date 1 October 2010

To Coastal Carolina University Master Plan and Steering Committee

from Sasaki Associates

subject Alternative Concepts

Overview

The purpose of this memorandum is to document the design strategies presented and refined at the September Worksession with the Master Plan Committee. On the morning of first day of the worksession, Sasaki presented two options: an inward-focused scheme and an outward-focused scheme. Both options accommodated the program for growth to an enrollment of 12,500, associated parking, and expanded recreation fields. The consultant team worked with the Master Plan to develop a hybrid scheme, which was presented on the second day and adopted as the preferred direction for the master plan. The schemes with diagrams and precedent images are documented in the attached powerpoint.

Background

The master plan options were developed from the analysis presented, and the ideas generated, at the July worksession. In summary:

- The importance of the historic development of the University, especially the academic core within Chanticleer
- The project program for growth to an enrollment of 12,500, including:
  - Approximately 336,000 gross square feet (gsf) of new academic and student life space
  - 70,000 gsf of academic space to replace space currently used at the Coastal Science Center
  - 1,200 new residential beds
  - 5,030 parking spaces
  - 2 additional recreation fields, for a total of 8 multi-purpose fields

July Charrette Summary

At the July worksession, the Master Plan Committee broke into 3 groups and developed strategies for growth. The major ideas included:

- Reinforce academic core – concentrate growth in the triangle between 501 and 544
- Create additional access and reduce general traffic on Chanticleer:
  - Founders Drive/544
Carolina Road to 501
- Green edge on 544
- Path/pedway to connect to University Place
- Long term
  - Incorporate HGTC and extend academic presence to 501
  - Occupy all of the triangle; include mixed-use district
- Fire Tower as parking with green buffer
- Parking and additional recreation fields on East Campus
- Increase use of 544 for access and parking
- Elvington Property: housing with parking

**Strategies**

The two options were developed, and are presented below, with important strategic differences. These differences are presented in the diagrams below and include: land use zones, street network, and long-term growth ideas.

*Land Use Concepts*
Street Network Concepts

Option A
Option A focused on adding density in the academic core and ringing it with additional housing and a consolidated sports and recreation zone. The scheme also included a connection from existing Chanticleer Drive to Carolina Road and US 501.

Scheme A – 12,500 students

Option B
Option B focused on reaching out from the academic core, reconfiguring Chanticleer Drive, and creating new gateway statements on US 501 at University Boulevard and Cox Ferry Road.
Option B also placed residential growth to the north of the core, creating a connection to a mixed-used district along Cox Ferry Road.

**Scheme B – 12,500 students**

450,000 GSF Academic Space, + 12,000 Beds

- 450,000 GSF New Academic Space
- 14,000 New Beds
- Parking

  *Existing*: 3596
  *Removed*: 1832
  *Added*: 3240

**Hybrid: Option C**

Based on input from the Master Plan Committee and the Steering Committee, the consultant team developed a hybrid option. Option C incorporates the reconfiguration of Chanticleer Drive, new street connections to US 501 and SC 544, and the densification of the academic core.

**Option C: View of Phase 1**
Agenda
• RECAP: July Worksession
  – History
  – Program
  – Charrette
• Options
• Discussion
Incremental Need for 12,500 HC: 504K ASF / 775K GSF

Incremental Need for 18,500 HC: 1,327M ASF / 2.042M GSF

Outdoor Recreation
NIRSA Standards & Existing/Future Need

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Field/Courts per 1,000 Students</th>
<th>Existing Supply</th>
<th>Existing Need</th>
<th>Existing Surplus/Deficit</th>
<th>Total Future Need 1</th>
<th>Total Future Need 2</th>
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<tbody>
<tr>
<td>Multi-purpose fields*</td>
<td>0.61</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>8</td>
<td>12</td>
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<tr>
<td>Softball fields</td>
<td>0.26</td>
<td>1</td>
<td>3</td>
<td>(2)</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Basketball courts</td>
<td>0.21</td>
<td>0</td>
<td>2</td>
<td>(2)</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Tennis courts</td>
<td>0.61</td>
<td>4</td>
<td>6</td>
<td>(2)</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Volleyball courts</td>
<td>0.22</td>
<td>1</td>
<td>2</td>
<td>(1)</td>
<td>3</td>
<td>5</td>
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</tbody>
</table>

*Multi-purpose fields comprise soccer and flag football; fields under construction included in analysis.

