



**US Army Corps  
of Engineers**®  
New England District

# PUBLIC NOTICE

696 Virginia Road  
Concord, MA 01742-2751

**Date:** December 1, 2009  
**Comment Period Ends:** January 4, 2010  
**File Number:** NAE-2009-2489  
**In Reply Refer To:** William J. Mullen  
**Or by e-mail:** [william.j.mullen@usace.army.mil](mailto:william.j.mullen@usace.army.mil)

The District Engineer has received a permit application from the applicant below to **conduct work in waters of the United States** as described below.

## **APPLICANT Town of Plainville, Connecticut**

**ACTIVITY** To place fill within, or otherwise impact, 8414 square feet (0.19 acres) of wetlands in conjunction with a project to replace the existing Stillwell Drive crossing over the Quinnipiac River in Plainville, Connecticut. A Federal Emergency Management Agency-identified floodway has been delineated along this reach of the Quinnipiac River and fill has been proposed to be placed within the floodway, hence consideration of the project as an Individual Permit. A detailed description and plans of the activity are attached.

## **WATERWAY AND LOCATION OF THE PROPOSED WORK**

This work is proposed in the Quinnipiac River at its Stillwell Drive crossing, Plainville, Connecticut. The proposed location on the USGS New Britain quadrangle sheet is at Lat 41 39' 24" N /Long 72 51' 38"W.

## **AUTHORITY**

Permits are required pursuant to:

- Section 10 of the Rivers and Harbors Act of 1899  
 Section 404 of the Clean Water Act  
 Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment

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**FILE NO. NAE-2009-2489**

and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972 as amended.

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

The following authorizations have been applied for, or have been, or will be obtained:

- Permit, License or Assent from State.
- Permit from Local Wetland Agency or Conservation Commission.
- Water Quality Certification in accordance with Section 401 of the Clean Water Act.

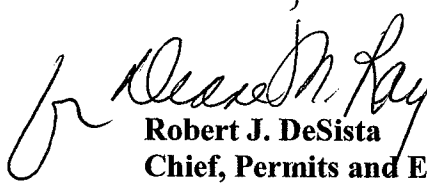
In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Bill Mullen at (978) 318-8559, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

For more information on the New England District Corps of Engineers programs, visit our website at <http://www.nae.usace.army.mil>.

**THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.**



**Robert J. DeSista  
Chief, Permits and Enforcement Branch  
Regulatory Division**

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at [bettina.m.chaisson@usace.army.mil](mailto:bettina.m.chaisson@usace.army.mil). You may also check here ( ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

## **PROPOSED WORK AND PURPOSE**

The work includes the discharge of dredged or fill material into 8414 square feet (0.19 acres) of wetlands (including both permanent and temporary impacts) in conjunction with a project to replace the existing two-lane Stillwell Drive crossing over the Quinnipiac River in Plainville, Connecticut. Stillwell Drive is located approximately 2000 to the east of Route 10 in Plainville. The existing crossing consists of triple 98"-wide by 63"-high, concrete elliptical culverts (61'-long). The project design proposes to relocate the centerline of the crossing approximately 50 feet south of its present location in order to eliminate the existing sharp "S" curve of the river channel. The replacement crossing is proposed to consist of twin 13'-wide concrete box culverts (69.3'-long) skewed 45 degrees to the roadway baseline, with new headwalls that will be arch-shaped (less susceptible to catching debris as compared to the existing elliptical culverts). The northerly box culvert will be 7.25'-high and backfilled with 12-15" of gravel streambed material. The southern box culvert will be backfilled with 6" of gravel streambed material with its invert set 6" above the gravel material in the northern cell, thereby enabling normal flows to be conveyed through the northern box and enabling unobstructed fish passage. The southern box will provide a riparian crossing for wildlife that will also convey flows during higher flows. The existing width and alignment of the roadway will be maintained. The project also includes 340 feet of roadway work that includes the installation of associated subsurface drainage systems north and south of the proposed crossing. The project has been proposed in order to replace the existing Stillwell Drive crossing which has been rated by the Connecticut Department of Transportation to be in poor condition.

A Federal Emergency Management Agency-identified floodway has been delineated along this reach of the Quinnipiac River and fill has been proposed to be placed within the floodway, hence consideration of the project as an Individual Permit (the Connecticut Programmatic General Permit mandates that all projects with fill placement in a floodway be considered as Individual Permit). Proposed flood elevations will generally be 0.2-0.5 feet lower upstream of the Stillwell Drive crossing than for the existing conditions, with the proposed crossing overtopping only at floods of greater than a 100-year recurrence interval (versus a 40-year recurrence interval currently).

Upstream (east) of Stillwell Drive, an extensive system of wooded wetland areas borders the relatively deep and well defined Quinnipiac River which is low gradient and sinuous in the area. Downstream (west) of Stillwell Drive, the Quinnipiac River has little bordering wetlands. The river turns sharply right (looking downstream) about 150 feet upstream of the crossing, and then takes a sharp bend to the left at the crossing. The realignment will eliminate the sharp bend to the left; the river will instead flow straight through the realigned crossing. The principal functions/values of wetlands in the vicinity of the roadway crossing are groundwater recharge/discharge and floodflow alteration (with some recreational use in the area east of Stillwell Drive).

