Washington State Department of Transportation

Statewide Assessment

Best Practices of Incorporating Environmental Commitments into Contracts

May 27, 2008 (FINAL)

By WSDOT Headquarters Construction and Environmental Services Offices
# TABLE OF CONTENTS

I. WHY IS WSDOT ASSESSING HOW ENVIRONMENTAL COMMITMENTS ARE INCORPORATED INTO CONTRACT DOCUMENTS? ................................................................. 1

II. HOW DID WE DO OUR ASSESSMENT? ........................................................................... 1

III. HOW DO THE VARIOUS WSDOT REGIONS INCORPORATE ENVIRONMENTAL COMMITMENTS INTO CONTRACT DOCUMENTS? .................. 2

   Washington State Ferries - Lopez Island Dolphin Replacement ................................................................. 4

   Eastern Region – SR 270 Pullman to Idaho .................................................................................................. 5

   North Central Region – SR 17 Pioneer Way to Stratford Road ................................................................. 6

   South Central Region – Frenchtown Vicinity to Walla Walla ................................................................. 8

   Olympic Region – Spring Valley Restoration ............................................................................................ 9

   Northwest Region – Quiet Cove Road Vic. to SR 20 Spur ................................................................. 11

   Southwest Region - I-5/SR 502 I/C ............................................................................................................. 13

IV. WHAT WERE THE SIMILARITIES AND DIFFERENCES WITH HOW REGIONS INCORPORATED COMMITMENTS INTO CONTRACTS? .......................... 14

   Similarities: .................................................................................................................................................. 14

   Differences: ................................................................................................................................................ 15

V. WHAT ARE THE BEST PRACTICES FOR INCORPORATING ENVIRONMENTAL COMMITMENTS INTO CONTRACT DOCUMENTS? .................... 15

   Olympic – Imposed Restrictions .................................................................................................................. 15

   Northwest – Incorporating Environmental Permit Requirements into Plans and Specifications ............ 16

   Southwest – Commitment Tracking System ............................................................................................... 16

VI. WHAT IS BEING RECOMMENDED? ........................................................................... 16

APPENDIX A: IMPOSED RESTRICTIONS ............................................................................. 18
I. Why is WSDOT assessing how environmental commitments are incorporated into contract documents?

In June 2007, Don Nelson, the Director of Environmental & Engineering Programs for Washington State Department of Transportation (WSDOT), requested that Headquarters Construction and Environmental Services Offices perform a statewide evaluation of how the Regions incorporate environmental commitments into contracts. Don’s request was announced at the August 2007 Project Development Engineers’ conference call, where Region and Headquarters representatives discuss issues related to project delivery. At this meeting, the goal, scope, and process of Don’s request were explained.

WSDOT makes many environmental commitments during the planning and design of a transportation project. The source of commitments ranges from environmental process documentation to permit approvals. In many cases, there are hundreds of environmental commitments for a single project. Project teams find it challenging to manage a large volume of commitments through the lifecycle of a project.

Some of these commitments are the responsibility of WSDOT itself to perform, while some require action on the part of contractors, which are hired to build our projects. WSDOT incorporates contractor-related required actions into our contracts, making the requirements clear for contractors and allowing them to include costs for the work in their bid.

WSDOT is separated into six independent Regions and various Modes, such as Washington State Ferries (herein referred to as a Region). Since each Region is different, so to, is the method for preparing the contract. And since the clarity and completeness of the contract could influence compliance during construction, this report is intended to evaluate those methods to identify best practices and share them statewide.

II. How did we do our assessment?

Jim Spaid, of the Headquarters Construction Office and Scott Carey, of the Environmental Services Office were tasked with making the assessment. First, they jointly prepared a standard set of questions to ask the Regions. Second, they identified one project per Region and obtained copies of the contract, environmental permits, and other environmental documentation. Jim and Scott reviewed the contracts and environmental documents to identify whether and how environmental commitments were included in the contract. Third, all environmental provisions from the environmental documents and permits were flagged and/or highlighted for analysis and discussion during the interview. Fourth, Scott reviewed data to determine if the project experienced any non-compliance events.

---

1 The Urban Corridors Office (UCO) is essentially a seventh Region that exists within Northwest Region. Its’ purpose is to facilitate large highway corridor projects in urban areas. UCO is not included in this report because they felt their smaller projects are handled similar to Northwest’s and most of their large projects utilize a new contracting method (Design Build), one not currently used by other Regions (except Olympic on Tacoma Narrows Bridge).
Meetings were set up with Region staff representing Environmental, Design, and Construction. Staff was asked questions about their contract, focusing on process and tools used. They were also asked questions about construction compliance in an effort to determine whether the contract played a part.

Jim and Scott took notes at all the meetings. The meeting notes were circulated to all who attended for review and comment and/or correction. The notes and observations, as well as our assessment of the environmental documents and contract documents are the basis for this report.

III. **How do the various WSDOT Regions incorporate environmental commitments into contract documents?**

This section summarizes the results of our meetings with the Regions. It provides our understanding of how well the environmental commitments for each project were incorporated into contract documents and describes the process for how each project team incorporated commitments into the contract.

Permits will be referred to throughout this report. Table III-1 provides a list of common permits, identifies the issuing agency, and states the purpose of the permit.

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>Issuing Agency</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Stormwater General Permit (NPDES)</td>
<td>Washington State Department of Ecology</td>
<td>This permit is triggered by activities that disturb over one acre in soil. This permit, also commonly referred to as a 402 due to its’ origination from that section of the Clean Water Act (CWA), is designed to protect waters of the state from all types of construction stormwater runoff, including pH and turbidity.</td>
</tr>
<tr>
<td>404 Nationwide (NWP)</td>
<td>US Army Corps of Engineers</td>
<td>This permit is triggered when a project dredges or fills any wetland or navigable water of the United States. There are two types of Corps permits, both of which are referred to as 404 permits because of their origination from that section of the Clean Water Act. The programmatic varieties are separated into Nationwides (approximately 30 versions exist) that focus on various types of common construction or maintenance activities. All other projects that cannot utilize Nationwides require an Individual 404.</td>
</tr>
<tr>
<td>401 Individual Water Quality Certification</td>
<td>Washington State Department of Ecology</td>
<td>Any time WSDOT obtains a 404, whether Individual or Nationwide, the agency must also obtain a Water Quality Certification (401, due to the origination from that section of the CWA) from Washington State Department of Ecology (DOE). The Certification acknowledges that the proposed work will also maintain water quality standards. If the 404 is Individual, then DOE must issue an Individual 401 Certification. For Nationwides, DOE has the discretion to issue an Individual permit or a Letter of Verification (LOV). WSDOT projects that receive a 401 LOV from DOE are required to comply with the Water Quality Implementing Agreement (WQIA).</td>
</tr>
<tr>
<td>Water Quality Implementing Agreement (WQIA)</td>
<td>WSDOT &amp; Department of Ecology Agreement</td>
<td>The Water Quality Implementing Agreement (WQIA) between WSDOT and DOE is a set of conditions that WSDOT agrees to do in order to receive a Letter of Verification from Ecology, and thus prevent the need of an Individual 401 Certification.</td>
</tr>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Washington State Department of Fish &amp; Wildlife</td>
<td>If our work involves disturbance of earth or water below a well defined portion (known as the ordinary high water mark) of any water of the state, WSDOT must obtain a Hydraulic Project Approval (HPA) from Washington State Department of Fish &amp; Wildlife (WDFW).</td>
</tr>
<tr>
<td>Endangered Species Act (ESA)</td>
<td>US Fish &amp; Wildlife NOAA Fisheries</td>
<td>WSDOT must consult these federal agencies when proposed projects have potential to affect species listed under the ESA as threatened or endangered.</td>
</tr>
<tr>
<td>Shoreline Substantial Development</td>
<td>Local Governments</td>
<td>A written permit issued by local government for development on or near shorelines, as described by the Shoreline Management Act (SMA).</td>
</tr>
</tbody>
</table>
Permit

Critical Area Development Permit

<table>
<thead>
<tr>
<th>Permit</th>
<th>Local Governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>A permit required by local governments falling under the jurisdiction of the Washington State Growth Management Act (GMA). When a development project is proposed, the GMA requires the project proponent to address how the project will affect critical areas, such as wetlands.</td>
<td></td>
</tr>
</tbody>
</table>

Floodplain Development Permit

<table>
<thead>
<tr>
<th>Permit</th>
<th>Local Governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>If a project is located in a mapped 100-year floodplain, the local government must require that a permit be obtained prior to development. Proposed projects are reviewed and conditions imposed to reduce the potential for damage from floodwater. Permits are required for any development as well as for filling or grading activities in the floodplain.</td>
<td></td>
</tr>
</tbody>
</table>

There are four main components to a contract, which are commonly referred to as contract documents. They include:

1. Standard Specification\(^2\) – contains construction, material and contract administration requirements applicable to every project unless supplemented or changed by an Amendment, Special Provision or GSP. Standard Specifications are contained in a paper bound document that is published every two years. The Standard Specifications are amended on a schedule of three times per year.

2. Contract Provisions – a compilation of several documents put together for a specific project. The components are:
   
   a. Amendments – changes to the Standard Specifications that are effective when the contract is advertised for bid.
   
   b. Special Provisions – additional project specific requirements that supplement or change the Standard Specifications. General Special Provisions (GSP) are previously approved provisions that have specific relationship to the contract. Other Special Provisions are written for specific project requirements that are not already included in other document.
   
   c. Proposal – the documents that include the list of bid items. The contractor fills in the bid prices for each item of work.
   
   d. Appendices – other items that relate to the contract such as soil boring logs, permits, agreements, etc.

3. Contract Plans – graphical representation of the various items of work that are to be accomplished on the project.

4. Standard Plans – a collection of plan details that have been pre-approved for use on WSDOT projects.

Plans, Specifications, and Estimate (PS&E) is prepared for each project. The PS&E must be complete before the project can be advertised for bid. Each Region has their own Plans Review Office\(^3\). The PS&E is prepared using the procedure outlined in the Plans Preparation Manual. Using this procedure provides a degree of uniformity that is helpful to contractors and subcontractors that bid on WSDOT projects.

\(^2\) Appendix A contains excerpts of the 2006 Standard Specifications referenced throughout this report.

\(^3\) WSF does have a formal PSE process, but does not have a formal Plans Review Office.
**Washington State Ferries - Lopez Island Dolphin Replacement**

a. **Were the contract-relevant commitments incorporated into the contract?**

Yes. For the most part, the Region relied on the Standard Specifications and wrote Special Provisions for incorporating environmental commitments. This information is summarized in Table III-2.

This project required three permits, including a 404 Nationwide 3 (Maintenance), Water Quality Implementing Agreement (WQIA), and a Hydraulic Project Approval (HPA). The project also required two ESA Consultation letters from US Fish & Wildlife Service and National Marine Fisheries Service. Although the project qualified for requiring a Shorelines permit, San Juan County exempted the work based on WSDOT’s petition, as allowed by the Shoreline Management Act.

### Table III – 2

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5(2) of the Standard Specifications, contained nine contract-relevant conditions from the HPA. A copy of the HPA was also attached to the appendices.</td>
</tr>
<tr>
<td>ESA Consultation Letters Supporting Biological Evaluation</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07 of the Standard Specifications, contained 10 contract-relevant conditions from a Biological Evaluation prepared by WSDOT.</td>
</tr>
<tr>
<td>Water Quality Implementing Agreement (WQIA)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5(3) of the Standard Specifications, noted the attachment of the WQIA to the contract appendices, requiring the contractor to abide by the agreement.</td>
</tr>
<tr>
<td>Nationwide 3(Maintenance)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07 of the Standard Specifications, was supplemented with language noting that the project obtained a NWP 3 and requiring contractor compliance with this permit. The NWP 3 conditions are covered elsewhere in the Standard Specifications or are not applicable to the contractor.</td>
</tr>
</tbody>
</table>

b. **What is the process Regions use for incorporating commitments into the contract?**

Washington State Ferries (WSF) uses a standard process of close involvement within the design team during the environmental documentation process, permit acquisition, and contract preparation. Bi-weekly meetings are held through the design of the project and the WSF Environmental Office is involved with writing Special Provisions and selecting GSPs during contract preparation.

