DESIGN STANDARDS & CRITERIA

For

ONEIDA NATION

Engineering Department

(Revised: 05/05/17)

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1. PREFACE *Revised: 02/20/12*

1.1. The purpose of this document is to provide criteria for the ongoing planning and design of the ONEIDA NATION's facilities. It contains both generalized issues and specific requirements to be used in the design and construction of new and remodeled facilities.

1.2. The information provided in this document will be the basis upon which the ENGINEERING DEPARTMENT will review design documents to insure that the program requirements are being met and that the ONEIDA NATION's design criteria are being followed.

1.3. The ENGINEERING DEPARTMENT wants to work with outside consulting firms to ensure that valid engineering criteria are applied while developing solutions to the ONEIDA NATION's building requirements.

1.4. The ENGINEERING DEPARTMENT is responsible for and has authority to update/revise these standards and promulgate them to appropriate parties. In addition, the Department has authority to waive any requirement if it deems the waiver beneficial to the Oneida Nation.

1.5. Certain portions of these criteria may not apply to your specific project. Any deviations from these criteria shall be approved in writing by the ENGINEERING DEPARTMENT, prior to their incorporation into the design documents.

1.6. Consultants having any questions relating to these criteria or requiring additional information should contact their project's PROJECT MANAGER at 920-869-1600.

2. GENERAL ISSUES (non-technical)

2.1. CONTRACT DOCUMENTS *Revised: 09/07/12*

2.1.1. PROJECT MANUAL: The manual (specifications) shall be organized utilizing the Construction Specifications Institute MasterFormat 2004 or 2010 edition.

2.1.2. PROPRIETARY SPECIFICATIONS: Proprietary specifications sections will NOT be allowed, unless otherwise approved by the Owner. All sections shall list a minimum of two (2) and a maximum of six (6) separate manufacturers/suppliers. In lieu of the multiple manufacturer listing, the section may be written so as to provide a performance specification.

2.1.2.1. An exception to this requirement is that if the product is covered under the GSA Pricing Schedule it may be proprietary specified. Identification that the Owner is eligible for GSA pricing shall be denoted at the individual specification section for the product.

2.1.3. DOCUMENTS SUPPLIED TO OWNER:

2.1.3.1. To comply with the Oneida Paper Reduction Policy, all documents (except drawings) submitted to Owner shall be printed two-sided.

2.1.3.2. When the final Project Manual is issued, one copy shall be bound in a 3 ring binder.

2.1.3.3. When final CD drawings are issued, two (2) sets of drawings on half size sheets shall be provided.

2.1.4. PROJECT NUMBER: The Engineering Department's Project Number shall be noted on all documents prepared, including: letters, memos, estimates, schedules, specifications, construction documents, invoices, etc.

2.1.5. CONSTRUCTION DOCUMENTS: All documents shall minimize or eliminate the reference to "General Contractor" in notes or specification sections. This GC reference shall be eliminated from the documents if a Construction Manager is involved in the project.

2.1.6. DOCUMENT ISSUE LOG: All sheets in the set of construction documents shall identify the history of the sheet's issuance. For example, if sheet was issued by Owner DD review, Owner Final review, and Issued for Bidding, all of these issues shall be identified on each sheet with a date. This information can be in the revision portion of the title block.

2.1.7. CODE COMPLIANCE DRAWINGS: The set of construction documents shall include:

2.1.7.1. A Code Compliance Plan which delineates: fire rated walls, smoke partitions, and floor & attic smoke compartments, occupant load of rooms, egress path.

2.1.7.2. Code Compliance Data and Schedules which denote: applicable codes used for design, occupancy classification, construction type, sprinklered or non-sprinklered, smoke/fire detection /alarm systems, number of stories, number of streets, allowable area, occupant load, exit width, plumbing fixture calculations, off-street parking, etc.

2.2. DESIGN PROCEDURES *Revised: 12/17/15*

2.2.1. MEETING MINUTES: The A/E shall take minutes of all meetings at which they are present, and distribute to all attendees and other appropriate individuals.

2.2.2. DESIGN REVIEWS: At the END of the following phases all departments listed shall review the documents prepared by the Architect. The Owner's Project Manager shall be responsible to coordinate distributing documents to identified departments. The Engineering Department will review all phases and give instructions to the architect to proceed into the next phase after all approvals are received.

2.2.2.1. Schematic Design Phase (SD)

- DPW – Custodial (Space needs)
- DPW – Facilities (Space needs, DDC Controls, HVAC, electrical)
- DPW – Groundskeeping (Site Maintenance)
- DPW – Plumbing (Plumbing)
- EH&S Division - Conservation (mitigation concerns)
- EH&S Division – Environmental Quality (storm water management, NEPA coord.)
- EH&S Division – Health & Industrial Services (Recycling Space, Safety)
- MIS Department (Space Needs)
- Planning Department (Site Planning issues)
- Utilities Department (fire hydrant, water and sewer main materials and connections)
- Zoning Department (Preliminary Site Plan Review)

2.2.2.2. Design Development Phase (DD)

- DPW – Custodial (Space needs & finish material selections)
- DPW – Facilities (Space needs, DDC Controls, HVAC, electrical)
- DPW – Groundskeeping (Site Maintenance)

- DPW – Plumbing (Plumbing)
- EH&S Division - Conservation (landscape plant materials)
- EH&S Division – Environmental Quality (storm water management, NEPA coord.)
- EH&S Division – Health & Industrial Services (Recycling Space, Safety)
- MIS Department (Space Needs, Kronos, voice & data)
- Planning Department (Site Planning issues)
- Utilities Department (fire hydrant, water and sewer main materials and connections)
- Wells & Septic Department (Preliminary review of systems)
- Zoning Department (Preliminary Site Plan Review)

