HIGH SCHOOL MUSIC (VOCAL)

New Construction

I. PROGRAM PHILOSOPHY

Music is one of the primary expressions of every culture. It is functional art, a fine art and a science. As such, it must be creatively cultivated, skillfully mastered, emotionally appreciated and intellectually understood. Music wisdom is not born from the acquisition of simple skill or the development of rote motor responses, but evolves from experience, judgment, thought and intrinsic concern.

II. PROGRAM GOALS

1. Music should enable each individual to develop his/her creative and expressive natures.
2. Music should enable each individual to find satisfaction and meaning in a musical experience.
3. Music should enable each individual to develop skills to express his/her emotions through music.
4. Music should enable each individual to exercise judgment about music.
5. Music should enable each individual to develop musical sensitivity.
6. Music should enable each individual to increase his/her understanding of the world and its culture.
7. Music should enable each individual to develop his/her principles of loyalty and responsibility in relation to home, school and nation.

III. PROGRAM ACTIVITIES

In vocal music each student will participate in small and large ensembles in the study of vocal technique, literature, sight reading and movement to rhythm. Students will listen and view audio visuals, participate in discussions, demonstrations, use technology, presentations, concerts, and listen to lectures.

IV. ORGANIZATIONAL NOMENCLATURE

Teacher – Student Ratio:	1:10 – 1:120
Student Capacity Per Period:	24 per room
Total Number of Teachers:	2
Total Number Aides:	0 (if applicable)
Grade Levels or Age Levels for Which Program is intended:	9 – 12
Hours per Day Space Will Be Used:	7

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V. INNOVATIONS, EXPERIMENTAL IDEAS, OTHER PLANNED USES

Vocal Rehearsal Room will be used for small public concerts

Area must be capable of being secured from remainder of school plant to facilitate evening use.

In Vocal, Material Storage and Robe Storage were combined

VI. SQUARE FOOTAGE CHANGES EXPLANATION THAT VARIES FROM APPROVED FACILITIES LIST.

NA

VII. SPACE CHART

SPACE RELATIONSHIPS

THE PA/E IS TO CONTACT THE VOCAL DIRECTOR AT THE SCHOOL FOR SPATIAL RELATIONSHIPS.

VIII. PROGRAM FURNITURE AND EQUIPMENT REQUEST FORM
*Shown on drawings
purchased and installed by contractor
The Supervisor of Music is to be contacted for approval of items to be purchased.

Space or Area	Number of Items	Description of Furniture/Equipment
MATERIAL / ROBE STORAGE		Built-In
	*#1	Full-Length Mirror (22" x 60")
	*#1	Washer/Dryer, to be shared by Vocal and Band
VOICE REHEARSAL ROOM		
	*1	Piano, 5'7" Grand with Bench, Dolly, Cover and Humidity Control System
	*1	Conductor's System, Wenger #1110225 or equivalent
	*110	Music Posture Student Chairs Wenger #0930000 or equivalent
	*7	Sections of 3-Steps Risers Wenger #024E806 or equivalent with 7 Back Rails Wenger #024E778
	9	Acoustical Shell Wenger #L015 or equivalent
	8	Acoustical Filler Wenger #L015 or equivalent
	*#1	Full Length Mirror (22" x 60")
	*2	Choral Folio Cabinets with Doors and Casters Wenger #146D542 or equivalent
	*1	Stereo System: dual tape, amplifier, photograph, speakers, CD player and recording capabilities
	*1	Locked cabinet 42"W x 45.5"H x 24"D for phonograph, tape recorder, amplifier, CD player, etc. Wenger#147C520 or equivalent
	*1	Interactive projector and standard white boards
	5	Computer workstations with Power PC (CD ROM) and one Laser Printer (Wenger 145E 520 or equal)

