

**Educational Specifications for
Davis Swing Space School
450 capacity**

April 2016



Introduction

This document articulates the requirements for an elementary school that will be used temporarily as swing space for other schools undergoing modernization. The square feet requirements specified are 'targets' to be used for planning purposes. It is expected that the architect will minimize the movement of walls unless the space is so undersized that it will impact the delivery of the program.

Background

As the District of Columbia transitions from the Phase 1 modernization program (summer projects) to comprehensive modernizations (year-long projects), schools need swing spaces where they can stay temporarily while their own schools are under construction. Schools currently scheduled for modernization over the next five years in the northeast and east of the Anacostia River include Kimball, Houston, CW Harris, and Smothers elementary schools. The Davis ES building is ideally located for a swing space in this area.

Davis Elementary School was consolidated with Plummer ES in 2013 and is currently empty. Originally built in 1943, the school had additions in 1946, 1953 and 1963 at a time when the city was growing rapidly. At 71,000 SF, Davis should be able to accommodate up to 450 students.

Scope

This project is a stabilization/renovation of the existing school for a capacity for 450 students. The educational specification requires a school of approximately 63,000 SF if constructed as a new building.

Classroom Requirements

Proposed Capacity Model

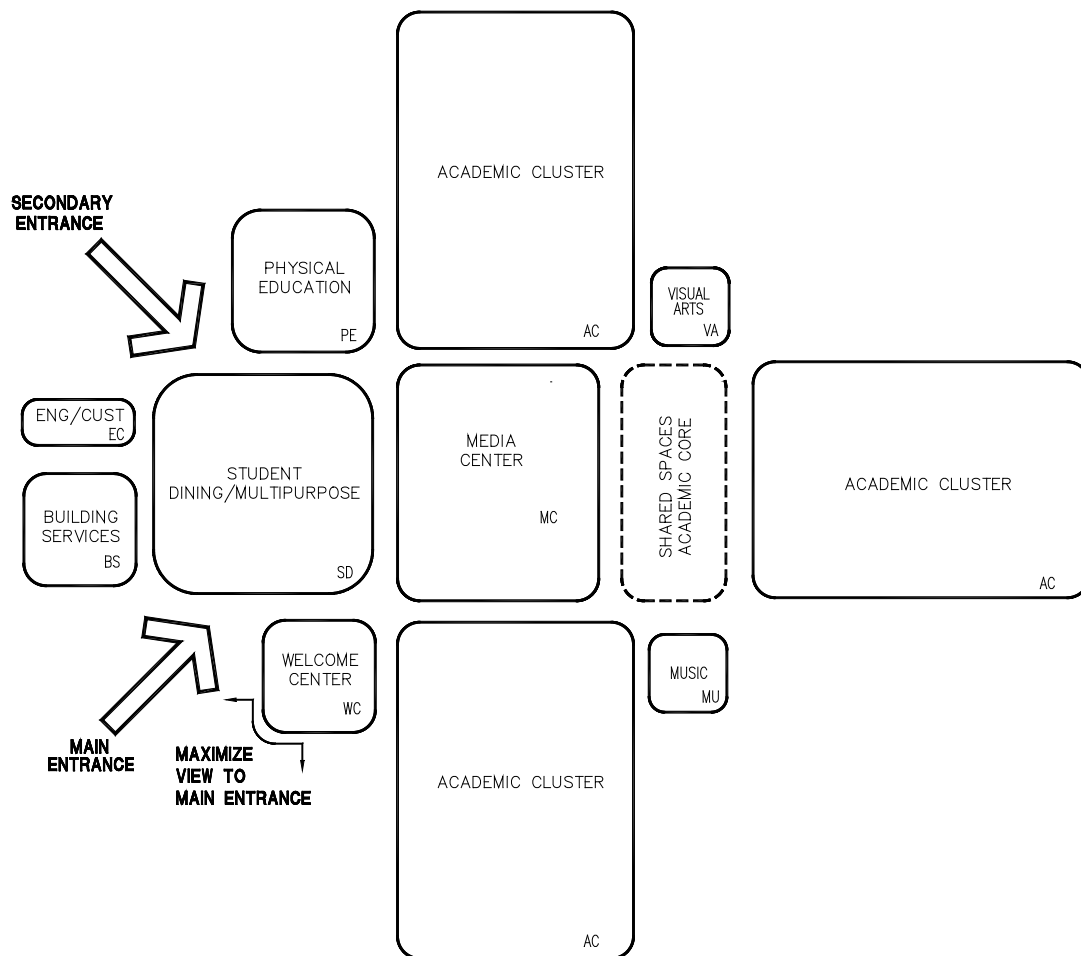
Grade	Number of	Capacity
	Classrooms	
Pre-S/K	5	90
Kindergarten	3	60
1 st -2nd Grade	6	120
3 rd -5th Grade	7	160
Special Education	2	20
Total	23	450

Overview of Planning Concepts

Academic Cluster Concept

The Academic Cluster concept best meets the needs of the educational programs, students, and staff. The cluster concept facilitates a variety of instructional strategies and it provides a learning environment which is characterized by flexibility, a sense of community for the students and teachers, and a safe, well-supervised environment. Teachers will have the option and flexibility within a cluster to create and organize learning environments that work for students and their learning styles.

Diagram Intro A shows a typical design based on the cluster concept.



Core Instructional Spaces

The basic organizational cluster for this school should consist of general purpose classrooms, a small group room, and a teacher work center. Each cluster would also contain a resource classroom used by support educators. Student restrooms should be located within the cluster commons.

“Welcome Area”/Administration/Student Services

The front entry lobby should be welcoming and inviting for students, staff, and visitors. Display systems should be provided for 2-dimensional and 3-dimensional student work and awards. Finishes should be durable and easy to maintain. The scale of all spaces should be child-friendly. Colors, artificial lighting, and natural daylighting should be managed artfully to create an environment that communicates that school is a very special place.

Visitors should be greeted by a security counter/desk where they will sign-in and show identification. For additional security, it is preferable that the welcome center be able to see visitors coming through the front entrance as well. The primary administrative offices will be located in this centralized area at the main entrance to the school. Additional administrators may be distributed around the school at the school's request.

Library Media Center

The library media center (LMC) should be centrally located in the school building with easy access for all students and staff. A LMC consists of flexible learning spaces for instruction, research, browsing, listening, viewing, reading, studying, and the production of academic projects, as well as administrative areas for library media center management and collaborative meetings. LMC spaces should be designed with maximum flexibility in mind.

Visual Arts, Performing Arts and Science

The art and music classrooms will be shared by all grade levels for general class and small group instruction. The location and access to these rooms should promote orderly transitions. If possible, the music suite will be located near the performance area. The art classroom may be in the academic areas preferably with an optimal north daylighting orientation.

Physical Education/Assembly

To support the physical education program, a variety of indoor and outdoor areas are required. Indoor play space will also be used as a performance area and will include a stage and storage space.

Furniture & Equipment

Classrooms vary in shape and size; therefore, the furniture should be flexible to accommodate a variety of classroom formats for both individual and group activities. Teachers and students should have storage space for personal belongings, papers, books, supplies, and teaching materials.

To the extent possible, movable furnishings will be used, rather than fixed casework, to provide flexibility for future reconfiguration.

Technology

The facility will contain the latest in technology and be wired for voice, data, and video throughout the building. It is intended that access to technology will be seamless and pervasive throughout the building.

Every classroom will be wired for teacher audio enhancement. Research into this cutting-edge technology suggests that student learning can improve in classrooms where the teacher's voice is amplified and the classroom acoustics are designed to support voice clarity.

Site

The site circulation will be organized for safety and efficiency. This will be accomplished through careful separation of vehicular and pedestrian traffic. All play areas will be protected from vehicular and pedestrian traffic, so students can be assured of a safe and secure environment on the entire school site.

To the extent feasible the early childhood wing should have a separate play area and an outdoor classroom.

Performance Criteria

Lighting Quality: Improving natural and artificial lighting in classrooms

	DESIGN PARAMETERS	PARAMETER NOTES
1) Controlled Natural Lighting (Glazing)	10 - 12% of floor S.F.	LEED & Green Globe
2) Combined Light Quality	35-50 Foot-candles	IES
3) Lighting Power Density	0.99 Watts/S.F. or less	ASHRAE 2010 & CHIPS

Environmental / Air Quality: Addressing temperature control, ventilation, air filtration, carbon dioxide levels, and HVAC background noise to ensure comfortable rooms.

	DESIGN PARAMETERS	PARAMETER NOTES
1) Winter Temperature	68.5 to 75.5 degrees	EPA 2000 & ASHRAE 55-04
Summer Temperature	74 to 80 degrees	
2) Humidity	30 % to 60% relative humidity	EPA 2000 & ASHRAE 55-04
3) Air Changes	6-10 per hour	ASHRAE
4) Outdoor Air Ventilation	10CFM per person	Plus 0.12 per SF of area
5) Air Filtration	MERV 13	LEED
	MERV 6 to 8	ASHRAE 52.2-2007 & 62.1-2007
6) Carbon Dioxide Levels	Below 700 PPM above outdoor air	ASHRAE 62.1-2007
7) HVAC Background Noise Level	RC(N) Mark II level of 37	ASHRAE Handbook Chapter 47

Acoustics: Limiting reverberation and background noise and improving sound isolation.

	DESIGN PARAMETERS	PARAMETER NOTES
1) Reverberation	.6 per second	(ANSI S12.60-2002)
2) Background Noise	45 dBA	(LEED)
3) Sound Isolation (Varies)	STC 45 between Classrooms	

DCPS EDUCATIONAL SPECIFICATION**DAVIS SWING SCHOOL**

Technology: Providing data connections for online learning resources, AV equipment, and a sound system with emergency capabilities.

DESIGN PARAMETERS		PARAMETER NOTES
1) Data / Computer Drops	At Teacher and Student Computers, at wireless access points	
2) Audio / Video Equipment		
Projector linked to Teacher's PC		
or		
Interactive Whitebaord		
Sound Reinforcement	Amplifier, microphone, speakers	
3) Clock	Synchronized with Bell system	
4) Sound System & Emergency Call-box		
Ceiling or Wall Speaker	Class change bells, emergency announcements	
5) CCTV Camera (TBD)		
Security, WebX conferencing, Distance Learning		

Sustainability: Build for energy efficiency

DESIGN PARAMETERS		PARAMETER NOTES
1) Building EUI	20% below Baseline	ASHRAE 2010
2) Building Envelope	Meet or exceed R-value standards for building type	ASHRAE 90.1 2010
3) Water	Ultralow flow fixtures	ASHRAE 90.1 2010

Safety & Security

DCPS wants to maintain an inviting and de-institutionalized environment, while simultaneously providing a safe environment for students, staff, and community who use the facility and adjacent support services. The organization of a building will have a major impact on student behavior and safety concerns. Building security can be addressed in an active or a passive manner: active security is based on security systems; passive security is based on program design, building configuration, and community participation. Schools should be based on passive concepts with applied active concepts where necessary.

1. Building Layout

- Avoid blind spots, corners, and cubby holes
- Locate administrative and teacher preparation with good visual contact of major circulation areas (i.e., corridors, cafeteria, bus drop-off, parking)
- Develop spatial relationships that naturally transition from one location to another
- Locate toilets in close proximity to classrooms
- Design toilets to balance the need for privacy with the ability to supervise
- Locate areas likely to have significant community (after school) use close to parking and where these areas can be closed off from the rest of the building

2. Types of Building Materials

- Use durable wall surfaces that are easy to clean so graffiti can be removed
- Incorporate pitched roofs which inhibit roof entry and are aesthetically pleasing
- Operational part of windows on the ground floor should be in the upper portion to prevent access.
- Install non-slip floors and walk-off mats at point of entry
- All doors will have locks on the inside.

3. Uses of Technology

- Phones in every instructional and support area
- Building-wide all-call designed to be heard throughout the school and on the play fields when needed
- Motion or infra-red detectors, which can also conserve lighting costs
- Video cameras that are used for instructional purposes could also be used for security purposes during non-school hours
- Smoke and heat detectors located throughout the building

4. Vehicular and Pedestrian Traffic

- Separate bus drop-off area from other vehicular traffic
- Separate staff and community parking area
- Separate student (pedestrian) traffic flow

5. Landscaping, Play/Practice Fields, Site, and Lighting

- Use native high trees and low bushes (less than three feet high) to deter hiding
- Use aesthetically pleasing fencing around perimeter of the building
- Non-intrusive lighting of all areas (not correctional-type lighting) according to the Light Pollution Credit in LEED-Ss with no lighting to leave property line
- Provide security lighting around building and parking lots with photocell timer, motion sensor and on/off capacity

DCPS Recycles!

All DCPS schools are required to participate in the recycling program provided by DGS. All modernization projects must be designed to be consistent with the standardized supplies and services described at <http://dgs.dc.gov/page/healthy-schools>, with the expectation that in the near term future all schools will recycle and compost under this program.

Since each school is different, the DGS recycling program should be consulted regarding the following design considerations. In general, every modernization project is expected to provide

- **Adequate, accessible space for pick-up of all serviced containers**, usually to include (1) 8 cu yd dumpster OR compactor for paper and cardboard; (2-4) 96 gallon totes for glass/plastic/metals, and (3-10) 36 gallon totes for compostable waste; that is accessible to both front-end loaded and rear-end loaded trucks and allows custodian to easily transport totes to be picked up at ground level. The best configuration of containers will depend on the specifics of the hauling contract, the occupancy of the building and space restrictions. Compactors are not usually recommended for buildings with occupancy less than 500. The dimensions of a standard 8 cu yd side loaded dumpster are 71"x 80"x76" (length x width x height).
- **Secure space for storing serviced containers and collection bins** with easy access for custodian to roll bins to/from pick up location, and distributed as necessary to facilitate flow of materials throughout the building to the pick-up location.
- **Cafeteria and kitchen layout and millwork** that supports a logical flow of materials including emptying liquids, sorting waste into three categories (landfill, recycling, compost), and tray return, while avoiding congestion; includes space for changeable signage and labels; is consistent with compost and recycling supplies provided by DGS for cafeterias (accommodates 32-gallon Brute-style bins with wheels); allows for easy access for cleaning by custodians (bottom of the sorting station is the floor); and has countertop holes that accommodate easy dumping of waste using both compostable and reusable trays.

The DGS recycling program provides a **standardized set of recycling supplies** at no cost to each school, the number and type of bins to be determined according to building characteristics supplied by the project team.

Project teams should also consult with the recycling program regarding providing large, highly visible sorting stations with signage in select high traffic common areas (not in hallways, and not built into the wall); as well as regarding the type and placement of s.

