

March 9, 2023

Regulatory Division File Number: NAE-2015-625

Kimberly Lesay Connecticut Department of Transportation 2800 New Berlin Turnpike Newington, Connecticut 06131 (via email: Kimberly.Lesay@ct.gov)

Dear Ms. Lesay:

Enclosed is your fully executed Department of the Army permit for the Walk Bridge replacement project and related activities located in the Norwalk River, near Norwalk, Connecticut. We have assigned the file number provided above to this project. Please refer to this number in all communication concerning this matter.

This permit is a limited authorization containing a specific set of conditions. Please read the permit thoroughly to familiarize yourself with the conditions, including any conditions contained in the enclosed State Section 401 water quality certification. If a contractor performs any authorized work for you, both you and the contractor are responsible for ensuring that the work is performed in compliance with the permit's terms and conditions, as any violations could result in civil or criminal penalties.

This permit and the enclosed permission letter also constitute your approval under Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408) as it has also been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and are not injurious to the public interest.

Please contact us immediately if you change the plans or construction methods for work within our jurisdiction. We must approve any changes before you undertake them. This authorization does not obviate the need to obtain other Federal, state, or local authorizations required by law.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <u>https://regulatory.ops.usace.army.mil/customer-service-survey.</u>

# WALK BRIDGE REPLACEMENT INDEX OF SECTION 408 PERMIT PLATES

Do Marine -							1
DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
GEN-1	INDEX OF PERMIT PLATES (SHEET 1 OF 2)	PP-1	PROPOSED CONDITIONS (SHEET 1 OF 14)	FP-1	FLOODPLAIN IMPACTS (SHEET 1 OF 12)	CA4-1	MARINE STAGING YARD (SHEET 1 OF 6)
GEN-1A	INDEX OF PERMIT PLATES (SHEET 2 OF 2)	PP-2	PROPOSED CONDITIONS (SHEET 2 OF 14)	FP-1A	FLOODPLAIN IMPACTS (SHEET 2 OF 12)	CA4-2	MARINE STAGING YARD (SHEET 2 OF 6)
GEN-2	GENERAL NOTES AND LEGEND	PP-3	PROPOSED CONDITIONS (SHEET 3 OF 14)	FP-2	FLOODPLAIN IMPACTS (SHEET 3 OF 12)	CA4-3	MARINE STAGING YARD (SHEET 3 OF 6)
GEN-3	LOCATION PLAN	PP-4	PROPOSED CONDITIONS (SHEET 4 OF 14)	FP-3	FLOODPLAIN IMPACTS (SHEET 4 OF 12)	CA4-4	MARINE STAGING YARD (SHEET 4 OF 6)
GEN-4	RESOURCE MAP (SHEET 1 OF 4)	PP-5	PROPOSED CONDITIONS (SHEET 5 OF 14)	FP-4	FLOODPLAIN IMPACTS (SHEET 5 OF 12)	CA4-5	MARINE STAGING YARD (SHEET 5 OF 6)
GEN-4A	RESOURCE MAP (SHEET 2 OF 4)	PP-6	PROPOSED CONDITIONS (SHEET 6 OF 14)	FP-5	FLOODPLAIN IMPACTS (SHEET 6 OF 12)	CA4-6	MARINE STAGING YARD (SHEET 6 OF 6)
GEN-5	RESOURCE MAP (SHEET 3 OF 4)	PP-7	PROPOSED CONDITIONS (SHEET 7 OF 14)	FP-6	FLOODPLAIN IMPACTS (SHEET 7 OF 12)		
GEN-5A	RESOURCE MAP (SHEET 4 OF 4)	PP-8	PROPOSED CONDITIONS (SHEET 8 OF 14)	FP-7	FLOODPLAIN IMPACTS (SHEET 8 OF 12)	CA5-1	NORTHWEST TRESTLE (SHEET 1 OF 5)
GEN-6	FLOOD ZONE MAP (SHEET 1 OF 2)	PP-8A	PROPOSED CONDITIONS (SHEET 9 OF 14)	FP-8	FLOODPLAIN IMPACTS (SHEET 9 OF 12)	CA5-2	NORTHWEST TRESTLE (SHEET 2 OF 5)
GEN-6A	FLOOD ZONE MAP (SHEET 2 OF 2)	PP-8B	PROPOSED CONDITIONS (SHEET 10 OF 14)	FP-9	FLOODPLAIN IMPACTS (SHEET 10 OF 12)	CA5-3	NORTHWEST TRESTLE (SHEET 3 OF 5)
GEN-6B	SITE PLAN/KEY MAP (SHEET 1 OF 3)	PP-8C	PROPOSED CONDITIONS (SHEET 11 OF 14)	FP-10	FLOODPLAIN IMPACTS (SHEET 11 OF 12)	CA5-4	NORTHWEST TRESTLE (SHEET 4 OF 5)
GEN-7	SITE PLAN/KEY MAP (SHEET 2 OF 3)	PP-8D	PROPOSED CONDITIONS (SHEET 12 OF 14)	FP-11	FLOODPLAIN IMPACTS (SHEET 12 OF 12)	CA5-5	NORTHWEST TRESTLE (SHEET 5 OF 5)
GEN-7A	SITE PLAN/KEY MAP (SHEET 3 OF 3)	PP-8E	PROPOSED CONDITIONS (SHEET 13 OF 14)				
GEN-8	VESSEL BERTHING PLAN OVERALL (SHEET 1 OF 4)	PP-9	PROPOSED CONDITIONS (SHEET 14 OF 14)	CA1-1	IMAX REMOVAL (SHEET 1 OF 7)	CA6-1	SOUTHWEST TRESTLE (SHEET 1 OF 5)
GEN-9	VESSEL BERTHING PLAN WALK BRIDGE (SHEET 2 OF 4)			CA1-2	IMAX REMOVAL (SHEET 2 OF 7)	CA6-2	SOUTHWEST TRESTLE (SHEET 2 OF 5)
GEN-10	VESSEL BERTHING PLAN MARINE STAGING YARD (SHEET 3 OF 4)	SUM-1	SUMMARY OF IMPACTS (SHEET 1 OF 17)	CA1-3	IMAX REMOVAL (SHEET 3 OF 7)	CA6-3	SOUTHWEST TRESTLE (SHEET 3 OF 5)
GEN-10A	VESSEL BERTHING PLAN MANRESA ISLAND (SHEET 4 OF 4)	SUM-1A	SUMMARY OF IMPACTS (SHEET 2 OF 17)	CA1-4	IMAX REMOVAL (SHEET 4 OF 7)	CA6-4	SOUTHWEST TRESTLE (SHEET 4 OF 5)
GEN-11	PARCEL MAP (SHEET 1 OF 3)	SUM-2	SUMMARY OF IMPACTS (SHEET (3 OF 17)	CA1-5	IMAX REMOVAL (SHEET 5 OF 7)	CA6-5	SOUTHWEST TRESTLE (SHEET 5 OF 5)
GEN-12	PARCEL MAP (SHEET 2 OF 3)	SUM-3	SITES 1, 2 & 3 STATE (SHEET 4 OF 17)	CA1-6	IMAX REMOVAL (SHEET 6 OF 7)		
GEN-13	PARCEL MAP (SHEET 3 OF 3)	SUM-4	SITE 4 STATE (SHEET 5 OF 17)	CA1-7	IMAX REMOVAL (SHEET 7 OF 7)	CA7-1	NORTHEAST TRESTLE (SHEET 1 OF 6)
GEN-14	BUILDING DEMOLITION MAP	SUM-5	SITE 5 STATE (SHEET 6 OF 17)			CA7-2	NORTHEAST TRESTLE (SHEET 2 OF 6)
		SUM-5A	SITE 7 STATE (SHEET 7 OF 17)	CA2-1	DUCTBANK INSTALLATION (SHEET 1 OF 4)	CA7-3	NORTHEAST TRESTLE (SHEET 3 OF 6)
EP-1	EXISTING CONDITIONS (SHEET 1 OF 14)	SUM-5B	SITE 8 STATE (SHEET 8 OF 17)	CA2-2	DUCTBANK INSTALLATION (SHEET 2 OF 4)	CA7-4	NORTHEAST TRESTLE (SHEET 4 OF 6)
EP-2	EXISTING CONDITIONS (SHEET 2 OF 14)	SUM-5C	SITE 9 STATE (SHEET 9 OF 17)	CA2-3	DUCTBANK INSTALLATION (SHEET 3 OF 4)	CA7-5	NORTHEAST TRESTLE (SHEET 5 OF 6)
EP-3	EXISTING CONDITIONS (SHEET 3 OF 14)	SUM-5D	SITE 10 STATE (SHEET 10 OF 17)	CA2-4	DUCTBANK INSTALLATION (SHEET 4 OF 4)	CA7-6	NORTHEAST TRESTLE (SHEET 6 OF 6)
EP-4	EXISTING CONDITIONS (SHEET 4 OF 14)	SUM-6	SITES 1, 2 & 3 FEDERAL (SHEET 11 OF 17)				
EP-5	EXISTING CONDITIONS (SHEET 5 OF 14)	SUM-7	SITE 4 FEDERAL (SHEET 12 OF 17)	CA3-1	VESSEL RELOCATION (SHEET 1 OF 4)	CA8-1	SOUTHEAST TRESTLE (SHEET 1 OF 5)
EP-6	EXISTING CONDITIONS (SHEET 6 OF 14)	SUM-8	SITE 5 FEDERAL (SHEET 13 OF 17)	CA3-2	VESSEL RELOCATION (SHEET 2 OF 4)	CA8-2	SOUTHEAST TRESTLE (SHEET 2 OF 5)
EP-7	EXISTING CONDITIONS (SHEET 7 OF 14)	SUM-9	SITE 7 FEDERAL (SHEET 14 OF 17)	CA3-3	VESSEL RELOCATION (SHEET 3 OF 4)	CA8-3	SOUTHEAST TRESTLE (SHEET 3 OF 5)
EP-8	EXISTING CONDITIONS (SHEET 8 OF 14)	SUM-10	SITE 8 FEDERAL (SHEET 15 OF 17)	CA3-4	VESSEL RELOCATION (SHEET 4 OF 4)	CA8-4	SOUTHEAST TRESTLE (SHEET 4 OF 5)
EP-8A	EXISTING CONDITIONS (SHEET 9 OF 14)	SUM-11	SITE 9 FEDERAL (SHEET 16 OF 17)			CA8-5	SOUTHEAST TRESTLE (SHEET 5 OF 5)
EP-8B	EXISTING CONDITIONS (SHEET 10 OF 14)	SUM-12	SITE 10 FEDERAL (SHEET 17 OF 17)				
EP-8C	EXISTING CONDITIONS (SHEET 11 OF 14)						
EP-8D	EXISTING CONDITIONS (SHEET 12 OF 14)						
EP-8E	EXISTING CONDITIONS (SHEET 13 OF 14)						
EP-9	EXISTING CONDITIONS (SHEET 14 OF 14)						

SCALE:

DRAWN: SIGNATURE BLOCK: T. ADINOLFI

CHECKED: V. ROBBINS APPROVED: C. BROWN



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

PROJECT TITLE:

TOWN:	PROJECT NO.:
NORWALK	0301-0176
DRAWING TITLE:	DATE:
INDEX OF	REV 02-23-21
PERMIT PLATES	DRAWING NO.:
(SHEET 1 OF 2)	GEN-1

# WALK BRIDGE REPLACEMENT INDEX OF SECTION 408 PERMIT PLATES

DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE	DRAWING NUMBER	DRAWING TITLE
CA9-1	PIER 2 CONSTRUCTION (SHEET 1 OF 7)	CA14-1	PIER REMOVAL (SHEET 1 OF 8)	CA17-1	DREDGING OPERATIONS (SHEET 1 OF 7)		
CA9-2	PIER 2 CONSTRUCTION (SHEET 2 OF 7)	CA14-2	PIER REMOVAL (SHEET 2 OF 8)	CA17-2	DREDGING OPERATIONS (SHEET 2 OF 7)		
CA9-3	PIER 2 CONSTRUCTION (SHEET 3 OF 7)	CA14-3	PIER REMOVAL (SHEET 3 OF 8)	CA17-3	DREDGING OPERATIONS (SHEET 3 OF 7)		
CA9-4	PIER 2 CONSTRUCTION (SHEET 4 OF 7)	CA14-4	PIER REMOVAL (SHEET 4 OF 8)	CA17-4	DREDGING OPERATIONS (SHEET 4 OF 7)		
CA9-5	PIER 2 CONSTRUCTION (SHEET 5 OF 7)	CA14-5	PIER REMOVAL (SHEET 5 OF 8)	CA17-5	DREDGING OPERATIONS (SHEET 5 OF 7)		
CA9-6	PIER 2 CONSTRUCTION (SHEET 6 OF 7)	CA14-6	PIER REMOVAL (SHEET 6 OF 8)	CA17-6	DREDGING OPERATIONS (SHEET 6 OF 7)		
CA9-7	PIER 2 CONSTRUCTION (SHEET 7 OF 7)	CA14-7	PIER REMOVAL (SHEET 7 OF 8)	CA17-7	DREDGING OPERATIONS (SHEET 7 OF 7)		
		CA14-8	PIER REMOVAL (SHEET 8 OF 8)				
CA10-1	PIER 3 CONSTRUCTION (SHEET 1 OF 7)			CA18-1	LIFT SPAN INSTALLATION (SHEET 1 OF 6)		
CA10-2	PIER 3 CONSTRUCTION (SHEET 2 OF 7)	CA15-1	FENDER INSTALLATION (SHEET 1 OF 5)	CA18-2	LIFT SPAN INSTALLATION (SHEET 2 OF 6)		
CA10-3	PIER 3 CONSTRUCTION (SHEET 3 OF 7)	CA15-2	FENDER INSTALLATION (SHEET 2 OF 5)	CA18-3	LIFT SPAN INSTALLATION (SHEET 3 OF 6)		
CA10-4	PIER 3 CONSTRUCTION (SHEET 4 OF 7)	CA15-3	FENDER INSTALLATION (SHEET 3 OF 5)	CA18-4	LIFT SPAN INSTALLATION (SHEET 4 OF 6)		
CA10-5	PIER 3 CONSTRUCTION (SHEET 5 OF 7)	CA15-4	FENDER INSTALLATION (SHEET 4 OF 5)	CA18-5	LIFT SPAN INSTALLATION (SHEET 5 OF 6)		
CA10-6	PIER 3 CONSTRUCTION (SHEET 6 OF 7)	CA15-5	FENDER INSTALLATION (SHEET 5 OF 5)	CA18-6	LIFT SPAN INSTALLATION (SHEET 6 OF 6)		
CA10-7	PIER 3 CONSTRUCTION (SHEET 7 OF 7)						
		CA16-1	WETLAND MITIGATION (MIT-001)	CA19-1	MANRESA ISLAND (SHEET 1 OF 3)		
CA11-1	BARGE MOORING (SHEET 1 OF 5)	CA16-2	WETLAND MITIGATION (MIT-002)	CA19-2	MANRESA ISLAND (SHEET 2 OF 3)		
CA11-2	BARGE MOORING (SHEET 2 OF 5)	CA16-3	WETLAND MITIGATION (MIT-003)	CA19-3	MANRESA ISLAND (SHEET 3 OF 3)		
CA11-3	BARGE MOORING (SHEET 3 OF 5)	CA16-4	WETLAND MITIGATION (MIT-004)				
CA11-4	BARGE MOORING (SHEET 4 OF 5)	CA16-5	WETLAND MITIGATION (MIT-005)				
CA11-5	BARGE MOORING (SHEET 5 OF 5)	CA16-6	WETLAND MITIGATION (MIT-006)				
CA11-6	BARGE MOORING (SHEET 6 OF 6)	CA16-7	WETLAND MITIGATION (MIT-007)				
		CA16-8	WETLAND MITIGATION (MIT-008)				
CA12-1	SUBMARINE CABLE REMOVAL (SHEET 1 OF 4)	CA16-9	WETLAND MITIGATION (MIT-009)				
CA12-2	SUBMARINE CABLE REMOVAL (SHEET 2 OF 4)	CA16-10	WETLAND MITIGATION (MIT-010)				
CA12-3	SUBMARINE CABLE REMOVAL (SHEET 3 OF 4)	CA16-11	WETLAND MITIGATION (MIT-011)				
CA12-4	SUBMARINE CABLE REMOVAL (SHEET 4 OF 4)	CA16-12	WETLAND MITIGATION (MIT-012)				
		CA16-13	WETLAND MITIGATION (MIT-013)				
CA13-1	SWING SPAN REMOVAL (SHEET 1 OF 7)	CA16-14	WETLAND MITIGATION (MIT-014)				
CA13-2	SWING SPAN REMOVAL (SHEET 2 OF 7)	CA16-15	WETLAND MITIGATION (MIT-015)				
CA13-3	SWING SPAN REMOVAL (SHEET 3 OF 7)	CA16-16	WETLAND MITIGATION (MIT-016)				
CA13-4	SWING SPAN REMOVAL (SHEET 4 OF 7)	CA16-17	WETLAND MITIGATION (MIT-017)				
CA13-5	SWING SPAN REMOVAL (SHEET 5 OF 7)	CA16-18	WETLAND MITIGATION (MIT-018)				
CA13-6	SWING SPAN REMOVAL (SHEET 6 OF 7)	CA16-19	WETLAND MITIGATION (MIT-019)				
CA13-7	SWING SPAN REMOVAL (SHEET 7 OF 7)	CA16-20	WETLAND MITIGATION (MIT-020)				