2.2.2.3. Construction Document Phase (CD)

- Division of Land Management – Real Estate Services (initiate process for easements approval)
- DPW – Custodial (finish material selections)
- DPW – Facilities (DDC Controls, HVAC, electrical)
- DPW – Groundskeeping (Site Maintenance)
- DPW – Plumbing (Plumbing)
- EH&S Division - Conservation (landscape plant materials and planting spec.)
- EH&S Division – Environmental Quality (storm water management, NEPA coord.)
- EH&S Division – Health & Industrial Services (Recycling Space, Safety)
- MIS Department (Kronos, voice & data)
- Planning Department (Site Planning issues)
- Risk Management (Fire Sprinkler System review, Insurance Requirements review)
- Utilities Department (fire hydrant, water and sewer main materials and connections)
- Wells & Septic Department (Review of systems)
- Zoning Department (Preliminary Site Plan Review)

2.2.2.4. Construction Administration (CA)

2.2.2.4.1. Pre-Bid conference:
- Indian Preference Department

2.2.2.4.2. Pre-Construction conference:
- Indian Preference Department
- EH&S Safety Department

2.2.3. CODE ISSUES: All building designs must comply with the Oneida Code of Laws – Chapter 66 – Building Code (*this code adopts the International Building Code and Wisconsin amendments by reference*) and documents shall be submitted for review, following standard Wisconsin procedures.

3. FACILITY & TECHNOLOGY FEATURES

3.1. DESIGN ELEMENTS *Revised: 12/17/15*

3.1.1. Data Rooms: All buildings shall have separate MIS (Management Information Systems) rooms. These functions are not to be combined with mechanical or electrical into one room. MIS room is to contain all telephone and computer network equipment.

3.1.1.1. Walls surrounding these rooms shall extend to underside of structure above and shall be a minimum of one-hour fire rated.

3.1.1.2. Provide 3'-0" clear floor area in front of and behind data rack for access and maintenance. Room dimensions shall comply with Owner's *Data Room Configuration Standard.*

3.1.1.3. See MEP and Division 27 sections of this document for additional requirements.

3.1.2. Entrance Canopies: Design all canopies over doors to ensure there are no drip lines onto walkways leading to door. Preference is to pitch roof to either side of door.

3.1.3. Kitchens: where project includes a commercial kitchen, the Construction Documents shall denote the requirement that locations of equipment are to be permanently marked on floor per *NFPA 1 – Chapter 50 Commercial Cooking Equipment.*

3.1.4. Knox-Box: Construction Documents shall denote the requirement to provide a Knox-Box key box for the building. Contractor shall coordinate with local fire department to insure compliance with local standards.

3.1.5. Mechanical/Electrical Rooms: All buildings shall have separate mechanical, electrical, and Data rooms. These functions are not to be combined into one room.

3.1.5.1. Walls surrounding these rooms shall extend to underside of structure above and shall be a minimum of one-hour fire rated.

3.1.5.2. See MEP sections of this document for additional requirements.

3.1.6. Parapet Walls: Do not use on Oneida projects, unless approved by Senior Tribal Architect.

3.1.7. Site/Civil: Storm water management systems designed for project shall address water quality concerns in addition to water quantity management.

3.1.8. Toilet Rooms:

3.1.8.1. All multi-fixture toilet doors shall be designed to have the entrance doors swinging out of the room not into room. The out swinging doors limit the spread of bacteria by patrons who do not wash their hands after using the facilities. A patron can exit the facilities without touching the door hardware.

3.1.8.2. All restroom accessories (not in toilet stalls) shall comply with ADA requirements for protruding objects. Accessories protruding more than 4 inches shall be located in corners, alcoves, between other structural elements, or recessed in walls.

3.1.9. Tornado Shelter: All building shall have an area designated as a tornado shelter. The structure in the area of the shelter shall be reinforced to provide a higher level of protection. The shelter does not need to be an additional room not already in the program, using one of the programmed spaces is sufficient.

3.2. SPECIFICATION ELEMENTS *Revised: 02/20/12*

Equipment: where multiple pieces of the same equipment are provided, all pieces must be manufactured within one year of each other. Example: if two boilers are installed on project, manufacture date of each boiler must be within one year of each other.

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

00 11 00 Invitation to Bid *Revised: 11/18/13*

1. The Oneida Engineering Department shall make a determination of the bid process to be used for each project. The process can be invited bids or public bidding.

2. On projects where an invited bid process will be used, the list of invited bidders shall be derived from the *Oneida Engineering Department Master List of Contractors.*

3. On projects where a public bid process will be used, the Bid Advertisement shall be published in a minimum of the following publications:

    a. Kalihwisaks (Tribal newspaper) – Oneida Project Manager will coordinate submittal.

    b. Green Bay Press-Gazette – Consultant responsible for submittal. Consultant shall ensure the Tribe receives a proof of publication from the Green Bay Press-Gazette.

00 21 00 Instructions to Bidders *Revised: 12/17/15*

2.0 BID INVITATION/ADVERTISEMENT:

A. Bids received by owner at:
Engineering Department
N7332 Water Circle Place
Oneida, WI 54155

B. Bids will be opened privately if invited bid process used, and opened publicly for advertised bid process or if required by funding source.

