

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:

Drainage maintenance dredging at Tidegate complexes 25 and 35, off-channel to Edison Slough

2. Name of applicant:

Skagit County Drainage and Irrigation District #16

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

Skagit County Drainage and Irrigation District #16

Attention: Dave Lohman

15283 Sunset Road

Bow, Washington 98232

360 708-3468

4. Date checklist prepared: *May 2008*

5. Agency requesting checklist:

Washington Department of Fish and Wildlife

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

Drainage maintenance dredging to occur between July and October 2008. Maintenance dredging will reoccur every 3-5 years as needed to maintain tidegate operation.

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

Yes, maintenance dredging will reoccur every 3-5 years as needed to maintain tidegate operation.

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

Skagit Basin Comprehensive Irrigation District Management Plan, October 2006.

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.

None known.

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

*Hydraulic Project Approval – WDFW
Section 10 and Section 404 Permits – Army Corps of Engineers
Shoreline Exemption – Skagit County
State Water Quality Certification and Coastal Zone Management Certification - Ecology*

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.)

Conduct routine drainage network maintenance dredging downstream of tidegate complexes 25 and 35 located off-channel to Edison Slough. Excavation will remove approximately 600 cubic yards of accumulated sediment downstream of the tidegate complex 25 and 2,600 cubic yards of accumulated sediment downstream of tidegate complex 35. Dredging will be completed in one to two low tide cycles (tides below 2.5 feet Port Townsend reference station) at complex 25 and three to four low tide cycles at complex 35. The majority of the excavated material will be disposed of on adjoining lands at complex 35, but the material excavated at complex 25 will be hauled off site and disposed of on two parcels owned by District 16 (see attached photos). Dredging will be completed utilizing a hydraulic excavator on the top of the dike.

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.

See attached maps and aerial photos.

Tidegate 25 is located west of Farm to Market road near Cain's Court road, Bow, WA.

48° 33'38.77"N 122° 26'43.21"W

Tidegate 35 is located further west of tidegate 25 along the access road off Farm to Market road.

48° 33'51.41"N 122° 27'17.79"W

Section: 32

Township: 36N

Range 03E

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

b. What is the steepest slope on the site (approximate percent slope)? *Variable slopes on the banks of the slough.*

- 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.

Dredged material will be composed of mud and fine silts. Soils in the area are composed of a variety of silts, loams and gravel types. The Natural Resource Conservation Service's National Soil Information System describes the soils in the delta area as a combination of the Skagit series and the Sumas series. The Skagit series consists of very deep, poorly drained soils on flood plains and deltas. Drainage has been altered by use of tile and open ditches. These soils are subject to flooding. They formed in recent alluvium and volcanic ash. Slopes are 0 to 1 percent. The Sumas series consists of very deep, poorly drained soils on flood plains and deltas. Drainage has been altered by tiling. These soils are subject to flooding. They formed in alluvium. Slopes are 0 to 2 percent. Elevation is 0 to 50 feet. The majority of the sites are farmland or on the margin of farm fields. Adjoining lands are prime farmlands.

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

None known.

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

None.

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

Some erosion could occur as a result of maintenance dredging activities. Erosion of dredged materials will be avoided and minimized through implementation of the Best Management Practices, detailed in the following text.

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

No new impervious surfaces will result from maintenance activities.

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

- *Disturbance of native vegetation in and along the watercourses at the project sites shall be held to the absolute minimum necessary to complete dredging.*
- *Disturbed access area soils at the project sites shall be protected from erosion using vegetation and/or other means.*
- *Excavated soils will be disposed of where they cannot re-enter the watercourse. At the Complex 25 disposal locations the existing previously dredged dry soils will be bermed along the perimeter of the disposal site to form a low area to contain the newly dredged material. At Complex 35 dredged spoils will be placed landward of the dike.*

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.

Normal emissions associated with operation of gas or diesel powered equipment, however, emissions would not likely be great enough to noticeably affect air quality.

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

None known.