When WSF prepares a contract, they tend to insert all their additional provisions near the front of the contract, rather than distribute them throughout. This allows the contractor to turn to one place to find them. WSF staff confirmed that attaching all permits to the appendix of the contract is standard procedure.
c. Were there any non-compliance events?

No. There weren’t any non-compliance events.

**Eastern Region – SR 270 Pullman to Idaho**

a. Were the contract-relevant commitments incorporated into the contract?

Yes, the Region used Standard Specifications, Special Provisions, General Special Provisions, Contract Plans and Standard Plans for incorporating contract-relevant commitments into the contract. This information is summarized in Table III-3.

This project required a Hydraulic Project Approval, Individual 404 Army Corps, Individual 401, and a Construction Stormwater General Permit (NPDES).

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5(2), Section 7-03.2, and 7-03.3 of the Standard Specifications, included 44 conditions from the HPA.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The plans incorporated conditions of the HPA.</td>
</tr>
<tr>
<td>404 Individual</td>
<td>General Special Provision</td>
<td>A General Special Provision, written to supplement Section 1-07.6 of the Standard Specifications, noted that ‘All contact with the Corps shall be through the Engineer. A copy of the permit is available at the Engineer’s Office. The Contractor shall, at no expense to the Contracting Agency, comply with all requirements’, of the permit. All but one of the 404 conditions applied to the contractor.</td>
</tr>
<tr>
<td></td>
<td>Standard Specification</td>
<td>Cultural resource concerns from the Army Corps were addressed by Section 1-07.16(4) of the Standard Specifications.</td>
</tr>
<tr>
<td>401 Individual Water Quality Certification</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-08.4 of the Standard Specifications, addressed one 404 permit condition.</td>
</tr>
<tr>
<td></td>
<td>Standard Specification</td>
<td>The Region places a heavy reliance on Sections 1-07.5(2) and (3) of the Standard Specifications to enforce 401 Water Quality Certification conditions.</td>
</tr>
<tr>
<td>Construction Stormwater General Permit (NPDES)</td>
<td>Standard Specification</td>
<td>In general, the Region places a heavy reliance on Section 1-07.5(3) and Section 8-01 of the Standard Specifications to enforce the NPDES permit. This contract supplemented Section 8-01 with five GSPs and three Special Provisions.</td>
</tr>
<tr>
<td></td>
<td>General Special Provision</td>
<td>Measures to minimize impacts to water quality are shown on these plan sheets.</td>
</tr>
<tr>
<td></td>
<td>Special Provision</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard Plans</td>
<td></td>
</tr>
</tbody>
</table>
b. What is the process Regions use for incorporating commitments into the contract?

Eastern Region uses a process comparable to others that involves close coordination between Environmental, Design, and Construction Offices, but on this project they supplemented it by using the Commitment Tracking System (CTS) for the first time. Commitments from environmental documents and permits were entered into CTS (an internal WSDOT database) by staff from the Region Environmental Office.

The CTS has an ‘Assign Responsibility’ feature that allows commitments to be separated between WSDOT and the contractor and allows references to contract documents to be made. The CTS provides a report that promotes building the contract through PSE-Word, but the project team followed their standard PS&E review process for the Region that includes Design, Environmental, plus other support groups, and did not use the CTS feature.

They did use CTS though to dump commitments into a spreadsheet where they were used to prepare an environmental compliance notebook. Although the ‘Assign Responsibility’ feature in CTS was not fully taken advantage of Eastern Region was still able to provide the contractor with their obligations using the notebook.

c. Were there any non-compliance events?

Yes. The project did experience non-compliance events associated with erosion and turbid stormwater discharges, violating the NPDES, but Eastern Region staff believes they were not attributed to contract preparation. They felt using the Plan Sheets and Standard Specifications were sufficient and clarifying conditions in the Special Provisions would not have helped.

Staff explained that successful compliance with the contract and permit requires teeth from both WSDOT and the resource agencies. They stated that DOE visited the project but did not cite the contractor’s poor performance occurring off the project site. The passive approach taken by DOE when non-compliance events occurred as a result of the contractor’s disposal sites probably diminished the credibility of WSDOT in enforcing environmental requirements on this project.

North Central Region – SR 17 Pioneer Way to Stratford Road

a. Were the contract-relevant commitments incorporated into the contract?

Yes, the Region used Standard Specifications, Special Provisions, Region General Special Provision, General Special Provisions, Contract Plans, and Standard Plans for incorporating contract-relevant commitments into the contract. This information is summarized in Table III-4.

This project required a Hydraulic Project Approval, Individual 404 Army Corps, Individual 401, Construction Stormwater General Permit, and a Shorelines permit from City of Moses Lake.
<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Region General Special Provision</td>
<td>A Region General Special Provision, written to supplement Section 1-07.5(2) of the Standard Specifications, noted the attachment of the HPA to the contract appendices, requiring contractor compliance with the requirements of the permit ‘at no expense to the Contracting Agency’.</td>
</tr>
<tr>
<td></td>
<td>Standard Specifications</td>
<td>The Region also places considerable reliance on Section 1-07.5(3) of the Standard Specifications to enforce certain conditions from this permit.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The plans also contained specific details of re-routing a stream to fulfill the HPA and Shorelines permits.</td>
</tr>
<tr>
<td>404 Individual</td>
<td>General Special Provision</td>
<td>An offsite wetland mitigation bank was used to make up for the impacts to wetlands resulting from this project. The Region still supplemented Standard Specification 1-07.6 with a General Special Provision to note a few items in the permit, for which the Contractor would be responsible. However, the Special did not spell them out, rather stated ‘a copy of the permit is available at the Engineer’s Office…and shall be complied with at no cost’ to WSDOT. Only one condition of the 404 permit applied to the contractor.</td>
</tr>
<tr>
<td></td>
<td>Standard Specification</td>
<td>Cultural resource concerns from the Army Corps were addressed by Section 1-07.16(4) of the Standard Specifications.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The plans detailed specifics for stream relocation activities.</td>
</tr>
<tr>
<td>401 Individual Water Quality Certification</td>
<td>Special Provision</td>
<td>A Special Provision was written to supplement Section 1-07.5(3) was supplemented with language noting the attachment of the 401 Certification to the contract appendices, requiring contractor compliance with the requirements of the permit ‘at no expense to the Contracting Agency’.</td>
</tr>
<tr>
<td>Construction Stormwater General Permit (NPDES)</td>
<td>Standard Specification</td>
<td>The Region leveraged Sections 1-07.5(1) and (3), as well as 1-07.15(1) and 8-01 of the Standard Specifications to address stormwater runoff.</td>
</tr>
<tr>
<td></td>
<td>Contact Plans</td>
<td>Measures to minimize impacts to water quality are shown on these plan sheets.</td>
</tr>
<tr>
<td>Shorelines – City of Moses Lake</td>
<td>Standard Specification</td>
<td>Cultural resource issues raised were addressed by Section 1-07.16(4) of the Standard Specifications.</td>
</tr>
</tbody>
</table>

**b. What is the process Regions use for incorporating commitments into the contract?**

North Central Region uses a process comparable to others that involves close coordination between Environmental, Design, and Construction Offices.
When a project is at about 95% design completion, they perform a “Plans in Hand Review”. This review is attended by the Project Engineer Office, Regional Administrator for Engineering, plus the Maintenance, Utilities, Traffic, Environmental, and Plans Offices. The participants review the contract Plans, plus General and Special Provisions page by page. They are cross referenced with permits and they look for inconsistencies and ambiguities. A record of changes is kept and once made; the updated contract is re-routed to the WSDOT Project Engineer responsible for the project.

c. Were there any non-compliance events?

No. There weren’t any non-compliance events. There were a couple of reported incidents that were reported to City of Moses Lake and Department of Ecology, but neither agency could validate the reports.

South Central Region – Frenchtown Vicinity to Walla Walla

a. Were the contract-relevant commitments incorporated into the contract?

Yes, the Region used Standard Specifications, Special Provisions, Contract Plans, and Standard Plans for incorporating contract-relevant commitments into the contract. This information is summarized in Table III-5.

This project required a Hydraulic Project Approval (HPA), Nationwide 14 (Linear Transportation Projects), Individual 401 Certification, and Construction Stormwater General Permit. The project was exempt from obtaining a Shoreline, Critical Area, or Floodplain permit.

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5(1) of the Standard Specifications, addresses one condition of the HPA.</td>
</tr>
<tr>
<td></td>
<td>General Special Provision</td>
<td>A General Special Provision, written to supplement Section 1-07.5(2) of the Standard Specifications, noted the attachment of the HPA to the contract appendices, requiring contractor compliance with the HPA. One condition pertaining to work time windows was extracted from the permit and included with the Special Provision.</td>
</tr>
<tr>
<td></td>
<td>Standard Specifications</td>
<td>Some of the conditions are also covered by Sections 1-07.5(1), (2), and (3) of the Standard Specifications.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The plans incorporated conditions of the HPA.</td>
</tr>
</tbody>
</table>
| Nationwide 14 (Linear Transportation Projects) | Special Provision | Specific permit conditions associated with wetlands were absent from the contract because mitigation is being handled offsite by a third party. However, Standard Specification 1-07.6 was supplemented with a Special Provision stating that ‘A copy of the permit can be obtained from the Project Engineers Office’ and that ‘The Contractor shall comply with all the requirements of this permit.’ The NWP 14 conditions are covered elsewhere in the
b. What is the process Regions use for incorporating commitments into the contract?

The South Central Region uses a fairly standard process. For this project and others as well, there is a single environmental staff point of contact assigned for the entire design phase of a project. This staff person coordinates federal and state environmental processes, working closely with the projects’ design team. These processes lead to commitments, which are recorded in a project file.

The project file is then delivered to another individual in the Environmental Office, whose responsibility it is to coordinate with the Construction Office responsible for building the project. This individual works with the Project Engineer’s Office during the preparation of the PSE&E to see that the necessary commitments are incorporated into the contract.

c. Were there any non-compliance events?

No. There weren’t any compliance events.

Olympic Region – Spring Valley Restoration

a. Were the contract-relevant commitments incorporated into the contract?

Yes, the Region prepares a highly customized set of Region General Special Provisions, Special Provisions, and Contract Plans to address permit conditions, while leveraging the existing Standard Specifications and Standard Plans for incorporating contract-relevant commitments into the contract. This information is summarized in Table III-6.

