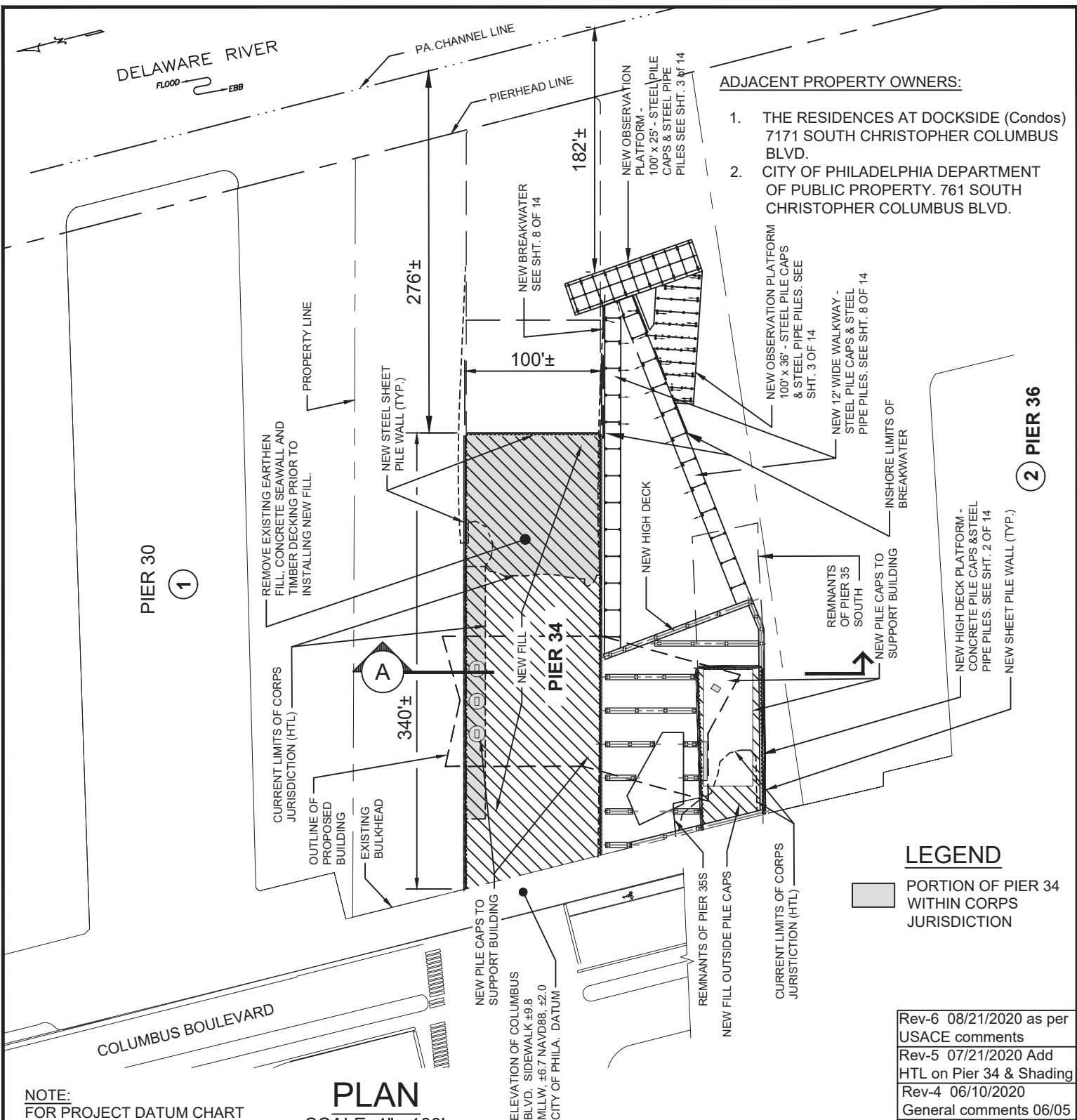




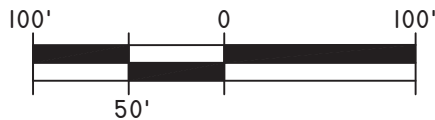


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NOTE: FOR PROJECT DATUM CHART  
SEE SHEET 14 of 14

PLAN  
SCALE: 1"= 100'



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
DRAWING IS FOR PERMITTING PURPOSES ONLY.

**S.T. HUDSON ENGINEERS, INC.**

PROFESSIONAL ENGINEERS & CONSULTANTS



900 Dudley Avenue  
Cherry Hill, N.J. 08002  
Phone 856-342-6600  
Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 1 of 16

Rev-6 08/21/2020 as per  
USACE comments  
Rev-5 07/21/2020 Add  
HTL on Pier 34 & Shading  
Rev-4 06/10/2020  
General comments 06/05  
Rev-3 05/18/2020  
General comments 05/12  
Rev-2 03/23/2020  
General comments 03/09  
Rev-1 02/14/2020  
Remove piles, reconfig.  
platform

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.

NEW STEEL SHEET  
PILE WALL

NEW WALKWAY - STEEL  
PILE CAPS STEEL  
PIPE PILES SEE SHT 8 OF 14

150'±

PIER 34

25'-0"  
TYP.

HIGH DECK

OPENING

25'-0"  
(TYP.)

122'±

10% OF SURFACE AREA  
OF HIGH DECK PLATFORM  
WILL BE GRATING LOCATION  
OF GRATING WILL BE BASED  
ON FINAL DESIGN

116'±

NEW 12' WIDE  
WALKWAY

REMNANTS OF  
PIER 35 SOUTH

EXISTING  
BULKHEAD

NEW FILL  
OUTSIDE PILE  
CAPS

CURRENT LIMITS  
OF CORPS  
JURISDICTION  
(HTL)

138'±

HTL +7.7  
MHW +6.3  
MLLW 0.0

NEW STEEL PILE WALL (TYP.)

NEW BUILDING COLUMN FOUNDATION -  
CONC. PILE CAP AND STEEL PIPE PILES  
(BOTTOM OF PILE CAP ELEV. IS ABOVE  
+7.7 HTL)

NEW BUILDING COLUMNS

NEW HIGH DECK PLATFORM -  
CONCRETE PILE CAPS, PRECAST  
CONCRETE BEAMS, 37 CONCRETE  
PILES AT APPROX. 25 FOOT  
CENTERS

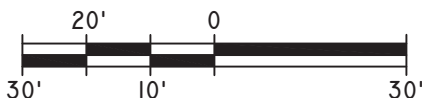
REMNANTS OF  
PIER 35 SOUTH

24'±

51'±

## PARTIAL PLAN

SCALE: 1"= 30'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 2 of 16

Rev-5 08/21/2020 as per  
USACE comments  
Rev-4 06/10/2020  
General comments 06/05  
Rev-3 05/18/2020  
General comments 05/12  
Rev-2 03/16/2020  
General comments 03/09

Rev-1 02/14/2020  
Remove piles,  
reconfig. platform

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34, L.P.

NEW OBSERVATION  
PLATFORM -  
100' x 25' - STEEL  
PILE CAPS & STEEL  
PIPE PILES

DELAWARE RIVER  
FLOOD → EBB

100'-0"

OUTSHORE FACE

10'-0" TYP.

25'-0"

23'±

33'±

NEW STEEL  
PIPE PILES  
TYP.

NEW BREAKWATER

20'-0" (TYP.)

95'±

12'-0"  
WALKWAY

34'±

100'±

PROPERTY  
LINE

NEW STEEL SHEET  
PILE WALL

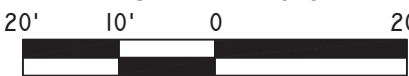
NEW OBSERVATION  
PLATFORM 100' x 36'  
- STEEL PILE CAPS &  
STEEL PIPE PILES

12'-0" WALKWAY

PLAN

T-HEAD PIER

SCALE: 1"= 20'-0"



NOTE: TOTAL PIPE  
PILES FOR PIER 35  
WALKWAY AND  
OBSERVATION  
PLATFORMS AT  
PIERHEAD LINE= 160

NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Cherry Hill, N.J. 08002  
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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 3 of 16

Rev-5 08/21/2020 as per  
USACE comments 08/10  
Rev-3 05/18/2020  
General comments 05/12  
Rev-2 03/16/2020  
General comments 03/09  
Rev-1 02/14/2020  
Remove piles

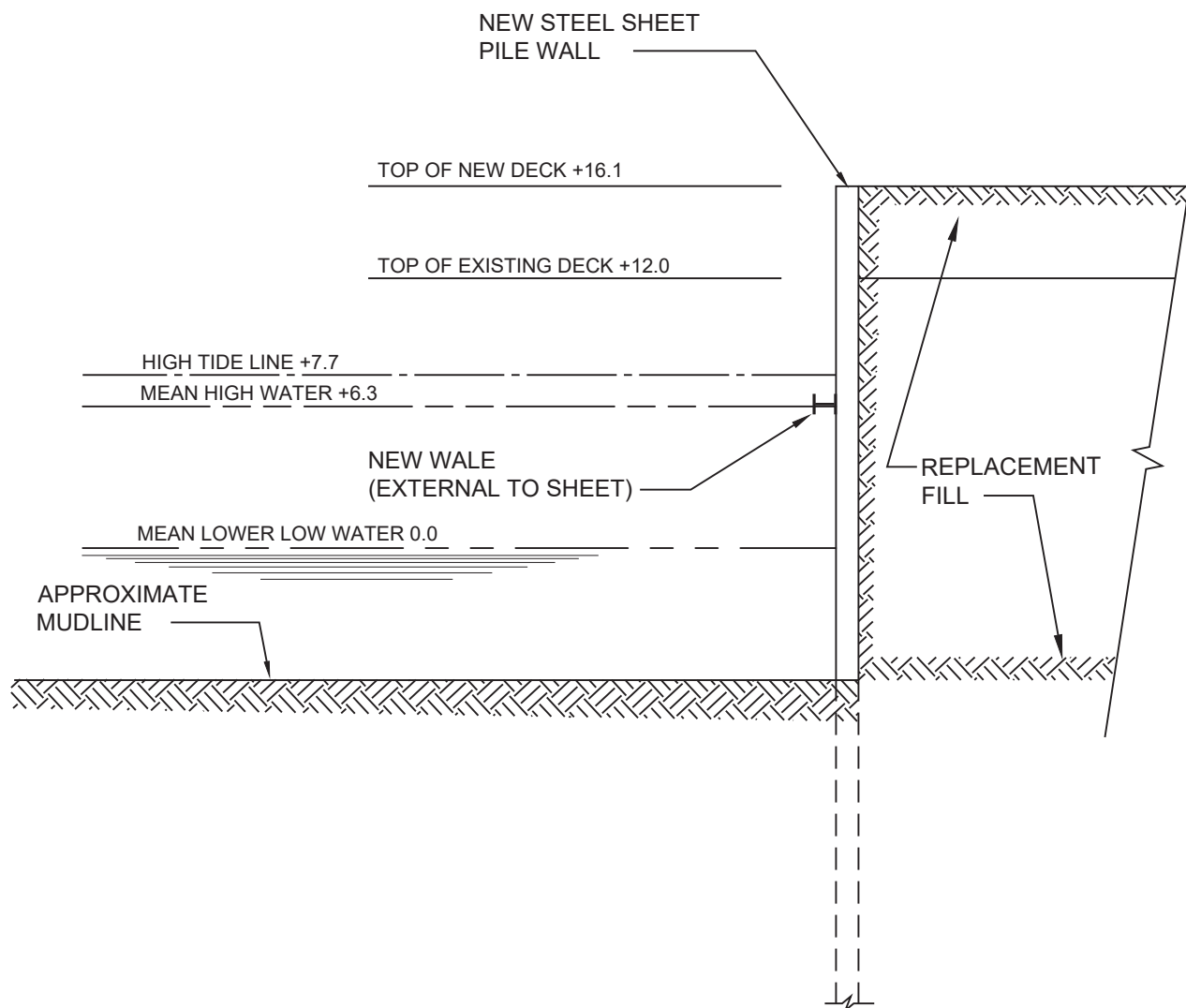
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.