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

- *Cover loads of excavated material being transported from the site.*
- *Sweep and/or wash dirt/mud from vehicles prior to leaving the area.*
- *Remove soil and mud deposited on public roads.*

Vehicular emissions associated with maintenance activities are anticipated to be short-term in nature. Measures to minimize vehicular emissions could include:

- *Perform proper vehicle/equipment maintenance.*

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.
Yes, the tidegates are located on Edison Slough and are within the intertidal area of Samish Bay.
- 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, conduct routine maintenance dredging downstream of tidegate complexes 25 and 35 located off-channel to Edison Slough. Dredging will be completed in one to four low tide cycles per complex.
- 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.
Excavation will remove approximately 600 cubic yards of accumulated sediment downstream of the tidegate complex 25, and 2,600 cubic yards of accumulated sediment downstream of the tidegate complex 35.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
No.
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
Yes.
- 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.
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 to the proposed action.

c. Water runoff (including stormwater):

Runoff from the project sites from stormwater is not anticipated as the dredging actions will be completed within one to four low tide cycles.

- 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.
Not applicable to the proposed action.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
No.

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

- *Disturbance of vegetation in and along the watercourses at the project sites shall be held to the absolute minimum necessary to complete the maintenance dredging.*
- *Under no circumstances shall excavated materials be stockpiled below OHW line.*
- *Dredge spoils will be placed where they can not reenter the water course. At the Complex 25 disposal sites the existing previously dredged dry soils will be bermed along the perimeter of the disposal site to form a low area to contain the newly dredged material. At Complex 35 dredged spoils will be placed landward of the dike.*

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
- X grass
- _____ pasture
- X crop or grain
- _____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- _____ water plants: water lily, eelgrass, milfoil, other
- X other types of vegetation – *isolated small patches of intertidal algae's*

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

Banks are mown or grazed grass and blackberry and will be impacted from access of the equipment.

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

No threatened or endangered plant species are known to occur on or near the site.

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

None.

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:

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

Marbled Murrelets:

Review of the USFWS on-line critical habitat mapper indicates that the nearest designated critical habitat area is approximately 18.8 northeast of the sites. Marbled murrelets could occur on the marine waters, but are not anticipated to occur near the project site during the low tide dredging.

Chinook Salmon:

Chinook salmon can occur within Edison Slough. The entire Samish River watershed was excluded from the Critical Habitat designation for Puget Sound Chinook salmon.

Steelhead Trout:

Steelhead trout can occur within Edison Slough. The Samish hatchery and Whatcom Creek winter steelhead are not part of Distinct Population Segmented listed under the ESA.

Bull Trout:

Bull trout are not known to utilize Edison Slough, however critical habitat for bull trout includes the eastern shoreline of Puget Sound and the site is subject to tidal waters.

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

The project site is within the Pacific Flyway, an avian migratory corridor consisting of the western coastal areas of South, Central, and North America. The Skagit Delta supports large concentrations of wintering waterfowl, shorebirds, and raptors. A significant portion of an entire trumpeter swan population winters in this area, as well as the entire population of gray-bellied brant, a subpopulation of brant geese. Additionally, thousands of snow geese utilize fields in the area.

Edison Slough is also utilized as a migratory corridor for various fish species.

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

If fish removal is necessary the following fish removal protocol will be followed. Immediately prior to initiating any excavation activity below OHW line a qualified biologist experienced and trained in the handling of fish shall supervise the capture and relocation of the fish at all times:

- Whenever water is present in the upstream watercourse, a block net shall be installed immediately upstream of the proposed project area to prevent fish from migrating back into the project area during fish salvage and project activities.
 - Whenever water is present in the downstream watercourse, a block net shall be installed immediately downstream of the proposed project area to prevent fish from migrating back into the project area during fish salvage and project activities.
 - Fish shall be captured and safely moved from the project area using the best available methods and practices, including but not limited to dip netting, and seining. The preferred sequence of fish removal is to first install the upstream blocknet followed by a seine and/or dip netting efforts proceeding in the downstream direction. The downstream blocknet shall be moved, closely behind the seining crew. After establishing the downstream block net, additional sweeps of the project area with a seine is recommended. Fish handling techniques shall be implemented that result in the least amount of stress or damage to the captured fish.
 - Captured fish shall be immediately and safely transferred to the watercourse downstream of the project reach.
 - The task of capturing and immediately relocating fish for the purpose of excluding them from the project area shall not require a separate Scientific Collection Permit from the Washington Department of Fish and Wildlife.
- Fish removal is not anticipated to occur as the dredging will occur during low tide cycles when the sites are dewatered.

