ENVIRONMENTAL PERMIT PLANS
STATE PROJECT NO. XXXX-XXXX
REPLACEMENT OF BRIDGE NO. XXXXX IN THE TOWN OF ______

GENERAL NOTES:
1. THESE PLANS ARE INTENDED ONLY FOR ENVIRONMENTAL ASSESSMENTS AND INITIAL PROJECT PLANNING CONSIDERATION. THESE PLANS DO NOT CONSTITUTE AUTHORITY FOR ANY ACTIVITIES CONCERNING THE PROJECT AND SHOULD NOT BE USED TO DETERMINE THE NEED TO COMPLY WITH THE DEPARTMENT'S ENVIRONMENTAL REGULATION AND PERMITTING REQUIREMENTS.
2. THE LEGAL DESCRIPTIONS OF PROPERTY OWNED OR CONTROLLED BY THE DEPARTMENT OF TRANSPORTATION ARE CONTAINED IN THE INITIAL QUESTIONNAIRE AND COMMENT FORM.
3. FOR A COMPREHENSIVE DESCRIPTION OF THE WATERBODIES, WETLANDS AND WETLAND SOILS, SEE RELEVANT SECTIONS OF THE PERMIT APPLICATION.
4. ALL CONSTRUCTION ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S STANDARD SPECIFICATIONS FOR HABITAT, BRIDGE, AND INCIDENTAL CONSTRUCTION WORK SET 5.1 TO 5.10 OF THE DEPARTMENT’S GUIDELINES FOR HABITAT CONSTRUCTION.
5. ALL CONSTRUCTION ACTIVITIES WITHIN THE STUDY AREA WILL BE CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT’S GUIDELINES FOR HABITAT CONSTRUCTION.

LOCATION PLAN
1" = 500'

NOTE: FOR ADDITIONAL ENVIRONMENTAL INFORMATION, SEE ENVIRONMENTAL PERMIT PLAN SET.

TITLE SHEET
1. LOCATION PLAN AT AN APPROPRIATE SCALE THAT SHOWS PROJECT LOCATION AND NEARBY CROSS STREETS (1"=500'), FOR A TRAIL PROJECT, EXIT BEGINNING AND END OF PROJECT (PROJECT LIMITS)
2. SHOW CUT/FILL LIMITS AND SEDIMENTATION CONTROL SYSTEM (SCS). (SCS NOT NECESSARY ON PLANTING PLAN)
3. SHOW ORDINARY HIGH WATER (OHW)
4. SHOW FLOOD LIMIT LINES ON PLAN VIEWS
5. SHOW FLOOD LIMIT LINES ON PLAN VIEWS
6. PLAN DATE (LATEST REVISION DATE OF SHEET. DATES DO NOT NEED TO MATCH WITHIN PLAN SET)

ENVIRONMENTAL PERMIT PLAN SET
1. LOCATION PLAN AT AN APPROPRIATE SCALE THAT SHOWS PROJECT LOCATION AND NEARBY CROSS STREETS (1"=500'), FOR A TRAIL PROJECT, EXIT BEGINNING AND END OF PROJECT (PROJECT LIMITS)
2. SHOW CUT/FILL LIMITS AND SEDIMENTATION CONTROL SYSTEM (SCS). (SCS NOT NECESSARY ON PLANTING PLAN)
3. SHOW ORDINARY HIGH WATER (OHW)
4. SHOW FLOOD LIMIT LINES ON PLAN VIEWS
5. GENERAL NOTES 1-5 (ADDITIONAL NOTES MAY BE ADDED AS APPROPRIATE FOR THE PROJECT)

NOTE: FOR ADDITIONAL ENVIRONMENTAL INFORMATION, SEE ENVIRONMENTAL PERMIT PLAN SET.
ENVIRONMENTAL PERMIT PLANS

PLAN DATE: MAY 23, 2019

STATE/FEDERAL WETLANDS

LEGEND:

- STATE/FEDERAL WETLANDS

GUIDE FOR THE DEVELOPMENT OF THE PERMIT PLAN SET

1. PLAN TO CLEARLY DEPICT TEMPORARY AND PERMANENT IMPACTS TO WETLAND AREAS (AREA ABOVE OHW) AND WATERCOURSES (BELOW OHW). TO MAINTAIN CLARITY, DO NOT SHOW EXISTING OR PROPOSED CONTROLS AVOID SHOWING PATTERNS FOR ITEMS WHICH INTERPRET WITH CLEARLY UNDERSTANDING IMPACTS (IE. RIPRAP). CONSTRUCTION ITEM CALL-OUTS NOT REQUIRED.