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Space or Area	Number of Items	Description of Furniture/Equipment
VOCAL ENSEMBLE AND ONE PRACTICE ROOM		
	*4	Studio Upright Pianos with bench, Dolly, Cover and Humidity Control System
	*20	Music Posture Student Chairs, Wenger #0930000 or equivalent
	*#1	Large Mirror on wall in Ensemble Room 12'L x 6'8"H
TEACHER PLANNING (VOCAL)		
	*1	Teacher's Desk and Chair with casters
	*2	Four-Drawer File Cabinets, Letter Size
	*2	Office Chairs
	1	Computer Workstations with Power PC (CD ROM) with Laser Printer and Word Processing Bundle
VOCAL RECORDING ROOM		
	3	Microcomputers with Movable Workstations with lockable doors
	1	Computer Laser Printer
	1	Keyboard Synthesizer
	3	Computer Chairs
TWO PRACTICE ROOMS		
	*4	Studio Upright Pianos with bench, Dolly, Cover and Humidity Control System
	*20	Music Posture Student Chairs, Wenger #0930000 or equivalent
	*#1	Large Mirror on wall in Ensemble Room 12'L x 6'8"H
REFERENCE		
	*1	Table
	*#4	Wenger Storage Systems
	*2	Office Chairs
	1	Computer Workstations with Power PC (CD ROM) with Laser Printer and Word Processing Bundle

XI. SPECIAL CONSIDERATIONS

- Heating/Cooling/Ventilation

  It is strongly recommended that music facilities be designed for all weather air conditioning and heating. Because of the large class size, and because wind players and singers need large amounts of fresh air, it is necessary to have complete change of air in the room every three minutes. It is very important that any blowers be located outside of the building so that the sound of the fans will not disturb the rehearsal. The air should enter via silent duct work and registers. Another point of care is in the engineering of duct work. The duct system should be so designed that a separate duct system services each large rehearsal room. For other rooms in the area, an off-set insulated, baffled duct system should be used to minimize the problem. It is absolutely necessary that sound is not able to carry through heating or cooling duct work from any one room to another.

  HVAC should be designed or re-designed to accommodate use during evening classes and/or performances without the necessity for operating the entire system. Thermostats are to be located in the Band and Vocal Rehearsal Rooms.

  Provide for continuous humidity and temperature control in Uniform (band), Robe (Vocal), and Instrument Storage Rooms, twenty-four hours per day, year around and independent of the building air conditioning system.

- Acoustics

  This topic is of primary importance and the acoustical design must be very carefully designed or re-designed to provide the optimum rehearsal and teaching conditions. Some considerations follow:

  a. Two Main acoustical factors must exist; optimum acoustical environment and optimum hearing conditions by director and every student.
  b. Acoustical environment: the maximum background noise level is 25 decibels with the optimum much lower.
  c. Hearing conditions:

     1. Reverberation time to allow for the separation of successive sounds is a critical problem in designing rehearsal facilities. What would be optimum for a concert hall, for example, would not be at all satisfactory for a music room. The optimum reverberation time for a large rehearsal room is 1.1 seconds. If the time falls below .8 seconds for the band area, or 1.0 seconds for the vocal area, the room becomes too dead for effective use. If the time is much greater than 1.1 seconds for band or 1.2 seconds for vocal, then boom, echo and over-loudness will result, causing severe distortion of sound and producing an impossible rehearsal situation. It should be noted that the reverberation times for band and vocal rehearsal rooms are different and should not be planned in the same way.

     2. Proper distribution of sound depends upon the uniform diffusion of all sounds throughout the room.

     3. Frequency levels throughout the full spectrum of audible sound must be allowed to be diffused equally. If certain types of acoustical treatment are used, they may cut down the high frequencies much more than the low frequencies or vice-versa. A proper balancing of materials is essential to eliminate the obvious distortion caused by lack of attention to this detail.

XI. SPECIAL CONSIDERATIONS (continued)

- Acoustics (continued)

    4. Since the field of acoustics is so complicated and because the acoustics of a room depend on so many factors, it is not feasible to go into greater detail in this document. However, it is absolutely essential that only the most expert advice be sought in designing a music vocal room. This special advice must function from the very first conception of the shape and size of the room to the very last detail of the final plans.

    5. The use of soft materials for acoustical treatment should be limited in all areas of the building to locations higher than students can bump into or reach.

