

May 17, 2019

ADDENDUM ACKNOWLEDGEMENT FORM

To Whom It May Concern:

Concerning the **PSJA ISD CARMAN ELEMENTARY SCHOOL AND SANTOS LIVAS ELEMENTARY SCHOOL PLAYGROUND IMPROVEMENTS BID # 18-19-049**, to be opened at 4:00 p.m., Tuesday, May 21, 2019. Please consider the following:

Addendum Number:	Description of REVISED Addendum:
3	CLARIFICATIONS / REVISED DETAILS / DRAWINGS /

For any questions pertaining to these changes, please contact Emily Garza, Director of Purchasing at (956) 354-2000.

Sincerely,



Emily Garza
Director of Purchasing

With the acceptance of this form, I acknowledge that I have received the above ***“ADDENDUM ACKNOWLEDGEMENT FORM”*** for the **PSJA ISD CARMAN ELEMENTARY SCHOOL AND SANTOS LIVAS ELEMENTARY SCHOOL PLAYGROUND IMPROVEMENTS BID # 18-19-049**, to be opened at 4:00 p.m., Tuesday, May 21, 2019. Please include a signed copy of this ***“ADDENDUM ACKNOWLEDGMENT FORM”*** with your bid/proposal.

Company Name:	_____	Authorized Signature:	_____
Address:	_____ _____	Authorized Signature (Print):	_____
City / State / Zip:	_____	Email:	_____
Telephone Number:	_____	Fax Number:	_____

START COLLEGE NOW! COMPLETE EARLY! GO FAR!

ADDENDUM # 3

Date: May 17, 2019

PROJECT: P S J A I. S. D.
Carman Elementary School & Santos Livas
Elementary School Playground Improvements
Bid # 18-19-049

ARCHITECT: EGV Architects, Inc.
220 S. Bridge
Hidalgo, TX 78557
(956) 843-2987



This addendum applies to work designated herein, shall be understood to be and as such shall be part and is included in the contract.

ITEM #1 Clarification, MEP Addendum

- Refer to attached MEP addendum labeled **ATTACHMENT #1** (8 sheets).

NOTIFICATION: It is the responsibility of the General Contractor to notify all of his subcontractors of the contents of all addenda.

5/16/2019



ADDENDUM #3

Architect: EGV ARCHITECTS

Project Name: P.S.J.A. ISD CARMAN ELEM. & SANTOS LIVAS ELEM.
PLAYGROUND RENOVATIONS.

Project Number: 19.1.32

Date: 5/16/2019

Note: The work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change in the Contract Sum or Contract Time.

- I. Specifications: N/A
- II. General: N/A
- III. Mechanical: N/A
- IV. Electrical:
 - A. Sheet EC1.1
 - 1. Additional wallpack at restrooms, refer to attached.
 - 2. Relocated IWH-1 disconnect, refer to attached.
 - B. Sheet EC3.1
 - 1. Revised load analysis, refer to attached.
 - 2. Revised keyed notes, refer to attached.
 - 3. Revised panel schedules, refer to attached.
 - 4. Revised electrical schematic diagram, refer to attached.
 - C. Sheet EC4.1
 - 1. Revised Detail #9, refer to attached.
 - 2. Added Detail #12, refer to attached.
 - D. Sheet ES1.1
 - 1. Additional wallpack at restrooms, refer to attached.
 - 2. Relocated IWH-1 disconnect, refer to attached.
 - E. Sheet ES3.1
 - 1. Revised load analysis, refer to attached.
 - 2. Revised keyed notes, refer to attached.
 - 3. Revised panel schedules, refer to attached.

4. Revised electrical schematic diagram, refer to attached.

F. Sheet ES4.1

1. Revised Detail #9, refer to attached.

2. Added Detail #12, refer to attached.

V. Plumbing:

A. Sheet PC2.1

1. Revised plumbing schedule. L-1 shall be 18" stainless steel lavatory model
1953-1-CSG-GT-TPT with gooseneck spout and wrist blade handles.

B. Sheet PS2.1

1. Revised plumbing schedule. L-1 shall be 18" stainless steel lavatory model
1953-1-CSG-GT-TPT with gooseneck spout and wrist blade handles.

VI. Fire Protection: N/A

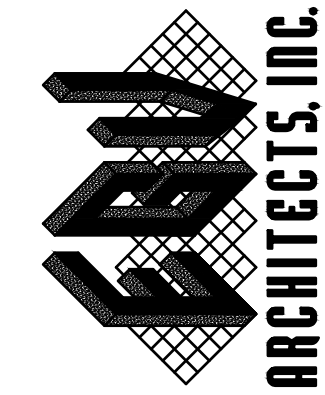
GENERAL ELECTRICAL NOTES (TO ALL SHEETS)

- A. CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND COORDINATE WITH POWER COMPANY FOR ALL NEW REQUIREMENTS AND ALL COST ASSOCIATED. CONTRACTOR SHALL INCLUDE ANY COST FOR THE NEW TRANSFORMER AND OTHER ASSOCIATED FEES IN BID. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FEES WITH POWER COMPANY AND TO INCLUDE IN BID. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POWER COMPANY AS SOON THE CONTRACT IS AWARDED TO ORDER TRANSFORMER AND THE RELATED ELECTRICAL SERVICE EQUIPMENT AS SOON AS POSSIBLE.
- B. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- C. CONTRACTOR TO VERIFY ALL EXISTING MAIN TELEPHONE SERVICES AND COORDINATE WITH TELEPHONE COMPANY FOR ALL REQUIREMENTS AND ALL COST ASSOCIATED. INCLUDE ALL COST IN BID. CONDUIT FROM MAIN TELEPHONE RISER SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- D. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- E. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER. ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.
- F. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST. TO OWNER, ARCHITECT, OR ENGINEER.
- G. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- H. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- I. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- J. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- K. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- L. ALL WIRING SHALL BE COPPER.
- M. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- N. ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.
- O. CONTRACTOR IS RESPONSIBLE TO VERIFY AND COORDINATE WITH EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- P. CONTRACTOR IS RESPONSIBLE CALL DIG-TESS; 1-800-DIG-TESS 2-BUSINESS DAYS IN ADVANCE.

KEYED NOTES: ELECTRICAL

- 1 NEW POWER COMPANY POWER POLE WITH NEW POLE MOUNTED TRANSFORMER AND DIP POLE RISER. COORDINATE WITH UTILITY ELECTRICAL COMPANY. INCLUDE ALL COST IN BID.
- 2 CONTRACTOR TO PROVIDE AND INSTALL (1) 4" PVC CONDUIT FROM MAIN POWER COMPANY POLE MOUNTED TRANSFORMER TO NEW SERVICE EQUIPMENT. ALL UNDERGROUND WORK SHALL BE ACCORDING TO POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS WITH THE POWER COMPANY BEFORE ANY ROUGH-IN. COORDINATE LOCATION, COST, AND INSTALLATION WITH POWER COMPANY PRIOR TO BID.
- 3 NEW 120/240V, 1Ø, 3W, ELECTRICAL SERVICE METER.
- 4 PROVIDE CHAIN LINK ENCLOSURE FOR ELECTRICAL SERVICE EQUIPMENT.
- 5 PROVIDE RECEPTACLE FOR IRRIGATION CONTROLS. REFER TO DETAIL.
- 6 GALVANIZED 3" PIPE AND GALVANIZED UNISTRUT STAND.
- 7 PROVIDE WEATHER-PROOF NEMA-3R J-BOX FOR SCORE BOARD CONTROLS. COORDINATE EXACT LOCATION WITH EQUIPMENT SUPPLIER/OWNER PRIOR TO ROUGH-INS.
- 8 PROVIDE 1-2" C. WITH PULLSTRING FOR SCORE BOARD CONTROLS. COORDINATE CONDUIT ROUTE AND LOCATION WITH OWNER TO SCORE KEEPER STRUCTURAL.
- 9 LINE REPRESENTS PROPOSED EACH CONDUITS PATH. FIELD VERIFY EXACT ROUTE. PROVIDE ALL TRENCHING AND BACK FILLING FOR NEW CONDUITS. REFER TO PANEL ELECTRICAL PANEL SCHEDULES FOR CIRCUIT SIZE.
- 10 120V PHOTOCELL. LOCATE AS DIRECTED BY MANUFACTURER.
- 11 VIA LIGHTING CONTACTOR 'LC1'.
- 12 **ALTERNATE #3** IF ALTERNATE IS ACCEPTED, PROVIDE LIGHTING AS SHOWN FOR BASKETBALL COURTS. ALL CONDUITS WITH PULLSTRINGS SHALL BE INCLUDED IN BASE BID.
- 13 **ALTERNATE #4** IF ALTERNATE IS ACCEPTED, PROVIDE LIGHTING AS SHOWN FOR SOFTBALL FIELD. ALL CONDUITS WITH PULLSTRINGS SHALL BE INCLUDED IN BASE BID.
- 14 **ALTERNATE #5** IF ALTERNATE IS ACCEPTED, PROVIDE LIGHTING AS SHOWN FOR OPEN PLAYING FIELD. ALL CONDUITS WITH PULLSTRINGS SHALL BE INCLUDED IN BASE BID.
- 15 CONTRACTOR SHALL FIELD IDENTIFY AND COORDINATE WITH ANY EXISTING UTILITIES PRIOR TO ANY WORK.
- 16 VIA LIGHTING CONTACTOR 'LC2'.
- 17 VIA LIGHTING CONTACTOR 'LC3'.
- 18 VIA LIGHTING CONTACTOR 'LC4'.

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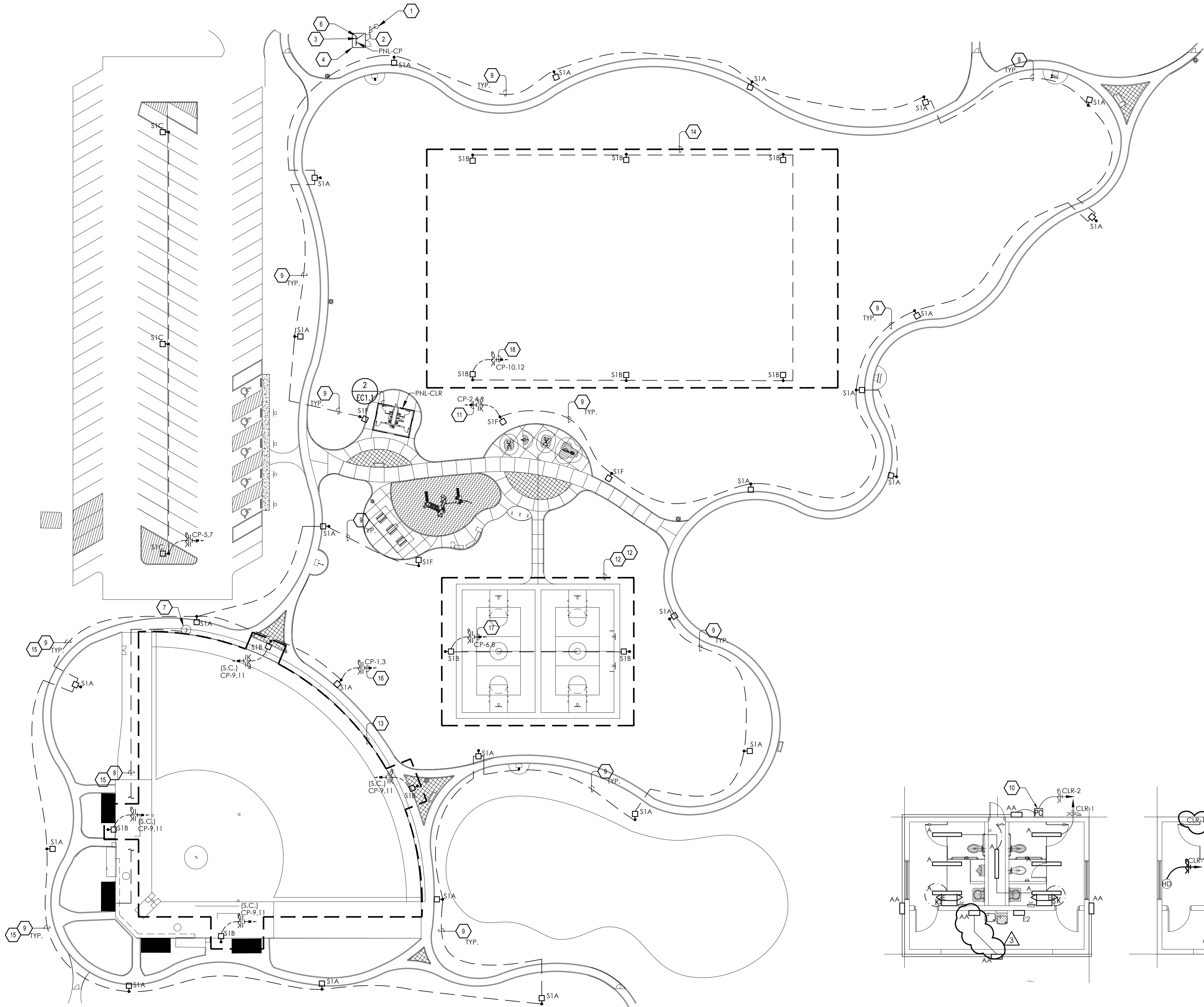


