



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 08-129544-LO
Project Name/Address: East Creek Rehabilitation
13451 SE 27th Place
Planner: Kevin LeClair
Phone Number: 425-452-2928

Minimum Comment Period: October 2, 2008

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

REVIEWED

By Kevin LeClair at 11:00 am, Sep 10, 2008

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable: **A&M Auto East Creek Restoration.**

2. Name of applicant: **Paul Vedmed.**

3. Address and phone number of applicant and contact person:

**Paul Vedmed
13451 SE 27th Pl.
Bellevue, WA 98005
Phone # 425.641.9455**

4. Date checklist prepared: **August 7, 2008.**

5. Agency requesting checklist: **City of Bellevue.**

6. Proposed timing or schedule (including phasing, if applicable): **Summer 2009.**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- **Critical Areas Report**
- **JARPA Application**
- **Rehabilitation Plan**

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

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PERMIT PROCESSING

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No.

10. List any government approvals or permits that will be needed for your proposal, if known.

Pending approvals include the following:

- **Washington Department of Ecology**
- **Washington Department of Fish and Wildlife – Hydraulic Project Approval**
- **City of Bellevue Clearing and Grading, and Critical Areas Review**

Culvert was installed without permits.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The major components of this project include the removal of an existing 120-foot 36-inch culvert, regrading of 219 feet of the existing stream bed to create a positive slope, streambed gravel enhancement, and revegetation of stream buffer. Plantings of native vegetation will take place along the north and south edges of the creek and within the upland stream buffer. A mitigation plan has been developed that outlines the proposed rehabilitation measures for project-related impacts.

The overall project length is approximately 219 lineal feet of stream, while the width of impact is approximately 20 feet. The total project footprint is approximately 3,110 square feet, which includes 1,908 square feet of stream channel and 1,202 square feet of upland buffer. The side slopes of the banks are 2 horizontal :1 vertical on the north bank and 1.5 horizontal :1 vertical on the south bank.

Construction would require the use of different types of equipment including a tracked excavator, back hoe, dump trucks, utility trucks, generators, pumps, chain saws, and various hand tools. No pile driving or blasting is required. Staging of equipment and spoils would occur on the HD Fowler property. Construction is anticipated to be completed within approximately one month.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project site is located within the City of Bellevue, King County, Washington (Section 10, Township 24 north, Range 05 east, W.M.). The proposed stream restoration would be located on East Creek, east of Interstate 405, north of Interstate 90. East Creek is tributary to Richards Creek. The project site is in Water Resource Inventory Area (WRIA) 8: Cedar – Sammamish Basin. More specifically, the project site is within the Cedar River/Lake Washington Watershed, while the approximate latitude and longitude of the central project area is 47° 35' 56.72" N by 122° 19' 52.9" W at an elevation of 60-68 feet above sea level. The project will take place on the following tax parcels: 545330-0146 and 545330-0139 (A&M Auto Repair) and 545330-0150 (HD Fowler Company).

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B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other

The site is generally flat, sloping toward the stream channel. The surrounding areas are flat, paved lots.

- b. What is the steepest slope on the site (approximate percent slope)?

The north streambank on the HD Fowler property is a 1 horizontal :1 vertical slope (50 percent).

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) mapped soils in the project area as Urban land (Ur). Urban land is defined as soil that has been modified by disturbance of the natural layers with additions of fill material several feet thick. The erosion hazard is slight to moderate. The USDA SCS Hydric Soils of the State of Washington (USDA 1991) list for King County does not include Urban land as a hydric soil.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Stream restoration will require approximately 120 cubic yards of excavation of sand, silt, gravel, and cobble, from the stream channel. The purpose of this excavation is to regrade the stream channel to a positive slope. 20 cubic yards of gravel will be placed within the channel bottom to create appropriate substrate for resident fish use. This gravel will be obtained from a commercial source.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, erosion could occur during construction.

Erosion on the site will be controlled through enforcement of clearing and grading codes in BCC 23.76 and required application TESC best management practices.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

< 5%

The entire property is almost entirely covered by impervious surface. This project will not change the overall coverage by impervious on the subject property.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

General

- **A Temporary Erosion and Sediment Control Plan will be developed and implemented.**
- **A qualified Erosion and Control Inspector will review all sediment control measures twice per week during construction.**
- **Turbidity will be monitored per the Turbidity Monitoring Plan as required by the City of Bellevue.**
- **A Spill Prevention Control and Countermeasures plan that meets the standards will be developed and implemented for the project to ensure that all pollutants and products will be controlled and contained.**

- Seasonal restrictions applied to work conducted below the ordinary high water mark (OHWM) will be as required by a Hydraulic Project Approval (HPA) issued by the WDFW.
- Construction impacts will be confined to the minimum area necessary to complete the project.
- Removal of riparian vegetation will be minimized as much as possible.
- Implementation of the Mitigation Plan prepared for this project will occur.

Water Quality/Erosion Control

- BMPs will be installed according to City of Bellevue standards and will be inspected and maintained throughout the life of the project.
- Staging and soil stockpile areas will be limited to those outlined in the clearing and grading permit. Staging areas will be fenced.
- Spill kits will be kept on-site.
- If present, fuels and other potentially hazardous materials will be kept in a secured area. Secured means fenced and locked during non-work hours.
- Secondary containment will be required for all hazardous materials. Spill containment is required for generators, parked equipment, porta-potty, fuels, solvents, etc.
- The project will comply with water quality conditions identified by Ecology.
- Wash water resulting from washdown of equipment or work areas will be contained for proper treatment and/or disposal, and will not be directly discharged into state waters.
- Oil, fuels, or chemicals will not be discharged to surface waters or onto land where there is a potential for reentry into surface waters.
- Cleaning solvents or chemicals used for tools or equipment cleaning will not be discharged to ground or surface waters.
- The contractor will regularly check fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc. for leaks, and will maintain and store materials properly to prevent spills.
- BMPs will be used on all project activities to control and prevent sediments from entering aquatic systems.

In-water and Over-water Work

- Fish will be removed from the work area prior to any in-water work activities per the Fish Salvage Plan.
- Materials removed from below the OHWM, will be placed in an upland location where they cannot enter water bodies.
- Materials, such as riprap, placed within the water, will be free of sediment and/or other contaminants.
- Water pumped from the work area will be treated to remove suspended sediments prior to returning to the water body. Discharge will occur in such a manner as not to cause erosion.
- Mechanical equipment will not enter the stream channel until the project reach has been dewatered and fish salvage has been completed.
- Mechanical equipment operating in the project area will be inspected daily for leaks. Any equipment found to be leaking will immediately be fixed or removed from the project site.

2. **Air**

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Emissions would be limited to those generated by construction equipment during construction and maintenance.

Control of construction related dust and smoke is required by the clearing and grading code per BCC 23.76

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None.

3. **Water**

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The proposed restoration would take place in a tributary to East Creek.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes, proposed project is a stream rehabilitation and will require work in and adjacent to the stream channel. Please refer to A. Background question number 11 for a detailed response. Site plans are attached.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Culvert removal and channel grading will require approximately 170 cubic yards of excavation of sand, silt, gravel, and cobble from the East Creek channel. The excavation will occur at the upstream end of the channel and stop 219 feet downstream.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Yes, stream flow will be diverted around the project area during construction. The exact quantity is uncertain, but it is less than 10 cubic feet per second.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No (King Co GIS data).

