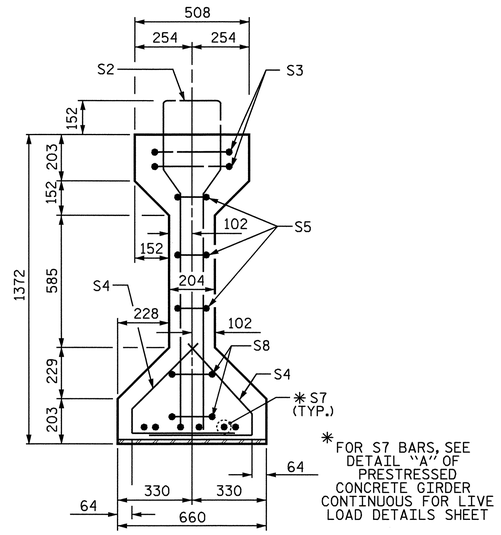
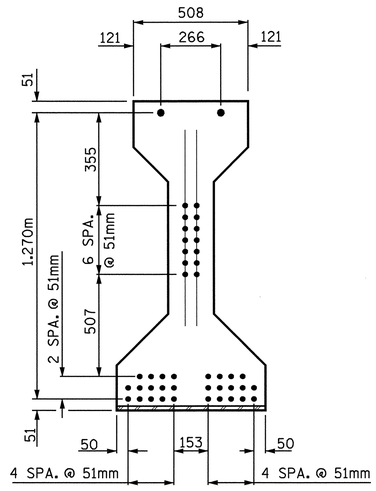
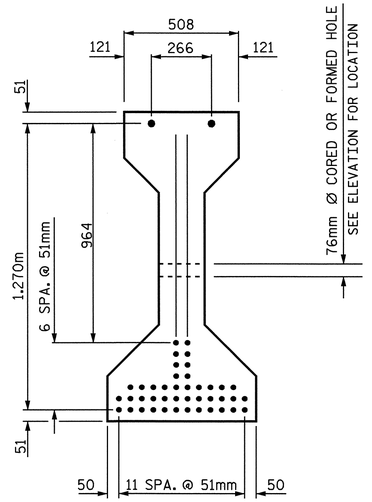
W:\squadq\r2206c\Final Plans\Str. 7\R2206C_SD_G2_07.dgn
emurray




