

SECTION 5.0

MITIGATION MEASURES

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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 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 avoid or minimize 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 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, Seminole Tribe of Florida (STOF) has entered into the Coconut Creek Fee to Trust Lands Mitigation Agreement (Mitigation Agreement) with the City of Coconut Creek (**Appendix G**). In the Mitigation Agreement, the City has agreed to provide services to the proposed facility that include, but are not limited to, domestic water, wastewater conveyance and treatment, law enforcement support as needed, fire protection, and emergency medical services. In return, STOF will ensure that the design, development, and operation of the facility will be consistent with City design standards and ordinances, and shall provide payments to the City to offset adverse impacts to City revenues. Unless stated otherwise in the text below, STOF will assume the costs of implementing required mitigation measures. Although monitoring of mitigation measures may be assigned to independent contractors, STOF will retain all responsibility for ensuring that mitigation measures are implemented.

5.2 MITIGATION MEASURES

5.2.1 GEOLOGY AND SOILS

No mitigation measures are recommended for Alternatives A, B, or C. These alternatives would require National Pollutant Discharge Elimination System (NPDES) permit compliance and a Stormwater

Pollution Prevention Plan (SWPPP), which, along with mitigation in Section 5.2.2., would address erosion issues.

5.2.2 WATER RESOURCES

SURFACE WATER

The following mitigation measures are to be implemented for Alternatives A, B, and C:

Construction Impacts

- A. As described under **Section 5.2.1**, an NPDES General Construction permit from the USEPA shall be complied with and a SWPPP shall be prepared. (Under Alternative C, the project site would remain in fee ownership and continue to be under state and local jurisdiction. STOF would, therefore, need to obtain the NPDES permit through the Florida Department of Environmental Protection rather than USEPA.) 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 as outlined below:
1. Prior to land-disturbing activities (including demolition of existing structures and facilities), 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 will either be paved or 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, existing retention ponds can be combined with or connected to temporary sedimentation ponds as long as the detention volume is not reduced 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 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 off-site 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 fences, 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.
 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, and sodding, and gradient terraces.
- B. In accordance with 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 USACE Section 404 permit shall be obtained 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. STOF shall comply with all provisions of the CWA including the NPDES program for wastewater and stormwater discharges. STOF 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 A.
- 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 an 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 required for Alternatives A and C:

- I. STOF shall obtain all necessary permit approvals from the Cocomar Water Control District (CWCD), the SFWMD and Broward County, prior to constructing the link to the Northwest

Cocomar Basin, creating the new off-site retention pond on the Johns Family Trust property or south of the Hillsboro Canal, and connecting to the Northwest Cocomar Basin.

- J. STOF will work with CWCD to determine if an interconnection between the northwest drainage sub-basin and the C-14 drainage sub-basin is warranted.

GROUNDWATER

The following mitigation measures are required for Sub-Alternative A-1 and Alternative B:

- K. A test well shall be drilled to a minimum depth of approximately 100 feet, and screen sections shall be placed in the water bearing zone of the Biscayne aquifer.
- L. Prior to operation, STOF shall drill an injection test well to determine design parameters for treated effluent disposal. A permit shall be obtained from the USEPA prior to injection.
- M. Prior to construction of either the water extraction well or the treated effluent injection well, STOF will pass a Tribal Resolution committing to compliance with the terms and conditions of the Tribal Criteria Manual to the Seminole Water Rights Compact regarding wetlands, domestic water wells, and underground injection wells.

WASTEWATER

The following measures are required for Sub-Alternative A-1 and Alternative B:

- A. Dechlorination facilities shall be added to the treatment facilities, along with chlorine residual monitors to ensure no significant chlorine residual is present in the effluent if the effluent is to be injected into the ground.
- B. The WWTP shall be staffed with operators who are qualified to operate the plant safely, effectively, and in compliance with all permit requirements and regulations. The operators shall have qualifications similar to those required by the State of Florida Department of Environmental Protection Certification Program for municipal wastewater treatment plants. An Operations and Maintenance Program must be followed by the plant operators. Emergency preparedness shall include all appropriate measures, including a high level of redundancy in the major systems.
- C. The on-site injection well shall be permitted and regulated during construction and operation by the USEPA through the Underground Injection Control Program.
- D. The on-site WWTP shall comply with Occupational Health and Safety Administration regulations regarding storage and use of chemicals using in wastewater treatment processes.