SCALE:

DRAWN: SIGNATURE BLOCK: T, ADINOLFI

CHECKED: V. ROBBINS APPROVED: C. BROWN



WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

TOWN:	PROJECT NO.:
NORWALK	0301-0176
DRAWING TITLE:	DATE:
INDEX OF	REV 02-23-21
PERMIT PLATES	DRAWING NO.:
(SHEET 2 OF 2)	GEN-1A

#### **GENERAL NOTES:**

- A SOFT START WILL BE REQUIRED BETWEEN MARCH 16TH AND OCTOBER 31ST. A SOFT START WILL BE USED AT THE BEGINNING OF EACH SHIFT THAT REQUIRES PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITES, AS WELL AS FOLLOWING CESSATION OF ACTIVITY FOR A PERIOD OF 30 MINUTES OR LONGER.
- 2. ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITY WILL BE ENCLOSED WITHIN TURBIDITY CURTAINS.
- ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES) ACTIVITIES CONDUCTED BETWEEN APRIL 1 AND JUNE 30 WILL ONLY OCCUR BETWEEN ONE HOUR AFTER SUNRISE TO ONE HOUR BEFORE SUNSET.
- 4. ALL PILE DRIVING AND EXTRACTION (INCLUDING SHEETPILES), SHAFT DRILLING, AND MICROPILE DRILLING ACTIVITIES WILL BE COORDINATED TO ENSURE THAT THE NAVIGATION CHANNEL IS AVAILABLE FOR MARINE TRAFFIC AND FISH PASSAGE. ACTIVITIES WILL OCCUPY LESS THAN 50% WHEN WORKING IN THE MIDDLE OF THE NAVIGATION CHANNEL.
- UNCONFINED DREDGING WILL BE CONDUCTED WITHIN TURBIDITY CURTAINS BETWEEN DECEMBER 1 AND JANUARY 31. IF NECESSARY TO DREDGE BETWEEN FEBRUARY 1 AND NOVEMBER 30, DREDGING WILL OCCUR WITHIN A MARINE ENCLOSURE SURROUNDED BY A TURBIDITY CURTAIN.
- 6. ALL BARGE MOVEMENTS WILL TAKE PLACE SUCH THAT THERE WILL BE NO IMPACT TO THE RIVER BOTTOM OR INCREASE TURBIDITY.
- 7. HORIZONTAL DATUM IS CT STATE PLANE COORDINATE SYSTEM BASED ON NAD83.
- 8. VERTICAL DATUM IS NAVD88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 9. AUTHORIZED DREDGE ELEVATION FOR THE FEDERAL NAVIGATION CHANNEL IS EL. -13.98 NAVD88 (-10.00 MLLW),10 FEET BELOW MEAN LOWER LOW WATER.
- EXISTING BRIDGE FOUNDATION ELEMENTS WITHIN THE NAVIGATION CHANNEL OR CHANNEL DREDGING SIDE SLOPE ARE TO BE REMOVED TO THE BOTTOM OF THE TIMBER MAT PER COORDINATION WITH THE UNITED STATES ARMY CORPS OF ENGINEERS AND THE UNITED STATES COAST GUARD.
- 11. THE FLOOD ZONE MAP ON DRAWING NO. GEN-6 AND GEN-6A ARE BASED ON FLOOD INSURANCE RATE MAP PANEL 0531 (REVISED JULY 8, 2013).
- 12. THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. SEE FLOOD ZONE MAP (DWG. GEN-6 AND GEN-6A) FOR ADDITIONAL INFORMATION.
- 13. TURBIDITY CURTAINS SHALL BE TYPE III AND COMPLY WITH ITEM #0210306A -TURBIDITY CONTROL CURTAINS.

### LEGEND:

SCALE:

CONTRACTOR OF RIPRAP

## **DETAILED CONSTRUCTION ACTIVITIES:**

THESE DRAWINGS INCLUDE SUBSETS THAT DESCRIBE THE SEQUENCE REQUIRED TO PERFORM VARIOUS ACTIVITIES THAT IMPACT REGULATED AREAS WITHIN THE PROJECT IMMTS. THE ORDER IN WHICH THEY ARE PRESENTED IS INTENDED TO CONVEY LOGICAL DEPENDENCIES BETWEEN ACTIVITIES. HOWEVER, IT DOES NOT NECESSARILY INDICATE THE SEQUENCE OF CONSTRUCTION, AS MANY OF THESE ACTIVITIES WILL OVERLAP THROUGHOUT THE COURSE OF THE PROJECT. SITE CONDITIONS AND BRIDGE PROGRESS ON EACH DRAWING ARE DEPICTED AS THEY WILL LIKELY EXIST AT THE TIME, BUT THEY ARE SUBJECT TO DIFFER BASED ON ACTUAL TIMING OF NOTICE TO PROCEED AND THE OVERLAL CONSTRUCTION SCHEDULE, PARTCULARLY FOR ACTIVITIES DIRECTLY TIED TO THE DREDING WINDOW (SEE GENERAL NOTE 5).

NO.	NAME	DESCRIPTION			
1	IMAX REMOVAL	REMOVAL OF THE EXISTING IMAX THEATER, SITE IMPROVEMENTS FOR CONSTRUCTION, AND RESTORATION UPON PROJECT COMPLETION			
2	DUCTBANK INSTALLATION	MICRO-TUNNEL OPERATION TO BURY CONDUITS FOR FUTURE PULLING OF CONDUCTORS FOR RAIL AND BRIDGE SYSTEMS			
з	VESSEL RELOCATION	RECONFIGURATION OF THE VESSEL DOCKS ON THE WEST BANK OF THE RIVER BETWEEN WALK BRIDGE AND STROFFOLINO BRIDGE DURING CONSTRUCTION AND POST-CONSTRUCTION			
4	MARINE STAGING YARD	PERMANENT IMPROVEMENTS TO PROPERTIES ON THE WEST BANK OF THE RIVER SOUTH OF STROFFOLINO BRIDGE INTENDED FOR STAGING ACTIVITIES THROUGHOUT CONSTRUCTION OF WALK BRIDGE			
5	NORTHWEST TRESTLE				
6	SOUTHWEST TRESTLE	INSTALLATION AND REMOVAL OF WORK			
7	NORTHEAST TRESTLE	FOR PRIMARY ACCESS TO THE BRIDGE			
8	SOUTHEAST TRESTLE				
9	PIER 2 CONSTRUCTION	MEANS AND METHODS FOR CONSTRUCTION OF			
10	PIER 3 CONSTRUCTION	THE LIFT SPAN TOWER FOUNDATIONS			
11	BARGE MOORING	MOORING LOCATION IN NORWALK RIVER AND LONG ISLAND SOUND USED FOR CONSTRUCTION BARGES			
12	SUBMARINE CABLE REMOVAL	REMOVAL OF THREE EXISTING SUBMARINE CABLES THAT WILL NO LONGER BE USED UPON COMPLETION OF WALK BRIDGE			
13	SWING SPAN REMOVAL	SLIDE RAIL SYSTEM INSTALLATION, REMOVAL AND DISASSEMBLY OF THE EXISTING SWING SPAN			
14	PIER REMOVAL	REMOVAL OF EXISTING PIERS IN THE RIVER AFTER REMOVAL OF THE SWING SPAN			
15	FENDER INSTALLATION	INSTALLATION OF THE PROPOSED FENDER SYSTEM AFTER REMOVAL OF THE EXISTING FENDERS AND REST PIERS			
16	WETLAND MITIGATION	TREATMENT AND REMOVAL OF INVASIVE SPECIES, SHORELINE AND SALT MARSH RESTORATION, AND ACCESS REQUIREMENTS			
17	DREDGING OPERATIONS	DREDGING PLANS AT THE BRIDGE, VESSEL DOCKS, AND MARINE STAGING YARD.			
18	LIFT SPAN INSTALLATION	SLIDE-IN AND FLOAT-IN OPERATIONS FOR INSTALLATION OF THE PROPOSED LIFT SPANS.			
19	MANRESA ISLAND	IMPROVEMENTS TO PROPERTIES AT MANRESA ISLAND INTENDED FOR LIFT SPAN ERECTION AND OTHER STAGING ACTIVITIES.			

1	H. UPSHAW	SIGNATURE BLOCK:		PROJECT TITLE:	NORWALK	PROJECT NO.:
	CHECKED:			WALK BRIDGE REPLACEMENT	DRAWING TITLE:	DATE:
	T. ADINOLFI		STATE OF CONNECTICUT	OVER THE NORWALK RIVER BRIDGE NO.04288R/MP 41.5	GENERAL NOTES AND LEGEND	REV 7-31-20
	APPROVED:					DRAWING NO.:
	C. BROWN		DEFARTMENT OF TRANSPORTATION			GEN-2































































100 Y	R (NOTE 2)	CHANNEL	(NOTE 1)	APPROX. EXISTING MUDLINE		
	PIER 1	PIER 2 PIVO	T PIER PI	IER 3 EAST ABU	TMENT	
		(VIEW LOOK	ING NORTH)			
ELEVATION TABLE   DESCRIPTION CONTOUR E   100-YEAR FLOODPLAIN 100 YR 1   MAX. ELEVATION OF LAND CAPABLE CJL+1 CJL+1   OF SUPPORTING TIDAL VEGETATION CJL CJL   HIGH TIDE LINE HTL HTL   MEAN HIGH WATER LINE MHW 100	LEVATION NAVD88)   ELEVATION (MLLW)     0.0/12.0   13.98/15.98     6.4   10.38     5.4   9.38     5.2   9.18     3.35   7.33			NOTES: 1. LIMITS OF FEDERAL NAVI CORPS OF ENGINEERS FE HARBOR, U.S. ARMY CORP SUPPLEMENTAL PROJECT 2. THE 100-YEAR FLOOD EL WITHIN THE RIVER, IT IS 10 (13.98 MLLW) DOWNS RESPECTIVELY. SEE FLOOD ADDITIONAL INFORMATIO	IGATION CHANNEL PROVIDED BY T EDERAL NAVIGATION PROJECT FOR 'S OF ENGINEERS, AFTER DREDGE DRAWING 4/11/2014. EVATION VARIES THROUGHOUT TH 5 DEFINED AS EL. 12 (15.98 MLLW TREAM AND UPSTREAM OF THE B D ZONE MAP (DWG. NO. GEN-6) FC N.	HE U.S. ARMY NORWALK SURVEY, E SITE. ) AND EL. RIDGE, R
MEAN LOW WATER LINE MLW MEAN LOWER LOW WATER LINE MLW SCALE : SCALE 1" = 80' CHECKED: T. ADINOLFI APPROVED: C. BROWN	-3.72 0.26 -3.98 0.00 SIGNATURE BLOCK:	STATI	E OF CONNECTICUT T OF TRANSPORTATION	WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5	TOWN: DRAWING TITLE: BRIDGE ELEVATION EXISTING CONDITIONS (SHEET 14 OF 14)	PROJECT NO.: 0301-0176 DATE: REV 7-31-20 DRAWING NO.: EP-9

