MEMORIAL GARDEN SIGN FOUNDATION (Detail 1 / D2, 1:25)

525
1600

PLAN VIEW

Memorial Garden Sign (NIC)

Finish Grade Planting Bed

PIP Concrete Sign Foundation

15M Epoxy Coated Rebar 300mm O.C. Both Ways

300
400
50
375

Granular A Compacted in 150mm Lifts To 100% SPD

Subgrade Compacted to Min. 95% SPD

FRONT ELEVATION

ESTATE COLUMBARIUM FOUNDATION (Detail 2 / D2, 1:25)

912
506

PLAN VIEW

Estate Columbarium (NIC)

Finish Grade Planting Bed

PIP Concrete Foundation

15M Epoxy Coated Rebar 300mm O.C. Both Ways

150 Typ.
200
375

Granular A Compacted in 150mm Lifts To 100% SPD

Subgrade Compacted to Min. 95% SPD

FRONT ELEVATION

PEDESTAL NICHE FOUNDATION (Detail 3 / D2, 1:25)

701
601

PLAN VIEW

Pedestal Niche (NIC)

Finish Grade Planting Bed

PIP Concrete Foundation

15M Epoxy Coated Rebar 300mm O.C. Both Ways

150 Typ.
200
375

Granular A Compacted in 150mm Lifts To 100% SPD

Subgrade Compacted to Min. 95% SPD

FRONT ELEVATION

OSSUARY PIT (Detail 4 / D2, 1:25)

Provide Temporary 25mm Plywood Cover For Hole and Fill Void Flush to Concrete with Granular

Ossuary Lectern By Others (NIC)

PIP Concrete Sidewalk Thicken As Shown At Ossuary Pit

15M Epoxy Coated Rebar Every 100mm Both Ways in Unsupported Concrete Over Ossuary and Extending 300mm Beyond

80 80
100
50
50
600 380 600
Opening Square
3000
1000 Ø

1000mm Ø Segmented Concrete Drain Pipe

200mm Granular A

Undisturbed Soil

MEMORY STONE (Detail 5 / D2, 1:25)

Bronze Plaque (NIC)

Boulder 700w x 600h x 600d

Bury 150-200 into Planting Bed

Boulder to Have One Flat Face for Plaque

150
50

Granular A Compacted to 98% SPD

Subgrade Compacted to 95% SPD

ROUND FOUNDATION

1700
2400
2600

SQUARE FOUNDATION

1700
2400
2400

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.

