

# SECTION 5.0

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## MITIGATION MEASURES

### 5.1 INTRODUCTION

The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations require that mitigation measures be developed for all of a proposed project's effects on the environment where it is feasible to do so (40 CFR Sections 1502.14(f) and 1502.16(h); CEQ 40 Most Asked Questions, 19a). The NEPA regulations define mitigation as “avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; compensating for the impact by replacing or providing substitute resources or environments” (40 CFR Section 1508.20). These principles have been applied to guide design and siting criteria for the alternatives. Where potential effects on the environment were identified in early stages of project design and in Environmental Impact Statement (EIS) preparation, appropriate changes in the project description were made to minimize or eliminate them. Other applications of mitigation have been incorporated into the design of the alternatives and have been mentioned throughout the EIS. In addition to the mitigation measures that have been incorporated into the design of the alternatives, the following section provides measures to mitigate specific effects identified in the preparation of the EIS or to further reduce the impacts to less than significant levels.

Additionally, the Tribe has entered into a Memorandum of Understanding (MOU) with Clark County (DEIS Vol. I, **Appendix C**). Under the MOU, the County has agreed to provide services to the proposed facility that include, but are not limited to, law enforcement, fire protection and emergency medical services. In return, the Tribe shall ensure that the development and operation of the facility is consistent with certain County ordinances and shall provide payments to the County to offset any impacts to County revenues. Because of litigation challenging the MOU, the Tribe also enacted a Tribal Gaming Ordinance Amendment, which has been approved by National Indian Gaming Commission (NIGC), and an Environment, Public Health and Safety (EPHS) Ordinance, which is incorporated into the Gaming Ordinance Amendment (**Appendix U** of the FEIS). Together, these tribal ordinances replicate the mitigation measures contained in the MOU and ensure that they will be implemented and enforced, even if the MOU is ultimately found to be invalid by the courts. A more in-depth discussion of the MOU and the Tribal Ordinances can be found in **Section 1.5** of this EIS.

## 5.2 MITIGATION MEASURES

### 5.2.1 GEOLOGY AND SOILS

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. In general, fill slopes shall not be greater than 2H:1V (horizontal to vertical) and shall be benched in if an existing slope is greater than 4H:1V. Permanent cut slopes shall not be steeper than 3H:1V unless recommended by a licensed geologist. Temporary cut slopes shall not be steeper than 2H:1V unless shored or allowed by a licensed geologist.
  
- B. A General Construction National Pollutant Discharge Elimination System (NPDES) permit shall be obtained from the U.S. Environmental Protection Agency (USEPA) under the Federal requirements of the Clean Water Act (CWA). As required by the NPDES permit, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared that addresses potential water quality impacts associated with construction and operation of the project alternatives. The SWPPP shall make provisions for erosion prevention and sediment control and control of other potential pollutants.

The SWPPP shall describe construction practices, stabilization techniques and structural Best Management Practices (BMPs) that are to be implemented to prevent erosion and minimize sediment transport. BMPs shall be inspected, maintained, and repaired to assure continued performance of their intended function. Reports summarizing the scope of these inspections, the personnel conducting the inspection, the dates of the inspections, major observations relating to the implementation of the SWPPP, and actions taken as a result of these inspections shall be prepared and retained as part of the SWPPP.

To minimize the potential for erosion to occur on the project site, the following items shall be addressed and implemented:

1. Prior to land-disturbing activities, the clearing and grading limits shall be marked clearly, both in the field and on the plans. This can be done using construction fences or by creating buffer zones.
  
2. Construction traffic shall be limited in its access to the site to a single entrance if possible. Haul roads and staging areas shall be developed to control impacts to on-site soil. All access points, haul roads and staging areas shall be stabilized with crushed rock. Any sediment shall be removed daily and the road structure maintained.

3. Downstream waterways and properties shall be protected during construction from increased flow rates due to the higher impervious nature of the site. During construction, detention ponds can be combined with sedimentation ponds as long as the detention volume is not impacted by a buildup of sediment.
4. Concentrated flows create high potential for erosion; therefore, any slopes shall be protected from concentration flow. This can be done by using gradient terraces, interceptor dikes, and swales, and by installing pipe slope drains or level spreaders. Inlets need to be protected to provide an initial filtering of stormwater runoff; however, any sediment buildup shall be removed so the inlet does not become blocked.
5. The SWPPP shall address maintenance and repair of heavy equipment on site to remove the potential for pollution from oil, fuel, hydraulic fluid, or any other potential pollutant.
6. Staging areas and haul roads shall be constructed to minimize future over-excavation of deteriorated sub-grade soil.
7. If construction occurs during wet periods, sub-grade stabilization shall be required. Mulching or netting may be needed for wet-weather construction.
8. Temporary erosion control measures (such as silt fence, gravel filter berms, straw wattles, sediment/grease traps, mulching of disturbed soil, construction stormwater chemical treatment, and construction stormwater filtration) shall be employed for disturbed areas. Due to the clay soils on the alternative project sites (the La Center Interchange Site and the Ridgefield Interchange Site), it is possible that settlement basins may not remove the fine clay particles. If this is the case, then the use of chemical treatment and stormwater filtration shall be required.
9. Exposed and unworked soils shall be stabilized by the application of effective BMPs. These include, but are not limited to, temporary or permanent seeding, mulching, nets and blankets, plastic covering, sodding, and gradient terraces.
10. The SWPPP shall address the maintenance of both temporary and permanent erosion and sediment control BMPs as described in the Erosion Control Plan recommendations in Appendix 5 of the grading and drainage report (DEIS Vol. I, **Appendix F**).

