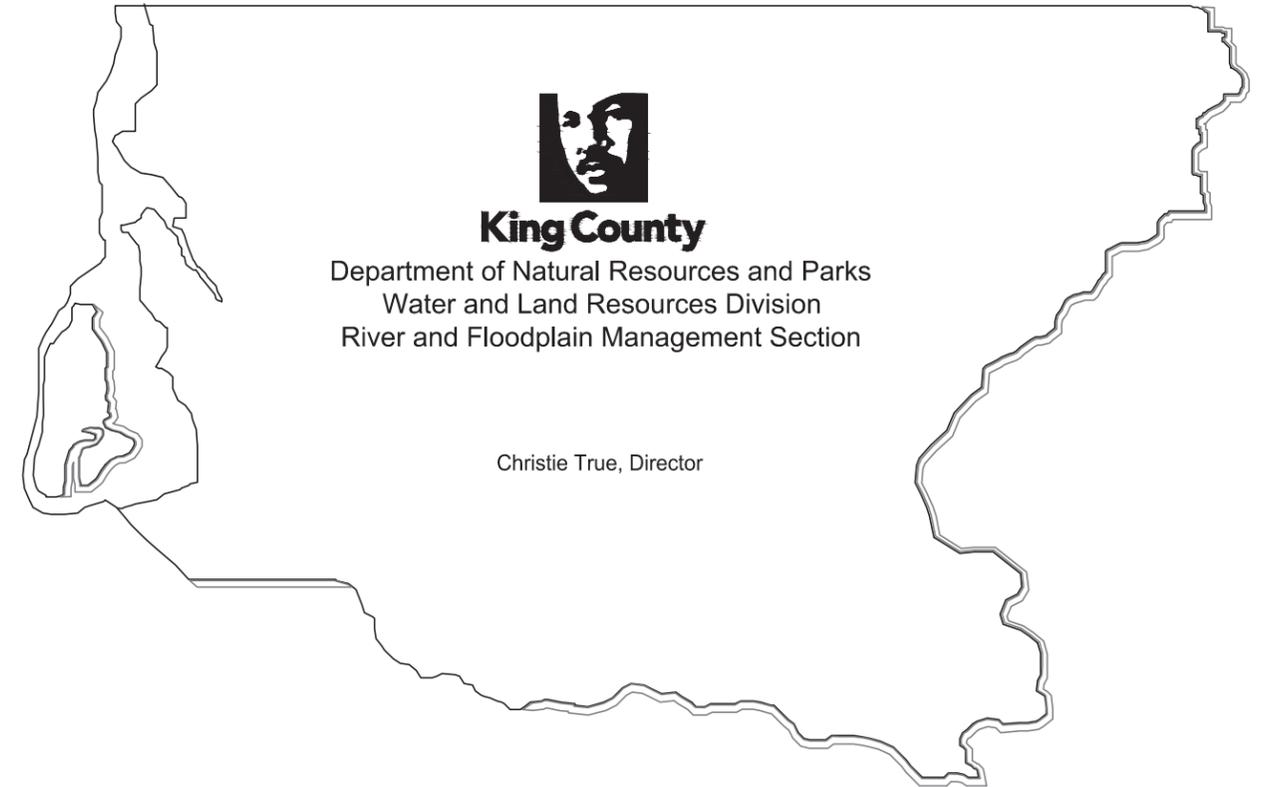
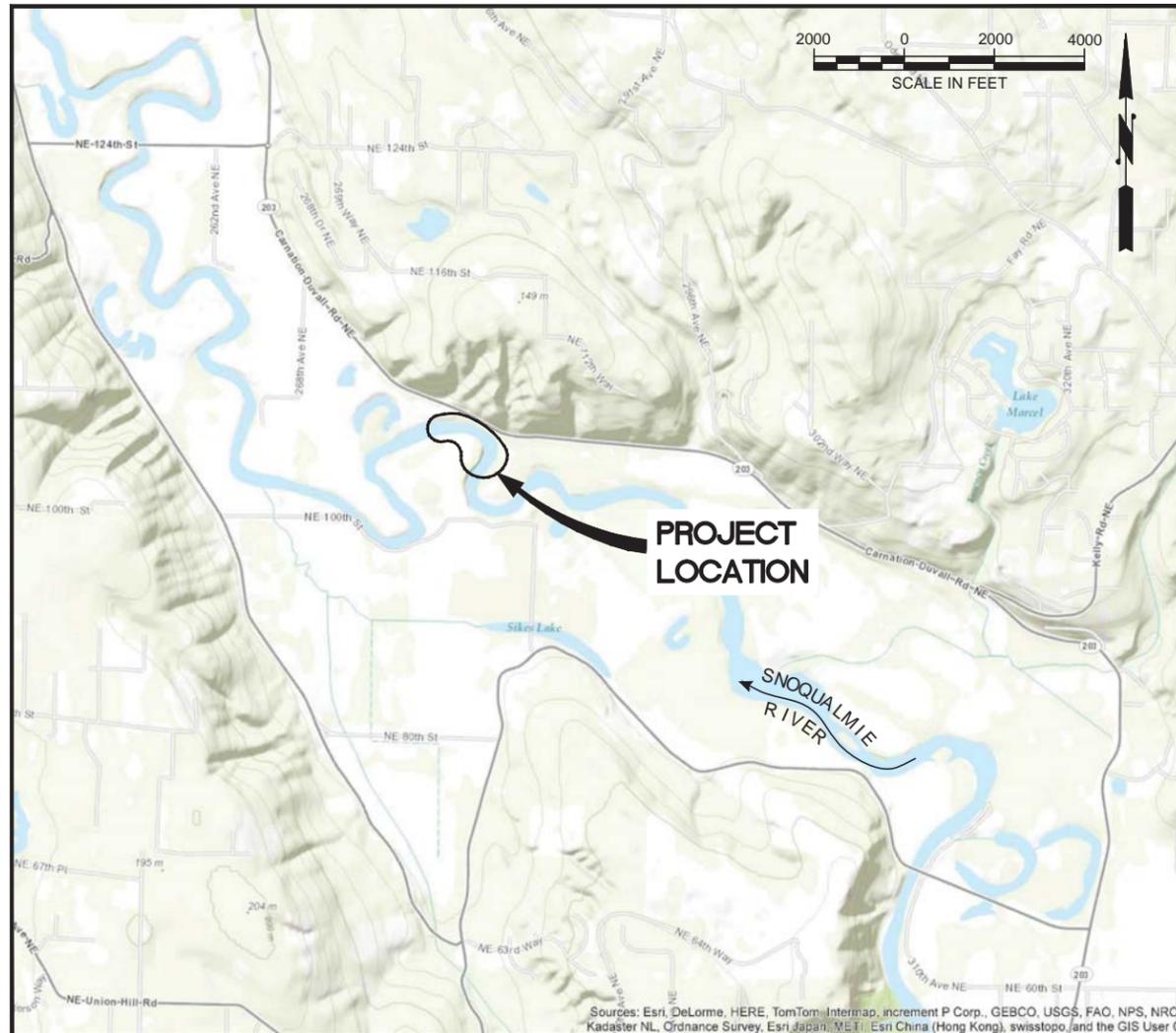


VICINITY MAP



King County

Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

SINNEMA QUAALE UPPER REVTMENT RECONSTRUCTION

60% DESIGN

SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
1	VICINITY MAP AND SHEET INDEX
2	LEGEND
3	CONSTRUCTION NOTES
4	EXISTING SITE PLAN AND SURVEY CONTROL
5	PROPOSED SITE PLAN
6	PROPOSED SITE PLAN - STRUCTURE LAYOUT
7	TRAFFIC, ACCESS AND STAGING PLAN
8	TRAIL CONSTRUCTION PLAN AND PROFILE
9	TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 1 OF 5
10	TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 2 OF 5
11	TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 3 OF 5
12	TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 4 OF 5
13	TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 5 OF 5
14	SHORING WALL PLAN AND PROFILE AND GRADING PLAN
15	SHORING GENERAL NOTES
16	SHORING WALL PLAN AND PROFILE SHEET 1 OF 3

17	SHORING WALL PLAN AND PROFILE SHEET 2 OF 3
18	SHORING WALL PLAN AND PROFILE SHEET 3 OF 3
19	SHORING WALL SECTIONS SHEET 1 OF 3
20	SHORING WALL SECTIONS SHEET 2 OF 3
21	SHORING WALL SECTIONS SHEET 3 OF 3
22	CRIB STRUCTURE GENERAL NOTES, DETAILS, AND CONTROL POINTS
23	TYPE A CRIB STRUCTURE LAYERING PLAN AND SECTION
24	TYPE B CRIB STRUCTURE LAYERING PLAN AND SECTION
25	TYPE C CRIB STRUCTURE LAYERING PLAN AND SECTION
26	EMBANKMENT REGRADING SECTIONS
27	TRAIL CONSTRUCTION DETAILS
28	MSE WALL SECTIONS
29	MSE WALL DETAILS
30	TESC AND WATER MANAGEMENT AND WORK AREA ISOLATION PLAN
31	TESC AND WATER MANAGEMENT AND WORK AREA ISOLATION DETAILS



NAVD 88

HORIZONTAL DATUM:
NAD83 WA STATE PLANE NORTH

**CALL 2 WORKING DAYS
BEFORE YOU DIG**
1-800-424-5555

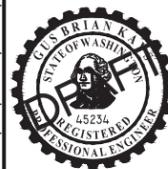
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\05492-000\CAD\dwgs\SH1.dwg
Plot Date: 12/19/2014 4:28 PM
Cad User: Eric Marshall

FIELD BOOK: _____				
SURVEYED: _____				
SURVEY BASE MAP: _____				
CHECKED: _____				
PROJECT No. _____				
SURVEY No. _____				
	NUM.	REVISION	BY	DATE

**60% DESIGN
DECEMBER 2014**

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: G. KAYS	12-2014
DESIGN ENTERED: E. MARSHALL	12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

**SINNEMA QUAALE UPPER REVTMENT
RECONSTRUCTION**

VICINITY MAP AND SHEET INDEX

SHEET
1
OF
31
SHEETS

XXXX-XX

EXISTING LEGEND

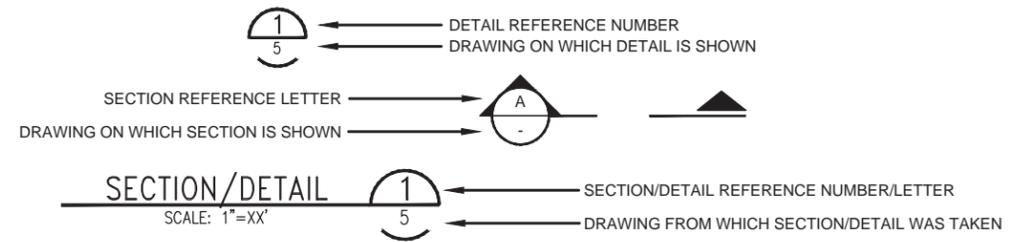
	PARCEL BOUNDARY
	SECTION LINE
APN 312679013	PARCEL NUMBER
	RIGHT OF WAY
	ORDINARY HIGH WATER LINE
	KC RIVER PROTECTION EASEMENT
	EXISTING ASPHALT
	EXISTING BARB WIRE FENCE
	BURIED FIBER OPTIC LINE
	OVERHEAD POWER LINE
	EXISTING GRAVEL TRAIL
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	VEHICLE IN BANK (NTS)
	EXISTING LARGE TREE
	EXISTING UTILITY POLE
	MONITORING WELL
HC-1 ●	BORING LOCATION AND NUMBER
B-1 ⊙	HISTORICAL BORING LOCATION AND NUMBER
	SURVEY CONTROL
	EXISTING GUARD RAIL
	EXISTING RIPRAP
	EXISTING REVETMENT
	EXISTING WETLAND
	NATIVE GROUND

PROPOSED LEGEND

	PROJECT LIMITS
	EXCAVATION AND BACKFILL EXTENTS
	TEMPORARY CONSTRUCTION ACCESS ROAD
	CONSTRUCTION ACCESS ROUTE
	CONSTRUCTION MATERIAL STOCKPILE AREA
	EQUIPMENT STAGING AREA
	STABILIZED CONSTRUCTION ENTRANCE
	TEMPORARY SILT BOOM
	STRAW WATTLES
	LOG YARDING ZONE LIMITS
	LIMITS OF EXCAVATION
	SHORING WALL
	MSE WALL
	PROPOSED MAJOR CONTOUR (5 FT)
	PROPOSED MINOR CONTOUR (1 FT)
	APPROXIMATE GLACIAL LACUSTRINE SOIL LAYER CONTACT
	REALIGNED TRAIL
	ELS FOUNDATION ROCK
	CSTC
	CSBC
	NATIVE ALLUVIUM BACKFILL
	SLASH MATERIAL
	TYPE A CRIB STRUCTURE
	TYPE B CRIB STRUCTURE
	TYPE C CRIB STRUCTURE
	CRIB STRUCTURE ID NUMBER

ABBREVIATIONS

ALCAP	ALUMINUM CAP	MSE	MECHANICALLY STABILIZED EARTH
ALD	ALDER	NO.	NUMBER
APPROX	APPROXIMATE	NTS	NOT TO SCALE
AVG	AVERAGE	OC	ON CENTER
BD	BRASS DISK	OHW	ORDINARY HIGH WATER
BMP	BEST MANAGEMENT PRACTICE	PL	PROPERTY LINE
BVCE	BEGIN VERTICAL CURVE ELEVATION	PLS	PROFESSIONAL LAND SURVEYOR
BVCS	BEGIN VERTICAL CURVE STATION	PSF	POUNDS PER SQUARE FOOT
CF	CUBIC FEET	PT	POINT
CFS	CUBIC FEET PER SECOND	RBC	REBAR W/ CAP
CP	CONTROL POINT	ROW	RIGHT OF WAY
CSBC	CRUSHED SURFACE BASE COURSE	RR	ROCK REMOVAL
CSTC	CRUSHED SURFACE TOP COURSE	SR	STATE ROUTE
CW	COTTONWOOD	STA	STATION
CY	CUBIC YARDS	SY	SQUARE YARD
DBH	DIAMETER AT BREAST HEIGHT	TEMP	TEMPORARY
DET	DETAIL	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
DIA	DIAMETER	TFP	TREE FELLING AND PLACEMENT
EL	ELEVATION	TOT	TOTAL
ELS	ENGINEERED LOG STRUCTURE	TW	TOP OF MSE WALL
EOP	EDGE OF PAVEMENT	TYP	TYPICAL
EVCE	END VERTICAL CURVE ELEVATION	VERT	VERTICAL
EVCS	END VERTICAL CURVE STATION	WDFW	WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
EXIST	EXISTING	WET	WETLAND
FT	FEET	WQSs	WATER QUALITY STANDARDS
HORIZ	HORIZONTAL	WQPMP	WATER QUALITY PROTECTION AND MONITORING PLAN
IE	INVERT ELEVATION	WSE	WATER SURFACE ELEVATION
IN	INCHES		
KC	KING COUNTY		
LF	LINEAR FEET		
MAX	MAXIMUM		
MIN	MINIMUM		
MPL	MAPLE		



"-" INDICATES THAT THE DETAIL/SECTION IS SHOWN ON THE SAME DRAWING
 "TYP" INDICATES THAT THE DETAIL/SECTION IS UNIFORMLY TYPICAL THROUGHOUT PROJECT EXCEPT WHERE OTHERWISE NOTED
 "VAR" SPECIFIES THAT DETAIL/SECTION WAS TAKEN FROM VARIOUS DRAWINGS

NOTE AND DETAIL/SECTION REFERENCING

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: O:\proj\2012\05492-000\CAD\Drawings\SH2.dwg
 PLOT Date: 12/19/2014 4:28 PM
 Cad User: Eric Marshall

FIELD BOOK: _____			
SURVEYED: _____			
SURVEY BASE MAP: _____			
CHECKED: _____			
PROJECT No. _____	KC: XXXX-XX HERRERA: 12-05492-000		
SURVEY No. _____			
NUM.	REVISION	BY	DATE

60% DESIGN
DECEMBER 2014

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: G. KAYS	12-2014
DESIGN ENTERED: E. MARSHALL	12-2014



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

LEGEND

SHEET **2** OF **31** SHEETS
 XXXX-XX

GENERAL CONSTRUCTION NOTES:

- THE WORK INCLUDES CLEARING WORK AREAS OF VEGETATION, STOCKPILING CLEARED VEGETATION, OFFSITE DISPOSAL OF INVASIVE VEGETATION THAT IS CLEARED, REMOVING EXISTING CAR BODIES, PILING, AND ROCK ARMORING, CONSTRUCTING A NEW SHORING WALL, CONSTRUCTING ENGINEERED LOG STRUCTURES, CONSTRUCTING TRAIL IMPROVEMENTS INCLUDING A CORRESPONDING MSE WALL, REGRADING A SLOPE BETWEEN THE TRAIL AND THE RIVER, CONSTRUCTING AND REMOVING TEMPORARY FACILITIES, WORKING AROUND EXISTING ABOVE GROUND UTILITIES, TRAFFIC CONTROLS, AND RESTORING THE SITE.
- THE WORK SHOWN ON THE PLANS SHALL BE SEQUENCED AND PERFORMED IN A MANNER THAT MINIMIZES IMPACTS TO THE RIVER, WETLANDS, EXISTING VEGETATION, THE WORK SITE AND ADJACENT PRIVATE PROPERTY AND PUBLIC INFRASTRUCTURE.
- THE CONTRACTOR MAY DECIDE HOW TO SEQUENCE THE WORK. HOWEVER THIS PROJECT WILL BE CONSTRAINED BY AN IN-WATER WORK WINDOW SET FORTH IN THE PROJECT HYDRAULIC PROJECT APPROVAL PERMIT, SECTION 404 PERMIT, AND ANY OTHER APPLICABLE PERMIT, OUTSIDE OF WHICH NO IN-WATER WORK MAY OCCUR. WORK WITHIN THE ORDINARY HIGH WATER LINE WILL BE RESTRICTED TO THE DATES SET FORTH IN THE HYDRAULIC PROJECT APPROVAL PERMIT.
- ENGINEER IS DEFINED AS THE OWNER'S REPRESENTATIVE OR OWNER'S ENGINEER. KING COUNTY IS DEFINED AS THE OWNER.
- THE CONTRACTOR SHALL STAKE THE PROJECT CONSTRUCTION LIMITS FOR APPROVAL BY THE OWNER OR ENGINEER AT LEAST 5 WORKING DAYS PRIOR TO COMMENCING ONSITE ACTIVITIES. PROJECT CONSTRUCTION LIMITS SHOWN ON THE PLANS REPRESENT WORK AREAS AND DOES NOT REPRESENT CLEARING LIMITS. CLEARING LIMITS ARE NOT SHOWN. CLEARING MAY OCCUR WITHIN THE PROJECT LIMITS; HOWEVER, THE CONTRACTOR SHALL STAKE CLEARING LIMITS FOR APPROVAL BY THE OWNER OR ENGINEER AT LEAST 5 WORKING DAYS PRIOR TO COMMENCING ONSITE CLEARING ACTIVITIES. ALL CLEARING NECESSARY FOR CONSTRUCTION SHALL BE LIMITED TO THE AREA REQUIRED FOR SAFE EQUIPMENT OPERATION AND TO MINIMIZE THE AREA OF DISTURBANCE. CLEARING LIMITS SHALL NOT BE EXPANDED UNLESS APPROVED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL PRESERVE AS MUCH EXISTING VEGETATION AS POSSIBLE AND NOT DAMAGE OR DISTURB VEGETATION MARKED BY THE OWNER OR ENGINEER FOR PRESERVATION.
- TREES AND BRUSH NOT SHOWN ON THE PLANS WILL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. THE OWNER SHALL IDENTIFY AND FLAG ALL TREES TO BE PROTECTED FROM DAMAGE PRIOR TO CONSTRUCTION. FOLLOWING CLEARING OF ALLOWED VEGETATION, THE CONTRACTOR SHALL STOCKPILE ALL TREES AND BRUSH PRIOR TO AND DURING CONSTRUCTION ACTIVITIES, FOR USE IN AREAS AS SHOWN ON THE PLANS, AND AS DIRECTED BY THE OWNER OR ENGINEER TO CREATE ROUGH FINISHED GRADED SURFACES. CERTAIN VEGETATION MAY BE FLAGGED BY THE ENGINEER OR OWNER FOR SALVAGE, AND CARE SHALL BE TAKEN TO PROTECT THOSE PLANTS FROM DAMAGE AND DESICCATION.
- ALTERATION OR DISTURBANCE OF THE CHANNEL, FLOODPLAIN, AND ANY BANK AND FLOODPLAIN VEGETATION SHALL BE MINIMIZED TO THAT NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL KEEP DISTURBED AREAS WITHIN THE PROJECT CONSTRUCTION LIMITS SHOWN ON THE PLANS, AND SHALL NOT EXTEND THESE LIMITS UNLESS APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE 24 HOURS ADVANCE NOTICE TO THE OWNER OR ENGINEER PRIOR TO ANY REQUIRED SPECIAL INSPECTION.
- CONSTRUCTION MATERIAL AND EQUIPMENT STAGING AREAS SHALL BE LOCATED ENTIRELY WITHIN THE PROJECT CONSTRUCTION LIMITS. CONSTRUCTION MATERIALS AND EQUIPMENT SHALL NOT BE STORED OUTSIDE OF IDENTIFIED STAGING AREAS, UNLESS APPROVED BY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL PROTECT ALL CONSTRUCTION MATERIALS AND EQUIPMENT FROM DAMAGE AT ALL TIMES.
- NO EQUIPMENT OR CONSTRUCTION MATERIALS SHALL BE STORED OVERNIGHT BELOW THE ORDINARY HIGH WATER (OHW) LINE. EQUIPMENT FUELING AREAS SHALL BE LOCATED MORE THAN 150' FROM THE EXISTING OHW LINE OF THE RIVER AND WETLAND BOUNDARIES.
- EQUIPMENT USED FOR THIS PROJECT SHALL BE FREE OF EXTERNAL PETROLEUM-BASED PRODUCTS WHILE WORKING NEAR AND IN ANY SURFACE WATER OR WETLANDS. ACCUMULATION OF SOILS OR DEBRIS SHALL BE REMOVED FROM EQUIPMENT PRIOR TO ITS WORKING BELOW THE OHW LINE AND WITHIN THE WATER.
- ALL EQUIPMENT OPERATING IN AREAS OTHER THAN EXISTING UNIMPROVED ACCESS ROADS SHALL USE ONLY BIODEGRADABLE, VEGETABLE BASED HYDRAULIC FLUIDS OR APPROVED OTHER.
- EQUIPMENT SHALL BE CHECKED AT THE BEGINNING OF EACH WORK SHIFT FOR LEAKS, AND ANY NECESSARY REPAIRS SHALL BE COMPLETED PRIOR TO COMMENCING WORK ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO PETROLEUM PRODUCTS, HYDRAULIC FLUID, CHEMICALS, OR ANY OTHER TOXIC OR DELETERIOUS MATERIALS ARE ALLOWED TO ENTER OR LEACH INTO THE RIVER, WETLANDS OR THE PROJECT SITE FROM EQUIPMENT OR SUPPLIES USED DURING CONSTRUCTION.
- CONTRACTOR SHALL LIMIT MACHINERY MOVEMENT TO THE PROJECT CONSTRUCTION LIMITS DEFINED ON THE PLANS OR IDENTIFIED AS ACCEPTABLE BY THE OWNER OR ENGINEER.
- IF AT ANY TIME, AS A RESULT OF PROJECT ACTIVITIES, FISH ARE OBSERVED IN DISTRESS, A FISH KILL OCCURS, OR WATER QUALITY PROBLEMS DEVELOP (INCLUDING EQUIPMENT LEAKS OR SPILLS), OPERATIONS SHALL CEASE AND THE OWNER SHALL BE NOTIFIED IMMEDIATELY. WASHINGTON DEPARTMENT OF FISH AND WILDLIFE AND WASHINGTON STATE DEPARTMENT OF ECOLOGY SHALL BE CONTACTED IMMEDIATELY BY THE OWNER OR BY HIS/HER DESIGNEE. WORK SHALL NOT RESUME UNTIL FURTHER APPROVAL BY THE OWNER.
- EROSION AND SEDIMENT CONTROL METHODS SHALL BE USED TO PREVENT SILT-LADEN WATER FROM ENTERING THE RIVER AND WETLANDS. MINIMUM EROSION AND WATER POLLUTION CONTROL AND WATER MANAGEMENT BMPs ARE SHOWN ON THE TESC AND WATER MANAGEMENT AND WORK AREA ISOLATION PLAN. THE CONTRACTOR SHALL IMPLEMENT THE PLAN, ADD ANY ADDITIONAL MEASURES REQUIRED TO MEET WASHINGTON STATE WATER QUALITY STANDARDS AND PROJECT PERMIT CONDITIONS, AND SHALL BE RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL, WATER MANAGEMENT, AND WORK AREA ISOLATION NEEDED DURING CONSTRUCTION ACTIVITIES.
- IF HIGH FLOW CONDITIONS THAT MAY CAUSE SILTATION, EROSION OR A DANGEROUS WORK ENVIRONMENT ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL STOP IN THOSE AFFECTED AREAS UNTIL THE FLOW SUBSIDES.
- APPROPRIATE CULTURAL RESOURCES MONITORING WILL BE COMPLETED BY THE OWNER DURING CONSTRUCTION.

GENERAL SURVEY NOTES:

- PARCEL ID NUMBERS FROM KING COUNTY GIS CENTER). DATA COMPILED IN 2014. OBTAINED AUGUST 1, 2014 FROM AGENCY WEBSITE [HTTP://WWW5.KINGCOUNTY.GOV/GISDATAPORTAL/DEFAULT.ASPX](http://www5.kingcounty.gov/gisdataportal/default.aspx)
- LIDAR CONTOURS FROM LIDAR BARE EARTH DIGITAL ELEVATION MODEL. OBTAINED THROUGH KING COUNTY ON FEBRUARY 2014.
- KING COUNTY ROW AND WSDOT ROW PROVIDED BY PAC GEO.

GROUND SURVEY NOTES: (PAC GEO 2014-04-28)

- ALL UNDERGROUND UTILITY LOCATIONS ARE BASED ON OBSERVED EVIDENCE OF STRUCTURES, PAINT MARKS PLACED BY OTHERS AND PREVIOUS SURVEY DATA PROVIDED BY KING COUNTY. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION PROVIDED.

HORIZONTAL DATUM:

THE HORIZONTAL DATUM FOR THIS SURVEY IS NAD 83/11, WASHINGTON STATE PLANE (NORTH ZONE), BASED ON WSDOT MONUMENT ID 2211 (GP17203-145) AND WSDOT MONUMENT ID 2213 (W 67).

VERTICAL DATUM:

THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88 BASED ON WSDOT MONUMENT ID 2211 (GP17203-145) AND WSDOT MONUMENT ID 2213 (W 67).

GP17203-145 ELEVATION: 63.756'
W 67 ELEVATION: 64.147'

STATISTICS:

EQUIPMENT: TRIMBLE VX AND S6 TOTAL STATIONS
TRIMBLE R8 AND R10 GNSS SYSTEMS
SONAR MITE MILL SPEC HYDROGRAPHIC SYSTEM
METHODOLOGY: CONVENTIONAL FIELD TRAVERSE AND NETWORK RTK
MEETS OR EXCEEDS SURVEY STANDARD AS PER:
WAC 332-130-050
WAC 332-130-090
WAC 332-130-100
ALL SURVEY WORK OCCURRED IN MARCH & APRIL OF 2014.

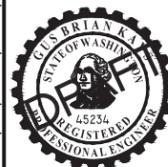
**CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555**

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\05\02\000\CAD\dwgs\SH3.dwg
Plot Date: 12/19/2014 4:28 PM
Eric Marshall
Cad User:

FIELD BOOK: _____				APPROVED: _____	
SURVEYED: _____				PROJECT _____	
SURVEY BASE MAP: _____				SUPERVISOR: _____	
CHECKED: _____				PROJECT MANAGER: J. PARSONS	12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000				DESIGNED: G. KAYS	12-2014
SURVEY No. _____				DESIGN ENTERED: E. MARSHALL	12-2014
NUM.	REVISION	BY	DATE		

**60% DESIGN
DECEMBER 2014**

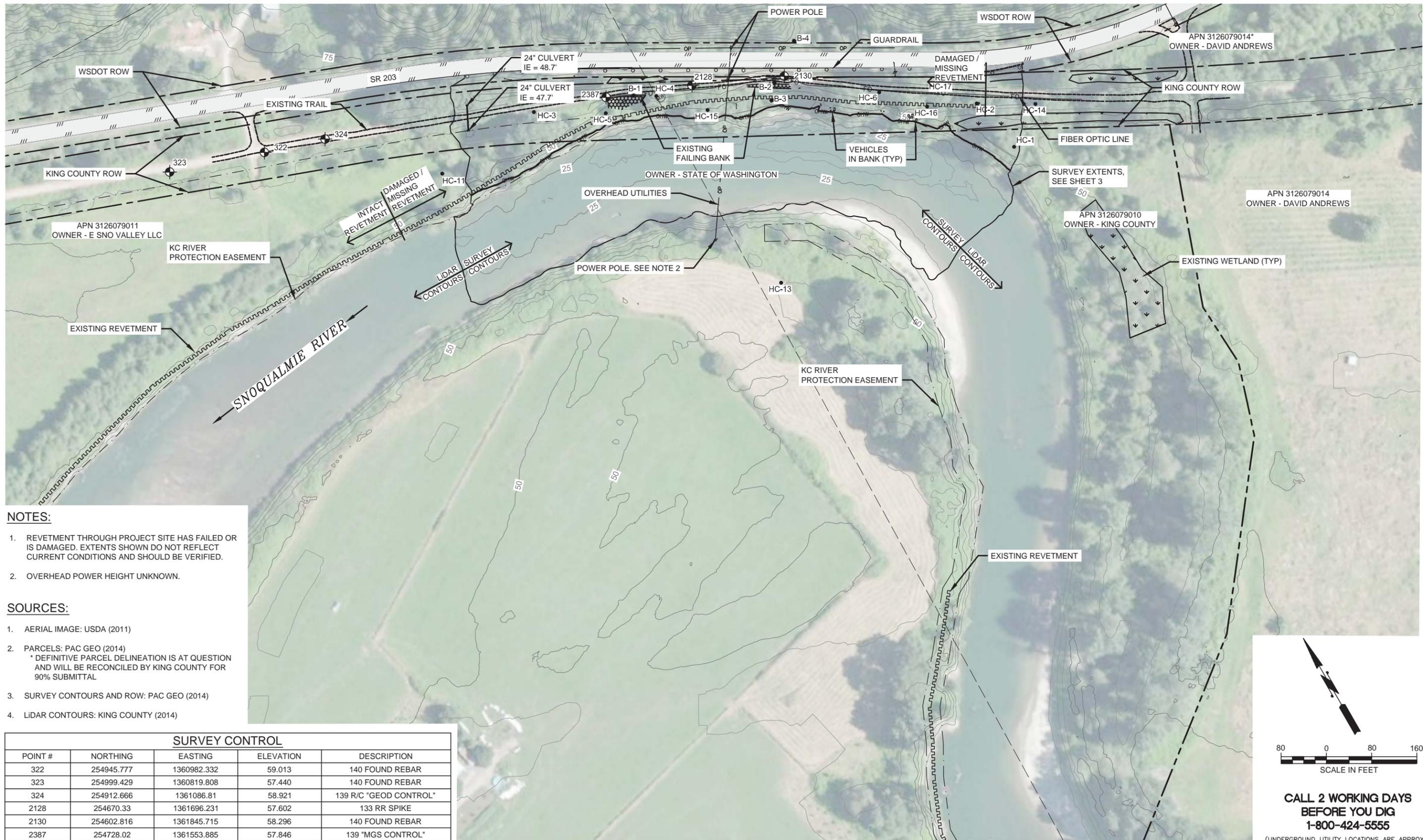


**SINNEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

CONSTRUCTION NOTES

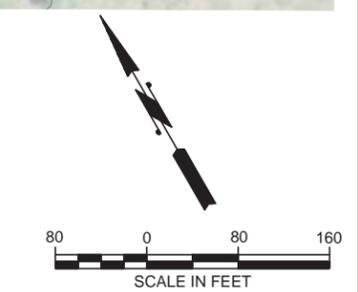
SHEET
3
OF
31
SHEETS

XXXX-XX



- NOTES:**
1. REVELMENT THROUGH PROJECT SITE HAS FAILED OR IS DAMAGED. EXTENTS SHOWN DO NOT REFLECT CURRENT CONDITIONS AND SHOULD BE VERIFIED.
 2. OVERHEAD POWER HEIGHT UNKNOWN.
- SOURCES:**
1. AERIAL IMAGE: USDA (2011)
 2. PARCELS: PAC GEO (2014)
* DEFINITIVE PARCEL DELINEATION IS AT QUESTION AND WILL BE RECONCILED BY KING COUNTY FOR 90% SUBMITTAL
 3. SURVEY CONTOURS AND ROW: PAC GEO (2014)
 4. LIDAR CONTOURS: KING COUNTY (2014)

SURVEY CONTROL				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
322	254945.777	1360982.332	59.013	140 FOUND REBAR
323	254999.429	1360819.808	57.440	140 FOUND REBAR
324	254912.666	1361086.81	58.921	139 R/C "GEOD CONTROL"
2128	254670.33	1361696.231	57.602	133 RR SPIKE
2130	254602.816	1361845.715	58.296	140 FOUND REBAR
2387	254728.02	1361553.885	57.846	139 "MGS CONTROL"



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-000\CAD\dwg\SH4.dwg
 PLOT Date: 12/19/2014 4:29 PM
 Cad User: Eric Marshall

FIELD BOOK: _____	APPROVED: _____
SURVEYED: _____	PROJECT _____
SURVEY BASE MAP: _____	SUPERVISOR: _____
CHECKED: _____	PROJECT MANAGER: J. PARSONS 12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000	DESIGNED: G. KAYS 12-2014
SURVEY No. _____	DESIGN ENTERED: E. MARSHALL 12-2014

