



# HARTCROWSER

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### Letter of Transmittal

Anchorage

**To:** Parametrix  
5808 Lake Washington Blvd. NE  
Suite 200  
Kirkland, WA 98033-7350

**Date:** June 18, 2001

**Job No.:** 4978-06

Boston

**Attn:** Jim Kelley

**Re:** Third Runway Project, Borrow Area 3 Wetland Protection Swale

### We are sending the following items:

Chicago

Date	Copies	Description
6/01	3	Figure 1 Draft Post-Reclamation Topography and Drainage Facilities
6/01	3	Figure 2 - Draft Typical Cross Sections
6/01	3	Figure 3 - Draft Post-Reclamation Topographical Detail
6/01	3	Figure 4 - Draft Proposed Wetland Protection Swale Profile and Cross Section

Denver

### These are transmitted:

Fairbanks

- For your information    
 For action specified below    
 For review and comment    
 For your use    
 As requested

### Remarks

Jersey City

Enclosed please find the revised plan and sections for the Borrow Area 3 Wetland protection Swale that provides mitigation of potential seepage changes. Per your request, copies are being sent directly to Ann Kenny at Ecology and Katie Walter at Shannon and Wilson. Pending any comments from the agencies, these draft plans and sections will be incorporated into the Borrow Area 3 excavation plans.

Please call if you have any questions.

Juneau

**By:**

*Michael Bailey*  
Michael Bailey, P.E.

Long Beach

**Title:** Senior Principal

- Copies to:**
- Ann Kenny, Ecology (4)
  - Katie Walter, Shannon & Wilson (1)
  - Elizabeth Leavitt, Port of Seattle (1)
  - Alan Black, HNTB (2)
  - Jim Thomson, HNTB (1)
  - Paul Fendt, Parametrix (1)
  - Ralph Wessels, Port of Seattle (1)

Portland

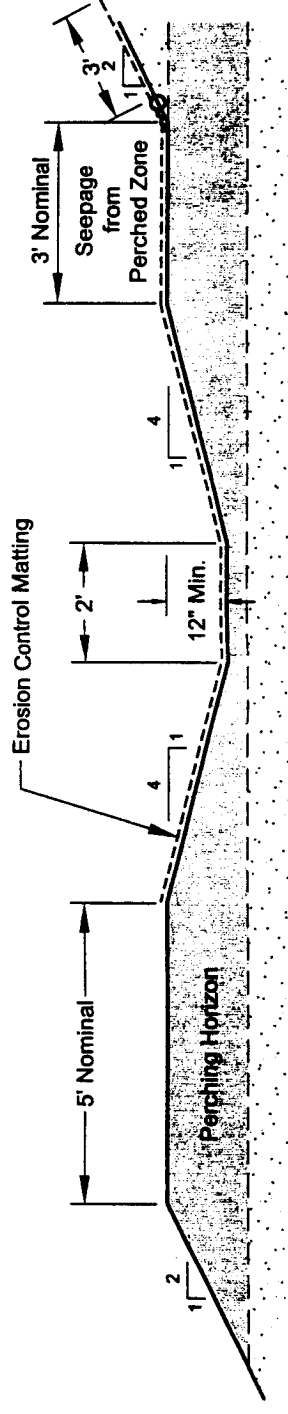
1910 Fairview Avenue East  
Seattle, Washington 98102-3699  
Fax 206.328.5581  
Tel 206.324.9530