## Outdoor Recreation
Estimated Area Requirements

<table>
<thead>
<tr>
<th>Facility Type</th>
<th># Students</th>
<th>Area Required per Field/Court (ac)</th>
<th>Existing Supply</th>
<th>Existing Need (ac)</th>
<th>Existing Surplus/Deficit</th>
<th>Total Future Need 1 (ac)</th>
<th>Total Future Need 2 (ac)</th>
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</thead>
<tbody>
<tr>
<td># Students</td>
<td>8,346</td>
<td></td>
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<td></td>
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<tr>
<td>Multi-purpose fields</td>
<td>2</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>16</td>
<td>24</td>
<td>18,500</td>
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<tr>
<td>Softball fields</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>7.5</td>
<td>(5)</td>
<td>10</td>
<td>12.5</td>
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<tr>
<td>Basketball courts</td>
<td>.5</td>
<td>0</td>
<td>1</td>
<td>1.5</td>
<td>(1)</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>Tennis courts</td>
<td>.25</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>(5)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Volleyball courts</td>
<td>.25</td>
<td>2.5</td>
<td>.5</td>
<td>5</td>
<td>(.25)</td>
<td>.75</td>
<td>1.25</td>
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<td>Recreational Track</td>
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<td>n/a</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.75</td>
<td>22.5</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6.75)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>34.25</td>
<td>46.75</td>
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</table>

- There is an existing need for approximately 7 acres of additional outdoor recreation space.
- Total future outdoor recreation need is approximately 35 acres (12,500 headcount) and 47 acres (18,500 headcount).
- In anticipation of enrollment growth to 12,500 students, a recreation track is recommended.

## Future Parking Program

### Parking Demand Ratios:

<table>
<thead>
<tr>
<th>Parking Demand Ratios:</th>
<th>Future Parking Demand</th>
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<tbody>
<tr>
<td></td>
<td>12,500</td>
</tr>
<tr>
<td></td>
<td>1,423</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>1,255</td>
</tr>
<tr>
<td>Staff</td>
<td>5,224</td>
</tr>
<tr>
<td>Main-Campus Resident</td>
<td>1,211</td>
</tr>
<tr>
<td>University Place</td>
<td>1,911</td>
</tr>
<tr>
<td>Visitor</td>
<td>83</td>
</tr>
<tr>
<td>HP, Other</td>
<td>42</td>
</tr>
</tbody>
</table>

### Future Population:

<table>
<thead>
<tr>
<th>Future Population:</th>
<th>12,500</th>
<th>18,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty/Staff</td>
<td>1,255</td>
<td>941</td>
</tr>
<tr>
<td>Commuter Student</td>
<td>5,224</td>
<td>1,971</td>
</tr>
<tr>
<td>Main-Campus Resident Student</td>
<td>1,211</td>
<td>325</td>
</tr>
<tr>
<td>University Place Resident Student</td>
<td>1,911</td>
<td>192</td>
</tr>
<tr>
<td>Visitor</td>
<td>83</td>
<td>132</td>
</tr>
<tr>
<td>HP, Other</td>
<td>42</td>
<td>54</td>
</tr>
</tbody>
</table>

### Program Summary

- Academic and Student Life: 336,000 gsf
- Residential: 439,000 gsf
- Fields: 34.25 acres
- Parking: 2,900 sp.
September 7, 2010

FRAMEWORK

PROGRAM
Residential
Recreation Fields
Parking
Visually Accessible?
Student Life?

CONNECTIONS
New Access?

PIECES
2,000 spaces = 12 chips
2,000 beds = 1 chip
200K GSF Academic SL = 20 chips

TABLE 1

JULY CHARRETTE
TABLE 1 SUMMARY

- Reinforce academic core – concentrate growth in the triangle between 501 and 544
- Create additional access and reduce general traffic on Chanticleer:
  - Founds Drive/544
  - Carolina Road to 501
- Green edge on 544
- Extend housing south on Chanticleer
- Path to connect to University Place
- Long term
  - Incorporate HGTC and extend academic presence to 501
  - Occupy all of the triangle; include mixed-use district

TABLE 2
TABLE 2 SUMMARY

- Reinforce academic core – extend to 501
- Keep recreation space with student housing:
  - Rec fields on Elvington Property
  - Infill around the Woods with new housing
  - Move varsity track to soccer field; keep track/field for student recreation
- Acquire Quail Creek Village for new housing
- Pedestrian path connection to University Place
- Fire tower as parking with green buffer
- Extend housing south on Chancellor
- Path to connect to University Place
- Parking and additional recreation fields on East Campus
<table>
<thead>
<tr>
<th>TABLE 3 SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reinforce academic core – extend to 501</td>
</tr>
<tr>
<td>• Increase use of 544 for access and parking</td>
</tr>
<tr>
<td>• Elvington Property: housing with parking</td>
</tr>
<tr>
<td>• Pedestrian path to connect to University Place</td>
</tr>
<tr>
<td>• Fire Tower: parking with landscape buffer</td>
</tr>
<tr>
<td>• Recreation Fields on East Campus</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTIONS</th>
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<tbody>
<tr>
<td>• Keep recreation space with student housing:</td>
</tr>
<tr>
<td>– Rec fields on Elvington Property</td>
</tr>
<tr>
<td>– Infill around the Woods with new housing</td>
</tr>
<tr>
<td>• Move varsity track to soccer field; keep track/field for student recreation</td>
</tr>
</tbody>
</table>
Residential Land Use, Mixed Use