CHANNEL DREDGING SIDE SLOPE LIMITS LIMITS OF FEDERAL NAVIGATION

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ELEVATION TA	BLE							
DESCRIPTION	CONTOUR	ELEVATION (NAVD88)	ELEVATION (MLLW)		,		1.1	\ \
100-YEAR FLOODPLAIN	100 YR	13.0/17.0	16.98/20.98				11	
MAX. ELEVATION OF LAND CAPABLE OF SUPPORTING TIDAL VEGETATION	CJL+1	6.4	10.38				to l	GRID
CT COASTAL JURISDICTION LINE	CJL	5.4	9.38				13 EX	INATE
HIGH TIDE LINE	HTL	5.2	9.18		~		( 2	COOKE
MEAN LOW WATER LINE		-3.72	0.26		$\cap$	j j	11	+
MEAN LOWER LOW WATER LINE	MLLW	-3.98	0.00		$\langle \mathcal{O} \rangle$	\ \ \		AV.
OSPREY	NEST	WITH OSPREY	NEST	THE FALCON NEST	OSPREY NEST	ALLARD CONC ALLARD CONC ALLAR	SS CHAIN LINK FENCI COR COR COR COR COR COR COR COR COR COR	GRAS
SCALE: IDRA	WN:	SIGNATURE BLC	OCK:			PROJECT TITLE:	TOWN:	PROJECT NO
SCALE:	wn: H. UPSHAW	SIGNATURE BLC	оск:	Ster Ster	COMMERTICO	PROJECT TITLE:	TOWN: NORWALK	PROJECT NO
SCALE:	WN: H. UPSHAW CKED:	SIGNATURE BLC	OCK:			PROJECT TITLE: WALK BRIDGE REPLACEMENT	TOWN: NORWALK DRAWING TITLE:	PROJECT NO 0301-
SCALE: SCALE 1" = 80' CHE 0 40 80	WN: H. UPSHAW CKED: F. ADINOLFI	SIGNATURE BLC	OCK:			PROJECT TITLE: WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO 042889/MP 41 5	TOWN: NORWALK DRAWING TITLE: PLAN	PROJECT NO 0301-0 DATE: REV 7-3



ELEVATION TAB	BLE	<b>ELEVATION</b>		MATCH				
DESCRIPTION	CONTOUR	(NAVD88)	(MLLW)	MATCH	INE - SEE DRAWING NO. PP-8D	/	/	
100-YEAR FLOODPLAIN	100 YR	17.0	20.98					
OF SUPPORTING TIDAL VEGETATION	CJL+1	6.4	10.38	, certo				
CT COASTAL JURISDICTION LINE	CJL	5.4	9.38			G TIMBER PIER		
HIGH TIDE LINE	HTL	5.2	9.18	3300	*	, '	/	
MEAN HIGH WATER LINE	MHW	3.35	7.33				·	
MEAN LOW WATER LINE	MLW	-3.72	0.26		м м			
NOTES: 1. SIDE SLOPE LIMITS I CHANNEL MAINTENAN AS THREE TIMES TH DEPTH OFFSET FROM	FOR FEDERA ICE DREDGIN E AUTHORIZ 1 THE EDGE	L NAVIGATIO	ON DWN L ANNEL.		ORWALK HAR	THANNEL DREDGING SIDE SLOPE LIMITS AL NAVIGATION CHANNEL		
SCALE: DRAW	WN:	SIGNATURE BLC	DCK:			PROJECT TITLE:	TOWN:	PROJECT NO.:
I   <sup>↓</sup>	H. UPSHAW						NORWALK	0301-0176
SCALE 1" = 80' CHEC	CKED:	1				WALK BRIDGE REPLACEMENT	DRAWING TITLE:	DATE:
	. ADINOLFI					OVER THE NORWALK RIVER	PLAN	REV 7-31-20
0 40 80 APPR	ROVED:	1			STATE OF CONNECTICUT	BRIDGE NO. 04288R/MP 41.5	PROPOSED CONDITIONS	DRAWING NO.:
	C. BROWN				DEPARIMENT OF TRANSPORTATION		(SHEET 13 OF 14)	PP-8E





SCA	F:	DRAWN:	SIGNATURE BLOCK:		PROJECT TITLE:	TOWN:	PROJECT NO :
	-	T. ADINOLFI				NORWALK	0301-0176
	SCALE 1" = 300'	CHECKED:			WALK BRIDGE REPLACEMENT	DRAWING TITLE:	DATE:
		V. ROBBINS			OVER THE NORWALK RIVER	CUMMARY OF THRACTO	REV 7-31-20
	0 150 300	APPROVED:		STATE OF CONNECTICUT	BRIDGE NO. 04288R/MP 41.5	SUMMARY OF IMPACIS	DRAWING NO.:
		C. BROWN		DEPARTMENT OF TRANSPORTATION		(SHEET I OF 17)	SUM-1



	SUMM	1ARY OF T	EMPORAR	Y IMPACTS	5 (SF)				
		ST	ATE		FED	ERAL			
SITE	VEGETATED				551.011	FEDERAL			
SIL	TIDAL	INTERTIDAL	INTERTIDAL	BELOW	BELOW	NAVIGATION			
	WETLAND	FLAT	ZONE	CJL		CHANNEL			
1	0	0	100	0	100	0			
2	0	0	0	200	200	200			
3	0	0	100	0	100	0			
4	0	0	200	6,400	6,600	0			
5	0	0	100	200	300	0			
6	0	0	0	0	0	0			
7	0	0	0	0	0	0			
8	0	0	0	0	0	0			
9	0	0	0	0	0	0			
10	0	0	0	0	0	0			
TOTAL	0	0	500	6,800	7,300	200			
	SUMM	1ARY OF F	PERMANEN	T IMPACTS	S (SF)				
		ST	ATE		FEC	ERAL			
	VEGETATED	1			11	FEDERAL			
SITE		INTERTIDAL	INTERTIDAL	BELOW	BELOW	NAVIGATION			
	WETLAND	FLAT	ZONE	CJL	HTL HTL	CHANNEL			
1	2 800	0	7 100	9 100	17 200	0			
2	2,000	0	,,100	50,500	50 500	50 500			
3	3 700	200	10,200	17,000	29,600	0			
1	100	200	10,200	4 800	4 900	0			
5	1 900	0	8 100	9,000	19 500	0			
6	0	0	0	0	0	0			
7	0	0	0	100	100	0			
8	0	0	0	300	300	0			
9	0	0	0	400	400	0			
10	0	0	0	0	0	0			
TOTAL	8,500	200	25,400	92,100	122,500	50,500			
		SLIM				TIFS			٦
			IGATION CHAI			NF	W		+
SITE	PEM				DEN				-
SIL			FILL	NET			FILL	NET (CX)	
	( SF )	( CY )	(())	(())	(SF)	( CY )	( ( ( )		
1	4,900	330	0	330	19,100	4,350	4,290	60	
2	40,800	4,210	0	4,210	21,600	3,670	4,110	-440	
3	7,500	770	0	770	25,100	3,460	3,670	-210	
4	0	0	0	0	4,600	300	0	300	
5	0	0	0	0	21,600	6,400	0	6,400	
6	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	0	4
10	0	0	0	0	0	0	0	0	4
TOTAL	53,200	5,310	0	5,310	92,000	18,180	12,070	6,110	
LE:		DRAWN: T. ADING	SIGNATURE	BLOCK:			544	2	
		CHECKED:	INC					9 873	(
		V. KOBB	1115					 	
		APPROVED:	MN				DEPARTN	ATE OF CONNE	SPO

## NOTES:

OF TRANSPORTATION

- 1. VERTICAL DATUM IS NAVD 88, ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES
- 2. FOR PLAN LIMITS OF SITES USED FOR IMPACT SUMMARIES, SEE DWG, SUM-1.
- ACTIVITIES AND IMPACTS IN/AROUND THE BRIDGE ARE LOCATED IN SITES 1,2, AND 3, 3. DELINEATED BY THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL SITE 1 IS WEST OF THE CHANNEL, SITE 2 IS WITHIN THE CHANNEL, AND SITE 3 IS EAST OF THE CHANNEL.
- SITE 4 INCLUDES IMPACTS ASSOCIATED WITH DREDGING, TEMPORARY DOCK RELOCATION AND 4 PERMANENT DOCK CONSTRUCTION AT THE VESSEL DOCKS ON THE WEST SIDE OF THE RIVER SOUTH OF WALK BRIDGE.
- SITE 5 INCLUDES IMPACTS ASSOCIATED WITH DREDGING, BULKHEAD CONSTRUCTION AND 5. TEMPORARY DOCK CONSTRUCTION AT THE MARINE STAGING YARD.
- 6. SITE 6 CONSIST OF SIX INDIVIDUAL WETLAND MITIGATION SITES ALONG THE NORWALK RIVER. THERE ARE NO IMPACTS ASSOCIATED WITH SITE 6.
- SITES 7, 8 AND 9 INCLUDES IMPACTS ASSOCIATED WITH BARGE MOORING IN THE NORWALK 7. RIVER AND LONG ISLAND SOUND REQUIRED FOR CONSTRUCTION.
- SITE 10 IS A TEMPORARY STAGING YARD AT MANRESA ISLAND, THERE ARE NO IMPACTS 8. ASSOCIATED WITH SITE 10.
- 9. IMPACTS WITH DURATION'S LESS THAN 24 MONTHS ARE CONSIDERED TEMPORARY. IMPACTS DUE TO TEMPORARY FILL AND/OR STRUCTURES THAT ARE EXPECTED TO BE IN PLACE MORE THAN 24 MONTHS ARE CONSIDERED PERMANENT.
- 10. INTERTIDAL ZONE IMPACTS INCLUDE AREAS BETWEEN MLW AND HTL THAT ARE NOT WITHIN A VEGETATED TIDAL WETLAND OR INTERTIDAL FLAT.
- 11. IMPACTS BELOW THE CJL INCLUDE AREAS BELOW THE CJL ELEVATION, SHORE TO SHORE, THAT ARE NOT INCLUDED AS VEGETATED TIDAL WETLAND, INTERTIDAL FLAT, OR INTERTIDAL ZONE IMPACTS.
- 12. IMPACTS BELOW THE HTL INCLUDE ALL AREAS BELOW THE HTL ELEVATION, SHORE TO SHORE, INCLUDING THOSE DESIGNATED AS VEGETATED TIDAL WETLAND, INTERTIDAL FLAT, OR INTERTIDAL ZONE.
- 13. FEDERAL NAVIGATION CHANNEL IMPACTS INCLUDE TEMPORARY AND PERMANENT IMPACTS TO NAVIGABILITY OF THE RIVER WITHIN THE LIMITS OF THE FEDERAL NAVIGATION CHANNEL.
- 14. PERMANENT VEGETATED TIDAL WETLAND IMPACT IN SITE 1 AND 3 INCLUDE IMPACTS DUE TO SHADING, IN THE EVENT THAT VEGETATION IS LOST DURING CONSTRUCTION, THIS AREA IS CONSERVATIVELY INCLUDED AS A PERMANENT IMPACT IN THE DETERMINATION OF MITIGATION REQUIREMENTS.
- 15. THE AUTHORIZED CHANNEL DEPTH WITHIN THE LIMITS OF MAINTENANCE DREDGING IS 10 FT, MEASURED FROM MLLW, WITH CORRESPONDING SIDE SLOPE LIMITS EXTENDING 30 FT (AT 3H:1V SLOPE) LANDWARD OF THE FEDERAL NAVIGATION CHANNEL LIMITS,
- 16. MAINTENANCE DREDGING INCLUDES ALL MATERIAL WITHIN THE NAVIGATION CHANNEL AND CHANNEL DREDGING SIDE SLOPE LIMITS. NEW DREDGING INCLUDES ALL MATERIAL THAT IS NOT DEFINED AS MAINTENANCE DREDGING NET DREDGING IS EQUAL TO THE VOLUME OF MATERIAL REMOVED LESS FILL PLACED WITHIN THE DREDGED AREA.
- 17, FOR SUMMARY OF FLOODPLAIN IMPACTS, SEE DWGS, FP-1 TO FP-11,

ROJECT TITLE: WALK BRI

18. THE 100-YEAR FLOOD ELEVATION VARIES THROUGHOUT THE SITE. SEE FLOOD ZONE MAP (DWG. GEN-6) FOR ELEVATION VALUES AND LIMITS OF APPLICABILITY.

		ELEVATIO	N TABLE				
	DESCRIPTIC	2N	CONTOUR	ELEVATION (NAVD88)		ELEVATION (MLLW)	
	100-YEAR FLOODPLAIN		100 YR	SEE NOT	E 18	SEE NOTE 18	
	MAX. ELEVATION OF LA OF SUPPORTING TIDAL	AND CAPABLE VEGETATION	CJL+1	6.4		10.38	
	CT COASTAL JURISDIC	TION LINE	CJL	5.4		9.38	
	HIGH TIDE LINE		HTL	5.2		9.18	
	MEAN HIGH WATER LI	INE	MHW	3.35	5	7.33	
	MEAN LOW WATER LI	NE	MLW	-3.7	2	0.26	
	MEAN LOWER LOW W	ATER LINE	MLLW	-3.9	8	0	
JECT TITLE:		TOWN:			PROJE	CT NO.:	
		NO.	RWALK		03	301-0176	
WALK BRIDGE	C REPLACEMENT	DRAWING TITLE:			DATE:		
OVER THE NO	JKWALK RIVER	SUMMARY		ACTE	REV	02-23-21	
DRIDGE NO. U	4200K/MP 41.5	(SHEFT	3 OF 1	7)	DRAWIN	NG NO.:	
			5 01 1	• •		SUM-2	




































































THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO INSTALL THE PROPOSED DUCTBANK WITH REFERENCE TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

#### WORK DESCRIPTION

INSTALL LAUNCHING AND RECEIVING PITS ON BOTH SIDES OF THE RIVER.

MICRO-TUNNEL ACROSS RIVER FROM LAUNCHING PIT TO RECEIVING PIT.

FILL PITS AND RESTORE SITE.

