Appendix I

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DELIVERABLE EXPECTATION MATRIX

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Properties • Confidence Reports • Baseline schedule • PDS Revised per Mgmt 0172 and Project Control • Quarterly Performance • Monthly Statused Schedules and Project • Memo to OEO 0169 • Communication Plan • DS Revised per Executive Appr. Submittal Incl: 0111 Control Spreadsheet Control Spreadsheet Ontrol Spreadsheet Ontrol Spreadsheet Memo to OEO Memo to OEO • Scope Validation • Communication Plan • Scope Validation • Concept Drawings • Outreach Decisions Outreach Decisions Outreach Decisions Outreach Decisions Project Development 0185 • Verify Project Definition • Verify Project Definition • Outreach Decisions • Outreach Decisions • Outreach Decisions • Project Development 0185 • Verify Decisions • Verify Decisions • Project Cantrol • Record of Contact • Outreach List • Project Development 019 • Verify Decisions • Project Cantrol • Project Analysis • Outreach List • Project Cantrol • Construction Funding • Verify Design Decisions • Project Kick Off Meeting • Project Analysis					 Stakeholder List 							standards historical data
Pige -Quarterly Performance -Budget -Review Design Documentation Package (DDP) -Communication Spreadsheets -Control Spreadsheet -Memo to OEO 0169 -Risk assessment -Communication Plan -Communication Plan -Scope Validation -Control Spreadsheet 0111 Control Spreadsheet 0172 -Ad Package to PQ • Verify Project Definition -Conspect Management plan -Conspect Management plan -Scope Validation -Conspect Management -Construction Preparation -Construction Funding -Construction Funding -Construction Funding -Construction Funding -Design Valiance (Now and) -Design Valiance (Now an			5									base
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0169 • Risk assessment • PDS Revised per Executive Appr. Submittal Incl: 0111 Control Spreadsheet 0172 • Ad Package to HQ • Project Summary • Communication Plan • Communication Plan • Communication Plan • PDS Revised per Executive • Ad Package to HQ • Scope Validation • Control Spreadsheet • Control Spreadsheet • Outreach Decisions • Pre-Ad Review and • PDP • Ad Package to HQ • Verify Project Definition • Verify Environmental • QA/QC plan • Cost Estimate • Outreach List • Pre-ad Review and • Project Development • Outreach List • Project Development • Construction Preparation		 Quarterly Performance 					Spreadsheets					File
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Project Validation • Change management plan • Project Description • Record of Contact 0185 Pre-Ad Review and Project Development 0198 • Verify Project Definition • Verify Project Definition • Outreach Decisions • Project Development 0198 • Verify Environmental 0121 • Cost Estimate • Cost Estimate • Outreach Decisions • Record of Contact • Outreach Decisions • Preparation • Construction Preparation • Verify Environmental 0121 • Cost Estimate • Cost Estimate • Outreach Decisions • Request WMBE & Training • Construction Preparation • Construction Preparation • Verify Design Decisions • Project Change Log • Project Analysis • Project Analysis • Outreach Decisions • Public Hearings Record Goals • Outreach Decisions • Construction Funding • Verify Design Decisions • Project Change Log • Project Analysis • Design Criteria worksheets • Design Criteria worksheets • Outreach Decisions • Stamped Cover Sheet • Design Record Close Out • Project Kick Off Meeting 0166 www.wsdot.wa.gov/design/pr • ojectdev • ojectdev • ojectdev • ojectdev • Design Variance Inventory				 PDS Revised per Executive 				Control Spreadsheet				Budget Workbook,
* Estimate Validation • QA/QC plan • Concept Drawings • Concept Drawings • Outreach Decisions Pre-Ad Review and Project Development Approval Submittal Construction Preparation • Verify Project Definition • Verify Environmental 0121 • Cost Estimate • Cost Estimate • Public Meeting Minutes • Request WMBE & Training Project Name Setup • Verify Design Decisions • Project Change Log • Project Change Log • Project Change Log • Design Criteria worksheets • Design Criteria worksheets • Design Criteria worksheets • Design Approval Submittal • Design Approval	age.										 Ad Package to HQ 	schedule archieved on Z-PM
Verify Project Definition Verify Project Definition Verify Project Definition Site Plans and Elevations Outreach List Preparation Approval Submittal Construction Preparation Verify Environmental Review Summary 0121 • Cost Estimate • Cost Estimate • Public Meeting Minutes • Request WMBE & Training • Construction Preparation • Construction Pre	ana				, , ,							Stds
• Verify Environmental Review Summary • Verify Design Decisions Summary • Project Kick Off Meeting 0121 • Change Management • Risk Spreadsheet • Project Analysis • Design Criteria worksheets • Design Criteria worksheets • Design Criteria worksheets • Construction Phase File • Public Meeting Minutes • Public Meeting Minutes • Public Hearings Record • Request WMBE & Training Goals • Construction Phase File • Setup • Construction Funding • Design Record Close Out • Design Record Close Out • Design Approval Submittal • Design Variance Inventory	Ξ		• QA/QC plan									
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0166 www.wsdot.wa.gov/design/pr Cost and Risk Estimating ojectdev • Environmental Permits 0199			 Contingency Estimate 		0							
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Identified • Cost Estimate Summary • Contract Addendum					1					,		
• Risk Modeling Spreadsheet (for Nicole, with Budget • Respond to Bidder RFIs	1 !		Risk Modeling Spreadshee	t	0181			1			 Respond to Bidder RFIs 	
PS&E Review Comparison Worksheet)					PS&E Review							
QAQC Cover Sheets for the Contract										Contract		
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Deliverables Expectation Matrices

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	PE.PD.75.60	PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Project Management	0166 <u>Cost and Risk Estimating</u> • Risk Analysis: Self Modeling Spreadsheet (also see "Project Management" above) • Project Kick Off Meeting	0166 <u>Cost and Risk Estimating</u> • Scoping Level Cost Validation • Determine if project needs Value Engineering or Cost Risk Assessment/Cost Estimating Validation Process • Basis of Estimate (see Cost Estimating Manual) • Bid Book with Initial Estimate		0166 <u>Cost and Risk Estimating -</u> <u>60%</u> • Ebase Setup • Permit Cost Estimate • Risk Cost, 60% level • Cost Est, 60% level • Operations Cost Est. (CN) • Outreach Cost Est. (PE & CN) • Env. Monitoring Est. • Traffic Control Est. • Discipline Cost Estimates		0166 <u>Cost and Risk Estimating 90%</u> • Pay groups and pay items determined • Summary of Quantities Draft • Lump sum cost detail	0166 <u>Cost and Risk Estimating</u> <u>Final</u> • Cost Estimate Final • Cost estimate below the line items (building permit, operations cost, risk cost, environmental and archaeological monitoring) • Summary of Quantities Final		0166 <u>Cost and Risk Estimating</u> <u>Final</u> • Construction Estimate Final Revisions		
Environmental	0132 <u>Endangered Species Act</u> <u>Compliance</u> • Environmental Permit List • Project Kick Off Meeting 0138 <u>Environmental Permits</u> • Validate ERS (Environmental Review Summary) • Project Kick Off Meeting	 Environmental project schedule development 	0123 <u>Pre-Design Study</u> • Environmental Section of Pre-Design Study 0138 <u>Environmental Permits</u> • Boring Permit	0138 Environmental Permits • Discipline studies, reports, and predecessor information completed • Noise Variance Application • JARPA Preparation • Eelgrass Survey	0132 <u>Endangered Species Act</u> <u>Compliance</u> • Biological Assessment or No Effect Letter • Drawings for Permits • Noise Test for Monitoring Zone • Permit Drawings for ESA (CAD) • SEPA Checklist and Determination	0138 <u>Environmental Permits</u> • Follow Up with Permit Agencies	0138 <u>Environmental Permits</u> • All environmental special provisions approved and included in the PS&E plan set • Environmental Commitment Meetings Set Up • Water Quality Certification		0138 Environmental Permits • Environmental Commitment File Entered	0138 <u>Environmental Permits</u> • Environmental Commitment Meetings	0138 <u>Environmental Permits</u> • Deliver Env. Files to PM for archiving
Tribal Outreach				0109 <u>Tribal</u> • Initial Letters to Tribes • Tribal Interim Notifications			0109 <u>Tribal</u> • Tribal MOUs			0138 <u>Environmental Permits</u> Environmental Commitment Meetings	
Geotechnical	0143 <u>Geotechnical</u> • Project Site Data to RME - Geotech Work • Onsite field investigation scheduled (schedule and initiate no sooner than 1 year prior to construction) • Topographic survey requested	Geotechnical • Soil Boring Notice of Intent • Field and Core Investigation completed • Borings coordinated with	0143 Geotechnical • Location of Borings	0143 <u>Geotechnical</u> • Soils and Geotechnical Report Received					0143 <u>Geotechnical</u> • Boring logs submitted	0143 <u>Geotechnical</u> • Geotechnical Report compiled for contractor review • Geotechnical Report & cross-sections posted on website	

