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History

<u>Revision</u>	<u>Authorizing Actions</u>	<u>Description</u>
	TCR 060806-08 of 14 TCR 111413-11 of 17	Provisions originally adopted as §8 of the Land Clearing Regulation Originally “Plan Notes Required for Small and Large Construction Activities,” re-organized and consolidated within this Title.
12-Jun-14	LU-14-079	Codification as Title 8 of Land Use Regulations

TITLE 8. CONDITIONS FOR SITE DEVELOPMENT**CHAPTER 1. GENERAL****§ 1. No Negative Impact to a Tribal Business**

When a Land Use Activity may affect the operations of a tribal business, including, but not limited to, the Gaming Enterprise, Applicants and Owners are required to meet or exceed any specification identified by the Tribe when the failure to do so would negatively impact insurance coverage, aesthetic quality, traffic flow or any other aspect related to such business.

§ 2. Tribal Resources

The Tribe owns all cultural, mineral and timber resources within Mashantucket. Such resources harvested as a necessity of an approved Land Use Activity remain the property of the Tribe. When approved, harvested resources may be utilized on-site as part of the permitted activity (e.g. cuts and fills to balance site grading). Excess resources not specifically utilized on-site as part of the permitted activity may not be sold or disposed of without the consent of tribal government. All harvested resources shall be delivered as specified by the Land Use Commission. If the Tribe declines such resources, disposal shall be the responsibility of the Land Use Permittee. If tribal government authorizes sale of resources by the Permittee, all proceeds shall be deposited into the general account of the Tribal Nation unless other in-kind arrangements have previously been negotiated.

CHAPTER 2. BEST MANAGEMENT PRACTICES (BMPS)**§ 1. Design Considerations****a. General**

The following measures shall be incorporated in site design to the extent possible. All prudent and feasible alternatives which could best meet these objectives must be considered.

- (1) Avoid any disturbance within fifty (50) feet of a wetland (see MPTN Inland Wetlands and Watercourse Regulation, 5 L.U.R).
- (2) Minimize site alteration/land clearing.
- (3) Site/building design shall preserve natural topography outside of the development footprint to reduce unnecessary land disturbance and to preserve natural drainage pathways on the site.
- (4) Protect wildlife habitat: Sites shall be designed in such a way as to avoid impacts to rare species and wildlife habitat on a site, and to maintain contiguous forested areas.
- (5) Avoid impacts to archaeological resources: Consult with the Mashantucket Pequot Historic Preservation Officer (THPO) regarding the potential for archaeological or historical resources on the site (see 6 L.U.R., Historic Preservation).
- (6) The extent possible forested areas shall be preserved if they are associated with significant forest communities as defined herein;

- (a) wetlands, waterbodies and their buffers;
 - (b) critical wildlife habitat areas;
 - (c) slopes over 25 percent.
- (7) Preserve open space and specimen trees on the site: In the design of a development, priority shall be given to retention of existing stands of trees, trees at site perimeter, contiguous vegetation with adjacent sites (particularly existing sites protected through conservation restrictions), and specimen trees.
 - (8) Placement of buildings, structures, or parking facilities shall not detract from the site's scenic qualities and shall blend with the natural landscape. Foundations shall be constructed to reflect the natural terrain.
 - (9) Minimize cut and fill in site development and strive for a "balanced site."
 - (10) Finished grades should be limited to no greater than a 2:1 slope, while preserving, matching, or blending with the natural contours and undulations of the land to the greatest extent possible.
 - (11) Finished grade shall be no higher than the trunk flare(s) of trees to be retained. If a grade change of 6" or more at the base of the tree is proposed, a retaining wall or tree well may be required.
- b. Stormwater Management
- (1) Stormwater management systems shall be designed following best management practices. In general, best design practices outlined within the 2004 Connecticut Stormwater Quality Manual shall be acceptable.
 - (2) Runoff shall not be discharged directly to rivers, streams, or other surface water bodies.
 - (3) Runoff from impervious surfaces shall, to the extent practicable, be recharged on the site through the use of infiltration basins, vegetated swales, constructed wetlands or similar systems covered with natural vegetation.
 - (a) All such basins, swales or constructed wetlands shall be preceded by oil/grit water quality structures.
 - (b) The goal shall be to retain, for subsequent infiltration, the "first flush" from a storm event (i.e. discharge associated with the first one inch of precipitation).
 - (4) At minimum runoff detention shall be provided so as to not result in an increase in peak runoff from a 25-yr. storm event.
 - (5) All conveyance structures shall be designed to, at minimum, convey a 100-yr. storm event without resulting in pre-system surcharge.
- c. Erosion and Sedimentations Control (ESC)
- (1) The designer shall, in consideration the unique characteristics of the specific site, select the appropriate controls to prevent soil erosion and off-site sedimentations.
 - (2) Erosion and Sediment Control (ESC) practices shall be shown schematically on a site civil plan sheet for review by the Land Use Commission. Notes shall be added to plans detailing the responsibilities of site personnel to ensure proper maintenance of ESC measures.
 - (3) Control measures shall include:
 - (a) the use of erosion control matting, mulches and/or temporary or permanent cover crops; and
 - (b) temporary or permanent diversions, berms, grassed swales, special culverts, shoulder dikes or such other mechanical measures as are necessary may be required to intercept and divert surface water runoff.

