



Columbia River
 **CROSSING**

CRC Procedures

November 2011
V4

 **Oregon Department
of Transportation**

 **Washington State
Department of Transportation**

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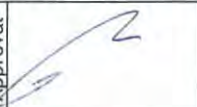
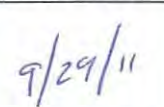
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3.3.7	CRC PROJECT PROCEDURES MANUAL	REVISION DATE: September 2011	
	Consultant Invoice Review/Approval	 <small>MANAGER</small>	 <small>APPROVAL DATE</small>

A. OBJECTIVE

To define the invoicing review, approval and signature process of Consultant invoices for work completed for the CRC Program. This procedure only covers invoices for Consultant agreements directly managed by CRC Task Managers. It does not cover invoices for Consultant agreements managed directly by WSDOT Headquarters. This review process is intended to verify:

- Consultant invoice includes back-up documentation per the requirement of the bi-state agreement
- Consultant invoice is in compliance with the payment provisions in the Consultant agreement with WSDOT
- Due diligence was exercised in the invoice production and review
- Consultant invoice math is accurate

B. DEFINITION

Task Manager - The manager authorized to review and verify the invoice. He/she may be referenced on the Contract Status Report Sheet Active, under heading "State" Mgr/Inv Reviewer.

TRAINS - Transportation Reporting and Accounting Information System.

Approval of Invoices – Approval of consultant invoices must be performed by the approving authority up to their respective limit of execution authority described in the CRC Delegation of Authority Table

C. REFERENCES

1. RCW 39.76.011 – (“payment must be made within 30 days of receipt of properly completed invoice”.)
2. WSDOT Consultant Services Manual, June 2011.
3. WSDOT Chart of Accounts, M13-02
4. CRC Delegation of Authority Table

D. WORK PROCESS

1. The Sr. Administrative Assistant:
 - Receives, opens and date stamps the original invoice and enters it into the incoming invoice log.
 - Scans the invoice and forwards the electronic scan to Document Control.

- Forwards the original invoice to the Budget Manager to initiate the review and approval process. Provides weekly the updated incoming invoice log to the Budget Manager.
2. Budget Manager sends electronic notification to the CRC Director and Deputy Director of invoice amount.
 3. Project Control Technician and Contracts Specialist/Agreements Manager under the supervision of the Budget Manager performs the following activities:
 - Confirm the monthly invoice includes a completed Quality Assurance Check List for Invoice Review form (Attachment 3.3.7-A) signed and dated by the Consultant Project Manager or designee and the monthly progress report.
 - Check invoice details such as invoice date, invoice number, period of performance, etc.
 - Check that correct labor rates are used and within approved range on current, approved ANTE Table.
 - Check that invoice arithmetic is correct.
 - Review Consultant prepared monthly progress report for consistency with invoice. Check that the progress report includes: a description of work completed, cumulative dollar costs incurred, dollar amount of remaining budget, anticipated work for the next reporting period, percentage of work completed, expected completion date for the remaining work, any problem areas and important issues that may affect the Project's cost and/or schedule, and the actual percent complete versus the planned percent complete.
 - Check that the classifications charged are allowed by task order.
 - Review direct expenses to make sure that charges are allowable by task order, match with progress report, are itemized, receipts are attached, and comply with state travel policies and regulations.
 - Record errors, questions and comments on invoice comment log and forward to the Consultant to provide responses to error, questions, and comments on comment log.
 - Complete and date the resolution section of the Invoice Comment Log by indicating the corrective action taken for the item(s) in question.
 - Assign appropriate work order number, TRAINS group number, agreement number, and task number to invoice.
 - Review and initial the items on the Quality Assurance Check List for Invoice Review form acknowledging that invoice was properly prepared and forward to the Budget Manager for signature.

- Attach the Invoice Review Form (Attachment 3.3.7–B) to the invoice and initiate invoice review and verification by the Task Manager(s).
 - Follow up with written notice to the Consultant, if the invoice is not approved. Notice to Consultant must be sent within eight working days of receiving the invoice per RCW, 39.76.011(2) b.
4. The respective Task Managers review and verify their portion of the invoice, and respond to the Budget Manager in writing with questions, if any, entered on the Invoice Comment Log (Attachment 3.3.7-C). The Project Control Technician forwards the Invoice Comment Log to the Consultant to provide responses to questions noted by the Task Manager(s). Forwards the Invoice Comment Log, with responses from Consultant to any review questions, to the respective Task Manager(s).
 5. The Task Manager(s) completes and dates the resolution section of the Invoice Comment Log for their respective review questions by indicating the item(s) in question is approved for payment or to withhold payment pending further action.
 6. Following resolution of all questions raised by Task Managers(s), the Project Control Technician coordinates obtaining written signature on the Invoice Review Form from the respective Task Manager(s) confirming each have reviewed and verified their respective portion of the invoice. Forwards the completed Invoice Review Forms to the Budget Manager.
 7. For invoices submitted by the Lead Consultant, the following steps apply:
 - Budget Manager prepares the Request for Payment form (Attachment 3.3.7–D) and obtains signature by the Consultants Project Manager and the CRC Project Controls Manager. Budget Manager prepares and signs the Cover Memorandum (Attachment 3.3.7–E).
 - Budget Manager attaches the signed Request for Payment form and the signed Cover Memorandum to the completed Invoice Review Form(s), and forwards with the invoice to the Deputy Director for review.
 - Deputy Director signs the Request for Payment form and returns with the invoice to the Budget Manager to proceed with preparation of a Payment Voucher (Attachment F).
 8. For other invoices, the Budget Manager provides the completed Invoice Review Form(s) to the Project Controls Manager or assigned task manager and obtains electronic approval to proceed with preparation of a Payment Voucher.
 9. Once steps 7 and/or 8 are complete, the Project Control Technician forwards the invoice to the Sr. Administrative Assistant to prepare a Payment Voucher.
 10. The Sr. Administrative Assistant prepares a Payment Voucher and returns with the original invoice to the Project Control Technician. (For payment voucher instructions/Trains procedures, refer to WSDOT Chart of Accounts, M13-02. Multiple invoices with the same vendor code should be placed on the same voucher to increase payment cost efficiency.)

11. The Project Control Technician reviews the Payment Voucher to ensure correct work order number, TRAINS group, invoice number, invoice date, agreement number, task number, work operation code, object code, organization code, control section number, and dollar amount has been input.
12. The Project Control Technician attaches the Payment Voucher to the invoice, and gives it to the Project Controls Manager, Project Delivery Director or the CRC Director for review/approval by signature of the Payment Voucher per the limits of their respective execution authority. After obtaining signature, the Project Control Technician returns original invoice and signed payment voucher to the Sr. Administrative Assistant.
13. The Sr. Administrative Assistant:
 - Scans the original invoice with any documented corrections, supporting documents, and signed Payment Voucher and forward the electronic scan to Document Control to file in the Document Controls System.
 - Makes one copy, attach it to the original invoice (and supporting documents) and mail out to WSDOT SW Region's Department Accounting to process for payment.
 - Makes one copy for the Program files.
14. Project Controls enters the invoice amount in cost tracking system (currently Prolog).

E. ATTACHMENTS

- | | |
|---------|---|
| 3.3.7–A | Quality Assurance Check List for Invoice Review |
| 3.3.7–B | Invoice Review Form |
| 3.3.7–C | Invoice Comment Log |
| 3.3.7–D | Request for Payment Form |
| 3.3.7–E | Cover Memorandum |
| 3.3.7–F | Payment Voucher |



**3.3.7-A Quality Assurance Check List for Invoice Review
DEA and CRC
(For use on DEA Invoices to CRC)**

Invoice # _____

Cover Page		
DEA Reviewer Initials	Review Item	CRC Reviewer Initials
	Invoice # - Invoice number clearly listed on all invoice pages (i.e. labor, billing schedules etc..., but not back up documentation)	
	Service Dates - "For Services Performed" equals the dates actual work was performed (from – to)	
	Invoice Dates - Date of invoice, invoice transmittal date, and CRC date received stamp on invoice	
	PCCO Review - List of PCCO numbers that are in effect during services performed period of this Invoice	
	Contract Expiration - Checked to make sure services were performed prior to the contract expiring. Contract Expiration Date: _____	

Billing Schedule & Subconsultant Invoices		
DEA Reviewer Initials	Review Item	CRC Reviewer Initials
	PCCO Validation - PCCOs amount listed have NTP Effective Date on or before Services Performed Date	
	Check Calculation - All fees applied mathematically correct and not "backed into"	
	Formula Validation - Verify formulas in spreadsheet	
	Task Totals - Totals by Task amounts adds correctly (no rounding errors)	
	Cost Reconciliation - Project to Date costs equals Contract to Date Billed Amount	
	Service Validation - Amounts listed are for what is for services being billed (i.e. - if invoice is for Subconsultant services only, then the schedule amounts need to be for the Subconsultants only and not Program also.)	
	Back up Documentation - All required back up documentation is provided for charges contained in invoice (i.e. - receipts and timesheets as applicable.	
	Direct Expenditure Review - Direct Expenditure Validation, lump-sum amount, or actual. Submitted in accordance with Chapter 10 of WSDOT Accounting Manual	
	Labor Rate Check - Direct labor rates are the agency approved actual hourly rates	
	NTE Budget Check - Check to see if NTE budget items are within budget	

Signature _____
DEA Project Manager Date

Signature _____
CRC Budget Manager Date



3.3.7–B INVOICE REVIEW FORM

Invoice Date: October 6, 2011

Invoice: 310596 & 310627

Invoice Period: August 28, 2011 thru September 24, 2011

Vendor Name: David Evans & Associates

Agreement #: Y-9245

The Project Manager (PM), being the primary observer of the project’s progress is responsible for ensuring vendor payments are made consistent with contract terms, approving pay requests and monitoring overall contract expenditures to report on planned versus actual project costs.

Please refer to the Monthly Progress Report to verify DEA invoices.

Reviewed Task Managers Initials	Description
	Is the quality and progress of the work acceptable? Review Agreement and Task # on invoice to the Monthly Progress report
	Does the invoice accurately reflect the goods/service received? Review and verify the invoice hours expended to the Monthly Progress Report for hours expended. Are the hours reasonable to the activities stated in the Monthly Progress Report
	Are the hours reasonable as compared to the previous month's activities/hours billed?
	Do the charges for time and materials seem reasonable for work received?
	Confirm work performed is within scope of contract and does it meet the detailed requirements of the SOW. Are these the appropriate classifications of personnel for tasks billed?
	Approve that Other Direct Charges (ODC's) related to the project are correct. Confirm the reasonableness of travel charges.
	Have any amendments been executed that you should consider for impacts to this invoice?
	Comment Log. Be sure to fill out any comments in the proper Agreement Invoice comment log and tag the invoice with items of concern and if further action is needed.

Task Manager Signature

Date XXXXXXX



3.3.7-C INVOICE COMMENT LOG

Invoice # _____

Agreement # _____

Consultant _____

Commenter _____ Page # _____ Date _____

Comment:

Response:

Resolution:

Commenter _____ Page # _____ Date _____

Comment:

Response:

Resolution:

Commenter _____ Page # _____ Date _____

Comment:

Response:

Resolution:



700 WASHINGTON STREET
VANCOUVER, WA 98660
360-737-2726 | 503-256-2726

REQUEST FOR PAYMENT

CLIENT: WSDOT/ODOT	All work for which payment is requested including all work performed by subconsultants, has been reviewed for quality control, as specified and is in compliance with work scope under the approved task orders.
CONTRACTOR: David Evans Associates 2100 SW River Pkwy Portland, OR 97201	
PROJECT: Columbia River Crossing Project	Period Covered by this Request for Payment Billing No.: 76 DEA Invoice No.: 308616 & 308618
CONTRACT NO: Agreement Y-9245	FROM: 7/1/2011 TO 7/30/2011

TOTAL ESTIMATED CONTRACT VALUE (INCLUDING ADJUSTMENTS)

Deductions/Corrections This Invoice:	Task	AMOUNTS			
		Budget	Total To Date	Previous Period	This Period
<p>Deduct \$5,972.29 from Task AH5.11 DEA Fwy&Interchange Area Desg Support - Labor as over spent NTE budget.</p> <p>Deduct \$5283.96 from Task AH5.12 DEA - Local Street Design Support - Labor as over spent NTE budget.</p> <p>Deduct \$12,993.65 from Task AH5.15 DEA - Traffic Sppt for Other Disp - Labor as over spent NTE budget.</p> <p>Deduct \$67.00 under Task AH 7.01PBEX for C. Burlingame monthly parking pass. This expenditure is from 09-11 biennium and should have been submitted prior to biennium cutoff date. See attached email for DEA's response.</p> <p>Deduct \$134.00 under Task AH 8.01PBEX for C. Belcher and J. Burke monthly parking passes. These expenditures are from 09-11 biennium and should have been submitted prior to biennium cutoff date. See attached email for DEA's response.</p>	AA Group 4	\$300,000.00	\$292,366.20	\$292,366.20	\$0.00
	AB Subtotal	\$3,610,340.33	\$3,296,668.48	\$3,296,668.48	\$0.00
	AB Group 5	\$2,110,343.33	\$2,110,343.33	\$2,110,343.33	\$0.00
	AB Group 9	\$1,499,997.00	\$1,186,325.15	\$1,186,325.15	\$0.00
	AC Group 10	\$16,351,854.27	\$13,192,883.42	\$13,192,883.42	\$0.00
	AC Group 10 w/4% Markup on Subs - allowed by WSDOT since 11/1/06	\$16,351,854.27	\$13,310,187.65	\$13,310,187.65	\$0.00
	AD Group 31	\$23,678,649.00	\$23,146,667.25	\$23,146,667.25	\$0.00
	AD Group 31 w/4% Markup on Subs - allowed by WSDOT since 11/1/06	\$23,678,649.00	\$23,147,937.52	\$23,147,937.52	\$0.00
	AE Group 39	\$75,000.00	\$65,242.49	\$65,242.49	\$0.00
	Task AF Group 10	\$32,884,240.00	\$29,757,360.87	\$29,757,360.87	\$0.00
	Task AF XL3604 Group 10 w/4% Markup on Subs - allowed by WSDOT since 11/1/06	\$32,884,240.00	\$30,455,044.04	\$30,455,044.04	\$0.00
	Task AG	\$100,000.00	\$93,882.48	\$93,882.48	\$0.00
	Task AH XL3604 Group 24	\$28,367,697.23	\$19,890,661.39	\$18,854,187.58	\$1,036,473.81
	Task AI XL3604 Group 25	\$612,438.00	\$315,874.21	\$315,874.21	\$0.00
	Task AJ XL3604 Group 30	\$150,000.00	\$76,523.48	\$72,751.87	\$3,771.61
AK XL3604 Group 34	\$1,128,994.00	\$981,220.15	\$981,220.15	\$0.00	
XL3604 Group 40 - Credit for Office Rent per Agreement Dated 2/1/10	\$0.00	(\$2,353,957.82)	(\$2,319,587.39)	(\$34,370.43)	
Groups Net Total	\$107,259,212.83	\$88,528,007.89	\$88,565,775.28	\$1,005,874.99	
Total Gross Earnings	\$107,259,212.83	\$91,925,608.09	\$90,885,362.67	\$1,040,245.42	
Credit for Office Rent per Agreement Dated 2/1/10	8/30/09 - 9/26/09	(\$2,353,957.82)	(\$2,319,587.39)	(\$34,370.43)	
Total Net Earnings	\$107,259,212.83	\$89,571,650.27	\$88,565,775.28	\$1,005,874.99	

Total Deductions/Corrections = \$24,450.90
Total Net Earnings submitted = \$1,030,325.89
Total Net Earnings Paid = \$ 1,005,874.99

REVIEWED AND VERIFIED BY ALL TASK ORDER MANAGERS (SEE ATTACHED SHEET)

APPROVED BY: _____
Kris Strickler, CRC Deputy Director Date

APPROVED BY: _____
Michael A. Williams, CRC Project Controls Manager Date



Date: November 10, 2011

TO: Nancy Boyd / Kris Strickler
CRC Director / CRC Deputy Director

FROM: Michael Williams – CRC Business Services Manager
Raymond Mabey – CRC Program Manager

SUBJECT: Columbia River Crossing – DEA Invoice No. 310596 and 310627 (relevant to Agreement Y-9245)

The review of the David Evans & Associates (DEA) Invoice No. 310596 and 310627 has been completed in accordance with the Columbia River Crossing Project (CRC) Procedures Manual. This invoice is for services performed on the CRC by DEA and its subconsultants for the period of August 28, 2011 through September 24, 2011.

It is our recommendation to approve payment of DEA Invoice No. 310596 and 310627 with no deductions.

Total amount withheld this invoice = \$0.00

Net amount submitted this invoice = \$1,116,927.92

Recommended net amount to pay this invoice = \$1,116,927.92

The total invoice package contains pages 1 through 428.

If you have any questions regarding this memorandum or the review of the DEA Invoice please contact Keith Daly at (360) 816-8870.

NOTED FOR PAYMENT

Nancy Boyd, CRC Director Date

Kristopher Strickler, CRC Deputy Director Date



PAYMENT VOUCHER

Acct Period /

Voucher #

XV 58E 000022

Vendor No.

Totals

Ret.Total

\$0.00

N/P Total

\$0.00

Total

\$0.00

Y/E Phase

Voucher Date

11/01/2011

Status

HELD

Vendor:
Address 1:
Address 2:
City, State, Zip:

PAGE NUMBER: 1 OF 0

Invoice				Reference			Retainage		
P. Auth	Date	Number	P. Agree	Order No.	Quantity	P/F	Type	Amount	

Distribution												
Job No.	Work Op	Obj	Org	B/S Acct	Parcel	C. Section Equip No.	Revenue Source	Fund	Activity	Appr.	Agency	Disc. Type
Estimated Accrual Document Ref #			Service Request No.		Location Code		N/P Amount		Total Amount		I/D	

Invoice				Reference			Retainage		
P. Auth	Date	Number	P. Agree	Order No.	Quantity	P/F	Type	Amount	

Distribution												
Job No.	Work Op	Obj	Org	B/S Acct	Parcel	C. Section Equip No.	Revenue Source	Fund	Activity	Appr.	Agency	Disc. Type
Estimated Accrual Document Ref #			Service Request No.		Location Code		N/P Amount		Total Amount		I/D	

Invoice				Reference			Retainage		
P. Auth	Date	Number	P. Agree	Order No.	Quantity	P/F	Type	Amount	

Distribution												
Job No.	Work Op	Obj	Org	B/S Acct	Parcel	C. Section Equip No.	Revenue Source	Fund	Activity	Appr.	Agency	Disc. Type
Estimated Accrual Document Ref #			Service Request No.		Location Code		N/P Amount		Total Amount		I/D	


User Name

Received By Date

Checked and Approved for Processing By Date

Comments:

Signature of Approving Authority Date

3.5.1	CRC PROJECT PROCEDURES MANUAL	REVISION DATE: 11/21/2011	
	Schedule Control	APPROVAL  MANAGER	11/21/2011 APPROVAL DATE

A. OBJECTIVE

To produce a time-structured plan for performing the scope that will, when followed, result in completing the project in the most desired sequence so that actual work performed can be compared to the plan and corrective action can be taken if undesirable deviation occurs.

B. DEFINITION

Critical Path - The series of interdependent activities of a project, connected end to end, which determines the longest overall duration. This also represents the shortest time possible to finish the project.

Scope - Answers the question "what are we going to do, and deliver in this project."

Primavera P6 - A Project Management software tool to measure progress, prioritize investments, and the capability to monitor all costs.

C. REFERENCES

Project Management Plan

D. WORK PROCESS

1. The Schedule Analyst working under the direction of the Program Manager and in collaboration with the task managers is responsible for creating, updating and analyzing the project schedule.
2. Program Manager and the Schedule Leads (SLs) with the assistance of the Cost/Schedule Analyst will identify all activities required to complete their portions of the project or any new scope added to the project.
3. SLs will estimate the durations and milestones of all the activities that were identified in the Project Baseline Schedule.
4. The Schedule Analyst will categorize these activities within the project work breakdown structure in P6.
5. The Schedule Analyst will then work with the SLs to determine the interrelationships of the activities in P6.
6. Once the activities, durations, relationships, and milestones are entered into P6 the Cost/Schedule Analyst identifies the critical path of the combined schedule and communicates this information to the SLs and obtains concurrence on the baseline schedule. This is an iterative process and is reviewed and progressed monthly.
7. The Schedule Analyst then compares the actual progress to the planned or baseline schedule and communicates these results to SLs and the Program Manager on a monthly basis.
8. Monthly Schedule Update Process - The schedule's data date is advanced to the end of the next month. The schedule is sent to the Schedule Lead at the end of each month. See Figure A. The schedule lead will review their activities and verify the following:

- a. Start and Finish Dates: verify that the dates are accurate and revise if necessary in the space provided. No actual dates after the data date will be allowed.
 - b. Original Duration: verify that the duration of the activities and revise if necessary in the space provided.
 - c. Predecessors and Successors: verify the predecessor(s) and successor(s) at each activity. Provide new predecessors or successors if necessary.
 - d. Critical Path: review the critical path and verify if it is accurate. Review the logic at the critical path for accuracy.
 - e. Activities: add activities if necessary or identify activities to be deleted.
 - f. Milestones: verify the milestone dates, indicate a new date if necessary.
 - g. Once all revisions have been made, the Schedule Analyst must sign/date and forward the mark-ups to their supervisor.
 - h. The marked up schedule is then returned to the Scheduler for input into a copied schedule.
 - i. After all changes have been incorporated, the Scheduler will review the schedule with each task lead to show the results.
 - j. A final review will be presented to all project leads prior to submitting the schedule to the PMOC.
 - k. After the final presentation to the project managers, the Program Manager will sign off on the schedule. The schedule will then be submitted to the PMOC.
9. SLs and the Program Manager determine if there is a need for corrective action to prevent any undesirable schedule impacts.
 10. A four-week Look Ahead Schedule is produced each week and distributed at the Project Controls Meeting.

