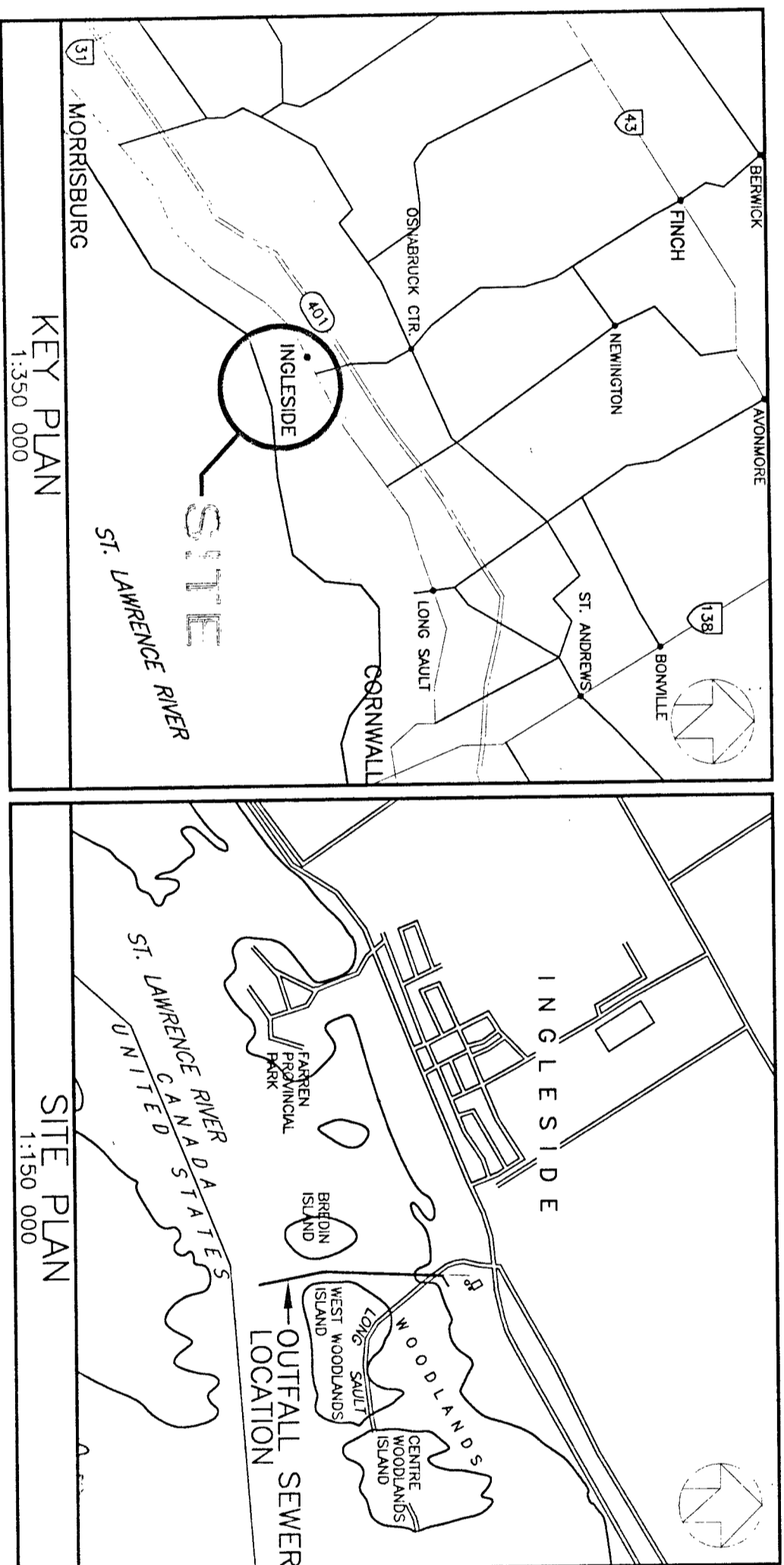


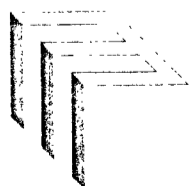
TOWNSHIP OF OSNABROCK

AS CONSTRUCTED

GORDON ROSS
REEVE



MCNEELY ENGINEERING CONSULTANTS
CONSULTING ENGINEERS



SEWAGE SYSTEM UPGRADING INGLESIDE OUTFALL SEWER

M.O.E.E. PROJECT No. 40-0797

CONTRACT No. 3

ISSUED FOR TENDER MAY, 1994



Ministry of the
Environment
And Energy

Ontario

SYMBOLS

DESCRIPTION	EXISTING	PROPOSED	REMOVALS
CONCRETE MONUMENT			X X X
ROCK BAR			X X X
IRON TUBE OR PIPE			X X X
IRON BAR			X
WOOD STAKE			X
2ND ORDER INTEGRATED SURVEY CONTROL MONUMENT			X
3RD ORDER INTEGRATED SURVEY CONTROL MONUMENT			X
CUT CROSS			X
CUT VEE			X X
ROUND IRON BAR			X
REINFORCING BAR			X
STANDARD IRON BAR			X
SHORT STANDARD IRON BAR			X
GATE, FLASHING LIGHT AND BELL			X
FLASHING LIGHT AND BELL			X
WIG-WAG			X
WIG-WAG AND BELL			X
RAILWAY CROSSING SIGN			X
FLASHING LIGHT			X
FLASHING LIGHT AND BELL			X
AREA TO BE CLEARED			X
AREA TO BE GRUBBED			X
AREA TO BE CLEARED AND GRUBBED			X
STUMP REMOVAL			X
SWAMP AND EDGE OF SWAMP			X
ROCK SECTION IN PROFILE			X
CUT			X
EMBANKMENT			X
OVERHEAD SIGN FOOTING			X
OVERHEAD SIGNS			X
FOUNDATION ONLY			X
BOREHOLE			X