- (c) runoff flow shall not be routed through areas of protected vegetation or revegetated slopes and other areas. Temporary runoff from erosion and sedimentation controls shall be directed to BMPs such as vegetated swales.
- (4) Projects impacting greater than one (1) acre in area will be required to submit a separate Stormwater Pollution Prevention Plan.
- (5) Refer to Chapter 3 for requirements for Erosion and Sedimentation Control during construction.

§ 2. Site Management

The following proper site management techniques shall be employed during the development of the site.

a. Protection of Vegetation

- (1) No vegetation shall be cut outside of the established and approved clearing area. The clearing of vegetation is regulated by the MPTN Land Clearing Law. Under no circumstances shall vegetation be damaged or removed unless specifically permitted under the procedures outline in that Law.
- (2) During clearing and/or construction activities, all vegetation to be retained shall be surrounded by temporary protective fencing or other measures before any clearing or grading occurs, and maintained until all construction work is completed and the site is cleaned up. Barriers shall be large enough to encompass the essential root zone of all vegetation to be protected. All vegetation within the protective fencing shall be retained in an undisturbed state.
- (3) BMPs shall be employed to avoid detrimental impacts to existing vegetation, soil compaction, and damage to root systems.
- (4) Understory vegetation beneath the dripline of preserved trees shall also be retained in an undisturbed state.
- (5) Roots should be cut cleanly rather than pulled or ripped out during utility trenching. Tunneling for utilities installation should be considered as an alternative wherever practicably and economically feasible to protect root systems of trees.

b. Minimum Land Disturbance

- (1) Development envelopes for structures, driveways, wastewater disposal, lawn areas and utility work shall be designated to limit clearing and grading. Other efforts to minimize the clearing and grading on a site associated with construction activities shall be employed, such as parking of construction vehicles, offices/trailers, stockpiling of equipment/materials, etc. in areas already planned for permanent structures.
- (2) Clearing for utility trenching shall be limited to the minimum area necessary to maneuver a backhoe or other construction equipment.

c. Erosion and Sedimentation Control

During construction adequate erosion and sedimentation controls shall be installed and maintains as specified within Chapter 3.

d. Fueling and Spill Procedures

- (1) Portable fuel containers shall be metal self-sealing safety cans.
- (2) No fueling of any equipment will be allowed within 50 feet of a wetland or water body.
- (3) Fuel delivery companies will be instructed not to “top-off” tanks. The fuel trucks will carry a spills kit. Machinery will not be fueled while on slopes greater than 5:1.

