



US Army Corps
of Engineers
Seattle District



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: (360) 694-1171
ATTN: Steve Manlow,
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: May 7, 2013

Expiration Date: June 6, 2013

Reference No.: NWS-2013-204

Name: Clark County (NE 119th Street
Improvement)

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 April 25, 2013.

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

APPLICANT: Clark County
P.O. Box 9810
Vancouver, Washington 98666-9810
Attention: Ms. Lisa Hemesath
Telephone: (360) 397-2121

LOCATION: In wetlands and jurisdictional ditches that drain into Curtin Creek, adjacent to Northeast 119th Street and between Northeast 72nd Avenue and Northeast 87th Avenue, near the City of Vancouver, in Clark County, Washington.

WORK: The proposed work is to improve 1.23 miles of Northeast 119th Street from the current two-lane road to a four-lane road consisting of two 12-foot-wide travel lanes, two 11-foot-wide travel lanes, a 14-foot-wide center left turn lane/median, a 5-foot-wide bicycle lane, and detached sidewalks, with a drainage system and stormwater management facilities. The proposed work includes replacing two 48-inch-diameter culverts in Curtin Creek with a 32-foot-long by 11-foot-wide single-span crossing structure. To construct the project, the applicant is proposing to permanently fill 1.38 acres of wetlands, 2.71 acres of wetland buffer, 0.18 acre of jurisdictional ditches, and 105 linear feet of Curtin Creek, and temporarily fill 3.74 acres of wetlands and 4.27 acres of wetland buffer.

PURPOSE: Improve traffic safety along Northeast 119th Street.

ADDITIONAL INFORMATION: 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

NWS-2013-204, Clark County (NE 119th Street Improvement)

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.

The wetland boundaries and/or location of the ordinary high water mark/ line of mean high water/ mean higher high water shown on the project drawings have not yet been verified by the Corps. If the Corps determines the boundaries of the wetland/waters are substantially inaccurate a new public notice may be published.

MITIGATION: Mitigation includes reconstructing 1,984 linear feet of a channelized reach of Curtin Creek into a 2,606 linear-foot meandering channel, establishing a floodplain bench, and conducting wetland mitigation adjacent to the realigned creek. The floodplain bench would be constructed by excavating the adjacent land 2 feet below the existing stream bank elevation. Large wood would be added to the floodplain bench, and the entire site revegetated to provide habitat diversity for both upland and aquatic species. Compensatory wetland mitigation would include 16.90 acres of wetland establishment, 3.25 acres of wetland rehabilitation, 2.36 acres of wetland enhancement, 13.22 acres of wetland buffer establishment, and 35.70 acres of riparian habitat establishment. The applicant proposes to utilize 7.96 acres of excess mitigation credit for three future transportation projects in the Curtin Creek watershed.

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 (USFWS) 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. The Federal Highway Administration (FHWA), as the lead agency for ESA consultation, will consult with the NMFS and/or the USFWS as required under Section 7 of the ESA.

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. The FHWA, as the lead agency for a determination regarding EFH, will consult with the National Marine Fisheries Services if necessary.

CULTURAL RESOURCES: The FHWA, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act, will consult with the State Historic Preservation Officer and Native American Tribes 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.

NWS-2013-204, Clark County (NE 119th Street Improvement)

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 United States.

SOURCE OF FILL MATERIAL: The applicant has not yet identified the source of the 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.

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 steven.w.manlow@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Mr. Steve Manlow, 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, P.O. 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: NWS-2013-204 Clark County (NE 119th Street Improvement)

Encl: Figures 1 through 22 of 22, dated April 25, 2013

Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver
 County : Clark County
 State: WA
 Page 1 of 22
 Date: April 25, 2013

COUNTY ROAD PROJECT #390722

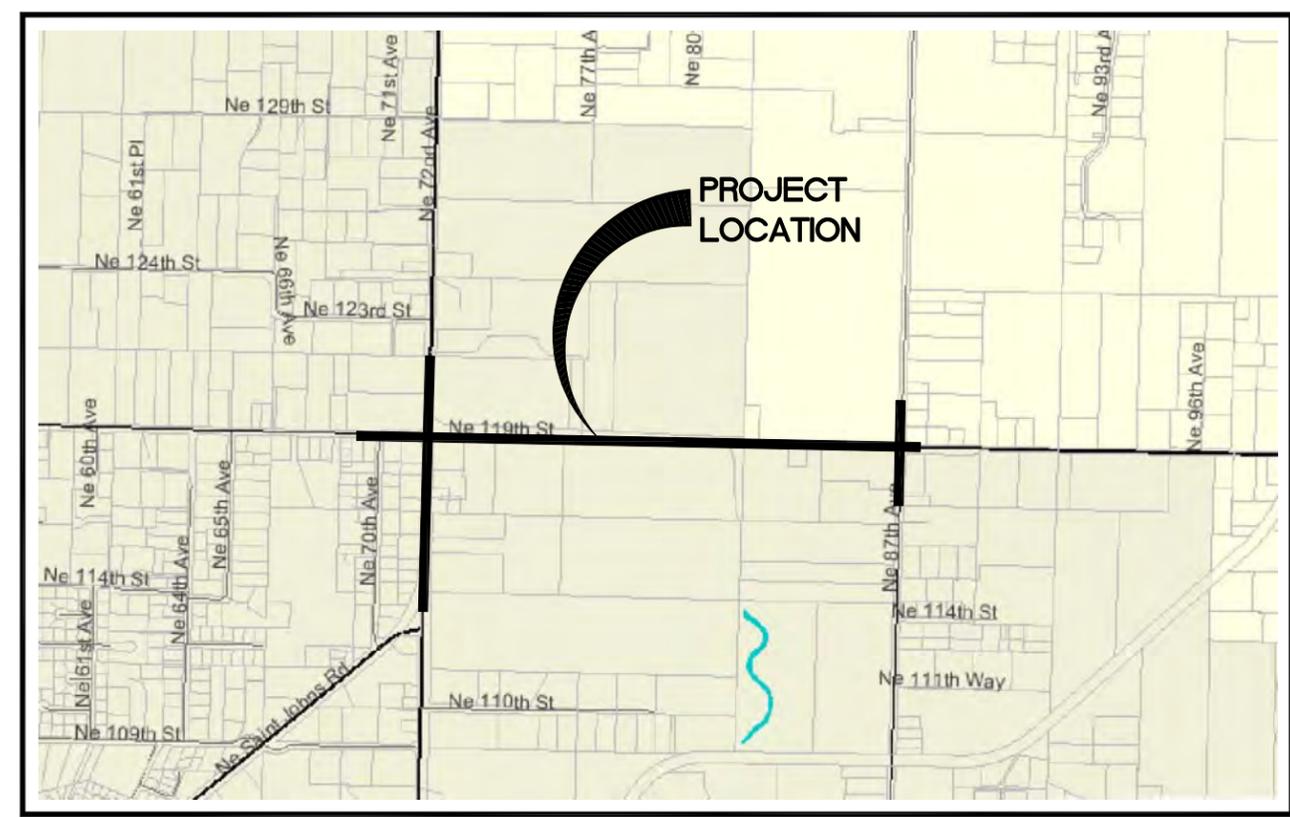
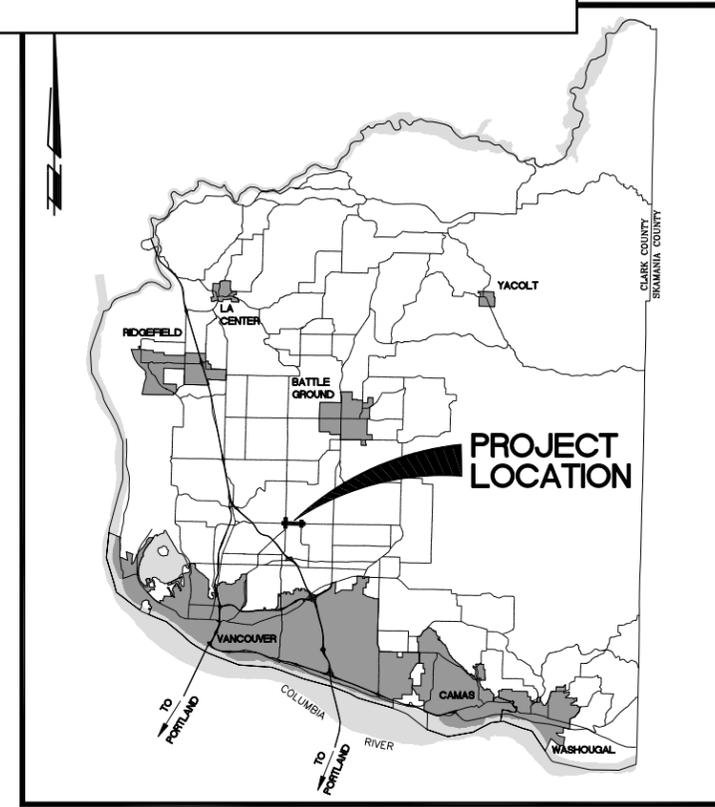
NE 119TH STREET

NE 72ND AVE TO EAST OF NE 87TH AVE

PLANS FOR THE CONSTRUCTION OF ROADWAYS, SIGNAL IMPROVEMENTS,
 STORM DRAINAGE AND WETLAND ENHANCEMENTS

Federal Aid No.
 STPUL-4430(003)

TA No.
 TA-3461



CLARK COUNTY WASHINGTON
 proud past, promising future

ENGINEERING CASE _____
 HABITAT CASE _____
 PLANNING LAND USE CASE _____
 WETLAND CASE _____

Signature Clark County Fire Marshal Date _____
 Signature Clark County Environmental Services Resource and Enhancement Permitting Date _____
 Signature Clark County Transportation-Concurrency Date _____
 Signature Clark County Transportation-Signal Date _____
 Signature Clark County Transportation-Signing and Striping Date _____
 Signature Clark County Development Engineering Final Site Plan Date _____
 Signature Clark County Development Engineering Date _____

COUNTY USE ONLY

A N/A
 Stormwater & Erosion Control CCC 40.380
 Stormwater & Erosion Control CCC 40.385
 Transportation & Circulation CCC 40.350
 Within Right-of-Way Landscaping Review
 Utility Permits CCC 13.12A & 12.20A
 Clark County Signing & Striping
 Clark County Traffic Signals
 Road Modifications CCC 40.550.010
 Critical Aquifer Recharge Areas CCC 40.410
 Geologic Hazard Areas CCC 40.430
 Flood Hazard Areas CCC 40.420
 Sewer and Water Plans
 Clark County M & O Pavement Deflection Testing
 Private Stormwater Covenant
 Grading, Excavation, Fill and Stockpile CCC 14.07

RECOMMENDED for APPROVAL
 Engineering Team Leader Date _____

APPROVED for CONSTRUCTION
 Clark County Engineer Date _____

Plans Approved for Construction by the County does not in any way relieve the applicant of responsibility to meet all requirements of the County or obligation to protect life, health and property. Plans have been reviewed and approved for compliance with Clark County Code and adopted regulations. Plans shall be revised or supplemented at any time it is determined that the full requirements of the County have not been met. Rev. 05/14/12

COMMISSIONERS:

MARC BOLDT, Chair
 STEVE STUART, Commissioner
 TOM MIELKE, Commissioner



DEPARTMENT OF
 PUBLIC WORKS

Quality Assurance	Project Manager	PW Director/ County Engineer
John Milne, P.E. DATE: _____	Robin Washington, PMP DATE: _____	Peter Capell, P.E. DATE: _____