	Begin Preliminary Engineering	Project Planning and Endorsement (PMP)	Pre-Design Study (5%)	Geometric Review (30%) PE.PD.75.30 Design Approval	Environmental Review Documentation Complete	General Plans Review (60%)	. ,	Environmental Permits Received	Project Development Approval (100%)	Contract Ad and Award	PE Phase End (Close Out and Archiving)
Traffic and Operations	PE.PM.02.01 0117 Project Data • Project survey requirements finalized, including areas that may be Project Limits • Potential utility relocations identified • Utilities within the project limits notified • Washington Utilities Transportation Commission (WUTC) permit application for railroad crossings submitted		PE.PS.07	PE.PD.42.10 0117 Project Data • Record of Survey completed and filed • Utility Plan with as-built information completed and transmitted to Utilities • Preliminary Utility conflicts identified • Project Overview Meeting held with Utility Owners 0150 <u>Operations Plan</u> • Operations Project Review - Document Decisions • Terminal Traffic Analysis Report	PE.EV.18	PE.PD.75.60 0117 Project Data • Field review of proposed features completed • Utility conflicts confirmed and relocation letters sent to utilities • Utility relocation meeting held 0150 Traffic Analysis • Assumptions and conclusions in Traffic Analysis Report verified for consistency with design • Traffic control plans showing Construction Sequence and staging • Traffic Control Final Estimate	information and specifications Incorporated in PS&E • Letters of Understanding issued to utilities requiring relocation • Construction Maintenance Agreement completed 0150 PS&E • Staging and Channelization Plans	PE.EV.29	PE.PD.42.60	PE.PD.90.35	PE.PD.90.65
CIVI	Project Summary • Review Project Summary Docs • Civil Design Criteria • Project Analysis • Project Kick Off Meeting	0106 Project Management Plan • Validate Civil Project Scope, Schedule, Budget • Incorporate Civil Scope, Schedule, Budget into MDEM • Plans list with estimate of design hours • Signed Civil Internal Agreement (scope, sched., budget) 0172 <u>Civil Design</u> • Civil Risks Identified • 5% Civil Plan, Elevation, Phasing Plan • Construction Water Quality Monitoring Plan submitted • Hydraulic and Water Quality issues identified • Storm Water Management and type documented • Stormwater Management	Civil Design • Civil Site Plans and Elevations • Preliminary Civil Item Estimate	0172 <u>Design Approval</u> • Civil Design Criteria • Civil Concept Drawings • Civil Site Plans and Elevations • DDP 01F1 <u>Civil Design</u> • Paving Plans • Stormwater Plans • Stormwater Plans • Stormwater Plans • Utilities Plans • Civil Specifications 30% • Civil Specifications 30% • Civil Estimate 60% • Documented Minimum Requirements from Highway Runoff Manual <u>Special Provisions</u> • PSE Word Set Up • Initial Run List		01F1 <u>Civil Design</u> • Environmental Site Plans • Civil Plans 90% • Civil Details 60% • Civil Specifications 60% • Civil Estimate 90% • Civil Abbreviations & Symbols, General Notes 90% <u>Special Provisions</u> • Diver Provisions • Environmental Provisions Draft • GSPs • Penalties and Incentives Draft • Proprietary Item (Sole Source) Provisions • RGSPs Coordination with Disciplines • Staging Provisions Draft	01F1 <u>Civil Design</u> • Environmental Site Plans 100% • Civil Plans 100% • Civil Specifications 90% • Civil Specifications 90% • Civil Estimate 100% <u>Special Provisions - 100%</u> • Environmental Provisions Final • GSPs check for updates • Penalties and Incentives Final • Proprietary Item (Sole Source) Provisions updates • RGSPs Coordination with Disciplines • Staging Provisions Final • Summary of Geotechnical Conditions Appendix	01F1 <u>Special Provisions - 100%</u> • Environmental Appendix	01F1 <u>Civil Design</u> • Final Environmental Site Plans • Final Civil Plans • Final Civil Plans • Final Civil Specifications • Final Civil Estimate <u>Special Provisions</u> • Last Changes to Provisions • Incorporating 90% Review Comments	01F1 <u>Civil Design</u> • Response to Bidder RFIs • Addendum Preparation	01F1 <u>Civil Design</u> • Deliver Design Calcs to PM for archiving • Complete QA/QC

DELIVERABLE EXPECTATION MATRIX

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Architectural	0169 <u>Project Summary</u> • Review Project Summary Docs • Project Kickoff Meeting	0106 Project Management Plan • Validate Arch. Project Scope, Schedule, Budget • Incorporate Arch. Scope, Schedule, Budget into MDEM • Plans list with estimate of design hours • Signed Architectural Internal Agreement (scope, sched., budget) 0172 <u>Architectural Design</u> • Architectural Risks Identified • 5% Architectural Plan, Elevation, Phasing Plan	0123 <u>Pre-Design Study</u> • Architectural Section of Pre- Design Study	0172 <u>Design Approval</u> • Architectural Design Criteria: View Corridor & Bldg Height • Project Analysis • Architectural Concept	01F2 • Architectural Permit input	01F2 Architectural Design • Architectural Phasing Plan 60% • Architectural Building Plans 90% • Architectural Security Plans 90% • Architectural Sections 60% • Architectural Details 60% • Architectural Specifications 60% • Architectural Estimate 90% • Architectural Abbreviations & Symbols, General Notes 90% • Architectural Demolition Plans	01F2 Architectural Design • Building Permit Submittal • Architectural Phasing Plan 90% • Architectural Plans 100% • Architectural Sections 90% • Architectural Details 90% • Architectural Specifications 90% • Architectural Estimate 100%	01F2 <u>Architectural Design</u> • Building Permit Received	01F2 <u>Architectural Design</u> • All plans, specs, and estimate 100%	01F2 <u>Architectural Design</u> • Response to Bidder RFIs • Addendum Preparation	01F2 Architectural Design • Deliver Design Calcs to PM for archiving • Complete QA/QC
Structural	0169 <u>Project Summary</u> • Review Project Summary Docs • Scope for TS&L Determined • Structural Input on Environmental Documentation and Permits • Project Kick Off Meeting	0106 Project Management Plan • Validate Struct. Project Scope, Schedule, Budget • Incorporate Struct. Scope, Schedule, Budget into MDEM • Plans list with estimate of design hours • Signed Structural Internal Agreement (scope, sched., budget) 0172 <u>Structural Design</u> • Structural Risks Identified • 5% Structural Plan, Elevation, Phasing Plan	0123 <u>Pre-Design Study</u> • Structural Section of Pre- Design Study 1 0172 <u>Structural Design</u> • Structural Site Plans and Elevations • Preliminary Structural Item Estimate • Establish Structural Methodology • Reload and Familiarize Model • Determine Foundation Type • Determine Bridge Seat/Foundation Connection Type	Building Permit Pre- Submittal Mtg with Port Townsend Struct. Phasing Plan 30% Structural Plans 90% Structural Specs 60% Structural Construction Est.		01F3 <u>Structural Design</u> • Struct. Phasing Plan 90% • Structural Plans 90% • Structural Sections 60% • Structural Sections 60% • Structural Details 60% • Structural Spec 90% • Structural Construction Est. 90% • 90% Construction Sequence & Schedule • Ferry Service Impact 90% • Determine Foundation Size 100% • Structural Abbreviations & Symbols, General Notes 90% • Structural Demolition Plans • Bridge Seat, Headframe, Railings and Ladders, Trestle, Transfer Span, Materials Schedules • Possible: Dolphins, Wingwalls • Final Analysis 90% • Final Design 90%	01F3 <u>Structural Design</u> • Building Permit Submittal • Struct. Phasing Plan 100% • Structural Plans 100% • Structural Sections 90% • Structural Construction Est. 100% • 100% Construction Sequence & Schedule • Ferry Service Impact 100% • Bridge Seat, Headframe, Railings and Ladders, Trestle, Transfer Span, Materials Schedules • Wingwalls • Final Analysis 100% • Final Design 100%		01F3 <u>Structural Design</u> • All plans, specs, and estimate 100%	01F3 <u>Structural Design</u> • Response to Bidder RFIs • Addendum Preparation	01F3 <u>Structural Design</u> • Deliver Design Calcs to PM for archiving • Deliver Geotech report to Library • Complete QA/QC

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
	0169 <u>Project Summary</u> • Review Project Summary Docs • Project Kick Off Meeting	0106 <u>Project Management Plan</u> • Validate Elect. Project Scope, Schedule, Budget • Incorporate Elect. Scope, Schedule, Budget into MDEN • Plans list with estimate of design hours • Signed Electrical Internal Agreement (scope, sched., budget) 0172 <u>Electrical Design</u> • Electrical Risks Identified • 5% Electrical Plan, Elevation, Phasing Plan	Pre-Design Study •Electrical Section of Pre- Design Study 10172 <u>Electrical Design</u> • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate	0172 Design Approval • Electrical Concept Dwgs • Electrical Site Plans & Elev • Prelim. Electrical Item Est. • Electrical Design Criteria • Project Analysis 01F5 <u>Electrical Design</u> • Electrical Plans 60% • Utilities Plans • Electrical Specs 30% • Cone-Line & One-Line Demolition 60% • Temp Power Plan 60% • 30% Transfer Span PLC Cabinet Layout, HPU Input Electrical Plan, PLC Network Block Diagram, Motor Control Panel, PLC Schematic, Range Lights and Fog Lights, Attendant's Control Station & Bridge Control Station		01F5 <u>Electrical Design</u> • Electrical Plans 90% • Electrical Sections 60% • Electrical Details 60% • Electrical Details 60% • Electrical Estimate 90% • Electrical Abbreviations & Symbols, General Notes 90% • Electrical Demolition Plans • Lighting Plan 90% • One-Line & One-Line Demolition 90% • Temporary Power Plan 90% • 90% Transfer Span Electrical Plan & Schedules, PLC Terminal Wiring, Electrical Details, Conduit Block Diagram	01F5 <u>Electrical Design</u> • Electrical Plans 100% • Electrical Sections 90% • Electrical Details 90% • Electrical Specs 90% • Lighting Plan 90% • One-Line & One-Line Demolition Final • Temp Power Plan Final • Final Transfer Span Electrical Plan & Schedules, PLC Terminal Wiring, Electrical Details, Conduit Block Diagram		01F5 <u>Electrical Design</u> All plans, specs, and estimate 100%	01F5 <u>Electrical Design</u> • Response to Bidder RFIs • Addendum Preparation	01F5 Electrical Design • Deliver Design Calcs to PM for archiving • Complete QA/QC
Reviewers (Mech, Electrical, Structural, Maintenance, Construction, etc.)				0180 <u>Constructability Review</u> • Participate in 30% Constructability Review Session • Provide 30% Constructability Comments • Review and Comment on Draft Construction Schedule 0181 <u>PS&E Review</u> • 30% Design Peer Review		0180 <u>Constructability Review</u> • 60% Constructability Review • 00% Constructability Comments • Draft Construction Schedule Review 0181 <u>PS&E Review</u> • 60% Design Peer Review	0180 <u>Constructability Review</u> • 90% Constructability Review • 90% Constructability Comments • Draft Construction Schedule Review 0181 <u>PS&E Review</u> • 90% PS&E Building Permit Application Pactor • 90% Design For eview • State Materials Justification and Approval by ASDE • Discipline QAQC Memos		0181 <u>PS&E Review</u> • File Review Comments and Designer Replies in Project File • Final PS&E Contract Packaged for Management Review • Contract Package QAQC Cover Sheet for Ad and Award		
Construction				01AC <u>Construction Scheduling</u> • Draft Construction Schedule		01AC <u>Construction Scheduling</u> • Draft Construction Schedule • Construction Phasing Alternatives	01AC <u>Construction Scheduling</u> • Final Construction Schedule				0199 <u>Construction Admin</u> • Construction Funding • Design Record Close Out • Funding Adjust-to-Award • Contract Addendum • Respond to Bidder RFIs

