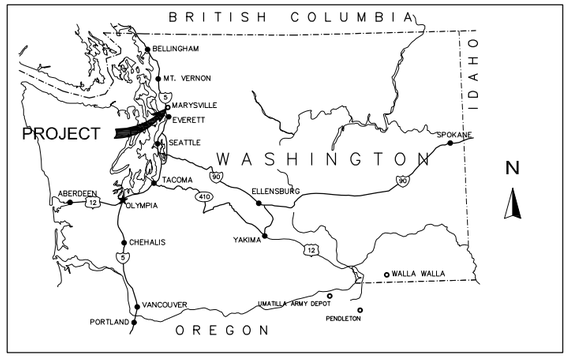
QWULOOLT
TIDAL WETLAND RESTORATION
MARYSVILLE, WASHINGTON



VICINITY MAP
N.T.S.

LOCATION MAP
MARYSVILLE N.T.S.

ABBREVIATIONS

APPROX.	APPROXIMATE	MIN.	MINIMUM
℄	CENTERLINE	MAX.	MAXIMUM
(D), DEMO	DEMOLISH	(N)	NEW
DS	DOWNSTREAM	NIC	NOT IN CONTRACT
EL,ELEV.	ELEVATION	NTS	NOT TO SCALE
(E), EXIST.	EXISTING	PIP	PROTECT IN PLACE
EG	EXISTING GRADE	PWA	PHILIP WILLIAMS & ASSOCIATES
FG	FINISHED GRADE	RC	RELATIVE COMPACTION
FT	FOOT, FEET	SPECS	SPECIFICATIONS
GB	GRADE BREAK	3:1	SLOPE, HORIZONTAL:VERTICAL
LF	LINEAR FEET	TBD	TO BE DETERMINED
		TYP.	TYPICAL
		VIF	VERIFY IN FIELD

INDEX OF DRAWINGS

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5	SOUTHEAST SITE PLAN
6	STORMWATER DETENTION AREA – SECTIONS
7	NEW LEVEE – PROFILE & SECTIONS
8	LEVEE LOWERING & BREACH – PROFILE & SECTIONS
9	CHANNELS AND BERMS – TYPICAL SECTIONS.

LEGEND

- SD — (E) STORM DRAIN
- SS — (E) SANITARY SEWERS LINE
- W — W — (E) WATER LINE
- EXISTING GRADE
- CENTERLINE
- DESIGN GRADE
- LOW BERM
- HIGH BERM
- FIRST ORDER CHANNEL
- SECOND ORDER CHANNEL
- PREVIOUSLY FILLED DITCH
- X — X — FENCE
- TREELINE
- RR TRACKS
- 4 — NEW CONTOUR
- 4 — EXISTING CONTOUR
- ROCK FILL
- BREACH
- TOP OF SLOPE / TOE OF SLOPE
- CONSTRUCTION STAGING AREA
- × 9.36 — SPOT ELEVATION
- 203 — CONTROL POINT
- APPROXIMATE WATER LEVEL
- 1 / 2 — 1 INDICATES DETAIL NUMBER; 2 INDICATES SHEET NUMBER ON WHICH SECTION OR DETAIL APPEARS
- EXISTING GROUND (PLAN & SECTION)
- EXCAVATION (PLAN & SECTION)
- FILL (PLAN & SECTION)
- 4 1 , 4:1 — BANK SLOPE
- ACCESS — CONSTRUCTION ACCESS

PRELIMINARY
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PHILIP WILLIAMS & ASSOCIATES, LTD.
ENVIRONMENTAL HYDROLOGY
550 KEARNY STREET, SUITE 900
SAN FRANCISCO, CALIFORNIA 94108
PHONE (415) 262-2300 FAX (415) 262-2303

PREPARED BY: ESA Adolfson

SHEET TITLE: COVER SHEET
QWULOOLT TIDAL WETLAND RESTORATION
BUILDING OR PROJECT

PREPARED FOR: TULALIP TRUSTEES

APPROVED	
DESIGNED	L. WHITE
DRAWN	R. FROIO
INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	1

