BOAT RAMP REPLACEMENT PROJECT

WEST BEACH CITY OF STAMFORD STAMFORD, CONNECTICUT



SITE VICINITY MAP

| INDEX OF DRAWINGS | | | | | |
|----------------------|-------|---------------|---|--|--|
| CATEGORY | SHEET | DRAWING TITLE | | | |
| GENERAL | 1 | G-01 | TITLE, INDEX OF DRAWINGS, LOCATION AND VICINITY MAPS | | |
| | 2 | G-02 | LEGEND AND ABBREVIATIONS | | |
| | 3 | G-03 | GENERAL NOTES | | |
| <u>CIVIL</u> | 4 | C-01 | EXISTING CONDITIONS PLAN | | |
| | 4A | C-01A | EXISTING WETLANDS AND SAV SURVEY PLAN | | |
| | 5 | C-02 | IMPROVEMENTS PLAN | | |
| | 6 | C-03 | DEMOLITION AND REMOVAL PLAN | | |
| | 7 | C-04 | BOAT RAMP PLAN | | |
| | 8 | C-05 | IMPROVEMENTS DREDGING PLAN | | |
| | 9 | C-06 | PARKING LOT IMPROVEMENTS PLAN | | |
| SECTIONS AND DETAILS | 10 | C-07 | SUGGESTED PHASING PLAN | | |
| | 11 | D-01 | ROAD WIDENING PLAN AND SECTION | | |
| | 12 | D-02 | BOAT RAMP SECTION AND PROFILE | | |
| | 13 | D-03 | PROPOSED MUDLINE SECTIONS | | |
| | 14 | D-04 | BOAT RAMP DETAILS | | |
| | 15 | D-05 | FLOATING DOCK SECTIONS AND DETAILS - 1 | | |
| | 16 | D-06 | FLOATING DOCK SECTIONS AND DETAILS - 2 | | |
| | 17 | D-07 | JETTY REPAIRS PLAN AND SECTION | | |
| | 18 | D-08 | EROSION AND SEDIMENTATION CONTROL DETAILS | | |
| | 19 | D-09 | MISCELLANEOUS DETAILS - 1 | | |
| | 20 | D-10 | MISCELLANEOUS DETAILS - 2 | | |
| | 20A | D-11 | SUGGESTED TEMPORARY COFFERDAM INSTALLATION SEQUENCE AND | | |
| | | | MINIMUM REQUIRED DEWATERING ELEVATIONS | | |



SITE LOCATION MAP

90% SUBMISSION NOT FOR CONSTRUCTION

THIS DRAWING IS HALF SIZE

| | RT Group, Inc. |
|------|---|
| ftg. | Engineered from the Ground Up SM |
| 7 | 458 Grand Avenue, Suite 213 New Haven, Connecticut 06513 |
| | T 203 823 9932 F 401 294 9806 |
| | ONT - CONSTRUCTION ENGINEERING - GEOTECHNICAL |

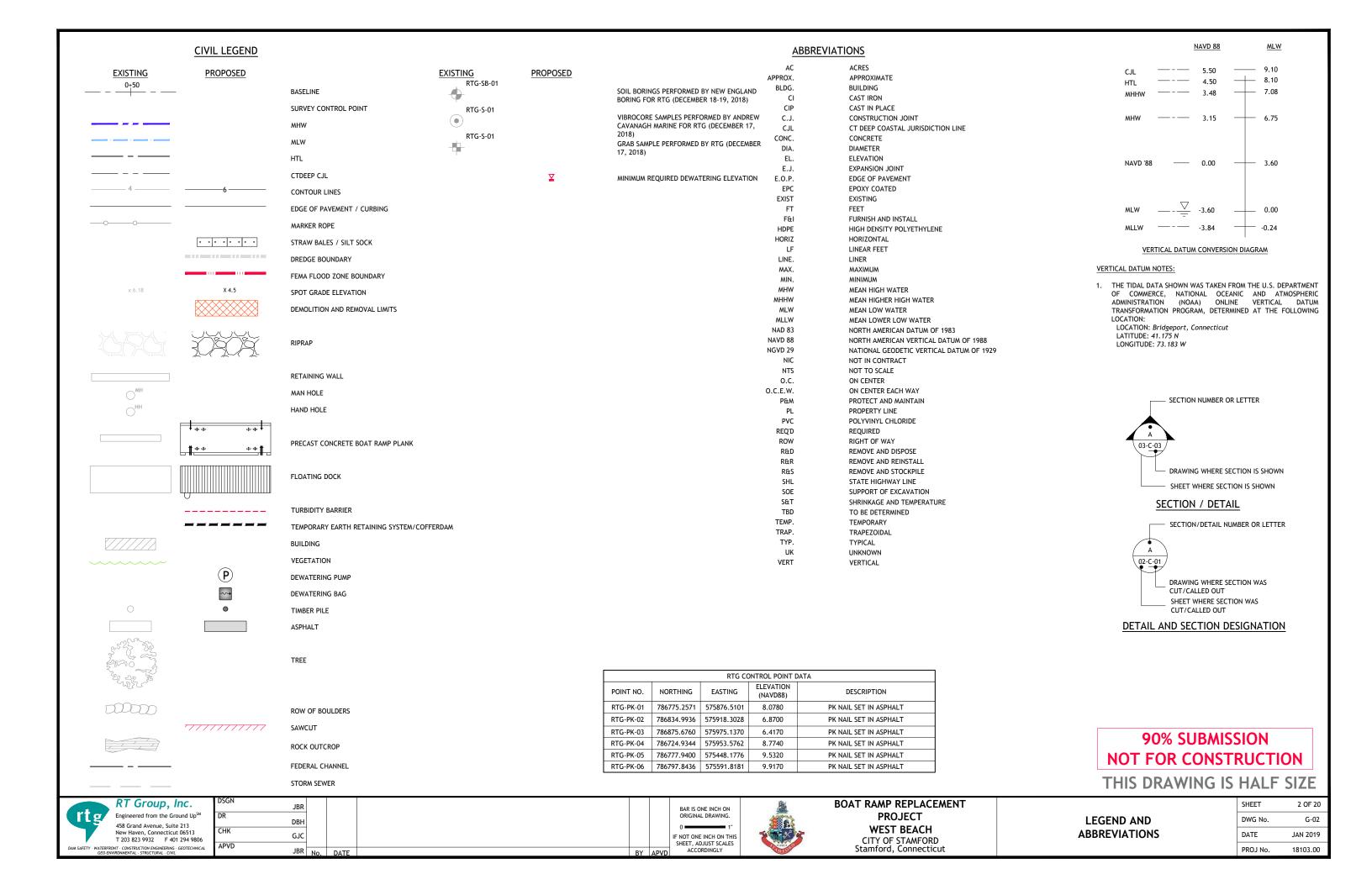
| · · · · - | JBR | No. | DATE | REVISIONS | R |
|----------------------|-----|-----|------|-----------|---|
| APVD | | | | | |
| CHK | GJC | | | | |
| DR | DBH | | | | |
| DSGN | JBR | | | | |





TITLE, INDEX OF DRAWINGS, LOCATION AND VICINITY MAPS

| | SHEET | 1 OF 20 |
|--|----------|----------|
| | DWG No. | G-01 |
| | DATE | JAN 2019 |
| | PROJ No. | 18103.00 |



〒

GENERAL NOTES:

- 1. THE UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE AND WERE OBTAINED FROM THE BEST INFORMATION AVAILABLE. THE ACTUAL LOCATION OF UTILITIES MAY VARY FROM THAT SHOWN AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF ALL UTILITIES, GRADES, AND DIMENSIONS PRIOR TO STARTING WORK
- 2. THE TOPOGRAPHIC AND BATHYMETRIC INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON SITE SURVEYS COMPLETED BY RT GROUP, INC. (RTG) ON JULY 5, 2018, JULY 19, 2018, AND AUGUST 10, 2018. A PROPERTY LINE SURVEY WAS NOT PERFORMED BY RTG.
- 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT "CALL BEFORE YOU DIG" (1-888-922-4455) A MINIMUM OF THREE (3) BUSINESS DAYS BEFORE COMMENCING WITH ANY EXCAVATION/GRADING, IN ORDER THAT ALL AFFECTED UTILITY COMPANIES ARE NOTIFIED PRIOR TO STARING WORK.
- CONSTRUCTION LIMITS COINCIDE WITHIN PROPERTY LINE LIMITS AS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE PERFORMANCE OF THE WORK. SAFETY PROVISIONS SHALL COMPLY WITH OSHA AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- 6. STANDARD SPECIFICATIONS, WHEN REFERENCED IN THESE DRAWINGS, SHALL MEAN THE CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2010 ED). PARTS OF THE STANDARD SPECIFICATIONS THAT ARE SPECIFICALLY REFERENCED SHALL BECOME PART OF THESE DRAWINGS AS THOUGH STATED HEREIN IN FULL. IN CASE OF A DISCREPANCY BETWEEN THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS STATED WITHIN THE DRAWINGS, THE REQUIREMENTS STATED WITHIN THE DRAWINGS SHALL PREVAIL.
- 7. THIS PROJECT IS OWNED AND FUNDED BY THE CITY OF STAMFORD (THE CITY). THEREFORE, SOME OF THE REFERENCES AND TERMINOLOGY OF THE STANDARD SPECIFICATIONS MAY SEEM OUT OF PLACE. THE OWNER IS THE CITY OF STAMFORD. THE ENGINEER FOR THIS PROJECT IS RT GROUP, INC. (RTG). THE CONNECTICUT DEPARTMENT OF TRANSPORTATION IS NOT A PARTY TO THE PROJECT
- 8. THE CONTRACTOR SHALL MAINTAIN AND NOT HINDER ACCESS TO WEST BEACH AND THE FEDERAL CHANNEL DURING THE PERFORMANCE OF THIS WORK
- 9. WEST BEACH IS LOCATED WITHIN A FEMA FLOOD ZONE AE AND WILL BE INUNDATED DURING THE 100 YEAR FLOOD. THE 100 YEAR FLOOD ELEVATION IS ESTIMATED AT ABOUT 14.0 FEET NAVD '88 AS SHOWN ON THE FAIRFIELD COUNTY FLOOD INSURANCE RATE MAP (FIRM) NO. 09001C0517G, COMMUNITY PANEL NUMBER 0517G, REVISED DATE: JULY 8,
- 10. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIAL, COMMENCING ANY FABRICATION, OR PERFORMING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, OF ANY CONDITIONS OR DIMENSIONS WHICH VARY FROM THOSE SHOWN IN THE DRAWINGS AND INCORPORATE SLICH VARIATIONS IN THE CONSTRUCTION AS APPROVED BY THE ENGINEER
- 11. RIGHT-OF-WAY LINES, LEASE LINES, PROPERTY LINES, AND EASEMENT LINES, WHEN SHOWN ON THESE DRAWINGS, ARE CONSIDERED APPROXIMATE.

LAYOUT WORK:

- 1. THE HORIZONTAL CONTROL DATUM FOR THIS PROJECT IS NAD '83.
- 2. THE VERTICAL CONTROL DATUM FOR THIS PROJECT IS NAVD '88.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING ALL LAYOUT WORK USING THE INFORMATION PROVIDED.

AVAILABLE SUBSURFACE INFORMATION:

- 1. IT IS INTENDED THAT SUBSURFACE INFORMATION, AS INCLUDED AND SHOWN IN THE CONTRACT DOCUMENTS, BE USED ONLY AS AN INDICATION OF POSSIBLE SUBSURFACE CONDITIONS, AND THAT UPON THE CONTRACTOR'S REVIEW, FURTHER SUBSURFACE EXPLORATIONS MAY BE WARRANTED. SUCH EXPLORATIONS SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- 2. THE CONTRACTOR SHALL USE THE SUBSURFACE INFORMATION SHOWN IN THE CONTRACT DOCUMENTS AT ITS OWN RISK AND SHALL COMPLETELY HOLD HARMLESS THE CITY AND RTG FROM ALL CONSEQUENCES AND/OR FAULT ARISING

DESIGN CRITERIA:

BOAT RAMP/PARKING LOT IMPROVEMENTS

- 1. THE PROPOSED BOAT RAMP PLANKS ARE RATED FOR HS-20 LOADING
- THE PROPOSED BOAT RAMP AND PARKING LOT IMPROVEMENTS HAVE BEEN DESIGNED TO ACCOMMODATE MOTOR BOATS UP TO 35-FEET IN LENGTH, ON TRAILERS UP TO 40-FEET IN LENGTH, AND A TOW VEHICLE (FULL SIZE PICKUP TRUCK ASSUMED) UP TO 20-FEET IN LENGTH.

