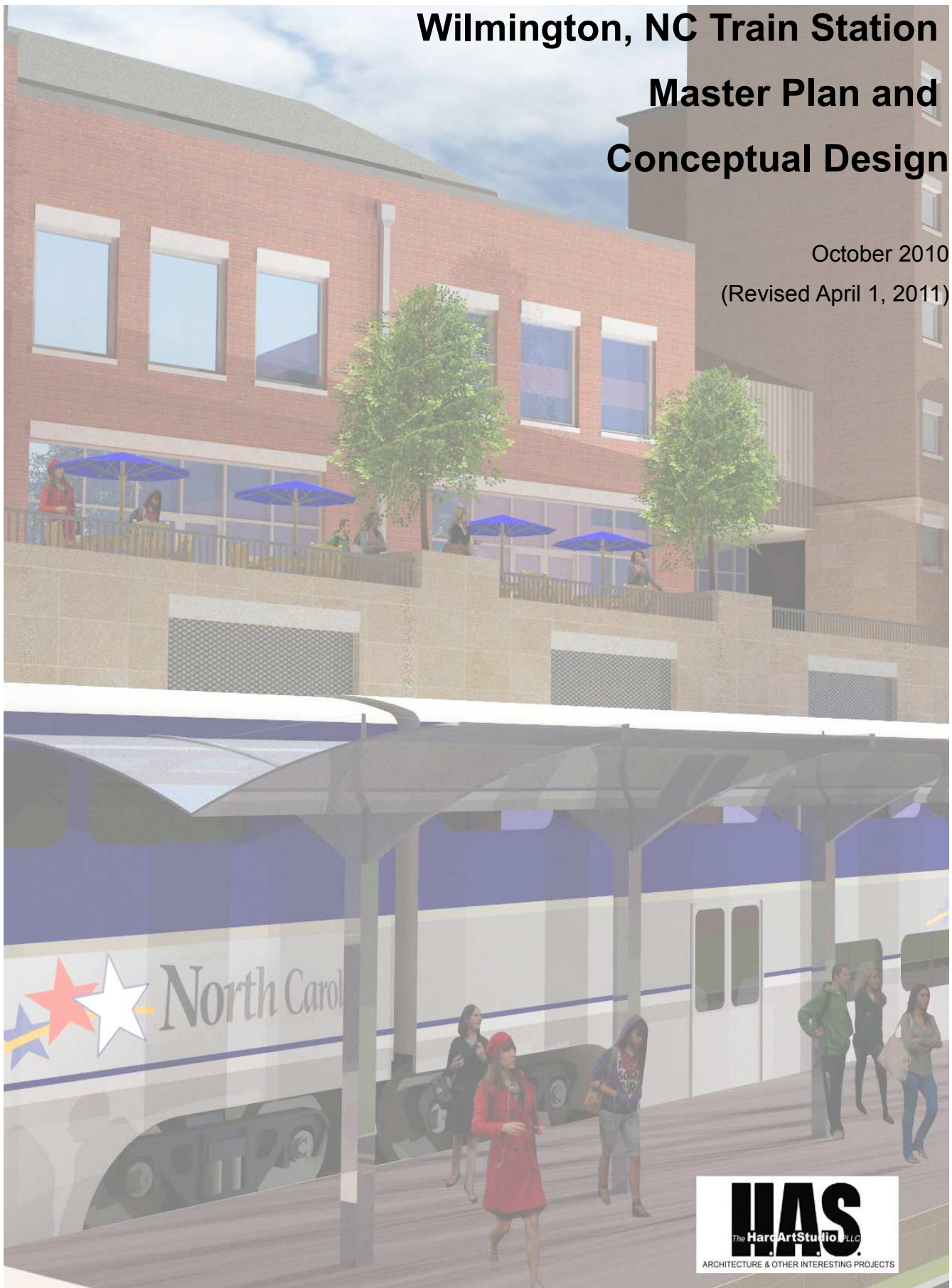


Wilmington, NC Train Station Master Plan and Conceptual Design

October 2010
(Revised April 1, 2011)



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Building Survey & Conceptual Design Summary

Background and Purpose

The Transit Needs Study for the Wilmington Multi-modal Transportation Center final report published in May of 2009 identified an extended site in Wilmington, NC bound on the south by Red Cross street and on the

north by Hanover street and by 3rd and 4th streets on the west and east respectively as the preferred location for a transportation oriented development that includes local and inter-city bus services, the downtown trolley, human service transportation, taxi service, and the future inter-city passenger train service.

