BEAVERTON SCHOOL DISTRICT

BSD Technical Standard
Division 11: Equipment

1. PURPOSE

1.1. This is the Beaverton School District (BSD) Technical Standard for Equipment. This document, in coordination with BSD's Educational Specifications and Technical Standards, communicates fundamental policies, procedures, standards and expectations for consultant services. This Division 11 outlines the minimum acceptable standards for products, materials, systems and documentation used in all District facility improvements. The Technical Standards follow CSI MasterFormat. Under no circumstances are the BSD Technical Standards to be used as unedited project specifications.

2. GENERAL

2.1. PROJECT RECORD DOCUMENTATION

2.1.1. In addition to Contract, Division 0 and Division 1 Technical Standards requirements, provide additional documentation as listed in individual sections.

2.2. DESIGN DOCUMENTS

2.2.1. The Project Design Team shall provide to the BSD, as part of all Design Document Submittals, a narrative with detailed descriptions of system features, functionality, limitations, design assumptions, and parameters. The narrative shall be provided as a "deliverable" with the Schematic Design and will be updated with each subsequent design delivery including Design Development (DD), and Construction Document (CD) phases. The narrative shall also be detailed enough to provide necessary and beneficial information to future Project Design Teams and be written in a manner that is informative and useful to building operations personnel.

2.2.2. Drawings shall contain all equipment schedules. As-built drawings shall include valve and pipe schedules for food service equipment.

2.3. CLOSEOUT

2.3.1. Project Record Documentation

2.3.1.1. Architect to provide PDFs of kitchen and kiosk plans showing equipment layouts and locations to Nutrition Services prior to occupancy for internal operational use. Coordinate with Facilities Project Manager for actual drawings required.

2.3.2. Training

2.3.2.1. Training shall be provided for Nutrition Services, maintenance staff, and building personnel. Additional specialized training shall be required for any equipment making use of materials or technology that is new to the District (e.g., equipment not already being operated and maintained by District staff). A determination of specialized training

requirements shall be finalized with BSD staff during the 80% CD review, or prior to GMP, whichever comes first.

2.3.2.2. Operational and Safety - Training will be attended by Nutrition Services, maintenance staff, and building personnel. Provide training that emphasizes operational instructions, daily maintenance requirements, cleaning, and safety procedures. Training shall cover the meaning of gauge readings, digital readouts, and alarms noting operational ranges and safety concerns.

2.3.2.3. Maintenance - Training shall provide a minimum of the following:

2.3.2.3.1. Review of complete O&M manuals, including but not limited to, programming and setup of any controllers, required maintenance, and troubleshooting, and shall include contact names and phone numbers for factory support.

2.3.2.3.2. Provide to BSD, three copies of the factory service manual for each unique piece of equipment along with any software tools or specialized test equipment required for routine service, or field maintenance of the equipment. This requirement may be modified for equipment already in use by the District.

2.3.2.4. Specialized - When specialized training is required, provide on-site or off-site service training on new equipment prior to project closeout.

3. VEHICLE AND PEDESTRIAN EQUIPMENT

3.1. LOADING DOCK

3.1.1. Dock height shall be 42” with a ramp adjacent for hand truck deliveries.

4. FOODSERVICE EQUIPMENT

4.1. DESIGN

4.1.1. The Project Design Team shall include the Architect and Kitchen Designer who will coordinate all kitchen designs, equipment layouts, and specifications with the Facilities Project Manager (PM), the Nutrition Services Administrator, or designee, and the District Maintenance Department for review and approval.

4.1.2. Designs are encouraged that allow for future increases in participation without requiring physical expansion of the kitchen/cafeteria area by providing the ability to change from a single serving line to a double loaded U-shaped serving line.

4.1.3. Trip hazards should be avoided and non-slip flooring products should be used in all kitchen areas. Kitchen, receiving doors, and serving area shall be located on the same level, ground floor if possible. Delivery traffic and trash removal should never enter or cross the food preparation areas.

4.1.4. The kitchen/cafeteria design should be in compliance with all applicable state and local building codes and health codes, as well as be in compliance with Americans with Disabilities Act (ADA) guidelines. Consult with the BSD Representative regarding BSD’s Integrated Pest Management (IPM) design considerations.

4.1.5. Designs should comply with all state and federal requirements for child nutrition programs as they relate to the construction of facilities including kitchens and cafeterias.