3. INCLUDE WETLAND AND WATERCOURSE IMPACT TABLE (VALUES CAN BE ROUNDED UP)

4. NOTE TO CONSTRUCTION FOR RESTRICTION OF WORK IN REGULATED AREAS.

5. APPROPRIATE LEGEND AND INCLUDE NOTE REGARDING D.O.T. SUBMITTALS FOR REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL AFFECT THE NOTED REGULATED AREAS.

6. LIMITS ON IMPACT SHOULD BE DEFINED BASED ON ENOUGH SPACE FOR THE CONTRACTOR TO PERFORM THE WORK. THE DESIGNER SHOULD CAREFULLY CONSIDER HOW THE PROJECT MAY BE CONSTRUCTED AND PROVIDE ENOUGH AREA TO ALLOW THE CONTRACTOR THE ABILITY FOR MINOR VARIATION IN CONSTRUCTION METHODS. UTILITY IMPACTS AS PART OF THE PROJECT SHOULD ALSO BE EVALUATED.

7. LIMITS OF IMPACT

8. APPROPRIATE LEGEND AND INCLUDE NOTE REGARDING D.O.T. SUBMITTALS FOR REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL AFFECT THE NOTED REGULATED AREAS.

9. APPROPRIATE LEGEND AND INCLUDE NOTE REGARDING D.O.T. SUBMITTALS FOR REVISIONS TO THE DEEP FOR CHANGES TO THE DESIGN THAT WILL AFFECT THE NOTED REGULATED AREAS.

10. PLAN DATE (LATEST REVISION DATE OF SHEET. DATES DO NOT NEED TO MATCH WITHIN PLAN SET)

NOTE:

THE CONTRACTOR SHALL NOT WORK WITHIN THE LIMITS OF THE WETLANDS AND WATERCOURSES WITH THE EXCEPTION OF THOSE AREAS DELIMITED AS TEMPORARY OR PERMANENT IMPACTS TO THE WETLANDS AND WATERCOURSE. ALL COSTED AREAS SHALL BE REMOVED.

TABLE: WETLAND IMPACT TALLIES

<table>
<thead>
<tr>
<th>WETLAND SITE NO.</th>
<th>WETLAND IMPACTS</th>
<th>WATERCOURSE IMPACTS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMANENT IMPACTS</td>
<td>800 S.F. [0.009 AC]</td>
<td>3 S.F. [0.00 AC]</td>
<td>803 S.F. [0.009 AC]</td>
</tr>
<tr>
<td>TEMPORARY IMPACTS</td>
<td>1,200 S.F. [0.021 AC]</td>
<td>1,000 S.F. [0.017 AC]</td>
<td>2,200 S.F. [0.028 AC]</td>
</tr>
<tr>
<td>TOTAL IMPACTS</td>
<td>2,003 S.F. [0.040 AC]</td>
<td>1,003 S.F. [0.017 AC]</td>
<td>3,006 S.F. [0.057 AC]</td>
</tr>
</tbody>
</table>

CAN ROUND VALUES UP

ENVIRONMENTAL PERMIT PLANS

STATE/FEDERAL WETLANDS
GUIDE FOR THE DEVELOPMENT OF THE
PERMIT PLAN SET

FLOOD IMPACT PLAN:
1. THIS SHEET IS NOT NECESSARY IF THERE ARE NO IMPACTS TO A WETLAND AND THE FLOOD IMPACT PLAN CAN USE THE SAME BASE MAP AS THE WETLAND IMPACT PLAN BUT WOULD SHOW FLOOD IMPACT AREAS.

2. PLAN TO CLEARLY DEPICT TEMPORARY AND PERMANENT IMPACTS TO FLOODPLAIN AREAS, TO MAINTAIN clarity AND NOT SHOW NEW FEATURES OR ALTERNATIVE PROPOSED CONTOURS. AVOID SHOWING PATTERNS FOR ITEMS WHICH INTERFERE WITH CLEARLY UNDERSTANDING IMPACTS (IE. RIPRAP).

