



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

May 7, 2014

City of Camas
ATTN: Mr. James Carothers, P.E.
PO Box 1055
Camas, WA 98607

RE: Water Quality Certification Order No.10672 for Corps Public Notice No. NWS-2013-746; NW 38th Avenue Improvements, Phases II & III, in Wetlands and Ditches, Clark County, Washington.

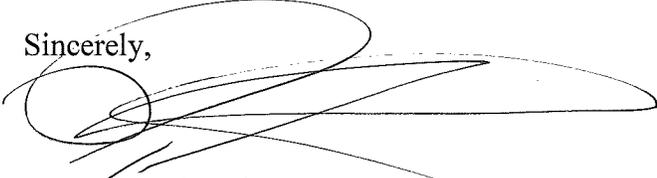
Dear Mr. Carothers:

On August 20, 2013, the City of Camas submitted a Joint Aquatic Resource Permit Application (JARPA) to the Department of Ecology (Ecology) for a Section 401 Water Quality Certification under the federal Clean Water Act for the NW 38th Avenue Improvements Project, Phases II & III. The purpose of the project is to improve traffic safety and efficiency in accordance with local and State transportation standards. The U.S. Army Corps of Engineers issued a joint public notice on August 22, 2013, for the project proposal.

On behalf of the State of Washington, Ecology certifies that the work described in the JARPA and the public notice complies with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and applicable state laws. This certification is subject to the conditions contained in the enclosed Order.

If you have any questions, please contact Lori Ochoa at (360) 407-6926. The enclosed Order may be appealed by following the procedures described in the Order.

Sincerely,



Perry J Lund, Unit Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office

Enclosure

By certified mail 7012 2920 0000 1182 4858



cc: Steve Manlow, U.S. Army Corps of Engineers, VFO
Andrea Aberle, Ecological Land Services, Inc.
Anne Friesz, WDFW
Phil Bourquin, City of Camas

e-cc: ecyrefedpermits@ecy.wa.gov
Lori Ochoa – Ecy, SWRO-SEA
Loree' Randall – Ecy, HQ-SEA
Rebecca Schroeder – Ecy, SWRO-SEA
Deborah Cornett – Ecy, SWRO-WQ

IN THE MATTER OF GRANTING A) ORDER No. 10672
WATER QUALITY) Corps Reference No. NWS-2013-746
CERTIFICATION TO) NW 38th Avenue Improvements, Phases II & III,
The City of Camas) Wetlands, Camas, Clark County, Washington
 in accordance with 33 U.S.C. 1341)
 (FWPCA § 401), RCW 90.48.120, RCW)
 90.48.260 and Chapter 173-201A WAC)

TO: City of Camas
 ATTN: Mr. James Carothers, P.E.
 PO Box 1055
 Camas, WA 98666-9810

On August 20, 2013, the City of Camas submitted a Joint Aquatic Resources Permit Application (JARPA) to the Department of Ecology (Ecology) requesting a Section 401 Water Quality Certification (401 Certification). A joint public notice regarding the request was distributed by the Army Corps of Engineers (Corps) for the above-referenced project pursuant to the provisions of Chapter 173-225 WAC on August 22, 2013.

The project proposes to construct Phases II and III of the NW 38th Avenue improvements, which entails reconstructing approximately 5,000 linear feet of existing roadway within a 74-foot right-of-way between Armstrong Avenue and Grass Valley Park. The proposed improvements will widen the roadway to 46 feet and will include a center left turn lane and two bike lanes. Additional improvements include: curbs and gutters, meandering sidewalks, storm drainage improvements, landscaping, placement of two new culverts and upgrade of an additional culvert, and re-alignment of the stream channel of an un-named tributary away from the new roadway.

The proposed project will directly impact 2.44 acres of Category III and Category IV Wetlands; temporarily impact 0.14 acres of Category III wetlands; and impact 1.89 acres of wetland buffer area. Mitigation for unavoidable project impacts will occur on site and will provide a total of 9.3 acres of combined wetland creation, enhancement, re-establishment, buffer replacement, and stream reconfiguration.

The project will occur within wetlands and ditches that drain to Dwyer Creek, located adjacent to NW 38th Avenue at the intersection with Armstrong Avenue, extending east to Grass Valley Park, City of Camas, Clark County, Washington; Sections 29, 30, 31, and 32; Township 3 North; Range 2 East; WRIA 28; Salmon-Washougal Watershed.

AUTHORITIES:

In exercising authority under 33 U.S.C. § 1341, RCW 90.48.120, and RCW 90.48.260, Ecology has examined this application pursuant to the following:

1. Conformance with applicable water quality-based, technology-based, and toxic or pretreatment effluent limitations as provided under 33 U.S.C. §1311, 1312, 1313, 1316, and 1317 (FWPCA § 301, 302, 303, 306, and 307);

2. Conformance with the state water quality standards contained in Chapter 173-201A WAC and authorized by 33 U.S.C. §1313 and by Chapter 90.48 RCW, and with other applicable state laws; and
3. Conformance with the provision of using all known, available and reasonable methods to prevent and control pollution of state waters as required by RCW 90.48.010.