The purpose of the current design study is threefold. First to conduct a survey of the existing buildings along the north side of Campbell street and the adjacent corner buildings at 4th street, to determine their structural soundness and hazardous material content. Secondly to develop master plan for how the site between Campbell and Hanover street (Figure A1) could be developed to successfully integrate with the City's proposed Multi-Modal Transportation center. And finally to develop a conceptual plan for the future NCDOT passenger rail station anticipated for the site.



Figure A1: Proposed Multi-Modal Project Site

Design Goals

The success of any development depends on the understanding of the specific site conditions, the incorporation of a functional program that anticipates future changes, and a sensitivity to the scale and intrinsic history of the site and its neighboring communities. With this in mind the design team developed

the following criteria to serve as benchmarks for creating a successful project.

- Development of the site should serve as a catalyst for rejuvenating the local community and increase a sense of connect to the city.
- Respect the architectural, cultural and historic fabric of the site and surrounding communities.
- Create opportunities to recycle buildings and materials on site wherever possible.
- Encourage the use of mass transit through convenience and interaction with the City's Multi-Modal station.
- Design the passenger rail station to anticipate future growth in intercity and commuter rail traffic.
- Encourage development of the site through Public / Private partnerships.

Structural and Hazardous Material Survey Findings

In June of this year a survey of the existing buildings along the north side of Campbell street and the adjacent corner at 4th street (Figures A2 & A3) was conducted by a licensed structural engineer to determine their present physical condition for possible incorporation into the redevelopment of the block. During that same month a certified Industrial Hygienist surveyed the same buildings and collected numerous samples from the each of the buildings to determine if any asbestos, PCB, lead, or black mold was present in them and if so in what quantities.



Figure A3: 313 Campbell Street & 601 4th Street

The structural survey revealed severe structural damage to all of the buildings. The majority of the damage to the buildings is due to the failure of the slope at the rear of the buildings and along the entire southern boundary of the rail bed located between the 3rd and 4th street bridges. Damage to the building's structure will continue until

the slope is stabilized. The deteriorated roof conditions at 311 and 313 Campbell street (Figure A4 & A5) is allowing the infiltration of rain water causing additional deterioration on the interior of the building. A portion



Figure A4: Roof at 313 Campbell Street



Figure A5: Interior of 313 Campbell Street

of the roof is missing in the north-west corner of 305 Campbell street allowing rainwater to erode the soil away from the foundation from the inside. At 601 4th street the buildings structure is in very poor condition due in part to past fire damage, extensive modification of the interior structural component by previous tenants, vagrants and animals living inside and the removal of the interior framing by persons unknown. Due to the poor condition of the interior structure of the building at 605 4th street and the ongoing failure of the slope, the design team has recommended that the building be posted “No Entry” and parking spaces located nearest to the building at the bottom of the slope are blocked off and barred from use.

(See appendix A for the full structural report.)

The hazardous materials survey found varying amount of asbestos, lead, and mold in each building. 305 Campbell had only minor amounts of mold, moderate levels of lead and asbestos but two abandoned petroleum product tanks were uncovered in the basement and will need remediation

whether the building is reused or demolished. 310 and 311 Campbell also had trace amounts of asbestos but had elevated black mold levels due to the leaking roofs. At 601 and 605 4th street's high level of asbestos ranged from 2% to 30% were found. Elevated lead levels were noted in the ceiling and wall paint. Cost for remediation of the hazardous materials for the buildings was estimated to be \$157,000.

(See appendix B for the full report and estimated abatement cost.)