- LAUNCHING AND RECEIVING PITS ARE BOTH LOCATED LANDWARD OF THE CJL.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP
- PITS WILL BE FORMED BY 36" (MAX) DIAMETER SECANT PILES. THE SIZE AND SHAPE OF THE PITS WILL BE DETERMINED WITH FINAL DESIGN.
- TOP OF LAUNCHING AND RECIEVING PIT WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW) 1 FOOT ABOVE HIGH TIDE LINE.
- THIS ACTIVITY CONSIST OF MICRO-TUNNELING TO BURY DUCTS BENEATH THE RIVER FOR FUTURE INSTALLATION OF MNR TRACTION POWER AND SIGNALS, AND SUBMARINE CABLES FOR BRIDGE POWER AND CONTROL. CONDUCTORS WILL BE INSTALLED IN THE FUTURE FROM THE ENDS OF THE DUCTS WITHOUT FURTHER DISTURBANCE TO THE
- VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN

CONTOUR

100 YR

CJL+1

CJL

HTL

MHW

MLW

MLLW

NORWALK

DUCTBANK

ELEVATION ELEVATION

(MLLW)

15.98

10.38

9,38

9.18

7.33

0.26

0

0301-0176

REV 02-23-21

CA2-1

(NAVD88)

12.0

6.4

5.4

5.2

3.35

-3.72

-3.98

DATE

DRAWING NO.:





		AUTHORIZED DREDGE ELEVATION EL3.98 (0.00 MLLW)	<u>N(</u> 1, 2, 3, 4,	OTES: LAUNCHING AND RECEIVING LANDWARD OF THE CJL. EXCAVATED MATERIAL AND I SHALL BE MANAGED IN ACC ENVIRONMENTAL SPECIAL PRO REQUIREMENTS. MICRO-TUNNEL CASING WILL MINIMUM OF 13 FEET BELOV ELEVATION WITH NO DISTU BOTTOM. VERTICAL DATUM IS NAVD 3 TO MILW TIDAL DATUM AR PARENTHESES.	PITS ARE BOTH LOCATED DEWATERED WASTEWATERS ORDANCE WITH THE DVISIONS AND CTDEEP BE INSTALLED A V AUTHORIZED DREDGE RBANCE TO THE RIVER 38. ELEVATIONS RELATIVE E SHOWN IN
	MICRO-TUNNEL 8' (MIN.) 28' (MAX.	CASING (TYP.)			
SCALE: SCALE IN FEET SCALE I"=10' CHECKED: V. RO APPROVED: C. BF	INOLFI BBINS ROWN	2-2 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	PROJECT TITLE: WALK BRIDGE REPLAC OVER THE NORWALK BRIDGE NO. 04288R/M	ELEVATION TA   DESCRIPTION COM   'LOODPLAIN 10   TION OF LAND CAPABLE C.   LING TIDAL VEGETATION C.   JURISDICTION LINE I   'WATER LINE M   WATER LINE M   EMENT TOWN:   RIVER P   P 41.5   INSTALLATION	BLE     ELEVATION (NAVD88)     ELEVATIOI (MLLW)       0 YR     12.0     15.98       JL+1     6.4     10.38       CJL     5.4     9.38       JTTL     5.2     9.18       IHW     3.35     7.33       ILW     -3.72     0.26       LLW     -3.98     0       PROJECT NO.:     0301-0176       DATE:     REV 02-23-23       ANK     DRAWING NO.:       (4 OF 4)     CA2-4



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO RELOCATE THE VESSEL DOCKS WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

	WORK DESCRIPTION
х	REMOVE MARITIME AQUARIUM AND SHEFFIELD ISLAND FERRY DOCKS AND GANGWAYS.
х	SET TURBIDITY CURTAIN AND REMOVE EXISTING PILES.
х	INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. DREDGE FOR VESSEL ACCESS TO DOCK (SEE ACTIVITY 17).
	REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM.
	INSTALL PILES FOR NEW DOCK.
	RELOCATE MARITIME AQUARIUM AND SHEFFIELD ISLAND FERRY GANGWAYS, INSTALL NEW PERMANENT DOCK AND CANGWAY

VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN

- 2. ALL FENDER, PERMANENT AND SPUD PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PILES.
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR
- 4. MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.
- TOP OF MARINE ENCLOSURE WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW), 1 FOOT ABOVE HIGH

6. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE

ELEVATION ELEVATION

(MLLW)

15.98

10.38

9,38

9.18

7.33

0.26

0

0301-0176

REV 02-23-21

CA3-1

(NAVD88)

12.0

6.4

5.4

5.2

3.35

-3.72

-3.98

DATE

DRAWING NO.:











THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

# WORK DESCRIPTION FILL SITE FOR ACCESS. MOVE BARGES INTO PLACE AND SET TURBIDITY INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. INSTALL BULKHEAD, REMOVE DERELICT PILES AND DREDGE TO EL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17). REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM, DRIVE PILES FOR DOCKS. REMOVE TURBIDITY CURTAIN. SET DOCKS AND GANGWAYS. SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN,
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.
- 5. TOP OF MARINE ENCLOSURE WILL BE INSTALLED TO ELEV. 6.2 (MIN.) (10.18 MLLW), 1 FOOT ABOVE HIGH
- 6. MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM WILL ONLY BE REQUIRED IF DREDGING OCCURS OUTSIDE THE MONTHS OF DECEMBER AND JANUARY.

CONTOUR

100 YR

CJL+1

CJL

HTL

MHW

641.14

7. LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.

INE	1*12.00	-3.7	2	0,20
ATER LINE	MLLW	-3.9	8	0
TOWN:			PROJE	CT NO.:
NO	RWALK		03	801-0176
DRAWING TITLE:			DATE:	
АСТ	IVITY 4		REV	02-23-21
MARINE S	TAGING	YARD	DRAWIN	NG NO.:
(SHEE	T 2 OF 6	5)		CA4-2

ELEVATION ELEVATION (NAVD88) (MLLW)

17.98

10.38

9,38

9.18

7.33

14.0

6.4

5.4

5.2

3.35





THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES, WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

WORK DESCRIPTION
FILL SITE FOR ACCESS.
MOVE BARGES INTO PLACE AND SET TURBIDITY CURTAIN.
INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM.
INSTALL BULKHEAD, REMOVE DERELICT PILES, AND DREDGE TO EL11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17).
REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. DRIVE PILES FOR DOCKS.
REMOVE TURBIDITY CURTAIN. SET DOCKS AND GANGWAYS.
SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

#### NOTES:

1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN

2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.

3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.

4. TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.

DESCRIPTIC	N	CONTOUR	ELEVAT (NAVD	ION 88)	ELEVATION (MLLW)
R FLOODPLAIN		100 YR	14.0	)	17.98
EVATION OF LA PORTING TIDAL	ND CAPABLE	CJL+1	6.4		10.38
STAL JURISDIC	TION LINE	CJL	5.4		9.38
DE LINE		HTL	5.2		9.18
IGH WATER LI	NE	MHW	3.3	5	7.33
OW WATER LI	NE	MLW	-3.7	2	0.26
OWER LOW W	ATER LINE	MLLW	-3.9	8	0
ACEMENT	TOWN: NO	RWALK		PROJE	CT NO.: 301-0176
ACEMENI	DRAWING TITLE:			DATE:	
K RIVER	АСТ	IVITY 4		REV	02-23-21
/MP 41.5	MARINE S	TAGING	YARD	DRAWI	NG NO.:
	(SHEE	T 4 OF 6	5)		CA4-4

ELEVATION TABLE



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES RELATED TO TEMPORARY AND PERMANENT IMPROVEMENTS AT THE MARINE STAGING YARD WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

# WORK DESCRIPTION FILL SITE FOR ACCESS. MOVE BARGES INTO PLACE AND SET TURBIDITY INSTALL MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. INSTALL BULKHEAD, REMOVE DERELICT PILES, AND DREDGE TO EL -11 (MIN.) (-7.02 MLLW) (SEE ACTIVITY 17) REMOVE MARINE ENCLOSURE AND TEMPORARY FENDER SYSTEM. DRIVE PILES FOR DOCKS. REMOVE TURBIDITY CURTAIN. SET DOCKS AND GANGWAYS. SET TURBIDITY CURTAIN, REMOVE DOCKS, GANGWAYS AND PILES.

- 1. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE 100-YR FLOODPLAIN,
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 3. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- 4. ALL PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER PIPE PILES.

ELEVATION TABLE					
DESCRIPTIC	)N	CONTOUR	ELEVA1 (NAVD	FION 88)	ELEVATION (MLLW)
00-YEAR FLOODPLAIN		100 YR	14.0	2	17.98
AX. ELEVATION OF LA F SUPPORTING TIDAL	AND CAPABLE . VEGETATION	CJL+1	6.4		10.38
T COASTAL JURISDIC	TION LINE	CJL	5.4		9.38
IGH TIDE LINE		HTL	5.2	2	9.18
EAN HIGH WATER LI	NE	MHW	3.3	5	7.33
EAN LOW WATER LI	NE	MLW	-3.7	2	0.26
EAN LOWER LOW W	ATER LINE	MLLW	-3.9	8	0
	TOWN:			PROJE	CT NO.:
	NO	RWALK		03	301-0176
REPLACEMENT	DRAWING TITLE:		-	DATE:	
WALK RIVER	ACT	IVITY 4		REV	02-23-21
LOOK/ MP 41.5	MARINE S	TAGING	YARD	DRAWIN	NG NO.:

CA4-5







THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD THE NORTHWEST TRESTLE WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES. WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

(MLLW)

13.98

10.38

9,38

9.18

7.33

0.26

0

0301-0176

CA5-2

OJECT NO.



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD THE NORTHWEST TRESTLE WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

	WORK DESCRIPTION
	SET TURBIDITY CURTAIN. EXCAVATE ALONG SHORELINE.
	CONSTRUCT TEMPORARY WALL TO SUPPORT EDGE OF PLATFORM.
	INSTALL PILES TO SUPPORT FIRST SECTION OF TRESTLE PLATFORM.
	CONSTRUCT CAP BEAMS AND PLATFORM FOR FIRST SECTION OF TRESTLE.
х	INSTALL REMAINING PILES, CONSTRUCT CAP BEAMS, AND CONSTRUCT PLATFORM INTERMITTENTLY TO COMPLETE THE PLATFORM.
х	INSTALL MOORING PILES AND TEMPORARY FENDER SYSTEM.
	SET TURBIDITY CURTAIN. REMOVE TEMPORARY FENDER SYSTEM, MOORING PILES, AND TRESTLE IN REVERSE ORDER FROM INSTALLATION.
	REMOVE REMAINDER OF MARINE ENCLOSURE FROM PROPOSED PIER 2.
	REMOVE TEMPORARY WALL, RESTORE SHORELINE TO PRECONSTRUCTION CONDITIONS.

- 1. SPUD PILES, PLATFORM SUPPORT PILES, AND MOORING PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER
- 2, VERTICAL DATUM IS NAVD 88, ELEVATIONS TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 3. TOP OF PLATFORM IS ELEV. 10.5 (14.48 MLLW).

LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH USCG.

FOLLOWING COMPLETION OF ALL PILE-DRIVING ACTIVITIES AND THE TURBIDITY HAS SETTLED TO RE-CONSTRUCTION CONDITIONS, THE TURBIDITY CURTAIN WILL BE REMOVED.

CONTOUR

ELEVATION ELEVATION

(NAVD88) (MLLW)

PARTMENT OF TRANSPORTATION			(SHEE	T 3 OF 5	5)	CA5-3
STATE OF CONNECTICUT	BRIDGE NO	. U4288K/MP 41.5	NORTHW	EST TRES	STLE DRA	WING NO.:
	OVER THE	NORWALK RIVER	АСТ	IVITY 5	R	EV 7-31-20
	WALK BRII	DGE REPLACEMENT	DRAWING TITLE:	KWALK	DAT	0301-0176 E:
CONNECTION	PROJECT TITLE:		TOWN:		PRC	JECT NO.:
		MEAN LOWER LOW V	ATER LINE	MLLW	-3.98	0
	Z	MEAN LOW WATER L	INE	MLW	-3.72	0.26
	o~ "	MEAN HIGH WATER L	INE	MHW	3.35	7.33
		님 HIGH TIDE LINE		HTL	5.2	9.18
		CT COASTAL JURISDIC	TION LINE	CJL	5.4	9.38
		MAX. ELEVATION OF L OF SUPPORTING TIDA	AND CAPABLE L VEGETATION	CJL+1	6.4	10.38
58' +/-		100-YEAR FLOODPLAIN		100 YR	10.0	13.98



THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD THE NORTHWEST TRESTLE WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

	WORK DESCRIPTION
	SET TURBIDITY CURTAIN. EXCAVATE ALONG SHORELINE.
	CONSTRUCT TEMPORARY WALL TO SUPPORT EDGE OF PLATFORM.
	INSTALL PILES TO SUPPORT FIRST SECTION OF TRESTLE PLATFORM.
	CONSTRUCT CAP BEAMS AND PLATFORM FOR FIRST SECTION OF TRESTLE.
	INSTALL REMAINING PILES, CONSTRUCT CAP BEAMS, AND CONSTRUCT PLATFORM INTERMITTENTLY TO COMPLETE THE PLATFORM.
	INSTALL MOORING PILES AND TEMPORARY FENDER SYSTEM.
<	SET TURBIDITY CURTAIN, REMOVE TEMPORARY FENDER SYSTEM, MOORING PILES, AND TRESTLE IN REVERSE ORDER FROM INSTALLATION.
<	REMOVE REMAINDER OF MARINE ENCLOSURE FROM PROPOSED PIER 2.
<	REMOVE TEMPORARY WALL. RESTORE SHORELINE TO PRECONSTRUCTION CONDITIONS.

- 1. SPUD PILES, PLATFORM SUPPORT PILES, AND MOORING PILES ARE ANTICIPATED TO BE 36" (MAX.) DIAMETER
- 2, VERTICAL DATUM IS NAVD 88, ELEVATIONS RELATIVE TO MLLW TIDAL ARE SHOWN IN PARENTHESES.
- 3. TOP OF PLATFORM IS ELEV. 10.5 (14.48 MLLW).
- SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.

5. SHORELINE RESTORATION TO MATCH EXISTING TREATMENT, SIDE-SLOPE, AND ELEVATION BASED ON PRE-CONSTRUCTION CONDITIONS AND ADJACENT SHORELINE NOT DISTURBED BY CONSTRUCTION

	(SHEE	T 4 OF 5	5)		CA5-4
1.5	NORTHW	EST TRES	STLE	DRAWI	NG NO.:
ER	ACT	IVITY 5		RE	V 7-31-20
	DRAWING TITLE:			DATE:	
	NO	RWALK		03	301-0176
	TOWN:			PROJE	CT NO.:
OW W	ATER LINE	MLLW	-3.9	8	0
TER LI	INE	MLW	-3.7	2	0.26
ATER L	INE	MHW	3.3	5	7.33
		HTL	5.2		9.18
RISDIC	TION LINE	CJL	5.4		9.38

CONTOUR

100 YR

CJL+1

ELEVATION ELEVATION (NAVD88) (MLLW)

13.98

10.38

10.0

6.4









THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD THE SOUTHWEST TRESTLE WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

	WORK DESCRIPTION
	SET TURBIDITY CURTAIN.
	EXCAVATE SHORELINE AT PLATFORM RAMP.
	CONSTRUCT GRADE BEAM AND INSTALL PILES TO SUPPORT FIRST SECTION OF TRESTLE PLATFORM.
	CONSTRUCT CAP BEAMS AND PLATFORM FOR FIRST SECTION OF TRESTLE.
	INSTALL REMAINING PILES, CONSTRUCT CAP BEAMS, AND CONSTRUCT PLATFORM INTERMITTENTLY TO COMPLETE THE PLATFORM.
	INSTALL MOORING PILES AND TEMPORARY FENDER SYSTEM.
	SET TURBIDITY CURTAIN. REMOVE TEMPORARY FENDER SYSTEM, MOORING PILES, AND TRESTLE IN REVERSE ORDER FROM INSTALLATION.
	REMOVE REMAINDER OF MARINE ENCLOSURE FROM PROPOSED PIER 2.
	REMOVE TEMPORARY GRADE BEAM AND RESTORE SHORELINE TO PRECONSTRUCTION CONDITIONS.
0	TES:

- PILES ARE ÁNTICIPATED TO BE 36" (MÁX.) DIAMETER
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. TOP OF PLATFORM ELEV. 10.66 (14.64 MLLW).