- (4) Fuel storage tanks on stationary equipment shall have spill containment approved by MPTN-NRP prior to fueling.
- e. Hazardous Materials
- (1) The contractor is responsible for the proper management of hazardous materials brought on to the site.
 - (2) Chemicals which may or have the potential to come in contact with the ground must be approved by MPTN-NRP in advance of being brought on-site. When requested, the contractor shall provide detailed work plans for the storage, use and disposal of all chemicals. At no time will chemicals be transferred to containers not properly labeled specific to its contents.
 - (3) On-site storage of hazardous substances or other chemicals in excess of those required for one day's site activities is not allowed.
 - (4) The contractor shall have spill kits for all hazardous material brought on-site and for machinery with the potential to leak hazardous materials.
 - (5) Machinery that is found to be leaking fluids will be repaired immediately or removed from the site.
 - (6) The contractor shall notify the MPTN Fire Department (860) 396-6620 and the MPTN-NRP (860) 396-6740 immediately upon identification that a release of a non-natural substance to the environment has occurred.
 - (7) The contractor shall be responsible for the remediation of a spill including but not limited to the removal of impacted soils and confirmatory testing if required by MPTN-NRP.
 - (8) Maintenance of equipment on-site is not allowed unless specifically authorized by MPTN-NRP's field representative. Emergency and regularly scheduled maintenance that falls within the duration of the construction schedule will be authorized provided that the proper spills protection equipment is deployed. Under no circumstances will maintenance be allowed on machinery brought on-site prior to the start of construction.
- f. Final Items
- (1) The washing of vehicles and machinery is not allowed on-site unless specifically authorized within the site specific Stormwater Pollution Prevention Plan or determined by MPTN-NRP to be necessary for the control of off-site sediment tracking.
 - (2) Concrete washout will be to a contractor supplied washout box constructed for this intended purpose. These waste concretes must be removed from the site by the contractor prior to the completion of their contract.
 - (3) The contractor shall clean all catch basins, grit separators, manholes, and basin forebays upon completion of construction activities and site stabilization.
 - (4) The contractor shall remove all ESC measures upon completion of construction activities and final stabilization as determined by MPTN-NRP.
 - (5) The contractor or project manager who filed the initial NPDES permit documents shall file the appropriate notice of termination.
 - (6) Site litter shall not be tolerated. The Contractor is responsible for providing proper disposal containers for general debris and litter. Daily site inspections will be performed and the contractor shall provide labor for trash picking if required.
 - (7) At no time will work be conducted within the boundaries of a wetland. No temporary fill or placement of equipment is allowed. There shall be no transport in or through wetlands.

CHAPTER 3. SEDIMENTATION AND EROSION CONTROL

§ 1. General Requirement

- a. The extent of a site exposed at any one time shall be limited through phasing of construction operations. Effective sequencing shall occur within the boundaries of natural drainage areas.
- b. ESC measures must be in place prior to the start of any construction. These measures, even if placed prior by others, shall be inspected and maintained throughout the duration of the project by the contractor.
- c. If a specific ESC detail does not appear within construction documents, the contractor will be responsible to adhere to the details as specified within Connecticut's 2002 Erosion and Sedimentation Controls Guidelines or as determined in the field by MPTN Natural Resources Protection and Regulatory Affairs staff (MPTN-NRP).
- d. The contractor is responsible for managing discharges from the site. The contractor shall relocate, adjust and maintain all ESC measures warranted as site development progresses.
 - (1) ESC measures identified on construction drawings, including within a Stormwater Pollution Prevention Plan (SWPPP) and/or listed in the specifications, are representative of minimum measures that shall be maintained during construction. Additional controls may be required due to changing site conditions and shall be constructed in accordance with the 2002 Erosion and Sedimentation Controls Guidelines and the 2004 Connecticut Stormwater Quality Manual.
 - (2) The contractor will use silt fencing, ECM berms, and earthen berms to divert flows from exposed soils during all construction phases of the site.
 - (3) Runoff will be controlled by hay bale checks, ECM or stone berms to remove silt and suspended solids.
 - (4) Discharges of sediment resulting in a deposition off-site are a violation and will require immediate remediation by the contractor. If sensitive areas are impacted such remediation will be supervised and methods dictated by the MPTN-NRP.
 - (5) At no time will sediment laden water be discharged downstream of perimeter ESC measures. Where traditional sediment and control measures prove ineffective, flocculants will be required and used by the contractor at no additional cost to the owner.
- e. MPTN-NRP has full jurisdiction over site ESC measures and methods. MPTN-NRP may at any time require additional controls or require relocation of existing controls to meet the site needs during construction.
- f. At no time will work be conducted within the boundaries of a wetland. No temporary fill or placement of equipment is allowed. There shall be no transport in or through wetlands.

§ 2. Installation of Erosion Control Measures

- a. Prior to any earth disturbing activities, all ESC measures shall be installed as shown on the ESC Plan or as directed by the Construction Manager or MPTN-NRP.
 - (1) The limits of disturbance must be clearly marked in the field.
 - (2) Existing vegetation shall be preserved wherever possible; trees to remain shall be protected before work begins.