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Texas Registered Engineering Firm - F10362
Project number: 19-132

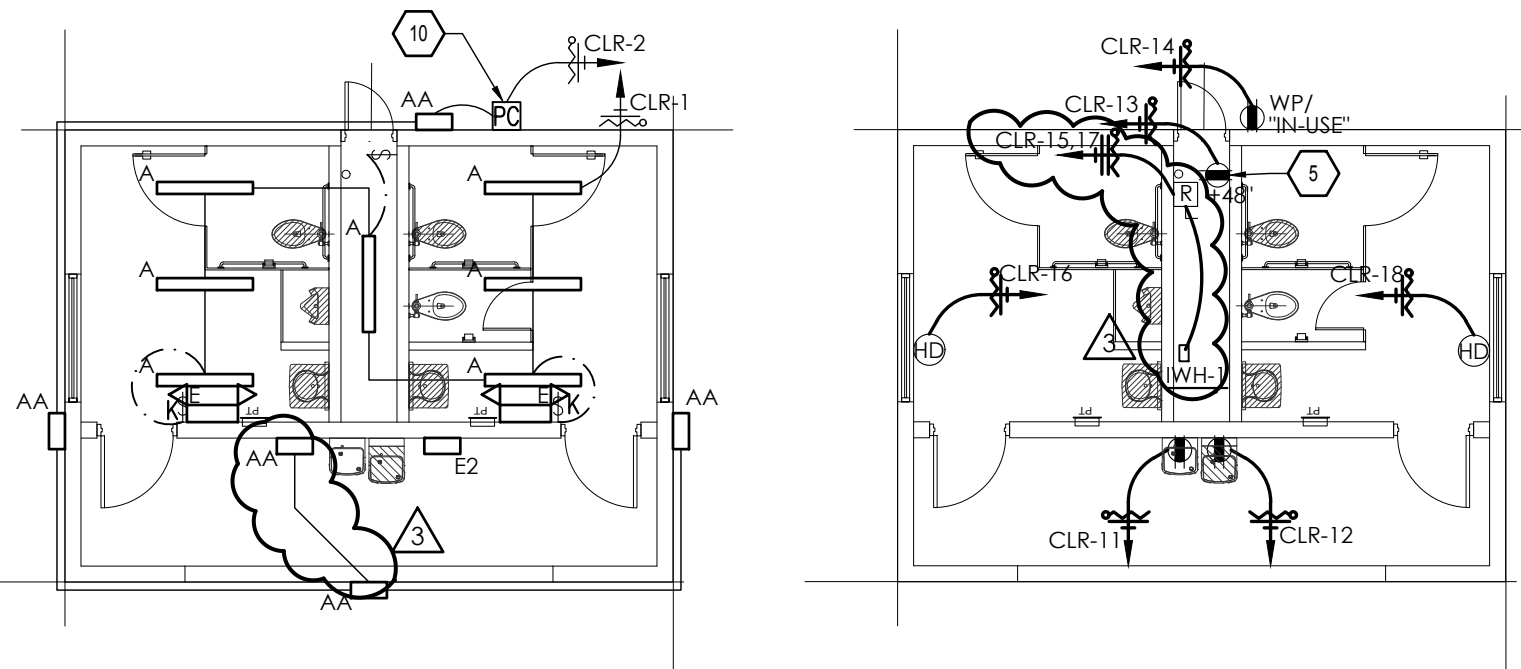
P-S-J-A- ISD
CARMAN ELEM.& SANTOS LIVAS ELEM.
PLAYGROUND IMPROVEMENTS

JOB NO.
FILE NO. *dwg/psjs/roofing* 17-18

EC1.1



1 CARMAN ELEM.
ELECTRICAL SITE PLAN
1"=40'-0"



2 RESTROOM ENLARGEMENT
1/8"=1'-0"

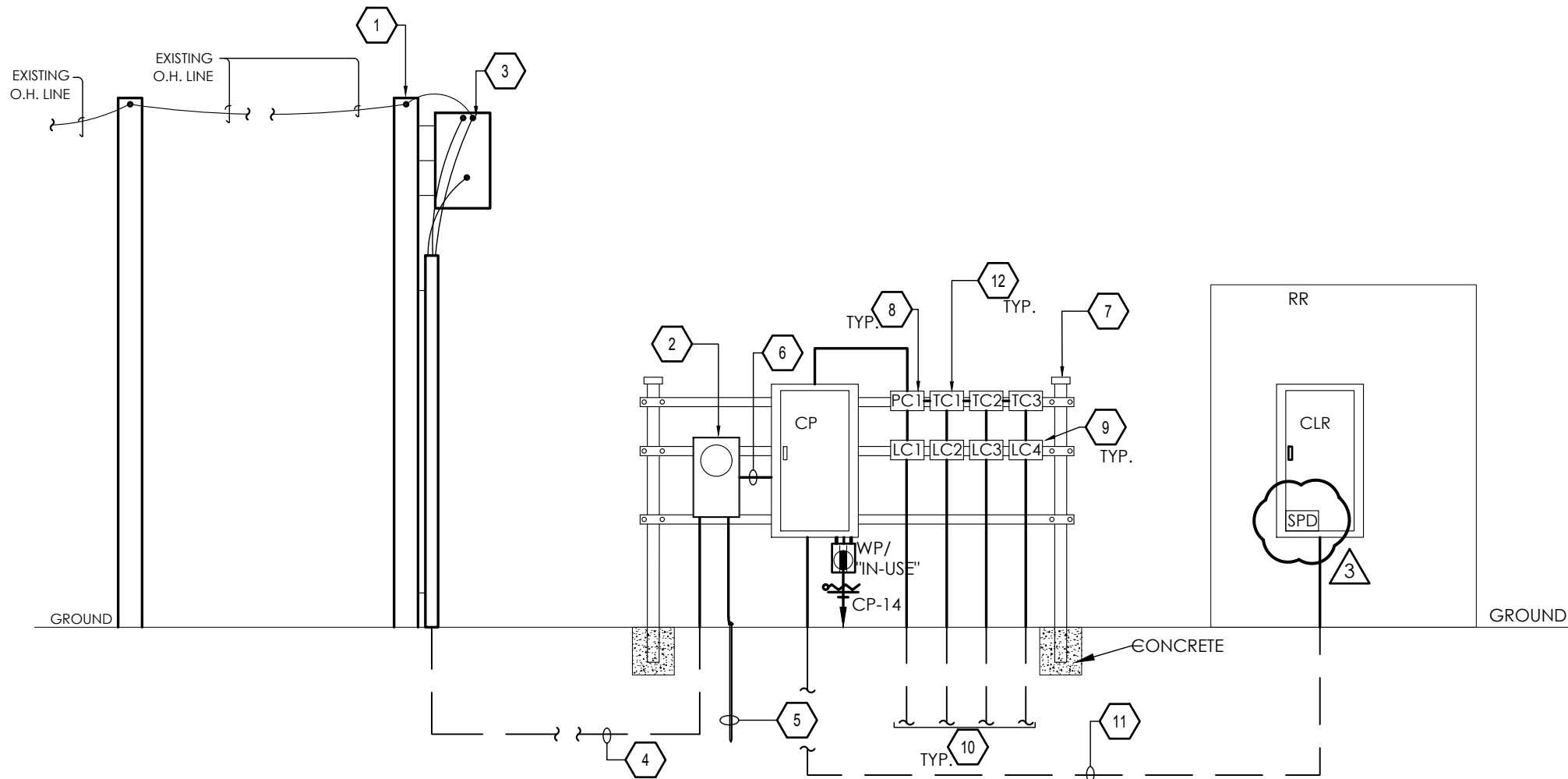
120/240V, 1Ø, 3W ELECTRICAL LOAD ANALYSIS	
DESCRIPTION	TOTAL KVA
LIGHTING	11
GENERAL POWER	11
WATER HEATER	5
TOTAL WATTS:	27 KVA
TOTAL AMPS:	112 AMPS
TOTAL AMPS+25%:	140 AMPS
WIRE SIZE AMPS:	200 AMPS

GENERAL NOTES:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
- F. PROVIDE 4" CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
- G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS. INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1) NEW POWER COMPANY POLE WITH RISER DIP POLE. COORDINATE WITH POWER COMPANY FOR ALL REQUIREMENTS.
- 2) NEW ELECTRICAL SERVICE METER 120/240V, 1Ø, 3W. CONTRACTOR SHALL PROVIDE METER BASE. VERIFY WITH POWER FOR METER BASE REQUIREMENTS PRIOR TO BID DATE. INCLUDE ALL COST IN BID. COORDINATE ALLOCATION OF METER SOCKET AND WIRING WITH POWER COMPANY.
- 3) COORDINATE WITH POWER COMPANY FOR 120/240V, 1Ø, 3W NEW POWER CO. POLE MOUNTED XFMR AT NEW POWER CO. POWER POLE LOCATION. FIELD VERIFY EXACT LOCATION.
- 4) PROVIDE 1-RUN OF 3#3/Ø, 2"Ø.
- 5) 1Ø, 3W, 120/240V, 3/4"X10" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 6) PROVIDE 1-RUN OF 3#3/Ø, 1#6G, 2"Ø.
- 7) 3" GALVANIZED PIPE WITH UNISTRUT STAND FOR ELECTRICAL SERVICE EQUIPMENT. COORDINATE WITH UTILITY COMPANY PRIOR TO ANY WORK.
- 8) 120V PHOTOCCELL. LOCATE AS DIRECTED BY MANUFACTURER.
- 9) LIGHTING CONTACTOR SHALL BE 120V, 20AMP, ELEC.HELD, HOA, 8-POLE IN A NEMA-3R ENCLOSURE.
- 10) ROUTE TO EXTERIOR LIGHTING.
- 11) PROVIDE 1-RUN OF 3#2, 1#6G, 2"Ø.
- 12) TIME CLOCK. REFER TO TIME CLOCK SCHEDULE.



1 ELECTRICAL SCHEMATIC DIAGRAM
SCALE: NTS

LIGHTING CONTACTOR SCHEDULE

ID	CONTACTOR DESCRIPTION	CONTROL SWITCH
LC1	CONTACTOR - 240V COIL, 20AMP, ELEC.HELD.HOA, 8-POLE IN A NEMA-3R ENCLOSURE	PHOTOCELL
LC2	CONTACTOR - 240V COIL, 20AMP, ELEC.HELD.HOA, 8-POLE IN A NEMA-3R ENCLOSURE	TIME CLOCK - TC1
LC3	CONTACTOR - 240V COIL, 20AMP, ELEC.HELD.HOA, 8-POLE IN A NEMA-3R ENCLOSURE	TIME CLOCK - TC2
LC4	CONTACTOR - 240V COIL, 20AMP, ELEC.HELD.HOA, 8-POLE IN A NEMA-3R ENCLOSURE	TIME CLOCK - TC3

NOTE: VERIFY POLES QUANTITIES.

TIME CLOCK SCHEDULE

ID	TIME CLOCK DESCRIPTION	CIRCUIT
TC1	STEEL COVER, 240V, 20AMP, SPST/DPST, EQUAL TO INTERMATIC #T100 SERIES	CP-15
TC2	STEEL COVER, 240V, 20AMP, SPST/DPST, EQUAL TO INTERMATIC #T100 SERIES	CP-17
TC3	STEEL COVER, 240V, 20AMP, SPST/DPST, EQUAL TO INTERMATIC #T100 SERIES	CP-19

NOTE: COORDINATE WITH OWNER TIME SEQUENCE.

DISCONNECT SCHEDULE

LABEL	DESCRIPTION
IWH-1	30AMP, 1Ø, 3W, N1, 240V, S/N, N.F., H.D. ROTARY TYPE DISCONNECT

NOTE: 1. REFER TO BREAKER SIZE FOR FUSE SIZE.
2. REFER TO PANELBOARD FOR DISCONNECT PHASES AND VOLTAGE.