REFERENCE POINTS

BM	BENCH MARK
CM	CONCRETE MONUMENT
RB	ROCK BAR
IP	IRON TUBE OR PIPE
IB	IRON BAR
WS	WOOD STAKE
ISCM 2-	2ND ORDER INTEGRATED SURVEY CONTROL MONUMENT
ISCM 3-	3RD ORDER INTEGRATED SURVEY CONTROL MONUMENT
C-C	CUT CROSS
V	CUT VEE
RIB	ROUND IRON BAR
	REINFORCING BAR
SIB	STANDARD IRON BAR
SSIB	SHORT STANDARD IRON BAR
	RAILWAYS
	1:500, 1:1000 SCALE, SINGLE (MULTIPLE) TRACK
FL-B	GATE, FLASHING LIGHT AND BELL
FW	WIG-WAG
FWB	WIG-WAG AND BELL
RCS	RAILWAY CROSSING SIGN
FL	FLASHING LIGHT
FL-B	FLASHING LIGHT AND BELL

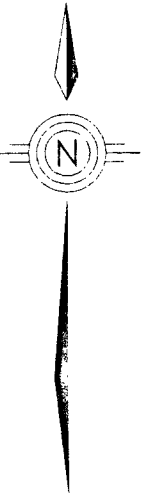
MISCELLANEOUS

	AREA TO BE CLEARED
	AREA TO BE GRUBBED
	AREA TO BE CLEARED AND GRUBBED
	STUMP REMOVAL
	SWAMP AND EDGE OF SWAMP
	ROCK SECTION IN PROFILE
	CUT
	EMBANKMENT
	OVERHEAD SIGN FOOTING
	OVERHEAD SIGNS
	FOUNDATION ONLY
	BOREHOLE

McNEELY ENGINEERING CONSULTANTS LTD.			
Owner	TOWNSHIP of OSNABRUCK	Design	D.K.M.
Project	SEWAGE SYSTEM UPGRADING INGLESIDE OUTFALL SEWER	Scale	1:10
	M.O.E.E. SEWAGE WORKS PROJECT No.40-0797	Check	R.G.
Title	LEGEND & INDEX	Date	SEPT 28 93
		Dwg No.	2

INDEX

DRAWING NO.	DESCRIPTION
1	COVER
2	LEGEND & INDEX
3	GENERAL ARRANGEMENT
4	PLAN AND PROFILE - STA.1+000 TO STA.1+250
5	PLAN AND PROFILE - STA.1+250 TO STA.1+600
6	PLAN AND PROFILE - STA.1+600 TO STA.1+950
7	PLAN AND PROFILE - STA.1+950 TO STA.2+137
8	SECTIONS AND DETAILS
9	DIFFUSER AND BALLAST DETAILS



No.	Date	Revision
2	APR., 96	AS CONSTRUCTED
1	MAY, 94	ISSUED FOR TENDER

D.K. MANIELY
REGISTERED PROFESSIONAL ENGINEER

R. GOUBO
REGISTERED PROFESSIONAL ENGINEER

IGNEEL Y ENGINEERING CONSULTANTS LTD.

Owner	TOWNSHIP of OSNABRUCK		
Project	SEWAGE SYSTEM UPGRADING INGSIDE OUTFALL SEWER		
Title	M.O.F.E. SEWAGE WORKS PROJECT No. 40-0797 GENERAL ARRANGEMENT		
Design	D.K.M.	Scale	H=1:2000 V=1:200
Drawn	Jan	Check	R.C.
Proj. No.	M2544-3	Date	SEPT 28 93
Dwg No.	3		

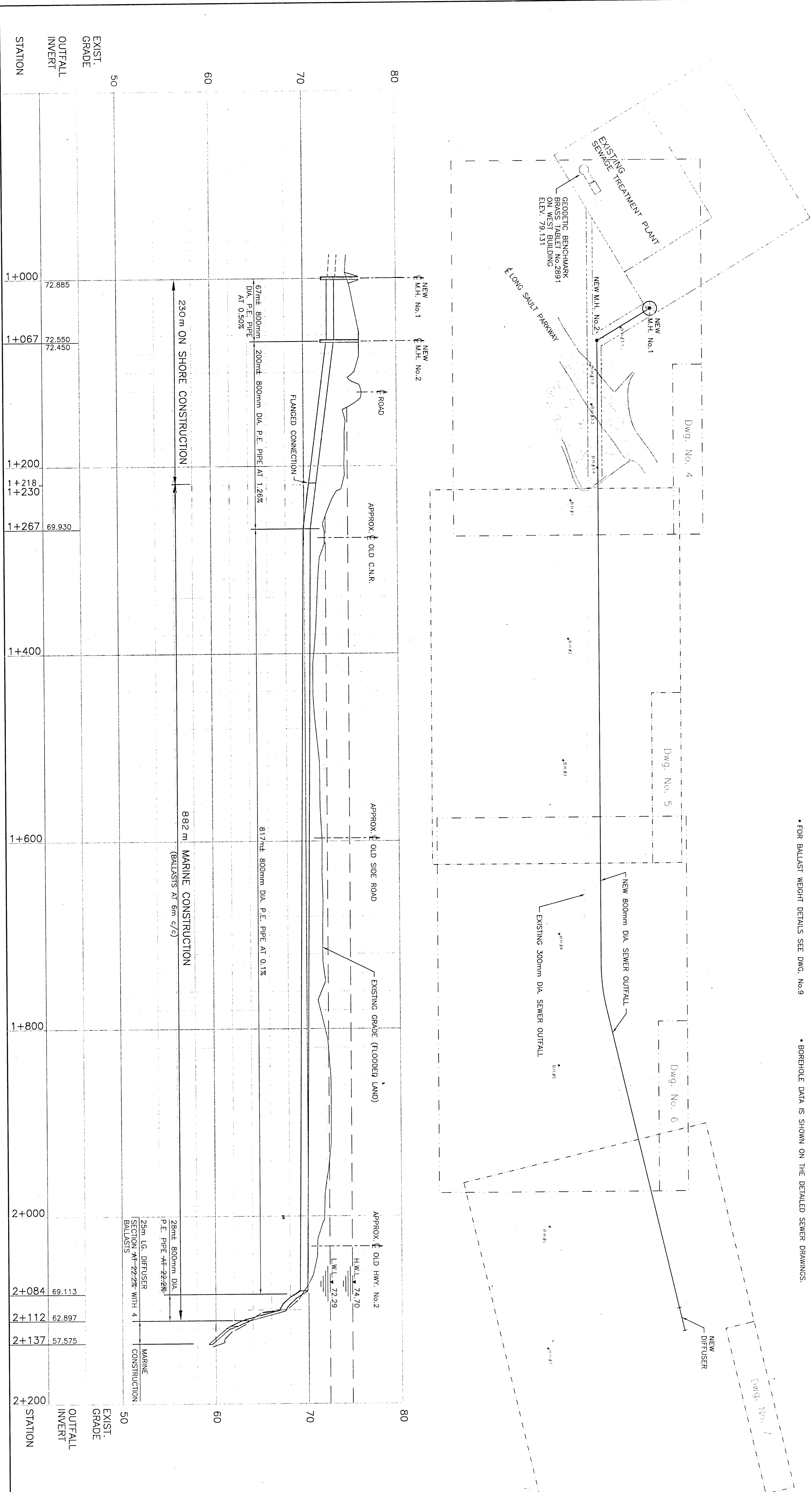
NOTES:

GENERAL:

- FOR STANDARD MANHOLE DETAIL SEE SPECIFICATIONS.
- FOR PIPING MATERIAL SEE SPECIFICATIONS.
- FOR TYPICAL SECTIONS SEE DWG. No.8
- FOR BALLAST WEIGHT DETAILS SEE DWG. No.9

BOREHOLES:

- THE ACCURACY OF THE SOILS REPORT OR THE ABBRIDGED VERSIONS SHOWN ON THESE DRAWINGS IS GUARANTEED.
- BOREHOLE LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY.
- BOREHOLE DATA IS SHOWN ON THE DETAILED SEWER DRAWINGS.



STATION	EXIST. GRADE	OUTFALL INVERT
1+000	72.885	
1+067	72.550	72.450
1+200		
1+218		
1+230		
1+267	69.930	
1+400		
1+600		
1+800		
2+000		
2+084	69.113	
2+112	62.897	
2+137	57.575	
2+200		



No.	Date	Revision
1	APR. 96	AS CONSTRUCTED
2	MAY 94	ISSUED FOR TENDER

LICHEELY ENGINEERING CONSULTANTS LTD.

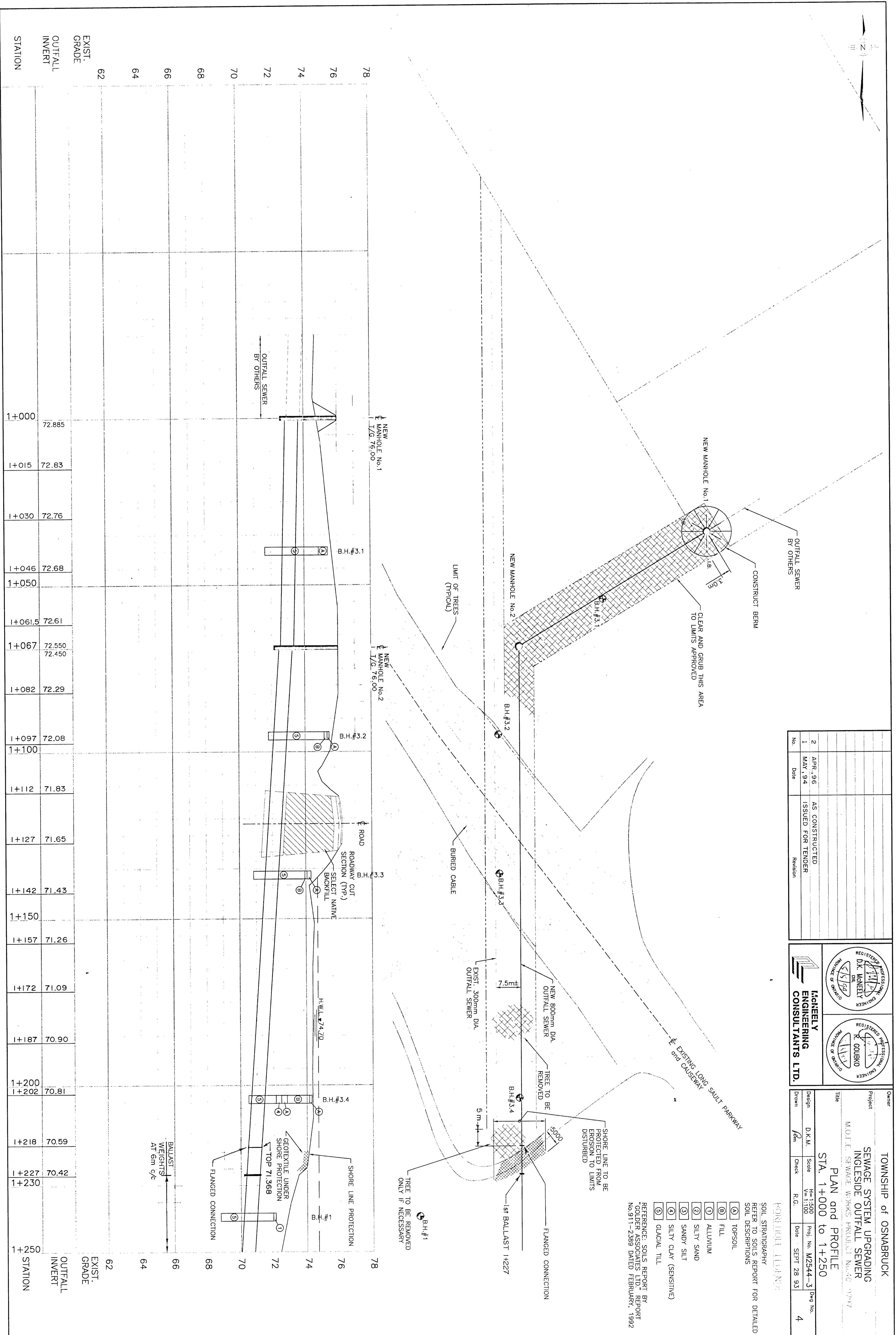
Other	TOWNSHIP of OSNABRUCK
Project	SEWAGE SYSTEM UPGRADING INSIDE OUTFALL SEWER
Title	PLAN and PROFILE STA. 1+000 to 1+250
Design	D.K.M.
Drawn	Jan
Scale	H=1:500 V=1:100
Proj. No.	M2544-3
Drawg No.	4
Check	R.C.
Date	SEP 28 93