DELIVERABLE EXPECTATION MATRIX

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Milestone Purpose	Provides basis to charter project team and begin developing the PMP Review Scoping documents	PM validates the project scope, schedule, and budget Management endorses the project's work plan	Refine the scope, schedule, budget Evaluate Alternatives	Documents design criteria and major design decisions. Documents the project purpose, type, strategy, phase durations, budget, and recommended ad date.	Complete NEPA/SEPA environmental process Complete the permit applications for agency approvals	Design of major project elements completed, review for constructability, conformance with standards	100 % PS&E review. Items missing from design should be minor and should be documented to reviewers.	All permits necessary for the project are received.	Comments from 90% review are incorporated. No other major changes to 90% PS&E review documents. At the end of this review, Contract Plans are Ad Ready.	Submittal of all final deliverables to Olympia for ad and award	Archive project electronic and hard copy files Document project in Z-PM standards file historical data base. Close out project through Project Controls Group.
Decisions Frozen and Milestones Completed (Overview)	Legislative budget Legislative ad dates	PMP complete Milestone dates set Schedule baselined Environmental Process defined Assumptions defined Risks defined File system and Logs are set up	Preferred alternative identified Predesign Study document complete OFM endorsed Predesign Study	Design criteria completed Alternative Analysis completed Design concept fixed Design type, size and location fixed Approval to begin ROW acquisition process Design Approval Package stamped and signed Draft construction schedule and phasing complete	documentation is considered complete on the date that all necessary NEPA/SEPA is complete Permits submitted to the agencies (excluding building and CZM permits)	All key project elements and features that drive the project outcome and costs are defined. Geometric Review comments resolved and documented. Design details to be completed identified	 ✓ The deliverables are substantially complete ✓ Review and acceptance of design detail of key elements and features ✓ Permits Obtained. All environmental permits are approved, verified, and accepted for inclusion into the plans ✓ General Plans Review comments resolved & documented. 	Permits are included in the contract documents	PS&E deliverables are complete. All review comments adjudicated. Plans and specifications stamped and sealed at end. ROW Certification Final Project Approval	Owner accepts design Approval to advertise ROW is clear	Consultants/WSDOT staff forward all required project records and files to the Project Manager Project Manager sends design file to library / construction group Electronic design file archived
	ninary Engineering										
	sign/PS&E Elements 0106 Draft Project Mgmt Plan • Deliverable Expectation Matrix • Critical Path Schedule • Milestone Schedule • Budget Sheet 01A0 Scheduling and Reporting Confidence Reports Quarterly Performance 0169 Project Summary • Scope Validation • Verify Project Definition • Verify Project Definition • Verify Design Decisions Summary	0101 <u>General Project Management</u> • Electronic and hard copy file System Set Up • Bid Book and Change Management Book Set Up 0106 <u>Endorsed PMP</u> • Signed Team Agreements • Baseline schedule • Budget • Cash Flow Sheet • Risk assessment • Communication Plan • Change management plan • QA/QC plan 0121 <u>Change Management</u> • Project Change Log • Contingency Estimate 0166 <u>Cost and Risk Estimating</u> • Risk Modeling Spreadsheet	0123 <u>Pre-Design Study</u> • PDS Draft Narrative • Alternatives Analysis • Cost Benefit Analysis • PDS Revised per Mgmt Review • PDS Final Narrative • PDS Final Narrative • PDS Revised per Executive 0111 <u>Communication Plan</u> • Draft Public Involvement Plan 0172 <u>Design Documentation</u> <u>Package (DDP)</u> • Design Approval Submittal (Concept Drawings, Site Plans, Elevations, Project Analysis, Cost Estimate)	0111 <u>Communication Plan</u> • Key Messages • Outreach Schedule • Project Description (Simple) • Impact to the Public • Draft Operations Plan • Draft Traffic Control Plan • Stakeholder List 0181 <u>PS&E Review</u> • QAQC Cover Sheets for the Project		Communication Summary • Record of Contact • Outreach Decisions • Outreach List • Public Meeting Minutes	01A0 Scheduling and Reporting • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet		01A0 Scheduling and Reporting • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet 0172 DDP Project Development Approval Submittal Project Development Submittal Includes: • Stamped Cover Sheet • Design Approval Submittal • Environmental Permits • Design Variance Inventory • Cost Estimate • Cost Estimate Summary (for Nicole, with Budget Comparison Worksheet) • Contract	01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet	0101 Project Management • Lessons Learned • Design File Transferred to CN • Design Records to Library • Design Files Archived • Consultant Evaluations • Team Evaluations • Copy records to Z-PM standards historical data base • DDP finalized and in Design File

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Environmental	Begin Preliminary Engineering PE.PM.02.01 0132 Endangered Species Act Compliance • Environmental Permit List 0138 Environmental Permits • Validate ERS (Environmental Review Summary) • Soil Boring Notice of Intent	Project Planning and Endorsement (PMP) PE.PM.03.15 0101 General Project Management • Team Agreement Validated	Pre-Design Study (5%) PE.PS.07 0138 Environmental Permits • Environmental Section of Pre-Design Study • Boring Permit	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10 0138 Environmental Permits • Discipline studies, reports, and predecessor information completed • Noise Variance Application • JARPA Preparation • Eelgrass Survey	Environmental Review Documentation Complete PE.EV.18 0132 Endangered Species Act Compliance • Biological Assessment or No Effect Letter • Drawings for Permits • Noise Test for Monitoring Zone • Permit Drawings for ESA (CAD) • SEPA Checklist and Determination	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90 0138 Environmental Permits • All environmental special provisions approved and included in the PS&E plan set • Environmental Commitment Meetings Set Up • Water Quality Certification	Environmental Permits Received PE.EV.29 0138 Environmental Permits • Validated ERS (NEPA CE) • HPA (Hydraulic Project Approval) • Section 402 NPDES Permit • Shoreline Permit • Shoreline Permit • Section 106 Corps and Tribal Response • SEPA Response to Comments • Noise Variance • USFW Biological Opinion • Section 106 Agreement on	Project Develo Approval (10 PE.PD.42.0 0138 Environmental Perr • Environmental Co File Entered
Tribal Outreach				0109 <u>Tribal</u> • Initial Letters to Tribes			0109 <u>Tribal</u> • Tribal MOUs	Area of Potential Effect and • Action Area for ESA work • CZM Certification • NOAA Biological Opinion or • Concurrence Letter	
Out T				Tribal Interim Notifications					
Geotechnical	0143 <u>Geotechnical</u> • Project Site Data to RME - Geotech Work • Onsite field investigation scheduled (schedule and initiate no sooner than 1 year prior to construction) • Topographic survey requested	0143 <u>Geotechnical</u> • Soil Boring Notice of Intent • Field and Core Investigation completed • Borings coordinated with aerial obstructions	0143 Geotechnical • Location of Borings	0143 Geotechnical • Soils and Geotechnical Report Received					0143 <u>Geotechnical</u> • Boring logs submi
Cost Estimate and Risk Management	0166 <u>Cost and Risk Estimating</u> • Risk Analysis: Self Modeling Spreadsheet (also see "Project Management" above)	0166 <u>Cost and Risk Estimating</u> • Scoping Level Cost Validation • Determine if project needs Value Engineering or Cost Risk Assessment/Cost Estimating Validation Process • Basis of Estimate (see Cost Estimating Manual) • Bid Book with Initial Estimate		0166 <u>Cost and Risk Estimating -</u> <u>60%</u> • Ebase Setup • Permit Cost Estimate • Risk Cost, 60% level • Cost Est, 60% level • Operations Cost Est. (CN) • Outreach Cost Est. (PE & CN) • Env. Monitoring Est. • Traffic Control Est. • Discipline Cost Estimates		0166 <u>Cost and Risk Estimating 90%</u> • Pay groups and pay items determined • Summary of Quantities Draft • Lump sum cost detail	0166 <u>Cost and Risk Estimating</u> Final • Cost Estimate Final • Cost estimate below the line items (building permit, operations cost, risk cost, environmental and archaeological monitoring) • Summary of Quantities Final		0166 <u>Cost and Risk Estin</u> Final • Construction Estin Revisions
Specifications				01F1 <u>Special Provisions - 30%</u> PSE Word Set Up Initial Run List		01F1 <u>Special Provisions - 60%</u> • Diver Provisions • Environmental Provisions Draft • GSPs • Penalties and Incentives Draft • Proprietary Item (Sole Source) Provisions • RGSPs Coordination with Disciplines • Staging Provisions Draft	01F1 <u>Special Provisions - 90%</u> • Environmental Provisions Final • GSPs check for updates • Penalties and Incentives Final • Proprietary Item (Sole Source) Provisions updates • RGSPs Coordination with Disciplines • Staging Provisions Final		01F1 Special Provisions - • Summary of Geot Conditions Appendi • Environmental Ap • Last Changes to F

