

**JOINT**  
**PUBLIC NOTICE**

**CHARLESTON DISTRICT, CORPS OF ENGINEERS**  
**69A Hagood Avenue**  
**Charleston, South Carolina 29403-5107**  
**and the**  
**S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**  
**OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT**  
**1362 McMillan Avenue, Suite 400**  
**Charleston, South Carolina 29405**

REGULATORY DIVISION

Refer to: P/N #2004-1W-396-C

1 APRIL 2005

P/N #2005-1W-114-C (dock 1 between lots 20 and 21)

P/N #2005-1W-115-C (dock 2 between lots 19 and 18)

P/N #2005-1W-116-C (dock 3 between lots 17 and 16)

P/N #2005-1W-117-C (dock 4 between lots 15 and 14)

P/N #2005-1W-118-C (dock 5 between lots 13 and 12)

P/N #2005-1W-119-C (dock 6 between lots 11 and 10)

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Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et.seq.) an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

**ARROWHEAD GRANDE, LLC**  
**c/o MR. JAMES M. WOOTEN, P.E.**  
**DDC ENGINEERS, INC.**  
**1298 PROFESSIONAL DRIVE**  
**MYRTLE BEACH, SOUTH CAROLINA 29577**

for a permit to construct a bulkhead, community dock, and six joint use docks and to perform excavation in waters of the

ATLANTIC INTRACOASTAL WATERWAY (AIWW)

at a location along 970 linear feet of shoreline of a 42.92 acre tract of land near the City of Myrtle Beach in Horry County, South Carolina (Latitude 33.69909°, Longitude 78.94595°)

In order to give all interested parties an opportunity to express their views

**NOTICE**

is hereby given that written statements regarding the proposed work will be received by both of the above mentioned offices until

**12 O'CLOCK NOON, MONDAY, 2 MAY 2005**

from those interested in the activity and whose interests may be affected by the proposed work.

Refer to: P/N #2004-1W-396-C

1 APRIL 2005

P/N #2005-1W-114-C (dock 1 between lots 20 and 21)

P/N #2005-1W-115-C (dock 2 between lots 19 and 18)

P/N #2005-1W-116-C (dock 3 between lots 17 and 16)

P/N #2005-1W-117-C (dock 4 between lots 15 and 14)

P/N #2005-1W-118-C (dock 5 between lots 13 and 12)

P/N #2005-1W-119-C (dock 6 between lots 11 and 10)

The proposed work consists of installing 970 linear feet of bulkhead that will require no backfilling below MHW as shown on sheet 4 of 31. A community day dock will be constructed adjacent to the common area next to lot 21 for use by the residents of the Arrowhead Grande development. This community dock will consist of a fixed pier that has 5' x 34' section that will extend from the bulkhead out into the AIWW where it will "L" into a 5' x 71' section with three 4' x 20' ramps that will each lead to a 16' x 16' floating dock. Approximately 1,807 cubic yards of material will be excavated from an area surrounding the community dock that measures 95' x 130'. Six shared individual docks will each consist of a "T" shaped fixed pier that will have a 4' x 50' section adjacent to the bulkhead with a central 5' x 46' section that extends out into the AIWW. Each end of the pier adjacent to the bulkhead will have a 4' x 24' ramp that will lead to a 6' x 28' floating dock. A 15' x 17' boat lift will be located between each of the two floating docks and the central section of fixed pier as shown on sheet 12 of 31. Each individual dock will also require excavation in the following amounts: Dock 1: 963 cubic yards of material from an area measuring 9,450 sq. ft., Dock 2: 1,375 cubic yards of material from an area measuring 10,170 sq. ft., Dock 3: 1,302 cubic yards of material from an area measuring 9,900 sq. ft., Dock 4: 1,167 cubic yards of material from an area measuring 9,000 sq. ft., Dock 5: 1,357 cubic yards of material from an area measuring 9,900 sq. ft., and Dock 6: 1,173 cubic yards of material from an area measuring 9,900 sq. ft. Because of the high rock content of the spoil material, all excavation will be performed using an excavator located on a barge and transported to the upland shoreline, temporarily stockpiled and used onsite for construction fill. The purpose of the project is for recreational boating access to the AIWW for the residents of Arrowhead Grande.

**NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the**

**U.S. Army Corps of Engineers  
ATTN: REGULATORY DIVISION  
69A Hagood Avenue  
Charleston, South Carolina 29403-5107.**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

Refer to: P/N #2004-1W-396-C

1 APRIL 2005

P/N #2005-1W-114-C (dock 1 between lots 20 and 21)

P/N #2005-1W-115-C (dock 2 between lots 19 and 18)

P/N #2005-1W-116-C (dock 3 between lots 17 and 16)

P/N #2005-1W-117-C (dock 4 between lots 15 and 14)

P/N #2005-1W-118-C (dock 5 between lots 13 and 12)

P/N #2005-1W-119-C (dock 6 between lots 11 and 10)

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 10.96 acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project will have no effect on any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended).

The District Engineer has consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. Consultation of the National Register constitutes the extent of cultural resource investigations by the District Engineer, and he is otherwise unaware of the presence of such resources. Presently unknown archaeological, scientific, prehistorical, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands,

Refer to: P/N #2004-1W-396-C

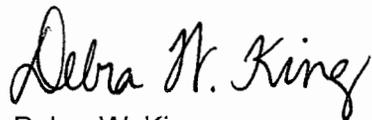
1 APRIL 2005

P/N #2005-1W-114-C (dock 1 between lots 20 and 21)  
P/N #2005-1W-115-C (dock 2 between lots 19 and 18)  
P/N #2005-1W-116-C (dock 3 between lots 17 and 16)  
P/N #2005-1W-117-C (dock 4 between lots 15 and 14)  
P/N #2005-1W-118-C (dock 5 between lots 13 and 12)  
P/N #2005-1W-119-C (dock 6 between lots 11 and 10)

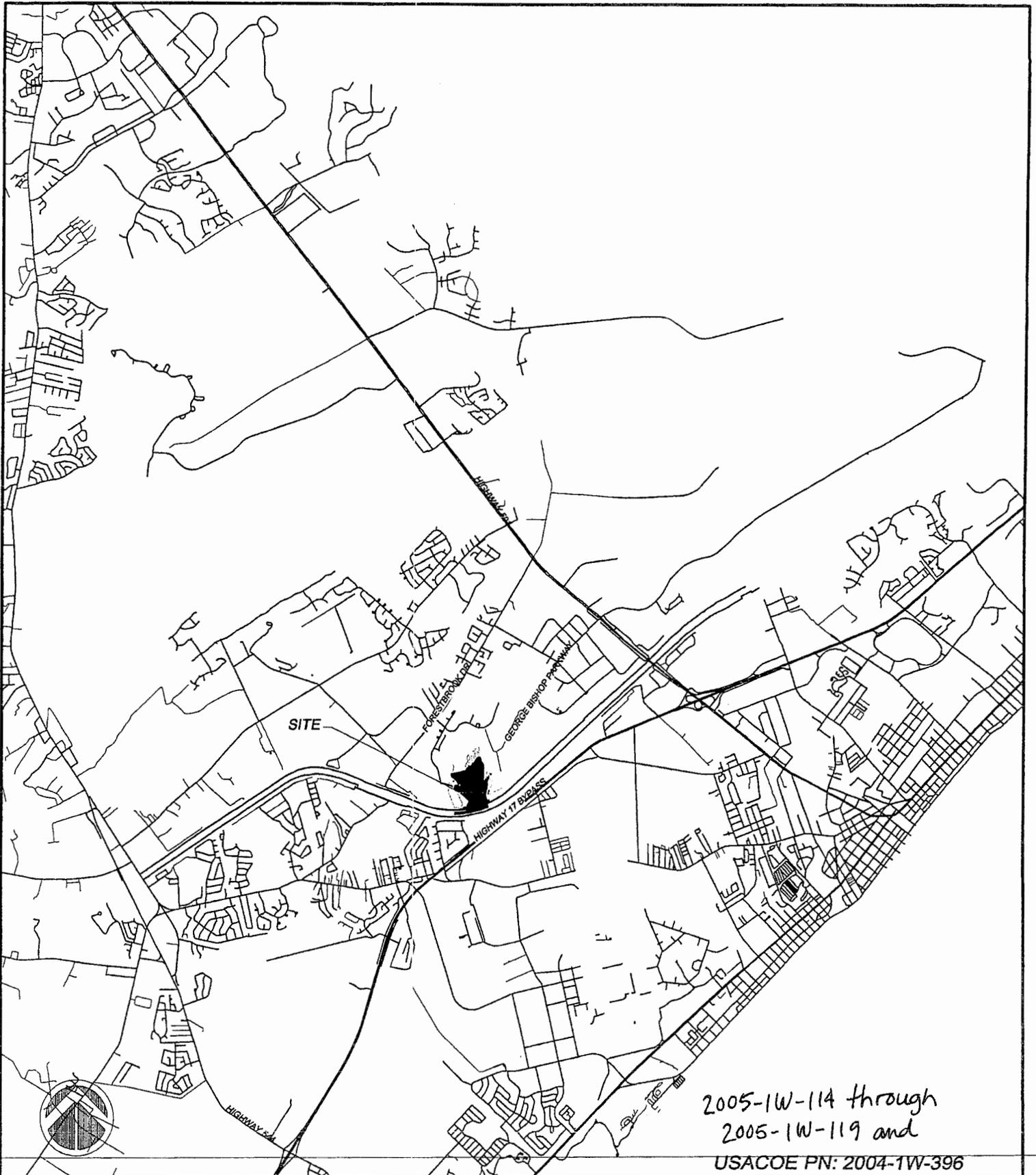
historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

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

If there are any questions concerning this public notice, please contact me at 843-329-8044 or toll free at 1-866-329-8187.



Debra W. King  
Project Manager  
Regulatory Division  
U.S. Army Corps of Engineers



2005-1W-114 through  
 2005-1W-119 and  
 USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
 DOCK, DREDGE  
 &  
 BULKHEAD PERMIT

VICINITY MAP

PURPOSE: RECREATION AND  
 TEMPORARY BOAT MOORING  
 COUNTY: HORRY  
 STATE: SOUTH CAROLINA

SHEET 1 OF 31

DDC PN: 04.04519E

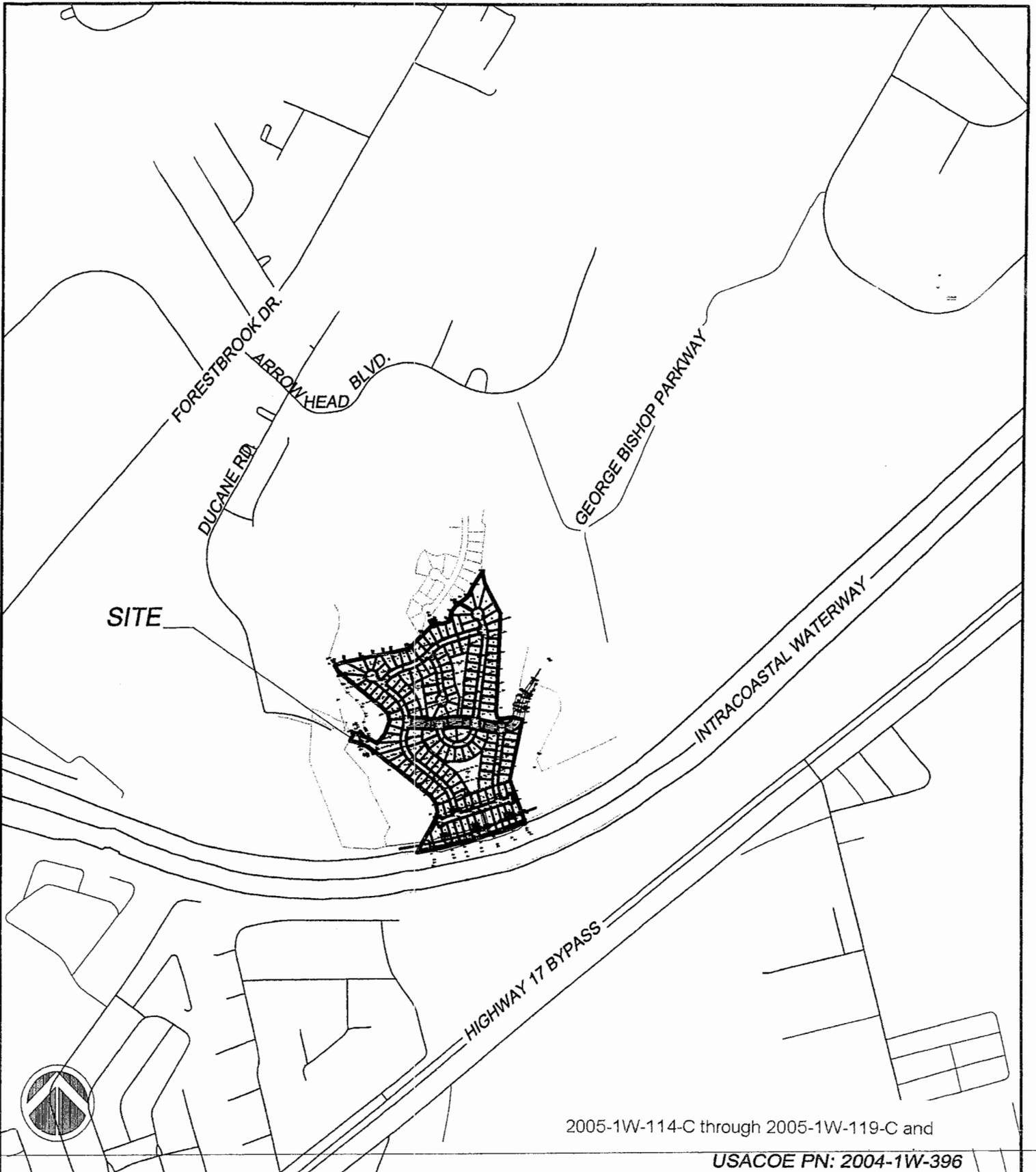
SCALE: NTS

ORIGINAL DATE: NOVEMBER 30, 2004  
 REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC



Consulting Engineers, Surveyors, Planners,  
 Landscape Architects & Environmentalists  
 1298 Professional Dr., Myrtle Beach, SC 29577  
 Phone: (843) 692-3700 Fax: (843) 692-3210



2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

**ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT**

**LOCATION MAP**

**PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA**

SHEET 2 OF 31

DDC PN: 04.04519E

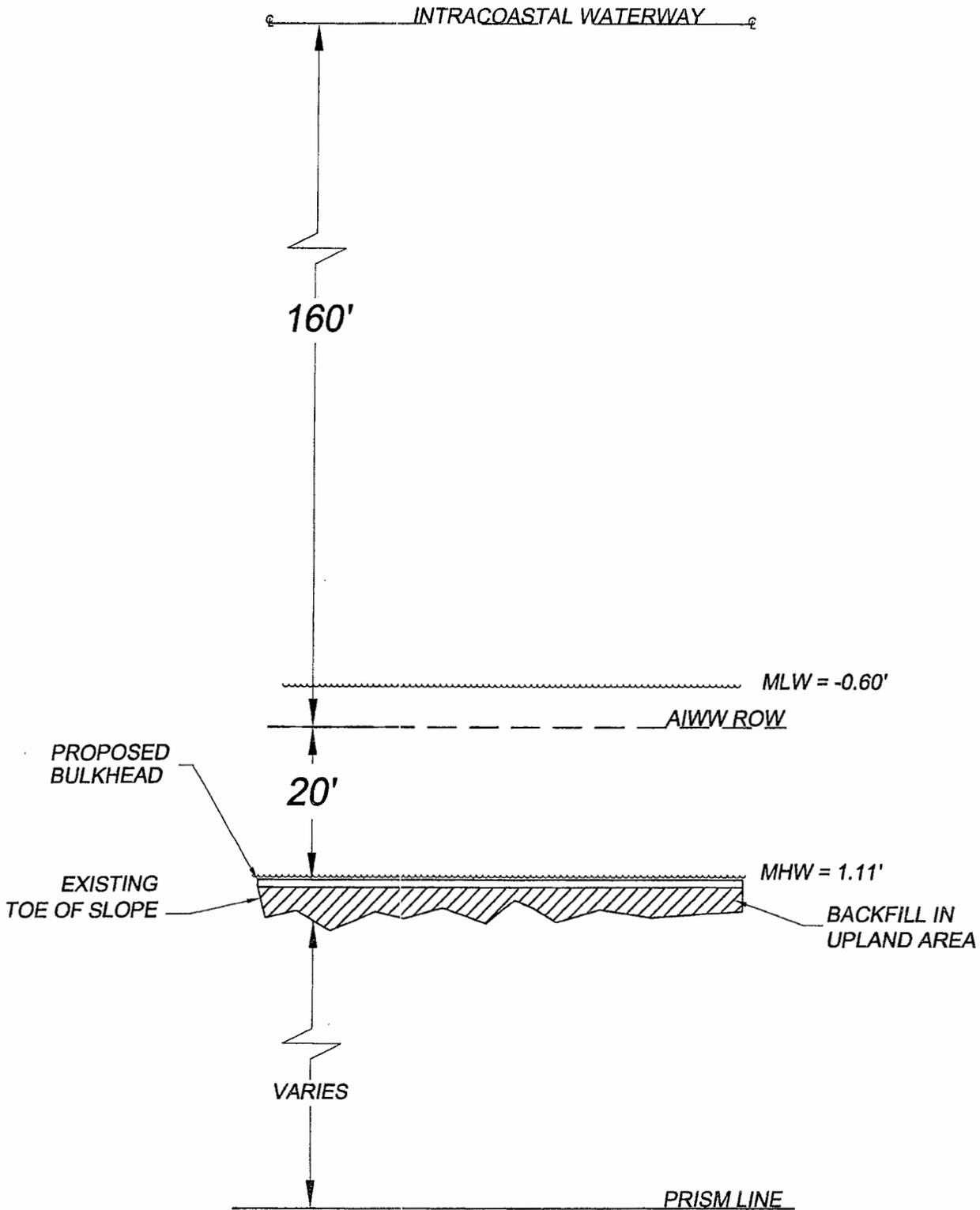
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ORIGINAL DATE: NOVEMBER 30, 2004  
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2005-1W-114-C through 2005-1W-119-C and

TIDE DATUM BASED ON NGVD29

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

PLAN VIEW  
BULKHEAD

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 3 OF 31

DDC PN: 04.04519E

SCALE: 1" = 20'

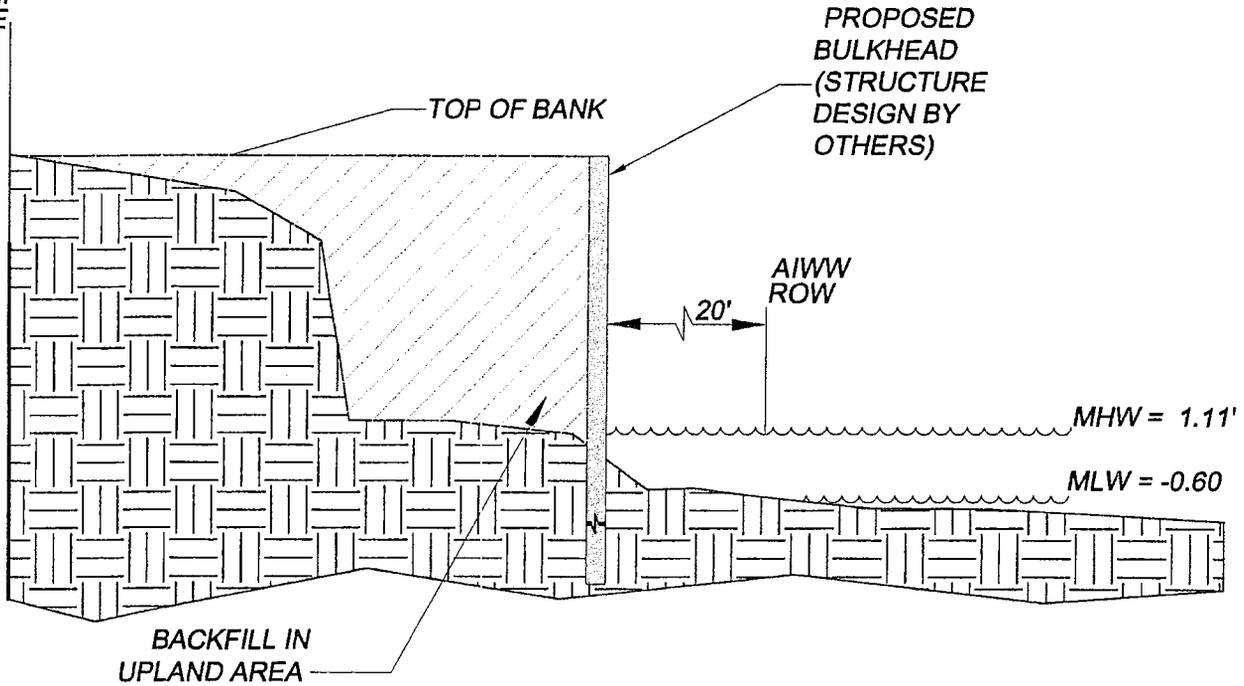


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ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

PRISM  
LINE



2005-1W-114-C through 2005-1W-119-C and

TIDE DATUM BASED ON NGVD29

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

PROFILE VIEW  
BULKHEAD

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 4 OF 31

DDC PN: 04.04519E

SCALE: 1" = 10'

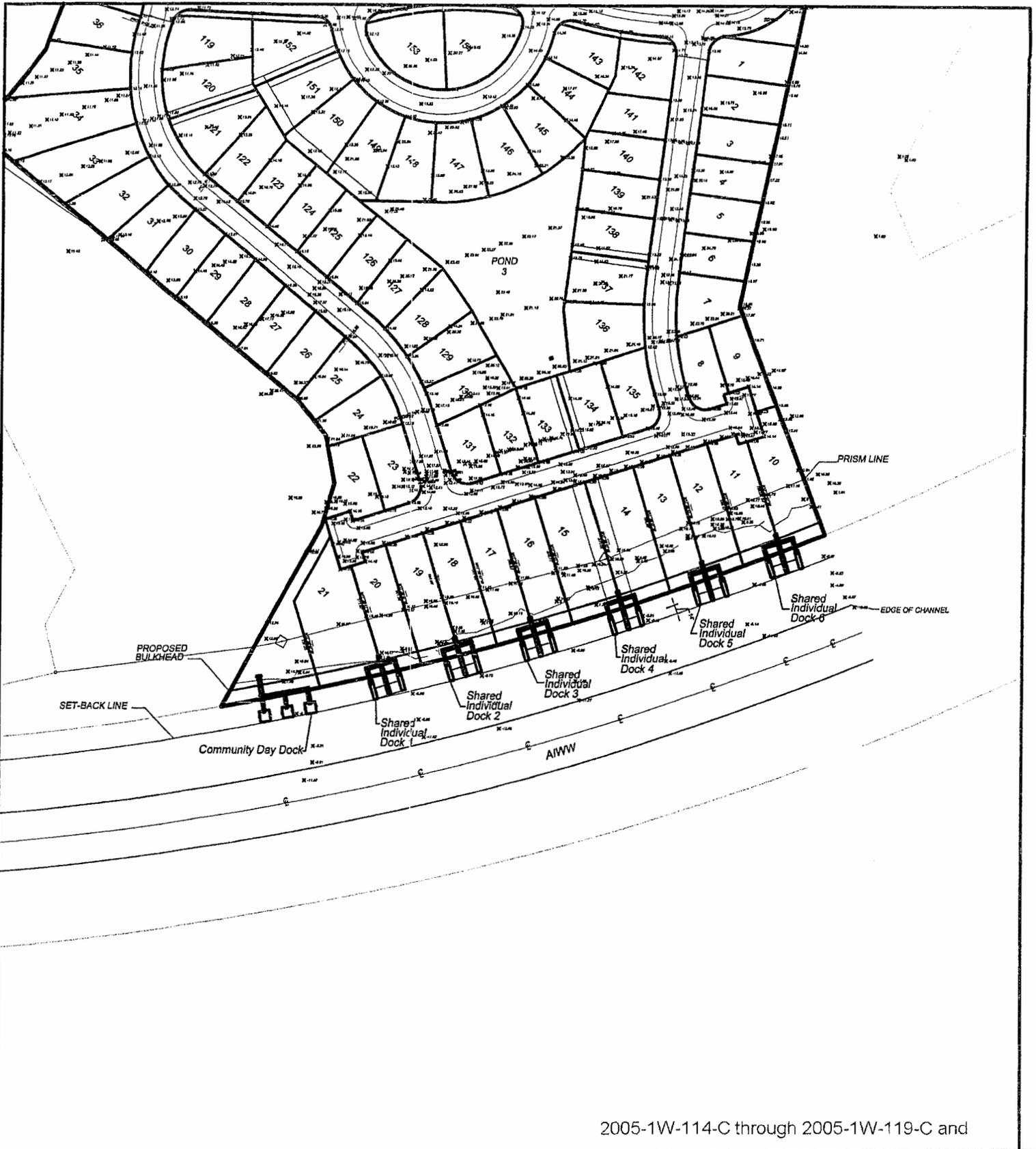
DDC



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REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC



2005-1W-114-C through 2005-1W-119-C and

TIDE DATUM BASED ON NGVD29

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

DOCK  
MASTER PLAN

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 5 OF 31

DDC PN: 04.04519E

SCALE: 1" = 200'