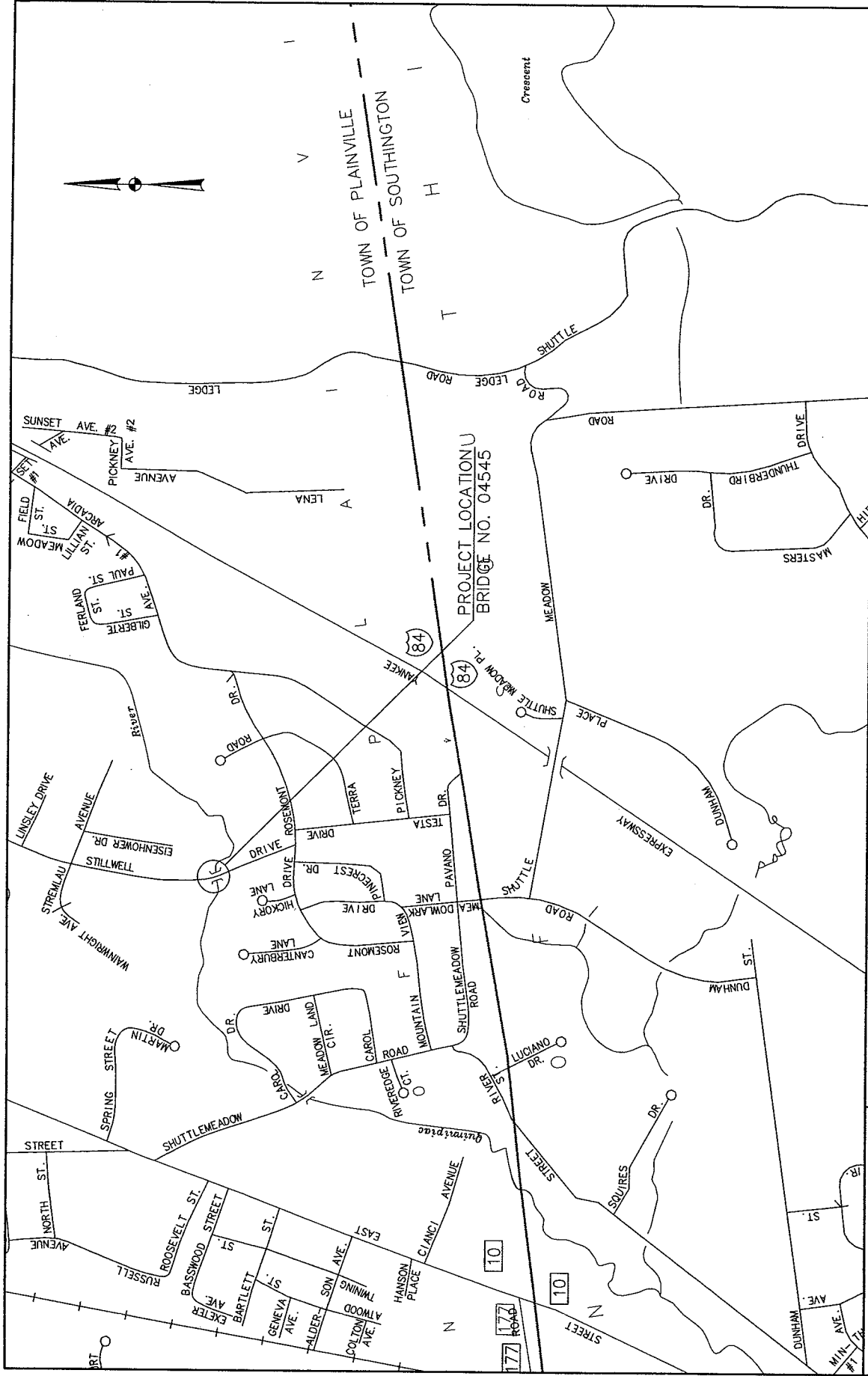
The proposed structure relocation necessitates realignment and reconstruction of the river banks at both ends of the culverts. To encourage the future vegetation of the reconstructed river banks, native riparian plantings have been incorporated into the channel design. Riprap is proposed to be placed adjacent to the wingwalls and along the realigned channel banks to protect the structure and roadway embankments from erosion. The proposed concrete cutoff walls and footings at either end of the box culverts will be extended by tying them into permanent sheetpiling driven deep into the sediments in order to provide the structure from undermining.

Project impacts cannot be avoided if the Quinnipiac River is to be realigned as proposed. Impacts to wetlands are minimal, occurring only in the immediate vicinity of the crossing. 940 sf of watercourse will be created when the river is realigned, slightly offsetting the 8414 sf of permanent and temporary impacts. The small

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extent of wetlands impacts is not believed to warrant the need for mitigation besides the improvements proposed (riparian plantings, the placement of natural streambed material within the culverts, the placement of large boulders in the riprapped banks to provide aquatic habitat, and the removal of invasive species within the project area).

The work is described on the enclosed plans entitled "Replacement of Stillwell Drive Bridge No. 04545, Plainville, CT" on 12 sheets, and revised "October 26, 2009".



DATE: 06/12/09  
 REVISIONS: 10/26/09

**WMC**  
 CONSULTING ENGINEERS

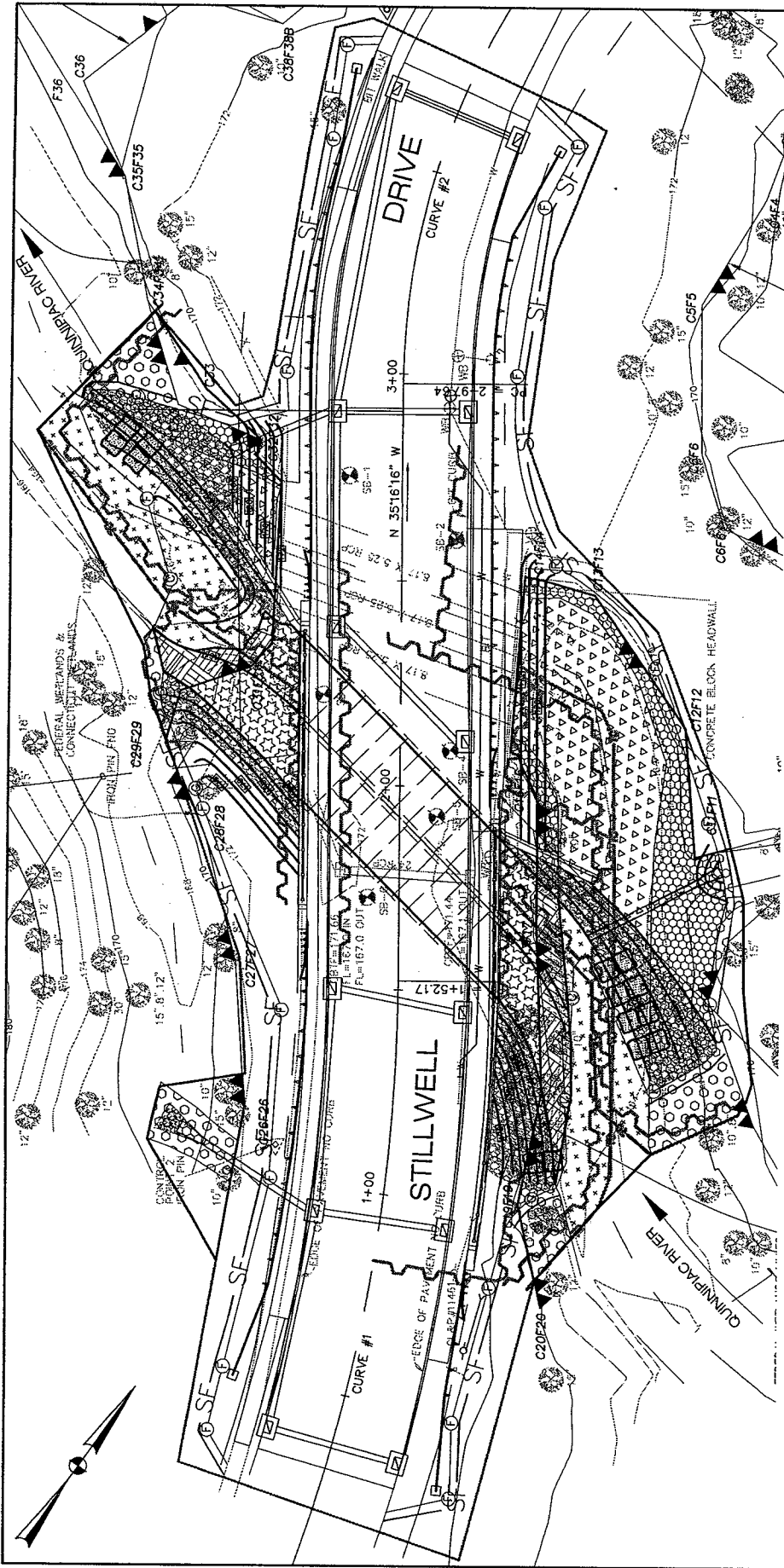
WENGELL, McDONNELL & COSTELLO  
 87 HOLMES ROAD  
 NEWINGTON, CT 06111  
 (860) 667-9624

