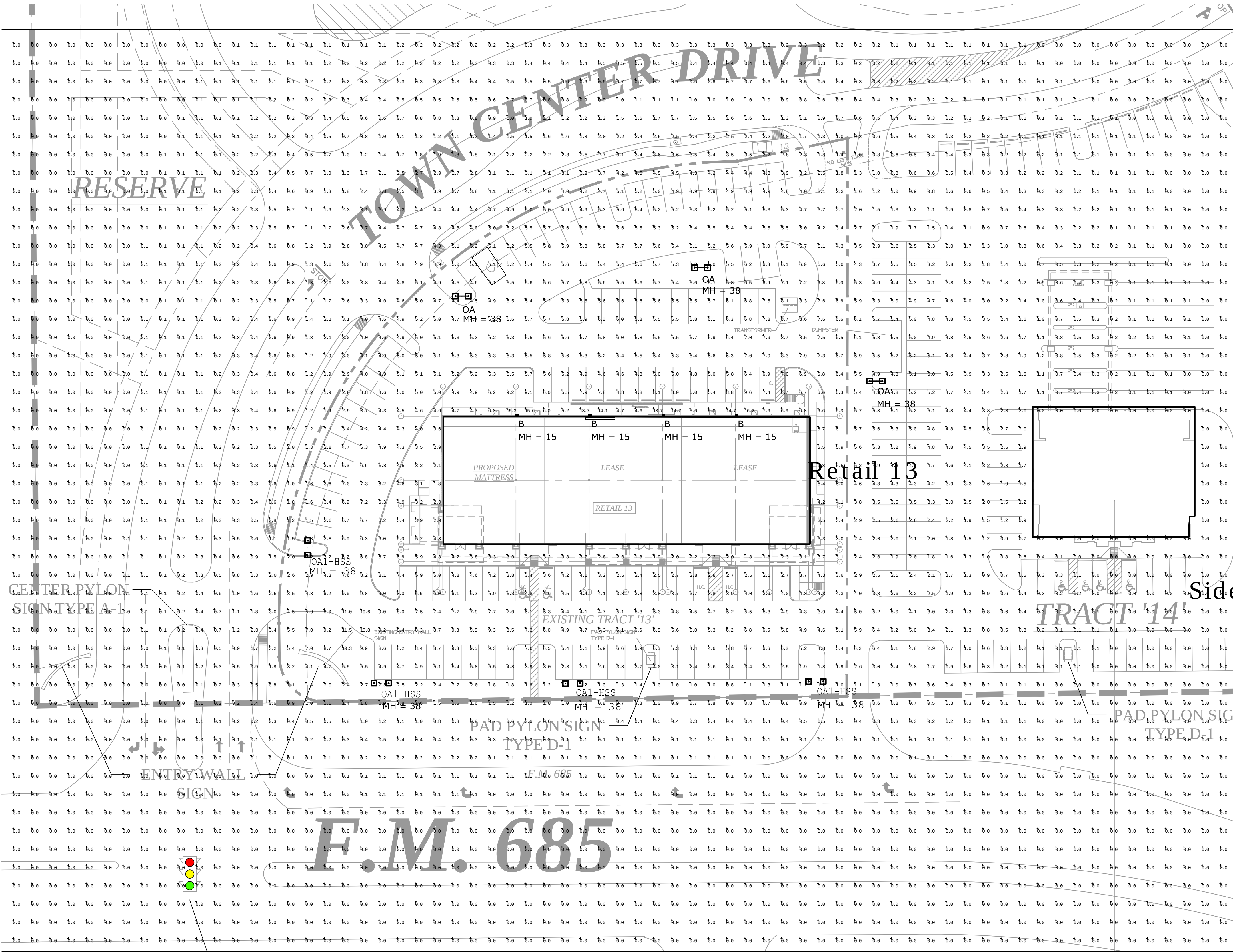




ALL FIXTURES SHOWN ON THIS DRAWING ARE FULL CUT OFF FIXTURES WITH FLAT GLASS LENS. FIXTURES WITH "HSS" ARE PROVIDED HOUSE SIDE SHEILDS. TOTAL MOUNTING HEIGHT OF POLES ARE 35' A.F.G. ALL WALL MOUNTED LIGHTING IS TO BE FULL DOWN CAST LIGHTING WITH FULL CUT OFF. ALL LIGHTING WILL BE IN CONFORMANCE WITH ALL SITE DEVELOPMENT REGULATIONS.

Luminaire Schedule									
Symbol	Label	Qty	Description	Lum. Watts	Total Lamp Lumens	Lum. Lumens	LLD	LDD	BF
	OA1-HSS	3	GARDCO HPV23-5XVF-1000PSMH	1080	115000	81689	0.750	0.900	1.000
	B	4	GARDCO HPV23-2-34XVF-1000PSMH-EHSS ROTATED OPTICS	1080	115000	33637	0.750	0.900	1.000
	B	4	GARDCO 101-MT-150PSMH-UNIV-OC (CHAMPAGNE)	185	12500	5715	0.850	0.900	1.000

PARKING LOT SURFACE_1
Illuminance (Fc)
Average = 5.29
Maximum = 11.0
Minimum = 1.0
Avg/Min Ratio = 5.29
Max/Min Ratio = 11.00

ELECTRICAL PHOTOMETRIC PLAN
SCALE: 1'-0"=30'

PHOTOMETRICS ARE BASED ON MANUFACTURES CALCULATIONS AND ARE SUBMITTED AND CALCULATED BY MANUFACTURE.

PROPOSED



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SWC OF SH 130 & SH 45
PFLUGERVILLE, TX
78660

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ISSUE LOG

NO.	DESCRIPTION	DATE
	ISSUED FOR REVIEW	05/25/12
	ISSUE FOR CITY PLAN	06/15/12
	ISSUE FOR CITY PLAN	07/30/12
	ISSUE FOR CITY PLAN	08/10/12
	ISSUE FOR CITY PLAN	08/10/12
	ADDENDUM #1	08/03/12
	ISSUE FOR CONSTRUCTION	09/14/12



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DATE:	JOB:	SCALE:
05-25-12	12024	AS NOTED

SHEET NO.