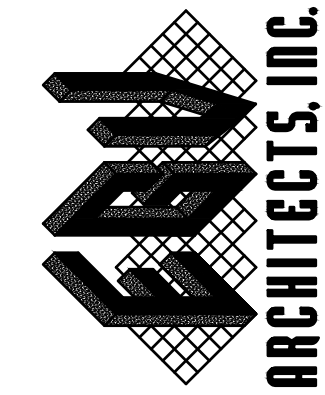
PANEL-CP LOCATION-	AMP 200	LUGS 1Ø	NEMA 3R	V(LL) 240		(P) 1	(W) 3		V(LN) 120	MNT S	K/AC 25	FDR 1-RUN 3#3/Ø, 1#6G, 2"Ø	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
TRAIL LIGHTING	1	0.5	20	2	3#6, 1#10G, 1"Ø	*	*	3#6, 1#10G, 1"Ø	2	20	0.6	2	TRAIL LIGHTING
-	3	0.5			-	*	*	-			0.6	4	-
PARKING LOT LIGHTING	5	0.5	20	2	3#6, 1#10G, 1"Ø	*	*	3#6, 1#10G, 1"Ø	2	20	0.4	6	B-BALL COURTS
-	7	0.5			-	*	*	-			0.4	8	-
SOFTBALL FIELD	9	0.7	20	2	3#6, 1#10G, 1"Ø	*	*	3#8, 1#10G, 3/4"Ø	2	20	1	10	MULTI-USE FIELD
-	11	0.7			-	*	*	-			1	12	-
PC1/LC1	13	0.6	20	1	2#10, 1#10G, 3/4"Ø	*	*	2#10, 1#10G, 3/4"Ø	1	20	1.5	14	1 RCPT
TC1/LC2	15	0.6	20	1	2#10, 1#10G, 3/4"Ø	*	*	-				16	SPACE
TC2/LC3	17	0.6	20	1	2#10, 1#10G, 3/4"Ø	*	*	-				18	SPACE
TC3/LC4	19	0.6	20	1	2#10, 1#10G, 3/4"Ø	*	*	-				20	SPACE
SPACE	21				-	*	*	-				22	SPACE
SPACE	23				-	*	*	-				24	SPACE
SPACE	25				-	*	*	-				26	SPACE
SPACE	27				-	*	*	-				28	SPACE
SPACE	29				-	*	*	-				30	SPACE
SPACE	31				-	*	*	-				32	SPACE
1, J SPD	33		30	2	-	*	*	-				34	SPACE
-	35				-	*	*	-				36	SPACE
SPACE	37		20	1	-	*	*	-				38	SPACE
SPACE	39		20	1	-	*	*	3#3, 1#8G, 1 1/2"Ø	2	100	8	40	PANEL-CLR
SPACE	41		20	1	-	*	*	-			7	42	-
LOADS	-	(KVA)				14	13				(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	27									10	-	LIGHTING
RESERVE	-	0									2	-	RECEPTACLES
TOTAL LOAD	-	27									0	-	COOLING
											0	-	HEATING
TOTAL AMPS	-	111									15	-	OTHER

1) SURGE PROTECTION DEVICE, 100KA WITH INTEGRAL DISCONNECT MEANS.

PANEL-CLR LOCATION-	AMP 100	LUGS MLO	NEMA 3R	V(LL) 240		(P) 1	(W) 3		V(LN) 120	MNT S	K/AC 10	FDR 1-RUN 3#3, 1#8G, 1 1/2"Ø	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
LIGHTING	1	0.6	20	1	2#12, 1#12G, 1/2"Ø	*	*	2#12, 1#12G, 1/2"Ø	1	20	0.6	2	EXTERIOR LIGHTING
SPACE	3				-	*	*	-				4	SPACE
SPACE	5				-	*	*	-				6	SPACE
SPACE	7				-	*	*	-				8	SPACE
SPACE	9				-	*	*	-				10	SPACE
1, J.E.D.F.	11	1.2	20	1	2#12, 1#12G, 1/2"Ø	*	*	2#12, 1#12G, 1/2"Ø	1	20	1.2	12	1, J.E.D.F.
IRRIGATION CONTROLS	13	0.6	20	1	2#12, 1#12G, 1/2"Ø	*	*	2#12, 1#12G, 1/2"Ø	1	20	1.5	14	1 RCPT
IWH-1	15	2.4	25	2	3#10, 1#10G, 1/2"Ø	*	*	2#10, 1#10G, 3/4"Ø	1	25	2.4	16	HAND DRYER
-	17	2.4			-	*	*	2#10, 1#10G, 3/4"Ø	1	25	2.4	18	HAND DRYER
SPACE	19				-	*	*	-				20	SPACE
SPACE	21				-	*	*	-				22	SPACE
SPACE	23				-	*	*	-				24	SPACE
SPACE	25				-	*	*	-				26	SPACE
SPACE	27				-	*	*	-				28	SPACE
SPACE	29				-	*	*	-				30	SPACE
SPACE	31				-	*	*	-				32	SPACE
SPACE	33				-	*	*	-				34	SPACE
SPACE	35				-	*	*	-				36	SPACE
SPACE	37		20	1	-	*	*	-		1	20	38	SPACE
SPACE	39		20	1	-	*	*	-		1	20	40	SPACE
SPACE	41		20	1	-	*	*	-		1	20	42	SPACE
LOADS	-	(KVA)				8	7				(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	15									1	-	LIGHTING
RESERVE	-	0									9	-	RECEPTACLES
TOTAL LOAD	-	15									0	-	COOLING
											0	-	HEATING
TOTAL AMPS	-	64									5	-	OTHER

NOTES:
1) PROVIDE WITH GFI BREAKER.
2)
3)