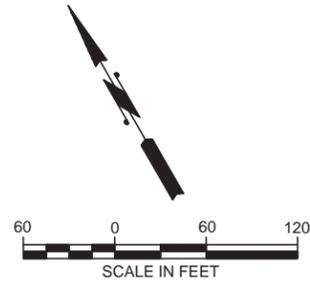
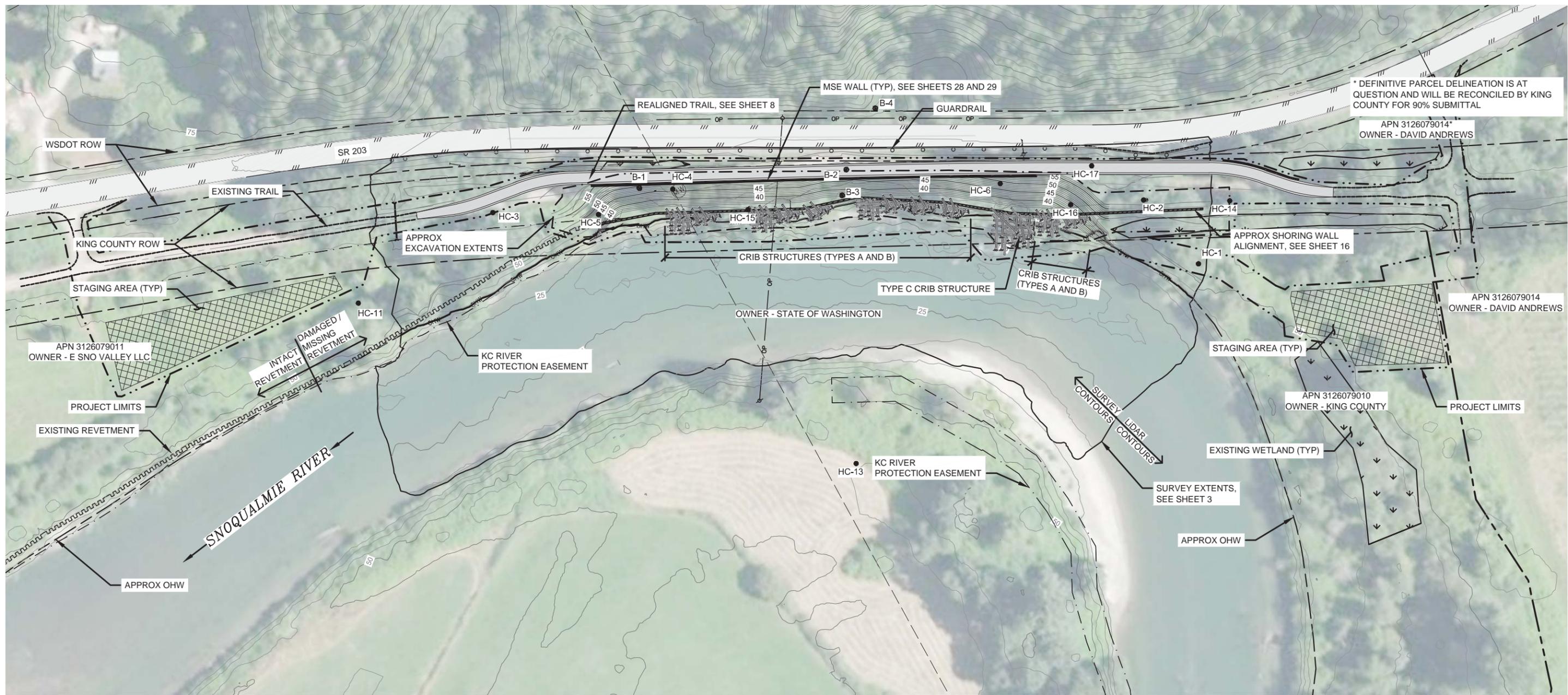
**60% DESIGN
 DECEMBER 2014**



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

**SINEMA QUAALE UPPER REVELMENT
 RECONSTRUCTION**
EXISTING SITE PLAN AND SURVEY CONTROL

SHEET
4
 OF
31
 SHEETS
 XXXX-XX



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\05492-000\CAD\dwg\SH5.dwg
 Plot Date: 12/19/2014 4:29 PM
 Cad User: Eric Marshall

FIELD BOOK: _____		APPROVED: _____	
SURVEYED: _____		PROJECT _____	
SURVEY BASE MAP: _____		SUPERVISOR: _____	
CHECKED: _____		PROJECT MANAGER: J. PARSONS	12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000		DESIGNED: G. KAYS	12-2014
SURVEY No. _____		DESIGN ENTERED: E. MARSHALL	12-2014
NUM.	REVISION	BY	DATE

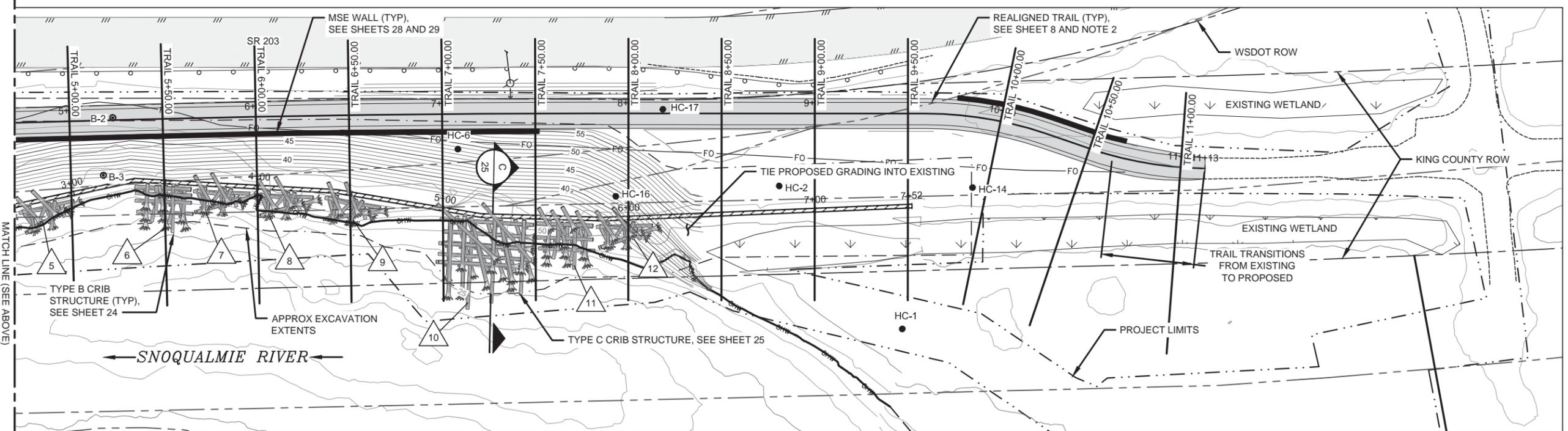
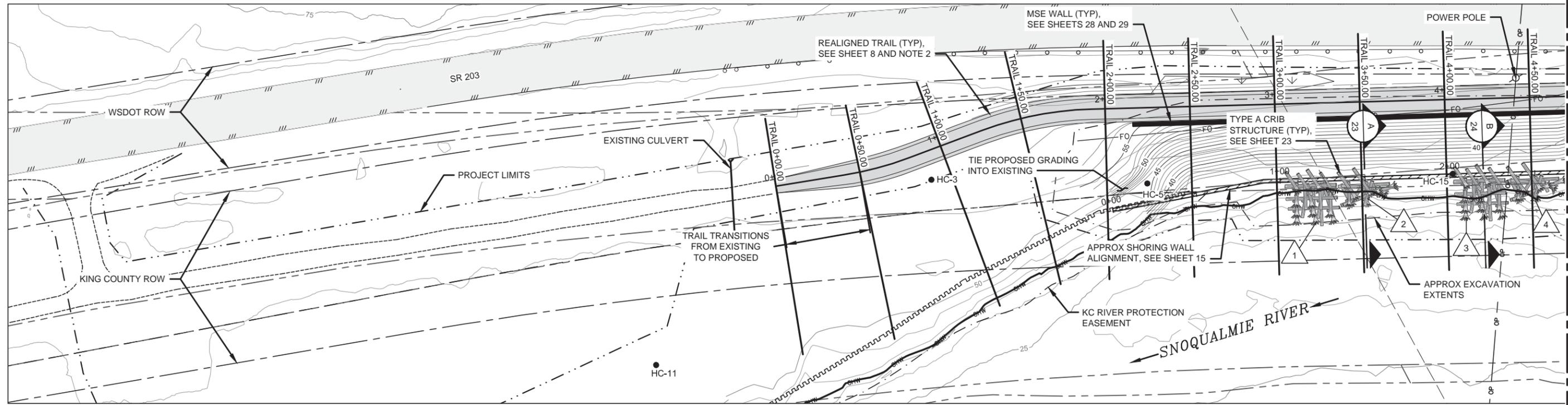
**60% DESIGN
 DECEMBER 2014**



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

**SINNEMA QUAALE UPPER REVETMENT
 RECONSTRUCTION**
PROPOSED SITE PLAN

SHEET
5
 OF
31
 SHEETS
 XXXX-XX



CRIB SCHEDULE:

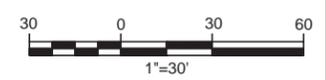
STRUCTURE	CRIB TYPE
1	TYPE B
2	TYPE A
3	TYPE B
4	TYPE A
5	TYPE A
6	TYPE B

CRIB SCHEDULE (CONT.):

STRUCTURE	CRIB TYPE
7	TYPE A
8	TYPE A
9	TYPE A
10	TYPE C
11	TYPE B
12	TYPE A

NOTES:

- RACKING, SLASH AND BALLAST ROCK AND BACKFILL IN CRIB STRUCTURES NOT SHOWN. SEE DETAIL SHEETS AND LAYERING PLANS FOR PLACEMENT.
- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION AS PART OF CONSTRUCTION.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\12-05-12-2014\CAD\Drawings\SH6.dwg
 Plot Date: 12/19/2014 4:29 PM
 Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE

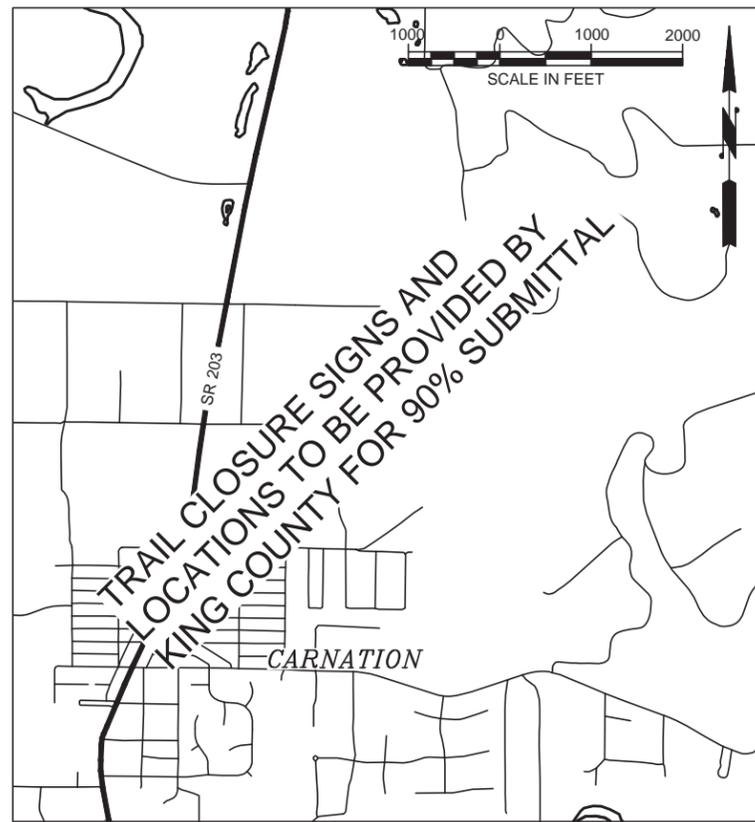
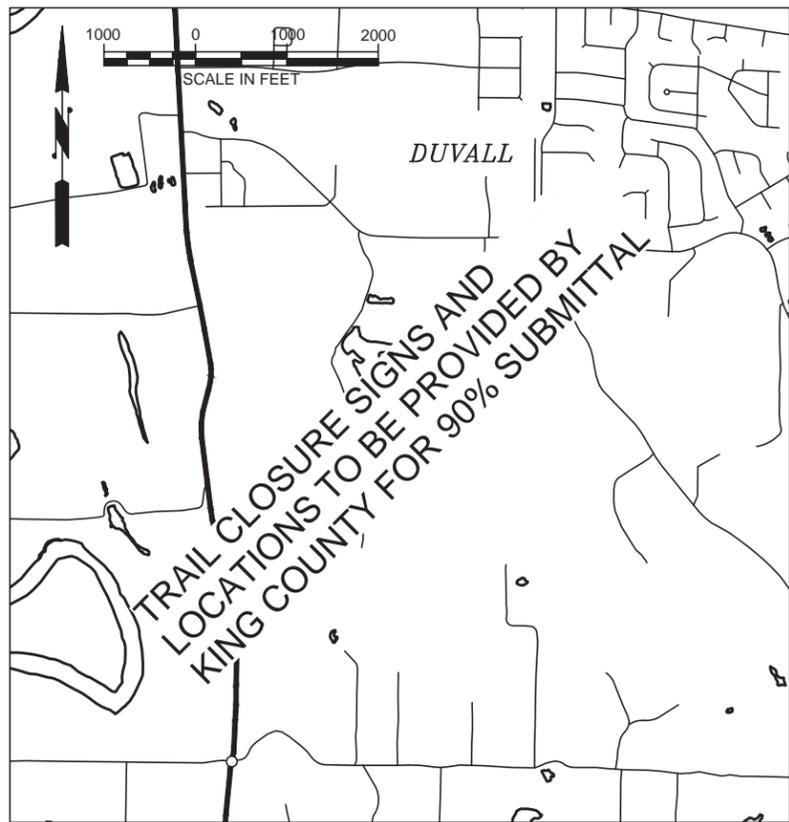
APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

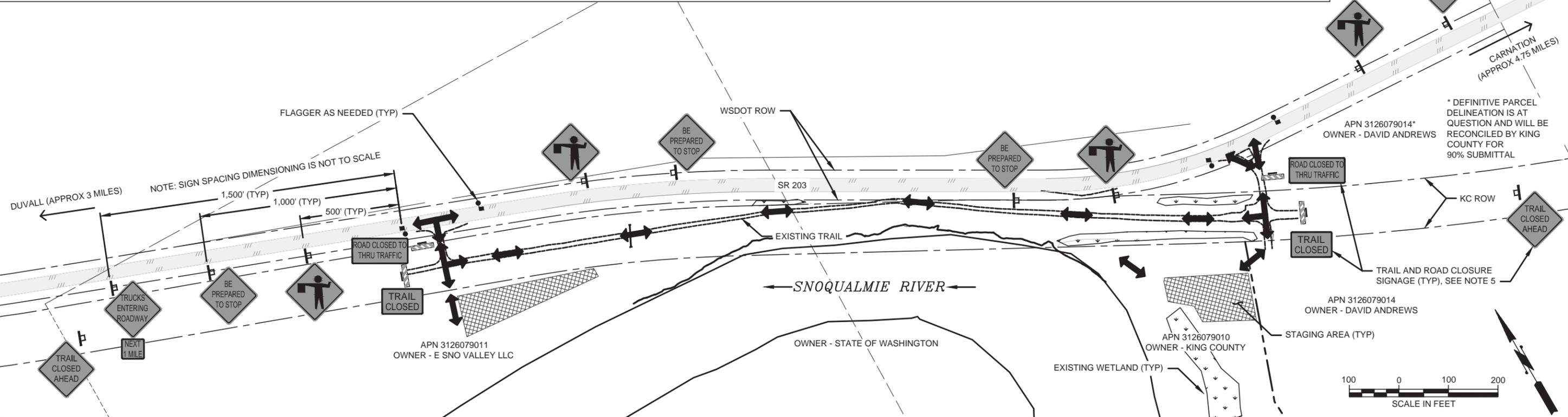
SINNEMA QUAALE UPPER REVETMENT RECONSTRUCTION
PROPOSED SITE PLAN - STRUCTURE LAYOUT

SHEET
6
 OF
31
 SHEETS
 XXXX-XX



GENERAL NOTES:

1. TRAFFIC CONTROLS SHOWN ARE THE MINIMUM REQUIRED AND SHALL BE AUGMENTED BY THE CONTRACTOR IN ACCORDANCE WITH CONTRACTOR'S TRAFFIC CONTROL PLAN (TCP).
2. ACCESS FROM STAGING AREAS SHALL FOLLOW EXISTING TRAIL.
3. SITE ACCESS FROM SR 203 SHALL BE VIA EXISTING TRAIL AND PRIVATE PROPERTY ACCESS ROUTES EAST AND WEST OF THE PROJECT SITE.
4. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN PER MUTCD, WSDOT TRAFFIC MANUAL M51-02.05, AND SPECIAL PROVISIONS.
5. CONTRACTOR SHALL PROVIDE AND MAINTAIN SIGNAGE PER APPROVED TCP WSDOT TRAFFIC MANUAL M51-02.05, FOR ALL WORK THAT WILL IMPACT OR DELAY TRAFFIC ON SR203 OR SNOQUALMIE VALLEY TRAIL. THE FOLLOWING SIGNAGE SHALL BE INSTALLED FOR THE DURATION OF THE WORK: "TRUCKS ENTERING ROADWAY", "BE PREPARED TO STOP", "TRAIL CLOSED AHEAD", "TRAIL CLOSED", AND "ROAD CLOSED TO THRU TRAFFIC". ADDITIONAL SIGNAGE AND TRAFFIC CONTROL MEASURES, INCLUDING, BUT NOT LIMITED TO, FLAGGERS, ROAD CLOSURE SIGNAGE, AND FLAGGING SIGNAGE REQUIRED TO PERFORM THE WORK, SHALL BE IDENTIFIED IN THE CONTRACTOR'S TCP.
6. THE FLAGGERS SHALL STOP THE FIRST VEHICLE FROM THE POSITION SHOWN, THEN MOVE TO THE CENTERLINE TO STOP APPROACHING TRAFFIC.
7. TEMPORARY ROAD CLOSURES SHALL NOT EXCEED 15-20 MINUTES.
8. MAINTAIN LOCAL ACCESS TO PRIVATE PROPERTY VIA EXISTING ACCESS ROADS FOR THE DURATION OF THE WORK.
9. ALL ACCESS ROADS AND ROUTES SHALL BE RESTORED AT PROJECT COMPLETION.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-000\CAD\Drawings\SH7.dwg
 Plot Date: 12/19/2014 4:29 PM
 Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

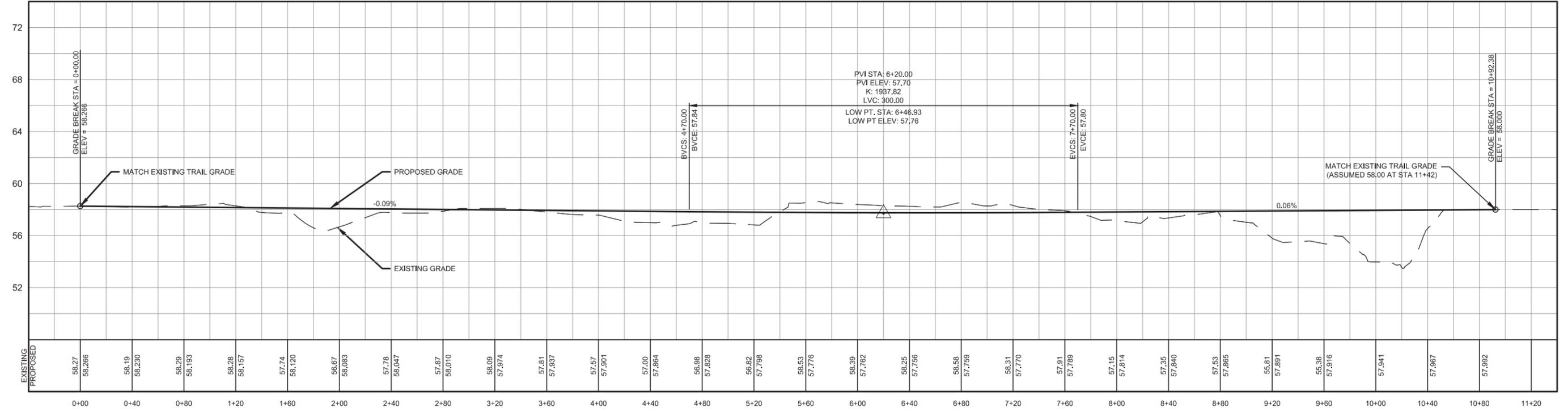
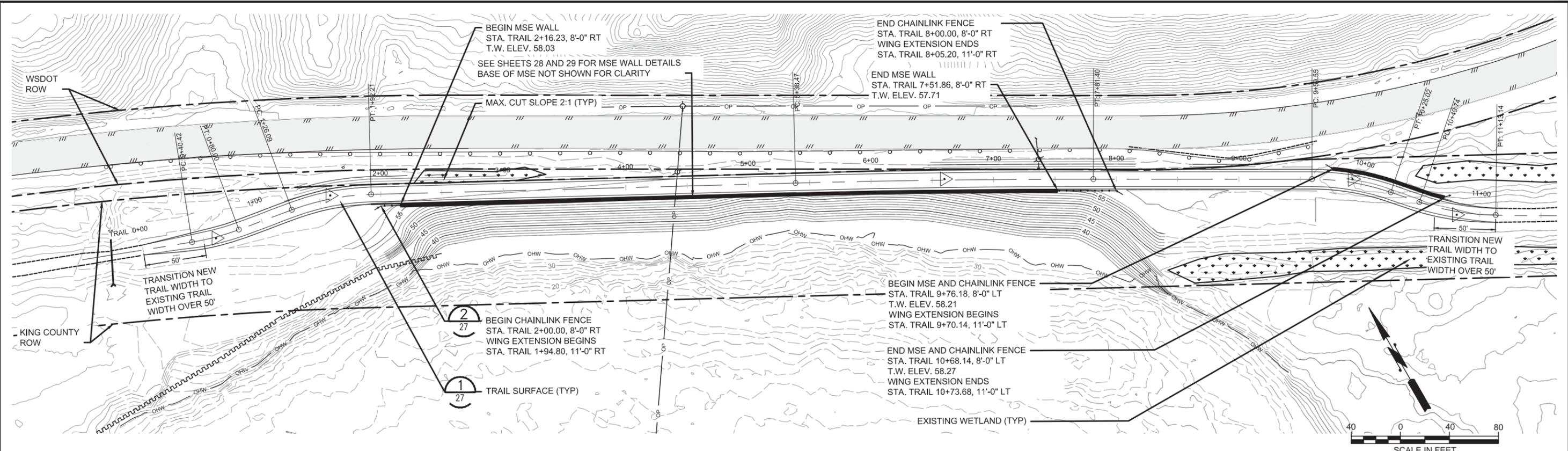
NUM.	REVISION	BY	DATE

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

SINNEMA QUAALE UPPER REVETMENT RECONSTRUCTION
TRAFFIC, ACCESS AND STAGING PLAN



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05\492-000\CAD\dwg\from subs\8 PLAN PROFILE.dwg
 PLOT Date: 12/19/2014 4:30 PM
 Cad User: Eric Marshall

FIELD BOOK: _____
 SURVEYED: _____
 SURVEY BASE MAP: _____
 CHECKED: _____
 PROJECT No. KC: XXXX-XX
 HERRERA: 12-05492-000
 SURVEY No. _____

**60% DESIGN
 DECEMBER 2014**

NUM.	REVISION	BY	DATE

APPROVED: _____
 PROJECT SUPERVISOR: _____
 PROJECT MANAGER: J. PARSONS 12-2014
 DESIGNED: C. RECKORD 12-2014
 DESIGN ENTERED: M. STEWART 12-2014

MacLeod Reckord PLLC
 83 Columbia Street, Suite 306
 Seattle, Washington 98104
 P 206-323-7919
 F 206-323-9242

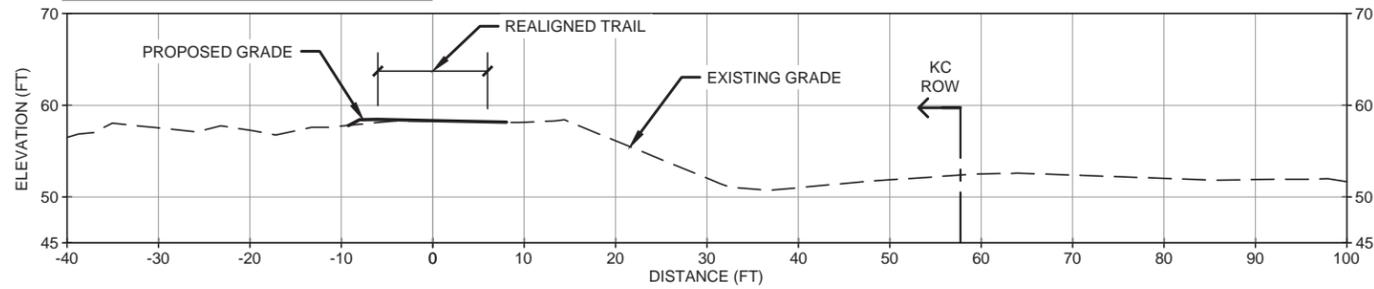


King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

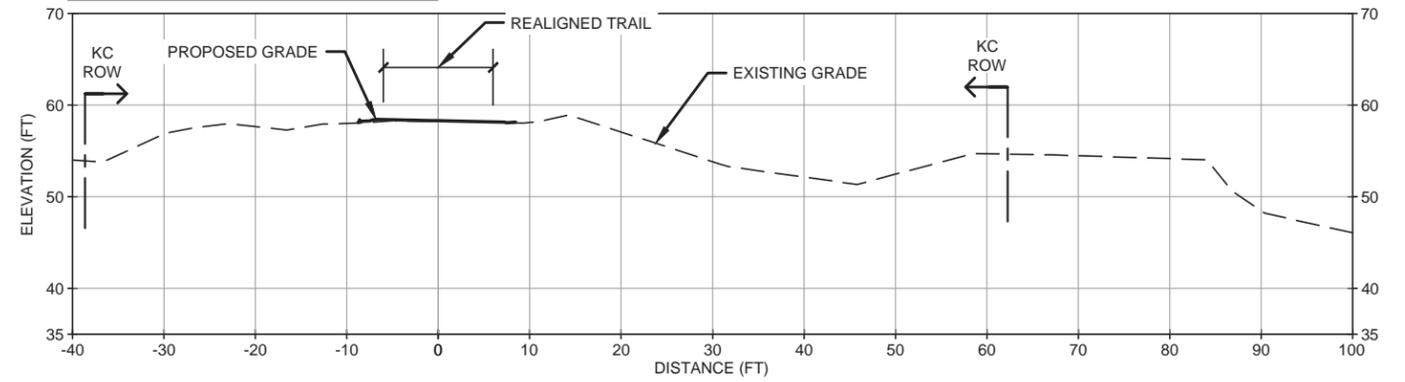
**SINEMA QUAALE UPPER REVETMENT
 RECONSTRUCTION**
**TRAIL RECONSTRUCTION
 PLAN AND PROFILE**

SHEET **8** OF **31** SHEETS
 XXXX-XX

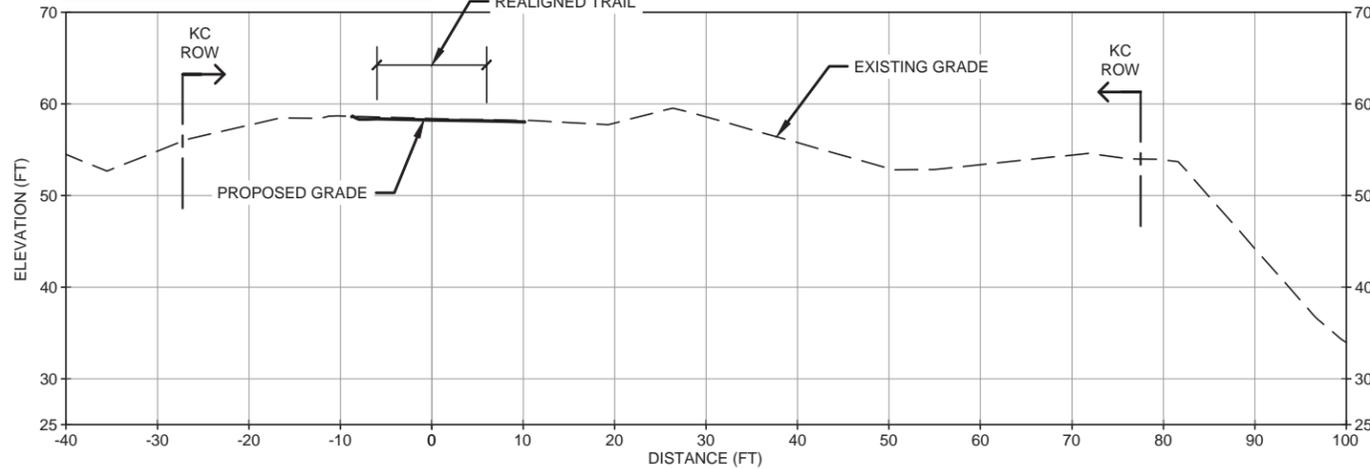
TRAIL ALIGNMENT STA 0+00.00



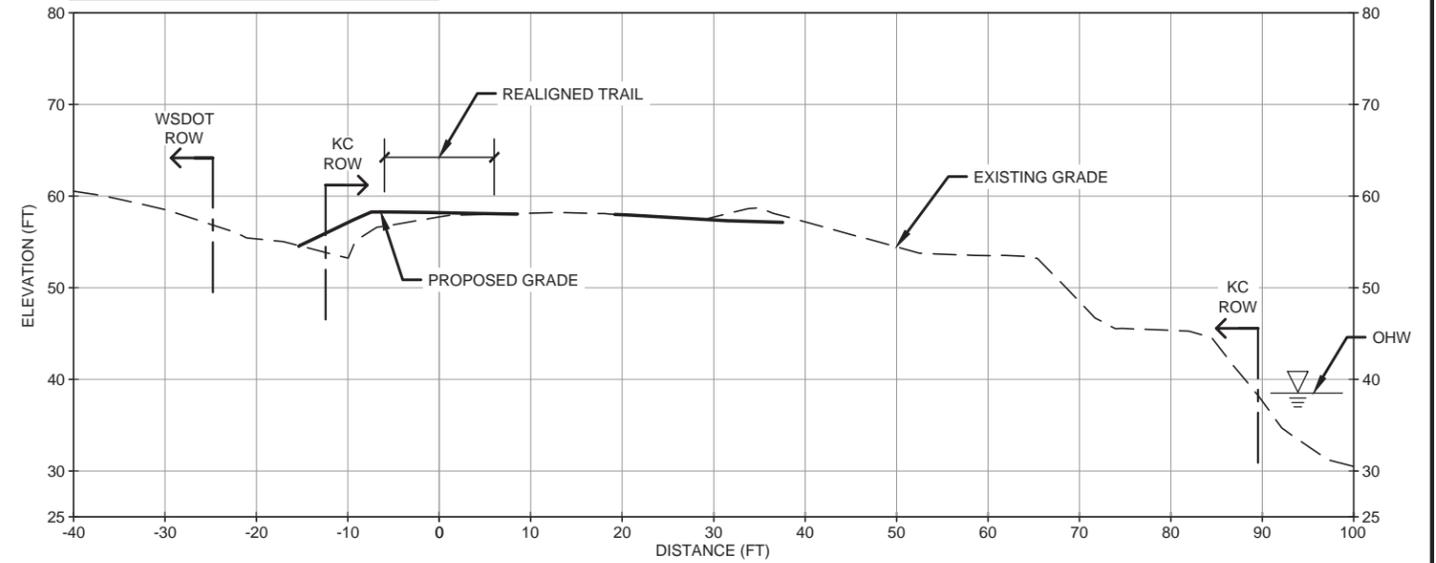
TRAIL ALIGNMENT STA 0+50.00



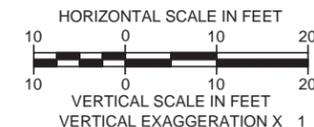
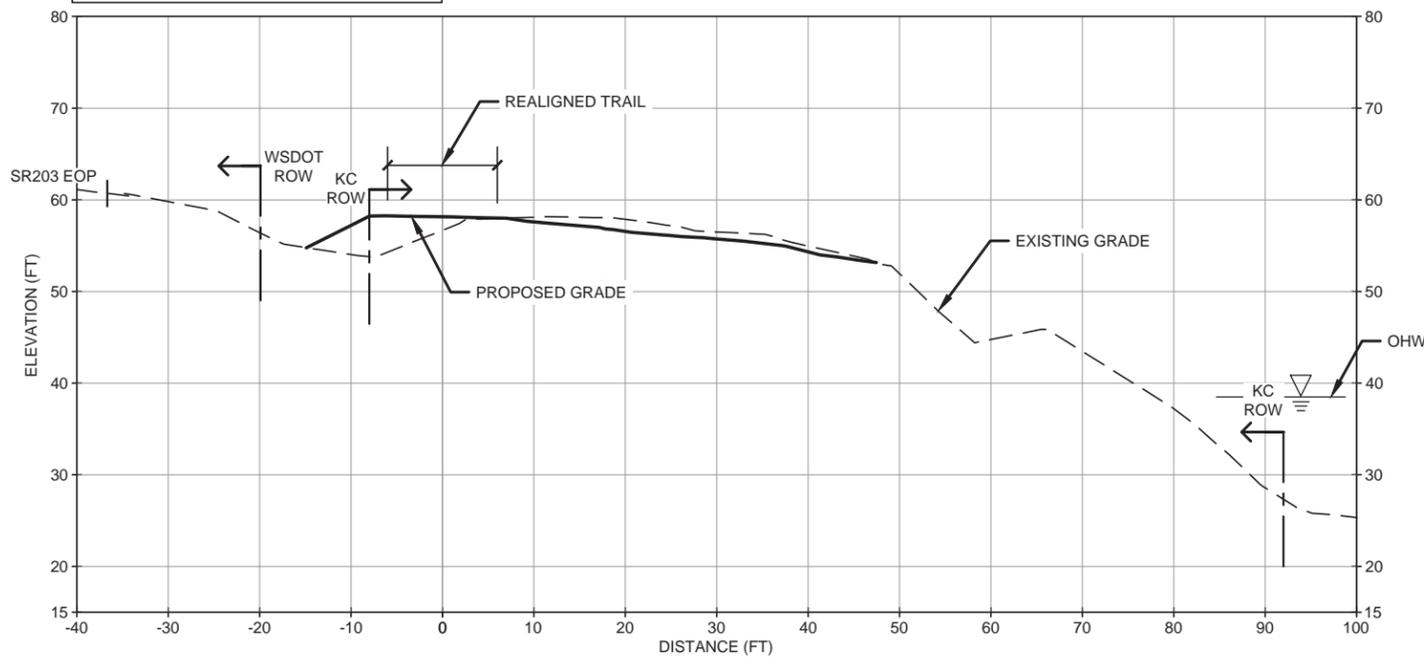
TRAIL ALIGNMENT STA 1+00.00