FLOATING DOCK

- 1. THE FLOATING DOCK HAS BEEN DESIGNED BASED ON THE FOLLOWING DESIGN CRITERIA:
 - A. THE FLOATING DOCK SHALL HAVE A MINIMUM FREEBOARD OF ABOUT 25 INCHES UNDER ITS SELF-WEIGHT AND ABOUT 15 INCHES UNDER ITS SELF-WEIGHT AND A LIVE LOAD OF 40 PSF.

TIMBER GUIDE PILES

1. THE TIMBER GUIDE PILES HAVE BEEN DESIGNED ASSUMING THE FOLLOWING VESSEL COULD UTILIZE THE FLOATING

A. DESIGN VESSEL, L = 35', B = 13'

- WAVE FORCE = 2.0 KIPS (VESSEL MOORED BROADSIDE AND WAVE HEIGHT = 3')
- WIND FORCE = 2.0 KIPS (VESSEL MOORED BROADSIDE AND WIND VELOCITY = 50 MPH) IMPACT FORCE = 1.0 KIPS (VESSEL IMPACTS THE FLOATING DOCK AT MID-POINT AT 1 FPS)

THE ABOVE DESIGN VESSEL WILL TRANSFER AN ESTIMATED MAXIMUM LATERAL LOAD OF ABOUT 0.70 KIPS TO THE GUIDE PILES, ASSUMING A MINIMUM OF THREE (3) GUIDE PILES ARE ENGAGED UNDER ITEM

2. THE FLOATING DOCK SHALL BE DETACHED FROM THE GUIDE PILES AND MOVED TO AN UPLAND LOCATION BY THE CITY FOR CONDITIONS THAT PRODUCE LOADS GREATER THAN THOSE PRESENTED ABOVE, (E.G., SIGNIFICANT STORM EVENTS, HURRICANES, ETC.).

1. THE PROPOSED TIMBER JETTY REPAIRS ARE ASSUMED TO BE AN "IN-KIND" REPAIR DESIGNED TO MAINTAIN THE EXISTING FUNCTIONALITY OF THE TIMBER JETTY.

ALL DECKING SHALL BE SOUTHERN YELLOW PINE, GRADE NO. 2 AND ALL STRINGERS AND BLOCKING SHALL BE SOUTHERN YELLOW PINE, GRADE NO. 1, CONFORMING TO THE FOLLOWING MINIMUM ALLOWABLE STRESSES IN ACCORDANCE WITH NDS.

| ALLOWABLE STRESSES | | | | | | |
|--------------------|--------------------------------------|------------------------------|--|--|--|--|
| COMPONENT | EXTREME FIBER IN BENDING Fb (psi) | HORIZONTAL SHEAR FV (psi) | COMPRESSION PERPENDICULAR TO GRAIN Fcl (psi) | COMPRESSION PARALLEL TO GRAIN Fc (psi) | | |
| DECKING | 1,000 | 175 | 565 | 1,400 | | |
| STRINGERS | 1,050 | 175 | 565 | 1,450 | | |
| BLOCKING | 1,050 | 175 | 565 | 1,450 | | |

- ALL TIMBER DIMENSIONS SHOWN ARE NOMINAL
- 3. ALL TIMBER MATERIAL IN CONTACT WITH THE WATER SHALL BE CCA TREATED TO 2.0 PCF (MIN). ALL TIMBER IN THE SPLASH ZONE (STRINGERS, BLOCKING, AND DECKING) SHALL BE CCA TREATED TO 0.60 PCF (MI
- 4. ALL PRESSURE TREATED TIMBER THAT HAS BEEN FIELD CUT, DRESSED, AND/OR DRILLED SHALL BE COATED WITH TWO (2) COATS OF COPPER NAPTHENATE PRESERVATIVE, INCLUDING THE ENDS OF ANY SPLICED SEGMENTS.

MISCELLANEOUS METALS:

- ALL BOLTS USED IN TIMBER CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED, A307 GRADE A BOLTS. ALL THREADED ROD SHALL BE HOT-DIPPED GALVANIZED A36 STEEL.
- 2. ALL MISC. STEEL HARDWARE USED IN TIMBER CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED A36 STEEL (MIN).
- 3. DECK BOARD FASTENERS SHALL BE 4" STAINLESS STEEL DECK SCREWS (20D).

COORDINATION AND SITE CONDITIONS:

COORDINATE WITH THESE DRAWINGS AND SECTION 01040, COORDINATION AND SITE CONDITIONS

PROJECT MEETINGS:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01200, PROJECT MEETINGS.

SUBMITTALS:

COORDINATE WITH THESE DRAWINGS AND SECTION 01340, SUBMITTALS.

QUALITY CONTROL:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01400, QUALITY CONTROL.

TEMPORARY CONSTRUCTION FACILITIES:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01500, TEMPORARY CONSTRUCTION FACILITIES.

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01510. TEMPORARY UTILITIES.

TEMPORARY CONTROLS

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01560, TEMPORARY CONTROLS.

PROJECT RECORD DOCUMENTS:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 01720, PROJECT RECORD DOCUMENTS

MOBILIZATION/DEMOBILIZATION:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02005, MOBILIZATION/DEMOBILIZATION.

DEMOLITION AND REMOVAL

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02050, DEMOLITION AND REMOVAL.

- COORDINATE WITH THESE DRAWINGS AND SECTION 02200, EARTHWORK.
- 2. THE FINAL SLOPE GEOMETRY AND THE PROTECTION OF EXISTING STRUCTURES AND UTILITIES ADJACENT TO THE WORK AREA IS THE CONTRACTOR'S RESPONSIBILITY.

DREDGING AND DISPOSAL OF MATERIAL:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02203, DREDGING AND DISPOSAL OF MATERIAL.

EROSION AND SEDIMENT CONTROL:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02270, EROSION AND SEDIMENT CONTROL.

TEMPORARY EARTH RETAINING SYSTEMS AND COFFERDAMS:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02300, TEMPORARY EARTH RETAINING SYSTEMS AND COFFERDAMS.

TIMBER GUIDE PILES:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02368, TIMBER GUIDE PILES.

DEWATERING, CONTROL, AND DIVERSION OF WATER:

- COORDINATE WITH THESE DRAWINGS AND SECTION 02400, DEWATERING, CONTROL, AND DIVERSION OF WATER.
- 2. CONSTRUCTION OF THE BOAT RAMP, INCLUDING THE PLACEMENT OF ALL EARTH AND STONE MATERIALS, SHALL BE COMPLETED IN THE "DRY". UNLESS OTHERWISE ALLOWED PER SHEET 20A
- DEWATERING PUMPS SHALL BE MULTIQUIP ST3020BCUL 170 GPM ELECTRIC SUBMERSIBLE WATER PUMP OR APPROVED EQUAL. ALL PUMPS SHALL BE CAPABLE OF DRY RUNNING.
- 4. DISCHARGE LINES SHALL BE APACHE 3" PVC LAY FLAT HOSES OR APPROVED EQUAL.
- 5. THE CONTRACTOR SHALL ROUTE ALL PUMPED WATER TO DEWATERING BASINS OR OTHER SUITABLE DEVICES (E.G. DEWATERING BAGS) PRIOR TO ALLOWING THE PUMPED WATER TO OVER LAND FLOW

BITUMINOUS CONCRETE PAVEMENT:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02512, BITUMINOUS CONCRETE PAVEMENT.

LAWNS AND LANDSCAPING:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 02900, LAWNS AND LANDSCAPING.

REINFORCING STEEL:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 03200, REINFORCING STEEL.

CAST-IN-PLACE CONCRETE:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 03310, CONCRETE.

PRECAST CONCRETE STRUCTURES:

1. COORDINATE WITH THESE DRAWINGS AND SECTION 03399, PRECAST CONCRETE STRUCTURES.

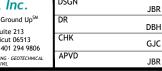
STOCKPILE MANAGEMENT:

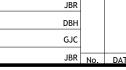
- 1. EXCAVATED MATERIAL GENERATED DURING THE EXECUTION OF THIS WORK SHALL BE STOCKPILED WITHIN THE TEMPORARY CONTAINMENT FACILITY.
- 2. THE CONTRACTOR SHALL MAINTAIN STOCKPILES AND THE AREAS AROUND THEM GRADED TO DRAIN AND TAKE ALL NECESSARY PRECAUTIONS TO MINIMIZE EROSION FROM THE STOCKPILES INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF HAY BALES OR SILT FENCE.
- 3. SOIL MATERIAL THAT MEETS THE SPECIFIED GRADATION REQUIREMENTS UNDER EARTHWORK, MAY BE STOCKPILED FOR
- EXCESS EARTH MATERIAL THAT DOES NOT MEET THE SPECIFIED GRADATION REQUIREMENTS AND/OR EXCAVATED MATERIAL IN EXCESS OF THAT REQUIRED FOR COMPLETING THIS PROJECT SHALL BE TRUCKED, UNLOADED, AND STOCKPILED AT CUMMINGS PARK AS DIRECTED BY THE ENGINEER. ALL DEMOLITION DEBRIS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS

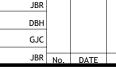


| Froup, Inc. | l | | | |
|---|---|--|--|--|
| ed from the Ground Up SM | | | | |
| d Avenue, Suite 213 en, Connecticut 06513 3 9932 F 401 294 9806 | | | | |
| CTION ENGINEERING - GEOTECHNICAL STRUCTURAL - CIVIL | | | | |









