

# MALLORY SQUARE ELECTRICAL UPGRADES



DATE: MAY 2015  
 PROJECT NUMBER: 14107  
 PROJECT NAME: MALLORY SQUARE ELECTRICAL UPGRADES  
 PREPARED BY: PEREZ ENGINEERING & DEVELOPMENT  
 PREPARED FOR: CITY OF KEY WEST, ENGINEERING SERVICES  
 PLANS DESCRIPTION: BID DOCUMENTS

## BID DOCUMENTS MALLORY SQUARE KEY WEST, FLORIDA 33040



Know what's below.  
 Call before you dig.

### SHEET LIST TABLE

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VICINITY MAP  
 NOT TO SCALE



LOCATION MAP  
 NOT TO SCALE

PREPARED FOR:  
**CITY OF KEY WEST**  
 P.O. BOX 1409  
 KEY WEST, FL 33041

| REVISIONS: | DATE  |
|------------|-------|
| 1. _____   | _____ |
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| 6. _____   | _____ |

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

**PEREZ ENGINEERING & DEVELOPMENT, INC.**  
 CERTIFICATE OF AUTHORIZATION No. 8579

**KEY WEST OFFICE**  
 1010 EAST KENNEDY DRIVE, SUITE 201  
 KEY WEST, FLORIDA 33040  
 TEL: (305) 293-9440 FAX: (305) 296-0243

| PERMIT AGENCY | PERMITS |        |        |
|---------------|---------|--------|--------|
|               | TYPE    | NUMBER | STATUS |
| _____         | _____   | _____  | _____  |
| _____         | _____   | _____  | _____  |
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| _____         | _____   | _____  | _____  |

ALLEN E. PEREZ, P.E. NO. 51468  
 (SEAL)  
 DATE \_\_\_\_\_

**GENERAL NOTES**

1. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS AND ADVISE THE ENGINEER OF ANY CONFLICTS OF REPRESENTATION BETWEEN DRAWINGS AND/OR SPECIFICATIONS PRIOR TO COMMENCING WITH CONSTRUCTION.
2. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING ANY WORK UNDER THIS CONTRACT AND NOTIFY THE ENGINEER IN WRITING OF ANY DIFFERENCES BEFORE COMMENCING WITH ANY CONSTRUCTION.
3. HORIZONTAL COORDINATES ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM. VERTICAL ELEVATIONS ARE BASED ON NGVD 1929 DATUM.
4. THE LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO OBTAIN ANY AVAILABLE RECORD DRAWINGS AND SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD. THE CONTRACTOR SHALL ANTICIPATE THAT SCANNING AND EXCAVATION USING LIGHT EQUIPMENT AND HAND METHODS WILL BE NECESSARY IN AREAS NEAR EXISTING UTILITIES AND STRUCTURES TO AVOID DAMAGING THESE FACILITIES. THE CONTRACTOR SHALL CONTACT BELLSOUTH, THE LOCAL TELEPHONE COMPANY AND COMCAST, THE LOCAL CABLE TV PROVIDER TO VERIFY THE LOCATION OF BURIED TELEPHONE AND CABLE TV UTILITIES. NONE HAVE BEEN INDICATED ON THE DRAWINGS. CALL 1-800-432-4770 BEFORE DIGGING OR TRENCHING OPERATIONS BEGIN. CONTRACTOR SHALL ALSO CONTACT KEYS ENERGY TO LOCATE ELECTRIC LINES.
5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD PRIOR TO INSTALLING ANY NEW WORK THAT CROSSES OR CONNECTS TO EXISTING UTILITY SYSTEMS. LOCATIONS OF NEW UTILITIES SHALL BE ADJUSTED IN A MANNER APPROVED BY THE ENGINEER TO AVOID CONFLICTS, DAMAGES TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE CLIENT.
6. ALL EXCAVATION, TRENCHING, SHEETING, SHORING AND BRACING SHALL BE INSTALLED AS REQUIRED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, INCLUDING OSHA (29 CFR 1926).
7. ALL ITEMS INDICATED TO BE REMOVED OR DEMOLISHED SHALL BE REVIEWED WITH THE OWNER TO DETERMINE IF THE ITEM IS TO BE PROPERTY OF THE CONTRACTOR. ALL ITEMS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, UNLESS OTHERWISE NOTED. NO SALVAGE VALUE IS EXPRESSED OR IMPLIED BY THESE CONTRACT DOCUMENTS FOR ANY ITEMS TO BE REMOVED OR DEMOLISHED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE CONTRACTOR'S EQUIPMENT, MATERIALS, AND PERSONNEL, AND SHALL PROVIDE ADEQUATE BARRIERS TO PREVENT RISK TO OTHERS FROM THE CONTRACTOR'S ACTIVITIES.
9. WHERE ACTUAL DIMENSIONS AND SIZES ARE PROVIDED IN THE DRAWINGS, THEY SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS. LARGE SCALE DRAWINGS SHALL TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.
10. THE CONTRACTOR SHALL SEQUENCE HIS OPERATIONS SUCH THAT ORANGE MESH SAFETY FENCING IS PROVIDED ALONG ALL AREAS BEING TRENCHED AND NO TRENCH IS LEFT OPEN AT THE END OF THE WORK DAY.
11. NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR BLOW-OFF STRUCTURE WITH OUT FIRST OBTAINING A CONSTRUCTION METER FROM THE FLORIDA KEYS AQUEDUCT AUTHORITY.
12. IF UNSATISFACTORY MATERIAL FOR ADEQUATE BEARING IS ENCOUNTERED AT THE NORMAL SUBGRADE, THE UNSATISFACTORY MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION STABILIZATION MATERIAL AS SPECIFIED.
13. IN GENERAL, EXISTING STRUCTURES AND UTILITIES ARE NOTED AS EXISTING AND/OR SHOWN IN LIGHT LINE WEIGHT. NEW CONSTRUCTION IS SHOWN IN HEAVY LINE WEIGHT.
14. ALL FIELD LAYOUT AND SURVEYING FOR CONSTRUCTION OF THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE, UNDER THE DIRECTION OF A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR.