PRELIMINARY

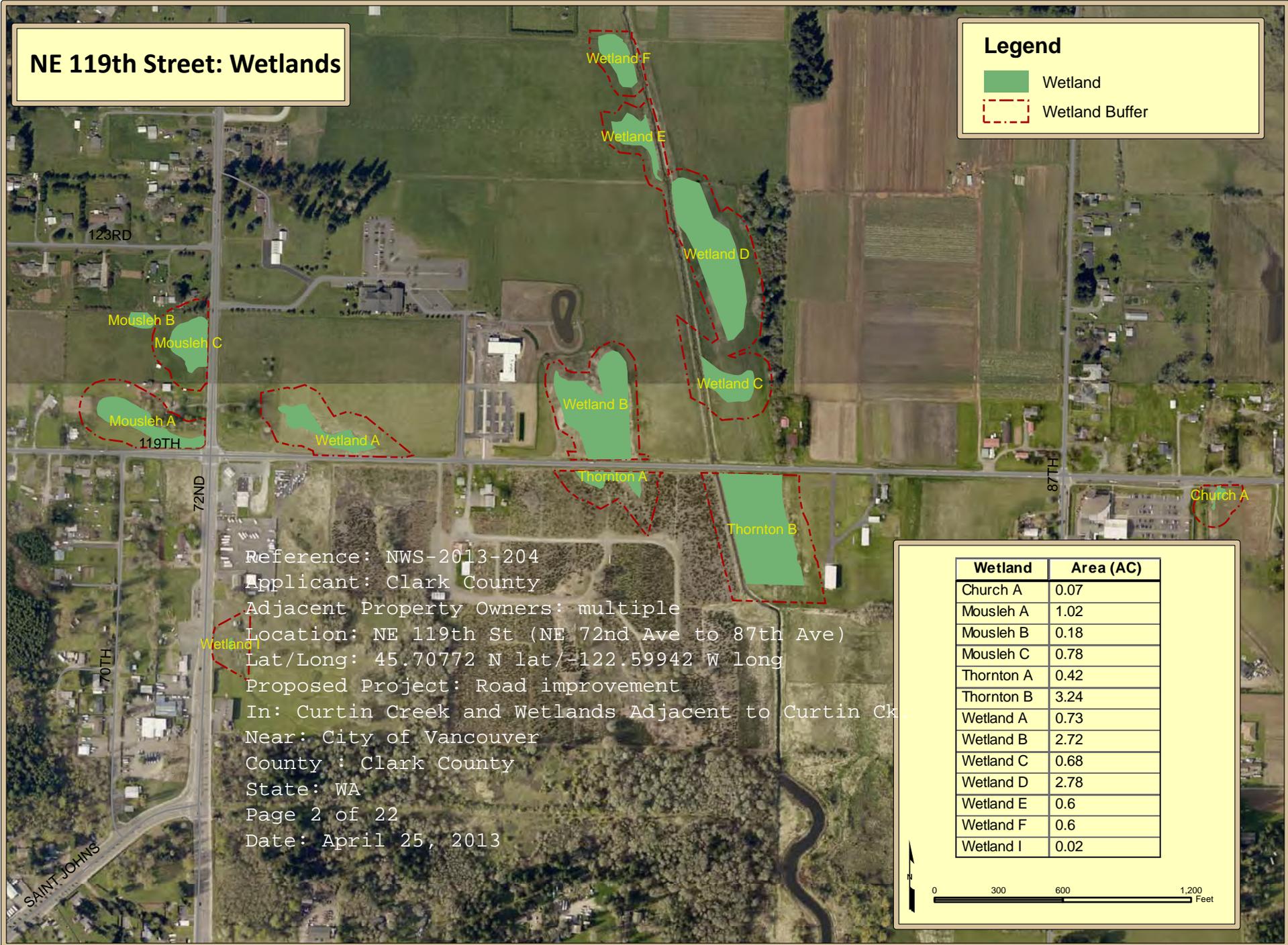
90% SET
10/31/2012

ENGINEERING AND CONSTRUCTION DIVISION

NE 119th Street: Wetlands

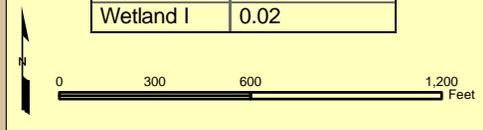
Legend

- Wetland
- Wetland Buffer



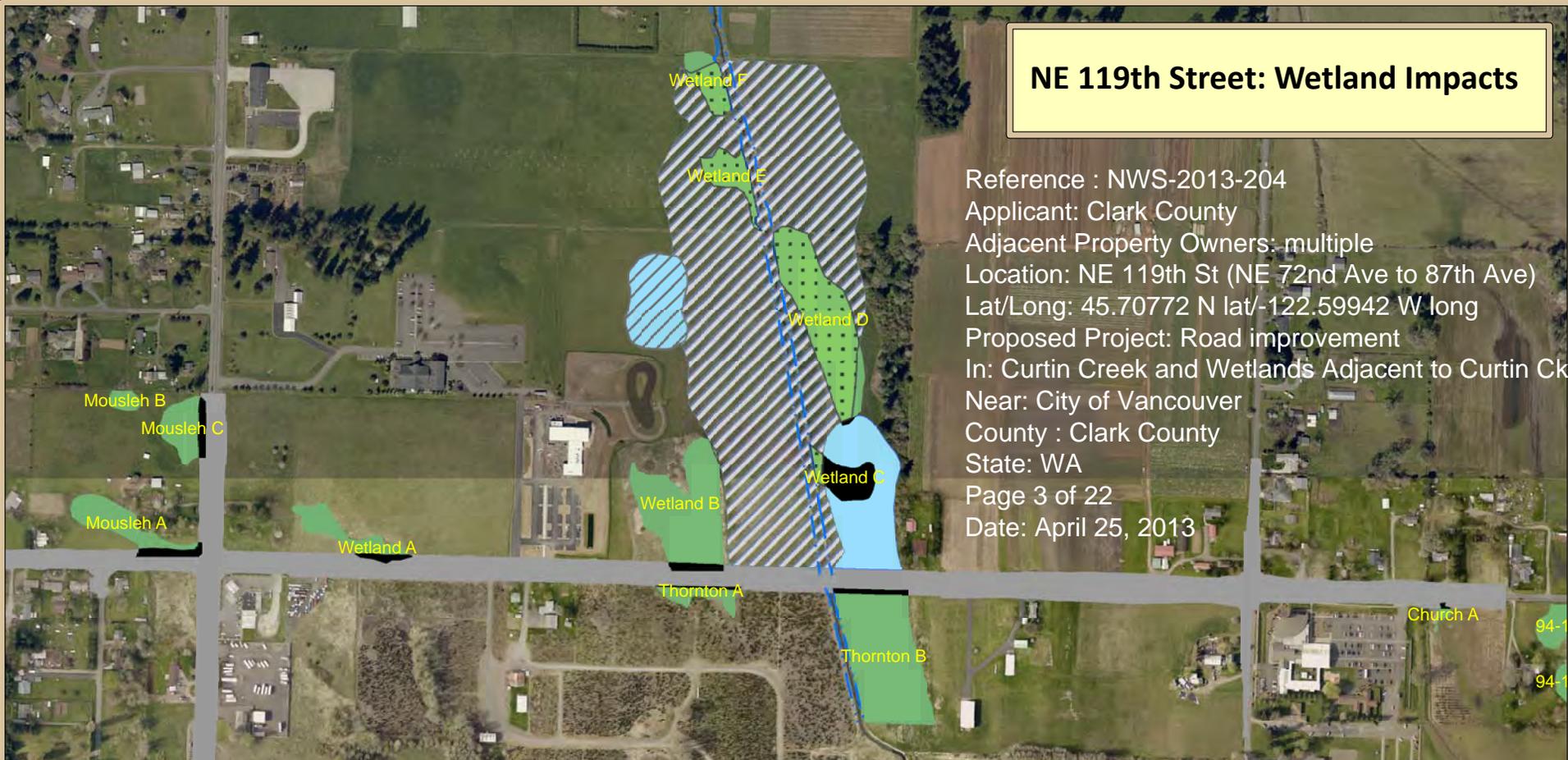
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 Near: City of Vancouver
 County : Clark County
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 Page 2 of 22
 Date: April 25, 2013

Wetland	Area (AC)
Church A	0.07
Mousleh A	1.02
Mousleh B	0.18
Mousleh C	0.78
Thornton A	0.42
Thornton B	3.24
Wetland A	0.73
Wetland B	2.72
Wetland C	0.68
Wetland D	2.78
Wetland E	0.6
Wetland F	0.6
Wetland I	0.02



NE 119th Street: Wetland Impacts

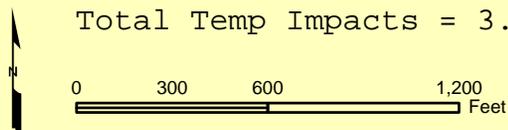
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 Page 3 of 22
 Date: April 25, 2013



Temporary Wetland Impacts

Wetland	Impacted Area (AC)	Cut (CY)	Fill (CY)
Wetland B	0.013	4.28	0
Wetland C	0.109	303.8	0
Wetland D	2.579	1310.7	19.4
Wetland E	0.601	575.3	96.0
Wetland F	0.435	1388.3	3.0

Total Temp Impacts = 3.74 ac



Permanent Wetland Impacts

Wetland	Impacted Area (AC)	Cut (CY)	Fill (CY)
Church A	0.014	0	39
Mousleh A	0.184	16.7	218.3
Mousleh C	0.151	0	437.2
Thornton A	0.063	0	1048.9
Thornton B	0.129	0	1819.6
Wetland A	0.106	19.1	38.8
Wetland B	0.143	0	2487.3
Wetland C	0.573	553.3	1035.1
Wetland D	0.018	0.9	29.9

Total Permanent Impacts = 1.56 ac

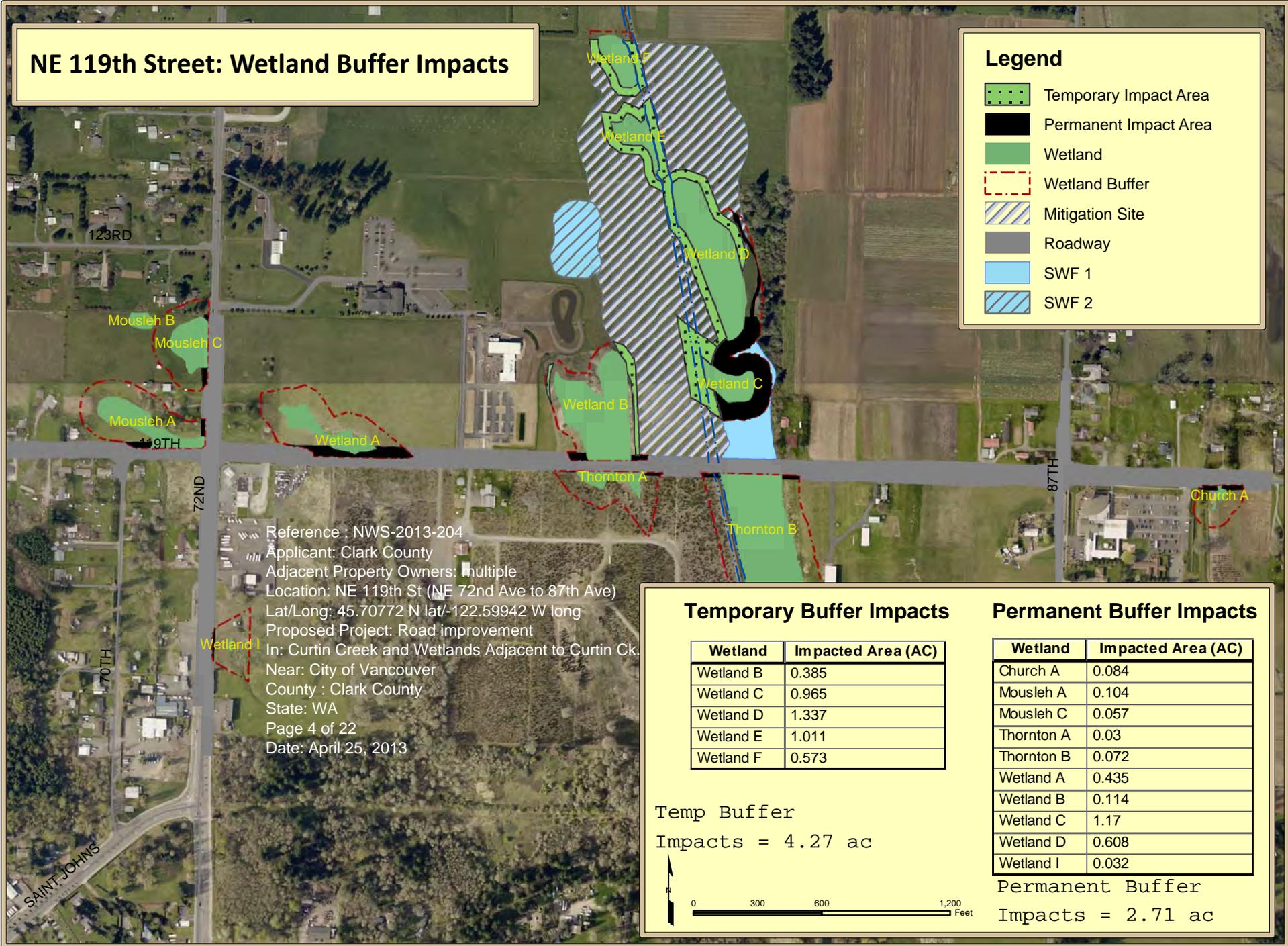
Legend

- Temporary Impact Area
- Permanent Impact Area
- Wetlands
- Mitigation Site
- Roadway
- SWF 1
- SWF 2

NE 119th Street: Wetland Buffer Impacts

Legend

-  Temporary Impact Area
-  Permanent Impact Area
-  Wetland
-  Wetland Buffer
-  Mitigation Site
-  Roadway
-  SWF 1
-  SWF 2



Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
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 Near: City of Vancouver
 County : Clark County
 State: WA
 Page 4 of 22
 Date: April 25, 2013

Temporary Buffer Impacts

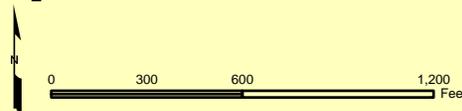
Wetland	Impacted Area (AC)
Wetland B	0.385
Wetland C	0.965
Wetland D	1.337
Wetland E	1.011
Wetland F	0.573

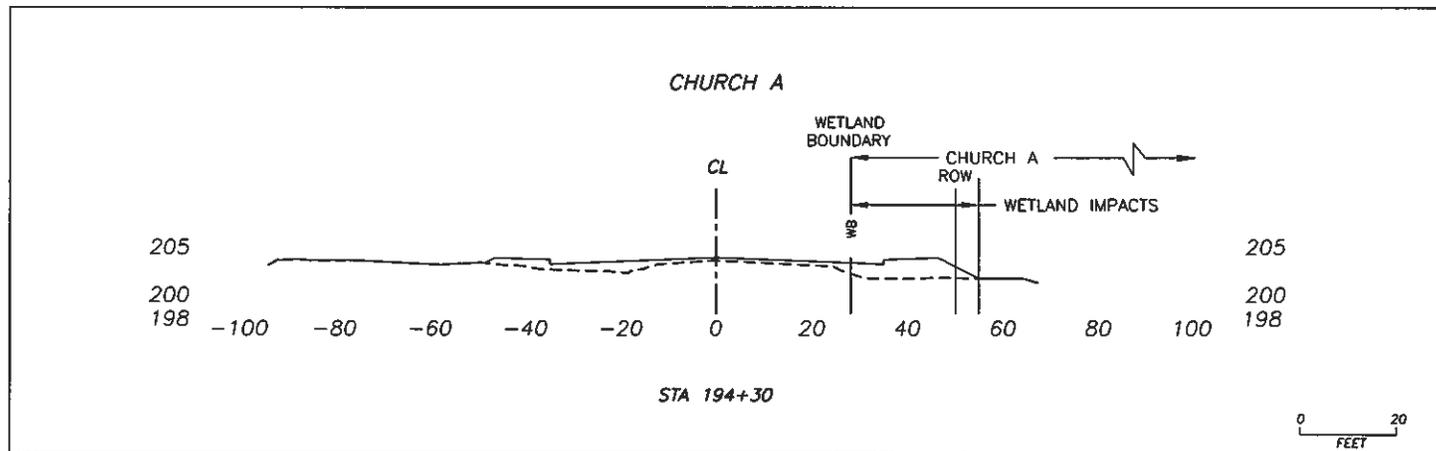
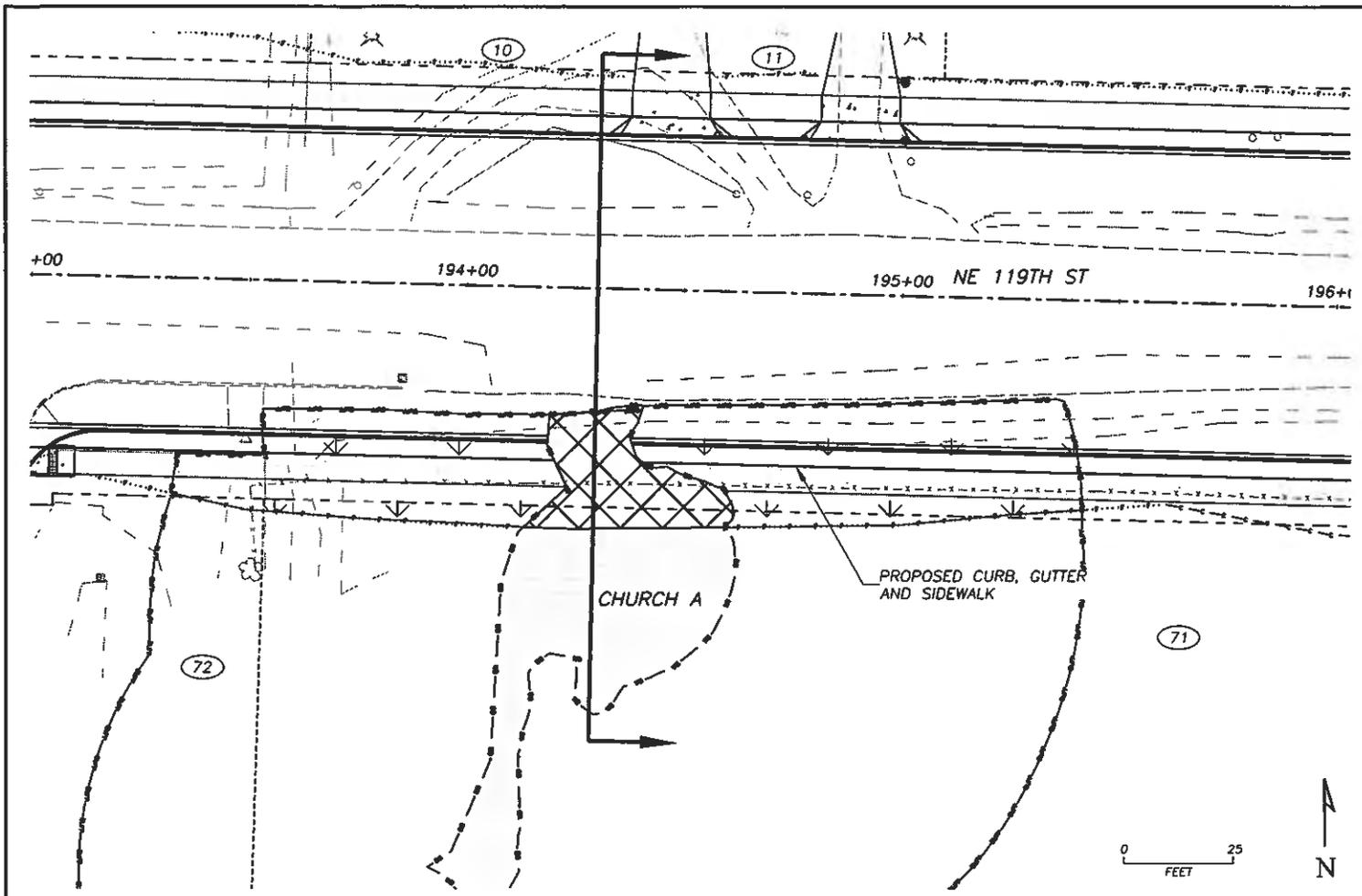
Temp Buffer
 Impacts = 4.27 ac

Permanent Buffer Impacts

Wetland	Impacted Area (AC)
Church A	0.084
Mousleh A	0.104
Mousleh C	0.057
Thornton A	0.03
Thornton B	0.072
Wetland A	0.435
Wetland B	0.114
Wetland C	1.17
Wetland D	0.608
Wetland I	0.032

Permanent Buffer
 Impacts = 2.71 ac





- LEGEND**
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 - SL - XXX+XX CROSS SECTION CUT LINE
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 - PROPOSED IMPACT TO WETLAND