REPLACEMENT OF  
 STILLWELL DRIVE BRIDGE NO. 04545  
 PLAINVILLE, CT  
 VICINITY MAP

ACOE 404 APPLICATION PLATE 1 OF 12



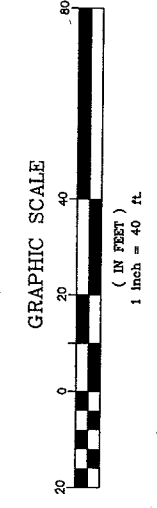




- PERMANENT WETLAND IMPACTS 1,953 S.F. (0.045 A.C.)
- TEMPORARY WETLAND IMPACTS 1,167 S.F. (0.027 A.C.)
- PERMANENT WATERCOURSE IMPACTS 2,797 S.F. (0.064 A.C.)
- TEMPORARY WATERCOURSE IMPACTS 2,497 S.F. (0.057 A.C.)
- WATERCOURSE CREATED 940 S.F. (0.022 A.C.)
- NET FEDERAL WETLAND IMPACTS/WATERCOURSE CREATED 611 S.F. (0.014 A.C.)
- NET FEDERAL WETLAND IMPACTS 7,474 S.F. (0.172 A.C.)

CONTOUR INTERVAL - 2'  
 KEY: APPROX. FEDERAL WETLANDS BOUNDARY

DATE: 06/11/09  
 REVISIONS: 10/26/09



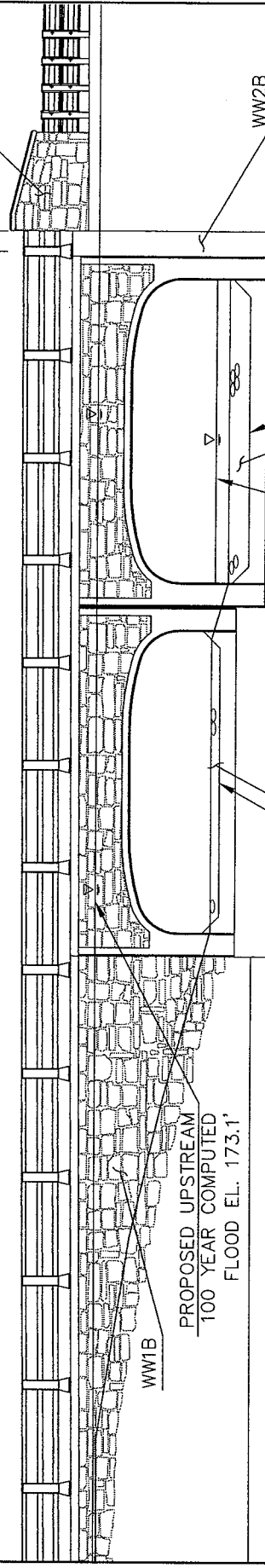
**WMC**  
 CONSULTING ENGINEERS  
 WENDELL, McDONNELL & COSTELLO  
 87 HOLMES ROAD  
 NEWINGTON, CT 06111  
 (860) 667-9624

REPLACEMENT OF  
 STILLWELL DRIVE BRIDGE NO. 04545  
 PLAINVILLE, CT  
 FEDERAL WETLANDS IMPACT PLAN  
 ACOE 404 APPLICATION PLATE 4 OF 12

METAL BRIDGE RAIL - COMBINATION  
16 SPACES @ 6'-3 7/8" = 101'-2"

1'-3"

AW2B



EL. 160.00'

13' x 5.5' PRECAST  
CONCRETE CULVERT BOX  
(INVERT EL. 165.50')

13' x 7.25' PRECAST  
CONCRETE BOX CULVERT  
(INVERT EL. 163.75')

6" NATURAL STREAMBED MATERIAL

12" MIN. NATURAL  
STREAMBED MATERIAL

PROPOSED UPSTREAM  
100 YEAR COMPUTED  
FLOOD EL. 173.1'

W.S. = 165.8  
DATE OBSERVED (11/09/06)

2' OF 3/4" CRUSHED  
STONE (TYP.)

