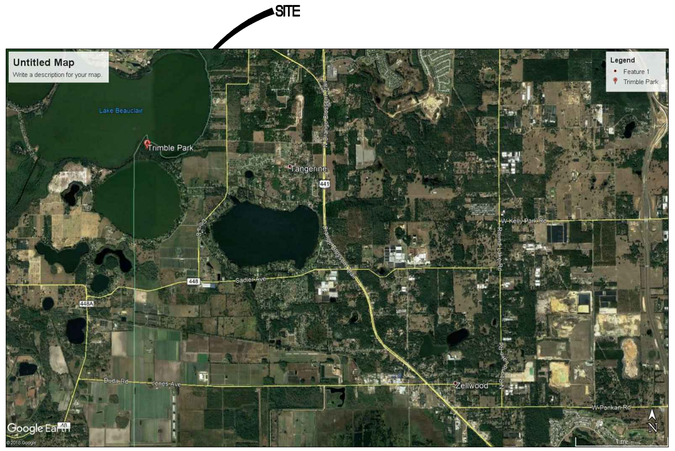
TRIMBLE PARK
BOAT MOORING AND DOCK REPAIRS

5802 Trimble Park Rd, Mt Dora, FL 32757

PARCEL ID: 7-20-27-0000-00-030

LEGAL DESCRIPTION:

TRIMBLE PARK
A PORTION OF SECTION 7, TOWNSHIP 20 SOUTH, RANGE 27 EAST, LYING IN ORANGE COUNTY, FLORIDA.



VICINITY MAP

SCALE: NTS

ORANGE COUNTY GOVERNMENT
FLORIDA

JERRY L. DEMINGS — MAYOR

ORANGE COUNTY BOARD OF COUNTY COMMISSIONERS

BETSY VANDERLEY	DISTRICT 1
CHRISTINE MOORE	DISTRICT 2
MAYRA URIBE	DISTRICT 3
MARIBEL GOMEZ CORDERO	DISTRICT 4
EMILY BONILLA	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6

INDEX OF DRAWINGS

OWNER

ORANGE COUNTY CAPITAL PROJECTS
400 E. SOUTH ST., 5TH FLOOR
ORLANDO, FL 32801
(407) 836-0050

ORANGE COUNTY PARKS & RECREATION
4801 WEST COLONIAL DR.
ORLANDO, FL 32808
(407) 836-6200

PLANNERS + ENGINEERS

SK CONSORTIUM, INC.
1053 N. ORLANDO AVE, SUITE 3
MAITLAND, FL 32751
(407) 629-4288

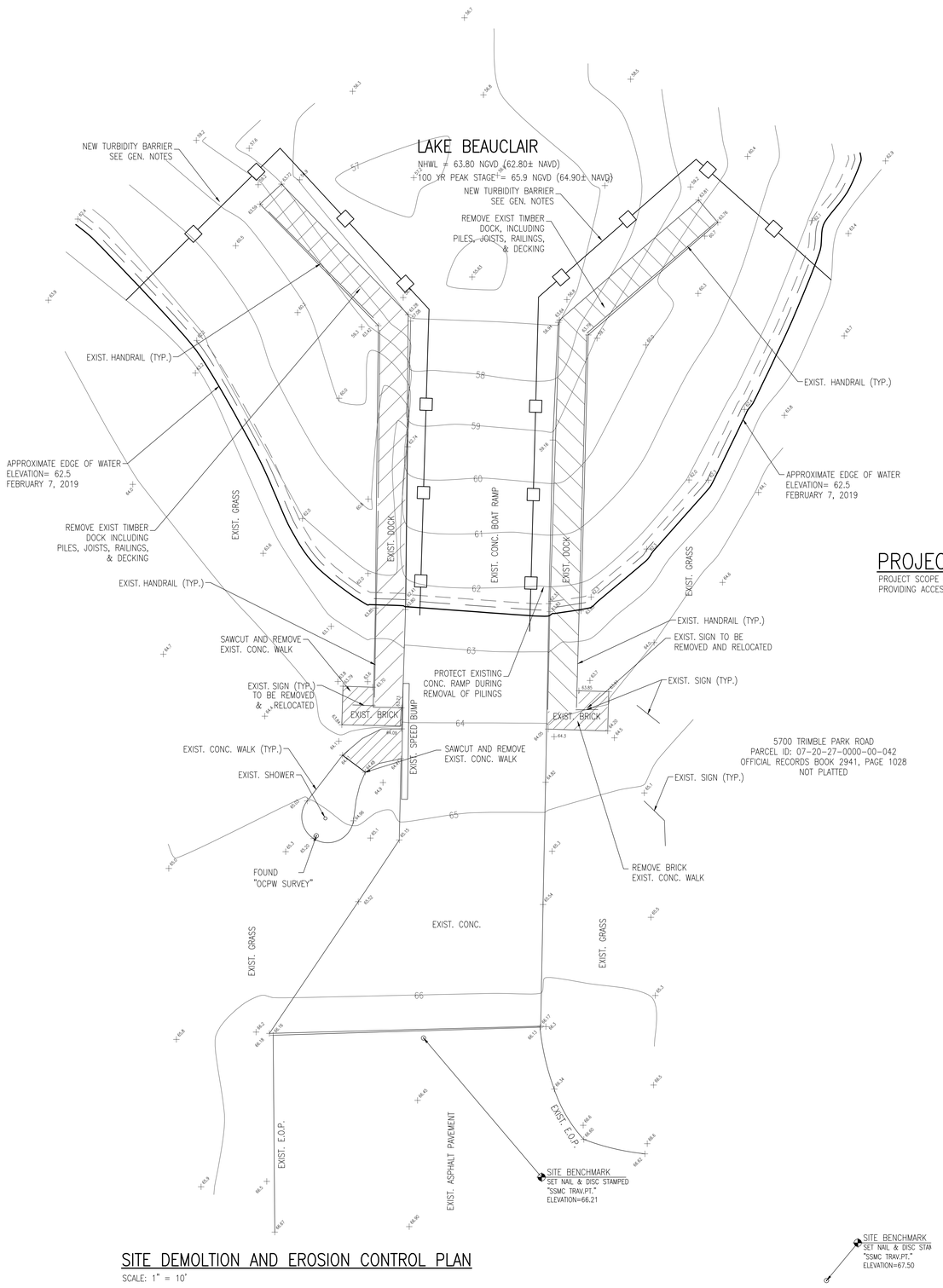
SURVEYORS

SOUTHEASTERN SURVEYING AND MAPPING CORP.
6500 ALL AMERICAN BLVD.
ORLANDO, FL 32810
(407) 292-8580

100% BID AND PERMIT SET 5-30-19

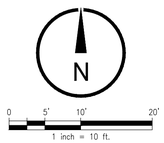
mri
ARCHITECTURAL GROUP, INC.
5032 GODDARD AVENUE
ORLANDO, FLORIDA 32804
(407) 245-3660 FAX: (407) 245-3662

