



ELEMENTARY SCHOOL

Planning and Design Standards

Pre-School

Kindergarten

Grades 1 - 5 (6)

March 2021

Facilities Management
Jefferson County Public Schools R-1
809 Quail Street, Bldg. #4
Lakewood, CO 80215

2021

Elementary School Educational Specifications

TABLE OF CONTENTS

INTRODUCTION	3
RELATED FACILITY DOCUMENTS	4
PHILOSOPHY OF THE LEARNING ENVIRONMENT	4
DESIGN PARAMETERS	4
ADMINISTRATION	7
Main Office Area	8
Support Spaces	9
Health Suite	10
INSTRUCTIONAL AREAS	11
Pre-School Suite	12
Kindergarten Suite	14
General Classrooms	15
Support Spaces	16
Special Education Suite	17
CORE SPACES	19
Multi-Purpose/Flex Classrooms	20
Art Suite	21
Music Suite	22
Library/Media	23
FOOD SERVICE	26
Cafeteria/Commons	27
PHYSICAL EDUCATION	30
Physical Education	31
SUPPORT AREAS	34
SITE DEVELOPMENT STANDARDS	38

INTRODUCTION

The underlying concept is that suites and rooms are elements that can be combined to form any number of school configurations and that any given school configuration has minimum requirements for specific rooms and elements.

Although drafted with new school construction in mind, educational specifications have a larger purpose. By establishing a threshold of educational adequacy, educational specifications can be a tool for evaluating adequacy and implementing equity in existing educational environments. They can be applied to assess the rooms, areas, amenities, configurations, and other physical attributes of schools of various ages to objectively evaluate existing construction and identify opportunities for future capital investment.

These Educational Specifications can be used in any number of ways:

- Evaluate a school site
- Plan and design a new school
- Plan and design a new room or suite of rooms within an existing school
- Evaluate an existing school, area, or room
- Assess, identify, and quantify capital needs at existing facilities
- Calculate the permanent student capacity of a new or existing school

These Educational Specifications do not endeavor to assign contractual obligations. The requirements of this document may be paid for by any of a number of funding sources that comprise the total project budget, e.g., the construction contract or the Furniture, Fixtures and Equipment (FF&E) budget.

The intent of this document is to establish educational planning and design standards for the construction of new elementary schools, and for the remodeling and renovation of existing elementary schools. The standards apply to the number, sizes and types of spaces required for elementary schools. This document establishes basic needs to be met within the broader design of elementary schools. Technical requirements are contained in a separate document.

The specification contained herein is intended to serve a student population range of 480-768. Schools designed to have larger or smaller populations will need to make appropriate adjustments, although elementary schools smaller than 480 or larger than 768 are not recommended.

These Educational Specifications establish goals and parameters for activity areas, rooms, school buildings, and site development, including:

- Amenities
- Capacities
- Configurations
- Environments
- Features
- Functions
- Materials
- Performance criteria

Elementary School Educational Specifications Jeffco Public Schools

- Relationships
- Sizes
- Systems
- Utilities

RELATED FACILITY DOCUMENTS

The following separate documents published by the Facilities Department at Jeffco Schools shall be used in conjunction with these Educational Specifications:

Jeffco Schools PK-5 Educational Space Program Matrices Technical Guidelines Technical Details – Volumes I and II Furniture Standards

PHILOSOPHY OF THE LEARNING ENVIRONMENT

The focus of any facility should be to support positive education outcomes. While facilities cannot be the change in and of themselves, they play a key role in supporting educational excellence.

Jeffco Schools should offer inspirational learning environments that allow for varied types and sizes of learner-centered engagements. They should provide opportunities for on-line educational support and supplemental instruction.

Design and develop inclusive and welcoming settings, providing opportunities, experiences, and relationships for all learners. Students become successful and contributing members of society through real-life learning experience. Design for potential experience with collaborative partnerships, including public, private and non-profit organizations.

Establish opportunities for hands-on, interest-based, creative and collaborative experiences to include interdependent thought and interdisciplinary work.

Develop transformative learning environments and facilities to support changing learning cultures, programs, student populations, and instructional delivery methods. The design of learning spaces will encourage instructors to achieve their maximum potential and provide learners the greatest opportunities for success.

DESIGN PARAMETERS

A. JEFFCO SCHOOLS DESIGN PARAMETERS

- 1. General Design Parameters:
 - **a.**To establish a consistent design quality across the District.

b.Facilities should allow for educational flexibility in meeting the educational programs established.

2. Site:

- **a.**The site should be designed as an extension of the community and its use should be encouraged by all.
- **b.**Care should be taken to ensure maximum safety of students, staff, and community.

3. Building Exterior:

a. The building exterior should be well-designed, inviting, and be designed as an integral part of its community.

4. Classrooms and other Designated Teaching Areas:

- a.General Room Proportions: Utilize classroom plan proportions between 1:1 and 1:1.5, with accepted variations depending upon site and building constraints and other program issues. Teaching nooks or other configurations are discouraged; the preference is to allow the space to be sub-divided with movable furniture or other components for maximum flexibility within the teaching space.
- b. While a single "Teaching Wall" is established in the specifications, each teaching space should allow for multiple walls to be used as a teaching wall, which will incorporate the necessary educational tools for the education professional.
 Care should be taken to ensure minimal distraction of students with concurrent activities going on outside the classroom space.
- **c.** Design for adequate daylighting without "hot spots" or major variations of light levels within classrooms.
- **d.**All classrooms shall have windows to the exterior to allow for daylighting opportunities and provide for visual connection to the outdoors.
- **e.**Use of short-throw interactive projectors above the teaching wall is preferred. Ceiling mounted projectors in approved areas only.

5. Flexible and Multi-Use Teaching Classrooms:

- **a.** Consider integrating one or more flexible or multi-use teaching spaces configured similar to a large classroom space, including additional electrical and data infrastructure for multiple uses.
 - 1. Science, Technology, Engineering, (Art), and Math (STEM or STEAM)
 - **2.** Art-focused programs
 - 3. Science-focused programs
 - **4.** Computer Labs
 - **5.** Other specialty uses

6. Accessibility:

a. All spaces open to students, the public, and staff shall be made accessible in conformance with ADA and other Codes.

7. Corridors:

- **a.** Corridors shall be of sufficient width to allow for comfortable passing of students and staff.
- **b.**Provide areas for small groups: Pull-out stations, technology stations, reading areas, and other areas that can support the academic needs. These may be open areas or areas defined by furniture or built separations.

8. Finishes:

- **a.** Finishes should be designed to inspire and uplift the senses of the students, staff, and community.
- b. Consider the use of color and design to define space and uses.

9. Cafeteria and Common Areas:

a.Should be designed for maximum flexibility and use.

10. Designing for the future:

- a. Future expansion
 - 1. All facilities shall be designed for future expansion to meet the full intended build-out of the facility.

b.Future changes and flexibly

- 1. All facilities shall be designed with flexibility in mind.
- **2.** Consider plan layouts that allow for full wings to be added without interruption to the core facility.

11. Libraries and Media Resource Centers:

- **a.** Main central library spaces should be designed for maximum flexibility. Consider the use of a centralized media area for student collaboration, staff and community meetings, and common resource materials.
- **b.**To supplement the centralized media area, utilize smaller, focused resource areas to accommodate reading needs of students of various ages and abilities, as well as interest-focused materials for art, music, math, science, etc.
- c. Areas should be well-lit and have sources of daylighting.

12. Computers Rooms or Labs:

a.Teaching areas designed solely for computer labs are discouraged. Mobile technology allows for more flexibility in classrooms and other areas. If programs are focused on computer use and training, consider using Flexible and Multi-use Teaching Classrooms.

13. Safety Design Guidance:

- a. Main Entrance:
 - 1. Securable entrance vestibule with transaction window

b.Building Interior:

- 1. Coordinate with the District Project Manager
- **2.** Consider the use of color to differentiate various areas and zones in the building

c. Exterior Doors:

- 1. Locate exterior doors at easily monitored locations.
- **2.** Avoid door pairs requiring removable mullions except at key locations where required for the movement of large equipment or furniture.

d. Monitoring and Zoning

- 1. The building shall have zones established so that the building can have portions locked off and monitored separately while other zones are accessible and usable by the public.
- 2. Provide intrusion, surveillance, and access control equipment.
- **3.** Provide exterior lighting at all areas adjacent to the building without creating shadowed areas that cannot be monitored.
- **4.** Landscape, fences, screen walls, etc. shall not provide places of concealment.

14. Fixtures, Furniture, and Equipment (FF&E):

- a. Design rooms and areas in coordination with the District's Furniture Standards. Design rooms and areas with open wall areas for placement of furniture, shelving, etc. Coordinate window and casework locations, along with heights of built-in components, including markerboards and tackboards, with furniture needed to be placed under or near these components.
- **b.**Some furniture items are listed in these Specifications to ensure proportions and sizes of rooms can, at a minimum, accommodate the furniture listed. Most areas do not list specific furniture; reference the District's Furniture Standards to ensure each space is fully coordinated with required furniture.