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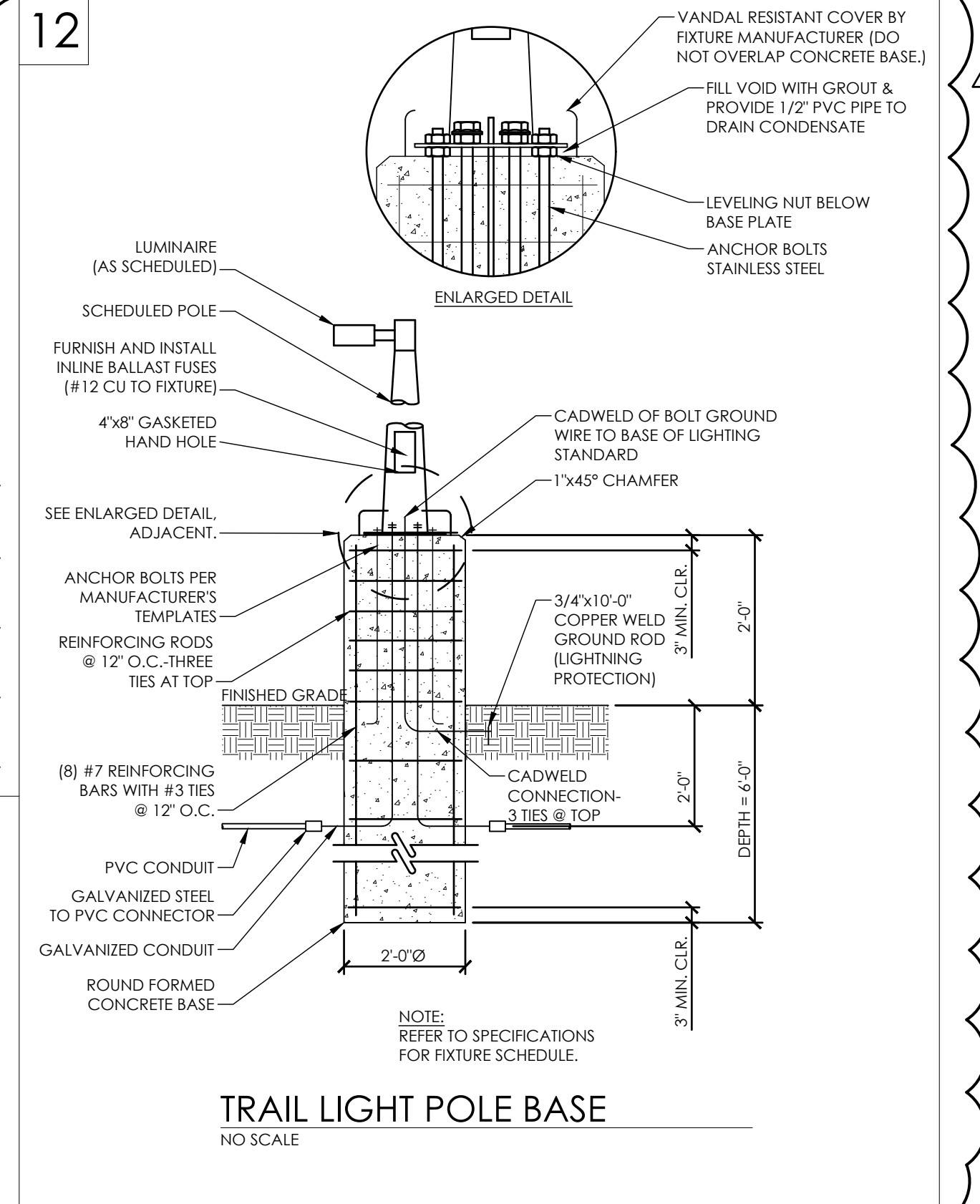
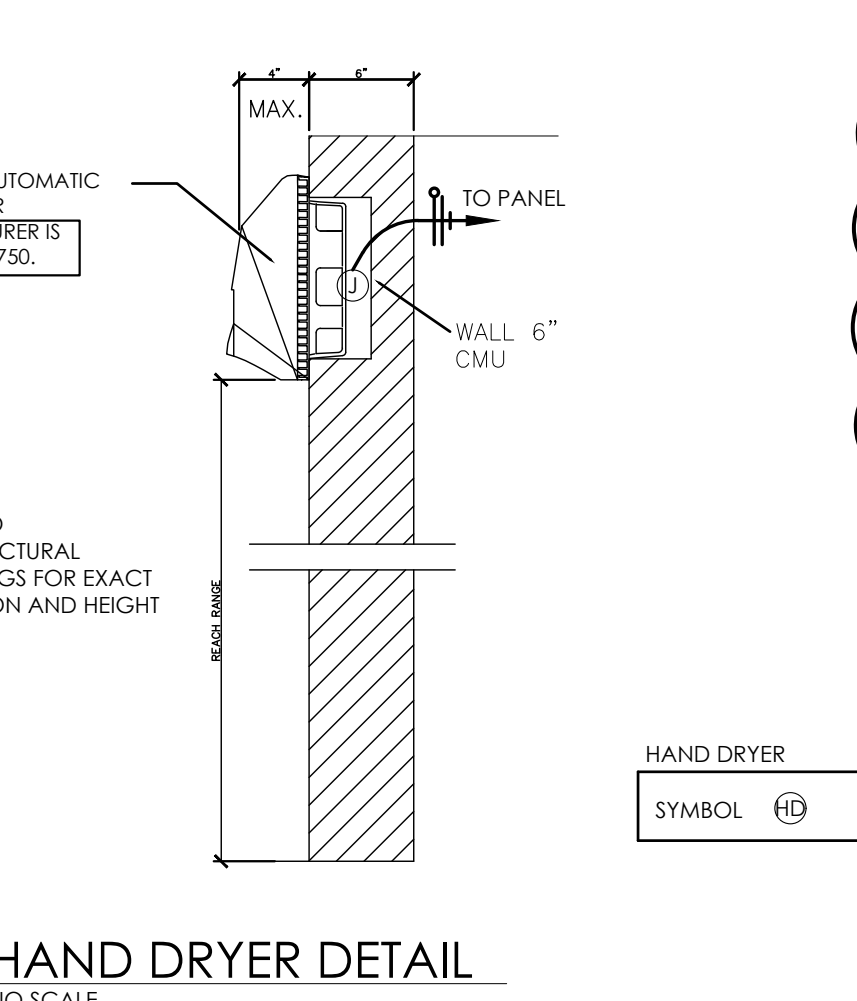
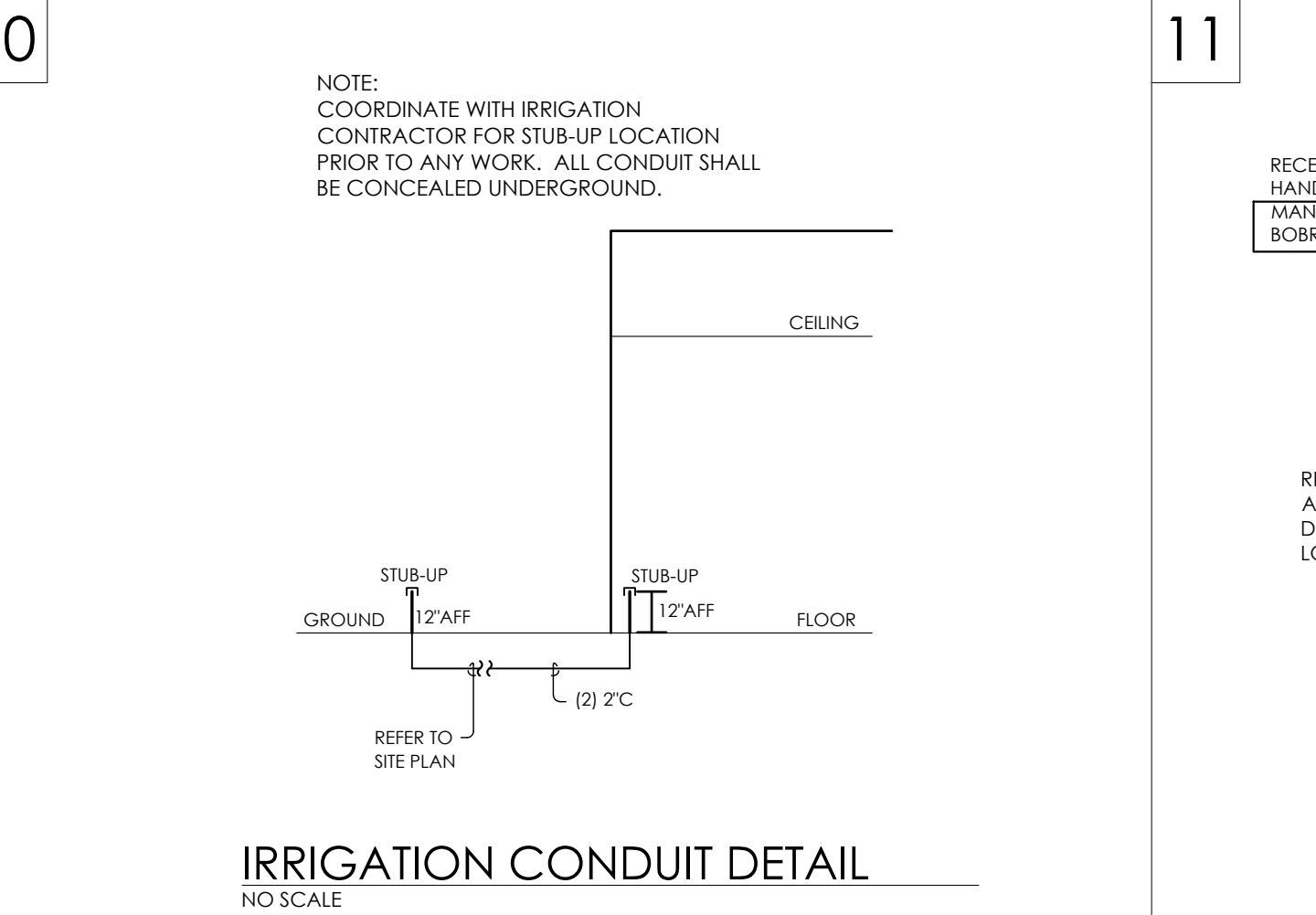
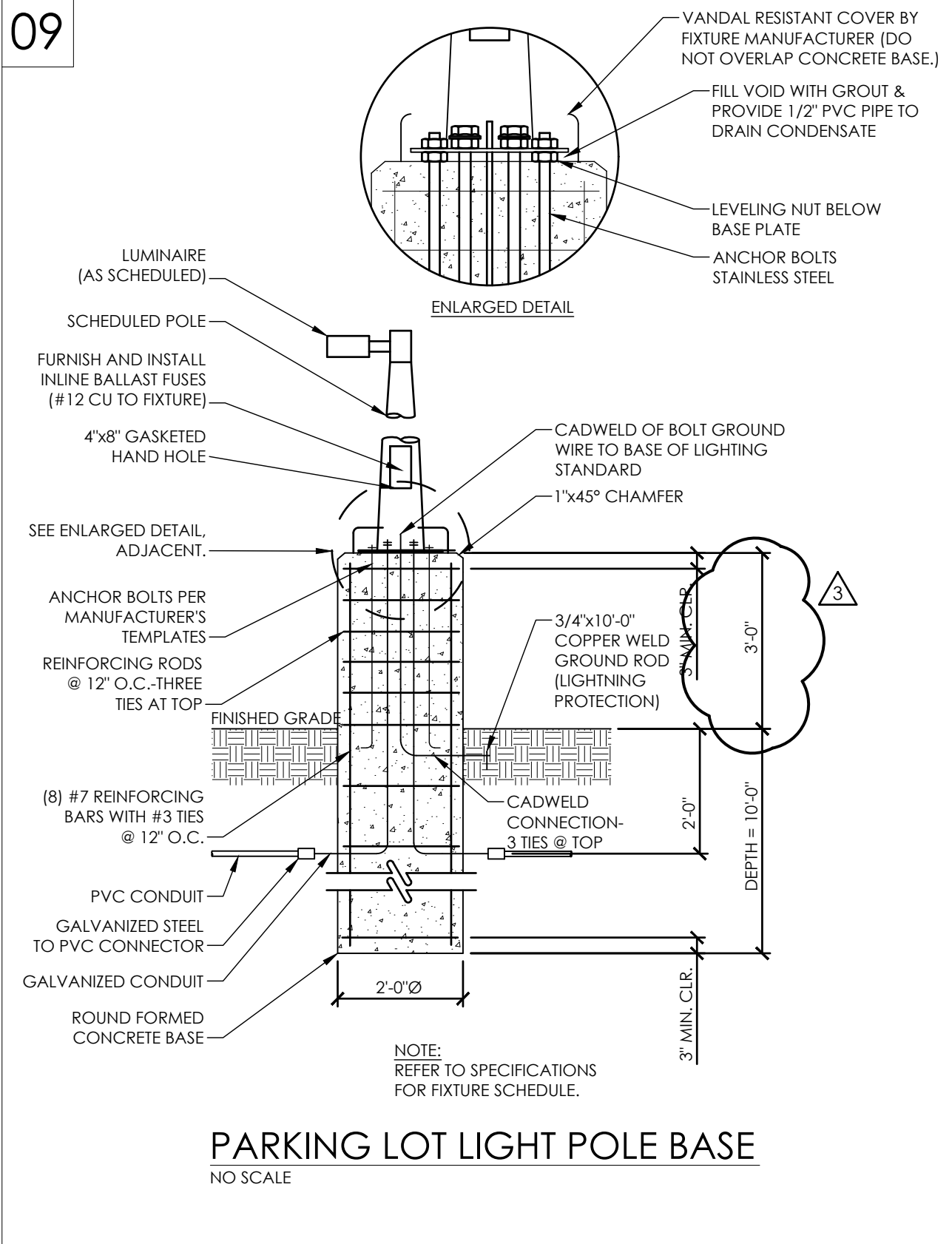
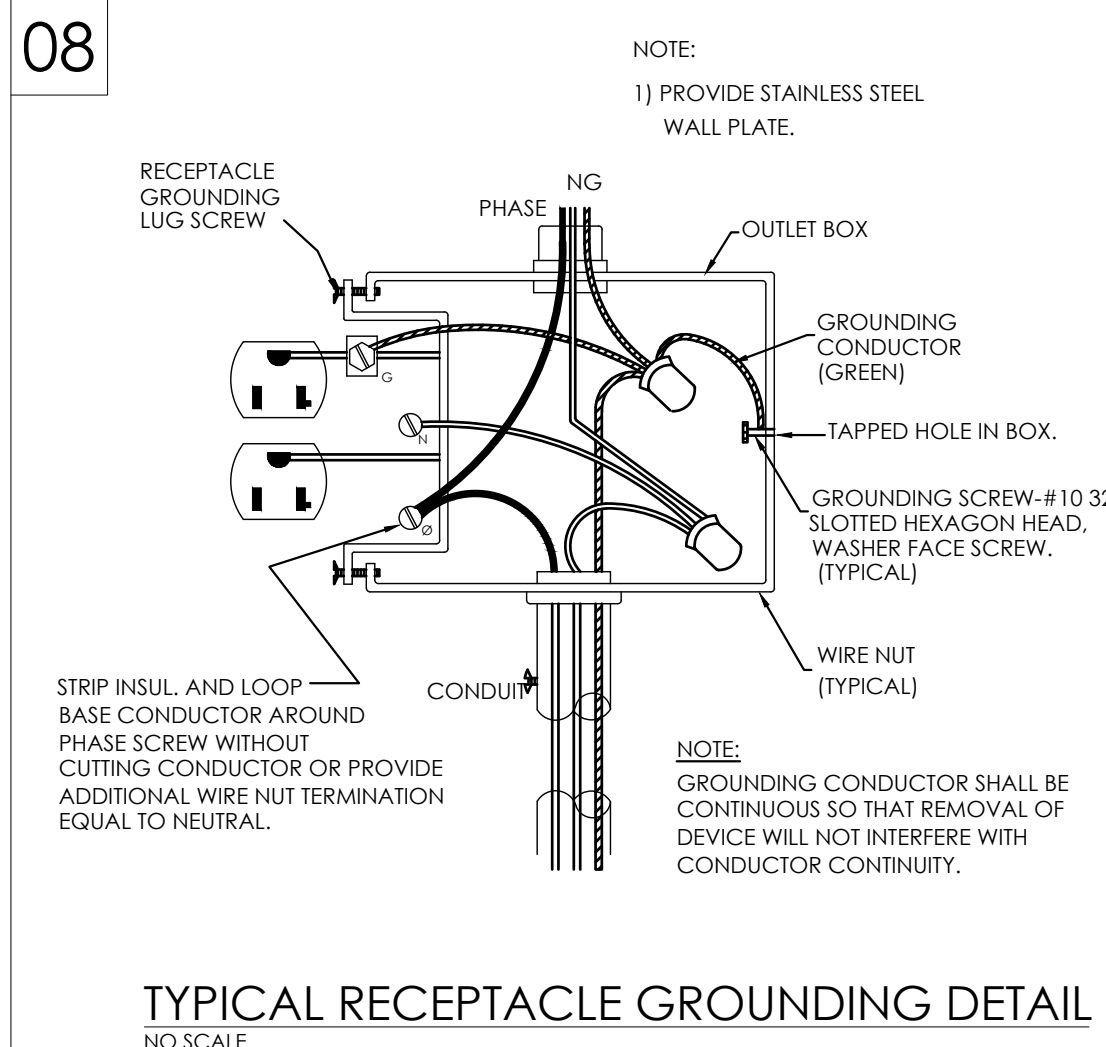