E. ATTACHMENTS

Figures A and B

Figure 3.5.1-A

Activity ID	Activity Name	Start	Finish	REVISED START	REVISED FINISH	Original Duration	REVISED DURATION	Predecessors	Successors
CRC 2011 08-31 Update		30-Dec-10 A	17-Sep-15			1229d			
PRE-CONSTRUCTION		30-Dec-10 A	17-Sep-15			1229d			
HIGHWAY & STRUCTURES DESIGN		30-Dec-10 A	17-Sep-15			1229d			
30% HIGHWAY DESIGN		30-Dec-10 A	24-Apr-12			342d			
30% Roadside		06-Oct-11	10-Nov-11			26d			
HW118	30% Site and Functional Analysis	06-Oct-11	18-Oct-11			9d		HW003, HW003b, RD1110	HW119, HW120
HW119	30% Conceptual Design Layout	19-Oct-11	01-Nov-11			10d		HW118	HW083, HW075
HW120	30% Preliminary Plant Palette	19-Oct-11	01-Nov-11			10d		HW118	HW075, AG6360, AG6450
HW024a	30% Preliminary WQ Planting Plan	28-Oct-11	10-Nov-11			10d		SW4620, SW4020, SW5220, SW4820	HW075, HW083, HW075
30% Traffic Design		06-Oct-11	19-Oct-11			10d			
HW122	30% Tolling Facility Layout	06-Oct-11	19-Oct-11			10d		HW003, HW003b	HW079b
30% Staging & Traffic Control		31-Aug-11	03-Jan-12			10d			
HW050	30% Finalize Prelim Stage&Traffic Contr Dsgn/Plans(LPaph1/RP2) - AH8023	31-Aug-11	21-Sep-11			15d		TC1200, TC1800, TC1500, HW002b, HW002c, HW002d, PM1180	HW055
HW055	30% Contract Packaging Discussions / Planning	22-Sep-11	20-Oct-11			10d		HW050	HW056
HW056	30% Construction Sequencing Layout & Schedule - AH8024	21-Oct-11	02-Dec-11			30d		HW055, HW003, HW003b, TR-047, ST0610, ST0830	HW057, HW073, HW058
HW058	30% Maintenance of Traffic	04-Nov-11	02-Dec-11			20d		HW056	TP2500, HW083
HW057	30% Const Sequencing - Horizontal/Vertical Alignment and Modeling	05-Dec-11	03-Jan-12			20d		HW056	HW083, HW083b
30% Plans & Estimates (P&E)		30-Dec-10 A	24-Apr-12			342d			
30% Plans		30-Dec-10 A	26-Jan-12			279d			
HW069	30%Plans - Title, Index, Vicinity Map, Miscellaneous	30-Dec-10 A	11-Aug-11			21d		HW002, HW070	HW080
HW070	30%Plans - Alignment	30-Dec-10 A	17-Sep-11			48d		HW002, HW002b, HW002c, HW002d, HW002e, HW002f, HW002g, HW002h,	HW080, HW070b, HW069
HW070b	30%Plans - Profiles	30-Dec-10 A	17-Sep-11			30d		HW070	HW080
HW071	30%Plans - Channelization & Intersection Layout - AH8005/06/07/09	06-Oct-11	11-Nov-11			27d		HW003, HW003b	HW080, DD9110
HW072	30%Plans - Roadway Sections	12-Oct-11	22-Nov-11			30d		HW003, HW003b, HW098a, HW098b	HW080
HW079b	30%Plans - Tolling Infrastructure / Equipment Locations	28-Oct-11	02-Nov-11			10d		HW122	HW080
HW075	30%Plans - Roadside Development & Mitigation Concept	11-Nov-11	09-Dec-11			20d		HW024a, HW025, HW024b, HW120, HW119, HW025b, HW024a	HW080
HW073	30%Plans - Staging	05-Dec-11	03-Jan-12			20d		HW056	HW080, HF0050
HW080	30%Plans - Compile Package	13-Jan-12	26-Jan-12			10d		HW069, HW070, HW071, HW072, HW073, HW074, HW075, HW079b,	HW089, HW090, DD1580
30% Estimate		29-Feb-12	13-Mar-12			10d			
HW085	30%Est - Estimate Review (Internal)	29-Feb-12	13-Mar-12			10d		HW084	HW091

EXAMPLE


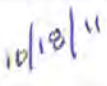
<p>August 31, 2011 schedule update</p> <p>DRAFT: FOR INTERNAL USE ONLY</p>	<p>CRC- U21</p> <p>CRC AUGUST 31, 2011 SCHEDULE UPDATE: Schedule Lead, Gavin O.</p> <p>Approved for Publishing by:</p> <p>Schedule Lead: _____ Date: _____ Highway Engineering Manager: _____ Date: _____</p>	<p>RUN DATE: 25-Aug-11</p> <p>PAGE: 1 of 10</p> <p>DATA DATE: 31-Aug-11</p>
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Figure 3.5.1-B

Activity ID	Activity Name	Start	Finish	REVISED START	REVISED FINISH	Original Duration	REVISED DURATION	Predecessors	Successors
CRC 2011 08-31 Update		20-Jan-09 A	23-Apr-21			3186d			
PRE-CONSTRUCTION		20-Jan-09 A	02-May-17			2148d			
PROJECT MANAGEMENT		03-Nov-10 A	14-Dec-12			532d			
PM General		03-Nov-10 A	14-Dec-12			532d			
PM1070	Prepare for CTRAN Vote - Tax Increase (How vote affects the project)	03-Nov-10 A	14-Dec-12			243d		TR1064, TR2030	PM1080, AG0430
PM1075	Legislative Development & Session (WA Tolling Authority & Committed Proj Funds)	30-Jun-11 A	01-May-12			192d		PM1010	AG0245, AG0260, FN1570b
PM1100	Begin Next Task A? (Final Design)	31-Aug-11				0d		PM1015	SF3200, SF3250, SF3300, SF3350, SF3400, SF3500, SF3550, SF3600,
PM1080	CTRAN Vote (2nd Tues in November 2011)		14-Dec-12			0d		PM1070	TR5200
ENVIRONMENTAL		23-Aug-11 A	22-Nov-11			68d			
Section 106 - Cultural Resources		23-Aug-11 A	08-Sep-11			15d			
Memorandum of Agreement (MOA)		23-Aug-11 A	08-Sep-11			15d			
MOA Development Process		23-Aug-11 A	08-Sep-11			15d			
EN1470	Obtain MOA Signatures	23-Aug-11 A	08-Sep-11			15d		EN1460	EN1490
EN1490	MOA Signed		08-Sep-11			0d		EN1470, EN1415, EN1415	EN4760
FEIS		06-Sep-11	23-Oct-11			34d			
EN4760	Approval for Publication - Camera Ready Collect Signatures		06-Sep-11			0d		EN4740, EN1490	EN4770
EN4770	FEIS to Printer		12-Sep-11			0d		EN4760, TP1520, TP1980, TP1980b, TP3010, TP3020, TP3030, TP3040,	EN4780
EN4780	Distribute to Libraries		14-Sep-11			0d		EN4770	EN4790
EN4790	Overnight Copies to DC		15-Sep-11			0d		EN4780	EN4800
EN4800	Arrive in DC		16-Sep-11			0d		EN4790	EN4810
EN4810	PUBLISH FEIS IN FEDERAL REGISTER BEGIN 30-DAY FEIS REVIEW PERIOD	23-Sep-11	23-Oct-11			31d		EN4800	RA1570, EN1800, AG14110, AG6760, AG14560, AG15460
Record of Decision		30-Aug-11 A	29-Oct-11			60d			
EN1480	Draft ROD	30-Aug-11 A	23-Sep-11			25d		EN4680	EN1590
EN1590	Review 1st Draft of ROD CRC	24-Sep-11	04-Oct-11			11d		EN1480	EN1670
EN1670	Revise ROD	01-Oct-11	19-Oct-11			15d		EN1590	EN1700
EN1700	2nd Draft ROD Review (FTA & FHWA)	20-Oct-11	03-Nov-11			15d		EN1670	EN1770
EN1770	Revise ROD	04-Nov-11	13-Nov-11			10d		EN1700	EN1790
EN1790	Print and Send to EPA for FR Publication		14-Nov-11			0d		EN1770	TM2200, EN1810
EN1810	FTA/FHWA Sign Record of Decision	14-Nov-11	21-Nov-11			5d		EN1790	EN1800



<p>August 31, 2011 schedule update</p> <p>DRAFT: FOR INTERNAL USE ONLY</p>	<p>CRC- U21</p> <p align="center">Columbia River Crossing Project Schedule</p> <p align="center"><i>August 31, 2011 Schedule Update</i></p> <p>Approved for Publishing by:</p> <p>CRC Program Manager: _____ Date: _____ CRC Deputy Director: _____ Date: _____</p>	<p>RUN DATE: 25-Aug-11</p> <p>PAGE: 1 of 112</p> <p>DATA DATE: 31-Aug-11</p>
	<p>_____</p>	

3.6	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Change Management	 <small>APPROVAL</small> <small>MANAGER</small>	 <small>APPROVAL DATE</small>

A. OBJECTIVE

To establish guidelines and assignment of responsibilities for developing and implementing a Change Management process that provides a consistent and well documented means of managing individual change and cumulative change. Change Management process provides for evaluating, approving and documenting changes to scope, schedule, or budget baselines established at the program and project package levels at the end of the preliminary engineering (PE) phase and described in the documentation to support the Program's application to the FTA to enter into Final Design.

B. DEFINITION

Baseline Scope – *Baseline Scope is represented by the Transit and Highway improvements approved at completion of the Preliminary Engineering phase at which time a scope, budget and schedule would be established for the Program and for each project package described in the Project Implementation Plan. The baseline scope is also described in the documentation submitted to the FTA in support of the Program's application to enter into Final Design.*

Project Change Request Form (PCRF) – *A PCRF is a form used to document and approve revisions to project scope, schedule, or budget from a previously approved project definition.*

C. REFERENCES

1. CRC Project Management Plan
2. WSDOT Capital Program Development and Management (CPDM) Manual, September 2008

D. WORK PROCESS

RESPONSIBILITIES

Business Services is responsible for ensuring project changes during Final Design, Construction, and Start-up phases are thoroughly documented and communicated using the Change Management process discussed in the Project Management Plan (PMP) and in this procedure. Business Services will establish a standard reporting format for summarizing material changes at the project package and program levels that would be reflected in monthly reports. The Business Services Manager will assign a Change Management Manager beginning with the completion of the PE phase through the remainder of the CRC Program.

The Change Management Manager is responsible for coordinating closely with the Program's design and construction managers on changes that may affect approved scope, budget and schedule baselines. Ensuring documentation is prepared for effect of changes on approved baselines. Maintaining a consolidated change management data base. Tracking and reporting monthly on changes by individual project packages and cumulative change effect on scope, budget and schedule at the program level.

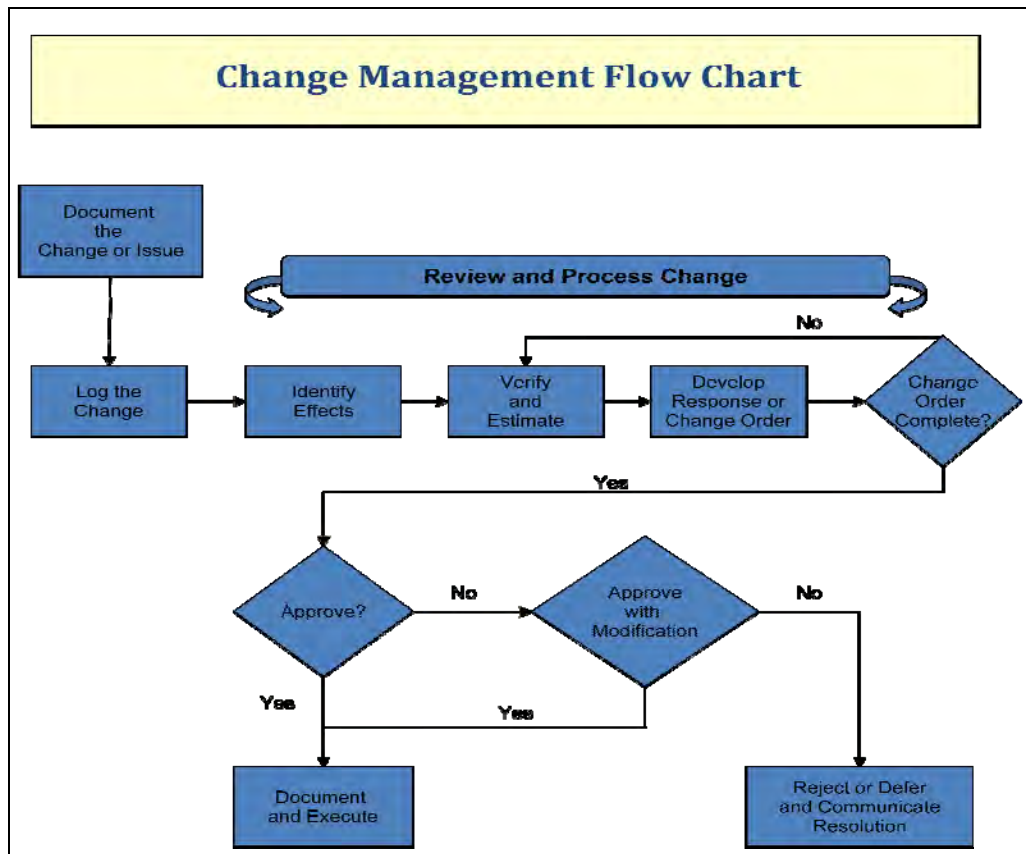
The Engineering Managers (and their assistant managers) and the Project Engineers (Resident Engineers) with input from Project Delivery Engineering Manager and the Cost/Schedule Analysts are responsible for documenting and justifying significant changes in their respective area of responsibility that affect approved baselines during Final Design and Construction execution.

The Program Manager or the Project Delivery Director are each responsible for reviewing draft documentation and justification of significant design and construction changes, respectively; preparing/signing Change Management Request memorandums discussed below under Change Management Approval; and presenting the information to/obtaining the approval of the CRC Director and concurrence of the Deputy Director.

It is the responsibility of all team members to implement the change management process and assist in identifying and tracking the source of the changes – whether it is an **internal** change initiated by the CRC team; an **external** change initiated by the contractor; or an **external** change that is a result of stakeholder requests. This in turn provides a record of changes that affect work elements including:

- Deletion, modification, or combination with other elements
- Change that materially affects the scope, cost or schedule

The CRC team will follow the change management process described in the flow chart below and in the general guidance that follows to address proposed or encountered changes during Final Design and Construction phases:



- **Identify and Manage Change Issues** – change identification involves determining what changes may occur during the project life cycle. When change occurs responsible team members are expected to implement the change management procedures when it is first encountered; and to identify the source and nature of the change.
- **Verify and Analyze the Change** – Concurrence of the existence of a change will be obtained; and if a change exists analyze related effect on approved baselines.
- **Develop a Mitigation/Recovery Strategy** – Develop options and determine actions to enhance positive changes and to reduce threats to project package (and Program) objectives, if needed.
- **Gain endorsement for the change** – from the CRC Director and, if needed, from other appropriate levels of authority.
- **Update the baselines and monitor the effects of the change** – Identify responsibilities to manage the change and timelines for carrying out. Monitor and evaluate implementation.
- **Communicate changes** – Notify CRC management, appropriate team members, contractors, etc.

PROGRAM FUNDING

The CRC Program has been funded to date by legislation as one programmatically-budgeted project and assigned one Program Item Number or PIN. The budget is broken down as lump-sum (fixed) levels between two categories of work by program phase: Preliminary Engineering (PE), including environmental, and Right of Way (RW).

The change management process described in this procedure assumes that future funding to advance the CRC Program into Final Design and Construction phases will continue to be programmatically-budgeted by legislation to one project and the additional funds assigned to the same Program Item Number. It is recognized, however, that the CRC Program could be funded in future budget cycles by legislation as Line-item budgeted projects, each assigned individual Budget Item Number (BIN), and therefore, the change management process would need to be updated at such time to address change approval requirements specific to Line-item project budgeting.

BASELINE CHANGE MANAGEMENT

PMP Chapter 8 – *Program Delivery and Procurement* describes the framework to advance the Program post-NEPA – into final design and construction. The framework divides the CRC Program following completion of the PE phase into separate project packages. PMP Chapter 3 – *Management Control* defines the CRC Program baselines - scope, schedule and budget that will be established at completion of the PE phase for each project package - and describes the management control system that will be in place at the start of Final Design and continue through the life of the program.

The baseline documentation will include a record of the initial scope, schedule and budget for each project package, tied to the appropriate Federal Transit Administration

(FTA) Standard Cost Category (SCC). This baseline documentation is the basis by which program performance will be tracked in order to provide a historical record of significant changes to approved baselines.

The change management process will track the cumulative effect of changes so cost (and schedule) performance can be measured at both the project package and Program levels.

CHANGE MANAGEMENT

The CRC team is required to follow one of two processes discussed below to obtain the necessary approvals for changes in scope, schedule, and/or budget baselines. The approval process to use depends on how changes (schedule and budget fluctuations) at the project package level are managed as they move through final design, right of way acquisition and through construction, and when rolled up whether or not they affect the Program level scope, schedule and/or budget.

- **Project Level Change** – Applies to project level changes that do not impact the Program level scope, schedule and/or budget. Approval by the CRC Director and the concurrence of the Deputy Director Changes is required, except as noted herein.
- **Program Level Change** – Applies to changes that impact the Program level scope, schedule and/or budget. Approvals by WSDOT and ODOT HQ (and possibly the Washington Legislature) may be required.

Project Level Change Management

Tracking individual project packages against established schedule milestones and aggregate level budgets allows early identification of design elements with cost and schedule variances; to mitigate project level issues before they cause significant risks; and keep the CRC Program within the overall budget and schedule. Budget assignments at the project package level will roll up to the Program level budget. Reconciliations will be made down through the project packages, as needed, to fit within the overall program budget, subject to approval by the CRC Director, except as noted herein.

Approval Requirements

1. CRC Director approval with concurrence of the Deputy Director is required on the following project package level changes:
 - Any design element that was not envisioned as part of the approved scope at completion of the PE phase (therefore, not included in the approved baseline budget), and is estimated to cost in excess of \$50,000.
 - Preliminary Engineering (PE), Right of Way (RW) and Utility Relocation budget transfers.
 - Budget transfers between project packages including contingency transfers.
 - Changes in baseline schedule milestone dates (e.g. advertisement of RFQ / RFP solicitations for Design-Build procurement, or advertisement date for bid-letting on traditional Design-Bid-Build delivery), except as noted herein. A

schedule shift in advertisement of up to three (3) weeks will not require CRC Director approval if initiated by HQ to address statewide bid schedule needs.

- Construction change orders as described in Procedures 3.6.3-B through 3.6.3-G.
2. WSDOT State Construction Engineer (or designees) approval is required on construction change orders that meet the requirements of Procedure 3.6.3-D
 3. Director of Capital Program Development and Management (CPDM) or Assistant Secretary approval (through the CRC Executive Management Team) is required on construction change orders (COs) for executed contracts procured through WSDOT (programmatically-budgeted project packages) as follows:
 - COs with monetary value that cannot be accommodated within established construction budget authority.
 - COs that impact the operationally complete milestone (“substantial completion”).

It should be noted that if Line-item budgeted project packages are funded in future budget cycles by legislation, approval by the Office of Financial Management (OFM), in lieu of the Director of CPDM or Assistant Secretary, is required when the Legislature is not in session, or by the Legislature (through budget action), if in session.

4. Oregon Transportation Commission (OTC) approval through the ODOT Director is required on construction change orders with monetary value that cannot be accommodated within established construction budget authority on executed contracts procured through ODOT.
5. TriMet Change Control Board or TriMet Board approval per their respective level of authority is required on construction change orders that exceed the authority of the Resident Engineer on executed contracts procured through TriMet.

Documentation requirements

Changes to scope, budget and schedule baselines discussed under *Approval Requirements* above, must be documented as follows:

1. In a memorandum format, entitled ‘Change Management Request’ (Attachment 3.6-A1) and in accordance with the documentation requirement discussed in Design Change Management below for changes approved by the CRC Director prior to execution of a construction contract.
2. In a construction change order (CO) format for changes approved by the CRC Director (or designees) or the WSDOT State Construction Engineer (or designees) after executing a construction contract per their respective level of execution authority described in Procedures 3.6.3-C and 3.6.3-D.
3. In addition to the CO format discussed above, prepare a Project Change Request Form (Attachment 3.6-A2) for changes that require the approval of the Director of CPDM or the Assistant Secretary (through the CRC Executive

Management Team). Preparation of a Project Change Request Form is discussed below under *Program Level Change Management*.

4. In a memo format from the ODOT Director to the Oregon Transportation Commission for changes that require increases in established construction budget authority on project packages procured through ODOT.
5. By resolution with an explanatory cover memo from the General Manager to the TriMet Board for changes that require Board approval on project packages procured through TriMet.

Process

Evaluation, analysis and documentation of project package level changes will be performed in accordance with the following steps:

- Change at the project package level is identified by the Engineering Managers, the Project Delivery Engineering Manager or Project Engineers (Resident Engineers) to possibly affect the project scope, schedule or budget.
- Change Management Manager coordinates with Engineering Managers, Project Delivery Engineering Manager, or Project Engineers (Resident Engineers) to confirm need for change request. Issues a CMR number for the change and logs the information in the CMR Log.
- Change Management Manager coordinates preparation of evaluation, analysis and documentation of the change by Engineering Managers, Project Delivery Engineering Manager, or Project Engineers (Resident Engineers) with support from Cost/Schedule Analysts in accordance with the requirements in the Change Management Request (CMR) memorandum and the Design Change Management below.
- Program Manager or Project Delivery Director, each in their respective areas concur or request additional information. If concurred, sign the CMR memorandum. If additional information is requested, Change Management Manager works with Program Manager or Project Delivery Director until reconciled and concurred. Program Manager or Project Delivery Director may at this point deny the change and the process stops here.
- Program Manager or Project Delivery Director, each in their respective areas presents the CMR to the CRC Management Team for discussion and concurrence. If concurrence is reached, obtain written approval of the CRC Director and the Deputy Director. CRC Director may at this point deny the change
- Process to prepare and receive approval on construction change orders are discussed under Construction Change Management below.

Program Level Change Management

The Project Change Request Form (Attachment 3.6-A2) is the key source document that the CRC team must use for documenting and approving changes in the CRC Program's scope, schedule, and budget baselines. The Project Change Request Form (PCRF) documentation must explain the reason for the change, the impacts of the change on the

CRC Program, and why the change is the most prudent course of action. It is the primary record that substantiates the need to deviate from prior commitments regarding CRC Program scope, schedule, and budget.

After execution of a construction contract, the Construction Change Order process discussed below is the key source document for the approval of project level changes affecting scope, schedule, or budget. However, the PCRf is still used to elevate funding and schedule issues associated with approved construction project changes that affect the Program's scope, schedule or budget.

Approval requirement

1. CRC Executive Management Team approval is required on the following Program level changes:
 - Changes to original planned improvements that significantly alter the functional intent of the CRC Program as funded by the Legislature
 - Cost increases above the programmatically approved program budget
 - Schedule advances that cannot be accommodated by current biennial cash flow and schedule delays that defer the ad date out of the current biennium.