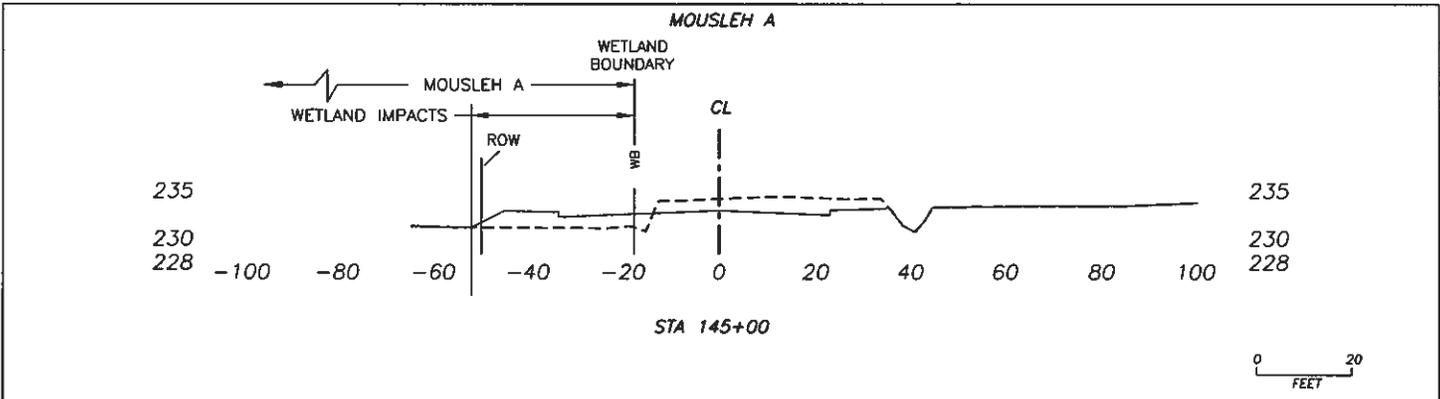
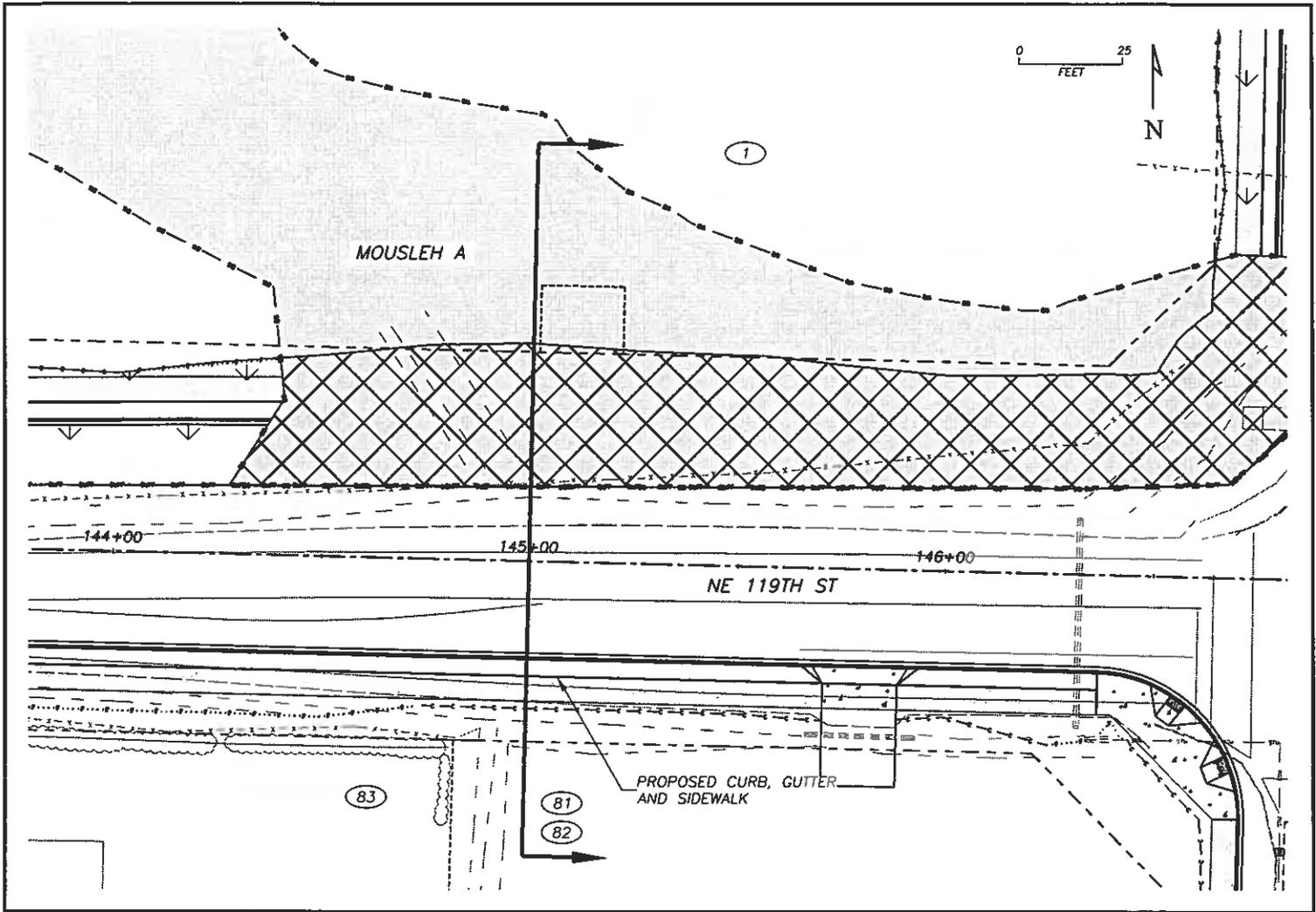
ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
(71)	199395-000	CATHOLIC ARCHBISHOP SEATTLE
(72)	199412-000	CATHOLIC ARCHBISHOP SEATTLE
(10)	198577-000	MODE
(11)	198603-000	CARROLL

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 5 of 22	XXXX	DATE: 6/14/2013	CORPS NO.: NWS-2013-204



April 25, 2013



- LEGEND**
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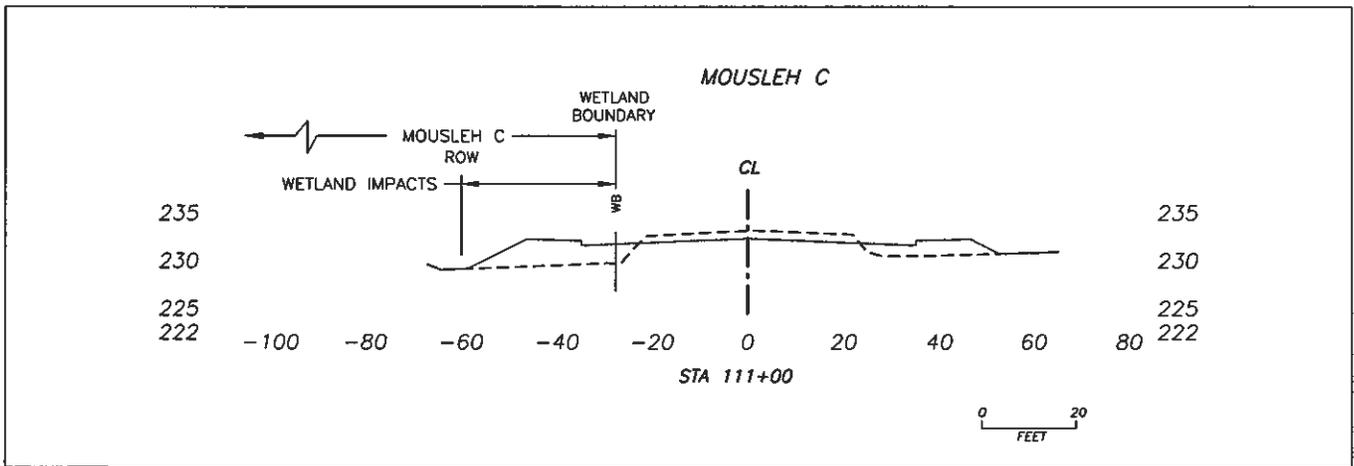
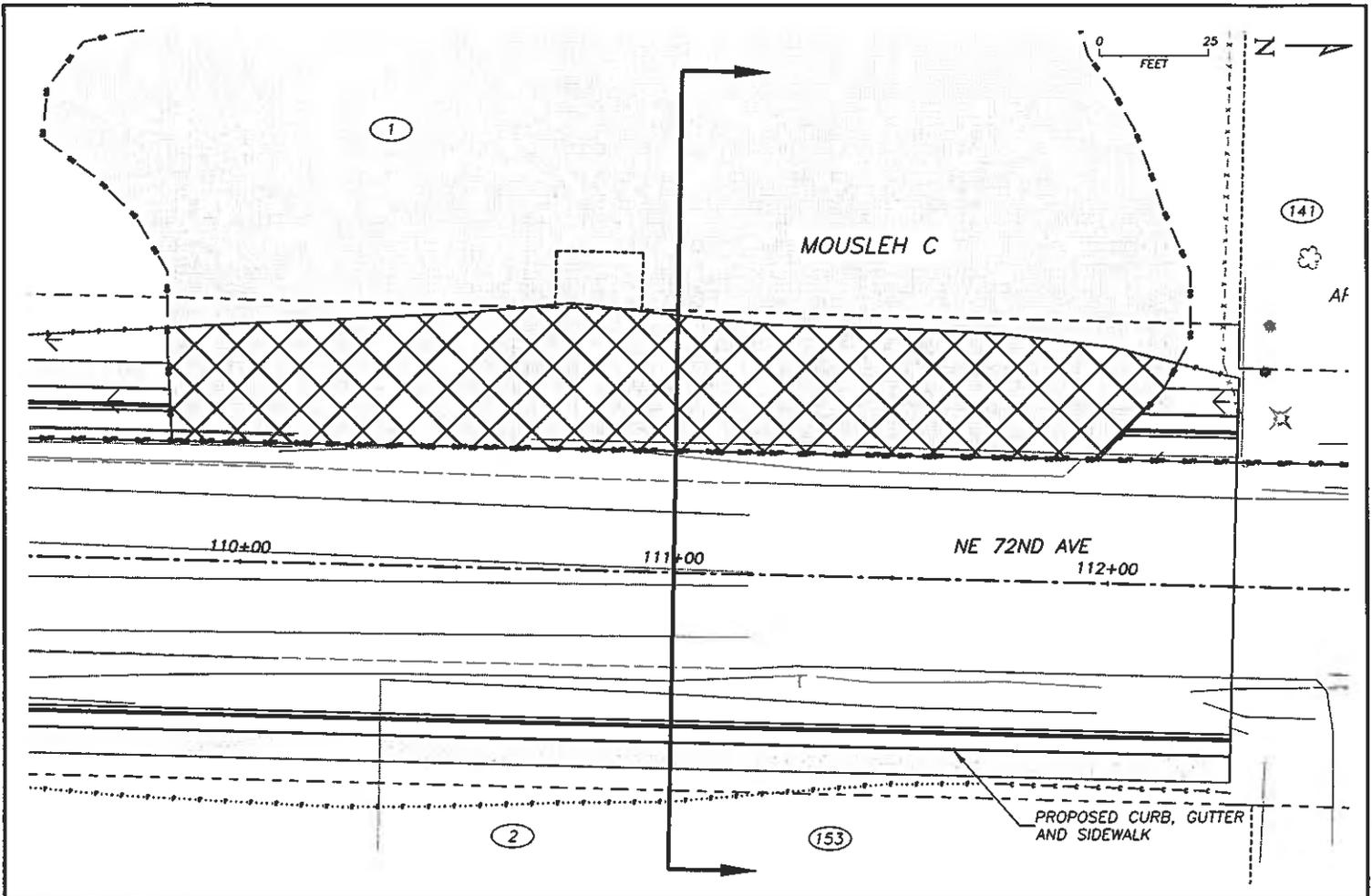
ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
1	198812-000	MOUSLEH
81	119887-020	FAKHOURY
82	119887-080	FAKHOURY
83	119887-040	HILL

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 6 OF 22	XXXXXX	DATE: 04/23/13	CORP NO: NWS-2013-204

CLARK COUNTY WASHINGTON

proud past. promising future



LEGEND

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ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
1	198812-000	MOUSLEH
2	198579-000	CE JOHN PROPERTIES 63 LLC
141	198956-000	ARIONUS
153	198596-000	GLENWOOD COMM CHURCH

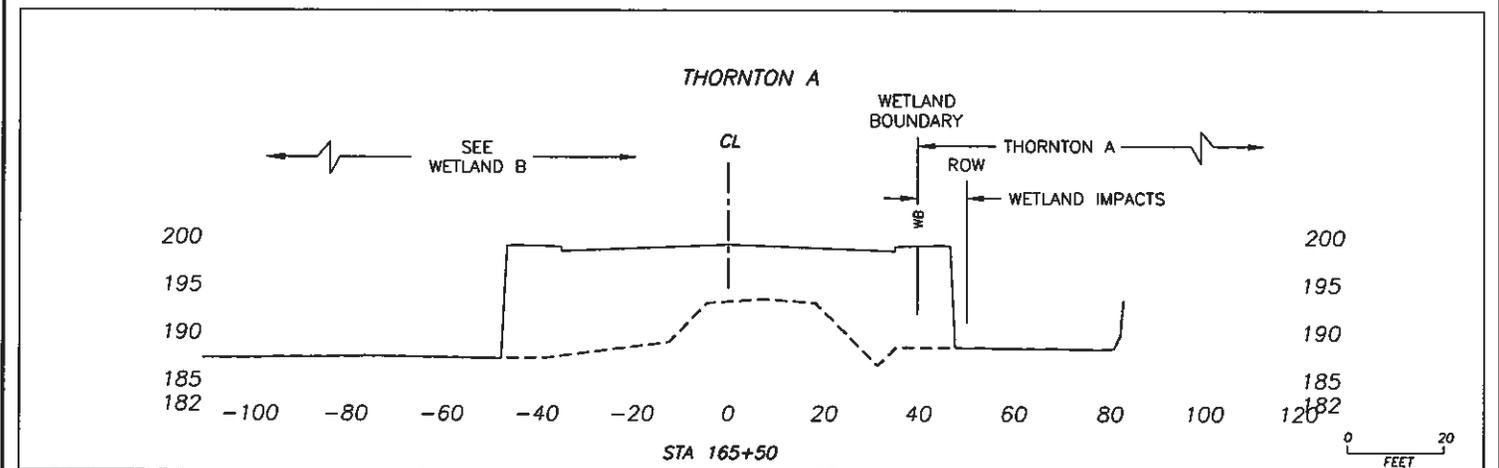
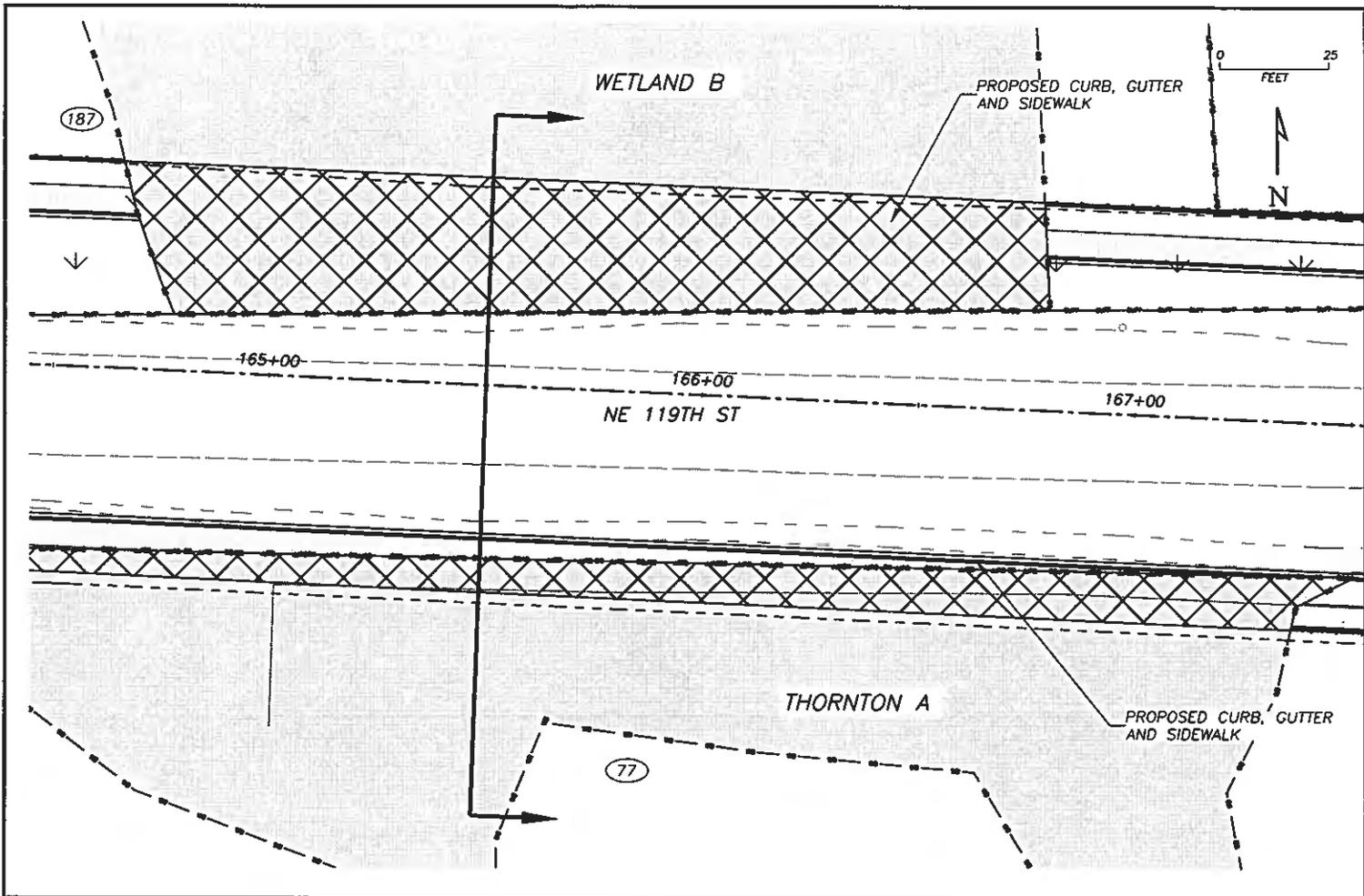
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LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 7 OF 22	XXXXXX	DATE: XXXXXX	CORP NO.: NWS-2013-204



proud past, promising future

CLARK COUNTY
WASHINGTON

April 25, 2013



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ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
187	986027-418	CLARK COUNTY
77	199390-000	THORNTON

