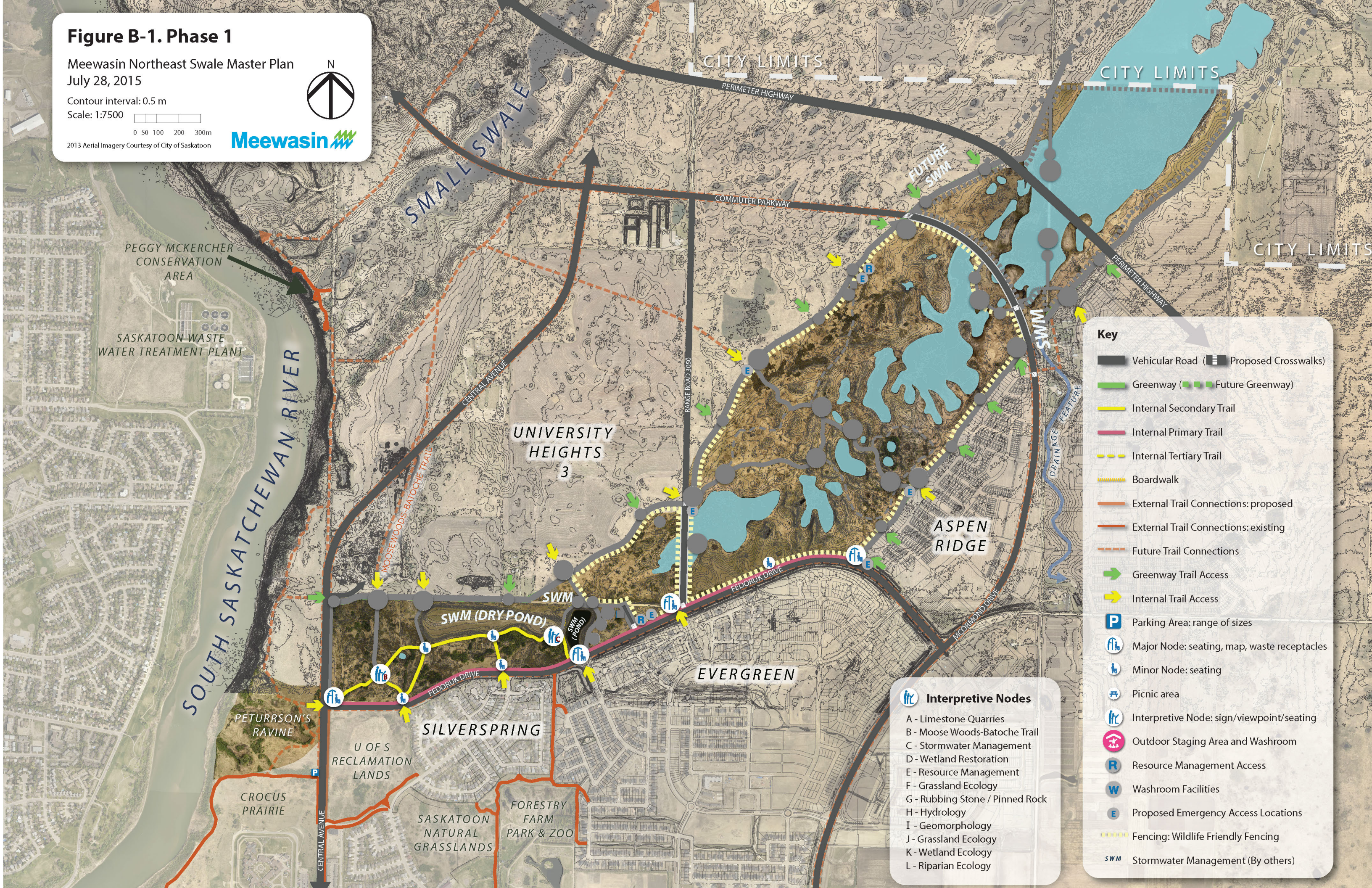


Figure B-1. Phase 1

Meewasin Northeast Swale Master Plan
July 28, 2015

Contour interval: 0.5 m
Scale: 1:7500
0 50 100 200 300m
2013 Aerial Imagery Courtesy of City of Saskatoon