**NOTE:** FINAL DESIGN REQUIRED FOR CONSTRUCTION THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

**S.T. HUDSON ENGINEERS, INC.**  
PROFESSIONAL ENGINEERS & CONSULTANTS



Fax No. 609-342-8323

800 Hudson Square  
P.O. Box 9106  
Camden, N.J. 08101  
609-342-660

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 5 of 16

Rev-3 06/10/2020  
General comments 06/05  
Rev-2 05/18/2020  
General comments 05/12

Rev-1 02/14/2020  
Remove piles

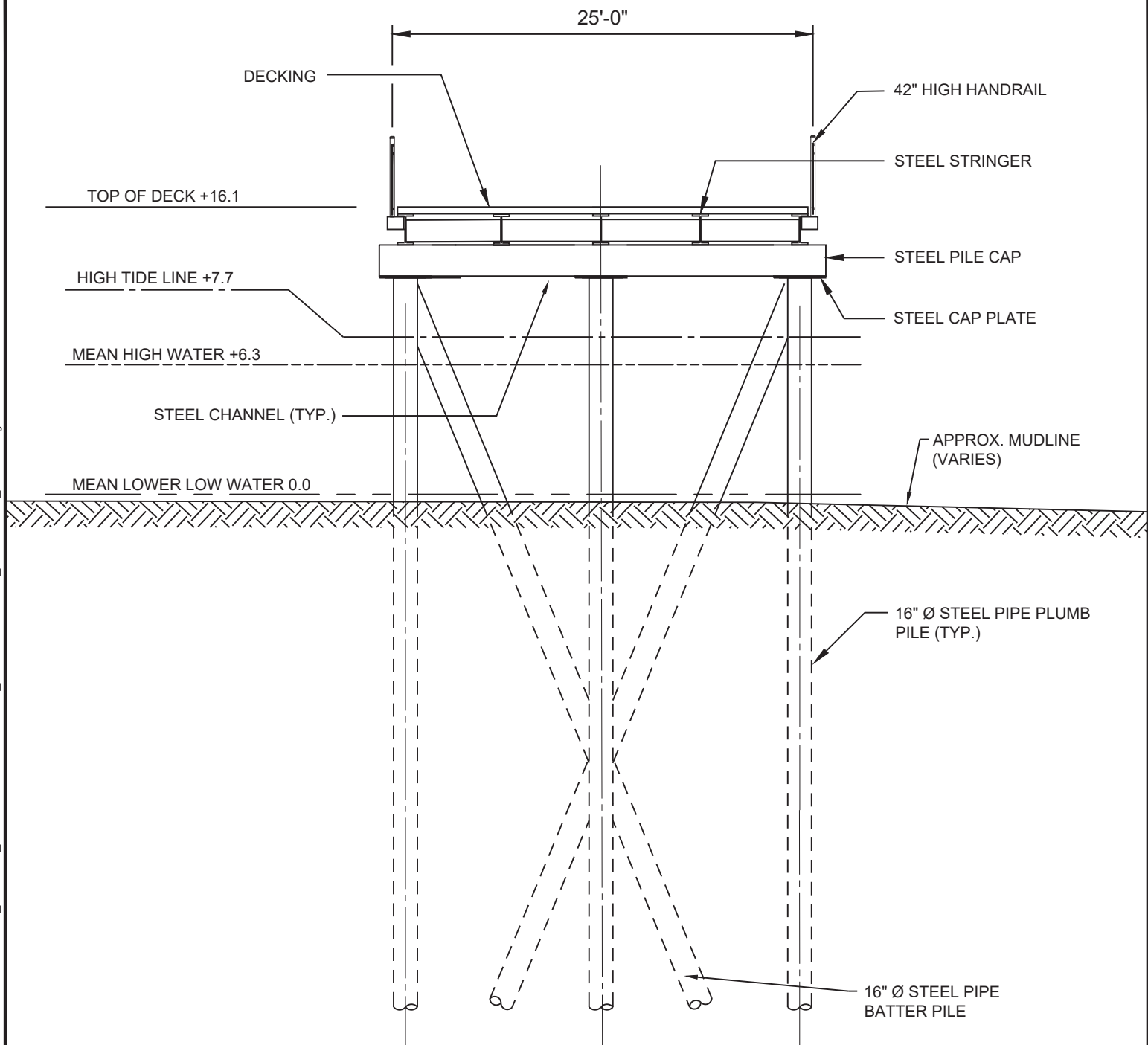
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.

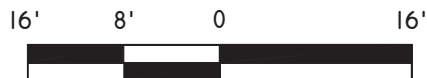
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# SECTION

C

SCALE: 1/16"= 1'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 6 of 16

Rev-1 06/10/2020  
General comments 06/05

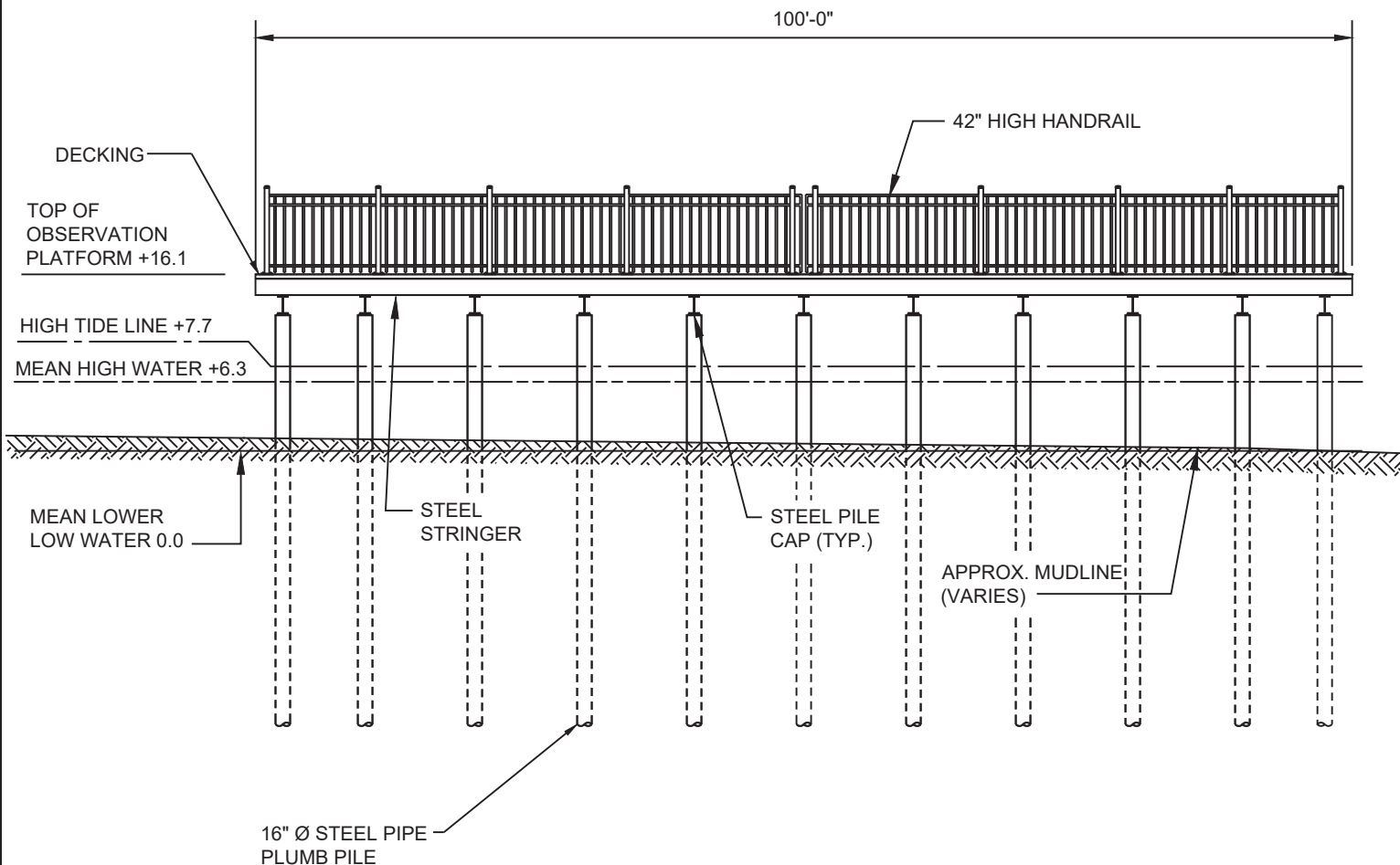
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.

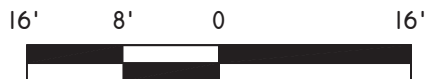
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SECTION **G**