TRAIL ALIGNMENT STA 1+50.00



TRAIL ALIGNMENT STA 2+00.00



CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-000\CAD\dwg\SH9.dwg
Plot Date: 12/19/2014 4:30 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

60% DESIGN DECEMBER 2014			
NUM.	REVISION	BY	DATE

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



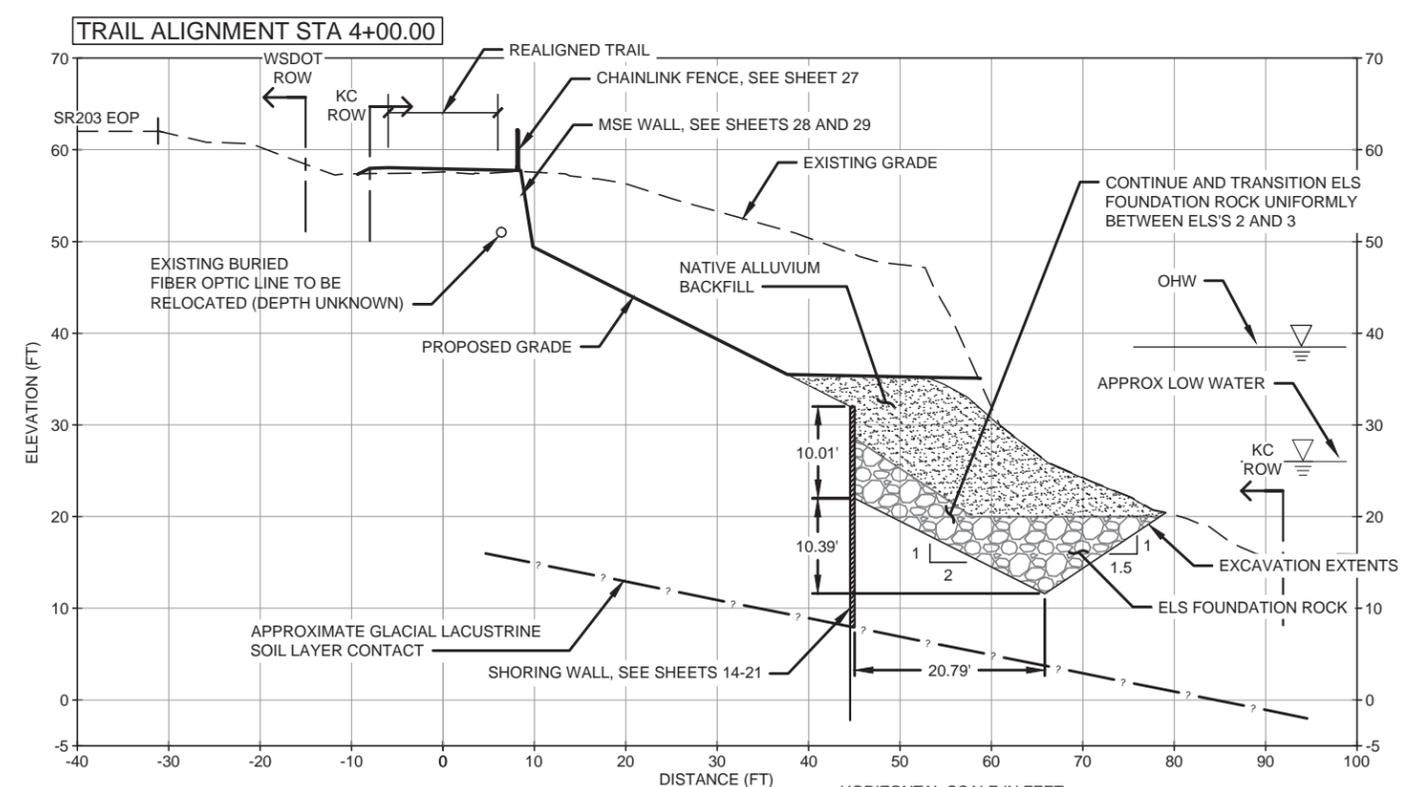
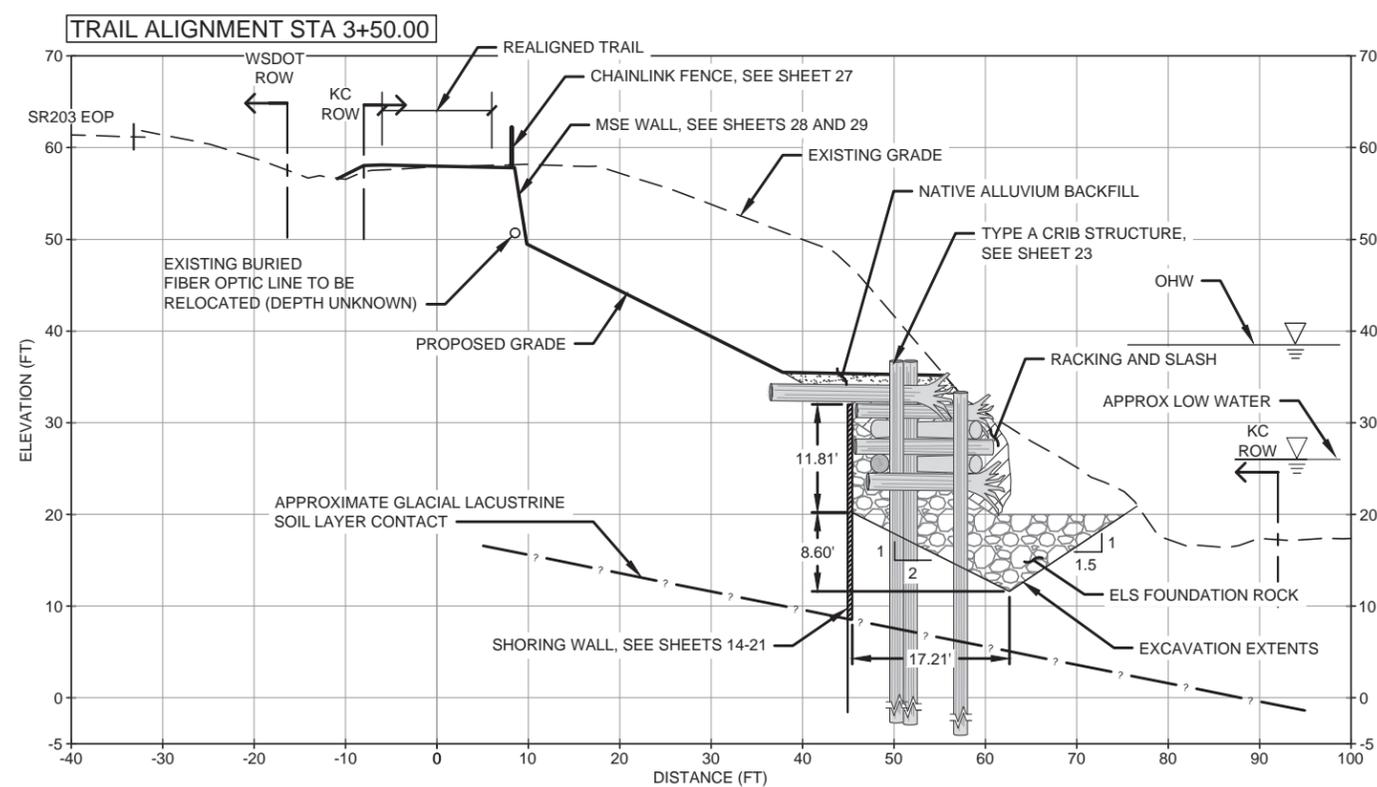
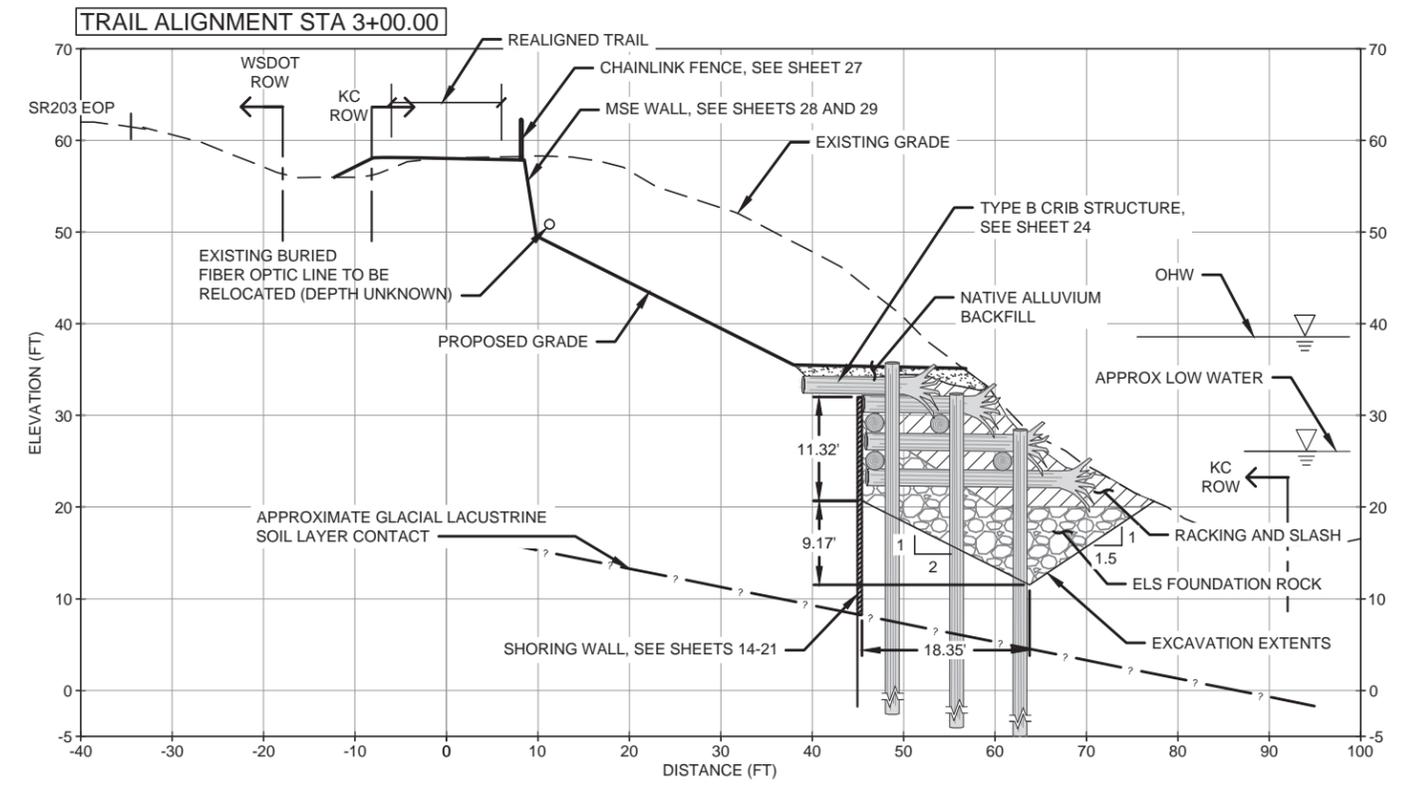
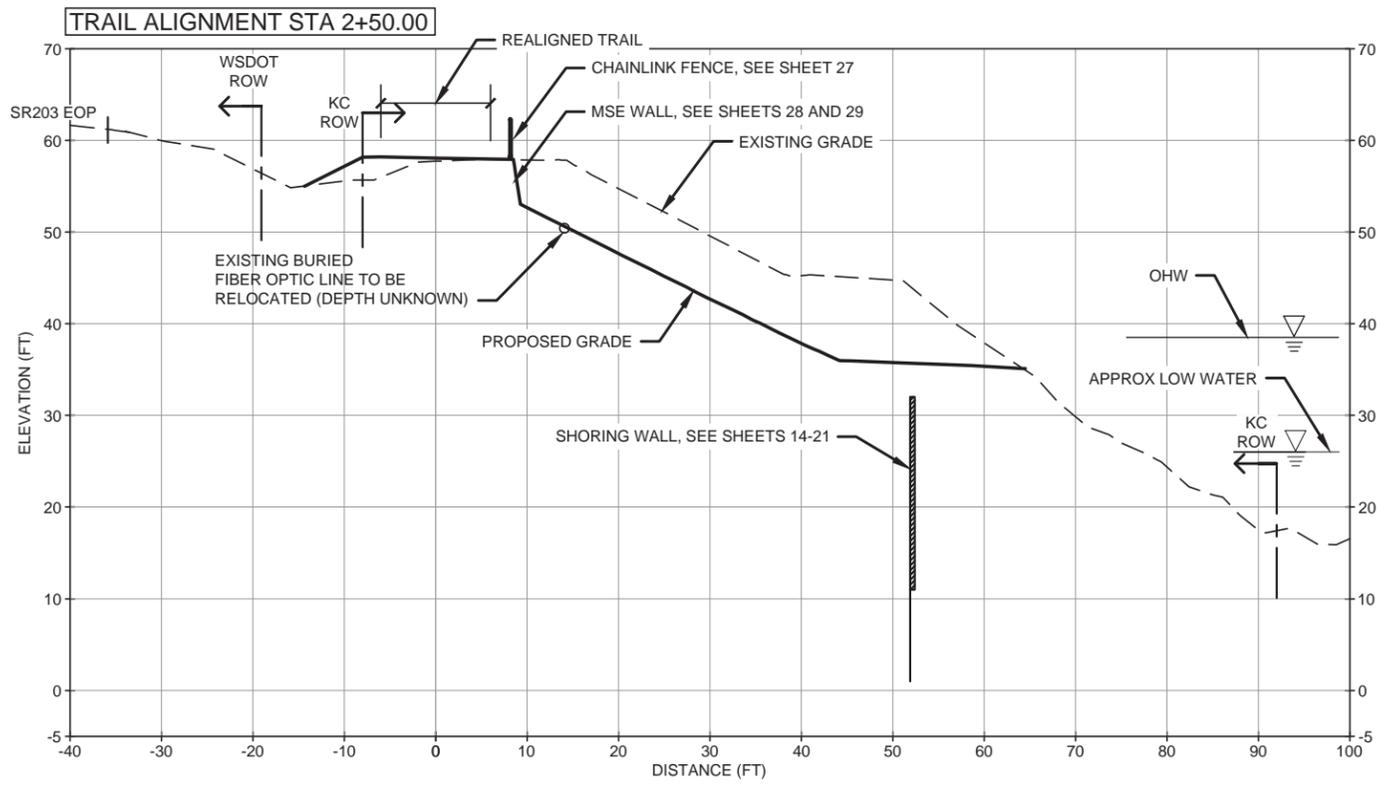
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

**SINEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

**TRAIL ALIGNMENT AND EMBANKMENT
MODIFICATION SECTIONS SHEET 1 OF 5**

SHEET
9
OF
31
SHEETS
XXXX-XX



NOTES:

- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION BASED ON BURIED DEPTH.
- REALIGNED TRAIL EXTENTS SHOWN ARE LIMITED TO THE 12 FT WIDE TRAIL SURFACE ONLY. SEE SHEET 27 FOR TRAIL DIMENSIONS.
- ELS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CAN BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.

HORIZONTAL SCALE IN FEET
 10 0 10 20
 VERTICAL SCALE IN FEET
 10 0 10 20
 VERTICAL EXAGGERATION X 1 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

Path: C:\p\proj\2012\12-05492-000\CAD\Drawings\SH10.dwg
 Plot Date: 12/19/2014 4:30 PM
 Cad User: Eric Marshall

FIELD BOOK: _____	APPROVED: _____
SURVEYED: _____	PROJECT: _____
SURVEY BASE MAP: _____	SUPERVISOR: _____
CHECKED: _____	PROJECT MANAGER: J. PARSONS 12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000	DESIGNED: G. KAYS 12-2014
SURVEY No. _____	DESIGN ENTERED: E. MARSHALL 12-2014

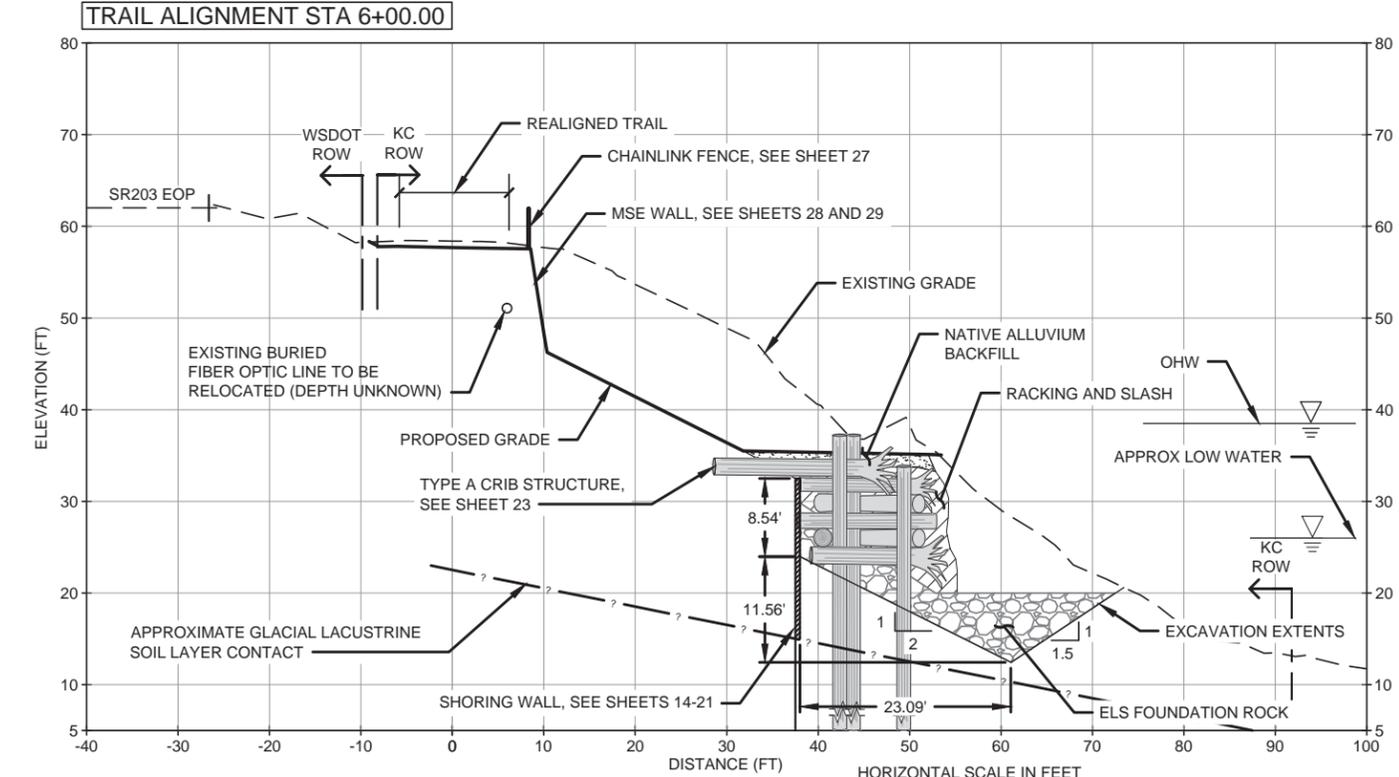
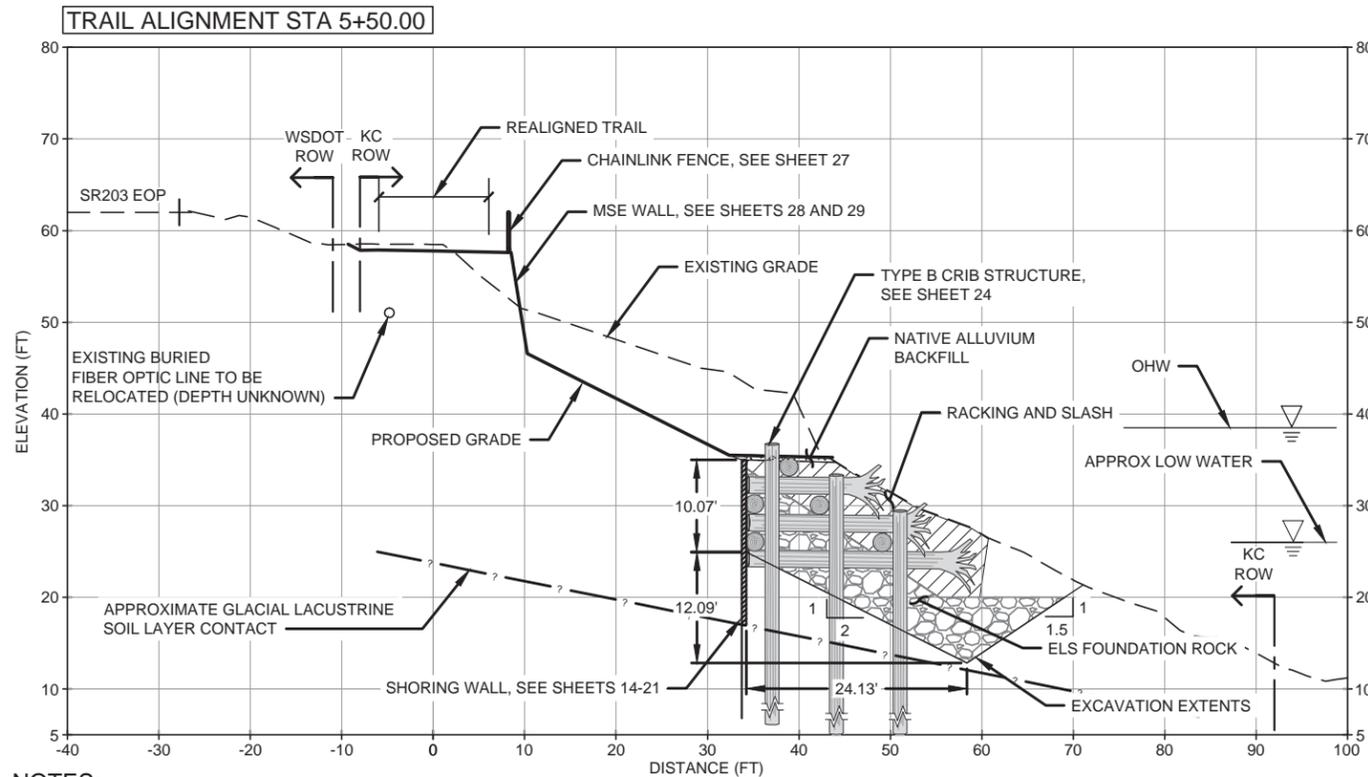
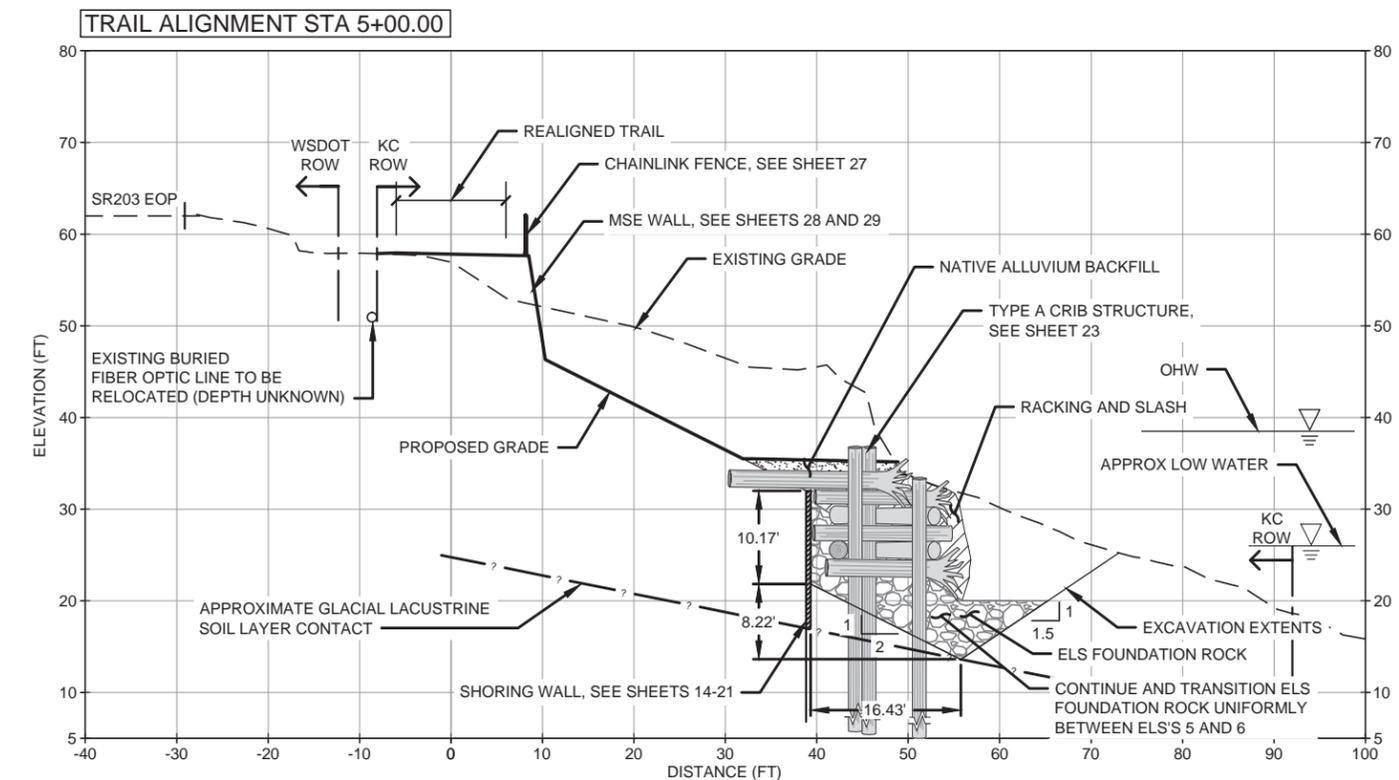
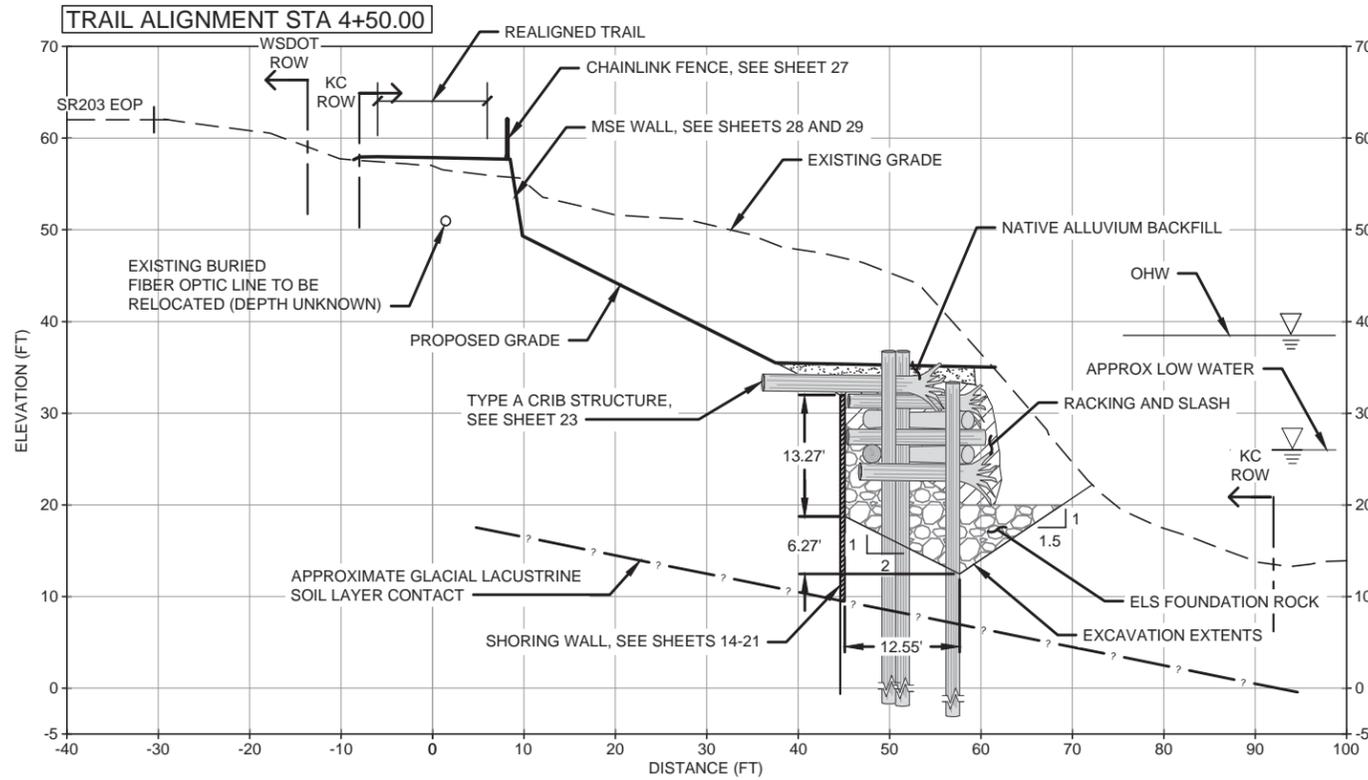


King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 2 OF 5

SHEET
 10
 OF
 31
 SHEETS
 XXXX-XX



- NOTES:**
- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION BASED ON BURIED DEPTH.
 - REALIGNED TRAIL EXTENTS SHOWN ARE LIMITED TO THE 12 FT WIDE TRAIL SURFACE ONLY. SEE SHEET 27 FOR TRAIL DIMENSIONS.
 - ELS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CAN BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.

