GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY ALL ENSURING AND LOCATIONS OF SCAFFOLDS AND HOSES USED ON THE WORK PADS AND CONSTRUCTION PADS PRIOR TO COMMENCEMENT OF any WORK.

2. ALL CONCRETE SHALL BE PLACED BY ONE COMPRESSOR, PUMPED CONCRETE, OR CONCRETE MIXED TO A.P.I. 200 GRADE IN.

3. FOR STRUCTURAL STEEL, USE SHEET 3-1.

4. ALL ENSURING AND LOCATIONS OF SCAFFOLDS AND HOSES USED ON THE WORK PADS AND CONSTRUCTION PADS PRIOR TO COMMENCEMENT OF any WORK.

5. LIGHTING FOR WORKING AREAS, ALL HOSES AND DEWATERING, CONSTRUCTION SCAFFOLDING, SHALL BE PROVIDED AND IN WORKING ORDER AT ALL TIMES.

6. WORKING IN HAZARD AREAS WITHIN THE WORKING AREAS, ALL WORKMEN SHALL BE REQUIRED TO WEAR HEADGEAR, SAFETY SHOES, AND PERSONAL PROTECTIVE EYE WEAR.

7. MATERIALS TO BE DELIVERED AND RECEIVED AT STAIRS AND LOADING DOCK.

8. REFER TO SPECIFICATIONS FOR THE SPECIFICATIONS OF DRAWING NUMBERS AND OTHER DETAILS.

9. BOARD FLOOR LIABLE

10. BOARD FLOOR LIABLE

11. BOARD FLOOR LIABLE

12. BOARD FLOOR LIABLE

13. BOARD FLOOR LIABE
Connection of New Road Pavement to Resurfaced Pavement

Typical Trench Detail for Water & Drain Lines

Impressed Concrete Pavement

Bid Alternate #1

Bid Alternate #2
### Unified Soil Classification System (USCS)

#### Major Divisions

- **Gravels**
  - **Drained Density**
  - **Unconfined Compressibility**
  - **Drainage Class**
  - **Consistency Group**
  - **Plasticity Index**
  - **Liquid Limit**
  - **Drainable Moisture Content**

- **Sands**
  - **Drained Density**
  - **Unconfined Compressibility**
  - **Drainage Class**
  - **Consistency Group**
  - **Plasticity Index**
  - **Liquid Limit**
  - **Drainable Moisture Content**

- **Clays**
  - **Drained Density**
  - **Unconfined Compressibility**
  - **Drainage Class**
  - **Consistency Group**
  - **Plasticity Index**
  - **Liquid Limit**
  - **Drainable Moisture Content**

#### Highly Organic Soils

- **PT**
  - **Drained Density**
  - **Unconfined Compressibility**
  - **Drainage Class**
  - **Consistency Group**
  - **Plasticity Index**
  - **Liquid Limit**
  - **Drainable Moisture Content**

### Geotechnical Notes

1. A geotechnical engineering report entitled "Geotechnical Engineering Exploration, Kaka’ako Community Development District, Improvement District 9, Ilio Street Improvements, Honolulu, Oahu Hawaii" dated June 18, 1989 has been prepared by Geolabs-Hawaii. A copy of the report is on file at the office of the Engineer for review by the Contractor.

2. For boring locations, see Sheets G-6 and G-7.

3. The information presented in the logs of borings depict the subsurface conditions encountered at that specified location and at the time of the field exploration only. Variations of subsurface and groundwater conditions from those depicted in the logs of borings may occur between and beyond the borings.

4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts shown may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.

5. Contractor shall be responsible for his own assumptions regarding the subsurface conditions.
GENERAL NOTES:
A. WORKMENSHIPS AND MATERIALS SHALL CONFORM TO THE CITY AND COUNTY OF HONOLULU DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. HOWEVER, WHERE INTERESTS IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRINGENT SHALL APPLY.
B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO THE CONTRACT MANAGEMENT ALL INCORRECTONES AND OMISSIONS.
C. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE BEGINNING WORK. REPORT IN WRITING TO THE CONTRACT MANAGEMENT ALL INCORRECTONES OR OMISSIONS.
D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMENSHIPS AND JOB SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED FOR STABILITY OF STRUCTURAL MEMBERS AND SYSTEMS.
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES DURING THE CONSTRUCTION PERIOD.
G. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.

DESIGN CRITERIA:
A. DESIGN LIVE LOADS
   a. Lane Load
      - 15,000 lb
   b. Sidewalk
      - 2,500 lb

B. ALLOWABLE FOUNDATION BEARING CAPACITIES
   a. Dead Load + Live Load
      - 32,000 lb
   b. Dead Load + Live Load + Lateral Load
      - 32,000 lb

C. RETAINING WALLS
   a. ACTIVE LATERAL PRESSURE
      - 1.0 lb/ft
   b. RESTRAINED LATERAL PRESSURE
      - 0.5 lb/ft

D. ALLOWABLE FOUNDATION DEVELOPMENT CAPACITIES
   a. Dead Load
      - 2,000 psi
   b. Dead Load + Live Load
      - 3,000 psi

E. MATERIALS
   a. Materials shall meet the ASTM and AASHTO specifications and be approved by the Engineer.
   b. All materials shall be tested by a certified laboratory.

F. DRAINAGE REQUIREMENTS
   a. All drainage shall be designed to carry the maximum expected flow.
   b. All drainage shall be approved by the Engineer.

G. BACKFILL
   a. Backfill shall consist of well-compacted granular materials.
   b. Backfill shall be approved by the Engineer.

H. CONCRETE
   a. Concrete shall meet the ASTM and AASHTO specifications.
   b. Concrete shall be placed in one lift not exceeding 6 inches in thickness.