Site Master Planning

Use of this site is largely dictated by the location of the existing rail bed, proximity to the City's future Multimodal station, programming requirements for the future passenger rail station, and its transitional location between the City's commercial district and historic neighborhoods. In developing the master plan for this site much consideration was given to its effect on revitalizing an underutilized block through public / private partnerships, encouraging the growing art district along 4th street, and preserving the historic and cultural fabric of the surrounding communities.

The surveys revealed serious structural problems in the buildings along north Campbell street and the adjacent corner at 4th street that are being exacerbated by the failure of the slope along the old rail bed.

Development of the site is predicated on the stabilization of the slope through extensive regrading and/or retaining walls. Programmatic and functional considerations for the inter-city passenger rail station and the goal of revitalizing the block through a public / private partnership leads the design team to recommend the removal of all the buildings (Figure A6).

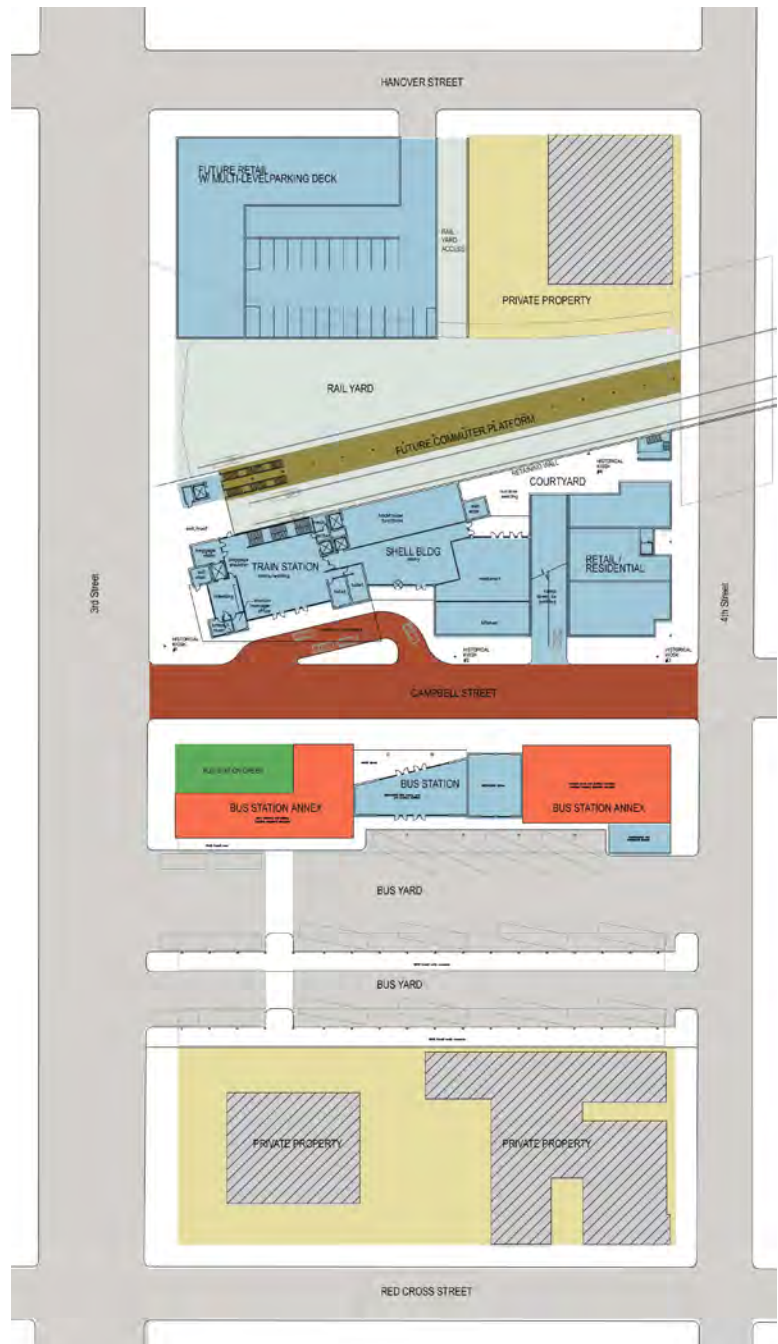


Figure A6: Site Master Plan showing a possible Public / Private development. Historical markers & the reuse of locally salvaged building material tell of the sites past history.

