This feasibility study has been modified to remove information on various options that were evaluated but ultimately not selected as part of the final project scope.

Interprofessional Health Space Feasibility Study
Charleston, SC

Project Number: H51-D194

May 10, 2018
Executive Summary

Project Estimates
- Combined Options
- Detailed Estimates

Project Options
- Colbert Options
- BSB Options

Meeting Minutes & Supporting Information
Executive Summary
Medical University of South Carolina  
Interprofessional Health Space Feasibility Study  
Charleston, SC  
Project Number: H51-D194

Executive Summary

The Medical University of South Carolina commissioned this study to determine if renovation of the centrally located Colbert Library and Basic Sciences Building could promote ‘optimizing instructional space, encouraging interprofessional collaboration and providing focused student space in alignment with the MUSC 2020 strategic plan’. Additionally, the study analyzed the co-location of the Simulation Center with supporting classrooms in the Colbert Library. The attached documents include cost estimates and schematic plan options for multiple schemes that include renovation, additions and new construction. Participants in this Study were led by Provost Lisa Saladin, Ph.D., Loretta Lynch-Reichert (Provost’s Office), Gregory Weigle (MUSC Facilities) and Maryellyn Cannizzaro (Compass 5 Partners) and included stakeholders: Dean Sarandeep Huja DDS, Ph.D., Joe Vuthiganon, DMD and Lindsey Hamil, Ph.D. (College of Dental Medicine), Dean Paula Traktman, Ph.D. (College of Graduate Studies), Nancy Carson, Ph.D. and Fran Lee, DBA (College of Health Professions), Donna Kern, M.D. (College of Medicine), Dean Philip Hall, Pharm.D. (College of Pharmacy), Shannon Jones MLS, M.Ed and Missy Anderson (Libraries), and Mary Mauldin, Ed.D. (Office of Instructional Technology).

Findings and Recommendations:

- Phased renovation in Colbert would take one year to complete. This includes co-location of the Simulation Center and enhancement of Library/Study spaces throughout the building at an estimated cost of $21 mil.

- Classroom renovations for BS100 would take 4 months of construction and create a flat/flex classroom for 100-128 in 4 months of construction at an estimated cost of $1.8 mil.

- Classroom renovations for BS202-502 create four flat/flex classrooms for 80 in 5 months of construction at an estimated cost of $4.8 mil.

- A two story addition along the south side of the Basic Sciences Building could house the College of Pharmacy. Construction would take 15 months at an estimated cost of cost $22.5 mil.

- Several other options for renovations, additions and new construction were explored and estimated as part of this study.
Project Estimates

• Combined Options

• Detailed Estimates
Combined Options
## MUSC IP Possible Combined Project Options Preliminary Estimates

Current As Of: 8 May 2018  
Project Number: TBD  
Estimated sf: varies

<table>
<thead>
<tr>
<th>Potential Projects Combined Option 1</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 BSB 100 Renovations</td>
<td>3,698</td>
<td>1,795,997</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>1 BSB 103 Renovations</td>
<td>1,411</td>
<td>634,887</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>2 BSB 202,302,402,502</td>
<td>7,800</td>
<td>4,747,180</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>3 Colbert Practical Solution 1+</td>
<td>42,515</td>
<td>20,877,014</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>4 Pharmacy in BSB Addition</td>
<td>38,348</td>
<td>22,441,183</td>
<td>2 Stories Total Project Cost</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50,496,261</strong></td>
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<table>
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<tr>
<th>Potential Projects Combined Option 2</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
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<tr>
<td>1 BSB 100 Renovations</td>
<td>3,698</td>
<td>1,795,997</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>1 BSB 103 Renovations</td>
<td>1,411</td>
<td>634,887</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>2 BSB 202,302,402,502</td>
<td>7,800</td>
<td>4,747,180</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>3 Colbert Practical Solution 1+ (No Sim./CCET)</td>
<td>42,515</td>
<td>19,367,294</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>4 New IP Building with Pharmacy</td>
<td>118,434</td>
<td>67,621,580</td>
<td>9 Stories with Sim./CCET, Parking, 2-100 Flex</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>94,166,938</strong></td>
<td></td>
</tr>
</tbody>
</table>
## MUSC BSB Renovations & Additions Recap Preliminary Estimates

**Current As Of:** 7 May 2018  
**Project Number:** TBD  
**Estimated sf:** varies

<table>
<thead>
<tr>
<th>Potential BSB Projects</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB 100 Renovations</td>
<td>3.698</td>
<td>1,795,997</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 103 Renovations</td>
<td>1.411</td>
<td>634,887</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 202, 302, 402, 502 Renovations</td>
<td>7.800</td>
<td>4,747,180</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 349, 355, 435 Renovations</td>
<td>6.040</td>
<td>2,489,088</td>
<td>Total Project Cost</td>
</tr>
</tbody>
</table>