DO NOT SCALE – DRAWING PLOT MAY NOT BE AT 100%
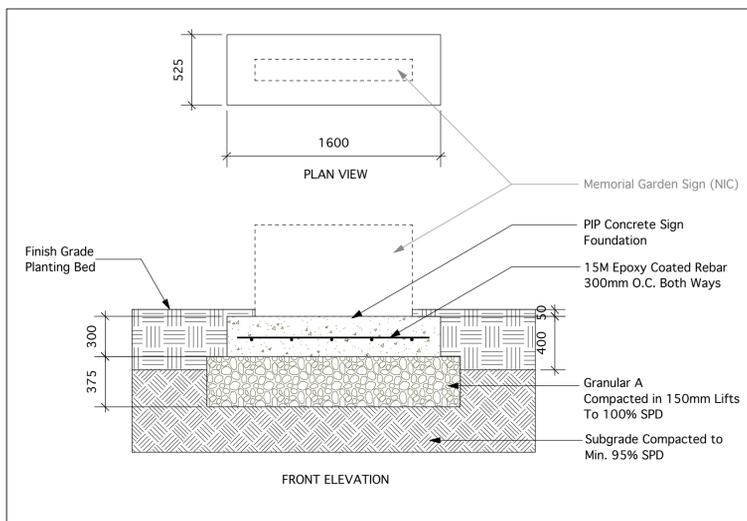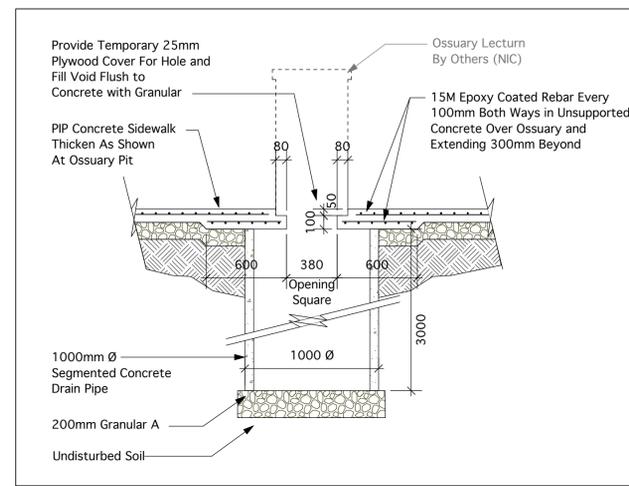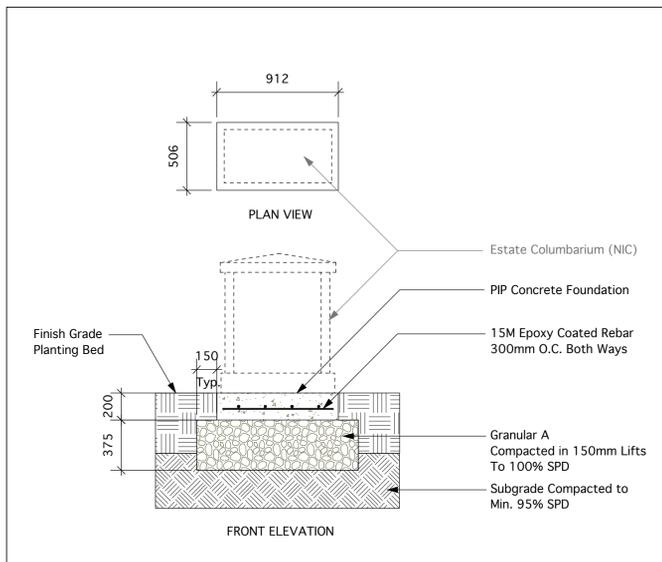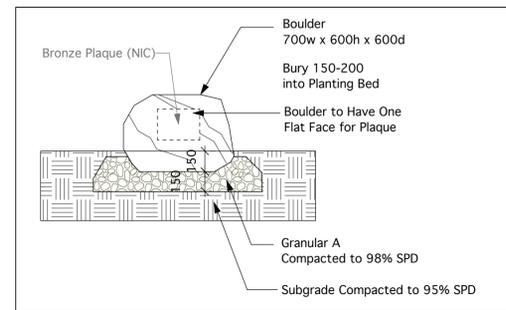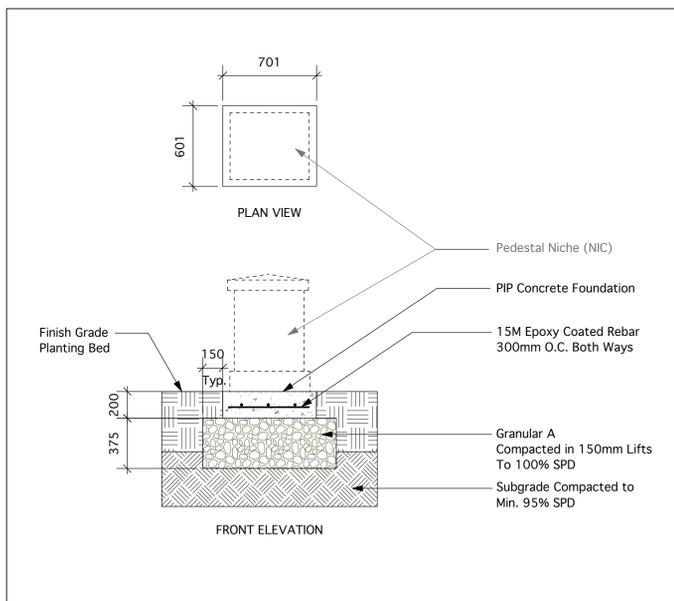
SQUARE / ROUND COLUMBARIUM FOUNDATION (Detail 7 / D2, 1:25)

Columbarium (NIC)

2400 Square For Square Columbarium

2600 Ø For Round Columbarium

150mm Cardboard Void Form

Finished Grade Patterned Concrete Walkway

150

200mm Thick PIP Concrete Slab

15M Epoxy Coated Rebar 300mm O.C. Both Ways T&B

150mm Gap Filled with 38mm Crushed Black Granite At All Walkway / Foundation Intersections (Typical)

Provide 10mil Polyethylene Wrapped Sono Tube Completely Greased on Inside for Top 1800

r/w 4-15M cont. C/W10M Circular Ties at 300mm O.C.

Qty. 3 - 300mm Ø x 6200 Concrete Piles 32 MPa Concrete Type HS Cement

Multi-Flow Drainage

Drawing Title: Multi-Flow Drainage
Drawing No: SCD-659

NOTES:
1. Multi-flow connection to catch basin shall be as per Standard Specification CW 3120.3.5.

Safety Surfacing

Safety Surfacing Drainage Layer

150 mm Multi-Flow Collector Line

6mm Clean Stone Backfill

Non-woven Geotextile

Slope bottom of trench min. 0.5%

150 mm MultiFlow Drain System c/w End Caps and Connectors. Place in center of trench.

50 MIN.
varies
150
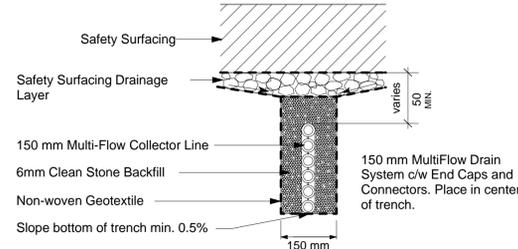
MULTI-FLOW DRAINAGE IN SAFETY SURFACING DETAIL

Coarse Sand - min. 2mm particle size

150 mm Multi-Flow Collector Line

6mm Clean Stone Backfill

Non-woven Geotextile

Slope bottom of trench min. 0.5%

150 mm MultiFlow Drain System c/w End Caps and Connectors. Place in center of trench.