URBAN DESIGN PLANNING ENGINEERING
SKConsortium, Inc.
1053 N. ORLANDO AVE. ■ SUITE 3 ● MAITLAND ▲ FLORIDA 32751
TELEPHONE 407-629-4288 ■ FACSIMILE 407-629-1656 ● EB# 7080



SITE DEMOLTION AND EROSION CONTROL PLAN

SCALE: 1" = 10'



PROJECT SCOPE:

PROJECT SCOPE CONSISTS OF REMOVAL AND REPLACEMENT OF EXISTING DOCK PROVIDING ACCESS AT THE EXISTING BOAT RAMP DUE TO DETERIORATION.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF ORANGE COUNTY, ST. JOHN RIVER WATER MANAGEMENT DISTRICT, AND FDEP NPDES CONSTRUCTION GENERIC PERMIT, 62-621.300(4)(A) FAC. BMP'S USED ON SITE MUST MEET THE MINIMUM SPECS IN THE 2013 STATE OF FLORIDA E&SC DESIGNER AND REVIEWER MANUAL.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION.
3. SOIL MATERIALS, FROM WORK ON THIS PROJECT SHALL BE CONTAINED, AND NOT ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS. THESE INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.

TEMPORARY EROSION CONTROL MEASURES

A. FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF THE PROPOSED CONSTRUCTION TO PREVENT SEDIMENTATION FROM LEAVING THE PROJECT BOUNDARIES OR DISCHARGE INTO OFF SITE DRAINAGE FACILITIES.
B. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
C. MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WHERE ORIGINALLY DESIGNED AND CONSTRUCTED.
D. CONTRACTOR SHALL PLACE FLOATING TURBIDITY BARRIERS WHERE SHOWN ON PLANS AS MIN. MEASURE TO PREVENT SOIL EROSION FROM PROJECT AREA. ALL TURBIDITY BARRIERS SHALL BE ANCHORED AS REQUIRED.

INSPECTIONS:

A. AN INSPECTOR, CERTIFIED BY ORANGE COUNTY, IS REQUIRED TO INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES SHOWN ON APPROVED STORMWATER POLLUTION PREVENTION PLAN. INSPECTION REPORTS ARE TO BE COMPLETED ON FORMS MEETING THE MINIMUM REQUIREMENTS OF CGP AND SUBMITTED ONCE EVERY WEEK AND AFTER EVERY RAINFALL OF 0.50" OR MORE DURING THE CONSTRUCTION PHASE.
B. ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOME ONE APPOINTED BY THE SUPERINTENDENT, AT LEAST ONCE A WEEK AND FOLLOWING ANY STORM EVENT OF 0.25 INCHES OR GREATER.
C. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
D. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT. TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
E. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER. ENGINEER OR ANY FEDERAL STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR AT LEAST THREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
F. PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. AND WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORTS.

GENERAL NOTES

1. SURVEY SHOWN ON THIS PLAN IS BASED ON INFORMATION PROVIDED BY SOUTHEASTERN SURVEYING AND MAPPING.
2. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF THE SITE WITHIN PROJECT LIMITS.
3. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AND IMPROVEMENTS PRIOR TO START OF CONSTRUCTION.
4. THE LOCATION/EXTENT OF EROSION CONTROL MEASURES SHOWN IS FOR INFORMATION ONLY. COORDINATE EXACT LOCATION WITH RESPECT TO LIMITS OF WORK & CONSTRUCTION PHASING.
5. UTILIZE TWO ROWS OF TURBIDITY BARRIERS WITH RIDGED FRAME BETWEEN THE TWO BARRIERS.
6. WHEN INSTALLING PILINGS, BE PREPARED TO IMPLEMENT TURBIDITY CONTROL WITHIN BARRIERS IN EVENT IF A CLAY OR MUCK LAYER IS ENCOUNTERED.
7. CONTRACTOR IS TO VIDEO RECORD EXISTING CONDITIONS AND PROVIDE A COPY OF THE RECORDING TO THE OWNER PRIOR TO THE START OF CONSTRUCTION.

SITE DEMOLITION NOTES:

1. ALL DEMOLITION AND CONSTRUCTION ACTIVITY WILL BE ACCOMPLISHED IN APPROPRIATE PHASES IN ORDER TO KEEP ACCESS TO EXISTING PARK FACILITY AND PARKING AREA. PROVIDE ADEQUATE NOTIFICATION TO OC PARKS PRIOR TO CLOSURE OF EXISTING BOAT RAMP..
2. CONTRACTOR SHALL PROVIDE A PHASING PLAN TO OCCP FOR CONSTRUCTION SEQUENCE ..
3. DISPOSAL OF ALL MATERIAL LEAVING THE SITE WILL BE ON HAUL ROUTES, AND BY METHODS AS APPROVED BY OCCP.
4. COORDINATE LOCATION OF CONTRACTOR STAGING AREA WITH OWNER CONSTRUCTION REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR SECURING CONSTRUCTION EQUIPMENT AND MATERIAL.
5. ALL PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTED UNLESS SPECIFICALLY EXEMPTED BY THE PLANS. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
6. ALL SURVEY DATA USED AND CONDITIONS ASSUMED TO BE PRESENT IN PREPARATION OF THESE PLANS WAS PROVIDED BY SOUTHEASTERN SURVEYING & MAPPING, INC. AND RECORD/AS-BUILT DOCUMENTS FOR THE EXISTING PARK PROVIDED BY OCCP.
7. CONTRACTOR SHALL CLEAN THE CONSTRUCTION AREA OF ALL DEBRIS, AGGREGATES, ETC. ALL WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
8. CONTRACTOR SHALL PROTECT EXISTING HARDSCAPE INCLUDING SIDEWALK, CONCRETE RAMP, AND OTHER IMRPOVEMENTS. DO NOT HAUL OVER UNPROTECTED HARDSCAPE.

PHASING NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE FOR VEHICLE AND PEDESTRIAN TRAFFIC WITHIN THE PROJECT AREA DURING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS BY USE OF BARRICADES, TEMPORARY WALKS, FENCING, ETC.
2. CONTRACTOR SHALL COORDINATE CONSTRUCTION PHASING WITH OWNER'S REPRESENTATIVE. CONSTRUCTION PHASING SHALL BE CONDUCTED IN A MANNER AS ACCEPTABLE TO OCCP.
3. CONTRACTOR IS RESPONSIBLE FOR SECURING THE CONSTRUCTION AREA, AND PREVENT PUBLIC ACCESS.

SITE DATA:

PARCEL ID:	7-20-27-0000-00-030
ADDRESS	5802 Trimble Park Rd, Mt Dora, FL 32757 (OC PARK)
PROJECT AREA*	0.1 AC.

DESCRIPTION:

A portion of Section 7, Township 20 South, Range 27 East, lying in Orange County, Florida.

SURVEYOR'S REPORT:

1. Vertical information shown hereon refers to a National Geodetic Survey (NGS) point with designation "GIS 0131 KAREN MCKEE", PID number AK7129 and has a published elevation of 79.26 feet North American Vertical Datum of 1988 (NAVD88).