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.

No energy would be required for maintenance dredging activities.

- 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:

None would be required.

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.

Some risk of spills/leakage from heavy equipment exists during maintenance activities.

1) Describe special emergency services that might be required.

None would be required.

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

To protect against hazardous substance spills from routine equipment operation the contractor would fuel all equipment off-site, and conduct routine maintenance and inspection of all equipment for leaks.

- b. Noise

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

No existing noise in the area would affect the proposal during maintenance activities.

- 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.

Short-term noise will occur from the operation of the excavator and from dump trucks. Back-up alarms will generate intermittent short-term noise. Noise would be generated during daylight hours.

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

None.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties?
The sites are tidegate complexes operated and managed by the Drainage and Irrigation District 16. Adjacent land use is predominantly agriculture. Adjoining land at Site 35 is used as a hunting lodge.
- b. Has the site been used for agriculture? If so, describe.
Yes, the site is drainage management infrastructure for the adjacent agricultural lands.
- c. Describe any structures on the site.
Site 25 is composed of three 36 inch tidegates, a concrete pump station discharge channel, and dike. Site 35 is composed of four 48 inch tidegates and dike. See attached site photos.
- d. Will any structures be demolished? If so, what?
No structures will be demolished.
- e. What is the current zoning classification of the site?
Agriculture – Ag- Natural Resource Lands
- f. What is the current comprehensive plan designation of the site?
Agriculture.
- g. If applicable, what is the current shoreline master program designation of the site?
Urban, Rural and Aquatic Shoreline Areas.
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Critical Areas in Skagit County include; wetlands, aquifer recharge areas, flood hazard areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. Project sites are likely to contain fish and wildlife conservation areas as they are located within tidally influenced watercourses.
- i. Approximately how many people would reside or work in the completed project?
Not applicable.
- j. Approximately how many people would the completed project displace?
Not applicable.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
Not applicable.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The land use would not change as a result of the proposed actions.

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?
No new structures are proposed.
- b. What views in the immediate vicinity would be altered or obstructed?
Views would not be altered or obstructed from the proposed actions.
- 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?
None.
- 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?
Private waterfowl hunting at Site 35.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
No.
- 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.
No known registered sites.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None.
- 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.
The sites are accessed off Farm to Market Road. Site 35 is accessed off West Edison Lane. Existing site access will not change.
- 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?
None.
- 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.

Not applicable.

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.

Not applicable.

