



SPECIFICATIONS – SECTION 15050 – AUTOMATIC SPRINKLER SYSTEM

REFERENCES: ALL SPECIFICATIONS SECTIONS OF DIVISION 15 ARE INTERRELATED AND WHERE APPLICABLE, EACH SECTION IS MADE A PART OF THE OTHER SECTIONS, THE SAME AS IF FULLY REPRODUCED IN SUCH SECTIONS.

SCOPES: WORK SPECIFIED IN THIS SECTION INCLUDES, BUT IS NOT LIMITED TO PROVIDING:

NET SPRINKLER SYSTEM AS INDICATED; WORK TO START AT 5'-0" OUTSIDE OF BUILDING LIMITS.

PIPING LAYOUT AS REQUIRED TO MEET NFPA 13 STANDARDS, COORDINATE WITH LOCAL A.H.J.

SPRINKLER SYSTEM SHALL BE CALCULATED TYPE WITH DENSITY OF 0.19 GPM IN ORDINARY HAZARD AREAS GROUP 2, OR AS REQUIRED BY A.H.J. FOR THE VARIOUS TENANTS.

QUALITY ASSURANCE: TOTAL INSTALLATION SHALL BE MADE IN ACCORD WITH THE REQUIREMENTS OF THE LOCAL FIRE MARSHAL.

SUBMITTALS: DEVELOP PLANS BY STATE LICENSED ENGINEER OR CERTIFIED DESIGNER AS PERMITTED BY LAW. SUBMIT SHOP DRAWINGS INDICATING ALL PHASES OF THE INSTALLATION AND INCLUDING SECTIONS, ELEVATIONS, DETAILS OF SPECIAL HANGERS AND RISER DETAILS TO THE FIRE MARSHAL FOR REVIEW AND APPROVAL. SUBMITTAL TO INCLUDE A WATER TEST AT THE POINT OF CONNECTION WITH COMMENTS TO ASSIST IN REVIEW AND APPROVAL, ALONG WITH HYDRAULIC CALCULATIONS. COPIES OF SUBMITTAL TO GO TO THE ARCHITECT (2 COPIES), GENERAL CONTRACTOR (3 COPIES) AND OWNER (1 COPY) FOR APPROVAL.

AFTER REVIEW AND APPROVAL IS OBTAINED, SUBMIT EIGHT SETS OF SHOP DRAWINGS, TWO SETS BEARING THE APPROVAL OF THE INSURING AGENCY, WHO WILL DELIVER TO ARCHITECT FOR APPROVAL. NO WORK IS TO BEGIN UNTIL ARCHITECT'S APPROVAL HAS BEEN GIVEN IN WRITING.

COORDINATING: COORDINATE DESIGN AND INSTALLATION WITH OTHER TRADES FOR TIMELY INSTALLATION AND TO AVOID DELAYS AND INTERFERENCE.

GUARANTEE: TOTAL INSTALLATION SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE. DEFECTS IN MATERIALS OR WORKMANSHIP SHALL BE ADJUSTED WITHOUT ADDED COST TO OWNER.

PRODUCTS:

ALARM VALVES: APPROVED FLANGED GASKET TYPE FOR VERTICAL RISERS COMPLETE WITH NECESSARY TEST AND DRAIN FACILITIES.

WATER OPERATED ALARM: WATER MOTOR GONGS SHALL BE INSTALLED ON OUTSIDE BUILDING WALL, AT ALARM VALVES AND CONNECTED TO SYSTEMS, AND FURNISHED WITH SIGN INDICATING ITS PURPOSE.

FIRE DEPARTMENT CONNECTION: FIRE DEPARTMENT CONNECTIONS SHALL BE EQUIPPED WITH A CHECK VALVE, BALL DRIP AND ROSE WREATHS TO MATCH THOSE OF LOCAL FIRE DEPARTMENT.

CAST IRON UNDERGROUND DRIP: CLASS 150 MECHANICAL JOINT OR SLP JOINT SHALL BE ENAMEL-LINED. FITTINGS SHALL BE MECHANICAL JOINT. UNDERGROUND TURNS SHALL BE ROD OR SADDLE CHAMFER TO INSURE REQUIREMENTS. INDICATOR VALVES SHALL BE PROVIDED WITH MONITOR SWITCH FOR CONNECTION BY ELECTRICAL CONTRACTOR TO CENTRAL STATION ALARM SYSTEM.

SPRINKLERS: PROVIDE SPRINKLER HEADS OF PENDENT TYPE.

INSIDE DRIP, FITTINGS AND HANGERS: PIPING SHALL BE STANDARD WEIGHT OF DOMESTIC ORIGIN, CAPABLE OF WITHSTANDING A WORKING PRESSURE OF 175#; FITTINGS SHALL BE STANDARD WEIGHT CAST IRON. HANGERS SHALL BE TURNISHED AND INSTALLED IN FULL ACCORDANCE WITH REQUIREMENTS OF NFPA PAMPHLET #13, LATEST EDITION.

EXECUTION:

INSTALLATION:

THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA PAMPHLET #13, LATEST EDITION.

INSTALLATION SHALL BEGIN AT POINT FIVE FEET OUTSIDE OF BUILDING AND SHALL INCLUDE OUTSIDE INDICATOR CONTROL. SEE CIVIL DRAWINGS FOR FIRE MAIN LOCATION.

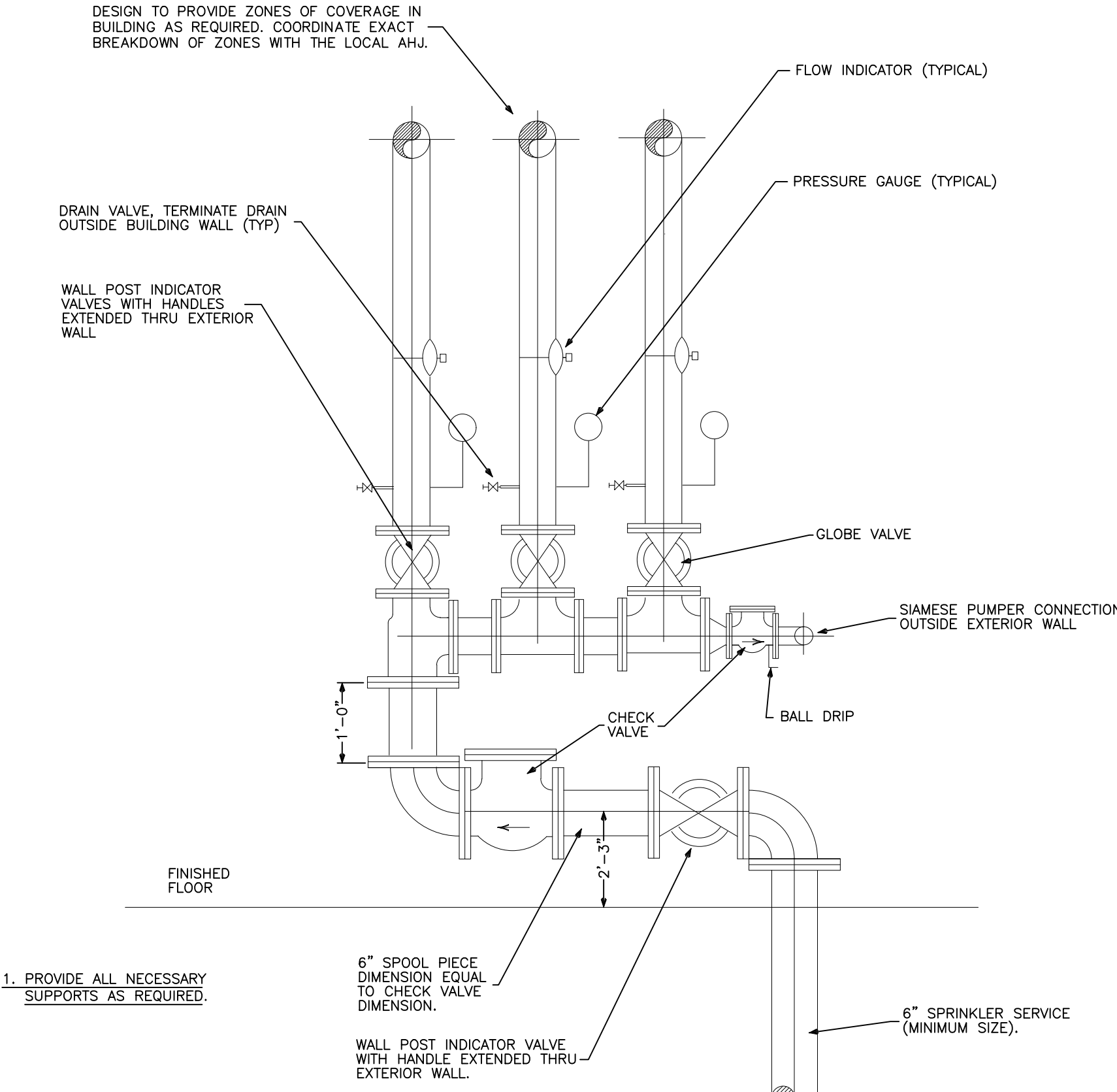
INSTALL INSIDE DRIP BASICALLY AS REQUIRED. SUPPORT PIPING FROM STRUCTURAL MEMBERS AND RISE JOISTS USING APPROVED TYPE HANGERS. INSTALL PIPING TO ONE MAXIMUM HEADROOM IN THE AREAS OF EXPOSED PIPING AND PROVIDE LOW POINTS WITH ADEQUATE DRAINS IN ACCORDANCE WITH NFPA PAMPHLET #13 STANDARDS. INSTALL ALARM VALVE AS INDICATED. RUN DISCHARGE FROM WATER MOTOR THROUGH BUILDING WALL FOR DISCHARGE TO OPEN AIR.

FURNISH AND INSTALL SPRINKLER CABINETS WITH TOTAL OF 12 PLAIN BRASS UPRIGHT HEADS AND 6 CHROME PENDANT HEADS, PLUS ONE SPRINKLER WRENCH AT EACH ALARM VALVE. MOUNT CABINETS ON SPRINKLER WRENCH AT EACH ALARM VALVE. MOUNT CABINETS ON SPRINKLER RISER OR ON ADJACENT BUILDING WALL.

FIELD TEST AND REQUIREMENTS: FINAL INSTALLATION SHALL BE TESTED AND WITNESSED BY ARCHITECT AND OWNER'S REPRESENTATIVE BEFORE BEING PLACED IN SERVICE. INSTALLATION SHALL NOT BE DEEMED AS COMPLETE UNTIL CERTIFICATES OF ACCEPTANCE FROM OFFICE OF FIRE MARSHAL ARE PRESENTED AND ACCEPTED BY OWNER.

ADJUST AND CLEAN-UP: MAKE NECESSARY ADJUSTMENT TO COMPLETED INSTALLATION AS REQUIRED FOR PROPER FUNCTIONING OF SYSTEM. IN EACH AREA AS INSTALLATION IS COMPLETED PROMPTLY REMOVE DEBRIS AND FOREIGN MATTER FROM SURFACES OF SPRINKLER SYSTEM, EQUIPMENT, AND EXCESS MATERIALS, AND LEAVE AREAS BROKE CLEAN.