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 8 OF 22	XXXXXX	DATE: XX/XX/XX	CORPS NO: NWS-2013-204

CLARK COUNTY
WASHINGTON

proud past. promising future

Adjacent Property Owners: multiple

Location: NE 119th St (NE 72nd Ave to 87th Ave)

(187) Lat/Long: 45.70772 N lat/-122.59942 W long

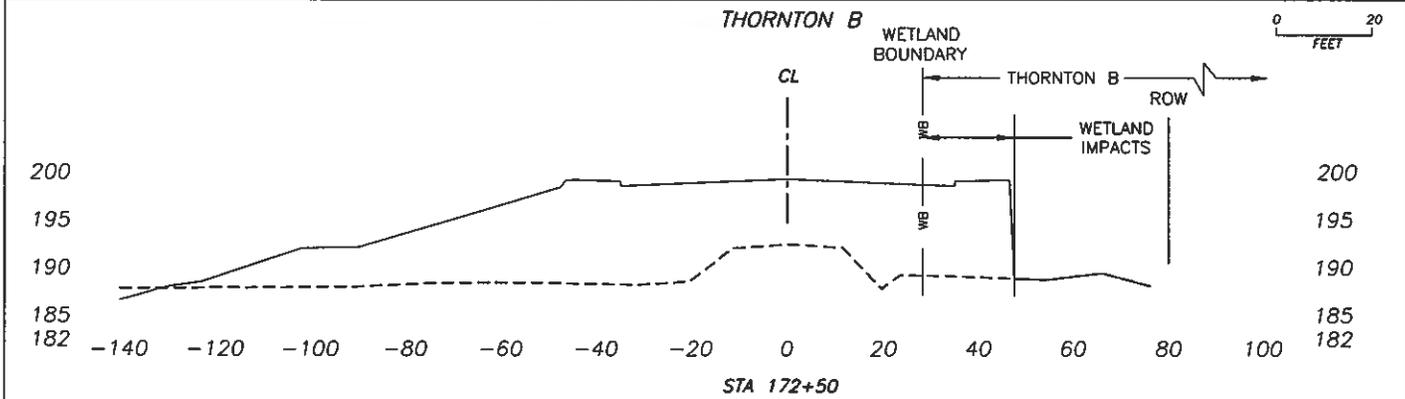
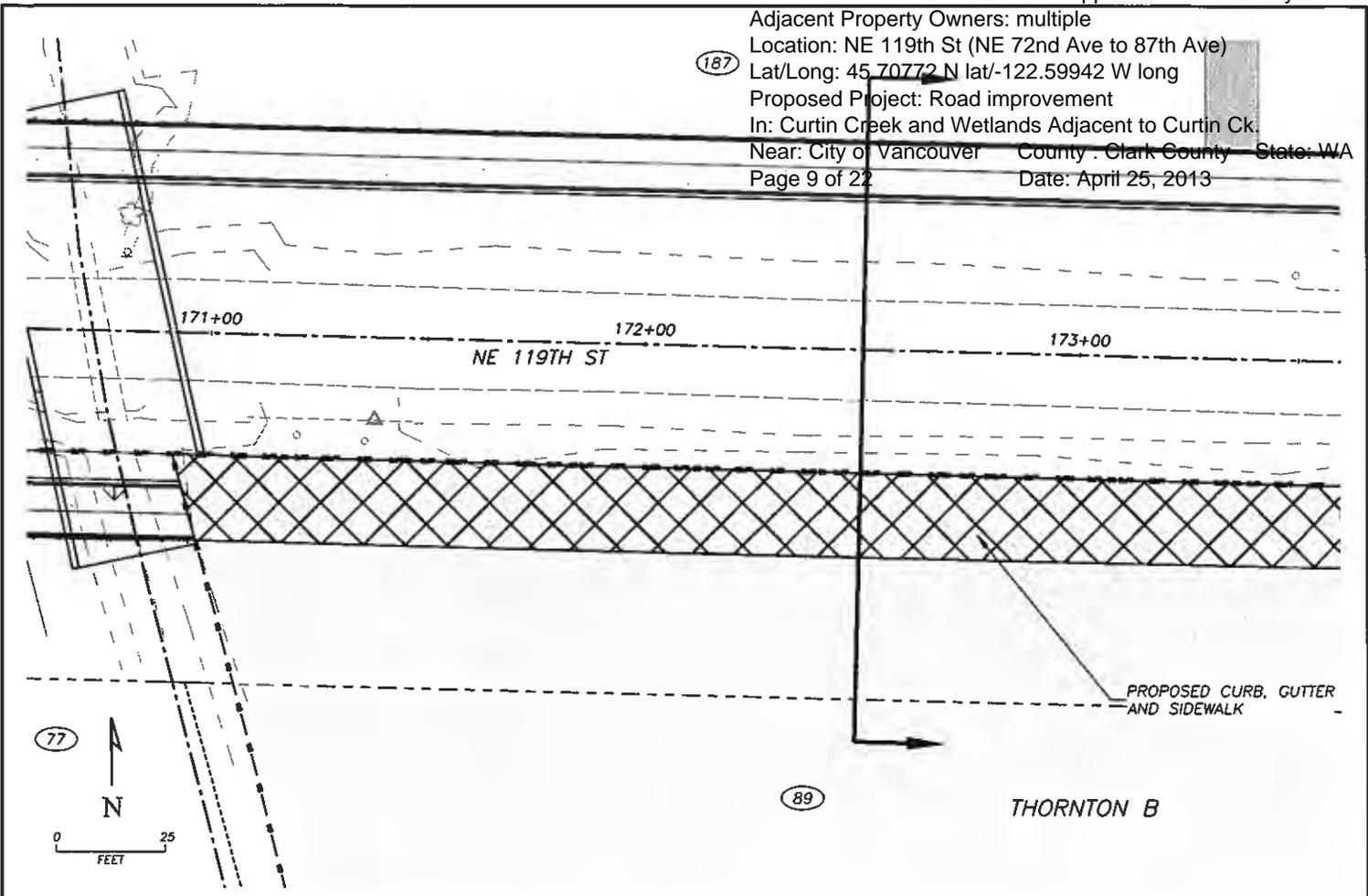
Proposed Project: Road improvement

In: Curtin Creek and Wetlands Adjacent to Curtin Ck.

Near: City of Vancouver County: Clark County State: WA

Page 9 of 22

Date: April 25, 2013



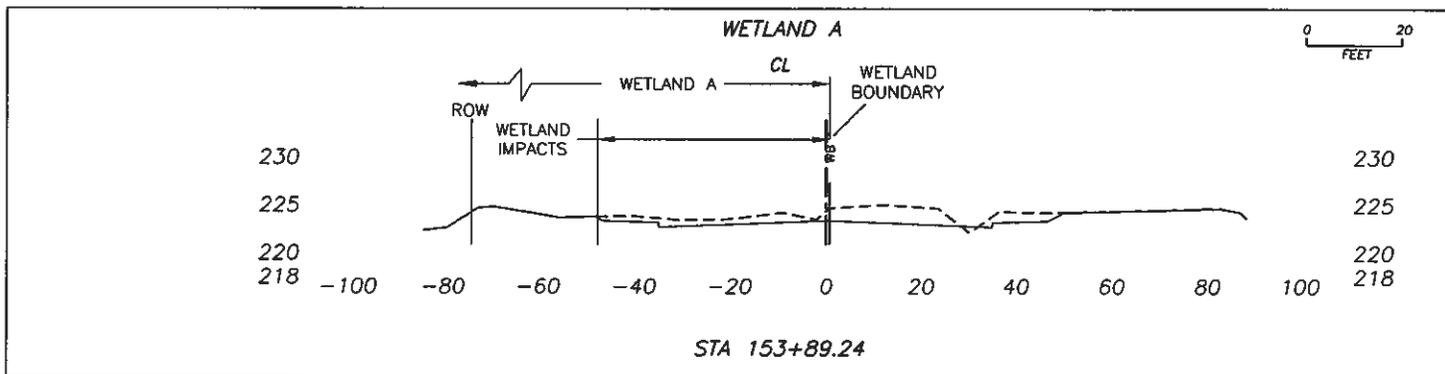
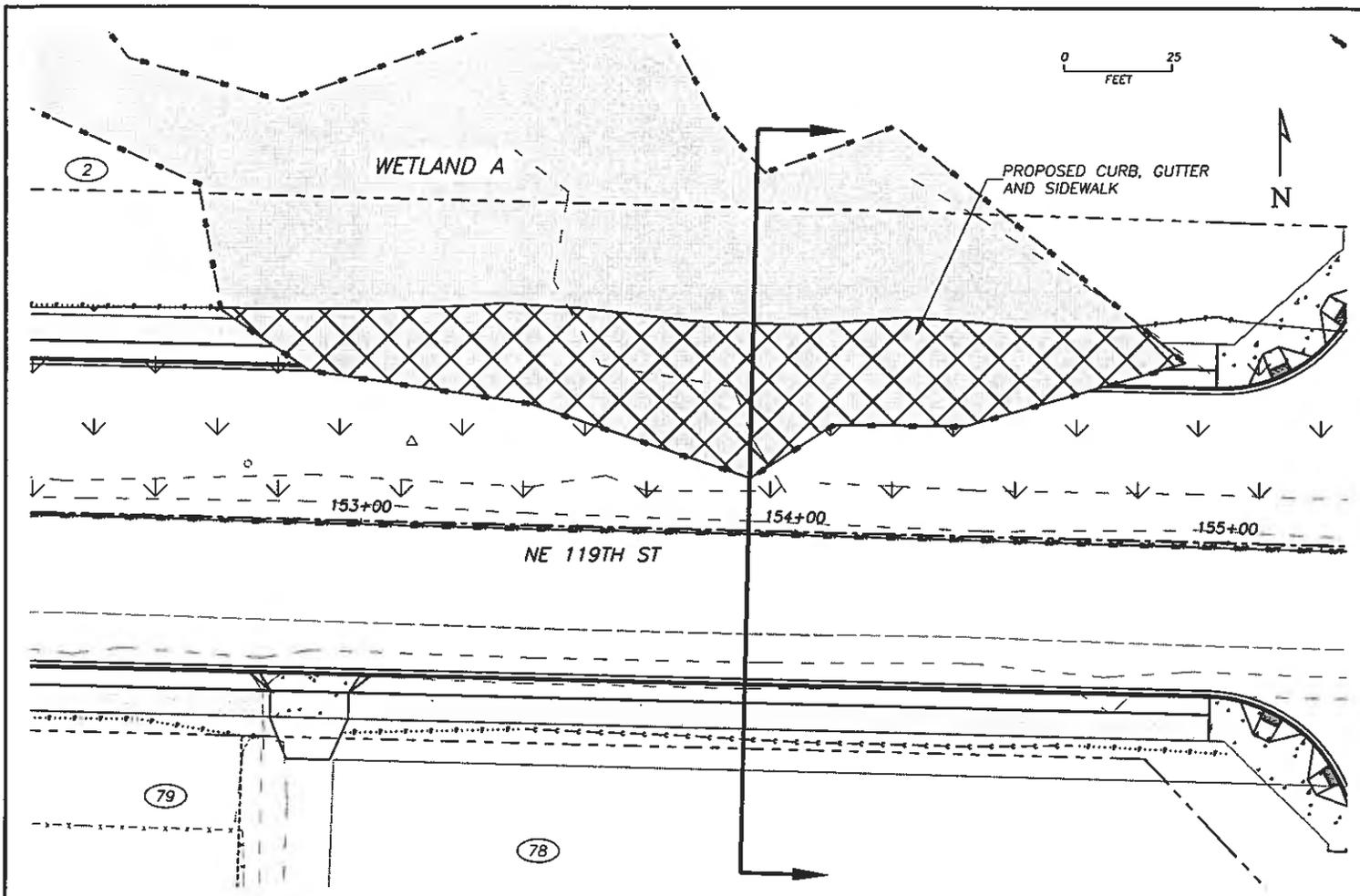
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 - SL - XXX+XX CROSS SECTION CUT LINE
 - [Hatched Box] EXISTING WETLAND
 - [Dotted Box] PROPOSED IMPACT TO WETLAND BUFFER
 - [Cross-hatched Box] PROPOSED IMPACT TO WETLAND

ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
(187)	986027-418	CLARK COUNTY
(77)	199390-000	THORNTON
(89)	199416-000	SMITH

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET:	8 OF 14	DATE:	04/15/2013 CORPS NO:

CLARK COUNTY
WASHINGTON



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ADJACENT PROPERTY OWNERS

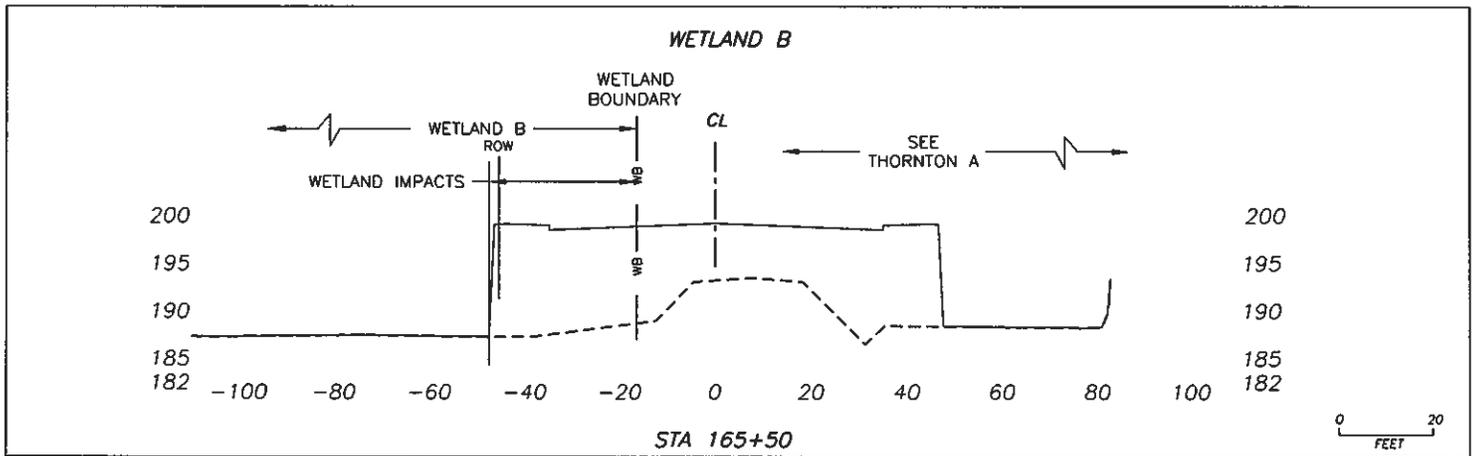
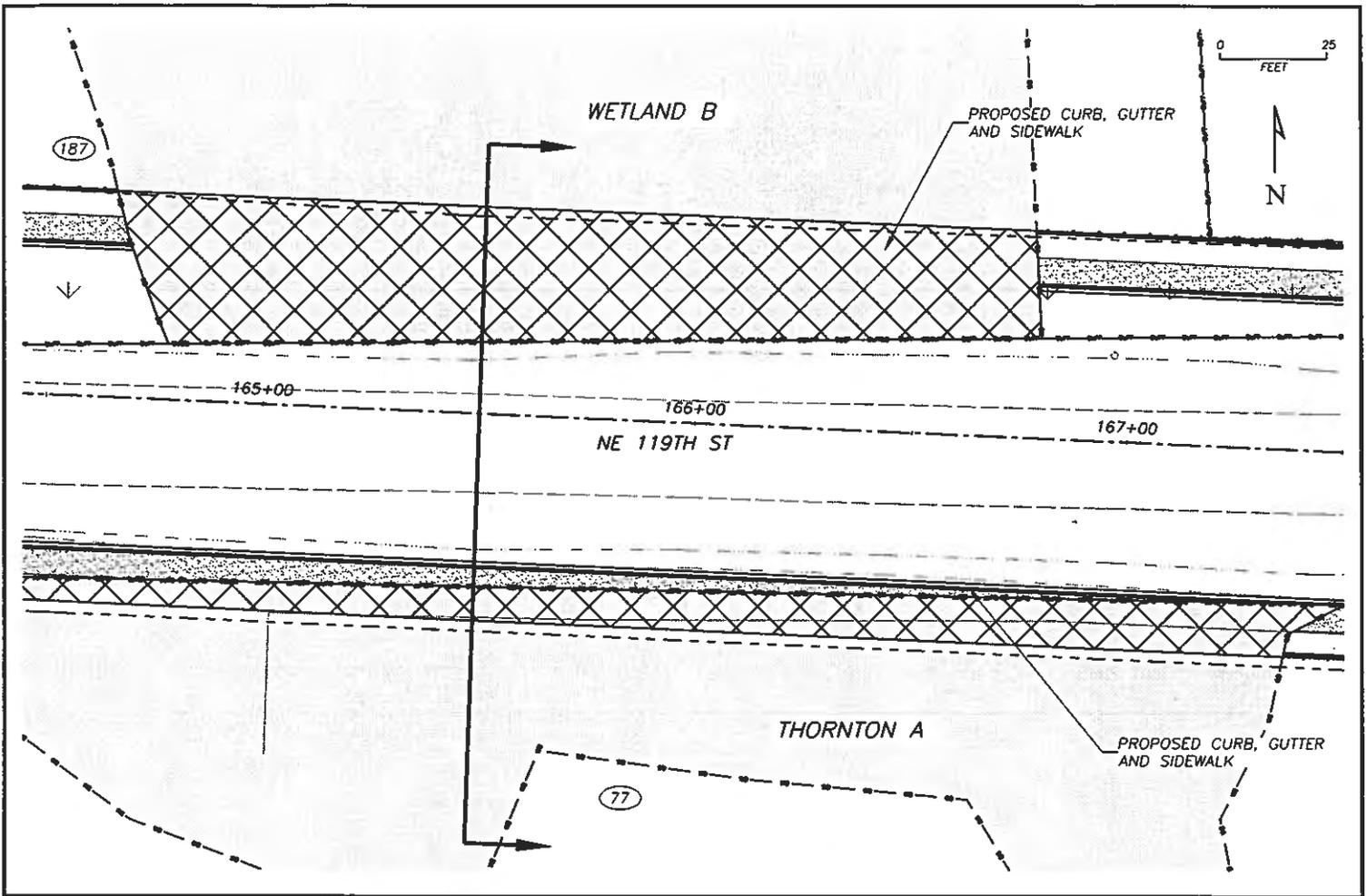
ID	SERIAL NO.	OWNER
2	198579-000	CE JOHN PROPERTIES 63 LLC
78	199396-000	THORTON
79	199386-000	GILLILAND