To retain the embodied history of the site the design team proposes the placement of historical markers at various intervals along Campbell street to explain the cultural and historical contributions specific to the area, reuse of building material salvaged from the site, and a well funded restoration effort to preserve the period iconic facades of the Neuwirth Brothers buildings (circa 1820 & 1945) at 525 N 3rd street and 302

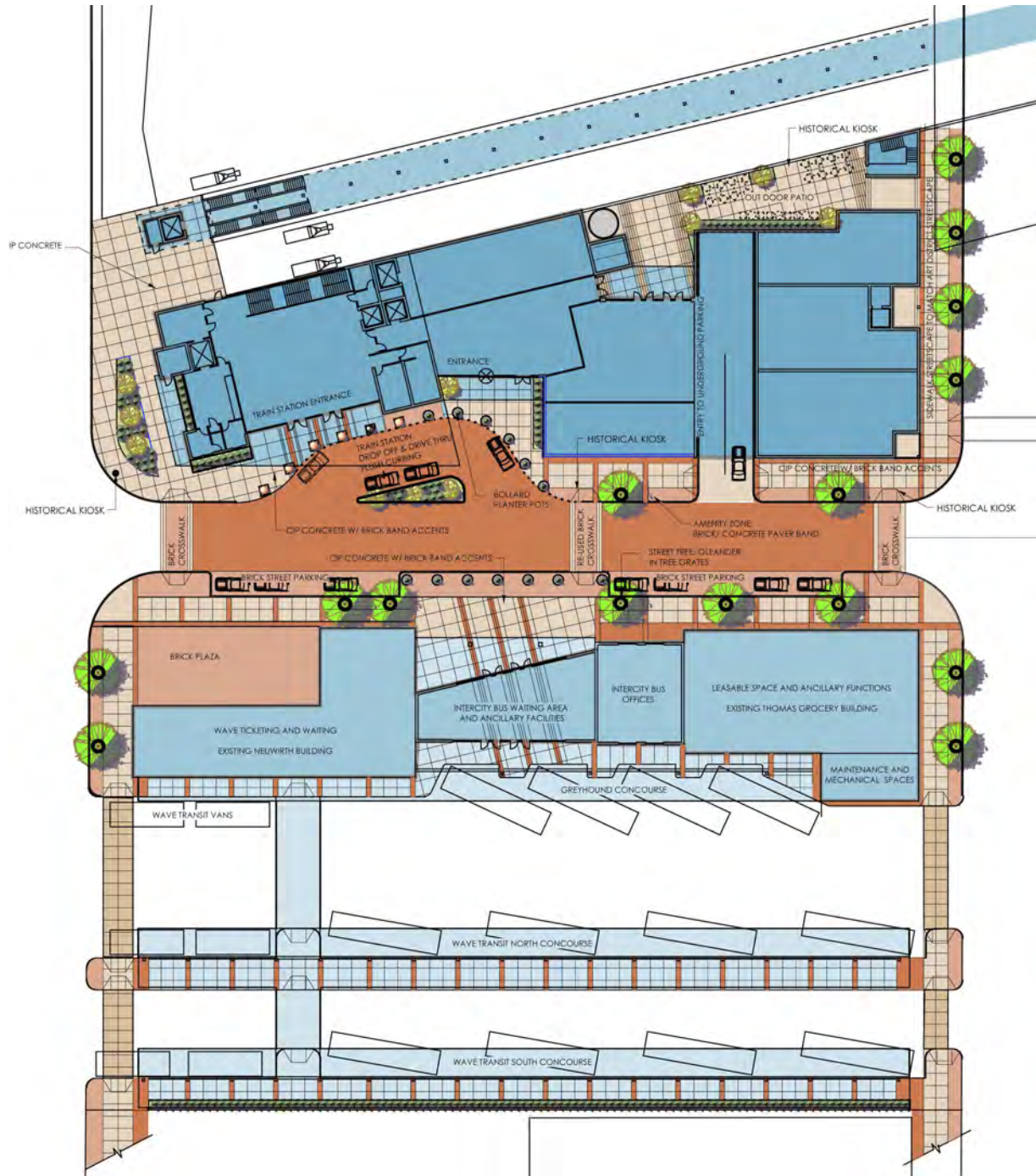


Figure A7: Campbell Street hardscape and plantings combine to create a pedestrian friendly connection between the train station on the north side and the Bus station on the south side.