3.0 BID DOCUMENTS

A. Bid Documents are **NOT** available at the office of the owner.

B. Bid Documents shall be sent to local plan rooms as follows (additional exchanges are at the Architect/Engineer's discretion):

American Indian Chamber of Commerce of Wisconsin – Plan Room 10809 W. Lincoln Ave. West Allis, WI 53227 414-604-2044 414-604-2070 Fax	Builders Exchange of Wisconsin, Inc. - Fox Valley Plan Room W2518 County Road JJ Appleton, WI 54913-9288 920-687-8782 920-687-8705 Fax http://bxwi.com/	

C. Bid Documents may also be made available at on-line websites.

4.0 SITE ASSESSMENT

A. A Prebid Conference shall be scheduled.

5.0 QUALIFICATIONS

A. Contractor shall submit an *AIA A305 Contractor's Qualification Statement* if specifically requested by Owner.

6.0 BID SUBMISSION

A. Submit three copies of bid.

B. Abstract summary of submitted bids will be made available to all bidders following bid opening.

7.0 BID ENCLOSURES / REQUIREMENTS

A. Bid Bond required.

B. Performance & Payment Bonds at owner's discretion, include cost on bid form.

C. See Supplementary Conditions for information regarding taxes.

00 22 00 Supplementary Instructions *Revised: 10/06/06*

1. Include a copy of the Oneida Engineering Department's *Document 00 22 01 - Indian Preference Vendors* in the Project Manual under this section and include listing of Certified Indian Owned Businesses following document.

00 31 00 Available Project Information *Revised: 10/06/06*

1. Include a copy of the Oneida Engineering Department's *Document 00 31 43 - Permit Fee Schedule* in the Project Manual under this section and include Oneida Zoning Department Permit Fee Schedule following document.

00 41 00 Bid Form *Revised: 02/20/12*

1. Performance & Payment Bonds at owner's discretion, include cost on bid form.

2. A subcontractors listing shall be included with bid.

3. Form shall list Contractor's name, address and telephone number, E-Mail address.

4. Within 24 hours of notification, apparent low-bidder will be required to submit the unit costs of products covered by GSA Schedule. Include Oneida Engineering Department's *Document 00 43 10 - Documentation of Special Pricing* in the Project Manual under this section. Architect shall complete the first two columns of form based upon materials selected for project.

00 52 00 Agreement *Revised: 05/05/17*

1. For Building Projects: The form of Agreement shall be *AIA Document A101, Standard Form of Agreement Between Owner and Contractor* and shall include the current *Oneida Nation's AIA Document A101, Modifications* amending the standard document.

2. For Civil Projects: The form of Agreement shall be *EJCDC C-520 Suggested Form of Agreement Between Owner and Contractor for Construction Contract (Stipulated Price)* and shall include the current *Oneida Nation's - Appendix A to: EJCDC C-520 Suggested Form of Agreement Between*

Owner and Contractor for Construction Contract (Stipulated Price) amending the standard document.

3. Other contract formats may be more appropriate for a particular project, confirm contract format with the Senior Tribal Architect.

00 71 00 General Conditions *Revised: 05/05/17*

1. For Building Projects: *AIA Document A201 General Conditions of the Contract for Construction* shall be the General Conditions between the Owner and Contractor.

2. For Civil Projects: *EJCDC Standard General Conditions of the Construction Contract* shall be the General Conditions between Owner and Contractor.

3. Other general conditions may be more appropriate for a particular project, confirm general condition format with the Senior Tribal Architect.

00 73 00 Supplementary Conditions *Revised: 05/05/17*

1. For Building Projects: Use the *Oneida Nation - AIA Supplementary Conditions* modifying AIA Document A201.

2. For Civil Projects: Use the *Oneida Nation - EJCDC Supplementary Conditions* modifying EJCDC C-700.

3. Include a copy of the Oneida Nation's *Indian Preference in Contracting Law (a.k.a Indian Preference Law)* in the Project Manual under this section.

4. Include the appropriate copy of the Oneida Engineering Department's *Document 00 73 43 Wage Rate Determination* in the Project Manual and include the appropriate wage rate determination. The county for Oneida projects will be Brown or Outagamie, verify project location. Wage rates will vary dependent upon specific project requirements:

   A. All projects with federal funding: use Davis-Bacon Wage determination and denote that rates apply to all workers.

   B. All other projects, Wage rates apply to workers hired from the Oneida Skills Bank, workers shall be paid according to the Wage Rate Determination established by the Indian Preference Office.

5. Security Requirements: Denote that Oneida Nation prohibits weapons on its property. Contractor will need to inform their employees and subcontractors. Contractor will also have to post signage prohibiting weapons on Oneida construction sites.

DIVISION 01 - GENERAL REQUIREMENTS

01 11 00 Summary of Work *Revised: 10/18/95*

1. Identify work by Owner, if any.

01 20 10 Special Product Purchasing Procedures *Revised: 10/06/06*

1. Include a copy of the Oneida Engineering Department's *Document 01 20 10 - Special Product Purchasing Procedures* in the Project Manual under this section.

01 23 00 Alternatives *Revised: 10/06/06*

1. Include alternates to allow flexibility in scope adjustments necessary to bring project into budget. There will be no requirement as to the order of the alternate listing or priority of their acceptance.

01 31 19 Project Meetings *Revised: 10/18/95*

1. Identify requirements for having construction meetings and meeting minutes.

01 35 63 Sustainability Certification Project Requirements *Revised: 01/17/14*

1. Include this Section and note the following: "It is a goal of the Oneida Nation to minimize the environmental impact of its building projects consistent with our cultural beliefs to respect nature and conserve natural resources. While we do not intend to pursue a LEED Certification Rating, LEED will be used as a benchmark for evaluating sustainable design features."