4.2. HEALTH INSPECTIONS

4.2.1. Health Department inspections must occur prior to the final plumbing inspection and sign off. Contractor shall obtain pre-opening requirements from the appropriate inspection agency Washington County Health Department) early in the project to determine items that need to be addressed.

4.2.2. Prior to health inspection, Contractor shall obtain appropriate signage for all sinks from Health Inspection Agency (hand wash sinks, food prep only).

4.2.3. Prior to substantial completion, or a minimum of one week before the first day of meal service (whichever is earlier), the Contractor shall schedule a pre-opening health inspection.

4.3. ENERGY USE

4.3.1. All mechanical systems shall meet and/or exceed current Oregon Energy Code. Design goals should provide building energy use that would allow easy qualification as an Energy Star rated building. Fixtures that are chosen on the basis of energy saving should provide a 10-year or less payback with anticipated maintenance costs included.

4.4. FOODSERVICE STORAGE EQUIPMENT

4.4.1. General

4.4.1.1. Provide adequate storage capacity for cold and dry goods, as well as equipment storage in all kitchen designs. All storage areas and shelving should be designed to minimize the requirement for overhead lifting and minimize the need for picking up heavy objects from floor level.

4.4.2. Cold Storage

4.4.2.1. Kitchen electrical service shall be sized to support future expansion (10-15% capacity) to include additional free-standing reach-in coolers and/or freezers.

4.4.2.2. Typical kitchens shall be equipped with the minimum as follows:

4.4.2.2.1. 1 walk-in cooler

4.4.2.2.2. 1 walk-in freezer

4.4.2.2.3. 1, 2-door, free-standing reach-in cooler

4.4.2.2.4. 1, 16-crate milk cooler located in the serving area, with space for an optional 8-crate milk cooler included in the design

4.4.2.3. Size, model, and number of milk coolers are based on the number of lunches served. If greater than 400 lunches are served daily, two 16-crate milk coolers are required. Separate

electrical receptacles shall be provided for separate milk cooler. HVAC shall be sized to handle the additional heat load.

4.4.2.4. Walk-in freezers and walk-in coolers shall be designed with flush floors requiring no ramps or transitions to enter or exit. Provide non-slip flooring. Ensure that walk-in finished floor is no lower than kitchen finished floor.

4.4.2.5. Threshold plate shall be of sufficient thickness so that it will not be damaged or bend under loads from product delivery equipment. Minimum size requirements are approximately 100 SF.

4.4.2.6. Subfloor insulation and rat slab are required for all walk-ins. Wall and ceiling insulation, R-32 minimum, is required for walk-in boxes. Thermal stopping is required for all penetrations of the box.

4.4.2.7. Electrical wiring methods and components used within walk-in freezers (lighting, door/frame heaters, switches, thermostats, etc.) should be suitable for wet locations and temperatures below freezing.

4.4.3. Equipment Storage

4.4.3.1. Storage shall be provided for mobile kitchen carts, racks, point of sale (POS) carts, etc., in kitchen and/or dry goods storage room. The space to store condiment bars and other equipment may be provided in the kitchen, but it must not obstruct or interfere with access to emergency egress paths. Kitchen Designer shall be responsible for providing, to the Architect, the requirements needed for adequate space for equipment storage.

4.5. FOOD PREPARATION EQUIPMENT

4.5.1. See List of Brand Name Products as approved via School Board Resolution 14-409 in accordance with ORS 279C.345.

4.5.2. When proposed, alternate kitchen equipment must have a proven record of reliable service, be easy to maintain and operate, and be approved by the NS Administrator or designee. Natural Gas is the preferred fuel for water heating, large cooking equipment, or appliances.

4.5.3. Kitchen flooring, surfaces, and ceilings shall be designed to create a safe, healthy, and sanitary work environment. Materials and surfaces must be moisture-, mold-, and humidity-resistant, closed cell, non-porous, and food service rated products that can be easily cleaned. Seams shall be avoided. Food service rated sealers and coatings are required.

4.5.4. Non-slip flooring products should be used in all kitchen areas.

4.5.5. Kitchen and food prep area walls shall be constructed of fiberglass reinforced plastic (FRP) panels manufactured by Kemlite, or equal, over water and mold-resistant drywall such as greenboard or DensGlass. All seams and joints shall be sealed with a water and mold-resistant compound.

4.5.6. Walls in ware wash areas shall have 14-gauge, food service rated, stainless steel panels over water and mold-resistant drywall such as greenboard or DensGlass. FRP and stainless steel panels shall extend from floor to a height of 6’-0”. Surfaces above 6’-0” shall be painted with epoxy paint.

