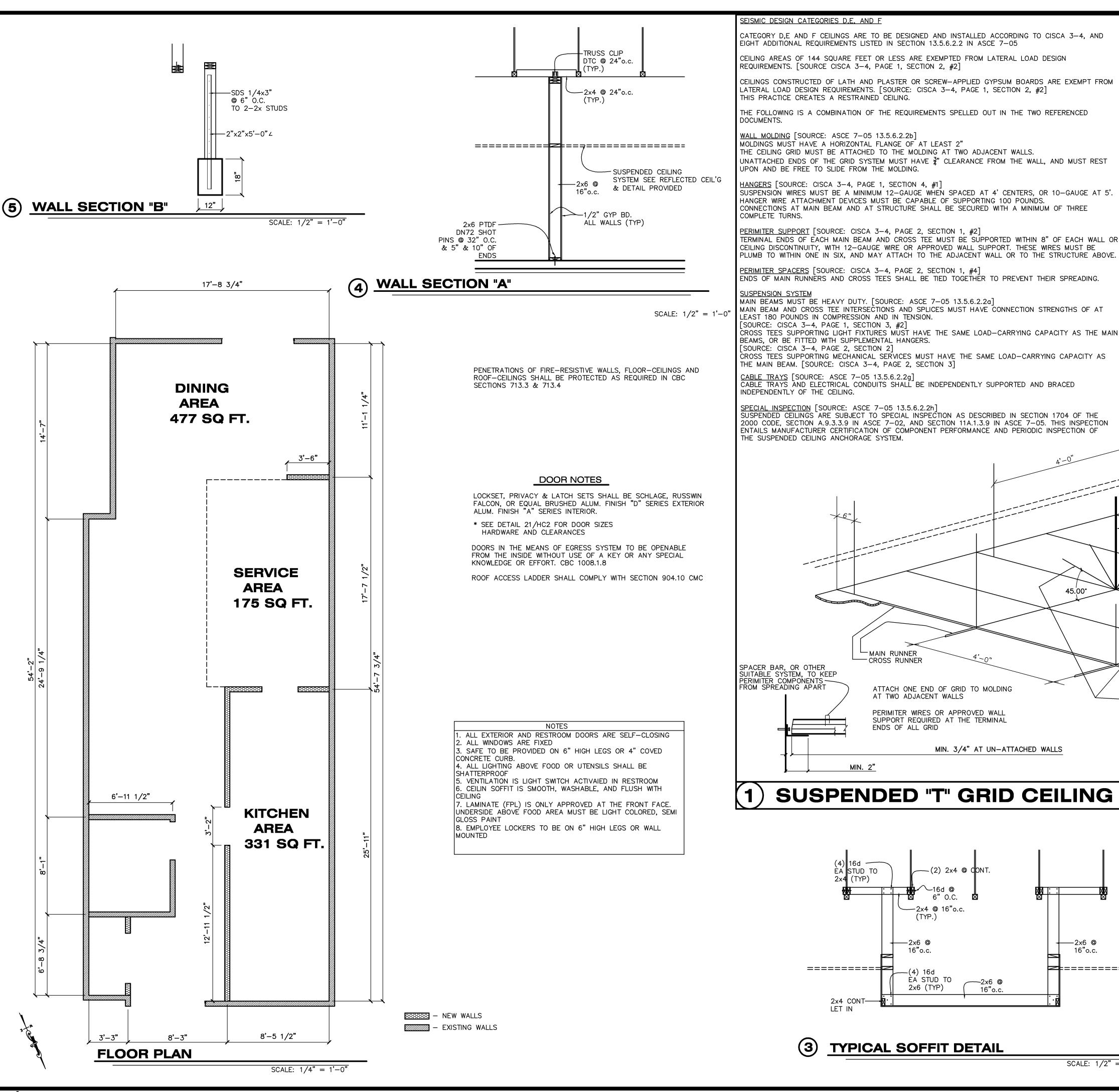
ASQUINI GINEERING

DATE

9 TO HEIRI S

THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

J.P. CHK'D BY 6/13/2011 JOB NO. 6364 636422



<u>SEISMIC DESIGN CATEGORIES D.E. AND F</u> CATEGORY D.E AND F CEILINGS ARE TO BE DESIGNED AND INSTALLED ACCORDING TO CISCA 3-4, AND EIGHT ADDITIONAL REQUIREMENTS LISTED IN SECTION 13.5.6.2.2 IN ASCE 7-05

CEILING AREAS OF 144 SQUARE FEET OR LESS ARE EXEMPTED FROM LATERAL LOAD DESIGN REQUIREMENTS. [SOURCE CISCA 3-4, PAGE 1, SECTION 2, #2]

CEILINGS CONSTRUCTED OF LATH AND PLASTER OR SCREW-APPLIED GYPSUM BOARDS ARE EXEMPT FROM LATERAL LOAD DESIGN REQUIREMENTS. [SOURCE: CISCA 3-4, PAGE 1, SECTION 2, #2] THIS PRACTICE CREATES A RESTRAINED CEILING.

