



US Army Corps  
of Engineers  
Seattle District



WASHINGTON STATE  
DEPARTMENT OF  
E C O L O G Y

# Joint Public Notice

## Application for a Department of the Army Permit and a Washington Department of Ecology Water Quality Certification and/or Coastal Zone Management Consistency Concurrence

### US Army Corps of Engineers

Regulatory Branch  
Post Office Box 3755  
Seattle, WA 98124-3755  
Telephone (206) 764-3482  
Attn: Karen Urelius, Project Manager

### WA Department of Ecology

SEA Program  
Post Office Box 47600  
Olympia, WA 98504-7600  
Telephone (360) 407-6068  
Attn: SEA Program, Federal Permit  
Coordinator

**Public Notice Date:** July 13, 2012

**Expiration Date:** August 12, 2012

Reference No.: NWS-2011-997

Name: Chiawana Inc.,  
dba Columbia Reach

---

Interested parties are hereby notified that the U.S. Army Corps of Engineers (Corps) and the Washington Department of Ecology (Ecology) have received an application to perform work in waters of the United States as described below and shown on the enclosed drawings dated June 29, 2012. The Corps will review the work in accordance with Section 404 of the Clean Water Act (CWA). Ecology will review the work pursuant to Section 401 of the CWA, with applicable provisions of State water pollution control laws.

**APPLICANT:** Chiawana Inc., dba Columbia Reach  
3107 River Road  
Yakima, Washington 98902  
Attention: Mr. Wally Meyer  
Telephone: (509) 457-8001

**AGENT:** Durant Development Services, Inc.  
P.O. Box 1723  
Yakima, Washington 98907  
Attention: Mr. Tom Durant  
Telephone: (509) 249-2883

**LOCATION:** In ponds and wetlands located at 3107 River Road, Yakima, Washington.

**WORK:** Construct three controlled-atmosphere agricultural warehouses along with accessory concrete aprons and an access road on a 10-acre site. 15,000-20,000 cubic yards of fill would be placed into two artificial ponds (Ponds 3 and 4) and portions of an artificial dewatering channel. The Corps has determined that Pond 4 is not a jurisdictional water of the US. Jurisdictional waters to be adversely affected by the project would total approximately 1.01 acres, consisting of 0.53 acre of impacts to open water and 0.48 acre of impacts to wetlands. In Pond 3, fill would be placed in 0.53 acre of open water and 0.05 acre of wetland fringe. Fill would also be placed in 0.37 acre of wetland in the dewatering channel. In order to create wetlands along the fringe of Pond 1 and Pond 2, a total of 0.06 acre of wetlands would be excavated.

**PURPOSE:** Provide controlled-atmosphere storage for agricultural products in Yakima County.

**MITIGATION:** Ponds 1 and 2 would be expanded by approximately 1.09 acres in order to create 0.72 acre of wetlands and 0.37 acre of open water habitat. The mitigation plan includes the establishment of 1.38 acres of buffers vegetated with native upland species. The buffers would be adjacent to the north portion of the dewatering channel, along the west shore of the Pond 1 mitigation area, and around the Pond 2 mitigation area.

**ENDANGERED SPECIES:** The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. A preliminary determination indicates that the activity will not affect endangered or threatened species, or their critical habitat. Consultation under Section 7 of the ESA is not required.

**ESSENTIAL FISH HABITAT:** The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The Corps has determined that the proposed action will not adversely affect designated EFH for federally managed fisheries in Washington waters. No further EFH consultation is necessary.

**CULTURAL RESOURCES:** The Corps has reviewed the latest published version of the National Register of Historic Places, lists of properties determined eligible and other sources of information. There are no recorded historic properties within the permit area. The permit area has been so extensively disturbed by surface mining that little likelihood exists for the proposed project to impinge upon an undisturbed historic property. The Corps invites responses to this public notice from Native American Tribes or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns regarding historic properties and sites of religious and cultural significance at or near the project area. After receipt of comments from this public notice, the Corps will evaluate potential impacts and consult with the State Historic Preservation Officer and Native American Tribes in accordance with Section 106 of the National Historic Preservation Act, as appropriate.

**SOURCE OF FILL MATERIAL:** Gravelly sandy loam fill material will be obtained on-site in the buffer areas of Ponds 1 and 2 and from local established commercial sources.

**EVALUATION – CORPS:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The Corps is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

The described discharge will be evaluated for compliance with guidelines promulgated by the Environmental Protection Agency under authority of Section 404(b)(1) of the CWA. These guidelines require an alternatives analysis for any proposed discharge of dredged or fill material into waters of the United States.

EVALUATION – ECOLOGY: Ecology is soliciting comments from the public; Federal, Native American Nations or tribal governments, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Ecology will be considering all comments to determine whether to certify or deny certification for the proposed project.

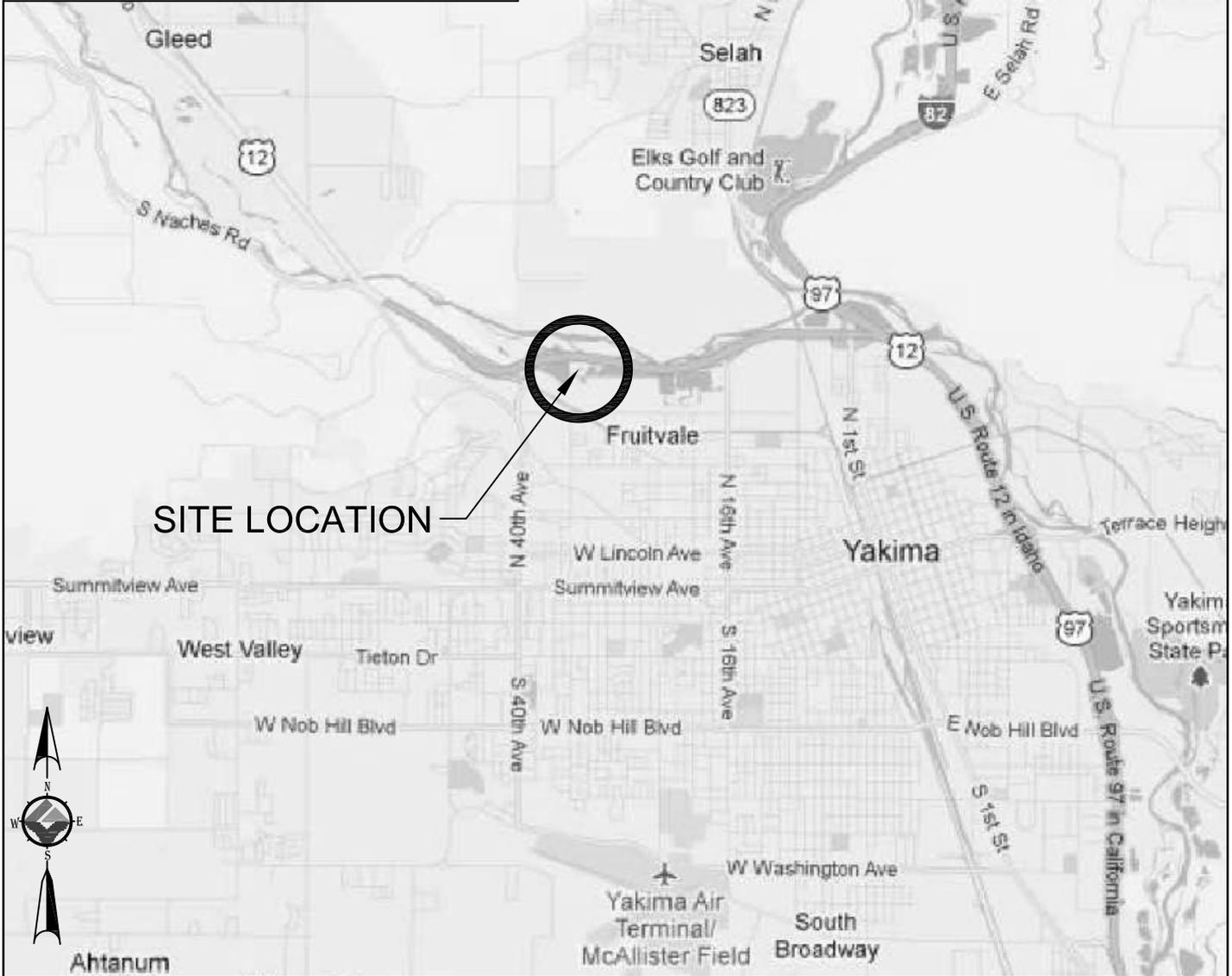
COMMENT AND REVIEW PERIOD: Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether it would be in the public interest to authorize this proposal. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commentator's name, address, and phone number. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

