AGENDA
MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

DATE: **July 26, 2018**

TIME: **Executive Closed Session – 6:00 PM**
Regular Session – 7:00 PM

PLACE: **Woodley Island Marina Meeting Room**

The Meeting Room is wheelchair accessible. Accommodations and access to Harbor District meetings for people with other handicaps must be requested of the Director of Administrative Services at 443-0801 at least 24 hours in advance of the meeting.

1. Call to Order at 6:00 PM

Move to Executive Closed Session pursuant to the provisions of the California Government Code Sections 54956.8 (Conference with Real Property Negotiator) and 54957(b)(1) (Public Employee Performance Evaluation).

a. CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential acquisition of real property in King Salmon, Humboldt County, with Assessor's Parcel Numbers, 305-162-012, 305-162-004 California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Paul Brisso, District Counsel. Negotiating party: Gary Mooslin. Under negotiation: price and payment terms.

b. CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential acquisition of real property in King Salmon, Humboldt County, with Assessor's Parcel Numbers, 305-162-010 California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Paul Brisso, District Counsel. Negotiating party: Humboldt County. Under negotiation: price and payment terms.

c. PUBLIC EMPLOYEE PERFORMANCE EVALUATION AND EMPLOYMENT CONTRACT RENEWAL pursuant to Government Code section 54957(b)(1).
    1. Title: Director of Harbor Operations and Bar Pilot- Tim Petrusha
    2. Title: Director of Operations and Facilities Maintenance- Alan Bobillot

d. CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential Right of Way acquisition through APN: 108-171-023 and 108-171-023R and sublease of District's lease interest by District under lease between the District and Mario's Marina LLC dated April 1, 2016 for the real property commonly known as Mario's Marina in Shelter Cove, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Paul Brisso, District Counsel. Negotiating party: Mario Marina LLC, Shelter Cove, CA. Under negotiation: price and payment terms.

2. Call to Order Regular Session at 7:00 P.M. and Roll Call

3. Pledge of Allegiance

4. Report on Executive Closed Session

5. Public Comment

Note: This portion of the Agenda allows the public to speak to the Board on the various issues not itemized on this Agenda. A member of the public may also request that a matter appearing on the Consent Calendar be pulled and discussed separately. Pursuant to the Brown Act, the Board may not take action on any item that does not appear on the Agenda. Each speaker is limited to speak for a period of three (3) minutes regarding each item on the Agenda. Each speaker is limited to speak for a period of three (3) minutes during the PUBLIC COMMENT portion of the Agenda regarding items of special interest to the public not appearing on the Agenda that are within the subject matter jurisdiction of the Board of Commissioners. The three (3) minute time limit may not be transferred to other speakers. The three (3) minute time limit for each speaker may be extended by the President of the Board of Commissioners or the Presiding Member of the Board of Commissioners at the regular meeting of the District. The three (3) minute time limit for each speaker may be enforced by the President of the Board of Commissioners or the Presiding Member of the Board of Commissioners at the regular meeting of the District.

6. Consent Calendar

a) Consideration of approval of minutes for April 26, 2018
b) Consideration of approval of minutes for May 10, 2018
c) Consideration of approval of minutes for May 24, 2018
d) Consideration of Approval of Permit 2016-08 Renewal for sediment sampling adjacent to PG&E's Humboldt Bay Power Plant.

7. Communications and Reports

a) Staff Reports
b) District Counsel, District Planner, District Engineer and District Treasurer Reports
c) Executive Director's Report
d) Commissioner's Reports
e) Standing/Ad Hoc Committee Reports

8. Unfinished Business –

a) Consideration of Resolution 2018-04 Adopting Fiscal Year 2018-2019 Budget and Goals

Summary: This budget represents the Humboldt Bay Harbor, Recreation and Conservation District's (District) financial plan for the upcoming fiscal year. The Board held a series of regular and special meetings where they reviewed the District's major properties and budget categories previous and projected income, expenditures, and goals. The Board adopted a preliminary budget on June 14, 2018 and noticed their intent to adopt this final budget pursuant to California Harbors and Navigation Section 6093.1.

b) Authorize Staff to Release of a Request for Proposal to Dredge Woodley Island Marina and Fields Landing Boat Yard and Other Actions Required to Finance the Proposed Multi-year Dredging Program.

Summary**: A SUPPLEMENTAL AGENDA PACKET WILL BE AVAILABLE BY 5:00 PM ON MONDAY JULY, 23, 2018.**

9. New Business

a) Consideration of contract renewal with Alan Bobillot, Director of Operations and Facilities Maintenance.
b) Consideration of contract renewal with Tim Petrusha, Director of Harbor Operations and Bar Pilot.
c) Consideration of appointment of Labor Relations Committee.

Summary: As per Section 2.03 of the Collective Bargaining Agreement with the International Longshore and Warehouse Union Local 14, Unit A, a Labor Relations Committee is composed of two members of the District Harbor Commission and the CEO and two members of the Unions Employee Liaison Committee. The Union Liaison Committee has requested a meeting to initiate renegotiation discussions.

10. Administrative and Emergency Permits

a) Administrative Permit A-2018-01 Schneider Dock Industrial Park - Maintenance Dredging

Summary: Maintenance dredging is proposed adjacent to the Schneider Dock to restore and maintain sufficient draft depth for moorage and shipping operations to continue at the dock. The project proposes to remove a maximum of 5,000 cubic yards of sediment during the initial dredging event, and the total volume dredged under this project will not exceed 10,000 cubic yards. Dredging will be performed using an excavator and/or crane with a clamshell bucket positioned on a floating work barge. Material will be scooped from the bay floor and deposited in a scow situated adjacent to the work barge. Once full, the scow will be transported to the Humboldt Open Ocean Disposal Site (HOODS) where the dredged material will be deposited.

District staff determined that the project is exempt from CEQA pursuant to a Class 4 categorical exemption (Section 15304. (g) Minor Alterations to Land), which exempts maintenance dredging where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies. A Notice of Exemption will be filed with the County.

b) Administrative Permit A-2018-02 Woodley Island Marina and Fields Landing Maintenance Dredging

Summary: HBHRCD is proposing regular maintenance dredging within Humboldt Bay at Woodley Island Marina (WIM) and Fields Landing Boat Yard Travel Lift. Permit coverage is being requested for a total volume of 300,000

cubic yards (cy) over ten years at WIM and up to 25,120 cy over ten years at Fields Landing. Dredging will be performed using a crane and/or excavator with a closed clamshell bucket. Material will be scooped from the bay floor and deposited in a scow and will be transported to the Humboldt Open Ocean Disposal Site (HOODS) where the dredged material will be deposited.

District staff determined that the project is exempt from CEQA pursuant to a Class 4 categorical exemption (Section 15304. (g) Minor Alterations to Land), which exempts maintenance dredging where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies. A Notice of Exemption will be filed with the County.

11. Adjournment

DRAFT MINUTES
REGULAR MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

April 26, 2018

The Humboldt Bay Harbor, Recreation, and Conservation District met in regular session on the above date, 6:00 P.M. Closed Session, 7:00 P.M. Open Session, at the Woodley Island Marina Meeting Room, 601 Startare Drive, Eureka, CA 95501.

1) CLOSED SESSION - 6:00 P.M**.**
The Commission met in closed session to discuss the following items:

a) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential sublease of District's lease interest by District under lease between the District and Mario's Marina LLC dated April 1, 2016 for the real property commonly known as Mario's Marina in Shelter Cove, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Paul Brisso, District Counsel. Negotiating party: Tony Miller, Shelter Cove, CA. Under negotiation: price and payment terms.

b) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential new lease of District property at Fairhaven, Humboldt County, California that is subject to the current lease of June 25, 1965 between State of California as lessor and Crown Simpson Pulp Mill Co., currently occupied by successor tenant Sequoia Investments X,LLC., pursuant to California Government Code section 54956.8. District negotiators: Larry Oetker, Executive Director and Paul Brisso, District Counsel. Negotiating party: Sequoia X, LLC. Under negotiation: price and other consideration for lease and payment terms.

2) ADJOURN EXECUTIVE CLOSED SESSION

3) OPEN SESSION – 7:00 P.M.
ROLL CALL:
PRESENT: MARKS
DOSS
KULLMANN
HIGGINS

ABSENT: DALE
QUORUM: Yes

4) PLEDGE OF ALLEGIANCE

5) REPORT ON EXECUTIVE CLOSED SESSION
a. No action report out on.
b. No action report out on.

6) PUBLIC COMMENT: The following individuals addressed the Commission regarding subject matters not on this meeting's agenda: No members of the public commented.

7) CONSENT CALENDAR:
a) Approval of Meeting Minutes for January 25, 2018 Regular Board Meeting
b) Approval of Meeting Minutes for February 22, 2018 Regular Board Meeting
c) Authorize purchase & installation of 12' wide by 14' tall cylinder type roll up door at RMT II for $ 13,196.78
d) Approval of Permit and Agreement to Operate a Charter Service Business with Steve Helton dba Judah Paul Sport Fishing.

I. COMMISSIONER HIGGINS MOVED TO APPROVE OF THE CONSENT CALENDAR. COMMISSIONER DOSS SECONDED.
II. Chair Marks then opened up public comment on the item. No members of the public commented.
III. Chair Marks then moved the discussion back to the Commission.
VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
Ayes: MARKS, KULLMANN, HIGGINS, DOSS
Noes: NONE
Absent: DALE
Abstain: NONE

COMMISSIONER KULLMANN MOVED TO MOVE THE PRESENTATION BY JOHN HUMMER, U.S MARITIME ADMINISTRATION, TO BEFORE THE COMMUNICATIONS AND REPORTS. COMMISSIONER HIGGINS SECONDED THE MOTION.

VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
Ayes: MARKS, KULLMANN, HIGGINS, DOSS
Noes: NONE
Absent: DALE
Abstain: NONE

8) COMMUNICATIONS AND REPORTS:

a. U.S. Maritime Administration Presentation
b. Staff Reports
   - Staff presented recent staff activities and projects.
c. District Counsel, District Planner, District Treasurer and District Engineer Reports
   - Staff presented recent staff activities and projects.
d. Executive Director Report:
   - Executive Director Larry Oetker presented Executive Director Report.
e. Commissioner Reports
f. HSU Student Project Presentation – Samoa Bayfront Properties Planning Project

9) UNFINISHED BUSINESS:

a. FY 2018-19 DISTRICT BUDGET PREPARATION – DRAFT GOALS REVENUES AND EXPENDITURES BY PROGRAMMATIC ACTIVITY.
   I. Executive Director Larry Oetker presented the item.
   II. The Commission discussed the item.
   III. Chair Marks then opened up public comment on the item: Public commenters included: Susan Penn.
   IV. As an informational item, no action was taken regarding this matter by the Commission.

b. FAIRHAVEN TIDAL PROPERTY LEASE WITH SEQUOIA INVESTMENTS X, LLC.
   I. Paul Brisso, Legal Counsel presented the item.
   II. COMMISSIONER HIGGINS MOVED TO ENTER INTO NEW LEASE WITH SEQUOIA INVESTMENTS X, LLC FOR THE FAIRHAVEN TIDAL PROPERTY. COMMISSIONER KULLMANN SECONDED THE MOTION.
   III. Chair Marks then opened up public comment on the item: Public commenters included: Scott Frazier.
   IV. Chair Marks then moved the discussion back to the Commission.
   VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
   Ayes: MARKS, KULLMANN, DOSS, HIGGINS
   Noes: NONE
   Absent: DALE
   Abstain: NONE

10) NEW BUSINESS:

a. CONSIDERATION OF EXTENSION FOR PERMIT NO. 14-05 FOR HUMBOLDT BAY REGIONAL INVASIVE SPARTINA ERADICATION AND NATIVE SALT MARSH RESTORATION.
   I. COMMISSIONER HIGGINS MOVED TO APPROVE PERMIT NO. 14-05 EXTENSION FOR HUMBOLDT BAY REGIONAL INVASIVE SPARTINA ERADICATION AND NATIVE SALT MARSH RESTORATION THROUGH DECEMBER 18, 2024. COMMISSIONER KULLMANN SECONDED THE MOTION.
   II. District Planner George Williamson presented the item.
   III. The Commission discussed the item.
   IV. Chair Marks then opened up public comment on the item: Public commenters included: No members of the public commented.
   V. Chair Marks then moved the discussion back to the Commission.
   VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
   Ayes: MARKS, KULLMANN, DOSS, HIGGINS
   Noes: NONE
   Absent: DALE
   Abstain: NONE

b. CONSIDERATION OF AGREEMENT WITH CHEVRON FOR REIMBURSEMENT OF SERVICES RELATED TO THE OPERATION AND MAINTENANCE OF THE HUMBOLDT BAY PHYSICAL OCEANOGRAPHIC REAL TIME SYSTEM (PORTS).
   I. Staff member Tim Petrusha and Executive Director Larry Oetker presented the item.
   II. The Commission discussed the item.
   III. COMMISSIONER KULLMANN MOVED TO APPROVE AGREEMENT WITH CHEVRON FOR REIMBURSEMENT OF SERVICES RELATED TO THE OPERATION AND MAINTENANCE OF THE HUMBOLDT BAY PHYSICAL OCEANOGRAPHIC REAL TIME SYSTEM (PORTS). COMMISSIONER HIGGINS SECONDED THE MOTION.
   IV. Chair Marks then opened up public comment on the item: Public commenters included: No members of the public commented.
   V. Chair Marks then moved the discussion back to the Commission.
   VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
   Ayes: MARKS, KULLMANN, DOSS, HIGGINS
   Noes: NONE
   Absent: DALE
   Abstain: NONE

c. AUTHORIZE EXECUTIVE DIRECTOR TO EXECUTE A CONTRACT WITH TRINITY VALLEY CONSULTING ENGINEERS INC. FOR PLOTTING AND MAPPING EXISTING FACILITIES AT RMT II.
   I. Executive Director Larry Oetker presented the item. The Commission discussed the item.
   II. COMMISSIONER HIGGINS MOVED TO AUTHORIZE THE EXECUTIVE DIRECTOR TO EXECUTE A CONTRACT WITH TRINITY VALLEY CONSULTING ENGINEERS INC. FOR PLOTTING AND MAPPING EXISTING FACILITIES AT RMT II. COMMISSIONER KULLMANN SECONDED THE MOTION.
   III. Chair Marks then opened up public comment on the item: Public commenters included: No members of the public commented on this item.
   IV. Chair Marks then moved the discussion back to the Commission.
   VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
   Ayes: MARKS, KULLMANN, DOSS, HIGGINS
   Noes: NONE
   Absent: DALE
   Abstain: NONE

11) ADMINISTRATIVE AND EMERGENCY PERMITS: NONE.

12) ADJOUNRMENT

APPROVED BY

_____
Patrick Higgins
Secretary

RECORDED BY:

_____
George Williamson
District Planner

DRAFT MINUTES
SPECIAL MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

May 10, 2018

The Humboldt Bay Harbor, Recreation, and Conservation District met in regular session on the above date, 12:00 P.M. Open Session, at the Woodley Island Marina Meeting Room, 601 Startare Drive, Eureka, CA 95501.

1) OPEN SESSION – 12:00 P.M.

ROLL CALL:
PRESENT: MARKS
DALE
DOSS
KULLMANN (arrived at 12:15)

ABSENT: HIGGINS
QUORUM: Yes

2) PLEDGE OF ALLEGIANCE

3) PUBLIC COMMENT: The following individuals addressed the Commission regarding subject matters not on this meeting's agenda: No members of the public commented.

4) UNFINISHED BUSINESS:

a. FY 2018-19 DISTRICT BUDGET PREPARATION –draft goals revenues and expenditures by programmatic activity – Woodley Island Marina and Dredging
   I. Executive Director Larry Oetker presented the item.
   II. The Commission discussed the item.
   III. Chair Marks then opened up public comment on the item: Public commenters included: No members of the public commented.
   IV. As an informational item, no action was taken regarding this matter by the Commission.

5) ADJOUNRMENT

APPROVED BY

_____
Patrick Higgins
Secretary

RECORDED BY:

_____
George Williamson
District Planner

DRAFT MINUTES
REGULAR MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

May 24, 2018

The Humboldt Bay Harbor, Recreation, and Conservation District met in regular session on the above date, 7:00 P.M. Open Session, at the Woodley Island Marina Meeting Room, 601 Startare Drive, Eureka, CA 95501.

1) OPEN SESSION – 7:00 P.M.

ROLL CALL:
PRESENT: MARKS
DALE
DOSS
HIGGINS
KULLMANN (arrived late, prior to Item 6a)

ABSENT: NONE
QUORUM: Yes

2) PLEDGE OF ALLEGIANCE

3) REPORT ON EXECUTIVE CLOSED SESSION
a. This item appeared on the agenda in error. No Closed Session occurred as a part of this meeting.

4) PUBLIC COMMENT: The following individuals addressed the Commission regarding subject matters not on this meeting's agenda: No members of the public commented.

5) CONSENT CALENDAR: NONE.

6) COMMUNICATIONS AND REPORTS:
a. Staff Reports
- **o** Staff presented recent staff activities and projects.

b. District Counsel, District Planner, District Treasurer and District Engineer Reports
- **o** Staff presented recent staff activities and projects.

c. Executive Director Report:
- **o** Executive Director Larry Oetker presented Executive Director Report.

d. Commissioner Reports
e. Standing/Ad Hoc Committee Reports

7) UNFINISHED BUSINESS:

a. FY 2018-19 DISTRICT BUDGET PREPARATION – draft goals revenues and expenditures by programmatic activity
I. Executive Director Larry Oetker presented the item.
II. The Commission discussed the item.
III. Chair Marks then opened up public comment on the item: Public commenters included: Bruce Silvey, Jenn Kalt, and Mike Wilson.
IV. As an informational item, no action was taken regarding this matter by the Commission.

8) NEW BUSINESS:
a. SENATE BILL 1029: GREAT REDWOOD TRAIL ACT
I. Commissioner Doss introduced the item.
II. The Commission discussed the item.
III. Chair Marks then opened up public comment on the item: Public commenters included: Bruce Silvey, Karen Underwood, Jenn Kalt, Larry Glass, Mike Wilson, and Korina Johnson.
IV. COMMISSIONER HIGGINS MOVED TO AUTHORIZE THE EXECUTIVE DIRECTOR TO WRITE A LETTER TO SENATOR MCGUIRE IN FAVOR OF SB 1029, WITH THE RESERVATION THAT THE SURFACE TRANSPORTATION BOARD TAKE PRIOR ACTION BEFORE THE DISSOLUTION OF THE NCRA, TO MAKE SURE THE RIGHTOF WAY IS INTACT FROM WILLITS TO SAMOA. COMMISSIONER DALE SECONDED THE MOTION.
V. Chair Marks then moved the discussion back to the Commission.
VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.
Ayes: MARKS, KULLMANN, DOSS, HIGGINS, DALE
Noes: NONE

Absent: NONE
Abstain: NONE

9) ADMINISTRATIVE AND EMERGENCY PERMITS: NONE.

10) ADJOUNRMENT

APPROVED BY

Patrick Higgins
Secretary

RECORDED BY:

George Williamson
District Planner

COMMISSIONERS
1st Division
Larry Doss
2nd Division
Greg Dale
3rd Division
Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

Humboldt Bay
Harbor, Recreation and Conservation District
(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members

FROM: Larry Oetker, Executive Director

DATE: July 26, 2018

TITLE: Consideration of Approval of Permit 2016-08 Renewal for sediment sampling adjacent to PG&E's Humboldt Bay Power Plant

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STAFF RECCOMENDATION: It is recommended that the Board: approve the permit renewal for an additional 12 months.

BACKGROUND: Pacific Gas & Electric Company (PG&E) is in possession of Harbor District Permit Number 2016-08 for Sediment Sampling along the Humboldt Bay shoreline adjacent to the Humboldt Bay Power Plant. This permit expired in December 2017. However, the project team was unable to complete the sampling required as part of the License Termination process associated with decommissioning of the nuclear power plant. Therefore, PG&E requests that the permit be reauthorized for 2018.

DISCUSSION: The Project Description and project materials for Consideration of Approval of Permit 2016-08 Renewal for sediment sampling adjacent to PG&E's Humboldt Bay Power Plant is in Attachment A and Attachment B.

ATTACHMENTS:

A. Final Permit 2016-08 Signed
B. Harbor District Renewal Request Permit 2016-08

Attachment A

Pacific Gas and Electric Company™

James T. Salmon
Environmental Manager
Humboldt Bay Power Plant

1000 King Salmon Ave
Eureka, CA 95503
707-444-0719

June 13, 2018

ENVR 18-19

Mr. George Williamson
District Planner
Humboldt Bay Harbor, Recreation, and Conservation District
P.O. Box 1030
Eureka, California 95502-1030

Dear Mr. Williamson,

Pacific Gas & Electric Company (PG&E) is in possession of Harbor District Permit Number 2016-08 for Sediment Sampling along the Humboldt Bay shoreline adjacent to the Humboldt Bay Power Plant. This permit expired in December 2017. However, the project team was unable to complete the sampling required as part of the License Termination process associated with decommissioning of the nuclear power plant. Therefore, PG&E requests that the permit be reauthorized for 2018.

Thank you in advance for your consideration. If there are any questions, please contact me at 707-674-7766 or at email james.salmon@pge.com.

Sincerely,

James T. Salmon
HBPP Environmental Manager
Pacific Gas & Electric Company

Attachment B

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

PERMIT

Permit No. 2016-08

601 Startare Drive
Woodley Island Marina
P.O. Box 1030
Eureka, CA 95502-1030

Permittee:

Pacific Gas and Electric Company
Humboldt Bay Power Plant
1000 King Salmon Ave.
Eureka, CA 95503
James T. Salmon, Environmental Manager

The Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District** hereinafter referred to as "**District**", having considered the Application herein, number 2016-08, hereinafter referred to as "**Permittee**", and the **District** as the lead agency, pursuant to the California Environmental Quality Act of 1970, as amended, establishing findings relative to the Application by **Permittee** for Humboldt Bay Power Plant Wetland Sediment Sampling as provided for in this Permit, the **Permittee** is hereby authorized to perform the work of repairs, as more particularly described in the Application filed with the **District**.

You are hereby authorized to conduct that activity described in the Permit Application of **Permittee** consisting of:

Humboldt Bay Power Plant Wetland Sediment Sampling as more particularly described in the Application filed by **Permittee**.

That the location of the proposed activity shall be in Humboldt Bay, Humboldt County, California,

SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. If the **Permittee** materially changes the activity plan and scope, it will be necessary to request a permit revision.

2. The **Permittee**, at all times, shall comply with Air Quality Regulation 1, Chapter IV of the North Coast Unified Air Quality Management District's Rules and Regulations.

3. The permit term is one year.

4. All sampling collection activities shall be conducted as described in the project description included in the application and follow the applicable protocols and practices contained in the Archaeological Resources Protection Plan for the Humboldt Bay Power Plant Final Site Restoration Plan, prepared by VCZ Archeology and Cultural Resource Management, April 2016.

5. If archeological or cultural features or materials are unearthed during any phase of project activity, all work in the immediate vicinity of the find shall halt until the **Permittee** has contacted the Wiyot Tribe's Cultural Department, and the significance of the resource has been evaluated, to the satisfaction of the Wiyot Tribe. Any mitigation measures that may be deemed necessary will be provided to the Wiyot Cultural Director for review and input to ensure they are consistent with the standards for cultural resource mitigation particularly in cooperation with Native American tribal representatives and the California State Native American Heritage Commission. Mitigation measures shall be implemented by a qualified archeologist representing the **Permittee** prior to resumption of construction activities. If human remains are exposed by project related activity, the **Permittee** shall comply with California State Health and Safety Code, §7050.5, which states that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition pursuant to California Public Resources Code, §5097.98.

6. That there shall be no unreasonable interference with navigation by the work herein authorized.

7. That no attempt shall be made by the **Permittee** to interfere or forbid the full and free use by the public of all navigable waters at or adjacent to the work.

8. That the **District**, its Commissioners, or any officer or employee of the **District** shall in no case be liable for any damages or injury of the work herein authorized which may be caused by or result from future operations undertaken by the **District** for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

9. That neither the **District**, nor its Board of Commissioners, nor any officer of the **District** shall be liable to any extent for any such injury or damage to any person or property or for the death of any person arising out of or connected with the work authorized by this Permit.

10. That the Board of Commissioners of the **District** may revoke this Permit at any time upon a finding by the **District** of a violation by the **Permittee** of any condition of this Permit.

11. That the **Permittee** shall comply with any regulations, condition, or instructions affecting the work hereby authorized if and when issued by the Federal Water Pollution Control Administration and/or the State of California Water Resources Control Agency having jurisdiction to abate or prevent water pollution. Such regulations, conditions, or instruction in effect or prescribed by Federal or State Agencies are hereby made a condition of this Permit.

12. That neither the **District**, nor its Board of Commissioners, nor any officer of the **District** shall be liable to any extent for the injury or damage to any person or property or for the work authorized by this Permit, and the **Permittee** shall indemnify and hold harmless the **District**, its Commissioners and officers free and harmless from any liability for any such injury, death or damage.

13. That as a condition to the issuance of this Permit, **Permittee** agrees to indemnify and hold harmless **District** from and against any and all liability, loss, or damage **District** may suffer from claims and demands for attorneys' fees, costs of suit, and costs of administrative records made against **District** by any and all third parties as a result of third party environmental actions against **District** arising out of the subject matter of this Permit, including, but not limited to attorneys' fees, costs of suit, and costs of administrative records pursuant to the California Code of Civil Procedure §1021.5 or any other applicable local, state or federal laws, whether such attorneys' fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial appeal or arbitration of claims for attorneys' fees, costs of suit, and costs of administrative records in connection with the subject matter of this Permit.

14. That this Permit is valid as of the 15th day of December, 2016, and is made subject to the **Permittee** approving and agreeing to the conditions above set forth and executing said approval as hereinafter provided.

EXECUTED on this 15th day of December, 2016, by authority of the Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District.**

PATRICK HIGGINS, President
Board of Commissioners
Humboldt Bay Harbor, Recreation and Conservation District

Pacific Gas and Electric, **Permittee,** in the above Permit, hereby accepts and agrees to all of the conditions hereinabove set forth. **Permittee** shall indemnify and hold harmless the **District**, its Board of Commissioners, officers and employees from any and all claims of any nature arising from the performance of and work of improvement contained in the Application for injury, death or damage to any person or property.

Pacific Gas and Electric **Permittee,** in the above Permit, agrees to indemnify and hold harmless **District,** its Board of Commissioners, officers and employees from and against any and all liability, loss or damage **District** may suffer from claims and demands from attorneys' fees; costs of suit and costs of administrative records made against **District** by any and all third parties as a result of third party environmental actions against **District** arising out of the subject matter of this Permit including, but not limited to, attorneys' fees, costs of suit and costs of administrative records pursuant to the California Code of Civil Procedure §1021.5 or any other applicable local, state or federal laws, whether such attorneys fees, costs of suit and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal or arbitration of claims for attorneys' fees, costs of suit and costs of administrative records in connection with the subject matter of this Permit.

Dated: 8/2/17

Pacific Gas and Electric Company

COMMISSIONERS
1st Division
Larry Doss
2nd Division
Greg Dale
3rd Division
Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

Humboldt Bay
Harbor, Recreation and Conservation District
(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members
FROM: Larry Oetker, Executive Director
DATE: July 26, 2018
TITLE: Consideration of Resolution 2018-04 Adopting Fiscal Year 2018-2019 Budget and Goals

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STAFF RECCOMENDATION: It is recommended that the Board:

1. Adopt Resolution NO. 2018-04 approving the FY 2018-19 District budget and goals: and
2. Authorize Staff to assemble an administrative budget and make the budget available on the Districts Website and at the front counter.

BACKGROUND: This budget represents the Humboldt Bay Harbor, Recreation and Conservation District's (District) financial plan for the upcoming fiscal year. The Board held a series of regular and special meetings where they reviewed the District's major properties and budget categories previous and projected income, expenditures, and goals. The Board adopted a preliminary budget on June 14, 2018 and noticed their intent to adopt this final budget pursuant to California Harbors and Navigation Section 6093.1.

DISCUSSION: The final budget is essentially the same as the draft budget with a few relatively minor adjustments between categories and refinements to the income and expenditure projections. The budget is balanced with approximately $4,912,000 in total revenues and $4,859,398 in expenditures resulting in a projected net income of approximately $52,000. The District Treasurer estimated on June 7, 2018 that the District's cash on hand as of July 1, 2018 would be approximately $1,500,000. Of the cash on hand, over $1,000,000 is associated with the dredging revenues

The most significant financial items to highlight in the FY 2018-19 budget are:

1. Additional expenditures associated with the proposed I -Bank Loan for dredging. (NOTE: the cost to dredge are not included in this budget. This line item is to set aside funds for the proposed loan. The appropriations for the dredging of Woodley Island Marina and Fields Landing Boat Yard will be considered outside this budget document).
2. Increased Revenues from leases associated with Redwood Marine Terminals I and II.
3. Increased Revenues from tideland leases associated with the subtidal maricultural prepermitting.
4. Establishment of a new reserve fund. (Note: establishing separate segregated funds for dredging are being considered separately on the agenda.)
5. Stabilization of electric utility bills due to the 740,000 KWH photovoltaic system on the RMT II buildings.
6. Shelter Cove boat yard shifting to seasonal staffing.

