HOUSTON INDEPENDENT SCHOOL DISTRICT

HISD EDUCATIONAL SPECIFICATIONS

FINAL

Approved by:

Jonathan Trinh, Principal

LEE HIGH SCHOOL

MAY 12, 2014

2012 HISD BOND
BUILDING EXCELLENCE

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING
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HOUSTON INDEPENDENT SCHOOL DISTRICT

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GUIDING PRINCIPLES

Guiding Principles articulate a school's vision, values, hopes and ideals to the design team. Guiding Principles will be used to "test" the decisions that are made throughout the design process, since every element of the building must be created to support the school's vision and values.

Lee High School's Guiding Principles

1. We believe it is important to support the whole student.
2. We believe that our students should be supported to become global leaders.
3. We believe it is important to showcase the wide variety of students' talents.
4. We believe it is important that Lee High School allows students to be creative with new and future activities.
5. We believe it is important that flexibility and adaptability are provided to prepare students to meet rapid change.
6. We believe that having people gather and appreciate learning and nature is important.

Executive Summary

Overview:

College and career readiness is a key priority for HISD and by working closely with college partners and area businesses the students are prepared for post-secondary success. They participate in rigorous core academic courses as well as specialized courses in career-focused areas that integrate learning and work world experiences. The 2012 bond program is grounded by the promise to provide 21st century learning environments for our students.

This Educational Specification evolved through a collaborative process with the school and its Project Advisory Team (PAT). It was developed by exploring program requirements of High Schools with consideration for extensive flexibility to address multiple approaches to the delivery of education with evolving pedagogies. Since new and renovated buildings are expected to serve multiple generations of learners, spaces must be planned to respond to changing program delivery strategies over time without "bricks and mortar" changes to the building. This educational specification has been prepared to provide spaces in a variety of sizes, interior zoning to enhance after-hours use, and a rich infrastructure to support current and This document includes descriptions of each space in the facility, the activities anticipated within and the furniture, fixtures and equipment (FF&E) expected to be needed. Final decisions on the FF&E for each space will be confirmed in conjunction with the facility's users once construction is underway. emerging approaches to educational program delivery.

Educational Program Delivery:

There is an emerging body of research that links student performance with school facilities. One leading study makes the following points:

- Design components and features have a measurable influence on student learning. Deficiencies in thermal comfort, acoustics, and lighting are particularly significant.
- Overcrowding has a negative impact on learning.
- There is a strong positive relationship between overall building condition and student achievement.
- Substandard facilities have a negative impact on teacher effectiveness and performance and consequently impact student performance. (Earthman 2002)

One of the important concepts in education is the philosophy of differentiation. Differentiation calls for students to be taught in the way that is most likely to be effective considering their individual readiness and styles of learning. Standards are "what" is taught. Differentiation can be "how" standards are taught. Howard Gardner's theories of multiple intelligences have helped us understand the variety of ways in which we all learn. They are illustrated in the table on the following page.

Eight Ways of Learning:

Children who are highly:	***Think***	***Love***	***Need***
Linguistic	in words	reading, writing, telling stories, playing word games	books, tapes, writing tools, paper, diaries, dialogue, discussion, debate, stories
Logical-Mathematical	by reasoning	experimenting, questioning, figuring out logical puzzles, calculating	materials to experiment with, science materials, manipulatives, trips to the planetarium and science museum
Spatial	in images and pictures	designing, drawing, visualizing, doodling	art, LEGOs, video, movies, slides, imagination games, mazes, puzzles, illustrated books, trips to art museums
Bodily-Kinesthetic	through somatic sensations	dancing, running, jumping, building, touching, gesturing	role play, drama, movement, things to build, sports and physical games, tactile experiences, hands-on learning
Musical	via rhythms and melodies	singing, whistling, humming, tapping feet and hands, listening	sing-along time, trips to concerts, music playing at home and school, musical instruments
Interpersonal	by bouncing ideas off other people	leading, organizing, relating, manipulating, mediating, partying	friends, group games, social gatherings, community events, clubs, mentors/apprenticeships
Intrapersonal	in relation to their needs, feelings, and goals	setting goals, meditating, dreaming, planning, reflecting	secret places, time alone, self-paced projects, choices
Naturalist	through nature and natural forms	playing with pets, gardening, investigating nature, raising animals, caring for planet earth	access to nature, opportunities for interacting with animals, tools for investigating nature (e.g., magnifying glass, binoculars)

(Armstrong, Thomas. Multiple Intelligences in the Classroom, 2nd Edition. Chapter 3. Describing Intelligences in Students. 2000.)

What this tells us about the school building is that the facility must be planned to provide a variety of experiences to insure optimal learning opportunities for each student. Space and furnishings should be flexible to accommodate whole group instruction as well as individual and group space. Connections, where possible, to the outdoors are important for active learning and science projects.

Technology

Technology is an essential tool for learning in today's schools. Computers are used for instruction in the core subjects as well as word processing, data analysis, and

presentation development. Computers and projection devices are found in classrooms as well as labs. HISD has embarked upon a program that will lead to each student having their own laptop or tablet. All spaces in the facility must be designed to support this 1:1 initiative.

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Flexibility

21st century schools should be organized to have the flexibility to embrace multiple program delivery systems. This may include: self-contained learning centers, team teaching, thematic instruction and/or departmental organization. The buildings must be flexible enough that from year to year the users of the building have the ability to alter the instructional methodology. Additionally, the learning environments must also be flexible enough that from period to period they can appeal to each learner.

Flexibility is addressed in this educational program through providing:

- Spaces in a variety of sizes that can be configured and re-configured in multiple layouts.
- Learning Centers with similar configurations and with as little fixed cabinetry as possible to allow for many configurations.
- Spaces such as the Learning Commons, Dining Commons, and Gymnasium that will be located to allow for after-hours access without disturbing the entire building.
- Finishes on the floors, walls, and, ceilings, that are easy to clean and allow for maximum personalization of the space.
- Furnishings that are flexible, durable, and easy to move, so the spaces can respond to a dynamic educational program.

Organization

At the High School level, spaces are increasingly organized in houses, schools-within-schools or small learning communities. Essentially these concepts are similar. They all include learning centers and teacher support areas located together with Special Education, Career and Technical Education (CTE) and Administration, creating personalized, smaller Neighborhoods within the larger facility.

Learning Centers

The focus for all disciplines with this Ed Spec is to create flexible and dynamic learning centers that support 21st century learning for whole group, small group, and individuals. Addressing the needs of all learners requires that learning be experiential and hands-on.

Each learning space should have as much moveable (rather than fixed) furniture and equipment as possible. Tables, chairs, moveable storage, and wireless technology, will support flexible configuration during the current school day and year and many different configurations as educational program delivery evolves over time.

Science Learning Centers/Wet Labs will have perimeter counters and sinks with tables that can be configured for individual activities, small group clusters, lab stations or moved back to the edges of the room for experimentation that requires free movement. Each Science Learning Center/Wet Lab will contain a sink for every 4 students and a demonstration table for teacher demonstration of experiments.

A variety of spaces have been included to support non-core academic learning. Learning Centers for visual and performing arts, world language, CTE, and physical education will be configured to provide maximum flexibility through the use of moveable furnishing, fixtures, and equipment with acoustic control, plumbing, etc. to support the intended primary user.

Program Area Overview

Administration/Guidance

Immediately upon entry, visitors will be greeted in the administration "welcome area." Offices may include the Principal, support staff, guidance and health services. These spaces should be located in a centralized area at the main entrance of the school to provide a controlled access point during the school day.

The front entry lobby should be welcoming and inviting for students, staff, and visitors. However, to address security concerns, a security vestibule will be provided. In order to gain access to the facility, a visitor will pass through the vestibule directly into the main administrative reception area before being allowed into the school.

Neighborhoods

The basic organizational unit for this school will be the neighborhood, consisting of general-purpose learning centers, teachers' work center, small group rooms, extended teaching area, and science learning centers/wet labs. The neighborhood concept accommodates a variety of instructional strategies and student-grouping approaches. This concept also provides a learning environment that is characterized by flexibility, a sense of community for the students and teachers working 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.

The neighborhoods can be organized based on individual grade levels, multi-grade groupings, or departmental groupings. The learning communities should be located near the Media Center and away from noisy spaces such as the Gymnasium and Cafeteria. Special attention should be given to accessibility of all educational and support spaces and an integrated learning program.

Learning Commons

The Learning Commons serves a dual role. Its traditional role is a library and a place to conduct research. Its new role is to serve as a technology and information base center. In this new role, it houses a transparent voice/video/data network, that runs throughout the entire building. This area is changing from a "depository of books" to a "technology information center." It is not projected that the library functions will discontinue; rather digital technology will enhance voice, video, and data communications within the school, among district facilities, and with distance learning resources. To that end, a portion of the Learning Commons will be included in each Neighborhood as an Extended Learning Area for electronic research, project collaboration, etc.

Visual Arts

The Visual Arts Learning Center will be configured to support both 2-dimensional activities and 3-dimensional creations. Space will be provided both within the classroom and in a connecting storage room for access to materials and storage of student work-in-progress. Configuration will provide as much display space as possible to showcase student work within the room and in display cases visible from the corridor. The connecting kiln room will provide an area to store work waiting to be fired as well as safe control and ventilation for the kiln.

Performing Arts

Design, flexibility, and acoustics should be especially considered when planning these spaces. The Instrumental Music/Vocal Music and Performance square footage will be grouped together. Storage areas, practice rooms, and teacher areas will connect with the larger space and be shared when feasible.

Physical Education

A variety of indoor and outdoor areas are required to support school physical education programs, Outdoor physical education teaching areas should be located near the indoor gymnasium. Physical education facilities should be designed and constructed with a focus on community use during non-school hours, since there is a high demand for both indoor and outdoor facilities. This will be accomplished by locating an entrance near the gym with lockable doors to control access to the rest of the building.

Food Services

The Dining Commons is planned as a flexible room that can accommodate student dining, meetings, and other events. The serving area will be designed as a food court. Movement among the various activities, i.e. hand washing queuing for serving, and exiting, will be planned for ease of movement.

Building Support – Corridors and Common Spaces

Extensive display areas should be provided for two-dimensional and three-dimensional student work and awards. Finishes should be durable and easy to maintain. The scale of all spaces must be student friendly. Colors, artificial lighting, and natural day-lighting should be artfully managed to create an environment that communicates that school is a very special place.

Technology

The facility should contain the latest in technology and be wired and wireless for voice, video and data throughout the building. The program design is intended to bring information to each student, and computer technology will be distributed in every classroom. HISD is in the early stages of an initiative which when completed will provide each learner with a laptop or tablet. It is intended therefore that access to technology will be seamless and pervasive throughout the building.

Accessibility

The entire facility must be universally accessible. This should be accomplished through judicious use of ramping and elevators where necessary, sufficient internal clearances for circulation, convenient bus/van loading and unloading, and nearby handicapped parking spaces. All elements of the Americans with Disabilities Act must be complied with, including way-finding and signage, appropriate use of textures, etc.

Aesthetics

Constructing the indoor and outdoor structures and spaces where students go to school today must meet many challenges and expectations. Interior and exterior aesthetics should reflect the high academic aspirations of the school. It should have community visibility and presence.

Creating a community landmark will establish a recognizable identity that will instill pride in students and community and also express the value that the community has for its children. Areas within the school should be developed to have clear organization and internal identity.

The facility should be inviting to students, making them feel that the space is special, and therefore make it clear that each person is special. Aesthetics that affirm the value of the individual must be emphasized, with spaces for the admiration of the accomplishments of self and others. The school should support academic success, high self-esteem, social interaction, and physical safety. The facility layout should be especially easy to comprehend and reflect how spaces relate to one another. Easily supervised areas should be provided for positive socialization among students and with teachers.

Flexibility

Facilities should be constructed in a manner in which change and flexibility is the norm, not the exception. Building materials, systems, and furniture should be selected to support these concepts as well.

Indoor and Outdoor Learning Environments

By rethinking all spaces, better use of the facilities and site can occur. One way to accomplish this is to use windows and outside areas to make rooms “feel” larger as well as utilizing outdoor areas for teaching environments. All grade level learning center must have windows to the exterior.

Common and shared use areas should be considered to provide spaces for positive interaction and orientation within the school. All learning environments should be developed to foster a sense of belonging and pride. The use of the building system/design as an actual teaching model and example of technology and environmentally conscious design should be considered. Creativity and functionality should work hand in hand

CAPACITY MODEL & SPACE REQUIREMENTS

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Capacity Model:

	# Teaching Stations	Students per Teaching Station	Building Capacity	% Utilization	Program Capacity
Learning Center (English, Math, Social Studies, World Language, ESOL, Health)	44	28	1232	85%	1,047
Science Wet Lab	9	28	252	85%	214
Special Education Learning Center	4	12	48	85%	41
CTE: Design/CAD	1	28	28	85%	24
CTE: Construction	1	28	28	85%	24
CTE: Digital Media	1	28	28	85%	24
CTE: Digital Photography	1	28	28	85%	24
CTE: Fire / EMT	1	28	28	85%	24
CTE: Technology / GIS	1	28	28	85%	24
CTE: Law Enforcement	1	28	28	85%	24
CTE: Welding	1	28	28	85%	24
CTE: Science / Forensic Lab	1	28	28	85%	24
Junior ROTC Large Learning Center	1	28	28	85%	24
Junior ROTC Small Learning Center	1	28	28	85%	24
Visual Arts Wet Lab	1	28	28	85%	24
Instrumental Music Learning Center	1	28	28	85%	24
Vocal Music Learning Center	1	28	28	85%	24
Black Box /Drama/Theater Learning Center	1	28	28	85%	24
Dance Learning Center	1	28	28	85%	24
Gymnasium	2	32	64	85%	54
Auxiliary Gymnasium	1	32	32	85%	27
Total	76		2,076		1,765

Space Requirements:

	Provided Spaces	
	Teaching Stations	Total
Core Academic Area	57	67,572
CTE	9	25,444
JROTC	2	5,215
Visual Arts	1	1,587
Performing Arts	4	23,218
Physical Education/Athletics	3	30,625
Welcome Center/Administration Space Requirements		12,105
Food Service Space Requirements		14,724
Custodial/Maintenance Space Requirements		1,965
Childcare Center		2,637
Total Net	76	185,092
Building Support		77,701
Total Gross		262,793

Space Details:

Neighborhoods	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Learning Center	44	44	843	37,089
Science Learning Center /Wet Lab	9	9	1,574	14,167
Wet Lab Storage		5	256	1,282
Flex Lab		1	844	844
Learning Commons/Information Center		7	1,187	8,308
Learning Commons/Information Center Storage		2	234	467
Special Education Learning Center (Life Skills)	3	3	873	2,618
Special Education Learning Center(MI) (locate near Nurse)	1	1	926	926
Kitchen/Restroom/Changing Room/Storage		2	166	332
Small Group Room		6	232	1,390
Storage		1	149	149
Total	**57**			**67,572**

Career and Technology Education	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Design / CAD	1	1	1,400	1,400
Storage		1	172	172
Digital Media	1	1	1,373	1,373
Storage		1	171	171
Digital Photography	1	1	1,394	1,394
Storage		1	178	178
Fire / EMT	1	1	1,365	1,365
Storage		1	172	172
Medical Technology (locate near Health Clinic) (Space will be used by Baylor Clinic)				
Waiting Area (10-15 students)		1	209	209
Office A (Nurse, nurse practitioner, sec/recp)		3	117	352
Examination Rooms		3	101	303
Laboratory		1	89	89
Pharmacy		1	97	97
Storage		1	122	122
Restrooms		2	74	147
Conference Room, Small		1	149	149
Technology / GIS	1	1	1,373	1,373
Storage		1	170	170
Law Enforcement	1	1	1,373	1,373
Storage		1	112	112
Science / Forensic Lab	1	1	1,621	1,621
Tools Room		1	363	363
Wet Lab Storage		1	200	200
Wood Working Lab	1	1	4,789	4,789
Learning Center		1	360	360
Office		1	200	200
Tool Storage		1	169	169
Storage		1	350	350
Spray Booth		1	259	259
Metal Lab	1	1	4,971	4,971
Learning Center		1	360	360
Office		1	200	200
Tool Storage		1	169	169
Storage		1	413	413
Wood Working/Metal Lab Shared Restrooms		1	187	187
Mechanical Room		2	56	112
Total	**9**			**25,444**

JROTC - Army	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Junior ROTC				
Rifle Range		1	2,334	2,334
Learning Center A	1	1	1,126	1,126
Learning Center B	1	1	983	983
Cadet Small Group Collaboration		1	132	132
Arms / Weapons Storage		1	240	240
Uniform / Drill Team / Color Guard Storage		1	268	268
Instructors' Center		1	132	132
Total	**2**			**5,215**

Visual Arts	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Visual Arts Wet Lab	1	1	1,164	1,164
Kiln Room		1	105	105
Storage Room		1	318	318
Total	**1**			**1,587**

Performing Arts	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Instrumental Music Learning Center	1	1	2,334	2,334
Instrument Storage		1	682	682
Uniform/General Storage		1	597	597
Music Storage/Library		1	247	247
Practice Room (s)		2	0	0
Vocal Music Learning Center	1	1	1,843	1,843
Uniform/General Storage		1	278	278
Music Storage/Library		1	162	162
Practice Room (s)		2	50	99
Shared Ensemble (Workroom)		1	347	347
Shared Ensemble Room		1	346	346
Black Box /Drama/Theater Learning Center	1	1	1,516	1,516
Costume Storage (Boys/Girls)		1	298	298
Prop Storage		1	264	264
Scene Shop		1	408	408
Scene Storage		1	459	459
Multipurpose Learning Center (Dance)	1	1	1,145	1,145
Dressing Rooms		2	133	266
Storage		1	194	194
Auditorium		1	6,406	6,406
Stage		1	1,888	1,888
Control Booth		1	102	102
Piano Storage		1	115	115
Lobby (shared with gym)		1	2,164	2,164
Concessions (Shared with gym)		1	227	227
Dressing Room/Restroom (Near Dance)		2	281	561
Restrooms		2	135	270
Total	**4**			**23,218**

Physical Education/Athletics	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
PE/Athletics Lobby (Shared with auditorium)		0		0
Gymnasium (seating for 1000)	2	1	11,035	11,035
Auxiliary Gymnasium	1	1	6,874	6,874
Weight Room		1	1,524	1,524
Boys' Athletic Locker Room		1	1,445	1,445
Girls' Athletic Locker Room		1	1,406	1,406
Athletic Toilets/Showers		2	546	1,091
Boys'/Girls' PE Locker Room		2	1,025	2,050
P.E. Toilets/Showers		2	546	1,091
Adult Toilet/Shower/Locker		2	140	279
Athletic Director (Office C)		1	196	196
Office B (shared)		2	305	610
Training Room		1	420	420
Laundry		1	175	175
PE Equipment Storage		2	518	1,036
Athletic Equipment Storage		1	1,393	1,393
Total	**3**			**30,625**

Administration/Guidance	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Administration				
Reception, Administration		1	520	520
Office A		5	107	537
Office C (Principal)		1	315	315
Principal's Restroom		1	63	63
Office B (AP)		4	112	446
AP Reception/Waiting		4	75	299
Conference Room, Main		2	245	490
Conference Room, Small		1	149	149
Storage		1	160	160
Office A (Security Office)		1	99	99
Health Clinic (locate near Medical Technology CTE (Baylor Clinic) and Sp. Ed		1	694	694
Reception/Waiting		1	102	102
Office A		1	141	141
Pharmacy		1	86	86
Restroom		1	85	85
Guidance/Student Services				
Reception, Guidance		2	171	342
Office B (Attendance, Registrar, Counselor)		6	124	746
Conference Room, Small		1	149	149
Records/File Room		1	252	252
Administration/Guidance Workroom/Break Room		1	345	345
Mail Room		1	101	101
Shared				
Professional Development/Data Center		1	351	351
Teacher Work Center		5	774	3,868
Teacher Conference/Break		4	126	502
Office B (Itinerant)		4	98	390
Computer Repair /Storage Room (with transaction counter)		1	873	873
Total	**0**			**12,105**

Food Service	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Kitchen Preparation Area		1	1,796	1,796
Serving Area		1	1,252	1,252
Dry Storage		1	230	230
Freezer		1	274	274
Cooler		1	270	270
Kitchen Manager's Office		1	117	117
Laundry/Custodial Area		1	66	66
Locker Room/Restroom		1	136	136
Student Dining Commons (seating for 1/3 of students at one time plus 200 for dining)		3	3,333	9,998
Coffee Shop		1	189	189
Dining Commons Storage		1	367	367
Janitor		1	29	29
Total	**0**			**14,724**

Custodial / Maintenance	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Receiving Entry		1	524	524
Office, Plant Engineer		1	80	80
Custodial/Maintenance Storage		1	406	406
Supply Storage		1	394	394
Custodial Closet		6	71	425
Custodial Locker Room/Restroom		1	136	136
Total	**0**			**1,965**

Child Care Center	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Director Office		1	154	154
Kitchen/Storage		1	235	235
Student Restrooms		2	59	118
Staff Restrooms		2	67	133
Outdoor Storage		1	140	140
New Mother's Room		1	84	84
Infant Room		1	920	920
Toddler/Preschool Learning Center		1	853	853
Total	**0**			**2,637**

SITE

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Site Overview

Attractive, functional buildings placed on adequate grounds in an appropriately landscaped environment help to create in students an appreciation for schools and in adults an added civic interest and respect for the dignity of education. Site planning is based on a thorough analysis of the site, determination of human needs, determination of requirements for other uses, and provision for transportation, communications and utilities. Site planning is the first opportunity for incorporating the four principles of Crime Prevention Through Environmental Design (CPTED):

- Natural Surveillance
- Natural Access Control
- Territorial Reinforcement
- Maintenance

In many communities, school facilities are frequently used for purposes other than those directly related to the learning activities of students; such as adult education, public assembly, recreation, election polling places, meetings that require food services, etc. There is a trend toward increasing this multi-use function of school facilities. Some schools are now being built as a part of a larger complex of community service facilities: recreation grounds and parks, health and social services centers, libraries and cultural centers.

On-site school traffic includes: buses, commercial vans, cars and bicycles transporting students, parents, staff and visitors to and from school, car and bus parking, service and delivery vehicles, and pedestrians entering, exiting and accessing site facilities. This traffic must be managed safely and efficiently so that it supports the school's mission and traffic management does not become a burden to the staff.

Outdoor recreational facilities will accommodate the physical education program, field exercises in academic programs such as science and art, unstructured play and social events such as picnics and carnivals. Group sizes will range from school wide events such as field days, to whole class grouping, small groups and individuals.

In planning new school construction and in site planning on existing campuses, space should be identified to site six temporary classroom units (T-Buildings) and accommodations made for their future utility hookups.

Design Considerations

- The outdoor playing fields shall accommodate the physical education program, athletics, and outdoor learning activities.
- As sites are identified, the opportunity for cooperative efforts such as buying adjacent land and master planning together with community groups should be explored.
- In developing a Campus Master Plan, consideration should be given to:
  - Future enhancements such as amphitheaters, picnic tables, nature trails, gardens for vegetables, wildflowers, and butterflies; wildlife habitats, sundials, etc.
  - Fire lane with access to all areas of the campus with special attention paid to allowing trucks to access the cafeteria, bus and parent drop off areas as these are the usual locations of fires. However, fire truck access to buildings must not be compromised during drop-off and pick-up times. Therefore, provide a 20' access way at critical points so the parents' vehicle queue will not interfere with emergency access to the building.
  - Security of life and property when designing the exterior lighting system. Consider placement of utility stub outs for lights which may be installed by community user groups.
  - Ways in which the community may use and upgrade the facilities. For schools these improvements may include stub outs for athletic field lighting (include baseball and softball fields). For schools/parks these improvements may include public restrooms/concession area/storage, spectator control access/storage, score boards & warm-up areas.
- Consider context and surrounding community circulation when planning site.
- Vehicular and pedestrian traffic should be separated.
- Site Master Plan should include covered walkways to bus and/or car loading/unloading areas.
- Coordinate traffic pattern so that students will not have to cross driveways or parking areas in route to outdoor play fields.
- Separate vehicular traffic as much as site and local governing bodies will allow.
- Allow for separate entrances/exits for bus traffic, car queuing and car parking. If separate roadway accesses are not possible separate traffic as soon as feasible on-site.
- The daily school schedule for arrival and dismissal, and occasional events, including large group assemblies and special events should be considered in the design of traffic patterns.
- Make all outdoor facilities ADA accessible.

- Allow for sufficient buffer space for safety when siting outdoor playing fields. Preservation of the natural environment and outdoor spaces for science and arts is desirable.
- Consider making provisions for shade and potential assembly areas.
- Design to allow for future upgrades, if possible.
- Consider safety and social zones of activity.
- Parking lots should be distant from foul ball territory.
- Screen noise producing areas from instructional areas.
- Campus Master Plan should indicate fire lane with access to all areas of the campus. This shall not be a paved road. It is critical that the school building not be encircled by vehicle circulation.
- Determine which development standards will be required, as these may have different requirements.
- In planning fields include fencing such as backstops, outfield, dugouts, temporary fencing with the thought of providing multiple use of athletic fields.
- See Design Guidelines concerning irrigation.
- Follow standards published by National Federation of State High School Associates for guide to proper athletic field orientation, sizes and markings:
  National Federation of State High School Associations
  PO Box 361246
  Indianapolis, IN 46236-5324
  1-800-776-3462

Site

Future T-Buildings Area

USERS:	ACTIVITIES:
• Students • Faculty/staff	• Future learning center(s)

DESIGN CONSIDERATIONS:

- When identifying the location, consider proximity of group toilets and other core facilities such as Learning Commons/Information Center, Food Service, etc.
- When identifying the location, consider access to the area for transporting the buildings to and from the site.
- Students moving to and from permanent buildings should not cross vehicular traffic.
- Do not use areas programmed for other uses for temporary buildings.
- Generally square area to accommodate six (6) temporary buildings.

FURNITURE, FIXTURES & EQUIPMENT:

- Provide underground conduit and stub ups from the nearest power panel in the main building for future electrical connections. This panel should be provided with the required extra capacity.
- Provide underground conduit and stub ups for future data connections.

Site

Service Court/Access Drive/Dumpster

USERS:	ACTIVITIES:
• Maintenance Staff • Custodial Staff • Food Service Staff	• School deliveries • Waste disposal bins (dumpsters) • Meeting with parents, students and other visitors • Placing phone calls
DESIGN CONSIDERATIONS:	
• Locate in close proximity to Receiving Entry and Food Service • Area should be sited or shielded so that a visual screen is created • Consider turning radii and path of delivery vehicles • Provide drains at waste disposal bins	
FURNITURE, FIXTURES & EQUIPMENT:	
Contractor Furnished – Contractor Installed	
• Screening • 3 Waste Bins (dumpsters) • 1 Recycling Bin (dumpster)	

Site

Bus Loop/Parking/Staging

USERS:	ACTIVITIES:
• Staff • Teachers • Students • Parents	• Entry, exit and staging of buses • Overnight parking for buses/daytime parking for driver's personal vehicles

DESIGN CONSIDERATIONS:

- The designated loading zone shall provide a minimum of 60 inches wide by 240 inches long clear floor area adjacent to the vehicle pull-up space with the long dimension parallel to the vehicle direction of travel.
- Locate in close proximity to the main entrance, preferably near large assembly area within the school building and as a second priority, outdoor play area.
- Provide a convenient, covered, accessible loading area for buses that is closer to the school than the car loading area (with the exception of special needs children).
- Consider the turning radii of buses so that buses can discharge and pickup students without having to cross roadways or back up.

