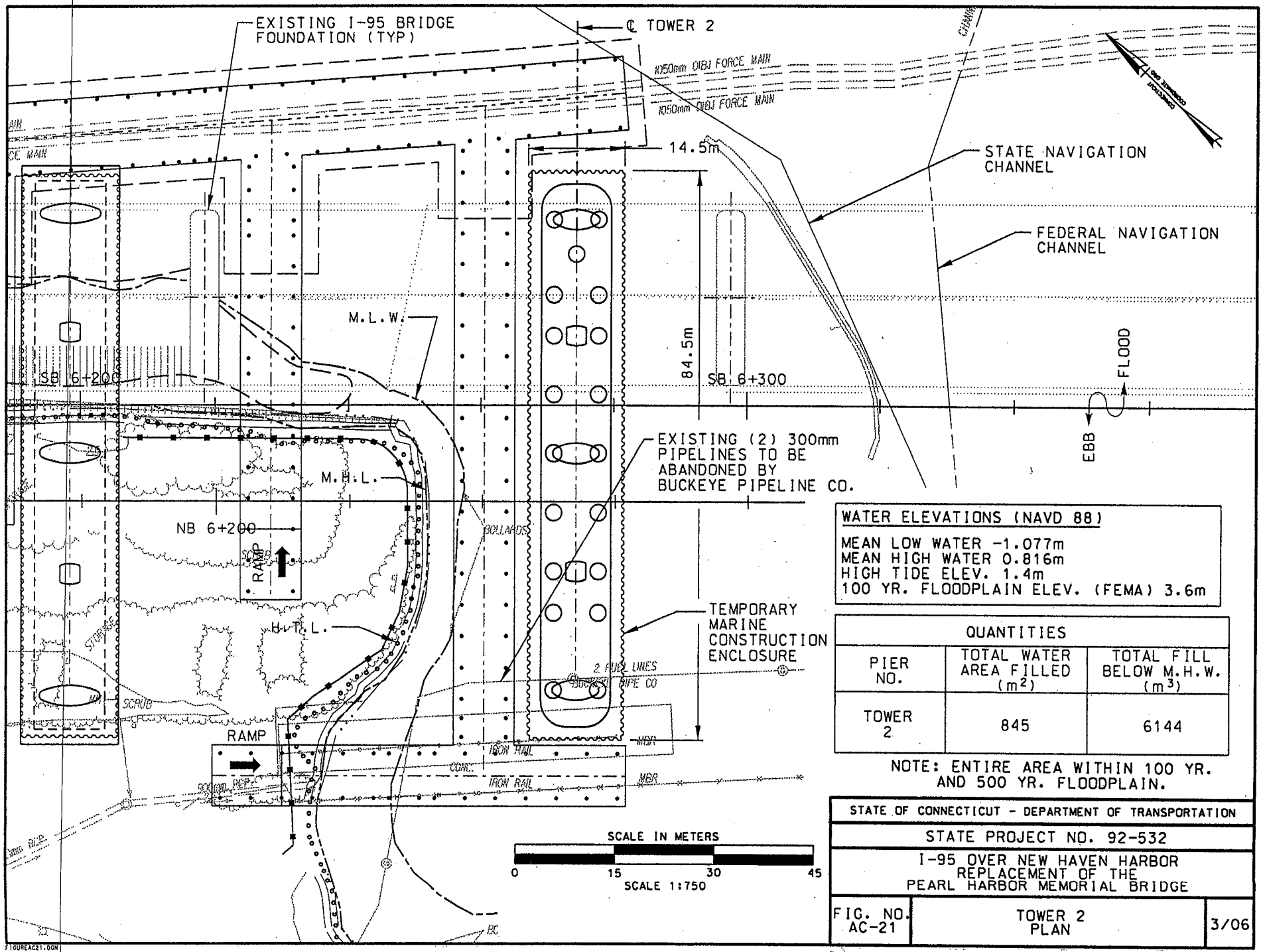

WATER ELEVATIONS (NAVD 88)

MEAN LOW WATER -1.077m
MEAN HIGH WATER 0.816m
HIGH TIDE ELEV. 1.4m
100 YR. FLOODPLAIN ELEV. (FEMA) 3.6m

QUANTITIES		
PIER NO.	TOTAL WATER AREA FILLED (m^2)	TOTAL FILL BELOW M.H.W. (m^3)
TOWER 2	845	6144

NOTE: ENTIRE AREA WITHIN 100 YR. AND 500 YR. FLOODPLAIN.

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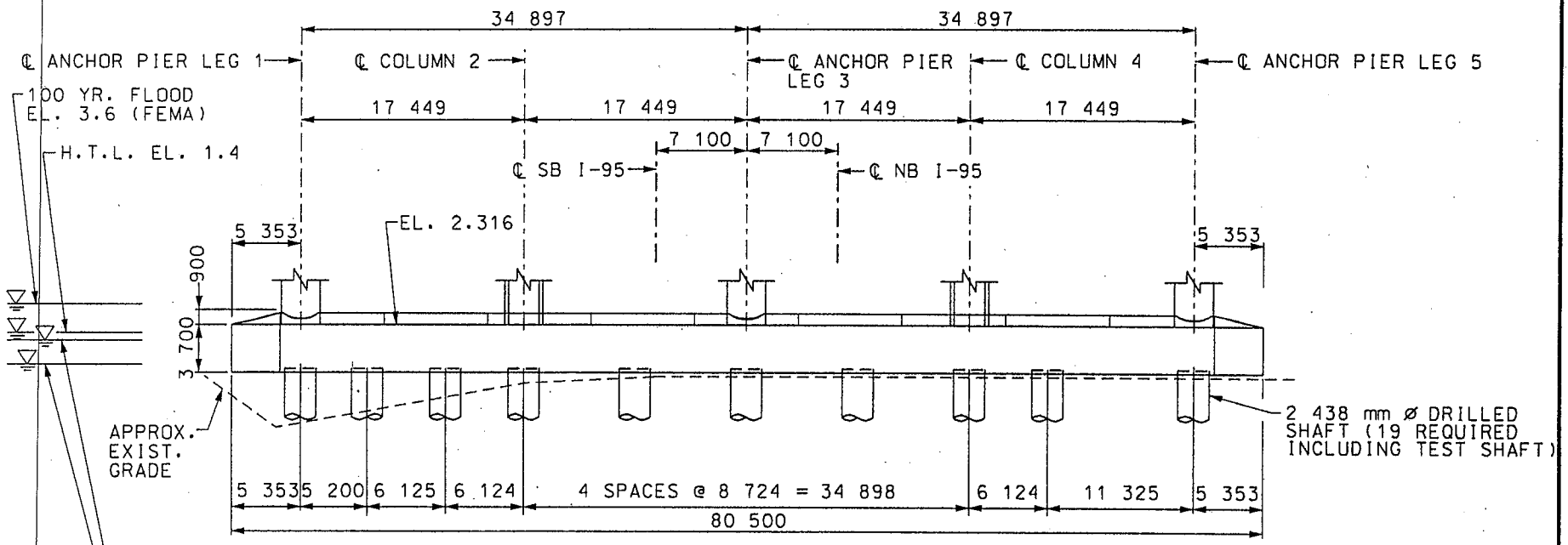
FIG. NO.		
AC-21	TOWER 2 PLAN	3/06

FIGUREAC21.DGN



ELEVATION

SCALE 1:500

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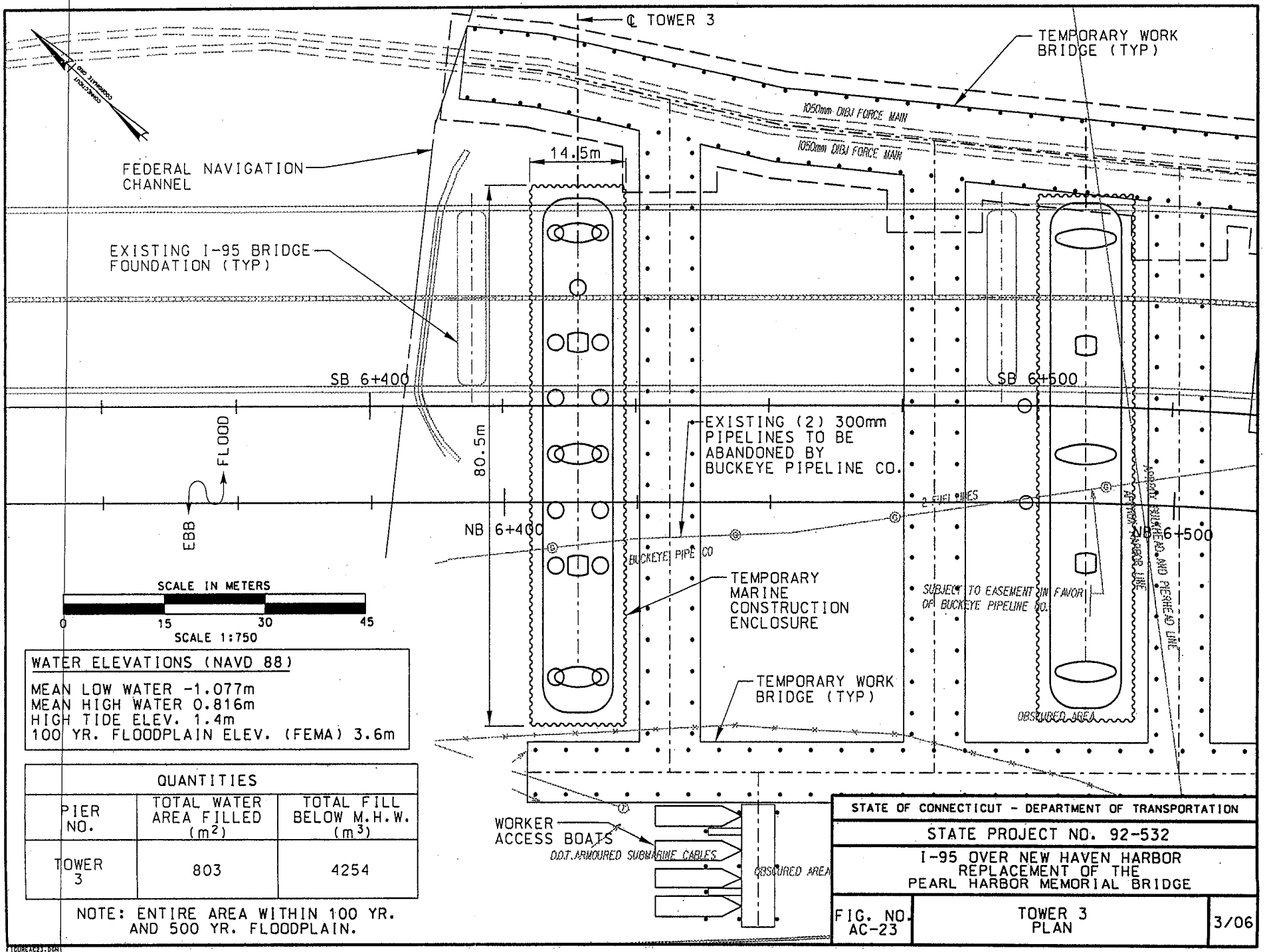
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-22	TOWER 2 ELEVATION	2/06

FIGUREAC22.DGN



WATER ELEVATIONS (NAVD 88)

MEAN LOW WATER -1.077m
MEAN HIGH WATER 0.816m
HIGH TIDE ELEV. 1.4m
100 YR. FLOODPLAIN ELEV. (FEMA) 3.6m

QUANTITIES		
PIER NO.	TOTAL WATER AREA FILLED (m^2)	TOTAL FILL BELOW M.H.W. (m^3)
TOWER 3	803	4254

NOTE: ENTIRE AREA WITHIN 100 YR. AND 500 YR. FLOODPLAIN.

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REPLACEMENT OF THE
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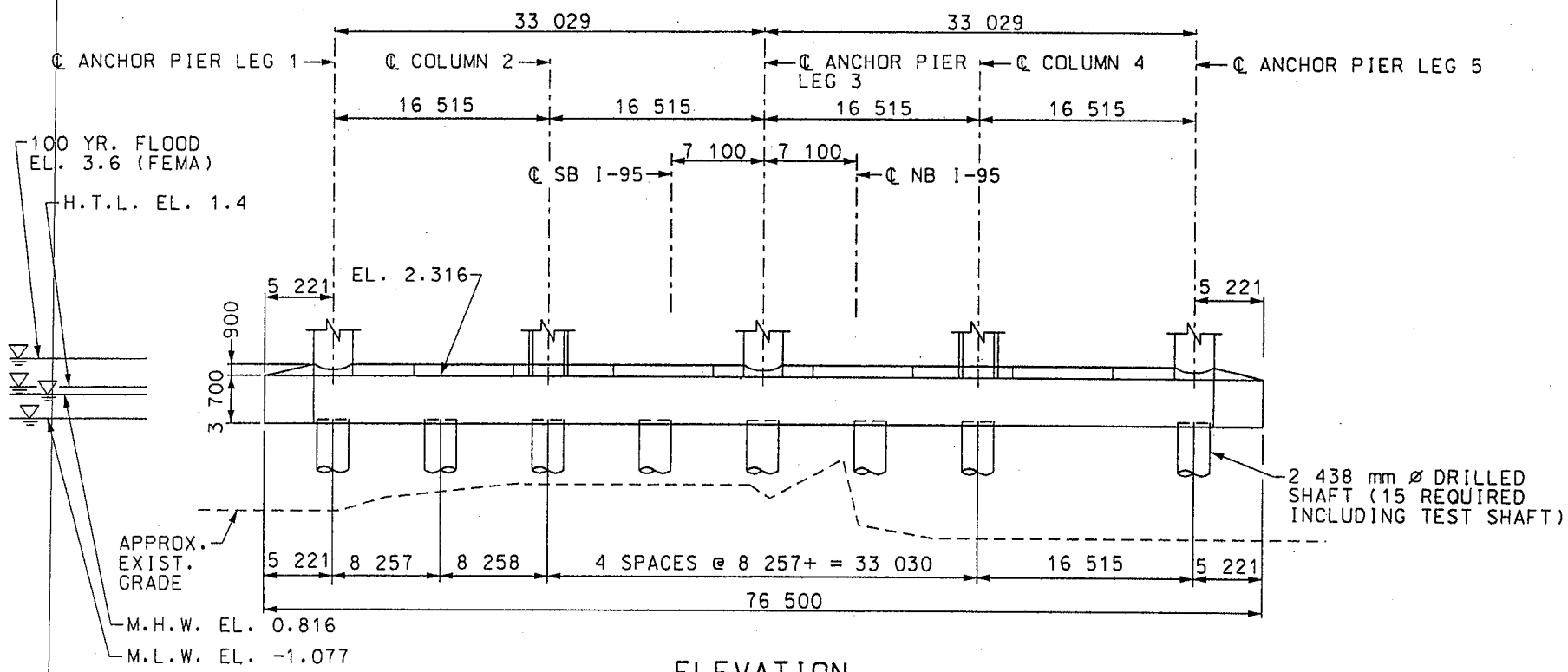
FIG. NO.		
AC-23	TOWER 3 PLAN	3/06