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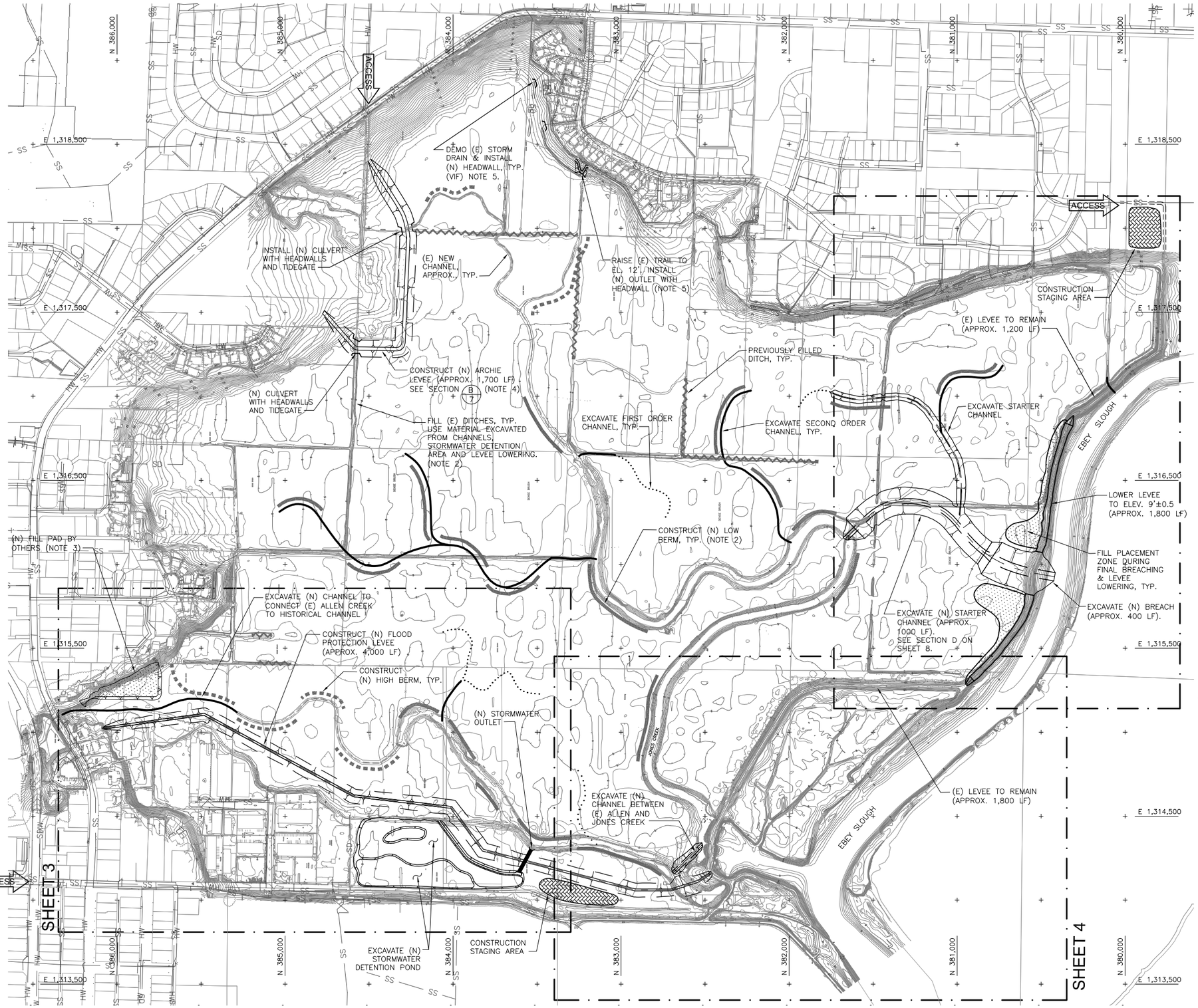

GENERAL NOTES

1. TOPOGRAPHIC MAPPING PREPARED BY DUANE HARTMAN AND ASSOCIATES USING AERIAL PHOTOGRAMMETRIC METHODS. AERIAL PHOTOGRAPH DATED JUNE 19, 2005. ELEVATIONS ARE APPROXIMATE, AND MAY NOT BE SHOWN ACCURATELY IN AREAS PONDED WHEN PHOTOGRAPH WAS TAKEN. MAPPING SHOULD BE FIELD CHECKED BEFORE FINAL DESIGN, AND CRITICAL GRADES SURVEYED IN THE FIELD BEFORE CONSTRUCTION. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) IN FEET. HORIZONTAL DATUM AT SITE IS NORTH AMERICAN DATUM OF 1983 (NAD83) STATE PLANE WASHINGTON NORTH IN FEET.
2. CONSTRUCT BERMS AND FILL DITCHES WITH MATERIAL GENERATED FROM EXCAVATION OF CHANNELS, NEW STORMWATER DETENTION PONDS, AND LEVEE LOWERING.
3. FILL PAD DESIGN BY OTHERS. LOCATION AND EXTENT SHOWN ON DRAWINGS IS APPROXIMATE.
4. NEW HOME PROTECTION LEVEE SHALL BE CONSTRUCTED TO DESIGN SECTION B, SHEET 7.
5. INFRASTRUCTURE BELOW ELEVATION 15' MAY BE SUSCEPTIBLE TO EROSION AND FLOODING. VERIFY ELEVATIONS OF EXISTING PROPERTY, UTILITIES, AND PATHWAYS.
6. DRAINAGE PIPE AT STORMWATER DETENTION OUTLET DISCHARGES TO THE EXISTING THALWEG OF ALLEN CREEK.
7. STORMWATER OUTLET FACILITY WILL REQUIRE ADDITIONAL DETAILS AT LATER LEVELS OF DESIGN (i.e. HEADWALL DESIGN, EMERGENCY CLOSURE GATE, ETC.)
8. FILL PLACEMENT AREAS TO BE UTILIZED DURING FINAL BREACHING AND LEVEE LOWERING. OTHERWISE, MATERIAL GENERATED SHALL BE RE-USED IN HABITAT BERMS AND DITCH FILL.
9. ACCESS IS LIMITED. CONTRACTOR TO USE CAUTION MOBILIZING AND DEMOBILIZING. OVERHEAD ELECTRIC LINES NOT SHOWN.
10. CONSTRUCTION WORK SHALL CONFORM TO REGULATIONS SET BY LOCAL, STATE AND FEDERAL AGENCIES. THE APPROVED WORK WINDOW FOR FISHERIES IS LIMITED TO JULY 16 THROUGH OCTOBER 14. DURING THIS PERIOD, NO WORK SHALL TAKE PLACE WITHIN 200 FEET LANDWARD OF THE STATE'S HIGH WATER LINE.
11. CONSTRUCTION OF NEW LEVEE REQUIRES MINIMUM COMPACTION OF 90% MAXIMUM DRY DENSITY, CONSTRUCTED IN 9 INCH LIFTS. APPROXIMATELY 50% SETTLEMENT IS EXPECTED DUE TO WEAK SUBGRADE, AND THEREFORE AN ADDITIONAL FIVE FOOT LIFT WILL BE REQUIRED AFTER INITIAL SETTLEMENT.