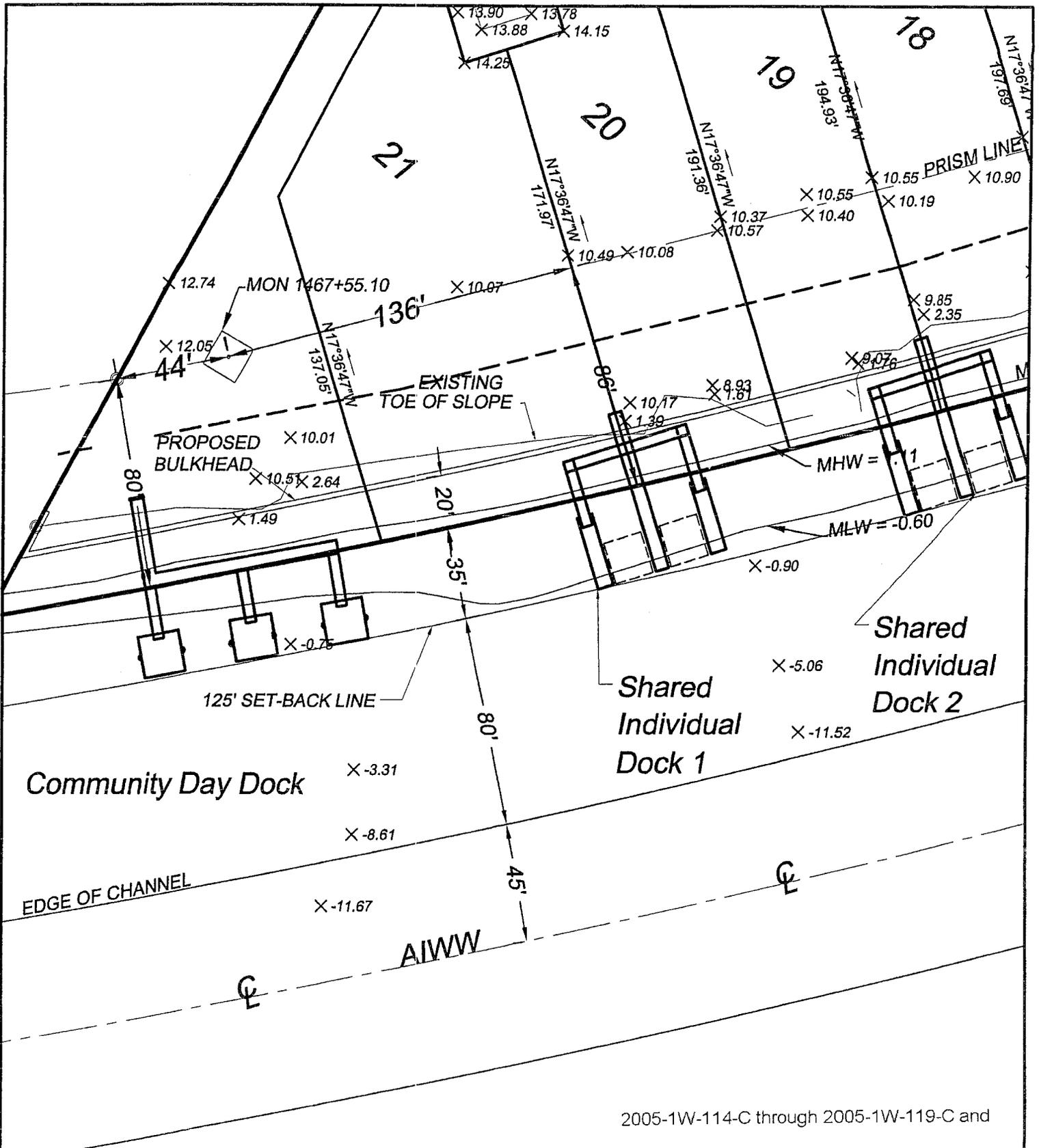
ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

DDC



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2005-1W-114-C through 2005-1W-119-C and

TIDE DATUM BASED ON NGVD29 USACOE PN: 2004-1W-396

<p><b>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</b></p>	<p><b>DOCK MASTER PLAN</b></p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING          COUNTY: HORRY          STATE: SOUTH CAROLINA</p>
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SHEET 6 OF 31	DDC PN: 04.04519E	SCALE: 1" = 50'	
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ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005	APPLICANT: ARROWHEAD GRANDE, LLC		
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CHART OF DISTANCES ALONG PRISM LINE FROM USACOE MONUMENTS TO END OF DOCKS			
DOCK NUMBER	MONUMENT NUMBER	DISTANCE ALONG PRISM TO PROPERTY LINE FROM USACOE MONUMENT	DISTANCE ALONG PRISM TO END OF DOCK AT USACOE RIGHT-OF-WAY
CDD	14+67.55	262 L.F.	80 L.F.
ISD-1	14+67.55	136 L.F.	87 L.F.
ISD-2	14+57.94	256 L.F.	88 L.F.
ISD-3	14+57.94	136 L.F.	86 L.F.
ISD-4	14+57.94	4 L.F.	80 L.F.
ISD-5	14+57.94	142 L.F.	88 L.F.
ISD-6	14+57.94	142 L.F.	90 L.F.

L.F. = Linear Feet

2005-1W-114-C through 2005-1W-119-C and

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

DISTANCE CHART

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 9 OF 31

DDC PN: 04.04519E

SCALE: NTS

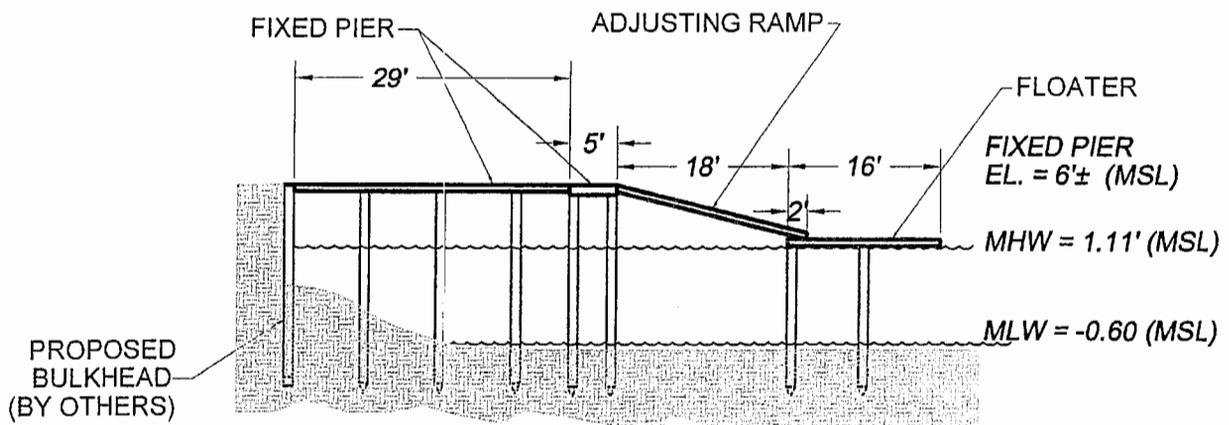
ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC



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Landscape Architects & Environmentalists  
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Phone: (843) 692-3200 Fax: (843) 692-3210





**NOTE:**

1. DISTANCE FROM END OF THE PIER IS 125' MIN. TO CL OF AIWW.
2. TIDE DATUM BASED ON NGVD29.

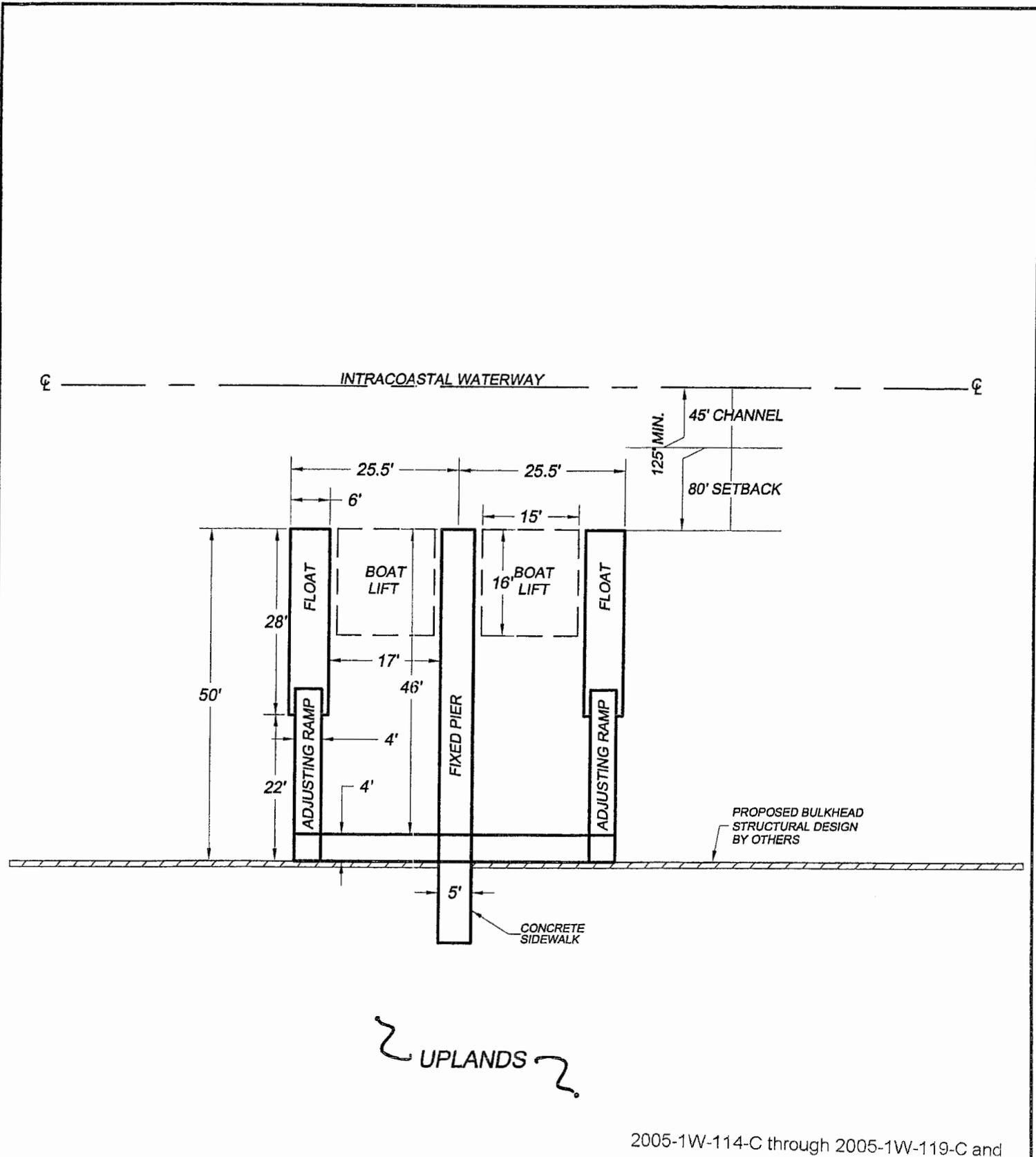
2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>PROFILE VIEW COMMUNITY DAY DOCK</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING          COUNTY: HORRY          STATE: SOUTH CAROLINA</p>
<p>SHEET 11 OF 31</p>	<p>DDC PN 04.04519E</p>	<p>SCALE: 1" = 20'</p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004          REVISED DATE:</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	



Consulting Engineers, Surveyors, Planners,  
 Landscape Architects & Environmentalists  
 1298 Professional Dr., Myrtle Beach, SC 29577  
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2005-1W-114-C through 2005-1W-119-C and

DATUM: NAVD 29

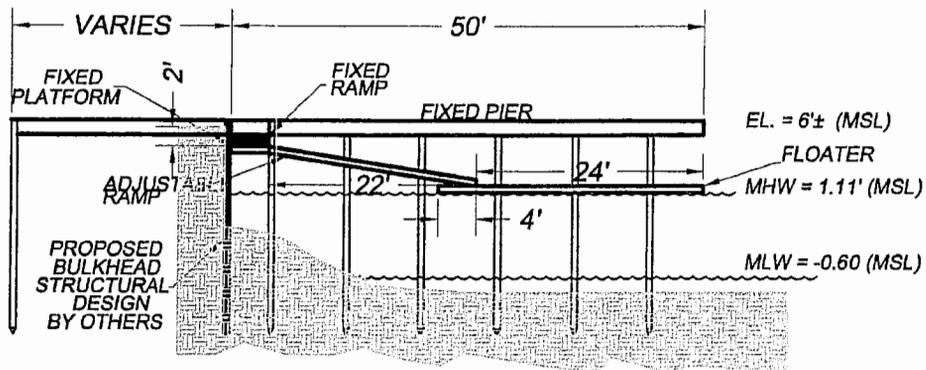
USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>PLAN VIEW SHARED INDIVIDUAL DOCK</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
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SHEET 12 OF 31	DDC PN: 04.04519E	SCALE: 1" = 20'	
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<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	<p>Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</p>
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11/20/04 11:58:58 AM S:\PROJECTS\2004\11-30-04\11-30-04.dwg PLOT DATE: 02/02/05 11:11:21 AM