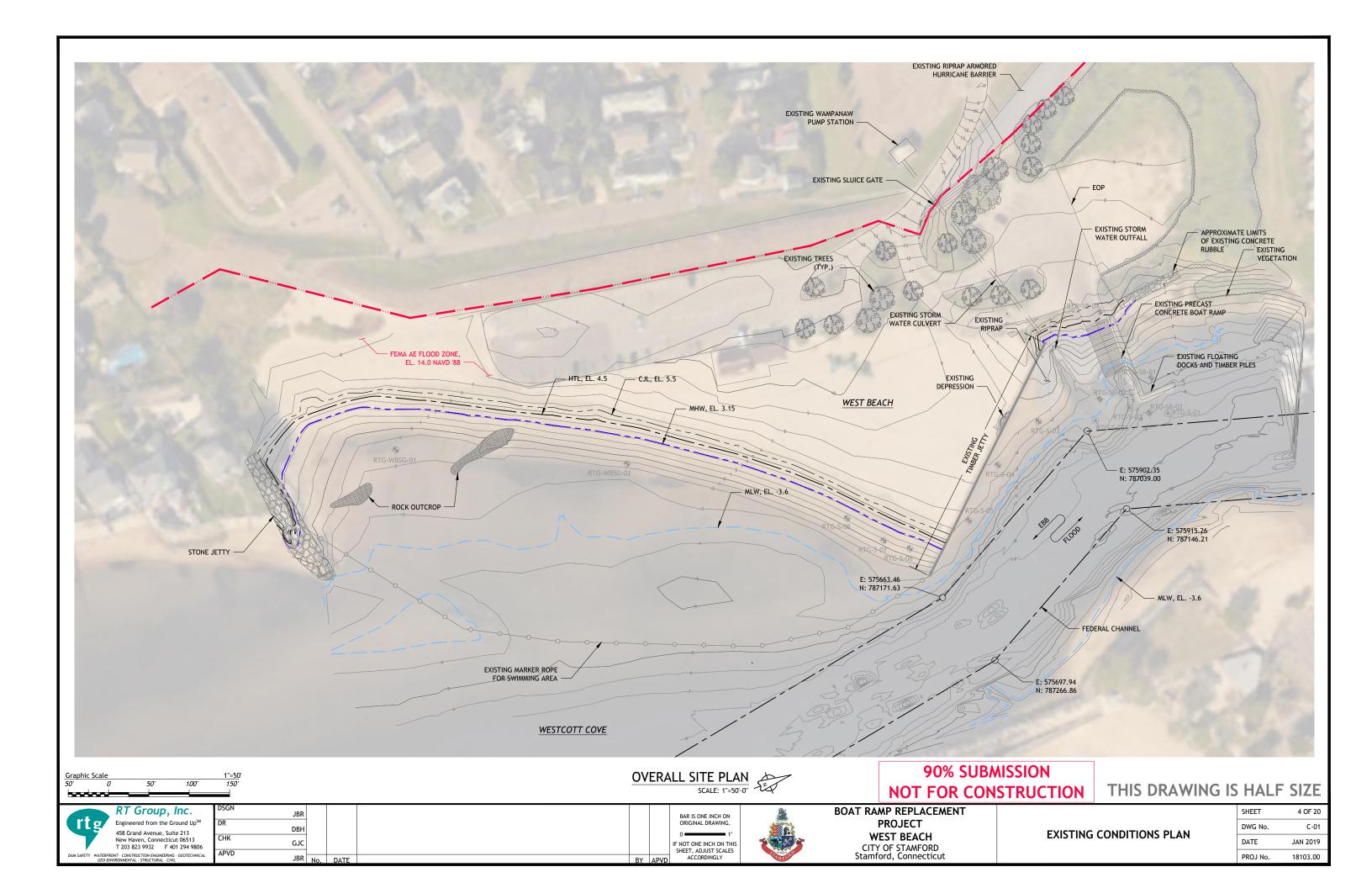


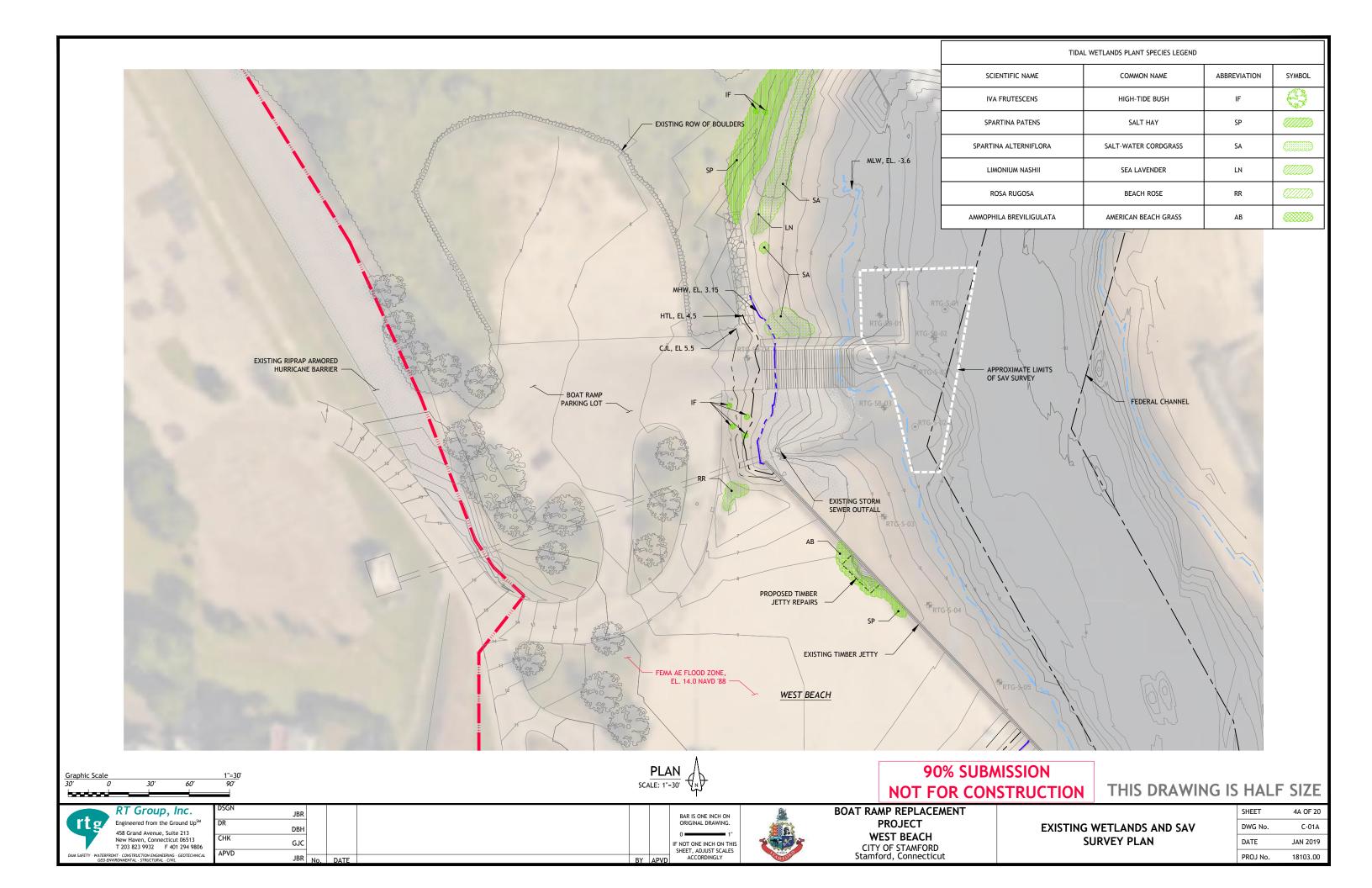


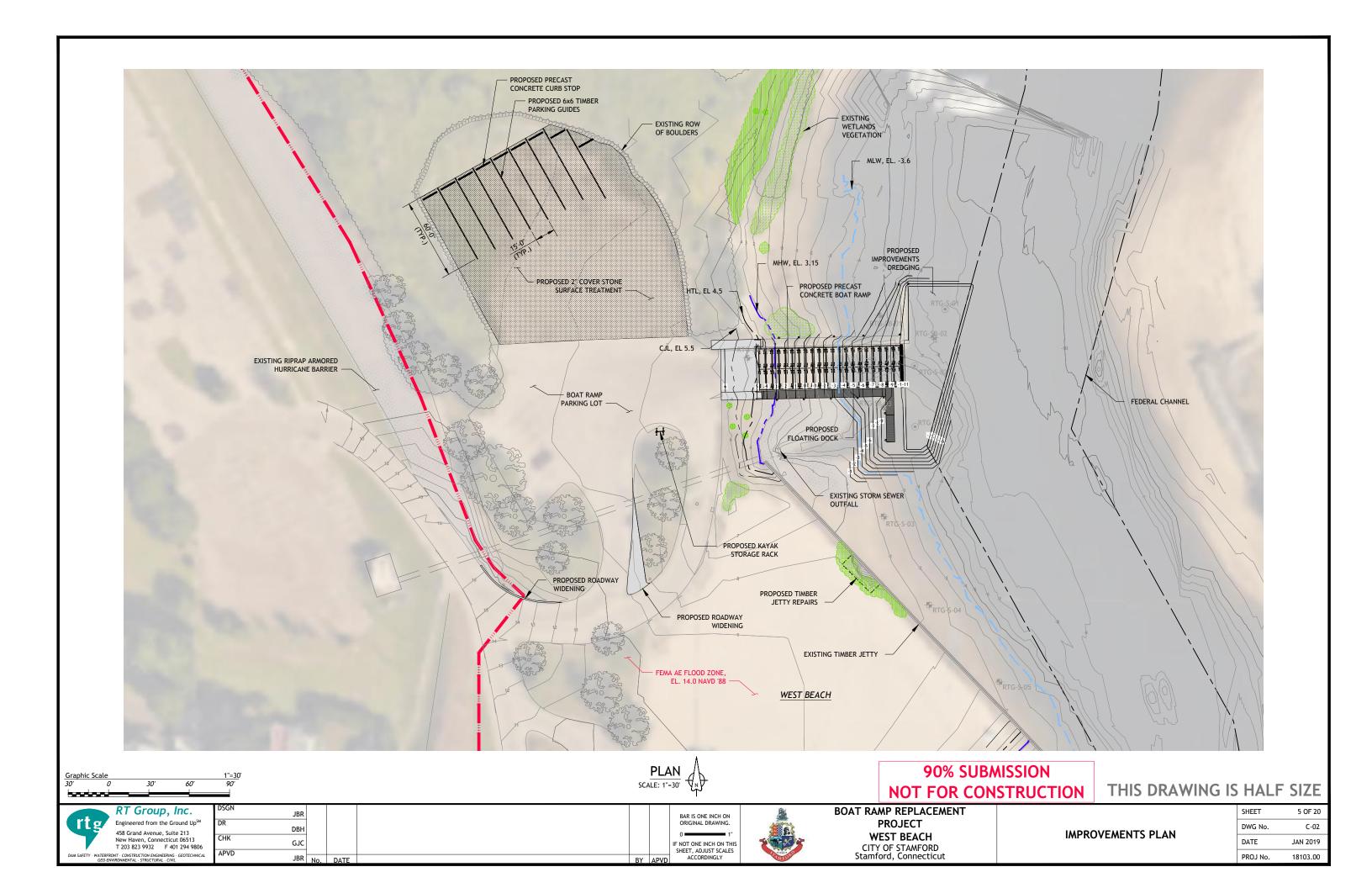
BOAT RAMP REPLACEMENT PROJECT **WEST BEACH** CITY OF STAMFORD Stamford, Connecticut