4.5.7. T-grid ceiling with moisture resistant drop-in panels shall be used, unless “hard-lid” is required by code. Restrooms, custodial, and ware washing areas, when required by code, have hard-lid with epoxy paint.

4.5.8. Exhaust fan grills shall be constructed of stainless steel or other corrosion resistant material.

4.5.9. All electrical branch circuits shall be in raceway systems that allow conductor replacement or expansion. MC cable shall not be used for any installation within the kitchen environment.

4.6. FOOD DELIVERY

4.6.1. Service Entry

4.6.1.1. For safety reasons, and to provide the maximum flexibility in scheduling of deliveries, the service entry should not be shared with bus traffic or parent/student drop off lane. Provide entry to the service yard for kitchen deliveries and trash pick-up separate from bus traffic, staff parking, and parent/student drop off.

4.6.1.2. Service yard shall be designed to allow easy access by large delivery vehicles and waste disposal trucks.

4.6.2. Receiving Doors

4.6.2.1. Kitchen receiving and storage areas (both cold and dry storage) shall be designed so that storage is located in close proximity to the receiving doors. Deliveries should not cross food preparation areas or interfere with kitchen work traffic pattern.

4.6.2.2. Receiving dock, kitchen, and storage areas shall be located on the same level of the building and accessible without ramps, steps, or transitions in elevation. Receiving doors shall be located adjacent to the dock and service area. Exterior entry shall be steel framed with steel doors. Preferred design is for 6’-0” x 7’-0” double door with inactive leaf and uneven sized leaves (3’-6” active leaf, 2’-6” inactive leaf).

4.6.2.3. Architectural design should ensure that the kitchen is not the main route for deliveries into the rest of the school, or for removal of trash from areas other than the kitchen.

4.6.3. Doorbells

4.6.3.1. Provide a hardwired doorbell at receiving door that rings in the kitchen. The doorbell ring should be unique for the kitchen, ensuring that it is easily recognized as a kitchen delivery. Decibel level must be loud enough to be heard over fans, dishwasher, ovens, etc. (< 100, 85 -90 decibels).

4.7. FOOD COOKING EQUIPMENT

4.7.1.Double-stack Ovens

4.7.1.1. Double-stack Combi (steam/dry air) oven on the bottom and a convection (dry air) oven on bottom, each with separate electrical feeder and disconnect, shall be provided in all kitchens.

4.7.1.2. Elementary, middle, and high schools with higher student participation should be designed for two or more sets of ovens.

4.7.1.3. Electric ovens may be used in remodels when the kitchen does not have gas service. The Combi ovens require a water connection and floor drain.

4.7.2.Jacketed Kettles

4.7.2.1. One tilting, 20-quart, jacketed kettle shall be provided in each kitchen. The kettles shall be located under the exhaust hood and heated with natural gas. In remodels, electric is acceptable, if natural gas service is not provided to the kitchen.

4.7.2.2. Options include the following: lid with lid holder, floor stand, drain, and swing arm faucet with cold water service only to facilitate filling and draining of the kettle.

4.7.3.Cooktops

4.7.3.1. One two-burner, smooth surface, electric cooktop shall be provided in each kitchen. Cooktops require flanged feet with the legs bolted to the floor to prevent tipping.

4.7.4.Exhaust Hoods

4.7.4.1. A fire protection system shall be provided at all cooking hoods with equipment below that has the potential of producing grease laden air or steam. Oven exhaust hoods shall be sized to include an Ansul Fire Suppression System.

4.7.4.2. Controls for oven exhaust hoods shall be intertied with HVAC Controls System.

4.7.4.3. Dishwasher exhaust hoods shall be intertied to operate when the dishwasher and/or natural gas fired dishwasher water temperature booster operates. The exhaust hood shall continue to run five minutes after the dishwasher is turned off to completely evacuate steam.

4.8. FOOD DISPENSING EQUIPMENT

4.8.1.Service Line Equipment

4.8.1.1. The service line(s) for an elementary or middle school usually consists of two to six stainless steel mobile units with plastic laminate covered bases, manufactured by Colorpoint or equivalent. The number of units used will be determined by the scope of work at each individual site.