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 10 of 22	X X X X X X X X	DATE: 6/15/2013	CORPS NO: NWS-2013-204



proud past. promising future

CLARK COUNTY
WASHINGTON



- LEGEND**
- WB — WETLAND BOUNDARY
 - BUFF — WETLAND BUFFER
 - - - - EXISTING GROUND
 - C - C - DAYLIGHT CUT SLOPE
 - - F - - DAYLIGHT FILL SLOPE
 - x - x - FENCE LINE
 - SL - XXX+XX CROSS SECTION CUT LINE
 - EXISTING WETLAND
 - PROPOSED IMPACT TO WETLAND BUFFER
 - PROPOSED IMPACT TO WETLAND

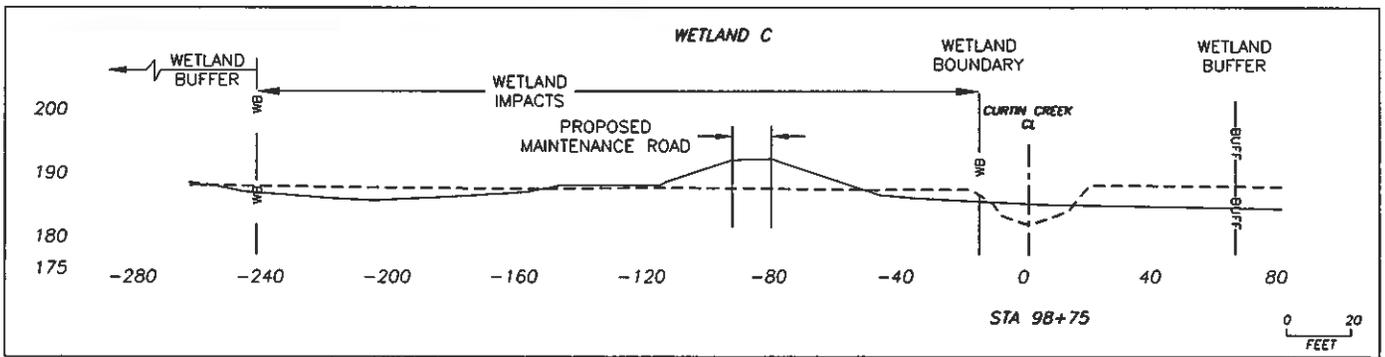
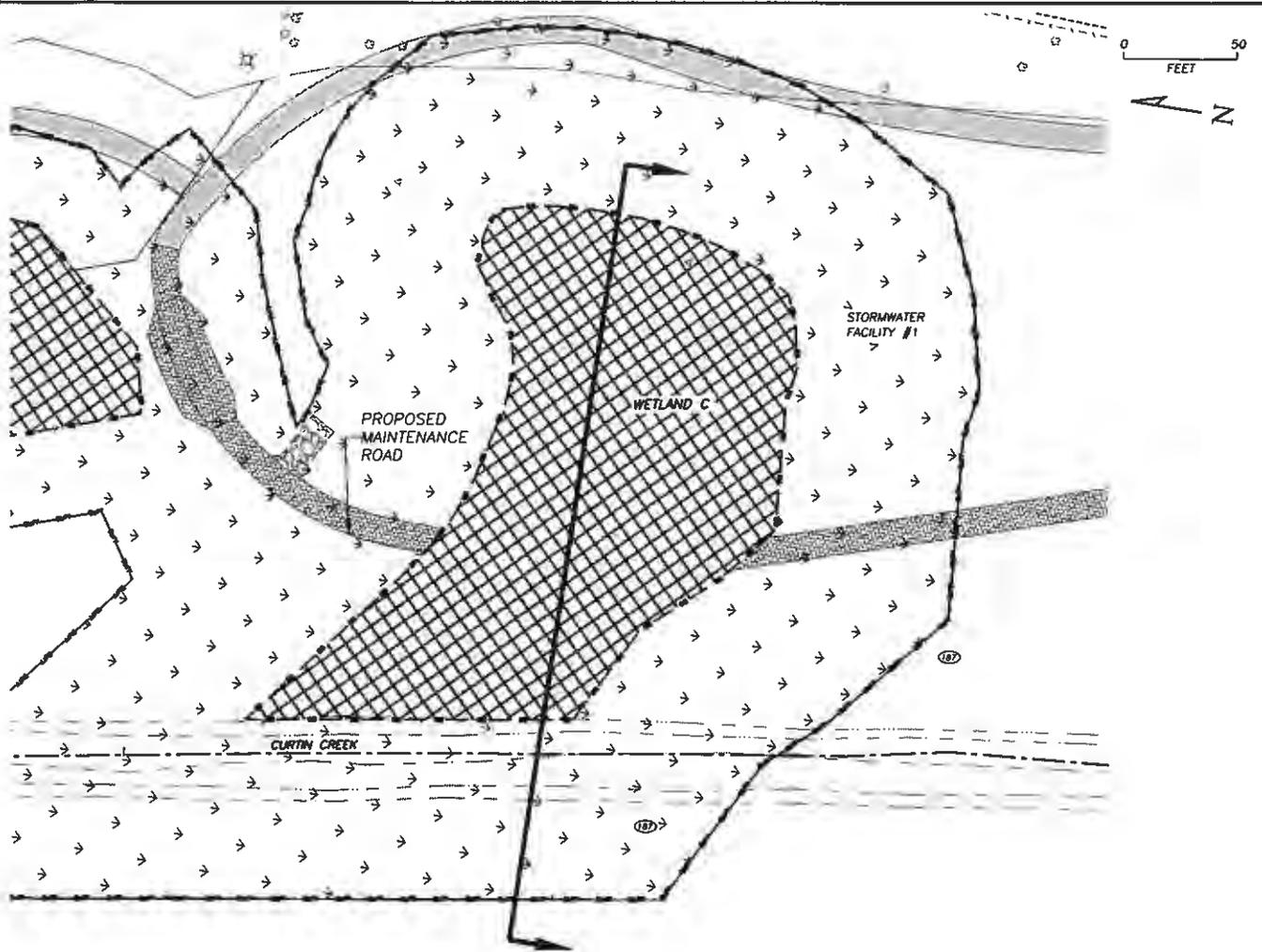
ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
(187)	986027-418	CLARK COUNTY
(77)	199390-000	THORNTON

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 11 OF 22	XXXXXX	DATE: XXXX/XX/XX	CORPS NO: NWS-2013-204

CLARK COUNTY
WASHINGTON

proud past, promising future



- LEGEND**
- WB — WETLAND BOUNDARY
 - BUFF — WETLAND BUFFER
 - - - - EXISTING GROUND
 - C - C - DAYLIGHT CUT SLOPE
 - . . . F . . . DAYLIGHT FILL SLOPE
 - x - x - FENCE LINE
 - SL - XXX+XX CROSS SECTION CUT LINE
 - [Hatched Box] EXISTING WETLAND
 - [Dotted Box] PROPOSED IMPACT TO WETLAND BUFFER
 - [Cross-hatched Box] PROPOSED IMPACT TO WETLAND

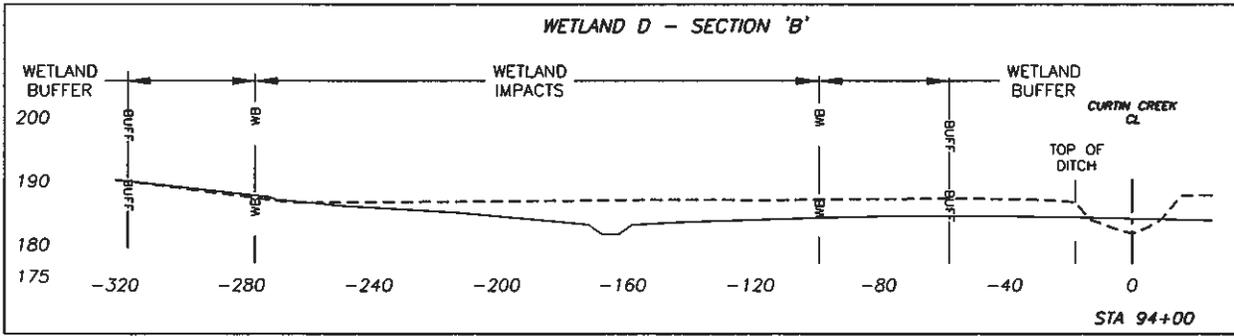
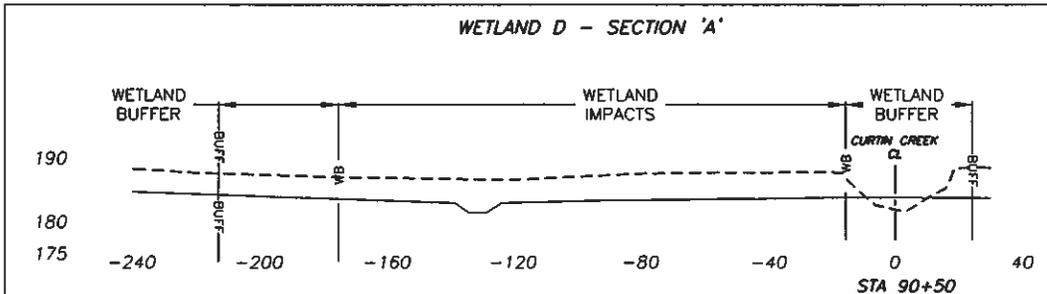
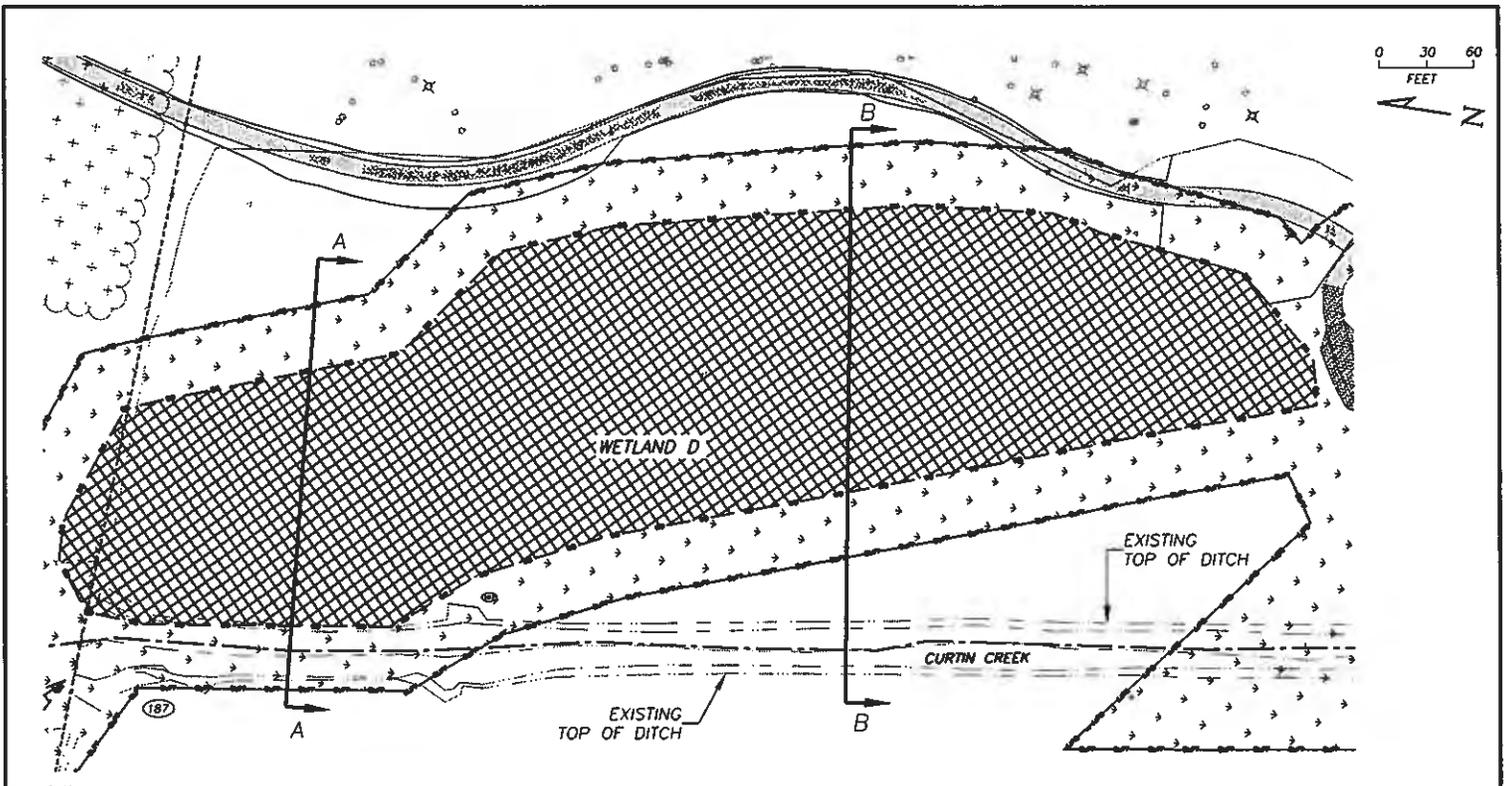
ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
(187)	986027-418	CLARK COUNTY

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N. R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 12 OF 22	XXXXXXX	DATE: XXXXX	CORPS NO: NWS-2013-204

CLARK COUNTY
WASHINGTON

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- LEGEND**
- WB — WETLAND BOUNDARY
 - BUFF — WETLAND BUFFER
 - - - - - EXISTING GROUND
 - C - C - DAYLIGHT CUT SLOPE
 - · · F · · · DAYLIGHT FILL SLOPE
 - X - X - FENCE LINE
 - SL - XXX+XX CROSS SECTION CUT LINE
 - EXISTING WETLAND
 - PROPOSED IMPACT TO WETLAND BUFFER
 - PROPOSED IMPACT TO WETLAND