This project required a Hydraulic Project Approval (HPA), Nationwide 27 (Restoration of Streams and Wetlands), Individual 401 Certification, Construction Stormwater
### Table III – 6

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>Special Provision</td>
<td>Special Provisions, written to supplement Sections 1-07.5 and 2-01.3 of the Standard Specifications contained 18 conditions from the HPA.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The plans incorporated detailed drawings from the HPA.</td>
</tr>
<tr>
<td>Nationwide 27 (Restoration of Streams and Wetlands)</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.6 of the Standard Specifications, noted the Nationwide being attached to contract appendices for informational purposes.</td>
</tr>
<tr>
<td></td>
<td>Standard Specification</td>
<td>Cultural resource issues raised by Army Corps were addressed by Section 1-07.16(4) of the Standard Specifications.</td>
</tr>
<tr>
<td>Individual 401 Water Quality Certification</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5 of the Standard Specifications, included conditions addressing 401 requirements. Section 1-07.6 was supplemented with language noting the 401 Certification being attached to contract appendices for informational purposes. And Section 1-07.15(1) was supplemented with additional spill prevention/response conditions.</td>
</tr>
<tr>
<td></td>
<td>Standard Specification</td>
<td>The Region also leveraged Section 8-01.3(1)C of the Standard Specifications.</td>
</tr>
<tr>
<td>Construction Stormwater General Permit (NPDES)</td>
<td>Special Provision And Region General Special Provisions</td>
<td>Section 8-01 of the Standard Specifications was supplemented with four Special Provisions and eight Region GSPs addressing the NPDES permit. Two additional Region General Special Provisions were also written to supplement Sections 1-07.16(2) and 1-08.4 of the Standard Specifications, address the permit. Measures to minimize impacts to water quality are shown on these plan sheets.</td>
</tr>
<tr>
<td>Critical Area Ordinance – City of Federal Way</td>
<td>N/A</td>
<td>No contract-relevant conditions applied.</td>
</tr>
</tbody>
</table>

**b. What is the process Regions use for incorporating commitments into the contract?**

Olympic Region has developed a very formal process referred to as Imposed Restrictions (IR) and is mandatory before any project can be advertised for bid.

Imposed Restrictions is a suite of Region General Special Provisions, which staff inserts to the contract through their Region PS&E process. The IR covers all the known and repeated conditions in the two Implementing Agreements with Department of Ecology, the Construction Stormwater General Permit, and all the Army Corps Nationwide permits.
There are three steps to the process:

1. Environmental, Design, Construction, and Plans Offices evaluate the whole GSP and select applicable conditions based on the project characteristics and exclude the rest.

2. Evaluate permits in addition to the ones covered by IR and determine whether those permits require supplementing language already in the IR or include a project Special Provision.

3. Compare the results of the IR process to NEPA/SEPA documents and Biological Assessment for consistency, which may also require addition of restrictions.

c. Were there any non-compliance events?

Yes. However, none of these events are attributed to a lack of commitments being incorporated into the contract. There were three hazardous materials incidents due to broken hydraulic lines, and one water quality exceedence when the creek was routed to the new and improved channel. The modified mixing zones were not able to accommodate the added turbidity, despite the care from the workers.

Northwest Region – Quiet Cove Road Vic. to SR 20 Spur

a. Were the contract-relevant commitments incorporated into the contract?

Yes, the Region used Standard Specifications, Special Provisions, General Special Provisions, Contract Plans, and Standard Plans for incorporating contract-relevant commitments into the contract. In addition, the Region incorporated select permit conditions into the Contract Plans. This information is summarized in Table III-7.

This project required an HPA, Nationwide 23 (Approved Categorical Exclusions), Individual 401 Certification, and a Construction Stormwater General Permit.

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>General Special Provision</td>
<td>A General Special Provision, written to supplement Section 1-07.5(2) of the Standard Specifications, noted the permit conditions attached to ‘the Environmental Compliance/TESC Plans’. A condition stating the dates of work was also included. Section 8-01 was supplemented with conditions for temporary stream diversion activities.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td>The Contract Plans (Environmental Compliance Notes) contain 18 written HPA conditions. The plans also incorporate HPA conditions into drawings.</td>
</tr>
<tr>
<td>Nationwide 23 (Approved Categorical Exclusions)</td>
<td>General Special Provision</td>
<td>A General Special Provision, written to supplement Section 1-07.6 of the Standard Specifications, noted</td>
</tr>
</tbody>
</table>
Contract Plans

that ‘All contact with the Corps shall be through the Engineer. A copy of the permit is available at the Engineer’s Office. The Contractor shall, at no expense to the Contracting Agency, comply with all requirements’, of the permit.
The NWP 23 conditions are covered elsewhere in the Standard Specifications or are not applicable to the contractor.

Two notes were added in addition to conditions of the Nationwide permit.

| 401 Individual Water Quality Certification | Contract Plans | Nine notes were added to the sheets addressing this permit. The Region also incorporated three notes from the Water Quality Implementing Agreement to compliment other 401 notes. |
| Construction Stormwater General Permit (NPDES) | Special Provision | A Special Provision, written to supplement Section 8-01 of the Standard Specifications, is heavily supplemented with language addressing stormwater. |
| Region General Special Provision | Contract Plans |
| Standard Plans | A Region General Special Provision, written to supplement Section 1-07.5(3) of the Standard Specifications, addresses additional NPDES issues. Measures to minimize impacts to water quality are shown on these plan sheets. |
| Noise Variance – Skagit County | Special Provision | A Special Provision, written to supplement Section 1-07 of the Standard Specifications, contained ten items required of the contractor. |

b. What is the process Regions use for incorporating commitments into the contract?

The Region Environmental Office coordinator facilitates the environmental documentation process and obtains permits in coordination with team members of the Design Office. The project design team sets up an Environmental Compliance Meeting (ECM) with the Design and Construction representatives. These include the Chief Inspector, Environmental Inspector, and the Environmental Compliance Assurance Inspector and the Environmental Technical Advisor, who provide varying levels of oversight and technical assistance during construction. The ECM is held during the time when the PS&E for the project is being developed.

During the ECM meeting, staff identifies which environmental commitments need to be incorporated into the contract. As a result of the ECM, the project team writes Special Provisions and prepares Contract Plans (Environmental Compliance Notes) that list the contractor-relevant environmental commitments. The Contract Plans also contain environmental compliance drawings that relate to the permit conditions.

c. Were there any non-compliance events?

Yes, however, none of the events resulted from conditions not being included in the contract. WSDOT is often required to notify resource agencies when and where preconstruction meetings will be held. The notification was made for the NPDES permit, but not for the 401 Certification. This was due to the amount of lead time required for
notification being longer than the time between contract execution and the date of the preconstruction meeting.

Also, high visibility fence (HVF) used to denote protected areas, was placed inside a wetland, due to a staking error in the field. The plan sheets had boundaries marked correctly. In another instance, pipe was stockpiled in a wetland behind (HVF). A final event resulted in excavation within a buffer of a sensitive area.

**Southwest Region - I-5/SR 502 I/C**

a. **Were the contract-relevant commitments incorporated into the contract?**

Yes, the Region used Standard Specifications, Special Provisions, General Special Provisions, Contract Plans, and Standard Plans for incorporating contract-relevant commitments into the contract. This information is summarized in Table III-8.

This project required an HPA, Individual 401 Certification, Individual 404, and a Construction Stormwater General Permit.

<table>
<thead>
<tr>
<th>Environmental Document</th>
<th>Contract Document Type</th>
<th>Method of Incorporating Commitments Into Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Project Approval (HPA)</td>
<td>General Special Provision</td>
<td>A General Special Provision, written to supplement Section 1-07.5(2) of the Standard Specifications, contained 28 conditions from the HPA. The plans incorporated conditions of the HPA.</td>
</tr>
<tr>
<td>404 Individual</td>
<td>General Special Provision</td>
<td>The contract was supplemented with language noting that ‘All contact with the Corps shall be through the Engineer. A copy of the permit is available at the Engineer’s Office. The Contractor shall, at no expense to the Contracting Agency, comply with all requirements’, of the permit. A General Special Provision, written to supplement Section 1-07.16(4) of the Standard Specifications, addressed cultural resource issues raised by Army Corps.</td>
</tr>
<tr>
<td>401 Individual Water Quality Certification</td>
<td>Special Provision</td>
<td>A Special Provision, written to supplement Section 1-07.5(3) of the Standard Specifications, contained 20 conditions related to the 401 Certification. A Special Provision was also inserted noting the attachment of the WQIA to the contract appendices, requiring contractor compliance with the requirements of the permit ‘at no expense to the Contracting Agency’. Only one of the 404 permit conditions applied to the contractor.</td>
</tr>
<tr>
<td>Construction Stormwater General Permit (NPDES)</td>
<td>Special Provision</td>
<td>The Region used Standard Specification 1-07.5(3) and 8-01 to address the NPDES permit. Measures to minimize impacts to water quality are shown on these plan sheets.</td>
</tr>
<tr>
<td></td>
<td>Contract Plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard Plans</td>
<td></td>
</tr>
</tbody>
</table>
b. What is the process Regions use for incorporating commitments into the contract?

The environmental coordinators facilitate the environmental documentation process and obtain permits with assistance from the project design team. The Coordinators use the Commitment Tracking System (CTS) to organize all environmental commitments and separate out the WSDOT commitments from the contract-relevant ones.

Using the ‘Assign Responsibility’ feature within CTS, the coordinators are enabled to identify gaps of coverage between the contract and permits. Some coordinators work closely with members of the design team to prepare contract language to fill the coverage gaps, while others prefer to identify possible gaps and let the design team prepare language. Either way, the contract is supplemented with project specific language when the Plans, Specification, and Estimates are prepared.

c. Were there any non-compliance events?

Yes. There were a handful of non compliance events associated with water quality, but they were not associated with inadequate contract language.

IV. What were the similarities and differences with how Regions incorporated commitments into contracts?

After reviewing how the various regions incorporated environmental commitments into contract documents, some similarities and differences were observed. This section describes those below.

Similarities:

a. All Regions have dedicated personnel and developed procedures for incorporating commitments into contracts.

b. To some degree, most Regions are referencing permits with special provisions and expecting contractor to read and apply the relevant conditions to their work. There is a 13 year old GSP that is to be used when there is an Army Corps of Engineers permit that states the contractor shall at, no expense to the contracting agency, comply with all the requirements.

c. Most Regions rely heavily on Standard Specifications 1-07.5(3) and 8-01 to address Construction Stormwater General Permit (NPDES) conditions.

d. Nearly half of the Regions expressed concern with the timing between permit acquisition and PS&E. Obtaining permits late in the process may affect the thoroughness of the contract.

e. None of the non-compliance events could be directly traced back to the adequacy of the contract.

f. Most Regions noted that resource agencies were requiring greater levels of detail in the permit applications. This delays the issuing of permits and requires design to be at a higher level of refinement than should be expected.
**Differences:**

a. When Regions reference permits in the contract provisions, there is no consistency in the availability of the permit to the contractor. In some cases Regions will only make these permits available if the contractor requests them, while others will attach them as an appendix.

b. Washington State Ferries, Southwest, Olympic, and Northwest Regions provide a highly customized contract. North Central, South Central, and Eastern Regions also customize their contracts, but not to the extent of the other Regions.

c. Some Regions (Washington State Ferries, North Central Region, Eastern Region, South Central Region) noted they had close working relationships among design, construction, and environmental staff due to their size and proximity of the respective offices.

**V. What are the Best Practices for incorporating environmental commitments into contract documents?**

A best practice exists if it leads to the intended goal, which in this case, is the incorporation of environmental commitments in contract documents. The success of incorporation is dependant on the level of scrutiny given while interpreting the permit conditions, and determining whether those conditions are already expressed in standard WSDOT contract documents or if contract provisions or plans need to be prepared to communicate the requirements to the contractor. Clear and concise specifications, and well thought out plans are critical to avoid misinterpretation.

On this basis, every WSDOT Region implements a best practice by virtue of having staff whose role is to coordinate permit acquisition and communicate the expectations to Design and Construction, and there is a distinguishable process followed.

However, there are three very unique processes within WSDOT that goes beyond the baseline best practice. This section of the report will identify and analyze these other best practices to clearly identify the pros and cons of each.

**Olympic – Imposed Restrictions**

Olympic Region’s Imposed Restrictions (IR) utilizes a suite of Region General Special Provisions and Special Provisions. One of the GSPs covers all the known and repeating conditions in two separate Implementing Agreements with Department of Ecology; the Construction Stormwater General Permit; and all Nationwide Army Corps permits.

