# BARTLETT YANCEY HIGH SCHOOL FACILITIES STUDY

## Summary of Probable Construction Costs – March 2018

### A. New Administration, Classroom and Science Lab Addition

| Description | Quantity | Unit | Unit Cost | Total Cost |
|---|---|---|---|---|
| • Demolition Hall 1, 2 and 3 (Inc. Asbestos Removal) | | Lump Sum | | $250,000 |
| • New Two (2) Story Building<br>o Staff Parking and Parent Drop Off<br>o Improve Road from Vocational Building to New Addition<br>o Digital Marquee | 118,561 | SF | 200 | $23,712,200 |
| • Enclosed Corridors<br>o Existing Dining to New Building<br>o New Building to Vocational<br>o Vocational to Vocational Addition<br>o Vocational Addition to East Wing | 6,194 | SF | 125 | $774,250 |
| • Canopies<br>o Bus Parking to New Gym<br>o East Wing to Civic Center | 5,600 | SF | 50 | $280,000 |
| • Temporary Used Mobile Units for Construction Phasing (12 month lease)<br>o 2 – 12 classroom modular units and 1 – 8 classroom modular unit | | Lump Sum | | $802,720 |
| | | **Total Construction Costs** | | **$25,819,170** |
| • Related Project Costs<br>o Construction Contingency<br>o A/E Fees<br>o Geotechnical, Construction Testing and Special Inspections<br>o Surveying<br>o Utilities (Electrical Service, Water, Sewer) | | | | $3,872,875 |
| | | **Total Project Costs Part A** | | **$29,692,045** |

### B. Renovations and Site Improvements

| Description | Quantity | Unit | Unit Cost | Total Cost |
|---|---|---|---|---|
| • Existing Kitchen/Dining Area<br>o Art, HE, Dance, Health Classrooms<br>o General Storage, Book Storage, etc. | 8,172 | SF | 125 | $1,021,500 |
| • Alternative Education<br>o Classroom/Toilet Addition | | Lump Sum | | $190,000 |
| • Athletic Facilities | | | | |
| o Concessions, Restrooms, Locker Rooms | 7,000 | SF | 175 | $1,225,000 |
| o Home Bleachers and Press Box (See Note 1 Below) | | Lump Sum | | $320,000 |
| o 8 Lane Track (See Note 1 Below)<br>- Paving, Surface and Lane Markings | | Lump Sum | | $250,000 |
| o Relocate Softball Field | | Lump Sum | | $50,000 |
| • Miscellaneous | | | | |
| o Chain Link Fencing and Gates | 3,500 | LF | 24 | $84,000 |
| o Decorative Fencing and Gates | 500 | LF | 40 | $20,000 |
| o Drive Gate | 1 | EA | 5,000 | $5,000 |
| o Dumpster Pad | | Lump Sum | | $2,500 |
| o Paved Walkway to PCC | 266 | SY | 35 | $9,310 |
| | | **Total Construction Costs** | | **$3,177,310** |
| • Related Project Costs<br>o Construction Contingency<br>o A/E Fees (Includes A/E Fees for Part C Alternates) | | | | $913,585 |
| | | **Total Project Costs Part B** | | **$4,090,895** |
| | | **Total Project Costs Parts A and B** | | **$33,782,940** |

## C. Alternates

| Description | Quantity | Unit | Unit Cost | Total Cost |
|---|---|---|---|---|
| • Gymnasium (Page Gym) | | Lump Sum | | $1,437,477 |
| o Expand Lobby into Senior Dining | | | | |
| o Generator | | | | |
| • Old Gymnasium | | Lump Sum | | $695,785 |
| o Gym, Lobby, Wrestling Practice, Storage | | | | |
| • Vocational Building | | Lump Sum | | $482,941 |
| • Vocational Addition | | Lump Sum | | $97,760 |
| • East Wing | | Lump Sum | | $1,066,500 |
| • Civic Center | | Lump Sum | | $1,609,725 |
| • Athletic Facilities | | | | |
| o Storage Weightlifting | 5,000 | SF | 150 | $750,000 |
| o Expand Bus Parking Lot | 1,500 | SY | 35 | $52,500 |
| | | **Total Construction Costs** | | **$6,192,688** |
| • Related Project Costs | | | | $491,914 |
| o Construction Contingency | | | | |
| | | **Total Project Costs Part C** | | **$6,684,602** |

Note 1: Home bleachers and press box are replaced if lanes are added to the track.

## D. Cost Estimate Information

1. Inflation: Add 4% per year to construction costs for inflation after January 2019.

2. Renovations costs include the following:

   - Page Gymnasium
     - Replace: bleachers, acoustical tile ceilings, light fixtures, HVAC equipment and controls, gym vinyl backed insulation, exterior EIFS, trophy cases.
     - Recoat metal roof and expand lobby into senior dining area.
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).
     - Generator to serve gym, kitchen and dining.
   - Old Gymnasium
     - Replace: gym windows, electrical panels and wiring.
     - Renovate locker room area
     - New HVAC system and controls
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).
   - Existing Kitchen/Dining Area
     - Complete interior demolition and renovation to accommodate home economics, art, dance, 2 health classrooms.
     - New HVAC system and controls.
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).
   - Vocational Building
     - Replace: windows, acoustical tile ceilings in classrooms and corridors, light fixtures, HVAC equipment and controls
     - Renovate toilets
     - Install Fritz tile in main corridor
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).
   - Vocational Addition
     - New HVAC controls only
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).
   - East Wing
     - Replace: windows, replace flat roofs, acoustical tile ceilings, light fixtures, HVAC equipment and controls.
     - Renovate toilets.
     - Demo mobile storage unit.
     - FA and security improvements (access control, CCTV, intrusion detection, intercom).