FIGUREAC23.DGN



ELEVATION
SCALE 1:500

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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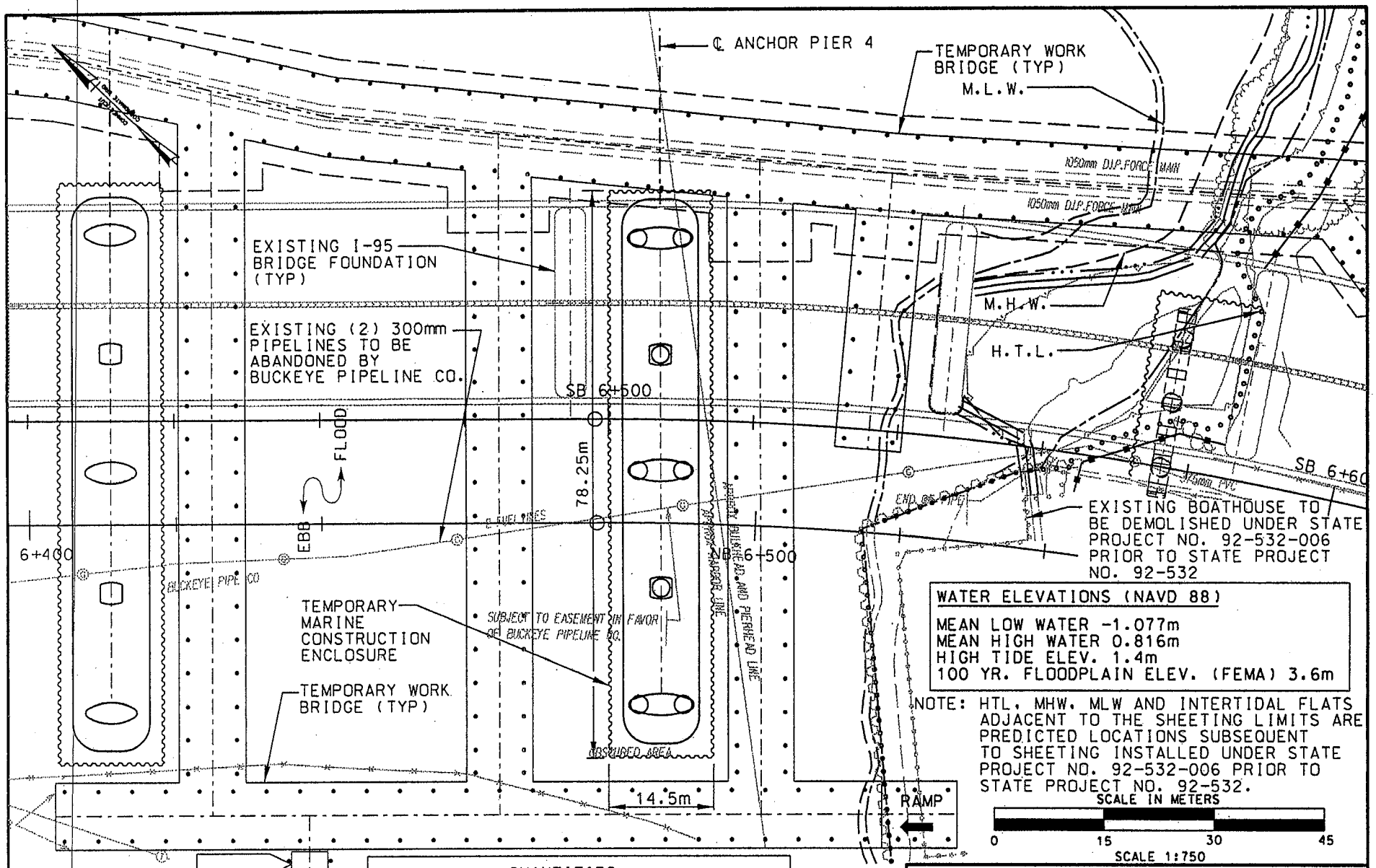
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-24	TOWER 3 ELEVATION	2/06

FIGUREAC24.DGN



WATER ELEVATIONS (NAVD 88)

MEAN LOW WATER -1.077m
MEAN HIGH WATER 0.816m
HIGH TIDE ELEV. 1.4m
100 YR. FLOODPLAIN ELEV. (FEMA) 3.6m

NOTE: HTL, MHW, MLW AND INTERTIDAL FLATS ADJACENT TO THE SHEETING LIMITS ARE PREDICTED LOCATIONS SUBSEQUENT TO SHEETING INSTALLED UNDER STATE PROJECT NO. 92-532-006 PRIOR TO STATE PROJECT NO. 92-532.

SCALE IN METERS

0 15 30 45

SCALE 1:750

QUANTITIES		
PIER NO.	TOTAL WATER AREA FILLED (m^2)	TOTAL FILL BELOW M.H.W. (m^3)
ANCHOR PIER 4	788	4411

NOTE: ENTIRE AREA WITHIN 100 YR. AND 500 YR. FLOODPLAIN.

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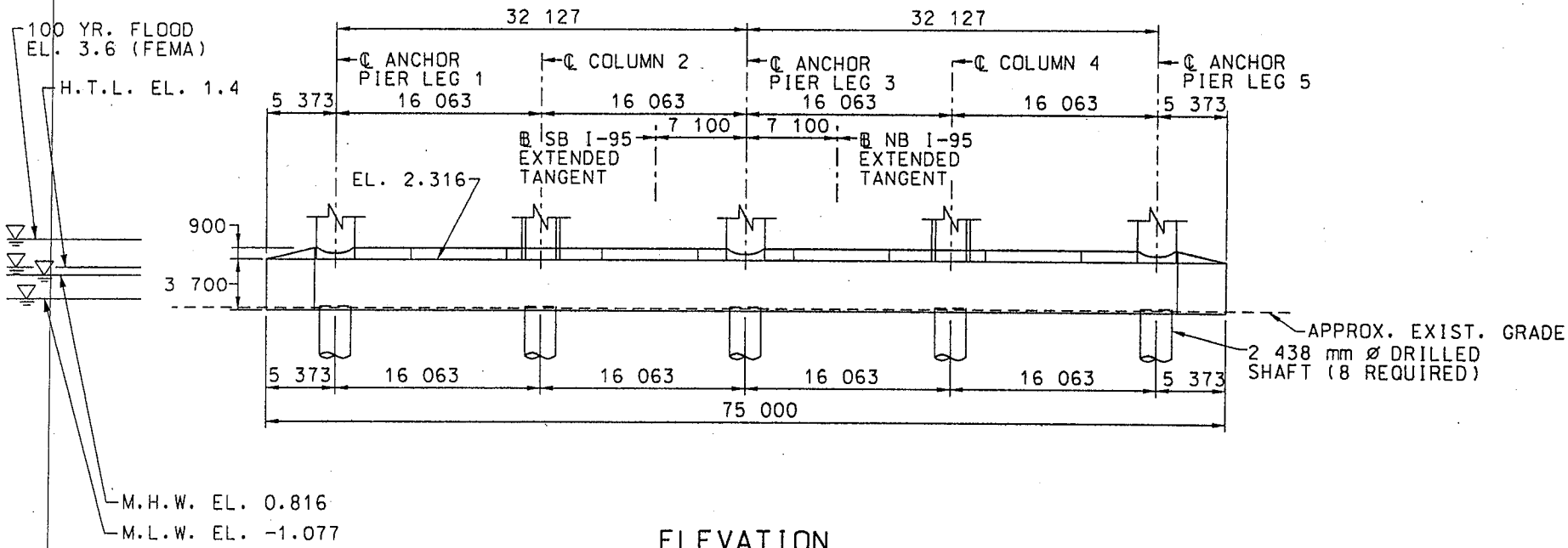
FIG. NO.		
AC-25	ANCHOR PIER 4 PLAN	3/06

CAFIGUREN508.DGN



ELEVATION

SCALE 1:500

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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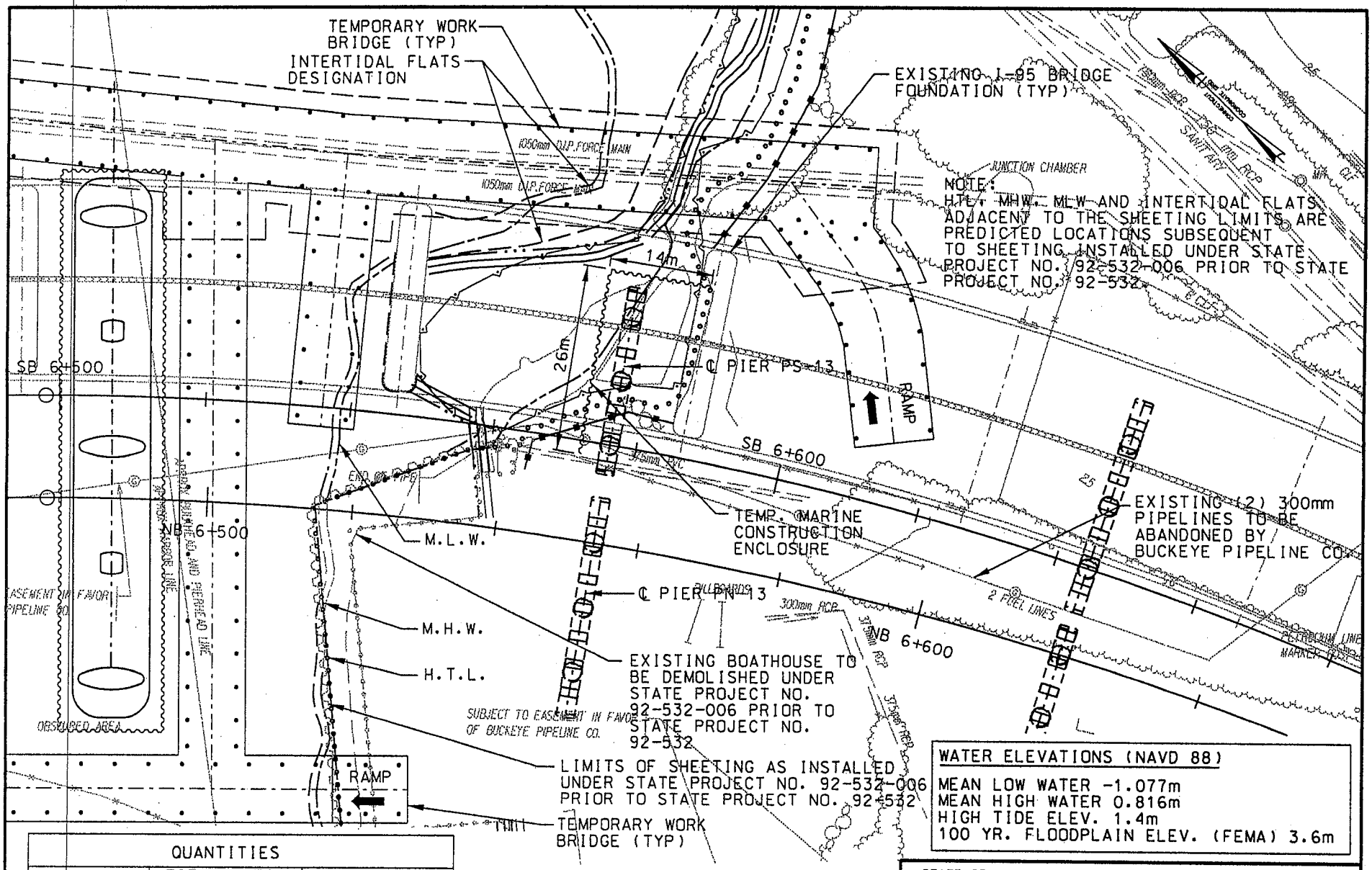
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-26	ANCHOR PIER 4 ELEVATION	2/06

FIGUREAC26.DGN



WATER ELEVATIONS (NAVD 88)
MEAN LOW WATER -1.077m
MEAN HIGH WATER 0.816m
HIGH TIDE ELEV. 1.4m
100 YR. FLOODPLAIN ELEV. (FEMA) 3.6m

QUANTITIES		
PIER NO.	TOTAL WATER AREA FILLED (m^2)	TOTAL FILL BELOW M.H.W. (m^3)
PIER PS-13	9	0

NOTE: ENTIRE AREA WITHIN 100 YR. AND 500 YR. FLOODPLAIN.

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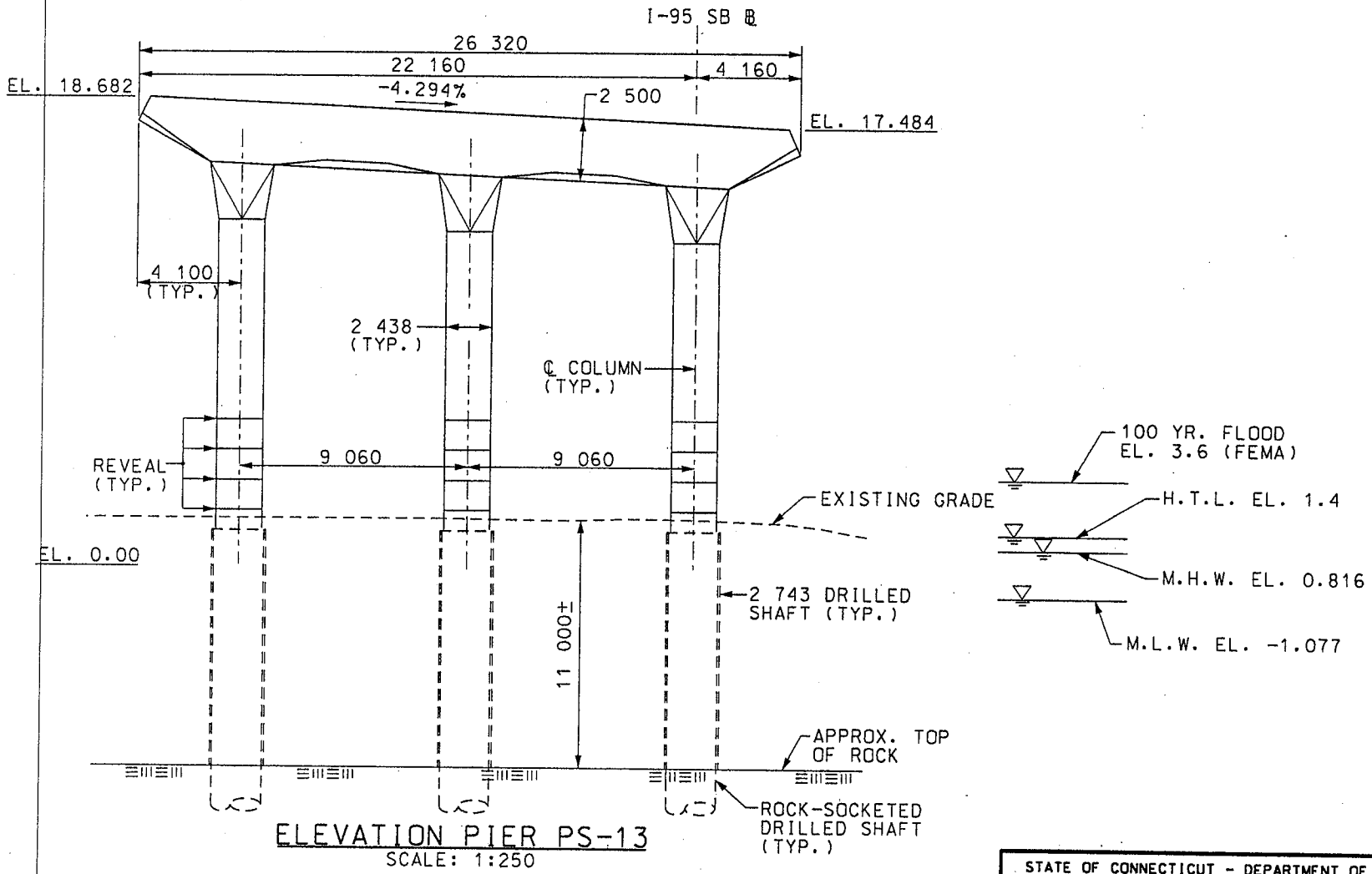
REPLACEMENT OF THE
PEARL HARBOR MEMORIAL BRIDGE

