

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

DISTRICT No. 9
CONT No 92-60
WP No 177-89-05

COUNTY ROAD No. 21 UNDERPASS
BRIDGE No. 3
HWY. 416
GENERAL ARRANGEMENT

SHEET
290

totten sims hubicki associates
ENGINEERS ARCHITECTS AND PLANNERS

GENERAL NOTES

CLASS OF CONCRETE

- DECK AND PIER COLUMNS 35MPa
- REMAINDER 30MPa

CLEAR COVER TO REINFORCING STEEL

- FOOTINGS 100 ±25mm
- ABUTMENTS, WINGWALLS
FRONT FACE 80 ±20mm
BACK FACE 70 ±20mm
- PIER COLUMNS 80 ±20mm
- DECK TOP SLAB TOP 70 ±20mm
BOTTOM 40 ±10mm
BOTTOM SLAB TOP 40 ±10mm
BOTTOM 50 ±10mm
WEBS 60 ±10mm
- REMAINDER 70 ±20mm

REINFORCING STEEL

- REINFORCING STEEL SHALL BE GRADE 400 UNLESS NOTED OTHERWISE. BAR MARKS WITH SUFFIX "C" DENOTE COATED BARS.

CONSTRUCTION NOTES

- IF THE ACTUAL BEARING THICKNESSES ARE DIFFERENT FROM THOSE GIVEN IN THE BEARING DESIGN DATA, THE CONTRACTOR SHALL ADJUST THE BEARING SEAT ELEVATIONS AND THE REINFORCING STEEL TO SUIT.