ADMINISTRATION

SPACE DESCRIPTION:

The administration area contains the administrative and clerical functions for the school. Administration is the primary contact point for all public interactions and is the center for management of the school. The main public entrance shall be easily recognizable and with direct line of sight from the visitor parking area. The main public entrance shall be secure and visible from the Main Office Area. General finishes are carpet and easily cleanable wall surfaces unless noted otherwise.

A. MAIN OFFICE AREA

- 1. General Office Work Area and Waiting.
- 2. Principal's Office
- 3. Assistant Principal's Office
- 4. General Multi-purpose Office

B. SUPPORT SPACES

- 1. Office Work Room
- 2. Mail Area
- 3. Conference Rooms
- 4. Records/Storage
- 5. Staff Lounge
- **6.** Staff Toilets
- **7.** Coat/Storage Closet

C. HEALTH SUITE

Elementary School Educational Specifications Jeffco Public Schools

1. Health Suite

a. Health Office/Exam/Cot Area

b.ADA Toilet Room

DESIGN CRITERIA

A. MAIN OFFICE AREA

1. General Office - Work Area and Waiting

- **a.**Location of the general office shall be adjacent to the primary public building entrance. The office will receive students, parents, and visitors and should serve to monitor access to the school. The general office should be easily accessible from all areas of the school building.
- **b.**Provide a transaction window between the entry vestibule and the main administration office.
- **c.** Area for display and general information
- **d.**Built-in workstations and transaction counters for the reception area are prohibited. The preference is for the school to purchase furniture systems, which can be easily reconfigured. Provide counter area suitable for use by adults and students of all ages.
- **e.**Provide space for 2-4 secretary/clerical workers at desks, depending on size of school. File cabinets, wall space for fire and security alarm panel.
- f. Provide a waiting area with seating for 8 to 10 people.
- g. All offices shall have doors with vision lites.
- **h.**Provide good visibility to the main corridor, main entrance/outside entry, and parking lot/drop-off.

2. Principal's Office

- **a.**The principal's office should be conveniently located near the main office work area. The principal must be able to enter and leave the office without passing through the waiting area.
- **b.**The principals' office should be adjacent to a conference room with locking connecting door.
- **c.** Provide space for office furniture (desk, wardrobe, computer station and shelving).
- **d.**Provide space for small conference table to seat 4.
- e.6 ft. marker board and 4 ft. tack board.

3. Assistant Principal's Office

- a. Provide space for desk, wardrobe, files, shelving, and seating for 2 guests.
- **b.**6 ft. marker board and 4 ft. tack board.

4. General Multi-purpose Office

- **a.** Provide space for desk, task chair, and 3 visitor chairs. For use by itinerant staff or others.
- **b.**6 ft. marker board and 4 ft. tack board.

B. SUPPORT SPACES

1. Office Workroom

- **a.**Separate space or spaces that provide floor area for a large format business machine and worktables.
- **b.**Total 20 linear feet of standard base cabinets, overhead cabinets, and countertop. 10 linear feet of base cabinet should be 30 inches deep.
- c. Directly adjacent to the General Office Area and office supply storage.
- **d.**Floor area for work tables and chairs
- e. Separated from any areas accessed by the public
- **f.** Lockable key cabinet
- **g.** Provide separate access from other areas of the building without having staff travel through the waiting area.
- **h.**Power, telephone, and data for business machine area and at perimeter of space
- i. Finishes:

1. Floor: Hard surface flooring

2. Walls: Easily cleanable

2. Mail Area:

- **a.** Provide an area for 60 teacher and staff mail boxes, or 1 slot for every 10 students, whichever is greater, to accommodate all staff and teachers including itinerant specialists.
- **b.**The mail boxes should be located so that they can be easily serviced by the General Office staff, but should be accessible to teachers without going through the General Office area.
- c. Open bin type with mailbox slots: min 15" deep by 11' wide by 4" high
 - 1. Open-shelf base cabinets with countertop below mail box slots for larger packages and storage
 - 2. 4' by 4' tack board

3. Conference Rooms

- **a.** Provide space for table to seat minimum 12-14 adults at the smaller conference room and minimum 16-20 adults at the larger conference room.
- **b.**At least one Conference room should be accessible from Main Office Area and from the Principal's Office
- **c.** Provide 6 ft. base cabinets and overhead cabinets with single compartment sink in the larger conference room.
- d.8 ft. markerboard and 6 ft. tackboard
- **e.**Provide data and power at one location for a short-throw interactive projector or interactive monitor

4. Records/Storage:

a.This room will provide storage for materials used in the general office which are not accommodated by work room case work or which require extra security.

- **b.**The store room should be convenient to the General Office.
- **c.** 15 linear feet of base cabinets and overhead storage for supplies.
- d. Floor area for file cabinets and other storage for student records.

5. Staff Lounge

- **a.**General Description: This space is used for school teachers and staff to confer and work together. The area is often used as a lounge and "break room" for school employees.
- **b.**Centrally located and easily accessible to staff toilets.
- **c.** Provide cabinetry along one wall with at least 15 linear feet of full height storage cabinets. The balance of cabinetry should include 15 linear feet of base and wall cabinets with a single compartment sink with disposal. Countertop at dishwasher shall be standard 36-in high.
- d.Standard size undercounter dishwasher
- e. Standard size refrigerator with ice maker.
- **f.** Provide space for loose tables and chairs to be arranged in different ways depending on the task or meeting taking place.
- g. Floor space and electrical outlets for two vending machines.
- **h.**8 linear feet of tackboard.
- i. Power, telephone, and data for copy/printer area and at perimeter of space(s)
- **j.** Finishes:
 - 1. Floor: Hard surface flooring
 - 2. Walls: Easily cleanable

6. Staff Toilets:

- a. Provide single-fixture ADA accessible toilets for staff use.
- **b.**Toilets should be easily accessible from the Main Office, Staff Work/Meeting Room and should be convenient to the Principal and other workers stationed in the administration area.
- **c.** Toilet rooms shall not be accessed directly off main circulation corridors.

7. Coat/Storage Closet

- **a.** Provide a small closet for the storage of personal effects of office staff.
- **b.**Locate near main office area.

C. HEALTH SUITE

1. Health Office/Exam

- **a.**Care for ill, injured, or upset students
- **b.** Management of chronic illnesses and associated medical interventions
- c. Controlled distribution of student medications
- **d.**Accessible from the general office area and easily accessible by students and parents through the general office control.
- **e.** Floor area for a workstation, 4 file cabinets, cots, and seating for students.
- f. Storage area for one folding wheel chair.

- **g.**Interior window or borrowed lites with blinds between Clinic and Administrative Support area for monitoring by administrative staff when the nurse is not available.
- **h.**6 linear feet of lockable base and overhead cabinets with countertop and single compartment sink. One 24d x 18w x 84h lockable wardrobe cabinet.
- i. Provide a full size refrigerator with freezer compartment and ice maker.
- i. Clinic Finishes:
 - 1. Floor: Hard surface flooring
 - 2. Walls: Easily cleanable

k. The Toilet Room shall be directly accessible from the Clinic.

2. Cot Area

- a. Part of Health Office/Exam floor area.
- b. Provide space for minimum 2 cots. Final count dependent on school capacity
- c. Cots shall have privacy curtains
- **d.** Administrative staff must be able to monitor the cot area when the nurse is not available.
- e.Power located at each cot
- f. Cot Area Finishes:
 - 1. Floor: Hard surface flooring
 - 2. Walls: Easily cleanable

3. ADA Toilet Room

- a. Toilet and wall-hung lavatory
- **b.**Flush-mounted hose bib.
- **a.** Handheld shower mounted on wall with floor drain. Individual shower stalls or compartments must be approved by the District Project Manager.
- c. Flip-down ADA shower seat
- **d.**Clinic-type shower curtain at shower area
- e. Area for changing table: 30"d x 60"l x 36" h. with available wall receptacle
- f. Finishes:
 - 1. Floor: porcelain tile with base
 - 2. Walls: Full height ceramic tile all walls.

INSTRUCTIONAL AREAS

SPACE DESCRIPTION:

Classrooms should be arranged within the building so that those rooms intended for each grade level are grouped together and there is a logical progression for younger grades to older grades. Spaces should be designed to allow for teachers and students to work together in a student-centered environment to achieve the academic goals for each student. Utilization of small academic learning

Elementary School Educational Specifications Jeffco Public Schools

communities enhances these goals by creating smaller, more personalized learning environments. The Pre-School and Kindergarten Classrooms should be designed so they can be used for either program.

The site planning should coordinate grade levels with exterior play areas intended for the various age groups. As much as possible, avoid long travel distances between classrooms and the core facility areas of the school. Design for multiple teaching options within each space.