5.2.3 AIR QUALITY

CONSTRUCTION IMPACTS

The following BMPs are required for Alternatives A, B, and C, and Sub-Alternative A-1:

- A. STOF shall control fugitive dust emissions (PM₁₀) during construction through the following actions, as applicable:
 - 1. Spray exposed soil with water or other suppressant.
 - 2. 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.
 - 3. Promptly clean up spills of transported material on public roads.
 - 4. Restrict traffic on site to reduce soil disturbance and the transport of material onto roadways.
 - 5. Locate construction equipment and truck staging areas away from sensitive receptors as practical and in consideration of potential effects on other resources.
- B. STOF shall control emissions of volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur oxides (SO_x), and carbon monoxide (CO) whenever reasonable and practicable by requiring all diesel-powered equipment be properly maintained and minimizing idling time to no more than 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. The primary contractor shall only use low VOC paints and coatings.

OPERATION IMPACTS

- D. The Tribe shall incorporate shade trees, adequate in number and proportional to project size, throughout the site to reduce building heating and cooling requirements.
- E. The Tribe shall ensure the use of clean fuel vehicles in vehicle fleet where practicable.
- F. The Tribe shall adopt a Vehicle Idling Policy requiring all vehicles under company control (including tribal-owned vehicles, contract vehicles, vendor vehicles, and delivery vehicles) to limit idling times to no more than 5 minutes. The Tribe shall implement the Vehicle Idling Policy by placing signage at strategic locations explaining the policy, training key employees on the policy, and including the policy in contractual language where applicable.

CLIMATE CHANGE

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

- G. STOF shall design buildings that incorporate Leadership in Energy and Environmental Design (LEED) energy efficient design concepts.
- H. STOF shall construct buildings to an elevation above potential flood depth, considering climate change.

5.2.4 BIOLOGICAL RESOURCES

The following mitigation measures shall be implemented for Alternatives A, B, and C to address potential impacts to wood storks:

- A. A pre-construction survey will be conducted by a qualified biologist prior to the start of construction to ensure that no wood storks are present within the project site.
- B. Worker awareness training for wood stork will be conducted by a qualified biologist for selected construction crew members. The training will include the following: a description and an identification of the wood stork and its habitat needs; an explanation of the status of the species and its protection under the Federal Endangered Species Act (FESA); and a list of measures being taken to reduce impacts to the species during project construction. A fact sheet conveying this information will be prepared for distribution to the crew members and anyone else who may enter the project site.
- C. While it is not anticipated that the wood stork will be present, if at any time a wood stork is observed within the project site, then all work will be stopped until informal consultation with USFWS is initiated.

A qualified biologist will be present periodically to monitor construction activities conducted in the vicinity of and within the onsite retention ponds to jointly ensure that no wood storks or migratory birds and waterfowl protected under the Migratory Bird Treaty Act (MBTA) (16 USC Sections 703-712) are present or harmed. Funding for this position will be provided by STOF. A biological monitor will be present onsite to monitor construction activities including initiation of groundbreaking and periodically thereafter when new intensive construction activities are planned (e.g., pile driving or other high-volume or high-vibration activities) near or within the retention ponds.

The following mitigation measures shall be implemented for Alternatives A, B, and C to avoid and/or minimize potential adverse effects of nighttime lighting to wildlife and migratory birds:

- D. Onsite external lighting will be downcast and compliant with Tribal regulations for safety.

The following mitigation measures shall be implemented for Alternatives A and C to avoid and/or minimize potential adverse effects to biological resources from the construction of the off-site stormwater retention improvements:

- E. Prior to the start of construction, a biologist will conduct a preconstruction survey of the site for the proposed retention pond to ensure that no federally threatened or endangered species or potentially jurisdictional wetlands or waters of the U.S. occur on-site. Should the biologist determine that suitable habitat for and evidence of federally listed species occurs on-site, consultation with USFWS will be initiated in accordance with Section 7 of the Endangered Species Act. Should the biologist determine that potentially jurisdictional waters of the U.S. occur on-site within the area of impact, consultation with U.S. Army Corps of Engineers will be initiated in accordance with Section 404 of the Clean Water Act.