The property and project area are not within the 100-year floodplain, but it was flooding on the property that prompted the owner to install the culvert.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

- b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

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No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Not Applicable.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Water runoff would be limited to stormwater water from adjacent imperious surfaces (roof tops, parking lots, roads) flowing into the stream.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No "waste materials" are present.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

See B.1.h. for a full list of measures.

4. Plants

a. Check or circle types of vegetation found on the site:

_____ deciduous tree: alder, maple, aspen, other

_____ evergreen tree: fir, cedar, pine, other

_____ shrubs

_____ grass

_____ pasture

_____ crop or grain

_____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

_____ water plants: water lily, eelgrass, milfoil, other

_____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

The total project footprint is 3,110 square feet, which includes 1,908 square feet of stream channel and 1,202 square feet of upland buffer. Grading of the stream will require the removal of some vegetation on the south bank of the stream. This would mainly be Himalayan blackberry, but will include three red alder greater than 6 inches diameter at breast height. Mature alders will be retained to the maximum extent possible. The north bank is currently unvegetated.

c. List threatened or endangered species known to be on or near the site.

No threatened or endangered plant species are known to occur at or near the project site according to Washington State Department of Natural Resources' Natural Heritage data.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

A mitigation plan has been prepared for this project that will add a significant amount of native vegetation to the stream buffer.

5. Animals

- a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other: **WDFW PHS data lists priority resident fish presence in East Creek.**

- b. List any threatened or endangered species known to be on or near the site.

East Creek is utilized by resident fish according to WDFW Priority Habitat and Species (PHS) data, and Bellevue stream inventory data lists Coho salmon in the lower reaches of East Creek and Cutthroat trout throughout the basin.

- c. Is the site part of a migration route? If so, explain.

None known.

- d. Proposed measures to preserve or enhance wildlife, if any:

The proposed mitigation plan will enhance wildlife habitat by increasing plant diversity and abundance in the project area.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Not Applicable.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any:

Not Applicable.

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No.

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- 1) Describe special emergency services that might be required.

None.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Not Applicable.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Traffic noise along Richards Road will not affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction; operation, other)? Indicate what hours noise would come from the site.

Noise will be limited to construction equipment during construction and maintenance.

- 3) Proposed measures to reduce or control noise impacts, if any:

None.

BCC 9.18 - Noise control code will limit work hours to minimize disturbance to neighboring properties.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?

The project site and parcel to the west are auto repair garages. The HD Fowler Company, a waterworks distributor, is located on southern parcel.

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

There are two buildings immediately to the north of the project site, ranging from 12 to 18 feet from the stream. The eastern building is associated with the A&M Auto Repair garage, and the western building is associated with the Bellevue Auto Detail garage.

- d. Will any structures be demolished? If so, what?

No.

The site is zoned Light Industrial by the City of Bellevue Land Use Code and Comprehensive Plan.

- e. What is the current zoning classification of the site?

Based on King County data, this area is zoned C, which is commercial area.

- f. What is the current comprehensive plan designation of the site?

Based on a review of Figure S-FA.1 – Factoria Land Use Plan in the City of Bellevue, Washington Comprehensive Plan, the project area is designated as light industrial.

- g. If applicable, what is the current shoreline master program designation of the site?

No, East Creek does not meet the cubic foot per second threshold in the project area to be classified as a shoreline of the State.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Yes, the project area includes East Creek.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project will go through the review process by the City of Bellevue.

The project will receive review under the Critical Areas Land Use Permit process with a Critical Areas Report.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Not Applicable.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Not Applicable.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

- c. What existing off-site sources of light or glare may affect your proposal?

None.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

None.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

None.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None known.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

- c. Proposed measures to reduce or control impacts, if any:

None.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

SE 30th Street will be used to access the project site. This is via the HD Fowler property.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Not Applicable.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

Not Applicable.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: *Kevin LeClair for PU Properties 9/10/08*

Date Submitted:

Reviewed by Kevin LeClair, Senior Land Use Planner, City of Bellevue on September 10, 2008



TO BE COMPLETED BY APPLICANT

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Not Applicable.

Proposed measures to avoid or reduce such increases are:

None.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The proposed project would improve riparian habitat quality.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Implement measures in the critical areas report and mitigation plan.

3. How would the proposal be likely to deplete energy or natural resources?

Not Applicable.

Proposed measures to protect or conserve energy and natural resources are:

None.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Refer to the Critical Areas Report and Biological Assessment.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Refer to the Critical Areas Report and Biological Assessment.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Not Applicable.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Not Applicable.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Not Applicable.

Proposed measures to reduce or respond to such demand(s) are:

None.

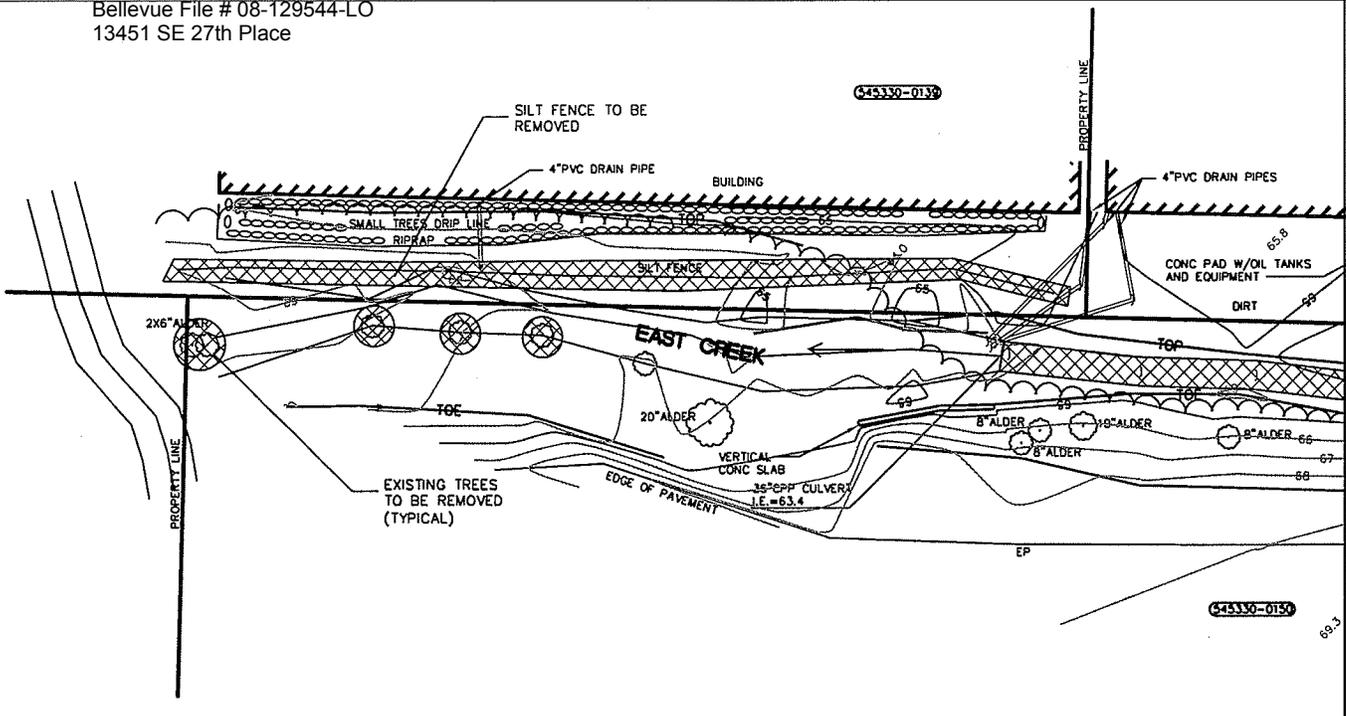
7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The project is currently being reviewed by federal, state, and local jurisdictions as part of the permit approval process.