A. PRE-SCHOOL SUITE (IF INCLUDED)

- 1. Pre-School Classrooms
- 2. Pre-Schools Toilets
- **3.** Pre-School Storage

B. KINDERGARTEN SUITE

- 1. Kindergarten Classroom
- 2. Kindergarten Toilets
- 3. Kindergarten Storage

C. CLASSROOMS

1. General Classrooms: Grades 1-5

D. SUPPORT SPACES

- 1. Resource/Intervention Rooms
- 2. Teacher Work/Conference Room
- 3. Staff Toilets
- 4. Instructional Materials Storage

E. SPECIAL EDUCATION SUITE

- 1. Classroom
- 2. Severe Needs Classroom
- 3. Resource Room/Office/Testing/Storage Area
- 4. Toilet Room

DESIGN CRITERIA

A. PRE-SCHOOL SUITE (IF INCLUDED)

1. PRE-SCHOOL CLASSROOMS

- **a.**The Pre-School Suite should be designed to be interchangeable with the Kindergarten Suite.
- **b.**Locate classrooms adjacent to the Pre-School/Kindergarten playground
- **c.** Pre-School suite shall be located near a front entrance that can be easily monitored and access controlled. Consider a separate pick-up and drop-off parking area for the pre-school suite.
- **d.**Provide an outside entrance to each classroom directly from the play area. Coordinate entrance locations in relation to the toilet room for teacher supervision of each door.
- **e.**Minimum 10'-0" ceiling height.
- f. Specialties and Equipment:

- **1.** Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
- 2. Provide 12 linear feet of marker boards with 12" high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18" of rail length. Mount boards at heights appropriate for small children.
- 3. Provide 16 linear feet of tack board.

g. Finishes:

- **1.** Floor: 40% of floor area shall be hard surface flooring. The remaining shall be carpet. Locate the hard surface flooring adjacent to all wet areas.
- 2. Walls: Easily cleanable

h.Cabinetry and Casework:

- **1.** Provide cabinetry along one wall of the classrooms which includes the following:
 - i. 8 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a paper drawer section with interior drawer dimensions no less than 42" wide by 28" deep.
 - ii. 6 lineal feet of base cabinet with countertop at 25" height.
 - iii. Provide a single compartment sink with gooseneck faucet.
 - iv. 8 linear feet of 84" high storage with adjustable shelving and lockable doors, 30" deep.
 - v. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
 - vi. Provide wall cabinets above all base cabinets.
 - vii. Each cabinet door shall be equipped with a keyed lock.
- **2.** Provide cubbies with shelf and hooks for 30 students. Mount coat hooks in cubbies at 36" above floor.

2. PRE-SCHOOL TOILETS

- **a.** Provide paired classrooms with two toilet rooms shared between the two classrooms. Each room should be designed to comply with Children's ADA standards. Toilet room doors shall not be lockable.
- **b.**Provide one child-size water closet in each toilet room.
- c. Provide one child height hand washing sink.
- **d.**Provide floor drain
- **e.**Finishes:
 - 1. Floor: porcelain tile with base
 - **2.** Walls: ceramic tile all walls to 5'-0" above floor. Remaining wall surfaces easily cleanable.

3. PRE-SCHOOL STORAGE

a.The room should accommodate 24" deep and 18" deep shelving with free floor area for loose storage.

b.The pre-school storage room should be directly accessible to the classrooms and should be convenient to an exterior door.

B. KINDERGARTEN SUITE

1. KINDERGARTEN CLASSROOM

- **a.**The Kindergarten Suite should be designed to be interchangeable with the Pre-School Suite.
- **b.**Locate classrooms adjacent to the Pre-School/Kindergarten playground.
- **c.** Classrooms shall be located on the main floor and near the main office or in the area of other primary level classrooms.
- **d.**Provide a direct outside entrance to each classroom directly from the play area or allow for convenient access from within the building. Coordinate entrance locations in relation to the toilet rooms for teacher supervision of each door.
- e. Minimum 10'-0" ceiling height.
- f. Specialties and equipment:
 - **1.** Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
 - 2. Provide 12 linear feet of marker boards with 12" high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18" of rail length. Mount boards at heights appropriate for small children.
 - **3.** Provide 16 linear feet of tack board.

g. Finishes:

- **1.** Floor: 40% of floor area shall be hard floor surfacing. The remaining shall be carpet. Locate hard floor surfacing adjacent to all wet areas.
- 2. Walls: Easily cleanable

h.Cabinetry and Casework:

- **1.** Provide cabinetry along one wall of the classrooms which includes the following:
 - 8 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a paper drawer section with interior drawer dimensions no less than 42" wide by 28" deep.
 - ii. 6 lineal feet of base cabinet with countertop at 25" height.
 - iii. Provide a single compartment sink with gooseneck faucet.
 - iv. 8 linear feet of 84" high storage with adjustable shelving and lockable doors, 30" deep.
 - v. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
 - vi. Provide wall cabinets above all base cabinets.
 - vii. Each cabinet door shall be equipped with a keyed lock.
- **2.** Provide cubbies with shelf and hooks for 30 students. Mount coat hooks in cubbies at 36" above floor.

2. KINDERGARTEN TOILETS

- **a.** Provide paired classrooms with two toilet rooms shared between the two classrooms. Each room should be designed to comply with Children's ADA standards. Toilet room doors shall not be lockable.
- **b.**Provide one child-size water closet in each toilet room.
- c. Provide one child height hand washing sink.
- **d.**Provide floor drain
- e.Finishes:
 - 1. Floor: porcelain tile with base
 - **2.** Walls: ceramic tile all walls to 5'-0" above floor. Remaining wall surfaces easily cleanable.

3. KINDERGARTEN STORAGE

- **a.** The room should accommodate 24" deep and 18" deep shelving with free floor area for loose storage.
- **b.**The pre-school storage room should be directly accessible to the classrooms and should be convenient to an exterior door.

C. GENERAL CLASSROOMS - GRADES 1 - 5 (6)

1. CLASSROOMS

a.General

- 1. Classrooms for primary level grades (1-3) shall be located on the main floor and laid out to minimize the need to navigate hallways and areas used by older students.
- **2.** Group classrooms by prospective grade levels.
- **b.**Minimum 10'-0" ceiling height.
- c. Specialties and equipment:
 - **1.** Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
 - **2.** Provide data and power at one location for a short-throw interactive projector.
 - **3.** Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide core-insert map rails full length of marker board with clops at 1 per 18" of rail length.
 - 4. Provide 16 linear feet of tack boards.

d.Finishes:

- **1.** Floor finishes: Carpeting. Provide a minimum of 5' of hard flooring surface or walk-off carpet in front of the sink cabinets.
- 2. Walls: Easily cleanable

e. Cabinetry and Casework

1. Provide cabinetry along one wall of the classrooms which includes the following:

- i. 12 linear feet of base cabinet (30" deep) with countertop at 34" height.
 - **i.** Primary Grades (1-3): Include a single compartment sink with gooseneck faucet.
- **ii.** Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
- iii. Provide wall cabinets above all base cabinets.
- iv. Each cabinet door must be equipped with keyed lock.
- 2. Provide cubbies with shelf and hooks.
 - i. Primary grades (1-3) for 30 students: Mount coat hooks in cubbies at 36" above floor.
 - ii. Intermediate grades (4-5) for 30 students: Mount coat hooks in cubbies at 48-54" above floor.

D. SUPPORT SPACES

1. TEACHER WORK/PLANNING ROOMS

a.General

- 1. The teacher work/planning room is a multi-functional space which can be used for offices, staff planning, supplies storage, and/or instructional purposes.
- **2.** Locate rooms for easy access from the classrooms or area(s) being served.

b.Specialties and Accessories

- 1. Provide 8 linear feet of full height storage cabinets, 24" deep
- 2. Provide 8 linear feet of base cabinets at 34" counter height.
- **3.** Provide space for 4 to 6 teachers work stations.
- **4.** The room should be laid out to allow for a small work table to be set in the middle of the room
- **5.** Provide a 4' by 4' tack board.

2. RESOURCE/INTERVENTION ROOMS

a. General

- **1.** Resource rooms are small classrooms which are generally used for special program instruction, tutoring, seminars, etc.
- **2.** Resource rooms should be distributed throughout the school and should be within or convenient to the general classroom areas.

b.Specialties and Accessories

- 1. Provide an 8 ft. marker board.
- **2.** Provide a 36-inch wide teacher's wardrobe cabinet with storage.

3. STAFF TOILETS

a.General

1. ADA single-fixture toilet rooms. Locate staff toilet rooms so they do not open into main circulation corridors.

- **2.** Distribute staff toilets throughout the building with convenient access from instructional areas.
- **3.** Walls shall be ceramic tile.
- **4.** Floors shall be porcelain ceramic tile with floor drains.
- **5.** Provide hose bib.

4. INSTRUCTIONAL MATERIALS STORAGE

a. General

- Instructional Materials Storage is intended for shared use by a group of classroom teachers, aids, etc. The room will store books, science kits, and other classroom instructional materials, and may be divided by grade levels.
- 2. Provide shelving of 24" depth and 12" depth.
- **3.** Distribute storage rooms throughout the building for easy access from the classrooms being served.