## 5.2.2 WATER RESOURCES

### *SURFACE WATER*

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

#### *Construction Impacts*

- A. As described under **Section 5.2.1**, Geology and Soils, Mitigation Measure B, prior to construction, an NPDES General Construction permit shall be obtained from the USEPA and a SWPPP shall be prepared and approved by the USEPA. The SWPPP shall describe construction practices, stabilization techniques and structural BMPs that are to be implemented to prevent erosion and minimize sediment transport as outlined above.
- B. In accordance the NPDES General Construction permit, a sampling and monitoring program shall be developed and implemented to assess the quality of surface water entering and leaving the project site. At a minimum, sampling sites shall include: a location above all proposed development and a location downstream of all development. Analyses shall include total suspended solids (TSS), oils and greases.
- C. As described in detail under **Section 5.2.4**, Biological Resources, Mitigation Measure B, a 404 permit shall be obtained from the USACE prior to any discharge of dredged or fill material into waters of the U.S, and a 401 Water Quality Certification shall be obtained from the EPA.

#### *Operational Impacts*

- D. The Tribe shall comply with all provisions of the CWA including the NPDES program for wastewater and stormwater discharges. The Tribe shall prepare a SWPPP that addresses water quality impacts associated with construction and operation of the project alternatives. Water quality control measures identified in the SWPPP shall include but not be limited to those BMPs previously listed under **Section 5.2.1**, Geology and Soils, Mitigation Measure B.
- E. Fertilizer use shall be limited to the minimum amount necessary and shall be adjusted for the nutrient levels in the water used for irrigation. Fertilizer shall not be applied immediately prior to anticipated rain.
- F. The runoff from trash collection areas shall be directed to the sanitary sewer system for treatment at a wastewater treatment plant (WWTP) prior to discharge.
- G. Landscape irrigation shall be adjusted based on weather conditions and shall be reduced or eliminated during the wet portion of the year in order to prevent excessive runoff.

- H. Water conservation measures shall be implemented, including low flow fixtures and electronic dispensing devices in faucets.

The following mitigation measures are recommended for Alternatives A, B, and C.

- I. In order to reduce the temperature of treated wastewater, an underground pipe field will be constructed along the discharge line leading to the unnamed tributary. The pipe field will cover an area of approximately 450 feet x 450 feet and be located below the RV park. The pipe field will transfer heat from treated wastewater to the cooler soil, reducing treated wastewater temperatures. Temperatures are anticipated to average 16°C following cooling.
- J. To ensure that the discharge into the unnamed tributary does not increase erosion or sedimentation, all water being discharged into the unnamed tributary will first be converted to sheet flow.
- K. In order to ensure compliance with the WAC criteria for ammonia, the anoxic basin of the WWTP will be sized in accordance with the calculated ammonia criteria as determined through the NPDES permitting process when commenced.

### 5.2.3 AIR QUALITY

#### *CONSTRUCTION IMPACTS*

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. The Tribe shall control fugitive dust emissions (PM<sub>10</sub>) during construction through the following actions, as applicable:
- Spray exposed soil with water or other suppressant.
  - Minimize dust emissions during transport of fill material or soil by wetting down loads, ensuring adequate freeboard (space from the top of the material to the top of the truck bed) on trucks, and/or covering loads.
  - Promptly clean up spills of transported material on public roads.
  - Restrict traffic on site to reduce soil disturbance and the transport of material onto roadways.
  - Locate construction equipment and truck staging areas away from sensitive receptors as practical and in consideration of potential effects on other resources.
  - Provide wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.

- Cover dirt, gravel, and debris piles as needed to reduce dust and wind-blown debris.
- B. The Tribe shall control emissions of volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), and carbon monoxide (CO) whenever reasonable and practicable by requiring all diesel-powered equipment be properly maintained and minimizing idling time to 5 minutes when construction equipment is not in use, unless per engine manufacturer's specifications or for safety reasons more time is required. Since these emissions would be generated primarily by construction equipment, machinery engines shall be kept in good mechanical condition to minimize exhaust emissions.
- C. In the event of air quality complaints received by SWCAA about activities which occur on the reservation and affect citizens residing off the reservation, a representative of the Tribe shall meet with the SWCAA to determine the appropriate course of action.

***OPERATIONAL IMPACTS***

The following mitigation measures are recommended for Alternatives A, B, C, and E:

- D. The Tribe shall provide transportation (e.g., shuttles) to nearby population centers, major transit stations, and multi-modal centers.
- E. The Tribe shall ensure the use of clean fuel vehicles in the vehicle fleet where practicable.
- F. The Tribe shall provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.
- G. The Tribe shall provide preferential parking for vanpools and carpools.
- H. The Tribe shall provide on-site pedestrian facility enhancements such as walkways, benches, proper lighting, and building access, which are physically separated from parking lot traffic.
- I. The Tribe shall provide adequate ingress and egress at entrances to the casino to minimize vehicle idling and traffic congestion.

The following mitigation measures are recommended for Alternative D:

- J. The Tribe shall encourage reduced setbacks for retail and employment land uses on streets with bus services consistent with zoning code requirements.

- K. The Tribe shall provide adequate ingress and egress at entrances to public facilities to minimize vehicle idling and traffic congestion.
- L. The Tribe shall encourage a development pattern that discourages auto-oriented uses in areas adjacent to bus stops and other transit facilities.
- M. The Tribe shall provide preferential parking for vanpools and carpools.