CORPS COMMENTS: All e-mail comments should be sent to karen.m.urelius@usace.army.mil. Conventional mail comments should be sent to: U.S. Army Corps of Engineers, Regulatory Branch, Attention: Karen Urelius, P.O. Box 3755, Seattle, Washington 98124-3755.

ECOLOGY COMMENTS: Any person desiring to present views on the project pertaining to a request for water quality certification under Section 401 of the CWA and/or Coastal Zone Management consistency concurrence, may do so by submitting written comments to the following address: Washington State Department of Ecology, Attention: SEA program – Federal Permit Coordinator, P.O. Box 47600, Olympia, Washington 98504-7600, or e-mail to [ecyrefedpermits@ecy.wa.gov](mailto:ecyrefedpermits@ecy.wa.gov).

To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Chiawana Inc., dba Columbia Reach; NWS-2011-997

Encl: Figures 1-11



**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT  
-120.552891 W LONG (NAD 83)

**CITY:** YAKIMA

**COUNTY OF:** YAKIMA

**STATE OF:** WASHINGTON

**SITE VICINITY MAP**

**REFERENCE #:** NWS-2011-997

CHIAWANA, INC. dba COLUMBIA REACH  
3107 RIVER ROAD  
YAKIMA, WA 98902



2102 North 30th Street, Suite A  
TACOMA, WA 98403  
(253) 573-9300  
gretteassociates.com

**TOM DURANT**  
DURANT DEVELOPMENT SERVICES  
PO BOX 1723  
YAKIMA, WA 98907  
(509) 248-4156

**DATE:** MAY 8, 2012

**REVISED:** JUNE 29, 2012

**SHEET:** 1 OF 11



	OWNER	PARCEL	MAILING ADDRESS
1	Yakima County	18131044002	PO Box 22530 Yakima, WA 98901
2	WA Dept. of Fish and Willife	18131511004	600 Capital Way N Olympia, WA 98501
3	Chiawana, Inc.	18131511023	3107 River Road Yakima, WA 98902
4	Chiawana, Inc.	18131422402	3107 River Road Yakima, WA 98902
5	MS River Park LLC	18131422423	101 Hodencamp #200 Thousand Oaks, CA 91360
6	Willow Lk. Condominium Master Assoc.	18131133400	2300 River Road #46 Yakima, WA 98902

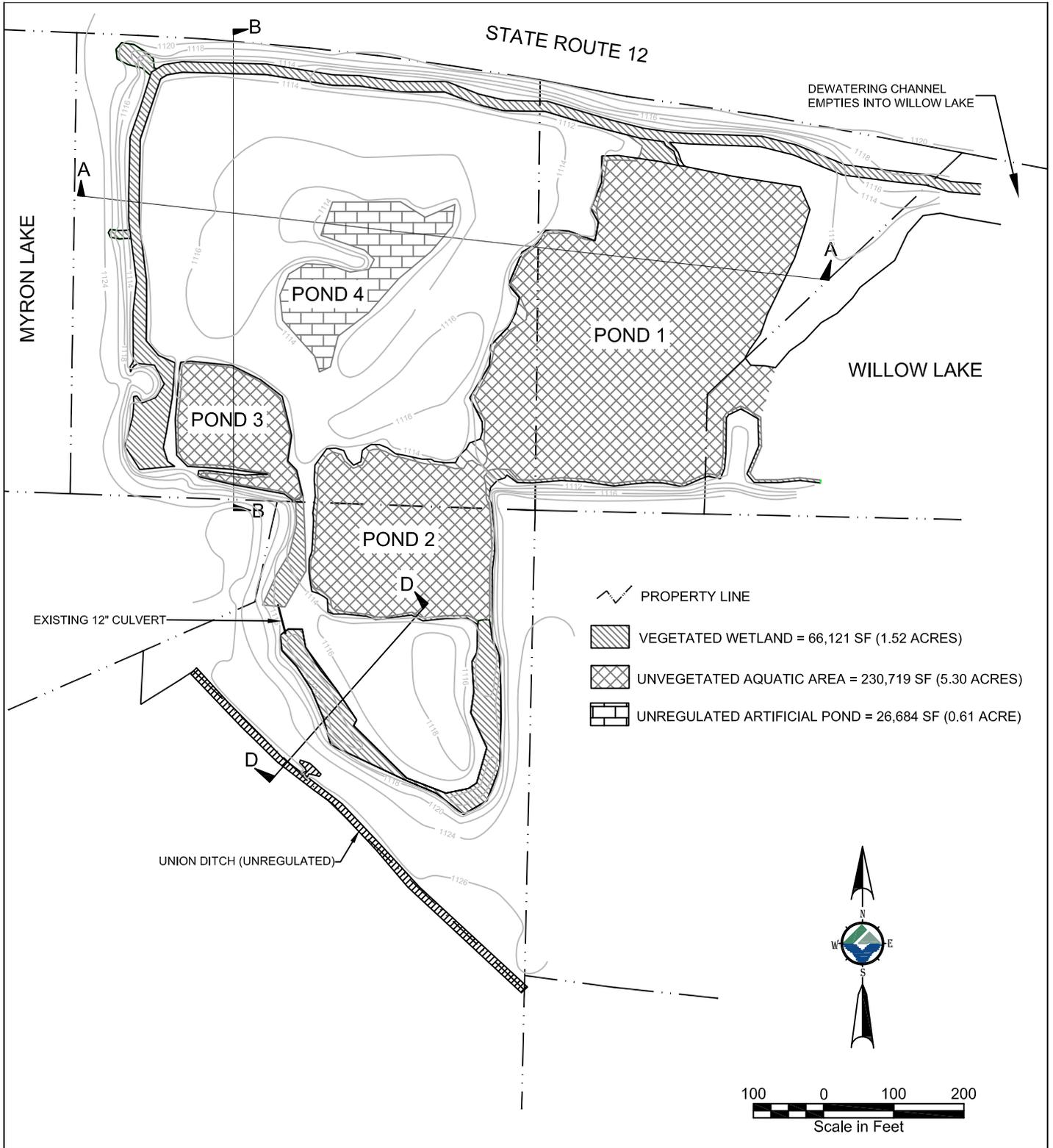
**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES  
**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH  
**LOCATION:** SEC 10, 11, 15 T13N, R18E WM  
**COORDINATES:** 46.621678 N LAT -120.552891 W LONG (NAD 83)  
**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