ATTACHMENTS:

A. Resolution 2018-04

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

RESOLUTION NO. 2018-04

A RESOLUTION ADOPTING THE FINAL FISCAL YEAR 2018-2019 HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT BUDGET AND GOALS

WHEREAS, the Board of Commissioners of the Humboldt Bay Harbor, Recreation, and Conservation District has prepared a draft and final annual budget pursuant to California Harbors and Navigation Code Section 6093;

WHEREAS, the Board of Commissioners approved the fiscal year 2018-19 draft budget on June 14, 2018 and scheduled and noticed a hearing for the adoption of the final budget on July 26, 2018 at 7:00 pm at the Woodley Island Meeting Room, 601 Startare Drive, Eureka, CA;

WHEREAS, notice of said hearing was posted on the Harbor District's website and published in the Eureka Times Standard pursuant to California Harbors and Navigation Section 6093.1; and

WHEREAS, copies of the budget were made available on the Harbor District's website and at the District Office.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District that the Board hereby:

1. Adopts the Final Fiscal Year 2018-19 Budget and Goals as set forth in Exhibit A, attached hereto and by reference incorporated herein.
2. Authorizes the Executive Director to transmit the budget to the Humboldt County Board of Supervisors pursuant to California Harbors and Navigation Section 6093.3

PASSED AND ADOPTED by the Humboldt Bay Harbor, Recreation and Conservation District Board of Commissioners at a duly called meeting held on the 26th day of July 2018, by the following polled vote:

AYES:

NOES:

ABSENT:

_____

RICHARD MARKS, President
Board of Commissioners

ATTEST:

_____

PAT HIGGINS, Secretary
Board of Commissioners

EXHIBIT A

Humboldt Bay Harbor, Recreation, and Conservation District
INCOME FY 2018 - 19 BUDGET

Account	Sub Account	General Fund	Tidelands	Woodley Island	RMT II	RMT I	Fields Landing	Shelter Cove	Grants	TOTAL 2018-19
R1	Dredging									-
R1a	Dredging Surcharge			95,000						95,000
R1b	Dredging Set Aside									-
R1c	Dredging Other									-
R2	Float Replacement			65,000						65,000
R3	Harbor Surcharge	100,000								100,000
R4	Utility Surcharge			100,000	60,228	10,000				170,228
R5	Grants									-
R5a	Conservation								269,000	269,000
R5a	Recreation								204,568	204,568
R5c	Harbor								187,113	187,113
R5d	Facilities								272,000	272,000
R6	Tax Revenue									-
R6a	Property Tax	975,000								975,000
R6b	Other									-
R8	Other Income									-
R8a	Other Revenue	32,500								32,500
R8b	Late Fees/Interest	10,000		10,000						20,000
R9	Interest Income				170,000					170,000
R10	Rents									-
R10a	Slip Rents			650,000						650,000
R10b	Transient Rents			100,000						100,000
R10c	Upland Rent			154,000	650,000	157,000	56,900			1,017,900
R10d	Tideland Rent		273,000							273,000
R10e	Equipment			2,000						2,000
R10f	Storage			12,000			122,000	15,000		149,000
R10g	Work Yard									-
R11	Fees									-
R11a	Services Office	60,000		10,000						70,000
R11b	Late Fees/Interest									-
R11c	Miscellaneous									-
R11d	Fork Lift			1,200		1,500	1,000			3,700
R11e	Boat Launch							33,000		33,000
R11f	Travel Lift						2,500			2,500
R11g	Haul Out						26,500			26,500
R11h	Moorage					3,700				3,700
R11i	Poundage					10,000				10,000
R11j	Port									-
R12	Sales									-
R12a	Laundry			9,900						9,900
R12b	Retail			100			400			500
R13	Donations									-
R13a	Light House									-
R13b	Sea Scouts									-
	TOTAL REVENUE	**1,177,500**	**273,000**	**1,209,200**	**880,228**	**182,200**	**209,300**	**48,000**	**932,681**	**4,912,109**
	TOTAL EXPENSE	**1,169,517**	**-**	**1,163,103**	**880,011**	**170,774**	**239,769**	**303,543**	**932,681**	**4,859,398**
	NET INCOME	**7,983**	**273,000**	**46,097**	**217**	**11,426**	**(30,469)**	**(255,543)**	**-**	**52,711**

EXHIBIT A

Humboldt Bay Harbor, Recreation, and Conservation District
EXPENSES FY 2018 - 19 BUDGET

	Account	Sub Account	General Fund	Tidelands	Woodley Island	RMT II	RMT I	Fields Landing	Shelter Cove	Grants	TOTAL 2018-19
	Personnel										
E1	Salaries/Wages		220,933		190,778	74,334	78,508	74,781	114,015		**753,349**
E1a		Salaries/Wages PT	19,036		2,380	952	4,759	1,428	54,080		**82,635**
E2	Commissioners Fees		24,000								**24,000**
E3	Payroll Burden		190,644		118,181	47,479	48,824	53,435	90,715		**549,278**
E3a		Payroll Burden PT	2,334		292	117	583	175	6,745		**10,246**
											-
	Materials and Services										-
E5	Advertising & Promotion		6,000		3,000						**9,000**
E6	Communications		7,000		6,000						**13,000**
E7	Conference & Meetings		25,000		3,000						**28,000**
E8	Dues,Subscript.,License		40,000		10,000						**50,000**
E9	Elections & Government Fees		20,000		5,000						**25,000**
E10	Insurance		30,000		30,000						**60,000**
E11	Supplies Office		25,000		16,000			150			**41,150**
E12	Supplies Maintenance		6,000		6,000	18,400			600		**31,000**
E13	Permits										-
E14	Utilities				160,000	140,000	1,300	34,000	12,000		**347,300**
E15	Fuel								6,500		**6,500**
E16	Accounting		40,000		10,000						**50,000**
E17	Legal		55,000		5,000						**60,000**
E18	Planning		100,000								**100,000**
E19	Engineering		60,000								**60,000**
E20	Other Professional/Outside Services		90,000								**90,000**
E20a		Information Technology									-
E20b		HSU Ports									-
E21	Small Tools - Protective Clothing										-
E22	Maintenance Facilities				25,772	15,500	14,300	7,300			**62,872**
E23	Maintenance Equipment					14,900		7,500	13,500		**35,900**
E24	Maintenance IT										-
E25	Dredging										-
E26	Capital Outlay										-
E26a		Building & Facilities			119,500	75,500	22,500	61,000			**278,500**
E26b		Equipment									-
E26c		Automotive									-
E26d		Vessels									-
E27	Rent/ Lease Payments					190,000					**190,000**
E28	Interest/Debt Payments										-
E29	Other Expenses										-
E30	Grant Expenses										-
E30a		Conservation Grant								269,000	**269,000**
E30b		Recreation Grant								204,568	**204,568**
E30c		Harbor Grant								187,113	**187,113**
E30d		Facilities Grant								272,000	**272,000**
	TOTAL EXPENSE		**960,947**	**-**	**710,903**	**577,182**	**170,774**	**239,769**	**298,155**	**932,681**	**3,890,411**
	Debt										
D1	**Bonds 2014**		**208,570**		**99,000**						**307,570**
D2	**Tri County Electric Meter**										-
D3	**Coast Seafood**					**142,092**					**142,092**
D4	**I Bank Dredge Loan**				**163,200**						**163,200**
D5	**Tractor**								**5,388**		**5,388**
D6	**BVVA Loan NMTC**					**160,737**					**160,737**
	TOTAL EXPENSE		**208,570**	**-**	**262,200**	**302,829**	**-**	**-**	**5,388**	**-**	**778,987**
	Dedicated Accounts Deposit										
	Dredge Surcharge				**95,000**						**95,000**
	Float Replacement				**65,000**						**65,000**
	General Fund Reserve				**30,000**						**30,000**
	TOTAL EXPENSE		**-**	**-**	**190,000**	**-**	**-**	**-**	**-**	**-**	**190,000**
	TOTAL REVENUE		**1,177,500**	**273,000**	**1,209,200**	**880,228**	**182,200**	**209,300**	**48,000**	**932,681**	**4,912,109**
	NET INCOME		**7,983**	**273,000**	**46,097**	**217**	**11,426**	**(30,469)**	**(255,543)**	**-**	**52,711**

Woodley Island Marina GOALS

- Obtain all required permits to dredge the Marina and begin to implement the long term maintenance dredging program.
- Establish a dredging maintenance fund which would pay for permitting, mitigation, dredging and other expenses associated with dredging:
  - Woodley Island,
  - Fisherman's Channel, and
  - Fields Landing Travel Lift Dock

Woodley Island Marina GOALS

- Repair/replace the roof over the restaurant and ACOE building as a 1st priority followed by the Coast Guard and Harbor District office roof.
- Develop and implement a dock repair, replace, and maintenance program.
- Coordinate commercial fish storage and work areas with efforts to improve the RMT I facility.
- Evaluate potential cost saving from installing smart electrical meters.

Woodley Island Marina GOALS

- Work with the Redwood Energy Authority to evaluate energy efficiency measure for Woodley Island.
- Work with the City of Eureka to promote Woodley Island as a commercial fishing, recreational boating, and tourist destination.
- Continue to evaluate and implement safety and security measures throughout the island.
- Develop a parking lot and access road maintenance program to prolong the useful life of the infrastructure.

RMT I GOALS

- Develop a fisherman's outdoor storage and work area master site plan and reorganize lease areas per master plan.
- Complete the Brownfield cleanup and subdivision of the roundhouse property and transfer ownership to the Timber Heritage Association.
- Continue to work with the City of Eureka and Humboldt Maritime Association to relocate the 1091 vessel as required by the Coastal Commission.

RMT I GOALS

- Continue the dock decking replacement program.
- Repair/replace saltwater intake pumping system and pumphouse.
- Upgrade the power to dock to 480 3-phase.
- Complete maintenance improvements to road access to Red Tank and Non Name Docks.
- Analyze sea level rise adaptation strategies through 2100

RMT I GOALS

- Develop a maintenance / replacement strategy:
  - Storm water culvert that runs under the building
  - Roofing
  - Siding
  - Fire suppression system
  - Domestic Water supply
  - Wastewater treatment
  - Roadway

RMT II GOALS

- Obtain a Coastal Development Permit for Uses
  - Phase I. Make all current uses allowable.
  - Phase II. Develop a master development plan for future Business Innovation Park uses and infrastructure.
- Complete the Brownfield cleanup.
- Improve the site access, signage, and layout based on the master development plan to set the stage for a true Business Innovation Park.
- Continue to target marketing efforts on the aquaculture and other water related uses while allowing non water related uses on an interim basis.

RMT II GOALS

- Convert the existing ocean outfall lease to a tidelands lease similar to other Harbor District leases with the State Lands Commission that allow for broader use that serve the public interest.
- Continue to support the North Coast Water Quality Control Board's efforts to develop wastewater treatment facilities on the Samoa Peninsula by utilizing the RMT II property and ocean outfall.
- Improve exterior lighting for security and exterior working areas.
- Implement repair and maintenance of the fire suppression system to insure that it complies with insurance requirements.

Fields Landing GOALS

- Develop a plans, specifications, and cost estimates refurbish the travel lift dock.
- Develop permitting/mitigation plan to dredge between the federal channel to the travel lift dock fingers.
- Develop and implement a storm water management strategy to collect heavy metals, paint and other potential contaminants as close to the source as possible.
- Improve exterior lighting for security and exterior working areas.

Fields Landing GOALS

- Work with the City of Eureka and the other members of the Harbor Safety Committee to find funding to dispose of abandoned and/or dangerous boats.
- Construct improvements to the large roll up doors to secure them during high wind events.
- Replace older boat stands and other equipment required to operate the boat yard service.

Shelter Cove GOALS

- Complete the conversion of the fish cleaning station discharge from direct ocean to the Community Improvement Districts wastewater treatment system.
- Implement changes to the boat launching operations that:
  - Require minimum trailer safety features.
  - Establishes seasonal commercial launching service.
  - Utilize more local staff.

Shelter Cove GOALS

- Develop a breakwater and boat ramp maintenance program.
- Install barriers, exterior lighting, and other improvements for security and safety.
- Work with the property owner to obtain permanent fee title to the boat launching, fish cleaning, and public access to the beach.

Port Operations GOALS

- Dredging strategy coordination with USACE for Federal Channel dredging that address winter shoaling issues.
- Begin Planning for multi-purpose berth development
  - Work with RCEA to prepare port for off-shore wind energy development
- Work with commercial fishing industry to evaluate existing support facilities and determine their needs.

Port Operations GOALS

- Continue to work with Humboldt Bay Cruise Ship Collaborative to market and develop port as cruise ship destination.
- Work with Sediment Advisory Committee to complete Sediment Management Plan Program EIR
- Work with the County, City of Eureka, RREDC, and private dock owners on a port marketing strategy to attract businesses to Humboldt Bay.

Conservation GOALS

- Coordinate dredging activities with potential beneficial reuse projects.
- Review Eelgrass Management Plan and begin to implement management strategy.
- Work with the County, City of Eureka, and City of Arcata to implement stormwater runoff programs to keep the Bay clean.

Recreation GOALS

- Promote boater safety and training programs for recreational and commercial users.
- Evaluate additional recreational boating opportunities around Dock I and Woodley Island Marina.

COMMISSIONERS
1st Division
Larry Doss
2nd Division
Greg Dale
3rd Division
Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

Humboldt Bay
Harbor, Recreation and Conservation District
(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members

FROM: Larry Oetker, Executive Director

DATE: July 20, 2018

TITLE: Authorize Staff to Release of a Request for Proposal to Dredge Woodley Island Marina and Fields Landing Boat Yard and Other Actions Required to Finance the Proposed Multi-year Dredging Program.

STAFF RECOMMENDATION: It is recommended that the Board: Direct the Executive Director to:

1. Utilize Alternative 4 in the Scope of Work and to release a Request for Proposals seeking a one-year contract with disposal at HOODS.
2. Come back to the Board with a Resolution which would authorize a future multiyear dredge Program which would establish:
   a. The dredging depths, frequency, and other program parameters.
   b. a mechanism to establish a Dredge Surcharge Fee for the Fields Landing Boat Yard and King Salmon Fisherman's Channel which would be utilized along with the Woodley Island Dredge Surcharge Fee to partially fund the multi-year dredging program.
   c. the total common Dredge Fund balance, including all sources, as of July 1, 2018 at $1,568,290;
   d. a segregated account with annual audit "Note" section which tracks the income and expenditures of the Dredge Fund to verify the annual fund balance.
   e. that the funds deposited into Dredge Fund through the Dredge Surcharge Fee would be utilized first to pay off the proposed dredge loan.
   f. an annual appropriation of "additional funds" as specified in the multi-year program to support the multi-year dredging program until the properties self-fund the dredging. The source of the "additional funds" is intended to come from the properties that require the dredging. The Board would be authorized to amend the multiyear program to adjust the Dredge Surcharge Fee, "additional funds" or any other portion of the Program as may be required.
   g. other revenue generating mechanisms from the Woodley Island Marina, Fields Landing Boat Yard and Fisherman's Channel so that in the long term, the multi-year dredging program can be self-sustaining and not be required to be subsidized from other funding sources.

3. Continue the underwriting of the I-Bank Loan to fund the multiyear dredging program.

BACKGROUND: The Woodley Island Marina was dredged in 1988 (131,000 CY), 1998 (226,238 CY), and 2006/07 (230,065 CY) with a cutterhead suction dredge with disposal on the Samoa Beach. According to a September 18, 2007 power point presentation to the Board, the total cost of the 2006/07 Woodley Island dredging was $2,443,102. Of that amount, $2,080,102 was for dredging; $290,000 on beach monitoring and $73,000 on sampling.

The records document that since 2007, the Harbor District has been consistently meeting with Agency Staff and industry experts to come up with a way to obtain the required permits that are required to utilize a suction head dredge and beneficially reuse the dredge material. For one reason or another the District has been unable to complete the required actions. Within the last six months, the District has shifted the strategy and has followed the City of Eureka's lead and obtained all the required permits to dredge using a clamshell bucket with disposal into the Humboldt Open Ocean Disposal Site (HOODS) (Refer to Permit material in Agenda Item # 10 b.) Although the District strongly believes that the suction dredge with beach/upland beneficial reuse is the far superior method, and we have and/or are in the process of acquiring the mitigation property required to utilize the cutterhead dredge, the District needs to dredge now and cannot wait two or more years to complete the mitigation and obtain the required permits.

The regulatory agencies have been very supportive of our efforts and have been diligently working to analyze the dredging project and issue the required permits so that we can try to dredge this season. As Executive Director, I would like to take this opportunity to thank the US Army Corps of Engineers, Coastal Commission, NOAA, USF&W and North Coast Water Quality Control Board Staff for their assistance. Without their efforts we would not have obtained the permits so quickly.

DISCUSSION:

A. Dredging Method: Clam shell bucket operated by excavator or crane with disposal into HOODS.

B. Dredge Volumes: Woodley Island Marina was originally permitted and constructed with a depth of 14 feet and an overdraft allowance of 1 foot for the entire Marina. The permit depth allows the District to dredge to a specified depth, but do not require the District to dredge to that depth. During the last dredging cycle, the actual dredging depth was 14 feet from the end tie to dock E and 10 feet from Docks E to I. Today if the District utilized the same 14 -10 feet strategy, the Marina would require approximately 130,000 CY of material to be removed. A revised strategy has been developed which reduces the volume to approximately 91,000 CY.

C. New Dredging Strategy: Over the last 6 months, we have reviewed several dredging strategies for Marina's throughout the world and have come to the following conclusions:

1. **Define your dredging objective.** The District's objective is to: *Dredge the least amount of material to allow the fleet to utilize the marina at low tide without draft restrictions.*
2. **Dredge depths should match the Marina fleet draft.** (Dredging to 14 feet in areas where the fleet only needs 8 or 10 feet is a waste of time, money, and resources. Conversely

Dredging to 10 feet in an area where the fleet needs 12 or 14 feet does not meet the needs of the fleet.

3. **Use the natural bay's flushing action to maintain marina depth as much as possible.**
   A. Move the fleet to match natural contours. Don't dredge to match the fleet unless absolutely required. The slips closest to the Eureka Channel are naturally deeper than the slips closet to the shore. Previously, docks E – I near the Eureka Channel were only maintained at 10 feet. These areas are naturally scoured and should be managed at deeper depths. Modifying the dredging to match the contours reduces the required dredging from 131,000 CY to 91,000 CY (41,000 CY reduction). This results in significant cost reductions (Attachment B).
   B. Annually take soundings to establish a model on how the Marina naturally scours and accretes. Adjust dredging to account for recurring problem areas; modify slip leases as required; and research/permit/implement engineering design alternatives to increase natural scour and reduce accretion rates. After approximately 4 to 5 years the District will begin to have enough data where we can begin to have a better understanding of the natural forces and refine our Marina dredging management strategy.
4. **Minimize tenant disruptions by dredging more frequently**. Dredging the entire Marina at one time may be more cost effective, however it is highly disruptive to the tenants. Other marinas have found that smaller focused 1 – 4-year dredging cycles instead of larger 8 – 10-year cycles provide consistently much more reliable fleet operations and is less disruptive to tenants.
5. **Never let maintenance dredging permits expire**. Getting a permit renewal is relatively simple, especially if you are following all the conditions of your permit and have a proven track record that you follow the rules. Having smaller more frequent events enables staff and contractors to have experience with dredging. Whereas 8 to 10-year dredging cycles generally results in a "new project feel" where the District has little practical experience with what it actually takes to dredge. When you have a 10-year permit plan to dredge in year 9 or 10 to prolong the benefits of the permit beyond the ten-year permit period. New regulations will inevitably come, and future dredging events will likely be more expensive.
6. **Dredging is a never-ending project.** The second you stop dredging; the Marina is starting to fill again. Every boat owner, contractor, government agency, property owner, or business will tell you that in the long run it is much cheaper to keep your property regularly maintained. If you wait until your property needs to be completely rebuilt, then it results in major disruptions and loss of revenues. The District needs to have a plan in place for the next dredging event before we have finished the current dredging project. Performing consistent and more frequent dredging cycles will result in a better managed marina and a healthier fleet. Once we have successfully implemented the successful multi-year dredging program, we can then begin the process to plan, finance, and implement an overall marina maintenance program for the topside.

D. Dredge Alternatives: As previously discussed, the District's preferred alternative is to use the suction dredge with beach/upland beneficial reuse. However, given the current condition of the Marina and permitting issues, this alternative is not realistic in the short term. The District must

select an alternative that is permittable now, financially feasible, and can be completed soon. Although we firmly believe that it is a waste to take the material out into the ocean and dump it when there are many beneficial uses around the bay; it will take several years to obtain the required permits for those sites and it is unlikely that the timing of the projects will coincide with the required dredging event. Without a permitted upland disposal site, it is simply not an option.

1. **Alternative 1:** This alternative is composed of a one to two year "catch up" period where the Marina is dredged, and the material disposed of at HOODS. Upon the completion of the initial "catch up" dredging, an annual dredging program would be implemented where less than 20,000 CY would be removed every year from both Woodley Island and Fields Landing Boat Yard. Under Alternative 1, the entire marina would be dredged every three years. The cost to mobilize equipment to dredge this small amount would be cost prohibitive. Therefore, approximately $1,150,000 of equipment would be purchased and a portion of the Samoa Lagoons would be lined with an impermeable membrane to prevent groundwater contamination (Attachment A 1).

   The cost to implement Alternative 1 are higher in the first 10 years primarily due to higher loan payments. However, after year ten, the loan is paid off; overall expenses significantly decrease; and the District owns the equipment and an operable upland disposal site free and clear. Because Alternative 1 utilizes an upland disposal site instead of HOODS, after the initial "catch up" dredging, the material can be stored for up to one year before it is beneficially reused. Under Alternative 1: a one dredging cycle contract would be issues for the "catch up" dredging; the District would manage the Samoa Lagoons upland dewatering site; and would contract out for the dredging utilizing the District's purchased work barge. Utilizing the District's work barge and having the District manage the upland dewatering site would greatly expand the number of potential local contractors and reduce mobilization costs.

   This Alternative would require an amendment to our Dredging permits and upland disposal site to allow for a change in disposal locations. Permits amendments would be applied and if not approved by the regulatory Agencies within the 12 months, the District could abandon the upland disposal and issue a new multi-year RFP for HOODS disposal. If the District, were not drowning in the backlog of deferred maintenance dredging, Alternative 1 would have been the clear preferred alternative.

2. **Alternative 2:** Similar to Alternative 1, This alternative is composed of a one to two year "catch up" period with disposal at HOODS. Upon the completion of the "initial catch up" dredging, a multi-year dredging program with approximately 60,000 CY of material removed in years four and five and an additional 60,000 CY in years nine and ten. Dredging in years nine and 10 has the effect of deferring the next permit period until years 13 – 14. This cycle would be repeated under a new 10-year permit (Attachment A 2). Awarding a contract for the full 10-year permit would provide surety that:
   a. the multi-year dredging program will get implemented;
   b. the District has fixed expenses that can be budgeted; and

c. contractors can purchase/amortize dump scows, barges and other equipment expenses over a longer period with the goal of reducing overall expenses.

All material dredged over the 10-year period would follow the existing permit to use the clamshell bucket and dispose at HOODS. No beneficial reuse would occur during the next 10 years. The first ten-year costs of Alternative 2 are estimated to be significantly lower than Alternative 1. However, after year ten, the benefits in Alternative 1 of having the upland disposal site and equipment paid for are not realized, and dredging expenses are estimated to continue to be higher than Alternative 1.

3. **Alternative 3:** This alternative is the same as Alternative 2 with the exception that the dredging contract would be for five years (Attachment A 3). Similar to Alternative 1, upon the completion of the "initial catch up" dredging, a multi-year dredging program with approximately 60,000 CY of material removed in years four and five. As the District is in the process of completing a Sediment Management Plan which covers all dredging, disposal, and beneficial reuse in the Bay for through at least 2040, Alternative 3 enables the district to get back on track, and allows flexibility to adjust dredging strategies in year 6. If permits were obtained and funds available, the District could switch to the Alternative 1 or another strategy in year 6. This Alternative provides five years of surety but does not provide contractors with a long-term equipment amortization period for equipment expenses.

4. **Alternative 4:** This Alternative, similar to all other alternatives does the "initial catch up" dredging and permitting/mitigation/dredging of Woodley Island Marina, Fields Landing Boat Yard; and Fisherman's Channel. However, it does not implement a multi-year dredging program at this time. The intent of this alternative is to "catch up", complete the sediment management plan, get the Districts finances in order, finalize a long-term dredging strategy.

Sell Cutterhead Dredge: If we cannot use the cutterhead then we must sell it. The District needs the revenue from the sale to pay for the multi-year dredging program. The District cannot afford to have a million-dollar piece of equipment sitting on land and providing no benefit. The cost of mitigation the potential impact to long term smelt from the cutterhead dredge makes this alternative financially infeasible. If the District shifts to an annual dredging cycle as outlined in Alternative 1., for less than $225,000 the District could purchase a new excavator cutterhead suction dredging attachment. Our dredge is bigger than is needed to dredge 20,000 CY annually but is ideal for dredging the entire marina and taking 91,000 CY at one time.

Fisherman's Channel: All Alternatives include funding to mitigate eel grass in Fisherman's Channel. The District is in the process of acquiring property and will begin to develop mitigation plans/permits once the properties are acquired. All Alternatives include $24,000 of revenue from the Fisherman's Channel tideland properties. Recommendation 2b above proposes to establish a mechanism for assessing/collecting a dredge surcharge fee from the King Salmon Fisherman's Channel which would be utilized along with the Woodley Island and proposed new Fields Landing Boat Yard Dredge Surcharge Fee to partially fund the multi-year dredging program.

The estimated cost to dredge Fisherman's Channel, after removing the mitigation costs, over the 10-year period is over $242,000. This would mean that a dredge surcharge fee of approximately $24,200 annually should be assessed/collected from the property owners and users surrounding Fisherman's Channel. If the Board approves the recommendation, Staff will come back to the Board with a recommendation and notify property owners. After the initial dredging event, the District will not be able to afford including Fisherman's Channel in the Multi-Year Dredging Program unless sufficient revenues are collected to offset expenses. Due to the eel grass and past proposed dredging by cutterhead suction dredge, the District does not have the required permits. The proposed RFP would include 9,000 CY of Dredging contingent upon obtaining the permits and authorization to proceed.

Dredge Surcharge Fee: There has been a great deal of discussion about what the Dredge Surcharge Fee Balance was in 2010 and what it is today. Recommendation 2d. proposes to establish a segregated account with an annual audit "Note" section which tracks the income and expenditures of the Dredge Fund to verify the annual fund balance. A common Dredge Fund would be established for the revenues and expenditures associated with Fields Landing Boat Yard and King Salmon Fisherman's Channel, and Woodley Island Marina Dredge Surcharge Fee.

When looking at what is the current balance of the funds, it is necessary to define what it is we are trying to balance. Generally, when discussing this topic it has been common practice to comingle the amount of funds that have been collected from the "Dredge Surcharge Fee" with other funds that the Board may have allocated from other sources into the "Dredge Fund". However, from an accounting perspective, these are two separate sources of revenue. When a segregated ("enterprise fund") is established it is intended to be self-sufficient. Any additional appropriations into the fund would be "loaned" and would therefore be expected to be repaid. The same would be true for additional funds deposited into the funds in prior years.

The Dredge Surcharge Fee was established in 2010. Going back to at least FY2001/02 and to FY 12/13, the annual budget maintained a Fund Balance Designation titled "WI Marina Dredging". At the top of the table was a statement that read: "The following section reflects the designation/reservation of funds set aside for future major projects."

Attachment B Option 1. Looked at every budget from FY 2001/02 to FY 2017/18. Option 1 projects an ending fund balance for both the Dredge Surcharge Fee and WI Marina Dredging fund of $846,237. One interesting note is when carefully looking at FY 2007/08. This budget shows an addition of $826,062 in the year following the last 2006 and 2007 dredging event when the prior year audited expenditure reflected a $2,150,087 expenditure and an ending balance of $50,000. The math does not add up and the actual balance should have been a negative ($1,024,533). An even more perplexing question is that this $826,062 additional appropriation came during a budget period when the District was facing severe financial distress and the Board considered leasing the entire Woodley Island Marina and Fields Landing Boat Yard. The power point presentation for the 2007-08 Budget DREDGE ONLY workshop for March 8, 2007 shows the Dredge Fund allocation of $876,062 and a corresponding negative balance of ($989,448) was charged to the Woodley Island Marina Budget.

Option 2 utilized the annual audit which as of June 30 ,2017 documented an ending balance of $1086,013. Option 3 ignores the accounting irregularities described in Option 1 and just assumes that the $826,062 beginning balance in FY 2007-08 is correct. This would make the current ending balance $1,568,290. Option 4 assumes that the Board had the authority to appropriate the original $826,062 and they also have the authority to remove the balance of the additional appropriation. Option 4 tracks all the Dredge Surcharge Fees collected and estimates that the fund has an ending Dredge Fund balance of $1,037,903.

From an accounting perspective, it is my opinion that Option 1 is the most accurate. From a political/transparency perspective, even if the accounting indicates otherwise, the community has been told in prior budgets that there was a balance of $530,387 in FY 2010/11 and therefore the balance in Option3 should be utilized ($1,568,290).

I bank loan: Since there is insufficient funds in the Dredge Surcharge Fund to complete even the initial "catch up" dredging, it is necessary to borrow funds. The Executive Director has been working with State I-Bank to secure a loan from their program. The proposed loan would have a 10-year term; 3.7% interest; 1% loan origination fee; and a 0.003% annual monitoring fee based on principal balance. There will also be 60-90 days of additional underwriting associated with this loan. The actual loan details would come back to the Board for approval.