Documentation requirements

Changes to scope, budget and schedule baselines discussed under *Approval Requirements* above, must be documented using a PCRf (Attachment 3.6-A2) for changes that require the approval of the Director of CPDM or the Assistant Secretary and the ODOT Director (through the CRC Executive Management Team) for programmatically approved program budget. It should be noted that a CMR approved when the change at the project level is first reviewed must support the PCRf.

Process

Evaluation, analysis and documentation of program level changes will be performed in accordance with the following requirements:

- Change at the project package level when rolled up is identified by the Engineering Managers and the Project Delivery Engineering Manager to possibly affect Program level scope, schedule or budget.
- Change Management Manager coordinates with Engineering Managers and Project Delivery Engineering Manager to confirm need for change request. It could be a budget change identified by a budget shortfall, but could also be a major change in the project schedule or scope of work.
- Engineering Managers and Project Engineers (Resident Engineers) with support from Project Delivery Engineering Manager and Cost/Schedule Analysts evaluate the effect of the change at the Program level and prepare documentation for review by the Program Manager or the Project Delivery Director, in their respective areas. Program Manager or the Project Delivery Director may request additional information. Program Manager or Project Delivery Director may at this point deny the change and the process stops here.

- Program Manager or Project Delivery Director, each in their respective area presents the CMR to the CRC Management Team for discussion and concurrence. If concurred, Change Management Manager coordinates preparation of the PCRf form by the Engineering Managers and the Project Engineers (Resident Engineers) with input from Project Delivery Engineering Manager and Cost/Schedule Analysts for review by the CRC Director and Deputy Director. Issues a PCRf number for the change and logs the information in the PCRf Log.
- CRC Director with concurrence from the Deputy Director provides approval for processing the PCRf.
- Budget Manager reconciles the PCRf with WSDOT's Capital Program Management System (CPMS) and ODOT's STIP, if necessary.
- Business Services Manager forwards the completed PCRf for approval through the Director of CPDM by the CRC Executive Management Team.
- CRC Director and Deputy Director present and obtain approval from the CRC Executive Management Team. CRC Executive Management Team may at this point deny the change.

DESIGN CHANGE MANAGEMENT

Through the Final Design and Construction phases, a design change proposed or encountered is any design element that:

- Was not envisioned as part of the approved scope at completion of the PE phase, and therefore not included in the approved baseline budget, and
- Is estimated to cost in excess of \$50,000.

Design changes that meet the above criteria are tracked with orders of magnitude cost and schedule implications and a WBS number assigned for each change. Evaluation of the effect of design changes on approved schedule and budget baselines and approval requirements are in accordance with this procedure. Minimum required documentation is in accordance to Procedure 3.6.3-A *Design Change Documentation*.

CONSTRUCTION CHANGE MANAGEMENT

In the Construction phase the technical baseline established during Final Design will be used to monitor construction and fabrication processes. This baseline must be closely adhered to in order to ensure quality, safety, performance and cost compliance. There may be occasions, however, when changes are required. Changes to the technical baseline become a matter of official record and must be requested in writing. They must be reviewed and approved by the responsible individuals, and executed by authorized individuals up to the dollar thresholds of their authority as set forth in the CRC procedures enumerated below. Special emphasis should be placed on recording and documenting any changes that are approved and completed.

- ***For WSDOT procured contract packages*** – evaluate, document and obtain approvals per the following procedures:
 - Procedure 3.6.3-B Construction Change Orders

- Procedure 3.6.3-C CRC Director Approval For Construction Change Orders
- Procedure 3.6.3-D State Construction Engineer Approval For Construction Change Orders
- **For TriMet procured contract packages** – evaluate, document and obtain approvals per the following procedures:
 - Procedure 3.6.3-E Processing Change Orders
 - Procedure 3.6.3-F Change Control Board
 - Procedure 3.6.3-G Board Approval for CRC Contracts, Change Orders and Modifications
- **For ODOT procured contract packages** – evaluate, document and obtain approvals per the following procedures:
 - Procedure 3.6.3-H (pending development)
 - Procedure 3.6.3-I (pending development)

As potential changes arise, the Project Engineer (Resident Engineer) records them within the Engineer’s Log in Prolog, the program’s current management database. Potential changes may arise as ‘Pressures’, with minimal information initially. The Project Engineer (Resident Engineer) notes all items with a cost and/or schedule impact, showing that all potential risks have been considered and quantified. When the Project Engineer (Resident Engineer) has a credible indication of a cost or schedule exposure, a Potential Change (PC) record is created in the Engineer’s Log. This record collects and documents the evolution of the PC from inception to resolution as a Change Order (CO) or being dropped with no cost or schedule impact.

Each month Project Engineers (Resident Engineers) meet with the Program Manager, Project Delivery Director, Transit Engineering Manager, Business Manager, Project Controls Manager and the Change Management Manager to review their respective contract(s) and all pending changes. Status and fund sources are verified at this review session. Project Controls transfers the cost information into the program’s cost data base (currently Prolog), accounting for timing issues with execution of CO’s. The cost data base is then reconciled with the Cost-to-Complete (CTC) Tracking system for each project package. This process validates that all revisions (potential and actual) have been accounted for, as well as any foreseeable cost pressures (construction-specific and non-construction).

E. ATTACHMENTS

- 3.6-A1 Change Management Request (CMR)
- 3.6-A2 Project Change Request Form (PCRF)

Memorandum

DATE: Month Day, Year

CMR: (no.)

TO: CRC Director / Deputy Director

FROM: (Program Manager or Project Delivery Director)

i.e.
Change in Budget
Change in Budget and Scope
Change in Bid Let Date

SUBJECT: Change Management Request – Change in _____
Name of Project Package and WBS Number

Requested Action:

Clearly define the requested action. Clearly state what action is required by the CRC Director (budget change, scope change, schedule change, etc.). If a change in budget or schedule is requested, provide the required information in the appropriate table below. For budget changes, show all of the funding sources on the project package regardless of whether they change or not. All budget and schedule changes must be supported by detailed justification and/or attachments.

Name of Project Package / WBS Number						
	PE	ROW	Utilities	CE	Const	Total
<i>Current Budget</i>						
<i>Budget Change</i>						
<i>Revised Budget</i>						

Name of Project Package / WBS Number						
	RFQ Date	RFP Date	Milestone Date	Bid Let Date Advertisement	Award Date	Substantial Completion Date
<i>Current Schedule Date</i>						
<i>Revised Schedule Date</i>						

Background:

Provide background information on the project package and the change. The purpose of the background information is to provide a basis for the requested change. Clearly indicate all of the effects of the change on budget, schedule, scope, permitting or other project package issues. If other project packages are affected by the change, state how they interact.

Justification:

Provide the justification for the change. If alternatives were analyzed, summarize the recommended option and the other alternatives. If budget data is provided, all budgets must be supported by detailed justification and/or attachments. Summarize any facts based on studies or design calculations needed to justify the change and include complete information. Any statement about a factor which justifies the need for the change must be substantiated.

(Name)
Program Manager or Project Delivery Director

Date Requested

Nancy Boyd
CRC Director

Date Approved

Kris Strickler
Deputy Director

Date Approved

Attachment A: _____

Attachment B: _____

3.6-A2 CAPITAL PROGRAM PROJECT CHANGE REQUEST FORM (PCRF)

Date Submitted: _____ **Office Submitting:** Columbia River Crossing

CPMS Project Title:

Program Item No:

Subprogram:

Location (Include SR Route):

Project Summary Approved by HQ: Yes _____ No _____

Project Description in LEGFIN/DOTLFC:

1. **Summary of the requested change to the currently approved scope/design element, budget, schedule (What is the needed change?):**

2. **Describe cause for the requested change (Why is the change needed?):**

3. **Describe the impact/benefit of the requested change to project delivery:**

4. **Summarize the alternatives that were considered to avoid the change or reduce the impacts to project delivery:**

5. **Summarize the outcome of any consultation to date with Federal/State agencies and/or HQ WSDOT offices about the need for the change:**

6. **Is the requested change already reflected in CPMS? _____ . (If no, please attach a spreadsheet displaying a comparison of the requested schedule and/or budget changes with LEGFIN and CURR-DM. See attached examples)**

3.6-A2 CAPITAL PROGRAM PROJECT CHANGE REQUEST FORM (PCRF)

7. Concurrence with requested change:

Title	Name	Date
CRC Director		
Assistant Project Delivery Manager, CPDM		
Funds Manager, CPDM		
Priority Manager, CPDM		
HQ ASDE		
Materials Lab		
Other:		
Project Delivery Manager, CPDM		
Director, CPDM		
Asst Secretary, Engineering & Regional Ops		


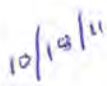
8. Concurrence Comments:

9. Approving Authority Response:

- Approved
- Approved with conditions (see Comments)
- Needs additional evaluation or information (see Comments)
- Not Approved

Name: _____ **Date:** _____

Approving Authority's Comments:

3.6.3-A	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Design Change Documentation	 <small>APPROVAL</small> <small>MANAGER</small>	 <small>APPROVAL DATE</small>

A. OBJECTIVE

To establish guidelines and assignment of responsibilities for documenting design changes to provide a consistent and well documented means of tracking individual design change and to provide a historical record of changes to approved scope baseline established at the end of the preliminary engineering (PE) phase and described in the documentation to support the Program’s application to the FTA to enter into Final Design.

B. DEFINITION

Baseline Scope – Baseline Scope is represented by the Transit and Highway improvements approved at completion of the Preliminary Engineering phase at which time a scope, budget and schedule would be established for the Program and for each project package described in the Project Implementation Plan. The baseline scope is also described in the documentation submitted to the FTA in support of the Program’s application to enter into Final Design.

C. REFERENCES

1. CRC Project Management Plan
2. CRC Procedure 3.6 Change Management

D. WORK PROCESS

RESPONSIBILITIES

Program Management is responsible for ensuring design changes during Final Design and Construction phases are thoroughly documented and communicated using the change management process discussed in the Project Management Plan (PMP).

Business Services will establish a standard reporting format for summarizing material scope changes at the project package and program levels that would be reflected in monthly reports.

The Change Management Manager is responsible for coordinating closely with the Program’s design and construction managers on design changes that may affect approved scope baseline. Maintaining a consolidated design change data base. Tracking and reporting monthly on design changes by individual project packages.

The Engineering Managers (with input from their assistant managers) and the Project Engineers (Resident Engineers) with support from the Project Delivery Engineering Manager are responsible for identifying and tracking design changes in their respective area of responsibility that impact approved scope baseline during Final Design and Construction execution.

DESIGN CHANGE DOCUMENTATION

Through the Final Design and Construction phases, design changes proposed or encountered will be tracked in accordance with this Design Change Documentation procedure. Design changes may be initiated by the Engineering Managers, requested by the Program Manager or the Project Delivery Director and the Project Engineers (Resident Engineers).

Design change that should be tracked and entered into the “Design Change Tracking System” (currently, the engineering module in Prolog) is any design element that:

- Was not envisioned as part of the approved scope at completion of the PE phase, and therefore not included in the approved baseline budget, and
- Is estimated to cost in excess of \$50,000

Each design change from the approved baseline that meets the above described criteria is assigned a unique identification number that relates to the WBS code.

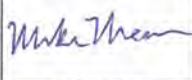
The ‘Change’ module in the ‘Design Change Tracking System” will be used to document these design changes. Minimum required information that should be entered in the ‘Change’ module includes the following:

- **Project package name**
- **Change title description**
- **Design change identification number**
- **Status** – *Active* (Actively monitored/controlled/waiting for a decision or approval by CRC Director); *Dormant* (not a current high priority, but may in the future); or *Retired* (change has passed or been resolved)
- **Date** – when the change was first identified.
- **Name of contact person** - responsible for tracking/resolving the change
- **Funding impact**; identify whether:
 - *Internally driven* (originated by WSDOT/ODOT/TriMet/C-TRAN)
 - *Externally driven* (originated outside WSDOT/ODOT/TriMet/C-TRAN; e.g. contractor or local government)
 - *Betterment* (either internally or externally driven, but paid for with outside Program funding)
- **Estimated likely cost** – provide a breakdown for the following three categories:
 - *Construction cost* (use YOE dollars plus any allocated contingency built into the unit pricing of the bid items)

- *Added A&E cost* (if the change requires significant additional design cost over what would have been required in the original PE scope)
- *Added Right of Way cost* (if the change requires additional right of way)
- **Estimated schedule impact** – describe the impact to the project schedule.
- **Related Risk Event** – identify whether the change is a result of a risk event occurring; if yes, provide the risk register reference number. If not, identify whether it introduces additional risk to the project package.
- **Establish a detailed change description** – include information that is specific, measurable, attributable, and relevant to help articulate the consequences of the change including:
 - *Who initiated it, what precipitated it*
 - *Justification for the change*
 - *Summary of how the cost estimate was developed including the cost of escalation*
- **Estimate the probability the design change will be approved.** When the change has been approved by the CRC Director, the probability is entered at 100%.

E. ATTACHMENTS

None

3.6.3-B	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	CRC Construction Change Orders (WSDOT Procurement)	APPROVAL 	10/5/11
		MANAGER	APPROVAL DATE

A. OBJECTIVE

Provide guidelines and assignment of responsibilities for control and processing of changes to construction contracts procured by WSDOT.

The change order justifications shall meet technical and contracting feasibility while ensuring compliance with funding authority guidelines, Federal-Aid Stewardship Agreements, and FTA Circular 4220.1F requirements.

B. DEFINITIONS

Contract Change Order - *Contract Change Orders (COs) are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.*

Construction Change Order Checklist (Attachments 3.6.3-B1 and 3.6.3-B3) - *Mechanism for determining who must give approval for the change, as well as who is the executing authority for the change.*

Execution of COs – *Execution of a CO makes it part of the contract. It must be performed by those authorized to execute a CO up to their respective limit of execution authority described in the **Construction Change Order Checklist**.*

Approval of COs – *Approval of a CO constitutes agreeing with the general nature of the change and can be granted by memorandum or e-mail. Approval does not constitute authority to proceed with the work.*

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan
2. A Guide to the WSDOT Construction Change Order Process, Revised July 2010
3. WSDOT Design-Build Project Delivery, Guidance Statement, Change Orders, December 18, 2009
4. Construction Manual, M 41-01.10, January 2011
5. Project Control and Reporting Manual, M 3026.01, February 2008
6. WSDOT/FHWA Federal-Aid Highway Program Stewardship and Oversight Agreements
7. FTA Circular 4220.1F

D. WORK PROCESS

Authority

The Project Engineer's authority to commit the CRC Program to added contract costs and time is limited to the following:

- Change in cost (or credit) not greater than \$100,000.

- Change in contract time not greater than 10 working days.

Preparing Construction Change Orders

The Project Engineer shall prepare CO justifications and supporting documentation for changes to the work (as defined by the contract) whether initiated by the Contractor, the CRC Program or both parties. *Refer to WSDOT Construction Manual, Section 1-2.4C Changes in the Work, for Cost Reduction Incentive Proposal (CRIP) documentation requirement.*

The CO approval requirements are described in Attachments 3.6.3-B1 (CRC Design-Bid-Build Construction Change Order Checklist) and 3.6.3-B3 (CRC Design-Build Construction Change Order Checklist) for Design-Bid-Build (D-B-B) and Design-Build (D-B) contracts, respectively.

Additional approval requirements by the CRC Program are described in Attachment 3.6.3-B2 (CRC Construction Change Order Checklist Supplement).

The flowchart in Attachment 3.6.3-B4 (CRC Construction Change Order Process Flowchart) describes the CRC Construction CO execution process.

On D-B contracts, all changes must be either approved, or ordered, in writing. Until a written change is approved or ordered, the Design-Builder shall remain obligated to perform the Work in accordance with the Contract. This is different from D-B-B contracts, where oral orders may be used to initiate a change.

The Project Engineer is responsible for:

- Coordinating with Project Controls to prepare an independent cost estimate of the change and performing a check of any schedule impacts prior to negotiating with the Contractor.
- Negotiating the price and contract time with the Contractor and preparing a CO and supporting documentation that justify the change agreed to and accurately describes the work to be done, the materials that are to be used, applicable specifications, and the method of measurement and payment. If revised or new drawings are needed for the change order work, obtain drawings signed by the Engineer of Record, and reference the drawings in the CO and attach a copy. This is followed by obtaining the signature of the Contractor on the CO.
- Preparing CO documentation according to the Construction Manual Chapter 1-2.4C(6), and using the Change Order Form and the Design-Build Minor Change Form (see Reference No. 3 - WSDOT Design-Build Project Delivery, Guidance Statement, Change Orders, December 18, 2009) for making changes to a Design-Build Contract.
- Completing the applicable D-B-B or D-B Construction Change Order Checklist and associated Supplement sheet for all change orders, including minor changes, and when requesting an approval to proceed with change work prior to the execution of the change order.
- Obtaining approvals (by memorandum or e-mail) for items described in the applicable D-B-B or D-B Construction Change Order Checklist and associated Supplement sheet prior to execution and before work is ordered.

- Preparing CO information packages, completing Attachment 3.6.3-B5 (CRC Director (or Designees) Approval Form For Change Orders), and presenting the facts and recommendation to the CRC Director (or designees) and the State Construction Engineer (or designees) per the limits of execution authority requirements described in the applicable D-B-B or D-B Construction Change Order Checklist for changes that exceed the Project Engineer's authority.
- Ensuring that change orders are processed expeditiously and that the change order is executed or, if warranted, approval to begin the work prior to execution of the change order is obtained from the executing authority, prior to any change order work being performed.
- Tracking executed change orders for the project contract and maintaining current the change order log that tracks the status of each change order starting from the date that a change is identified by the Contractor, Project Engineer or both parties.

E. ATTACHMENTS

3.6.3-B1	CRC Design-Bid-Build Construction Change Order Checklist
3.6.3-B2	CRC Construction Change Order Checklist Supplement
3.6.3-B3	CRC Design-Build Construction Change Order Checklist
3.6.3-B4	CRC Construction Change Order Process Flowchart
3.6.3-B5	CRC Director (or Designees) Approval Form For Change Orders

3.6.3-B1 CRC Design-Bid-Build Change Order Checklist - WSDOT Procurement

Cont. #: Cont. Title: C.O. #: C.O. Title:	If yes, State Construction Office Approval Required.
I. Executed by the State Construction Office	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
1. Cost or credit equal to or exceeding \$500,000.*1	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
2. Change in the contract documents beyond the scope, intent or termini of the original contract.*2	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
3. Any proposed revision or deletion of work that affects the condition of award requirements.	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
II. Executed by the CRC Director (or designees)	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. Cost or credit greater than \$100,000 but less than \$500,000. *1	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. Change in contract time greater than 10 and less than or equal to 30 working days, must be related to changes implemented by change order.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. Change in contract time greater than 30 working days.	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
III. Executed by the Project Engineer	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
7. Determination of impacts and/or overhead.	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
8. Specification change involving Headquarters generated specification. (Includes Region generated specification requiring State Construction Office Approval)	<input type="checkbox"/> YES <input type="checkbox"/> NO
9. Specification change involving Region generated specifications.	<input type="checkbox"/> YES <input type="checkbox"/> NO
10. Material or product substitution.	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
11. Structural design change in the roadway section. (Requires State Materials Lab approval)	<input type="checkbox"/> YES <input type="checkbox"/> NO
12. Determination of changed condition. <i>(Section 1-04.7 of the Standard Specifications)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
13. Settlement of a claim. <i>(Section 1-09.11(2) of the Standard Specifications)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
14. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". <i>(Section 1-07.13 of the Standard Specification)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ
15. Structural change to structures. <i>(See BTA authority as shown in the Construction Manual)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO XÁ

Approvals obtained:

Project Engineer **(Required)**: Date:

CRC Director (or designees) **(Required if yes marked)**: Date:

State Construction Office: Date:

State Materials Lab: Date:

Other (Local Agency, FHWA, Surety, etc.): Date:

To be completed by the Project Engineer:

CO Reason(s) (See CCIS "Browse Reasons" or "HQ Construction SharePoint"):

Change Order Prepared By: Date:

Has change been entered as lesson learned? YES NO Has design documentation been updated? YES NO

Is this project under full FHWA stewardship oversight? *1 YES NO

To be completed by the CRC Director (or designees):

Is the change eligible for Federal participation where applicable? YES NO

Change Order Reviewed by: Date:

*1 Change (Cost or Credit) greater than \$200,000 or greater than 30 days on Full Federal Stewardship Oversight projects requires FHWA approval. (see Construction Manual - Chapter 1-2.4C(3), Chapter 1-3.4, and <http://www.wsdot.wa.gov/biz/construction/Stewardship/Stewardship.xls>)

*2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.

This form represents the **minimum** information required by the State Construction Office.

See Attachment 3.6.3-B2 CRC Construction Change Order Checklist-Supplement for additional information required by the CRC Program.

3.6.3-B2 CRC Construction Change Order Checklist – Supplement

Approvals Obtained:

FTA *3 Date:

ODOT *4 Date:

TriMet *5 Date:

Director of PCRO *6-1 Date:

OFM or legislature *6-2 Date:

*3 Change Order for final settlement involving a dispute, claim, or litigation that exceeds \$100,000 requires FTA concurrence (See FTA C4220.1F – Chapter VII).

*4 Change Order that exceeds \$XXXX requires ODOT concurrence (See the bi-state Project Development and Funding Term Sheet).

*5 Change Order that impact a Transit work element (e.g. specification change, structural design change, material or product substitution, etc.) requires TriMet approval irrespective of the dollar amount.