The following mitigation measures shall be implemented for Sub-Alternative A-1 and Alternative B to avoid and/or minimize potential adverse effects to off-site wetlands from the operation of the water extraction wells:

- F. Prior to construction of the water extraction well, STOF will pass a Tribal Resolution committing to compliance with the terms and conditions of the Tribal Criteria Manual to the Seminole Water Rights Compact regarding wetlands, domestic water wells, and underground injection wells. (This mitigation measure is similar to Water Resources Measure M above.)

5.2.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

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

- A. In the event of any inadvertent discovery of prehistoric or historic archaeological resources or paleontological resources during construction-related earth-moving activities, shall be subject to Section 106 of the National Historic Preservation Act as amended (36 CFR 800), the Native American Graves Protection and Repatriation Act (25 USC 3001 et seq.), and the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa-mm). 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 STOF and the Bureau of Indian Affairs (BIA) 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, work shall halt in the vicinity, the Broward County Coroner should be notified immediately, and, pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA), Section 10.4 Inadvertent Discoveries, a Tribal Official and BIA representative will be contacted immediately.

No further ground disturbances shall occur until the Tribal Official and BIA representative have examined the findings and agreed on the appropriate course of action. 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.

The following mitigation measures shall be implemented for Alternatives A and C to avoid and/or minimize potential adverse effects to cultural resources from the construction of the off-site stormwater retention improvements:

- D. Prior to the start of construction, an archaeologist shall conduct a literature review and field reconnaissance to determine if there is a potential for cultural resources to be found on the site of the proposed stormwater retention pond. Should the archaeologist determine that cultural resources occur on-site appropriate consultation shall be initiated in compliance with applicable federal and state regulations.

5.2.6 SOCIOECONOMIC CONDITIONS/ENVIRONMENTAL JUSTICE

The provisions of the Coconut Creek Fee-to-Trust Lands Mitigation Agreement (**Appendix G**) and the existing Tribal / State Gaming Compact (**Appendix L**) would avoid, minimize, or mitigate adverse socioeconomic effects.

The Tribe has also previously agreed to comply with Section 13-110 through 13-177 of the City of Coconut Creek Affordable Housing Program.

Although project related impacts are not expected to result in any significant adverse effect to Broward County (based on degree of impact and not absolute dollar impacts), STOF has also expressed a willingness to discuss compensation to Broward County to offset project-related costs if the property is brought into federal trust.

No further mitigation is required.

5.2.7 TRANSPORTATION/TRAFFIC

CONSTRUCTION MITIGATION MEASURES

The following mitigation measures are required during the construction of all alternatives:

- A. A Traffic Management Plan (TMP) shall be implemented to address lane closure during construction, areas where night construction is proposed, and other issues identified in the *Manual on Uniform Traffic Control Devices for Streets and Highways* (US DOT FHWA, 2003). The TMP shall be submitted to the City for review prior to start of construction.

- B. Prior to the finalization of construction plans, the Tribe shall work with emergency service providers to avoid impending emergency response service. Police, fire, ambulance, and other emergency response providers shall be notified in advance of the construction schedule, the exact location of construction activities, duration of construction period, and any access restrictions that could impact emergency response services. The TMP shall include details regarding emergency service coordination. Copies of the TMP shall be provided to all affected emergency service providers as well as local school districts with buses traveling along SR-7/US-441 and Sample Road.

OPERATION MITIGATION MEASURES

Alternative A

The following mitigation measures are required for Alternatives A, to reduce traffic impacts to less than significant levels with regard to the intersections and roadway segments.

The following mitigation measures are committed improvements within the PMDD, which apply to Alternative A, as approved by STOF and the City of Coconut Creek.

- C. The southbound approach to Sample Road on NW 54th Avenue shall be reconfigured by converting one of the two through lanes into a second left turn lane (eastbound).
- D. Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum Road (this improvement is also included as mitigation in the Coconut Creek Development of Regional Impact (DRI)).
- E. Construct the main site access improvement at NW 54th Avenue and North Access, including signalization, dual left turn lanes and two through lanes on northbound NW 54th Avenue, a right turn lane on the southbound approach, and a left turn lane, shared left-right turn lane and a right-turn lane on the North Access road eastbound approach.
- F. Close the existing site access at 40th Street and NW 54th Avenue. This four-way intersection shall be reconfigured to a three legged intersection and signalization shall be implemented.
- G. Alignment improvements at the site access point at NW 40th Street and SR-7/US-441.