ATTACHMENTS:

A. Dredging Alternative
   1. Alt 1
   2. Alt 2
   3. Alt 3

B. Dredge Surcharge

Attachment A 1

ALTERNATIVE 1. LOAN **HOODS One year catch up, then annual dredging program 3 year cycle with upland disposal**

Year					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Dredge Area (Docks)	**Current Projected Volumes**	**Projected Volumes with 1 Foot Accumulation**	**Projected Accumulation in 1 year (6" Depth)**	**Current Accumulation Depth (ft)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
End Tie to A	11,439	4,169	2,084	2.7	11,439	2,084		4,169				6,253		
A to B	10,681	3,417	1,709	3.1	10,681	1,709			5,126			5,126		
B to C	12,493	3,240	1,620	3.9	12,493	1,620			4,860			4,860		
C to D	6,448	2,561	1,280	2.5	6,448		2,561			3,841			3,841	
D to E	9,475	2,654	1,327	3.6	9,475		2,654			3,981			3,981	
E to F	10,201	2,613	1,307	3.9	10,201		2,613			3,920			3,920	
F to G	12,265	2,728	1,364	4.5	12,265		2,728			-	5,457			4,092
G to H	7,501	2,161	1,081	3.5	7,501			3,242			3,242			3,242
H to I	5,723	1,991	996	2.9	5,723			2,987			2,987			2,987
I to End	4,317	1,552	776	2.8	4,317			2,328			2,328			2,328
TOTAL WOODLEY ISLAND CY	**91,002**				**90,542**	**5,413**	**10,556**	**12,726**	**9,986**	**11,741**	**14,014**	**16,239**	**11,741**	**12,650**
Misc. Shoaling			1,500		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Fields Landing	12,120	1,000	500		7,000				2,000				2,000	
Fisherman's Channel	5,000	500	250			5,000		750				1,000		
			TOTAL CUBIC YARDS		**99,042**	**11,913**	**12,056**	**14,976**	**13,486**	**13,241**	**15,514**	**18,739**	**15,241**	**14,150**

ALTERNATIVE 1. LOAN **HOODS One year catch up, then annual dredging program 3 year cycle with upland disposal**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Expenses	1	2	3	4	5	6	7	8	9	10
Total Dredge Cost	2,079,892	168,033	171,321	214,418	194,531	192,433	227,153	276,432	226,520	211,876
Equipment		1,150,000								
Ibank Loan	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757	229,757
Loan Origination Fee	19,000									
Loan annual monitoring	5,700	5,700	5,700	5,700	5,700	5,700	5,700	5,700	5,700	5,700
Permitting								75,000	25,000	
401 Permit Fee	1,500								1,500	
401 Annual monitoring Fee (0.328 per CY dredged)	32,486	3,907	3,954	4,912	4,423	4,343	5,089	6,146	4,999	4,641
Equipment Reserve Deposit	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Mitigation	**100,000**	**100,000**	**600,000**							
Monitoring /Other Expenses		-	**35,000**	**35,000**	**35,000**	**35,000**	**35,000**			
Contingency @ 10%	207,989	16,803	17,132	21,442	19,453	19,243	22,715	27,643	22,652	21,188
TOTAL EXPENSES	**2,696,324**	**1,694,200**	**1,082,864**	**531,228**	**508,864**	**506,476**	**545,413**	**640,679**	**536,128**	**493,161**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
INCOME	1	2	3	4	5	6	7	8	9	10
Dredge Fund Initial Deposit	1,568,290									
Dredge Fund Deposit		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Sell Cutterhead		950,000								
Initial Deposit From Ibank Loan	**1,900,000**									
Dredge Surcharge Fees (Woodley Island)	95,000	95,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Dredge Surcharge Fees (FL Boat Yard)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Dredge Surcharge Fees (King Salmon)		24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
TOTAL INCOME	**3,566,790**	**1,472,500**	**527,500**	**527,500**	**527,500**	**527,500**	**527,500**	**527,500**	**527,500**	**527,500**
CUMULATIVE INCOME	**3,566,790**	**5,039,290**	**5,566,790**	**6,094,290**	**6,621,790**	**7,149,290**	**7,676,790**	**8,204,290**	**8,731,790**	**9,259,290**
INCOME - EXPENSE	870,466	(221,700)	(555,364)	(3,728)	18,636	21,024	(17,913)	(113,179)	(8,628)	34,339
NET DREDGE FUND BLANCE	**870,466**	**648,765**	**93,401**	**89,673**	**108,309**	**129,333**	**111,420**	**(1,759)**	**(10,387)**	**23,952**

Loan Calculator	
Loan Amount	$ 1,900,000
Annual Interest Rate	3.90%
Life of Loan (Years)	10
Number of Payments per year	12
Total Number of Payments	120
Payment per period	$ 19,146
Sum of payments	$ 2,297,569
Interest cost	$ 397,569

DASHBOARD	
Income Multiplier	1%
Expense Multiplier	2%
Reserve Multiplier	0%
Dredge Cost Multiplier	0.75%
401 Annual Dredge Fee	0.328

Clamshell	
Truckable Work Barge	75,000
Hopper Barge(s)	400,000
Eddy Pump Barge	250,000
Upland Dewatering Area	200,000
Miscelanious Equipment	100,000
Contingency	125,000
TOTAL	1,150,000

ALTERNATIVE 2. LOAN HOODS One year catch up, then annual dredging program with 10 year contract with upland disposal

Year					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Dredge Area (Docks)	**Current Projected Volumes**	**Projected Volumes with 1 Foot Accumulation**	**Projected Accumulation in 1 year (6" Depth)**	**Current Accumulation Depth (ft)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
End Tie to A	11,439	4,169	2,084	2.7	11,439	-	-	6,253.07		-		-	8,337.42	
A to B	10,681	3,417	1,709	3.1	10,681	-	-	5,125.79				-	6,834.38	
B to C	12,493	3,240	1,620	3.9	12,493	-	-	4,860.11				-	6,480.14	
C to D	6,448	2,561	1,280	2.5	6,448	-	-	3,840.84				-	5,121.12	
D to E	9,475	2,654	1,327	3.6	9,475				5,307.54					6,634.43
E to F	10,201	2,613	1,307	3.9	10,201				5,226					6,533
F to G	12,265	2,728	1,364	4.5	12,265				5,457	-				6,821
G to H	7,501	2,161	1,081	3.5	7,501				4,323					5,403
H to I	5,723	1,991	996	2.9	5,723				3,983					4,978
I to End	4,317	1,552	776	2.8	4,317				3,105					3,881
TOTAL WOODLEY ISLAND CY	**91,002**				**90,542**	**-**	**-**	**20,080**	**27,400**	**-**	**-**	**-**	**26,773**	**34,250**
Misc. Shoaling/ Overdraft			1,500		1,500				4,000				4,000	4,000
Fields Landing	12,120	1,000	500		7,000				5,000				5,000	
Fisherman's Channel	5,000	500	250					5,000					4,000	
	TOTAL CUBIC YARDS				**99,042**	**-**	**-**	**25,080**	**36,400**	**-**	**-**	**-**	**39,773**	**38,250**

Attachment A 2

ALTERNATIVE 2. LOAN **HOODS One year catch up, then annual dredging program with 10 year contract with upland disposal**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Other Expenses	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Total Dredge Cost	2,079,892	-	-	610,676	764,401	-	-	-	835,234	803,251
Equipment										
Ibank Loan	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572
Loan Origination Fee	17,000									
Loan annual monitoring	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100
Permitting								75,000	25,000	
401 Permit Fee	1,500									
401 Annual monitoring Fee (0.328 per CY dredged)	32,486	-	-	8,226	11,939	-	-	-	13,046	12,546
Mitigation	**100,000**	**100,000**	**600,000**							
Monitoring /Other Expenses		**-**	**35,000**	**35,000**	**35,000**	**35,000**	**35,000**			
Contingency @ 10%	207,989	-	-	61,068	76,440	-	-	-	83,523	80,325
TOTAL EXPENSES	**2,649,539**	**310,672**	**845,672**	**925,642**	**1,098,452**	**245,672**	**245,672**	**285,672**	**1,167,475**	**1,106,794**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
INCOME	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Dredge Fund Initial Deposit	1,568,290									
Dredge Fund Deposit		350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Sell Cutterhead		950,000								
Initial Deposit From Ibank Loan	**1,700,000**									
Dredge Surcharge Fees (Woodley Island)	95,000	95,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Dredge Surcharge Fees (FL Boat Yard)	3,500	3,500	3,500	3,500	3,500	3,501	3,502	3,503	3,504	3,505
Dredge Surcharge Fees (King Salmon)		24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
TOTAL INCOME	**3,366,790**	**1,422,500**	**477,500**	**477,500**	**477,500**	**477,501**	**477,502**	**477,503**	**477,504**	**477,505**
CUMULATIVE INCOME	**3,366,790**	**4,789,290**	**5,266,790**	**5,744,290**	**6,221,790**	**6,699,291**	**7,176,793**	**7,654,296**	**8,131,800**	**8,609,305**
INCOME - EXPENSE	717,251	1,111,828	(368,172)	(448,142)	(620,952)	231,829	231,830	191,831	(689,971)	(629,289)
NET DREDGE FUND BLANCE	**717,251**	**1,829,079**	**1,460,907**	**1,012,765**	**391,813**	**623,642**	**855,472**	**1,047,303**	**357,332**	**(271,957)**

Loan Calculator	
Loan Amount	$ 1,700,000
Annual Interest Rate	3.90%
Life of Loan (Years)	10
Number of Payments per year	12
Total Number of Payments	120
Payment per period	$ 17,131
Sum of payments	$ 2,055,719
Interest cost	$ 355,719

DASHBOARD	
Income Multiplier	1%
Expense Multiplier	2%
Reserve Multiplier	0%
Dredge Cost Multiplier	0.75%
401 Annual Dredge Fee	0.328

ALTERNATIVE 3. LOAN **HOODS One year catch up, then annual dredging program with 5 year contract with upland disposal**

Year					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Dredge Area (Docks)	**Current Projected Volumes**	**Projected Volumes with 1 Foot Accumulation**	**Projected Accumulation in 1 year (6" Depth)**	**Current Accumulation Depth (ft)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
End Tie to A	11,439	4,169	2,084	2.7	11,439	-	-	6,253.07						
A to B	10,681	3,417	1,709	3.1	10,681	-	-	5,125.79						
B to C	12,493	3,240	1,620	3.9	12,493	-	-	4,860.11						
C to D	6,448	2,561	1,280	2.5	6,448	-	-	3,840.84						
D to E	9,475	2,654	1,327	3.6	9,475				5,307.54					
E to F	10,201	2,613	1,307	3.9	10,201				5,226					
F to G	12,265	2,728	1,364	4.5	12,265				5,457					
G to H	7,501	2,161	1,081	3.5	7,501				4,323					
H to I	5,723	1,991	996	2.9	5,723				3,983					
I to End	4,317	1,552	776	2.8	4,317				3,105					
TOTAL WOODLEY ISLAND CY	**91,002**				**90,542**	**-**	**-**	**20,080**	**27,400**					
Misc. Shoaling/ Overdraft			1,500		1,500			4,000	4,000					
Fields Landing	12,120	1,000	500		7,000				5,000					
Fisherman's Channel	5,000	500	250					5,000						
	TOTAL CUBIC YARDS				**99,042**	**-**	**-**	**29,080**	**36,400**	**-**	**-**	**-**	**-**	**-**

ALTERNATIVE 3. LOAN **HOODS One year catch up, then annual dredging program with 5 year contract with upland disposal**

Other Expenses	2018 1	2019 2	2020 3	2021 4	2022 5	2023 6	2024 7	2025 8	2026 9	2027 10
Total Dredge Cost	2,079,892	-	-	610,676	764,401	-	-	-	-	-
Equipment										
Ibank Loan	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572	205,572
Loan Origination Fee	17,000									
Loan annual monitoring	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100	5,100
Permitting								75,000	25,000	
401 Permit Fee	1,500								1,500	
401 Annual monitoring Fee (0.328 per CY dredged)	32,486	-	-	9,538	11,939	-	-	-	-	-
Mitigation	**100,000**	**100,000**	**600,000**							
Monitoring /Other Expenses		**-**	**35,000**	**35,000**	**35,000**	**35,000**	**35,000**			
Contingency @ 10%	207,989	-	-	61,068	76,440	-	-	-	-	-
TOTAL EXPENSES	**2,649,539**	**310,672**	**845,672**	**926,954**	**1,098,452**	**245,672**	**245,672**	**285,672**	**237,172**	**210,672**

INCOME	2018 1	2019 2	2020 3	2021 4	2022 5	2023 6	2024 7	2025 8	2026 9	2027 10
Dredge Fund Initial Deposit	1,568,290									
Dredge Fund Deposit		255,000	255,000	255,000	255,000	255,000	255,000	255,000	255,000	255,000
Sell Cutterhead		950,000								
Initial Deposit From Ibank Loan	**1,700,000**									
Dredge Surcharge Fees (Woodley Island)	95,000	95,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Dredge Surcharge Fees (FL Boat Yard)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Dredge Surcharge Fees (King Salmon)		24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
TOTAL INCOME	**3,366,790**	**1,327,500**	**382,500**	**382,500**	**382,500**	**382,500**	**382,500**	**382,500**	**382,500**	**382,500**
CUMULATIVE INCOME	**3,366,790**	**4,694,290**	**5,076,790**	**5,459,290**	**5,841,790**	**6,224,290**	**6,606,790**	**6,989,290**	**7,371,790**	**7,754,290**
INCOME - EXPENSE	717,251	1,016,828	(463,172)	(544,454)	(715,952)	136,828	136,828	96,828	145,328	171,828
NET DREDGE FUND BLANCE	**717,251**	**1,734,079**	**1,270,907**	**726,453**	**10,501**	**147,329**	**284,157**	**380,985**	**526,313**	**698,141**

Loan Calculator	
Loan Amount	$ 1,700,000
Annual Interest Rate	3.90%
Life of Loan (Years)	10
Number of Payments per year	12
Total Number of Payments	120
Payment per period	$ 17,131
Sum of payments	$ 2,055,719
Interest cost	$ 355,719

DASHBOARD	
Income Multiplier	1%
Expense Multiplier	2%
Reserve Multiplier	0%
Dredge Cost Multiplier	0.75%
401 Annual Dredge Fee	0.328

ALTERNATIVE 4. LOAN **HOODS One year catch up, then annual dredging program with upand disposal**

Year					2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Dredge Area (Docks)	**Current Projected Volumes**	**Projected Volumes with 1 Foot Accumulation**	**Projected Accumulation in 1 year (6" Depth)**	**Current Accumulation Depth (ft)**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
End Tie to A	11,439	4,169	2,084	2.7	11,439	-	-							
A to B	10,681	3,417	1,709	3.1	10,681	-	-							
B to C	12,493	3,240	1,620	3.9	12,493	-	-							
C to D	6,448	2,561	1,280	2.5	6,448	-	-							
D to E	9,475	2,654	1,327	3.6	9,475									
E to F	10,201	2,613	1,307	3.9	10,201									
F to G	12,265	2,728	1,364	4.5	12,265									
G to H	7,501	2,161	1,081	3.5	7,501									
H to I	5,723	1,991	996	2.9	5,723									
I to End	4,317	1,552	776	2.8	4,317									
TOTAL WOODLEY ISLAND CY	**91,002**				**90,542**	-	-	-	-					
Misc. Shoaling/ Overdraft			1,500		1,500			4,000						
Fields Landing	12,120	1,000	500		7,000									
Fisherman's Channel	5,000	500	250					5,000						
	TOTAL CUBIC YARDS				**99,042**	-	-	**9,000**	-	-	-	-	-	-

ALTERNATIVE 4. LOAN **HOODS One year catch up, then annual dredging program with upland disposal**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Other Expenses	1	2	3	4	5	6	7	8	9	10
Total Dredge Cost	2,079,892	-	-	190,000		-	-	-	-	-
Equipment										
Ibank Loan	108,832	108,832	108,832	108,832	108,832	108,832	108,832	108,832	108,832	108,832
Loan Origination Fee	9,000									
Loan annual monitoring	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700	2,700
Permitting								75,000	25,000	
401 Permit Fee	1,500								1,500	
401 Annual monitoring Fee (0.328 per CY dredged)	32,486	-	-	9,538	11,939	-	-	-	-	-
Mitigation	**100,000**	**100,000**	**600,000**							
Monitoring /Other Expenses		**-**	**35,000**	**35,000**	**35,000**	**35,000**	**35,000**			
Contingency @ 10%	207,989	-	-	19,000	-	-	-	-	-	-
TOTAL EXPENSES	**2,542,400**	**211,532**	**746,532**	**365,070**	**158,471**	**146,532**	**146,532**	**186,532**	**138,032**	**111,532**

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
INCOME	1	2	3	4	5	6	7	8	9	10
Dredge Fund Initial Deposit	1,568,290									
Dredge Fund Deposit		110,000	110,000	250,000	250,000	250,000	275,000	275,000	275,000	275,000
Sell Cutterhead		950,000								
Initial Deposit From Ibank Loan	**900,000**									
Dredge Surcharge Fees (Woodley Island)	95,000	95,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Dredge Surcharge Fees (FL Boat Yard)	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Dredge Surcharge Fees (King Salmon)		24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000	24,000
TOTAL INCOME	**2,566,790**	**1,182,500**	**237,500**	**377,500**	**377,500**	**377,500**	**402,500**	**402,500**	**402,500**	**402,500**
CUMULATIVE INCOME	**2,566,790**	**3,749,290**	**3,986,790**	**4,364,290**	**4,741,790**	**5,119,290**	**5,521,790**	**5,924,290**	**6,326,790**	**6,729,290**
INCOME - EXPENSE	24,390	970,968	(509,032)	12,430	219,029	230,968	255,968	215,968	264,468	290,968
NET DREDGE FUND BLANCE	**24,390**	**995,358**	**486,326**	**498,756**	**717,784**	**948,752**	**1,204,720**	**1,420,688**	**1,685,155**	**1,976,123**

Loan Calculator		
Loan Amount	$	900,000
Annual Interest Rate		3.90%
Life of Loan (Years)		10
Number of Payments per year		12
Total Number of Payments		120
Payment per period	$	9,069
Sum of payments	$	1,088,322
Interest cost	$	188,322

DASHBOARD	
Income Multiplier	1%
Expense Multiplier	2%
Reserve Multiplier	0%
Dredge Cost Multiplier	0.75%
401 Annual Dredge Fee	0.328

Attachment B

Dredge Surcharge

Ending Dredge Fund Balance

OPTION 1

Budget	Beginning Balance	Transfer to Capital Expenses	Additions	Ending Balance	Audited Expenditure	PG&E GRANT	ESTIMATED ENDING BALANCE
2001-02				1,057,870	834		1,057,870
2002-03	1,057,870	5,000	50,000	1,104,317	2,258		1,105,612
2003-04	1,104,317	20,000		1,105,342			1,105,612
2004-05	1,105,342			1,105,342	30,058		1,075,554
2005-06	1,105,342	1,105,342		958,731			1,075,554
2006-07	958,731	958,731	50,000	50,000	2,150,087		(1,024,533)
2007-08	50,000	-	826,062	876,062	29,134		(227,605)
2008-09	876,062	289,100	53,800	640,762	7,873		(181,678)
2009-10	640,762	107,476		533,286	9,988		(191,666)
2010-11	533,286	66,619		530,387	16,820		(208,486)
2011-12	530,387	-	51,373	593,387	11,684		(168,797)
2012-13	593,387	-	63,658	656,387	-		(105,139)
2013-14			69,843				(35,296)
2014-15			99,663			2,000,000	2,064,367
2015-16			96,325				2,160,692
2016-17			100,000				2,260,692
2017-18			100,000		$ 1,514,455		846,237
				TOTAL	**3,773,191**		**846,237**
					Ending Dredge Fund Balance		**846,237**

OPTION 2

Ending June 30, 2014 Audit PDF Page 31	Ending June 30, 2015 Audit PDF Page 37	Ending June 30, 2016 Audit PDF Page 42	Ending June 30, 2017 Audit PDF Page 42
1,470,000	1,000,000	756,822	1,086,013
Ending Dredge Fund Balance			**1,086,013**

OPTION 3

INCOME	
2010-11 Beginning Balance	530,387
2011-12	51,373
2012-13	63,658
2013-14	69,843
2014-15	99,663
2015-16	96,325
2016-17	100,000
2017-18	100,000
PG&E Grant	2,000,000
TOTAL	**3,111,249**
EXPENSE	
Expense 2010 - 2018	1,542,959
TOTAL	**1,542,959**
Ending Dredge Fund Balance	**1,568,290**

OPTION 4

INCOME	
2010-2011 Beginning Balance	
2011-12	51,373
2012-13	63,658
2013-14	69,843
2014-15	99,663
2015-16	96,325
2016-17	100,000
2017-18	100,000
PG&E Grant	2,000,000
TOTAL	**2,580,862**
EXPENSE	
Expense 2010 - 2018	1,542,959
TOTAL	**1,542,959**
Ending Dredge Fund Balance	**1,037,903**

EMPLOYMENT AGREEMENT
With
ALAN BOBILLOT

THIS AGREEMENT, made this 1st day of July, 2017 between the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, a public entity, located in Humboldt County, California, herein referred to as "District", and Alan Bobillot, herein referred to as "Employee".

The parties recite that:

A. District is a public entity with legal duties, powers and obligations set forth in Sections 1 through 83 of Appendix 2 of the Harbors and Navigation Code of the State of California.

B. Employee is willing to be employed by District, and District is willing to employ Employee in the unclassified, at-will position of Director of Operations and Facility Maintenance on the terms and conditions hereinafter set forth.

C. The position of Director of Operations and Facility Maintenance is an unclassified service employee as defined in Section 73 of Appendix 2 of the Harbors and Navigation Code. Said position is an "At Will" position terminable at the will of either the employer or the employee.

FOR THE REASONS SET FORTH ABOVE, AND IN CONSIDERATION OF THE MUTUAL COVENANTS AND PROMISES OF THE PARTIES HERETO, DISTRICT AND EMPLOYEE COVENANT AND AGREE AS FOLLOWS:

1. Pursuant to this Agreement, Employee is employed as Director of Operations and Facility Maintenance for the Humboldt Bay Harbor, Recreation and Conservation District effective July 1, 2017, and Employee hereby accepts and agrees to such employment.

2. Employee shall perform and complete the services and tasks set forth in and according to the time frame set forth in Exhibit "A", attached hereto and incorporated by reference, entitled "Scope of Work".

3. Employee shall at all times faithfully, industriously, and to the best of his ability, experience, and talent perform all duties that may be required pursuant to the expressed and implicit terms as set forth by the Executive Director of the District. Such duties shall be rendered in Humboldt County, California and at such other place or places as District shall in good faith require or the interest, and needs or requests of District shall require or make advisable.

4. Employee shall serve in the position of Director of Operations and Facility Maintenance at the will and pleasure of the Executive Director of District. The Executive Director of the District or Employee may terminate this Agreement and terminate Employee's employment with

or without cause at any time. In the event Employee desires to terminate employment with the District as Director of Operations and Facility Maintenance, it is expected that Employee shall give to District a minimum of thirty (30) days written notice of said intention to terminate. Employee shall be compensated for accrued benefits to the date of termination in accordance with the provisions of the Personnel Policy.

5. District shall pay Employee and Employee agrees to accept from District, $80,017/year in full payment of Employee's services for his position as Director of Operations and Facility Maintenance hereunder, compensation to be set by the Board of Commissioners and as adjusted from time to time.

   In addition to the foregoing, Employee shall receive the employee benefits for full time employees as now established by the District's personnel policy, or different employee benefits as may be modified or established by the District in the future. However, nothing in this section or any other part of this Agreement shall be interpreted as preventing or precluding the District from rescinding, amending or otherwise modifying the existing Personnel Policy or from adopting additional personnel policies or procedures concerning the employment, including but not limited to modifications of the benefits of employment.

6. Employee's salary, job duties and performance shall be reviewed in May of each year by the Executive Director of the District. The annual performance review may be used to adjust Employee's salary based upon performance and/or cost of living, as negotiated and recommended by the Executive Director and approved by the Board of Commissioners. However, nothing in this section shall be construed as a promise or commitment by the District to increase compensation, or concerning the amount of any such increase.

7. The effective date of appointment of Employee as Director of Facility Maintenance shall be July 1, 2017 and unless renewed, will terminate on June 30, 2018. In the event the Employee is terminated without cause or the Employee's contract is not renewed, Employee will be given the opportunity to retire.

8. Employee shall devote his full time, attention, knowledge and skill solely and exclusively as Director of Operations and Facility Maintenance, solely and exclusively to the business and interest of the District. The position is considered to by an exempt position within the meaning of the California Labor Code for the purposes of wage and hour provisions. Employee's workweek is not necessarily limited to 40 hours per week. Employee may be expected to work in excess of 40 hours per week if required to perform his duties as Director of Operations and Facility Maintenance at the regular monthly salary with no provision for overtime pay.

9. Employee is an unclassified employee as Director of Operations and Facility Maintenance. The position of Director of Operations and Facility Maintenance is not entitled to participate as a member of the International Longshoremen's and Warehousemen's Union AFL/CIO Local 14, Unit A, pursuant to the Union Contract with District and Director of Facility Maintenance is not included as a member of the bargaining unit represented by the Union.

10. Employee shall abide by all applicable provisions of District's Personnel Policy as amended and with all other District policies and procedures currently in force or as may be implemented during the term of employment.

11. This written Agreement contains the sole and entire agreement between the parties. It supersedes any and all other agreements between the parties. The parties acknowledge and agree that neither of them has made any representation with respect to the subject matter of this Agreement or any representations including the execution and delivery hereof except such representations as are specifically set forth herein, and each party acknowledges that he/she or it has relied on his/her or its own judgment in entering into this Agreement. The parties further acknowledge that any statements or representations that may have heretofore been made by either of them to the other are void and of no effect and that neither of them has relied thereon in connection with his or its dealings with the other.

12. No waiver of modification of this Agreement or of any covenant, condition, or limitation herein contained shall be valid unless in writing and duly executed by the party to be charged therewith.

13. This Agreement and performance hereunder and all suits and special proceedings hereunder shall be construed in accordance with the laws of the State of California. In any action, special proceeding, or other proceedings that may be brought arising out of, in connection with, or by reason of this Agreement, the laws of the State of California shall be applicable and shall govern to the exclusion of the law of any other form. Any legal proceedings or actions arising out of this agreement shall be venued in Humboldt County, California.

Executed at Humboldt County, California, on the date first above written.

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

By_____
Alan Bobillot- Employee

EXHIBIT A

DIRECTOR OF FACILITY MAINTENANCE

SCOPE OF WORK

Definition of Position:

Under the direction of the Executive Director, the Director of Facility Maintenance oversees the Harbor District's maintenance staff, Harbor District vehicles and vessels and maintenance of all Harbor District facilities including Woodley Island Marina; Fields Landing Boat Yard; Redwood Marine Terminal and Redwood Terminal 2; Gerald Hansen Wildlife Area; King Salmon Beach; Shelter Cove Boat Launching Facility, Park Street Mitigation Area, all other projects and properties under Harbor District management, and such other related duties, tasks and responsibilities as may be assigned by the Executive Director .

The Director of Facility Maintenance is a full-time, permanent, unclassified, at-will management position.

EMPLOYMENT AGREEMENT
With
TIM PETRUSHA

THIS AGREEMENT, made this 1st day of July, 2017 between the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, a public entity, located in Humboldt County, California, herein referred to as "District", and Tim Petrusha, herein referred to as "Employee".

The parties recite that:

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B. Employee is willing to be employed by District, and District is willing to employ Employee in the unclassified, at-will position of Director of Harbor Operations and Bar Pilot on the terms and conditions hereinafter set forth.

C. The position of Director of Harbor Operations and Bar Pilot is an unclassified service employee as defined in Section 73 of Appendix 2 of the Harbors and Navigation Code. Said position is an "At Will" position terminable at the will of either the employer or the employee.

FOR THE REASONS SET FORTH ABOVE, AND IN CONSIDERATION OF THE MUTUAL COVENANTS AND PROMISES OF THE PARTIES HERETO, DISTRICT AND EMPLOYEE COVENANT AND AGREE AS FOLLOWS:

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4. Employee shall serve in the position of Director of Harbor Operations and Bar Pilot at the will and pleasure of the Executive Director of District. The Executive Director of the District or Employee may terminate this Agreement and terminate Employee's employment with

or without cause at any time. In the event Employee desires to terminate employment with the District as Director of Harbor Operations and Bar Pilot, it is expected that Employee shall give to District a minimum of thirty (30) days written notice of said intention to terminate. Employee shall be compensated for accrued benefits to the date of termination in accordance with the provisions of the Personnel Policy.

5. District shall pay Employee and Employee agrees to accept from District, $88,842/year in full payment of Employee's services for his position as Director of Harbor Operations and Bar Pilot hereunder, compensation to be set by the Board of Commissioners and as adjusted from time to time.

   In addition to the foregoing, Employee shall receive the employee benefits for full time employees as now established by the District's personnel policy, or different employee benefits as may be modified or established by the District in the future. However, nothing in this section or any other part of this Agreement shall be interpreted as preventing or precluding the District from rescinding, amending or otherwise modifying the existing Personnel Policy or from adopting additional personnel policies or procedures concerning the employment, including but not limited to modifications of the benefits of employment.

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9. Employee is an unclassified employee as Director of Harbor Operations and Bar Pilot. The position of Director of Harbor Operations and Bar Pilot is not entitled to participate as a member of the International Longshoremen's and Warehousemen's Union AFL/CIO Local 14, Unit A, pursuant to the Union Contract with District and Director of Harbor Operations and Bar Pilot is not included as a member of the bargaining unit represented by the Union.

10. Employee shall abide by all applicable provisions of District's Personnel Policy as amended and with all other District policies and procedures currently in force or as may be implemented during the term of employment.