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PHONE (415) 262-2300 FAX (415) 262-2303

PREPARED BY:
ESA Adolfson

SHEET TITLE
SITE MAP

QWULOOLT TIDAL WETLAND RESTORATION
BUILDING OR PROJECT

PREPARED FOR:
TULALIP TRUSTEES

APPROVED	
DESIGNED	L. WHITE
DRAWN	R. FROIO
INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	2

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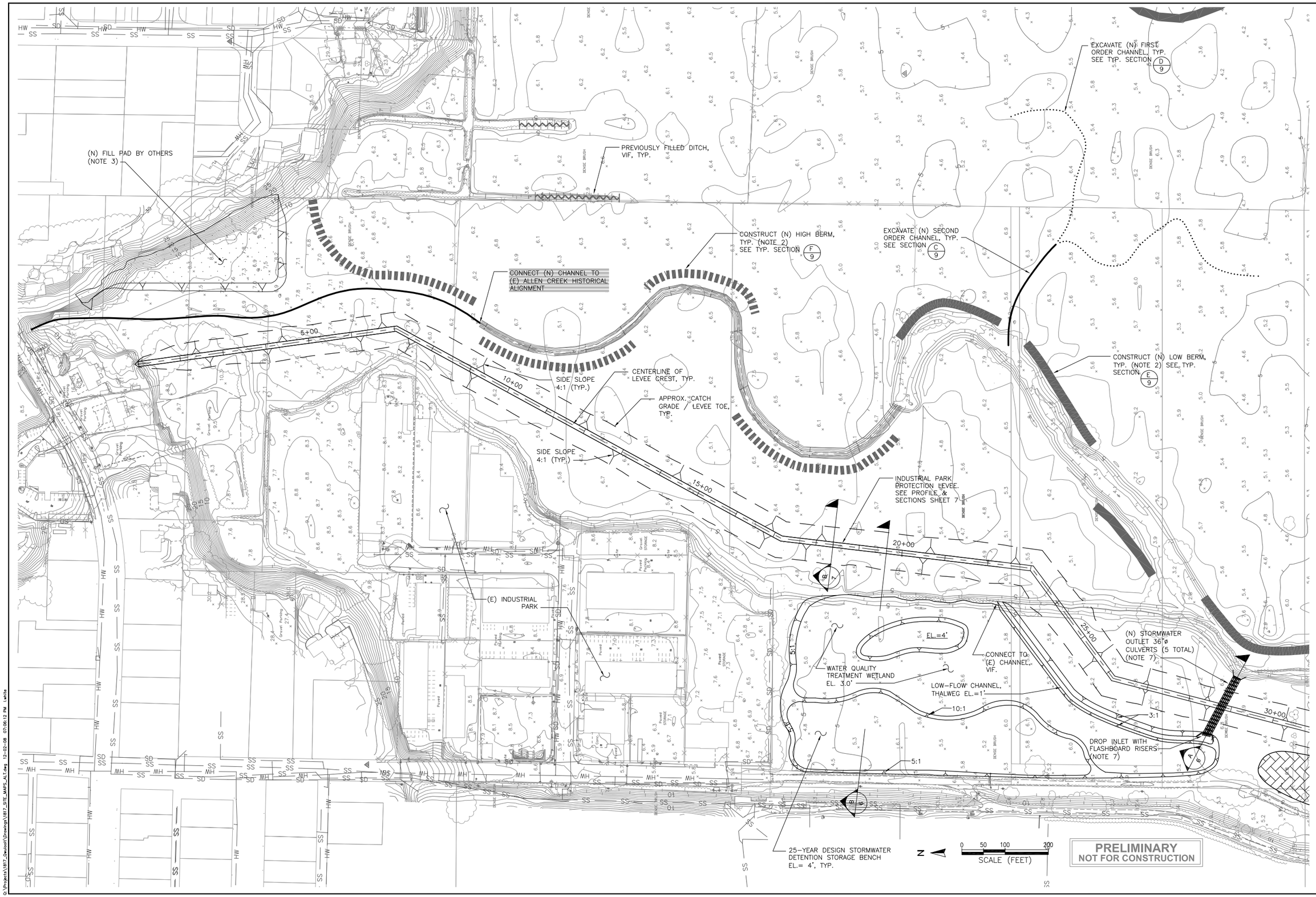

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SHEET TITLE
NORTHWEST SITE PLAN

QWULOOLT TIDAL WETLAND RESTORATION
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DESIGNED	L. WHITE
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INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	3