*6 Change Order that: (a) impacts the operationally complete milestone (“substantial completion”), or (b) cannot be accommodated within established construction contract authority require approval by:

- *6-1. Director of Project Control and Reporting Office (PCRO) (See Project Control and Reporting Manual – Appendix C), if **programmatically-budgeted project package**.
- *6-2. Office of Financial Management (OFM), when legislature is not in session, or Legislature (through budget action), if **Line-item budgeted project package**

3.6.3-B3 CRC Design-Build Change Order Checklist - WSDOT Procurement

Cont. #: Cont. Title: C.O. #: C.O. Title: Category: <input type="checkbox"/> A <input type="checkbox"/> B	Approval from State Construction Office Required
I. Executed by the State Construction Office	<input type="checkbox"/> YES <input type="checkbox"/> NO X
1. Cost or credit equal to or exceeding \$500,000.*1	<input type="checkbox"/> YES <input type="checkbox"/> NO X
2. Change in the contract documents beyond the scope, intent or termini of the original contract.*2	<input type="checkbox"/> YES <input type="checkbox"/> NO X
3. Change in the condition of award.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
II. Executed by the CRC Director (or designees)	<input type="checkbox"/> YES <input type="checkbox"/> NO
4. Cost or credit greater than \$100,000 but less than \$500,000. *1	<input type="checkbox"/> YES <input type="checkbox"/> NO
5. Change in contract time greater than 10 and less than or equal to 30 working days, must be related to changes implemented by change order.	<input type="checkbox"/> YES <input type="checkbox"/> NO
6. Change in contract time greater than 30 working days.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
III. Executed by the Project Engineer	<input type="checkbox"/> YES <input type="checkbox"/> NO X
7. Determination of impacts and/or overhead.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
8. Design or construction work that does not comply with the Mandatory Standards.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
9. A change to a Chapter 1 General Provision.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
10. A change to a technical requirement in any of the following sections: Design Deviations, Geotechnical Design, Pavement, Project Documentation, Bridges and Structures, Control of Materials, MWBE Goals, QMP Requirements, or WSDOT Standard Specifications.	<input type="checkbox"/> YES <input type="checkbox"/> NO X
11. Determination of changed condition. <i>(Section 1-04.7 of the Request For Proposal).</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO X
12. Settlement of a claim. <i>(Section 1-09.11(2) of the Request For Proposal).</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO X
13. Repair of damage regarding "acts of God" or "acts of the public enemy or of government authorities". <i>(Section 1-07.13 of the Request For Proposal).</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO X
14. A "no-cost" change based upon a determination of "equal or better".	<input type="checkbox"/> YES <input type="checkbox"/> NO X

Approvals obtained:

Project Engineer **(Required):** Date:

CRC Director (or designees) **(Required):** Date:

State Construction Office: Date:

To be completed by the Project Engineer:

CO Reason(s) (See CCIS Source/Outcome):

Change Order Prepared By: Date:

Has change been entered as lesson learned? YES NO N/A

Has design documentation been updated? YES NO N/A

Is change approved by program management? YES NO N/A

To be completed by the CRC Director (or designees):

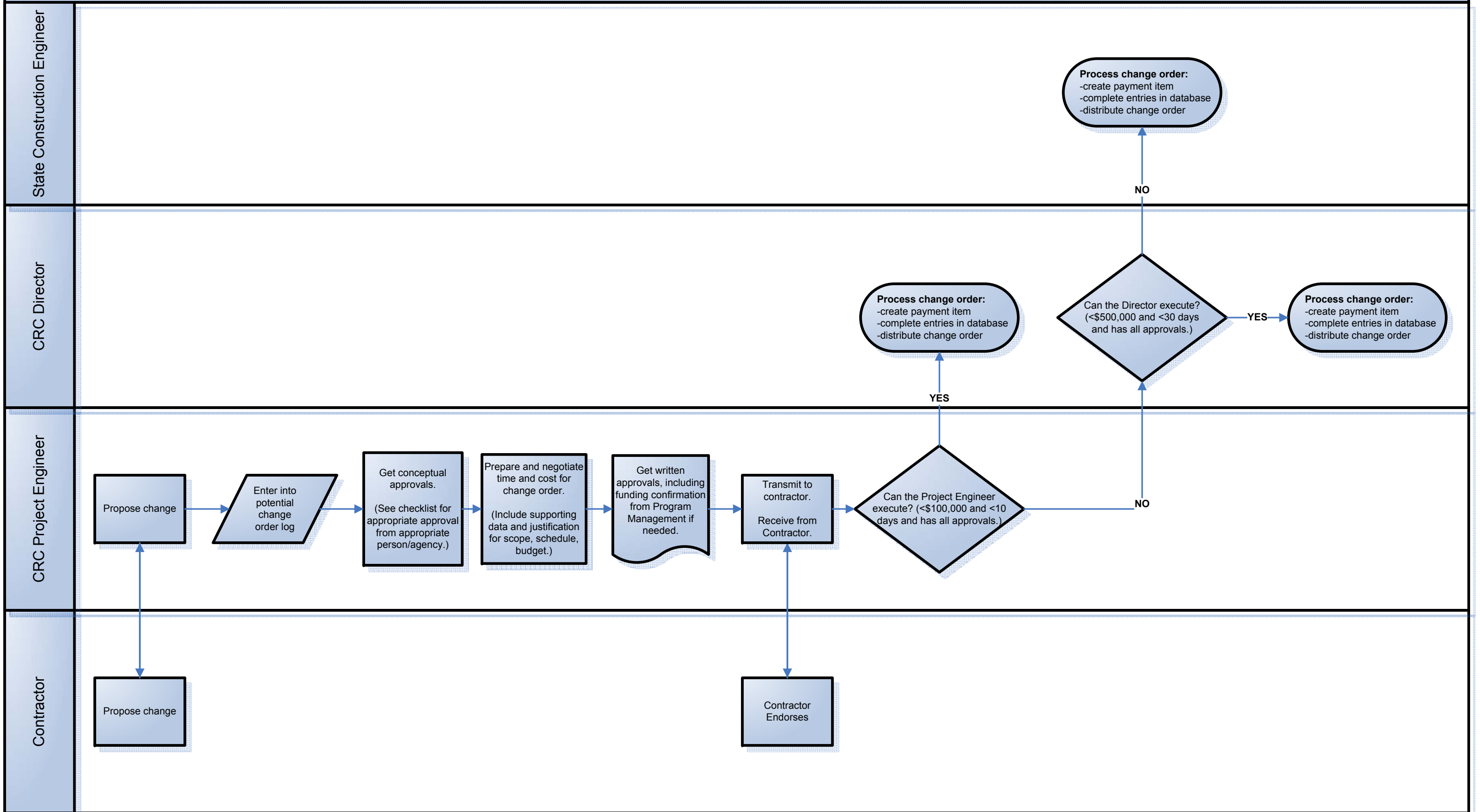
Is the change eligible for Federal participation? YES NO N/A

Change Order Reviewed by: Date:

This form represents the **minimum** information required by the State Construction Office. *3

*1 Cost or Credit greater than \$200,000 on Federal Stewardship requires FHWA approval (see Construction Manual - Chapter 1-2.4C(3), Chapter 1-3.4)
 *2 Per RCW 47.28.050, any change beyond \$7,500 that is beyond the original scope shall go through the competitive bidding process.
 *3 Changes that do not meet any of the itemized criteria above may be executed by the PE with CRC Administrator (or designees) approval.

Columbia River Crossing
 3.6.3-B4 Change Order Execution Process Flow Chart (WSDOT Procurement)



Note: Flow chart only addresses CO Execution requirements. See the applicable Construction Change Order Checklist for all Approval requirements.

3.6.3-B5 CRC Director (or Designee) Approval Form For Change Orders

Project:		Contractor		Contract #:	
Subject:				Date:	
Presenter:			Order of Magnitude Cost:	\$	
Schedule Impacts:					
	Milestone				
	Overall Contract Time				
Scope of Change:					
Discussion Summary:					
Checklist Questions					
#	Question	Y/N/NA	Comments		
1	Is this an Owner-requested change?				
2	Any time delays to the project?				
3	Any impacts to other contract packages?				
4	Any impacts to environmental commitments?				
5	Any impacts to IGAs in effect?				
6	Funding sources? Grant eligible?				
7	What category is this work? (circle)				
	A. Extra Work - within original design intent	E. Time delay- non-compensable	I. New requirements after the contract was awarded		
	B. New Work- outside scope	F. Work acceleration	J. Differing site conditions		
	C. Changed Work	G. Error in Plans/Specifications	K. Contractor proposed change		
	D. Time delay- compensable	H. Value Engineering	L. Other (Explain)		
8	What is the cost impact to the contract?				
	Contract amount (before change)	\$			
	Original contract contingency	\$			
	Contract contingency balance (before change)	\$			
	Cost of proposed change order	\$			
	Contract contingency balance (after change)	\$			
	Value of remaining change proposals	\$			
	Contract amount at completion	\$			
Recommendation for approval by Project Engineer:					
CRC Director (or Designee) Decision:					

3.6.3-C	CRC PROJECT PROCEDURES	REVISION DATE:	
	CRC Director Approval for Construction Change Orders (WSDOT Procurement)	APPROVAL	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

The CRC Director (or designees) reviews and executes certain change orders that exceed the authority of the Project Engineer. The CRC Director's (or designees) review assures contracting feasibility, compliance with funding authority guidelines, compliance with obligations set forth in the Federal-Aid Highway Program Stewardship and Oversight Agreements, and FTA Circular 4220.1F requirements.

This procedure applies to CRC project packages procured by the WSDOT.

B. DEFINITIONS

Contract Change Order – *Contract Change Orders (COs) are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.*

Construction Change Order Checklist (Attachments 3.6.3-B1 and 3.6.3-B3) – *Mechanism for determining who must give approval for the change, as well as who is the executing authority for the change.*

Execution of COs – *Execution of a CO makes it part of the contract. It must be performed by those authorized to execute a CO up to their respective limit of execution authority described in the applicable **Construction Change Order Checklist**.*

Approval of COs – *Approval of a CO constitutes agreeing with the general nature of the change and can be granted by memorandum or e-mail. Approval does not constitute authority to proceed with the work.*

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan
2. A Guide to the WSDOT Construction Change Order Process, Revised July 2010
3. WSDOT Design-Build Project Delivery, Guidance Statement, Change Orders, December 18, 2009
4. Construction Manual, M 41-01.10, January 2011
5. Project Control and Reporting Manual, M 3026.01, February 2008
6. WSDOT/FHWA and ODOT/FHWA Federal-Aid Highway Program Stewardship and Oversight Agreements
7. FTA Circular 4220.1F

D. WORK PROCESS

Presenting Construction Change Orders to the CRC Director (or designees)

COs that meet any of the following requirements must be reviewed and executed by the CRC Director (or designees) before work is ordered:

1. Change in cost (or credit) greater than \$100,000 but less than \$500,000
2. Change in contract time greater than 10 working days but less than 30 working days, related to changes implemented by change order
3. Change in contract time greater than 30 working days

The Project Engineer is responsible for:

- Preparing the CO and supporting documentation, including obtaining signed drawings from the Engineer of Record, if revised or new drawings are needed.
- Obtaining approvals (by memorandum or e-mail) for items described in the applicable Construction Change Order Checklist (Attachment 3.6.3-B1 for Design-Bid-Build contracts and Attachment 3.6.3-B3 for Design-Build contracts).
- Obtaining applicable additional approvals described in Attachment 3.6.3-B2 (CRC Construction Change Order Checklist Supplement).
- Completing Attachment 3.6.3-B5 (CRC Director (or Designees) Approval Form For Change Orders).

The Project Engineer will present the facts and his/her recommendation to the CRC Director (or designees). The recommendation must take into consideration the following:

- Reason for the change
- Calculation or analysis to justify the cost
- Impacts to the contract schedule and associated costs
- Impacts to environmental commitments
- Current contract financial information including effect of the proposed CO on the authorized contract amount
- Funding source and Grant eligibility.
- Compatibility with executed CRC Inter-Governmental Agreements

Meetings

Meetings are held as required, with agenda announcements and CO supporting documentation circulated one week prior to the meeting.

Staff Support

The Project Engineer is given administrative support by the Business Services Manager or designated alternate.

E. ATTACHMENTS

None.

3.6.3-D	CRC PROJECT PROCEDURES		REVISION DATE:	
	State Construction Engineer Approval for Construction Change Orders (WSDOT Procurement)		APPROVAL	
			MANAGER	APPROVAL DATE

A. OBJECTIVE

The WSDOT State Construction Engineer (or designees) reviews and executes certain change orders that exceed the authority of the CRC Director. The CRC Program may not enter into any change order which exceeds the designated level without State Construction Engineer (or designees) approval.

This procedure applies to CRC project packages procured by the WSDOT.

B. DEFINITIONS

Contract Change Order – *Contract Change Orders (COs) are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.*

Construction Change Order Checklist (Attachments 3.6.3-B1 and 3.6.3-B3) – *Mechanism for determining who must give approval for the change, as well as who is the executing authority for the change.*

Execution of COs – *Execution of a CO makes it part of the contract. It must be performed by those authorized to execute a CO up to their respective limit of execution authority described in the applicable **Construction Change Order Checklist**.*

Approval of COs – *Approval of a CO constitutes agreeing with the general nature of the change and can be granted by memorandum or e-mail. Approval does not constitute authority to proceed with the work.*

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan
2. A Guide to the WSDOT Construction Change Order Process, Revised July 2010
3. WSDOT Design-Build Project Delivery, Guidance Statement, Change Orders, December 18, 2009
4. Construction Manual, M 41-01.10, January 2011
5. Project Control and Reporting Manual, M 3026.02, September 2008
6. WSDOT/FHWA Federal-Aid Highway Program Stewardship and Oversight Agreement
7. FTA Circular 4220.1F

D. WORK PROCESS

Presenting Construction Change Orders to the State Construction Engineer (or designees)

COs that meet any of the following requirements must be reviewed and executed by the State Construction Engineer (or designees) before work is ordered:

1. Change in cost (or credit) greater than \$1,000,000
2. Change in the contract documents beyond the scope, intent or termini of the original contract
3. Revision or deletion of work that affects the condition of award requirements

For Design-Build contracts, the State Construction Engineer designates Design-Build Contract Change Order execution authority as follows:

Executing Authority	Dollar Limit	Time Limit
State Const. Engineer	Greater than \$1,000,000	Greater than 60 days
Const. Engineers	Not to exceed \$1,000,000	Not to exceed 60 Days
Assistant Const. Engineers	Not to exceed \$ 750,000	Not to exceed 45 Days
CRC Director (or Designees)	Not to exceed \$500,000	Not to exceed 30 Days

The Project Engineer is responsible for:

- Preparing the CO and supporting documentation, including obtaining signed drawings from the Engineer of Record, if revised or new drawings are needed.
- Obtaining approvals (by memorandum or e-mail) for items described in the applicable Construction Change Order Checklist (Attachment 3.6.3-B1 for Design-Bid-Build contracts and Attachment 3.6.3-B3 for Design-Build contracts).
- Obtaining applicable additional approvals described in Attachment 3.6.3-B2 (CRC Construction Change Order Checklist Supplement).
- Completing Attachment 3.6.3-B5 (CRC Director (or Designees) Approval Form For Change Orders).

The Project Engineer will present the facts and recommendation. The recommendation must take into consideration the following:

- Reason for the change
- Calculation or analysis to justify the cost
- Impacts to the contract schedule and associated costs
- Impacts to environmental commitments

- Current contract financial information including effect of the proposed CO on the authorized contract amount
- Funding source and Grant eligibility.
- Compatibility with executed CRC Inter-Governmental Agreements

Meetings

Meetings are held as required, with agenda announcements and CO supporting documentation circulated one week in advance.

Staff Support

The Project Engineer is given administrative support by the Business Services Manager or designated alternate.

E. ATTACHMENTS

None.

3.6.3-E	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Processing Change Orders (TriMet Procurement)	APPROVAL	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

This procedure describes the steps to process a CRC-related change order. The process begins after the contractor’s (or consultant) cost proposal is received or after a force account is authorized. No payment for a change order or force account work can be made until the change order process is complete.

B. DEFINITIONS

Contract Change Order (COs) – COs are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.

C. REFERENCE DOCUMENTS

1. TriMet Change Control Board Procedure
2. TriMet Delegated Authority Procedure
3. CRC Project Management Plan
4. FTA Circular 4220.1F

D. WORK PROCESS

Change orders often arise on construction contracts. The Resident Engineer (RE) is responsible for initiating a Potential Change (PC) to track a possible change, coordinating the required design changes and requesting a price proposal from the contractor (or consultant). Guidelines for PC handling are described in the TriMet (TM) RE Manual.

Once the contractor’s (or consultant) price proposal is received, the RE works with TM Program Management staff to complete a change order for the work. The review and approval steps to process a CO are illustrated in the Change Order Processing Flow Chart (Attachment 3.6.3-E1).

Before accepting the contractor (or consultant) price, the RE obtains a fair cost estimate of the work to assist in contractor (or consultant) price negotiations. The RE will work with TM Program Management to prepare the estimate and review the proposal to verify that the time extension request is reasonable, excusable, and compensable. TM Program Management will also coordinate a review by the TM Contracts & Legal Department, if necessary. The RE will obtain approval from the CRC Director (or Designees).

The RE uses the completed cost, schedule, and legal reviews to negotiate a final price with the contractor (or consultant). If the negotiated price is greater than the fair cost

estimate, the RE will obtain approval for increased amount from the CRC Director (or Designee). After agreement is reached, the RE writes a Change Order (Attachment 3.6.3-E2) to document the agreed-upon price and terms and sends two originals to the contractor (or consultant) for signature.

After the contractor (or consultant) returns the signed change orders, the RE completes and attaches a Change Order Transmittal (Attachment 3.6.3-E3) and routes the packet as follows:

- To the Change Control Board (CCB), if required
- To the TM Director of Program Management for “approval as to form” signature
- To each TM representative specified on the CO Transmittal form
- To the TM signatory (according to delegated authority) for signature on the CO
- To the CRC Director (or Designees) for signature on the CO Transmittal
- To TM's Contracts Department for final distribution

Of the two, signed originals, one is sent to the contractor (or consultant) and the other is retained by the TM Contracts & Legal Department. The TM Contracts & Legal Department will send a copy of the fully executed CO to the RE, TM Program Management, and CRC Director (or Designees).

The RE's authority to commit TM to added contract costs is limited to \$50,000. If the RE authorizes work in the field which may exceed this amount through a field order, force account, or change order, the RE MUST obtain an approved change order BEFORE costs in excess of the RE's authority are incurred. In cases where the final value is indeterminate, a provisional sum or not-to-exceed change order can be prepared. If it is not possible to prepare a change order at the time the authority is needed, the matter should be immediately referred to the Change Control Board, where “pre-approval” of a change can be made up to the delegated authority of the TM Executive Director.

E. ATTACHMENTS

- 3.6.3-E1 Change Order Process Flowchart
- 3.6.3-E2 Change Order
- 3.6.3-E3 Change Order Transmittal

3.6.3-E1

CHANGE ORDER PROCESS FLOW CHART (TriMet Procurement)

STEP	RESPONSIBLE PARTY	ACTIONS
1	<i>CONTRACTOR / CONSULTANT</i>	Submit cost proposal or force account calculation
2	<i>RESIDENT ENGINEER / DESIGN MANAGER</i>	Update potential change log in Prolog Prepare/request fair cost estimate and schedule check Coordinate legal review
3	<i>TM PROGRAM MANAGEMENT</i>	Prepare fair cost estimate and schedule check Assist with legal review
4	<i>RESIDENT ENGINEER/DESIGN MANAGER</i>	Obtain change approval from CRC Director (or designees).
5	<i>RESIDENT ENGINEER / DESIGN MANAGER</i>	Negotiate agreement Obtain change approval from CRC Director (or Designees) if negotiated cost is greater than fair cost estimate Prepare two (2) original change orders Send to contractor (if bilateral)
6	<i>CONTRACTOR / CONSULTANT</i>	Sign and return original change orders (if bilateral)
7	<i>RESIDENT ENGINEER / DESIGN MANAGER</i>	Attach change order transmittal and summary Circulate for approvals
8	<i>CHANGE CONTROL BOARD</i>	Approve: CO's = / > \$50K; any schedule change Review PCO Logs, CO Logs, and Cost-to-Complete
9	<i>TRIMET APPROVALS</i>	Signatures based on TM Delegated Authority Policy.
10	<i>CRC DIRECTOR (OR DESIGNEES) APPROVAL</i>	Approve all CO's irrespective of the dollar amount and schedule change
11	<i>TM CONTRACTS AND LEGAL</i>	Enter information into Oracle and ProCal File original in permanent contract file Send executed original to contractor Distribute copies
12	<i>RESIDENT ENGINEER / DESIGN MANAGER</i>	Update change order log in Prolog
13	<i>TM PROGRAM MANAGEMENT</i>	Coordinate with CRC Scheduler updating contract and master schedules, if needed

3.6.3-E2



CHANGE ORDER

Change Order No.:
Change Order Title:

Project Title:
Contract No.:
Contractor:

CO Description:

Change Order Amount: \$

PC No. (if applicable)

The Contract is hereby changed as follows:

A. Description of Work:

B. Measurement and Payment:

C. Milestone:

The following documents are incorporated into this Change Order:

Except as provided herein, all terms and conditions of the Contract as heretofore modified remain unchanged. The terms and conditions of this Change Order constitute a full and final accord and satisfaction for all costs and time of performance related to the change described or referenced herein. Notwithstanding the foregoing, provisions in the Contract for relief due to unforeseen circumstances affecting the work covered by this Change Order shall be available to either party to this agreement.

Accepted by Contractor:
(enter Contractor's name)

Signature _____ Date _____

Name _____ Title _____

Approved:
Tri-County Metropolitan Transportation District of Oregon

Executive Director _____ Date _____

Approved as to form:

Contracts Administration _____ Date _____



CHANGE ORDER TRANSMITTAL

CONTRACT NO. / TITLE: CO TRANSMITTAL NO: CHANGE SUBJECT: CO NO -

CHANGE ORDER COST, CONTINGENCY AND TIME IMPACT SUMMARY

COST AND CONTINGENCY IMPACT		TIME IMPACT TO CONTRACT COMPLETION	
1. ORIGINAL CONTRACT COST 2. CHANGE ORDER ALLOWANCE TOTAL CHANGE ORDER ALLOWANCE 3. PREVIOUSLY APPROVED CHANGE ORDERS 4. BID ITEM OVER/ (UNDER) RUNS 5. CONTRACT PRICE PRIOR TO THIS CHANGE ORDER (1+3+4) 6. COST OF THIS CHANGE ORDER 7. CONTRACT COST AFTER THIS CHANGE ORDER (5+6) 8. REMAINING CHANGE ORDER ALLOWANCE [2-(3+4+6)]		1. ORIGINAL CONTRACT DURATION (DAYS) 2. ORIGINAL CONTRACT COMPLETION DATE 3. CHANGES TO THE MILESTONES 4. CHANGES TO THE CONTRACT COMPLETION COMPLETION 5. CONTRACT DURATION AFTER THIS CHANGE 6. NEW CONTRACT COMPLETION DATE AFTER THIS CHANGE	<div style="border-bottom: 1px solid black; height: 100px; margin-bottom: 5px;"></div> YES [] NO [X] <hr/> YES [] NO [X] <hr/> 0

FUNDING SOURCES

	TRIMET	OTHER	OTHER
COST SHARE			

RECOMMENDATION FOR APPROVAL SIGNATURES

TITLE:	SIGNATURE:	DATE:
RESIDENT ENGINEER:		
CONSTRUCTION MANAGER:		
PROJECT CONTROLS DIRECTOR:		
CRC DIRECTOR (OR DESIGNEES)		
EXECUTIVE DIRECTOR:		

3.6.3-F	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Change Control Board (TriMet Procurement)	APPROVAL	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

The Change Control Board (CCB) is composed of staff that review certain change orders, budget transfers and internal contingency allocations. The CCB review assures technical and contracting feasibility, compliance with funding authority guidelines, and balance of competing priorities.