### **CLIMATE CHANGE**

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- N. Implement Mitigation Measures 5.2.8 I, J, K, L, Q, R, S, and T to ensure project consistency with applicable Washington Climate Advisory Team (WCAT) greenhouse gas emission reduction strategies as shown in **Table 5-1**.

**TABLE 5-1**  
COMPLIANCE WITH STATE EMISSIONS REDUCTION STRATEGIES

<b>WCAT Number</b>	<b>WCAT Strategy</b>	<b>Project Consistency</b>
RCI-10	More Stringent Appliance/Equipment/Lighting Efficiency Standards, and Appliance and Lighting Product Recycling and Design.	Project would be consistent after implementation of Mitigation Measures 5.2.8 Q, R, S, and T.
RCI-11	Policies and/or Programs Specifically Targeting Non-energy GHG Emissions.	Project would be consistent after implementation of Mitigation Measures 5.2.8 Q, R, S, and T.
AW-3	Significant Expansion of Source Reduction, Reuse, Recycling, and Composting.	Project would be consistent after implementation of Mitigation Measures 5.2.8 I, J, K, and L.

Source: State of Washington Climate Advisory Team, 2007; AES, 2008.

### **5.2.4 BIOLOGICAL RESOURCES**

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. If feasible, vegetation removal activities shall occur outside of the nesting season (approximately March through September) for migratory birds, olive-sided flycatcher, and slender-billed white-breasted nuthatch. If vegetation removal activities are to be conducted during the nesting season, a pre-construction survey for active nests within proposed

- disturbance areas shall be conducted by a qualified biologist within one week prior to vegetation removal. If vegetation removal activities are delayed or suspended for more than one month after the pre-construction survey, the site shall be resurveyed. If active migratory bird, olive-sided flycatcher, or slender-billed white-breasted nuthatch nests are identified, vegetation removal that would disturb these nests shall be postponed until after the nesting season, or a qualified biologist has determined the young have fledged and are independent of the nest site. No active nests shall be disturbed without a permit or other authorization from the U.S. Fish and Wildlife Service (USFWS).
- B. A permit shall be obtained from the USACE prior to any discharge of dredged or fill material into waters of the U.S. The Tribe shall comply with all the terms and conditions of the permit and compensatory mitigation shall be in place prior to any direct effects to waters of the U.S. Minimal mitigation measures would require the creation of wetlands at a 1:1 ratio for any wetlands impacted. If the jurisdictional road-side ditch is to be impacted, minimal mitigation shall require that an equivalent drainage be created along the realigned road. Any project which will cause fill to “waters of the U.S.” will require a 404 permit. The USEPA will require a 401 Water Quality Certification permit prior to the USACE issuance of a 404 permit. Development which will impact less than 0.5 acres or less than 300 feet may require a Nationwide 39 or Nationwide 18 permit. Full mitigation will be carried out in compliance with any permits.
- C. The project shall incorporate BMPs for stormwater runoff, including sedimentation basins, vegetated swales, and runoff infiltration devices if necessary, to ensure that the water quality of the on-site unnamed seasonal stream does not degrade. Stormwater runoff from the project site shall be monitored according to BMPs to assess the quality of water leaving the project site.
- D. Temporary fencing shall be installed around areas of wetland, intermittent drainage and riparian habitat as shown on the site plans (**Figure 2-1** and **Figures 2-6 through 2-9**), unless a USACE Section 404 Permit is obtained for placement of fill. Fencing shall be placed in accordance with the Clark County Wetland Protection Ordinance (CCWPO) pursuant to the MOU with Clark County and EPHS Ordinance. Fencing shall be installed prior to any construction and shall remain in place until all construction activities on the site have been completed.
- E. Construction staging areas shall be located away from the wetlands and intermittent drainages that are to be preserved. Temporary stockpiling of excavated or imported material shall occur only in approved construction staging areas. Excess excavated soil shall be used on site or disposed of at a regional landfill or other appropriate facility. Stockpiles that are to remain on

- the site through the wet season shall be protected (e.g. with silt fences or straw bales) to prevent erosion.
- F. Lighting shall optimize the use of downward directed low-pressure sodium lighting. No strobe lights shall be utilized except as required by Federal Aviation Administration (FAA) regulation.
  - G. In order to avoid the introduction of noxious weeds to the project site, no plants designated as “noxious weeds” by the Washington State Noxious Weed Control Board shall be used for landscaping. Additionally, no mulch with the potential to contain viable seeds from a designated noxious weed shall be used on the project site.
  - H. Preconstruction surveys shall be conducted prior to construction to determine if bat species are roosting on the project site. If bat species are not found roosting on the project site, then no further mitigation will be necessary. If bat species are found roosting on the project site, USFWS will be contacted to discuss potential mitigation measures.

The following mitigation measures are recommended for Alternatives A, B, C and D:

- I. If construction is scheduled to occur between January 15 and August 1, a biologist shall conduct a survey for active bald eagle nests located within 0.5 miles of the project site. If active nests are located, the following mitigation measures shall apply:
  - 1. Project construction within 0.5 miles of an active nest shall be prohibited during the bald eagle nesting season, from January 15 through August 1, unless there is evidence that nests are abandoned or the young have fledged.
  - 2. The Tribe shall be responsible for educating contractors about sensitive biological resources, particularly nesting bald eagles. The Tribe shall inform the construction contractor about the biological constraints of the project site.
  - 3. If bald eagles are observed in the immediate project area during the construction period, the Tribe shall contact the USFWS to determine whether further consultation is necessary.
  - 4. Where possible, existing trees to be removed will be relocated and/or additional trees and screening vegetation shall be planted to increase the vegetated buffer between the site and nesting raptors and to help compensate for any habitat loss.

