NORTH CULVERT DETAILS

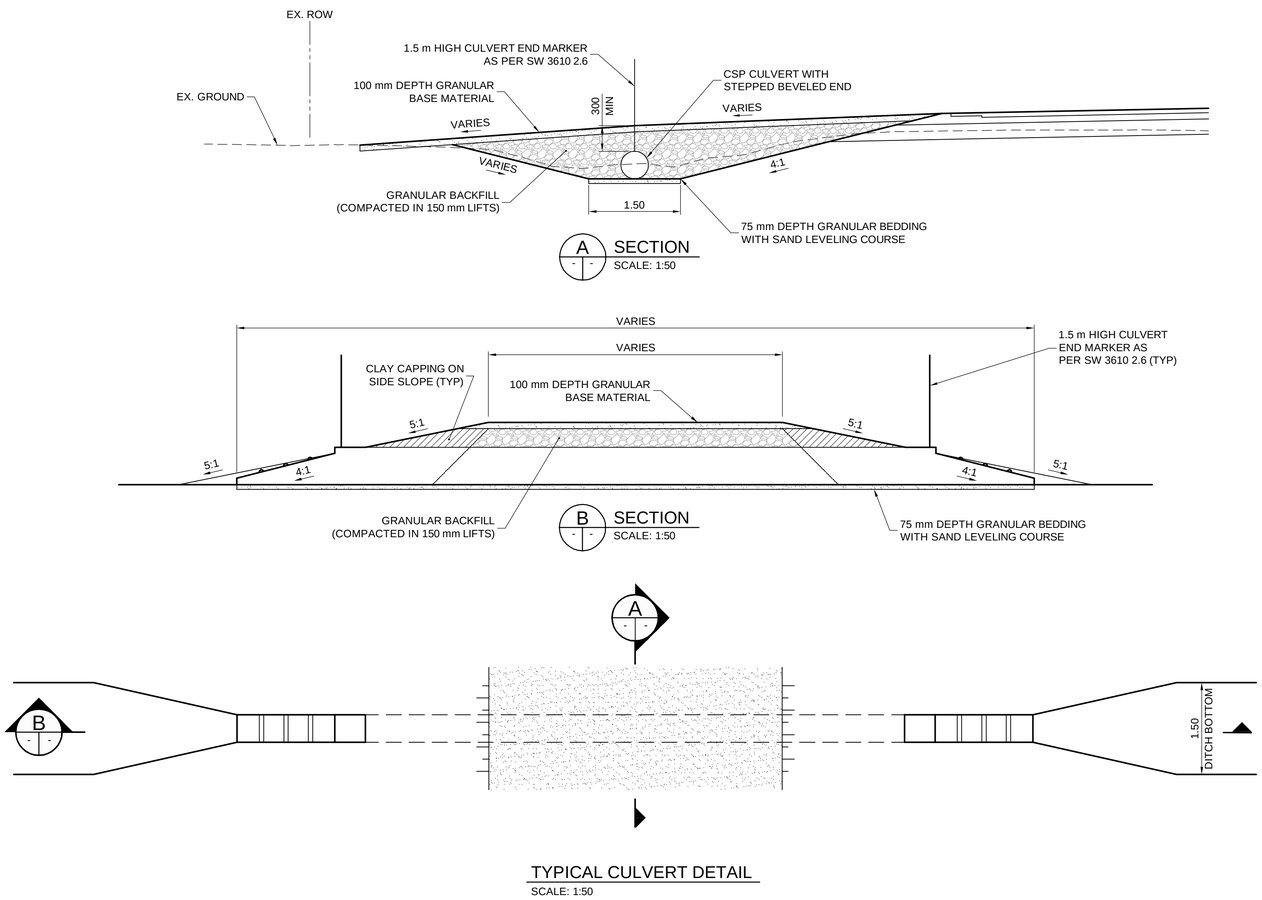
NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	START STATION	START OFFSET	END INV. ELEV.	END STATION	END OFFSET
N1	450 mm	13.2 m	0.03%	231.593	1+835.08	-9.365	231.589	1+848.27	-9.365
N2	450 mm	13.8 m	0.03%	231.529	2+047.96	-9.365	231.525	2+061.81	-9.365
N3	450 mm	14.2 m	-3.57%	231.349	2+648.30	-11.007	231.857	2+662.53	-10.912
N4	450 mm	14.1 m	-0.05%	231.945	2+823.54	-9.764	231.953	2+837.68	-9.746
N5	450 mm	13.5 m	-0.06%	231.982	2+892.81	-9.505	231.990	2+906.30	-9.487
N6	600 mm	12.3 m	-0.05%	232.018	2+958.43	-9.335	232.025	2+970.72	-9.319
N7	600 mm	13.1 m	-0.05%	232.034	2+986.58	-9.305	232.041	2+999.69	-9.289
N8	450 mm	11.4 m	-0.05%	232.064	3+041.19	-9.247	232.070	3+052.56	-9.233
N9	450 mm	12.8 m	-0.06%	232.090	3+090.91	-9.195	232.098	3+103.70	-9.179
N10	450 mm	14.6 m	0.08%	232.093	3+153.01	-9.176	232.082	3+167.60	-9.157