HORIZONTAL SCALE IN FEET

 VERTICAL SCALE IN FEET
 VERTICAL EXAGGERATION X 1 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

Path: C:\p\proj\2012\05492-000\CAD\Drawings\SH11.dwg
 PLOT Date: 12/19/2014 4:31 PM
 Cad User: Eric Marshall

FIELD BOOK: _____	APPROVED: _____
SURVEYED: _____	PROJECT: _____
SURVEY BASE MAP: _____	SUPERVISOR: _____
CHECKED: _____	PROJECT MANAGER: J. PARSONS 12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000	DESIGNED: G. KAYS 12-2014
SURVEY No. _____	DESIGN ENTERED: E. MARSHALL 12-2014

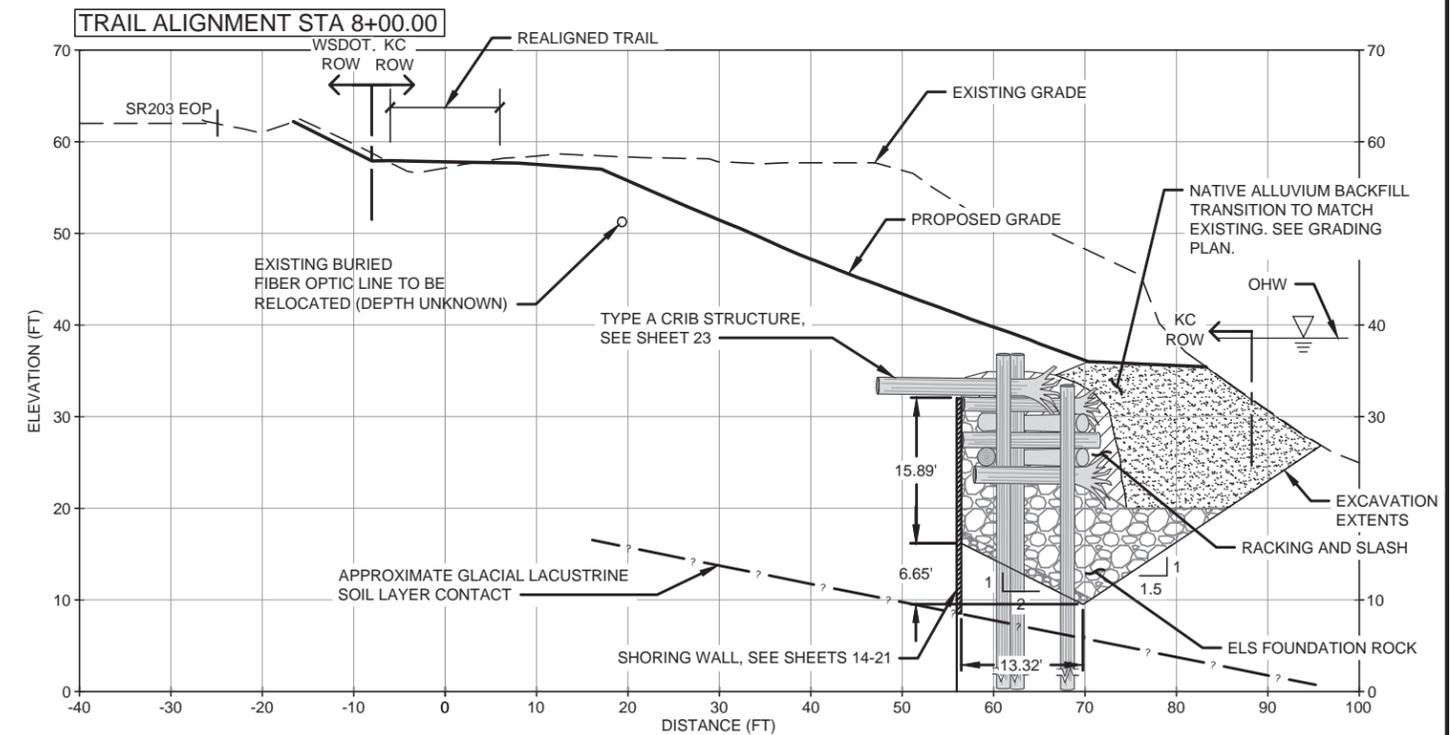
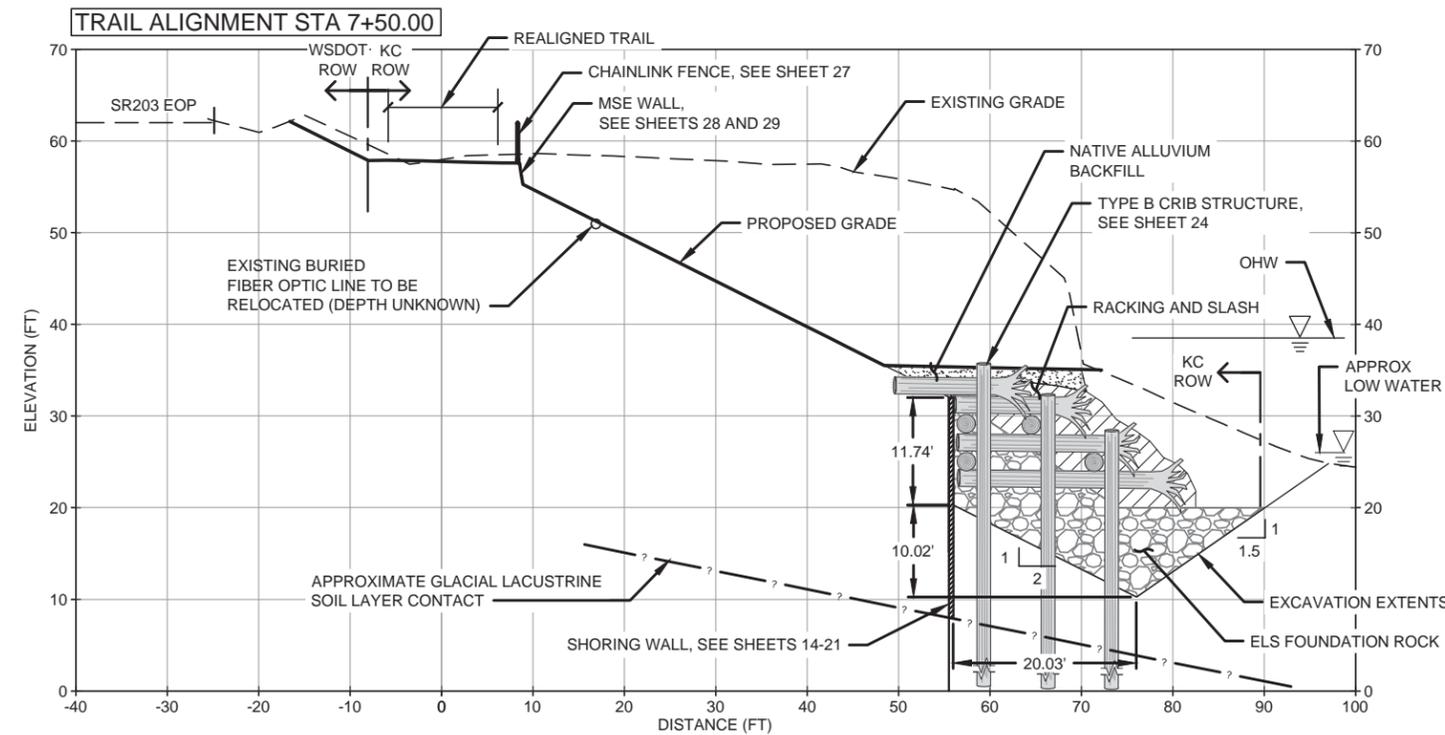
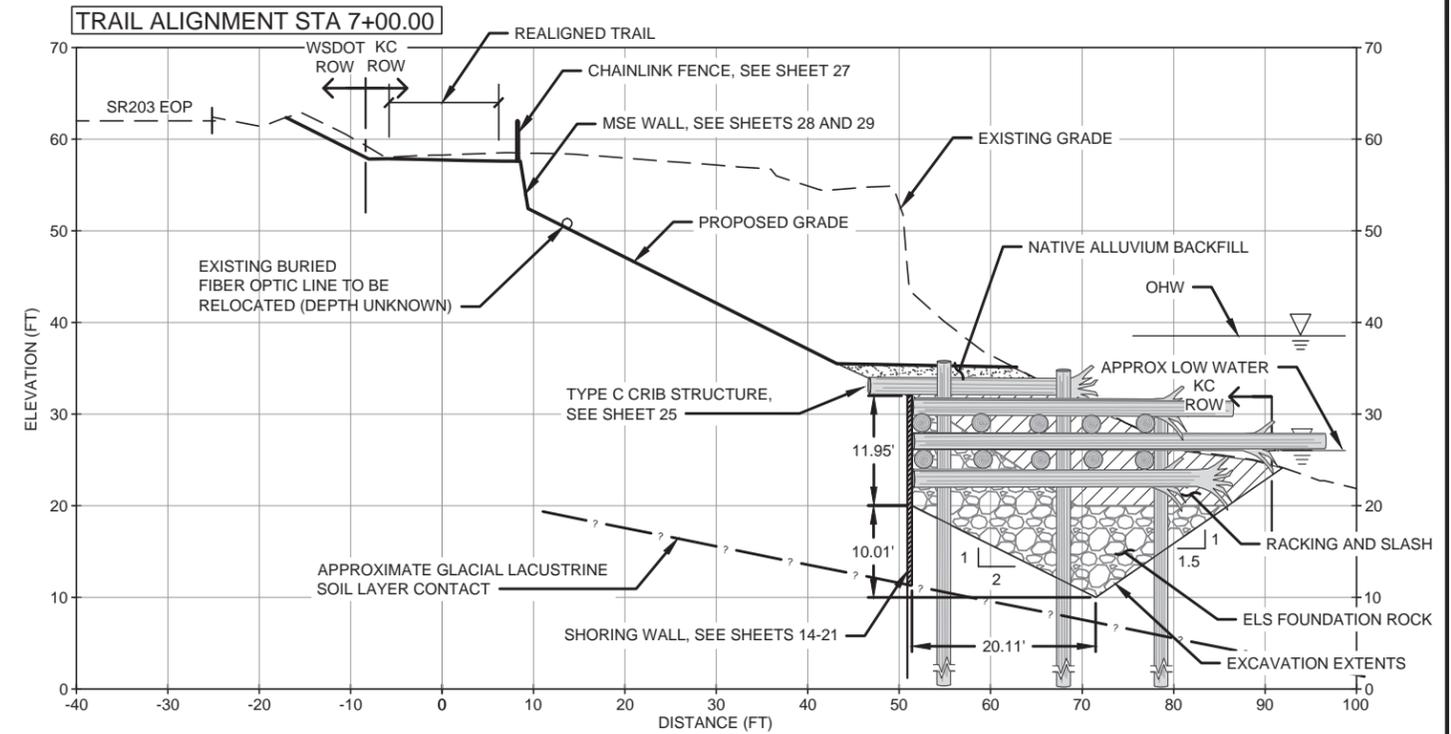
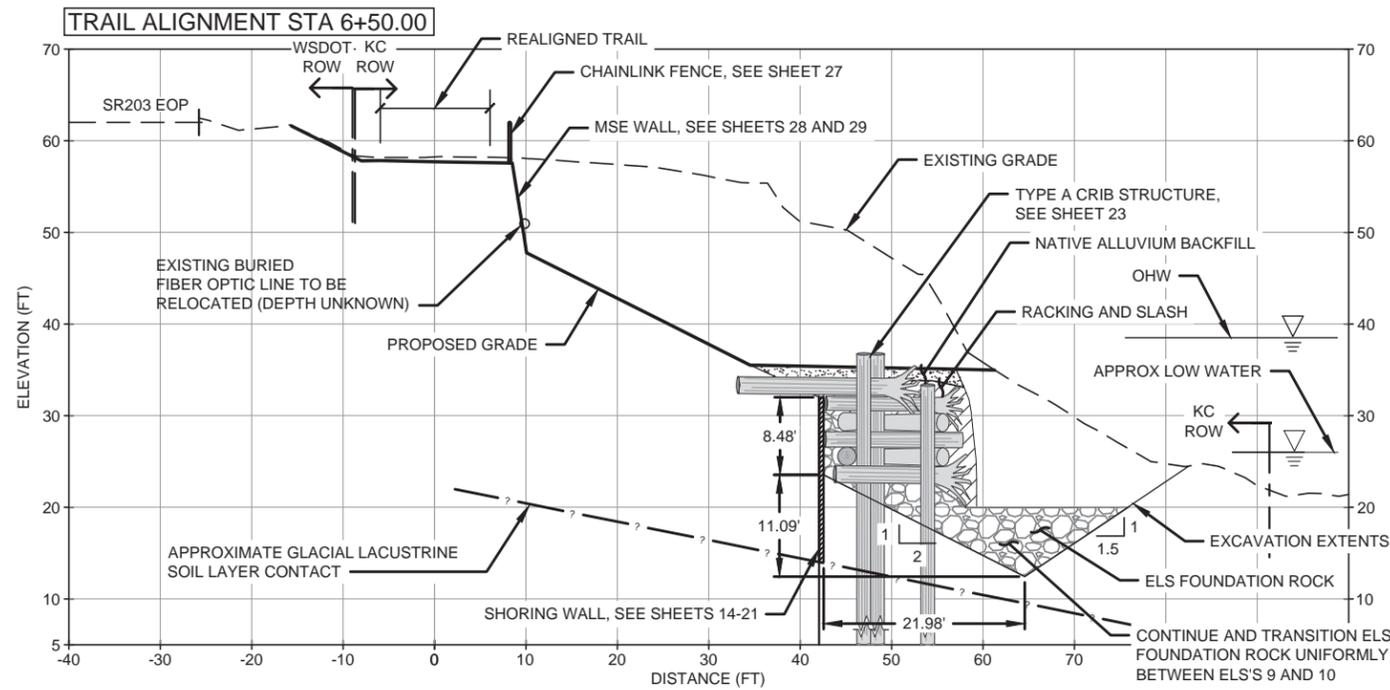


King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

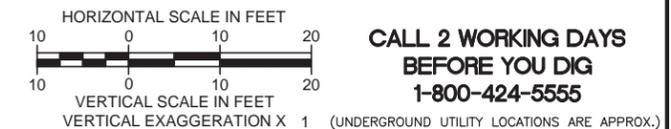
SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TRAIL ALIGNMENT AND EMBANKMENT MODIFICATION SECTIONS SHEET 3 OF 5

SHEET
 11
 OF
 31
 SHEETS
 XXXX-XX



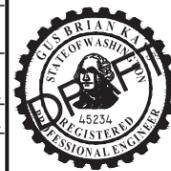
- NOTES:**
- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION BASED ON BURIED DEPTH.
 - REALIGNED TRAIL EXTENTS SHOWN ARE LIMITED TO THE 12 FT WIDE TRAIL SURFACE ONLY. SEE SHEET 27 FOR TRAIL DIMENSIONS.
 - ELS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CAN BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.



Path: C:\p\proj\2012\05492-000\CAD\Drawings\SH12.dwg
 Plot Date: 12/19/2014 4:31 PM
 Cad User: Eric Marshall

FIELD BOOK: _____	APPROVED: _____
SURVEYED: _____	PROJECT _____
SURVEY BASE MAP: _____	SUPERVISOR: _____
CHECKED: _____	PROJECT MANAGER: J. PARSONS 12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000	DESIGNED: G. KAYS 12-2014
SURVEY No. _____	DESIGN ENTERED: E. MARSHALL 12-2014
NUM. _____	REVISION _____
BY _____	DATE _____

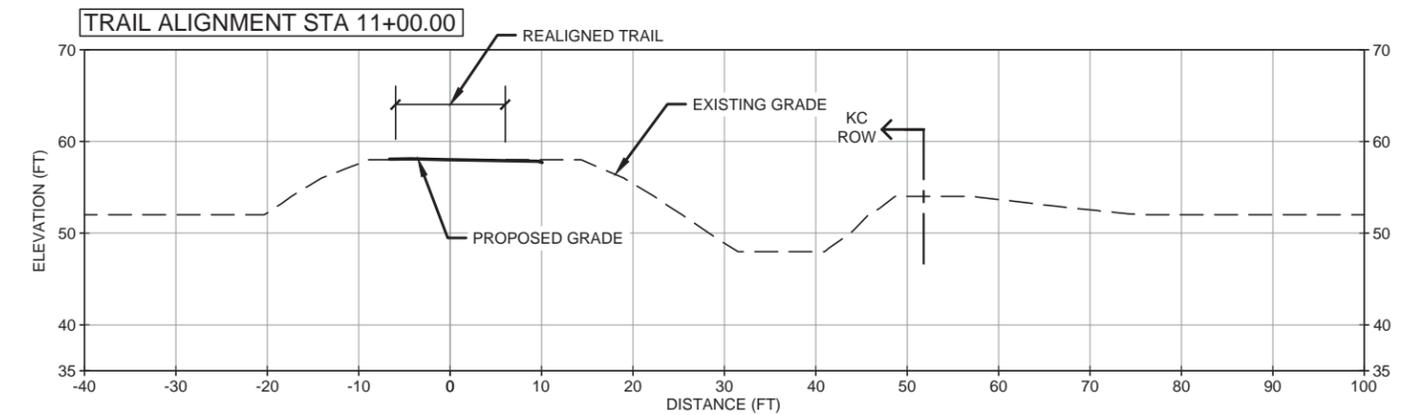
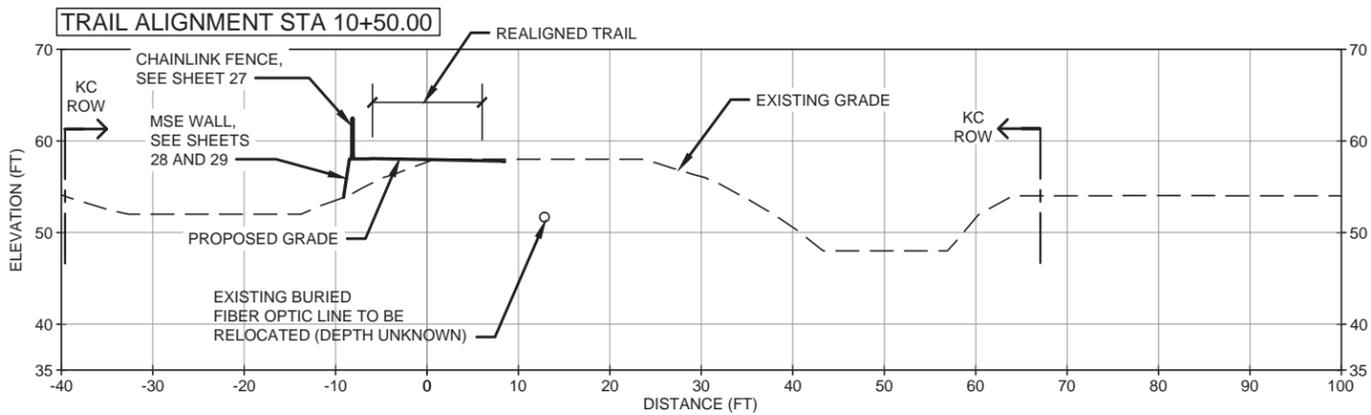
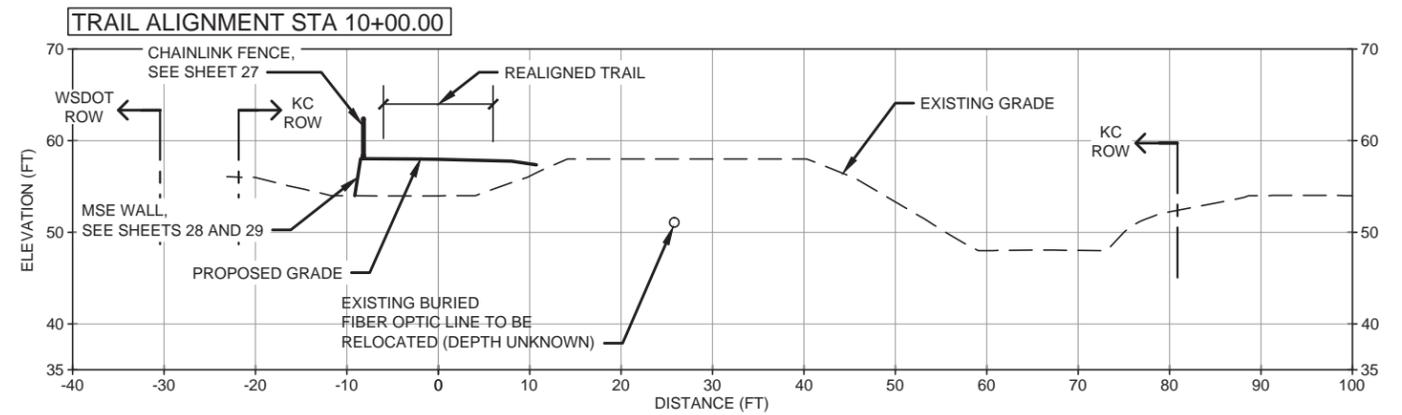
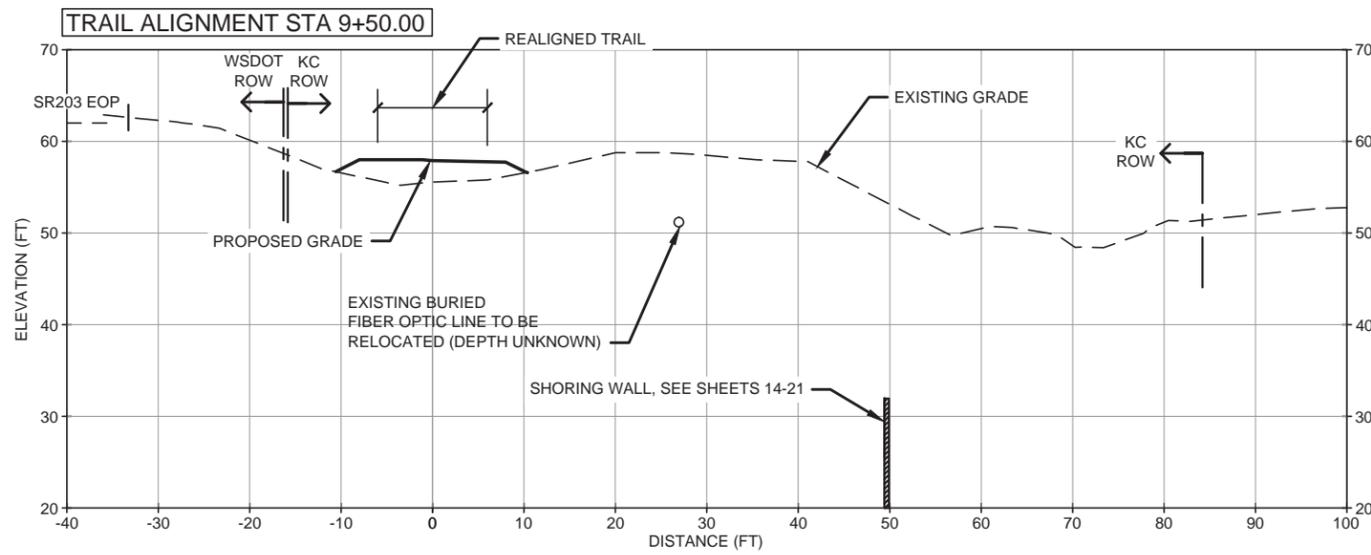
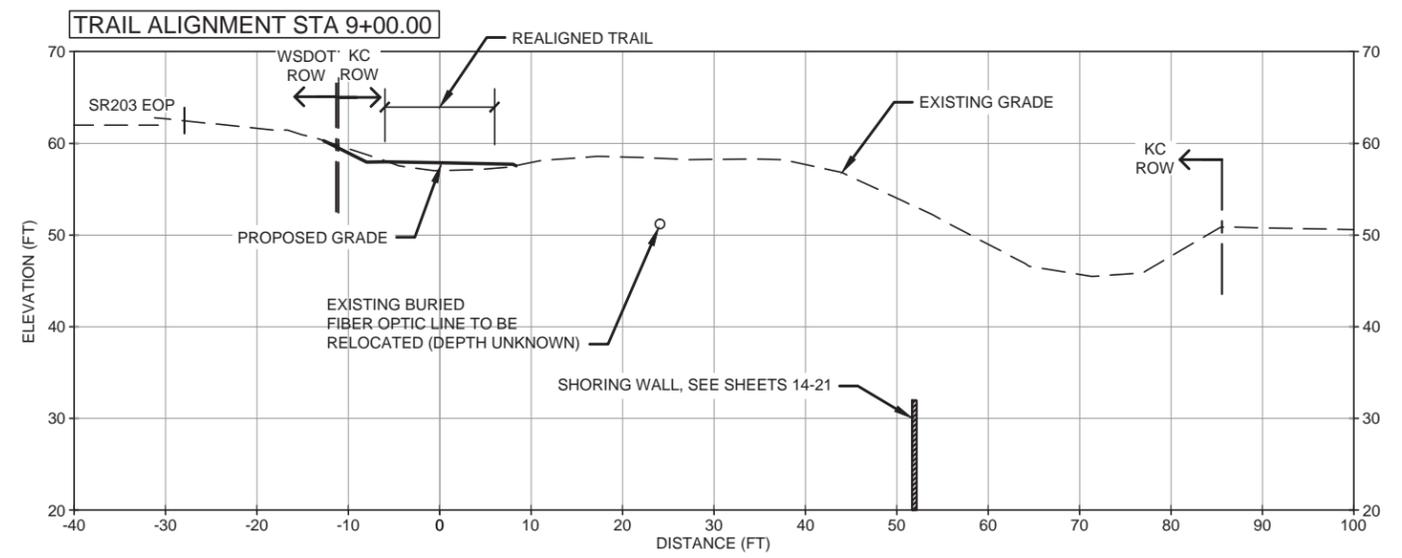
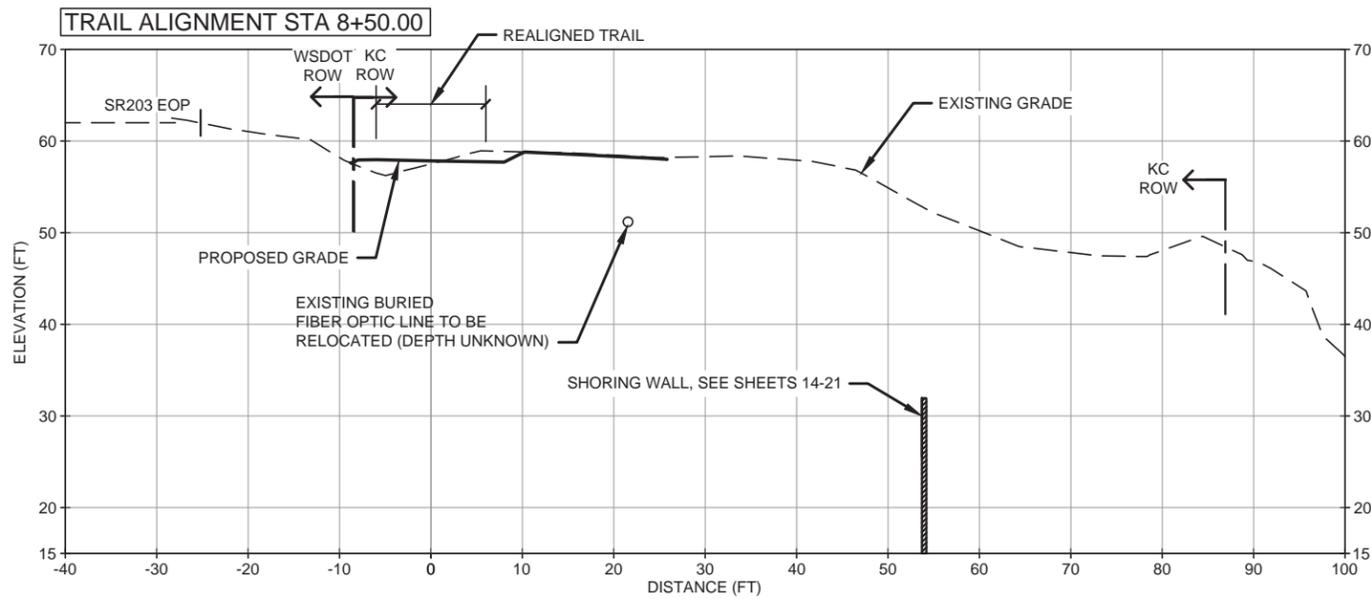
**60% DESIGN
 DECEMBER 2014**



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

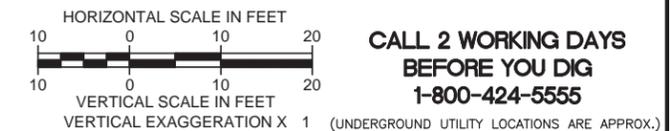
**SINEMA QUAALE UPPER REVETMENT
 RECONSTRUCTION**
 TRAIL ALIGNMENT AND EMBANKMENT
 MODIFICATION SECTIONS SHEET 4 OF 5

SHEET
 12
 OF
 31
 SHEETS
 XXXX-XX



NOTES:

- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION BASED ON BURIED DEPTH.
- REALIGNED TRAIL EXTENTS SHOWN ARE LIMITED TO THE 12 FT WIDE TRAIL SURFACE ONLY. SEE SHEET 27 FOR TRAIL DIMENSIONS.



Path: C:\p\proj\2012\05492-000\CAD\Drawings\SH13.dwg PLOT Date: 12/19/2014 4:31 PM Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE

**60% DESIGN
DECEMBER 2014**

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

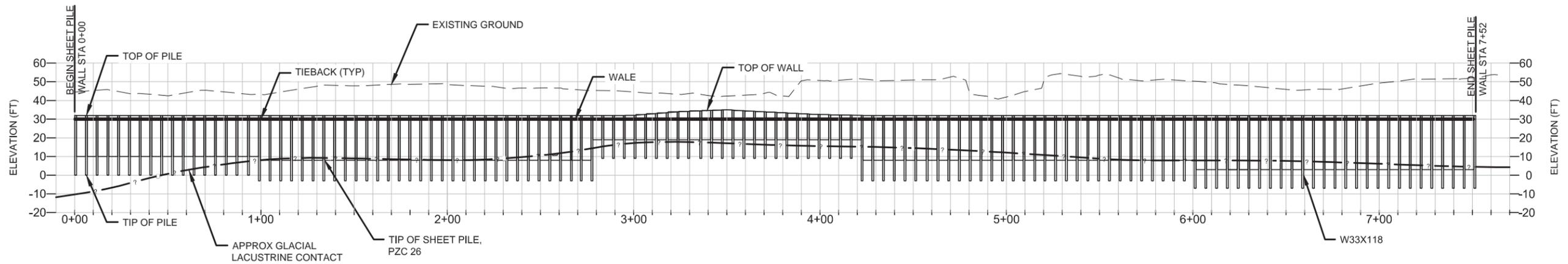
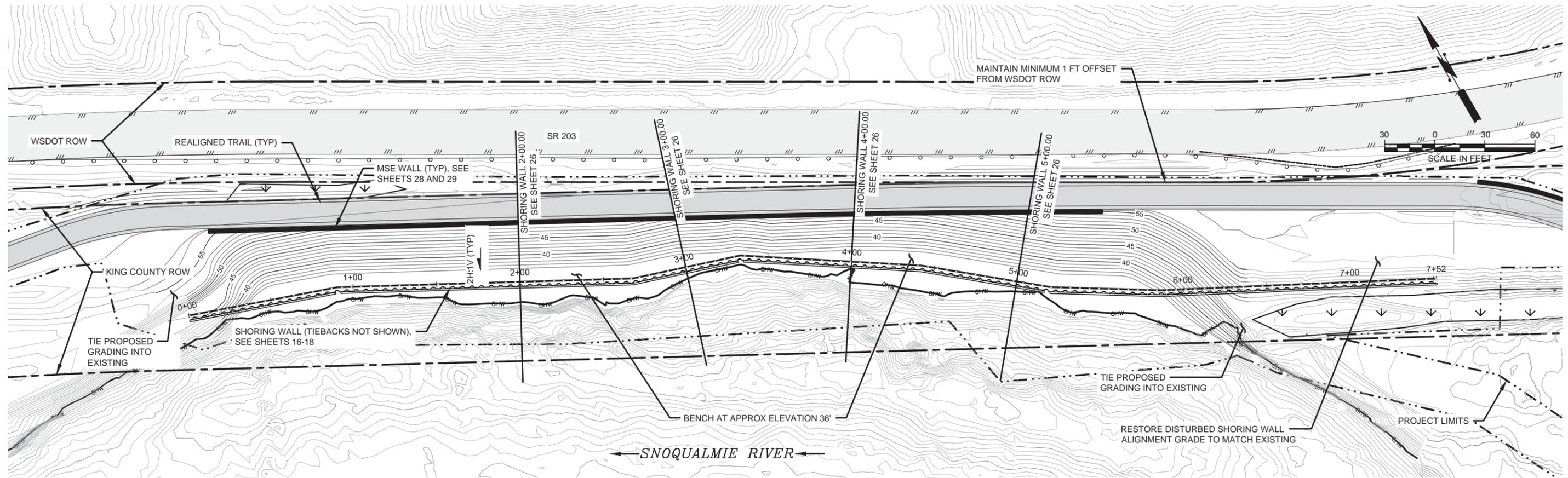
Christie True, Director

**SINNEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

**TRAIL ALIGNMENT AND EMBANKMENT
MODIFICATION SECTIONS SHEET 5 OF 5**

SHEET
13
OF
31
SHEETS

XXXX-XX



**CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555**

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\05492-000\CAD\dwgs\SH14.dwg
PLOT Date: 12/19/2014 4:31 PM
Cad User: Eric Marshall

FIELD BOOK: _____
 SURVEYED: _____
 SURVEY BASE MAP: _____
 CHECKED: _____
 PROJECT No. KC: XXXX-XX
 HERRERA: 12-05492-000
 SURVEY No. _____

NUM.	REVISION	BY	DATE

**60% DESIGN
DECEMBER 2014**

APPROVED: _____
 PROJECT SUPERVISOR: _____
 PROJECT MANAGER: J. PARSONS 12-2014
 DESIGNED: G. KAYS 12-2014
 DESIGN ENTERED: E. MARSHALL 12-2014



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

**SINNEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**
**SHORING WALL PLAN AND PROFILE AND GRADING
PLAN**

SHEET
14
 OF
31
 SHEETS
 XXXX-XX

SHORING GENERAL NOTES

PURPOSE: THE SHORING SYSTEM IS INTENDED TO BE A PERMANENT STRUCTURE FOR PROVIDING EARTH RETENTION.

REFERENCES:

- DRAFT 60 PERCENT GEOTECHNICAL DESIGN REPORT SINNEMA QAAALE UPPER REVETMENT RECONSTRUCTION DATED DECEMBER 19, 2014 BY HART CROWSER
- DRAFT BASIS OF DESIGN REPORT, SINNEMA QAAALE UPPER REVETMENT RECONSTRUCTION PROJECT, DATED DECEMBER 19, 2014 BY HERRERA

CONSTRUCTION REQUIREMENTS : ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL CONFORM TO THE SHORING PLANS AND WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, 2014 EDITION

DESIGN REQUIREMENTS : DESIGN CONFORMS TO THE FOLLOWINGS REQUIREMENTS.

- DIVISION 1, SECTION 5 OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION - 2002 FOR ALLOWABLE STRESS DESIGN
- CHAPTER 15 OF WSDOT GEOTECHNICAL DESIGN MANUAL 2014 EDITION
- SECTIONS 2-09.3(3)D OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION 2014 EDITION

UTILITY LOCATE : THE CONTRACTOR SHALL UTILIZE THE SERVICES OF THE "UTILITY LOCATOR SERVICE" (1-800-424-5555) TO VERIFY THE EXTENT AND LOCATIONS OF SITE UTILITIES. THE UTILITIES SHALL BE CHECKED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK. CONSTRUCTION ELEMENTS SUCH AS PILES ARE TYPICALLY LOCATED TO BE A NOMINAL DISTANCE (3 TO 5 FOOT) AWAY FROM ANY UTILITIES. ANY MAJOR DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. ANY DISCREPANCIES IN LOCATION BETWEEN ACTUAL UTILITIES AND THE UTILITY LOCATIONS SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.

SPECIAL CONDITIONS : CONTRACTOR SHALL VERIFY EXISTING GRADES AND DIMENSIONS OF EXISTING STRUCTURES, AS SHOWN ON THE PLANS, IN THE FIELD AND SHALL NOTIFY THE ENGINEER OF ALL FIELD CHANGES WHICH WOULD MODIFY THE SHORING SYSTEM PRIOR TO EXCAVATION, DRILLING, FABRICATION AND INSTALLATION.

SURCHARGE PRESSURES - SHORING WALL: CONSTRUCTION AND TRAFFIC LOAD UP TO 500 PSF IS ALLOWED ADJACENT TO THE EDGE OF WALL. LARGER LOADS SHALL BE PLACED A MINIMUM DISTANCE OF H FROM THE TOP OF THE WALL, WHERE H IS THE WALL HEIGHT.

VERIFICATION CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED DIMENSIONS, MEMBER SIZES AND CONDITIONS PRIOR TO FABRICATION AND COMMENCING ANY WORK. NOTIFY THE ENGINEER ABOUT ANY DISCREPANCIES. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE PLANS ARE INTENDED AS GUIDELINES ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR. THE EXISTING CONDITIONS SHOWN ON THE PLANS ARE BASED ON EITHER SITE OBSERVATION OR ORIGINAL DRAWINGS OR WERE ASSUMED BASED ON EXPECTED CONDITIONS. IF THE EXISTING CONDITIONS DO NOT CLOSELY MATCH THE CONDITIONS SHOWN ON THE PLANS, OR IF THE EXISTING MATERIALS ARE OF QUESTIONABLE OR SUBSTANDARD QUALITY, NOTIFY THE ENGINEER PRIOR TO COMMENCING ANY WORK.