- J. Wetland Cs is proposed as a natural stormwater detention basin. A wetland buffer will be maintained around this area, consistent with the CCWPO standards. A stormwater treatment facility will be constructed adjacent to this stormwater detention pond. Runoff from paved surfaces will be treated prior to entering the stormwater detention basin.
- K. Construction of stormwater and effluent discharging structures in the vicinity of the unnamed seasonal stream on site will require an NPDES permit and SWPPP monitoring.
- L. Preconstruction bloom-period surveys shall be done for water howellia and tall bugbane. The bloom-period for tall bugbane is May to August and the bloom period for water howellia is June to August. If the plants are present, the Tribe shall consult with the USFWS to determine appropriate mitigation measures, including relocation of the plants to a suitable location on-site or the purchase of mitigation credits, and implement the required mitigation.. No activities that could potentially impact water howellia will be conducted without a Biological Opinion, Incidental Take Permit, or other authorization from USFWS. All terms and conditions of any USFWS authorization will be met.

The following mitigation measure is recommended for Alternatives A, B, and C:

- M. Discharge of treated wastewater to the unnamed seasonal stream on site will require an NPDES permit. Continued water quality monitoring will be required to ensure the stream will not be impaired by water discharged on-site.

The following mitigation measures are recommended for Alternative B:

- N. Palustrine wetlands on the northern boundary of the north parcel would be filled due to construction of Alternative B. These wetlands will be replaced at a ratio determined by the CCWPO.

The following mitigation measures are recommended for Alternative E:

- O. A preconstruction, bloom-period survey shall be conducted for tall bugbane between May and August. If this plant is not observed on the site, no further mitigation is necessary. If the plant is present, the Tribe shall consult with the USFWS to determine appropriate mitigation measures, including relocation of the plants to a suitable location on-site or the purchase of mitigation credits, and implement the required mitigation.
- P. If the Ridgefield site is chosen for development, a USACE verification of the wetland delineation for the site shall be obtained. All impacts to jurisdictional wetlands on the site

shall be mitigated in compliance with current USACE regulations. The minimum mitigation for the site shall be the creation of wetlands at a 1:1 ratio for all wetlands impacted. The location of the created wetlands shall be determined in consultation with the USACE as part of a 404 permit.

### **5.2.5 CULTURAL AND PALEONTOLOGICAL RESOURCES**

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. In the event of any inadvertent discovery of prehistoric or historic archaeological resources or paleontological resources during construction-related earth-moving activities, all such finds shall be subject to Section 106 of the National Historic Preservation Act as amended (36 CFR 800). Specifically, procedures for post-review discoveries without prior planning pursuant to 36 CFR 800.13 shall be followed. All work within 50 feet of the find shall be halted until a professional archaeologist can assess the significance of the find. If any find is determined to be significant by the archaeologist, then representatives of the Tribe shall meet with the archaeologist to determine the appropriate course of action, including the development of a Treatment Plan, if necessary. All significant cultural materials recovered shall be subject to scientific analysis, professional curation, and a report prepared by the professional archaeologist according to current professional standards.
- B. If human remains are discovered during ground-disturbing activities on Tribal lands, the Tribal Official and BIA representative shall be contacted immediately. No further disturbance shall occur until the Tribal Official and BIA representative have made the necessary findings as to the origin and disposition. If the remains are determined to be of Native American origin, the BIA representative shall notify a Most Likely Descendant (MLD). The MLD is responsible for recommending the appropriate disposition of the remains and any grave goods.
- C. In the event of accidental discovery of paleontological materials during ground-disturbing activities, a qualified paleontologist shall be contacted to evaluate the significance of the find and collect the materials for curation as appropriate.

### **5.2.6 SOCIOECONOMIC CONDITIONS**

The following mitigation measure is recommended for Alternatives A, B, C, and E:

- A. The Tribe shall establish a fund, through escrow account or other means, adequate to replace revenues lost by the City of La Center due to reduced taxes received from the existing card rooms and make this fund available to the City of La Center for at least 10 years.

- B. The Tribe shall contribute no less than \$50,000 annually to a program that treats problem gamblers.

The following mitigation measure is recommended for Alternative E:

- C. The Tribe shall provide for a new agreement to make payments to the City of Ridgefield for the Ridgefield Interchange Site in lieu of property tax, sales tax, and hotel/motel tax, similar to the existing MOU with Clark County (DEIS Vol. I, **Appendix C**) and the EPHS Ordinance (**Appendix U** of the FEIS) for the La Center Interchange Site.

### 5.2.7 TRANSPORTATION/CIRCULATION

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. All work conducted within the Washington Department of Transportation (WsDOT) right-of-way will require the following:
  - Proposed changes to State facilities must be designed to current WsDOT standards and specifications.
  - Plans must be reviewed and approved by WsDOT and Federal Highway Administration (FHWA) prior to beginning work.
  - Engineering calculations, plans and reports submitted for review and approval must bear the seal and original signature of a professional engineer.
  - Construction must be done in accordance with the current WsDOT Standard Specifications for Road, Bridge, and Municipal construction manual.
  - Construction inspection will be performed by WsDOT at the Tribe's expense.