N11	450 mm	14.7 m	0.08%	232.066	3+187.52	-9.192	232.054	3+202.21	-9.174
N12	450 mm	20.7 m	0.08%	232.044	3+214.68	-9.210	232.027	3+235.35	-9.184
N13	450 mm	22.5 m	0.08%	232.018	3+247.11	-9.227	232.000	3+269.59	-9.199
N14	450 mm	27.0 m	0.08%	231.965	3+312.56	-9.262	231.943	3+339.55	-9.228
N15	450 mm	12.1 m	0.08%	231.896	3+397.95	-9.290	231.886	3+410.07	-9.275
N16	450 mm	20.8 m	0.08%	231.853	3+452.04	-9.323	231.836	3+472.87	-9.297
N17	450 mm	18.0 m	0.08%	231.704	3+637.07	-9.409	231.689	3+655.09	-9.386
N18	450 mm	21.5 m	0.08%	231.662	3+688.23	-9.437	231.645	3+709.76	-9.409
N19	450 mm	15.1 m	0.08%	231.632	3+726.26	-9.449	231.620	3+741.38	-9.430
N20	450 mm	19.6 m	0.08%	231.546	3+832.51	-9.504	231.530	3+852.13	-9.479
N21	450 mm	14.8 m	0.08%	231.516	3+870.38	-9.517	231.504	3+885.17	-9.499
N22	450 mm	15.3 m	0.08%	231.202	4+260.35	-9.704	231.190	4+275.62	-9.684