WATER QUALITY CERTIFICATION CONDITIONS:

Through issuance of this Order, Ecology certifies that it has reasonable assurance that the activity as proposed and conditioned will be conducted in a manner that will meet the applicable water quality standards and other appropriate requirements of state law. In view of the foregoing and in accordance with 33 U.S.C. § 1341, RCW 90.48.120, RCW 90.48.260, Chapter 173-200 WAC, and Chapter 173-201A WAC, water quality certification is granted to the Applicant subject to the conditions within this Order.

Certification of this proposal does not authorize the Applicant to exceed applicable state water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC), or sediment quality standards (Chapter 173-204 WAC). Furthermore, nothing in this certification shall absolve the Applicant from liability for contamination and any subsequent cleanup of surface waters, ground waters or sediments occurring as a result of project construction or operations.

A. General Conditions:

1. For purposes of this Order, the term "Applicant" shall mean the City of Camas and its agents, assignees, and contractors.
2. All submittals required by this Order shall be sent to Ecology's Southwest Regional Office, Attn: Federal Permit Manager, P.O. Box 47775 Olympia, WA 98504-7775 and/or via e-mail (preferred) to: loch461@ecy.wa.gov. The submittals shall be identified with Order No. 10672, Corps Reference No. NWS-2013-746, the Applicant's name, project name, and project location.
3. Work authorized by this Order is limited to the work described in the JARPA received by Ecology on August 20, 2013. The Applicant will be out of compliance with this Order and must submit an updated JARPA if the information contained in the JARPA is voided by subsequent changes to the project not authorized by this Order.
4. Within 30 days of receipt of an updated JARPA, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.

5. This Order shall be rescinded if the U.S. Army Corps of Engineers does not issue a Section 404 and/or Section 10 permit for the project.
6. Copies of this Order shall be kept on the job site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
7. The Applicant shall provide access to the project site upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
8. Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the state. Furthermore, Ecology retains continuing jurisdiction to make modifications hereto through supplemental order, if additional impacts due to project construction or operation are identified or if additional conditions are necessary to further protect water quality.
9. The Applicant shall ensure that all appropriate project engineers and contractors at the project site have read and understand relevant conditions of this Order and all permits, approvals, and documents referenced in this Order. The Applicant shall provide Ecology a signed statement (see Attachment A for an example) from each project engineer and contractor that they have read and understand the conditions of this Order and the above-referenced permits, plans, documents, and approvals. These statements shall be provided to Ecology before construction begins at the project.
10. This Order does not authorize direct, indirect, permanent, or temporary impacts to waters of the state (including wetlands) or related aquatic resources, except as specifically provided for in conditions of this Order.
11. Failure of any person or entity to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce its terms.

B. Water Quality Conditions:

1. This order does not authorize the Applicant to exceed applicable state water quality standards beyond the limits established in WAC 173-201A-200(1)(e)(i).
2. The Applicant shall conduct water quality monitoring as described in the approved *Water Quality Monitoring and Protection Plan for the NW 38th Avenue Improvements Phase II & III* (WQMPP) prepared by Ecological Land Services, Inc. dated April 2014 and as revised May, 2014.
3. Any changes to the WQMPP must be reviewed and approved, in writing, by Ecology prior to implementation.

4. Mitigation and/or additional monitoring may be required if the monitoring results indicate that the water quality standards have not been met.

C. Timing Requirements:

1. All in-water work shall be completed within the work window identified in the most current HPA issued for this project. Any project change that requires a new or revised HPA should also be sent to Ecology for review.
2. This Order shall remain in effect until all of the compliance requirements in this document have been met.

D. Notification Requirements:

The Applicant shall provide written notification (e-mail is preferred) to Ecology's Southwest Regional Office Federal Permit Manager in accordance with Condition A.2 of this Order for the following activities:

1. At least ten (10) days prior to the onset of any work on the project site in each construction season;
2. At least ten (10) days prior to the onset of work at the wetland mitigation site;
3. Immediately following a violation of the state water quality standards or any condition of this Order;
4. Within fourteen (14) days after completion of project construction.
5. If project construction is not completed within 13 months of issuance of this Order, the Applicant shall submit a written status report. Status reports shall be submitted every 12 months thereafter until project construction is complete.