FURNITURE, FIXTURES & EQUIPMENT:

- None

Site

Car Parking

USERS:	ACTIVITIES:
• Parents • Students (High School) • Community members • Faculty/Staff	• Parking to meet code requirements or as shown below, whichever is greater. • Parking for School Faculty and Staff plus 10% • Parking for Guests – provide spaces equal to 1% of the student capacity or 10 spaces whichever is greater. • Student parking at High Schools will likely not be possible due to the constraints of the site.
DESIGN CONSIDERATIONS:	
• Separate car parking from bus traffic and car drop-off/pickup • Car drop-off/pickup should not interfere with traffic flow to car parking • Locate staff/visitor parking at the front of the building to promote and identify the front entrance as well as for visual surveillance from Administration. • Provide convenient preferred parking spaces for low emission vehicles and those with special needs however, all other parking spaces should be located far enough away from the school that it is clear that priority is given to walkers, bikers, playgrounds and open space • Locate 15 of the staff spaces near the Service Court for use by the Maintenance, Custodial and Food Service Staff	
FURNITURE, FIXTURES & EQUIPMENT:	
• Consecutively numbered spaces • “Visitor” spaces • 6 “Reserved” spaces	

Site

Car Staging/Access

USERS:	ACTIVITIES:
• Parents/Students	• Safely discharge and pick-up students from private vehicles

DESIGN CONSIDERATIONS:

- Accommodate 15-20 cars
- The designated loading zone shall provide a minimum of 60 inches wide by 240 inches long clear floor area adjacent to the vehicle pull-up space with the long dimension parallel to the vehicle direction of travel.
- Locate near the main entrance but so as not to interfere with bus loading.

FURNITURE, FIXTURES & EQUIPMENT:

- None

Site

Pedestrian Circulation

USERS:	ACTIVITIES:
• Staff/Faculty • Parents • Students • Community	• Safe and secure passage from parking/access areas to the school's indoor facilities (including T-Buildings if any) and to the outdoor facilities including all athletic facilities
DESIGN CONSIDERATIONS:	
• Provide permanent walkways where anticipated foot traffic would destroy vegetation or where required for ADA compliant access • Provide minimum 10'-0" wide walkways to and at Bus Staging • Provide minimum 6'-0" wide walkways to and at Car Staging	
FURNITURE, FIXTURES & EQUIPMENT:	
• None	

Site

Football/Soccer/Track

USERS:	ACTIVITIES:
• Faculty • PE Students • Athletic Teams • Community	• Competing (Athletics) • Practicing (Athletics) • Physical Education classes

DESIGN CONSIDERATIONS:

- Provide a 225' x 360' layout for soccer and a 160'x360' layout for football all within a 400 meter, 8 lane track. As closely as possible, align the football/soccer field along a NW/SE axis. Additionally, provide for separate high jump, long jump, triple jump, pole vault, shot put and discus. Locate so that landing areas for shot put and discus are not on the football/soccer field.
- Provide space for future bleachers, concession/ticket stand, and scoreboard.
- Provide 4'-0" high perimeter fencing around the track.

FURNITURE, FIXTURES & EQUIPMENT:

- Permanently installed apparatus/infrastructure:
  - Banked track with two straight runs and two semicircular ends. The length of the straight sections and the curves shall be equal. A curb at grade shall mark the inner limits of the track. The curb shall be cut at regular intervals to allow for drainage. Track shall be rubberized with markings for:
    a. 100 meter, straight start
    b. 200 meter, straight start
    c. 400 meter, curved start
    d. 800 meter, curved start
    e. 1600 meter, curved start
    f. 3200 meter, waterfall start
    g. 4 x 100 meter relay, staggered start plus exchange zone
    h. 4 x 200 meter relay, stagger start plus exchange zone
    i. 3200 meter relay, waterfall start plus exchange zone
    j. 100 meter hurdles, straight start
    k. 110 meter hurdles, straight start on apron
    l. 300 meter intermediate hurdles, one curve staggered start
  - Rubberized runway, planting box, and landing pad space for pole vault
  - Rubberized runway and sandpit for long jump
  - Rubberized runway and sand pit for triple jump
  - Rubberized apron for high jump
  - Concrete throwing circle and cage for discus
  - Concrete putting circle for shot put.
  - Turtlebacked field with gooseneck goal posts for football
- Electrical stub outs from main facility for scoreboards and field lighting
- Underground drainage system with catch basins located outside of activity areas for safety of players.
- Irrigation system
- Pole vault landing pad
- Soccer goals

Site

Baseball

USERS:	ACTIVITIES:
• Faculty • Athletic Teams • Community	• Competing (Athletics) • Practicing (Athletics)

DESIGN CONSIDERATIONS:

- Provide 6'-0" high perimeter fencing and 12'-0" high backstop fencing with 6'-0" foul ball screen set at 45 degrees on top
- Provide fencing for the "dugout"
- Include in planning future bleachers, adjacency to football/track concession stand, ticket booth, restrooms

FURNITURE, FIXTURES & EQUIPMENT:

- Permanently installed apparatus/infrastructure
- Electrical stub outs from main facility for scoreboards
- Irrigation system for outfield, quick connects for infield

Site

Softball

USERS:	ACTIVITIES:
• Students (PE) • Faculty • Athletic Teams • Community	• Learning the fundamentals of softball (PE) • Competing • Practicing

DESIGN CONSIDERATIONS:

- Locate for ease of access for PE classes
- Provide playing field for fast-pitched play
- Provide 6'-0" high perimeter fencing and 12'-0" high backstop fencing with 6'-0" foul ball screen set at 45 degrees on top
- Provide fencing for the "dugout"
- Include in planning future bleachers, adjacency to football/track concession stand, ticket booth, restrooms

FURNITURE, FIXTURES & EQUIPMENT:

- Permanently installed apparatus/infrastructure
- Electrical stub outs from main facility for scoreboard
- Irrigation system for outfield

Site

Tennis Courts

USERS:	ACTIVITIES:
• Students (PE) • Faculty • Athletic Teams • Community	• Learning the fundamentals of tennis (PE) • Competing • Practicing
DESIGN CONSIDERATIONS:	
• Locate for ease of access for PE classes • Provide 12'-0" high fencing • Include in site plan space for future bleachers adjacent to football/track concession stand, ticket booth, restrooms	
FURNITURE, FIXTURES & EQUIPMENT:	
• Permanently installed apparatus/infrastructure • Tennis court nets	

Site

Playing/Practice Fields

USERS:	ACTIVITIES:
• Students (PE) • Faculty • Athletic Teams • Community	• PE Classes • Athletic practices
DESIGN CONSIDERATIONS:	
• Provide _1 field if space allows • Each field to be approximately 160’ x 360’ • Fields should be relatively level but sloped to drain without need of underground drainage • Locate for ease of access for PE classes	
FURNITURE, FIXTURES & EQUIPMENT:	
• Irrigation system for outfield	

Site

General

USERS:	ACTIVITIES:
• Parents • Students • Community members • Faculty/staff	• Access to school and its facilities

DESIGN CONSIDERATIONS:

- All exterior signage, fencing, and railings should be included in design documents
- Site lighting
- Flagpole should be located near the main entrance with a paved walkway to it
- Bike racks should be located to promote their use
- Fixed landscape equipment (i.e. trash cans, seating benches etc.) should be included in design documents

FURNITURE, FIXTURES & EQUIPMENT:

- Marquee sign, directional and traffic Signage, fencing and railings
- Site lighting
- Flagpole
- Bike Racks
- Irrigation system
- Flags

NEIGHBORHOODS

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

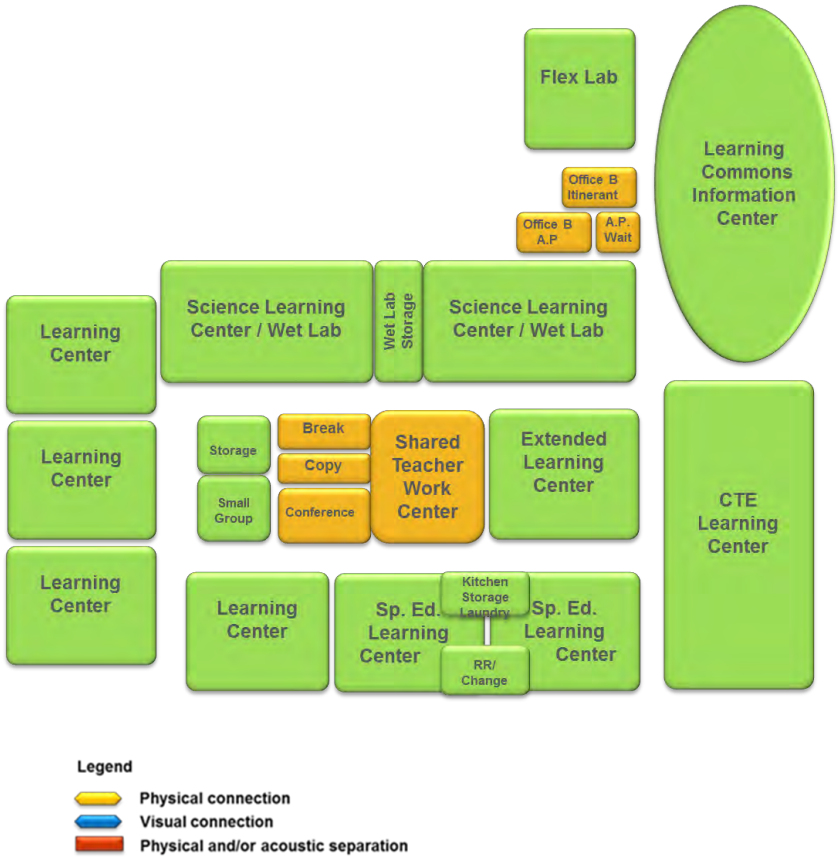
Neighborhoods

Overview:

Core academic requirements for all children are mandated by state and federal law. HISD's promise is to provide 21st Century learning environments, accordingly, the facilities shall:

- Meet the state and federal requirements
- Be safe and conducive to learning
- Create life-long learners
- Create an environment conducive to teacher retention
- Provide for flexibility of course offerings within core academic subject areas
- Accommodate interdisciplinary learning
- Accommodate multiple intelligences and varied learning styles
- Provide effective space for collaboration and increased communication
- Provide easy access to teaching resources for anytime, anywhere learning

Each neighborhood will include collaborative spaces for students and faculty, Core Academic Learning Centers, Science (or other flex) Lab space, and a CTE Learning Center. The neighborhoods will be arranged adjacent to common learning areas as well as Assistant Principal's offices.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Neighborhoods

Space Requirements

Neighborhoods	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Learning Center	44	44	843	37,089
Science Learning Center /Wet Lab	9	9	1,574	14,167
Wet Lab Storage		5	256	1,282
Flex Lab		1	844	844
Learning Commons/Information Center		7	1,187	8,308
Learning Commons/Information Center Storage		2	234	467
Special Education Learning Center (Life Skills)	3	3	873	2,618
Special Education Learning Center(MI) (locate near Nurse)	1	1	926	926
Kitchen/Restroom/Changing Room/Storage		2	166	332
Small Group Room		6	232	1,390
Storage		1	149	149
Total	**57**			**67,572**

Neighborhoods

Learning Center

USERS:	ACTIVITIES:
• Teachers • 28 Students	• Mastering the core curriculum • Mastering 21st Century learning skills • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Operable partitions are permitted in this area.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Presentation Wall:
- 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- Presentation Cart
- Teacher stool
- 28 Student tables
- 28 Student chairs
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Projector
- Clock

Neighborhoods

Science Learning Center/Wet Lab

USERS:	ACTIVITIES:
• Teacher • Staff/Faculty • 28 Students	• Lecture, labs, computer work • Technology-based instruction • Chemical, physical and biological experimentation • Collaborative relationship building • Working individually, in small groups, and in large groups • Mastering 21st Century learning skills • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Emergency utility shut-off
- Power and Data in apron of casework
- One station in each lab to be handicapped accessible

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Presentation Wall
- 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- Casework – Side wall:
  - Sink cabinets and drawer/door cabinets
  - Drying racks above sinks
  - Door/shelf cabinets above sinks
- Safety station(s) (number determined by code) including eyewash, body drench shower
- Goggles cabinet with UV light for disinfecting
- Fume hood in 1/3 of Learning Centers/Wet Labs at wall connecting with Prep Room
- Fixed science demonstration table with gas and water
- 2 paper towel dispensers
- 2 soap dispensers
- 14 – 2-person tables with chemical resistant epoxy tops
- 29 adjustable height stools
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Shallow drawer cabinet (must accommodate 24" x 46" paper)
- Projector
- Clock
- Large Periodic Table Chart and other large wall charts (provide clear wall space and tack boards to hang additional material)

Neighborhoods

Wet Lab Storage

USERS:	ACTIVITIES:
• Teacher • Staff/Faculty • Students	• Teacher preparation and clean-up for lab exercises

DESIGN CONSIDERATIONS:

- If more than one fume hood, locate to minimize the visual connection from one classroom to another.

FURNITURE, FIXTURES & EQUIPMENT:

- Refrigerator/freezer with small ice maker, not self-defrosting so that temperature will be constant
- Casework on one wall with chemical resistant countertop, drawer/door base cabinets, and open shelf wall cabinets
- Drying rack mounted above sink
- Fire rated chemical storage cabinet
- Residential dishwasher with permanently attached sign stating: ***Thoroughly rinse all acid containing items before placing in dishwasher***
- Paper towel dispenser
- Soap dispenser
- 2 tall work stools
- Maximum linear feet of 12”D, adjustable height wooden shelving with rim guards on wall facing casework
- 36”W x 84”H lockable storage cabinet

Neighborhoods

Flex Lab

USERS:	ACTIVITIES:
• Teachers • 28 Students	• Mastering the core curriculum • Mastering 21st Century learning skills • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- None

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Presentation Wall
- 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
- 1 – 8'x4' Marker Board
- Presentation Cart
- Stool
- 28 Student tables
- 28 Student chairs
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Projector
- Clock
- Phone

Neighborhoods

Learning Commons/Information Center

USERS:	ACTIVITIES:
• Students • Faculty • Staff • Community members and parents for after school events	• • Learning hub to provide effective using of information and ideas for students and faculty • Circulation of materials and resources in the format of print, digital and multi-media etc. • Reading • Research • Technology based instruction for large group and small group • Provide meeting areas • Processing new media

DESIGN CONSIDERATIONS:

- Some of this square footage will be used in a centralized location for print materials. Some will be used to create extended learning areas (ELA's) for wireless research.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Adjustable shelving for books. Locate tall shelving on room perimeter. Shelf units to be no wider than 36". Provide both 60-70"H (on perimeter only) and 42"H units. Perimeter units shall be detailed and coordinated with electrical to provide for outlets in the toe space. 42"H units should be double sided and on large casters.
- 8 - Tables
- 6 computer tables
- Printer table
- 38 chairs
- Display cases with glass shelving for student artwork and other displays. If possible provide at corners where bookcases may meet to avoid wasted space
- Circulation desk (modular, not fixed):
  - 2 task chairs
  - Drawer/door base cabinets & low shelving behind circulation desk with work space for processing
  - Work station for computer terminals and printer. Provide grommets for wire managements
  - Multi-level check in/out counter
  - Book drop-off with depressible book truck
- Network capabilities for access to programs and on-line card catalog
- Soft seating: chairs and tables for 10
- Clock

Neighborhoods

Learning Commons/Information Center – Extended Learning Center

USERS:	ACTIVITIES:
• Students • Faculty • Staff • Community members and parents for after school events	• Reading • Research • Technology based instruction for large group and small group • Provide meeting areas
DESIGN CONSIDERATIONS:	
• Some of the square footage for these spaces will be from the Learning Commons/Information Center.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Continuous marker surface on one wall • Blinds for windows • Tables • Chairs • Soft seating • Clock	

Neighborhoods

Special Education Learning Center

USERS:	ACTIVITIES:
• 4-10 students • Teacher • Teacher Aide(s) • Itinerant Staff (Psychologist, Social Worker, Therapist, etc.)	• Project-based learning • Physical therapy (PT) • Occupational therapy (OT) • Social skills activities (appropriate social interaction skills, listening skills, etc.) • Life skills activities (tooth brushing, personal care, career preparation, etc.)

DESIGN CONSIDERATIONS:

- None

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Student Lift and Tracks
- Presentation Wall: (all items at appropriate height for age group)
- 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- Teacher package
- Student Area
  - 7 open front 18"x24" student desks
  - 18 student chairs
  - 1 rectangular table, 30"x60"
  - 3 computer tables, 30"x48"
  - 1 half-moon table, 36"x72"
- 2 - 18" seat height, 4 leg chairs
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Shallow drawer cabinet (must accommodate 24" x 46" paper)
- Projector
- Clock

Neighborhoods

Special Education Learning Center (MI)

USERS:	ACTIVITIES:
• 7-10 students • 1 Teacher • 2 Teacher Aide(s) • 1 Nurse • Itinerant Staff (Psychologist, Social Worker, Therapist, etc.)	• Project-based learning • Physical therapy (PT) • Occupational therapy (OT) • Social skills activities (appropriate social interaction skills, listening skills, etc.) • Life skills activities (tooth brushing, personal care, career preparation, etc.)

DESIGN CONSIDERATIONS:

- Wheelchair accessible for 4-6 wheelchair bound students.
- Provide positioning area for students.
- Provide area for Nurse to meet with students in private within the space.
- Provide space for 3-4 learning centers within the space with separate furniture storage in each.
- Locate adjacent to wheelchair storage room.
- Locate adjacent to one of the restroom/changing rooms. This room will not be shared with others.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Student Lift and Tracks
- Presentation Wall: (all items at appropriate height for age group)
- 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- Teacher package
- Student Area
  - 3-4 open front 18"x24" student desks
  - 3-4 student chairs
  - 6-8 student adaptive chairs
  - 1 rectangular table, 30"x60"
  - 3 computer tables, 30"x48"
  - 2 half-moon table, 36"x72"
- 3 - 18" seat height, 4 leg chairs
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Shallow drawer cabinet (must accommodate 24" x 46" paper)
- Presentation board
- Projector
- Clock

Neighborhoods

Special Education – Restroom/Changing Room/Laundry

USERS:	ACTIVITIES:
• Students • Teacher • Teacher Aide(s) • Staff	• Personal hygiene • Diapering • Catheterization • Life skills activities (tooth brushing, personal care, career preparation, etc.)
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Wall mounted storage cabinet for changing supplies near changing table • Ceiling tracks for Student Lifts • Mirror above sink in restroom • Washer and dryer hookups • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Adjustable height changing table • Mobile student lift • Washer, residential grade • Dryer, residential grade	

Neighborhoods

Special Education – Kitchen/Storage

USERS:	ACTIVITIES:
• Teacher • Teacher Aide(s)	• Breakfast and lunch preparation • Staging meals before serving • Cleaning equipment
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Refrigerator with ice maker
• Casework-handicapped accessible
  • Sink cabinet
  • Drawer/door base cabinets
• Door/shelf wall cabinets
• Paper towel dispenser
• Maximum linear feet of 18”D, adjustable shelving in storage	

Neighborhoods

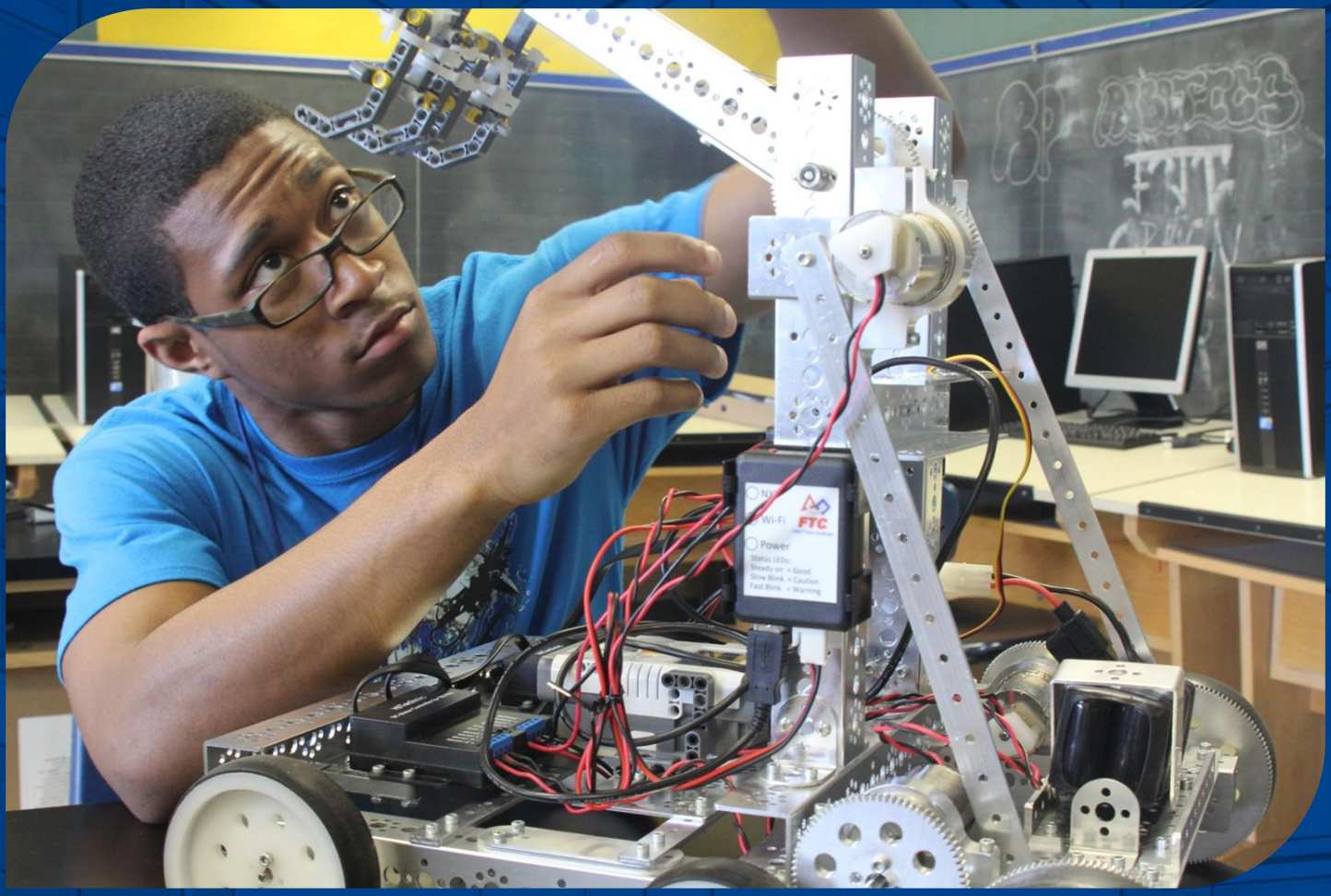
Small Group Room

USERS:	ACTIVITIES:
• Teacher • Students	• Group meetings and work • Individual study • Testing
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x8' marker board • 4'x8' tack board • 6 person table • 6 chairs	

Neighborhoods

Storage

USERS:	ACTIVITIES:
• Faculty • Teachers	• Storing instructional materials and supplies • Securing and charging mobile computer cart(s)
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' tack board • Maximum LF of heavy-duty 18"D adjustable shelving	



CAREER AND TECHNICAL EDUCATION

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

Career and Technical Education

Overview:

College and career readiness is a key priority for HISD and by working closely with college partners and area businesses the students are prepared for post-secondary success. They participate in rigorous core academic courses as well as specialized courses in a career-focused area that integrates learning and provides work world experiences such as internships, job shadowing and work-based learning. CTE program clusters help students organize and prepare for college and their future career by linking both core and elective courses based on commonalities. The program also provides articulated offerings which are part of Tech Prep sequences of courses and are articulated with a specific college and credits can apply toward a four-year degree. The clusters are:

Architecture and Construction – design, planning, management, building and maintaining the built environment.

- Design / CAD
- Construction

Arts, AV Technology, Communications – designing, producing, exhibiting, performing, writing and publishing multimedia content including visual and performing arts and design, journalism and entertainment services.

- Digital Media
- Digital Photography

Health Science – planning, managing and providing therapeutic services, diagnostic services health informatics, support services and biotechnology research and development.

- Fire / EMT
- Medical Technology

Information Technology – design, development, support, and management of hardware, software, multimedia and systems-integration services.

- Technology / GIS

Law, Public Safety, Corrections, Security – planning, managing and providing legal, public safety, protective services and homeland security, including professional and technical support services.

- Law Enforcement

Manufacturing – planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

- Welding

Science, Technology, Engineering – planning, managing and providing scientific research and professional and technical services including laboratory testing and research & development.

- Science / Forensic Lab

The CTE spaces should be located adjacent to the neighborhoods. This will allow for collaboration with the core academic programs. Additionally, it will provide access to the Extended Learning Area which can be used for small group sessions, presentations, etc.