<p>0 0.25 0.5 Miles</p>		<p>A&M Auto East Creek Rehabilitation</p>	
<p> Project Boundary</p> <p> Stream</p>		<p><i>Vicinity Map</i></p>	
<p> Road</p> <p> Freeway</p>		<p>AMIN0000-0001</p>	<p><i>Figure 1</i></p>
<p>N</p>		<p>DAVID EVANS AND ASSOCIATES INC.</p>	

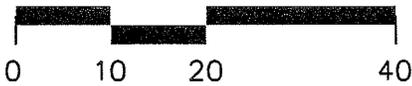
East Creek Rehabilitation
 Bellevue File # 08-129544-LO
 13451 SE 27th Place



MATCHLINE SEE EXH. 1B

LEGEND:

- ← STREAM FLOW ARROW
- TO BE REMOVED



PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

EXISTING SITE CONDITIONS

COUNTY	PROJECT	SCALE	DATUM
KING	AMIN0000-0001	AS NOTED	NAVD 88
DRAWN BY	DESIGN BY	APPROVED BY	DATE
GBK	JCGA	JASH	8-18-08

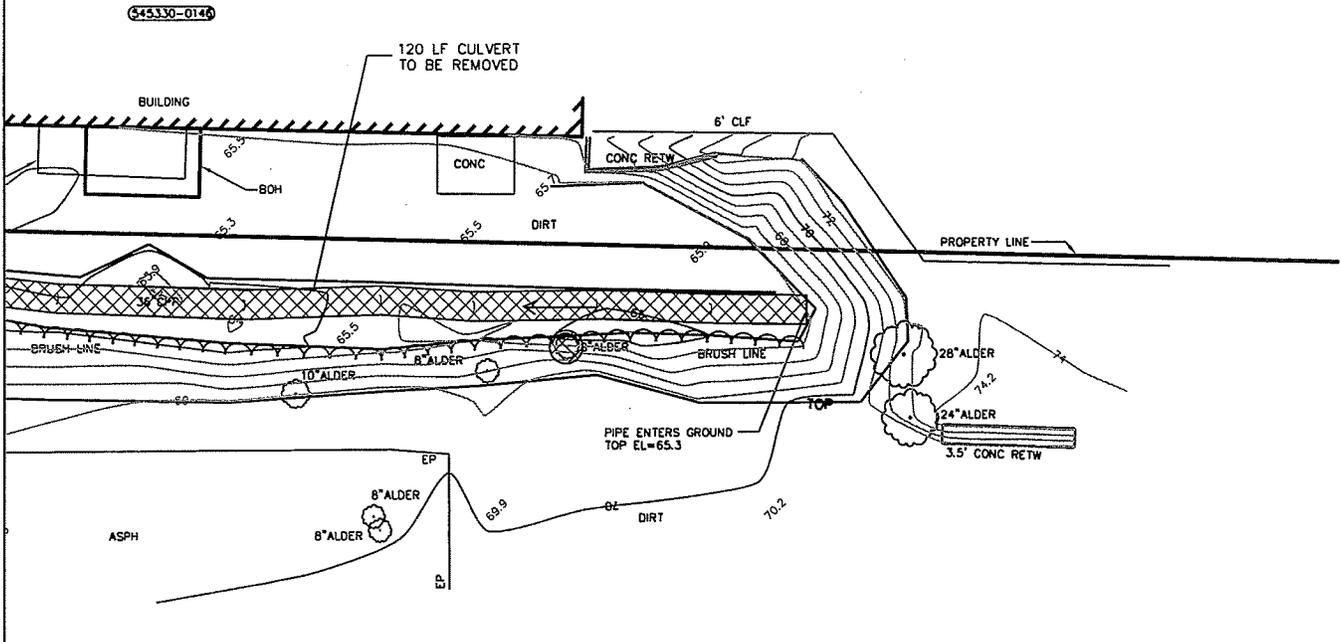
EXH. 1A



DAVID EVANS AND ASSOCIATES INC.
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.6500

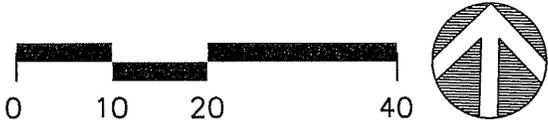
J:\A\ADMIN\00000001\A\00000001\A\JARPA EXHIBIT - EAST CREEK

MATCHLINE SEE EXH. 1A



LEGEND:

- ← STREAM FLOW ARROW
- TO BE REMOVED



PROJECT

SHEET

EAST CREEK STREAM REHABILITATION
JARPA EXHIBIT - EAST CREEK BASIN

TITLE

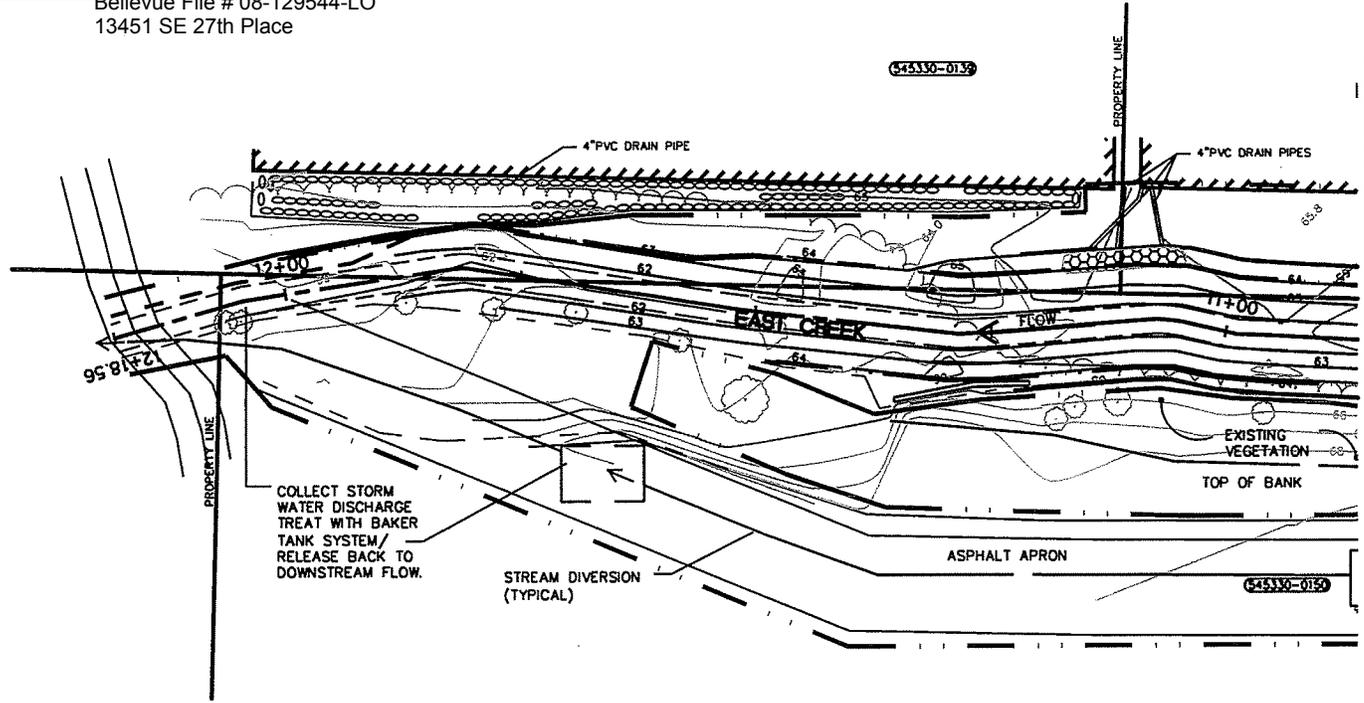
EXISTING SITE CONDITONS

DAVID EVANS
AND ASSOCIATES INC.
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.6500

COUNTY	PROJECT	SCALE	DATUM
KING	AMIN0000-0001	AS NOTED	NAVD 88
DRAWN BY	DESIGN BY	APPROVED BY	DATE
GBK	JCGA	JASH	8-18-08

EXH. 1B

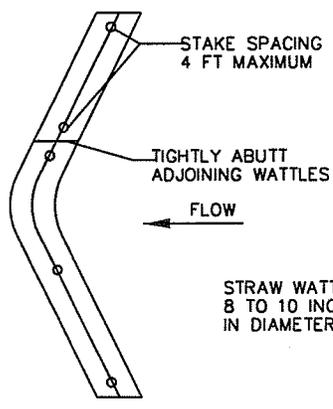
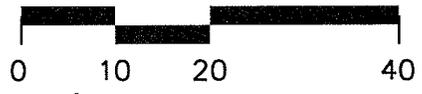
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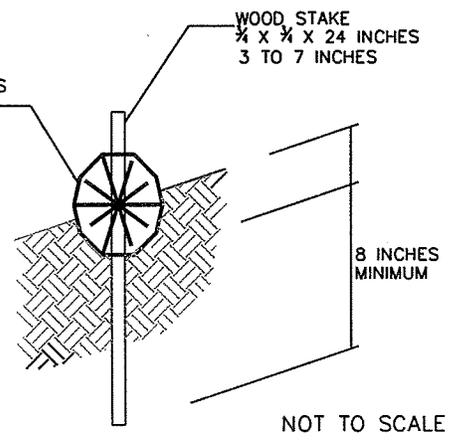
MATCHLINE SEE EXH. 2B

LEGEND:

- ← STREAM FLOW ARROW
- LIMIT OF WORK/
HIGH VISIBILITY FENCE
- - - STRAW WATTLES
- TOP OF SLOPE
- - - TOE OF SLOPE
- · - · - ORDINARY HIGH WATER MARK
- STREAM CENTER LINE
- 64 — PROPOSED CONTOUR
- · - · - EXISTING CONTOUR
- ◻ 8" QUARRY SPALL ARMOUR



PLAN VIEW



SECTION

NOT TO SCALE

SIEVE	MASS RETAINED	CUM MASS RETAINED	IND% RETAINED	% RETAINED	% PASSING
4" (100mm)	0.0	0.0	0.0	0.0	100
3" (75mm)	1.9	1.9	7.2	7.2	92
2" (50mm)	11.3	13.2	42.6	49.8	50
1 1/2" (37.5mm)	6.3	19.5	23.6	73.4	27
1" (25mm)	6.9	26.4	26.0	99.4	0-1
#200 (75um)	0.0	26.4	0.00	99.43	0-1

