APPENDIX C: Basis for Engineering Documents

Durham-Orange Light Rail Transit Project

November 2016
Appendix C: Basis for Engineering Documents

- D-O LRT Project NCCU Station Refinement Plan and Profile
- D-O LRT Project NCCU Station Refinement Illustrative Station Layouts
- D-O LRT Project NCCU Station Refinement Typical Sections
- D-O LRT Project NCCU Station Refinement Cross Sections
D-O LRT Project NCCU Station Refinement

Illustrative Station Layouts
Bicycle Storage Racks for 30 Bicycles

Drop-Off / Pick-Up Area with 10 Spaces

Traction Power Substation (TPSS) # 17

LRT Station Side Platforms with Shelters, Canopies, and Platform Furniture

Retention Wall

Future RR Bridges for Widened Alston Ave.

Future Pettigrew St. Bridge for Widened Alston Ave.

Street-Level Commercial Space

Existing RR Tracks

Opportunity Areas for Stormwater Management (Typical)

Existing Path to R. Kelly Bryant Pedestrian/Bicycle Bridge

LRT Park-and-Ride 8-Level Parking Deck

Planned Alston Ave. Widening and Bridge Improvements by NCDOT

John Avery Boys' and Girls Club

Rainbow St.

Pettigrew St.

Humphrey St.

Water Tower

Guillette Ave.

Benjamin D. Catlin Pkwy

BP Gas Station

Gandy St.

Future LRT Station

Carrithers Rd.

Rainbow St.

LRT Tracks on Fill

Aerial LRT Guideways

Bicycle Storage Racks for 20 Bicycles Under LRT Bridge

Staircase and Pedestrian Ramp for Access to LRT Platforms

Staircases and Pedestrian Ramp for Access to LRT Platforms

Parking Summary:
8-Level Parking Deck
Total = 919 Spaces (Including 18 ADA Spaces)

Surface Parking Lot
Total = 277 Spaces (Including 24 ADA Spaces)

TOTAL = 1,196 Spaces (Including 42 ADA Spaces)
D-O LRT Project NCCU Station Refinement

Typical Sections
SECTION A1 - ALSTON AVE LOOKING SOUTH
STA. 1152 + 00 TO STA. 1154 + 30

SECTION A2 - ALSTON AVE LOOKING SOUTH
STA. 1155 + 73 TO STA. 1160 + 30
SECTION A3 - ALSTON AVE LOOKING SOUTH
STA. 1160 + 30 TO STA. 1171 + 20
STA. 1173 + 90 TO STA. 1174 + 15

SECTION A4 - ALSTON AVE LOOKING SOUTH
WITH STATION CENTER PLATFORM
STA. 1171 + 20 TO STA. 1173 + 90
D-O LRT Project NCCU Station Refinement

Cross Sections
1152 + 50.00

-NCCU STATION REFINEMENT-

EXIST ROW