B. DEFINITIONS

Contract Change Order (COs) – COs are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan

D. WORK PROCESS

Board Membership

TM Executive Director (Chairperson)	TM Director of Program Construction
TM Director of Program Management	TM Environmental Permits Coordinator
TM Director of Program Design	CRC Director (or Designees)

Representatives from other TriMet (TM) departments may also attend as non-voting members.

Presenting Items to the CCB

CRC-related change orders, potential changes, pressures to cost or schedule assumptions, or contingency allocations that meet any of the following requirements must be reviewed and approved by the CCB prior to execution and before the work is ordered:

- Change orders that exceed \$50,000, affect a contract milestone date, or modify the contract’s administrative provisions
- Potential changes involving controversial issues or those with potential for significant cost or time impacts.
- Items related to the transfer or re-allocation of the approved project contingency funds.

The Resident Engineer (RE) initiating the item will present the facts and his/her recommendation to the CCB. The recommendation should take into consideration:

Scope	Cost	effectiveness
Technical desirability/feasibility	Compatibility	Schedule impacts
Need		with existing design

Funding source/availability
Operational considerations

Compatibility with other projects or contracts
Environmental considerations

The RE should seek assistance from TM Program Management and CRC staff in evaluating the above topics.

The RE is responsible for preparation of the proposed change order along with supporting information and current contract financial information with assistance from the CRC Director (or Designees). This includes completing the Change Control Board (CCB) Checklist (Attachment 3.6.3-F1), reviewing it with a Board member, and including it in the information presented for CCB consideration.

Meetings

Meetings are held as required, with agenda announcements circulated in advance. A quorum shall consist of not less than three board members or their designated alternates. Decision will be by consensus of the members present. If the members are unable to reach consensus, the chairperson will make the decision.

Staff Support

The CCB is given administrative support by TM's Program Management who is responsible for:

- Providing meeting time notification
- Recording minutes of meetings
- Communicating CCB actions to affected staff and contractors
- Maintaining documents and records

E. ATTACHMENTS

3.6.3-F1 Change Control Board (CCB) Checklist

3.6.3-F1

CHANGE CONTROL BOARD (CCB) CHECKLIST

PROJECT:		CONTRACTOR:		Contract #		
SUBJECT:				DATE:		
Presenter:			Order of Magnitude Cost:	\$		
Schedule Impacts:						
	Milestone					
	Overall Project					
Scope of Change:						
Discussion Summary:						
Checklist Questions						
#	Question		Y/N/NA	Comments		
1	What are the implications of saying "NO?"					
2	Ways to reduce cost? Any savings?					
3	Delays or impacts to the project?					
4	Are there options?					
5	Is this an Owner-requested change?					
6	Any NEPA considerations?					
7	Impacts to other contracts or projects?					
8	Impacts to maintenance or operations?					
9	Any effects on future projects?					
10	Funding sources? Grant eligible?					
11	What category is this work? (circle)					
	A.	Extra Work - in scope	E.	Differing site conditions	I.	Deleted work
	B.	New Work - outside scope	F.	Change in requirements	J.	Disruption
	C.	Time delay - compensable	G.	Risk Table	K.	Administrative change
	D.	Work acceleration	H.	Value Engineering	L.	Other (Explain)
12	What is the cost impact to the contract?					
	Contract Amount (before change)			\$		
	Original Change Order Allowance			\$		
	C.O. Allowance Balance (before change)			\$		
	Cost of Change			\$		
	Change Order Allowance (after change)			\$		
	Value of Remaining PCs			\$		
	Change Order Allowance (after PCs)			\$		
	Anticipated Contract Amount			\$		
Pre-approval by PM Director/PC Director						
CCB Decision:						

3.6.3-G	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Board Approval for CRC Contracts, Change Orders, and Modifications (TriMet Procurement)	APPROVAL	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

The TriMet Board of Directors (Board), acting as the Contract Review Board (TCRB), has delegated specific contracting levels for Board review and approval. TriMet (TM) may not enter into any CRC-related contract, change order, or modification, which exceeds designated levels without Board approval.

B. DEFINITIONS

Contract Change Order (COs) – COs are changes to a legal document (the contract) and are themselves legal documents. Once a change order is executed, it becomes part of the contract, and cannot be un-executed. The only way to make further modification to a contract is to process another change order.

C. REFERENCE DOCUMENTS

1. FTA Circular 4220.1F
2. FTA Master Grant Agreement
3. TriMet Contracting Rules
4. TriMet Contract Review Board Rules
5. Oregon Revised Statutes
6. TriMet BPM Procedure A.11, Delegated Signature Authority
7. CRC Project Management Plan

D. WORK PROCESS

CRC-related contracts, change orders, and modifications are presented to the Board of Directors by resolution with an explanatory cover memo from the General Manager. Contracts, change orders, and modifications need prior approval from the CRC Director (or Designees) before presenting to the Board. With assistance from TM Program Management the project manager requesting the resolution will prepare the draft documents. The TM Capital Projects Division (CPD) legal staff will review the drafts and present the final forms to the TM General Manager's office. The CPD's executive director briefs the TM General Manager, who presents the resolution to the Board.

Board Approval Levels

The TCRB has set the following levels of CRC-related contracts, change orders or modifications for Board approval.

- Goods and Services Contracts, including Construction Contracts, over \$500,000, if procured by an Invitation to Bid (ITB); Personal Service Contracts over \$150,000 and Goods and Services Contracts, including Construction Contracts, over \$500,000, if procured via process other than ITB.


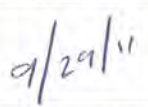
- Modifications to Personal Service Contracts, which increase contract value to over \$150,000 or increase the cumulative value of changes by more than 10% of the original Board authorized amount.
- Modifications or change orders to Goods and Services Contracts, including Construction Contracts, which increase contract value to over \$500,000.
- Real property transactions and Intergovernmental agreements (IGAs) over \$500,000.

Contract Options

Modifications that exercise options for time or work extensions do not need Board approval, if the options are part of the original contract as previously presented to and approved by the Board. Contracts that have options to extend, with a cost of less than the stated Board approval amounts over the course of the contract, may be extended without Board approval.

E. ATTACHMENTS

None.

3.6.3-J	CRC PROJECT PROCEDURES MANUAL	REVISION DATE: September 29, 2011	
	Consultant Agreement Amendments	APPROVAL  MANAGER	 APPROVAL DATE

A. OBJECTIVE

To provide guidelines and assign responsibilities for control and processing of changes to Consultant agreements in a proper and systematic manner, and ensure approval by the Program Manager and the Specialty Services Manager, in their respective areas, for changes to the work (as defined by the agreement) initiated by the CRC Program, Consultant, or both.

B. DEFINITIONS

Agreement Amendments: *A written contract used to modify the contents of or to supplement an existing Consultant agreement. An amendment may be used to add new elements, make up for a deficiency, or extend or strengthen the agreement.*

Execution of Agreement Amendments – *Execution of an agreement amendment makes it part of the contract with the Consultant. It must be performed by the WSDOT Consultant Services Manager who is authorized to execute an agreement amendment.*

Approval of Agreement Amendments – *Approval of an agreement amendment constitutes agreeing with the general nature of the change and can be granted by memorandum or e-mail. Approval does not constitute authority to execute an agreement amendment.*

C. REFERENCES

1. CRC Project Management Plan
2. WSDOT Consultant Services Manual, June 2011.

D. WORK PROCESS

1. The Program Manager and the Specialty Services Manager are each responsible for the approval of all Consultant Agreement amendments, in their respective areas, and identifying the funding source.
2. Project Controls is responsible for ensuring change management procedures are developed and properly followed. Maintains Change Management documentation through all Program phases.
3. The Consultant Contract Specialist is responsible for coordinating approvals by the Program Manager and the Specialty Services Manager, in their respective areas, and execution by the WSDOT Consultant Services Manager.
4. Discipline Managers are responsible for initiating and completing a Record of Negotiations in their respective areas of the amendment summarizing the financial negotiations made with the Consultant.

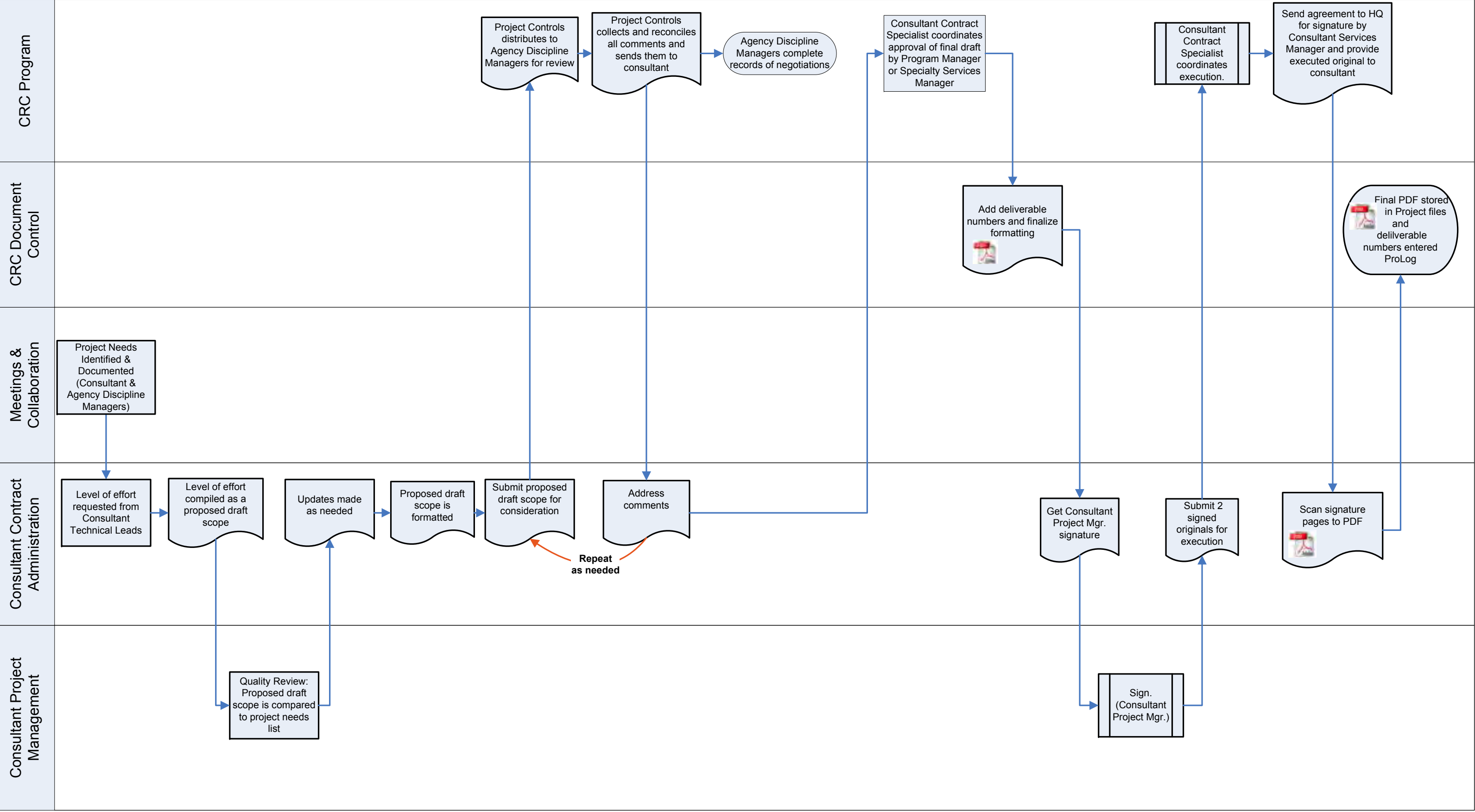
5. General elements of a draft amendment are proposed by Consultant or the Discipline Managers.
6. Consultant's contract administration staff with input from Consultant's technical leads creates a draft of proposed amendment after the Consultant and the Discipline Managers, each in their respective discipline, agree that the issue under discussion is a change to the existing agreement, is not covered by any other item of contract work, and is not incidental to other items by other amendments.
7. Consultant's contract administration staff completes cursory formatting, word processing, updates the listing of deliverables and assumptions, and provides to the Consultant Project Manager who performs a quality review. Consultant's contract administration staff incorporates the Consultant Project Manager's comments to the draft amendment, performs formatting/word processing, and submits the revised draft amendment to Project Controls for distribution to the Discipline Managers for review.
8. Project Controls support staff collects, reconciles and consolidates data detailing specific change(s) to the draft amendment from the Discipline Managers, and submits the changes to the Consultant's contract administration staff to address the review comments and make the necessary changes to the draft amendment. This work process step will be repeated, as needed, until all review comments are addressed and a final draft amendment prepared.
9. Consultant Contract Specialist coordinates approval by the Program Manager or the Specialty Services Manager, in their respective areas, of the final draft amendment.
10. Following approval of the final draft amendment by the Program Manager or the Specialty Services Manager, Consultant Contract Specialist coordinates with Document Control the numbering assignment of deliverables and then creating a PDF of the approved final draft amendment. Sends two originals of the formatted PDF to the Consultant Project Manager for signature.
11. The Consultant's contract administration staff submits the two signed originals of the amendment to the Consultant Contract Specialist to process for approval by the WSDOT Consultant Services Manager.
12. The Consultant Contract Specialist transmits the approval by the Program Manager or the Specialty Services Manager and the two signed copies to the WSDOT Consultant Services Manager for signature and execution.
13. The Consultant Contract Specialist provides one original copy of the executed agreement to the Consultant Project Administration staff to create a PDF of the executed agreement and forwarding the PDF to CRC Document Control for filing.

E. ATTACHMENTS

- | | |
|----------|--|
| 3.6.3-J1 | Consultant Agreement Amendment Process Flowchart |
| 3.6.3-J2 | Record of Negotiations |

3.6.3-J1 Consultant Agreement/Amendment Process Work Flow

Negotiation Phase





Memorandum

September 30, 2011

TO: Director, Consultant Programs Division
MS-47323

FROM: MS
PH

SUBJECT: Record of Negotiations
Project Y-
Project Title-

Negotiation Participants:

Agency Staff and Titles

Consultant Staff and Titles

Summary of Negotiations Process- Notes from Meetings/Conference Calls, Correspondence, and Other Actions (Include names, dates, etc; Attach any related correspondence)

1. Project description and purpose of negotiations

2. Project Estimate of Costs WSDOT/Consultant (not profit/fee amount) Y N

- *WSDOT Estimate Range \$ to \$ (Internal or independent estimate must be completed prior to receiving of Consultant Estimate)*
- *Consultant's initial estimate \$*

3. Negotiated Profit/Fee % (Attach Consultant Fee Calculation Worksheet)

4. Source of funding

*5. Agreement method: CPFF TONHR NHR LS
 Other*

- *Reasons for compensation method selected*

6. Confirmed billing rates and classifications match rates and classifications in Consultant's Rate table/ Rate letter Y N

7. Agreed-to estimate includes appropriate staff classifications for the tasks Y N

Director, Consultant Programs Division
September 30, 2011
Page 2

8. *Agreed-to estimate includes appropriate hours for classifications for the tasks* Y N

9. *Proposed DBE participation(list estimated tasks and estimated percentage)(if applicable):*

10. *Estimate includes WSDOT/ Consultant travel and other direct non-labor cost* Y N

11. *Estimate includes mark-up on subconsultants* Y N

- *If not, explain:*

12. *Copy of approved Work Breakdown Structure(WBS)* Y N

Project Manager

Date

Attachments

cc:

3.7.1	CRC PROJECT PROCEDURES MANUAL		REVISION DATE: October 2011		
	Public Records Request			APPROVAL	
				MANAGER	APPROVAL DATE

A. OBJECTIVE

To provide transparency in accordance with state law to requests for public records in a timely manner.

B. DEFINITIONS

Public Records Requests include any writing containing information relating to the conduct of government or the performance of any governmental or proprietary function prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics.

C. REFERENCES

1. Administrative Services Manual, M3012.02, June 2008.
2. Washington State Law RCW 42.56.

D. WORK PROCESS

1. A *Public Disclosure Request (PDR)* for records is received by the **Public Disclosure Coordinator (PDC)** Columbia River Crossing (CRC) Program, during the course of business.
2. The **PDC** notifies the **Public Disclosure Lead (PDL)**, and the **CRC Program** supervisors and management, of the **PDR**.
3. A letter of acknowledgement to the **PDR** requestor is generated by the **PDC**, and promulgated by **CRC Program** management, within five (5) business days of receiving the **PDR**.
4. The **PDC** and the **PDL** identify and coordinate individuals within the **CRC Program's** organizational structure, and/or within **WSDOT Headquarters**, best able to respond to or produce records responsive to the **PDR**. The **PDC** requests assistance from **WSDOT Headquarters** in responding to the **PDR**, when appropriate.
5. The **PDC** locates, gathers, reviews for exemptions, requests exemptions from the **WSDOT Headquarters** when appropriate, and otherwise prepares the requested records for inspection and / or prepares and provides copies of the requested records to the **PDR** requestor within 30 calendar days of **CRC Program's** receipt of the **PDR**.
6. If clarification of the **PDR** is required from the **PDR** requestor, a letter requesting clarification to the **PDR** requestor is generated by the **PDC**, and promulgated by **CRC Program** management, as soon as practicable after recognition of the need for clarification but not beyond 30 calendar days of **CRC Program's** receipt of the **PDR**.


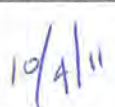
7. If more than 30 days are required to fulfill the **PDR**, a phased approach will be implemented with a portion of responsive documents and a letter of extension going to the **PDR** requestor within 30 calendar days of **CRC Program's** receipt of the **PDR**. The responsive documents and letter of extension is generated by the **PDC**, and promulgated by **CRC Program** management.
8. A letter of closure, with accompany responsive records, or with reasons for no records provided, to the **PDR** requestor, is generated by the **PDC**, and promulgated by **CRC Program** management, within 30 calendar days of **CRC Program's** receipt of the **PDR**, if no extension is otherwise issued.
9. The **PDC** maintains, or coordinates the maintenance of, all **CRC Program** and **WSDOT PDR**-tracking databases and electronic filing systems.
10. Adobe Acrobat, Microsoft Word and Excel, and Prolog are used by the **PDC** to respond to the **PDR**, track and archive the requested records, and maintain the **CRC Program's** electronic files.

Approval Levels

- a. CRC Business Manager must approve external notification.
- b. The PDL and the CRC Program supervisors and management provide guidance, oversight, and quality control to the PDC on responding to the PDR throughout this Work Process.

E. ATTACHMENTS

None

3.7.3	CRC PROJECT PROCEDURES MANUAL	REVISION DATE: September 2011	
	Document Control and Records Management	APPROVAL 	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

To establish a process for review, revision, distribution, maintenance and storage of program documents, **not subject to controlled distribution**, to ensure that:

1. Appropriate, current information is available to the affected team members when needed,
2. Obsolete documents are prevented from the possibility of use.
3. CRC Program documents are protected.

B. DEFINITION

Project Files are generally a product of the project and can be either electronic or paper, and are in their final form.

Workpaper Files include any document or file that is a direct product of the CRC Program, but that is not in its final or distribution format. Program work paper generally requires further collaboration or processing among team members.

Reference Files include any document that is not a direct product of the Program but that is helpful or necessary in order to perform program functions.

Controlled Documents are key documents either developed internally or acquired from external sources, and used as authoritative references during the development of design and construction of the CRC Program. They are subject to controlled distribution.

Prolog is a Sequel based database application that is housed on the CRC's local area network.

Adobe Acrobat is application software that was developed to view, create, manipulate, print and manage files in Portable Document Format (PDF).

C. REFERENCES

1. CRC Project Management Plan
2. CRC Prolog Procedures Manual
3. CRC Quality Assurance Manual

D. WORK PROCESS

TYPES OF PROJECT RECORDS THAT ARE MANAGED

Project records and document tracking is assisted by the use of Adobe Acrobat and Prolog.

Prolog software is used to track:

- Submittals
- Transmittals
- Correspondence
- Quality Assurance/Quality Control (QA/QC) Review of Engineering and Design Documents
- Public Comments
- Public Disclosure Requests
- Controlled Documents
- Project Contracts
- Contract Invoices
- Contract Amendments
- Contract Potential Change Orders
- Project Budget
- Project Estimates
- Project Expenditures
- Project Changes
- Project Risks or Potential Changes

RECORD SECURITY

In order to ensure the integrity of project files, the CRC Program has developed permissions that enable users to view, edit, and delete certain documents depending on where these documents are located and what user group the individual is assigned to. The table below summarizes the basic users and their related permissions:

Location	Group	Default Permissions
Workpaper Files	All CRC Users	Add, Modify, Delete
Project Files (except DOT folder)	All CRC Users	Read Only
	Administrators, Document Control	Add, Modify, Delete
Project Files DOT Folders	All CRC Users	No Access
	DOT & Mgt Group	Read Only
	Administrators, Document Control	Add, Modify, Delete
Reference Files (not subject to controlled distribution)	All CRC Users	Read Only
	Administrators, Document Control	Add, Modify, Delete
Controlled Documents	All CRC Users	Read Only
	Administrators, Document Control	Add, Modify, Delete

Location	Group	Default Permissions
Document Control In-Box	All CRC Users	Add
	Administrators, Document Control	Add, Modify, Delete

In order to be assigned to a user group, the person must have a CRC network login.

Some files that have contents that are not considered to be appropriate for widespread distribution are kept in the DOT folders.

ARCHITECTURAL AND ENGINEERING DRAWINGS

Procedures pertaining to accessing and managing Architectural and Engineering Drawings are provided in CRC Procedure 12.4.3 - ProjectWise Architectural And Engineering Drawing Management.

RECORDS MANAGEMENT AND FILING PROCESS

1. All project files will be maintained at the CRC Program offices under the responsibility of the Business Services Manager.
2. The Document Control Manager is responsible for managing, distributing and keeping records on all documents that are either developed internally or externally issued reference documents used in the development of the CRC Program while adhering to strict approval processes and version control.

The Document Control Manager is responsible for establishing and implementing document control procedures, and coordinating the administration, distribution and control of key Program documents and records.

3. It is the responsibility of all project team members, regardless of discipline to submit project documents to Document Control to store in the official project file. Discipline-Specific Task Managers are responsible to make certain that their team's official project files are being forwarded to Document Control.

The flowchart in Attachment 3.7.3–A (Document Control and Records Management Procedure Flowchart) describes the CRC Document Control process.