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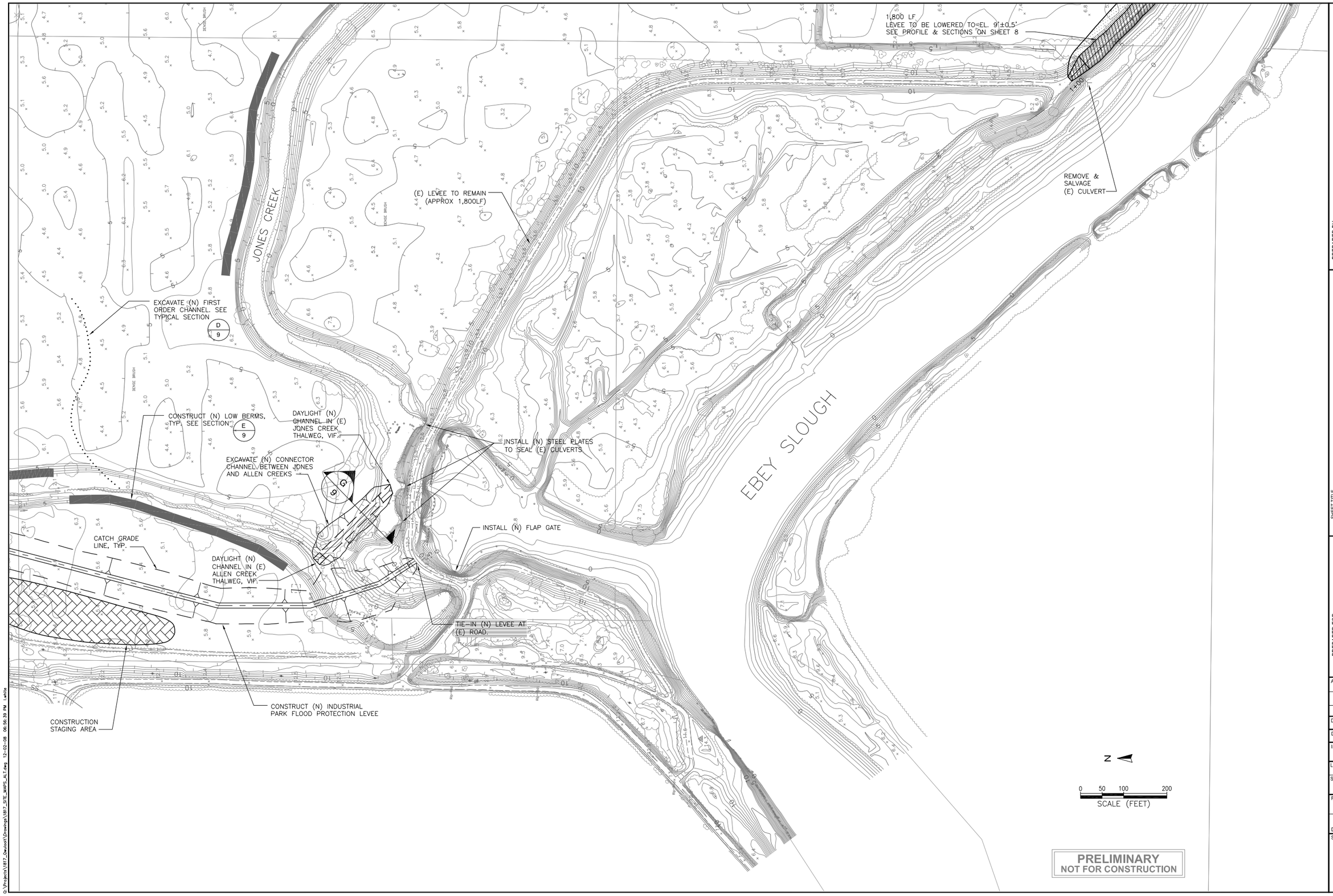

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SHEET TITLE
SOUTHWEST SITE PLAN

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INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	4

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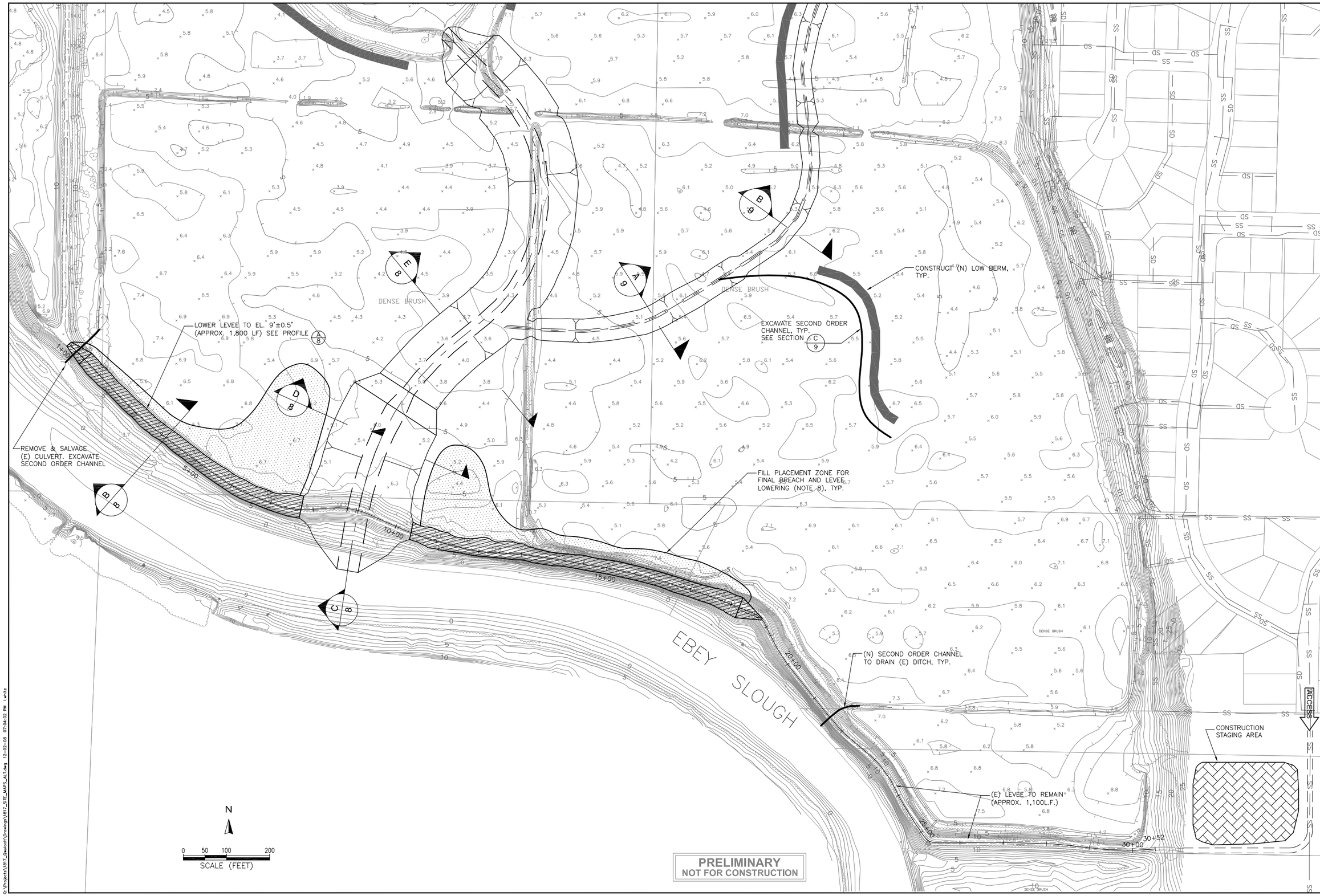