E. SPECIAL EDUCATION SUITE

1. CLASSROOM

- a. Provide classrooms for use as special education rooms.
 - 1. Classrooms shall be either grouped into a core area or distributed within the classroom cores team areas.
 - 2. Provide floor area for special needs equipment.
- **b.**Minimum 10'-0" ceiling height.
- c. Specialties and equipment:
 - **1.** Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
 - **2.** Provide data and power at one location for a short-throw interactive projector.
 - **3.** Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide core-insert map rails full length of marker board with clops at 1 per 18" of rail length.
 - 4. Provide 16 linear feet of tack boards.

d.Finishes:

- **1.** Floor finishes: Carpeting, provide a minimum of 5' of hard surface flooring or walk-off carpet in front of the sink cabinets.
- 2. Walls: Easily cleanable

e. Cabinetry and Casework

- **1.** Provide cabinetry along one wall of the classrooms which includes the following:
 - i. 12 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.

- **ii.** Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
- iii. Provide wall cabinets above all base cabinets.
- iv. Each cabinet door shall be equipped with keyed lock.

2. SEVERE NEEDS CLASSROOM

- a. Large classroom with additional facilities internal to the classroom area.
 - Classroom shall be located within Special Education area or within a core team teaching area.
 - **2.** Locate classroom for ease of access from primary building entrance.
 - **3.** Provide areas within space for physical therapy equipment and other special needs support materials and devices.
- **b.**Minimum 10'-0" ceiling height.
- c. Specialties and equipment:
 - **1.** Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
 - **2.** Provide data and power at one location for a short-throw interactive projector.
 - **3.** Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
 - 4. Provide 16 linear feet of tack boards.

d.Finishes:

- **1.** Floor finishes: Carpeting, provide a minimum of 5' of hard surface flooring or walk-off carpet in front of the sink cabinets.
- 2. Walls: Easily cleanable
- e. Cabinetry and Casework
 - **1.** Provide cabinetry along one wall of the classrooms which includes the following:
 - i. 12 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.
 - **ii.** Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
 - iii. Provide wall cabinets above all base cabinets.
 - iv. Each cabinet door shall be equipped with keyed lock.

3. RESOURCE ROOM/OFFICE/TESTING/STORAGE AREA

- a. Provide room for use to support the Severe Needs Classroom.
- **b.**Provide areas for storage, office desks, and testing.
- **c.** Equipment and furnishings for Special Ed resource rooms shall be the same as standard resource rooms.
- **d.**Finishes:

- 1. Flooring shall have carpeting.
- **2.** Provide a minimum of 5' of hard surface flooring or walk-off carpet in front of the sink cabinets.
- 3. Minimum 10'-0" ceiling height
- e. Specialties, Equipment and Casework.
 - One markerboard, 6 linear feet with cork-insert map rails full length of markerboards with clips (one per 18" of board length) and on flag holder per room.
 - **2.** Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
 - **3.** 8 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.
 - i. Provide wall cabinets above all base cabinets.
 - ii. Each cabinet door shall be equipped with keyed lock.

4. TOILET ROOM

- **a.**Toilet and wall-hung lavatory
- **b.**Provide enough space for two adults assisting a disabled student.
- c. Flush-mounted hose bib.
- **d.**Handheld shower mounted on wall with floor drain. Individual shower stalls or compartments must be approved by the District Project Manager.
- e.Flip-down ADA shower seat
- f. Clinic-type shower curtain at shower area
- $\textbf{g.} Area \ for \ changing \ table: 30"d \ x \ 60"l \ x \ 36" \ h.$ with available wall receptacle
- **h.**Finishes:
 - 1. Floor: porcelain tile with base
 - **2.** Walls: Full height ceramic tile all walls.

CORE SPACES

SPACE DESCRIPTION:

Core spaces are instructional spaces designed to support and supplement core teaching concepts through art, music, and other programs. Multi-purpose/flex classrooms are designed to support the electives and specialized student interests which may focus on S.T.E.M., S.T.E.A.M., computer and robotics, English and foreign language development, and other studies. The Multi-purpose/flex classrooms may be located within suites or distributed throughout the core team teaching areas. Spaces should be designed to allow for teachers and students to work together in a student-centered environment to achieve the creative and academic goals for each student. Consider resource areas for independent learning opportunities as part of the design. Design for multiple teaching options within each space.

Elementary School Educational Specifications Jeffco Public Schools

The Music Classroom is a specialized use. Students will be instructed in music on a rotating basis. The Performance Area typically doubles as a Music Room. Room should be elevated above adjacent seating area.

A. MULTI-PURPOSE/FLEX CLASSROOMS

1. Multi-Purpose/Flex Classrooms

B. ART SUITE

- 1. Studio Classroom
- 2. Storage/Kiln Room
- 3. Office

C. MUSIC SUITE

- 1. Classroom (General Music/Instrumental)
- **2.** Storage
- 3. Office/Work Area

D. LIBRARY/MEDIA

- 1. Reading, Instructional, and Stack Area
- 2. Seminar Rooms
- 3. Workroom/Office/Storage

DESIGN CRITERIA

A. MULTI-PURPOSE/FLEX CLASSROOMS

1. Multi-Purpose/Flex Classrooms

a.General

- **1.** These classrooms should be designed for supplemental studies of specialty programs that focus on specific or various subjects.
- 2. For use as Makerspaces, S.T.E.M., S.T.E.A.M., Computer and Language Labs, etc. based on agreed upon programs for a particular school or courses of study.
- **3.** These classrooms should be designed for maximum flexibility to implement special programs.
- **4.** These spaces should have additional infrastructure, including additional data, power, and water.
- **5.** These spaces may be used as standard classrooms, so it is important that they conform to the general requirements of a standard classroom space.
- 6. Minimum 10'-0" ceiling height.

a. Finishes:

- 1. Floor finishes: Carpeting, unless initial program use requires hard surface flooring. Provide a minimum of 5' of hard surface flooring or walk-off carpet in front of the sink cabinets.
- 2. Walls: Easily cleanable.

B. ART SUITE

1. Art Classroom

a.General

- **1.** Classroom finishes should consist of highly durable and easily cleaned materials. Sealed concrete floors are appropriate.
- **2.** Locate Art Classroom with direct access to the outside for delivery of art materials and to expand the program to the building exterior.
- **3.** Instructional and studio space for 2D and 3D art, as well as other activities.
- **4.** Open structure ceiling. Minimum 10 ft. A.F.F. to bottom of structure.
- 5. Ceiling mounted electric drop-cords.

b.Specialties and Equipment:

- **1.** Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
- **2.** Provide data and power at one location for interactive short-throw projector.
- **3.** Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18" of rail length.
- 3. Provide 16 linear feet of tack boards.
- 4. Area to re-charge a laptop cart.

c. Casework:

- 1. One teacher's wardrobe with storage (36" wide by 24" deep by 84" high). Four full height storage cabinets (36" wide by 24" deep by 84" high)
- **2.** Provide countertop work surface along one wall with base cabinets below.
- **3.** Provide stainless steel sink with double compartment and integral drain boards at each end. 8'-0" l. x 24" d. with 28" rim height and two 20"x24"x14"d. sinks with 6" backsplash. Hot and cold single lever swingtype gooseneck faucets. Drain to plaster traps-2"drain line required.
- **4.** Provide 2 base cabinet paper drawer sections with minimum inside drawer dimensions of 29" by 43".
- **5.** Provide one drawer unit (18" wide +/-) with 5 drawers.
- **6.** Other base cabinets to be standard, adjustable shelf base cabinets.
- 7. Provide open wall cabinets above countertop.
- **8.** Provide storage for 60 drawing boards (maximum dimension of 24" X 36"). Drawing boards should be stored in 24" deep cabinet.
- **9.** Provide a safety eyewash station.
- **10.** Provide floor drains with plaster trap.
- **d.**Provide fire-resistant horizontal surface area and wall protection for a table-top glass kiln. Preferred location is within Kiln Room.
- e. Provide a clay drying cabinet
- **f.** Plan for additional floor space to store wet clay, drying racks, slab roller, hand extruders, pottery wheels, etc.
- g. Unistrut-type grid in center of room for hanging or art and track lighting.
- **h.**Furniture:

1. 42"x60" general art tables

2. Storage / Kiln Room

- **a.**Locate adjacent to Art Classroom.
- **b.**Materials Storage Room should be located for ease of stocking materials from outside delivery.
- c. Floor should be sealed concrete.
- **d.**Provide 24"d x 36"w x84" h metal shelving. Adjustable shelving of various sizes and depths located along perimeter walls.
- e. Provide one electric kiln with Down-Draft Ventilation System.
- f. Room finishes should be the same as the classroom.

3. Office

- a. Area within Art Classroom.
- **b.** Visual access to all areas of the classroom.
- c. Floor should be sealed concrete.
- **d.**Space for desk, shelves, and files for one staff.