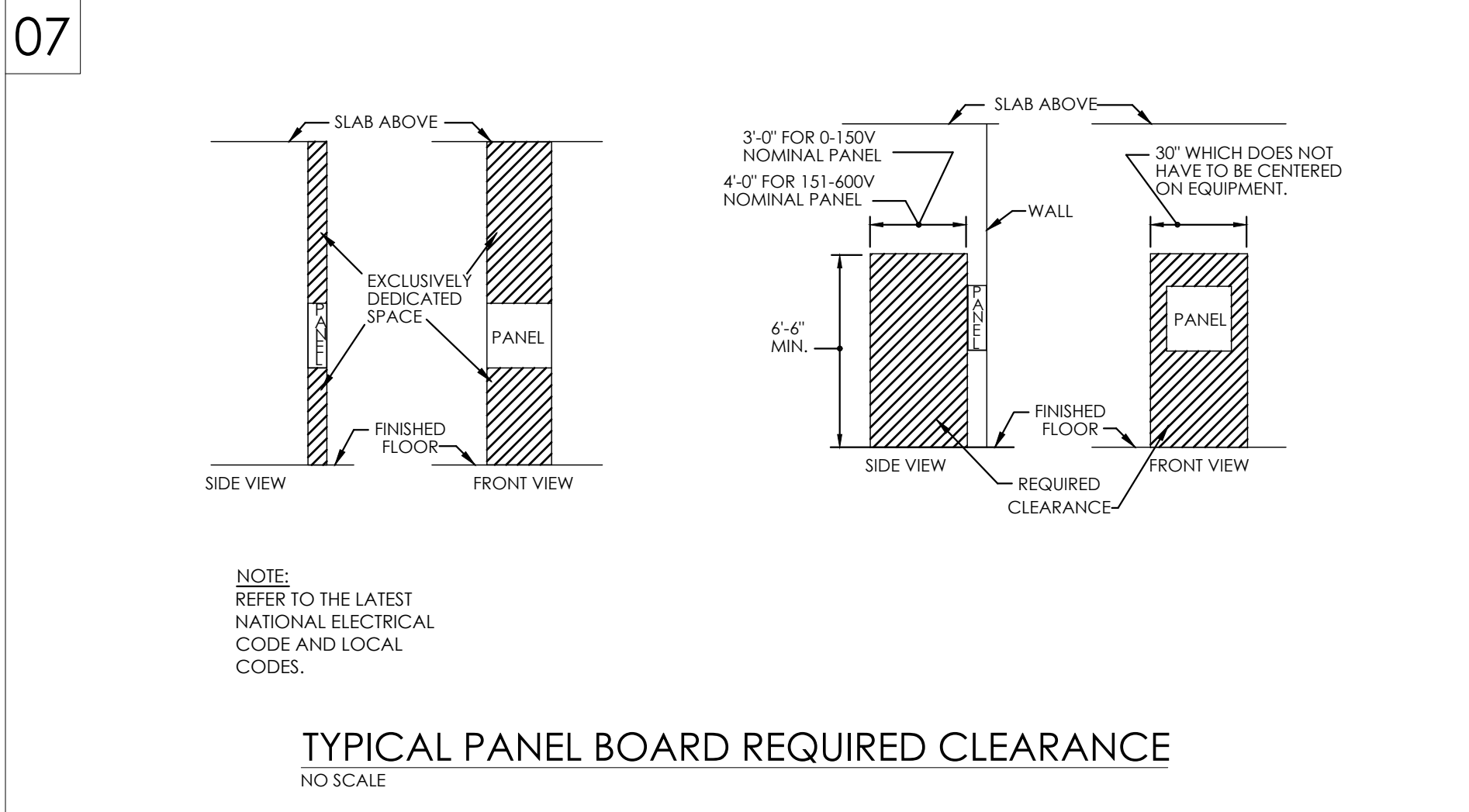
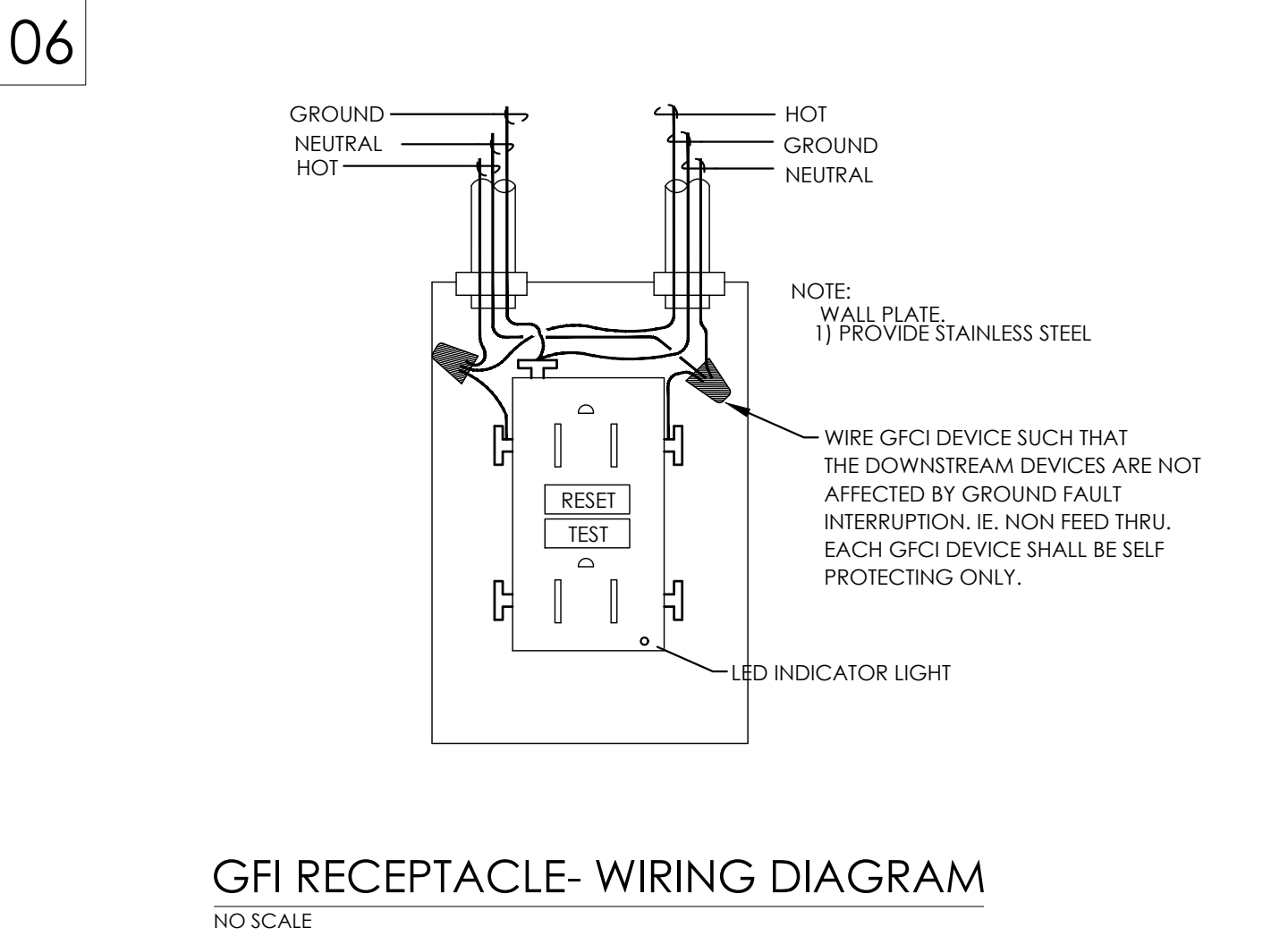
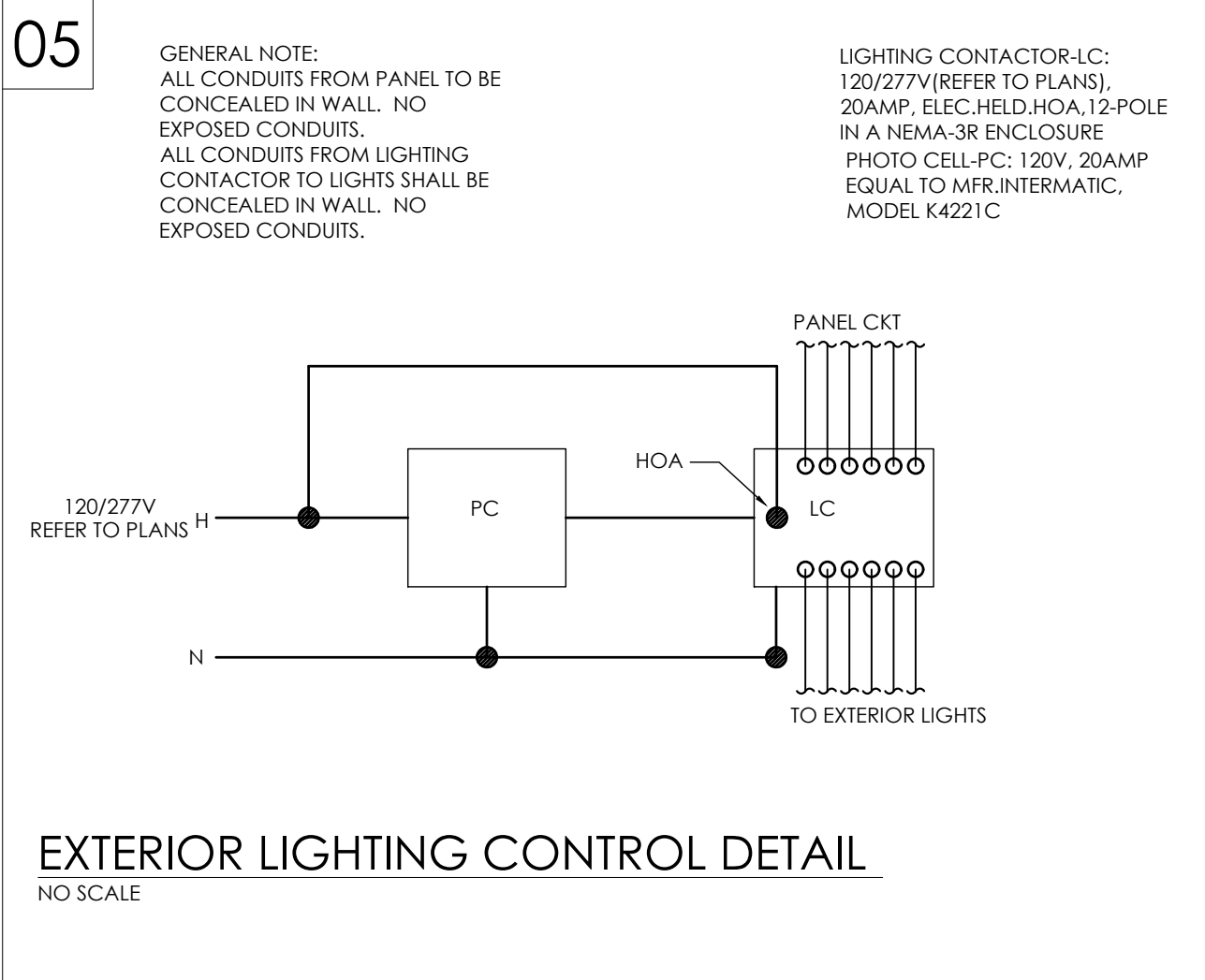
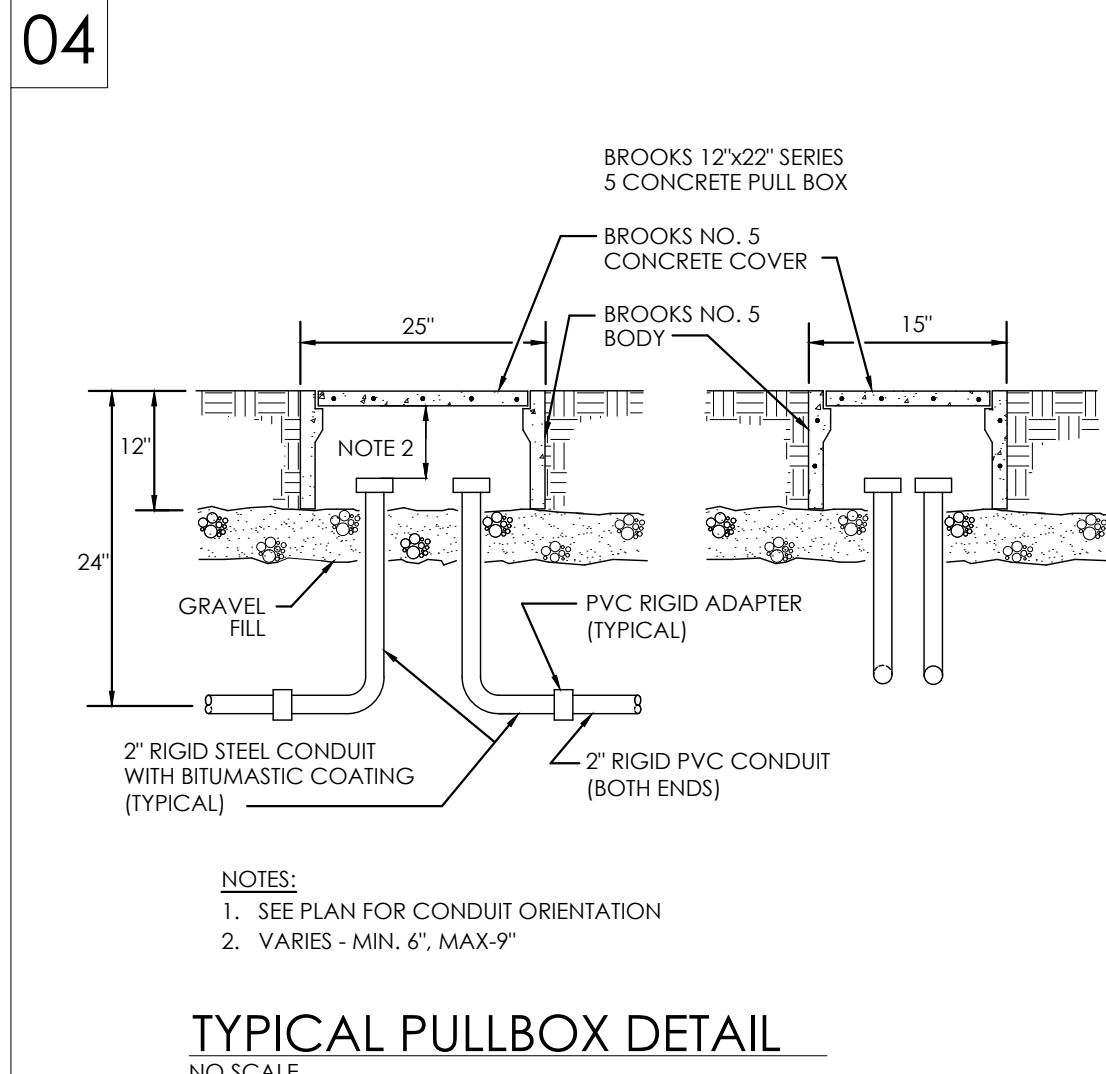
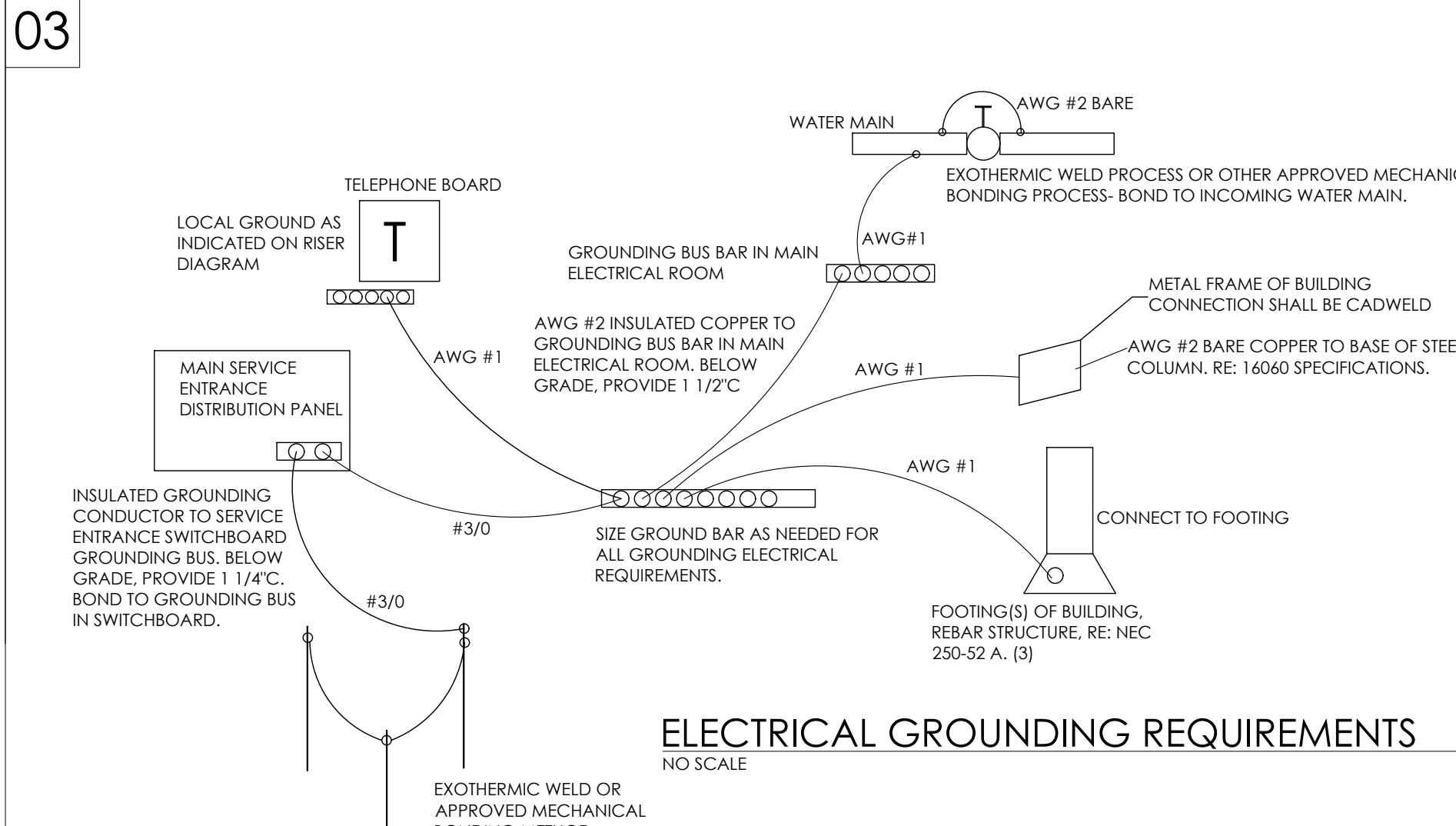
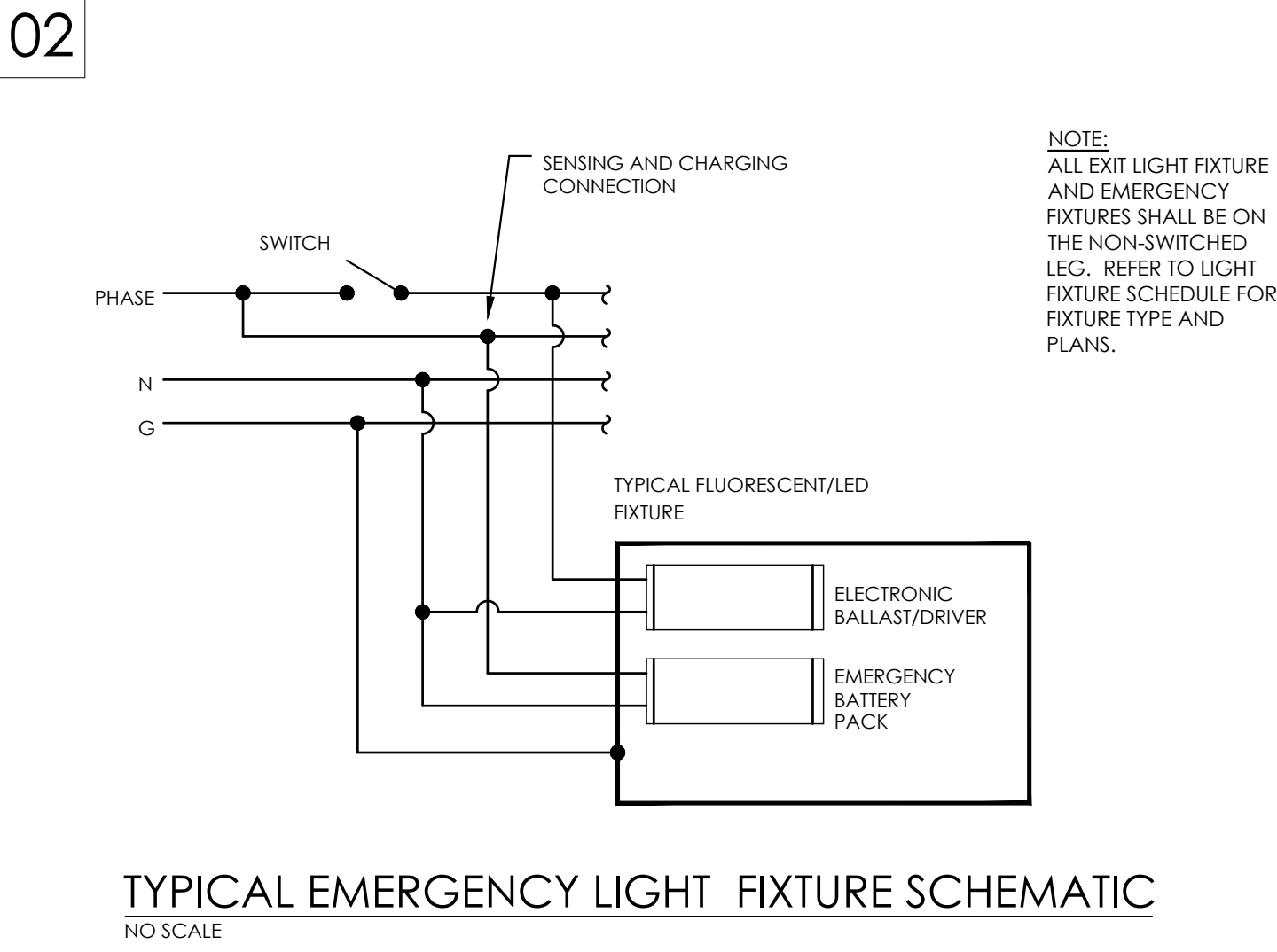
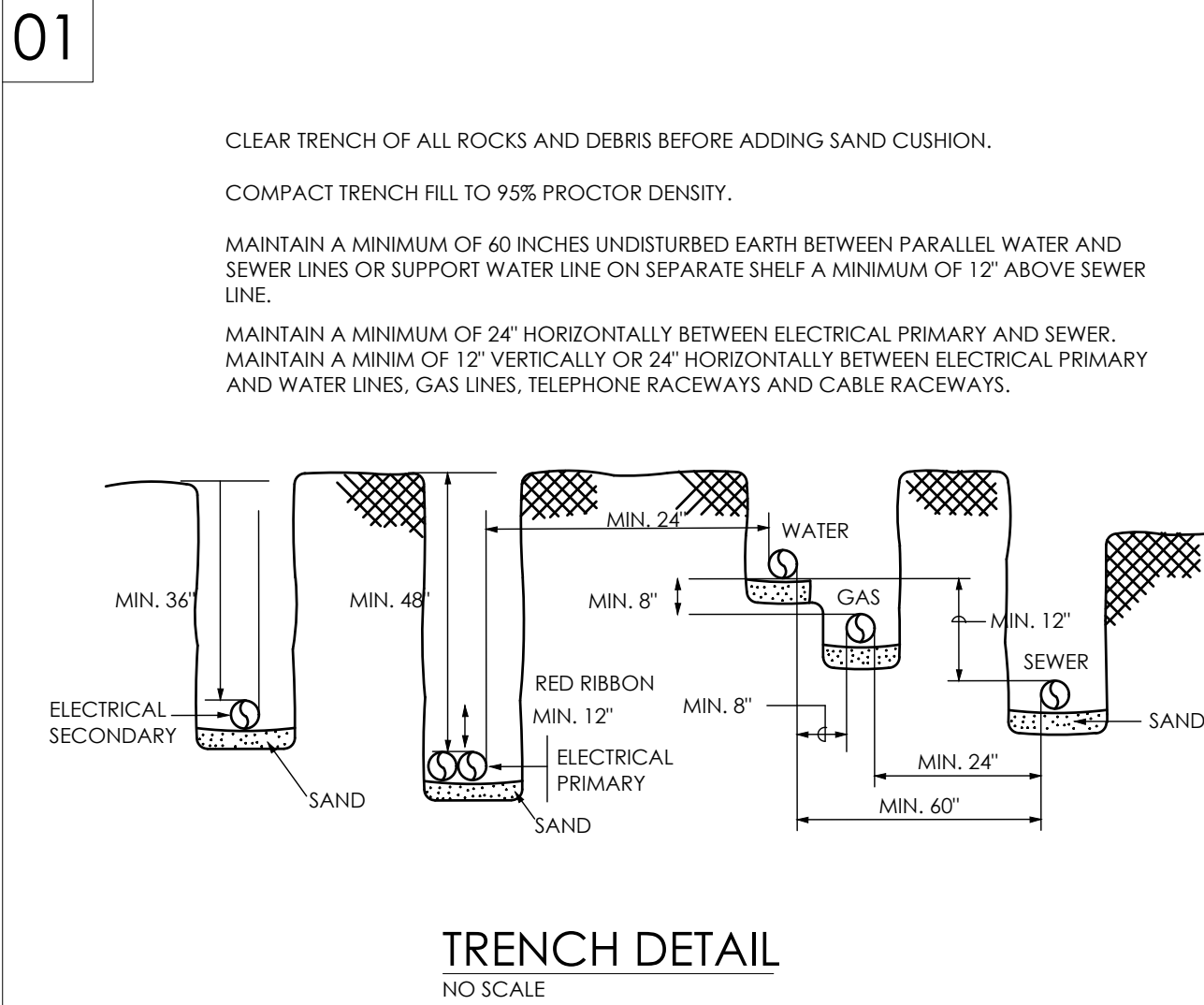


