

**PROJECT LOCATION**

RE #00537170-000000  
LOT 4, BLOCK 12, LAKE SURPRISE ESTATES  
PLAT BOOK 4 PG 162  
KEY LARGO  
SECTION 31, TOWNSHIP 60 SOUTH, RANGE 40 EAST  
LATITUDE: 25.173825°N LONGITUDE: 80.377129°W

**DIRECTIONS:**

U.S. HIGHWAY NO. 1 NORTH TO MM 106±. LEFT ●  
LAKE BLVD. RIGHT ● KEY LARGO RD. LEFT ●  
BIG PINE ROAD.  
PROJECT SITE: 455 BIG PINE ROAD.

**ADJOINING OWNERS**

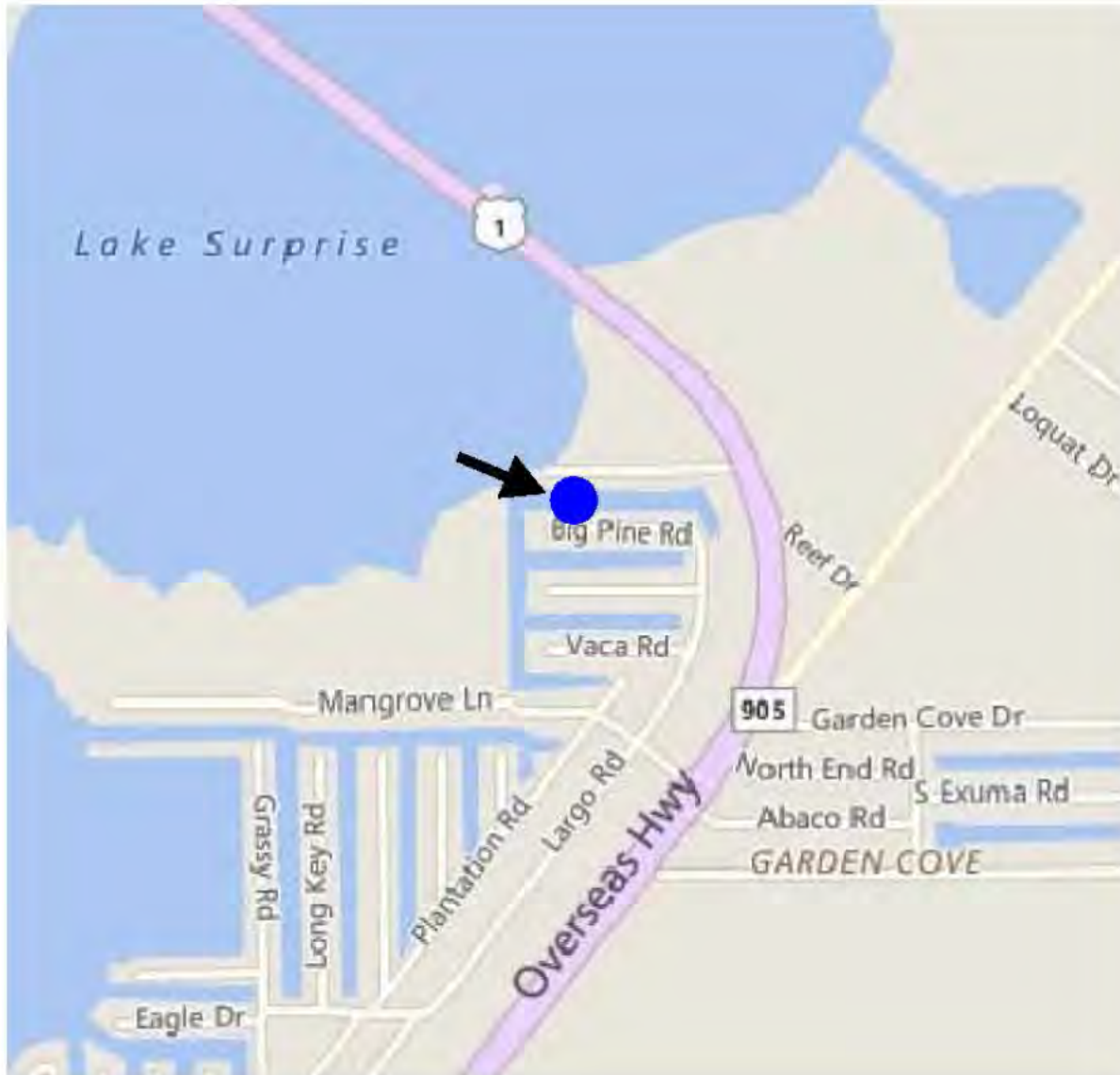
NORBERTO LOPEZ & TANIA DEL PILAR  
4393 SW 146TH AVE.  
MIAMI, FL 33175-6862

OSCAR RONDA, JR.  
5230 SW 5TH ST.  
CORAL GABLES, FL 33134-1118



REVISION			

LOCATION & VICINITY MAP  
SCALE: AS SHOWN

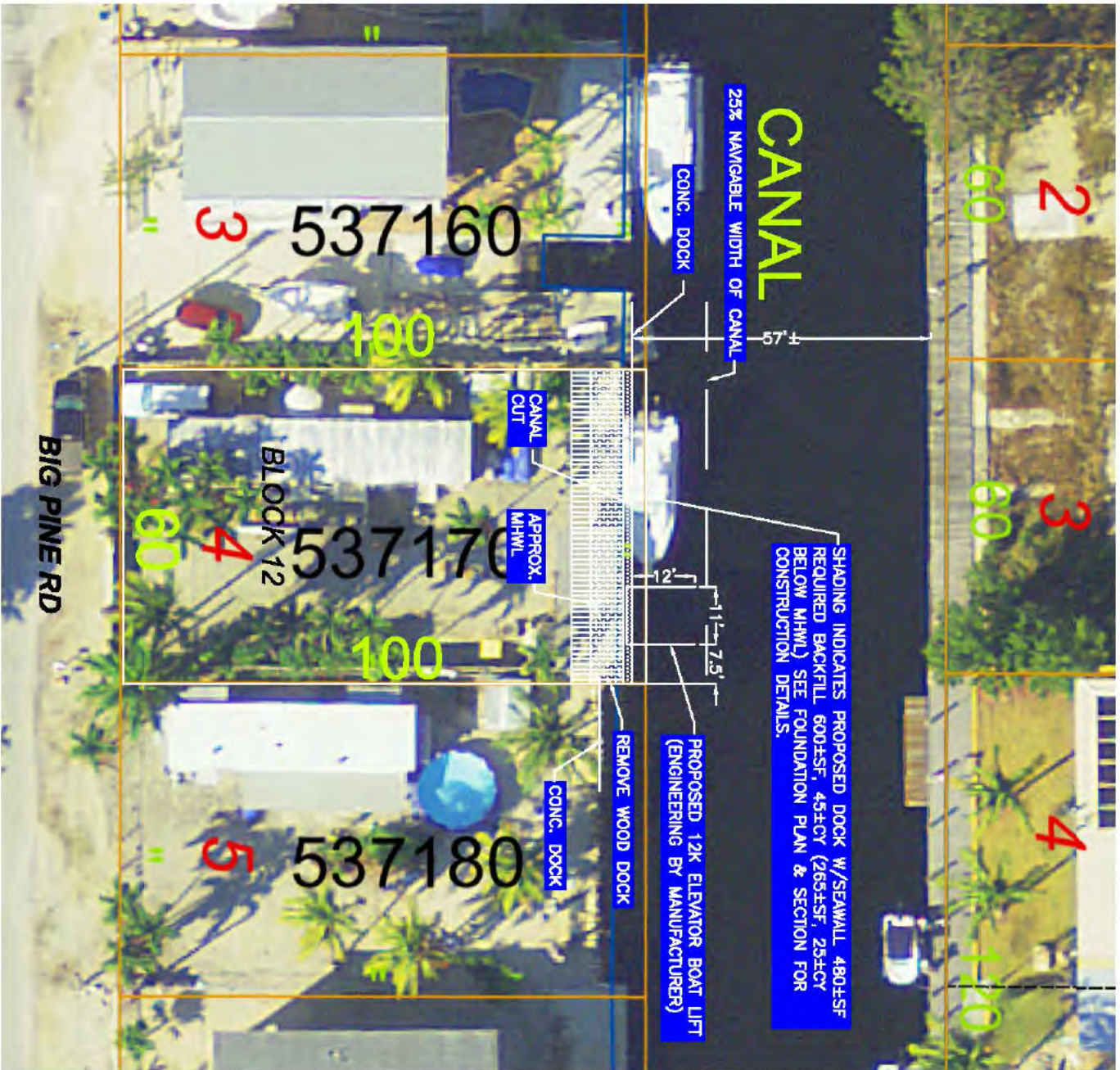


DOCK REPAIR & BOAT LIFT FOR MANUEL MENA  