FOURHOLE LEGEND

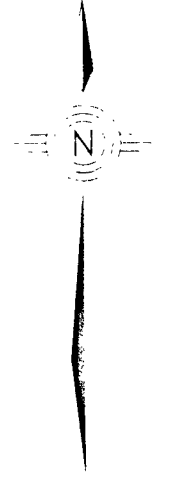
SOIL STRATIGRAPHY
REFER TO SOILS REPORT FOR DETAILED SOIL DESCRIPTIONS

- (A) TOPSOIL
- (B) FILL
- (1) ALLUVIUM
- (2) SILTY SAND
- (3) SANDY SILT
- (4) SILTY CLAY (SENSITIVE)
- (5) GLACIAL TILL

REFERENCE: SOILS REPORT BY "GOLDER ASSOCIATES LTD." REPORT No. 911-2389 DATED FEBRUARY, 1992



STATION	EXIST. GRADE	OUTFALL INVERT
1+000	72.885	
1+015	72.83	
1+030	72.76	
1+046	72.68	
1+050		
1+061.5	72.61	
1+067	72.550 72.450	
1+082	72.29	
1+097	72.08	
1+100		
1+112	71.83	
1+127	71.65	
1+142	71.43	
1+150		
1+157	71.26	
1+172	71.09	
1+187	70.90	
1+200		
1+202	70.81	
1+218	70.59	
1+227	70.42	
1+230		
1+250		
STATION	EXIST. GRADE	OUTFALL INVERT
62		
64		
66		
68		
70		
72		
74		
76		
78		



No.	Date	Revision
2	APR. 96	AS CONSTRUCTED
1	MAY 94	ISSUED FOR TENDER

McNEELY ENGINEERING CONSULTANTS LTD.

REGISTERED PROFESSIONAL ENGINEERS
 REGISTERED PROFESSIONAL ENGINEERS
 REGISTERED PROFESSIONAL ENGINEERS

D.K. McNEELY
 R. COUBRO

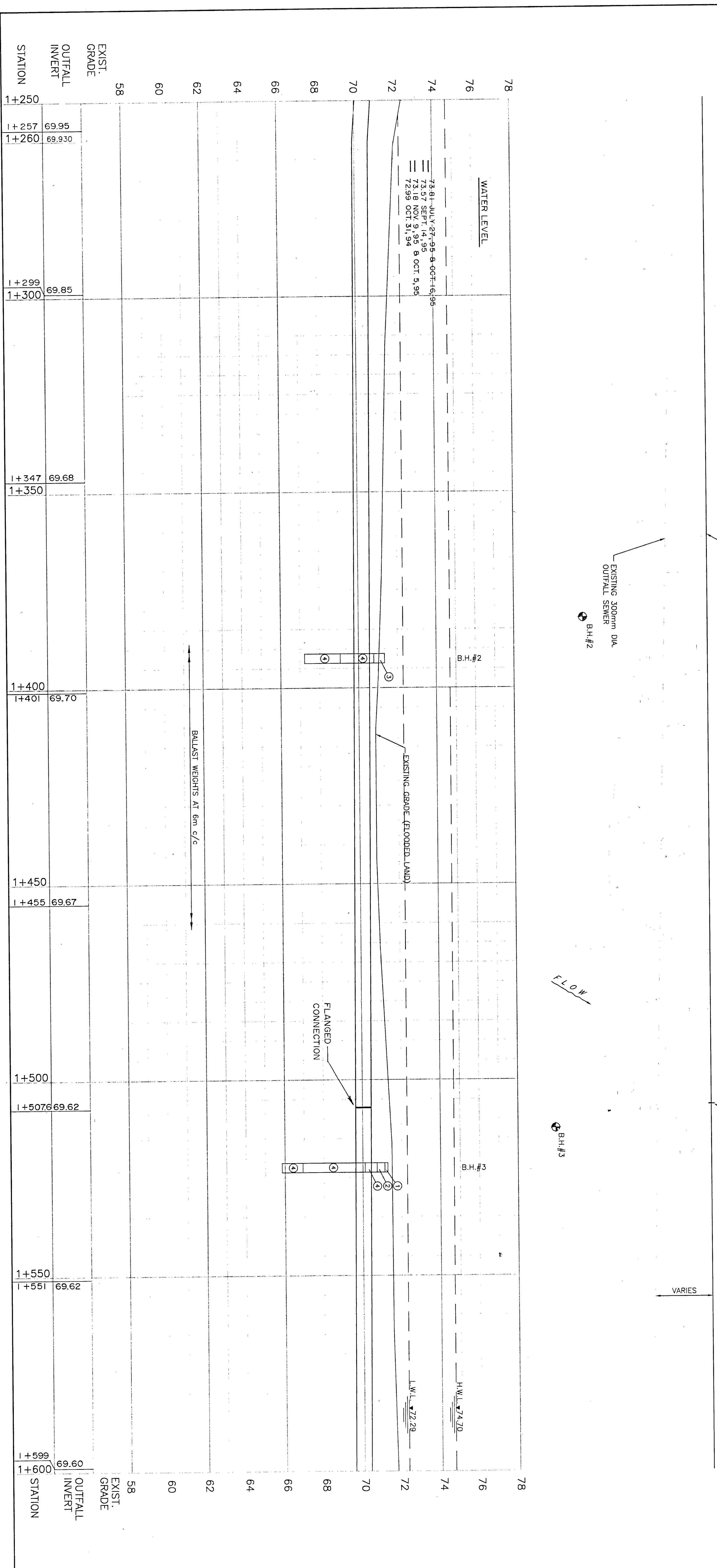
Owner	TOWNSHIP of OSNABRUCK
Project	SEWAGE SYSTEM UPGRADING INSIDE OUTFALL SEWER
Title	PLAN and PROFILE STA. 1+250 to 1+600
Design	D.K.M.
Drawn	R.M.
Scale	H=1:500 V=1:100
Check	R.G.
Date	SEPT 28 93
Drawg No.	5