Career and Technical Education

Space Requirements

Career and Technology Education	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Design / CAD	1	1	1,400	1,400
Storage		1	172	172
Digital Media	1	1	1,373	1,373
Storage		1	171	171
Digital Photography	1	1	1,394	1,394
Storage		1	178	178
Fire / EMT	1	1	1,365	1,365
Storage		1	172	172
Medical Technology (locate near Health Clinic) (Space will be used by Baylor Clinic)				
Waiting Area (10-15 students)		1	209	209
Office A (Nurse, nurse practitioner, sec/recp)		3	117	352
Examination Rooms		3	101	303
Laboratory		1	89	89
Pharmacy		1	97	97
Storage		1	122	122
Restrooms		2	74	147
Conference Room, Small		1	149	149
Technology / GIS	1	1	1,373	1,373
Storage		1	170	170
Law Enforcement	1	1	1,373	1,373
Storage		1	112	112
Science / Forensic Lab	1	1	1,621	1,621
Tools Room		1	363	363
Wet Lab Storage		1	200	200
Wood Working Lab	1	1	4,789	4,789
Learning Center		1	360	360
Office		1	200	200
Tool Storage		1	169	169
Storage		1	350	350
Spray Booth		1	259	259
Metal Lab	1	1	4,971	4,971
Learning Center		1	360	360
Office		1	200	200
Tool Storage		1	169	169
Storage		1	413	413
Wood Working/Metal Lab Shared Restrooms		1	187	187
Mechanical Room		2	56	112
Total	**9**			**25,444**

Career and Technical Education - Architecture and Construction

Design/CAD Lab

USERS:	ACTIVITIES:
• Teachers • 24-32 Students	• Project-based learning • Technology-based instruction • Demonstrations • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall
• 2 flag holders and map hooks
• Adjacent or Rear Wall:
  • 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
• 1 – 8'x4' Marker Board
• Presentation Cart
• Stool
• Student Area:
  • 30 -1 person computer tables
  • 30 task chairs
• 2 tall storage cabinets with adjustable shelving
• 3 bookcases (height may be dependent on window sill height), with adjustable shelving
• Projector
• Clock	

Career and Technical Education – Architecture and Construction

Design/CAD Storage

USERS:	ACTIVITIES:
• Teacher • Students	• Storing materials • Storing research • Storing computers
DESIGN CONSIDERATIONS:	
• Access directly from CAD lab	
FURNITURE, FIXTURES & EQUIPMENT:	
• Heavy duty adjustable shelving • 2- 4 drawer file cabinets	

Career and Technical Education – Arts, AV Technology, Communications

Digital Media Lab

USERS:	ACTIVITIES:
• Teachers • 24-32 Students	• Project-based learning • Technology-based instruction • Demonstrations • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall
• 2 flag holders and map hooks
• Adjacent or Rear Wall:
  • 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
• 1 – 8'x4' Marker Board
• Presentation Cart
• Stool
• Student Area:
  • 30 -1 person computer tables
  • 30 task chairs
• 2 tall storage cabinets with adjustable shelving
• 3 bookcases (height may be dependent on window sill height), with adjustable shelving
• Projector
• Clock	

Career and Technical Education – Arts, AV Technology, Communications

Digital Media Storage

USERS:	ACTIVITIES:
• Teacher • Students	• Storing materials • Storing research • Storing computers
DESIGN CONSIDERATIONS:	
• Access directly from Graphic Arts lab	
FURNITURE, FIXTURES & EQUIPMENT:	
• Heavy duty adjustable shelving • 2- 4 drawer file cabinets	

Career and Technical Education – Arts, AV Technology, Communications

Digital Photography Lab

USERS:	ACTIVITIES:
• Teachers • 24-32 Students	• Project-based learning • Technology-based instruction • Demonstrations • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall:
• 2 flag holders and map hooks
• Adjacent or Rear Wall:
  • 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
• 1 – 8'x4' Marker Board
• Presentation Cart
• Stool
• Student Area:
  • 30 -1 person computer tables
  • 30 task chairs
• 2 tall locking storage cabinets with adjustable shelving
• 3 bookcases (height may be dependent on window sill height), with adjustable shelving
• Projector
• Cameras
• Tripods
• Clock	

Career and Technical Education – Arts, AV Technology, Communications

Digital Photography Storage

USERS:	ACTIVITIES:
• Teacher • Students	• Storing materials • Storing research • Storing computers
DESIGN CONSIDERATIONS:	
• Access directly from Graphic Arts lab	
FURNITURE, FIXTURES & EQUIPMENT:	
• Heavy duty adjustable shelving • 2- 4 drawer file cabinets	

Career and Technical Education-Health Science

Fire Fighting/ EMT Learning Center

USERS:	ACTIVITIES:
• Teachers • 24 Students	• Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations • Practicing lab skills • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Provide 6 sink stations along three walls of the space, one station to be accessible.
- Provide power and data in apron of casework.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Casework (with chemical resistant tops) with sinks, under and over counter storage.
- Safety station(s) (number determined by code) including eyewash, body drench shower
- Electrical and data at each station
- Teacher demonstration desk with sink
- Presentation Wall
- 2 flag holders and map hooks
- Paper towel dispensers
- Soap dispensers
- Presentation Cart
- UV goggle/face mask sterilizer
- Student Area
  - 12 - two student tables with chemically resistant tops
  - 25 – rolling adjustable student stools
- Projector
- Clock

Career and Technical Education-Health Science

Fire / EMT Lab Storage

USERS:	ACTIVITIES:
• Teachers • Students	• Storing materials and supplies
DESIGN CONSIDERATIONS:	
• Directly accessible from Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x 4' Tack Board • Adjustable 12" and 18" deep shelving	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) – Reception/Waiting Area

USERS:	ACTIVITIES:
• School nurse • Staff • 10-15 Students • Parents • Visitors	• Waiting area for visitors, students, and staff members
DESIGN CONSIDERATIONS:	
• Visual connection between Nurses' and Waiting	
FURNITURE, FIXTURES & EQUIPMENT:	
• 15 guest chairs • Literature racks	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) – Office A

USERS:	ACTIVITIES:
• Baylor Clinic Nurse • Baylor Clinic Nurse Practitioner • Secretary /Receptionist • Students • Parents • Visitors	• Consultation by nurse with students, parents and staff • Record-keeping and paperwork • Working with student health files
DESIGN CONSIDERATIONS:	
• Visual connection between Secretary/Receptionist Office and Waiting	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • File cabinet • Literature rack • Double pedestal desk with center drawer & lock, 60" x 30" • Credenza • Task chair • 2 guest chairs • 4-shelf bookcases, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) – Examination Rooms

USERS:	ACTIVITIES:
• School nurse • Staff • Students • Parents	• Treating ill or hurt students • Conducting medical exams/screening • Dispensing medications
DESIGN CONSIDERATIONS:	
• Locate in close proximity to sink and restrooms	
FURNITURE, FIXTURES & EQUIPMENT:	
• Cot/exam table • Adjustable height stool • Biohazard disposable can • Medical sharps waste disposal • 2 guest chairs	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) – Laboratory

USERS:	ACTIVITIES:
• School nurse • Staff	• Analyzing specimens
DESIGN CONSIDERATIONS:	
• Provide separate keying. • Locate near Pharmacy	
FURNITURE, FIXTURES & EQUIPMENT:	
• Sink • 2 Adjustable height stool • Biohazard disposable can • Medical sharps waste disposal	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) – Pharmacy

USERS:	ACTIVITIES:
• School nurse • Staff • Students • Parents	• Dispensing medications
DESIGN CONSIDERATIONS:	
• Provide separate keying. • Locate near Pharmacy and Examination Rooms	
FURNITURE, FIXTURES & EQUIPMENT:	
• Lockable casework • 2 Adjustable height stool • Biohazard disposable can • Medical sharps waste disposal	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) - Storage Room

USERS:	ACTIVITIES:
• Counselors • Administrators' • Office Staff	• Storing student records • Storing educational materials • Storing supplies
DESIGN CONSIDERATIONS:	
• Provide separate keying	
FURNITURE, FIXTURES & EQUIPMENT:	
• Maximum LF of heavy duty adjustable shelving • 2 Filing cabinets	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) - Restroom

USERS:	ACTIVITIES:
• Staff • Students • Faculty • Visitors	• Restroom activities • Hand Washing • Personal hygiene
DESIGN CONSIDERATIONS:	
• Provide separate staff and student restrooms. • Provide pass through window for specimens from student restroom to laboratory if possible.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirror • Toilet paper dispenser • Toilet seat cover dispenser • Coat hook • Paper towel dispenser • Soap dispenser • Toilet paper dispenser	

Career and Technical Education-Health Science

Medical Technology (Baylor Clinic) - Conference Room, Small

USERS:	ACTIVITIES:
• Staff/Faculty • Parents • School Support Groups (PTO, etc.)	• Meetings/Conferences between Faculty/Staff and Students, Parents and Community
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • Marker and tack board in cabinet • Credenza • Conference table for 6 people • 6 Swivel, tilt armchairs • Television and/or Projector	

Career and Technical Education - Information Technology

Technology / GIS Learning Center

USERS:	ACTIVITIES:
• Teachers • Students	• Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Keyboarding • Learning and practicing computer skills and software programs • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• Provide power and data on the perimeter of the room	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall:
  • 1 - 4'x4' Tack Board
  • 1 – 8'x4' Marker Board
  • Tack Strips located 12" above marker/tack boards
  • 2 flag holders and map hooks
• Presentation Cart
• Teacher stool
• 12 - two student tables
• 24 - task chairs
• Projector
• Clock	

Career and Technical Education – Information Technology

Technology / GIS Learning Center Storage

USERS:	ACTIVITIES:
• Teachers • Students	• Storing materials and supplies
DESIGN CONSIDERATIONS:	
• Directly accessible from Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x 4' Tack Board • Adjustable 12" and 18" deep shelving	

Career and Technical Education Law, Public Safety, Corrections, Security

Law Enforcement Learning Center

USERS:	ACTIVITIES:
• Teachers • 24 Students	• Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Keyboarding • Learning and practicing computer skills and software programs • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• Provide power and data on the perimeter of the room	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall:
  • 1 - 4'x4' Tack Board
  • 1 – 8'x4' Marker Board
  • Tack Strips located 12" above marker/tack boards
  • 2 flag holders and map hooks
• Presentation Cart
• Teacher stool
• 12 - two student tables
• 24 - task chairs
• Projector
• Clock	

Career and Technical Education Law, Public Safety, Corrections, Security

Law Enforcement Learning Center Storage

USERS:	ACTIVITIES:
• Teachers • Students	• Storing materials and supplies •
DESIGN CONSIDERATIONS:	
• Directly accessible from Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x 4' Tack Board • Adjustable 12" and 18" deep shelving	

Career and Technical Education – Science, Technology, Engineering

Science / Forensic Lab Learning Center

USERS:	ACTIVITIES:
• Teacher • Staff/Faculty • Students	• Lecture, labs, computer work • Technology-based instruction • Chemical, physical and biological experimentation • Collaborative relationship building • Working individually, in small groups, and in large groups • Mastering 21st Century learning skills • Project-based learning • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Emergency utility shut-off
- Power and Data in apron of casework
- One station in each lab to be handicapped accessible

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Presentation Wall: (all items at appropriate height for age group)
- 2 - flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- Casework – Side wall:
  - Sink cabinets and drawer/door cabinets
  - Drying racks above sinks
  - Door/shelf cabinets above sinks
- Safety station(s) (number determined by code) including eyewash, body drench shower
- Goggles cabinet with UV light for disinfecting
- Fume hood at wall connecting with Storage/Prep Room
- Fixed science demonstration table with gas and water
- Hand washing sink
- 2 paper towel dispensers
- 2 soap dispensers
- 14 – 2-person tables with chemical resistant epoxy tops
- 29 adjustable height stools
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Shallow drawer cabinet (must accommodate 24" x 46" paper)
- Projector
- Clock

Career and Technical Education Law, Public Safety, Corrections, Security

Science / Forensic Lab Tool Room

USERS:	ACTIVITIES:
• Teachers • Students	• Storing materials and supplies •
DESIGN CONSIDERATIONS:	
• Directly accessible from Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• Peg Board • Adjustable 12” and 18” deep shelving	

Career and Technical Education – Science, Technology, Engineering

Science / Forensic Lab Learning Center Storage

USERS:	ACTIVITIES:
• Teacher • Staff/Faculty • Students	• Teacher preparation and clean-up for lab exercises

DESIGN CONSIDERATIONS:

- Fume hood to be double sided.

FURNITURE, FIXTURES & EQUIPMENT:

- Refrigerator/freezer with small ice maker, not self-defrosting so that temperature will be constant
- Casework on one wall with chemical resistant countertop, drawer/door base cabinets, and open shelf wall cabinets
- Drying rack mounted above sink
- Fire rated chemical storage cabinet
- Residential dishwasher with permanently attached sign stating: ***Thoroughly rinse all acid containing items before placing in dishwasher***
- Paper towel dispenser
- Soap dispenser
- 2 tall work stools
- Maximum linear feet of 12”D, adjustable height wooden shelving with rim guards on wall facing casework
- 36”W x 84”H lockable storage cabinet

Career and Technical Education - Architecture and Construction

Wood Working Lab

USERS:	ACTIVITIES:
• Teachers • 24-32 Students	• Mastering the core curriculum • Mastering 21st Century learning skills • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations, instruction and practice of carpentry, drywall, cabinet making, plumbing, electrical, HVAC, etc. • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Provide overhead door with access to loading area
- Provide sufficient clear space within room for flexible arrangement of student tables, power tools and work space.
- Provide direct access to storage.
- Provide overhead power throughout space
- Provide display case in corridor outside of space to display student work.

FURNITURE, FIXTURES & EQUIPMENT:

- Provide wall hooks near entry door for student aprons
- Presentation Wall:
  - 1 – 4'x4' Tack Board
  - 1 – 8'x4' Marker Board
  - Tack Strips located 12" above marker/tack boards
  - 2 flag holders and map hooks
- Presentation Cart
- Stool
- Student Area
  - 2 – 5x10 rolling work tables w/storage underneath. Provide four casters on two sides to allow vertical and horizontal storage capabilities.
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Power tools with integral sawdust collection
- Stationary electrical needs for tools, spray booth, table saw, panel saw, miter saw, air compressor, multiple drills, band saw, and flexible stations to plug in other tools
- Clock

Career and Technical Education - Information Technology

Wood Working Learning Center

USERS:	ACTIVITIES:
• Teachers • Students	• Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Instruction in carpentry, drywall, cabinet making, plumbing, electrical, HVAC, etc. • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• Provide power and data on the perimeter of the room • Provide operable wall connecting the Metals Lab Learning Center.	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall:
  • 1 - 4'x4' Tack Board
  • 1 – 8'x4' Marker Board
  • Tack Strips located 12" above marker/tack boards
  • 2 flag holders and map hooks
• Presentation Cart
• Teacher stool
• 12 - two student tables
• 24 - task chairs
• Projector
• Clock	

Career and Technical Education - Information Technology

Wood Working Lab - Office A

USERS:	ACTIVITIES:
• Staff/Faculty • Students • Parents	• Assisting in administrative record keeping • Preparation of correspondence, reports and other administrative tasks • Private conferences
DESIGN CONSIDERATIONS:	
• Provide visual connection to Wood Working Lab.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Career and Technical Education - Information Technology

Wood Working Lab – Tool Storage

USERS:	ACTIVITIES:
• Staff/Faculty • Students	• Tool Storage • Material Storage
DESIGN CONSIDERATIONS:	
• Provide direct access from Wood Working Lab • Secure storage	
FURNITURE, FIXTURES & EQUIPMENT:	
• Adjustable shelving • Hand tools • Power tools • Pegboard walls • Rolling carts • Work table	

Career and Technical Education - Information Technology

Wood Working Lab –Storage

USERS:	ACTIVITIES:
• Staff/Faculty • Students	• Tool Storage • Material Storage
DESIGN CONSIDERATIONS:	
• Provide direct access from Wood Working Lab • Provide overhead door or double doors w/removable center bar • Provide a minimum of 10’ high ceiling • Secure storage	
FURNITURE, FIXTURES & EQUIPMENT:	
• Adjustable shelving • Hand tools • Power tools • Pegboard walls • Rolling carts • Work table	

Career and Technical Education - Information Technology

Wood Working Lab –Spray Booth

USERS:	ACTIVITIES:
• Staff/Faculty • Students	• Tool Storage • Material Storage
DESIGN CONSIDERATIONS:	
• Provide direct access from Wood Working Lab • Relocate and install existing spray booth	
FURNITURE, FIXTURES & EQUIPMENT:	
• None	

Career and Technical Education - Architecture and Construction

Metal Lab

USERS:	ACTIVITIES:
• Teachers • 24-32 Students	• Mastering the core curriculum • Mastering 21st Century learning skills • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations, instruction and practice of welding metals • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Provide overhead door with access to loading area
- Provide sufficient clear space within room for flexible arrangement of student tables, power tools and work space.
- Provide direct access to storage.
- Provide overhead power throughout space
- Provide display case in corridor outside of space to display student work.

FURNITURE, FIXTURES & EQUIPMENT:

- Provide wall hooks near entry door for student aprons
- Safety station(s) (number determined by code) including eyewash, body drench shower
- Goggle cabinet with UV light for disinfecting
- Central compressor system (separate from wood shop)
- Rail crane
- Presentation Wall:
  - 1 – 4'x4' Tack Board
  - 1 – 8'x4' Marker Board
  - Tack Strips located 12" above marker/tack boards
  - 2 flag holders and map hooks
- Presentation Cart
- Stool
- Student Area
  - 4 steel wood tables – 4'x8' & 15 student stools
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Power tools with integral sawdust collection
- Stationary electrical needs for tools, spray booth, table saw, panel saw, miter saw, air compressor, multiple drills, band saw, and flexible stations to plug in other tools
- Clock

Career and Technical Education - Information Technology

Metal Lab - Learning Center

USERS:	ACTIVITIES:
• Teachers • Students	• Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Instruction in carpentry, drywall, cabinet making, plumbing, electrical, HVAC, etc. • Working individually, in small groups and in large groups
DESIGN CONSIDERATIONS:	
• Provide power and data on the perimeter of the room • Provide operable wall connecting the Wood Working Lab Learning Center.	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall:
  • 1 - 4'x4' Tack Board
  • 1 – 8'x4' Marker Board
  • Tack Strips located 12" above marker/tack boards
  • 2 flag holders and map hooks
• Presentation Cart
• Teacher stool
• 12 - two student tables
• 24 - task chairs
• Projector
• Clock	

Career and Technical Education - Information Technology

Metal Lab - Office A

USERS:	ACTIVITIES:
• Staff/Faculty • Students • Parents	• Assisting in administrative record keeping • Preparation of correspondence, reports and other administrative tasks • Private conferences
DESIGN CONSIDERATIONS:	
• Provide visual connection to Wood Working Lab.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Career and Technical Education - Information Technology

Metal Lab – Tool Storage

USERS:	ACTIVITIES:
• Staff/Faculty • Students	• Tool Storage • Material Storage
DESIGN CONSIDERATIONS:	
• Provide direct access from Wood Working Lab • Secure storage	
FURNITURE, FIXTURES & EQUIPMENT:	
• Adjustable shelving • Hand tools • Power tools • Pegboard walls • Rolling carts • Work table	

Career and Technical Education - Information Technology

Metal Lab –Storage

USERS:	ACTIVITIES:
• Staff/Faculty • Students	• Tool Storage • Material Storage
DESIGN CONSIDERATIONS:	
• Provide direct access from Wood Working Lab • Provide overhead door or double doors w/removable center bar • Provide a minimum of 10’ high ceiling • Secure storage	
FURNITURE, FIXTURES & EQUIPMENT:	
• Adjustable shelving • Hand tools • Power tools • Pegboard walls • Rolling carts • Work table	

Career and Technical Education - Information Technology

Wood Working and Metals Lab - Shared Restrooms

USERS:	ACTIVITIES:
• Teachers • Students	• Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors • 2 high lockers • Paper towel dispenser • Soap dispenser • Toilet paper dispenser	

JROTC

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

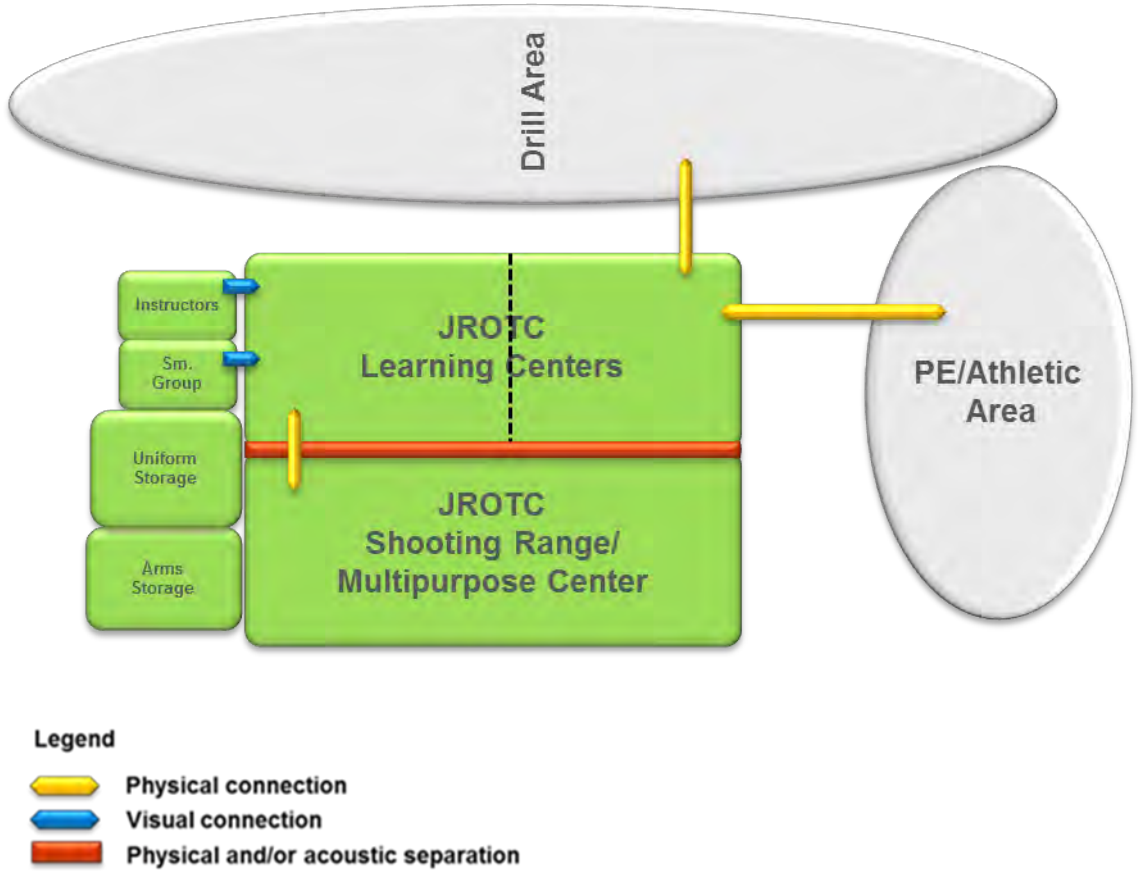
Junior ROTC

Overview:

HISD offers the Junior Reserve Officer Training Corps (JROTC) program at the high school level. JROTC builds self-discipline, teamwork, motivation, and confidence in young people, and provides students with the opportunity to learn about career opportunities in the Armed Forces of the United States. High schools which elect to do so will provide adequate space and facilities to support the JROTC curriculum in accordance with established standards and guidelines.

The program must have access to adequate interior drill, student and staff changing and showering and laundry facilities as well as outside paved space 100' x 100' with perimeter striping for inspections, physical training and practice space for competitive drill teams. Therefore, it is recommended that the JROTC suite be located adjacent to the PE/Athletic area and share the spaces as needed. If sharing of facilities is not possible, then separate facilities will need to be included for JROTC use.

Provide display case (for trophy and awards) and bulletin board (for Chain of Command) in corridor adjacent to Learning Centers.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Junior ROTC

Space Requirement:

JROTC - Army	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Junior ROTC				
Rifle Range		1	2,334	2,334
Learning Center A	1	1	1,126	1,126
Learning Center B	1	1	983	983
Cadet Small Group Collaboration		1	132	132
Arms / Weapons Storage		1	240	240
Uniform / Drill Team / Color Guard Storage		1	268	268
Instructors' Center		1	132	132
Total	**2**			**5,215**

Junior ROTC

Air Rifle Range

USERS:	ACTIVITIES:
• Students • Teachers • Volunteers/Mentors	• Instruction on marching, physical training, and gun drills. Practice for these activities will take place in the Gym and practice fields • Target practice
DESIGN CONSIDERATIONS:	
• The overall length of the space should be a minimum of 55 feet for air rifle range. • Each shooting lane should be 40-49 inches wide	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds for windows • 2 - Teacher stools • 2 – 4-person tables with folding legs • 4 stackable chairs • Targets and ammunition catch boxes • 4 – 4-drawer lockable filing cabinets • 4 tall storage cabinets with adjustable shelving • 6 bookcases with adjustable shelving • 2 Clocks	

Junior ROTC

Learning Centers A & B

USERS:	ACTIVITIES:
• Students • Teachers • Volunteers/Mentors	• Lecturing • Instruction on marching, physical training, and gun drills. Practice for these activities will take place in the Gym and practice fields • Watching videos • Target practice
DESIGN CONSIDERATIONS:	
• Provide operable partition dividing the space into two equal spaces.	
FURNITURE, FIXTURES & EQUIPMENT:	

• Blinds for windows
• Presentation Wall in each half of Learning Center:
  • 1 - 4'x4' Tack Board
  • 1 – 8'x4' Marker Board
  • Tack Strips located 12" above marker/tack boards
  • 2 flag holders and map hooks
• Adjacent or Rear Wall of each half of Learning Center:
  • 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  • 1 – 8'x4' Marker Board
• 2 - Presentation Carts
• 2 - Teacher stools
• 32 – 2-person tables with folding legs
• 64 stackable chairs
• 4 – 4-drawer lockable filing cabinets
• 4 tall storage cabinets with adjustable shelving
• 6 bookcases (height may be dependent on window sill height), with adjustable shelving
• 2 - Projectors mounted on presentation wall adjacent to and at same height as marker board
• 2 Clocks	

Junior ROTC

Cadet Small Group Collaboration

USERS:	ACTIVITIES:
• 6-8 Cadets • Cadet Leadership	• Preparing reports • Research • Small Group Instruction
DESIGN CONSIDERATIONS:	
• View to Learning Center and Instructor Work Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • modular open office systems furniture with open over desk storage • 8 - Tilt swivel desk chairs on casters • tall storage cabinet • bookcase	

Junior ROTC

Arms/Weapons Storage

USERS:	ACTIVITIES:
• Instructional Staff	• Storing weapons, targets and ammunition used in JROTC instruction • Storing chairs and tables from learning center when it is being used as a firing range
DESIGN CONSIDERATIONS:	
• Connected (preferred) or adjacent to JROTC office	
FURNITURE, FIXTURES & EQUIPMENT:	
• Locking arms rack (approximately 2'x2' square) to store 55 weapons • Metal adjustable shelving for storage of ammunition, supplies, etc.	

:

Junior ROTC

Uniform / Drill Team / Color Guard Supply Storage

USERS:	ACTIVITIES:
• Instructional Staff • Students	• Storing materials, uniforms and books used in JROTC instructions
DESIGN CONSIDERATIONS:	
• Adjacent to JROTC office with easy access to JROTC Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• Maximum linear feet of 2 high hanging rods with shelf above on 2 walls (200 uniforms, 120 pairs of shoes) • 2 duplex outlets on each wall • Hollow metal door • Maximum linear feet of heavy duty adjustable shelving on one wall • Lockable storage cabinets • Filing cabinets	

:

Junior ROTC

Instructors' Center

USERS:	ACTIVITIES:
• Instructional staff	• Preparing program plans • Preparing reports • Teacher supply storage • Researching • Meeting
DESIGN CONSIDERATIONS:	
• View to Learning Center and Cadet Small Group Collaboration • If unable to be located adjacent to PE area, add separate Restroom and Shower	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Sink and overhead casework • Full size Refrigerator • 3 sets - Modular open office systems furniture with keyed over desk storage and file drawers, each set separately keyed to a master. • 3 - Tilt swivel desk chairs on casters • 3 – guest chairs • bookcase	

VISUAL ARTS

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

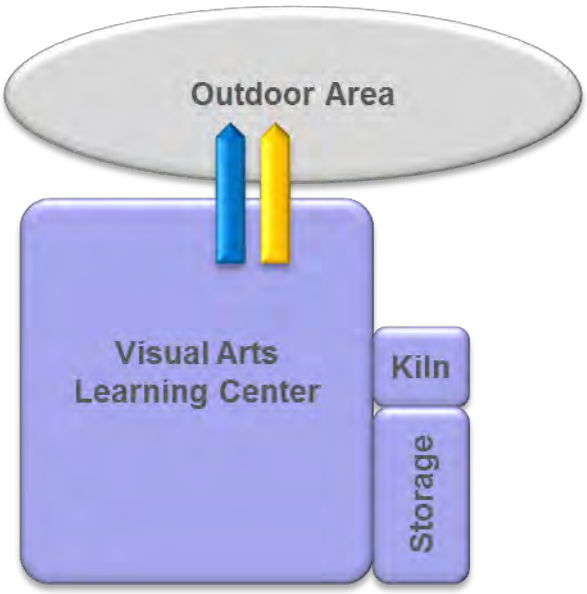
Visual Arts

Overview:

The arts are fundamental to communicating and understanding not only ourselves, but others. Through the arts we learn to appreciate and to create things of beauty. Important 21st Century skills enhanced by arts education include creativity, innovation, critical thinking, cooperative decision making, leadership, and capacity of problem-posing and solving. Visual Arts Learning Centers should**:**

- Provide a view to the outdoors
- Provide for flexibility of course offerings
- Be easy to clean
- Create an environment conducive to creativity

The Visual Arts should be located in proximity to the Performing Arts to encourage collaboration.