4. The flowchart in Attachment 3.7.3–A (Document Control and Records Management Procedure Flowchart) describes the CRC Document Control process. Identify what type of document from the following four categories:
 - Project Files
 - Workpaper Files
 - Reference Files (not subject to controlled distribution)
 - Controlled Documents (subject to controlled distribution). The *Quality Assurance Manual*, describes in detail the controlled-distribution procedures for internally produced and external reference documents

PROJECT FILES

1. If the document is in electronic format, the responsible staff will place an electronic copy in the Document Control inbox at <\\CRC.LOC\Root\Office\CRC\Document Control In Box> or email the document to Document.Control@ColumbiaRiverCrossing.org.
2. If the document is in paper format, it can be placed in the paper in-box located in the document control area.
3. The Document Control Specialist (DCS) will scan documents from the Doc Box (paper) or retrieve from the Document Control In-Box (electronic).
4. Once the document is retrieved and or scanned, the file will be renamed using the CRC-approved naming convention, and filed in the project files.
5. The DCS will log into the Prolog tracking system when required.

WORKPAPER FILES

1. All work in progress should be saved in the Project workpaper files so that they are assessable by team members.
2. Continue collaboration on work until which point it needs to be sent out for review or submitted for final.
3. Responsible staff will place the document in the Document Control Inbox at <\\CRC.LOC\Root\Office\CRC\Document Control In Box> or email the document to Document.Control@ColumbiaRiverCrossing.org.
4. Once the document is retrieved and/or scanned, the file will be renamed using the CRC-approved naming convention, and filed in the project files.
5. The Document Control Specialist will log into the Prolog tracking system when required.





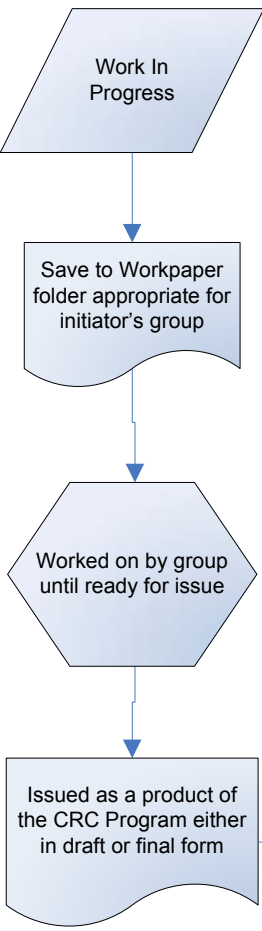
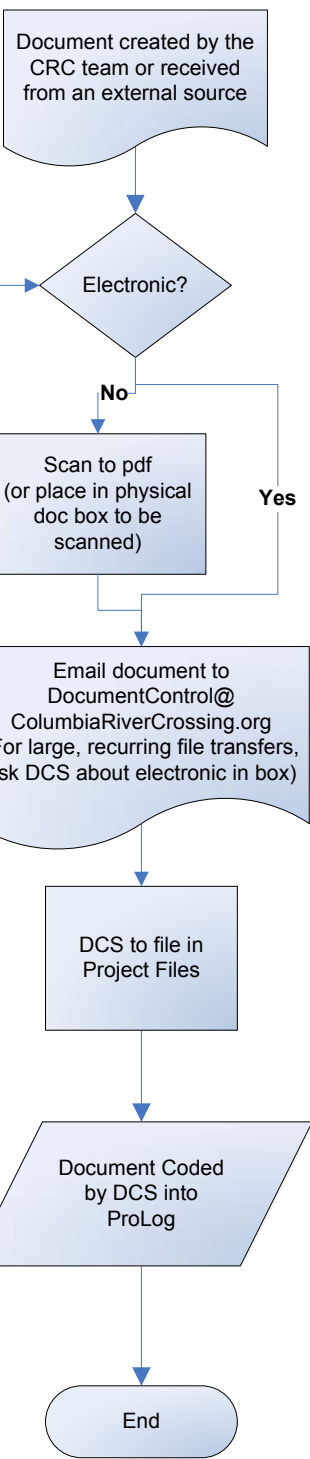
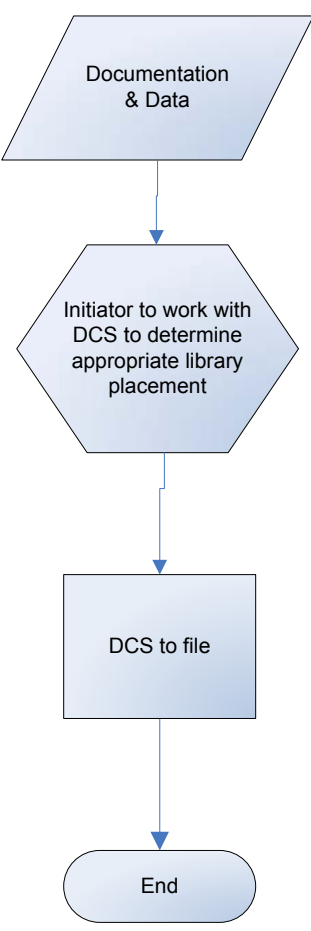
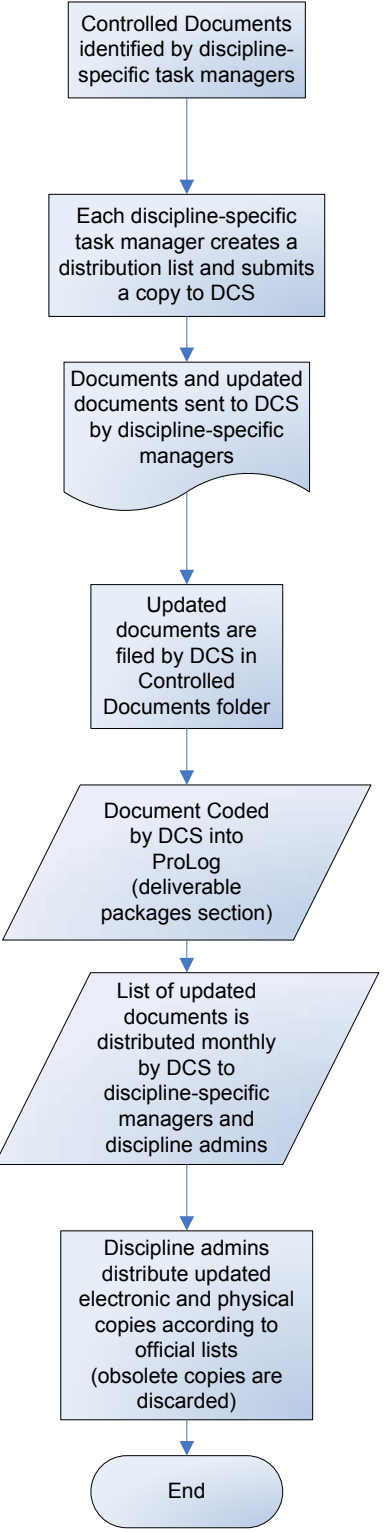
REFERENCE FILES

1. The initiator of reference files will work with the Document Control Specialist to determine the appropriate library placement for the reference document.
2. The DCS places the document in the reference files.

A. ATTACHMENTS

- 3.7.3–A Document Control and Records Management Procedure Flowchart

3.7.3-A CRC Document Control Procedures

Criteria	Workpaper Files 	Project Files 	Reference Files 	Controlled Documents 
	1. Product of the CRC program 2. Requires work and/or collaboration	1. Product of the CRC program 2. Is in an issued draft or final format	1. Not a direct product of the CRC program 2. Is considered useful or necessary by team members	1. Key documents that are either developed or used during design and construction 2. Is determined by management to be a controlled document
 <pre> graph TD A[/Work In Progress/] --> B[Save to Workpaper folder appropriate for initiator's group] B --> C{{Worked on by group until ready for issue}} C --> D[Issued as a product of the CRC Program either in draft or final form] </pre>	 <pre> graph TD A[Document created by the CRC team or received from an external source] --> B{Electronic?} B -- No --> C[Scan to pdf (or place in physical doc box to be scanned)] B -- Yes --> C C --> D[Email document to DocumentControl@ColumbiaRiverCrossing.org (For large, recurring file transfers, ask DCS about electronic in box)] D --> E[DCS to file in Project Files] E --> F[/Document Coded by DCS into ProLog/] F --> G([End]) </pre>	 <pre> graph TD A[/Documentation & Data/] --> B{{Initiator to work with DCS to determine appropriate library placement}} B --> C[DCS to file] C --> D([End]) </pre>	 <pre> graph TD A[Controlled Documents identified by discipline-specific task managers] --> B[Each discipline-specific task manager creates a distribution list and submits a copy to DCS] B --> C[Documents and updated documents sent to DCS by discipline-specific managers] C --> D[Updated documents are filed by DCS in Controlled Documents folder] D --> E[/Document Coded by DCS into ProLog (deliverable packages section)/] E --> F[/List of updated documents is distributed monthly by DCS to discipline-specific managers and discipline admins/] F --> G[Discipline admins distribute updated electronic and physical copies according to official lists (obsolete copies are discarded)] G --> H([End]) </pre>	

10.3A	CRC PROJECT PROCEDURES	REVISION DATE:	
	Term Sheet Preparation And Approval	APPROVAL <i>MP</i>	<i>10/9/11</i>
		MANAGER	APPROVAL DATE

A. OBJECTIVE

To provide guidelines and assign responsibilities for preparation and approval of Term Sheet(s), ensuring compliance with WSDOT Agreements Manual, and maintaining the CRC Program schedule.

B. DEFINITIONS

Term Sheet: Project management tool to document understandings that form the basis of formal agreements between two or more entities that include federal, state, city, and regional agencies as well as special districts, railroads, and utilities. A Term Sheet is meant to summarize key terms, not to contain a verbatim version of what will be included in the formal agreement. A Term Sheet defines the purpose of an agreement, the key terms of the agreement, general outline of each party's scope of work, financial obligations, and agreement signature authority. Term Sheets are mutually agreed to and precede formal agreements for design services, construction, and continuing operations.

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan
2. CRC Agreements Master Tracking Matrix (most current and in effect)
3. WSDOT Agreements Manual - M 22-99.01 (November 2009)
4. CRC Delegation of Authority Table (most current and in effect)

D. WORK PROCESS

1. The Specialty Services Manager is responsible for ensuring Term Sheet(s) are prepared and executed to Program schedule.
2. The Agreements/IGA Lead with input from the CRC Management Team, the Highway, Bridge and Transit (Discipline) Managers and their respective Discipline-Specific Task leads, is responsible for identifying required agreements with federal, state, city, and regional agencies as well as special districts, railroads, and utilities. The Agreements/IGA Lead is responsible for tracking the progress of preparing Term Sheet(s), and coordinating obtaining signatures to Program schedule.
3. The Responsible Team Leads identified in the CRC Agreements Master Tracking Matrix or designated delegates are key information contributors to the Term Sheet process and are responsible for preparing the Term Sheet(s).
4. The Agreements/IGA Lead determines the timeline necessary to complete a Term Sheet for each agreement and works with the Project Scheduler to document this timeline in the master project schedule. The Agreements/IGA Lead (or designee) is responsible for the day-to-day tracking and maintaining current the CRC Agreements Master Tracking Matrix.
5. The Project Controls Manager determines whether or not a Term Sheet requires review by the Federal Transit Administration (FTA). Such Term Sheets are FTA

- **Prospective other parties signature.** Agreements/IGA Lead sends the final Term Sheet to the other party representative for signature by an authorized signatory.
- **Term Sheet Finalization.** Agreements/IGA Lead coordinates internal signature of the final Term Sheet by CRC Approver, and distribution of copies of the executed Term Sheet to the Prospective other party representative and to Document Control for filing.

E. ATTACHMENTS

- 10.3-A1 CRC Term Sheet Checklist
- 10.3-A2 CRC Term Sheet Form

Critical and this information is recorded in the Agreements Tracking Matrix by the Agreements/IGA Lead.

6. The following steps describe the process for drafting/reviewing/approving Term Sheets for the CRC Program:

- Responsible Team Lead initiates preparation of a Term Sheet by completing the Term Sheet Checklist (Attachment 10.3-A1) including identifying the Writer, Reviewers, and Approver.
- The Responsible Team Lead arranges a meeting with the other party (or parties) to the Term Sheet. At this kickoff meeting, attendees determine the issues, relevant documents to be completed, and scope and budget parts of the Term Sheet, and create a timeline to prepare, review, and approve the Term Sheet to the CRC schedule.
- The CRC Writer identified in the Term Sheet Checklist uses the Term Sheet Form (Attachment 10.3-A2) to complete the first draft of Term Sheet based on the results of the meeting between the term sheet parties. The Agreements/IGA Lead sends this first draft to Reviewers for comment.
- CRC Reviewers identified in Term Sheet Checklist review the draft Term Sheet. Agreements/IGA Lead compiles comments, reconciles, if any, conflicting comments with the reviewers, and sends the draft Term Sheet to the Writer for revisions.
- The CRC Writer revises the Term Sheet. The Agreements/IGA Lead sends the Term Sheet to CRC Reviewers to confirm content.
- CRC Reviewers confirm Term Sheet content. The Agreements/IGA Lead sends the Term Sheet to the CRC Approver.
- CRC Approver identified in Term Sheet Checklist approves the draft Term Sheet for external review. At this point, the draft Term Sheet may be shared with the other party. FTA Critical term sheets are also reviewed by the FTA and PMOC. Agreements/IGA Lead sends the Term Sheet to the other party for review and a copy of the request for review and draft term sheet to Document Control. The distribution form will include a clearly defined date to return review comments.
- Prospective other parties review the draft Term Sheet and return it to the Agreements/IGA Lead with comments.
- The Agreements/IGA Lead coordinates with CRC Writer, Reviewers, and Approver to address comments from Prospective other parties. He/she will arrange, if necessary, a meeting between CRC and Prospective other parties' representatives to resolve any outstanding comments.
- **WSDOT headquarters review.** Agreements/IGA Lead sends the draft Term Sheet to WSDOT HQ Utilities, Railroad, and Agreement Section, if headquarters review is required.
- **WSDOT legal review.** WSDOT HQ Utilities, Railroad, and Agreement Section coordinates obtaining the WSDOT Assistant Attorney General (AAG) review comments, if legal review is required.

10.3-A1	CRC PROJECT PROCEDURES	REVISION DATE:	
	CRC Term Sheet Checklist	APPROVAL <i>MP</i> MANAGER	<i>10/4/11</i> APPROVAL DATE

Term Sheet Number: _____ Term Sheet Title: _____

FTA Review Required? (Check one) YES NO

Due date for executed agreement:

CRC Development and Review:

Role	Name(s)
Writer	
Reviewer	
Approver - <i>only one person</i>	

Agency Review and Approval Process:

Agency	Lead Contact	Agency Review Process	Estimated Review Time

	Yes/No	Contact
Does term sheet require WSDOT headquarters review?		
Does term sheet require WSDOT legal review?		

	Yes/No	Content Needed
Will agreement require supporting technical documents?		
Will agreement require other agreements?		

Development Process – copy Peter Markgraf as term sheets move through development process

Party	Action	Plan Start	Plan Finish	Actual Start	Actual Finish
	<i>Items in italics are only applicable if noted above</i>				
All	1. Meet with parties to term sheet				
CRC	2. Writers draft term sheet				
CRC	3. Reviewers review term sheet				
CRC	4. Writers revise term sheet				
CRC	5. Reviewers confirm term sheet content				
CRC	6. Approvers approve term sheet for external review				
Agency(s)	7. Agency review term sheet Bcc document control on request for review and draft term sheet				
CRC	8. Writers revise term sheet as necessary				
CRC	9. Approver/Reviewer confirms content				

CRC	10. Writers revise term sheet as necessary				
CRC	11. Approver/Reviewer confirms content				
WSDOT	12. WSDOT headquarters review				
WSDOT	13. WSDOT legal review				
Agency(s)	14. Agency signature Bcc document control on request for review and term sheet				
CRC	15. Term Sheet finalization				

10.3-A2 CRC TERM SHEET

The CRC Term Sheet is intended to be a tool for project offices to use during the early development phase of an agreement by providing a place to record agreement elements and decisions as they are made. It is meant to be a synopsis of these elements and decisions, and is not intended to contain a verbatim version of what will be included in the formal agreement, nor will it include the legal language of the agreement.

Other Party:		Status:	
Agreement Type: Agreement Title:			
Agreement Project Title:	Columbia River Crossing (CRC) Project		
Agreement Duration:		Consideration (if applicable):	

Agreement Project Manager/Contact:

<Agency:>		Phone/email:	
<Agency:>		Phone/email:	
<Agency:>		Phone/email:	
<Agency:>		Phone/email:	

Agreement Schedule Dates:	
Complete Draft Term Sheet:	00/00/00
Term Sheet Finalization:	00/00/00
Completed Draft Agreement:	00/00/00
Agreement Finalization:	00/00/00

Purpose of Agreement:

Key Terms of Agreement:

All Parties agree:

- Xxxxxx
- Xxxxxxx
- Xxxxxx

Scope of Work (if applicable):

Financial Implications/Budget Impacts/Source of Funding/Payment:

Approval Requirements/Signature Authority:			
Summary Completed By:		Date:	

The undersigned expressly acknowledge and agree that this Term Sheet is not a legally binding contract. This Term Sheet is approved by the undersigned to form a written statement outlining their understanding which they intend to serve as the basis for future formal contracts.

<Agency:>

Date

<Agency:>

Date

SHEET INSTRUCTIONS:

Other Party:

Place all parties that are affected by this Term Sheet

Status:

Place current status for the term sheet with date.

Example:

- *2nd Draft 11/24/2010*
- *Draft Final 02/15/2011*

Agreement Type:

Example:

- *Intergovernmental Agreement (IGA)*
- *Memorandum of Understanding*
- *Real Estate*
- *Utilities*
- *Other <explain>*

Agreement Title:

The official title of this agreement.

Agreement Project Title:

It will say "Columbia River Crossing (CRC) Project" in this box every time.

Agreement Duration:

Make one of the two statements:

- *In effect until construction complete*
- *Contingent on execution of easement*

Agreements Project Manager/Contact:

Use the Agency or other parties name in these boxes with their Director/CEO/Executive Manager.

Example:

- *WSDOT Nancy Boyd*
- *TriMet: Dan Blocher*

Phone/email is self explanatory

Agreement Schedule:

Place dates that are reflected in the CRC Project Schedule

Purpose of Agreement:

State the purpose of the agreement in two or three paragraphs.

Key Terms of Agreement:

Place a bullet of all general terms of this agreement and group by type if feasible:

- Interface
- Easement
- Local Laws
- Design/Review

Scope of Work (if applicable):

If necessary in general terms or statement identify the scope of work. If not needed, enter Not Applicable and skip this section.

Financial Implications/Budget Impacts/Source of Funding/Payment:

Make a statement of who, what, when and how much will be necessary once the agreement is in place. If no payment of fee then state that and who are the parties that are agreeing to those terms.

Approval Requirements/Signature Authority:

Record the parties that will need to approve the agreement when finalized.

Example:

- *WSDOT Assistant Attorney General*
- *ODOT Assistant Attorney General*
- *City of Vancouver Legal Representative*
- *City of Portland Legal Representative*
- *Ctran Legal Representative*
- *TriMet Legal Representative*

Summary Completed By:

Indicate the contact person that wrote and is overseeing the completion of the term sheet.

Date: current date of the Summary Completed By

Signature Section

Should include the signatures of the individuals identified as Agreement Project Managers/Contacts on page 1.

10.3-B	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Agreement Development and Approval (Public Entities)	APPROVAL <i>MP</i> MANAGER	<i>11/22/11</i> APPROVAL DATE

A. OBJECTIVE

To document the process for development and execution of formal agreements between WSDOT and another party or parties (agencies of Washington State, other states' agencies, federal agencies, a city or other public entity – "Agency") consistent with the intent of the parties described in Term Sheets for each agreement, and to maintain the CRC Program schedule and adhere to applicable rules and regulations.

Agreement Development and Approval procedure for utility agreements is covered under a separate procedure.

B. DEFINITION

Agreement – An agreement is defined in the WSDOT Agreements Manual M 22-99.01 as "a written contract between WSDOT and another party or parties (public, private, or both), establishing an exchange of benefits and/or obligations."

The CRC Program requires executing various types of agreements defined in the WSDOT Agreements Manual M 22-99.01 and listed in –the CRC Agreements Master Tracking Matrix.

Term Sheets – Project management tool to document understandings that form the basis of formal agreements between two or more entities that include federal, state, city, and regional agencies as well as special districts, railroads, and utilities. A Term Sheet is meant to summarize key terms, not to contain a verbatim version of what will be included in the formal agreement. A Term Sheet defines the purpose of an agreement, the key terms of the agreement, general outline of each party's scope of work, financial obligations, and agreement signature authority. Term Sheets are mutually agreed to and precede formal agreements for design services, construction, and continuing operations.

C. REFERENCES

1. WSDOT Agreements Manual, M 22-99.01, November 2009.
2. Interlocal cooperation act: [RCW 39.34](#)
3. CRC Agreements Master Tracking Matrix (most current and in effect)
4. CRC Project Schedule
5. CRC Delegation of Authority Table (most current and in effect)

D. WORK PROCESS

1. The Specialty Services Manager is responsible for ensuring Agency agreements are prepared and executed to Program schedule.


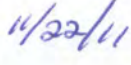
2. The Agreements/IGA Lead is responsible for tracking the day-to-day preparation of agreements, and coordinating the execution of agreements to Program schedule.
3. The Responsible Team Leads identified in the CRC Agreements Master Tracking Matrix or designated delegates are key information contributors to the agreement process. They initiate an agreement by providing the Agreements/IGA Lead with the details on agreement content.
4. The Agreements/IGA Lead with input from other functional managers and their respective Discipline-Specific Task Leads is responsible for identifying required agreements with federal, state, city, and regional agencies as well as special districts.
5. The Agreements/IGA Lead (or designee) will update weekly the CRC Agreements Master Tracking Matrix, and provide the weekly updated matrix to the Specialty Services Manager with a status on key issues/concerns/potential delaying factors. The Agreements/IGA Lead (or designee) will store the CRC Agreement Status file in shared folders on the project network, allowing CRC Team members to check on the status of agreements associated with the Program.
6. The Agreements/IGA Lead is responsible for the production of agreements with input from the Responsible Teams Leads to Program schedule and to the agreement work process in Chapter 3 of the WSDOT Agreements Manual M 22-99.01. In cases where the agreement is preceded by a Term Sheet, the Agreements/IGA Lead will include in the agreement the elements agreed to in the Term Sheet.
7. The Agreements/IGA Lead is responsible for maintaining all versions/drafts, coordinating reviews/edits and distribution of the agreement documents.
8. The Agreements/IGA Lead must inform Agency, very early in the agreement discussion that WSDOT cannot pay for any work performed by another party prior to execution (signature) of the agreement by all parties.
9. The following steps describe the process for drafting/reviewing/approving Agency agreements for the CRC Program:
 - Responsible Team Lead initiates an agreement by providing the details on agreement content (who, what, when, where, why), schedule, interagency meetings, etc. to the Agreements/IGA Lead.
 - Agreements/IGA Lead prepares a first draft of the agreement documents and distributes the draft documents to the Responsible Team Lead for initial review.
 - Responsible Team Lead enters project specific details in Track Change mode or sends information to the Agreement/IGA Lead to incorporate in the agreement. Returns the edited documents to the Agreements/IGA Lead.
 - Agreements/IGA Lead reviews/accepts/incorporates changes, and works with Responsible Team Lead to resolve any questions. Agreements/IGA Lead

distributes a clean draft to Responsible Team Lead for concurrence with revisions to the draft agreement.