UPSTREAM ELEVATION - LOOKING DOWNSTREAM

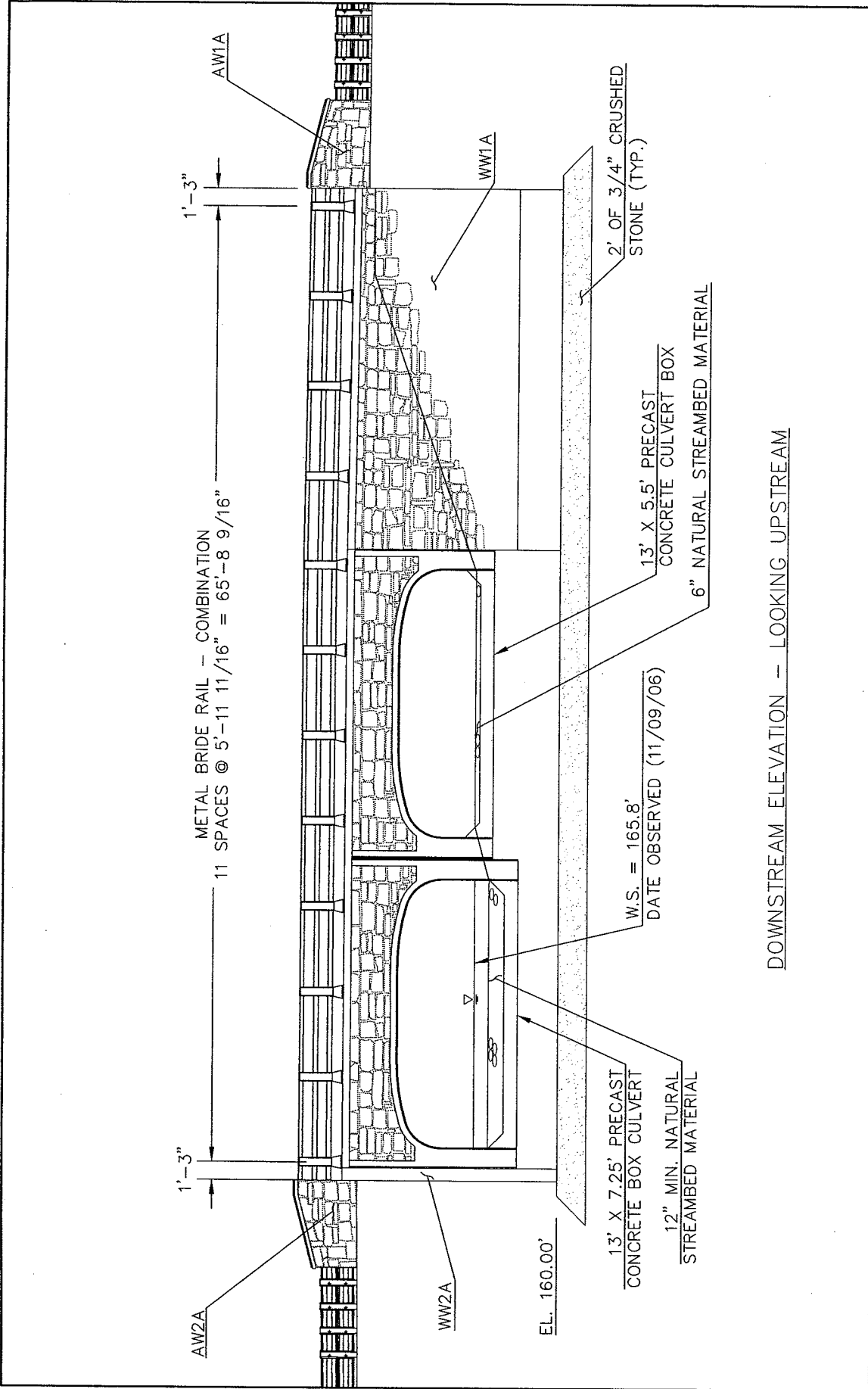
DATE: 06/12/09  
REVISIONS: 10/26/09

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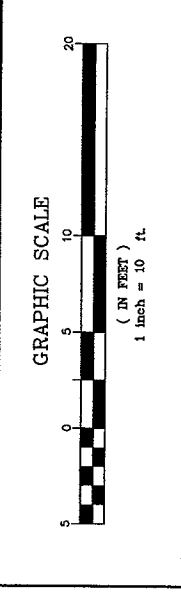
GRAPHIC SCALE  
( IN FEET )  
1 inch = 10 ft

REPLACEMENT OF  
STILLWELL DRIVE BRIDGE NO. 04545  
PLAINVILLE, CT  
UPSTREAM ELEVATION VIEW  
ACOE 404 APPLICATION PLATE 5 OF 12



DOWNSTREAM ELEVATION - LOOKING UPSTREAM

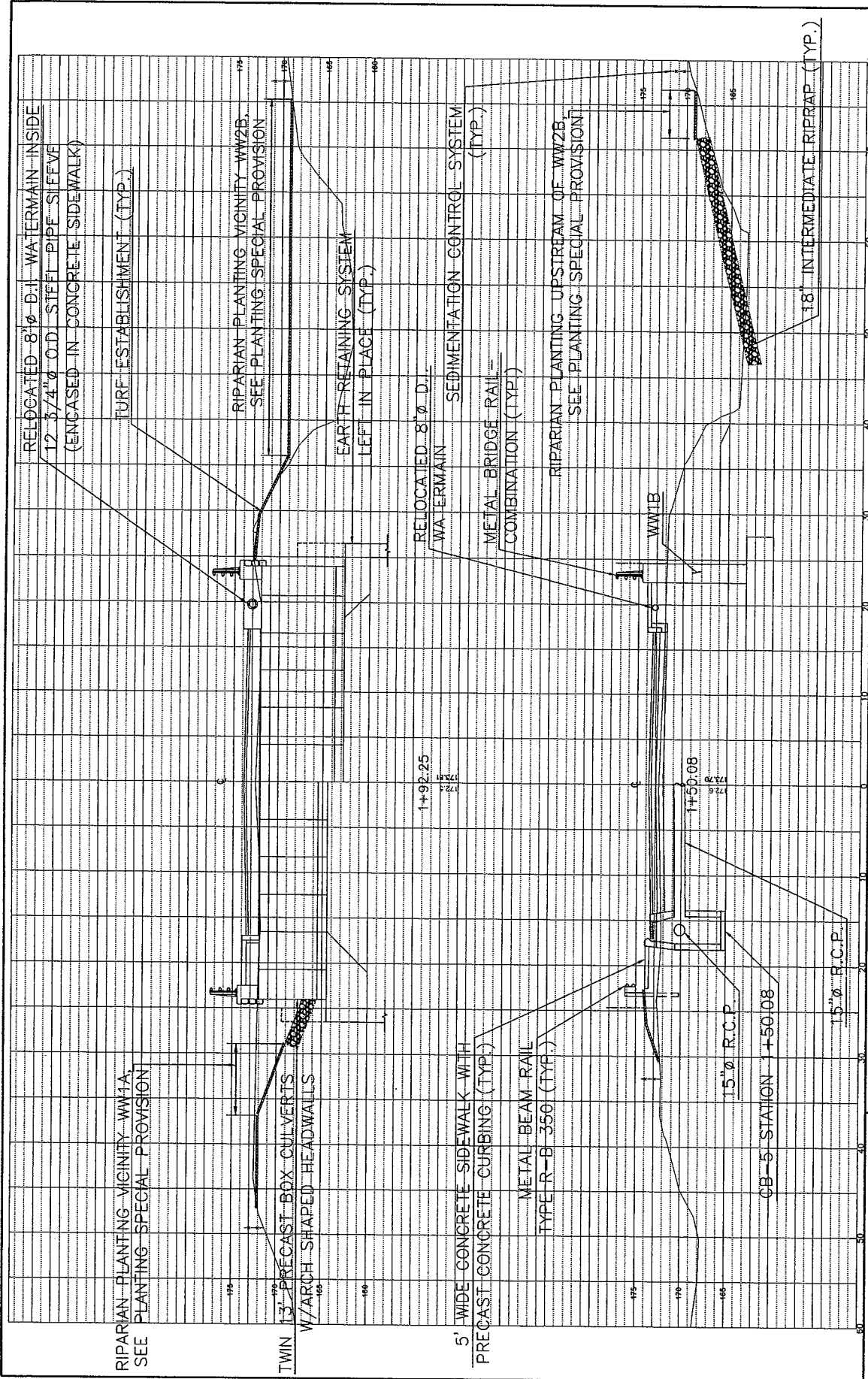
DATE: 06/12/09  
REVISIONS: 10/26/09



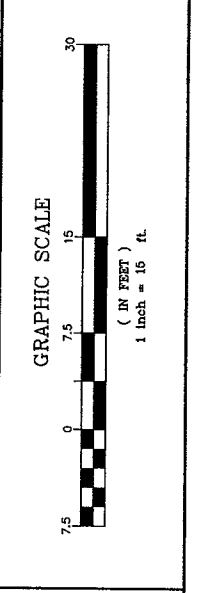
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CONSULTING ENGINEERS