- Civic Center
  - Replace: bleacher type seats, roof, acoustical tile ceilings, light fixtures, windows, HVAC equipment and controls
  - Band Room: clean/grind terrazzo floor, add acoustical wall and ceiling panels, add instrument storage cabinets
  - FA and security improvements (access control, CCTV, intrusion detection, intercom).

3. Mechanical System Description and Estimated Costs For Renovated Facilities

- Vocational Building
  - Classrooms: approximately 7,000 SF
    The existing mechanical systems consist of multiple Dx split systems with hot water heating coils. These systems shall be replaced with in kind equipment. New controls shall be added to this facility. Estimated Cost $15/SF.

  - Shops: approximately 10,035 SF
    The existing mechanical systems consist of hot water fan coils and cabinet heaters to provide heating only to this area. This area is currently not cooled. There are some ductless mini splits being utilized to condition office spaces within the shop area. These systems shall be replaced with in kind equipment. New controls shall be added to this facility. Estimated Cost $10/SF.

- Vocational Addition: 7,728 SF
  The existing mechanical systems consist of multiple Dx split systems heat pumps, gas heaters and ductless mini-split system. These systems are newer and are not to be replaced at this time. New controls shall be added to this facility. Estimated Cost $10/SF

- East Wing: 21,620 SF
  The existing mechanical systems consist of multiple constant volume Dx packaged roof top units with hot water heating coils and multiple Dx split systems with hot water heating coils. These systems shall be replaced with in kind equipment. There is also an existing cast iron boiler and pumps that serve this building along with the vocational building. These boilers shall replace with high efficiency condensing type boilers and the pumps shall be replaced with in kind equipment. Zoning shall be reviewed at time of design, we anticipate this to require two more roof top units to be added. New controls shall be added to this facility. Estimated Cost $25/SF.

- Civic Center: 21,770 SF
  The existing mechanical systems consist of multiple constant volume Dx packaged roof top heat pump units with electric heat and two constant volume modular indoor air handling units with remote Dx condensers and electric heat. These systems shall be replaced with in kind equipment. New controls shall be added to this facility. Estimated Cost $20/SF

- Old Gym/Locker: 11,370 SF
  The existing mechanical systems consist of Hot Water Cabinet Unit Heaters. This area is currently not cooled. The boiler serving this building is located in Hall 1 which is being demolished. New constant volume Dx packaged ground mounted heat pump units with electric heat shall be added to heat and cool the gym. New constant volume DX split systems units with electric heat shall be added to heat and cool the weight training and lobby areas and two modular indoor air handling units with remote condensers and electric heat. New controls shall be added to this facility. Estimated Cost $22/SF

- Kitchen/Dining: 8,172 SF
  The existing mechanical systems consist of two ground mounted Dx packaged units with gas heat. A new variable volume Dx packaged ground mounted heat pump units shall be added to heat and cool the renovated spaces. New variable volume terminal boxes with electric reheat shall be utilized for zoning of the renovated spaces. This building is getting completely renovated and all new ductwork will be required. New controls shall be added to this facility. Estimated Cost $30/SF

- Page Gym: 23,954 SF
  The existing mechanical systems consist of two constant volume modular indoor air handling units with remote Dx condensers and hot water heating coils to provide the heating and cooling to the gym. The surrounding support spaces are only heated by cabinet unit heaters and fan coil units with hot water. These systems shall be replaced with in kind equipment. A new constant volume Dx packaged ground mounted unit with hot water coils shall be added to heat and cool the new lobby addition. New controls shall be added to this facility. Estimated Cost $25/SF.

4. Security Improvements

Providing a secure environmental for students at Bartlett Yancey High School was a primary emphasis of the study. The final design incorporates the following:

- Creates a secure public entry to the school.
- Connects the individual buildings with enclosed corridors.
- Incorporates electronic technologies such as closed circuit television (CCTV), access control, alarm notification and unified communications.
- Decorative fencing in select areas.
- Drive gates

Access control and alarm systems help to deter events from occurring but if they do, they provide audible and visual notification to the administrator. CCTV helps to quickly identify the location and severity of the situation. Unified communications allow the administrator to effectively communicate visually and audibly with emergency responders, students, staff and parents.

5. Concessions, restrooms, locker rooms (50' x 140')

Metal building to house concessions/storage, men/women restrooms sized per building code based on number of bleacher seats, separate JV and varsity locker rooms that share restrooms/showers, office space for two (2) coaches and a Mechanical/Engineer Room.