E. Construction Conditions:

1. The Applicant shall comply with the conditions of the current Construction Stormwater General Permit (National Pollutant Discharge Elimination System - NPDES) issued for this project.
2. All work in and near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment, and erosion control BMPs suitable to prevent exceedances of state water quality standards shall be in place before starting clearing, filling, or grading work and shall be maintained throughout construction.
3. The Applicant must use an Ecology-approved stormwater manual for implementation, maintenance, and operation of BMPs.
4. Within the project limits, all environmentally sensitive areas that are to be protected from disturbance shall be fenced with high-visibility construction fencing (HVF) prior to commencing construction activities. All project staff shall be trained to recognize construction fencing or flagging that identifies sensitive area boundaries.
5. The project shall be clearly marked/staked prior to commencing project activities on site. Clearing limits, travel corridors, stockpile sites, and staging areas shall be clearly marked

- and maintained until all work is completed. Equipment shall enter and operate within the marked clearing limits, corridors, and stockpile areas.
6. Staging areas will be located a minimum of 50 feet from waters of the state, including wetlands. If a staging area must be located within 50 feet of waters of the state, then the Applicant shall provide a written explanation (with additional BMPs) and obtain approval from Ecology's Federal Permit Manager before placing the staging area within the setback area.
 7. Machinery and equipment used during construction shall be serviced, fueled, and maintained on uplands a minimum of 50 feet, and where practical, 100 feet, from waters of the state including wetlands, unless otherwise approved by Ecology, in order to prevent contamination to any surface water.
 8. No petroleum products, fresh concrete, lime, chemicals, or other toxic or deleterious materials shall be allowed to enter waters of the state.
 9. All equipment that will operate over or within waters of the state shall be free of external petroleum-based products. Accumulation of soils or debris shall be removed from the drive mechanisms and the undercarriage of equipment prior to use. Equipment shall be inspected daily for leaks, accumulation of grease, etc. Any identified problems shall be fixed before operating over or within waters of the state.
 10. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working area shall not be discharged into state waters. The Applicant shall establish a separate, contained area for washing down vehicles and equipment that does not have any possibility of draining to surface waters and/or wetlands.
 11. All construction debris, concrete waste material, excess sediment, and other solid waste shall be properly managed and disposed of in an upland disposal site approved by the appropriate regulatory authority.
 12. Appropriate BMPs shall be implemented to minimize track-out during construction.
 13. Clean Fill Criteria: The Applicant shall ensure that fill (soil) placed for the proposed project does not contain toxic materials in toxic amounts.

Culvert Work & Temporary Diversion Structures

14. Culvert and stream diversion work shall be conducted in the dry or in isolation from waters of the state. The temporary cofferdam to divert water around the work area shall be in place prior to initiation of other work within the wetted perimeter of the stream.
15. The temporary diversion shall be of sufficient size, constructed of non-erosive materials, and installed to divert the entire flow through the bypass or around the isolated work area for the duration of the project.
16. The diversion system shall be designed and operated so as not to cause erosion in the channel or on the bank of the waterbody in which the work is being conducted.

17. Prior to returning water flow to the work area, all bank protection measures shall be in place.
18. Re-introduction of water into the isolated work area shall be done gradually, and at a rate not higher than the normal flow, in order to minimize the mobilization of sediments and fines.
19. Upon completion of the project, all material used for the temporary diversion shall be removed from the site.
20. Turbid dewatering water (including turbid water generated from cleaning and maintenance activities) shall not be discharged directly into waters of the state. Turbid water shall be pumped to an upland area to allow the turbid water to settle. The discharge from the upland areas shall meet water quality criteria at the point of discharge into surface waters and/or wetlands.
21. Dewatering water that is not turbid may be discharged directly to surface waters and/or wetland provided that: a) waste water containing raw concrete or other harmful material has not been in contact with the water to be discharged, and b) the water will meet all of the water quality standards at the point of discharge.

F. Wetland Compensatory Mitigation Conditions

1. The Applicant shall mitigate wetland impacts as described in the *NW 38th Avenue Improvements (Phases 2 & 3) Wetland and Buffer Mitigation Plan for the City of Camas, WA* (Mitigation Plan) prepared by Ecological Land Services, dated June 26, 2013, and as revised on March 24, 2014 or as modified by this Order or revised and approved by Ecology.
2. The Applicant shall submit any changes to the Mitigation Plan in writing to Ecology (per Condition A.2) for review and approval before work begins.
3. The Applicant shall get review and written approval from Ecology of any plan changes required if problems arise during construction and planting of the wetland mitigation site.
4. The Applicant shall have a wetland professional at the wetland mitigation site to supervise during construction and planting.

Implementation

5. Unless otherwise approved by Ecology in writing, the Applicant shall begin the compensatory mitigation project before, or concurrent with, impacting wetlands or Ecology may require additional compensation to account for additional temporal loss of wetland functions.
6. If the mitigation site cannot be completed within 13 months of the date of this Order, the Applicant shall inform Ecology in writing of the status of:
 - a. The NW 38th Avenue Improvements, Phases II and III;
 - b. The Mitigation Site;

With the:

- a. Reason for the delay; and
- b. Expected date of completion.