FOLLOWING COMPLETION OF ALL PILE-DRIVING ACTIVITIES AND THE TURBIDITY HAS SETTLED TO THE PRE-CONSTRUCTION CONDITIONS, THE TURBIDITY CURTAIN WILL BE REMOVED.

- LIMITS OF TEMPORARY FENDER SYSTEM AND TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTING) WILL BE COORDINATED WITH THE USCG.
- 6. THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE

	(SHEE	T 3 OF 5	5)		CA6-3	
41.5	NORWALK DRAWING TITLE: ACTIVITY 6 SOUTHWEST TRESTLE			DRAWING NO.:		
IVER				DATE: REV 05-19-21		
MENI						
				0301-0176		
	TOWN:			PROJE	CT NO.:	
R LOW WATER LINE		MLLW	-3.98		0	
WATER LINE		MLW	-3.72		0.26	
WATER LI	NE	MHW	3.35	5	7.33	
INE		HTL	5.2		9.18	
JURISDIC	TION LINE	CJL	5,4		9.38	
ON OF LA	ND CAPABLE	CJL+1	6.4		10.38	
JODPLAIN		100 YR	12.0	)	15.98	

ELEVATION ELEVATION (NAVD88) (MLLW)


## **CONSTRUCTION SEQUENCE**

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD THE SOUTHWEST TRESTLE WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

	WORK DESCRIPTION		
	SET TURBIDITY CURTAIN.		
	EXCAVATE SHORELINE AT PLATFORM RAMP.		
	CONSTRUCT GRADE BEAM AND INSTALL PILES TO SUPPORT FIRST SECTION OF TRESTLE PLATFORM.		
	CONSTRUCT CAP BEAMS AND PLATFORM FOR FIRST SECTION OF TRESTLE.		
	INSTALL REMAINING PILES, CONSTRUCT CAP BEAMS, AND CONSTRUCT PLATFORM INTERMITTENTLY TO COMPLETE THE PLATFORM.		
	INSTALL MOORING PILES AND TEMPORARY FENDER SYSTEM.		
<	SET TURBIDITY CURTAIN. REMOVE TEMPORARY FENDER SYSTEM, MOORING PILES, AND TRESTLE IN REVERSE ORDER FROM INSTALLATION.		
<	REMOVE REMAINDER OF MARINE ENCLOSURE FROM PROPOSED PIER 2.		
<	REMOVE TEMPORARY GRADE BEAM AND RESTORE SHORELINE TO PRECONSTRUCTION CONDITIONS.		
OTES:			

- SPUD PILES, PLATFORM SUPPORT PILES, AND MOORING PILES ARE ÁNTICIPATED TO BE 36" (MÁX.) DIAMETER
- 2. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN
- 3. TOP OF PLATFORM ELEV. 10.66 (14.64 MLLW).
- SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR
- 5. SHORELINE RESTORATION TO BE CONSISTENT WITH IMAX REMOVAL RESTORATION (SEE ACTIVITY 1).
- THIS ACTIVITY IS CONTAINED ENTIRELY WITHIN THE

ELEVATION ELEVATION

OJECT NO.

DRAWING NO.:

DATE

(MLLW)

15.98

10.38

9,38

9.18

7.33

0.26

0

0301-0176

REV 05-19-21

CA6-4

(NAVD88)

12.0

6.4

5.4

5.2

3.35

-3.72

-3.98































































## **CONSTRUCTION SEQUENCE**

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO BUILD BARGE MOORINGS WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X"

## WORK DESCRIPTION

- INSTALL MOORING BUOY AND ANCHOR.
- REMOVE MOORING BUOY AND ANCHOR AT END OF
- 1. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR TYPICAL BARGE SIZES.
- NO DREDGING IS REQUIRED FOR ANY BARGE MOORING LOCATIONS.
- 3. TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTS) WILL BE COORDINATED WITH THE USCG.
- MOORING LOCATIONS WILL NOT EXCEED THE DEPICTED LIMITS AT ANY TIDE.
- THIS LOCATION WILL BE USED TO MOOR SMALLER WORK BOATS AND CONSTRUCTION VESSELS.
- THIS LOCATION IS OUTSIDE THE LIMITS FOR THE FEDERAL NAVIGATION CHANNEL FOR THE NORWALK

ROJECT NO.

DRAWING NO.:

DATE:

0301-0176

REV 02-23-21

CA11-5

MATERIAL BARGE			
SWING MOORING DETAIL			
60° DIAMETER MOORING BUOY (TYP.) CONSTRUCTION BARGE/VESSEL VEL. 3.35 (7.33 MLLW) EL. 3.35 (7.33 MLLW) VEL3.98 (0.00 MLLW) EL3.98 (0.00 MLLW) APPROXIMATE EXISTING MUDLINE	DATIUM IS NAVO 88 EU	EVATIONS D	EI ATTIVE
FIXED MOORING DETAIL	TIDAL DATUM ARE SHC	WN IN PAR	ENTHESES.
	LEVATION TABLE	FLEVATION	FLEVATION
DESCRIPTIO	ON CONTOUR	(NAVD88)	(MLLW)
100-YEAR FLOODPLAIN MAX. ELEVATION OF LA	AND CAPABLE	14.0	17.98
OF SUPPORTING TIDAL	VEGETATION CIL+1	0.4 E 4	10.38
LI COASTAL JURISDICT	HTL	5.4	9.38
MEAN HIGH WATER		3.35	7.33
MEAN LOW WATER LIN MEAN LOWER LOW W/	NE MLW	3.72	0.26
SCALE: DRAWN: SIGNATURE BLOCK: T ADTINIOL FL PROJECT TITLE: PROJECT TITLE:	TOWN	PROJE	ECT NO.:
SCALE 1" = 20' CHECKED: V. ROBBINS   0 10 20   APPROVED: C. BROWN	DRAWING TITLE: ACTIVITY 11 BARGE MOORIN (SHEET 6 OF (	O DATE: REV NG DRAW 6)	V 02-23-21

60" DIAMETER MOORING BUOY —






I +		Ţ MLLW ELEV.	-3.98 (0.00 MLLW)										
			40	)'-0"				DINE PRIOR T		(CA17)			
_	-		UPPER 4' W	ILL BE REMOVED FOR UPLAND	-	/			o preporte	(0,117)			
6 6			DISPOSAL A	AND REPLACED WITH CLEAN E	BACKFILL								
01E													
UX III						/	ELEV13.98 (MAX AUTHORIZED DRE	X.) (-10.00 MLL EDGE ELEVATIO	<u>_W)</u> DN OR EXISTIN	IG			
APPR	GRANULAR FII				1 2	4'-0"	CHANNEL BOTTOM	1, WHICHEVER	IS LOWER				
	NA	ATIVE MATERIAL -		L L L L L L L L L L L L L L L L L L L	LOW 4' EXISTINC TTOM WILL BE I D DEWATERED F	G RIVERBED DREDGED FOR RE-USE	Ť						
<u>.</u>				3				1	NOTES:				
			4	-0" EXISTING CABLE	:(S)			1	1. VERTICAL E TO MLLW PARENTHES	ATUM IS NAV TIDAL DATUM ES.	D 88. ELEVA ARE SHOWN	ATIONS R N IN	ELATIVE
			SECTION A	A A (CA12-2/(CA12-3)				2	2. BACKFILL V MORE THAN ORGANIC C MORE THAN	/ILL CONSIST ( 1 25% SAND CONTENT NO L 1 40% BY WE	OF SOILS CO BY WEIGHT ESS THAN 2 EIGHT.	ONTAININ AND AN 25% ANI	g NO D NO
								3	3. UPPER 4'O CONTAMINA OFF-SITE L DREDGING EXCAVATIO	F EXCAVATED TED AND DIS OCATION, REGA (SEE ACTIVITY N.	MATERIAL TO POSED OF A ARDLESS OF ( 17) HAS O	O BE TRI AT AN AF WHETHE OCCURRED	EATED AS PROVED R AT THE
								2	4. UPPER 4'O CABLE ROU AND MAY I DETERMINE	F EXCAVATED TE WILL HAVE BE TESTED FOI SUITABILITY F	MATERIAL A BEEN RECE R CONTAMIN FOR RE-USE	LONG TH ENTLY PLA NATION T AS BACI	E CP243 ACED O <fill.< th=""></fill.<>
								5	5. IF MATERIA CONTAMINA UNSUITABL CLEAN BAC	L BELOW 4' IS TED OR OTHE E FOR RE-USE, KFILL.	5 FOUND TO RWISE DETE IT WILL BE	) BE ERMINED E REPLACE	ED WITH
								e	5. EXISTING VARIES. AV CABLE DEP AUTHORIZE	CABLE DEPTH I AILABLE AS-BU THS APPROXIM D DREDGE ELE	BELOW RIVE ILT INFORM ATELY 8'TO EVATION.	ER BOTTO ATION IN 9' BELOV	OM DICATES V THE
								7	7. TRENCH DI ASSUMED ACTUALLY I	MENSIONS SHO CABLE DEPTHS FIELD CONDITI	OWN ARE B. AND MAY N ONS.	ASED ON VARY WIT	Ή
								8	3. THIS ACTIN 100-YR FLC	ITY IS CONTA	INED ENTIR	ELY WITH	IIN THE
										ELEVATIO	N TABLE		
									DESCRIPTI	ON	CONTOUR	ELEVATI (NAVD8	ON ELEVATION 8) (MLLW)
								100-YEA MAX, ELI	R FLOODPLAIN	AND CAPABLE	100 YR	10.0/12 6.4	10 13.98/15.9
								CT COAS	STAL JURISDIC	TION LINE	CJL	5.4	9.38
								HIGH TI MEAN H	IDE LINE IIGH WATER L	INE	HTL MHW	5.2 3.35	9.18
								MEAN L	OW WATER L	INE ATER LINE	MLW MLI W	-3.72	0.26
SCALE:		DRAWN: T. ADINOLFI	SIGNATURE BLOCK:		(une)	CONNECTI	PROJECT TITLE:			TOWN:	RWAIK	F	ROJECT NO.:
SCALE	IN FEET	CHECKED:				C PPANTN	WALK BR	IDGE REPL		DRAWING TITLE:		C	ATE:
0 SCALE	5 <u>10</u> 1"=10'	APPROVED: C. BROWN			STATE O DEPARTMENT (	F CONNECTICUT DF TRANSPORTATI		10. 04288R	MP 41.5	ACTI SUBMAI REMOVA	IVITY 12 RINE CAE AL (4 OF	BLE D	REV 7-31-20 RAWING NO.: CA12-4









































# ACTIVITY 16 - WETLAND MITIGATION INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE
MIT-001	DRAWING INDEX
MIT-002	MITIGATION INDEX PLAN
MIT-003	MITIGATION AREA 1 PHRAGMITES TREATMENT
MIT-004	MITIGATION AREA 2 GRADING PLAN
MIT-005	MITIGATION AREA 2 GRADING SECTIONS 1
MIT-006	MITIGATION AREA 2 GRADING SECTIONS 2
MIT-007	MITIGATION AREA 2 PLANTING PLAN
MIT-008	MITIGATION AREA 2 PLANTING SECTIONS 1
MIT-009	MITIGATION AREA 2 PLANTING SECTIONS 2
MIT-010	MITIGATION AREA 3 PHRAGMITES TREATMENT
MIT-011	MITIGATION AREA 4 PHRAGMITES TREATMENT
MIT-012	MITIGATION AREA 4 PLANTING PLAN
MIT-013	MITIGATION AREA 5 PHRAGMITES TREATMENT
MIT-014	MITIGATION AREA 5 PLANTING PLAN
MIT-015	MITIGATION AREA 6 GRADING PLAN
MIT-016	MITIGATION AREA 6 GRADING SECTIONS 1
MIT-017	MITIGATION AREA 6 GRADING SECTIONS 2
MIT-018	MITIGATION AREA 6 PLANTING PLAN
MIT-019	MITIGATION AREA 6 PLANTING SECTIONS 1
MIT-020	MITIGATION AREA 6 PLANTING SECTIONS 2

DATE: 06/26/2019



SIGNATURE BLOCK V. ROBBINS T. ADINOLFI APPROVED: C. BROWN

CHECKED:

CALE

# FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

OJECT NO 0301-0176

#### NORWALK

12-5-19 RAWING NO.:

CA16-1

DRAWING TITLE:

ACTIVITY 16 WETLAND MITIGATION (MIT-001)







CALE

WETLAND SCIENTIST





DEPTH AT WHICH THE ENTIRE ROOT/RHIZOME LAYER IS REMOVED, AS DETERMINED BY THE OEP WETLAND SCIENTIST



#### LIVING SHORELINE DETAIL



# TERRAPIN HABITAT DETAIL

(MIT-006)

CA16-6

- SLOPE SEEDING AREA MIX BASED ON ITEM NO. 0950202A - SHORELINE GRASS ESTABLISHMENT.
- BEFORE ANY WORK IS TO PROCEED IN THE WETLAND 2. MITIGATION AREAS THE CONTRACTOR SHALL ARRANGE THROUGH THE ENGINEER FOR A MEETING WITH AN ENVIRONMENTAL INSPECTOR FROM THE CONNDOT OFFICE OF ENVIRONMENTAL PLANNING (CTDOT OEP). THIS MEETING WILL BE SCHEDULED AT LEAST 10 DAYS PRIOR TO COMMENCEMENT OF WORK ACTIVITY DESCRIBED IN THE SPECIAL PROVISION "TIDAL WETLAND CREATION".
- REFER TO THE WETLAND MITIGATION AREA PLANS, DRAWING NO. MIT-004 FOR PROPOSED GRADING IN з. THE WETLAND CREATION SITE.
- 4. AFTER COMPLETION OF FINAL GRADE, A 7-14 DAY TIDAL FLOW CYCLE SHALL OCCUR PRIOR TO PLANTING. DIANTING IN THE WETLAND CREATION SITES SHALL BE DONE BETWEEN APRIL 15 AND OCTOBER 15.
- SEEDING FOR SHORELINE GRASS ESTABLISHMENT SHALL COMMENCE UPON COMPLETION OF GRADING 5. AND PLACEMENT OF PLANTING SUBSTRATE/TOPSOIL AND AFTER INITIAL INSTALLATION OF ALL PLANTS. THE GRADING AND SEEDING MUST BE PERFORMED WITHIN THE SAME CONSTRUCTION SEASON WITH NO SCHEDULED INACTIVE PERIOD OF MORE THAN 10 WORKDAYS. SEED SHALL BE APPLIED BY BROADCAST SPREADING

- AN ENVIRONMENTAL INSPECTOR FROM THE CTDOT OEP 6. SHALL INSPECT THE WETLAND CREATION SITES PRIOR TO PLANTING TO DETERMINE THE SITES ARE SUITABLE FOR PLANTING. THE ENVIRONMENTAL INSPECTOR MAY MODIFY THE PLANT LAYOUT FROM THE PLANTING PLAN IF AS-BUILT CONDITIONS POSE A THREAT TO THE SURVIVAL OF PLANTINGS
- AUGER OR DIG TO MAKE PLANTING HOLES FOR SHRUBS, AND TRANSPLANT. DO NOT REMOVE PLANTS FROM 7. CONTAINERS UNTIL IMMEDIATELY BEFORE PLANTING SEPARATE ANY POT-BOUND OR CRAMPED ROOTS AND SPREAD THEM WHEN PLACING THE PLANTS. MACHINERY WILL NOT BE ALLOWED WITHIN THE MITIGATION SITE AT ANY TIME FOR PLANTING.

