US Army Corps of Engineers
Seattle District

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Joint Public Notice

Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

US Army Corps of Engineers
Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755
Telephone: (206) 764-3708
ATTN: Suzanne L. Anderson,
Project Manager

WA Department of Ecology
SEA Program
Post Office Box 47600
Olympia, WA 98504-7600
Telephone: (360) 407-6068
ATTN: SEA Program,
Federal Permit Coordinator

Public Notice Date: July 9, 2014
Expiration Date: August 8, 2014

Reference No.: NWS-2013-804
Name: Renton, City of (Cedar River Maintenance Dredge)

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the United States as described below and shown on the enclosed drawings dated February 3, 2014.

The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws and the Coastal Zone Management Act.

APPLICANT: City of Renton
Surface Water Utility Engineering Department
Attention: Ronald J. Straka, P.E.
Renton City Hall - 5th Floor
1055 South Grady Way
Renton, Washington 98057
Telephone: (425) 430-7248

AGENT: GeoEngineers, Incorporated
Attention: Joseph O. Callaghan
1101 South Fawcett Avenue, Suite 200
Tacoma, Washington 98402
Telephone: (253) 383-4940

LOCATION: In the Cedar River at Renton, Washington.

WORK: Dredge/excavate sediments, maintain existing outfall structures, maintain existing bank stabilization structures, and install new bank stabilization structures. Temporarily place fill and temporarily install a sheet pile bulkhead for construction access.

Dredging - Dredge approximately 125,000 cubic yards of accumulated sediment from the lower 1.23 miles of the Cedar River. Proposed work would extend from the mouth of the river (at the North Boeing Bridge) upstream to Williams Avenue. The proposed dredging would be an average depth of four feet with a one-foot over-depth

allowance from the mouth of the river upstream (south) to Logan Avenue (approximately one mile). A transition slope (maximum slope of approximately 0.63 percent) would gradually reduce the dredge cut from Logan Avenue upstream to Williams Avenue where it would meet the existing river bed level (approximately 0.23 miles). The proposed work would impact approximately 1.23 miles of riparian habitat and two Category IV wetlands (total of 0.062 acres of wetland).

Maintenance dredging would be conducted using a combination of land-based and water-based dredging equipment. Land-based dredging would be conducted from temporary gravel berms (total of approximately 5,915 linear feet), which would consist primarily of material removed from the river. The majority of the berm material would be removed as dredging is completed, although where appropriate, portions would be left to create riparian planting benches. Water-based dredging would be conducted from a portable sectional barge, and would include installation of up to three temporary unloading platforms (approximately 50 linear feet of temporary sheet piling for each platform). Dredged material not re-used within the project would be disposed of off-site.

Outfalls – The proposed work would repair/maintain approximately 30 outfalls located in the project area. The work would include:

- Excavation of buried outfalls as needed for repairs.
- Maintenance and replacement of existing backflow valves at outfalls.
- Minor repairs to damaged outfall pipes including shortening and lengthening pipe protrusions as needed in coordination with other project improvements.

Bank Stabilization - Streambank stabilization work would include:

- Maintenance - Minor restoration of portions of displaced rock on existing bank stabilization features while access to the areas is provided during the dredging work (approximately 250 linear feet).
- Repair/replace existing deteriorated and failing bank stabilization features (approximately 1,300 linear feet).
- New Bank Stabilization - Install new stabilization measures to ensure protection of flood control walls and levees (approximately 184 linear feet, angular rock placed at a 2H:1V slope similar to existing bank stabilization features).

In-water work is proposed only from June 15 to August 31 to protect juvenile and adult salmonid migration.

Project Background – The project site is the Section 205 Cedar River Flood Damage Reduction Project. Section 205 of the 1948 Flood Control Act, as amended, provides authority to the Corps to plan and construct small flood damage reduction projects in cooperation with a local sponsor. In 1993 the City of Renton, as the local sponsor, requested Federal assistance in reducing the flood damages along the Cedar River within the City of Renton. The Cedar River Flood Damage Reduction Project was originally constructed in 1998-1999. The project constructed levees and flood walls and dredged the Cedar River channel. As the local sponsor, the City of Renton is responsible to operate, maintain, repair, replace, and rehabilitate the project as long as the project is authorized. The original project design predicted the channel would require re-dredging to remove accumulated material approximately every three years. To date, the river channel has not been dredged since construction of the original Cedar River Flood Damage Reduction Project.

Periodic removal of accumulated sediment and other work is required by the *Cedar River at Renton Flood Damage Reduction Project Operation and Maintenance Manual*, dated July 15, 2004 (O&M Manual). The proposed maintenance dredge work is similar in scope to the original Cedar River Flood Damage Reduction Project, although the proposed dredge widths would be slightly smaller than the 1998 dredge.

PURPOSE: The applicant's stated purpose is to maintain the 100-year flood protection of the Section 205 Cedar River Flood Damage Reduction Project as required by the *Cedar River at Renton Flood Damage Reduction Project Operation and Maintenance Manual*, dated July 15, 2004.

NWS-2013-804, Renton, City of (Cedar River Maintenance Dredge)

DREDGED MATERIAL MANAGEMENT PROGRAM (DMMP): Dredged Material Testing: The applicant has chosen not to complete the testing before this Public Notice was published. Prior to completing our review, the proposed dredged material must be tested according to the procedures specified by the DMMP. The DMMP evaluation may include both chemical and biological testing of sediments. For this project, the DMMP agencies will determine whether the dredged material is suitable for beneficial reuse either in the Cedar River or in uplands, or if it must be disposed of at an upland location. The sediment testing data will be available at the Corps, Seattle District, Dredged Material Management Office.

ADDITIONAL INFORMATION: The wetland boundaries and locations of the ordinary high water mark shown on the project drawings have not yet been verified by the Corps. If the Corps determines that the boundaries of the wetlands and/or waters are substantially inaccurate, a new public notice may be published.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at http://www.nws.usace.army.mil/ and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently-issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

MITIGATION: The proposed work would result in impacts to approximately 1.23 miles of riparian habitat in the lower Cedar River, and the loss of 0.062 acres of Category IV wetlands. Work would also permanently and temporarily impact wetland and riparian buffers with forested, shrub, and herbaceous vegetation. Temporary impacts to wetlands, buffers, and riparian areas would be rehabilitated and revegetated in keeping with the guidelines for vegetation along levees and floodwalls set by Corps.

Mitigation for the Cedar River Flood Damage Reduction Project included construction of a sockeye salmon spawning channel and riparian plantings. Proposed mitigation measures for the proposed work include: creating riparian benches and installing riparian plantings; filling void spaces in existing riprap; removing gabions and replacing them with bioengineered structures with plantings; and conducting a study to identify city-owned lights that can be modified to reduce light impacts on Cedar River habitat, which would be implemented as funding allows. Mitigation to compensate for the proposed wetland impacts would be provided by the purchase of credits (amount to be determined) from the Springbrook Creek Mitigation Bank, which is located in the City of Renton.

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires Federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. After receipt of comments from this public notice, the Corps will evaluate the potential impacts to proposed and/or listed species and their designated critical habitat.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. If the Corps determines that the proposed action may adversely affect EFH for federally managed fisheries in Washington waters, the Corps will initiate EFH consultation with the NMFS. The Corps' final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

CULTURAL RESOURCES: The Corps has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible, and other sources of information. There are no recorded historic properties within the permit area. The proposed work involves activities limited to actions within a land form (dredged river channel) where there is little likelihood that the proposed project will impinge on any historic

property. The Corps invites responses to this public notice from Native American Tribes or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns regarding historic properties and sites of religious and cultural significance at or near the project area. After receipt of comments from this public notice, the Corps will evaluate potential impacts and consult with the State Historic Preservation Officer and Native American Tribes in accordance with Section 106 of the National Historic Preservation Act, as appropriate.

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

EVALUATION – CORPS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

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

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the U.S.

SOURCE OF FILL MATERIAL: The primary source of the fill material would be material excavated from the Cedar River. The applicant has not yet identified the source of additional fill material. Should a permit be issued, the Corps will evaluate the fill material source prior to the start of construction.

EVALUATION – ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

ADDITIONAL EVALUATION: This proposal is the subject of a Shorelines Substantial Development Permit Application that is being processed by the City of Renton.

COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and

reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentator's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

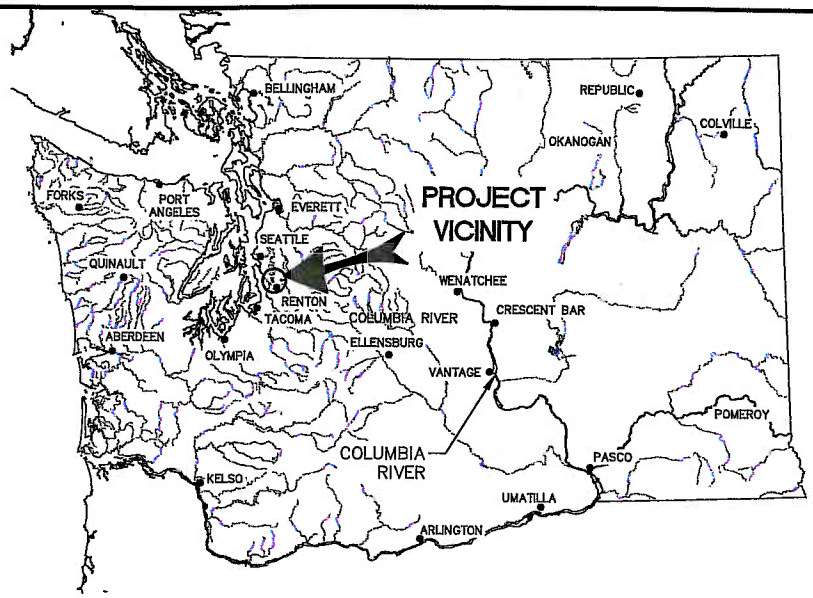
CORPS COMMENTS: All e-mail comments should be sent to suzanne.l.anderson@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Suzanne L. Anderson, P.O. Box 3755, Seattle, Washington 98124-3755. All comments received will become part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses.

ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: Federal Permit Coordinator, Post Office Box 47600, Olympia, Washington 98504-7600, or e-mail to ecyrefedpermits@ecy.wa.gov.

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Renton, City of (Cedar River Maintenance Dredge); NWS-2013-804.

Encl: Figures (29)

S7, 17, 18 T23N R5E



WASHINGTON KEY MAP

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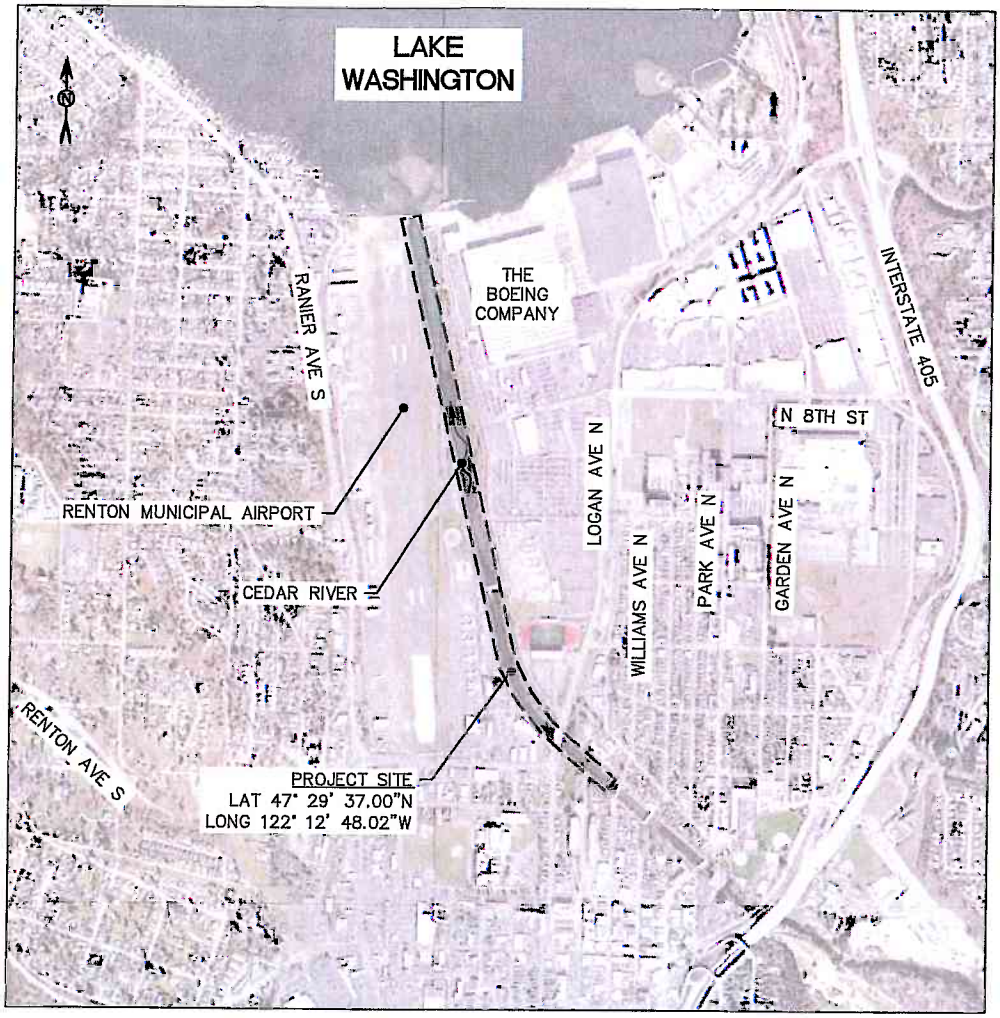


LOCATION MAP

0 1000 2000
SCALE IN FEET

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. CITY OF RENTON
2. THE BOEING COMPANY
3. RENTON FACILITIES AND OPERATIONS CTR
4. CONDOMINIUMS (55 WILLIAMS AVE)
5. RENTON HOUSING AUTHORITY
6. WASHINGTON DNR
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN–BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

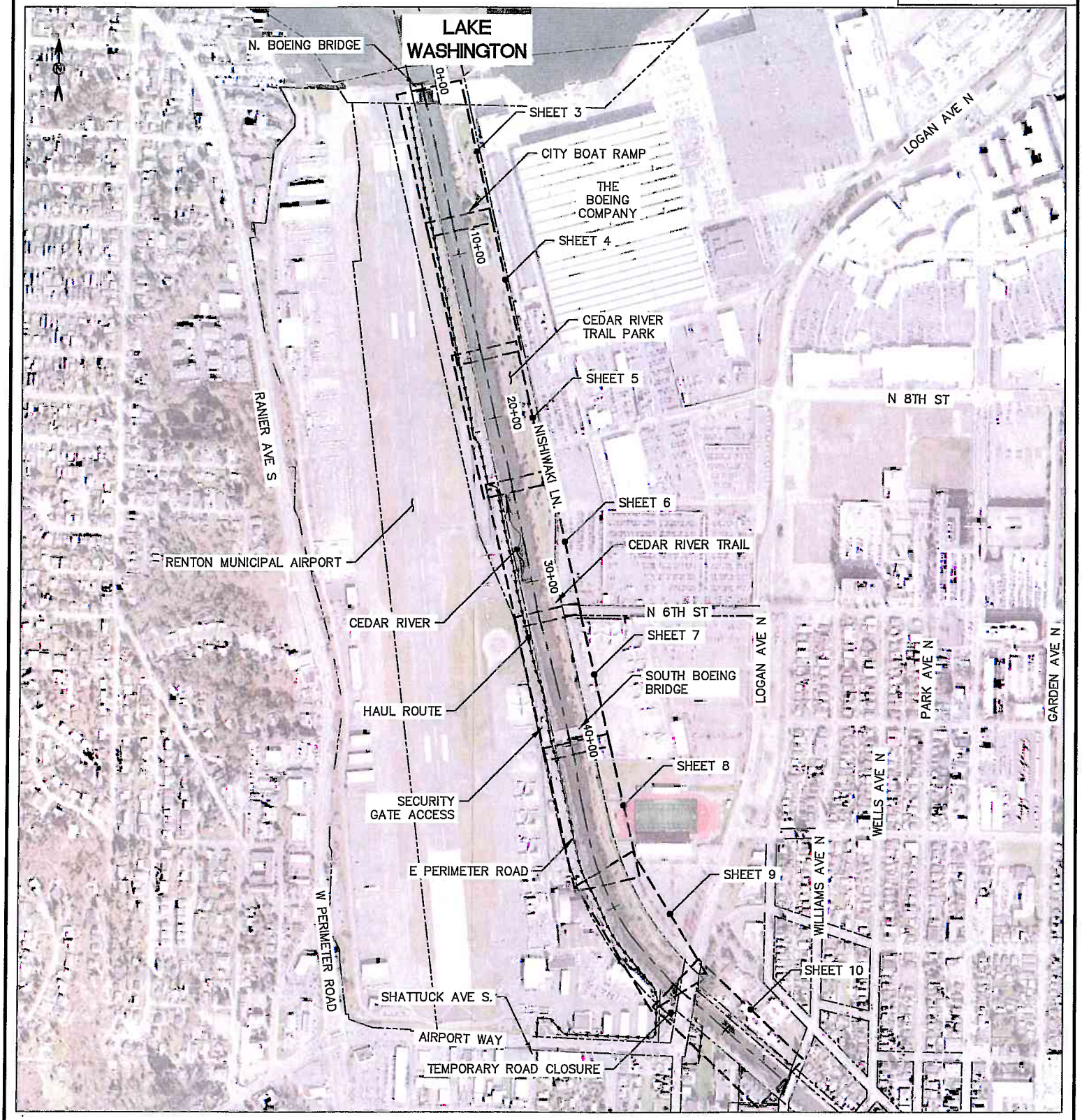
VICINITY MAP

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING STATE: WASHINGTON
SHEET 1 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E