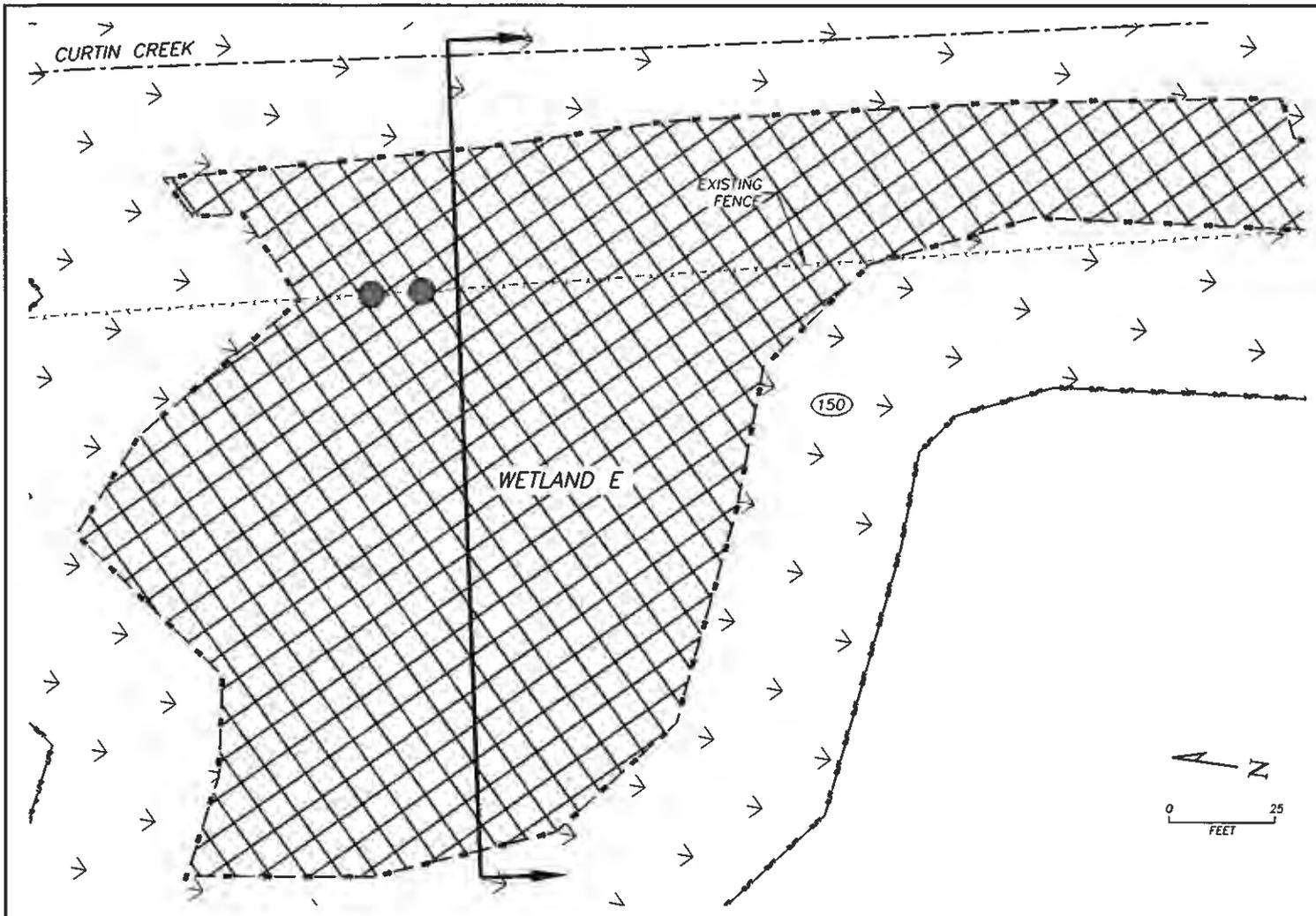
ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
(187)	986027-418	CLARK COUNTY

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 13 OF 22	XXXXXXX	DATE: XXXXXX	CORPS NO: NWS-2013-204

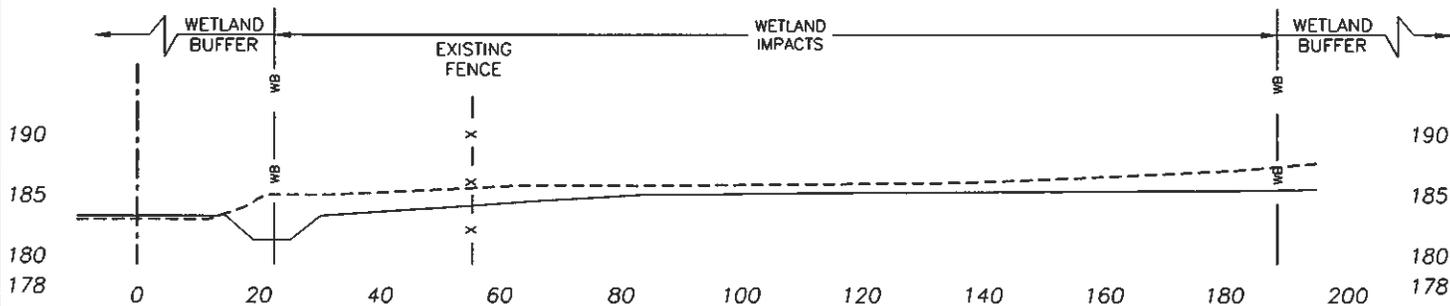
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CLARK COUNTY
WASHINGTON



WETLAND E

**CURTIN CREEK
CL**



STA 86+50

LEGEND

- WB — WETLAND BOUNDARY
- BUFF — WETLAND BUFFER
- - - - EXISTING GROUND
- C - C - DAYLIGHT CUT SLOPE
- F - F - DAYLIGHT FILL SLOPE
- x - x - FENCE LINE
- SL - XXX+XX CROSS SECTION CUT LINE
- EXISTING WETLAND
- PROPOSED IMPACT TO WETLAND BUFFER
- PROPOSED IMPACT TO WETLAND

ADJACENT PROPERTY OWNERS

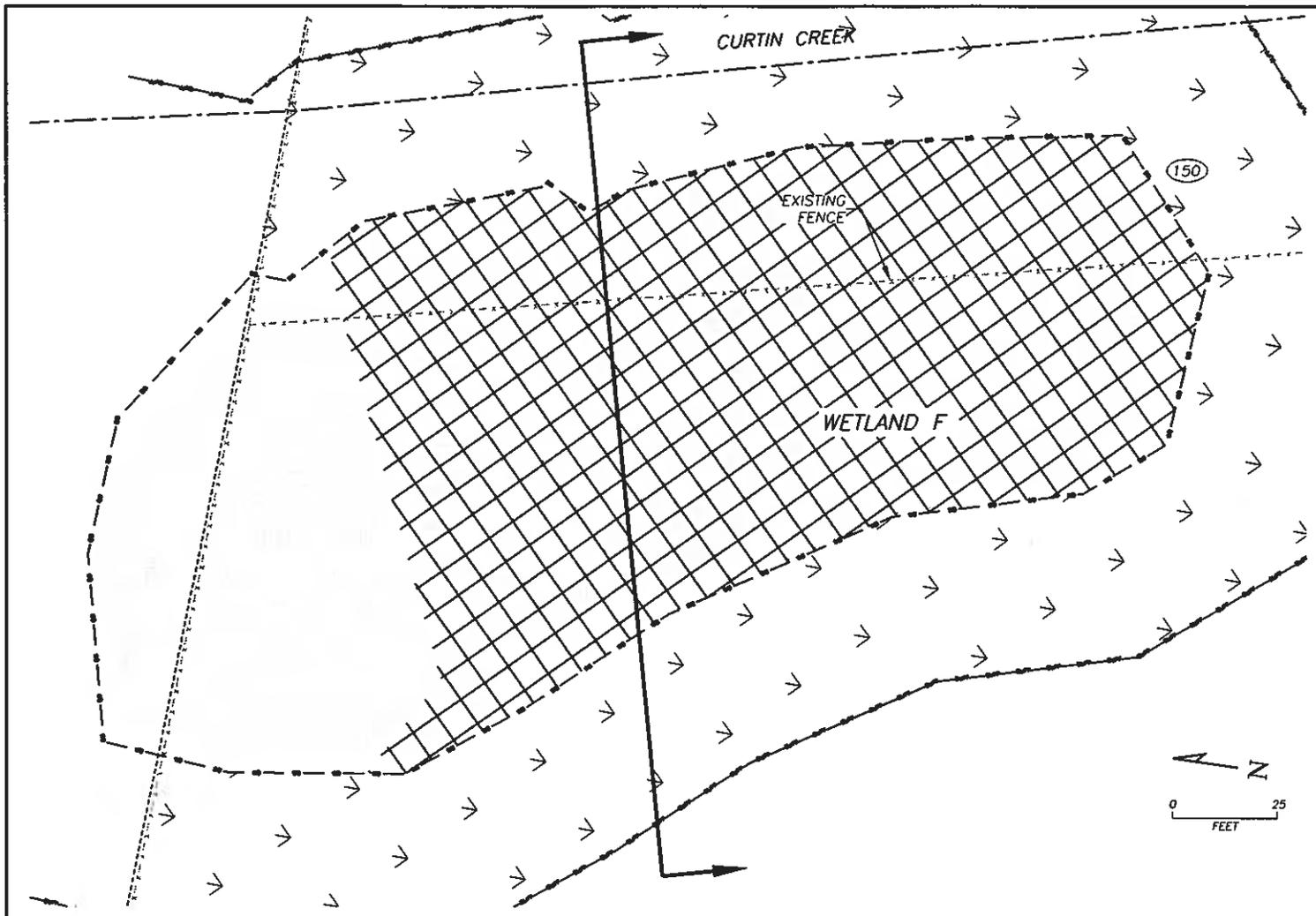
ID	SERIAL NO.	OWNER
(150)	198555-000	CITY OF VANCOUVER

PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET: 14 OF 22	XXXXXX	DATE: XXXXX	CORPS NO: NWS-2013-204



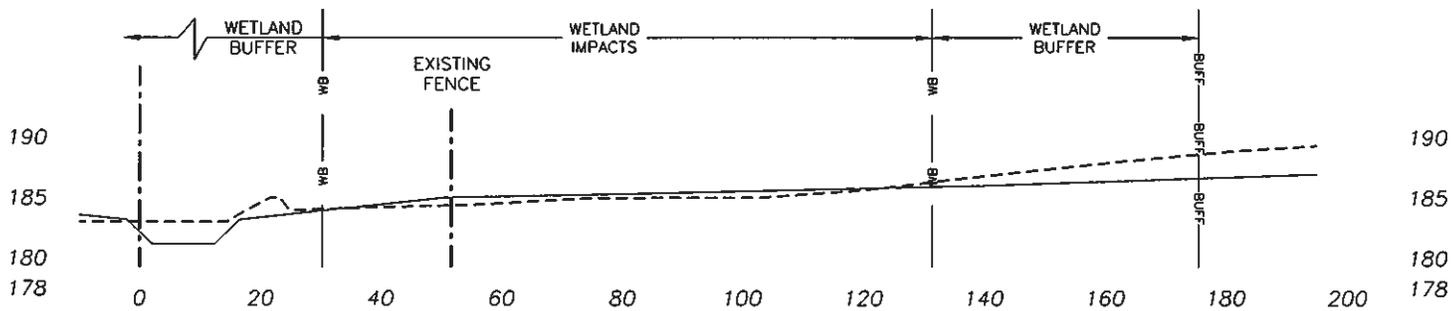
proud past. promising future

**CLARK COUNTY
WASHINGTON**



WETLAND F

**CURTIN CREEK
CL**



STA 83+00

LEGEND

- WB — WETLAND BOUNDARY
- BUFF — WETLAND BUFFER
- - - - EXISTING GROUND
- C - C - DAYLIGHT CUT SLOPE
- · · · · DAYLIGHT FILL SLOPE
- X - X - FENCE LINE
- SL - XXX+XX CROSS SECTION CUT LINE
- [Cross-hatched box] EXISTING WETLAND
- [Dashed line box] PROPOSED IMPACT TO WETLAND BUFFER
- [Cross-hatched box] PROPOSED IMPACT TO WETLAND

ADJACENT PROPERTY OWNERS

ID	SERIAL NO.	OWNER
150	198555-000	CITY OF VANCOUVER

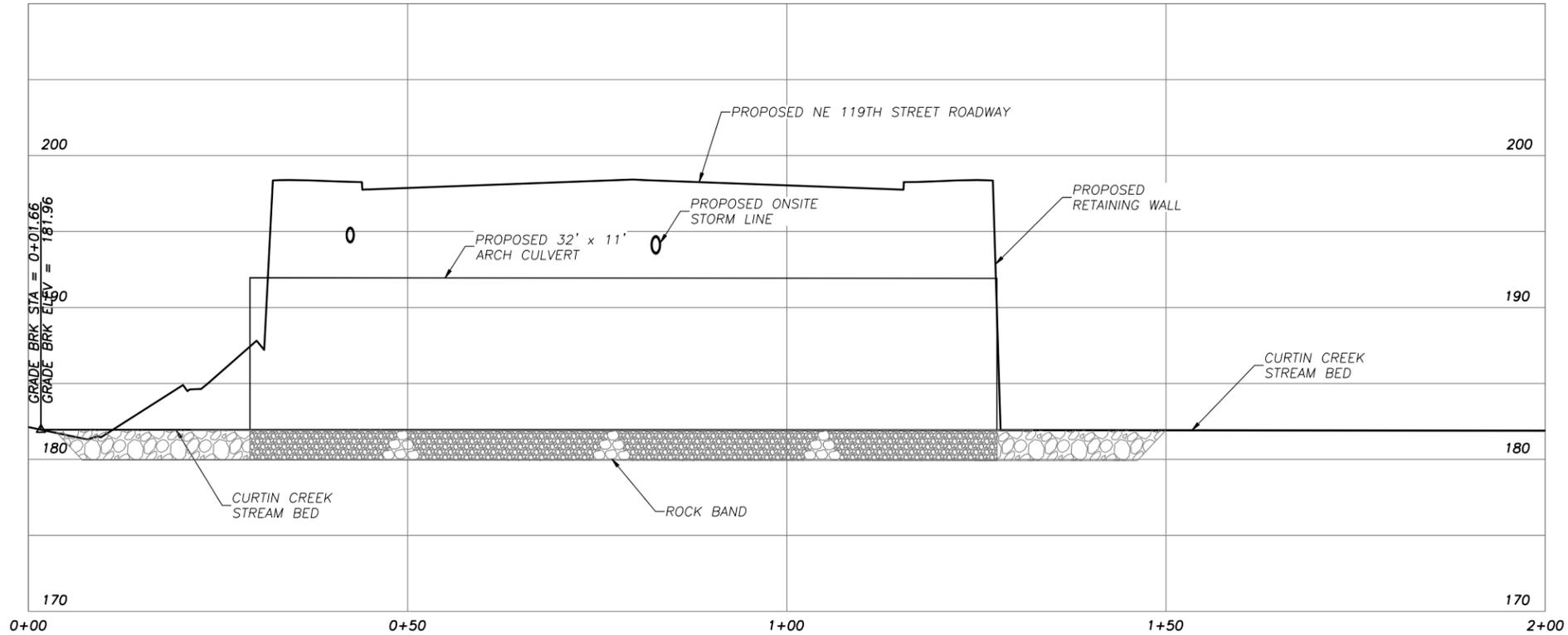
PROJECT:	NE 119TH STREET	REFERENCE:	
LOCATION:	(NE 72ND AVE TO NE 87TH AVE)	APPLICANT:	CLARK COUNTY
DATUM:	NAD 83	COUNTY:	CLARK COUNTY
TOWNSHIP & RANGE:	T3N, R2E	NEAR/WATER BODY:	CURTIN CREEK
SHEET:	15 OF 22	DATE:	04/15/2013
	XXX+XXX	CORPS NO:	NWS-2013-204



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**CLARK COUNTY
WASHINGTON**

April 25, 2013



Reference : NWS-2013-204 Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver County : Clark County State: WA
 Page 16 of 22 Date: April 25, 2013