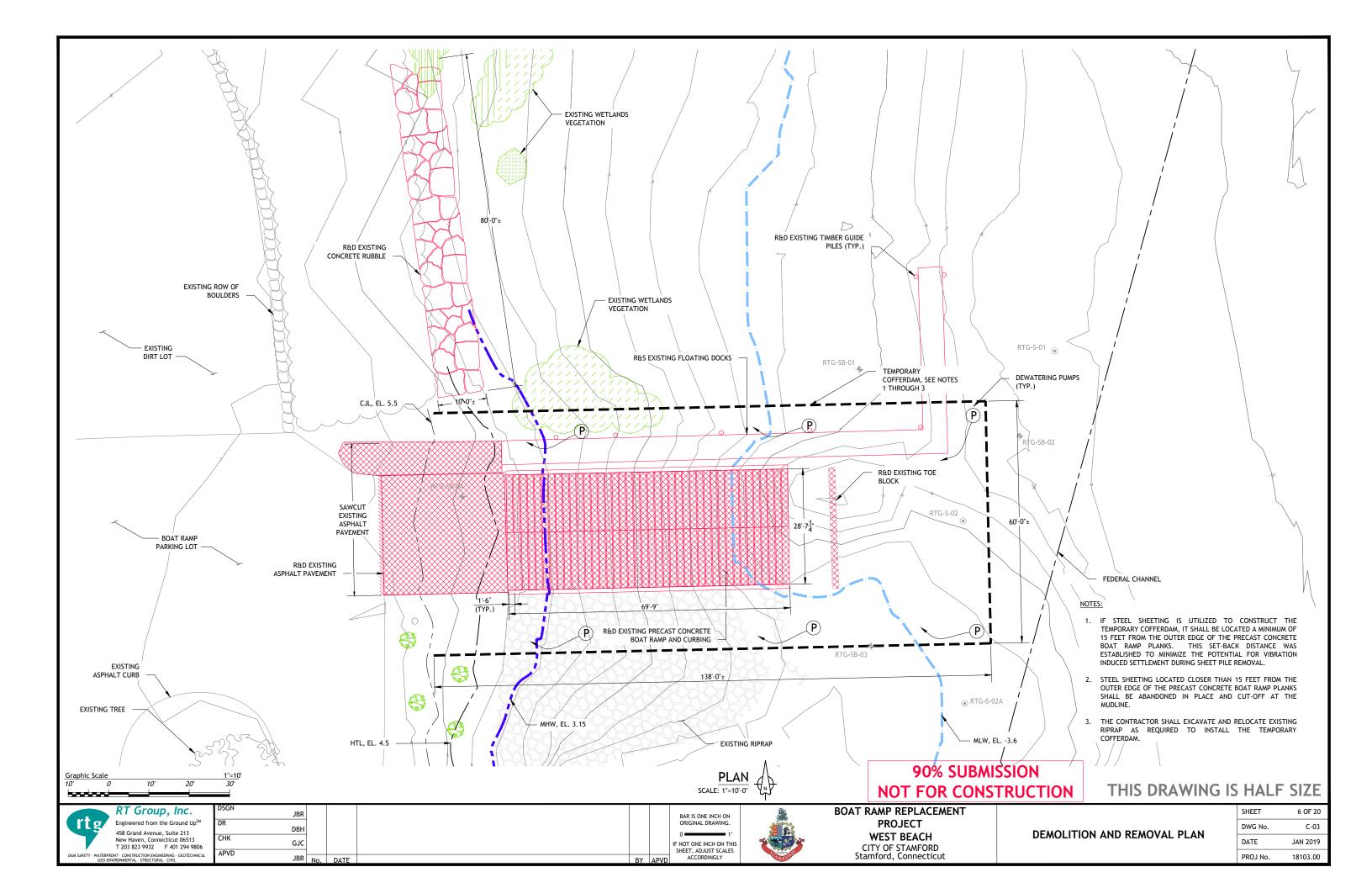
GENERAL NOTES

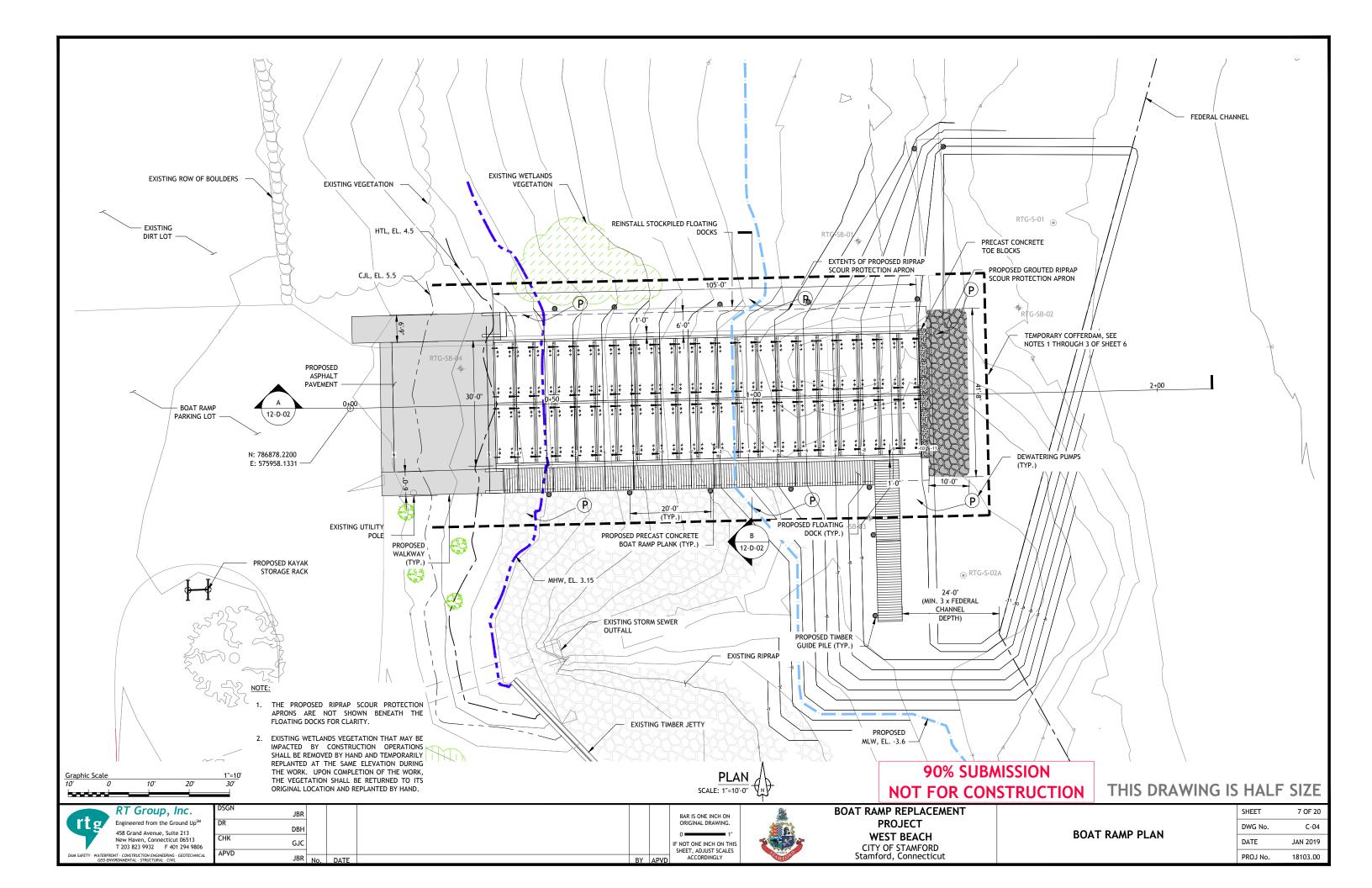
| SHEET | 3 OF 2 |
|----------|---------|
| DWG No. | G-03 |
| DATE | JAN 201 |
| PROJ No. | 18103.0 |