The following mitigation measure is recommended for Alternatives A, B, C, and E:

- B. For the Cowlitz Events Center, the Tribe will encourage carpooling and bus use to the project site on events nights. Shuttles running from points in west and east Vancouver, and potentially a site or two in Portland, Oregon, will help to reduce traffic impacts, including impacts to key segments of I-5 and I-205. Such shuttle service will be particularly important on those few weekday evenings where there are coincidental events at both the Cowlitz Events Center and the Clark County Amphitheatre.

The following mitigation measures are recommended for Alternatives A, B, C, and D:

- C. The MOU (DEIS Vol. I, **Appendix C**) between the Tribe and Clark County and the EPHS Ordinance (**Appendix U** of the FEIS) include provisions for determining when mitigation measures are necessary to reduce impacts related to the addition of project traffic on the public roadway network. As described in the MOU and EPHS Ordinance, the Tribe shall make roadway and intersection improvements to maintain traffic level of service (LOS) at existing levels and shall also ensure that LOS does not operate below LOS D for intersection delay during the peak traffic hours. A credit shall be given to the Tribe for the number of vehicles that would be generated if the site were developed based on uses permitted in the Agriculture District for each phase of the development. Additionally, the Tribe and Clark County have agreed to work together to ensure that “late comer” provisions (Revised Code of Washington [RCW] Section 35.72.040) apply to any future developments in the vicinity of the project site. Such provisions shall ensure that the Tribe receives reimbursement or contribution for improvements as otherwise would be permitted under State law.
- D. All work conducted within the WsDOT right-of-way for the Interstate 5 (I-5)/La Center Interchange, including overpass widening, shall be conducted in accordance with the WsDOT and FHWA approved Interchange Access Justification Report (IJR) (Parsons Brinckerhoff, 2003d). No work shall be conducted on the interchange until a Documented Categorical Exclusion (DCE) has been accepted by WsDOT.
- E. To provide adequate sight distance and horizontal curvature for the proposed access points along NW 31<sup>st</sup> Avenue, the roadway, within a 20-foot setback from right-of-way lines, shall be kept obstacle-free, and if landscaping is placed in this area, it shall be limited to no more than 2 feet in height.
- F. Realign NW 31<sup>st</sup> Avenue approximately 300-350 feet west of its current intersection with NW 319<sup>th</sup> Street in order to provide appropriate intersection spacing from the I-5 interchange. The intersection with NW 319<sup>th</sup> Street would be signalized and improved with left- and right-turn lanes.

The following mitigation measures are recommended for Alternatives A, B, and C:

- G. I-5 and La Center Interchange:
  - 1. Signalize the northbound and southbound ramp intersections with separate controllers, which are in coordination with one another;

2. Add an auxiliary lane to the northbound off-ramp of approximately 1,500 feet in length (consistent with WsDOT standards) and widen to accommodate a two-lane off-ramp.
  3. Add a left-turn lane with a storage length of 450 feet for Alternatives A and B, or 300 feet for Alternative C, to the northbound ramp; this ramp will also require a 450-foot right-turn lane;
  4. Widen the overpass between the I-5 northbound and southbound ramps to accommodate a second westbound traffic lane and a back-to-back left turn lane (a total of four lanes on the overpass); the overpass shall be constructed so as to accommodate a second eastbound travel lane in the long-term (2030) future.
  5. Add an auxiliary lane to the southbound on-ramp of approximately 1,500 feet consistent with WsDOT standards;
  6. The southbound ramp intersection shall have one exclusive right-turn lane and one through-lane in the eastbound direction; the westbound direction shall have one through-lane and one through- and right-turn lane; while westbound has two through lanes plus a left-turn lane.
  7. Although no mitigation is needed for the NW La Center Road/Paradise Park Road intersection, minor improvements to shift the intersection as far east along the existing alignment as is possible will provide additional spacing between the frontage road intersection and the ramp intersection. Note: future interchange improvements conducted by WsDOT or another public agency with eminent domain authority shall realign this frontage road approximately 300 feet east of its current location to provide adequate intersection spacing.
  8. Add a right-turn storage lane of 100 feet to the southbound I-5 off-ramp at NW 319<sup>th</sup> Street.
  9. Realign NW 31<sup>st</sup> Avenue westward as shown on the site plans.
- H. To provide adequate site access at Parking Garage #1, the site access intersection will need to be signalized and shall be coordinated with the northbound and southbound I-5 ramp intersections with NW La Center Road.

The following mitigation measures are recommended for Alternative D:

- I. Widen the La Center Interchange to include right- and left-turn lanes on the off-ramps, with two lanes westbound and one lane eastbound, plus a center left-turn lane on the overpass over I-5;