One benefit to the Region is that the IR frees up time to focus attention on permit conditions that are not known to be already covered by the IR or Standard Specifications. Also, the IR is built around the Region’s business process, which provides consistency and predictability in contract preparation, plus builds confidence in the WSDOT Project Engineers who administer the contract. In addition, projects cannot be advertised for bid without being evaluated using IR process.

On the other hand, any portion of the Imposed Restrictions, which is based on existing Standard Specifications, must at least be double-checked when Standard Specifications are amended or GSPs are changed. Also, if interagency agreements and/or permits are
updated, which are the foundation of the IR, then the IR must be evaluated and modified accordingly.

**Northwest – Incorporating Environmental Permit Requirements into Plans and Specifications**

The Northwest Region white paper entitled *Incorporating Environmental Permit Requirements into Plans and Specifications*, addresses: (1) project risk identification, delineation, and staking of environmental resources; (2) permit acquisition for at least 90% PS&E constructability review; (3) establishment of Environmental Compliance Note (ECN) Plan Sheets; (4) standardization of project risk types and a naming convention for all environmental resources within the project limits.

This is a well documented process and fits Region’s business process, for which a white paper was written and distributed. It provides a very custom process for each project. Also, this process addresses duplicate permit conditions by utilizing one note that can provide references back to the specific locations in the permit where it originated.

As far as drawbacks to this approach, there is a potential for conflict due to placement of permit requirements in the contract and the choice of requirements used on the ECN sheets. There is a concern that there may be conflict or ambiguity between the ECN and other specifications. For example, a note related to TESC requirements says “the contractor shall perform periodic inspection and maintenance of all erosion control structures at a minimum frequency of every seven days.” Requirements in Section 8-01.3 say “The contractor shall inspect all on-site erosion control BMP’s at least once every calendar week.” Section 8-01 also includes detail of how inspections are to be reported and provides a means of paying the contractor for the work. In case of conflict, the Plans govern over the Standard Specifications. The partial redundancy and lack of detail on the ECN are of concern in how the contract may be interpreted.

**Southwest – Commitment Tracking System**

Southwest has combined an internal project support process and the Commitment Tracking System (CTS) to meet their needs. The CTS is a web-based application that allows Regions to store commitments for a project, assign responsibility (link commitments with contract documents), and manage the status of commitments at all phases of project delivery. The CTS also provides a report for use when building the contract through the agency’s primary contract building tool called PSE-Word.

Using CTS ensures that commitments are always updated with the most current information and the status of each commitment is identifiable, making management of commitments easier. Also, information is easily accessible by those responsible for project delivery.

One drawback to CTS is that it is a new tool and takes time to implement. There are also some identified deficiencies, such as improved security, that need to be provided.

**VI. What is being recommended?**

This report concludes that regions used different methods of incorporating environmental commitments, and that collectively, the regions did a thorough job of accomplishing this. This report recommends the following measures to continue improving the process of incorporating environmental commitments into contracts:
1. Permits included in contract appendices should be for reference only. If permit conditions require action of the contractor, continue the common practice of extracting the condition and inserting it into a contract provision or plan detail. Attaching the permit as an appendix helps the contractor understand the original source of the commitment.

2. Continue the common practice of enhancing Standard Specifications and General Special Provisions to address as many known permit conditions as possible. The HQ ESO and Construction will continue to work with the Regions to develop the Standard Specifications. Developing better special provisions should be accomplished through the Regions, using the Olympic Region Imposed Restrictions as a model. HQ ESO and Construction will develop statewide General Special Provisions that include conditional language commonly found throughout the state.

3. Continue engaging with resource agencies to clarify and standardize permit language up front, such that standard contract language mentioned above, can be prepared. Examples of accomplishing this measure include WSDOT's Water Quality Implementing Agreement and General HPA's, which contain activity specific conditions negotiated on a program (or activity) specific basis that meet WSDOT's criteria for contract language.

4. Recognize that environmental compliance has a cost. The 13 year old GSP and any other similar language, that references complying with environmental conditions “at no cost to the Contracting Agency” will be updated or eliminated.

This report also concludes that in several instances non-compliance with contract commitments occurred for the following reasons:

1. Environmental commitments were being followed and non-compliance events occurred for reasons outside of procedural control (e.g. hydraulic fluid line breaks).

2. Environmental commitments were either not being followed by the contractor or were not being enforced.

In addition, this report concludes that the process for enforcing environmental commitments in the contract can be improved. Examples of improvements may include more effective compliance procedures and training.
Appendix A: Imposed Restrictions

Environmental Regulations
Section 1-07.5 is supplemented with the following:

(OR September 7, 2007)

Imposed Restrictions and Requirements

The following provisions summarize the requirements, in addition to those required elsewhere in the contract, imposed upon the Contracting Agency by the various environmental permits referenced in the following section. Throughout the work, the Contractor shall comply with the following requirements:

General
The Contractor shall ensure that the Project Manager representing the Prime Contractor has read and understands this Special Provision. Prior to commencing any work on site, the Contractor shall provide the Engineer with a signed statement from the Project Manager stating that the Project Manager has read, understands and will abide by the conditions of this Special Provision.

Wetlands and Water Quality
The following restrictions and requirements pertain to work throughout the project limits:

1. A copy of the WSDOT/DOE Implementing Agreement on Surface Water Quality Standards must be kept on site at all times.

2. A mixing zone is established within which the turbidity standard is waived during actual in-water work. The mixing zone is established to only temporarily allow exceeding the turbidity criteria (such as a few hours or days) and is not authorization to exceed the turbidity standard for the entire duration of the construction. The mixing zone shall not exceed (**1$$1$$) feet downstream from the construction area.

3. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into waters of the State including wetlands.

4. All forms used for concrete shall be completely sealed to prevent the possibility of fresh concrete from getting into the stream. All concrete shall be cured a minimum of seven days before contact with waters of the State, including wetlands. Any water that comes into contact with concrete within the first seven days of cure shall be contained and discharged to land with no possible entry to surface waters. Where land is not available for treatment, other methods of water treatment shall be utilized as approved by the Engineer.

OR THE FOLLOWING STATEMENT MAY APPLY INSTEAD:

All concrete placed on the project shall be covered with plastic for a minimum of seven days to prevent stormwater from coming into contact with uncured concrete.
5. If at any time, as a result of project activities, fish are observed in distress, or a fish kill occurs, the local Habitat Biologists with the Department of Fish and Wildlife (**$2$$**) and the Department of Ecology (**$3$$**) shall be called immediately.

6. Debris accumulation on bridges, road surfaces and within bridge drains shall be collected and properly disposed of off site.

7. Wastewater and water removed from the work area shall be routed to an area landward and contained or placed in such a way that the runoff will not flow directly to waters of the State including wetlands. Temporary sediment traps shall be used to allow the turbid water to settle for a minimum of two hours before discharge. The flow rate of turbid water into the stream shall not exceed one tenth of the natural flow rate of the stream at the time of discharge. Measures developed to bring the turbidity levels of the discharge into compliance with Standards with less than the required detention time will require a plan, with supporting test data showing compliance, to be submitted to the Engineer for approval.

8. No Contractor staging areas will be allowed within 300 feet of any waters of the State including wetlands.

9. If using a diversion system, temporary sediment traps shall be cleaned out and the settled sediments removed from the stream channel before removing the stream diversion system and returning the stream to its natural channel. Settled sediments shall not be allowed to enter the stream due to water or runoff flows that may occur after construction is completed.

10. Impacts to bank and shoreline vegetation shall be minimized and replanted immediately per Section 1-07.5(2). Work shall be conducted in a manner to avoid deformation of the streambed.

11. A separate area shall be set aside, that does not have any possibility of draining to waters of the State including wetlands, for wash out of concrete delivery trucks, pumping equipment, and tools.

12. During demolition, materials shall not be stored where high tides, wave action or upland runoff can cause the materials to enter into waters of the State including wetlands.

13. Materials used to construct temporary access roads, where approved or shown on the plans, shall be clean and placed in a manner to prevent erosion and siltation that might result from high water and/or heavy rains. Upon completion of the project, the approach area shall be stabilized and planted to pre-project conditions or as approved by the Engineer.

14. All paved surfaces shall be dry cleaned of debris accumulations prior to fresh water flushing. Flush water shall be clean, without detergents or other cleaning agents.

15. Ditch and culvert cleaning activities shall take place when the ditch or culvert does not contain water whenever possible. If the ditch or culvert is flowing with water at the time of the cleaning activity, temporary sediment traps shall be used to control turbid water created by the activity. Disturbance to bank and wetland vegetation adjacent to the ditch shall be held to a minimum. All materials excavated from roadside ditches or streams shall be completely
removed and disposed of at an upland location. No material shall be side cast into adjacent wetlands or other water conveyances. If material is placed on the upland to dewater, it shall be contained in such a way that the runoff will not flow into nearby storm drains or waters of the State, including wetlands.

16. Decant water resulting from the cleaning of stormwater conveyance systems shall be disposed to municipal decant stations and/or sanitary sewers. The Contractor shall secure approval from the local sewer authority to dispose of decant water. If a municipal decant station or sanitary sewer is not available, the material shall be allowed to settle for a minimum of 30 minutes prior to discharge to either the ground with no discharge to surface waters, or upstream of a regional detention facility.

17. Cleaning of stormwater treatment ponds or swales shall be performed when there is not a possibility of a discharge from the pond for at least 24 hours.

18. During any operation involving saw cutting of concrete, all water generated by the cutting operation shall be controlled and contained, to be disposed of on land with no possibility of entry to waters of the State, including wetlands.

19. End dumping riprap into the water will not be allowed unless approved by the Engineer.

20. All lumber treated with creosote or other protective material shall be completely dry before use in or within 300 feet of any waters of the State, including wetlands.

21. Heavy equipment working in wetlands or mudflats must be placed on mats or other measures taken to minimize soil disturbance as approved by the Engineer.

22. Materials placed below OHW or MHHW may not consist of trash, debris, car bodies, asphalt, or other potentially contaminating materials.

23. Any temporary fills placed *** $$4$$ *** must be removed in their entirety and the affected areas returned to their preexisting elevation. (Choose from the following list to be used for the fill-in information: “below OHW”, “below MHHW”, or “within wetlands”)

24. The Contractor shall notify the Engineer a minimum of 15 calendar days prior to commencing any work in environmentally sensitive areas, mitigation areas, and wetland buffers. Installation of construction fencing is excluded from this notice requirement. At the time of notification, the Contractor shall submit a work plan for review and approval detailing how the work will be performed. Plan detail must be sufficient to verify that work is in conformance with all contract provisions.

25. The Contractor shall be responsible to report to the Engineer any deviation from the contract provisions pertaining to environmental compliance, including but not limited to spills, unauthorized fill in waters of the State including wetlands, water quality standards, noise, air quality, etc.

26. The intentional bypass of stormwater from all or any portion of a stormwater treatment system is prohibited without the approval of the Engineer.
Payment
All costs to comply with this special provision for the imposed restrictions and requirements are incidental to the contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the contract.
State Department of Ecology

Section 1-07.5(3) is supplemented with the following:

(OR December 19, 2005)

9. When construction activities occur within a waterbody, the natural flow of the waterbody shall be diverted around the construction site.
Permits and Licenses
Section 1-07.6 is supplemented with the following:

(OR December 19, 2005)
The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. All contacts with the permitting agency concerning the below-listed permit(s) shall be through the Engineer. The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits, shall be included in the applicable bid items for the work involved.