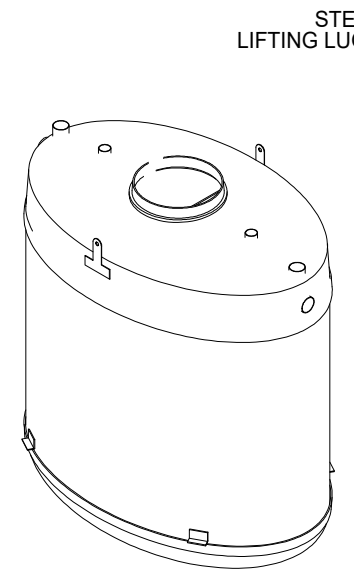
WATER SUPPLY: SPRINKLER CONTRACTOR IS NOT RESPONSIBLE FOR THE ADEQUACY OF THE WATER SUPPLY. HOWEVER, A FLOW TEST IS TO BE MADE AT THE SITE AND TEST DATA FURNISHED WITH SHOP DRAWINGS AT TIME OF SUBMITTAL FOR APPROVAL. PERFORM FLOW TEST WITH LOCAL WATER COMPANY AND LOCAL FIRE DEPARTMENT IN ATTENDANCE.



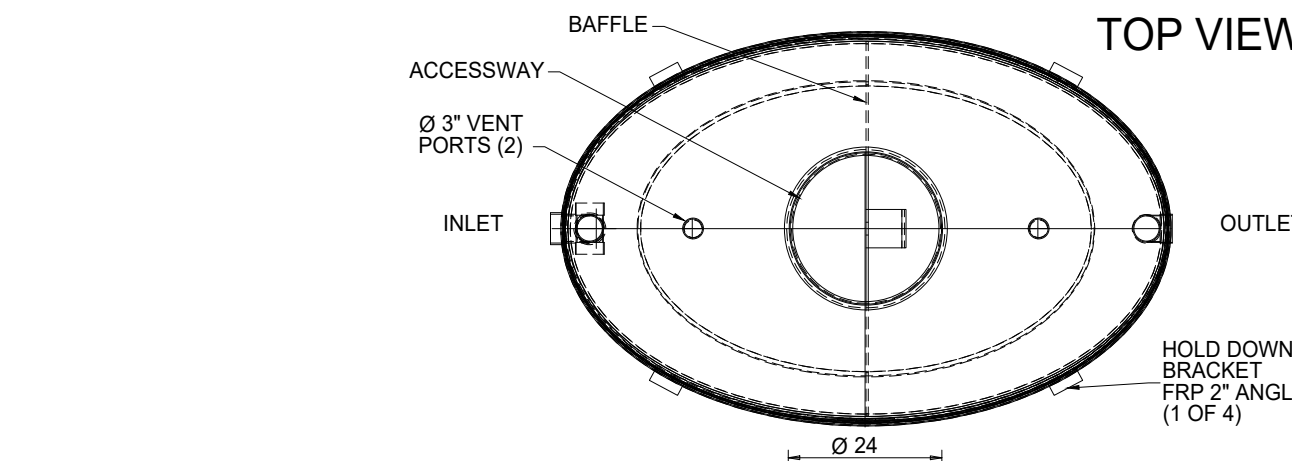
**3 SECTION AT TYP FIRE PROTECTION RISER**  
NO SCALE

NOTES:

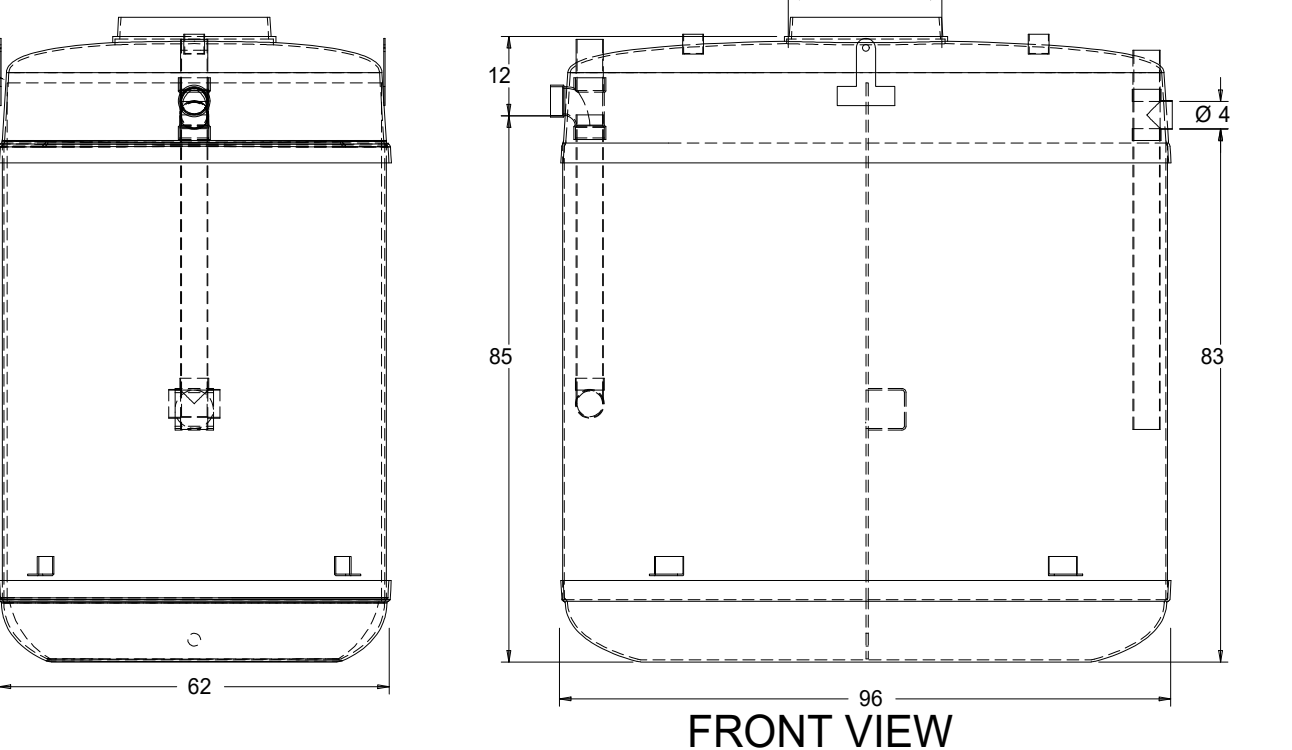
1. FOR GRAVITY APPLICATIONS ONLY.
2. ALL INSTRUCTIONS FOR INSTALLATION AND MANUFACTURE WITH CHARACTERISTICS AND THICKNESS.
3. MINIMUM THICKNESS 1/4\"/>
4. STANDARD PIPE STEEL ARE REQUIRED FOR ALL PROJECTS IN THIS SCHEDULE. AN ALUMINUM ALLOY PIPE IS ALLOWED FOR THE 1/2\"/>
5. SCHEDULE 40S ALUMINUM PIPE IS REQUIRED FOR THE 1/2\"/>
6. SCHEDULE 40S ALUMINUM PIPE IS REQUIRED FOR THE 1/2\"/>
7. SCHEDULE 40S ALUMINUM PIPE IS REQUIRED FOR THE 1/2\"/>
8. SCHEDULE 40S ALUMINUM PIPE IS REQUIRED FOR THE 1/2\"/>
9. SCHEDULE 40S ALUMINUM PIPE IS REQUIRED FOR THE 1/2\"/>
10. U.S. PATENT #2,746,912; CON. PATENT #2,185,822.



