

Verify all dimensions prior to construction - Do not scale

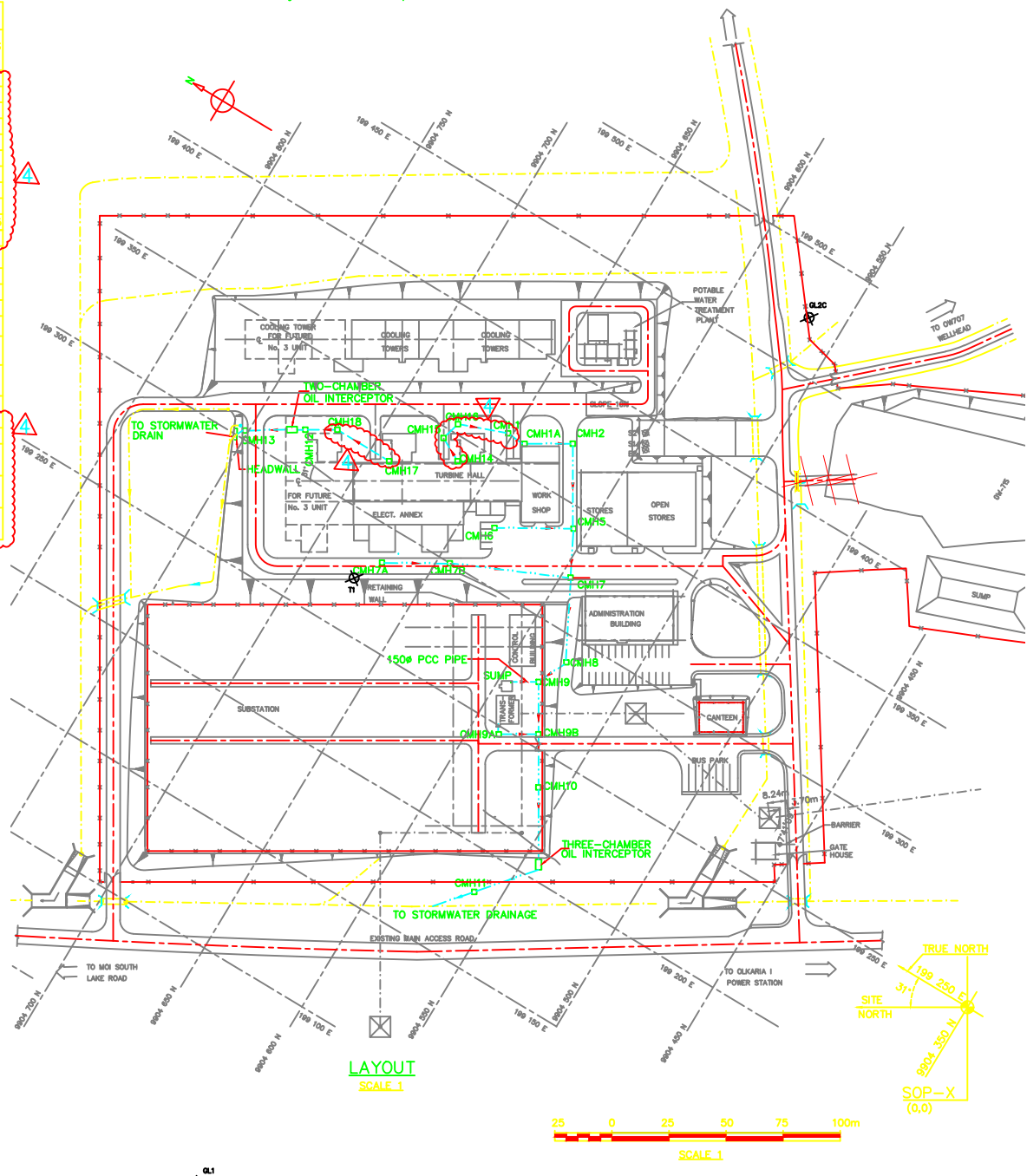
CONTAMINATED WATER DRAINAGE MANHOLE SCHEDULE

| UPSTREAM MANHOLE | DOWNSTREAM MANHOLE | INVERT LEVEL UPSTREAM | INVERT LEVEL DOWNSTREAM | LENGTH (m) | REMARKS | SLOPE 1: |
|-------------------------------|-------------------------------|-----------------------|-------------------------|------------|------------------------------|----------|
| CMH14 | CMH15 | 2002.88 | 2002.80 | 11.85 | | 150 |
| CMH15 | CMH16 | 2002.80 | 2002.74 | 8.80 | | 150 |
| CMH16 | CMH1 | 2002.74 | 2002.59 | 22.35 | | 150 |
| CMH1 | CMH1A | 2002.59 | 2002.50 | 8.59 | | 100 |
| CMH1A | CMH2 | 2002.50 | 2002.08 | 21.07 | | 50 |
| CMH2 | CMH5 | 2002.08 | 2002.83 | 37.22 | | 150 |
| CMH5 | CMH5 | 2003.08 | 2002.35 | 34.69 | CMH5 is a circummanhole | 47 |
| CMH5 | CMH7 | 2001.83 | 2001.40 | 21.52 | | 50 |
| CMH7A | CMH7B | 2003.08 | 2002.58 | 29.68 | | 60 |