THE FOLLOWING IS A COMBINATION OF THE REQUIREMENTS SPELLED OUT IN THE TWO REFERENCED

WALL MOLDING [SOURCE: ASCE 7-05 13.5.6.2.2b]

THE CEILING GRID MUST BE ATTACHED TO THE MOLDING AT TWO ADJACENT WALLS. UNATTACHED ENDS OF THE GRID SYSTEM MUST HAVE 3" CLEARANCE FROM THE WALL, AND MUST REST UPON AND BE FREE TO SLIDE FROM THE MOLDING.

HANGERS [SOURCE: CISCA 3-4, PAGE 1, SECTION 4, #1] SUSPENSION WIRES MUST BE A MINIMUM 12-GAUGE WHEN SPACED AT 4' CENTERS, OR 10-GAUGE AT 5'. HANGER WIRE ATTACHMENT DEVICES MUST BE CAPABLE OF SUPPORTING 100 POUNDS.

CONNECTIONS AT MAIN BEAM AND AT STRUCTURE SHALL BE SECURED WITH A MINIMUM OF THREE PERIMITER SUPPORT [SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #2]

PERIMITER SPACERS [SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #4 ENDS OF MAIN RUNNERS AND CROSS TEES SHALL BE TIED TOGETHER TO PREVENT THEIR SPREADING.

MAIN BEAMS MUST BE HEAVY DUTY. [SOURCE: ASCE 7-05 13.5.6.2.2a] MAIN BEAM AND CROSS TEE INTERSECTIONS AND SPLICES MUST HAVE CONNECTION STRENGTHS OF AT

SOURCE: CISCA 3-4, PAGE 1, SECTION 3, #2] CROSS TEES SUPPORTING LIGHT FIXTURES MUST HAVE THE SAME LOAD-CARRYING CAPACITY AS THE MAIN BEAMS, OR BE FITTED WITH SUPPLEMENTAL HANGERS.

[SOURCE: CISCA 3-4, PAGE 2, SECTION 2] CROSS TEES SUPPORTING MECHANICAL SERVICES MUST HAVE THE SAME LOAD-CARRYING CAPACITY AS THE MAIN BEAM. [SOURCE: CISCA 3-4, PAGE 2, SECTION 3]

CABLE TRAYS [SOURCE: ASCE 7-05 13.5.6.2.2g]
CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE INDEPENDENTLY SUPPORTED AND BRACED

INDEPENDENTLY OF THE CEILING.

SPECIAL INSPECTION [SOURCE: ASCE 7-05 13.5.6.2.2h] SUSPENDED CEILINGS ARE SUBJECT TO SPECIAL INSPECTION AS DESCRIBED IN SECTION 1704 OF THE 2000 CODE, SECTION A.9.3.3.9 IN ASCE 7-02, AND SECTION 11A.1.3.9 IN ASCE 7-05. THIS INSPECTION ENTAILS MANUFACTURER CERTIFICATION OF COMPONENT PERFORMANCE AND PERIODIC INSPECTION OF

LATERAL FORCE BRACING [SOURCE: CISCA 3-4 AND IBC 1621.2.5.2.2] CEILING AREAS GREATER THAN 1000 SQUARE FEET MUST HAVE LATERAL FORCE BRACING.

[SOURCE: ASCE 7-05 13.5.6.2.2c] RIGID BRACING MAY BE USED INSTEAD OF DIAGONAL SPLAY WIRES. BRACING MUST LIMIT CEILING MOVEMENT TO LESS THAN  $\frac{1}{4}$ " AT THE POINT OF ATTACHMENT.

[SOURCE: ASCE 7-05 13.5.6.2.2c] SPLAY WIRE BRACING SHALL BE CLUSTERS OF FOUR 12-GAUGE WIRES ATTACHED TO THE MAIN BEAM WITHIN 2" OF THE CROSS TEE INTERSECTION. WIRES ARE ARRAYED 90°FROM EACH OTHER AT AN ANGLE NOT EXCEEDING 45°FROM THE PLANE OF THE CEILING. [SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #3] A STRUT, WITH STIFFNESS ADEQUATE TO RESIST THE VERTICAL LOADS IMPOSED, SHALL BE ATTACHED TO THE SUSPENSION SYSTEM, AND TO THE STRUCTURE ABOVE AT EACH BRACING LOCATION.

[SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #3] HORIZONTAL RESTRAINT POINTS SHALL BE NO MORE THAN 12' ON CENTER IN EACH DIRECTION, AND THE FIRST POINT SHALL BE WITHIN 6' OF EACH WALL. [SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #3] ATTACHMENT OF THE BRACING WIRES TO THE MAIN BEAM AND TO THE STRUCTURE SHALL BE CAPABLE OF SUPPORTING THE GREATER OF 200 POUNDS OR THE ACTUAL DESIGN LOAD WITH A SAFETY FACTOR OF 2. [SOURCE: CISCA 3-4, PAGE 2, SECTION 1, #3]

LIGHT FIXTURES [SOURCE: CISCA 3-4, PAGE 2, SECTION 2]

ALL FIXTURES MUST BE POSITIVELY ATTACHED TO THE SUSPENSION SYSTEM. THE ATTACHMENT DEVICE MUST BE ABLE TO WITHSTAND 100% OF THE WEIGHT OF THE FIXTURE ACTING IN ANY DIRECTION. FIXTURES WEIGHING 10 POUNDS OR LESS MUST HAVE ONE 12-GAUGE WIRE ATTACHED TO THE HOUSING. FIXTURES WEIGHING MORE THAN 10 POUNDS TO 56 POUNDS MUST HAVE TWO 12-GAUGE WIRES ATTACHED TO DIAGONAL CORNERS, AND THESE WIRES MUST BE SLACK. FIXTURES WEIGHING IN EXCESS OF 56 POUNDS MUST BE INDEPENDENTLY SUPPORTED FROM THE BUILDING STRUCTURE.

PENDANT-MOUNTED FIXTURES MUST BE SUPPORTED DIRECTLY FROM THE STRUCTURE, USING 9-GAUGE WIRE. THEY MAY NOT USE THE CEILING SUSPENSION SYSTEM FOR SUPPORT.

MECHANICAL SERVICES [SOURCE: ASCE 7-05 13.5.8.1]

MUST BE POSITIVELY ATTACHED TO THE SUSPENSION SYSTEM SYSTEM MAIN BEAMS, OR TO CROSS TEES WITH THE SAME LOAD CARRYING CAPACITY.

TERMINALS OR SERVICES WEIGHING 20 POUNDS TO 56 POUNDS MUST HAVE TWO 12-GAUGE WIRES CONNECTING THEM TO THE CEILING SYSTEM HANGERS, OR TO THE STRUCTURE ABOVE. TERMINALS OR SERVICES WEIGHING MORE THAN 56 POUNDS MUST BE INDEPENDENTLY SUPPORTED.

PARTITION ATTACHMENT [SOURCE: ASCE 7-05, 5.6.2.2e] PARTITIONS ATTACHED TO THE CEILING SUSPENSION SYSTEM SHALL BE LATERALLY BRACED TO THE BUILDING STRUCTURE. THIS BRACING IS TO BE INDEPENDENT OF ANY CEILINGS SPLAY WIRE BRACING. EXCEPTION: PARTITIONS NOT TALLER THAN 9' AS LONG AS THE HORIZONTAL SEISMIC LOAD DOES NOT EXCEED 5 PSF.