- Responsible Team Lead concurs with the revisions and distribution of the draft agreement.
- Agreements/IGA Lead distributes the draft agreement to the Agency, and copies the Support Services Manager and Responsible Team Lead on the distribution. The distribution form will include a clearly defined date to return review comments.
- Agreements/IGA Lead tracks the progress of reviews and initiates any necessary follow up with Agency to ensure reviews are performed and comments provided in a timely manner.
- Agreements/IGA Lead coordinates with the Responsible Team Lead, and the Specialty Services Manager, if necessary, to resolve any questions or comments received from Agency reviewers. Agreements/IGA Lead finalizes the draft agreement after resolution of review comments.
- Agreements/IGA Lead sends the draft agreement to WSDOT HQ Utilities, Railroad, and Agreement Section for their review and commenting.
- Agreements/IGA Lead coordinates with the Responsible Team Lead to resolve any questions or comments received from WSDOT HQ Utilities, Railroad, and Agreement Section. Agreements/IGA Lead finalizes the agreement after resolution of review comments. If required, the Agreements/IGA Lead sends the final agreement to WSDOT HQ Utilities, Railroad, and Agreement Section for processing by the AAG as to form.
- WSDOT HQ Utilities, Railroad, and Agreement Section coordinates obtaining AAG's signature on two original copies. AAG signs two originals and sends both to CRC's Agreements/IGA Lead.
- Agreements/IGA Lead sends two original documents of the finalized agreement to Agency for signatures and processing by Agency authorized signatories.
- Agreements/IGA Lead receives signed documents from Agency. Gather final WSDOT signature from CRC authorized signatory per the most current CRC Delegation of Authority Table.
- Agreements/IGA Lead sends one original to WSDOT HQ, one original to Agency, and keeps a copy at the CRC office.

E. ATTACHMENTS

None

10.3-C	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Agreement Development and Approval (with Utilities)	APPROVAL 	
		MANAGER	APPROVAL DATE

A. OBJECTIVE

To document the process for development and execution of formal agreements between WSDOT and utility owners (Utilities) consistent with the intent of the parties described in Term Sheets for each agreement, and to maintain the CRC Program schedule and adhere to applicable rules and regulations.

B. DEFINITION

Agreement – A written contract in support of the CRC program between WSDOT or ODOT and another party or parties (public, private, or both), establishing an exchange of benefits and/or obligations.

Term Sheets – Project management tool to document understandings that form the basis of formal agreements between two or more entities that include federal, state, city, and regional agencies as well as special districts, railroads, and utilities. A Term Sheet is meant to summarize key terms, not to contain a verbatim version of what will be included in the formal agreement. A Term Sheet defines the purpose of an agreement, the key terms of the agreement, general outline of each party’s scope of work, financial obligations, and agreement signature authority. Term Sheets are mutually agreed to and precede formal agreements for design services, construction, and continuing operations.

C. REFERENCES

1. WSDOT Agreements Manual, M 22-99.01, November 2009
2. WSDOT Utilities Manual, M 22-87.02, March 2010
3. Interlocal cooperation act: [RCW 39.34](#)
4. WAC 468-34, Utility lines — franchises and permits
5. OAR 734-055 Utility Accommodation Policy
(http://arcweb.sos.state.or.us/rules/OARS_700/OAR_734/734_tofc.html)
6. ODOT Utility Manual (Chapter 10, Right of Way Manual) updated December 2010
7. ODOT Utility Relocation Guide, Revision Date: 7/26/2011
8. CRC Agreements Master Tracking Matrix (most current and in effect)
9. CRC Project Schedule
10. CRC Delegation of Authority Table (most current and in effect)

D. WORK PROCESS

1. The CRC Specialty Services Manager is responsible for ensuring Utility agreements are prepared and executed to Program schedule.
2. The CRC Agreements/Inter-governmental Agreements (IGA) Lead is responsible for tracking the day-to-day preparation of agreements, and coordinating the execution of agreements to Program schedule.
3. The CRC Utilities Lead (Utilities Lead), with input from the Responsible Team Leads identified in the CRC Agreements Master Tracking Matrix or designated delegates, initiates an agreement by providing the Agreements/IGA Lead with detailed information about the project impacts to the existing utilities, or in the case of Design/Build procurement, potential impacts that need to be further addressed by the Design/Build Contractor but which can be shared with the Utilities ahead of time.
4. The Utilities Lead works with each Utility to scope the work and negotiate an agreeable budget, or an acceptable agreement, establishing guidelines for interaction between the Design/Build Contractor and the Utilities and WSDOT or ODOT during further design and construction.

In the case of Utilities providing service to WSDOT or ODOT, the Utilities Lead prepares draft estimate request letters and final agreements for obtaining the service connection and establishing ongoing service.

5. The Agreements/IGA Lead (or designee) will update weekly the CRC Agreements Master Tracking Matrix, and provide the weekly updated matrix to the Specialty Services Manager with a status on key issues/concerns/potential delaying factors. The Agreements/IGA Lead (or designee) will store the CRC Agreement Status file in networked project drives allowing CRC Team members to check on the status of agreements with Utilities impacted by the Program.
6. The Agreements/IGA Lead is responsible for the production of agreements with input from the Utilities Lead to Program schedule and to the agreement work process in Chapter 3 of the WSDOT Agreements Manual M 22-99.01 and Chapter 2 of the WSDOT Utilities Manual M 22-87.02 for utilities in Washington, and in the ODOT Utility Manual (Chapter 10, Right of Way Manual) updated December 2010 for utilities in Oregon.

Guidelines for determining applicable law, compensable property interests, and standard agreement forms are in Chapter 2 of the WSDOT Utilities Manual M 22-87.02 and in ODOT's Utility Relocation Guide, Revision Date: 7/26/2011, for utilities in Washington and Oregon, respectively. In cases where the agreement is preceded by a Term Sheet with the Utilities, the Agreements/IGA Lead will include in the agreement the elements agreed to in the Term Sheet.

7. The Agreements/IGA Lead is responsible for maintaining all versions/drafts, coordinating reviews/edits and distribution of the agreement documents.
8. The Utilities Lead must inform the Utilities very early in the agreement discussion that the applicable agency (WSDOT or ODOT) cannot pay for any work

performed by another party prior to execution (signature) of the agreement by all parties.

9. The following steps describe the process for drafting/reviewing/approving Utility agreements for the CRC Program:

- For utilities on the Washington side of the Project, the Utilities Lead, with input from Responsible Team Leads, initiates an agreement by providing the details on agreement content (who, what, when, where, why), and schedule, to the Agreements/IGA Lead. This could include a draft scope of the work identified with input from the Utilities, or a draft of the guidelines for interaction between the Design/Build Contractor, Utilities and WSDOT or ODOT during further design and construction.

For utilities on the Oregon side of the project, the ODOT State Utility Liaison is the Utilities Lead and determines whether the agreement requires a Letter Agreement or an IGA. In the case of a Letter Agreement, the ODOT State Utility Liaison negotiates, writes, and signs the agreement with the Utility(ies). In the case of a Letter Agreement, the State Utility Liaison and the Utility(ies) sign a Reimbursement Information form. In the case of an IGA, the process below is followed.

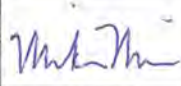
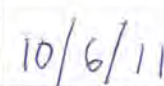
- Agreements/IGA Lead prepares a first draft of the agreement documents and distributes the draft documents to the Utilities Lead for initial review.
- Utilities Lead enters project specific details in Track Change mode or sends information to the Agreement/IGA Lead to incorporate in the agreement. Returns the edited documents to the Agreements/IGA Lead.
- Agreements/IGA Lead reviews/accepts/incorporates changes, and works with Utilities Lead to resolve any questions. Agreements/IGA Lead distributes a clean draft to Utilities Lead for concurrence with revisions to the draft agreement.
- Utilities Lead concurs with the revisions and distribution of the draft agreement.
- Agreements/IGA Lead distributes the draft agreement to the Utility, and copies the Specialty Services Manager and Utilities Lead on the distribution. The distribution form will include a clearly defined date to return review comments.
- Agreements/IGA Lead tracks the progress of reviews and initiates any necessary follow up with Utility to ensure reviews are performed and comments provided in a timely manner.
- Agreements/IGA Lead coordinates with the Utilities Lead, and the Specialty Services Manager, if necessary, to resolve any questions or comments received from Utility reviewers. Agreements/IGA Lead finalizes the draft agreement after resolution of review comments.
- Agreements/IGA Lead sends the draft agreement to WSDOT HQ Utilities, Railroad, and Agreement Section for their review and commenting for Utilities

work in Washington, or to ODOT's Region 1 Utility Specialist for review and commenting for Utilities work in Oregon.

- Agreements/IGA Lead coordinates with the Utilities Lead to resolve any questions or comments received from WSDOT HQ Utilities, Railroad, and Agreement Section or from ODOT's Region 1 Utility Specialist. Agreements/IGA Lead finalizes the agreement after resolution of review comments. If required, the Agreements/IGA Lead sends the final agreement to WSDOT HQ Utilities, Railroad, and Agreement Section for processing by the AAG as to form, or to the State Utility Liaison, thru ODOT's Region 1 Utility Specialist, for processing as to compliance and consistency to ODOT's Utility Relocation Program.
- WSDOT HQ Utilities, Railroad, and Agreement Section coordinates obtaining AAG's signature on two original copies for utilities work in Washington. AAG signs two originals and sends both to CRC's Agreements/IGA Lead.
- ODOT's State Utility Liaison coordinates obtaining AG's signature on two original copies for utilities work in Oregon. AG signs two originals and sends both to CRC's Agreements/IGA Lead.
- Agreements/IGA Lead sends two original documents of the finalized agreement to Utility for signatures and processing by Utility authorized signatories. Agreements/IGA Lead receives signed documents from Utility.
- Agreements/IGA Lead gathers final WSDOT or ODOT signature from CRC authorized signatory per the most current CRC Delegation of Authority Table for Utilities work in Washington, or from the ODOT State Utility Liaison for work in Oregon.
- Agreements/IGA Lead sends one original to WSDOT HQ or to ODOT's State Utility Liaison, as applicable, one original to Utility, and keeps a copy at the CRC office.

E. ATTACHMENTS

None

11.2.4	CRC PROJECT PROCEDURES	REVISION DATE: -	
	Field Incident Notification - Internal Staff	APPROVAL  MANAGER	 APPROVAL DATE

A. OBJECTIVE

To provide the project with a system for internal notification for incidents occurring in the field to ensure necessary CRC disciplines and leadership are informed and can determine necessary additional contacts outside the project office.

B. DEFINITIONS

Field Crew – Any staff working on the job site in the field.

Field Staff – Staff regularly assigned to the CRC project office responsible for overseeing field work: Field Operations Manager; Structures Engineering Manager; Assistant Structures Manager.

Discipline Specialists – Discipline Specialist with specific knowledge of engineering, environmental or communications considerations related to field work.

Leadership – Leadership staff within the CRC project office including CRC Director and Deputy Director.

C. REFERENCE DOCUMENTS

1. Field Work Incident - Internal Notification Protocol for CRC Office

D. WORK PROCESS

1. Field Staff reviews the Field Work Incident – Internal Notification Protocol prior to contract work beginning to determine if a contract or task specific protocol should be established. If so, Field Staff edits the notification protocol to reflect the contract or task specific protocols and provides copies to CRC’s Field Staff, Discipline Specialists, Communications, Front Desk, and Leadership. Field Staff files this Field Work Incident – Internal Notification Protocol with project files.
2. Field Staff provides Field Crew with contact information (desk and cellular phones when available) for pertinent Field Staff, Discipline Specialists, Leadership and Front Desk.

When an incident occurs:

3. Field Crew takes necessary action on-site according to the contract between their employer and WSDOT.
4. Field Crew contacts the identified Field Staff by speaking with them personally; a voice message is not acceptable for this notification.
5. If no identified Field Staff is available, the Field Crew will contact the CRC Front Desk, during regular business hours, and request their assistance. Front Desk staff will locate and connect the Field Crew with an identified Field Staff member or will ensure that notice is provided to an identified Field Staff member by working with staff available in the office.


6. If no identified Field Staff is available outside of regular business hours, the Field Crew will leave a message on the CRC Field Operations Manager's cell phone and continue to try to notify a Field Staff personally. Continued attempts to notify is defined as phoning identified Field Staff hourly until one person to person notification has been achieved.
7. Identified Field Staff identifies the disciplines which require notification.
8. Identified Field Staff notifies either the Task Lead or Discipline Specialist for each applicable discipline, as well as communications staff, and Leadership.
9. Identified Field Staff and/or Discipline Specialists in coordination with Leadership determine any external notifications necessary and staff responsible to conduct these external notifications specific to the nature of the incident.
10. External notification is completed as agreed to by Field Staff, Discipline Specialists and Leadership

Approval Levels

- a. CRC Director or Deputy Director must approve external notification.

E. ATTACHMENTS

None

12.2	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	Design Criteria Approval and Modifications	APPROVAL 	9/29/11 APPROVAL DATE
		MANAGER	APPROVAL DATE

A. OBJECTIVE

To create, approve, and modify the CRC Design Criteria to be used in the design of highway, structures, transit, and ancillary elements of the CRC Program. The CRC Program is a multi-modal project that draws upon numerous sources for its design criteria. These sources comprise the CRC Design Criteria, which includes but is not limited to reference manuals, documents, and memorandums. It is expected that some reference documents, identified as 'Controlled Documents,' may have its criteria updated or modified during the PE and Final Design phases, necessitating updates to individual CRC design criterion on an as-needed basis. This procedure also provides the CRC Program with the process to modify its design criteria when necessary and as allowed by executed Intergovernmental Agreements (e.g. with cities of Portland and Vancouver, TriMet, and C-TRAN).

B. DEFINITIONS

Design Approval - Documented approval of the design criteria which becomes part of a Design Documentation Package (WSDOT) or Design Acceptance Package (ODOT).

Controlled Documents - Key documents developed internally or acquired from external sources, and used as authoritative references during the development of design for the CRC Program.

C. REFERENCE DOCUMENTS

1. CRC Project Management Plan
2. CRC Quality Assurance Manual - Controlled Documents Procedure
3. WSDOT Design Manual, Chapter 300 – Design Documentation, Approval, and Process Review
4. ODOT Highway Design Manual, Chapter 13 – Design Exception Process

D. WORK PROCESS

1. The Highway, Structures and Transit Managers assisted by their Discipline-Specific Leads are each responsible for identifying and approving the list of required reference manuals and any augmentations with pertinent provisions of project specific criteria to be detailed in the CRC design criteria technical memorandums.
2. Design plans and specifications prepared by Contractors shall be prepared in accordance with approved CRC Design Criteria.
3. The Discipline-Specific Leads are responsible for confirming the relevance of proposed design criteria technical memorandum update(s), need to incorporate, and consistency with the appropriate state DOT's reference manuals and current engineering practices and procedures.
4. The Discipline-Specific Leads are responsible for identifying deviations or exceptions to ODOT, WSDOT and TriMet design standards in their respective discipline for inclusion into their individual design approval files, documenting the need and

justification for each deviation or exception, and obtaining approval, in writing, of the respective Highway, Structures and Transit Manager and:

- For Washington-based Highway work elements, obtaining approvals for the levels described in the WSDOT Design Manual, Chapter 300, Exhibits 300-7 and 300-2.
 - For Oregon-based Highway work elements, obtaining approvals for the levels described in the ODOT Highway Design Manual, Chapter 13.
 - For transit project packages, no approvals other than the Transit Manager are required.
5. The Discipline-Specific Leads are responsible for updates and modifications to the CRC Design Criteria and to incorporate any design-related requirements in executed Intergovernmental agreements (IGAs). They shall follow the review and approval process described in this procedure with special attention to identifying the version of any reference manual required by executed IGA's (with cities of Portland and Vancouver, and TriMet and C-TRAN).

The Discipline-Specific Leads shall not subsequently incorporate into the CRC Design Criteria revised versions of reference manuals listed in IGAs without prior written concurrence of the respective Highway, Structures and Transit Managers, and the approval of the CRC Administrator if revised versions result in cost and schedule impacts to the CRC Program.


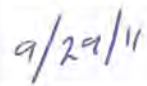
6. Redistribution of the revised CRC Design Criteria shall be carried in accordance with the requirements of the CRC Quality Assurance Manual - Controlled Documents procedure.

Approval Levels

- a. Transit Manager with concurrence from the Deputy Transit Manager provides final approval, in writing, of CRC Design Criteria (transit portion), and any future modifications, before using in the design.
- b. Highway and Structures Managers provide final approval, in writing, of CRC Design Criteria (non-transit portion), and any future modifications, before using in the design.
- c. WSDOT SW Region Project Delivery Engineer and WSDOT Headquarter Design provide approval for design deviations or exceptions (non-transit), in writing, before using in the design.
- d. ODOT Region 1 Technical Center Manager and State Traffic/Roadway Engineer provide approval for design exceptions (non-transit), in writing, before using in the design.

E. ATTACHMENTS

None

12.4.3	CRC PROJECT PROCEDURES MANUAL	REVISION DATE:	
	ProjectWise Architectural and Engineering Drawing Management	APPROVAL  MANAGER	 APPROVAL DATE

A. OBJECTIVE

To provide guidance on accessing and managing the development of Architectural and Engineering Drawings that are controlled documents to see that changes and updates are made in a systematic manner, each file has a record in the database, and that all parties are working from the latest version of the engineering drawings.

The Highway, Structures, and Transit Managers (discipline managers) are responsible to ensure their design staff (agency and consultant) follows established ProjectWise process.

B. DEFINITION

User - Anyone with an assigned login and access to ProjectWise

Group - Selection of Users who have same access/privileges to a folder or document. This function is used to manage access. CRC's ProjectWise configuration currently has the following discipline groups:

- Administrator
- Super User
- CADD
- Design
- Read Only

Controlled Documents – Key documents that are either developed internally or acquired from external sources, and used as authoritative references during the development of design and construction of the CRC Program.

C. REFERENCES

1. Project Management Plan
2. WSDOT Electronic Engineering Data Standards (EEDS) Manual (May 2010)

D. WORK PROCESS

1. The CAE Systems Manager is the ProjectWise Administrator. The ProjectWise Administrator is responsible for establishing ProjectWise accounts for new Users, assigning Users to groups, and making modifications to these groups as needed.
2. The ProjectWise Administrator will manage the assignment of group permissions for the folders and documents for their respective Project folders. Typical securities setting for Project folders is as follows:

<u>Discipline Groups</u>	<u>CADD Folders – access</u>	<u>Design Folders - access</u>
CADD	Create, Read, Write	Create, Read, Write
Design	Create, Read, Write	Create, Read, Write
Read Only	Read	Read

3. The ProjectWise Administrator will maintain a current list of Users, their group assignment, and any unique access privileges necessary to perform their tasks.

4. All requests for modification of User permissions must follow prescribed protocol described in attachment 12.4.3-A ProjectWise Management Plan (March 2011), Section D.
5. All requests to change security of documents and folders must be submitted to the ProjectWise Administrator. Changes can only be made by the ProjectWise Administrator.

Folder and Document Creation and Handling

The ProjectWise Administrator has rights to create folders, sub-folders, and documents as needed. Members of the CADD and Design Groups have rights to create sub-folders and documents. Other groups have various permissions assigned by the ProjectWise Administrator.

The file naming and folder structure within ProjectWise is based on the guidelines established by the WSDOT Electronic Engineering Data Standards (EEDS) Manual (May 2010).

E. ATTACHMENTS

1. 12.4.3-A ProjectWise Management Plan (March 2011)
2. 12.4.3-B CRC ProjectWise Quick-Start Guide

Columbia River Crossing

ProjectWise Management Plan

March 2011

CRC Procedure 12.4.3-A



1. Scope

Introduction

The goal of this PMP is to provide standards to be used by all members of the Columbia River Crossing Project (CRC) to access and manage the architectural and engineering drawings through the life of the Project. The instructions are guidelines and boundaries, not barriers, for our team members, and are intended to supplement WSDOT documents.

General Information:

MicroStation, InRoads and ProjectWise will be used for this Project. Work by team members must be delivered in MicroStation, using current WSDOT and CRC Expanded Levels standards.

All Project MicroStation, InRoads and survey files will be stored and accessed via ProjectWise.

This PMP has been created for use by the CRC. During this Project, the software, standards, regulations, and team members will change. A reasonable effort will be made to keep this document current and relevant. If issues are found that do not reflect a current situation, please call them to the attention of the CRC CAE Manager to have them addressed.

Document Locations

The CRC is using ProjectWise as its design file management software. Files/documents created from MicroStation, InRoads, survey or other specialty design software will be in ProjectWise. For information on other file/document management, please check with the Project's Document Controls group.

i. CRC ProjectWise

The **ProjectWise Explorer** database is used for storing MicroStation, InRoads and survey files. Other file types supporting MicroStation and Inroads are also stored in this database. Users must have a CRC ProjectWise account in order to access the Project. ProjectWise licenses are automatically distributed through CRC.

Software and Versions used for Design and Drafting

Currently, the CRC Project uses the following versions of Computer Aided Engineering (CAE) software:

MicroStation V8 XM (V08.09.04.111)

InRoads XM Edition (V08.09.03.06)

ProjectWise Explorer V8i (Select Series 1)

These versions will be updated as necessary. Other software may be used for design, some of which will have graphic output that may be included in MicroStation files. Coordinate with the CRC CADD Manager to establish appropriate symbology.

ProjectWise Support Organization

ii. Support by Discipline

A contact support protocol has been established by the CRC ProjectWise Administrator. When Users experience ProjectWise issues, their organization's local ProjectWise support person is to be contacted. If the issue cannot be resolved by that support person, the following are to be the secondary contact (by discipline) – These contacts are also responsible for providing the CRC ProjectWise Administrator with information needed to establish new User accounts (See Appendix A):

Matt Deml (HDR) – *Columbia River and other “over-water” structures*
demlm@ColumbiaRiverCrossing.org
360-816-2193

Joel Tubbs (HDR) – *Landside Structures*
tubbsj@ColumbiaRiverCrossing.org
360-816-8877

Gavin Oien (DEA) – *Highway / Right of Way*
oieng@ColumbiaRiverCrossing.org
360-816-2176

Vicky Smith (DEA) – *Transit*
smithv@ColumbiaRiverCrossing.org
360-816-8887

Heather Wills (ODOT) – *Environmental*
wills@ColumbiaRiverCrossing.org
360-816-2199

Daniel Teran (WSDOT) – *Utilities Mapping*
terand@ColumbiaRiverCrossing.org
360-816-2205

Upon receiving notification that a User is experiencing ProjectWise issues, the above contacts will notify the CRC ProjectWise Administrator.

iii. CRC ProjectWise Administrator

The CRC CAE Systems Manager serves as CRC ProjectWise Administrator. He is responsible for establishing accounts for new Users, assigning Users to groups, and making modifications to these groups as needed. He is also a resource for troubleshooting problems within ProjectWise.