<table>
<thead>
<tr>
<th>NAME OF PERMIT</th>
<th>PERMITTING AGENCY</th>
<th>PERMIT REFERENCE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of the Army Section 404 Individual Permit</td>
<td>Corps of Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seattle District</td>
<td></td>
</tr>
<tr>
<td>Department of the Army Section 404 Nationwide Permit</td>
<td>Corps of Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seattle District</td>
<td></td>
</tr>
<tr>
<td>Department of the Army Section 10 Individual Permit</td>
<td>Corps of Engineers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seattle District</td>
<td></td>
</tr>
<tr>
<td>Section 401 Water Quality Certification</td>
<td>Department of Ecology</td>
<td></td>
</tr>
<tr>
<td>Coastal Zone Management Consistency Certification</td>
<td>Department of Ecology</td>
<td></td>
</tr>
<tr>
<td>Temporary Modification of Water Quality Standards</td>
<td>Department of Ecology</td>
<td></td>
</tr>
<tr>
<td>NPDES Industrial Stormwater Permit for Construction Activities</td>
<td>Department of Ecology</td>
<td></td>
</tr>
<tr>
<td>Hydraulic Project Approval</td>
<td>Department of Fish &amp; Wildlife</td>
<td></td>
</tr>
<tr>
<td>Scientific Collection Permit</td>
<td>Department of Fish &amp; Wildlife</td>
<td></td>
</tr>
<tr>
<td>Shoreline Substantial Development Permit</td>
<td>X County -or- City of X</td>
<td></td>
</tr>
<tr>
<td>Critical Area Ordinance Permit</td>
<td>X County -or- City of X</td>
<td></td>
</tr>
</tbody>
</table>
Temporary Water Pollution/Erosion Control

Spill Prevention, Control and Countermeasures Plan

Section 1-07.15(1) is supplemented with the following:

(OR January 24, 2007)

The Contractor shall address the following items in the SPCC Plan in addition to the requirements of Section 1-07.15(1):

Mixing, Transfers, & Storage
1. All oil, fuel or chemical storage tanks or containers shall be diked and located on impervious surfaces so as to prevent spill from escaping.

2. All liquid products shall be stored and mixed on impervious surfaces in a secure water tight environment and provide containment to handle the maximum volume of liquid products on site at any given time.

3. Proper security shall be maintained to prevent vandalism.

4. Drip pans or other protective devices shall be required for all transfer operations.

Spills
Paint and solvent spills shall be treated as oil spills and shall be prevented from reaching storm drains or other discharges. No cleaning solvents or chemicals used for tool or equipment cleaning may be discharged to the ground or water.

Maintenance of Equipment
Fuel hoses, oil drums, oil or fuel transfer valves and fittings, etc, shall be checked regularly for drips or leaks and shall be maintained and stored properly to prevent spills into State waters.

Disposal
Spilled waste, chemicals or petroleum products shall be transported off site for disposal at a facility approved by the Department of Ecology. The materials shall not be discharged to any sanitary sewer without approval of the local sewer authority.

Reporting & Cleanup
The Contractor's designated person for managing and implementing the SPCC Plan shall report hazardous material spills as follows:

Spills into State water (including ponds, ditches, seasonally dry streams, and wetlands) – Immediately call all of the following:
National Response Center 1-800-424-8802
WA State Div. of Emergency Management (24 hr) 1-800-258-5990
Ecology SW Regional Office 1-360-407-6300

Spill to Soil (Including encounters of pre-existing contamination):
Ecology SW Regional Office 1-360-407-6300
Report immediately if threatening to health or environment (i.e., explosive, flammable, toxic vapors, shallow groundwater, nearby creek), otherwise within 90 days

Underground Storage Tank (confirmed release of material)
Containment and cleanup efforts shall begin immediately and be completed as soon as possible, taking precedence over normal work. Cleanup shall include proper disposal of any spilled material and used cleanup materials. No emulsifiers or dispersants are to be used in waters of the State without written approval from the Department of Ecology. Concentrated waste or spilled chemicals shall be transported off the site for disposal at a facility approved by the Department of Ecology or local County Health Department.
(April 26, 2006)
The Contracting Agency has identified critical environmental areas adjacent to work areas within the project limits. Wetland boundaries as well as surrounding buffer zones are shown in the plans.

A site preservation line has been established as a boundary between work zones and critical environmental areas. As described in the Special Provisions ORDER OF WORK and HIGH VISIBILITY FENCE, the Contractor shall install high visibility fence along the site preservation line. The preservation zones include critical environmental areas, buffer zones, and other areas of vegetation to be preserved. The Contractor shall keep the preservation zones identified by the site preservation lines free of construction equipment, construction materials, debris, and runoff. No excavation, clearing, staging, or stockpiling shall be performed inside the preservation zone.
Section 1-08.4 is supplemented with the following:

(OR September 9, 2004)

Order of Work
The first order of work on this project shall be the installation of fencing to delineate all wetland and sensitive areas, as described in the Special Provision HIGH VISIBILITY FENCE. No other work shall be performed on the site until the Contracting Agency has accepted the installation of the wetland and sensitive area delineation. The acceptance will be evidenced in writing.
Description
Section 8-01.1 is supplemented with the following:

(OR November 27, 2001)
This work shall consist of preparing a Fugitive Dust Control Plan (FDCP) in conjunction with the Temporary Erosion and Sediment Control (TESC) Plan and preparing for implementation of the plan.

(OR September 9, 2004)
**High Visibility Fence**
This work shall consist of delineating all wetland and sensitive areas by furnishing, installing, maintaining, and removing high visibility construction fence in accordance with these specifications and as shown in the Plans or as designated by the Engineer.

(OR October 30, 2006)
High visibility fence shall be UV stabilized, orange or yellow high-density polyethylene or polypropylene mesh, and shall be at least four feet in height. The fence shall weigh a minimum of 0.12 pounds per linear foot.

Either wood or steel support posts shall be used. Wood posts shall have minimum dimensions of 1.5 inch by 1.5 inch, and shall be free of defects such as knots, splits, or gouges. Steel posts shall consist of T-bar posts, size No. 6 rebar or larger, ASTM A120 steel pipe with a minimum weight of 1.3 pounds per foot, or other steel posts having equivalent strength and bending resistance to the posts listed.

Section 8-01.3 is supplemented with the following:

(OR March 24, 2008)
**High Visibility Fence**
As described in the Special Provision **ORDER OF WORK**, the Contractor shall, as the first order of work, install a high visibility fence along the site preservation lines shown in the Plans. Support posts for the fence shall be placed at six-foot centers or as needed to provide rigidity. The fence shall be attached to the posts every sixteen inches with a polyethylene tie. The fence shall not be fastened to trees.

Upon completion of this work, the Contractor shall request the Engineer to inspect the fence. Contracting Agency acceptance of the material and installation will be based on visual inspection, and acceptance will be evidenced in writing. No other work shall be performed until the Engineer has accepted the fence installation.

Throughout the life of the project, the Contractor shall preserve and protect the delineated area, acting immediately to repair or restore any fencing damaged or removed.

**General**
Sentences one and two of Section 8-01.3(1) paragraph 5 are replaced by the following:

(OR December 19, 2005)
All sediment control devices including sediment ponds, perimeter silt fencing, and other sediment trapping BMP’s shall be installed prior to any ground disturbing activity.
Submittals
Section 8-01.3(1)A is supplemented with the following:

(OR December 19, 2005)
Any TESC plan submitted by the Contractor must meet all requirements of Chapter 6-2 of the current edition of the WSDOT Highway Runoff Manual.

(OR December 19, 2005)
The Contractor shall submit a Fugitive Dust Control Plan (FDCP). This plan shall reflect conditions specific to the Contractor’s operation and schedule of work. The Contractor shall base the FDCP on Best Management Practices (BMPs) set forth in the Associated General Contractors of Washington Education Foundation and Fugitive Dust Task Force Pamphlet, “Guide To Handling Fugitive Dust From Construction Projects”.

Erosion and Sediment Control (ESC) Lead (for projects outside Kitsap or Pierce County)
In Section 8-01.3(1)B, the second paragraph is supplemented with the following:

(OR March 13, 2007)
3. Updating and maintaining a TESC file on site that includes, but is not limited to:
   a. Erosion and Sediment Control Inspection Forms.
   b. Temporary Erosion and Sediment Control (TESC) Plan and narrative.
   c. National Pollutant Discharge Elimination System construction permit (Notice of Intent).
   d. Other applicable permits.
   e. Contracting Agency-supplied stormwater monitoring reports, if applicable.
   f. Contracting Agency-supplied NPDES permit coverage letter.

Upon request, the file shall be provided to the Engineer for review.

The first sentence of the third paragraph is revised to read:

(OR March 13, 2007)
The Contractor shall inspect all on-site erosion and sediment control BMPs at least once every calendar week and within 24 hours of runoff events in which stormwater discharges from the site.

Section 8-01.3(1)B is supplemented with the following:

(OR March 13, 2007)
In addition to those outlined in Section 8-01.3(1)B, duties of the ESC Lead shall also include, but are not limited to:

1. Being responsible for the preparation of a Temporary Erosion and Sediment Control (TESC) Plan, to be used for the duration of the project, when a TESC Plan is not included in the contract plans.
2. Making Contracting Agency initiated revisions to the approved TESC Plan.

3. Inspecting all stormwater discharge points.

(OR November 27, 2001)
The lump sum contract price for the “Temporary Erosion and Sediment Control (TESC) Plan” shall be full pay for all labor, equipment, material and overhead costs associated with the preparation of the TESC Plan and any coordination and preparation needed prior to implementation.

Erosion and Sediment Control (ESC) Lead (for projects inside Kitsap or Pierce County)
In Section 8-01.3(1)B, the second paragraph is supplemented with the following:

(OR March 13, 2007)
3. Updating and maintaining a TESC file on site that includes, but is not limited to:
   a. Erosion and Sediment Control Inspection Forms.
   b. Temporary Erosion and Sediment Control (TESC) Plan and narrative.
   c. National Pollutant Discharge Elimination System construction permit (Notice of Intent).
   d. Other applicable permits.
   e. Contracting Agency-supplied stormwater monitoring reports, if applicable.
   f. Contracting Agency-supplied NPDES permit coverage letter.

Upon request, the file shall be provided to the Engineer for review.

The first sentence of the third paragraph is revised to read:

(OR March 13, 2007)
The Contractor shall inspect all on-site erosion and sediment control BMPs at least once every calendar week and within 24 hours of runoff events in which stormwater discharges from the site.

Section 8-01.3(1)B is supplemented with the following:

(OR March 13, 2007)
In addition to those outlined in Section 8-01.3(1)B, duties of the ESC Lead shall also include, but are not limited to:

1. Being responsible for the preparation of a Temporary Erosion and Sediment Control (TESC) Plan, to be used for the duration of the project, when a TESC Plan is not included in the contract plans.
2. Making Contracting Agency initiated revisions to the approved TESC Plan and Fugitive Dust Control Plan (FDCP), maintaining both in a TESC file.

3. Inspecting all stormwater discharge points.

4. Implementing the FDCP and inspecting the Best Management Practices (BMPs) for proper location and installation.

5. Preparing a FDCP Inspection Report for each inspection. The inspection reports shall be included in the TESC File maintained by the Contractor's ESC Lead. The inspection reports shall be made available to the Engineer upon request and shall include, but not be limited to the following:
   
   a. The date and time BMPs are installed, removed, or changed;
   b. The date and time maintenance is needed and performed;
   c. The date, time, and person who performs inspection and maintenance, and what, if any maintenance is done;
   d. Observations of BMP effectiveness and proper placement;
   e. Recommendations for improving performance of BMPs.