FIG. NO.		
AC-27	PIER PS-13 PLAN	2/06

FIGUREAC27.DGN



ELEVATION PIER PS-13
SCALE: 1:250

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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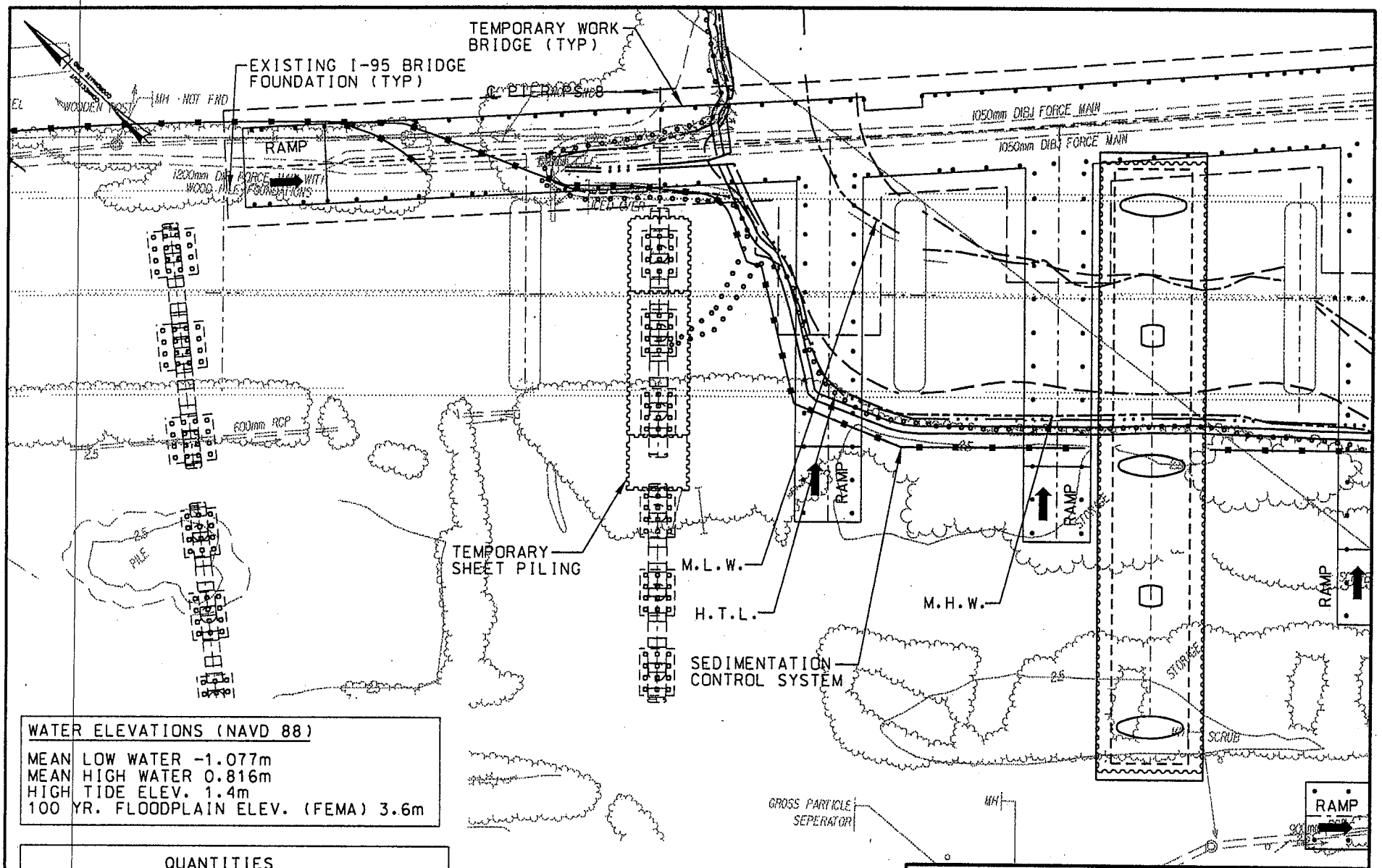
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-28	PIER PS-13 ELEVATION	2/06

FIGUREAC28.DGN



WATER ELEVATIONS (NAVD 88)

MEAN LOW WATER -1.077m
MEAN HIGH WATER 0.816m
HIGH TIDE ELEV. 1.4m
100 YR. FLOODPLAIN ELEV. (FEMA) 3.6m

QUANTITIES		
PIER NO.	TOTAL WATER AREA FILLED (m^2)	TOTAL FILL BELOW M.H.W. (m^3)
PIER PS-8	0	0

SCALE IN METERS
0 15 30 45
SCALE 1:750

NOTE: ENTIRE AREA WITHIN 100 YR. AND 500 YR. FLOODPLAIN.

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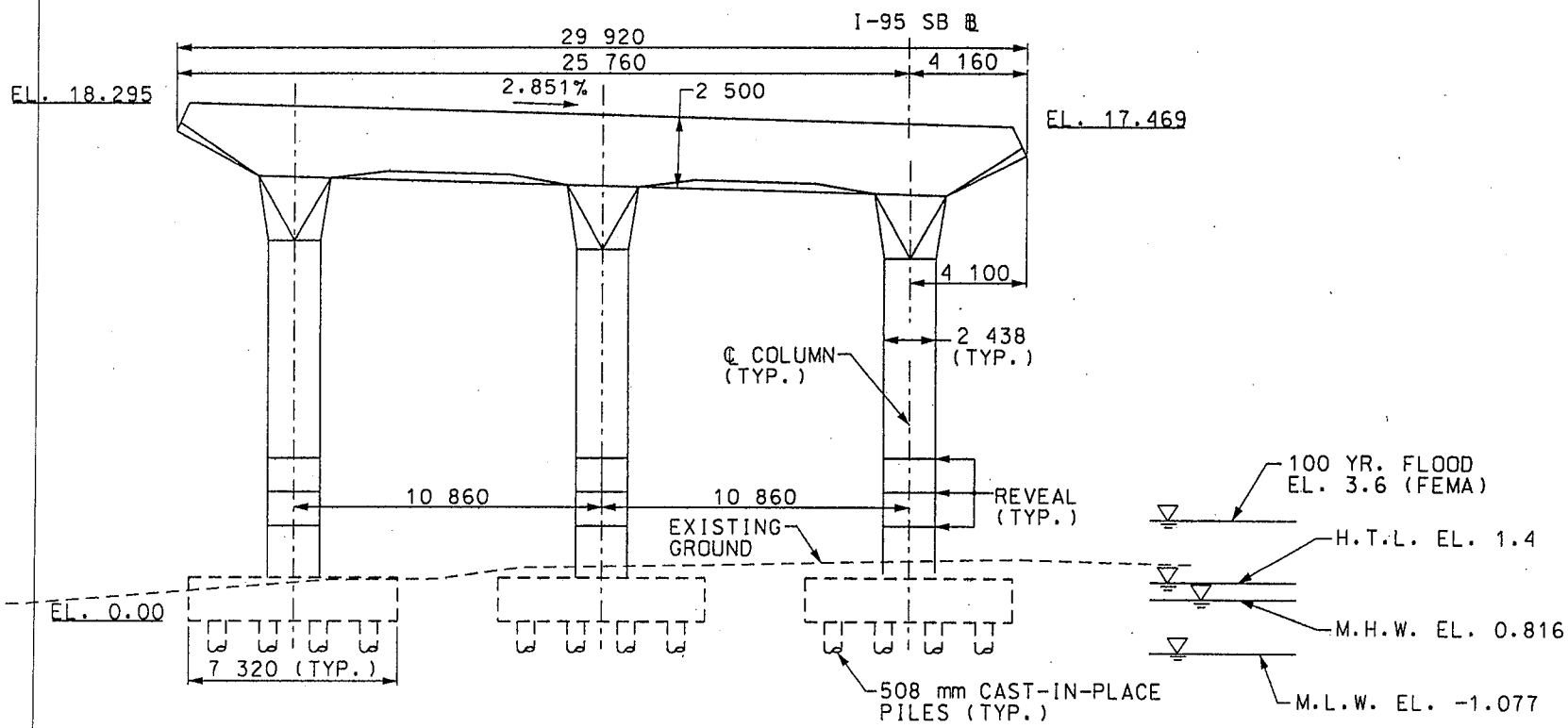
FIG. NO.		
AC-29	PIER PS-8 PLAN	2/06



ELEVATION PIER PS-8

SCALE: 1:250

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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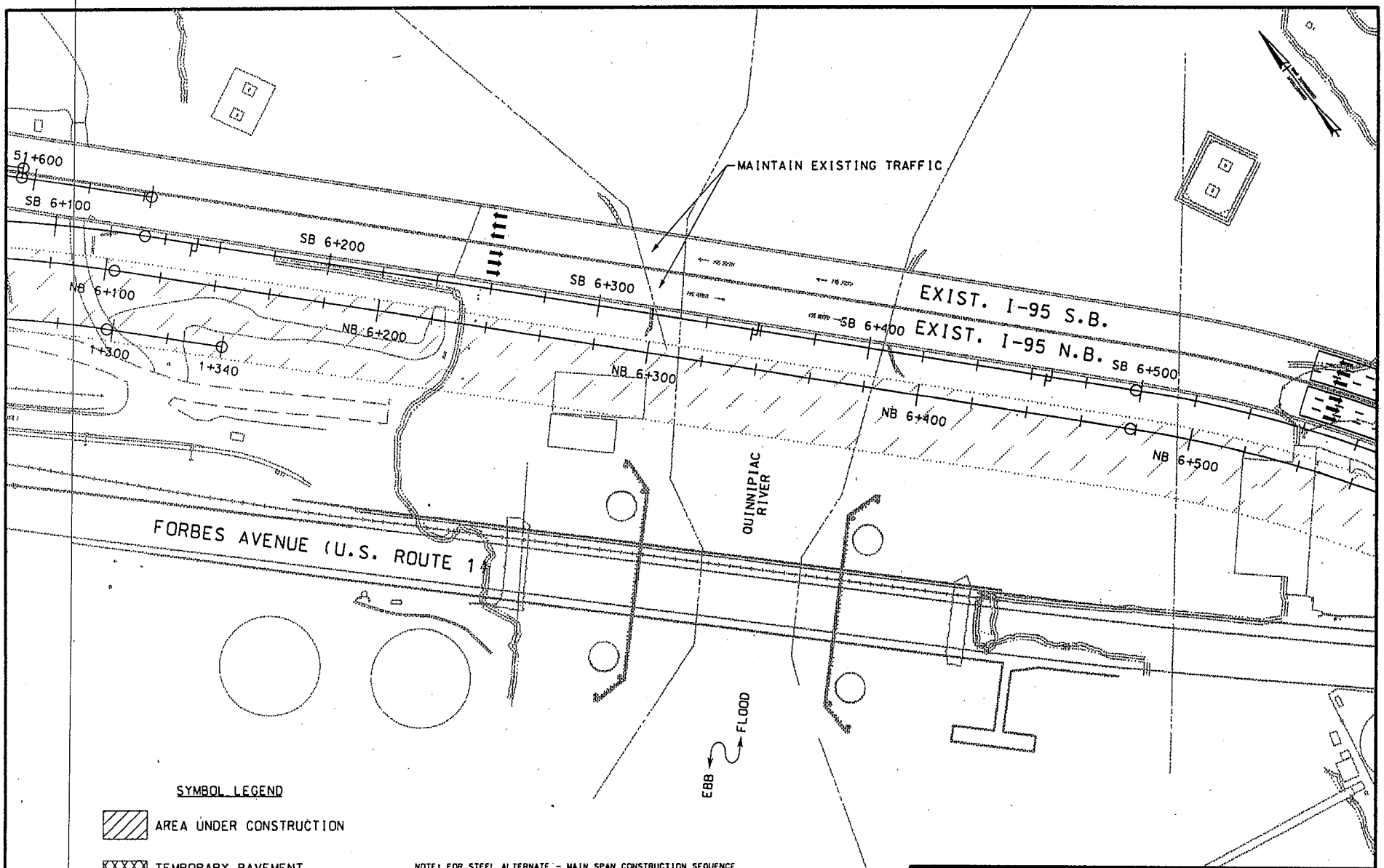
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-30	PIER PS-8 ELEVATION	2/06

FIGUREAC30.DGN



SYMBOL LEGEND

- AREA UNDER CONSTRUCTION
- TEMPORARY PAVEMENT UNDER CONSTRUCTION
- FINAL PAVEMENT COMPLETED
- TEMPORARY PAVEMENT COMPLETED

NOTE: FOR STEEL ALTERNATE - MAIN SPAN CONSTRUCTION SEQUENCE PLATES, SEE FIGURE NO.'S AC-31S THROUGH AC-48S.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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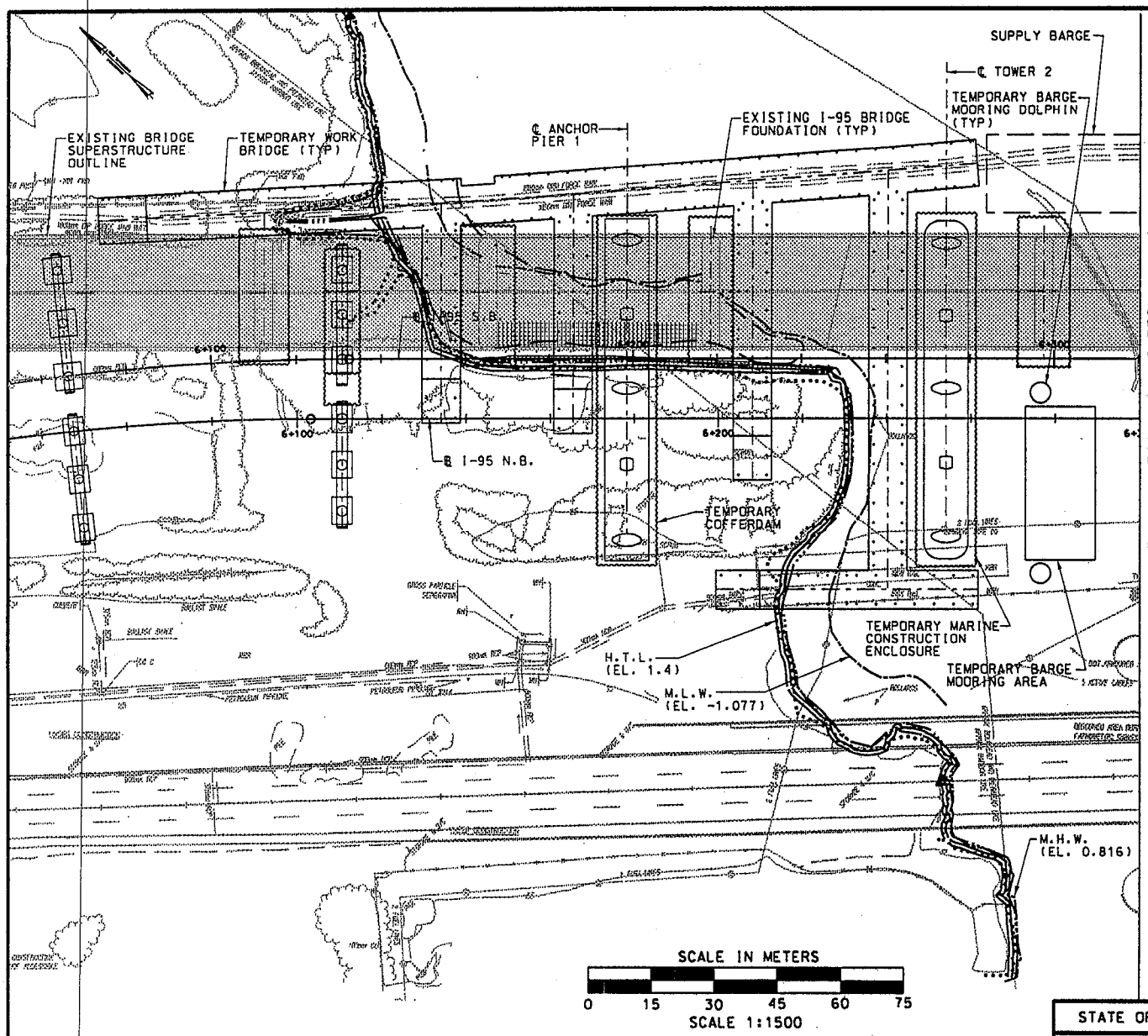
FIG. NO. AC-31C	CONCRETE ALTERNATE MAIN SPAN STAGE 1A CONSTRUCTION	2/06

FIGUREAC31C.DGM



MATCH LINE - SEE FIG. NO. AC-33C

STAGES 1A-1B: NORTHBOUND I-95 BRIDGE CONSTRUCTION

(STAGE CORRESPONDS TO OVERALL PROJECT STAGING)

STEP 1

1. CONSTRUCT TEMPORARY WORK BRIDGES AT EACH PIER LOCATION. LOW MEMBER OF EACH WORK BRIDGE TO BE 500 mm ABOVE THE 10 YEAR FLOOD ELEVATION OF 2.300.
2. INSTALL TEMPORARY COFFERDAM AT ANCHOR PIER 1 AND MARINE CONSTRUCTION ENCLOSURES AT TOWERS 2 & 3 AND ANCHOR PIER 4.
3. CONSTRUCT FOUNDATION AND FOOTINGS FOR I-95 NORTHBOUND AND I-95 SOUTHBOUND BRIDGES. NOTE THAT FOUNDATION/FOOTING FOR I-95 SOUTHBOUND IS CONSTRUCTED BENEATH EXISTING I-95 BRIDGE.