The Applicant shall submit an updated written notification every 12 months thereafter until the NW 38th Avenue Improvements, Phases II and III and the Mitigation Site are complete.

7. The Applicant shall ensure that all excess excavated site material is disposed of in an appropriate location outside of wetlands and their buffers at the wetland mitigation site and above the 100-year floodplain.
8. The Applicant shall ensure that no material is stockpiled within existing wetlands or their buffers at the wetland mitigation site at any time, unless provided for in the Ecology-approved Mitigation Plan.
9. The Applicant shall ensure that no construction debris is deposited within existing wetlands or their buffers at the wetland mitigation site at any time, unless provided for in the Ecology-approved Mitigation Plan.
10. The Applicant shall not use polyacrylamide on exposed or disturbed soil at the mitigation site.
11. Aquatic herbicides can be used or applied only by certified applicators or persons under the direct supervision of a certified applicator, and only for those uses covered by the certified applicator's license category. Applicators are required to be permitted under Ecology's Noxious Weed Control Permit. Applicators shall comply with all conditions of the Noxious Weed Control Permit.
12. If weed-barrier fabric is used on the site, the Applicant shall use only permeable, fully biodegradable, non-toxic weed-barrier fabric for entire-site and/or individual-plant weed control. Non-biodegradable plastic weed-barrier fabric shall be used only at the base of individual plants and shall be removed before it starts to break down, before it interferes with plant growth, or before the end of the monitoring period, whichever comes first.
14. If seeding is used at the wetland mitigation site, the seed mix must contain only native, non-invasive plant species.
15. After completing construction and planting of the mitigation sites, the Applicant shall submit to Ecology (per Condition A.2) an as-built report, including plan sheets, documenting site conditions at Year Zero. The as-built report must:
 - a. Be submitted within 90 days of completing construction and planting. Include one hard copy and one electronic file.
 - b. Include the information listed in Attachment B (Information Required for As-built Reports).
 - c. Include documentation of the recorded legal mechanism required in Condition F.16.

16. Within 90 days of completing construction and planting of the Mitigation Site, the Applicant shall record a restrictive covenant, a copy of this Order, and the site map from the final Wetland Mitigation Plan or as-built indicating the location of wetlands and their buffers. These documents must be recorded with the County Recording Office, Registrar of Deeds, or other official responsible for maintaining records for, or interest in, real property.

Monitoring and Maintenance

17. The Applicant shall water and maintain all mitigation site plantings so as to meet the Mitigation Plan's performance standards. If an irrigation system is installed, it shall be removed by the end of year three unless permission is received in writing from Ecology to allow the system to remain for a longer period.
18. The Applicant shall monitor the mitigation site for a minimum of 10 years. The Applicant shall use the monitoring methods described on pages 27-28 of the Mitigation Plan.
19. The Applicant shall submit to Ecology (per Condition A.2) monitoring reports documenting mitigation site conditions for years 1, 2, 3, 5, 7, and 10. The monitoring reports must:
 - a. Be submitted by December 31 of each monitoring year. Include one hard copy and one electronic file.
 - b. Include the information listed in Attachment C (Information Required for Monitoring Reports).
20. The Applicant shall implement the Mitigation Plan's contingency measures if the Mitigation Plan's goals, objectives, or performance standards are not being met.
21. Prior to implementing any contingency measures not specified in the Mitigation Plan, the Applicant shall consult with, and obtain written approval from, Ecology for the changes.
22. When necessary to meet the performance standards, the Applicant shall replace dead or dying plants with the same species, or an appropriate native plant alternative, during the first available planting season and note species, numbers, and approximate locations of all replacement plants in the subsequent monitoring report.
23. For monitoring years five (5) and ten (10) the Applicant shall use the most current approved federal wetland delineation manual and appropriate regional supplement to delineate all compensatory wetlands and include delineation information (e.g., data sheets, maps, etc.) in the monitoring reports.
24. At the end of the monitoring period, the Applicant shall use the August 2004 or updated version of "Washington State Wetlands Rating System for Western Washington" to rate all wetlands and include the information in the monitoring report.
25. If the Applicant has not met all conditions and performance standards for the mitigation site at the end of the monitoring period, Ecology may require additional monitoring, additional mitigation, or both.
26. Until the Applicant has received written notice from Ecology that the Mitigation Plan has

been fully implemented, the Applicant's obligation under Condition F.1 to mitigate for wetland impacts is not met.