MISCELLANEOUS: THE PLANS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE ENGINEER.

SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO ANY FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS INCLUDING STRUCTURAL STEEL.

INSPECTION: INSPECTION SHALL BE PERFORMED BY A QUALIFIED GEOTECHNICAL ENGINEER OR APPROVED TESTING LAB FOR PILE PLACEMENT, TIEBACK PLACING AND STRESSING AND SOILS COMPACTION. INSPECTION SHALL BE PERFORMED BY A QUALIFIED TESTING LAB FOR WELDING.

STEEL SPECIFICATION : FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
STRUCTURAL STEEL AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, 14TH EDITION

WELDING AWS D1.1
WELDER CERTIFICATION WASHINGTON ASSOCIATION OF BUILDING OFFICIALS (WABO)

STEEL MATERIALS :

- ASTM A992 GRADE 50M WIDE FLANGE BEAM
- ASTM A572 GRADE 50 SHEET PILE
- ASTM A36 CONNECTION MATERIAL, EMBEDDED ITEMS, ANGLES, BASE PLATES, CHANNEL AND MISCELLANEOUS STEEL
- ASTM A416 (LOW RELAXATION) PERMANENT TIEBACK STRAND
- ASTM A722 PERMANENT TIEBACK BAR
- WELDING ELECTRODES E70XX

SHORING PROCEDURE

PILE PLACEMENT: PILE PLACEMENT SHALL BE PER WSDOT STANDARD SPECIFICATION SECTION 2-09.3(3)D.

SHORING MONITORING: A SYSTEMATIC PROGRAM OF OBSERVATION SHALL BE CONDUCTED BY THE CONTRACTOR DURING THE PROJECT EXECUTION TO DETERMINE PERFORMANCE OF SHORING WALL AND THE EFFECT OF CONSTRUCTION ON ADJACENT FACILITIES AND STRUCTURES IN ORDER TO PROTECT THEM FROM DAMAGE. IF CONTRACTOR OBSERVES UNSTABLE CONDITIONS, CONTRACTOR SHALL BACKFILL FRONT OF SHORING WALL TO STABILIZE EXCAVATION AND NOTIFY THE OWNER AND ENGINEER TO EVALUATE NEXT COURSE OF ACTION.

SHORING SEQUENCE

NON-BURIED SHORING WALL:

1. INSTALL PILES AT LOCATIONS AND ELEVATIONS SHOWN IN THE PLANS
2. EXCAVATE TO 2 FEET BELOW TIE-BACK
3. INSTALL WALE AND TIE-BACK
4. DREDGE TO THE SPECIFIED EXCAVATION BASE
5. COMPLETE ELS PER CONTRACT PLANS
6. REPAIR GROUND SURFACE AS REQUIRED BY CONTRACT PLANS

BURIED SHORING WALL:

1. EXCAVATE TO THE TOP OF THE PILES SHOWN IN THE PLANS
2. INSTALL PILES AT LOCATIONS AND ELEVATIONS SHOWN IN THE PLANS
3. INSTALL WALE AND TIE-BACK
4. BACKFILL AND REPAIR GROUND SURFACE AS REQUIRED BY CONTRACT PLANS

Path: C:\p\proj\2012\05492-000\Info Sources-Reis\CTE_SQU_60% - StandardSQ-Sheet_15.dwg
 Plot Date: 12/19/2014 4:35 PM
 Cad User: Eric Marshall

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

FIELD BOOK: _____				APPROVED: _____	
SURVEYED: _____				PROJECT _____	
SURVEY BASE MAP: _____				SUPERVISOR: _____	
CHECKED: _____				PROJECT MANAGER: J. PARSONS	12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000				DESIGNED: A. BI	12-2014
SURVEY No. _____				DESIGN ENTERED: J. ROBERTS	12-2014
NUM.	REVISION	BY	DATE		

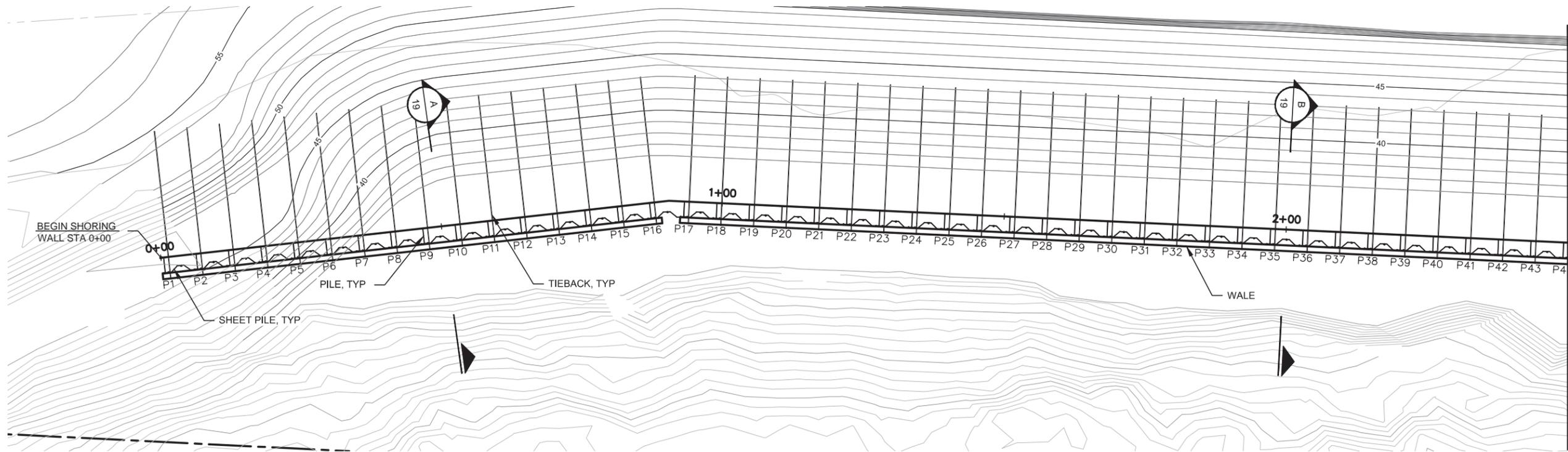
**60% DESIGN
DECEMBER 2014**



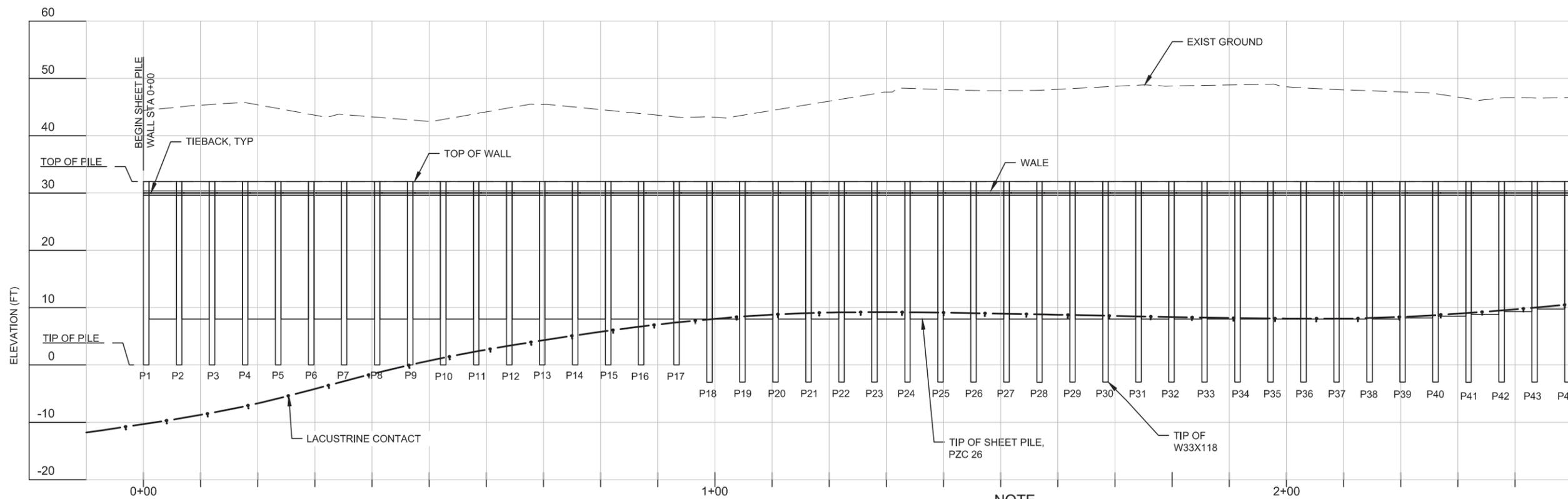
SINNEMA QAAALE UPPER REVETMENT RECONSTRUCTION
SHORING GENERAL NOTES

SHEET **15** OF **31** SHEETS

XXXX-XX



SHORING PLAN



SHORING PROFILE

NOTE

SHEET PILES FROM STA 1+00 TO STA 6+00 SHALL BE DRIVEN 2 FT INTO LACUSTRINE CONTACT OR REFUSAL PENDING SEEPAGE ANALYSIS PERFORMED PRIOR TO 90% DESIGN SUBMITTAL.

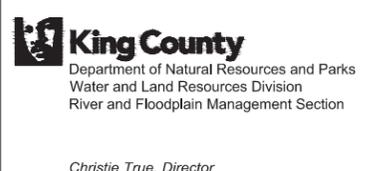
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\05492-000\Info Sources\Reis\CTE_SQU_60% - Standard\SQ-Sheet_16.dwg
 PLOT Date: 12/19/2014 4:35 PM
 Cad User: Eric Marshall

FIELD BOOK: _____			
SURVEYED: _____			
SURVEY BASE MAP: _____			
CHECKED: _____			
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000			
SURVEY No. _____			
NUM.	REVISION	BY	DATE

**60% DESIGN
 DECEMBER 2014**

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: A. BI	12-2014
DESIGN ENTERED: J. ROBERTS	12-2014

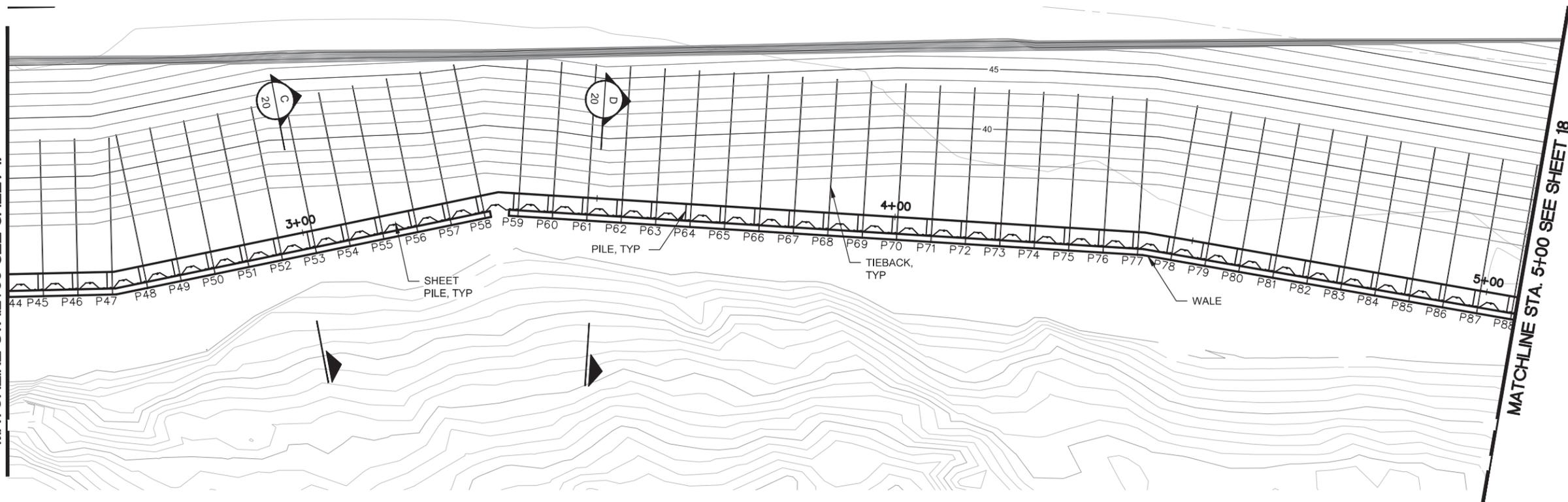


**SINEMA QUALE UPPER REVETMENT
 RECONSTRUCTION**

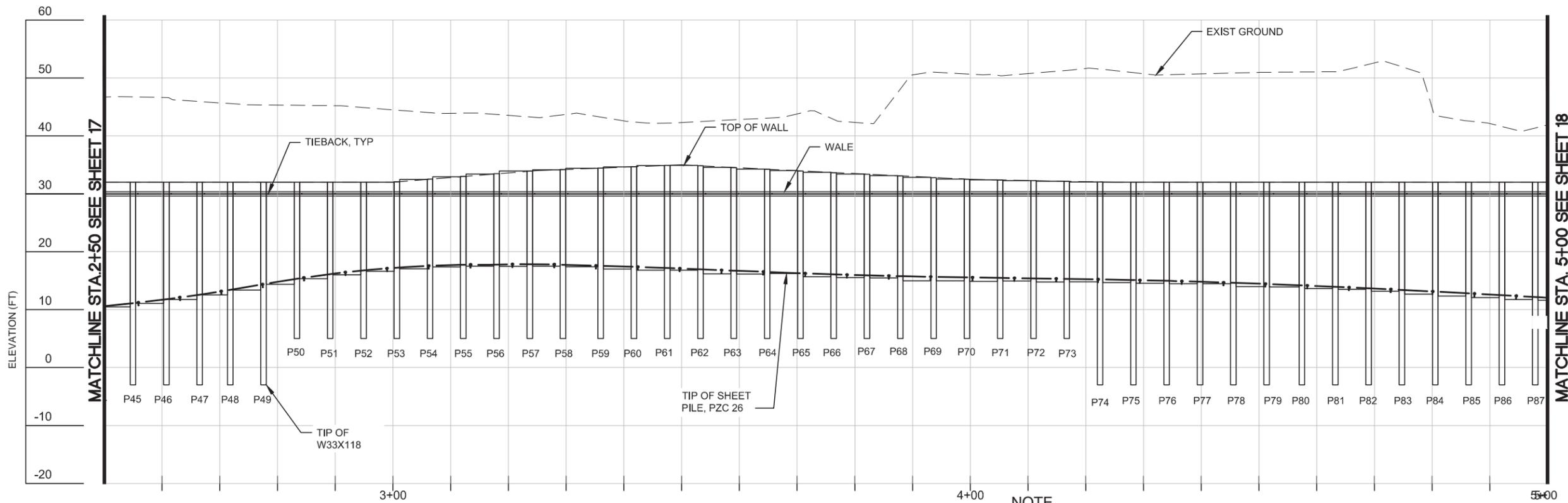
SHORING WALL PLAN AND PROFILE 1 OF 3

SHEET
16
 OF
31
 SHEETS
 XXXX-XX

MATCHLINE STA. 2+50 SEE SHEET 17



SHORING PLAN



SHORING PROFILE

NOTE

SHEET PILES FROM STA 1+00 TO STA 6+00 SHALL BE DRIVEN 2 FT INTO LACUSTRINE CONTACT OR REFUSAL PENDING SEEPAGE ANALYSIS PERFORMED PRIOR TO 90% DESIGN SUBMITTAL.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-2000\Info Sources\Reis\CTE_SQU_60% - Standard\SO-Sheet 17.dwg
PLOT Date: 12/19/2014 4:35 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE
60% DESIGN DECEMBER 2014			

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	A. BI 12-2014
DESIGN ENTERED:	J. ROBERTS 12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

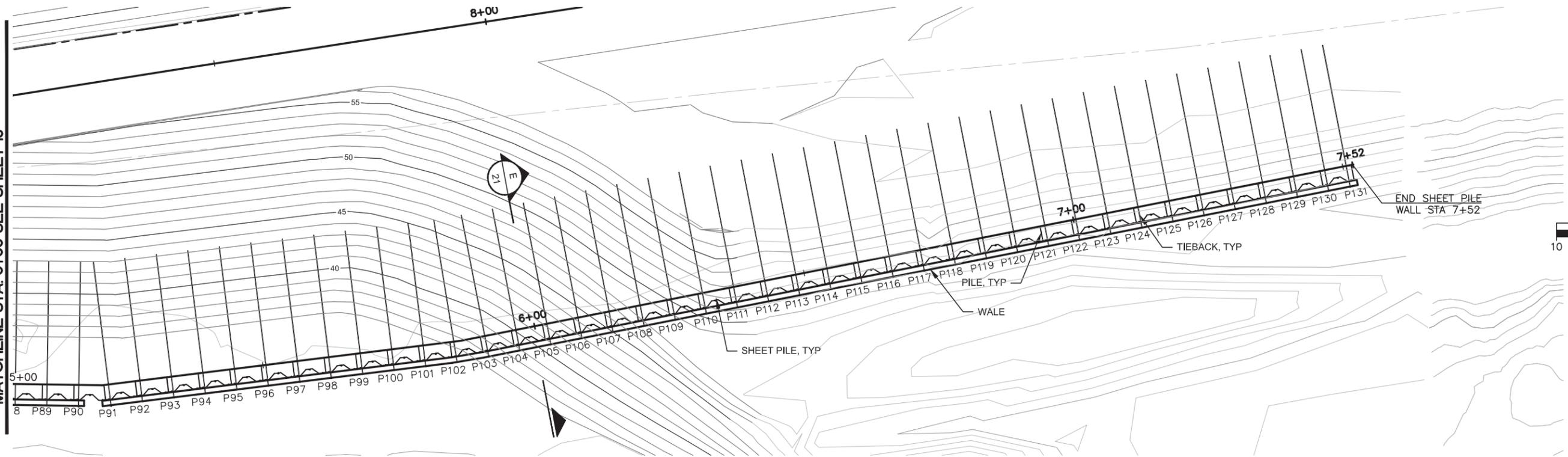
Christie True, Director

**SINEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

SHORING WALL PLAN AND PROFILE 2 OF 3

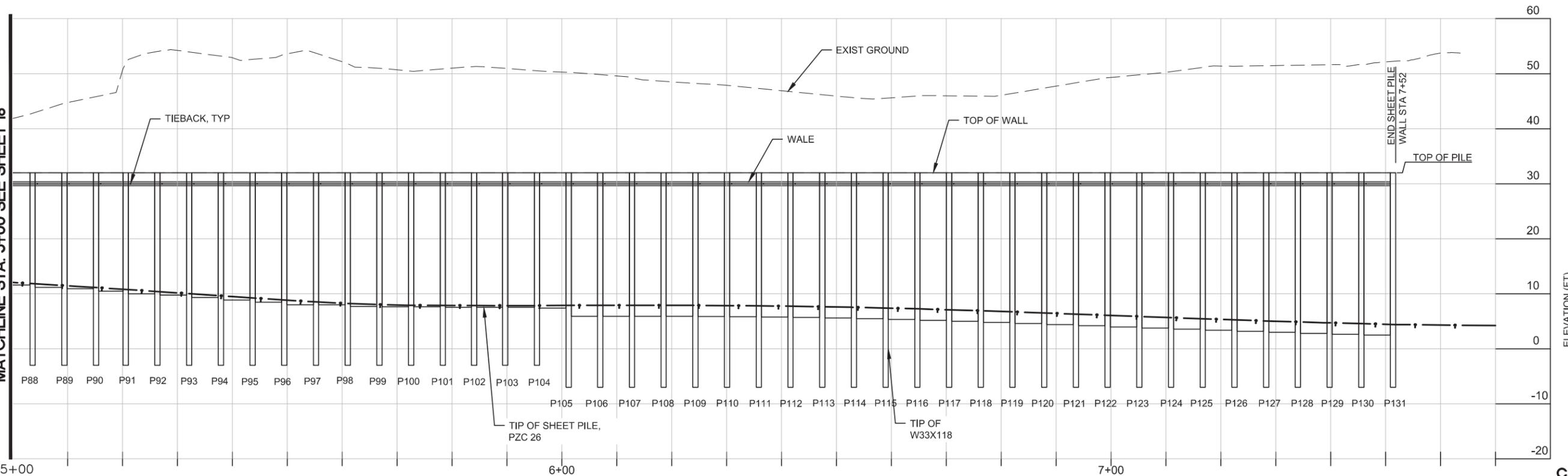
SHEET
17
OF
31
SHEETS
XXXX-XX

MATCHLINE STA. 5+00 SEE SHEET 18



SHORING PLAN

MATCHLINE STA. 5+00 SEE SHEET 18



SHORING PROFILE

NOTE

SHEET PILES FROM STA 1+00 TO STA 6+00 SHALL BE DRIVEN 2 FT INTO LACUSTRINE CONTACT OR REFUSAL PENDING SEEPAGE ANALYSIS PERFORMED PRIOR TO 90% DESIGN SUBMITTAL.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

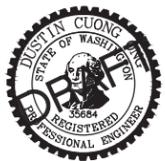
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05492-000\Info Sources\Reis\CTE_SQU_60% - Standard\SQ-Sheet 18.dwg
PLOT Date: 12/19/2014 4:35 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.	

60% DESIGN DECEMBER 2014			
NUM.	REVISION	BY	DATE

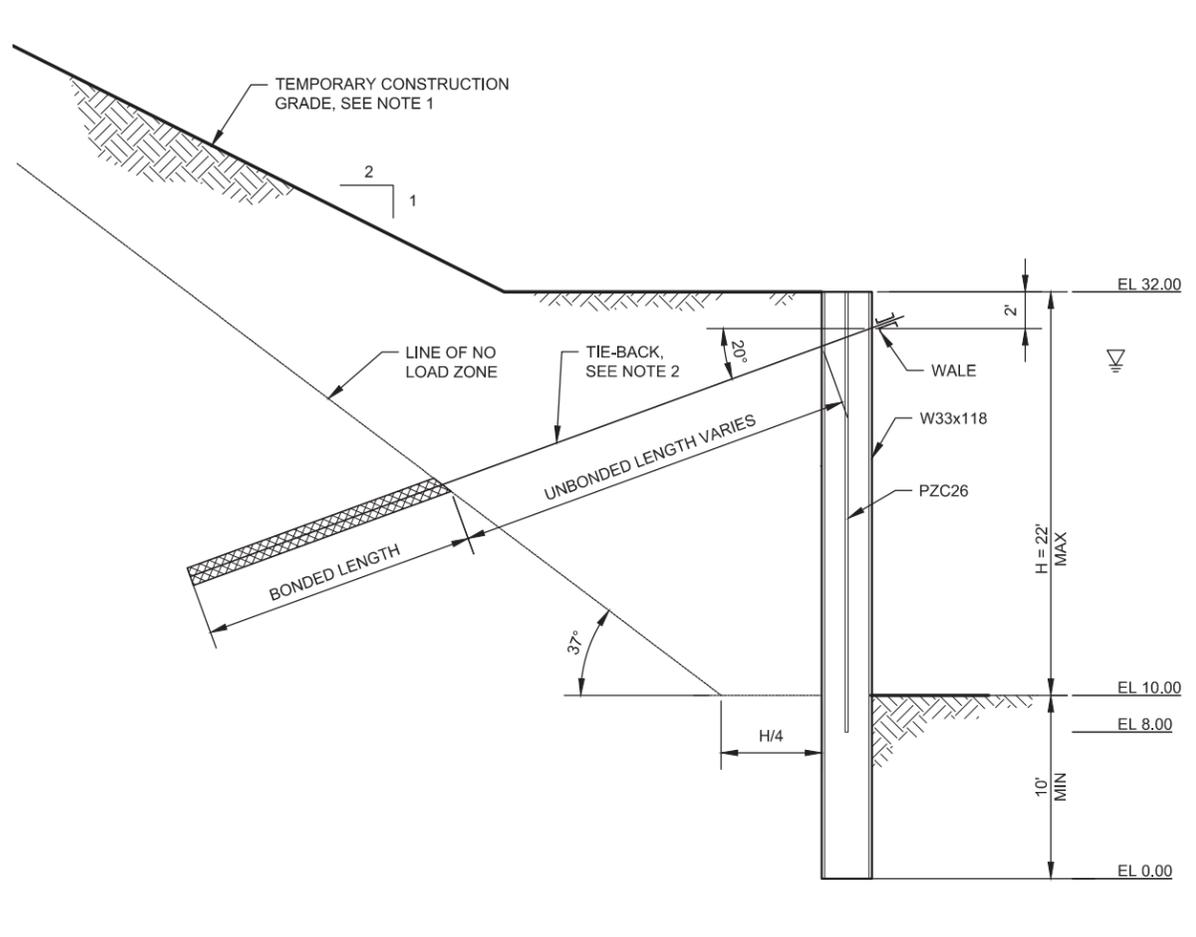
APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	A. BI 12-2014
DESIGN ENTERED:	J. ROBERTS 12-2014



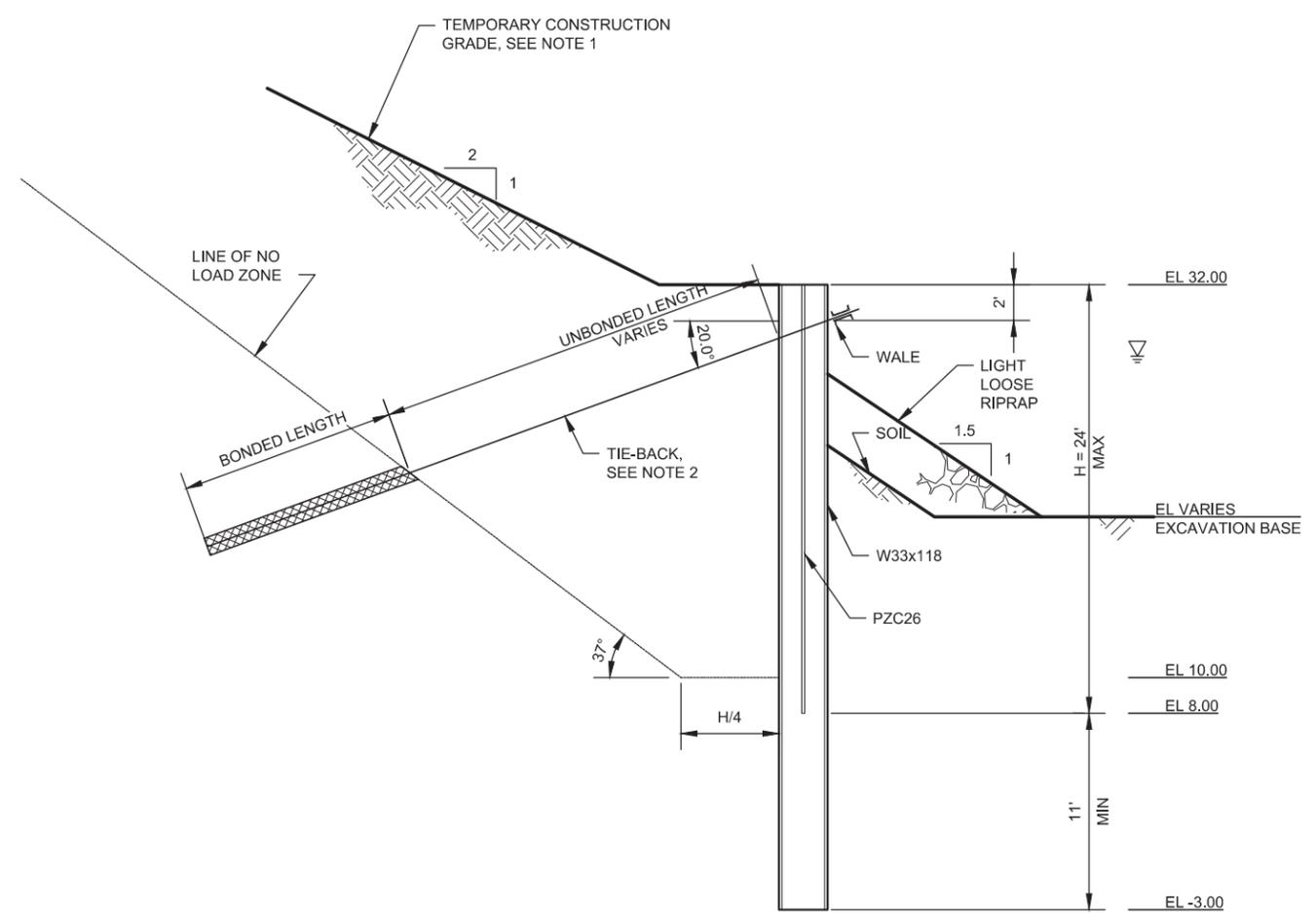
SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION
SHORING WALL PLAN AND PROFILE SHEET 3 OF 3

SHEET 18 OF 31 SHEETS
XXXX-XX

Path: C:\p\proj\2012\05492-000\Info Sources\Reis\CTE_SQU_60% - StandardSQ-Sheet 19.dwg
 PLOT Date: 12/19/2014 4:35 PM
 Cad User: Eric Marshall



SECTION A
 SCALE: NTS



SECTION B
 SCALE: NTS

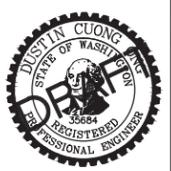
- NOTES:
- EXISTING AND FINAL PROPOSED GRADE NOT SHOWN FOR CLARITY.
 - TIE-BACK SYSTEM SHALL BE SELECTED, SIZED, AND INSTALLED BY THE CONTRACTOR PER WSDOT STANDARD SPECIFICATION SECTION 6-17.

CALL 2 WORKING DAYS BEFORE YOU DIG
 1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

FIELD BOOK: _____			
SURVEYED: _____			
SURVEY BASE MAP: _____			
CHECKED: _____			
PROJECT No. _____			
SURVEY No. _____			
NUM.	REVISION	BY	DATE

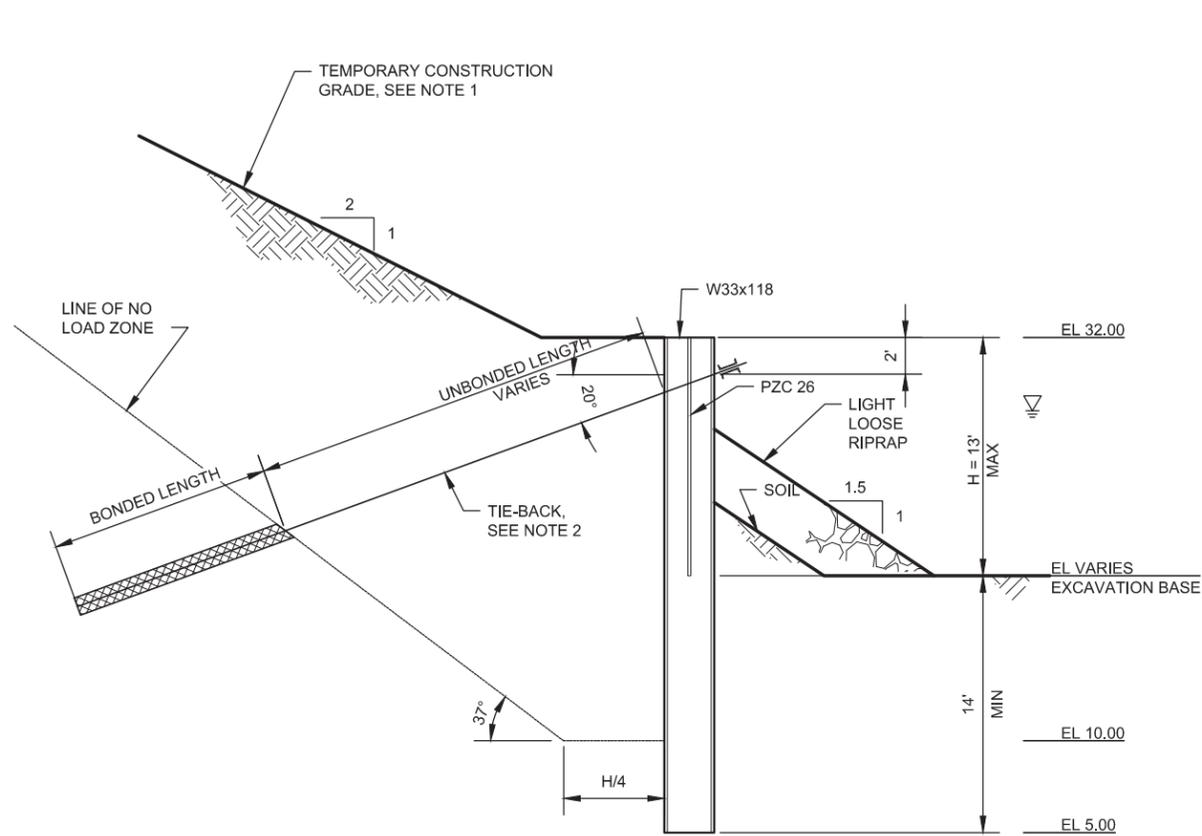
**60% DESIGN
 DECEMBER 2014**

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: A. BI	12-2014
DESIGN ENTERED: J. ROBERTS	12-2014

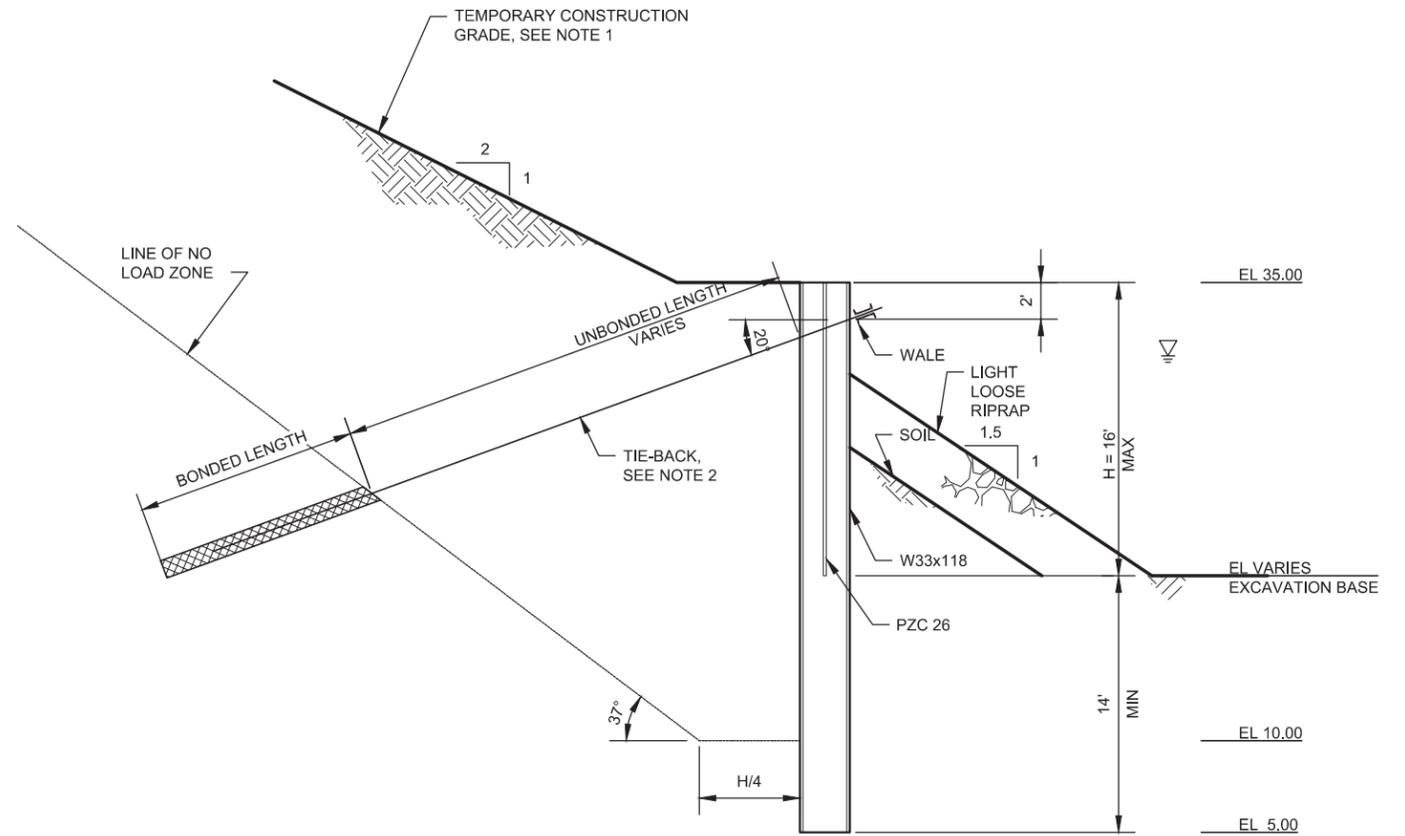


SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION
 SHORING WALL SECTIONS SHEET 1 OF 3

SHEET 19 OF 31 SHEETS
 XXXX-XX



SECTION C
SCALE: NTS
17



SECTION D
SCALE: NTS
17

NOTES:

- EXISTING AND PROPOSED FINAL GRADE NOT SHOWN FOR CLARITY.
- TIE-BACK SYSTEM SHALL BE SELECTED, SIZED, AND INSTALLED BY THE CONTRACTOR PER WSDOT STANDARD SPECIFICATION SECTION 6-17.