2. Horizontal features shown on the map refer to a National Geodetic Survey point with designation "GIS 0131 KAREN MCKEE", PID number AK7129 and is relative to North American Datum of 1983 (NAD83), 2011 adjustment, State Plane Coordinate System, Florida East Zone. Distances shown are GRID distances.

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FL LIC. # AA0002264

PROJECT TITLE AND OWNERS NAME

ORANGE COUNTY TRIMBLE PARK BOAT MOORING AND DOCK REPAIRS

ORANGE COUNTY GOVERNMENT FLORIDA

100% BID AND PERMIT SET

CONSULTANTS

MAJID KALAGHCHI
FL PE 41046

SEAL AND SIGNATURE

PETER M. IKEGAMI
FL. LIC. # AR 0003065

REVISIONS

60% CONSTRUCTION DOCS 3-12-19
90% CONSTRUCTION DOCS 5-8-19
PERMIT SET 5-30-19

DRAWN BY

CHECKED BY

JOB NUMBER

SKC 1864

DATE

5-30-19

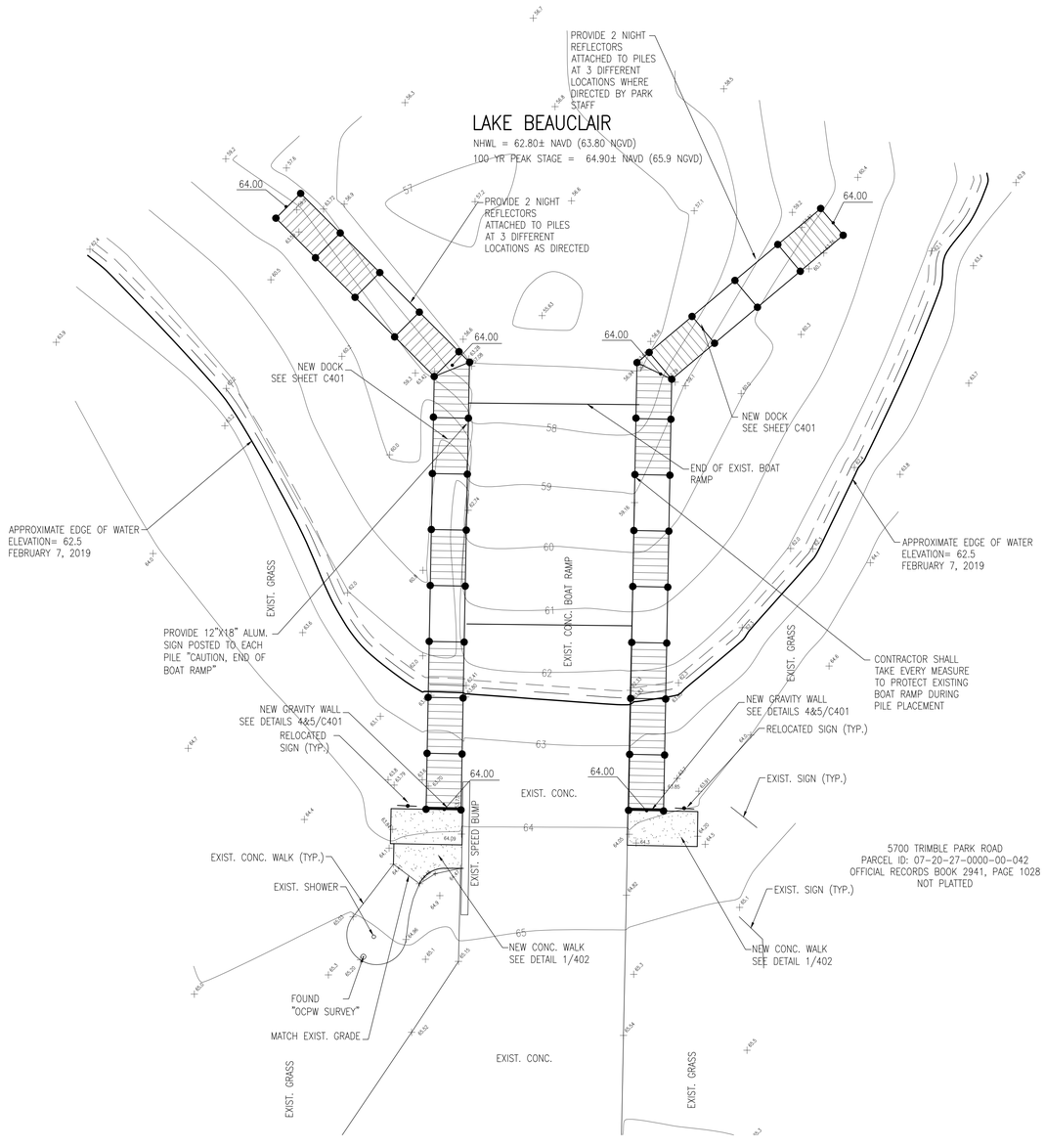
DRAWING TITLE

SITE DEMOLITION AND EROSION CONTROL PLA PLAN

DRAWING NUMBER

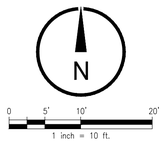
C001

SHEET OF



SITE DEVELOPMENT PLAN

SCALE: 1" = 10'



GEOMETRY NOTES

1. ALL SURVEY DATA USED AND CONDITIONS ASSUMED TO BE PRESENT IN PREPARATION OF THESE PLANS WAS PROVIDED BY SOUTHEASTERN SURVEYING.
2. THE CONTRACTOR SHALL VERIFY AND LOCATE ALL VERTICAL AND HORIZONTAL CONTROL POINTS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES SHOULD BE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SURVEYOR OF THE CONDITION IN WRITING PRIOR TO COMMENCING HIS CONSTRUCTION ACTIVITIES.
3. ALL PAVEMENT OFFSETS, RADII AND DIMENSIONS SHOWN ARE TO PROPOSED EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE GEOMETRIC DATA PROVIDED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, PRIOR TO THE INSTALLATION OF ANY IMPROVEMENTS.

GRADING AND DRAINAGE NOTES

1. ALL DISTURBED AREAS SHALL BE SODDED.
2. SEE SHEET C001 FOR EROSION & SEDIMENTATION CONTROL.
3. ALL CONSTRUCTIONS SHALL CONFORM TO AND SHALL BE INSTALLED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE ORANGE COUNTY STANDARDS UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, OR ON THE PLANS.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES AT PROPOSED CROSSINGS AND POINTS OF CONNECTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY UTILITY CONFLICTS.