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: *David Shum*

Date Submitted: *5-15-08*

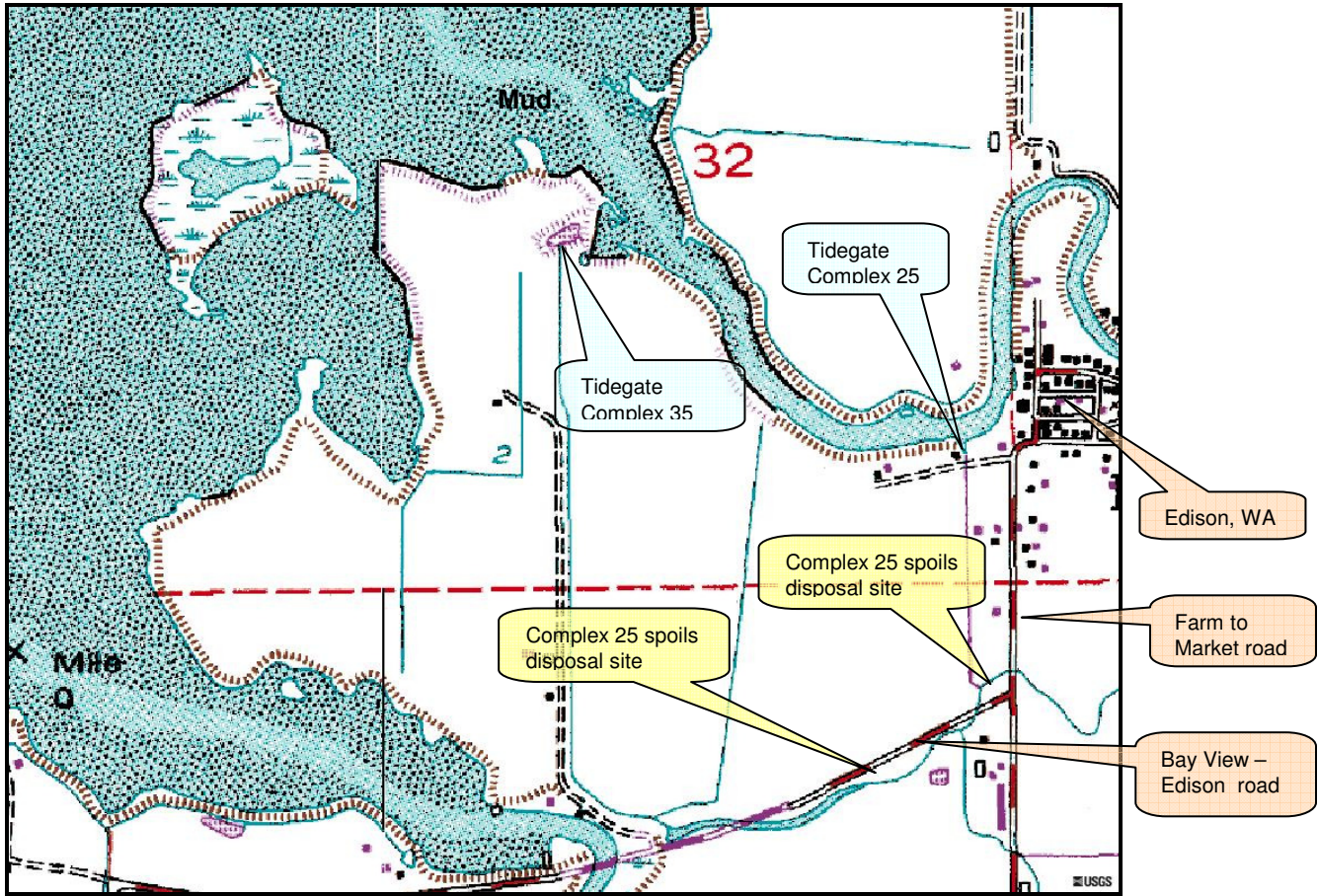


Figure 1. Site Map: Skagit Drainage and Irrigation District 16 Tidegate Complexes 25 and 35.