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05492-000\Info Sources-Reis\CTE_SQU_60% - Standard\SQ-Sheet 20.dwg
PLOT Date: 12/19/2014 4:35 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.	

NUM.	REVISION	BY	DATE
60% DESIGN DECEMBER 2014			

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	A. BI 12-2014
DESIGN ENTERED:	J. ROBERTS 12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

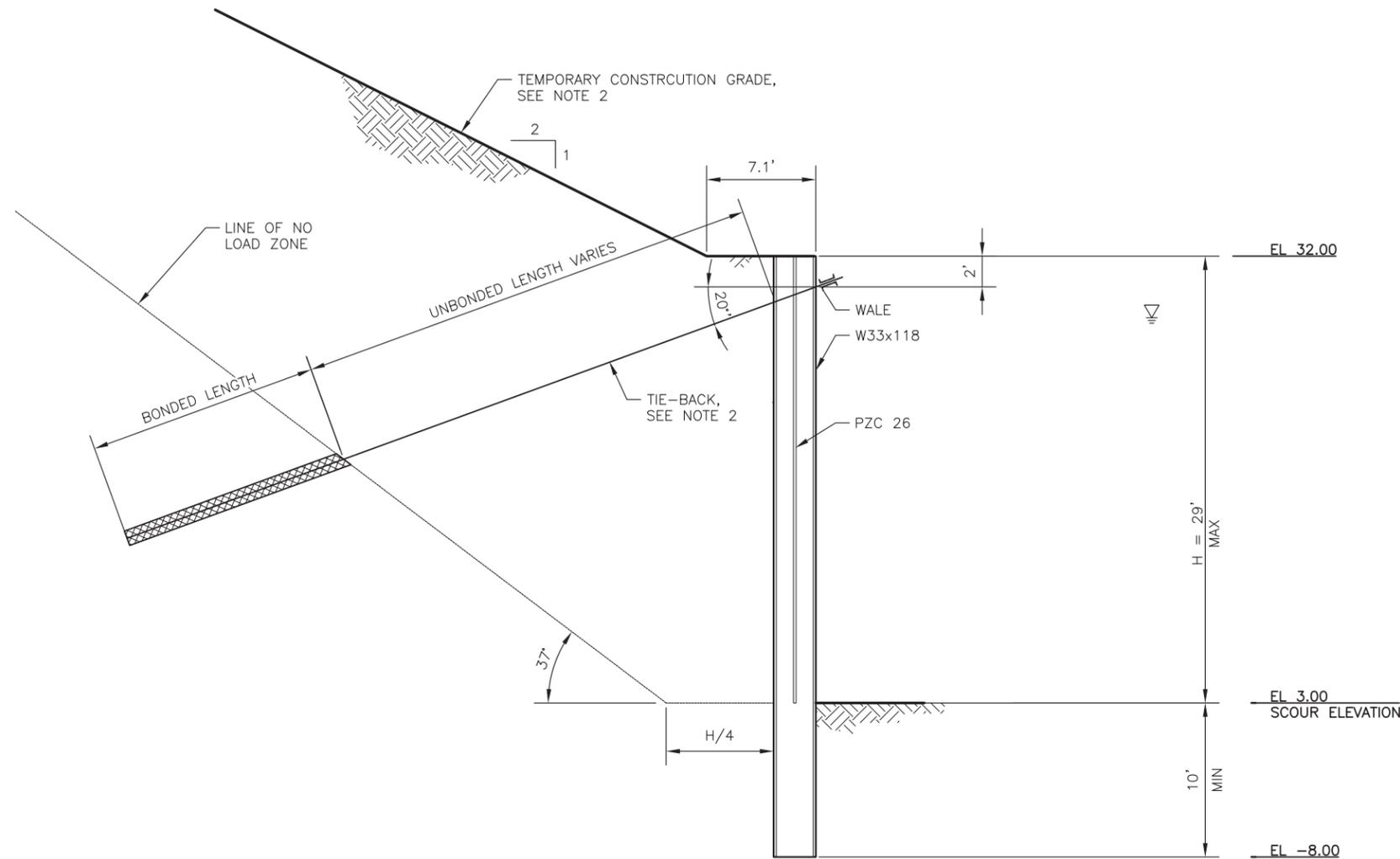
**SINEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

SHORING WALL SECTIONS SHEET 2 OF 3

SHEET
20
OF
31
SHEETS
XXXX-XX

NOTES:

1. TEMPORARY CONSTRUCTION GRADE SHOWN FOR REFERENCE ONLY. EXISTING AND FINAL PROPOSED GRADE NOT SHOWN FOR CLARITY.
2. TIE-BACK SYSTEM SHALL BE SELECTED, SIZED, AND INSTALLED BY THE CONTRACTOR PER WSDOT STANDARD SPECIFICATION SECTION 6-17.



SECTION E
SCALE: NTS
18

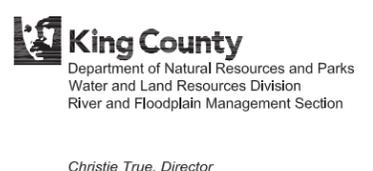
CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\12-05492-000\Info Sources-Refs\CTE_SQU_60% - Standard\ISO-Sheet 21.dwg
Plot Date: 12/19/2014 4:42 PM
Cad User: Eric Marshall

FIELD BOOK: _____				APPROVED: _____	
SURVEYED: _____				PROJECT _____	
SURVEY BASE MAP: _____				SUPERVISOR: _____	
CHECKED: _____				PROJECT MANAGER: J. PARSONS	12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000				DESIGNED: A. BI	12-2014
SURVEY No. _____				DESIGN ENTERED: J. ROBERTS	12-2014
NUM.	REVISION	BY	DATE		

**60% DESIGN
DECEMBER 2014**



**SINEMA QUALE UPPER REVETMENT
RECONSTRUCTION**
SHORING WALL SECTIONS SHEET 3 OF 3

SHEET
21
OF
31
SHEETS
XXXX-XX

GENERAL NOTES:

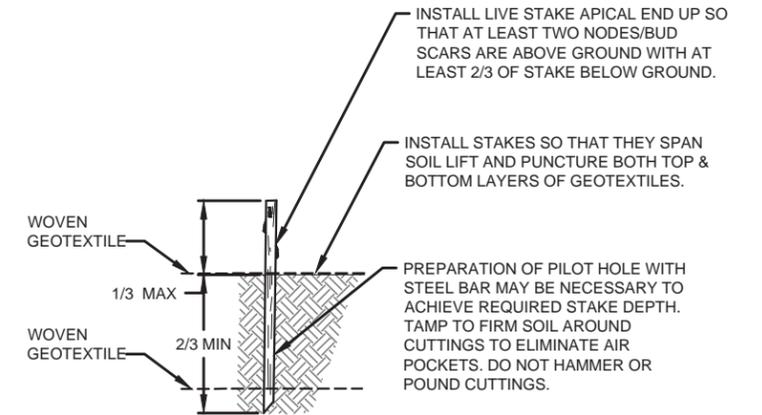
- GENERAL STRUCTURE LOCATION AND ORIENTATION SHALL BE STAKED BY THE CONTRACTOR. FINAL STRUCTURE LOCATION AND ORIENTATION TO BE FIELD VERIFIED BY THE ENGINEER FOLLOWING CONTRACTOR STAKING.
- ALL PILE LOCATIONS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO PILE INSTALLATION.
- PRIOR TO PLACING ANY ELS FOUNDATION ROCK OR LOGS, THE CONTRACTOR SHALL OBTAIN INSPECTION APPROVAL FROM THE ENGINEER VERIFYING EXTENTS OF THE EXCAVATION. IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE ENGINEER FOR THE EXCAVATION INSPECTION. THE CONTRACTOR SHALL ALLOW 2 WORKING DAYS FOR THE INSPECTION TO TAKE PLACE.
- LOG MATERIALS SHALL BE PLACED AT THE LOCATIONS AND ORIENTATIONS SPECIFIED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. TRIM CUT ENDS OF HORIZONTAL KEY LOGS TO FIT AS REQUIRED.
- PLACE SLASH OVER AND BETWEEN KEY LOGS AND PILES AS SHOWN FOR EACH LAYER SPECIFIED FOLLOWING PLACEMENT OF KEY LOGS AND RACKING LOGS. PLACE APPROXIMATELY 2' TO 3' OF EXCAVATION SPOILS OVER 1/2 THE WIDTH OF SLASH TO SECURE IN PLACE SUCH THAT SLASH IS VISIBLE FOLLOWING CONSTRUCTION. COORDINATE WITH THE ENGINEER PRIOR TO PLACING RACKING AND SLASH.
- RACKING LOGS NOT SHOWN FOR CLARITY. PLACE RACKING LOGS ALONG UPSTREAM FACES OF STRUCTURE. APPROXIMATELY 1/2 OF RACKING LOGS SHALL BE PLACED ACROSS PILE ROWS AND 1/2 OF THE LOGS EXTENDING INTO THE CORE OF THE STRUCTURE BETWEEN HORIZONTAL LOGS. RACKING SHALL BE PLACED WITH EACH LAYER OF LOGS, SHALL BE ANGLED UP AND DOWN FROM THE HORIZONTAL, AND SHALL BE PLACED TO CREATE AN INTERLOCKING MATRIX OF LOGS SECURED BETWEEN VERTICAL PILE LOGS AND HORIZONTAL KEY LOGS. COORDINATE WITH ENGINEER PRIOR TO PLACING RACKING LOGS, SLASH AND BACKFILLING.
- BACKFILL EACH LAYER ABOVE LOW WATER WITH DRY EXCAVATION SPOILS AND IMPORTED ELS FOUNDATION ROCK FLUSH TO TOP OF CURRENT LAYER PRIOR TO CONSTRUCTING SUBSEQUENT LAYER. COMPACT BACKFILL WITH EXCAVATOR BUCKET. FILL ALL VOIDS BETWEEN ROCKS GREATER THAN 12" DIAMETER WITH FINER BACKFILL MATERIAL TO ACHIEVE A WELL GRADED AND COMPACTED MASS.

CRIB STRUCTURE (ELS) NOTES:

- ONLY THE UPPER LAYERS OF LOGS FOR EACH STRUCTURE SHALL BE CHAINED TO DRIVEN PILES. DO NOT SECURE LOWER LAYER KEY LOGS TO PILE OR TO ANOTHER KEY LOG.
- RACKING LOGS AND SLASH MATERIAL NOT SHOWN IN PLAN DETAIL FOR CLARITY. RACKING LOG PLACEMENT SHALL BE COORDINATED WITH LOG LAYER PLACEMENT AND SLASH PLACEMENT TO ENSURE RACKING AND SLASH EXTEND THROUGH WATERWARD FACE OF STRUCTURE. SEE LAYERING PLAN AND SPECIAL PROVISIONS.
- EXTENTS OF BACKFILL SHOWN ARE APPROXIMATE AND WILL VARY FOR EACH STRUCTURE. PLACE BACKFILL OVER KEY LOGS AS SHOWN AND AS DIRECTED BY THE ENGINEER.
- BACKFILL MATERIAL FOR CRIB STRUCTURE WILL CONSIST OF LOCALLY EXCAVATED SOILS AND BALLAST ROCK.
- SURVEY CONTROL FOR STRUCTURE PLACEMENTS DEFINED BASED ON CONTROL PILE LOCATIONS, SEE TABLE.

CRIB STRUCTURE (ELS) CONTROL POINTS:

TYPE A CRIB STRUCTURE			
STRUCTURE ID	CONTROL PILE ID	NORTHING	EASTING
2	CP1	254642.67	1361639.35
	CP2	254634.42	1361652.28
4	CP1	254595.53	1361727.19
	CP2	254587.28	1361740.13
5	CP1	254579.41	1361759.53
	CP2	254573.48	1361773.67
7	CP1	254541.80	1361845.51
	CP2	254532.40	1361857.64
8	CP1	254522.99	1361874.03
	CP2	254513.60	1361886.16
9	CP1	254503.09	1361904.28
	CP2	254492.10	1361914.99
12	CP1	254417.41	1362023.37
	CP2	254408.88	1362036.12
TYPE B CRIB STRUCTURE			
1	CP1	254657.92	1361612.32
	CP2	254648.22	1361629.81
3	CP1	254610.70	1361699.71
	CP2	254601.00	1361717.20
6	CP1	254559.02	1361819.76
	CP2	254547.83	1361836.33
11	CP1	254434.43	1361996.56
	CP2	254423.53	1362013.33
TYPE C CRIB STRUCTURE			
10	CP1	254460.72	1361954.97
	CP2	254439.42	1361987.77



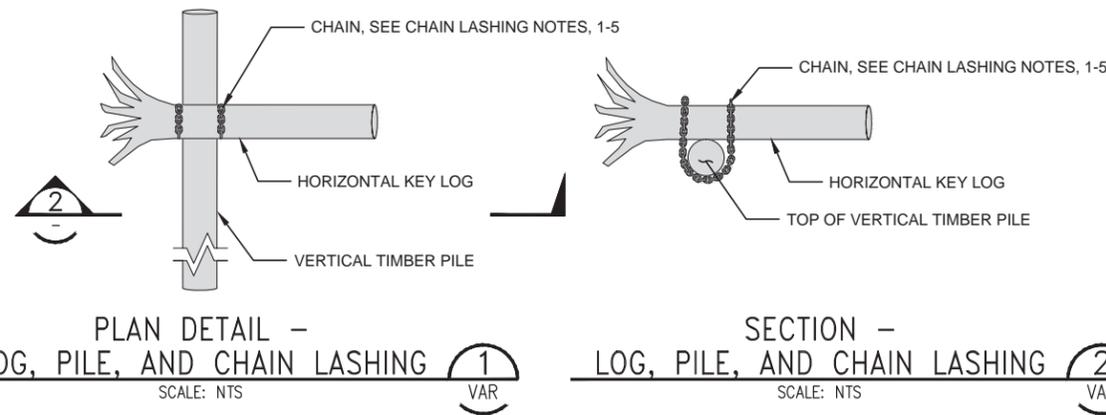
NOTES:

- SOAK WILLOW STAKES IN WATER FOR 24 HOURS PRIOR TO PLANTING.
- BASAL END OF LIVE STAKES SHOULD BE 0.5-1.5 INCHES IN DIAMETER AND AT LEAST 36 INCHES IN LENGTH.
- KEEP LIVE STAKES COVERED, COOL, AND MOIST AT ALL TIMES PRIOR TO PLANTING. AT NO TIME SHOULD LIVE STAKES BE EXPOSED AND ALLOWED TO DRY OUT.
- WHEN PLANTING ON STREAM BANKS, ANGLE APICAL END OF STAKES SLIGHTLY DOWNSTREAM.

LIVE WILLOW STAKE PLANTING DETAIL (3) VAR
SCALE: NTS

CHAIN LASHING NOTES

- SADDLE LASH HORIZONTAL LOGS TO VERTICAL TIMBER PILES WITH CHAIN AS SHOWN ON DETAIL AND LAYERING PLAN OR AS DIRECTED BY ENGINEER. CHAIN LASHING SYSTEM SHALL BE PUT IN TENSION TO 1/4 OF THE CHAIN WORKING LOAD LIMIT AND BE MAINTAINED DURING CHAIN SHACKLING.
- CHAIN LENGTH NEEDED PER LASHING WILL VARY BASED ON DIAMETER OF LOGS AT THE ACTUAL LOCATIONS THEY ARE LASHED TOGETHER.
- CHAIN FOR LASHING SHALL BE 3/8 INCH DIAMETER CARBON-WELDED GRADE 43 HIGH-TEST CHAIN, WITH A MINIMUM BREAKING STRENGTH OF 9.2 TONS.
- ALL HARDWARE USED FOR LASHING SHALL BE STAINLESS STEEL OR NATURAL UNTREATED STEEL, AND CONNECTIONS SHALL BE OF THE QUANTITY AND TYPE SPECIFIED BY THE MANUFACTURER WITH AN EQUAL OR GREATER STRENGTH THAN THE CHAIN BREAKING STRENGTH OR AS APPROVED BY THE ENGINEER.
- WELD OR ROUND ALL EXPOSED HARDWARE NUTS AND BOLT THREADS AFTER INSTALLATION FOR THEFT PROTECTION. ENGINEER OR OWNER SHALL APPROVE ANY COATING PRIOR TO CONTRACTOR APPLYING IT. SECURE CHAIN TO LOG AND PILE USING 6 INCH LOGGING STAPLE.
- CONTRACTOR MAY SUBMIT ALTERNATIVE CHAIN CONNECTION SYSTEM FOR APPROVAL.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\12-05-12-000\CAD\Drawings\SH22.dwg
Plot Date: 12/19/2014 4:32 PM
Cad User: Eric Marshall

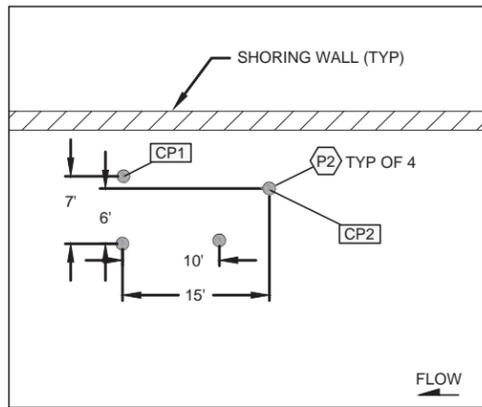
FIELD BOOK: _____				APPROVED: _____	
SURVEYED: _____				PROJECT _____	
SURVEY BASE MAP: _____				SUPERVISOR: _____	
CHECKED: _____				PROJECT MANAGER: J. PARSONS	12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000				DESIGNED: G. KAYS	12-2014
SURVEY No. _____				DESIGN ENTERED: E. MARSHALL	12-2014
NUM.	REVISION	BY	DATE		

**60% DESIGN
DECEMBER 2014**

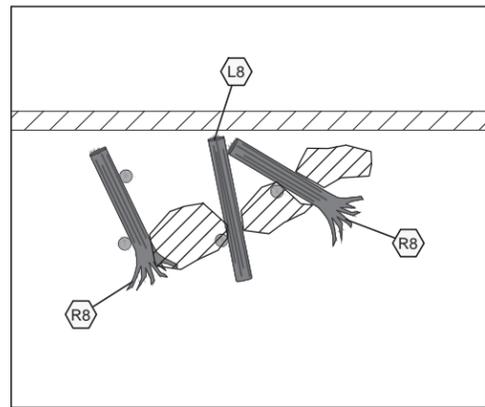


SINNEMA QUAALE UPPER REVETMENT RECONSTRUCTION
CRIB STRUCTURE GENERAL NOTES, DETAILS, AND CONTROL POINTS

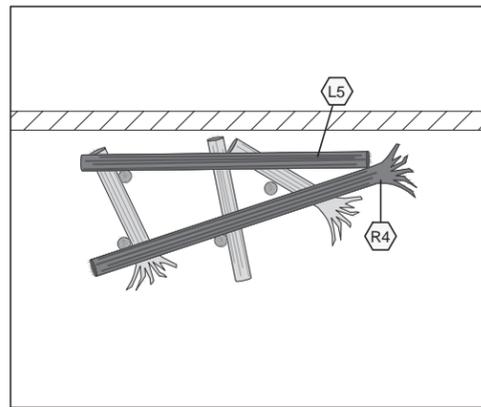
SHEET
22
OF
31
SHEETS
XXXX-XX



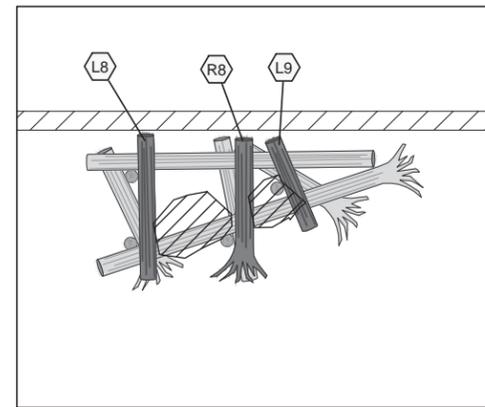
PILES



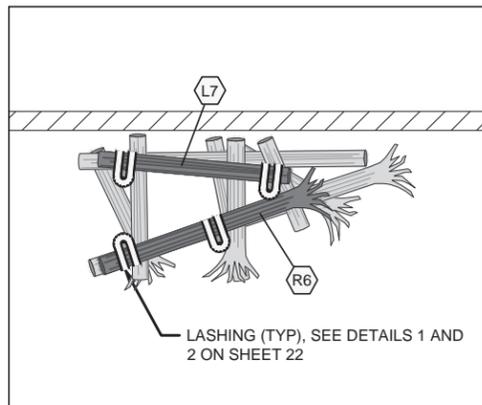
LAYER 1



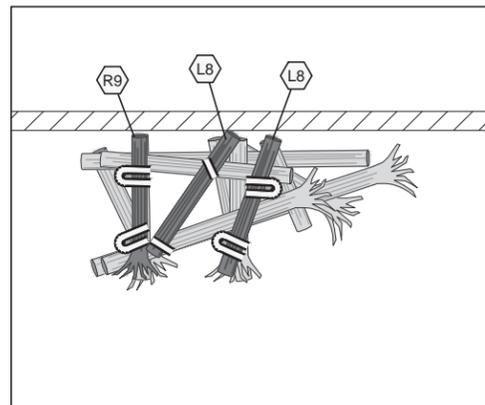
LAYER 2



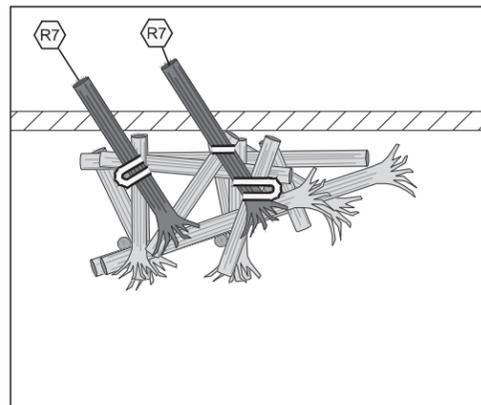
LAYER 3



LAYER 4

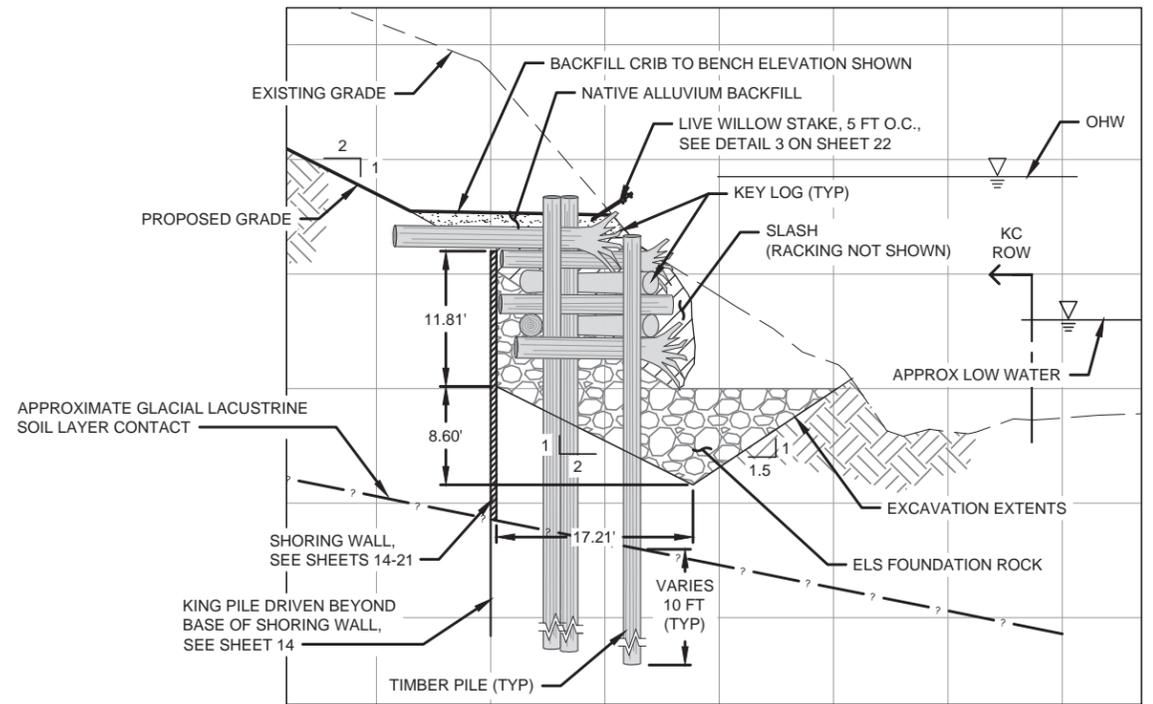


LAYER 5



LAYER 6

LAYERING PLAN



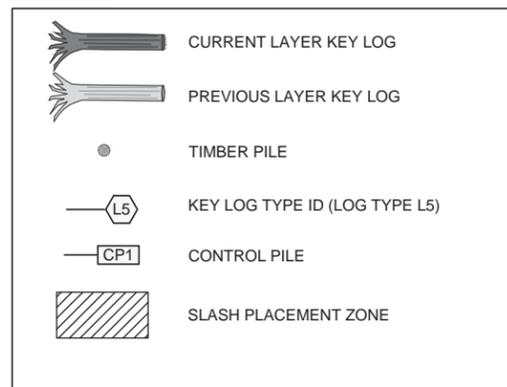
SECTION A

SCALE: 1" = 8'

NOTE:

1. ELS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CANNOT BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.

LEGEND:



TYPE A CRIB STRUCTURE LOG SCHEDULE:

LOG TYPE	DIAMETER (IN)	LENGTH (FT)	ROOTWAD	TOTAL/UNIT
P2	18 (BUTT)	50	NO	4
R4	22	35	YES	1
R6	22	25	YES	1
R7	22	20	YES	2
R8	22	15	YES	3
R9	18	15	YES	1
L5	20	30	NO	1
L7	20	20	NO	1
L8	20	15	NO	4
L9	20	10	NO	1

NOTE: SEE TABLE ON SHEET 22 FOR CONTROL POINT LOCATIONS.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-14-2014\CAD\DWG\SH23.dwg
PLOT Date: 12/19/2014 4:32 PM
Cad User: Eric Marshall

FIELD BOOK: _____
SURVEYED: _____
SURVEY BASE MAP: _____
CHECKED: _____
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No. _____

60% DESIGN
DECEMBER 2014

NUM.	REVISION	BY	DATE

APPROVED: _____
PROJECT SUPERVISOR: _____
PROJECT MANAGER: J. PARSONS 12-2014
DESIGNED: G. KAYS 12-2014
DESIGN ENTERED: E. MARSHALL 12-2014



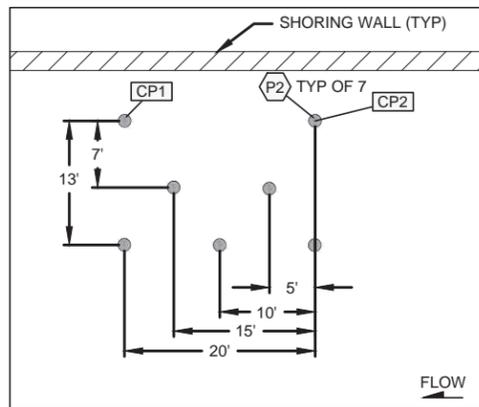
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

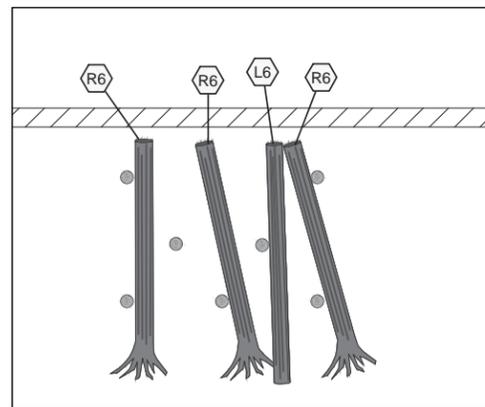
SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TYPE A CRIB STRUCTURE LAYERING PLAN AND SECTION

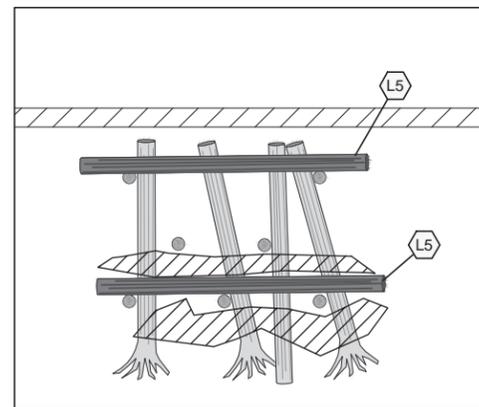
SHEET 23 OF 31 SHEETS
XXXX-XX



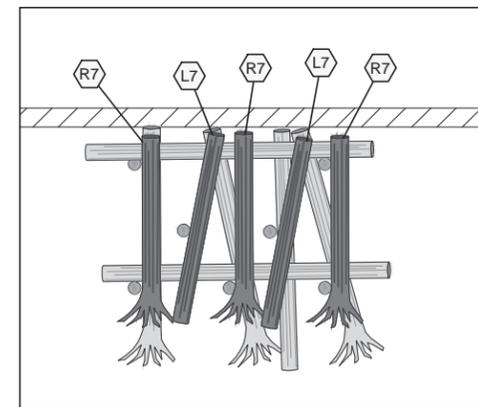
PILES



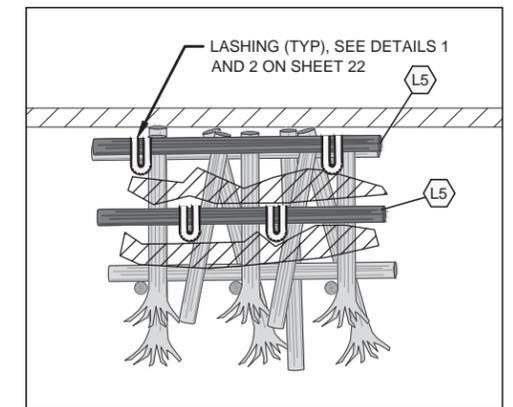
LAYER 1



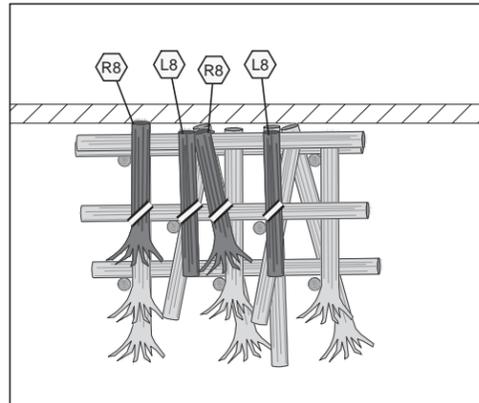
LAYER 2



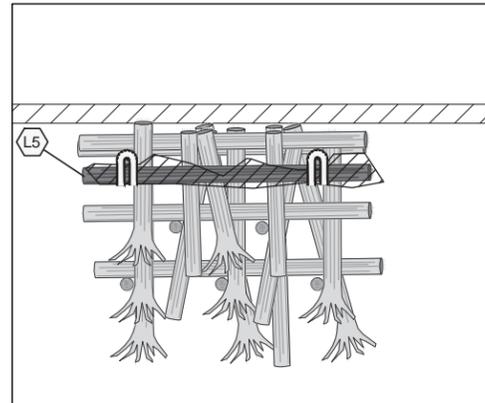
LAYER 3



LAYER 4

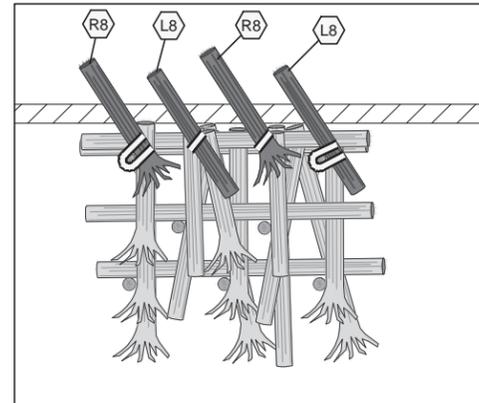


LAYER 5



LAYER 6*

* LAYER 6 IS THE FINAL LAYER ON STRUCTURE 6, AND IS NOT INCLUDED ON THE OTHER TYPE B STRUCTURES.