11. This written Agreement contains the sole and entire agreement between the parties. It supersedes any and all other agreements between the parties. The parties acknowledge and agree that neither of them has made any representation with respect to the subject matter of this Agreement or any representations including the execution and delivery hereof except such representations as are specifically set forth herein, and each party acknowledges that he/she or it has relied on his/her or its own judgment in entering into this Agreement. The parties further acknowledge that any statements or representations that may have heretofore been made by either of them to the other are void and of no effect and that neither of them has relied thereon in connection with his or its dealings with the other.

12. No waiver of modification of this Agreement or of any covenant, condition, or limitation herein contained shall be valid unless in writing and duly executed by the party to be charged therewith.

13. This Agreement and performance hereunder and all suits and special proceedings hereunder shall be construed in accordance with the laws of the State of California. In any action, special proceeding, or other proceedings that may be brought arising out of, in connection with, or by reason of this Agreement, the laws of the State of California shall be applicable and shall govern to the exclusion of the law of any other form. Any legal proceedings or actions arising out of this agreement shall be venued in Humboldt County, California.

Executed at Humboldt County, California, on the date first above written.

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

By_____
Tim Petrusha- Employee

COMMISSIONERS
1st Division
Larry Doss
2nd Division
Greg Dale
3rd Division
Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

Humboldt Bay
Harbor, Recreation and Conservation District
(707) 443-0801
P.O. Box 1030
Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members
FROM: Larry Oetker, Executive Director
DATE: July 26, 2018
TITLE: Consideration of Appointment of Labor Relations Committee

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STAFF RECCOMENDATION: It is recommended that the Board: Appoint two members to serve along with the Executive Director on the Labor Relations Committee.

BACKGROUND: As per Section 2.03 of the Collective Bargaining Agreement with the International Longshore and Warehouse Union Local 14, Unit A, a Labor Relations Committee is composed of two members of the District Harbor Commission and the CEO and two members of the Unions Employee Liaison Committee. The Union Liaison Committee has requested a meeting to initiate renegotiate discussions.

COMMISSIONERS
1st Division
Larry Doss
2nd Division
Greg Dale
3rd Division
Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

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(707) 443-0801
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Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members

FROM: Larry Oetker, Executive Director

DATE: July 26, 2018

TITLE: Administrative Permit A-2018-01 Schneider Dock Maintenance Dredging

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STAFF RECCOMENDATION: It is recommended that the Board: accept and file the permit as approved.

BACKGROUND: Rebuilt in 1994 by David Schneider, Schneider Dock (formerly Dock A) is used in conjunction with the 16-acre Intermodal Facility for the storage, import and export of various types of cargo. Vessels from the U.S. Navy, National Oceanic and Atmospheric Administration (NOAA), U.S. Army Corps of Engineers, as well as local, regional and even international traffic utilize the Schneider Dock Industrial Park (SDIP). No dredging has occurred since the dock was rebuilt, primarily due to its proximity to the Humboldt Bay Channel.

DISCUSSION: The Project Description and project materials for Schneider Dock Maintenance Dredging is in Attachment A.

ATTACHMENTS:

A. Administrative Permit A-2018-01

PROJECT DESCRIPTION

Describe in detail the proposed project:

History

Rebuilt in 1994 by David Schneider, Schneider Dock (formerly Dock A) is used in conjunction with the 16-acre Intermodal Facility for the storage, import and export of various types of cargo. Vessels from the U.S. Navy, National Oceanic and Atmospheric Administration (NOAA), U.S. Army Corps of Engineers, as well as local, regional and even international traffic utilize the Schneider Dock Industrial Park (SDIP). No dredging has occurred since the dock was rebuilt, primarily due to its proximity to the Humboldt Bay Channel.

Purpose of Project

In order to provide vessels continued safe access to the SDIP dock, the applicant requests to secure a ten-year maintenance dredging permit. Vessels utilizing the Schneider Dock can be up to 600 ft in length with draft depths of 30 to 35 ft. Dredging is required to maintain adequate berthing depth for the vessels, as well as to ensure the continued safe and efficient operation of the Schneider Dock facility.

Project Description

Maintenance dredging of bay sediment is proposed for the area adjacent to the Schneider Dock. The project site is located along the eastern shore of the North Humboldt Bay Channel in the City of Eureka at 990 West Waterfront Drive. Project parcels are described as APN's 003-062-026, 003-062-024 and 003-062-021; the former being a tideland parcel owned by the City of Eureka and the latter two being the adjacent upland parcels owned by the applicant, David Schneider. Maintenance dredging will restore and maintain sufficient draft depth for moorage and shipping operations to continue at the dock.

It is proposed to remove a maximum of 5,000 cubic yards of sediment during the initial dredging event. Dredging extents are described as follows: from the eastern edge of the dock to 100 feet westerly from the face of the dock (140 feet total width perpendicular to face of dock) and extending 150 feet northerly from the north end and 150 feet southerly from the south end of the dock (650 feet total length parallel to face of dock), for a total footprint of approximately 2.1 acres. Within this area, approximately 0.9 acres is proposed to be dredged. The area immediately north and south of the dock will only be sloped back from the dredged area to minimize the amount of material sloughing off into the dredged area; it will not be dredged to full depth.

Hydrographic surveys are completed annually, and dredging is proposed during a two-week period between the dates of July 1 through October 15. Dredging volume will not exceed 5,000 cubic yards per 12-month period, and the total volume dredged under this permit will not exceed 10,000 cubic yards. The extent of the dredge area(s) will be determined based on the results of the pre-dredge hydrographic survey and may differ slightly from the area proposed for the initial dredging event. Under no circumstances will the dredge area extend beyond the dredging extents described above.

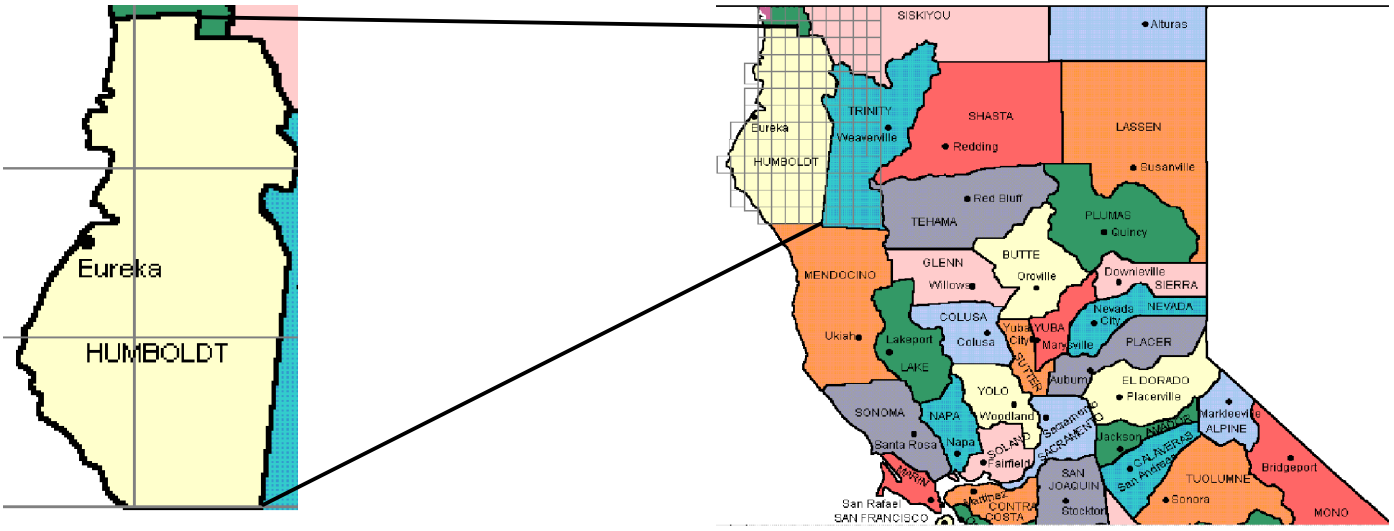
Dredging will be performed using an excavator and/or crane with a clamshell bucket positioned on a floating work barge. Material will be scooped from the bay floor and

deposited in a sealed dump scow situated adjacent to the work barge. Once full, the scow will be transported to the Humboldt Open Ocean Disposal Site (HOODS) located three nautical miles northwest of the Humboldt Bay entrance where the dredged material will be deposited (see Figures IV and V.)

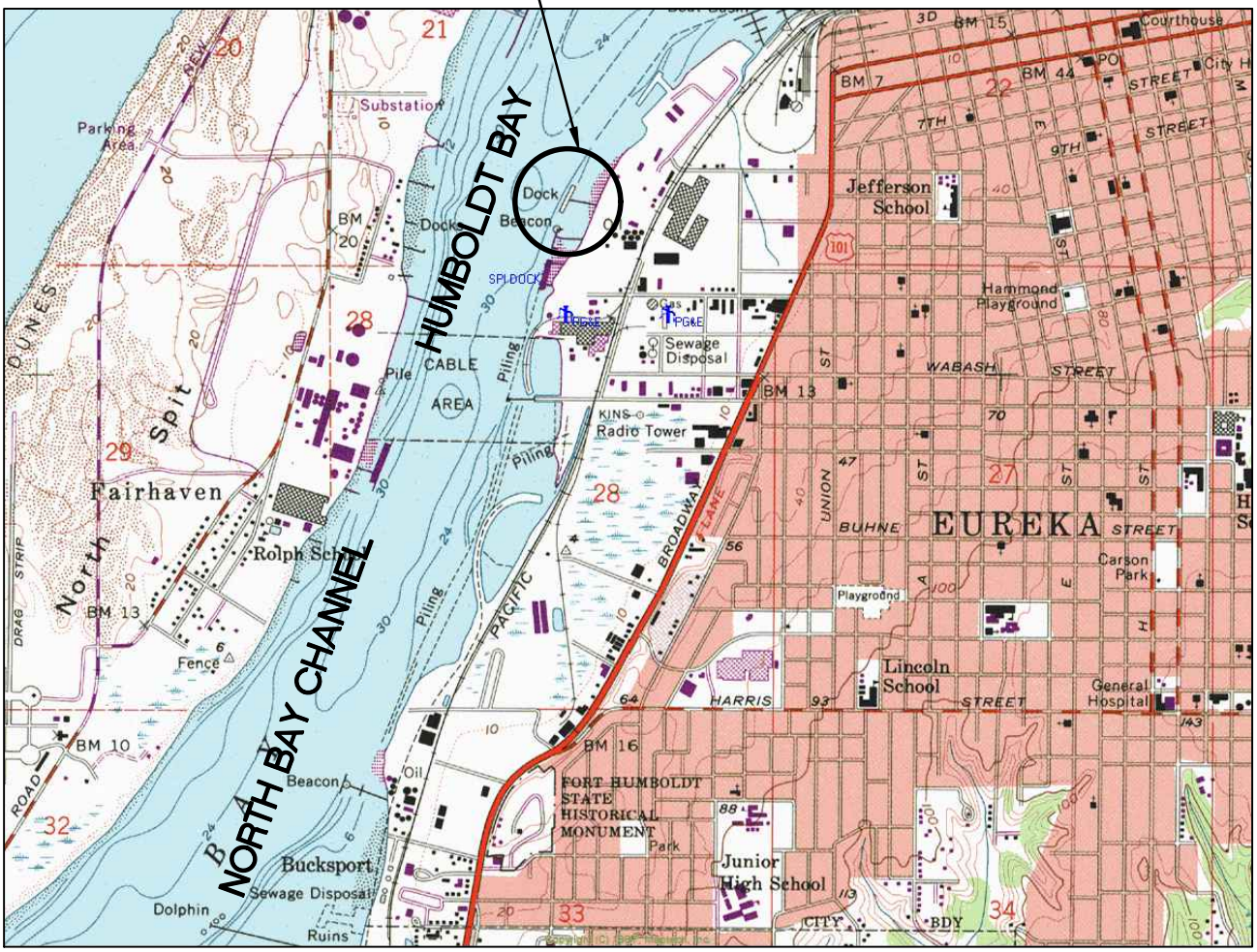
At this time, a dredging contractor has not been selected. Each contractor will have unique means and methods to complete the project based on their experience and equipment. As such, specific details of construction, such as types of equipment, barge/scow size, number of trips to HOODS, schedule, etc., are still unknown. However, the general dredging methodology will consist of heavy equipment removing material from the bay floor and placing it into a scow for transport to the disposal site. Prior to dredging, pre-project hydrographic surveys will be completed for each facility. Updated dredge volumes will be generated and verified with post-project hydrographic surveys.

The dredge barge will be moved into position and will anchor, typically by setting two spud piles attached to the barge. A tugboat will then move the dump scow into position nearby the work barge. A crane outfitted with a closed clamshell bucket will be used. Other than the negligible amount of sediment on the exterior of the bucket during loading, there will be no water or sediment released back into Humboldt Bay. Dredged material will be placed in the water tight dump scow positioned adjacent to the work barge. Once the scow is full, it will be towed out of Humboldt Bay to the HOODS ocean disposal site. The barge and scow will be repositioned frequently throughout the project in order to access all the areas to be dredged.

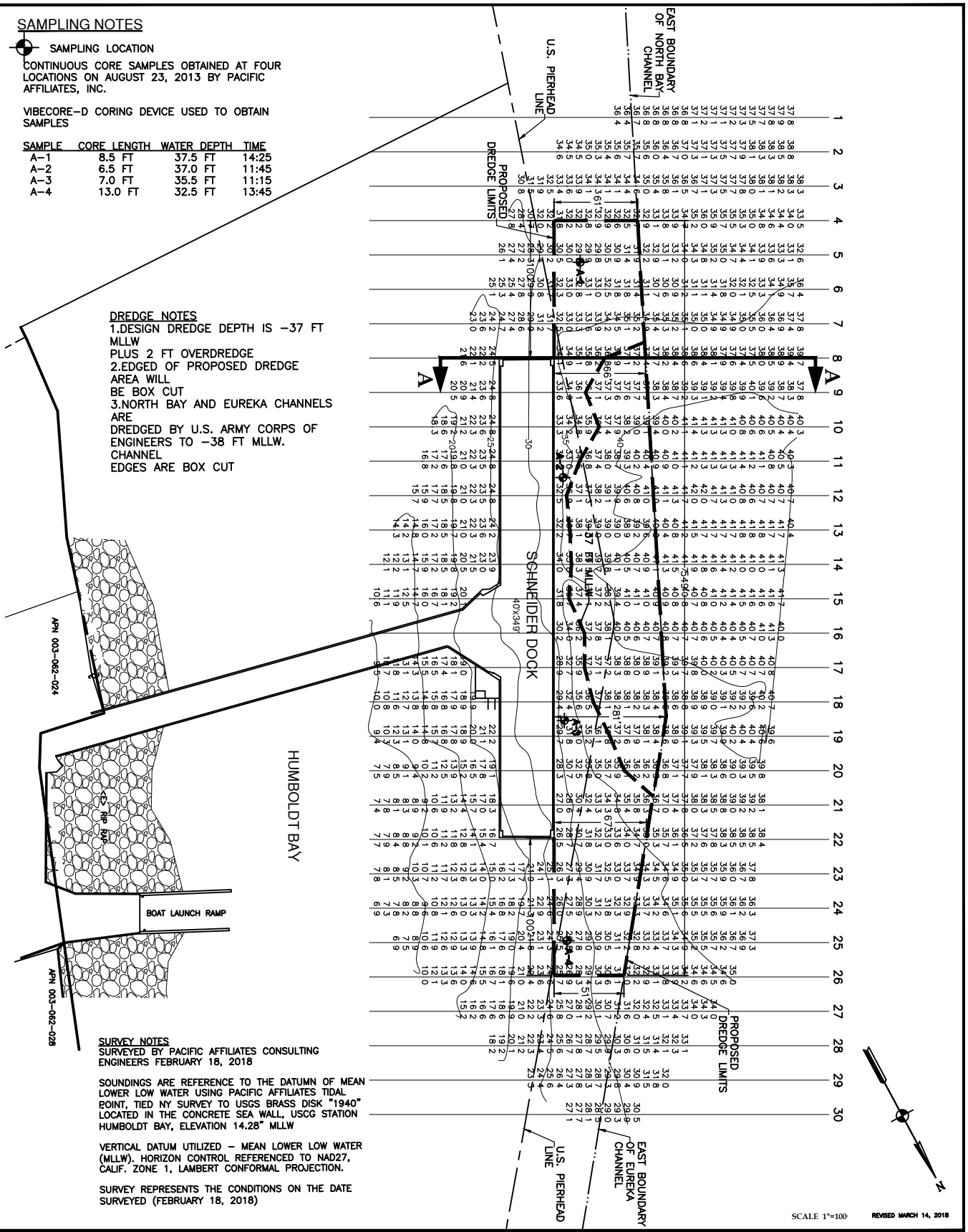
See Attached “Plan of Operations: Schneider Dock Industrial Park Maintenance Dredging” for additional information.



SCHNEIDER DOCK



SCHNEIDER DOCK INDUSTRIAL PARK 1206 WEST 14TH STREET Eureka, California	VICINITY MAP FIGURE 1	PACIFIC AFFILIATES CONSULTING ENGINEERS 990 W. WATERFRONT DRIVE, EUREKA, CA 95501 TEL (707) 445-3001 FAX (707) 445-3003



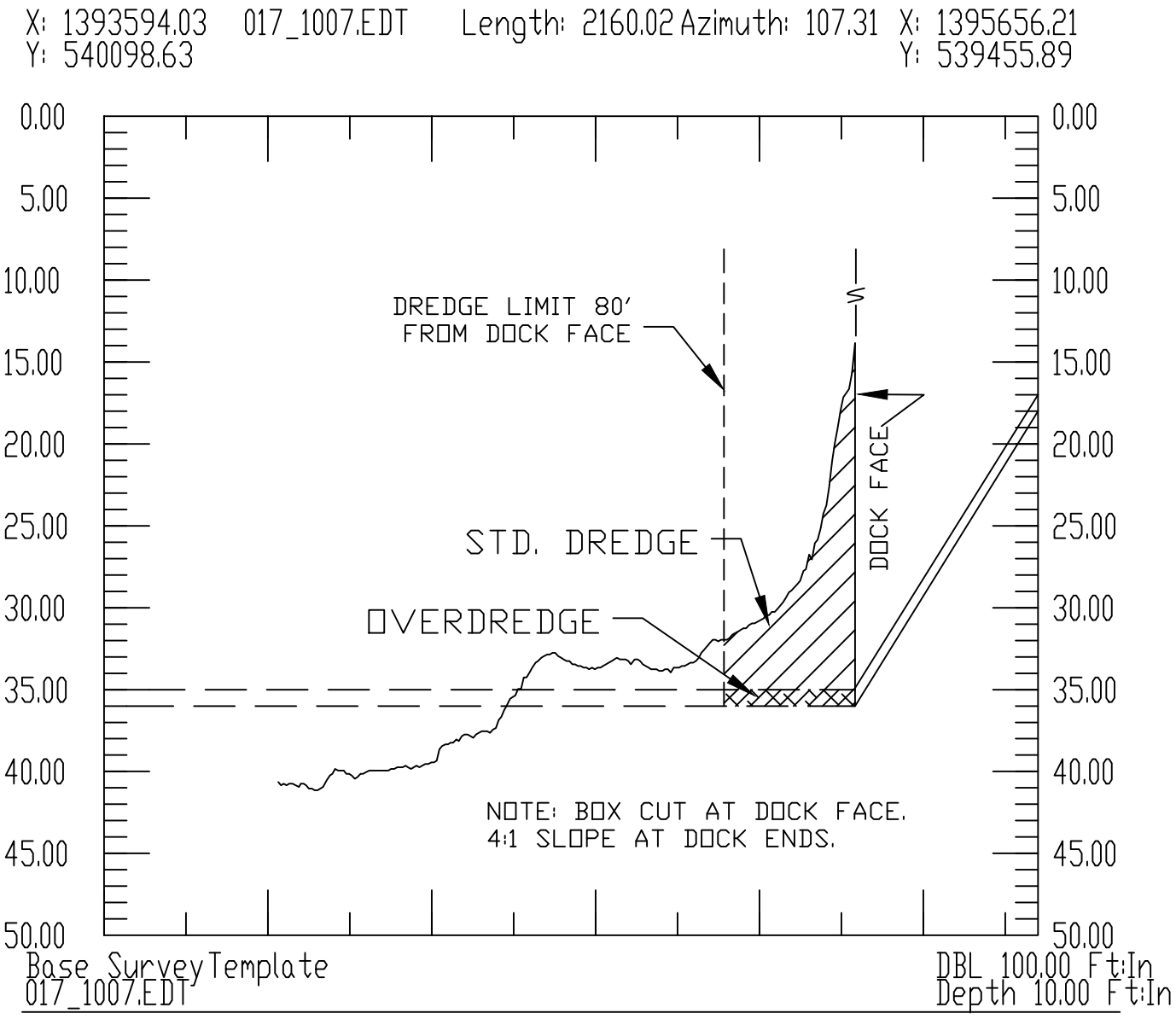
SCHNEIDER DOCK

990 W. WATERFRONT DR.
EUREKA, CA 95519
APN 003-062-026

BATHYMETRIC SURVEY & SAMPLE LOCATIONS

FIGURE 2

PACIFIC AFFILIATES
CONSULTING ENGINEERS
990 W. WATERFRONT DRIVE, EUREKA, CA 95501
TEL (707) 445-3001 • FAX(707)445-3003



SCALE: H: 1"=100'
V: 1"=10'

SCHNEIDER DOCK 990 WATERFRONT DRIVE Eureka, California	TYPICAL CROSS SECTION OF DREDGE PRISM FIGURE 3	PACIFIC AFFILIATES CONSULTING ENGINEERS 990 W. WATERFRONT DRIVE, EUREKA, CA 95501 TEL (707) 445-3001 FAX(707)445-3003

COMMISSIONERS
1st Division
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Stephen Kullmann
4th Division
Richard Marks
5th Division
Patrick Higgins

Humboldt Bay
Harbor, Recreation and Conservation District
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P.O. Box 1030
Eureka, California 95502-1030

STAFF REPORT - HARBOR DISTRICT MEETING

July 26, 2018

TO: Honorable Board President and Harbor District Board Members

FROM: Larry Oetker, Executive Director

DATE: July 26, 2018

TITLE: Administrative Permit A-2018-02 Woodley Island Marina and Fields Landing Maintenance Dredging

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STAFF RECCOMENDATION: It is recommended that the Board: accept and file the permit as approved.

BACKGROUND: HBHRCD is proposing regular maintenance dredging within Humboldt Bay at Woodley Island Marina (WIM) and Fields Landing Boat Yard Travel Lift. Permit coverage is being requested for a total volume of 300,000 cubic yards (cy) over ten years at WIM and up to 25,120 cy over ten years at Fields Landing. Dredging will be performed using a crane and/or excavator with a closed clamshell bucket. Material will be scooped from the bay floor and deposited in a scow and will be transported to the Humboldt Open Ocean Disposal Site (HOODS) where the dredged material will be deposited.

District staff determined that the project is exempt from CEQA pursuant to a Class 4 categorical exemption (Section 15304. (g) Minor Alterations to Land), which exempts maintenance dredging where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies. A Notice of Exemption will be filed with the County.

DISCUSSION: The Project Description and project materials for Woodley Island Marina are on Attachment A. The Project Description and project materials for Fields Landing Boat Yard are on Attachment B.

ATTACHMENTS:

A. Woodley Island Marina Maintenance Dredging – Clamshell with HOODS Disposal
B. Fields Landing Boat Yard – Travel Lift Maintenance Dredging

Humboldt Bay Harbor, Recreation and Conservation District

Woodley Island Marina Maintenance Dredging

Clamshell with HOODS Disposal

PROJECT DESCRIPTION

Introduction

Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD or District) is proposing regular maintenance dredging within Humboldt Bay at Woodley Island Marina (WIM). This site was previously dredged in 2007 and has accumulated significant amounts of sediment, requiring dredging to provide for safe vessel mooring depths. Current conditions have become hazardous in some areas and rendered some facilities unusable due to shallow depths. Total estimated accumulated volume at WIM is approximately 130,000 cubic yards, see Table 1 below.

Table 1. Woodley Island Marina Dredging

Location	Dredging Surface Area (acres)	Dredge Depth (ft MLLW[1])	Estimated current Volume[2] (cy)
Woodley Island Marina(WIM)	19.3	-14	130,000

Notes:

1. MLLW – mean lower low water
2. Volumes based on SHN 2014 hydrographic surveys, will be confirmed with pre-dredge survey

Dredging will be performed using an excavator and/or crane with a clamshell bucket positioned on a floating work barge. Material will be scooped from the bay floor and deposited in a sealed dump scow situated adjacent to the work barge. Once full, the scow will be transported to the Humboldt Open Ocean Disposal Site (HOODS) located three nautical miles northwest of the Humboldt Bay entrance where the dredged material will be deposited, see Attachment 1 – Project Plans.

Permit coverage is being requested for a total volume of up to 300,000 cubic yards over a ten year period. Dredged volume shall not exceed 100,000 cy in any 12 month period. Ten year permits are being requested to give the District the flexibility to re-evaluate the facilities and shorten the recent ten year dredge cycle to avoid replicating the current state of the facilities in the future. The amount and timing of dredging during this permit, and under future permits, is dependent on the District's available funding at the time of the project.

Background

Maintenance dredging has been an ongoing project within Humboldt Bay since the late 1800's when channels were first established throughout the bay. A number of public and private facilities around the Bay have been dredged approximately once every ten years since the 1980's in an effort to maintain adequate berthing depths. During the last dredge episode in 2007, sediment was pumped across the Samoa Peninsula and deposited in the surf zone on Samoa Beach. Since 2007, significant sedimentation has occurred from the Entrance Channel to the far reaches of Humboldt Bay. Between the past two episodes of main channel dredging performed by the Army Corps in Humboldt Bay and the entrance, the Army Corps estimates that approximately 3 million cubic yards of sediment has been deposited in the Bay

from runoff, rivers and sloughs that discharge into the Bay. Typically between the Corps' dredging cycles, approximately 1 million cubic yards gets deposited in the bay. This has clearly exacerbated the issues at the public facilities within the Bay.

The District is currently working on a comprehensive strategy for management of sediments that accumulate within Humboldt Bay's locally managed sites (smaller channels, docks and marinas that are outside federally maintained shipping channels). The Humboldt Bay Sediment Management Strategy and Program Environmental Impact Report (PEIR) will describe a long-term strategy for sediment management and assess the environmental effects of the proposed strategy. The Humboldt Bay Sediment Management Strategy will be a long-term program for dredging, pumping, dewatering, processing, stockpiling and beneficially using dredged sediments from locally maintained sites. The anticipated completion date is October 2018.

Location

Woodley Island Marina is on the north side of the Eureka Inner Channel, along the southwest portion of Woodley Island, within the City of Eureka boundary, see Figure 1: Vicinity Map. To access the facility from Eureka, take Highway 101 and turn north on Highway 255 (R Street). Exit at the Startare Drive turnoff and continue southeast until reaching the Woodley Island Marina. The 237-berth marina was constructed in 1978, and is used by both commercial fishermen and recreational boaters. There are 10 existing docks (Docks A through J). Dredging of the Woodley Island Marina shall include removal of all sediment from within the berths, fairways, slips and from beneath all floating and fixed structures within a total area of approximately 19.3 acres.

Construction methods

At this time, a dredging contractor has not been selected. Each contractor will have unique means and methods to complete the project based on their experience and equipment. As such, specific details of construction, such as types of equipment, barge/scow size, number of trips to HOODS, schedule, etc., are still unknown. However, the general dredging methodology will consist of heavy equipment removing material from the bay floor and placing it into a scow for transport to the disposal site. Prior to dredging, pre-project hydrographic surveys will be completed for each proposed dredge area. Updated dredge volumes will be generated and verified with post-project hydrographic surveys.

The dredge barge will be moved into position and will anchor, typically by setting two spud piles attached to the barge. A tugboat will then move the dump scow into position nearby the work barge. A crane outfitted with a closed clamshell bucket will be used. For the interior areas where space is limited, an excavator may be used. The excavator bucket will have a thumb to seal the bucket as it retrieves through the water column. Other than the negligible amount of sediment on the exterior of the bucket during loading, there will be no water or sediment released back into Humboldt Bay. Dredged material will be placed in the water tight dump scow positioned adjacent to the work barge. Once the scow is full, it will be towed out of Humboldt Bay to the HOODS ocean disposal site. The barge and scow will be repositioned frequently throughout the project in order to access all the areas to be dredged. The marina would continue to operate during the dredging work to ensure commercial and recreational access to coastal waters.

Dredging of the Woodley Island Marina shall include removal of all sediment from within the berths, fairways, slips and from beneath all floating and fixed structures. Dredging shall also be conducted beneath gangway landing areas to maintain utility line clearance at low tide. Project dredge depth shall

be -14.0 feet mean lower low water (MLLW). Dock structures may be dismantled as necessary to complete dredging; any broken docks will be repaired and/or replaced. The excavator will have the capability to reach under the floating docks to some degree. Sediment will be dredged as close to the docks as possible, then a clean-up dredge will be performed to remove any material that sloughed off from underneath the docks. Side slopes shall be cut at 2:1 or the natural angle of repose. Overdredge depth at all locations is assumed to be one foot below the design depth. Maximum pay line shall be two feet below the design dredge depth.

Schedule

Dredging is, by definition, "in-water" work. As such, there are specific work windows established by the regulatory agencies to minimize impacts to various fish species present in Humboldt Bay. The in-water work window for Humboldt Bay is from July 1st to October 15th of each year. Dredging will occur during this work window, with construction occurring up to 24 hours per day, depending on contractor availability and scheduling.