8.

- PAYMENT FOR THE WORK OF CONSTRUCTING WETLAND MITIGATION AREAS WILL BE MADE UNDER THE FOLLOWING ITEMS:
  - DISPOSAL OF DEBRIS WILL BE PAID UNDER ITEM #0101135A DISPOSAL OF DEBRIS.

EXCAVATION TO PERFORM GRADING WILL BE PAID UNDER ITEM #0202000 - EARTH EXCAVATION

FURNISHING, PLACING, MAINTAINING AND REMOVING SEDIMENTATION CONTROL SYSTEMS WILL BE PAID UNDER ITEM #0219001 - SEDIMENTATION CONTROL SYSTEM

REMOVAL OF INVASIVE PLANT SPECIES WILL BE PAID UNDER #0952051A - CONTROL AND REMOVAL OF INVASIVE VEGETATION.

8.

(CONTINUED): FORMATION OF SUBGRADE IN WETLAND CREATION SITES AND TERRAPIN HABITAT AREA, PROVIDING AND PLACING PLANTING SUBSTRATE/TOPSOIL, PROVIDING AND PLACING SAND AND GRANULAR FILL IN THE TERRAPIN HABITAT AREA, FURNISHING AND PLACING RIPRAP AND GRANULAR FILL FOR THE LIVING SHORELINE, PLACEMENT OF OYSTER CULTCH AND FINISH GRADING WILL BE PAID UNDER ITEM #0948013A - TIDAL WETLAND CREATION.

FURNISHING, PLACING AND ESTABLISHING SHORELINE GRASS WILL BE PAID UNDER ITEM #0950202A -SHORELINE GRASS ESTABLISHMENT.

FURNISHING AND PLACING SHRUBS AND HERBACEOUS PLANTINGS IN THE WETLAND MITIGATION AREAS WILL BE PAID UNDER ITEM #0949875A - WETLAND PLANTINGS. REPLACEMENT OF PLANTINGS IN MITIGATION AREA 2 SHALL BE INCLUDED IN THIS ITEM.

FIBER ROLL SHALL BE PAID FOR UNDER ITEM #0949315A -FIBER ROLL.

THE COST OF INSTALLING WETLAND CREATION SIGNS (31-5478) WILL BE PAID FOR UNDER ITEM #1208932A SIGN FACE - SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING)

TERRAPIN HABITAT AREA

-EXISTING TREE TO REMAIN







-SOLIDAGO SEMPERVIRENS, TYP

					сонивестисит	J.		E GRID	
PLANTIN									
	COMMON NAM	E	SIZE		SPACINO	1 E	VOTES		
<u>م</u>	SMOOTH COR		DULC		19" 0 0				
A ML	SEA LAVENDER	2 <u>06RA55</u> ?	PLUG		18" O.C.				
A	EASTERN BAC	CHARIS	2 GAL		48" O.C				
NS	MARSH ELDER		2 GAL		36" O.C. 12" O.C.				
ATA	AMERICAN BE	ACHGRASS	PLUG		18" O.C.				
ι.	NORTHERN BA	YBERRY	2 GAL		48" O.C.	. 2	FEMAL	E PLAN	
						F	LANT E	BEHIND	
JM WTER	HIGHBUSH BL	UEBERRY	2 GAL		48" O.C.				
<i>w/2/</i>									
TIDAL 1	TABLE								
	ELEVATION	LINEST	YLE						
	10.0'	100YF	₹						
(ISDICTION	6.40'	CJL+1	·						
RISDICTION LINE	5.40'	CJL							
: TER LINE	3.35'	НПС МНW	_						
TER LINE	-3.72'	MLW							
OW WATER LINE	-3.98'	MLLV	<u> </u>						
14			-15-	A A A	of the the		<u></u>	2	×
10 W									1 1 1 1 101
	L+10		<u>ro  +1</u>	C1	7	H Tra	L+Tro		1.8.1
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PEDESTRIA			$\square$						
	N BRIDGE						~		
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MHW	0.9888	HELL		CJL	.1				2
100-22-20	GIL.							+!	5
				$\bigcirc$		BACC	HARIS	HALIMIF	OLIA
				Œ	$\overline{\cdot}$	(EAS	rern b	ACCHAR	íS)
	SPARTINA ALTE (SMOOTH CORD	RNIFLORA (GRASS)		Q.	2	IVA	FRUTES	CENS	
		OLINIANUM		66	ø	VACC	INIUM	CORYME	SOSUM
	SHORELINE GRA	ASS		(A)m	Ð	MORE	ELLA PE	INSYLVAI	VICA
	ESTABLISHMENT TERRAPIN HABI	TAT SAND	PER	<u>س</u> ۔	y -	MITI	SATION	AREA	N1)
	DEP SPECIFICAT AMMOPHILA BRI (AMERICAN BEA	FION & EVILIGULAT CHGRASS)	A	-©	©		OXIMAT	TE SLOPI	Ξ
$\stackrel{\circ}{\searrow}$ $\bigcirc$ $\textcircled{m}$	SOLIDAGO SEMPERVIRENS (SEASIDE GOLD	ENROD)				OUTE	ER LIMI	TS OF	
/==		,				EXIS PROT	TING V ECTION	EGETATI	ON
7		FOR	INFO	RMAT		NLY			
1									

	FOR INFORMATION ONLY										
	MITIGATION SITES OUTSIDE NAVIGATION CHANNEL										
_											
	LOWN: IPROJECT NO :										

WALK BRIDGE REPLACEMENT OVER THE NORWALK RIVER BRIDGE NO. 04288R/MP 41.5

DRAWING TITLE **ACTIVITY 16** WETLAND MITIGATION (MIT-007)

NORWALK

0301-0176 12-5-19 AWING NO CA16-7

2. SEE GRADING DRAWING (MIT-004) AND SECTIONS (MIT-005 & 006) FOR OVEREXCAVATION DEPTHS AND LIMITS.



CALE

1. SEE MIT-007 MITIGATION AREA 2 PLANTING PLAN FOR LAYOUT OF IVA FRUTESCENS, BACCHARIS HALIMIFOLIA, SPARTINA ALTERNIFLORA, LIMONIUM CAROLINIANUM AND SOLIDAGO SEMPERVIRENS.

3. SEE GRADING DRAWING (MIT-004) FOR SECTION BASELINE,

### LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1 CJL = CT COSTAL JURISDICTION LINE HTL = HIGH TIDE LINE MHW = MEAN HIGH WATER LINE EL = ELEVATION O.C. = ON CENTERYR = YEAR

	MITIGAT	FOR INFORMATION ONLY ION SITES OUTSIDE NAVIGATI	ON CHANNEL
			PROJECT NO.:
RIDGE REP	LACEMENT	DRAWING TITLE:	DATE:
IE NORWA	LK RIVER	ACTIVITY 16	12-5-19
NU. U4288	K/MP 41.5	WETLAND MITIGATION (MIT-008)	DRAWING NO.: CA16-8

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-0																					UMIT OF	TERRAPIN	HA
																FI	BER ROLL A	PROPOS	ЕР НТL—				
30 -			_													IV	A FRUTESCE	NS, 36" O.	<u>.с, түр. ¬</u> \	·			
															LIMON	IUM CAROL	INIANUM, —		\	N.			
															18" O.	C.		X		$\mathbb{N}$			,
20													3 SHOREL					<u> </u>		++	<u> </u>	+	-+
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- 1. SEE MIT-007 MITIGATION AREA 2 PLANTING PLAN FOR LAYOUT OF IVA FRUTESCENS, BACCHARIS HALIMIFOLIA, MORELLA PENSYLVANICA, SPARTINA ALTERNIFLORA, LIMONIUM CAROLINIANUM, VACCINIUM CORYMBOSUM, AND SOLIDAGO SEMPERVIRENS.
- 2. SEE GRADING DRAWING (MIT-004) AND SECTIONS (MIT-005 & 006) FOR OVEREXCAVATION DEPTHS AND LIMITS.
- 3. SEE GRADING DRAWING (MIT-004) FOR SECTION BASELINE.

# LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1 CJL = CT COSTAL JURISDICTION LINE HTL = HIGH TIDE LINE MHW = MEAN HIGH WATER LINE EL = ELEVATION O.C. = ON CENTER YR = YEAR









- DRAWING NO. MIT-011 FOR PHRAGMITES TREATMENT.
- AN ENVIRONMENTAL INSPECTOR FROM THE CTDOT OEP SHALL INSPECT THE SITE PRIOR TO PLANTING TO DETERMINE IF THE SITE IS SUITABLE FOR PLANTING. IF A SUFFICIENT AMOUNT OF NATIVE VOLUNTEER PLANTS HAS ESTABLISHED IN THE MITIGATION AREA, THE ENVIRONMENTAL INSPECTOR MAY DETERMINE THAT SHRUB PLANTING IS NOT NEEDED. IF IT IS DETERMINED THAT SHRUB PLANTING IS NEEDED, THE ENVIRONMENTAL INSPECTOR MAY MODIFY THE PLANTING PLAN AND WILL DETERMINE THE LOCATIONS FOR PLANTING.
- BEFORE PLANTING SEPARATE ANY POT-BOUND OR CRAMPED ROOTS AND SPREAD THEM WHEN PLACING THE PLANTS. MACHINERY WILL NOT BE ALLOWED WITHIN THE MITIGATION SITE AT ANY TIME FOR PLANTING.
- DISPOSAL OF DEBRIS WILL BE PAID UNDER ITEM

#### FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

0301-0176

12-5-19 AWING NO :

**ACTIVITY 16** WETLAND MITIGATION (MIT-012)

CA16-12

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RAWING	TITLE:			



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[		a)	AREA	то і	BE TREATED	WITH H	HERBICIDE		
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PL.	5. TH	HE TRE	EATMENT	F FOR	THIS AREA	WILL BE	E PAID UNDER	R ITEM NO. 09	952051A -
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			міті	GAT	FOR	INFO	RMATION	ONLY /IGATION	CHANNEL
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ID E	GE R	EPLA Nalk		NT ER	DRAWING TITLE:	A ~ T	IVITY 16		DATE: 12-E-10
0	042	88R/	MP 4	1.5	w	ETLANE	MITIGAT	ION	DRAWING NO.:
						(M	IT-013)		CA16-13



NEEDED SEE	NOTE 2)		
NAME	SIZE	SPACING	NOTES
BACCHARIS	2 GAL	36" O.C.	
LDER	2 GAL	36" O.C.	

LINESTYLE								
-	100YR							
_	CJL+1							
_	CJL							
_	HTL							
_	MHW							
-	MLW							
_								

- 1. REFER TO THE WETLAND MITIGATION AREA PLANS, DRAWING NO. MIT-013 FOR PHRAGMITES TREATMENT.
- 2. AN ENVIRONMENTAL INSPECTOR FROM THE CTDOT OEP SHALL INSPECT THE SITE PRIOR TO PLANTING TO DETERMINE IF THE SITE IS SUITABLE FOR PLANTING. IF A SUFFICIENT AMOUNT OF NATIVE VOLUNTEER PLANTS HAS ESTABLISHED IN THE MITIGATION AREA, THE ENVIRONMENTAL INSPECTOR MAY DETERMINE THAT SHRUB PLANTING IS NOT NEEDED. IF IT IS DETERMINED THAT SHRUB PLANTING IS NEEDED, THE ENVIRONMENTAL INSPECTOR MAY MODIFY THE PLANTING PLAN AND WILL DETERMINE THE LOCATIONS FOR PLANTING.
- 2A. PLANTING SHALL BE DONE DURING THE FINAL YEAR OF BRIDGE CONSTRUCTION, IF NEEDED.
- ACCESS WITHIN WETLAND AREA WILL BE LIMITED TO FOOT TRAFFIC. FOOT ACCESS THROUGH CONSTITUTION PARK MAY BE NECESSARY FOR TRANSPORTATION OF DEBRIS AND PLANTINGS.
- 4. IF SHRUB PLANTING IS NEEDED, AUGER OR DIG TO MAKE PLANTING HOLES FOR SHRUBS, AND TRANSPLANT. DO NOT REMOVE PLANTS FROM CONTAINERS UNTIL IMMEDIATELY BEFORE PLANTING. SEPARATE ANY POT-BOUND OR CRAMPED ROOTS AND SPREAD THEM WHEN PLACING THE PLANTS. MACHINERY WILL NOT BE ALLOWED WITHIN THE MITIGATION SITE AT ANY TIME FOR PLANTING.
- 5. PAYMENT FOR THE WORK WILL BE MADE UNDER THE FOLLOWING ITEMS:

DISPOSAL OF DEBRIS WILL BE PAID UNDER ITEM #0101135A - DISPOSAL OF DEBRIS.

FURNISHING AND PLACING SHRUBS AND HERBACEOUS PLANTINGS IN THE WETLAND MITIGATION AREAS WILL BE PAID UNDER ITEM #0949875A - WETLAND PLANTINGS.

THE COST OF INSTALLING WETLAND CREATION SIGNS (31-5478) WILL BE PAID FOR UNDER ITEM #1208932A - SIGN FACE - SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING).

