

Appendix IV
Flexible Pavement Design Worksheet for Subgrade Streets

Client: BOTETOURT
Subdivision: DALEVILLE TOWN CENTER
Street Name: MARKET STREET
Developer: FRANK & WALDRON

ADT: 1000
CBR: 10
Subgrade: 10
Traffic: 1000
Design: 1000
Subgrade: 10
Traffic: 1000
Design: 1000

Step 1: Determine Design Values
Step 2: Determine Design Values
Step 3: Pavement Design

Design ADT: 1000
Design CBR: 10
Design Subgrade: 10

SILK REED CIRCLE, BOXWOOD LANE,
SOMERSET STREET, NORBORNE STREET

500 - 1500 ADF
Virginia Department of Transportation - Pavement Design Guide 8 (1996) (rev.2000)

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COLONY AVENUE, CHARTER AVENUE,
SHENANDOAH AVENUE, SEDGEWOOD AVENUE

4,335 ADF
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TOWN CENTER STREET, MARKET SQUARE

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BROAD STREET, RIVER BIRCH AVENUE

4,335 ADF
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TOWN CENTER STREET, MARKET SQUARE

US 220 WATERLINE CONNECTION & SEQUENCING NOTES:
1. CONTRACTOR SHALL FOLLOW THE SEQUENCING NOTES BELOW UNLESS APPROVED BY BOTETOURT COUNTY.
2. ONE WEEK PRIOR TO SCHEDULED CONNECTION TO US 220 WATERLINE, CONTRACTOR SHALL NOTIFY BOTETOURT COUNTY AND COORDINATE WORK ALLOWING BOTETOURT COUNTY INSPECTORS TO BE PRESENT, IF REQUESTED.
3. WET-TAP EXISTING 12" WATERLINE ALONG US 220 AT THE PROPOSED SOUTHERN (SHENANDOAH AVENUE) CONNECTION POINT. THRUST BLOCK AND RESTRAIN CONNECTION.
4. INSTALL NEW 8" WATERLINE TO CREATE A CONTINUOUS CONNECTION BETWEEN THE SOUTHERN AND NORTHERN (CHARTER AVENUE) WET-TAP LOCATIONS.
5. WET-TAP AND CONNECT NEW 8" WATERLINE AT NORTHERN CONNECTION POINT. THRUST BLOCK AND RESTRAIN CONNECTION.
6. WET-TAP VALVING TO US 220 WATERLINE SHALL REMAIN CLOSED UNTIL ALL REQUIRED TESTING HAS BEEN COMPLETED AND APPROVED BY BOTETOURT COUNTY.
7. ONCE APPROVED, COORDINATE OPENINGS OF US 220 WATERLINE VALVING TO BRING NEW 8" WATERLINE INTO SERVICE.
8. AFTER THE 8" WATERLINE IS IN SERVICE, CONTRACTOR SHALL CLOSE (2) 12" MAINLINE VALVES LOCATED ON US 220 BETWEEN THE WET-TAP LOCATIONS ISOLATING A SECTION OF WATERLINE TO BE LOWERED AT THE TOWN BOULEVARD ENTRANCE.
9. CONTRACTOR SHALL VERIFY THE COVER OF THE EXISTING WATERLINE AT THE TOWN BOULEVARD ENTRANCE AND LOWER THE EXISTING 12" WATERLINE TO ENSURE A MINIMUM COVER OF 3' IS PROVIDED A MINIMUM OF 15' BEYOND THE PROPOSED BACK OF CURB.
10. UPON COMPLETION OF LOWERING OF 12" WATERLINE, CONTRACTOR SHALL PERFORM REQUIRED TESTING.
11. ONCE TESTING HAS BEEN APPROVED BY BOTETOURT COUNTY, CONTRACTOR SHALL OPEN THE (2) 12" MAINLINE VALVES.
12. WORK SHOWN ON SHEETS 5, 6, & 7.