Legend

Physical connection
Visual connection
Physical and/or acoustic separation

The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Visual Arts

Space Requirements

Visual Arts	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Visual Arts Wet Lab	1	1	1,164	1,164
Kiln Room		1	105	105
Storage Room		1	318	318
Total	**1**			**1,587**

Visual Arts

Visual Arts Learning Center

USERS:	ACTIVITIES:
• Teachers • Students	• Creative individual and group activities • Learning/researching art history/artist • Discussions on Art criticism • Learning/practicing drawing, painting, embossed prints, ceramics, sculptures, etc

DESIGN CONSIDERATIONS:

- Need area for arranging still lifes with track lighting.
- Northern exposure is desirable.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Presentation Wall: (all items at appropriate height for age group)
  - 4'x4' marker boards (one on each side of Projector)
  - 24' tack strip located 12" above marker/tack boards
  - Flag holders and map hooks
- Adjacent or Rear Wall: (all items at appropriate height for age group)
  - 8' marker board with tack strip
  - 4' tack boards
- Casework – Side wall:
  - Sink cabinet – with sink projecting from front edge of casework to allow access from 3 sides
- Door/shelf cabinets above sink
- Shelving above marker boards and windows for project display
- 1 wall with continuous tackable surface
- Paper towel dispenser
- Soap dispenser
- Teacher demonstration table, 30"x60", adjustable height, with chemical resistant top
- Tall teacher stool
- Student Area
  - 24 student adjustable height stools
  - 7 art tables, 42"x60", with chemical resistant tops (1 to be used for still life set-up)
  - 2 computer tables, 30"x60"
- Projector
- 2 tall storage cabinets with adjustable shelving
- Portfolio cabinets
- Double-sided mobile drying rack
- 2 mobile paper racks
- 55-tray tote tray cabinet
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Shallow drawer cabinet (must accommodate 24" x 46" paper)

Visual Arts

Kiln Room

USERS:	ACTIVITIES:
• Art teacher	• Storing greenware. • Firing items in kiln.
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Electric kiln • Greenware cabinet with doors	

Visual Arts

Storage Room

USERS:	ACTIVITIES:
• Art teacher	• Storing and maintaining art supplies.
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Maximum LF of heavy-duty, adjustable height shelving – 50% 18” d, 25% 24” d, 25% 12” d. • 3-shelf mobile cart with recessed top well for moving supplies between Art Storage and Visual Arts Learning Center	

PERFORMING ARTS

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

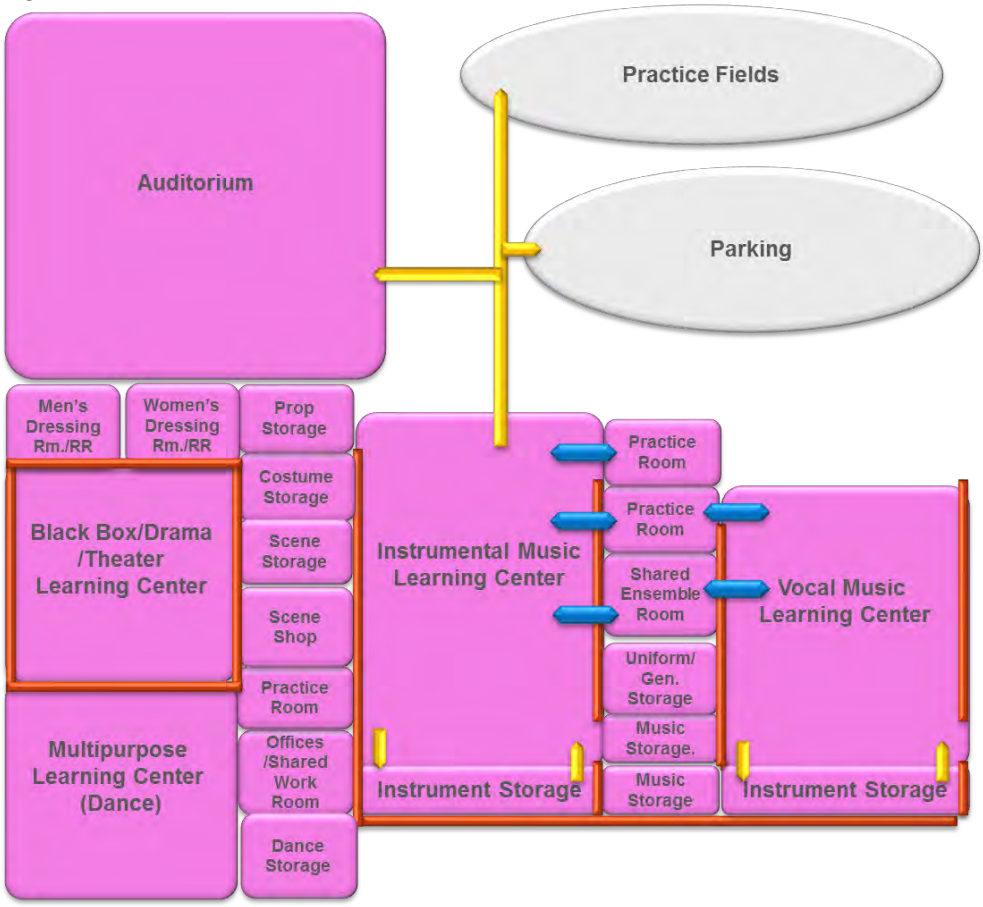
Performing Arts

Overview:

The arts are fundamental to communicating and understanding not only ourselves, but others. Through performing arts students build a value system in which they learn self-discipline and responsibility. Important 21st Century skills enhanced by arts education include creativity, innovation, critical thinking, cooperative decision making, leadership, and capacity of problem-posing and solving. Performing Arts learning centers should:

- Provide for flexibility of course offerings
- Be accessible after regular school hours
- Create an environment conducive to creativity

The Performing Arts Learning Centers should be located adjacent to performance spaces – stage at cafeteria, auditorium, etc. and be in proximity to the Visual Arts to encourage collaboration.



Legend

- **Physical connection**
- **Visual connection**
- **Physical and/or acoustic separation**

The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Performing Arts

Space Requirements

Performing Arts	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Instrumental Music Learning Center	1	1	2,334	2,334
Instrument Storage		1	682	682
Uniform/General Storage		1	597	597
Music Storage/Library		1	247	247
Practice Room (s)		2	0	0
Vocal Music Learning Center	1	1	1,843	1,843
Uniform/General Storage		1	278	278
Music Storage/Library		1	162	162
Practice Room (s)		2	50	99
Shared Ensemble (Workroom)		1	347	347
Shared Ensemble Room		1	346	346
Black Box /Drama/Theater Learning Center	1	1	1,516	1,516
Costume Storage (Boys/Girls)		1	298	298
Prop Storage		1	264	264
Scene Shop		1	408	408
Scene Storage		1	459	459
Multipurpose Learning Center (Dance)	1	1	1,145	1,145
Dressing Rooms		2	133	266
Storage		1	194	194
Auditorium		1	6,406	6,406
Stage		1	1,888	1,888
Control Booth		1	102	102
Piano Storage		1	115	115
Lobby (shared with gym)		1	2,164	2,164
Concessions (Shared with gym)		1	227	227
Dressing Room/Restroom (Near Dance)		2	281	561
Restrooms		2	135	270
Total	**4**			**23,218**

Performing Arts

Instrumental Music Learning Center

USERS:	ACTIVITIES:
• Instrumental Music Instructors/Director(s) • Students	• Developing technical music skills through individual work, group work and performances • Instrumental music theory instruction • Orchestra Classes • Recitals • Meeting area for community • Recording of performances • Sectional usage

DESIGN CONSIDERATIONS:

- Size opening to allow for transporting piano, drums, etc.
- Provide acoustical treatments
- Provide acoustical treatment.
- Sound-rated door should share the same rating as the walls.
- Provide storage dock or ramp access to parking lot for loading equipment.

FURNITURE, FIXTURES & EQUIPMENT:

- Provide maximum LF of shelving above door height for display
- 2 marker boards, one with permanent music staff markings.
- Sound system – recording and playback
- 2 - 4'x4' tack boards
- 60 posture chairs with retractable table arms
- 60 music stands
- Music stand cart
- Instrumental music risers
- Small stand carts for risers
- Conductor's podium: double podium with rail
- Presentation cart
- Teacher's stool
- Music folio cabinets
- Presentation board

Performing Arts

Instrumental Music Learning Center – Instrument Storage

USERS:	ACTIVITIES:
• Instrumental Music Instructors/Director(s) • Students	• Storing and retrieving orchestra instruments

DESIGN CONSIDERATIONS:

- Size opening to allow for transporting piano, drums, etc.
- Provide acoustical treatment.
- Sound-rated door should share the same rating as the walls.

FURNITURE, FIXTURES & EQUIPMENT:

- 4'x4' marker board
- 4'x4' tack board
- Maximum # of instrument storage cabinets, lockable, solid doors
- Deep utility sink for cleaning instruments

Average Distribution of Band Instruments (Wenger)

Instrument	Percent
Piccolo	1%
Oboe	3%
Flute	12%
Clarinet	24%
Alto Clarinet	3%
Bass Clarinet	3%
Bassoon	4%
Alto Sax	5%
Tenor Sax	1%
Baritone Sax	1%
Cornet/Trumpet	14%
French Horn	6%
Baritone Horn	4%
Trombone	6%
Tuba	4%
Snare Drum	6%
Tenor Drum	2%
Base Drum	1%
	100%

Average Distribution of Orchestra Instruments (Wenger)

Instrument	Percent
Violin	25%
Viola	19%
Cello	14%
Double Bass	8%
Flute	3%
Clarinet	3%
Trumpet	6%
Trombone	4%
Tuba	1%
French Horn	11%
Oboe	3%
Bassoon	3%
	100%

Performing Arts

Instrumental Music Learning Center – Uniform/General Storage

USERS:	ACTIVITIES:
• Instrumental Music Directors • Students	• Storing and retrieving uniforms
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Maximum LF of double hanging rods with shelving above	

Performing Arts

Instrumental Music Learning Center – Music Storage/Library

USERS:	ACTIVITIES:
• Instrumental Music Directors • Students	• Storing and sorting music
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Music sorting cabinet • Music storage cabinets • 24"x36" table • 2 chairs	

Performing Arts

Practice Room(s)

USERS:	ACTIVITIES:
• Instrumental Music/Orchestra / Guitar Music Directors • Students	• Individual rehearsals and lessons

DESIGN CONSIDERATIONS:

- Provide acoustical treatments
- Provide acoustical treatment.
- Sound-rated door should share the same rating as the walls.
- Make sure all acoustical wall treatments are out of reach of students.
- Locate within rehearsal spaces to allow visual supervision by instructors.

FURNITURE, FIXTURES & EQUIPMENT:

- 2 stackable posture chairs
- Chair storage cart
- 1 conductor's chair, music stand, podium

Performing Arts

Vocal Music Learning Center

USERS:	ACTIVITIES:
• Vocal Music Instructors/Director(s) • Students	• Developing technical music skills through individual work, group work and performances • Choir/Vocal Classes • Recitals • Meeting area for community • Recording of performances • Vocal music theory instruction • Sectional usage
DESIGN CONSIDERATIONS:	
• Provide acoustical treatments. • Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Provide maximum LF of shelving above door height for display • Provide 2 marker boards, one with permanent music staff markings. • 2 - 4'x4' tack boards • Sound System – recording and playback • 50 posture chairs with retractable tablet arms • Seated music risers • Small stand carts for risers • Presentation cart • Teacher stool • 2 music folio cabinets • Piano	

Performing Arts

Vocal Music Learning Center – Uniform/General Storage

USERS:	ACTIVITIES:
• Vocal Music Directors • Students	• Storing and retrieving uniforms.
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Maximum LF of double hanging rods with shelving above	

Performing Arts

Vocal Music Learning Center – Music Storage/Library

USERS:	ACTIVITIES:
• Vocal Music Directors • Students	• Storing and sorting music.
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Music sorting cabinet • Music storage cabinets • 24"x36" table • 2 chairs	

Performing Arts

Practice Room(s)

USERS:	ACTIVITIES:
• Instrumental Music/Orchestra / Guitar Music Directors • Students	• Individual rehearsals and lessons
DESIGN CONSIDERATIONS:	
• Provide acoustical treatments • Provide acoustical treatment. • Sound-rated door should share the same rating as the walls. • Make sure all acoustical wall treatments are out of reach of students.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 2 stackable posture chairs	

Performing Arts

Shared Workroom

USERS:	ACTIVITIES:
• Instrumental Music/ Vocal Music Directors • Students	• Planning and sorting music for classes • Grading • Meeting with students
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Double pedestal desks with center drawer & lock, 60" x 30" • Task chairs, swivel, tilt, armless • Guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Performing Arts

Shared Ensemble Room

USERS:	ACTIVITIES:
• Instrumental Music/Vocal Music Directors • Students	• Group rehearsals and lessons • Sectionals
DESIGN CONSIDERATIONS:	
• Provide acoustical treatments • Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 15 – 20 stackable posture chairs • Chair storage cart • 1 conductor's chair, music stand, podium	

Performing Arts

Black Box/Drama/Theater Learning Center

USERS:	ACTIVITIES:
• Teacher • Students • Community	• Developing technical theatre skills through individual work, group work and performances • Drama instruction • Performances • Rehearsals • Dance • Meeting area for community • Recording of performances

DESIGN CONSIDERATIONS:

- Size opening to allow for transporting sets, equipment, etc.
- Consider overhead door to Prop Storage and exterior for ease of set and equipment movement
- Provide acoustical treatments
- Provide acoustical treatment.
- Sound-rated door should share the same rating as the walls.

FURNITURE, FIXTURES & EQUIPMENT:

- Retractable risers which provide stable platform for portable chairs
- Catwalk around perimeter of room – approximately 4’ wide
- Drapes hung from catwalk
- Continuous mirrors on one wall from base to 8’-0” AFF
- Additional drapes in front of mirrors
- Operable (raise/lower) pipe grid with power for theatrical lighting
- Dimmer system for theatrical lights
- Sound system
- All interior finishes to be black
- 1 - 4’x 12 marker boards
- 2 - 4’x4’ tack boards
- Chairs
- Presentation Cart
- Teacher stool
- Portable ballet barrel(s)
- Presentation board
- Clock
- 2 lockable double door storage units

Performing Arts

Drama Learning Center – Costume / General Storage

USERS:	ACTIVITIES:
• Theater Directors • Students	• Producing and repairing costumes. • Maintaining and organizing costumes.
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Stackable washer and dryer • Maximum LF of heavy-duty, adjustable, wall-mounted shelving above file cabinets for additional storage • Shelving to house large storage bins • Costume rack • 2 – sewing machines and tables • 1- Large cutting table with stools • 2 - 4-drawer vertical file cabinets	

Performing Arts

Drama Learning Center – Prop Storage

USERS:	ACTIVITIES:
• Theater Director(s) • Students	• Storing and sorting scripts • Storing theatrical textbooks
DESIGN CONSIDERATIONS:	
• Provide acoustical treatment. • Sound-rated door should share the same rating as the walls.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • 2 - 4-drawer vertical file cabinets • 2 – 4 foot wide, 6-8" high bookshelves • 24"x36" table • 4 chairs	

Performing Arts

Drama – Scene Shop

USERS:	ACTIVITIES:
• Teachers • Students	• Constructing Scene Props • Project-based learning • Technology-based instruction • Activities that stimulate inventive thinking, creativity and imagination • Collaborative relationship building • Demonstrations, instruction and guidance in constructing scenes • Working individually, in small groups and in large groups

DESIGN CONSIDERATIONS:

- Provide overhead door for ease of movement of materials to/from exterior covered area adjacent to drive/parking
- Provide overhead door for ease of movement of finished scenes to/from shop to main theatre and Black Box
- Provide sufficient clear space within room for flexible arrangement of student tables, power tools and work space

FURNITURE, FIXTURES & EQUIPMENT:

- Overhead power throughout space
- Wall hooks near entry door for student aprons
- Presentation Wall:
  - 1 - 4'x4' Tack Board
  - 1 – 8'x4' Marker Board
  - Tack Strips located 12" above marker/tack boards
  - 2 flag holders and map hooks
- Adjacent or Rear Wall:
  - 2 - 4'x4' Tack Boards (one on each side of 8'x4' Marker Board)
  - 1 – 8'x4' Marker Board
- 2 tall storage cabinets with adjustable shelving
- 3 bookcases (height may be dependent on window sill height), with adjustable shelving
- Power tools with integral sawdust collection
- Projector
- Clock

Performing Arts

Drama – Scene Storage

USERS:	ACTIVITIES:
• Teacher • Students	• Storing of performance costumes • Storing fabrics, materials, and sewing supplies
DESIGN CONSIDERATIONS:	
• Provide direct access from Costume Shop • Provide lockable wardrobe cabinet for expensive wardrobe items.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Locking Cabinets • Hanging rods • Shelving	

Performing Arts

Multipurpose/ Dance Learning Center

USERS:	ACTIVITIES:
• PE Teachers/Coaches • Dance Instructors • Students • Parents • Community Groups • Staff • Sports teams	• Dance classes and competitions • Physical education classes and activities • Athletic competitions • Sports: basketball, volleyball, gymnastics, cheerleading, drill/dance team, wrestling, badminton • Fitness/health presentations • School assemblies • Performances • Graduation • Community sports activities/events
DESIGN CONSIDERATIONS:	
• Protect all devices and windows from damage by ball strikes • Provide sports floor that is also suitable for dance	
FURNITURE, FIXTURES & EQUIPMENT:	
• 2 fiberglass, motorized, height adjustable, retractable backboards • Continuous wall pads on end walls • Wall finish and any acoustic treatments must be capable of sustaining repeated ball strikes • Mirrors on two walls with drapes to cover • Portable ballet barre(s) • Portable sound system	

Performing Arts

Multipurpose /Dance – Dressing/Changing Rooms

USERS:	ACTIVITIES:
• Drama/Theater Directors • Students • Community	• Changing into costumes • Applying makeup for performances • Performance preparation • Personal hygiene
DESIGN CONSIDERATIONS:	
• Locate within Dance Learning Center	
FURNITURE, FIXTURES & EQUIPMENT:	
• Makeup counter continuous on one wall • Mirrors above makeup counter • Full length mirrors w/lighting • 3-tier locker units • 12 LF of hanging rod • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Chairs	

Performing Arts

Multipurpose/ Dance - Storage

USERS:	ACTIVITIES:
• Faculty • Teachers	• Storing dance supplies and costumes • Storing PE equipment
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' tack board • Maximum LF of double rod with shelf above on one wall. • Maximum LF of heavy-duty 18"D adjustable shelving on other walls	

Performing Arts

Auditorium

USERS:	ACTIVITIES:
• Drama/Theater/Vocal/Music Directors • Students • Community	• Performances (school play, choir, orchestra, dance, etc) • Assemblies • Graduation • Seminars • Meetings • Other Community Events • Seating for audiences attending drama, theater and musical productions
DESIGN CONSIDERATIONS:	
• Provide minimum of 1 set of tormentors on a traveler behind the stage curtain.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Acoustical treatment • Fixed, upholstered seats with arms • Seats with movable tablet arms or back mounted flip-up writing surfaces	

Performing Arts

Auditorium – Stage

USERS:	ACTIVITIES:
• Drama/Theater Directors • Students • Community	• Instrumental, choral and drama presentations by groups and individuals • Dance and other physical activity presentations • Public and school meetings requiring interaction between those on stage and those seated in the Auditorium • Video presentation • May be used as a classroom by the drama program • Award ceremonies • Assemblies

DESIGN CONSIDERATIONS:

- Stage floor, up stage walls should be flat black in color.
- Provide cyclorama with cyclorama lights.
- Provide scrim
- Provide catwalk at stage house.
- Provide electric hoist battens on stage. 4-6 line sets on stage.
- Do not provide border curtains at stage.
- Provide access to stage from auditorium.
- Provide sound booth in the house, not in a separate room.
- Complete sound system with microphones.
- Provide roll up door to scene shop.
- Provide roll up door to loading area.

FURNITURE, FIXTURES & EQUIPMENT:

- Acoustical treatment
- Motorized projection screen
- Curtains at front, sides and back of stage. Back and side curtains to be black.

Performing Arts

Auditorium – Control Room

USERS:	ACTIVITIES:
• Drama/Theater/Vocal/Music Directors • Students • Community	• Control of lighting systems, • Controlling and creating of special effects
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Chairs • 30'x60" tables • Tall lockable 2-door storage cabinets	

Performing Arts

Auditorium – Piano Storage

USERS:	ACTIVITIES:
• Faculty • Teachers	• Storing baby grand piano
DESIGN CONSIDERATIONS:	
• Locate on Auditorium Stage	
FURNITURE, FIXTURES & EQUIPMENT:	
• Baby Grand Piano	

Performing Arts

Auditorium – Lobby (shared with gym)

USERS:	ACTIVITIES:
• Drama/Theater Directors • Students • Community/Volunteers	• Waiting for performances • Transitioning from ticket area and concessions to performance space
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Cushioned bench seating for 3-5 people	

Performing Arts

Auditorium –Concessions (shared with gym)

USERS:	ACTIVITIES:
• Drama/Theater Directors • Students • Community/Volunteers	• Selling tickets for performances or other events held in auditorium • Selling and serving food items during events • Potential use as school store
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Refrigerator • 400 lb. ice maker with bin • Microwave ovens • 2 walls: 24”Dx36”H drawer/open shelf base cabinets with one sink cabinet and lockable shelf cabinets above base cabinets • Transaction counter in front of roll-up window with shelves below counter • Paper towel dispenser • Soap dispenser • Heavy duty table in center of room, if room is wide enough	

Performing Arts

Auditorium – Dressing Room/Restroom

USERS:	ACTIVITIES:
• Drama/Theater Directors • Students • Community	• Changing into costumes • Applying makeup for performances • Performance preparation • Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Makeup counter continuous on one wall • Mirrors above makeup counter • Full length mirrors w/lighting • 3-tier locker units • 12 LF of hanging rod • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Chairs	

PHYSICAL EDUCATION / ATHLETICS

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

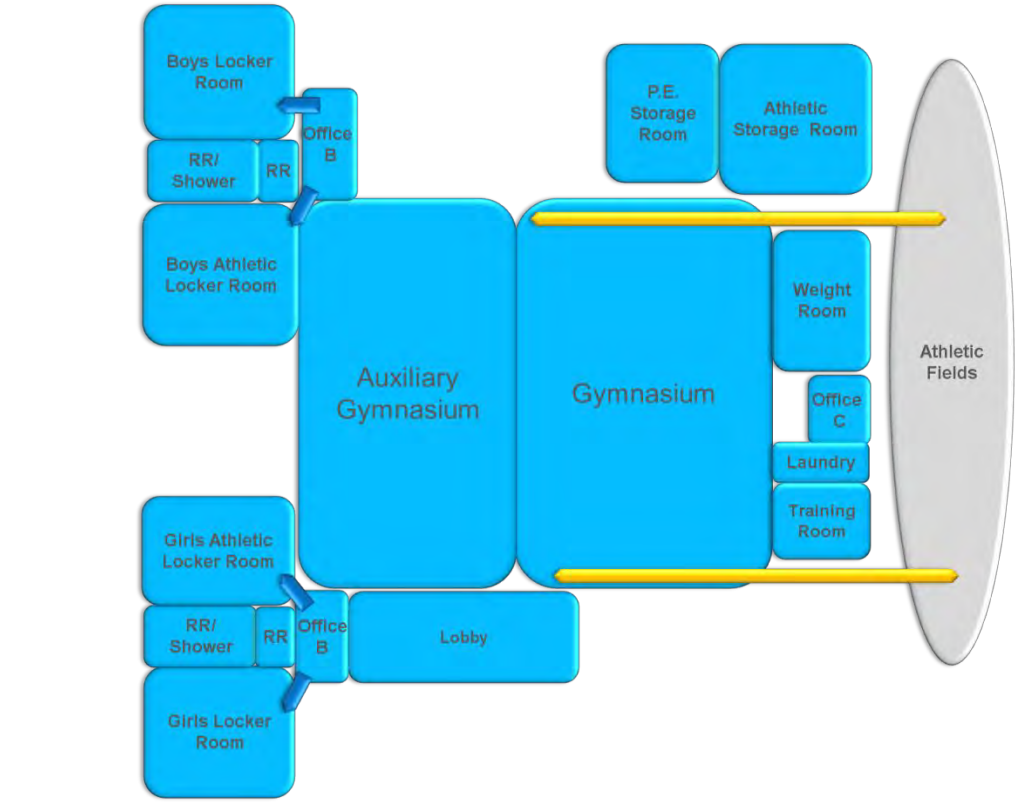
Physical Education (P.E.)/Athletics

Overview:

The mission of HISD's Health and Physical Education programs is to provide a framework of knowledge, practices and skills to positively impact student's health and physical well-being. Health Education focuses on the development of wellness lifestyles by addressing knowledge, attitudes, behaviors and skills for healthy living. Physical Education and Athletic programs focus on personal fitness through participation in leisure and lifetime activity that lead to self-responsibility, teamwork, sportsmanship, and leadership. The following sports are offered in the Athletic program:

- August-November: Boys Football, Girls Volleyball, Girls Team Tennis
- December-March: Boys and Girls Basketball, Swimming, Tennis, Cross-Country, Golf, Track, Wrestling, Soccer
- March-May: Boys Baseball, Girls Softball

Community use and involvement with the PE/Athletics programs is needed and encouraged through the availability of indoor and outdoor facilities when not being used as part of the school program.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Physical Education (P.E.)/Athletics

Space Requirements

Physical Education/Athletics	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
PE/Athletics Lobby (Shared with auditorium)		0		0
Gymnasium (seating for 1000)	2	1	11,035	11,035
Auxiliary Gymnasium	1	1	6,874	6,874
Weight Room		1	1,524	1,524
Boys' Athletic Locker Room		1	1,445	1,445
Girls' Athletic Locker Room		1	1,406	1,406
Athletic Toilets/Showers		2	546	1,091
Boys'/Girls' PE Locker Room		2	1,025	2,050
P.E. Toilets/Showers		2	546	1,091
Adult Toilet/Shower/Locker		2	140	279
Athletic Director (Office C)		1	196	196
Office B (shared)		2	305	610
Training Room		1	420	420
Laundry		1	175	175
PE Equipment Storage		2	518	1,036
Athletic Equipment Storage		1	1,393	1,393
Total	**3**			**30,625**

P.E./Athletics

Lobby

USERS:	ACTIVITIES:
• Parents • Students • Community members • Faculty/staff	• Transition/surge space for events held in Gymnasium • Entering and exiting of events held in Gymnasium • Event attendee overflow • Small sitting area • Greeting of attendees for events held in the Gymnasium
DESIGN CONSIDERATIONS:	
• Consider shared lobby if applicable with floor plan	
FURNITURE, FIXTURES & EQUIPMENT:	
• Benches • Wall mounted video display panels	

P.E./Athletics

Gymnasium

USERS:	ACTIVITIES:
• PE Teachers/Coaches • Students • Parents • Community Groups • Staff • Sports teams	• Physical education classes and activities • Athletic competitions • Sports: basketball, volleyball, gymnastics, cheerleading, drill team, wresting, badminton • Fitness/health presentations • School assemblies • Performances • Graduation • Community sports activities/events

DESIGN CONSIDERATIONS:

- Protect all devices and windows from damage by ball strikes
- Wall finish and any acoustic treatments must be capable of sustaining repeated ball strikes
- 10’ Over run on ends or sides

FURNITURE, FIXTURES & EQUIPMENT:

- 2 glass motorized, height adjustable, retractable backboards
- 4 fiberglass motorized, height adjustable, retractable backboards
- Telescoping bleachers to seat number indicated in space requirements. Provide separation between spectators and playing court with railings.
- Volleyball system to include poles and recessed floor sleeves
- Floor markings for basketball and volleyball
- Continuous wall pads on end walls
- Motorized curtain to divide gym into 2 teaching areas
- Scoreboard/clock
- Sound system
- 2 - 30”x60” folding tables
- 6 Chairs
- Projector

P.E./Athletics

Auxiliary Gymnasium

USERS:	ACTIVITIES:
• PE Teachers/Coaches • Students • Parents • Community	• Physical education classes and activities • Athletic competitions • Sports: basketball, volleyball, gymnastics, cheerleading, drill team, wrestling, badminton • Fitness/health presentations • School assemblies • Performances • Graduation • Community sports activities/events
DESIGN CONSIDERATIONS:	
• Protect all devices and windows from damage by ball strikes • Wall finish and any acoustic treatments must be capable of sustaining repeated ball strikes	
FURNITURE, FIXTURES & EQUIPMENT:	
• 2 glass, motorized, height adjustable, retractable backboards • 4 fiberglass, motorized, height adjustable, retractable backboards • Telescoping bleachers to seat number indicated in space requirements • Volleyball system to include poles and recessed floor sleeves • Floor markings for basketball and volleyball • Continuous wall pads on end walls • Motorized curtain to divide gym into 2 teaching areas • Scoreboard/clock • Sound system • 2 - 30”x60” folding tables • 6 Chairs	

P.E./Athletics

Weight Room

USERS:	ACTIVITIES:
• Coaches • Teachers • 20-32 students	• Physical education classes • Weight training for students and staff • Potential for community use
DESIGN CONSIDERATIONS:	
• Provide interlocking rubber tile floor over VCT or concrete floor (polished or stained)	
FURNITURE, FIXTURES & EQUIPMENT:	
• 8’ marker board with tack strip • 4’ tack boards • Mirrors on one wall • Interlocking rubber tile floor • Paper towel dispenser • Sanitizer dispenser • Weight equipment and machines	

P.E./Athletics

Boys Athletic Locker Room

USERS:	ACTIVITIES:
• PE Teachers • Coaches • Students	• Changing clothes before and after athletic activities • Storing personal items during classes, practices or competitions
DESIGN CONSIDERATIONS:	
• Design for air flow that will maintain consistent temperature and humidity level. • Provide clear view for passive supervision (no tall lockers blocking line of sight).	
FURNITURE, FIXTURES & EQUIPMENT:	
• 60 - Large lockers (football) • 75 - Double lockers • Benches • 4'x4' marker board • 4'x4' tack board • Mirrors • Paper towel dispenser • Sanitizer dispenser	

P.E./Athletics

Girls Athletic Locker Room

USERS:	ACTIVITIES:
• PE Teachers • Coaches • Students	• Changing clothes before and after athletic activities • Storing personal items during classes, practices or competitions
DESIGN CONSIDERATIONS:	
• Design for air flow that will maintain consistent temperature and humidity level. • Provide clear view for passive supervision (no tall lockers blocking line of sight).	
FURNITURE, FIXTURES & EQUIPMENT:	
• 75 – double lockers • Benches • 4'x4' marker board • 4'x4' tack board • Mirrors • Paper towel dispenser • Sanitizer dispenser	

P.E./Athletics

Boys/Girls P.E. Locker Room

USERS:	ACTIVITIES:
• PE Teachers • Coaches • Students	• Changing clothes • Storing personal items during classes, practices or competitions
DESIGN CONSIDERATIONS:	
• Design for air flow that will maintain consistent temperature and humidity level • Provide clear view for passive supervision (no tall lockers blocking line of sight)	
FURNITURE, FIXTURES & EQUIPMENT:	
• 125 - 6:1 Lockers • Benches • 4'x4' marker board • 4'x4' tack board • Mirrors • Paper towel dispenser • Sanitizer dispenser	

P.E./Athletics

Student Toilet/Showers

USERS:	ACTIVITIES:
• Students	• Restroom and bathing
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors • Paper towel dispensers • Soap dispensers • Toilet paper dispensers • Shower curtains	

P.E./Athletics

Adult Toilet/Shower/Locker

USERS:	ACTIVITIES:
• Coaches/Teachers	• Restroom and bathing activities
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors • 2 high lockers • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Shower curtain	

P.E./Athletics

Athletic Director (Office C)

USERS:	ACTIVITIES:
• Athletic Director and/or Coaches • Students	• Space for Athletic Director, coach and/or teachers to perform administrative tasks • Secure storage for electronic equipment • Area for filing of athletic program documents
DESIGN CONSIDERATIONS:	
• Provide direct line of sight into the locker rooms.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Credenza • Task chair • 2 Guest chairs • 36" conference table • 2 4-shelf bookcases, 52"H x 36"W x 15"D • 2 4-drawer vertical file, letter size, lockable	

P.E./Athletics

Office (Shared)

USERS:	ACTIVITIES:
• Coaches/Teachers • Students	• Coach and teacher administrative tasks • Changing clothes before and after physical education activities • Storing personal items
DESIGN CONSIDERATIONS:	
• Provide direct line of sight into the locker rooms.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Double pedestal desks with center drawer & lock, 60" x 30" • Task chairs, swivel, tilt, armless • Guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

P.E./Athletics

Storage/ Future Training Room

USERS:	ACTIVITIES:
• Trainer • Student assistants • Coaches • PE students • Student athletes	• Administering First Aid • Taping of student athletes before/after athletic competitions • Administering physical therapy • Training supply and equipment storage
DESIGN CONSIDERATIONS:	
• Space shall be used as storage room currently but utilities shall be roughed in to allow it to serve as a Training Room in the future.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Rough Ins for future counter and sink • Rough In for Hydrotherapy whirlpool • Floor drain • Rough In for ice machine • Paper towel dispenser (Future) • Soap dispenser (Future) • Sanitizer dispenser (Future) • Small ice machine in accordance with Design Guidelines • Microwave for heating pads (Future) • Scale (Future) • Exercise bicycle (Future) • Taping table (36"Dx36"H) with drawer door cabinets below. (Future) • Maximum 18" deep heavy duty shelving	

P.E./Athletics

Laundry

USERS:	ACTIVITIES:
• PE Teachers/Coaches • Staff	• Laundering of athletic team uniforms • Laundering of cheerleading uniforms

DESIGN CONSIDERATIONS:

- Floor drain
- Floor angled towards drain
- Exhaust to the exterior
- Emergency water shutoff valve

FURNITURE, FIXTURES & EQUIPMENT:

- 8 LF of hanging rod (commercial grade)
- Commercial washer and dryer
- Wall mounted adjustable shelves
- Washer and dryer hook ups in the Laundry Room
- Plate on door.
- Single, deep utility sink
- Paper towel dispenser
- Soap dispenser
- 30”x 60” table
- 36”W tall shelf unit – 24”D

P.E./Athletics

P.E. Equipment Storage

USERS:	ACTIVITIES:
• PE Teachers/Coaches • Students	• Storing and retrieving equipment used for physical education classes
DESIGN CONSIDERATIONS:	
• Floors need to be level and transition strip should be low profile to allow for easy movement of heavy equipment on carts. • Provide exterior access 4'-0" door	
FURNITURE, FIXTURES & EQUIPMENT:	
• Heavy-duty adjustable shelving on 3 walls. Lower shelf 24"D. Upper shelves to ceiling 18"D. Locate bottom shelf on 2 walls 48" AFF for ball carts and mats. • Provide pegboard on 1 wall for hanging jump ropes, hula hoops, etc.	

P.E./Athletics

Athletic Equipment Storage

USERS:	ACTIVITIES:
• Coaches/Teachers • Students	• Storing and retrieving equipment used for athletic programs
DESIGN CONSIDERATIONS:	
• Floors need to be level and transition strip should be low profile to allow for easy movement of heavy equipment on carts • Provide exterior access 4'-0" door	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Provide lockable cages to secure team equipment and uniforms • 36"Wx60"H heavy-duty, adjustable shelf unit in each cage • Heavy-duty adjustable 18" shelving on walls beside door	

ADMINISTRATION / GUIDANCE

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

Administration/Guidance

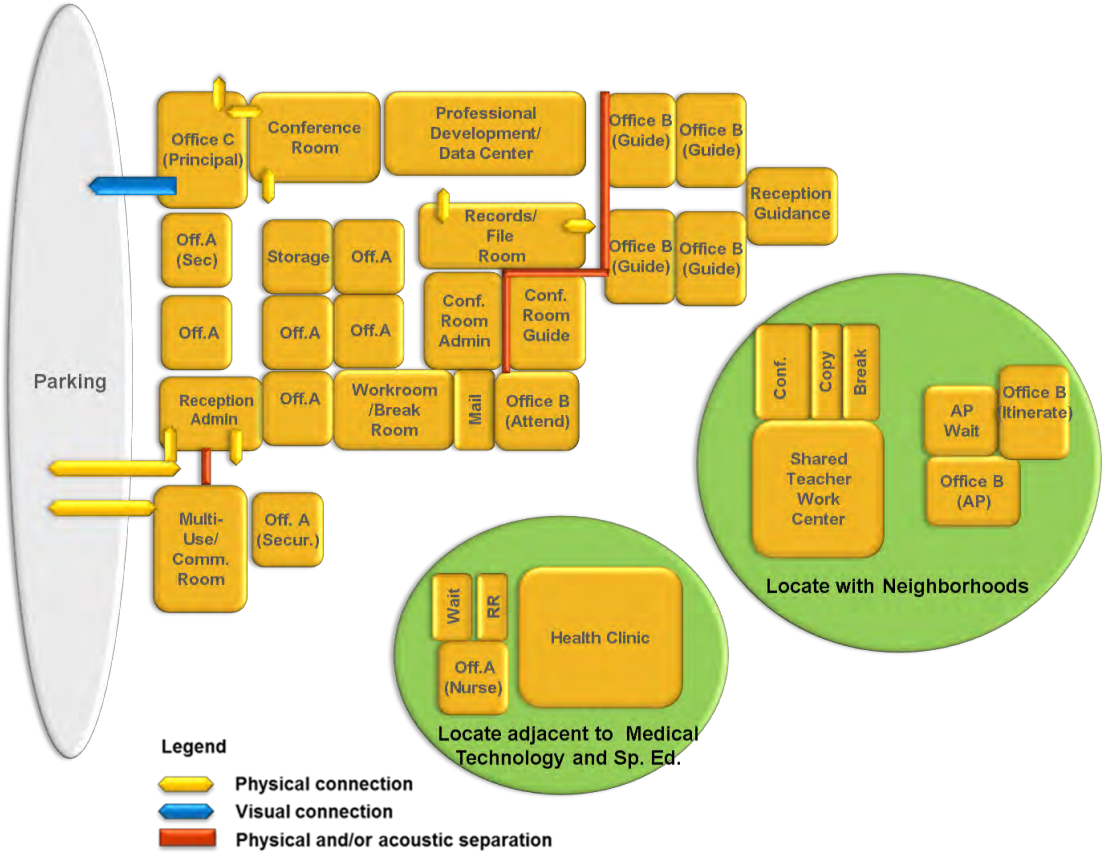
Overview:

These facilities are most community member's first introduction to the School. As such, they must not only be inviting, professional and businesslike but also serve as the secure checkpoint prior to visitors entering the school.

The Administration/Guidance facilities should**:**

- Provide a secure entrance
- Provide privacy for confidential discussions
- Store student and financial records
- Serve as the communications hub of the school
- Provide a readily accessible location for the School Clinic
- Provide spaces for receiving and distributing incoming mail and packages

The entrance to the Administration suite shall be located adjacent to the front door of the school. It should be located adjacent to but separate from Guidance. Guidance should be readily accessible to Students and easy to find by Parents but should not be perceived as being part of Administration. Satellite Administration and Guidance offices should be located adjacent to the various neighborhoods.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Administration/Guidance

Space Requirements

Administration/Guidance	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Administration				
Reception, Administration		1	520	520
Office A		5	107	537
Office C (Principal)		1	315	315
Principal's Restroom		1	63	63
Office B (AP)		4	112	446
AP Reception/Waiting		4	75	299
Conference Room, Main		2	245	490
Conference Room, Small		1	149	149
Storage		1	160	160
Office A (Security Office)		1	99	99
Health Clinic (locate near Medical Technology CTE (Baylor Clinic) and Sp. Ed		1	694	694
Reception/Waiting		1	102	102
Office A		1	141	141
Pharmacy		1	86	86
Restroom		1	85	85
Guidance/Student Services				
Reception, Guidance		2	171	342
Office B (Attendance, Registrar, Counselor)		6	124	746
Conference Room, Small		1	149	149
Records/File Room		1	252	252
Administration/Guidance Workroom/Break Room		1	345	345
Mail Room		1	101	101
Shared				
Professional Development/Data Center		1	351	351
Teacher Work Center		5	774	3,868
Teacher Conference/Break		4	126	502
Office B (Itinerant)		4	98	390
Multi-use/Community Room		1	255	255
Computer Repair /Storage Room (with transaction counter)		1	873	873
Total	**0**			**12,360**

Administration/Guidance

Reception, Administration

USERS:	ACTIVITIES:
• Parents • Students • Community members • Faculty/staff	• Greeting and welcoming people and directing them to the proper location or person • Waiting/seating area for visitors, students, and staff members • Controlling entrance to the school
DESIGN CONSIDERATIONS:	
• All visitors must pass through reception to enter school • Use modular furniture for the circulation desk. A portion shall be at height to meet accessibility requirements.	
FURNITURE, FIXTURES & EQUIPMENT:	

• Modular reception desk with work stations to include:
  • 30”D x 30’H x 10-12 LF work surface (section with reduced height for greeting children/ ADA compliance).
  • Half of the reception desk should have a transaction counter 1’D x 42”H with a maximum of 6” overlapping work surface
  • Rear work surface 30”D x 30”H
• Work surfaces should have lockable built-in storage below including a combination of 6”D and file drawers (at least 4) as well as cabinets with adjustable shelving2 Task chairs
• Guest chairs
• Side tables
• Video Display	

Administration/Guidance

Office A

USERS:	ACTIVITIES:
• Staff/Faculty • Clerical Support Staff • Students • Parents	• Assisting in administrative record keeping • Preparation of correspondence, reports and other administrative tasks • Private conferences
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Office C (Principal)

USERS:	ACTIVITIES:
• Principal • Students • Parents	• Conducting administrative duties • Preparing correspondence and reports • Meeting with parents, students and other visitors • Placing phone calls
DESIGN CONSIDERATIONS:	
• Locate with view to school entry drive. • Locate so Principal can leave Administration Suite without being seen from reception. • Should have direct access to large conference room	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Credenza • Task chair • 4 guest chairs • 48" conference table • Video Display • 2 - 4-shelf bookcases, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Office B (AP)

USERS:	ACTIVITIES:
• Staff • Teachers • Assistant Principal • Students • Parents	• Conducting administrative tasks • Preparing correspondence and reports • Creating and documenting new and existing students • Meeting with parents, students and other visitors • Placing phone cards
DESIGN CONSIDERATIONS:	
• Locate with neighborhoods	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4’x4’ marker board • 4’x4’ tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 4 guest chairs • 36” conference table • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

AP Waiting

USERS:	ACTIVITIES:
• Parents • Students • Community members • Faculty/staff	• Greeting and welcoming people • Waiting/seating area for visitors, students, and staff members

DESIGN CONSIDERATIONS:

- Should be located adjacent to Neighborhoods

FURNITURE, FIXTURES & EQUIPMENT:

- Modular reception desk with work stations to include:
  - 30”D x 30’H x 10-12 LF work surface (section with reduced height for greeting children/ ADA compliance).
  - Half of the reception desk should have a transaction counter 1’D x 42”H with a maximum of 6” overlapping work surface
  - Rear work surface 30”D x 30”H
- Work surfaces should have lockable built-in storage below including a combination of 6”D and file drawers (at least 4) as well as cabinets with adjustable shelving2 Task chairs
- Guest chairs
- Side tables

Administration/Guidance

Conference Room, Main

USERS:	ACTIVITIES:
• Principal • Staff/Faculty • Parents/Students • School Support Groups (PTO, etc.)	• Meetings/Conferences between Faculty/Staff and Students, Parents and Community
DESIGN CONSIDERATIONS:	
• Provide direct access from Principal's Office and secondary corridor.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • Marker and tack board in cabinet • Credenza • Conference table for 12 people • 12 Swivel, tilt armchairs • Television and/or Projector	

Administration/Guidance

Conference Room, Small

USERS:	ACTIVITIES:
• Staff/Faculty • Parents • School Support Groups (PTO, etc.)	• Meetings/Conferences between Faculty/Staff and Students, Parents and Community
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • Marker and tack board in cabinet • Credenza • Conference table for 6 people • 6 Swivel, tilt armchairs • Television and/or Projector	

Administration/Guidance

Storage Room

USERS:	ACTIVITIES:
• Guidance Clerk • Counselors • Administrators' • Office Staff	• Storing office supplies • Storing educational materials
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Maximum LF of heavy duty adjustable shelving	

Administration/Guidance

Office A (Security Office)

USERS:	ACTIVITIES:
• Security Officer • Staff/Faculty • Students • Parents	• Administrative tasks • Preparing correspondence and reports • Creating and documenting safety and security matters • Meeting with parents, students and other visitors
DESIGN CONSIDERATIONS:	
• Locate near main entrance with full access and visibility to Lobby	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Health Clinic

USERS:	ACTIVITIES:
• School nurse • Staff • Students • Parents	• Treating ill or hurt students • Conducting medical exams/screening • Dispensing medications • Waiting area for ill students prior to being picked up
DESIGN CONSIDERATIONS:	
• Visual connection between Nurses' Office and Clinic • Provide two private areas for examination rooms	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on all windows • Sink cabinet with single deep sink • 4 LF of Drawer/door cabinets – lockable • 6 LF Door/shelf wall cabinets • Paper towel dispenser • Soap dispenser • 2 Cot/exam tables • Adjustable height stool • Locking refrigerator with ice maker • Biohazard disposable can • Medical sharps waste disposal • 2 guest chairs • Defibrillator	

Administration/Guidance

Health Clinic – Reception/Waiting

USERS:	ACTIVITIES:
• School nurse • Staff • Students • Parents • Visitors	• Waiting area for visitors, students, and staff members
DESIGN CONSIDERATIONS:	
• Visual connection between Nurses' Office and Waiting	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4 guest chairs • Literature racks	

Administration/Guidance

Health Clinic – Office A

USERS:	ACTIVITIES:
• School nurse • Staff • Students • Parents • Visitors	• Consultation by nurse with students, parents and staff • Record-keeping and paperwork • Working with student health files
DESIGN CONSIDERATIONS:	
• Visual connection between Nurses' Office and Waiting	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • File cabinet • Literature rack • Double pedestal desk with center drawer & lock, 60" x 30" • Credenza • Task chair • 2 guest chairs • 4-shelf bookcases, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Health Clinic - Restroom

USERS:	ACTIVITIES:
• Staff • Students • Faculty • Visitors	• Restroom activities • Hand Washing • Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirror • Toilet paper dispenser • Toilet seat cover dispenser • Coat hook • Paper towel dispenser • Soap dispenser • Toilet paper dispenser	

Administration/Guidance

Reception, Guidance

USERS:	ACTIVITIES:
• Parents • Students • Community members • Faculty/staff	• Greeting and welcoming people and directing them to the proper location or person • Waiting/seating area for visitors, students, and staff members
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Modular reception desk with work station to include:
  • 30”D x 30’H x 4-6 LF work surface
  • Include a transaction counter 1’D x 42”H with a maximum of 6” overlapping work surface
  • Rear work surface 30”D x 30”H
  • Work surface should have lockable built-in storage below including a combination of 6”D and file drawers (at least 4) as well as cabinets with adjustable shelving
• Task chair
• 2 – Guest chairs	

Administration/Guidance

Office B (Attendance, Registrar, Counselors)

USERS:	ACTIVITIES:
• Attendance Clerk, Registrar, Counselors • Staff • Students • Parents	• Administrative tasks • Preparation of correspondence and reports • Creating and documenting new and existing students • Meeting with parents, students and other visitors
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 Guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Conference Room, Small – Guidance/Student Services

USERS:	ACTIVITIES:
• Staff/Faculty • Parents • Visitors	• Meetings/Conferences between Faculty/Staff and Students, Parents and Community
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • Marker and tack board in cabinet • Credenza • Conference table for 6 people • 6 Swivel, tilt armchairs	

Administration/Guidance

Records/File Room

USERS:	ACTIVITIES:
• Guidance Clerk • Counselors • Administrators	• Storing and retrieving student records
DESIGN CONSIDERATIONS:	
• Room should be treated as a 1 hour fire-rated enclosure.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Maximum LF of heavy-duty, adjustable, wall-mounted shelving above filing cabinets for additional storage • 24"x36" table • 2-door lockable storage cabinet • Side chair • 10 - 5-drawer vertical file cabinets	

Administration/Guidance

Workroom/Break Room

USERS:	ACTIVITIES:
• Faculty • Staff • Volunteers • Parents	• Copying • Collating • Preparing communications for mailing • Laminating, book making, poster making • General office work • Storing and retrieving supplies • Mail delivery and retrieval

DESIGN CONSIDERATIONS:

- Mail slots should open directly to mail pick up room.

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds on windows
- 4'x4' marker board
- 4'x4' tack board
- 12"W x 9"H x 12"D pass through mail slots with 24"D adjustable shelving below for packages – provide one for every staff member plus 10%
- Approximately 10 LF of casework with countertop, sink cabinet, drawer/door base cabinets and door/shelf wall cabinets
- Large counter (standing height) in the middle of the space for sorting (with a stack of flat file drawers and drawer/door cabinets).
- Paper towel dispenser
- Soap dispenser
- 36" x 72" work tables
- 6 Lounge chairs
- Refrigerator with icemaker
- 8 Chairs
- 2 - 42" square tables
- Vending machines – 2 drink & 1 snack (vendor provided)
- Microwaves/Oven
- Copier

Administration/Guidance

Mail Pick Up

USERS:	ACTIVITIES:
• Faculty • Staff	• Picking up mail • Reading notices • Dropping off mail
DESIGN CONSIDERATIONS:	
• Provide in/out doors off of secondary corridor. • Mailboxes provide separation between this space and workroom/break room.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x8' tack board	

Administration/Guidance

Shared – Professional Development/Data Center

USERS:	ACTIVITIES:
• Teachers • Administrators	• Keeping track of student progress and activity • Professional teacher training, development and in services
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 2 walls continuous tackable surface • 2 walls continuous marker surface • 6 - 24”x36” tables • 2-door lockable storage cabinet • 18 - Swivel, tilt chairs • 2 -5-drawer vertical file cabinets • Television and/or Electronic marker Board	

Administration/Guidance

Shared – Teacher Work Center, Work Stations

USERS:	ACTIVITIES:
• Teachers	• Preparing lesson plans • Teacher supply storage • Researching • Meeting
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Modular open office systems furniture with keyed over desk storage and file drawers, each set separately keyed to a master. • Tilt swivel desk chairs on casters	

Administration/Guidance

Shared – Teacher Work Center, Copier Room

USERS:	ACTIVITIES:
• Teachers	• Preparing lesson documents • Teacher supply storage
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Copier • Tall double door storage cabinet	

Administration/Guidance

Shared – Teacher Work Center, Conference Room

USERS:	ACTIVITIES:
• Teachers	• Meetings • Collaboration
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Credenza • Conference table for 6 people • 6 Swivel, tilt armchairs • Television and/or Projector	

Administration/Guidance

Shared – Teacher Work Center, Break Area

USERS:	ACTIVITIES:
• Teachers	• Lounging • Eating
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4'x4' marker board • 4'x4' tack board • Chairs • Tables	

Administration/Guidance

Shared – Office B (Itinerant)

USERS:	ACTIVITIES:
• Staff • Students • Parents	• Administrative tasks • Preparation of correspondence and reports • Creating and documenting new and existing students • Meeting with parents, students and other visitors
DESIGN CONSIDERATIONS:	
• Locate with Neighborhoods, Office B (AP) and Teacher Work Centers.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • Double pedestal desk with center drawer & lock, 60" x 30" • Task chair • 2 Guest chairs • 4-shelf bookcase, 52"H x 36"W x 15"D • 4-drawer vertical file, letter size, lockable	

Administration/Guidance

Shared – Multi-Use/Community Room

USERS:	ACTIVITIES:
• Community Members • Principal • Staff/Faculty • Parents/Students • School Support Groups (PTO, etc.)	• Meetings/Conferences between Faculty/Staff and Students, Parents and Community
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Approximately 6’ LF casework including, sink cabinet, door base and wall cabinet • Blinds on windows • Marker board • Tack board • 2 door locking storage cabinet • 2 - computer tables • 10 modular tables for easy rearrangement depending on room use (18” x 48”) • 20 stackable chairs • Projector	

Administration/Guidance

Computer Repair / Storage Room

USERS:	ACTIVITIES:
• 2 Computer Repair Technicians • 2-4 Students	• Distributing computers • Receiving computers needing repair • Repairing computers • Instructing students on the repair of computers •

DESIGN CONSIDERATIONS:

- Locate on first floor of multi story buildings
- Design so that there is a direct connection to the Computer Storage Room.
- Provide surveillance cameras focused on entry to room

FURNITURE, FIXTURES & EQUIPMENT:

- Blinds for windows
- Power and Data outlets located along perimeter
- Marker Board
- Tack Board
- 12 Modular work benches
- 4 folding tables
- 6 task chairs
- 1 bookcase (height may be dependent on window sill height), with adjustable shelving
- Modular reception desk
- Tall storage cabinets similar to Tennsco #7824MGY
- 4 – wire bin shelving similar to Quantum #QUS954BLMetal storage shelving
- Clock

FOOD SERVICE

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

Food Service

Overview:

School Food Service Trends

Source: National Food Service Management Institute

Purchasing food service equipment and/or planning new and renovated school nutrition facilities can be one of the most challenging projects for school administrators. Success with these projects can be achieved by communicating with professionals in the industries of school food and nutrition, engineering, and architecture.

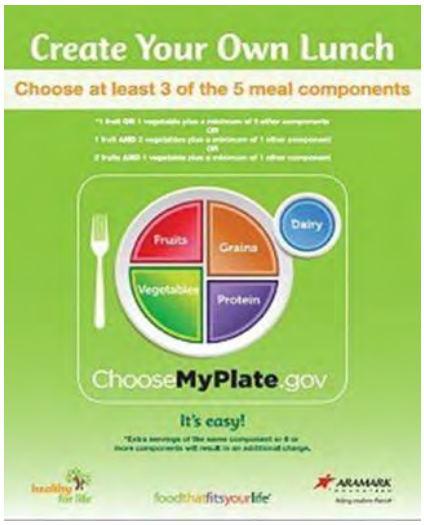
There are many aspects that need to be considered. When you take into account the rapidly changing architecture technology, the constantly evolving school food nutrition requirements, and student preferences, it is essential to design school cafeterias that are functionally sound, financially and operationally efficient, and student relevant.

A state-of-the-art school cafeteria and operation can make a significant impact on student participation in the child nutrition program and thereby on student performance.

Furthermore, with the increase in the number of summer or after-school feeding programs across the country, and especially in urban settings, school cafeterias are evolving into areas for community centers, parent open houses, and other common meeting places, acting as living rooms for the broader community we serve.