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
<u>ermits</u> Commitment	0138 Environmental Permits • Environmental Commitment Meetings	
	0138	
	<u>Environmental Permits</u> Environmental Commitment Meetings	
mitted	0143 Geotechnical • Geotechnical Report compiled for contractor review • Geotechnical Report & cross-sections posted on website	
timating		
timate Final		
<u>s - Final</u> otechnical idix Appendix o Provisions		

DELIVERABLE EXPECTATION MATRIX

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Develop Approval (10 PE.PD.42.6
ect Data, Survey and Basema	0117 Project Data • Project survey requirements finalized, including areas that may be Project Limits • Potential utility relocations identified • Utilifies within the project limits notified • Washington Utilities Transportation Commission (WUTC) permit application for railroad crossings submitted	0 1		0117 <u>Project Data</u> • Record of Survey completed and filed • Utility Plan with as-built information completed and transmitted to Utilities • Preliminary Utility conflicts identified • Project Overview Meeting held with Utility Owners		0117 <u>Project Data</u> • Field review of proposed features completed • Utility conflicts confirmed and relocation letters sent to utilities • Utility relocation meeting held	information and specifications Incorporated in		
Traffic and Operations				0150 <u>Operations Plan</u> • Operations Project Review - Document Decisions • Terminal Traffic Analysis Report		0150 <u>Traffic Analysis</u> • Assumptions and conclusions in Traffic Analysis Report verified for consistency with design • Traffic control plans showing Construction Sequence and staging • Traffic Control Final Estimate	0150 <u>PS&E</u> • Staging and Channelization Plans • Traffic Control Plans • Traffic Control Provisions		
De	sign/PS&E Elements	s By Support Group							
	0169	01F1 <u>Civil Design</u> • Construction Water Quality Monitoring Plan submitted • Civil Estimate 30% • Hydraulic and Water Quality issues identified • Stormwater Treatment Deficiencies Identified • Storm water Management and Report Requirements and type documented • Stormwater Management Strategy endorsed (HQ)		0172 <u>Design Approval</u> • Civil Design Criteria • Civil Concept Drawings • Civil Site Plans and Elevations • Preliminary Civil Item Estimate • DDP 01F1 <u>Civil Design</u> • Civil Plans 60% • Civil Specifications 30% • Civil Estimate 60%		01F1 <u>Civil Design</u> • Environmental Site Plans • Civil Plans 90% • Civil Details 60% • Civil Specifications 60% • Civil Estimate 90% • Civil Abbreviations & Symbols, General Notes 90% 0181 <u>PS&E Review</u> • Civil Design Peer Review	01F1 <u>Civil Design</u> • Environmental Site Plans 100% • Civil Plans 100% • Civil Details 90% • Civil Specifications 90% • Civil Estimate 100% 0181 <u>PS&E Review</u> • Civil QAQC		01F1 <u>Civil Design</u> • Final Environmenta Plans • Final Civil Plans • Final Civil Details • Final Civil Specifica • Final Civil Estimat

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
ental Site s is ifications nate	01F1 <u>Civil Design</u> • Response to Bidder RFIs • Addendum Preparation	

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
01F3 Structural	0169 <u>Project Summary</u> • Plans list with estimate of design hours 01F3 <u>Structural Design</u> • Scope for TS&L Determined • Structural Input on Environmental Documentation and Permits	01F3 <u>Structural Design</u> • Structural Estimate 30% • 15% Structural Plan, Elevation, Phasing Plan	01F3 <u>Structural Design</u> • Structural Site Plans and Elevations • Preliminary Structural Item Estimate	0172 Design Approval • Structural Design Criteria • Structural TS&L • Project Analysis • Structural Concept Drawings 01F3 <u>Structural Design</u> • Structural Phasing Plan 30% • Structural Plans 60% • Structural Specifications 30% • Structural Estimate 60% • Structural Type, Size & Location • Structural Review (includes constructability review for viable construction method, sequence, and schedule)		 Structural Plans 90% Structural Sections 60% Structural Details 60% Structural Specifications 60% Structural Estimate 90% Structural Abbreviations & Symbols, General Notes 90% Structural Demolition Plans Bridge Seat, Headframe, Railings and Ladders, Trestle, 	01F3 <u>Structural Design</u> • Structural Phasing Plan 90% • Structural Plans 100% • Structural Sections 90% • Structural Specifications 90% • Structural Estimate 100% • Bridge Seat, Headframe, Railings and Ladders, Trestle, Transfer Span, Materials Schedules • Possible: Dolphins, Wingwalls 0181 <u>PS&E Review</u> • Structural QAQC		01F3 <u>Structural Design</u> • All plans, specs, and estimate 100%	01F3 <u>Structural Design</u> • Response to Bidder RFIs • Addendum Preparation	
01F5 Electrical	0169 <u>Project Summary</u> • Plans list with estimate of design hours	01F5 <u>Electrical Design</u> • Electrical Plans 60% • Utilities Plans • Electrical Specifications 30% • Electrical Estimate 60% • 30% Hydraulic System	0172 <u>Design Documentation</u> <u>Package</u> • Electrical Concept Drawings • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate 01F5 <u>Electrical Design</u> • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate	0172 Design Approval • Electrical Concept Drawings • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate • Electrical Design Criteria • Project Analysis 01F5 <u>Electrical Design</u> • Electrical Plans 60% • Utilities Plans • Electrical Specifications 30% • Electrical Estimate 60% • Lighting Plan 60% • One-Line & One-Line Demolition 60% • Temporary Power Plan 60% • 30% Transfer Span PLC Cabinet Layout, HPU Input Electrical Plan, PLC Network Block Diagram, Motor Control Panel, PLC Schematic, Range Lights and Fog Lights		Plan & Schedules, PLC Terminal Wiring, Electrical Details, Conduit Block Diagram	01F5 Electrical Design • Electrical Plans 100% • Electrical Sections 90% • Electrical Details 90% • Electrical Specifications 90% • Electrical Estimate 100% • Lighting Plan 90% • One-Line & One-Line Demolition Final • Temporary Power Plan Final • Final Transfer Span Electrical Plan & Schedules, PLC Terminal Wiring, Electrical Details, Conduit Block Diagram 0181 <u>PS&E Review</u> • Electrical QAQC		01F5 <u>Electrical Design</u> All plans, specs, and estimate 100%	01F5 <u>Electrical Design</u> • Response to Bidder RFIs • Addendum Preparation	

DELIVERABLE EXPECTATION MATRIX

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Reviews and QAQC				0181 <u>PS&E Review</u> • 30% Constructability Review • 30% Constructability Comments 0180 <u>Constructability Review</u> • 30% Constructability Review • 30% Constructability Comments • Draft Construction Schedule Review		0181 <u>PS&E Review</u> • 60% Constructability Review • 60% Constructability Comments • Discipline Peer Reviews 0180 <u>Constructability Review</u> • 60% Constructability Review • 60% Constructability Comments • Draft Construction Schedule Review	Discipline QAQC Memos		0181 <u>PS&E Review</u> • File Review Comn Designer Replies in File • Final PS&E Contra Packaged for Mana Review • Contract Package Cover Sheet for Ac Award
PE	Close Out								
Construction Preparation				01AC <u>Construction Scheduling</u> • Draft Construction Schedule		01AC <u>Construction Scheduling</u> • Draft Construction Schedule • Construction Phasing Alternatives	01AC <u>Construction Scheduling</u> • Final Construction Schedule		

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
mments and in Project ntract nagement ge QAQC Ad and		
	0189 <u>Advertisement</u> • Memo to OEO • Memo to Contract Ad & Award • Ad Package to HQ	0199 <u>Construction Admin</u> • Construction Funding Approval Work Order • Design Record Close Out • Funding Adjust-to-Award • Contract Addendum • Respond to Bidder RFIs 0101 <u>Project Management</u> • Lessons Learned • Design Records to Library