E0

ELECTRICAL
PHOTOMETRIC PLAN

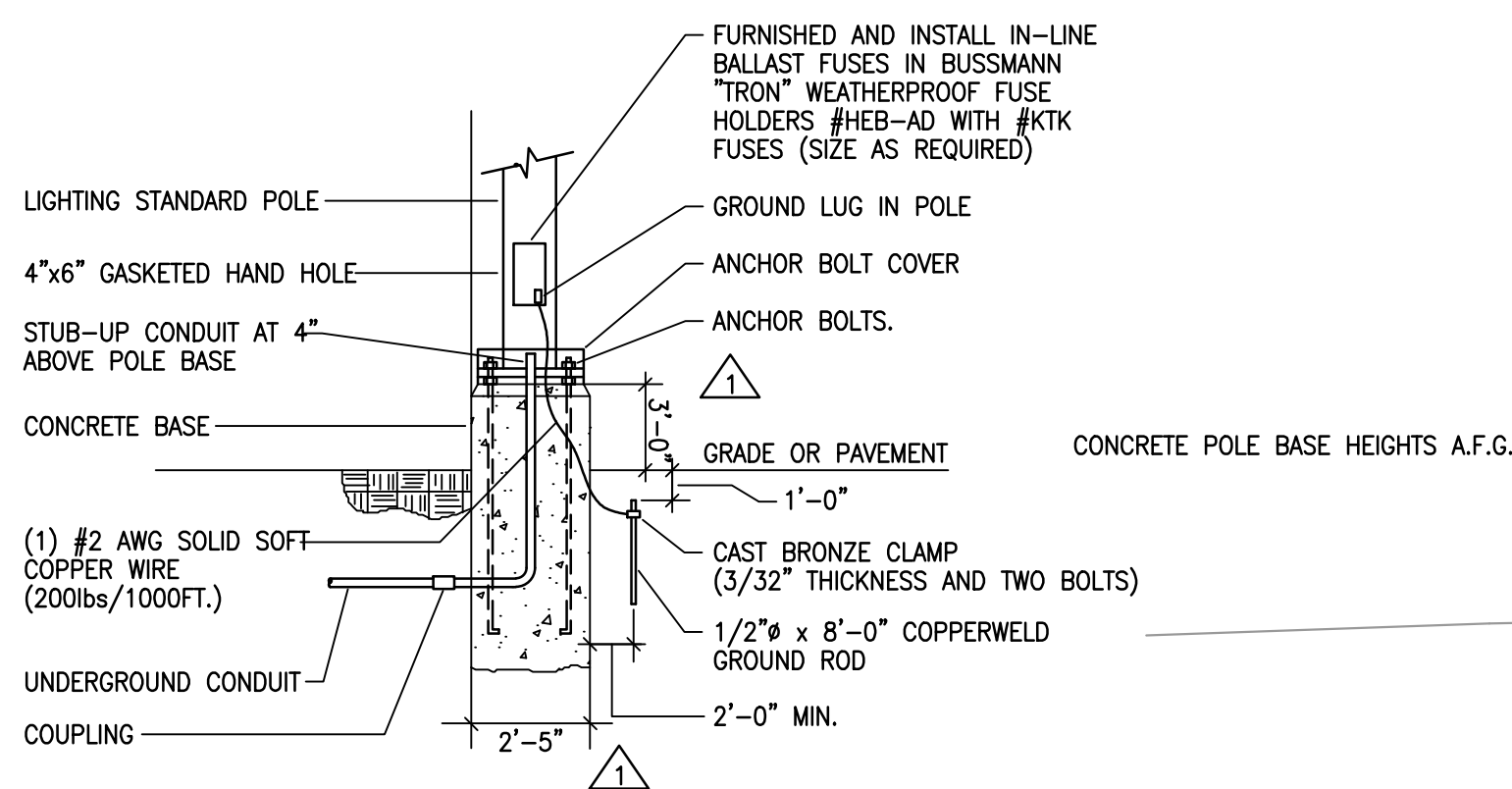
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UTILITY CONTACTS	
<u>ELECTRIC</u>	<u>TELEPHONE</u>
ONCOR	AT&T
EARLENE FOLMAR	MARK DAVIS
512-244-5656(OFFICE)	MGR. NORTH ENG. DESIGN
Barbara.Folmar@oncor.com	512-870-4760(OFFICE)
	md4731@att.com

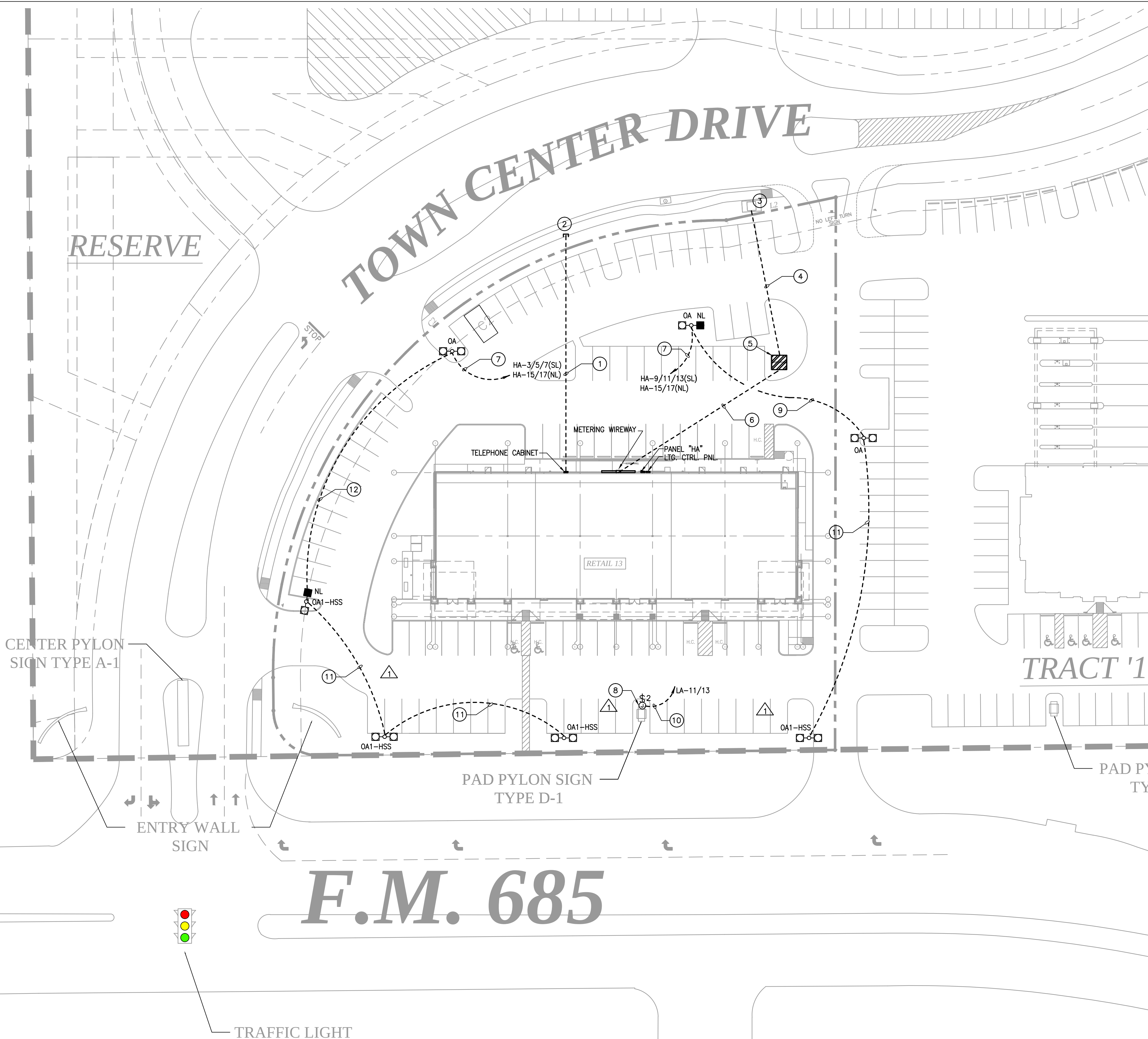
PARKING LOT LIGHT FIXTURE SCHEDULE						
TYPE	MANUFACTURER	NUMBER OF FIXTURES PER POLE	LAMPS		VOLTS	POLE MODEL NO./REMARKS
			NO.	TYPE		
OA	GARDCO #HPV23-5XVF-1000PSMH-CC-480 FLAT LENS FIXTURE TO BE CHAMPAGNE IN COLOR.	2	2	1000 WATT CLR-PSMH	480	GARDCO #07TRS-35-11-D2-CC POLE TO BE CHAMPAGNE IN COLOR
OA1-HSS	GARDCO #HPV23-2-34XVF-1000PSMH-CC-480- EHSS-ROTATED OPTICS FLAT LENS FIXTURE TO BE CHAMPAGNE IN COLOR.	2	2	1000 WATT CLR-PSMH	480	GARDCO #07TRS-35-11-D2-CC HOUSE SIDE SHIELDS POLE TO BE CHAMPAGNE IN COLOR