SECTION B-B

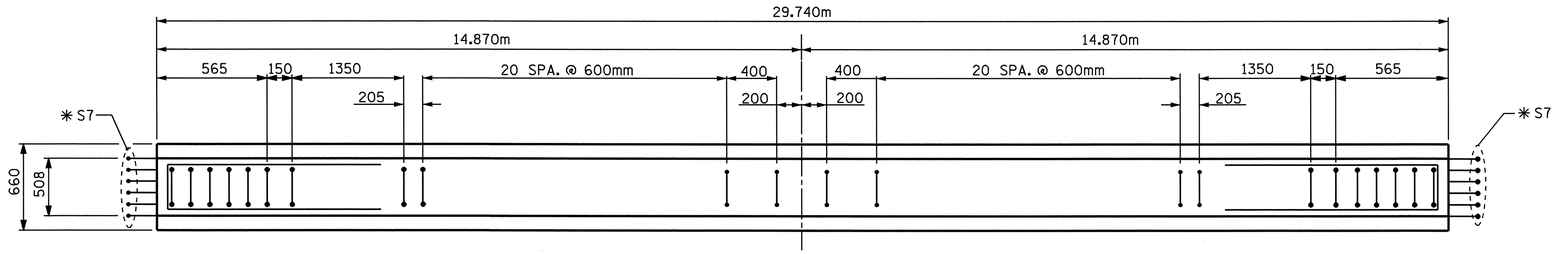



AT END OF GIRDER

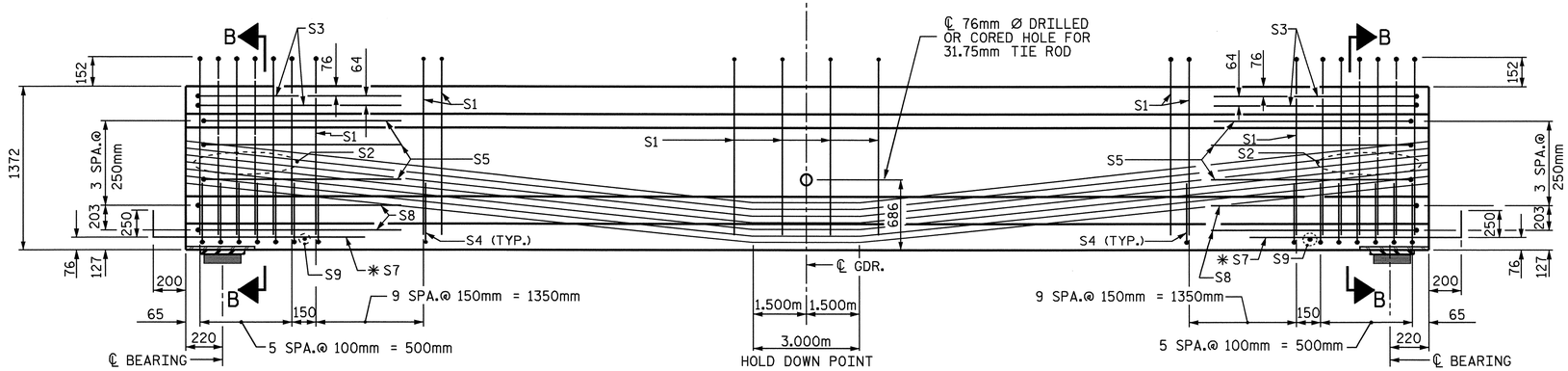



AT ℄ OF GIRDER

## 12.70mm Ø LOW RELAXATION STRAND LAYOUT




PLAN OF GIRDER




FIX

ELEVATION OF GIRDER

FIX

## 12.70mm Ø L. R. GRADE 270 STRANDS

| AREA ($mm^2$) | ULTIMATE STRENGTH (kN PER STRAND) | APPLIED PRESTRESS (kN PER STRAND) |
|---|---|---|
| 98.71 | 183.7 | 137.8 |

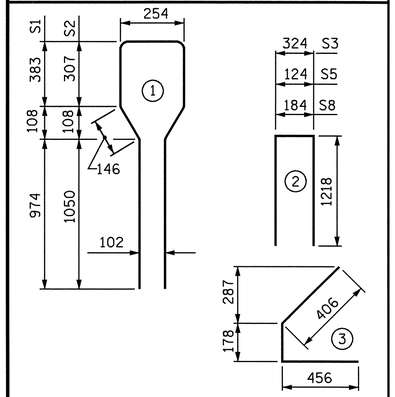
## REINFORCING STEEL FOR ONE GIRDER

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|---|---|---|---|---|---|
| | | | | | |
| S1 | 64 | #13 | 1 | 3260 | 207 |
| S2 | 12 | #19 | 1 | 3260 | 87 |
| S3 | 4 | #13 | 2 | 2760 | 11 |
| S4 | 64 | #13 | 3 | 1040 | 66 |
| S5 | 6 | #13 | 2 | 2560 | 15 |
| ✳S7 | 12 | #16 | STR | 1120 | 21 |
| S8 | 4 | #13 | 2 | 2620 | 10 |
| S9 | 2 | #10 | STR | 560 | 1 |

✳NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

## BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT




## QUANTITIES FOR ONE GIRDER

| | REINFORCING STEEL | 48.26 MPa CONCRETE | 12.70mm Ø L.R. STRANDS |
|---|---|---|---|
| | kg | $m^3$ | No. |
| | 418 | 15.138 | 44 |

## GIRDERS REQUIRED

| NUMBER | LENGTH | TOTAL LENGTH |
|---|---|---|
| 5 | 29.740m | 148.700m |

PROJECT NO. R-2206C

LINCOLN-CATAWBA COUNTY

STATION: 199+48.000-L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPAN B
LEFT LANE

| ASSEMBLED BY : M.D.PISO | DATE : 9/03 |
|---|---|
| CHECKED BY : M.M.PARSONS | DATE : 9/03 |
| DRAWN BY : ELR 8/91 | REV. 5/16/97 EEM/RGW |
| CHECKED BY : GRP 8/91 | REV. 7/17/98 RWW/LES |
| | REV. 10/17/00 RWW/LES |

NORTH CAROLINA PROFESSIONAL SEAL 022516 ENGINEER EMILY E. MURRAY
10/8/04

| REVISIONS | | | | | | SHEET NO. |
|---|---|---|---|---|---|---|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-43 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 374 |

STR. #7

STD. NO. PCG6SM