| CMH7B | CMH7 | 2002.58 | 2001.40 | 53.28 | | 45.15 |
| CMH7 | CMH8 | 2001.40 | 2001.00 | 37.14 | | 92.9 |
| SUMP | CMH9 | 1997.50 | 1997.30 | 13.0 | ump at auxiliary transformer | 65 |
| CMH8 | CMH9 | 1997.40 | 1997.30 | 14.90 | CMH8 is a circummanhole | 150 |
| CMH9 | CMH9B | 1997.30 | 1997.17 | 22.68 | | 150 |
| CMH9A | CMH9B | 1997.55 | 1997.44 | 17.32 | CMH9B is a circummanhole | 150 |
| CMH9B | CMH10 | 1997.17 | 1997.00 | 23.33 | | 150 |
| CMH10 | THREE CHAMBER OIL INTERCEPTOR | 1997.00 | 1996.73 | 33.76 | | 150 |
| THREE CHAMBER OIL INTERCEPTOR | CMH11 | 1996.73 | 1996.52 | 32.09 | | 150 |
| CMH11 | STORMWATER | 1996.52 | *1996.31 | *32.09 | | *150 |
| CMH17 | CMH18 | 2002.88 | 2002.61 | 26.54 | | 100 |
| CMH18 | CMH12 | 2002.61 | 2002.52 | 14.02 | | 150 |
| CMH12 | TWO-CHAMBER OIL INTERCEPTOR | 2002.52 | 2002.46 | 5.85 | | 100 |
| TWO-CHAMBER OIL INTERCEPTOR | CMH13 | 2002.46 | 2002.25 | 20.57 | | 100 |
| CMH13 | HEADWALL/STORMWATER | 2002.25 | *2002.05 | *3.84 | | *19 |