ISOMETRIC VIEW



TOP VIEW



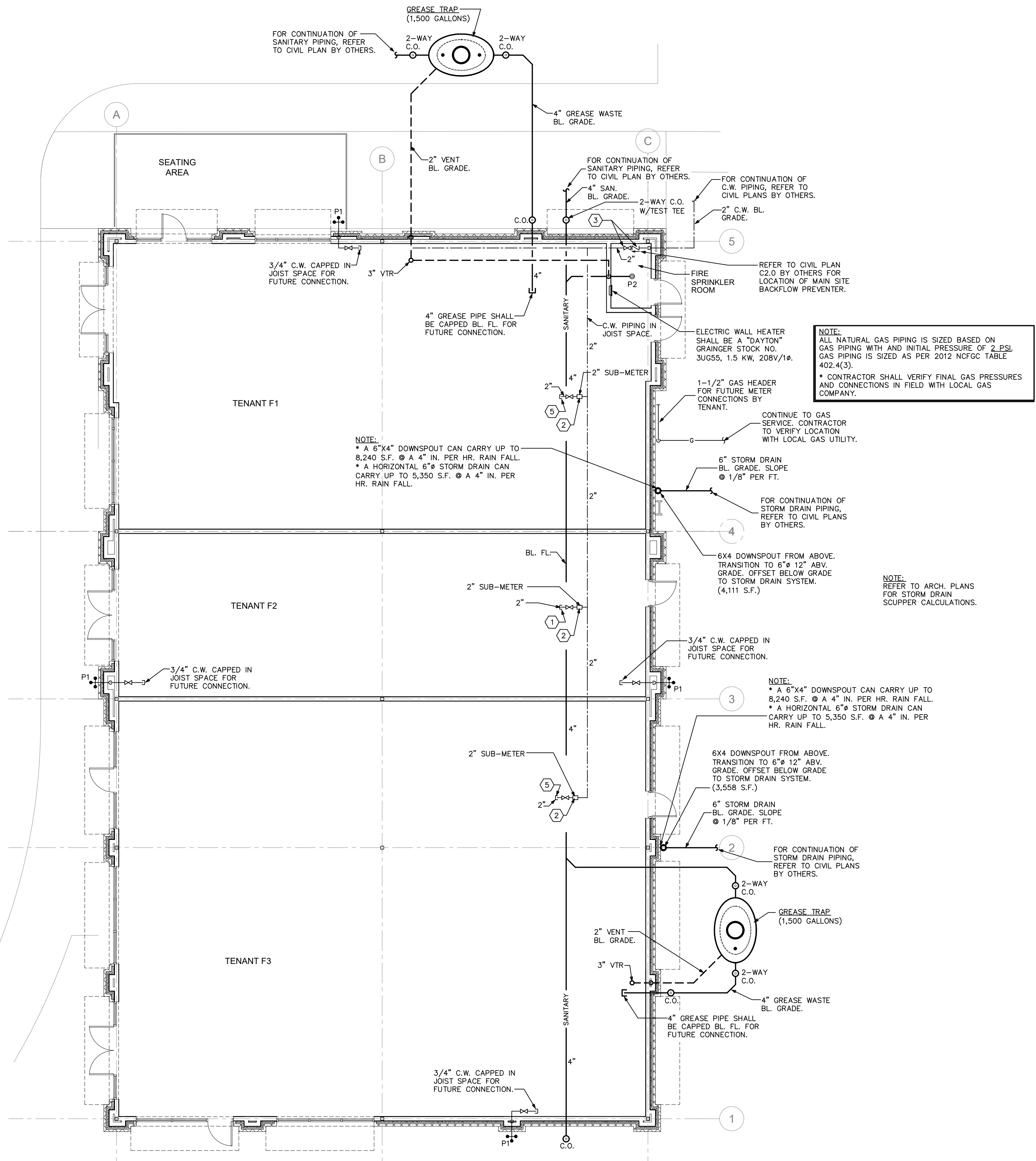
FRONT VIEW

**1,500 GALLONS**

**2 GREASE TRAP DETAIL**  
NO SCALE

PLUMBING ABBREVIATION LEGEND

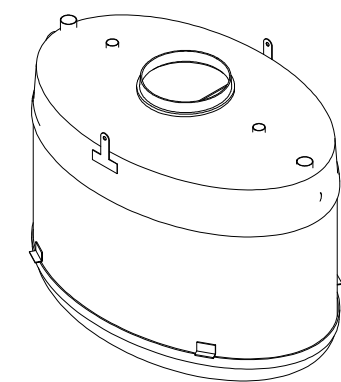
- 1 1-1/4\"/>
- 2 C.W. SUB-METER IN JOIST SPACE AT THIS LOCATION WITH REMOTE READER, COORDINATE FINAL SPECIFICATIONS AND INSTALLATION WITH DEVELOPER PRIOR TO CONSTRUCTION.
- 3 C.W. SHUT-OFF VALVE AND BACKFLOW PREVENTER IN JOIST SPACE AT THIS LOCATION. BACKFLOW PREVENTER SHALL BE A \"WATTS\" SERIES LP007.
- 4 1-1/2\"/>
- 5 2\"/>



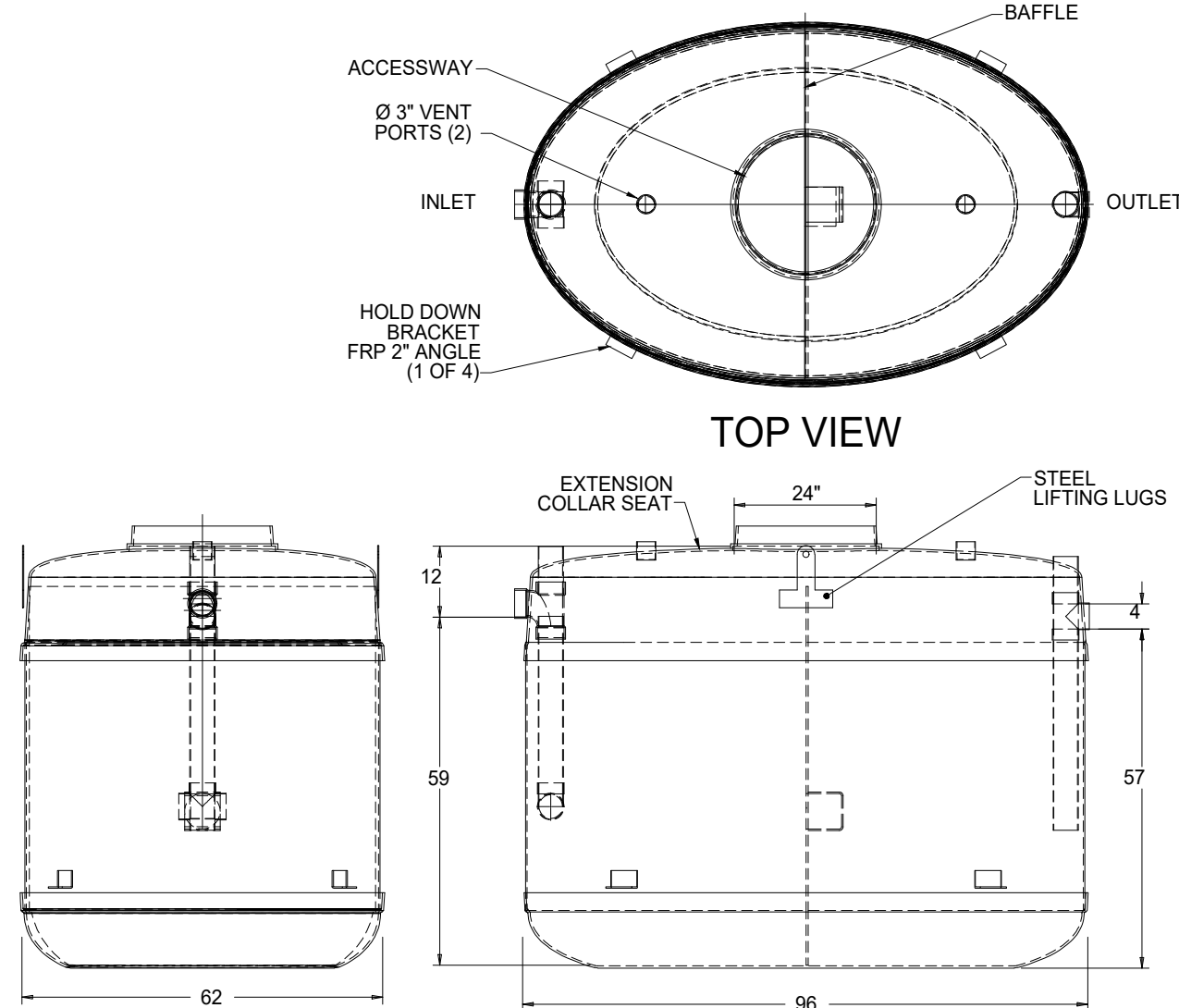
**2 FLOOR PLAN [BUILDING F1] - PLUMBING**  
SCALE: 1/8\"/>

- NOTES:
1. FOR GRAVITY APPLICATIONS ONLY.
  2. ALL PROCEPTOR UNITS ARE MANUFACTURED WITH FIBERGLASS REINFORCED PLASTIC. PHYSICAL PROPERTIES AND THICKNESS:
  3. PROCEPTOR IS A 1/2" CLASS.
  4. MANHOLE THICKNESS: 1/2" WALL AND 3/8" TOP AND BOTTOM RINGS.
  5. ALL PROCEPTOR UNITS ARE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  6. DRAINING: PROCEPTOR UNITS ARE STANDARD WITH INLET AND OUTLET OTHER PIPE SIZE OPTIONS AVAILABLE ON REQUEST.
  7. EXTENDING COLLARS: EXTENDING COLLARS TO BE PROVIDED WITH SEAL BY CONTRACTOR FOR WATER TIGHT SEAL.
  8. INLET: INLET FOR FINAL ADJUSTMENT AND CHARGING WITH PRESSURE TANK OR AIR OR MORE GRAVITY INSTALLATION.
  9. COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.
  10. U.S. PATENT #6,746,912; CAN PATENT #2,186,822.

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ISOMETRIC VIEW



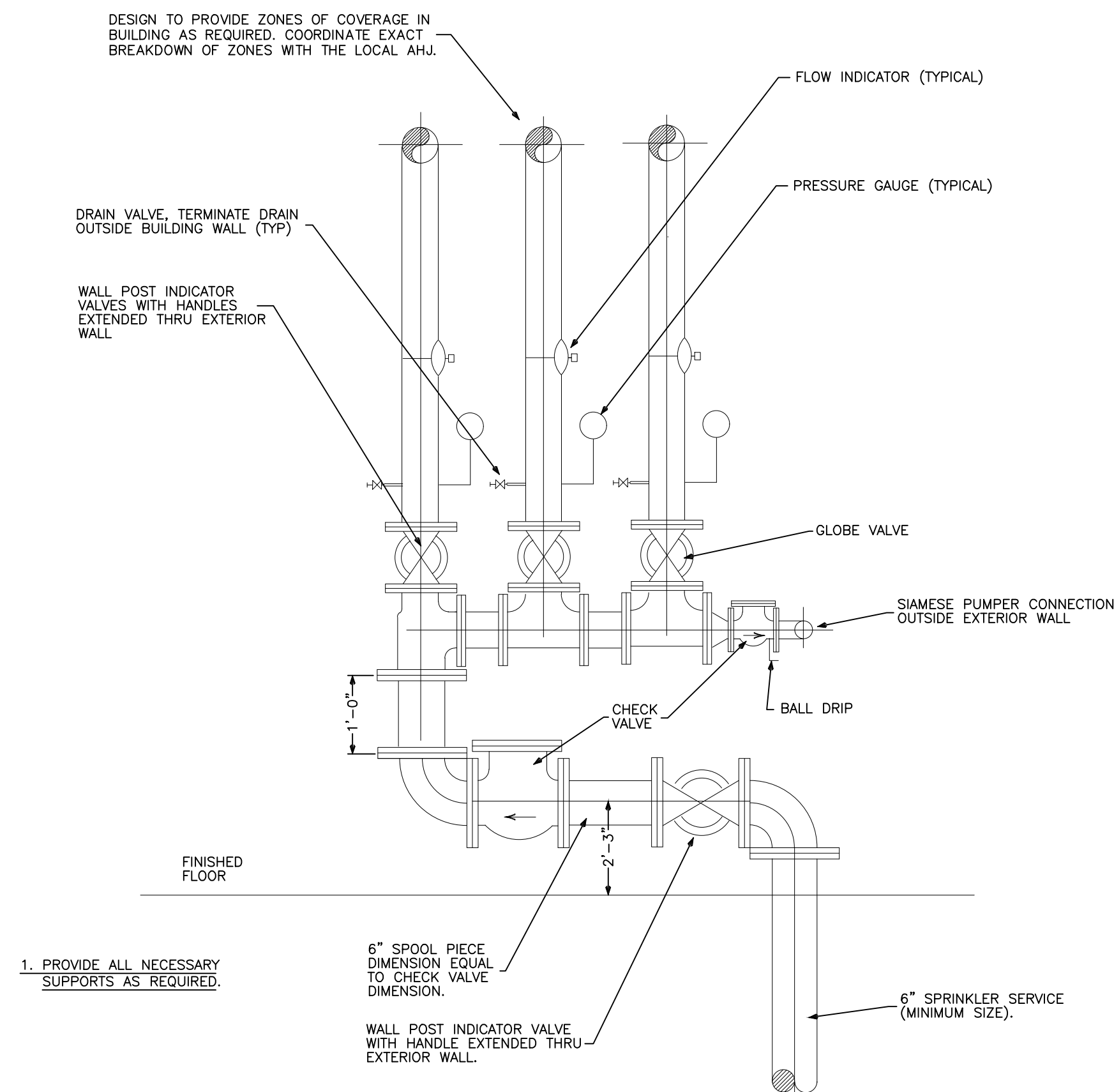
SIDE VIEW

FRONT VIEW

1,000 GALLONS

## 2 GREASE TRAP DETAILS

NO SACLE



## 3 SECTION AT TYP FIRE PROTECTION RISER

NO SCALE

### SPECIFICATIONS - SECTION 15050 - AUTOMATIC SPRINKLER SYSTEM

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SCOPE: WORK SPECIFIED IN THIS SECTION INCLUDES, BUT IS NOT LIMITED TO PROVIDING:

WET SPRINKLER SYSTEM AS INDICATED, WORK TO START AT 5'-0\"/>

PIPING LAYOUT AS REQUIRED TO MEET NFPA 13 STANDARDS, COORDINATE WITH LOCAL A.H.J.