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Milestone Purpose	Provides basis to charter project team and begin developing the PMP Review Scoping documents	PM validates the project scope, schedule, and budget Management endorses the project's work plan	Refine the scope, schedule, budget Evaluate Alternatives	Documents design criteria and major design decisions. Documents the project purpose, type, strategy, phase durations, budget, and recommended ad date.	Complete NEPA/SEPA environmental process Complete the permit applications for agency approvals	Design of major project elements completed, review for constructability, conformance with standards	100 % PS&E review. Items missing from design should be minor and should be documented to reviewers.	All permits necessary for the project are received.	Comments from 90% review are incorporated. No other major changes to 90% PS&E review documents. At the end of this review, Contract Plans are Ad Ready.	Submittal of all final deliverables to Olympia for ad and award	Archive project electronic and hard copy files Document project in Z-PM standards file historical data base. Close out project through Project Controls Group.
Decisions Frozen and Milestones Completed (Overview)	Legislative budget Legislative ad dates	PMP complete Milestone dates set Schedule baselined Environmental Process defined Assumptions defined Risks defined File system and Logs are set up	Preferred alternative identified Predesign Study document complete OFM endorsed Predesign Study	Design criteria completed Alternative Analysis completed Design concept fixed Design type, size and location fixed Approval to begin ROW acquisition process Design Approval Package stamped and signed	The environmental review documentation is considered complete on the date that all necessary NEPA/SEPA is complete Permits submitted to the agencies (excluding building and CZM permits)	All key project elements and features that drive the project outcome and costs are defined. Geometric Review comments resolved and documented. Design details to be completed identified	 ✓ The deliverables are substantially complete ✓ Review and acceptance of design detail of key elements and features ✓ Permits Obtained. All environmental permits are approved, verified, and accepted for inclusion into the plans ✓ General Plans Review comments resolved & documented. 	Permits are included in the contract documents	PS&E deliverables are complete. All review comments adjudicated. Plans and specifications stamped and sealed at end. ROW Certification Final Project Approval	Owner accepts design Approval to advertise ROW is clear	Consultants/WSDOT staff forward all required project records and files to the Project Manager Project Manager sends design file to library / construction group Electronic design file archived
Preli	ninary Engineering			and phasing complete							
	sign/PS&E Elements										
Project Management	Sign/PS&E Elements 0106 Daft Project Mgmt Plan • Deliverable Expectation Matrix • Critical Path Schedule • Milestone Schedule • Budget Sheet 01A0 Scheduling and Reporting Confidence Reports Quarterly Performance 0169 Project Summary • Scope Validation • Verify Project Definition • Verify Design Decisions Summary	0101 <u>General Project Management</u> • Electronic and hard copy file System Set Up • Bid Book and Change Management Book Set Up 0106 <u>Endorsed PMP</u> • Signed Team Agreements • Baseline schedule • Budget • Cash Flow Sheet • Risk assessment • Communication Plan • Change management plan • QA/QC plan 0121 <u>Change Management</u> • Project Change Log	0123 Pre-Design Study • PDS Draft Narrative • Alternatives Analysis • Cost Benefit Analysis • PDS Revised per Mgmt Review • PDS Final Narrative • PDS Revised per Executive 0111 <u>Communication Plan</u> • Draft Public Involvement Plan 0172 <u>Design Documentation</u> <u>Package (DDP)</u> • Design Approval Submittal (Concept Drawings, Site Plans, Elevations, Project Analysis, Cost Estimate)	0111 <u>Communication Plan</u> • Key Messages • Outreach Schedule • Project Description (Simple) • Impact to the Public • Draft Operations Plan • Draft Traffic Control Plan • Stakeholder List 0181 <u>PS&E Review</u> • QAQC Cover Sheets for the Project		0111 <u>Communication Summary</u> • Record of Contact • Outreach Decisions • Outreach List • Public Meeting Minutes • Public Hearings Record 0172 <u>Design Documentation</u> <u>Package (DDP)</u> Design Approval Submittal Design Approval Submittal Includes: • Stamped cover sheet • Project Description • Concept Drawings • Site Plans and Elevations • Cost Estimate • Risk Cost & Confidence • Project Analysis • Design Criteria worksheets or equivalent: www.wsdot.wa.gov/design/pro jectdev • Design Variances Inventory	01A0 Scheduling and Reporting • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet		01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet 0172 <u>DDP</u> Project Development Approval Submittal Project Development Submittal Includes: • Stamped Cover Sheet • Design Approval Submittal • Environmental Permits • Design Variance Inventory • Cost Estimate • Cost Estimate • Cost Estimate Summary (for Nicole, with Budget Comparison Worksheet) • Contract	01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet	0101 Project Management • Lessons Learned • Design File Transferred to CN • Design Records to Library • Design Files Archived • Consultant Evaluations • Team Evaluations • Copy records to Z-PM standards historical data base • DDP finalized and in Design File

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Environmental	0132 Endangered Species Act Compliance • Environmental Permit List 0138 Environmental Permits • Validate ERS (Environmental Review Summary) • Soil Boring Notice of Intent	0101 <u>General Project Management</u> • Team Agreement Validated	0138 <u>Environmental Permits</u> • Environmental Section of Pre-Design Study • Boring Permit	0138 <u>Environmental Permits</u> • Discipline studies, reports, and predecessor information completed • Noise Variance Application • JARPA Preparation • Eelgrass Survey	0132 <u>Endangered Species Act</u> <u>Compliance</u> • Biological Assessment or No Effect Letter • Drawings for Permits • Noise Test for Monitoring Zone • Permit Drawings for ESA (CAD) • SEPA Checklist and Determination		0138 <u>Environmental Permits</u> • All environmental special provisions approved and included in the PS&E plan set • Environmental Commitment Meetings Set Up • Water Quality Certification	0138 Environmental Permits • Validated ERS (NEPA CE) • HPA (Hydraulic Project Approval) • Section 402 NPDES Permit	0138 <u>Environmental Perm</u> • Environmental Cor File Entered
Tribal Outreach				0109 <u>Tribal</u> • Initial Letters to Tribes • Tribal Interim Notifications			0109 <u>Tribal</u> • Tribal MOUs		
Geotechnical	0143 <u>Geotechnical</u> • Project Site Data to RME - Geotech Work • Onsite field investigation scheduled (schedule and initiate no sooner than 1 year prior to construction) • Topographic survey requested	0143 <u>Geotechnical</u> • Soil Boring Notice of Intent • Field and Core Investigation completed • Borings coordinated with aerial obstructions	0143 <u>Geotechnical</u> • Location of Borings	0143 Geotechnical • Soils and Geotechnical Report Received					0143 <u>Geotechnical</u> • Boring Logs Recei
Cost Estimate and Risk Management	• Risk Analysis: Self Modeling Spreadsheet (also see "Project Management" above)	0166 <u>Cost and Risk Estimating</u> • Scoping Level Cost Validation • Determine if project needs Value Engineering or Cost Risk Assessment/Cost Estimating Validation Process • Basis of Estimate (see Cost Estimating Manual) • Bid Book with Initial Estimate		0166 <u>Cost and Risk Estimating -</u> <u>60%</u> • Ebase Setup • Permit Cost Estimate • Risk Cost, 60% level • Cost Est, 60% level • Operations Cost Est. (CN) • Outreach Cost Est. (PE & CN) • Env. Monitoring Est. • Traffic Control Est. • Discipline Cost Estimates		0166 <u>Cost and Risk Estimating 90%</u> • Pay groups and pay items determined • Summary of Quantities Draft • Lump sum cost detail	0166 <u>Cost and Risk Estimating</u> Final • Cost Estimate Final • Cost estimate below the line items (building permit, operations cost, risk cost, environmental and archaeological monitoring) • Summary of Quantities Final		0166 <u>Cost and Risk Estirr</u> Final • Construction Estirr Revisions
Specifications				01F1 <u>Special Provisions - 30%</u> PSE Word Set Up Initial Run List		01F1 <u>Special Provisions - 60%</u> • Diver Provisions • Environmental Provisions Draft • GSPs • Penalties and Incentives Draft • Proprietary Item (Sole Source) Provisions • RGSPs Coordination with Disciplines • Staging Provisions Draft	01F1 <u>Special Provisions - 90%</u> • Environmental Provisions Final • GSPs check for updates • Penalties and Incentives Final • Proprietary Item (Sole Source) Provisions updates • RGSPs Coordination with Disciplines • Staging Provisions Final		01F1 Special Provisions - • Summary of Geote Conditions Appendi • Environmental App • Last Changes to P

0138 <u>Environmental Permits</u> ▪ Environmental Commitment Meetings	
<u>Environmental Permits</u> Environmental Commitment Meetings	
0143 <u>Geotechnical</u> • Geotechnical Report compiled for contractor review • Geotechnical Report & cross-sections posted on website	
	Environmental Commitment Meetings 1143 Geotechnical Geotechnical Report scompiled for contractor eview • Geotechnical Report & cross-sections posted on

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Develop Approval (10 PE.PD.42.6
urvey and Basema	may be Project Limits Potential utility relocations identified 	0117 <u>Project Data</u> • Aerial Photographs Background Data • Final Basemap • Established Geodetic Survey Control - Document in Design File • Utility As-Builts requested		0117 <u>Project Data</u> • Record of Survey completed and filed • Utility Plan with as-built information completed and transmitted to Utilities • Preliminary Utility conflicts identified • Project Overview Meeting held with Utility Owners		0117 <u>Project Data</u> • Field review of proposed features completed • Utility conflicts confirmed and relocation letters sent to utilities • Utility relocation meeting held	information and specifications Incorporated in		
Traffic and Operations				0150 <u>Operations Plan</u> • Operations Project Review - Document Decisions • Terminal Traffic Analysis Report		0150 <u>Traffic Analysis</u> • Assumptions and conclusions in Traffic Analysis Report verified for consistency with design • Traffic control plans showing Construction Sequence and staging • Traffic Control Final Estimate	0150 <u>PS&E</u> • Staging and Channelization Plans • Traffic Control Plans • Traffic Control Provisions		
De	sign/PS&E Elements	By Support Group							
	0169 <u>Project Summary</u> • Civil Design Criteria • Project Analysis • Plans list with estimate of design hours	Of F1 Civil Design • Construction Water Quality Monitoring Plan submitted • Civil Estimate 30% • Hydraulic and Water Quality issues identified • Stormwater Treatment Deficiencies Identified • Storm water Management and Report Requirements and type documented • Stormwater Management Strategy endorsed (HQ)		0172 <u>Design Approval</u> • Civil Design Criteria • Civil Concept Drawings • Civil Site Plans and Elevations • Preliminary Civil Item Estimate • DDP 01F1 <u>Civil Design</u> • Civil Plans 60% • Civil Specifications 30% • Civil Estimate 60%		01F1 <u>Civil Design</u> • Environmental Site Plans • Civil Plans 90% • Civil Specifications 60% • Civil Estimate 90% • Civil Abbreviations & Symbols, General Notes 90% 0181 <u>PS&E Review</u> • Civil Design Peer Review	01F1 <u>Civil Design</u> • Environmental Site Plans 100% • Civil Plans 100% • Civil Details 90% • Civil Specifications 90% • Civil Estimate 100% 0181 <u>PS&E Review</u> • Civil QAQC		01F1 <u>Civil Design</u> • Final Environment Plans • Final Civil Plans • Final Civil Details • Final Civil Specific • Final Civil Estimat