    A. Identify any specific requirements or documents that the contractor(s) will need to submit to verify sustainable design features.

01 58 00 Project Identification *Revised: 02/20/12*

1. Provide a temporary project sign with a layout complying with the Owner's *Temporary Project Sign Standard Layout*.

2. Project Identification - the project sign shall identify an after-hours emergency telephone number for both the general contractor and the owner.

01 74 19 Construction Waste Management and Disposal *Revised: 10/06/06*

1. Include requirements for waste management and recycling of project materials under this section. Identify forms required to verify quantities of materials.

    A. WasteCap Wisconsin has sample specifications and forms available for download on their website www.wastecapwi.org

01 78 00 Closeout Submittals *Revised: 12/17/15*

1. Operations and Maintenance manuals shall be provided to Owner.

    A. Owner preference is for manuals to be provided on a CD as a Portable Document File (PDF).

    B. If paper copies are provided:

1. Owner will require three (3) copies.
2. Binder edge must be labeled with:
    a. Project Title
    b. Oneida Project number
    c. Volume number (if multiple volumes)

2. Operations and Maintenance manuals shall include (at a minimum):

A. Subcontractor / Material Supplier Listing. Identify the company name, address, phone, contact name, e-mail address, and identification of scope of work provided by Section number.

B. Warranty Letter from General Contractor identifying the date of Substantial Completion.

C. Specification Sections, identify each specification section in which work was provided, identify the name of subcontractor, included relevant data of materials used and their maintenance requirements.

DIVISION 02 – EXISTING CONDITIONS

DIVISION 03 - CONCRETE

DIVISION 04 - MASONRY

04 05 00 Common Work Results for Masonry *Revised: 10/06/06*

1. Sills:

A. Brick sills are not acceptable (row-lock or other). Sill must be either stone material or metal. Material should not have a joint across width of opening, unless it is a wide opening.

2. Masonry Embedded Flashings:

A. The following flashing materials are NOT ACCEPTABLE and cannot be specified:
    1. PVC Flashing.
    2. Aluminum Flashing.

B. The following flashing materials are acceptable:
    1. Rubberized asphalt.
    2. Copper, stainless steel, etc.

C. Flashings shall be specified and detailed as:
    1. Continuous at corners.
    2. Having end dams at ends of flashing at all openings. End dams shall be detailed on Construction Documents.
    3. Extending flashing as follows:
        a. <u>Multi-Wythe Walls:</u> Extend through back-up wythe to 1 inch from inside face of wall. Turn flashing back over itself a minimum of 1/4 inch to form a water dam.
        b. <u>Single-Wythe Walls:</u> Extend flashing to 1 inch from inside face of wall. Turn flashing back over itself a minimum of 1/4 inch to form a water dam.

c. Masonry walls where covered on interior with another finish material: Extend flashing entirely through masonry. Turn flashing up a minimum of ½ inch on inside face of masonry to form a water dam.

4. Flashing shall have a drip edge where exiting the exterior face of wall. If rubberized asphalt flashing is used, stop flashing short of exterior face of wall and provide a stainless steel drip and adhere flashing to drip.
5. Flashing shall extend a minimum of 6 inches above the "Mortar Net".

3. Masonry Cavity Drainage, Weepholes, and Vents:

A. The following methods for creating weepholes are NOT ACCEPTABLE and cannot be specified:
   1. Rope wick (rope eventually fills with sand and water and turns to cement, preventing the wicking of moisture and does not allow air into cavity).
   2. Oiled rod (hole created by removed rod eventually fills with debris, preventing the wicking of moisture and does not allow air into cavity).
   3. Plastic tubes (tube eventually fills with debris, preventing the wicking of moisture and does not allow air into cavity).

B. The following method is acceptable for creating weepholes:
   1. UV resistant recycled polyester mesh inserted into open head joint.
   2. "Weep Vent" by Mortar Net or equal.

04 27 00 Multiple-Wythe Unit Masonry *Revised: 10/06/06*

1. Cavity Walls:

A. Wall shall have a 2 inch clear drainage cavity.
B. Walls shall contain a "Mortar Net" or other similar product at all thru-wall flashing locations: wall base, lintel, etc.
   1. Full height of cavity with "Cav-A-Clear" or other similar product is acceptable in lieu of "Mortar Net" at wall base and lintels.

DIVISION 05 - METALS

DIVISION 06 - WOOD AND PLASTIC

DIVISION 07 - THERMAL & MOISTURE PROTECTION

07 27 00 Air Barriers *Revised: 02/20/12*

1. Provide air barrier as required by Building Code.

07 50 00 Membrane Roofing *Revised: 10/06/06*

1. Preferred roofing material for Oneida projects is Built-Up Bituminous Roofing. Verify roofing material with Senior Tribal Architect on each project.

DIVISION 08 - OPENINGS

08 70 00 Hardware *Revised: 03/21/14*

1. Doors to receive an access control device (proximity card reader) shall have an electric strike and associated conduit, supplied and installed by the Contractor.

   A. The electric strike shall be 24 volt DC.
   B. Access control system will be by owner under a separate contract (see 28 13 00).

2. On projects for the Tribe's Gaming Division, all locksets shall be specified with a Best Access Systems interchangeable core to match Owner's keying standards.