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.

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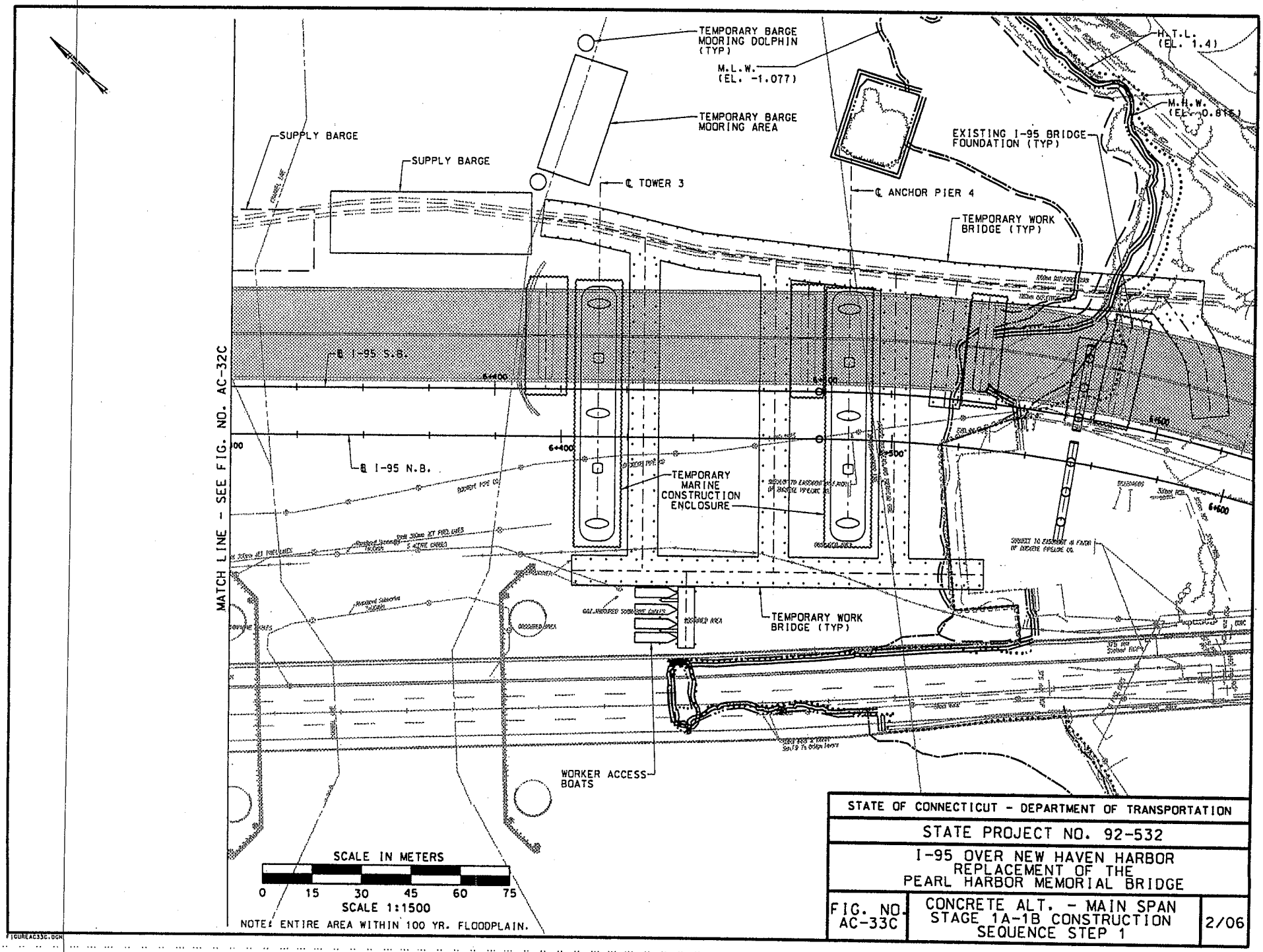
FIG. NO. AC-32C	CONCRETE ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEP 1	2/06

FIGURAC32C.DGN


TEMPORARY BARGE MOORING DOLPHIN (TYP)
M.L.W. (EL. -1.077)
TEMPORARY BARGE MOORING AREA
H.T.L. (EL. 1.4)
M.H.W. (EL. 0.815)
EXISTING I-95 BRIDGE FOUNDATION (TYP)
SUPPLY BARGE
SUPPLY BARGE
℄ TOWER 3
℄ ANCHOR PIER 4
TEMPORARY WORK BRIDGE (TYP)
℄ I-95 S.B.
℄ I-95 N.B.
6+400
6+500
TEMPORARY MARINE CONSTRUCTION ENCLOSURE
TEMPORARY WORK BRIDGE (TYP)
WORKER ACCESS BOATS
MATCH LINE - SEE FIG. NO. AC-32C
SCALE IN METERS
0 15 30 45 60 75
SCALE 1:1500
NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.
STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION
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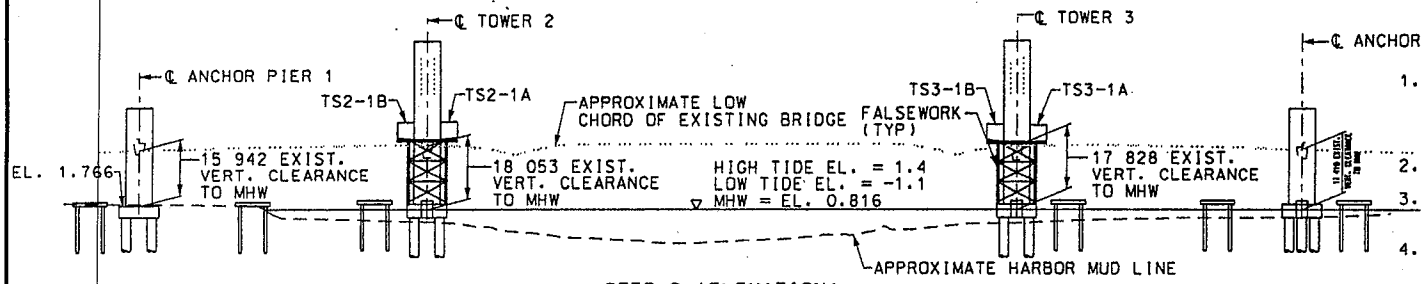
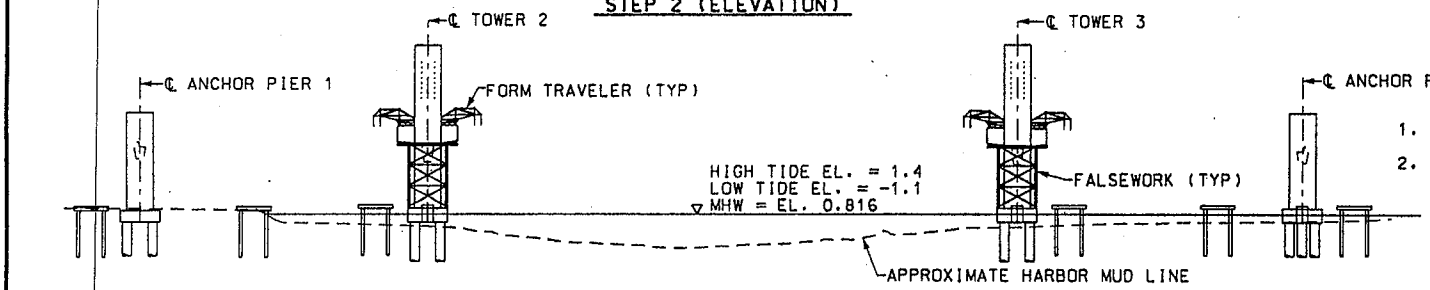
I-95 OVER NEW HAVEN HARBOR
REPLACEMENT OF THE
PEARL HARBOR MEMORIAL BRIDGE
FIG. NO. AC-33C
CONCRETE ALT. - MAIN SPAN
STAGE 1A-1B CONSTRUCTION
SEQUENCE STEP 1
2/06
FIGUREAC33C.DGN



STEP 2 (ELEVATION)

STEP 2

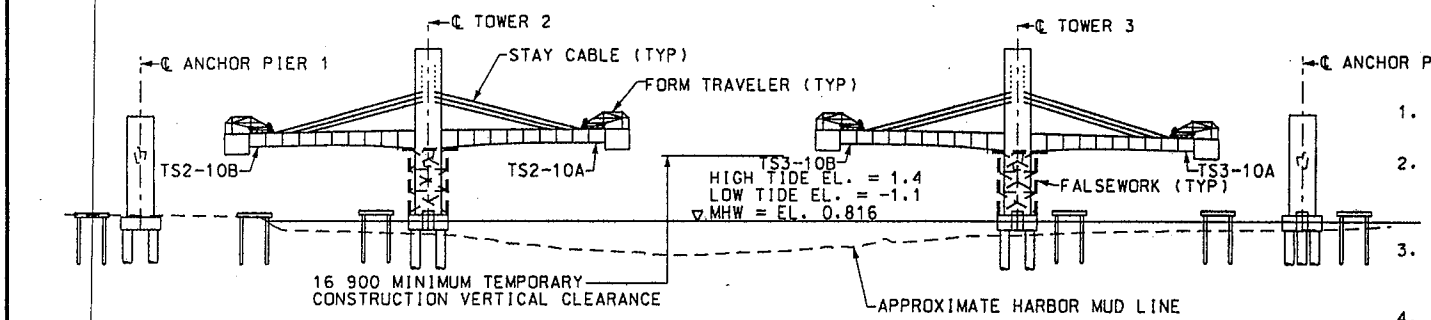
1. CONSTRUCT NORTHBOUND HALF OF ANCHOR PIERS 1 AND 4 AND TOWERS 2 & 3. PIER TABLES CAN BE STARTED PRIOR TO TOWER HEADS BEING COMPLETED.
2. CONSTRUCT FALSEWORK AT TOWERS 2 & 3.
3. CONSTRUCT TOWER 2 PIER TABLE AND SEGMENTS TS2-1A & 1B.
4. CONCURRENTLY, CONSTRUCT TOWER 3 PIER TABLE AND SEGMENTS TS3-1A & 1B.



STEP 3 (ELEVATION)

STEP 3

1. ERECT TRAVELERS AT TOWERS 2 AND 3.
2. CONSTRUCT SUPERSTRUCTURE AT TOWERS 2 AND 3 WITH TECHNIQUE EMPLOYING FORM TRAVELER AND CAST-IN-PLACE SEGMENTS IN BALANCE CANTILEVER.



STEP 4 (ELEVATION)

STEP 4

1. CONTINUE CONSTRUCTION OF SUPERSTRUCTURE CANTILEVER OFF TOWERS 2 AND 3.
2. INSTALL AND STRESS STAY CABLES AFTER SEGMENTS HAVE ACHIEVED SUFFICIENT STRENGTH AND AFTER ADVANCING TRAVELERS ONE SEGMENT.
3. REMOVE FALSEWORK AT TOWER 2 ONCE TRAVELERS HAVE ADVANCED PAST SEGMENTS TS2-10A & 10B.
4. REMOVE FALSEWORK AT TOWER 3 ONCE TRAVELERS HAVE ADVANCED PAST SEGMENTS TS3-10A & 10B.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

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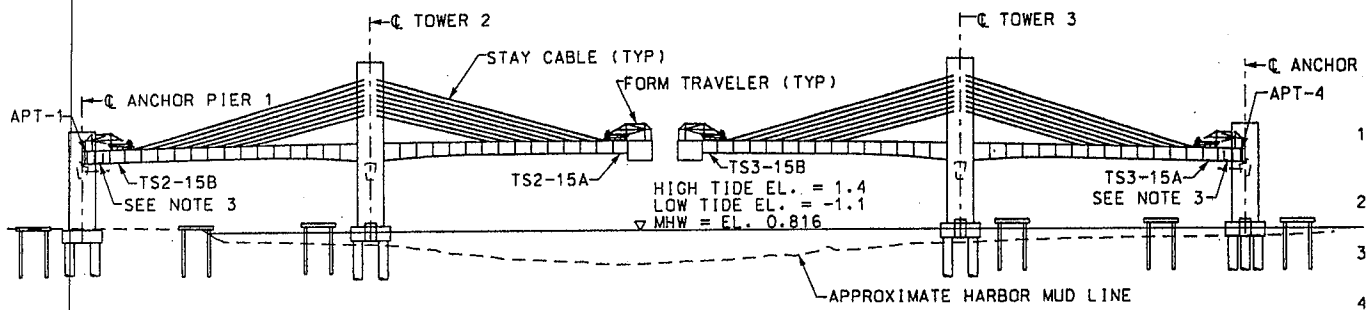
FIG. NO. AC-34C	CONCRETE ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEPS 2, 3 & 4	2/06

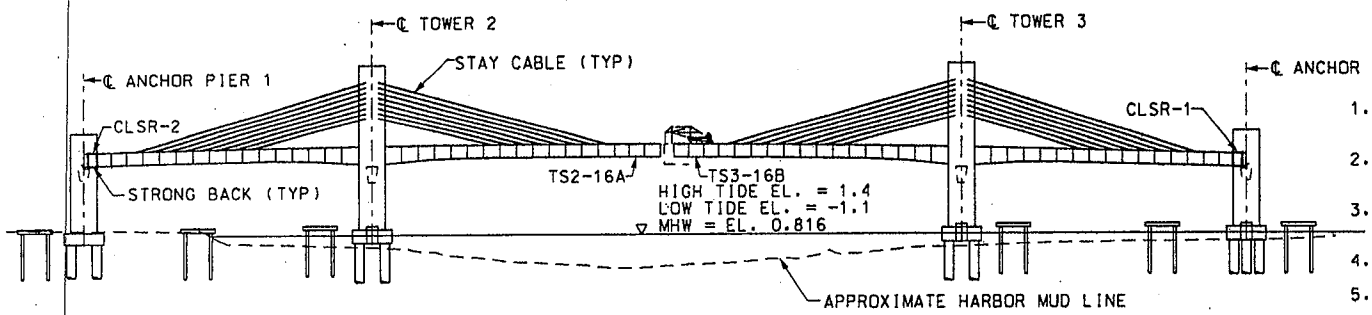
FIGUREAC34C.DGN



STEP 5 (ELEVATION)

STEP 5

1. COMPLETE CONSTRUCTION OF SUPERSTRUCTURE CANTILEVER OFF TOWERS 2 & 3. (TS2-16B, TS2-16A, TS3-16B & TS3-16A)
2. CONSTRUCT ANCHOR PIER TABLE SEGMENTS APT-1 AND APT-4.
3. CAST INTERNAL DIAPHRAGM IN SEGMENTS TS2-16B & TS3-16A.
4. REMOVE SPANS 1 & 3 FORM TRAVELERS.