LEGEND

- HAUL ROUTE
- DREDGING CENTERLIINE
- PROPERTY LINE

SITE KEY MAP

0 400 800

SCALE IN FEET

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

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10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

SITE KEY MAP

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

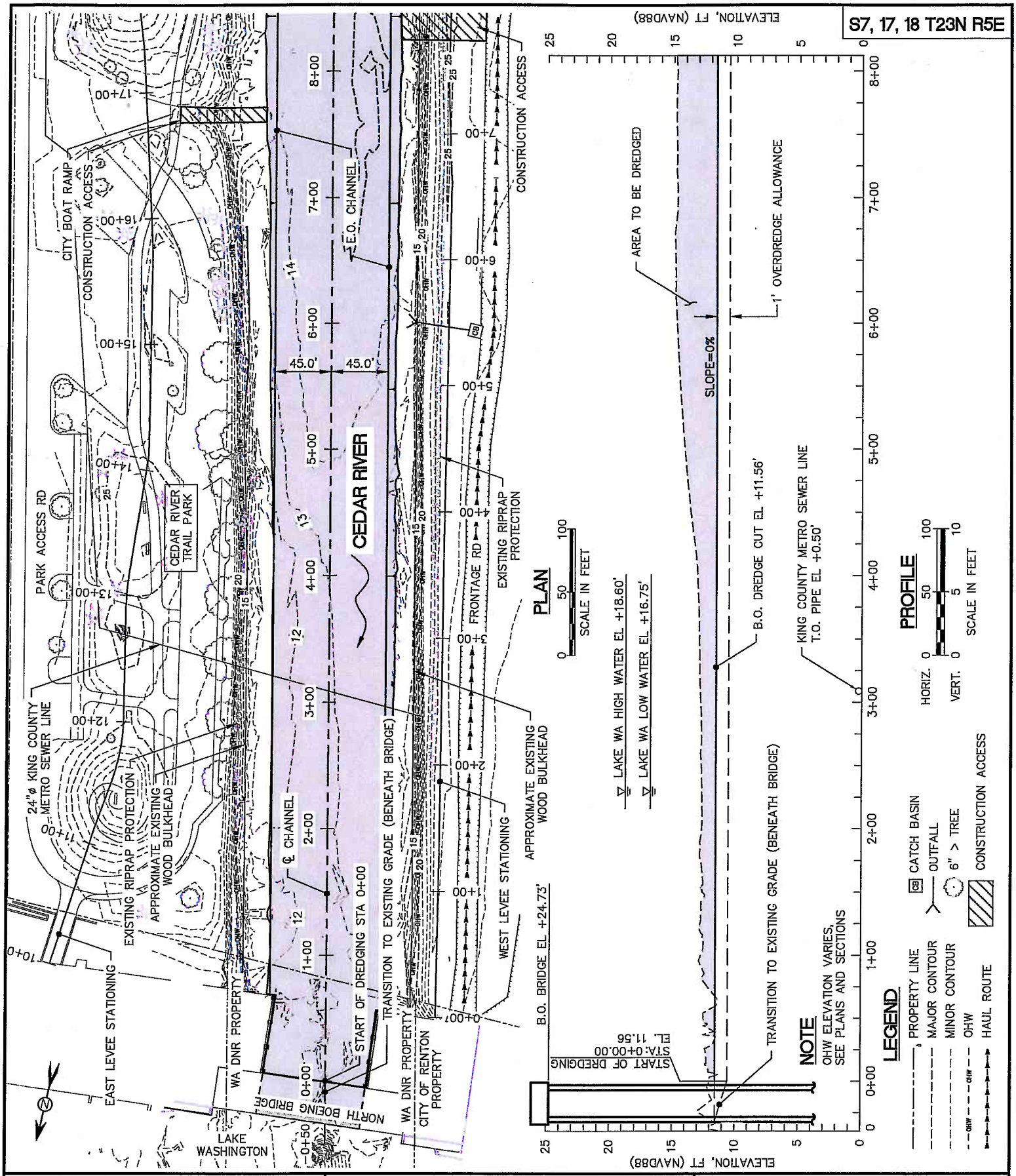
IN: CEDAR RIVER

AT: RENTON

COUNTY: KING STATE: WASHINGTON

SHEET 2 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E



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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 0+00–8+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

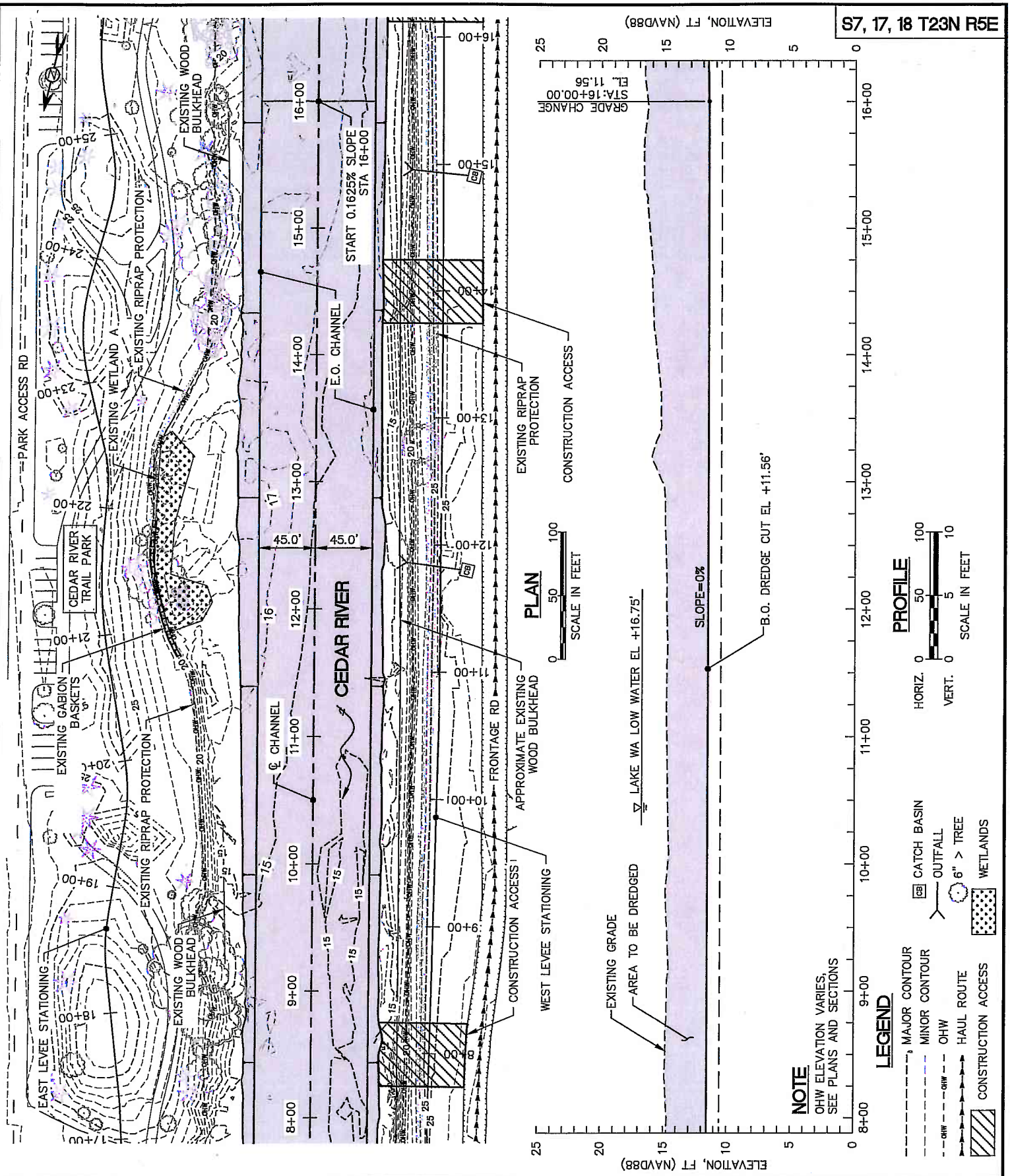
COUNTY: KING

STATE: WASHINGTON

SHEET 3 OF 29

DATE: 2/3/14

S7, 17, 18 T23N R5E



PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 8+00–16+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

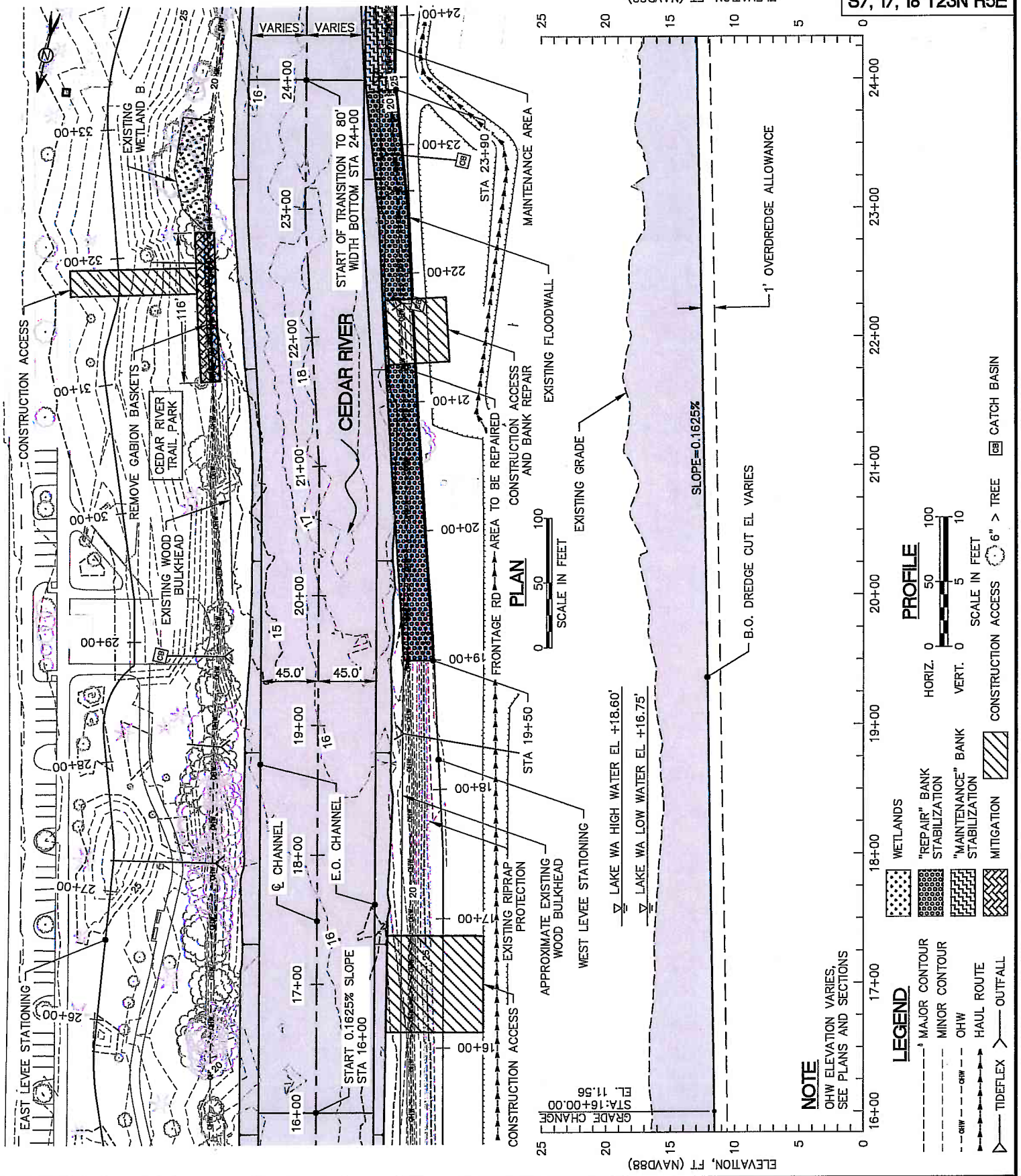
COUNTY: KING

STATE: WASHINGTON

SHEET 4 OF 29

DATE: 2/3/14

S7, 17, 18 T23N R5E



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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 16+00–24+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

COUNTY: KING

STATE: WASHINGTON

SHEET 5 OF 29

DATE: 2/3/14

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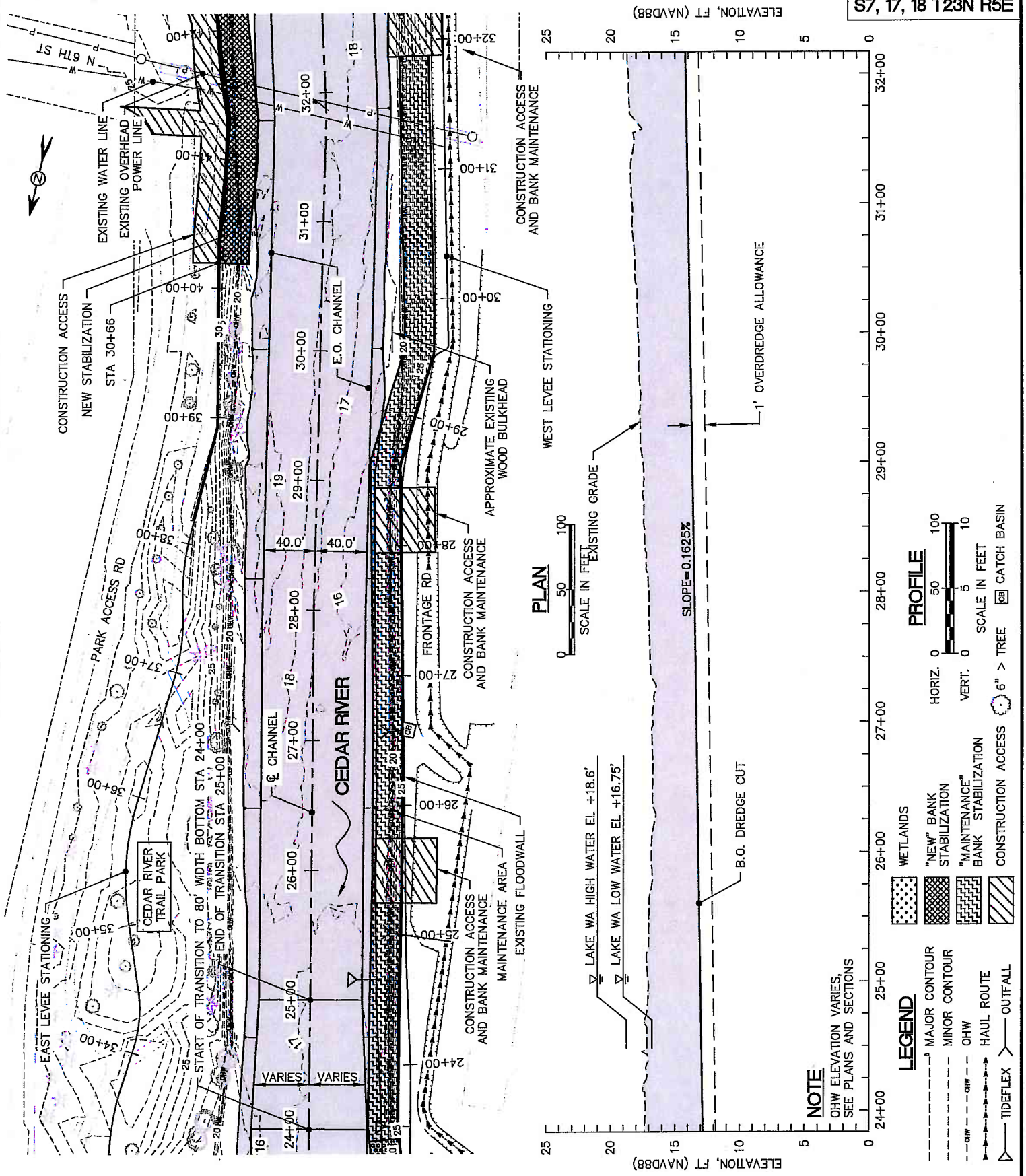