G. Emergency/Contingency Measures:

1. The Applicant shall develop a spill prevention and containment plan for this project, and shall have spill cleanup materials and an emergency call list available on site.
2. Any work that is out of compliance with the provisions of this Order, or conditions causing distressed or dying fish, or any discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, is prohibited. If these occur, the Applicant or operator shall immediately take the following actions:
 - a. Cease operations that are causing the compliance problem.
 - b. Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage.
 - c. In the event of finding distressed or dying fish, the applicant shall collect fish specimens and water samples in the affected area within the first hour of the event. These samples shall be held in refrigeration or on ice until the applicant is instructed by Ecology on what to do with them. Ecology may require analyses of these samples before allowing the work to resume.
 - d. In the event of a discharge of oil, fuel, or chemicals into state waters, or onto land with a potential for entry into state waters, 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.
 - e. Immediately notify Ecology's 24-Hour Spill Response Team at 1-800-258-5990, **and** within 24 hours of spills or other events Ecology's Federal Permit Manager at (360) 407-6926.
 - f. Submit a detailed written report to Ecology within five (5) days that describes the nature of the event, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.
3. 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, including wetlands.
4. If at any time during work the proponent finds buried chemical containers, such as drums, or any unusual conditions indicating disposal of chemicals, the proponent shall immediately notify Ecology using the above phone numbers.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Rd SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

CONTACT INFORMATION

Please direct all questions about this Order to:

Lori Ochoa
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775
loch461@ecy.wa.gov

MORE INFORMATION

Pollution Control Hearings Board Website
www.cho.wa.gov/Boards_PCHB.aspx

Chapter 43.21B RCW - Environmental Hearings Office – Pollution Control Hearings Board
<http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21B>

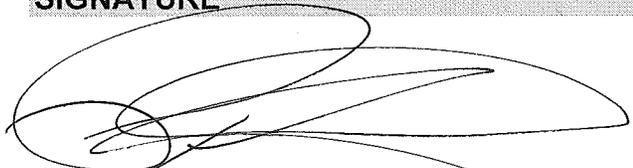
Chapter 371-08 WAC – Practice and Procedure
<http://apps.leg.wa.gov/WAC/default.aspx?cite=371-08>

Chapter 90.48 RCW – Water Pollution Control
<http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>

Chapter 173-200 WAC – Water Quality Standards for Ground Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173200.html

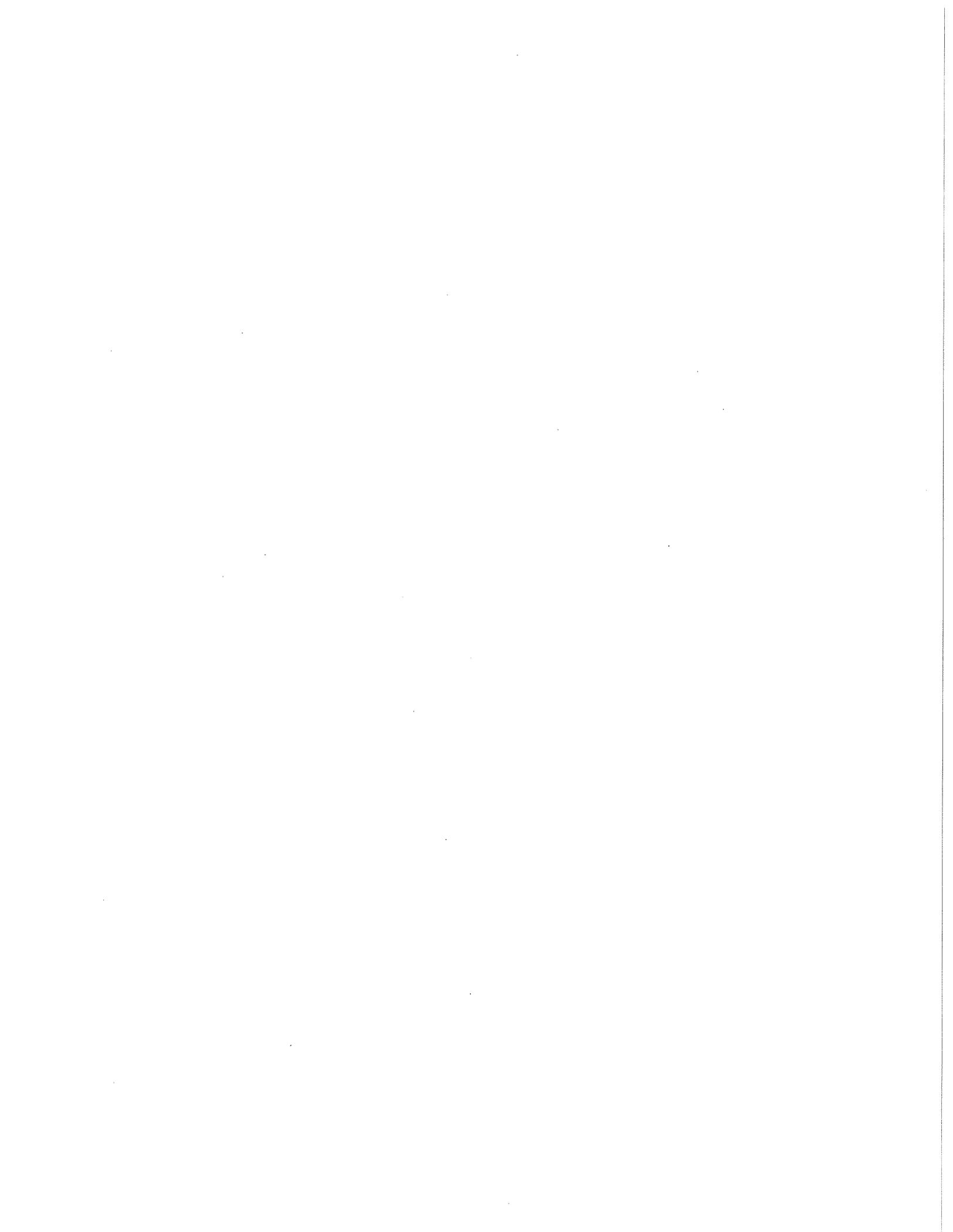
Chapter 173-201A WAC – Water Quality Standards for Surface Waters of the State of Washington
www.ecy.wa.gov/biblio/wac173201A.html