ELEVATION - OBSERVATION PLATFORM

SCALE 1/16" = 1'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 7 of 16

Rev-1 06/10/2020  
General comments 06/05

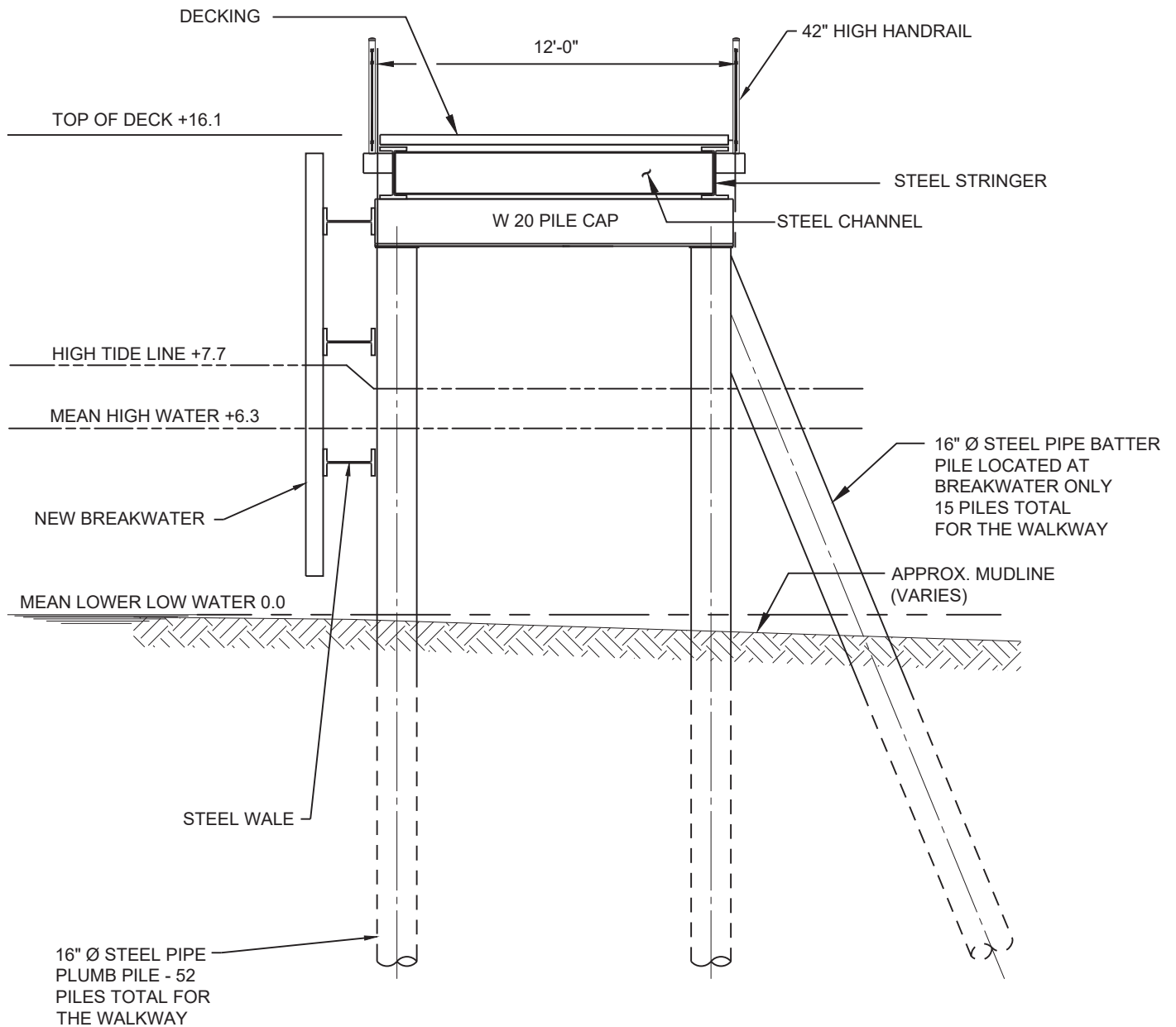
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

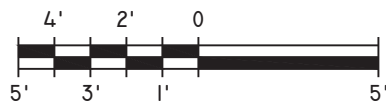
APPLICATION BY: DESERT DIAMOND 34 L.P.





## SECTION D

SCALE: 3/16" = 1'-0"



**NOTE:** FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

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Cherry Hill, N.J. 08002  
Phone 856-342-6600  
Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 8 of 16

Rev-2 06/10/2020  
General comments 06/05

Rev-1 02/14/2020  
Revised pile count  
plumb & spurs

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND L.P.

DELAWARE RIVER  
FLOOD → EBB

PA. CHANNEL LINE  
PIERHEAD LINE

AREA OF PIER FORMERLY  
REMOVED WITHIN DASHED  
LINE

TIMBER PILE  
CLUSTERS

PROPOSED FACE  
OF NEW PIER

PIER 30

PIPE PILE  
CLUSTER

E

PIER 34

PROPERTY LINE

PIPE PILE  
CLUSTERS

EXISTING PIPE  
SUPPORTED HIGH  
DECK STRUCTURE  
180' X 16'

OUTLINE OF  
ORIGINAL CRIB  
STRUCTURE

AREA NUMBER ①

PROPERTY  
LINE

PIER 36

REMNANTS OF  
PIER 35 SOUTH

EXISTING  
BULKHEAD

### LEGEND

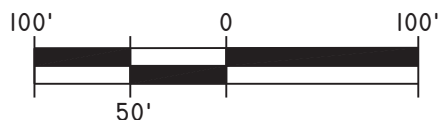
- OPEN WATER TIDAL UNDER EXISTING  
HIGH DECK AND LOW DECK (3,793 S.F.)
- SHOALED IN LOW DECK (22,300 S.F.)
- COLLAPSED LOW DECK TO BE  
REMOVED AND INCLUDED IN NEW  
PROPOSED PIER (11,050 S.F.)
- COLLAPSED LOW DECK TO BE  
REMOVED (10,100 S.F.)
- REMNANTS OF PIER 35 TO BE  
FILLED (3,954 S.F.)

--- UNDERWATER COLLAPSED AREA

NOTE:  
AREA NUMBER ① IS  
OUTSIDE USACE  
JURISDICTION

## EXISTING PLAN

SCALE: 1"= 100'



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
DRAWING IS FOR PERMITTING PURPOSES ONLY.

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Cherry Hill, N.J. 08002  
Phone 856-342-6600  
Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 9 of 16

Rev-4 7/21/20 Add Note,  
Add to Legend, Rev sq.ft.  
Rev-3 06/10/2020  
Change dwg number  
Rev-2 05/18/2020  
General comments 05/12  
Rev-1 03/23/2020  
General comments 03/09

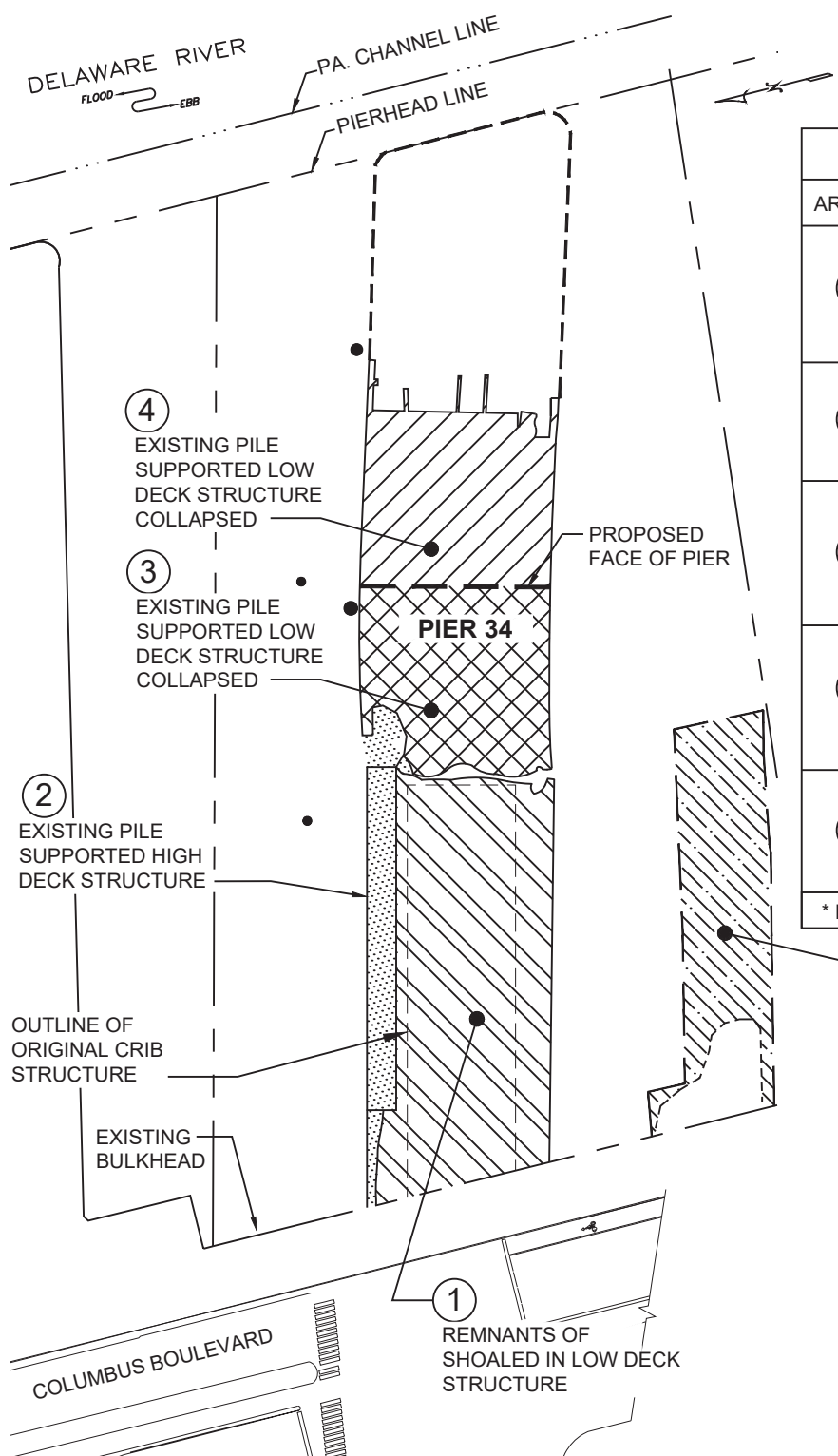
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.

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FOOTPRINT & VOLUME OF FILL			
AREA No.	SQUARE FEET	VOLUME	DESCRIPTION
①	22,300 S.F.	4,130 C.Y.	MATERIAL TO BE REMOVED AND BACK FILLED *
②	+ 3,793 S.F.	+ 1,270 C.Y.	AREA TO BE FILLED
③	11,050 S.F.	2,865 C.Y.	MATERIAL TO BE REMOVED AND BACK FILLED *
④	- 10,100 S.F.	- 2,619 C.Y.	MATERIAL TO BE REMOVED
⑤	+3,954 S.F.	+879 CY	AREA TO BE FILLED
* NO NET CHANGE			

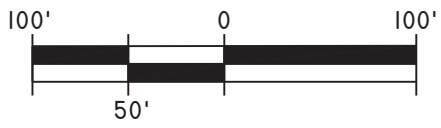
LEGEND

- OPEN WATER TIDAL UNDER EXISTING HIGH DECK AND LOW DECK (3,793 S.F.)
- SHOALED IN LOW DECK (22,300 S.F.)
- COLLAPSED LOW DECK TO BE REMOVED AND INCLUDED IN NEW PROPOSED PIER (11,050 S.F.)
- COLLAPSED LOW DECK TO BE REMOVED (10,100 S.F.)
- REMNANTS OF PIER 35 TO BE FILLED (3,954 S.F.)