(OR November 27, 2001) 
The lump sum contract price for the “Temporary Erosion and Sediment Control (TESC) Plan”, which includes the “Fugitive Dust Control Plan (FDCP)”, shall be full pay for all labor, equipment, material and overhead costs associated with the preparation of the TESC Plan and FDCP and any coordination and preparation needed prior to implementation.

There shall be no other payment for Dust Control Measures other than what is provided for in Section 2-07.
Appendix B: Project Development Process - Incorporating Environmental Permit Requirements into Plans and Specifications

May 2005
By NW Region Environmental Plans and Specification Process Improvement Team

Note: this is an excerpt of this document and is available in its entirety at http://www1.wsdot.wa.gov/regions/northwest/RP&S/Environmental/Permits_Docs/Incorporating%20Permit%20Requirements%20into%20Plans%20and%20Specifications.pdf

Introduction:

During the spring and summer of 2004, the Northwest Region construction program incurred multiple violations of regulatory permits on the SR 18, Maple Valley to Issaquah Hobart Road contract. The violations resulted in unacceptable impacts to the environment and damage to our credibility with other agencies and the public. A large part of the contract was shut down for most of the construction season. The monetary cost to the taxpayers is easily into the millions of dollars.

The department conducted a detailed study of the events that led up to the most significant of the multiple violations. That study identified weaknesses in the methods we use in placing regulatory information in our contract documents.

This team was created by the NW Region Design Guidance Team to provide a forum for addressing the issue and to recommend modifications to our PS&E development process. (See Team Charter in Appendix G) This team consisted of people with a significant level of experience and expertise in all phases of project development (Environmental, Design and Construction).

Our Team Mission was broken into several tasks and products (see Mission Statement in attached Team Charter). In considering these goals, we found it difficult to separate one without affecting the others. To make changes in one portion without considering the whole process and how the participants interact, would not necessarily achieve the desired goal. We determined the best way to address the problem was to look at all parts of the process from start to finish and make recommendations over the entire process.

Our current processes work well for reviewing the engineering elements of projects, they should work equally well for environmental review. Having appropriate staff actively engaged in the review of the environmental elements and how they affect constructability is critical. The coordination by Design and Environmental with Construction needs to improve. There needs to be assurance that this coordination will begin earlier and last through construction of the project. Administration and Management support is crucial to implement these changes due to their impact on project schedules, personnel assignments/positions and funding aspects of the design and construction processes.

For the purposes of this document “sensitive areas” is defined as wetlands, streams, lakes, shoreline zones, associated buffers and any other resource that is either regulated or protected by environmental regulations, permits or approvals.
Process Recommendations

The recommendations in this document are intended to expand upon the information contained in the attached “Permit Compliance Design Flow Chart” (Appendix C). This flow chart started as a representation of the existing project development process and was modified to enhance and ensure better communication/coordination of environmental issues.

If implemented these recommendations should result in better understanding of environmental issues and constraints by construction staff and a better understanding by Designers and Environmental staff of the problems associated with completing major construction activities in the proximity of sensitive environmental resources.

As these recommendations are implemented, issues will arise that will test these process changes. However, these recommendations will provide a baseline upon which improvements can be made with the resources and people identified to resolve those problems. This will be an iterative process that will refine itself over time. Those items that prove of value, should ultimately be incorporated into the WSDOT Standard Specifications, Design, Plans Preparation and Construction Manuals as appropriate.

Implementation of these recommendations should result in:
• Early resolution of environmental and constructability problems by all staff.
• Permits which are better suited to construction needs.
• Contract plans that incorporate environmental permit requirements and are constructible.
• Environmental information incorporated into the contract documents consistently from contact to contract. Project Inspectors will know exactly where the information resides before they open the plan set. This consistency will simplify Plan Review for environmental compliance.
• Fewer and less severe compliance problems on projects.

Appendices F, G and H (link to entire document at top of Appendix B) include proposed changes to the Design Manual, Construction Manual and Plans Prep Manual. These changes should be considered by Headquarters for statewide use and should provide for consistency across the state.

Project Risk Assessments and Level of Effort

Some of the recommendations are tied to the relative level of complexity of the environmental issues surrounding a project. The risk levels are based on the proximity of the project’s work to environmental resources and the potential for the project to result in violations of environmental regulations or permit conditions during construction.

How, and when, do we determine the level of risk for WSDOT projects?

Recommendations:

Level of risk should be identified at the beginning of design, it should be clearly communicated at the Managing Project Delivery (MPD) meeting and/or MPD documentation. It should be identified in all Plans, Specifications & Estimate (PS&E) review requests.

Risk Level should be concurred upon by Design, Environmental and Construction staff. Three risk levels are proposed:

**Level 1 (Low Risk)**, projects with little or no work off of the existing developed roadway prism, that do not require permits or approvals. There are either no regulated resources within the project limits or if they exist, are in areas where there is no foreseeable need to disturb the area.
Level 2 (Moderate Risk), projects with clearing, grading or earthwork, where there are sensitive areas within close proximity to the project limits but do not require regulatory permits or approvals.

Level 3 (High Risk), are projects that have environmental permits/approvals, have temporary or permanent impacts to sensitive areas (streams, wetlands or their regulated buffers, flood plains, … etc.) or due to close proximity to resources and the nature of the work, are potentially more than a moderate risk of environmental damage.

Surveying for Environmental Resources and Clearing Limits/Data Needs

All environmental resources (streams, wetlands, buffers, flood plains, etc. …) as well as clearing and clearing limits will be surveyed and/or calculated to an accuracy of +/- 0.1 foot. In addition to using this information for PS&E preparation, the Design PE will transmit this data to the Construction PE in a format that can be used to re-establish the locations of these features in the field.

Delineation of Environmental Resources

Risk Level 2 and 3 Projects: All sensitive areas that are located within or whose buffers extend onto State R/W should be completely delineated, surveyed and identified in the contract documents.

Risk Level 1 Projects: These projects may not need full delineations or surveys. It may be possible to greatly reduce the delineation effort based on the proximity to sensitive areas of activities that disturb vegetation or soils.

A Reconnaissance Level Review could be an option. A reconnaissance level review could require identifying of the beginning and end of a sensitive area and identifying stationing for these points. The plans could identify the area between those points as “sensitive areas not delineated” and prohibit any activity off of the developed roadway in the area, greatly reducing the level of effort expended during design and construction.

The decision not to do less than a full delineation effort should be made by the Construction PE on a case by case basis and concurred upon by Design and Environmental.

Examples:
  Paving projects with no earth disturbing activities.
  Projects where earth disturbance is not in proximity to sensitive areas.

Construction Staking of Environmental Resources

Risk Level 2 and 3 Projects (See Section 140.05): All sensitive areas that are located within or whose buffers extend onto state right-of-way (or property owned by others, such as temporary easements) and are within the project limits will be completely delineated, surveyed and identified in the contract documents.

Risk Level 1 Projects (See Section 140.05): These projects may not need full delineations or surveys. It may be possible to greatly reduce the delineation effort based on the proximity to sensitive areas of activities that disturb vegetation or soils.
A reconnaissance level review, as a minimum, will be required for low risk (Risk Level 1 Projects). A reconnaissance level review requires identifying the beginning and end of a sensitive area and identifying stationing for these points. The plans will identify, as a minimum, the area between those points as “sensitive areas not delineated” and prohibit any activity off of the developed roadway in the area, greatly reducing the level of effort expended during design and construction.

**Pre Design Phase**

Commitments made during the Design/Environmental Process, that could affect the timing of, or how construction is to occur in and around environmental resources should be reviewed by Construction. This would include, but not be limited to commitments made in: SEPA/NEPA documents, Biological Assessments or a result of early coordination with the public or outside agencies.

**Recommendations:**

MPD Meeting/MPD documentation, specific agenda item for environmental issues. Identify Risk Level, permit and permit submittal requirements, mitigation needs, and timing of environmental process. Identify Project Review schedule (will there be reviews at 30%, 60%, 90%…?).

Adopt a naming convention for all environmental resources within the project limits, use the same terminology in all documentation throughout the project development process. (See Appendix D, Sensitive Areas Naming Conventions)

**Permit Process**

Permit application should be timed with the intent of having all permits in hand in time to incorporate conditions into the PS&E for the Constructability Review or circulation of the 90% PS&E review.

Construction staff should participate at critical points during the permit process and provide input as necessary on how permitting decisions affect the constructability of a project. Construction should review permit data prior to making application, with particular attention to constructability issues, constraints on and access in and around environmental resources, how the work is accomplished, and the timing and staging of the work.

Construction should approve permit applications prior to submittal to agencies.

Permit coordinator is to track, document, distribute, and coordinate review of permits and related issues. Conduct a separate Environmental Compliance meeting with Management, Construction, Design, Environmental, and Landscape groups. Provide coordination with resource agencies for any changes.

**Comments and Responses**

Permitting is an iterative process. Agencies comment on our submittals and we are required to respond with data to support our design or position. This can result in modifications to our design. Prior to making revisions or agreeing to change our application, the Design and Environmental groups will coordinate the revisions with the Construction office.
Draft Permit Conditions
Some agencies provide a draft of permit conditions for our review prior to issuance and allow us the opportunity to request modifications within certain limitations. Others issue a final permit and our option is to accept the permit, go back for a revision or contest the appropriateness of the conditions and elevate as necessary.

Prior to acceptance and incorporation into the PS&E, the Construction PE will be asked to review and accept the permit(s) terms and conditions or request modifications as necessary.

Once we have accepted the permits, they are finalized and incorporated into PS&E (at 90%).

Recommendations:
Schedule permit applications to have permits in hand by 90% PS&E review or Constructability Review Meeting.

Construction will review and approve permit applications prior to submittal.

Construction will review for conflicts that could adversely affect the timing, staging or the constructability of the project.

Construction will participate in review of agency comments on applications, draft permits or conditions, and assist in developing responses to items that would affect constructability.

Incorporating Permit Conditions into the Plans and Specials
A team representing the Design PE, Construction PE and Region Environmental Offices shall work together to complete the incorporation of all environmental permit conditions and terms into the Plans and Specs.

Risk Level: All projects with regulatory permits.

Review of Project Design/PS&E
The current PS&E review process allows the Design PE to circulate the design for review by all disciplines. These reviews typically take place at 30, 60, 90 and 100% (final review prior to submittal to Region Plans Office) completion. This review process varies depending on the project type and complexity. There needs to be greater emphasis on review by Construction Staff during each review opportunity.

Recommendation:
Construction should provide documentation at each appropriate review that the plans have been reviewed and provide comments or a statement that there are no comments. A primary focus of the review will be the ability to construct the project within the environmental constraints.

30% Plan Review - The footprint of the project and environmental resources are generally defined. The proximity of the work to environmental resources is known.

Recommendations:
For projects at Risk Level 2 and 3:
Review by Construction should focus on the ability to construct work with no or minimal additional encroachment on resources. Anticipated impacts or conflicts need to be identified. Discuss construction access issues related to sensitive areas.

**60% Plan Review** - Impacts to environmental resources are generally well defined, project coordination with resource agencies should be to the point where construction access, staging and timing concerns should have been resolved. The project should have permit applications prepared and submitted at this time (see section titled “Permit Process”).

**Recommendations:**

For projects at Risk Level 2 and 3:

Construction reviews to see that their 30% review comments have been incorporated in the contract documents in a manner that allows the project to be constructed in a practical manner and does not unnecessarily constrain construction activities. Provide further comments as necessary.

**90% Plan Review** - Permit process should be complete, permits should be in hand (if not, will need to defer these steps to 100% PS&E).

**Recommendations:**

For projects at Risk Level 2 and 3:

Environmental (permit coordinator) will complete and submit draft “Environmental Compliance Notebook and Commitment File”. The Compliance Notebook and Commitment File will include a copy of all documentation to support the environmental design of the project and the base information used to develop the Environmental Compliance Note sheets.