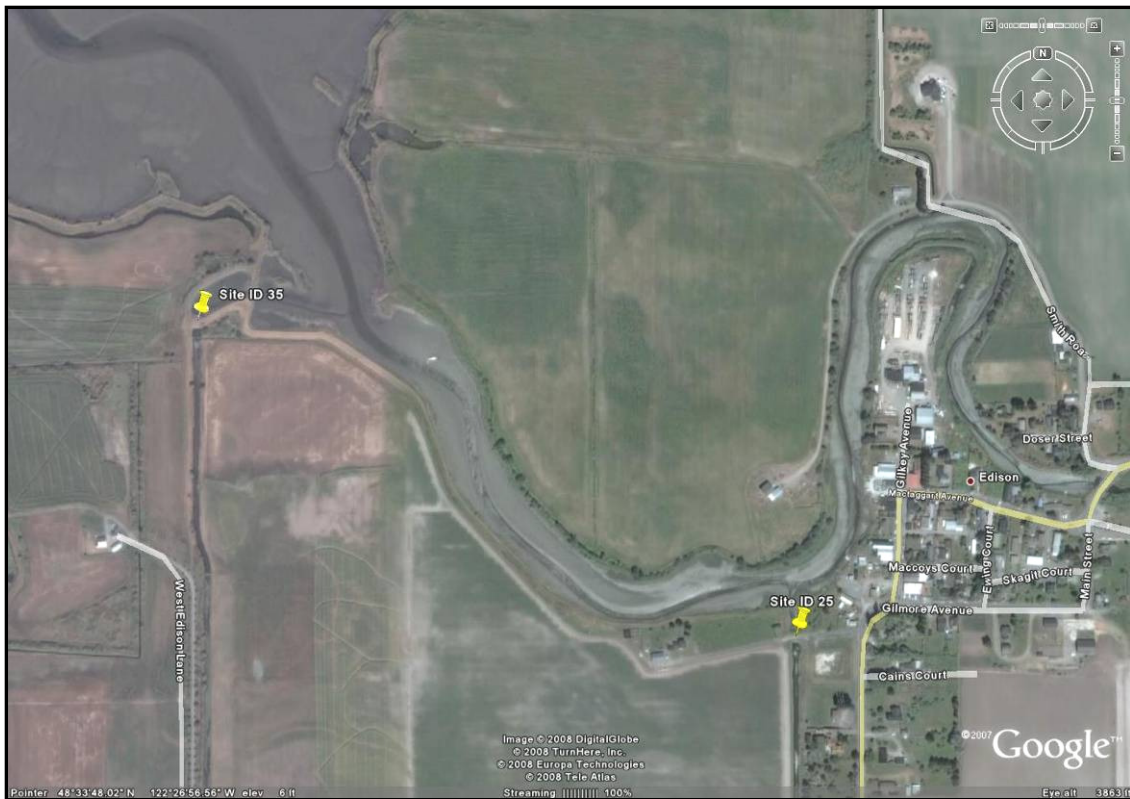


Figure 2. Skagit Drainage and Irrigation District 16 Tidegate Complexes 25 and 35, aerial.



Figure 3. Tidegate Complex 25.



Figure 4. Tidegate Complex 35.



Figure 5. Complex 35 Dredge Spoils Disposal Areas.

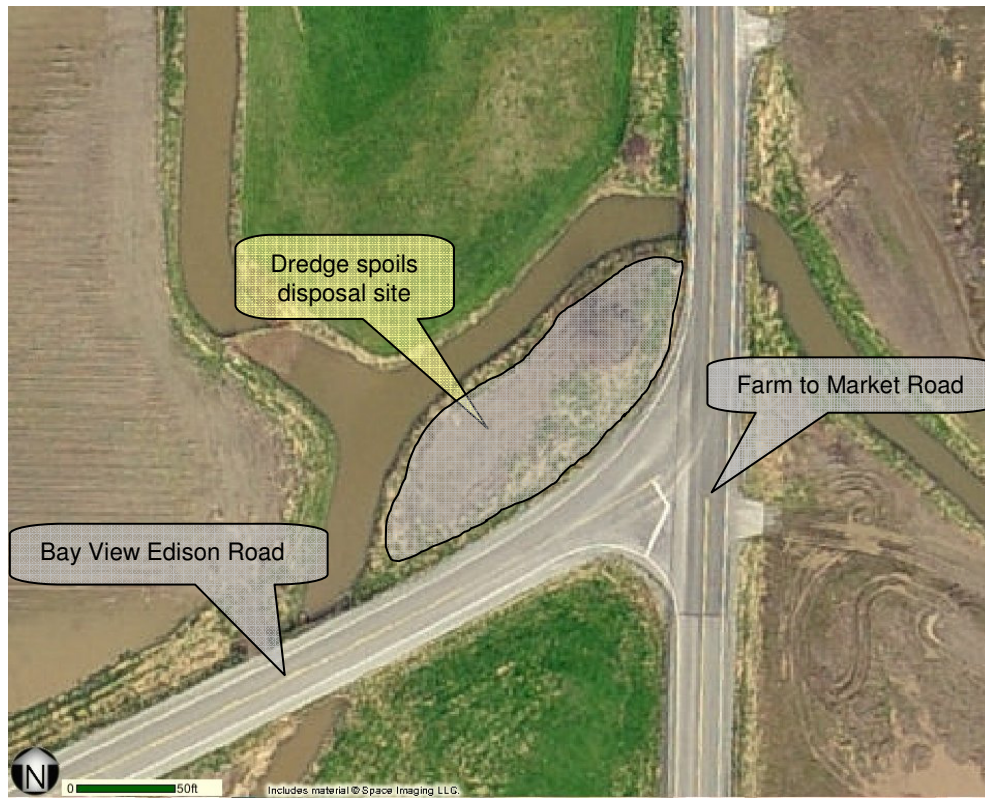


Figure 6. Complex 25 Dredge Spoils Disposal Area.

