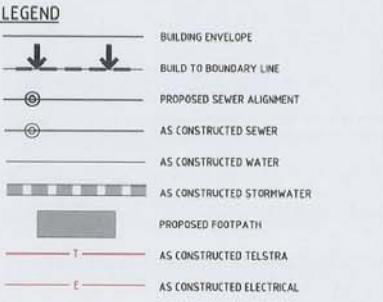


- ### SEWERAGE NOTES
- ALL SEWERS LESS THAN 5.7m DEEP ARE 150MM DIAMETER uPVC DWV S10 IN ACCORDANCE WITH STANDARD AS/NZS 1260:1999. UNLESS SHOWN OTHERWISE.
 - ALL 100mm DIAMETER SEWER LINES LESS THAN 5.7m DEEP ARE uPVC DWV S10 IN ACCORDANCE WITH STANDARD AS/NZS 1260:1999. UNLESS SHOWN OTHERWISE.
 - CONTRACTOR SHALL VERIFY FINISHED SURFACE LEVELS ON SITE BEFORE CONSTRUCTION OF SEWERS AND PROPERTY CONNECTION BRANCHES.
 - ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT T.C.C. STANDARD METHODS AND DRAWINGS.
 - EACH ALLOTMENT SHALL BE SERVED BY A 100MM PROPERTY CONNECTION. THE CONTRACTOR IS TO HAVE PROPERTY BOUNDARIES PEGGED AND LOCATION OF PROPERTY CONNECTIONS CONFIRMED PRIOR TO COMMENCING CONSTRUCTION OF PROPERTY CONNECTION BRANCHES.
 - D.B.'S SHALL BE LOCATED 15m FROM DOWNSTREAM ALIGNMENT.
 - PROPERTY CONNECTION BRANCHES SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 1.0m.
 - INSTALLATION AND COMPACTION OF TRENCH BACKFILL IS TO BE CARRIED OUT STRICTLY IN ACCORDANCE WITH TCC AUS. SPEC. AND TO THE COMPACTION VALUES SHOWN IN THE JOB SPECIFICATION SCHEDULES.
 - ALL WORK ASSOCIATED WITH LIVE SEWERS OR MANHOLES TO BE CARRIED OUT BY THE CONTRACTOR UNDER TOWNSVILLE CITY COUNCIL SUPERVISION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING SERVICES WITH ALL RELEVANT AUTHORITIES BEFORE COMMENCING CONSTRUCTION.
 - THE CONSTRUCTION OF SEWERAGE WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED IN ACCORDANCE WITH T.C.C. POLICIES AND DEPARTMENT OF LOCAL GOVERNMENT REQUIREMENTS.
 - PROPERTY CONNECTIONS CROSSING U/G ELECTRICITY ALLOCATION TO HAVE A MINIMUM OF 1.0m COVER.
 - TOP OF MANHOLES SHALL BE 150mm ABOVE F.S.L. AS PER T.C.C. STANDARD DWS.
 - BACKFILL ROAD CROSSINGS WITH CRUSHER DUST COMPACTED TO NOT LESS THAN 95% OF THE STANDARD MAX. DRY DENSITY TO A.S. 289, INCLUDING FUTURE ROAD CROSSINGS.
 - SEWER STRUCTURES ARE LOCATED 15M FROM THE PROPERTY BOUNDARIES U.N.O.