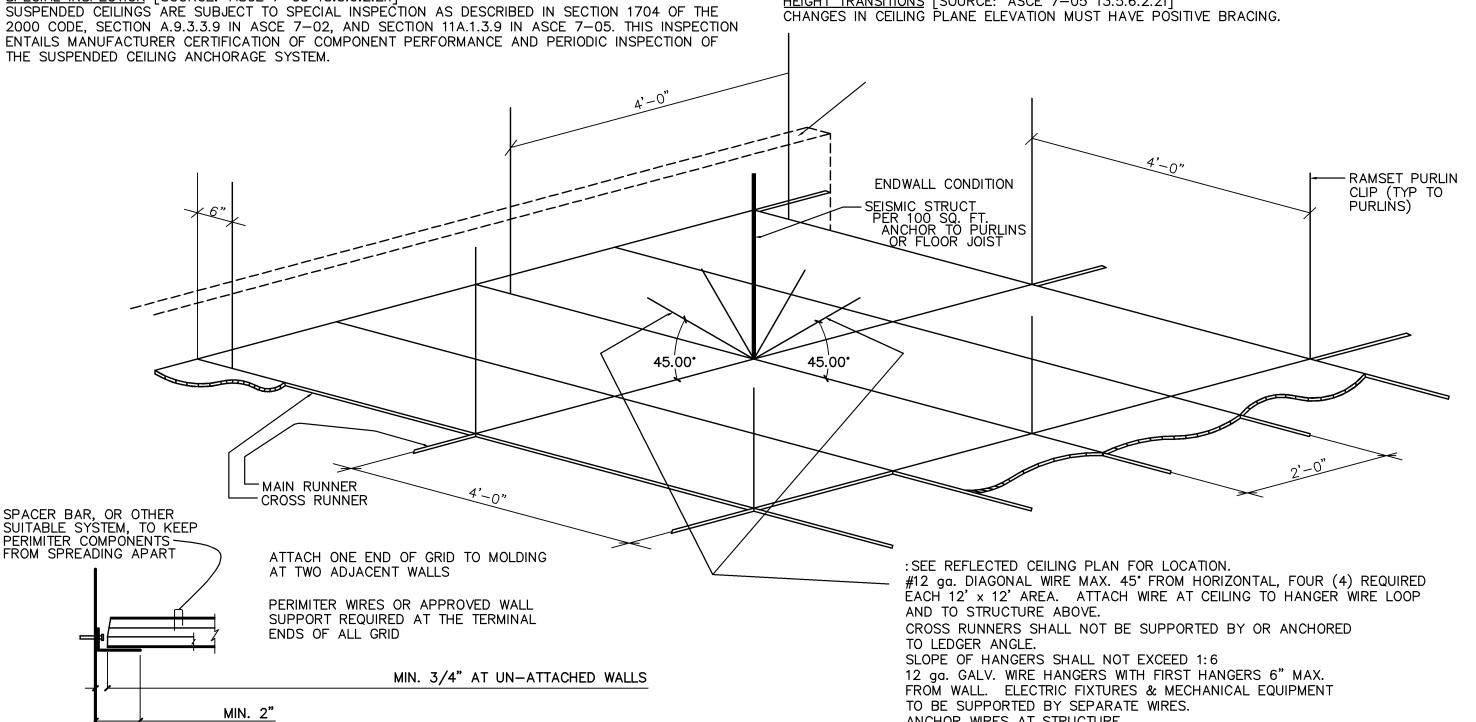
PENETRATIONS [SOURCE: ASCE 7-05 13.5.6.2.2e]

EXCEPT WHEN RIGID BRACING IS USED, SPRINKLER HEADS AND OTHER PENETRATIONS MUST HAVE 2" OVERSIZED TRIM TO ALLOW 1" HORIZONTAL MOVEMENT IN ALL HORIZONTAL DIRECTIONS.

SEISMIC SEPARATION JOINTS [SOURCE: ASCE 7-05 13.5.6.2.2d] CEILING AREAS GREATER THAN 2500 SQUARE FEET MUST HAVE SEISMIC SEPARATION JOINTS OR FULL HEIGHT PARTITIONS UNLESS ANALYSES ARE PERFORMED TO DEMONSTRATE THAT THE CLOSURE TRIMS AND ANGLES PROVIDE ENOUGH CLEARANCE TO ACCOMODATE THE ADDITIONAL CEILING MOVEMENT.

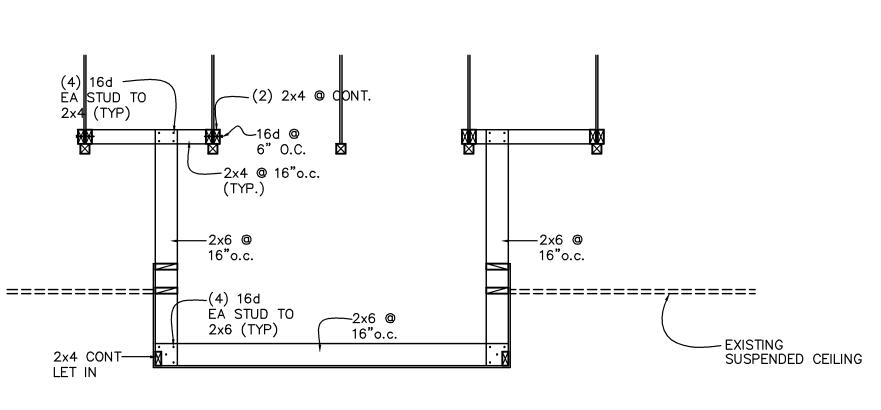
HEIGHT TRANSITIONS [SOURCE: ASCE 7-05 13.5.6.2.2f] CHANGES IN CEILING PLANE ELEVATION MUST HAVE POSITIVE BRACING.

ANCHOR WIRES AT STRUCTURE.



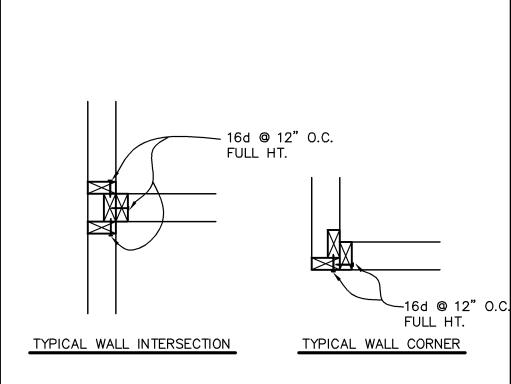
# SUSPENDED "T" GRID CEILING SYSTEM

N.T.S.