Construction review status of project to date, review and comment on modifications necessitated by permit process (see section titled “Permit Process”).

All commitments affecting the timing, staging or how contract work must be accomplished to be reviewed by Construction for concurrence, prior to finalizing documentation.

**100% PS&E** - Plan documents complete, all permits in-hand. All permit conditions, environmental considerations and commitments necessary for administering construction are completely incorporated into the contract documents.

**Recommendation:**

For projects at Risk Level 1, 2 and 3: Final check by Construction, Design and Environmental of contract documents and permits to ensure constructability.

**Revisions to PS&E**

How we incorporate environmental commitments, permit conditions and other regulatory requirements needs revision. The method should be consistent from plan set to plan set. This consistency will better ensure that the information can be readily accessed and understood by Construction staff.
Recommendations:

Add new, “Environmental Compliance Plan (ECP)” and “Environmental Compliance Notes (ECN)” plan sheet(s)(see Appendices A and B) to identify each sensitive area, cross-referenced to environmental commitment type (BA, NEPA/SEPA, permit condition…) Each Compliance Note will be re-written into clear contract language.

Identify all sensitive areas on Environmental Compliance plan sheets. (See Appendix E for NWR Designer’s Guide for PSUE/Permit Environmental Compliance.)

Add sensitive areas to any plans sheets that identify earth disturbing activities within or adjacent to the resource.

At 100% review, or as soon as the permit process is complete, the Region Environmental Office will coordinate with the Design Project Engineer and prepare an “Environmental Compliance Notebook and Commitment File” for the Construction Project Engineer.

Pre Construction Conference

A Pre Construction Conference should be held for all Risk Level 2 and 3 projects. It is critical that all of the attendees be given adequate notification of the time and location of these meetings. Some project permits require a pre-construction meeting and dictate attendance. The Environmental Coordinator will lead a discussion of the environmental issues/concerns on the project using the Environmental Compliance Plan, Environmental Compliance Notes and Environmental Compliance Notebook and Commitment File as the basis.

Recommendations:

Construction and Environmental will coordinate the need, timing and attendance for Pre Construction Conferences.

If regulatory agency staff is required or desired, 30 days notification should be allowed.

Appendices from this document are not attached but are available at: http://wwwi.wsdot.wa.gov/regions/northwest/RP&S/Environmental/Permits_Docs/Incorporating%20Permit%20Requirements%20into%20Plans%20and%20Specifications.pdf
Appendix C: Commitment Tracking System

The following is an excerpt from the CTS training manual, which if attached in its entirety would be 82 pages. The full manual is available through the “HELP” feature within CTS at the following web address:

http://webprod2.wsdot.wa.gov/Audit/Compliance/Commitments/SelectProjectType.aspx

Introduction

What is the Goal of the Commitment Tracking System (CTS)?
The goal of CTS is to provide the ability to track individual commitments from their inception (usually in project development) through Design, Construction and Maintenance to their completion.

What Commitments will be tracked?
Commitments incorporated in environmental documents including final NEPA/SEPA documents, permits, approvals, letters and Memorandums of Understanding.

What business process changes are required?
- Users must pull individual commitments out of NEPA/SEPA documents, permits, approvals and letters and input them into CTS. This means itemizing the requirements within those documents.
- As CTS is completed, the tracking function will require the packaging and handing off of commitments from one office to another and noting the completion of commitments.

CTS includes an optional tool for matching commitments with Standard Specifications, General Special Provisions, Standard Plans or writing a Special Provision to cover the commitment. Users of the tool will have to associate each commitment with one or more of those contract provisions to help ensure the commitment is appropriately incorporated in the contract.

Who is responsible for entering commitments into CTS?
Whoever is responsible for making the commitment is responsible for entering the commitment into the system. For project commitments that responsibility will generally fall on regional environmental staff. For statewide commitments, including programmatic permits, that responsibility will fall on ESO staff. Hopefully, WSDOT can get permit source documents electronically to ease data entry burden.

System Overview

The commitment tracking system is used for tracking environmental document, permits and approvals and their associated commitments.

Documents are the physical (or electronic) items which have been issued by an authorizing agency or written agreement with a private party. Certain information about the document, including the issuing agency, the physical location of the document, the type, title, state location (area) that the document applies to, are entered into CTS.

There are three scope types:
- **Project**: any document and associated commitments which are project specific are entered into the system using Project Scope.
- **Corridor**: documents and associated commitments which are specific to a corridor for example (I-405 Record of Decision).
- **Programmatic**: Any documents/commitments which are not specific to a corridor or project but may have regional or state-wide effect.

Commitments are the agreements within the documents which WSDOT is legally bound to fulfill. Information relating to these commitments is entered in the commitment area. This includes the location (area) where the commitment applies, the environmental discipline, the start/end dates, etc.

System reports allow for tracking or querying information specific to a project, environmental discipline or region. The report options allow filtering of the information to assist in providing specific information.

How can I assign contract provisions and contract responsibilities to the commitments for my project?

This tool is meant to aid the Plans, Specifications, and Estimates (PS&E) process by allowing the system user to align contractor-related commitments. This feature will assign the commitments to one of three categories: WSDOT, Contractor or WSDOT/Contractor based upon the selected Standard Specification, General Special Provision, Standard Plan or office.

By providing the WSDOT Information, Special Provisions, Special Provisions, Plan Sheet Information, Standard Specification or General Special Provisions Standard Plan, the system will make the determination to assign the commitment to either WSDOT, Contractor or WSDOT/Contractor.

Some commitments we make are not covered by any of the Department’s existing contract provisions. In those cases CTS provides a place where a Special Provision can be written and associated with the commitment.

Prior to assigning contract provisions, the commitment scope must be “Project”, a project PIN must be selected and there must be documents and commitments available to the selected project to assign the contract provisions. If all of these conditions have been fulfilled,

1. Select “Assign Responsibility” from the commitment area on the left side menu bar.
2. The system will display a message from the HQ Environmental Office.

3. The system will display the Assign Responsibility (list) screen.

4. All the documents which have been assigned or entered into this project will be displayed. Select the desired commitment by clicking on the link in the responsibility column.

   **NOTE:** The system will display "unassigned" in the responsibility column when no provisions have been assigned.

   - IF a "Responsible Organization" has been selected on the Assign Contract Provisions screen, the system will display "WSDOT" for the responsibility.
   - IF no "Responsible Organization" has been selected, however any of the Special Provisions, Special Provisions, Plan Sheet Information, Standard Specification or General Special Provisions Standard Plan have been selected/entered, the system will display "Contractor" for the "Responsible Organization".
   - IF both a WSDOT Office has been selected and one or more of the Special Provisions, Special Provisions, Plan Sheet Information, Standard Specification or General Special Provisions Standard Plan has been selected, the system will display "WSDOT/CONTRACTOR" in the "Responsible Organization" column.

5. Click on the "unassigned" link in the Responsibility Column to assign a responsibility to a commitment or the WSDOT or WSDOT/Contractor or Contractor links for updating responsibilities.

6. The system will display the Assign Responsibility Detail screen
7. Any changes to the “Commitment Action” field, updates the originating commitment record.

8. Any selection in the “WSDOT INFORMATION, Responsible Organization” field, updates the “Responsibility” to WSDOT. Select the appropriate office if applicable.

9. Add any text in to the “Special provisions field that applies.


11. If step 8 & 9 were completed, the system will update the responsibility to “CONTRACTOR”

12. Click on the “Assign” command button (bottom of page).

13. The system will display “Contract Provision Assigned Successfully” in green at the top of the screen.

14. To add the next contract provision, click on the “Assign Contract Provision” button and the system will take you back to that screen.
Appendix D: Standard Specifications Referenced

1-07.5 Environmental Regulations

1-07.5(1) General
Throughout the work, the Contractor shall comply with all current rules of the resource agencies having jurisdiction over the affected areas. Some, though not all, of these rules are summarized below. Any of these agencies may, without prejudice to the Contracting Agency, add rules as needed to protect game, fish, or the environment.

The following restrictions apply to all work:
1. No work shall occur within the jurisdictional areas unless authorized in the contract provisions and associated permits.
2. No materials shall be placed below the ordinary high water line except as may be specified in the contract.
3. No equipment shall enter waters of the State, except as may be specified in the contract.

1-07.5(2) State Department of Fish and Wildlife
In doing the work, the Contractor shall:
1. Not degrade water in a way that would harm fish. (Criteria: Washington State Water Quality Regulations.)
2. Release any fish stranded by the project into a flowing stream or open water.
3. Replant any stream bank or shoreline area if the project disturbs vegetative cover. Replanted trees, brush, or grasses shall resemble the type and density of surrounding growth, unless the special provisions permit otherwise.
4. Leave, when the work is complete, an open-water channel at the lowest level of any isolated pothole to connect it with the main body of water.
5. Prevent any fish-threatening silt buildup on the bed or bottom of any body of water.
6. Never block stream flow or fish passage.
7. Never remove gravel or other bottom material from the high-water flow channel bed of any stream or from the bottom of any other body of water, except as may be permitted by the special provisions.
8. Dispose of any project debris by removal, burning, or placement above high-water flows.

If the work in (1) through (3) above differs little from what the contract requires, the Contracting Agency will measure and pay for it at unit contract prices. But if contract items do not cover those areas, the Contracting Agency will pay pursuant to Section 1-09.4. Work in (4) through (8) above will be incidental to contract pay items.

1-07.5(3) State Department of Ecology
In doing the work, the Contractor shall:
1. Get a waste discharge permit from the Ecology Department before:
   a. Washing aggregate; or
   b. Discharging water from pit sites or excavations into a ground or surface waterway when the water contains turbidity, silt, or foreign materials.
2. Give the Project Engineer a copy of each waste discharge permit before the work begins.
3. Control drainage and erosion in a manner that reduces waterway pollution.
4. Perform work in such a manner that all materials and substances not specifically identified in the contract documents to be placed in the water do not enter waters of the State, including wetlands.
5. Use equipment that is free of external petroleum-based products.
6. Remove accumulations of soil and debris from drive mechanisms (wheels, tracks, tires) and undercarriage of equipment prior to using equipment below the ordinary high water line.
7. Clean loose dirt and debris from all materials placed below the ordinary high water line. No materials shall be placed below the ordinary high water line without the Engineer’s approval.
8. Notify the Engineer and Ecology Department immediately should oil, chemicals, or sewage spill into waters of the State.

1-07.5(4) Air Quality
The Contractor shall comply with all rules of local air pollution authorities. If there are none, air-quality rules of the State Department of Ecology shall govern the work. The Washington Clean Air Act requires that rock crushing, rock drilling, asphalt batch plants, and concrete plants receive an air quality permit in advance of the operation. The air quality permit process may include additional State Environment Policy Act (SEPA) requirements. Contractors or operators should contact the appropriate air pollution control authority well in advance of intended start-up. The permit process may require up to 30 days.
When the work includes demolition of any existing facility, the Contractor shall comply with the requirements of the National Emission Standards for Asbestos. Any requirement included in state or Federal regulations on this subject that applies to the “owner or operator” shall be the responsibility of the Contractor.

1-07.6 Permits and Licenses
Contractors shall obtain all required permits and licenses and give any notices these call for. The Contracting Agency will support the Contractor in efforts to obtain a temporary operating permit in its name if:
1. A local rule or an agency policy prevent issuing the permit to a private firm;
2. The Contractor takes all action to obtain the permit;
3. The permit will serve the public interest;
4. The permit applies only to work under the contract;
5. The Contractor agrees in writing: (a) to comply with all the issuing agency requires, and (b) to hold the Contracting Agency harmless for any work-related liability incurred under the permit; and
6. The permit costs the Contracting Agency nothing.