**STREAM CHANNEL
GRAVEL GRADIENT CHART**

STRAW WATTLE INSERT

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

GRADING PLAN



**DAVID EVANS
AND ASSOCIATES INC.**
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.8500

COUNTY

KING

PROJECT

AMIN0000-0001

SCALE

AS NOTED

DATUM

NAVD 88

DRAWN BY

GBK

DESIGN BY

JCGA

APPROVED BY

JASH

DATE

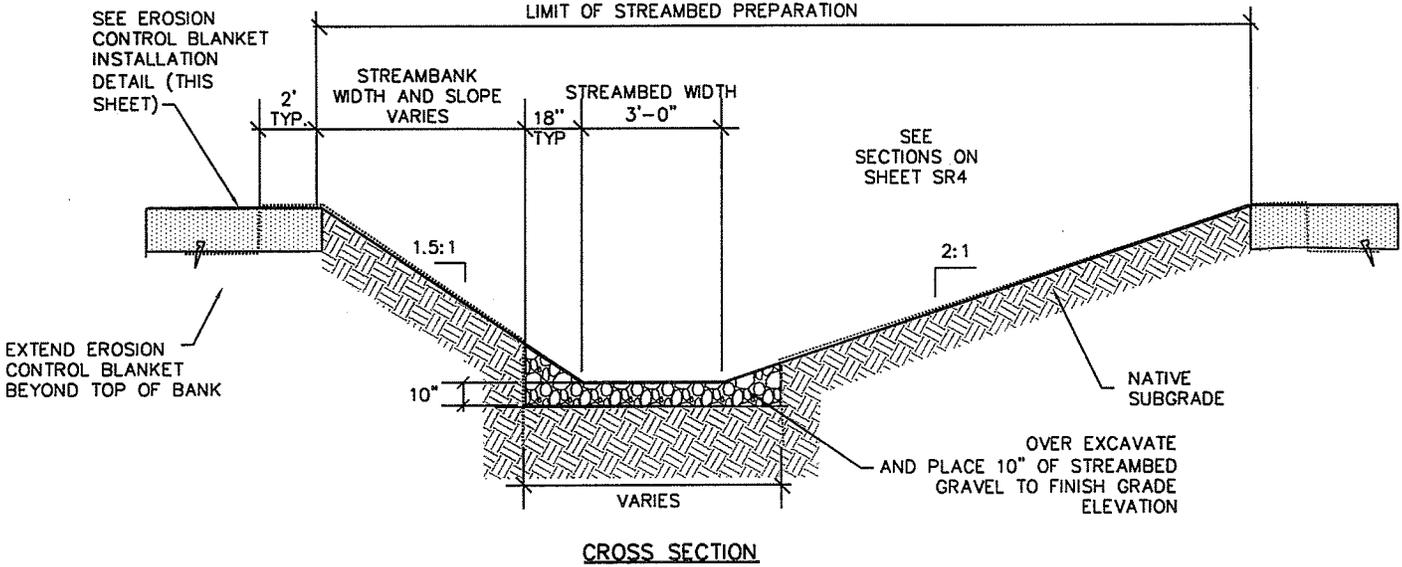
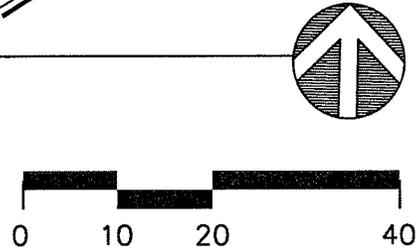
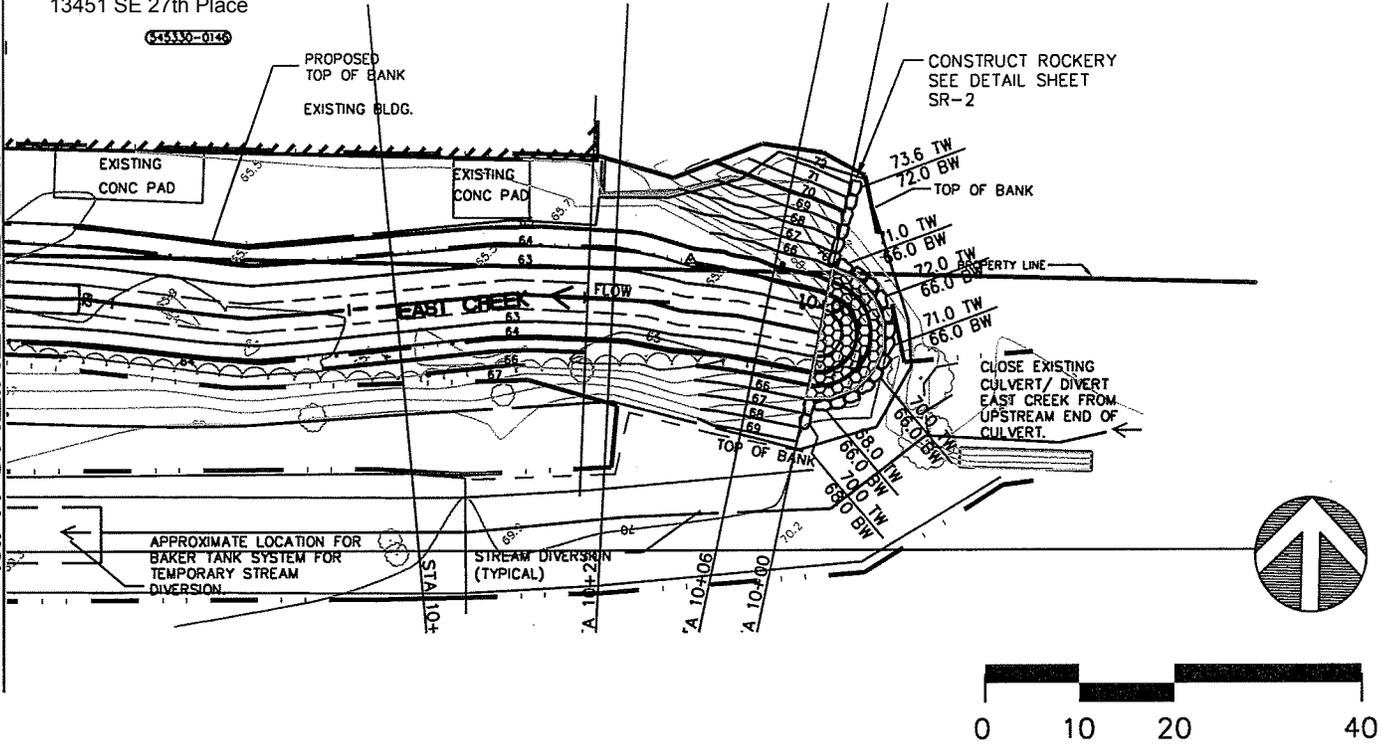
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EXH. 2A

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East Creek Rehabilitation
 Bellevue File # 08-129544-LO
 13451 SE 27th Place

MATCHLINE SEE EXH. 2A



TYPICAL STREAM CHANNEL CONSTRUCTION

NOT TO SCALE

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

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JARPA EXHIBIT - EAST CREEK BASIN

GRADING PLAN



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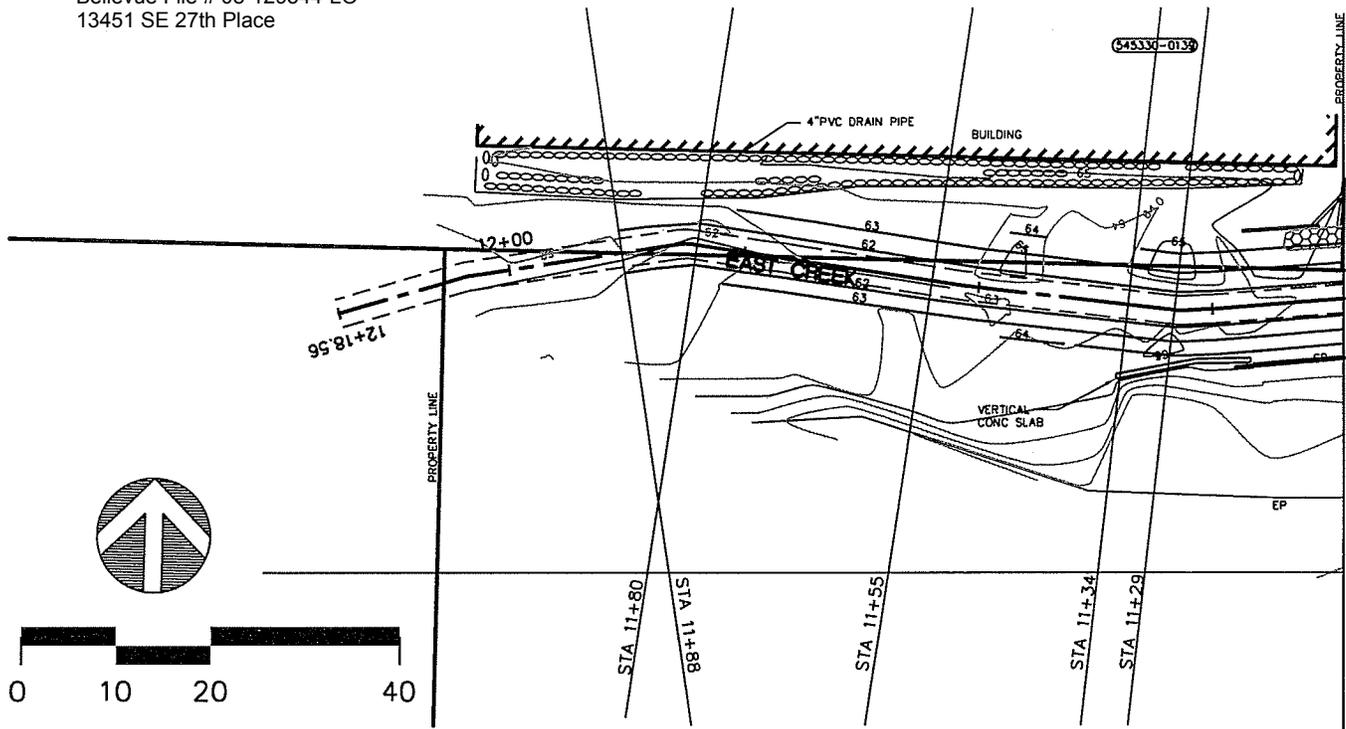
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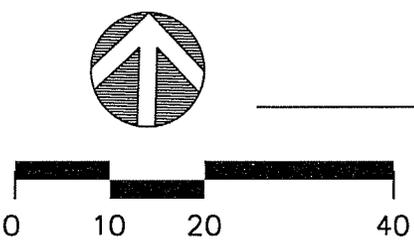
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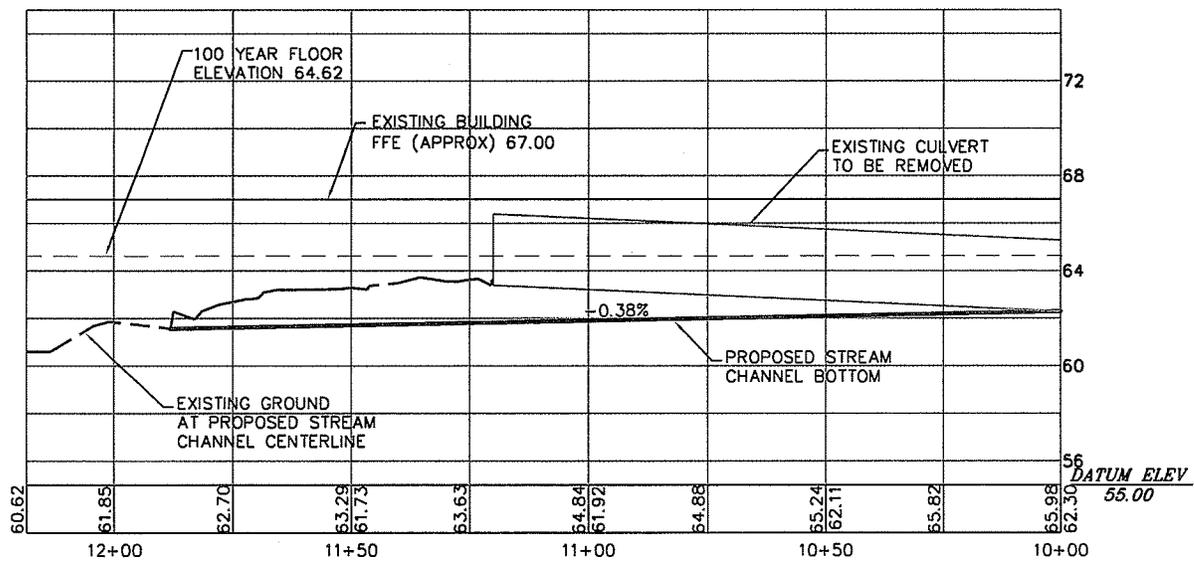
East Creek Rehabilitation
 Bellevue File # 08-129544-LO
 13451 SE 27th Place