**ADJACENT PROPERTY OWNERS**  
  
**REFERENCE #:** NWS-2011-997  
  
 CHIAWANA, INC. dba COLUMBIA REACH  
 3107 RIVER ROAD  
 YAKIMA, WA 98902

**Grette Associates** LLC  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com

**TOM DURANT**  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 248-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012    **SHEET:** 2 OF 11



**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT -120.552891 W LONG (NAD 83)

**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

**EXISTING PLAN VIEW**

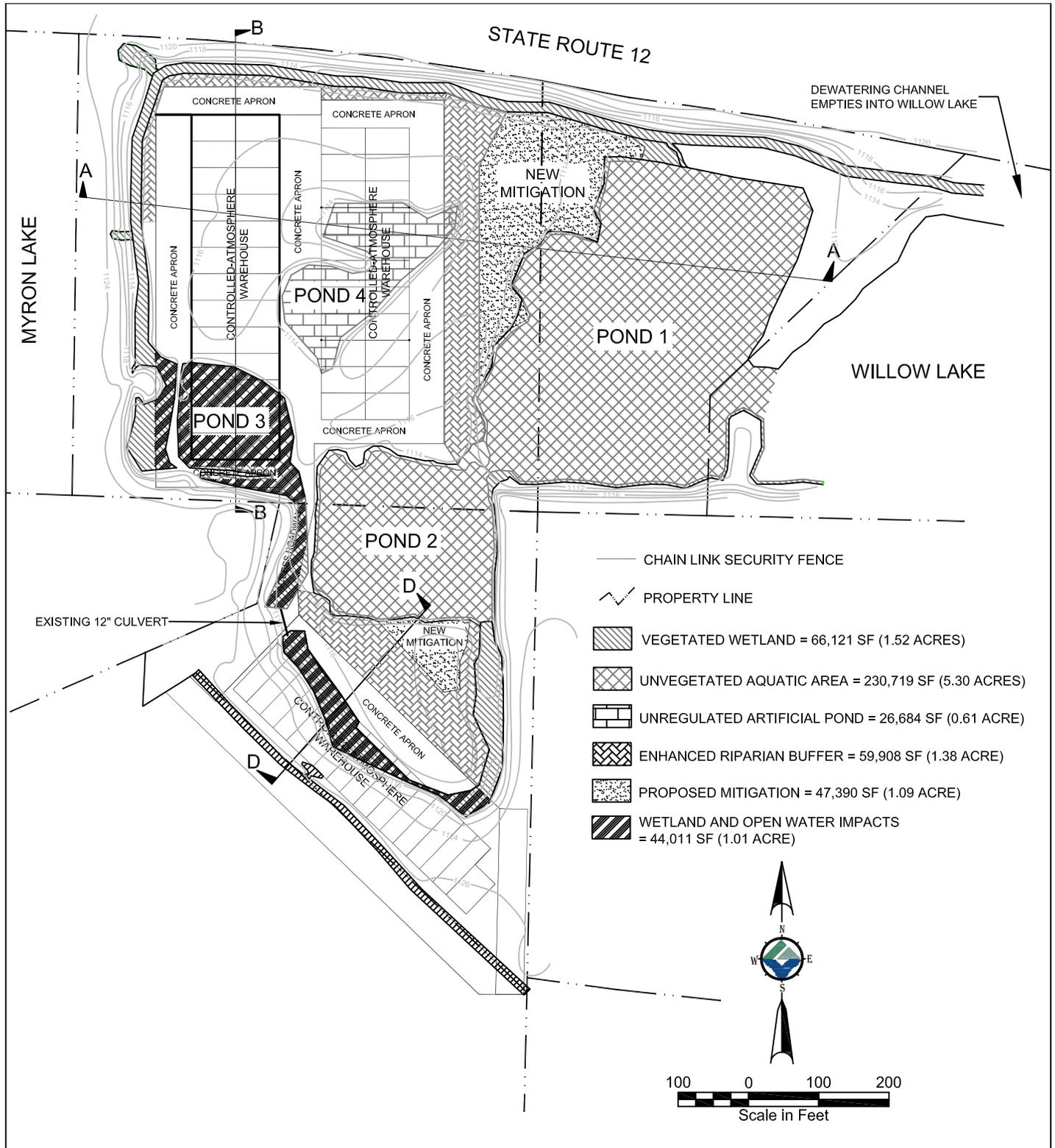
**REFERENCE #:** NWS-2011-997

CHIAWANA, INC. dba COLUMBIA REACH  
 3107 RIVER ROAD  
 YAKIMA, WA 98902

 **Grette Associates LLC**  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com

TOM DURANT  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 248-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012    **SHEET:** 3 OF 11



**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT  
-120.552891 W LONG (NAD 83)

**CITY:** YAKIMA

**COUNTY OF:** YAKIMA

**STATE OF:** WASHINGTON

**PROPOSED PLAN VIEW**

**REFERENCE #:** NWS-2011-997

**CHIAWANA, INC. dba COLUMBIA REACH**  
3107 RIVER ROAD  
YAKIMA, WA 98902

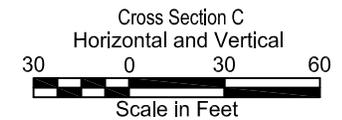
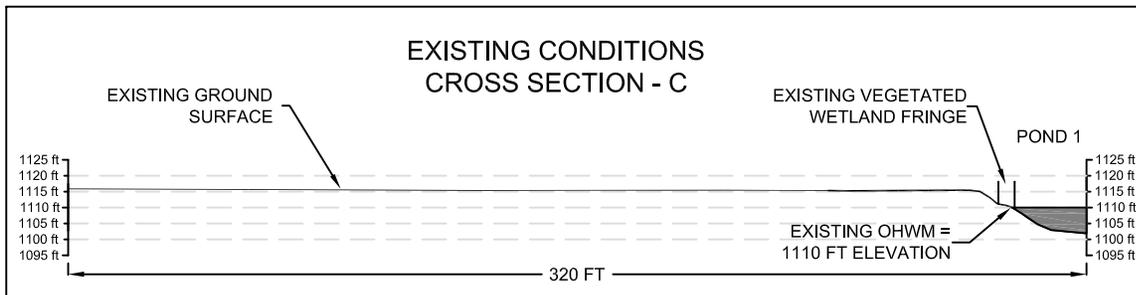
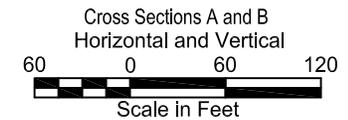
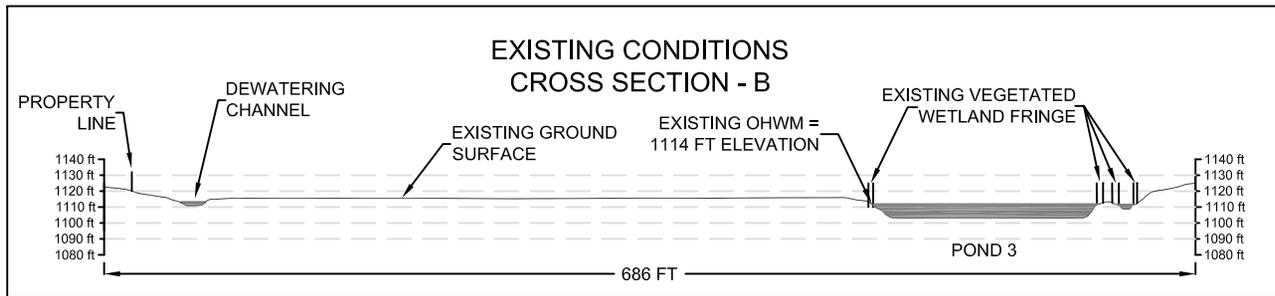
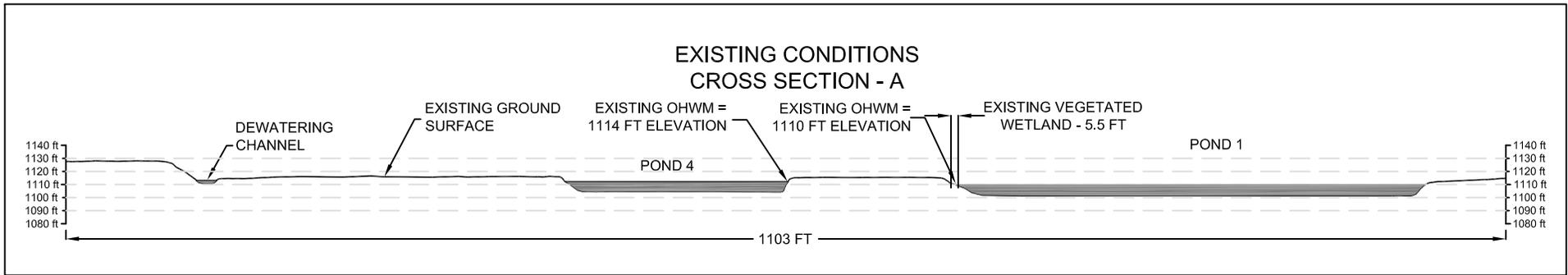
**Grette Associates LLC**  
ENVIRONMENTAL CONSULTANTS