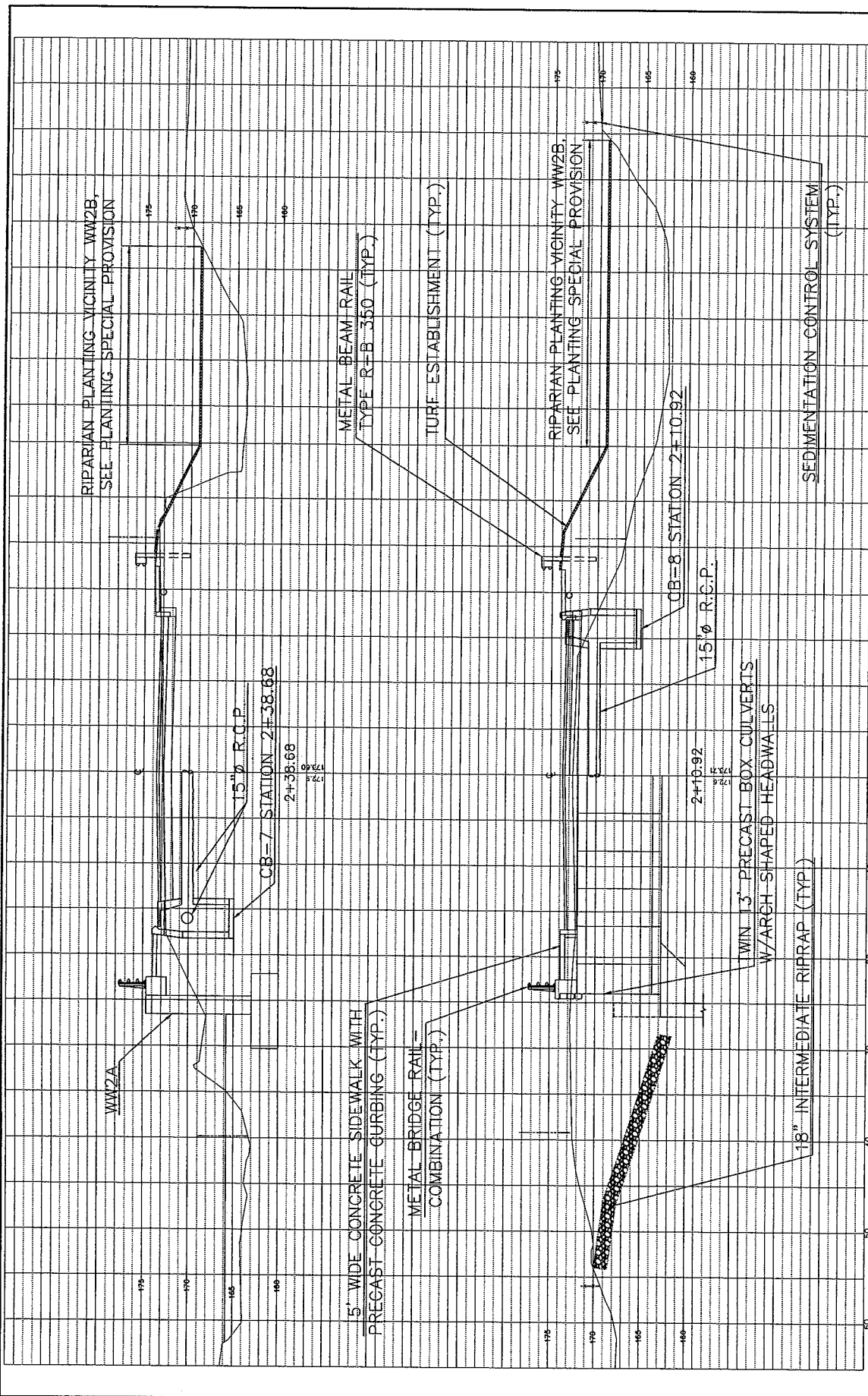
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NEWINGTON, CT 06111  
(860) 667-9624

REPLACEMENT OF  
STILLWELL DRIVE BRIDGE NO. 04545  
PLAINVILLE, CT  
DOWNSTREAM ELEVATION VIEW  
ACOE 404 APPLICATION PLATE 6 OF 12



<p>DATE: 06/12/09          REVISIONS: 10/26/09</p>	<p style="text-align: center;"><b>WMC</b>          CONSULTING ENGINEERS</p> <p style="text-align: center;">WENGEL, McDONNELL &amp; COSTELLO •          87 HOLMES ROAD          NEWINGTON, CT 06111          (860) 667-9624</p>	<p style="text-align: center;">REPLACEMENT OF          STILLWELL DRIVE BRIDGE NO. 04545          PLAINVILLE, CT          CROSS SECTIONS</p> <p style="text-align: right;">ACOE 404 APPLICATION    PLATE 7 OF 12</p>
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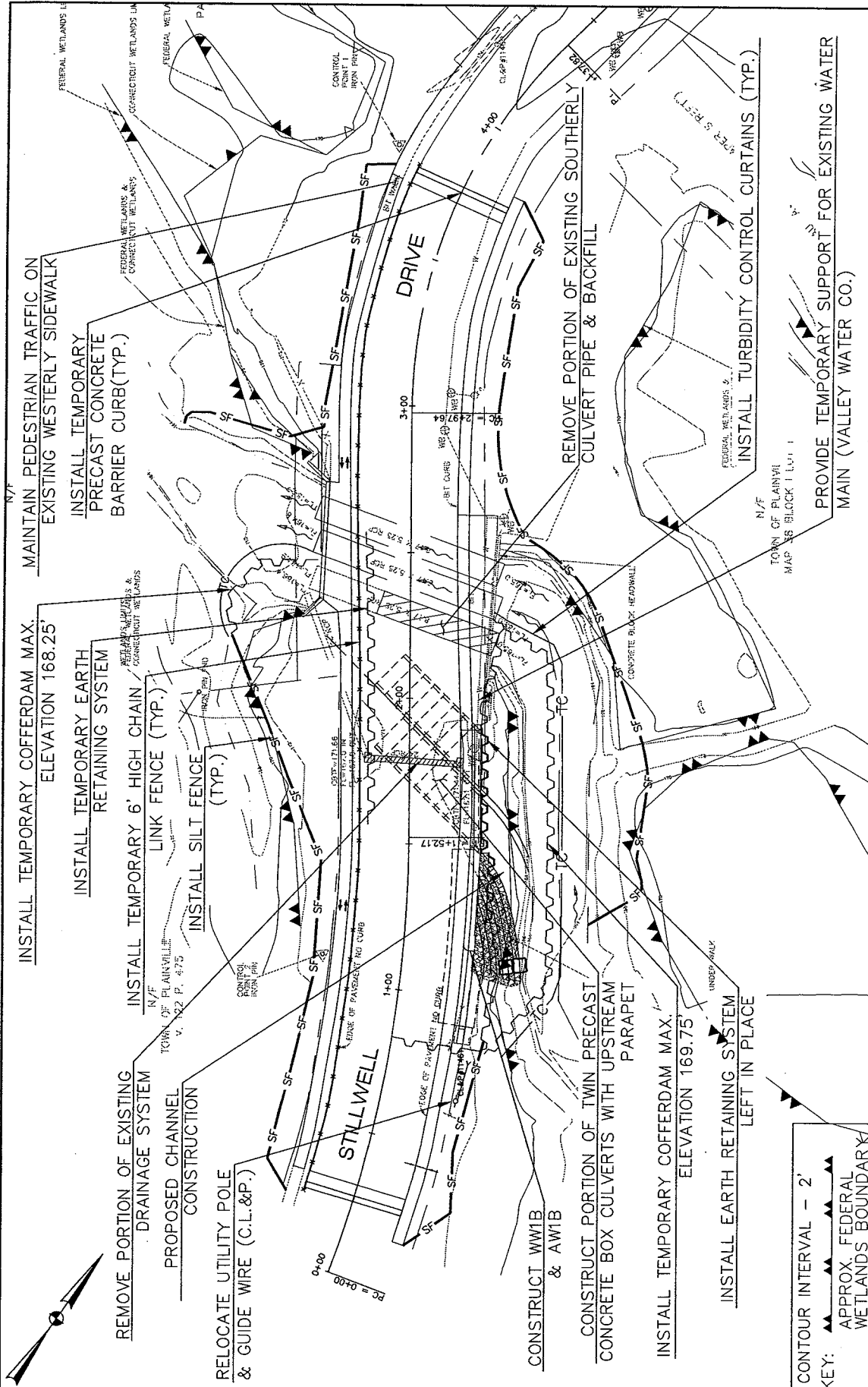
DATE: 06/12/09  
 REVISIONS: 10/26/09

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 NEWINGTON, CT 06111  
 (860) 667-9624

GRAPHIC SCALE  
 ( IN FEET )  
 1 inch = 15 ft.