- J. In the eastbound direction on NW 319<sup>th</sup> Street, provide for two exclusive right-turn only lanes with channelized right-turn (with pedestrian crosswalk) onto the I-5 southbound on-ramp. The southbound I-5 on-ramp at NW 319<sup>th</sup> Street will need two lanes that drop to one lane after 500 feet. The westbound left-turn lane onto the southbound on-ramp would need to be coordinated with the signalized eastbound right-turn lane onto the same ramp, so as to avoid vehicle conflicts.
- K. Signalize the intersections of NW 319<sup>th</sup> Street/La Center Road with I-5 southbound ramps, I-5 northbound ramps, and NW 31<sup>st</sup> Avenue;
- L. Realign NW 31<sup>st</sup> Avenue to match up with the entrance into Parking Garage #1 on the north side of 319<sup>th</sup> Street;
- M. Provide funding to WsDOT or another public agency with jurisdiction over the project area and with the power of Eminent Domain to realign Paradise Park Road approximately 300 feet to the east of its current location, on the east side of I-5;
- N. Add a right-turn vehicle storage capacity of at least 250 feet to the I-5 northbound off-ramp at NW 319<sup>th</sup> Street;
- O. The westbound left-turn at NW 319<sup>th</sup> Street/I-5 southbound ramps intersection will need a minimum storage length of 400 feet. Since the current I-5 overpass is about 550 feet long with one lane for each direction of traffic, the overpass may need to be replaced to accommodate the extra lanes.
- P. The southbound I-5 off-ramp at NW 319<sup>th</sup> Street will need left-turn storage of 200 feet.
- Q. The southbound I-5 on-ramp at NW 319<sup>th</sup> Street shall have two lanes of 350 feet length that drop to one lane further south on the ramp before merging with the southbound I-5 mainline.
- R. Eastbound and westbound NW 319<sup>th</sup> Street, just west NW 31<sup>st</sup> Avenue, shall be two lanes in each direction.
- S. Contribute to the City of Ridgefield's future project to construct a roundabout at Pioneer and 45<sup>th</sup> Avenue in Ridgefield.
- T. Contribute to signalizing E 4<sup>th</sup> St at La Center Road/Timmen Road.

The following mitigation measures are recommended for Alternative E:

U. I-5 and Ridgefield Interchange:

1. Construct the Ridgefield Interchange Project currently in project development by the City of Ridgefield and WsDOT;
2. Widen the Ridgefield interchange to an additional lane in each direction between the I-5 southbound ramps and 65<sup>th</sup> Avenue;
3. Widen the Ridgefield Interchange to include right- and left-turn lanes on the northbound off-ramps; also include two lanes westbound and two lanes eastbound, plus a center left turn lane on the overpass above the interstate;
4. Widen the southbound off-ramps to provide for two left-turn lanes from southbound-to-eastbound;
5. Improve the 65<sup>th</sup> Avenue/Pioneer intersection to have triple left turns in the eastbound direction and double left-turns in the southbound direction.
6. Widen 65<sup>th</sup> Avenue to six lanes between Pioneer and the main Casino entrance, and four lanes north to the Parking Garage entrance.

- V. As an option to implementing any of the proposed mitigation measures for Alternative E, the Tribe could, with the approval of the City of Ridgefield, contribute a proportionate share to the City's future, partially-funded project to reconstruct the I-5 Interchange to a single-point urban interchange (SPUI). Since site trips for Alternative E would constitute approximately 20% of the total traffic, the Tribe shall contribute 20% of the \$34 million cost or \$6.8 million. As an additional option, the Tribe could contribute a proportionate share to the City of Ridgefield's planned project at Pioneer and 45th Avenue.

## 5.2.8 PUBLIC SERVICES

### *WATER SUPPLY*

The following mitigation measures are recommended for Alternatives A, B, and C:

- A. The use of recycled water shall be maximized to the extent feasible. Potential uses include toilet flushing, landscape irrigation, emergency fire flow, and evaporative cooling. According to the wastewater engineering report (FEIS Vol. II, **Appendix G**), water usage could be reduced by up to 67% by maximizing recycled water use.

The following mitigation measure is recommended for Alternative D:

- B. Construct an on-site reservoir with a capacity of at least 120,000 gallons to ensure adequate fire flows of 2,500 gallons per minute (gpm) for 2 hours.

The following mitigation measure is recommended for Alternative E:

- C. The Tribe shall enter into negotiations with Clark Public Utilities (CPU) to contract for water service similar in intent and scope to the agreement made for the La Center Interchange Site (DEIS Vol. III, **Appendix BB**).

The following optional mitigation measure is recommended for Alternatives A, B, C, and D:

- D. As an optional source of potable water that would reduce impacts to CPU, the Tribe shall consider constructing on-site water wells for potable water supply. Based on the hydrogeology of the area, the development of wells within the Sand and Gravel Aquifer (SGA) under the La Center Interchange Site, it is estimated that water yields could be between 500 gpm and 1,000 gpm, which would be more than adequate to serve the project alternatives.

The following optional mitigation measure is recommended for Alternatives A, B, C, D, and E:

- E. As an optional source of potable water that would reduce impacts to CPU, water supply from the City of Ridgefield water system shall be considered. This system, however, has significant limitations for meeting the demands of a large project. For the City of Ridgefield to supply water for Alternatives A, B, C, or D, a pipeline connection of more than 2 miles would be required.

#### **WASTEWATER SERVICE**

The following mitigation measure is recommended for Alternative D:

- F. The Tribe should seek to obtain a services agreement with the City of La Center to provide municipal sewer service. As noted in **Section 3.9**, Land Use, the La Center Interchange Site is within the City of La Center's UGA. Proposed improvements needed to service the project and alternatives are discussed under the wastewater service discussion for Alternative D in **Section 4.10**, Public Services.

The following mitigation measure is recommended for Alternative E:

- G. The Tribe should seek to obtain a services agreement with the Ridgefield to provide municipal sewer service. Proposed improvements needed to service the project and alternatives are discussed under the wastewater service discussion for Alternative E in **Section 4.10**, Public Services.