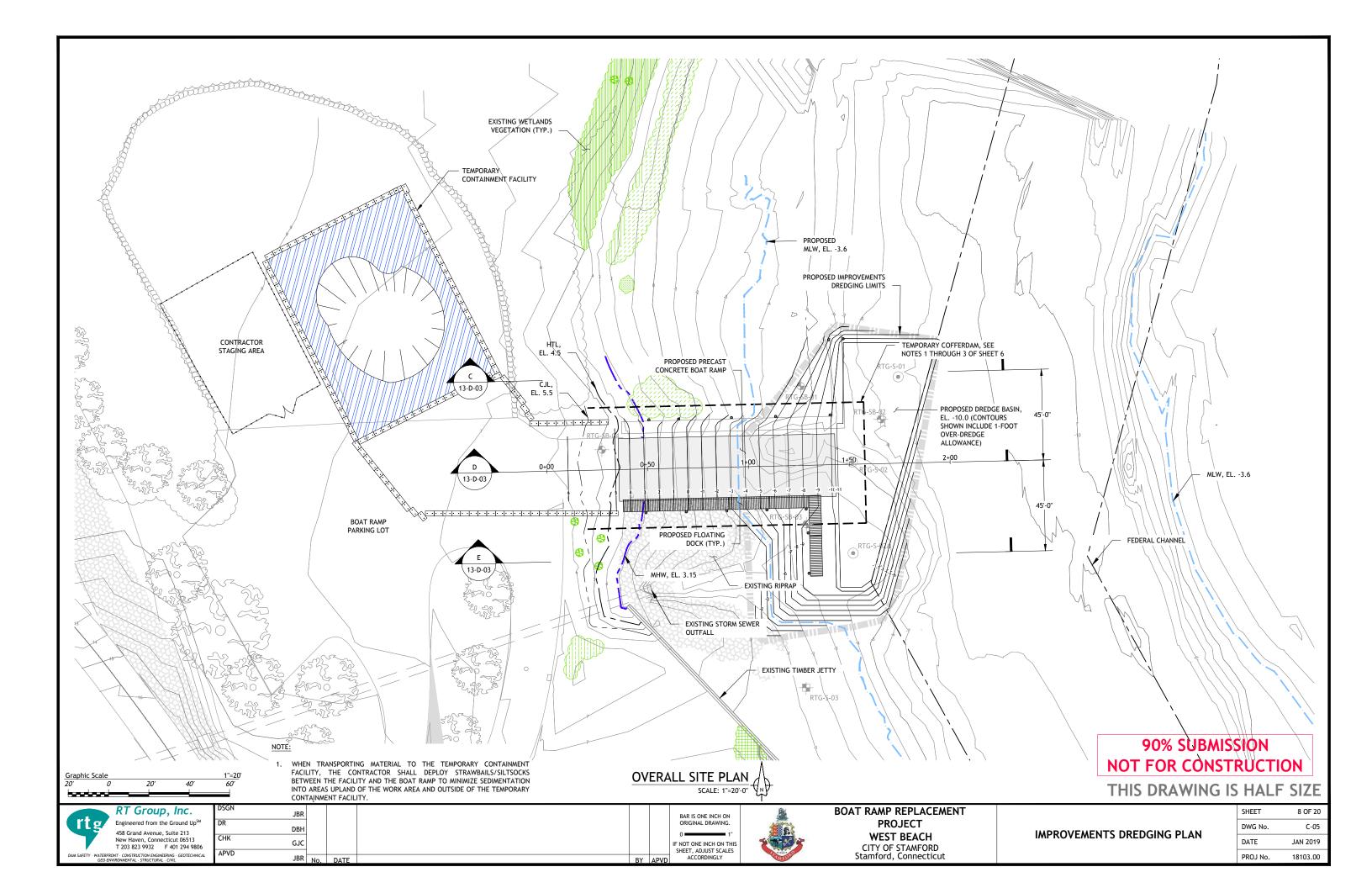


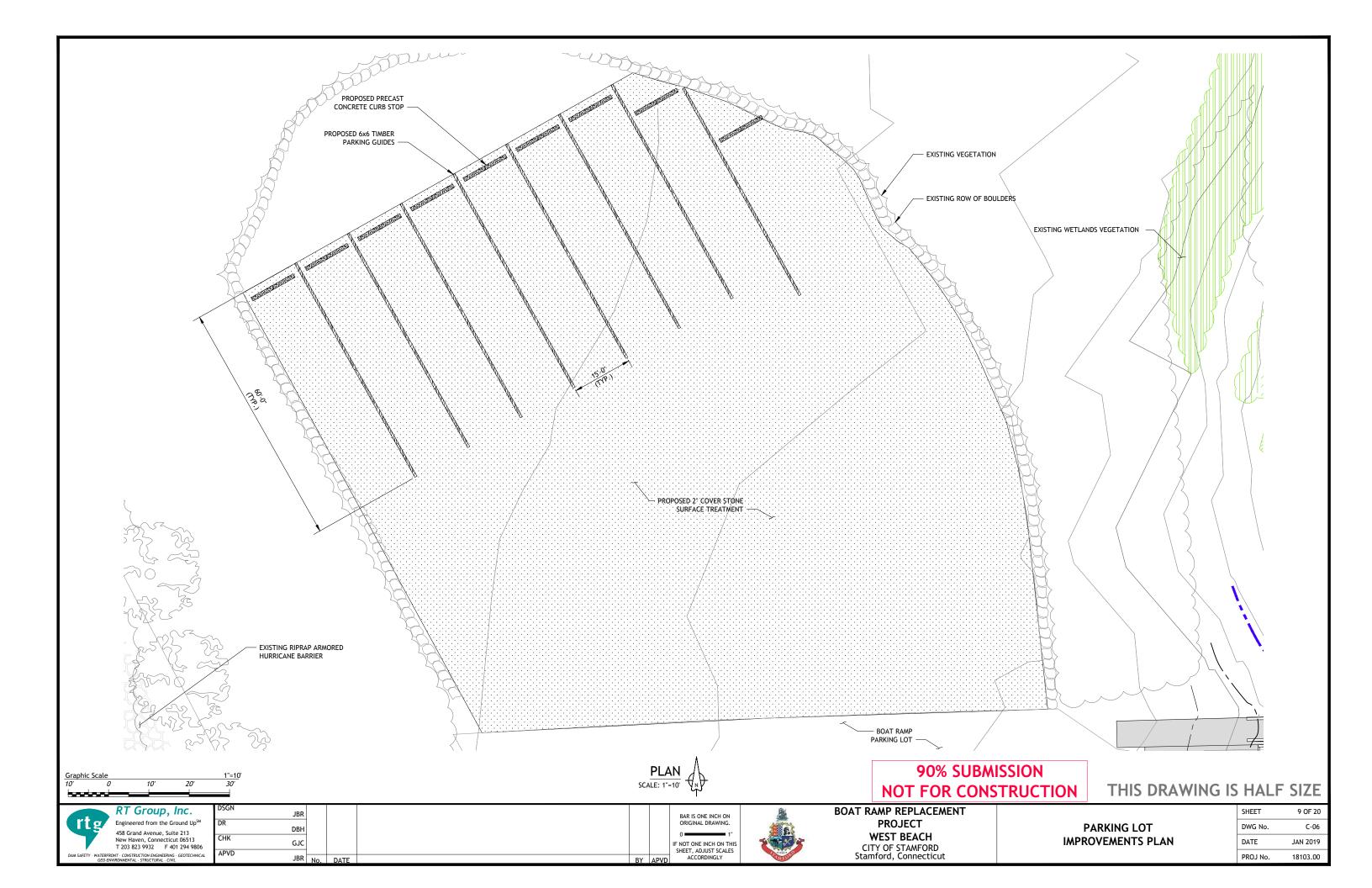


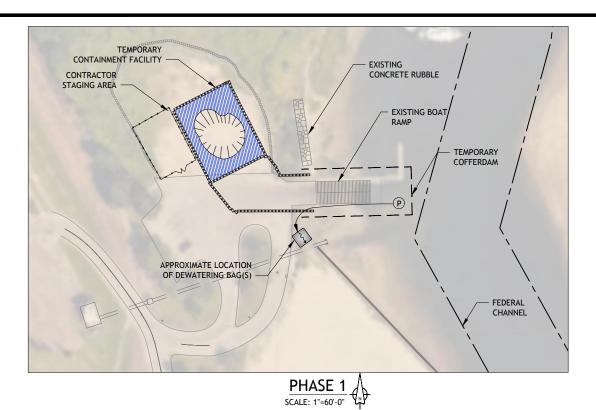




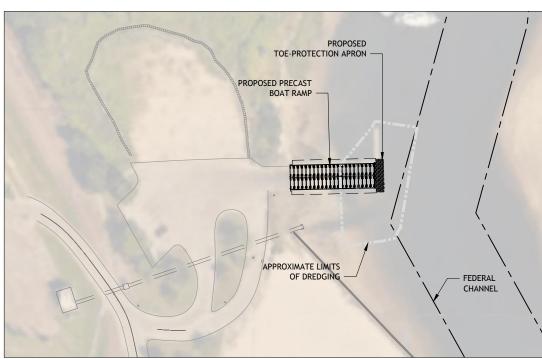






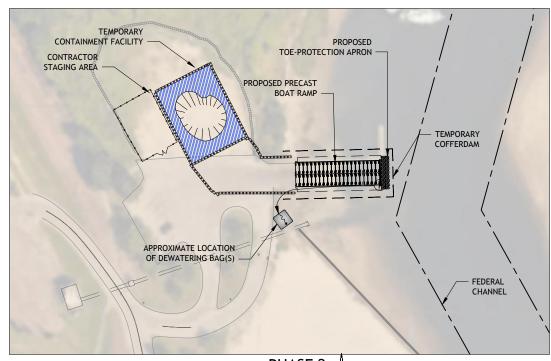


- SETUP CONTRACTOR'S STAGING AREA AND TEMPORARY CONTAINMENT FACILITY.
- R&D CONCRETE RUBBLE UPLAND OF WETLANDS.
- R&S EXISTING FLOATING DOCKS AND R&D TIMBER GUIDE PILES.
- F&I TEMPORARY COFFERDAM.
 DEWATER TEMPORARY COFFERDAM.





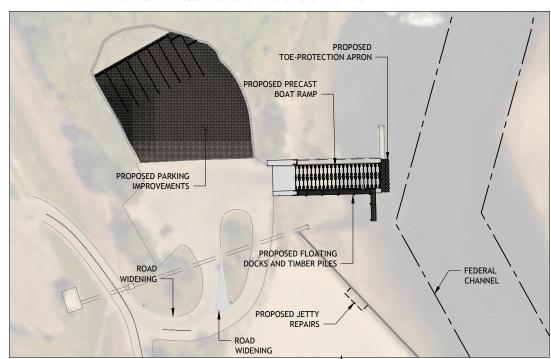
- COMPLETE REMAINDER OF IMPROVEMENTS DREDGING.
- REMOVE TEMPORARY COFFERDAM.
 TRANSPORT STOCKPILED MATERIAL TO CUMMINGS PARK FOR CONSTRUCTION OF LANDSCAPE FEATURES.
- REMOVE THE TEMPORARY CONTAINMENT FACILITY.



PHASE 2

- R&D EXISTING BOAT RAMP.
- 1. RED EXISTING BOAT RAMP.
 2. EXCAVATE AND PREPARE SUBGRADE.
 3. INSTALL GEOTEXTILE FABRIC, CRUSHED STONE, GEOGRID, AND TOE BLOCKS.
 4. F&I RIPRAP SCOUR PROTECTION APRON AT THE TOE OF RAMP.
 5. F&I PRECAST BOAT RAMP PLANKS.

- 6. F&I RIPRAP SCOUR PROTECTION APRONS ALONG THE SIDES OF RAMP.



PHASE 4 SCALE: 1"=60'-0"

- 1. REINSTALL STOCKPILED FLOATING DOCKS AND INSTALL NEW TIMBER
- GUIDE PILES.

 2. F&I NEW TIMBER GUIDE PILES AND FLOATING DOCKS.
- 3. F&I APPROACH PAVEMENT.
- 4. COMPLETE REMAINING IMPROVEMENTS AND DEMOBILIZE.

90% SUBMISSION **NOT FOR CONSTRUCTION**

THIS DRAWING IS HALF SIZE



120

Graphic Scale

JBR DBH GJC JBR No

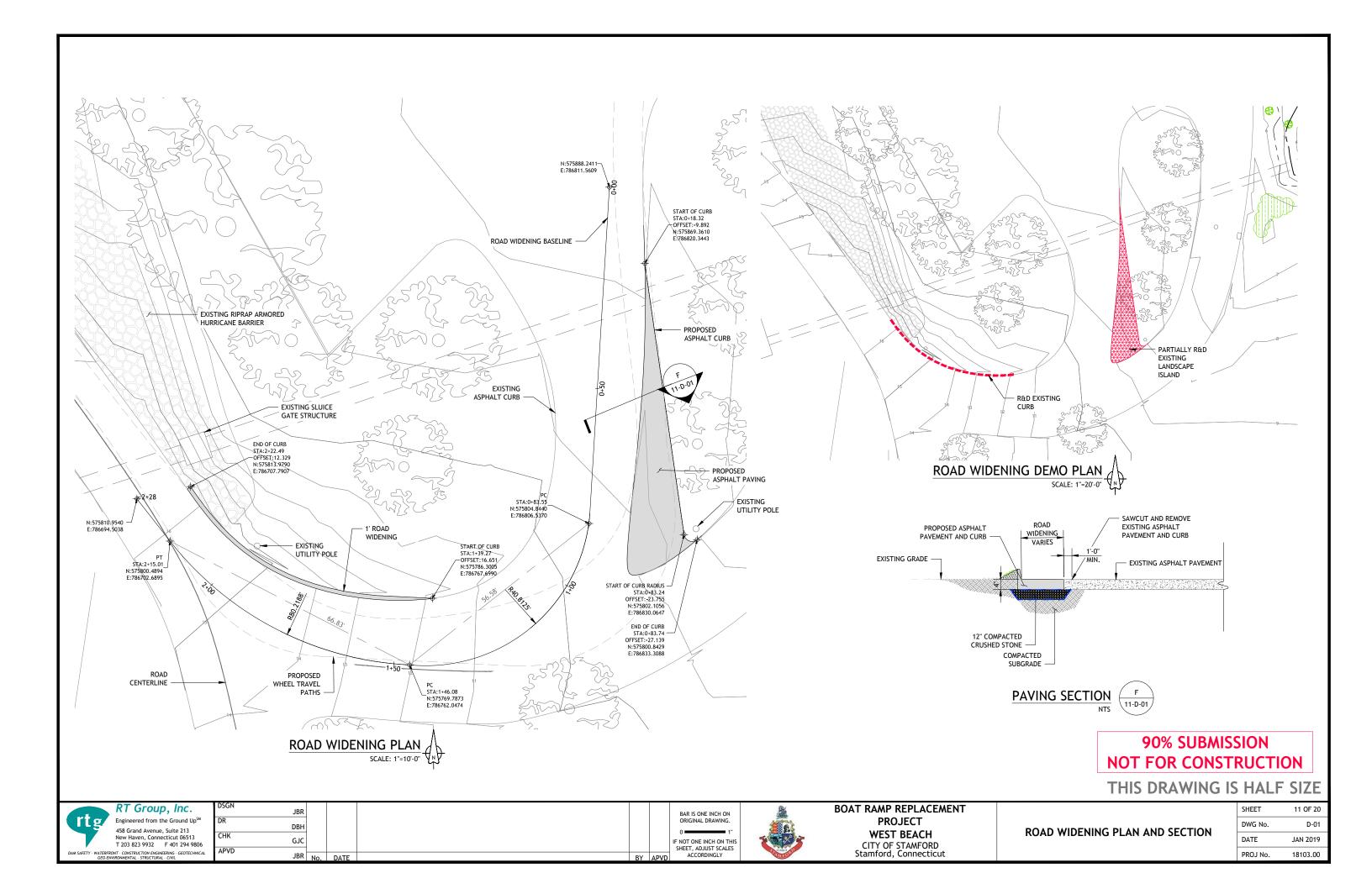
BAR IS ONE INCH ON F NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