1-07.15 Temporary Water Pollution/Erosion Control
In an effort to prevent, control, and stop water pollution and erosion within the project, thereby protecting the Work, nearby land, streams, and other bodies of water, the Contractor shall perform all Work in strict accordance with all Federal, State, and local laws and regulations governing waters of the State, as well as permits acquired for the project.

The Contractor shall perform all temporary water pollution/erosion control measures shown in the Plans, specified in the Special Provisions, proposed by the Contractor and approved by the Engineer, or ordered by the Engineer as Work proceeds.

1-07.15(1) Spill Prevention, Control and Countermeasures Plan
The Contractor shall prepare a project specific spill prevention, control and countermeasures (SPCC) plan to be used for the duration of the project. The plan shall be submitted to the Engineer prior to the commencement of any on site construction activities. The Contractor shall maintain a copy of the plan at the work site, including any necessary updates as the work progresses. If hazardous materials are encountered during construction, the Contractor shall do everything possible to control and contain the material until appropriate measures can be taken. Hazardous material, as referred to within this specification, is defined in RCW 70.105.010 under
“Hazardous Substances”. Occupational safety and health requirements that may pertain to SPCC planning are contained in but not limited to WAC 296-824 and WAC 296-843.

The SPCC plan shall address the following project-specific information:
1. SPCC Plan Elements
   A. Site Information
      Identify general site information useful in construction planning, recognizing potential sources of spills, and identifying personnel responsible for managing and implementing the plan.

   B. Project Site Description
      Identify staging, storage, maintenance, and refueling areas and their relationship to drainage pathways, waterways, and other sensitive areas. Specifically address:
      · the Contractor’s equipment maintenance, refueling, and cleaning activities.
      · the Contractor’s on site storage areas for hazardous materials.

   C. Spill Prevention and Containment
      For each of the locations identified in B, above, specifically address:
      1. Spill prevention and containment measures to be used at each location.
      2. The method of collecting and treating, or disposing of runoff from each location.
      3. The method of diverting project runoff from each location.

   D. Spill Response
      Outline spill response procedures including assessment of the hazard, securing spill response and personal protective equipment, containing and eliminating the spill source, and mitigation, removal and disposal of the material.

   E. Standby, On-Site, Material and Equipment
      The plan shall identify the equipment and materials the Contractor will maintain on site to carry out the preventive and responsive measures for the items listed.

   F. Reporting
      The plan shall list all federal, state and local agency telephone numbers the Contractor must notify in the event of a spill.

   G. Program Management
      Identify site security measures, inspection procedures and personnel training procedures as they relate to spill prevention, containment, response, management and cleanup.

   H. Preexisting Contamination
      If pre-existing contamination in the project area is described elsewhere in the plans or specifications, the SPCC plan shall indicate measures the Contractor will take to conduct work without allowing release or further spreading of the materials.

   I. Work Below the Ordinary High Water Line
      Identify equipment that will be used below the ordinary high water line. Outline daily inspection and cleanup procedures that ensure equipment is free of all external petroleum-based products. Identify refueling procedures for equipment that cannot be moved from below the ordinary high water line.

2. Attachments
   A. Site plan showing the locations identified in (1. B. and 1. C.) noted previously.
   B. Spill and Incident Report Forms, if any, that the Contractor will be using.
Implementation Requirements
The Contractor shall implement prevention and containment measures identified in the SPCC plan prior to performing any of the following:
1. Placing materials or equipment in staging or storage areas
2. Equipment refueling
3. Equipment washing
4. Stockpiling contaminated materials

Payment
The lump sum contract price for the “SPCC Plan” shall be full pay for:
1. All costs associated with creating the SPCC plan.
2. All costs associated with providing and maintaining on site standby materials and equipment described in the SPCC plan.
3. All costs associated with implementing the prevention and containment measures identified in the approved SPCC plan.
As to other costs associated with spills, the contractor may request payment as provided for in the Contract. No payment shall be made if the spill was caused by or resulted from the Contractor’s operations, negligence or omissions.

1-07.16(4) Archaeological and Historical Objects
Archaeological or historical objects, such as ruins, sites, buildings, artifacts, fossils, or other objects of antiquity that may have significance from a historical or scientific standpoint, which may be encountered by the Contractor, shall not be further disturbed.

The Contractor shall immediately notify the Engineer of any such finds. The Engineer will determine if the material is to be salvaged. The Contractor may be required to stop work in the vicinity of the discovery until such determination is made.

The Engineer may require the Contractor to suspend work in the vicinity of the discovery until salvage is accomplished. If the Engineer finds that the suspension of work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the work under this contract, the Engineer will make an adjustment in payment or the time required for the performance of the work in accordance with Sections 1-04.4 and 1-08.8.
1-08.4 Prosecution of Work
The Contractor shall begin work within 10 calendar days from the date of execution of the contract by the Contracting Agency, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

2-01.3(1) Clearing
The Contractor shall:
1. Fell trees only within the area to be cleared.
2. Close-cut parallel to the slope of the ground all stumps to be left in the cleared area outside the slope stakes.
3. Close cut all stumps that will be buried by fills 5-feet or less in depth.
4. Follow these requirements for all stumps that will be buried by fills deeper than 5-feet:
   a. Close-cut stumps under 18-inches in diameter.
   b. Trim stumps that exceed 18-inches in diameter to no more than 12-inches above original ground level.
5. Leave standing any trees or native growth indicated by the Engineer.
6. Trim all trees to be left standing to the height specified by the Engineer, neatly cutting all limbs close to the tree trunk.
7. Thin clumps of native growth as the Engineer may direct.
8. Protect, by fencing if necessary, all trees or native growth from any damage caused by construction operations.

8-01.3(1) General
Controlling pollution, erosion, runoff, and related damage requires the Contractor to perform temporary work items including but not limited to:
1. Providing ditches, berms, culverts, and other measures to control surface water;
2. Building dams, settling basins, energy dissipaters, and other measures, to control downstream flows;
3. Controlling underground water found during construction; or
4. Covering or otherwise protecting slopes until permanent erosion-control measures are working.

To the degree possible, the Contractor shall coordinate this temporary work with permanent drainage and erosion control work the contract requires.
The Engineer may require additional temporary control measures if it appears pollution or erosion may result from weather, the nature of the materials, or progress on the work.

When natural elements rut or erode the slope, the Contractor shall restore and repair the damage with the eroded material where possible, and clean up any remaining material in ditches and culverts. When the Engineer orders replacement with additional or other materials, unit contract prices will cover the quantities needed.

If the Engineer anticipates water pollution or erosion, the Contractor shall schedule the work so that grading and erosion control immediately follows clearing and grubbing.
The Engineer may also require erosion control work to be done with or immediately after grading. Clearing, grubbing, excavation, borrow, or fill within the right of way shall never expose more erodible earth than as listed below, without written approval by the Engineer:

<table>
<thead>
<tr>
<th>Acres</th>
<th>April 1 - October 31</th>
<th>East of the Summit of the Cascade Range</th>
</tr>
</thead>
</table>
May 1 - September 30   West of the Summit of the Cascade Range
5 Acres   November 1 - March 31  East of the Summit of the Cascade Range
October 1 - April 30  West of the Summit of the Cascade Range

The Engineer may increase or decrease the limits in light of project conditions. Erodible earth is defined as any surface where soils, grindings, or other materials are capable of being displaced and transported by rain, wind, or surface water runoff. In western Washington, erodible soil not being worked, whether at final grade or not, shall be covered within the following time period, using an approved soil covering practice, unless authorized otherwise by the Engineer:

October 1 through April 30 - 2 days maximum
May 1 to September 30 - 7 days maximum

If the Engineer, under Section 1-08.6, orders the work suspended for an extended time, the Contractor shall, before the Contracting Agency assumes maintenance responsibility, make every effort to control erosion, pollution, and runoff during shutdown. Section 1-08.7 describes the Contracting Agency’s responsibility in such cases. Nothing in this section shall relieve the Contractor from complying with other contract requirements.

8-01.3(1)A Submittals
When a temporary erosion and sediment control (TESC) plan is included in the plans, the Contractor shall either adopt or modify the existing TESC plan. The Contractor shall provide a schedule for TESC plan implementation and incorporate it into the Contractor’s progress schedule. The Contractor shall obtain the Engineer’s approval of the TESC plan and schedule before any work begins. The TESC plan shall cover all areas the Contractor’s work may affect inside and outside the limits of the project (including all Contracting Agency-provided sources, disposal sites, and haul roads, and all nearby land, streams, and other bodies of water). The Contractor shall allow at least five working days for the Engineer’s review of any original or revised plan. Failure to approve all or part of any such plan shall not make the Contracting Agency liable to the Contractor for any work delays.

8-01.3(1)B Erosion and Sediment Control (ESC) Lead
The Contractor shall identify the ESC Lead at the preconstruction discussions. The ESC Lead shall have, for the life of the contract, a current Certificate of Training in Construction Site Erosion and Sediment Control from a course approved by WSDOT’s Statewide Erosion Control Coordinator.

The ESC Lead shall implement the Temporary Erosion and Sediment Control (TESC) plan. Implementation shall include, but is not limited to:
1. Installing and maintaining all temporary erosion and sediment control Best Management Practices (BMPs) included in the TESC plan to assure continued performance of their intended function. Damaged or inadequate TESC BMPs shall be corrected immediately.

2. Inspecting all on-site erosion and sediment control BMPs at least once every five working days and each working day there is a runoff event. Inspections shall occur within 24 hours of the runoff event. A TESC Inspection Report shall be prepared for each inspection and shall be included in the TESC file. A copy of each TESC Inspection Report shall be submitted to the Engineer no later than the end of the next working day following the inspection. The report shall include, but not be limited to:
   a. When, where and how BMPs were installed, maintained, modified, and removed;
   b. Observations of BMP effectiveness and proper placement;
c. Recommendations for improving future BMP performance with upgraded or replacement BMPs when inspections reveal TESC plan inadequacies.

3. Updating and maintaining a TESC file on site that includes, but is not limited to:
   a. TESC Inspection Reports.
   b. Temporary Erosion and Sediment Control (TESC) plan narrative.
   c. National Pollutant Discharge Elimination System construction permit (Notice of Intent).
   d. Other applicable permits.
   Upon request, the file shall be provided to the Engineer for review.

8-01.3(1)C Water Management

1. Ground Water
   When ground water is encountered in an excavation, it shall be treated and discharged as follows:
   a. When the ground water conforms to Water Quality Standards for Surface Waters of the State of Washington (Chapter 173-201A WAC), it may bypass detention and treatment facilities and be routed directly to its normal discharge point at a rate and method that will not cause erosion.
   b. When the turbidity of the ground water is similar to the turbidity of the site runoff, the ground water may be treated using the same detention and treatment facilities being used to treat the site runoff and then discharged at a rate that will not cause erosion.
   c. When the turbidity is greater than the turbidity of the site runoff, the ground water shall be treated separately until the turbidity is similar to or better than the site runoff, and then may be combined and treated as in B, above.

2. Process Water
   All water generated on site from construction or washing activities that is more turbid than site runoff shall be treated separately until the turbidity is the same or less than the site runoff, and then may be combined and treated as in 1B, above. Water may be infiltrated upon the approval of the Engineer.

3. Offsite Water
   The Contractor shall, prior to disruption of the normal watercourse, intercept the offsite stormwater and pipe it either through or around the project site. This water shall not be combined with onsite stormwater and shall be discharged at its pre-construction outfall point in such a manner that there is no increase in erosion below the site. The method for performing this work shall be submitted by the Contractor for the Engineer’s approval.