The following mitigation measure is required due to unacceptable LOS at the intersection of the West Access Road and SR-7/US-441.

- H. Signalization and widening to two-lanes outbound at the West Access Road, specifically of the SR-7/US-441 approach and NW 40th Street Connector.

This measure would be designed, and reviewed by the applicable state and local regulatory authorities prior to construction. The STOF would be responsible for funding this improvement.

Sub-Alternative A-1

The following mitigation measures are required for Sub-Alternatives A-1, to reduce traffic impacts to less than significant levels. These measures are identical to those committed to by the STOF in the PMDD as described under Alternative A.

- I. The southbound approach to Sample Road on NW 54th Avenue shall be reconfigured by converting one of the two through lanes into a second left turn lane (eastbound).
- J. Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum Road (this improvement is also included as mitigation in the Coconut Creek Development of Regional Impact (DRI)).
- K. Construct the main site access improvement at NW 54th Avenue and North Access, including signalization, dual left turn lanes and two through lanes on northbound NW 54th Avenue, a right turn lane on the southbound approach, and a left turn lane, shared left-right turn lane and a right-turn lane on the North Access road eastbound approach.
- L. Close the existing site access at 40th Street and NW 54th Avenue. This four-way intersection shall be reconfigured to a three legged intersection and signalization shall be implemented.
- M. Alignment improvements at the site access point at NW 40th Street and SR-7/US-441.

The following mitigation measure is required due to unacceptable LOS at the intersection of the West Access Road and SR-7/US-441.

- N. Signalization and widening to two lanes outbound at the West Access Road, specifically of the SR-7/US-441 approach and NW 40th Street Connector.

Alternative B

The following mitigation measures are required for Alternative B to reduce traffic impacts to less than significant with regards to the intersection of NW 54th Avenue and the NW40th Street entrance and the intersection of the West Access road and SR-7/US-441.

- O. Close the existing site access at 40th Street and signalize the intersection of NW 54th Avenue and 40th Street.
- P. Signalize the West Access Road, specifically the SR-7/US-441 approach and NW 40th Street Connector.

Alternative C

The following mitigation measures are required for Alternative C, as committed to in the PMDD, to reduce traffic impacts to less than significant levels.

- Q. The southbound approach to Sample Road on NW 54th Avenue shall be reconfigured by converting one of the two through lanes into a second left turn lane (eastbound).
- R. Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum Road (this improvement is additionally included as mitigation in the Coconut Creek Development of Regional Impact (DRI)).
- S. Construct the main site access improvement at NW 54th Avenue and North Access, including signalization, dual left turn lanes and two through lanes on northbound NW 54th Avenue, a right turn lane on the southbound approach, and a left turn lane, shared left-right turn lane and a right-turn lane on the North Access road eastbound approach.
- T. Close the existing site access at 40th Street and NW 54th Avenue. This four-way intersection shall be reconfigured to a three legged intersection and signalization shall be implemented.

- U. Alignment improvements at the site access point at NW 40th Street and SR-7/US-441.

The following mitigation measure is required due to unacceptable LOS at the intersection of the West Access Road and SR-7/US-441.

- V. Signalize the West Access Road, specifically of the SR-7/US-441 approach and NW 40th Street Connector.

Sub-Alternative C-1

None warranted.

5.2.8 UTILITIES AND PUBLIC SERVICES

WATER SUPPLY

The following mitigation measures are required for Alternatives A and B, and if appropriate C:

- A. STOF shall work with the City of Coconut Creek to extend reclaimed water infrastructure to the project site.
- B. The use of recycled water shall be maximized to the extent feasible. Potential uses include landscape irrigation, emergency fire flow, and evaporative cooling.

If project water supply is not obtainable through the development of an on-site groundwater well, the following optional mitigation measure is recommended for Sub-Alternatives A-1 and Alternative B:

- C. If on-site production wells are not feasible, prior to operation STOF shall obtain a services agreement with a local water utility to provide water supply service. The construction of an underground connection to existing infrastructure would occur in the vicinity of the project site. STOF would fund any required infrastructure improvements required.