STEP 6 (ELEVATION)

STEP 6

1. CAST SPAN 1 & 3 CLOSURES CLSR-1 AND CLSR-2.
2. INSTALL AND STRESS SPANS 1 & 3 CONTINUITY POST-TENSIONING.
3. ADVANCE SPAN 2 (AHEAD) FORM TRAVELER AND CAST SEGMENT TS2-17A.
4. REMOVE SPAN 2 (AHEAD) FORM TRAVELER.
5. ADVANCE SPAN 2 (BACK) FORM TRAVELER AND CAST SEGMENT TS3-17B.
6. REMOVE SPAN 2 (BACK) FORM TRAVELER.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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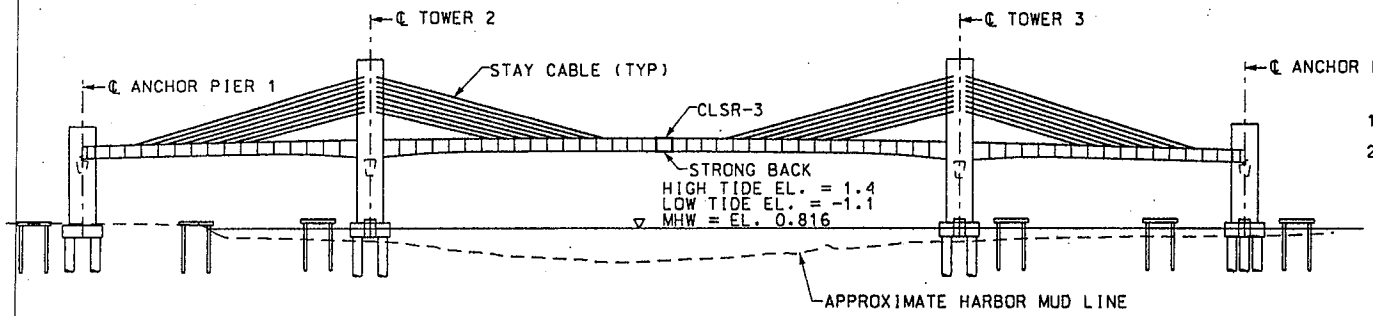
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-35C	CONCRETE ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEPS 5 & 6	2/06

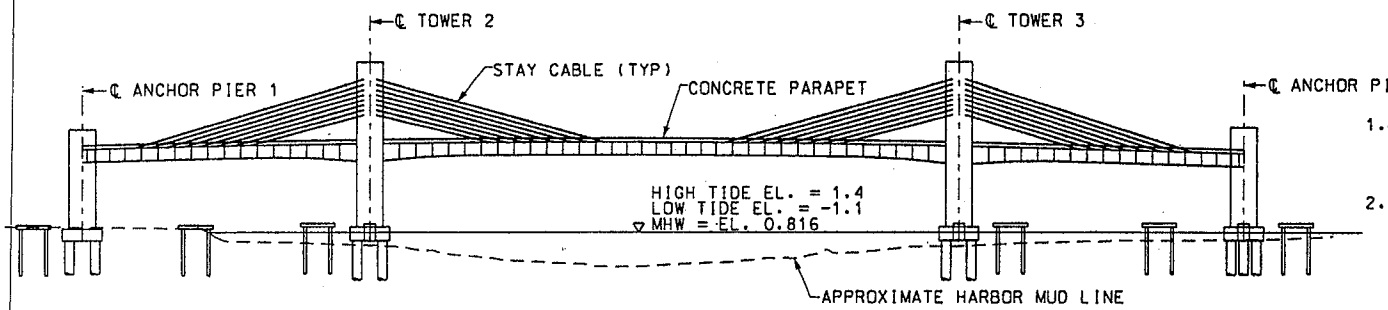
FIGUREAC35C.DGN



STEP 7 (ELEVATION)

STEP 7

1. CAST SPAN 2 CLOSURE.
2. INSTALL AND STRESS SPAN 2 CONTINUITY POST-TENSIONING.



STEP 8 (ELEVATION)

STEP 8

1. CONSTRUCT PARAPET AND TEMPORARY MEDIAN BARRIER. INSTALL OVERLAY FOR TEMPORARY CONDITION AND COMPLETE MISCELLANEOUS WORK.
2. OPEN TO STAGED TRAFFIC.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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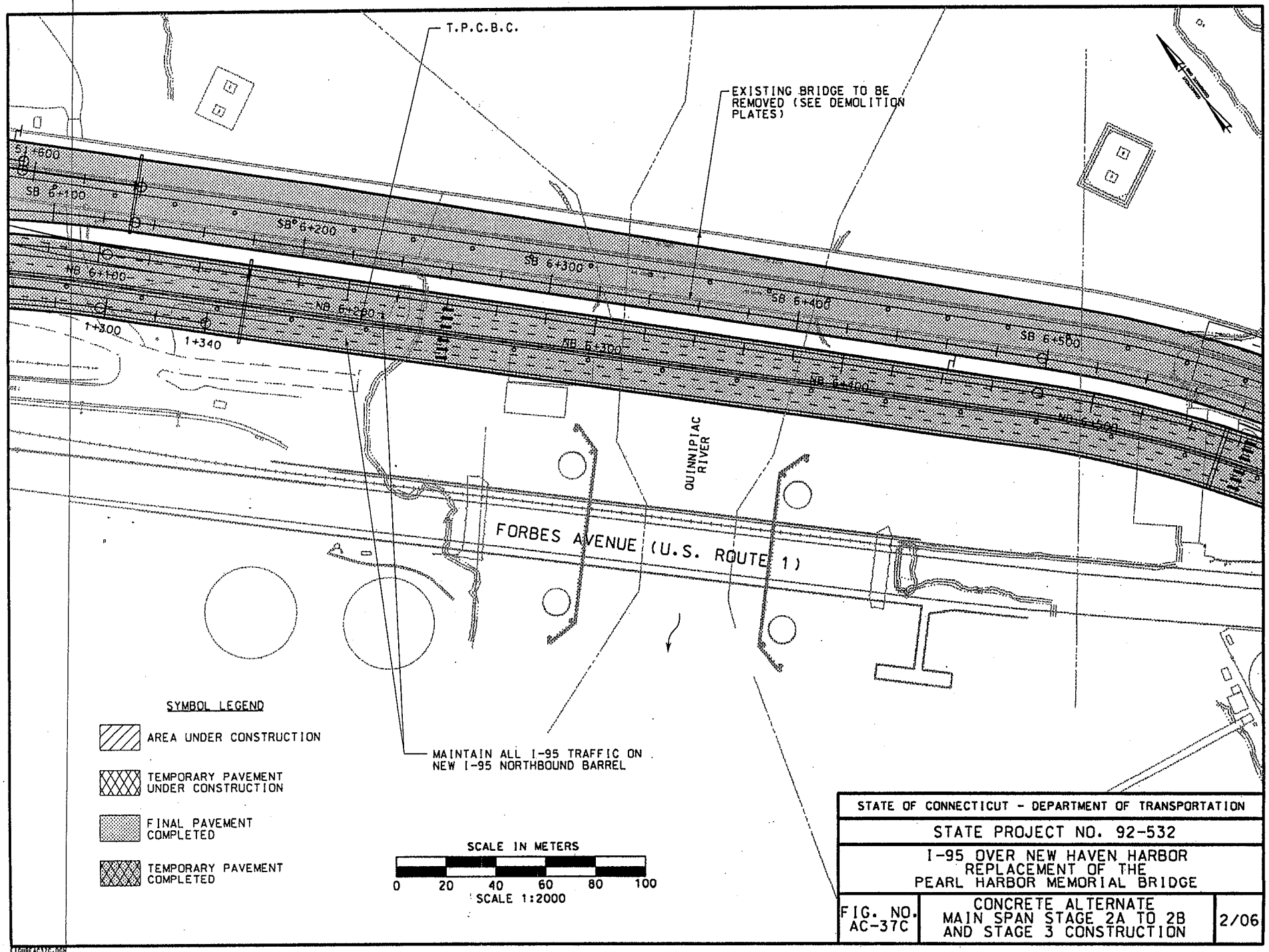
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-36C	CONCRETE ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEPS 7 & 8	2/06

FIGURE AC36C.DGN



STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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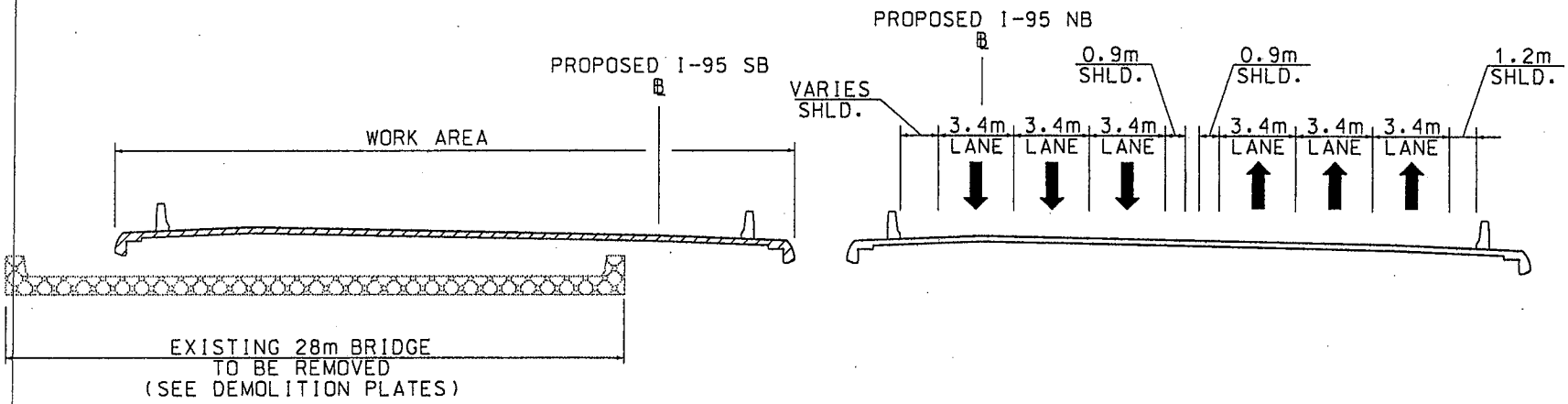
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-37C	CONCRETE ALTERNATE MAIN SPAN STAGE 2A TO 2B AND STAGE 3 CONSTRUCTION	2/06

FIGUREAC37C.DGN



SYMBOL LEGEND

- AREA UNDER CONSTRUCTION
- TEMPORARY PAVEMENT UNDER CONSTRUCTION
- FINAL PAVEMENT COMPLETED
- TEMPORARY PAVEMENT COMPLETED

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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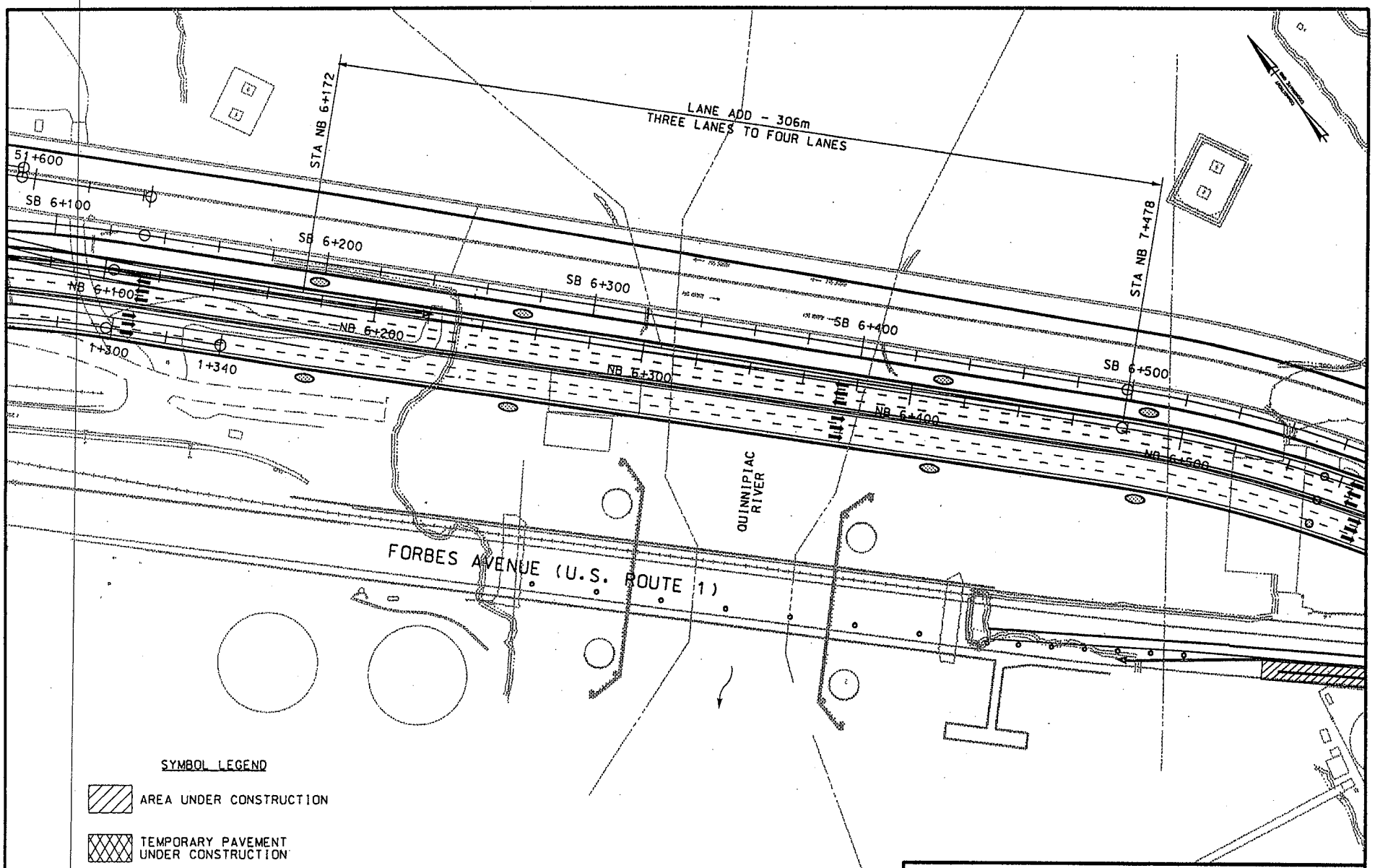
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-38C	CONCRETE ALT. - MAIN SPAN STAGE 2A TO 2B AND STAGE 3 TYPICAL SECTION	2/06

FIGUREAC38C.DGN



SYMBOL LEGEND

- AREA UNDER CONSTRUCTION
- TEMPORARY PAVEMENT UNDER CONSTRUCTION
- FINAL PAVEMENT COMPLETED
- TEMPORARY PAVEMENT COMPLETED

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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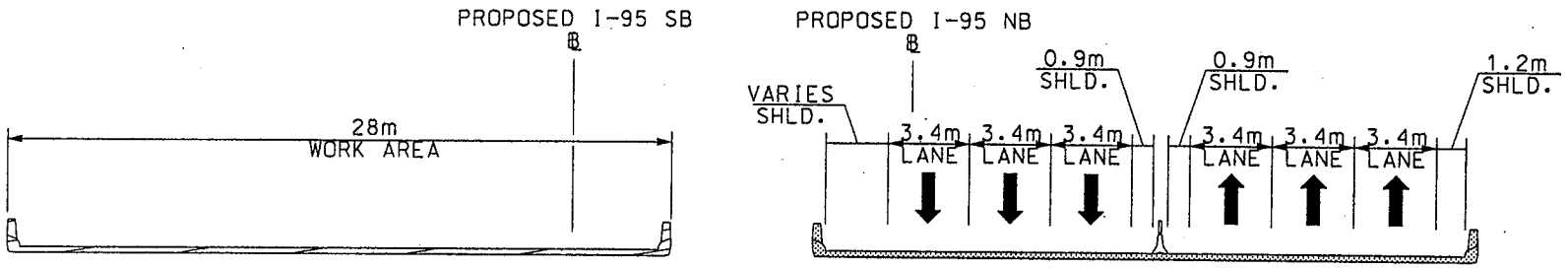
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-39C	CONCRETE ALTERNATE MAIN SPAN STAGE 3 TO 4B/5A CONSTRUCTION	2/06

FIGUREAC39C.DGN



SYMBOL LEGEND

- AREA UNDER CONSTRUCTION
- TEMPORARY PAVEMENT UNDER CONSTRUCTION
- FINAL PAVEMENT COMPLETED
- TEMPORARY PAVEMENT COMPLETED