SIGNATURE



Perry J Lund, Unit Manager
Shorelands and Environmental Assistance Program
Southwest Regional Office

Date 5/7/2014



Attachment A
Statement of Understanding
Water Quality Certification Conditions

NW 38th Avenue Improvements, Phases II & III
City of Camas
Water Quality Certification Order No. **10672**
and
Corps Reference No. **NWS-2013-746**

I, _____, state that I will be involved as an agent or contractor for The City of Camas in the site preparation and/or construction of the NW 38th Avenue Improvement Project, Phases II & III, from its intersection with Armstrong Road extending east to Grass Valley Park, City of Camas, Clark County, Washington. I further state that I have read and understand the relevant conditions of Washington Department of Ecology Water Quality Certification Order No. 10672 and the applicable permits and approvals referenced therein which pertain to the project-related work for which I am responsible.

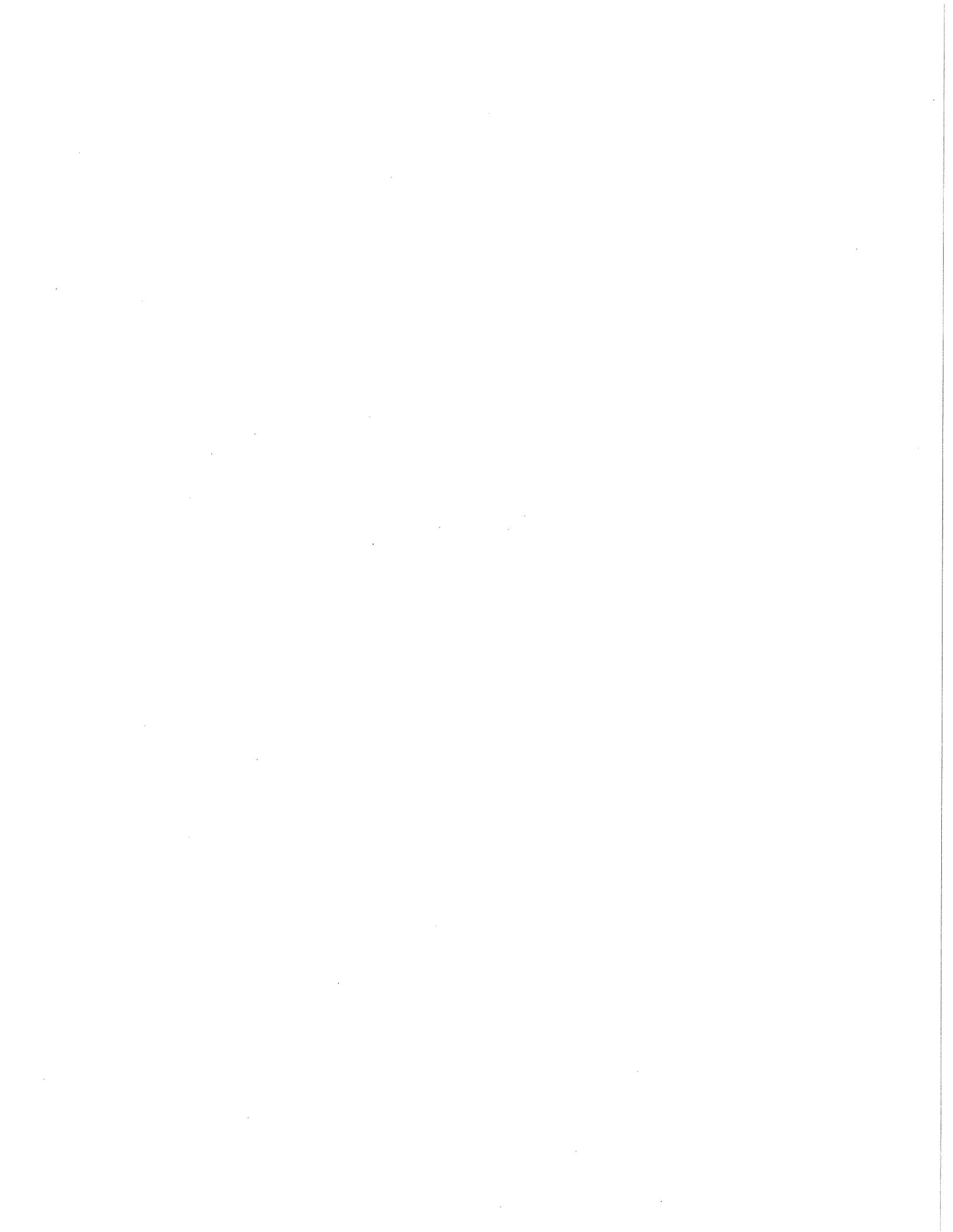
Signature

Date

Title

Phone

Company



Attachment B
Information Required for As-built Reports
NW 38th Avenue Improvements, Phases II & III

Water Quality Certification Order No. 10672
And
Corps Reference No. NWS-2013-746

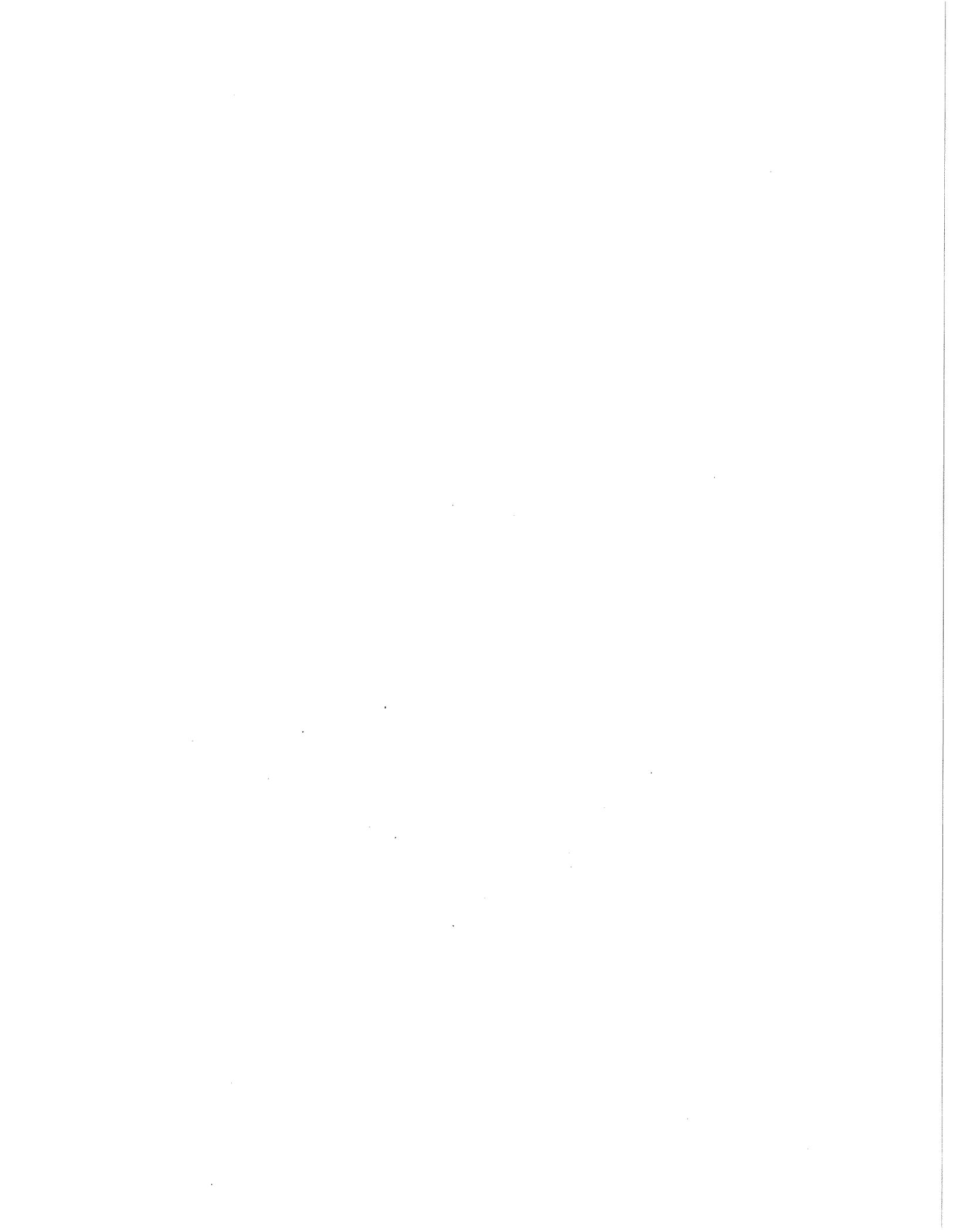
Ecology requires the following information for as-built reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

Background Information

- 1) Project name.
- 2) Ecology Order number and the Corps reference number.
- 3) Name and contact information of the person preparing the as-built report. Also, if different from the person preparing the report, include the names of:
 - a) The applicant
 - b) The landowner
 - c) Wetland professional on site during construction of the mitigation site.
- 4) Date the report was produced.