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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 24+00-32+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

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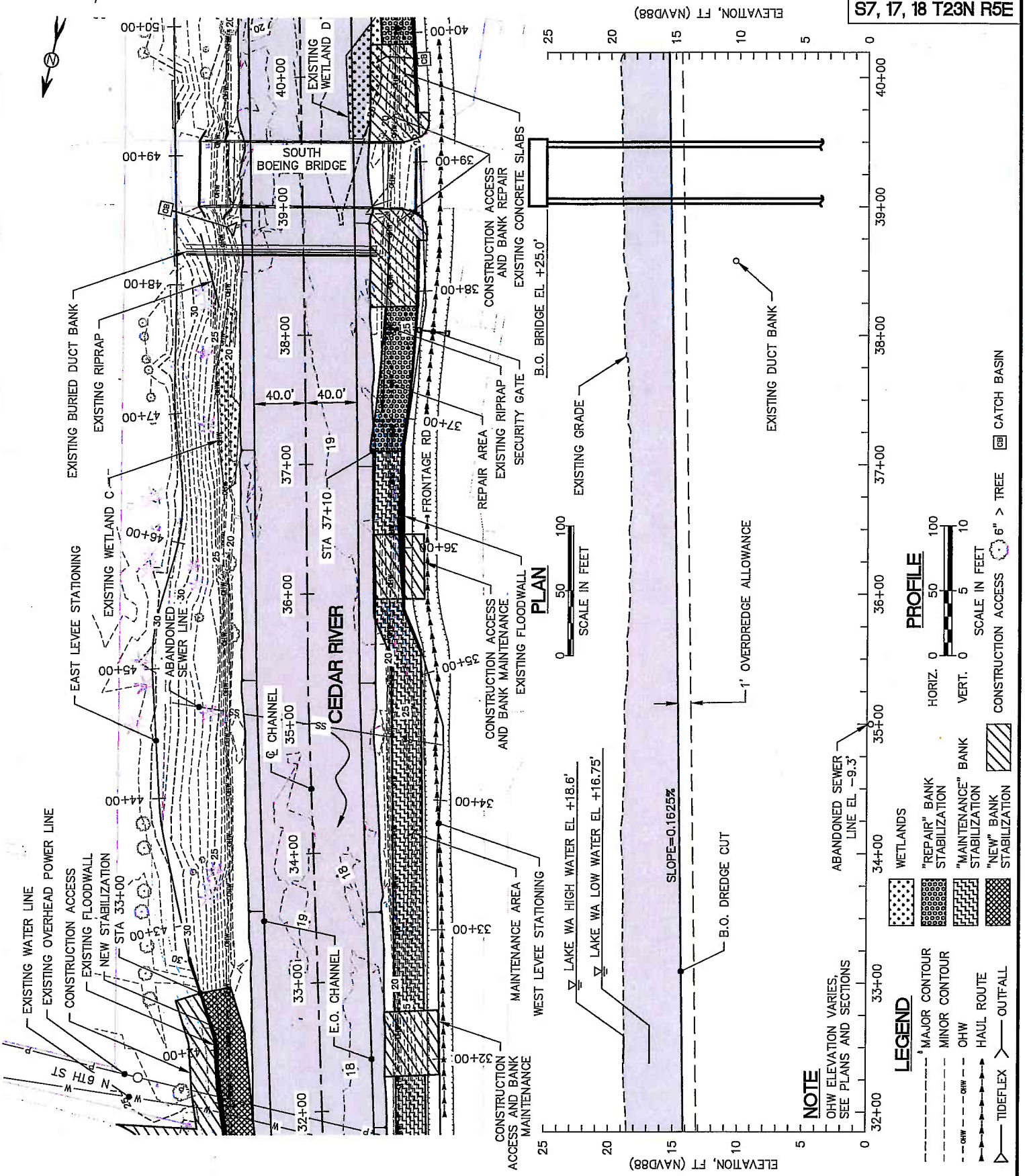
AT: RENTON
COUNTY: KING STATE: WASHINGTON
SHEET 6 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E



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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 32+00-40+00)

APPLICATION BY: CITY OF RENTON

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SHEET 7 OF 29
DATE: 2/3/14

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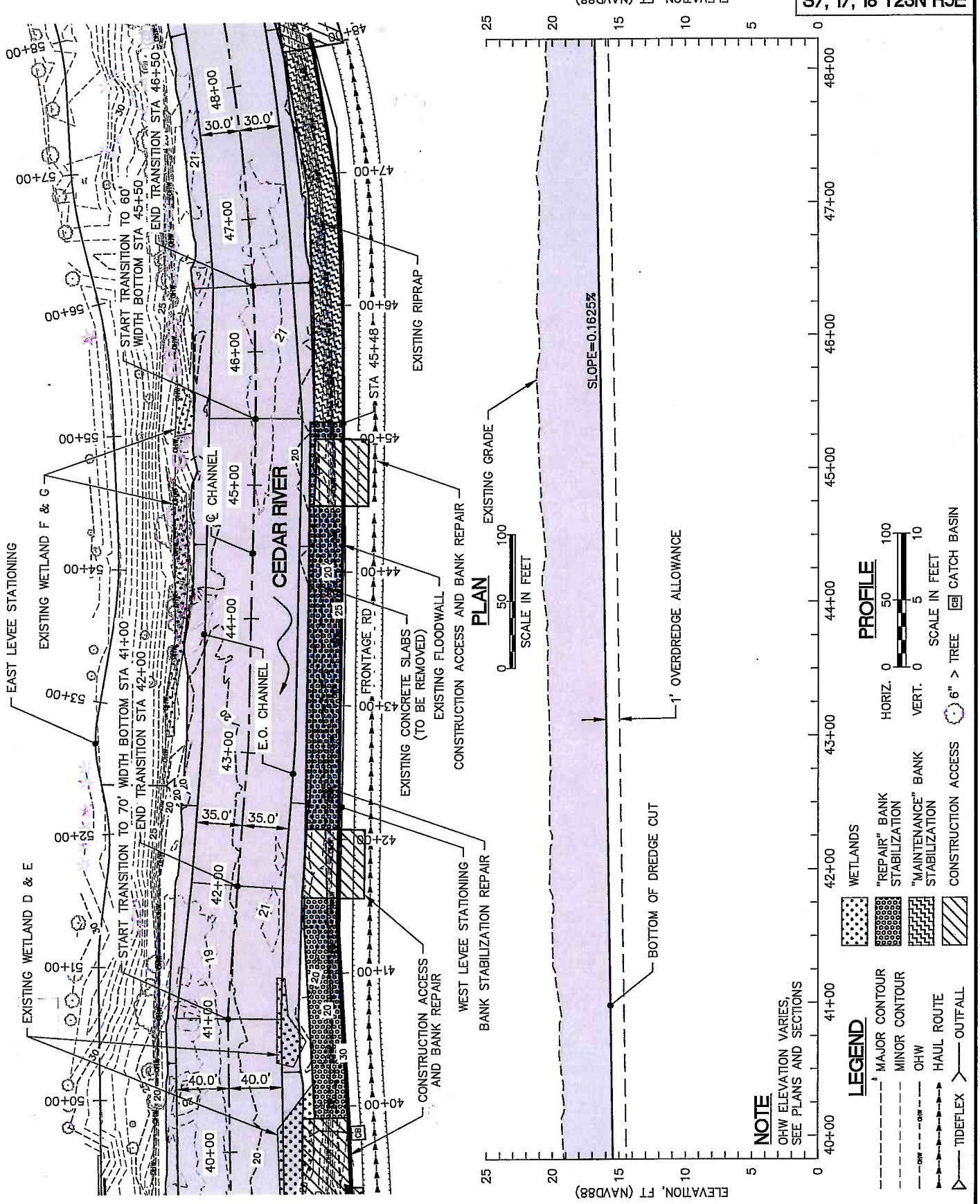

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CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 40+00-48+00)

APPLICATION BY: CITY OF RENTON

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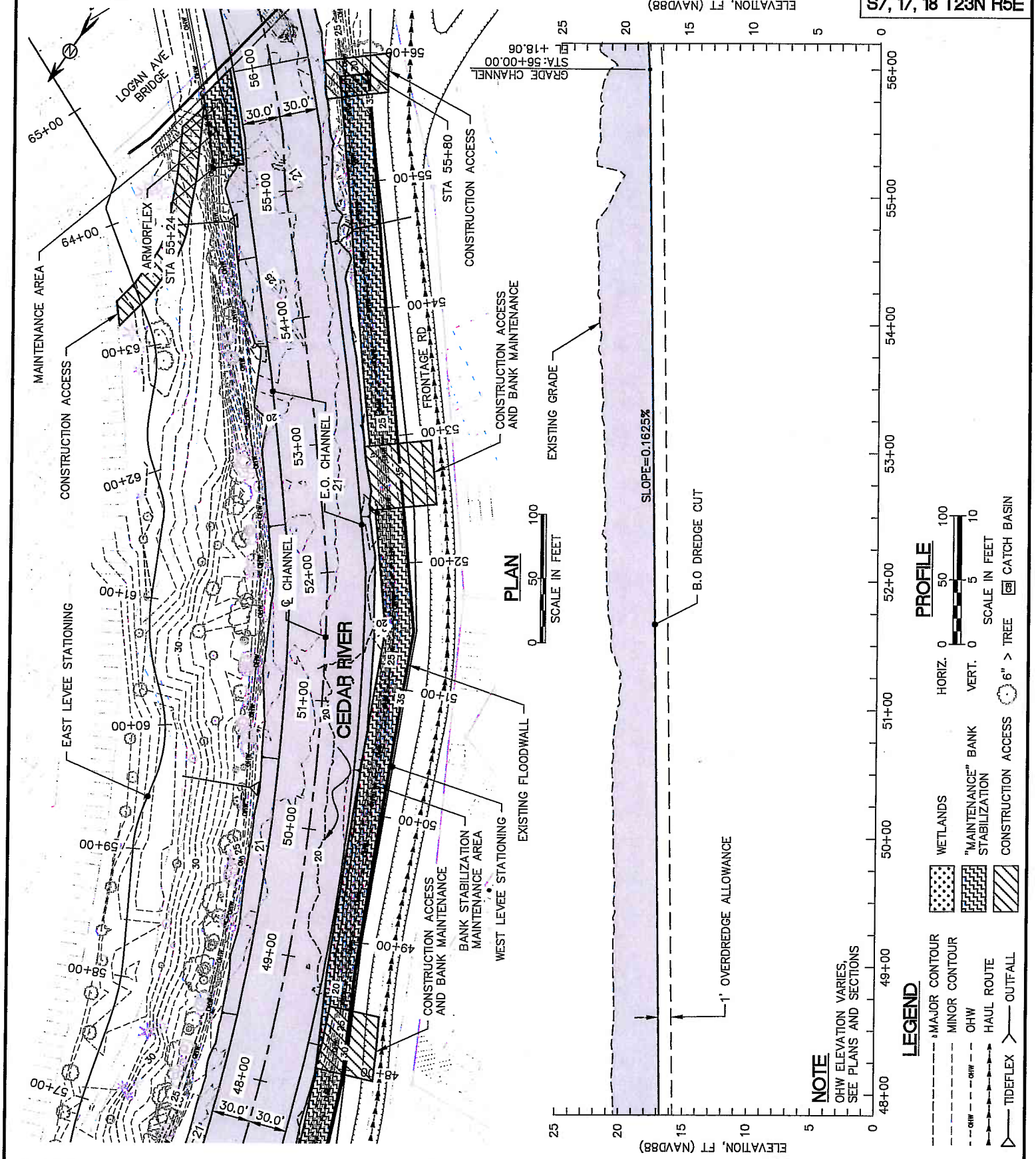


PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. CITY OF RENTON
2. THE BOEING COMPANY
3. RENTON FACILITIES AND OPERATIONS CTR
4. CONDOMINIUMS (55 WILLIAMS AVE)
5. RENTON HOUSING AUTHORITY
6. WASHINGTON DNR
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN–BODEN, S
10. AMBROSE, K

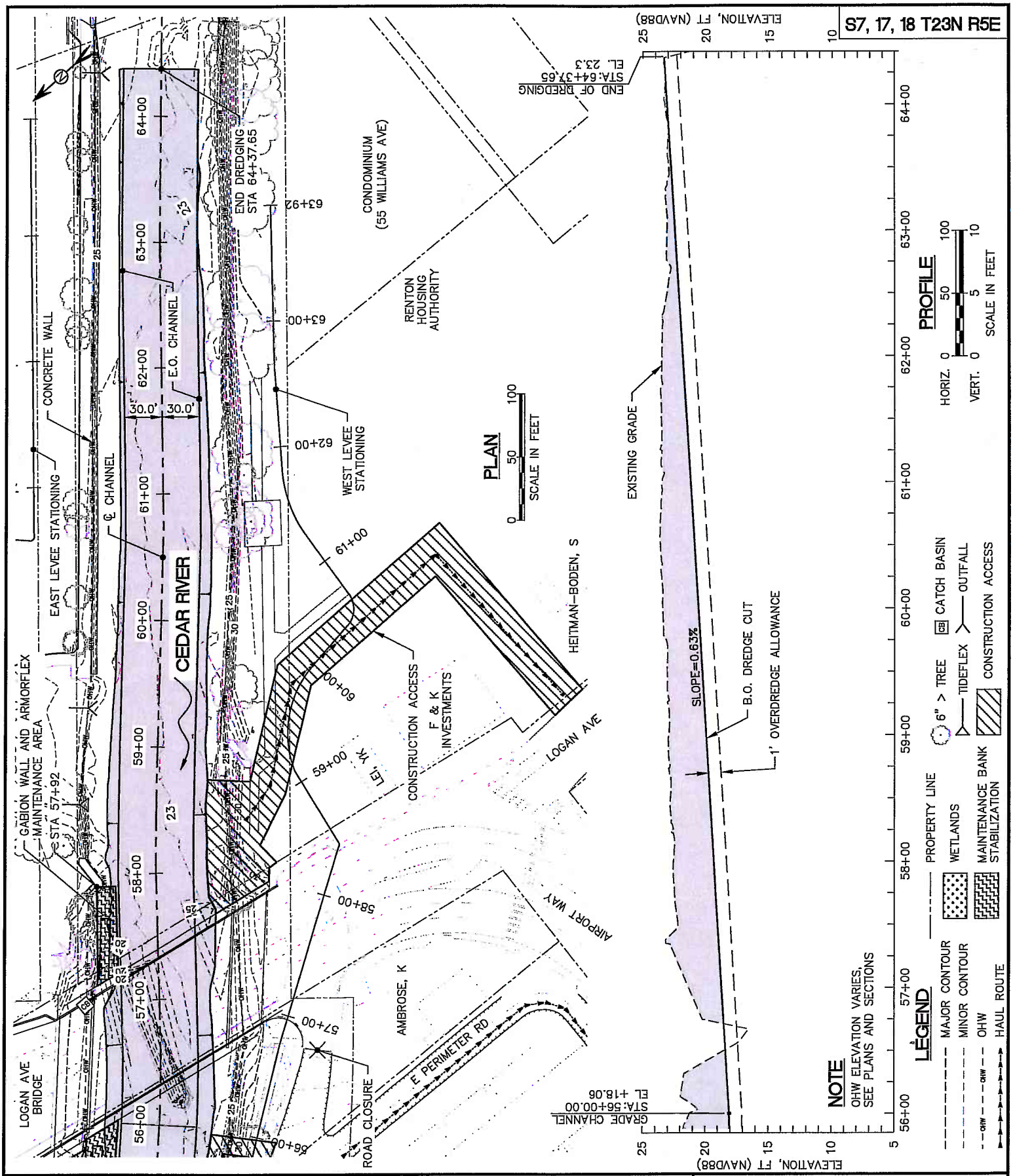
CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 48+00–56+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 9 OF 29
DATE: 2/3/14



PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. CITY OF RENTON
2. THE BOEING COMPANY
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6. WASHINGTON DNR
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN-BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

PLAN/PROFILE (STA 56+00-64+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

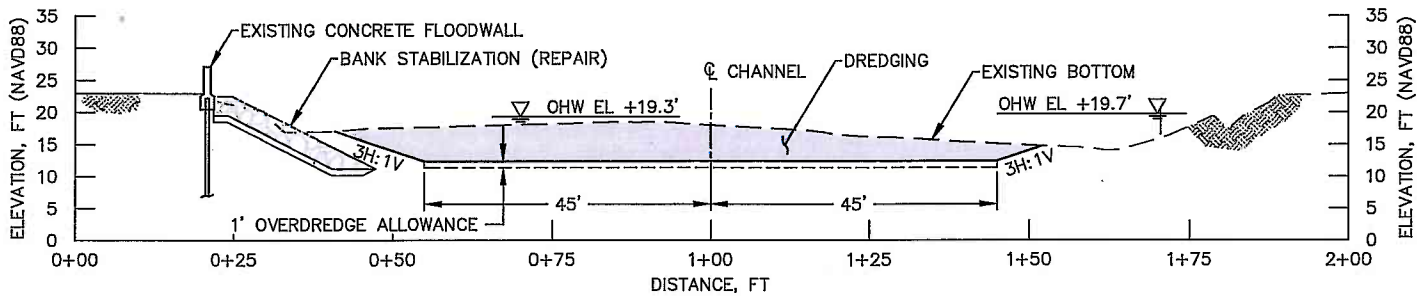
IN: CEDAR RIVER

AT: RENTON

COUNTY: KING STATE: WASHINGTON

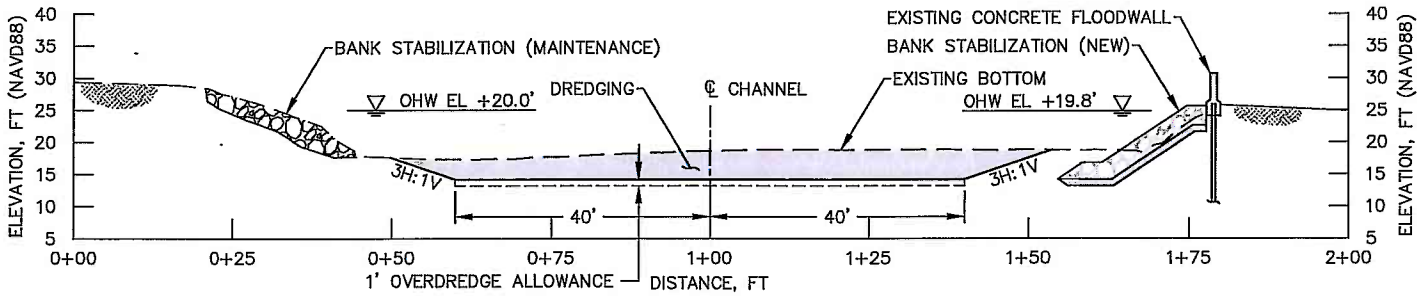
SHEET 10 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E



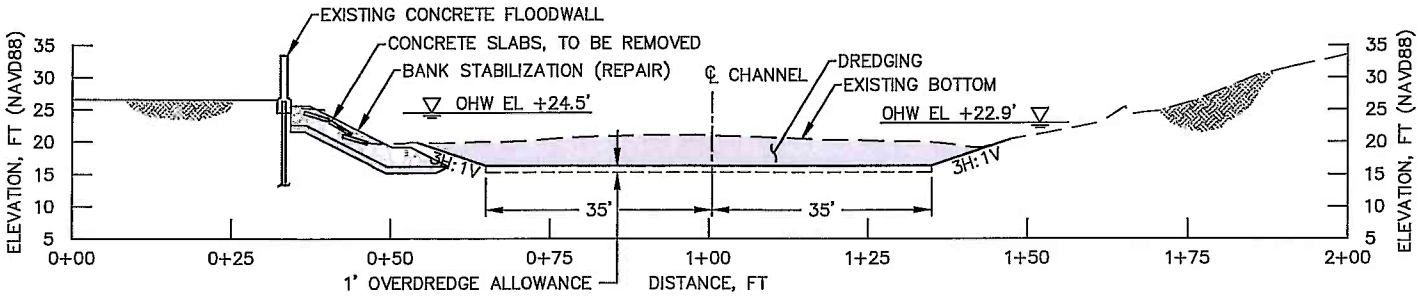
TYPICAL SECTION

DREDGING 90 FT WIDE
(STA 20+00)



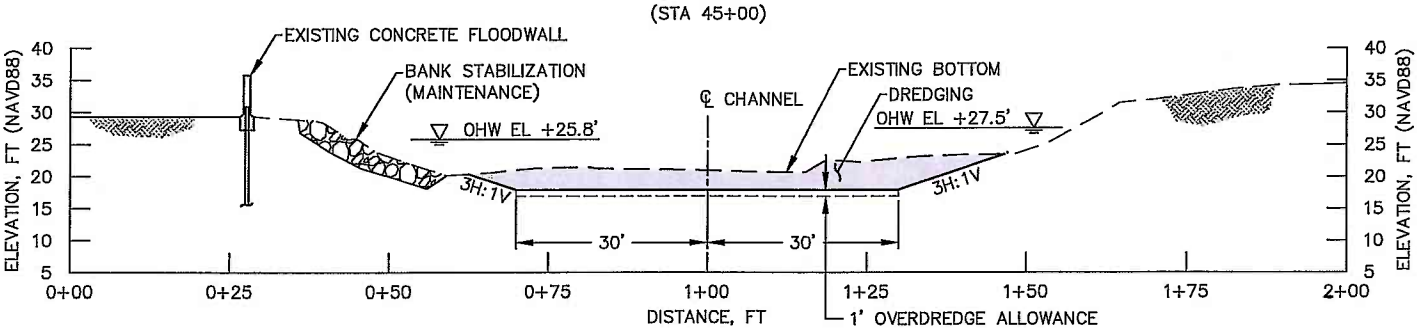
TYPICAL SECTION

DREDGING 80 FT WIDE
(STA 32+00)



TYPICAL SECTION

DREDGING 70 FT WIDE
(STA 45+00)



TYPICAL SECTION

DREDGING 60 FT WIDE
(STA 55+00)

0 15 30
SCALE IN FEET

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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5. RENTON HOUSING AUTHORITY
6. WASHINGTON DNR
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10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

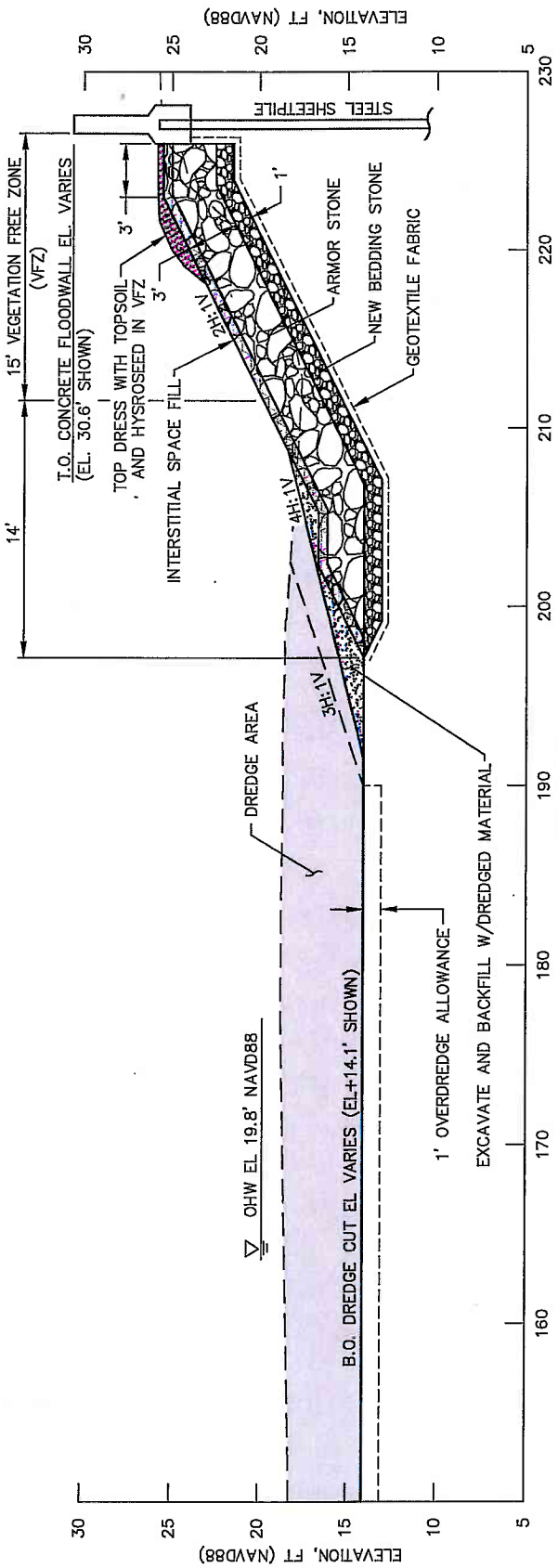
DREDGING SECTIONS

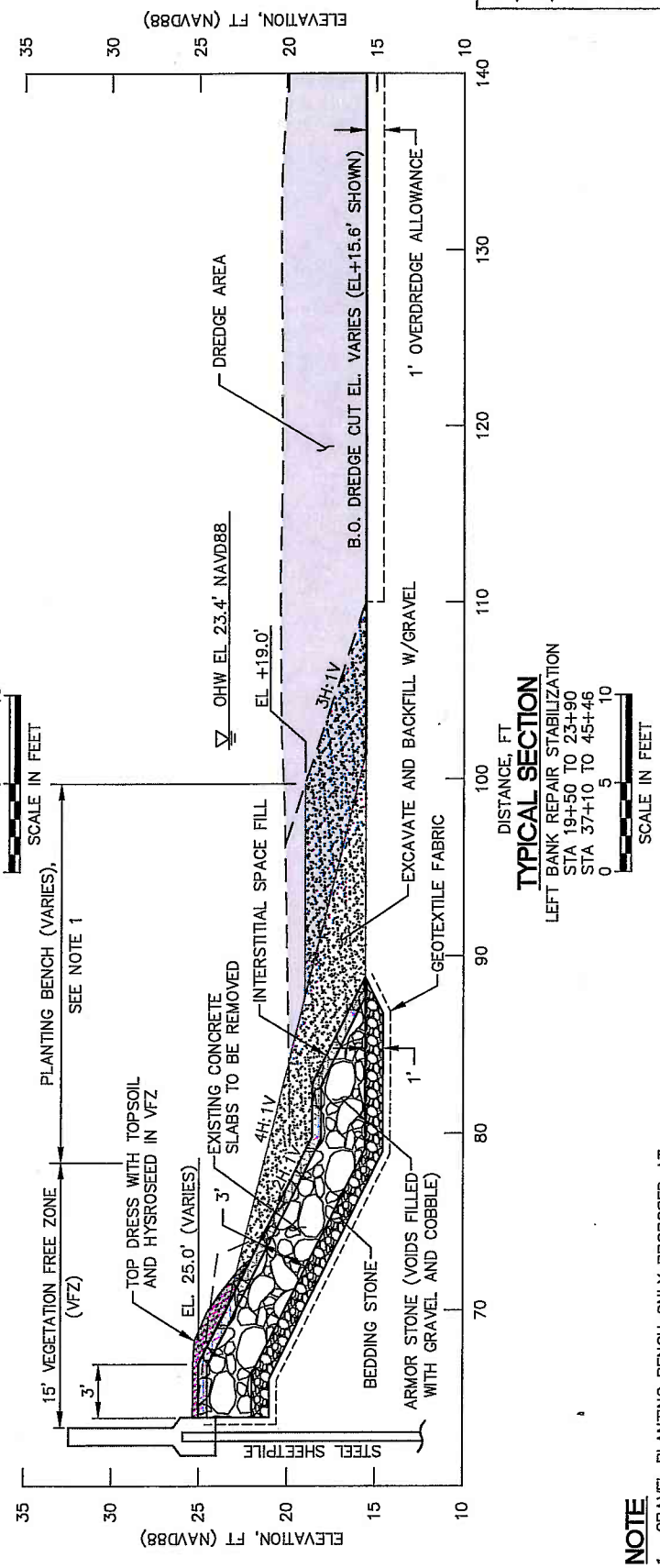
APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING STATE: WASHINGTON
SHEET 11 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E





NOTE

1. GRAVEL PLANTING BENCH ONLY PROPOSED AT LOCATIONS SHOWN ON PLANS, NOT THROUGHOUT.

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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CEDAR RIVER MAINTENANCE DREDGING

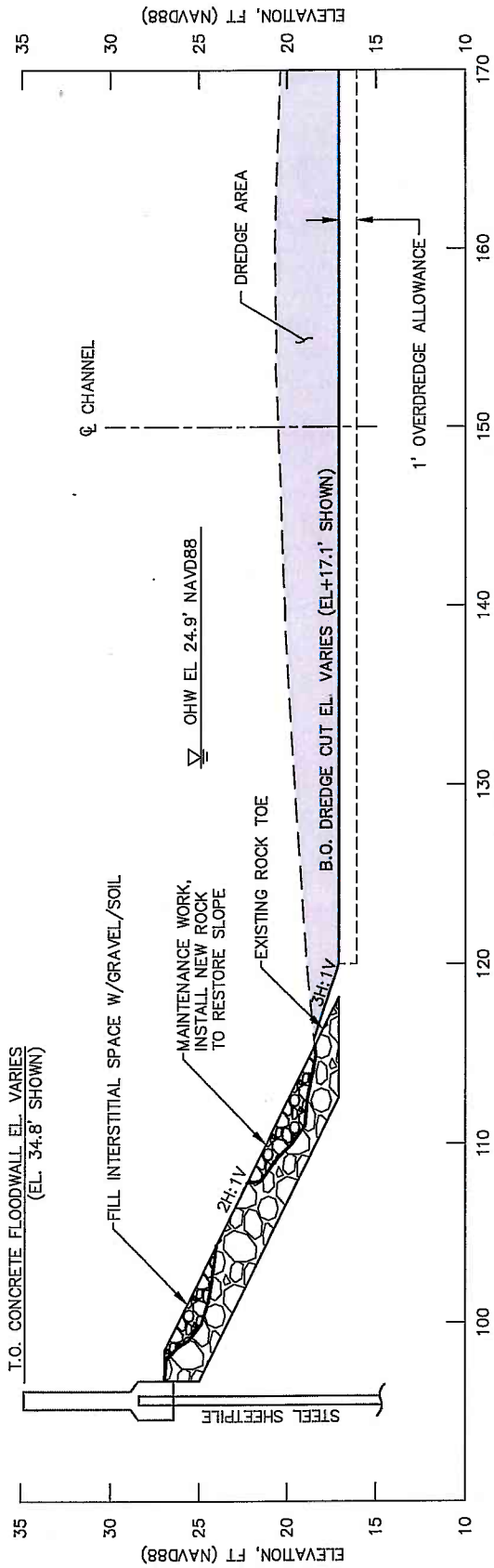
BANK STABILIZATION SECTIONS

APPLICATION BY: CITY OF RENTON

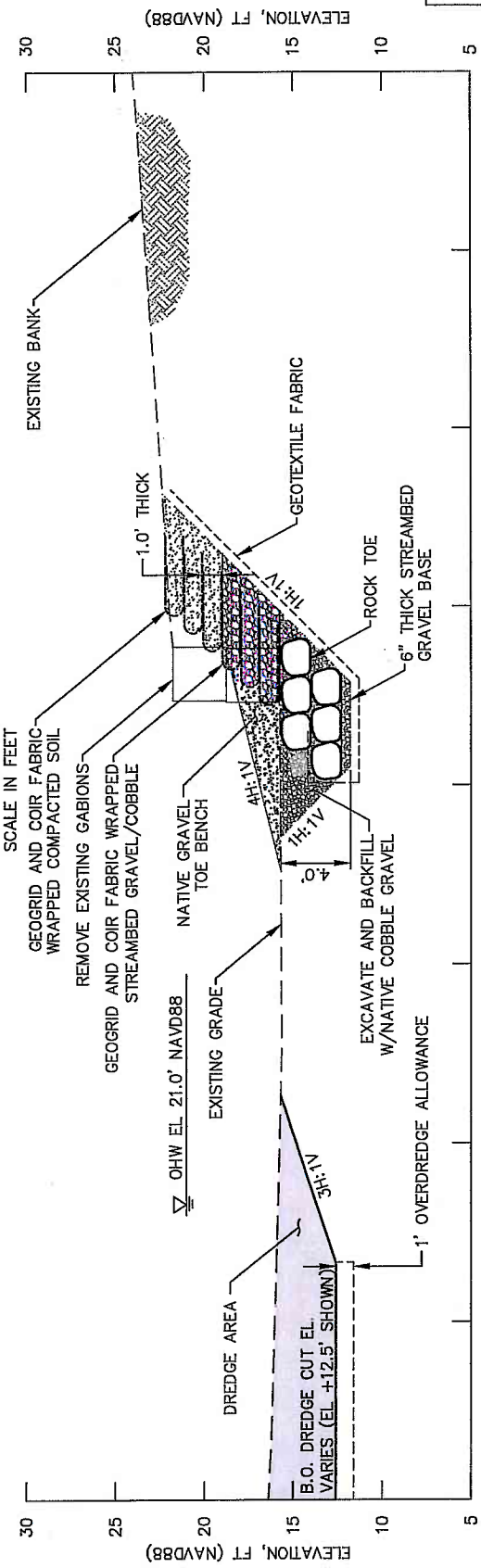
PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 12 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E