I. FEEDBACK
   a. Feedback shall be provided to the Engineer for approval.
   b. Feedback shall be documented in writing.

J. ALTERATIONS
   a. Alterations shall be designed to meet the original specifications.
   b. Alterations shall be approved by the Engineer.

K. COMPLIANCE
   a. Compliance with all applicable codes and regulations shall be verified by the Engineer.
   b. Compliance shall be documented in writing.

L. CONSTRUCTION
   a. Construction shall be performed in accordance with the approved drawings.
   b. Construction shall be approved by the Engineer.

M. QUALITY CONTROL
   a. Quality control shall be performed by the Contractor.
   b. Quality control shall be approved by the Engineer.

N. COMPLETION
   a. Completion shall be verified by the Engineer.
   b. Completion shall be documented in writing.

O. ACCEPTANCE
   a. Acceptance shall be performed by the Owner.
   b. Acceptance shall be documented in writing.

P. ARCHIVES
   a. Archives shall be maintained by the Contractor.
   b. Archives shall be available for inspection by the Owner.

Q. RECORD DRAWINGS
   a. Record drawings shall be prepared by the Contractor.
   b. Record drawings shall be approved by the Engineer.

R. CHANGE ORDERS
   a. Change orders shall be approved by the Owner.
   b. Change orders shall be documented in writing.

S. ADDENDUMS
   a. Addendums shall be prepared by the Contractor.
   b. Addendums shall be approved by the Owner.

T. ADDITIONAL WORK
   a. Additional work shall be performed by the Contractor.
   b. Additional work shall be documented in writing.

U. ENVIRONMENTAL
   a. Environmental compliance shall be maintained.
   b. Environmental compliance shall be documented in writing.

V. SAFETY
   a. Safety measures shall be implemented.
   b. Safety measures shall be documented in writing.

W. CONTRACT
   a. Contract shall be performed in accordance with the terms and conditions.
   b. Contract shall be approved by the Owner.

X. COMPLIANCE WITH LAW
   a. Compliance with all applicable laws shall be maintained.
   b. Compliance with all applicable laws shall be documented in writing.

Y. COMPLIANCE WITH CODES
   a. Compliance with all applicable codes shall be maintained.
   b. Compliance with all applicable codes shall be documented in writing.

Z. COMPLIANCE WITH SPECIFICATIONS
   a. Compliance with all applicable specifications shall be maintained.
   b. Compliance with all applicable specifications shall be documented in writing.

AA. COMPLIANCE WITH DRAWINGS
   a. Compliance with all applicable drawings shall be maintained.
   b. Compliance with all applicable drawings shall be documented in writing.
### Typical Single Box Culvert and Box Drain

**Table 1**

<table>
<thead>
<tr>
<th>Size (Span x Height)</th>
<th>Varies 5'-0&quot; x 5'-0&quot;</th>
<th>Varies 5'-0&quot; x 10'-0&quot;</th>
<th>Varies 10'-0&quot; x 10'-0&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Slab T1</td>
<td>8&quot;</td>
<td>10&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>Bottom Slab T2</td>
<td>8&quot;</td>
<td>10&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>Side Wall T3</td>
<td>8&quot;</td>
<td>10&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>1/2&quot; Bars</td>
<td>#4 at T1</td>
<td>#4 at T2</td>
<td>#4 at T3</td>
</tr>
<tr>
<td>5/8&quot; Bars</td>
<td>#6 at T1</td>
<td>#6 at T2</td>
<td>#6 at T3</td>
</tr>
</tbody>
</table>

**Notes:**
1. When connecting pipe spool, do not break the invert or spool.
2. Provide #4 hoop around pipe. Lap ends 12" minimum.

**Table 2**

<table>
<thead>
<tr>
<th>Span (5'-0&quot; - 10'-0&quot;)</th>
<th>Height (2'-0&quot; - 5'-0&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Slab T1</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Bottom Slab T2</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Side Wall T3</td>
<td>8&quot;</td>
</tr>
<tr>
<td>1/2&quot; Bars</td>
<td>#4 at 6&quot;</td>
</tr>
<tr>
<td>5/8&quot; Bars</td>
<td>#4 at 6&quot;</td>
</tr>
<tr>
<td>3/4&quot; Bars</td>
<td>#4 at 12&quot;</td>
</tr>
</tbody>
</table>

**Notes:**
- For dimensions and reinforcement see Table 1.
- No. 2 Rock (ASTM C33, No. 4 Gradation) wrapped in geotextile fabric.

### Typical Double Box Drain

**Table 2**

<table>
<thead>
<tr>
<th>Span (5'-0&quot; - 10'-0&quot;)</th>
<th>Height (2'-0&quot; - 5'-0&quot;)</th>
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<tbody>
<tr>
<td>Top Slab T1</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Bottom Slab T2</td>
<td>10&quot;</td>
</tr>
<tr>
<td>Side Wall T3</td>
<td>8&quot;</td>
</tr>
<tr>
<td>1/2&quot; Bars</td>
<td>#4 at 6&quot;</td>
</tr>
<tr>
<td>5/8&quot; Bars</td>
<td>#4 at 6&quot;</td>
</tr>
<tr>
<td>3/4&quot; Bars</td>
<td>#4 at 12&quot;</td>
</tr>
</tbody>
</table>

**Notes:**
- For dimensions and reinforcement see Table 2.
- No. 2 Rock (ASTM C33, No. 4 Gradation) wrapped in geotextile fabric.

---

*Record Drawings: S-3 Sheet 62 of 140 sheets*
FOUNDATION PLAN

TOP PLAN AT CULVERT

NOTES:
1. Manhole shall have Department of Public Works type top frame and cover.
2. Rungs shall be ¾" diameter ASTM A36 steel rods hot-dipped galvanized. Department of Public Works type "B". Lowest rungs shall be not more than 2'-0" above the invert.
3. Provide waterstop at all joints.