08 80 00 Glazing *Revised: 02/20/12*

1. Exterior glazing shall have a shading coefficient of 0.45 or lower.

DIVISION 09 – FINISHES

09 06 00 Schedules for Finishes *Revised: 02/20/12*

1. Wood base is not permitted where ceramic tile floors are used.

DIVISION 10 - SPECIALTIES

10 28 00 Toilet, Bath, and Laundry Accessories *Revised: 03/23/05*

2. All of the following items are supplied by Owner, installed by Contractor:

   A. Toilet Tissue Holders
   B. Paper Towel Dispensers
   C. Soap Dispensers (mounting on mirrors is not permitted by our Custodial Dept.)

3. All of the following items are supplied by Owner (no installation required):

   A. Waste Receptacles

10 44 00 Fire Protection Specialties *Revised: 10/18/95*

1. Fire extinguishers are by Owner. Cabinets supplied and installed by Contractor.

DIVISION 11 - EQUIPMENT

DIVISION 12 - FURNISHINGS

DIVISION 13 - SPECIAL CONSTRUCTION

DIVISION 14 - CONVEYING EQUIPMENT

14 20 00 Elevators *Revised: 02/20/12*

1. The following equipment is NOT allowed and cannot be specified on Oneida Nation projects:

   A. Kone Elevators.

DIVISION 21 - FIRE SUPPRESSION

21 00 00 Fire Suppression *Revised: 01/17/14*

1. All newly constructed Oneida Nation building shall have full fire sprinkler system installed.

2. Construction Documents for this system shall identify code, industry, and/or manufacturers required/recommended maintenance clearances as hatched areas around units/equipment.

3. A Clean-Agent Fire-Extinguishing System shall be utilized for fire suppression in the following room types:

   A. Data Centers, Data Rooms (of any size)
   B. Large file/record rooms
   C. Electrical rooms in Gaming facilities

4. "Omega" brand, manufactured by Central Sprinkler Co., Fire Sprinkler Heads by are not allowed and cannot be specified on Oneida Nation projects.

5. Flexible piping used in system:

   A. Braided is acceptable
   B. Corrugated is NOT acceptable

6. System plans and specifications shall comply with the Owner's insurance carrier (FM Global) requirements.

7. Awarded Fire Suppression Contractor shall submit systems plans and specifications to the Owner (at same time as submitted for state plan review), for review by the Owner's Risk Management Department and insurance carrier (FM Global).

DIVISION 22 - PLUMBING

22 00 00 Plumbing *Revised: 1/22/16*

1. Construction Documents for this system shall identify code, industry, and/or manufacturers required/recommended maintenance clearances as hatched areas around units/equipment.

2. The following equipment is NOT allowed and cannot be specified on Oneida Nation projects:

   A. Aerco Water Heaters
   B. A.O. Smith Water Heaters
   C. ProFlo fixtures

3. Plumbing, On large toilet rooms, (greater than three water closets), provide a keyed hose bibb connection located under the vanity counter.

4. All toilet room fixtures shall be sensor operated. Sensors shall be electrically powered. If this requirement seems excessive for scope of building verify owner requirements with Owner's Project Manager.

5. Interior clean-outs on sanitary sewers shall be spaced a maximum of 75 feet on center. Clean-out shall be sized to pipe downstream. Prefer wall to floor clean-outs.

6. Cross connection control shall be provided at or near all mop basins.

7. Cross Connection devices shall comply with the Oneida Plumbing Department standard.

8. If project includes coolers and freezers, coordinate providing heat recovery water heater to use condenser wasted heat with HVAC design. Example manufacturer is “Therma-Stor”.

9. Provide floor drains in all toilet rooms. Verify if self-priming traps are required on project.

10. All water closets shall be installed with a seat height between 17 to 19 inches above floor. This requirement applies to all water closets, not just accessible water closets (exception allowed for fixtures serving child care areas).

11. Pipe size standards:

    A. Serving each water closet – 4” minimum diameter.
    B. Serving each urinal – 3” minimum diameter.
    C. Serving beverage (soda) dispenser – 4” minimum diameter receptor.

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

23 00 00 HVAC *Revised: 12/17/15*

1. Construction Documents for this system shall identify code, industry, and/or manufacturers required/recommended maintenance clearances as hatched areas around units/equipment.

2. The following equipment is NOT allowed and cannot be specified on Oneida Nation projects:

   A. Fulton Pulse Boilers

3. HVAC system shall have a two year warranty.

4. HVAC system redundancy – system shall achieve heating and cooling loads by multiple units (i.e. boiler, chiller, compressor, etc.). Unit size shall provide approximately 50% capability to meet load requirements. Verify with Project Manager if any areas require 100% redundancy.

5. HVAC design shall not allow zoning of ventilation systems to permit service by a single unit for a majority of a given space or facility. If necessary or desired to use large, multi-zone systems, then system shall have multiple fan configurations.

6. HVAC Air Handling Units - Adjustable sheaves are NOT allowed on equipment as part of final installation. Adjustable sheaves may be used temporarily until system is balanced, but shall be replaced with fixed sheaves thereafter.

7. Electric Heaters are not acceptable on Oneida projects and shall not be designed into a heating system. The Engineering Department may approve use of electric heaters under certain circumstances, contact the Project Manager if electric heaters seem to be a viable option on a particular project.

8. Fin tube baseboard heating shall be installed with a shut-off valve at each end of fin pipe in each room to allow removal of section. Each section shall be installed with a drain valve.

9. The following Design Temperatures shall be used on Oneida projects:

		Code:	**Preferred / Design:**
Heating (min.)	Outside	-15 degrees F dry bulb	- 15 Degrees F Dry Bulb
	Inside	67 degrees F	70 degrees F
Cooling (max.)	Outside	87 degrees F	90 degrees F
	Inside	78 degrees F	75 degrees F

10. Refrigerants, HCFC (R-22) are not allowed on Oneida projects because of future EPA phase out and environmental reasons. Alternative refrigerants must be used in lieu of R-22.