B. MUSIC SUITE

1. Classroom (General Music/Instrumental)

a.General

- **1.** The Music Classroom's primary function is a classroom use.
- **2.** If space allows, the classroom should be sized to allow for up to 2 combined classes to use the space at the same time.
- 3. Floor shall be flat without slope or permanent tier and risers
- **4.** Large instruments, such as pianos, are typically stored within the room.
- **5.** Area to store furniture-type portable risers
- **6.** Provide oversized door into room. Min. 42-inch single door, 36-inch single door with operable fixed leaf, or 3 ft. double doors with removable mullion.

7. Acoustics

- a. Acoustically controlled and isolated
- b. Acoustical treatment is required, including lower frequency absorption/dispersion materials
- c. Avoid reflective parallel surfaces
- d. Ceiling treatment should alternate reflective and adsorbent surfaces
- e. Minimum ceiling height: 14 feet.
- **8.** Provide folding sound partition separating Music Classroom/Platform from Cafeteria or Gymnasium.
- **9.** Minimum proscenium opening shall be 24 ft. wide.
- **10.** Motorized projection screen facing audience area.
- 11. Stage Curtains and cyclorama
 - a. For Stage proscenium opening and back-of-stage

b.Finishes

- 1. Provide acoustical treatment.
- 2. Carpet or hard surface flooring
- 3. Hard surface flooring at sinks

c. Storage Cabinets and Casework

- **1.** Provide lockable instrument storage cabinets of various sizes capable of storage of musical instruments.
 - **a.** 36 linear feet of 30"d x 84"h cabinets with adjustable shelving and lockable doors and 12 linear feet of 24"d x 84"h cabinets with adjustable shelving and lockable doors.
- **2.** One 36" wide wardrobe storage-half shelves and half coat storage.
- **3.** Provide 10 linear feet of base cabinet with single compartment sink with gooseneck faucet.
- 4. Provide wall cabinets above the base cabinets.

d.Accessories

- 1. Provide a drinking fountain.
- **2.** Two markerboards, 8 linear feet each.
 - a. Mount markerboards adjacent to each other on the teaching wall. One markerboard shall have factory-applied ruled music staff lines. Cork-insert map rails full length of markerboards with clip (one per 18" of board length) and one flag holder per room.
 - b. Provide total 16 linear feet of tackboard surface.

e.Special Equipment

- 1. Room planning must accommodate the following equipment:
 - a. Studio piano.
 - b. Portable P.A. system.
 - c. Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
 - d. Provide data and power at one location for interactive short-throw projector.

2. Storage

a. General

- **1.** Provide a storeroom for securing large instruments and sound equipment.
- **2.** Provide storage and shelving for a variety of instrument and equipment types.
- **3.** Provide area for sheet music storage.

3. Office/Work Area

a.General

- 1. Space for one instructor.
- 2. View lites for visual supervision of adjacent instructional areas
- **3.** 6-ft Markerboard
- 4. No fixed casework

b.Furnishings

- 1. Modular systems furniture preferred
- 2. Include wardrobe cabinet
- **3.** Space for file cabinets
- 4. Space for bookcases for reference material

C. LIBRARY/MEDIA

1. Reading, Instructional, and Stack Area

a. General

- The library holds the schools learning materials, provides access to computers and internet services and provides instruction in use of these resources.
- 2. The main room in the library contains various functional areas which can be arranged in a number of different ways. The areas generally are open to one another and are defined only by their furnishings and equipment.
- **3.** Entry, Stack Area, Small Group Area, Instructional Group Area, Reading Area, Circulation Desk, and Makerspace Area should be designed as an open area with overlapping use. Areas may be divided by shelving and furniture.

b.Entry

- 1. Entry should be visible from the circulation desk.
- 2. Entry should be from a main corridor or lobby.
- **3.** Provide pair of doors for main entrance into library.
- **4.** Provide electrical power near entrance for potential future security detection equipment.
- 5. Display case with lighting visible from the corridor and library.

c. Stack Area

- 1. The stack area contains the shelving for books and other material which are on open display in the library. Stack shelving must be capable of holding 8,400 volumes.
 - a. Shelving may be distributed within the stack area and at other areas.
 - b. If other areas are utilized, provide mobile carts, book bins, and shelving.
- 2. Interior shelving should be low units where higher shelves would interfere with supervision.
- 3. Wall shelving should maximize space with heights up to, but not exceeding 72".
- The stack area may be consolidated into one part of the main room or may be divided by reading areas, etc., and distributed throughout the Library space.
- 5. Provide room in the student area for two copiers for student use and to support publishing which may be done at any workstation.

d.Small Group Area

- **1.** The small group area is intended for small group activities, teaching, and presentations.
- **2.** Locate the area away from high activity portions of the library.
- 3. Provide video outlet within sightline of circulation desk.
- 4. Provide flat screen monitor with wireless access.

e.Instructional Group Area

- **1.** The instructional group area should be designed to provide instruction for larger groups of students, staff, and community members.
- 2. Provide an area for seating a minimum of 32 persons at tables.
- **3.** Provide data and power at one location for interactive short-throw projector.
- **4.** Provide one 8 ft. long markerboard.
- **5.** Locate the area away from quiet areas so that instruction will not interfere with reading or other quiet activities. Maintain sightline from circulation desk.

f. Reading Area(s)

- 1. The reading area(s) may be consolidated into a single area or may occur at various locations within the main room or facility. Maintain sightlines from circulation desk.
- **2.** Furnishing will primarily be tables and chairs, but easily movable couches and easy chairs may also be used.

g.Circulation Desk

- 1. The circulation desk is the control center for the library.
- The circulation desk must be located for visual supervision of all of the areas in the main room and should have a good visual and physical relation to the library entrance.
- **3.** The circulation desk must accommodate computer work stations as well as catalog index computers. Provide wiring and coordination.
- **4.** Provide a workstation modular circulation desk and surface countertop area containing:
 - a. Book drop (with depressible book truck).
 - b. Two attendant stations (w/computer connections)
 - c. Integrated Storage
 - d. 8 to 10 lineal feet of modular work surface countertops behind or near the circulation desk. Provide wall cabinets above the countertop if space permits.

h.Makerspace Area

- 1. For student project research and creation
- **2.** Provide data and power at one location for a short-throw interactive projector.
- 3. Provide 8 linear feet of marker board.
- **4.** Finishes:
- **5.** Floor finishes: Hard surface flooring.
- **6.** Cabinetry and Casework
 - **a.** Provide cabinetry along one wall which includes the following:
 - i. 8 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.

- ii. Provide three 36" wide, full height cabinet with doors and adjustable shelving.
- iii. Provide wall cabinets above all base cabinets.
- iv. Each cabinet door must be equipped with keyed lock.
- i. Online Reference Catalog and Technology Access Areas
 - 1. Provide space for modular countertops at multiple locations.

2. Seminar Rooms

- **a.** Provide seminar area for use by small groups of students with instructor.
- **b.**Seminar area should be convenient to the library entrance and should be open or have windows for supervision.
 - 1. Provide data and power at one location for interactive short-throw projector.
- **c.** . Provide one 8 ft. markerboard.

3. Workroom/Office/Storage

- **1.** The library workroom/office/storage is occupied by the Media Specialist who supervises the library operations and services.
- **2.** Locate the workroom/office/storage with windows for supervision of as much of the library as possible.
- 3. Locate the office directly adjacent to the Circulation desk.
 - a. Workstation modular furniture
 - **b.** Space for file cabinets
- **4.** The library storage is intended to store miscellaneous books and equipment related to the library operations.
- 5. Provide open floor space for storage of equipment on carts.

FOOD SERVICE

SPACE DESCRIPTION:

The Cafeteria serves as a multifunctional space for dining, community meetings, and may accommodate school gatherings and performances. The area will receive students for meals on a scheduled basis and will serve as a public gathering space at special times. Maximum flexibility shall be considered within this space.

The Kitchen design must be coordinated closely with the district's Food & Nutrition Services

Department. Equipment lists shall be provided to the designer designating type, function, quantity, size, utility requirements, and contractual responsibility for each piece of equipment. All surfaces in the kitchen are to be non-porous materials that are easily cleaned and comply with local health authority requirements.