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SHEET TITLE

SOUTHEAST SITE PLAN

QWULOOLT TIDAL WETLAND RESTORATION

BUILDING OR PROJECT

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INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	5

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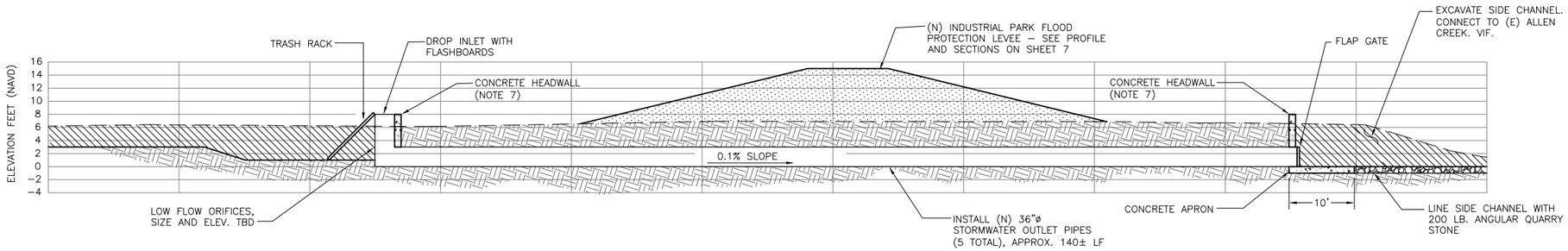
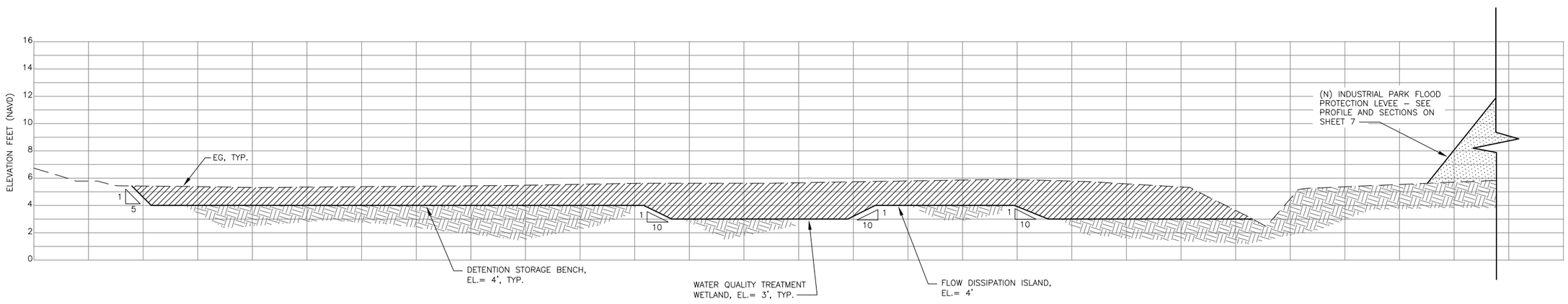


A

STORMWATER DETENTION OUTLET PROFILE

SCALE: 1"=10'



B

STORMWATER DETENTION POND SECTION

SCALE
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=4'

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ESA Adolfson

SHEET TITLE
STORMWATER DETENTION AREA SECTIONS

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PREPARED FOR:
TULALIP TRUSTEES

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INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	6