**Anticipated Total Projects Cost**  
9,667,152

Compass 5 Partners, LLC
## MUSC Colbert Renovations & Additions Recap Preliminary Estimates

Current As Of: 26 April 2018  
Project Number: TBD  
Estimated sf: varies

<table>
<thead>
<tr>
<th>Potential Colbert Projects</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1 Mixed Renovation</td>
<td>42,515</td>
<td>17,024,904</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>Option 1+ Mixed Renovation</td>
<td>44,015</td>
<td>20,877,014</td>
<td>Total Project Cost</td>
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<td>19,367,294</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>Option 2 Major Renovation</td>
<td>73,048</td>
<td>27,324,987</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>Option 3 Addition &amp; Major Renovation</td>
<td>92,048</td>
<td>54,898,166</td>
<td>Total Project Cost</td>
</tr>
</tbody>
</table>
## MUSC Pharmacy Options Recap New, Renovations & Additions Preliminary Estimates

**Current As Of:** 26 April 2018  
**Project Number:** TBD  
**Estimated sf:** varies

<table>
<thead>
<tr>
<th>Potential Pharmacy Projects</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1   New Building No Parking, (COM, CHP, CGS…)</td>
<td>121,818</td>
<td>65,774,290</td>
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<td>87,237,375</td>
<td>12 Stories Escalated Total Project Cost</td>
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<td>77,618</td>
<td>40,675,561</td>
<td>6 Stories Total Project Cost</td>
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<tr>
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<td>118,434</td>
<td>67,621,580</td>
<td>9 Stories Total Project Cost</td>
</tr>
<tr>
<td>5   Pharmacy in BSB Addition</td>
<td>38,348</td>
<td>22,441,183</td>
<td>2 Stories Total Project Cost</td>
</tr>
</tbody>
</table>

Compass 5 Partners, LLC
Detailed Estimates
# MUSC BSB Renovations & Additions Recap Preliminary Estimates

Current As Of: 7 May 2018  
Project Number: TBD  
Estimated sf: varies  

<table>
<thead>
<tr>
<th>Potential BSB Projects</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB 100 Renovations</td>
<td>3.698</td>
<td>1,795,997</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 103 Renovations</td>
<td>1.411</td>
<td>634,887</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 202, 302, 402, 502 Renovations</td>
<td>7.800</td>
<td>4,747,180</td>
<td>Total Project Cost</td>
</tr>
<tr>
<td>BSB 349, 355, 435 Renovations</td>
<td>6.040</td>
<td>2,489,088</td>
<td>Total Project Cost</td>
</tr>
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</table>

## Anticipated Total Projects Cost

9,667,152

Compass 5 Partners, LLC
## 1. MUSC BSB 100 Collaborative Classroom Renovations Project Cost Estimate