SPRINKLER SYSTEM SHALL BE CALCULATED TYPE WITH DENSITY OF 0.19 GPM IN ORDINARY HAZARD AREAS GROUP 2, OR AS REQUIRED BY A.H.J. FOR THE VARIOUS TENANTS.

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#### PRODUCTS:

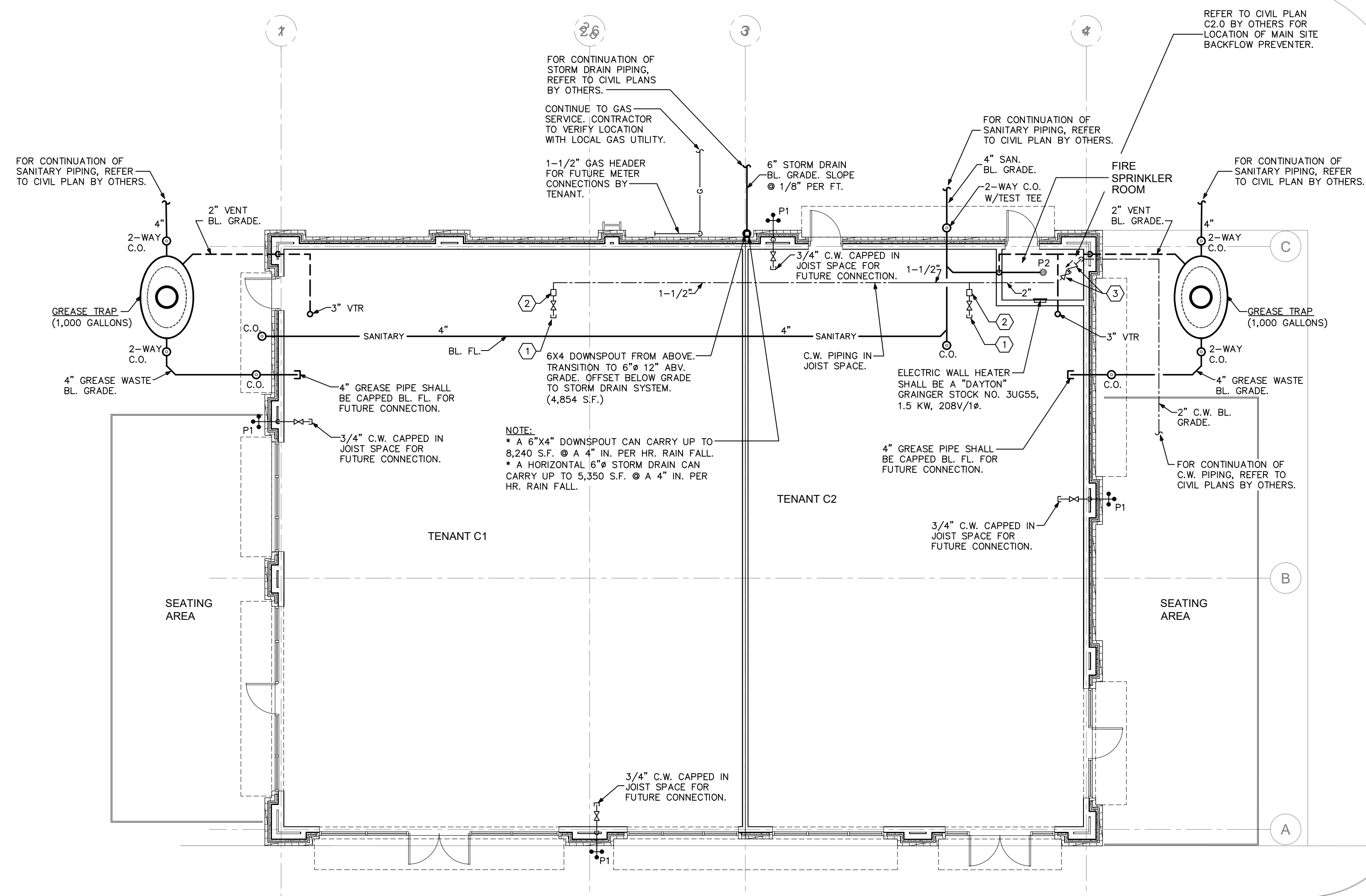
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WATER OPERATED ALARM: WATER MOTOR GONGS SHALL BE INSTALLED ON OUTSIDE BUILDING WALL AT ALARM VALVES AND CONNECTED TO SYSTEMS, AND FURNISHED WITH SIGN INDICATING ITS PURPOSE.

### PLUMBING ABBREVIATION LEGEND

- 1 2" C.W. VALVED AND CAPPED IN JOIST SPACE FOR FUTURE CONNECTION.
- 2 2" C.W. SUB-METER IN JOIST SPACE AT THIS LOCATION WITH REMOTE READER. COORDINATE FINAL SPECIFICATIONS AND INSTALLATION WITH DEVELOPER PRIOR TO CONSTRUCTION.
- 3 C.W. SHUT-OFF VALVE AND BACKFLOW PREVENTER IN JOIST SPACE AT THIS LOCATION. BACKFLOW PREVENTER SHALL BE A "WATTS" SERIES LF007.

NOTE:  
ALL NATURAL GAS PIPING IS SIZED BASED ON GAS PIPING WITH AND INITIAL PRESSURE OF 2 PSI.  
GAS PIPING IS SIZED AS PER 2012 NOTICE TABLE 402.4(3).  
\* CONTRACTOR SHALL VERIFY FINAL GAS PRESSURES AND CONNECTIONS IN FIELD WITH LOCAL GAS COMPANY.



## 1 FLOOR PLAN [BUILDING C1] - PLUMBING

SCALE: 1/8"=1'-0"



## 2 GREASE TRAP DETAIL

PLUMBING ABBREVIATION LEGEND	
①	2" C.W. VALVED AND CAPPED IN JOIST SPACE FOR FUTURE CONNECTION.
②	C.W. SUB-METER IN JOIST SPACE AT THIS LOCATION WITH REMOTE READER. COORDINATE FINAL SPECIFICATIONS AND INSTALLATION WITH DEVELOPER PRIOR TO CONSTRUCTION.
③	C.W. SHUT-OFF VALVE AND BACKFLOW PREVENTER IN JOIST SPACE AT THIS LOCATION. BACKFLOW PREVENTER SHALL BE A "WATTS" SERIES LP007.

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PANEL SCHEDULE A4																	
400 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, M.L.D., 10000 AMPS MINIMUM A.I.C. BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE																	
#	BKR.	WIRE AND CONDUIT				LOAD DESCRIPTION	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	WIRE AND CONDUIT				BKR.	#
		COND.	NEUTRAL	COND.	C.							KEYS	COND.	NEUTRAL	COND.		
1					SPACE	0	0	0			SPACE						
3					SPACE	0	0	0			SPACE					4	
5					SPACE	0	0	0			SPACE					6	
7					SPACE	0	0	0			SPACE					8	
9					SPACE	0	0	0			SPACE					10	
11					SPACE	0	0	0			SPACE					12	
13					SPACE	0	0	0			SPACE					14	
15					SPACE	0	0	0			SPACE					16	
17					SPACE	0	0	0			SPACE					18	
19					SPACE	0	0	0			SPACE					20	
21					SPACE	0	0	0			SPACE					22	
23					SPACE	0	0	0			SPACE					24	
25					SPACE	0	0	0			SPACE					26	
27					SPACE	0	0	0			SPACE					28	
29					SPACE	0	0	0			SPACE					30	
31					SPACE	0	0	0			SPACE					32	
33					SPACE	0	0	0			SPACE					34	
35					SPACE	0	0	0			SPACE					36	
37					SPACE	0	0	0			SPACE					38	
39					SPACE	0	0	0			SPACE					40	
41					SPACE	0	0	0			SPACE					42	
WIRE/CONDUIT KEY		WIRING TYPE	INSULATION	CONDUIT TYPE	TEMP. RATING	NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = . AMPS											
1234		TEMP. RATING	CONDUIT TYPE	INSULATION	WIRING TYPE	PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001											
						REGISTERED TO - TODD W. CAREY AND ASSOCIATES											