**NEW CONSTRUCTION NOTES**

1. IT IS THE CONTRACTOR'S RESPONSIBILITY DURING CONSTRUCTION OF NEW UTILITIES TO ANTICIPATE AND PLAN FOR CROSSINGS OF NEW AND EXISTING UTILITIES AND SUBSURFACE FEATURES.
2. NEW SLABS SHALL BE GRADED TO POSITIVELY DRAIN WITHOUT ANY STORMWATER PONDING.
3. PROVIDE CONTRACTION JOINTS AT 12' O.C. MAX. JOINT PATTERNS IN PAVEMENTS AND SIDEWALKS SHALL BE GENERALLY SQUARE. AT CURBS PROVIDE FULL DEPTH EXPANSION JOINTS AT 100 FT. O.C. MAX. AND AT LOCATIONS WHERE STRAIGHT CURB RUNS CHAGE DIRECTIONS. AT SIDEWALKS PROVIDE WEAKENED PLANE CONTRACTION JOINTS NOT MORE THAN 5'-0" MAX. AND EXPANSION JOINTS AT 20-FT. O.C. MAX (TOOL ALL EDGES). INSTALL SELF-LEVELING SEALANT AT ALL ISOLATION/ EXPANSION JOINTS.

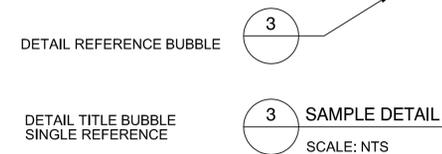
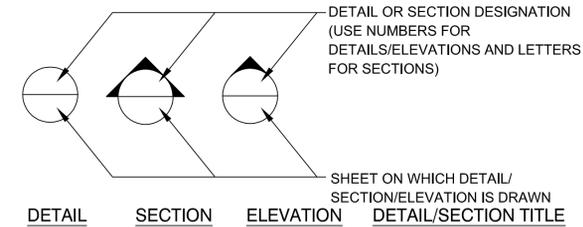
**EROSION CONTROL NOTES**

1. EROSION, SEDIMENT, AND TURBIDITY CONTROL MEASURES SHALL BE PROVIDED THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL SLOPES AND SURFACES THROUGHOUT CONSTRUCTION AND UNTIL A STABLE SURFACE CONDITION EXISTS. THE CONTRACTOR SHALL MINIMIZE THE EXPOSED AREA AT ANY POINT DURING CONSTRUCTION AS MUCH AS PRACTICAL.
2. FILTER FABRIC SILT FENCE SHALL BE IN CONFORMANCE WITH SECTION 985, FDOT SPECIFICATION.
3. CONTRACTOR SHALL INSTALL EROSION CONTROLS AND IS RESPONSIBLE FOR PROVIDING ALL APPLICABLE PERMITS. EROSION CONTROLS SHALL BE MAINTAINED.
4. BALED HAY OR STRAW BARRIERS SHALL BE CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH FDOT INDEX NO. 103.
5. SILT FENCES SHOULD BE CONSTRUCTED WITHIN PROPERTY LINES.
6. PROVIDE EROSION CONTROL MEASURES CONSISTING OF HAY BALES ALONG THE PROPOSED LIMITS OF CONSTRUCTION. PROVIDE ADDITIONAL MEASURES AS NECESSARY TO AVOID ADVERSE IMPACTS TO JURISDICTIONAL AREAS (WATER BODIES) AND OFF-SITE LANDS. MAINTAIN THESE MEASURED DAILY UNTIL CONSTRUCTION ACCEPTANCE BY THE OWNER AND THEN REMOVE AND LEGALLY DISPOSE OF SAID MEASURES.
7. EROSION CONTROL SHALL MAINTAINED WITHIN CONSTRUCTION AREA BY QUICKLY STABILIZING DISTURBED AREA TO PREVENT THE RELEASE OF SEDIMENT. THIS SHALL BE ACCOMPLISHED USING HAY BALES OR OTHER MEANS ACCEPTABLE TO OWNER, ENGINEER AND REGULATORY AGENCIES.
8. ALL SURFACE WATER DISCHARGE FROM SITE, INCLUDING DEWATERING DISCHARGE SHALL MEET STATE WATER QUALITY STANDARDS (LESS THAN 29 NTU ABOVE BACKGROUND) PRIOR TO REACHING ANY WATERS OF THE STATE.

**LEGEND**

**GENERAL**

- RIGHT-OF-WAY AND/ OR PROPERTY LINE
- TL 1500 TAX LOT NUMBER
- ▲ CONTRACTOR'S SURVEY REFERENCE
- ⑤ KEY NOTE MARKER
- ⑨ (ON SITE PLAN) # OF PARKING SPACES