Key Considerations in Designing a Successful School Food Operation and Cafeteria

Increased Emphasis on Health and Wellness



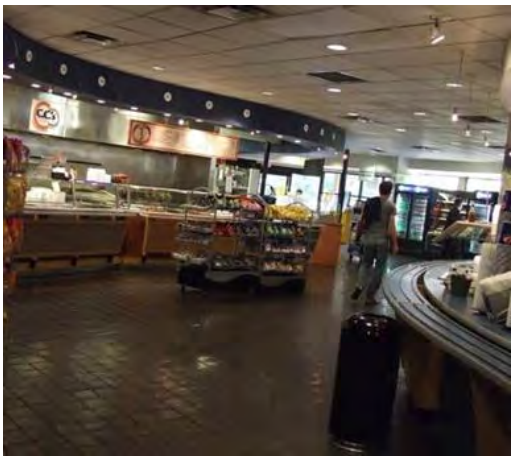
- The Healthy, Hunger-Free Kids Act of 2010, championed by First Lady Michelle Obama and signed by President Obama, authorizes funding and sets policy for the United States Department of Agriculture (USDA) core child nutrition programs, including the National School Lunch Program and National School Breakfast Program. Through this Act, the USDA made the first major changes in school meals in 15 years to help ensure a healthier generation of children. These changes are intended to significantly benefit the long-term well-being and success of today's students.
- Even prior to the Healthy, Hunger-Free Kids Act of 2010, during the Child Nutrition and WIC Reauthorization Act of 2004, and in addition to wellness policies on food and nutrition education, there were ramifications and policies focusing on the food environment, food service operations, and even food service equipment and design. For example, local policies might suggest the following in regard to the eating environment:

Increased Emphasis on Health and Wellness (continued)

  - Dining areas should be clean, attractive, well lighted, and well maintained and should provide adequate time and space to eat meals.
  - Dining areas should be designed to minimize the amount of time that students spend waiting in line.
  - Safe drinking water and convenient access to facilities for hand washing and oral hygiene should be available during all meal periods.
  - Dining areas should consider additional wellness messaging in their design, such as the need for signage or demonstrations that incorporate wellness education.
- The increased emphasis on healthy methods of cooking has also changed the types of equipment that used to be standard in food service kitchens. For example, instead of deep- fat fryers that once were included in kitchen preparation areas, steamers and convection ovens are now a more suitable replacement.

Food Security and Emergency Preparedness

Food security and emergency preparedness are very real issues for today's school nutrition programs. Crisis management may include having a plan in place in case of lockdown of a school building. Such a crisis may require schools to plan food to accommodate a different number of students, particularly for centralized or satellite operations. Security planning may include additional locking, camera, or communication systems, such as phone tree networks, or an NOAA radio which was originally used to transmit weather-related information, but can also be used to communicate other alerts and emergency information.



Emergency planning for natural disasters is also receiving renewed attention, both from the standpoint of planning for evacuation and for sheltering in place. The idea of sheltering in place as a response to an emergency situation may mean that schools must contend with the possibility that a major incident might necessitate keeping students at school for longer periods of time, such as days rather than hours. The use of schools for emergency shelters for both students and residents of the community has also become a priority planning issue with disasters such as Hurricane Katrina.

Alternate Food Production Systems

Labor shortages are not new, but continue to be a concern across the entire food service industry, including schools. To answer this problem, some large school districts such as HISD have switched to centralized production facilities. Although high school kitchen designs tend to focus more on fresh on-site cooking, often in view of the customer service area, many high-use items can be prepared in the central location and supplied to the school campus to eliminate preparation time and deliver consistent, safe products for menu incorporation. This method reduces equipment, inventory, and storage needs in school sites. In most cases, it can reduce

overall labor or, at a minimum, redirect labor to a front-of-the-house customer focus. This is especially critical with older student customers.

Smaller and More Mobile Equipment

Newer equipment trends include a focus on smaller equipment and more mobile units, particularly for self-service areas such as salad, deli, or fruit and vegetable bars. Smaller and more mobile equipment offers the maximum flexibility to accommodate daily, as well as long-term menu needs. In addition, smaller, more mobile equipment also allows the service of food in schools in non-traditional locations.

Equipment with New or Blended Technologies

Cooking equipment with multiple or blended cooking options has become more common. Blended cooking equipment offers efficient and faster cooking. Examples include:

- Combi-ovens which offer the opportunity to cook with or without steam
- Central cooking units or “mono-blocks” may include gas burners, induction cooking plates, electric solid tops, wok ports, etc.
- Combined convection and microwave systems
- Combined lightwave and microwave ovens

Combination technology is now being found in other areas besides cooking equipment. Blixers or combination blenders and mixers are a more versatile and powerful option in food preparation. Conversely, more specialized equipment is also popular. Although not as commonly purchased in schools, bagel mixers, pizza ovens, and specialty coffee equipment have become popular in commercial restaurants.

Labor-Saving Options

Automation of equipment has already been used as one solution to the labor shortage in quick service restaurants. While schools may not be able to take advantage of this solution as completely as other segments of the food service industry, purchasing equipment that enables labor savings is one way to combat the labor shortage. Options that schools have installed include self-cleaning or descaling systems on certain types of equipment such as steamers, or water washing hoods that can be pre-set to wash when they are not being used. A trend toward manufacturing equipment with built-in maintenance operations is being observed across the board for many types of equipment. As it becomes a value-added feature, it may also reduce warranty cost.

Better Ventilation

Newer technology in ventilation systems allows for more comfortable work environments. Newer technologies include ventless hoods and cooking equipment that have been developed to allow the use of equipment outside of a ventilation hood; an example would be some specialty steamers. Local regulations should be followed in regard to the use of these; however, some schools have profited from the expanded cooking area. Less equipment underneath the hood might also be considered energy saving as it decreases the load on the heating, ventilation, and air conditioning (HVAC) systems. Due to increasing energy costs, the goal to minimize ventilation needs is also a trend for the future. In addition, ultraviolet hoods are now available for cleaning

grease that accumulates in and above range filters and ducts.

Increased Emphasis on Food Safety

Implementation of HACCP (Hazard Analysis Critical Control Point)-based Standard Operating Procedures is required in all areas of the school food service operation shown below:

- Improved chilling of foods with smallwares and refrigeration equipment
- Better temperature tracking with faster and more convenient types of thermometers (for example, thermocouple and infrared thermometers) as well as more efficient documentation systems
- Decreased cross-contamination with equipment and supplies using color-coded methodology
- Greater availability of equipment that meets HACCP standards
- More effective hot- and cold-holding of foods
- Greater emphasis on equipment that is easy to clean and sanitize, as well as more effective, easier-to-use cleaning supplies
- Equipment systems that are integrated into computerized smart systems for better tracking and efficiency

Incorporation of Electro-Processors and Computers into Equipment

The use of electro-processor-based controls from electro-mechanical controls has become the standard. Electro-processor-based controls may be seen as digital read outs, touch pads, and other computer programming options. As these controls have become more reliable and multi- functional, they also have become smaller.

This enhancement results in a smaller piece of equipment with the same or greater production capacity. Programmable equipment can also result in significant energy savings if it is used to adjust equipment settings during periods when the equipment is not needed. It has been used extensively for heating, ventilation, and air conditioning systems, but is also possible in other areas.

Computer technology also includes computer monitored freezer alarms that will dial the central office or designated manager's home phone if the temperature falls to a certain level. Food loss can be avoided and food safety maintained with the proper use of these alarm systems. Computers can even be used to track defrost cycles and how long the freezer doors remain open.

Smart kitchens are one of the latest trends that make a great deal of sense in light of today's energy concerns. In a smart kitchen, equipment is hooked up to modems to remotely monitor temperature changes, malfunctions, and data related to food safety, as well as data related to food quality. Smart systems are a wave of the future for efficiency, quality, and control, but require greater investment to start. Examples of equipment that could be hooked up to smart systems include warewashers, blast chillers, walk-in and other refrigerators, and cooking equipment, as well as heating, ventilation, and air conditioning systems.

More Colorful and/or Less Expensive Construction Materials

Construction materials have also evolved. Although stainless steel will continue to be viewed as one of the most durable materials, newer materials are being developed that are attractive and less expensive, yet still very practical. Some of these materials even

incorporate additional benefits, such as antimicrobial properties. Examples range from colorful porcelain or enamel on equipment surfaces to the use of new materials such as silicone for smallwares. Silicone bakeware offers unique properties for insulation, but is considerably more expensive than metal bakeware and is not as likely to be used in volume preparation. Color-coded cutting boards, utensils, and plastic boxes offer food safety protection through their ability to identify their separate use for different food products, such as poultry, beef, and vegetables, thus minimizing the risk of cross-contamination.

Environmentally Friendly Equipment

Manufacturers are adapting equipment to meet growing environmental concerns. These concerns include energy use, air quality, water quality, and water use. Other environmental trends include reflective window glass, products made from recyclable materials, or energy-saving equipment. For example, air-cooled ice machines may be selected over water-cooled ice machines.

Consumer Trends

Changing lifestyles have affected the way we serve food in school cafeterias. There are many factors that contribute to this:

- Changing Lifestyles: Students are clearly more savvy and sophisticated in their tastes and desires for food service. Students have higher expectations resulting from their dining out experiences. Their expectations demand a wider variety of foods, better quality, increased food service choices, and an enhanced dining atmosphere. Students expect what they see in retail food courts or restaurants.
- Dining Environments: Student demands include more variety including “ethnic” menu items that are served in retail-like environments that offer convenience. Historical “scramble” or “single line serving” systems are not sufficient to satisfy the needs of these increasingly demanding and savvy students. There also is an increasing requirement to focus on the student as a “customer” instead of as a “captive audience.”
- Convenience: Speed of service is a significant determining factor in the success of the food service operation as students simply do not want to wait in line. As a result, multiple service points are becoming the norm in new school cafeteria designs. Nationally, students have 22 minutes on average to pick up their food and eat. Most students prefer to spend this time eating and socializing with their friends rather than waiting in line.

According to the student ViewPOINT™ survey conducted by ARAMARK Education in 2012 among 42,000 students across the country:

- *Of the students who skip lunch or do not eat at the cafeteria, 53 percent of them stated that long lines are the main reason why they do not eat at the cafeteria one or more days in a week.*
- *Eighty percent of the students stated that shorter lines or line speed is an important factor when they decide whether or not to get lunch at school.*

Service Trends

The trends being observed in new school food service programs include a blend of self-service and multiple points of employee service with greater showcasing of food. This includes more open kitchen/preparation areas allowing for some part of the food preparation

to be seen and appreciated by the student customer. Rounding out this trend is the food service operations' use of school kitchens to prepare meals for non-student populations. If a school program provides meals to groups outside of the school population or is considering it in the next five years, there may be an additional set of customer expectations to address in the purchase of food service equipment.

A guiding principle when making equipment purchasing decisions should be flexibility to meet future needs of the changing customer base. This will allow operations to handle incoming fads and long-term trends while maintaining operational viability.

Food Court Concepts

The food court design has been an extremely popular trend where students select from various specialty stations, such as burger bars, deli stations, and taco bars. This allows the students to wait only at the stations of their choice and go to different stations depending on their preference for the day. These kiosks or stations should consider providing standard pieces of equipment in each station so flexibility is retained when menus are redesigned as student tastes change.

Alternative Service Points

Quick service walk-up windows are being offered in some schools with positive outcomes. These service points can be in addition to the food court concept as an alternative point of service for the student population to be able to "grab and go." Schools also feel that the window service allows additional opportunities beyond the normal meal service periods. Clubs, for example, may use the windows after hours to sell concessions for different events at the school.

Speed Lines

Speed lines provide a fast system where multiple points of service are offered. Foods may include pre-wrapped products such as fresh salads, bagged lunches, breakfast meals, or other grab-and-go healthy options. Lines are often double-sided and the focus is on efficient movement for students on the go.

Kiosks and Food Carts

Kiosks offer food for faster service at small, mobile, free-standing carts. This increases and/or diversifies the number of service locations offered. It also enables higher participation as we are able to take more options to the students in places such as hallways, entrances, and gymnasiums.

Exhibition-Style Cooking

Some form of display cooking or custom assembly of food right in front of the customer's view adds to a preferred perception of quality and freshness. Savvy students of all ages are catching on to the resurgence of *"fresh is best."* Television cooking channels also continue to push this approach as well as increasing the popularity of cooking "from scratch."

In order to meet customer demand for freshness, high schools may choose to include exhibition-style cooking at some service points. Panini grills, conduction cook tops, woks, grill/broilers, and pizza impinge (conveyor) ovens are often incorporated in cooking areas

behind the service stations. Given the high volume of typical school lunch period customer traffic, these stations are limited to certain service points and are incorporated into serving areas offering more traditional speed-of-service and grab-and-go stations to meet volume demands. They serve to pique customer interest and sales and should be versatile to meet changing student preferences.

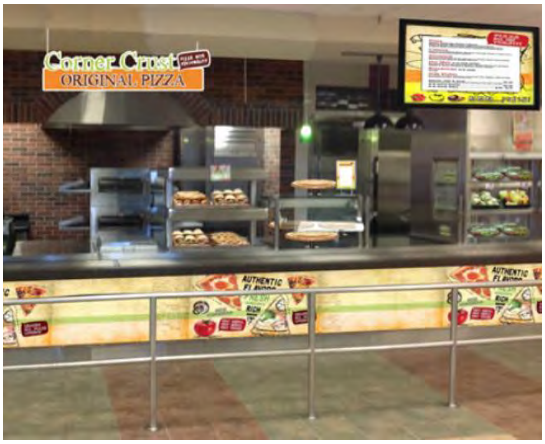
Critical Needs List

Following site visits to a number of Texas schools a broader group of HISD Food Services/ARAMARK operations and support services senior team members reviewed the findings and discussed key local considerations for an HISD facility. The group included leaders from maintenance, quality control, operations, warehouse and distribution, marketing, and administrative staffs. The following five factors were determined to be the critical drivers to successfully achieving HISD's food service's end goal:

1. Key regulatory considerations/National School Lunch Program requirements:
   a. HISD should continue offering a large variety of fresh fruit and vegetables with every meal. Adequate and refrigerated merchandising space is needed on each service line.
   b. The POS (point-of-sale) units must be located at the end of the serving line after all food and beverages have been served in order to comply with NSLP regulations.
   c. To comply with NSLP potable water access regulations, water fountains must be located in the dining area.
2. Changing trends in menus:
   a. Student ViewPOINT surveys conducted over the last three years in all HISD middle and high schools show the consumer preference to continue popular build-your-own style serving options for our students.
   b. Relevant concepts and environments where students want to eat must be offered.
   c. Serving lines need mobile serving equipment and versatile cooking equipment to change menu theme with consumer preference. For example, this could include a grill station that can double as a Mexican theme station (including fresh tortilla grilling and live action preparation of items) without major equipment change.
   d. The HISD Parent Advisory Committee recommends that small high schools be afforded full-service menu options with a cooking facility versus a non-cooking satellite setup whenever possible.

Home Zone Concept
Traditional and fresh fare; build-your-own meal as you like it

3. The HISD Food Services Support Facility (FSSF) production model:
   a. Specialized small equipment needs will be kept to a minimum as all HISD campuses are supplemented with prepared foods from the Food Service Support Facility.
   b. Storage space needs are significantly less than the NFSMI standard as the FSSF warehouse and production center controls the product delivery schedule and menuing. Inventory levels in HISD campuses are tightly controlled.
   c. With the production facility supplementing food production, site staffing should meet service model requirements with the majority of staff assigned to the serving line area for speed of service at an average of 17 students per minute.



Corner Crust Original Pizza & Pasta
Made fresh and daily: pizza, salads, calzones,and made-to-order pasta

4. Design by enrollment:
   a. The size and number of serving areas should adjust and vary with enrollment. À la carte serveries were deemed necessary at all campuses, with smaller locations serving less enrollment receiving smaller à la carte serving areas.

5. Equipment considerations:
   a. Equipment quantities will adjust with enrollment size, although the type of equipment would be standard for most school models.
   b. Walk-in freezers should open into coolers to temper air.
   c. Cook lines should be separated in larger kitchens to manage the work flow of traffic efficiently and to avoid unsafe conditions.

ARAMARK Marketing and Design Services Engagement

ARAMARK regional and national marketing representatives were engaged to discuss consumer trends in dining and service concepts to ensure that the proposed cafeterias for HISD 2012 Bond High Schools would be in line with cutting-edge marketing trends. John Kandemir, Vice President of ARAMARK Education Marketing, and Rick Ward, Regional Marketing Director, were consulted for their expertise in consumer trends and operational design to meet consumer expectations.

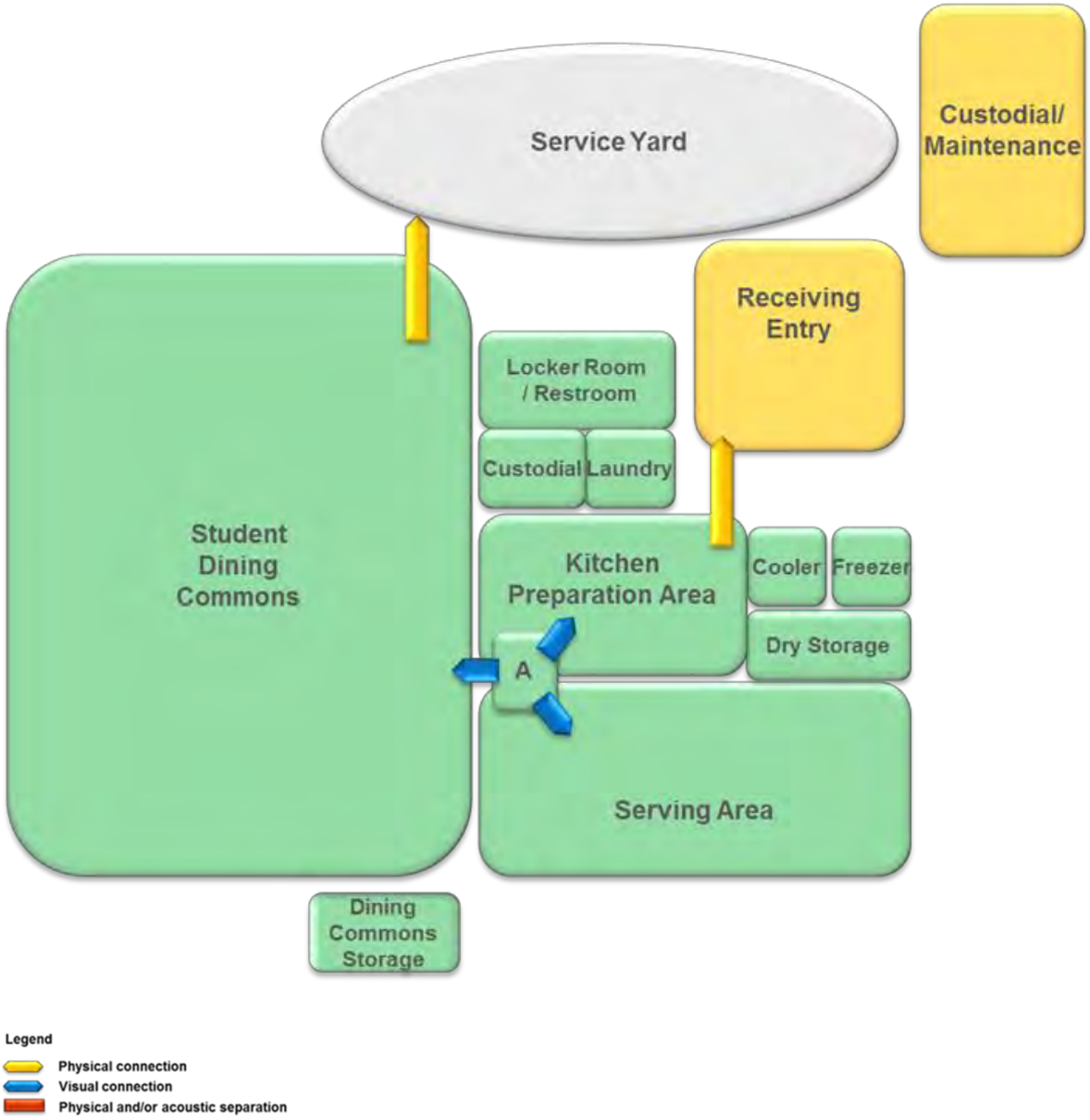
John and Rick monitor the latest research from education organizations, K–12 publications, industry experts, and agencies to stay abreast of K–12 legislation, regulations, and food and customer trends. Providing their expertise and support to more than 400 school district partners across the country, they complement their research with a proprietary ViewPOINT Survey to provide an integrated 360-degree view of the K–12 environment that delivers insight for school- specific improvements and innovation. The local HISD ViewPOINT Survey results were considered in developing this document.

ARAMARK Capital Projects' design experts were also consulted for their expertise and validation of our plan direction. Their group connects resources, guides capital project innovations, and educates the company and its partners on ways to maximize investment value. They are responsible for ARAMARK's creation and management of dining concepts, facility design standards, and managing our network of equipment and smallwares relationships. The Associate Vice President of Project Development, Michael Bolanos; Director of Project Execution, Bill Miller; and Project Agent, Mark Bond, were specifically consulted in our planning.

Last year they supported more than 500 facility and food concept design projects throughout ARAMARK. The K–12 district partners made up over 200 of these projects, including the concept development of the 75 new build-your-own service lines recently installed in HISD high schools. Their expertise, feedback, and support have been invaluable in the development of the enclosed plan.

The facilities described on subsequent pages provide for the preparation and serving of food to the students, staff and faculty. The Dining Commons serves not only as a place for eating but also a location used by the school for assemblies and student performances.

These facilities should be located in close proximity to the Custodial/ Maintenance area so that the receiving area can be shared.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Food Service

Space Requirements

Food Service	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Kitchen Preparation Area		1	1,796	1,796
Serving Area		1	1,252	1,252
Dry Storage		1	230	230
Freezer		1	274	274
Cooler		1	270	270
Kitchen Manager's Office		1	117	117
Laundry/Custodial Area		1	66	66
Locker Room/Restroom		1	136	136
Student Dining Commons (seating for 1/3 of students at one time plus 200 for dining)		3	3,333	9,998
Coffee Shop		1	189	189
Dining Commons Storage		1	367	367
Janitor		1	29	29
Total	**0**			**14,724**

Food Service

Kitchen Preparation Area

USERS:	ACTIVITIES:
• Manager • Food Service Staff	• Preparation of food • Cooking foods • Staging meals before moving to serving lines • Cleaning equipment, work surfaces and floors

DESIGN CONSIDERATIONS:

- Equipment shall be located under two exhaust hoods located in close proximity to serving areas.
- Gas line to be exposed with additional electric circuit for expansion.
- Fire protection system – add one floor sink and water connection under each hood.
- Doorbell at receiving should be audible in Food Preparation Area.
- Allow space to store Utility Carts.
- Provide a minimum of 4’ - 0” wide doors.
- Provide window, peep hole or camera for visibility of persons making deliveries to those receiving deliveries.
- Additional equipment included to service satellite campuses.

FURNITURE, FIXTURES & EQUIPMENT:

- Markerboard
- Tackboard
- Cookline:
  - 2- Vent Hoods, 15’ min. size each
  - Fire Protection System
  - 5- Convection ovens, double ovens
  - 3- Steamers, Electric w/two on one stand
  - 1- Four Burner Range convection oven
  - 1- Two comp. sink w/disposal
  - 1- Disposal
  - 8- work tables min., number as needed
  - 10’ Worktable w/ utility rack located in front of cook line, number as needed
  - 12- Pan Racks (Bun rack)
  - 1- Three compartment sink w/shelf
  - Mobile Utensil shelf, number as needed
  - 1- Ice machine w/bin
  - 11- Utility Carts
  - 10- Dolly, Milk Case
  - 12- Camcarts (1 cart for every 100 students)
  - Small Wares package(s), as needed
  - 4- Manual Can openers
  - 1- Commercial Blender
- Soap Dispensers
- Paper Towel Dispensers
- Clock(s)

Food Service

Serving Area

USERS:	ACTIVITIES:
• Kitchen Manager • Food Service Staff • Students • Faculty	• Serving food • Receiving payment for food

DESIGN CONSIDERATIONS:

- Equipment is based on a minimum of 3 lunch periods.
- Serving will be in a food court design – number of stations dependent upon school capacity.
- If more than four stations, one station to be separate from kitchen so it can be used by school organizations after hours.
- Doorbell at receiving should be audible in Serving Area.
- Provide a minimum of 4'-0" wide doors.

FURNITURE, FIXTURES & EQUIPMENT:

- 2- Traditional (Standard Serving Lines)
  - 1 – Cold Display Merchandiser, 3' min.
  - 2- 3' Serving Unit Pan Flat
  - 1- 5' Serving Unit Pan Hot
  - 1- 3' Serving Unit Pan Cold
  - 1- Cold Tier Hot/Frost
  - 1- Cash Table
- 3- Specialty Lines
  - 2- Cold Tier Hot/Frost
  - 1- 2' Serving Unit Pan Cold
  - 1- 3' Serving Unit Pan Flat
  - 1- 4' Serving Unit Pan Hot
  - 1- 3' Serving Unit Pan Cold
  - 1- 2' Serving Unit Pan Flat
  - 1- Cash Table
- 1- Snack-To-Go
  - 5- Serving Unit 5' Pan Flat
  - 4- Flat Table 2'x3'
  - 2- Table Top Cold Unit
  - 2- Hot Gravity Feed (3')
  - 3- Cash Tables
- 1- Heated Cabinet, 2 Door, pass thru preferred
- 1- Refrigerator, 1 door, pass thru preferred
- Back Counter, as needed
- Multi-fold Hand Towel Dispensers
- Soap Dispensers
- 8- Electronic Display (Menus)
- 8- Point Of Sale (POS) Units
- 8- Adjustable height stools
- Clock(s)

Food Service

Dry Storage

USERS:	ACTIVITIES:
• Food Service Staff	• Storing dry food / supplies

DESIGN CONSIDERATIONS:

- Locate Dry Storage near Kitchen Preparation Area
- Locate Dry Storage for easy access to Receiving Entry
- Provide security camera to monitor entrance
- Provide a minimum of 4’ - 0” wide doors.

FURNITURE, FIXTURES & EQUIPMENT:

- 4 - Can Racks – gravity fed
- Dry Storage Shelving, solid, as needed
- Dunnage Racks, solid, as needed

Food Service

Freezer

USERS:	ACTIVITIES:
• Food Service Staff	• Storing frozen food

DESIGN CONSIDERATIONS:

- Locate freezer near Kitchen Preparation Area and have it open from Cooler.
- Enter freezer through cooler
- Locate for easy access to Receiving Entry
- Provide computerized remote monitoring system.
- Provide a minimum of 4’ - 0” wide door

FURNITURE, FIXTURES & EQUIPMENT:

- 1- Walk-in Freezer – TN-078, walk thru evenly spaced, min. 400 sq. ft.
- 2- Dunnage Racks, (Vented cold storage)
- Cold Storage Shelving, vented, number as needed.