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DRAWN BY

CHECKED BY

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DATE

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DRAWING TITLE

SITE DEVELOPMENT PLAN

DRAWING NUMBER

C101

SHEET OF

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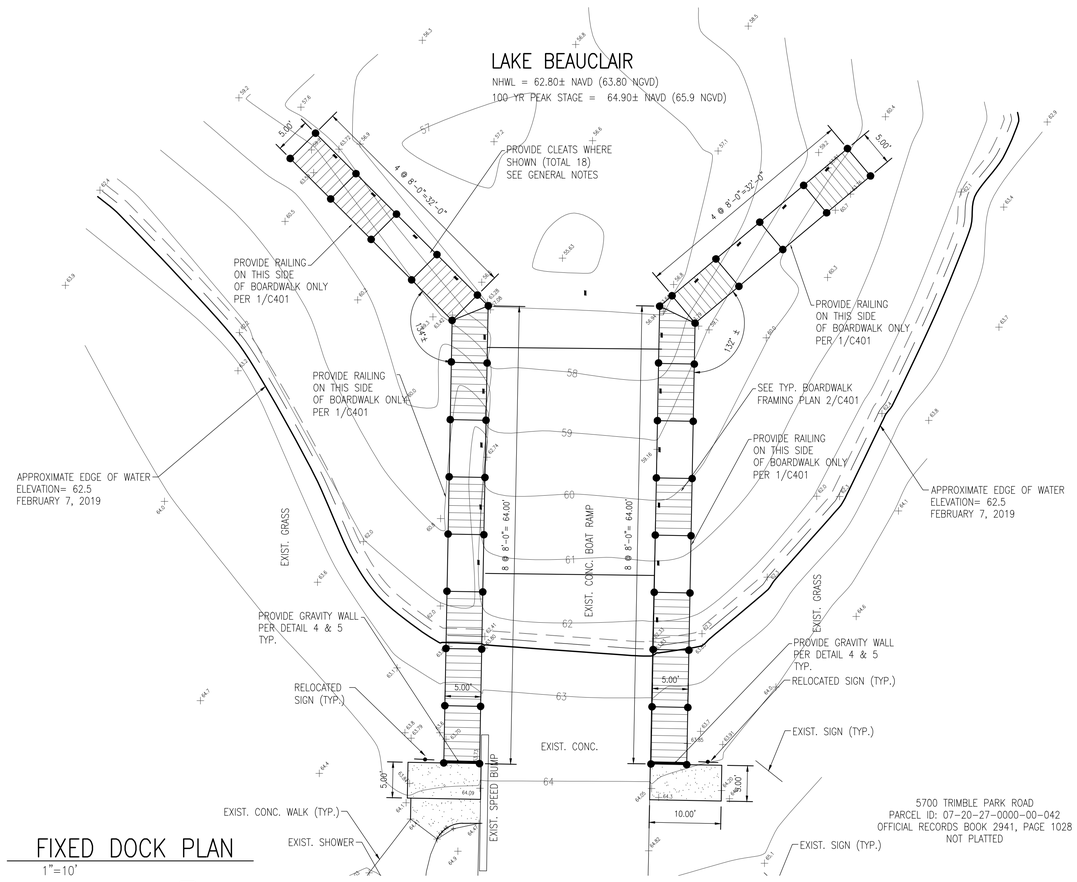
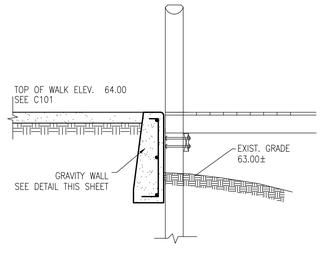
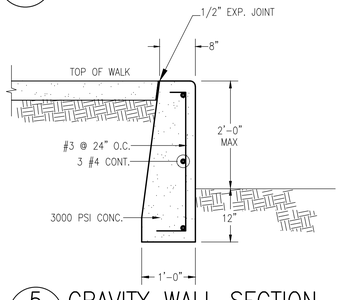


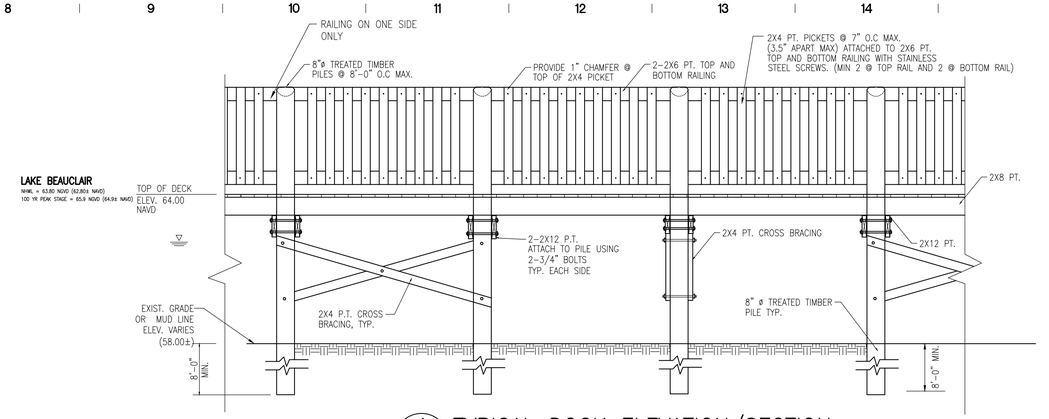
FIXED DOCK PLAN
1"=10'



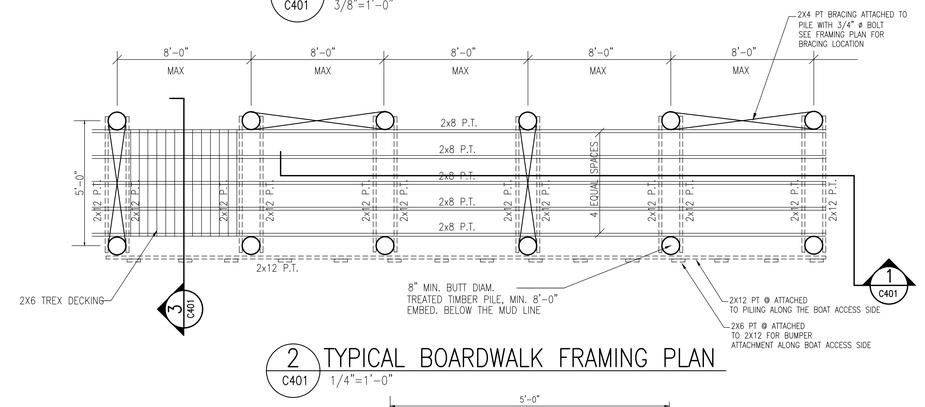
4 C401 BOARDWALK/SIDEWALK TRANSITION
3/8"=1'-0"