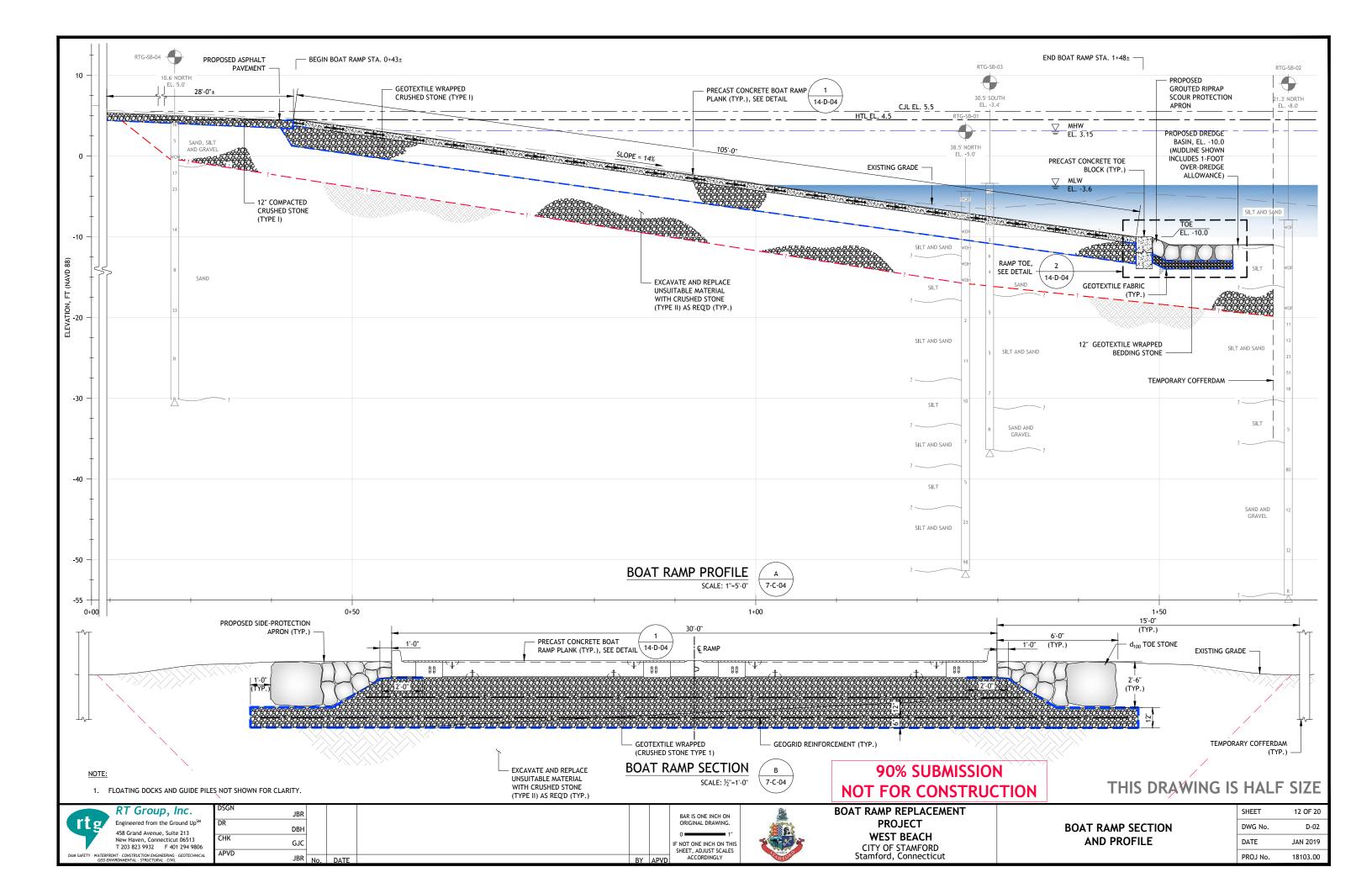


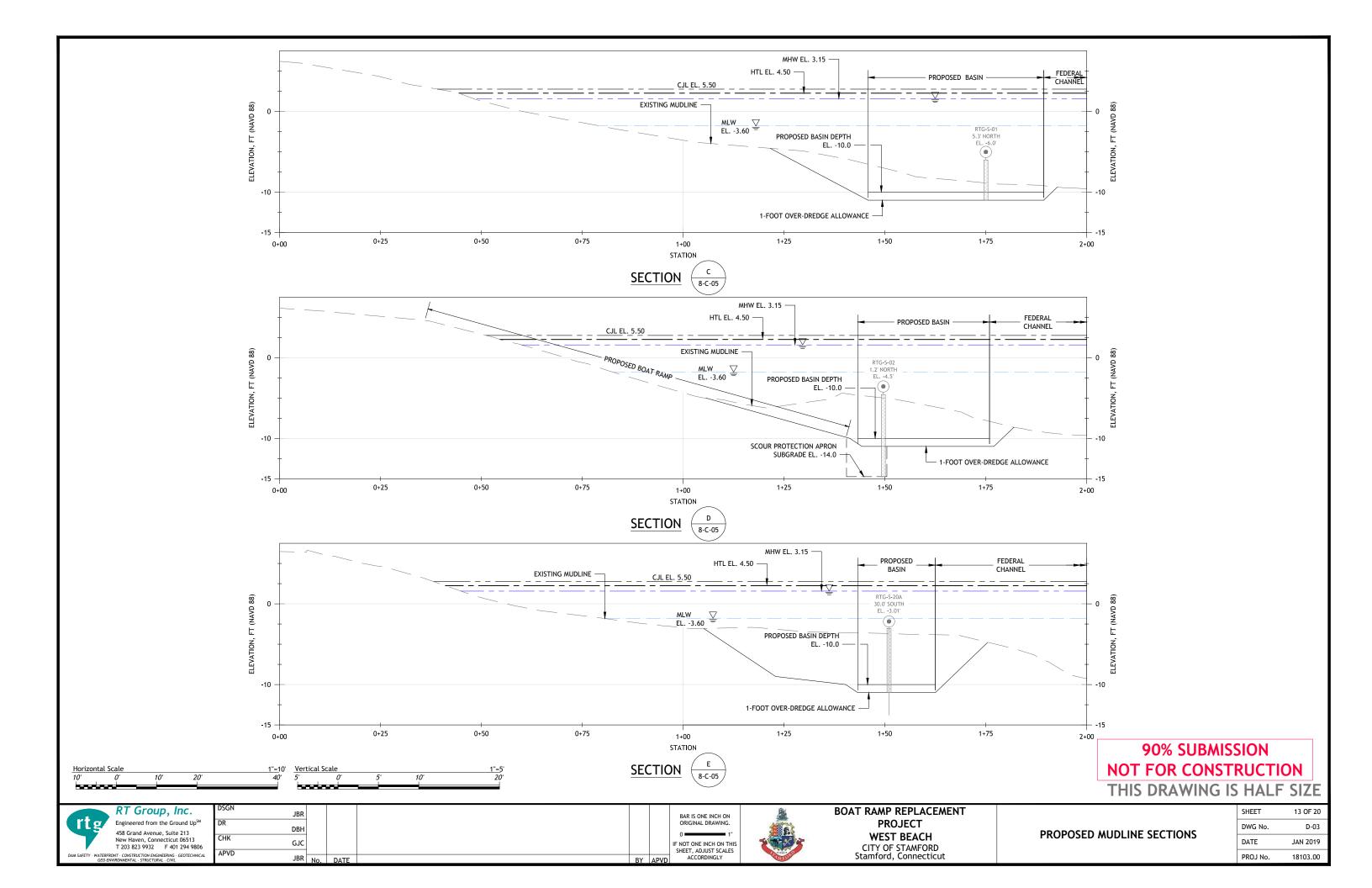
BOAT RAMP REPLACEMENT PROJECT WEST BEACH CITY OF STAMFORD Stamford, Connecticut

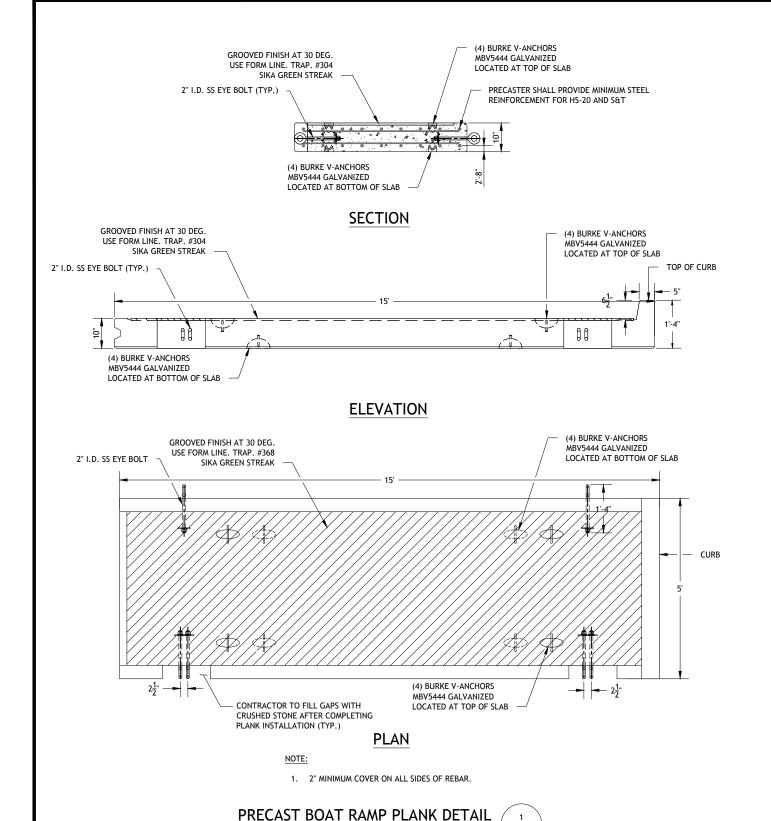
SUGGESTED PHASING PLAN

| SHEET | 10 OF 20 |
|----------|----------|
| DWG No. | C-07 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |









PRECAST CONCRETE BOAT PROPOSED PRECAST CONCRETE TOE RAMP PLANK BLOCK (TYP.) d₈₅ STONE — $-\frac{3}{4}$ " CHAMFER (TYP.) PROPOSED TOP OF APRON
 EL. -11.0 PROPOSED GROUTED RIPRAP SCOUR PROTECTION APRON SHEAR KEY GEOTEXTILE WRAPPED CRUSHED 2'-0" STONE (TYPE I) (TYP.) 12" GEOTEXTILE WRAPPED BEDDING STONE - EXCAVATE AND REPLACE GEOTEXTILE FABRIC UNSUITABLE MATERIAL WITH CRUSHED STONE (TYPE II) AS REQ'D (TYP.)

NOTE:

1. RIPRAP FOR GROUTED SCOUR PROTECTION APRON SHALL BE 24" FLAT LAID STONES.



90% SUBMISSION NOT FOR CONSTRUCTION

THIS DRAWING IS HALF SIZE

RT Group, Inc.
Engineered from the Ground UpSM
458 Grand Avenue, Suite 213
New Haven, Connecticut 06513
T 203 823 9932
F 401 294 9806
DAM SAFTY: WATERFRONT: CONFINITION INCOMPRISING: GEOTECHNICAL

| DSGN | JBR | | |
|------|-----|-----|------|
| DD | JDK | | |
| DR | DBH | | |
| СНК | | | |
| | GJC | | |
| APVD | | | |
| · | JBR | No. | DATE |

SCALE: 3/4"=1'-0"

12-D-02

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1" 1"

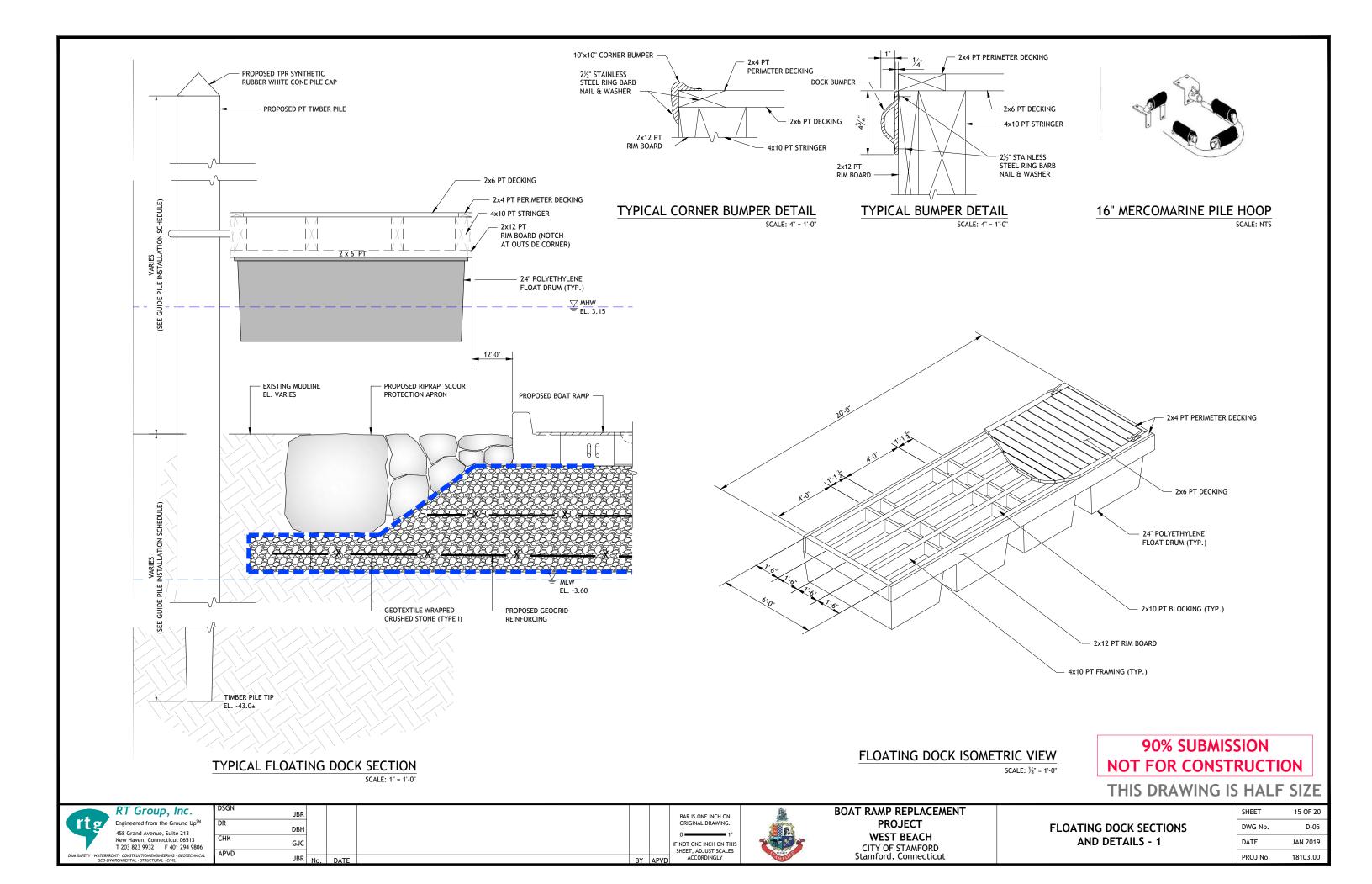
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