**Current As Of: 5/7/2018 in current dollars**  
**Construction Duration: 120 days**

<table>
<thead>
<tr>
<th>BSB 100</th>
<th>Net SF</th>
<th>Cost</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Div 1 General Conditions</td>
<td>3,698</td>
<td>153,763</td>
<td>OH&amp;P, Bonds etc.</td>
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<tr>
<td>Div 2 Demolition</td>
<td>3,698</td>
<td>57,319</td>
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<tr>
<td>Div 3 Concrete</td>
<td>3,698</td>
<td>33,023</td>
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<tr>
<td>Div 4 Masonry</td>
<td>3,698</td>
<td>46,595</td>
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</tr>
<tr>
<td>Div 5 Metals</td>
<td>3,698</td>
<td>147,180</td>
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<tr>
<td>Div 6 Woods &amp; Plastics</td>
<td>3,698</td>
<td>11,501</td>
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</tr>
<tr>
<td>Div 7 Thermal &amp; Moisture</td>
<td>3,698</td>
<td>6,989</td>
<td></td>
</tr>
<tr>
<td>Div 8 Doors &amp; Windows</td>
<td>3,698</td>
<td>20,783</td>
<td></td>
</tr>
<tr>
<td>Div 9 Finishes</td>
<td>3,698</td>
<td>77,806</td>
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<tr>
<td>Div 10 Specialties</td>
<td>3,698</td>
<td>88,863</td>
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</tr>
<tr>
<td>Div 22 Plumbing</td>
<td>3,698</td>
<td>2,515</td>
<td></td>
</tr>
<tr>
<td>Div 23 HVAC</td>
<td>3,698</td>
<td>150,730</td>
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</tr>
<tr>
<td>Div 26 Electrical</td>
<td>3,698</td>
<td>99,254</td>
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</tr>
<tr>
<td>Div 27 Tech &amp; AV/IT</td>
<td>3,698</td>
<td>51,957</td>
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</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>3,698</strong></td>
<td><strong>948,278</strong></td>
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</tr>
<tr>
<td>Construction Contingency 5%</td>
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<td>47,414</td>
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</tr>
<tr>
<td><strong>Sub-Total Construction Cost</strong></td>
<td><strong>995,692</strong></td>
<td><strong>269</strong></td>
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</tr>
<tr>
<td>Abatement</td>
<td>0</td>
<td>TBD</td>
<td>Seating/Tables for 128</td>
</tr>
<tr>
<td>Furn., Blinds, Equipment Etc.</td>
<td>201,600</td>
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</tr>
<tr>
<td>AV &amp; IT/Communications</td>
<td>343,914</td>
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</tr>
<tr>
<td>A/E/AV-IT Fees/Owner Costs</td>
<td>169,268</td>
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</tr>
<tr>
<td><strong>Sub-Total Project Costs</strong></td>
<td><strong>1,710,474</strong></td>
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</tr>
<tr>
<td>Total Project Contingency 5%</td>
<td>85,524</td>
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<td></td>
</tr>
<tr>
<td><strong>Estimated Total Project Cost</strong></td>
<td><strong>1,795,997</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Total Project Cost/SF</td>
<td><strong>486</strong></td>
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<td></td>
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</tbody>
</table>
## 2. MUSC BSB 202,302,402,502 Collaborative Classroom Renovations Project Cost Estimate

**Current As Of: 4/18/18 in current dollars**  
**Construction Duration: 150 days**

<table>
<thead>
<tr>
<th>BSB 103-110</th>
<th>Net SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Div 1 General Conditions</td>
<td>9,150</td>
<td>380,457</td>
<td>OH&amp;P, Bonds etc.</td>
</tr>
<tr>
<td>Div 2 Demolition</td>
<td>9,150</td>
<td>386,588</td>
<td>Shore/Steel Rework/Slab Demo</td>
</tr>
<tr>
<td>Div 3 Concrete</td>
<td>9,150</td>
<td>72,560</td>
<td></td>
</tr>
<tr>
<td>Div 4 Masonry</td>
<td>9,150</td>
<td>133,590</td>
<td></td>
</tr>
<tr>
<td>Div 5 Metals</td>
<td>9,150</td>
<td>327,570</td>
<td></td>
</tr>
<tr>
<td>Div 6 Woods &amp; Plastics</td>
<td>9,150</td>
<td>46,757</td>
<td></td>
</tr>
<tr>
<td>Div 7 Thermal &amp; Moisture</td>
<td>9,150</td>
<td>17,294</td>
<td></td>
</tr>
<tr>
<td>Div 8 Doors &amp; Windows</td>
<td>9,150</td>
<td>69,723</td>
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</tr>
<tr>
<td>Div 9 Finishes</td>
<td>9,150</td>
<td>192,516</td>
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</tr>
<tr>
<td>Div 10 Specialties</td>
<td>9,150</td>
<td>229,025</td>
<td></td>
</tr>
<tr>
<td>Div 22 Plumbing</td>
<td>9,150</td>
<td>24,522</td>
<td></td>
</tr>
<tr>
<td>Div 23 HVAC</td>
<td>9,150</td>
<td>299,754</td>
<td>Includes A/V Cooling</td>
</tr>
<tr>
<td>Div 26 Electrical</td>
<td>9,150</td>
<td>172,386</td>
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</tr>
<tr>
<td>Div 27 Tech &amp; AV/IT</td>
<td>9,150</td>
<td>128,558</td>
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</table>

Sub-Total: 2,481,297

Construction Contingency 5%: 124,065

Sub-Total Construction Contingency 5%: 2,605,362

Sub-Total Project Costs: 4,521,123

Total Project Contingency 5%: 226,056

Estimated Total Project Cost: 4,747,180

Estimated Total Project Cost/SF: 519

-Does not include new AHU.