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
ental Site Is ifications nate	01F1 <u>Civil Design</u> • Response to Bidder RFIs • Addendum Preparation	

DELIVERABLE EXPECTATION MATRIX

				Geometric Review (30%)							
	Begin Preliminary	Project Planning and		PE.PD.75.30	Environmental Review		Preliminary Contract	Environmental Permits	Project Development		PE Phase End (Close Out
	Engineering PE.PM.02.01	Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Design Approval PE.PD.42.10	Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Review (90%) PE.PD.75.90	Received PE.EV.29	Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	and Archiving) PE.PD.90.65
	0169	01F3		0172	FE.EV.10	01F3	01F3	FE.EV.29	01F3	01F3	PE.PD.90.65
	Project Summary	Structural Design	Structural Design	Design Approval		Structural Design	Structural Design		Structural Design	Structural Design	
	 Plans list with estimate of 	Structural Estimate 30%	Structural Site Plans and	Structural Design Criteria		Structural Phasing Plan 60%	Structural Phasing Plan		All plans, specs, and	Response to Bidder RFIs	
	design hours	 15% Structural Plan, 	Elevations	Structural TS&L		 Structural Plans 90% 	90%		estimate 100%	 Addendum Preparation 	
		Elevation, Phasing Plan	Preliminary Structural Item	 Project Analysis 		 Structural Sections 60% 	 Structural Plans 100% 				
	01F3		Estimate	Structural Concept		Structural Details 60%	Structural Sections 90%				
	Structural Design Scope for TS&L 			Drawings		 Structural Specifications 60% Structural Estimate 90% 	 Structural Details 90% Structural Specifications 				
	Determined			01F3		Structural Abbreviations &	90%				
	Structural Input on			Structural Design		Symbols, General Notes 90%	Structural Estimate 100%				
a	Environmental			 Structural Phasing Plan 		 Structural Demolition Plans 	 Materials Schedules 				
ctr	Documentation and Permits			30%		 Bridge Seat, Headframe, 					
Structural				 Structural Plans 60% Structural Specifications 		Railings and Ladders, Trestle, Transfer Span, Materials	0181 PS&E Review				
ŝ				• Structural Specifications		Schedules	Structural QAQC				
01F3				Structural Estimate 60%		Possible: Dolphins,					
8				Structural Type, Size &		Wingwalls					
				Location		_					
				Structural Permitting		0181					
				Submittal Review (includes		PS&E Review • Structural Design Peer					
				constructability review for viable construction method,		Review					
				sequence, and schedule)							
	0169	01F5	0172	0172		01F5	01F5		01F5	01F5	
	Project Summary	Electrical Design	Design Documentation	Design Approval		Electrical Design	Electrical Design		Electrical Design	Electrical Design	
	 Plans list with estimate of 	Electrical Concept Plans	Package	Electrical Concept Drawings		Electrical Plans 90%	Electrical Plans 100%		All plans, specs, and	Response to Bidder RFIs	
	design hours	15% • Utilities Basemap Update	 Electrical Concept Drawings Electrical Site Plans and 	Electrical Site Plans and Elevations		Electrical Sections 60% Electrical Details 60%	 Electrical Sections 90% Electrical Details 90% 		estimate 100%	 Addendum Preparation 	
		Clinics Basemap opulie	Elevations	Preliminary Electrical Item		Electrical Specifications 60%	Electrical Specifications				
			Preliminary Electrical Item	Estimate		Electrical Estimate 90%	90%				
			Estimate	 Electrical Design Criteria 		 Electrical Abbreviations & 	 Electrical Estimate 100% 				
				 Project Analysis 		Symbols, General Notes 90%	Lighting Plan 90%				
			01F5	01F5		 Electrical Demolition Plans Lighting Plan 90% 	 One-Line & One-Line Demolition Final 				
01F5 Electrical PE.PD.30.05			Electrical Design	Electrical Design		One-Line & One-Line	Temporary Power Plan				
D.3			Electrical Site Plans and	Electrical Plans 60%		Demolition 90%	Final				
5 E			Elevations	 Utilities Plans 		Temporary Power Plan 90%	 Final Electrical Plan & 				
E B			Preliminary Electrical Item	Electrical Specifications		90% Electrical Plans	Schedules, Electrical Details,				
-			Estimate	30% • Electrical Estimate 60%		0181	Conduit Block Diagram				
				Lighting Plan 60%		PS&E Review	0181				
				One-Line & One-Line		Electrical Design Peer	PS&E Review				
				Demolition 60%		Review	 Electrical QAQC 				
				Temporary Power Plan							
				60%							
				 30% Range Lights and Fog Lights 							
				Lighto							
	<u>u</u>	1	4			1			1	<u>.</u>	

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Reviews and QAQC				0181 <u>PS&E Review</u> • 30% Constructability Review • 30% Constructability Comments 0180 <u>Constructability Review</u> • 30% Constructability Review • 30% Constructability Comments • Draft Construction Schedule Review		60% Constructability Comments Discipline Peer Reviews 0180 <u>Constructability Review</u> 60% Constructability Review 60% Constructability Comments	0181 <u>PS&E Review</u> • 90% PS&E Building Permit Application Package • State Materials Justification and Approval by ASDE • 90% Constructability Review • 90% Constructability Comments • Discipline QAQC Memos 0180 <u>Constructability Review</u> • 90% Constructability Review • 90% Constructability Review • 90% Constructability Comments • Draft Construction Schedule Review		0181 <u>PS&E Review</u> • File Review Comments and Designer Replies in Project File • Final PS&E Contract Packaged for Management Review • Contract Package QAQC Cover Sheet for Ad and Award		
PE	Close Out	1					1	1		1	
Construction Preparation				01AC <u>Construction Scheduling</u> • Draft Construction Schedule		01AC <u>Construction Scheduling</u> • Draft Construction Schedule • Construction Phasing Alternatives	01AC <u>Construction Scheduling</u> • Final Construction Schedule			0189 <u>Advertisement</u> • Memo to OEO • Memo to Contract Ad & Award • Ad Package to HQ	0199 <u>Construction Admin</u> • Construction Funding Approval Work Order • Design Record Close Out • Funding Adjust-to-Award • Contract Addendum • Respond to Bidder RFIs 0101 <u>Project Management</u> • Lessons Learned • Design Records to Library

	Begin Preliminary Engineering PE.PM.02.01 Provides basis to charter	Project Planning and Endorsement (PMP) PE.PM.03.15 PM validates the project	Pre-Design Study (5%) PE.PS.07 Refine the scope, schedule,	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10 Documents design criteria	Environmental Review Documentation Complete PE.EV.18 Complete NEPA/SEPA	General Plans Review (60%) PE.PD.75.60 Design of major project	Preliminary Contract Review (90%) PE.PD.75.90 100 % PS&E review.	Environmental Permits Received PE.EV.29 All permits necessary for the	Project Development Approval (100%) PE.PD.42.60 Comments from 90% review	Contract Ad and Award PE.PD.90.35 Submittal of all final	PE Phase End (Close Out and Archiving) PE.PD.90.65 Archive project electronic and
Milestone Purpose	project team and begin developing the PMP Review Scoping documents	scope, schedule, and budget Management endorses the project's work plan		and major design decisions. Documents the project purpose, type, strategy, phase durations, budget, and recommended ad date.	environmental process Complete the permit applications for agency	elements completed, review for constructability, conformance with standards	Items missing from design should be minor and should be documented to reviewers.	project are received.	are incorporated. No other major changes to 90% PS&E review documents. At the end of this review, Contract Plans are Ad Ready.	deliverables to Olympia for ad and award	hard copy files Document project in Z-PM standards file historical data base. Close out project through Project Controls Group.
Decisions Frozen and Milestones	Legislative budget Legislative ad dates	PMP complete Milestone dates set Schedule baselined Environmental Process defined Assumptions defined Risks defined File system and Logs are set up	Preferred alternative identified Predesign Study document complete OFM endorsed Predesign Study	Design criteria completed Alternative Analysis completed Design concept fixed Design type, size and location fixed Approval to begin ROW acquisition process Design Approval Package stamped and signed Draft construction schedule and phasing complete	The environmental review documentation is considered complete on the date that all necessary NEPA/SEPA is complete Permits submitted to the agencies (excluding building and CZM permits)	All key project elements and features that drive the project outcome and costs are defined. Geometric Review comments resolved and documented. Design details to be completed identified	 ✓ The deliverables are substantially complete ✓ Review and acceptance of design detail of key elements and features ✓ Permits Obtained. All environmental permits are approved, verified, and accepted for inclusion into the plans ✓ General Plans Review comments resolved & documented. 	Permits are included in the contract documents	PS&E deliverables are complete. All review comments adjudicated. Plans and specifications stamped and sealed at end. ROW Certification Final Project Approval	Owner accepts design Approval to advertise ROW is clear	Consultants/WSDOT staff forward all required project records and files to the Project Manager Project Manager sends design file to library / construction group Electronic design file archived
Pre	iminary Engineering			p							
	Design/PS&E Elements	6									
Project Management	0106 Draft Project Mgmt Plan • Deliverable Expectation Matrix • Critical Path Schedule • Milestone Schedule • Budget Sheet 01A0 Scheduling and Reporting Confidence Reports Quarterly Performance 0169 <u>Project Summary</u> • Scope Validation • Verify Project Definition • Verify Project Definition • Verify Environmental Review Summary • Verify Design Decisions Summary	0101 <u>General Project Management</u> • Electronic and hard copy file System Set Up • Bid Book and Change Management Book Set Up 0106 <u>Endorsed PMP</u> • Signed Team Agreements • Baseline schedule • Budget • Cash Flow Sheet • Risk assessment • Communication Plan • Change management plan • QA/QC plan 0121 <u>Change Management</u> • Project Change Log	0123 <u>Pre-Design Study</u> • PDS Draft Narrative • Alternatives Analysis • Cost Benefit Analysis • PDS Revised per Mgmt Review • PDS Final Narrative • PDS Final Narrative • PDS Revised per Executive 0111 <u>Communication Plan</u> • Draft Public Involvement Plan 0172 <u>Design Documentation</u> <u>Package (DDP)</u> • Design Approval Submittal (Concept Drawings, Site Plans, Elevations, Project Analysis, Cost Estimate)	0111 <u>Communication Plan</u> • Key Messages • Outreach Schedule • Project Description (Simple) • Impact to the Public • Draft Operations Plan • Draft Traffic Control Plan • Stakeholder List 0181 <u>PS&E Review</u> • QAQC Cover Sheets for the Project		0111 Communication Summary • Record of Contact • Outreach Decisions • Outreach List • Public Meeting Minutes • Public Meeting Minutes • Public Hearings Record 0172 Design Documentation Package (DDP) Design Approval Submittal Includes: • Stamped cover sheet • Project Description • Concept Drawings • Site Plans and Elevations • Cost Estimate • Risk Cost & Confidence • Project Analysis • Design Criteria worksheets or equivalent: www.wsdot.wa.gov/design/pro jectdev • Design Variances Inventory	01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet		01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet 0172 <u>DDP</u> Project Development Approval Submittal Project Development Submittal Includes: • Stamped Cover Sheet • Design Approval Submittal • Environmental Permits • Design Variance Inventory • Cost Estimate • Cost Estimate Summary (for Nicole, with Budget Comparison Worksheet) • Contract	01A0 <u>Scheduling and Reporting</u> • Confidence Reports • Quarterly Performance • Monthly Statused Schedules and Project Control Spreadsheet	0101 <u>Project Management</u> • Lessons Learned • Design File Transferred to CN • Design Records to Library • Design Files Archived • Consultant Evaluations • Team Evaluations • Copy records to Z-PM standards historical data base • DDP finalized and in Design File