4.8.1.2. Each line shall utilize, at a minimum:

4.8.1.2.1. One mobile unit with hot wells (for elementary schools, dry – no drains, and for middle and high schools, wet or dry as determined by Nutrition Services) and sneeze guard, undershelf, and drawer(s)

4.8.1.2.2. One mobile unit with a flat top, undershelf, and drawer(s)

4.8.1.3. Schools serving larger numbers of students in fewer lunch periods may require additional space and mobile units. The current model used is a U-shaped design similar to that at McKinley Elementary School (ES) or Stoller Middle School (MS).

4.8.2.Stations

4.8.2.1. High schools use a food court concept with different serving stations or "kiosks" stationed at various points in the serving area/cafeteria. Each kiosk will require mobile units similar to those described above. However, the type of mobile units used at each kiosk will depend on what menu items will be served. Aloha High School (HS), Beaverton HS, and Southridge HS are examples of this kiosk concept; however, they feature built-in cabinetry instead of the preferred mobile units.

4.8.2.2. Salad Bars - The salad bars for elementary schools (ES) and middle schools (MS) will consist of two 5' (ES) or two 6' (MS) mobile salad bars with sneeze guards, trays rails, and end tables. Height of legs will be determined by site. Elementary schools require child height legs. Middle schools require regular (tall) legs. Schools serving larger numbers of students, or multiple grade levels (K-8), may require salad bar units with both regular and short leg heights.

4.8.2.3. Condiment Bars - The condiment bar for schools will consist of one 6' condiment bar with tray rails and end tables. Height of legs will be determined by site. Elementary schools require child height legs.

4.8.2.4. Hot Cabinets - A minimum of two hot cabinets are required in each kitchen, dependent on the size of the schools and expected participation.

4.8.2.5. Point of Sale (POS) - Provide data and electric at each POS. Point of Sale system shall be provided by Nutrition Services. A cart for each POS shall be provided, see specifications on equipment list.

4.8.2.6. Crowd Control - A minimum of eight crowd control stanchions are required. The total number of stanchions will be determined by the design.

4.8.2.7. Floor Drops and Receptacles (Data and Electric) - Limit the use of floor boxes to point of sale locations only. All floor mounted convenience receptacles and devices shall be water-resistant. Vertically mounted (perpendicular to the floor) receptacles and devices are preferred.

4.8.3.Ice Machines

4.8.3.1. The BSD requires drainable ice machines for all locations specified in the Educational Specifications. Make lockable, if accessible to students. Drainless ice makers are not acceptable. See also Division 22.

4.9. FOODSERVICE CLEANING AND DISPOSAL EQUIPMENT

4.9.1.Sinks

4.9.1.1. Handwashing Sinks - Per Washington County Health Code, handwashing sinks shall be completely separate from culinary food prep sinks. Provide a minimum of two handwashing sinks, one located near primary food prep area(s), and the other located in the dishwashing

room. Handwashing sinks shall be provided with 4” paddle handles. If automatic handwash stations are considered, contact BSD Representative for approval.

4.9.1.2. Culinary Sinks - One three-compartment deep sink is required to allow for three-step wash procedure with indirect drains with air-gap as required by code.

4.9.1.3. Garbage Disposals - Shall be provided in dishwashing area and culinary sinks as allowed by code.

4.9.2. Work Tables

4.9.2.1. Construct of 14-gauge, food service grade, stainless steel. Provide manual can opener (Edlund) bolted to the table. Tables should have under and upper shelves and as many drawers as possible.

4.9.3. Dishwashers

4.9.3.1. Residential Dishwashers - ADA height compliant residential dishwashers shall be used for staff lunch room and other specialized programs. Residential dishwashers for specialized programs shall have high temperature wash option and be supplied with 125°F minimum water temperature.

4.9.3.2. Kitchen Dishwashers - Design and plumbed for high temperature, single tank, conveyor machines. Maximum rated water use shall not exceed 128 gallons-per-hour during continuous use. Preferred model: Hobart CL44e with Opti-rinse.

4.9.3.3. Provide counter space adequate to accommodate two dish racks on the intake side of the dishwasher, and three dish racks on the return side. Corner dishwashers are discouraged.

4.9.3.4. The hot water line to the dishwasher manifold shall include a branch with shut off, stubbed out to a 1/4” compression tap for connection by the detergent provider. Use of saddle valves is prohibited.

4.9.3.5. The exhaust hood shall continue to run five minutes after the dishwasher is turned off to completely evacuate steam.

4.9.4. Recycling and Garbage

4.9.4.1. The kitchen design shall accommodate placement of up to two 50-gallon garbage receptacles in areas strategic to work processes, and up to two 50-gallon recycling roll carts for recyclable plastic, metal, cardboard, and paper material.