PANEL A4 DIVERSIFICATION CALCULATIONS	
TOTAL DIVERSIFIED PANEL LOAD	- 0
LOAD AT 120/208V/3-PHASE/4-WIRE	- .0A

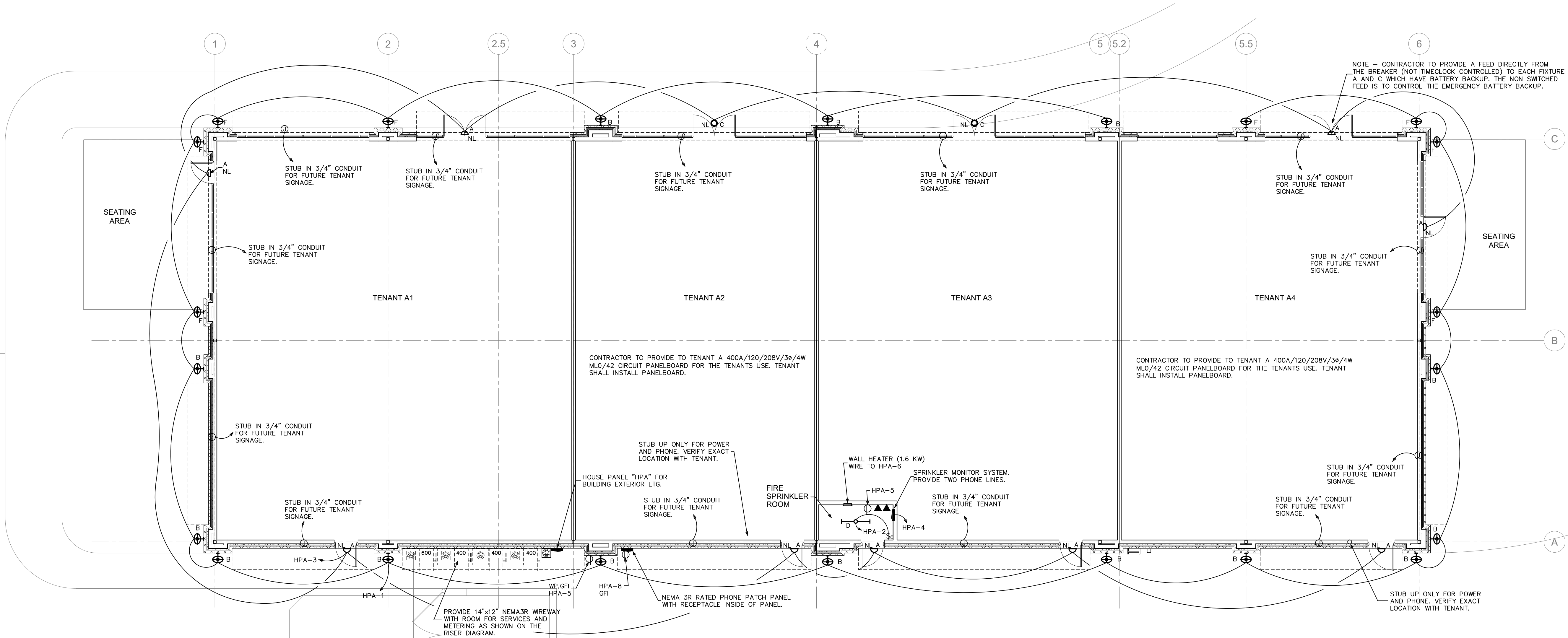
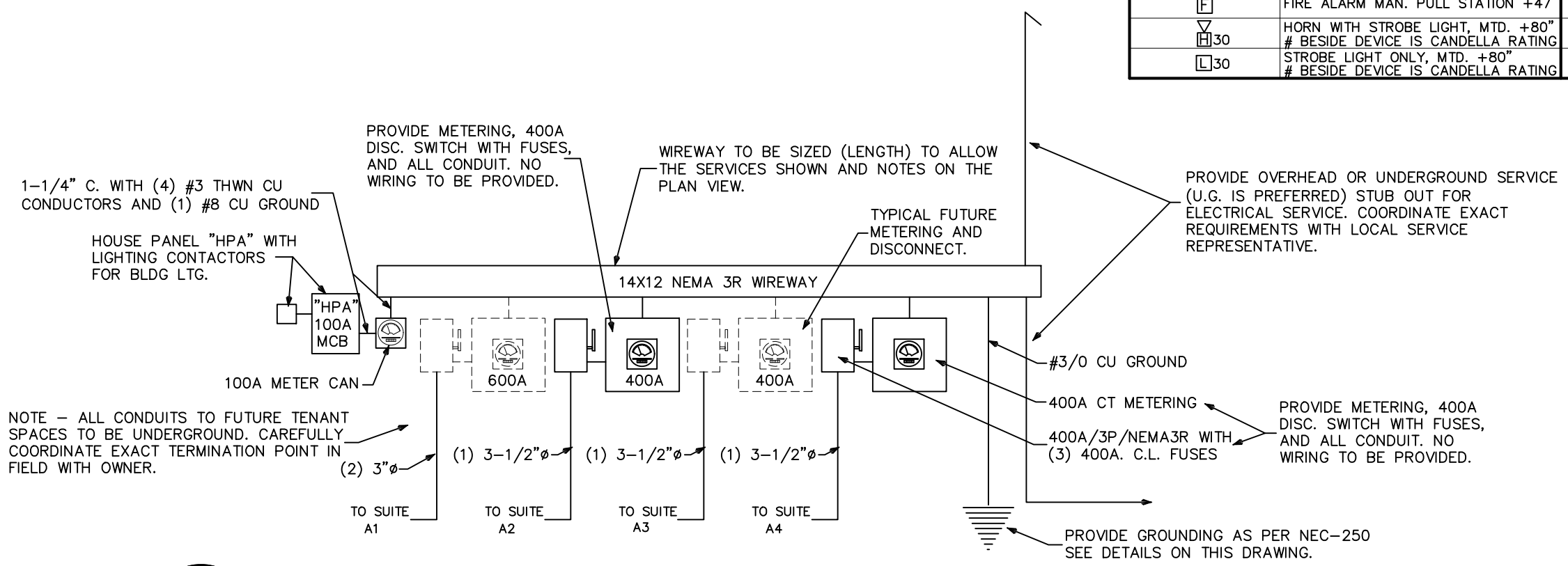
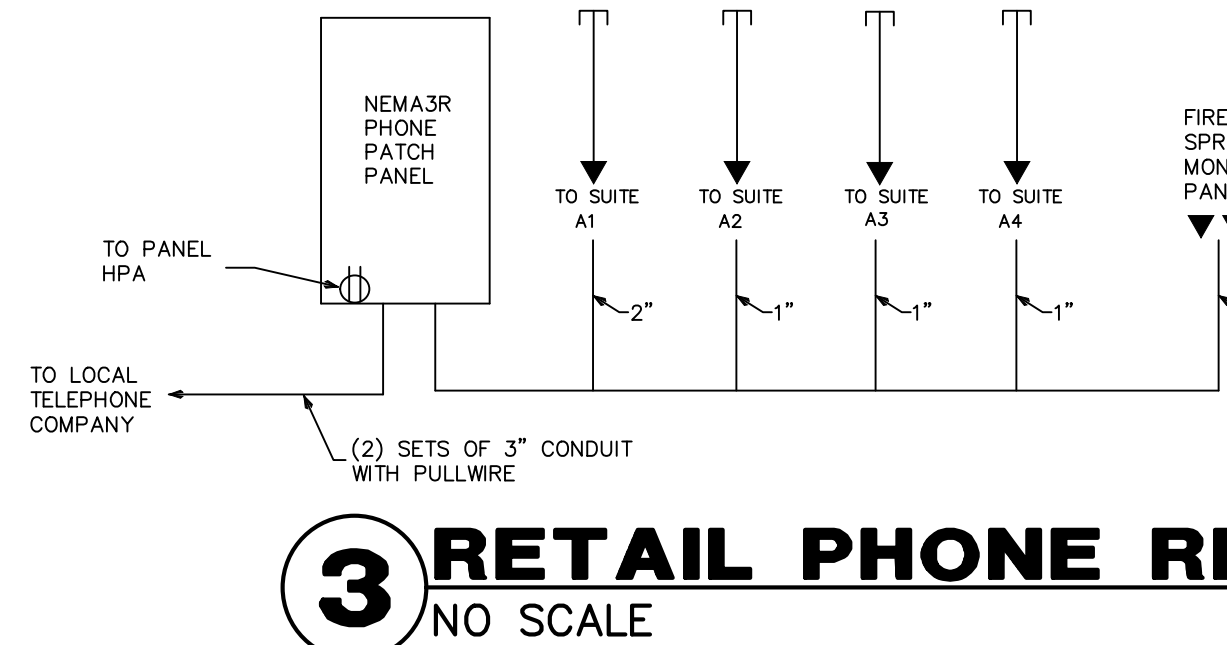
PANEL SCHEDULE HPA																	
100 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, 100A. M.C.B., 22000 AMPS MINIMUM A.I.C. BRACING, SURFACE MOUNTED, TYPE NEMA 3R ENCLOSURE																	
#	BKR.	WIRE AND CONDUIT				LOAD DESCRIPTION	NEUT. LINE A LINE B LINE C				LOAD DESCRIPTION	WIRE AND CONDUIT				BKR.	
		COND.	NEUTRAL	COND.	KEYS		COND.	C.	COND.	COND.		KEYS	C.	COND.	COND.		
1	20/1	#12	#12	1/2	CHAL	EXTERIOR BLDG LIGHTING	990	990	64	0	FIRE SPRINKLER RM LTG	CHAL	1/2	#12	#12	20/1	2
3	20/1	#12	#12	1/2	CHAL	EXTERIOR BLDG NITE LTG	220	220	0	0	SPRINKLER MONITOR SYSTEM	CHAL	1/2	#12	#12	20/1	4
5	20/1	#12	#12	1/2	CHAL	SERVICE RECEPTACLES	360	360	0	0	SPRINKLER ROOM HEATER	CHAL	1/2	#12	#12	20/1	6
7						SPACE	1500	0	0	0	PHONE PATCH PANEL RECEPT	CHAL	1/2	#12	#12	20/1	8
9						SPACE	180	180	0	0	SPACE						10
11						SPACE	0	0	0	0	SPACE						12
13						SPACE	0	0	0	0	SPACE						14
15						SPACE	0	0	0	0	SPACE						16
WIRE/CONDUIT KEY							WIRING TYPE	INSULATION	CONDUIT TYPE	TEMP RATING	PEAK PHASE (C) UNBALANCED NEUTRAL LOAD AMPS = 15.5 AMPS						
1234							WIRING TYPE	INSULATION	CONDUIT TYPE	TEMP RATING	NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 9.8 AMPS						
							WIRING TYPE	INSULATION	CONDUIT TYPE	TEMP RATING	PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001						
							WIRING TYPE	INSULATION	CONDUIT TYPE	TEMP RATING	REGISTERED TO - TDD W. CAREY AND ASSOCIATES						

PANEL NOTES:  
\* PROVIDE TIMELOCK CONTROL FOR THIS CIRCUIT

PANEL HPA DIVERSIFICATION CALCULATIONS	
RECEPTACLES (C) - 540 VA TOTAL	- 540
FIRST 10 KW AT 100% - 540	- 540
LIGHTING - 1276 X 120% - 1535	- 1535
MISC NON-CONTINUOUS LOADS AT 100% - 1750	- 1750
TOTAL DIVERSIFIED PANEL LOAD - 3825	- 3825
LOAD AT 120/208V/3-PHASE/4-WIRE - 10.7A	- 10.7A

LIGHTING FIXTURE SCHEDULE									
LABEL	TYPE OF FIXTURE	FINISH	LENS TYPE	VOLTAGE	LAMP	MANUFACTURER & MODEL NO.		REMARKS	
A	LED WALL LIGHT / EGRESS LT	WHITE		120	(1) LED DRIV. 23W.	LITHONIA WSD LED 1 10A/700/40K SR3	120 ELDR	W/ EMERGENCY BATTERY BACKUP	
B	LED WALL LIGHT	BLACK	WHITE ACRYLIC	120	3431 LUMENS 29W	LIGHTWAY DKA-W-29W-3-B1-WSA			
C	RECESSED LED CEILING DN LT	WHITE		120	1500 LUMENS 18.8W	LITHONIA REAL6CD6 MW ESL 1500L 30K .955SC	120 6VL ELR	W/ LITHONIA L7X HOUSING & EMERGENCY BATTERY BACKUP	
D	4' FLUORESCENT STRIP	WHITE		120	(2) 32W T8	LITHONIA C-232-MVOLT			
F	LED WALL LIGHT	BLACK	WHITE ACRYLIC	120	3431 LUMENS 29W.	LIGHTWAY DKW-U-29W-3-B1-WSA			