455 BIG PINE ROAD  
KEY LARGO, MONROE COUNTY, FL

GLEN BOE AND ASSOCIATES, INC. # 4061  
8800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33060  
Telephone (305) 743-8121 Fax (305) 743-8187  
Email: glenboe@glboe.com

DATE: 11/28/18





**SITE PLAN**  
 SCALE: 1" = 30'



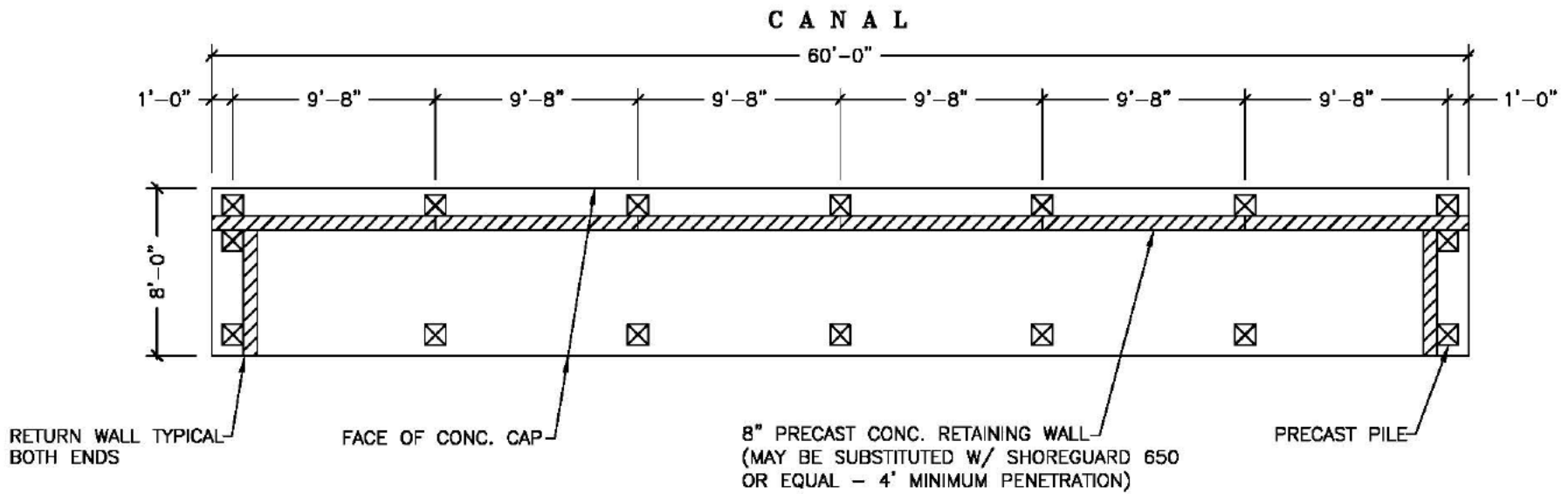
REVISIONS:


**DOCK REPAIR & BOAT LIFT FOR MANUEL MENA**  
 455 BIG PINE ROAD  
 KEY LARGO, MONROE COUNTY, FL

CERTIFIED BY:  
 SEAN KIRWAN, P.E. #67506

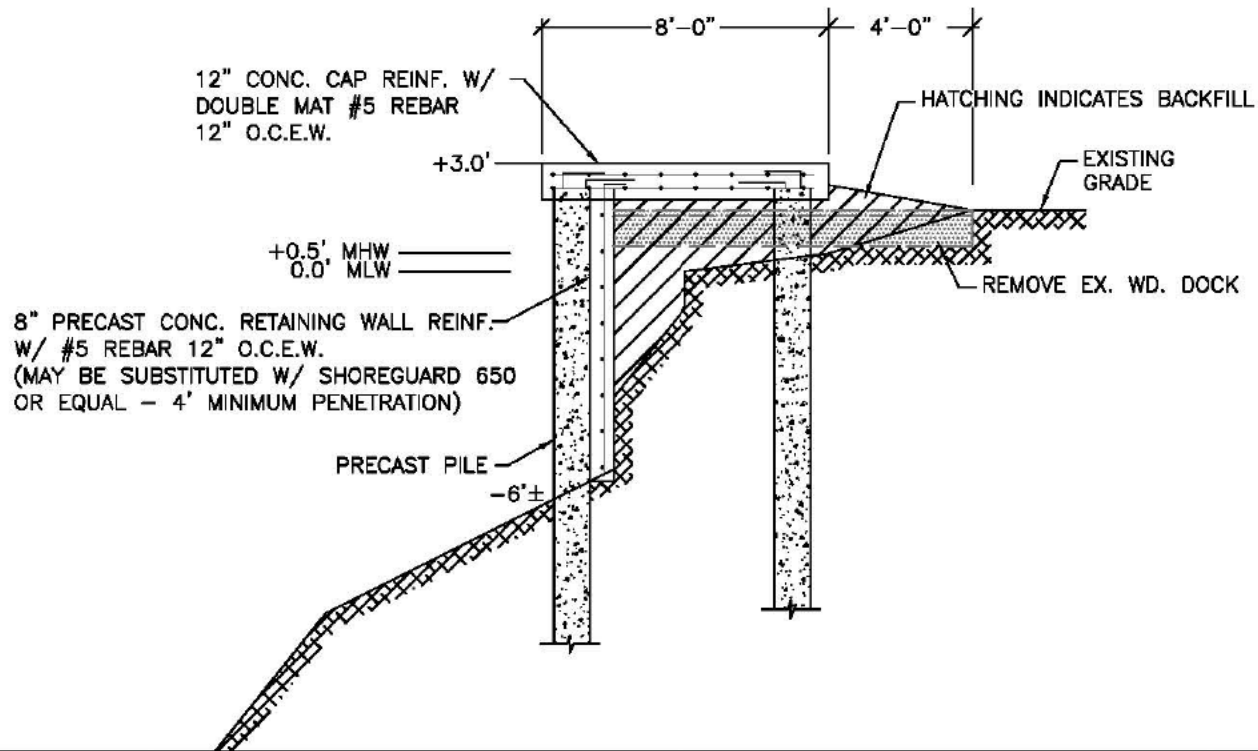
**GLEN BOE AND ASSOCIATES, INC. # 4061**  
 5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33060  
 Telephone (305) 743-9121 Fax (305) 743-9197  
 Email: glenboe@bellsouth.net

DATE: 11/29/16



**FOUNDATION PLAN**

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



**TYPICAL SECTION**

SCALE: 3/16" = 1'-0"

SHEET 3 OF 4	DATE: 11/29/18	<b>GLEN BOE AND ASSOCIATES, INC. # 4061</b> 5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33050 Telephone (305) 743-9121 Fax (305) 743-9197 Email: glenboe@bellsouth.net	<b>DOCK REPAIR &amp; BOAT LIFT FOR MANUEL MENA</b> 455 BIG PINE ROAD KEY LARGO, MONROE COUNTY, FL	CERTIFIED BY: SEAN KIRWAN, P.E. #67506	REVISIONS:
					1      12/2/18