REPLACEMENT OF  
 STILLWELL DRIVE BRIDGE NO. 04545  
 PLAINVILLE, CT  
 CROSS SECTIONS  
 ACOE 404 APPLICATION PLATE 8 OF 12



REPLACEMENT OF  
STILLWELL DRIVE BRIDGE NO. 04545  
PLAINVILLE, CT  
WATER HANDLING PLAN STAGE I  
ACOE 404 APPLICATION PLATE 9 OF 12

**WMC**  
CONSULTING ENGINEERS

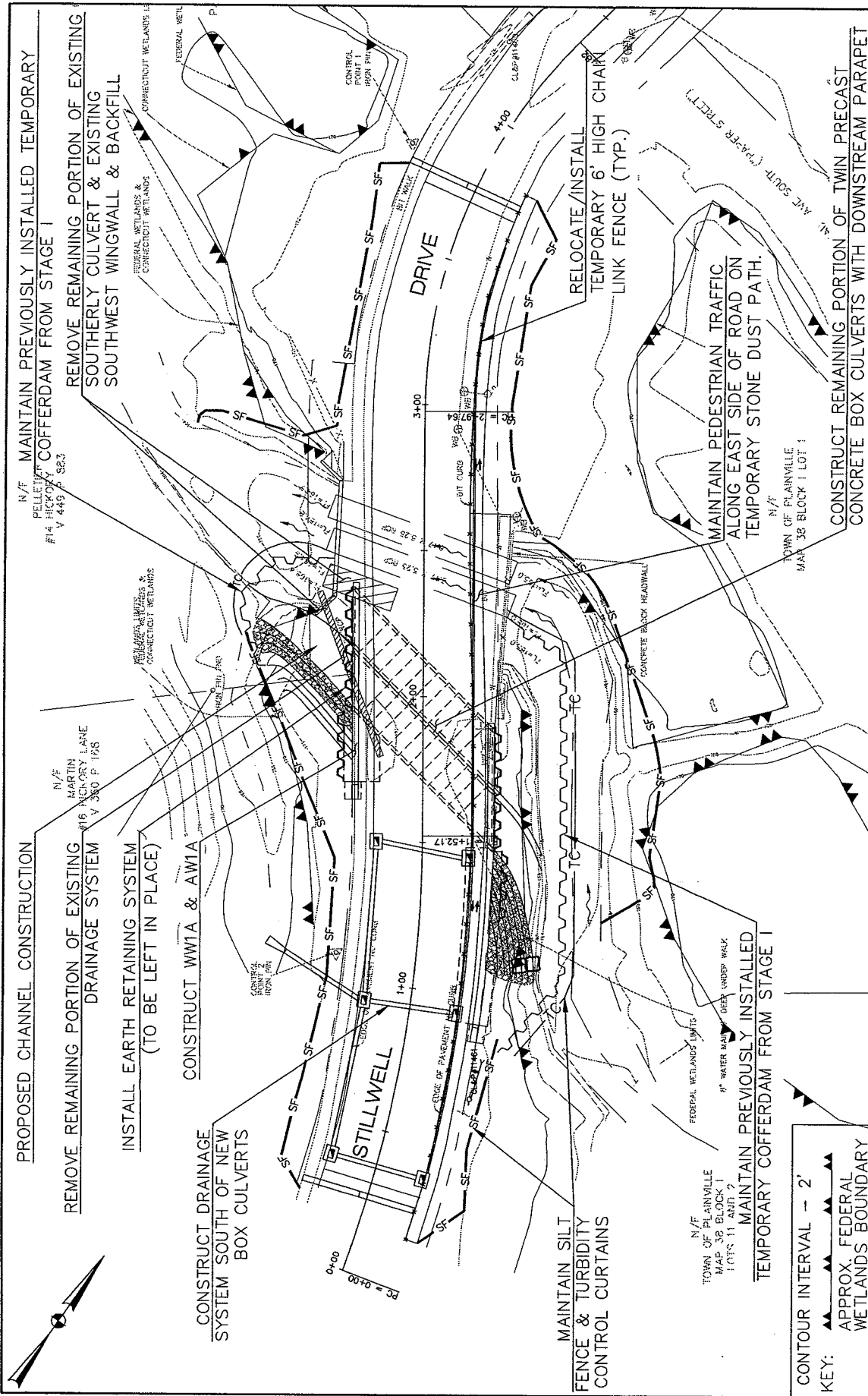
WENGL, McDONNELL & COSTELLO  
87 HOLMES ROAD  
NEWINGTON, CT 06111  
(860) 667-9824

GRAPHIC SCALE  
(IN FEET)  
1 inch = 50 ft

0 25 50 100

CONTOUR INTERVAL - 2'  
KEY: APPROX FEDERAL WETLANDS BOUNDARY

DATE: 06/12/09  
REVISIONS: 10/26/09



PROPOSED CHANNEL CONSTRUCTION

N/F BELLETTA HYCKOWSKI #14 V 445 P 523

MAINTAIN PREVIOUSLY INSTALLED TEMPORARY COFFERDAM FROM STAGE I

REMOVE REMAINING PORTION OF EXISTING SOUTHERLY CULVERT & EXISTING SOUTHWEST WINGWALL & BACKFILL

INSTALL EARTH RETAINING SYSTEM (TO BE LEFT IN PLACE)

CONSTRUCT WW1A & AW1A

CONSTRUCT DRAINAGE SYSTEM SOUTH OF NEW BOX CULVERTS

MAINTAIN SILT FENCE & TURBIDITY CONTROL CURTAINS

RELOCATE/INSTALL TEMPORARY 6' HIGH CHAIN LINK FENCE (TYP.)

MAINTAIN PEDESTRIAN TRAFFIC ALONG EAST SIDE OF ROAD ON TEMPORARY STONE DUST PATH.

CONSTRUCT REMAINING PORTION OF TWIN PRECAST CONCRETE BOX CULVERTS WITH DOWNSTREAM PARAPET

REMOVE REMAINING PORTION OF EXISTING DRAINAGE SYSTEM

N/F MARTIN #16 V 360 P 158

CONSTRUCT WW1A & AW1A

CONSTRUCT DRAINAGE SYSTEM SOUTH OF NEW BOX CULVERTS

MAINTAIN SILT FENCE & TURBIDITY CONTROL CURTAINS

RELOCATE/INSTALL TEMPORARY 6' HIGH CHAIN LINK FENCE (TYP.)