4.9.4.2. Design Space for receptacles for composting kitchen food waste should be considered if a composting facility becomes available to the district.

4.10. WATER HEATING

4.10.1. The District preference is to use natural gas water heating devices to minimize utility costs, carbon footprint, and avoid electric demand charges.

4.10.2. Provide dedicated kitchen water heater and dishwasher booster heater sized with adequate capacity to continuously heat 128 gallons-per-hour from a supply temperature of 40°F to a discharge temperature of 180°F. The water heater shall be sized to heat the water to 140°F and the booster shall be sized to continue water temperature increase from 140°F to 180°F.

4.10.3. The dedicated kitchen water heater shall have 100 gallons of storage capacity. This is to ensure that the system can provide hot water for other kitchen uses without impacting the ability of the booster to continuously deliver hot water at a minimum of 170°F to the dishwasher manifold.

4.10.4. All hot water piping shall be insulated. The dedicated kitchen water heater shall be a commercial natural gas fired condensing unit rated at 92% or better efficiency.

4.10.5. The dishwasher booster heater shall be placed in close proximity to the dishwasher to minimize the length of high temperature (180°F) pipe runs. The natural gas fired booster heater shall be plumbed with a pressure/temperature safety valve vented to the dishwasher drain.

4.10.6. The burner shall have independent venting with adequate provisions for combustion air to prevent odors in the building.

4.11. KITCHEN SUPPORT

4.11.1. Cafeteria Lead's Office Space

4.11.1.1. Each kitchen design shall include room for kitchen lead desk and chair, two-drawer file cabinet, upper shelving, computer, and printer. Data and electric shall be provided below desk.

4.11.2. Locker Storage

4.11.2.1. Provide locker storage for kitchen staff. Half-size lockers are preferred. Number of lockers shall be determined on site-by-site basis.

4.11.3. Paging/Intercom System

4.11.3.1. Provide speakers in kitchen and dishwashing areas with amplification such that employees can hear emergency communication over equipment noise. Provide volume control for individual speaker locations.

4.11.4. Custodial

4.11.4.1. The kitchen design shall include a custodial closet with a corner floor mount mop sink and faucet with hot and cold water service. All custodial chemicals stored in or near the kitchen must be in a secure location (e.g., locked cabinet). Storage items will include rags, dust mops, paper towels, and chemicals for the custodian.

4.11.4.2. The custodial closet shall be large enough to meet the custodial storage needs and allow adequate space to fill and dump the auto scrubber, as well as the mop and wash buckets. Storage space for custodial supplies and equipment in or near the kitchen is essential for efficient cleaning of the cafeteria and kitchen.

4.11.4.3. The closet shall also be equipped with a chemical dispensing unit that will dispense both sanitizer and soap products. Either the two-button unit or the four-button unit is acceptable. Kitchen design remodels and upgrades with epoxy floor shall include designated space for storage of an auto scrubber.

4.11.4.4. Provide a protected can wash area just outside the kitchen with hose bib with frost proof valves for hot and cold water. Can wash area to include hangers to hold floor mats for washing/drying.

4.12. STUDENT HANDWASHING STATIONS

4.12.1. Student handwash stations shall be provided in the cafeteria. Design to accommodate the large number of students washing their hands prior to lunch in a safe and orderly manner.

4.12.2. The preferred design would have two handwash stations with three faucets per station. Where possible, recess handwash stations in alcoves.

4.12.3. Soap dispensers shall be located directly above the sinks and low enough for access by all grade levels.

4.12.4. Paper towel dispensers shall be located so that students will have to step away from the sinks to dry their hands, thus allowing the queue of students to advance. Provide non-slip flooring.

5. ENTERTAINMENT AND RECREATION EQUIPMENT

5.1. ATHLETIC EQUIPMENT

5.1.1.Basketball Hoops

5.1.1.1. For all new construction and remodels use electric hoist basketball hoops from Performance Sports Systems Overhead Basketball Hoops[1] for indoor installations.

5.1.1.2. Closeout - An independent inspection report is required for submittal with closeout documents.

5.2. PLAY FIELD EQUIPMENT AND STRUCTURES

5.2.1.Playground Equipment

5.2.1.1. Equipment must be certified and warrantied to comply with guidelines set forth by the Americans with Disability Act (ADA), U.S. Consumer Product Safety Commission (CPSC), and ASTM standards per the International Playground Equipment Manufacturers Association (IPEMA) installation methods.