-Includes 1350 sf of work on 1st floor.
## MUSC Colbert Renovations & Additions Recap Preliminary Estimates

**Current As Of:** 26 April 2018  
**Project Number:** TBD  
**Estimated sf:** varies

<table>
<thead>
<tr>
<th>Potential Colbert Projects</th>
<th>SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Option 1 Mixed Renovation</td>
<td>42,515</td>
<td>17,024,904</td>
</tr>
<tr>
<td>1+</td>
<td>Option 1+ Mixed Renovation</td>
<td>44,015</td>
<td>20,877,014</td>
</tr>
<tr>
<td>1++</td>
<td>Option 1++ Mixed Renovation (No Sim/CCET)</td>
<td>44,015</td>
<td>19,367,294</td>
</tr>
<tr>
<td>2</td>
<td>Option 2 Major Renovation</td>
<td>73,048</td>
<td>27,324,987</td>
</tr>
<tr>
<td>3</td>
<td>Option 3 Addition &amp; Major Renovation</td>
<td>92,048</td>
<td>54,898,166</td>
</tr>
</tbody>
</table>
## 1+. MUSC Colbert Option 1+ Renovations Project Cost Estimate

**Current As Of: 4/16/2018 in current dollars**

Construction Duration: 360 days in 3-4 phases

<table>
<thead>
<tr>
<th>Scheme 1</th>
<th>Net SF</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Div 1 General Conditions</td>
<td>44,015</td>
<td>1,830,144</td>
<td>OH&amp;P, Bonds etc.</td>
</tr>
<tr>
<td>Div 2 Demolition</td>
<td>44,015</td>
<td>704,240</td>
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</tr>
<tr>
<td>Div 3 Concrete</td>
<td>44,015</td>
<td>833,204</td>
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</tr>
<tr>
<td>Div 4 Masonry</td>
<td>44,015</td>
<td>466,559</td>
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</tr>
<tr>
<td>Div 5 Metals</td>
<td>44,015</td>
<td>1,399,677</td>
<td></td>
</tr>
<tr>
<td>Div 6 Woods &amp; Plastics</td>
<td>44,015</td>
<td>136,887</td>
<td></td>
</tr>
<tr>
<td>Div 7 Thermal &amp; Moisture</td>
<td>44,015</td>
<td>567,353</td>
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<tr>
<td>Div 8 Doors &amp; Windows</td>
<td>44,015</td>
<td>731,529</td>
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<tr>
<td>Div 9 Finishes</td>
<td>44,015</td>
<td>1,146,151</td>
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<tr>
<td>Div 10 Specialties</td>
<td>44,015</td>
<td>529,500</td>
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<tr>
<td>Div 14 Conveying</td>
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<td>380,000</td>
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<tr>
<td>Div 22 Plumbing</td>
<td>44,015</td>
<td>464,798</td>
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<tr>
<td>Div 23 HVAC</td>
<td>44,015</td>
<td>1,706,021</td>
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<tr>
<td>Div 26 Electrical</td>
<td>44,015</td>
<td>1,269,393</td>
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</tr>
<tr>
<td>Div 27 Tech &amp; AV/IT</td>
<td>44,015</td>
<td>706,441</td>
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<tr>
<td></td>
<td></td>
<td>12,871,897</td>
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<tr>
<td>Construction Contingency 5%</td>
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<td>643,595</td>
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<tr>
<td>Sub-Total Construction Cost</td>
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<td>13,515,492</td>
<td>307</td>
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<tr>
<td>Abatement</td>
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<td>0</td>
<td>TBD</td>
</tr>
<tr>
<td>Furn., Blinds, Equipment Etc.</td>
<td></td>
<td>666,800</td>
<td>Seating/Tables for 264 Plus Study</td>
</tr>
<tr>
<td>AV &amp; IT/Communications</td>
<td></td>
<td>1,674,000</td>
<td>New Sim Suite &amp; Classrooms</td>
</tr>
<tr>
<td>A/E/AV-IT Fees/Owner Costs</td>
<td></td>
<td>2,297,634</td>
<td></td>
</tr>
<tr>
<td>Sub-Total Project Costs</td>
<td></td>
<td>18,153,926</td>
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</tr>
<tr>
<td>Total Project Contingency 5%</td>
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<td>907,696</td>
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</tr>
<tr>
<td>Phasing Cost @ 10%</td>
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<td>1,815,393</td>
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</tr>
<tr>
<td>Estimated Total Project Cost</td>
<td></td>
<td>20,877,014</td>
<td></td>
</tr>
<tr>
<td>Estimated Total Project Cost/SF</td>
<td></td>
<td>474</td>
<td></td>
</tr>
</tbody>
</table>

--- Assumes existing HVAC/Elec infrastructure remains in large part.

Compass 5 Partners, LLC
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<td>2 Stories Total Project Cost</td>
</tr>
</tbody>
</table>
5. MUSC BSB Pharmacy Addition & Related Renovations Project Cost Estimate

Current As Of: 4/16/18 Escalated to MP Const Q4 '19
Construction Duration: 15 Months
Includes up to 11,275 sf Renovation.