Dredge volume during the first year will depend on when permits are obtained, dredging costs, contractors' equipment, etc., however, as much material will be dredged as is possible. In the following years of permit coverage, the remaining sediment will be cleaned up to reach the design dredge depths. Dredged volume shall not exceed 100,000 cubic yards in any 12 month period.

Ocean Disposal

Ocean disposal at the Humboldt Open Ocean Disposal Site (HOODS) will be implemented for this project. Disposal at HOODS will be performed in accordance with Special Conditions established by the Environmental Protection Agency (EPA) and Army Corps, which may include bathymetric surveys, vessel tracking systems and record keeping/reporting. Scows shall only be transported to HOODS when ocean conditions will not interfere with safe transportation and will not create a risk of spillage, leak or other loss of dredge material. Specific cells within HOODS will be identified by EPA and Army Corps which shall be used for disposal.

Sediment Testing Results

A Sediment Sampling and Analysis Plan (SAP) was prepared for the Humboldt Bay Harbor, Recreation and Conservation District (District) and the City of Eureka in December 2015 for 15 docks and marinas around Humboldt Bay. Sediment sampling and testing proposed in the SAP was executed in August 2016. A total of eight core samples collected at the WIM were composited into two samples (WIM-A and WIM-B) for laboratory analysis (the SAP and Results are on file at the Harbor District).

Comprehensive sampling and testing was also completed for the US Army Corps channel dredging project throughout Humboldt Bay in 2015. Six samples were collected adjacent to or within WIM (HUM-EKI-2-2015-5, HUM-EKI-3-2015-2, HUM-EKI-3-2015-3, HUM-EKI-3-2015-4, HUM-EKI-3-2015-5 and HUM-EKI-3-2015-6). Samples were composited by area, as designated by the first number in the sample ID (i.e. HUM-EKI-1, HUM-EKI-2 and HUM-EKI-3). Refer to Humboldt Harbor and Bay O&M Dredging, Grain Size Verification and Tier III Evaluation, Sampling and Analysis Results, USACE Contract No. W912P7-15-C-0019 dated April 2016 by Kinnetic Laboratories, Inc. for complete analysis of Army Corps sampling and testing (on file at the Harbor District).

Attachment 2 presents a summary of the testing results comparing WIM and City of Eureka Small Boat Basin (SBB) and Commercial Street Dock (COM) results to the Army Corps results (HUM-EKI-1, -2 and-3).

The sediments are similar in physical and chemical composition. Within the project areas, the material to be dredged is approximately 90-97% fines and 3-10% sands, while the material in the Channel had slightly more sand. Dioxin/furan TEQs were detected in low concentrations, similar to background levels. Metals concentrations were low and very similar to those detected in Army Corps samples. PAH's and pesticides were mostly non-detect at the method detection limit at WIM, SBB, and COM, while in the Channels low levels of PAH's were detected and pesticides were mostly non-detect at the method detection limit. Overall, the sediment from WIM, SBB, and COM is relatively clean material and very similar to what was dredged by the Army Corps. EPA approved the sediment from the Army Corps project and City of Eureka for disposal at HOODS, and based on their review of the WIM, SBB, and COM sediment to date, they have no objections to using HOODS for the proposed dredge projects.

Endangered Species

Humboldt Bay provides habitat for a variety of plants, birds, fish, invertebrates and marine mammals, some of which are listed under the state and federal Endangered Species Acts (ESA). The following listed species have potentially suitable habitat within the vicinity of the proposed project site:

Green sturgeon (*Acipenser medirostris*)

The National Marine Fisheries Service (NMFS) listed the southern Distinct Population Segment (DPS) green sturgeon as "threatened" in 2006 (71 FR 17757) and designated Humboldt Bay as critical habitat effective October 9, 2009 (74 FR 52300). Green sturgeons migrate to coastal ocean waters, estuaries and bays after two to three years of rearing, where it is believed they spend the majority of their lives. Adults migrate up large coastal rivers to spawn every two to four years. Sub-adults and adults may forage in the project area during summer and fall months.

Salmonids

The Humboldt Bay watershed supports three species of salmonids listed as threatened under the federal ESA: Coho salmon, Chinook salmon and steelhead. NMFS designated critical habitat in northern California for each of the three salmonid species in February of 2000 (65 FR 42422 42481), (Federal Register 2000). The following migration time frames given are approximate and coincide with the peak runs.

Coho salmon (*Onchorhynchus kisutch*)

Southern Oregon/Northern California Coast (SONCC) coho salmon were listed under the federal Endangered Species Act (ESA) as threatened on June 18, 1997 (62 FR 33038) and under the California Endangered Species Act (CESA) in 2005. Coho salmon travel through Humboldt Bay as juveniles between February and June on their way to the ocean and again as adults from October through December while traveling to spawning grounds.

Chinook salmon (*O. tshawytscha*)

Chinook Salmon in the California Coastal ESU were listed as a threatened species under the federal ESA on September 16, 1999 (64 FR 50393). Similar to the coho salmon, Chinook salmon travel through Humboldt Bay on their way to the Pacific as juveniles from February through June and again as adults to their spawning grounds between October and November.

Steelhead (*O. mykiss*)

The Northern California (NC) DPS steelhead were listed under the ESA as threatened in 2006 (71 FR 834). Steelhead in the Northern California DPS were listed as a threatened species under the federal ESA on January 5, 2006 (50 FR). Similar to the coho and Chinook, the steelhead will travel through Humboldt Bay as a juvenile on its way to the Pacific and again as an adult to spawn in rivers. Steelhead will, however, make multiple spawning migrations in its adult years, so it will travel through Humboldt Bay to freshwater and back out to the Pacific between December and April.

Longfin smelt (*Spirinchus thaleichthys*)

The state of California listed the longfin smelt as threatened under the California ESA in 2009. Adult and juvenile longfin smelt can be found in the open waters of estuaries, mostly in the middle or at the bottom of the water column. Spawning occurs in fresh water during the winter to early spring (February through April) over sandy or gravel substrate. Longfin smelt larvae would not be present in the area during the late summer and fall. Juvenile and adult longfin smelt would have a moderate likelihood of presence during operations.

Environmental Effects

Potential impacts on these species could include injury or mortality of individuals due to entrainment in the dredging equipment, exposure to sediment-associated contaminants, and turbidity produced by dredging. In addition, short-term degradation of water quality, such as increased turbidity from disturbance of sediment or spills or leakage from machinery could occur during dredging activities. This could result in localized disturbance of juvenile and adults, potentially resulting in stress, disruption of essential behaviors, or physiological impairment. Impacts on designated critical habitat could result from loss of foraging and cover due to the removal of subtidal benthic substrate and associated benthic invertebrates from dredging.

Dredging activities are not expected to have a significant environmental impact based on the timing and duration of dredging and amount of potential and occupied habitat affected. The dredging equipment is slow moving and makes sufficient noise to alert any animals to allow them time to flee the area. It is not so noisy that it will exceed sound thresholds for disturbance or injury to fish or marine mammals. Short-term, localized increases in suspended sediments will occur, but are expected to disperse within 500 feet. Humboldt Bay is naturally turbid, so localized suspended sediments are not expected to have an effect.

The salmonid species discussed above are not expected to be in Humboldt Bay during the project work window (July 1 to October 15). Fish and marine mammals, including green sturgeon and longfin smelt, may be in the project area during construction, but would likely flee to other areas of the bay. With the activity taking place between the shore and channel, there is sufficient room for fish and mammals to travel around the area. Since these species are likely to avoid equipment while dredging occurs, there would not likely be any direct impacts from encounters with the dredge, contact with turbid water, or decreased water quality. The mechanical clamshell dredge will effectively eliminate the possibility of entrainment and reduce turbidity.

Eelgrass & Benthic Habitat

The Woodley Island Marina basin provides soft bottom habitat that may be habitat for a variety of benthic organisms. In addition, sparse clumps of eelgrass materialize sporadically along the slope of the marina.

The proposed dredging would involve removal of much of this soft bottom habitat area. However, the impacts to bay bottom habitat are considered to be insignificant for several reasons. Firstly, when the marina was created in 1978, the eelgrass and soft bottom habitat that was removed by excavating the marina basin was reestablished elsewhere in Humboldt Bay as a mitigation measure. To fulfill associated mitigation requirements the HBHRCD purchased a 22 acre parcel located at the end of Park Street in Eureka. Restoration of this site included breaching of the perimeter levee to restore tidal action to a portion of the property and construction of a levee in the upper portion of the property to enhance existing freshwater wetlands at the site. At the time, it was recognized that the marina would require periodic maintenance dredging and the mitigation was required to ensure that creation of the marina and its subsequent maintenance dredging would not result in a net loss of habitat. Secondly, as occurred after the 1988, 1998, and 2007 maintenance dredging projects, the site can be expected to be recolonized by the flora and fauna that would be temporarily displaced by the project. These organisms grow in sufficient abundance in areas adjacent to the marina that a ready source of colonizers exists to replace the organisms that are lost.[1]

Conservation and Protection Measures

Conservation and protection measures have been designed to limit the risk of project-related impacts to threatened and endangered species and designated critical habitat in Humboldt Bay. The following protection measures would minimize the risk of impacts on listed fish species and habitat:

- Dredging activities will only be performed between July 1 and October 15 of each calendar year to avoid impacts to salmonids migrating through Humboldt Bay.
- Clamshell and excavator dredging is a slow and controlled process allowing marine life time to escape as the equipment approaches. There are no suction or jetting pressures involved. Operator has the ability to limit descent speeds to minimize sediment dispersion.
- Vegetable based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment. Note, not all equipment is compatible with these types of fluids.
- Equipment shall be inspected and serviced prior to mobilization. Routine inspections shall occur through the project and leaks shall be repaired immediately when discovered.
- Spill kits equipped with enough material to provide preliminary containment for a volume of material that can reasonably be expected to spill shall be maintained on the barge and the dock. Spill containment trays shall be placed around all equipment on the barge deck.
- Dredging will not extending beyond the overdredge depths as described herein and in the attached typical cross-sections.

CEQA Compliance

The District intends to issue a Class 4 Categorical Exemption from CEQA per Section 15304 (g) Minor alterations to land including maintenance dredging where the soils are deposited in an area authorized by all state and federal regulatory agencies.

[1] Coastal Commission Staff Report for CDP 1-05-039-A1, February 2, 2007.

Attachment 1 – Project Plans

Figure 1a – Vicinity Map

Figure 1b – Site Location Map

Figure 2 – Aerial View Showing Cross Section Locations

Figure 3 – Aerial View Showing Cross Section A

Figure 4 – Cross Section A

Figure 5 - Aerial View Showing Cross Section B

Figure 6 - Cross Section

Figure 7 - Aerial View Showing Cross Section C

Figure 8 - Cross Section C

Figure 9 - Aerial View Showing Cross Section D

Figure 10 - Cross Section D

Figure 11 – Aerial View Showing Cross Section E

Figure 12 – Cross Section E

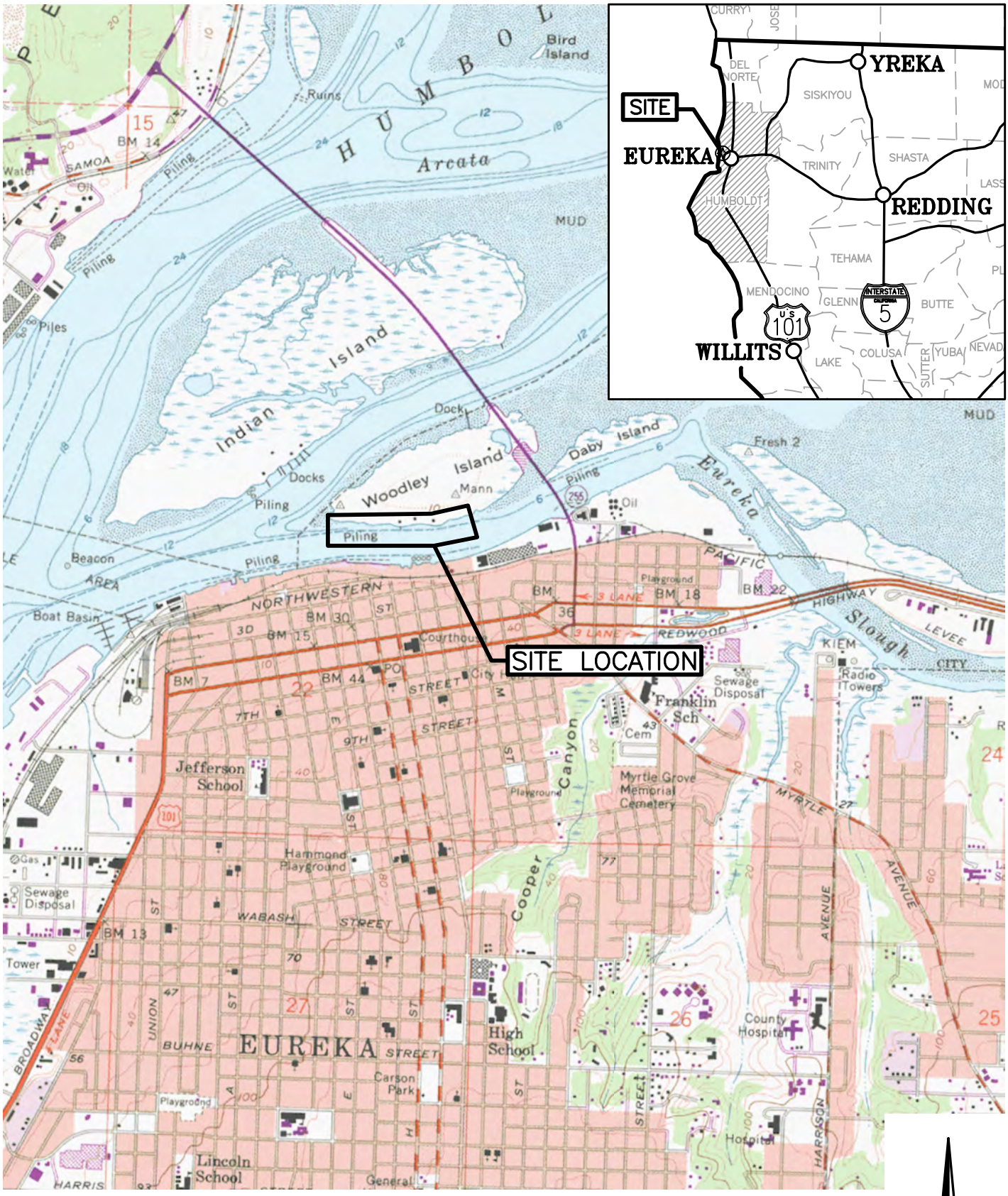
Figure 13 – Region 9 Ocean Dumping Sites, EPA

Woodley Island Marina Dredge Site

Figure 1a - Vicinity Map

PLANWEST PARTNERS, INC.

Map Date: 2/27/2018



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SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Site Location Map SHN 016240
	March 2018 | 016240-020-SITE-LCTN	Figure 1

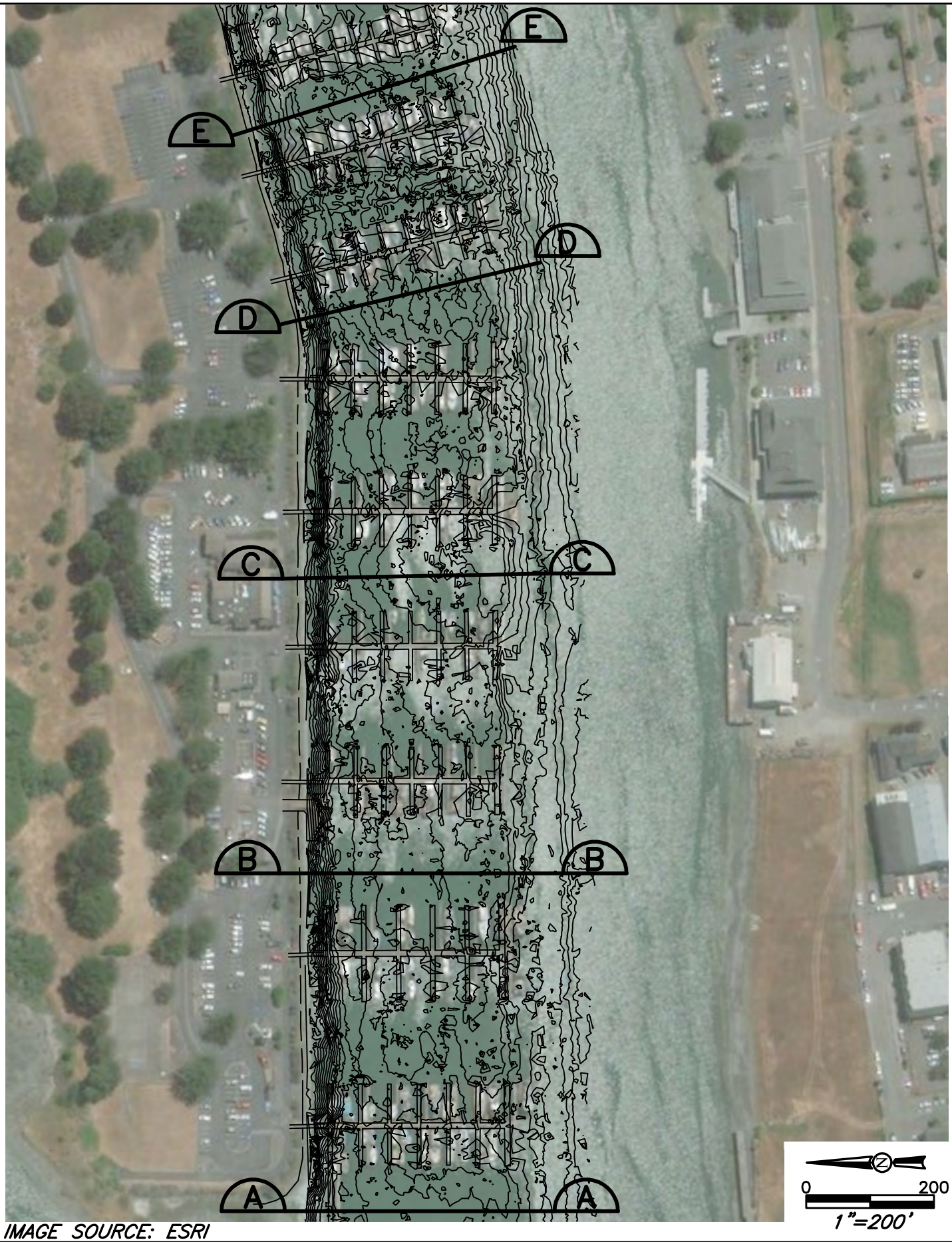

IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section Locations SHN 016240
	March 2018 | 016240-020-XSECT	Figure 2

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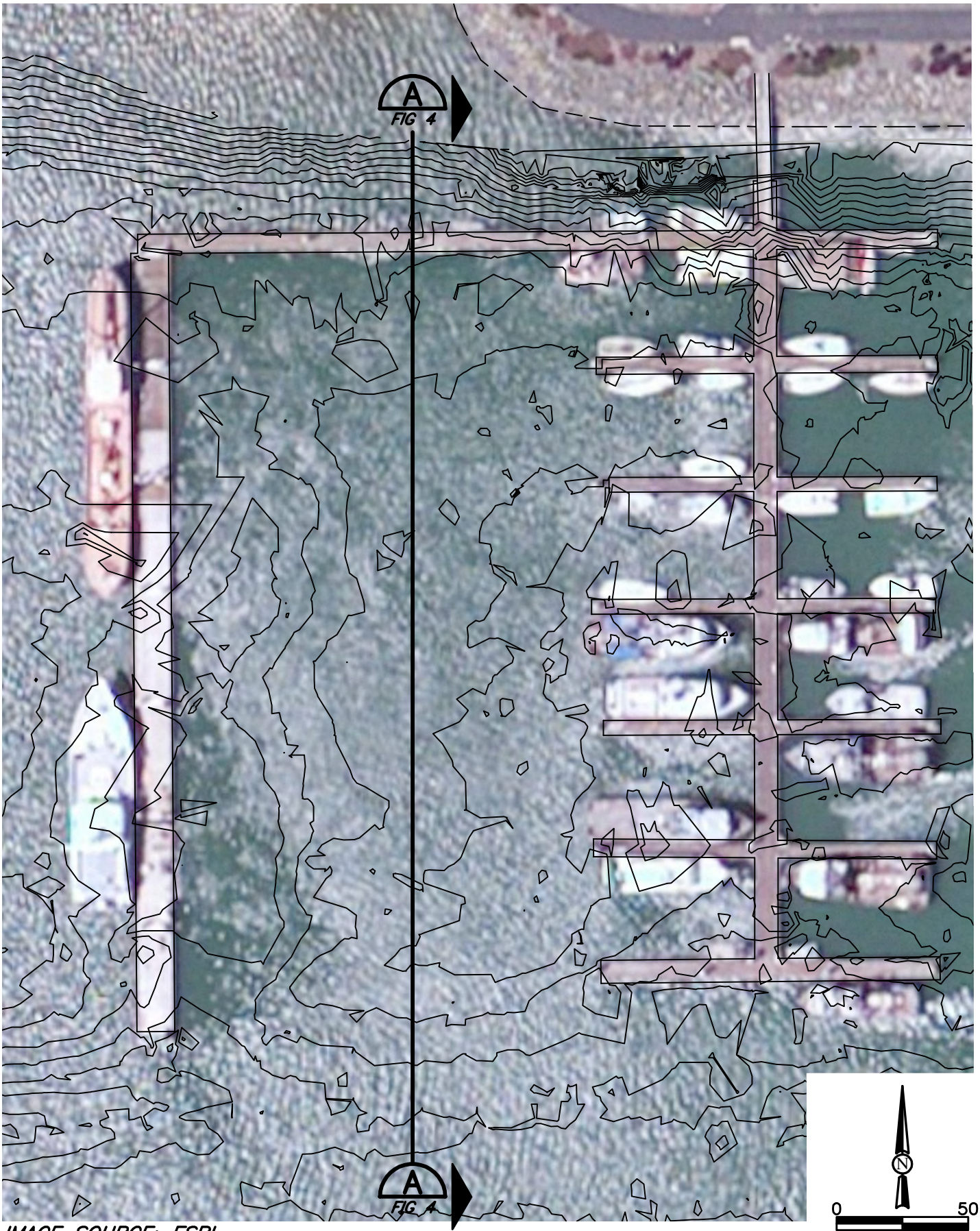

IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section A Location SHN 016240
	March 2018 | 016240-020-XSECT	Figure 3

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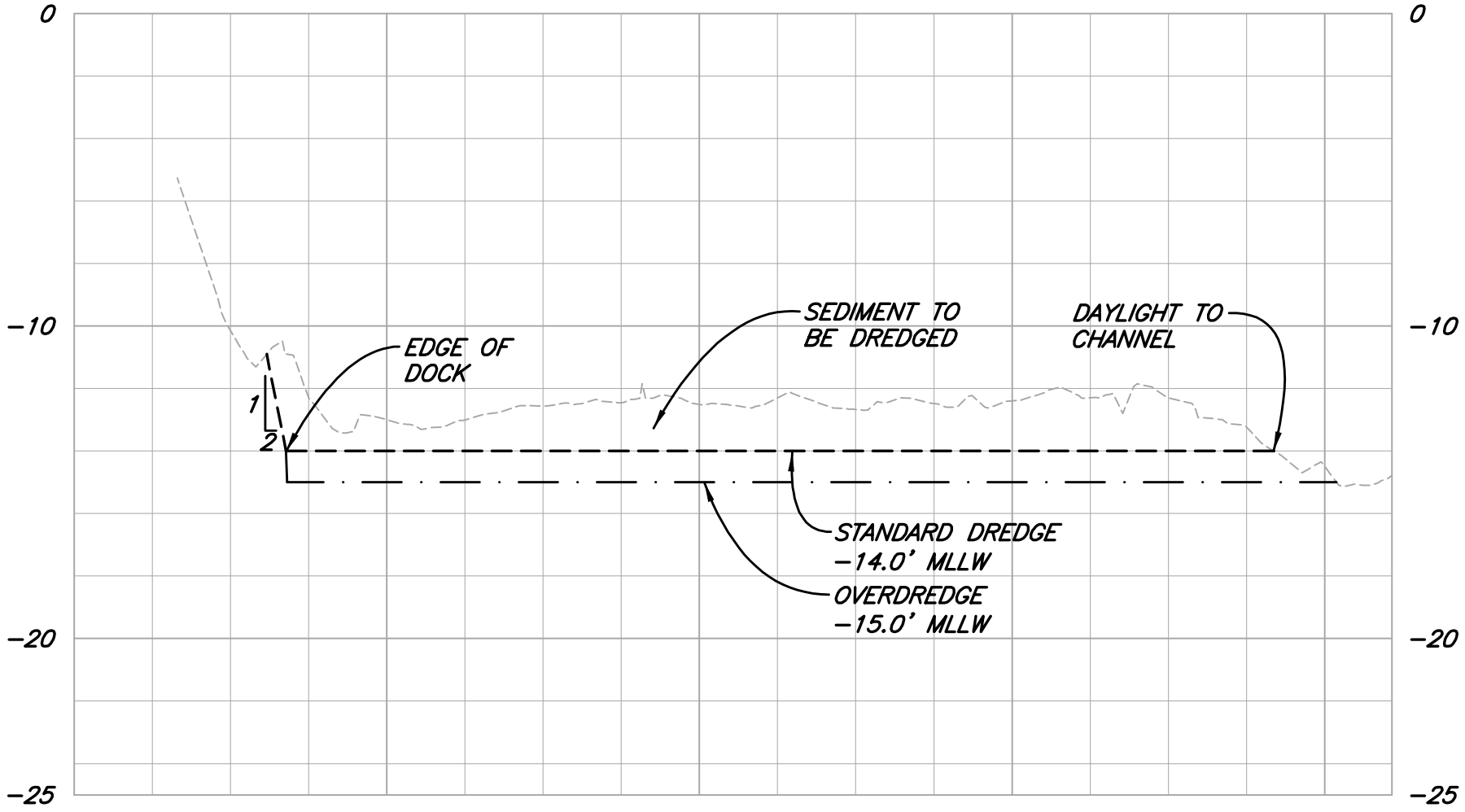

SECTION A

SCALE: 1"=50' H
1"=5' V

FIG 3

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	March 2018 | 016240-020-XSECT	Figure 4