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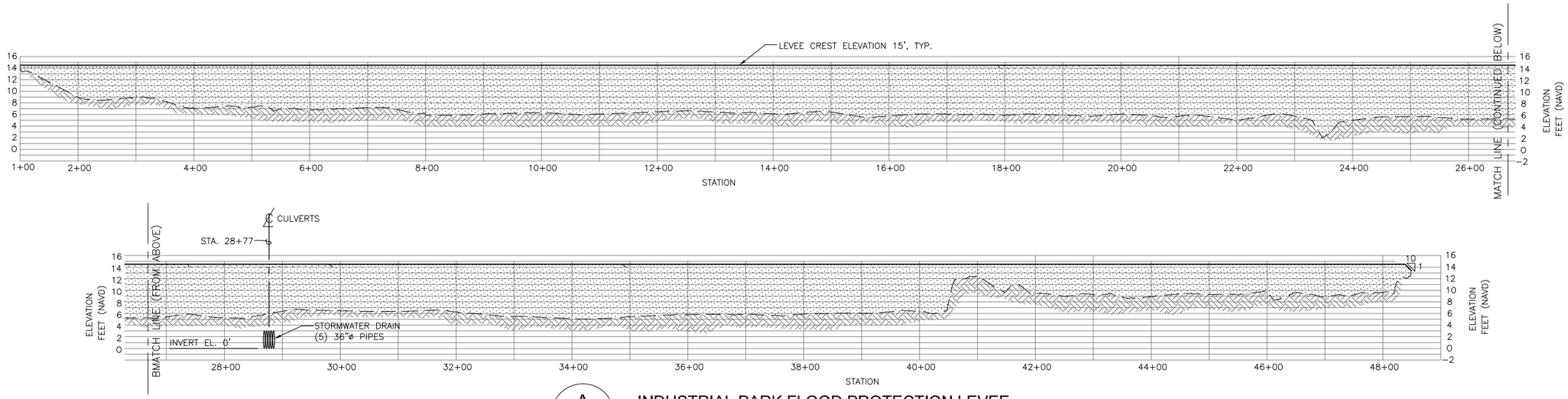
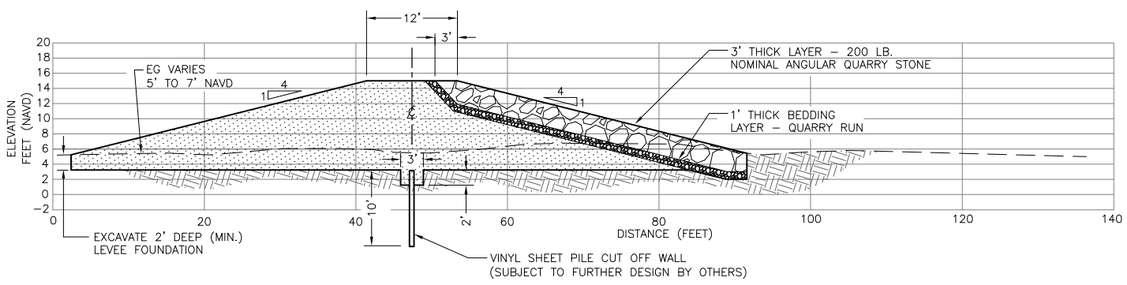
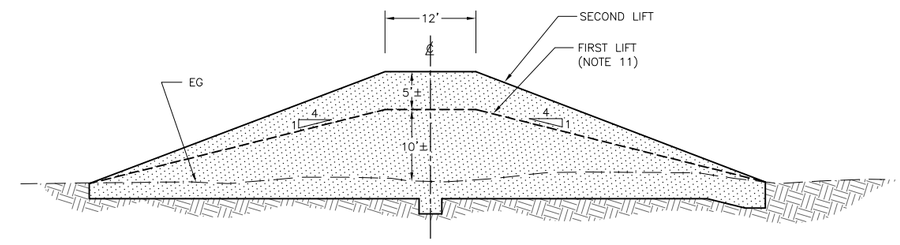


A INDUSTRIAL PARK FLOOD PROTECTION LEVEE
PROFILE
SCALE:
HORIZ. 1"=100'
VERT. 1"=10'



B INDUSTRIAL PARK FLOOD PROTECTION LEVEE - POST SETTLEMENT
TYPICAL SECTION
SCALE: 1"=10'



C INDUSTRIAL PARK FLOOD PROTECTION LEVEE - PRE SETTLEMENT
TYPICAL SECTION
SCALE: 1"=10'

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PREPARED BY:
ESA Adolfson

SHEET TITLE
NEW LEVEE - PROFILE

QWULOOLT TIDAL WETLAND RESTORATION
BUILDING OR PROJECT

PREPARED FOR:
TULALIP TRUSTEES

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DRAWN	R. FROIO
INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	7

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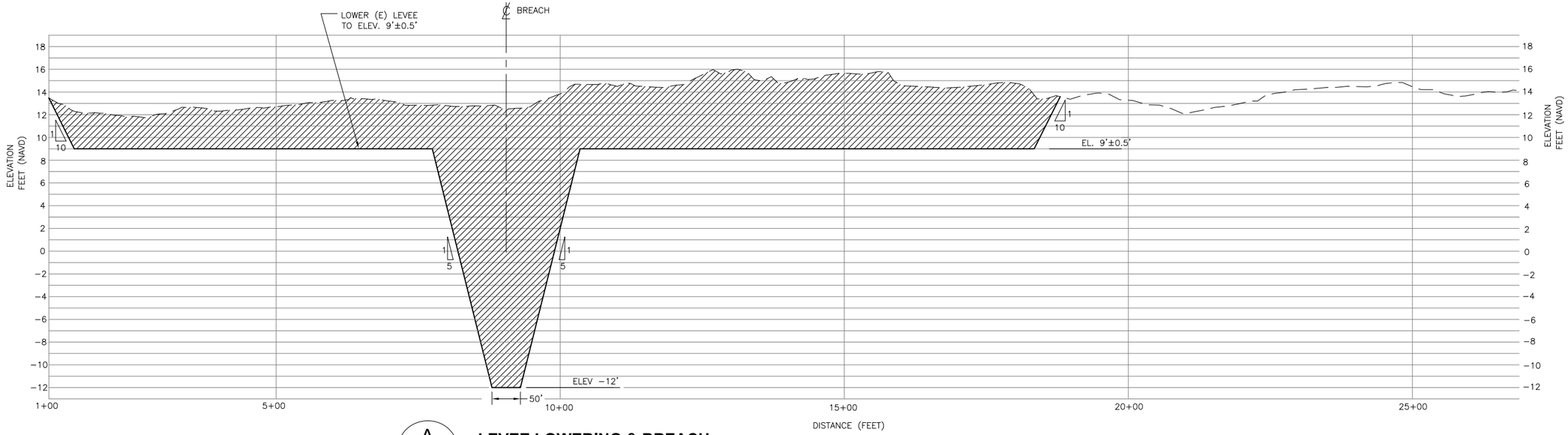
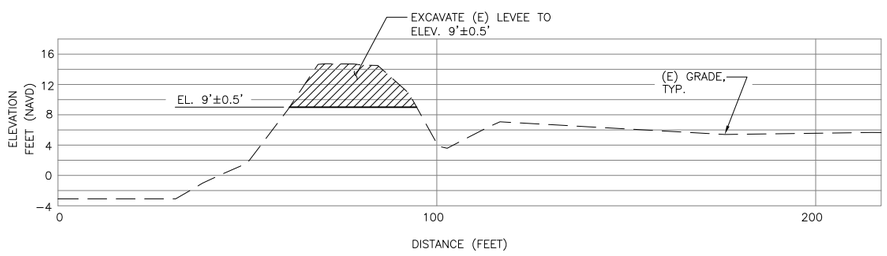