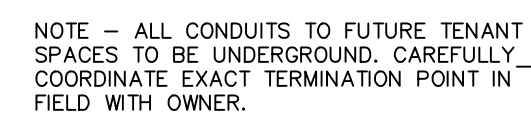
ELECTRICAL SYMBOLS LEGEND			
SYMBOLS	DESCRIPTION	SYMBOLS	DESCRIPTION
Ⓢ	DUPLEX RECEPTACLE, MTD. +18" AFF	Ⓢ	TRANSFORMER - SIZE AS NOTED
Ⓢ	240 VOLT RECEPTACLE (HT. AS REQ.)	Ⓢ	PANEL - SIZE AS NOTED
Ⓢ	QUADRUPEX RECEPTACLE, MTD. +18"	Ⓢ	MOMENTARY CONTACT PUSH BUTTON
Ⓢ	COUNTERTOP HT. RECEPTACLE +42"	Ⓢ	F-FAN; M-MOTOR; P-PUMP
Ⓢ	SINGLE POLE SWITCH, MTD +42"	Ⓢ	SPECIAL OUTLET - AS REQUIRED
Ⓢ	THREE-WAY SWITCH, MTD +42"	Ⓢ	OUT. NUMBER (B INDICATES PANEL)
Ⓢ	MANUAL STARTER SWITCH	Ⓢ	*2* DESIGNATES CIRCUIT NUMBER
Ⓢ	DIMMER SWITCH, MTD +42"	Ⓢ	EXIT SIGN, ONE SIDED, OR TWO SIDED
Ⓢ	SWITCH W/ ILLUM WHEN ON MTD +42"	Ⓢ	EMERGENCY LIGHTING
Ⓢ	THREE-WAY SWITCH W/ OCCU SENSOR	Ⓢ	RECESSED MOUNTED LIGHTING FIXTURE
Ⓢ	SWITCH W/ OCCU SENSOR	Ⓢ	B DESIGNATES FIXTURE TYPE
Ⓢ	JUNCTION BOX, FLUSH IF POSSIBLE	Ⓢ	OVERHEAD OCCUPANCY SENSOR
Ⓢ	TELEPHONE / DATA OUTLET +18"	Ⓢ	HIGHWAY HD LIGHTING FIXTURE
Ⓢ	DED. COMPUTER TERM. OUTLET +18"	Ⓢ	B DESIGNATES FIXTURE TYPE
Ⓢ	DISCONNECT SWITCH W/ STARTER	Ⓢ	FLUORESCENT LIGHTING NIGHT LIGHT
Ⓢ	DISCONNECT SWITCH	Ⓢ	B DESIGNATES FIXTURE TYPE
Ⓢ	FLR. MTD. FLUSH DUPLEX RECEPTACLE	Ⓢ	FLUORESCENT STRIP LIGHTING FIXTURE
Ⓢ	FLR. MTD. FLUSH QUAD. RECEPTACLE	Ⓢ	B DESIGNATES FIXTURE TYPE
Ⓢ	FLR. MTD. FLUSH PHONE/DATA OUTLET	Ⓢ	ISOLATED GROUND
Ⓢ	FLR. MTD. FLUSH COMPUTER OUTLET	Ⓢ	WP WEATHER-PROOF
Ⓢ	AREA SMOKE DETECTOR	Ⓢ	BC BELOW COUNTER
Ⓢ	HEAT DETECTOR	Ⓢ	TC TIME CLOCK - 24 HOUR
Ⓢ	DUCT SMOKE DETECTOR	Ⓢ	GF1 GROUND FAULT INTERRUPTER
Ⓢ	FIRE ALARM MAX. PULL STATION +42"	Ⓢ	AFF ABOVE FINISHED FLOOR
Ⓢ	WORK WITH STROBE LIGHT, MTD +42"	Ⓢ	EWC ELECTRIC WATER COOLER
Ⓢ	STROBE LIGHT ONLY, MTD +42"	Ⓢ	ASW ABOVE SHOW WINDOW
Ⓢ	# BESIDE DEVICE IS CANDELLA RATING	Ⓢ	BSW BELOW SHOW WINDOW
Ⓢ		Ⓢ	FACP FIRE ALARM CONTROL PANEL
Ⓢ		Ⓢ	FAAP FIRE ALARM ANNUNCIATOR PANEL



PANEL SCHEDULE HPF																
100 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, 100A. M.C.B., 22000 AMPS MINIMUM A.I.C. BRACING, SURFACE MOUNTED, TYPE NEMA 3R ENCLOSURE																
#	BKR.	WIRE AND CONDUIT				LOAD DESCRIPTION	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	WIRE AND CONDUIT				BKR.
		COND.	NEUTRAL	COND.	C. KEYS							KEYS	C.	COND.	NEUTRAL	
1	ED/1	#12	#12	#12	1/2	CHAL. EXTERIOR BLDG LIGHTING *	1080	1080	-----		FIRE SPRINKLER RM LTG	CHAL. 1/2	#12	#12	20/1	2
2	ED/1	#12	#12	#12	1/2	CHAL. EXTERIOR BLDG NITE LTG *	64	64	-----		SPRINKLER MONITOR SYSTEM	CHAL. 1/2	#12	#12	20/1	4
3	ED/1	#12	#12	#12	1/2	CHAL. EXTERIOR BLDG NITE LTG *	148	148	-----		SPRINKLER ROOM HEATER	CHAL. 1/2	#12	#12	20/1	6
4	ED/1	#12	#12	#12	1/2	CHAL. SERVICE RECEPTACLES	200	200	-----		PHONE PATCH PANEL RECEPT	CHAL. 1/2	#12	#12	20/1	8
5						SPACE	360	360	-----							
6						SPACE	1500	1500	-----							
7						SPACE	180	180	-----							
8						SPACE	0	0	-----							
9						SPACE	0	0	-----							
10						SPACE	0	0	-----							
11						SPACE	0	0	-----							
12						SPACE	0	0	-----							
13						SPACE	0	0	-----							
14						SPACE	0	0	-----							
15						SPACE	0	0	-----							
16						SPACE	0	0	-----							
WIRE/CONDUIT KEY							1234	360	1860	PEAK PHASE (C) UNBALANCED LOAD AMPS = 15.5 AMPS						
1234							L-78-86 Deg. F.							MIN DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 9.8 AMPS		
1234							3,532									
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001, 4001																
REGISTERED TO - TODD W. CAREY AND ASSOCIATES																

PANEL NOTES:  
\* - PROVIDE TIMECLOCK CONTROL FOR THIS CIRCUIT

RECEPTACLES (3) - 540 VA TOTAL	
FIRST 10 KVA AT 100% -	540
1005 X 125% -	1256
MISC NON-CONTINUOUS LOADS AT 100% -	1700
-----	
TOTAL DIVERSIFIED PANEL LOAD -	3496
LOAD AT 120/208V/3-PHASE/4-WIRE -	9.7A