----- UNDERWATER COLLAPSED AREA

PLAN

SCALE: 1"= 100'



NOTE: AREA NUMBER ① IS OUTSIDE USACE JURISDICTION

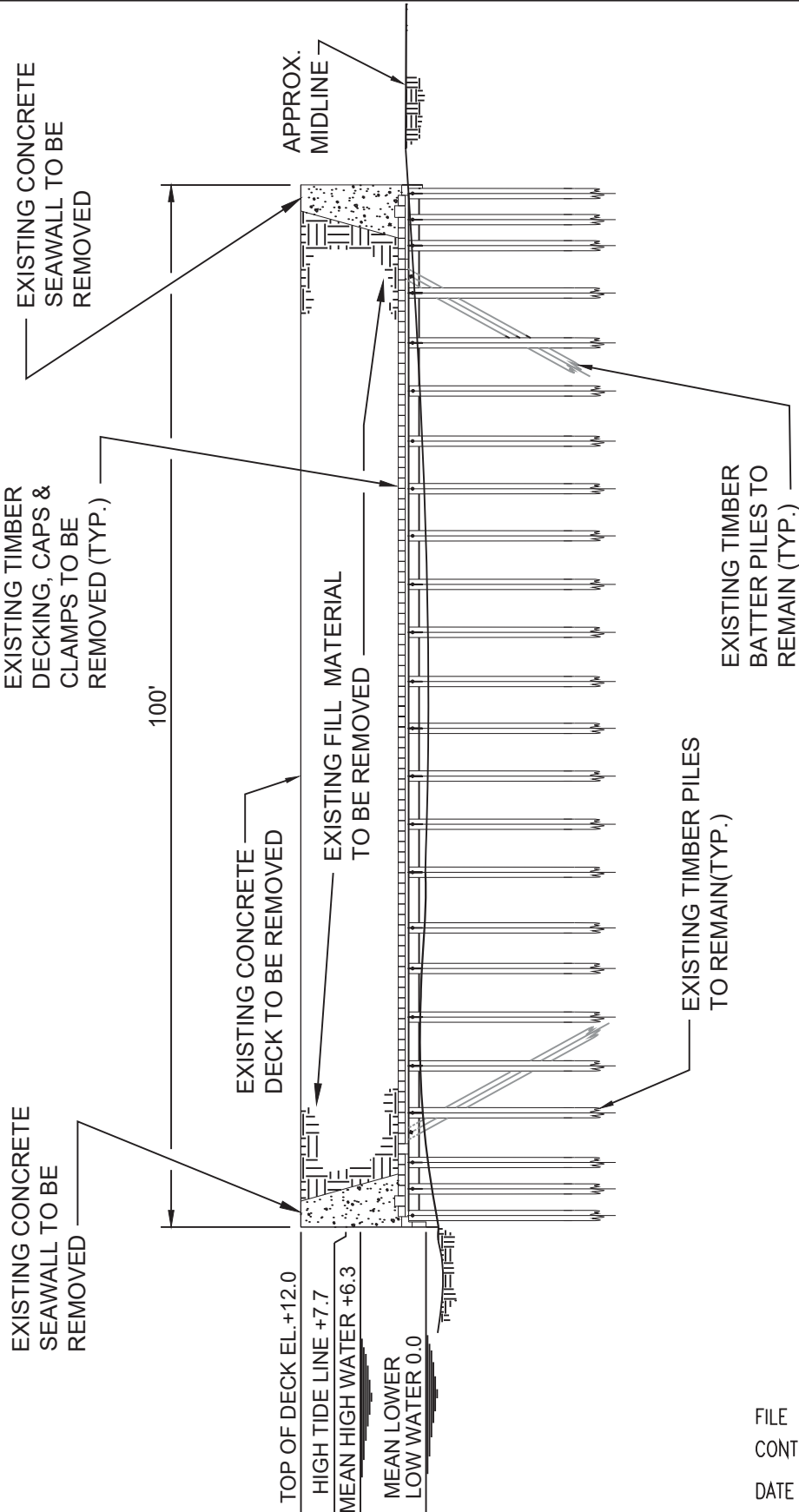
NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

**S.T. HUDSON ENGINEERS, INC.**  
PROFESSIONAL ENGINEERS & CONSULTANTS  
900 Dudley Avenue  
Cherry Hill, N.J. 08002  
Phone 856-342-6600  
Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 10 of 16

Rev-4 07/21/2020  
Added fill area 5 and Note  
Rev-3 06/10/2020  
Change dwg number  
Rev-2 05/18/2020  
General comments 05/12  
Rev-1 03/23/2020  
General comments 03/09

PROPOSED: PIER REHABILITATION	
AT:	CITY OF PHILADELPHIA
COUNTY OF: PHILADELPHIA	
APPLICATION BY: DESERT DIAMOND 34 L.P.	



# EXISTING SECTION PRIOR TO COLLAPSE E

SCALE: 1/16" = 1'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

**S.T. HUDSON ENGINEERS, INC.**  
PROFESSIONAL ENGINEERS & CONSULTANTS



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800 Hudson Square  
P.O. Box 9106  
Camden, N.J. 08101  
609-342-660

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 11 of 16

Rev-3	06/10/2020
Change dwg number	
Rev-2	05/18/2020
General comments 05/12	
Rev-1	03/23/2020
General comments 03/09	

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34,LP



NOTE  
TOTAL VOLUME  
OF RIP-RAP FOR  
OUTFALLS No.1 & 2  
= 111 CUBIC YARDS

OUTFALL No.2  
36" RCP  
INV. ELEV. -1.00  
SEE DWG. 13 of 14  
FOR DETAILS

DELAWARE RIVER  
F1.000 EBB

OUTLINE OF  
PROPOSED  
BUILDING

PIER 34

70'±

PIER 30

OUTFALL No.1  
36" RCP  
INV. ELEV. -3.00  
SEE DWG. 13 OF 14  
FOR DETAILS

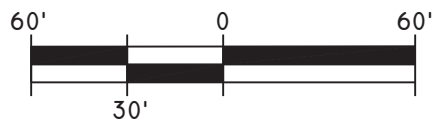
125'±

NEW STEEL  
SHEET PILE  
WALL (TYP.)

COLUMBUS BOULEVARD

## STORMWATER OUTFALL PLAN

SCALE: 1"= 60'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Phone 856-342-6600  
Fax No. 856-342-8323

E-2030

FILE No. H-7478-01  
CONTRACT No. 06-12-19  
DATE  
SHEET No. 12 of 16

Rev-4 08/25/2020 as per  
USACE comments of 08/10  
Rev-3 06/10/2020  
General comments 06/05  
Rev-2 03/23/2020  
General comments 03/09

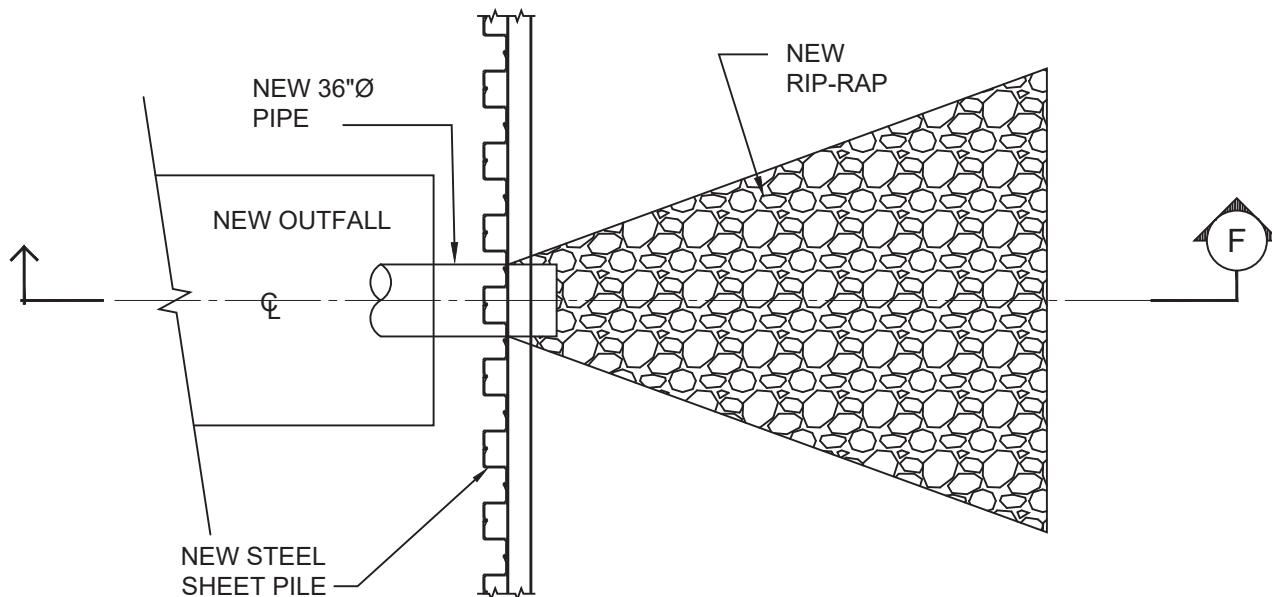
Rev-1 02/11/2020  
Remove piles,  
reconfig. platform

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.

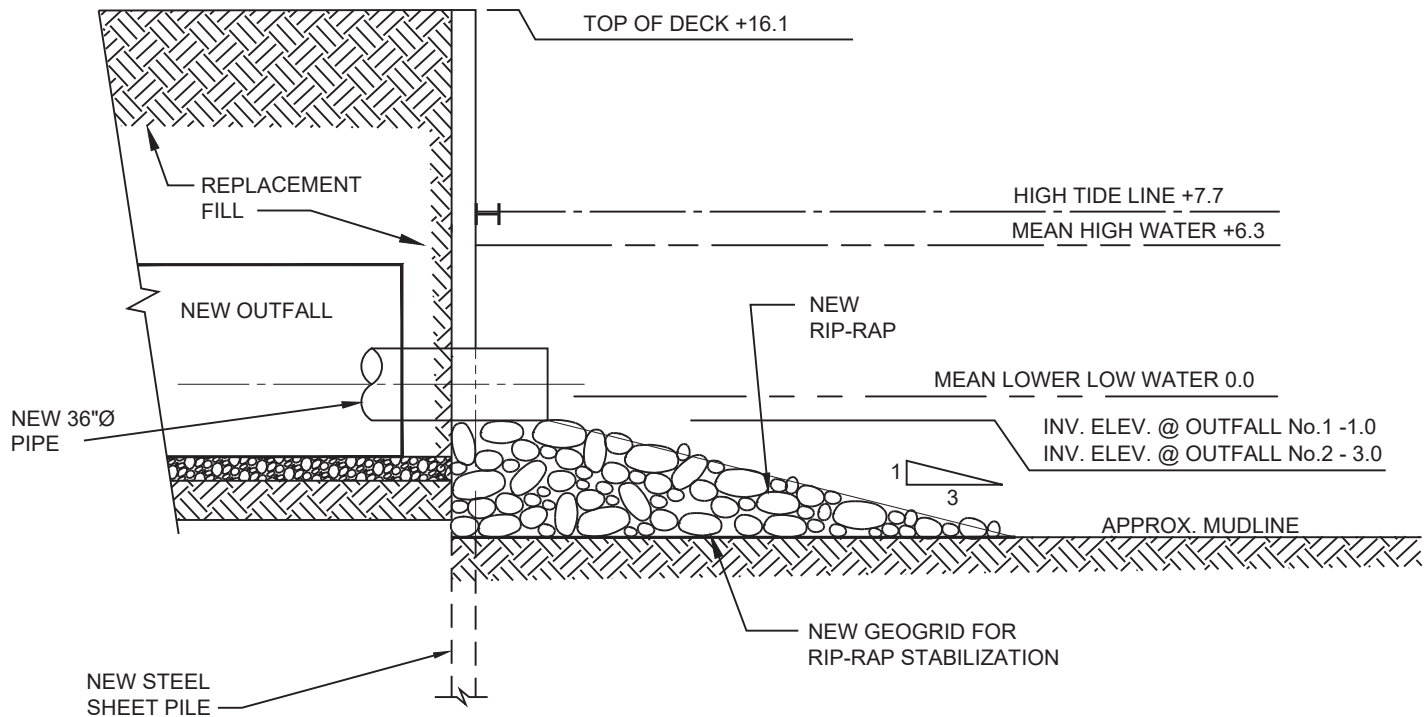


## OUTFALL PLAN TYPICAL

SCALE: 1/8" = 1'-0"



AREA OF RIP-RAP = 250 S.F.  
VOLUME OF RIP-RAP = 55.5 C.Y.  
(AT EACH OUTFALL)



## SECTION F

SCALE: 1/8" = 1'-0"



NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Cherry Hill, N.J. 08002  
Phone 856-342-6600  
Fax No. 856-342-8323