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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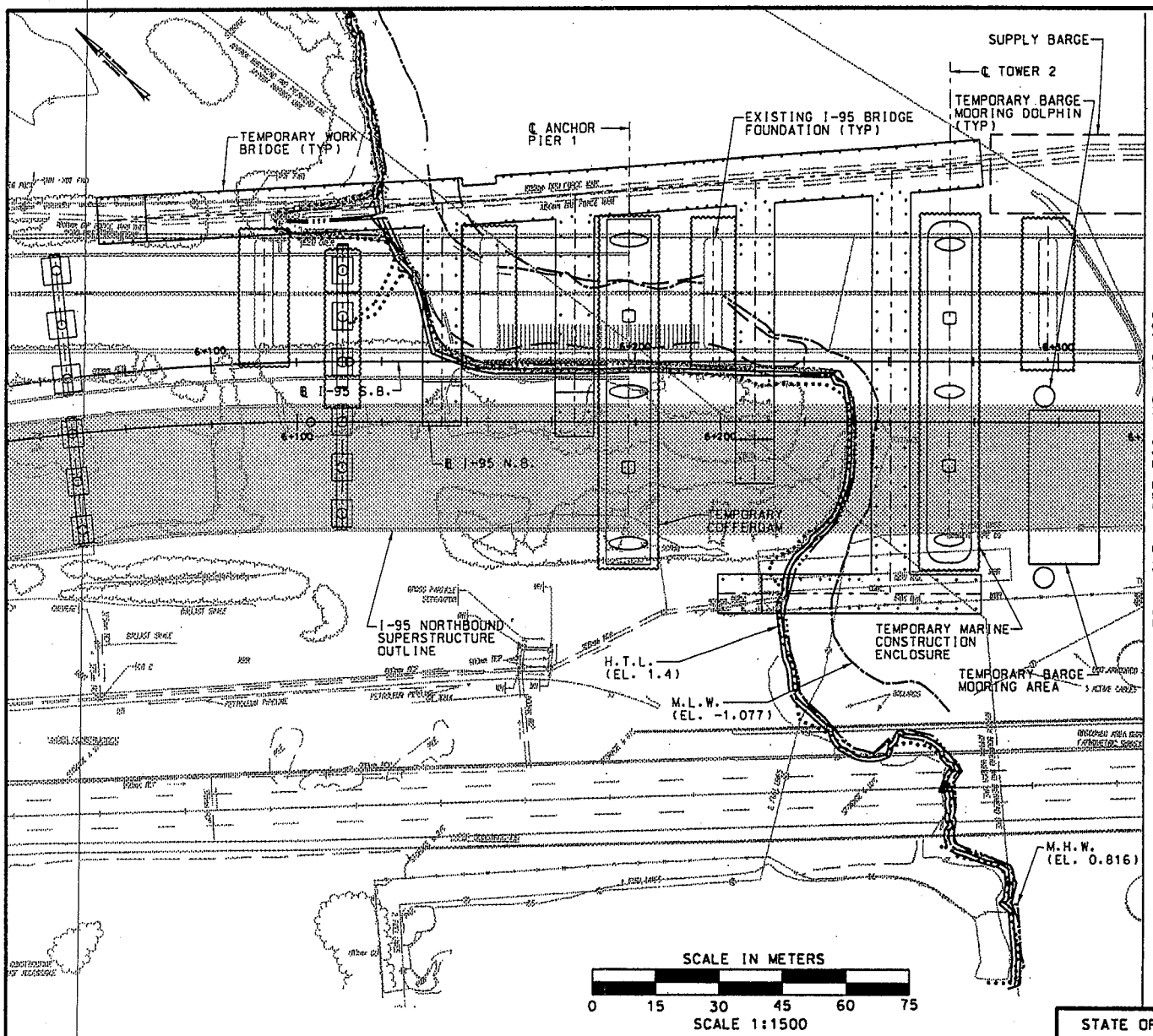
FIG. NO. AC-40C	CONCRETE ALT. - MAIN SPAN STAGE 3 TO 4B/5A TYPICAL SECTION	2/06

FIGUREAC40C.DGN



STAGE 3 CONSTRUCTION
(DEMOLITION)

1. DEMOLISH EXISTING I-95 BRIDGE MAIN SPAN UNIT.

STAGE 3 TO 4B/5A CONSTRUCTION
(NEW CONSTRUCTION)

STEP 1

1. COMPLETE CONSTRUCTION OF ANCHOR PIERS 1 & 4 AND TOWERS 2 & 3. PIER TABLES CAN BE STARTED PRIOR TO TOWER HEADS BEING COMPLETED.

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.

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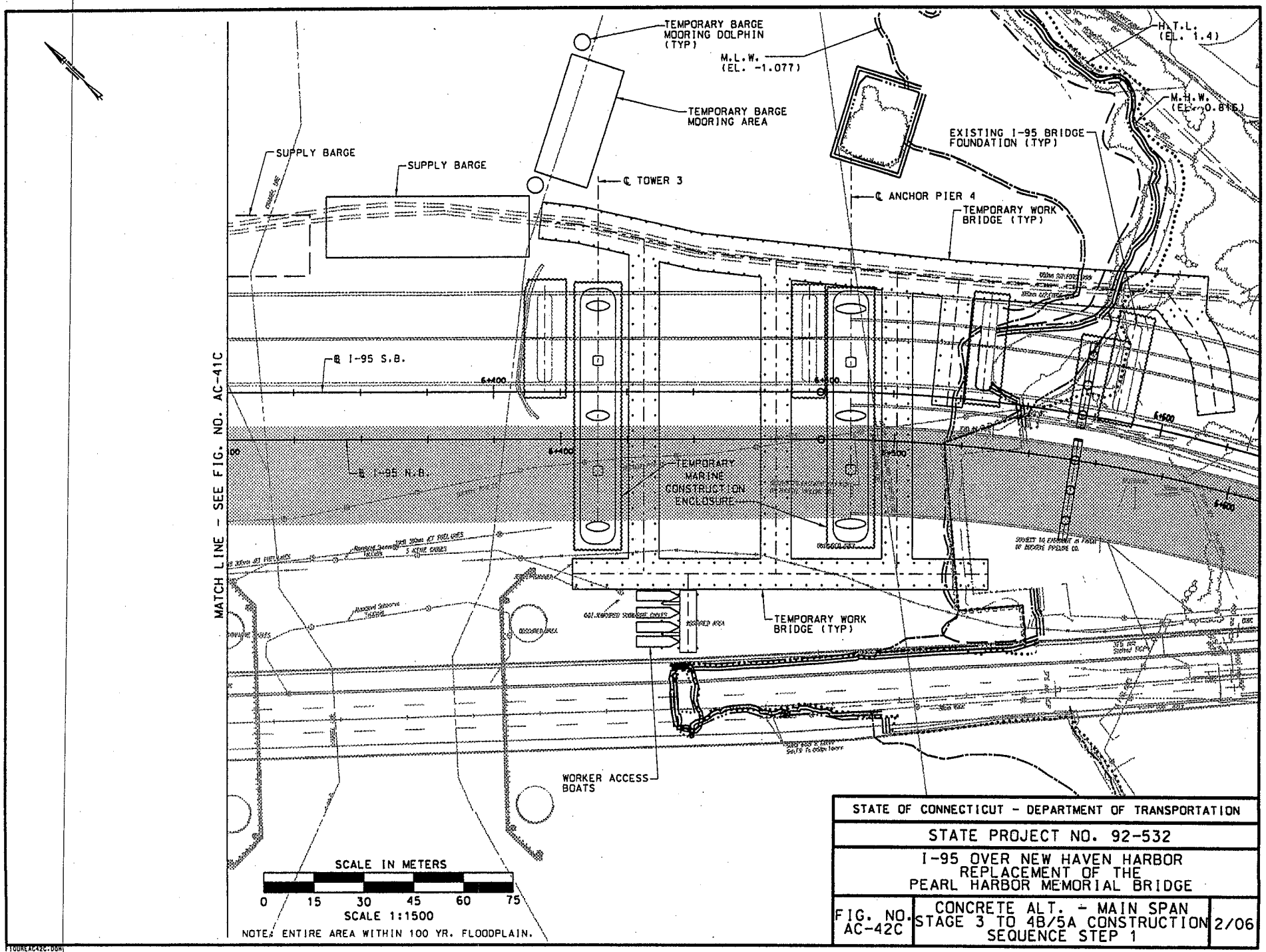
FIG. NO. AC-41C	CONCRETE ALT. - MAIN SPAN STAGE 3 TO 4B/5A CONSTRUCTION SEQUENCE STEP 1	2/06

FIGURE AC41C.DGN


TEMPORARY BARGE MOORING DOLPHIN (TYP)
M.L.W. (EL. -1.077)
TEMPORARY BARGE MOORING AREA
H.T.L. (EL. 1.4)
M.H.W. (EL. 0.815)
EXISTING I-95 BRIDGE FOUNDATION (TYP)
SUPPLY BARGE
SUPPLY BARGE
℄ TOWER 3
℄ ANCHOR PIER 4
TEMPORARY WORK BRIDGE (TYP)
℄ I-95 S.B.
℄ I-95 N.B.
TEMPORARY MARINE CONSTRUCTION ENCLOSURE
TEMPORARY WORK BRIDGE (TYP)
WORKER ACCESS BOATS
MATCH LINE - SEE FIG. NO. AC-41C
SCALE IN METERS
0 15 30 45 60 75
SCALE 1:1500
NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.
STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION
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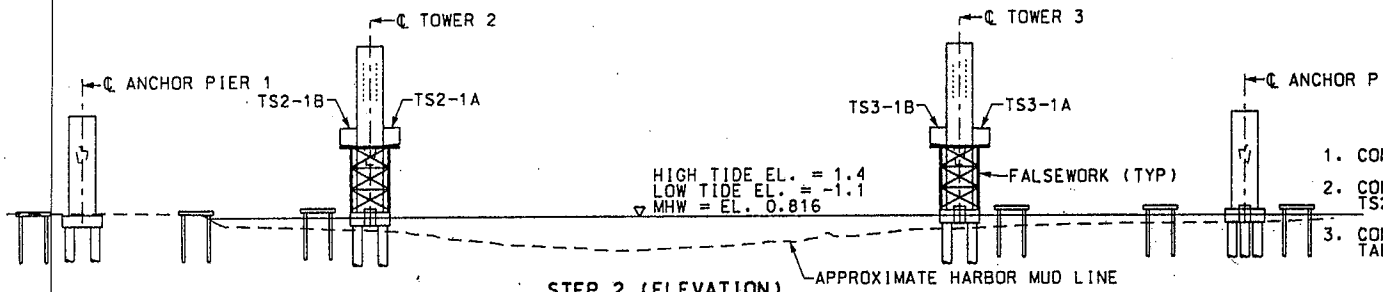
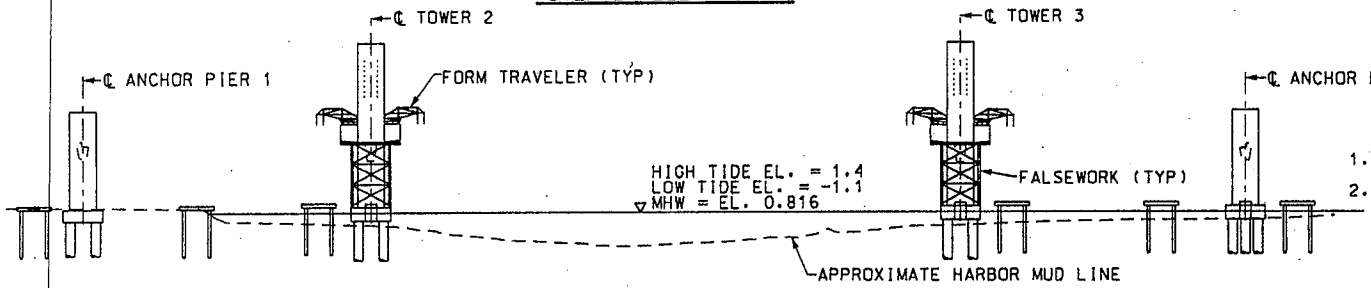
I-95 OVER NEW HAVEN HARBOR
REPLACEMENT OF THE
PEARL HARBOR MEMORIAL BRIDGE
FIG. NO. AC-42C
CONCRETE ALT. - MAIN SPAN
STAGE 3 TO 4B/5A CONSTRUCTION
SEQUENCE STEP 1
2/06



STEP 2 (ELEVATION)

STEP 2

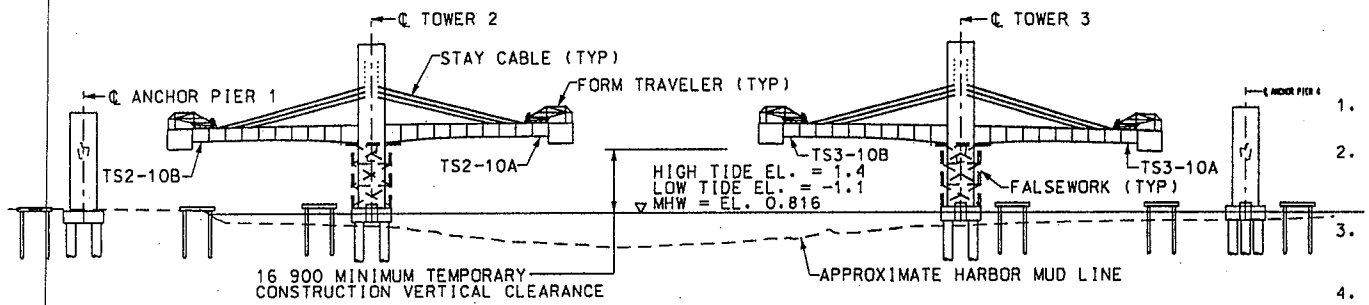
1. CONSTRUCT FALSEWORK AT TOWERS 2 & 3.
2. CONSTRUCT TOWER 2 PIER TABLE AND SEGMENTS TS2-1A & 1B.
3. CONCURRENTLY CONSTRUCT TOWER 3 PIER TABLE AND SEGMENTS TS3-1A & 1B.



STEP 3 (ELEVATION)

STEP 3

1. ERECT TRAVELERS AT TOWERS 2 AND 3.
2. CONSTRUCT SUPERSTRUCTURE AT TOWERS 2 AND 3 WITH TECHNIQUE EMPLOYING FORM TRAVELER AND CAST-IN-PLACE SEGMENTS IN BALANCE CANTILEVER.