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P-S-J-A- ISD
CARMAN ELEM.& SANTOS LIVAS ELEM.
PLAYGROUND IMPROVEMENTS

JOB NO.
FILE NO. dwg/psjx/reroofing 17-18

EC3.1



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ARCHITECTS, INC.

05/16/19

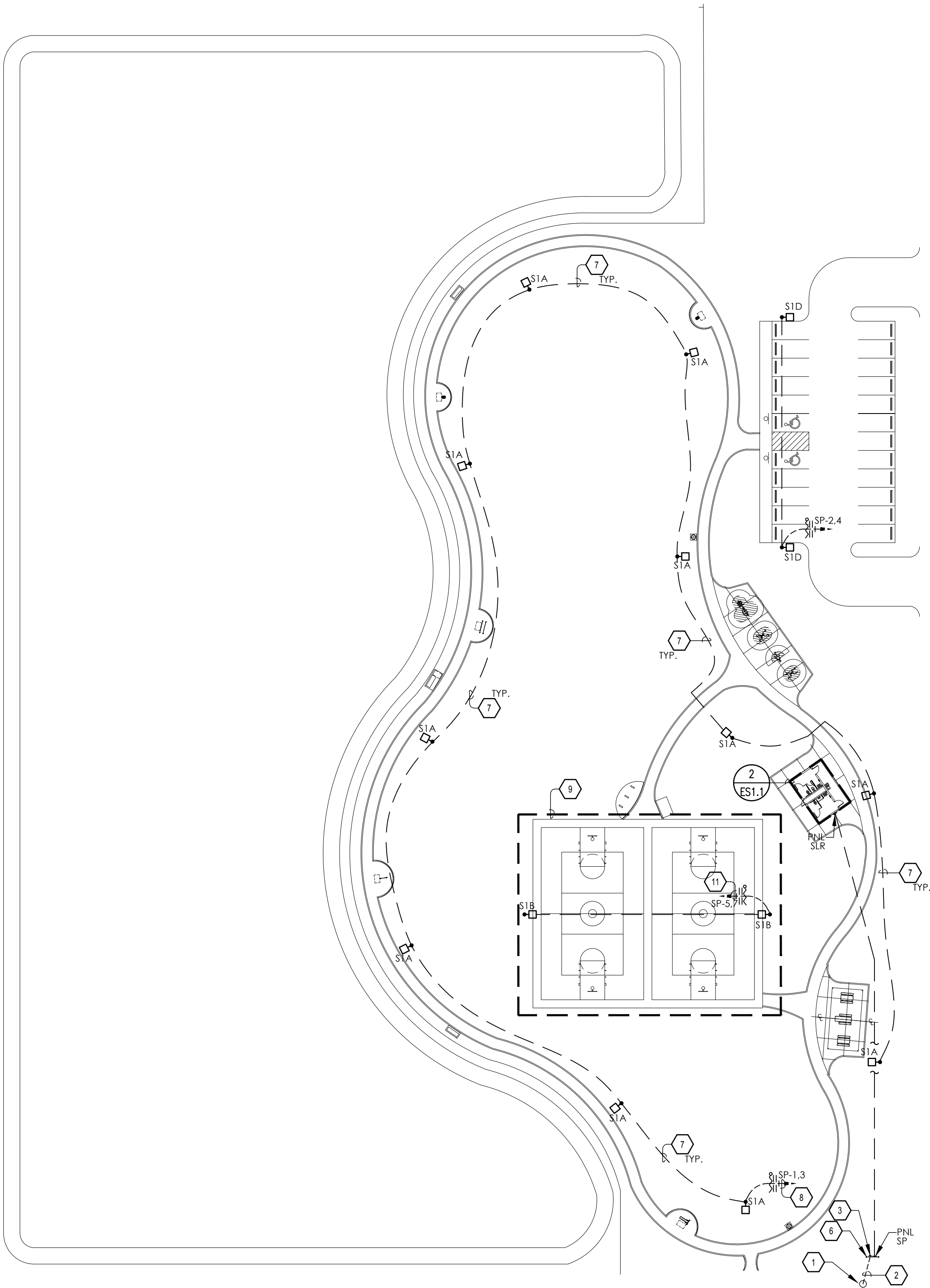
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LEONARDO MUNOZ
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Exp. 05/16/2021