E-2030

FILE No. H-7478-01  
CONTRACT No. 06-12-19  
DATE  
SHEET No. 13 of 16

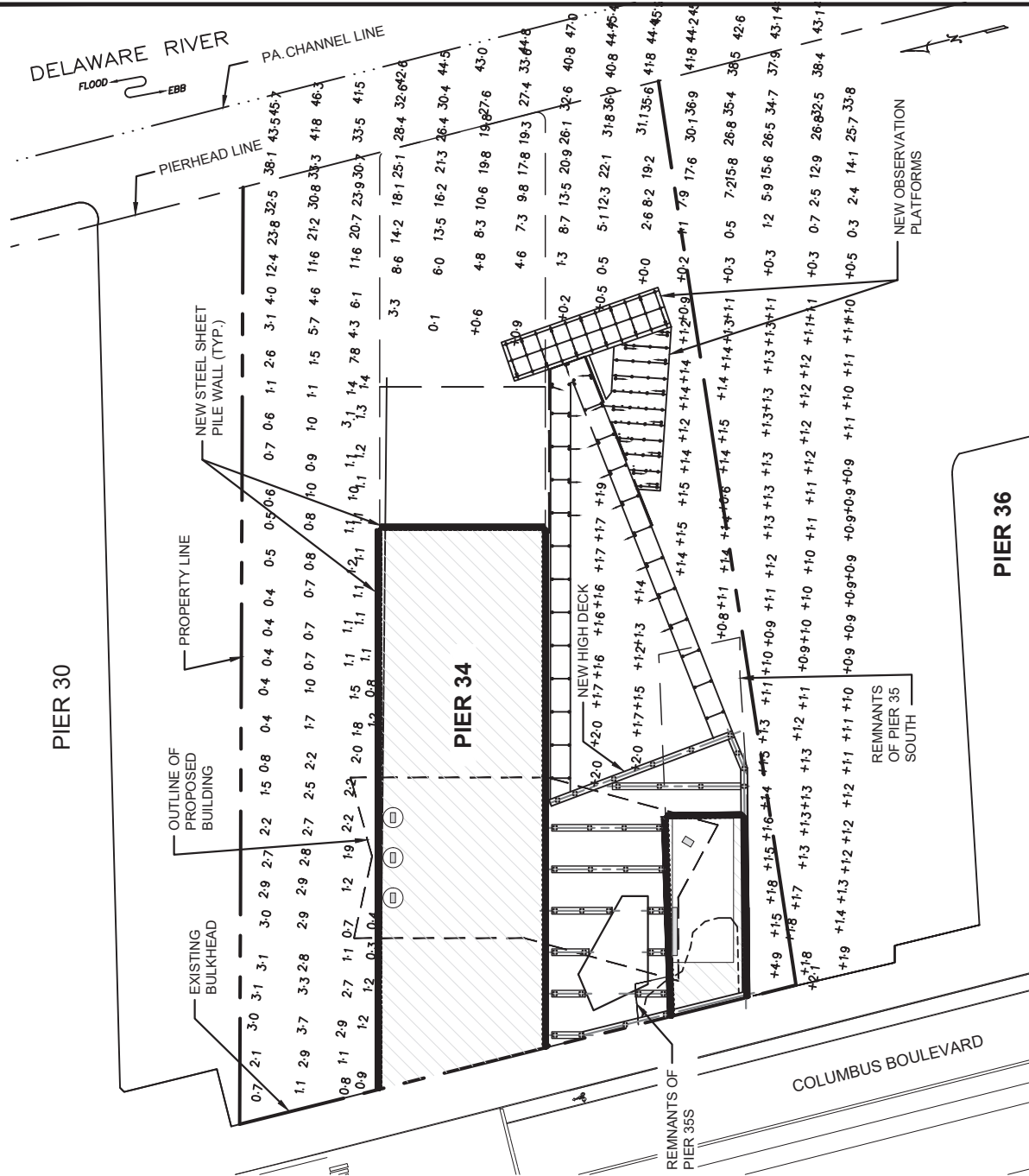
Rev-3 06/10/2020  
General comments 06/05  
Rev-2 03/23/2020  
General comments 03/09

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.



**NOTES:**

SOUNDINGS ARE IN ELEVATION MODE.  
SOUNDINGS ARE REFERENCED TO MEAN  
LOWER LOW WATER AND ARE EXPRESSED  
IN FEET AND TENTHS OF A FOOT.

**REFERENCE DRAWING:**

S.T. HUDSON ENGINEERS INC. DRAWING  
TITLED "PIER 34/35 SOUTH - CONDITION  
HYDROGRAPHIC SURVEY". FILE NUMBER  
E-1134, DWG. 1, REV-1, DATED 6/7/19.

# HYDROGRAPHIC SURVEY PLAN

SCALE: 1"= 100'



**PROJECT DATUM CHART**

NO.	MLLW DATUM	NAVD88 DATUM	CITY DATUM	DESCRIPTION
1.	0.0	-3.1	-7.8	MEAN LOWER LOW WATER (MLLW)
2.	3.1	0.0	-4.7	NORTH AMERICAN VERTICAL DATUM (NAVD88) = 0.0
3.	6.3	3.2	-1.5	MEAN HIGH WATER (MHW)
4.	7.7	4.6	-0.1	HIGH TIDE LINE (HTL)
5.	9.8	6.7	2.0	SIDE WALK ELEVATION AT COLUMBUS BLVD.
6.	12.0	8.9	4.2	TOP OF EXISTING DECK AT PIER 34 SOUTH
7.	15.1	12.0	7.3	FEMA 100 YEAR FLOOD ELEVATION
8.	16.1	13.0	8.3	TOP OF NEW DECK & WALKWAYS - PIER 34 & 35 SOUTH

**NOTE:** FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS  
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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 14 of 16

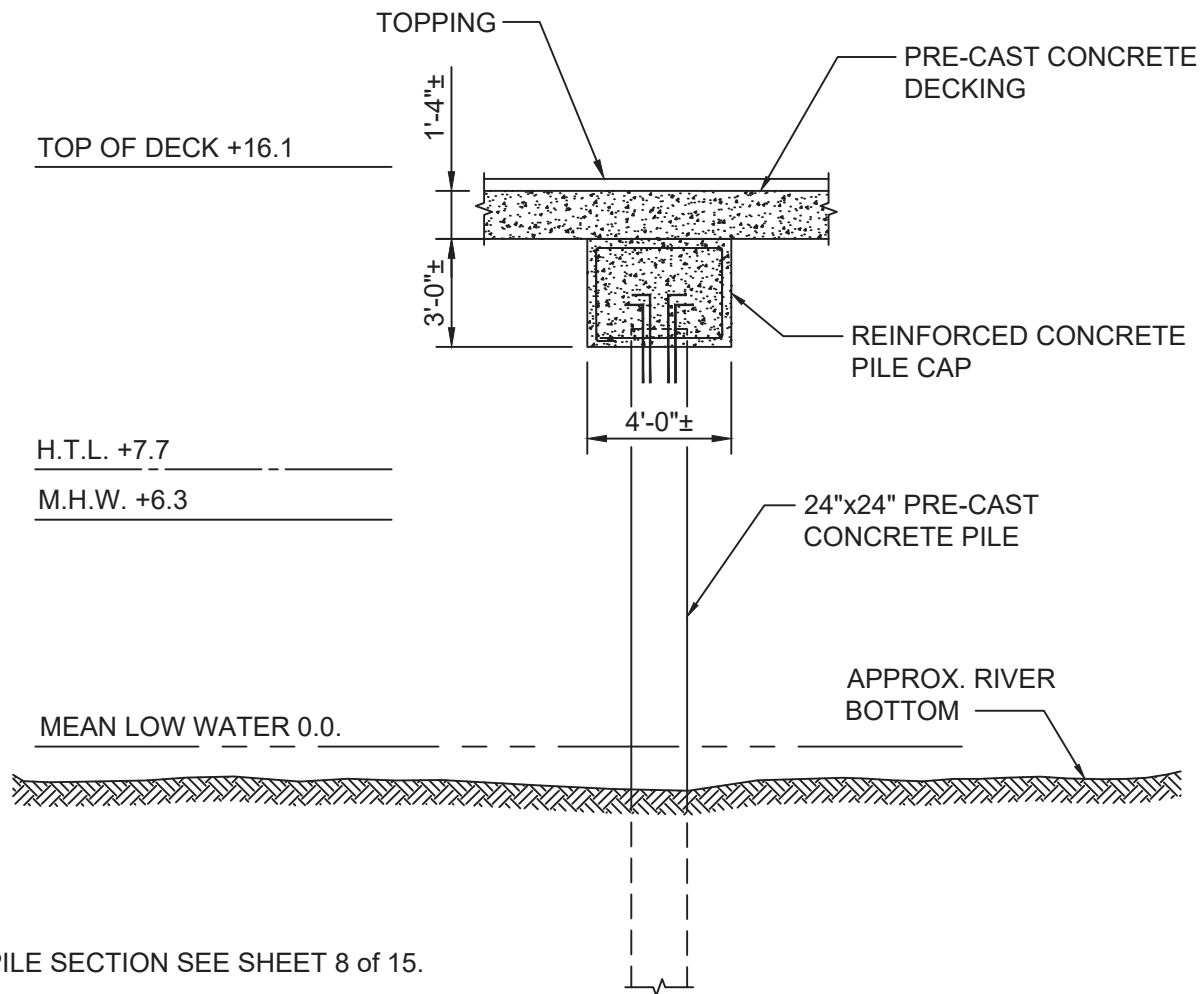
Rev-1 08/25/2020 as per  
USACE comments of 8/10

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.



## SECTION

SCALE: 3/16" = 1'-0"

G



## SUPPORT PILE INFORMATION

PILE TYPE	NUMBER OF PILES	PILE SIZE	TOTAL FOOTPRINT S.F.	TOTAL VOLUME OF FLOWABLE CONCRETE BELOW HTL (CY)
PRE-CAST CONCRETE	37	24"x24"	148 S.F.	NONE

NOTE: FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

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PROFESSIONAL ENGINEERS & CONSULTANTS



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Cherry Hill, N.J. 08002  
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Fax No. 856-342-8323