MATCHLINE SEE EXH. 3B



STREAM CHANNEL PLAN VIEW



STREAM CHANNEL PROFILE

SCALE: VERT - 1"=8'
 HORIZ - 1"=40'

PROJECT EAST CREEK STREAM REHABILITATION SHEET

TITLE **JARPA EXHIBIT - EAST CREEK BASIN**

PROFILE AND CROSSSECTION - PLAN VIEW/ PROFILE

DAVID EVANS AND ASSOCIATES INC.
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.6500

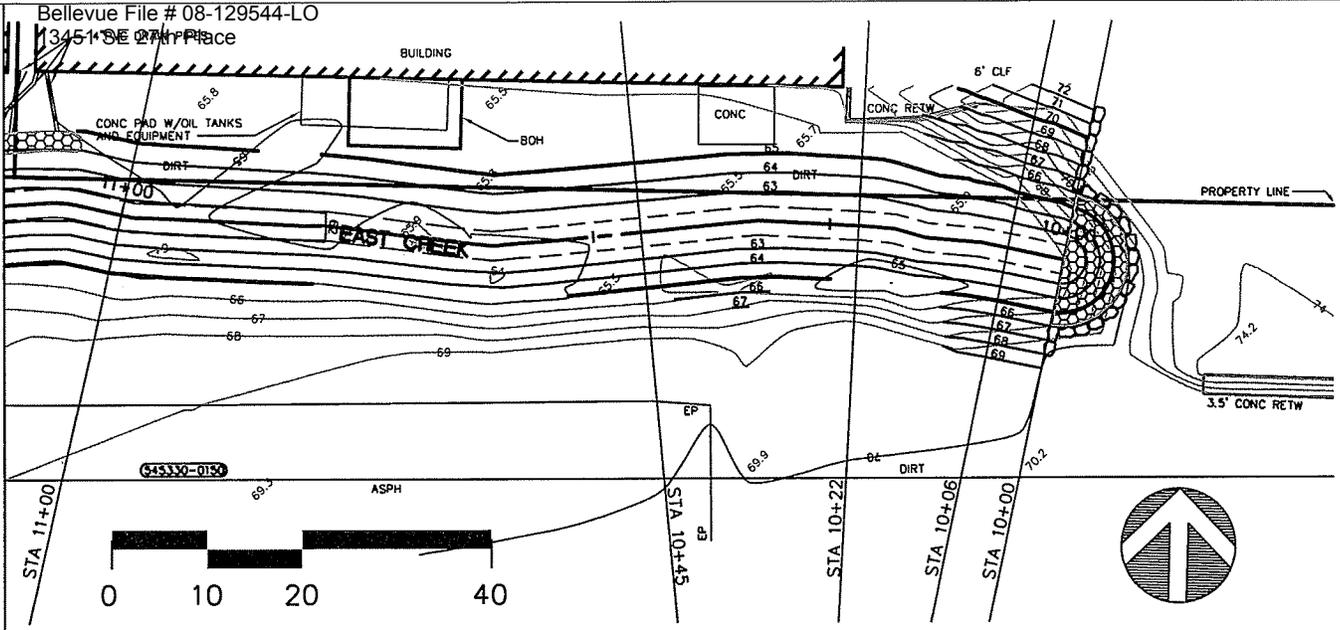
COUNTY	PROJECT	SCALE	DATUM
KING	AMIN0000-0001	AS NOTED	NAVD 88
DRAWN BY	DESIGN BY	APPROVED BY	DATE
GBK	JCGA	JASH	8-18-08

EXH. 3A

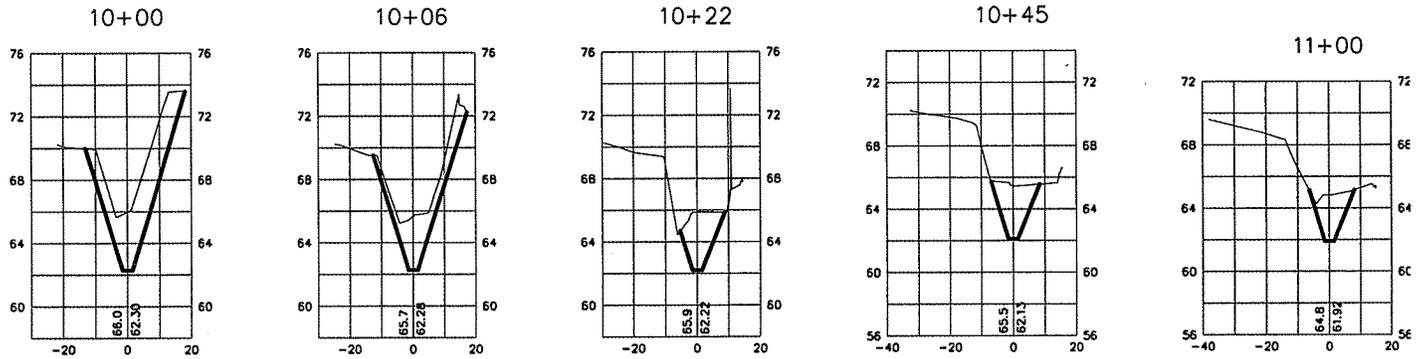
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East Creek Rehabilitation
 Bellevue File # 08-129544-LO
 13451 SE 27th Place