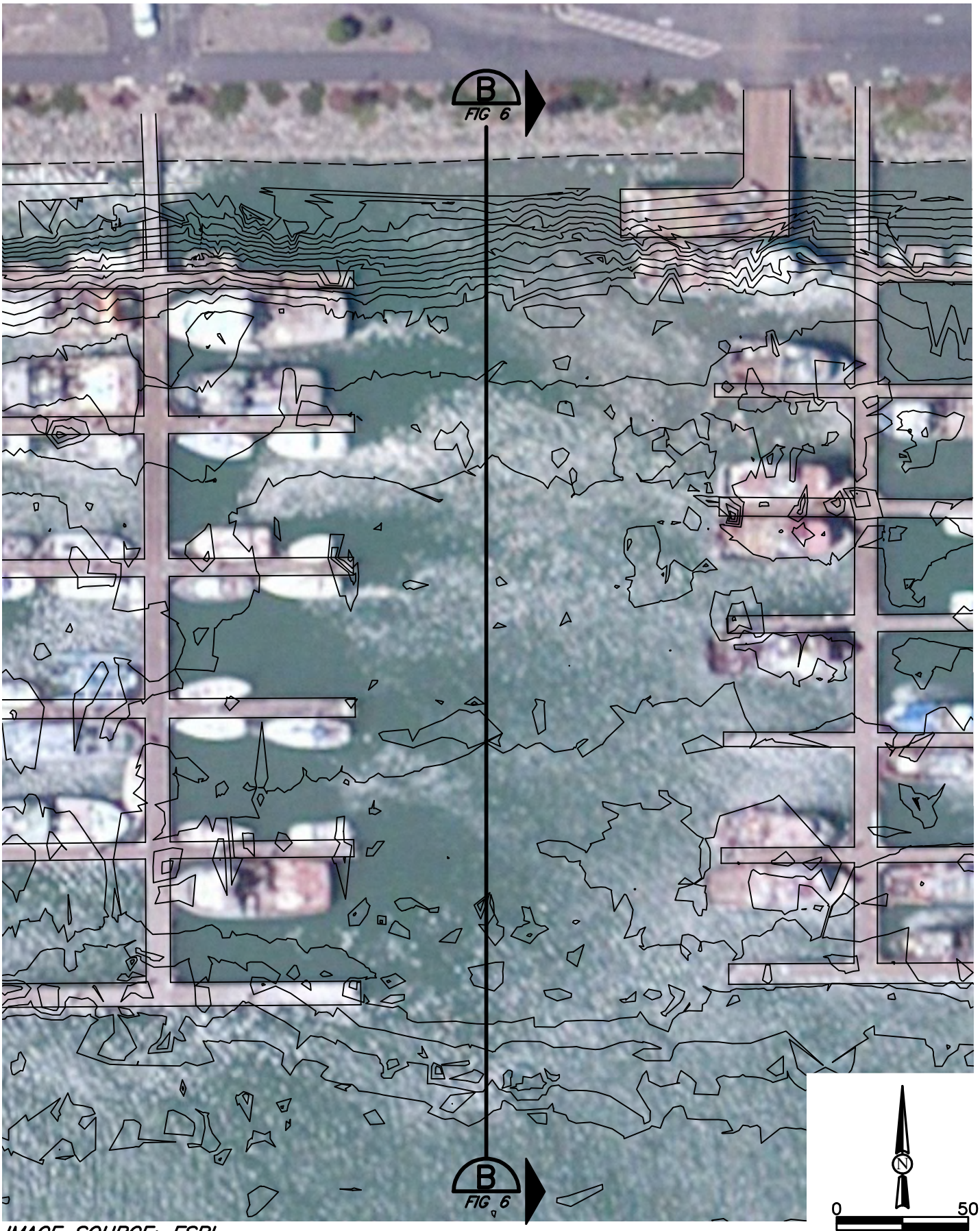

IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section B Location SHN 016240
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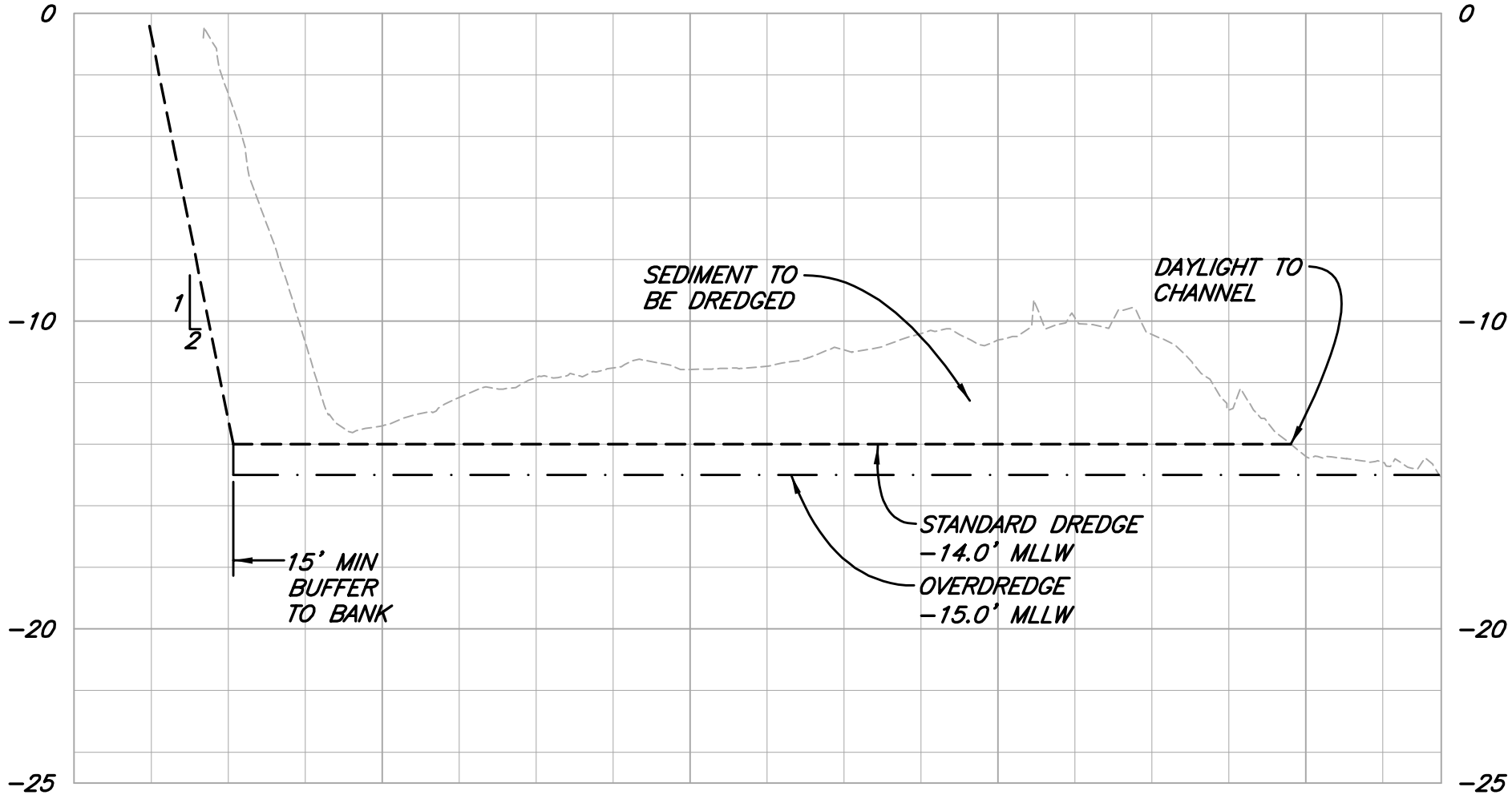

SECTION B

SCALE: 1"=50' H
1"=5' V

FIG 5

Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Section B SHN 016240
	March 2018 | 016240-020-XSECT	Figure 6

IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section C Location SHN 016240
	March 2018 | 016240-020-XSECT	Figure 7

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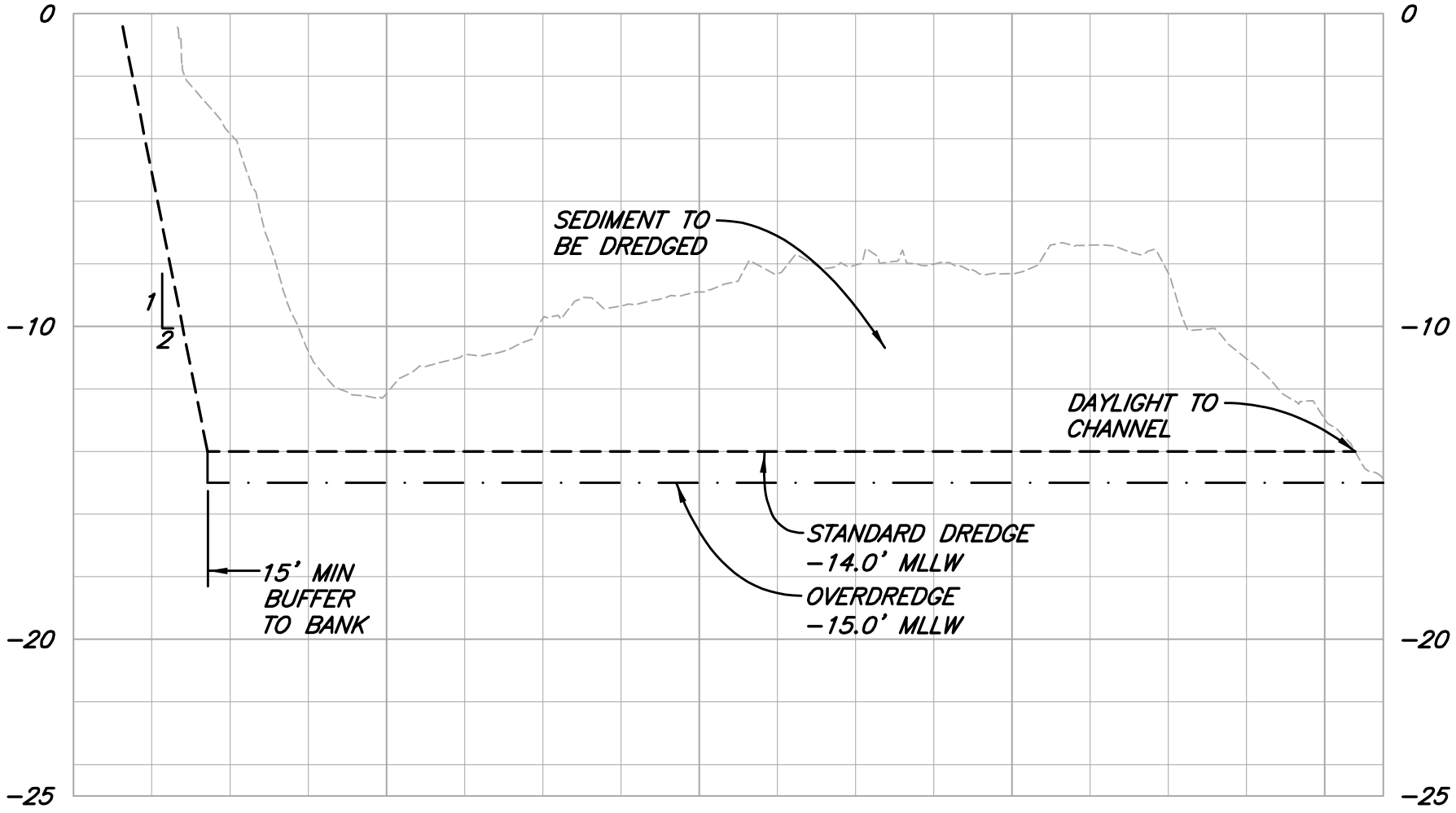

SECTION C

SCALE: 1"=50' H
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FIG 7

Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Section C SHN 016240
	March 2018 | 016240-020-XSECT	Figure 8

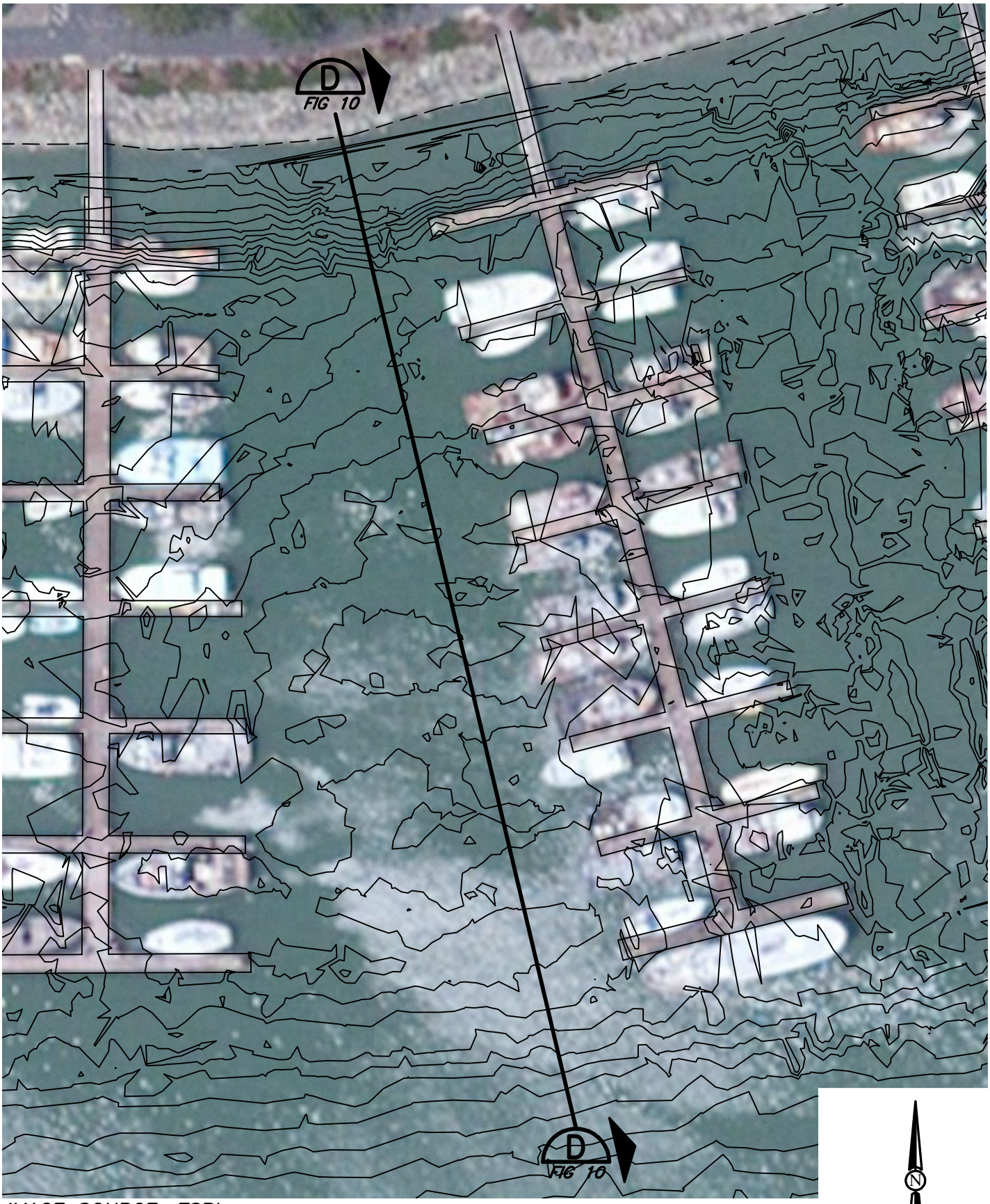
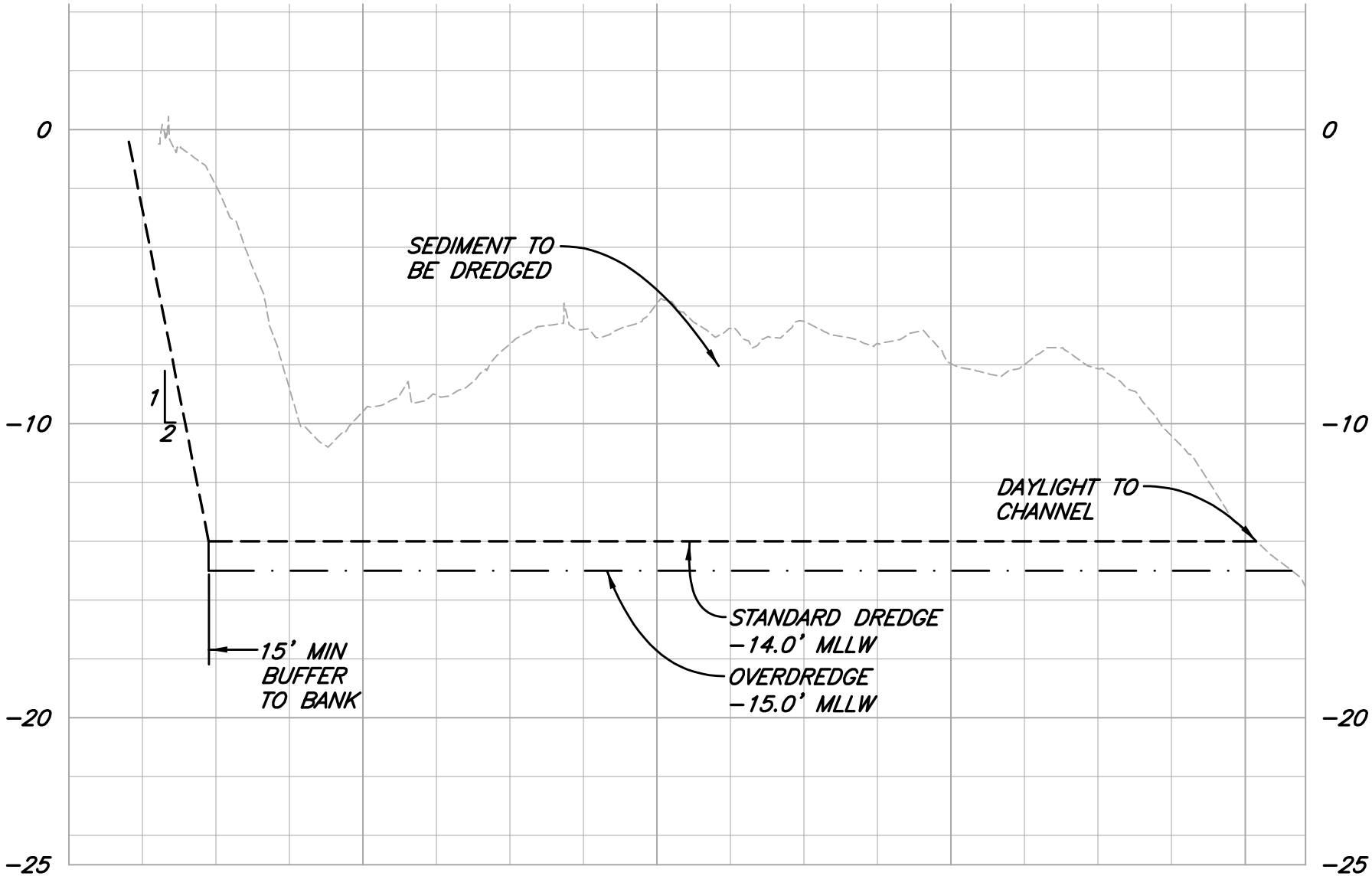


IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section D Location SHN 016240
	March 2018 | 016240-020-XSECT	Figure 9

\\Eureka\Projects\2016\016240-Engr-HBHRCD\020-dredge-suppor\Dwgs, SAVED: 3/2/2018 2:52 PM CNEWELL, PLOTTED: 3/2/2018 2:54 PM, CHRIS D. NEWELL



SECTION D

SCALE: 1"=50' H
1"=5' V

FIG 9

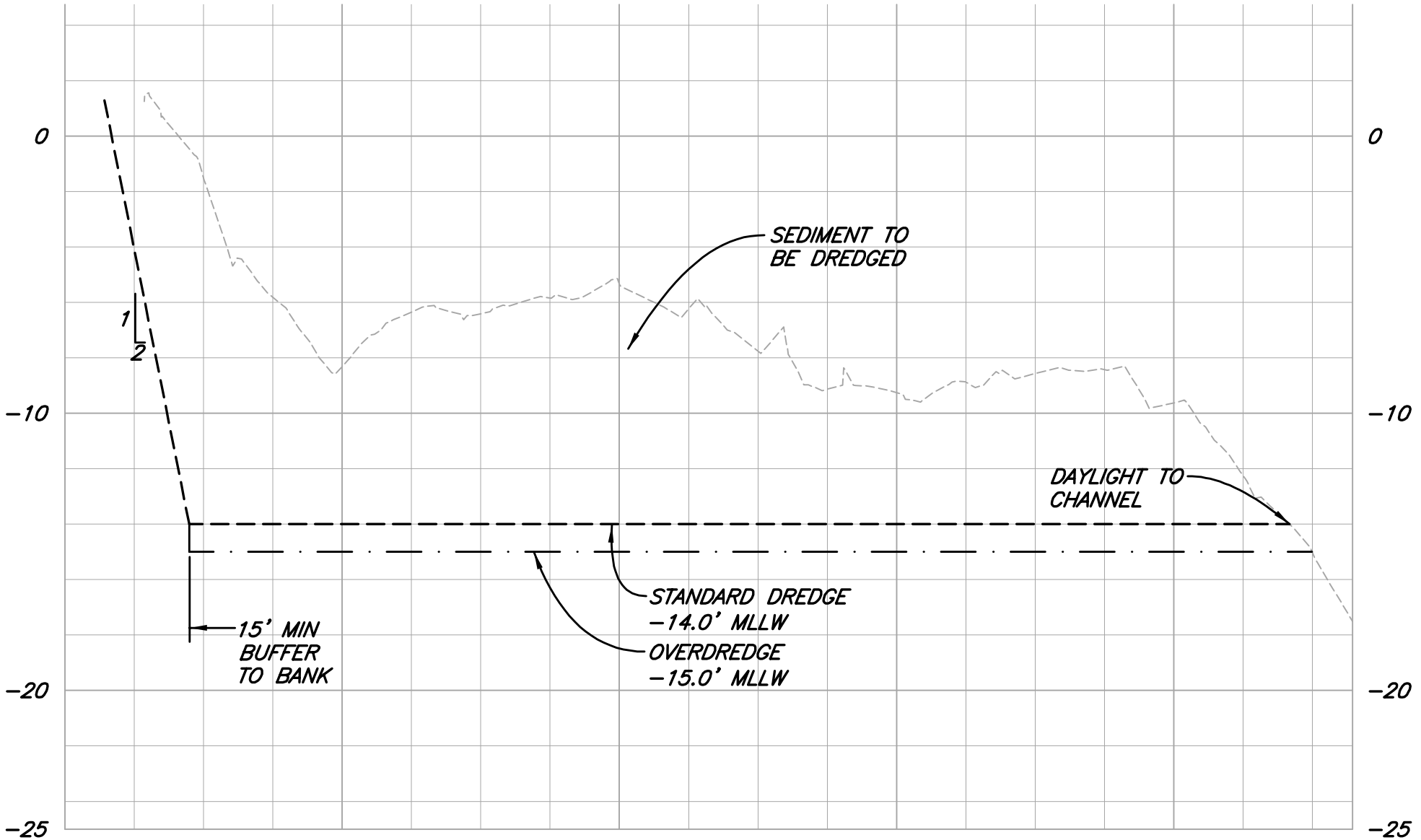
Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Section D SHN 016240
	March 2018 | 016240-020-XSECT	Figure 10

IMAGE SOURCE: ESRI

SHN Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Aerial View showing Section E Location SHN 016240
	March 2018 | 016240-020-XSECT	Figure 11

\\Eureka\Projects\2016\016240-Engr-HBHRCD\020-dredge-suppor\Dwgs, SAVED: 3/2/2018 2:52 PM CNEWELL, PLOTTED: 3/2/2018 2:55 PM, CHRIS D. NEWELL

\\Eureka\Projects\2016\016240-Engr-HBHRCD\020-dredge-suppor\Dwgs, SAVED: 3/2/2018 3:07 PM CNEWELL, PLOTTED: 3/2/2018 3:08 PM, CHRIS D. NEWELL



SECTION E

SCALE: 1"=50' H
1"=5' V

FIG 11

Consulting Engineers & Geologists, Inc.	Harbor District Woodley Island Maintenance Dredging Eureka, California	Section E SHN 016240
	March 2018 | 016240-020-XSECT	Figure 12

Region 9 Ocean Dumping Sites

HOODS Dump Site

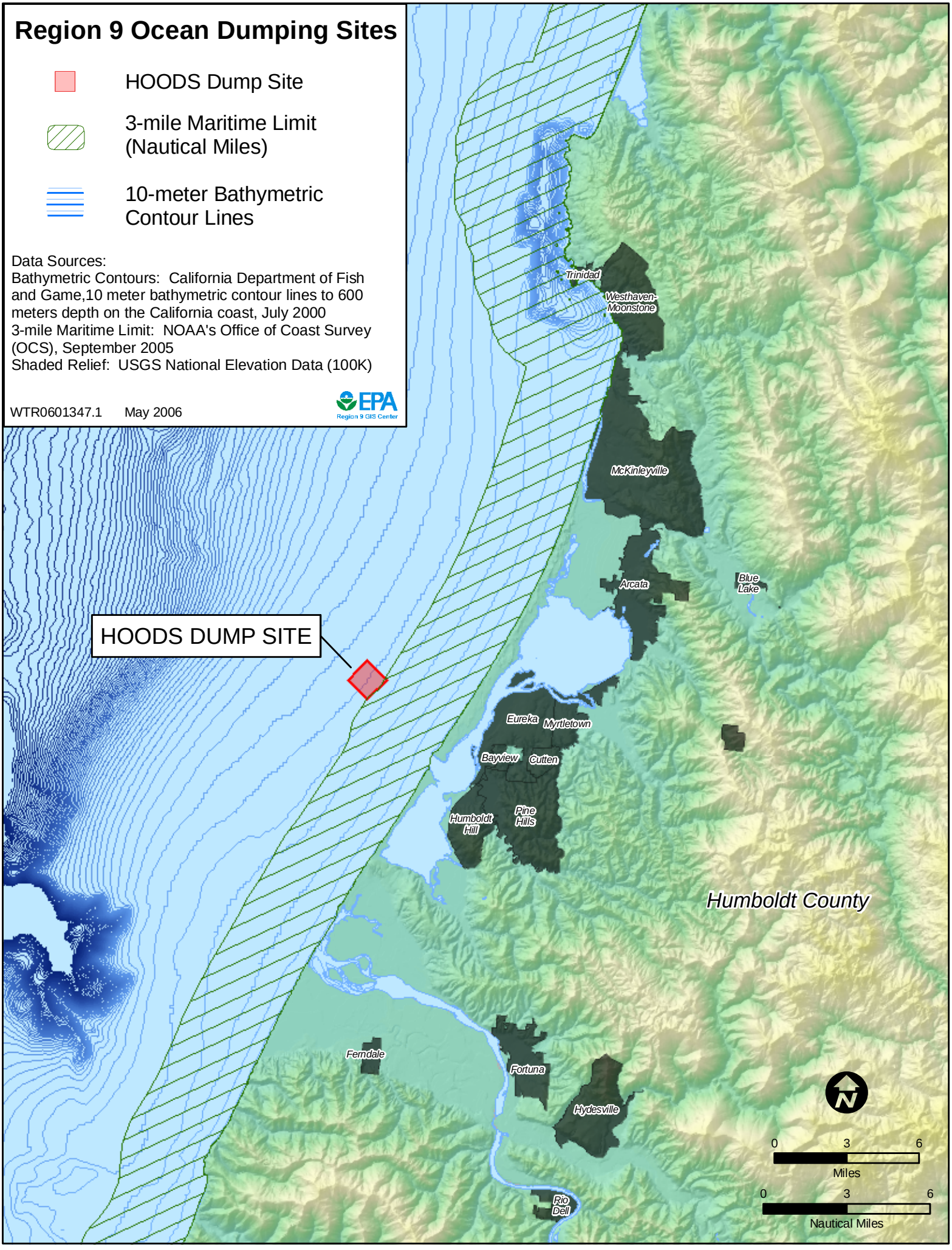
3-mile Maritime Limit (Nautical Miles)

10-meter Bathymetric Contour Lines

Data Sources:
Bathymetric Contours: California Department of Fish and Game,10 meter bathymetric contour lines to 600 meters depth on the California coast, July 2000
3-mile Maritime Limit: NOAA's Office of Coast Survey (OCS), September 2005
Shaded Relief: USGS National Elevation Data (100K)

WTR0601347.1 May 2006

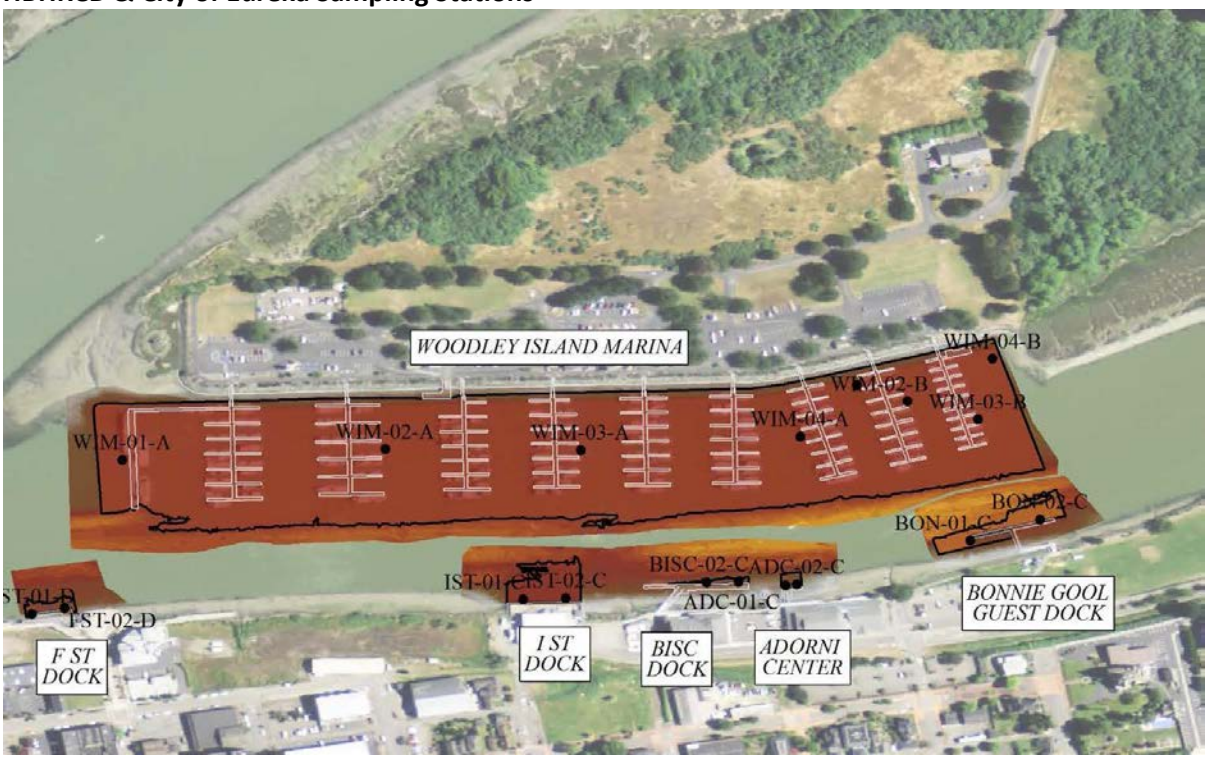
EPA Region 9 GIS Center



Attachment 2 – Physical and Chemical Results for Humboldt Bay Composite Samples and Reference Samples

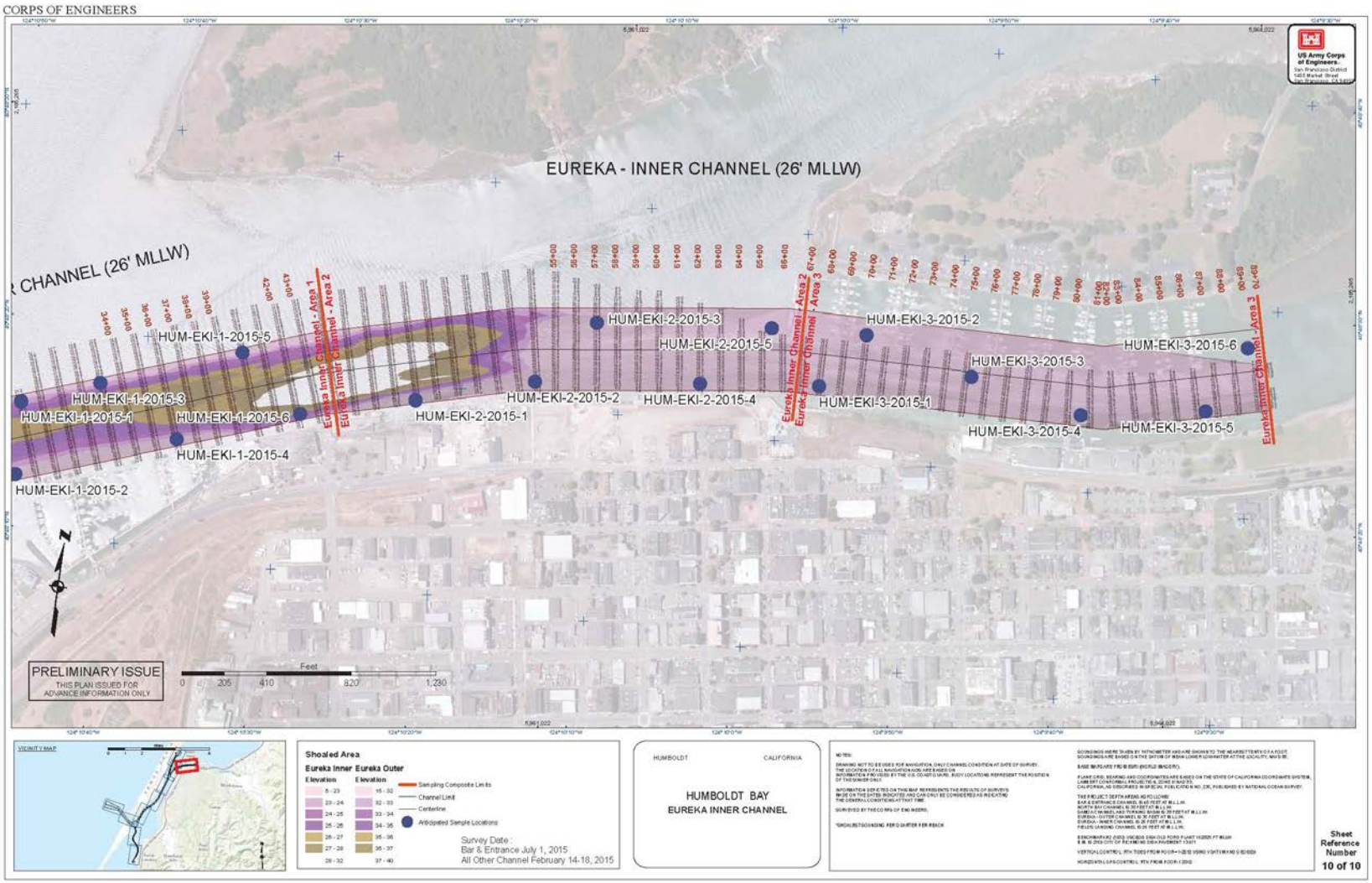
The Attachment 2 Table presents a summary of testing results comparing WIM and City of Eureka Small Boat Basin (SBB) and Commercial Street Dock (COM) results to the U.S. Army Corps of Engineers sampling results for the stations that are adjacent to the project site (HUM-EKI-1, -2 and-3). These results are copied from Humboldt Harbor and Bay O&M Dredging, Grain Size Verification and Tier III Evaluation, Sampling and Analysis Results, USACE Contract No. W912P7-15-C-0019 dated April 2016 by Kinnetic Laboratories, Inc. (on file at the Harbor District). Also included in the table are the test results from HOODS, which were presented in the Army Corps Sampling and Analysis Results report referenced above. (The table below was prepared by Pacific Affiliates for City of Eureka Maintenance Dredging 2017 permit applications and also includes City of Eureka's Small Boat Basin and Commercial Street Dock).