Food Service

Cooler

USERS:	ACTIVITIES:
• Food Service Staff	• Storing cold foods • Defrosting frozen food
DESIGN CONSIDERATIONS:	
• Locate cooler near Kitchen Preparation Area and have it open into both Prep and Freezer • Locate cooler/freezer for easy access to Receiving Entry. • Provide computerized remote monitoring system • Provide a minimum of 4’ - 0” wide doors.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 1- Walk-in Cooler, walk thru evenly spaced, min. 400 sq. ft. • 2- Dunnage Racks, (Vented Cold Storage) • Cold Storage Shelving, vented, number as needed	

Food Service

Office A (Kitchen's Manager's Office)

USERS:	ACTIVITIES:
• Manager	• Filing out Food Service documentation • Reviewing employee request • Ordering supplies • Counting cash •

DESIGN CONSIDERATIONS:

- Locate manager's office in a central location to allow visibility into kitchen prep area, service line holding area and receiving.
- Provide window, peep hole or camera for visibility of person receiving deliveries.
- Provide windows above 3' to below ceiling on all sides.
- Doorbell at receiving should be audible in Kitchen Manager's Office and Kitchen Preparation Area.
- If camera is provided it needs to be monitored through the computer system in the office.
- Combination safe should be secured to the building in a non- visible space in the office.
- Provide minimum of 4' wide doors.

FURNITURE, FIXTURES & EQUIPMENT:

- 1- Combination Safe
- 4' x 4' marker board
- 4' x 4' tack board
- Desk
- 1- Task Chair
- 1- Guest Chair
- File Cabinet
- Bookcase
- Blinds
- Clock
- Printer
- Computer
- Trash cans

Food Service

Laundry / Custodial Area

USERS:	ACTIVITIES:
• Manager • Food Service Staff	• Washing food prep clothes and aprons • Drying food prep clothes and aprons • Storing cleaning supplies • Storing cleaning equipment • Cleaning mops
DESIGN CONSIDERATIONS:	
• Provide sufficient ventilation to prevent fumes from cleaners from damaging mother boards in washer and dryer. Alternatively, provide separate rooms for	
FURNITURE, FIXTURES & EQUIPMENT:	
• 1- Washer • 1- Dryer • Shelving, composite, as needed • Mop/Broom Rack • Mop Sink • Paper Towel Dispenser	

Food Service

Locker Room / Restroom

USERS:	ACTIVITIES:
• Kitchen Manager • Food Service Staff	• Staff clothes changing • Storing of personal items by Staff
DESIGN CONSIDERATIONS:	
• Provide floor drains with easy access clean-outs.	
FURNITURE, FIXTURES & EQUIPMENT:	
• 8-10 Lockers min. • Coat Hooks • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Bench • Clock	

Food Service

Student Dining Commons

USERS:	ACTIVITIES:
• Kitchen Manager • Food Service Staff • Students • Faculty	• Eating • Student Assembly • Social Gathering

DESIGN CONSIDERATIONS:

- Provide access from Dining Commons to dumpster area without going through Kitchen Prep.
- Include drinking fountains in the Dining Commons per code
- Provide area for future addition of vending machines

FURNITURE, FIXTURES & EQUIPMENT:

- 4’ x 8’ Tack board(s)
- Connections for projectors
- Sound System, to balance sound throughout the room
- Electronic Display
- Charging stations, as needed
- Tables and chairs for 1/3 of the program capacity plus 200 for dining
- Size and shape of tables should be varied to prevent an institutional appearance
- Clock

Food Service

Coffee Shop

USERS:	ACTIVITIES:
• Manager • Food Service Staff	• Preparation of food • Cleaning equipment, work surfaces and floors

DESIGN CONSIDERATIONS:

- Provide counter space separate from regular serving lines.

FURNITURE, FIXTURES & EQUIPMENT:

- Markerboard
- Tackboard
- Preparation Line:
  - Fire Protection System
  - 1- Two comp. sink w/disposal
  - 1- Disposal
  - 1- work tables min., number as needed
  - 1- Three compartment sink w/shelf
  - Mobile Utensil shelf, number as needed
  - 1- Ice machine w/bin
  - Small Wares package(s), as needed
  - 2- Manual Can openers
  - 1- Commercial Blender
- Soap Dispensers
- Paper Towel Dispensers
- Clock(s)

Food Service

Student Dining Commons – Storage

USERS:	ACTIVITIES:
• Kitchen Manager • Food Service Staff • Students • Faculty	• Storing dining tables and chairs • Storing dining room equipment
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Cart for Chairs • Cart for Tables	

CUSTODIAL / MAINTENANCE

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

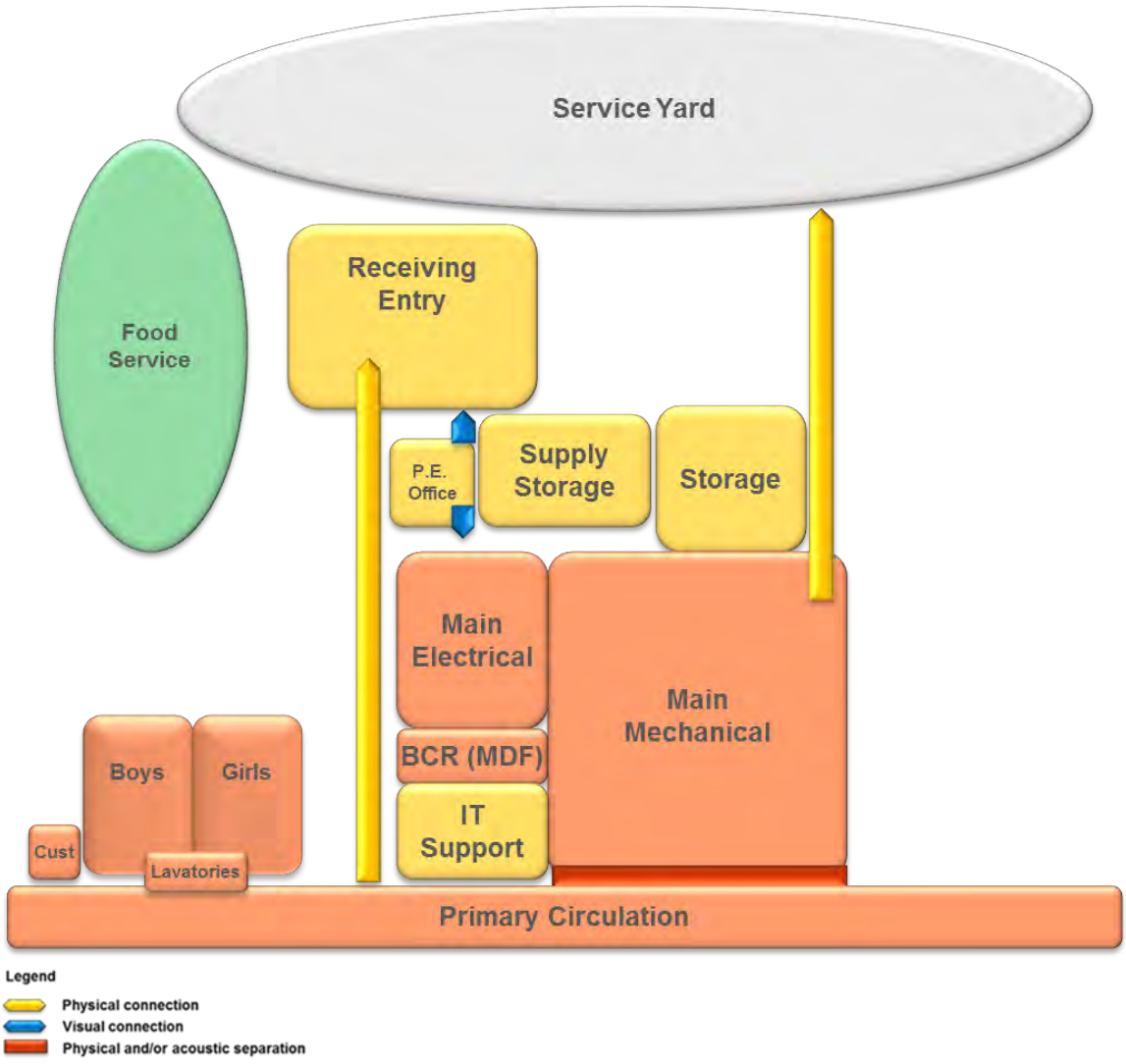
HOUSTON INDEPENDENT SCHOOL DISTRICT

Custodial / Maintenance

Overview:

These facilities provide for the cleaning and maintenance of the facility and include not only spaces dispersed throughout the school, but also central facilities for receiving, inventorying and storing supplies and equipment.

The centralized facilities should be located in close proximity to the Food Service area so that the receiving area can be shared.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Custodial / Maintenance

Space Requirements

Custodial / Maintenance	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Receiving Entry		1	524	524
Office, Plant Engineer		1	80	80
Custodial/Maintenance Storage		1	406	406
Supply Storage		1	394	394
Custodial Closet		6	71	425
Custodial Locker Room/Restroom		1	136	136
Total	**0**			**1,965**

Custodial / Maintenance

Receiving Entry

USERS:	ACTIVITIES:
• Plant Operator • Maintenance Staff • Custodial Staff • Kitchen Staff • Delivery Personnel	• Filing out documentation for receipt of goods • Receiving miscellaneous school supplies • Receiving equipment • Receiving food deliveries • Disposal of school & food service waste
DESIGN CONSIDERATIONS:	
• Provide space for a minimum of ____ waste bins and ___ recycle bin in Service Yard. • Loading area is not to be a dock, but a curb. • Provide doorbell that will be audible in kitchen. • Provide window, peep hole or camera for visibility of persons making deliveries to those receiving deliveries. • Provide bollards to prevent damage to buildings.	
FURNITURE, FIXTURES & EQUIPMENT:	
• None	

Custodial / Maintenance

Plant Engineer's Office

USERS:	ACTIVITIES:
• Plant Engineer • Custodial Staff • Maintenance Personnel	• Office functions for Plant Engineer • Repairing equipment using hand tools • Scheduling of custodial staff • Reviewing staff requests
DESIGN CONSIDERATIONS:	
• View to Receiving Entry	
FURNITURE, FIXTURES & EQUIPMENT:	
• 4' x 4' Tack board • 4'x4' Marker board • Desk • Filing cabinet • Task chair • Guest chair • Bookcase	

Custodial / Maintenance

Storage

USERS:	ACTIVITIES:
• Plant Engineer • Custodial Staff • Maintenance Personnel	• Repairing equipment using hand tools • Storing miscellaneous building supplies • Storing building maintenance equipment
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 3 locking cages to secure equipment/supplies • 30” x 48” table • 2- Chairs • 3 tall deep heavy duty shelf units • Maximum LF of 24” D x 84” H x 16’ L heavy duty open adjustable shelving on perimeter	

:

Custodial / Maintenance

Supply Storage

USERS:	ACTIVITIES:
• Plant Engineer • Custodial Staff •	• Storing miscellaneous school supplies • Storing school furniture • Storing school equipment
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Adjustable metal shelving	

Custodial / Maintenance

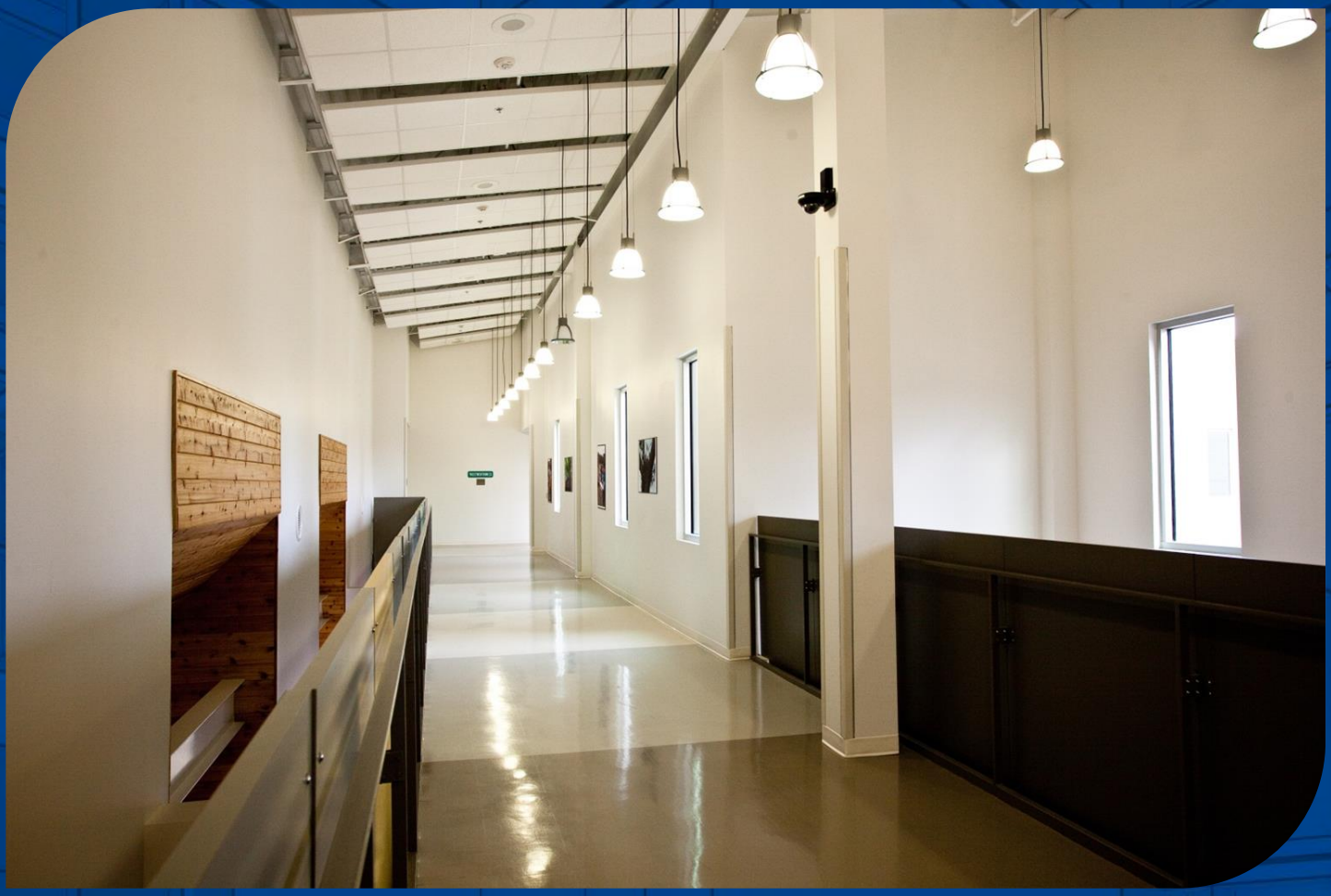
Custodial Closet

USERS:	ACTIVITIES:
• Plant Engineer • Custodial Staff	• Storing of Mops and Brooms • Cleaning of mops and other custodial equipment
DESIGN CONSIDERATIONS:	
• Locate throughout school	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mop Sink • Mop and Broom Rack • Metal shelving unit	

Custodial / Maintenance

Locker Room / Restroom

USERS:	ACTIVITIES:
• Plant Engineer • Custodial Staff • Maintenance Staff	• Staff clothes changing • Storing of personal items by Staff
DESIGN CONSIDERATIONS:	
• Provide floor drains with easy access clean-outs.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Lockers (5-8 minimum) • Coat Hooks • Paper towel dispenser • Soap dispenser • Toilet paper dispenser • Bench • Clock	



BUILDING SUPPORT

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

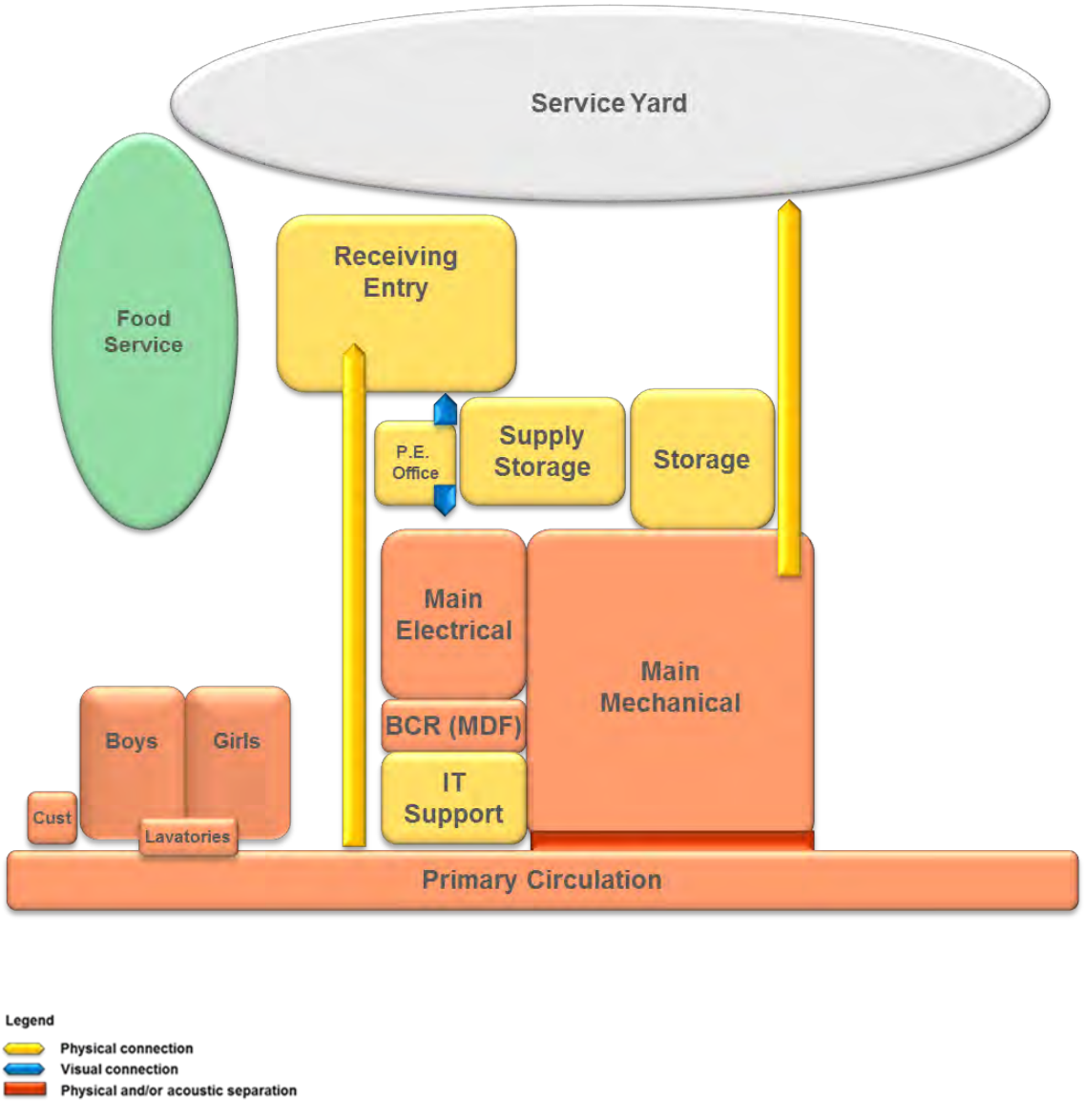
HOUSTON INDEPENDENT SCHOOL DISTRICT

Building Support

Overview:

These facilities provide for centralized building services including electrical and mechanical necessary for the operations of the building, but also service areas that are located throughout the building.

The centralized facilities should be located in close proximity to the Food Service area so that the receiving area can be shared.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Building Support

Corridors

USERS:	ACTIVITIES:
• Students • Faculty • Staff • Visitors	• Circulation of occupants • Displaying awards, pictures, student work and school announcements

DESIGN CONSIDERATIONS:

- Lockable display cases are encouraged for the displaying of awards, pictures, school announcements and student work.
- Decision on whether to provide student lockers as well as their size and location will be determined in conjunction with the PAT during the Schematic Design phase.
- Decision on whether to provide student lockers as well as their size and location will be determined in conjunction with the PAT during the Schematic Design phase.
- Minimum corridor widths are:
  - Serving more than two classrooms: 8’-0”
  - Serving more than eight classrooms: 9’-0”
  - Major corridor: 12’-0”
  - Lockers along one wall: add 2’-0”
  - Lockers along two walls: add 3’-0”

FURNITURE, FIXTURES & EQUIPMENT:

- Lockable display cabinets
- Tack board / Tack wall

Building Support

Group Restrooms

USERS:	ACTIVITIES:
• Students	• Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors (not above sinks) • Paper towel dispensers • Soap dispensers	

Building Support

Single Restrooms

USERS:	ACTIVITIES:
• Faculty • Visitors	• Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors • Paper towel dispensers • Soap dispensers	

Building Support

Main Mechanical

USERS:	ACTIVITIES:
• Plant Operator • Maintenance Staff	• Mechanical Equipment which heats and cools school • Repairing Mechanical Equipment • Servicing Mechanical Equipment
DESIGN CONSIDERATIONS:	
• Size doors to allow for replacement of equipment.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mechanical Equipment	

Building Support

Main Electrical

USERS:	ACTIVITIES:
• Plant Engineer • Maintenance Personnel	• Electrical Equipment for school's electrical needs • Repairing Electrical Equipment • Servicing Electrical Equipment
DESIGN CONSIDERATIONS:	
• Attempt to locate so not below "wet" spaces.	
FURNITURE, FIXTURES & EQUIPMENT:	
• Electrical Equipment	

Building Support

BCR - Building Communication Room (MDF)
FCR - Floor Communication Room (IDF)

USERS:	ACTIVITIES:
• Plant Engineer • IT Personnel	• House IT equipment • House mission critical equipment (i.e. fire alarm, intrusion alarm, intercom)
DESIGN CONSIDERATIONS:	
• Maintain a temperature of 40 degrees in the BCR. • Locate FCRs so that serve an area within a 190 foot radius. • In multi-story facilities, FCRs shall be stacked vertically	
FURNITURE, FIXTURES & EQUIPMENT:	
• Fire Rated Plywood on a minimum of 3 walls • Fire alarm • Intrusion alarm • IT Racks • IT Equipment	

Building Support

Stairs

USERS:	ACTIVITIES:
• Students • Faculty • Staff • Visitors	• Vertical circulation for building occupants
DESIGN CONSIDERATIONS:	
• Visual supervision of stairs from corridors should be maintained • Multiple staircases for student circulation should be considered rather than a single monumental stair	
FURNITURE, FIXTURES & EQUIPMENT:	
• None	

Building Support

Elevator

USERS:	ACTIVITIES:
• Students • Faculty • Staff • Visitors	• Vertical circulation for building occupants
DESIGN CONSIDERATIONS:	
• Key operated only	
FURNITURE, FIXTURES & EQUIPMENT:	
• None	

CHILDCARE

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

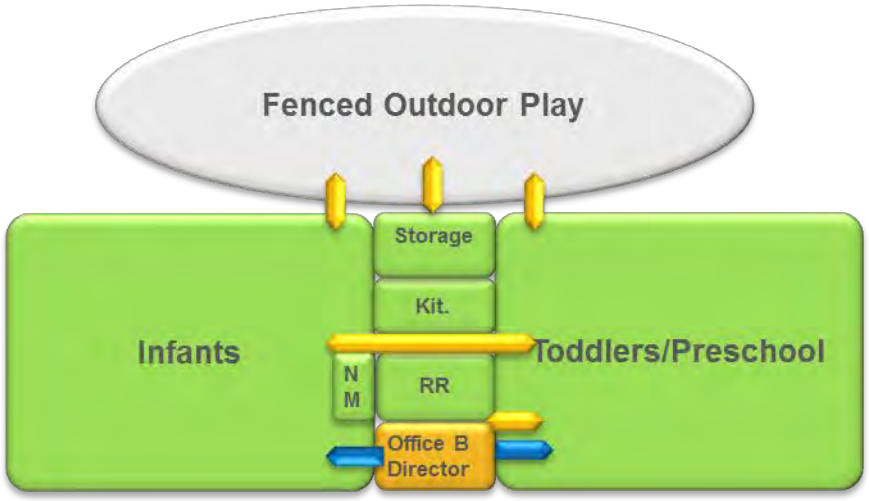
HOUSTON INDEPENDENT SCHOOL DISTRICT

Childcare

Overview:

In order to provide a safe environment for the children of students and staff, a childcare facility will be included in the school. Facilities will be designed to meet the most current minimum standards for Child-Care Centers published by the Texas Department of Family and Protective Services.

The two learning centers should be constructed similar so that they can be used by either infants or toddlers/preschoolers as the population requires. Only the furniture should differ.



The functional relationships illustrated are diagrammatic only. Further interpretation of these relationships shall be implemented by the Design Team.

Childcare

Space Requirements

Child Care Center	Provided Spaces			
	Teaching Station(s)	Quantity	Ave. Sq. Ft.	Net Area
Director Office		1	154	154
Kitchen/Storage		1	235	235
Student Restrooms		2	59	118
Staff Restrooms		2	67	133
Outdoor Storage		1	140	140
New Mother's Room		1	84	84
Infant Room		1	920	920
Toddler/Preschool Learning Center		1	853	853
Total	**0**			**2,637**

Childcare

Office B (Director)

USERS:	ACTIVITIES:
• Director • Instructor • Caregivers • Parents	• Paper work • Processing materials • Filing • Telephoning • Ordering
DESIGN CONSIDERATIONS:	
• Centrally locate with visual access to infant and toddler/preschool rooms	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds for internal and external windows • Marker board • Tack board • 1 - Double pedestal desk with center drawer & lock, 60" x 30" • 1 - task chairs, swivel, tilt, armless • 1 - 4-shelf bookcases, 60"h x 36"w x 12"d • 2 - 4-drawer vertical files, letter size, lockable • 2 - guest chairs • Teacher wardrobe cabinet: coat hook, shelving, 2 drawers, lockable	

Childcare

Kitchen/Storage

USERS:	ACTIVITIES:
• Teacher • Caregivers	• Breakfast and lunch preparation • Staging meals before serving • Storage of supplies
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	

• Refrigerator with ice maker
• Casework-handicapped accessible
  • Sink cabinet
  • Drawer/door base cabinets
• Door/shelf wall cabinets
• Paper towel dispenser
• Soap dispenser
• Maximum linear feet of 18”D, adjustable shelving
• Microwave oven(s)	

Childcare

Student Restrooms

USERS:	ACTIVITIES:
• Toddlers • Pre-schoolers	• Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• 60” tall wall mirror • Child height toilets • Child height wall mounted sinks • Paper towel dispenser • Soap dispenser	

Childcare

Staff Restrooms

USERS:	ACTIVITIES:
• Faculty • Visitors	• Personal hygiene
DESIGN CONSIDERATIONS:	
• None	
FURNITURE, FIXTURES & EQUIPMENT:	
• Mirrors • Paper towel dispensers • Soap dispensers	

Childcare

Outdoor Storage

USERS:	ACTIVITIES:
• Director • Teacher • Caregivers	• Storing instructional materials and supplies
DESIGN CONSIDERATIONS:	
• Provide exterior access from fenced play area	
FURNITURE, FIXTURES & EQUIPMENT:	
• Maximum LF of heavy-duty 18”D adjustable shelving	

Childcare

New Mother's Room

USERS:	ACTIVITIES:
• Students • Parents • Visitors	• Diapering • Sleeping • Nursing • Feeding
DESIGN CONSIDERATIONS:	
• Locate near main entrance with full access and visibility to Lobby	
FURNITURE, FIXTURES & EQUIPMENT:	
• Blinds on windows • 4'x4' marker board • 4'x4' tack board • 1 diaper changing tables • 1 Book shelf • 1 rocking chairs	

Childcare

Infant Care (6 weeks – 11 months old)

USERS:	ACTIVITIES:
• 4 caregivers • 16 infants	• Diapering • Sleeping • Nursing • Feeding

DESIGN CONSIDERATIONS:

- Provide visual and physical access to toddler/preschool room
- Use book shelves, storage cabinets and other furniture to create distinct areas to meet Texas requirements regarding maximum group size and so that children in one group do not freely mix with children in the other group.