6

# FOR INFORMATION ONLY MITIGATION SITES OUTSIDE NAVIGATION CHANNEL

	NORWALK	PROJECT NO.: 0301-0176
E NORWALK RIVER	DRAWING TITLE: ACTIVITY 16	DATE: 12-5-19
0.04288R/MP 41.5	WETLAND MITIGATION (MIT-014)	DRAWING NO.: CA16-14

- PRIOR TO COMMENCEMENT OF ANY WORK ASSOCIATED WITH THE MITIGATION AREA, THE CONTRACTOR SHALL SUBMIT TO CTDOT OFFICE OF ENVIRONMENTAL PLANNING (OEP) FOR REVIEW AND APPROVAL, A WORK PLAN THAT INCLUDES A CONSTRUCTION SCHEDULE AND AN OUTLINE OF CONSTRUCTION METHODOLOGIES FOR PERFORMING THE REQUIRED WORK IN ACCORDANCE WITH ITEM NO. 0948013A - TIDAL WETLAND CREATION, AND IN ACCORDANCE WITH OTHER ITEMS LISTED
- PRIOR TO ANY EARTH WORK, THE SITE WILL BE TREATED FOR INVASIVE SPECIES UNDER ITEM NO. 0952051A CONTROL AND REMOVAL OF INVASIVE VEGETATION. EXCAVATION SHALL COMMENCE FOLLOWING 10 DAYS OF HERBICIDE SET.
- EXCAVATION TO PERFORM GRADING TO BE COMPLETED IN ACCORDANCE WITH ITEM NO. 0202000 - EARTH EXCAVATION. THE FORMATION OF SUBGRADE, FINAL GRADE, AND PLACEMENT OF BACKFILL AND SUBSTRATE TO BE COMPLETED IN ACCORDANCE WITH ITEM NO. 0948013A - TIDAL WETLAND CREATION.
- SEE DRAWING NO. MIT-018 FOR LIMITS OF SHORELINE GRASS ESTABLISHMENT AND PLANTINGS IN TIDAL MITIGATION AREA.
- A WETLAND SCIENTIST FROM CTDOT, OEP WILL BE ON-SITE TO MONITOR AND DIRECT CONSTRUCTION OF THE TIDAL MITIGATION AREA. AT LEAST 10 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE FOR A MEETING WITH THE OEP WETLAND SCIENTIST ENVIRONMENTAL INSPECTOR TO REVIEW THE PLANNED WORK ACTIVITIES.
- THE TIDAL WETLAND AND MITIGATION WORK SHALL CONSIST 0 OF, BUT NOT LIMITED TO, THE CONSTRUCTION AND REMOVAL OF TEMPORARY ACCESS ROADS OR TEMPORARY ACCESS RAMPS PLACEMENT AND REMOVAL OF RIPRAP, HERBICIDE TREATMENT OF PHRAGMITES OR OTHER INVASIVE SPECIES, OVER EXCAVATION OF RIPRAP AND DEBRIS, PREPARING APPROPRIATE SITE GRADES, CONSTRUCTION OF THE LIVING SHORELINE, PLACEMENT OF OYSTER CULTCH, PLACING FIBER ROLL, PLACING APPROVED OF PLANTING BACKFILL/TOPSOIL, THE FURNISHING AND PLACEMENT OF PLANTINGS, SHORELINE GRASS ESTABLISHMENT, AND WETLAND CREATION SIGN.
- PRIMARY AND SECONDARY ACCESS PATHS WITHIN MITIGATION AREA ARE CONCEPTUAL ONLY. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL SUBMIT A PROPOSED ACCESS PLAN TO CTDOT OEP FOR REVIEW AND APPROVAL PER ITEM NO. 0948013A - TIDAL WETLAND CREATION.
- THE SURFACE LAYER OF EXISTING RIPRAP SHALL BE EXCAVATED AND ROCK THAT IS CLEAN, AND A MINIMUM 90% FREE OF SOIL, SHALL BE REUSED FOR CONSTRUCTION OF THE LIVING SHORELINE, AS DIRECTED BY THE OEP WETLAND SCIENTIST. IF THE AMOUNT OF SUITABLE REUSED ROCK FROM WITHIN THE MITIGATION AREA IS NOT SUFFICIENT TO CONSTRUCT THE LIVING SHORELINE, RIPRAP OF SIMILAR SIZE AS SPECIFIED IN CTDOT FORM 817 SECTION M.12.02 SHALL BE PROVIDED TO COMPLETE THE LIVING SHORELINE WORK.
- EXISTING RIPRAP REMAINING BELOW THE SURFACE LAYER SHALL BE OVEREXCAVATED TO A SUFFICIENT DEPTH (BETWEEN 1.5' AND 2.75' BELOW EXISTING GRADE) AS DIRECTED BY THE OEP WETLAND SCIENTIST AS FOLLOWS:
- IF THE LAYERS OF EXISTING RIPRAP CONSIST OF MORE THAN 50% ROCK FROM WITHIN THE OVEREXCAVATED AREA, THE RIPRAP MATERIAL SHALL BE PROPERLY DISPOSED OF AT AN APPROVED UPLAND FACILITY, AS DETERMINED BY THE OEP WETLAND SCIENTIST. BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED WITHIN THE OVEREXCAVATED AREA TO ACHIEVE THE PROPOSED SUBGRADE. THE REMAINING TOPSOIL MATERIAL SHALL BE PLACED AND COMPACTED UP TO THE PROPOSED FINAL GRADE.
- IF THE LAYERS OF EXISTING RIPRAP CONSIST OF MORE THAN 50% SOIL FROM WITHIN THE OVEREXCAVATED AREA, THE MATERIAL SHALL REMAIN IN PLACE, AS DETERMINED BY THE OEP WETLAND SCIENTIST. ADDITIONAL COMPACTED BACKFILL MATERIAL MAY BE REQUIRED TO ACHIEVE THE PROPOSED SUBGRADE. THE REMAINING TOPSOIL MATERIAL SHALL BE PLACED AND COMPACTED UP TO THE PROPOSED FINAL GRADE
- 0. A 14" DEEP LAYER OF WETLAND PLANTING SOIL/TOPSOIL SHALL A 14" DEEP LAYER OF WEILAND PLANING SOIL/IOPSOIL SHALL BE PLACED ON THE PROPOSED SUBGRADE. THIS ACCOUNTS FOR COMPACTION AND SETTING FOLLOWING THE TIDAL FUNCTION OF A WEILAND SCIENTIST FROM COMPACTION AND SETTLING FOLLOWING THE TIDAL FLUSHING.
- 1. WETLAND MITIGATION SIGN NO. 31-5478 TO BE INSTALLED AT THE LOCATION AS DIRECTED BY THE WETLAND SCIENTIST FROM THE CTDOT, OEP
- 2. EQUIPMENT WILL NOT BE PERMITTED ON COMPACTED PROPOSED FINAL GRADE WITHIN THE MITIGATION AREA

SCALE IN FEET

SCALE  $\frac{20}{1''} = 40'$ 

\_\_\_\_

3. MITIGATION AREA 6A TO BE COMPLETED LAST IN COORDINATION WITH THE REMOVAL OF THE WALK BRIDGE CONSTRUCTION TRESTLE. CONSTRUCTION ACTIVITIES FOR AREA 6A WILL BE PERFORMED FROM THE NE TRESTLE AS IT GETS REMOVED UPON COMPLETION OF BRIDGE CONSTRUCTION. ACCESS TO AREA 6A AFTER THE CONSTRUCTION TRESTLE IS REMOVED WILL BE ALONG THE EXISTING MULTI-USE TRAIL FROM THE CONSTRUCTION STAGING AREA WITHIN CTDOT RIGHT OF WAY ON THE NORTH SIDE OF THE EAST APPROACH TO WALK BRIDGE

HECKED

PPROVED

V. ROBBINS

T. ADINOLFI

C. BROWN




CHECKED T. ADINOLFI APPROVED:

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CALE

OYSTER CULTCH

(SEE NOTE 16 ON DRAWING NO. MIT-015 AND DETAIL ON

-PROPOSED GRADE

LIVING SHORELINE CONSTRUCTED OF REUSED EXCAVATED RIPRAP, TOP OF RIPRAP TO BE AT OR SLIGHTLY ABOVE PROPOSED FINAL GRADE (SEE NOTE 15 ON DRAWING NO. MIT-015

AND DETAIL ON DRAWING NO MIT-017)

- EXIST. GRADE

PROPOSED GRADE

-PROPOSED GRADE EL. 1.0

SALT PANNE EL. VARIES

DRAWING ND. MIT-017)

EL. 1.0

A 1988-1981 J STATE OF CONNECTICUT



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EXIST 100YR EL 10.0'

KIST. MHW L. 3.35 EXIST. HTL EL. 5.20' EXIST. CJL EXIST. CJL EXIST. CJL EXIST. CJL

EXISTING WETLAND AREA TO REMAIN UNDISTURBED, NO OVEREXCAVATION

NOTES:

- 1. SEE SECTIONS FOR TOPSOIL DEPTHS.
- 2. OVEREXCAVATION TO BE SEQUENCED AS FOLLOWS:
- I. EXCAVATE SURFACE LAYER OF EXISTING RIPRAP TO REMOVE AND REUSE ROCK THAT IS CLEAN AND A MINIMUM 90% FREE OF SOIL FOR CONSTRUCTION OF LIVING SHORELINE
- II. OVEREXCAVATE REMAINING RIPRAP LAYERS TO A SUFFICIENT DEPTH (BETWEEN 1.5' AND 2.75') BELOW EXISTING GRADE TO REMOVE ANY LAYERS OF RIPRAP THAT CONSIST OF MORE THAN 50% ROCK, LAYERS OF RIPRAP WITH MORE THAN 50% SOIL CAN REMAIN IN PLACE ONCE PROPOSED SUBGRADE IS ACHIEVED AS DETERMINED BY THE OEP WETLAND SCIENTIST.
- iii. GRADE MITIGATION AREA 6 TO MATCH PROPOSED GRADE.

LEGEND:

CJL+1= CT COASTAL JURISDICTION LINE +1 CJL = CT COASTAL JURISDICTION LINE HTL = HIGH TIDE LINE MHW = MEAN HIGH WATER LINEEL = ELEVATION EXIST. = EXISTING YR = YEAR







NOTES:

1. SEE MIT-018 MITIGATION AREA 6 PLANTING PLAN

2. SEE GRADING DRAWING (MIT-015) AND SECTIONS (MIT-016 AND MIT-017) FOR OVEREXCAVATION

LEGEND: CJL+1= CT COASTAL JURISDICTION LINE +1 CJL = CT COSTAL JURISDICTION LINE HTL = HIGH TIDE LINE MHW = MEAN HIGH WATER LINE



2. SEE GRADING DRAWING (MIT-015) AND SECTIONS (MIT-016 AND MIT-017) FOR OVEREXCAVATION DEPTHS AND LIMITS.

NOTES:



1. SEE MIT-018 MITIGATION AREA 6 PLANTING PLAN







#### CONSTRUCTION SEQUENCE

THE SHEETS IN THIS SUBSET DESCRIBE THE SEQUENCE OF ACTIVITIES REQUIRED TO DREDGE THE RIVER WITH REFERENCES TO RELATED ACTIVITIES THROUGHOUT, FOR DETAILS OF RELATED ACTIVITIES, REFER TO THE SUBSETS NOTED IN PARENTHESES WORK DEPICTED ON THIS SHEET IS IDENTIFIED WITH AN "X" IN THE TABLE.

# WORK DESCRIPTION REMOVE EXISTING FENDER SYSTEM. INSTALL MOBILIZE BARGES AND EQUIPMENT TO SOUTH SIDE DREDGE CHANNEL ON SOUTH SIDE OF BRIDGE. MOBILIZE BARGES AND EQUIPMENT TO NORTH SIDE DREDGE CHANNEL ON NORTH SIDE OF BRIDGE.

- 1. VERTICAL DATUM IS NAVD 88. ELEVATIONS RELATIVE TO MLLW TIDAL DATUM ARE SHOWN IN PARENTHESES.
- 2. EXCAVATED MATERIAL AND DEWATERED WASTEWATERS SHALL BE MANAGED IN ACCORDANCE WITH THE ENVIRONMENTAL SPECIAL PROVISIONS AND CTDEEP

WEST CHANNEL MAY BE PARTIALLY RESTRICTED FOR A PERIOD OF TIME BUT WILL OTHERWISE REMAIN OPEN DURING THIS WORK, TEMPORARY AIDS TO NAVIGATION (E.G., LIGHTS) WILL BE COORDINATED

4. DREDGING REQUIRED AROUND THE EXISTING PIERS WILL TAKE PLACE WITHIN MARINE ENCLOSURES IN CONJUNCTION WITH PIER REMOVAL, SEE ACTIVITY 14,

(MLLW)

10.38

9,38

9.18

7.33

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0301-0176

REV 02-23-21

CA17-3

DATE

5. SEE VESSEL BERTHING PLAN (DWG. GEN-9) FOR

























Geotextile FABRIC EXISTING GROUND TYPICAL FILL SECTION NOT TO SCALE				DESCRIPTION 100-YEAR FLOODPLAIN MAX. FLEVATION OF LAN	TABLE CONTOUR 100 YR	ELEVATIO (NAVD88 VARIES	N ELEVATIO ) (MLLW) VARIES
		6" +/- CRUSHEL GEOTEXTILE EXISTING GRO TYPICAL FILL SECTION NOT TO SCALE	D STONE FABRIC DUND				

# **Enclosure III**

Required Statement, General Conditions, and Special Conditions For Inclusion in the S408 Authorization Letter & DOA Permit

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

Section 408 (S408) Permission Request for CDOT to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

In accordance with EC 1165-2-220 part 16.e and appendices G & K, the following statement, general conditions, and any additional special conditions are required to be in the S408 authorization.

#### I. STATEMENT:

In accordance with EC 1165-2-220 part 16.e and appendices G & K and the Summary of Findings prepared for this permission request, Enclosure 3 provides general conditions, and additional special conditions required to be included in the S408 permission letter and DoA permit respectively. These conditions must be adhered to by the Requester to assure the proposed alteration does not impact the usefulness of the project nor is injurious to the public interest. Concurrent with issuing the final Department of Army (DoA) permit for the proposed action, a (S408) letter including Appendix K authorizing the entire action including the new span and support structures, the temporary occupation of the channel during demolition and construction and for the in-water work also covered by S10 and S404 will be issued to the Requester. For consistency, special conditions specifically related to the in-water work will be included in the final DoA permit.