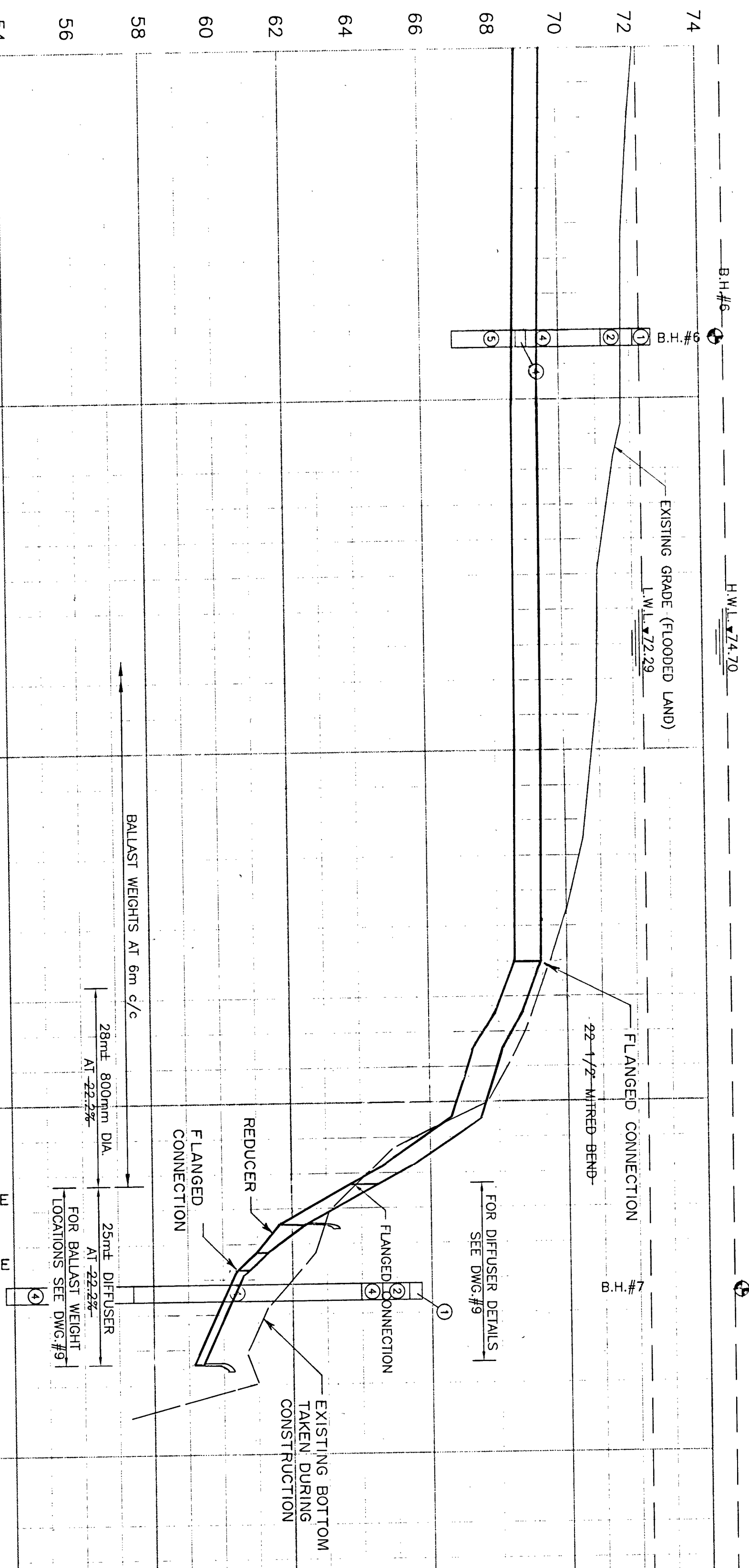
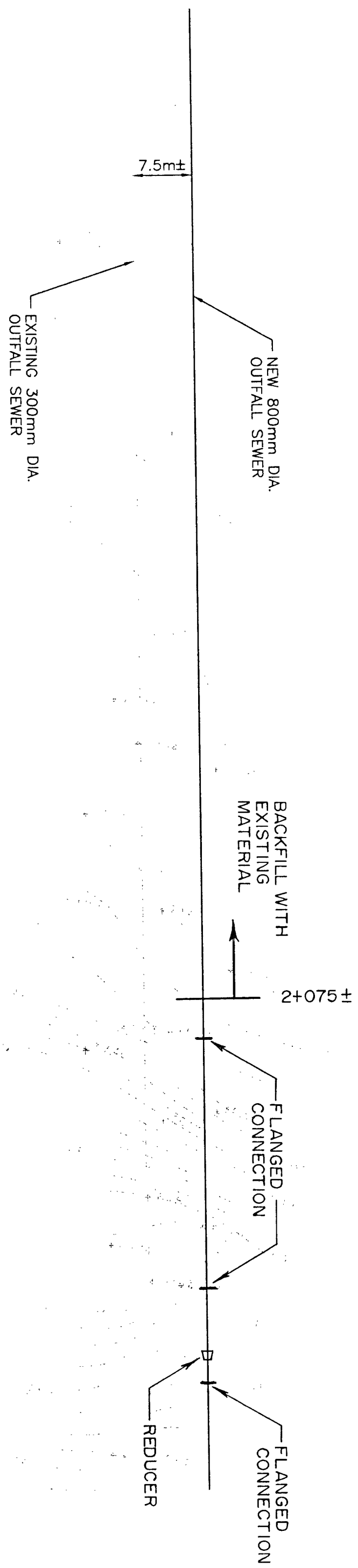
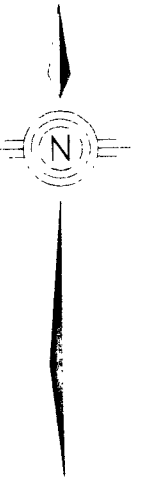
BOREHOLE LEGEND:

SOIL STRATIGRAPHY
 REFER TO SOILS REPORT FOR DETAILED SOIL DESCRIPTIONS

① TOPSOIL
 ② FILL
 ③ ALLUVIUM
 ④ SILTY SAND
 ⑤ SANDY SILT
 ⑥ SILTY CLAY (SENSITIVE)
 ⑦ GLACIAL TILL

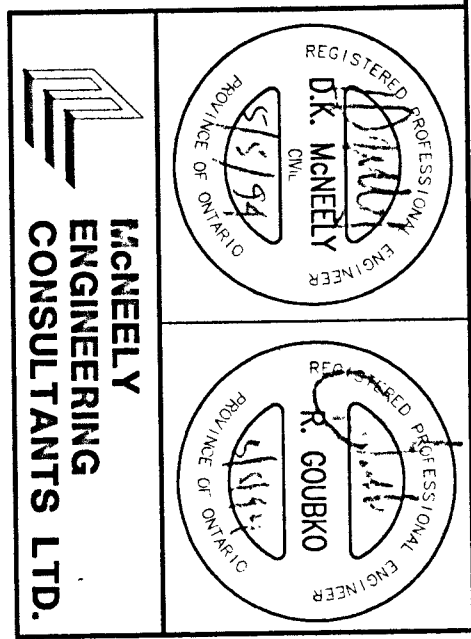
REFERENCE: SOILS REPORT BY "GOLDER ASSOCIATES LTD." REPORT No. 911-2389 DATED FEBRUARY, 1992





STATION	EXIST. GRADE	OUTFALL INVERT
1+950	68.75	68.75
2+000	68.59	68.59
2+049	68.52	68.52
2+050		
2+075	68.51	68.51
2+080	FLANGE	
2+084	69.11	69.11
2+087	67.92	67.92
2+093	67.12	67.12
2+100		
2+103	66.62	66.62
2+109	64.72	64.72
2+112	62.89	62.32
2+116	61.32	61.32
2+123.5	60.04	60.04
2+137	59.24	57.575
		(315 DIA.)
2+150		
2+200		
STATION		OUTFALL INVERT