- Floor

  Carpeted throughout Music spaces

  Risers in Vocal Rehearsal Room (minimum depth of 3.5 feet)

- Walls

  All walls acoustically treated in practice rooms, to prevent sound transfer to adjacent spaces used for instruction. No temporary or demountable walls. All walls are to be fully constructed to roof deck. **Non-paralleled walls** in practice rooms.

- Ceiling

  Vocal – Acoustical treatment, minimum of 14 foot ceilings for rehearsal areas. This would include the height from the highest riser.

- Lighting

  Spot lights (with dimmers) in Vocal Rehearsal Room.
  Two spotlight groups
  a. Perimeter of room
  b. Strip of spots to light the podium area
  c. Both groups on rheostat so that the rehearsal facility can be used as a chamber theater.

- Doors

  Double panes of glass are recommended. Doors should have a continuous rubber sound seal. Doors on practice rooms are to be constructed to prevent sound transfer from adjacent spaces used for instruction.

  Doors opening into vocal spaces shall be recessed.

  Lockable doors in Practice Rooms and Recording Rooms spaces.

XI. SPECIAL CONSIDERATIONS (continued)

- Electrical

  Each wall should have at least two duplex outlets. Use only heavy duty cable line for recording purposes to reduce interference from computers. Microphone cable should not run parallel with electrical wiring. This wiring should be shielded and Teflon coated. Permanent microphones should be suspended 2' below the ceiling.

  Provide wiring for speakers from sound cabinet, as needed

  Two communications outlets in each Practice Room

  One communication outlet in each Recording Room

- Safety

  Keyed locks should be separated as follows:
  1. The Recording room should be on the same key as Teacher Planning, Reference Room, Uniform Storage, Instrument Storage and Instrument Repair.
  2. Practice rooms should be on the same key as Rehearsal and Ensemble.

- Service Drives

  Because of the heavy use of music facilities at night, and also because of the need to transport students and equipment by bus and truck:

  a. Free access must be provided via hard surfaced roadways to the nearest street.
  b. The service road should be brought up to the loading doors of the building, especially to the instrumental side, because of the necessity of loading heavy equipment for trips.
  c. Service roadways and exterior loading areas should be well lighted for night use.

- Built-in Cabinetry

  A. Built-in work counter/Storage Space

  (The Supervisor of Music is to be consulted on specifications when plans are drawn).

  Built-in bookshelves: Open bookcases or shelves near entrance of the Vocal rehearsal room for students' books (for 120 students), purchased out of Furniture, Fixtures, Equipment & Technology (FFE&T).

  1. Base Cabinet (12' long x 2' wide x 3' high) with stainless steel sink with hot and cold water in Vocal Reference Room. Wall Cabinet 12' long x 12" wide x 30" high with closed adjustable shelving and lockable.

  2. Provide lockable storage in Vocal Room for sound equipment.

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XI. SPECIAL CONSIDERATIONS (continued)

- Built-in Cabinetry (continued)

B. Built-in cabinets/shelving

1. Material/Robe Storage (Vocal)

a. ROBES: Five open cabinets: 4' wide x 80" high and 24" (I.S.) depth with hanging rod. Build 5" off floor to insure protection from water. Rod 56" off floor of cabinet and three inches below a shelf in top of the cabinet.
b. JACKETS: Two 4' wide x 80" high x 24" deep (I.S.) cabinets. Each cabinet is divided into two sections (40" high) with hanging bars since jackets are one half the length of robes.
c. Dutch door with drop shelf to be placed in this room.

C. Built-in Instructional Aids

1. Markerboards and tackboards: A large magnetic markerboard area should be provided at the center of the rehearsal room on the side which the students face. A minimum area of 8' x 4' of plain magnetic markerboard should be adjacent to a minimum area of 8' x 4' of magnetic markerboard containing permanent music Staves. The five line staves should be approximately 6" high and 1" between the lines, and should run the full width of the board. The top staff should have its top line approximately 6" below the top of the board. A space of approximately 4" should separate each staff. This will allow for 4 staves of 4" or 16" in all. No markings are needed on the staves as they will be supplied by the teacher.