EC 1165-2-220, appendix G, part G-4.d. requires that that Regulatory staff include in the Section 10 permit document being provided to the applicant the following statement:

"....It has been determined that the activities authorized do not impair the usefulness of the USACE Navigation project and is not injurious to the Public Interest...."

#### II. STANDARD TERMS AND CONDITIONS:

In this instance, concurrent with issuing the final Department of Army (DoA) permit for the proposed action, a (S408) letter including Appendix K authorizing the entire action including the new span and support structures, the temporary occupation of the channel during demolition and construction and for the in-water work also covered by S10 and S404 will be issued to the Requester. For consistency, special conditions specifically related to the in-water work will be included in the final DoA permit. The standard terms and conditions contained in appendix K of the EC are as follows:

#### LIMITS OF THE AUTHORIZATION

1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.

- 2. The time limit for completing the authorized S408 work ends concurrently with the expiration of the Department of the Army Permit # NAE-2015-625 or in accordance with any extensions to Department of Army Permit # NAE-2015-625. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
- 4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

#### INDEMNIFICATION AND HOLD HARMLESS

- 5. The United States will in no case be liable for:
  - a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
  - b. damage claims associated with any future modification, suspension, or revocation of this permission.
- 6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, indemnify, and hold harmless the

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

United States and USACE from any and all such claims, subject to any limitations in law.

7. Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

## REEVALUATION OF PERMISSION

- 8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
- 9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:
  - a. you fail to comply with the terms and conditions of this permission;
  - b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or
  - c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest

#### CONDUCT OF WORK UNDER THIS PERMISSION

- 10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
- 11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.
- 12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
- 13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.

- 14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.
- 15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
- 16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.

## III. SPECIAL CONDITIONS:

**NOTE:** The following conditions contain specific elevations and other minimum requirements to be met to meet the requirements of this permit. All elevations refer to the plane of Mean Lower Low Water (MLLW)

#### 17. Submittals and Notifications

Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. NAE-2015-625" and submitted via the following:

#### 1. Regulatory Division

a. MAIL: PATS Branch – Regulatory Division Corps of Engineers, New England District

696 Virginia Road, Concord, MA 01742-2751

- b. EMAIL: cenae-r@usace.army.mil
- **c. FAX:** (978) 318-8303

and

#### 2. Navigation Section

a. **MAIL**: Navigation Division – Programs and Project Management Division

Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742-2751

b. EMAIL: jenifer.e.thalhauser@usace.army.mil

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. Requirements for immediate notification to the Corps shall be done by telephone to (978) 318-8338.

18. We have sent a copy of this authorization to the National Ocean Service (NOS). You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used).

All submittals to the Corps and NOS shall be marked with the words "Permit No. NAE-2015-625."

Send NOS submittals to:

Department of Commerce, NOAA National Ocean Service Nautical Data Branch; N/CS26; 1315 East-West Highway Silver Spring, MD 20910 \*or email: ocs.ndb@noaa.gov

Send Corps submittals to:

PATS Branch - Regulatory Division Corps of Engineers New England District 696 Virginia Road Concord, MA 01742-2751 \*or email: cenae-r@usace.army.mil

And

Navigation Section – Programs and Project Management Division Corps of Engineers, New England District 696 Virginia Road, Concord, MA 01742-2751 \*or email: jenifer.e.thalhauser@usace.army.mil

- a. Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit. The Corps may note the location on future survey drawings and NOAA may use the information for charting purposes.
- b. The notification of completion shall be done within 60 days of completing an activity that involves an aerial transmission line, submerged cable, or submerged pipeline across a tidal or non-tidal navigable water of the U.S.

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

(i.e., Section 10 waters). The permittee shall furnish the NOS and this office with certified (professional engineer or land surveyor registered in the state the work is being performed) as-built drawings, to scale, with control points (i.e., latitude/longitude, state plane coordinates), depicting the alignment and minimum clearance of the aerial wires above the MHW/OHW line at the time of survey or depicting the elevations and alignment of the buried cable or pipeline across the tidal or non-tidal navigable waterway. Authorization in writing and as-built documentation is required when: a) a new cable or pipeline (overhead or submerged) is installed; b) an existing pipeline or cable is moved to another location or is completely removed; c) an overhead cable or overhead pipeline clearance above the MHW line is changed; d) there is a change in the type of cables (power, telephone, etc.) at a water crossing; or e) there is a change in elevation of the submerged pipeline or cable.

- 19. Construction Schedule: A detailed schedule of work shall be provided to the Corps Regulatory and Navigation Project Managers a minimum of 30 days prior to the start of construction (see par 25, m. for addresses). The permittee shall submit a standard USACE work-start notification form a minimum of two weeks prior to the start of actual construction work and then weekly schedule updates shall be prepared by the permittee or their contractor shall be sent to the aforementioned project managers after start of work.
- 20. The work shall not interfere with USACE personnel or its contractors engaged in hydrographic surveys, maintenance or improvement of the existing FNP. If, in the opinion of the USACE, the permittee's structures or vessels attached to them must be moved to allow for the maintenance or improvement of the existing FNP, the permittee shall move the structures or vessels as directed by the USACE.
- 21. Work associated with this permit shall not affect the depth or width of the existing Federal Navigation Project (FNP). Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway shall be removed immediately. The Norwalk Harbormaster shall be informed about the nature of the object and location of the object entering the waterway at (203) 849-8823. If immediate removal is impractical and the object entering the waterway is, or could become, an obstruction or hazard to navigation, the object shall be suitably marked to protect navigation and the U.S. Coast Guard, Waterways Management Section, First Coast Guard District, Sector Long Island Sound, shall be notified immediately at (203) 468-4432.

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

- 22. The existing submarine cables that power the existing bridge shall be removed in their entirety. No remnants of these cables are allowed to remain or abandoned in place. If before or during construction it is determined that the submarine cables cannot be removed entirely, then a meeting between the permittee, the construction contractor and the USACE New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 23. The project shall remove the existing bridge piers (i.e., piers 2, 3 and the center pivot pier). All foundation elements shall be removed to the bottom of the timber mat, approximately at elevation -16.02 feet below MLLW. The existing fender system piles around Pier 2 and 3 will be fully removed. Existing piles within the navigation channel will be completely removed, unless the removal may compromise the integrity of adjoining structures, where they shall be cut off at a depth of 2 feet below mudline. If before or during construction it is determined that the foundation elements cannot be removed to these elevations, then a meeting between the permittee, the construction contractor and the USACE New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 24. Any dredging occurring within the limits of the authorized 10 feet deep channel (incl. 1V:3H side-slopes) shall achieve a minimum dredge elevation of -10 feet below Mean Lower Low Water (MLLW). If before or during construction it is determined that this minimum elevation cannot be realized, the location(s) where the minimum dredge elevation cannot be achieved will be documented and a meeting between the permittee, the construction contractor and the USACE, New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.
- 25. The proposed top of pipe elevation for the micro-tunnel is -38.02 below MLLW. To meet the minimum required 13-foot setback from the authorized 10-feet deep channel and minimum bottom cover requirement, the submarine cables (top of cable/conduit) shall be installed such that the minimum top of pipe elevation is no higher than -23.0 feet below MLLW. A minimum of 7 feet of bottom cover over the top of the utility shall be maintained over the entire utility crossing. If before or during construction it is determined that the minimum top of pipe elevation or minimum cover requirement cannot be realized, a meeting between the permittee, the construction contractor and the USACE, New England District Navigation Section and Regulatory Division must be scheduled by the permittee and held before the contractor may proceed any further with work on this construction element.

#### Enclosure III – Statement & Conditions: Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

- 26. Pre- Construction and Post-Construction Surveys: Electronic sweep surveys shall be conducted to collect pre-construction existing conditions and post-construction conditions of the submarine cables that will be removed as a part of this project. Pre-construction and post-construction sweep surveys shall cover the entire area of river bottom disturbed by the submarine cable work and at least 200 feet upstream and downstream from the upper and lower limits of the bottom disturbance areas; the sweep survey shall also cover the full width of the FNP (both the east and west channels) within the areas of in-river construction disturbance and also include an additional distance of 50.0 feet to the east and west of the FNP limits.
  - a. To ensure that the proposed method of surveying is acceptable, a detailed description of the method and the equipment to be employed shall be furnished to the Corps (see address below in 3.d) at least 30 days prior to the start of each survey. The multi-beam swath method or multi-transducer sweep method are required. For hydrographic surveying techniques and information, refer to the Corps of Engineers Hydrographic Manual (EM 1110-2-1003), which can be viewed at: <a href="http://www.nae.usace.army.mil/Missions/Regulatory/Useful-Documents-Forms-and-Publications/">http://www.nae.usace.army.mil/Missions/Regulatory/Useful-Documents-Forms-and-Publications/</a>
  - b. Sweep surveys shall be done only during daylight hours.
  - c. Survey data shall be submitted to the Corps in a format that will allow verification of survey results.
  - d. The Corps may assign a government representative to accompany the survey party during performance of the sweep surveys. The permittee shall notify the Corps Survey Section Chief a minimum of ten working days prior to the start of each survey at (978) 318-8783 or "Survey Section Chief, U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751."
  - e. Plans adequately showing the results of the pre-construction and postconstruction sweep surveys along with a written description of how they were performed, and copies of all field books and notes shall be submitted to the Corps (see address above in 24.d) for review and acceptance no later than 30 days after completion of the authorized work.
- 27. Post Construction As-Builts: The permittee shall submit as-built drawing(s) of the installed submarine cables, the newly constructed bridge piers, and the condition of the channel post-removal of all piers and existing cables. As-built drawings submitted to the Corps shall include:

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

- a. At least one plan view showing the utility's horizontal alignment and a profile view showing the utility's vertical alignment for the cable crossing's entire length that is below the mean high water (MHW)
- b. The authorized channel limits of the Norwalk Harbor FNP on both the plan and profile views and the theoretical side-slopes on the profile view
- c. The elevation(s) of the top of the utility and all associated installation materials (such as anchoring systems) measured below MLLW.
  Elevations of the top of utility and installation materials as well as finished grade of the bottom of river shall be reported at a frequency of not less than 25' along the length of the utility.
- d. Construction details of the proposed utility to include all associated installation materials (such as anchoring systems) shall be included.
- e. Material cut sheets of all installed materials (to include cable, conduit, anchoring system, backfill, etc.).
- f. A bar (graphic) scale on drawings
- g. The date(s) of the survey and drawings.
- h. On the plan view drawing: north arrow, horizontal grid, and shoreline features
- i. On the profile view drawing: the actual elevation(s) of the top of cables in the datum of MLLW with a note regarding conversion to NAVD 88 vertical datum.
- j. The submarine cable's horizontal state plane coordinates and vertical elevations(s) at:
  - i. each horizontal and vertical turning point or point of inflection
  - ii. the points of curvature and tangency
  - iii. each location where the cables intersect the bridge fender system at the Walk Bridge
  - iv. each location where the cables intersects the limits of the Norwalk Harbor FNP

Show the cable's horizontal state plane coordinates in U.S. survey feet based on the Lambert Grid System for the State of Connecticut Zone 0600 NAD 83. Show the elevation(s) at the top of cable referenced to NAVD 88 vertical datum and MLLW datum with the correction factor detailing how MLLW was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.

- k. A stamp by a professional engineer or land surveyor registered in the state the work is being performed.
- I. The permittee shall provide the as-builts showing that the utility was installed in compliance with the requirements of this permit <u>prior to</u> allowing the cable to be connected to the system.

Section 408 (S408) Permission Request for Connecticut Department of Transportation (CDOT) to Alter the Norwalk Harbor Federal Navigation Project (FNP) in Norwalk, Connecticut.

m. As-built drawing(s) shall be submitted electronically to the following: <u>cenae-r@usace.army.mil</u> jenifer.e.thalhauser@usace.army.mil <u>christina.m.comeau@usace.army.mil</u>

## CONNECTICUT IN-LIEU FEE (ILF) PROJECT IMPACT WORKSHEET

- 1. Corps file number: <u>NAE-2015-00625</u>
- 2. Date permit issued: March 3, 2023
- 3. Corps project manager: <u>Peter Olmstead</u>
- 4. Permittee(s): <u>Kevin F. Carifa</u>
- 5. Project location/address: Walk Bridge, Bridge No. 04288R over the Norwalk River, Norwalk, CT
- 6. Lat/long of impact: <u>North 41 degrees, 06' 02"/West 73 degrees, 24' 55"</u> (choose the midpoint within each service area if the project is linear)
- 7. 8-digit hydrologic unit code(s): <u>HUC8 01100006 and HUC8 01100007</u>
- 8. Service area: <u>Southwest Coastal</u>
- 9. Service area rate/square foot: <u>\$9.12</u>
- 10. Number of credits to be purchased (impacts (SF)/43,560)\*(0.75): 0.12
- 11. Resource(s) impacted:

<b>Resource Type</b> (list all that apply)	<b>Type of Impact</b> (by resource type)	SF of Aquatic Resources or Linear FT of Streams Impacted and Subject to Compensation	% of the Standard Amount	Credit Cost Per SF or LF	Cost
	Excavation/				
E2US	Disturbance <sup>a</sup>	400 SF	100%	\$9.12	\$2,736.00
	Excavation/				
E2EM1	Disturbance <sup>a</sup>	6,200 SF	100%	\$9.12	\$42,408.00
E1UB	Excavation <sup>a</sup>	200 SF	100 %	\$9.12	\$1,368.00
R	N/A <sup>b</sup>				
		Total:		\$9.12	\$46,512.00

Notes:

a. Per coordination with USACE New England Division, 25 percent credit to be applied due to CTDEEP-required wetland mitigation.

b. Per coordination with USCE New England Division, watercourse impacts to be waived.

<u>Resource Type</u>: Wetlands by NWI type (PFO, PSS, PEM, M1, M2, E2, etc.), vernal pool (VP), VP critical terrestrial habitat (CTH), and/or river, stream, or brook (R).

<u>Type of impact</u>: May include one or more of the following: fill, conversion (e.g., forested to shrub/scrub), excavation with associated discharge, etc.

Should you have any questions regarding this project please contact Peter Olmstead, of my staff, at (978) 318-8211 or by email at <u>peter.d.olmstead@usace.army.mil</u>.

Sincerely,

Tammy R. Turley

Tammy R. Turley Chief, Regulatory Division

Enclosures

CC:

Nathan Margason, U.S. EPA Region 1, <u>margason.nathan@epa.gov</u> Bill Sigmund, CT DEEP Transportation, <u>William.Sigmund@ct.gov</u> Jenifer Thalhauser, USACE Navigation, <u>jenifer.e.thalhauser@usace.army.mil</u>