Building Space Summary

Space Summary	Modernization
	Total
Core Academic Areas	29,400
Media Center	2,700
Administration	2,430
Student Dining & Food Service	4,000
Auditorium/Assembly (as is)	4,250
Maintenance & Custodial Services	600
Mechanical, Electrical, Toilets, Custodial Closets	14,627
Total Net	58,007
Construction Factor[.082]	4,756
Total Gross	62,763

Outdoor Area Requirements Summary

Exterior Spaces
Structured Play Area For Primary/Intermediate Grades
Protected Pre-School Play Area
Outdoor Paved Play Area [reduced size basketball courts, with markings for other games]
Outdoor Classroom
Faculty, Staff, and Visitor Parking (TBD)

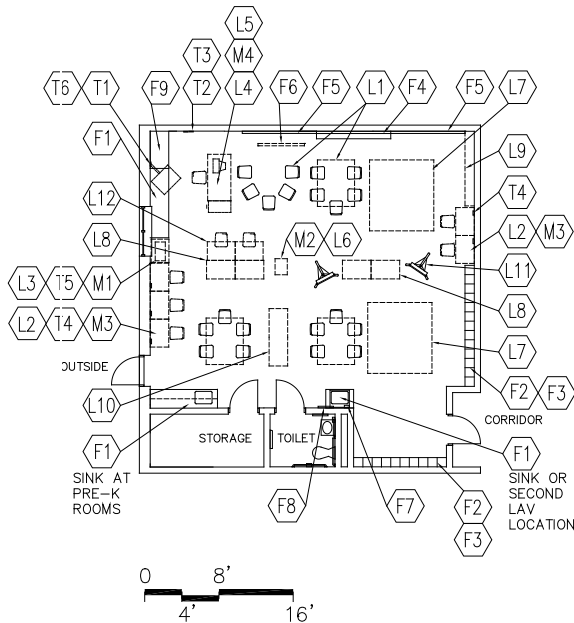
Core Academic Area Space Requirements

Spaces	Guideline		Total	Comments
	Quantity	S.F.		
Pre-S/Kindergarten Classroom	5	1,000-1,175	5,875	Includes 50 sf toilet
Kindergarten Classroom	3	1000-1,175	3,525	Includes 50 sf toilet
Grade 1-2 Classroom	6	800-900	5,400	
Grade 3-5 Classroom	7	800-900	6,300	
Special Needs Classroom	2	800-900	1,800	
Special Needs - Resource Rm. - OT/PT - Speech - Offices	4 1 1 3	250 300 200 150	1,950	Psychologist, Social worker, behavior tech, etc.
Academic Resource	1	300	300	World language
Instructional coach	1	300	300	
Workrooms - Laptop cart storage/charging	2 3	200 50	550	May be combined One per floor
Additional instructional spaces			0	
Art	1	1,000-1,200	1,200	w/ kiln and storage
Music	1	1,000-1,200	1,200	w/storage
Multi-purpose Lab	1	1,000	1,000	
			0	
Total			29,400	

Tolerances of + or – 5-15% are acceptable. Adjacencies as specified are desirable, but options may be considered and should be reviewed with the planning team.

PRE-K-S / KINDERGARTEN

E-ACA-1A



CAPACITY:

- Teachers
- 16-20 students (PS/PK/K)
- Parents/other staff

SIZE:

- 1,175 SF

ANCILLARY SPACES:

- Restroom E-ACA-16 (50 SF)
- Storage closet (50-100 SF)

SPATIAL RELATIONSHIPS:

- Group classrooms for potential teaming
- Locate coat cubbies near door
- Locate at first floor for emergency evacuations, if possible

Communications:

Div. 27

Single point 'face plate' near teachers work station to include:

Voice, data, VGA, audio enhancement, and HDMI

Additional ports:

Printer
3 data ports for student use
Electronic white board
Clock/PA
2 wireless

ENVIRONMENTAL CONSIDERATIONS:

- Windows to provide natural light and egress
- Adequate ventilation
- Electrical outlets for equipment
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
 - Reverberation Time: .4-.6 seconds
- Uniform lighting
- Proportion classroom for effective viewing and listening from all areas of the classroom
- Window treatment to darken room for AV Presentation

Spec.
Ref.#

Features¹:

Fixed Equipment:

F2	Carpentry:	
	Student cubbies (22/24)	064123
F3	Casework:	
	Wall shelving (over cubbies)	123200
F4	Marker board (1 walls)	101100
	10 LF primary	
F5	Tack board flanking marker board and on secondary teaching wall	101100
	Plus two (2) parallel rows of continuous tack strips on all available walls (4 LF or longer) at 30" and 48" AFF	
F6	Manual projection screen (60"X60")	115213 ³
F7	Soap dispenser	102800
F8	Towel dispenser	102800
F9	Casework:	
	Wardrobe (18"X18")	123200

Plumbing: Div. 22

Double sink at two heights
w/ drinking fountain at child height
w/ deep well at adult height

Plumbing connections

Wall-mounted watercloset

Wall-mounted lavatory

Electrical: Div. 26

Duplex receptacles

3 per primary teaching wall

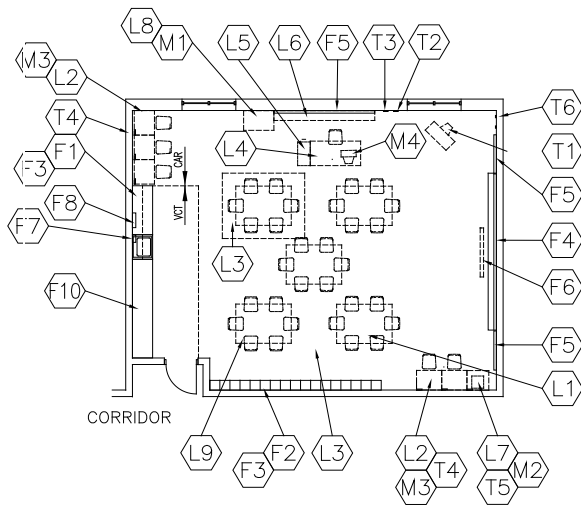
At least 2 per other walls

TVSS protected quad receptacle

adjacent to each data and

video port

Multilevel switching

GRADES 1-5 CLASSROOM**E-ACA-2****SIZE:**

- 850 SF to 950 SF

CAPACITY:

- 20-22 students (1st – 2nd)
- 22-24 students (3rd – 5th)
- 1 teacher
- Staff members
- Guest speakers/volunteers

Communications:

Div. 27

Single point 'face plate' near teachers work station to include:

Voice, data, VGA, audio enhancement, and HDMI

Additional ports:

Printer

3 data ports for student use

Electronic white board

Clock/PA

2 wireless

SPATIAL RELATIONSHIPS:

- Group classrooms for potential teaming
- Locate cubbies near student work area
- Locate coat cubbies near door

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Windows to provide natural light and egress
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
 - Reverberation Time: .4-.6 seconds
- Electrical outlets for equipment
- Adequate ventilation
- Proportion classroom for effective viewing and listening from all areas of the classroom
- Window treatment to darken room for AV presentations

Features¹:

Spec.

Ref.#

Fixed Equipment:

F1	Casework: Base/wall cabinets by sink Sturdy shelves on 3 walls in storage	123200
F2	Carpentry: Student cubbies (24/28)	064123
F3	Casework: Wall shelving (24 LF- H 30-32")	
F4	Marker board (2 walls) 16 LF primary/8 LF secondary	101100
F5	Tack board flanking marker boards Plus two (2) parallel rows of continuous tack strips on all available walls (4 LF or longer) at 30" and 48" AFF	
F6	Manual projection screen (60"X60")	115213 ²
F7	Soap dispenser	102800
F8	Towel dispenser	102800
F9	Casework: Wardrobe (18"X18")	123200

Plumbing: Div. 22

Sink with drinking fountain (optional)

Plumbing connections

Electrical: Div. 26

Duplex receptacles

3 per primary teaching wall

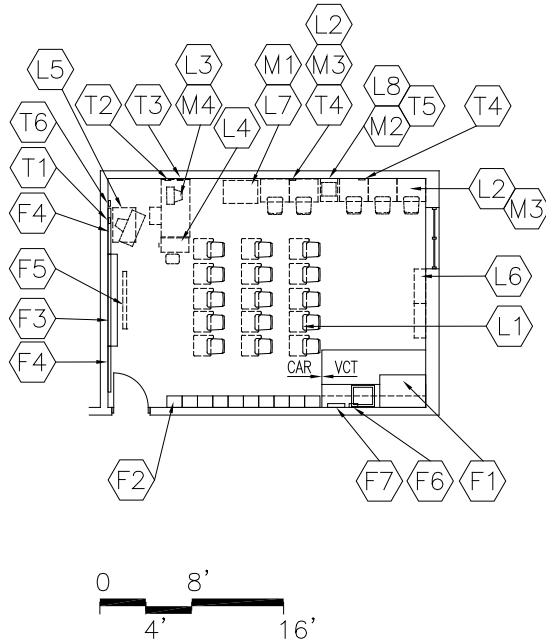
2 per other walls

TVSS protected quad receptacle

adjacent to each data and

video port

Multilevel switching

RESOURCE CLASSROOM**E-ACA-4****CAPACITY:**

- Up to 15 students
- 2 or more staff members

Communications:

Div. 27

Single point 'face plate' near teachers work station to include:

Voice, data, VGA, audio enhancement, and HDMI

Additional ports:

Printer

3 data ports for student use

Electronic white board

Clock/PA

1 wireless

SPATIAL RELATIONSHIPS:

- Located within Academic Core areas
- Ingress/egress to the building which allows for special transportation pick-ups

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Windows to provide natural light and egress
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
Reverberation Time: .4-.6 seconds
- Electrical outlets for equipment
- Proportion classroom for effective viewing and listening from all areas of the classroom
- Window treatment to darken room for AV Presentation

Features¹:

Spec.

Ref.#

Fixed Equipment:

F1	Casework:	123200
	Base/wall cabinets and shelving	
	Paper storage cabinets	
F3	Marker board (8 LF)	101100
F4	Tack board (8 LF minimum)	101100
F5	Manual projection screen	115213
F6	Soap dispenser	102800
F7	Towel dispenser	102800
F8	Casework: Wardrobe	123200

Electrical: Div. 26

Duplex receptacles

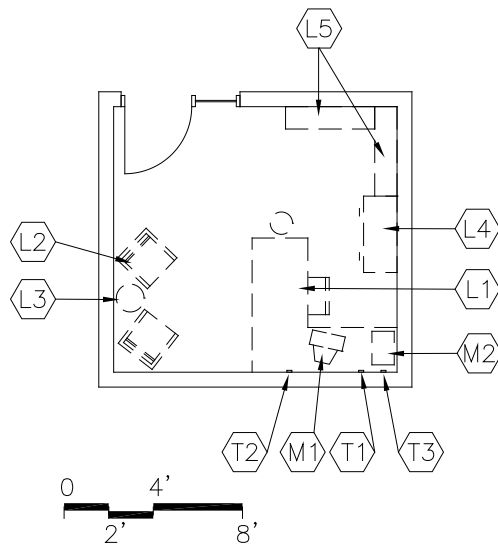
3 per primary teaching wall

2 per other walls

TVSS protected quad receptacle adjacent to each data and video port

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
2. Orientation of Resource Classroom shall be determined as a result of layout of adjacent classrooms
3. Sink shall be located with close proximity to corridor.

STUDENT SERVICES**E-ACA-5****CAPACITY:**

- Counselors/social workers/Sped Coordinators
- Students and parents
- Staff

SIZE:

- 150 SF

SPATIAL RELATIONSHIPS:

- Near Academic Core areas

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
- Windows to provide natural light if on outside wall, if possible

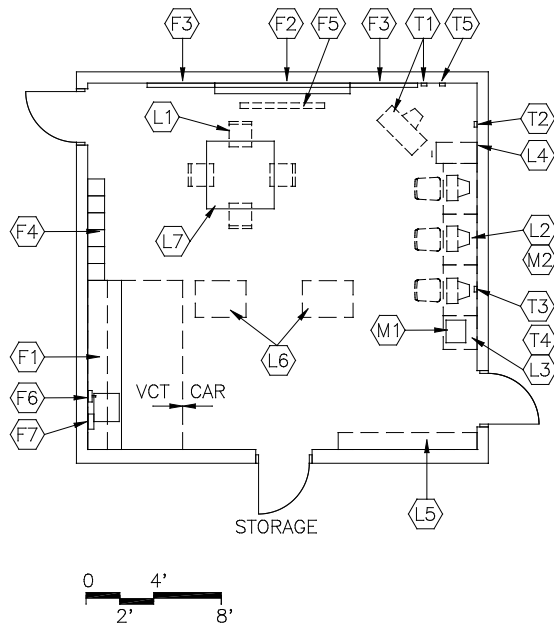
Communications:

Div. 27

- T1 Data port near workstation
- T2 Voice port and phone
- T3 Data port for printer

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
2. An internal window (with blinds) may be provided in lieu of sidelight.

**CAPACITY:**

- Up to 3 students
- Up to 2 staff

ANCILLARY SPACES:

- Speech/Occupational/ Physical Therapy Storage (M-AC-14)

SPATIAL RELATIONSHIPS:

- Near Academic Core Classrooms
- Near Special Needs Classrooms
- Adjacent and access to Speech Occupational/Physical Therapy Storage

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Adequate ventilation
- Electrical outlets for equipment
- Wheelchair accessibility
- Reinforce structure to support equipment such as a trapeze
- Windows to provide natural light, desirable; provide treatment to darken if windows are provided
- Auditory privacy

Features¹:**Fixed Equipment:**

	Spec. Ref.#
F1 Casework: Wall/base cabinets with shelving	123200
F2 Marker board (8 LF)	101100
F3 Tack board (8 LF)	101100
F5 Manual projection screen	115213
F6 Soap dispenser	102800
F7 Towel dispenser	102800

Plumbing: Div. 22 (optional)

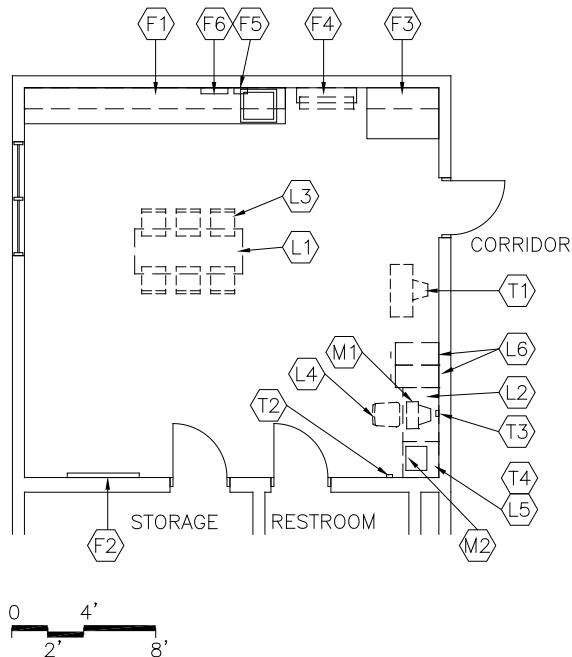
Plumbing connections
Sink with drinking fountain

Electrical: Div. 26

Duplex receptacles:
3 per primary teaching surface
2 per other walls
TVSS protected quad receptacle adjacent to each data and video port
Multilevel switching

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

WORKROOM / TEACHER OFFICE/Instructional Coaches E-ACA-12**CAPACITY:**

- Teachers
- Teachers' assistants
- Parents/volunteers

SIZE:

- Varies, see table

ANCILLARY SPACES:

- Staff restroom

SPATIAL RELATIONSHIPS:

- Near Academic Core classrooms (centrally located)
- Access to Staff Restroom(s) from within Workroom/Teacher Office
- Access to Storage from within Workroom/Teacher Office

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Adequate ventilation
- Electrical outlets for equipment
- Window to provide natural light, desirable

Features¹:**Fixed Equipment:**

		Spec. Ref.#
F1	Casework: Base cabinets Wall cabinets/shelving	123200
F2	Tack board (4 LF)	101100
F3	Casework: Deep storage for poster board	123200
F4	Towel dispenser	
F5	Soap dispenser	102800

Plumbing: Div. 22

Plumbing connections
Sink

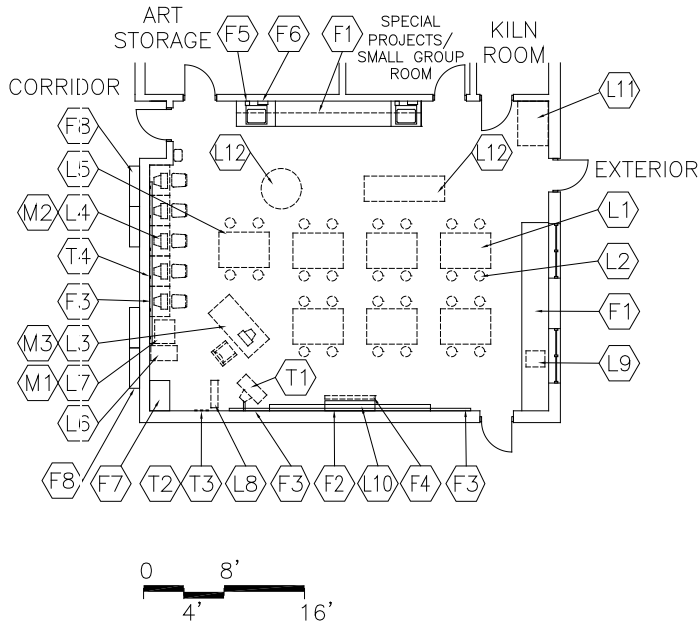
Communications:

Div. 27

T2	Voice port and phone
T3	Data port near workstation
T4	Data port at printer

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
2. Optional: Consideration for internal window(s) with blinds to corridor.