2102 North 30th Street, Suite A  
TACOMA, WA 98403  
(253) 573-9300  
gretteassociates.com

**TOM DURANT**  
DURANT DEVELOPMENT SERVICES  
PO BOX 1723  
YAKIMA, WA 98907  
(509) 248-4156

**DATE:** MAY 8, 2012

**REVISED:** JUNE 29, 2012    **SHEET:** 4 OF 11



NOTE: ALL ELEVATIONS APPROXIMATE

**PROPOSED:** TO CONSTRUCT THREE COLD-STORAGE AGRICULTURE WAREHOUSES.

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT  
-120.552891 W LONG (NAD 83)

**IN:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

## EXISTING CROSS SECTIONS

REFERENCE #: NWS-2011-997

CHIAWANA, INC. dba COLUMBIA REACH  
3107 RIVER ROAD  
YAKIMA, WA 98902



2102 North 30th Street, Suite A  
TACOMA, WA 98403  
(253) 573-9300  
gretteassociates.com

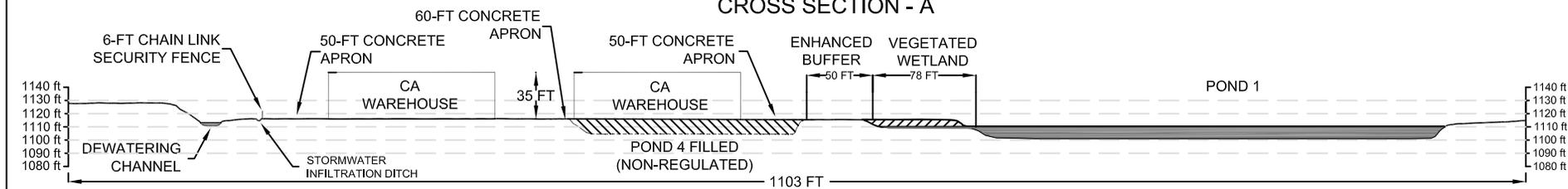
TOM DURANT  
DURANT DEVELOPMENT SERVICES  
PO BOX 1723  
YAKIMA, WA 98907  
(509) 248-4156

**DATE:** MAY 8, 2012

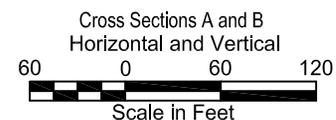
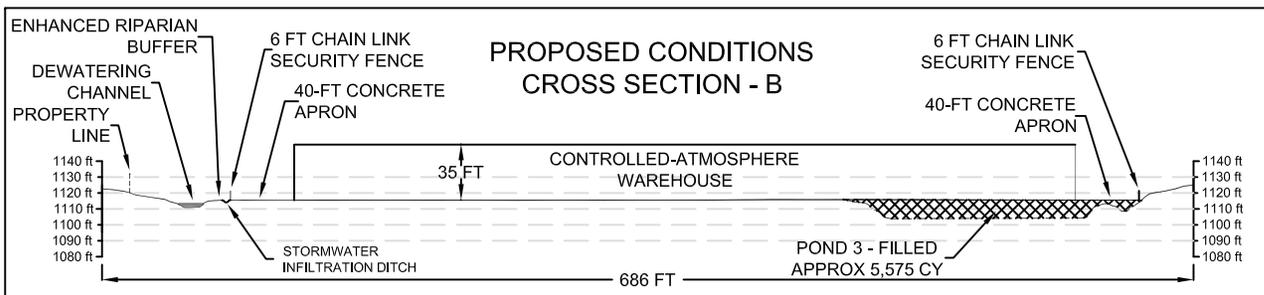
**REVISED:** JUNE 29, 2012

**SHEET:** 5 OF 11

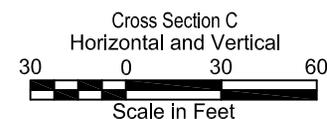
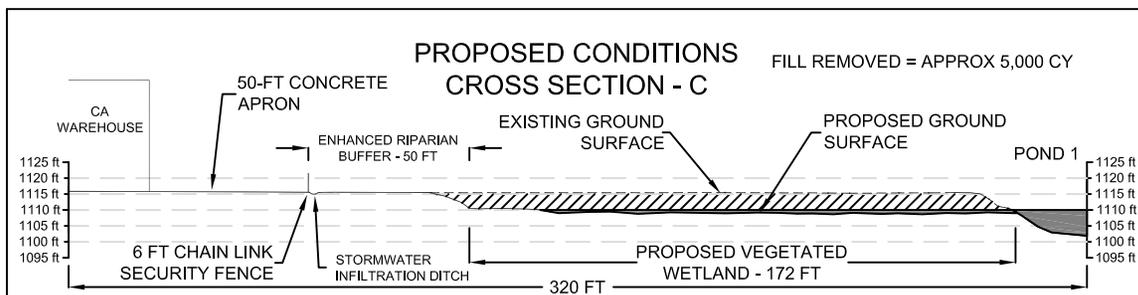
**PROPOSED CONDITIONS  
CROSS SECTION - A**