**CONSTRUCTION NOTES:**

1. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO COMMENCING WORK. THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE ARMY CORPS OF ENGINEERS & LOCAL REGULATIONS SHALL GOVERN ALL WORK.
2. WORK SHOWN ON DRAWINGS IS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (LATEST ADDITION). FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION.
3. THE PROPOSED STRUCTURE(S) IS DESIGNED FOR A LIVE LOAD OF 40 PSF. WIND LOADS ARE DESIGNED PER THE FLORIDA BUILDING CODE.
4. CONTRACTOR SHALL ADHERE TO THE STANDARD MANATEE CONSTRUCTION CONDITIONS (LATEST ADDITION). IF NEEDED, THE CONTRACTOR CAN CONTACT THE ARMY CORPS OF ENGINEERS OR THIS OFFICE TO OBTAIN A COPY OF THE STANDARD MANATEE CONSTRUCTION CONDITIONS.
5. BEST MANAGEMENT PRACTICES, INCLUDING THE USE OF TURBIDITY SCREENS, ARE REQUIRED TO ISOLATE THE CONSTRUCTION AREA FROM THE ADJACENT WATERS. CONTRACTOR SHALL INSTALL TURBIDITY SCREENS AROUND THE IMMEDIATE PROJECT AREA PRIOR TO CONSTRUCTION. THE TURBIDITY SCREENS REMAIN IN PLACE UNTIL WATER QUALITY CONDITIONS RETURN TO PRECONSTRUCTION CONDITIONS. WATER QUALITY MONITORING SHALL ADHERE TO STATE REGULATIONS.
6. ELECTRIC & WATER (DESIGN PROVIDED BY OTHERS UNLESS SHOWN) SHALL BE PROVIDED. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL PROPOSED UTILITIES WITH OWNER PRIOR TO CONSTRUCTION.
7. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS & WATER DEPTHS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
8. THE STRUCTURAL INTEGRITY OF THE COMPLETED STRUCTURE DEPENDS ON INTERACTION OF VARIOUS CONNECTED COMPONENTS. PROVIDE ADEQUATE BRACING, SHORING, AND OTHER TEMPORARY SUPPORTS AS REQUIRED TO SAFELY COMPLETE THE WORK.
9. EXERCISE EXTREME CARE AND CAUTION WHEN EXCAVATING AND FILLING ADJACENT TO EXISTING STRUCTURES. UNDER NO CIRCUMSTANCES SHALL THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURES BE IMPAIRED IN ANY WAY BY CONSTRUCTION OPERATIONS AND PROCEDURES. DO NOT EXCAVATE OR DISTURB SOIL ADJACENT TO OR BENEATH EXISTING FOOTINGS.
10. CONTRACTOR SHALL COORDINATE INSTALLATION OF CLEATS, LADDERS, PILE CAPS, AND OTHER DOCK ACCESSORIES WITH OWNER PRIOR TO CONSTRUCTION. ALL DOCK ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. STAINLESS STEEL HARDWARE SHALL BE USED FOR ALL CONNECTIONS TO DOCK. PROVIDE A MINIMUM OF 3" CLEARANCE FROM EDGE OF STRUCTURE TO EDGE OF BOLTS.

**CONCRETE PILES:**

PILES SHALL BE COMMERCIAL GRADE BY FLORIDA ROCK & SAND OR APPROVED EQUAL.

CONCRETE PILES SHALL BE 12"x12" PRESTRESSED CONCRETE PILES W/ FOUR 0.5" DIAMETER 270 LOW-RELAXATION STRAND @ 44 KIPS W/ W3.4 WIRE SPIRAL TIES. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 6000 PSI. CONCRETE SHALL BE FDOT CLASS V SPECIAL. ALL REINFORCING STEEL, EXCEPT SPIRAL TIES, SHALL BE ASTM A615, GRADE 60. SPIRAL TIES SHALL BE HARD DRAWN BASIC WIRE IN ACCORDANCE WITH ASTM A-82. EACH WRAP OF SPIRAL SHALL BE TIED TO AT LEAST TWO CORNER STRANDS. ALTERNATE STRAND PATTERNS -

- EIGHT 7/16" DIAMETER 270 LOW-RELAXATION STRAND @ 23.3 KIPS
- EIGHT 1/2" DIAMETER 250 STRESS RELIEVED STRAND @ 24.1 KIPS
- TWELVE 3/8" DIAMETER 270 LOW-RELAXATION STRAND @ 17.2 KIPS
- TWELVE 3/8" DIAMETER 250 STRESS RELIEVED STRAND @ 15.6 KIPS

PILES SHALL BE SET IN PREDRILLED OR PREPUNCHED HOLES AND DRIVEN TO PENETRATE FIRM ROCK 7' MIN.

PILES SHALL BE SPACED @ MAXIMUM OF 10' O.C. UNLESS OTHERWISE SHOWN.

DO NOT DRIVE PILES WITHIN 20 FEET OF CONCRETE LESS THAN SEVEN DAYS OLD.