ART LAB**E-VA-1****CAPACITY:**

- 20-24 students
- 1 teacher
- Student teacher
- Parent volunteers
- Student volunteers

SIZE:

- Varies, see table

ANCILLARY SPACES:

- Kiln Room (E-VA-3) 75 SF
- Art Storage (E-VA-2) 125 SF

SPATIAL RELATIONSHIPS:

- Centrally located with convenient access to Core Academic classrooms
- Adjacent and access to Kiln Room

PROGRAM ACTIVITIES:

- Drawing, painting, and print making
- Sculpture, model-making, collage, and assembly
- Ceramics-clay (age appropriate)
- Computer graphics and mixed media work
- Guest artist lectures
- Demonstrations
- Viewing prints/slides/movies/art videos
- Research, reading, and writing
- Individual and cooperative group work
- Storage of supplies, projects, and small equipment
- Mixed media work

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting/track and display lighting
- Windows to provide natural light and egress, preferably northern exposure
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Include outlets on the wall above counter spaces in raceway
- Electrical outlets for equipment
- Provide one ceiling hung, retractable electrical outlet
- Window treatment to darken room for AV presentation as required

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

ART LAB**E-VA**

Communications: Div. 27
 Single point 'face plate' near teachers work station to include:
 Voice, data, VGA , audio enhancement, and HDMI
 Additional ports:
 Printer
 3 data ports for student use
 Electronic white board
 Clock/PA
 2 wireless

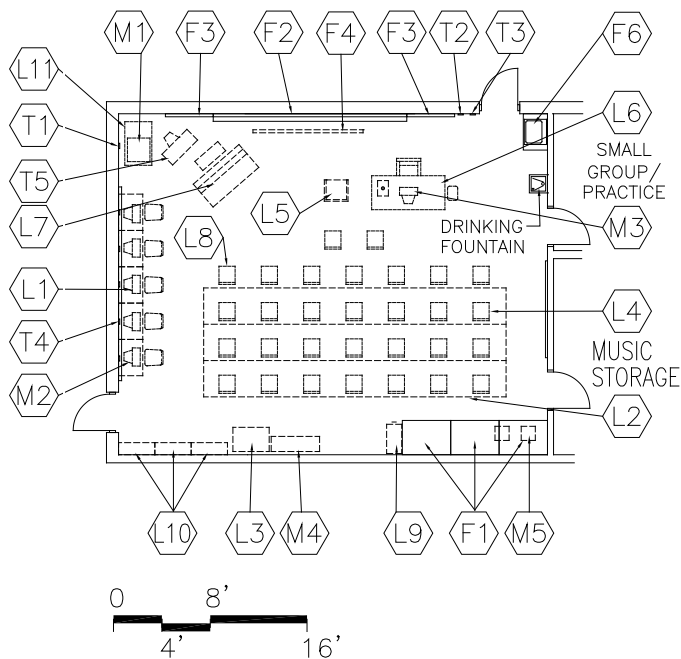
Features¹:
Fixed Equipment:
 F1 Casework:
 30" high base/wall cabinets near sinks 123200
 Paper storage cabinets
 F2 Marker board 101100
 16 LF primary
 F5 Tack board flanking marker board
 Plus two (2) parallel rows of continuous tack strips on all available walls (4 LF or longer) at 30" and 48" AFF
 F6 Manual projection screen (60"X60") 115213³
 F5 Soap dispenser (at each sink) 102800
 F6 Towel dispenser (at each sink) 102800
 F7 Casework: Wardrobe 123200
 F8 Display cases

Plumbing: Div. 22
 Sinks with solids interceptor
 2 large, deep sinks
 Plumbing connections

Electrical: Div. 26
 Duplex receptacles
 3 per primary teaching wall
 At least 2 per other walls
 TVSS protected quad receptacle adjacent to each data port
 Multilevel switching
 Display/track lighting

NOTES:

Finishes/Features: Refer to Chapter 8 for specification references.

GENERAL MUSIC ROOM**E-MU-1****CAPACITY:**

- 20-24 music students
- 1 teacher
- Parents/volunteers

SIZE:

- 1,000 SF

PROGRAM ACTIVITIES:

- Listen, analyze, describe, and compose music (stereos, CD players, computers and printer, laser discs)
- Sing alone and with others (solos, duets, trios, ensembles, large groups)
- Guest speakers and performers (solo and ensembles)
- Group instruction (small and large)
- Choral, speech, theatrics (musicals, operas)
- View educational videos for music enrichment
- Extra-curricular after school activities (i.e., Odyssey of the Mind, church groups)

SPATIAL RELATIONSHIPS:

- Storage in the classroom

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting/Theatrical lighting
- Environmental sound control:
Wall minimum: STC 50
Ceiling minimum: CAC 35
- Sound insulation in walls (extended above ceiling to underside of deck)
- Acoustical wall treatments
- Electrical outlets for equipment
- Adequate ventilation
- Proportion classroom for effective viewing and listening from all areas of the classroom
- Auditory privacy
- Drinking fountain in classroom

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

GENERAL MUSIC ROOM**E-MU-1**

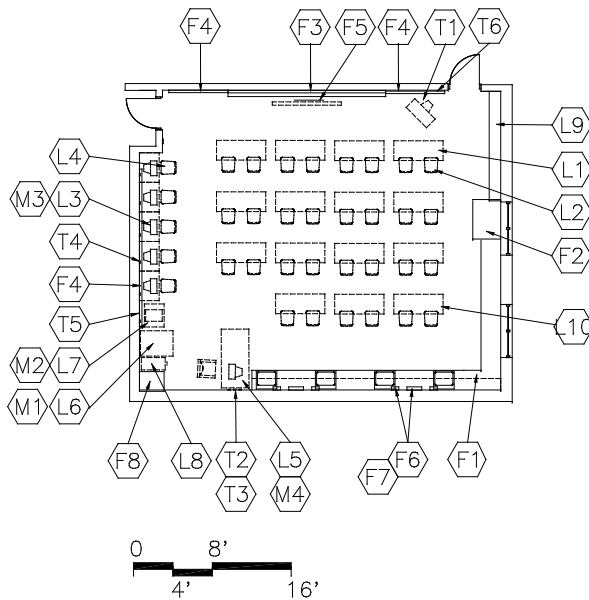
	Spec. Ref.#		Spec. Ref.#
<u>Finishes¹:</u>		<u>Features¹:</u>	
Flooring:		Fixed Equipment:	
Carpet	096816	F1 Casework:	
Base:		Paper storage cabinets	123200
Resilient base	096519	F2 Marker board (16 LF)	
Ceiling(10' high minimum):		1/2 with music staff bars	101100
Suspended, acoustical	095113	F3 Tack board	101100
Walls:		F4 Manual projection screen	115213
Painted concrete masonry units		F5 Casework:	
042000 / 099123		Wardrobe	123200
		F6 Casework:	
		Sink cabinet	123200
<u>Communications:</u>	Div. 27	<u>Plumbing:</u>	Div. 22
Single point 'face plate' near teachers work station to include:		Plumbing connections	
Voice, data, VGA , audio enhancement, and HDMI		Drinking fountain	
Additional ports:		Sink	
Printer		<u>Electrical:</u>	Div. 26
3 data ports for student use		Duplex receptacles	
Electronic white board		3 per primary teaching wall	
Clock/PA		2 per other walls	
2 wireless		TVSS protected quad receptacle	
		adjacent to each data and video port	
		Multilevel switching	

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

MULTI-PURPOSE LAB

E-ACA-14



CAPACITY:

- 20-24 students
- 1-2 staff

SIZE:

- 1,100 SF

ANCILLARY SPACES:

N/A

PROGRAM ACTIVITIES:

- Direct instruction
- Research
- Student and class projects
- Cooperative learning groups
- Student display
- Activities

SPATIAL RELATIONSHIPS:

- Near Academic Core Classrooms
- Near main Corridor
- Near Media Center
- Near Workroom/Teacher Office

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Windows to provide natural light and egress
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
 - Reverberation Time: .4-.6 seconds
- Window treatment to darken room for AV presentation
- Proportion classroom for effective viewing and listening from all areas of the classroom

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
2. Casework countertop at sink wall(s) shall be 30" deep with a 6" plumbing chase for services. No plumbing shall be in exterior wall

MULTI-PURPOSE LAB

Communications: Div. 27
 Single point 'face plate' near teachers work station to include:
 Voice, data, VGA , audio enhancement, and HDMI
 Additional ports:
 Printer
 3 data ports for student use
 Electronic white board
 Clock/PA
 1 wireless

Features¹:
Fixed Equipment:
 F1 Casework:
 Base cabinets and shelving 123200
 F3 Casework:
 Wall shelving (24 LF- H 30-32") 123200
 F4 Marker board (2 walls) 101100
 16 LF primary/8 LF secondary
 F5 Tack board flanking marker boards
 Plus two (2) parallel rows of continuous tack strips on all available walls (4 LF or longer) at 30" and 48" AFF
 F6 Manual projection screen (60"X60") 115213³
 F8 Casework:
 Wardrobe 123200

Plumbing: Div. 22 (optional)
 Sinks with solids interceptor
 Plumbing connections
 sinks, single/deep bowl

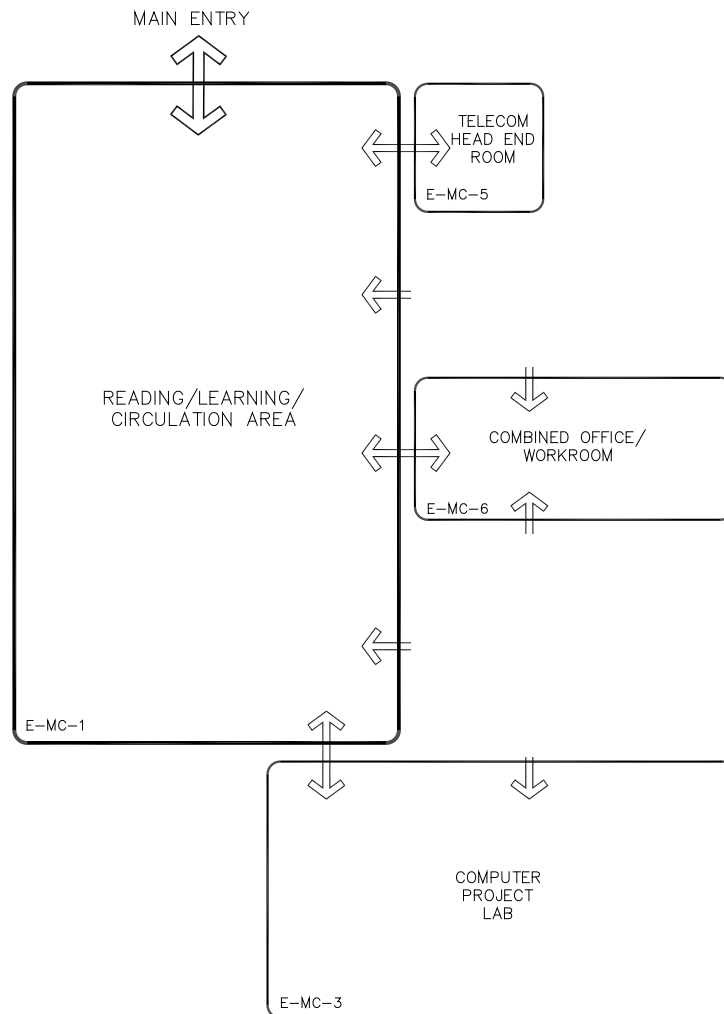
Electrical: Div. 26
 Duplex receptacles
 3 per primary teaching wall
 At least 2 per other walls
 Continuous raceway above countertop
 TVSS protected quad receptacle adjacent to each data and video port
 Multilevel switching

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

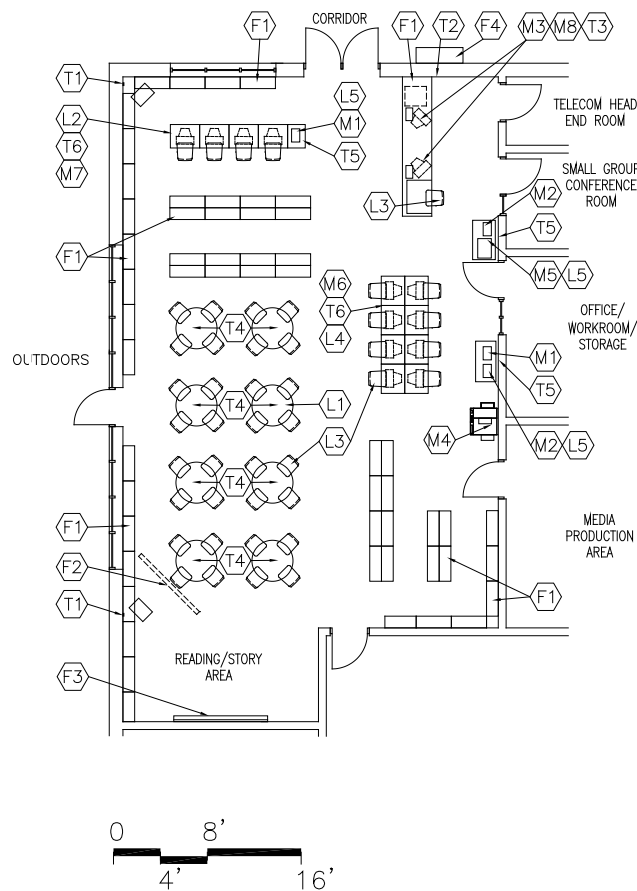
MEDIA CENTER

Spaces	Qty.	S.F.	Total	Comments
Reading/Learning/Circulation	1	1,600	1,600	
- Laptop lab	1	800	800	May be a separate room
Office	1	150	150	
Lockable computer storage	1	50	50	
Telecom Head End Room	1	100	100	
Total			2,700	



READING / LEARNING / CIRCULATION AREA

E-MC-1



CAPACITY:

- 40 students
- 2 teachers
- 1 media specialist
- Community patrons after school hours

PROGRAM ACTIVITIES:

- Reading
- Circulation of materials and resources including online catalogs
- Large group and small group instruction
- Informal small group interaction
- Provide meeting areas for community, staff, and parents
- Research
- Dramatic reading and storytelling

SPATIAL RELATIONSHIPS:

- Instructional area to accommodate one full class of students
- Space around computers for 2-3 students to work together
- Story area with flexible seating
- Comfortable seating areas for independent reading
- Display areas for books and interesting objects
- Circulation area located close to entrance/exit
- Periodical area located near entrance and close to circulation
- Two catalog station areas centrally located

ENVIRONMENTAL CONSIDERATIONS:

- Recessed floor (data and duplex) outlets in floor throughout
- Adequate ventilation
- Lighting appropriate to task with switches to dim separate zones of Media Center
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
- Electrical outlets at entrance for future security system
- Electrical outlets at all column locations
- Windows to provide natural light
- Security of school when center is in use after school hours
- Ceiling height in proportion to room dimensions
- Open flow for traffic in reference/professional/periodical areas
- Electrical outlets in toe space of wall shelving
- Window treatment to darken room for AV presentation

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
2. Freestanding book stacks shall be no more than 42" high with castors. Book stacks against the wall may be 60" to 72" high. Coordinate with other equipment and windows.