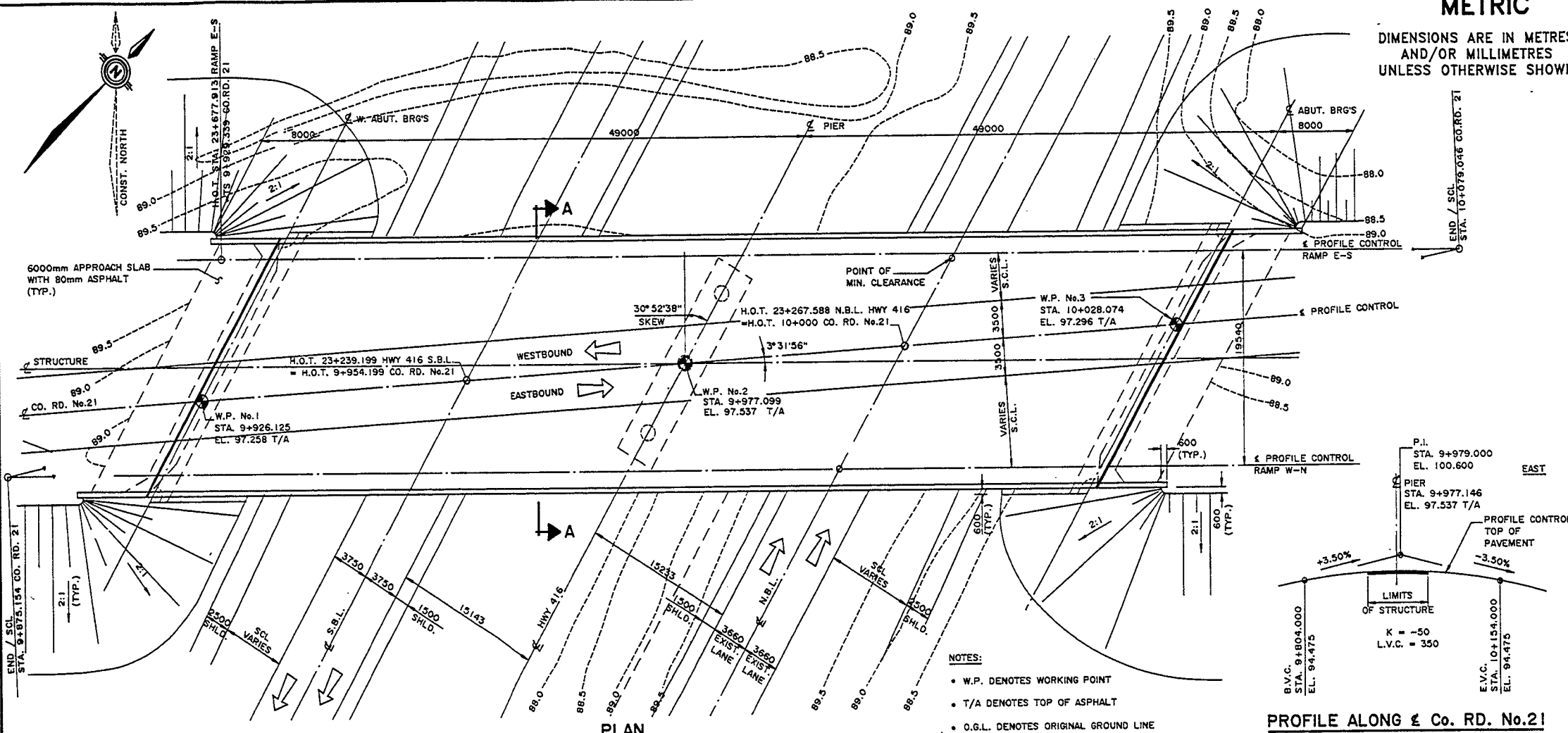
LIST OF DRAWINGS

1. GENERAL ARRANGEMENT
2. BOREHOLE LOCATION & SOIL STRATA
3. FOOTING LAYOUT
4. FOOTING REINFORCING
5. WEST ABUTMENT
6. EAST ABUTMENT
7. WINGWALLS
8. PIER DETAILS
9. DECK DETAILS
10. LONGITUDINAL TENDONS
11. TRANSVERSE TENDONS
12. DECK REINFORCING I
13. DECK REINFORCING II
14. DECK REINFORCING III
15. DECK REINFORCING IV
16. BARRIER WALLS
17. JOINT ANCHORAGE & ARMOURING
18. 6000mm APPROACH SLAB
19. DETAILS OF CONCRETE SLOPE PAVING
20. STANDARDS I
21. STANDARDS II
22. AS CONSTRUCTED ELEV. & DIM.
23. ELECTRICAL EMBEDDED WORK
24. QUANTITIES -STRUCTURE I
25. QUANTITIES -STRUCTURE II