Seattle

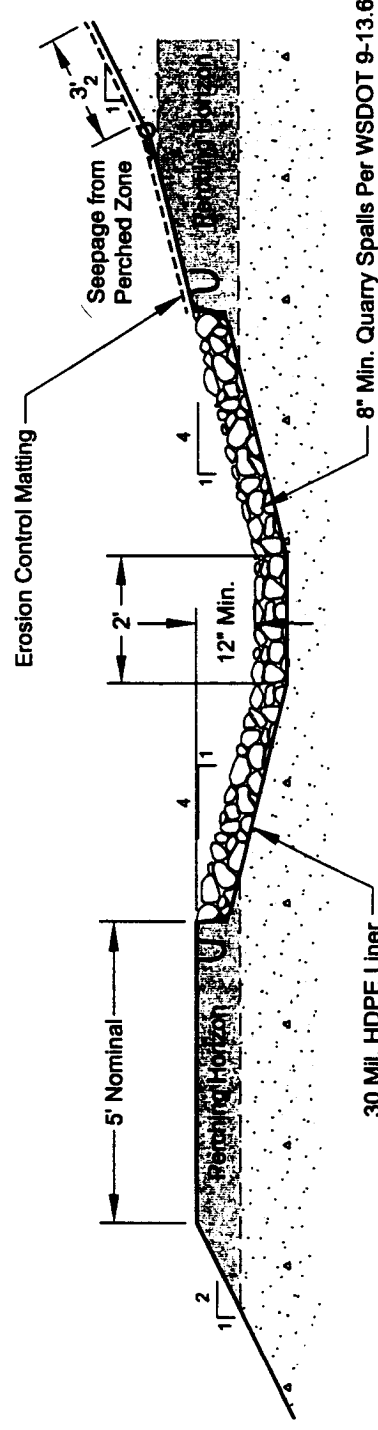
**AR 050666**

**Typical Cross Section  
Borrow Area 3 Wetland Protection Swale**

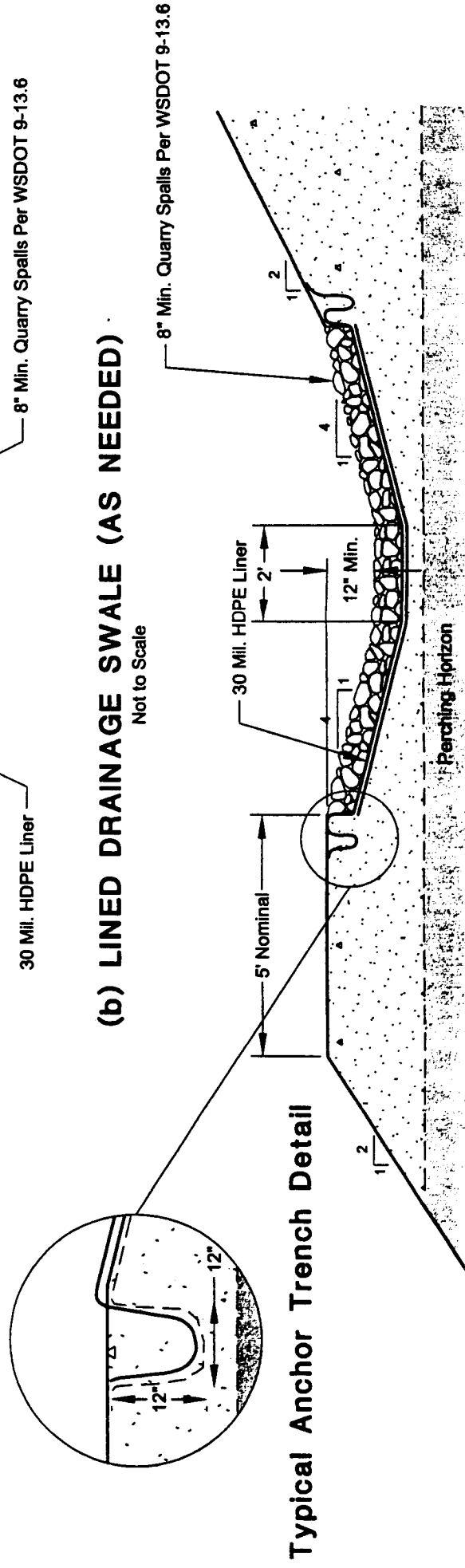
**DRAFT**



**(a) DRAINAGE SWALE (TYPICAL)**  
Not to Scale



**(b) LINED DRAINAGE SWALE (AS NEEDED)**  
Not to Scale



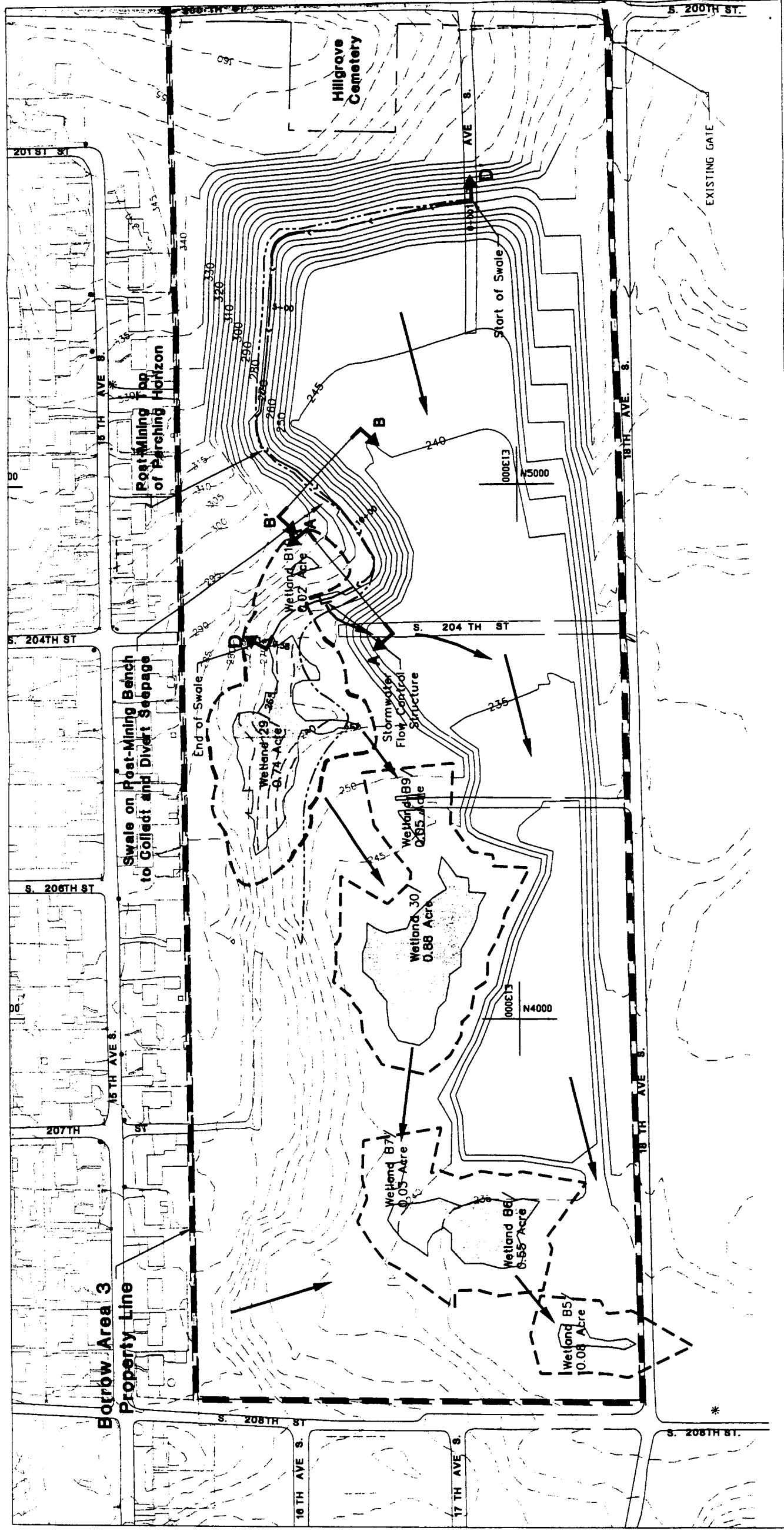
**(c) LINED DRAINAGE SWALE (AS NEEDED)**  
Not to Scale

- ~ Seepage Zone
- Erosion Control Matting
- 30 Mil. HDPE Liner
- ▨ Perching Horizon

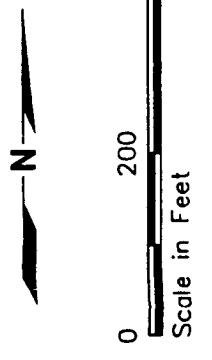
Note:  
Elevation and thickness of perching horizon and groundwater levels are shown schematically based on existing information. Design grades will be established following field survey during excavation of Borrow Area 3 and exposure of the perching horizon.