Campbell street and the Thomas Grocery building (circa 1894) at the corner 4th and Campbell street (Figure A7). New construction on the site should transition west to east from the large scale structures being built along 3rd street to the smaller scale of 4th street and should incorporate the materials, fenestration and detailing of the sites former buildings, adjacent commercial buildings and churches.

Inter-city Passenger Train Station Conceptual Plan

The inter-city passenger rail station and hotel is conceived as a public / private venture. Through this process the revitalization of the block can precede prior to the establishment of regular train service and provide a multi-use space that can be converted into the future passenger rail station once rail service is established, address the local markets need for a hotel, and provide incentive for developers to invest in the community.

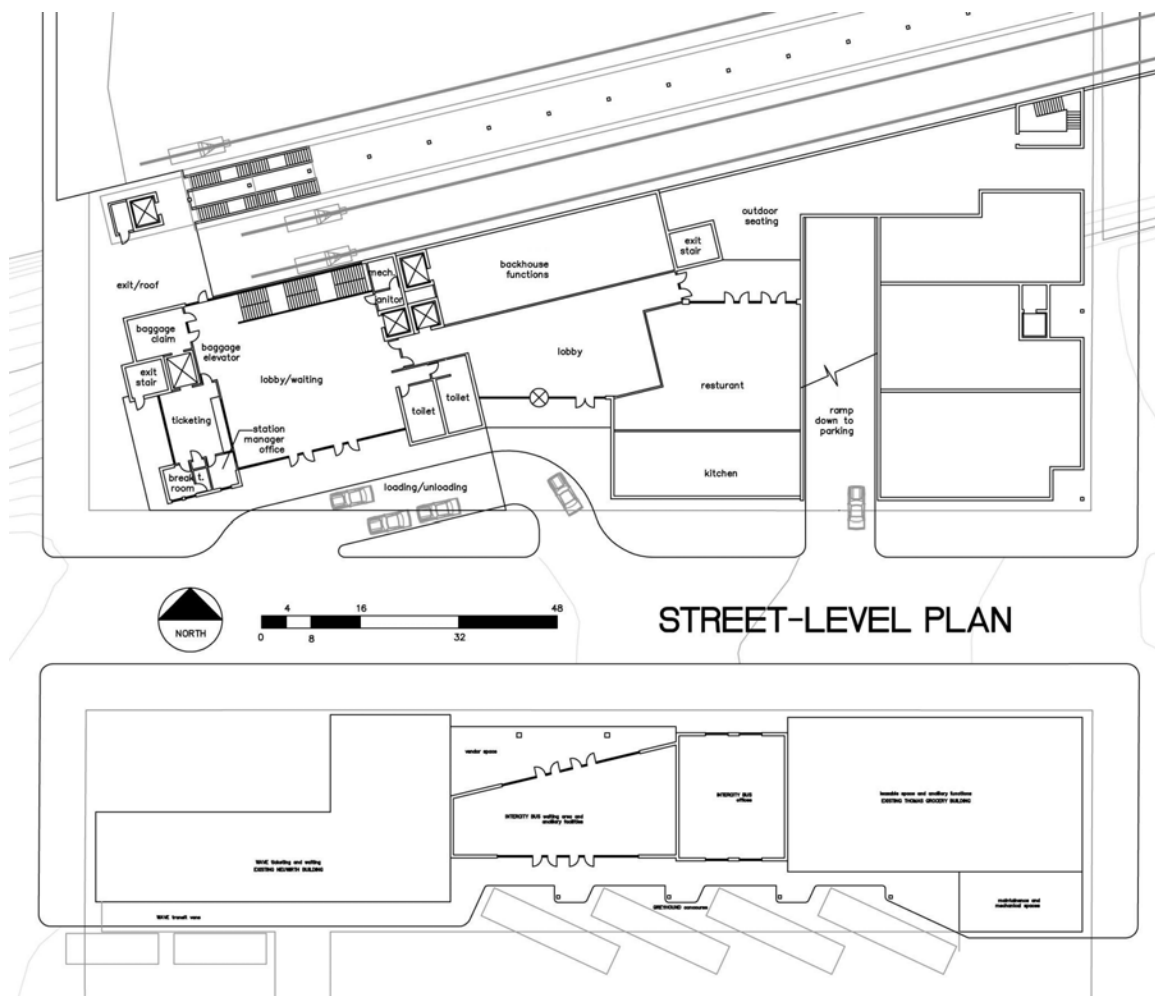


Figure 2: Figure A8: Campbell Street Entry Level Plan. Plan is oriented parallel to the train tracks to simplify passenger movement between platform and rail cars and to provide space for a drop-off zone at the front of the building. Elevator and stairs in lobby take passengers to the rail platform below.

The scale of the project is largely determined by the size of the commercial buildings springing up along 3rd street and the desire to create an iconic building that speaks of the continued growth and aspirations of Wilmington. Challenges of the site include a change in elevation that slopes upward from the rail yard twenty (20') feet to reach Campbell street and the adjacent Multi-Modal Transportation center. In developing the train station floor plan much consideration was given to transitioning this grade and connecting commuters with the transportation center and downtown Wilmington. (See Figure 8A & 9A, See appendix C for additional plans and elevations).

Other challenges included finding a compatible development opportunity, planning for the future growth in