Ray Barker
barkerr@ColumbiaRiverCrossing.org
(Business Hours) 360-816-8854 (After Hours) 360-903-1316

iv. Additional ProjectWise Support

In the event that the CRC ProjectWise Administrator is not available, below are additional support contacts:

WSDOT HQ CAE Help Desk
HQCAEHelpDesk@wsdot.wa.gov
(Business Hours) 360-709-8013

Scott Soper (WSDOT CAE Emerging Technologies Coordinator)
sopers@wsdot.wa.gov
(Business Hours) 360-709-8005 (After Hours) 360.485.8703

2. ProjectWise

Introduction

ProjectWise is a network document management tool that allows multiple Users to collaborate from various locations to work on the same Project(s). ProjectWise allows a User to checkout a document or file, modify it, and then check the file back in to the network so others can reference the work. Unlike Microsoft Windows Explorer environments with a “real & tangible” folder and file structure, ProjectWise Explorer is a database where each file is a record in that database. .

Users and Groups

User: Anyone with an assigned login and access to ProjectWise.

Groups: Selection of Users who have same access/privileges to a folder or document. This function is used to manage access. At the CRC, ProjectWise has the following discipline groups:

- Administrator
- Super User
- CADD
- Design
- Read Only

A User may be a member of multiple ProjectWise groups. Most Users will fall into either the **CADD** group or **Design** group, depending on their roles and duties. Some Users are in both **CADD** and **Design** groups. If you are unable to perform a function, it may be because of your group assignment and the respective access rights. To request modification of User permissions, please follow prescribed support protocol (See Section D, this document).

Folder and Document Security and Access

Only an Administrator has permissions to change security of documents and folders.

The CRC ProjectWise Administrator will manage the assignment of group permissions for the folders and documents for their respective Project folders.

Typical securities setting for Project folders.

Discipline Groups	CADD Folders - access	Design Folders - access
• CADD	Create, Read, Write	Create, Read, Write
• Design	Create, Read, Write	Create, Read, Write
• Read Only	Read	Read

The CRC CADD Manager may request the CRC ProjectWise Administrator to create different groups to suit their work flow or task assignments. The CRC CADD Manager develops list of Users, recommends their group assignment, then forwards to the CRC ProjectWise Administrator. Once the group is created, the CRC ProjectWise Administrator assigns them to the folders.

The CRC CADD Manager or the Discipline Support contacts will gather new User account information, complete and forward the New User Application document to the CRC ProjectWise Administrator for account setup. (See Appendix A)

The CRC ProjectWise Administrator will schedule installation of ProjectWise on User’s machine. The CRC CADD Manager will provide instruction and/or training on ProjectWise as necessary.

The CRC ProjectWise Administrator will maintain a current list of Users, their group assignment, and any unique access privileges necessary to perform their tasks. The CRC CADD Manager will submit requests for changes in User’s group assignment to the CRC ProjectWise Administrator. They will also notify the CRC ProjectWise Administrator of Users who will no longer be working on the Project as soon as that is established.

Folder and Document Creation and Handling

The CRC ProjectWise Administrator has rights to create the folders, sub-folders, and documents as needed. Members of the CADD and Design Groups have rights to create sub-folders and documents. Other groups have various permissions assigned by the CRC ProjectWise Administrator.

Folder Structure

Under the "Documents" folder, folders are established for each Project. The Project folders enable the ProjectWise Administrator to manage access/permissions to design files, assist other team members in locating information, and facilitate document maintenance.

All Users have permission to view/read-only all files under the CRC Project folder.

Users have additional rights under their Project folder depending on their role in the Project. The CRC ProjectWise Administrator establishes and maintains this property.

Each User may have a working folder assigned to them where they may create and maintain sub-folders and documents for their use. Under this folder, Users should store any MicroStation and Inroads files they are actively working with. Other files should be referenced into these working/scratch files.

Note: The file naming and folder structure within ProjectWise is based on the guidelines established by the WSDOT Electronic Engineering Data Standards (EEDS) Manual (May 2010).

Appendix A. ProjectWise New User Application

1. Please provide the following information:

Requestor Name:

Email:

Phone #:

New User Name:

Organization:

Email:

Phone No:

Their direct task lead/manager's name:

Discipline and specific task (if known):

Role:

Access Needed:for ProjectWise:

(Example -- CADD, Design, Manager/Reviewer (Read Only))

Your Organization's ProjectWise contact person:

Name:

Email:

Phone No:

2. Submit above information by email to the CRC ProjectWise Administrator:

- Ray Barker
barkerr@columbiarivercrossing.org
360-816-8854 (office)

When new User account has been established, the CRC ProjectWise Administrator will email User with the login name and password and attach the links to:

- **CRC ProjectWise Management Plan**
- **CRC ProjectWise Quick-Start Guide**

CRC ProjectWise Quick-Start Guide

Accessing Files in ProjectWise Explorer

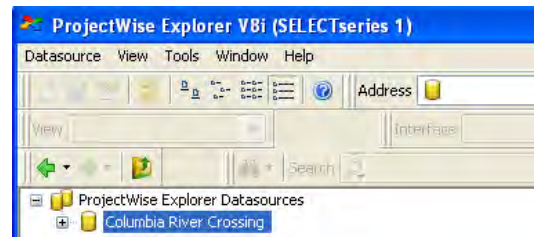
There are generally two ways to access files in ProjectWise Explorer. You can open ProjectWise directly to see the project files or you can open an application that has been integrated with ProjectWise and access the files through the application. Opening files through the ProjectWise Explorer will give you much more access to file information than it will through an application. The first part of this guide covers the ProjectWise interface and the last section covers the MicroStation interface.

Accessing files directly through ProjectWise Explorer.



Go to **Start > Programs > Engineering Applications**, or use the desktop icon.

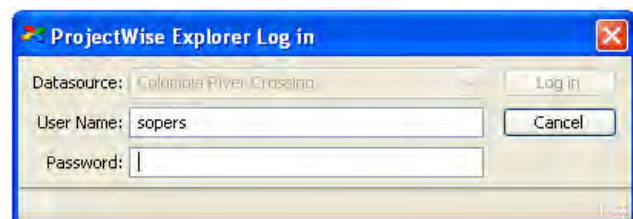
Click on the plus symbol next to the Project Datasource you want to access.



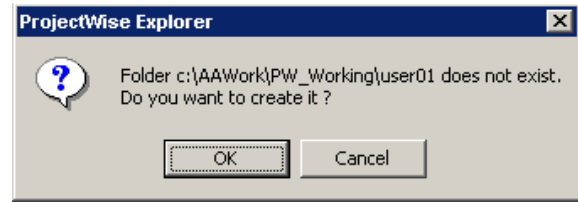
If you have a **CRC** domain account, ProjectWise will use your Windows (CRC) login and password to open the session. **Note:** Logins and passwords **are** case sensitive in ProjectWise. Notice the **CRC/** preceding the user ID.



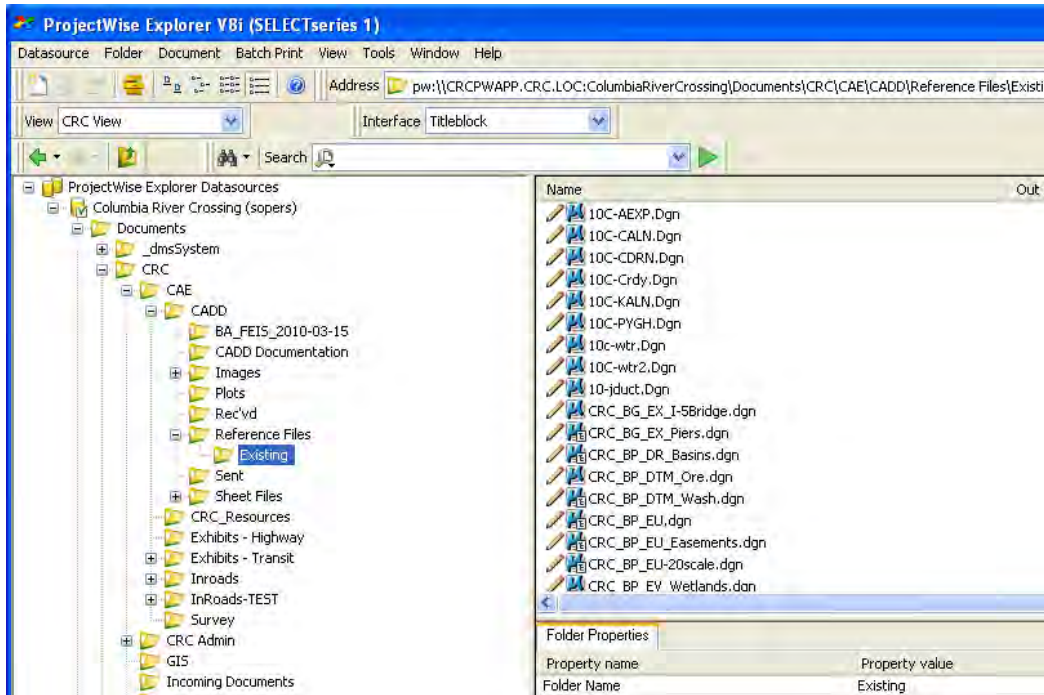
Users outside the CRC environment have logical ProjectWise accounts that use unique IDs and passwords. Contact the CRC ProjectWise Admin for this information.



The first time you access ProjectWise on any PC, you will see the following dialog box - *Internal users* should select **OK** to create the local working directory. *External users* will have the option to create this folder in a different location.



When ProjectWise Explorer opens you can scroll to the folder and/or file you're working with.



Document Icons

Each file will have an icon associated with it describing its status:



Read / Write Access



Read Only Access (due to access control or the file is a previous version)



File is **Locked** (the file is either checked out or exported by another)



File is **Checked Out** by you (others see the **Lock** symbol)



File has been **Exported** by you (others see the **Lock** symbol)

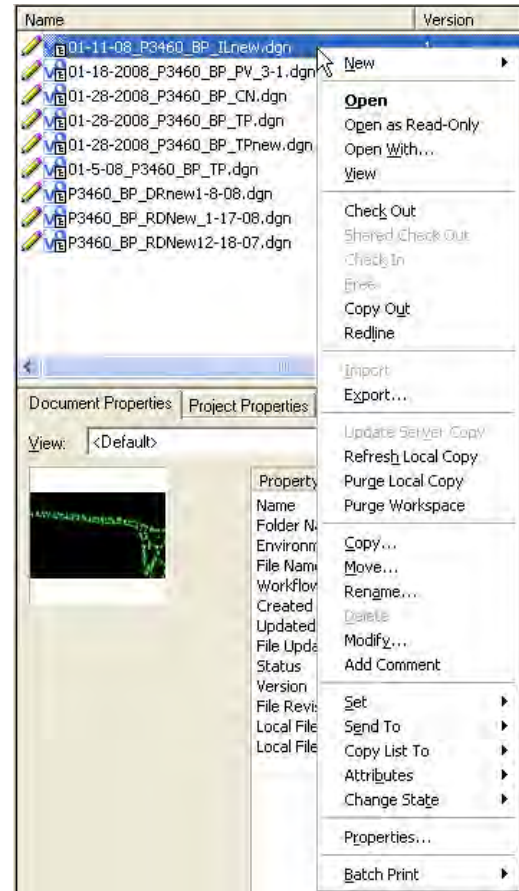


File is in **Final Status**

Working With Documents

You can access files in ProjectWise in a variety of ways. If you double-click on a file, that file will be accessed according to the default method – typically it will be checked out and opened. To access files in other ways, right click the file to see options.

Only the most pertinent options will be covered in this guide.



Open

Checks out and opens a document in its specified software. The file shows that it is checked out in ProjectWise and cannot be opened by others, only copied.

Open as Read-Only

Opens the file as read-only but **does not check it out**. The file is available for others to check out and modify while you are viewing it.

Check Out

This checks out a file but does not open it. The file shows that it is checked out in ProjectWise and it is unavailable to others.

Use this when you want to secure a file to work on later.

Check In

Checks a file back into ProjectWise. File is returned to ProjectWise and is available for others to check out.

Free

Freeing a document changes the status of the file in ProjectWise from Checked Out to Checked In and makes it available to others. If a User has checked out a file and is away from the office, the administrator can free the document in ProjectWise. Any work that was done in the file by that User will be lost.

Note:

If you have opened a document but haven't modified it, it is better to free the document than to check it back in if you don't want a record that inaccurately indicates that you modified it.

Copy Out

Copies the file to your local working directory. Does not check out the file or lock it down. You will be unable to check the file back in so consider this a **read-only** file. Some users use this to pre-load a group of files to their PC.

Properties – See next section.

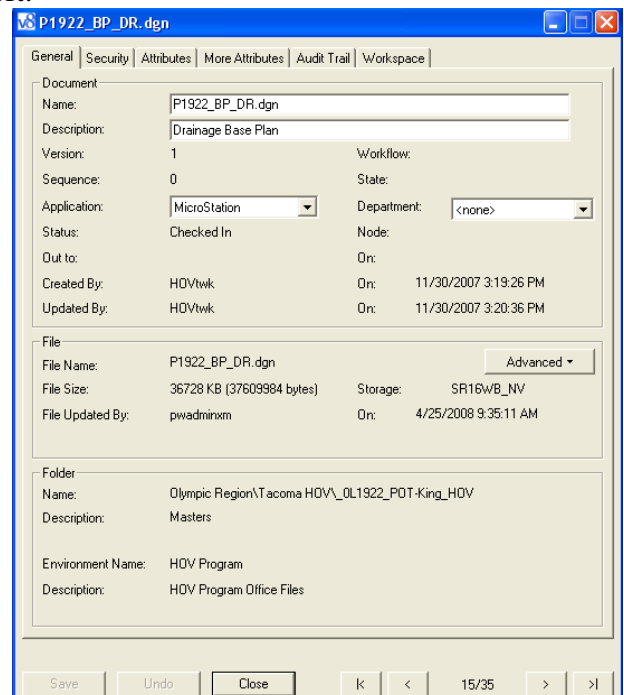
Document Properties

To see the Document Properties of a file, right click the file and select **Properties** near the bottom of the list. This will open a window showing you the properties of the file with the file name at the top.

Notice that there is a **Document** name and a **File** name. When a file is brought into ProjectWise, by default it uses the file name for the document name. It's the document name you see under the "**Name**" column header in the documents window. If you want to see a document's file name, add the **File Name** information column (see previous exercise.)

Note: Document name and File name should **always** be the same.

The **Audit Trail** tab allows you to track who has accessed the file and any comments that have been left.

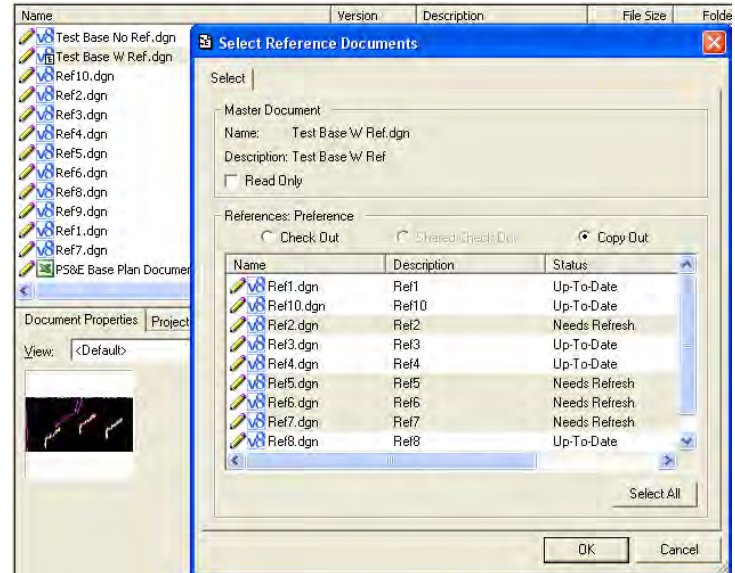


Opening and Closing Documents

When a file is opened in ProjectWise, associations with other files are recognized and those files are copied out as well. For example, if a MicroStation sheet file is opened, ProjectWise sees the files that are used to populate the information on the sheet, and gives you the option of copying those files out along with the sheet file.

In this example, **Test Base W Ref.dgn** has 10 references attached.

Notice that ProjectWise recognizes that some are **Up-To-Date** and some need to be refreshed. By default, any reference files that need to be refreshed are selected for downloading. The user has the option to select or de-select the files to download.



Also notice that you have the option to **Check Out** or **Copy Out** the reference files. By default, the files are copied out and are still available for others to edit.

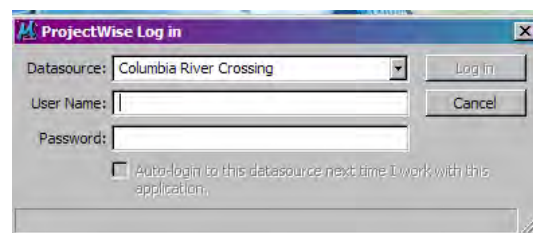
Deleting Files

To avoid unintentional consequences, CRC ProjectWise is configured so that users cannot delete files. If you need to have files removed from ProjectWise, rename the file(s), adding the text “DELETE_” (all caps) to the front of the file name. For example, test.dgn would become DELETE_test.dgn. The ProjectWise administrator will delete the file(s). Use the same procedure if you need a folder deleted.

Accessing files through An Integrated Application.

When an application is integrated with ProjectWise, you can access files by opening the application. This guide will cover the MicroStation interface.

Begin by opening MicroStation through the CAE Control Panel. MicroStation begins to open but first the following window will appear:

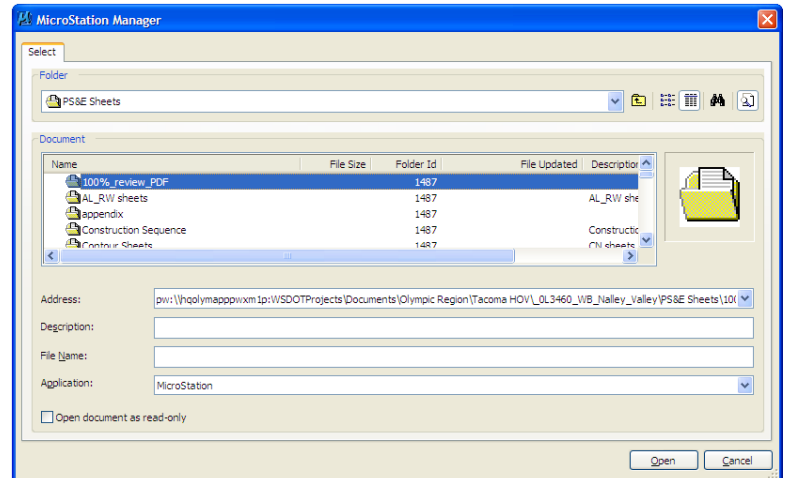


To access files through ProjectWise, enter your user name and password.

Note:

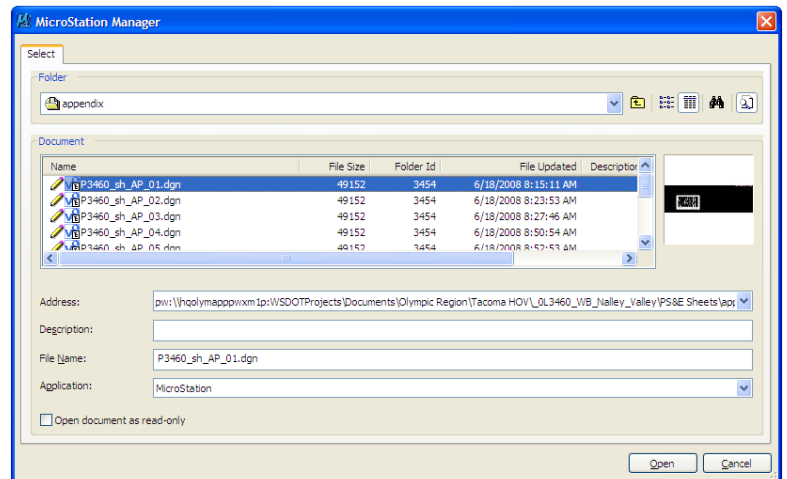
If you select **Cancel**, then MicroStation will bypass ProjectWise and open the MicroStation manager window.

After you have entered your password, a window appears that shows the project's folders. You can click on the folders in the center section or use the back button to access a particular folder. Notice the folder path in the Address bar.



When you get to the file level you can see the file properties. Double click on the file to open it.

Notice that there is an option in the lower left of the window to **Open document as read-only**.



CRC ProjectWise User Support

A contact support protocol has been established by the CRC ProjectWise Administrator. When Users experience ProjectWise issues, their organization's local ProjectWise support person is to be contacted. If the issue cannot be resolved by that support person, the following are to be the secondary contact (by discipline) – These contacts are also responsible for providing the CRC ProjectWise Administrator with information needed to establish new User accounts (See Appendix A):

Matt Deml (HDR) – *Columbia River and other “over-water” structures*

demlm@ColumbiaRiverCrossing.org

360-816-2193

Joel Tubbs (HDR) – *Landside Structures*

tubbsj@ColumbiaRiverCrossing.org

360-816-8877

Gavin Oien (DEA) – *Highway / Right of Way*

oieng@ColumbiaRiverCrossing.org

360-816-2176

Vicky Smith (DEA) – *Transit*

smithv@ColumbiaRiverCrossing.org

360-816-8887

Heather Wills (ODOT) – *Environmental*

willsh@ColumbiaRiverCrossing.org

360-816-2199

Daniel Teran (WSDOT) – *Utilities Mapping*

terand@ColumbiaRiverCrossing.org

360-816-2205

Upon receiving notification that a User is experiencing ProjectWise issues, the above contacts will notify the CRC ProjectWise Administrator.

Ray Barker

barkerr@ColumbiaRiverCrossing.org

(Business Hours)

360-816-8854

(After Hours)

360-903-1316

In the event that the CRC ProjectWise Administrator is not available, below are additional support contacts:

WSDOT HQ CAE Help Desk

HQCAEHelpDesk@wsdot.wa.gov

(Business Hours)

360-709-8013

Scott Soper

sopers@wsdot.wa.gov

(Business Hours)

360-709-8005

(After Hours)

360.485.8703