5.2.2.General Safety Precautions

5.2.2.1. Equipment shall be securely installed and anchored in the ground.

5.2.2.2. Construction shall be free of points, sharp edges, tight angles, and any protrusions that can cut or puncture.

5.2.2.3. All metal edges shall be hemmed, eased, rolled, curled or capped.

5.2.2.4. Equipment shall be free of pinch and crush points.

5.2.2.5. Equipment shall be free of openings or angles that can entrap body parts.

5.2.2.6. Shield or enclose moving parts of equipment so body parts cannot be pinched, crushed or caught.

5.2.2.7. Any pieces with motion should have speed/motion limiters or other measures to make the equipment safe.

5.2.2.8. Pieces with limited visibility (e.g. tunnels, pipes, enclosed swings), exposed springs, and roller bars are prohibited

5.2.2.9. Climbing elements have appropriate hand grabs or rails.

5.2.2.10. Ramps shall have slip-resistant surfacing.

5.2.2.11. Equipment shall be arranged to prevent overlapping of fall zones and paths of travel.

[1] See List of Brand Name Products as approved via School Board Resolution 14-409 in accordance with ORS 279C.345.

5.2.2.12. No climbing or standing surface will be more than six feet above the ground level.

5.2.2.13. Footings to be coordinated with manufacturer's recommended installation instructions for required sizes and depth.

5.2.2.14. Swings – suspension chains should be electro-galvanized and shall have 360° compression clamps. Beam height: 8'. Clamp style: 360° compression clamp. Seat type: Belt seat. Pads are required under swings at playgrounds with engineered wood fiber.

5.2.2.15. Slides – should not be more than 8' above grade nor have metal slide chutes. Slides should not be located adjacent to vertical climbing play equipment.

6. OTHER EQUIPMENT

6.1. HAND DRYERS

6.1.1. Hand dryers shall be installed in all student restrooms. Dryers are not to be installed on a wall adjacent to a teaching space nor where sound could travel directly into an area that would impact the teaching environment. Care should be taken to design these spaces accordingly.

6.1.2. Installation shall be reinforced with wood backing. Use World Dryer: Series A Model DA5-974[1].

REVISION HISTORY

Rev 1: 12/23/16

Section	Section Title	Revision
IX.A.	GENERAL EQUIPMENT; Hand Dryers	*New section: add* **Hand dryers shall be installed in all student restrooms. Dryers are not to be installed on a wall adjacent to a teaching space, nor where sound could travel directly into an area that would impact the teaching environment. Care should be taken to design these spaces accordingly. Installation shall be reinforced with wood backing. Use World Dryer: Series A Model DA5-974.**

Rev 2: 12/31/17

Section	Section Title	Revision
ALL	ALL	*Division reorganization for closer alignment with CSI MasterFormat.*
III.I.2.	FOODSERVICE EQUIPMENT; FOOD DISPENSING EQUIPMENT; Ice Machines	*New section: add* **The BSD requires drainable ice machines for all locations specified in the Educational Specifications. Make lockable, if accessible to students. Drainless ice makers are not acceptable. See also Division 22.**
IV.A.1.	ENTERTAINMENT AND RECREATION EQUIPMENT; ATHLETIC EQUIPMENT; Basketball Hoops	*New section: add* **Basketball Hoops** **For all new construction and remodels use electric hoist basketball hoops from Performance Sports Systems Overhead Basketball Hoops (1) for indoor installations.** **a) Closeout - An independent inspection report is required for submittal with closeout documents.**
IV.B.	ENTERTAINMENT AND RECREATION	*New section: add* **For design and programmatic considerations, refer to the Educational Specifications: Volume I - Elementary Schools**

	EQUIPMENT; PLAY FIELD EQUIPMENT AND STRUCTURES	**Playground Addendum. For play equipment specifications see Technical Standard Division 32: Grounds & Exterior Improvements.**

Rev 3: 12/31/18

Section	Section Title	Revision
various	various	*Removed broken link to List of Brand Name Products*

Rev 4: 5/31/19

Note: **Bold** indicates new text; ~~strikethrough~~ indicates removed text; plain text indicates unchanged text; *italics* indicate summarized information.

Section	Section Title	Revision
IV.B	PLAY FIELD EQUIPMENT AND STRUCTURES	*Existing playground equipment standard relocated from Div 32*

Rev 4: 1/2025

Section	Section Title	Revision
All	All	Renumbered all sections of the Technical Standard; included other minor formatting and edits for clarity.