TYPICAL SECTION
LEFT BANK MAINTENANCE STABILIZATION
STA 23+90 TO 37+10
STA 45+46 TO 55+85
0 5 10 SCALE IN FEET



TYPICAL SECTION
GABION REMOVAL MITIGATION
STA 21+70 TO 22+86
0 5 10 SCALE IN FEET

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
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CEDAR RIVER MAINTENANCE DREDGING

BANK STABILIZATION SECTIONS

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

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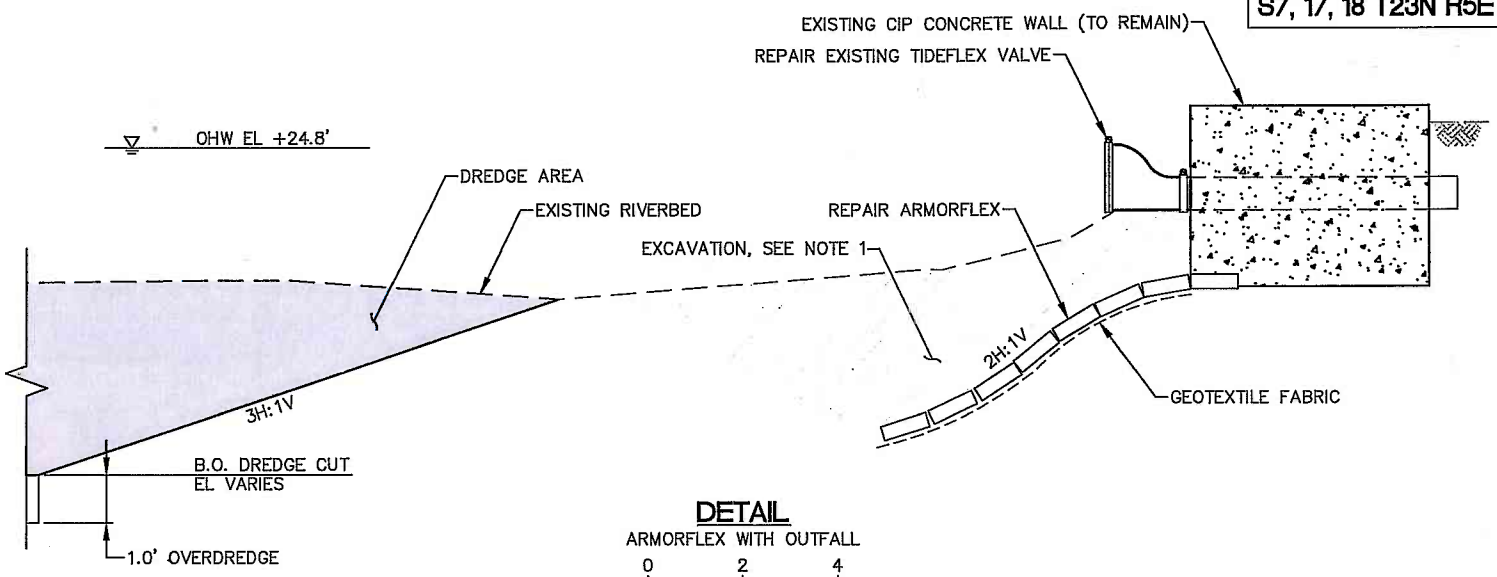
STATE: WASHINGTON
SHEET 13 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

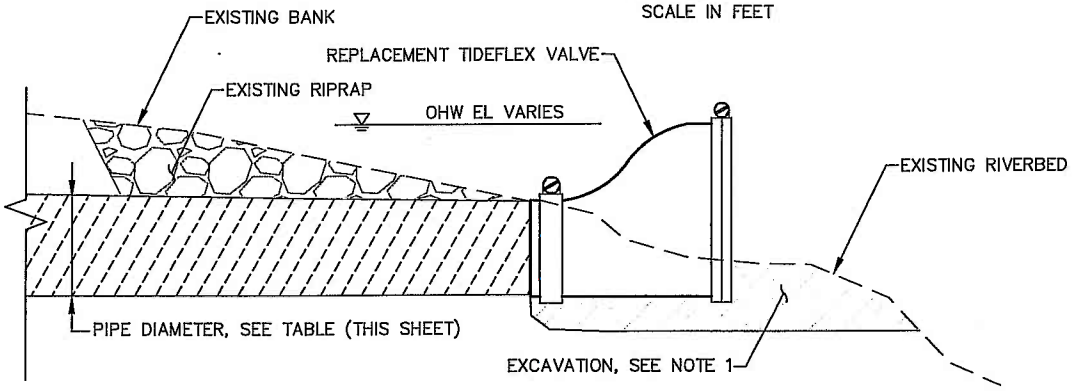


DETAIL

ARMORFLEX WITH OUTFALL

0 2 4

SCALE IN FEET



TYPICAL DETAIL

OUTFALL WITH TIDEFLEX

0 2 4

SCALE IN FEET

OUTFALL PIPE LOCATION TABLE

BANK	LEVEE STATIONING	PIPE MATERIAL	DIAMETER (IN)
LEFT	5+50	PVC	12
LEFT	12+85	C	18
LEFT	14+85	C	18
LEFT	18+50	C	12
LEFT	22+90	C	4
LEFT	23+70	PVC	12
LEFT	25+00	PVC	12
LEFT	31+00	PVC	12
LEFT	31+05	C	12
LEFT	36+75	C	18
LEFT	48+00	PVC	12
LEFT	55+00	DI	24
RIGHT	28+85	PVC	8
RIGHT	41+55	DI	24
RIGHT	48+60	CM	12
RIGHT	53+00	PVC	8
RIGHT	59+70	C	24
RIGHT	64+00	PVC	12
RIGHT	68+00	CMP	12
RIGHT	69+00	UNKNOWN	18

LEGEND

PVC – POLYVINYL CHLORIDE
C – CONCRETE
DI – DUCTILE IRON
CM – CORRUGATED METAL

NOTES

1. EXCAVATE LOCALIZED AREA TO TEMPORARILY ACCESS TIDEFLEX VALVE AND ARMOR FLEX FOR REPAIR WORK AND BACKFILL W/GRAVEL TO PREDISTURBANCE CONDITIONS.

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

OUTFALL REPAIR DETAILS

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING STATE: WASHINGTON
SHEET 14 OF 29 DATE: 2/3/14

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W DATUM: NAVD88
ADJACENT PROPERTY OWNERS:
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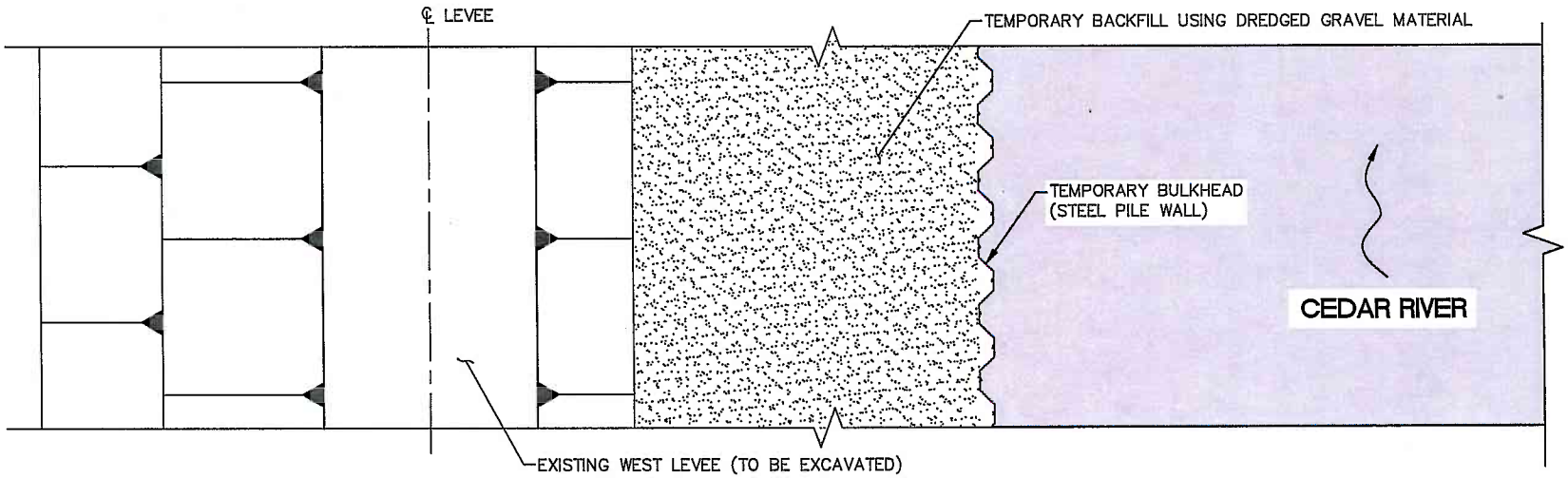
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

TEMPORARY CONSTRUCTION ACCESS PLAN

APPLICATION BY: CITY OF RENTON

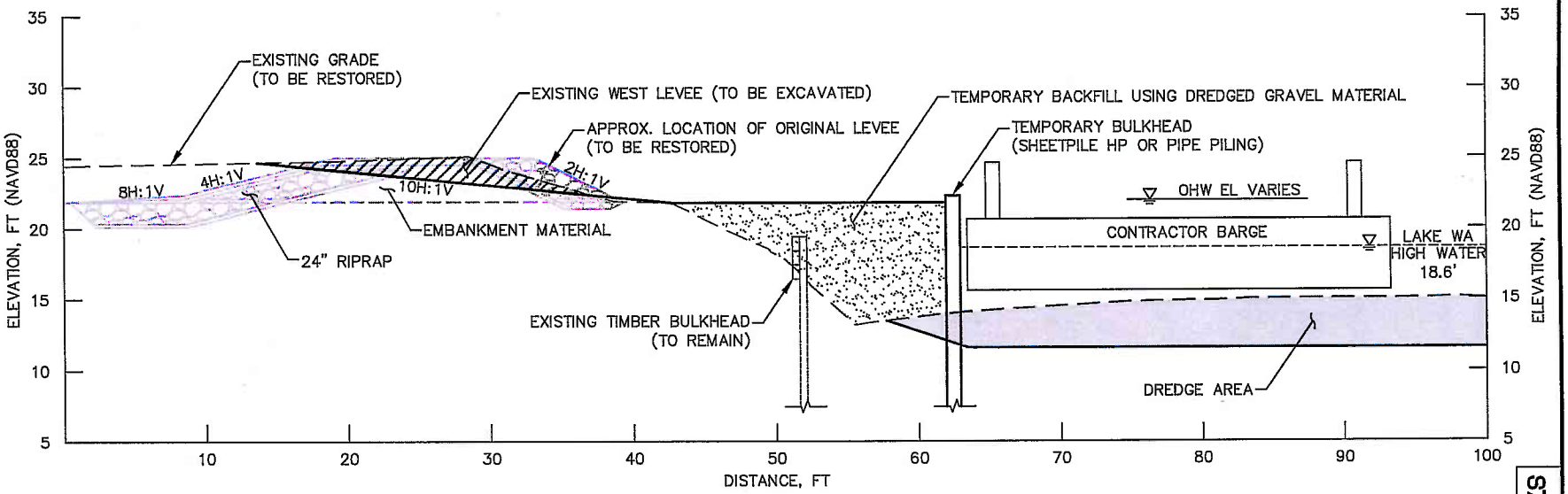


TYPICAL PLAN

BARGE ACCESS

0 6 12

SCALE IN FEET



TYPICAL SECTION

BARGE ACCESS

0 6 12

SCALE IN FEET

NOTES

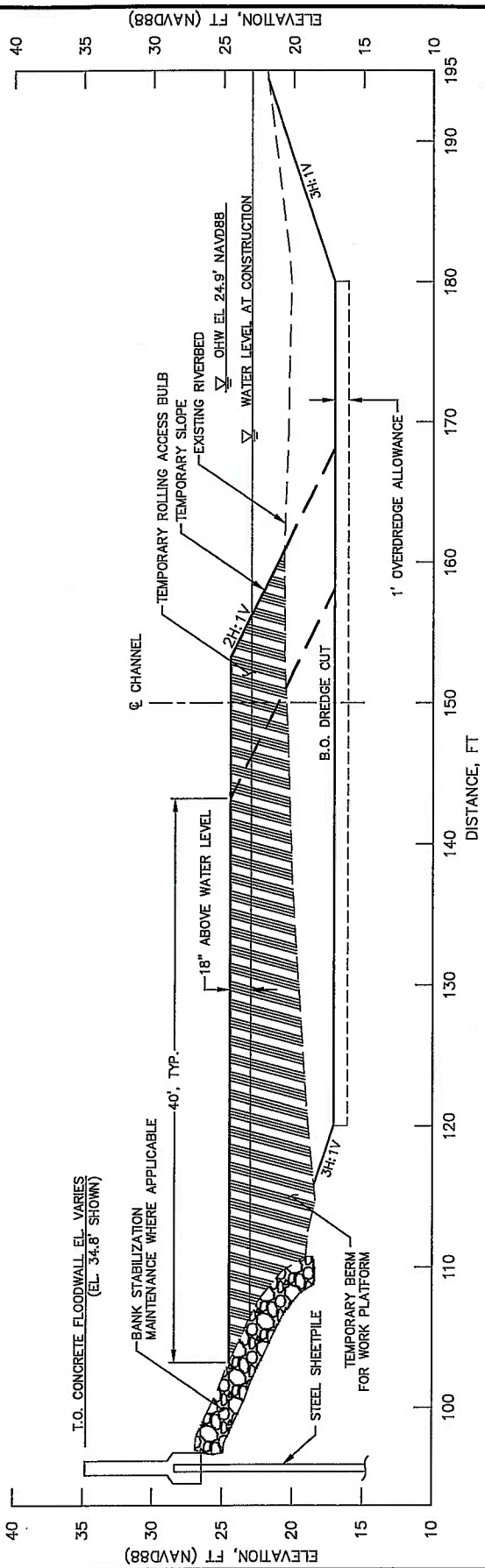
1. TEMPORARY BULKHEAD TO BE MINIMUM LENGTH NEEDED BUT NOT LONGER THAN 100'.

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
DATE: 2/3/14

S7, 17, 18 T23N R5E

S7, 17, 18 T23N R5E



TYPICAL SECTION

GRAVEL BERM ACCESS

0 6 12

SCALE IN FEET

NOTES

1. CONCEPT SHOWN REPRESENTS A POTENTIAL METHOD TO BE UTILIZED DURING CONSTRUCTION TO REMOVE AND REHANDLE DREDGED MATERIAL FROM THE RIVER CHANNEL.