HBHRCD & City of Eureka Sampling Stations



Source: HBHRCD & City of Eureka Sampling and Analysis Plan (Northern Hydrology & Engineering, 2015)

US Army Corps of Engineers Sampling Stations



Source: USACE 2015

Attachment 2 - Physical and Chemical Results for Humboldt Bay Composite Samples and Reference Samples

Valid Analyte Name	Army Corps 2015 Samples			HBHRCD & City of Eureka 2015 Samples					Reference Sediments	
	Eureka Inner Channel			Small Boat Basin		Commercial Street Dock	Woodley Island Marina		Historic HOODS (HOODS-REF)	New HOODS (HOODS-NEW)
	HUM-EKA-1	HUM-EKA-2	HUM-EKA-3	SBB-H	SBB-J	COM-G	WIM-A	WIM-B		
SEDIMENT GRAIN SIZE										
% Gravel (>4.75 mm)	0	0	0	0	0	0	0	0	0	0
% Sand (0.075 – 4.75 mm)	62	23	20	4.9	9.8	2.4	3.5	9.9	56	33
% Silt (0.0045 – 0.075 mm)	24	51	50	73.6	62.2	76.6	70.9	65.6	35	58
% Clay (<0.0045 mm)	14	26	30	21.5	28.0	21.0	25.6	24.5	9	9
SEDIMENT CONVENTIONALS										
Percent Solids	67.6	63.7	64.9						70.3	66.1
Total Organic Carbon (%)	0.49	0.96	1						0.22	0.27
METALS (mg/kg dry)										
Antimony				0.32	0.27	0.43	0.28	0.29		
Arsenic	5.51	6.82	7.32	7.9	7.8	7.6	8.1	8.1	5.22	4.84
Barium				80	80	78	83	74		
Beryllium				0.51	0.5	0.43	0.53	0.54		
Cadmium	0.205	0.162	0.329	0.26	0.22	0.24	0.15	0.17	0.193	0.182
Chromium	62.6	81.3	88.4	94	87	79	92	98	66.2	74.4
Cobalt				15	14	13	14	14		
Copper	20.2	33.4	36.6	41	38	34	37	36	16.5	19.8
Lead	7.91	11.3	14.7	12	11	16	12	11	6.19	6.85
Mercury	0.0394	0.0794	0.0763	0.11	0.16	0.12	0.13	0.10	0.0344	0.0446
Molybdenum				0.79	0.7	0.79	0.88	0.78		
Nickel	75.8	100	107	120	120	99	110	110	77.3	90.8
Selenium	0.12	0.2	0.22	0.38	0.37	0.31	0.49	0.52	0.09	0.12
Silver	0.0693J	0.150J	0.188	0.13	0.12	0.14	0.13	0.12	0.0466J	0.0525J
Terbium				106	113	108	100	97		
Thallium				<0.17	<0.17	<0.15	<0.18	<0.18		
Vanadium				60	55	51	60	60		
Zinc	60.8	84.9	96.2	100	100	140	94	94	57.8	69.4
BUTYLTINS (µg/kg dry)										
Dibutyltin	<1.1	<1.1	<1.1	<0.1	<0.1	<0.090	<0.11	<0.11	<1.0	<1.1
Monobutyltin	<2.0	<2.1	<2.1	<0.12	<0.12	<0.1	<0.12	<0.13	<1.9	<2.0
Tetrabutyltin	<1.1	<1.2	<1.1	<0.017	<0.017	<0.015	<0.018	<0.018	<1.0	<1.1
Tributyltin	<2.2	<2.3	<2.2	<0.051	<0.05	<0.045	<0.053	<0.054	<2.1	<2.2

Valid Analyte Name	Army Corps 2015 Samples			City of Eureka 2015 Samples					Reference Sediments	
	Eureka Inner Channel			Small Boat Basin		Commercial Street Dock	Woodley Island Marina		Historic HOODS (HOODS-REF)	New HOODS (HOODS-NEW)
	HUM-EKA-1	HUM-EKA-2	HUM-EKA-3	SBB-H	SBB-J	COM-G	WIM-A	WIM-B		
PAH's (µg/kg dry)										
1-Methylnaphthalene	23	39	42	<9.9	<9.7	43	<25	<25	21	29
1-Methylphenanthrene	<3.6	<3.9	<3.8						<3.6	17
2,3,5-Trimethylnaphthalene	12J	24	24						11J	15J
2,6-Dimethylnaphthalene	30	63	62						43	46
2-Methylnaphthalene	34	63	68	8.7	7.5	55	<18	<18	34	45
Acenaphthene	5.6J	10J	15J	<8.4	<8.7	100	<23	<24	<3.4	<3.5
Acenaphthylene	4.0J	9.2J	8.0J	<12	<11	<10	<30	<31	<2.6	<2.7
Anthracene	6.6J	15J	17	<9.9	<9.7	11	<25	<25	<5.0	<5.2
Benzo (a) Anthracene	10J	34	21	<5.8	<5.7	36	<15	<15	<3.1	<3.2
Benzo (a) Pyrene	7.6J	37	21	<9.2	<9	<5.1	<25	<25	<2.6	<2.7
Benzo (b) Fluoranthene	15	54	32	<5.1	5.2	11	13	14	8.7J	11J
Benzo (e) Pyrene	11J	36	24						6.1J	7.8J
Benzo (g,h,i) Perylene	14J	39	32	<11	<11	<9.9	<28	<29	7.3J	6.5J
Benzo (k) Fluoranthene	4.9J	35	15J	<5.5	<5.3	<5.4	<14	<14	<4.0	<4.2
Biphenyl	11J	20	22						11J	13J
Chrysene	16	67	35	<5.5	<8	12	<21	<22	9.9J	13J
Dibenz (a,h) Anthracene	3.2J	7.3J	<3.0	<17	<17	<15	<44	<45	<2.8	<2.9
Dibenzothiophene	4.2J	9.6J	11J						<1.9	<2.0
Fluoranthene	25	66	70	22	23	160	<35	<14	5.8J	6.9J
Fluorene	20	36	45	<21	<20	28	<54	<43	13J	17
Indeno (1,2,3-c,d) Pyrene	6.1J	19	16	<17	<16	<15	<53	<42	<2.3	<2.4
Naphthalene	28	51	53	<5.5	<5.3	45	<14	<14	16	19
Perylene	93	270	430						21	25
Phenanthrene	53	110	130	14	13	39	<32	<33	36	45
Pyrene	35	97	93	16	18	100	<40	<39	8.7J	11J
Total Low Weight PAHs	231	450	497						185	246
Total High Weight PAHs	241	761	789						67.5	81.2
Total PAHs	472	1211	1286						253	327
OC PESTICIDES (µg/kg dry)										
2,4'-DDD	<0.42	1.3J	<0.44						<0.41	<0.43
2,4'-DDE	<1.5	11	1.6J						<1.4	<1.5
2,4'-DDT	<0.46	11	<0.48						<0.45	<0.47
4,4'-DDD	<0.73	2	<0.76						<0.71	<0.75
4,4'-DDE	<0.65	57	<0.68						<0.63	<0.67

Valid Analyte Name	Army Corps 2015 Samples			City of Eureka 2015 Samples					Reference Sediments	
	Eureka Inner Channel			Small Boat Basin		Commercial Street Dock	Woodley Island Marina		Historic HOODS (HOODS-REF)	New HOODS (HOODS-NEW)
	HUM-EKA-1	HUM-EKA-2	HUM-EKA-3	SBB-H	SBB-J	COM-G	WIM-A	WIM-B		
4,4'-DDT	<0.64	6	<0.67						<0.62	<0.66
p,p-DDD				<2.4	<2.3	<2.1	<4.9	<36		
p,p-DDE				<5.5	<5.3	<4.8	<11	<36		
p,p-DDT				<7.4	<7.2	<6.4	<15	<36		
Total DDT	ND	88.3	1.6						ND	ND
Aldrin	<0.64	<0.68	<0.67	<4.6	<4.5	<4	<9.5	<9.8	<0.62	<0.66
alpha-BHC	<1.1	<1.2	<1.1	<1.7	<1.7	<1.5	<3.5	<3.6	<1.1	<1.1
alpha-Chlordane	<0.59	<0.63	<0.62	<0.8	<7.8	<7	<17	<17	<0.58	<0.61
beta-BHC	<0.73	<0.78	<0.76	<4.3	<4.2	<3.7	<8.8	<9.0	<0.71	<0.74
Chlordane	<7.7	<8.2	<8.0	<270	<270	<240	<570	<580	<7.5	<7.9
cis-Nonachlor	<0.38	<0.40	<0.40						<0.37	<0.39
delta-BHC	<1.3	<1.4	<1.3	<6.3	<6.2	<5.5	<13	<13	<1.3	<1.3
Dieldrin	<0.64	<0.68	<0.67	<5.6	<5.5	<4.9	<12	<12	<0.62	<0.66
Endosulfan I	<0.58	<0.62	<0.61	<11	<11	<9.7	<23	<7.1	<0.56	<0.59
Endosulfan II	<0.69	<0.74	<0.72	<3.4	<3.3	<3	<24	<7.2	<0.67	<0.70
Endosulfan sulfate	<0.76	<0.82	<0.80	<11	<10	<9.4	<23	<24	<0.74	<0.78
Endrin	<0.71	1.1J	<0.73	<7.2	<7	<6.3	<15	<15	2	1.5J
Endrin aldehyde	<0.89	<0.94	<0.92	<3.4	<3.3	<3	<7.1	<7.2	<0.86	<0.91
Endrin ketone	<0.74	<0.79	<0.77	<2.2	<2.2	<1.9	<4.6	<4.7	<0.72	<0.75
gamma-BHC (Lindane)	<0.65	<0.70	<0.68	<1.7	<1.6	<1.4	<3.4	<3.4	<0.63	<0.67
gamma-Chlordane	<1.3	<1.4	<1.4	<3.6	<3.5	<3.1	<7.4	<7.6	<1.3	<1.3
Heptachlor	<0.63	<0.68	<0.66	<3.6	<3.5	<3.1	<7.4	<7.6	<0.62	<0.65
Heptachlor epoxide	<1.2	<1.1	<1.2	<3.4	<3.3	<3	<7.1	<7.2	<1.1	<1.1
Methoxychlor	<0.82	<0.87	<0.85	<15	<15	<1.3	<32	<33	<0.79	<0.83
Toxaphene	<13	<14	<14	<600	<580	<520	<1200	<1300	<13	<13
trans-Nonachlor	<0.40	<0.42	<0.41						<0.39	<0.41
Total Chlordane	ND	ND	ND						ND	ND
PCB CONGENERS (µg/kg dry)										
PCB 005+008	<0.21	<0.23	<0.22						<0.21	<0.22
PCB 018	<0.10	<0.11	<0.11						<0.10	<0.11
PCB 028	<0.049	<0.052	<0.052						<0.047	<0.050
PCB 031	<0.073	<0.077	<0.077						<0.070	<0.074
PCB 033	<0.18	<0.19	<0.19						<0.18	<0.19
PCB 044	<0.13	<0.13	<0.13						<0.12	<0.13
PCB 049	<0.17	<0.17	<0.17						<0.16	<0.17
PCB 052	<0.092	<0.097	<0.097						<0.089	<0.094

Valid Analyte Name	Army Corps 2015 Samples			City of Eureka 2015 Samples					Reference Sediments	
	Eureka Inner Channel			Small Boat Basin		Commercial Street Dock	Woodley Island Marina		Historic HOODS (HOODS-REF)	New HOODS (HOODS-NEW)
	HUM-EKA-1	HUM-EKA-2	HUM-EKA-3	SBB-H	SBB-J	COM-G	WIM-A	WIM-B		
PCB 056	<0.19	<0.20	<0.19						<0.18	<0.19
PCB 060	<0.21	<0.22	<0.22						<0.20	<0.21
PCB 066	<0.15	<0.16	<0.16						<0.15	<0.15
PCB 070	<0.088	<0.093	<0.092						<0.084	<0.089
PCB 074	<0.13	<0.14	<0.13						<0.12	<0.13
PCB 087	<0.16	<0.17	<0.17						<0.15	<0.16
PCB 095	<0.21	0.32	0.25J						<0.21	<0.22
PCB 097	<0.20	<0.21	<0.21						<0.19	<0.20
PCB 099	<0.089	0.19J	0.24J						<0.086	<0.091
PCB 101	<0.14	0.25J	0.61						<0.14	<0.15
PCB 105	<0.080	<0.085	<0.084						<0.077	<0.082
PCB 110	<0.068	0.44	0.32						<0.065	<0.069
PCB 118	<0.12	0.39	0.43						<0.12	<0.13
PCB 128	<0.15	<0.16	<0.16						<0.14	<0.15
PCB 132+153	<0.25	0.71	0.37J						<0.24	<0.26
PCB 138+158	<0.14	0.46J	0.47J						<0.13	<0.14
PCB 141	<0.17	<0.18	<0.18						<0.16	<0.17
PCB 149	<0.14	0.28J	<0.15						<0.14	<0.15
PCB 151	<0.099	<0.10	<0.10						<0.095	<0.10
PCB 156	<0.085	<0.090	<0.089						<0.082	<0.086
PCB 170	<0.093	<0.099	<0.098						<0.090	<0.095
PCB 174	<0.21	<0.23	<0.22						<0.21	<0.22
PCB 177	<0.13	<0.14	<0.13						<0.12	<0.13
PCB 180	<0.062	<0.065	<0.065						<0.059	<0.063
PCB 183	<0.16	<0.17	<0.17						<0.16	<0.17
PCB 187	<0.12	<0.13	0.23J						<0.12	<0.13
PCB 194	<0.17	<0.17	<0.17						<0.16	<0.17
PCB 195	<0.17	<0.18	<0.18						<0.17	<0.18
PCB 201	<0.14	<0.15	<0.15						<0.14	<0.14
PCB 203	<0.21	<0.23	<0.22						<0.21	<0.22
Total PCB Congeners	ND	3.04	2.92	ND	ND	ND	ND	ND	ND	ND
DIOXINS (ng/kg dry)										
2,3,7,8-Tetra CDD	<0.088	0.28J	0.3J	<0.5	<0.5	<0.5	<0.45	<0.45	<0.11	<0.074
1,2,3,7,8-Penta CDD	0.39J	0.57J	0.73J	<2.5	<2.5	<2.5	<0.79	<0.79	<0.1	<0.086
1,2,3,4,7,8-Hexa CDD	0.356J	0.63J	0.95J	<2.5	<2.5	<2.5	<0.91	<0.91	0.108J	<0.089
1,2,3,6,7,8-Hexa CDD	1.55J	3.71J	5.22J	<2.5	<2.5	5.22	<1.1	<1.1	0.269J	0.283J

Valid Analyte Name	Army Corps 2015 Samples			City of Eureka 2015 Samples					Reference Sediments	
	Eureka Inner Channel			Small Boat Basin		Commercial Street Dock	Woodley Island Marina		Historic HOODS (HOODS-REF)	New HOODS (HOODS-NEW)
	HUM-EKA-1	HUM-EKA-2	HUM-EKA-3	SBB-H	SBB-J	COM-G	WIM-A	WIM-B		
1,2,3,7,8,9-Hexa CDD	1.26J	2.8J	3.71J	<2.5	<2.5	2.66	<1.2	<1.2	0.266J	0.195J+
1,2,3,4,6,7,8-Hepta CDD	12.3	43.6	93.7	28.9	22.5	51.9	2.1	3	1.53J	1.76J
Octa CDD	103	265	658	233	202	424	97.7	22.6	8.27J	9.34J
Total Tetra CDD	9.8	3.22	2.35	1.76	0.68	4.24	<0.45	<0.45	<0.17	<0.17
Total Penta CDD	6.38	4.71J	4.41J	<2.5	<2.5	4.56	<0.79	<0.79	<0.1	<0.086
Total Hexa CDD	14.9	31	40.3	22.4	9.94	66.8	<0.91	1.42J	1.87J	1.85J
Total Hepta CDD	32.4	101	201	82.1	71.4	210	<1.1	8.84	3.23J	3.69J
2,3,7,8-Tetra CDF	0.797J	1.16J	1.18J	<0.5	<0.5	1	<0.36	<0.36	0.184J	0.159J
1,2,3,7,8-Penta CDF	<0.2	0.15J	0.37J	<2.5	<2.5	<2.5	<0.79	<0.57	<0.093	<0.1
2,3,4,7,8-Penta CDF	0.25J	0.34J	0.48J	<2.5	<2.5	<2.5	<0.57	<0.5	<0.093	<0.1
1,2,3,4,7,8-Hexa CDF	0.799J	1.19J	1.98J	<2.5	<2.5	<2.5	<0.84	<0.84	0.17J	<0.08
1,2,3,6,7,8-Hexa CDF	0.39J	0.52J	0.89J	<2.5	<2.5	<2.5	<1.3	<0.91	0.13J	<0.08
2,3,4,6,7,8-Hexa CDF	0.262J	0.43J	0.61J	<2.5	<2.5	<2.5	<0.9	<0.9	0.119J	<0.078
1,2,3,7,8,9-Hexa CDF	<0.093	<0.14	<0.15	<2.5	<2.5	<2.5	<1.3	<1.3	<0.11	<0.09
1,2,3,4,6,7,8-Hepta CDF	3.99J	9.11	17	6.26	3.96	12.1	2.1J	<1.3	0.575J	0.282J
1,2,3,4,7,8,9-Hepta CDF	0.236J	0.71J	1.32J	<2.5	<2.5	<2.5	<1.1	<1.1	<0.098	<0.076
Octa CDF	8.19J	20.4	48	18.2	14.8	29.3	6.9	<1.8	0.76J	0.5J
Total Tetra CDF	7.58	3.55	3.41	0.88	0.76	10.2	<0.36	<0.36	0.184J	0.159J
Total Penta CDF	5.63	2.36J	3.5J	<2.5	<2.5	15.9	<0.5	<0.5	<0.093	<0.1
Total Hexa CDF	8.85	10.7	17.7	9.86	5.34	23.5	<1.1	<1.1	0.1J	0.161J+
Total Hepta CDF	11.2	28.3	56.4	21.5	14.1	36.6	<1.1	<1.1	1.03J	0.763J
Total TEQ	1.31	2.64	3.99	0.427	0.33	1.66			0.397	0.323
ERMq	0.034	0.223	0.061						0.028	0.033

1. Effects Range Low (ERL) and Effects Range Median (ERM) sediment quality objectives from Long et al. (1995).

< = Not detected at the corresponding Method Detection Limit.

J = Estimated between the Reporting Limit and the Method Detection Limit.

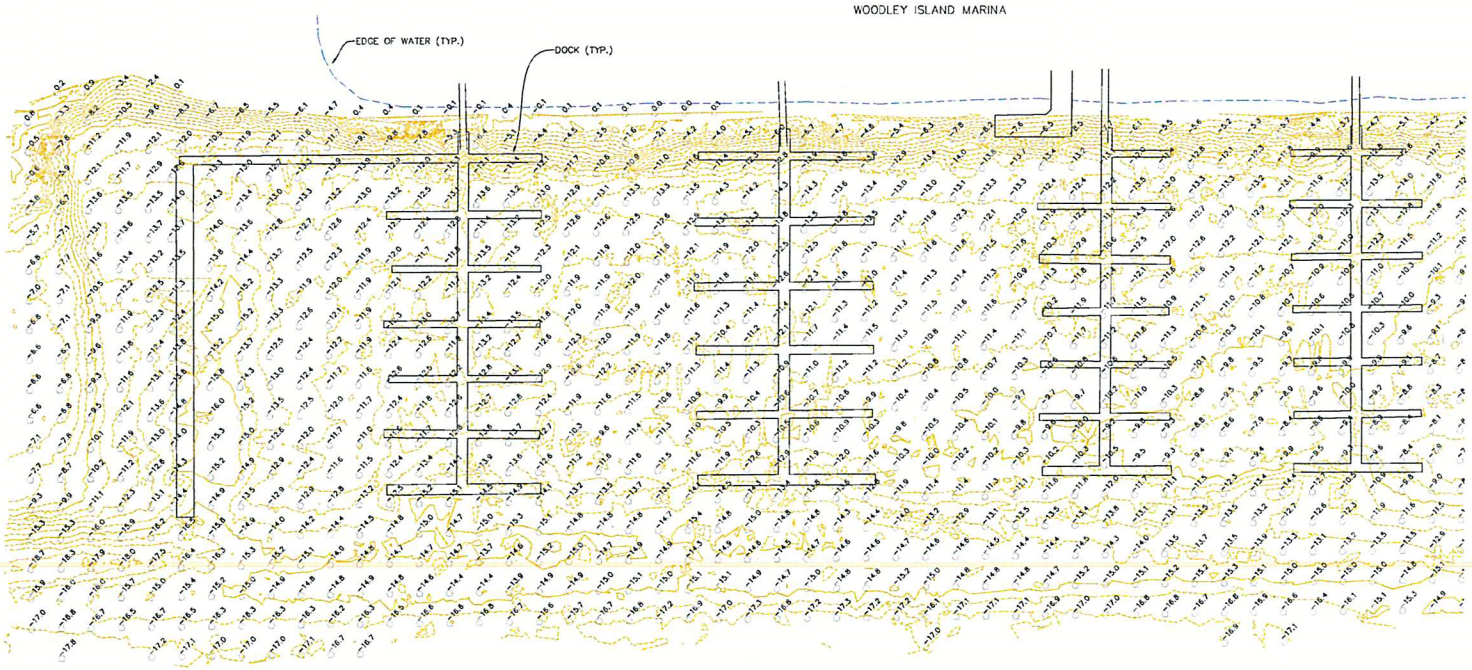
J+ = Result is possible overestimate.

ND = Not Detected above the MDL.

Attachment 3 – Bathymetric Survey Maps

Preliminary survey results from SHN survey in 2014. These survey maps have been scaled to fit the pages. Full size plans are available upon request.

Sheet 1 - Woodley Island Marina - West
Sheet 2 - Woodley Island Marina - East



1" = 40'

Preliminary

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SHN
CONSULTING ENGINEERS & GEOLOGISTS, INC.
275 Market Ave. Coos Bay, OR 97420
(541)266-9890 FAX (541)266-9486

NO.	DATE	REVISION	BY

DSGN
DRFT CDT
CHK EWW
APVD

HBHD & City of Eureka
Pre-Dredge Bathymetric Survey
Eureka, Humboldt County, California

Woodley Island Marina – West

SHEET 1 OF 14
DATE 11/2014
PROJ. NO. 014188

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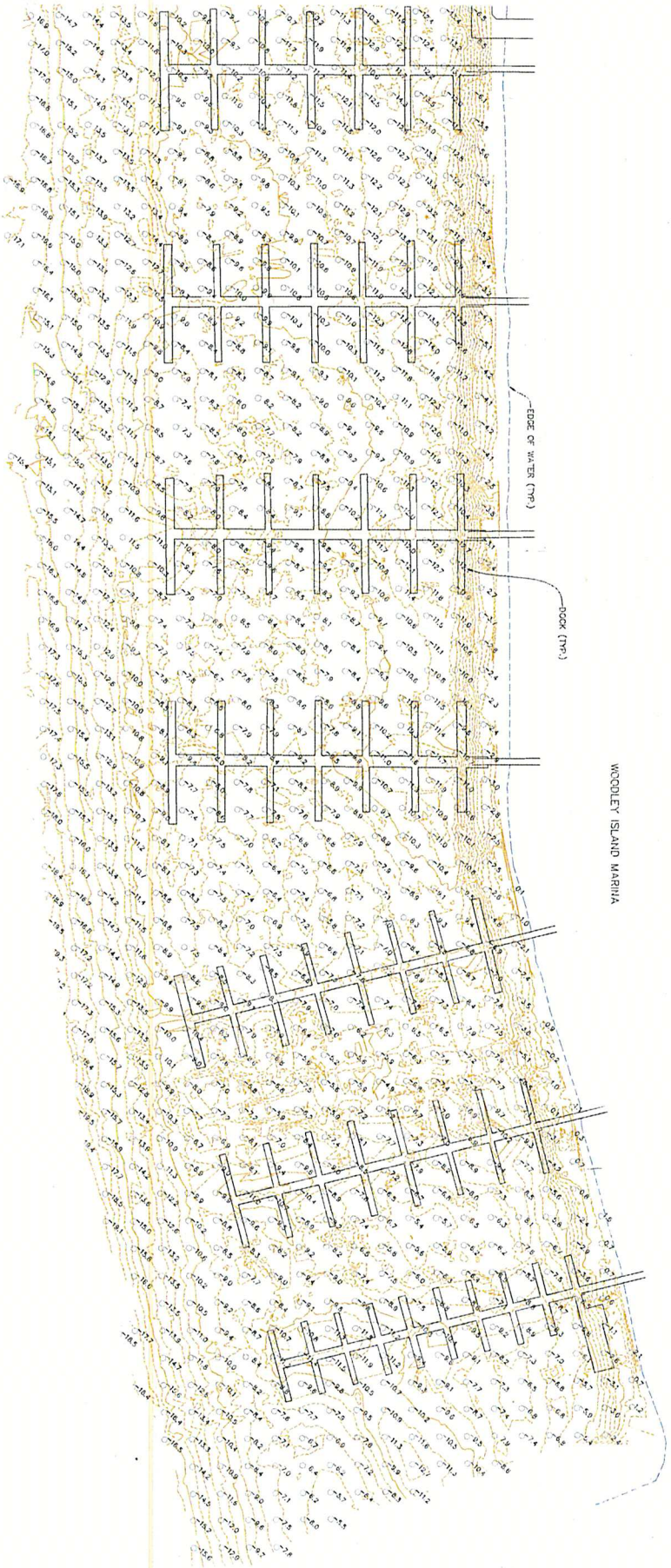

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NTS

PROJ. NO. 014188	DATE 11/2014	SHEET 2 OF 14	HBHD & City of Eureka Pre-Dredge Bathymetric Survey Eureka, Humboldt County, California Woodley Island Marina – East	DSGN DRFT CDT CHK EWW APVD	NO.	DATE	REVISION	BY

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.
275 Market Ave. Coos Bay, OR 97420 FAX (541)266-9496

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Attachment B

Humboldt Bay Harbor, Recreation and Conservation District

Fields Landing Boat Yard - Travel Lift Maintenance Dredging

Fields Landing, Humboldt Bay, CA

PROJECT SUMMARY

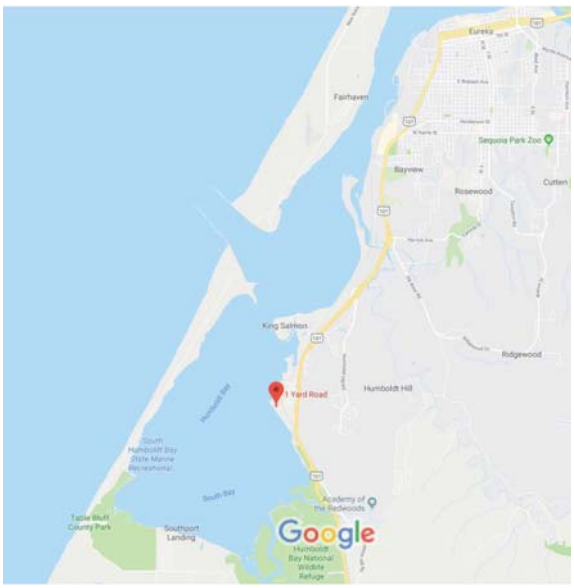
Applicant: Humboldt Bay Harbor, Recreation and Conservation District
601 Startare Drive, Eureka, CA 95501

Project Location: 1 Yard Road, Fields Landing, CA 95537 **APN:** 307-101-002

PROJECT DESCRIPTION

Introduction

Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD or District) is proposing maintenance dredging over a ten-year period within Humboldt Bay at the Fields Landing Boat Yard travel lift dock. Located at the south end of the community of Fields Landing in Humboldt Bay, south bay area, the boat yard offers easy access to the Bay's Pacific Ocean entrance and to Highway 101 (Figure 1). Vessels may be hauled out of the water and moved via the 150-ton capacity travel lift - mobile boat lifting hoist. The two approximately 150-foot-long dock fingers are 26 feet apart and extend northwest from the shore towards the existing federal navigation channel.