- (3) All existing oil/grit separators and catch basins which will receive runoff from the site shall be cleaned and the contents properly disposed.
- (4) Perimeter protection shall be established utilizing by Erosion Control Mulch (ECM) for berms
 - (a) ECM shall consist of a 3:1 mixture of ground stumps to wood chips and the entire mixture reground together. Additional ECM should be produced and stockpiled for future maintenance of berms and temporary mulch for stabilization.
 - (b) When allowed by MPTN-NRP alternative (e.g. E.C. Socks) or traditional (e.g. silt fence) may be utilized. Sediment build-up along silt fence and ECM berms shall be removed when it is half the height of the barrier.
- (5) Hay bales shall be installed around all inlets to existing stormwater systems and wrap the top of all catch basins including throat with fabric to prevent sediment from entering existing drainage systems.
 - (a) The contractor shall replace clogged sedimentation bales as required.
 - (b) The contractor shall clean sediment from basins when accumulation of sediment exceeds 8" depth.
- (6) At no time will sediment laden water be discharged downstream of perimeter ESC measures. Where traditional sediment and control measures prove ineffective, flocculants will be required and used by the contractor at no additional cost to the owner.

b. Run-off Management

- (1) Sediment controls at the perimeter are the last line of defense on a construction site. Selection of additional controls requires that consideration be given to drainage areas, site limitations, and effectiveness of individual practices.
- (2) Temporary sediment traps must be excavated as necessary. Sediment traps shall be maintained and cleaned out to maintain the required storage volume.
 - (a) Temporary sedimentation traps shall be constructed as necessary to control run-off. At minimum provide 134 cy of storage per acre of disturbance.
 - (b) Temporary sedimentation traps are not to be located within 50 feet of the edge of a wetland or surface water body unless specifically authorized by MPTN-NRP.
 - (c) Runoff shall be directed towards the sedimentation traps by use of grading, channels and berms.
 - (i) Runoff velocity shall be controlled by hay bale checks, ECM or stone berms.
 - (ii) Runoff flow shall not be routed through areas of protected vegetation or revegetated slopes and other areas.
- (3) Early installation of final stormwater conveyance structures and basins is highly recommended.
 - (a) Rough excavation of final detention basins can be utilized as temporary sedimentation traps.
 - (b) After the contributing area has been permanently stabilized, such basins are to be cleaned and regraded to final design grade.
- (4) Temporary runoff from erosion and sedimentation controls shall be directed to BMPs such as vegetated swales.

c. Anti-Tracking

- (1) Install temporary construction entrances that will prevent tracking or washing of sediment onto paved surfaces at all vehicular access points to minimize tracking of sediment off-site.

- (2) Construction entrances shall be maintained in a condition that will prevent tracking or washing of sediment onto paved surfaces. A top dressing with additional stone or additional length shall be provided as conditions require.
- (3) All paved surfaces shall be cleaned daily to avoid traffic hazards and added sediment from entering existing stormwater structures.

d. Dust Control

The contractor is responsible for dust control and wind erosion throughout site construction activities. Dust control shall include, but is not limited to, sprinkling of water on exposed soils and haul roads. The use of chemicals including additives to water requires prior approval from MPTN-NRP.

e. Temporary Stabilization

- (1) All temporary and permanent seeding activity shall be conducted in accordance with the applicable provisions in the 2002 CT Erosion and Sedimentation Controls Guidelines, including seed bed preparation, liming and mulching.
- (2) Slopes greater than 2:1 with a height ten feet or greater shall be stabilized using turf reinforced matting, bonded fiber matrix hydroseed, or ECM mulch of at least four inches in thickness.
- (3) Areas damaged from heavy rainfall, severe storms or construction activity shall be repaired immediately and mulched.
- (4) All areas that remain disturbed but inactive for at least thirty days shall receive temporary seeding in accordance with the CT DEP guidelines referenced above.
- (5) Where construction activities have been permanently suspended for more than seven days, or when final grades are reached in any portion of the site, stabilization practices (including mulching and permanent seeding) will be implemented within three days.