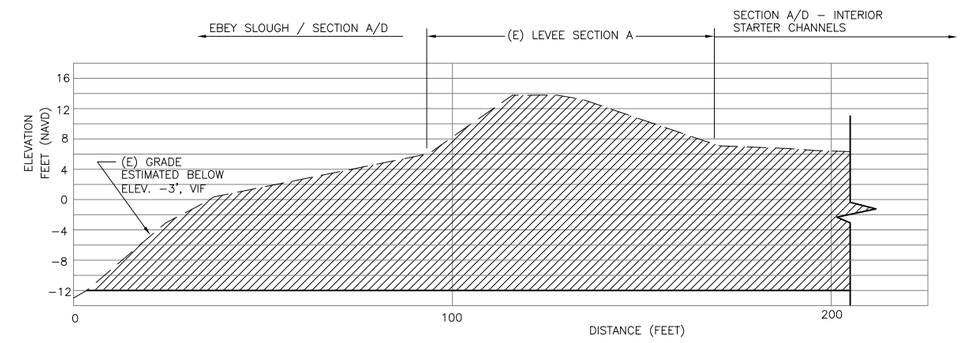
A **LEVEE LOWERING & BREACH PROFILE**

SCALE:
HORIZ. 1"=100'
VERT. 1"=5'



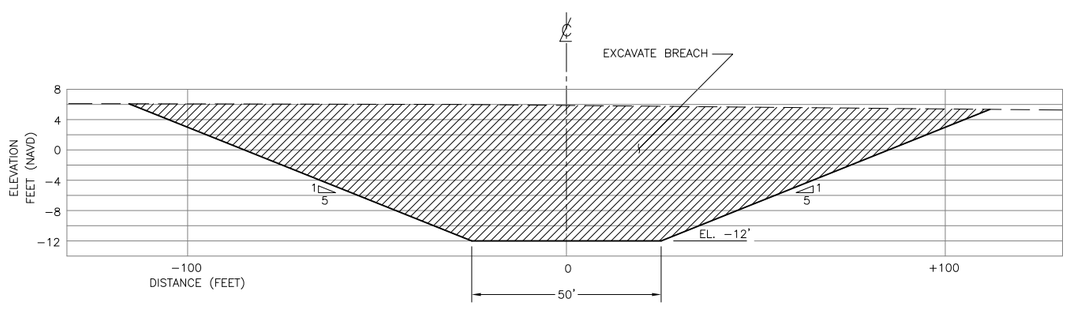
B **LEVEE LOWERING TYPICAL SECTION**

SCALE:
HORIZ. 1"=20'
VERT. 1"=10'



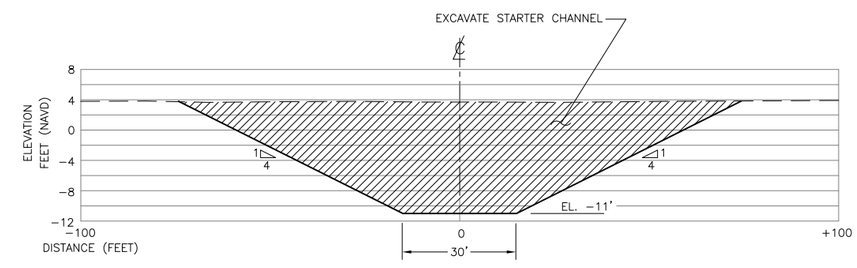
C **BREACH AND STARTER CHANNEL PROFILE AT BREACH**

SCALE:
HORIZ. 1"=20'
VERT. 1"=10'



D **BREACH TYPICAL SECTION**

SCALE:
HORIZ. 1"=20'
VERT. 1"=10'



E **STARTER CHANNEL TYPICAL SECTION**

SCALE:
HORIZ. 1"=20'
VERT. 1"=10'

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PREPARED BY:

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ENVIRONMENTAL HYDROLOGY
550 KEARNY STREET, SUITE 500
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PHONE (415) 262-2300 FAX (415) 262-2303

ESA Adolfson

SHEET TITLE
LEVEE LOWERING & BREACH PROFILE AND SECTIONS

QWULOOLT TIDAL WETLAND RESTORATION
BUILDING OR PROJECT

PREPARED FOR:
TULALIP TRUSTEES

APPROVED

DESIGNED L. WHITE
DRAWN R. FROIO
INCHARGE B. BATTALIO 42109
LOCATION
SCALE AS SHOWN
FILE NO. 1817
DATE DECEMBER 1, 2008
SHEET 8