**PROPOSED CONDITIONS  
CROSS SECTION - B**



**PROPOSED CONDITIONS  
CROSS SECTION - C**



**NOTE: ALL ELEVATIONS APPROXIMATE  
EXISTING OHWM = 1110 FT ELEVATION**

**PROPOSED: TO CONSTRUCT THREE  
COLD-STORAGE AGRICULTURE WAREHOUSES.**

**APPLICANT: CHIAWANA, INC. dba COLUMBIA  
REACH**

**LOCATION: SEC 10, 11, 15 T13N, R18E WM**

**COORDINATES: 46.621678 N LAT  
-120.552891 W LONG (NAD 83)**

**IN: YAKIMA  
COUNTY OF: YAKIMA  
STATE OF: WASHINGTON**

**PROPOSED CROSS SECTIONS**

**REFERENCE #: NWS-2011-997**

**CHIAWANA, INC. dba COLUMBIA REACH  
3107 RIVER ROAD  
YAKIMA, WA 98902**



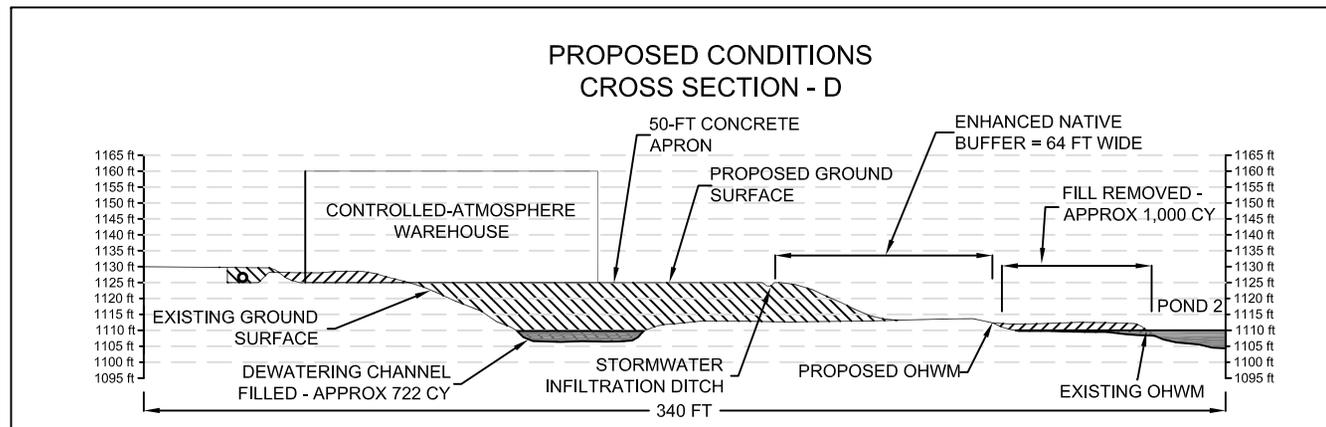
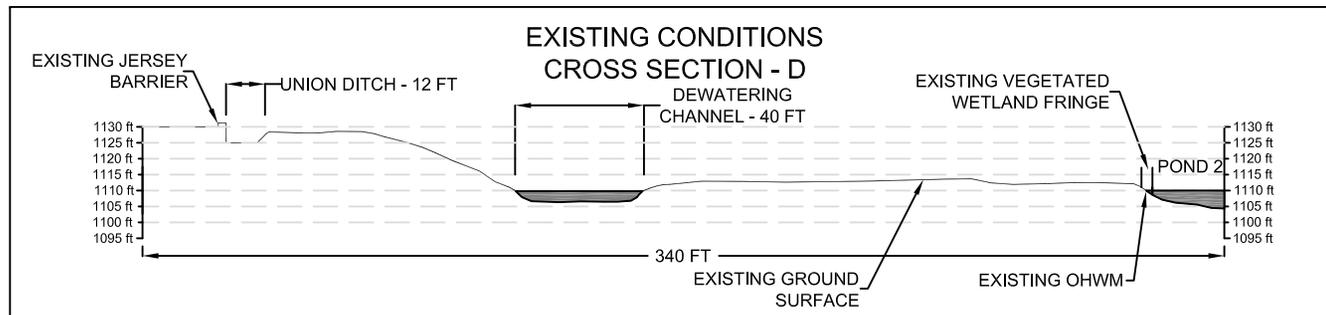
2102 North 30th Street, Suite A  
TACOMA, WA 98403  
(253) 573-9300  
gretteassociates.com

**TOM DURANT  
DURANT DEVELOPMENT SERVICES  
PO BOX 1723  
YAKIMA, WA 98907  
(509) 248-4156**

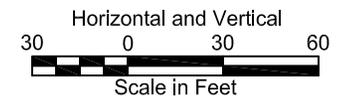
**DATE: MAY 8, 2012**

**REVISED: JUNE 29, 2012**

**SHEET: 6 OF 11**



NOTE: ALL ELEVATIONS APPROXIMATE  
EXISTING OHWM LOCATED AT APPROXIMATELY 1110 FT ELEVATION



**PROPOSED:** TO CONSTRUCT THREE COLD-STORAGE AGRICULTURE WAREHOUSES.

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT  
-120.552891 W LONG (NAD 83)

**IN:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

## EXISTING AND PROPOSED CROSS SECTION D

REFERENCE #: NWS-2011-997

CHIAWANA, INC. dba COLUMBIA REACH  
3107 RIVER ROAD  
YAKIMA, WA 98902



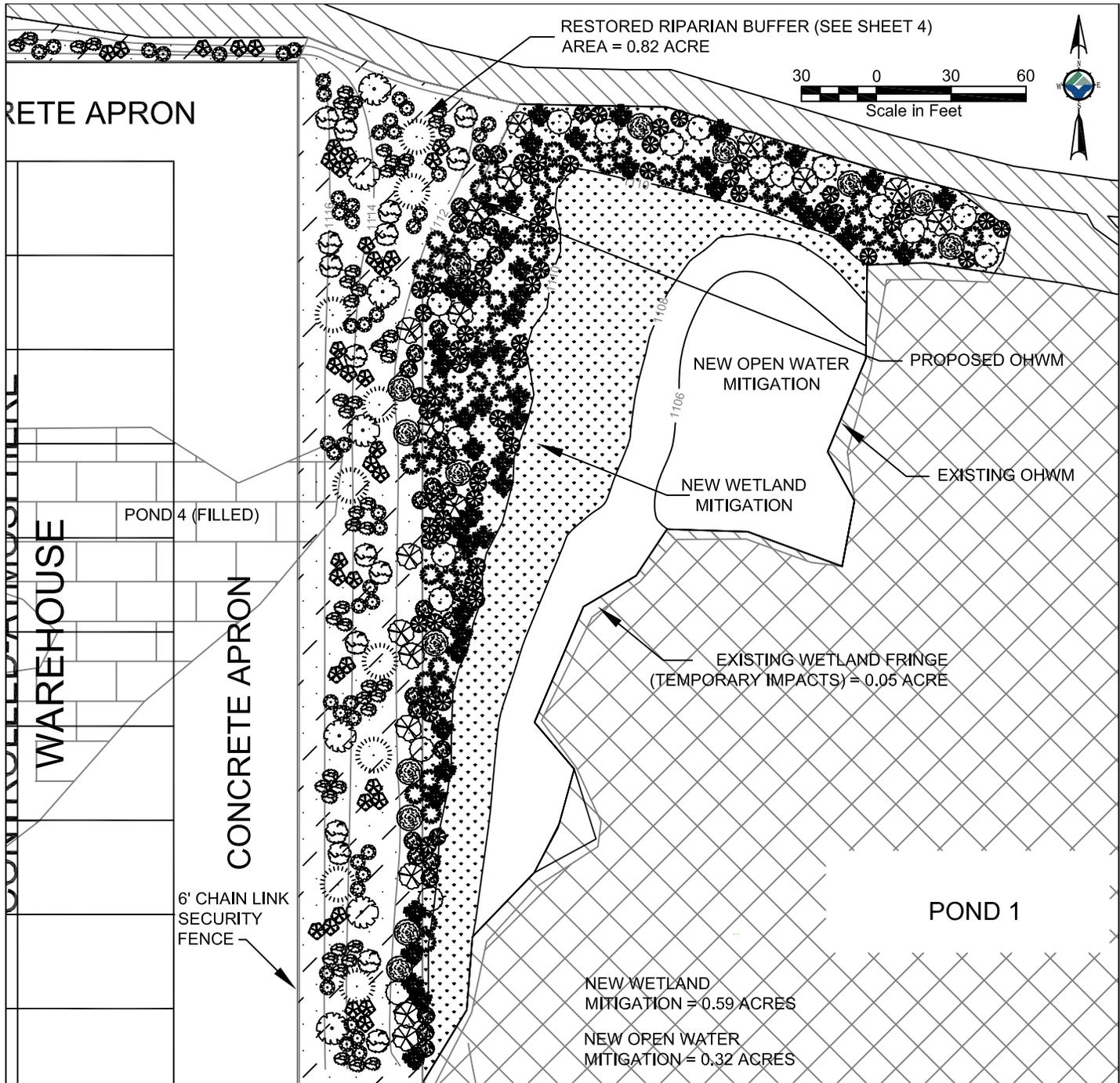
2102 North 30th Street, Suite A  
TACOMA, WA 98403  
(253) 573-9300  
gretteassociates.com