f. Stock Piles

- (1) Stockpiles are not to be located within 50 feet of a wetland or waterbody unless specifically approved by MPTN-NRP.
- (2) Stockpile shall not be located within the drip line of any protected trees.
- (3) The side slopes of stockpiled material shall be no steeper than 2:1 and benched when the height exceeds thirty feet.
- (4) Appropriate ESC devices shall immediately be established around the perimeter of a stockpile.
 - (a) a continuous silt fence or ECM berm will be in place to divert water from entering the area.
 - (b) Stockpiles will have openings for access on the upgrade side only.
- (5) Stockpiles that are not to be used within thirty days shall be seeded and mulched immediately after formation or as directed by MPTN-NRP.
- (6) Excess material that will not be reused on-site shall be taken off-site immediately.

g. Dewatering

- (1) MPTN-NRP will be notified prior to any dewatering activities.
- (2) If continuous dewatering is required "dirt bags" or settling basins, properly designed to ensure sediment free discharge, shall be utilized.
- (3) All discharge points shall be located or constructed so as not to promote downstream channeling.
- (4) At no time shall discharge be directed directly into wetlands or water bodies

h. Inspection and Maintenance

- (1) The Contractor shall assign qualified personnel to inspect all ESC measures on-site to ensure that they are properly functioning.
 - (a) Inspections shall be conducted prior to each forecasted rainfall event.
 - (b) Post rainfall inspections shall be conducted within 24-hours of the end of a storm event that is 0.1 inches or greater.
 - (c) Regardless of rainfall, inspection of all ESC measures shall occur at least once every seven calendar days.
 - (d) All deficiencies and maintenance items noted within an inspection shall be corrected immediately by the Contractor.
- (2) MPTN-NRP will periodically inspect the site for proper ESC measures. The contractor shall correct any noted deficiencies by placing, repairing or replacing ESC measures within 24-hours or immediately if existing site conditions or forecasted weather events warrant.

i. Final Stabilization

- (1) Areas to be revegetated will be planted as soon as practicable immediately after final grading.
 - (a) Proper revegetation techniques shall be employed using native plant species (locally grown), proper seed bed preparation, fertilizer and mulching to protect germinating plants.
 - (b) Revegetation shall occur on cleared sites within 7 (seven) calendar days of final grading.
 - (c) A minimum of 4" of topsoil shall be placed on all disturbed surfaces which are proposed to be planted.
 - (d) MPTN NRP-RA shall determine the success of stabilization efforts. If necessary, that the area are not satisfactory stabilized, the contractor shall be responsible for replanting during the following growing season appropriate to the selected plant species.
- (2) Slopes greater than 2:1 with a height ten feet or greater shall be stabilized using turf reinforced matting, bonded fiber matrix hydroseed, or ECM mulch of at least four inches in thickness.
- (3) Final seeding shall be conducted in accordance with the applicable provisions in the 2002 CT Erosion and Sedimentation Controls Guidelines, including seed bed preparation, liming and mulching.
- (4) The contractor shall ensure that all temporary ESC measures are remove following final site stabilization.

§ 3. Additional Requirements for Sites Large than 1 acre

a. The discharge of stormwater from construction sites is regulated under the National Pollution Discharge Elimination System (NPDES), authorized by the Clean Water Act. The United States Environmental Protection Agency (EPA) has NPDES jurisdiction within Mashantucket.

b. Construction sites involving earth disturbance of one acre or greater require permit coverage from EPA. Earth disturbing activities are not to commence without permit coverage. Permit coverage requires, among other things, the preparation and implementation of a site specific Stormwater Pollution Prevention Plan (SWPPP).

c. All contractors responsible to comply with the SWPPP, shall have an authorized representative sign the NPDES permit certification, and maintain a copy of the SWPPP on-site at all times during the length of the contract.

d. Inspection and Maintenance

- (1) For each inspection, required by § 2, paragraph h., a report shall be prepared summarizing the scope of the inspection, name(s), signature(s) and qualifications of personnel making the inspection, the date(s) of the inspection, observations relating to the implementation of the SWPPP, and actions taken.
- (2) Inspection reports shall be delivered to MPTN-NPR within 24-hours of completion.
- (3) Inspection reports are to be retained for at least three years after the date of the inspection.
- (4) All deficiencies and maintenance items noted within a report shall be corrected immediately by the Contractor