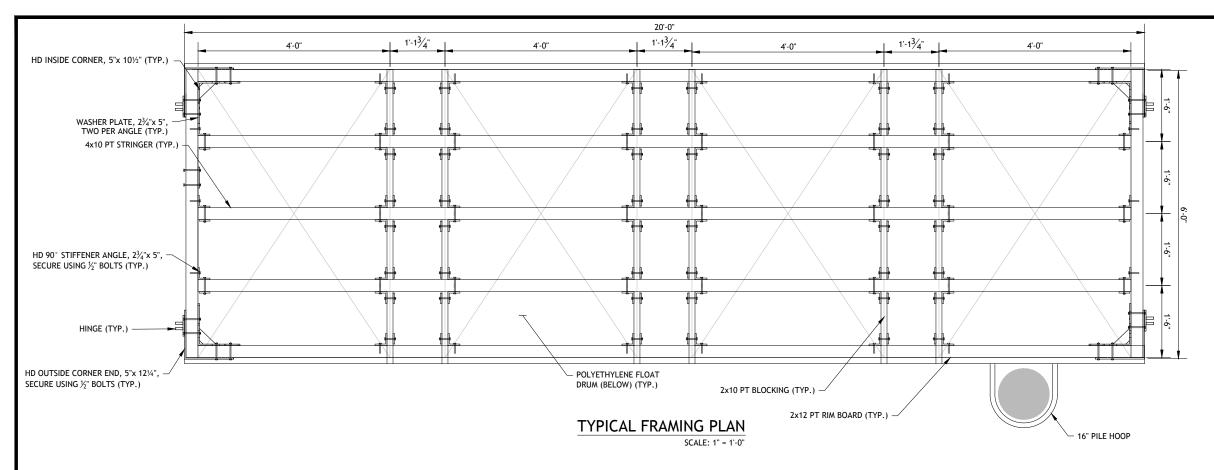


BOAT RAMP REPLACEMENT
PROJECT
WEST BEACH
CITY OF STAMFORD
Stamford, Connecticut

BOAT RAMP DETAILS

| SHEET | 14 OF 20 |
|----------|----------|
| DWG No. | D-04 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |





4x10 PT STRINGER BELOW

MALLEABLE IRON CLEAT

 $\frac{3}{8}$ " Ø, 16" LONG HEX HEAD BOLT (2 PER CLEAT)

2x6 PT DECKING

SCALE: 4" = 1'-0"

10" HOT DIPPED GALV. 2x4 PT PERIMETER DECKING

2x6 PT DECKING

RIM BOARD (NOTCH AT OUTSIDE CORNER)

4x10 PT STRINGER

POLYETHYLENE

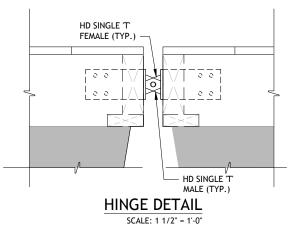
FLOAT DRUM (TYP.)

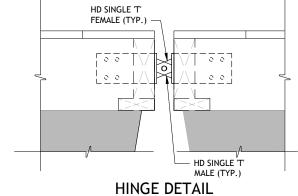
½"x6" GALV. LAG BOLT

2x12 PT

NOTES:

- 1. FLOATING DOCK HARDWARE BY FOLLANSBEEDOCKS.COM OR APPROVED EQUAL.
- 2. PILE GUIDES, CLEATS, AND BUMPERS BY MERCOMARINE.COM AND CUSTOMFLOAT.COM OR APPROVED EQUAL.
- 3. 2x6 PT TIMBER DECKING AND 2x6 PT FLOAT ATTACHMENT BOARDS NOT SHOWN ON FRAMING PLAN FOR CLARITY.
- 4. POLYETHYLENE FLOAT DRUMS BY PERMAFLOATS.COM, MODEL NO. DF-C-48072-24, OR APPROVED EQUAL.







THIS DRAWING IS HALF SIZE

RT Group, Inc. Engineered from the Ground UpSM 458 Grand Avenue, Suite 213 New Haven, Connecticut 06513 T 203 823 9932 F 401 294 9806

FOR 3/8" HEX

33/4"

10" CLEAT DETAIL

SCALE: 4" = 1'-0'

JBR DBH GJC JBR No

CLEAT CONNECTION - DETAIL

2x12 PT RIM BOARD BELOW

16-D-06

13/4"

1.25" x 4.70" RUBRAIL



FLOAT DRUM

SCALE: 2" = 1'-0"

CONNECTION DETAIL

2 x 6 PT

BOAT RAMP REPLACEMENT PROJECT WEST BEACH CITY OF STAMFORD Stamford, Connecticut

SECTION /

SCALE: 4" = 1'-0" \ 16-D-06

2 x 4 PT PERIMETER DECKING

2 x 6 PT DECKING

- 3/8" Ø, 16" LONG HEX HEAD BOLT (2 PER CLEAT)

(COLOR: WHITE)

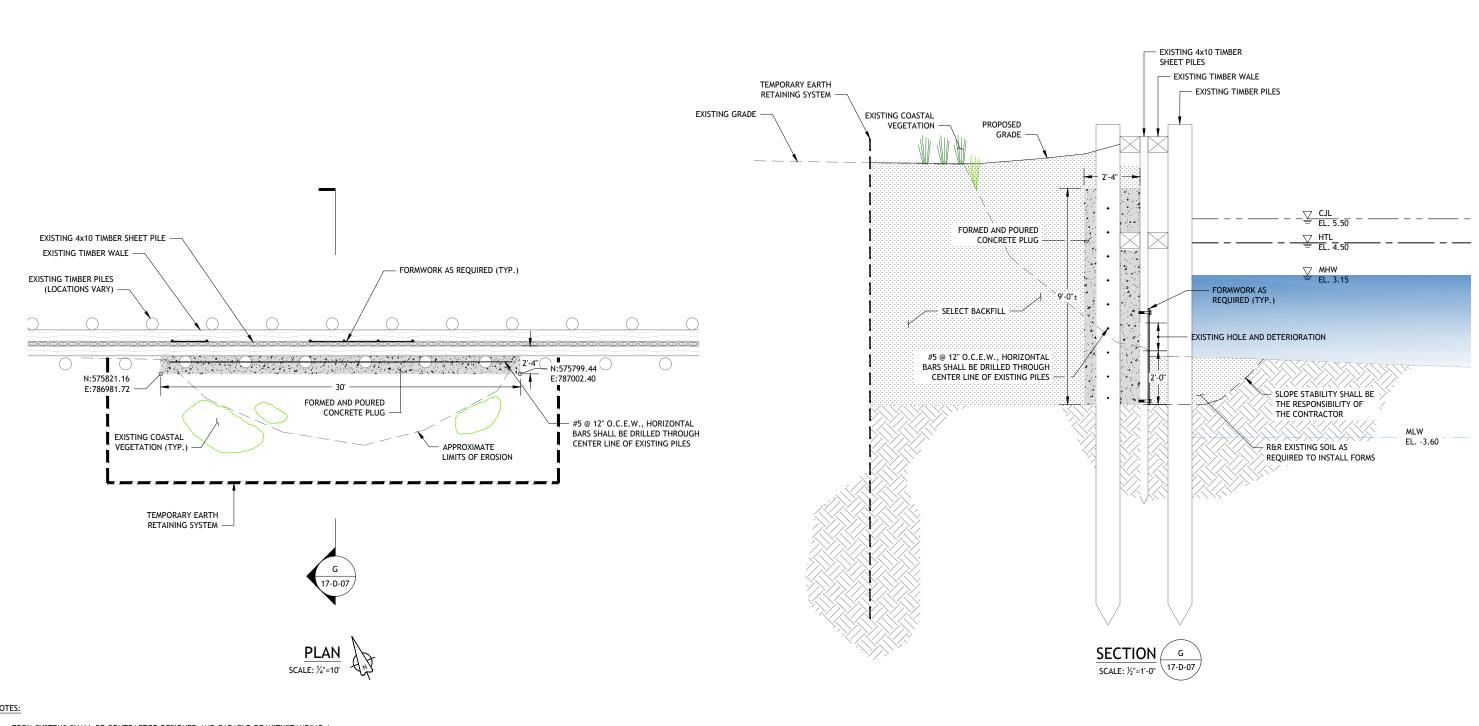
2x12 PT RIM BOARD

1.25" x 4.70" RUBRAIL

4x10 PT STRINGER

FLOATING DOCK SECTIONS AND DETAILS - 2

| SHEET | 16 OF 20 |
|----------|----------|
| DWG No. | D-06 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |



- 1. FORM SYSTEMS SHALL BE CONTRACTOR DESIGNED AND CAPABLE OF WITHSTANDING A MARINE ENVIRONMENT FOR THE DURATION OF CONSTRUCTION.
- 2. THE CONTRACTOR SHALL TEMPORARILY TRANSPLANT EXISTING COASTAL VEGETATION LOCATED WITHIN THE WORK ZONE DURING THE COURSE OF CONSTRUCTION AND REPLANT IT AT ITS ORIGINAL LOCATION UPON COMPLETION.
- 3. 30-LB TAR PAPER SHALL BE INSTALLED IN ALL TIMBER SURFACES PRIOR TO PLACING CONCRETE.
- 4. THE CONTRACTOR MAY ELECT TO OPEN CUT THE EXCAVATION IN LIEU OF INSTALLING A TEMPORARY EARTH RETAINING SYSTEM.

90% SUBMISSION **NOT FOR CONSTRUCTION**

THIS DRAWING IS HALF SIZE

RT Group, Inc. Engineered from the Ground UpSM 458 Grand Avenue, Suite 213 New Haven, Connecticut 06513 T 203 823 9932 F 401 294 9806

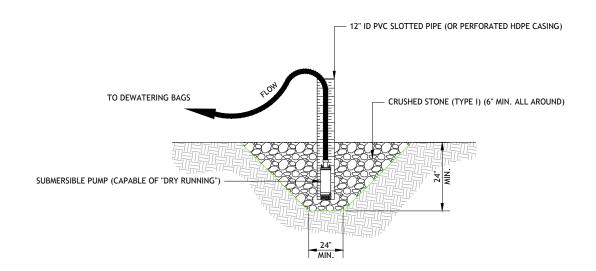
JBR DBH GJC JBR No.