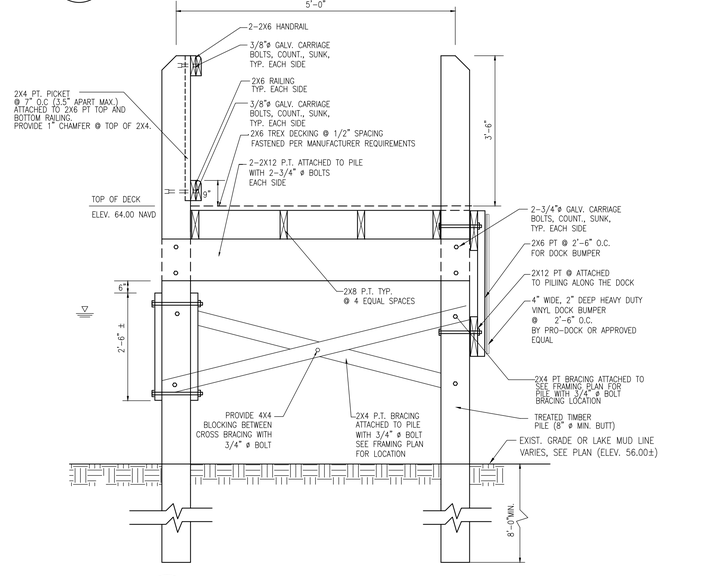
5 C401 GRAVITY WALL SECTION
3/4" = 1'-0"



1 C401 TYPICAL DOCK ELEVATION/SECTION
3/8"=1'-0"



2 C401 TYPICAL BOARDWALK FRAMING PLAN
1/4"=1'-0"



3 C401 TYP. BOARDWALK SECTION
5/8"=1'-0"

GENERAL NOTES, DESIGN LOADS FOR BOARDWALK

GENERAL NOTES

1. A PILE BEARING CAPACITY OF 2 KIPS HAS BEEN ASSUMED.
2. ALL LUMBER SHALL BE NO.2 SOUTHERN YELLOW PINE OR BETTER.
3. ALL BOLTS AND CONNECTIONS SHALL BE HOT DIPPED GALV. STEEL OR STAINLESS STEEL.
4. ALL PRESSURE TREATED LUMBER SHALL BE IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS ASSOCIATION.
5. TIMBER PILES SHALL BE TREATED IN ACCORDANCE WITH FBC 2016, SECTION 1809.1.2. PRESERVATIVE AND MINIMUM FINAL RETENTION SHALL BE IN ACCORDANCE WITH AWPA C3 FOR ROUND TIMBER PILES. PILES CUT OFFS SHALL BE TREATED IN ACCORDANCE WITH AWPA M4.
6. EACH PIECE OF LUMBER SHALL BE IDENTIFIED WITH A QUALITY MARK OR END TAG BEARING THE NAME OF THE INSPECTION AGENCY, PRODUCT CLASS, PROCESS, USE EXPOSURE AND RETENTION VALUES.
7. ALL LUMBER IN TRANSIT, STORAGE AND HANDLING SHALL BE PROTECTED FROM MOISTURE, WEATHER AND CONTAMINANTS.
8. ALL LUMBER PRODUCT SHALL BE TREATED ALKALINE COPPER QUATERNARY (ACQ) PRESERVATIVE-TREATED WOOD WITH WATER REPELLENT COMPONENT CONTAINING NO ARSENIC OR CHROMIUM IN COMPLIANCE WITH AWPA STANDARD VI RETENTION RATES SHALL BE AS FOLLOW:

   WOOD FRAMING: 0.6 PCF
   WOOD PILING: 2.5 PCF
9. DESIGN LIVE LOAD:
   PEDESTRIAN BOARDWALK, ELEVATED WALKWAY, 65 PSF
10. CONTRACTOR SHALL COORDINATE THE TOTAL LENGTH OF BOARDWALK WITH RESPECT TO MAXIMUM PILE SPACING
11. MINIMUM PILE EMBEDMENT IS 8'-0" BASED ON MINIMUM DESIGN LOAD OF 2 KIPS PER PILE AND 65 PSF LIVE LOAD.
12. CONTRACTOR IS TO VERIFY EMBEDMENT OF EXISTING PILES DURING DEMO OPERATION.

BOAT DECK CLEATS

1. PROVIDE STAINLESS STEEL CLEATS WHERE SHOWN ON PLAN, ANCHORED WITH 2-1/4" STAINLESS STEEL SCREWS TO 2X12 PT JOIST ALONG THE WATERSIDE OF THE DOCK. DESIGN BASIS IS E-RIGGING OR APPROVED EQUAL.
   VERIFY SCREW OR BOLT SIZE AND ANCHORING PER MANUFACTURER SELECTED

TREX DECKING

1. PROVIDE TREX TRANSCEND COMPOSITE DECKING PREMIUM TROPICAL BEST (2" SQ. EDGE, ACTUAL DIMENSIONS 1.375"X5.5") OR OWNER APPROVED EQUAL. ALL CONNECTIONS TO FRAMING SYSTEM SHALL MEET TREX REQUIREMENTS. COLOR SELECTED PER OWNER

HARDWARE SCHEDULE

1. CONTRACTOR SHALL VERIFY ALL COMPONENTS OF HARDWARE SCHEDULE PRIOR TO START OF CONSTRUCTION.
2. CARRIAGE BOLT
   3/8" X 10" - #BCAR-037-1000G
   3/4" X 12" - #BCAR-075-1200G
   3/4" X 14" - #BCAR-037-10000
   MANUFACTURED BY REYNOLDS OR ACCEPTED EQUAL
3. STAINLESS STEEL SCREWS
   #10, 3" SWANEZE, BY SWAN SECURE PRODUCTS INC. OR ACCEPTED EQUAL
   #8, 2 1/2" SWANEZE, BY SWAN SECURE PRODUCTS INC. OR ACCEPTED EQUAL
   THE ABOVE HARDWARE SCHEDULE IS NOT ALL INCLUSIVE OF SIZES REQUIRED FOR ASSEMBLY OF THE BOARDWALK. IT IS GIVEN FOR INFORMATION ONLY.

DESIGN LOADS

PER FLORIDA BUILDING CODE 2016 EDITION
ULTIMATE DESIGN WIND VELOCITY =140 MPH, 3 SEC. GUST
NOMINAL DESIGN WIND VELOCITY =109 MPH, 3 SEC. GUST
RISK CATEGORY II
EXPOSURE C

DESIGN LIVE LOAD: 65 PSF FOR PEDESTRAIN BOARDWALK/OVERLOOK

RAILING HAS BEEN DESIGNED FOR A UNIFORM LOAD OF 50 PLF INCLUDING TRANSFER OF THE LOAD TO THE STRUCTURE.

RAILING ASSEMBLY HAS BEEN DESIGNED TO RESIST A SINGLE CONCENTRATED LOAD OF 200 LBS APPLIED IN ANY DIRECTION AND HAVE ATTACHMENTS AND SUPPORTING STRUCTURE TO TRANSFER THIS LOAD TO THE PILING.