MAINTAIN PEDESTRIAN TRAFFIC ALONG EAST SIDE OF ROAD ON TEMPORARY STONE DUST PATH.

CONSTRUCT REMAINING PORTION OF TWIN PRECAST CONCRETE BOX CULVERTS WITH DOWNSTREAM PARAPET

CONTOUR INTERVAL - 2'

KEY:   
 ▲ APPROX FEDERAL WETLANDS BOUNDARY

DATE: 06/12/09  
 REVISIONS: 10/26/09

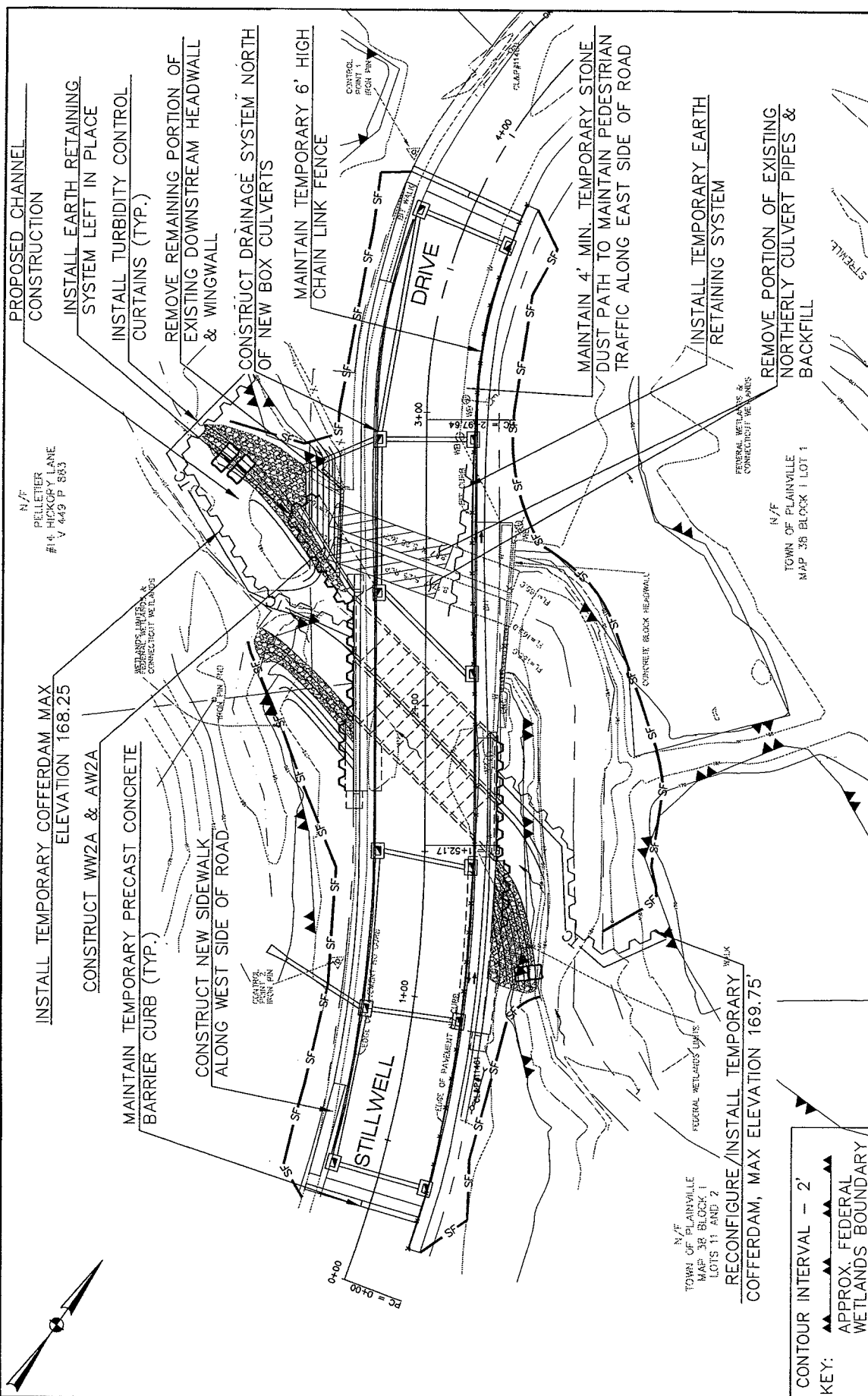
GRAPHIC SCALE  
 0 25 50 100  
 ( IN FEET )  
 1 inch = 50 ft.

REPLACEMENT OF  
 STILLWELL DRIVE BRIDGE NO. 04545  
 PLAINVILLE, CT  
 WATER HANDLING PLAN STAGE II  
 ACOE 404 APPLICATION PLATE 10 OF 12

**WMC**  
 CONSULTING ENGINEERS  
 WENGELL, McDONNELL & COSTELLO  
 87 HOLMES ROAD  
 NEWINGTON, CT 06111  
 (860) 667-9624

TOWN OF PLAINVILLE  
 MAP 38 BLOCK 1  
 LOTS 11 AND 7

N/F TOWN OF PLAINVILLE  
 MAP 38 BLOCK 1 LOT 1



PROPOSED CHANNEL CONSTRUCTION

INSTALL EARTH RETAINING SYSTEM LEFT IN PLACE  
INSTALL TURBIDITY CONTROL CURTAINS (TYP.)  
REMOVE REMAINING PORTION OF EXISTING DOWNSTREAM HEADWALL & WINGWALL

CONSTRUCT DRAINAGE SYSTEM NORTH OF NEW BOX CULVERTS

MAINTAIN TEMPORARY 6' HIGH CHAIN LINK FENCE

MAINTAIN 4' MIN. TEMPORARY STONE DUST PATH TO MAINTAIN PEDESTRIAN TRAFFIC ALONG EAST SIDE OF ROAD

INSTALL TEMPORARY EARTH RETAINING SYSTEM

REMOVE PORTION OF EXISTING NORTHERLY CULVERT PIPES & BACKFILL

INSTALL TEMPORARY COFFERDAM MAX ELEVATION 168.25

CONSTRUCT WW2A & AW2A

MAINTAIN TEMPORARY PRECAST CONCRETE BARRIER CURB (TYP.)