50
VARIES
150
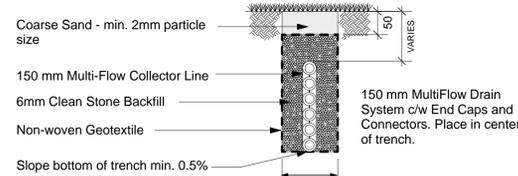
MULTI-FLOW DRAINAGE IN TURF DETAIL

DIMENSIONS SHOWN ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED

REVISION: 1
DATE: January 12, 2012
SCALE: NTS
DRAWN BY: SP

The City of Winnipeg
Planning, Property and Development Department
Planning and Land Use Division
Unit 15 - 30 Fort Street, Winnipeg, MB, R3C 4X5

CAST-IN-PLACE CONCRETE

I   CONCRETE

1. ALL CONCRETE IS TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF CAN/CSA-A23.1-09 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION" AND CAN/CSA-A23.2-09 "METHOD OF TEST FOR CONCRETE".
2. PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF QUALITY, YIELD AND STRENGTH AS SPECIFIED IN CONCRETE MIXES, AND WILL COMPLY WITH CAN/CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
3. PROVIDE CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CAN/CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
4. CONCRETE STRENGTHS AT 28 DAYS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

PILES:
32 MPa MIN. AT 56 DAYS
CLASS OF EXPOSURE: S-2
ENTRAINED AIR CATEGORY: 2 (4% TO 7%)
CEMENT TYPE: HS
AGGREGATE: MAX. 20 mm
CURING TYPE: TYPE 1 - BASIC
SLUMP: MIN. 120 mm

EXTERIOR SLABS-ON-GRADE:
32 MPa MIN. AT 28 DAYS
CLASS OF EXPOSURE: C-2
ENTRAINED AIR CATEGORY: 1 (5% TO 8%)
AGGREGATE MAX. 20 mm
CURING TYPE: TYPE 1 - BASIC

UNLESS INDICATED OTHERWISE THE GENERAL CONTRACTOR CONTRACTOR SHALL SPECIFY CONCRETE SLUMP APPROPRIATE WITH PLACEMENT METHODS AND SITE CONDITIONS. THE GENERAL CONTRACTOR CONTRACTOR SPECIFIED SLUMP MUST BE SHOWN ON THE CERTIFICATION LETTER AND CONCRETE DELIVERY TICKET.

5. UNLESS NOTED OTHERWISE CONCRETE CURING TO CONFORM TO THE LATEST EDITION OF CAN/CSA-A23.1-09 AS FOLLOWS:
A)   TYPE 1 – BASIC: 3 DAYS ≥ 10°C AND FOR A TIME NECESSARY TO ATTAIN 40% OF THE SPECIFIED STRENGTH.
B)   TYPE 2 – ADDITIONAL: 7 DAYS ≥ 10°C AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.
C)   TYPE 3 – EXTENDED: 7 DAYS WET CURING at ≥ 10°C.

6. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C260/C260M-10a "STANDARD SPECIFICATION FOR AIR ENTRAINING ADMIXTURES FOR CONCRETE". SUPERPLASTICIZING ADMIXTURES SHALL CONFORM TO ASTM C494/C494M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE" OR ASTM C1017/C1017M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR USE IN PRODUCING FLOWING CONCRETE" WHEN FLOWING CONCRETE IS APPLICABLE. AIR ENTRAINING ADMIXTURES TO HAVE A DURABILITY FACTOR GREATER THAN 75, WHEN TESTED TO ASTM STANDARDS C666/C666M PROCEDURE A. SPACING FACTOR FOR ANY AIR ENTRAINING ADMIXTURE MUST BE 0.17mm OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM C457 "STANDARD TEST METHOD FOR MICROSCOPICAL DETERMINATION OF PARAMETERS OF THE AIR-VOID SYSTEM IN HARDENED CONCRETE".

RELEASED FOR CONSTRUCTION	DATE: XX Month, 20XX		
8			
7			
6			
5			
4			
3			
2	Issued for Tender	26/07/12	
1	ISSUED FOR 99% REVIEW	20/07/12	
NO.	REVISION	DATE	BY

CLIENT

PROJECT

Memorial Garden Site Works
Brookside and Transcona Cemeteries
Winnpeg, Manitoba

| DRAWN BY | LLW | DATE | 07 MARCH, 2012 |
| APPROVED BY | DW | SCALE | AS SHOWN |

DRAWING TITLE

FOUNDATION DETAILS

| PROJECT NO. | SHEET NO. | REVISION NO. |
| 1118 | D2 | 0 |