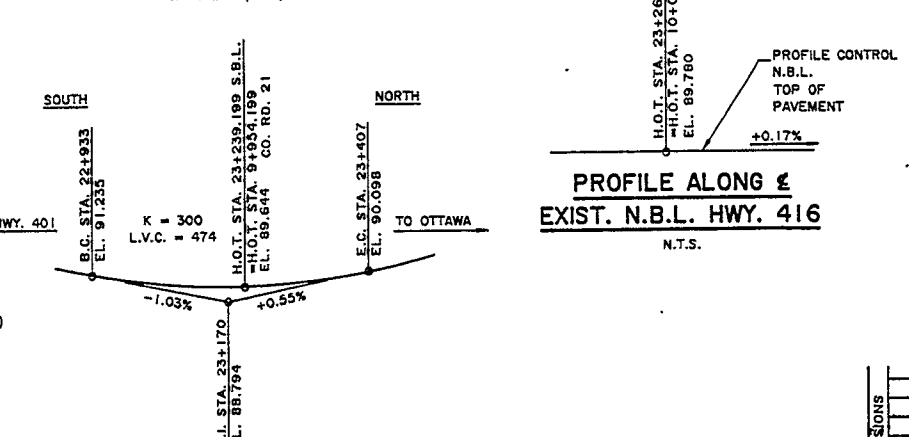
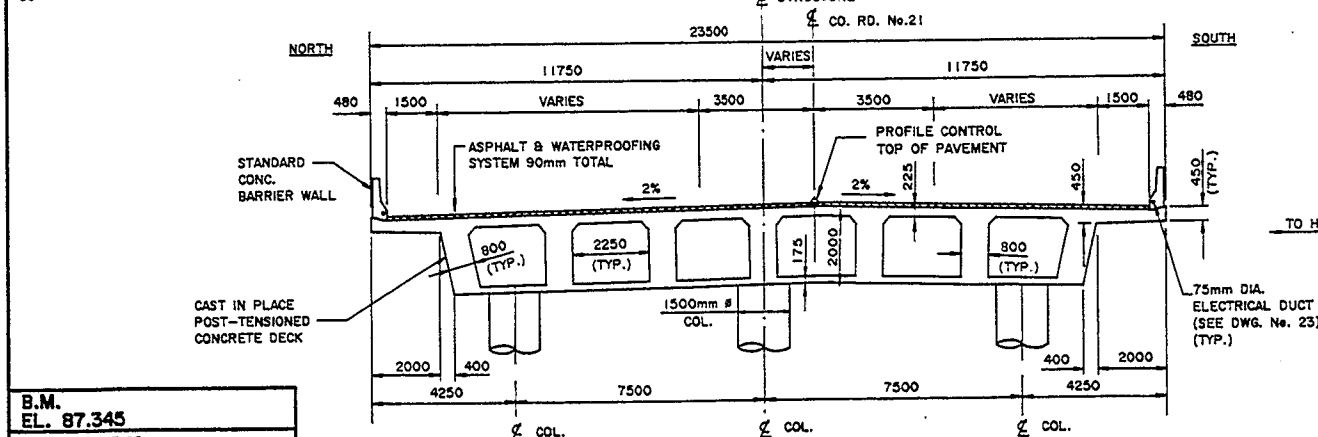
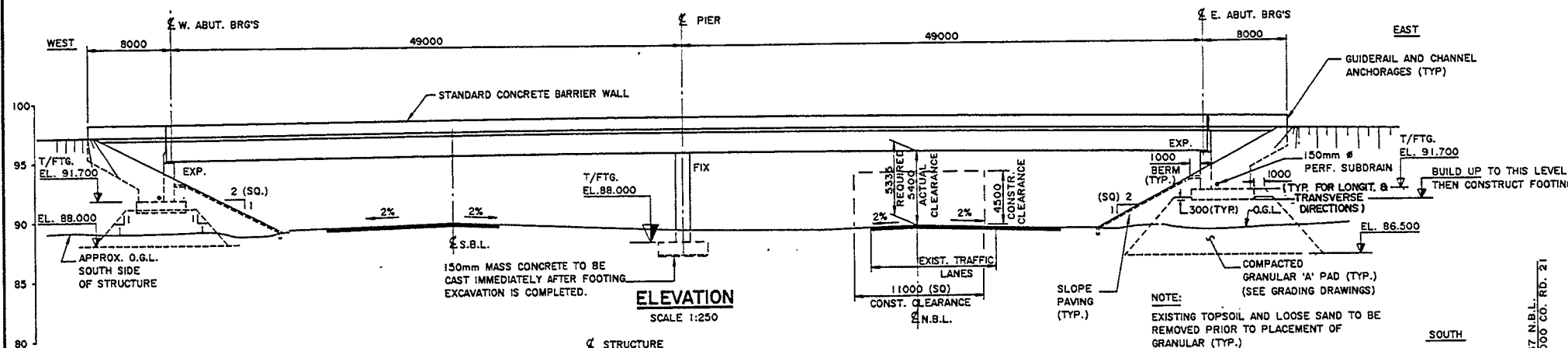
APPLICABLE STANDARD DRAWINGS

DD-3503 MINIMUM GRANULAR BACKFILL REQUIREMENTS



PROFILE ALONG & Co. RD. No.21

N.T.S.