A. CAFETERIA/COMMONS

1. Kitchen and Support

Elementary School Educational Specifications Jeffco Public Schools

- a.Serving
- b.Dish Return
- c. Food Preparation Area
- d.Dishwashing Area
- e. Dry Food Storage
- **f.** Walk-in Freezer/Refrigerator
- g. Food Service Office
- **h.**Food Service Toilet
- i. Food Service Laundry Room
- j. Receiving Area

2. Seating/Commons Area

- a. Seating and Dining Area
- **b.**Chair and Table Storage
- c. Special Program Storage

DESIGN CRITERIA

A. CAFETERIA/COMMONS

1. KITCHEN AND SUPPORT

a. Serving

- 1. The serving area is where students pickup their food. Serving is equipped with hot food tables, cold food tables, and flat table area.
- **2.** Floor drains are not to be located in the serving area unless required by code.
- **3.** Provide a minimum of 15 lineal feet of serving line. Some schools may require dual serving lines.
- **4.** The serving line will terminate in a portable point-of-scale computer station which is connected to the Kitchen Office and the central food service server.
 - **a.** Provide power and data at point-of-sale stations.
- **5.** The serving line can be within the kitchen area with an "in" door and an "out" door. The preference is to have coiling counter doors opening into the cafeteria seating area.
- **6.** The serving line should be positioned to allow for students to line up waiting for their turn to be served.
- **7.** Serving line and the cafeteria entrance should be positioned for good traffic flow and should avoid cross-traffic.
- **8.** Use of color and texture for finishes in this area is encouraged.

b.Dish Return

1. The dish return is the area where students return their dirty dishes for washing. The dish return area can be either within the kitchen and

accessible by a door or coiling counter door, or an area within the seating area where trash and trays are collected.

c. Food Preparation Area

- 1. The food preparation area is where the food is cooked or heated in preparation for being served.
- 2. Locate the food preparation area with direct relationships to the Serving Area, Dry Food Storage, and the Walk-in Freeze/Refrigerator.
- 3. Finishes and Plumbing:
 - a. Provide quarry tile flooring with 6" base throughout the area,
 - b. Provide floor sinks and floor drains as need and required by Health Code.
 - c. All Faucets for kitchen hand sinks are to be manually operated by hand or foot controls.
 - d. Floor sinks should be set level with the floor. Floor drains should have a slope-to-drain.
- 4. All Food Preparation Equipment and Tables should be on locking casters for ease of cleaning.
- 5. Food Preparation Equipment shall conform to the District's preparation concepts and philosophy.
- 6. Provide hand wash sinks as required by Health Codes.

d.Dishwashing Area

1. The dishwashing area is where soiled trays are washed as well as the pots and pans and other tools of food preparation.

e. Dry Food Storage

- 1. The Dry Food Storage room is where canned goods and other packaged materials are stored.
- 2. Provide shelving and dunnage racks.
- 3. Locate Dry Food Storage near the Receiving Area.

f. Walk-in Freezer/Refrigerator

- 1. Locate the walk-ins near the Receiving Area and convenient to the Preparation Area.
- 2. Walk-ins are to be provided with air-cooled condensers located on the roof.

g. Food Service Office

- 1. The Food Service Office is where the manager performs clerical work and conducts the routine business of the Kitchen.
- 2. Provide a modular work surface with double file drawers.
- 3. Floor space for file cabinet.
- 4. Food Service lockers (15" two tier) may be located within the Food Service Office or in another convenient location (adjacent to the Food Service Toilet).

- 5. Locate the Food Service Office with direct connection to the Food Service Toilet.
- 6. Provide easily accessible data and power outlets to accommodate the Point-of-Sale computer on a cart.
- 7. Provide window between office and food preparation.

h.Food Service Toilet

- 1. Single occupant, ADA accessible, with toilet and wall-hung lavatory for use by Kitchen staff.
- 2. Provide convenient access to lockers, or locate lockers within the toilet room.
- 3. Room shall not be accessed directly from the Food Preparation area.
- 4. The toilet can be accessed through the food service office.

i. Food Service Laundry Room

- 1. The laundry room is for the washing of cleaning cloths, etc. and also contains a mop basin and provides for storage of cleaning supplies.
- 2. Provide side-by-side or stack type washer/dryer combination.
- 3. Provide a floor mounted mop sink with mop holder and shelf.
 - a. Provide space for storage shelving to hold cleaning supplies.

j. Receiving Area

- 1. The receiving area is where food products are received and where refuse is removed from the Food Service area.
- 2. The receiving must have direct access to the service drive with vehicle access.
- 3. The receiving area may be within the kitchen area or may be a separate room
- 4. Provide doorbell or other signaling devices at door for controlled access to receiving area. Provide peep hole at door.
- 5. Receiving should have convenient access to Dry Food Storage and refrigerated storage equipment.
- 6. Allow for space within the receiving area for small recycle bins, etc.

2. SEATING/COMMONS AREA

a. Seating and Dining Area

- 1. General
 - **a.** The seating area shall have a flat floor.
 - **b.** The seating area must have direct relationships to the serving line, chair/table storage, and the Performance Area.
 - **c.** The seating area should be configured for good visual site lines to the Performance Area.
 - d. The seating area should be in close proximity to the playground areas.
 - e. Direct access from a main corridor.

- f. Locate Dining/Seating near public toilets and allow for direct outside entrance to the area for after-hours use.
- g. Provide exterior windows and daylighting.
- h. Acoustical attenuation should be considered.
- i. Provide drinking fountain with bottle filler station.

2. Finishes:

- a. Floor: Hard surface flooring or stained, sealed concrete
- b. Walls: Abuse-resistant and easily cleanable.

3. Technology:

- a. Public Address System.
- 4. Other: A motorized projection screen in front of the Performance Area and facing the audience.

b.Chair and Table Storage

- 1. The chair and table storage area is for the storage of cafeteria tables when not in use as well as storage for additional loose chairs required for assembly seating in the area.
- Chair and table storage may be in one location or may be divided into separate areas. Locate storage to allow for the setup or breakdown of the Dining/Seating or Performance Seating areas separately without interference with ongoing activities in the other area.
- 3. Locate Chair/ Table Storage with direct access to the Seating Area.

c. Special Program Storage

- **1.** Separate room or area for material storage for school-related, community and after-school programs.
 - **a.** Wardrobe cabinet type storage may be utilized. All cabinets lockable.

PHYSICAL EDUCATION

SPACE DESCRIPTION

Physical Education spaces are utilized for the delivery of Physical Education programs and include interior and exterior spaces, playgrounds and play fields.

A. PHYSICAL EDUCATION

- 1. Gymnasium
 - 1. Gymnasium
 - 2. P.E. Teacher Office
 - 3. Equipment Storage
 - 4. Exterior Equipment Storage

2. Hard Surface Outdoor Play Area

- a. Basketball Courts
- **b.** Tetherball
- **c.** Other Court Markings

Elementary School Educational Specifications Jeffco Public Schools

3. Apparatus Play Areas

- a. Kindergarten / Pre-School Apparatus Area
- **b.** Primary Apparatus Area
- c. Intermediate Apparatus Area

4. Play Fields

- a. Softball
- b. Multi-Use Field

DESIGN CRITERIA

The physical education area should be organized so that the various parts are in optimum relation to each other and are so located that the noise inherent in physical education activities does not interfere with academic activities within the school.

Students rotate through physical education classes which are conducted within the Gymnasium and on outside courts and fields. The gymnasium shall have direct access to outside activity areas without crossing vehicular traffic or service drives. Students will normally assemble in the gymnasium for class and will move from this location to the exterior for those programs conducted outside.

The gymnasium may be used after hours for organized school and public programs. Informal leagues may use the gym for games. Public, after-school access to the gym should be provided without compromising security for the remainder of the building.

Apparatus areas are associated with specific age groups of children with areas separated by fencing. All apparatus areas shall be surfaced with an impact-absorbing material. All apparatus areas shall be designed with clear access paths between equipment. All equipment shall be planned with safety fall zones as required by applicable codes and regulations and accommodate students with disabilities and/or limited physical abilities.

Play fields should be easily accessed from the hard-surface play areas or by concrete or asphalt paths. Accommodation of students with disabilities and/or limited physical abilities shall be designed into all areas. Sites with limited area may have play fields overlapped.

A. PHYSICAL EDUCATION

1. Gymnasium

a. Gymnasium

- 1. Court Striping:
 - **a.** Provide full size regulation main basketball court: Min. court size of 74' x 42'.
 - **b.** Provide two non-regulation cross courts with backboards.
 - **c.** Provide two adjustable basketball back boards which can be lowered from standard height to 8' above floor level (or lower) at main court.
 - **d.** Regulation Size Volleyball: Provide volleyball in-floor anchors for one main-court net.
- 2. Sound Amplification System
- **3.** Design for future traversing wall (Max. 8ft. high)
- **4.** Finishes
 - **a.** Gym floor shall be athletic sports sheet flooring.

- **b.** Acoustical roof decking and sound-absorbing masonry
- **5.** Equipment and Accessories:
 - **a.** Provide padding at walls behind basketball goals where goals are closer than 10' to the wall.
 - **b.** Two 8 linear feet marker board without trays one for each half-court.
 - **c.** Motorized gym divider curtain.
 - d. Climbing ropes with stopper disks
 - e. Wall mounted arm ladder
 - f. Wall mounted adjustable chinning bar
 - g. Wall mounted horizontal monkey bar
- **6.** Gymnasium clear height: Minimum 20 ft. from floor to underside of lights, ductwork, and structure.