**BUBBLE SYMBOLS**

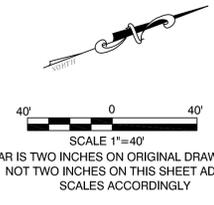
ORIGINAL: AUGUST 2014

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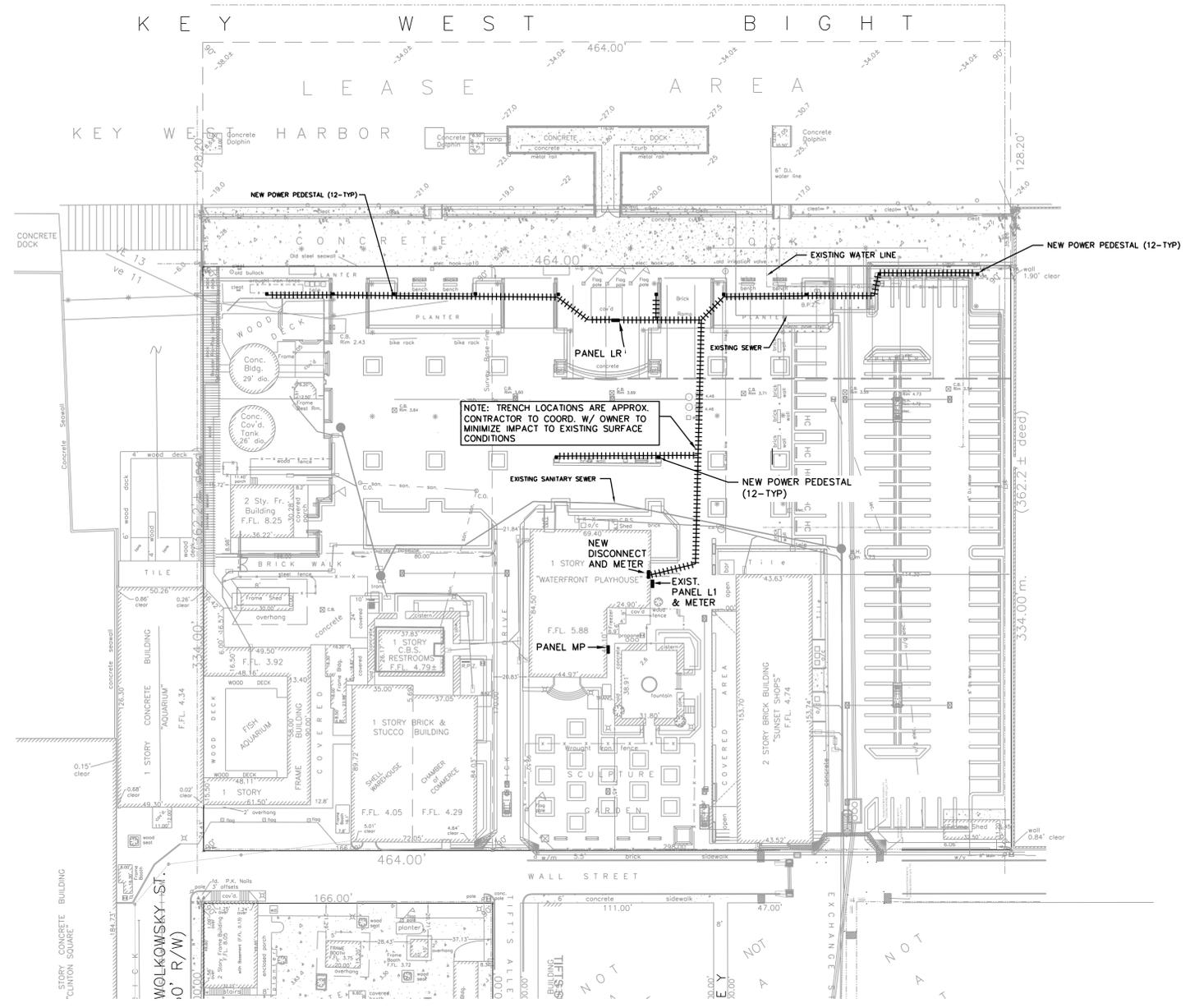
MALLORY SQUARE  
 ELECTRICAL UPGRADES  
 KEY WEST, FL 33040  
 GENERAL NOTES

CITY OF KEY WEST  
 P.O. BOX 1409  
 KEY WEST, 33041

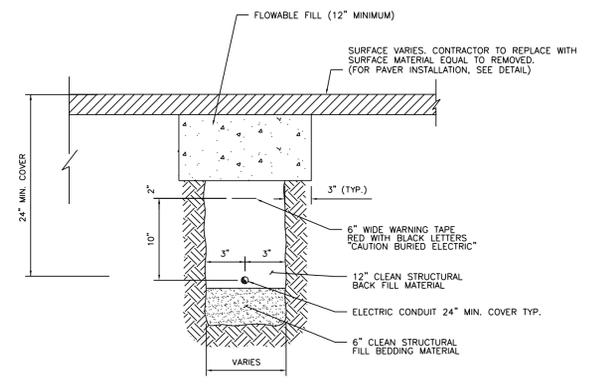
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| JOB NO.  | 141017 |
| DRAWN    | BGO    |
| DESIGNED | AEP    |
| CHECKED  | AEP    |
| QC       |        |
| SHEET    |        |



SCALE 1"=40'  
 BAR IS TWO INCHES ON ORIGINAL DRAWINGS IF  
 NOT TWO INCHES ON THIS SHEET ADJUST  
 SCALES ACCORDINGLY



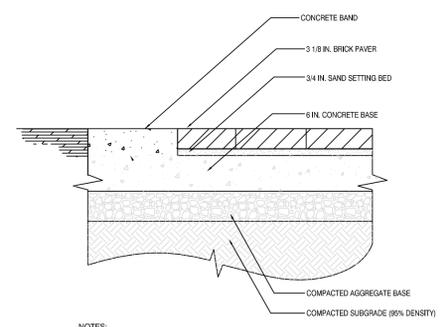
**TRENCHING PLAN**



**ELECTRICAL TRENCH**  
 N.T.S.

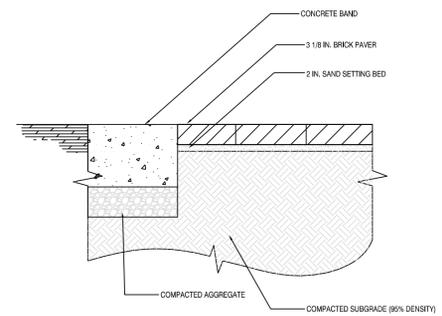
- NOTES:
- UTILIZE SAME TRENCH DETAIL FOR POWER AND CONTROL CONDUITS, WARNING TAPE SHALL READ "CAUTION BURIED ELECTRIC"
  - COMPACT BEDDING AND BACKFILL TO 98% DENSITY IN ASPHALT/CONCRETE AREAS WHERE (ASHTO-T-180).
  - TRENCH WIDTH SHALL VARY AS NEEDED DEPENDENT UPON NUMBER AND SIZE OF PIPES/CONDUIT BEING INSTALLED.