**DRAFT**

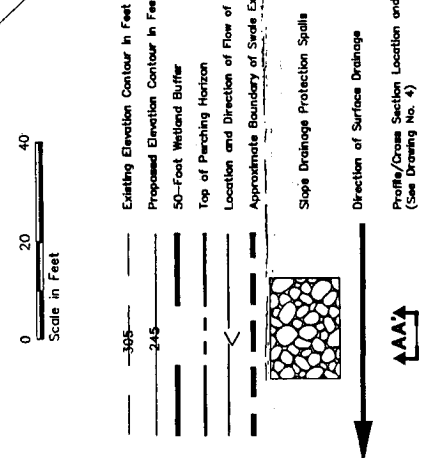
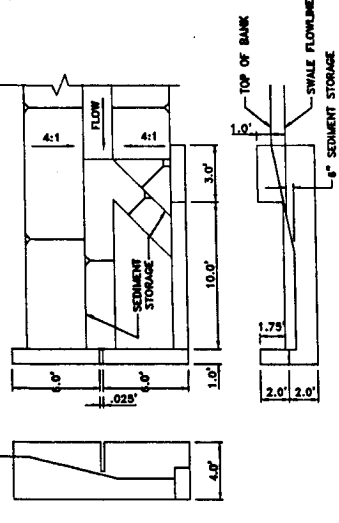
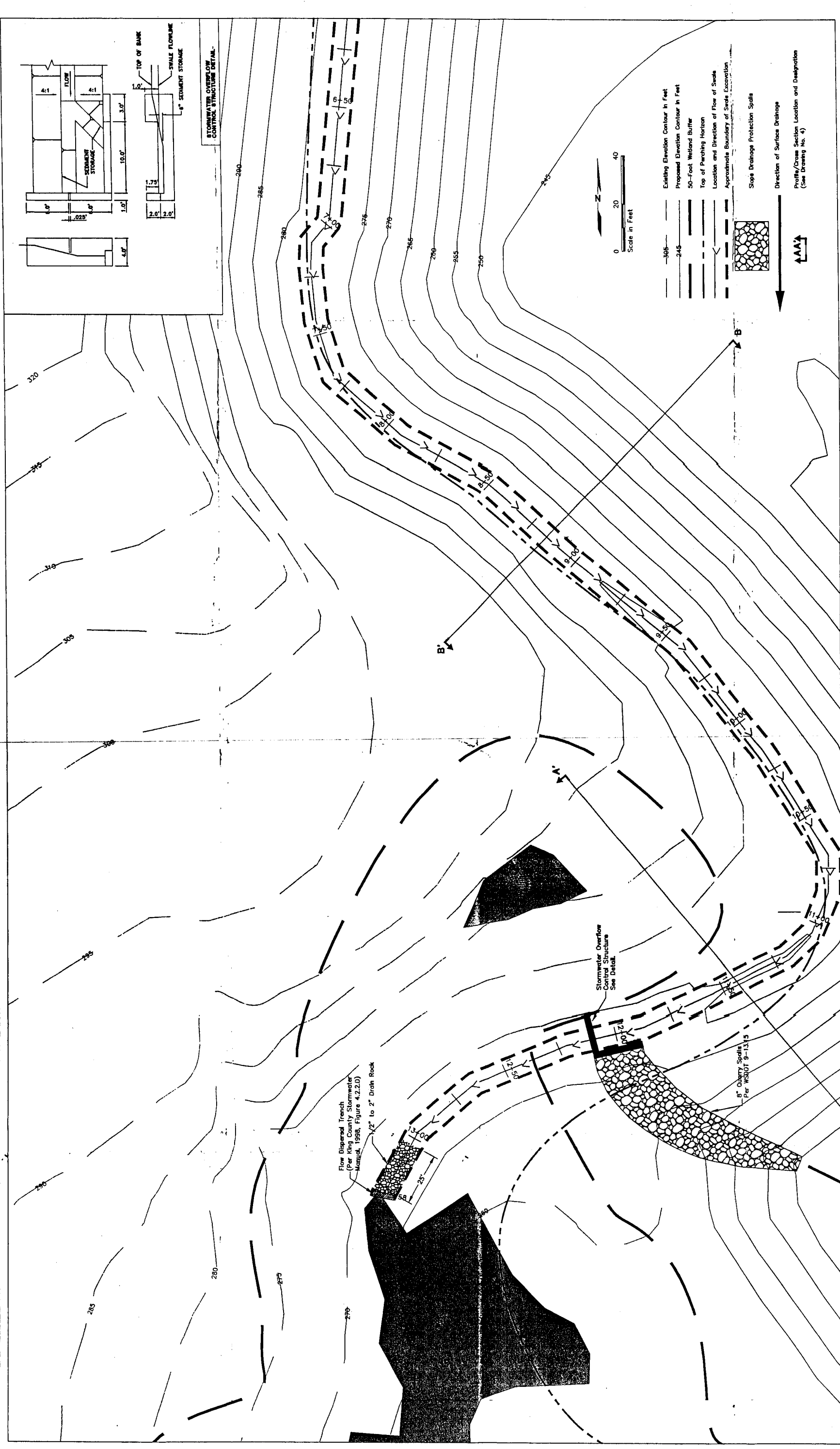
**Post-Reclamation Topography and Drainage Facilities  
Borrow Area 3 Wetland Protection Swale**