READING / LEARNING / CIRCULATION AREA**E-MC-1**

		Spec. <u>Ref.#</u>			Spec. <u>Ref.#</u>
<u>Finishes¹:</u>			<u>Features¹:</u>		
Flooring:			Fixed Equipment:		
Carpet		096816	F1	Library casework - see below	
			F2	Motorized projection screen	115213
			F3	2 Marker board (8 LF each)	101100
				2 Tackboards (8 LF each)	
			F4	Display cases	123559
<u>Miscellaneous:</u>			<u>Electrical:</u>		Div. 26
M1	Black and white printers		Duplex receptacles		
M3	2 bar code readers		TVSS protected quad receptacle		
M6	8 computers for student use		adjacent to each data and		
M7	2 computers for reference		video port		
M8	2 computers for staff use		Multi-level switching to allow for dimming		
			part of the room		
			Fluorescent lighting		
			Means of egress lighting per code		
			Central sound system		
			Floor boxes (electrical/data) throughout		
			reading room for flexible loose		
			furnishings layout		
			<u>Communications:</u>		Div. 27
			T2	Voice port and phone at circulation desk	
			T3	2 data ports at circulation desk	
			T4	8 data ports for student use	
			T5	2 data ports for printers	
			T6	2 data ports for automated data catalog	
				Interactive board in the 'teaching area'	

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

Shelving

Calculating Shelving Requirements

Where possible shelves placed off of the wall should be on casters. All shelving must have a full back and be fully adjustable with no lip that prevents access to books. In determining type and placement of shelving, consider the following:

- Consider shelf height and arrangement to promote maximum visibility of students
- Freestanding, mobile double-faced stacks placed in rows of 4-6 sections are the most preferred stack arrangement
- Counter height shelving may be used for picture books, reference books and to create special interest areas
- Special shelving will be needed for periodicals and displays
- Shelves should not be more than two-thirds full. It is recommended that the top and bottom shelves be initially reserved for collection expansion or used for display
- To ensure continuity, purchase enough shelving to meet future needs
- Shelves that are longer than 36" may warp
- Shelves should be able to accommodate a variety of formats

Mobile Shelving to be placed in the center of the space should be mobile and there should be no lip around the shelves that block access to books. Examples:

- Brodart Mobile Shelving: <http://www.brodartfurniture.com/products/mobile-shelving/products~detail.aspx?id=114&cld=59>
- Demco Mobile Shelving: http://www.demco.com/goto?PNHD21&intcmp=CN_D21

Calculating Shelving Dimensions

Provide approximately 200 linear feet of shelving.(confirm volumes with the first swing school)

Furniture

Circulation Desks should not be overly large and should be placed with maximum sight lines for the space. A book drop and book cart should be included as well as desk space, and work space.

Height of the consideration as all ADA

desk should take in to the size of the students as well guidelines. Examples:

Circulation Desk



OPAC Catalog Stations



Book drops if at all possible, in addition to the book drop in the circulation desk, a second lockable book drop should be accessible from the hallway outside the library. A second book cart should be provided to collect the books from this book drop.

Technology**OPAC Catalog Stations**

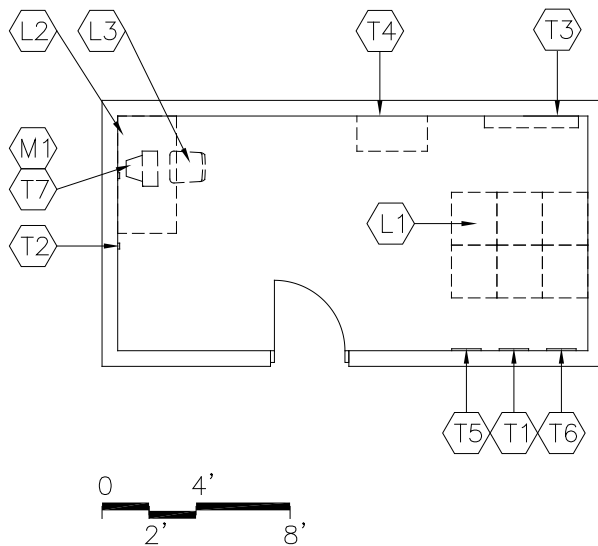
Computers dedicated to OPAC searching should be placed at the circulation desk or throughout the LMC, not included as part of a computer lab.

Computer Area

- Peripheral design strongly preferred (vs. lecture/row style)
- Flexible furniture preferred; plain tables for collaboration should be included in the center of the room when possible
- Network drops should be available for 28-30 students
- Desktops hardwired
- 100% wireless coverage

TELECOM HEAD END ROOM

E-MC-5



CAPACITY:

- 1-2 staff members

SIZE:

- 100 SF

ANCILLARY SPACES:

- Reading/Learning/Circulation Area (E-MC-1)

GOALS:

- To provide a secure area to serve as the information hub of the school. File servers will serve the building computer network
- To provide satellite up and down links that will send and receive voice, video, and data
- Location of cable TV input and output
- All areas of the school are to be wired to this area

PROGRAM ACTIVITIES:

- Voice, video, data reception, and distribution
- Security system location
- Network management
- Telephone wiring entry and distribution
- Cable and CCTV reception and broadcasting

SPATIAL RELATIONSHIPS:

- May also be located in the Administration Area
- Adjacent to and access to Reading/Learning/Circulation Area
- Could be accessed from workroom in lieu of Reading/Learning/Circulation Area
- Additional access from corridor

ENVIRONMENTAL CONSIDERATIONS:

- Adequate power supply will be required and auxiliary UPS power for back-up (Quality of power is important.)
- Dedicated electrical circuitry
- Air conditioning dedicated to this space
- Adequate ventilation
- Access to ceiling and walls for modification to systems and wiring
- Security of door

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

TELECOM HEAD END ROOM
E-MC-5
Loose Furnishings:

- L1 6-8 technology racks
- L2 Workstation
- L3 Ergonomic task chair

Electrical:

Div. 26

- Duplex receptacles
- Quad receptacles for electronic systems
- Single-level switching
- Fluorescent lighting
- Central sound system

Communications:

Div. 27

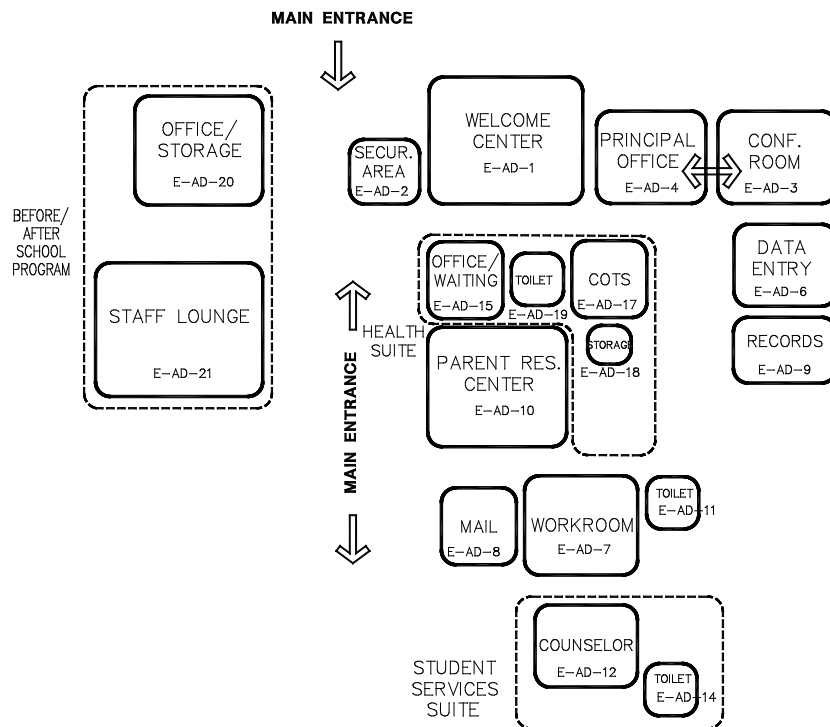
- T1 Data network system
- T2 Voice port and phone
- T3 Telephone switchgear
- T4 Video network control
- T5 Satellite dish connection
- T6 Satellite/cable system controls 17430
- Access

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

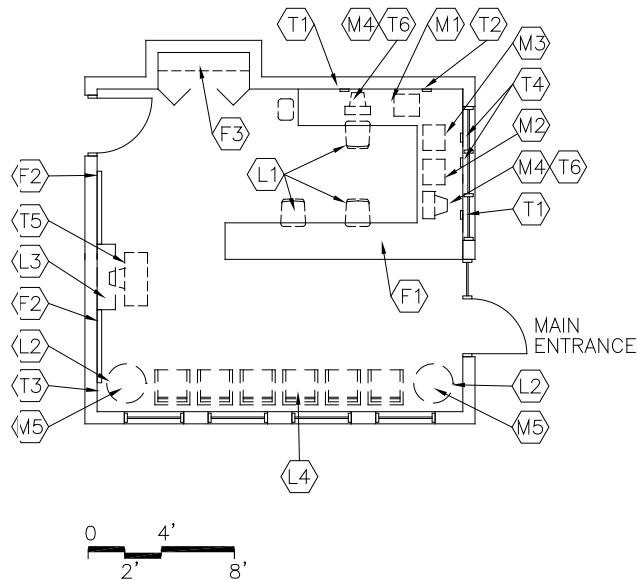
ADMINISTRATION

Spaces	Suggested			Comments
	Qty.	S.F.	Total	
Welcome Center	1	250	250	
Security Area w/ storage	1	75	75	
Conference Room	1	200	200	
Principal's Office	1	180	180	
Business Office	1	120	120	
Administrative Workroom	1	120	120	
Parent Resource Center	1	230	230	Near the front door.
Student Services/counselor	1	150	150	
Health Suite			0	
Office	1	100	100	
Waiting/Treatment Area	1	180	180	
Cots	1	100	100	
Storage	1	25	25	
Toilet	1	50	50	
Extended Day Office/Storage	1	250	250	
Staff Lounge	1	400	400	Includes staff toilet with shower.
Total			2430	



WELCOME CENTER

E-AD-1



CAPACITY:

- Administrative assistants
- Visitors/parents
- Students

Communications:

- T1 2 voice port and phone at workstations
- T2 Fax port
- T3 Voice port and phone at waiting area
- T4 data ports for printer
- T6 Data port near each workstation

Div. 27

PROGRAM ACTIVITIES:

- Greeting visitors
- Waiting for students or staff
- Student waiting/pick up area
- Workstation for administrative assistant

SPATIAL RELATIONSHIPS:

- Located inside the main Administrative Area
- Centrally located to Administrative Area
- Near public restrooms
- Maximize view to the exterior and main entry

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting, areas of soft lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Adequate ventilation
- Electrical outlets for equipment
- Administrative area should be mechanically zoned for year round use.
- Windows to provide natural light

Features¹:

Fixed Equipment:

		Spec. Ref.#
F1	Finish carpentry Reception counter	064123
F2	Tack board (8 LF)	101100
F3	Closet shelving	064123

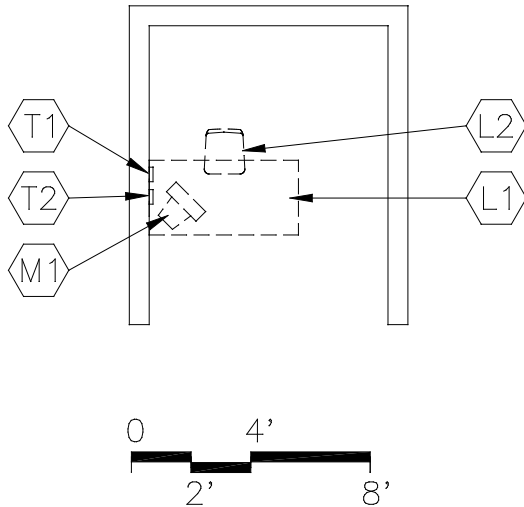
Electrical:

Div. 26

- Duplex receptacles
- TVSS protected quad receptacle adjacent to each data port
- Single-level switching

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

SECURITY AREA**E-AD-2****CAPACITY:**

- Security officer

PROGRAM ACTIVITIES:

- Check-in/out visitors
- Monitor main entrance to school
- Workstation for security office

SPATIAL RELATIONSHIPS:

- Adjacent to main entry

ENVIRONMENTAL CONSIDERATIONS:

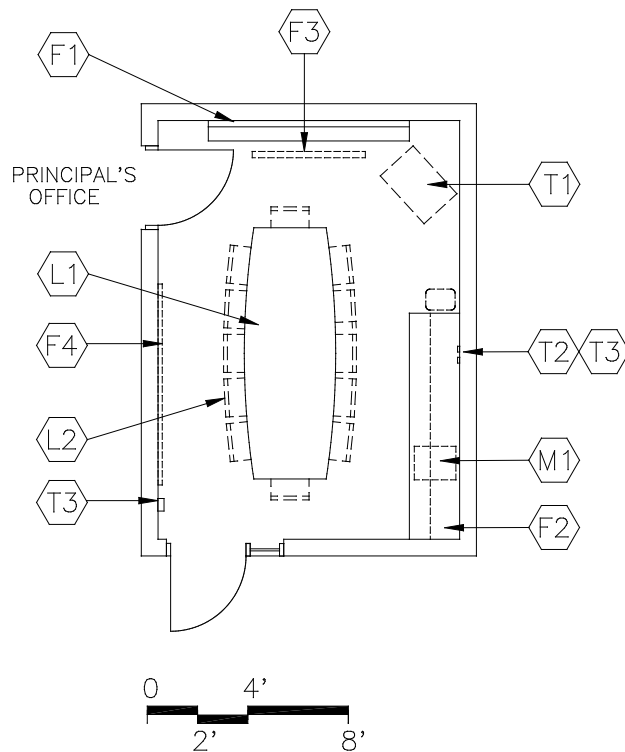
- Uniform lighting
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35

NOTES:

Loose furnishings and features shown represent one of many possible arrangements.