7. Windows

a. High windows for daylighting should be considered. Protect openings and provide appropriate glazing or other transparent or semi-transparent material to eliminate glare and to provide maximum safety.

b. P.E. Teacher Office

- 1. Provide one office for the physical education instructor(s). The office shall be accessible from the gym and should be located near the main gym entrance.
- 2. Provide a window between the office and the gymnasium.
- 3. 4'-0" x 6'-0" markerboard and 4'-0" x 4'-0" tackboard

c. Equipment Storage

- **1.** Gym storage is required for the storage of balls, volleyball posts, mats and other athletic apparatus.
- 2. Storage shelving (24" deep) along 2 walls in the room.
- 3. Open floor area should be planned for storage of large equipment.
- **4.** Easy access to outside play areas.
- **5.** Storage for stacking chairs may be separate from equipment storage.

d. Exterior Equipment Storage

- 1. Storage for outdoor P.E. and Athletic equipment
- 2. Door pair or overhead manual coiling door Min. 6'-0" w x 7'-0" h opening
- 3. Open and unobstructed floor area
- **4.** Should be attached to the main building with easy access to all play areas.
- **5.** Locate near the main exterior student access from the Gymnasium to the outdoor activity areas.
- **6.** Level threshold for rolling equipment.

2. Hard Surface Outside Play Area

a. Basketball Courts

1. General Requirements:

- **a.** Provide 3 full size basketball courts. Side goals can be added if desired.
- **b.** One or two courts should be equipped with adjustable backstops which allow the goals to be lowered for children's use.
- c. Hard surface play areas are used for physical education classes as well as being available for free play during lunch and recess periods.
- **d.** Accommodation of students with disabilities and/or limited physical ability shall be designed into all areas.
- **e.** These areas may also be used before and after school as a gathering place for students. Exterior areas are available for use by the general public during non-school hours.

b. Tetherball

- 1. Provide 4 tetherball poles with pavement markings.
- **2.** Locate tetherball poles in an area which is out of the way of student traffic.

c. Other Courts and Markings

- 1. Provide 4 to 6 "four-square" courts
- 2. Provide 3 to 4 "hopscotch" courts
- 3. Provide one wheel chair hopscotch court
- 4. Other play court markings as designed

3. Apparatus Play Areas

a. Kindergarten/Pre-School Apparatus Area

- 1. The playground and apparatus area for Kindergarten and Pre-School areas shall be located for direct access from the classrooms.
- **2.** The Kindergarten/Pre-School play area shall contain various hard-surface, grass and apparatus components and shade.
 - **a.** Fenced area.
 - **b.** Hard-surface areas should be adjacent to the classrooms.
 - **c.** The apparatus area should be located adjacent to the hard surface area.
 - d. The grass area should be located with access to both hardsurface and apparatus areas. The grass area should be located to provide access for lawn mowing equipment and should be planned for ease of maintenance.
 - e. Provide minimum of 25% of the play area in shade.
 - **f.** Provide minimum of 120 square feet of storage for Pre-School/Kindergarten playground equipment. Storage may be part of the school building or in a separate stand-alone building.

b. Primary Apparatus Area

1. Locate primary apparatus area adjacent to the exterior hard-surface play area.

2. Primary apparatus is normally located adjacent to the intermediate area with a 4' fence separating the two areas. This allows for easy supervision of the areas together.

c. Intermediate Apparatus Area

1. Locate intermediate apparatus area adjacent to the exterior hard-surface play area.

4. Play Fields

a. Softball

- 1. Provide 1 softball field
- **2.** Provide minimum 200 ft. length foul lines, skinned infield edge 60 ft. radius from pitching rubber for each field.
- 3. Provide backstops and fencing.

b. Multi-Use Field(s)

- 1. If there is sufficient site area, provide separate soccer and football fields. All football fields should be equipped for use as soccer fields.
- 2. Provide a minimum of one combination soccer/football field.
- 3. Minimum size of 150 ft. x 300 ft., if site size will allow.

SUPPORT AREAS

SPACE DESCRIPTION

Support areas are those spaces which are required for the building to function properly. They provide for circulation, physical comfort and provide the necessary spaces for maintenance and operations.

A. SUPPORT AREAS

1. Facility Maintenance Center

- a. Facility Manager's Office
- b. Toilet Room /Locker Area
- **c.** Storage
- d. Recycling/Trash/Receiving
- e. Custodial Closets and Storage
- f. Outdoor Facility Storage

2. Utilities and Infrastructure

- a. MDF Room
- **b.** IDF Rooms
- c. Mechanical Room
- d. Main Electrical Room
- e. Electrical Closets
- 3. Corridors and Circulation
- 4. Student, Staff, and Public Toilets
 - a. Toilet Rooms

DESIGN CRITERIA

Elementary School Educational Specifications Jeffco Public Schools

Locate the various support spaces at appropriate locations and adjacencies within the building for efficient maintenance and utility usage.

1. Facility Maintenance Center

a. Facility Manager's Office

1. General

- i. The Facility Manager's Office should be located near the primary service entrance of the building.
- ii. The office will contain the building security control panel and the Facility Manager must be able to enter the building and make his way to the office in sufficient time to disarm the security system before the alarm is initiated.
- iii. Where compatible with other building planning considerations, the Facility Manager's office should be centrally located in the building.

2. Furniture and Accessories

- i. Area for two workstations
- ii. Shelving and filing cabinets
- iii. Areas for small conference table for seating of six staff

b. Toilet Room / Locker Room

- 1. Single ADA Toilet Room
- 2. Area for 5 full height lockers

c. Storage

- **1.** The storage room should be located for direct access to the receiving room with indirect access to the exterior of the building.
- 2. Provide a minimum 42-inch wide single door or double 36-inch doors
- **3.** Provide 24" deep shelving to 84" A.F.F. multiple shelving units to store cleaning and other supplies
- 4. Open floor area(s) for larger cleaning equipment storage
- **5.** Floor drain
- **6.** Mop sink

d. Recycling/Trash/Receiving

- 1. For the collection of materials scheduled for recycling and for materials designated to be taken to a landfill. Temporary holding space until recycling and trash can be moved outdoors.
- **2.** Provide outdoor enclosure to screen recycle/trash area from view. Gates are prohibited.

3. Receiving:

- i. The receiving room should be located for direct access to the primary building service access with direct access to the exterior of the building.
- ii. Provide a minimum 42-inch wide door access from the exterior of the building and between the receiving room and a primary building corridor.
 Double 36-inch doors are acceptable.
- iii. The receiving room should have easy access to a building elevator, if provided.
- iv. The space will contain a washer and dryer for maintenance use.

e. Custodial Closet and Storage

- Custodial closets shall be located at convenient points throughout the building
 for efficient cleaning operations without moving materials and equipment over
 long distances. Custodial closets should be located as near as possible to areas
 requiring frequent cleaning such as student toilet rooms.
- **2.** Closets must contain:
 - i. Floor-mounted mop sink with an impervious wall treatment surrounding.
 - ii. Mop rack and shelf
 - iii. Floor drain
 - iv. Space for storage of cleaning materials and supplies in steel shelving units.
 - 1. Minimum locations (near or within):
 - a. Gymnasium
 - b. Kitchen
 - c. Cafeteria
 - d. Instructional Areas

f. Outdoor Facility Storage

- 1. Outdoor Storage is required for the storage of fuel powered maintenance equipment such as lawn mowers, snow blowers, etc.
- **2.** The area may be in an independent building or part of the primary school building.
- **3.** The Outdoor Facility Storage area shall open only to the outdoors and must be separated from the remainder of the building by a two-hour fire separation.
- **4.** Provide a double door opening to accommodate the movement of riding mowers, etc.
- **5.** Door threshold should be level.
- **6.** Locate equipment storage with vehicle access from service drive or other truck accessible area.

2. Utilities And Infrastructure

a. General

- 1. Provide adequate floor space for both mechanical and electrical rooms. Rooms must be of adequate size to facilitate maintenance of equipment and movement of personnel during normal maintenance procedures. Consider the requirement to pull heating/cooling coils and/or fan shafts from equipment.
- **2.** Floors should be constructed at grade level. The main mechanical rooms should be accessible by driveway for pick-up trucks delivering supplies and equipment.
- **3.** Concrete floor finish. Painted walls are not required. Suspended ceilings in electrical rooms are not required.
- **4.** Direct exterior access from main mechanical rooms should be through a set of double doors. The door opening size must permit passage of the largest piece of equipment and equipment maintenance items. Building access must also be provided from an internal corridor.
- **5.** Acoustical isolation from adjacent rooms and areas is a critical consideration in the location and design of mechanical and electrical rooms.
- **6.** All building systems should be concealed in public areas, classrooms and finished spaces.

7. Vertical ladders with safety accessories and hoist must provide access to roof equipment. Avoid ships ladders/alternating stairs for roof access.