- Existing Elevation Contour in Feet
- Proposed Elevation Contour in Feet
- 50-Foot Wetland Buffer
- Wetland Location, Designation, and Acreage
- Direction of Surface/Shallow Subsurface Drainage
- Proposed Drainage Swale
- Inferred Seepage Face above Outcrop of Perching Layer
- Cross Section/Profile Location and Designation



RC 6/11/01 1:200 (ref) see drawing file/charlie.pcf 49780670



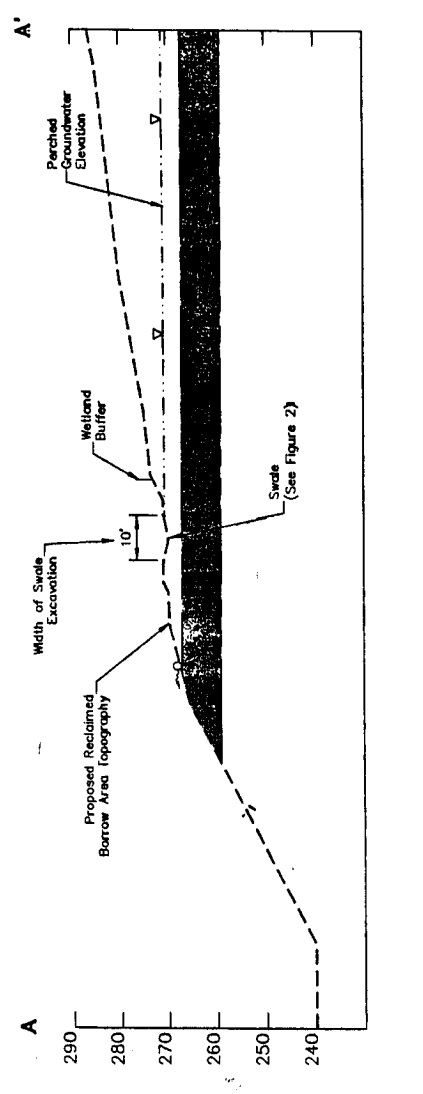
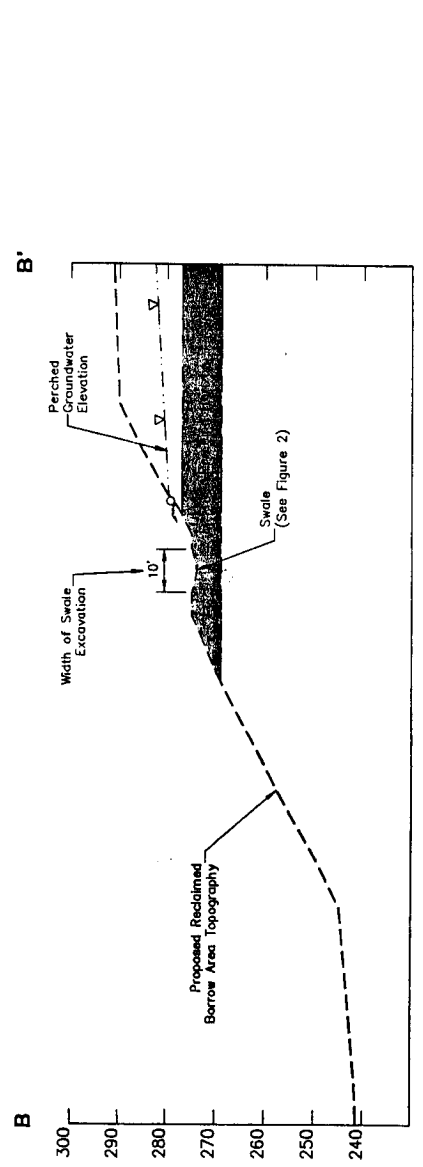
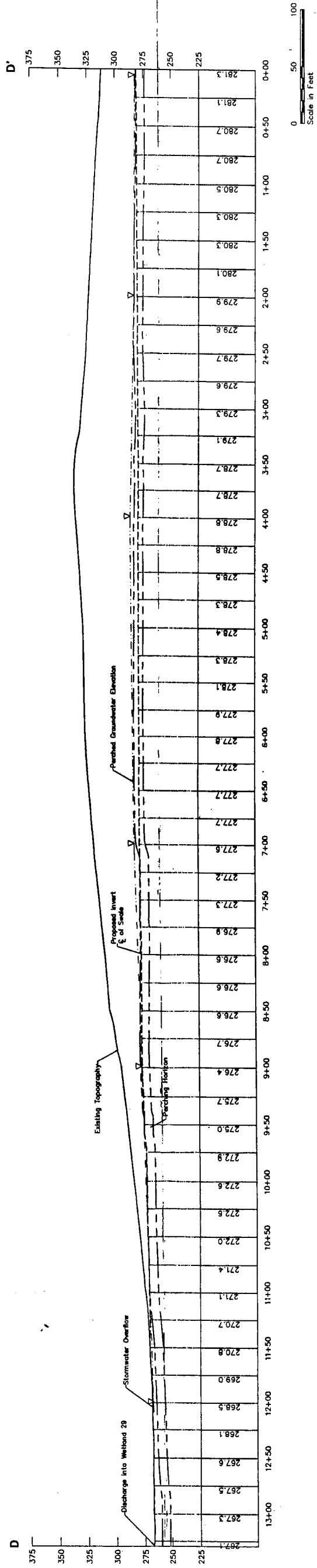
SEA-TAC THIRD RUNWAY  
 POST-RECLAMATION TOPOGRAPHIC DETAIL  
 BORROW AREA 3 WETLAND PROTECTION SWALE  
 HNTB REVISION AR 050669

DRAFT

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Revised Mark:

Checked By	Date	By	Date	Approved By	Date
Proj. Mgr. M. J. BAILEY		Designed By M. J. BAILEY		Drawn By R. CHAO	



Notes:  
 1. Elevation and thickness of perching horizon and groundwater levels are shown schematically based on existing information. Final grades will be established following field survey during construction of Borrow Area 3 and exposure of the perching horizon.

Seepage Zone  
 Water Level

SEA-TAC THIRD RUNWAY		DRAFT		Job No.: 4978-06		Drawing No.: 4	
PROPOSED WETLAND PROTECTION SWALE PROFILE AND CROSS SECTIONS				AR 050670			
BORROW AREA 3				Date Issued: 6/7/01			
Scale: AS SHOWN		Drawing Type: DRAFT		Date Issued: 6/7/01		SHEET of	
Drawing Size: 24x36		Scale: AS SHOWN		Date Issued: 6/7/01		Job No.: 4978-06	
Drawing Size: 24x36		Scale: AS SHOWN		Date Issued: 6/7/01		Job No.: 4978-06	

Bench Mark:		Designed By: M. WOLTMAN		Drawn By: R. CHAO	
Proj. Mgr.: M. J. BAILEY		Checked By:		Date:	
No.	Date	By	Revision		

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