1 Typical Trench Detail  
 N.T.S.



- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
  - IT IS BELIEVED THAT THIS CONFIGURATION ONLY EXISTS ON THE CONCRETE DOCK SECTION.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR STOCKPILING EXISTING PAVERS FOR REPLACEMENT.

2 Typical Brick Paver Installation: Concrete Base  
 N.T.S.



- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR STOCKPILING EXISTING PAVERS FOR REPLACEMENT.

3 Typical Brick Paver Installation: Sand Base  
 N.T.S.

CONTRACTOR SHALL BE RESPONSIBLE FOR  
 STOCKPILING PAVERS FOR REPLACEMENT.

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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 TEL: (305) 295-9440 FAX: (305) 296-0243

ALLEN PEREZ, P.E.  
 Florida P.E. NO. 51468  
 May 6, 2015

ORIGINAL: AUGUST 2014

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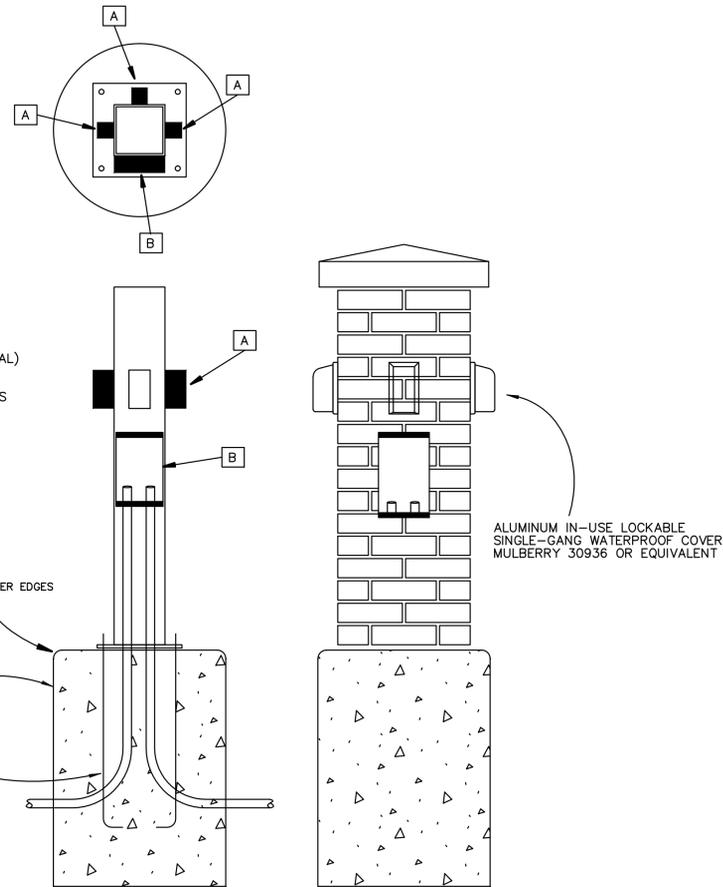
MALLORY SQUARE  
 ELECTRICAL UPGRADES  
 KEY WEST, FL 33040  
 TRENCHING PLAN

CITY OF KEY WEST  
 P.O. BOX 1409  
 KEY WEST, 33041

JOB NO. 141017  
 DRAWN BGO  
 DESIGNED AEP  
 CHECKED AEP  
 QC  
 SHEET C-2

PEDESTAL DETAIL A – BASE BID

- A DUPLEX GFCI-20A
- B 6"W x 10"H SS ACCESS HATCH SECURED WITH 1/4"-20 18-8 TORX-SECURITY SCREWS



PEDESTAL CORE FABRICATED FROM 6" x 6" x 1/4" EXTRUDED SQUARE ALUMINUM TUBE 6061-T6 WELDED TO A 10" x 10" x 1/2" SQUARE ALUMINUM BASE 5/8" HOLES AT EACH CORNER. (SUBMIT SHOP DRAWINGS FOR APPROVAL)

THREE SINGLE GANG BOXES AND ONE 6" x 10" TAMPER RESISTANT STAINLESS ACCESS DOOR MOUNTED AS SHOWN.

TO BE SHEATHED IN BRICK AFTER MOUNTING, AND TAPPED WITH 20" x 20" PRECAST PYRAMID CAP AS SHOWN.

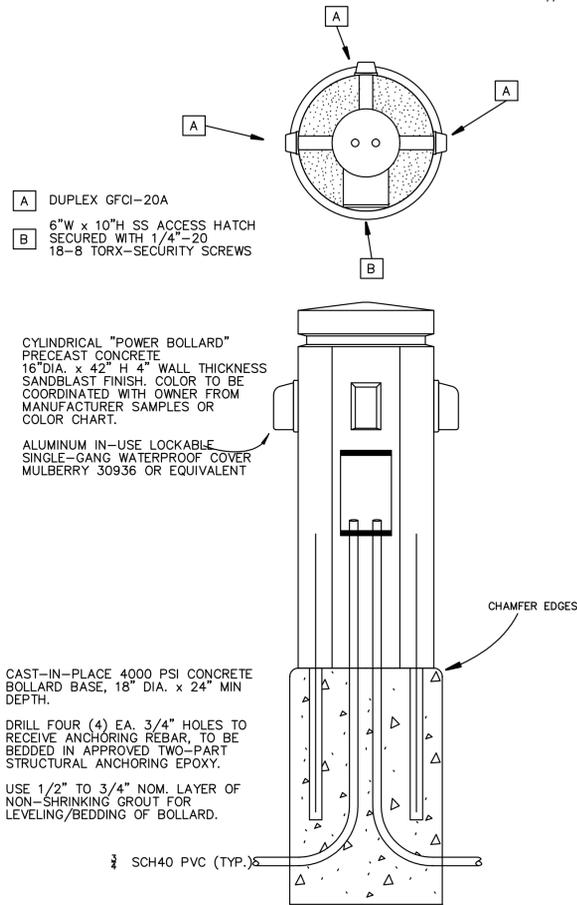
ALUMINUM IN-USE LOCKABLE SINGLE-GANG WATERPROOF COVER MULBERRY 30936 OR EQUIVALENT

CAST-IN-PLACE 4000 PSI CONCRETE BOLLARD BASE, 18" DIA. x 24" MIN DEPTH.