3. Corridors And Circulation

a. General

- Design and material selections should provide corridors that are durable, easily maintainable, attractive and non-institutional in appearance. The corridor layout should provide direct, simple and logical pathways throughout the building.
- 2. Design corridor systems to allow for direct visual security monitoring with minimal cameras. Within the corridor system, provide lockable security separations to isolate building wings and other areas that may be used after hours by the public such as the gymnasium, cafeteria, music room, and library.
- **3.** For security purposes, provide swinging separation doors with magnetic hold-open devices if doors also serve as fire doors or manual hold-open devices if doors are not fire rated. Coiling or folding corridor security gates are prohibited.
- **4.** Utilize widened corridor areas for extension of teaching and study space.
- **5.** Corridor view windows into classrooms are not recommended for security reasons. Corridor transom windows with sill height of 7'-4" above finished floor are acceptable.
- **6.** Minimum Corridor width is 8 ft., unless otherwise approved. Main circulation corridors shall be a minimum of 12 ft. wide.
- 7. Vestibules: Air lock type vestibules are required at the main building entrance. Provide transaction window. Heavy-duty walk-off surfaces or hard surface with walk-off mats are required in vestibules. Provide an area for parents to drop off student lunches, backpacks, coats, etc.

8. Finishes

- i. Carpeting in corridors. Heavy-duty walk-off surfaces or hard surface flooring in heavy traffic area at entrance and exterior corridor doors.
- ii. Acoustical treatment may be necessary to minimize reverberation. Minimum ceiling height for corridors is 10'-0" A.F.F.

9. Accessories and Casework:

- i. General-purpose lighted display cases in the main lobby, art area and near the gymnasium
- ii. Approximately 150 square feet of tack boards should be provided at three or four prominent locations in the main corridor.
- iii. Provide two rows of tack strips on selected corridor walls. Mount tack strips at approximately 54" and 72" above the floor.

4. Student, Staff, and Public Toilets

a. Space Description

1. Core Area Public Toilet Rooms

- i. Locate near the gymnasium, cafeteria and administration areas.
- ii. Walls to 84 inches high behind all plumbing fixtures shall be ceramic tile.
- iii. Floors are required to be porcelain ceramic tile with floor drains.
- iv. Provide hose bibs

v. Provide ADA accessible toilet rooms. Hand washing areas shall be a part of, and within, each toilet room.

2. Instructional Area Student Toilet Rooms

- i. The design should be configured with an entrance passage without door, configured for visual privacy, rather than an entrance door.
- ii. Provide acoustical separation from the instructional suite.
- iii. Walls to 84 inches high behind all plumbing fixtures shall be ceramic tile.
- iv. Floors are required to be porcelain ceramic tile with floor drains.
- v. Provide hose bibs.
- **vi.** Provide ADA accessible toilet rooms. Hand washing areas shall be a part of, and within, each toilet room.

3. Staff and Single Fixture Toilet Rooms

- i. Distribute staff toilet rooms throughout the building and easily accessible from instructional areas.
- ii. Walls shall be ceramic tile.
- iii. Floors shall be porcelain ceramic tile with floor drains.
- iv. Provide hose bib.

4. Drinking Fountains

- i. Quantities should be determined by building code requirements.
- Locate at least one electric water cooler near gymnasium, cafeteria and administration areas. Locate instructional area drinking fountains near student toilet rooms.
- iii. Drinking fountains which are located in corridors or other areas of high pedestrian activity shall be mounted in an ADA compliant recess. Flooring to be hard surface flooring or walk-off carpet at drinking fountains.
- iv. Provide bottle filler stations near the gymnasium and cafeteria
- v. Place drinking fountains at heights appropriate for age groups.

SITE DEVELOPMENT STANDARDS

DESIGN CRITERIA:

Preferable site components include land that is almost flat but with positive drainage, a large amount of non-major highway road frontage or corner site, and a location which abuts a neighborhood park. The site should be close to utilities and centered within the District boundary area and shall not be in a flood plain or over a mining area. The geology and soils must be acceptable to the District Facilities Management Department and to the office of the State Geologist.

GENERAL SITE REQUIREMENTS

A. Optimum Site Size:

1. Suburban Site: Ten (10) useable acres.

B. Sustainability:

1. In as much as it is feasible, site development should incorporate sustainable design concepts and techniques.

2. Utilize passive solar design elements, such as minimizing north side entrances and large glass expanses, and incorporate shading features into the building configuration.

C. Joint-Use:

- **1.** Selection of sites adjacent to the following features may be considered:
 - a. Public open space
 - **b.** Public parks
 - c. Public facilities, such as libraries or recreational facilities
 - **d.** Community or neighborhood focal points

D. The following land areas should not be included in the calculation of usable acreage:

- 1. Drainage ways, detention ponds, or wetlands
- 2. Slopes greater than 5 percent
- **3.** Intrusive easements or rights-of-way
- **4.** Space requirements may be adjusted based on an analysis of joint-use facilities, parking, and play fields.

E. General Site Requirements:

- 1. Develop site contours such that building exits are on grade.
- 2. All site amenities, including but not limited to, athletic fields, parking lots, pedestrian walks, and building entries shall have barrier-free accessibility in compliance with the ADA.
- **3.** Minimize concealed exterior building areas with limited public view to enhance visual security.
- **4.** Design buildings and grounds to provide maximum safety and visual observation for all site components.
- **5.** Design the site as an amenity to the surrounding neighborhood.
- **6.** Develop a site plan that minimizes the impact of the overall site. Minimize cut and fill work, if possible.
- **7.** Develop the overall site to promote positive drainage
- **8.** If the site is large enough, provide off street loading and circulation space for buses separate from the auto loop.
- **9.** Provide bicycle parking and auto parking spaces with vehicle circulation for staff, students, and visitors. Provide accessible parking complying with current accessibility codes. Parking lots shall be designed to avoid traffic conflicts with pedestrians, bicycles and buses.
- **10.** Provide service and delivery drives with turnaround space to serve the kitchen, custodial facilities, and play fields. A trash area to house trash containers and recycled material containers is required near the kitchen.
- **11.** Trash compactor trucks and recycled material trucks driving up to the containers require a curb-less concrete pad with minimum elevation change. Minimize traffic conflicts between delivery vehicles and pedestrians, bicycles, buses and autos.
- **12.** Design convenient paths and sidewalks from all building exits to fire refuge areas, parking lots, bicycle enclosures, and service areas and play pads. Avoid conflicts between vehicles and bicycles.

F. Site Improvements:

- 1. When required by governing agencies, storm drainage and erosion studies are required. Protect headwalls by appropriate plantings or other safety devices.
- **2.** Water discharge over sidewalks is prohibited. Provide necessary site drainage improvements as required by the design concept. Where quantities of water are

- discharged to earth surfaces, provide erosion control structures. Direct water to storm drains where possible.
- **3.** Orient and design playgrounds, parking lots, sidewalks, service drives, etc., to easily shed water and to not accumulate winter ice. Provide low areas for snow piles that will include an area drain. Avoid snow pile areas that are uphill from walks and parking areas.
- **4.** Avoid retaining walls or other site features which would complicate maintenance and/or create fall hazards. Where retaining walls cannot be avoided, tops of walls must be fenced.
- **5.** Avoid service and delivery conflict with playgrounds and playground access from building.
- **6.** An automatic underground irrigation system is required for turf grass play fields, lawns and planted areas.
- 7. Low maintenance landscape materials and drought resistant plant materials are encouraged. Plant materials and site furniture should be able to withstand normal site use by students. Plantings such as shade and ornamental trees, shrubbery and ground covers should be used judiciously to provide shading, visual screening and wind protection for the building, and to make the site harmonious with the community.
- **8.** Vandal resistant building and site materials are required.
- 9. Provide chain link fencing.
- **10.** The design should incorporate into the site plan a flagpole, benches for informal seating in patios and at main entrances, and fire and weather resistant fixed trash receptacles at main building entrances, patios and gathering areas.
- **11.** Provide sturdy chain link, masonry or concrete enclosures for meters, transformers, etc. Provide chain link tops for all utility enclosures.
- **12.** Exterior building identification, street address, and direction and traffic control signage is required.
- **13.** Design parking and drive areas to allow for stockpiling of snow during snow plowing efforts.

G. Vehicle Circulation and Parking:

- **1.** Buses:
 - **a.** Provide off street loading and circulation space for buses separate from, and not in conflict with, automobile traffic.
 - **b.** Bus circulation shall be counter-clockwise in direction.

2. Automobiles

- **a.** Unless otherwise directed by the District Project Manager, provide automobile parking spaces and vehicle circulation as recommended by zoning regulations for staff, students, and visitors. Provide ADA spaces.
- **b.**Emergency Vehicle
 - 1. Coordinate with the local Fire Prevention Bureau and other authorities having jurisdiction for locations and types of access drives required.

H. Temporary Classroom/Expansion Areas:

3. General Requirements:

- **a.** Design exterior site area(s) for possible future standard-sized modular classroom buildings and cottages.
- **b.**Plan for one (1) temporary classroom for each 200 students of permanent design capacity.

- **c.** Locate to facilitate transport and placement with minimal site disruption.
- **d.**Locate to minimize distances to main building and comply with minimum travel distances to interior toilet rooms.
- **e.** Design the area to minimize visual impact on adjacent properties.
- **f.** Provide provisions for future underground utilities that would extend from the main school building to the classroom buildings.