The following optional mitigation measure is recommended for Alternatives A, B, and C:

- H. As an alternative to on-site wastewater treatment and disposal, the Tribe should seek to obtain a services agreement with the City of La Center to provide municipal sewer service. As noted in **Section 3.9**, Land Use, the La Center Interchange Site is within the City of La Center is proposing a UGA. Proposed improvements needed to service the project and alternatives are discussed under the wastewater service discussion for Alternative D in **Section 4.10**, Public Services.

#### ***CONSTRUCTION-RELATED SOLID WASTE***

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- I. Construction waste shall be recycled to the fullest extent practicable by diverting green waste and recyclable building materials from the solid waste stream.
- J. Environmentally preferable materials shall be selected, to the extent practical, for construction of facilities.

#### ***SOLID WASTE FROM FACILITY OPERATIONS***

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- K. A solid waste management plan shall be adopted by the Tribe that addresses recycling and solid waste reduction on site. These measures shall include, but not be limited to, the installation of a trash compactor for cardboard and paper products, and annual waste stream analysis.
- L. Recycling bins shall be installed throughout the facilities for glass, cans and paper products.
- M. Decorative trash and recycling receptacles shall be placed strategically throughout the site to encourage people not to litter.
- N. Security guards shall be trained to discourage littering on site.

***ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS***

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

***Construction***

- O. At least three working days prior to construction, the Tribe shall contact the Utility Notification Center, which provides a free “Dig Alert” to all excavators (e.g., contractors, homeowners, and others) in Washington. This call shall automatically notify all utility service providers at the excavator’s work site. In response, the utility service providers shall mark or stake the horizontal path of underground facilities, provide information about the facilities, and/or give clearance to dig.

***Operation***

- P. The Tribe and CPU shall enter into negotiations to provide electrical service to the project site.

***Energy Conservation***

- Q. Buildings shall be thoroughly insulated and weatherized so as to minimize energy loss due to heating and cooling waste. Doors and windows shall be regularly inspected for air leaks, and shall be caulked or weather-stripped as appropriate where leaks are identified. Storm windows and double-paned glass shall be used to the extent practicable, shall be maintained in good repair, and shall be weatherized. New windows shall meet energy-saving criteria set forth by the National Fenestration Rating Council (NFRC). Caulk and seal shall be used as appropriate to prevent air leaks where plumbing, ducting, or electrical wiring penetrates through exterior walls, floors, ceilings, and soffits over cabinets. Rubber gaskets shall be installed as appropriate behind outlet and switch plates on exterior walls. Exterior walls shall be sealed with appropriate sealants.
- R. For heating systems, filters on furnaces shall be cleaned or changed once a month or as needed. Energy-efficient equipment, such as appliances bearing the ENERGY STAR® logo, shall be selected for purchase and installation.
- S. The selected heating, ventilation, and air conditioning (HVAC) system shall minimize the use of energy by means of using high efficiency variable speed chillers, high efficiency low emission steam and/or hot water boilers, variable speed hot water and chilled water pumps, variable air volume air handling units, and air-to-air heat recovery where appropriate. Hotel rooms shall have four pipe fan coil units and individual exhaust vents. Pool area dehumidification shall include heat recovery systems. All systems shall be designed in

accordance with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 90. Complex ventilation shall be designed in accordance with ASHRAE Standard 62. A building automation system shall be integrated with all building support systems.

- T. Energy efficient lighting shall be installed throughout the facilities. Dual-level light switching shall be installed in support areas to allow users of the buildings to reduce lighting energy usage when the task being performed does not require all lighting to be on. Day lighting controls shall be installed near windows to reduce the artificial lighting level when natural lighting is available. Controls shall be installed for exterior lighting so it is turned off during the day.

#### ***Water Heating and Conservation***

- U. Water systems shall be inspected regularly for leaks or degradation that could lead to leaks, and water heater tanks and pipes shall be insulated or lagged to the extent practicable.
- V. Non-aerating, low-flow faucets and showerheads shall be installed in the hotel rooms.
- W. New, energy-efficient water heaters shall be installed, and shall be evaluated for replacement every seven years.
- X. Water tanks shall be maintained and cleaned every three months to remove sediment in order to maintain the heat transfer efficiency of water heaters.

#### ***PUBLIC HEALTH AND SAFETY***

##### ***Law Enforcement***

The following mitigation measures are recommended for Alternatives A, B, C, and E:

- Y. The Tribe shall provide traffic control with appropriate signage and the presence of peak-hour traffic control staff. This shall aid in the prevention of off-site parking, which could create possible security issues.
- Z. The Tribe shall provide on-site security for casino operations to reduce and prevent criminal and civil incidents and shall coordinate response calls with the Clark County Sheriff's Office.
- AA. The Tribe shall adopt a Responsible Alcoholic Beverage Policy that shall include, but not be limited to, checking identification of patrons and refusing service to those who have had enough to drink.

The following mitigation measure is recommended for Alternatives A, B, C, and D:

- AB. In accordance with Section 3.0 of the MOU (DEIS Vol. I, **Appendix C**) and Section 3(A) of the EPHS Ordinance (**Appendix U** of the FEIS), the Tribe shall enter into an agreement to reimburse the Clark County Sheriff's Office for reasonable direct and indirect costs incurred in conjunction with providing law enforcement services, of which some costs shall be re-evaluated on an annual basis.
  
- AC. The Tribe shall enter into an agreement with Clark County to provide reimbursement for court and jail services, similar to Exhibit B in the MOU and Section 3(B) of the EPHS Ordinance, unless these services are otherwise paid for through an impact mitigation fund given directly to the County.