1. PROVIDE FUSED PROTECTION IN ALL POLE BASES.
2. POLE SHALL BE DESIGNED TO WITHSTAND 110 MPH WINDS WITH A GUST FACTOR OF 1.3.
3. SEE POLE BASE DETAIL THIS SHEET.
4. PROVIDE ALL REQUIRED MOUNTING BRACKETS FOR COMPLETE INSTALLATION OF POLES AND FIXTURES.
5. POLE AND FIXTURE TO BE CHAMPAGNE IN COLOR.

(1)	(2) 4" C. WITH PULLSTRINGS FOR TELEPHONE. INSTALL PER AT&T REQUIREMENTS.	(9)	3#8, 1#8G., 1" C.
(2)	COORDINATE EXACT DEMARCATION POINT WITH UTILITY COMPANY PRIOR TO INSTALLATION.	(10)	4#8, 1#8G., 1" C.
(3)	COORDINATE WITH ONCOR REPRESENTATIVE FOR EXACT ROUTING AND LOCATION OF PRIMARY CONDUITS.	(11)	2#8, 1#8G., 1" C.
(4)	(2) 4" C'S. EACH WITH PULL WIRE FOR PRIMARY FEEDERS. INSTALL PER ONCOR REQUIREMENTS.	(12)	2#8, 2#8(NL), 1#8G., 1" C.
(5)	POWER COMPANY PAD MOUNTED TRANSFORMER. PAD INSTALLED BY CONTRACTOR PER POWER COMPANY REQUIREMENTS		
(6)	SECONDARY CONDUITS, SEE ONE-LINE DIAGRAM SHEET E2 FOR ADDITIONAL INFORMATION.		
(7)	3#8, 2#8(NL), 1#8G., 1" C.		
(8)	WP J-BOX FOR SIGN. PROVIDE SERVICE SWITCH AS REQUIRED. COORDINATE WITH SIGN CONTRACTOR FOR ALL REQUIREMENTS.		



(2) SCALE: none



SCALE: 1'-0"=30'



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NO.	DESCRIPTION	DATE
	ISSUED FOR REVIEW	05/25/12
	ISSUE FOR PERMIT	06/15/12
	ISSUE FOR CITY PLAN SUBMITTAL COMMENT	07/30/12
	ISSUE FOR BID & PERMIT	08/01/12
1	ADDENDUM #1	08/03/12
	ISSUE FOR CONSTRUCTION	09/19/12



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09/9/2

DATE:	JOB:	SCALE:
05-25-12	12024	AS NOTED

SHEET NO.

E0.1

ELECTRICAL
SITE PLAN

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KME PROJECT # 86212012



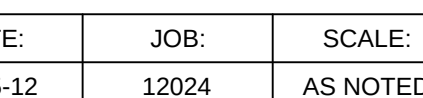
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A DEVELOPMENT OF:
NEWQUEST PROPERTIES

NO.	DESCRIPTION	DATE
	ISSUED FOR REVIEW	05/25/12
	ISSUE FOR PERMIT	06/15/12
	ISSUE FOR CITY PLAN	01/30/12
	SUBMITTAL COMMENT	
	ISSUE FOR BID & PERMIT	08/01/12
	ADDENDUM #1	08/03/12
	ADDENDUM #4	08/10/12
	ISSUE FOR CONSTRUCTION	09/19/12



09/19/12



E1

ELECTRICAL POWER
FLOOR PLAN



AKME
KALMANS MARSHALL ENGINEERING, INC.

REGISTRATION # F-4111
KME PROJECT # 86212012



- ## KEYED NOTES

-

01 ELECTRICAL POWER FLOOR PLAN
SCALE: 1/8"=1'-0"

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



AKME
KALMANS MARSHALL ENGINEERING, INC.