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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CEDAR RIVER MAINTENANCE DREDGING

TEMPORARY CONSTRUCTION ACCESS PLAN

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

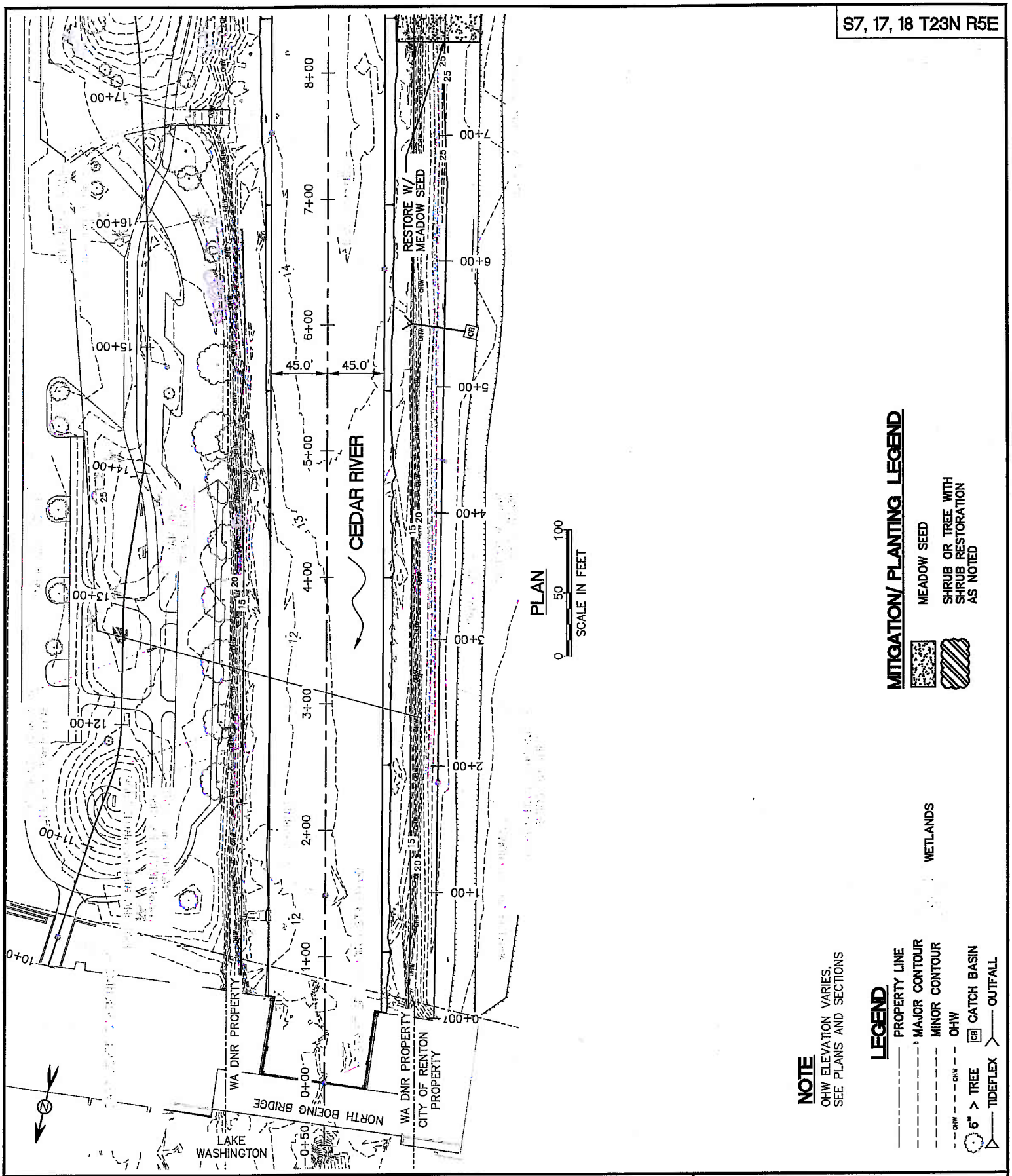
IN: CEDAR RIVER

AT: RENTON

COUNTY: KING STATE: WASHINGTON

SHEET 16 OF 29 DATE: 2/3/14

S7, 17, 18 T23N R5E



PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 0+00-8+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

COUNTY: KING

STATE: WASHINGTON

SHEET 17 OF 29

DATE: 2/3/14

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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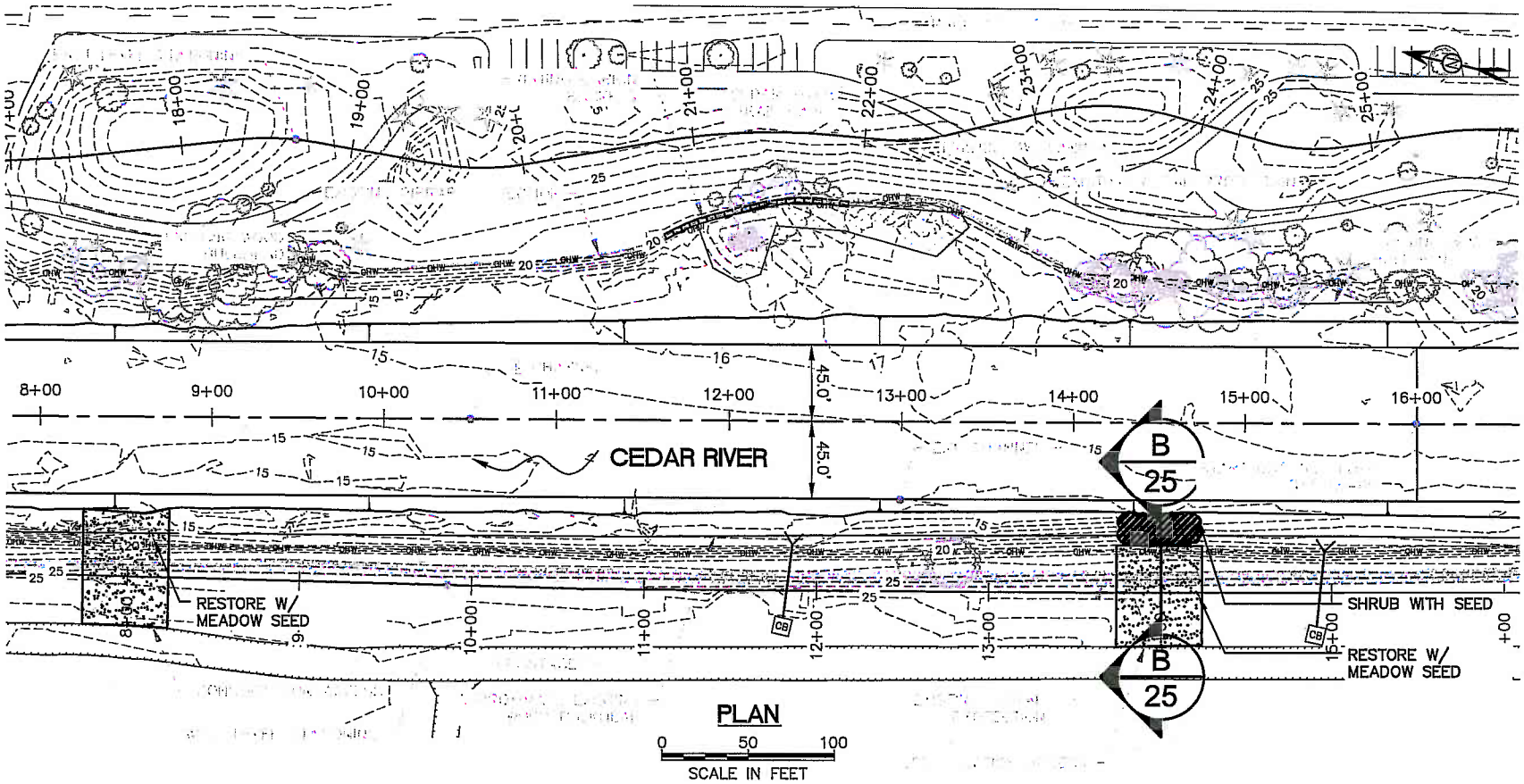
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN –BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 8+00-16+00)

APPLICATION BY: CITY OF RENTON



NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- PROPERTY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CB CATCH BASIN
- TIDEFLEX
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

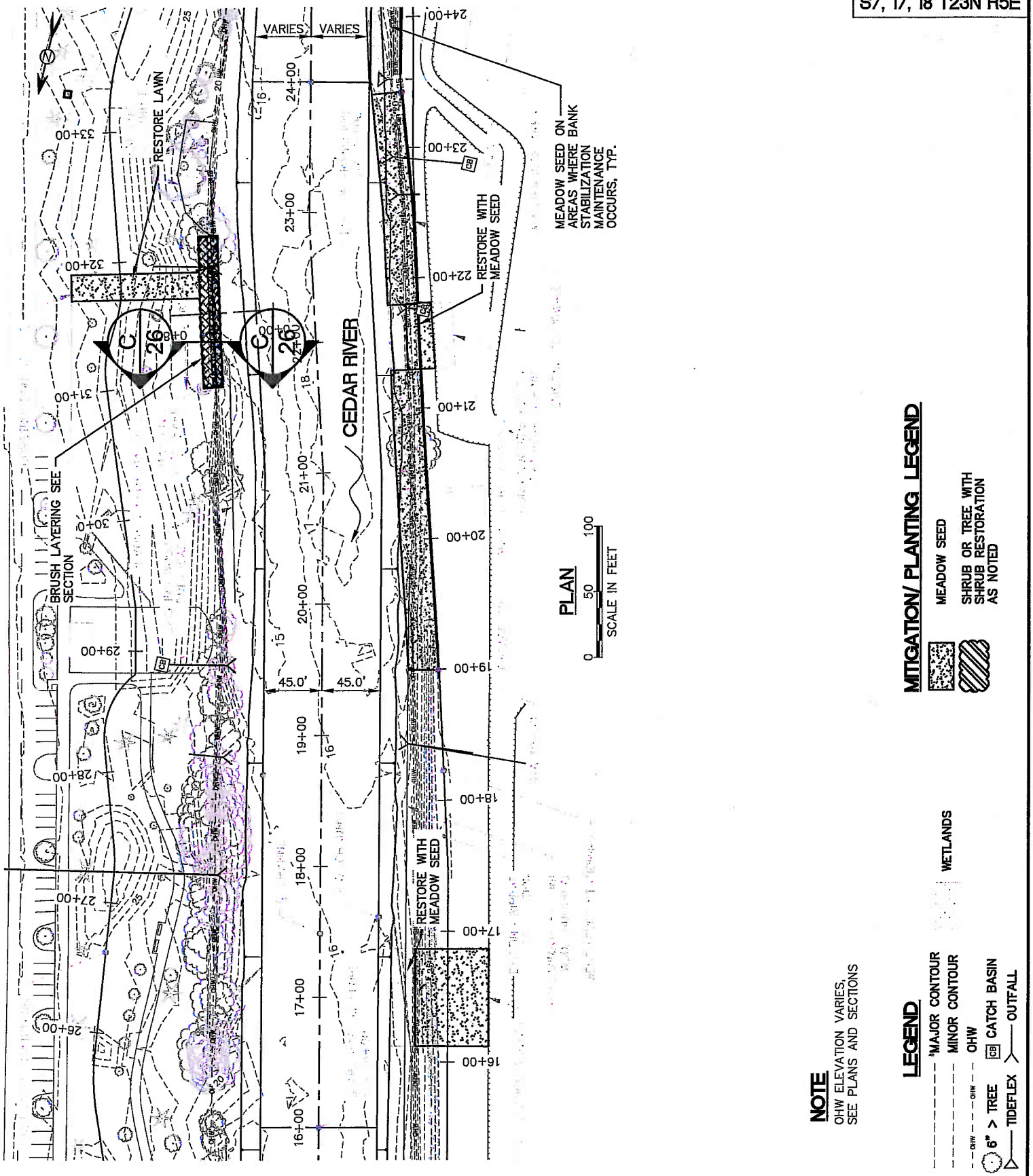
- MEADOW SEED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 18 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

S7, 17, 18 T23N R5E



PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 16+00-24+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

COUNTY: KING

STATE: WASHINGTON

SHEET 19 OF 29

DATE: 2/3/14

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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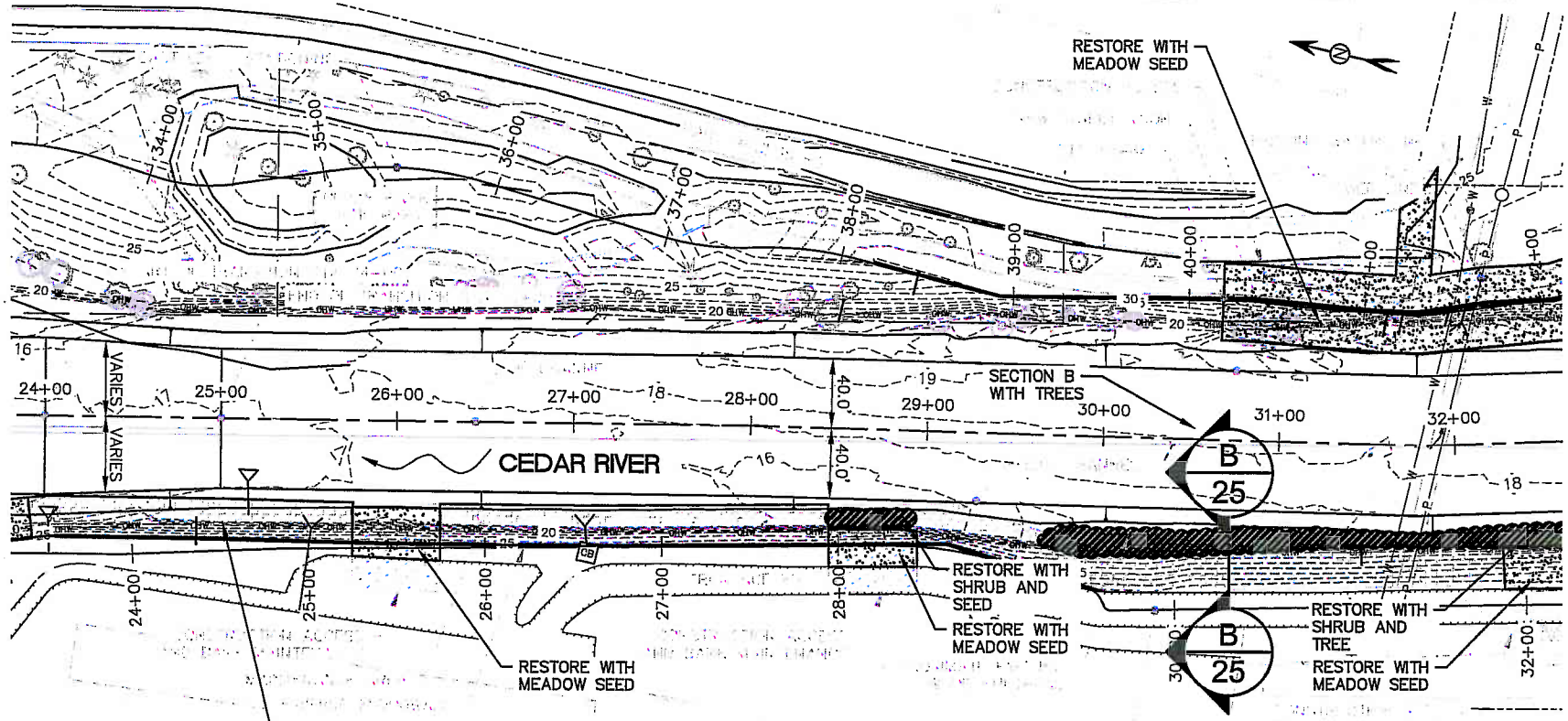
6. WASHINGTON DNR
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN –BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 24+00-32+00)

APPLICATION BY: CITY OF RENTON



PLAN

0 50 100
SCALE IN FEET

NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CATCH BASIN
- TIDEFLEX
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