No.	Date	Revision
2	APR. 96	AS CONSTRUCTED
1	MAY, 94	ISSUED FOR TENDER



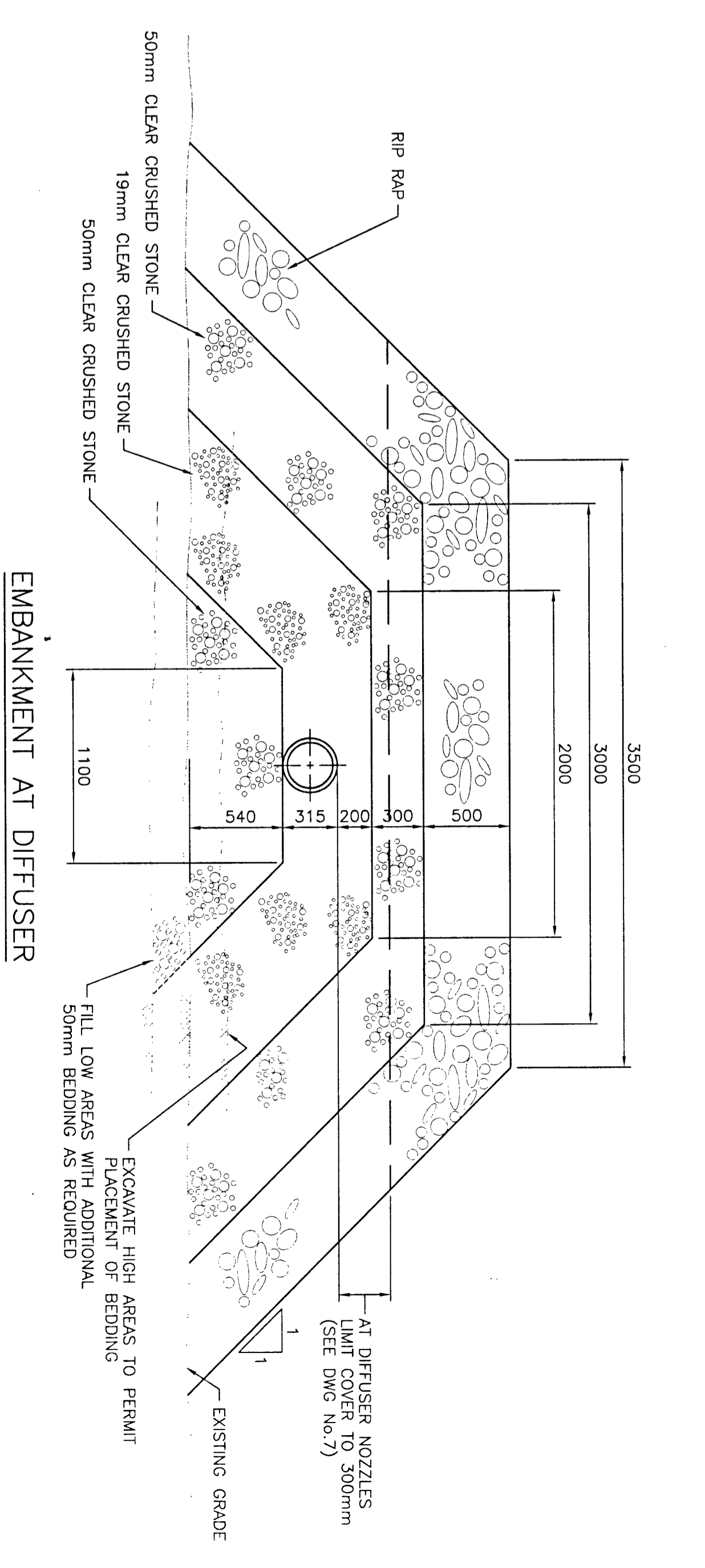
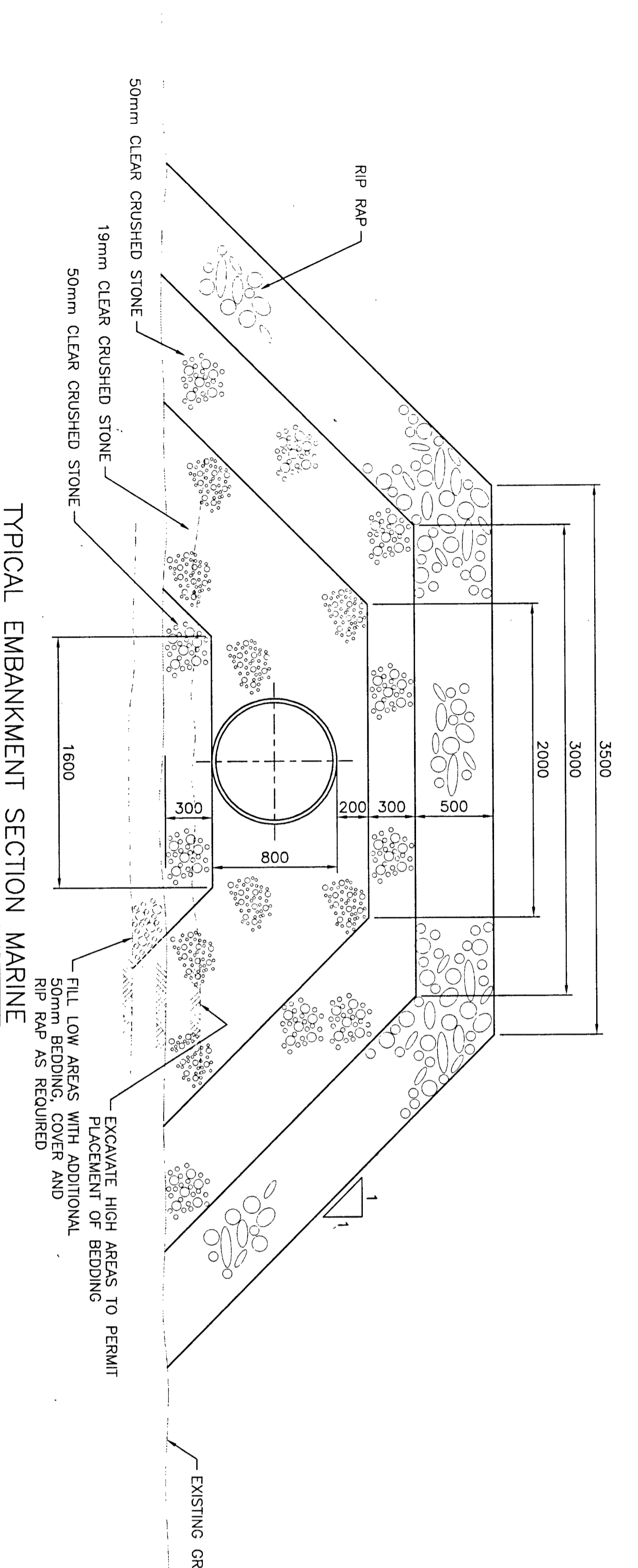
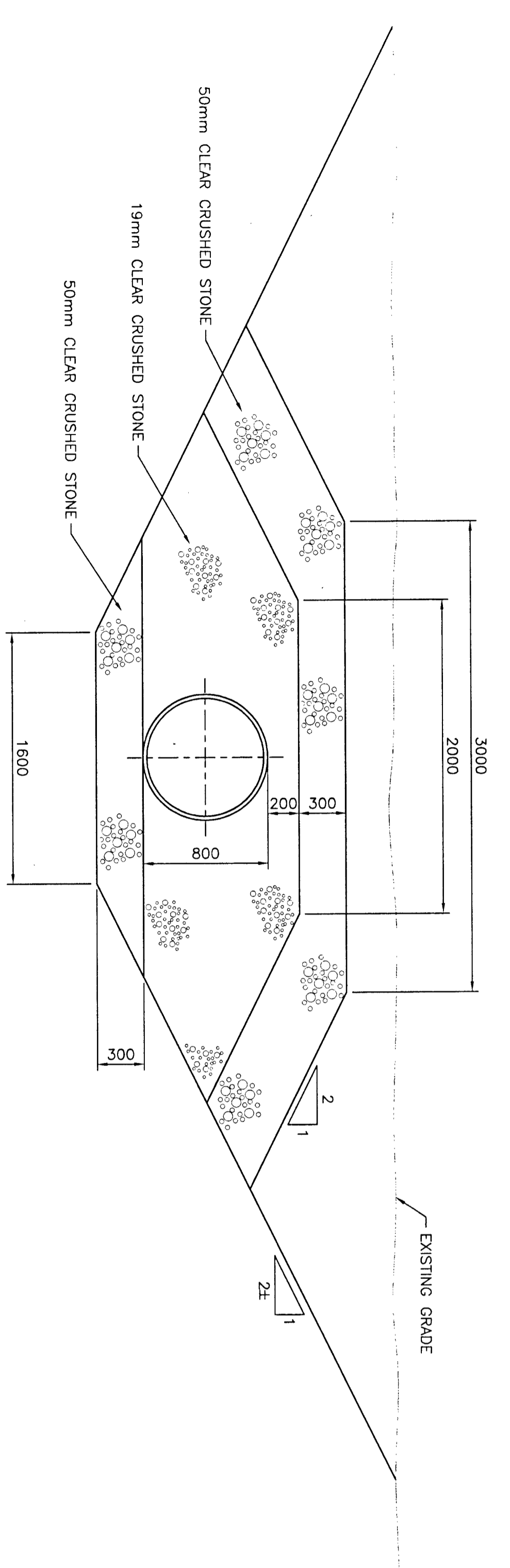
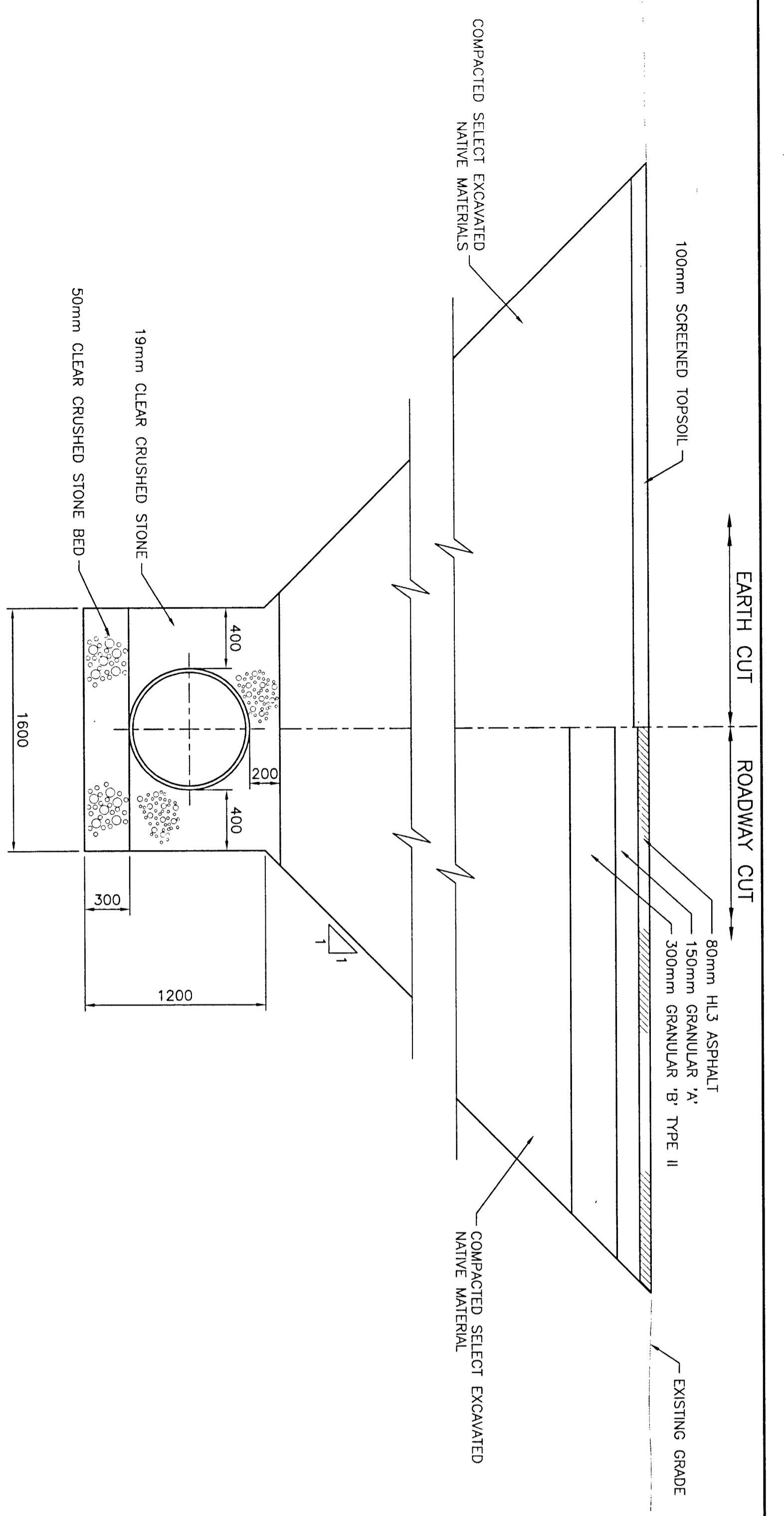
Owner	TOWNSHIP of OSNABURCK
Project	SEWAGE SYSTEM UPGRADING INGSIDE OUTFALL SEWER
Design	D.K.M.
Scale	H=1:500 V=1:100
Check	R.C.
Date	SEPT 28 93
Dwg No.	7