SCALE: 1/2" = 1'-0"

TYPICAL SOFFIT DETAIL



DWG. BY J.P. CHK'D BY 6/13/2011 JOB NO. 6364 636422

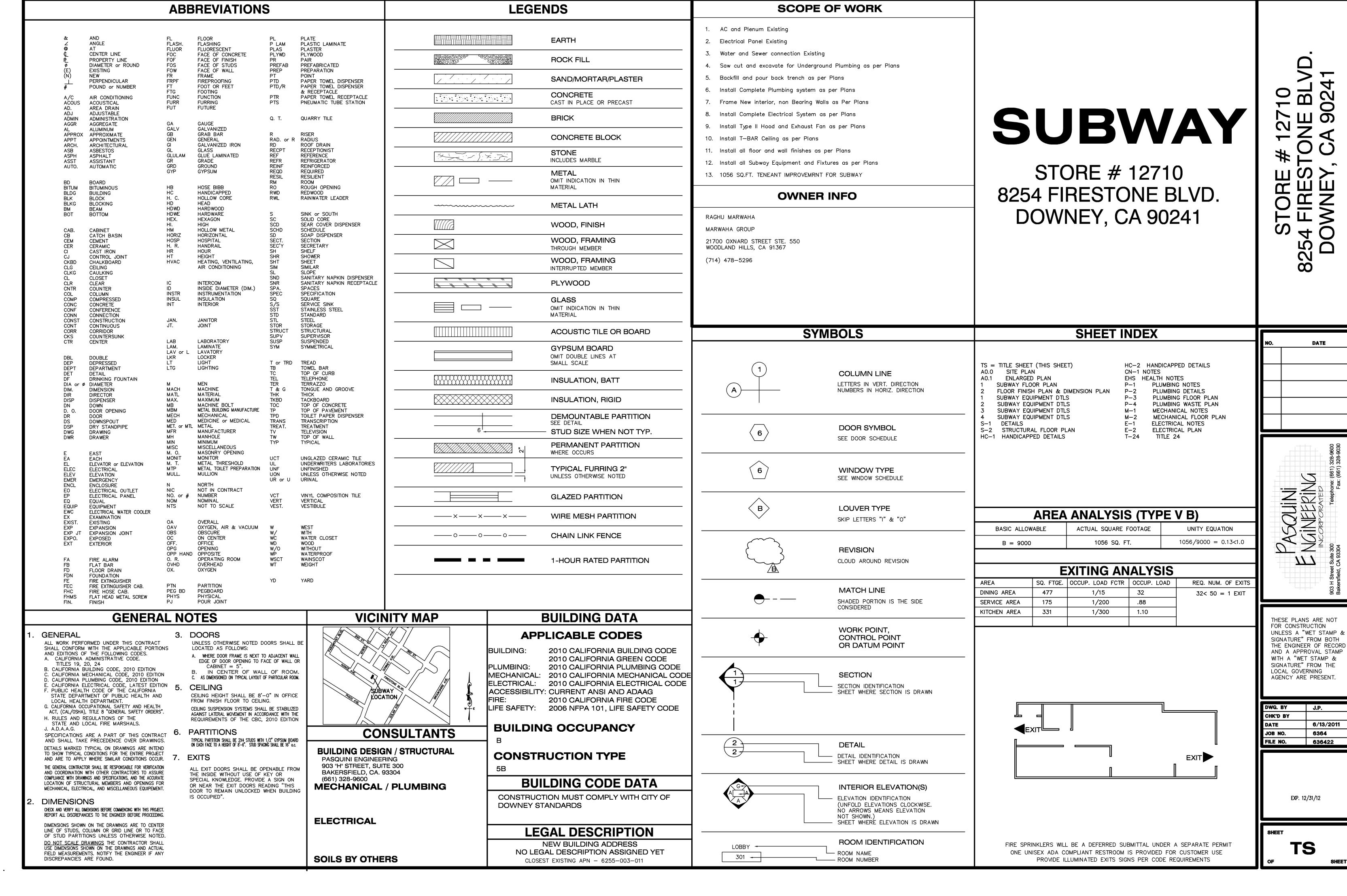
EXP. 12/31/12