<table>
<thead>
<tr>
<th>Scheme 3 Addition</th>
<th>Net SF</th>
<th>Cost</th>
<th>Notes</th>
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<tr>
<td>0. Demolition/Abatement</td>
<td>38,348</td>
<td>538,789</td>
<td>Includes Window Closure</td>
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<td>1. Foundations</td>
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<td>2. Vertical Structure</td>
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<td>3. Floor &amp; Roof Structure</td>
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<td>4. Exterior Cladding</td>
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<td>5. Roofing &amp; Waterproofing</td>
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<td>6. Interior Partitions Doors &amp; Glazing</td>
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<td>Exit Stair Extensions</td>
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<td>7. Floor, Wall &amp; Ceiling Finishes</td>
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<td>8. Function Equipment &amp; Specialities</td>
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<td>9. Stairs</td>
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<td>404,571</td>
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<td>10. Plumbing Systems</td>
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<td>11. HVAC</td>
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<td>12. Electrical</td>
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<td>13. Fire Protection</td>
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<td>14. Site &amp; Utilities Relocations</td>
<td>38,348</td>
<td>569,468</td>
<td>Electrical, Storm &amp; Related</td>
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</table>

Sub-Total | 14,715,978 |
General Conditions 7% | 1,030,118 |
GC OH&P 4.5% | 708,574 |
Bonds 2.2% | 362,003 |
Construction Contingency 5% | 840,834 |

Sub-Total Construction Cost | 17,657,507 |

Sub-Total Project Costs | 21,372,556 |
Total Project Contingency 5% | 1,068,628 |
Estimated Total Project Cost | 22,441,183 |
Estimated Total Project Cost/SF | 585 |

-Includes 21,659sf + related renovations+grossing factor.
Project Options

• Colbert Options

• BSB Options
Colbert Options
OPTION 1 +:
PRACTICAL SOLUTION +

OPPORTUNITIES
- Enhanced West Entrance
- Dynamic Lobby
- New Elevators
- New Grand Stairs
- Reconfigured Classrooms
- Sprinkler Building / Update Code Items

LEGEND
- EXISTING
- RENOVATED MEETING / CLASSROOM SPACE - 4,071 SF
- NEW ENTRY RENOVATION - 1,490 SF
- NEW ELEVATORS AND STAIRS
- CORE BUILDING

MUSC - JAMES W. COLBERT EDUCATION CENTER & LIBRARY (BLDG 400)
Compass 5 Partners, LLC
April 17, 2018

FIRST FLOOR
OPTION 1 +: PRACTICAL SOLUTION +

OPPORTUNITIES
- CCET and SIM Together
- New Elevators
- New Grand Stairs
- New Student Study and Lounge
- Sprinkler Building / Update Code Items

RELOCATIONS
- COM Curriculum / Office to 3rd Floor
- Center for Acad. Excellence to 3rd Floor

LEGEND
- CLINICAL EDUCATION CENTER - 16,180 SF
- CCET - 4,670 SF
- NEW ELEVATORS AND STAIRS
- CORE BUILDING

MUSC - JAMES W. COLBERT EDUCATION CENTER & LIBRARY (BLDG 400)
Compass 5 Partners, LLC
April 17, 2018
OPTION 1 +: PRACTICAL SOLUTION +

OPPORTUNITIES
- New Flex Classrooms (2)
- Enhanced Study Area
- Double Height Natural Light
- New Elevators
- Sprinkler Building / Update Code Items

RELOCATIONS
- Archives Off - Site

LEGEND
- SHARED STUDY SPACE - 11,960 SF
- LIBRARY SERVICES / OFFICES - 1,100 SF
- CLINICAL EDUCATION CENTER / CLASSROOMS - 2,310 SF
- COM CURRICULUM / OFFICES - 3,615 SF
- CENTER FOR ACADEMIC EXCELLENCE - 2,235 SF
- NEW ELEVATORS AND STAIRS
- CORE BUILDING
OPTION 1 +: PRACTICAL SOLUTION +

OPPORTUNITIES
- COM Student Lounge & Locker
- Enhanced Study Space and Balcony
- Possible Room for OT/PT/PA and Shared Scholar Lab
- New Elevators
- New Grand Stairs
- Library Staff to Open Office Style
- Sprinkler Building / Update Code Items