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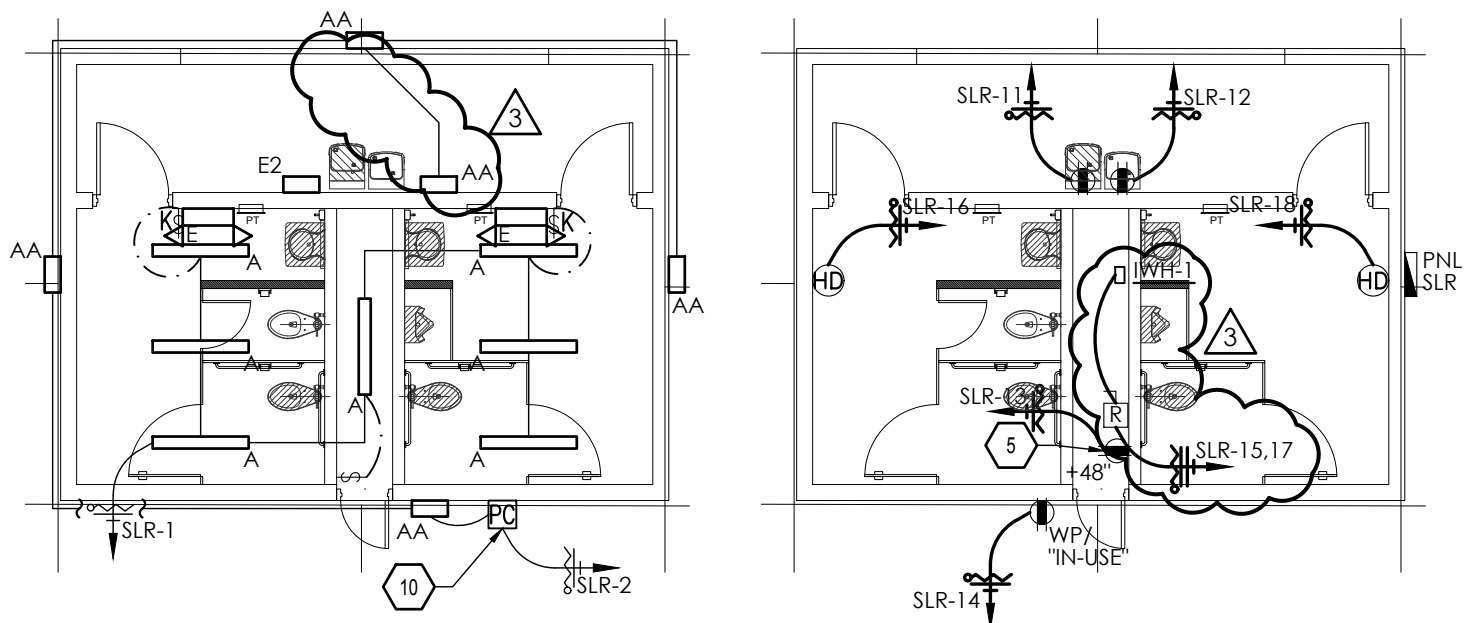
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1 SANTOS LIVAS ELEM.
ELECTRICAL SITE PLAN
1"=40'-0"



2 RR ENLARGEMENT
1/8"=1'-0"

GENERAL ELECTRICAL NOTES (TO ALL SHEETS)

- A. CONTRACTOR TO VERIFY ALL EXISTING MAIN POWER SERVICES AND COORDINATE WITH POWER COMPANY FOR ALL NEW REQUIREMENTS AND ALL COST ASSOCIATED. CONTRACTOR SHALL INCLUDE ANY COST FOR THE NEW TRANSFORMER AND OTHER ASSOCIATED FEES IN BID. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FEES WITH POWER COMPANY AND TO INCLUDE IN BID. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH POWER COMPANY AS SOON THE CONTRACT IS AWARDED TO ORDER TRANSFORMER AND THE RELATED ELECTRICAL SERVICE EQUIPMENT AS SOON AS POSSIBLE.
- B. CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, TRENCHING AND BACKFILLING. COORDINATE WITH ALL UTILITIES PRIOR TO EXCAVATION.
- C. CONTRACTOR TO VERIFY ALL EXISTING MAIN TELEPHONE SERVICES AND COORDINATE WITH TELEPHONE COMPANY FOR ALL REQUIREMENTS AND ALL COST ASSOCIATED. INCLUDE ALL COST IN BID. CONDUIT FROM MAIN TELEPHONE RISER SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- D. ALL ELECTRICAL EQUIPMENT OUTDOORS SHALL BE RATED TYPE NEMA 3R UNLESS OTHERWISE NOTED.
- E. CONTRACTOR SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES. ALL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES AND ALL OTHER AUTHORITY HAVING JURISDICTION. OBTAIN PERMITS AND PAY ALL FEES. PERFORM MODIFICATIONS TO MEET CODE AND ORDINANCE REQUIREMENTS AT NO ADDITIONAL COST TO OWNER, ARCHITECT OR ENGINEER. VERIFY PRIOR TO BID DATE.
- F. VERIFY AT JOB SITE THE EXACT LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS, COLUMNS, ETC. TO LOCATE EQUIPMENT CONDUIT, PANELS AND DEVICES. IF DEVIATIONS FROM THE DRAWING ARE NECESSARY TO MEET STRUCTURAL CONDITIONS MAKE DEVIATIONS WITHOUT ADDITIONAL COST, TO OWNER, ARCHITECT, OR ENGINEER.
- G. IN COOPERATION WITH OTHER CONTRACTORS, DETERMINE THE EXACT LOCATION OF EQUIPMENT AND DEVICES AND CONNECTIONS THERETO BY REFERENCE TO THE SUBMITTALS AND ROUGH-IN DRAWINGS, AND BY MEASUREMENTS AT THE SITE. REFER TO ALL OTHER TRADES SUBMITTAL FOR ELECTRICAL INFORMATION.
- H. GROUND ENTIRE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- I. VERIFY AT JOB SITE GENERAL WORK TO BE DONE AS SPECIFIED, AS NOTED, OR AS REQUIRED FOR INSTALLATION ELECTRICAL SYSTEMS PRIOR TO SUBMISSION OF BIDS.
- J. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND EQUIPMENT TO BE REMOVED AND REPLACED BEFORE SUBMITTING HIS BID.
- K. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SMALL SCALE ONLY. THEY CONVEY THE INTENT OF THE WORK BUT DO NOT SHOW DETAIL SUCH AS JUNCTION AND PULL BOXES REQUIRED BY THE SPECIFICATIONS AND THE NATIONAL ELECTRICAL CODE(NEC). PROVIDE ALL MATERIALS AND METHODS CALLED FOR IN THE SPECIFICATIONS AND AS REQUIRED IN THE NEC TO PROVIDE A COMPLETE INSTALLATION OF ALL WORK.
- L. ALL WIRING SHALL BE COPPER.
- M. ALL SLEEVES, PENETRATIONS, ETC. SHALL BE SEALED SOLID NON-SHRINKING MATERIAL IMMEDIATELY UPON FILLING OF THE OPENING WITH PIPE OR CONDUIT.
- N. ARRANGE FOR SOURCES OF TEMPORARY CONSTRUCTION SERVICES. SUCH SERVICES SHALL BE NOMINALLY 120/240V, 1-PHASE, 3-WIRE FROM WHICH A COMPLETE SYSTEM OF TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED FOR ALL CONSTRUCTION NEEDS.
- O. CONTRACTOR IS RESPONSIBLE TO VERIFY AND COORDINATE WITH EXISTING/NEW UNDERGROUND UTILITIES PRIOR TO ANY WORK.
- P. CONTRACTOR IS RESPONSIBLE CALL DIG-TESS: 1-800-DIG-TESS 2-BUSINESS DAYS IN ADVANCE.

KEYED NOTES: ELECTRICAL

- 1 NEW POWER COMPANY POWER POLE WITH NEW POLE MOUNTED TRANSFORMER AND DIP POLE RISER. COORDINATE WITH UTILITY ELECTRICAL COMPANY. INCLUDE ALL COST IN BID.
- 2 CONTRACTOR TO PROVIDE AND INSTALL 11/4" PVC CONDUIT FROM NEW POWER COMPANY POLE MOUNTED TRANSFORMER TO NEW SERVICE EQUIPMENT. ALL UNDERGROUND WORK SHALL BE ACCORDING TO POWER COMPANY STANDARDS. VERIFY ALL REQUIREMENTS WITH THE POWER COMPANY BEFORE ANY ROUGH-IN. COORDINATE LOCATION, COST, AND INSTALLATION WITH POWER COMPANY PRIOR TO BID.
- 3 NEW 120/240V, 1Ø, 3W, ELECTRICAL SERVICE METER.
- 4 PROVIDE CHAIN LINK ENCLOSURE FOR ELECTRICAL SERVICE EQUIPMENT.
- 5 PROVIDE RECEPTACLE FOR IRRIGATION CONTROLS. REFER TO DETAIL.
- 6 GALVANIZED 3" PIPE AND GALVANIZED UNISTRUT STAND.
- 7 LINE REPRESENTS PROPOSED EACH CONDUITS PATH. FIELD VERIFY EXACT ROUTE. PROVIDE ALL TRENCHING AND BACK FILLING FOR NEW CONDUITS. REFER TO PANEL ELECTRICAL PANEL SCHEDULES FOR CIRCUIT SIZE.
- 8 VIA LIGHTING CONTACTOR 'LC1'.
- 8 ALTERNATE #8: IF ALTERNATE IS ACCEPTED, PROVIDE LIGHTING AS SHOWN FOR BASKETBALL COURTS.
- 10 120V PHOTOCELL. LOCATE AS DIRECTED BY MANUFACTURER.
- 11 VIA LIGHTING CONTACTOR 'LC2'.