CULVERT BEND AT ILALO STREET - STA. 3+40
(KOULA STREET - STA. 9+89 SIMILAR)
NOTES:
1. Manhole shall have Department of Public Works type "CA" frame and cover.
2. Rungs shall be 9" diameter ASTM A23 Steel rods. Hot-dipped galvanized and Department of Public Works type "I". Lowest rung shall be not more than 12" above grade.
3. Provided waterstop at all joints. See sheet 6-3 for box drain reinforcement.
1. MANHOLE SHALL HAVE DEPARTMENT OF PUBLIC WORKS TYPE "D" AND "T" FRAME AND COVER WHERE CALLED FOR.
2. RINGS SHALL BE 11.5" DIAMETER ASTM A36 STEEL RINGS.
3. HOT-DIPPED GALVANIZED AND DEPARTMENT OF PUBLIC WORKS TYPE "F", LONGEST RUNG SHALL BE NOT MORE THAN 2'-0".
4. PROVIDE WATERSTOP AT ALL JOINTS.

1  
BOX DRAIN TOP PLAN

SPECIAL DMH #6 TOP PLAN

4-S-9  SCALE: 1/2"=1'-0"

SPECIAL DMH #7 TOP PLAN

5-S-9  SCALE: 1/2"=1'-0"

3  
CULVERT DRAIN INLET TOP PLAN

8-S-9  SCALE: 1/2"=1'-0"
SPECIAL CATCH BASIN 8

SECTION "A"

1. MODIFIED TYPE 7P CATCH BASIN, SEE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS D-7 AND D-8 FOR SIZES AND REINFORCING NOT SHOWN.

2. MANHOLE SHALL HAVE DEPARTMENT OF PUBLIC WORKS TYPE 7A FRAME AND COVER.

3. RINGS SHALL BE 1/2" DIAMETER ASTM A36 STEEL RODS.

4. PROVIDE WATERSTOP AT ALL JOINTS.

SECTION "B"

NO. 2 ROCK (ASTM C33, NO. 4 GRADATION) WRAPPED IN GEOTEXTILE FABRIC

SECTION "C"

NO. 2 ROCK (ASTM C33, NO. 4 GRADATION) WRAPPED IN GEOTEXTILE FABRIC

SCALE 1/2"=1'-0"
NOTE:
SEE CIVIL DRAWING FOR LOCATION AND INVERT OF S30.
<table>
<thead>
<tr>
<th>Existing</th>
<th>New</th>
<th>Description</th>
<th>Existing</th>
<th>New</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>DECKER STREET LIGHT, 230V HPS, LEC E-22</strong></td>
<td></td>
<td></td>
<td><strong>ELECTRICAL MAINLINE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>DECKER STREET LIGHT, 120V HPS, LEC E-22</strong></td>
<td></td>
<td></td>
<td><strong>ELECTRICAL PULLBOX</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>EXISTING STREET LIGHT</strong></td>
<td></td>
<td></td>
<td><strong>GREY</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>AREA/PARKING LOT LIGHT</strong></td>
<td></td>
<td></td>
<td><strong>TELEPHONE MAINLINE</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>MANHOLE, TYPE AS INDICATED</strong></td>
<td></td>
<td></td>
<td><strong>TELEPHONE PULLBOX</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>HECO HARDWARE, TYPE AS INDICATED</strong></td>
<td></td>
<td></td>
<td><strong>SIGNAL/SIGNS, MARKERS</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>HTCC HARDWARE, TYPE AS INDICATED</strong></td>
<td></td>
<td></td>
<td><strong>CABLE TELEVISION</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>CATV 6' x 6' PULLBOX</strong></td>
<td></td>
<td></td>
<td><strong>NATURAL</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>TYPE &quot;A&quot; TRAFFIC SIGNAL PULLBOX, SEE E-10</strong></td>
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<td><strong>ELECTRIC/SIGNAL DUTELINE</strong></td>
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<tr>
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<td><strong>TYPE &quot;C&quot; TRAFFIC SIGNAL PULLBOX, SEE E-10</strong></td>
<td></td>
<td></td>
<td><strong>OVERHEAD LINES (O/P) + FIBER 1&quot; TELEPHONE POLE</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>STREET LIGHT PULLBOX, TYPE E-16</strong></td>
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<td><strong>TELECOMMUNICATIONS CABLE</strong></td>
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<tr>
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<td><strong>STREET LIGHT PULLBOX, TYPE SL-4, E-21</strong></td>
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<td><strong>TRAFFIC SIGNAL DUTELINE</strong></td>
</tr>
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<td></td>
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<td><strong>CITY COMMUNICATIONS PULLBOX, TYPE SL-4, E-21</strong></td>
<td></td>
<td></td>
<td><strong>STREET LIGHT DUTELINE AND MAPPING</strong></td>
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<td><strong>CITY PULLBOX, TYPE SL-4, E-21</strong></td>
<td></td>
<td></td>
<td><strong>CITY PULLBOX, TELECOMMUNICATIONS CABLE</strong></td>
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<tr>
<td></td>
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<td><strong>HECO TRANSFORMER PAD</strong></td>
<td></td>
<td></td>
<td><strong>EXPOSED CONCRETE</strong></td>
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<tr>
<td></td>
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<td><strong>HECO PST-9 SWITCH PAD</strong></td>
<td></td>
<td></td>
<td><strong>LUMINARY 3-FDL, 300W, A-150, M1-1/4</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>EXISTING HARDWARE OR PULLBOX</strong></td>
<td></td>
<td></td>
<td><strong>DENOTES UTILIZATION/REMARKS</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>WATERING EQUIPMENT CABINET</strong></td>
<td></td>
<td></td>
<td><strong>DENOTES UTILIZATION/REMARKS</strong></td>
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<td></td>
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<td><strong>JOINT UTILITY POOL, POLE NO.10 INDICATED</strong></td>
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<td><strong>NOTE INDICATOR</strong></td>
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<tr>
<td></td>
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<td><strong>ELECTRICAL SERVICE EQUIPMENT</strong></td>
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<td></td>
<td></td>
<td><strong>JUNCTION BOX, SIZE AND TYPE AS NOTED</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>POLE MOUNTED FLOODLIGHTS</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**GENERAL NOTES:**
1. COORDINATE ALL DUCT WORK WITH RESPECTIVE UTILITY COMPANY.
2. SEE UTILITY COMPANY STANDARD DRAWINGS FOR ALL DETAILS.
3. COORDINATE DUCT ENTRY WITH HANDHOLES WITH UTILITY COMPANY.
4. THE CONTRACTOR SHALL BRACE ALL POLES OR LIGHT STANDARDS FOR THE NEW DUCTLINE, MAINLINE, OR HANDHOLE DURING CONSTRUCTION.
5. MANHOLE CONNECTIONS TO EXISTING UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES PRIOR TO EXCAVATION OF THE MAIN TRENCHES TO VERIFY LOCATIONS AND DEPTHS.
6. ALL OVERHEAD MEDIATIONS AND REMOVALS, INCLUDING POLES AND ANCHORS, SHALL BE PERFORMED BY THE RESPECTIVE UTILITY COMPANIES UNLESS NOTED.
7. COORDINATE THE REMOVAL OF STREET LIGHTS ADDED ON JOINT UTILITY POLES WITH HECO.
8. MANHOLE, HARDWARES AND PULLBOXES SHALL BE PROVIDED IN ACCORDANCE WITH THE HECO STANDARD SPECIFICATIONS.