TOM DURANT  
DURANT DEVELOPMENT SERVICES  
PO BOX 1723  
YAKIMA, WA 98907  
(509) 246-4156

**DATE:** MAY 8, 2012

**REVISED:** JUNE 29, 2012

**SHEET:** 7 OF 11



Riparian/Wet Zone Shrubs	Riparian/Wet Zone Trees	Upland Zone Shrubs	Upland Zone Trees
<i>Rosa nutkana</i> Nootka rose <i>Cornus sericea</i> Red osier dogwood <i>Salix exigua</i> Coyote willow <i>Salix scouleriana</i> Scouler willow	<i>Betula occidentalis</i> Water birch <i>Populus balsamifera</i> Black cottonwood <i>Salix lasiandra</i> Pacific willow	<i>Mahonia aquifolium</i> Tall Oregon grape <i>Rhus glabra</i> Smooth sumac <i>Rosa woodsii</i> Wood's rose	<i>Acer douglasii</i> Douglas maple <i>Amelanchier alnifolia</i> Serviceberry <i>Pinus ponderosa</i> Ponderosa pine
Emergent Seed and Plugs		Riparian/Upland Zone Grasses	

**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES  
**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH  
**LOCATION:** SEC 10, 11, 15 T13N, R18E WM  
**COORDINATES:** 46.621678 N LAT -120.552891 W LONG (NAD 83)  
**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

**MITIGATION PLAN VIEW**

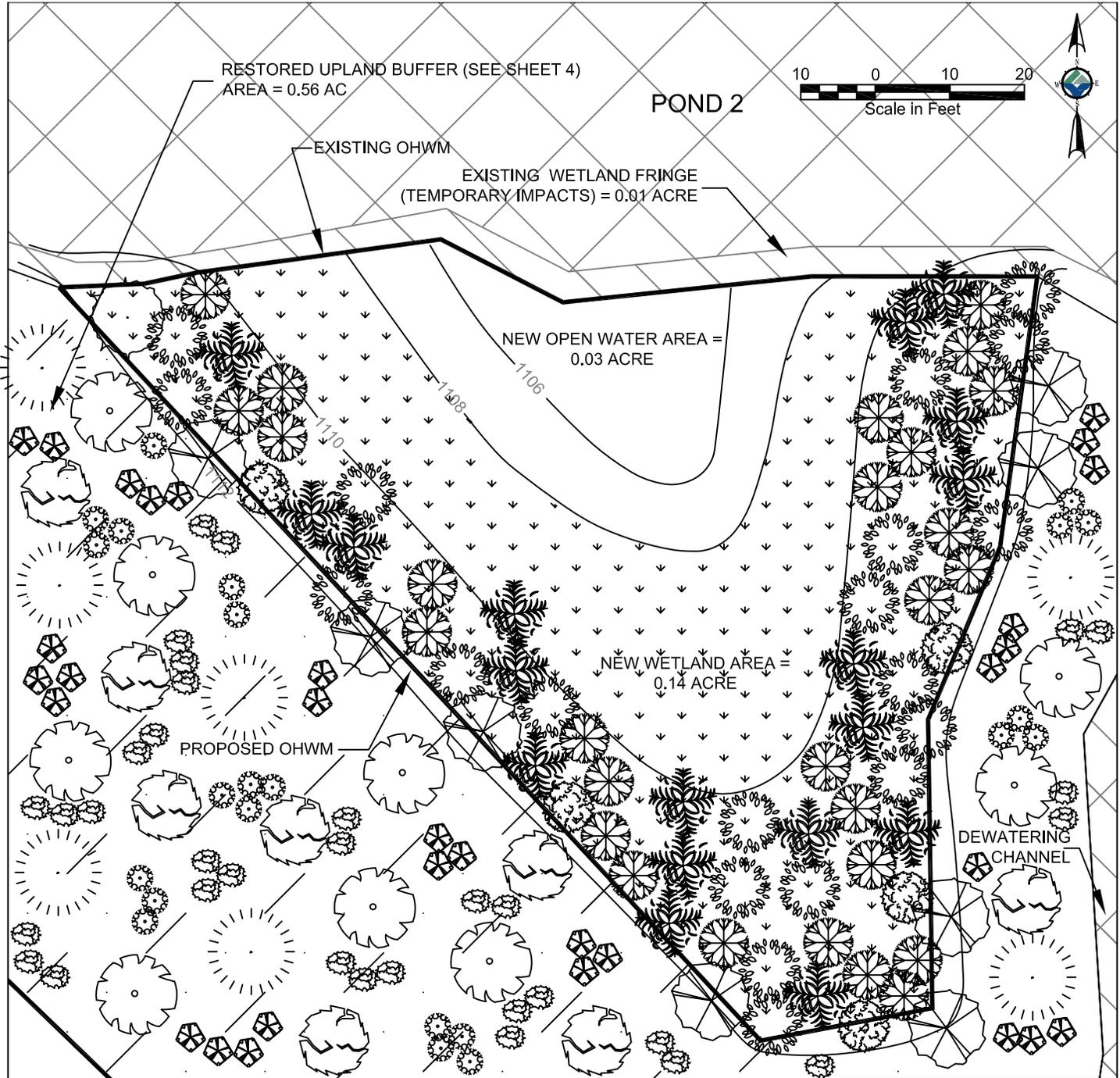
**REFERENCE #:** NWS-2011-997

CHIAWANA, INC. dba COLUMBIA REACH  
 3107 RIVER ROAD  
 YAKIMA, WA 98902

**Grette Associates LLC**  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com

TOM DURANT  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 248-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012 **SHEET:** 8 OF 11



Riparian/Wet Zone Shrubs	Riparian/Wet Zone Trees	Upland Zone Shrubs	Upland Zone Trees
<i>Rosa nutkana</i> Nootka rose	<i>Betula occidentalis</i> Water birch	<i>Mahonia aquifolium</i> Tall Oregon grape	<i>Acer douglasii</i> Douglas maple
<i>Cornus sericea</i> Red osier dogwood	<i>Populus balsamifera</i> Black cottonwood	<i>Rhus glabra</i> Smooth sumac	<i>Amelanchier alnifolia</i> Serviceberry
<i>Salix exigua</i> Coyote willow	<i>Salix lasiandra</i> Pacific willow	<i>Rosa woodsii</i> Wood's rose	<i>Pinus ponderosa</i> Ponderosa pine
<i>Salix scouleriana</i> Scouler willow	Emergent Seed and Plugs	Riparian/Upland Zone Grasses	