**NOTE:**

1. DISTANCE FROM END OF THE PIER IS 125' MIN. TO CL OF AIWW.

2. TIDE DATUM BASED ON NGVD29.

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

**ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT**

**PROFILE VIEW  
SHARED  
INDIVIDUAL DOCK**

**PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA**

SHEET 13 OF 31

DDC PN: 04.04519E

SCALE: 1" = 20'

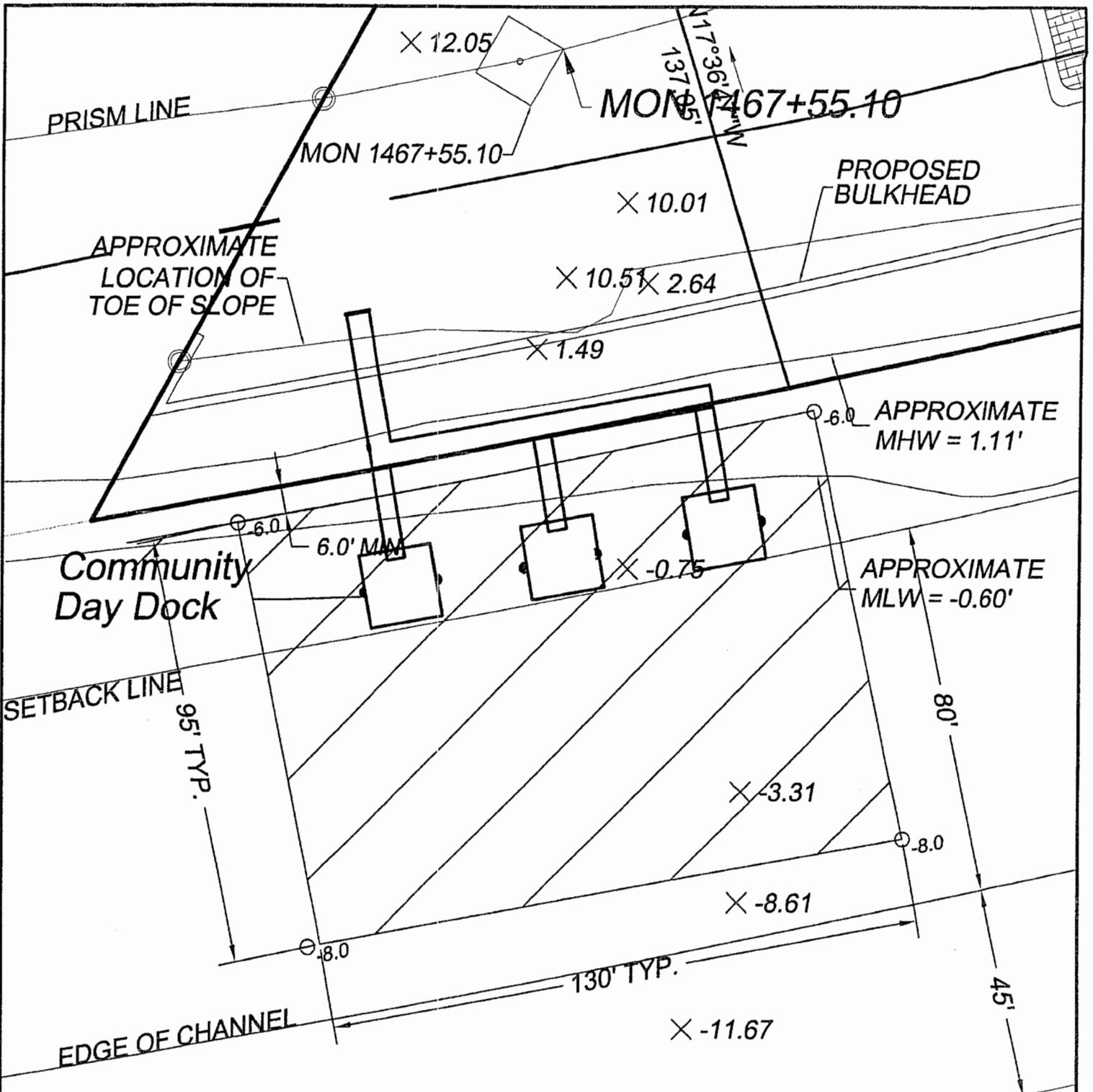
ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

**DDC**



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2005-1W-114-C through 2005-1W-119-C and

**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,807 C.Y.
3. TIDE DATUM BASED ON NGVD29

CL

AIWW

**LEGEND:**

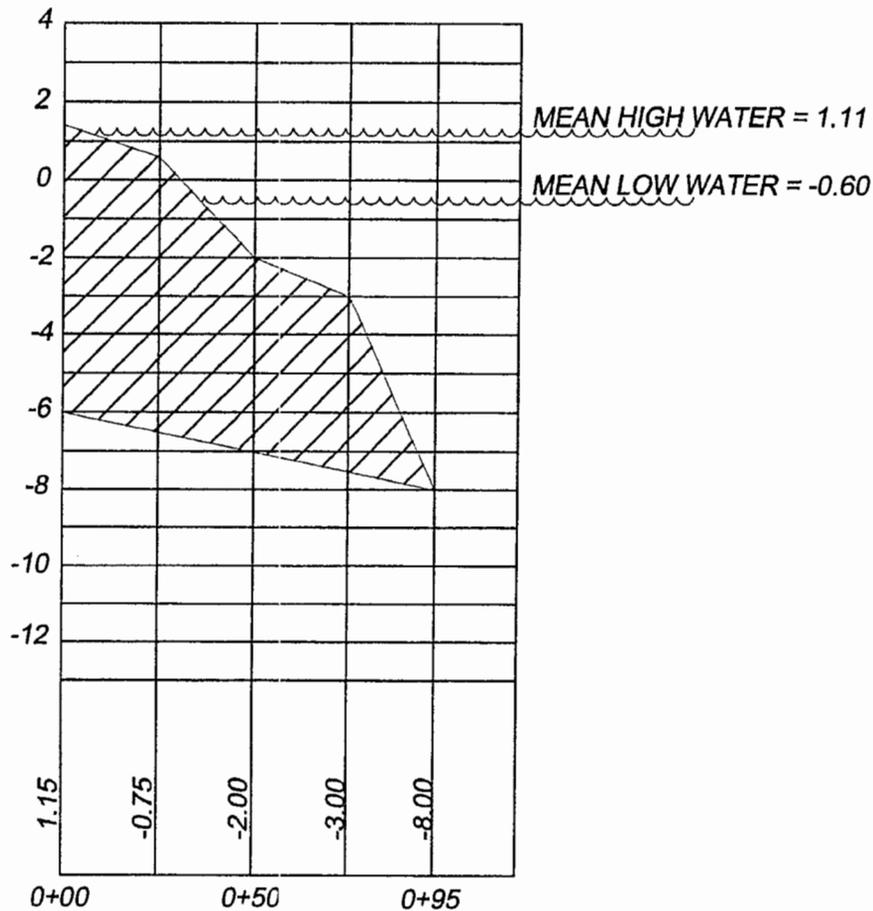
 AREA TO BE DREDGED

→ USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>COMMUNITY DAY DOCK DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
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<p>SHEET 14 OF 31</p>	<p>DDC PN: 04.04519E</p>	<p>SCALE: 1" = 30'</p>	<p>DDC</p>
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<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	<p>Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</p>
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**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,807 CY.
3. TIDE DATUM BASED ON NGVD29

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>COMMUNITY DAY DOCK DREDGE AREA PROFILE VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING          COUNTY: HORRY          STATE: SOUTH CAROLINA</p>
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SHEET 15 OF 31

DDC PN: 04.04519E

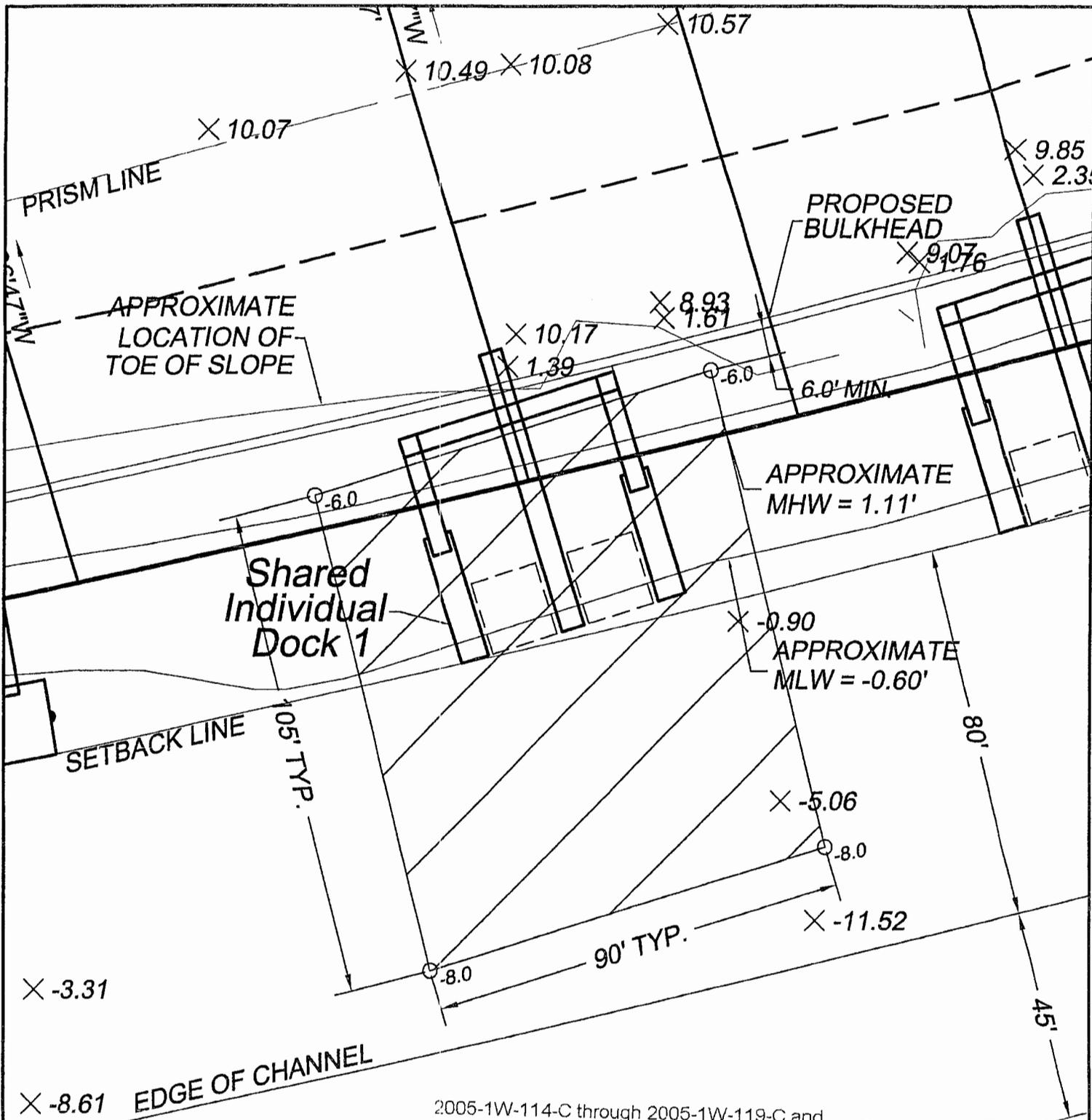
SCALE: 1" = 50' H  
 1" = 10' V



ORIGINAL DATE: NOVEMBER 30, 2004  
 REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

Consulting Engineers, Surveyors, Planners, Landscape Architects & Environmentalists  
 1298 Professional Dr., Myrtle Beach, SC 29577  
 Phone: (843) 692-3200 Fax: (843) 692-3210