3. INCLUDE FLOOD LIMITS IN BOLD (NOT SCREENED)

4. INCLUDE FLOODPLAIN IMPACT TABLE. VOLUME IMPACTS IN CUBIC YARDS.

5. LIMITS OF IMPACT SHOULD BE DEFINED BASED ON ENOUGH SPACE FOR THE PROJECT FEATURES TO MATCH WITHIN PLAN SET

6. WETLAND LIMITS IN BOLD (NOT SCREENED)

7. CALL-OUT LIMITS OF IMPACT. THE LIMITS OF IMPACT SHOULD BE CLEARLY SHOWN AND MAY OR MAY NOT COINCIDE WITH THE R.O.W. LINE OR EASEMENT LINE TO ALINE THE CONSTRUCTION THE ABILITY FOR MINOR VARIATION IN CONSTRUCTION METHODS. UTILITY IMPACTS AS PART OF THE PROJECT SHOULD ALSO BE EVALUATED.

8. CALL-OUT LIMITS IN BOLD (NOT SCREENED)

9. CALL-OUT SCS LINE SHOW FLOOD IMPACT AREAS.

10. PLAN DATE (LATEST REVISION DATE OF SHEET. DATES DO NOT NEED TO MATCH WITHIN PLAN SET)

CAN ROUND VALUES UP
SUGGESTED SEQUENCE OF CONSTRUCTION

CONSTRUCTION OF THIS PROJECT WILL BE PERFORMED BY SHIFTING TWO-WAY TRAFFIC.

STAGE 1:
1. COORDINATE WITH UTILITY COMPANIES TO RELOCATE UTILITIES IN TOWN.
2. INSTALL SEPTIC SYSTEMS/CONTROL SYSTEM (SEC), WHERE APPROPRIATE.
3. PERFORM CLEANSING AND GRADING, AS NECESSARY.
4. INSTALL SEPTIC SYSTEMS/CONTROL SYSTEM (SEC), WHERE APPROPRIATE. FOUNDATIONS TO REMAIN THROUGHOUT STAGE.
5. INSTALL TEMPORARY WATER HANDLING SYSTEM INCLUDING WATER-HANDLING-COFFERDAM AND TEMPORARY FLOODING SYSTEM. WATER HANDLING SYSTEM TO REMAIN THROUGHOUT STAGES. CONSTRUCTION WILL BE PERFORMED BY SHIFITNG TWO-WAY TRAFFIC.
6. CONSTRUCT TEMPORARY ROADWAY WIDENING.

STAGE 2:
1. SHIFT TRAFFIC TO SOUTH SIDE OF ROADWAY. ERECT AND CONSTRUCT MICROPLANTINGS. CONSTRUCT FOOTINGS ON NORTH SIDE.
2. PARTIALLY REMOVE TOP AND SIDE PORTIONS OF EXISTING CULVERT AND COMPLETE CONSTRUCT FINAL CHANNEL OUTSIDE THE TEMPORARY PIPE.
3. ERECT NORTH SIDE PRECAST CONCRETE THREE-SIDED FRAME UNITS. COMPLETE WINGWALLS 1A AND 1B, COMPLETE SOUTH AND BSF, COMPLETE NORTH SIDE ROADWAY CONSTRUCTION.
4. COORDINATE WITH EXISTING UTILITIES TO RELOCATE FACILITIES TO PERMANENT LOCATION ALONG THE SOUTH FORCS.
5. REMOVE THE REMAINING PORTION OF THE EXISTING CULVERT AND COMPLETE CONSTRUCTION.
6. REMOVE TEMPORARY WATER HANDLING SYSTEM INSTALL CHANNEL SCHOOLS.
7. COORDINATE WITH GAS COMPANY TO RELOCATE FACILITIES TO PERMANENT LOCATION ALONG THE SOUTH FORCS. BFGG.
8. PERFORM FINAL GRADEING AND INSTALL PLANTINGS.
9. REMOVE EXISTING DWELLING CONTROL ON PERMANENT STABILIZATION.

STAGING WATER HANDLING PLAN:

STAGE 1:

1. SHIFITNG OF TRAFFIC TO SOUTH SIDE OF ROADWAY. ERECT AND CONSTRUCT MICROPLANTINGS. CONSTRUCT FOOTINGS ON NORTH SIDE. INSTALL TEMPORARY WATER HANDLING SYSTEM INCLUDING WATER-HANDLING-COFFERDAM AND TEMPORARY FLOODING SYSTEM. WATER HANDLING SYSTEM TO REMAIN THROUGHOUT STAGES.