REGISTRATION # F-4111
KME PROJECT # 86212012

SPECIFICATIONS

GENERAL

- * VERIFY ALL DIMENSIONS AT THE JOB SITE AND FROM THE ARCHITECTURAL PLANS.
- * UNLESS OTHERWISE NOTED, CONTRACTOR AND SUBCONTRACTOR SHALL PAY FOR ALL PERMITS AND CHARGES REQUIRED AND SHALL COMPLY WITH ALL GOVERNING CODES AND ORDINANCES AND AGENCIES HAVING JURISDICTION.
- * VISITING THE SITE: EACH BIDDER SHALL VISIT THE SITE OF THE PROPOSED WORK AND SHALL FULLY INFORM HIMSELF REGARDING THE FACILITIES. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR WORK OR MATERIAL OMITTED FROM THE BIDDER'S CONTRACT PROPOSAL DUE TO HIS FAILURE TO SO INFORM HIMSELF BY SUCH INVESTIGATION.
- * ALL CHANNELING AND PATCHING OF ROOF, FLOOR, CEILING AND WALLS SHALL BE GENERAL CONTRACTOR.
- * FURNISH AND INSTALL A COMPLETE ELECTRICAL SYSTEM AS INDICATED ON PLANS. ELECTRICAL CONTRACTOR TO MAKE ALL FINAL CONNECTIONS TO ALL EQUIPMENT. MATERIAL SHALL BE AS FOLLOWS:

CONDUIT:

- * ALL ELECTRICAL CONDUCTORS SHALL BE INSTALLED IN CONDUIT COMPLYING WITH THE NATIONAL ELECTRICAL CODE, WHERE INSTALLED SUBJECT TO STRESS FROM COLLISION OR IMPACT, CONDUIT SHALL BE GALVANIZED RIGID STEEL. WHERE RIGID STEEL CONDUIT IS NOT REQUIRED, CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL METALLIC TUBING WITH ELECTRO-GALVANIZING OUTSIDE AND ENAMEL INSIDE. TUBING SHALL BE BY "TRIANGLE" OR AN APPROVED SUBSTITUTION. LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED AT ALL MOTOR CONNECTIONS OR WHERE MOVEMENT OR VIBRATION IS A CONCERN. UNLESS NOTED OTHERWISE, FLEXIBLE METAL CONDUIT MAY BE USED ONLY FOR CONNECTION TO LIGHTING FIXTURES, IN LENGTHS NOT TO EXCEED 6 (SIX) FEET. MINIMUM CONDUIT SIZE SHALL BE 1/2" INCH. MINIMUM SIZE FOR FLEXIBLE METAL CONDUIT SHALL BE 1/2" INCH. CONDUIT/CONDUCTOR FILL SHALL CONFIRM TO NATIONAL ELECTRICAL CODE, LATEST EDITION.
- * CARLON PVC TYPE SCH. 40 HEAVY WALL CONDUIT WITH GROUND WIRE MAY BE USED BELOW FLOOR SLAB OR UNDERGROUND IN USE OF RIGID, THREADED, GALVANIZED CONDUIT. PVC SCH. 40 CONDUIT SHALL NOT BE RUN IN OR ABOVE FLOOR SLAB, OR IN TILT WALL PANELS. PVC CONDUIT SHALL TERMINATE BELOW FLOOR SLAB WITH RIGID, THREADED METAL CONDUIT ADAPTER. CONDUIT ABOVE SLAB SHALL BE METAL.
- * A GROUND CONDUCTOR SHALL BE SUPPLIED IN NONMETALLIC CONDUIT OR ELECTRICAL METALLIC TUBING UTILIZING SET SCREW TYPE CONNECTORS. THE GROUND CONDUCTOR SHALL BE BARE, STRANDED, ANNEALED COPPER.
- * CONDUIT TO BE SUPPORTED FROM JOIST. PROVIDED HANGERS, SUPPORTS AND FASTENINGS AS REQUIRED BY NATIONAL ELECTRICAL CODE DO NOT SUPPORT FROM ROOF DECK.
- * PROVIDE PULL STRING IN ALL EMPTY CONDUITS.

CONDUIT FITTINGS:

- * ALL CONDUIT FITTINGS SHALL BE STEEL, SET SCREW OR COMPRESSION TYPE, INSULATED THROAT, UL LISTED. FITTINGS SHALL BE AS MANUFACTURED BY APPLETON ELECTRIC, OZ GEDNEY CO., ARROW CONDUIT AND FITTINGS CORP., OR EQUAL.

CONDUCTORS:

- * ALL CONDUCTORS SHALL BE COPPER. EACH CONDUCTOR SHALL BE CONTINUOUS, WITHOUT WELD, SPlice, OR JOIST THROUGHOUT ITS LENGTH, AND UNIFORM IN CROSS-SECTION. WIRE #6 AWG AND LARGER SHALL HAVE TYPE "THWN" INSULATION. WIRE #8 AWG AND SMALLER SHALL HAVE DUAL-RATED TYPE "THHN/THWN" INSULATION. MINIMUM WIRE SIZE, EXCEPT FOR CONTROL WIRING, SHALL BE #12 AWG. ALL WIRING INSIDE LIGHTING FIXTURES SHALL BE TEMPERATURE RATED PER THE NATIONAL ELECTRICAL CODE - 90 DEGREES C. MINIMUM. BRANCH CIRCUIT WIRING WITHIN 3 INCHES OF FLUORESCENT BALLASTS SHALL BE TEMPERATURE RATED FOR 90 DEGREES C.

LIGHTING PANELBOARDS:

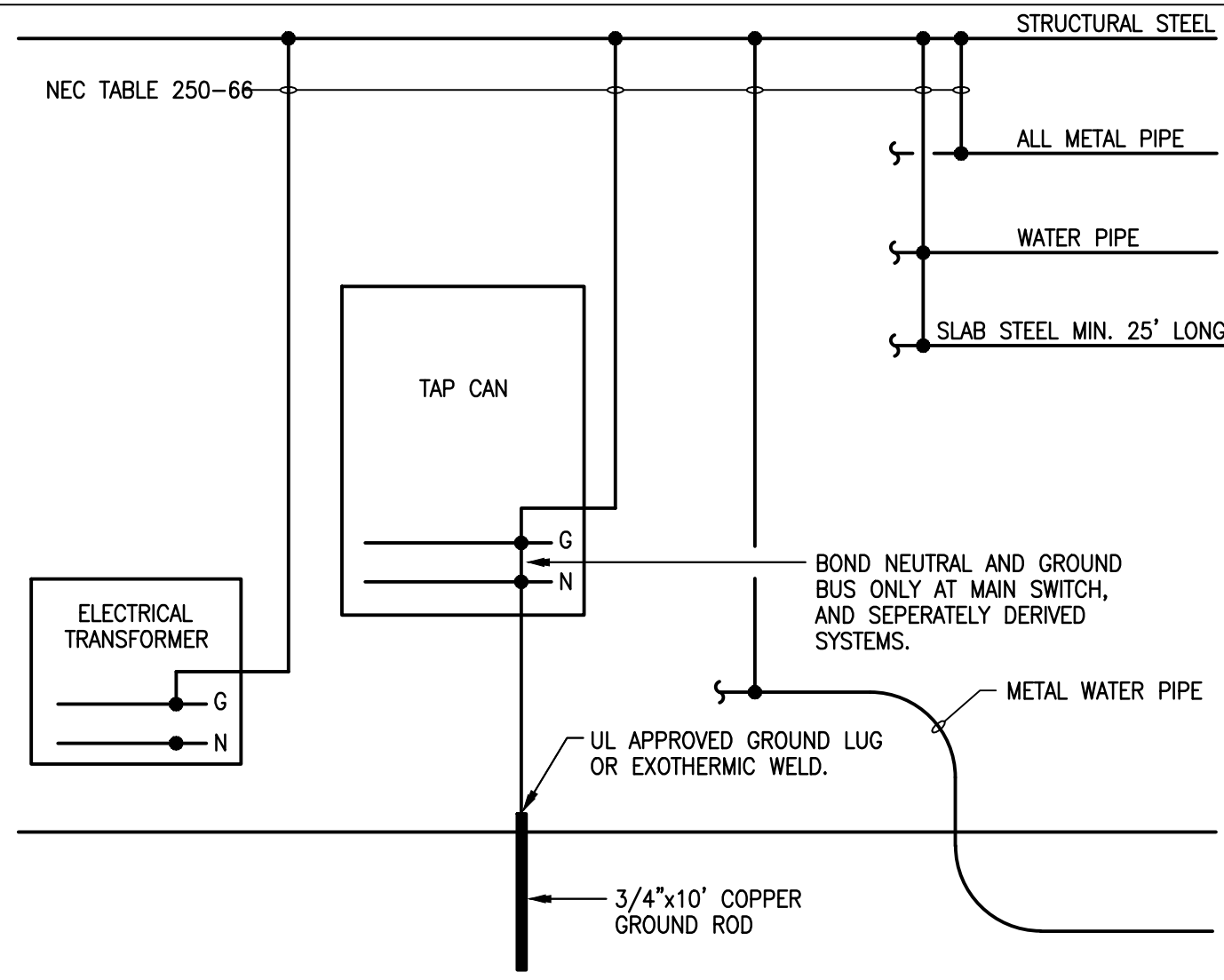
- * 1. 120/208V, 3-PHASE, 4-WIRE OR 120/240V, 1-PHASE, 3-WIRE: FURNISH AND INSTALL AS SHOWN ON PLANS, LIGHTING PANEL BOARDS BY SQUARE "D" TYPE "NODD", STYLE "Q", OR EQUAL WITH BOLT ON CIRCUIT BREAKERS OR AN APPROVED SUBSTITUTION. ALL BUSSING TO BE COPPER.
- * 2. 277/480V, 3-PHASE, 4-WIRE: FURNISH AND INSTALL AS SHOWN ON PLANS, LIGHTING PANELBOARDS BY SQUARE "D", OR EQUAL TYPE "NEHB" WITH BOLT ON CIRCUIT BREAKERS OR AN APPROVED SUBSTITUTION. ALL BUSSING TO BE COPPER.

SAFETY SWITCHES:

- * SAFETY SWITCHES SHALL BE FURNISHED AND INSTALLED AT ALL LOCATIONS INDICATED ON PLANS OR REQUIRED BY THE NATIONAL ELECTRICAL CODE. ALL SWITCHES SHALL BE HEAVY DUTY TYPE AND SHALL HAVE CLIPS FOR REJECTION TYPE FUSES AND SHALL BE BY SQUARE "D", GEAR OR EQUAL FOR THE VOLTAGE AND LOAD INVOLVED. PROVIDE A COMPLETE SET OF FUSES IN ALL FUSED SWITCHES. FUSES SHALL BE CLASS AK-1 (BUSSMAN "LOW-PEAK") FOR CIRCUITS UP TO 600 AMPS AND CLASS L (BUSSMAN "HI-CAP" KRP-C) FOR CIRCUITS ABOVE 600 AMPS.