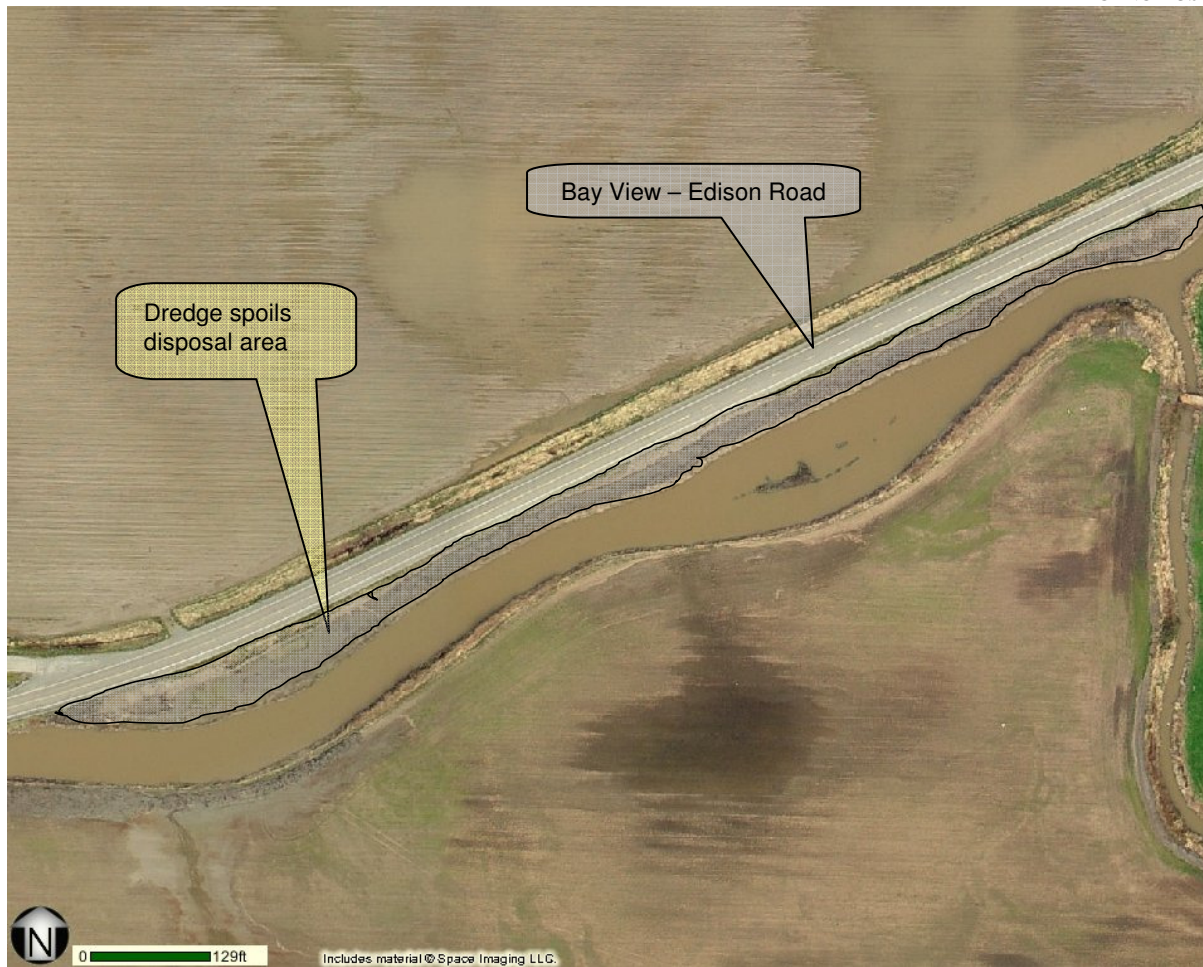


Figure 7. Complex 25 Dredge Spoils Disposal Area.