LOCATIONS OF EXISTING UTILITIES ARE
 APPROXIMATE AND MAY BE INCOMPLETE



PUBLIC WORKS
 ENGINEERING & CONSTRUCTION DIVISION

TRANSPORTATION PROGRAM

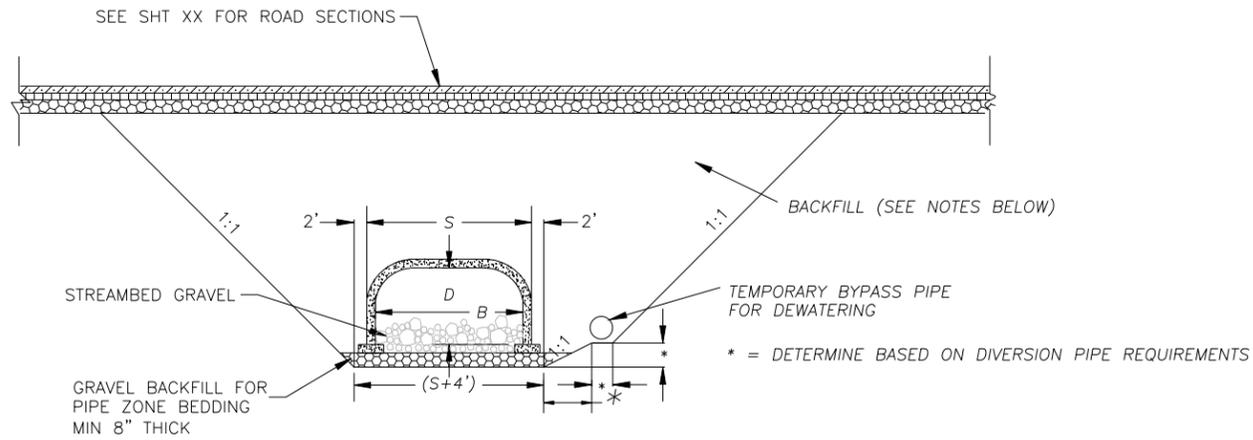
NE 119TH STREET CRP# 390722
CULVERT PLAN AND PROFILE
 NE 72ND AVENUE TO NE 87TH AVENUE



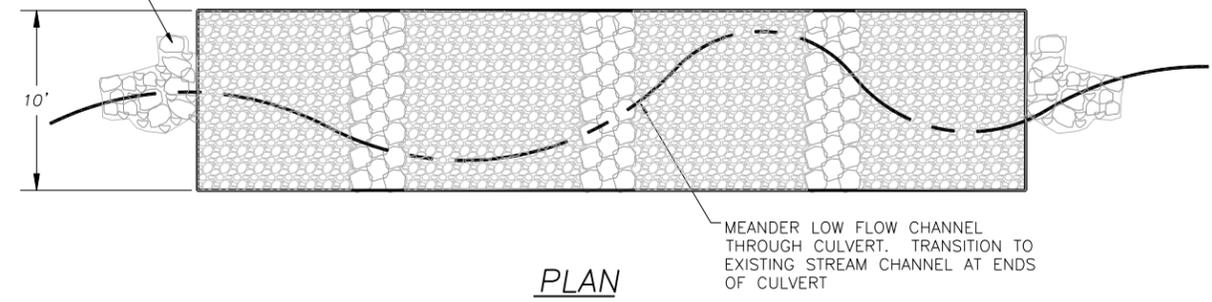
ENGINEERING AND DESIGN SECTION



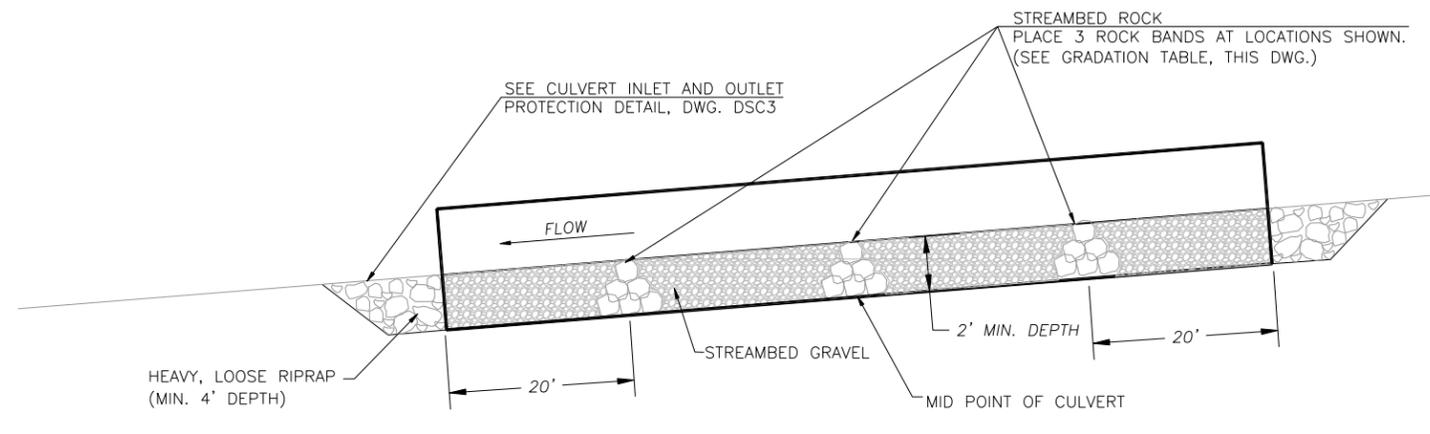
DESIGNED ME/JD
 DRAWN RK/RR
 DATE 10/31/12
CCPP1



SEE CULVERT INLET AND OUTLET PROTECTION DETAIL, DWG. DSC3



PLAN



PROFILE

TYPICAL CULVERT LAYOUT

N.T.S.

REINFORCED CONCRETE BOX CULVERT (DESIGN-BUILD)

N.T.S.

- NOTES:
1. CONTRACTOR SHALL COMPLETE STRUCTURAL DESIGN AND SUBMIT DETAILED SHOP DRAWINGS FOR ENGINEER'S REVIEW AND APPROVAL. BOTH PRE-CAST AND CAST-IN-PLACE DESIGNS ARE ACCEPTABLE, SUBJECT TO REVIEW AND APPROVAL.
 2. ALL REINFORCED CONCRETE DESIGN SHALL BE TO WSDOT DESIGN MANUAL, M 22-01. DESIGN SHALL BE H2O LOADING TO ASTM850.
 3. BACKFILL SHALL BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 6" TO 8" LIFTS.
 4. PLACEMENT, BACKFILL AND COMPACTION TO BE AS DIRECTED BY ENGINEER.
 5. ALL PAVING INCLUDED IN PAVEMENT BID ITEMS
 6. ALL DESIGN, BEDDING, BACKFILL AND INSTALLATION INCLUDED IN BID ITEM FOR CULVERT. FILL INSIDE CULVERT PAID UNDER SEPARATE BID ITEMS.

Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver
 County : Clark County State: WA
 Page 17 of 22
 Date: April 25, 2013

CULVERT #1	
Diameter (in)	Percent Finer
21	100
17	90
12	50
10	30
9	15

GRADATION FOR STREAMBED ROCK BANDS

CULVERT #1	
Diameter (in)	Percent Finer
12	100
5	90
3/4	50
1/4	30
0.05	15

GRADATION FOR STREAMBED GRAVEL

1. STREAMBED GRAVEL TO BE WELL-GRADED GRAVEL PIT MATERIAL, QUARRIED. ANGULAR MATERIAL IS NOT ACCEPTABLE.
2. STREAMBED GRAVEL TO BE TESTED AND GRADATION CONFIRMED AT GRAVEL PIT PRIOR TO DELIVERY TO SITE.



PUBLIC WORKS
 ENGINEERING & CONSTRUCTION DIVISION

TRANSPORTATION PROGRAM

NE 119TH STREET CRP# 390722
 STREAM CROSSING DETAILS
 NE 72ND AVENUE TO NE 87TH AVENUE
 SHEET 17#4



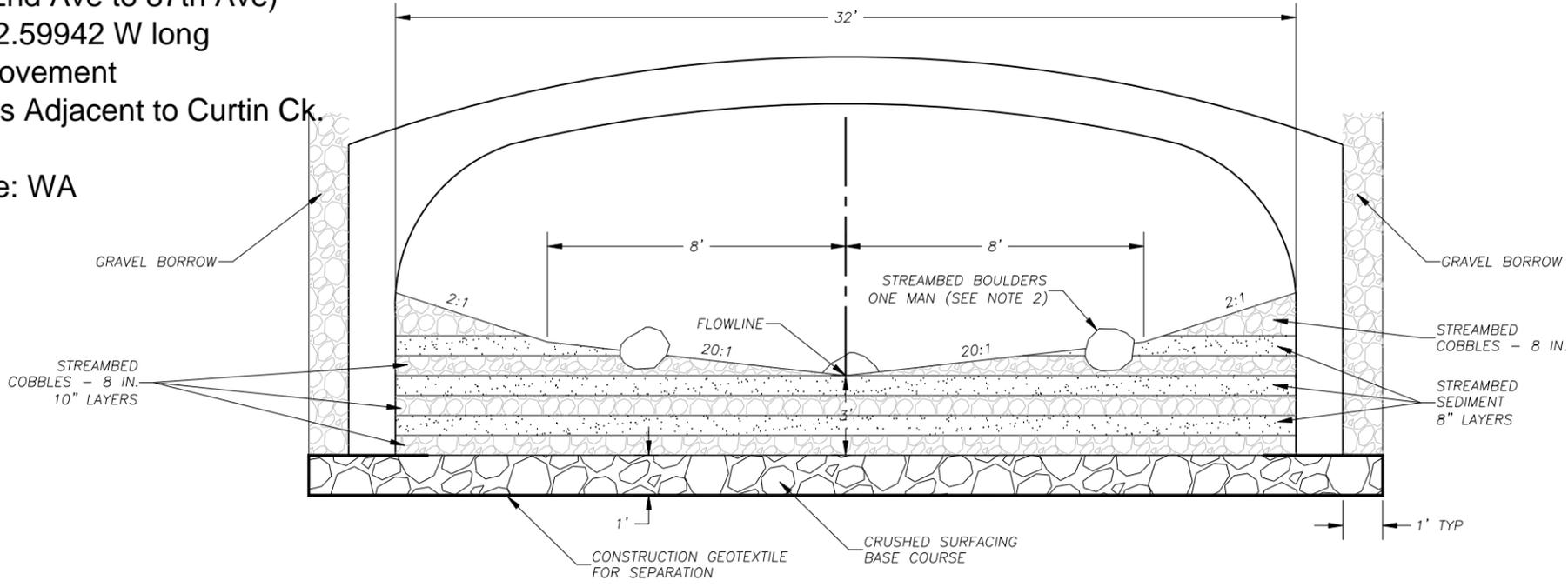
ENGINEERING AND DESIGN SECTION



DESIGNED ME/JD
 DRAWN RK/RR
 DATE 10/31/12
 DSC1

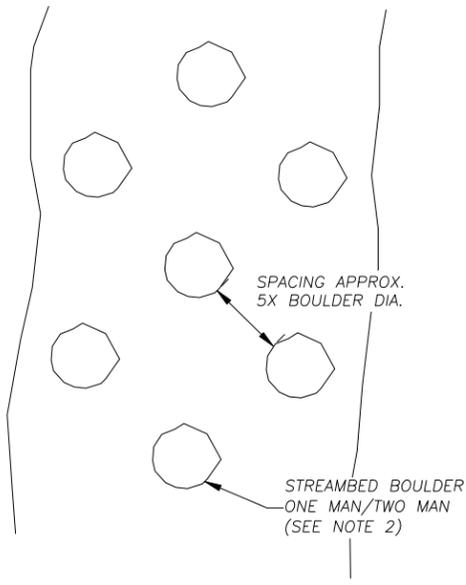
104 of 198
 Ver: 2.0

Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver
 County : Clark County State: WA
 Page 18 of 22
 Date: April 25, 2013

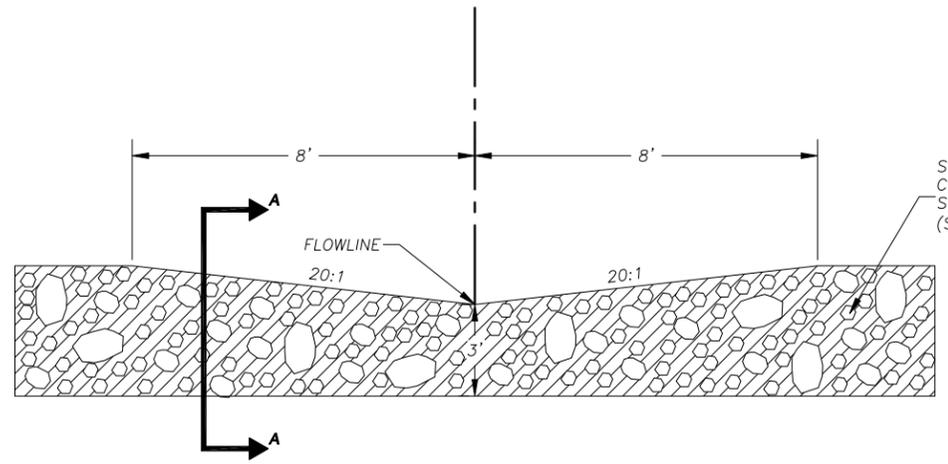


ARCH CULVERT TYPICAL SECTION
N.T.S.

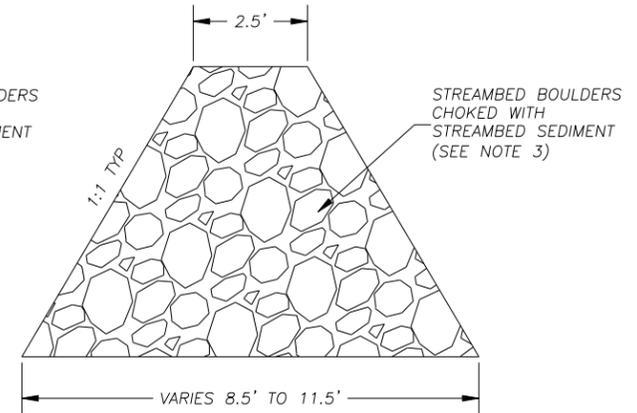
- NOTES:**
1. FOR PROFILE VIEW AND QUANTITIES SEE SHEET XXX.
 2. EMBED BOULDERS 1/2 TO 2/3 DEPTH, (EXCEPT ON TWO MAN BOULDERS)
 3. SEE SPECIAL PROVISIONS FOR ROCK BAND.



STREAMBED BOULDER DETAIL
N.T.S.



ROCK BAND TYPICAL SECTION
N.T.S.



ROCK BAND SECTION A-A
N.T.S.



PUBLIC WORKS
 ENGINEERING & CONSTRUCTION DIVISION

TRANSPORTATION PROGRAM

NE 119TH STREET CRP# 390722
 STREAM CROSSING DETAILS
 NE 72ND AVENUE TO NE 87TH AVENUE
 SHEET 2/4

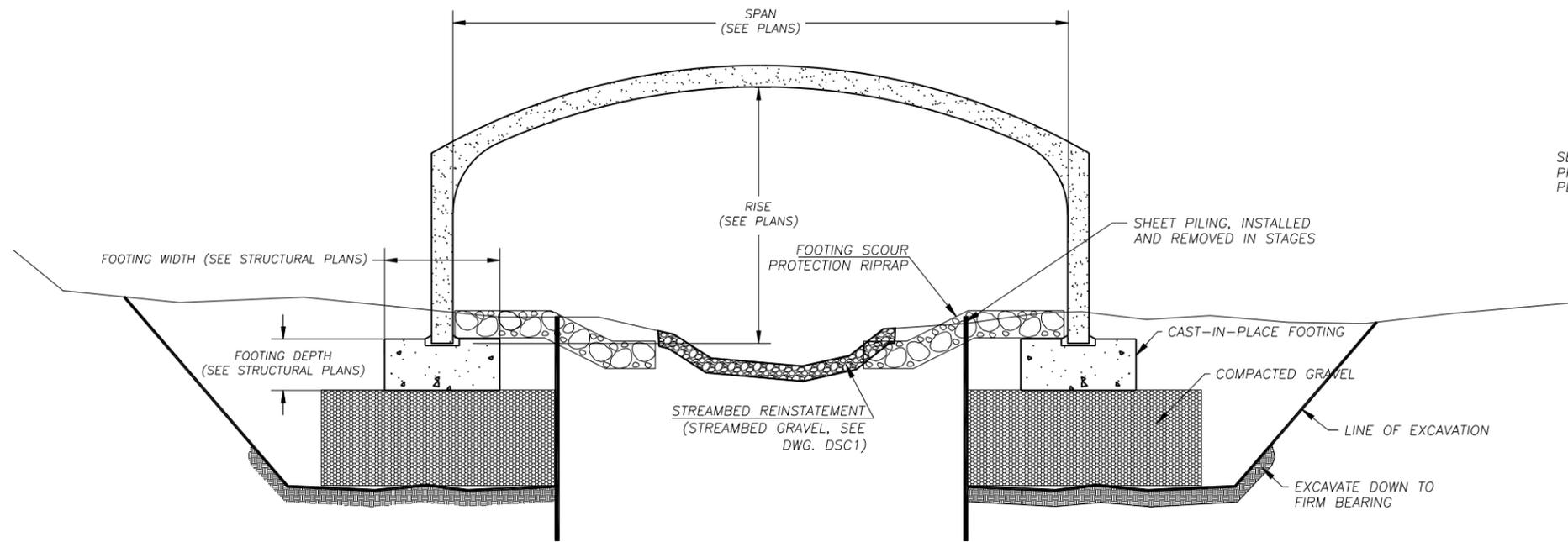
CALL 48 HOURS BEFORE YOU DIG
 1-800-553-4344
 "It's the Law"
 NORTHWEST UTILITIES NOTIFICATION CENTER