2. Replace existing old chalk boards with new markerboards. On the right hand side of the new replacement markerboards containing permanent music staves, install an interactive projector in the center of the new markerboards. Markerboards will be purchased and provided by the district.

3. Provide cabinet with two shelves for sound enhancement equipment and amplifier, purchased and provided by the district. Cabinet and equipment shall be located at, or adjacent to, the major teaching wall on the interactive projector connection side. The cabinet shall be 17" wide and 25" deep with a slide tray top (4" high), fold up side shelf (approximately 12" wide and 15" long) and two doors (one on front and the other on opposite side of fold up shelf). The slide tray shall hold a document presenter provided by owner. The back of the cabinet must allow connections of white speaker wire for the four speakers used with sound enhancement equipment, a network connection, connection to interactive projector and power.

4. Install the interactive projector in the center of the markerboards.

5. Magnetic markerboards to have eraser tray, flag holder and demountable map railing.

6. Verify that a non-glare glass enclosed tackboard area exists on an outside wall where traffic is the heaviest and evaluate the condition of enclosed bulletin board. Location to be determined by the Supervisor of Music Education.

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XI. SPECIAL CONSIDERATIONS (continued)

- Built-in Cabinetry (continued)

C. Built-in Instructional Aids (continued)

7. Evaluate the condition and quantity of existing tackboard and provide recommendation. A rather large amount of tackboard should be provided because of the vast amount of announcements and information that must be posted. A 4' x 8' tackboard should be located near the main entrance. At least one 4' x 4' tackboard should be provided in another location in the rehearsal room where it can be easily observed.

D. Other Built-ins

Any substitutes for Wenger cabinets or equivalents must be approved by the Supervisor of Music Education.

1. Reference, Vocal
   a. Seven-Shelf Music Library Units: Seven at 92-1/2" high x 16" deep x 44" long with adjustable shelves (similar to Wenger 173A700).
   b. Cabinet with lockable doors and adjustable shelves; 84" high x 38" wide x 16" deep (I.S.)

Built-in sound cabinet in Vocal Rehearsal Room 84" high x 48" wide x 18" deep.

- Other Considerations

The Supervisor of Music Education is to be consulted on specifications when plans are drawn.

A. Size and Shape – Vocal
1. Provide 20 feet in front of the singers to allow for proper diffusion of sound, and also to serve as an area for observers, recording equipment, piano and portable equipment, and rehearsal activity.
2. Ceiling height should be a minimum of 14', optimum of 16', depending upon the acoustical treatment and architectural shape of the room. National Broadcasting Company recommended room proportions of H: W: L—2:3:5.
3. Non parallel walls are necessary. Ceiling should also be non-parallel to floor. Moderately splayed (zigzag) walls may be utilized.
4. The practice room must have soundproofing and acoustical treatment.
5. Band and vocal rehearsal rooms should face diagonally (corner to corner) facing opposite directions.
6. Air conditioner in Robe Storage will run 24 hours per day for 12 months.

B. Adjacent to auditorium or concert site facility

C. Near football field

D. Covered walkways near the buildings and between the buildings. The auditorium and covered walkways should be well lighted for night use.

E. Overall campus planning must prohibit sound transmission from other areas into the music vocal facility.

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XI. SPECIAL CONSIDERATIONS (continued)

- Other Considerations (continued)

F. Building must be acoustically designed so that transmission of sound is contained within the separate sections of the music building, so as not to interfere with other music rehearsals or other school areas.

G. Adjacent rest rooms which may be opened at night for workshops and rehearsals without entering the rest of the building.

H. Follow instructions carefully on keyed locks as listed under Safety (13).

I. Careful selection of paints is necessary in order to maintain proper acoustics. There cannot be any use of gloss/high gloss paints in any area used for practice performance.

J. Intercom speakers in main and large ensemble rooms

K. Provide the ability to hang pictures in lab areas.

L. No hidden corners in labs.

M. If possible connect music Vocal suite to theatre by covered walkway.

N. Robe storage area needs to be placed for easy access by students.

O. Located on an access road for loading and unloading instruments.

P. Access to facility during nights and weekends.