- MEADOW SEED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 20 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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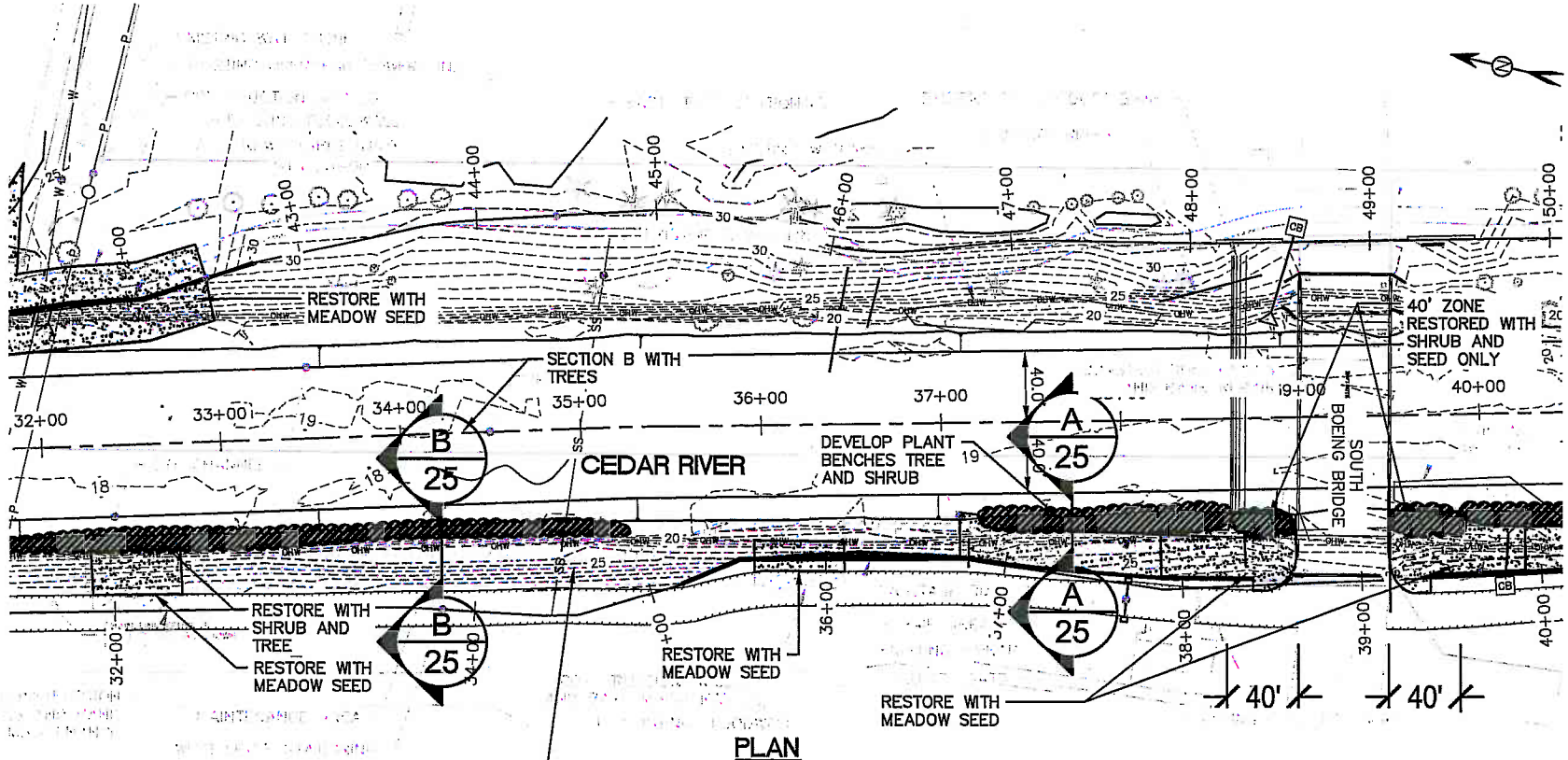
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 32+00-40+00)

APPLICATION BY: CITY OF RENTON



PLAN

0 50 100
SCALE IN FEET

NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CB CATCH BASIN
- TIDEFLEX
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

- MEADOW SEED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 21 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

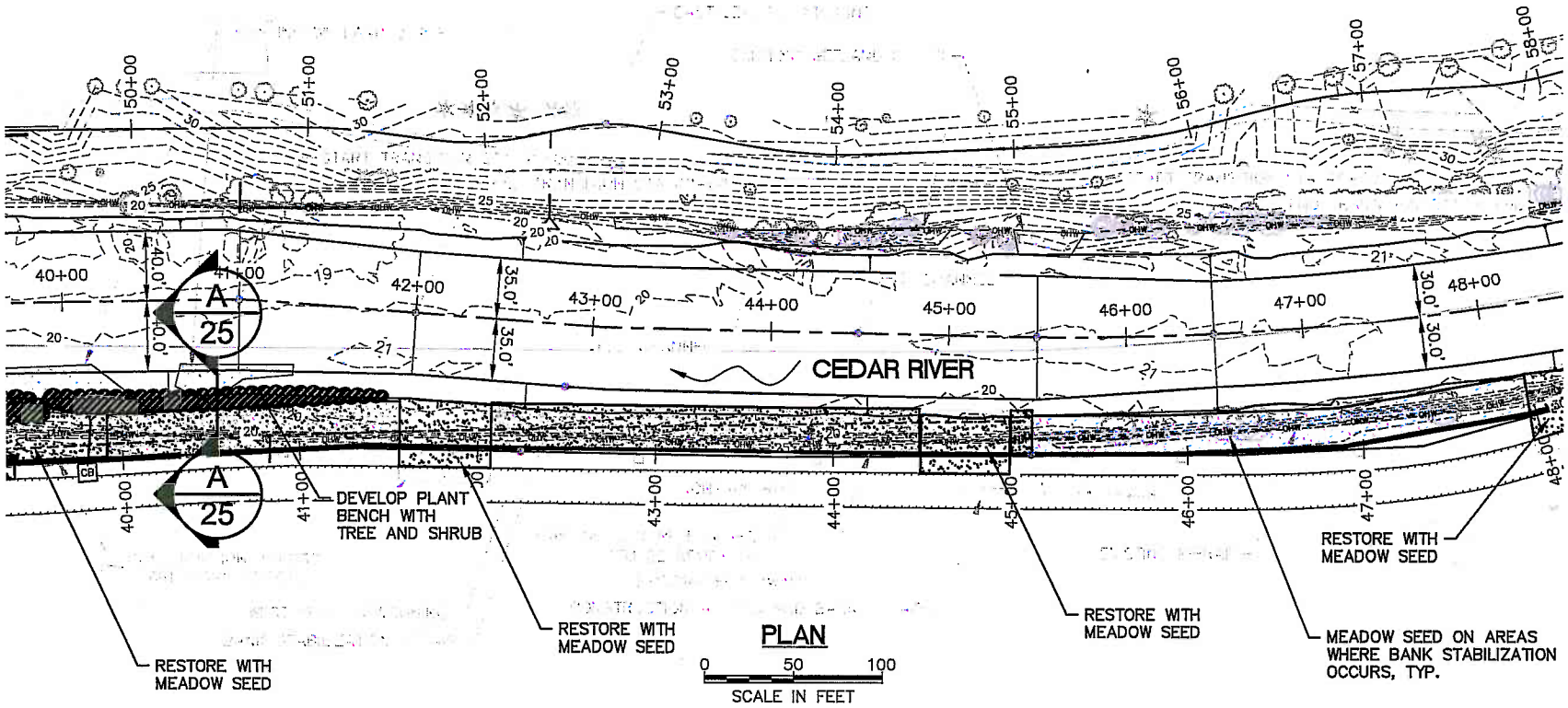
PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. CITY OF RENTON
2. THE BOEING COMPANY
3. RENTON FACILITIES AND OPERATIONS CTR
4. CONDOMINIUMS (55 WILLIAMS AVE)
5. RENTON HOUSING AUTHORITY
6. WASHINGTON DNR
7. LEI, YK
8. F & K INVESTEMENTS
9. HEITMAN -BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 40+00-48+00)

APPLICATION BY: CITY OF RENTON



PLAN

0 50 100
SCALE IN FEET

NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CATCH BASIN
- TIDEFLEX
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

- MEADOW SEED OR LAWN SEED AS NOTED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 22 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W

ADJACENT PROPERTY OWNERS: DATUM: NAVD88

1. CITY OF RENTON
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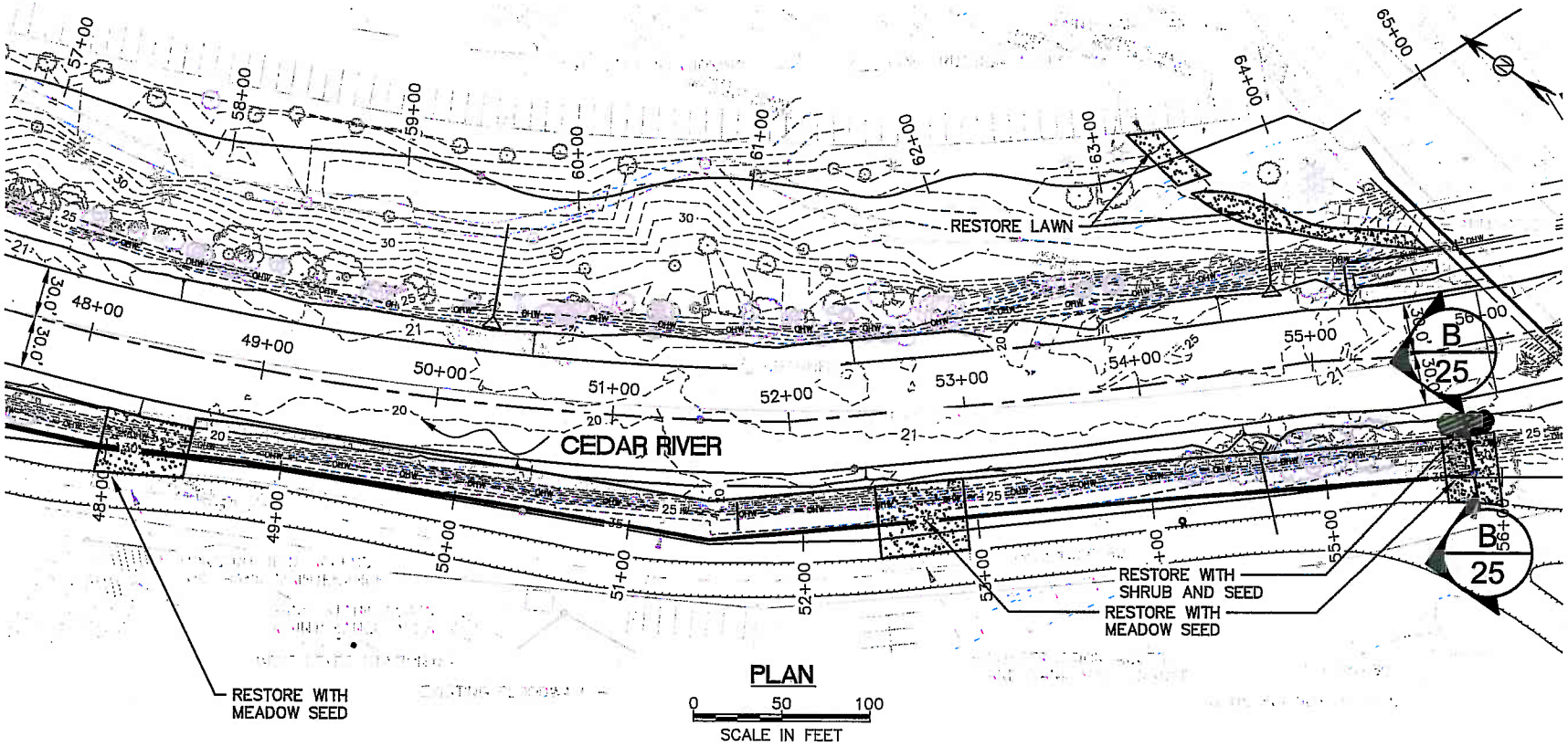
CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 48+00-56+00)

APPLICATION BY: CITY OF RENTON



PLAN

0 50 100

SCALE IN FEET

NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CB CATCH BASIN
- TIDEFLEX
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

- MEADOW SEED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

AT: RENTON

COUNTY: KING

STATE: WASHINGTON

SHEET 23 OF 29

DATE: 2/3/14

S7, 17, 18 T23N R5E

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT

LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W DATUM: NAVD88

ADJACENT PROPERTY OWNERS:

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CEDAR RIVER MAINTENANCE DREDGING

MITIGATION/ PLANTING PLAN (STA 56+00-64+00)

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:

IN: CEDAR RIVER

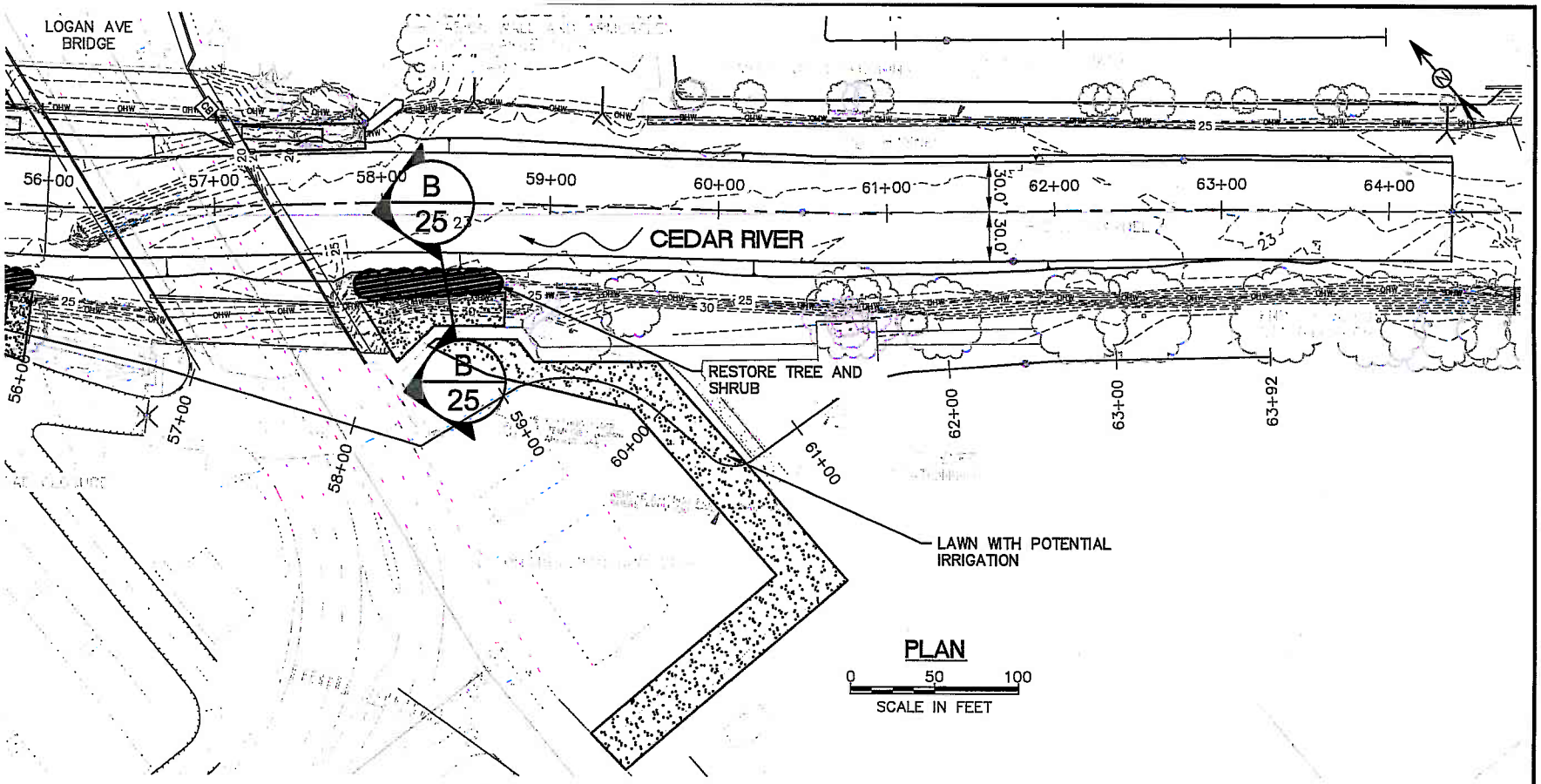
AT: RENTON

COUNTY: KING

STATE: WASHINGTON

SHEET 24 OF 29

DATE: 2/3/14



NOTE

1. ALL RIPARIAN (SHRUB WITH SEED AND SHRUB WITH TREE) AREAS SHALL RECEIVE GRAVEL SOIL MIX

NOTE

OHW ELEVATION VARIES, SEE PLANS AND SECTIONS

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- OHW
- 6" > TREE
- CB CATCH BASIN
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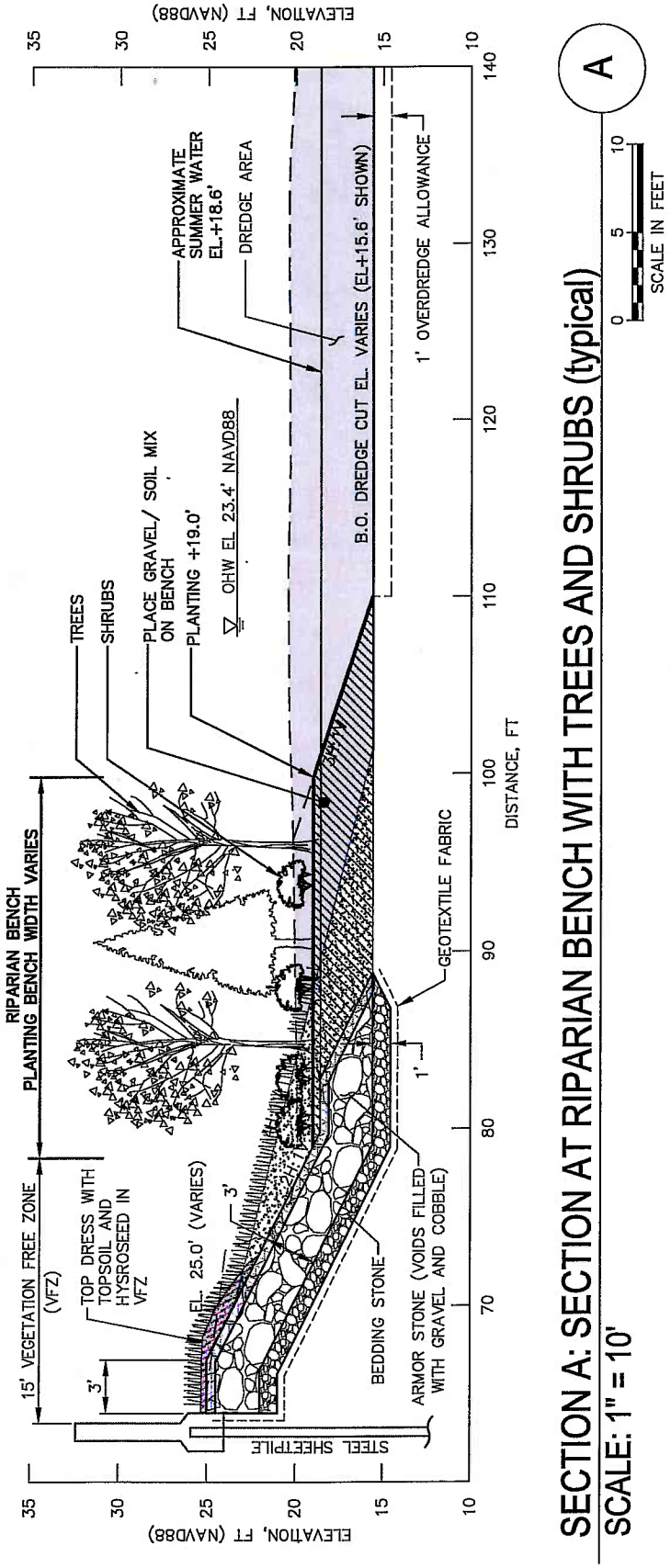
- OUTFALL
- WETLANDS

MITIGATION/ PLANTING LEGEND

- MEADOW SEED
- SHRUB OR TREE WITH SHRUB RESTORATION AS NOTED

S7, 17, 18 T23N R5E

S7, 17, 18 T23N R5E

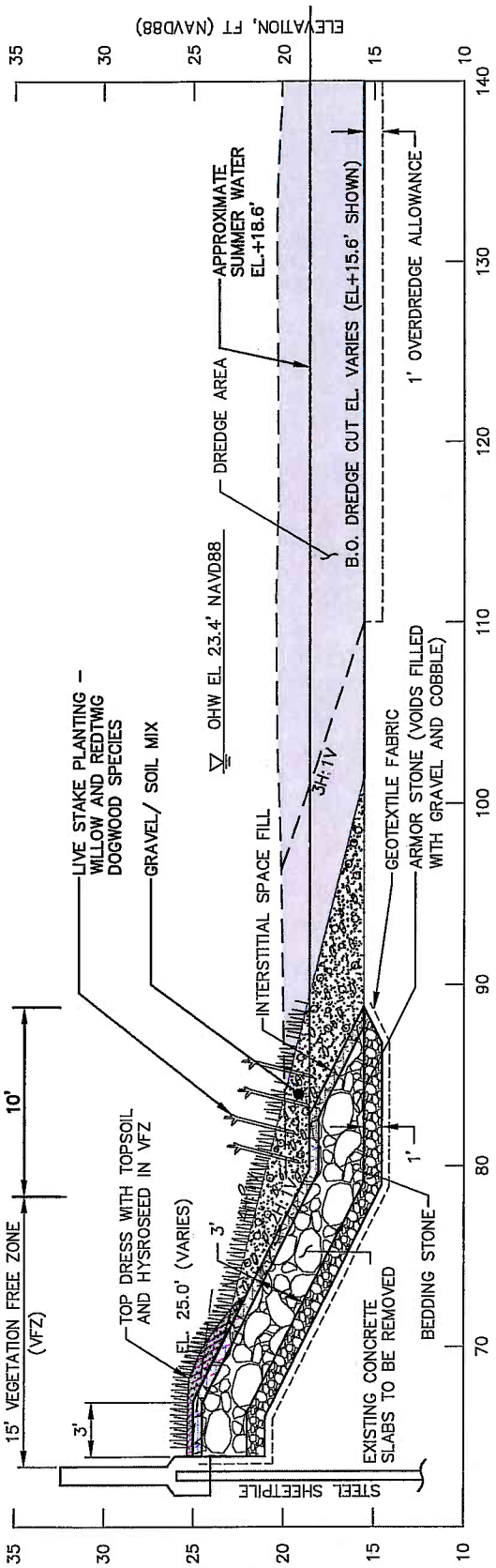


A

0 5 10
SCALE IN FEET

SECTION A: SECTION AT RIPARIAN BENCH WITH TREES AND SHRUBS (typical)

SCALE: 1" = 10'



B

0 5 10
SCALE IN FEET

SECTION B: SECTION AT BENCH WITH LIVESTAKE PLANTING (typical)

SCALE: 1" = 10'

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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9. HEITMAN –BODEN, S
10. AMBROSE, K

CEDAR RIVER MAINTENANCE DREDGING

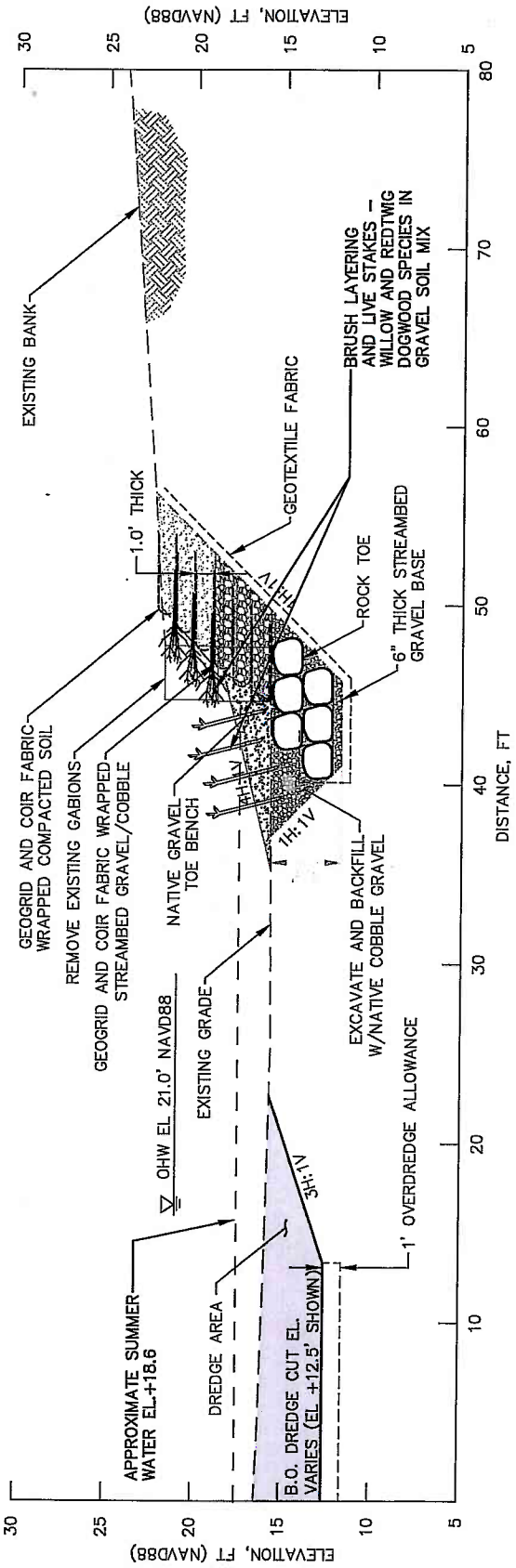
PLANTING SECTIONS

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 25 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E



C

0 5 10
SCALE IN FEET

SECTION C: SECTION AT RIPARIAN BENCH WITH BRUSH LAYERING AND LIVE STAKE

SCALE: 1" = 10'

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
ADJACENT PROPERTY OWNERS: DATUM: NAVD88

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CEDAR RIVER MAINTENANCE DREDGING

PLANTING SECTIONS

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 26 OF 29
DATE: 2/3/14

CONIFER TREES					
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION	SPACING
PCL	PINUS CONTORTA 'LATIFOLIA'	LODGEPOLE PINE	5 GAL	CONTAINER	AS SHOWN
PM	PSEUDOTSUGA MENZESII	DOUGLAS FIR	5 GAL	CONTAINER	AS SHOWN
TP	THUJA PLICATA	WESTERN RED CEDAR	5 GAL	CONTAINER	AS SHOWN
DECIDUOUS TREES					
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION	SPACING
AGm	ACER GLABRUM	DOUGLAS MAPLE	5 GAL	CONTAINER	AS SHOWN
FL	FRAXINUS LATIFOLIA	OREGON ASH	5 GAL	CONTAINER	AS SHOWN
MF	MALUS FUSCA	PACIFIC CRABAPPLE	5 GAL	CONTAINER	AS SHOWN
SL	SALIX LUCIDA	PACIFIC WILLOW	5 GAL	CONTAINER	AS SHOWN
SHRUBS					
SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	CONDITION	SPACING
AA	AMELANCHIER ALNIFOLIA	SERVICEBERRY	1 GAL	CONTAINER	6' O.C.
CS	CORNUS STOLONIFERA	REDOSIER DOGWOOD	LIVESTAKE	–	6' O.C.
HD	HOLODISCUS DISCOLOR	OCEANSPRAY	1 GAL	CONTAINER	6' O.C.
LI	LONICERA INVOLUCRATA	TWINBERRY	1 GAL	CONTAINER	6' O.C.
PN	PHYSOCARPUS CAPITATUS	PACIFIC NINEBARK	1 GAL	CONTAINER	6' O.C.
RS	RIBES SANGUINEUM	RED FLOWERING CURRANT	1 GAL	CONTAINER	6' O.C.
RN	ROSA NUTKANA	NOOTKA ROSE	1 GAL	CONTAINER	6' O.C.
RP	ROSA PISOCARPA	CLUSTERED WILD ROSE	1 GAL	CONTAINER	6' O.C.
RSS	RUBUS SPECTABILIS	SALMONBERRY	1 GAL	CONTAINER	6' O.C.
SS	SALIX SCOULERIANA	SCOULER'S WILLOW	LIVESTAKE	–	8' O.C.
	GAULTHERIA SHALLON	SALAL	1 GAL	CONTAINER	3' O.C.
MA	MAHONIA AQUIFOLIUM	TALL OREGON-GRAPE	1 GAL	CONTAINER	6' O.C.
	SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL	CONTAINER	3' O.C.
	ATHYRIUM FILIX-FEMINA	LADY FERN	1 GAL	CONTAINER	3' O.C.

NOTES

1. IN PROXIMITY OF THE AIRPORT RUNWAY USE ONLY AIRPORT APPROVED NATIVE PLANTS.

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W DATUM: NAVD88
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CEDAR RIVER MAINTENANCE DREDGING

PLANT LIST SHEET 1

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 27 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E

SEED MIX 1 (WET MEADOW) - APPLY AT A RATE OF 1/2 LBS/ 1000 SQ.FT		
COUNT	SCIENTIFIC NAME	COMMON NAME
15%	CAREX OBNUPTA	SLOUGH SEDGE
25%	JUNCUS ENSIFOLIUS	BULRUSH
5%	FESTUCA RUBRA RUBRA VAR. MOLETA	MOLETA RED FESCUE
10%	SCIRPUS MICROPCARPUS	SMALL FRUITED BULRUSH
15%	GLYCERIA GRANDIS	REED MANNAGRASS
15%	AGROSTIS EXARATA	SPIKE BENTGRASS
15%	HORDUM BRANCHYANTHERUM	MEADOW BARLEY

SEED MIX 2 (UPLAND MEADOW) APPLY AT A RATE OF 4 LBS/ 1000 SQ. FT.		
COUNT	SCIENTIFIC NAME	COMMON NAME
10%	AGROPYRON RIPARIUM	STREAMBANK WHEATGRASS
20%	BROMUS CARINATUS	CALIFORNIA BROME
10%	DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS
30%	ELYMUS GLAUCUS	BLUE WILDRYE
30%	FESTUCA RUBRA RUBRA	NATIVE RED FESCUE

SEED MIX 3 (LAWN) APPLY AT A RATE OF 8 LBS/ 1000 SQ. FT.		
COUNT	SCIENTIFIC NAME	COMMON NAME
70%		3 WAY TURF TYPE PERENNIAL RYE
15%		CREEPING RED FESCUE
15%		CHEWING FESCUE

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W DATUM: NAVD88
ADJACENT PROPERTY OWNERS:
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CEDAR RIVER MAINTENANCE DREDGING

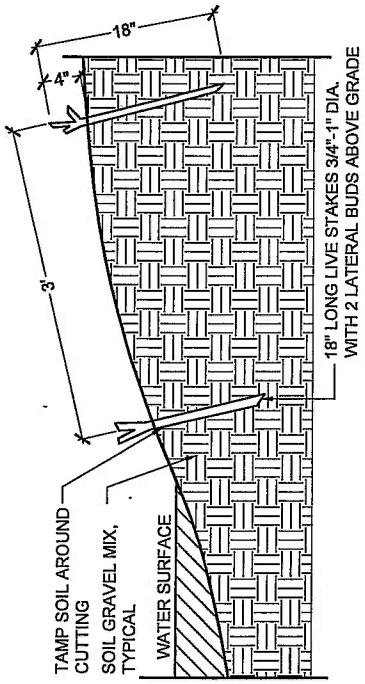
PLANT LIST SHEET 2

APPLICATION BY: CITY OF RENTON

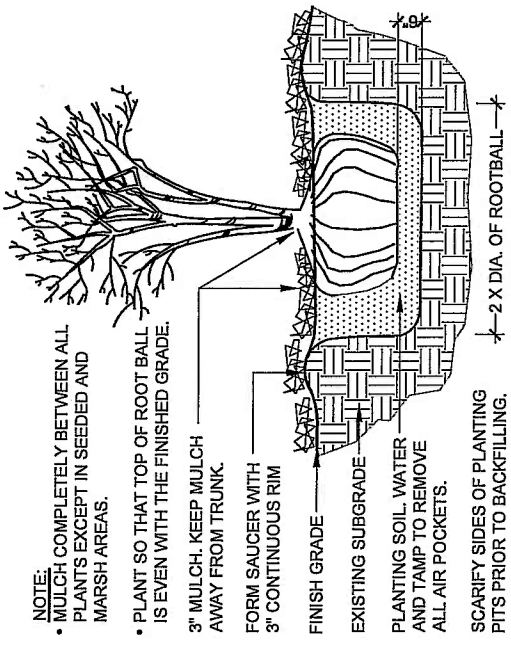
PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING
STATE: WASHINGTON
SHEET 28 OF 29
DATE: 2/3/14

S7, 17, 18 T23N R5E



B LIVE STAKE DETAIL
NOT TO SCALE



C TREE AND SHRUB PLANTING DETAIL
NOT TO SCALE

PURPOSE: MAINTENANCE OF SECTION 205 FLOOD HAZARD REDUCTION PROJECT
LOCATION: 47° 29' 37.00"N, 122° 12' 48.02"W
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CEDAR RIVER MAINTENANCE DREDGING

PLANTING DETAILS

APPLICATION BY: CITY OF RENTON

PROPOSED: MAINTENANCE DREDGING, REPAIR EXISTING BANK STABILIZATION, NEW BANK STABILIZATION AND OUTFALL REPAIRS

REFERENCE NUMBER:
IN: CEDAR RIVER
AT: RENTON
COUNTY: KING STATE: WASHINGTON
SHEET 29 OF 29 DATE: 2/3/14