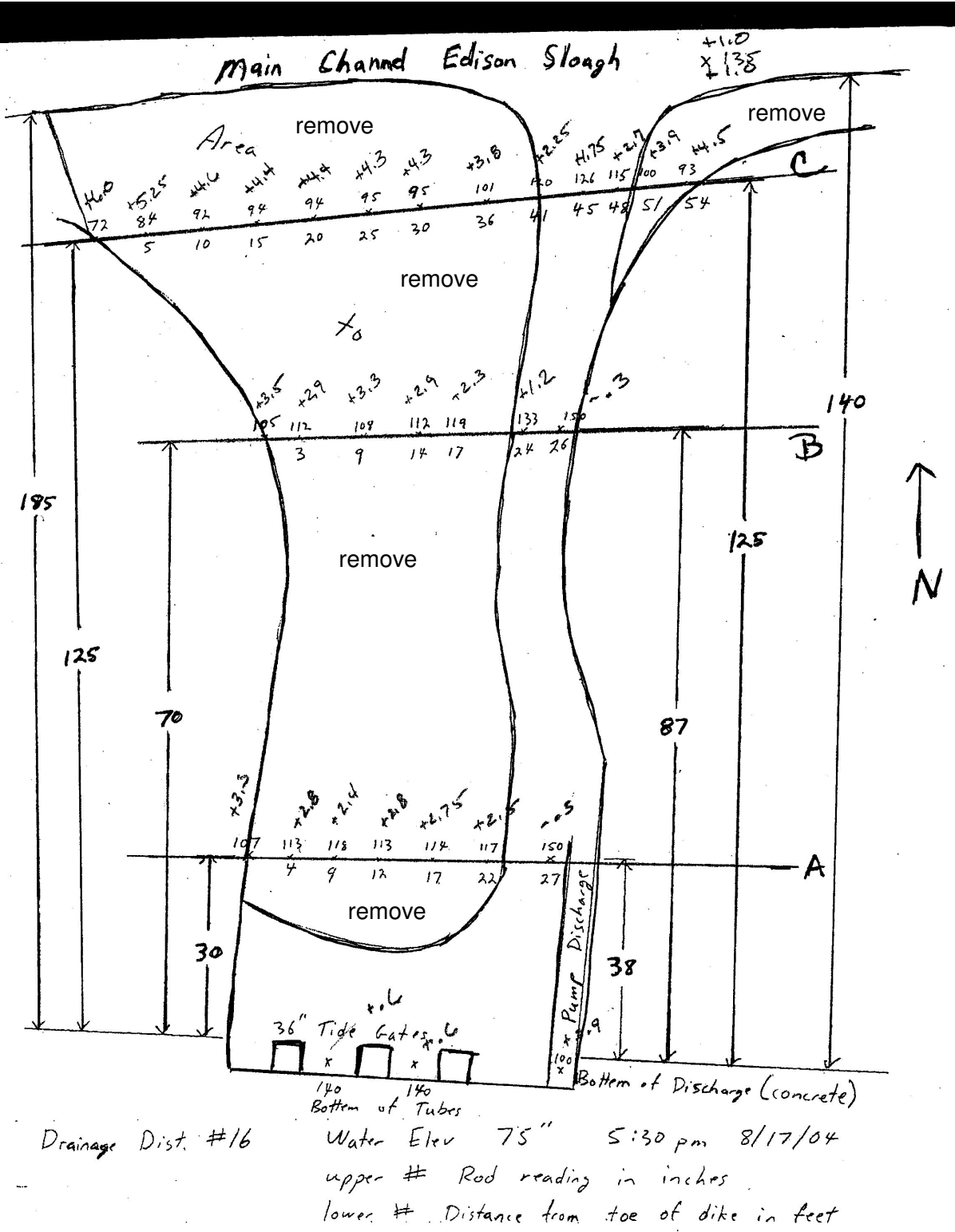


Figure 8. Tidegate Complex 25 – Site Plan and cross-section locations.