MATCHLINE SEE EXH. 3A

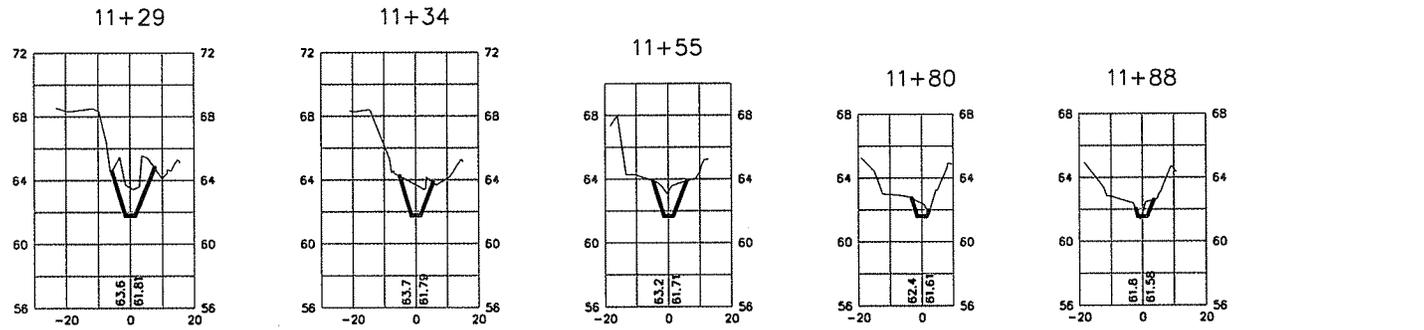


STREAM CHANNEL PLAN VIEW



STREAM CHANNEL CROSS SECTIONS

SCALE: VERT = 1"=12'
 HORIZ = 1"=60'



PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

PROFILE AND CROSS SECTION

DAVID EVANS AND ASSOCIATES INC.
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.6500

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 JCGA

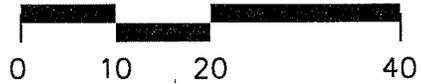
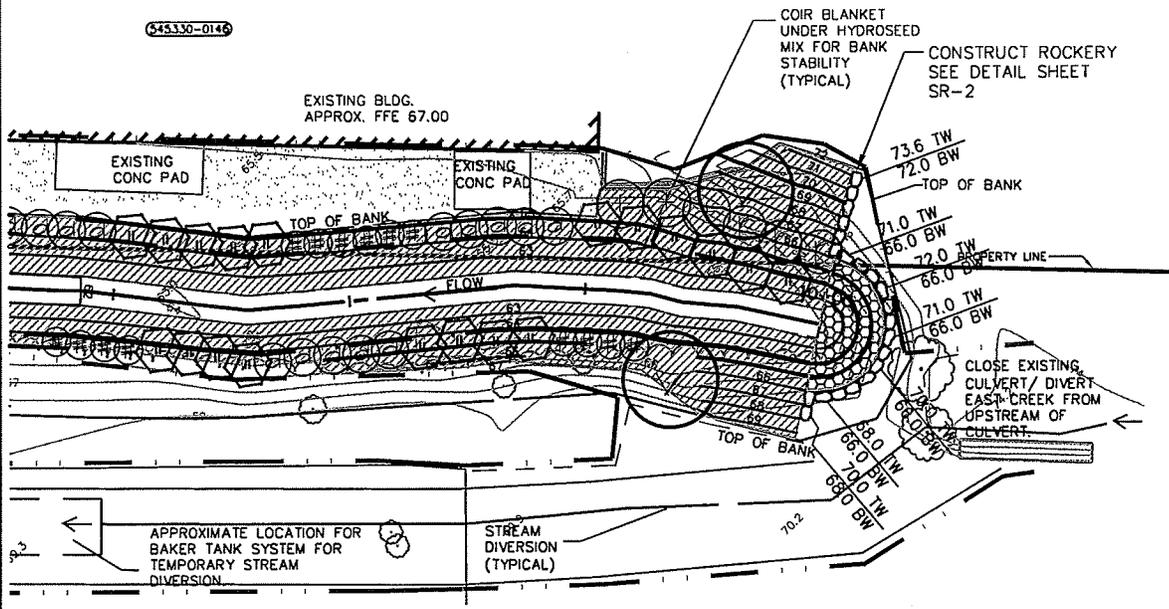
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EXH. 3B

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MATCHLINE SEE EXH. 4A



PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	QUANTITY	CONDITION	SIZE (HT)	REMARKS
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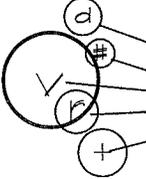
TREES



SALIX LASIANDRA	PACIFIC WILLOW	496	STAKES	36"	24" O.C.
-----------------	----------------	-----	--------	-----	----------

NOTE: EACH WILLOW SYMBOL IS EQUAL TO 16 STAKES.

SHRUBS/GROUNDCOVERS



CORNUS SERICEA	RED OSIER DOGWOOD	37	2 GAL.	3' MIN. HT.	4' O.C.
LONICERA INVOLUCRATA	BLACK TWINBERRY	35	2 GAL.	3' MIN. HT.	4' O.C.
ACER CIRCINATUM	VINE MAPLE	2	2 GAL.	3' MIN. HT.	4' O.C.
ROSA NUTKANA	NOOTKA ROSE	3	2 GAL.	3' MIN. HT.	4' O.C.
SYMPHORICARPOS ALBUS	SNOWBERRY	3	2 GAL.	3' MIN. HT.	4' O.C.

HYDROSEED MIX

KIND/VARIETY	% BY WEIGHT	MIN. % GERM
RICE CUTGRASS	45%	90%
WESTERN MANA GRASS	40%	90%
CANADA REED	10%	90%
SPIKE BENTGRASS	3%	90%
WOOL-GRASS	2%	90%

APPLICATION RATE: _____ 120 LBS/ACRE
 WOOD CELLULOSE FIBER MULCH: _____ 2,000 LBS/ACRE
 14N-14P-14K FERTILIZER: _____ 255 LBS/ACRE
 GUAR TACKIFIER: _____ 40 LBS/ACRE

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

LANDSCAPE PLAN - PLANT SCHEDULE



**DAVID EVANS
 AND ASSOCIATES INC.**
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.6500

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PROJECT

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8-18-08

EXH. 4B

DATE PLOTTED: 08/18/08 11:07:00 AM

1.0 MITIGATION PLAN OVERVIEW

The project is called the East Creek Rehabilitation Project, and is located in the City of Bellevue, Washington. East Creek rehabilitation will occur by removing an existing culvert, regrading 219 lineal feet of stream channel, 1,201 square feet of riparian buffer enhancement and installing erosion and sediment control measures. Regraded areas total 3,110 square feet of which 1,908 square feet are below the ordinary high water mark.