CONFERENCE ROOM

E-AD-3



CAPACITY:

- Staff
- Students
- Parents
- Visitors

SIZE:

- 200 SF

ANCILLARY SPACES:

- Principal's Office (E-AD-4)

PROGRAM ACTIVITIES:

- Conferences with staff, students, parents, and visitors

SPATIAL RELATIONSHIPS:

- Near Welcome Center
- Centrally located within Administrative Area
- Adjacent and access to Principal's Office

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting, appropriate to task
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 40
- Electrical outlets for equipment
- Windows to provide natural light, desirable
- Auditory privacy

Features¹:

Fixed Equipment:

	Spec.	Ref.#
F1 Marker board (8 LF)	101100	
F2 Casework:		
Base/wall cabinets (6 LF)	123200	
F3 Manual projection screen	115213	
F4 Tack board (8 LF)	101100	

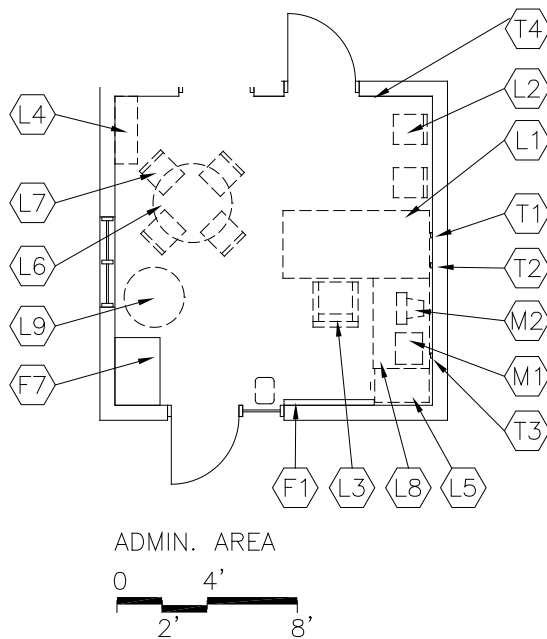
Communications:

- T2 Voice port and phone
- T3 2 data ports

Div. 27

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

PRINCIPAL'S OFFICE**E-AD-4****CAPACITY:**

- Principal

SIZE:

- 180 SF

ANCILLARY SPACES:

- Conference Room (E-AD-3)

PROGRAM ACTIVITIES:

- Conferences with students, parents, teachers, staff, and visitors
- Curriculum development
- Research and planning
- Telephone communications
- Dealing with personnel issues
- Coordination of school and support services

SPATIAL RELATIONSHIPS:

- Near main entry
- Near administrative assistant
- Adjacent and access to Conference Room

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting, appropriate to task
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Electrical outlets for equipment
- Windows to provide natural light
- One area should be especially child-scaled and friendly for working with individual children
- Auditory privacy
- Back door to secondary corridor, desirable

Features¹:**Fixed Equipment:**

F1 Tack board (4 LF)

Wall mounted coat rack/shelf

Spec.
Ref.#

101100

Communications:

T1 Voice port and phone

T2 Data port near workstation

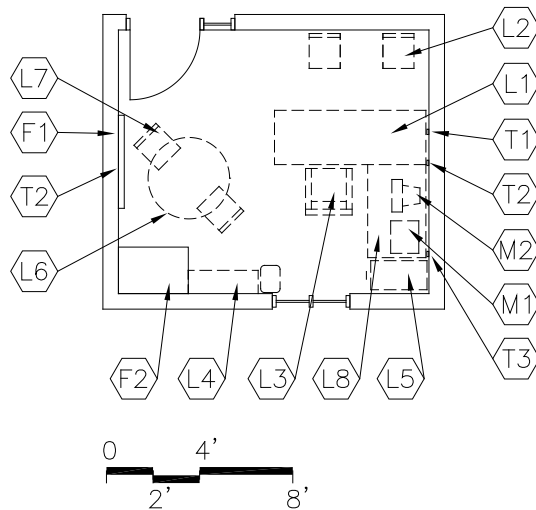
Cable drop for input/output

T3 Data port for printer

Div. 27

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

OTHER OFFICES**E-AD-5****SIZE:**

- 120-150 SF

ANCILLARY SPACES:

N/A

PROGRAM ACTIVITIES:

- Conferences with parents
- Student interaction
- Conferences with individual teachers or small groups
- Telephone communications (private)
- Research and planning
- Coordination of school and support services

SPATIAL RELATIONSHIPS:

- May be located near Academic Core for supervision
- May be located near administration suite

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Electrical outlets for equipment
- Windows to provide natural light
- Auditory privacy

Features¹:**Fixed Equipment:**

F1 Tack board (4 LF)

F2 Casework:

Wardrobe 103200

Communications:

T1 Voice port and phone

T2 2 data ports

T3 Data port for printer

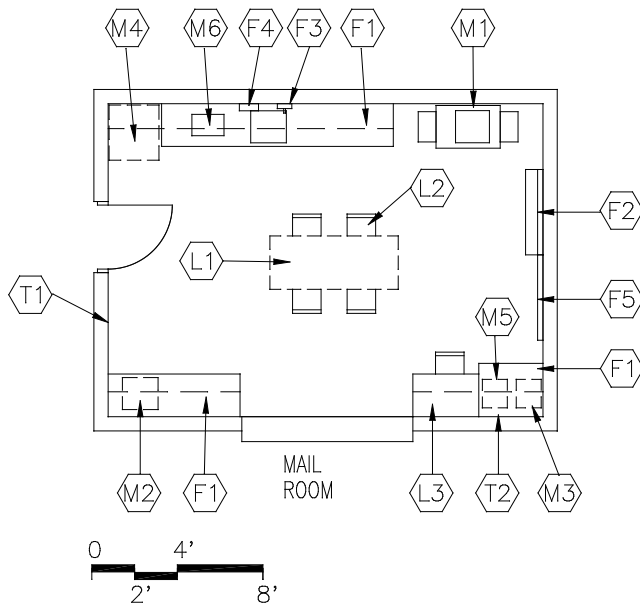
Spec.
Ref.#

101100

Div. 27

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

ADMINISTRATIVE WORKROOM
E-AD-7
**CAPACITY:**

- Secretaries and Administrators
- Volunteers
- Staff

SIZE:

- Varies, see table

ANCILLARY SPACES:

- Mail Room (E-AD-8)

PROGRAM ACTIVITIES:

- Copying
- Collating
- Sorting of files
- Preparing communications for mailing
- Binding reports
- Telephone communications

SPATIAL RELATIONSHIPS:

- Near Welcome Center
- Adjacent to Mail Room

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting, appropriate to task
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Adequate ventilation
- Electrical outlets for equipment
- Organize for efficient work flow and sufficient clearance for several people to work at one time

Features¹:**Fixed Equipment:**

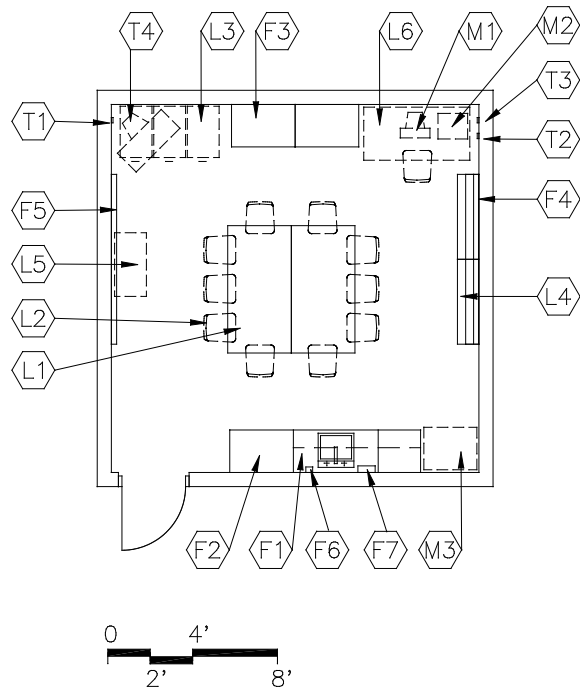
- F1 Casework: Base/wall cabinets and shelving
- F2 Marker board (4 LF)

Spec.
Ref.#

123200

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

PARENT RESOURCE CENTER**E-AD-10****CAPACITY:**

- Parents
- PTO/PTA members
- Volunteers

SIZE:

- Varies, see table

ANCILLARY SPACES:

N/A

PROGRAM ACTIVITIES:

- Small group meetings
- Work area
- Storage for personal items
- Storage of fundraising materials (PTO/PTA)
- Parent training

SPATIAL RELATIONSHIPS:

- Near Welcome Center
- Near Lobby Entrance
- Near Public Restrooms

ENVIRONMENTAL CONSIDERATIONS:

- Electrical outlets for equipment
- Lighting appropriate to task
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35

Features¹:**Fixed Equipment:**

	Spec. Ref.#
F1 Casework: Base/wall cabinets	123200
F2 Casework Wardrobe cabinet	123200
F3 Casework: Storage cabinets	123200
F4 Marker board (8 LF)	101100
F5 Tack board (8 LF)	101100
F6 Soap dispenser	102800
F7 Towel dispenser	102800

Plumbing: (optional)

- Plumbing connections
- Sink, single/deep bowl
- Hook-up for ice maker

Div. 22

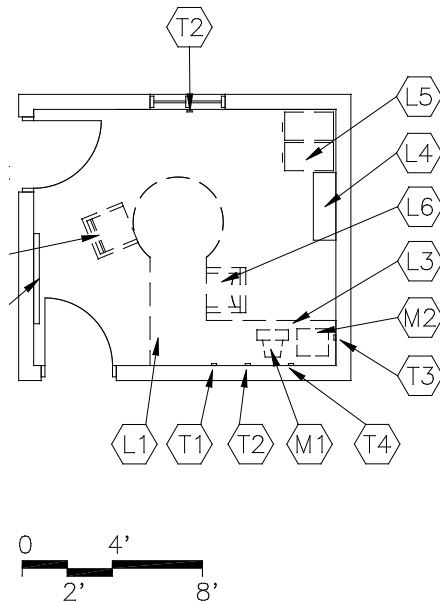
Communications:

- T2 Voice port and phone
- T3 Data port

Div. 27

NOTES:

Loose furnishings and features shown represent one of many possible arrangements.

NURSES OFFICE**E-AD-15****CAPACITY:**

- Staff
- Students
- Parents
- Visitors

SIZE:

- 100-150 SF

ANCILLARY SPACES:

- Treatment Area (E-AD-16)
- Storage (E-AD-18)

SPATIAL RELATIONSHIPS:

- Adjacent and access to Treatment Area
- Adjacent and access to Storage

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
 - Wall minimum: STC 40
 - Ceiling minimum: CAC 35
- Visual control to Welcome Center or corridor
- Visual and auditory privacy

Communications:

Div. 27

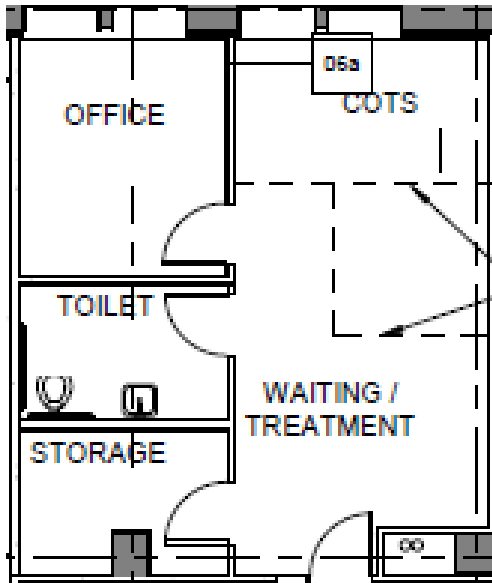
T1 Voice port and phone

2 Data port for printer

T3 Data port near workstation

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

WAITING/TREATMENT AREA
E-AD-16
**CAPACITY:**

- 1 staff member/volunteer/nurse
- Students

SIZE:

- 150 SF

ANCILLARY SPACES:

- Office (E-AD-15)
- Cots
- Storage

Communications:

- T1 Voice port and phone
- T2 Data port

Div. 27

PROGRAM ACTIVITIES:

- First aid
- Consultation with students
- Health screening
- Medical treatments
- Medication administration
- Student resting while awaiting pick-up by parent or guardian

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Stain-resistant floor covering
- Sink with hot and cold water
- Adequate ventilation
- Electrical outlets for equipment
- Locate away from rooms with copiers,
interferes with hearing screening
- Auditory and visual privacy
- Visual control to Office/Waiting or Welcome Center

Spec.**Features¹:****Ref.#****Fixed Equipment:****F1 Casework:**

Base/wall cabinets

123200

Place for refrigerator

F2 Casework:

Tall storage

123200

F3 Cubicle curtain

102123

F4 Soap dispenser

102800

F5 Towel dispenser

102800

Tackboard

Plumbing: Div. 22

Plumbing connections

Single sink w/hands-free gooseneck

Electrical: Div. 26

Duplex receptacles

TVSS protected quad receptacle
adjacent to each data port

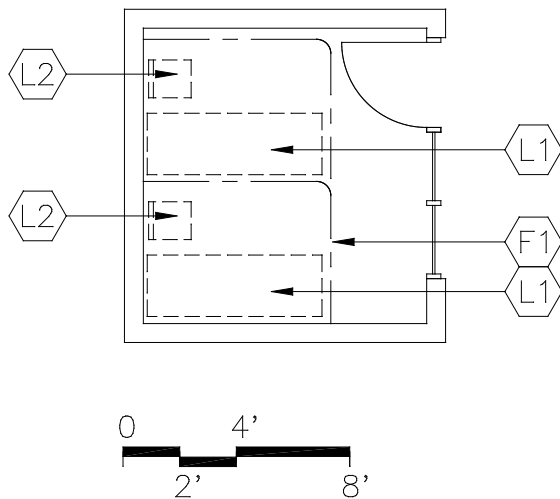
Single-level switching

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

COTS

Health Suite



CAPACITY:

- Staff
- Students

SIZE:

- 100 SF

GOAL:

- To provide a place for students and staff to lie down when feeling ill

PROGRAM ACTIVITIES:

- A resting place for students and staff when feeling ill

SPATIAL RELATIONSHIPS:

- Located within Health Suite
- Near welcome center

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting/dimmable lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Stain-resistant floor covering
- Adequate ventilation
- Auditory and visual privacy
- Visual control from Office/Waiting

Features¹:

Fixed Equipment:

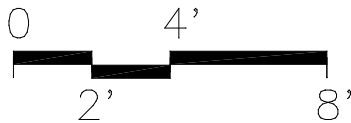
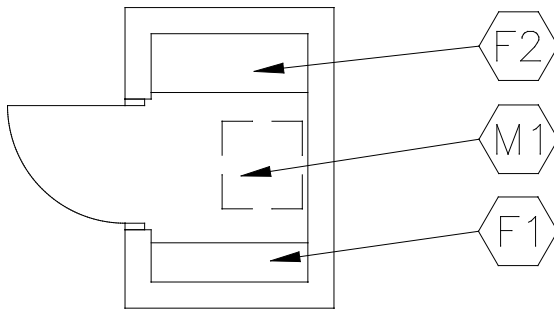
F1 Cubicle curtains

Spec.
Ref.#

102123

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.
Finishes/Features: Refer to Chapter 8 for specification references.