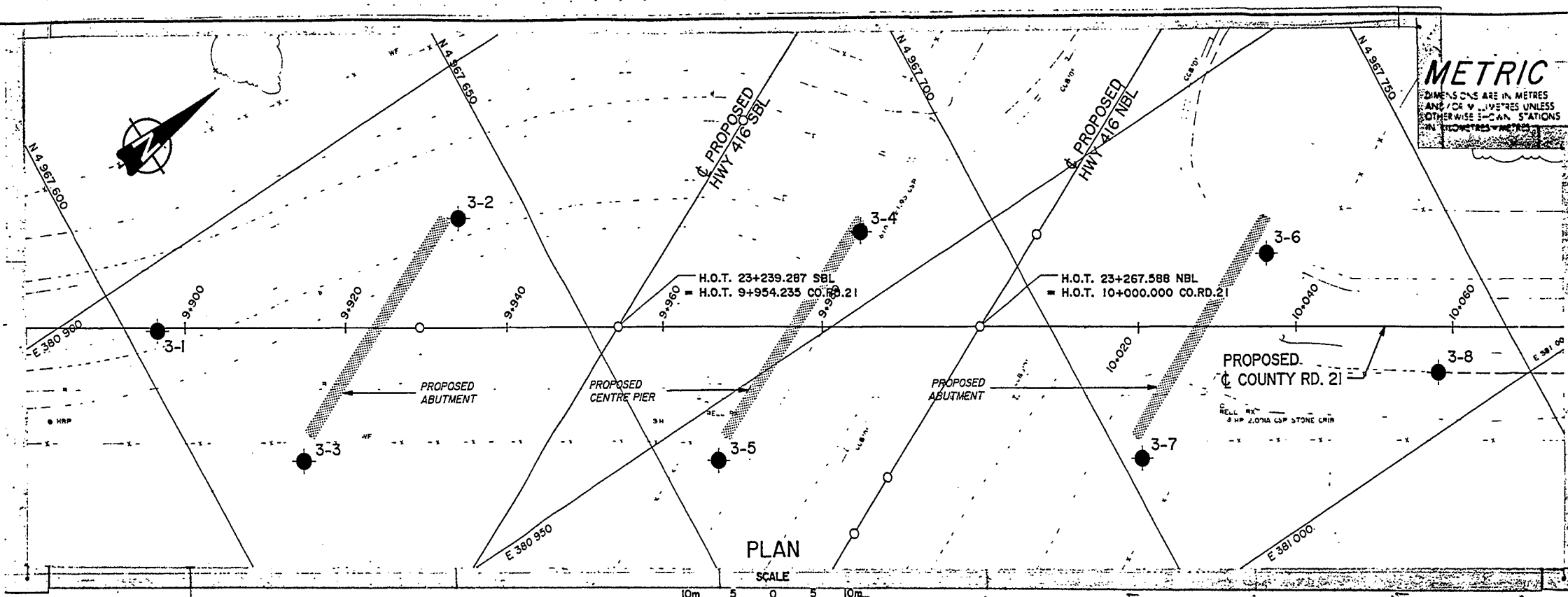


B.M.
EL. 87.345
N & W IN ROOT OF
0.20 MAPLE
7.7m RT STA 23+377.2

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

REVISIONS	DATE	BY	DESCRIPTION

DESIGN W.L. CHKS.W.L. CODE OHBDC B3 [LOAD CLASS 'A'] DATE OCT. 1 90
DRAWN P.S.HCHK G.L.A. SITE 16-311 STRUCT SCHEME DWG 1