2.0 MITIGATION GOALS AND OBJECTIVES

The rehabilitation plan has the following goals:

1. Daylighting 120 lineal feet of culverted stream; 2) regrading the stream channel to achieve a positive flow and remain within its banks during a hundred year storm period; 3) replant the riparian buffer with native trees and shrubs for habitat diversity.

3.0 PERFORMANCE STANDARDS

A specific set of performance standards have been established that correspond to the stated mitigation goals and objectives. These standards are the primary factors that will be used to judge the success of the rehabilitation project. It will be important to evaluate the development of the stream rehabilitation program over the entire monitoring period when determining whether each individual standard has been met or not. While specific performance criteria provide important benchmarks and will help to direct maintenance and contingency efforts, the success of rehabilitation must be evaluated against the goals and objectives of the overall program. By monitoring the project and comparing monitoring results to performance standards, a determination can be made as to the need for implementing maintenance efforts or the contingency plan. The performance standards are:

1. There will be 100 percent survival of installed plant species at the end of the one year warranty period. The warranty inspection will be conducted by a qualified Wetland Biologist or Landscape Architect. The results of the inspection will be tabulated and presented to the Owner who shall inform the contractor with the recommendations for replacement.
2. Percent survival of riparian plantings as measured in year 1-5 are as follows: Year 1, 100 percent; Year 2, 80 percent; Year 3, 75 percent; Year 4, 70 percent and Year 5, 70 percent.
3. The percent cover of non-native invasive species will be less than 15 percent after five years in the stream rehabilitation areas. No Japanese Knotweed shall be permitted within the stream rehabilitation areas during the 5 year monitoring period. All Japanese Knotweed observed shall be removed with maintenance procedures and discarded off site.
4. The condition of the stream channel in East Creek will be monitored in years 1,2,3,4 and 5. Monitoring will include documentation of fish use, condition of pools and assessment of fish passage potential through the project reach. Collected stream condition data will be included in the annual mitigation monitoring reports.

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066 067 068 069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 084 085 086 087 088 089 090 091 092 093 094 095 096 097 098 099 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

STREAM MONITORING PLAN



DAVID EVANS AND ASSOCIATES INC.
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
 Phone: 425.519.8500

COUNTY

KING

PROJECT

AMIN0000-0001

SCALE

AS NOTED

DATUM

NAVD 88

DRAWN BY

GBK

DESIGN BY

JCGA

APPROVED BY

JASH

DATE

8-18-08

EXH. 5A

4.0 MONITORING PLAN

The objective of the monitoring program over its five-year duration will be to: (1) verify condition of daylighted stream channel : (2) assess revegetation success in the riparian areas, and (3) verify the non-native invasive species are not precluding establishment of the planted mitigation species. Results of all monitoring will be included in Year 1, 2, 3, 4, and 5 monitoring reports submitted to the City and Corps of Engineers by December 31 of each monitoring year. The monitoring results will be related to the performance standards and recommendations will be made based on these findings.

4.2 STREAM CHANNEL ESTABLISHMENT

The success of the stream rehabilitation will be evaluated during Years 1, 2, 3, 4, and 5 of the monitoring program. A total count of all fish, habitat types and fish barriers will be conducted each year. Rehabilitation success will be evaluated by documenting increasing fish use and habitat type diversity. No fish barriers shall develop during the monitoring time frame. In addition to the monitoring a general visual inspection with photographs will be conducted.

4.3 VEGETATION ESTABLISHMENT

The establishment and success of the rehabilitation plantings will be evaluated during Years 1, 2, 3, 4, and 5 of the monitoring program. A total count of all trees and shrubs will be conducted one year after installation. This first-year monitoring will serve as the one-year warranty inspection.

Planting success in the mitigation areas will be evaluated by assessing percent survival.

In addition to the quantitative monitoring, a general visual inspection of the mitigation areas will be conducted each year to determine the condition of the plant materials and the need for removal of invasive plants. Photopoints will be established at each mitigation area to allow a visual comparison of vegetative development. Photos will be taken from established photopoint locations, in the mitigation areas, during the annual monitoring visits. Photos will be included in the annual mitigation monitoring reports.

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**DAVID EVANS
AND ASSOCIATES INC.**
415 - 118th Avenue SE
Bellevue Washington 98005-3518
Phone: 425.519.6500

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

STREAM MONITORING PLAN

COUNTY	PROJECT	SCALE	DATUM
KING	AMIN0000-0001	AS NOTED	NAVD 88
DRAWN BY	DESIGN BY	APPROVED BY	DATE
GBK	JCCA	JASH	8-18-08

EXH. 5B

4.1 MONITORING SCHEDULE

Table 1: Monitoring Schedule

Monitoring Year	Task	Expected Date
Construction	Mitigation Installation	2009
Year 0	Planting Complete As-Builts	September 2009 December 2009
Year 1	Stream Channel Inspection, Warranty Plant Inspection and Quantitative Vegetation Monitoring, Monitoring Report	September 2010 December 2010
Year 2	Stream Channel Inspection, Vegetation Monitoring Monitoring Report	September 2011 December 2011
Year 3	Stream channel Inspection, Vegetation Monitoring Monitoring Report	September 2012 December 2012
Year 4	Stream channel Inspection, Vegetation Monitoring Monitoring Report	September 2013 December 2013
Year 5	Stream channel Inspection, Vegetation Monitoring Final Monitoring Report	September 2014 December 2014

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

STREAM MONITORING PLAN



**DAVID EVANS
AND ASSOCIATES INC.**
 415 - 118th Avenue SE
 Bellevue Washington 98005-3518
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JASH

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8-18-08

EXH. 5C

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5.0 MAINTENANCE PLAN

Maintenance within the mitigation areas will be performed by the Landscape Contractor in Years 1 during the one year warranty period. Maintenance tasks following the warranty period will be directed by the owner or under direction of the Owner's Representative. Required maintenance activities are included in Table 2.

Table 2: Maintenance Tasks

Activity	Schedule	Special Notes
Replace all failed mitigation plantings.	One year following planting. Then as required to meet performance standards.	By landscape contractor.
Temporary irrigation of new plantings.	At least weekly, June through September for two years following planting.	All plants must receive one inch of water during each watering by landscape contractor.
Weeding	At least once each year for years 1, 2, 3, 4 and 5 of the five year monitoring period	Trees and shrubs must be weeded to the dripline and mulch maintained at 2 inches depth. By landscape contractor.
Clear and grub undesirable invasive plants from NGPA. Undesirable species include: Himalayan Blackberry Evergreen Blackberry Scot's Broom English Ivy Purple Loose Strife Morning Glory Climbing Nightshade Japanese Knotweed Reed Canarygrass	As required in biannual monitoring reports.	Removal should be as directed by monitoring biologist. Clearing and grubbing should be accomplished by physically (non-mechanical) removing plant materials (including root masses) or hand trimming by landscape contractor. Weeds must be properly disposed of off-site.

PROJECT

EAST CREEK STREAM REHABILITATION

SHEET

TITLE

JARPA EXHIBIT - EAST CREEK BASIN

STREAM MONITORING PLAN



COUNTY

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PROJECT

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8-18-08

EXH. 5D

001/12/08 9:30pm - F. W. WASHINGTON COUNTY JARPA EXHIBIT - EAST CREEK BASIN