LEGEND
- SHARED STUDY SPACE - 6,480 SF
- LIBRARY SERVICES / OFFICES - 3,495 SF
- EXISTING LIBRARY IT AND COMPUTER LABS - 6,120 SF
- CLINICAL EDUCATION CENTER / CLASSROOM - 1,150 SF
- COM STUDENT LOUNGE - 3,510 SF
- NEW ELEVATORS AND STAIRS
- CORE BUILDING
Meeting Minutes & Supporting Information
### MUSC - Interprofessional Health Space
#### Feasibility Study
##### Summary Space Program

#### BSB Pharmacy Addition - Displaced Spaces

<table>
<thead>
<tr>
<th>Office/Conference</th>
<th>Quantity</th>
<th>Square Feet</th>
<th>Total Net SF</th>
<th>Comments</th>
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<td>BS102B Chief Diversity Officer</td>
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<td>BS128 Stomatology</td>
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<td>BS128A Stomatology</td>
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<tr>
<td>BS208F Micro and Immuno Research</td>
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<td>BS246A Oral Health Sciences</td>
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<td><strong>HALL OF RECEPTION</strong></td>
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</tbody>
</table>

**Total Square Feet**: 2351

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Compass 5 Partners, LLC  
1329 State Street  Cayce, SC 29033  
803 765 0838
Interprofessional Health Innovation Meeting Minutes
Date: March 6, 2018

Compass 5 Partners, LLC

PROJECT: MUSC Interprofessional Health Innovation
PLACE: Colcock Hall, Charleston, SC 29425
TIME: Time 1:00pm – 1:30pm, Tuesday – March 6, 2018
SITE CONDITIONS: N/A

ATTENDING:
Nancy Carson Ph.D. (MUSC) carsonn@musc.edu 843.792.2239

COLLEGE OF HEALTH PROFESSIONS

Maryellyn Cannizzaro (C5P) mcannizzaro@compass5partners.com 803.765.0838
Jimmy Wall (C5P) jwall@compass5partners.com 803.765.0838
Jacquelyn Beattie (C5P) jbeattie@compass5partners.com 803.765.0838
Igor Polyakov (C5P) ipolyakov@compass5partners.com 803.765.0838

This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

EXISTING SPACE USAGE
• Classrooms
  o (9) General usage
    ▪ 40-60 students each
    ▪ 151 Rutledge – Bldg. A
    ▪ Flexible tables with power
  o (1) Classroom for AFN program
• Student Training Labs
  o (3) for OT/PT/PA programs
  o (1) for Peds.

CURRENT SPACE NEEDS
• New Large Classroom
  o 100 students, min.
  o Lecture-Based with IT/AV capabilities
• New Computer Exam Room
  o 112 students, min.
• Additional Student Training Lab for OT/PT/PA programs
  o 24 students, min.
  o Larger space requirements than traditional classroom
  o Need space for equipment, flexible table arrangements, active learning
• Additional Offices
  o 6 faculty, min.
  o 3 admin
  o 2 IT

FUTURE SPACE CONSIDERATIONS
• Projected growth of online and distance learning courses
  o No extra space needed, but will require access to classroom and meeting space over the weekend
  o Up to 30 students
• More student lounge space would be a plus
• Cyber café for students
• All labs (existing and future) need to be collocated for shared storage needs

Prepared by:
Igor Polyakov, RA
Compass 5 Partners, LLC
• Would consider renovating existing classrooms to create additional lab space if there were access to flexible collaborative classrooms in other locations

PRECEDENT IMAGES
• Liked the following collaborative classrooms

University of Michigan
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

**EXISTING SPACE USAGE**
- No centralized facilities: 5 locations spread over 4 bldgs.
- Student Lounge in 2nd floor of Colbert
- Auditoriums in Bioengineering and Drug Discovery
- Center for Clinical Evaluation and Testing (CCET) in 2nd floor of Colbert
- Reserve study rooms on 1st floor of Colbert

**CURRENT SPACE NEEDS**
- New or Enlarged Student Support Spaces
  - Needed for accreditation
  - 730 students in 4 learning communities
  - Lounge, Lockers, and Study Spaces
  - Ideally one large space with separate areas, or 4 separate but connected spaces
  - Dedicated student support space would alleviate need to reserve study rooms in 1st floor of Colbert
- New Classrooms
  - 2 rooms, each able to be divided into two, resulting in 4 separate classroom spaces
  - 100 students, min. per room
  - Flexible layouts for collaborative learning
- Additional Offices
  - 8 faculty
  - 18 staff
- Additional Meeting Rooms
  - 1 large conference room
  - 1 small conference / breakout room

**FUTURE SPACE CONSIDERATIONS**
- Collocate Simulation Labs with CCET to create Clinical Education Center
- Need a centralized “College” space, whether through renovation of existing bldg or new construction
- See attachment for more detailed information on space request
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