**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES

**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH

**LOCATION:** SEC 10, 11, 15 T13N, R18E WM

**COORDINATES:** 46.621678 N LAT  
-120.552891 W LONG (NAD 83)

**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

**MITIGATION PLAN VIEW**

**REFERENCE #: NWS-2011-997**

CHIAWANA, INC. dba COLUMBIA REACH  
3107 RIVER ROAD  
YAKIMA, WA 98902

**Grette Associates LLC**  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com

TOM DURANT  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 246-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012    **SHEET:** 9 OF 11

**5. CONCEPTUAL MITIGATION PLAN**

To offset the impacts to aquatic areas resulting from the project, Columbia Reach proposes to grade and expand the western shoreline of Pond 1 and plant a portion of the new aquatic area with native wetland vegetation (Sheet 8). This action will increase the amount and quality of both vegetated wetland and open water habitat in Pond 1 by approximately 39,658 square feet (0.91 ac). In addition, a portion of the south shore of Pond 2 will be graded down, expanded and planted with native wetland vegetation (Sheet 9). This action on Pond 2 will result in an increase in vegetated wetland and open water habitat of 7,732 square feet (0.18 ac).

Columbia Reach also proposes to enhance approximately 63,530 square feet (1.38 ac) of vegetated uplands adjacent to Ponds 1 and 2 and the dewatering channel to protect water quality and increase wildlife habitat (Sheet 4). Mitigation actions in these areas will offset the impacts to functions resulting from the removal of upland vegetated areas within the property.

**5.1 Goals and Objectives**

The overall goal of the Conceptual Mitigation Plan is to compensate for lost vegetation and aquatic area resulting from project construction. More specific mitigation goals include:

1. Provide structurally diverse, native vegetation communities;
2. Provide structurally diverse shoreline habitat;
3. Provide enhanced wildlife habitat functions;
4. Provide equivalent aquatic area.
5. Provide enhanced stormwater filtration through upland vegetation establishment.

Specific functional objectives of the Plan include:

1. Create 0.73 acres of shallow, vegetated wetland habitat;
2. Create 0.36 acre of open water habitat;
3. Enhance 1.38 acres of native riparian and upland vegetation.

**5.2 Mitigation Site Selection**

Selection of Ponds 1 and 2 within the property to be used for mitigation purposes was done after careful consideration of actions that would best replace the functions lost to the proposed project. These locations within the site offer the potential to replace the aquatic acreage that will be lost to the project, while also offering the potential to increase the functional value of the created habitat beyond that which is present today.

*5.2.1 Proximity to Hydrology*

Lack of adequate water is a major factor in the failure of many aquatic mitigation projects (Ecology, Corps and EPA 2006). An advantage of utilizing Ponds 1 and 2 for mitigation is the presence of permanent inundation within the ponds, as well as the dewatering channel. These permanent sources of water will provide a dependable source of hydrologic support to the mitigation areas.

*5.2.1 Size and Function Potential*

Use of Ponds 1 and 2 on the subject property will provide adequate size to replace the aquatic acreage lost to the project, as well as enough area to also enhance the upland and riparian vegetation within the site to protect the created aquatic resources. The increased function of these areas will offset the degraded functions that will be affected by the proposed project.

**5.3 Mitigation Design**

The intent of the compensatory mitigation actions at the Columbia Reach site is to offset the permanent loss of vegetated wetland and open water habitat within the site. Mitigation actions to be conducted include removal of existing invasive vegetation along the west shoreline of Pond 1 and the south shoreline of Pond 2, excavation of the shoreline, and planting of the

mitigation areas with native nursery stock. Additionally, the east and south bank of the dewatering channel along the north and west portions of the site will be densely planted with native riparian vegetation. Native upland vegetation will also be planted in the area between the new shoreline of Pond 1 and the concrete apron of the proposed CA storage building, as well as south of and adjacent to the Pond 2 mitigation area (Sheet 4). Each of these actions is described in further detail below.

*5.3.1 Grading Plan*

Initially, the extents of the proposed grading will be clearly marked, and silt fencing will be installed along the outer grading extents. Additionally, a silt curtain may be deployed in Pond 1 to prevent sediment-laden water from entering Willow Lake. Native vegetation along the shore that is proposed for preservation will also be flagged or otherwise clearly marked. All other vegetation within the areas proposed for excavation and grading will be mechanically removed and disposed of at an approved off-site location.

During excavation and grading, Best Management Practices (BMPs) will be employed to minimize erosion of disturbed surface soils and to prevent sediment-laden runoff from entering Willow Lake. BMPs to be employed during construction may include (but are not limited to) silt fencing and/or straw bales around the perimeter of the clearing and grading areas, mulching areas immediately after completion of grading, and installation of plant material as soon as practical after grading. In addition, a silt curtain or boom may be installed within Pond 1 to prevent sediment-laden water from entering Willow Lake.

Once the vegetation is removed, grading of the mitigation areas (not including the upland planting areas) will be conducted using bull dozers, excavators, dump trucks and other like equipment. It is anticipated that the existing shoreline areas will be left intact to prevent the flooding of the excavation areas. Once work within the excavated areas has been completed, the shoreline areas to be graded will be graded down to the design elevation.

The interior of the mitigation areas will be graded down to approximately 3-4 feet lower than the existing elevation. This elevation will be refined upon topographic surveying and an analysis of the hydrologic conditions along the shoreline. The mitigation areas will be graded such that the new shoreline edges will be wavy and irregular (Sheets 4 and 5).

Once excavation of the mitigation areas is complete, standing snags and other large woody debris (LWD) structures will be installed within the aquatic and upland areas. A total of twenty (20) LWD structures and snags will be installed once final grade is achieved. For LWD, the entire tree, including root wad and branches, will be used when possible. Snags will have several branches retained to provide perching opportunities. The debris and snag locations will be determined during final design. It is anticipated that trees cleared from the site can be utilized for LWD and snags.

If necessary, topsoil will be amended into surface soils after installation of large woody debris but before planting. After grading is complete, the landscape contractor and biologist will determine if topsoil amendments are necessary for the survival of the planted and seeded vegetation.

No grading is proposed within the upland areas planned for vegetation enhancement along the dewatering channel and adjacent to the concrete apron.

*5.3.3 Planting Plan*

The landscape architect or project biologist will monitor plant installation to ensure that the plantings are prepared and installed as outlined in the approved planting plan. The landscape architect will inspect and approve the planting stock and review the plans with the field crew to ensure they both recognize the species selected for installation and understand the proposed placement of each species. The project biologist will assist the landscape contractor in making any final adjustments in the planting schedule, in response to field conditions. Substitutions to the planting plan will be submitted in writing to, and approved by, the appropriate regulatory agencies prior to installation.



**Grette Associates LLC**  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com  
 TOM DURANT  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 248-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012 **SHEET:** 10 OF 11

**MITIGATION PLAN TEXT**

**REFERENCE #:** NWS-2011-997  
 CHIAWANA, INC. dba COLUMBIA REACH  
 3107 RIVER ROAD  
 YAKIMA, WA 98902

**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES  
**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH  
**LOCATION:** SEC 10, 11, 15 T13N, R18E WM  
**COORDINATES:** 46.621678 N LAT -120.552891 W LONG (NAD 83)  
**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

An early spring or fall installation schedule (February 1<sup>st</sup> – March 31<sup>st</sup>, or October 1<sup>st</sup> – November 31<sup>st</sup>) is preferred for lower mortality rates of new plantings. If plant installation in the uplands occurs during the late spring or summer (April 1<sup>st</sup> – September 31<sup>st</sup>) those plantings will be irrigated with a temporary irrigation system through the summer months.

