

**DRAWING INDEX**

| SHEET NUMBER | CITY OF WINNIPEG DRAWING NUMBER | DRAWING TITLE  |
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| 2            | D-13899                         | COLLEGE AVENUE - CHARLES STREET TO MAIN STREET                                       |
| 3            | D-13900                         | MARGARET AVENUE - SALTER STREET TO 110 W OF SALTER STREET                            |
| 4            | D-13901                         | MARGARET AVENUE - 110 W OF SALTER STREET TO SOUTHALL DRIVE (W-LEG)                   |
| 5            | D-13902                         | SOUTHALL DRIVE (W-LEG) - MARGARET AVENUE TO SOUTHALL DRIVE (N-LEG)                   |
| 6            | D-13903                         | SOUTHALL DRIVE (N-LEG) - SOUTHALL DRIVE (W-LEG) TO 74 W OF SALTER STREET (W R)       |
| 7            | D-13904                         | SOUTHALL DRIVE (N-LEG) - 74 W OF SALTER STREET (W R) TO SALTER STREET (W R)          |
| 8            | D-13905                         | NOVARA STREET - COURLAND BAY TO MARSEILLES CLOSE                                     |
| 9            | D-13906                         | POWERS STREET - PRICHARD AVENUE TO 57 N OF MANITOBA AVENUE                           |
| 10           | D-13907                         | POWERS STREET - 57 N OF MANITOBA AVENUE TO BURROWS AVENUE                            |
| 11           | D-13908                         | REDWOOD AVENUE - SARGENT TOMMY PRINCE STREET TO 140 E OF SARGENT TOMMY PRINCE STREET |
| 12           | D-13909                         | REDWOOD AVENUE - 140 E OF SARGENT TOMMY PRINCE STREET TO BATTERY STREET              |

**ABBREVIATIONS**

|            |                                    |
|------------|------------------------------------|
| WWS        | WASTE WATER SEWER                  |
| CS         | COMBINED SEWER                     |
| LDS        | LAND DRAINAGE SEWER                |
| R          | PROPERTY LINE                      |
| CL         | CENTER LINE                        |
| G.I.S.     | GEOGRAPHIC INFORMATION SYSTEM      |
| B.M.       | BENCH MARK                         |
| TH         | TEST HOLE                          |
| ELEV       | ELEVATION                          |
| INV        | INVERT                             |
| MIN        | MINIMUM                            |
| MAX        | MAXIMUM                            |
| SL         | STREET LIGHTING                    |
| TS         | TRAFFIC SIGNALS                    |
| ABAND      | ABANDONED                          |
| BLDG       | BUILDING                           |
| HSE        | HOUSE                              |
| CRN        | CORNER                             |
| OPP        | OPPOSITE                           |
| C/S OR S/C | CURB STOP                          |
| MTS        | MANITOBA TELEPHONE SYSTEM          |
| R.O.W.     | RIGHT-OF-WAY                       |
| WM         | WATERMAIN                          |
| CULV       | CULVERT                            |
| MH         | MANHOLE                            |
| CB         | CATCH BASIN                        |
| CI         | CURB INLET                         |
| VERT.      | VERTICAL                           |
| HORZ.      | HORIZONTAL                         |
| I.B.       | IRON BAR                           |
| FIBRE      | FIBRE OPTIC                        |
| TYP        | TYPICAL                            |
| X-ING      | CROSSING                           |
| HYD        | HYDRANT                            |
| EXIST      | EXISTING                           |
| N          | NORTH                              |
| E          | EAST                               |
| S          | SOUTH                              |
| W          | WEST                               |
| W/         | WITH                               |
| C/W        | CONSTRUCTED WITH                   |
| CONC       | CONCRETE                           |
| AC         | ASBESTOS CEMENT                    |
| VC OR CLAY | VITRIFIED CLAY                     |
| CI         | CAST IRON                          |
| DI         | DUCTILE IRON                       |
| PVC        | POLYVINYL CHLORIDE                 |
| HDPE       | HIGH DENSITY POLYETHYLENE          |
| PCCP       | PRESTRESSED CONCRETE CYLINDER PIPE |