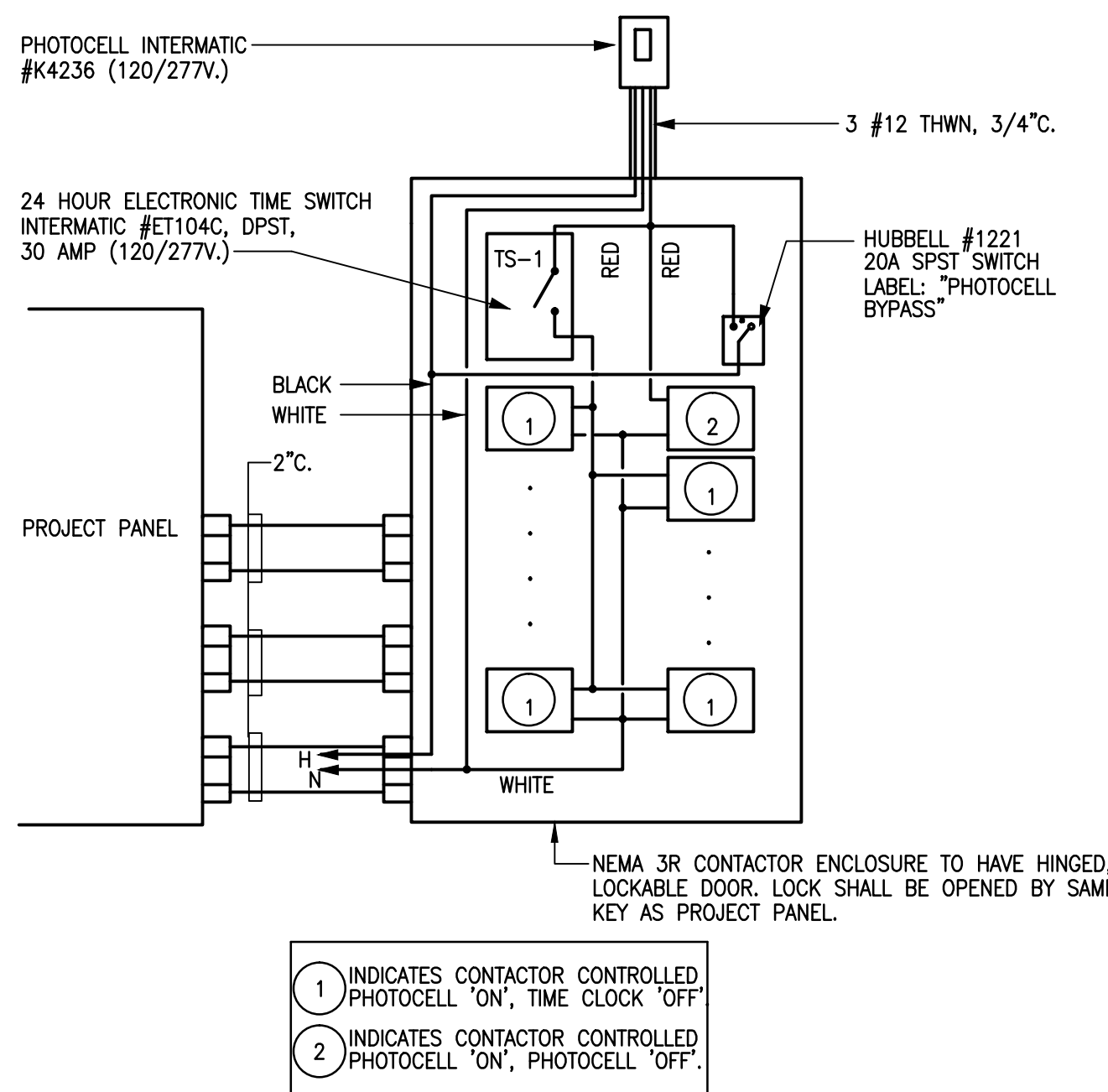
SYMBOL LEGEND	
SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE)	
○	DOWNLIGHT FIXTURE
□	LIGHT FIXTURE - WALL MOUNTED
RECEPTACLES AND OUTLETS	
⊕	DUPLEX RECEPTACLE
⊞	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
⊞⊞	DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE
⊙	JUNCTION BOX
MOTOR CONTROLLERS AND EQUIPMENT	
□	DISCONNECT SWITCH
ELECTRICAL EQUIPMENT	
⌚	277/480V PANELBOARD
⌚	120/208V PANELBOARD
⌚	TELEPHONE CABINET
CIRCUITING	
—	CONDUIT
—	CONDUIT BELOW FLOOR, SLAB, OR GRADE
—H—	3/4" UNLESS OTHERWISE NOTED; LONG HATCH = NEUTRAL; SHORT HATCH = PHASE; "Z" HATCH = INSULATED GROUND, NO HATCHES INDICATES 2 CONDUCTORS, ARROW INDICATES HOMERUN
—+—	PARTIAL ELECTRICAL HOMERUN
SUBSCRIPTS AND ABBREVIATIONS	
WP	INDICATES WEATHERPROOF
NL	LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT

GENERAL NOTE:
ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF
NEMA-3R MINIMUM.



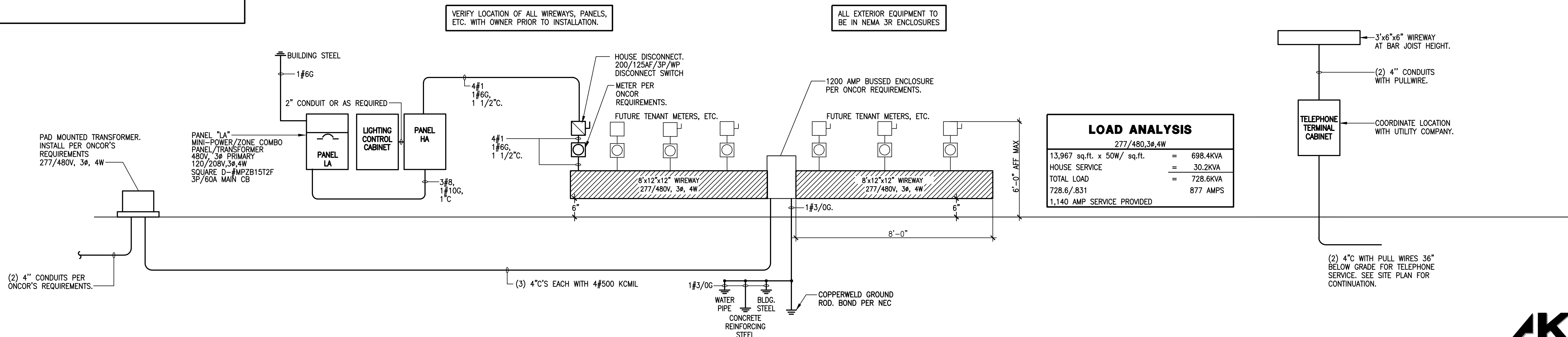
3

SCALE: none



2

SCALE: none



1

SCALE: none

[illegible]

NOTES:

1. ROUTE CIRCUIT VIA 20A/2P CONTACTOR. (PHOTOCELL ON/ TIMECLOCK OFF)
2. ROUTE CIRCUIT VIA 20A/3P CONTACTOR. (PHOTOCELL ON/ TIMECLOCK OFF)
3. ROUTE CIRCUIT VIA 20A/2P CONTACTOR. (PHOTOCELL ON/OFF)

PANEL LA						120/208V ,3PH, 4W	MOUNTING: SURFACE		
							NEMA : 3R		
LOCATION: PAD 13 EXTERIOR WALL.							18 K ISCA		
* CKT	LOAD	KVA	WIRE	BKR	BKR	WIRE	KVA	LOAD	CKT *
1	LTG. CTRL. CABINET	.2	#12	20/1	20/1	#10	.5	ROOF RECEPTACLE	2
1	IRRIGATION CONTROL	.5	#12	20/1	20/1	#10	.5	ROOF RECEPTACLE	4
2	5 ROOF RECEPTACLE	.5	#10	20/1	20/1	#10	.5	ROOF RECEPTACLE	6
2	7 ROOF RECEPTACLE	.5	#10	20/1	20/1	#12	.1	FACP	8
2	9 ROOF RECEPTACLE	.5	#10	20/1	20/1	#12	-2	LTG./RECEIPT	10
4	11 SIGN	1.2	A	20/1	--	#12	2.5	UNIT HEATER	12
4	13 SIGN	1.2	A	20/1	--	---	---	---	14
4	15 SPARE	---	---	20/1	20/1	---	---	SPARE	16
4	17 SPARE	---	---	20/1	20/1	---	---	SPARE	18
4	19 SPARE	---	---	20/1	20/1	---	---	SPARE	20
4	21 SPARE	---	---	20/1	20/1	---	---	SPARE	22
4	23 SPARE	---	---	20/1	20/1	---	---	SPARE	24