Mitigation Project Information

- 5) Brief description of the **final** mitigation project with any changes from the approved plan made during construction. Include:
 - a) **Actual** acreage of Cowardin classes and mitigation type(s) (re-establishment, rehabilitation, creation, enhancement, preservation, upland, buffers).
 - b) Important dates, including:
 - i. Start of project construction.
 - ii. When work on the mitigation site began and ended.
 - iii. When different activities such as grading, removal of invasive plants, installing plants, and installing habitat features began and ended.
- 6) Description of any problems encountered and solutions implemented (with reasons for changes) during construction of the mitigation site.
- 7) List of any follow-up actions needed, with a schedule.
- 8) Vicinity map showing the geographic location of the site with landmarks.
- 9) Mitigation site map(s), 8-1/2" x 11" or larger, showing the following:
 - a) Boundary of the site(s).
 - b) Topography (with a description of how elevations were determined).
 - c) Installed planting scheme (quantities, densities, sizes, and approximate locations of plants, as well as the source(s) of plant material).
 - d) Location of habitat features.
 - e) Location of permanent photo stations and any other photos taken.Include the month and year when each map was produced or revised. The site map(s) should reflect on-the-ground conditions after the site work is completed.
- 10) Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction from which each photo was taken. Photo pans are recommended.
- 11) A copy of any deed notifications, conservation easements, or other approved site protection mechanism.



Attachment C
Information Required for Monitoring Reports

NW 38th Avenue Improvements, Phases II & III

Ecology Order No. 10672

And

Corps Reference No. NWS-2013-746

Ecology requires the following information for monitoring reports submitted under this Order. Ecology will accept additional information that may be required by other agencies.

Background Information

- 1) Project name.
- 2) Ecology Order number and the Corps reference number.
- 3) Name and contact information of the person preparing the monitoring report. Also, if different from the person preparing the report, include the names of:
 - a) The applicant
 - b) The landowner
 - c) The party responsible for the monitoring activities.
- 4) Dates the monitoring data were collected.
- 5) Date the report was produced.

Mitigation Project Information

- 6) Brief description of the mitigation project, including acreage of Cowardin classes and mitigation type(s) (re-establishment, rehabilitation, creation, enhancement, preservation, upland, buffers).
- 7) Description of the monitoring approach and methods. For each performance standard being measured provide the following information:
 - a) Description of the sampling technique (e.g., monitoring point for soil or hydrology, line or point intercept method, ocular estimates in individually placed plots). If you are using a standardized technique, provide a reference for that method.
 - b) Size and shape of plots or transects.
 - c) Number of sampling locations and how you determined the number of sampling locations to use.
 - d) Percent of the mitigation area being sampled.
 - e) Locations of sampling (provide a map showing the locations), how you determined where to place the sampling locations (e.g., simple random sample), and whether they are permanent or temporary.
 - f) Schedule for sampling (how often and when).
 - g) Description of how the data was evaluated and analyzed.
- 8) Summary table(s) comparing performance standards with monitoring results and whether each standard has been met.

- 9) Discussion of how the monitoring data were used to determine whether the site is meeting performance standards.
- 10) Goals and objectives and a discussion of whether the project is progressing toward achieving them.
- 11) Summary, including dates, of management actions implemented at the site, for example, maintenance and corrective actions.
- 12) Summary of any difficulties or significant events that occurred on the site that may affect the success of the project.
- 13) Specific recommendations for additional maintenance or corrective actions with a timetable.
- 14) Photographs taken at permanent photo stations and other photographs, as needed. Photos must be dated and clearly indicate the direction the camera is facing. Photo pans are recommended.
- 15) Vicinity map showing the geographic location of the site with landmarks.
- 16) Mitigation site map(s), 8-1/2" x 11" or larger, showing the following:
 - a) Boundary of the site.
 - b) Location of permanent photo stations and any other photos taken.
 - c) Data sampling locations, such as points, plots, or transects.
 - d) Approximate locations of any replanted vegetation.
 - e) Changes to site conditions since the last report, such as areas of regrading, a shift in the location of Cowardin classes or habitat features, or a change in water regime.Include the month and year when each map was produced or revised. The site map should reflect on-the-ground conditions during the most recent monitoring year.