FOUR (4) EACH 16" x 5/8" HOT DIP GALVANIZED J-BOLT THREADED ANCHORS.

PEDESTAL DETAIL B – BID ALT #1

- A DUPLEX GFCI-20A
- B 6"W x 10"H SS ACCESS HATCH SECURED WITH 1/4"-20 18-8 TORX-SECURITY SCREWS



CYLINDRICAL "POWER BOLLARD" PRECAST CONCRETE 16" DIA. x 42" H 4" WALL THICKNESS SANDBLAST FINISH. COLOR TO BE COORDINATED WITH OWNER FROM MANUFACTURER SAMPLES OR COLOR CHART.

ALUMINUM IN-USE LOCKABLE SINGLE-GANG WATERPROOF COVER MULBERRY 30936 OR EQUIVALENT

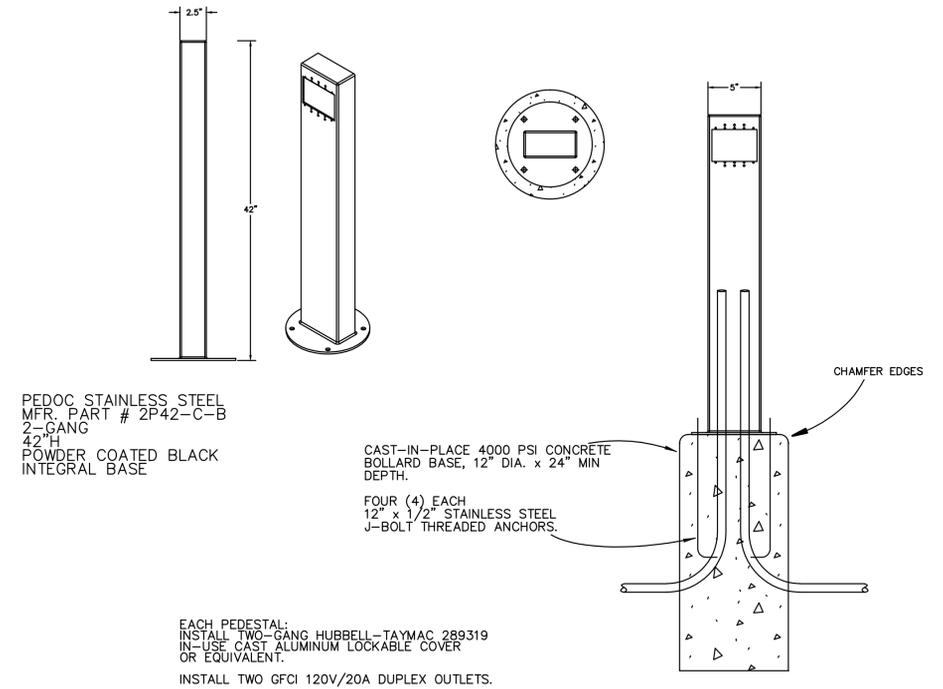
CAST-IN-PLACE 4000 PSI CONCRETE BOLLARD BASE, 18" DIA. x 24" MIN DEPTH.

DRILL FOUR (4) EA. 3/4" HOLES TO RECEIVE ANCHORING REBAR, TO BE BEDDED IN APPROVED TWO-PART STRUCTURAL ANCHORING EPOXY.

USE 1/2" TO 3/4" NOM. LAYER OF NON-SHRINKING GROUT FOR LEVELING/BEDDING OF BOLLARD.

3/4" SCH40 PVC (TYP.)

PEDESTAL DETAIL C – BID ALT #2



PEDOC STAINLESS STEEL MFR. PART # 2P42-C-B 2-GANG 42"H POWDER COATED BLACK INTEGRAL BASE

CAST-IN-PLACE 4000 PSI CONCRETE BOLLARD BASE, 12" DIA. x 24" MIN DEPTH.

FOUR (4) EACH 12" x 1/2" STAINLESS STEEL J-BOLT THREADED ANCHORS.