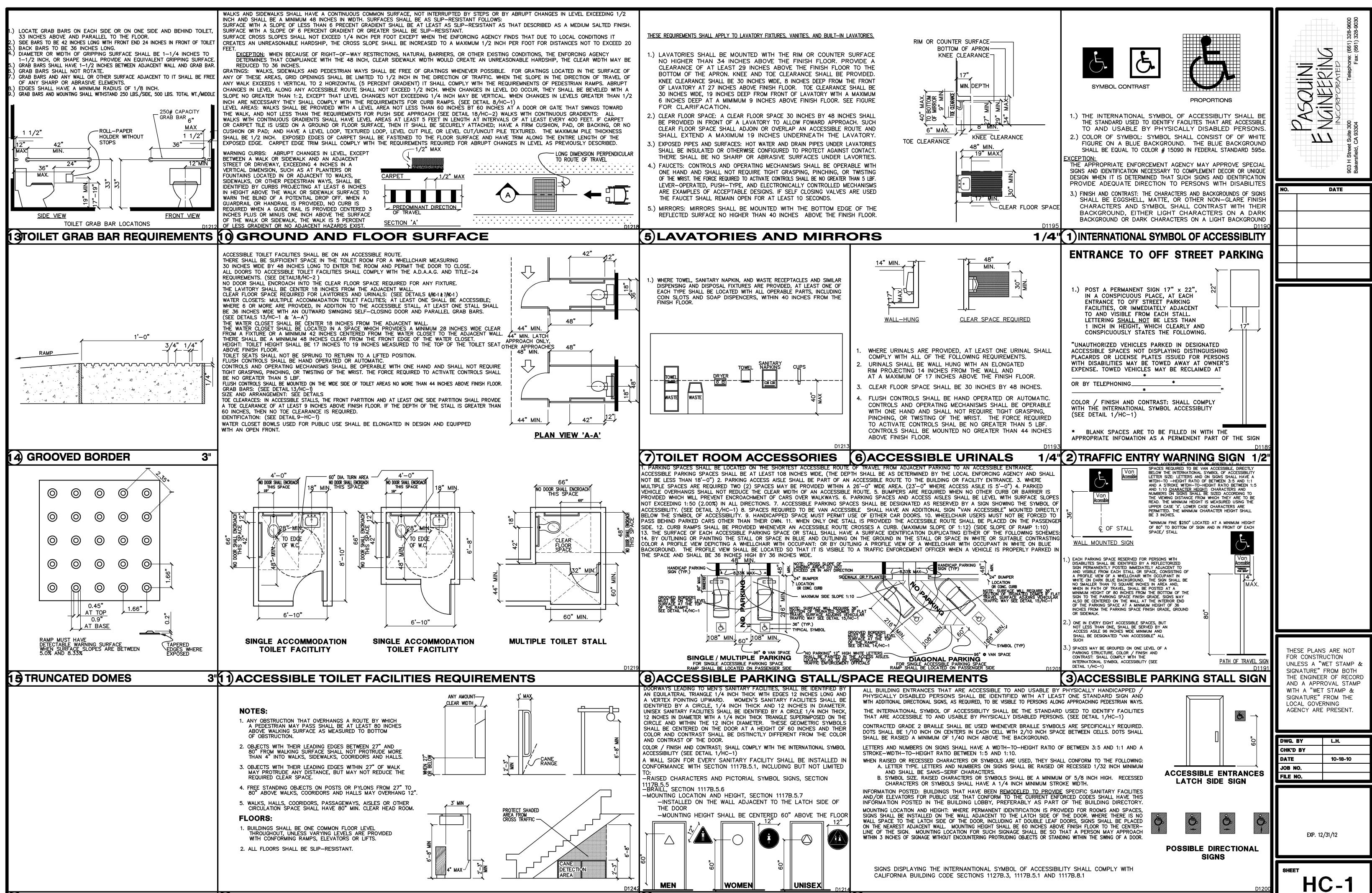
9 10

PASQUINI NGINERRING

DATE

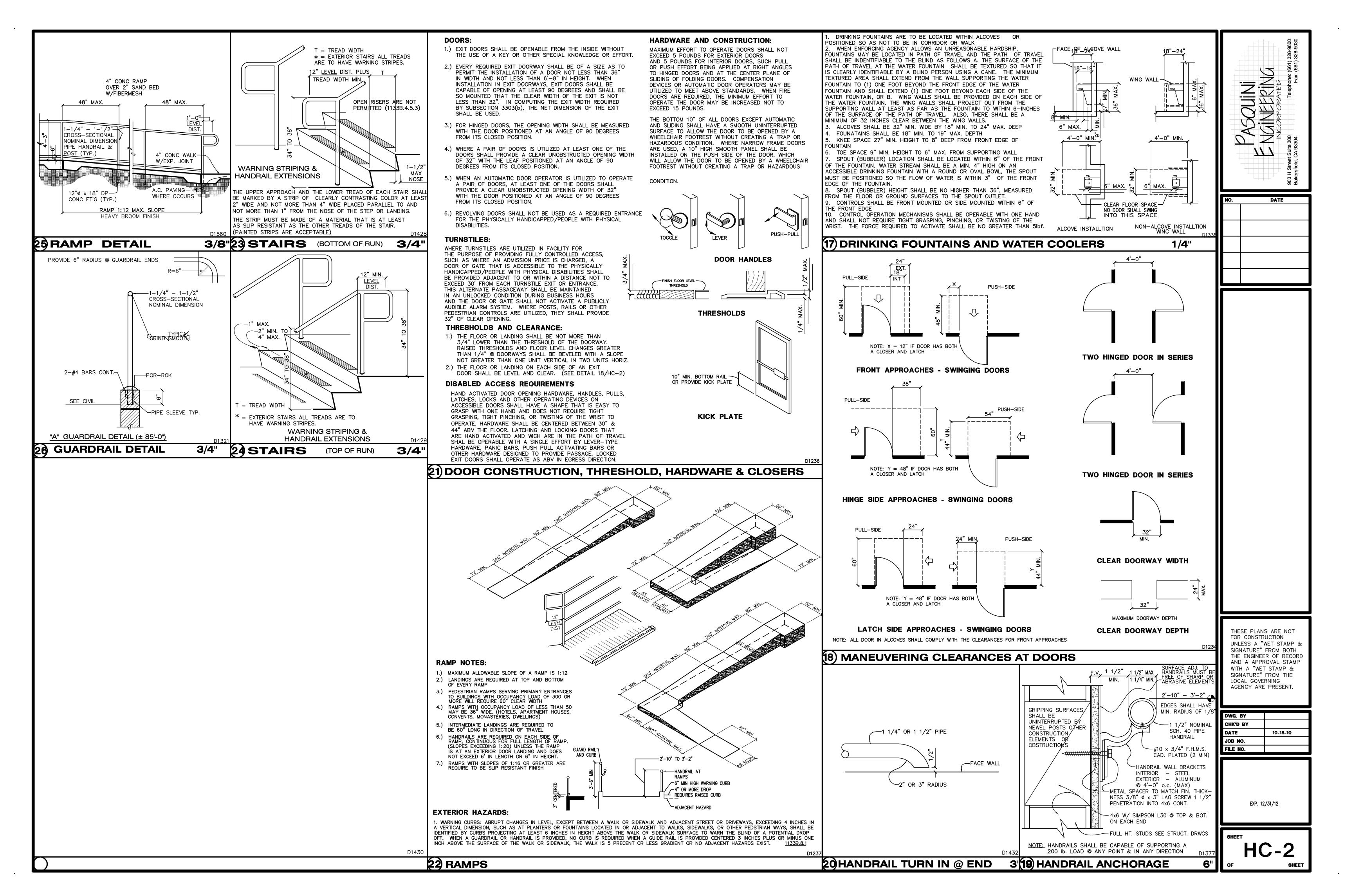
THESE PLANS ARE NOT FOR CONSTRUCTION UNLESS A "WET STAMP SIGNATURE" FROM BOTH THE ENGINEER OF RECORD AND A APPROVAL STAMP WITH A "WET STAMP & SIGNATURE" FROM THE LOCAL GOVERNING AGENCY ARE PRESENT.