STAGE 2:

1. SHIFT TRAFFIC TO SOUTH SIDE OF ROADWAY.
2. ERECT AND CONSTRUCT MICROPLANTINGS. CONSTRUCT FOOTINGS ON NORTH SIDE.
3. PARTIALLY REMOVE TOP AND SIDE PORTIONS OF EXISTING CULVERT AND COMPLETE CONSTRUCT FINAL CHANNEL OUTSIDE THE TEMPORARY PIPE.
4. ERECT PRECAST CONCRETE THREE-SIDED FRAME UNITS ON SOUTH SIDE. COMPLETE WINGWALLS 1A AND 1B, COMPLETE STAGE 3 ROADWAY CONSTRUCTION.
5. REMOVE THE REMAINING PORTION OF THE EXISTING CULVERT AND COMPLETE CONSTRUCTION.
6. REMOVE TEMPORARY WATER HANDLING SYSTEM INSTALL CHANNEL SCHOOLS.
7. COORDINATE WITH GAS COMPANY TO RELOCATE FACILITIES TO PERMANENT LOCATION ALONG THE SOUTH FORCS.
8. PERFORM FINAL GRADEING AND INSTALL PLANTINGS.
9. REMOVE EXISTING DWELLING CONTROL ON PERMANENT STABILIZATION.

ENVIRONMENTAL PERMIT PLANS

PLAN DATE: SEPTEMBER 9, 2019

PROPOSED WATER HANDLING SCHEMATIC FOR PROJECT

SEE NOTE 4

WATER HANDLING NOTES:

1. THE CONTRACTOR SHALL MAINTAIN WATER THROUGH THE TEMPORARY WATER HANDLING SYSTEM AS DESIGNED DURING CONSTRUCTION OF THE NEW STRUCTURE.
2. EQUIPMENT SHALL NOT BE PERMITTED IN THE STREAM WHEN TEMPORARY WATER HANDLING SYSTEM IS IN PLACE WITHOUT APPROVAL FROM THE ENGINEER.
3. A DRAINAGE BASIN SHALL BE ESTABLISHED OUTSIDE OF THE WETLAND LIMITS.
4. A "HANDLING WATER TYPICAL SCHEMATICS" GUIDE HAS BEEN DEVELOPED AND CAN BE FOUND ON THE OEP WEBPAGE. FOR MICROPILES FILES OF THE SCHEMATIC CONTACT DOT'S EPC UNIT.
5. SHOW DEWATERING BASIN (IF NEEDED).
6. CALL-OUT SIZE OF TEMPORARY PIPE FOR GRAVITY FLOW (OR MINIMUM CHANNEL WIDTH, DEPENDING ON PROJECT REQUIREMENTS. (DETAIL IS NOT REQUIRED TO BE SANDBAGS)
7. INCLUDE TEMPORARY HYDRAULIC DATA TABLE AS APPROPRIATE FOR PROJECT.
8. INCLUDE ANY REGULATORY TIME-OF-YEAR (TOY) RESTRICTION AS A NOTE ON THE PLAN.
9. STATE ANY PROHIBITED ACTIONS, IE. WATER HANDLING TECHNIQUES NOT ALLOWED.
10. PLAN DATE (LATEST REVISION DATE OF SHEET. DATES DO NOT NEED TO MATCH STATE OF CONNECTICUT.

VALUES ELEVATIONS AND DATES SHOWN IN THE TABLES DETAILS AND NOTES ARE DEPENDENT UPON PROJECT SPECIFICS.

VALUES CALCULATED BY DOT'S HYDRAULICS AND DRAINAGE UNIT OR CONSULTANT.

WATER HANDLING-COFFERDAM

STAGES 3:

1. SHIFT TRAFFIC TO SOUTH SIDE OF ROADWAY.
2. COORDINATE WITH UTILITY COMPANIES TO RELOCATE FACILITIES TO PERMANENT LOCATION ALONG THE SOUTH FORCS.
3. PERFORM FINAL GRADEING AND INSTALL PLANTINGS.
4. REMOVE THE REMAINING PORTION OF THE EXISTING CULVERT AND COMPLETE CONSTRUCTION.
5. REMOVE TEMPORARY WATER HANDLING SYSTEM INSTALL CHANNEL SCHOOLS.
6. COORDINATE WITH GAS COMPANY TO RELOCATE FACILITIES TO PERMANENT LOCATION ALONG THE SOUTH FORCS.
7. REMOVE EXISTING DWELLING CONTROL ON PERMANENT STABILIZATION.