SQUARE D MINI POWER ZONE PANEL TOTAL CONNECTED LOAD = 8.9 KVA

A=REFER TO SHEET E0.1 FOR WIRE AND CONDUIT SIZE
MINI-POWER-ZONE COMBO

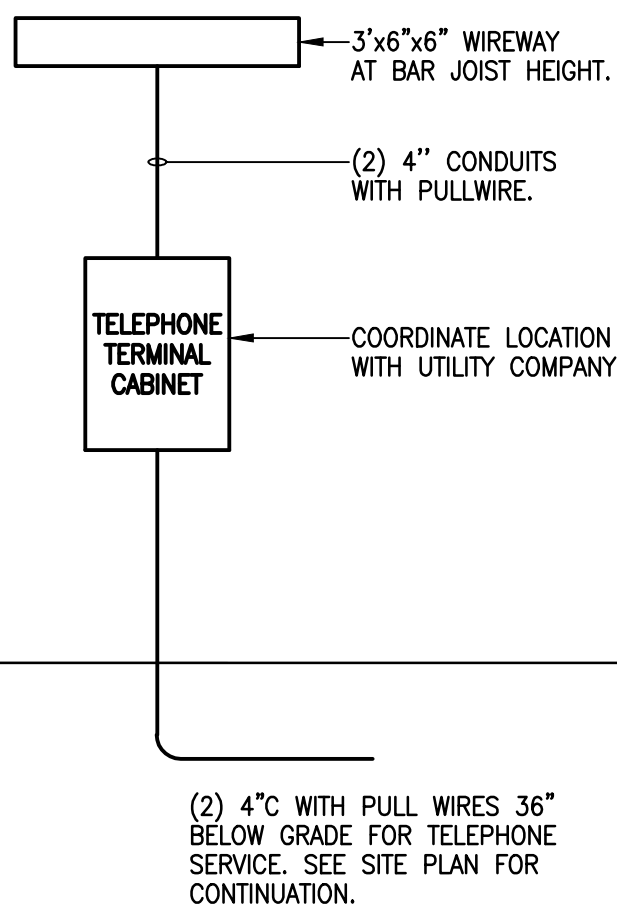
NOTES:

1. GFCI CIRCUIT BREAKER
2. GFCI CIRCUIT BREAKER; ROUTE CIRCUIT VIA 20A/6P CONTACTOR. (PHOTOCELL ON/ TIMECLOCK OFF)
3. PROVIDE CIRCUIT BREAKER LOCK ON DEVICE
4. ROUTE CIRCUIT VIA 20A/2P CONTACTOR. (PHOTOCELL ON/ TIME CLOCK OFF)

GARDCO #101-MT-150PSMH-UNIV-OC (CHAMPAGNE)	WALL	1	150W PSMH	277V	WALL PACK. MOUNT 14'-0" AFF
--	------	---	--------------	------	-----------------------------

LIGHT FIXTURE SCHEDULE						
TYPE	MANUFACTURER AND CATALOG NUMBER	MOUNTING	LAMPS		VOLTS	REMARKS
			NO.	TYPE		
A	BECA #6493P-COLOR SELECTED BY. ARCH.	WALL	1	42W CFT-4P GX24q-4	277V	WALL MOUNTED FIXTURE-COORDINATE LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATION DRAWINGS.
B	GARDCO #101-MT-150PSMH-UNW-OC- CHAMPAGNE COLOR LIGHTTULER	WALL	1	150W PSMH	277V	WALL PACK. MOUNT 15'-0" AFF
CE	#SW-45323HPF-UNW-SO-AH5-CSP- AWG3W CSP-EM	SURFACE	2	F32/T8	120/ 277V	4' 2-LIGHT STRIP CHAIN HUNG WITH WIRE GUARD AND EMERGENCY BATTERY BACK UP
C	LIGHTTULER #SW-45323HPF-UNW-SO	SURFACE	2	F32/T8	120/ 277V	4' 2-LIGHT STRIP MOUNTED UP IN TOWER, COORDINATE WITH ARCHITECTURAL ELEVATIONS

LOAD ANALYSIS		
277/480, 3ø, 4W		
13,967 sq.ft. x 50W/ sq.ft.	=	698.4KVA
HOUSE SERVICE	=	30.2KVA
TOTAL LOAD	=	728.6KVA
728.6/.831		877 AMPS
1,140 AMP SERVICE PROVIDED		



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ELECTRICAL DETAILS

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STONE HILL
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ISSUE LOG

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PLUMBING SITE PLAN

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CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVE WITH EXISTING CONDITIONS AND SATISFY THEMSELVE AS TO THE NATURE AND SCOPE OF THE WORK. THE BASE PROPOSAL SHALL INCLUDE MODIFICATIONS TO SYSTEMS AND DEVICES AS REQUIRED BY STATE AND LOCAL CODES WHETHER INDICATED OR NOT. IF THE CONTRACTOR'S COMMENTS TO THE BASIS OF A PROPOSAL WILL BE EVIDENCE THAT SUCH AN EXAMINATION AND COMPLIANCE WITH GOVERNING CODES/REQUIREMENTS HAS BEEN MADE. LATER CLAIMS FOR LABOR, EQUIPMENT, OR MATERIALS REQUIRED FOR DIFFICULTIES ENCOUNTERED COULD HAVE BEEN FORESEEN BY SUCH AN EXAMINATION AND CODES/REQUIREMENTS REVIEW BEEN MADE, WILL NOT BE ACCEPTED.

PLUMBING KEYED NOTES

- 1 2" STUB UP FOR FUTURE GAS CONNECTIONS BY TENANT
- 2 EXTEND NEW 2" GAS LINE FROM EASEMENT TO BUILDING WALL. INSTALLATION BY APPROVED ATMOS ENERGY CONTRACTOR.
- 3 VERIFY EXACT DEMARCATION POINT WITH UTILITY COMPANY PRIOR TO INSTALLATION.