STORAGE**CAPACITY:**

- Staff

SIZE:

- 25 SF

ANCILLARY SPACES:

- Office/Waiting Area (E-AD-15)

GOAL:

- To provide storage for medical supplies and equipment

PROGRAM ACTIVITIES:

- Storing chemicals, equipment, and supplies

SPATIAL RELATIONSHIPS:

- Adjacent and access to Office/Waiting

ENVIRONMENTAL CONSIDERATIONS:

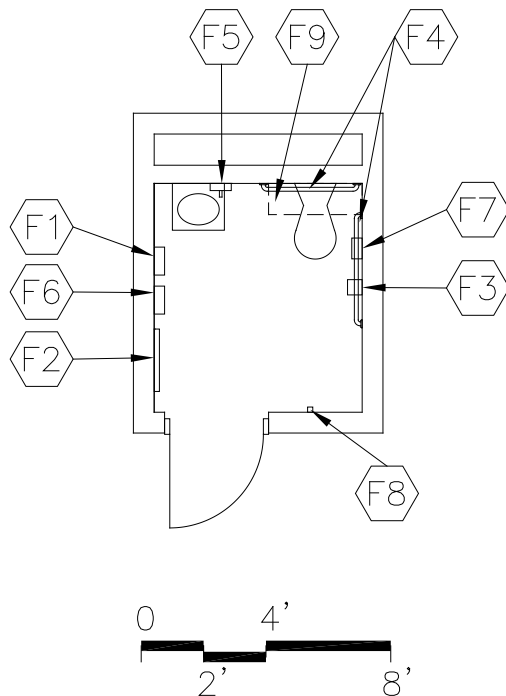
- Uniform lighting
- Security of equipment, supplies, and medicines
- Security of door

Features¹:**Fixed Equipment:**

	Spec. Ref.#
F1 Storage shelving: 12" deep	105613
F2 Storage shelving: 18" deep	105613

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

**TOILET
E-AD-19****CAPACITY:**

- Students
- Staff

SIZE:

- 50 SF

ANCILLARY SPACES:

N/A

PROGRAM ACTIVITIES:

- Personal and health needs for the health suite
- Changing clothing

SPATIAL RELATIONSHIPS:

- Located within Health Suite

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 35
- Moisture- and stain-resistant finishes
- Adequate exhaust/ventilation

Spec.**Features¹:****Ref.#****Fixed Equipment:**

F1 Towel dispenser	102800
F2 24" x 60" mirror	102800
F3 Toilet tissue holder	102800
F4 36" and 42" grab bars	102800
F5 Soap dispenser	102800
F6 Sanitary dispenser	102800
F7 Sanitary disposal	102800
F8 Coat hook	102800
F9 Casework:	
Wall cabinet	103200

Plumbing: Div. 22

Wall-mounted water closet
 Wall-mounted lavatory
 Plumbing connections
 Floor drain

NOTES:

1. Loose furnishings and features shown represent one of many possible arrangements.

STAFF LOUNGE

E-AD-21

CAPACITY:

- Staff

SIZE:

- Varies, see table

Communications:

Voice port and phone
2 data ports

Div. 27

PROGRAM ACTIVITIES:

- Staff dining
- Relaxation

SPATIAL RELATIONSHIPS:

- Near Academic Classrooms
- Access to Main Corridor
- May be divided among floors

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting, appropriate to task
- Environmental sound control:
Wall minimum: STC 45
Ceiling minimum: CAC 40
- Electrical outlet for equipment
- Windows to provide natural light, desirable

Spec.

Features¹:Ref.#

Fixed Equipment:

Casework:

Base/wall cabinets	123200
24" x 60" mirror	102800
Toilet tissue dispenser	102800
36" and 42" grab bars	102800
Soap dispenser	102800
Towel dispenser	102800
Shower curtain with rod	102800
ADA shower accessories	102800

Plumbing:

Div. 22

Plumbing connections
Wall-mounted lavatory
Wall-mounted water closet
Floor drains - in restroom and shower

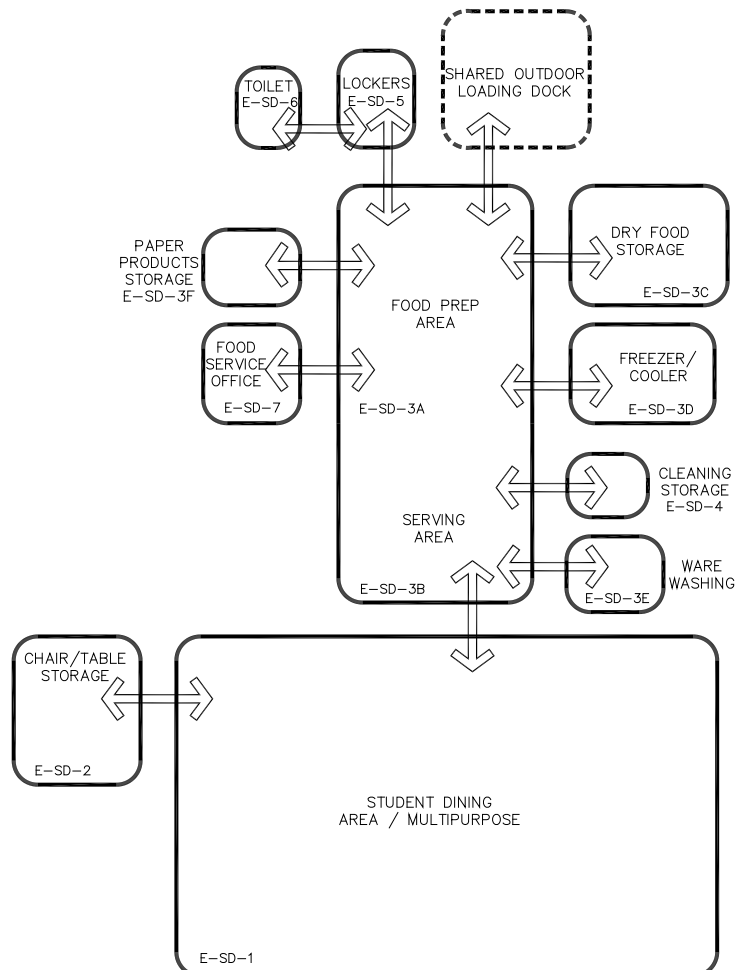
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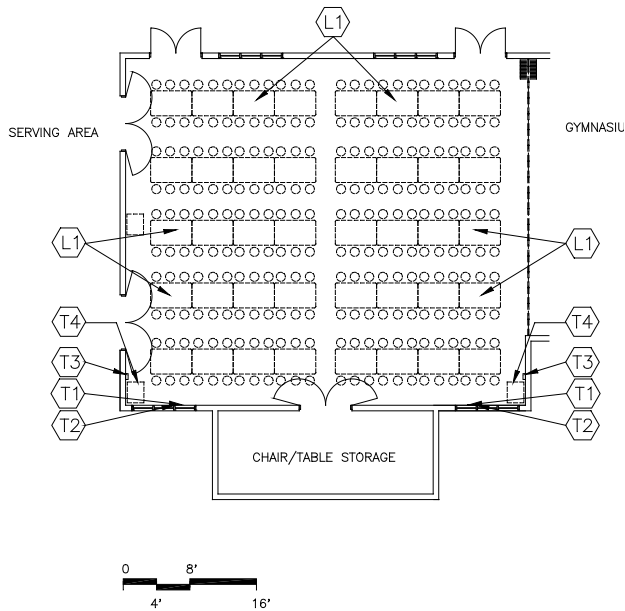
1. Loose furnishings and features shown represent one of many possible arrangements.

Dinning and Food Services

Spaces	Suggested			Comments
	Qty.	S.F.	Total	
Student Dining Area/Multi-purpose	1	2250	2250	As is
Chair and Table Storage	1	200	200	
Food Prep	1	400	400	
Servery	1	300	300	
Dry Storage	1	150	150	
Freezer & Cooler	1	400	400	
Ware washing	1	75	75	
Toilet/Lockers	1	75	75	
Cleaning Storage	1	50	50	
Food Service Office	1	100	100	
Total			4000	

Comments: The overall total for the Dining and Food Services area may be + or – 15%.



STUDENT DINING AREA/MULTIPURPOSE**E-SD-1****CAPACITY:**

- 150 students per lunch period
- 10 staff members
- Members of community (after hours)

ANCILLARY SPACES:

- Serving Area (E-SD-3B)

GOALS:

- To provide a pleasant atmosphere for students to eat meals
- To provide a flexible meeting space for groups if needed

PROGRAM ACTIVITIES:

- Student dining
- School and community programs
- Meetings and activities

SPATIAL RELATIONSHIPS:

- Adjacent and access to Serving Area
- Near Food Preparation Area
- Near parking and entry to building

ENVIRONMENTAL CONSIDERATIONS:

- Lighting appropriate to tasks
- Adequate ventilation
- Electrical outlets for equipment
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
- Higher than normal ceiling height
- Cleanable building surfaces
- Windows to provide ample natural light
- Good sight lines to all areas of the room for supervision
- Window treatment to darken room for AV presentation
- Movable wall to allow the space to be divided into two spaces

TECHNOLOGY:

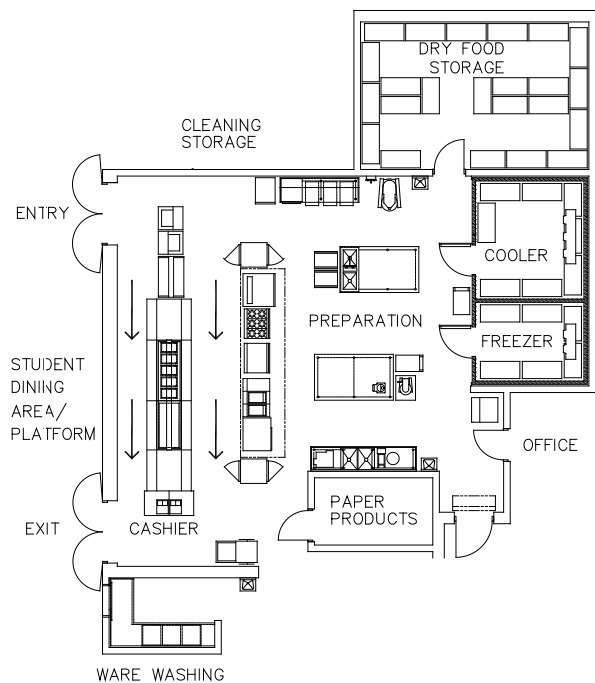
- Video port, motorized screen on stage
- Voice port and phone
- Data port for a teacher workstation
- Ceiling mounted for a projection device
- Infrastructure for audio system on stage

KITCHEN**E-SD-3**

This space consists of the following areas:

Food Preparation Area	650
Dry Food Storage	225
Freezer	150
Cooler	250
Ware Washing	100
Paper Storage	100
Lockers	75
Toilet	50
Food Service Office	100
	1700

A space plate follows for each of these areas.

**CAPACITY:**

- Students
- Staff
- Community

ANCILLARY SPACES:

- Student Dining Area/Multipurpose (E-SD-1)

GOAL:

- To provide an area for the preparation of student and staff meals

PROGRAM ACTIVITIES:

- Prep food
- Serve food
- Storage
- Point of sale

SPATIAL RELATIONSHIPS:

- Near loading dock to permit semi-tractor trailers access to docking and storage areas (site specific)
- Adjacent and access to Student Dining Area/Multipurpose
- Near dumpsters
- Cafeteria serving arrangement

ENVIRONMENTAL CONSIDERATIONS:

- Food service department, public health
- Durable flooring
- Proper ventilation of space to remove cooking odors
- Cleanable building surfaces

Hand sinks in each area of service, production, dishwashing, and serving.

Paper towel dispensers need to be uniform with the rest of the school for ordering purposes.

Soap dispensers need to be uniform with schools for ordering purposes.

NOTES:

1. This is an example of a kitchen. Food service equipment will vary from school to school; confirm requirements with District of Columbia Public Schools Food Service Department.

FOOD PREPARATION AREA**CAPACITY:**

- Staff

SIZE:

- Varies, see table

GOAL:

- To prepare student meals

PROGRAM ACTIVITIES:

- Prepare food

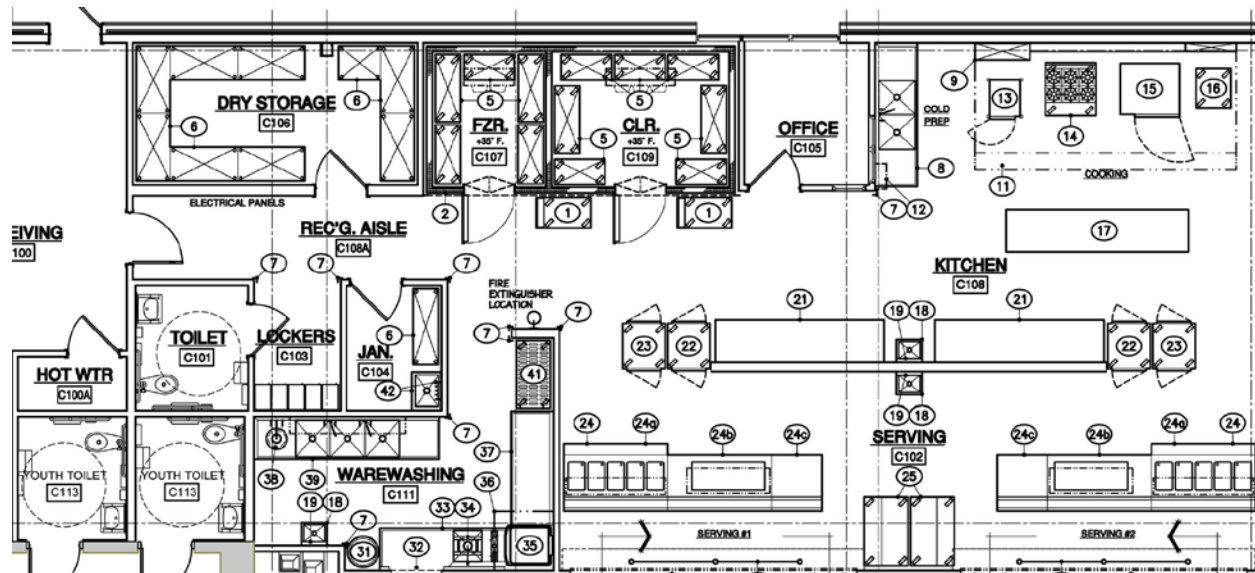
SPATIAL RELATIONSHIPS:

- Adjacent to Student Dining Area/Multipurpose
- Open to Serving Area

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Proper ventilation of space to remove cooking odors
- Cleanable building surfaces
- Electrical/plumbing/mechanical connections for food service equipment
- Towel dispensers, Soap dispensers,

This is an example of a preparation area. Food service equipment will vary from school to school; confirm requirements with District of Columbia Public Schools Food Service Department.