ENVIRONMENTAL PERMIT PLANS

PLAN DATE: SEPTEMBER 9, 2019

REPLACEMENT OF BRIDGE NO. XXXX OVER A BROOK

TOWN
STAGING/WATER HANDLING PLAN

XXX-XXX
ROUTE X OVER A BROOK
1. INLET AND OUTLET VIEWS AND CONSTRUCTION SECTION VIEW TO SHOW ELEVATION FOR 100-YEAR FLOOD (OR THE DESIGN YEAR AS APPLICABLE). OWN AND INVERTS, INVERTS FOR CULVERTS CAN BE DEPICTED TO THE INVERT FOR THE 2-YR STORM) TO ALIGN CHANNEL MATERIALS WITH INSTALLATION.

2. TYPE OF BEDDING MATERIAL AND RIPRAP USED SHOULD BE SHOWN AND DEPTH CALLED OUT. FOR NATURAL STREAMBED MATERIAL, IDENTIFY TOP TENTH (FOR EX. 98.1) TO ALLOW TOLERANCE WITH INSTALLATION.

3. SHOW OPENNESS RATIO AND BANKFULL WIDTH CALCUATIONS (AS APPLICABLE FOR PROJECT)

4. IF A WILDLIFE SHELF IS REQUIRED, CALL-OUT AND SPECIFY DIMENSIONS, APPLICABLE FOR PROJECT.

5. HYDRAULIC DATA TABLE AS APPROPRIATE FOR PROJECT.

6. SHEET DOES NOT NEED TO SHOW UNNECESSARY CONSTRUCTION NOTES AND COMMENTS. SHEET SHOULD SHOW ITEMS PERTINENT TO ENVIRONMENTAL PERMITTING.

7. PLAN DATE (LATEST REVISION DATE OF SHEET. DATES DO NOT NEED TO MATCH WITHIN PLAN SET)

ENVIRONMENTAL PERMIT PLANS

REPLACE OF BRIDGE NO. XXXX
ROUTE X OVER A BROOK

REPLACEMENT OF WILEY ROAD OVER A BROOK

TOWN
ELEVATION AND SECTIONS PLAN

CULVERT SECTION
1" = 5'
NOTES

1. PLANTINGS ON THIS SHEET ARE FOR ENVIRONMENTAL PERMITTING ANY SUBSEQUENT PLANTINGS SHAL BE CONFORMED TO THE DEPARTMENT'S OFFICE OF ENVIRONMENTAL PLANNING (OEP).

2. PROPOSED PLANTINGS TO BE FIELD LOCATED BY CTDOT OEP OR DESIGNATED REPRESENTATIVE.

3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA. A "MITIGATION PLANTING PLAN" IS CREATED ADDITIONAL ITEMS NOT IN THE REGULATED LANDSCAPE ITEMS WITHIN THE OTHER UNITS INVOLVED IN THE PROJECT.

4. TOTAL PLANTING AREA = 3,230 S.F.

5. ALL PLANT MATERIAL SHALL BE NATIVE PLANTS ON PERMIT PLANS SET. SIZES TO MATCH DOT MASTER BID ITEM LIST

6. EXPLANATION OF PLANTING PLANS:

7. DESIGNER SHOULD BE AWARE OF PROJECT SLOPE PROTECTION AREAS AND OTHER UNITS INVOLVED IN THE PROJECT.

1. PLAN DEPICTS COMPLETED PROJECT WITH PROPOSED PLANTING AREA PERMIT PLANTING PLAN (IF REQUIRED):

2. THIS PERMIT PLANTING PLAN SCHEME SHALL NOT BE USED FOR PROPOSED PLANTINGS TO BE FIELD LOCATED BY CTDOT OEP OR DESIGNATED REPRESENTATIVE.

3. WOOD CHIP MULCH SHALL NOT BE PLACED IN THE WETLAND AREA.

4. TOTAL PLANTING AREA = 3,230 S.F.

5. ALL PLANT MATERIAL SHALL BE NATIVE PLANTS ON PERMIT PLANS SET. SIZES TO MATCH DOT MASTER BID ITEM LIST

6. EXPLANATION OF PLANTING PLANS:

7. DESIGNER SHOULD BE AWARE OF PROJECT SLOPE PROTECTION AREAS AND OTHER UNITS INVOLVED IN THE PROJECT.

 tuples:

1. Plan depicts completed project with proposed planting area
2. This permit planting plan scheme shall not be used for proposed plantings to be field located by CTDOT OEP or designee.
3. Wood chip mulch shall not be placed in the wetland area.
4. Total planting area = 3,230 S.F.
5. All plant material shall be native plants on permit plans set. Sizes to match DOT master bid item list.
6. Explanation of planting plans:
7. Designer should be aware of project slope protection areas and other units involved in the project.