RE-DRIVE ANY PILE WHICH IS RAISED DURING DRIVING OF ADJACENT PILES, TO THE ORIGINAL TIP ELEVATION.

CUT OFF PILES TO PROVIDE A MINIMUM OF 3" EMBEDMENT INTO CONCRETE CAP. PROVIDE A MINIMUM 30" SPLICE FOR ALL STRANDS.

PILES SHALL DEVIATE FROM PLUMB AND ANGLE OF BATTER NO MORE THAN 1/4 INCH PER FOOT OF PILE LENGTH, BUT NOT MORE THAN 6 INCHES OVERALL. PILES SHALL NOT DEVIATE FROM LOCATION OF PILE TOP MORE THAN 6 INCHES.

REMOVE CUTOFF SECTIONS OF PILES FROM THE SITE AND LEGALLY DISPOSE.

**CONCRETE CAP, VERTICAL SLABS & BEAMS:**

CAST IN PLACE CONCRETE SHALL BE TYPE II CONCRETE WITH A COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. MAXIMUM WATER-CEMENTIOUS MATERIALS RATIO BY WEIGHT RATIO SHALL BE 0.40. SLUMP SHALL NOT EXCEED 5" (1"±).

REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A 615, GRADE 60. ALL DETAILING AND ACCESSORIES TO CONFORM TO ACI DETAILING MANUAL (LATEST ADDITION).

PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.

PROVIDE LIGHT BROOM FINISH ON ALL EXPOSED CONCRETE SLABS.

REINFORCED CONCRETE CONSTRUCTION TO CONFORM TO ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

PROVIDE SLEEVES FOR ALL PIPES, CONDUITS, ETC., THAT PENETRATE CONCRETE STRUCTURAL MEMBERS PRIOR TO PLACEMENT OF CONCRETE. CUTTING OR DRILLING OF HARDENED CONCRETE NOT PERMITTED.

DO NOT EMBED HORIZONTAL CONDUITS, PIPES, ETC., IN HORIZONTAL CONCRETE STRUCTURAL MEMBERS UNLESS SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.

REQUIRED CONCRETE COVER FOR REINFORCING STEEL (UNLESS NOTED OTHERWISE):

3" MINIMUM, BOTTOM 3" MINIMUM, SIDES 3" MINIMUM

PROVIDE 90° BEND WITH 36" MINIMUM SPLICE FOR ALL VERTICAL BARS ON TOP OF VERTICAL WALL. PANELS SHALL PENETRATE CONCRETE CAP 3" MINIMUM. BOTTOM OF VERTICAL SLABS SHALL BE PLACED ON FIRM ROCK OR PENETRATE CANAL BOTTOM 4' MIN.

PROVIDE CHAIRS, SPACERS, TIES, AND ALL DEVICES NECESSARY FOR PROPER PLACING, SPACING, SUPPORTING, AND FASTENING REINFORCEMENT AS REQUIRED BY ACI 315. PROVIDE CHAIRS, SPACERS, BOLSTERS, AND ITEMS IN CONTACT WITH FORMS WITH HOT-DIP GALVANIZED LEGS OR PLASTIC LEGS.

LAP SPLICE CONTINUOUS VERTICAL OR HORIZONTAL BARS IN CONCRETE MEMBERS BY WIRING TOGETHER IN CONTACT IN ACCORDANCE WITH ACI 318, LATEST EDITION, FOR CLASS "B" TENSION LAP SPLICES. DO NOT SPLICE CONTINUOUS TOP BARS IN BEAMS AT ENDS OF CLEAR SPANS. DO NOT SPLICE CONTINUOUS BOTTOM BARS IN BEAMS IN CLEAR SPANS BETWEEN SUPPORTS.

REVISIONS:


CERTIFIED BY:  
SEAN KIRWAN, P.E. #57508

DOCK REPAIR & BOAT LIFT FOR MANUEL MENA  
455 BIG PINE ROAD  
KEY LARGO, MONROE COUNTY, FL

GLEN BOE AND ASSOCIATES, INC. # 4061  
5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33950  
Telephone (305) 743-9121 Fax (305) 743-9197  
Email: glenboe@bellacouth.net

DATE: 11/30/18