Environmental	Begin Preliminary Engineering PE.PM.02.01 0132 Endangered Species Act Compliance • Environmental Permit List 0138 Environmental Permits • Validate ERS (Environmental Review Summary) • Soil Boring Notice of Intent	Project Planning and Endorsement (PMP) PE.PM.03.15 0101 General Project Management • Team Agreement Validated		Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10 0138 Environmental Permits • Discipline studies, reports, and predecessor information completed • Noise Variance Application • JARPA Preparation • Eelgrass Survey	Environmental Review Documentation Complete PE.EV.18 0132 Endangered Species Act Compliance • Biological Assessment or No Effect Letter • Drawings for Permits • Noise Test for Monitoring Zone • Permit Drawings for ESA (CAD) • SEPA Checklist and Determination	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90 0138 Environmental Permits • All environmental special provisions approved and included in the PS&E plan set • Environmental Commitment Meetings Set Up • Water Quality Certification	Environmental Permits Received PE.EV.29 0138 Environmental Permits • Validated ERS (NEPA CE) • HPA (Hydraulic Project Approval) • Section 402 NPDES Permit • Shoreline Permit • Section 106 Corps and Tribal Response • SEPA Response to Comments • Noise Variance • USFW Biological Opinion • Section 106 Agreement on Area of Potential Effect and • Action Area for ESA work • CZM Certification • NOAA Biological Opinion or • Concurrence Letter	Project Develop Approval (10 PE.PD.42.6 0138 Environmental Perm • Environmental Cor File Entered
Tribal Outreach	-			0109 <u>Tribal</u> • Initial Letters to Tribes • Tribal Interim Notifications			0109 <u>Tribal</u> • Tribal MOUs		
Geotechnical	0143 Geotechnical • Onsite field investigation scheduled (schedule and initiate no sooner than 1 year prior to construction) • Topographic survey requested	0143 <u>Geotechnical</u> • Soil Boring Notice of Intent • Field and Core Investigation completed • Borings coordinated with aerial obstructions	0143 <u>Geotechnical</u> • Project Site Data to Region Materials Engineer (RME) - Geotech Work • Archaeological Investigation	0143 <u>Geotechnical</u> • Soils and Geotechnical Report • Archaeological Report			0143 <u>Geotechnical</u> • Materials Source Report completed and submitted to State Material's Lab (for Paving)		0143 <u>Geotechnical</u> • Boring Logs Recei
Cost Estimate and Risk Management	0166 <u>Cost and Risk Estimating</u> • Risk Analysis: Self Modeling Spreadsheet (also see "Project Management" above)	0166 <u>Cost and Risk Estimating</u> • Scoping Level Cost Validation • Determine if project needs Value Engineering or Cost Risk Assessment/Cost Estimating Validation Process • Basis of Estimate (see Cost Estimating Manual) • Bid Book with Initial Estimate		0166 <u>Cost and Risk Estimating -</u> <u>60%</u> • Ebase Setup • Permit Cost Estimate • Risk Cost, 60% level • Cost Est, 60% level • Operations Cost Est. (CN) • Outreach Cost Est. (PE & CN) • Env. Monitoring Est. • Traffic Control Est. • Discipline Cost Estimates		0166 <u>Cost and Risk Estimating 90%</u> • Pay groups and pay items determined • Summary of Quantities Draft • Lump sum cost detail	0166 <u>Cost and Risk Estimating</u> <u>Final</u> • Cost Estimate Final • Cost estimate below the line items (building permit, operations cost, risk cost, environmental and archaeological monitoring) • Summary of Quantities Final		0166 <u>Cost and Risk Estin</u> <u>Final</u> • Construction Estin Revisions
Specifications				01F1 <u>Special Provisions - 30%</u> PSE Word Set Up Initial Run List		01F1 <u>Special Provisions - 60%</u> • Diver Provisions • Environmental Provisions Draft • GSPs • Penalties and Incentives Draft • Proprietary Item (Sole Source) Provisions • RGSPs Coordination with Disciplines • Staging Provisions Draft	01F1 <u>Special Provisions - 90%</u> • Environmental Provisions Final • GSPs check for updates • Penalties and Incentives Final • Proprietary Item (Sole Source) Provisions updates • RGSPs Coordination with Disciplines • Staging Provisions Final		01F1 Special Provisions - • Summary of Geote Conditions Appendi • Environmental Ap • Last Changes to F

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
ermits	0138 <u>Environmental Permits</u> • Environmental Commitment Meetings	
	0138 <u>Environmental Permits</u> Environmental Commitment Meetings	
ceived	0143 <u>Geotechnical</u> Report compiled for contractor review • Geotechnical Report & cross-sections posted on website	
timating		
timate Final		
<u>s - Final</u> otechnical ndix Appendix o Provisions		

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Develop Approval (100 PE.PD.42.6
Project Data, Survey and Basemap	0117 Project Data • Project Survey requirements finalized, including areas that may be Project Limits • Potential utility relocations identified • Utilities within the project limits notified • Washington Utilities Transportation Commission (WUTC) permit application for railroad crossings submitted			0117 <u>Project Data</u> • Record of Survey completed and filed • Utility Plan with as-built information completed and transmitted to Utilities • Preliminary Utility conflicts identified • Project Overview Meeting held with Utility Owners		0117 <u>Project Data</u> • Field review of proposed features completed • Utility conflicts confirmed and relocation letters sent to utilities • Utility relocation meeting held	information and specifications Incorporated in		
Traffic and Operations				0150 <u>Operations Plan</u> • Operations Project Review - Document Decisions • Terminal Traffic Analysis Report		0150 <u>Traffic Analysis</u> • Assumptions and conclusions in Traffic Analysis Report verified for consistency with design • Traffic control plans showing Construction Sequence and staging • Traffic Control Final Estimate	Traffic Control Plans Traffic Control Provisions		
91F1 CIvil	sign/PS&E Element: 0169 <u>Project Summary</u> • Civil Design Criteria • Project Analysis • Plans list with estimate of design hours	s By Support Group 01F1 Civil Design • Construction Water Quality Monitoring Plan submitted • Civil Estimate 30% • Hydraulic and Water Quality issues identified • Stormwater Treatment Deficiencies Identified • Storm water Management and Report Requirements and type documented • Stormwater Management Strategy endorsed (HQ)		0172 Design Approval • Civil Design Criteria • Civil Concept Drawings • Civil Site Plans and Elevations • Preliminary Civil Item Estimate • DDP 01F1 <u>Civil Design</u> • Paving Plans • Stormwater Plans • TESC Plans & BMPs • Utilities Plans • Civil Specifications 30% • Civil Stimate 60% • Documented Minimum Requirements from Highway Runoff Manual		01F1 <u>Civil Design</u> • Environmental Site Plans • Civil Plans 90% • Civil Specifications 60% • Civil Specifications 60% • Civil Estimate 90% • Civil Abbreviations & Symbols, General Notes 90% 0181 <u>PS&E Review</u> • Civil Design Peer Review	01F1 <u>Civil Design</u> • Environmental Site Plans 100% • Civil Plans 100% • Civil Specifications 90% • Civil Specifications 90% • Civil Estimate 100% 0181 <u>PS&E Review</u> • Civil QAQC		01F1 <u>Civil Design</u> • Final Environment: Plans • Final Civil Plans • Final Civil Specific: • Final Civil Specific: • Final Civil Estimat

lopment 100%) 2.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
ental Site s ls ifications nate	01F1 <u>Civil Design</u> • Response to Bidder RFIs • Addendum Preparation	