The intent of the planting plan is to establish aquatic vegetation within the graded mitigation areas, and also to provide native riparian and upland vegetation adjacent to the dewatering channel (Figure 4). Native trees to be planted within and around the graded areas include Pacific willow (*Salix lasiandra*), mountain alder (*Alnus incana*), water birch (*Betula occidentalis*) and black cottonwood (*Populus balsamifera*). Shrub species will be interplanted in clusters among the forested vegetation and will include Scouler's willow (*Salix scouleriana*), coyote willow (*S. exigua*), Nootka rose (*Rosa nutkana*) and red-osier dogwood (*Cornus sericea*). Emergent species to be planted in the graded aquatic areas include short-awn foxtail (*Alopecurus aequalis*), hardstem bulrush (*Scirpus acutus*), small-fruited bulrush (*Scirpus microcarpus*) and common spikerush (*Eleocharis palustris*).

For restoration of the riparian and upland vegetation communities near the dewatering channel and east of the concrete apron, native trees and shrubs will include ponderosa pine (*Pinus ponderosa*), Douglas maple (*Acer douglasii*), serviceberry (*Amelanchier alnifolia*), tall Oregon grape (*Mahonia aquifolium*), smooth sumac (*Rhus glabra*) and Wood's rose (*Rosa woodsii*). Grasses and groundcover vegetation to be planted in these areas include streambank wheatgrass (*Elymus lanceolatus*), needle and thread grass (*Heterostipa comata*) Idaho fescue (*Festuca idahoensis*), big bluegrass (*Poa ampla*).

**6. PLANT INSTALLATION**

Plant installation will be performed in accordance with the specifications outlined in this plan. Any alterations to the planting plan due to site conditions will require prior approval from the project biologist and appropriate regulatory agencies.

**6.2 Planting Materials**

The landscape contractor shall submit documentation to the project biologist that the specified plant materials have been ordered and secured for delivery as well as a list of supplier names, addresses, phone numbers, and the storage/growing location. The landscape contractor shall inform the project biologist of the on-site staging area location and submit documentation of the species, size, and quantity to be delivered to the site.

All plant materials to be used on the site will be native to Eastern Washington and will consist of nursery grown stock from a reputable, local dealer. Only native species specified in the approved plant schedule are to be used; no hybrids will be allowed. Plant substitutions must be approved by the project biologist if specified species are not commercially available.

Plant material provided will be typical of their species or variety; they will exhibit normal, densely-developed branches and vigorous, fibrous root systems. Plants will be sound, healthy, vigorous plants free from defects and all forms of infestation.

Container stock shall have been grown in its delivery container for not less than six months but not more than two years. Plants shall not exhibit rootbound conditions. Under no circumstances shall container stock be handled by their trunks, stems, or tops.

The seed mixtures used shall contain fresh, clean, and new crop seed mixed by an approved method. The mixture is to be mixed to the specified proportions by weight and tested to minimum percentages of purity and germination.

All plant material shall be inspected by the project biologist and/or landscape contractor upon delivery. Plant material not conforming to the specifications above will be rejected and replaced by the landscape contractor. Rejected plant materials shall be immediately removed from the site.

Mulch will consist of sterile wheat straw or clean recycled wood chips approximately ½ inch to 1 inch in size and ½ inch thick, and will be applied around the base of the plantings upon installation to prevent them from drying out.

**6.3 Product Handling, Delivery and Storage**

Fertilizer, if appropriate, will be in the form of Agroform plant tabs or an approved like form. Fertilizer should be delivered in original, unopened, and undamaged containers showing weight, analysis, and name of manufacturer. They should be stored in a manner to prevent wetting and deterioration.

All precautions customary in good trade practice shall be taken in preparing plants for moving and storage. Workmanship that fails to meet industry standards will be rejected. Plants will be packed, transported, and handled with care to ensure protection against injury and from drying out. If plants cannot be planted immediately upon delivery they should be protected with soil, wet peat moss, or in a manner acceptable to the project biologist. Stockpiling of plants shall be confined to upland areas and limited to a maximum duration of less than four weeks. Plants, fertilizer, and mulch not installed immediately upon delivery shall be secured on the site to prevent theft or tampering. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Plants transported on open vehicles should be secured with a protective covering to prevent windburn.

**6.4 Preparation and Installation of Plant Materials**

The landscape contractor shall verify the location of all elements of the landscape plan prior to installation. The project biologist may adjust the locations of landscape elements during the installation period as necessary.

Circular plant pits with vertical sides will be excavated for all container stock. The pits should be at least twice the diameter of the root system, and the depth of the pit should accommodate the entire root system. The bottom of each pit will be scarified to a depth of 4 inches, and the pit should be thoroughly wetted prior to plant insertion to prevent capillary stress. The planting hole shall be amended with a mixture of topsoil and organic material if necessary to provide appropriate rooting media.

Broken roots should be pruned with a sharp instrument and rootballs should be thoroughly soaked prior to installation. Set plant material upright in the planting pit to proper grade and alignment. Water plants thoroughly midway through backfilling and add Agroform tablets. Water pits again upon completion of backfilling. No filling should occur around stems. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water, and install a 2-1/2 inch layer of mulch around the base of each container plant.

**6.6 Installation Schedule**

All planting will occur under the supervision of the landscape contractor and/or the project biologist. Seeding and mulching of disturbed areas shall occur as soon after site grading as is practical, to prevent erosion.

As grading of the mitigation areas is likely to occur during the late summer of 2012, a late fall plant installation (October-November) schedule is preferred to reduce mortality. Plants should not be installed during or immediately before freezing weather.

**6.7 Irrigation Requirements**

Supplemental water will be required during the summer months (June – October) in the first year after planting to ensure plant survival. Supplemental watering (above-ground sprinkler system, watering truck, etc.) will be supplied for a minimum of one (1) growing season following planting. It shall be the responsibility of the project biologist to determine if further irrigation is required.

**PROPOSED:** TO CONSTRUCT THREE CONTROLLED-ATMOSPHERE AGRICULTURE WAREHOUSES  
**APPLICANT:** CHIAWANA, INC. dba COLUMBIA REACH  
**LOCATION:** SEC 10, 11, 15 T13N, R18E WM  
**COORDINATES:** 46.621678 N LAT -120.552891 W LONG (NAD 83)  
**CITY:** YAKIMA  
**COUNTY OF:** YAKIMA  
**STATE OF:** WASHINGTON

**MITIGATION PLAN TEXT**  
**REFERENCE #:** NWS-2011-997  
 CHIAWANA, INC. dba COLUMBIA REACH  
 3107 RIVER ROAD  
 YAKIMA, WA 98902



**Grette Associates LLC**  
 ENVIRONMENTAL CONSULTANTS  
 2102 North 30th Street, Suite A  
 TACOMA, WA 98403  
 (253) 573-9300  
 gretteassociates.com  
 TOM DURANT  
 DURANT DEVELOPMENT SERVICES  
 PO BOX 1723  
 YAKIMA, WA 98907  
 (509) 248-4156

**DATE:** MAY 8, 2012  
**REVISED:** JUNE 29, 2012 **SHEET:** 11 OF 11