2005-1W-114-C through 2005-1W-119-C and

**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 963 CY.
3. TIDE DATUM BASED ON NGVD29

**LEGEND:**

 AREA TO BE DREDGED

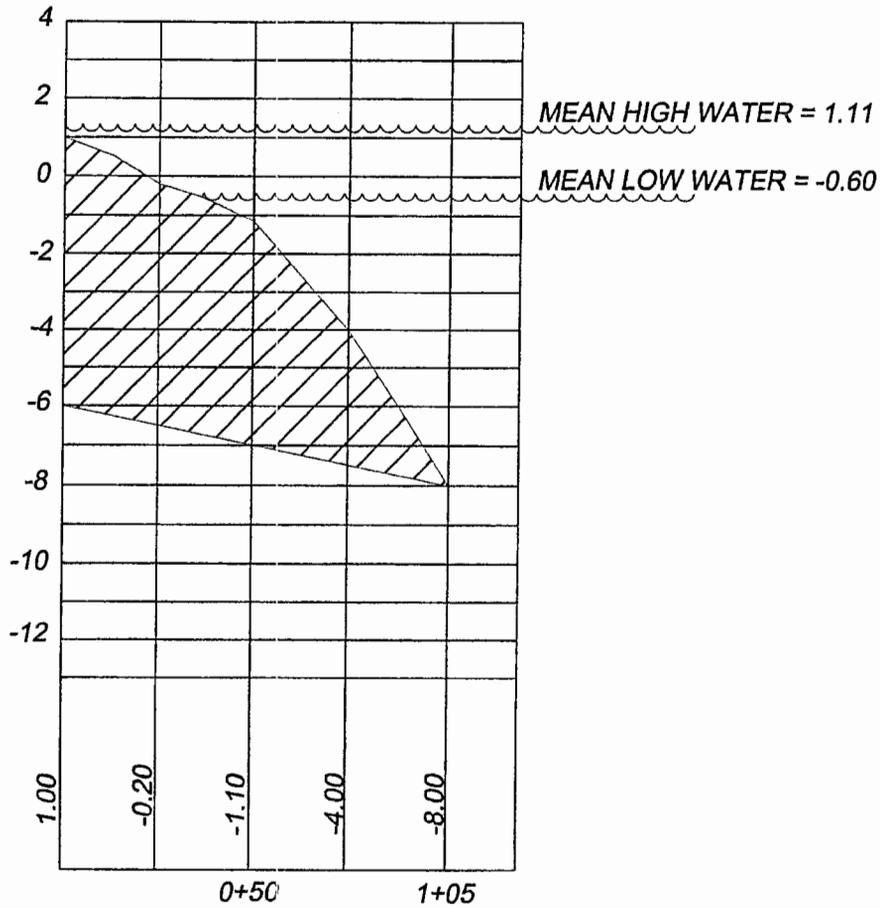
**AIWW**

USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 1 DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING          COUNTY: HORRY          STATE: SOUTH CAROLINA</p>
<p>SHEET 16 OF 31</p>	<p>DDC PN: 04.04519E</p>	<p>SCALE: 1" = 30'</p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004          REVISED DATE: FEBRUARY 2, 2005</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	

**DDC**

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 1298 Professional Dr., Myrtle Beach, SC 29577  
 Phone: (843) 692-3200 Fax: (843) 692-3210



**NOTES:**

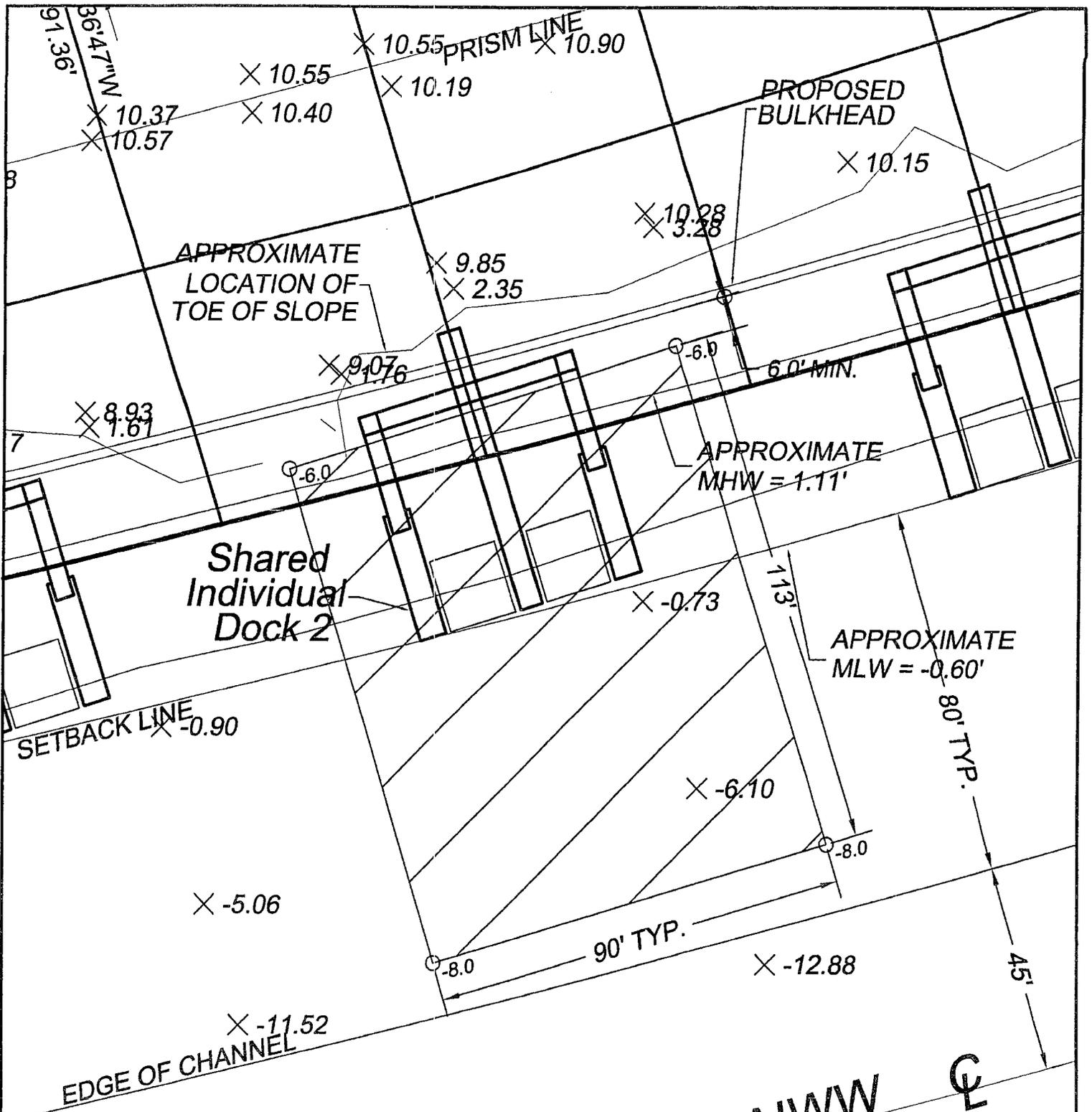
1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 963 CY.
3. TIDE DATUM BASED ON NGVD29

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 1 DREDGE AREA PROFILE VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
<p>SHEET 17 OF 31</p>	<p>DDC PN: 04.04519E    SCALE: 1" = 50' H 1" = 10' V</p>	<p><b>DDC</b> Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	

C:\WORK\2005\1W-114-C\1W-114-C-17.DWG



**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,375 CY.
3. TIDE DATUM BASED ON NGVD29

**AIWW**

**LEGEND:**

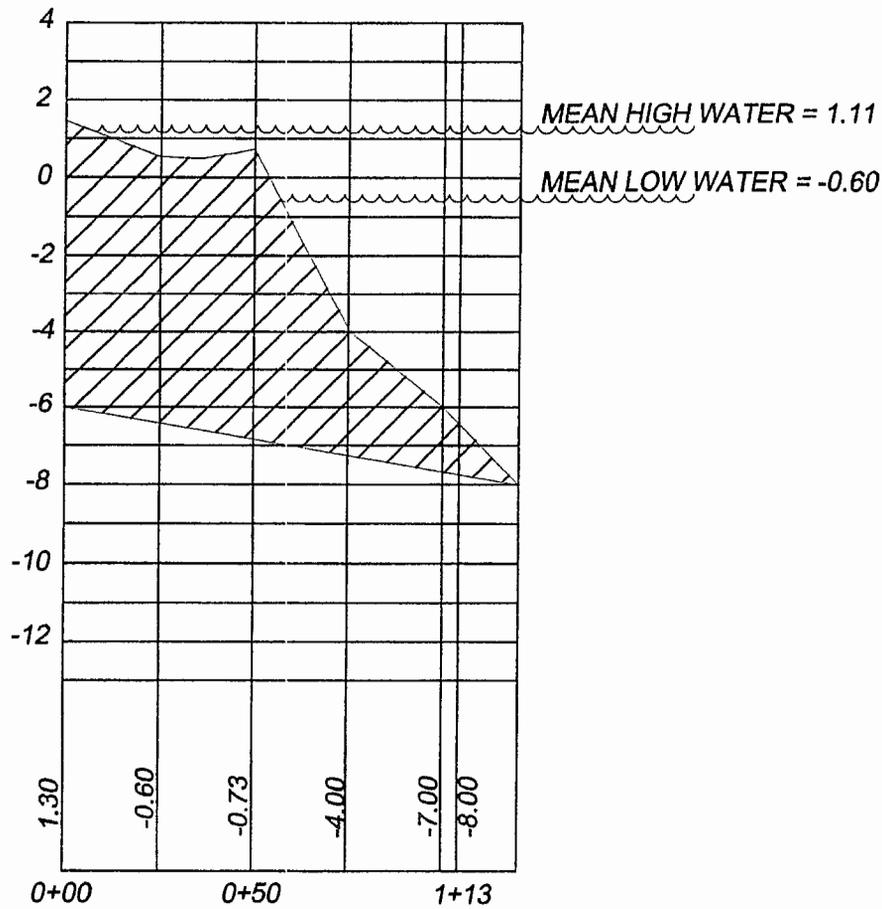
AREA TO BE DREDGED

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE DOCK, DREDGE & BULKHEAD PERMIT	SHARED INDIVIDUAL DOCK 2 DREDGE AREA PLAN VIEW	PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA
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SHEET 18 OF 31	DDC PN: 04.04519E	SCALE: 1" = 30'	
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ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005	APPLICANT: ARROWHEAD GRANDE, LLC	Consulting Engineers, Surveyors, Planners, Landscape Architects & Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210
--------------------------------------------------------------------	----------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



**NOTES:**

- 1. BATHYMETRY SURVEY DONE 11/04
- 2. ESTIMATED DREDGE SPOIL = 1,375 CY.
- 3. TIDE DATUM BASED ON NGVD29

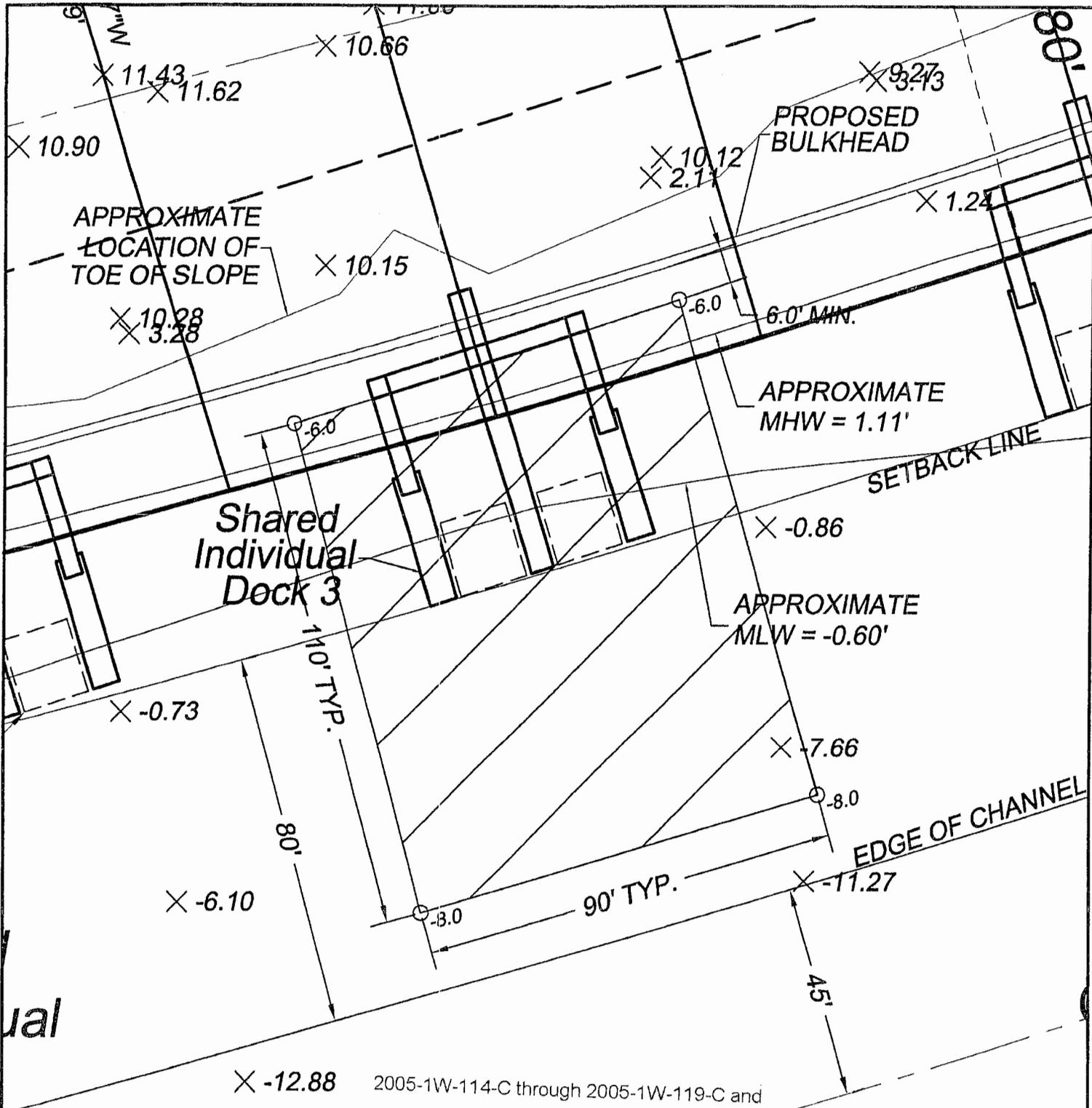
2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