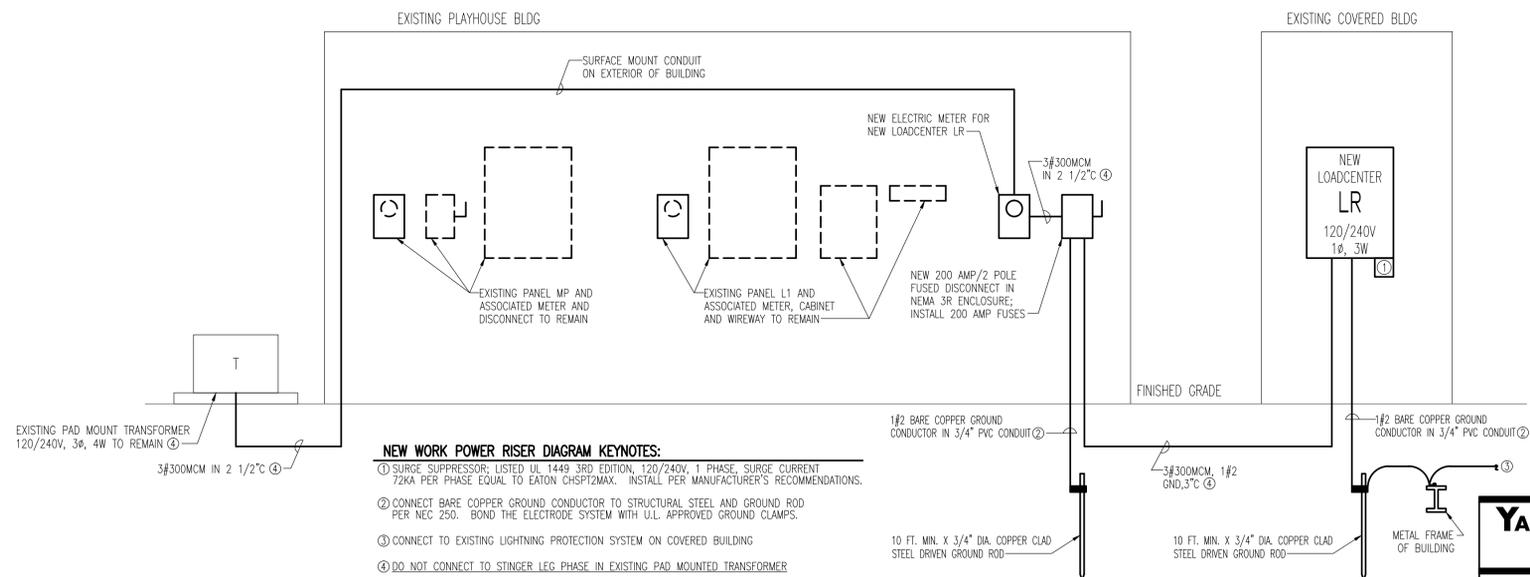
EACH PEDESTAL: INSTALL TWO-GANG HUBBELL-TAYMAC 289319 IN-USE CAST ALUMINUM LOCKABLE COVER OR EQUIVALENT. INSTALL TWO GFCI 120V/20A DUPLEX OUTLETS.

ELECTRICAL GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION. REFER TO CIVIL DRAWINGS FOR EXACT SIZE AND LOCATION OF EQUIPMENT WHICH IS FURNISHED BY OTHERS AND CONNECTED BY ELECTRICAL.
2. OBTAIN OWNER'S/ENGINEER'S APPROVAL OF ALL PROPOSED TRENCH AND EQUIPMENT LOCATIONS PRIOR TO EXCAVATION.
3. ALL PANELBOARDS, BACKBOARDS, TERMINAL CABINETS, ETC SHALL HAVE CUSTOM ENGRAVED MICARTA NAMEPLATE AFFIXED IDENTIFYING SYSTEM.
4. GENERAL CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES. FAILURE TO DO SO INDICATES THAT THE CONTRACTOR ACCEPTS THE CONDITIONS AS THEY EXIST, AND SHALL PERFORM THE WORK REQUIRED AS SHOWN AND SPECIFIED.
5. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.
6. COMPLY WITH ALL LOCAL CODE, LAWS, AND ORDINANCES APPLICABLE TO ELECTRICAL WORK, THE STATE BUILDING CODE AND THE NATIONAL ELECTRIC CODE. OBTAIN ALL PERMITS REQUIRED BY LOCAL ORDINANCES.
7. OBTAIN OWNER'S/ENGINEER'S APPROVAL OF ALL RECEPTACLES, FACEPLATES, PANELBOARDS, ETC. PRIOR TO PURCHASING.
8. FURNISH ALL EQUIPMENT AND LABOR, PERFORM ALL LABOR WITH SUPERVISION, BEAR ALL EXPENSES, AS NECESSARY FOR THE SATISFACTORY COMPLETION OF ALL WORK READY FOR OPERATION.
9. THE ELECTRICAL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. ALL NOT SO INSTALLED SHALL BE REMOVED AND REPLACED AT NO COST TO THE OWNER.
10. ALL CONDUCTORS SHALL BE COPPER. #12 & #10 SOLID, #8 AND LARGER STRANDED, #6 AND SMALLER TO BE TYPE THHN, 600 VOLT INSULATION
11. PROVIDE GROUNDING PER NATIONAL ELECTRIC CODE. A SEPERATE GROUND CONDUCTOR SHALL BE INSTALLED FOR ALL CIRCUITS. THE CONDUIT CANNOT SERVE AS THE CIRCUIT GROUND.
12. THE CONTRACTOR SHALL LEAVE THE ENTIRE ELECTRICAL SYSTEM INSTALLED IN PROPER WORKING ORDER, AND SHALL REPLACE WITHOUT ADDITIONAL COST, ALL WORK OR MATERIAL WHICH MAY DEVELOP DEFECTS, (ORDINARY WEAR AND TEAR OR DAMAGE RESULTING FROM IMPROPER HANDLING EXCEPTED) WITHIN A PERIOD OF ONE(1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.
13. EQUIPMENT GROUNDING CONDUCTOR SHALL BE PULLED IN ALL BRANCH CIRCUIT WIRING. CONDUIT GROUND SHALL NOT BE ACCEPTABLE.
14. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS FOR INSTALLING ALL UTILITY SERVICE REQUIREMENTS.
15. ALL EMPTY CONDUITS SHALL HAVE PULLSTRINGS INSTALLED.