FILE No. E-2030  
CONTRACT No. H-7478-01  
DATE 06-12-19  
SHEET No. 15 of 16

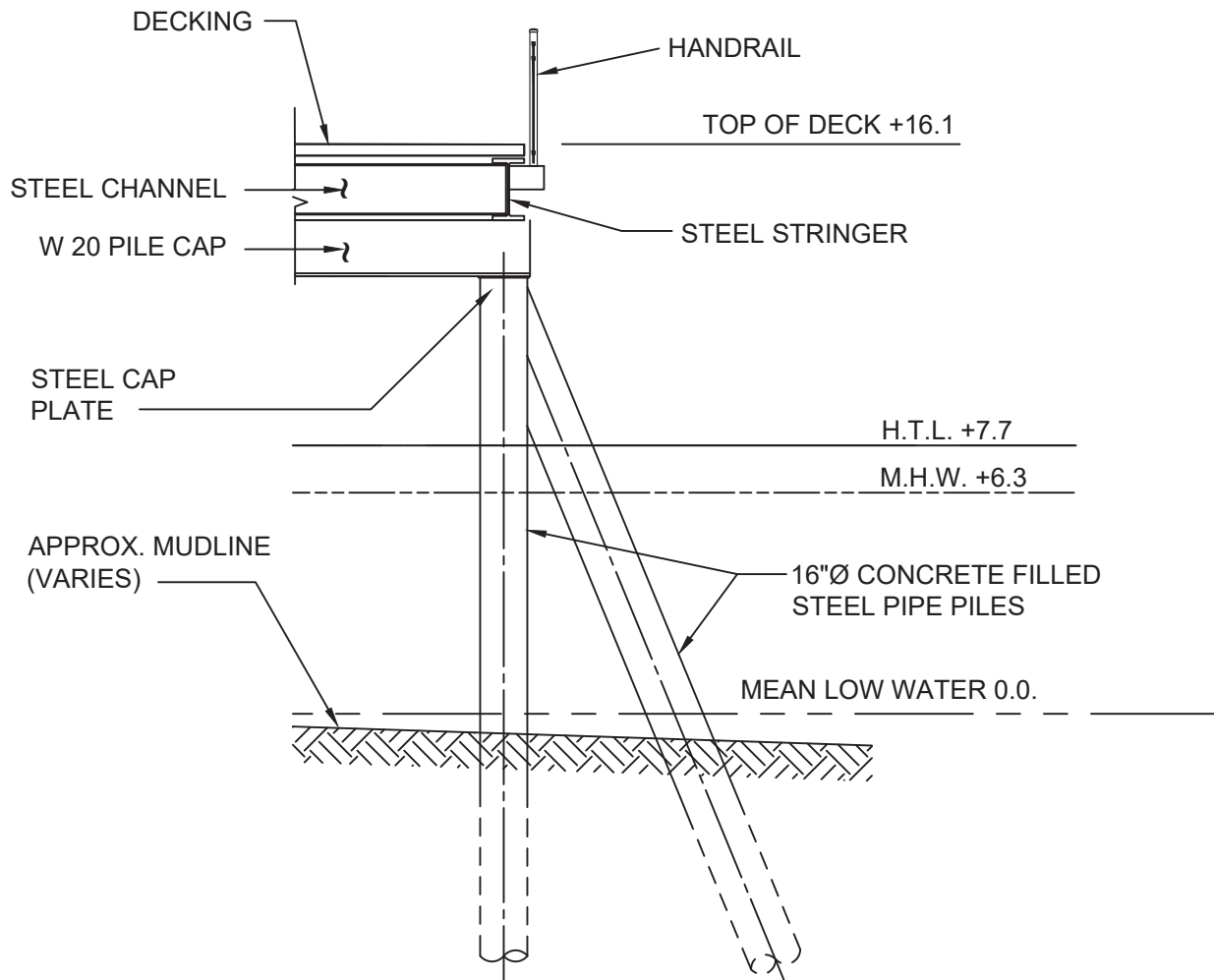
PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

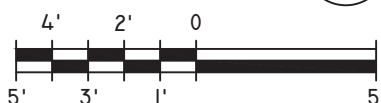
APPLICATION BY: DESERT DIAMOND 34 L.P.





## SECTION

SCALE: 3/16" = 1'-0"



## SUPPORT PILE INFORMATION

PILE TYPE	NUMBER OF PILES	PILE SIZE	TOTAL FOOTPRINT S.F.	TOTAL VOLUME OF FLOWABLE CONCRETE BELOW HTL (CY)
STEEL PIPE PILE	160	16"Ø	223 S.F.	50.1 C.Y.

FILE No. E-2030  
 CONTRACT No. H-7478-01  
 DATE 06-12-19  
 SHEET No. 16 of 16

**NOTE:** FINAL DESIGN REQUIRED FOR CONSTRUCTION. THIS DRAWING IS FOR PERMITTING PURPOSES ONLY.

**S.T. HUDSON ENGINEERS, INC.**

PROFESSIONAL ENGINEERS & CONSULTANTS



900 Dudley Avenue  
 Cherry Hill, N.J. 08002  
 Phone 856-342-6600  
 Fax No. 856-342-8323

PROPOSED: PIER REHABILITATION

AT: CITY OF PHILADELPHIA

COUNTY OF: PHILADELPHIA

APPLICATION BY: DESERT DIAMOND 34 L.P.



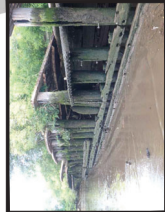




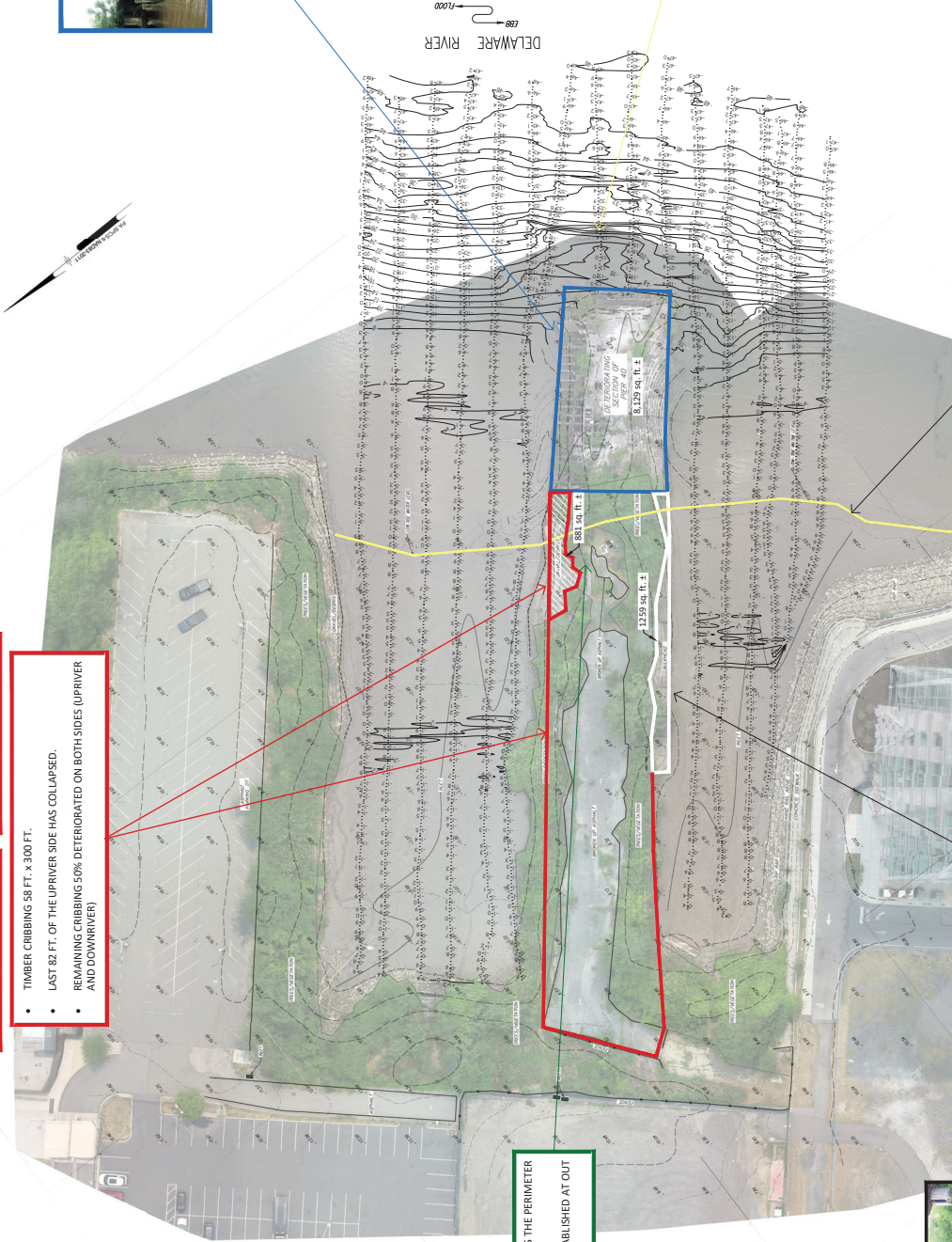
- TIMBER CRIBBING 58 FT. x 300 FT.
- LAST 82 FT. OF THE UP-RIVER SIDE HAS COLLAPSED.
- REMAINING CRIBBING 50% DETERIORATED ON BOTH SIDES (UP-RIVER AND DOWN-RIVER)



- HEAVY, HARD VEGETATION LINES THE PERIMETER OF THE CRIBBING.
- ACTIVE HOMELESS SHELTER ESTABLISHED AT OUT SHORE END OF CRIBBING.



- 8 FT. x 160 FT. TIMBER HIGH DECK APRON.
- FAILING CONCRETE SLAB SPANS FROM SINGLE ROW OF PILES (SPACED EVERY 3 FT.) TO TOP OF CRIBBING.



- 66 FT. x 140 FT. TIMBER HIGH DECK REMAINS 98% WITHIN THE DELAWARE RIVER DURING LOW TIDE. NO SHOAL BUILD-UP.
- BENT SPACING = 5 TO 6 FEET
- PILE SPACING = 5 TO 6 FEET.
- 4 INCH TO 6 INCH THICK CONCRETE AND ASPHALT DECK WHERE PRESENT



25 ISOLATED TIMBER PILES, VISIBLE DURING LOW TIDE



CONDITION SURVEY PLAN

SCALE 1" = 20'

PROGRESS PRINT ONLY  
8/25/2023

Ownership: State of Delaware, Division of Parks and Recreation, Delaware State Parks, 1000 Delaware Avenue, Dover, DE 19901. This map is for informational purposes only and does not constitute a warranty of any kind. The State of Delaware is not responsible for any errors or omissions on this map.