11. Design shall not place air intakes near areas where idling vehicles will be parked. Need to avoid drawing vehicle exhaust into building HVAC system.

12. Condensers serving coolers and freezer shall be remotely located, verify maximum run with manufacturer.

    A. Option: provide heat recovery water heater to use condenser wasted heat. Example manufacturer is “Therma-Stor”.

13. Data Rooms shall be provided with an independent HVAC system to maintain an ambient temperature range of 68° to 75°F and an ambient relative humidity level between 45% and 55%.

14. All HVAC equipment shall be permanently labeled to match the HVAC plans.

15. Construction Documents for HVAC system shall identify responsible discipline for providing electrical disconnect switches on HVAC equipment, HVAC or Electrical contractor. Responsible party shall be noted on both HVAC and Electrical Construction Documents.

DIVISION 25 - INTEGRATED AUTOMATION

25 00 00 Integrated Automation *Revised: 11/18/13*

1. Oneida standard manufacturer for Direct Digital Controls is Schneider Electric – SmartStruxure Solution. Controls will be by Owner's standard vendor under a separate contract, unless noted otherwise in project requirements or contract. This section shall denote that HVAC contractor will coordinate with standard vendor.

2. HVAC Designer shall identify a Sequence of Operation so that Owner's control contractor can create a control point listing. HVAC Designer shall coordinate with Oneida DPW – Facilities to coordinate system control issues.

3. Sensor/Thermostats will be supplied and installed by Owner under a separate contract, unless noted otherwise in project requirements or contract. Wall box and conduit for sensor is to be supplied and installed by Electrical Contractor.

DIVISION 26 - ELECTRICAL

26 05 00 Common Work Results for Electrical Systems *Revised: 12/17/15*

1. Construction Documents for this system shall identify code, industry, and/or manufacturers required/recommended maintenance clearances as hatched areas around units/equipment.

2. HVAC Sensor/Thermostats will be supplied and installed by Owner under a separate contract. Wall box and conduit for sensor is to be supplied and installed by Electrical Contractor, note this requirement on electrical drawings.

3. Door Access Controls will be supplied and installed by Owner under a separate contract. Wall box and conduit for electric strike is to be supplied and installed by Electrical Contractor, note this requirement on electrical drawings.

4. Electrical panels/equipment shall not be installed on walls behind doors. Installation at these locations poses a safety hazard for maintenance personnel. No panels/equipment shall be installed within the area defined by ADA for Maneuvering Clearances at doors.

5. Aluminum is not allowed for wire, conductors, bus bars, etc. and cannot be specified on Oneida Nation projects.

6. 10 AWG conductors and smaller are to be stranded not solid.

7. On projects for the Tribe's Gaming Division, provide power receptacles in the toilet rooms to allow drying fans to be used. Coordinate locations with Gaming Facilities Director.

8. Construction Documents for Electrical shall identify responsible discipline for providing electrical disconnect switches for HVAC equipment, HVAC or Electrical contractor. Responsible party shall be noted on both HVAC and Electrical Construction Documents.

9. Conductors for branch circuits shall be sized to prevent a voltage drop exceeding 3% at the farthest outlet of power, heating, lighting and motor loads or combination of such loads.

10. The maximum total voltage drop on both feeds and branch circuits to the farthest outlet shall not exceed 5%.

11. The ground fault protection system shall be performance tested when first installed on site. A written record of the test shall be available to the Authority Having Jurisdiction (AHJ).

12. The ungrounded and grounded circuit conductors of each multi wire branch circuit shall be grouped with cable ties, tape, or similar means within the panel board or other point of origination.

13. A grounding conductor shall be pulled in each raceway. The raceway shall not be used as the grounding means.

14. Direct buried cables or conduits shall have a warning ribbon buried 12 inches above the cables or conduits.

15. Emergency circuits and normal circuits shall not share the same raceways.

16. All service conductors, motor conductors, and feeder conductors larger than # 4 shall have the insulation tested and documented with the date, time, and results and signed by the electrician conducting the test.

17. Raceways, boxes, and conduit bodies shall be of sufficient size to provide free space for the conductors.

26 05 26 Grounding and Bonding for Electrical Systems *Revised: 12/17/15*

1. Building and structures supplied by feeder(s) or branch circuit(s) shall comply with article 250.32 of the NEC.

2. All grounding electrodes as described in the NEC article 250.52(A)(1) through (A)(7) that are present at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist one or more of the grounding electrodes specified in NEC article 250.52(A)(4) through (A)(8) shall be used.

3. A metal underground water pipe shall be supplemented by an additional electrode of the types specified in the NEC article 250.52(A)(2) through (A)(8).

4. An intersystem bonding termination for connecting intersystem bonding conductors required for other systems shall be provided externally to enclosures at the service equipment or the metering equipment enclosure and at the disconnecting means for any additional buildings or structures.

5. Bonding of the piping system and the exposed structural steel shall comply with the NEC article 250.104.

6. Metal raceways shall not be used as equipment grounding conductors.

26 05 33 Raceway and Boxes for Electrical Systems *Revised: 12/17/15*

1. Junction boxes are to be a minimum of 2 1/8" deep, unless limited by stud cavity depth.

2. Boxes shall be independently supported.

3. EMT, IMC, AND RMC conduits shall be supported at intervals not exceeding seven (7) feet.

4. Couplings and connecters shall be steel set screw type (exception where the NEC prohibits this type of raceway fitting).