| 120/240 VOLT 1Ø 3W<br>225 AMP MAIN LUGS ONLY |                  | CIRCUIT BREAKER PANEL SCHEDULE |     |          |     | SURFACE MOUNTED<br>NEMA 4X ENCLOSURE |      |                  |    |
|--|------------------|--------------------------------|-----|----------|-----|--------------------------------------|------|------------------|----|
|  |                  | LOADCENTER LR                  |     |          |     | *FURNISH PANEL WITH LOCKABLE HASP    |      |                  |    |
| CKT  | LOAD DESCRIPTION | BREAKER                        |     | LOAD KVA |     | BREAKER                              |      |                  |    |
|  |                  | POLE                           | AMP |          |     | AMP                                  | POLE |                  |    |
| 1  | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 2  |
| 3  | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 4  |
| 5  | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 6  |
| 7  | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 8  |
| 9  | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 10 |
| 11   | REC-PEDESTAL     | 1                              | 20  | 1.0      | 1.0 | 20                                   | 1    | REC-PEDESTAL     | 12 |
| 13   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 14 |
| 15   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 16 |
| 17   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 18 |
| 19   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 20 |
| 21   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 22 |
| 23   | SPARE            | 1                              | 20  |          |     | 20                                   | 1    | SPARE            | 24 |
| 25   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 26 |
| 27   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 28 |
| 29   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 30 |
| 31   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 32 |
| 33   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 34 |
| 35   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 36 |
| 37   | SPACE            | 1                              | --- |          |     | ---                                  | 1    | SPACE            | 38 |
| 39   | SPACE            | 1                              | --- |          |     | 30                                   | 2    | SURGE SUPPRESSOR | 40 |

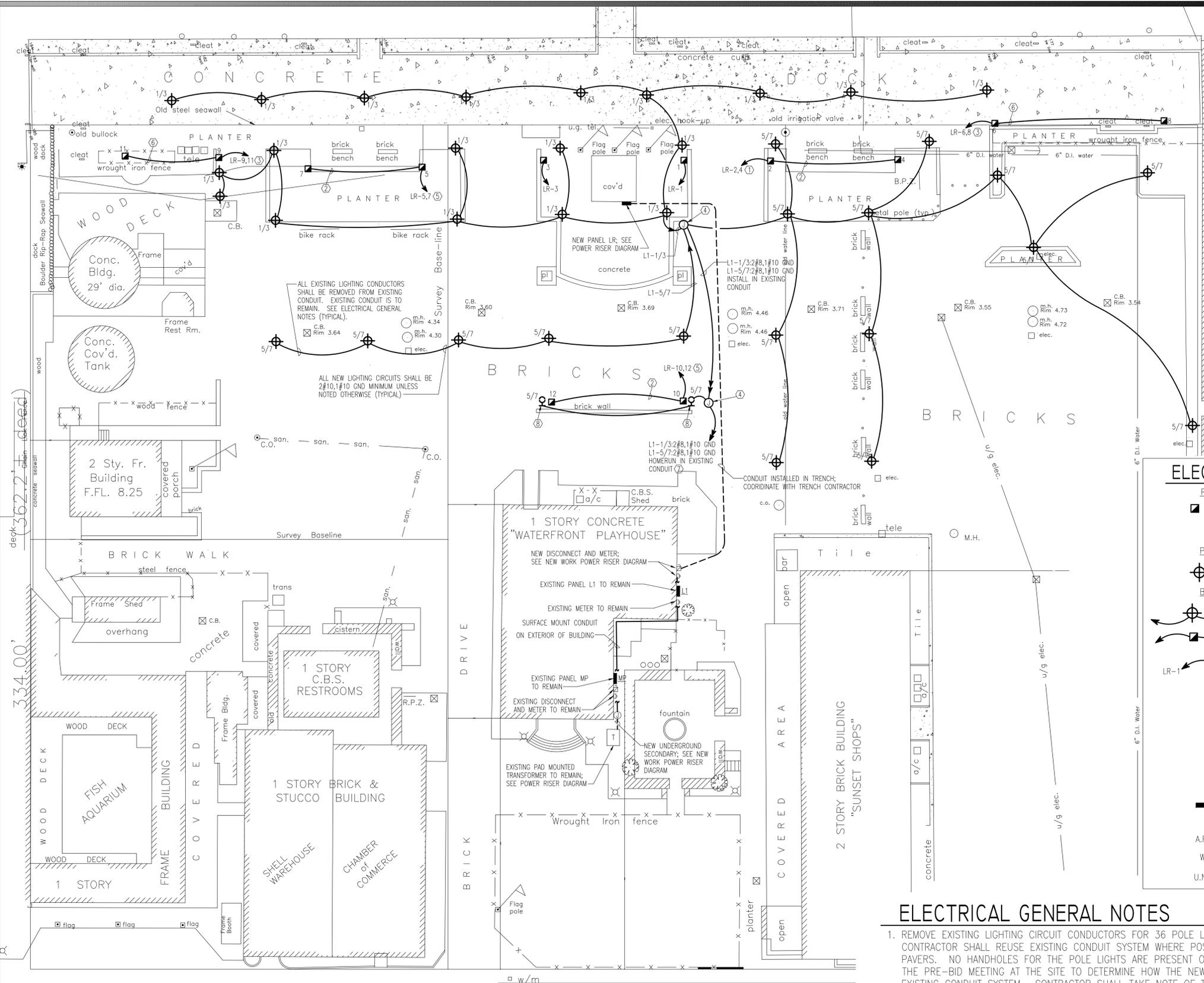
TOTAL CONNECTED LOAD: 12.00 KVA  
MINIMUM INTERRUPTING CAPACITY: 10,000 AMPS SYMMETRICAL



NEW WORK POWER RISER DIAGRAM KEYNOTES:

- ① SURGE SUPPRESSOR LISTED UL 1449 3RD EDITION, 120/240V, 1 PHASE SURGE CURRENT 72KA PER PHASE EQUAL TO EATON CHSP72MAX. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- ② CONNECT BARE COPPER GROUND CONDUCTOR TO STRUCTURAL STEEL AND GROUND ROD PER NEC 250. BOND THE ELECTRODE SYSTEM WITH U.L. APPROVED GROUND CLAMPS.
- ③ CONNECT TO EXISTING LIGHTNING PROTECTION SYSTEM ON COVERED BUILDING
- ④ DO NOT CONNECT TO STINGER LEG PHASE IN EXISTING PAD MOUNTED TRANSFORMER