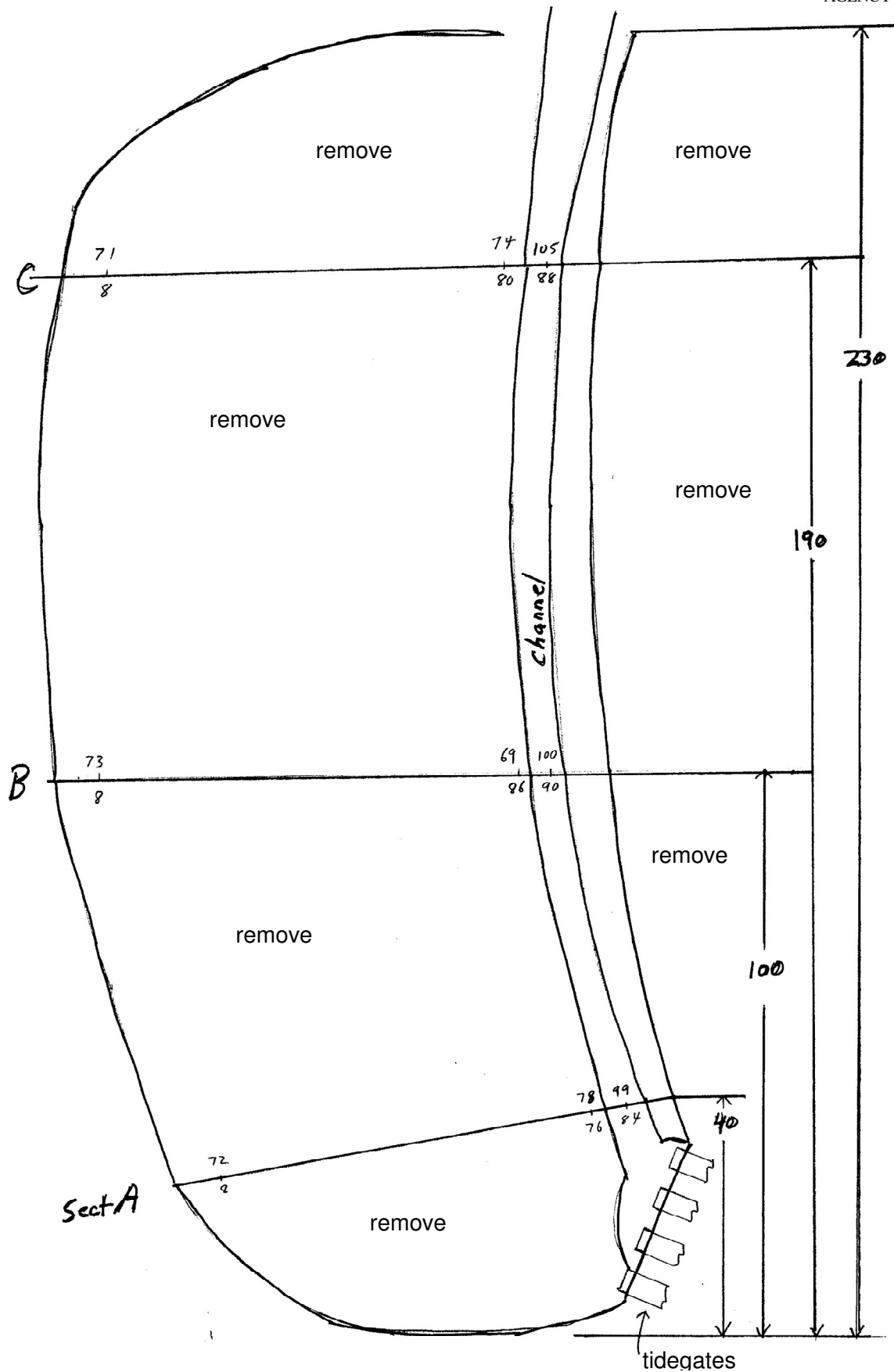


Figure 9. Tidegate Complex 35 – Site Plan and cross-section locations.



Figure 10. Tidegate Complex 25 side channel to Edison Slough.



Figure 13. Tidegate Complex 35 downstream of gates at low tide.



Figure 11. Edison Slough upstream of tidegate complex 25 side channel.



Figure 14. Downstream of Tidegate Complex 35 showing accumulated sediment.



Figure 12. Edison Slough downstream of tidegate complex 25 side channel.



Figure 15. Channel downstream of Tidegate Complex 35 at dike points (See aerial photo above).



Figure16. Drainage channel outside of work area at confluence with Edison Slough.



Figure 17. Typical dike bank and site access.