FURNITURE, FIXTURES & EQUIPMENT:

- 2 - Hand washing sinks (adult height)
- Blinds for windows
- 4'x4' Tack Board
- 4'x8' Marker Board
- Tack Strips located 12" above marker/tack boards
- 2 - flag holders and map hooks
- Paper towel dispenser
- Soap dispenser
- 16 cribs
- 2 diaper changing tables
- 4 Book shelf
- 4 - Lockable storage cabinet
- 8 - Teacher wardrobe cabinets: coat hook, shelving, 2 drawers, lockable
- 4 rocking chairs
- 2 - 30" x 60" table
- 8 chairs
- Microwave oven
- Small refrigerator
- Clock

Childcare

Toddler/Preschool Learning Center

USERS:	ACTIVITIES:
• 5 caregivers • 20 Toddlers /Preschoolers	• Playing • Reading to Children • Dining • Playing • Napping
DESIGN CONSIDERATIONS:	
• Provide visual and physical connection to Infant room	
FURNITURE, FIXTURES & EQUIPMENT:	
• 2 – hand wash sinks (adult height) • Blinds for windows • 4'x4' Tack Board • 4'x8' Marker Board • Tack Strips located 12" above marker/tack boards • 2 - flag holders and map hooks • 4 - round student tables • 20 - student chairs • 4 - Book shelves with adjustable shelves • 4-Tall lockable storage cabinets with adjustable shelving • 2-Teacher wardrobe cabinets: coat hook, shelving, 2 drawers, lockable • Clock • Educational rugs • 20 nap mats • 4 - rocking chairs • 2 - 30" x 60" table • 5 - adult chairs • 20-student storage cubbies	

EDUCATIONAL SPECIFICATIONS MATRIX

2012 HISD BOND
BUILDING EXCELLENCE

HISD EDUCATIONAL SPECIFICATIONS
LEE HIGH SCHOOL – MAY 12, 2014

CONSTRUCTION AND FACILITY SERVICES
FACILITIES PLANNING

HOUSTON INDEPENDENT SCHOOL DISTRICT

General Notes

G1. Provide base as appropriate for flooring material.
G2. Provide acoustical wall treatment as appropriate for all open, tall and / or noise producing spaces.
G3. All materials should be easily sanitized and long wearing.
G4. Ceiling Heights shall be 9'-0" minimum, 10'-0" maximum, unless noted otherwise on Matrix
G5. Terrazzo may be used as a floor finish in high traffic areas if project can bear the additional cost.
G6. Use of carpet in non office areas must be approved by HISD.
G7. The use of flexible furniture/equipment is encouraged. Built-in casework and shelving should be minimized-generally casework should only be provided where a sink is required.
G8. All windows in spaces that are occupied on a regular basis shall receive shades or blinds.
G9. All spaces to which a student may go shall have a visual connection (fixed window, door light or sidelight) to the adjacent space or circulation.
G10. All spaces shown to receive an electronic whiteboard/projector by Owner should have blocking installed in the wall by the Contractor. The projector is integral to the board.
G11. Provide acoustical wall treatment as appropriate for all open, tall and/or noise producing spaces.
G12. All window sills to be plastic laminate.
G13. Consider the use of large tackable wall surfaces where tackboard is noted.
G14. Data drops noted on the matrix do not include wireless access or video display connections. See Design Guidelines for number and locations of drops for these devices.

Program Specific Notes

A. Continue flooring from corridor to front side of reception counter.
B. Removable interlocking rubber tile floor designed for use in weight rooms shall be provided and installed by contractor over the permanent substrate.
C. 2 duplex outlets located in casework apron at each student station
D. One duplex and data located for wall mounted display monitor
E. Locate one set of drinking fountains in adjacent corridor.
F. Provide floor drain at emergency shower/eyewash station. Provide acid resistant piping and neutralization.
G. Provide system noted with an * if required for specific curriculum.
H. Provide lockable storage, including one ventilated cabinet for paints and thinners. Coordinate mechanical for proper ventilation.
I. Provide large deep sink for cleaning instruments.
J. Provide large electrically operated, projection screen with projector
K. Install an eye wash station at sink.
L. Provide drinking fountain in or near treatment area.
M. Wall and ceiling finishes of walk-in are by the manufacturer. Floor to match the floor in food preparation area
N. Provide mop sink in Custodial area.
O. Provide washer and dryer connections and sufficient ventilation in Laundry area.
P. Plaster Traps at art sinks
Q. Coordinate HVAC/Plumbing/Electrical requirements with equipment
R. Provide permanent speaker system
T. Provide electrical and data outlets as required by equipment layout.

FINISH, FENESTRATION & INFRASTRUCTURE MATRIX

HISD LEE HIGH SCHOOL

	FINISHES																	OPENINGS									HVAC, PLUMBING AND ELECTRICAL														EQUIPMENT AND SPECIAL SYSTEMS												NOTES
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS			HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS					
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior glass	Roll-up, interior grille	View Lite	Interior	None	Daylighting	Exhaust to exterior	Fume/Exhaust Hood	Dust Collection System	Sink	Natural Gas (double outlet @ each)	Drinking fountain	Eye wash & Shower	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone				Specialty	
Neighborhoods																																																					
Learning Center				X					X	X	X		X	X		X		9/10	X		X	X		X			X									8	3	6	X			2	3	1						X				
Science Learning Center/Wet Lab				X					X	X	X		X			X		9/10	X		X			X			X	X		8	8		1	X	16		10	X			2	3	1		X	X	X	X	X				C,F,G
Wet Lab Storage				X					X	X	X					X		8			X			X		X		X	X		1	1		1	X	4	1	1				1	1			X	X	X	X	X				
Flex Lab				X					X	X	X					X		9/10	X		X	X		X			X	X		*	*				8	*	*	X			2	3	1		*	*	*	*	X				G
Learning Commons / Information Center/Extended Learning Area	X			X						X	X		X	X	X	X		12/16	X		X	X		X	X		X						2 charging areas wit		?	?	X			1	1	1						X					D
Learning Commons / Information Center Storage				X					X	X	X					X		8			X			X		X																											
Special Education Learning Center				X					X	X	X		X			X		9/10	X		X	X		X	X		X			1					8	1	6	X			2	3	1						X				G
Kitchen				X					X	X	X					X		8			X			X	X	X	X		X		1				X	3		1				1	1			X	X	X						
Restroom						X				X	X	X					X	8			X					X		X			1				X	1		1								X								
Changing Room (Shower Area)						X				X	X	X					X	8			X					X		X			1				X	1		1								X								
Storage				X					X	X	X					X		8			X			X		X										1																	
Small Group Room	X			X						X	X		X			X		9/10	X		X			X	X		X									4		1	X			1	1							X				
Storage				X					X	X	X					X		8			X			X		X										2												X					

	FINISHES																		OPENINGS									HVAC, PLUMBING AND ELECTRICAL													EQUIPMENT AND SPECIAL SYSTEMS													NOTES
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS			HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	NOTES
Career and Technical Education																																																						
CTE: Design / CAD				X						X	X		X	X	X	X	X	12/18			X				X			X									17	8	17	X	X		2	3	1					X				T
Storage			X	X						X	X					X	X	12/16			X				X												2	0	1															
CTE: Digital Media				X					X	X	X		X	X			X	12/16				X			X		X				1					30	8	30	X			2	3	1						X				Q,T
Storage			X						X	X	X						X	12/16				X			X											4																		
CTE: Digital Photography				X					X	X	X		X	X			X	12/16				X			X		X				1					30	8	30	X			2	3	1						X				Q,T
Storage			X						X	X	X						X	12/16				X			X											4																		
CTE: Fire Fighting / EMT				X					X	X	X		X	X			X					X			X		X	X			X					17	4	17	X			2	3	1						X				I
Storage			X						X	X	X						X	12/16				X			X											4																		
Medical Technology (Baylor Clinic)			X	X						X	X		X	X	X	X	X	12/18			X				X			X				X				17	8	17	X	X		2	3	1						X				C,F,I,Q,T
Waiting Area			X						X									12/16																																				
Office A	X		X	X					X	X	X					X	X				X			X	X	X	X									4	1	1					1							X				
Examination Rooms	X								X	X	X					X	X				X					X										4	1	1				1	1			X	X							
Laboratory			X	X					X	X	X					X	X				X								X	X		X				4	1	1				1	1			X	X							
Pharmacy			X	X					X	X	X					X	X				X								X	X		X				4	1	1				1	1			X	X							
Storage			X							X						X	X	12/16			X		X			X											3							1										
Restrooms						X		X		X	X	X					X				X					X					1				1	1																		
Conference Room, Small	X									X	X		X			X			X					X			X									4	1	1	X				1		X					X				
CTE: Technology / GIS				X					X	X	X		X	X			X					X			X		X									30	8	30	X			2	3	1						X				Q,T
Storage			X						X	X	X						X	12/16				X			X											4																		
CTE: Law Enforcement			X	X						X	X		X	X	X	X	X	12/18			X				X			X								17	4	17	X	X		2	3	1						X				I
Storage			X	X						X	X					X	X	12/16			X		X		X	X										3	1						1											
CTE: Welding																																																						
Lab			X	X						X	X		X	X	X	X	X	12/18			X				X			X								17	4	17	X	X		2	3	1						X				I,K,Q,T
Storage			X	X						X	X					X	X	12/16			X		X		X	X										3	1						1											
CTE: Science / Forensic Lab			X	X						X	X		X	X	X	X	X	12/18			X				X			X				X				17	8	17	X	X		2	3	1						X				C,F,I,Q,T
Tools Room			X															12/16																																				
Wet Lab Storage			X	X						X	X					X	X	12/16			X		X		X	X										3	1	1					1											
CTE: Construction Lab			X	X						X																																												
Wood Working Learning Center			X							X					X			12/18			X							X	X	X				1	X	30	8	30	X			2	3	1						X				Q,T
Office	X		X	X						X	X					X	X				X			X	X	X	X									4	1	1					1							X				
Tool Storage			X							X					X	X	X	12/16			X		X			X											3	1	1				1											
Storage			X							X					X	X	X	12/16			X		X			X											3						1											
Spray Booth			X							X					X	X	X	12/16			X		X			X		X	X	X							3																	
CTE: Manufacturing Precision Metal Working Lab																																																						
Learning Center			X							X					X			12/18			X							X	X	X				1	X	30	8	30	X			2	3	1						X				Q,T
Office	X		X	X						X	X					X	X				X			X	X	X	X									4	1	1					1							X				
Tool Storage			X							X					X	X	X	12/16			X		X			X											3	1	1				1											
Storage			X							X					X	X	X	12/16			X		X			X											3						1											

JROTC

FINISHES

	FLOOR									PARTITIONS					CEILING			
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max
Learning Center A			X	X					X	X	X			X	X	X		9/10
Learning Center B			X	X					X	X	X			X	X	X		9/10
Cadet Small Group Collaboration	X								X	X	X					X		
Arms / Weapons Storage			X						X	X	X				X	X		
Uniform / Drill Team / Color Guard Storage															X	X		
Instructors' Center				X					X	X	X					X		
Chair, table, target, storage															X	X		

OPENINGS

	DOORS						WINDOWS		
	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure
Learning Center A	X		X	X		X			
Learning Center B	X		X	X		X			
Cadet Small Group Collaboration	X		X			X			X
Arms / Weapons Storage			X	X				X	
Uniform / Drill Team / Color Guard Storage		X							
Instructors' Center			X			X	X		X
Chair, table, target, storage				X	X				

HVAC, PLUMBING AND ELECTRICAL

	HVAC			PLUMBING					ELECTRICAL				
	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty
Learning Center A									8	3	6	X	
Learning Center B									8	3	6	X	
Cadet Small Group Collaboration									4	1	2	X	
Arms / Weapons Storage										X			
Uniform / Drill Team / Color Guard Storage									8	X			
Instructors' Center									4	1	2	X	
Chair, table, target, storage										X			

EQUIPMENT AND SPECIAL SYSTEMS

	EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				NOTES
	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Intercom Speaker			Specialty	
Learning Center A		2	3	1						X				
Learning Center B		2	3	1						X				
Cadet Small Group Collaboration		1	1							X				D
Arms / Weapons Storage									2					
Uniform / Drill Team / Color Guard Storage									2					
Instructors' Center		1	1							X				
Chair, table, target, storage									2					

	FINISHES																		OPENINGS								
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS		
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure
Visual Arts																											
Visual Arts Learning Center				X					X		X		X			X		10/12			X			X			X
Kiln Room				X					X		X					X					X			X		X	
Storage Room				X					X		X					X					X			X		X	

	HVAC, PLUMBING AND ELECTRICAL													EQUIPMENT AND SPECIAL SYSTEMS													NOTES
	HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	
Visual Arts																											
Visual Arts Learning Center				2				X	8	4	6	X			2	3	1		X	X		X	X				P
Kiln Room	X								1				X		X	X											Q
Storage Room																						X					H

FINISH, FENESTRATION & INFRASTRUCTURE MATRIX

HISD LEE HIGH SCHOOL

	FINISHES																	OPENINGS									HVAC, PLUMBING AND ELECTRICAL												EQUIPMENT AND SPECIAL SYSTEMS															NOTES
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS			HVAC			PLUMBING			ELECTRICAL					EQUIPMENT					BUILT-INS			SPECIAL SYSTEMS						
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain (dual height)	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone				Specialty	
Performing Arts																																																				
Instrumental Music Learning Center				X					X	X	X					X		18/22		X	X			X	X		X					1				10	2	6	X			2	3	1					X	X					E=optional
Instrument Storage				X					X	X	X					X				X	X			X	X		X					1				2		1			X	1	1					X						I
Uniform / General Storage				X					X	X	X					X					X			X	X											2		1				1	1					X						
Music Storage/ Library				X					X	X	X					X					X			X	X											2		1				1	1					X						
Practice Rooms	X								X	X	X				X	X					X			X												X		X				1											
Vocal Music Learning Center	X									X	X					X		16/20		X	X			X	X		X					1				6	2	6	X			1	3	1					X	X					E-optional I
Uniform / General Storage				X					X	X	X					X					X			X	X											2		1				1	1					X						
Music Storage / Library				X					X	X	X					X					X			X	X											2		1				1	1					X						
Practice Rooms	X								X	X	X				X	X					X			X												X		X				1											
Shared Workroom				X					X	X	X					X					X			X	X											6	4	3	X			1	1						X					
Shared Ensemble Room				X					X	X	X					X					X			X	X											X	X	X	X			1	1											
Practice Rooms	X								X	X	X				X	X					X			X												X		X				1											
Black Box/ Drama/ Theater Learning Center				X					X	X	X				X	X					X	X			X											X	x	X		X					X								
Costume Storage (Boys/Girls)				X					X	X	X				X	X		18/20			X				X											2						1	4											
Prop Storage			X						X	X	X				X	X					X	X			X											2						1	4											
Scene Shop			X						X	X	X				X	X					X	X			X											2						1	4											
Scene Storage			X						X	X	X				X	X					X	X			X											2						1	4											
Multipurpose Learning Center (Dance)									X	X	X				X	X		18/22			X	X														X	x	X		X					X								
Storage				X					X	X	X				X	X					X	X			X											2						1	4											
Auditorium	X					X			X	X	X		X		X	X	X		X		X			X			X									X			X	X				X			X							R
Stage		X								X	X				X																					X	X	X																J
Control Room				X					X	X	X		X		X	X			X		X			X												X	X	X				1	1			X		X						
Lobby (Shared with gym)				X					X	X	X					X	X					X		X							X						X	X	X				X		X		X						
Concessions (Shared with gym)				X					X	X	X				X	X					X			X							X				X	X	X					X	X				X		X					
Dressing Room/ Restroom				X		X			X	X	X	X			X	X					X					X					X			X					X		X	X				X								

FINISH, FENESTRATION & INFRASTRUCTURE MATRIX

HISD LEE HIGH SCHOOL

	FINISHES																		OPENINGS									HVAC, PLUMBING AND ELECTRICAL													EQUIPMENT AND SPECIAL SYSTEMS													Notes
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS			HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylighting	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain (dual height)	Eye Wash	Floor drain	Duplex	Quad	Data/Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard/Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	
Physical Education / Athletics																																																						
Physical Education / Athletics / Auditorium Lobby				X					X	X	X		X			X			X					X			X						2			8		1	X	X			2							X				D, R
Gymnasium		X								X	X				X			23		X				X			X									8	2	2	X	X										X				E,Q,R
Auxiliary Gymnasium		X								X	X				X			23		X				X			X									8	2	2	X	X										X				E,Q,R
Weight Room				X					X	X	X					X		10/12			X			X	X											4	1	1	X			1	2							X				B,E,Q
Boys/Girls Athletic Locker Room				X		X		X		X	X					X					X				X										X	4		2			X	1	2							X				E
Boys/Girls P.E. Locker Rooms				X		X		X		X	X					X					X				X										X	4		2			X	1	2							X				E
Student Toilet / Showers				X		X		X		X	X	X					X			X						X					X				X																			
Adult Toilet / Shower / Locker				X		X		X		X	X	X					X			X						X					X				X						X													
Athletic Director (Office C)				X					X	X	X					X					X			X	X		X									4	1	2	X			1	1							X				
Office (shared)				X					X	X	X					X					X			X			X									8	1	2	X			1	2							X				
Training Room				X		X		X		X	X					X				X				X	X						1				X	8	1	2	X	X		1	1			X	X			X				E,Q
Laundry				X		X		X		X	X					X				X				X		X		X			1				X	1				X									X				X	Q
P.E. Equipment Storage				X					X	X	X					X				X				X		X										1																		
Athletic Equipment Storage				X					X	X	X					X				X				X		X										1																		

	FINISHES																		OPENINGS									HVAC, PLUMBING AND ELECTRICAL													EQUIPMENT AND SPECIAL SYSTEMS													NOTES
	FLOOR									PARTITIONS					CEILING				DOORS						WINDOWS			HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylighting	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	
Administration / Guidance																																																						
Administration																																																						
Main Reception	X			X					X	X	X		X			X			X					X	X		X									7	2	4	X				X							X				A, D
Office A	X									X	X					X					X			X			X									4	1	2	X			1	1							X				
Office C (Principal)	X									X	X					X					X			X			X									6	2	4	X			1	1							X				D
Principal's Restroom						X		X		X	X	X					X				X					X					1				1	1																		
Office B (A.P.)	X									X	X					X					X			X			X									4	1	2	X			1	1							X				
A.P. Reception / Waiting	X									X	X		X			X			X					X			X									4	1	2	X				1							X				
Main Conference Room	X									X	X		X			X			X					X			X									6	2	4	X			1	1							X				D
Small Conference Room	X									X	X		X			X			X					X			X									4	1	2	X			1	1							X				D
Storage				X					X	X	X					X					X			X		X										1		1																
Office A (Security)	X									X	X					X					X			X			X									4	1	2	X			1	1							X				
Health Clinic				X					X	X	X					X					X			X	X		X				1			X		6	1	2	X			1	1			X	X			X				K
Reception / Waiting				X					X	X	X					X			X		X			X	X		X									4	1	2					1							X				
Office A				X					X	X	X					X					X			X	X		X									4	1	2	X			1	1							X				
Restroom						X		X		X	X	X					X				X					X					1				1	1																		
Guidance / Student Services																																																						
Reception / Guidance	X									X	X		X			X			X					X			X									4	2	4					1							X				
Office B (Attendance/Registrar/Counselor)	X									X	X					X					X			X			X									4	1	2	X			1	1							X				
Conference Room, Small	X									X	X		X			X			X					X			X									4	1	2	X			1	1							X				
Records / File Room				X					X	X	X					X					X			X		X										1		1				1	1						X					
Administration Workroom / Break Room	X			X					X	X	X					X					X			X			X				1				X	8	2	4		X		1	1			X	X		X	X				Q
Mail Room				X					X	X	X					X								X			X								X	2		1					1							X				
Shared																																																						
Professional Development / Data Center	X			X					X	X	X					X					X			X			X									6	2	4				1	2							X				D
Teacher Work Center	X			X					X	X	X					X					X			X	X		X				X					X	X	X	X			1	1			X	X			X				
Office B (Itinerant)	X									X	X					X					X			X			X									6	2	4	X			1	1							X				
Multi-use / Community Room	X			X					X	X	X		X			X		9/10	X					X			X									8	4	8	X			2	3	1						X				
New Mother's Room	X								X	X	X		X			X		9/10	X					X			X									1														X				
IT Support				X					X	X	X				**X**	X					X					X		X								16	8	32	X											X				

FINISH, FENESTRATION & INFRASTRUCTURE MATRIX

HISD LEE HIGH SCHOOL

	FINISHES																				OPENINGS											HVAC, PLUMBING AND ELECTRICAL															EQUIPMENT AND SPECIAL SYSTEMS												
	FLOOR									PARTITIONS						CEILING				DOORS						WINDOWS			HVAC			PLUMBING				ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	Manufacturer's Panels	CMU or GWB	Ceramic Tile	Glass Wall	Markable Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Ceiling Height Min/Max	Alumin / Storefront	Hollow Metal	Wood, plastic laminate	Roll-up, exterior-insulated	Roll-up, interior door/grille	View Lite	Interior	None	Daylighting	Exhaust to exterior	Fume/Exhaust Hood	Dust Collection System	Sink	Natural Gas (double outlet @ each)	Drinking fountain	Eye wash/Shower	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	NOTES
Food Service																																																						
Food Preparation																																																					
Cooler							X	X		X							Mfr.				Mfr.																																		
Freezer							X	X		X							Mfr.				Mfr.						X																										
Dry Storage							X	X			X						X					X	X			X		X											X														
Kitchen Manager's Office							X	X	X		X	X	X				X					X	X			X	X	X										2	2	2	X			X	X							X			
Kitchen Preparation Area			X				X	X				X					X					X	X			X			X	X		X				X	as required for equipt																
Laundry Area			X				X	X			X	X					X					X	X			X		X								X	1			X													N,O
Custodial			X				X	X			X	X					X					X	X			X		X	X							X	1																N,O
Locker Room			X			X	X	X			X	X					X					X	X				X		X							X	1			X		X									X		
Restroom			X			X	X	X			X	X					X					X	X				X			X					X	1																
Serving Area			X				X	X			X	X					X					X	X		X	X	X		X					X	X	X	1 per POS															
Student Dining																																																						
Commons Area				X					X		X				X	X	X	X	16/20			X	X		X	X	X		X								12	4	4	X			X	X							X			R
Dining Commons Storage			X	X					X		X											X	X			X	X										1																

	FINISHES																			OPENINGS									HVAC, PLUMBING AND ELECTRICAL																			EQUIPMENT AND SPECIAL SYSTEMS														Notes
	FLOOR									PARTITIONS						CEILING				DOORS						WINDOWS			HVAC			PLUMBING					ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Wood	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resinous	Resilient	CMU	Gypsum Wallboard	FRP	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical	Gypsum Board	Ceiling Height Min/Max	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure	Exhaust to exterior	Fume Hood	Dust Collection System	Sink	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard	Interactive Board	Projection Screen	Base Cabinets w/ Counters	Wall Cabinets	Tall Storage Cabinets	Built-In Shelves	Phone			Specialty	
Custodial / Maintenance																																																							
Receiving Entry			X							X							X		16/20		X		X		X										X	X	4		1												X				
Office, Plant Engineer				X					X	X	X						X				X				X	X		X									4	2	2	X			1	1							X				
Custodial / Maintenance Storage			X	X					X	X	X						X				X				X		X									X	6		1				1	1											
Supply Storage																																																							
IT Support				X					X	X	X						X				X				X		X	X									12	4	6				1	1											
Custodial Closets			X			X		X		X		X					X	X			X	X					X									X	1																		N

FINISH, FENESTRATION & INFRASTRUCTURE MATRIX

HISD LEE HIGH SCHOOL

	FINISHES																			OPENINGS									HVAC, PLUMBING AND ELECTRICAL														EQUIPMENT AND SPECIAL SYSTEMS													NOTES
	FLOOR							FLOOR BASE			PARTITIONS							CEILING			DOORS							WINDOWS			HVAC			PLUMBING							ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS					
	Carpet	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resilient	None	Rubber Cove	Tile	CMU	Reinforced Concrete	Gypsum Wallboard	Plaster	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	Interior	None	Daylight Exposure	Exhaust to exterior	Fume Hood	Dust Collection System	Domestic Water, cold	Domestic Water, hot	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Taddboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Phone			Specialty	
Building Support																																																						
Corridors		X	X		X		X		X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X			X																										
Student Restrooms		X			X		X		X	X	X	X	X	X	X	X		X	X	X			X			X			X									X	X		X	X	X											
Adult Restrooms		X			X		X		X	X	X	X	X	X	X	X		X	X	X			X			X			X									X	X		X	X	X											
Stair, Main / Open		X	X				X		X	X	X	X	X	X	X	X		X	X	X					X				X																									
Stair, Exit		X	X					X	X		X	X	X					X		X		X					X																											
Mechanical Room		X																																					1	2														
Electrical Room		X																																					1	2														
Building Data Room			X				X																																															
Elevator					X		X																																															3
Elevator Machine Room		X					X	X	X		X	X	X					X	X			X	X				X																											

	FINISHES																				OPENINGS									HVAC, PLUMBING AND ELECTRICAL														EQUIPMENT AND SPECIAL SYSTEMS													NOTES
	FLOOR							FLOOR BASE			PARTITIONS							CEILING			DOORS						WINDOWS			HVAC			PLUMBING						ELECTRICAL					EQUIPMENT					BUILT-INS				SPECIAL SYSTEMS				
	Carpet	Concrete	Polished or Stained Concrete	Sports	Ceramic Tile	Quarry Tile	Resilient	None	Rubber Cove	Tile	CMU	Reinforced Concrete	Gypsum Wallboard	Plaster	Ceramic Tile	Glass Wall	Folding Wall	Exposed Structure	Acoustical Ceiling Tile	Gypsum Wallboard	Aluminum	Hollow Metal	Wood, plastic laminate	Roll-up, interior non-insulated	Roll-up, interior grille	View Lite	None	Interior	Daylight Exposure	Exhaust to exterior	Fume Hood	Dust Collection System	Domestic Water, cold	Domestic Water, hot	Natural Gas	Drinking fountain	Eye wash	Floor drain	Duplex	Quad	Data / Voice	Switching to Allow Multiple Light Levels	Specialty	Lockers	Markerboard	Tackboard / Tackwall	Interactive Board	Projection Screen	Base Cabinets with Counters	Wall Cabinets	Tall Storage Cabinets	Built-in Shelves	Intercom Speaker	Call Button	Phone	Specialty	
Childcare																																																									
Office (Director)	X								X		X		X			X					x		X				X		X										4	1	2	X			1	1							X		X		
Kitchen/Storage		X	X				X		X		X		X					X	X			X	X			X				X	X	X	X	X	X			X	as required for equipt																		
Student Restrooms		X			X		X		X	X	X	X	X	X	X	X		X	X	X			X			X			X	X			X	X				X	X	X	X												X	X			
Staff Restrooms		X			X		X		X	X	X	X	X	X	X	X		X	X	X			X			X			X	X			X	X				X	X	X	X												X	X			
Outdoor Storage		X						X			X	X						X					X		X		X																														
New Mother's Room	X								X		X		X						X	X			X			X			X										4	1	2	X			1	1											
Infant Room	X								X		X		X						X	X			X			X			X							X			4	1	2	X			1	1							X	X			
Toddler / Preschool Learning Center	X								X		X		X						X	X			X			X			X							X			4	1	2	X			1	1							X	X			