ARROWHEAD GRANDE DOCK, DREDGE & BULKHEAD PERMIT	SHARED INDIVIDUAL DOCK 2 DREDGE AREA PROFILE VIEW	PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA
----------------------------------------------------------	------------------------------------------------------------	---------------------------------------------------------------------------------------------

SHEET 19 OF 31	DDC PN: 04.04519E	SCALE: 1" = 50' H 1" = 10' V	<b>DDG</b> 
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ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005	APPLICANT: ARROWHEAD GRANDE, LLC	Consulting Engineers, Surveyors, Planners, Landscape Architects & Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210
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**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,302CY.
3. TIDE DATUM BASED ON NGVD29

**AIWW**

**LEGEND:**  
 AREA TO BE DREDGED

USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 3 DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING          COUNTY: HORRY          STATE: SOUTH CAROLINA</p>
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SHEET 20 OF 31

DDC PN: 04.04519E      SCALE: NTS

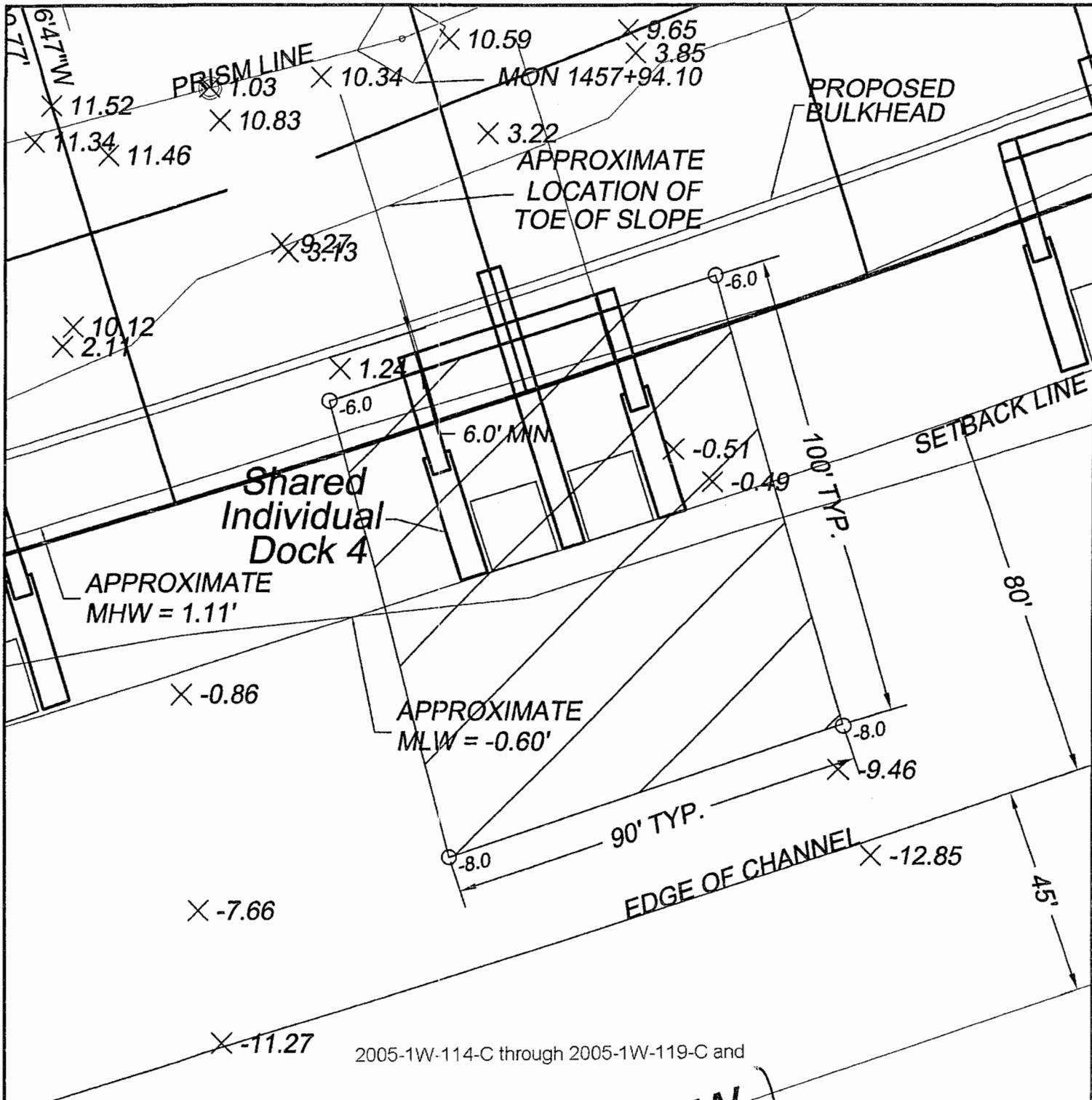
**DDC**  


ORIGINAL DATE: NOVEMBER 30, 2004  
 REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

Consulting Engineers, Surveyors, Planners,  
 Landscape Architects & Environmentalists  
 1298 Professional Dr., Myrtle Beach, SC 29577  
 Phone: (843) 692-3200 Fax: (843) 692-3210





**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,167 CY.
3. TIDE DATUM BASED ON NGVD29

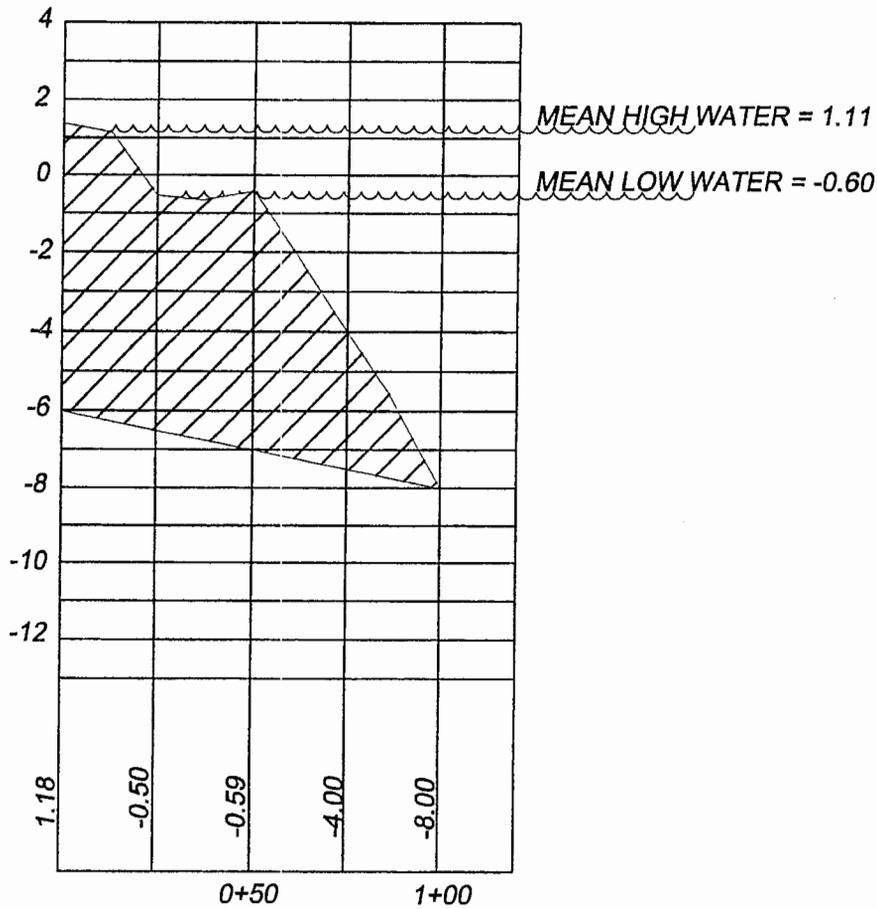
**LEGEND:**

 AREA TO BE DREDGED

USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 4 DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
<p>SHEET 22 OF 31</p>	<p>DDC PN: 04.04519E      SCALE: 1" = 30'</p>	<p></p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	<p>Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</p>

ARROWHEAD GRANDE DOCK, DREDGE & BULKHEAD PERMIT, SHEET 22 OF 31, DATE: 02/02/05, 10:30 AM EST



**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,167 CY.
3. TIDE DATUM BASED ON NGVD29

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

**ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT**

**SHARED INDIVIDUAL  
DOCK 4  
DREDGE AREA  
PROFILE VIEW**

**PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA**

SHEET 23 OF 31

DDC PN: 04.04519E

SCALE: 1" = 50' H  
1" = 10' V

**DDG**

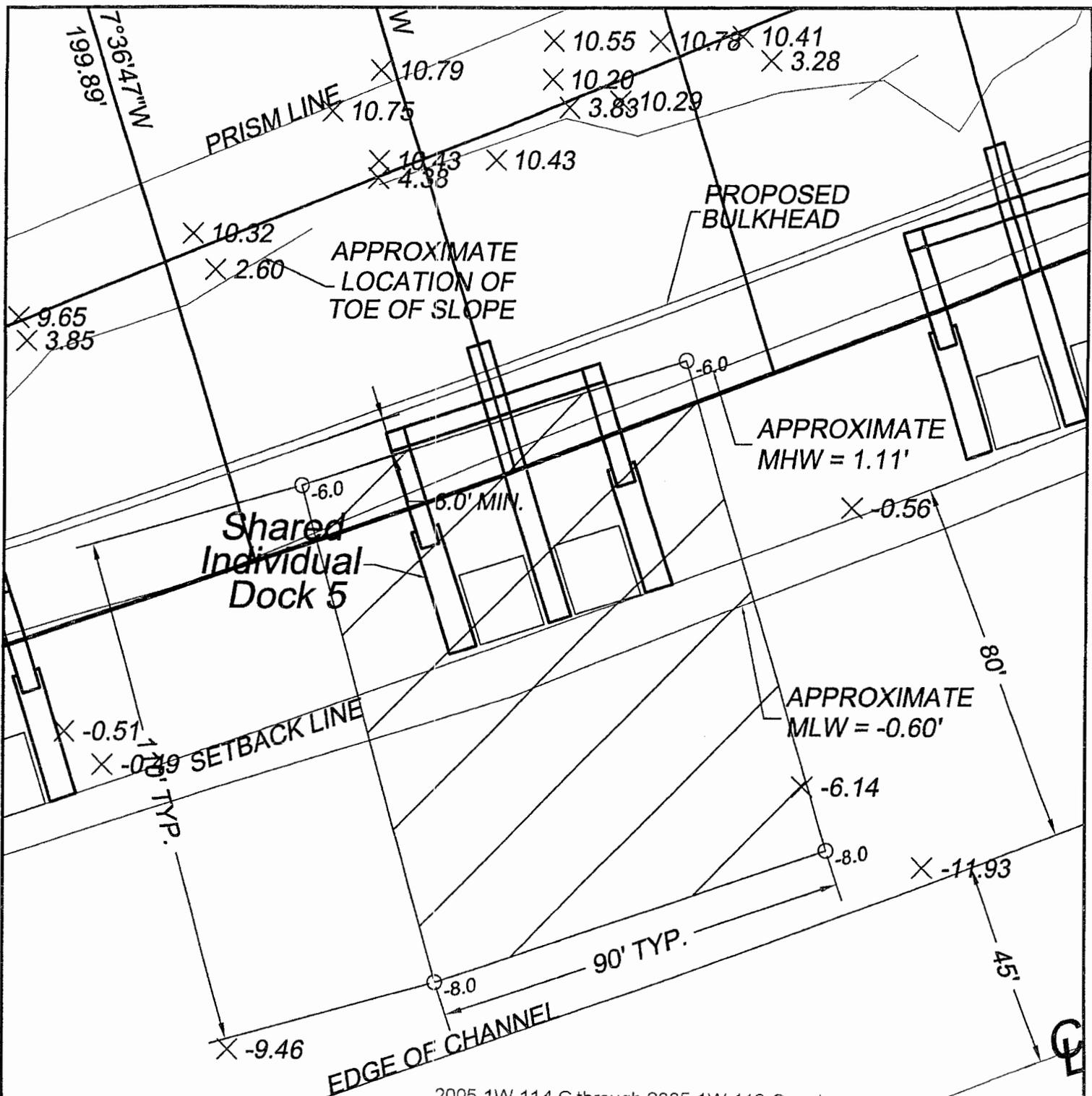
ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

**APPLICANT: ARROWHEAD GRANDE, LLC**



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Landscape Architects & Environmentalists  
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ARROWHEAD GRANDE DOCK.dwg 10/20/04 1:14 PM EET