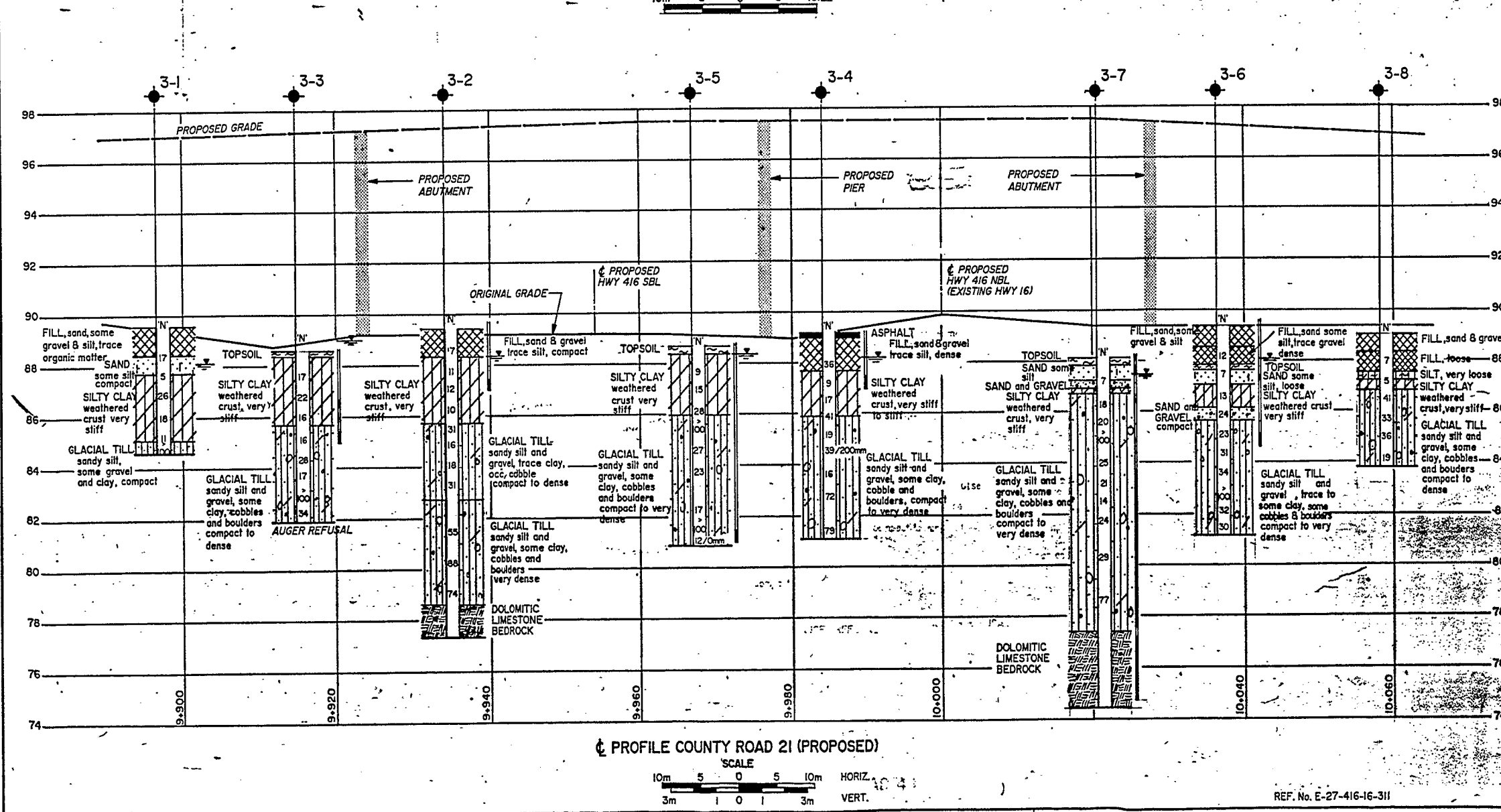
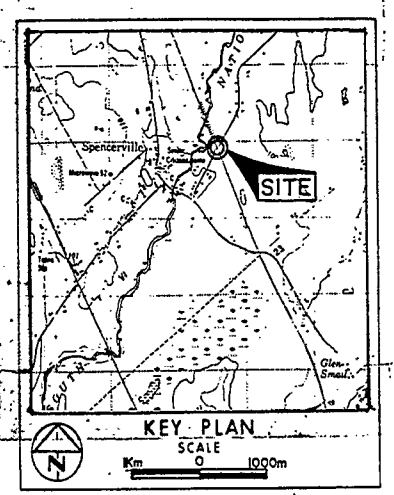
METRIC
DIMENSIONS ARE IN METRES
UNLESS OTHERWISE SPECIFIED
OTHERWISE IN CAN. STATIONS
IN METRES

CONT No 92-60
WP No 177-89-05

COUNTY ROAD 21
BORE HOLE LOCATIONS & SOIL STRATA

SHEET
291

Golder Associates Ltd.



- LEGEND**
- Bore Hole
 - ⊕ Dynamic Cone Penetration Test (Cone)
 - ⊕ Bore Hole & Cone
 - N Blows/0.3m (Std Pen Test, 475 J/blow)
 - CONE Blows/0.3m (60° Cone, 475 J/blow)
 - W.L. at time of investigation (April and May 1990)
 - Standpipe

No	ELEVATION	STATION	OFFSET
3-1	89.6	9+896.4	0.4m Rt
3-2	89.4	9+933.9	12.3m Lt
3-3	88.6	9+914.7	15.1m Rt
3-4	89.2	9+984.9	10.8m Lt
3-5	88.7	9+967.0	15.0m Rt
3-6	89.3	10+036.3	8.3m Lt
3-7	88.1	10+020.4	14.8m Rt
3-8	89.0	10+058.3	5.0m Rt

NOTE
The boundaries between soil strata have been established only at Bore Hole locations. Between Bore Holes the boundaries are assumed from geological evidence.

NOTE: The complete foundation investigation and design report for this project and other related documents may be examined at the Engineering Materials Office, Downsview. Information contained in this report and related documents is specifically excluded in accordance with the conditions of Section 102-2 of Form 100.

REV.	DATE	BY	DESCRIPTION

Geocres No 318-62

HWY No 416		DIST 9	
SUBMD AC	CHECKED AC	DATE 90/08/14	SITE 16-311
DRAWN JC	CHECKED	APPROVED	DWG 1778905-A