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MAJID KALAGHCHI
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SEAL AND SIGNATURE

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90% CONSTRUCTION DOCS 5-8-19
100% BID AND PERMIT SET 5-30-19

DRAWN BY

CHECKED BY

JOB NUMBER
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DATE
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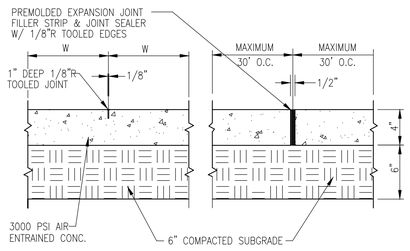
DRAWING TITLE
DOCK PLAN AND DETAILS

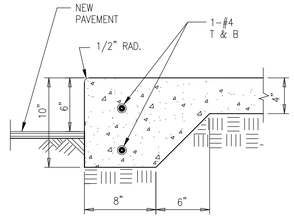
DRAWING NUMBER
C401

SHEET OF



CONTRACTION JOINT – C.J.

EXPANSION JOINT – E.J.

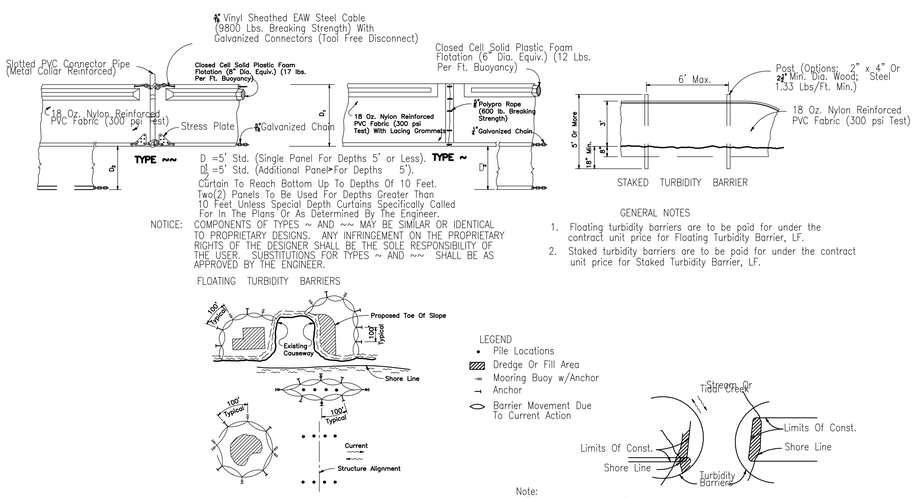


CONC. WALK – THCKND EDGE

NOTES:
1. A THICKENED EDGE SHALL BE PROVIDED BETWEEN SIDEWALK AND DRIVEWAYS OR PARKING LOT.
2. SLOPE CONC. SIDEWALKS AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE.
3. PROVIDE 2% CROSS SLOPE ON CONC. WALKS TYP.
4. PROVIDE CONTROL JOINTS @ INTERVALS EQUAL TO SIDEWALK WIDTH (W).
5. PROVIDE PREMOLDED EXPANSION JOINT WHERE CONC. WALK ABUTS BLDG., POLES, AND OTHER CONC. WALKS.
6. PROVIDE LIGHT BROOM FINISH APPLIED PERPENDICULAR TO WALK EDGES.

1 / C402 CONCRETE SIDEWALK DETAIL

1-1/2"=1'-0"



NOTICE: COMPONENTS OF TYPES ~ AND ~~ MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES ~ AND ~~ SHALL BE AS APPROVED BY THE ENGINEER.

D =5' Std. (Single Panel For Depths 5' or Less).
D1 =5' Std. (Additional Panel>For Depths 5').
Curtain To Reach Bottom Up To Depths Of 10 Feet. Two(2) Panels To Be Used For Depths Greater Than 10 Feet Unless Special Depth Curtains Specifically Called For In The Plans Or As Determined By The Engineer.

FLOATING TURBIDITY BARRIERS

GENERAL NOTES
1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.

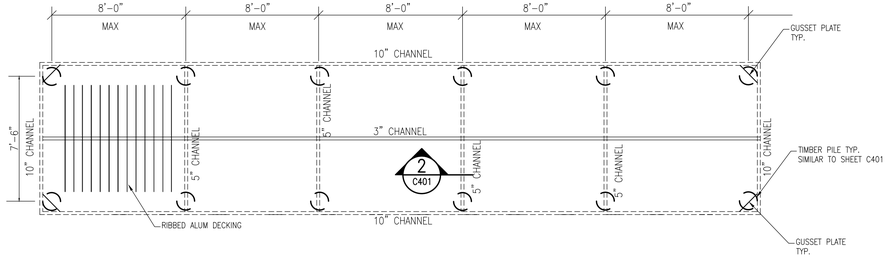
LEGEND
- Pile Locations
- Dredge Or Fill Area
- Mooring Buoy w/Anchor
- Anchor
- Barrier Movement Due To Current Action

NOTES:
1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile locations may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 104 of the Standard Specifications.

Note:
Turbidity barriers for flowing streams and tidal creeks may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Posts in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

1 / C402 TURBIDITY BARRIER APPLICATIONS

NOT TO SCALE



3 / C402 ALUM FIXED DECKING FRAMING FOR ALT BID 1

1/4"=1'-0"

NOTE
ALUM DECK FRAMING PLAN IS PROVIDED FOR INFORMATION ONLY. ALUM DOCK MANUFACTURER IS TO PROVIDE CERTIFIED SHOP DRAWINGS FOR REVIEW AND APPROVAL BY ENGINEER AND OC.