LAYER 7

LAYERING PLAN

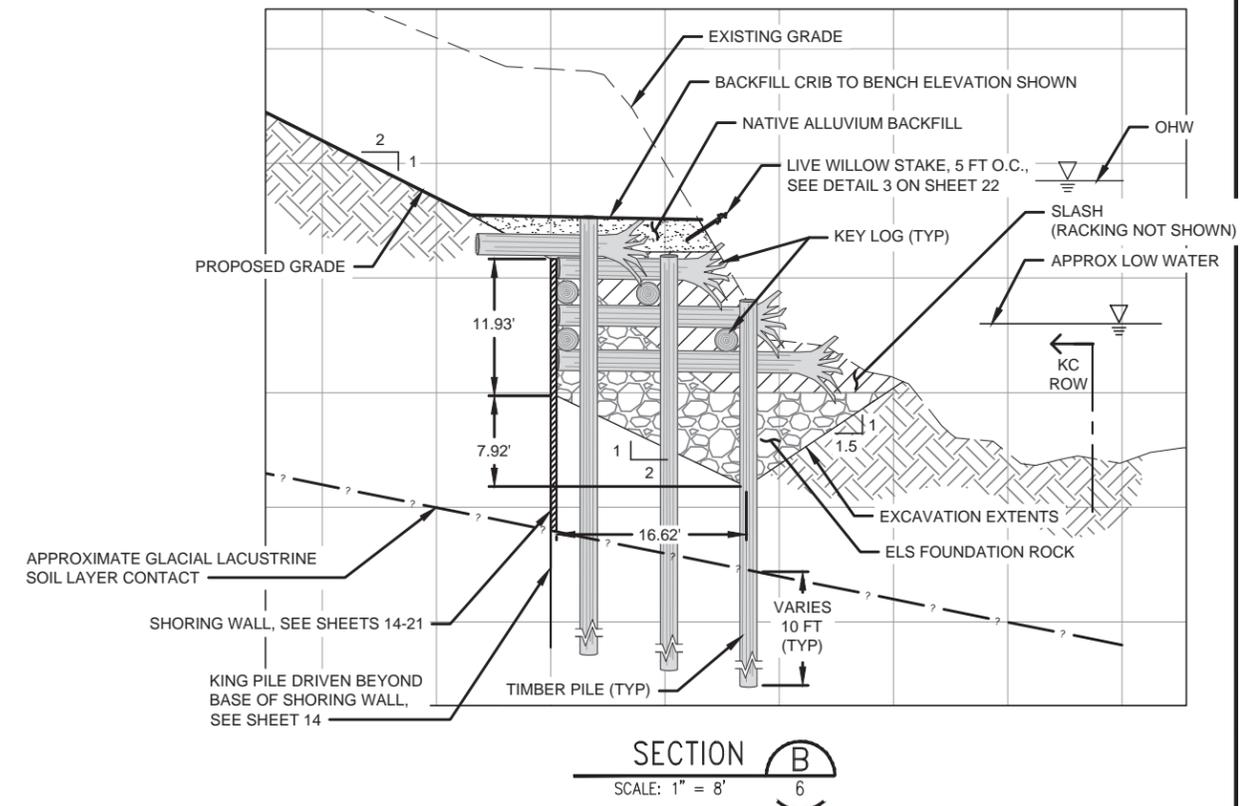
LEGEND:

- CURRENT LAYER KEY LOG
- PREVIOUS LAYER KEY LOG
- TIMBER PILE
- KEY LOG TYPE ID (LOG TYPE L5)
- CONTROL PILE
- SLASH PLACEMENT ZONE

TYPE B CRIB STRUCTURE LOG SCHEDULE:

LOG TYPE	DIAMETER (IN)	LENGTH (FT)	ROOTWAD	TOTAL/UNIT
P2	18 (BUTT)	50	NO	7
R6	22	25	YES	3
R7	22	20	YES	3
R8	22	15	YES	4
L5	20	30	NO	5
L6	20	25	NO	1
L7	20	20	NO	2
L8	20	15	NO	4

NOTE: SEE TABLE ON SHEET 22 FOR CONTROL POINT LOCATIONS.



NOTE:

1. ELS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CANNOT BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: O:\proj\2012\05492-000\CAD\Drawings\SH24.dwg
PLOT Date: 12/19/2014 4:32 PM
Cad User: Eric Marshall

FIELD BOOK: _____			
SURVEYED: _____			
SURVEY BASE MAP: _____			
CHECKED: _____			
PROJECT No. _____			
SURVEY No. _____			
	NUM.	REVISION	BY DATE

60% DESIGN
DECEMBER 2014

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: G. KAYS	12-2014
DESIGN ENTERED: E. MARSHALL	12-2014



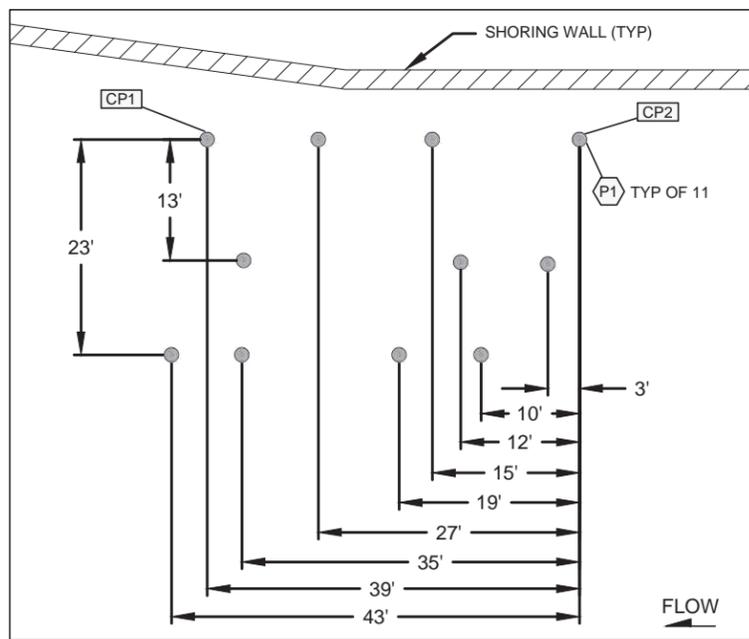
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

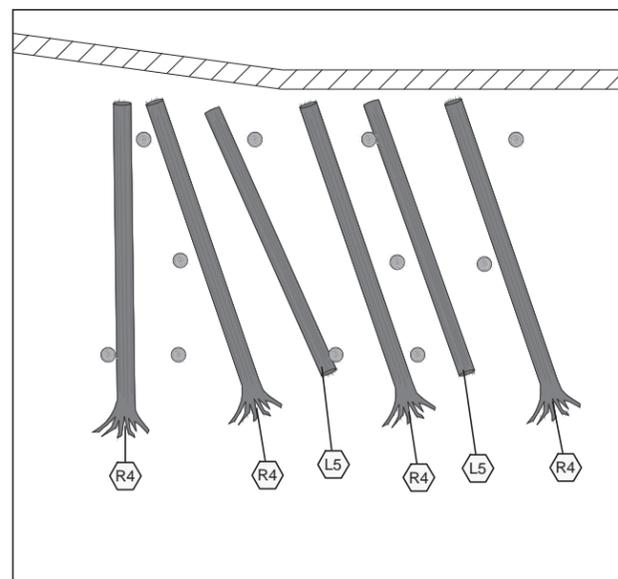
SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TYPE B CRIB STRUCTURE LAYERING PLAN AND SECTION

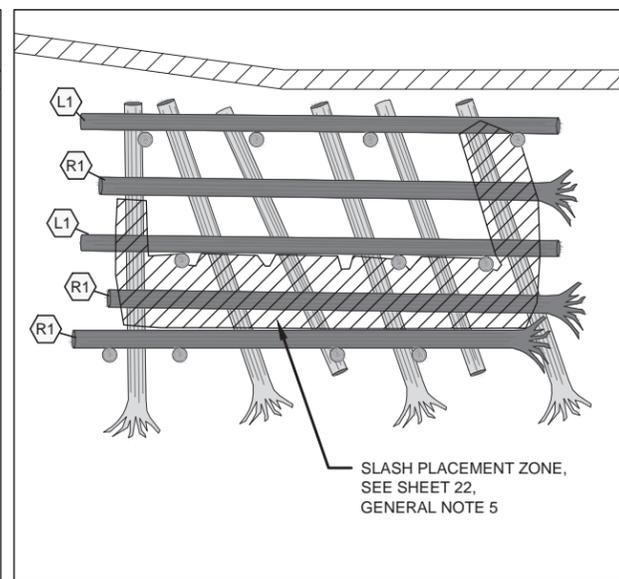
SHEET 24 OF 31 SHEETS
XXXX-XX



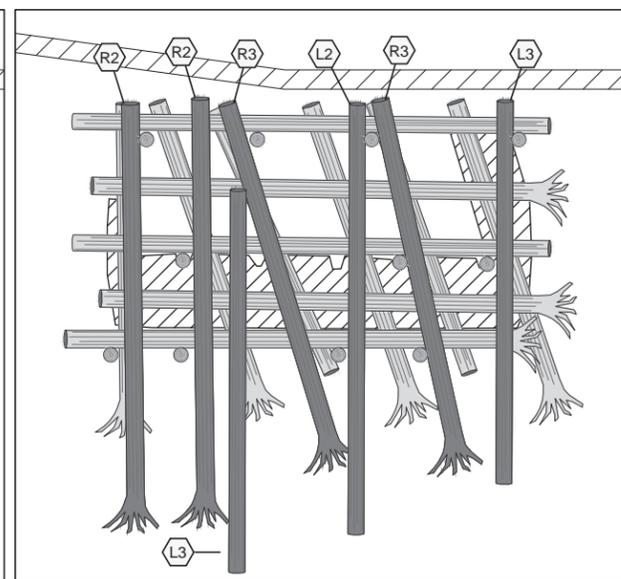
PILES



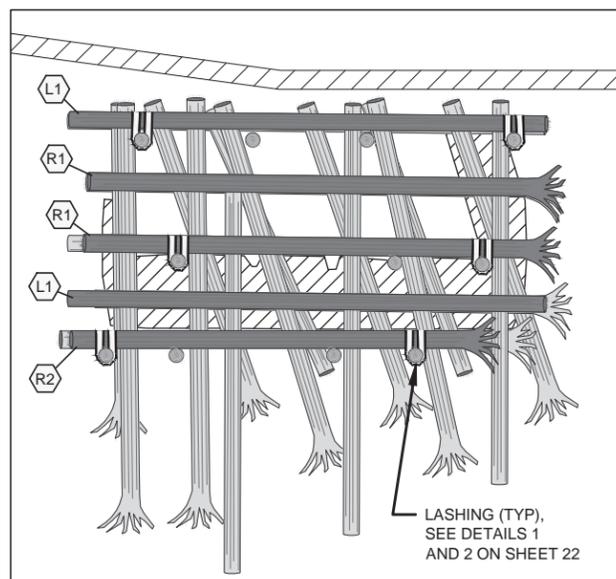
LAYER 1



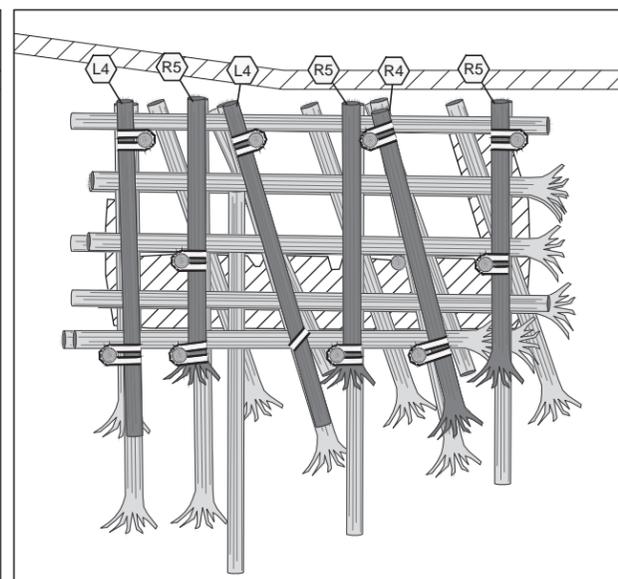
LAYER 2



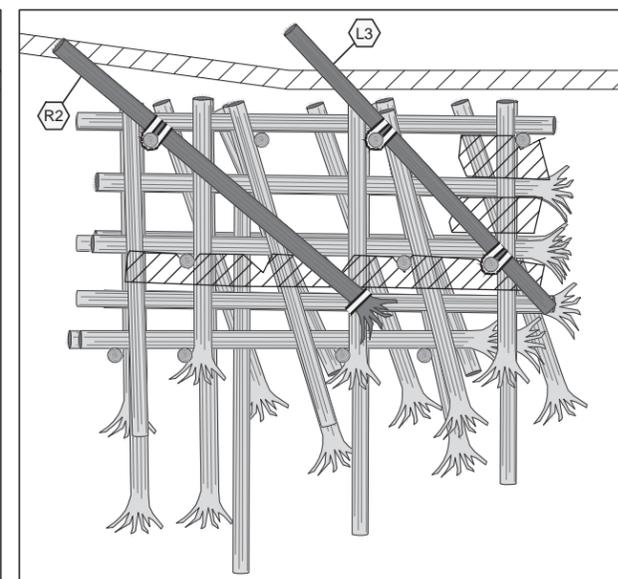
LAYER 3



LAYER 4

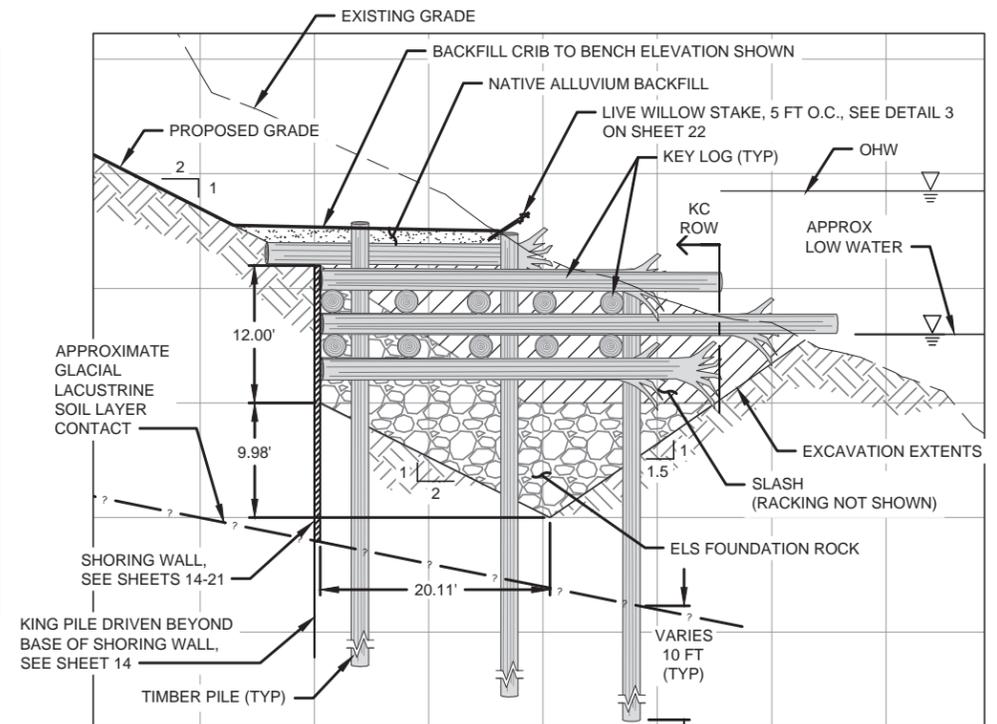


LAYER 5



LAYER 6

LAYERING PLAN



SECTION C
SCALE: 1" = 8'

LEGEND:

- CURRENT LAYER KEY LOG
- PREVIOUS LAYER KEY LOG (AFTER BACKFILLING)
- TIMBER PILE
- KEY LOG TYPE ID (LOG TYPE L1)
- CONTROL PILE
- SLASH PLACEMENT ZONE

TYPE C CRIB STRUCTURE LOG SCHEDULE:

LOG TYPE	DIAMETER (IN)	LENGTH (FT)	ROOTWAD	TOTAL
P1	18 (BUTT)	50	NO	11
R1	20 - 24	50	YES	5
R2	20 - 24	45	YES	4
R3	20 - 24	40	YES	2
R4	20 - 24	35	YES	5
R5	20 - 24	30	YES	3
L1	20 - 24	50	NO	4
L2	20 - 24	45	NO	1
L3	20 - 24	40	NO	2
L4	20 - 24	35	NO	1
L5	20 - 24	30	NO	2

NOTE:

- ELLS FOUNDATION ROCK EXCAVATION SLOPES SHOWN MAY VARY. IF EXCAVATION SLOPES CANNOT BE MAINTAINED AS SHOWN, CONTRACTOR SHALL ADJUST DEPTH TO ENSURE ROCK VOLUME IS MAINTAINED.

TYPE C CRIB STRUCTURE LOG SCHEDULE (CONT.):

LOG TYPE	DIAMETER (IN)	LENGTH (FT)	ROOTWAD	TOTAL
RACKING	4"-16"	15-30	OPTIONAL	100 - 150
SLASH				150 CY

NOTE: SEE TABLE ON SHEET 22 FOR CONTROL POINT LOCATIONS.

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-000\CAD\dwgs\SH25.dwg
PLOT Date: 12/19/2014 4:32 PM
Cad User: Eric Marshall

FIELD BOOK: _____
SURVEYED: _____
SURVEY BASE MAP: _____
CHECKED: _____
PROJECT No. _____
SURVEY No. _____

NUM.	REVISION	BY	DATE

**60% DESIGN
DECEMBER 2014**

APPROVED: _____
PROJECT SUPERVISOR: _____
PROJECT MANAGER: J. PARSONS 12-2014
DESIGNED: G. KAYS 12-2014
DESIGN ENTERED: E. MARSHALL 12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

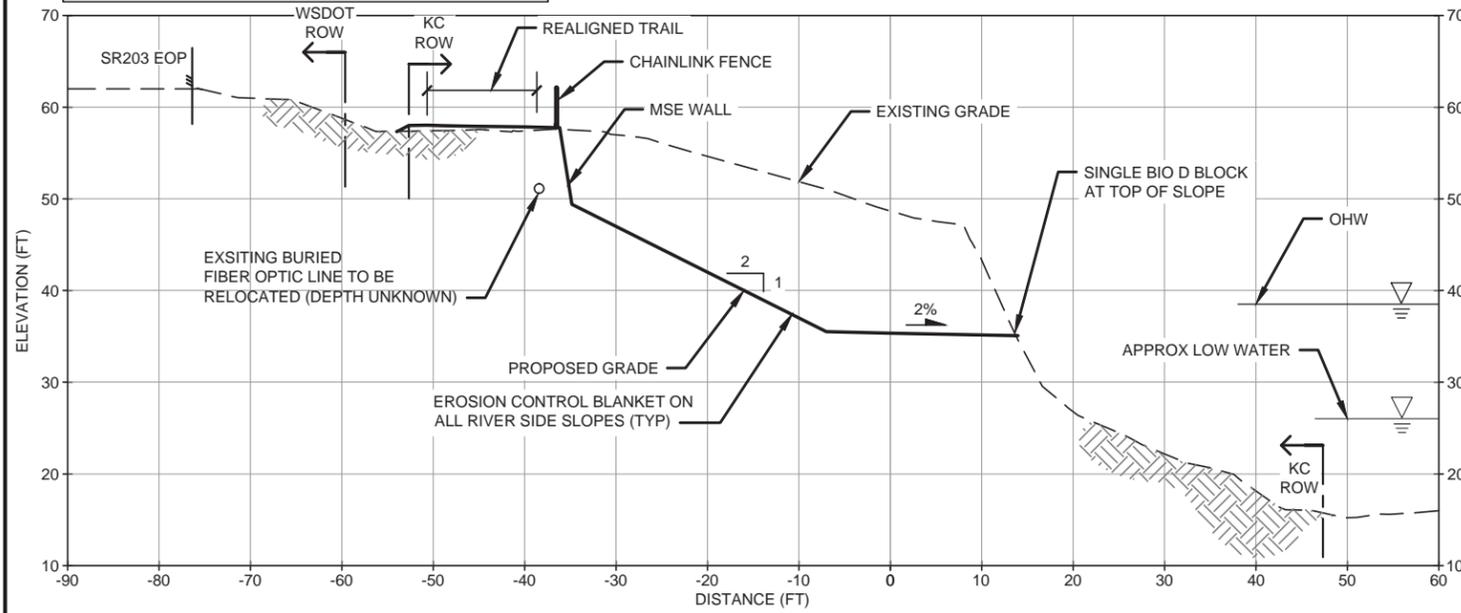
Christie True, Director

**SINEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

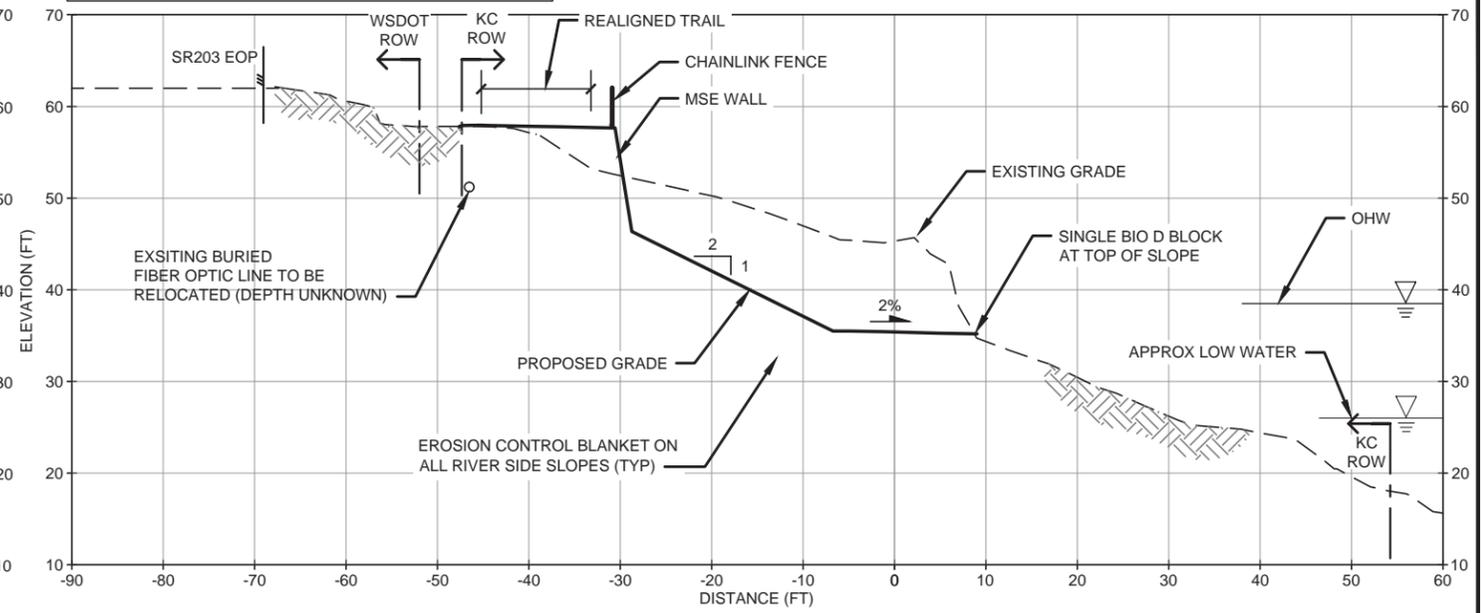
**TYPE C CRIB STRUCTURE LAYERING PLAN AND
SECTION**

SHEET
25
OF
31
SHEETS
XXXX-XX

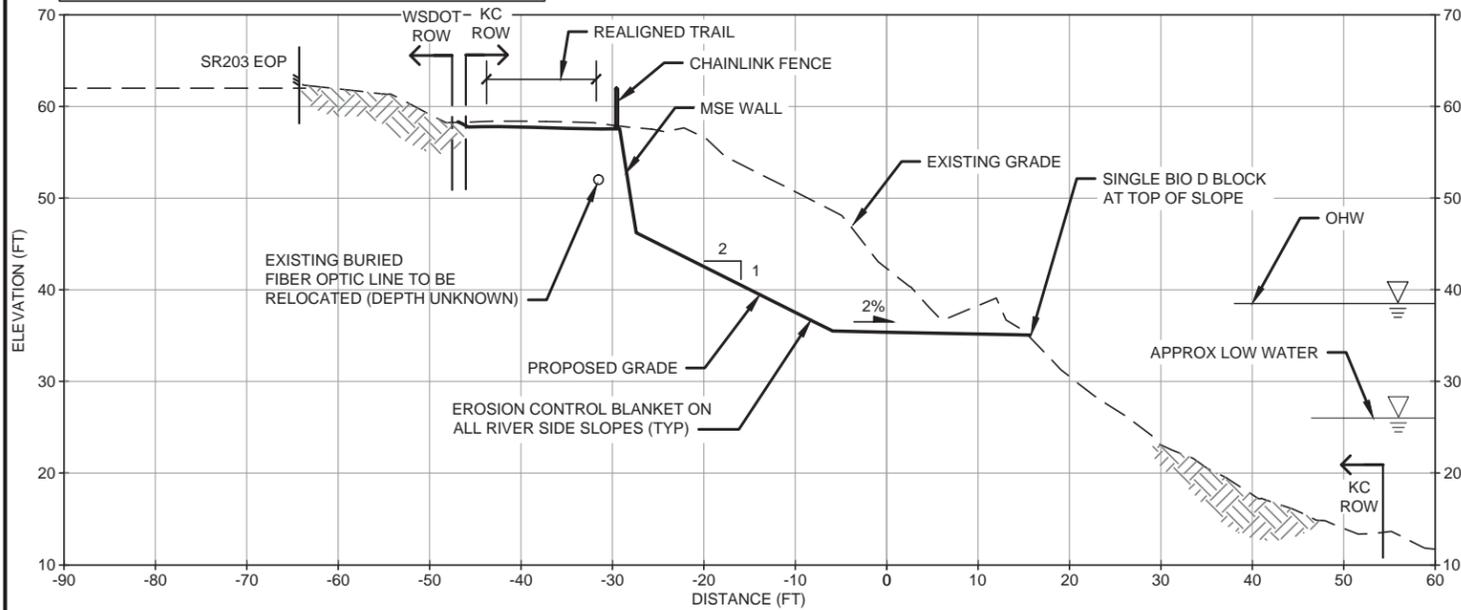
SHORING WALL ALIGNMENT STA 2+00.00



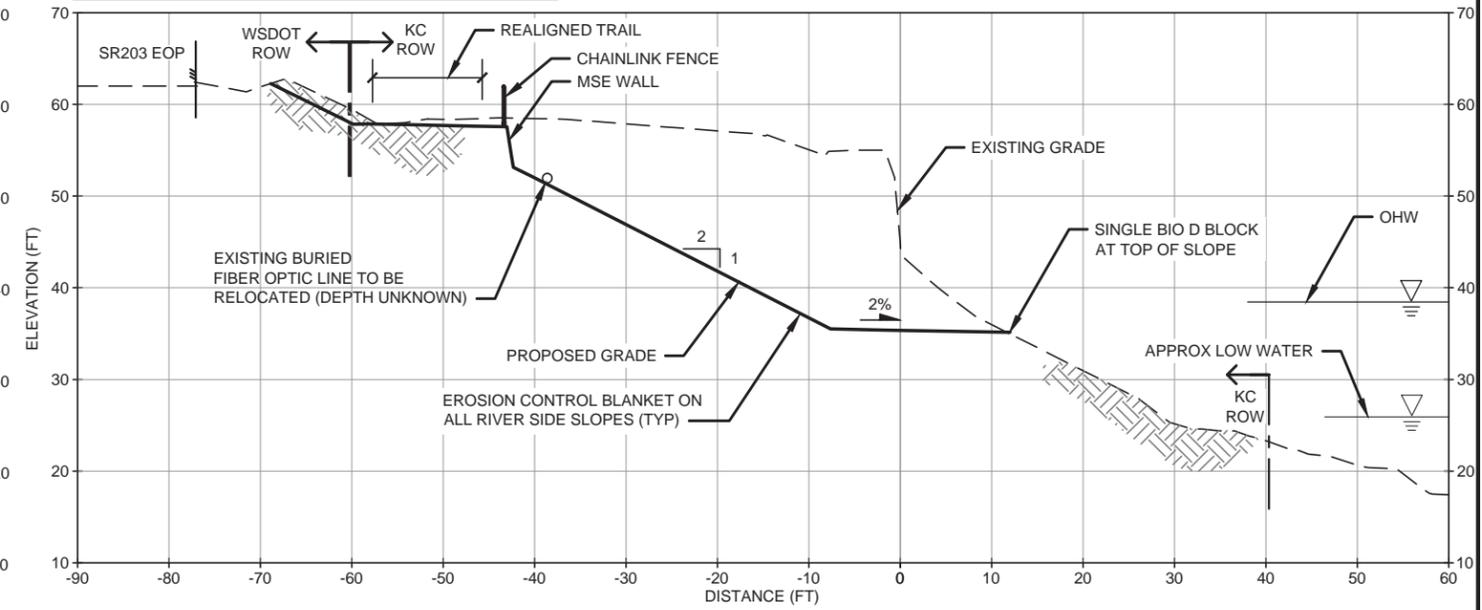
SHORING WALL ALIGNMENT STA 3+00.00



SHORING WALL ALIGNMENT STA 4+00.00

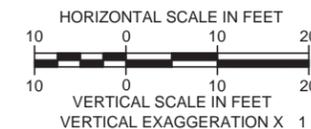


SHORING WALL ALIGNMENT STA 5+00.00



NOTES:

- EXISTING BURIED FIBER OPTIC LINE MAY REQUIRE RELOCATION BASED ON BURIED DEPTH.
- REALIGNED TRAIL EXTENTS SHOWN ARE LIMITED TO THE 12 FT WIDE TRAIL SURFACE ONLY. SEE SHEET 27 FOR TRAIL DIMENSIONS.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\p\proj\2012\12-05-12-000\CAD\Drawings\SH26.dwg
Plot Date: 12/19/2014 4:33 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE

60% DESIGN
DECEMBER 2014

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



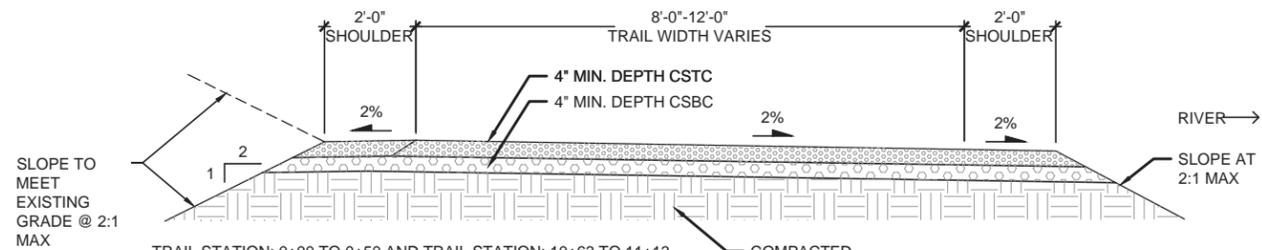
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

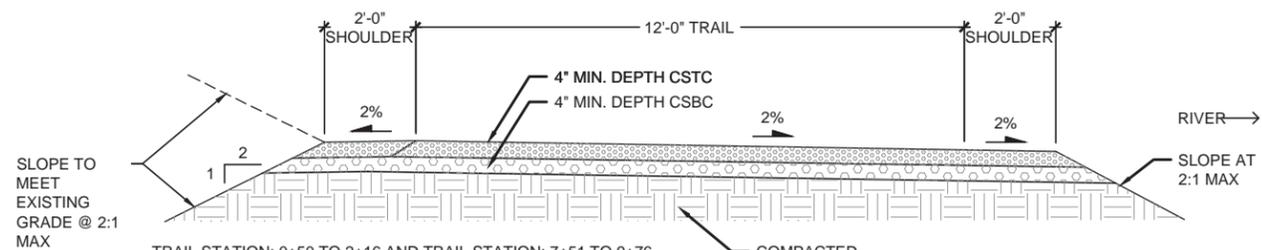
SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

