


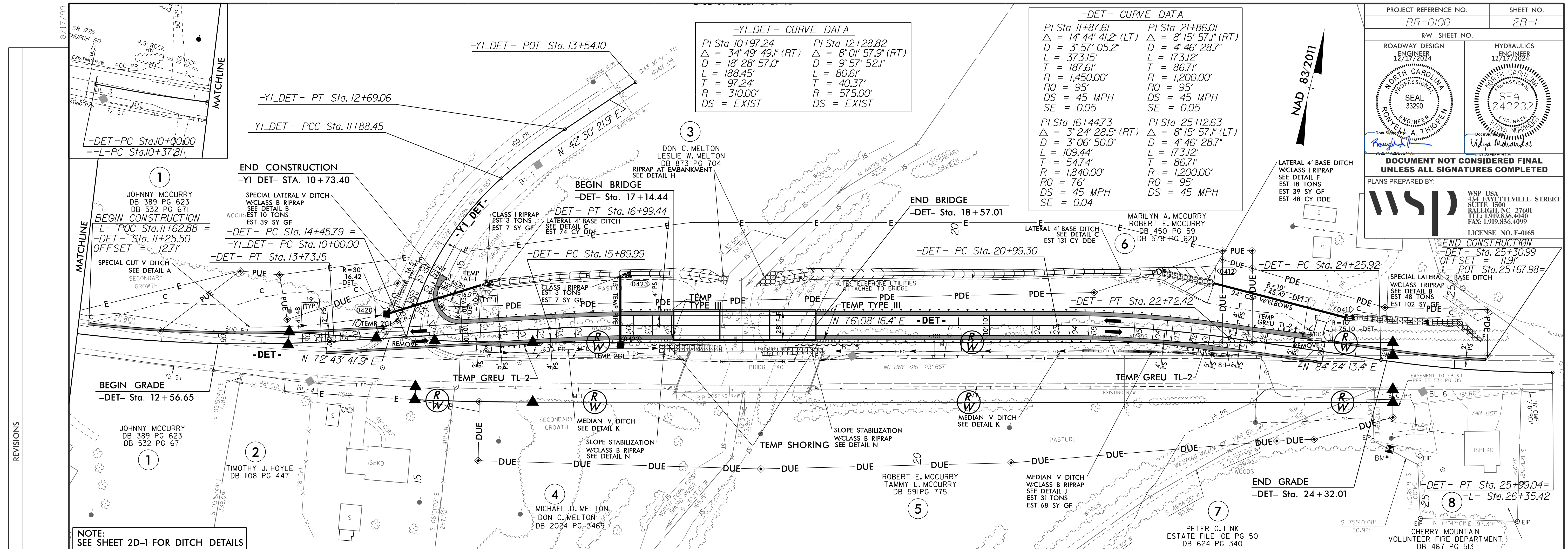
|   |   |
|---|---|
| PROJECT REFERENCE NO.<br><b>BR-0100</b>   | SHEET NO.<br><b>2B-1</b>                        |
| ROADWAY SHEET NO.   | HYDRAULICS                                      |
| ENGINEER<br>12/17/2024<br><b>JOHN W. THIGPEN</b>  | ENGINEER<br>12/17/2024<br><b>Vidya Mohandas</b> |
| SEAL<br>33290   | SEAL<br>043232                                  |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b>  |   |
| PLANS PREPARED BY:<br> WSP USA<br>434 FAYETTEVILLE STREET<br>SUITE 1500<br>RALEIGH, NC 27601<br>TEL: 1.919.836.4040<br>FAX: 1.919.836.4099<br>LICENSE NO. F-0165 |   |

**-Y1\_DET- CURVE DATA**

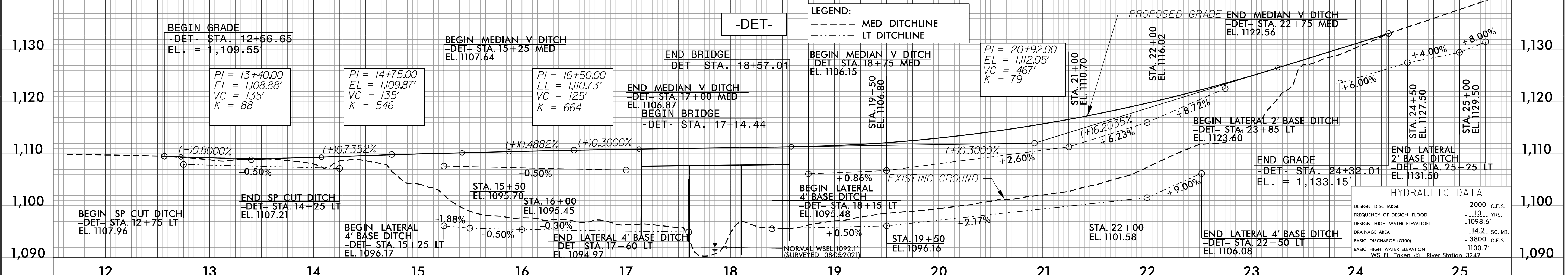
|  |   |
|--|---|
| PI Sta 10+97.24<br>Δ = 34° 49' 49.0" (RT)<br>D = 18' 28' 57.0"<br>L = 188.45'<br>T = 97.24'<br>R = 310.00'<br>DS = EXIST | PI Sta 12+28.82<br>Δ = 8° 01' 57.9" (RT)<br>D = 9' 57' 52.1"<br>L = 80.61'<br>T = 40.37'<br>R = 575.00'<br>DS = EXIST |
|--|---|

**-DET- CURVE DATA**

|  |  |
|--|--|
| PI Sta 11+87.61<br>Δ = 14° 44' 41.2" (LT)<br>D = 3' 57' 05.2"<br>L = 373.15'<br>T = 187.61'<br>R = 1,450.00'<br>DS = 45 MPH<br>SE = 0.05 | PI Sta 21+86.01<br>Δ = 8° 15' 57.1" (RT)<br>D = 4' 46' 28.7"<br>L = 173.12'<br>T = 86.71'<br>R = 1,200.00'<br>DS = 45 MPH<br>SE = 0.05 |
| PI Sta 16+44.73<br>Δ = 3° 24' 28.5" (RT)<br>D = 3' 06' 50.0"<br>L = 109.44'<br>T = 54.74'<br>R = 1,840.00'<br>DS = 45 MPH<br>SE = 0.04   | PI Sta 25+12.63<br>Δ = 8° 15' 57.1" (LT)<br>D = 4' 46' 28.7"<br>L = 173.12'<br>T = 86.71'<br>R = 1,200.00'<br>DS = 45 MPH<br>SE = 0.05 |



NOTE:  
SEE SHEET 2D-1 FOR DITCH DETAILS



**HYDRAULIC DATA**

|                             |                    |
|-----------------------------|--------------------|
| DESIGN DISCHARGE            | = 2000 C.F.S.      |
| FREQUENCY OF DESIGN FLOOD   | = 10 YRS.          |
| DESIGN HIGH WATER ELEVATION | = 1098.6'          |
| DRAINAGE AREA               | = 14.2 SQ. MI.     |
| BASIC DISCHARGE (Q100)      | = 3800 C.F.S.      |
| BASIC HIGH WATER ELEVATION  | = 1100.7'          |
| WS EL. Taken @              | River Station 3242 |