**DRAWING REVIEW:**

**Drawing Date:**

**Drawn By:**

**Reviewed By:**

**Project No.:**

**Scale:**

**Engineering Department:**

**Henderson Engineering Company, Inc.**

**NOTE:**

In the event of any change or deviation from the drawings, the applicable notes shall be used as the controlling and any material specified in the notes only shall be installed.

**APPROVED:**

**HECO TOWILL CORPORATION**

**KAKA'AKO COMMUNITY DEVELOPMENT AUTHORITY**

**ELECTRICAL SYMBOLS LIST**

**GENERAL NOTES:**

**DATE:**

**HECO TOWILL CORPORATION**

**KAKA'AKO COMMUNITY DEVELOPMENT AUTHORITY**

**ELECTRICAL SYMBOLS LIST**
The text on the image appears to be a mix of different sections, likely part of a larger document or contract. It includes terms like "HAWAIIAN ELECTRIC COMPANY", "OCEAN CABLE (CAY) NOTES", "TRAFFIC SIGNAL AND TECHNOLOGY DIVISION NOTES", and "U.S. ARMY SIGNAL CORPS NOTES". The content seems to be related to technical specifications, operational procedures, and possibly legal or regulatory notices. Without a full context, it's challenging to provide a coherent summary. The text is fragmented and seems to be part of a complex document that might be related to electrical engineering, signaling systems, or infrastructure projects. The mention of "Hawaiian Electric Company" suggests a focus on electrical utilities or telecommunications, while "U.S. Army Signal Corps" points to military communication systems. The "Ocean Cable (CAY) Notes" might refer to undersea cables or telecommunications infrastructure. The "Traffic Signal and Technology Division" likely deals with traffic management and signal systems. The "Approval" section at the bottom looks like a formal approval notice, possibly for a contract, plan, or project. The text is too fragmented to provide a detailed summary, but it certainly pertains to technical and regulatory matters in an industrial or public utility context.
ILALO STREET ELECTRICAL UTILITY PLAN - 3

NOTES:
1. PSO 51-1 1/16" spirituals highlight ICC changes for site
   Geographical Drawing. See 5-17.
2. Existing OPGW wiring. Some wiring to new
   node poles are connect to relocated substation.
   See Sheet 6-3A.
3. S-18/19 schedule 40 conduit, concrete encased. 24"wide.

APPROVED:

[Signatures]

[Date]

[Date]

[Date]
GENERAL PULLBOX NOTES:

1. PROVIDE A MINIMUM OF ONE 2-1/2" DIAMETER COPPER-CLAD GROUND ROOD IN EACH PULLBOX. WHEN EXPOSED BY THE TRAFFIC SIGNAL INSPECTION ENGINEER, INSTALL ADDITIONAL GROUND ROOD. COST OF GROUND ROOD SHALL BE INVOICE TO THE PULLBOXES.

2. ALL PRE-CAST CONCRETE PULLBOXES SHALL BE MANUFACTURED IN TWO PIECES.

3. THE PULLBOX COVER SHALL BE CAPABLE OF SUPPORTING AN 180 LB LOADING.

4. THE MAXIMUM WEIGHT OF THE PULLBOX COVER SHALL NOT EXCEED 27 POUNDS.

5. THE OPENINGS FOR THE CONDUITS ON ALL PULLBOXES SHALL BE PRE-CAST CONCRETE INSERTS.


8. ALL CONCRETE SHALL BE CLASS "A" (20MPA, MA).

9. REBAR SHALL BE GRADE 300 AND ALL LAPPED SPACES SHALL BE 380MM MINIMUM.

10. THE #7 OR #6 REBAR AGGREGATE SHALL CONFORM TO LATEST VERSION OF AAWHTI #43 (WAY 5 446).

11. TYPE "C" PULLBOXES SHALL BE INSTALLED IN A LOCATION PROTECTED FROM VEHICULAR TRAFFIC, I.E., BENEATH A.R.C. CONES, TRAFFIC SIGNAL STANDARDS OR PIPE GUARDERS.