GAS LINE NOTE

UTILITY CONTACT

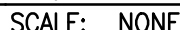
GAS
ATMOS ENERGY
BRAD CROSSWHITE
512-310-3801 (OFFICE)
512-496-9844 (OFFICE)
brad.crosswhite@atmosenergy.com



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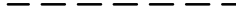
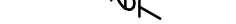
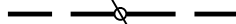
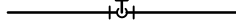
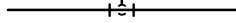
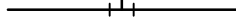
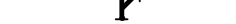
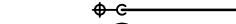
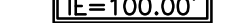
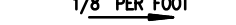
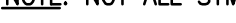
ST03-12/16/05

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





PLUMBING LEGEND

SYMBOL	DESCRIPTION
	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
	VENT PIPING ABOVE OR BELOW GRADE (V)
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	HOT WATER RETURN PIPING (HWR)
	FLOW DIRECTIONAL ARROW
	BALL VALVE (BV)
	BALL VALVE (BV)
	CHECK VALVE
	UNION
	Y-STRAINER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBPF)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	WALL HYDRANT
	GAS METER
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	REFER TO KEYED NOTE
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	P-TRAP
	INVERT ELEVATION
	1/8TH OF AN INCH SLOPE
	1/8" PER FOOT
	4" VTR
	RISER FLAG

PLUMBING SCOPE & SPECIFICATION

PROVIDE PLUMBING FIXTURES AS SPECIFIED OR PROVIDE FIXTURES EQUAL TO THOSE SPECIFIED.



1. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.
2. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO SUPPLEMENT EACH OTHER AND ANY MATERIAL OR LABOR CALLED FOR IN ONE SHALL BE FURNISHED AND INSTALLED EVEN THOUGH NOT SPECIFICALLY MENTIONED IN BOTH. ANY MATERIAL OR LABOR WHICH IS NEITHER SHOWN ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK, AND WHICH IS USUALLY INCLUDED IN THE WORK OF SIMILAR CHARACTER, SHALL BE FURNISHED AND INSTALLED AS PART OF CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE ALL WORK CLOSELY WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK, CONDUIT AND STRUCTURAL ITEMS. SHOULD A CONFLICT OCCUR CONTRACTOR MUST NOTIFY THE ARCHITECT/ ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
4. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
5. COORDINATE ROUTING OF ALL BELOW GRADE PIPING WITH GRADE BEAMS. ADJUST INVERT ELEVATIONS OR PIPE ROUTING TO CLEAR GRADE BANS.
6. ROUTE ALL EQUIPMENT DRAIN PIPES TO NEAREST FLOOR SINK OR DRAIN.
7. PROTECT EQUIPMENT AND WORK FROM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION.
8. REMOVE ALL EXCESS MATERIAL AND DEBRIS AND CLEAN ALL EQUIPMENT UPON COMPLETION OF WORK. TOUCH UP WITH PAINT WHERE REQUIRED.
9. ALL CONNECTIONS BETWEEN PIPES OF DISSIMILAR MATERIALS SHALL BE MADE WITH DI-ELECTRIC UNIONS. PROVIDE ACCESS PANELS WHERE REQUIRED.
10. THE CONTRACTOR SHALL COORDINATE ALL WORK CLOSELY WITH EXISTING AND/ OR NEW MECHANICAL, ELECTRICAL AND STRUCTURAL ITEMS.
11. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND SUBMITTED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
12. CONTRACTOR TO PROVIDE (1) YEAR WARRANTY ON ALL ITEMS PROVIDED.

PIPE MATERIAL LIST

BELOW SLAB SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS
CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS.

PLUMBING FIXTURE SPECIFICATION

TYPE:	WH-1 - EXTERIOR GENERAL PURPOSE
DESCRIPTION:	WALL HYDRANT, CONCEALED BOX TYPE, NON-FREEZE, 3/4" MALE HOSE THREAD OUTLET, SELF-DRAINING WITH ANTI-SIPHON VACUUM BREAKER, CHROME PLATED BRONZE HEAD CASTING HOUSED WITHIN SATIN FINISH NICKEL COATZ BOX WITH LOCKING HINGED COVER. LOOSE TEE OPERATING KEY. MIFAB MHY-20.
ROUGH-IN:	3/4" COLD WATER. INSTALL WITH BOTTOM OF BOX AT 24" A.F.F. OR AS DIRECTED BY ARCHITECT / OWNER.
TYPE:	ECO
DESCRIPTION:	EXTERIOR CLEANOUT TO GRADE, CAST IRON BODY WITH SECONDARY O-RING TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORRIATED VANDAL RESISTANT DUCTILE IRON TRACTOR TYPE COVER. IF LOCATED IN ASPHALT OR DIRT PROVIDE 18" x 18" x 12" CONCRETE PAD. MIFAB C1100-KR-1-Z.
TYPE:	FCO
DESCRIPTION:	FLOOR CLEANOUT, CAST IRON BODY WITH SECONDARY O-RING TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORRIATED STAINLESS STEEL COVER. MIFAB C1100-R-3. FOR CARPETED FLOORS PROVIDE MIFAB C1100-RC-3.
TYPE:	WCO
DESCRIPTION:	WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH DUCTILE IRON COMBINED COVER/PLUG AND ROUND STAINLESS COVER PLATE WITH CENTER SECURING SCREW. MIFAB C1450 WITH C1400- RD6. PROVIDE MIFAB C1460 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED FOR WALL CONSTRUCTION.
TYPE:	FS-1
DESCRIPTION:	FLOOR SINK ZURN MODEL: Z-1910. 8"x8"x8" DEEP WITH CAST IRON BODY AND SQUARE SLOTTED MEDIUM-DUTY 3/4" GRATE. WHITE ACID RESISTANT PORCELAIN ENAMEL INTERIOR AND TOP WITH WHITE ABS ANTI-SPLASH INTERIOR. BOTTOM DOME STRAINER. ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES.
TYPE:	TP-1
DESCRIPTION:	AUTOMATIC TRAP PRIMER VALVE. INTEGRAL VACUUM BREAKER PORTS. OPERATING RANGE 35 TO 75 PSIG. INSTALL ON WATER LINES 1-1/2" DIAMETER OR LESS.
ROUGH-IN:	PPP PO-500 OREGON MODEL #1. 1/2" NPT INLET/OUTLET

KME
KALMANS MARSHALL ENGINEERING, INC.
HOUSTON | DALLAS/FT. WORTH | BATON ROUGE
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Irving, TX 75038 (972) 812-1270
REGISTRATION # F-4111
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78660

A DEVELOPMENT OF:
NEWQUEST PROPERTIES

ISSUE LOG

[illegible]

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DATE:	JOB:	SCALE:
05-25-12	12024	AS NOTE

SHEET NO.

P2

PLIMBING Details

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