The following mitigation measure is recommended for Alternative E:

- AD. The Tribe shall negotiate with Clark County Sheriff's Office or City of Ridgefield Police Department to financially compensate the agency for additional demands caused by the operation of the casino-resort.

***Fire Protection and Emergency Medical Service***

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- AE. During construction, any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. Staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.
  
- AF. The Tribe shall use fire-resistant construction materials for the larger buildings and equip enclosed buildings with automatic sprinkler systems as required by applicable building codes. The automatic sprinkler systems shall be designed to meet or exceed the National Fire Protection Association (NFPA) standards governing the different occupancies associated with the project structures. All fire protection water systems shall be in place before the introduction of combustible material to any of the facilities.

AG. Through the use of modern construction and fire engineering techniques, the Tribe shall build in automatic systems designed to contain any fire to the room of origin. All automatic systems will meet or exceed the NFPA standards.

AH. Through the use of modern fire engineering technology, the Tribe shall create and maintain a facility equipped with the latest early detection systems that insure an initial response to any fire alarm (automatic, local, or report). This would rely on automatic sprinkler systems in the occupied areas and smoke detection, along with automatic sprinkler systems, in the areas of the facility that are normally unoccupied, such as storerooms and mechanical areas. All early detection systems will meet or exceed the NFPA standards.

The following mitigation measure is recommended for Alternatives A, B, C, and D.

AI. In accordance with Section 6.0 of the MOU (DEIS Vol. I, **Appendix C**) and Section 3(C) of the EPHS Ordinance (**Appendix U** of the FEIS), the Tribe shall enter into an agreement to reimburse Clark County Fire District (CCFD) 12, taking into account payments received by the District, directly or indirectly, though any impact mitigation fund given directly to Clark County.

The following mitigation measure is recommended for Alternative D:

AJ. An on-site reservoir with a capacity of at least 120,000 gallons shall be required to ensure adequate fire flows of 2,500 gpm for 2 hours.

The following mitigation measure is recommended for Alternative E:

AK. The Tribe shall negotiate with the appropriate fire department to provide services to compensate the department for additional demands caused by the operation of the facilities.

## **5.2.9 NOISE**

### ***CONSTRUCTION NOISE***

The following mitigation measures are recommended for Alternatives A, B, C, D and E:

A. Construction using heavy equipment shall not be conducted between 10:00 p.m. and 7:00 a.m. Additionally, the following measures shall be used to minimize impacts from noise during work hours (7:00 a.m. to 10:00 p.m.):

1. All engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake (a.k.a. “Jake Brake”) use shall be limited to emergencies.
2. Loud stationary construction equipment shall be located as far away from residential receptor areas as feasible.
3. All diesel engine generator sets shall be provided with enclosures.
4. All nighttime truck traffic activities, deliveries, and loading and unloading of equipment during the night shall be eliminated.

### **5.2.10 HAZARDOUS MATERIALS**

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. In the event that contaminated soil and/or groundwater or other hazardous materials are encountered during construction-related earth-moving activities, all work shall be halted until a qualified individual can assess the extent of contamination. If contamination is determined to be significant, representatives of the Tribe shall consult with the USEPA to determine the appropriate course of action, including the development of a sampling plan and remediation plan if necessary.
- B. All hazardous materials that would be necessary for the operation of the facilities shall be stored and handled according to State, Federal, and manufacturer’s guidelines. All flammable liquids shall be stored in a labeled secured container.
- C. Personnel shall follow written standard operating procedures (SOP) for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include the following:
  1. Refueling shall be conducted only with approved pumps, hoses, and nozzles.
  2. Catch-pans shall be placed under equipment to catch potential spills during servicing.
  3. All disconnected hoses shall be placed in containers to collect residual fuel from the hose.
  4. Vehicle engines shall be shut down during refueling.
  5. No smoking, open flames, or welding shall be allowed in refueling or service areas.
  6. Refueling shall be performed away from bodies of water to prevent contamination of water in the event of a leak or spill.

7. Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents.
8. Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with local, State, and Federal regulations.
9. All containers used to store hazardous materials shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas shall be inspected monthly. Results of inspections shall be recorded in a logbook that shall be maintained on site.

The following mitigation measure is recommended for Alternatives A, B, and C:

- D. As part of the proposed wastewater treatment design, sodium hypochlorite and citric acid shall be stored in the chemical room of the wastewater treatment plant building. The chemical room shall contain an emergency shower and eyewash. The storage and chemical metering facilities shall be located inside a chemical spill containment area, sized to contain 150% of the storage volume in case of an unintentional release. The sodium hypochlorite shall be stored in a 55-gallon drum and the citric acid shall be stored as dry material and then in a 50-gallon mixing tank when needed. Both chemicals shall be transferred to the dip tanks using pumps.

### **5.2.11 AESTHETICS**

The following mitigation measures are recommended for Alternatives A, B, C, D, and E:

- A. Screening features shall be integrated into the landscaping design of the alternatives to screen the view of the facilities from existing residences and to integrate natural elements into the design. For the La Center Interchange Site this includes screening views for residents within a medium range north and west of the site. For the Ridgefield Interchange Site this includes screening views for residents within a medium range north, east, and south of the site. The following species are recommended for screening where appropriate, as they are native to the area and on average grow to approximately 100 feet or taller: Douglas-fir, Western red cedar, Ponderosa pine, and Western white pine. Due to the slower rate of maturity, a row of a faster growing species such as Knobcone pine, which reaches approximately 80 feet in height, could be utilized as other species mature.