TOWNSVILLE CITY COUNCIL
 REC'D 2 APR 2014
 TOWN PLANNING

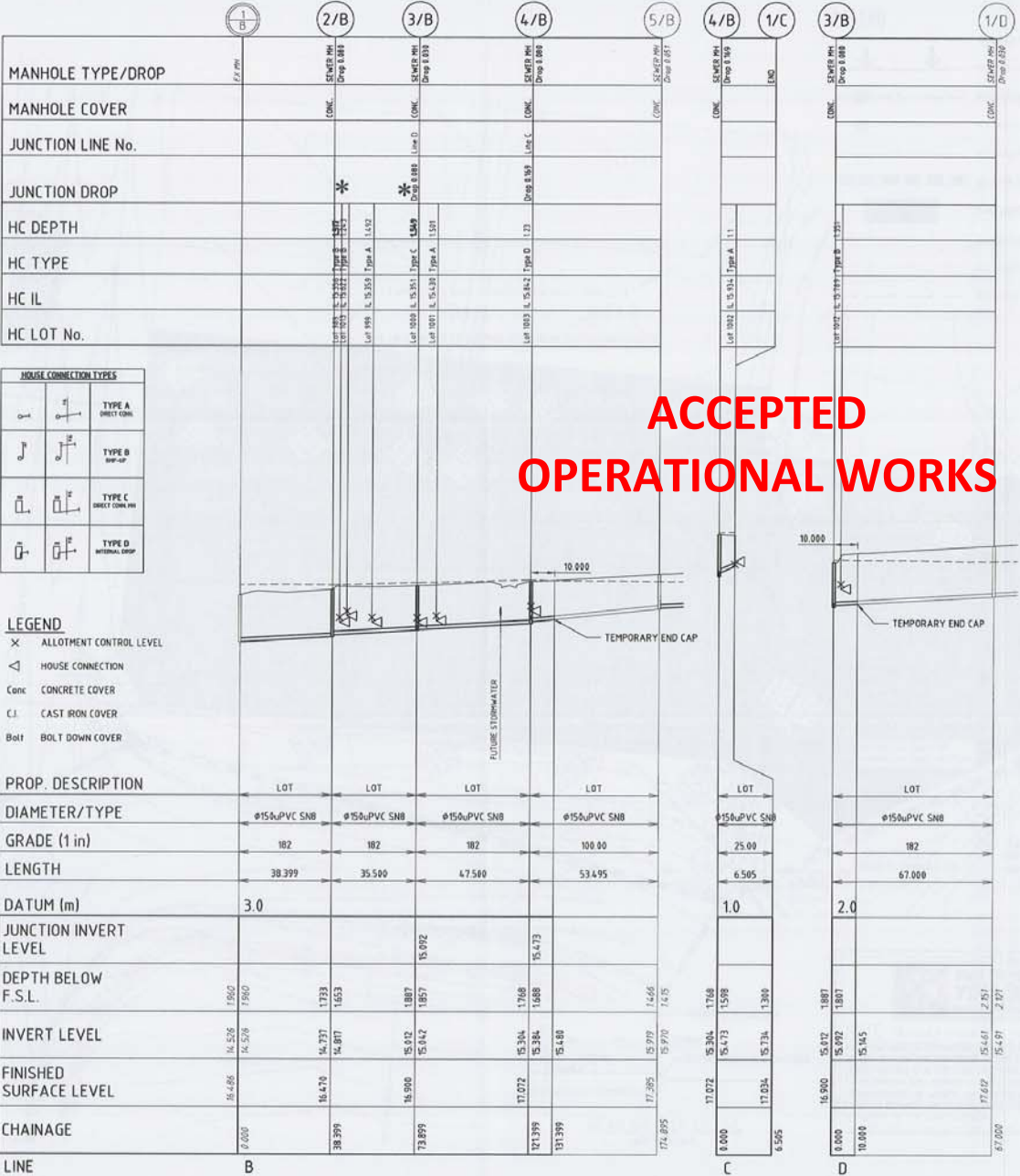
**ACCEPTED
 OPERATIONAL WORKS**

| | | | | | | |
|--|--|-------|--------|------|---------|----------|
| A ORIGINAL ISSUE | | MM | MM | MM | 5555 | 21/03/14 |
| No. Amendments | | Drawn | Design | Appd | Reg No. | Date |
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| | | | | |
|-------------|-------------------------|-----------------------------|--------|--------|
| Client | URBEX PTY LTD | Status | AHD | 131651 |
| Project | KALYNDIA STAGE 1B 1.1 | RL | 10.240 | AHD |
| Title | SEWER RETICULATION PLAN | NOT FOR CONSTRUCTION | | |
| Project No. | | Drawing No. | | Rev |
| | | CT-1521-SK102 | | A |