2005-1W-114-C through 2005-1W-119-C and

**NOTES:**

- 1. BATHYMETRY SURVEY DONE 11/04
- 2. ESTIMATED DREDGE SPOIL = 1,357 CY.
- 3. TIDE DATUM BASED ON NGVD29

**LEGEND:**

AREA TO BE DREDGED

C AIIWW

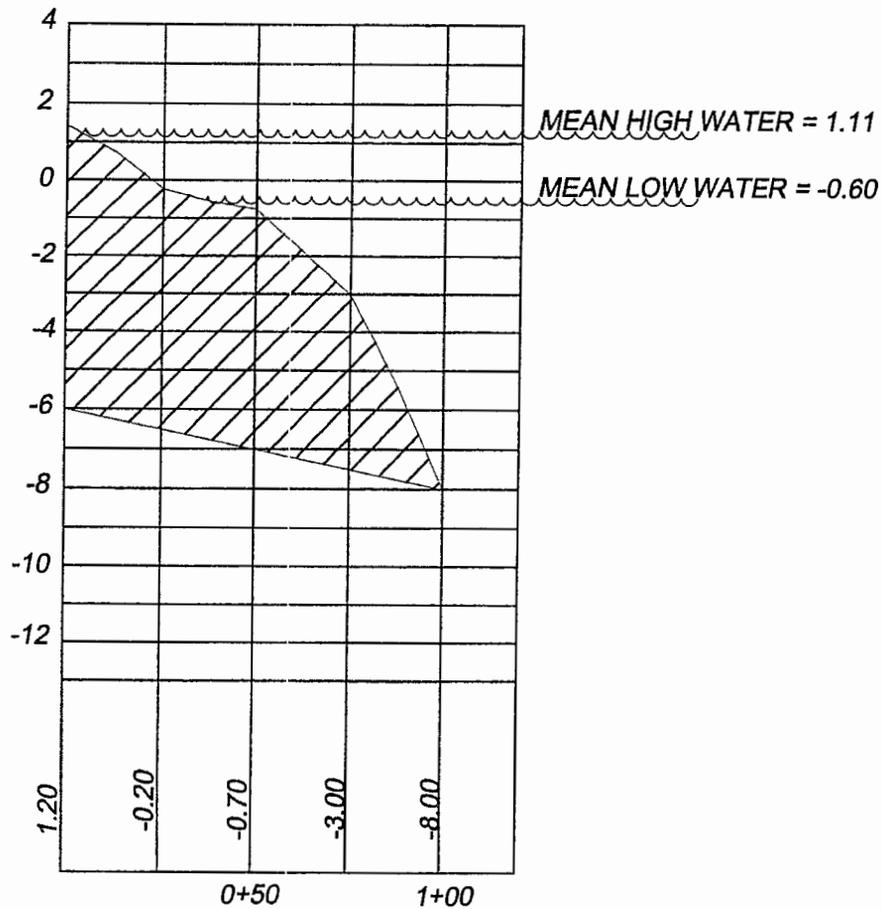
USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 5 DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: Horry STATE: SOUTH CAROLINA</p>
------------------------------------------------------------	-------------------------------------------------------	---------------------------------------------------------------------------------------------------

SHEET 24 OF 31	DDC PN: 04.04519E	SCALE: 1" = 30'
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ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005	<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	 <small>Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</small>
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**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,357 CY.
3. TIDE DATUM BASED ON NGVD29

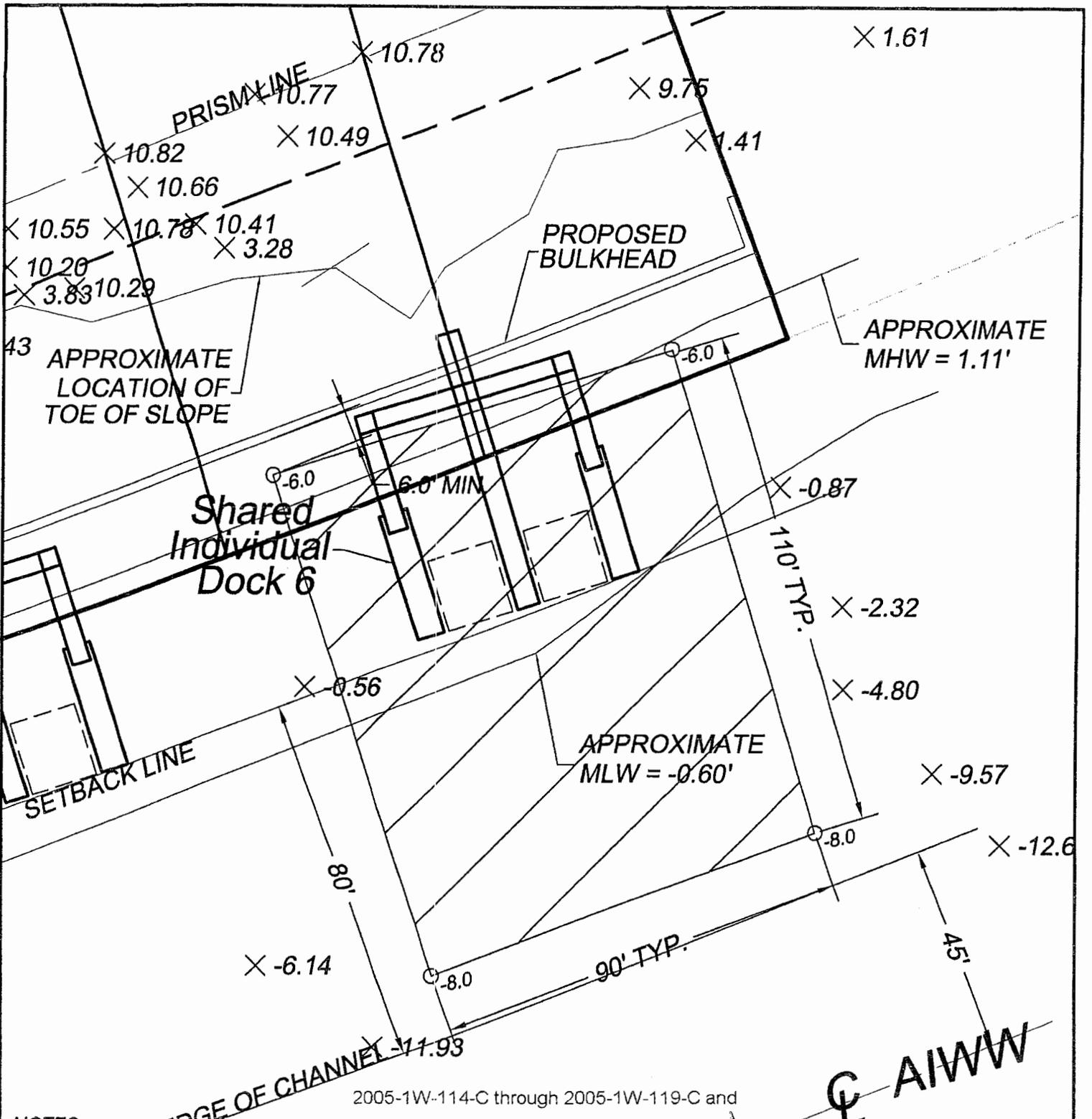
2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

<p align="center"><b>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</b></p>	<p align="center"><b>SHARED INDIVIDUAL DOCK 5 DREDGE AREA PROFILE VIEW</b></p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
<p>SHEET 25 OF 31</p>	<p>DDC PN. 04.04519E</p>	<p>SCALE: 1" = 50' H 1" = 10' V</p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>	<p align="center">APPLICANT: ARROWHEAD GRANDE, LLC</p>	



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1298 Professional Dr., Myrtle Beach, SC 29577  
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**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,173 CY.
3. TIDE DATUM BASED ON NGVD29

2005-1W-114-C through 2005-1W-119-C and

**LEGEND:**

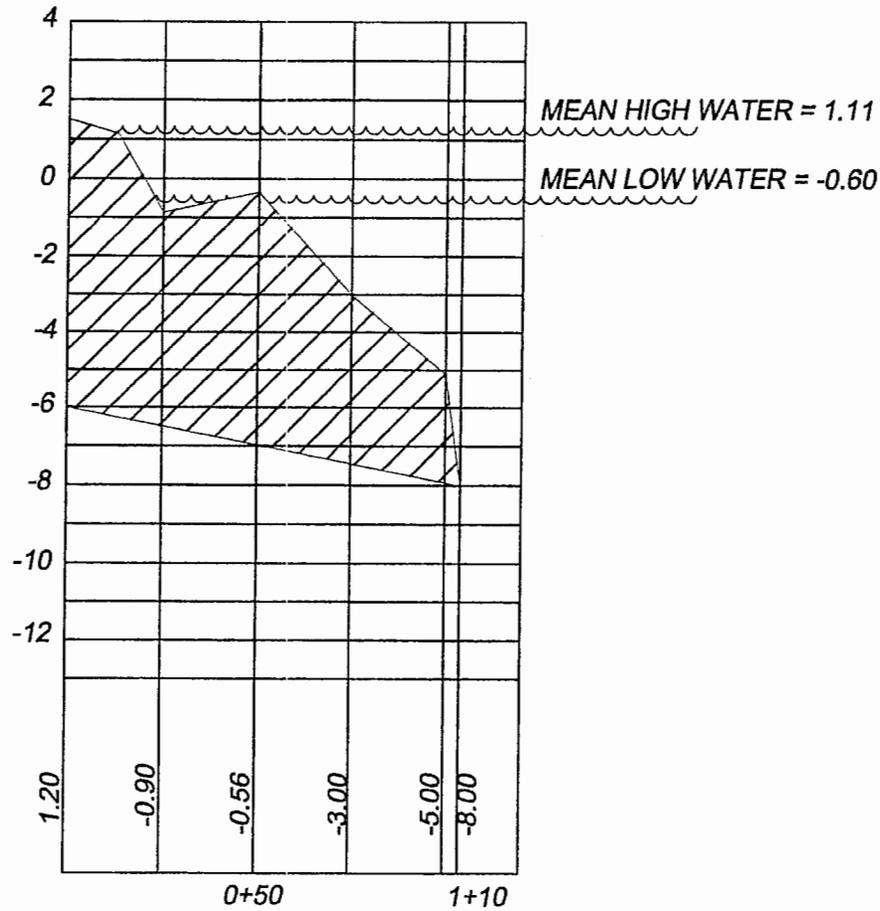
 AREA TO BE DREDGED

USACOE PN: 2004-1W-396

<p>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</p>	<p>SHARED INDIVIDUAL DOCK 6 DREDGE AREA PLAN VIEW</p>	<p>PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA</p>
------------------------------------------------------------	-------------------------------------------------------	---------------------------------------------------------------------------------------------------

<p>SHEET 26 OF 31</p>	<p>DDC PN: 04.04519E</p>	<p>SCALE: 1" = 30'</p>	<p> Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210</p>
<p>ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005</p>		<p>APPLICANT: ARROWHEAD GRANDE, LLC</p>	

PLAN AND PHASE OPERATIONS TO DOCK AND BULKHEAD PERMIT



**NOTES:**

1. BATHYMETRY SURVEY DONE 11/04
2. ESTIMATED DREDGE SPOIL = 1,173 CY.
3. TIDE DATUM BASED ON NGVD29

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

**ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT**

**SHARED INDIVIDUAL  
DOCK 6  
DREDGE AREA  
PROFILE VIEW**

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 27 OF 31

DDC PN: 04.04519E

SCALE: 1" = 50' H  
1" = 10' V

ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

**DDC**



Consulting Engineers, Surveyors, Planners,  
Landscape Architects & Environmentalists  
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## DREDGE SPOIL SUMMARY