ALUM. DECKING AND SUPPORT SPECS ALTERNATE BID NO. 1

1. CONTRACTOR SHALL PROVIDE AN ALTERNATE BID TO PROVIDE FIXED ALUMINUM PIER AS AN ALTERNATE BID. THE ALUMINUM DECKING AND SUPPORT SYSTEM CAN BE SUPPORTED BY THE PROPOSED PILING SYSTEM.
2. FIXED PIER SYSTEM DESIGN BASIS IS RAVENS MARINE, INC., 407-935-9799, 800-676-3023, FAX 407-935-9436. CONTRACTOR MAY UTILIZE AN OWNER APPROVED EQUAL.
3. FIXED ALUM. PIER BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF THE ALUMINUM ASSOCIATION "SPECIFICATIONS FOR ALUMINUM STRUCTURES" FOR BUILDINGS AND SIMILAR TYPE STRUCTURES. THE INSTALLING CONTRACTOR SHALL BE A QUALIFIED MARINE CONTRACTOR OR GENERAL CONTRACTOR LICENSED BY THE APPROPRIATE GOVERNING AGENCY. HE SHALL BE CAPABLE OF SECURING BUILDING OR CONSTRUCTION PERMITS. THE MANUFACTURER/SUPPLIER SHALL HAVE A MINIMUM OF 5 YEARS CONTINUOUS EXPERIENCE IN COMMERCIAL PIER, DOCK OR GANGWAY FABRICATION AND MAY BE REQUIRED TO SUBMIT A LIST OF PREVIOUS EXPERIENCE ON SIMILAR PROJECTS.
4. PROVIDE ENGINEERING CALCULATIONS AND ENGINEER CERTIFIED SHOP DRAWINGS IN COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED HEREIN.
5. ALL CALCULATIONS WILL BE STAMPED WITH THE SEAL OF A QUALIFIED LICENSED PROFESSIONAL ENGINEER. COMPUTATION SHALL INCLUDE AS A MINIMUM, THE FOLLOWING:
   COMPLIANCE WITH COMBINED LIVE AND DEAD LOAD REQUIREMENTS CONSIDERING BOTH BENDING AND DEFLECTION.
6. ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ALLOY 6061-T6. ALLOY 6061-T6 SHALL BE EXTRUDED IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE SECTIONS OF FEDERAL SPECIFICATION QQ-A-200.
7. DOCK FENDERING SHALL BE COMPOSED OF NON-MARRING, NON YELLOWING MARINE GRADE EXTRUDED VINYL. DOCK TENDERING SHALL BE INSTALLED WITH ALUMINUM POP RIVETS ON METAL DOCKS AND ALUMINUM NAILS OR STAINLESS STEEL SCREWS ON WOOD DOCKS. FENDERS SHALL BE HEAVY DUTY.
8. CLEATS SHALL BE COMPOSED OF ALMAG 35 CAST ALUMINUM ALLOY MEETING THE REQUIREMENTS OF THE FEDERAL SPECIFICATION QQ-A-571 F AND QQ-A-601 E.
9. THE EXTRUDED RIBBED DECKING SHALL BE DESIGNED TO WITHSTAND A COMBINED DEAD LOAD AND LIVE LOAD OF 100 POUNDS PER SQUARE FOOT PER INDIVIDUAL SLAT. ALLOWABLE DEFLECTION SHALL BE U180 WHERE "L" IS THE FREESPAN BETWEEN CROSSMEMBERS IN INCHES.
10. HANDRAILS SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT ABOVE THE FINISHED WALKING SURFACE AND SHALL WITHSTAND A UNIFORM HORIZONTAL LOAD OF 20 POUNDS PER LINEAR FOOT APPLIED AT THE TOP OF THE RAIL.
11. CLEATS SHALL BE DESIGNED TO WITHSTAND A MOORING LINE LOAD OF 1500 POUNDS IN ANY DIRECTION.
12. DECKING SHALL BE EXTRUDED RIBBED ALUMINUM SLATS TO PROVIDE A NON-SKID SURFACE AND SHALL NOT EXCEED 9 INCHES IN WIDTH WITH NOT MORE THAN 3/8 INCH AIR SPACE BETWEEN THE SLATS. THE LEGS OF EACH DECKING SLAT SHALL BE WELDED TO THE SIDE MEMBERS AND TO ANY LONGITUDINALS WITH A MINIMUM OF 1-1/4 INCHES OF WELD PER LEG. THE DECKING SLATS SHALL BE PLACED TRAVERSELY ON THE GANGWAY OR DOCK.
13. HANDRAILS SHALL BE INSTALLED IN LOCATIONS SHOWN IN THE PLANS. HANDRAILS SHALL BE SECURED IN PLACE WITH TWO STAINLESS STEEL BOLTS THROUGH THE EXTRUDED HANDRAIL POCKETS WELDED TO THE SIDE OF THE STRUCTURE. HANDRAILS MAY BE WELDED TO HANDRAIL POCKETS AT THE OPTION OF THE ENGINEER.
14. CLEATS ON ALUMINUM DECKED DOCKS SHALL BE WELDED WITH A CONTINUOUS FILLET WELD.
15. THE MAIN WALKWAY WILL BE DESIGNED FOR A 100 PSF LIVE LOAD IS RECOMMENDED UNLESS APPROVED BY FLORIDA BLDG. CODE FOR LESSER LOAD.

ALTERNATIVE BID NO. 1– GENERAL REQUIREMENTS FOR ALUMINUM DECKING AND SUPPORT

1. THE DECK AND FRAME STRUCTURAL COMPONENTS OF FIXED PIERS, FLOATING DOCKS AND GANGWAYS SHALL BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF THE ALUMINUM ASSOCIATION "SPECIFICATIONSFOR ALUMINUM STRUCTURES" FOR BUILDINGS AND SIMILAR TYPE STRUCTURES. THE INSTALLING CONTRACTOR SHALL BE A QUALIFIED MARINE CONTRACTOR OR GENERAL CONTRACTOR LICENSED BY THE APPROPRIATE GOVERNING AGENCY. HE SHALL BE CAPABLE OF SECURING BUILDING OR CONSTRUCTION PERMITS. THE MANUFACTURER/SUPPLIER SHALL HAVE A MINIMUM OF 5 YEARS CONTINUOUS EXPERIENCE IN COMMERCIAL PIER, DOCK OR GANGWAY FABRICATION AND MAY BE REQUIRED TO SUBMIT A LIST OF PREVIOUS EXPERIENCE ON SIMILAR PROJECTS. TO INSURE THAT ALL SPECIFIED CRITERIA HAVE BEEN MET WHEN SUPPLYING OTHER THAN THE SPECIFIED ITEMS, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING :

2 DIMENSIONAL LAYOUT OF DOCK AND PILES OR ANCHORAGE SYSTEMS TO BE FURNISHED UNDER THIS CONTRACT.

3. ENGINEERING CALCULATIONS SHOWING COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED HEREIN.
   -ALL CALCULATIONS WILL BE STAMPED WITH THE SEAL OF A QUALIFIED LICENSED PROFESSIONAL ENGINEER. COMPUTATION SHALL INCLUDE AS A MINIMUM, THE FOLLOWING:
   -COMPLIANCE WITH COMBINED LIVE AND DEAD LOAD REQUIREMENTS CONSIDERING BOTH BENDING AND DEFLECTION.
   -COMPLIANCE WITH FREEBOARD REQUIREMENTS UNDER NORMAL LOAD CONDITIONS.

4. TYPICAL SECTIONS OR DETAILS OF THE FOLLOWING:
   -FIXED PIERS, INCLUDING PILE CONNECTORS.
   -ANCHORAGE SYSTEM.
   -DECKING MATERIAL AND CONNECTION DETAILS.
   -CLEATS – LOCATION AND CONNECTION DETAILS.
   -2.3.9FENDERING.

5. TECHNICAL REQUIREMENTS: THE FOLLOWING REQUIREMENTS ARE A MINIMUM AND MUST BE MET BY EACH DOCK FABRICATOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE MENTIONED SECTION ENTITLED GENERA L. ALTERNATE APPROVAL MUST BE IN WRITING FROM THE ENGINEER OR DESIGNATED OWNER'S REPRESENTATIVE.