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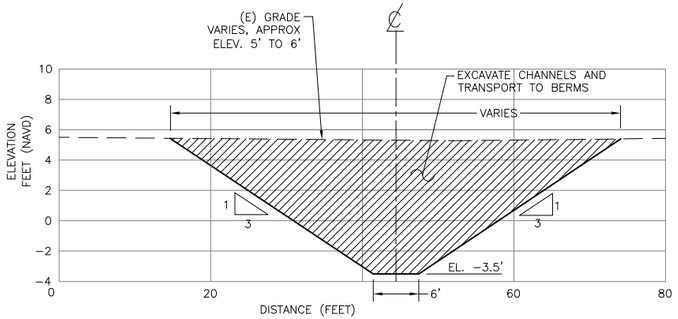
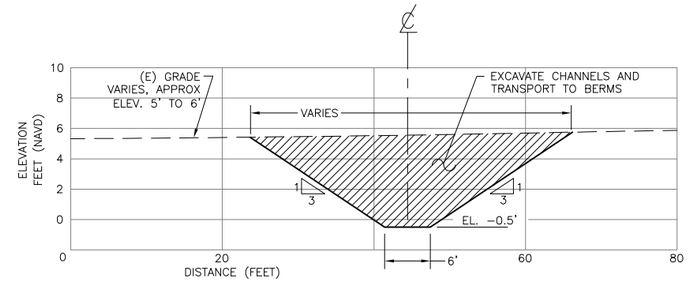
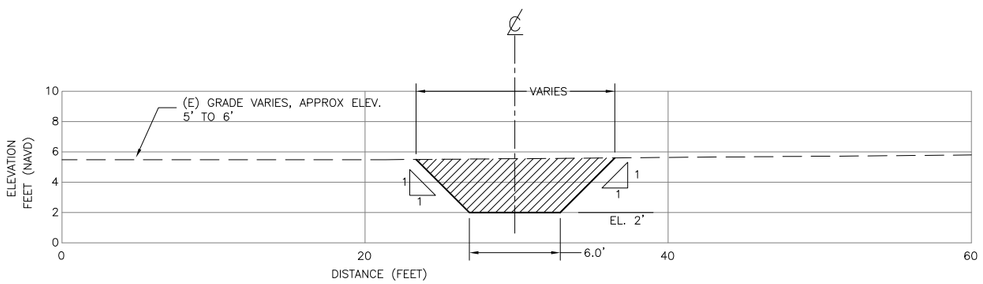


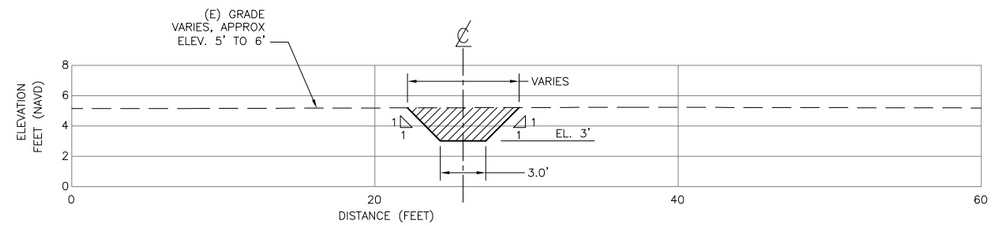
A **THIRD ORDER CHANNEL - TYPE A**
TYP. SECTION
HORIZ: 1"=10'
VERT: 1"=5'



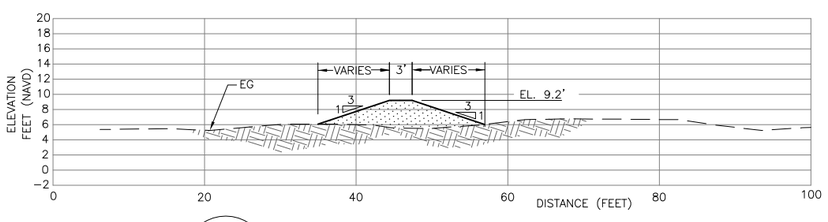
B **THIRD ORDER CHANNEL - TYPE B**
TYP. SECTION
HORIZ: 1"=5'
VERT: 1"=5'



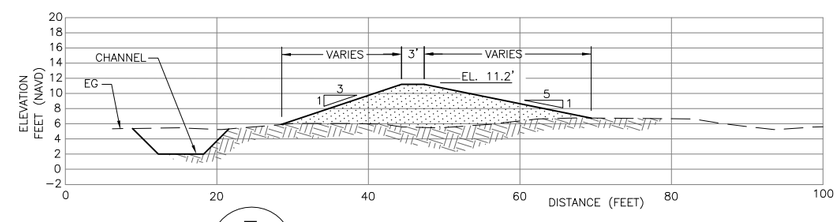
C **SECOND ORDER CHANNEL**
TYP. SECTION
SCALE: 1"=5'



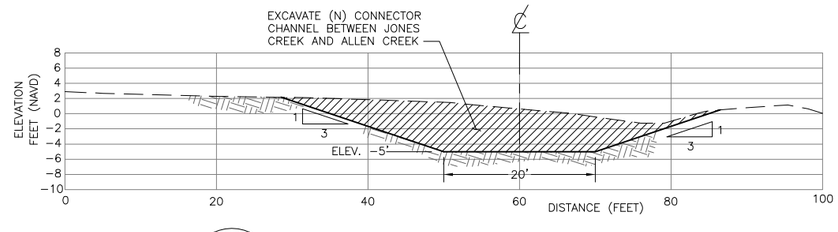
D **FIRST ORDER CHANNEL**
TYP. SECTIONS
SCALE: 1"=5'



E **LOW BERM**
TYP. SECTION
SCALE: 1"=10'



F **HIGH BERM**
TYP. SECTION
SCALE: 1"=10'



G **JONES/ALLEN CREEK CONNECTOR CHANNEL**
TYP. SECTION
SCALE: 1"=10'

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ENVIRONMENTAL ECOLOGY
2600 BAYSHORE FRONTAGE, SUITE 100
SAN FRANCISCO, CALIFORNIA 94105
PHONE (415) 262-0300 FAX (415) 262-0303

PREPARED BY:
ESA Adolfson

SHEET TITLE
CHANNELS & BERMS - TYPICAL SECTIONS

QWULOOLT TIDAL WETLAND RESTORATION
BUILDING OR PROJECT

PREPARED FOR:
TULALIP TRUSTEES

APPROVED	
DESIGNED	L. WHITE
DRAWN	R. FROIO
INCHARGE	B. BATTALIO 42109
LOCATION	
SCALE	AS SHOWN
FILE NO.	1817
DATE	DECEMBER 1, 2008
SHEET	9

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