NOTE:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.
**PLAN VIEW**

**A** CONCRETE COVER

E-20  NOT TO SCALE

- SYMBOL M (HARD METRIC) SHAPE SIZE AS MFH LOGO
- LEFT SIDE 10 x 50
- "TRAFFIC SIGNAL" OR "STREET LIGHTING" AS APPLICABLE

**ELEVATION**

C. CONSTRUCTION JOINT

E-20  NOT TO SCALE

- CLEAN CONCRETE SURFACE BEFORE APPLICATION OF FIRST COAT OF PRIMER COATING AND FLASHING COMPOUNDS
- PRIMER COATING CONFORMING TO THE REQUIREMENTS OF ASTM E 84
- 2ND LAYER FABRIC CONFORMING TO THE REQUIREMENTS OF ASTM
- FLASHING COMPOUND CONFORMING TO THE REQUIREMENTS OF ASTM 1-4388
- FLASHING COMPOUND CONFORMING TO THE REQUIREMENTS OF ASTM 1-4388

**TYPICAL CONSTRUCTION JOINT DETAIL**

E-20  NOT TO SCALE

- SLOPE 1/12

**TYPICAL FLASHING COMPOUND**

E-20  NOT TO SCALE

**NOTE:**
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN.

**APPROVED:**

**UPDATE MECHANICAL/ELECTRICAL**

DATE

**DESIGN AND ENGINEERING DIVISION**

DEPARTMENT OF DESIGN AND CONSTRUCTION

CITY AND COUNTY OF HONOLULU

(FOR STREET LIGHT WORK ONLY)

**UPDATE TRAFFIC SIGNAL AND TECHNOLOGY DIVISION**

DATE

DEPARTMENT OF TRANSPORTATION SERVICES

CITY AND COUNTY OF HONOLULU

(FOR TRAFFIC SIGNAL WORK ONLY)

**UPDATE TRAFFIC SIGNAL DIVISION**

DATE

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

**RECORD DRAFTING**

E-20  SHEET 36 OF 140 SHEETS
**DUCT SCHEDULE**

<table>
<thead>
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<th>TYPE</th>
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<td>BY HDG, PREMIXED, FILLMERE</td>
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<td>2&quot; STREET LIGHTING, PVC SCHEDULE 40, CONCRETE ENCAVED</td>
<td>SEE ONE-LINE DIAGRAM AND STREET LIGHT CONNECTION DIAGRAM</td>
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<td>1 1/2&quot; STREET LIGHTING, PVC SCHEDULE 40, CONCRETE ENCAVED</td>
<td>SEE ONE-LINE DIAGRAM AND STREET LIGHT CONNECTION DIAGRAM</td>
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<td>3&quot; CITY COMMUNICATIONS, PVC SCHEDULE 40, CONCRETE ENCAVED</td>
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**E-27**

**B TYPICAL PAVEMENT RESTORATION - STATE RIGHT OF WAY**

**C CONCRETE MARKER DETAIL**

**D TYPICAL CONDUIT BY-PASS DETAIL**
**RELOCATED FLOOD LIGHT POLE**

**A** RELOCATED FLOOD LIGHT POLE

**B** FLOODLIGHT POLE 6 CONNECTION DIAGRAM

**GENERAL NOTES:**
1. Dimensions and measurements of existing light poles are approximate and are to be used for reference only. The contractor shall verify dimensions and conditions in the field.
2. Work shall be coordinated with the State of Hawaii, Department of Transportation, Harbors Division.
3. Luminaries shall be operational during the hours of darkness.

**PAINTING NOTES:**
1. The contractor shall prepare and paint the new anchor bolts, note junction boxes, concrete pads, and any other light pole surfaces where paint has been applied at the discretion of the construction manager.
2. Finish paint shall be orange safety yellow. Submit painting materials for approval in accordance with "Materials" section of the specifications.
3. All surfaces to be painted shall be thoroughly cleaned of all loose paint, debris, dirt, scale, and other foreign material prior to painting.
4. Metal surfaces - paint with one primer coat at a thickness of 3 mils, allowing 24 hours for dried wet coat. Paint with one finish coat at a thickness of 3 mils, test feet on approved equal.
5. Concrete surfaces - paint with one primer coat, to paint orange safety yellow, one finish coat, to paint orange safety yellow. Total dry thickness shall be at least 6 mils. A primer shall be used, total dry thickness shall be at least 6 mils.
6. The time interval between each coat of paint shall be 24 hours.