EXISTING SPACE USAGE
- Nursing Bldg, 1st Floor – Simulation Labs
- Nursing Bldg, 2nd Floor – Procedure/Skills Lab

CURRENT SPACE NEEDS
- Need relocate from Nursing Building
- New facility, ideally collocating Sim Labs and CCET to become the “Clinical Education Center”: Simulation 7,200 SF, CCET 3,190 SF, Learning Spaces 4,650 SF, Offices 1,750 SF, Common Areas 1,500 SF, TOTAL 18,290 SF

FUTURE SPACE CONSIDERATIONS
- Collocating new Sim Lab with CCET will reduce duplicated learning spaces (debriefing rooms, classrooms, etc.)
- Sim Lab/CCET classrooms must be dedicated as their usage needs do not align with ASTRA schedule
- New facility needs to be centrally located on campus to delivery mannequins to all programs
- Door, corridor, and elevator clearances must accommodate hospital beds and gurneys
- Simulation to include:
  - 6 bays, able to be reconfigured: 2/4/6
  - Portable headwalls
- Common Area Spaces to include:
  - Sign-In / Reception
  - Waiting
  - Lockers, 30 min.
  - Restrooms
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

**EXISTING SPACE USAGE**
- Colbert Hall
  - Half of 2nd floor (flexible open study, small group study)
  - 3rd floor (flexible open study, small group study, support offices, stacks)
  - 4th floor (flexible open study, computer labs, support offices, stacks)

**CURRENT SPACE NEEDS**
- Continue converting old stack space to small group study rooms
- Existing spaces need following improvements
  - More power receptacles throughout
  - Shading devices on windows
  - Better acoustical privacy in small group study rooms
  - Writeable surfaces on finishes and furniture

**FUTURE SPACE CONSIDERATIONS**
- Would like to offer students new space types and features
  - Satellite Public Safety Office on 1st Floor
  - Gender Neutral Restroom
  - Innovation/Maker Space with 3D printing and scanning capabilities
  - Lactation Room
  - Wellness Space with treadmill desks, fit bike, etc.
  - Presentation Labs for public speaking and interview simulation/evaluation
- Shannon: Colbert should be one-stop-shop for students.
- Shannon: Look at Hunt Library at NC State in Raleigh as exemplar for this space type.
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

EXISTING SPACE USAGE

- Provides A/V support for all ASTRA-reserved learning spaces
  - Learning management system
  - Faculty Development (A/V + IT training)
  - Interprofessional Initiatives (teamwork skills)
  - Primary classrooms located in College of Health Professions, BSB, and Colbert

- Basic Science Building Classrooms
  - Large Auditorium with fixed seats: BS100
  - Sloped/Tiered Lecture Rooms with furniture: BS202, BS302, BS349, BS355, BS402, BS502
  - BS435 – CDM manages collaborative classroom
    - Reconfigurable but faculty don’t know how to utilize space
    - Glass wall shared with student lounge a source of distraction
    - Too much furniture to make the room truly flexible
    - Can’t eat in room provides a deterrent for use during lunch meetings/classes

- Colbert 1st Floor
  - Manage everything but ancillary spaces
  - “Students use them as study spaces under the name of a class”

FUTURE SPACE CONSIDERATIONS

- Colbert
  - EL116/EL118 – would like to take away the partition wall and reconfigure, but room too long.
  - Relocate Center for Academic Excellence
  - Create 40-50 capacity flex classrooms from library stack location
  - Students request more study rooms, but wouldn’t want to see library turned into study hall

- Looked at “Classroom of the Future”
  - Flexible design
  - 50-80 students
  - Similar to what dental medicine developed last year in BSB
  - Capable of being sub-divided

- Future technology
  - Incorporate virtual reality and augmented reality technologies into some classrooms
  - Touch boards
  - Improved quality of AV equipment in general
“Lightboard”? Damon knows a lot of technology

- BS100: Flatten and convert to a distance learning classroom
- Features desired for future study rooms
  - Give students ability to reserve room at the room with touchpad
  - Control the heat and air in
  - Writeable surfaces, both room finishes and furniture
  - Easy and quick connectivity to monitors in student rooms
- More built-in lockers would be ideal

PRECEDENT IMAGES

- Liked the following collaborative classrooms

[Images of collaborative classrooms from University of Michigan and University of Missouri – Kansas City]
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