STEP 4 (ELEVATION)

STEP 4

1. CONTINUE CONSTRUCTION OF SUPERSTRUCTURE CANTILEVER OFF TOWERS 2 AND 3.
2. INSTALL AND STRESS STAY CABLES AFTER SEGMENTS HAVE ACHIEVED SUFFICIENT STRENGTH, AND AFTER ADVANCING TRAVELERS ONE SEGMENT.
3. REMOVE FALSEWORK AT TOWER 2 ONCE TRAVELERS HAVE ADVANCED PAST SEGMENTS TS2-10A & 10B.
4. REMOVE FALSEWORK AT TOWER 3 ONCE TRAVELERS HAVE ADVANCED PAST SEGMENTS TS3-10A & 10B.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

FIGUREAC43C.DGN

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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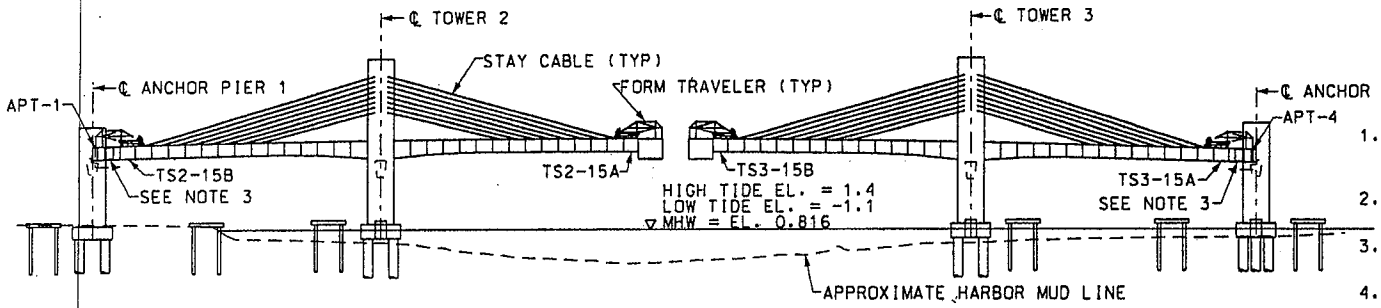
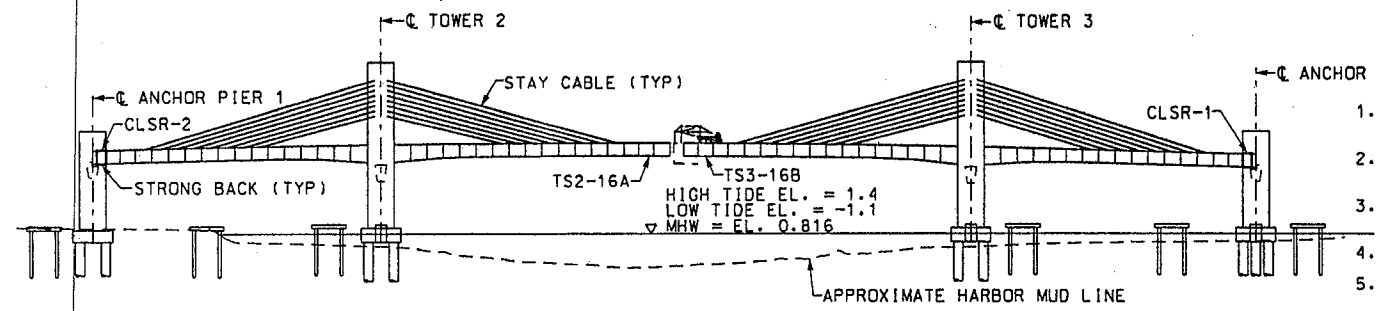
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-43C	CONCRETE ALT. - MAIN SPAN STAGE 3 TO 4B/5A CONSTRUCTION SEQUENCE STEPS 2, 3 & 4	2/06



STEP 5 (ELEVATION)

STEP 5

1. COMPLETE CONSTRUCTION OF SUPERSTRUCTURE CANTILEVER OFF TOWERS 2 & 3. (TS2-16B, TS2-16A, TS3-16B & TS3-16A.
2. CONSTRUCT ANCHOR PIER TABLE SEGMENTS APT-1 AND APT-4.
3. CAST INTERNAL DIAPHRAGM IN SEGMENTS TS2-16B & TS3-16A.
4. REMOVE SPANS 1 & 3 FORM TRAVELERS.



STEP 6 (ELEVATION)

STEP 6

1. CAST SPAN 1 & 3 CLOSURES CLSR-1 AND CLSR-2.
2. INSTALL AND STRESS SPANS 1 & 3 CONTINUITY POST-TENSIONING.
3. ADVANCE SPAN 2 (AHEAD) FORM TRAVELER AND CAST SEGMENT TS2-17A.
4. REMOVE SPAN 2 (AHEAD) FORM TRAVELER.
5. ADVANCE SPAN 2 (BACK) FORM TRAVELER AND CAST SEGMENT TS3-17B.
6. REMOVE SPAN 2 (BACK) FORM TRAVELER.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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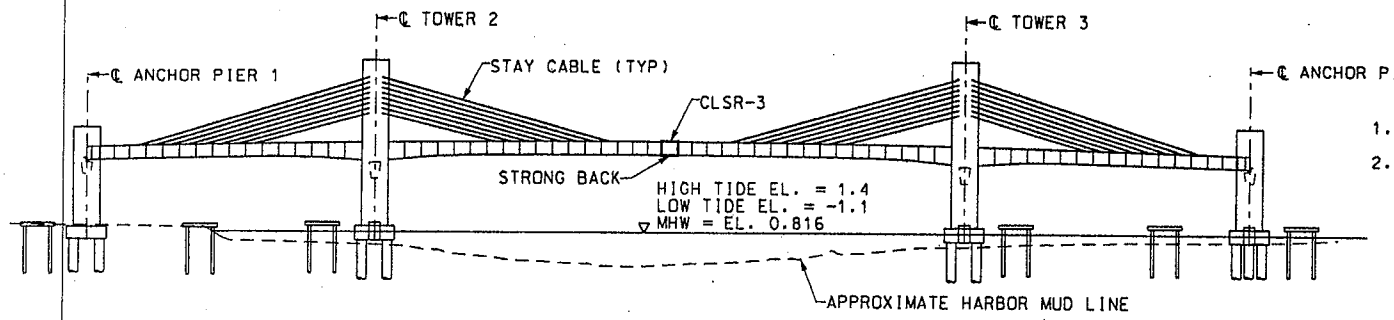
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-44C	CONCRETE ALT. - MAIN SPAN STAGE 3 TO 4B/5A CONSTRUCTION SEQUENCE STEPS 5 & 6	2/06

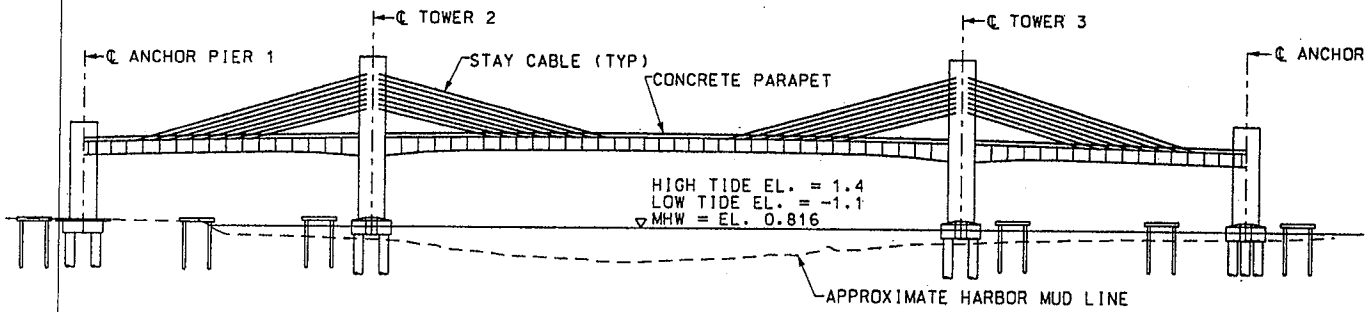
FIGUREAC44C.DGN



STEP 7 (ELEVATION)

STEP 7

1. CAST SPAN 2 CLOSURE.
2. INSTALL AND STRESS SPAN 2 CONTINUITY POST-TENSIONING.



STEP 8 (ELEVATION)

STEP 8

1. COMPLETE CONSTRUCTION OF TOP OF FOOTING CAPS.
2. REMOVE TEMPORARY WORK BRIDGES, COFFERDAMS AND MARINE CONSTRUCTION ENCLOSURES.
3. CONSTRUCT PARAPET, OVERLAY AND COMPLETE FINISH WORK FOR SOUTHBOUND BRIDGE.
4. OPEN SOUTHBOUND BRIDGE TO TRAFFIC.
5. REMOVE TEMPORARY OVERLAY AND MEDIAN BARRIER ON NORTH BOUND BRIDGE. CONSTRUCT FINAL OVERLAY. (STAGED WITH TRAFFIC)

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

NOTE: FOR FOUNDATION CONSTRUCTION SEQUENCE PLATES, SEE FIGURE NO.'S MS-36 THROUGH MS-39.

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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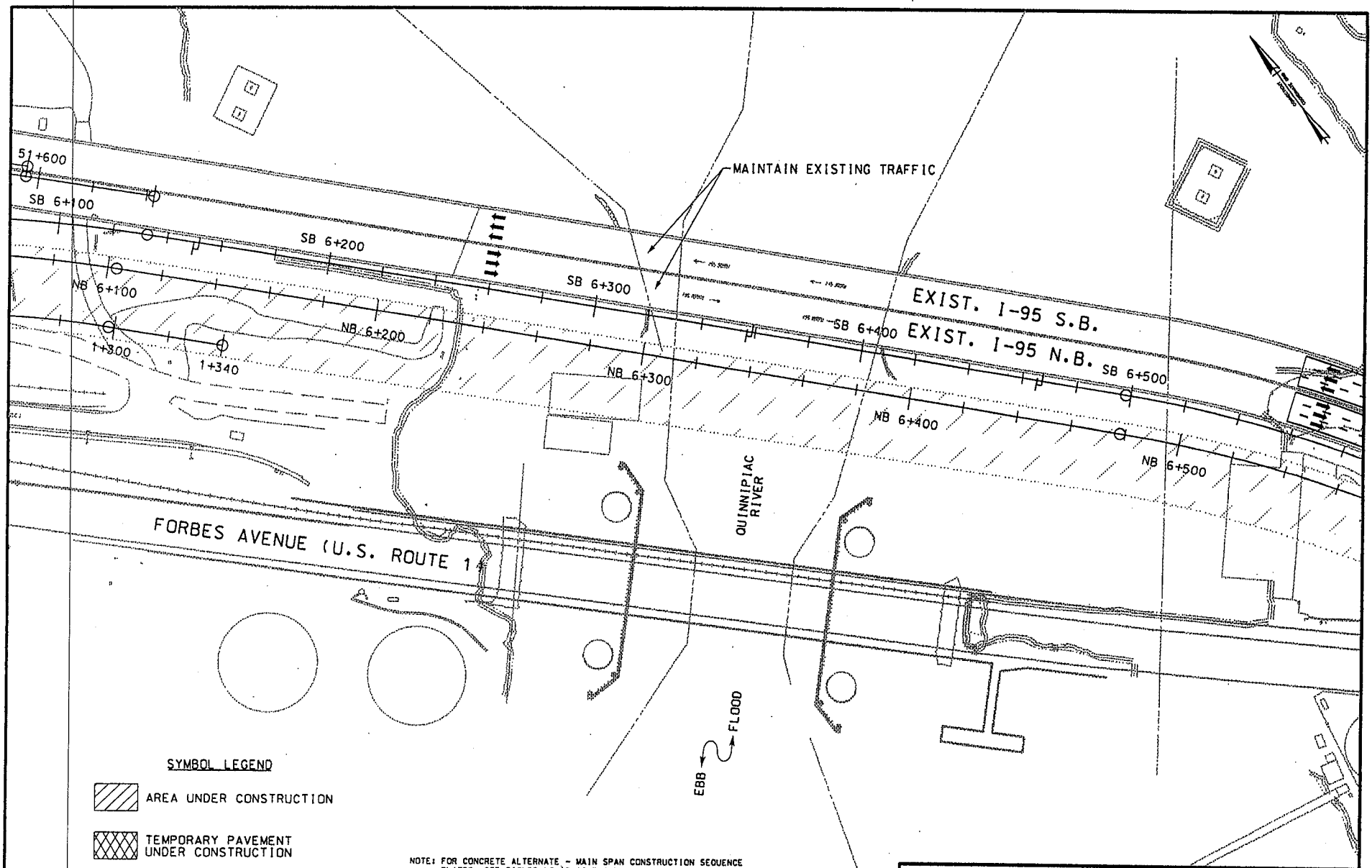
FIG. NO. AC-45C	CONCRETE ALT. - MAIN SPAN STAGE 3 TO 4B/5A CONSTRUCTION SEQUENCE STEPS 7 & 8	2/06

FIGUREAC45C.DGN



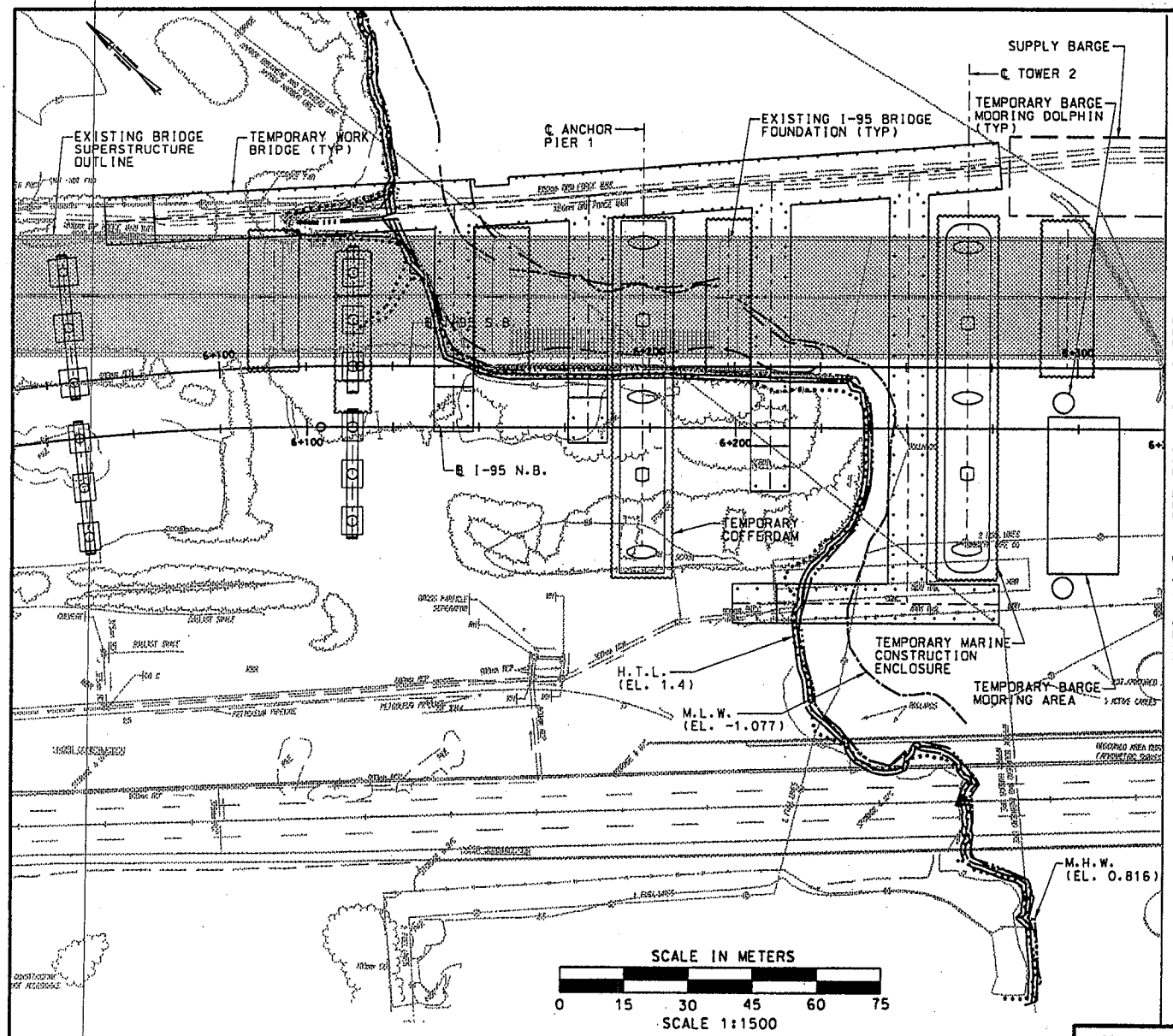
STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION

STATE PROJECT NO. 92-532

I-95 OVER NEW HAVEN HARBOR
REPLACEMENT OF THE
PEARL HARBOR MEMORIAL BRIDGE

FIG. NO.		
AC-31S	STEEL ALTERNATE MAIN SPAN STAGE 1A CONSTRUCTION	2/06

FIGUREAC31S.DGN



MATCH LINE - SEE FIG. NO. AC-33S

STAGES 1A THROUGH 1B: NORTHBOUND I-95 BRIDGE CONSTRUCTION

(STAGE CORRESPONDS TO OVERALL PROJECT STAGING)

STEP 1

1. CONSTRUCT TEMPORARY WORK BRIDGES AT EACH PIER LOCATION. LOW MEMBER OF EACH WORK BRIDGE TO BE 500 mm ABOVE THE 10 YEAR FLOOD ELEVATION OF 2.300.
2. INSTALL TEMPORARY COFFERDAM AT ANCHOR PIER 1 AND MARINE CONSTRUCTION ENCLOSURES AT TOWERS 2 & 3 AND ANCHOR PIER 4.
3. CONSTRUCT FOUNDATION AND FOOTINGS FOR I-95 NORTHBOUND AND I-95 SOUTHBOUND BRIDGES. NOTE THAT FOUNDATION/FOOTING FOR I-95 SOUTHBOUND IS CONSTRUCTED BENEATH EXISTING I-95 BRIDGE.