EMBANKMENT REGRADING SECTIONS

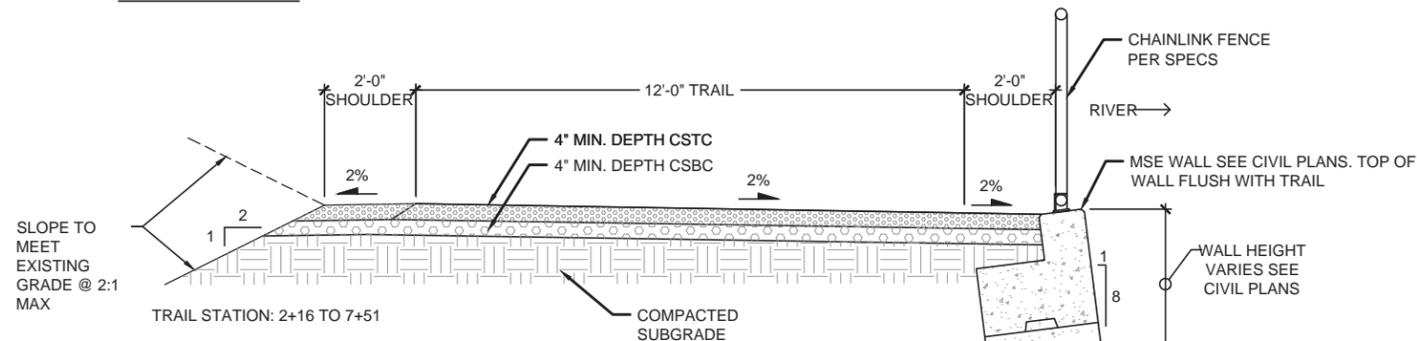
SHEET
26
OF
31
SHEETS
XXXX-XX



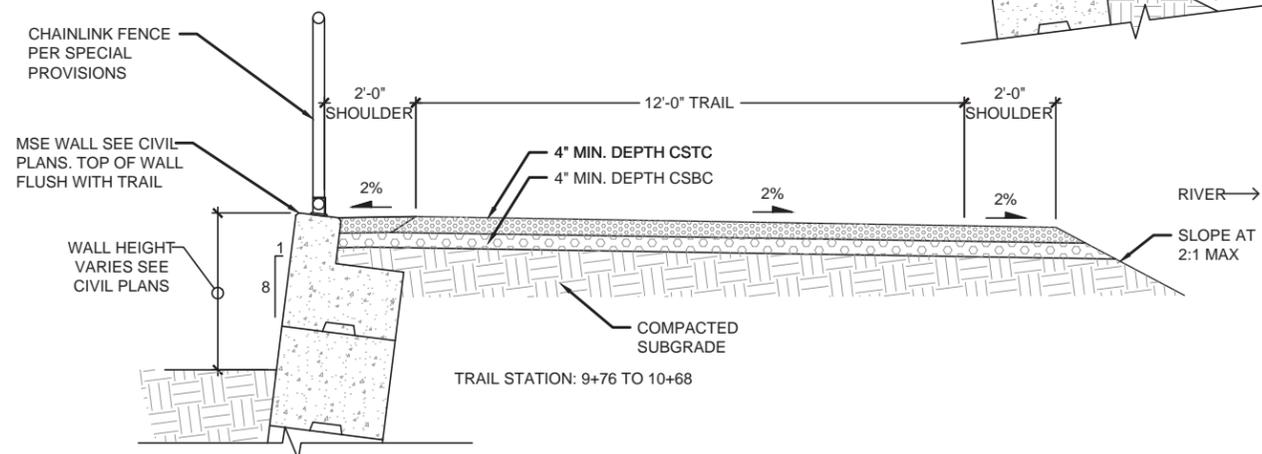
TRAIL SECTION A



TRAIL SECTION B



TRAIL SECTION C

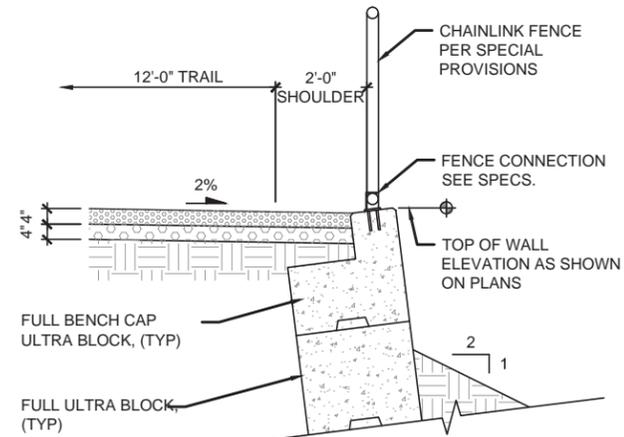


TRAIL SECTION D

TRAIL SURFACE

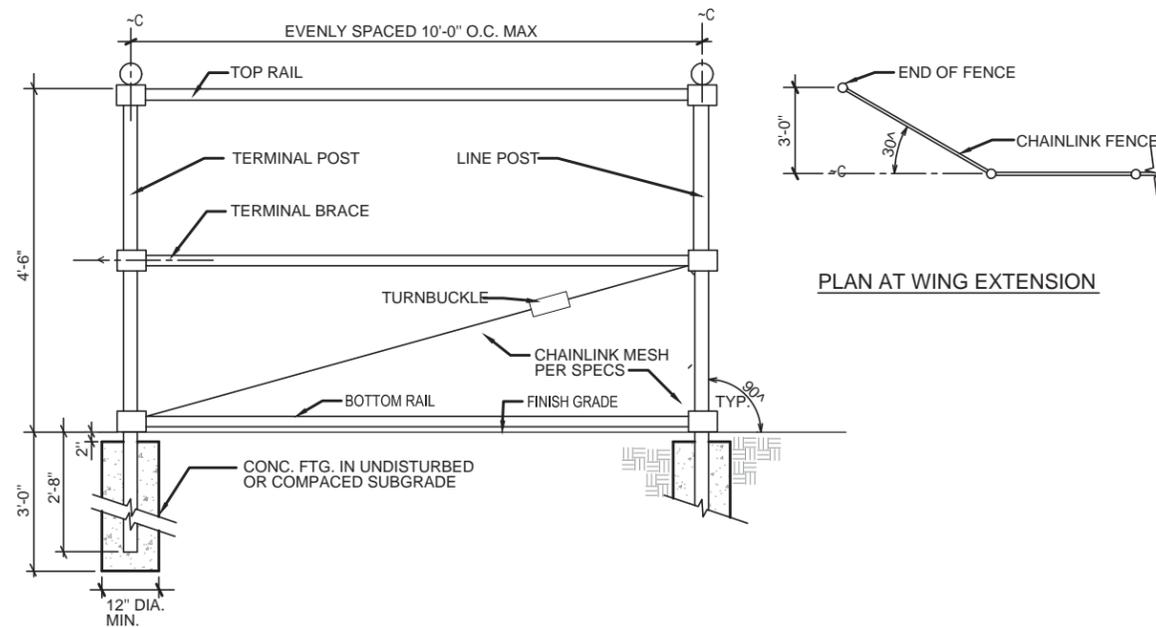
SCALE: 1/2" = 1'-0"

1
8



* USE RIGHT CORNER BENCH AND LEFT CORNER BENCH AS REQUIRED AT WALL ENDS, (TYP)

TOP OF MSE WALL SECTION



ELEVATION AT GRADE SECTION

CHAINLINK FENCE

SCALE: NTS

2
8

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: O:\proj\2012\12-05492-000\CADD\Drawings\from suba27 TRAIL DETAILS.dwg
PLOT Date: 12/19/2014 4:33 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE

60% DESIGN
DECEMBER 2014

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	C. RECKORD 12-2014
DESIGN ENTERED:	M. STEWART 12-2014

MacLeod Reckord PLLC
83 Columbia Street, Suite 306
Seattle, Washington 98104
P 206-323-7919
F 206-323-9242

HERRERA

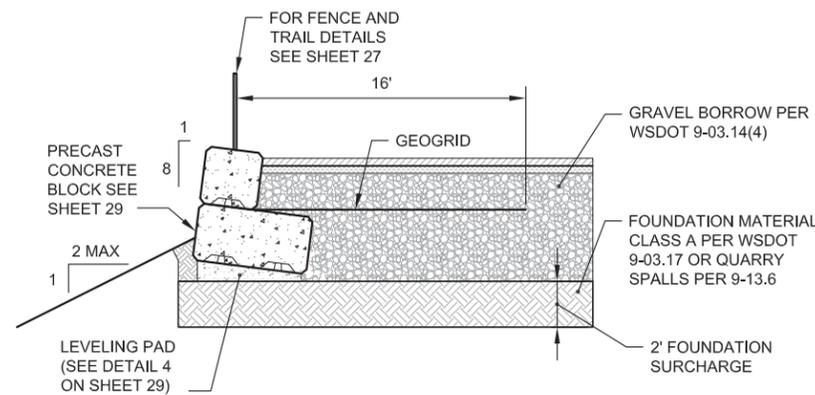
King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

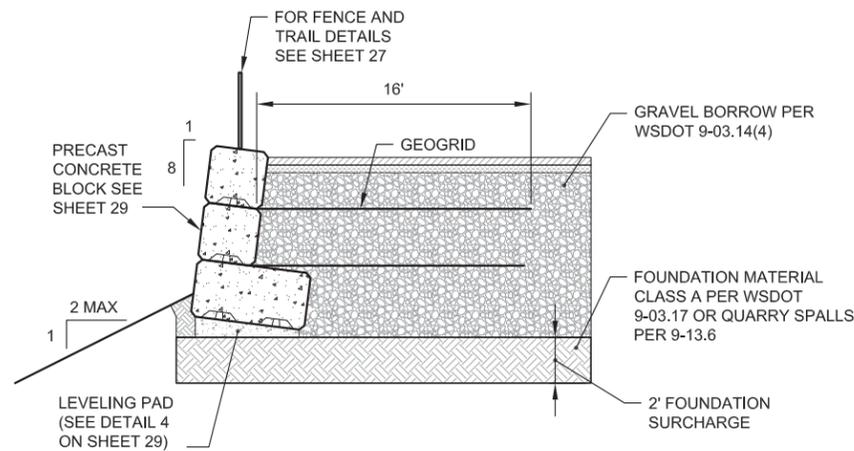
SINNEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TRAIL CONSTRUCTION DETAILS

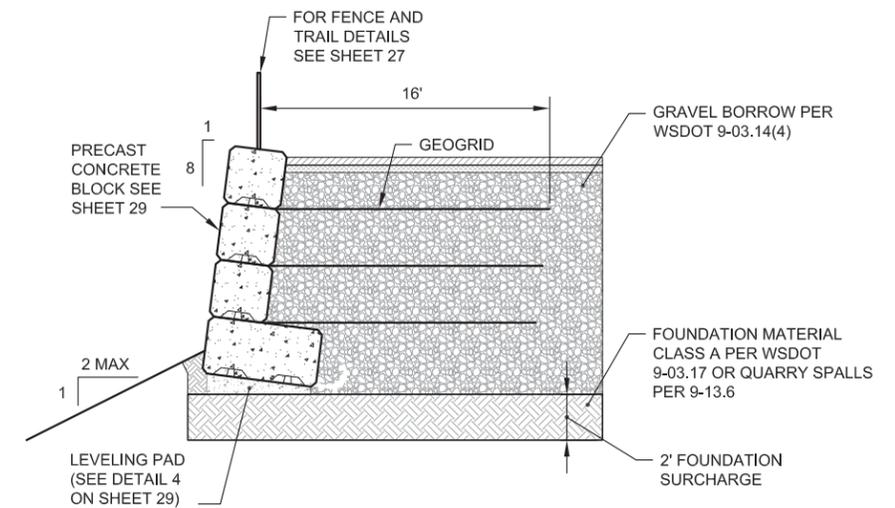
SHEET
27
OF
31
SHEETS
XXXX-XX



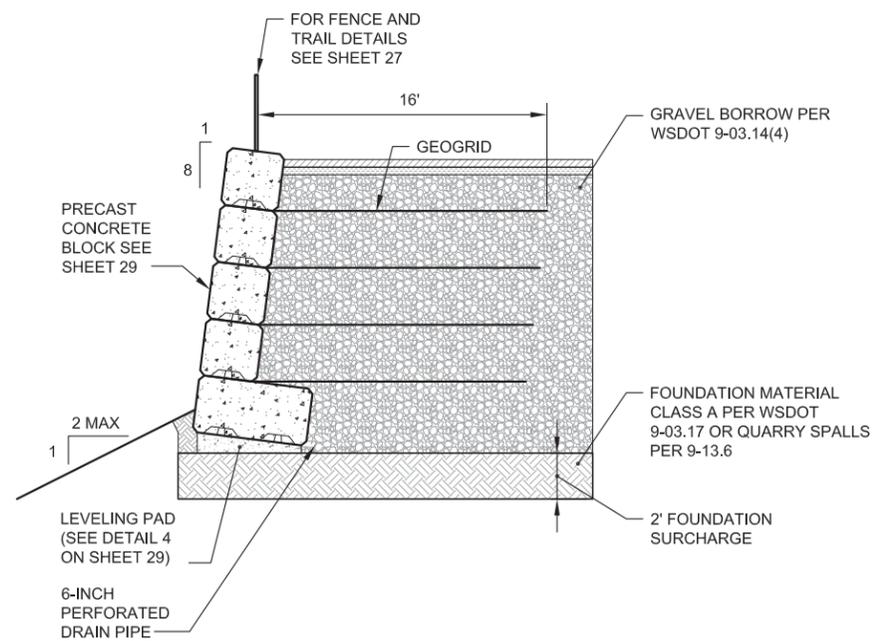
TYPICAL 2 BLOCK HIGH MSE WALL (A)
SCALE: NTS



TYPICAL 3 BLOCK HIGH MSE WALL (B)
SCALE: NTS



TYPICAL 4 BLOCK HIGH MSE WALL (C)
SCALE: NTS



TYPICAL 5 BLOCK HIGH MSE WALL (D)
SCALE: NTS

- NOTES
- LOAD OFFSET OF 1.5-FEET MINIMUM FOR CONSTRUCTION SURCHARGE. LOAD OFFSET OF 5-FEET MINIMUM FOR CRANE LOAD.
 - REINFORCEMENT LENGTH OF 12-FEET FOR CONSTRUCTION SURCHARGE. REINFORCEMENT LENGTH OF 18-FEET FOR CRANE LOAD.

CALL 2 WORKING DAYS
BEFORE YOU DIG
1-800-424-5555

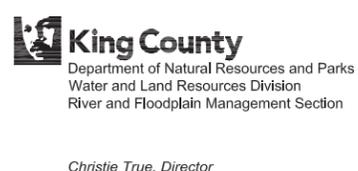
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\12-05492-000\Info Sources\Revis\CTE_SQU_60%_Standard\ISO-Sheet_28.dwg
Plot Date: 12/19/2014 4:42 PM
Cad User: Eric Marshall

FIELD BOOK: _____			
SURVEYED: _____			
SURVEY BASE MAP: _____			
CHECKED: _____			
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000			
SURVEY No. _____			
	NUM.	REVISION	BY DATE

**60% DESIGN
DECEMBER 2014**

APPROVED: _____	
PROJECT SUPERVISOR: _____	
PROJECT MANAGER: J. PARSONS	12-2014
DESIGNED: A. BI	12-2014
DESIGN ENTERED: J. ROBERTS	12-2014

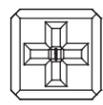


**SINEMA QUAALE UPPER REVETMENT
RECONSTRUCTION**

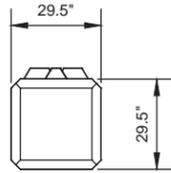
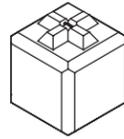
MSE WALL SECTIONS

SHEET
28
OF
31
SHEETS

XXXX-XX



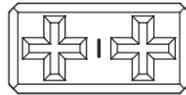
TOP



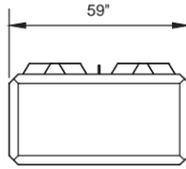
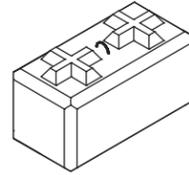
SIDE

HALF BLOCK DETAIL 1

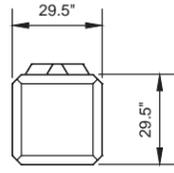
SCALE: NTS



TOP



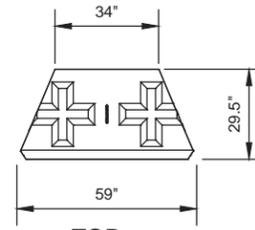
FRONT



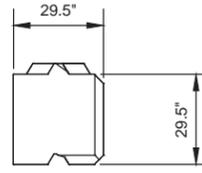
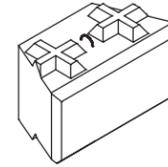
SIDE

FULL BLOCK DETAIL 2

SCALE: NTS



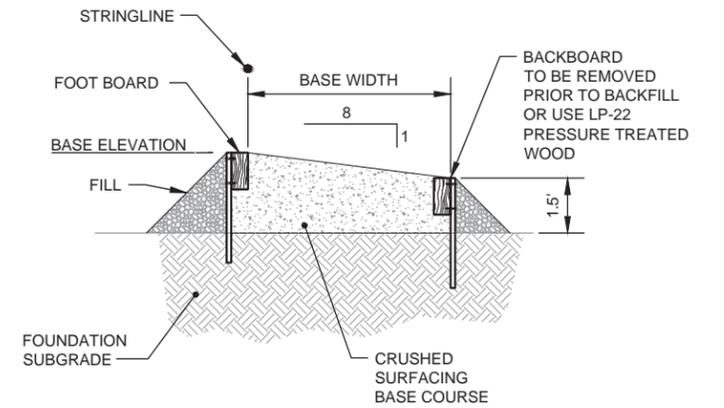
TOP



SIDE

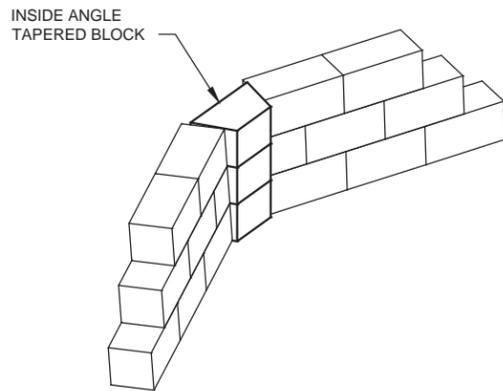
TAPERED BLOCK DETAIL 3

SCALE: NTS



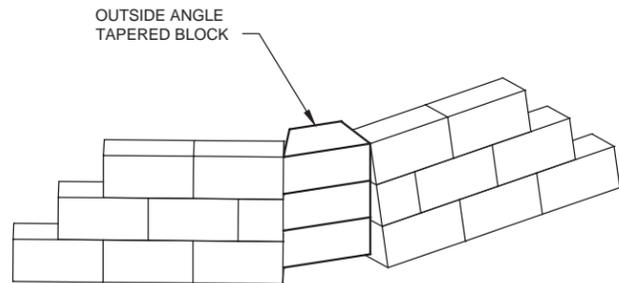
LEVELING PAD DETAIL 4

SCALE: NTS



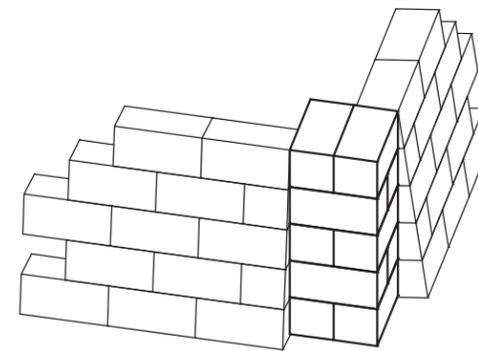
TYPICAL INSIDE ANGLE TAPERED BLOCK DETAIL 5

SCALE: NTS



TYPICAL OUTSIDE ANGLE TAPERED BLOCK DETAIL 6

SCALE: NTS



TYPICAL 90° CORNER WITH BATTER (MSE BALL) DETAIL 7

SCALE: NTS

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

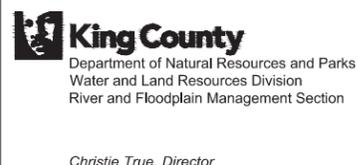
Path: C:\p\proj\2012\12-05-12-2000\Info Sources-Reis\CTE_SQU_60% - Standard\SQ-Sheet 29.dwg
PLOT Date: 12/19/2014 4:36 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.:	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.:	

NUM.	REVISION	BY	DATE

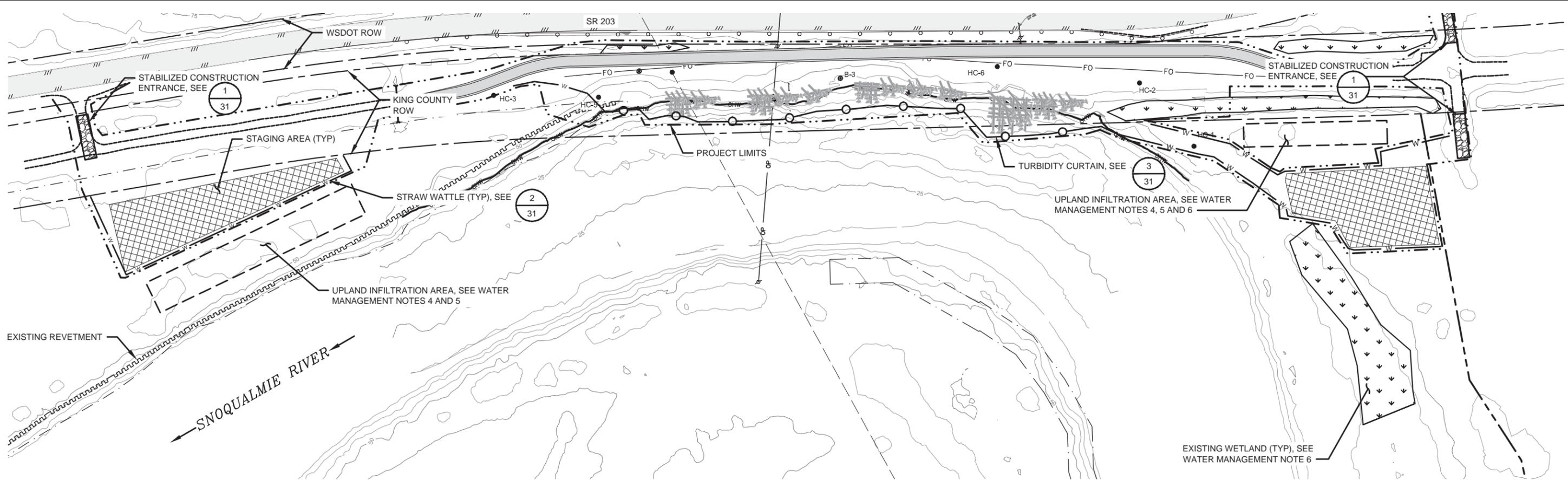
60% DESIGN
DECEMBER 2014

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	A. BI 12-2014
DESIGN ENTERED:	J. ROBERTS 12-2014



SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION
MSE WALL DETAILS

SHEET 29 OF 31 SHEETS
XXXX-XX

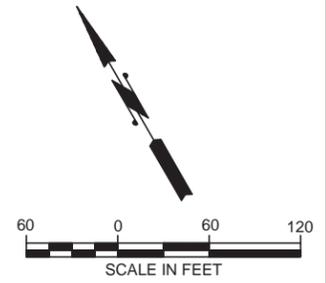


TEMPORARY EROSION AND SEDIMENT CONTROL NOTES:

- APPROVAL OF THE CONTRACTOR'S TEMPORARY EROSION AND SEDIMENT CONTROL PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
- THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF WATTLES, ETC.).
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR'S ESC SUPERVISOR AND MAINTAINED AS NECESSARY.
- ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR SEVEN DAYS SHALL BE IMMEDIATELY STABILIZED WITH ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.)
- ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
- AT COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL BACKBLADE TO MATCH EXISTING GRADE AND REPAIR SOFT SPOTS BY REPLACING SUITABLE NATIVE MATERIAL.
- WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.

WATER MANAGEMENT AND IN-WATER WORK AREA ISOLATION NOTES:

- WATER MANAGEMENT METHODS SHALL BE USED TO DIVERT FLOW AND ISOLATE IN-WATER WORK AREAS AS NECESSARY TO COMPLETE CONSTRUCTION OF CRIB STRUCTURES AND TO AVOID IMPACTS TO WATER QUALITY. THE CONTRACTOR SHALL SUBMIT A WATER MANAGEMENT AND WORK AREA ISOLATION PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO INITIATING ANY ONSITE CONSTRUCTION ACTIVITIES ADDRESSING SITE SPECIFIC TECHNIQUES AND METHODS FOR TEMPORARILY ISOLATING WORK AREAS. ISOLATION MEANS SHALL CONSIST OF TURBIDITY CURTAINS, BULK BAGS, OR APPROVED EQUAL AS NECESSARY TO ALLOW CONSTRUCTION WHILE PREVENTING IMPACTS TO WATER QUALITY. COMBINATION OF ISOLATION MEASURES MAY BE USED AS NECESSARY. THIS PLAN MAY BE COMBINED WITH THE TESC PLAN.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY FLOW ISOLATION MEASURES STARTING AT UPSTREAM END OF IN-WATER WORK AREA TO ISOLATE AND DIRECT WATER AWAY FROM WORK AREA.
- CONSTRUCTION WITHIN THE ISOLATED WORK AREA MAY NOT COMMENCE UNTIL THE OWNER HAS COMPLETED ALL FISH EXCLUSION ACTIVITIES.
- GROUND WATER ENCOUNTERED DURING CHANNEL AND CRIB STRUCTURE EXCAVATIONS MAY BE PUMPED AS NECESSARY TO UPLAND INFILTRATION AREAS TO ALLOW CONSTRUCTION AND INSPECTION OF CRIB STRUCTURES, AND TO FACILITATE THE REMOVAL OF SEDIMENT AND TURBIDITY FROM THE WATER. ANY DISCHARGE OF WATER RETURNING TO THE RIVER SHALL NOT EXCEED THE WATER QUALITY REQUIREMENTS SET FORTH IN THE PROJECT PERMITS.
- WATER MAY BE PUMPED TO UPLAND INFILTRATION AREAS AND DISCHARGED THROUGH AN ENERGY DISSIPATER, LEVEL SPREADER, SILT BAGS, OR OTHER BMPS AS APPROVED BY THE ENGINEER. WATER DISCHARGED OR INFILTRATED IN WATER MANAGEMENT AREAS SHALL NOT CAUSE EROSION OR RESULT IN TURBIDITY IMPACTS TO THE RIVER. CONTRACTOR SHALL INCLUDE PROPOSED DEWATERING DISCHARGE/INFILTRATION AREA(S) IN THE WATER MANAGEMENT PLAN SUBMITTAL.
- WATER MAY NOT BE PUMPED DIRECTLY TO WETLANDS. WATER SHALL BE DISCHARGED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND PERMITS, AND THE APPROVED WATER MANAGEMENT PLAN.
- THE ENGINEER SHALL BE NOTIFIED 24 HOURS IN ADVANCE OF ANY WATER PUMPING ACTIVITIES.
- CONSTRUCTION WATER MANAGEMENT SHALL BE MAINTAINED 24 HOURS PER DAY DURING CONSTRUCTION AND MONITORED BY THE CONTRACTOR DURING NON-WORKING HOURS. 24-HOUR PUMPING IS NOT REQUIRED UNLESS TO CONTROL TURBIDITY.
- THE PLANS ON THIS DRAWING SHOW A SUGGESTED METHOD FOR THE CONTRACTOR TO ISOLATE IN-WATER WORK AREAS. ACTUAL SITE CONDITIONS MAY REQUIRE ADJUSTMENTS TO THE PLANS SHOWN.
- ANY DAMAGE TO THE WORK RESULTING FROM FAILURE OR INADEQUACY OF THE WORK AREA ISOLATION SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL NOT BE ENTITLED TO ANY ADDITIONAL PAYMENT FOR COSTS ASSOCIATED WITH FAILURE OF THE ISOLATION SYSTEM.
- CONTRACTOR IS RESPONSIBLE FOR ALL OPERATION AND CONTINUED MAINTENANCE TO ENSURE TURBIDITY CURTAIN FUNCTIONS PER THE MANUFACTURER'S GUIDELINES.



CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555
 (UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: C:\proj\2012\05492-000\CAD\Drawings\SH30.dwg
 Plot Date: 12/19/2014 4:33 PM
 Cad User: Eric Marshall

FIELD BOOK: _____	APPROVED: _____
SURVEYED: _____	PROJECT _____
SURVEY BASE MAP: _____	SUPERVISOR: _____
CHECKED: _____	PROJECT MANAGER: J. PARSONS 12-2014
PROJECT No. KC: XXXX-XX HERRERA: 12-05492-000	DESIGNED: G. KAYS 12-2014
SURVEY No. _____	DESIGN ENTERED: E. MARSHALL 12-2014

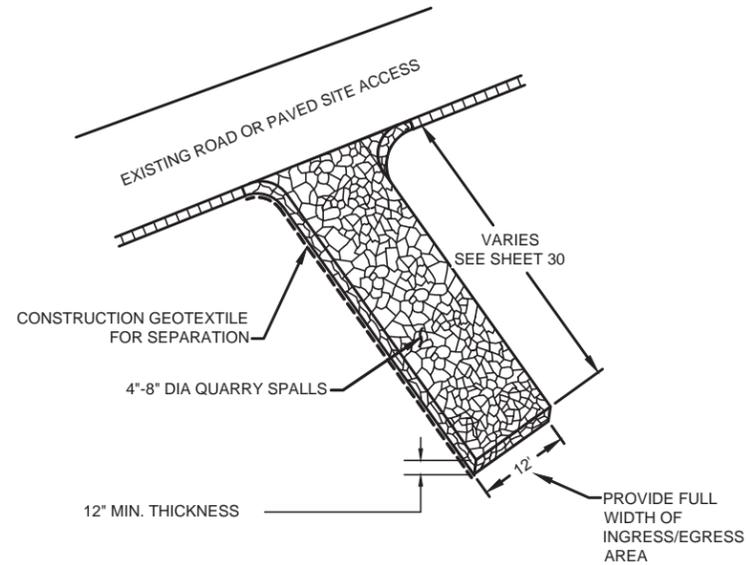
**60% DESIGN
 DECEMBER 2014**



King County
 Department of Natural Resources and Parks
 Water and Land Resources Division
 River and Floodplain Management Section
 Christie True, Director

**SINNEMA QUAALE UPPER REVETMENT
 RECONSTRUCTION**
**TESC AND WATER MANAGEMENT AND WORK AREA
 ISOLATION PLAN**

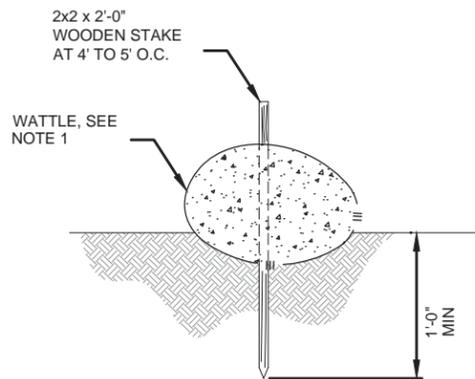
SHEET
30
 OF
31
 SHEETS
XXXX-XX



STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. PLACE SEPARATION GEOTEXTILE UNDER THE SPALLS TO PREVENT FINE SEDIMENT FROM PUMPING UP INTO THE ROCK PAD. THE GEOTEXTILE SHALL MEET THE STANDARDS IN APPENDIX D OF THE KING COUNTY SURFACE WATER DESIGN MANUAL.
2. ANY QUARRY SPALLS THAT ARE LOOSENEED FROM THE PAD AND END UP ON THE EXISTING ROAD SHALL BE REMOVED.

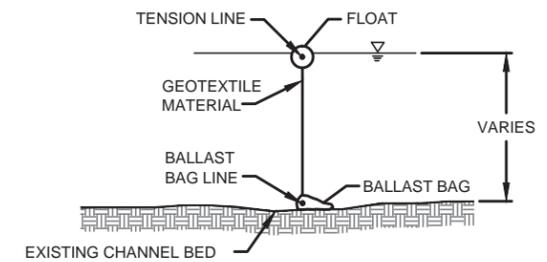
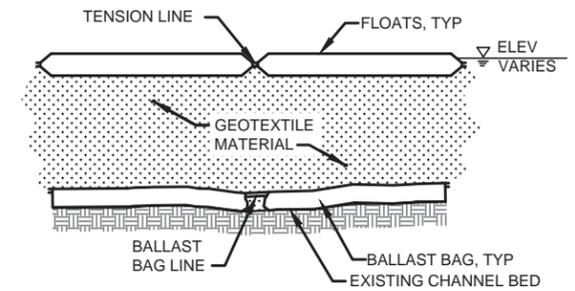
STABILIZED CONSTRUCTION ENTRANCE 1
SCALE: NTS 30



WATTLE DETAIL NOTES:

1. WATTLE SHALL BE PER WSDOT STANDARD PLAN I-30.30-01

WATTLE 2
SCALE: NTS 30



PRIMARY AND SECONDARY TURBIDITY CURTAIN DETAIL 3
SCALE: NTS 30

CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-424-5555

(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

Path: O:\proj\2012\05492-000\CAD\dwgs\SH31.dwg
PLOT Date: 12/19/2014 4:33 PM
Cad User: Eric Marshall

FIELD BOOK:	
SURVEYED:	
SURVEY BASE MAP:	
CHECKED:	
PROJECT No.	KC: XXXX-XX HERRERA: 12-05492-000
SURVEY No.	

NUM.	REVISION	BY	DATE
60% DESIGN DECEMBER 2014			

APPROVED:	
PROJECT SUPERVISOR:	
PROJECT MANAGER:	J. PARSONS 12-2014
DESIGNED:	G. KAYS 12-2014
DESIGN ENTERED:	E. MARSHALL 12-2014



King County
Department of Natural Resources and Parks
Water and Land Resources Division
River and Floodplain Management Section

Christie True, Director

SINEMA QUAALE UPPER REVETMENT RECONSTRUCTION

TESC AND WATER MANAGEMENT AND WORK AREA ISOLATION DETAILS

SHEET **31** OF **31** SHEETS
XXXX-XX