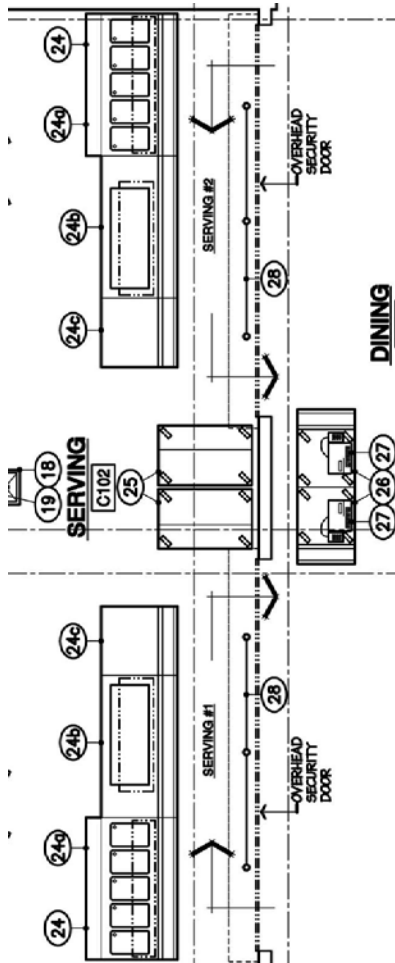


FOOD PREPARATION AREA

	Spec. Ref.#		Spec. Ref.#
<u>Finishes</u> ¹ :		Flooring:	
Easy clean, non-slip flooring - Single surface poured or rolled flooring		Base:	<u>Fire Suppression:</u> Div. 21
Resilient base	096519	Ceiling:	<u>Ref.#</u>
Cleanable, suspended, acoustical	095113	Walls:	Fire suppression system
Epoxy-painted concrete masonry units		Water areas of kitchen, eg. Dish room, pot sink area.	Plumbing: Div. 22
042000 / 099123			Connections to food service equipment
<u>Features</u> -(Specifications from DCPS):		Equipment:	Plumbing and gas connections
• Pot washing sinks		• Food Preparation Sinks	Hand washing lavatory
• Hand Sinks with adjacent trash bin		• Work Tables	Floor drains
• Warming/Holding/Cabinets		• Refrigeration - Reach-ins	Food preparation sink with adjacent trash bin
• Storage shelving		• Mop washing sink	HVAC: Div. 23
• Lockable chemical storage		• Exhaust Hood Systems, including Fire Suppression	Supply/return air system
• Combi oven		• Convection steamer	Independent temperature control
• Range, with oven, convection base		• Ware Washing Machine with appropriate accessories (tables, booster heater, disposer, etc.)	Kitchen canopy exhaust system
			Air conditioning
			Electrical: Div. 26
			Duplex receptacles
			Connections to food service equipment
			Single-level switching
			Fluorescent lighting
			Illumination level: See Table 7600-16
			Clock
			Central sound system
			Communications:
			N/A
			Electronic Safety and Security: Div. 28
			Life safety devices per code
			Miscellaneous:
			N/A

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

SERVING AREA**E-SD-3B****CAPACITY:**

- Students
- Staff
- Community

ANCILLARY SPACES:

- Student Dining Area/Multipurpose (E-SD-1)
- Kitchen (E-SD-3)

GOAL:

- To provide serving station for those seeking meals or snacks

PROGRAM ACTIVITIES:

- Serve food

SPATIAL RELATIONSHIPS:

- Within Student Dining Area/Multipurpose or Food Preparation Area
- Beginning of serving line should be near entry door of Students Dining Area/Multipurpose
- Adjacent and access to Student Dining Area/Multipurpose
- Open to Food Preparation Area

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Cleanable building services
- Electrical connections for food service equipment

NOTES:

1. This is an example of a serving area. Food service equipment will vary from school to school; confirm requirements with District of Columbia Public Schools Food Service Department.
2. Loose furnishings and features shown represent one of many possible arrangements.

DCPS EDUCATIONAL SPECIFICATION

DAVIS SWING SCHOOL

SERVING AREA

E-SD-3B

	Spec. Ref.#		Spec. Ref.#
<u>Finishes¹:</u>		<u>Features¹:</u>	
Flooring:		Fixed Equipment:	
Quarry tile	093000	Drop-In Individually Controlled Heated	
Base:		Electric Food Wells, Full Service Sneeze	
Quarry tile base	093000	Guard with overshef may use existing milk	
Ceiling:		box or a new airtscreen refrigerator for	
Cleanable, suspended, acoustical	095113	beverages. Size of equipment and	
Walls:		number of are determined by space	
Epoxy-painted concrete masonry units	042000 / 099123	available. A Drop-In Self-Contained	
<u>Loose Furnishings:</u>		Refrigerated Cold Pan will also be	
N/A		included for side items. Counter and	
<u>Miscellaneous:</u>		sneeze guards are lower than normal for	
Cash registers at end of service		better viewing and service to elementary	
		students.	
<u>Fire Suppression:</u>	Div. 21	<u>HVAC:</u>	Div. 23
Fire suppression system		Supply/return air system	
<u>Plumbing:</u>	Div. 22	Independent temperature	
Connections to food service		control	
equipment		Kitchen canopy exhaust system	
Plumbing and gas connections		Air conditioning	
Hand washing lavatory		<u>Electrical:</u>	Div. 26
Floor drains		Single-level switching	
		Fluorescent lighting	
		Illumination level: See Table 7600-16	
		Central sound system	
		Duplex receptacles along permanent	
		perimeter walls	
		Electrical supply to support	
		equipment specified	
		Clock	
		Circuits for portable generator	
		TVSS protected quad receptacle	
		adjacent to data and video ports	
		<u>Communications:</u>	Div. 27
		T1 1 voice port and phone	
		T2 2 data ports at cash registers or per	
		salad bar	
		<u>Electronic Safety and Security:</u>	Div. 28
		Life safety devices per code	

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

PHYSICAL EDUCATION AND ASSEMBLY

Spaces	Suggested			Comments
	Qty.	S.F.	Total	
PE/Assembly	1	3,000	3,000	As is
Stage	1	800	800	As is
Chair and Table Storage	1	200	200	
PE Storage	1	150	150	
PE Office	1	100	100	
Total			4,250	

PE/Assembly Room**E-PE-1****CAPACITY:**

- 20-24 students per class
- Teacher
- Parents and community members for meetings
- Assemblies to accommodate at least 1/2 of the student body

SIZE:

- As is

ANCILLARY SPACES:

- P.E. Office (E-PE-2)
- P.E. Storage (E-PE-4)
- Stage (E-PE-5)

PROGRAM ACTIVITIES:

- Athletic skills and leader games
- Adaptive physical education
- Student assemblies and programs
- Lectures/Teaching
- Community use

SPATIAL RELATIONSHIPS:

- Near public restrooms, with easy access
- Access to outdoor physical education play areas
- May be adjacent to Student Dining Area with folding wall between
- Near visitor parking
- Located with easy access to rest of school, but must be able to close off area for security during evening activities
- Adjacent and access to P.E. Office
- Adjacent and access to P.E. Storage
- Adjacent and access to Stage

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
Wall minimum: STC 50
- Adequate sound control/acoustics
- Clear height of 20' from floor to nearest obstruction
- Electrical outlets for equipment
- Drinking fountain in adjacent area
- Structure, lighting, and ducts designed not to trap P.E. balls
- Ceiling heights should be proportional to room volume

NOTES:

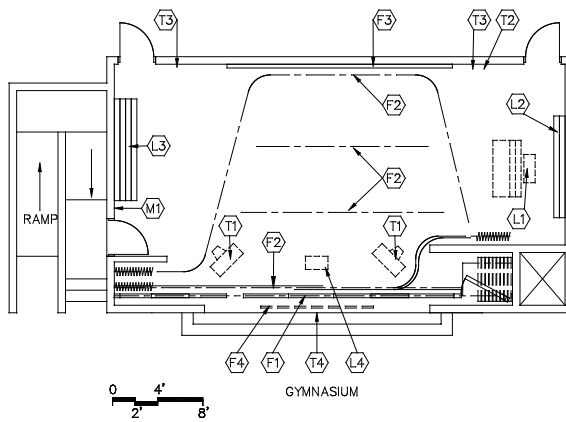
1. Loose furnishings and features shown represent one of many possible arrangements.
2. This size space will not accommodate a full-size basketball court.

PE/ Assembly Room

	Spec. Ref.#		Spec. Ref.#
<u>Finishes¹:</u>		<u>Features¹:</u>	
Flooring:		Fixed Equipment:	
Wood strip flooring for athletic applications or Resilient athletic flooring	096466 096566	F1 Basketball backstops, adjustable height (ceiling hung or portable)	116600
		F2 Operable partition, motorized	102226
		F3 Chin-up bars	116600
		F4 Volleyball standards	
Base:		<u>Fire Suppression:</u>	Div. 21
Vented resilient base	096466	Fire suppression system	
Ceiling:		<u>HVAC:</u>	Div. 23
Painted exposed structure on acoustical deck	099923	Supply/return air system	
Walls:		Independent temperature control	
Painted concrete masonry units	042000 + 099123	<u>Electrical:</u>	Div. 26
Acoustical wall treatment	098400	Duplex receptacles	
And/or sound absorbing concrete masonry units	042000	TVSS protected quad receptacle adjacent to each data and video port	
<u>Communications:</u>	Div. 27	Electrical connections to P.E. equipment where necessary	
T1 Video/		Single-level switching	
T2 Voice port and phone		High intensity discharge lighting	
T3 Microphone port		Illumination level: See Table 7600-16	
T4 Intercom		Means of egress lighting per code	
T5 Outside microphone ports/portable System (wireless mics)		Clock	
T6 Data port		Central sound system	
Jacks for sound system		Gymnasium sound system	
<u>Electronic Safety and Security:</u>	Div. 28	Provide wire guards on light fixtures and electrical devices	
Life safety devices per code			

NOTES:

Finishes/Features: Refer to Chapter 8 for specification references.

STAGE**E-PE-5****CAPACITY:**

- Students
- Teachers
- Parents/volunteers
- Community members

SIZE:

- As is

ANCILLARY SPACES:

- PE/Assembly (E-PE-1)

GOAL:

- To provide space for students to present performances

PROGRAM ACTIVITIES:

- Student assembly/award programs
- Theatrical/musical performances
- In-service conferences

SPATIAL RELATIONSHIPS:

- Near music rooms with ramp access

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Electrical outlets for equipment
- Stage to be no more than 21" above gymnasium floor
- Direct and convenient access to stage via stairs/ramps

NOTES:

Loose furnishings and features shown represent one of many possible arrangements.

**STAGE
E-PE-5**

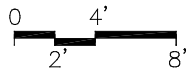
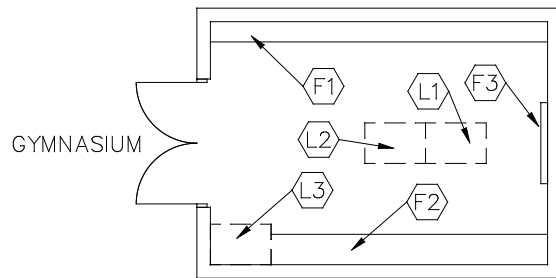
	Spec. Ref.#		Spec. Ref.#
<u>Finishes¹:</u>		<u>Features¹:</u>	
Flooring:		Fixed Equipment:	
Wood strip flooring for athletic applications	096466	F1 Operable partition, manual	102226
Base:		F2 Theatre and stage equipment	116143
Vented	096466	F3 Mirror	088000
Ceiling:		F4 Motorized projection screen	115213
Suspended, acoustical	095113		
Or painted exposed structure	099123	<u>Fire Suppression:</u>	Div. 21
Walls:		Fire suppression system	
Painted concrete masonry units	042000 / 099123		
<u>Communications:</u>	Div. 27	<u>Plumbing:</u> Div. 22	
T1 2 video port, monitor, VCR, and bracket		Fire protection system	
T2 Voice port and phone			
T3 2 data ports on stage		<u>Electrical:</u> Div. 26	
T4 Data port in center of stage apron		Duplex receptacles	
		3 to be located in apron at front of stage	
		TVSS protected quad receptacle adjacent to each data and video port	
		Multilevel switching	
		Fluorescent lighting	
		Illumination level: See Table 7600-16	
		Clock	
		Adjustable lighting tracks for front of stage, center of stage, and back of stage	
		Central sound system	
		1 microphone jack to be located in apron at front of stage	

NOTES:

1. Finishes/Features: Refer to Chapter 8 for specification references.

P.E. STORAGE

E-PE-4



CAPACITY:

- 1-2 teachers
- Student teachers

SIZE:

- Varies, see table

ANCILLARY SPACES:

- Gymnasium (E-PE-1)

PROGRAM ACTIVITIES:

- Storage

SPATIAL RELATIONSHIPS:

- Adjacent and access to Gymnasium

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Leave space below shelving on one wall for portable bins

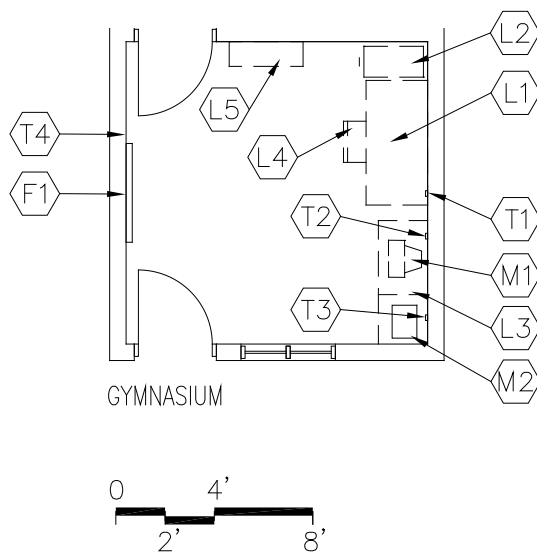
Features¹:

Fixed Equipment:

		Spec. Ref.#
F1	Storage shelving: 12" deep	105613
F2	Storage shelving: 18" deep	105613
F3	Pegboard (4 LF)	101100

NOTES:

Loose furnishings and features shown represent one of many possible arrangements.