ACCEPTED
OPERATIONAL WORKS



| | 1/B | 2/B | 3/B | 4/B | 5/B | 4/B | 1/C | 3/B | 1/D |
|-------------------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|-----|---------------------|---------------------|
| MANHOLE TYPE/DROP | F.F. MH | SEWER MH Drop 0.188 | SEWER MH Drop 0.013 | SEWER MH Drop 0.083 | SEWER MH Drop 0.071 | SEWER MH Drop 0.169 | END | SEWER MH Drop 0.088 | SEWER MH Drop 0.026 |
| MANHOLE COVER | | CONC. | CONC. | CONC. | CONC. | CONC. | | CONC. | CONC. |
| JUNCTION LINE No. | | | Line D | Line D | | | | | |
| JUNCTION DROP | | * | * | | | | | | |
| HC DEPTH | | 1.502 | 1.509 | 1.723 | | 1.11 | | 1.151 | |
| HC TYPE | | Type A | Type C | Type D | | Type A | | Type B | |
| HC IL | | Lot 199 L. 15.358 | Lot 191 L. 15.230 | Lot 193 L. 15.642 | | Lot 192 L. 15.911 | | Lot 192 L. 15.784 | |
| HC LOT No. | | 199 | 191 | 193 | | 192 | | 192 | |

| | |
|--|--------------------------|
| | TYPE A DIRECT CON. |
| | TYPE B BYP-UP |
| | TYPE C DIRECT CON. MH |
| | TYPE D INTERNAL CON. |

| | |
|-------|-------------------------|
| X | ALLOTMENT CONTROL LEVEL |
| △ | HOUSE CONNECTION |
| CONC. | CONCRETE COVER |
| C.I. | CAST IRON COVER |
| Bolt | BOLT DOWN COVER |

| PROP. DESCRIPTION | LOT | LOT | LOT | LOT | LOT | LOT |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| DIAMETER/TYPE | Ø150uPVC S/NB | Ø150uPVC S/NB | Ø150uPVC S/NB | Ø150uPVC S/NB | Ø150uPVC S/NB | Ø150uPVC S/NB |
| GRADE (1 in) | 182 | 182 | 182 | 100.00 | 25.00 | 182 |
| LENGTH | 38.399 | 35.500 | 47.500 | 53.495 | 6.505 | 67.000 |
| DATUM (m) | 3.0 | | | | 1.0 | 2.0 |
| JUNCTION INVERT LEVEL | | | 15.092 | 15.473 | | |
| DEPTH BELOW F.S.L. | 1.860 | 1.733 | 1.887 | 1.768 | 1.558 | 1.887 |
| INVERT LEVEL | 14.506 | 14.817 | 15.012 | 15.384 | 15.473 | 15.092 |
| FINISHED SURFACE LEVEL | 16.486 | 16.476 | 16.900 | 17.072 | 17.022 | 16.900 |
| CHAINAGE | 0.000 | 38.399 | 73.899 | 127.399 | 181.399 | 187.904 |

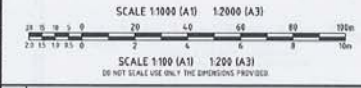
TOWNSVILLE CITY COUNCIL
RECD 2 APR 2014
TOWN PLANNING

NOTE:-
REFER TCC STD DWG Nos. SD-455 TO SD-475 FOR DETAILS OF SEWER MANHOLES, COVERS, FRAMES, INLETS, OUTLETS, HOUSE CONNECTIONS & PIPELINE CONSTRUCTION.

NOTE:-
TOP OF MANHOLE RINGS TO BE SET 150mm ABOVE F.S.L. AS PER TCC STD DWG SD-475.

MANHOLE DROP NOTE:
INTERNAL MH DROPS TO BE AS PER TOWNSVILLE CITY COUNCIL STANDARD DRAWING SD-474

HOUSE CONNECTIONS DEEPER THAN 1.5m TO HAVE A VERTICAL RISER ADDED TO ENSURE MAXIMUM 1.5m DEPTH.



| No. | Amendments | Drawn | Design | Appd | Reg No | Date |
|-----|----------------|-------|--------|------|--------|----------|
| A | ORIGINAL ISSUE | MM | MM | MB | 5555 | 21/03/14 |



| | |
|---------|----------------------------|
| Client | URBEX PTY LTD |
| Project | KALYNDA STAGE 11B 1.1 |
| Title | SEWER LONGITUDINAL SECTION |

| | |
|-----------------------------|---------------|
| Datum | AHD |
| PSM | 131651 |
| RL | 10.248 |
| AHD | |
| NOT FOR CONSTRUCTION | |
| Project No. | CT-1521-SK103 |
| Drawing No. | |
| Rev | A |

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