NEW WORK POWER RISER DIAGRAM  
NOT TO SCALE



- KEY NOTES:**
- ① 3#10,1#10 GND, 3/4" C
  - ② 2#10,1#10 GND, 3/4" C
  - ③ 3#6,1#10 GND, 3/4" C
  - ④ EXISTING UNDERGROUND JUNCTION BOX TO REMAIN
  - ⑤ 3#8,1#10 GND, 3/4" C
  - ⑥ 2#8,1#10 GND, 3/4" C
  - ⑦ ROUTE CONDUCTORS THROUGH EXISTING LIGHTING CONTACTOR FOR CONTROLS
  - ⑧ EXISTING HID AREA LIGHT FIXTURE TO REMAIN; CONNECT TO NEW CONDUCTORS AS INDICATED. VERIFY FIXTURE VOLTAGE PRIOR TO REMOVING CONDUCTORS.

**ELECTRICAL LEGEND**

**POWER PEDESTALS**

- POWER PEDESTALS - 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5-20R. INSTALL FLUSH IN PEDESTALS. PROVIDE WEATHERPROOF BOX AND COVERPLATE FOR RECEPTACLE. COVERPLATE SHALL BE ALUMINUM WITH LOCKABLE HASP EQUAL TO MULBERRY 30936. SEE PEDESTAL AND MOUNTING DETAILS SHEET E-1.

**POLE LIGHTS**

- ⊕ EXISTING HID, 100W HPS DECORATIVE POLE LIGHT TO REMAIN. CONNECT TO NEW LIGHTING CIRCUIT AS INDICATED.

**BRANCH CIRCUITING**

- WIRING REMOVED AND REPLACED IN EXISTING CONDUITS FOR SITE LIGHTING
- RUN CONCEALED UNDERGROUND IN NEW CONDUITS FOR POWER PEDESTAL CIRCUITS

**HOMERUN TO PANEL** ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #12, 1 #12 GROUND - 1/2" C; 3 #12, 1 #12 GROUND - 1/2" C; 4 #12, 1 #12 GROUND - 1/2" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.

**EXAMPLE 1:** LR-5,7  
INDICATES HOMERUN TO PANEL LR, INDIVIDUAL BREAKERS, POSITIONS 5 & 7

**EXAMPLE 2:** L1-1/3  
INDICATES HOMERUN TO PANEL L1, 2-POLE BREAKER POSITION 1/3

**PANELS AND POWER**

- 120/240 VOLT PANELBOARD

**MISCELLANEOUS**

- A.F.F. ABOVE FINISH FLOOR
- WP WEATHERPROOF
- U.N.O. UNLESS NOTED OTHERWISE

**ELECTRICAL GENERAL NOTES**

1. REMOVE EXISTING LIGHTING CIRCUIT CONDUCTORS FOR 36 POLE LIGHTS (INDICATED BY SYMBOL ⊕ ON DRAWINGS). CONTRACTOR SHALL REUSE EXISTING CONDUIT SYSTEM WHERE POSSIBLE TO PREVENT DISTURBING THE EXISTING PAVERS. NO HANDHOLES FOR THE POLE LIGHTS ARE PRESENT ON THE SITE. THE CONTRACTOR SHALL ATTEND THE PRE-BID MEETING AT THE SITE TO DETERMINE HOW THE NEW CONDUCTORS WILL BE INSTALLED IN THE EXISTING CONDUIT SYSTEM. CONTRACTOR SHALL TAKE NOTE OF THE CONDUIT SIZE AND CONTACT THE ENGINEER IF THE WIRE SIZE OF THE NEW CONDUCTORS EXCEEDS NEC LIMITS FOR CONDUIT FILL.
2. IF A POLE LIGHT CONDUCTOR IS BEING REMOVED AND THE CIRCUIT FEEDS OTHER LOADS FROM THE POLE LIGHT, THEN THE CIRCUIT SHALL BE MADE CONTINUOUS TO THE REMAINING LIGHTS. NO CIRCUIT CONTINUITY SHALL BE LOST. NO SPLICES SHALL BE MADE UNDERGROUND. ALL NEW SPLICES SHALL BE MADE ABOVE GROUND.
3. INSTALL ALL NEW CONDUCTORS CONTINUOUS IN THE GROUND, DO NOT MAKE UNDERGROUND SPLICES FOR ANY NEW POWER PEDESTAL OR LIGHTING CIRCUITS. SPLICES SHALL BE MADE ABOVE GRADE IN ACCESS POINTS IN LIGHT POLES AND RECEPTACLE PEDESTALS.
4. COORDINATE WITH OWNER FOR TRENCH LOCATIONS PRIOR TO ROUGHING IN ANY CONDUIT. AN EFFORT WILL BE MADE TO DISTURB THE LEAST AMOUNT OF FINISHED PAVERS AND CONCRETE. COORDINATE WITH THE OWNER PRIOR TO DISTURBING ANY FINISHED PAVERS, CONCRETE OR GRADE.

**ELECTRICAL SITE PLAN**  
SCALE: 1"=20'

CIVIL ENGINEERING • REGULATORY PERMITTING • CONSTRUCTION MANAGEMENT

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ORIGINAL: FEBRUARY 2014

REVISIONS:

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CITY OF KEY WEST  
P.O. BOX 1409  
KEY WEST, 33041

MALLORY SQUARE  
ELECTRICAL UPGRADES  
KEY WEST, FL 33040  
ELECTRICAL SITE PLAN

JOB NO. 141017  
DRAWN RQY  
DESIGNED RQY  
CHECKED RQY  
QC  
SHEET E-2

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