**ELEVATION**

**SECTION AT PEDESTAL**

**FOUNDATION SECTION (BELOW GRADE)**

**PLAN**

**rietfCH POINTS**

**BASE DETAIL**

**NEW ANCHOR BOLT (TYPICAL FOR 4)**

**JUNCTION BOX**

**1 1/2" PVC SCHEDULE 40**

**FLOOR**

**NEW STAINLESS STEEL JUNCTION BOX**

**CONCRETE FOUNDATION**

**GROUND LUG**

**RELOCATED POLE**

**NEW NUTS WITH MOLDERS, SEE PAINTING NOTES**

**EXISTING BARRIERPLATE**

**NEW LEVELING BOLT**

**1 1/2" PVC SCHEDULE 40, STUB INTO POLE**

**NEW CONCRETE PEDESTAL, SEE ELEVATION**

**NEW STAINLESS STEEL JUNCTION BOX**

**FINISHED GRADE**

**TO EXISTING FLOODLIGHT FEEDERS**

**SPRUKE TO EXISTING FEEDER**

**ADHESIVE MOUNTING TO CHIP, ADHESIVE CONDUIT**

**NEW CONCRETE PEDESTAL, SEE ELEVATION**

**NEW POLE FOUNDATION, SEE BASE DETAIL**

**NEW ANCHOR BOLT (TYPICAL FOR 4)**

**FOOTING DETAILS**

**NEW LEVELING BOLT**

**1 1/2" PVC SCHEDULE 40, STUB INTO POLE**

**NEW CONCRETE PEDESTAL, SEE ELEVATION**

**NEW ANCHOR BOLT (TYPICAL FOR 4)**

**1 1/2" PVC SCHEDULE 40, STUB INTO POLE**

**NEW CONCRETE PEDESTAL, SEE ELEVATION**
IRRIGATION NOTES

1. IRRIGATION SYSTEM IS DIAGRAMATIC AND SUBJECT TO CHANGES DUE TO ACTUAL LANDSCAPE LAYOUT AND UNANTICIPATED FIELD CONDITIONS. ADJUST ALL SYSTEMS TO ASSURE PROPER COVERAGE AND TO AVOID ANY CONFLICTS BETWEEN IRRIGATION SYSTEMS, PLANTINGS, UTILITIES AND ARCHITECTURAL ELEMENTS.

2. CONTRACTOR SHALL INSPECT THE SITE CONDITIONS PRIOR TO COMMENCING WITH THE WORK. ANY DISCREPANCIES OR UNUSUAL CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. BY COMMUNICATING WITH THE WORK, THE CONTRACTOR ACCEPTS THE EXISTING CONDITIONS AND RESPONSIBILITY FOR MAINHAINING THE PROPER CONDITIONS.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK WITH THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS OR TRADES, ESPECIALLY THE INSTALLATION OF SLEEVES, CONDUITS, ELECTRICAL LINES AND WATER CONNECTIONS.

4. CONTRACTOR SHALL INSTALL ALL EQUIPMENT ACCORDING TO THE CITY AND COUNTY PARK DEPARTMENT STANDARD DETAILS EXCEPT WHEN MODIFIED ABOVE.

5. CONTRACTOR SHALL ADJUST ALL PRESSURE REGULATING CONTROL DEVICES ON EACH REMOTE CONTROL VALVE TO INSURE THE DOWNSTREAM PRESSURE DOES NOT EXCEED 33 PSI FOR SPRAY AND BUBBLE TYPE SPRINKLER CIRCUITS AND 50 PSI FOR ALL ROTARY SPRINKLER CIRCUITS.

6. CONTRACTOR SHALL ADJUST ANY EXISTING SYSTEMS AFFECTED BY THE NEW WORK TO INSURE NO OVERSPLAY ONTO WALKWAYS OR ROADS, ANY DAMAGE INCURRED AS A RESULT OF NEW CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
GENERAL:
A. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE BUILDING CODE OF THE CITY AND COUNTY OF HONOLULU (AMENDED 1984 EDITION). HOWEVER, WHERE REFERENCE IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRONGER SHALL APPLY.
B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO THE CONSTRUCTION MANAGER ALL INCONSISTENCIES AND OMISSIONS.
C. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE CONSTRUCTION MANAGER ALL INCONSISTENCIES AND OMISSIONS.
D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHOD OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED FOR STABILITY OF STRUCTURAL MEMBERS AND SYSTEMS.
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES DURING THE CONSTRUCTION PERIOD.
G. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS.

DESIGN CRITERIA:
A. SEISMIC ZONE: 2A
B. BASIC WIND SPEED AND EXPOSURE: 80 MPH, EXPOSURE C
C. DESIGN LIVE LOADS:
   a. ROOF: 20 PSF
   b. LIGHT STORAGE: 125 PSF
D. ALLOWABLE FRICTION BEARING CAPACITIES:
   a. DEAD LOAD + LIVE LOAD: 2,500 PSF
   b. DEAD LOAD + LIVE LOAD + LATERAL LOAD: 3,333 PSF

FOUNDATION:
A. CONTRACTOR SHALL PROVIDE D.E.-WATERING OF EXCavaTION FROM SURFACE WATER, GROUND WATER OR SEEPAGE.
B. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIbbing, SHEETING AND SHORING NECESSARY TO PREVENT EXCAVATIONS AND ENCLOSURES.
C. EVALUATIONS FOR FOOTINGS SHALL BE PERFORMED BY THE GEO-TECHNICAL CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF CONCRETE AND CONTINUING.
D. EXCAVATIONS SHALL BE BAFFLED WITH NON-EXPLOSIVE, SELECT GRANULAR MATERIAL, PLACED IN LAYER, NOT EXCEEDING 6 INCHES IN THICKNESS, WETTED AND COMPACTED TO A MINIMUM 95 PERCENT RELATIVE COMPACTION.