				Geometric Review (30%)							
	Begin Preliminary Engineering	Project Planning and Endorsement (PMP)	Pre-Design Study (5%)	PE.PD.75.30 Design Approval	Environmental Review Documentation Complete	General Plans Review (60%)		Environmental Permits Received	Project Development Approval (100%)	Contract Ad and Award	PE Phase End (Close Out and Archiving)
	PE.PM.02.01	PE.PM.03.15	PE.PS.07	PE.PD.42.10	PE.EV.18	PE.PD.75.60	PE.PD.75.90	PE.EV.29	PE.PD.42.60	PE.PD.90.35	PE.PD.90.65
	0169 Project Summary	01F2 Architectural Design	01F2 Architectural Design	0172 Design Approval		01F2 Architectural Design	01F2 Architectural Design	01F2 Architectural Design	01F2 Architectural Design	01F2 Architectural Design	
	Plans list with estimate of	Architectural Estimate 30%		Architectural Design		Architectural Phasing Plan	Building Permit Submittal	Building Permit Received	• All plans, specs, and	Response to Bidder RFIs	
	design hours	15% Architectural Plan.	Elevations	Criteria: View Corridor & Bldg		60%	Architectural Phasing Plan	Durang Permit Received	estimate 100%	Addendum Preparation	
	accigit incare	Elevation, Phasing Plan	Preliminary Architectural	Height		Architectural Building Plans	90%				
		Fire Marshall Approval	Item Estimate	Project Analysis		90%	Architectural Plans 100%				
				 Architectural Concept 		 Architectural Security Plans 	Architectural Sections 90%				
_				Drawings		90%	 Architectural Details 90% 				
ura				0450		Architectural Sections 60%	Architectural Specifications				
scti				01F2 Architectural Design		 Architectural Details 60% Architectural Specifications 	90% • Architectural Estimate				
hite				Building Permit Pre-		60%	100%				
\rc				Submittal Meeting with Pt.		Architectural Estimate 90%	100 //				
51				Townsend		Architectural Abbreviations &	0181				
01F2 Architectural				 Architectural Phasing Plan 		Symbols, General Notes 90%	PS&E Review				
-				30%		 Architectural Demolition 	 Architectural QAQC 				
				Architectural Plans 60%		Plans					
				 Utilities Plans Architectural Specifications 		0181					
				• Architectural Specifications		PS&E Review					
				Architectural Estimate 60%		Architectural Design Peer					
						Review					
	0169	01F3	01F3	0172		01F3	01F3		01F3	01F3	
	Project Summary	Structural Design	Structural Design	Design Approval		Structural Design	Structural Design		Structural Design	Structural Design	
	 Plans list with estimate of design hours 	 Structural Estimate 30% 15% Structural Plan, 	 Structural Site Plans and Elevations 	 Structural Design Criteria Structural TS&L 		 Structural Phasing Plan 60% Structural Plans 90% 	Building Permit Submittal Structural Phasing Plan		 All plans, specs, and estimate 100% 	Response to Bidder RFIs Addendum Preparation	
	design nours	Elevation, Phasing Plan	Preliminary Structural Item	Proiect Analysis		Structural Sections 60%	90%		estimate 100%	· Addendum Freparation	
	01F3		Estimate	Structural Concept		Structural Details 60%	Structural Plans 100%				
	Structural Design			Drawings		Structural Specifications 60%	Structural Sections 90%				
	 Scope for TS&L 			_		 Structural Estimate 90% 	 Structural Details 90% 				
	Determined			01F3		 Structural Abbreviations & 	 Structural Specifications 				
	Structural Input on			Structural Design		Symbols, General Notes 90%	90%				
a	Environmental Documentation and Permits			 Building Permit Pre- Submittal Meeting with Dept 		 Structural Demolition Plans Bridge Seat, Headframe, 	Structural Estimate 100%				
ţ,	Documentation and Fermits			of Development		Railings and Ladders, Trestle,					
01F3 Structural				Structural Phasing Plan		Transfer Span, Materials	0181				
ŝ				30%		Schedules	PS&E Review				
1E				 Structural Plans 60% 		 Possible: Dolphins, 	 Structural QAQC 				
•				 Structural Specifications 		Wingwalls					
1				30%		04.04					
				 Structural Estimate 60% Structural Type, Size & 		0181 PS&E Review					
				Location		Structural Design Peer					
				Structural Permitting		Review					
				Submittal Review (includes							
1				constructability review for							
				viable construction method,							
				sequence, and schedule)							
1	Ш	I						l			

DELIVERABLE EXPECTATION MATRIX

	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07		Environmental Review ocumentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
	0169 <u>Project Summary</u> • Plans list with estimate of design hours	01F4 <u>Mechanical Design</u> • Mechanical Estimate 30% • 15% Mechanical Plan, Elevation, Phasing Plan		0172 Design Approval • Mechanical Concept Drawings • Mechanical Site Plans and Elevations • Preliminary Mechanical Item Estimate • Mechanical Design Criteria • Project Analysis 01F4 <u>Mechanical Design</u> • Mechanical Plans 60% • Utilities Plans • Mechanical Specifications 30% • Mechanical Estimate 60% • 30% Utilities Plans		01F4 <u>Mechanical Design</u> • Mechanical Phasing Plan 60% • Mechanical Plans 90% • Mechanical Sections 60% • Mechanical Specifications 60% • Mechanical Estimate 90% • Mechanical Abbreviations & Symbols, General Notes 90% • Mechanical Demolition Plans 100% • 60% Water & Sewer Line Sections and Details 0181 <u>PS&E Review</u> • Mechanical Design Peer Review	01F4 <u>Mechanical Design</u> • Mechanical Phasing Plan 90% • Mechanical Plans 100% • Mechanical Sections 90% • Mechanical Details 90% • Mechanical Estimate 100% • 90% Water & Sewer Line Sections and Details 0181 <u>PS&E Review</u> • Mechanical QAQC		01F4 <u>Mechanical Design</u> All plans, specs, and estimate 100%	01F4 <u>Mechanical Design</u> • Response to Bidder RFIs • Addendum Preparation	
01E5 Flectrical	0169 <u>Project Summary</u> • Plans list with estimate of design hours	01F5 Electrical Design • Electrical Plans 60% • Utilities Plans • Electrical Specifications 30% • Electrical Estimate 60% • 30% Hydraulic System	Design Documentation Package • Electrical Concept Drawings • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate	0172 Design Approval • Electrical Concept Drawings • Electrical Site Plans and Elevations • Preliminary Electrical Item Estimate • Electrical Design Criteria • Project Analysis 01F5 <u>Electrical Design</u> • Electrical Plans 60% • Utilities Plans • Electrical Specifications 30% • Electrical Estimate 60% • Lighting Plan 60% • One-Line & One-Line Demolition 60% • Temporary Power Plan 60%		01F5 Electrical Design • Electrical Plans 90% • Electrical Sections 60% • Electrical Details 60% • Electrical Specifications 60% • Electrical Specifications 60% • Electrical Sectifications & Symbols, General Notes 90% • Electrical Demolition Plans • Lighting Plan 90% • One-Line & One-Line Demolition 90% • Temporary Power Plan 90% • 90% Transfer Span Electrical Plan & Schedules, PLC Terminal Wiring, Electrical Details, Conduit Block Diagram 0181 <u>PS&E Review</u> • Electrical Design Peer Review	01F5 Electrical Design • Electrical Plans 100% • Electrical Sections 90% • Electrical Details 90% • Electrical Specifications 90% • Electrical Estimate 100% • Lighting Plan 90% • One-Line & One-Line Demolition Final • Temporary Power Plan Final • Final Transfer Span Electrical Plan & Schedules, Electrical Details, Conduit Block Diagram 0181 <u>PS&E Review</u> • Electrical QAQC		01F5 <u>Electrical Design</u> All plans, specs, and estimate 100%	01F5 <u>Electrical Design</u> • Response to Bidder RFIs • Addendum Preparation	

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	Begin Preliminary Engineering PE.PM.02.01	Project Planning and Endorsement (PMP) PE.PM.03.15	Pre-Design Study (5%) PE.PS.07	Geometric Review (30%) PE.PD.75.30 Design Approval PE.PD.42.10	Environmental Review Documentation Complete PE.EV.18	General Plans Review (60%) PE.PD.75.60	Preliminary Contract Review (90%) PE.PD.75.90	Environmental Permits Received PE.EV.29	Project Development Approval (100%) PE.PD.42.60	Contract Ad and Award PE.PD.90.35	PE Phase End (Close Out and Archiving) PE.PD.90.65
Reviews and QAQC				0181 <u>PS&E Review</u> • 30% Constructability Review • 30% Constructability Comments 0180 <u>Constructability Review</u> • 30% Constructability Review • 30% Constructability Comments • Draft Construction Schedule Review		0181 <u>PS&E Review</u> • 60% Constructability Review • 60% Constructability Comments • Discipline Peer Reviews 0180 <u>Constructability Review</u> • 60% Constructability Review • 60% Constructability Comments	0181 <u>PS&E Review</u> • 90% PS&E Building Permit Application Package • State Materials Justification and Approval by ASDE • 90% Constructability Review • 90% Constructability Comments • Discipline QAQC Memos 0180 <u>Constructability Review</u> • 90% Constructability Review • 90% Constructability Review • 90% Constructability Comments • Draft Construction Schedule Review		0181 <u>PS&E Review</u> • File Review Comments and Designer Replies in Project File • Final PS&E Contract Packaged for Management Review • Contract Package QAQC Cover Sheet for Ad and Award		
PE	Close Out			-							
Construction Preparation				01AC <u>Construction Scheduling</u> • Draft Construction Schedule		01AC <u>Construction Scheduling</u> • Draft Construction Schedule • Construction Phasing Alternatives	01AC <u>Construction Scheduling</u> • Final Construction Schedule			0189 <u>Advertisement</u> • Memo to OEO • Memo to Contract Ad & Award • Ad Package to HQ	0199 <u>Construction Admin</u> • Construction Funding Approval Work Order • Design Record Close Out • Funding Adjust-to-Award • Contract Addendum • Respond to Bidder RFIs 0101 <u>Project Management</u> • Lessons Learned • Design Records to Library