**2** **ELEC**  
NO SCALE



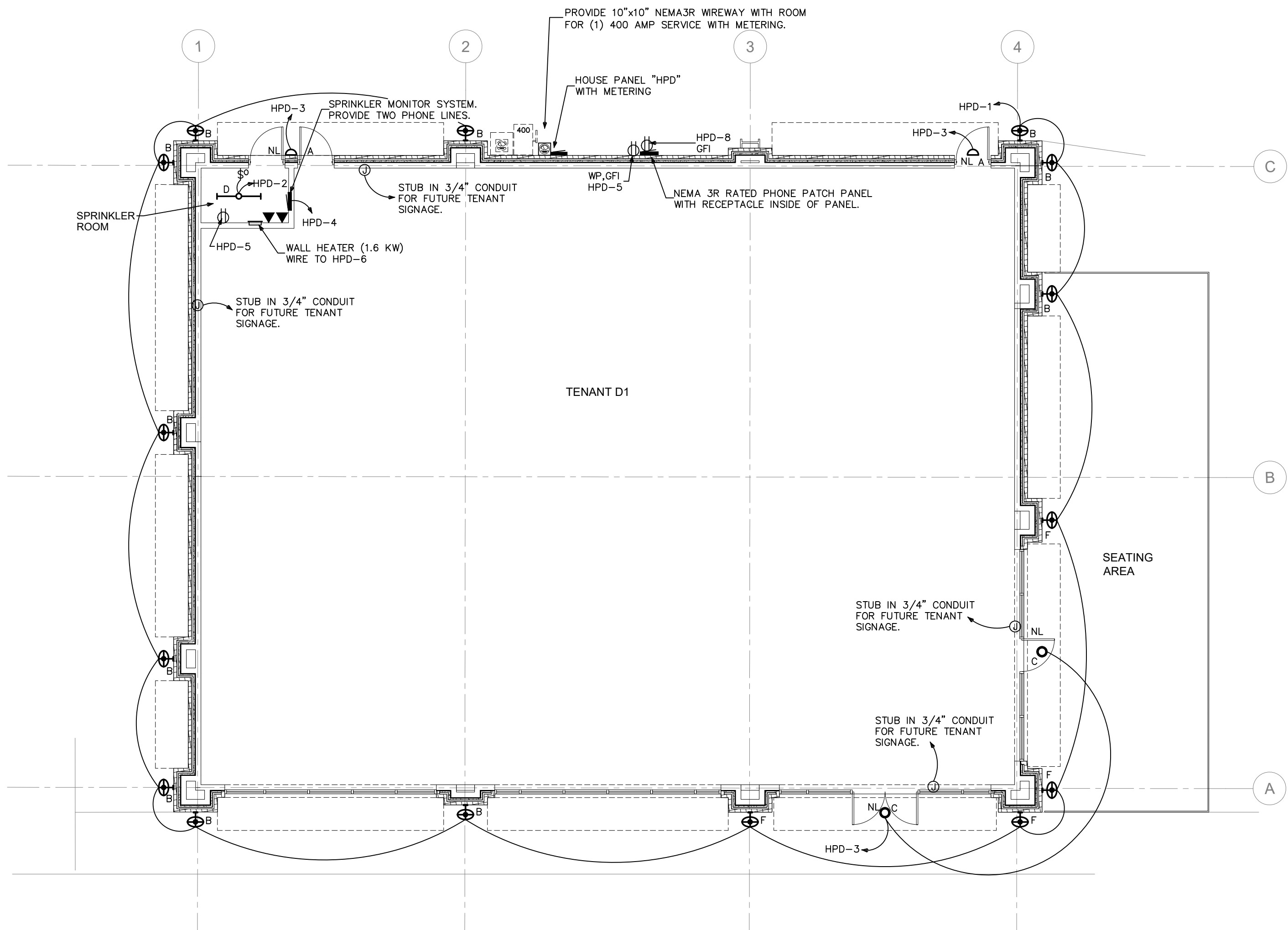
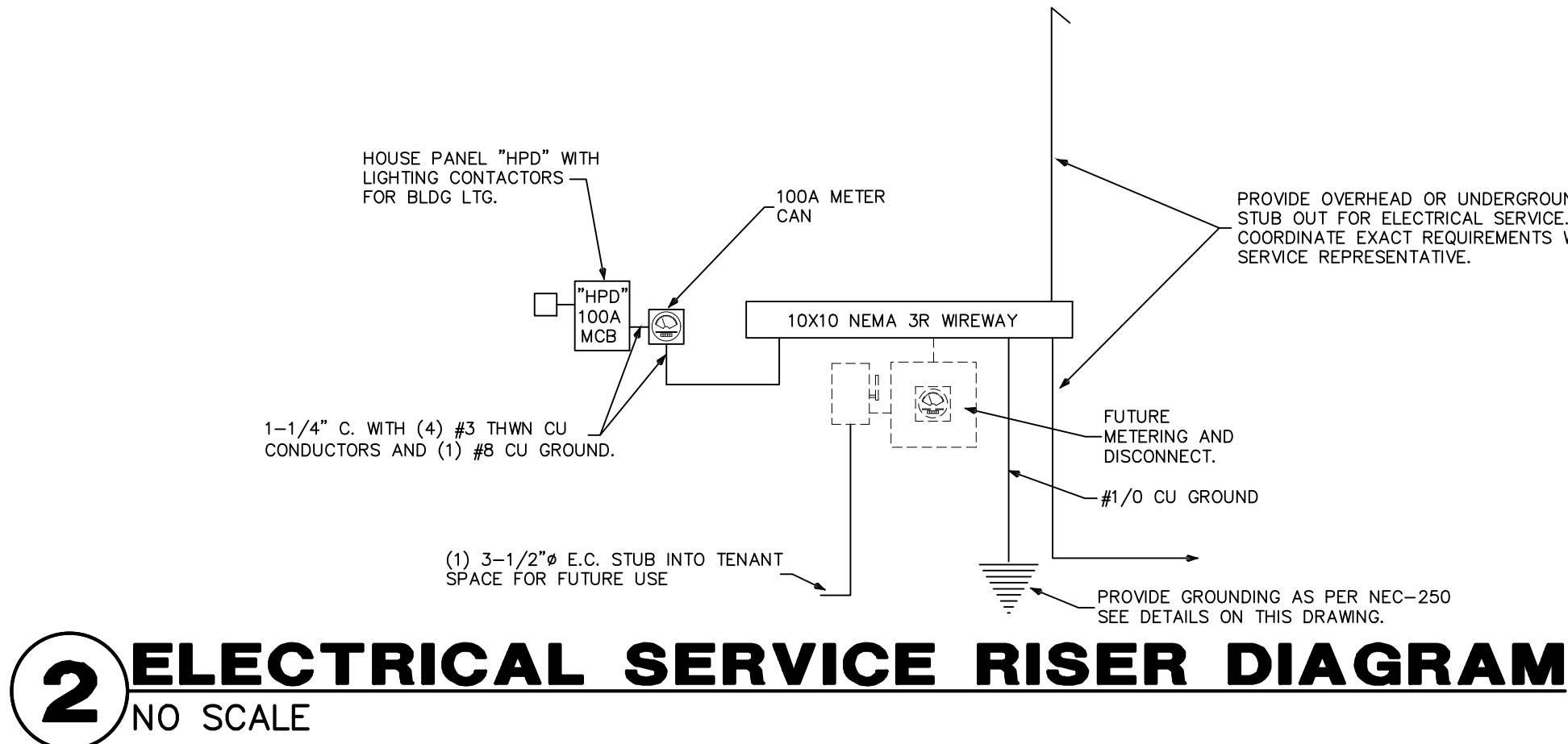
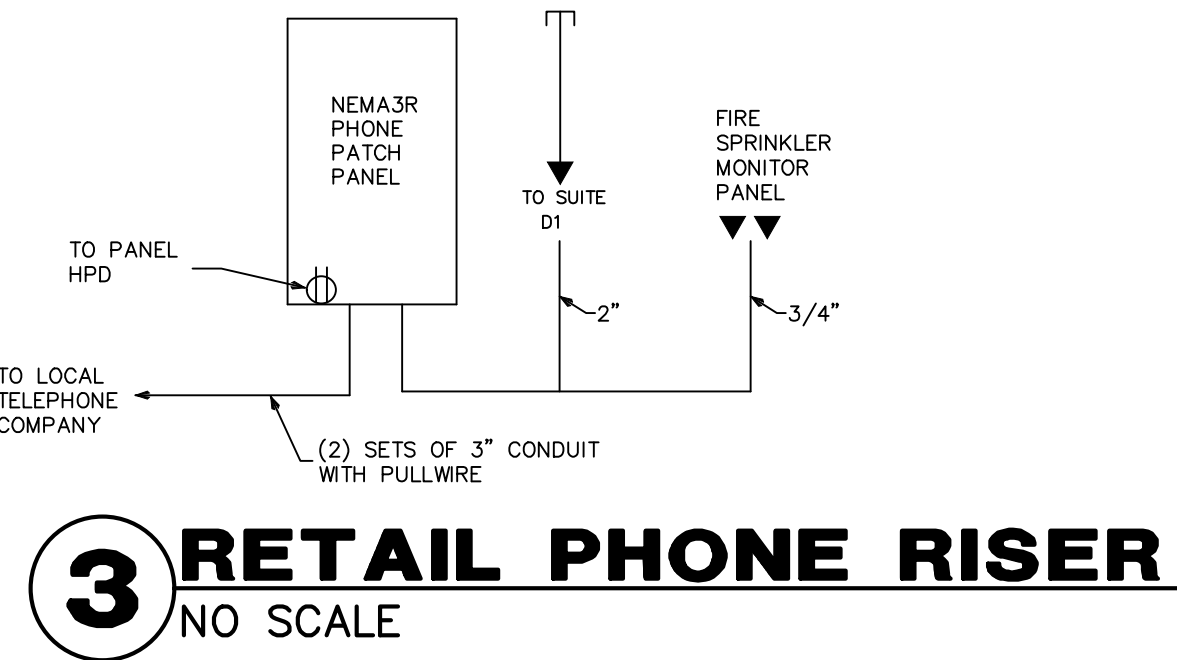
PANEL SCHEDULE HP													
100 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, 100A M.C.B., 22000 AMPS MINIMUM A.I.C., BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE													
#	BKR.	WIRE AND CONDUIT			LOAD DESCRIPTION			WIRE AND CONDUIT			BKR. #		
		COND.	NEUTRAL	C.	KEYS	NEUT.	LINE A	LINE B	LINE C	KEYS	C.	COND.	
1		#10	---	#10	1	CHL	SITE PARKING LOT LTG			CHL	1	#10	2
3	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG			CHL	1	#10	2
5													
7													
9	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG			CHL	1	#10	2
11													
13													
15	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG			CHL	1	#10	2
17													
WIRE/CONDUIT KEY: WIRING TYPE: INSULATION: CONDUIT TYPE: TEMP. RATING: L-78-86 Deg. F. C-CU WIRE H-THWN E-PVC SCH. 40 1234 L-TEMP. RATING L-CONDUIT TYPE L-INSULATION L-WIRING TYPE													
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001 REGISTERED TO - TODD W. CAREY AND ASSOCIATES													

PANEL NOTES:  
\* - PROVIDE TIMECLOCK CONTROL FOR THIS CIRCUIT

PANEL SCHEDULE HPB													
100 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, 100A M.C.B., 22000 AMPS MINIMUM A.I.C., BRACING, SURFACE MOUNTED, TYPE NEMA 3R ENCLOSURE													
#	BKR.	WIRE AND CONDUIT			LOAD DESCRIPTION			WIRE AND CONDUIT			BKR. #		
		COND.	NEUTRAL	C.	KEYS	NEUT.	LINE A	LINE B	LINE C	KEYS	C.	COND.	
1	20/1	#12	#12	1/2	CHL	EXTERIOR BLDG LIGHTING *	675	675	-----	CHL	1/2	#12	2
3	20/1	#12	#12	1/2	CHL	EXTERIOR BLDG NITE LTG *	64	64	-----	CHL	1/2	#12	2
5	20/1	#12	#12	1/2	CHL	SPRINKLER MONITOR SYSTEM	200	200	-----	CHL	1/2	#12	4
7													
9													
11													
13													
15													
WIRE/CONDUIT KEY: WIRING TYPE: INSULATION: CONDUIT TYPE: TEMP. RATING: L-78-86 Deg. F. C-CU WIRE H-THWN A-DMT 1234 L-TEMP. RATING L-CONDUIT TYPE L-INSULATION L-WIRING TYPE													
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001 REGISTERED TO - TODD W. CAREY AND ASSOCIATES													

PANEL NOTES:  
\* - PROVIDE TIMECLOCK CONTROL FOR THIS CIRCUIT

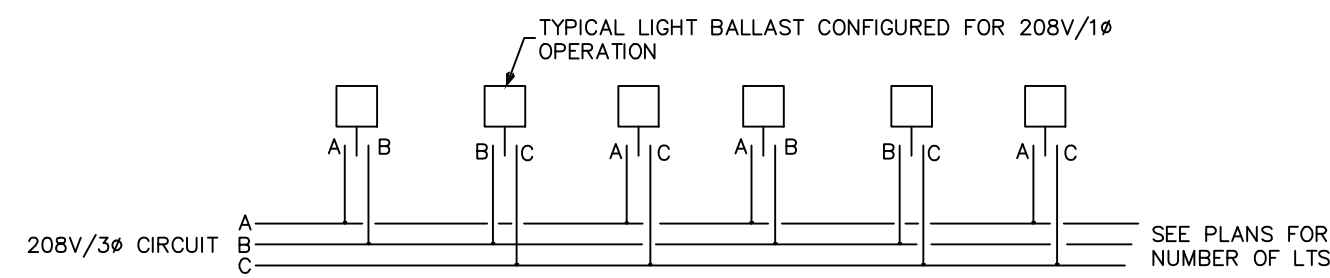
PANEL HPD DIVERSIFICATION CALCULATIONS		PANEL HP DIVERSIFICATION CALCULATIONS	
RECEPTACLES (3) - 540 VA TOTAL	540	LIGHTING - 10625 V 125V - 13393	
FIRST 10 KVA AT 100% - 540		MISC NON-CONTINUOUS LOADS AT 100% - 100	
800 V 125V - 1000			
MISC NON-CONTINUOUS LOADS AT 100% - 1700		TOTAL DIVERSIFIED PANEL LOAD - 13393	
TOTAL DIVERSIFIED PANEL LOAD - 3240		LOAD AT 120/208V/3-PHASE/4-WIRE - 37.2A	
LOAD AT 120/208V/3-PHASE/4-WIRE - 9.6A			



PANEL SCHEDULE HP																	
100 AMP, 120/208 VOLT, THREE PHASE, FOUR WIRE, 100A, M.C.B., 20000 AMPS MINIMUM A.I.C. BRACING, FLUSH MOUNTED, TYPE NEMA 1 ENCLOSURE																	
#	BKR.	WIRE AND CONDUIT				LOAD DESCRIPTION	NEUT.	LINE A	LINE B	LINE C	LOAD DESCRIPTION	WIRE AND CONDUIT				BKR.	#
		COND.	NEUTRAL	GN	C.							KEYS	C.	GN	NEUTRAL		
1								0	1171	-----							
3	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG	100	-----	100	PARKING LOT LTG CONTROLS	CHL	1	#10	#10	20/1	2
5								0	1171	-----	SPACE						4
7								0	1171	-----	SPACE						6
9	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG	0	1200	-----	SPACE						8
11								0	1200	-----	SPACE						10
13								0	1171	-----	SPACE						12
15	20/3	#10	---	#10	1	CHL	SITE PARKING LOT LTG	0	1171	-----	SPACE						14
17								0	1171	-----	SPACE						16
								0	1171	-----	SPACE						18
WIRE/CONDUIT KEY							3642	3542	3542	PEAK PHASE (A) UNBALANCED NEUTRAL LOAD AMPS = .8 AMPS							
100A										NON DIVERSIFIED LOAD AT 208 VOLT, THREE PHASE = 29.8 AMPS							
TEMP RATING										10,726							
CONDUIT TYPE																	
INSULATION																	
WIRING TYPE																	
PRINTED ON PANELS PROGRAM SERIAL NUMBER 2001.4001																	
REGISTERED TO - TODD W. CAREY AND ASSOCIATES																	