MATERIALS
-ALUMINUM EXTRUSIONS FOR PIER, DOCK AND GANGWAY STRUCTURES SHALL BE ALUMINUM ALLOY 6061-T.6ALLOY 6061-T6 SHALL BE EXTRUDED IN ACCORDANCE WITH THE REQUIREMENTS OF APPLICABLE SECTIONS OF FEDERAL SPECIFICATION QQ-A-200.
-DOCK TENDERING SHALL BE COMPOSED OF NON-MARRIN,GNON YELLOWING MARINE GRADE EXTRUDED VINYL. DOCK TENDERING SHALL BE INSTALLED WITH ALUMINUM POP RIVETS ON METAL DOCKS AND ALUMINUM NAILS OR STAINLESS STEEL SCREWS ON WOOD DOCKS. OPTIONAL HEAVIER FENDERS ARE AVAILABLE.
-CLEATS SHALL BE COMPOSED OF ALMAG 35 CAST ALUMINUM ALLOY MEETING THE REQUIREMENST OF THE FEDERAL SPECIFICATION QQ-A-571F AND QQ-A-601E.
-STAINLESS STEEL BOLTS, RODS, NUTS, WASHERS, AND SCREWS SHALL BE TYPE 304.

-DESIGN REQUIREMENTS – ACCESSORIES
THE EXTRUDED RIBBED DECKING SHALL BE DESIGNED TO WITHSTAND A COMBINED DEAD LOAD AND LIVE LOAD OF 100 POUNDS PER SQUARE FOOT PER INDIVIDUAL SLAT. ALLOWABLE DEFLECTION SHALL BE U180 WHERE "L" IS THE FREESPAN BETWEEN CROSSMEMBERS IN INCHES.
HANDRAILS SHALL BE A MINIMUMOF 42 INCHES IN HEIGHT ABOVE THE FINISHED WALKING SURFACE AND SHALL WITHSTAND A UNIFORM HORZIONTAL LOAD OF 20 POUNDS PER LINEAR FOOT APPLIED AT THE TOP OF THE RAIL.
CLEATS SHALL BE DESIGNED TO WITHSTAND A MOORING LINE LOAD OF 1500 POUNDS IN ANY DIRECTION.
ALL DESIGN REQUIREMENTS FOR ACCESSORIES NOT ENUMERATED TO THE PLANS OR SPECIFICATIONS SHALL CONFORM TO THE LATEST REVISED RAVENS MARINE'S STANDARD DRAWING.
DESIGN REQUIREMENST – STRUCTURES
FIXED PIER STRUCTURES SHALL BE DESIGNED TO WITHSTAND A MINIMUM LIVE LOAD OF 50 POUNDS PER SQUARE FOOT APPLIED VERTICALLY AND AN UPLIFT FORCE OF 75 PERCENT OF THE COMBINED DEAD LOAD AND LIVE LOAD. ALLOWABLE DEFLECTIONS SHALL BE A MAXIMUM OF U180 WHERE "L" IS THE DISTANCE BETWEEN SPAN SUPPORT IN INCHES.

FABRICATION REQUIREMENTS – ACCESSORIES
DECKING SHALL BE EXTRUDED RIBBED ALUMINUM SLATS TO PROVIDE A NON-SKID SURFACE AND SHALL NOT EXCEED 9 INCHES IN WIDTH WITH NOT MORE THAN 3/8 INCH AIR SPACE BETWEEN THE SLATS. THE LEGS OF EACH DECKING SLAT SHALL BE WELDED TO THE SIDE MEMBERS AND TO ANY LONGITUDINALS WITH A MINIMUM OF 1-1/4 INCHES OF WELD PER LEG. THE DECKING SLATS SHAL BE PLACED TRAVERSELY ON THE GANGWAY OR DOCK.

HANDRAILS SHALL BE INSTALLED IN LOCATIONS SHOWN IN THE PLANS. HANDRAILS SHALL BE SECURED IN PLACE WITH TWO STAINLESS STEEL BOLTS THROUGH THE EXTRUDED HANDRAIL POCKETS WELDED TO THE SIDE OF THE STRUCTURE. HANDRAILS MAY BE WELDED TO HANDRAIL POCKETS AT THE OPTION OF THE ENGINEER.
CLEATS ON ALUMINUM DECKED DOCKS SHALL BE WELDED WITH A CONTINUOUS FILLET WELD. CLEATS ON WOOD DECKED DOCKS SHALL BE BOLTED USING STAINLESS STEEL STUDS, BOLTS AND NUTS. ALL CLEATS SHALL BE INSTALLED IN LOCATIONS SHOWN ON PLANS.
HINGE MOUNT EXTRUSION SSHALL BE WELDED TO THE FRAME OF THE DOCK WITH A CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN ON THE PLANS. FRAMING SHALL BE BRACED AT PILE GUIDES.
ANCHORING DEVICES, INCLUDING PILE GUIDES, SHALL BE BOLTED OR WELDED TO THE PIERS AND DOCKS IN LOCATIONS AND ACCORDING TO THE DETAILS SHOWN IN THE PLANS. FRAMING SHALL BE BRACED AT PILE GUIDES.
UTILITY HANGARS AND ACCESS PANELS SHALL BE MOUNTED AND LOCATED AS SHOWN IN PLANS.
– VINYL FENDER INSTALLED OVER ALUMINUM SHALL BE SECURED WITH ALUMINUM POP RIVETS AT NOT MORE THAN 6 INCH INTERVALS ALONG THE TOP AND 12 INCH INTERVALS ALONG THE BOTTOM. VINYL TENDERING INSTALLED OVER WOOD SHALL BE SECURED WITH ALUMINUM NAILS AT NOT MORE THAN 6 INCH INTERVALS ALONG THE TOP AND 12 INCH INTERVALS ALONG THE BOTTOM. HEAVY DUTY VINYL CORNER FENDERS SHAL BE INSTALLED IN THE LOCATIONS AND AS DETAILED IN THE PLANS.
– ANY POTENTIALLY CORROSIVE INSTALLATION OF DISSIMILAR MATERIALS SHALL BE PROPERLY INSULATED TO MINIMIZE OR ELIMINATE CORROSION IN A MARINE ENVIRONMENT.

FABRICATION REQUIREMENTS – STRUCTURES
FIXED PIER UNITS SHALL BE SEQUENTIALLY NUMBERED TO MATCH DRILLED AND BOLTED IN THE SHOP PRIOR TO SHIPMENT. ALL JOINTS ARE TO BE MIG WELDED EXCEPT HANDRAIL JOINTS WHICH MUST BE WELDED.

–

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PROJECT TITLE AND OWNERS NAME

ORANGE COUNTY TRIMBLE PARK BOAT MOORING AND DOCK REPAIRS

ORANGE COUNTY GOVERNMENT FLORIDA

100% BID AND PERMIT SET

CONSULTANTS

MAJID KALAGHCHI
FL PE 41046
SEAL AND SIGNATURE

PETER M. IKEGAMI
FL. LIC. # AR 0003065

REVISIONS
60% CONSTRUCTION DOCS 3-12-19
90% CONSTRUCTION DOCS 5-8-19
100% BID AND PERMIT SET 5-30-19

DRAWN BY

CHECKED BY

JOB NUMBER
SKC 1864

DATE
5-30-19

DRAWING TITLE
SITE DETAILS

DRAWING NUMBER
C402

SHEET OF