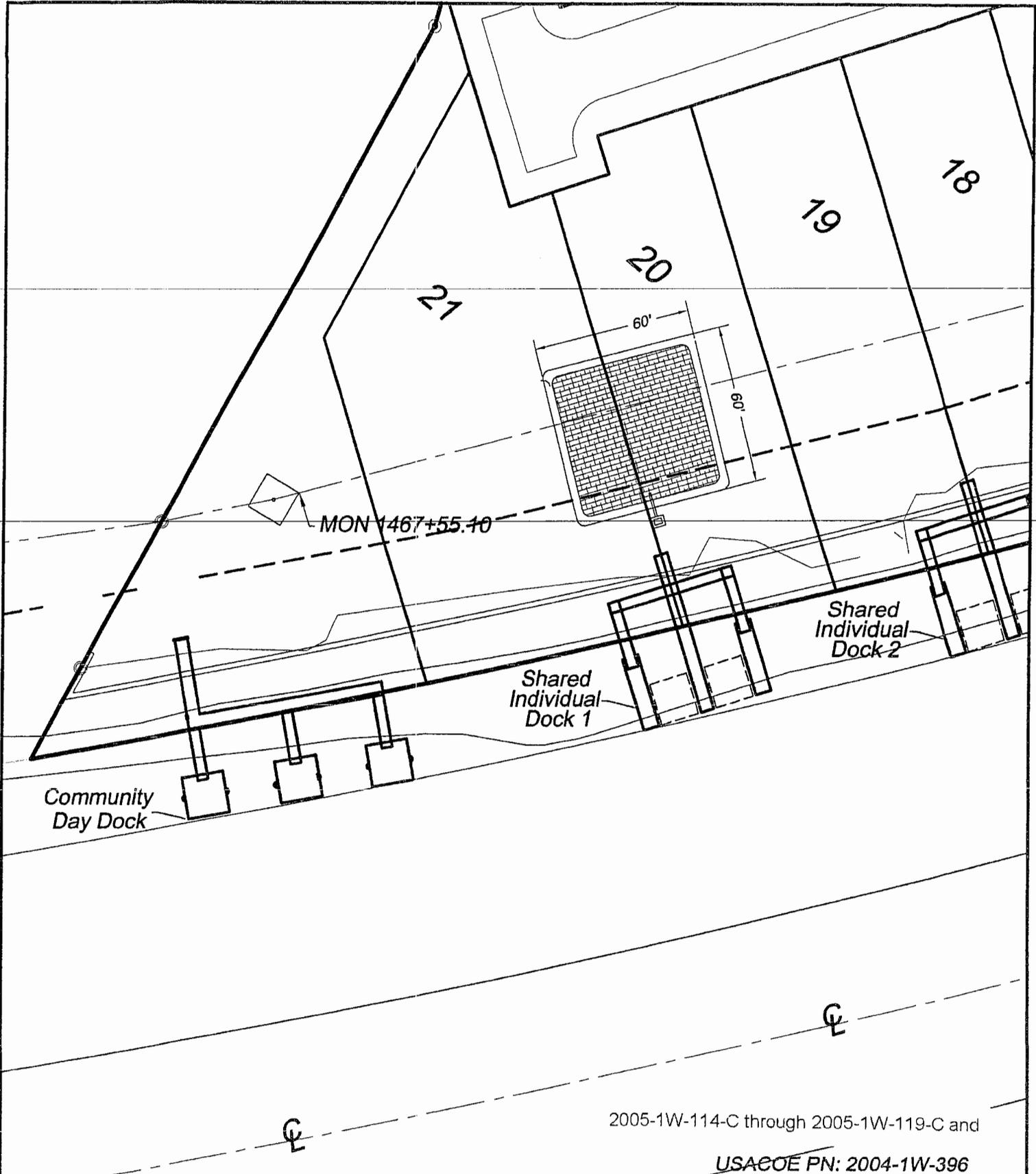
DOCK NUMBER	DREDGE AREA	DREDGE SPOIL QUANTITY
CDD	12,350 S.F.	1,807 C.Y.
SID-1	9,450 S.F.	963 C.Y.
SID-2	10,170 S.F.	1,375 C.Y.
SID-3	9,900 S.F.	1,302 C.Y.
SID-4	9,000 S.F.	1,167 C.Y.
SID-5	9,900 S.F.	1,357 C.Y.
SID-6	9,900 S.F.	1,173 C.Y.
<b>TOTAL</b>	<b>70,670 S.F.</b>	<b>9,144 C.Y.</b>

2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

<b>ARROWHEAD GRANDE DOCK, DREDGE &amp; BULKHEAD PERMIT</b>	<b>DREDGE SPOIL SUMMARY</b>	PURPOSE: RECREATION AND TEMPORARY BOAT MOORING COUNTY: HORRY STATE: SOUTH CAROLINA
SHEET 28 OF 31	DDC PN: 04.04519E	SCALE: 1" = 50'
ORIGINAL DATE: NOVEMBER 30, 2004 REVISED DATE: FEBRUARY 2, 2005	APPLICANT: <b>ARROWHEAD GRANDE, LLC</b>	
		 <p style="font-size: small;">                     Consulting Engineers, Surveyors, Planners, Landscape Architects &amp; Environmentalists 1298 Professional Dr., Myrtle Beach, SC 29577 Phone: (843) 692-3200 Fax: (843) 692-3210                 </p>

I:\Projects\2005\1W-114-C through 119-C\Drawings\28.dwg, 10/20/04, 1:10, 11/16/04 (BT)



2005-1W-114-C through 2005-1W-119-C and

**USACOE PN: 2004-1W-396**

**ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT**

**PLAN VIEW  
TEMPORARY SPOIL  
STORAGE AREA**

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 29 OF 31

DDC PN: 04.04519E

SCALE: 1" = 50'

**DDC**

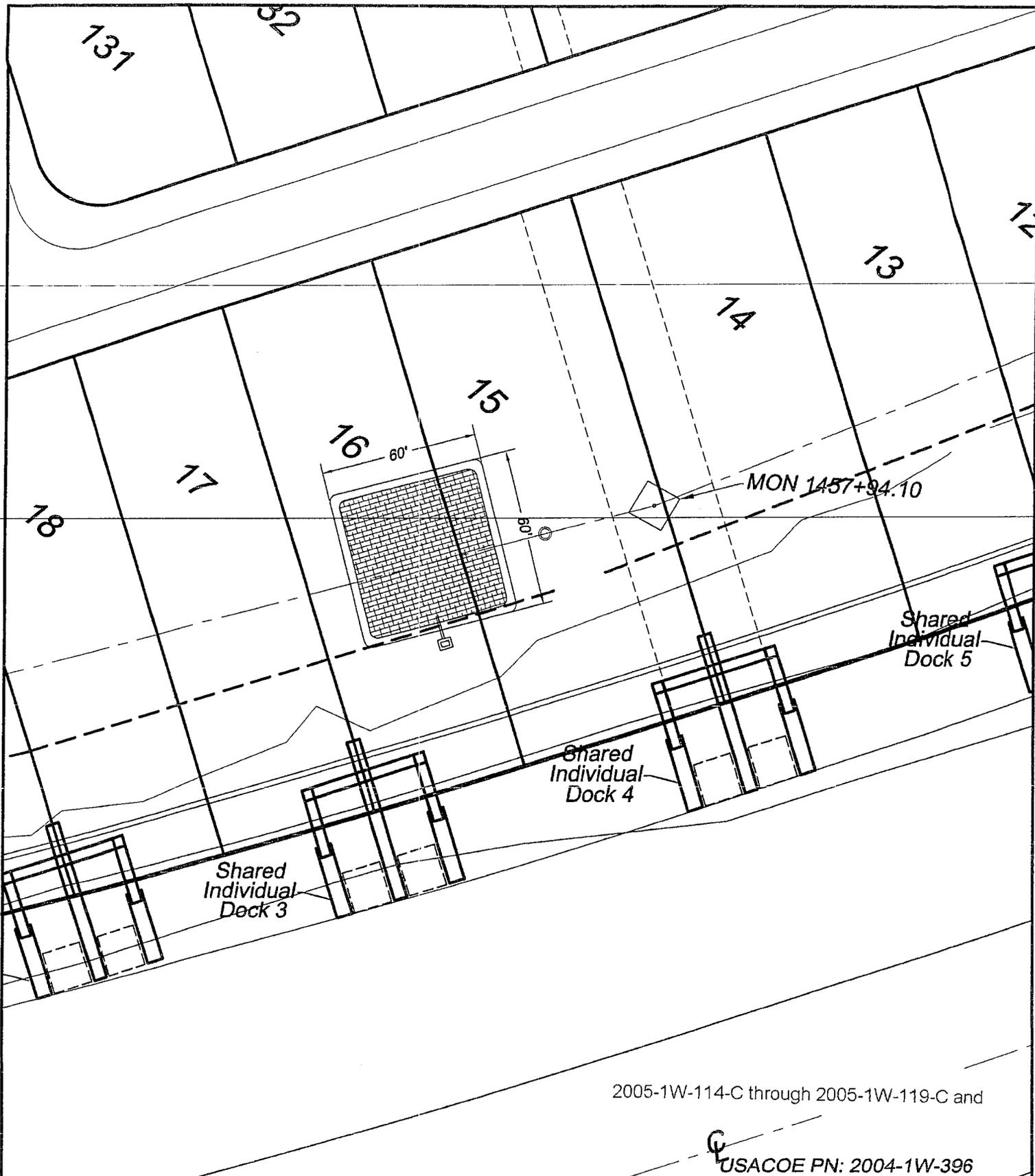


Consulting Engineers, Surveyors, Planners,  
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ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC

2005-1W-114-C THROUGH 2005-1W-119-C AND USACOE PN: 2004-1W-396



ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

PLAN VIEW  
TEMPORARY SPOIL  
STORAGE AREA

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 30 OF 31

DDC PN: 04.04519E

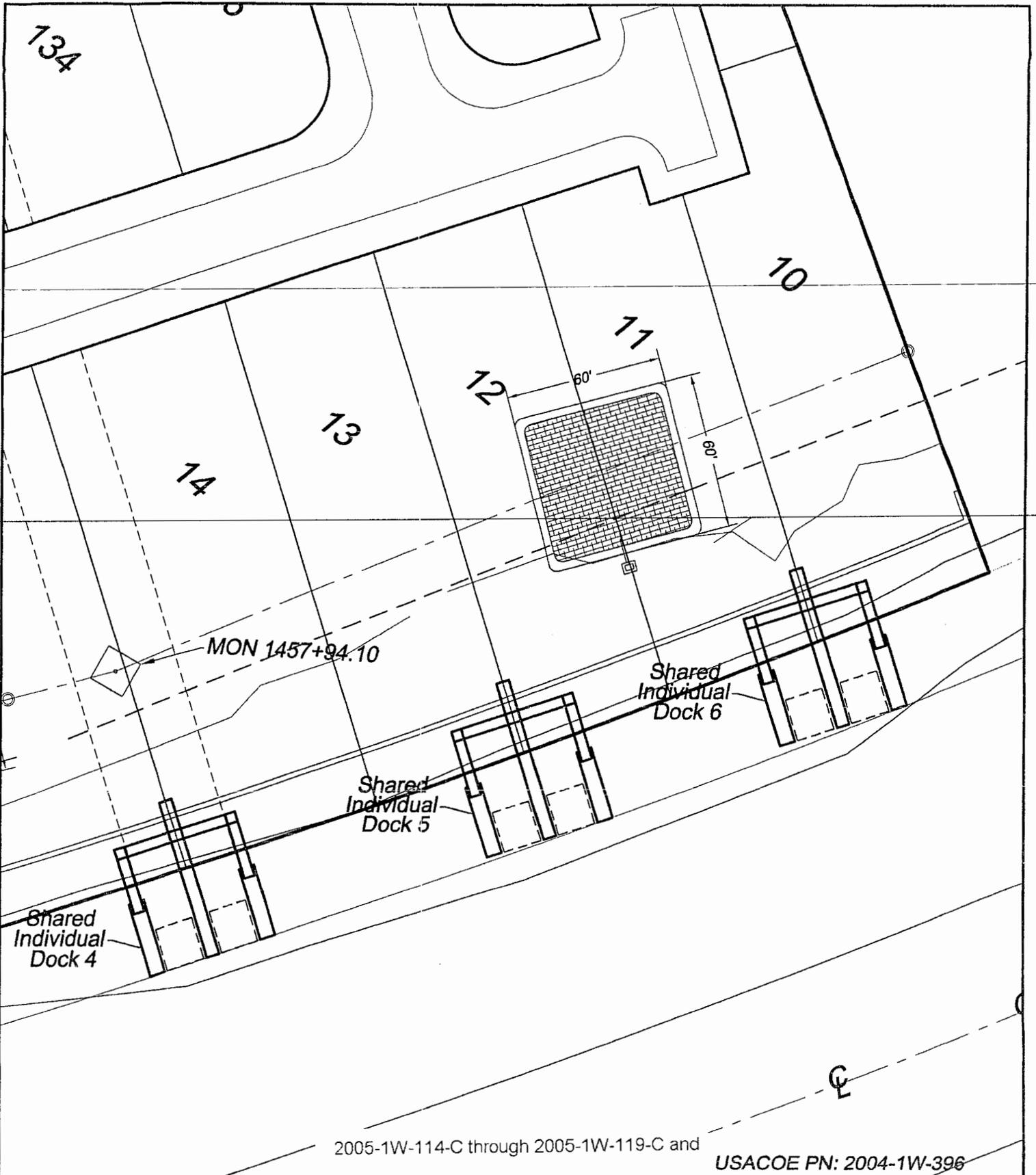
SCALE: 1" = 50'



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ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC



2005-1W-114-C through 2005-1W-119-C and

USACOE PN: 2004-1W-396

ARROWHEAD GRANDE  
DOCK, DREDGE  
&  
BULKHEAD PERMIT

PLAN VIEW  
TEMPORARY SPOIL  
STORAGE AREA

PURPOSE: RECREATION AND  
TEMPORARY BOAT MOORING  
COUNTY: HORRY  
STATE: SOUTH CAROLINA

SHEET 31 OF 31

DDC PN: 04.04519E

SCALE: 1" = 50'

ORIGINAL DATE: NOVEMBER 30, 2004  
REVISED DATE: FEBRUARY 2, 2005

APPLICANT: ARROWHEAD GRANDE, LLC



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