Fields Landing Boat Yard Location Map

Fields Landing Boat Yard – Travel Lift Dock

The Fields Landing Boat Yard dock was approved through Coastal Commission Application No. 80-P-21 and constructed in 1981. The original 1981 construction plans document the dredging depth of -15 feet Mean Lower Low Water (MLLW) with a one-foot overdraft allowance to a maximum of -16 ft. MLLW. The original project area has significantly filled in from the depth of -15 ft. MLLW as a result of natural deposition, with up to 12,120 cubic yards (cy) of material proposed to be removed during the initial dredging event(s) (Figures 2 and 3). This volume amount consists of the original "As Built" depth of -15 ft MLLW and 1 foot of overdredge.

The Harbor District is proposing to closely monitor the deposition of material and to conduct periodic maintenance dredging over the ten-year period to maintain the travel lift operations. It is anticipated that an additional 13,000 cy of material will be removed during episodic maintenance dredging over the 10-year permit period; for a maximum of 25,120 cy of material proposed to be removed under this permit.

Travel lift dock dredging is necessary as soon as possible; in May 2018 the Harbor District issued draft restrictions that significantly limit when boats can be hauled out of Fields Landing. Humboldt Bay is a Port of Refuge and the Fields Landing travel lift dock is used to haul out boats in case of an emergency. The marine oil spill response equipment is also stored on land directly adjacent to the travel lift fingers and needs to be deployed quickly in case of an emergency. In addition, the travel lift is utilized to haul out boats that have either sunk or are at risk of sinking into the bay. The Humboldt Bay Harbor Safety Committee which is comprised of the US Coast Guard, County Sheriff, Harbor District, and other Agencies discussed the need to maintain the Fields Landing Travel Lift at their recent May 2018 meeting. The Safety Committee stressed the travel lift is an essential piece of harbor safety infrastructure and that the inability to haul out or deploy the emergency response equipment via the travel lift due to the draft restrictions has significantly reduced the area's safety response capacity.

Project Background

The Fields Landing Boat Yard dock was constructed in 1981. There is no fueling station or industry on the land mass associated with this dock. Historically, a larger dock was located approximately 70 feet west of the existing dock structures, extending from the land mass approximately 150 feet into the bay in a northward direction. Historic photos show that the dock spanned the shoreline approximately 1,000 feet from north to south beyond Depot Road servicing a lumber mill and yard, where a historic railway extended further south. The historic dock structures were completely dismantled by 2010. Existing dock pilings remain. None of the historic dock area is within the Fields Landing Boat Yard dredging area (NHE, 2015).

Fields Landing Boat Yard Dock and Vicinity in 1948 and Present (Source: NHE, 2015)

Boat Yard Operations

Fields Landing Boat Yard is a secured boatyard owned and operated by HBHRCD. The facility site consists of boat storage areas; a boat cleaning and maintenance work yard; boat launch; rest rooms; covered boat repair shop, office, and store; storage area for the boat lift; and a dock. Vessels may be hauled out of the water and moved via the mobile boat lifting hoist (150 ton capacity). This secure facility is fenced and has 24-hour surveillance. A floating dock is secured to the outside (east) of the three existing pilings that extend towards the federal channel off the end of the eastern dock finger. This dock is used when multiple vessels are launched and to preform vessel checks after launching, prior to heading out to sea. The floating concrete dock is approximately 5 feet wide and 24 feet long (in 8 foot sections); similar to what is used at Woodley Island Marina. A gangway is installed to provide access from the pier to the floating dock.

The facility operates under an approved stormwater pollution prevention plan from the State Water Resources Control Board; which is available upon request. The facility has one industrial drainage area, which is nearly entirely paved. The industrial area at the site flows to a drainage inlet (DI) in the east portion of the site. During boat cleaning activities, the DI is plugged and wash water is run through a three-tank oil/water separator and settling system located adjacent to the DI. The three-tank oil/water separator system flows into a settling tank, and then to the Humboldt Community Services District (HCSD) sanitary sewer system. Boat cleaning activities are not permitted to occur during rain events. During the winter months when boat cleaning is not occurring, the DI is unplugged, a drainage inlet filter is inserted, and stormwater is conveyed from the DI by way of a buried culvert to the east drainage swale and, ultimately, to Humboldt Bay. There are two paved areas (north and west of the industrial area) and one gravel area (south of the industrial area) that are designated by facility operators for boat storage. No cleaning or maintenance activities occur in these areas.

Dredging Methods

Dredging will be performed using an excavator and/or crane with a closed clamshell bucket. Material will be scooped from the bay floor and deposited into a hopper scow. Once full, the scow will be transported to the Humboldt Open Ocean Disposal Site (HOODS) located three nautical miles northwest of the Humboldt Bay entrance where the dredged material will be deposited. The Harbor District will closely monitor the deposition of material and to conduct periodic maintenance dredging over the ten-year period to maintain the travel lift operations.

Clamshell dredge operation temporarily effects include sediment suspension and increased turbidity. Turbid waters are expected to extend no more than 500 feet from work sites, and work is expected to be limited to only one portion of the project area at a time. Baseline turbidity will be measured and monitored upstream and downstream of the work site. If turbidity is found to exceed the 20% above background threshold, the District will take necessary action(s) to come into compliance, including one or more of the following: stop dredging and wait for sediment to settle; determine if dredging adjustments can be made to address the issue; and/or wait for the tides to ebb. Dredging will only continue when turbidity does not exceed the established threshold.

Schedule

Dredging is, by definition, “in-water” work. As such, there are specific work windows established by the regulatory agencies to minimize impacts to various fish species present in Humboldt Bay. The in-water

work window for Humboldt Bay is from July 1st to October 15th of each year. Dredging will occur during this work window, with construction occurring up to 24 hours per day, depending on contractor availability and scheduling. The initial proposed dredging (2018) is estimated to take less than two weeks and will occur during the in-water work window prior to October 15th.

Ocean Disposal

Ocean disposal at the Humboldt Open Ocean Disposal Site (HOODS) will be implemented for this project (Figure 4). Disposal at HOODS will be performed in accordance with Special Conditions established by the Environmental Protection Agency (EPA) and Army Corps, which may include bathymetric surveys, vessel tracking systems and record keeping/reporting. Scows shall only be transported to HOODS when ocean conditions will not interfere with safe transportation and will not create a risk of spillage, leak or other loss of dredge material. Specific cells within HOODS will be identified by EPA and Army Corps which shall be used for disposal.

Sediment Sampling

The protocols contained in the District's Sampling and Analysis Plan (SAP) (NHE, 2015) will be implemented in addition to an addendum to the SAP that has been prepared for the Fields Landing Boat Lift area (SHN, 2018). The SAP addendum addresses the sampling design that follows the Inland Testing Manual (ITM) sampling methodology to fulfill all agency requirements (Figure 5). Sediment sampling using the District's vibracore is scheduled to be conducted upon approval of the SAP addendum from the US Army Corps of Engineers (USACE) and the US Environmental Protection Agency (EPA). In addition, recent sampling was conducted by USACE in the immediately adjacent Federal Channel; two USACE core samples were taken very close to the proposed dredging area (Figure 6). These adjacent sediments were quite clean chemically, passed all the comprehensive ocean disposal testing (including 7 bioassay), and were determined by EPA and USACE to be suitable for ocean disposal at HOODS. Results for dredge material characterization taken in accordance with the SAP Addendum will be compared to the USACE samples and submitted to the USACE, EPA, and NCRWQCB as soon as they become available.

Endangered Species

Humboldt Bay provides habitat for a variety of plants, birds, fish, invertebrates and marine mammals, some of which are listed under the state and federal Endangered Species Acts (ESA). The following listed species have potentially suitable habitat within the vicinity of the proposed project site:

Green sturgeon (Acipenser medirostris)

The National Marine Fisheries Service (NMFS) listed the southern Distinct Population Segment (DPS) green sturgeon as "threatened" in 2006 (71 FR 17757) and designated Humboldt Bay as critical habitat effective October 9, 2009 (74 FR 52300). Green sturgeons migrate to coastal ocean waters, estuaries and bays after two to three years of rearing, where it is believed they spend the majority of their lives. Adults migrate up large coastal rivers to spawn every two to four years. Sub-adults and adults may forage in the project area during summer and fall months.

Longfin smelt (Spirinchus thaleichthys)

The state of California listed the longfin smelt as threatened under the California ESA in 2009. Adult and juvenile longfin smelt can be found in the open waters of estuaries, mostly in the middle or at the bottom of the water column. Spawning occurs in fresh water during the winter to early spring (February

through April) over sandy or gravel substrate. Longfin smelt larvae would not be present in the area during the late summer and fall. Juvenile and adult longfin smelt would have a moderate likelihood of presence during operations.

Salmonids

The Humboldt Bay watershed supports three species of salmonids listed as threatened under the federal ESA: Coho salmon, Chinook salmon and steelhead. NMFS designated critical habitat in northern California for each of the three salmonid species in February of 2000 (65 FR 42422 42481), (Federal Register 2000). The following migration time frames given are approximate and coincide with the peak runs.

Coho salmon (Onchorhynchus kisutch)

Southern Oregon/Northern California Coast (SONCC) coho salmon were listed under the federal Endangered Species Act (ESA) as threatened on June 18, 1997 (62 FR 33038) and under the California Endangered Species Act (CESA) in 2005. Coho salmon travel through Humboldt Bay as juveniles between February and June on their way to the ocean and again as adults from October through December while traveling to spawning grounds.

Chinook salmon (O. tshawytscha)

Chinook Salmon in the California Coastal ESU were listed as a threatened species under the federal ESA on September 16, 1999 (64 FR 50393). Similar to the coho salmon, Chinook salmon travel through Humboldt Bay on their way to the Pacific as juveniles from February through June and again as adults to their spawning grounds between October and November.

Steelhead (O. mykiss)

The Northern California (NC) DPS steelhead were listed under the ESA as threatened in 2006 (71 FR 834). Steelhead in the Northern California DPS were listed as a threatened species under the federal ESA on January 5, 2006 (50 FR). Similar to the coho and Chinook, the steelhead will travel through Humboldt Bay as a juvenile on its way to the Pacific and again as an adult to spawn in rivers. Steelhead will, however, make multiple spawning migrations in its adult years, so it will travel through Humboldt Bay to freshwater and back out to the Pacific between December and April.

<u>Environmental Effects</u>

Potential impacts on these species could include injury or mortality of individuals due to entrainment in the dredging equipment, exposure to sediment-associated contaminants, and turbidity produced by dredging. In addition, short-term degradation of water quality, such as increased turbidity from disturbance of sediment or spills or leakage from machinery could occur during dredging activities. This could result in localized disturbance of juvenile and adults, potentially resulting in stress, disruption of essential behaviors, or physiological impairment. Impacts on designated critical habitat could result from loss of foraging and cover due to the removal of subtidal benthic substrate and associated benthic invertebrates from dredging.

Dredging activities are not expected to have a significant environmental impact based on the timing and duration of dredging and amount of potential and occupied habitat affected. The dredging equipment is slow moving and makes sufficient noise to alert any animals to allow them time to flee the area. It is not

so noisy that it will exceed sound thresholds for disturbance or injury to fish or marine mammals. Short-term, localized increases in suspended sediments will occur, but are expected to disperse within 500 feet. Humboldt Bay is naturally turbid, so localized suspended sediments are not expected to have an effect.

The salmonid species discussed above are not expected to be in Humboldt Bay during the project work window (July 1 to October 15). Fish and marine mammals, including green sturgeon and longfin smelt, may be in the project area during construction, but would likely flee to other areas of the bay. With the activity taking place between the shore and channel, there is sufficient room for fish and mammals to travel around the area. Since these species are likely to avoid equipment while dredging occurs, there would not likely be any direct impacts from encounters with the dredge, contact with turbid water, or decreased water quality. The mechanical clamshell dredge will effectively eliminate the possibility of entrainment and reduce turbidity.

In summary, dredging activities are not expected to have a significant environmental impact based on the timing and duration of dredging and amount of potential and occupied habitat affected. The dredging equipment is slow moving and makes sufficient noise to alert any animals to allow them time to flee the area. It is not so noisy that it will exceed sound thresholds for disturbance or injury to fish or marine mammals. Short-term, localized increases in suspended sediments will occur, but are expected to disperse within 500 feet. Humboldt Bay is naturally turbid, so localized suspended sediments are not expected to have an effect. Potential impacts to endangered species are similar to those described in the Woodley Island Marina dredging application. Conservation and protection measures have been designed to limit the risk of project-related impacts to threatened and endangered species and designated critical habitat in Humboldt Bay.

Eelgrass & Benthic Habitat

The area surrounding the travel lift provides soft bottom eelgrass habitat that may be habitat for a variety of benthic organisms. The proposed dredging would involve removal of much of this soft bottom habitat area. However, impacts to tidal mudflats and eelgrass were mitigated when the Fields Landing Boat Yard was developed and the dock was constructed (1980-81). At the time, it was recognized that the travel lift would require periodic maintenance dredging and mitigation was required to ensure that creation of the lift and its subsequent maintenance dredging would not result in a net loss of habitat. Per the Coastal Commission Staff Report for Application No. 80-P-21, one acre of tidal mudflat and eelgrass was mitigated for as part of the original dredging project (Attachment 2). It is the District's understanding that the mitigation area was part of the "Broadway-wetlands Restoration". Therefore, potential eelgrass impacts resulting from the proposed maintenance dredging were fully mitigated when the dock was constructed.

<u>Conservation and Protection Measures</u>

Conservation and protection measures have been designed to limit the risk of project-related impacts to threatened and endangered species and designated critical habitat in Humboldt Bay. The following protection measures would minimize the risk of impacts on listed fish species and habitat:

- Dredging activities will only be performed between July 1 and October 15 of each calendar year to avoid impacts to salmonids migrating through Humboldt Bay.

- Clamshell and excavator dredging is a slow and controlled process allowing marine life time to escape as the equipment approaches. There are no suction or jetting pressures involved. Operator has the ability to limit descent speeds to minimize sediment dispersion.
- Vegetable based or biodegradable hydraulic fluids shall be used, if possible, in equipment operating over water or without secondary containment. Note, not all equipment is compatible with these types of fluids.
- Equipment shall be inspected and serviced prior to mobilization. Routine inspections shall occur through the project and leaks shall be repaired immediately when discovered.
- Spill kits equipped with enough material to provide preliminary containment for a volume of material that can reasonably be expected to spill shall be maintained on the barge and the dock. Spill containment trays shall be placed around all equipment on the barge deck.
- Dredging will not extending beyond the overdredge depths as described herein and in the attached typical cross-sections.
- Turbidity will be monitored upstream and downstream of work sites to ensure turbidity is limited to 500-feet from the project area.

CEQA Compliance

The District intends to issue a Class 4 Categorical Exemption from CEQA per Section 15304 (g) Minor alterations to land including maintenance dredging where the soils are deposited in an area authorized by all state and federal regulatory agencies.

ATTACHMENTS

Attachment A – Maps and Figures

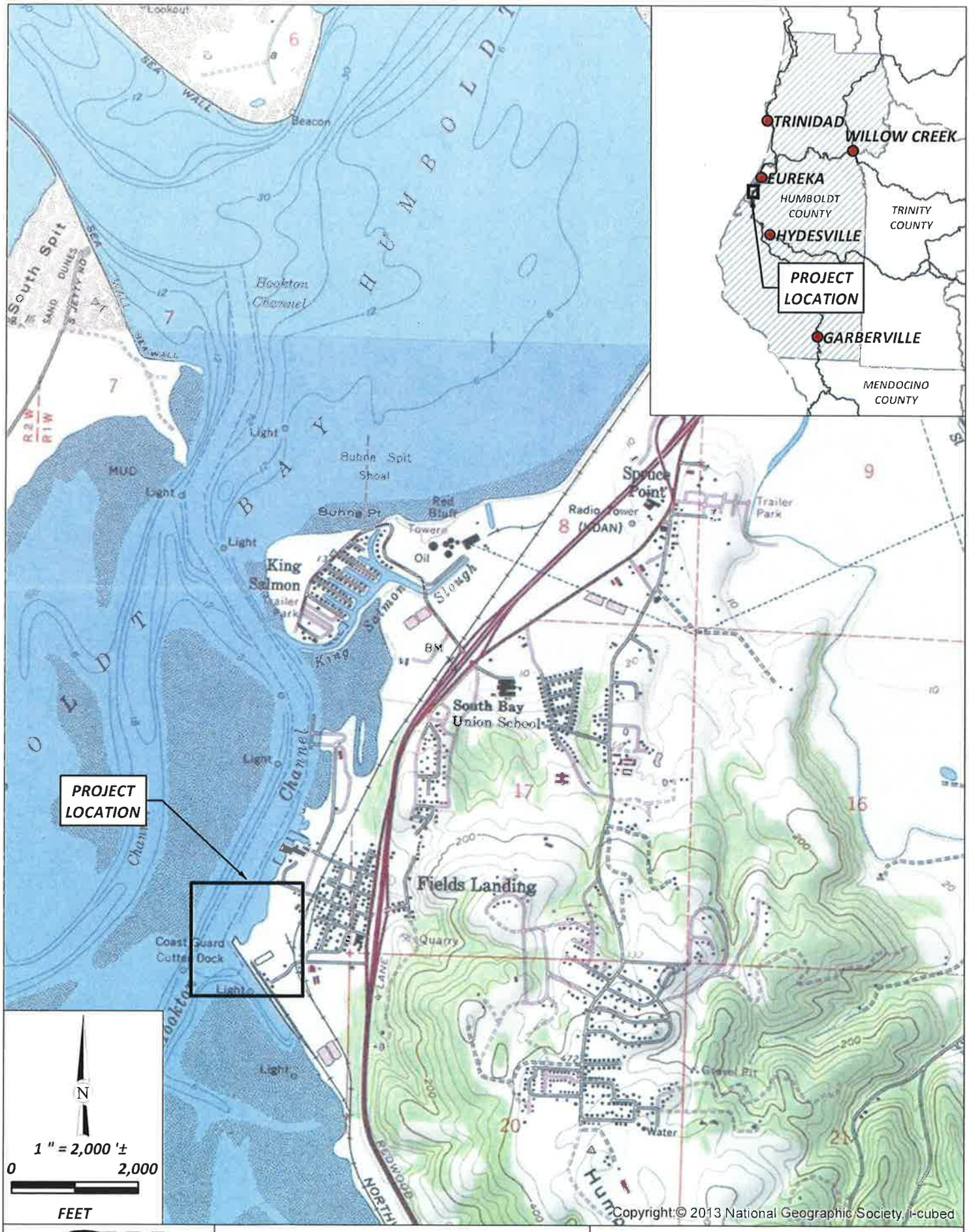
Figure 1 - Project Location Map
Figure 2 - Proposed Dredging Plan
Figure 3 - Typical Dredging Cross Section
Figure 4 - Region 9 Ocean Dumping Sites, EPA
Figure 5 - Proposed Sampling Locations
Figure 6 - USACE Fields Landing Channel Sampling Locations
Figure 7 - Fields Landing Dredging “As Built” 1981

Attachment B - Coastal Commission Staff Report for Application No. 80-P-21

REFERENCES

Northern Hydrology & Engineering, December 2015 (NHE, 2015). Sampling and Analysis Plan, Humboldt Bay Harbor, Recreation and Conservation District and City of Eureka Sediment Characterization for 2016-2021 Maintenance Dredging.

SHN Engineers and Geologists, July 11, 2018 (SHN, 2018). Addendum to Maintenance Dredging Sampling and Analysis Plan, submitted to Debra O’Leary, U.S. Army Corps of Engineers.



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Consulting Engineers & Geologists, Inc.	HBHRCD Fields Landing Boat Yard Lift Dock Eureka, California	Project Location Map SHN 016240.020
July 2018	Figure1_ProjectLocationMap	Figure 1

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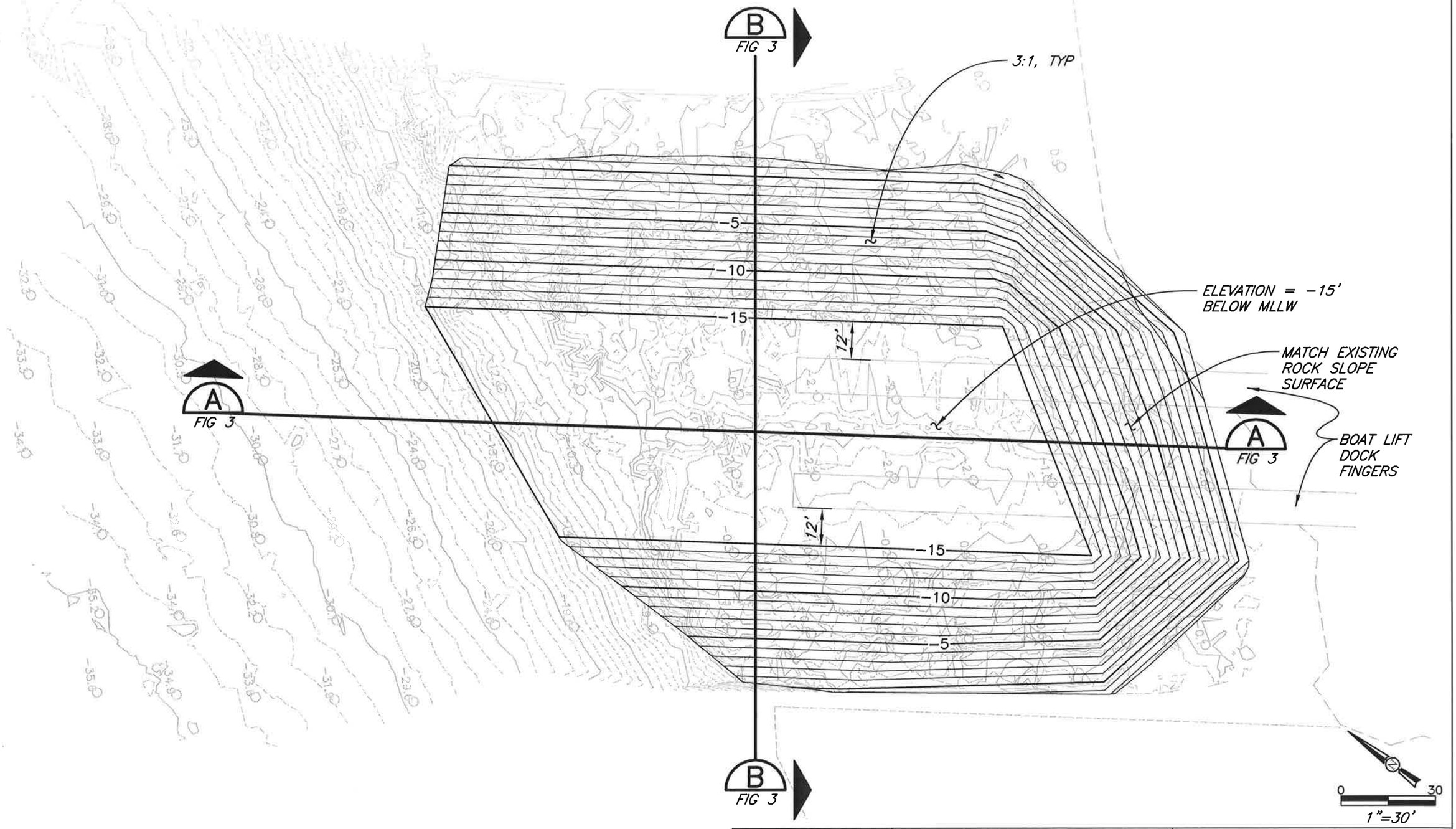
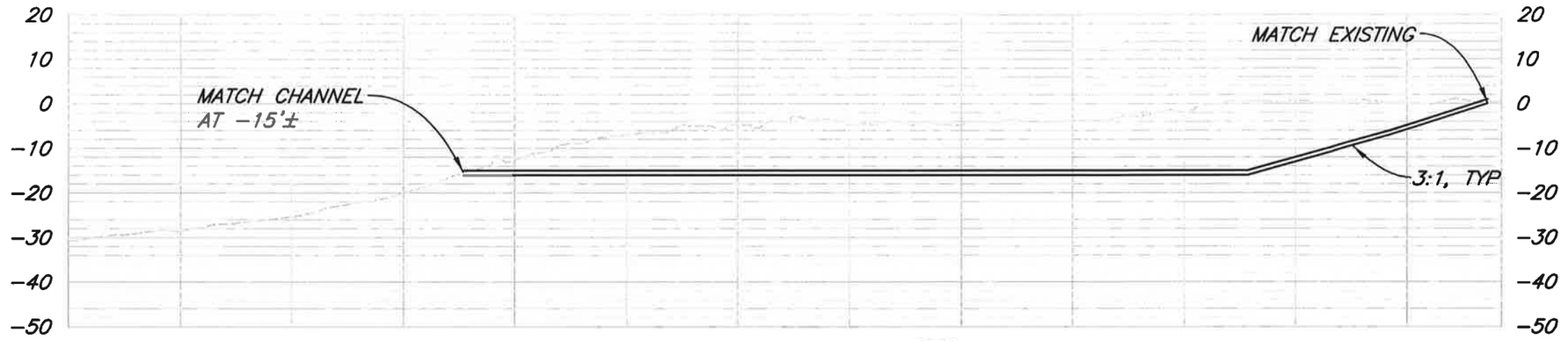
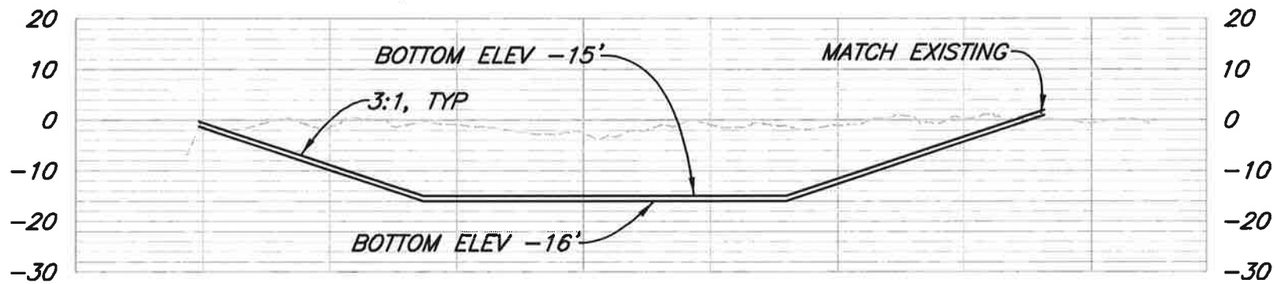


SHN Consulting Engineers & Geologists, Inc.	HBHRCD Fields Landing Boat Yard Lift Dock Eureka, California	Proposed Dredging Plan with Cross Section Locations SHN 016240.020
	July 2018 | 016240-020-DRDG-QTY-FLANDING	Figure 2



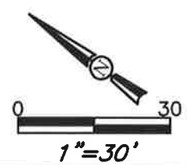
SECTION A

SCALE: 1"=30' H&V FIG 2



SECTION B

SCALE: 1"=30' H&V FIG 2



SHN Consulting Engineers & Geologists, Inc.	HBHRCD Fields Landing Boat Yard Lift Dock Eureka, California	Typical Cross Sections SHN 016240.020
	July 2018 | 016240-020-DRDG-QTY-FLANDING	Figure 3

\\Eureka\Projects\2016\016240-Engr-HBHRCD\020-dredge-suppor\Fields Landing Boat Lift\DWG, SAVED: 7/6/2018 1:51 PM CNEWELL, PLOTTED: 7/6/2018 2:38 PM, CHRIS D. NEWELL