**LEGEND**

| DESCRIPTION                    | PLAN VIEW |          |
|--------------------------------|-----------|----------|
|                                | EXISTING  | PROPOSED |
| WATER PIPE                     |           |          |
| FIRE HYDRANT                   |           |          |
| VALVE                          |           |          |
| CURB STOP                      |           |          |
| REDUCER                        |           |          |
| COUPLING OR SLUDDER            |           |          |
| CROSS                          |           |          |
| BEND - 11.25', 22.5', 45', 90' |           |          |
| TEE                            |           |          |
| VERTICAL BEND                  |           |          |
| ANODE                          |           |          |
| REPAIR MARKER                  |           |          |
| PLUG                           |           |          |
| SEWER PIPE                     |           |          |
| MANHOLE                        |           |          |
| CATCH BASIN                    |           |          |
| CURB INLET                     |           |          |
| JUNCTION                       |           |          |
| DITCH                          |           |          |
| CULVERT                        |           |          |
| SURVEY BAR                     |           |          |
| SURVEY MONUMENT                |           |          |
| TREE - DECIDUOUS               |           |          |
| TREE - CONIFEROUS              |           |          |
| HYDRO                          |           |          |
| HYDRO POLE                     |           |          |
| LAMP STANDARD                  |           |          |
| HYDRO POLE W/STREET LIGHTING   |           |          |
| POLE                           |           |          |
| GUY ANCHOR                     |           |          |
| M.T.S. POLE                    |           |          |
| PEDESTAL OR BOX                |           |          |
| CABINET                        |           |          |
| M.T.S., SHAW, OR VIDEO         |           |          |
| TRAFFIC SIGNALS                |           |          |
| TRAFFIC LIGHT STANDARD         |           |          |
| GAS                            |           |          |
| STEAM                          |           |          |
| FIBRE OPTIC                    |           |          |
| FENCE                          |           |          |
| EDGE OF PAVEMENT OR GUTTER     |           |          |
| EDGE UNPAVED OR GRAVEL ROAD    |           |          |
| PROJECTED R                    |           |          |
| LOT LINE                       |           |          |
| SIDEWALK - PATHWAY             |           |          |
| EASEMENT                       |           |          |
| EDGE OF BUILDING               |           |          |
| MAILBOX                        |           |          |
| PARKING METER                  |           |          |
| TEST HOLE                      |           |          |
| TREE LINE OR BUSH              |           |          |

**PROFILE**

| DESCRIPTION                   | PROFILE  |          |
|-------------------------------|----------|----------|
|                               | EXISTING | PROPOSED |
| WATER PIPE                    |          |          |
| HYDRANT TOP                   |          |          |
| VALVE                         |          |          |
| TEE OR CROSS                  |          |          |
| COUPLING OR BEND              |          |          |
| REDUCER                       |          |          |
| END OF PIPE                   |          |          |
| SEWER PIPE                    |          |          |
| UNPAVED GROUND SURFACE        |          |          |
| PAVED GROUND SURFACE - R PIPE |          |          |
| GUTTER (NORTH AND WEST)       |          |          |
| GUTTER (SOUTH AND EAST)       |          |          |
| R DITCH (NORTH AND WEST)      |          |          |
| R DITCH (SOUTH AND EAST)      |          |          |
| STRUCTURE                     |          |          |
| MANHOLE OR CATCH BASIN        |          |          |

**CONSTRUCTION NOTES**

1. EXPOSE EXISTING WATERMAIN & CONFIRM INVERTS PRIOR TO CONSTRUCTION.
2. LOCATION OF ALL SERVICES TO BE CONFIRMED IN THE FIELD.
3. INSTALL WATERMAIN BY TRENCHLESS METHODS.
4. TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS SHALL BE CLASS 3 BACKFILL.
5. ALL MATERIALS SHALL CONFORM TO THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
6. MINIMUM COVER TO TOP OF WATERMAIN SHALL BE 2.4 m.
7. REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATERMAIN TO R.
8. NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.

**HATCH PATTERNS**

| EXISTING | PROPOSED | DESCRIPTION                       |
|----------|----------|-----------------------------------|
|          |          | EARTH OR GROUND ABOVE PIPE        |
|          |          | SAND OR OTHER FINE MATERIAL       |
|          |          | CONCRETE                          |
|          |          | WASHED STONE OR GRANULAR MATERIAL |
|          |          | INTERLOCKING STONE                |
|          |          | METAL                             |
|          |          | GRAVEL OR STONE                   |

|  |  |  |   |  |  |
|--|--|--|---|--|--|
| LOCATION APPROVED<br>UNDERGROUND STRUCTURES<br>SUPV. U/G STRUCTURES COMMITTEE DATE<br>NOTE:<br>LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION. |  | B.M. ELEV.<br>CONSTRUCTION COMPLETION DATE: YYYY MM DD | DESIGNED BY MK<br>CHECKED BY SC<br>DRAWN BY RS/MA<br>APPROVED BY KZ<br>SCALE:<br>HORIZONTAL 1:250<br>VERTICAL 1:50<br>DATE 2015 03 18 | ENGINEER'S SEAL<br>ORIGINAL SIGNED BY K.R. ZUREK 15/03/18<br>CONSULTANT DRAWING NUMBER | <br><b>THE CITY OF WINNIPEG</b><br>WATER AND WASTE DEPARTMENT<br>ENGINEERING DIVISION<br>2015 WATERMAIN RENEWALS<br>SHEET 1 OF 12<br>CITY DRAWING NUMBER D-13898 |
|  |  | NO. REVISIONS DATE BY                                  | PLOT DATE: 2015 03 18   | FILE PATH: R:\DRAWINGS\WATER\RENEWAL\2015 RENEWAL\CONTRACT 5\CONTRACT 5 - INDEX.dwg    |  |

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