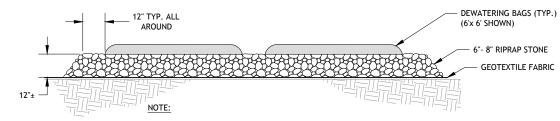
BOAT RAMP REPLACEMENT PROJECT WEST BEACH CITY OF STAMFORD Stamford, Connecticut

JETTY REPAIRS PLAN AND SECTION

| SHEET | 17 OF 20 |
|----------|----------|
| DWG No. | D-07 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |



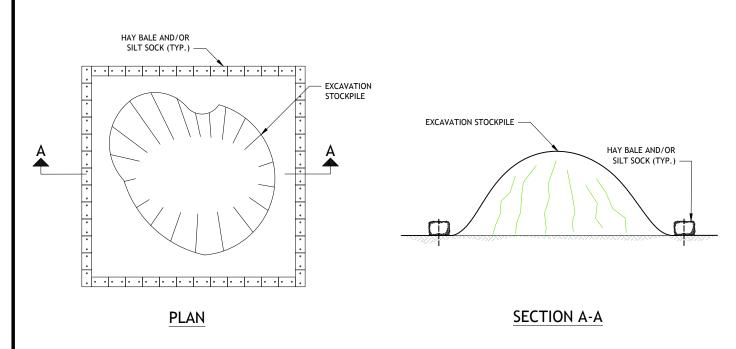
SUMP AND PUMP DETAIL



- 1. SIZE AND QUANTITY TO BE DETERMINED IN FIELD.
- REMOVE DEWATERING BAGS, RIPRAP, AND GEOTEXTILE FABRIC IN THEIR ENTIRETY AT COMPLETION.

DEWATERING BAG DETAIL

SCALE: NTS

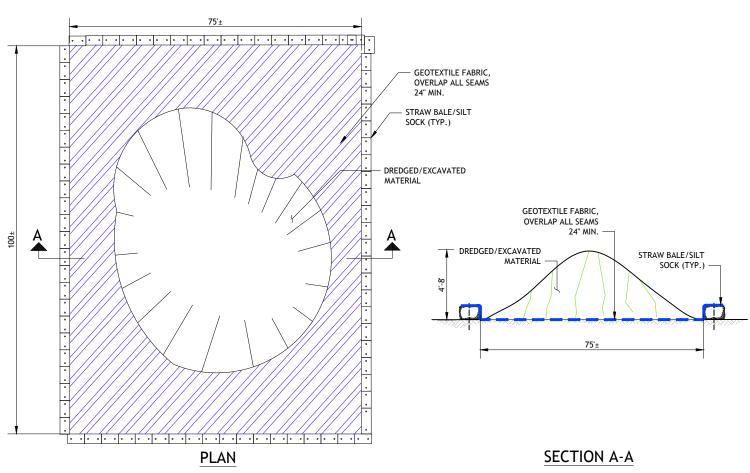


NOTES:

- 1. THE STOCKPILE DETAIL SHOWN IS CONSIDERED TYPICAL AND MAY VARY.
- SEE THE STOCKPILE MANAGEMENT NOTES SHOWN ON SHEET NO. G-03 FOR STOCKPILE REQUIREMENTS.
- 3. SILT SOCKS MAY BE USED IN LIEU OF HAY BALES AT THE CONTRACTOR'S DISCRETION.

STOCKPILE DETAIL SCALE: NTS

90% SUBMISSION NOT FOR CONSTRUCTION



TEMPORARY CONTAINMENT FACILITY DETAIL

SCALE: NTS

THIS DRAWING IS HALF SIZE



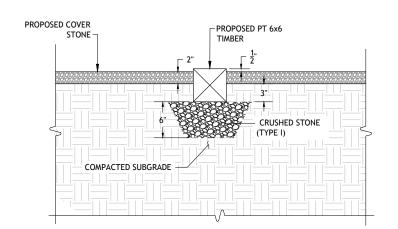
| | BAR IS ONE INCH ON ORIGINAL DRAWING. | |
|----|--|--|
| | 0 1" | |
| | IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES | |
| VD | ACCORDINGLY | |



BOAT RAMP REPLACEMENT
PROJECT
WEST BEACH
CITY OF STAMFORD
Stamford, Connecticut

EROSION AND SEDIMENTATION CONTROL DETAILS

| SHEET | 18 OF 20 |
|----------|----------|
| DWG No. | D-08 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |



TIMBER PARKING GUIDE

SETTING DETAIL

SCALE: 1½" = 1'-0"

SAWCUT EXISTING ASPHALT PAVEMENT BACK AN ADDITIONAL 1-FOOT AND REMOVE BEFORE FINAL PAVEMENT RESTORATION

PROPOSED ASPHALT BASE COURSE

12" GEOTEXTILE WRAPPED CRUSHED STONE (TYPE I)

SAWCUT EXISTING ASPHALT PAVEMENT BACK AN ADDITIONAL 1-FOOT AND REMOVE BEFORE FINAL PAVEMENT RESTORATION

EXISTING ASPHALT PAVEMENT

EXISTING SUBGRADE

OMPACTED SUBGRADE

NOTE:

PROPOSED BOAT RAMP
APPROACH ASPHALT
PAVEMENT
PAVEMENT
PATH
6'-0"

8" COMPACTED
CRUSHED STONE
(TYPE I)

COMPACTED
SUBGRADE

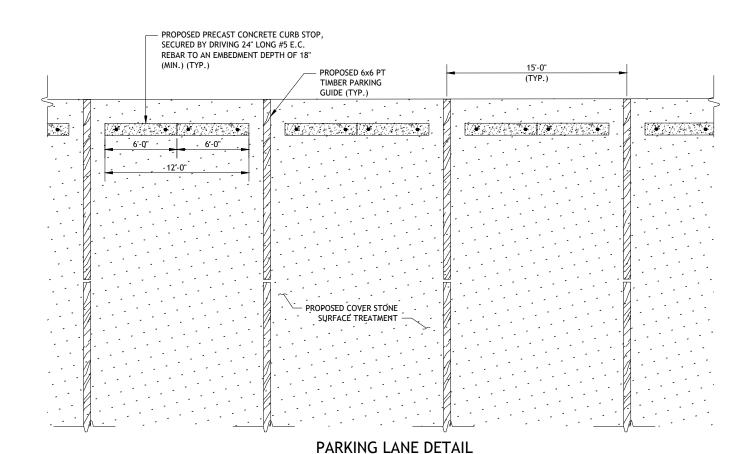
 CONTRACTOR SHALL APPLY AN ASPHALT EMULSION TACK COAT TO ALL SURFACES BEFORE PLACING AND COMPACTING PROPOSED ASPHALT PAVEMENT.

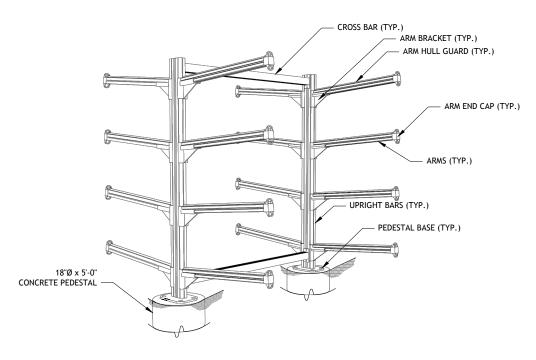
ASPHALT PAVEMENT RESTORATION DETAIL

SCALE: 1½" = 1'-0"

PROPOSED WALKING PATH SECTION

SCALE: NTS





NOTE:

- THE KAYAK STORAGE RACK SHALL BE MODEL NUMBER SRCCM8-P AS PRODUCED BY THE DOCK DOCTORS.
- THE KAYAK RACK SHALL BE LOCKABLE WITH A STANDARD KAYAK LOCKING CABLE.

KAYAK STORAGE DETAIL
SCALE: NTS

90% SUBMISSION
NOT FOR CONSTRUCTION
THIS DRAWING IS HALF SIZE

| | RT Group, Inc. |
|----------------------|---|
| rt g | Engineered from the Ground $\mathrm{Up}^{\mathrm{SM}}$ |
| | 458 Grand Avenue, Suite 213 New Haven, Connecticut 06513 |
| | T 203 823 9932 F 401 294 9806 |
| DAM SAFETY · WATERFR | ONT · CONSTRUCTION ENGINEERING · GEOTECHNICAL |

| DSGN JBR | | | |
|----------|-----|------|--|
| DR DBH | | | |
| CHK GJC | | | |
| APVD | | | |
| JBR | No. | DATE | |

SCALE: 1/4"=1'-0"

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 1 1"

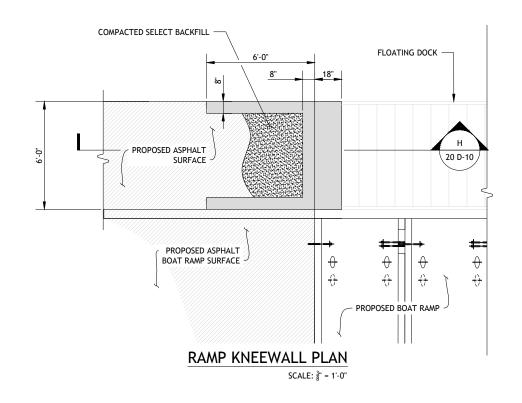
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES
VD ACCORDINGLY

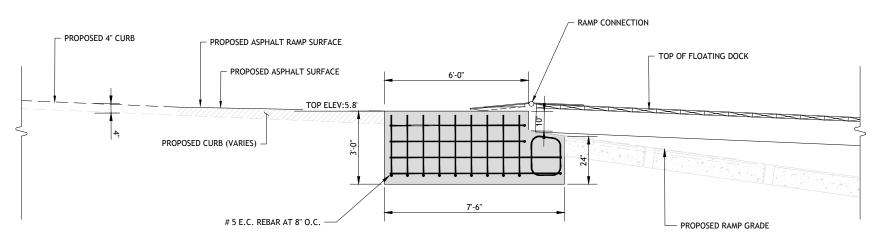


BOAT RAMP REPLACEMENT
PROJECT
WEST BEACH
CITY OF STAMFORD
Stamford, Connecticut

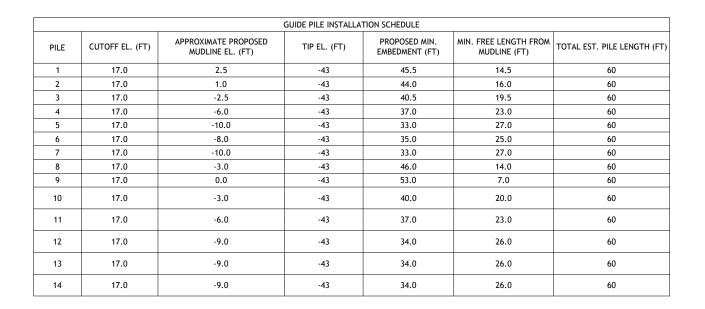
MISCELLANEOUS DETAILS - 1

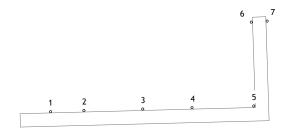
| SHEET | 19 OF 20 |
|----------|----------|
| DWG No. | D-09 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |

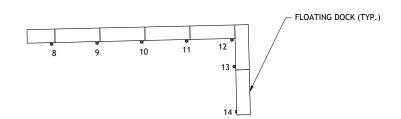




| RAMP KNEE WALL SECTION | H |
|------------------------|---------|
| SCALE: ½" = 1' | 20 D-10 |







GUIDE PILE INSTALLATION DIAGRAM

90% SUBMISSION **NOT FOR CONSTRUCTION**

THIS DRAWING IS HALF SIZE

RT Group, In 458 Grand Avenue, Suite 2 New Haven, Connecticut 0 T 203 823 9932 F 401 2

| ic. | DSGN |
|--------------------------|------|
| ınd Up SM | DR |
| 213 06513 294 9806 | СНК |
| EOTECHNICAL | APVD |
| | |

| DSGN | JBR |
|------|-----|
| DR | DBH |
| CHK | GJC |
| APVD | JBR |

| JBR | | | |
|-----|-----|------|--|
| DBH | | | |
| GJC | | | |
| | | | |
| JBR | No. | DATE | |

BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



BOAT RAMP REPLACEMENT PROJECT WEST BEACH CITY OF STAMFORD Stamford, Connecticut

MISCELLANEOUS DETAILS - 2

| SHEET | 20 OF 20 |
|----------|----------|
| DWG No. | D-10 |
| DATE | JAN 2019 |
| PROJ No. | 18103.00 |