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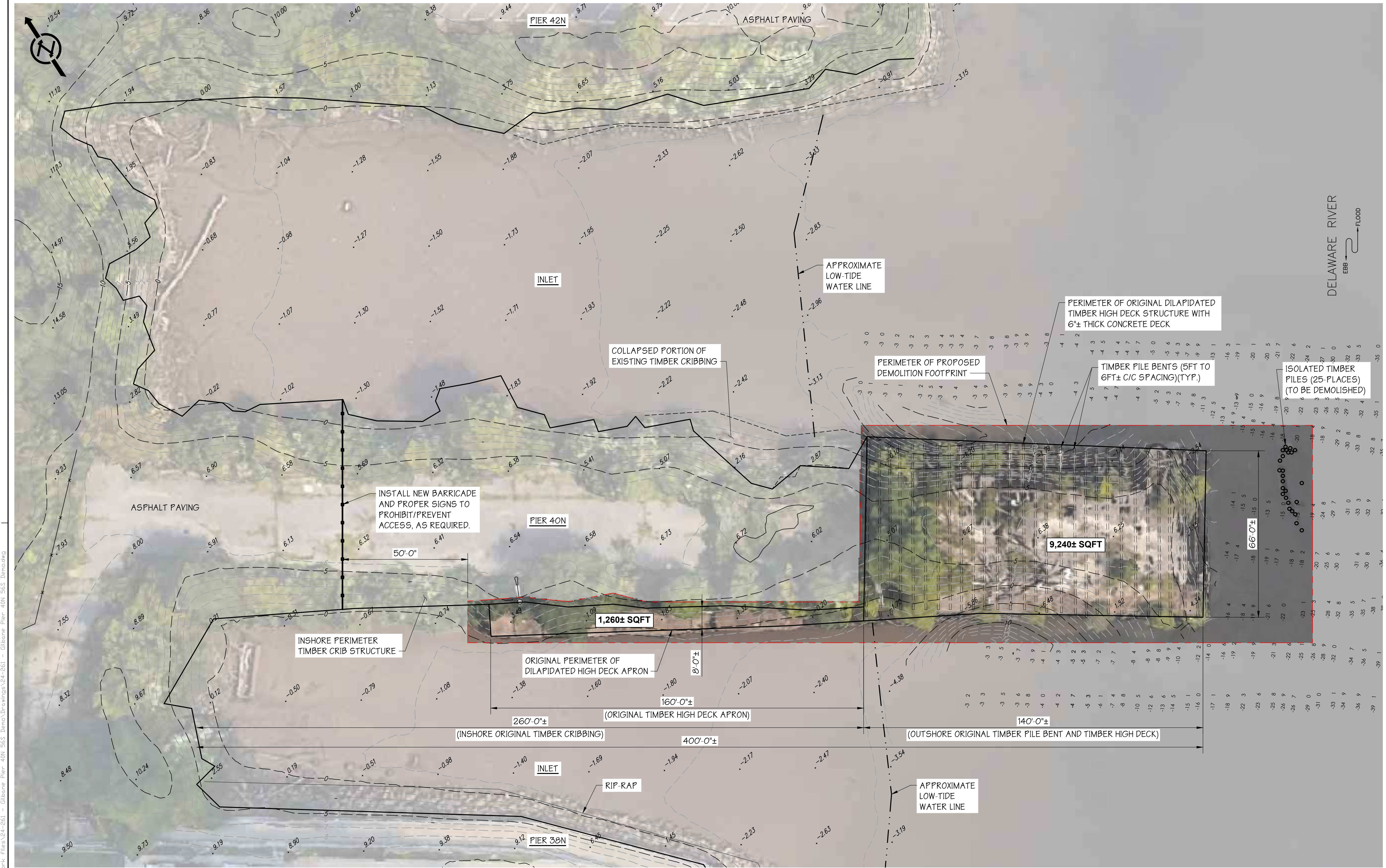
**GILBANE BUILDING COMPANY**  
100 PENN SQUARE EAST, SUITE 1040  
DOVER, DE 19901  
PHONE 302-342-8800  
FAX 302-342-8833

DATE	BY	DESCRIPTION
8/25/2023	STH	CONDITION SURVEY PLAN

PROJECT: PIER 40 NORTH MITIGATION  
SHEET: 1



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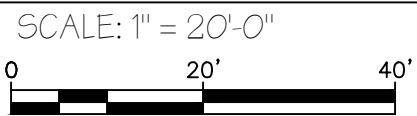


FOR BID PURPOSES:

INSHORE PORTION - CONTRACTOR SHALL DEMOLISH AND REMOVE FROM SITE ALL REMAINING ELEMENTS OF THE ORIGINAL TIMBER PILE SUPPORTED HIGH DECK APRON (APPROXIMATELY 8FT WIDE x 160FT LONG), HIGH TIMBER DECK, CONCRETE DECK WITH STEEL FORMWORK, VEGETATION, AND ALL MISC. ELEMENTS INCLUDING FOREIGN MATERIAL AND DEBRIS OF THE ORIGINAL INSHORE PORTION OF THE APRON WITHIN THE DEMOLITION FOOTPRINT. ALL TIMBER PILES SHALL BE CUT A MINIMUM OF 6 INCHES BELOW THE EXISTING MUDLINE.

OUTSHORE PORTION - CONTRACTOR SHALL DEMOLISH AND REMOVE FROM SITE ALL REMAINING ELEMENTS OF THE ORIGINAL TIMBER PILE BENTS AND HIGH DECK (29 BENTS, APPROXIMATELY 66FT WIDE x 140FT LONG), CONCRETE AND ASPHALT DECK WITH STEEL FORMWORK, VEGETATION, CONCRETE STRUCTURES, OUTBOARD TIMBER PILES (25 PILES) AND ALL MISC. ELEMENTS INCLUDING FOREIGN MATERIAL AND DEBRIS OF THE ORIGINAL OUTSHORE PORTION OF THE PIER WITHIN THE DEMOLITION FOOTPRINT. ALL TIMBER PILES SHALL BE CUT A MINIMUM OF 6 INCHES BELOW THE EXISTING MUDLINE.

PIER 40 NORTH - DEMOLITION PLAN



LEGEND:

- x XXX EXISTING SOUNDINGS PER SURVEY PERFORMED ON MAY 2023
- DEMOLITION FOOTPRINT
- CONTOURS

DATUM CHART:

NORTH AMERICAN VERTICAL DATUM NAVD88 +2.96  
MEAN LOWER LOW WATER (MLLW) ELEV. 0.0

GENERAL NOTES:

- DEMOLITION PLAN SHOWN ARE FOR REFERENCE AND BID PURPOSES ONLY. ALL EXISTING TOPSIDE FEATURES SHOWN ARE A REPRESENTATION ONLY. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS PRIOR TO SUBMITTING BID.
- REFER TO DRAWING S-2 FOR TYPICAL PIER SECTION DETAILS.
- THESE DRAWINGS REPRESENT THE PROPOSED MITIGATION BY S.T. HUDSON ENGINEERS, INC. (HUDSON) FOR THIS PROJECT. ANY DEVIATION FROM THESE DRAWINGS WITHOUT A WRITTEN ACCEPTANCE OF THE PROPOSED DEVIATION FROM HUDSON WILL RELIEVE HUDSON OF ALL LIABILITIES ASSOCIATED WITH THIS PROJECT.
- ALL DEMOLITION WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND STANDARDS.
- ALL WORK SHALL BE PERFORMED VIA WATERBORNE EQUIPMENT.
- NO NEW OR REMOVED MATERIALS, PERSONNEL, TOOLS AND/OR EQUIPMENT ARE PERMITTED ON ANY SECTION OF THE EXISTING PIER.
- CONTOURS AND SOUNDINGS SHOWN ARE BASED ON CONDITIONS SURVEY TAKEN ON MAY OF 2023. SOUNDINGS ARE REFERENCED TO NAVD88 AND EXPRESSED IN FEET AND TENTHS OF A FOOT. THE INFORMATION DEPICTED ON THIS DRAWING REPRESENTS THE RESULTS OF SURVEYS CONDUCTED ON THE DATES INDICATED, AND CAN ONLY BE CONSIDERED AS INDICATING GENERAL CONDITIONS AT THAT TIME.
- THE DEPTH OF THE MUDLINE VARIES AT LOCATIONS SURROUNDING AND UNDER THE PIER AND CAN GREATLY FLUCTUATE. DEBRIS AND FALLEN MATERIAL REST AT THE EXISTING MUDLINE. CONTRACTOR SHALL CONSIDER EXISTING CONDITIONS AND PERFORM WORK AND STAGE EQUIPMENT IN CONSIDERATION AND ANTICIPATE THE POTENTIAL COLLAPSE AND/OR SHIFTING OF DEBRIS DURING DEMOLITION WORK. CONTRACTOR SHALL CONSIDER THE MIGRATION OF MATERIALS BEYOND THE DEMOLITION FOOTPRINT AS A RESULT OF A COLLAPSE. ALL MATERIAL THAT MIGRATE OUTSIDE OF THE DEMOLITION FOOTPRINT AS A RESULT OF DEMOLITION ACTIVITIES SHALL BE UNDER THE RESPONSIBILITY OF THE CONTRACTOR TO BE REMOVED AND DISPOSED OF AS OUTLINED BELOW.
- THE CONTRACTOR SHALL REMOVE FROM THE SITE, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY OWNER, ALL REMOVED MATERIAL, WASTE MATERIAL AND DEBRIS GENERATED DURING THE COURSE OF DEMOLITION WORK WITHIN THE SHOWN DEMOLITION FOOTPRINT, INCLUDING ALL MATERIALS THAT HAVE PREVIOUSLY FALLEN WITHIN THE SHOWN DEMOLITION FOOTPRINT. DISPOSAL OF ALL GENERATED WASTE MATERIAL AND DEBRIS IS THE RESPONSIBILITY OF CONTRACTOR. ALL DEMOLISHED & EXCAVATED MATERIAL SHALL BE DISPOSED OF, OFFSITE BY THE CONTRACTOR, IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE & LOCAL ENVIRONMENTAL REGULATIONS & STANDARDS.
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- NO STRUCTURES BELOW THE MEAN HIGH WATER LINE AND NO DISCHARGE OF DREDGE AND/OR FILL MATERIALS BELOW THE HIGH WIDE LINE SHALL BE PLACED BEYOND THOSE SPECIFICALLY DEPICTED IN THE ALREADY-APPROVED PLANS UNTIL SUCH FURTHER ACTIVITIES HAVE BEEN APPROVED BY THE PADEP AND USACE IN WRITING.
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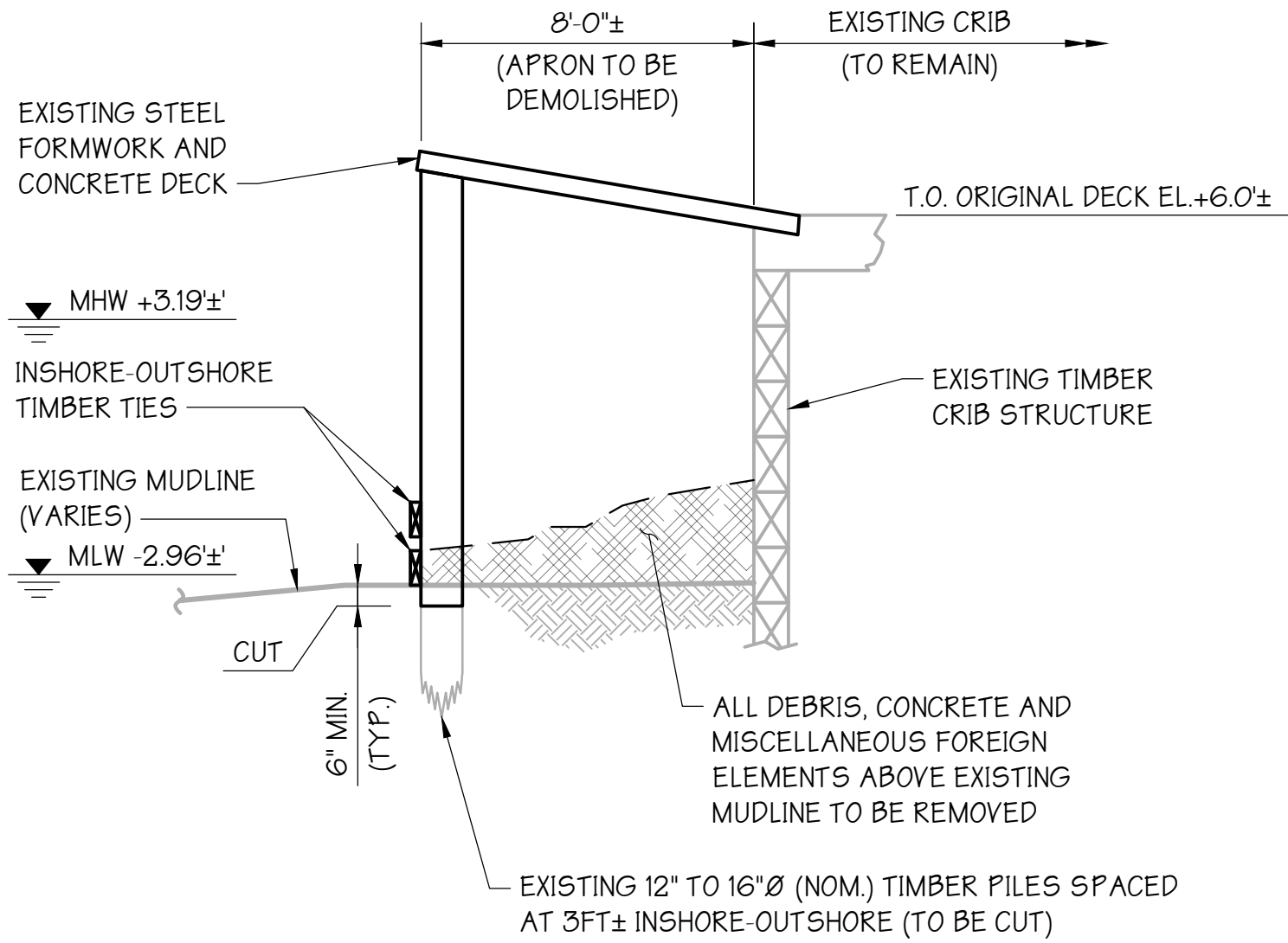
**GILBANE BUILDING COMPANY**  
100 PENN SQUARE EAST, SUITE 1040  
PHILADELPHIA, PA 19047