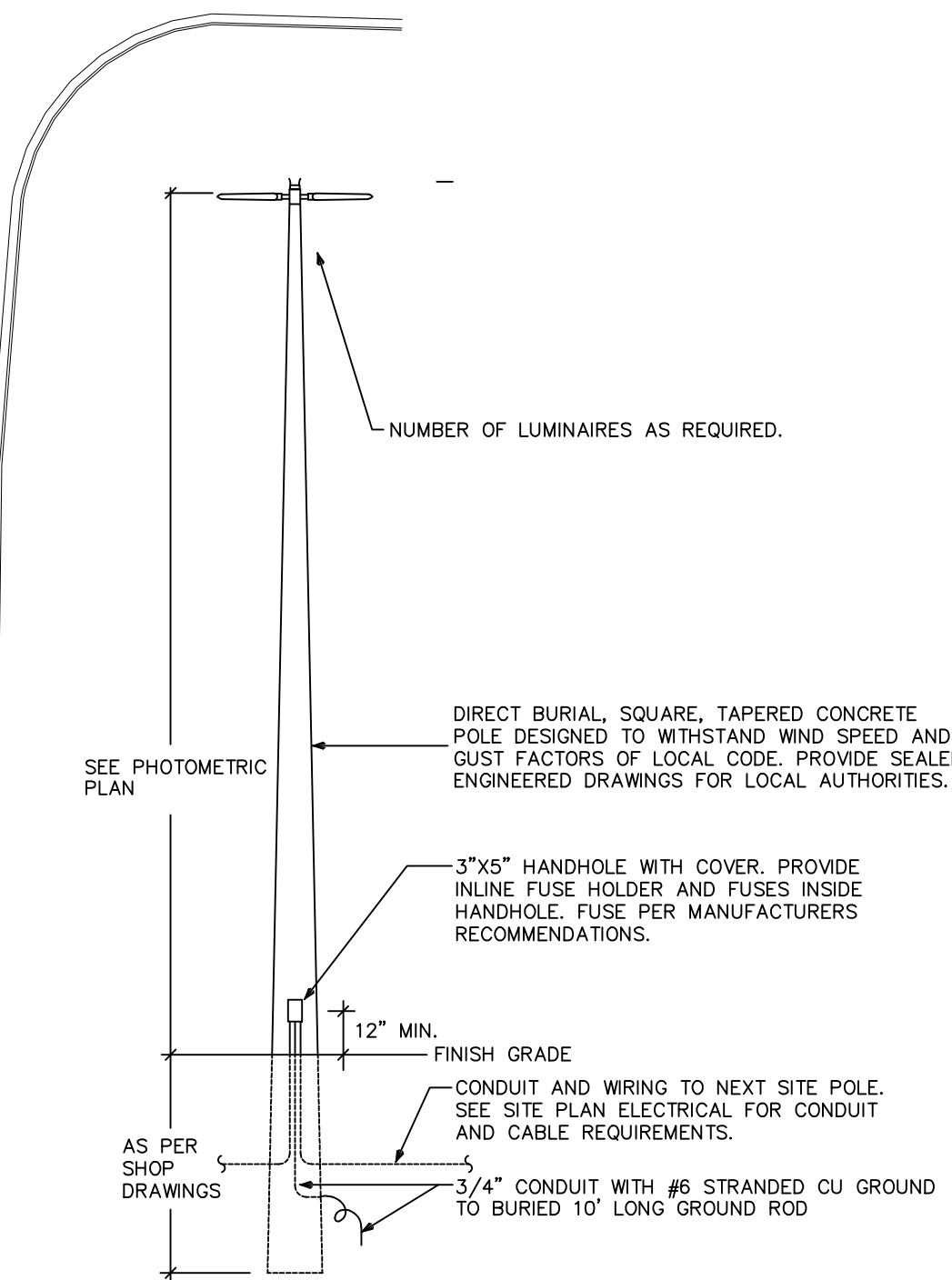
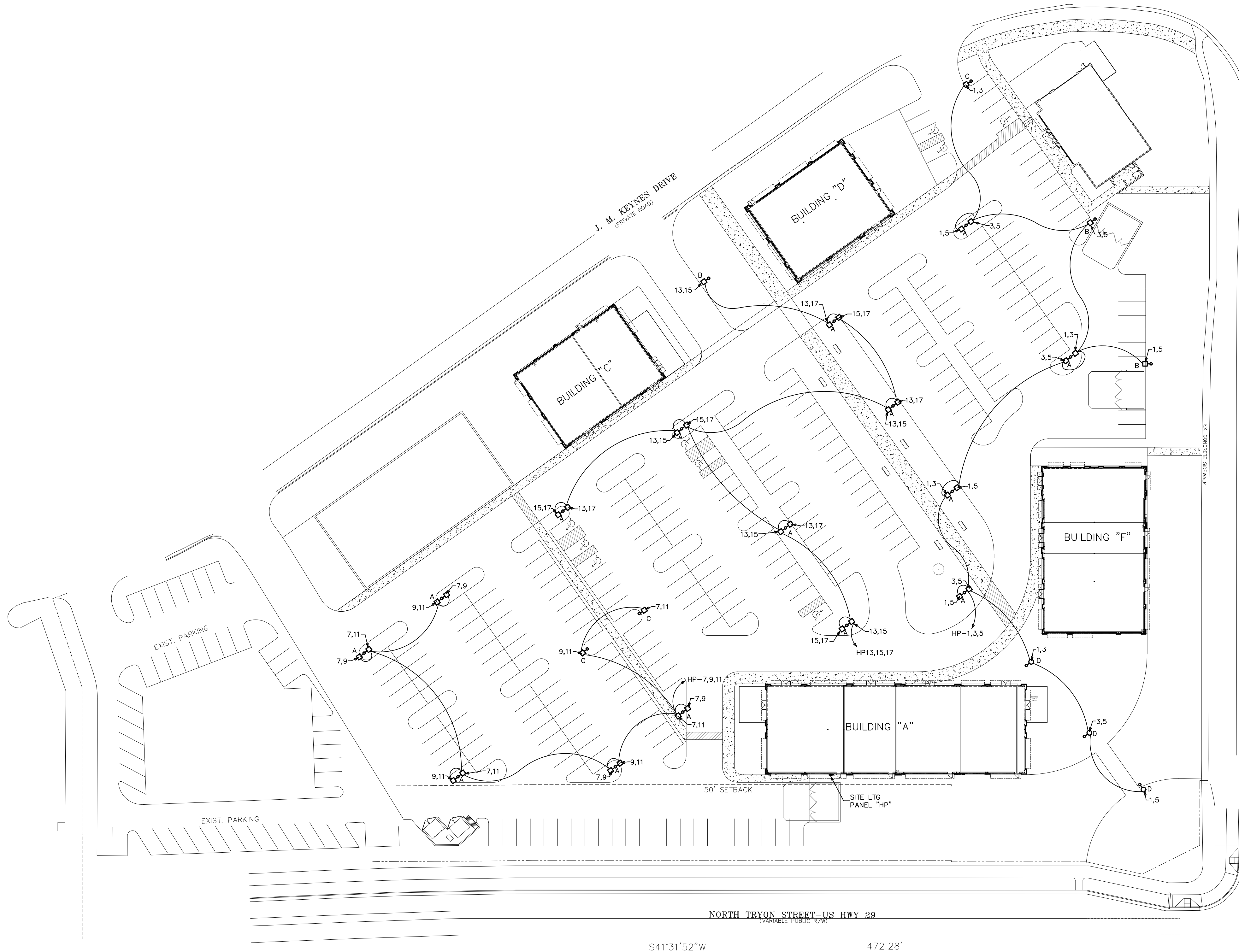
PANEL NOTES:  
\* - PROVIDE TIMECLOCK CONTROL FOR TH IS CIRCUIT

PANEL HP DIVERSIFICATION CALCULATIONS			
LIGHTING -	10626 X 125% -	13283	
MISC. NON-CONTINUOUS LOADS AT 100% -	100		
TOTAL DIVERSIFIED PANEL LOAD -	13383		
LOAD AT 120V/208V/3-PHASE/4-WIRE -	37.2A		



### 3 BALLAST WIRING DIAGRAM

NO SCALE



### 2 SITE POLE DETAILS

NO SCALE

- GENERAL SITE WIRING NOTES
- 1.) ALL SITE WIRING IS TO BE A MINIMUM SIZE OF #10 CU, U.O.N., RUN IN A MINIMUM OF A 1" PVC CONDUIT WITH A BURIAL DEPT OF 18" MINIMUM. IF MULTIPLE CIRCUITS ARE RUN IN A COMMON CONDUIT, THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WIRE SIZE WITH NEC REQUIRED DERATING.
  - 2.) ALL SITE POLES ARE TO BE ENGINEERED FOR THE WIND LOADING AS REQUIRED BY THE LOCAL AUTHORITIES. BURIAL DEPTH OF POLES TO BE VERIFIED BY POLE MANUFACTURER. PROVIDE SIGNED AND SCALED DRAWINGS TO LOCAL AUTHORITIES FOR SITE POLE DESIGN SPECIFICS.
  - 3.) SITE LIGHTING IS DIMMABLE LED. CONTRACTOR TO PROVIDE 0-10V DIMMING WIRING TO A PROGRAMMABLE CONTROL SYSTEM FOR LATE NIGHT LIGHTING.
  - 4.) CONTRACTOR TO CAREFULLY VERIFY ALL SITE WIRING LOADS AND OTHER REQUIREMENTS WITH MANUFACTURER SUBMITTALS. PRIOR TO ANY CONSTRUCTION WORK, FINAL LOCATIONS OF ALL SITE POLES IS TO BE COORDINATED WITH THE SITE PHOTOMETRICS DRAWING. THIS PLAN IS ONLY INTENDED TO SHOW THE WIRING NECESSARY FOR THE SITE POLES SHOWN ON THE PHOTOMETRIC PLAN.

NOTE - SEE SEPARATE PHOTOMETRIC DRAWINGS FOR EXACT LOCATIONS AND SPECIFICATIONS OF ALL SITE LIGHTING FIXTURES. THE TYPE A HAS A SYSTEM WATTAGE OF 650W, TYPE B AND C HAVE A SYSTEM WATTAGE OF 300 WATTS, AND TYPE D HAS A SYSTEM WATTAGE OF 71 WATTS.

### 1 SITE PLAN - WIRING

SCALE: 1" = 40'-0"