Scheme A

Scheme B

Recreation, Parking, Stormwater and Buffer Landscapes

Scheme A

Scheme B

Campus Summary

Scheme A

Scheme B

Scheme A – 12,500 students

- 400,000 GSF New Academic Space
- 12,000 New Beds
- Parking
  - Existing: 3596
  - Removed: 1703
  - Added: 3137
  - Total: 5030
Core Capacity Study

- 825,000 GSF Academic Space
- 21,000 Beds
- Parking
  - Existing: 5048
  - Removed: 281
  - Added: 2786
  - Total: 7553

Scheme A Summary

- Existing: 5048
- Removed: 281
- Added: 2786
- Total: 7553

Scheme B – 12,500 students

- 450,000 GSF Academic Space
- 14,000 New Beds
- Parking
  - Existing: 3596
  - Removed: 1832
  - Added: 3240
  - Total: 5004

Scheme B – potential build out

- 1,000,000 GSF Academic Space
- 23,000 Beds
- 275,000 GSF Mixed Use Development
- Parking
  - Existing: 5004
  - Removed: 164
  - Added: 2713
  - Total: 7553
**Scheme B Summary**

- 2 New Recreation Fields
- Firetower Lot: xxx cars
- Pedestrian Connection back to campus through Quail Creek property

**Green Connection to University Place along 544**

- Landscape Gateway at corner of University & 501
- Shuttle connection across 501
- 3 Recreation Fields
- East Lots:
  - within existing property: xxx cars
  - acquired property: xxx cars

**Campus Gateway & Connecting across 501**

- Landscape Gateway at corner of University & 501
- Shuttle connection across 501
- 3 Recreation Fields
- East Lots:
  - within existing property: xxx cars
  - acquired property: xxx cars

**Connecting across 501**

- Extended University presence to corner of University & 501
- Pedestrian bridge connection across 501
- 3 Recreation Fields
- East Lots:
  - within existing property: xxx cars
  - acquired property: xxx cars
Circulation and Parking

Main Campus: Existing Parking

Current Users:
- Faculty/Staff/Visitors/HP: 674
- Students: 2922
- Total: 3596

Projected Need:
- 12,500 Students
  - Faculty/Staff/Visitors/HP: 1783
  - Resident Students: 1148
  - Commuter Students: 2099
  - Total: 5030

- 18,500 Students
  - Faculty/Staff/Visitors/HP: 2506
  - Resident Students: 1941
  - Commuter Students: 3106
  - Total: 7553

University Place
- Student/HP: 1893

East Campus
- Student/HP: xxxx

Supply:
- Existing: 5048
- Removed: 281
- Added: 2768
- Total: 7633

Need/Distribution:
- Faculty/Staff/Visitors/HP: 2506
- Resident Students: 1941
- Commuter Students: 3106
- Total: 7633

Scheme A
- Garage: 850 spaces
- 1500 spaces

Scheme B
- Garage: 850 spaces
- 1500 spaces

Circulation and Parking

12,500 Students: Resident students park near housing/core.

Supply:
- Existing: 5048
- Removed: 281
- Added: 2768
- Total: 7633

Need/Distribution:
- Faculty/Staff/Visitors/HP: 2506
- Resident Students: 1941
- Commuter Students: 3106
- Total: 7633

Circulation and Parking

18,500 Students: Additional 1,500 SF parking garage.

Supply:
- Existing: 5048
- Removed: 281
- Added: 2768
- Total: 7633

Need/Distribution:
- Faculty/Staff/Visitors/HP: 2506
- Resident Students: 1941
- Commuter Students: 3106
- Total: 7633
Circulation and Parking

12,500 Students: Commuter students given priority over residents

Supply: Need/Distribution:
Existing: 3996 Faculty/Staff/Majors/HP: 1783
Removed: 1703 Resident Students: 1190
Added: 3137 Commuter Students: 2097
Total: 5030 Total: 5030

Supply: Need/Distribution:
Existing: 3996 Faculty/Staff/Majors/HP: 1797
Removed: 1832 Resident Students: 1118
Added: 3240 Commuter Students: 2099
Total: 5004 Total: 5004

Garage
800 spaces

Circulation and Parking

18,500 Students: Commuter students given priority over residents

Supply: Need/Distribution:
Existing: 5048 Faculty/Staff/Majors/HP: 2511
Removed: 281 Resident Students: 1942
Added: 2791 Commuter Students: 3105
Total: 7558 Total: 7558

Supply: Need/Distribution:
Existing: 5004 Faculty/Staff/Majors/HP: 2505
Removed: 164 Resident Students: 1942
Added: 2713 Commuter Students: 3106
Total: 7553 Total: 7553

Horseshoe/Quad Precedent

Horseshoe/Quad Precedent
THANK YOU