drawn	FNY	date	10/06/24	contract
checked		FILE	G-1249	24-261
drftg.	approval			

PIER 40 NORTH - MITIGATION		dwg. no.	rev.
DEMOLITION PLAN		S-1	A

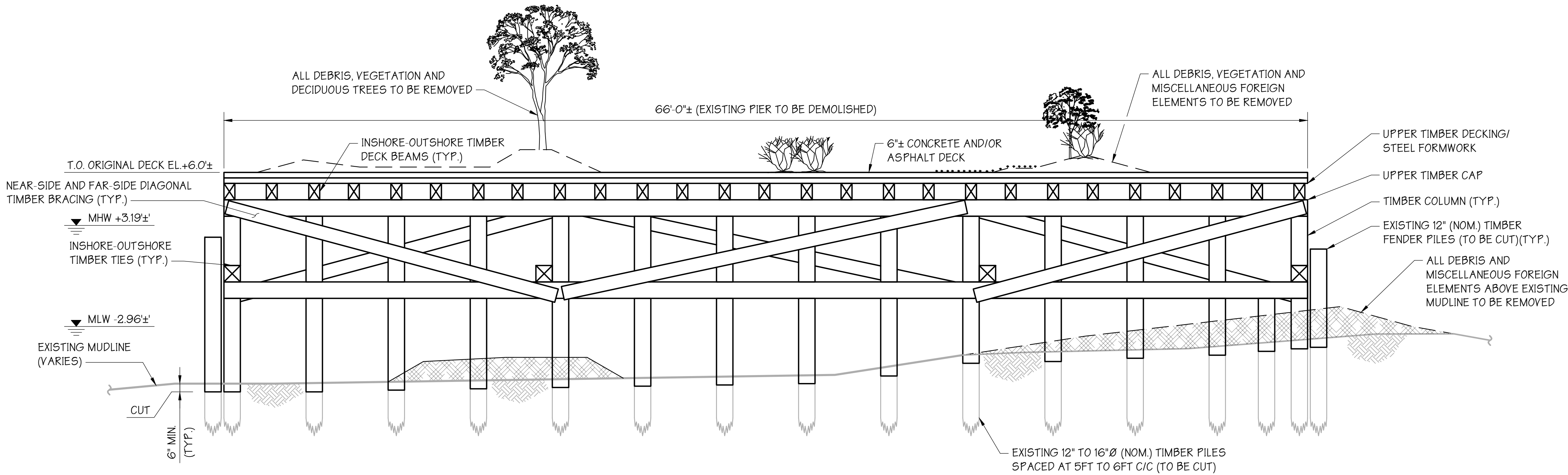
FOR INFORMATION ONLY  
DATE: 01/02/25





PIER 40 NORTH - TYPICAL INSHORE APRON SECTION

SCALE: 3/16" = 1'-0"  
(SECTION LOOKING INSHORE)  
(SECTION SHOWN REFLECTS AN OVERVIEW OF THE ORIGINAL CONDITION, EXISTING CONDITION IS DAMAGED, MISSING, AND DILAPIDATED, ALL EXISTING CONDITION FEATURES ARE NOT SHOWN)



PIER 40 NORTH - TYPICAL OUTSHORE SECTION

SCALE: 3/16" = 1'-0"  
(SECTION LOOKING INSHORE)  
(SECTION SHOWN REFLECTS AN OVERVIEW OF THE ORIGINAL CONDITION, EXISTING CONDITION IS DAMAGED, MISSING, AND DILAPIDATED, ALL EXISTING CONDITION FEATURES ARE NOT SHOWN)

- NOTES:
- FOR GENERAL NOTES SEE DRAWING S-1.
  - ALL TIMBER PILES SHALL BE CUT A MINIMUM OF 6 INCHES BELOW THE EXISTING MUDLINE.
  - EXISTING MUDLINE SHOWN ARE FOR REFERENCE ONLY. SHOWN MUDLINE ARE PER SURVEY PERFORMED IN MAY OF 2023. EXISTING MUDLINES MAY VARY AT TIME OF WORK. REFER TO DRAWING S-1 FOR SOUNDINGS. CONTRACTOR SHALL FIELD VERIFY PRIOR TO BID.

- LEGEND:
- EXISTING ELEMENTS TO REMAIN
  - EXISTING ELEMENTS TO BE DEMOLISHED

DATUM CHART:  
NORTH AMERICAN VERTICAL DATUM NAVD88 +2.96  
MEAN LOWER LOW WATER (MLLW) ELEV. 0.0

			appr.	approvals		
				approved by	for	date
			by			
			description			
			date	seal	seal	
			rev.	FOR INFORMATION ONLY DATE: 01/02/25		

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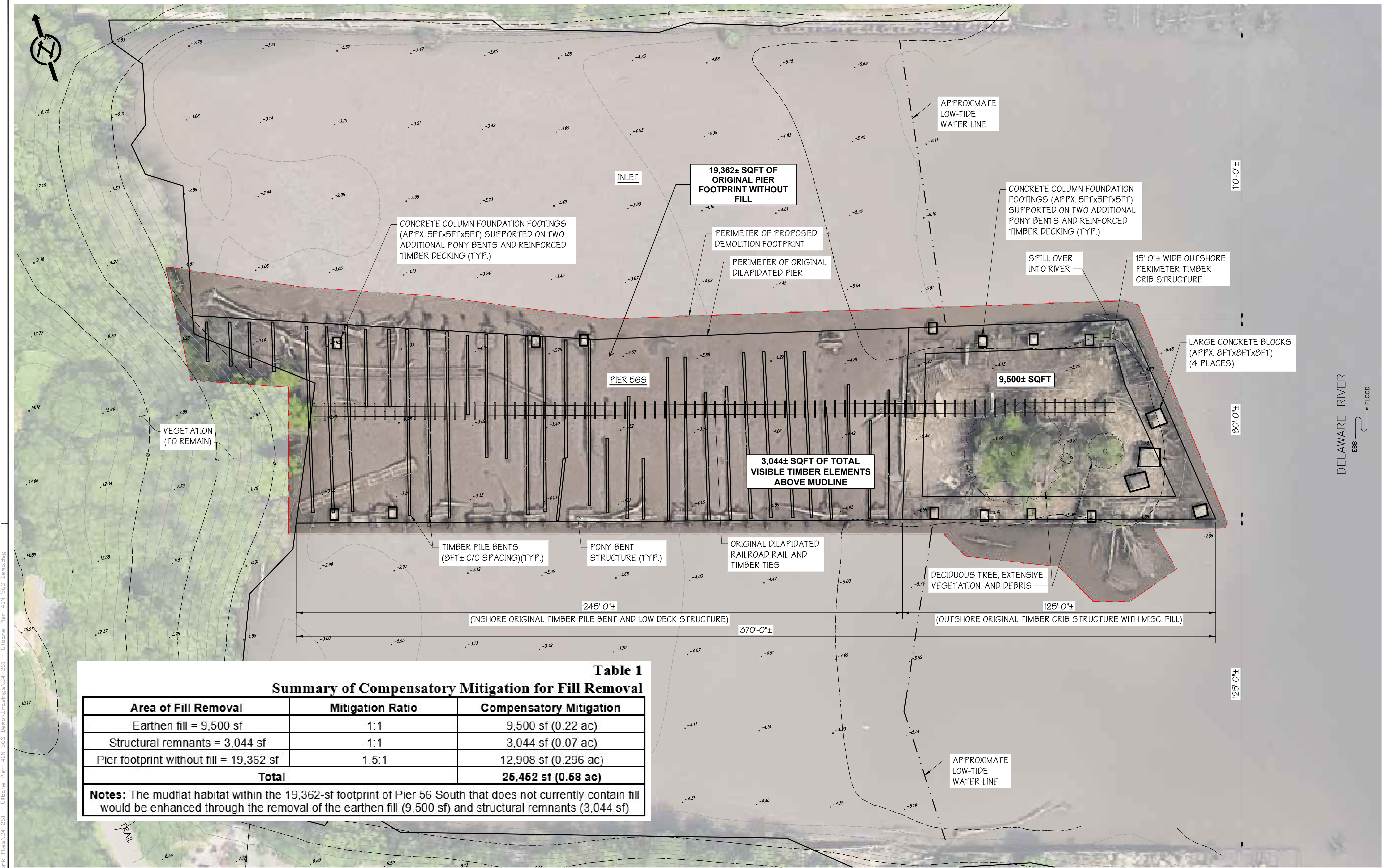
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PHILADELPHIA, PA 19047

drawn checked drftg.	FNY	date FILE	10/06/24 G-1249	contract 24-261
PIER 40 NORTH - MITIGATION				dwg. no.
DEMOLITION SECTIONS				S-2
				rev. A

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**Table 1**  
**Summary of Compensatory Mitigation for Fill Removal**

Area of Fill Removal	Mitigation Ratio	Compensatory Mitigation
Earthen fill = 9,500 sf	1:1	9,500 sf (0.22 ac)
Structural remnants = 3,044 sf	1:1	3,044 sf (0.07 ac)
Pier footprint without fill = 19,362 sf	1.5:1	12,908 sf (0.296 ac)
<b>Total</b>		<b>25,452 sf (0.58 ac)</b>

**Notes:** The mudflat habitat within the 19,362-sf footprint of Pier 56 South that does not currently contain fill would be enhanced through the removal of the earthen fill (9,500 sf) and structural remnants (3,044 sf)

**PIER 56 SOUTH - DEMOLITION PLAN**

SCALE: 1" = 20'-0"  
0 20' 40'

**LEGEND:**

- x XXX EXISTING SOUNDINGS PER SURVEY PERFORMED ON MAY 2023
- DEMOLITION FOOTPRINT
- CONTOURS

**DATUM CHART:**

NORTH AMERICAN VERTICAL DATUM NAVD88 +2.96

MEAN LOWER LOW WATER (MLLW) ELEV. 0.0

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drawn FNY	date 10/06/24	contract
checked	FILE G-1249	24-261
drftg. approval		

PIER 56 SOUTH - MITIGATION	dwg. no.	rev.
DEMOLITION PLAN	S-3	A

FOR INFORMATION ONLY  
DATE: 01/02/25