ENGINEERING AND DESIGN SECTION



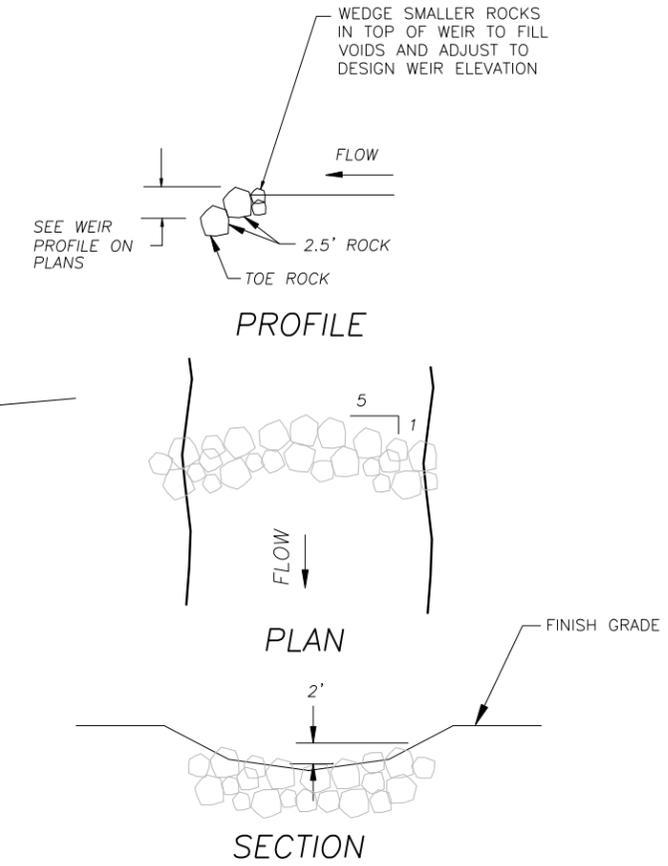
DESIGNED ME/JD
 DRAWN RK/RR
 DATE 10/31/12

DSC2
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 Ver: 2.0

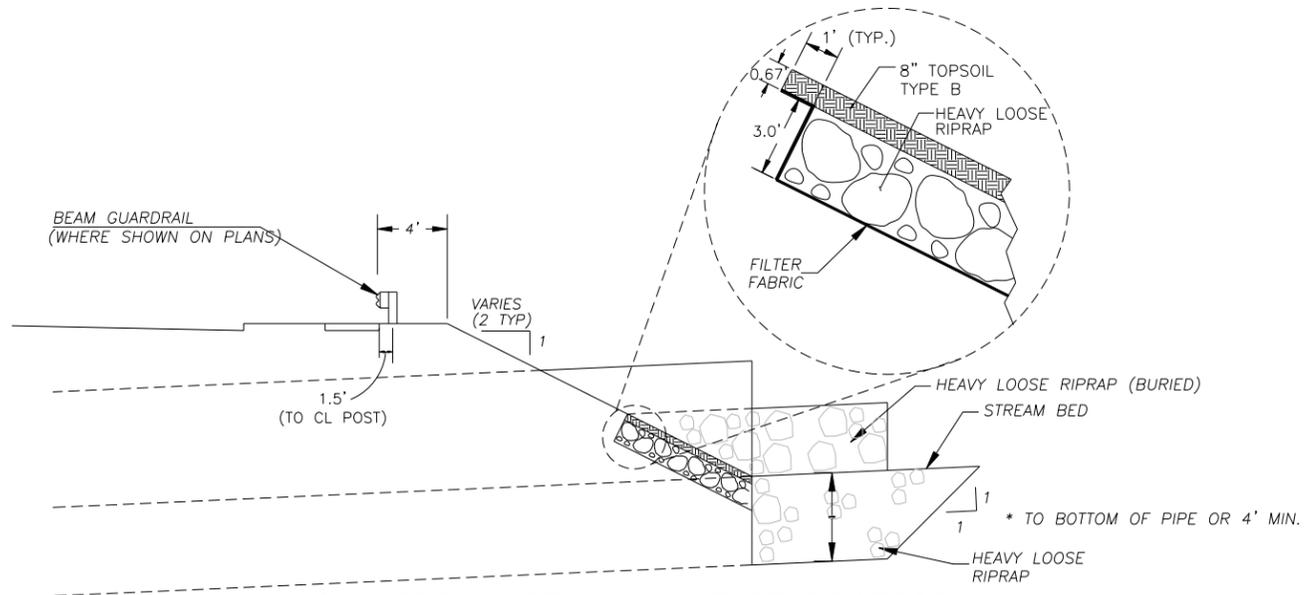


CULVERT CROSS SECTION ("CON-SPAN")
N.T.S.

- NOTES:
1. SEE PLAN AND PROFILE SHEETS FOR DETAILED LAYOUT AND ELEVATION INFORMATION.
 2. SEE STRUCTURAL DESIGN SHEETS FOR FOUNDATION DESIGN AND RIPRAP SCOUR PROTECTION.
 3. DESIGN OF "CON-SPAN" BRIDGE STRUCTURE TO BE PROVIDED BY MANUFACTURER
 4. SEE DWG. DSC3 FOR SPECIFICATIONS FOR CON-SPAN BRIDGE SYSTEMS.



ROCK WEIR DETAIL
N.T.S.



CULVERT INLET AND OUTLET PROTECTION
N.T.S.

- NOTES:
1. SEE PLAN AND PROFILE SHEETS FOR DETAILED LAYOUT AND ELEVATION INFORMATION.
 2. FILTER FABRIC SHALL BE CONSTRUCTION GEOTEXTILE FOR SEPARATION OR SOIL STABILIZATION
 3. FOR BEAM GUARDRAIL, SEE WSDOT STD. PLAN C-1.
 4. WHERE DRIVEN BEAM MAY IMPACT CULVERT, PROVIDE 12'-6" SPAN PLACEMENT PER WDOT STD PLAN C-2K.

Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver
 County : Clark County State: WA
 Page 19 of 22
 Date: April 25, 2013



PUBLIC WORKS
ENGINEERING & CONSTRUCTION DIVISION

TRANSPORTATION PROGRAM

NE 119TH STREET CRP# 390722
 STREAM CROSSING DETAILS
 NE 72ND AVENUE TO NE 87TH AVENUE
 SHEET 19



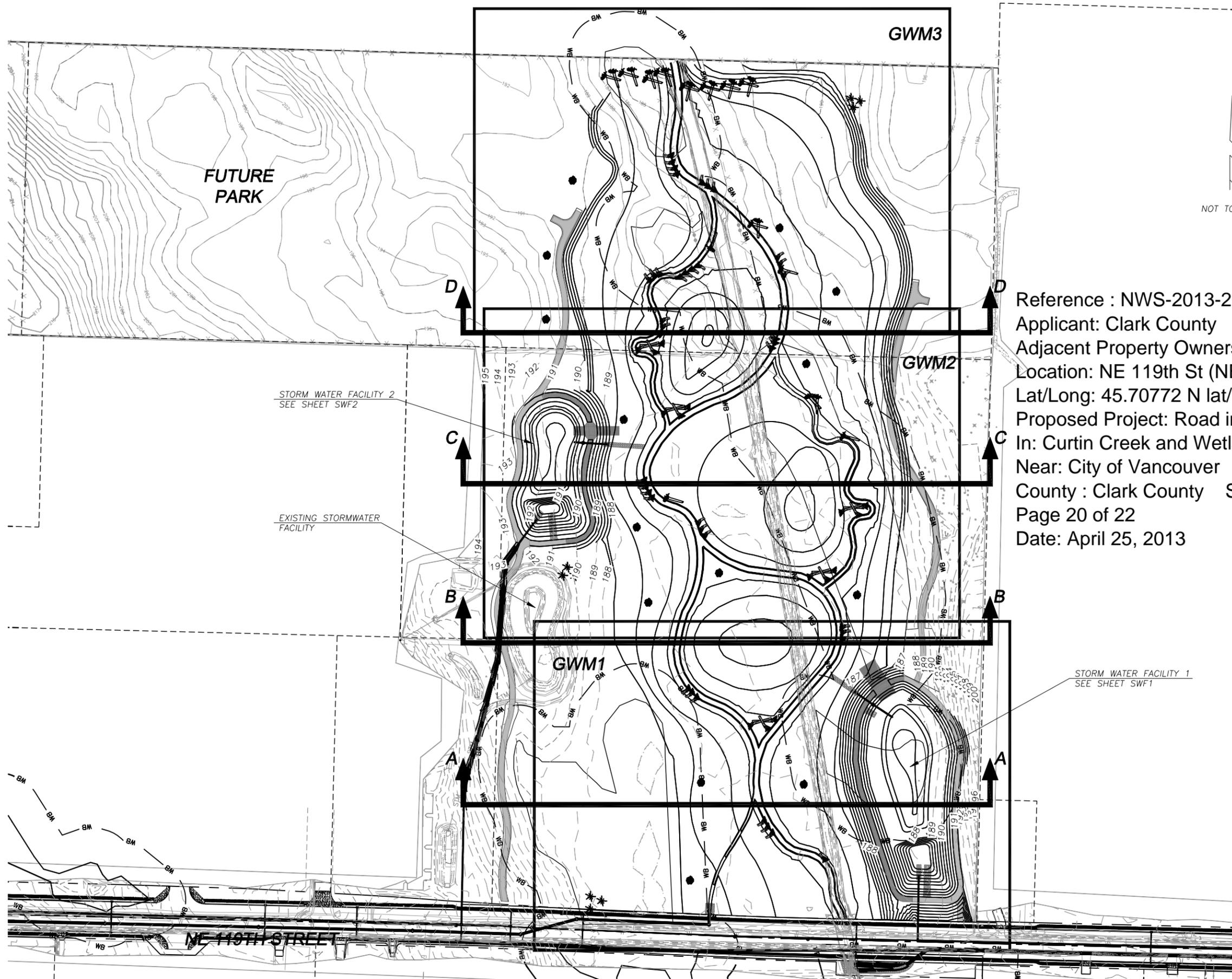
ENGINEERING AND DESIGN SECTION



DESIGNED ME/JD
 DRAWN RK/RR
 DATE 10/31/12
 DSC3

106 X 198
 Ver: 2.0

N:\CIP\PROJECTS\2012\NE 119th St\Drawings\2012\Stream Crossing\Detail\19.dwg, 10/30/12 1:00 PM, rrr



Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
 Location: NE 119th St (NE 72nd Ave to 87th Ave)
 Lat/Long: 45.70772 N lat/-122.59942 W long
 Proposed Project: Road improvement
 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver
 County : Clark County State: WA
 Page 20 of 22
 Date: April 25, 2013

LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND MAY BE INCOMPLETE



PUBLIC WORKS
 ENGINEERING & CONSTRUCTION DIVISION
 TRANSPORTATION PROGRAM

NE 119TH STREET CRP# 390722
 WETLAND MITIGATION AREA
 NE 72ND AVENUE TO NE 87TH AVENUE
 WETLAND MITIGATION SHEET LAYOUT



ENGINEERING AND DESIGN SECTION



DESIGNED ME/JD
 DRAWN RK/RR
 DATE 10/31/12
 LAY2
 01xx0fxx198



PUBLIC WORKS
ENGINEERING & CONSTRUCTION DIVISION

TRANSPORTATION PROGRAM

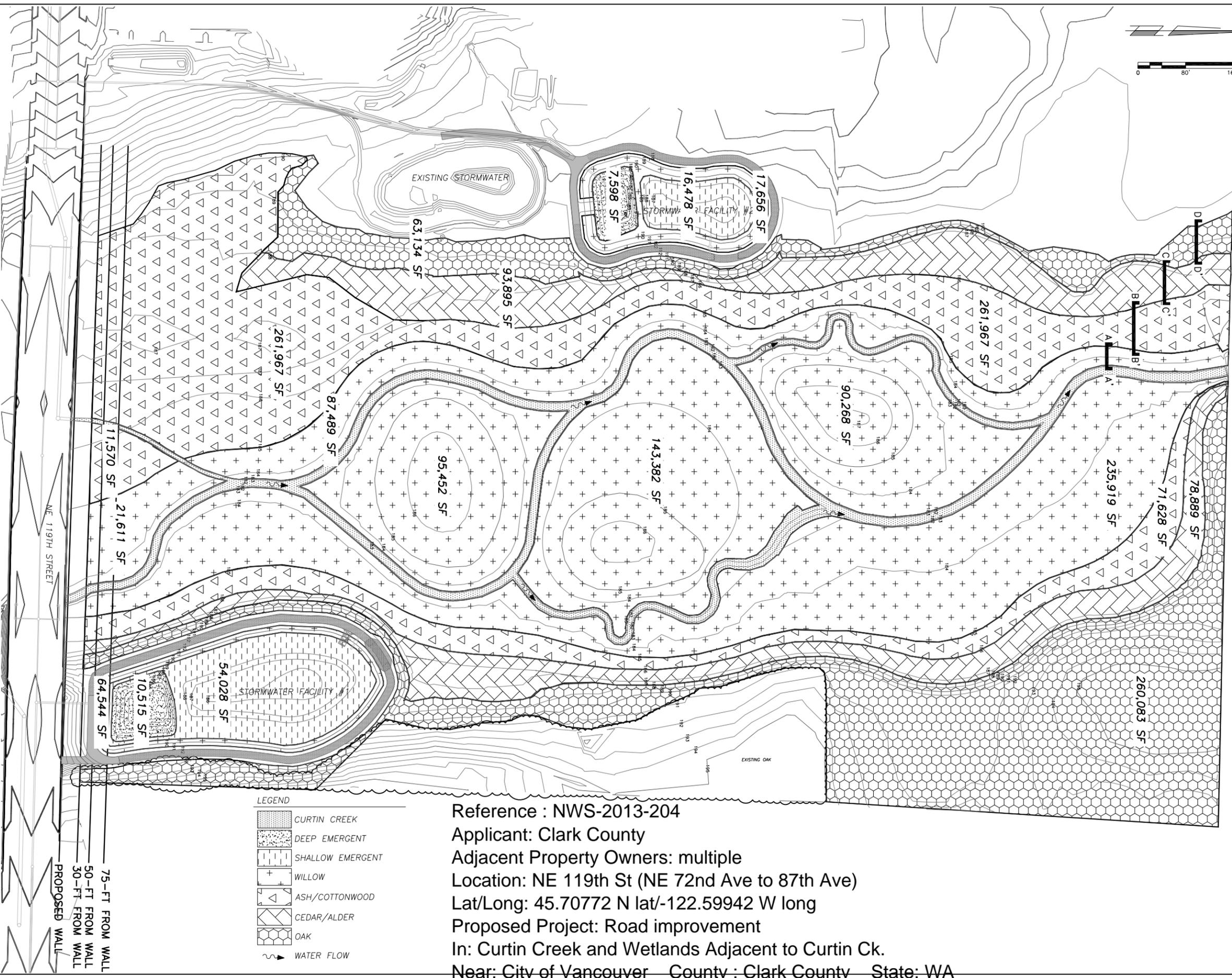
NE 119TH STREET CRP# 390722
PLANTING PLAN
NE 72ND AVENUE TO NE 87TH AVENUE
WETLAND MITIGATION AREA

CALL 48 HOURS BEFORE YOU DIG
1-800-424-5555
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NORTHWEST UTILITIES NOTIFICATION CENTER

ENGINEERING AND DESIGN SECTION



DESIGNED JC
DRAWN JC
DATE 10/31/12
WMPP1
108 X 198
Ver. 3.0



LEGEND

[Symbol]	CURTIN CREEK
[Symbol]	DEEP EMERGENT
[Symbol]	SHALLOW EMERGENT
[Symbol]	WILLOW
[Symbol]	ASH/COTTONWOOD
[Symbol]	CEDAR/ALDER
[Symbol]	OAK
[Symbol]	WATER FLOW

Reference : NWS-2013-204
 Applicant: Clark County
 Adjacent Property Owners: multiple
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 In: Curtin Creek and Wetlands Adjacent to Curtin Ck.
 Near: City of Vancouver County : Clark County State: WA
 Page 22 of 22 Date: April 25, 2013

75-FT FROM WALL
 50-FT FROM WALL
 30-FT FROM WALL
 PROPOSED WALL