CONSTRUCTION-RELATED SOLID WASTE

The following mitigation measures are required for Alternatives A, B, and if appropriate C:

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

SOLID WASTE FROM FACILITY OPERATIONS

The following mitigation measures are required for Alternatives A, B, and if appropriate C:

- F. A solid waste management plan shall be adopted by STOF 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.
- G. Recycling bins shall be installed throughout the facilities for glass, cans and paper products.
- H. Decorative trash and recycling receptacles shall be placed strategically throughout the site to encourage people not to litter.
- I. Security guards shall be trained to discourage littering on site.

ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS

The following mitigation measures are required for Alternatives A, B, and if appropriate C:

Construction

- J. At least three working days prior to construction, STOF shall contact the Utility Notification Center, which provides a free “Dig Alert” to all excavators (e.g., contractors, homeowners, and others) in Florida. 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

- K. STOF shall continue discussions with Florida Power and Light to provide expanded electrical service to the project site.

Energy Conservation

- L. 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.
- M. 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.

- N. 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

- O. 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.
- P. Non-aerating, low-flow faucets and showerheads shall be installed in the hotel rooms.
- Q. New, energy-efficient water heaters shall be installed, and shall be evaluated for replacement every seven years.
- R. 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

STOF has expressed a willingness to discuss with Broward County compensation for project-related costs to the County courts and judicial system. The following mitigation measures are required for Alternatives A and B:

- S. Seminole Tribal Police Officers 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.
- T. STOF shall provide on-site Seminole Tribal Police Officers to reduce and prevent criminal and civil incidents and shall coordinate response calls with the Coconut Creek Police Department.
- U. STOF 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.
- V. For trust lands, the Tribe shall adopt a Tribal Ordinance related to the maintenance of health and safety of retail food facilities, public swimming pools/spas, well drilling, well abandonment, soil borings, and disposal of medical waste that is the functional equivalent of the applicable sections of the Broward County Code of Ordinances.

Fire Protection and Emergency Medical Service

The following mitigation measures are required for Alternatives A, B, and if appropriate C:

- W. 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.
- X. STOF shall use fire-resistant construction materials for the larger buildings and equip enclosed buildings with automatic sprinkler systems as required by applicable building codes, including the South Florida Building Code. 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.
- Y. Through the use of modern construction and fire engineering techniques, STOF 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.
- Z. Through the use of modern fire engineering technology, STOF shall create and maintain a facility equipped with the latest early detection systems that ensure 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 measures are required for Sub-Alternative A-1 and B:

- AA. STOF shall adopt a Tribal ordinance which requires that on-reservation construction be in accordance with the fire safety standards that are equivalent to those in the South Florida Building Code. The following components will be required by the Tribal ordinance: fire alarms, fire communication systems, fire suppression equipment, smoke evacuation and control systems, fire-resistant construction, fire hydrant systems, sprinkler systems, and fire-control measures.
- BB. STOF Fire Department shall conduct annual staffing analyses, to ensure that its staff is properly trained and certified to provide fire protection and first response emergency services to the trust property. An annual apparatus analysis is also performed to determine the sufficiency of existing equipment for fire protection and first response emergency services on-site.
- CC. STOF will comply with all fire protection and public safety provisions and design standards included within the 2008 Public Safety Plan.

5.2.9 NOISE

CONSTRUCTION NOISE

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

- 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 required for Alternatives A, B, and C:

- 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 STOF shall consult with the USEPA and the Broward County Pollution Prevention, Remediation and Air Quality Division (PPRAQD) to determine the appropriate course of action, including the development of a sampling plan and remediation plan if necessary.
- B. All hazardous materials 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, encircled within a secondary containment enclosure.
- 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 incorporating auto shut-off and shear valves.

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.
10. All temporary or permanent refueling facilities will have approved Spill Prevention, Control, and Countermeasure plans.

The following mitigation measure is required for Sub-Alternative A-1 and Alternative B:

- 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 55-gallon drums 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.
- E. All chemicals meeting or exceeding the quantity thresholds for storage of hazardous materials under Emergency Planning and Community Right-to-Know (EPCRA) reporting agencies will report to local/tribal fire/police agencies.

5.2.11 AESTHETICS

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

- A. Landscaping design will screen the view of the facilities from existing residences to the maximum extent practicable. The design of the hotel/resort and ancillary facilities would integrate natural elements into the design as much as possible.