P.E. OFFICE**E-PE-2****CAPACITY:**

- 1-2 teachers
- Student teachers

SIZE:

- 250 SF

ANCILLARY SPACES:

- PE/Assembly (E-PE-1)

PROGRAM ACTIVITIES:

- Ordering
- Scheduling
- Planning
- Maintaining records
- Meetings

SPATIAL RELATIONSHIP:

- Adjacent and access to Gymnasium
- Near restrooms

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control:
 - Wall minimum: STC 45
 - Ceiling minimum: CAC 35
- Electrical outlets for equipment
- Windows to provide natural light, desirable
- Auditory privacy

Spec.**Features¹:****Ref.#****Fixed Equipment:**

F1 Tack board (4 LF)	101100
F8 Coat hook	102800

Communications:**Div. 27**

- T1 Voice port and phone
- T2 Data port near teacher workstation
- T3 Data port for printer

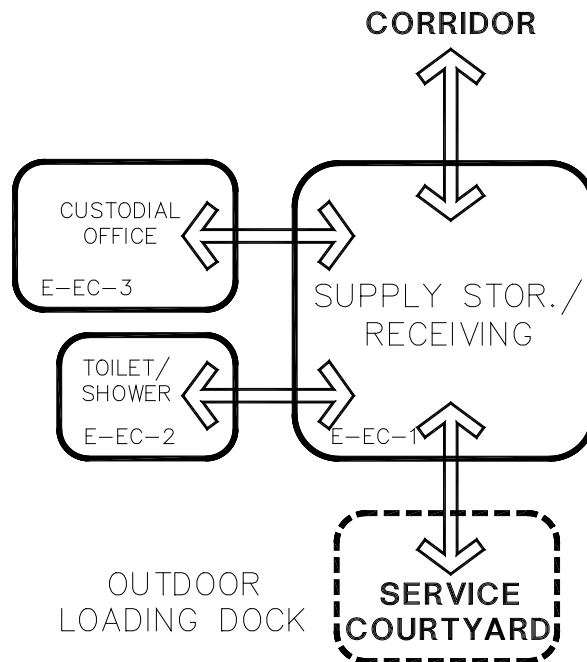
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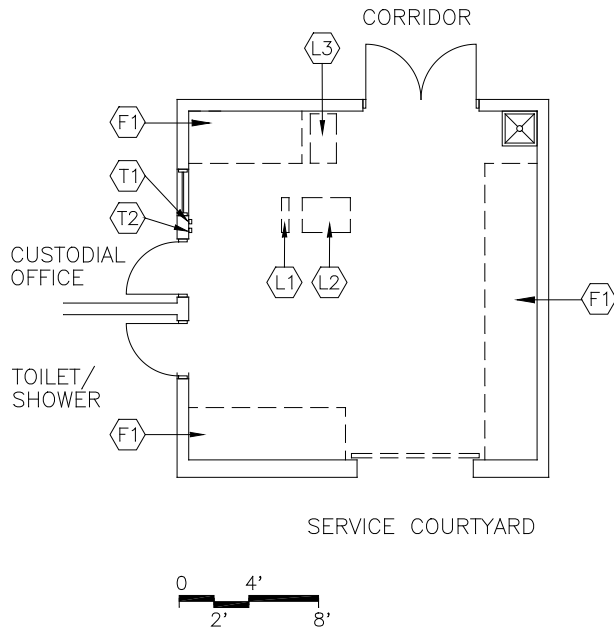
1. Loose furnishings and features shown represent one of many possible arrangements.

ENGINEERING AND CUSTODIAN

Spaces	Suggested			Comments
	Qty.	S.F.	Total	
Supply Storage / Receiving	1	350	350	
Outdoor storage	1	150	150	
Custodial/Engineer Office	1	150	150	
Total			600	

Comments: The overall total for the Engineering and Maintenance area may be + or – 5%.



SUPPLY STORAGE/RECEIVING**E-EC-1****CAPACITY:**

- Maintenance personnel

SIZE:

- 350 SF

ANCILLARY SPACES:

- Toilet/Shower (E-EC-2)
- Custodial Office (E-EC-3)

PROGRAM ACTIVITIES:

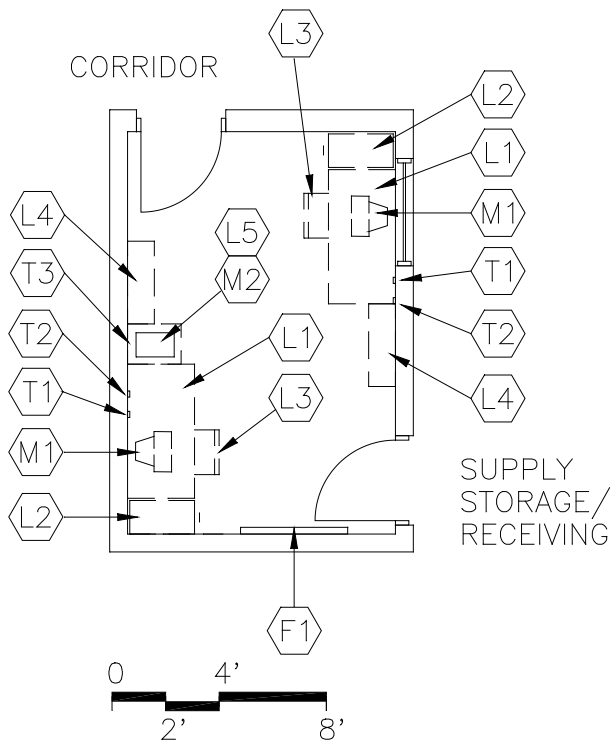
- Loading and unloading
- Storage of furniture, materials for special events, paper, and general supplies

SPATIAL RELATIONSHIPS:

- Adjacent and access to loading dock area and service courtyard
- Access to main corridor
- Adjacent and access to Custodial Office
- Adjacent and access to Toilet/Shower

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Supplemental heating source
- Double door with removable mullions
- Overhead door to service courtyard

CUSTODIAL OFFICE**E-EC-3****CAPACITY:**

- Maintenance and custodial staff
- Building engineer

SIZE:

- 150 SF

ANCILLARY SPACES:

- Supply Storage/Receiving (E-EC-2)

GOAL:

- To provide an area for the maintenance manager, staff, and building engineer to provide supervision of the physical plan

PROGRAM ACTIVITIES:

- Conferences with staff and other visitors
- Telephone calls
- Paperwork

SPATIAL RELATIONSHIPS:

- Adjacent and access to Supply Storage/Receiving
- Access to corridor

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Electrical outlets for equipment
- Visual control from Supply Storage/Receiving

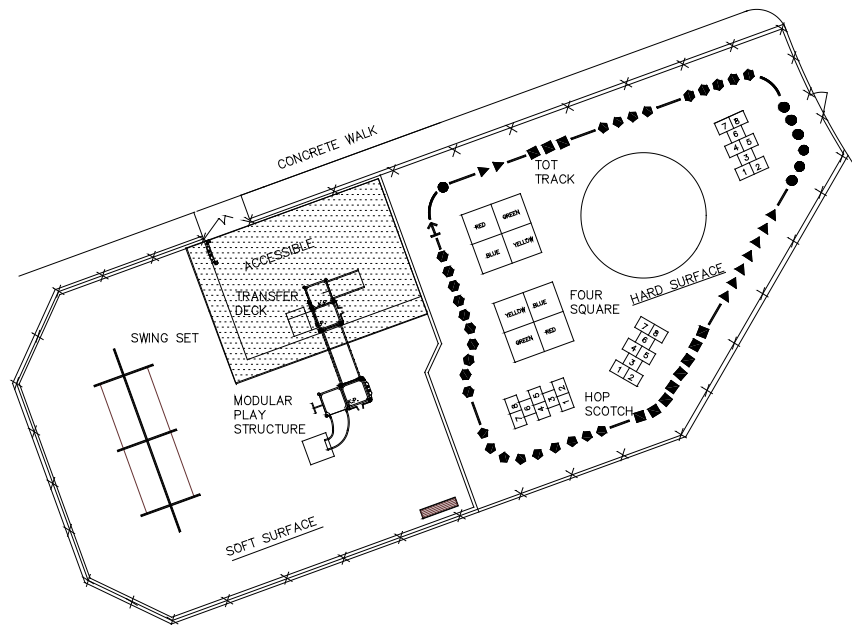
PLAYGROUNDS

AREA REQUIRED

1. Provide playground areas to allow for difference in age, ability, and varying interests.
2. Follow applicable safety guidelines for different age groups.

Pre-kindergarten to grade 1 play area. See Figure B-1.

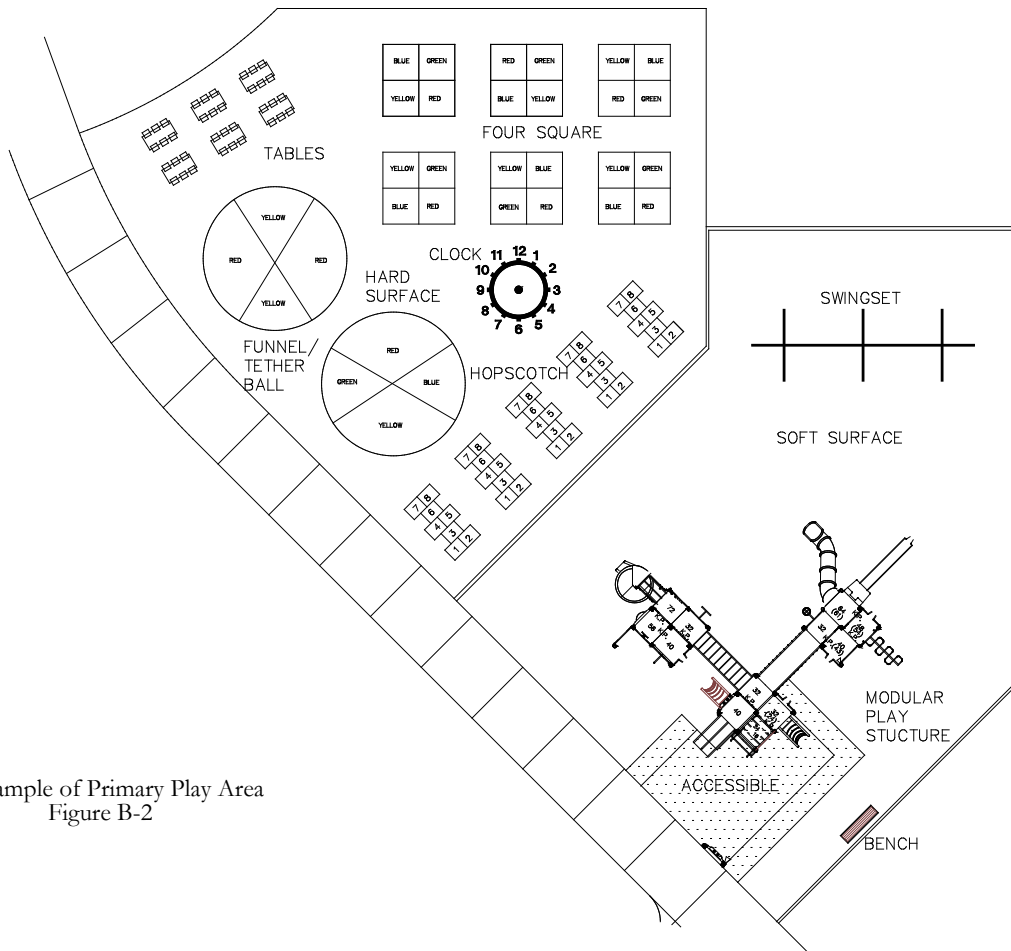
- a. Plan for play activities that include rocking, swinging, balancing, climbing, and sliding.
- b. Include tables and chairs for age group
- c. Locate equipment with moving parts, such as swings, at the perimeter of the play area. Use fence or planting beds to prevent children from inadvertently stepping into path of moving equipment.



Example of Pre-kindergarten to Grade 1 Play Area
Figure B-1

Primary Play Area (See Figure B-2)

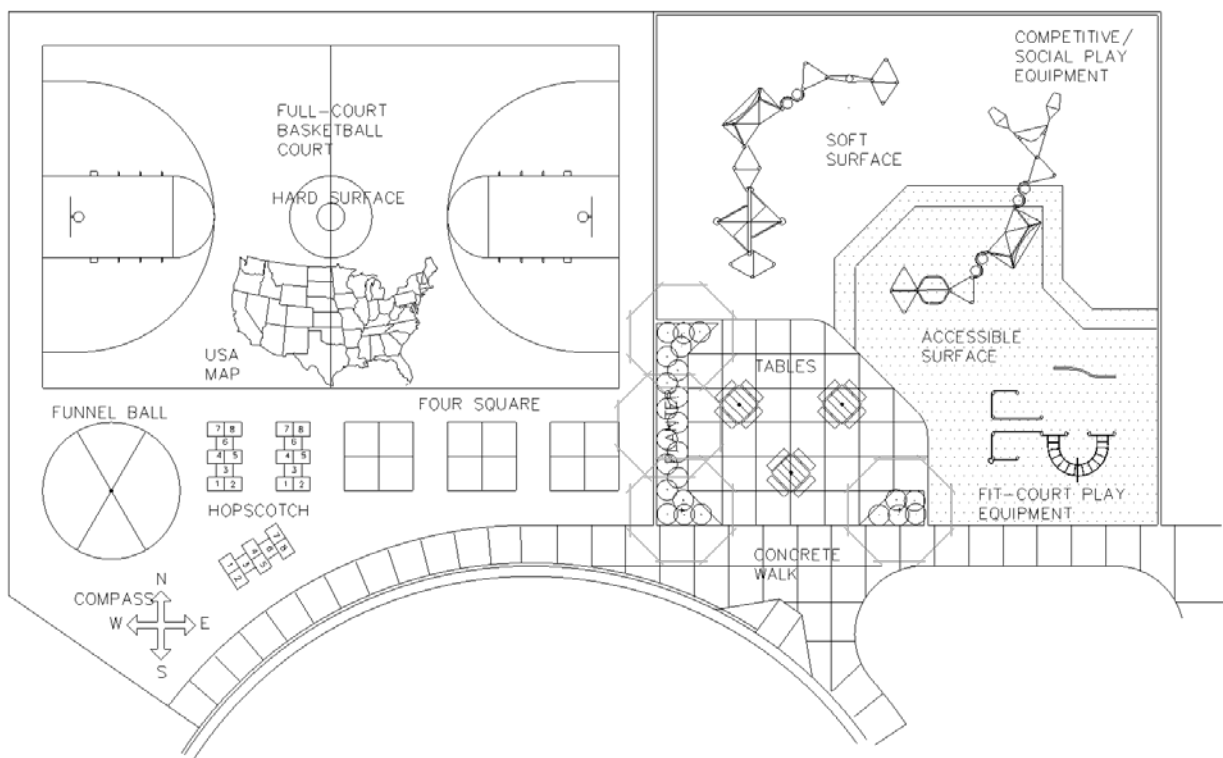
- a. Design for grades 1 through 3.
- b. Plan for play activities that include rocking, swinging, balancing, climbing, and sliding.
- c. Plan for upper-body strengthening devices such as a parallel bar and overhead ladder play equipment.



Example of Primary Play Area
Figure B-2

Intermediate Play Area (See Figure B-3)

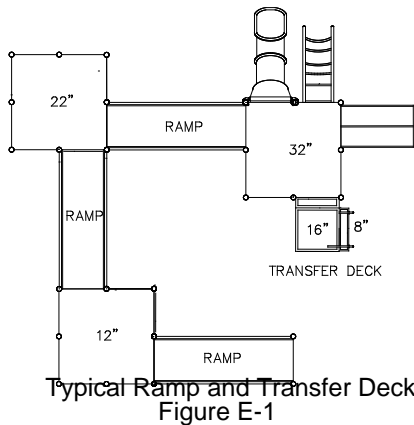
- a. Design for grades 4 and 5.
- b. Intermediate play area may be combined with primary play area and a 'tot track' designed around both play areas
- c. Include an outdoor science classroom that may include a garden.
- d. Plan for 1 full basketball court (50 feet by 84 feet) or 2 half courts (50 feet by 42 feet).



Example of Intermediate Play Area
Figure B-3

SOFT SURFACE PLAY AREA

1. Soft surfaces are provided under play equipment and must be handicapped accessible.
2. Surfacing is to be a poured polyurethane surface. Avoid using black surfacing.

ACCESSIBILITY STANDARDS

1. Plan for ramps and/or transfer points on composite play structures for access to play components on elevated decks. Meet the Americans with Disabilities Act guidelines for percentage of components that are to be accessible by ramp and by transfer deck. See Figure E-1.
2. Provide table and benches along accessible route.
3. Provide upper-body strengthening devices as appropriate for age group and amount of supervision.

See Design Guidelines for Site requirements for parking, circulation, etc.