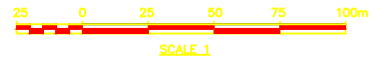
TO BE CONFIRMED ON SITE

CONTAMINATED WATER DRAINAGE MANHOLE SOPs

| UPSTREAM MANHOLE | EASTINGS | NORTHINGS |
|-------------------------------|-----------|------------|
| CMH1 | 199361.95 | 9904652.03 |
| CMH1A | 199361.70 | 9904643.44 |
| CMH2 | 199372.58 | 9904625.39 |
| CMH6 | 199323.31 | 9904635.79 |
| CMH5 | 199340.89 | 9904605.88 |
| CMH7A | 199284.91 | 9904670.20 |
| CMH7B | 199299.94 | 9904644.60 |
| CMH7 | 199321.77 | 9904596.00 |
| CMH8 | 199289.03 | 9904578.46 |
| CMH9 | 199275.38 | 9904584.44 |
| CMH9A | 199246.79 | 9904587.59 |
| CMH9B | 199255.72 | 9904572.74 |
| CMH10 | 199235.72 | 9904560.72 |
| THREE CHAMBER OIL INTERCEPTOR | 199206.82 | 9904543.26 |
| CMH11 | 199182.00 | 9904561.23 |
| CMH12 | 199317.51 | 9904729.00 |
| TWO-CHAMBER OIL INTERCEPTOR | 199314.52 | 9904734.03 |
| CMH13 | 199303.56 | 9904751.44 |
| CMH14 | 199340.05 | 9904664.71 |
| CMH15 | 199345.56 | 9904675.20 |
| CMH16 | 199354.07 | 9904672.94 |
| CMH17 | 199324.60 | 9904690.43 |
| CMH18 | 199324.72 | 9904716.97 |



LAYOUT SCALE 1



- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 - ALL LEVELS ARE BASED ON A LOCAL DATUM (GL2).
 - THIS DRG. SHALL BE READ IN CONJUNCTION WITH DRG. Nos. 2571-101-C-CS-903(MANHOLE DETAILS), 2571-101-C-CS-906(PIPE BEDDING), 2571-101-C-PP-553 (STORMWATER DRAINAGE) 2571-101-C-CS-905 (OIL INTERCEPTOR DETAIL)
 - ALL CONCRETE PIPES ARE TO BE MADE USING SULPHATE RESISTING CEMENT AND TO BE SOCKET AND SPIGOT JOINTED.
 - MINIMUM COVER TO THE CROWN OF THE PIPES SHALL BE AS FOLLOWS:
(i) UNDER ROADS - 1.2m
(ii) OTHER AREAS - 0.9m
 - ALL MANHOLES FALLING WITHIN TRAFFICKED AREAS TO HAVE HEAVY DUTY MANHOLE COVERS. IN OTHER AREAS MANHOLE COVERS TO BE MEDIUM DUTY.
 - ALL CONTAMINATED PIPES TO BE DN225 CONCRETE PIPES UNLESS SHOWN OTHERWISE
 - PIPE AND MANHOLE LOCATION TO BE CONFIRMED ON SITE BY THE ENGINEER

- LEGEND**
- CMH2 DN 225 PCC CONTAMINATED WATER DRAIN PIPES WITH MANHOLE POSITION
 - STORMWATER DRAIN
 - PCC PRECAST CONCRETE
 - EXTENT OF REVISION

| Rev | Reason | By | Chk | Appr. | Date |
|-----|---|-----|-----|-------|----------|
| 4 | NEW MANHOLES INTRODUCED & INVERT LEVELS CHANGED | PNW | | | JUNE 02 |
| 3 | MANHOLE SOPs INCLUDED AND INVERT LEVELS REVISED | PNW | | | MAY'02 |
| 2 | AS SHOWN | MWG | | | MAY'01 |
| 1 | CMH3 INVERT CHANGED | MWG | | | APRIL'01 |
| 0 | FIRST ISSUE | MWG | | | MAR'01 |

Rev Reason By Chk Appr. Date
 Scales AS SHOWN Drawn MWG Designed MWG
 Date MAR'99 CAD Ref 552-1-3 Checked

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Consultants
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 Consulting Engineers PB Kennedy & Donkin Limited

OLKARIA II GEOTHERMAL POWER PROJECT
 POWER STATION INFRASTRUCTURE SERVICES LAYOUT
 CONTAMINATED WATER DRAINAGE

ISSUED FOR CONSTRUCTION

BASED ON XREF FILES
 1. PPSXR5X6

| Client | Design | Rev | Construction | As Built |
|----------|----------|-----|--------------|----------|
| 18.03.01 | 05.04.01 | 1 | 31.05.01 | 2 |
| | | | 20.05.02 | 3 |
| | | | 13.06.02 | 4 |