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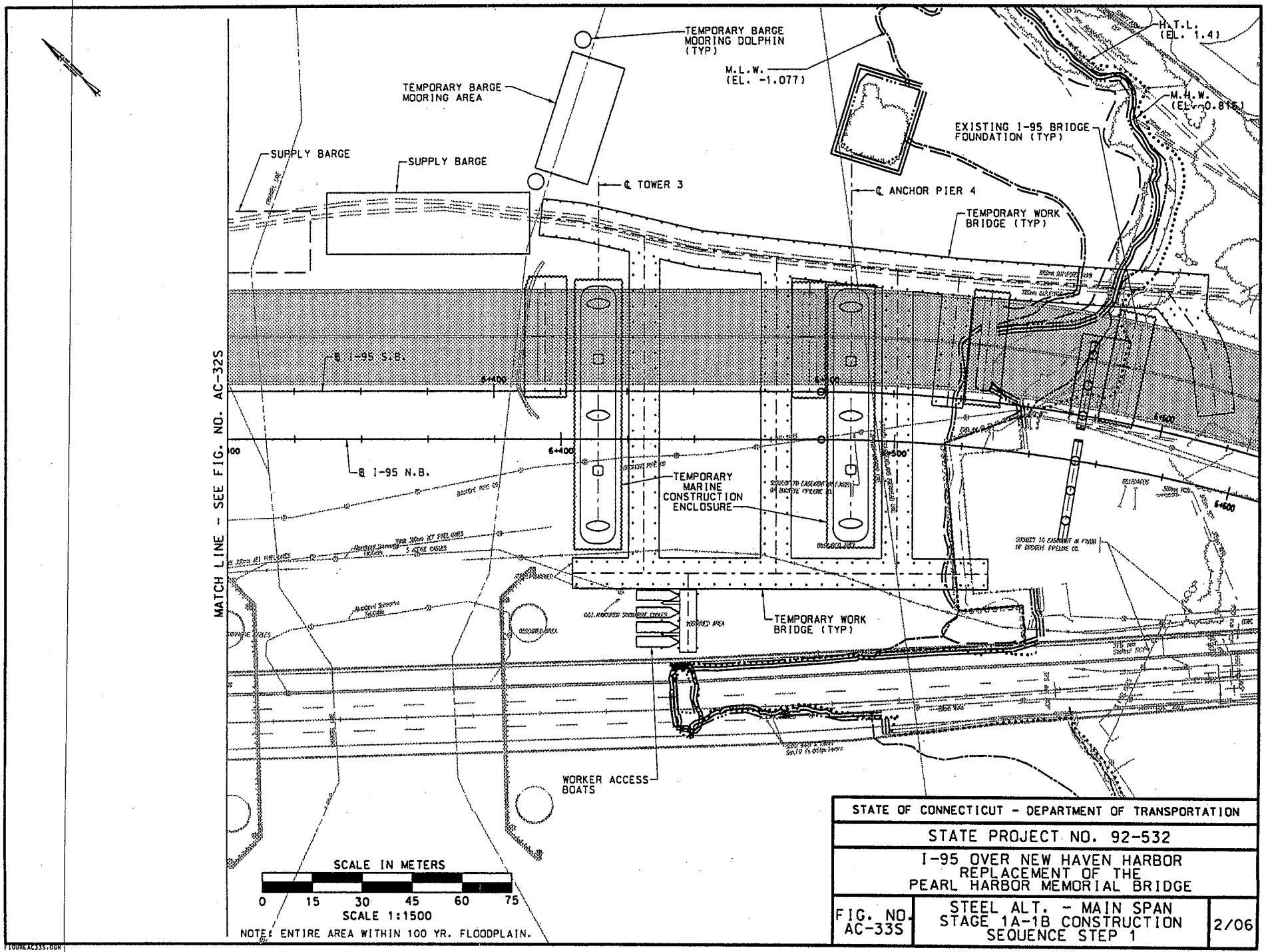
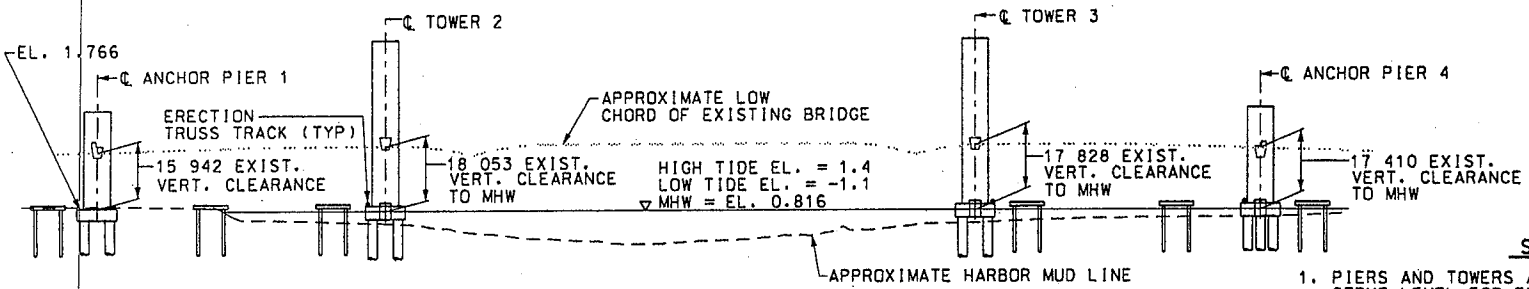
NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.

FIGURE AC32S.DGN

STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
STATE PROJECT NO. 92-532		
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-32S	STEEL ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEP 1	2/06

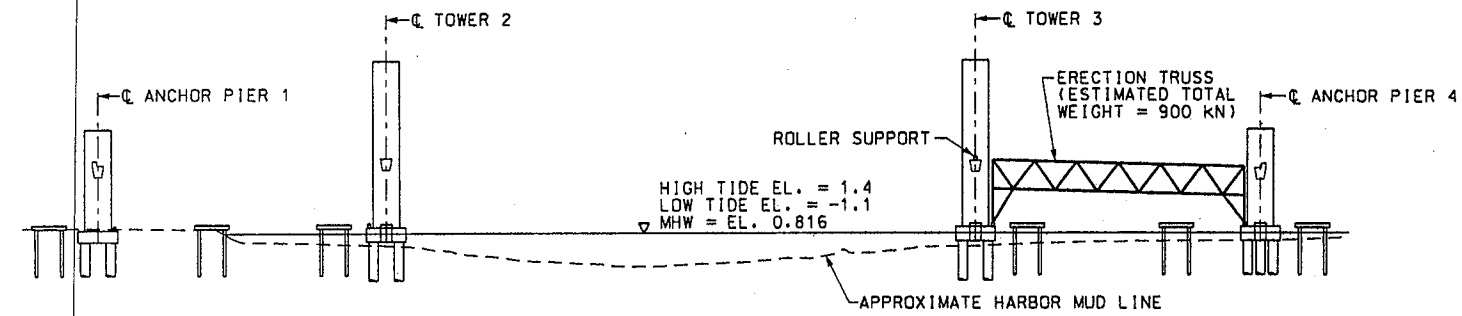

TEMPORARY BARGE MOORING DOLPHIN (TYP)
M.L.W. (EL. -1.077)
H.T.L. (EL. 1.4)
M.H.W. (EL. 0.815)
TEMPORARY BARGE MOORING AREA
EXISTING I-95 BRIDGE FOUNDATION (TYP)
SUPPLY BARGE
SUPPLY BARGE
℄ TOWER 3
℄ ANCHOR PIER 4
TEMPORARY WORK BRIDGE (TYP)
℄ I-95 S.B.
6+400
6+500
6+600
℄ I-95 N.B.
TEMPORARY MARINE CONSTRUCTION ENCLOSURE
TEMPORARY WORK BRIDGE (TYP)
WORKER ACCESS BOATS
MATCH LINE - SEE FIG. NO. AC-32S
SCALE IN METERS
0 15 30 45 60 75
SCALE 1:1500
NOTE: ENTIRE AREA WITHIN 100 YR. FLOODPLAIN.
STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION
STATE PROJECT NO. 92-532
I-95 OVER NEW HAVEN HARBOR
REPLACEMENT OF THE
PEARL HARBOR MEMORIAL BRIDGE
FIG. NO. AC-33S
STEEL ALT. - MAIN SPAN
STAGE 1A-1B CONSTRUCTION
SEQUENCE STEP 1
2/06



STEP 2 (ELEVATION)

STEP 2

1. PIERS AND TOWERS ARE TO BE COMPLETED TO THE STRUT LEVEL FOR ERECTION TRUSS AND PERMANENT BRIDGE SUPPORT.
2. CONSTRUCT TEMPORARY SUPPORT BLOCKS AND RAIL TRACKS FOR ERECTION TRUSS.
3. CONSTRUCTION OF ANCHOR PIER 1 AND TOWER 2 MAY CONTINUE CONCURRENTLY WITH SPAN 3 ERECTION. CONVERSELY, CONSTRUCTION OF ANCHOR PIER 4 AND TOWER 3 MAY CONTINUE WITH SPAN 1 ERECTION.



STEP 3 (ELEVATION)

STEP 3

1. INSTALL ERECTION TRUSS IN SPAN 3 TO SUPPORT BOX GIRDER FIELD SECTIONS AS THEY ARE ERECTED.
2. INSTALL ROLLER SUPPORTS AT TOWER 3 STRUT TO ALLOW BOX GIRDER FIELD SECTIONS TO CANTILEVER INTO SPAN 2.

FOR SPANS 1 & 3 ERECTION DETAILS, SEE DRAWINGS "SPAN 1 & 3 ERECTION PROCEDURES".

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

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STATE OF CONNECTICUT - DEPARTMENT OF TRANSPORTATION		
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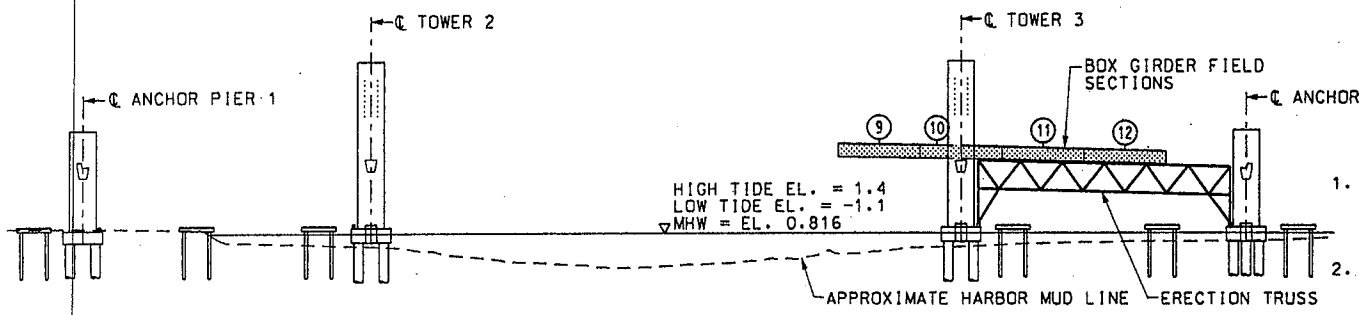
I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-34S	STEEL ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEPS 2 & 3	2/06

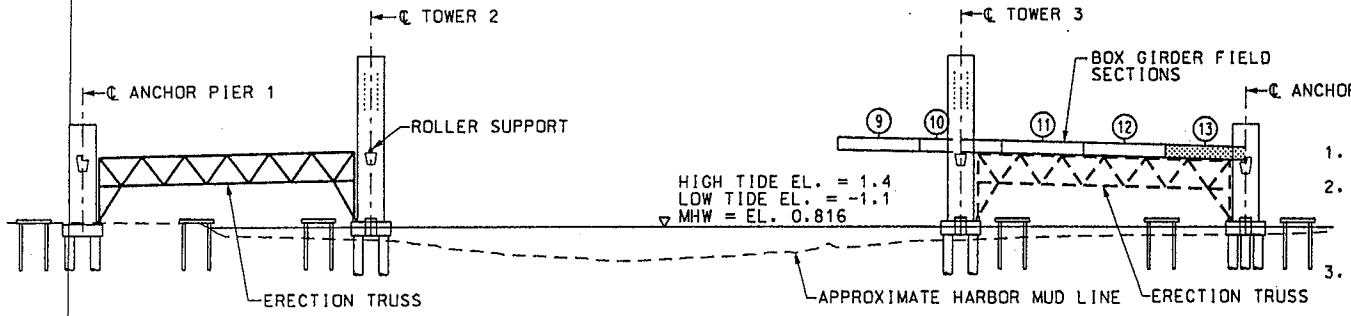
FIGUREAC34S.DGN



STEP 4 (ELEVATION)

STEP 4

1. THE ERECTION TRUSS SHALL INCORPORATE ROLLERS WHICH WILL ALLOW THE BOX GIRDERS TO BE ASSEMBLED TOGETHER AND ROLLED TO THEIR FINAL POSITION.
2. INSTALL GIRDER FIELD SECTIONS 9, 10, 11 AND 12 FOR FIRST GIRDER ON TOP OF ERECTION TRUSS. BOX GIRDERS SHALL HAVE THE TRANSVERSE TOP FLANGE BRACING IN PLACE TO PREVENT DISTORTION AND OVERSTRESS DURING ERECTION. ROLL FIELD SECTIONS INTO FINAL POSITION.



STEP 5 (ELEVATION)

STEP 5

1. INSTALL FIELD SECTION 13.
2. AFTER FIELD SECTIONS 12 & 13 ARE FITTED AND BOLTED TOGETHER, ROLL TRUSS TO THE OTHER GIRDERS. THE ERECTION SEQUENCE IS REPEATED TO OTHER GIRDER LINES.
3. TRANSVERSE FRAMES SHALL BE FITTED AND INSTALLED AS GIRDERS REACH THEIR FINAL POSITION.
4. EDGE BOXES ARE ERECTED IN SPAN 3 USING ERECTION TRUSS WORKING PLATFORMS.
5. AFTER SPAN 3 GIRDERS ARE IN PLACE, THE ERECTION TRUSS IS MOVED TO SPAN 1.
6. INSTALL ROLLER SUPPORTS AT TOWER 2 STRUTS TO ALLOW BOX GIRDERS TO CANTILEVER INTO SPAN 2.
7. CAST BALLAST CONCRETE IN BOX GIRDERS AT ANCHOR PIER 4.

FOR SPANS 1 & 3 ERECTION DETAILS, SEE DRAWINGS "SPAN 1 & 3 ERECTION PROCEDURES".

◯ DENOTES FIELD SECTION.

SCALE IN METERS

0 20 40 60 80 100

SCALE 1:2000

THE INFORMATION SHOWN ON THIS DRAWING, INCLUDING (AS APPLICABLE) SIZES OF MEMBERS, THE SEQUENCE OF CONSTRUCTION, AND ERECTION PROCEDURES CONVEYS THE ASSUMPTIONS MADE BY THE DESIGNER IN DESIGNING THE STRUCTURE, AND IS FOR INFORMATIONAL USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE MEANS AND METHODS FOR CONSTRUCTION. THE CONTRACTOR SHALL ALSO SUBMIT INFORMATION INCLUDING DESIGN CALCULATIONS, CONSTRUCTION SCHEMATICS, AND CONSTRUCTION SEQUENCES AND PROCEDURES TO THE ENGINEER FOR REVIEW.

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I-95 OVER NEW HAVEN HARBOR REPLACEMENT OF THE PEARL HARBOR MEMORIAL BRIDGE		
FIG. NO. AC-35S	STEEL ALT. - MAIN SPAN STAGE 1A-1B CONSTRUCTION SEQUENCE STEPS 4 & 5	2/06

FIGUREAC35S.DGN