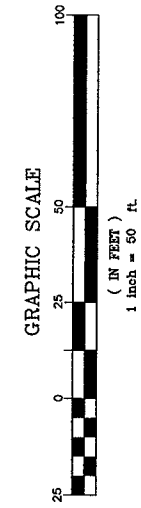
CONSTRUCT NEW SIDEWALK ALONG WEST SIDE OF ROAD

STILLWELL

RECONFIGURE/INSTALL TEMPORARY COFFERDAM, MAX ELEVATION 169.75

CONTOUR INTERVAL - 2'  
KEY: **▲▲** APPROX. FEDERAL WETLANDS BOUNDARY

DATE: 06/12/09  
REVISIONS: 10/26/09



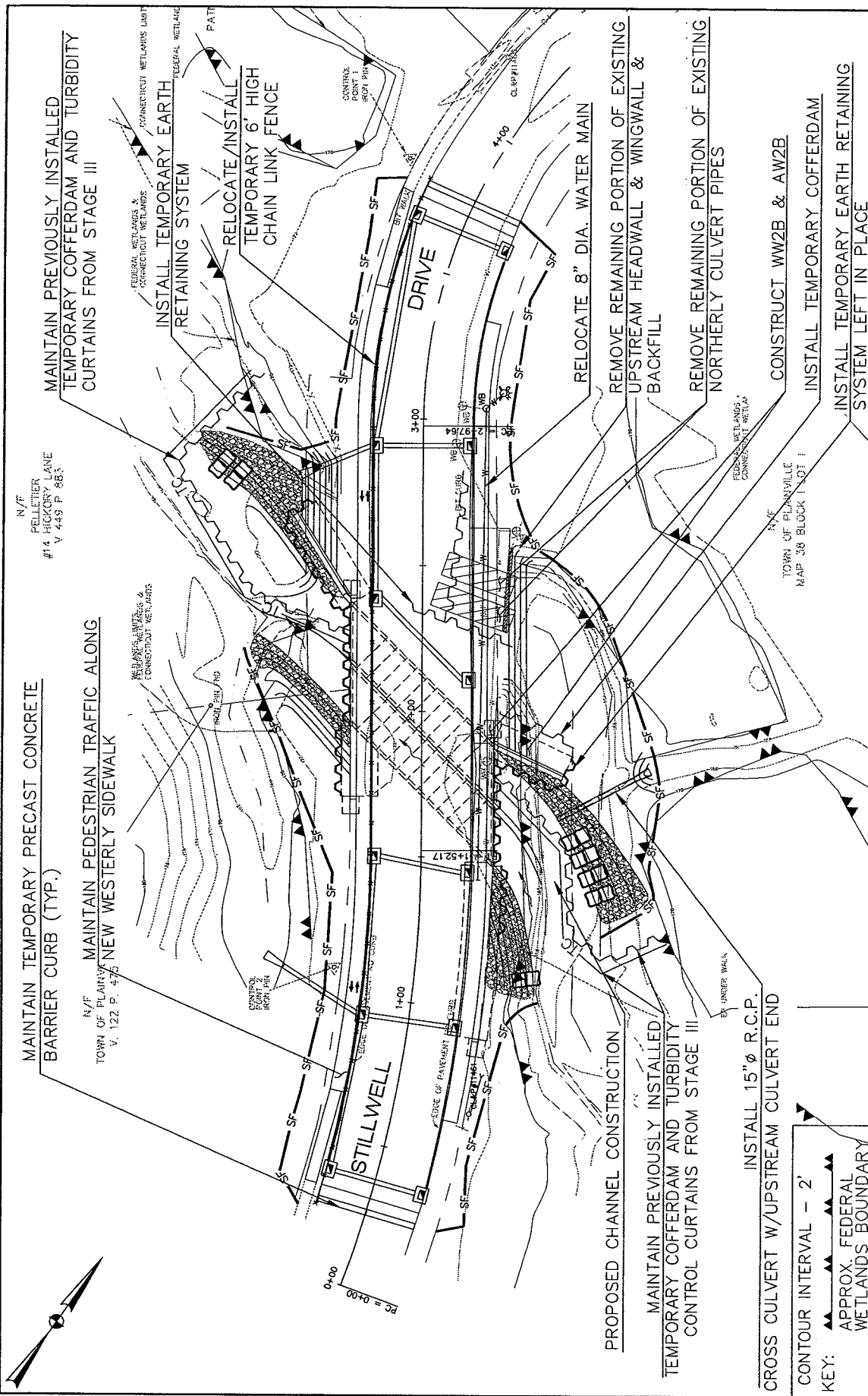
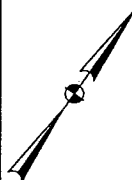
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NEWINGTON, CT 06111  
(860) 667-9624

REPLACEMENT OF STILLWELL DRIVE BRIDGE NO. 04545  
PLAINVILLE, CT  
WATER HANDLING PLAN STAGE III  
ACOE 404 APPLICATION PLATE 11 OF 12

N/E  
PELLETIER  
#14 HICKORY LANE  
V 449 P 583

N/E  
TOWN OF PLAINVILLE  
MAP 38 BLOCK 1 LOT 1

N/E  
TOWN OF PLAINVILLE  
MAP 38 BLOCK 1  
LOTS 11 AND 2



MAINTAIN TEMPORARY PRECAST CONCRETE BARRIER CURB (TYP.)

MAINTAIN PEDESTRIAN TRAFFIC ALONG NEW WESTERLY SIDEWALK

N/F PELLETIER #14 - HICZORY LANE V. 449 P. 865

N/F TOWN OF PLAINVILLE V. 122 P. 475

FEDERAL WETLANDS & CONNECTICUT WETLANDS

FEDERAL WETLANDS & CONNECTICUT WETLANDS LIMIT

CONTROL POINT 1 RCP PIP

CONTROL POINT 1 RCP PIP

STILLWELL

DRIVE

EDGE OF PAVEMENT

RELOCATE 8" DIA. WATER MAIN

CONCRETE CURB

REMOVE REMAINING PORTION OF EXISTING UPSTREAM HEADWALL & WINGWALL & BACKFILL

INSTALL 15"  $\phi$  R.C.P.

REMOVE REMAINING PORTION OF EXISTING NORTHERLY CULVERT PIPES

CROSS CULVERT W/UPSTREAM CULVERT END

CONSTRUCT WW2B & AW2B

CONTOUR INTERVAL - 2'

INSTALL TEMPORARY COFFERDAM

KEY: APPROX. FEDERAL WETLANDS BOUNDARY

INSTALL TEMPORARY EARTH RETAINING SYSTEM LEFT IN PLACE

PROPOSED CHANNEL CONSTRUCTION

REPLACE REMAINING PORTION OF EXISTING TEMPORARY COFFERDAM AND TURBIDITY CONTROL CURTAINS FROM STAGE III

MAINTAIN PREVIOUSLY INSTALLED TEMPORARY COFFERDAM AND TURBIDITY CONTROL CURTAINS FROM STAGE III

RELOCATE 8" DIA. WATER MAIN

INSTALL 15"  $\phi$  R.C.P.

REMOVE REMAINING PORTION OF EXISTING NORTHERLY CULVERT PIPES

CROSS CULVERT W/UPSTREAM CULVERT END

CONSTRUCT WW2B & AW2B

CONTOUR INTERVAL - 2'

INSTALL TEMPORARY COFFERDAM

KEY: APPROX. FEDERAL WETLANDS BOUNDARY

INSTALL TEMPORARY EARTH RETAINING SYSTEM LEFT IN PLACE

<p>DATE: 06/12/09 REVISIONS: 10/26/09</p>	<p><b>WMC</b> CONSULTING ENGINEERS</p> <p>WENDELL, McDONNELL &amp; COSTELLO 87 HOLMES ROAD NEWINGTON, CT 06111 (860) 667-9624</p>	<p>REPLACEMENT OF STILLWELL DRIVE BRIDGE NO. 04545 PLAINVILLE, CT</p> <p>WATER HANDLING PLAN STAGE IV ACOE 404 APPLICATION PLATE 12 OF 12</p>
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