CONCRETE:
A. CONCRETE CONSTRUCTION SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE ACI 318M-97.
B. CONTRACTOR SHALL BE REGULAR WEIGHT HARD ROCK CONCRETE AND SHALL HAVE THE FOLLOWING MINIMUM 28 DAY COMPREHENSIVE STRENGTHS:
   a. ALL CONCRETE: 3,000 PSI
C. CONCRETE DELIVERY TICKETS SHALL RECORD ALL FREE WATER IN THE MIX AT BATCHING PLANT. FOR CONCRETE CONFORMITY BY ORGAN AND ANY ADDITIONAL REQUEST BY CONTRACTOR IF PERMITTED BY THE MIX DESIGN.
D. ALL INSERTS, ANCHOR BOLTS, PLATELS AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE HOT-DIPPED GALVANIZED UNLESS OTHERWISE NOTED.
E. REINFORCING BARS AND ANCHOR BOLTS, INSERTS AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE.
F. CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB OR FOOTING AND NOT CONFORMING TO TYPICAL DETAILS SHALL BE LOCATED AND SUBMITTED TO THE CONSTRUCTION MANAGER FOR APPROVAL.
G. CONDUITS, PIPES, AND SLEEVES EMBEDDED WITHIN A SLAB OR WALL (OTHER THAN THOSE MENTIONED PASSING THROUGH SLEEVES) SHALL:
   a. NO LARGER THAN 8 INCHES DIAMETER THAN ONE THIRD THE OVERALL SLAB OR WALL THICKNESS IN WHICH THEY ARE EMBEDDED
   b. PLACED IN THE MIDDLE ONE THIRD OF SLAB OR WALL THICKNESS
   c. SPACED NO closer THAN 3 TIMES THEIR DIAMETER OR MOWING CENTER TO CENTER.
H. CONDUITS, PIPES, AND SLEEVES SHALL NOT BE PLACED THROUGH OR EMBEDDED IN A BEAM UNLESS SPECIFICALLY DETAILED.
I. THE CONTRACTOR SHALL LOCATE CONSTRUCTION JOINTS SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURES AND TO MINIMIZE SHrinkage STRESSES. SUBMIT LOCATION OF CONSTRUCTION JOINTS TO THE CONSTRUCTION MANAGER FOR APPROVAL, UNLESS OTHERWISE NOTED.
J. NON-SHRINK GROUT SHALL BE A PREMIXED NON-METALLIC FORMULA, CAPABLE OF DEVELOPING A MINIMUM COMPREHENSIVE STRENGTH OF 5,000 PSI IN 1 DAY AND 5,000 PSI IN 28 DAYS.

REINFORCING STEEL:
A. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615, GRADE 60.
B. CLEAR CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
   a. FOOTING, GRAGE BEAMS, ETC CAST AGAINST EACH OTHER:"3"
   b. FOOTING, GRAGE BEAMS, ETC. FORMED AND EXPOSED TO EARTH OR WEATHER:"2"
C. CLEAR DISTANCE BETWEEN THE SURFACE OF A REINFORCEMENT AND ANY SURFACE OF A MASONRY UNIT SHALL NOT BE LESS THAN 1 1/2 INCH, UNLESS OTHERWISE NOTED.
D. REINFORCING STEEL SHALL BE PLACED WHERE INDICATED ON PLANS. PROVIDE LAP SPlice LENGTH PER TYPICAL DETAILS AND SCHEDULE, UNLESS OTHERWISE NOTED.
E. MECHANICAL splice CONNECTIONS SHALL DEVELOP IN TENSION 125 PERCENT OF THE SPECIFIED MINIMUM YIELD STRENGTH OF REINFORCING BARS.
F. BAR BENDS AND HOOKS SHALL BE "STANDARD HOOKS" IN ACCORDANCE WITH ACI 318.

COLD-FORMED STEEL PURLINS:
A. FABRICATION AND ERECTION OF COLD-FORMED STEEL STRUCTURES SHALL BE IN ACCORDANCE WITH THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS, LATEST EDITION.
B. COLD-FORMED STEEL PURLINS AND ACCESSORIES SHALL BE OF THE TYPE AND GAUGE COLD FORGED FOR ON THE CONTRACT DOCUMENTS.
C. PURLINS SHALL SPAN OVER TWO OR MORE SUPPORTS.
D. COLD-FORMED STEEL PURLINS SHALL MEET THE REQUIREMENTS OF ASTM A-570. MINIMUM YIELD STRENGTH OF STEEL SHALL BE 35,000 PSI.
E. COLD-FORMED STEEL PURLINS SHALL HAVE THE FOLLOWING MINIMUM SECTION PROPERTIES:
   a. L-PURLIN: ip = 1/2 in, ix = 0.57 in
   b. LAV EXT: ip = 26.9 ft, ix = 5.25 in
   c. EAVE STRUT: ix = 19.0 ft, ix = 5.86 in
F. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INDICATE LAYOUT, FRAMING AND SUPPORTS WITH DIMENSIONS, SECTIONS, TYPE AND LOCATION OF ATTACHMENTS AND DETAILS OF ACCESSORIES.

METAL ROOFING:
A. ROOFING SHALL BE 22 Gauge GALVANIZED STEEL PANELS, PREPunched on the TOP.
B. ROOFING AND ALL ACCESSORIES SHALL BE FABRICATED FROM STEEL SHEETS HAVING MINIMUM YIELD STRENGTH OF 33,000 PSI AND CONFORM TO ASTM A653, 0333, 091.
C. THE MINIMUM SCAFFOLDING OF ROOFING SUPPORTS SHALL BE 2 INCHES.
D. PROVIDE ALL CLOSURES AS REQUIRED TO COMPLETE THE WORK AND MAKE WATERPROOF. OPEN ENDS OF ALL HIPS SHALL BE CLOSED WITH WOODEN OR RUBBER FILLER STOPS.
E. METAL ROOFING INCLUDING ITS ATTACHMENTS AND ACCESSORIES, SHALL BE CAPABLE OF RESISTING A 25 PSI WIND UPLIFT FORCE.
F. SUBMIT STRUCTURAL CALCULATIONS CERTIFIED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF HAWAII.

PRE-ENGINEERED METAL BUILDINGS:
A. DESIGN OF THE PRE-ENGINEERED BUILDING SHALL CONFORM TO THE 1984 UNIFORM BUILDING CODE AS ADOPTED AND OR AMENDED BY THE CITY AND COUNTY OF HONOLULU OR THE METAL BUILDING MANUFACTURERS ASSOCIATION (MBA) DESIGN PRACTICES MANUAL, WHEREVER IS MORE RESTRICTIVE.
B. SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER FOR APPROVAL. A MINIMUM OF 45 DAYS PRIOR TO FABRICATION. THESE DRAWINGS AND CALCULATIONS SHALL BE STAMPED AND SIGNED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF HAWAII.
C. BASIC DESIGN LOADS:
   a. DEAD LOADS INCLUDE STRUCTURAL FRAMING, SECONDARY FRAMING AND ELECTRICAL LOADS.
   b. ROOF LIVE LOAD: 20 PSF
   c. MEDICAL LOADS
   d. BASIC WIND SPEED: 80 MPH
   e. WIND LOADS
D. SUBMIT STRUCTURAL CALCULATIONS CERTIFIED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF HAWAII.