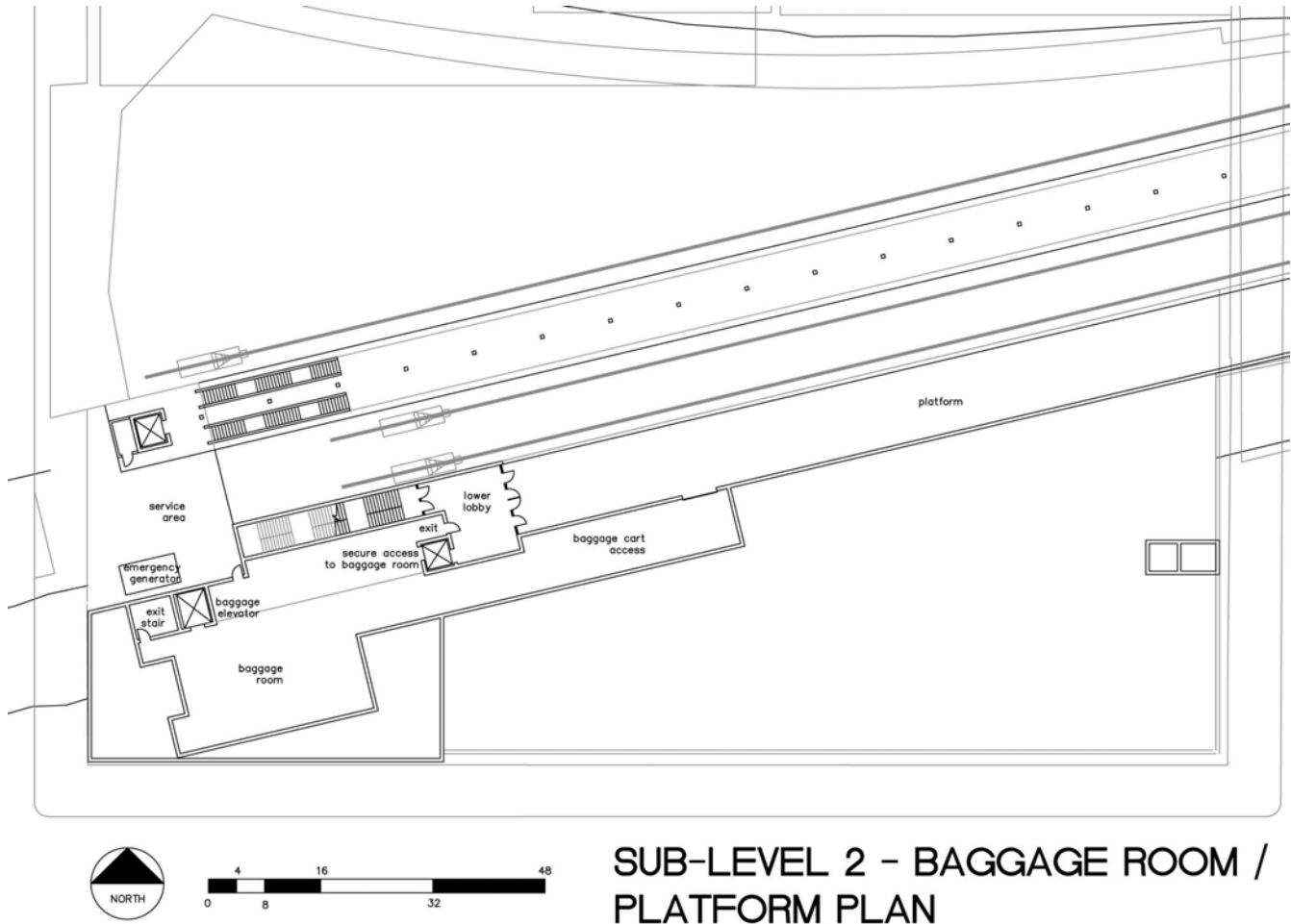


Figure A9: Platform Level Plan. Plan shows secure baggage handling area and controllable access to the rail platform. (See appendix "C" for additional plans and elevations.)

rail traffic, anticipating future security needs of mass transit and encouraging its use, and providing an adaptable space that both provides for a functional train station and can be used for private and public uses and events in the interim. A brief review of the design shows the train station as it would appear after train service is established. Prior to the establishment of regular train service the space reserved for the station could double as a convention space for the hotel, community meeting place or as a gallery to exhibit the

areas rich artistic culture. The actual size of the hotel will be determined through a public / private development agreement with community input but is envisioned as a ninety room hotel in this plan to study space needs. An independent or hotel affiliated restaurant would take up the center of the block. Both the hotel and restaurant would benefit from traffic generated by the transportation centered development occurring on the extended site. A combination of live / work units are located on the corner of Campbell and 4th street. As noted above the slope is in need of major restructuring. Taking advantage of the extensive site work required to correct the slope the design team proposes to add additional parking below grade.

Concept Renderings:



Figure A10: Bird's eye view of Campbell Street looking north-east. Image shows combined Train Station and hotel next to live/work studios (left to right). Multi-Modal Transit Center is across street on south side. Future parking retail development shown in upper left hand corner.



Figure A 11: View looking north-west. Scale and character of development transitions between 3rd & 4th street.



Figure A12: View looking south-east showing the rail yard, inter-city passenger train arrival and future commuter platform.



Figure A13 View along future commuter platform.



Figure A14: View toward southwest overlooking the bus station.

Prediction of costs:

Construction costs are at their lowest level in many years due to the sluggish economy and the cost saving for this project could be substantial . Timely construction of the project would also provide local jobs and an boost to the regions economy. A current estimate based on the concepts presented here for the Train Station, adjacent shell building, Inter- and intra-city bus station predicts construction cost in the twenty-five million dollar range, excluding site and utility improvements. A full build out of the site using Public / Private Partnerships could provide upwards of a forty-five million dollars economic stimulus to the local economy. (See appendix D for cost estimate details.)

Conclusion:

The documents presented above are not intended to be a rigid depiction for the future development along Campbell street but rather a conceptual outline of the possibilities for the sensible revitalizing of an underutilized parcel into one that contributes to the future growth and prestige of Wilmington, NC while preserving the cultural history and livability of the surrounding neighborhood.

Appendix A (Structural Survey)

Appendix B (Hazardous Material Survey)

Appendix C (Architectural Documents)

Appendix D (Preliminary Design Cost Estimate)