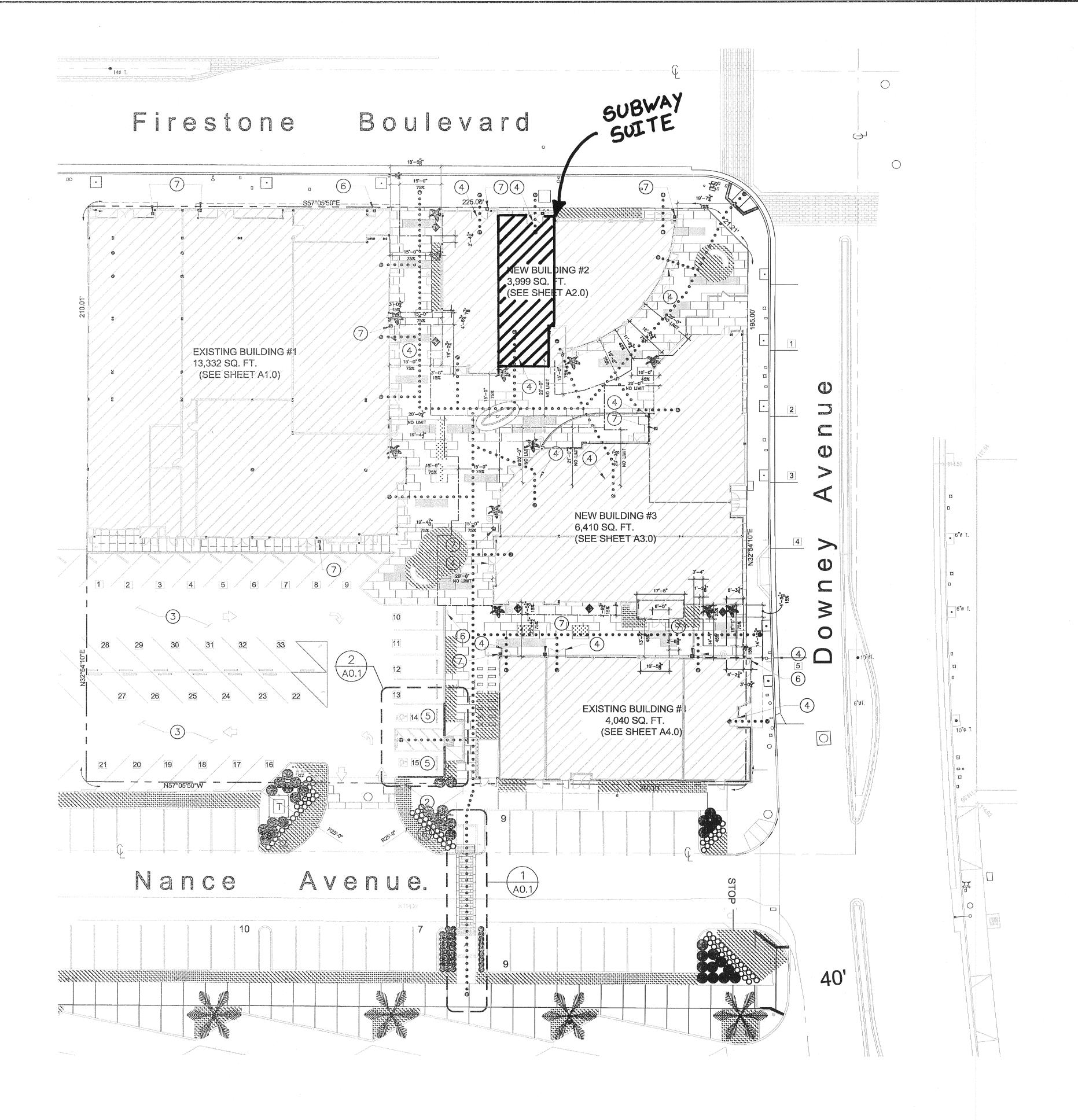




(9) ACCESSIBLE TOILET FACILITY SIGNAGE (4) ENTRANCE SIGNS AND DIRECTIONAL SIGNS

12 HAZARDS / PROPTRUDING OBJECTS / HEAD ROOM





PARKING COUNT STANDARD STALLS: 31 ACCESSIBLE STALLS: REQUIRED: 2 ADA LEGENDS PROPERTY LINE ●0000 PATH OF TRAVEL ASSUMED IMAGINARY LINE PER CBC 705.3 PER CBC SEC 705.8.2 PROTECTED EXTERIOR OPEINGS Y A WATER CURTAIN IN ACCORDANCE WITH SEC. 903.3.1.1 NFPA 13 SYSTEM

10'-0" ABOVE FINISH FLOOR.
APPROVED BY DOWNEY FIRE DEPT.
SEE DETAIL AND SPECIFICATIONS

FIRE KNOX-BOX MOUNTED 8'-0" TO

1) (N) CONCRETE STAMP PATTERN (N)

2 HANDICAP SITE ENTRANCE SIGNAGE, SEE DETAIL: (17) (N) TYPICAL SURFACE MARKINGS, SEE DETAILS: (10)

**KEY NOTES** 

(4) (N) EXTERIOR & EXIT DOOR TACTILE EGGRESS SIGNS, SEE DETAIL: (1-D)(5) (N) ACCESSIBLE PARKING STALLS TO MEET ADA REQUIREMENTS.

7 (N) KNOX-BOX

NOT PUBLISHED; ALL RIGHTS RESERVED.
THESE DRAWINGS AND SPECIFICATIONS, AND IDEAS,
DESIGNS AND ARRANGEMENTS SHALL REMAIN THE
PROPERTY OF THE ARCHITECT. NO PART THEREOF SHALL BE
REPRODUCED, COPIED, ADAPTED, DISCLOSED OR
DISTRIBUTED TO OTHERS WITHOUT THE PRIOR WRITTEN
CONSENT OF, AND APPROPRIATE COMPENSATION TO THE
ARCHITECT. VISUAL CONTACT WITH THE ABOVE DRAWINGS
OR SPECIFICATIONS SHALL CONSTITUTE CONCLUSIVE
EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.
C WESTLAND INDUSTRIES 2010.



SIGNATURE DATE:

Submittals:	
Bldg. Submittal	4
	THE PART OF A STREET AS A STRE
AND SECURITY	

No. Description Drawn By: MM, BC & TT

Sheet Title:

ADA PATH OF TRAVEL PLAN

Not for construction until reviewed, signed, and dated.