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ES1 SHEET 1 OF 1

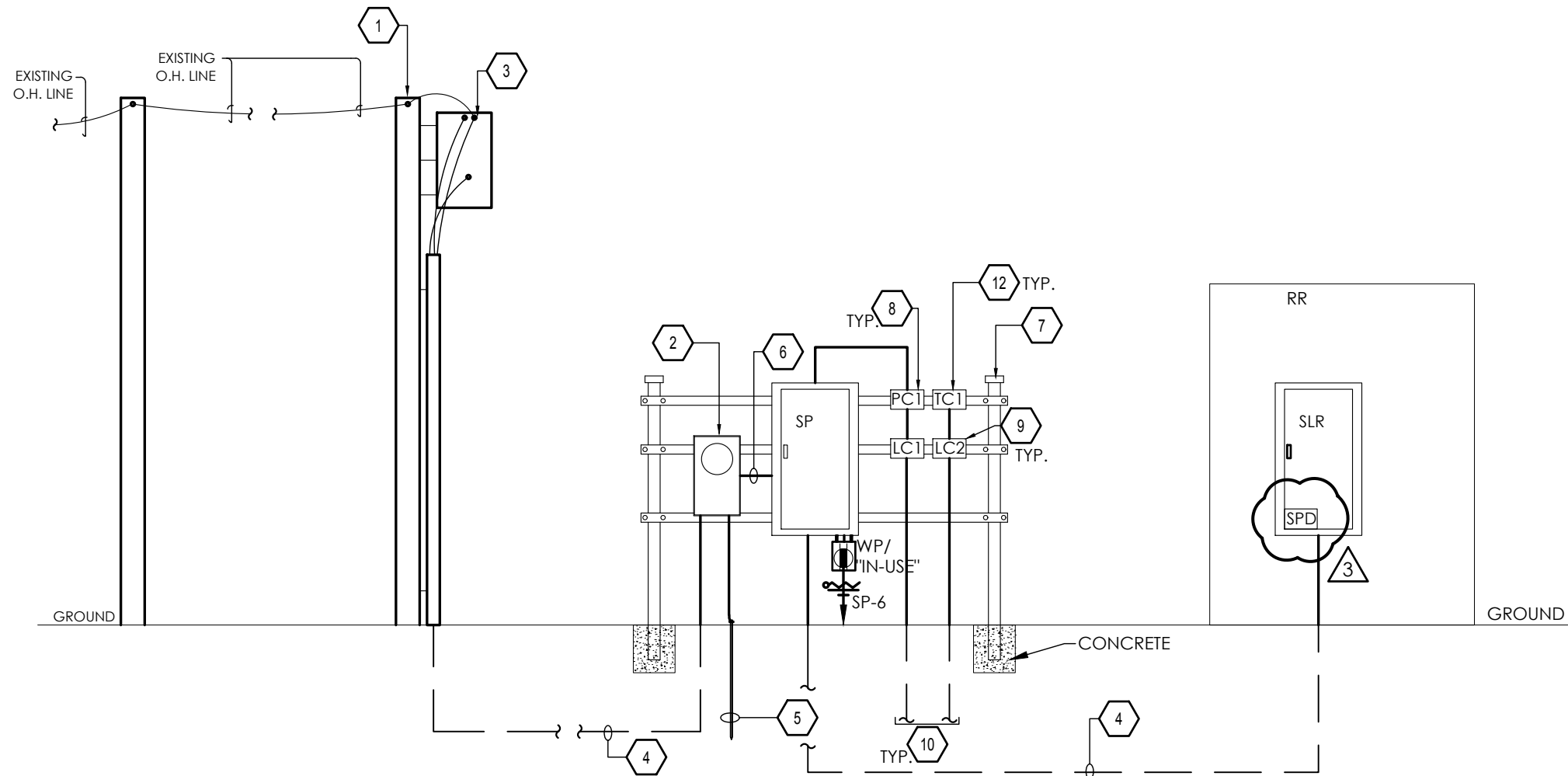
120/240V, 1Ø, 3W ELECTRICAL LOAD ANALYSIS	
DESCRIPTION	TOTAL KVA
LIGHTING	5
GENERAL POWER	11
WATER HEATER	5
TOTAL WATTS:	21 KVA
TOTAL AMPS:	87 AMPS
TOTAL AMPS+25%:	109 AMPS
WIRE SIZE AMPS:	200 AMPS

GENERAL NOTES:

- A. PROVIDE GROUND /BONDING AS INDICATED ON THE NATIONAL ELECTRICAL CODE.
- B. NAME PLATES SHALL BE PROVIDED FOR ALL ELECTRICAL SWITCH GEAR, PANEL BOARDS, LIGHTING CONTACTORS, LIGHTING CONTROL PANELS, ETC., BY ELECTRICAL CONTRACTOR.
- C. NEW ELECTRICAL METERING AND SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE LOCAL POWER UTILITY CO. AND CITY REQUIREMENTS. VERIFY AND COORDINATE WITH POWER UTILITY CO. AND AHJ BEFORE BID AND INSTALLATION.
- D. COMPLY WITH NFPA 70E SAFETY REQUIREMENTS.
- E. PANELBOARDS WITH MORE THAN 42 CIRCUITS SHALL BE IN ONE CABINET ENCLOSURE, UNLESS OTHERWISE NOTED.
- F. PROVIDE 4"CONCRETE PAD FOR ALL DRY-TYPE TRANSFORMERS.
- G. ALL TWO SECTION PANELBOARDS SHALL BE FEED THRU LUGS.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY OF ELECTRICAL SERVICE TO THE NEW BUILDING WITHIN PROJECT SCHEDULE. COORDINATE ALL COST FOR LABOR AND MATERIALS WITH LOCAL ELECTRICAL UTILITY COMPANY PRIOR TO BID. ALL COST ASSOCIATED WITH THE DELIVERY OF ELECTRICAL SERVICE INCLUDING ALL MATERIALS SHALL BE INCLUDED IN BID. TRANSITION OF NEW ELECTRICAL SERVICE SHALL PROCEED IN WEEKENDS OR HOLIDAYS. INCLUDE ALL COST IN BID FOR OVERTIME FROM ELECTRIC UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE MADE FOR SERVICE DELIVERY COSTS AFTER CONTRACT HAS BEEN AWARDED.

ELECTRICAL RISER
DIAGRAM KEYED NOTES:

- 1) NEW POWER COMPANY POLE WITH RISER DIP POLE. COORDINATE WITH POWER COMPANY FOR ALL REQUIREMENTS.
- 2) NEW ELECTRICAL SERVICE METER 120/240V, 1Ø, 3W. CONTRACTOR SHALL PROVIDE METER BASE. VERIFY WITH POWER FOR METER BASE REQUIREMENTS PRIOR TO BID DATE. INCLUDE ALL COST IN BID. COORDINATE ALLOCATION OF METER SOCKET AND WIRING WITH POWER COMPANY.
- 3) COORDINATE WITH POWER COMPANY FOR 120/240V, 1Ø, 3W NEW POWER CO. POLE MOUNTED XFMR AT NEW POWER CO. POWER POLE LOCATION. FIELD VERIFY EXACT REQUIREMENTS.
- 4) PROVIDE 1-RUN OF 3#3/Ø, 2"C.
- 5) 1#3/ØG IN 1"C. 3/4"X1Ø" COPPER CLAD RODS. PROVIDE GROUNDING AS PER NEC REQUIREMENTS.
- 6) PROVIDE 1-RUN OF 3#3/Ø, 1#6G, 2"C.
- 7) 3 GALV. STEEL POLE WITH DISTRIBUTION STAND FOR ELECTRICAL SERVICE EQUIPMENT. COORDINATE WITH UTILITY COMPANY PRIOR TO ANY WORK.
- 8) 120V PHOTOCCELL. LOCATE AS DIRECTED BY MANUFACTURER.
- 9) LIGHTING CONTACTOR SHALL BE 120V, 2ØAMP, ELEC.HELD. HOA, 8-POLE IN A NEMA-3R ENCLOSURE.
- 10) ROUTE TO EXTERIOR LIGHTING.
- 11) PROVIDE 1-RUN OF 3#2, 1#8G, 2"C.
- 12) TIME CLOCK. REFER TO TIME CLOCK SCHEDULE.



1 ELECTRICAL SCHEMATIC DIAGRAM
SCALE: NTS

LIGHTING CONTACTOR SCHEDULE		
ID	CONTACTOR DESCRIPTION	CONTROL SWITCH
LC1	CONTACTOR - 240V COIL, 2ØAMP, ELEC.HELD.HOA, 6-POLE IN A NEMA-3R ENCLOSURE	PHOTOCCELL
LC2	CONTACTOR - 240V COIL, 2ØAMP, ELEC.HELD.HOA, 6-POLE IN A NEMA-3R ENCLOSURE	TIME CLOCK - TC1

NOTE: VERIFY POLES QUANTITIES.

TIME CLOCK SCHEDULE		
ID	TIME CLOCK DESCRIPTION	CIRCUIT
TC1	STEEL COVER,240V, 2ØAMP, SPST/DPST, EQUAL TO INTERMATIC #T100 SERIES	SP-11

NOTE: COORDINATE WITH OWNER TIME SEQUENCE.

DISCONNECT SCHEDULE	
LABEL	DESCRIPTION
IWH-1	3ØAMP, 1Ø, 3W, N1,240V, S/N, N.F., H.D. ROTARY TYPE DISCONNECT

NOTE: 1. REFER TO BREAKER SIZE FOR FUSE SIZE.
2. REFER TO PANELBOARD FOR DISCONNECT PHASES AND VOLTAGE.

PANEL-SP LOCATION-	AMP 200	LUGS MB	NEMA 3R	V(LL) 240		(P) 1	(W) 3		V(LN) 120	MN S	KAIC 25	FDR 1-RUN 3#3/0, 1#6G, 2"C	
LOAD SERVED	WT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CH #	LOAD SERVED
TRAIL LIGHTING	1	0.4	20	2	3#6, 1#10G, 1"C	*	*	3#6, 1#10G, 1"C	2	20	0.4	2	PARKING LOT LIGHTING
B-BALL COURTS	5	0.4	20	2	3#6, 1#10G, 1"C	*	*	2#10, 1#10G, 3/4"C	1	20	1.5	6	1 RCPT
PC1/LC1	9	0.6	20	1	2#10, 1#10G, 3/4"C	*	*	-				8	SPACE
TC1/LC2	11	0.6	20	1	2#10, 1#10G, 3/4"C	*	*	-				10	SPACE
SPACE	13				-	*	*	-				12	SPACE
SPACE	15				-	*	*	-				14	SPACE
SPACE	17				-	*	*	-				16	SPACE
SPACE	19				-	*	*	-				18	SPACE
SPACE	21				-	*	*	-				20	SPACE
SPACE	23				-	*	*	-				22	SPACE
SPACE	25				-	*	*	-				24	SPACE
SPACE	27				-	*	*	-				26	SPACE
SPACE	29				-	*	*	-				28	SPACE
SPACE	31				-	*	*	-				30	SPACE
1, J SPD	33		30	2	-	*	*	-				32	SPACE
SPACE	35				-	*	*	-				34	SPACE
SPACE	37		20	1	-	*	*	-				36	SPACE
SPACE	39		20	1	-	*	*	3#3, 1#8G, 1 1/2"C	2	100	8	40	PANEL-SLR
SPACE	41		20	1	-	*	*	-			7	42	-
LOADS	-	(KVA)				11	10				(KVA)	-	DESCRIPTIVE LOADS
CONNECTED LOAD	-	20					KVA/PHASE				4	-	LIGHTING
RESERVE	0	0									2	-	RECEPTACLES
TOTAL LOAD	-	20									0	-	COOLING
											0	-	HEATING
TOTAL AMPS	-	85									15	-	OTHER

NOTES:
1) SURGE PROTECTION DEVICE, 100KA WITH INTEGRAL DISCONNECT MEANS.
2)
3)

PANEL-SLR LOCATION-	AMP 100	LUGS MLO	NEMA 3R	V(LL) 240		(P) 1	(W) 3		V(LN) 120	MNT S	KAIC 10	FDR 1-RUN 3#3, 1#8G, 1 1/2"C	
LOAD SERVED	CKT #	LOAD KVA	BKR SIZE	POLE	FEEDER/BRANCH CIRCUIT SIZE	A	B	FEEDER/BRANCH CIRCUIT SIZE	POLE	BKR SIZE	LOAD KVA	CKT #	LOAD SERVED
LIGHTING	1	0.6	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	0.6	2	EXTERIOR LIGHTING
SPACE	3				-		*	-				4	SPACE
SPACE	5				-		*	-				6	SPACE
SPACE	7				-		*	-				8	SPACE
SPACE	9				-		*	-				10	SPACE
1)J.E.D.F.	11	1.2	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	1.2	12	1)J.E.D.F
IRRIGATION CONTROLS	13	0.6	20	1	2#12, 1#12G, 1/2"C	*		2#12, 1#12G, 1/2"C	1	20	1.5	14	1 RCPT
IWH-1	15	2.4	25	2	3#10, 1#10G, 1/2"C	*		2#10, 1#10G, 3/4"C	1	25	2.4	16	HAND DRYER
-	17	2.4			-	*		2#10, 1#10G, 3/4"C	1	25	2.4	18	HAND DRYER
SPACE	19				-		*	-				20	SPACE
SPACE	21				-		*	-				22	SPACE
SPACE	23				-		*	-				24	SPACE
SPACE	25				-		*	-				26	SPACE
SPACE	27				-		*	-				28	SPACE
SPACE	29				-		*	-				30	SPACE
SPACE	31				-		*	-				32	SPACE
SPACE	33				-		*	-				34	SPACE
SPACE	35				-		*	-				36	SPACE
SPARE	37		20	1	-		*	-	1	20		38	SPARE
SPARE	39		20	1	-		*	-	1	20		40	SPARE
SPARE	41		20	1	-		*	-	1	20		42	SPARE
LOADS	-	(KVA)				8	7			(KVA)	-		DESCRIPTIVE LOADS
CONNECTED LOAD	-	15					KVA/PHASE				1		LIGHTING
RESERVE	0	0									9		RECEPTACLES
TOTAL LOAD	-		15								0		COOLING
											0		HEATING
TOTAL AMPS	-		64								5		OTHER

NOTES:
1)
2)
3)

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