SOUTH CULVERT DETAILS

NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	START STATION	START OFFSET	END INV. ELEV.	END STATION	END OFFSET
S1	450 mm	11.2 m	0.04%	231.687	1+836.85	8.993	231.682	1+848.05	8.993
S2	450 mm	13.2 m	0.05%	232.165	2+739.86	9.027	232.158	2+753.08	9.043
S3	450 mm	15.8 m	0.05%	231.885	3+253.17	8.959	231.876	3+268.94	8.979
S4	450 mm	21.4 m	0.05%	231.819	3+373.14	8.887	231.807	3+394.52	8.914
S5	600 mm	11.8 m	0.05%	231.367	4+199.20	8.436	231.361	4+211.02	8.451

CROSSING CULVERT DETAILS

NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	START STATION	START OFFSET	END INV. ELEV.	END STATION	END OFFSET
C1	600 mm	17.5 m	-0.53%	231.437	2+355.00	8.568	231.530	2+355.00	-8.939
C2	750 mm	27.0 m	0.51%	231.317	4+290.16	13.500	231.178	4+290.48	-13.500



TYPICAL CULVERT DETAIL
SCALE: 1:50

CONSTRUCTION NOTES:

1. ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH LATEST REVISION OF THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
2. LEGAL PLAN AND UNDERGROUND INFORMATION FROM CITY OF WINNIPEG LBIS. CONTRACTOR TO VERIFY ALL UNDERGROUNDS IN THE FIELD.
3. CONTRACTOR TO TAKE PRECAUTIONARY STEPS TO AVOID DAMAGE FROM CONSTRUCTION ACTIVITIES TO TREES WITHIN THE LIMITS OF CONSTRUCTION.
4. LOCATION OF EXISTING SERVICES TO BE CONFIRMED IN THE FIELD BY THE CONTRACTOR.
5. HYDRO POLES AND ANCHORS THAT REQUIRE TEMPORARY SUPPORT, REMOVAL OR REPLACEMENT, TO BE DONE SO AT THE EXPENSE OF THE CONTRACTOR, AS NECESSARY.
6. LIMITS OF WORK FOR CLEARING AND GRUBBING, RESTORATION OF APPROACHES AND LANDSCAPING TO BE DETERMINED BY THE CONTRACT ADMINISTRATOR.
7. IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION, TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS (SEE PROVINCIAL REGULATION 210/72 FOR DETAILS) AND OBTAIN EXCAVATION PERMITS PRIOR TO CONSTRUCTION.

ABBREVIATIONS:

CONC	CONCRETE
ASP	ASPHALT
TYP	TYPICAL
EX	EXISTING
MH	MANHOLE
WV	WATER VALVE
EL	ELEVATION
CB	CATCH BASIN
CP	CATCH PIT
CI	CURB INLET
CL	CONTROL LINE
SL	STREET LIGHT
TS	TRAFFIC SIGNAL

SYMBOLS:

- HYDRO MANHOLE
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL SPLICE PIT
- WATER VALVE
- HYDRANT
- CURB STOP
- GAS VALVE
- HYDRO POLE
- HYDRO POLE WITH LIGHT
- STREET LIGHT
- TRAFFIC SIGNAL
- SIGNAL CONTROL BOX
- BELLMTS PEDESTAL
- TREE
- IRON PROPERTY BAR
- HYDRO GUY ANCHOR

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PROFILE	PROPOSED
150 WM	WATERMAIN	150 WM		CONCRETE ROAD			℄ PROFILE	
300 LDS	LAND DRAINAGE SEWER	300 LDS		ASPHALT ROAD			NORTH/WEST GUTTER	
250 WWS	WASTE WATER SEWER	250 WWS		CONC ROAD W/ASP OVERLAY			SOUTH/EAST GUTTER	
HYDRO	HYDRO	HYDRO		CONCRETE SIDEWALK			NORTH/WEST MED. GUTTER	
BELLMTS	BELLMTS	BELLMTS		ASPHALT PATH			SOUTH/EAST MED. GUTTER	
100 GAS	GAS	100 GAS		LANDSCAPING FEATURE			NORTH/WEST DITCH	
T.S.	TRAFFIC SIGNALS	T.S.		GRASS/SOD			SOUTH/EAST DITCH	
S.L.	STREET LIGHTS	S.L.	232.000	ELEVATION	232.000		NORTH/WEST SIDEWALK	
○	MANHOLE	●		PROPERTY LINE			SOUTH/EAST SIDEWALK	
□	CATCH BASIN	■		CURB RAMP				
▽	CATCH PIT	▼		DETECTABLE TILE				

UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES DATE

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. 654537 (SW CORNER OF MOLLARD AND KING EDWARD) ELEV. 233.128

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	25/02/28	TJP

DESIGNED BY TJH
DRAWN BY TJH
CHECKED BY MRD
APPROVED BY TJP
HOR. SCALE 1:500
VERTICAL 1:20
DATE

DILLON CONSULTING

RELEASED FOR CONSTRUCTION
DATE

ENGINEER'S SEAL
PROVINCE OF MANITOBA
M. R. DONGET
Member 22306
REGISTERED PROFESSIONAL ENGINEER
2025/02/28

CONSULTANT PROJECT NUMBER
24-9201

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 Date: 2025/02/28

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

2025 LOCAL STREET RENEWAL (25-R-10)
MOLLARD ROAD RECONSTRUCTION

CITY DRAWING NUMBER

SHEET 10 OF 16

CONSULTANT DRAWING NUMBER

CULVERT DETAILS

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