BOREHOLE LEGEND:

SOIL STRATIGRAPHY
REFER TO SOILS REPORT FOR DETAILED SOIL DESCRIPTIONS

- ① TOP-SOIL
- ② FILL
- ③ ALLUVIUM
- ④ SILTY SAND
- ⑤ SANDY SILT
- ⑥ SILTY CLAY (SENSITIVE)
- ⑦ GLACIAL TILL

REFERENCE: SOILS REPORT BY "GOLDER ASSOCIATES LTD." REPORT No.911-2389 DATED FEBRUARY, 1992



No.	Date	Revision
2	APR. 96	AS CONSTRUCTED
1	MAY 94	ISSUED FOR TENDER

MONEELY ENGINEERING CONSULTANTS LTD.

REGISTERED PROFESSIONAL ENGINEER
D.K. MONEELY
PROVIDER OF SERVICE

REGISTERED PROFESSIONAL ENGINEER
R. GOUBRO
PROVIDER OF SERVICE

Owner	TOWNSHIP of OSNABRUCK
Project	VILLAGE of INGLESIDE OUTFALL SEWER
Title	M.O.E. SEWAGE WORKS PROJECT No.40-0797
SECTIONS and DETAILS	
Design	D.K.M.
Drawn	Jan
Scale	1:25
Check	R.G.
Proj. No.	M2544-3
Date	SEPT 28 93
Dwg No.	8

No.	Date	Revision
2	APR. 96	AS CONSTRUCTED
1	MAY. 94	ISSUED FOR TENDER

McNEELY ENGINEERING CONSULTANTS LTD.

REGISTERED PROFESSIONAL ENGINEER
D.K. McNEELY
REGISTERED PROFESSIONAL ENGINEER
R. GOUBKO

Owner	TOWNSHIP of OSNABRUCK
Project	SEWAGE SYSTEM UPGRADING INLETSIDE OUTFALL SEWER
Title	DIFFUSER and BALLAST DETAILS
Design	D.K.M.
Drawn	R.M.
Scale	1:10
Check	R.G.
Date	SEPT 28 93
Proj. No.	M2544-3
Dwg No.	9