5. EMT, IMC, and RMC supporting straps shall be of the steel type.

6. MC cable shall not be used for service entrance, feeders or branch circuit wiring (exception when fished between access points through concealed spaces).

7. Where all conduits penetrate fire rated walls and ceilings the openings shall be fire stopped to maintain the rating of the walls and ceilings.

8. Emergency system box covers, fitting covers and enclosures shall be identified as emergency system components.

9. Conduit originating at panels, switch gear and load centers shall not be sized less than ¾ in.

26 05 53 Identification for Electrical Systems *Revised: 12/17/15*

1. Wiring colors shall be per standard NEC Code.

2. The ungrounded conductors of a 1 phase 120/240v and 3 phase 120/208v systems shall be colored coded black, red, and blue.

3. The ungrounded conductors of a 3 phase 277/480v system shall be color coded brown, orange, yellow.

4. Switch gear, motor control centers, and panels shall have name tag information labels on the equipment such as the voltage, amperage, phase, and location of source.

5. Disconnects shall have name tag information labels on them such as voltage, amperage of the overcurrent protection, phase and location of the source, and purpose of the disconnect if not evident.

6. Emergency system equipment such as switch gear, panels, generators and transfer switches shall be permanently marked so they will be identified as emergency equipment.

26 05 73 Overcurrent Protective Device Coordination Study *Revised: 12/17/15*

1. Electrical system coordination is required for short circuit protection where an orderly shut- down is needed to minimize the hazards to personnel and equipment.

26 06 20 Schedules for Electrical Distribution *Revised: 12/17/15*

1. Switch gear and panels shall have a circuit directory or circuit identification.

2. Feeders and branch circuits shall be identified with the panel label and circuit number at the source and the outlet(s) or equipment.

3. All conductors at termination and splice points shall be labeled with the panel and circuit number. Labels shall not be hand written.

26 24 00 Switchboards and Panelboards *Revised: 12/17/15*

1. Commercial grade equipment shall be used. Preferred manufacturer is Square D.

2. Aluminum is not allowed for bus bars and cannot be specified on Oneida Nation projects.

3. On projects for the Tribe’s Gaming Division, provide dedicated service panel(s) within observation and/or security areas.

4. Ground- fault protection of equipment shall be provided for solidly grounded wye electrical services of more than 150 volts to ground but not exceeding 600 volts phase to phase for each service disconnect rated 1000 amps or more.

5. Available fault-current for the service equipment other than dwelling units shall be legibly marked in the field with the maximum available fault current. The field markings shall include the date the fault current calculation was performed and be sufficient durability to with stand the environment involved.

6. All working space for electrical equipment per NEC article 110.26 shall be maintained.

7. Service equipment rated 1200 amps or more shall have disconnecting means remote from the service equipment. This shall be discussed and determined if feasible per project.

26 43 00 Transient Voltage Suppression *Revised: 12/17/15*

1. TVSS protection shall be installed remote from the electrical equipment it is protecting.

26 51 00 Interior Lighting *Revised: 12/17/15*

1. All lighting fixtures requiring ballast, shall have electronic ballasts specified.

   A. Owner's preferred ballast manufacturers are: Advance and Osram Sylvania.

2. 2 x 4 lay-in fixtures shall have split ballast to allow multiple lighting levels.

3. Dimmable ballasts are not allowed.

4. Suggested light fixtures shall be reviewed by Oneida DPW – Electrical Department.

5. Halogen lamps are not allowed in light fixtures.

6. 2 x 2 lay-in fluorescent fixtures are not allowed.

7. Light Switching:

   A. Provide wall or ceiling mount occupancy sensors at the following rooms (review specific locations with project team):
      1. Offices
      2. Small storage rooms
      3. Conference rooms
      4. Toilet rooms
   B. Occupancy sensors are NOT to be installed in Mechanical and electrical rooms.

26 52 00 Emergency Lighting *Revised: 12/17/15*

1. Mechanical rooms and electrical rooms shall have at least one battery backup emergency fixture. The emergency fixture shall share the same circuit as the normal lighting in these rooms.

2. Commercial building exits shall have emergency outdoor egress lights. Exception : where emergency outdoor egress lights at exits are not required by SPS 316 and NFPA 70.

26 53 00 Exit Signs *Revised: 12/17/15*

1. Exit lights shall be L.E.D.

26 56 00 Exterior Lighting *Revised: 12/17/15*

1. Lamps - reviewed options with Oneida DPW – Electrical Department.

2. Photo cell control in groups is acceptable.

3. Review requirements for receptacles at poles with project team.

4. Commercial building outdoor lighting shall be controlled by the Building Automation Direct Digital Control System (BAS DDC System).

DIVISION 27 - COMMUNICATIONS

27 00 00 Communications *Revised: 12/17/15*

1. Construction Documents shall require the Electrical Contractor to provide conduit and box roughed out to above ceiling for Owner voice and data outlets. Provide at all offices and other rooms as designated by Owner during design phases.

2. All rooms to receive voice and data outlets, shall have a minimum of two (2) voice and data outlets located so as to provide the most flexible arrangement of furniture in each room.

3. System design shall be compliant with the current edition of the *Oneida Casino Network Standards*.

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

28 13 00 Access Control *Revised: 11/18/13*

1. Oneida standard manufacturer for door access controls is Schneider Electric – SmartStruxure Solution. Controls will be by Owner's standard vendor under a separate contract, unless noted otherwise in project requirements or contract. This section shall denote that Electrical contractor will coordinate with standard vendor.

2. Construction Documents shall require the Electrical Contractor to provide conduit and box roughed out to above ceiling for Owner Access Control system.