"RECORD DRAWINGS" P-9 SHEET 130 OF 140 SHEETS
MINIMUM SPLICE & EMBEDMENT LENGTHS

| CONCRETE STRENGTH | 3,000 PS |

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NOTE:
1. LENGTHS ARE FOR CONCRETE WITH REBAR SPACED 6 BAR DIAMETERS MIN. ENC. INCREASE BAR LENGTH 25% FOR BARS SPACED LESS THAN 6 BAR DIAMETERS MIN.
2. "TOP BARS" ARE HORIZONTAL BARS WITH 12" OR MORE OF CONCRETE CAST BELOW.

TYPICAL SLAB JOINT DETAIL

TYPICAL REBAR SPLICE AND EMBEDMENT LENGTH SCHEDULE
GENERAL NOTES:

1. LIFTING TECHNIQUES FOR THE PRE-CAST BLOCK AND PUMP ASSEMBLY SHALL BE ACCORDING TO PUMP MANUFACTURER'S SPECIFICATIONS. PRE-CAST BLOCKS SHALL HAVE A MINIMUM DIAMETER AS SHOWN IN THE SCHEDULE.

2. HOOKUP REQUIREMENTS:
   a. Site preparation required to include the removal of all debris and debris around designated pump.
   b. Structural placement and filling of structural requirements as shown.
   c. Structural fill shall be compacted to a minimum of 95% of theoretical density.
   d. Structural elements shall be fully cured before installation.

3. CONCRETE SHALL BE REGULAR HARD ROCK CONCRETE AND SHALL HAVE 3000 PSI MINIMUM 28 DAY COMPRRESSIVE STRENGTH.


5. BACKFILL DRAINAGE:
   a. Backfill below the water table shall consist of free-draining granular materials, such as No. 30 FNCE ASHCROFT (TYPICAL NO. 89 DRAINS) up to a minimum of 12 INCHES ABOVE THE HIGHEST ANTICIPATED DRAINAGE LEVEL.
   b. The free-draining materials shall be wrapped in a non-woven filter fabric, such as MANN IRON BAGS.
   c. BACKFILL ABOVE THE WATER TABLE:
      i. Structurally, all shall consist of well-graded materials from coarse to fine with no particles greater than 5 INCHES IN LARGEST DIAMETER. The materials shall also contain between 10 and 30% particles finer than the No. 200 SIEVE. The materials shall have a California Bearing Ratio (CBR) value of 20 OR HIGHER AND A DRAINAGE VALUE OF 1 PERCENT OR LESS TESTED IN ACCORDANCE WITH ASTM TEST DESIGNATION E 1015.
      ii. Backfill shall be placed in thin lifts, 8 INCHES IN LOOSE THICKNESS. EACH LIFT SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 95 PERCENT RELATIVE COMPACTED. THE LAYER 3 FEET SHALL BE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTED.
NOTES:

1. REBAR CONCRETE WITH DUCT SEAL AFTER INSTALLATION OF CABLES
2. BUNDLES AND GROUND ROPE CONNECTIONS MUST BE IN A VERTICAL ALIGNMENT DURING INSTALLATION AND MAINTENANCE, THEN HORIZONTAL.
3. ALL EXPOSED ANCHOR BOLTS MUST BE COVERED AFTER INSTALLATION.

**PLAN**

12 - #8 Vertical

-12 - 4" Deep

**ELEVATION**

-6.00 FLOOR

**FOUNDATION SECTION**

RELOCATED POLE BASE

EXISTING #8 ARC., BIBH-USE, CONDUCTORS, PROTECT #8 BLACK

EXISTING WATERPROOF CONNECTOR KIT WITH A LEAP FUSE TYPE 22

EXISTING TERMINAL BLOCK

PROVIDE GROUNDING BURIED OR PLACED IN BOXES AS REQUIRED

GROUND WIRE 18 GAUGE

CONCRETE BASE

BOLT CHAIN CONCRETE TO BE USED.

1/2" O.D. DRAINAGE CHUTE

**PARTIAL ELECTRICAL SITE PLAN**

-3.00 FLOOR

**GENERAL NOTES**

1. DIMENSIONS AND MEASUREMENTS OF EXISTING LIGHT POLES AND APPURTEMENTS ARE APPROXIMATE AND ARE TO BE USED FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD.

2. COORDINATE ALL WORK WITH PRODUCER CENTER DEVELOPMENT, LTD.

GRAPHIC SCALE: 1" = 20' 1/2" JAVA METER AND EQUIPMENT SHCELS

-2" 2X4 ENLACE BOARD

**RELOCATED LIGHT POLE NO. 1**

**RELOCATED LIGHT POLE NO. 2**

**RELOCATED LIGHT POLE NO. 3**
NOTES:
1. B NEW POLE SHALL BE TREATED WITH PENTA-BROMOPHENOL. USING THE_prefs PROCESS BY LICENSED TREATMENT COMPANY.
2. TREATMENT THE BOTTOM OF THE HOLES AND SANKER MATERIAL WITH AQUATIC CHEMICAL SOLUTION CONSISTING OF 0.5% AMLON OR 0.3% DURATREAT VIAD. 1 MILLION GALLONS OF THE SOLUTION SHALL BE USED FOR EACH POLE. APPLICATION SHALL BE PERFORMED BY CONTRACTOR LICENSED FOR THIS TYPE OF WORK. TREATMENT SHALL BE DONE AS THE HOLE IS BEING BACKFILLED.