**FUTURE SPACE CONSIDERATIONS**

- No limitation to expanding Colbert or BSB (horseshoe side)
  - Fire lane runs through/around Colbert
- Buildings should remain open and operational during any additions
- Utilities:
  - Chilled water at capacity at both an issue in BSB and Colbert
  - Utility tunnel on horseshoe side of library
  - Would like to reconnect loop between main hospital and ??
- Colbert
  - Provost feels that it should be interprofessionally friendly...not specific to any one college
  - She would see the Sim Labs going there and collocating with CCET
  - Gregg: When doing the MFP, felt that the library was very defensive of their turf to the point that they wouldn’t openly communicate what they need
  - Loretta: Library staff a perfect candidate for open office concept to reduce SF
  - Loretta: Haven’t heard anything about down-sizing the library staff
  - Loretta: Possible for library to be more “in-residence” in each college
  - Gregg: “Library is more of a function than a space.”
- Basic Science Building
  - 2nd floor lab renovations are tied to a federal grant
  - Open to university classrooms...would like to move all classrooms to being university
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

EXISTING SPACE USAGE
- Basic Science Building
  - CDM 1-5 floors have spaces
  - Cannot comment on needs of clinical spaces. Contact: Dr. Amy Martin or Dean Huja
  - BS349, BS355
    - Would not like classrooms completely flattened
    - Didactic teaching methods still popular
    - Students like that they can spread out on fixed tables
    - Renovated within 5 years by CDM
    - Used 8a-5p daily by CDM
  - 433 – Collaborative Learning Environment
    - Other colleges are welcome to use space
    - Feels like renovated space is working really well
    - Modular furniture and seating
    - Students don’t like tables as much to spread out for testing, but she thinks it is minor complaint
    - Glass wall was a design choice, but can be a source of distraction
    - Wanted the learning to be transparent
    - Has a “back door” which provides multiple egress opportunities
    - Wanted room to be a little uncomfortable for lecturing
  - 533, 540 is heavily used Clinical Lab

- Colbert
  - Students frustrated that they can’t get into Colbert
  - COM reserves a lot of space for students
  - 116, 118 – Used every other Friday, August – February for Admission Orientation
    - Appreciate that rooms can be separated
    - Modular walls not acoustically private
  - Like that Colbert is access controlled and patrolled

CURRENT SPACE NEEDS
- BS100 Auditorium
  - Needs complete renovation
  - Capacity of the room is an asset (259)
  - Used for Orientations and Guest speakers
• BS__02 Rooms perfect candidates to renovate to convert to flat collaborative classrooms

FUTURE SPACE CONSIDERATIONS
• Critical for all the students of each cohort to be able to come together
• A room/lecture hall that holds at least 120 people, if not 300. Some place that can hold ceremonies.

PRECEDENT IMAGES
• Likes this layout overall but podium would need to be mobile or set further back

University of Missouri – Kansas City
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

**EXISTING SPACE USAGE**
- Do not have dedicated teaching spaces. All classrooms are reserved through ASTRA
- Biomedical Sciences are primary students in CGS classes
- Typically reserve classrooms for 20-40 ppl for small group discussions
  - Clinical Sciences 628
  - Cannon Street 301
  - Bioengineering 201
  - **CHP-A 2nd Floor**?
    - ASTRA Occupancy is 38, reality is 25 ppl comfortably
    - Flexible Furniture
    - Room **not** Flexible
      - Room too restrictive to reconfigure furniture
      - Large, fixed podium an obstacle
      - Tables don’t have power
  - Colbert 1st Floor: 102, 103, 104/105, 119/121, 116/118
- **BS433** – Renovated Collaborative Space
  - Dislikes the glass wall – curtain would be easy fix
  - Dislikes the furniture types and colors

**CURRENT SPACE NEEDS**
- **Student Teaching Lab**
  - Post-baccalaureate Research Education Program (PREP)
  - NIH-funded program needs small lab space
  - 6 – 10 Scholars, summer only
  - Equipment: tissue culture hood the largest, mostly table top

**FUTURE SPACE CONSIDERATIONS**
- “MUSC has too many really large lecture halls”
- Drug/Behavior has rooms that hold 70
- 2nd floor of QF holds 40
• Liked the following collaborative classrooms:

University of Missouri – Kansas City

• Liked this collaborative classroom but didn’t feel it was very useable:

University of Michigan
This meeting was held for MUSC Interprofessional Health Innovation to coordinate existing spaces, space requirements and new potential spaces for relocation and upfit. The following items were discussed and reviewed in the meeting:

**FUTURE SPACE CONSIDERATIONS**

- Both the Basic Science and Colbert buildings can be renovated and receive additions
- BS100 Auditorium and all BS_02 lecture rooms need renovating
- Pharmacy program will need a new building
- Cost of renovations cannot exceed cost of new buildings