28 16 00 Intrusion Detection *Revised: 10/12/06*

1. Owner will be incorporating a security system into project. System and monitoring will be by Owner's standard vendor under a separate contract. Coordinate equipment utility requirements with standard vendor.

28 31 00 Fire Detection and Alarm *Revised: 11/18/13*

1. Owner requires complete fire alarm system installation. Manufacturer: UTC Fire and Security.

   A. If this requirement seems excessive for scope of building verify owner requirements with Owner's Project Manager.

2. System plans and specifications shall comply with the Owner's insurance carrier (FM Global) requirements.

3. Awarded Fire Alarm Contractor shall submit systems plans and specifications to the Owner (at same time as submitted for state plan review), for review by the Owner's Risk Management Department and insurance carrier (FM Global).

4. Fire alarm system monitoring will be by Owner's standard vendor, unless noted otherwise in project requirements or contract. Coordinate equipment installation with standard vendor.

DIVISION 31 - EARTHWORK

31 09 00 Geotechnical Instrumentation and Monitoring of Earthwork *Revised: 10/06/06*

1. The following wording shall be added to all appropriate site preparation and earthwork sections:

   A. "An Oneida Archaeological Site Monitor is required to be on the project site during all ground breaking and earth moving activities. The Contractor is to give the Oneida Project Manager adequate notification as to when these activities are scheduled and the Oneida Project Manager will make arrangements to have a monitor available during these activities. Particular care is to be given when ground breaking begins and at any time during the earth moving process. If at any time during the process artifacts or human remains are uncovered/discovered, construction is to cease immediately and the Oneida Project Manager is to be contacted. The Oneida Project Manager will in turn contact the Oneida Tribal Historic Preservation Office for proper handling and care of these finds -- BEFORE REMOVAL FROM THE EARTH!"

31 10 00 Site Clearing *Revised: 05/05/17*

1. Clearing and Grubbing Construction Documents shall denote:

   A. Contractor will be required to obtain a Tree Cutting Permit from the Oneida Conservation Department.
   B. Removed trees (5" caliper and larger) are the property of the Oneida Nation and shall be returned to the Tribe.
   C. Limb and cut trees into 8'4" lengths and deliver to Oneida Conservation Department.
   D. Properly dispose of stumps, brush, branches and other debris off site.

   E. Oneida Conservation Department – Compost Yard
   N8085 County Road U
   Oneida, WI 54155
   920-869-1450

2. Earthwork sections shall denote that excess top soil and sub-soil is the property of the Owner and shall be delivered to a site determined by Owner.

   A. Identify the address of the owner's property where material will be stock piled with Owner's Project Manager, and include in Construction Documents.

31 20 00 Earth Moving *Revised: 12/17/15*

1. Civil Engineer shall determine if Oneida has stock piled soils available to meet the fill requirements of the project. Coordinate with the Oneida Material Team to confirm available soil types and quantities. If stockpiled material meets the project needs, earthwork sections shall denote location and use of material. No imported material will be allowed if sufficient stockpile material is available. Identify the address of the owner's property where material will be loaded for delivery to project site.

   A. Material Team contact: Mary Jo Nash, 920-869-1690 ext. 6612, mnash@oneidanation.org

2. Construction Documents must denote the requirements for truck routes to and from the stock pile location. Routes shall maximize utilization of use state highway, followed by county highways, then municipal roads. Routes over municipal roads shall be minimized to the greatest extent possible.

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 10 00 Bases, Ballasts, and Paving *Revised: 02/20/12*

1. Parking, in addition to the required amount of handicap parking spaces provide "Elder Parking" spaces in a quantity to match 50% of the quantity of handicap spaces, but no less than two.

   A. Size of spaces shall be standard parking stall.

32 80 00 Irrigation *Revised: 10/06/06*

1. Irrigation systems are not allowed on Oneida projects. Landscaping is NOT to be irrigated.

32 90 00 Planting *Revised: 10/06/06*

1. To the maximum extent possible, plant materials should be indigenous to Wisconsin, and drought tolerant.

2. At sloped roof drip lines, provide ground cover to protect exterior building wall from splash stains.

DIVISION 33 - UTILITIES

DIVISION 34 - TRANSPORTATION

DIVISION 35 - WATERWAY AND MARINE CONSTRUCTION

APPENDIX A

REFERENCED DOCUMENTS LISTING: *Revised: 05/05/17*

A.1 *Oneida Engineering Department Master List of Contractors*

A.2 *Oneida Nation's AIA Document A101, Modifications*

A.3 *Oneida Nation's - Appendix A to: EJCDC C-520 Suggested Form of Agreement Between Owner and Contractor for Construction Contract (Stipulated Price)*

A.4 *Oneida Nation's Indian Preference in Contracting Law (a.k.a Indian Preference Law)*

A.5 *Oneida Nation - AIA Supplementary Conditions*

A.6 *Oneida Nation - EJCDC Supplementary Conditions*

A.7 *Oneida Engineering Department's Document 00 22 01 - Indian Preference Vendors*

A.8 *Oneida Engineering Department's Document 00 31 43 - Permit Fee Schedule*

A.9 *Oneida Engineering Department's Document 00 43 10 - Documentation of Special Pricing*

A.10 *Oneida Engineering Department's Document 00 73 43 Wage Rate Determination*

A.11 *Oneida Engineering Department's Document 01 20 10 - Special Product Purchasing Procedures*

A.12 *Oneida Nation - Temporary Project Sign Standard Layout*

A.13 *Oneida Nation – Data Room Configuration Standard*

A.14 *Oneida Casino Network Standards*