Key

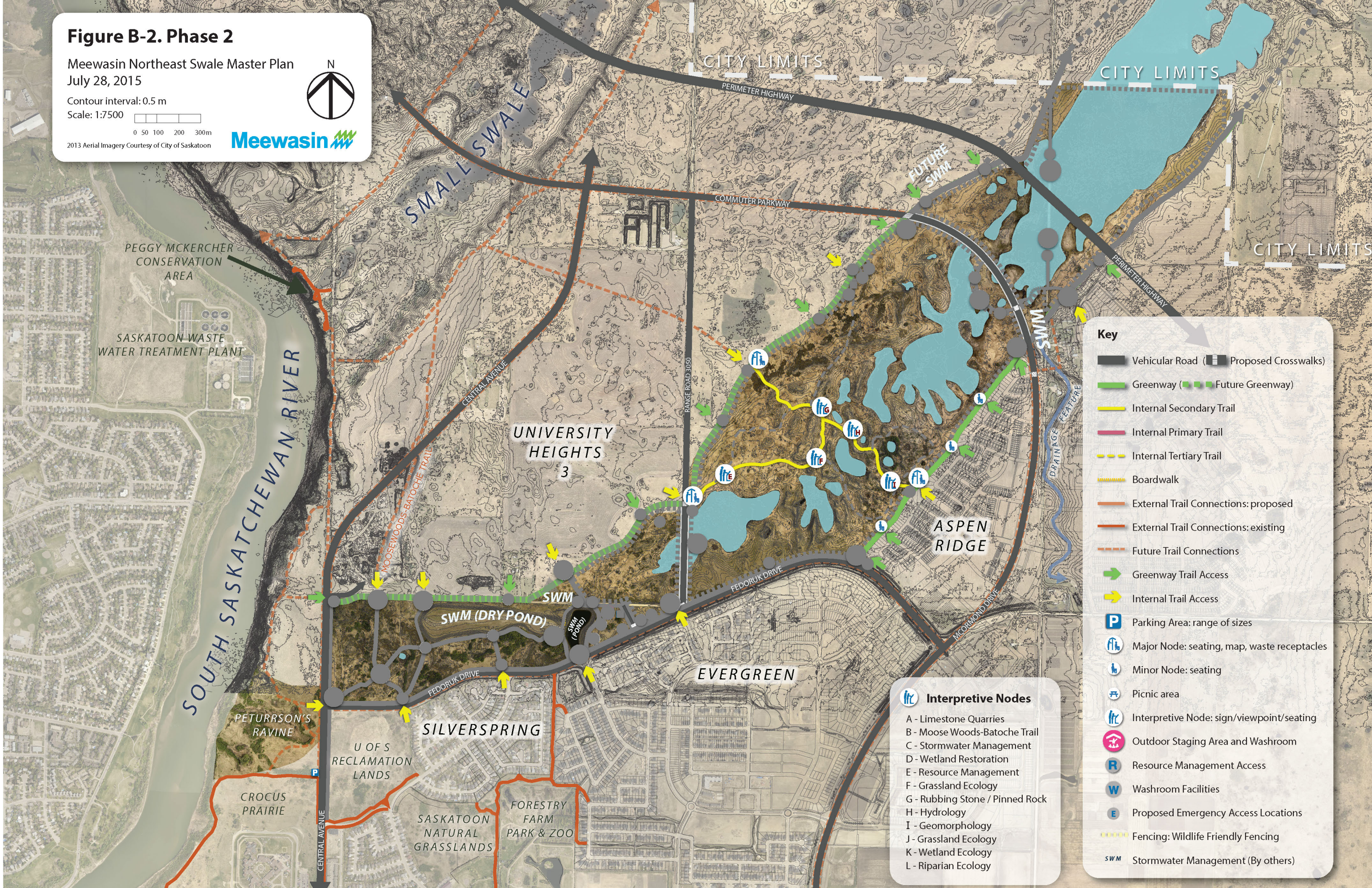
- Vehicular Road (Proposed Crosswalks)
- Greenway (Future Greenway)
- Internal Secondary Trail
- Internal Primary Trail
- Internal Tertiary Trail
- Boardwalk
- External Trail Connections: proposed
- External Trail Connections: existing
- Future Trail Connections
- Greenway Trail Access
- Internal Trail Access
- Parking Area: range of sizes
- Major Node: seating, map, waste receptacles
- Minor Node: seating
- Picnic area
- Interpretive Node: sign/viewpoint/seating
- Outdoor Staging Area and Washroom
- Resource Management Access
- Washroom Facilities
- Proposed Emergency Access Locations
- Fencing: Wildlife Friendly Fencing
- SWM Stormwater Management (By others)

Interpretive Nodes

- A - Limestone Quarries
- B - Moose Woods-Batoche Trail
- C - Stormwater Management
- D - Wetland Restoration
- E - Resource Management
- F - Grassland Ecology
- G - Rubbing Stone / Pinned Rock
- H - Hydrology
- I - Geomorphology
- J - Grassland Ecology
- K - Wetland Ecology
- L - Riparian Ecology

Figure B-2. Phase 2
Meewasin Northeast Swale Master Plan
July 28, 2015

Contour interval: 0.5 m
Scale: 1:7500
0 50 100 200 300m
2013 Aerial Imagery Courtesy of City of Saskatoon



Key

- Vehicular Road (Proposed Crosswalks)
- Greenway (Future Greenway)
- Internal Secondary Trail
- Internal Primary Trail
- Internal Tertiary Trail
- Boardwalk
- External Trail Connections: proposed
- External Trail Connections: existing
- Future Trail Connections
- Greenway Trail Access
- Internal Trail Access
- Parking Area: range of sizes
- Major Node: seating, map, waste receptacles
- Minor Node: seating
- Picnic area
- Interpretive Node: sign/viewpoint/seating
- Outdoor Staging Area and Washroom
- Resource Management Access
- Washroom Facilities
- Proposed Emergency Access Locations
- Fencing: Wildlife Friendly Fencing
- SWM Stormwater Management (By others)

Interpretive Nodes

- A - Limestone Quarries
- B - Moose Woods-Batoche Trail
- C - Stormwater Management
- D - Wetland Restoration
- E - Resource Management
- F - Grassland Ecology
- G - Rubbing Stone / Pinned Rock
- H - Hydrology
- I - Geomorphology
- J - Grassland Ecology
- K - Wetland Ecology
- L - Riparian Ecology

MEEWASIN NORTHEAST SWALE

PHASE 1 DEVELOPMENT



LIST OF DRAWINGS

C-1 COVER SHEET

LAYOUT

L-1 EXISTING SITE CONDITIONS

L-2 TRAIL LAYOUT

L-3 TRAIL LAYOUT, SEATING & INTERPRETIVE NODES

DETAILS

D-1 RUSTIC BENCH

D-2 WAYFINDING

D-3 TRAIL, FENCE & INTERPRETIVE ROCK

D-4 RUSTIC WASTE RECEPTACLE

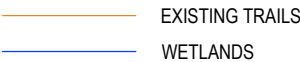
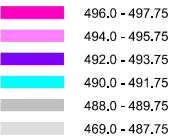
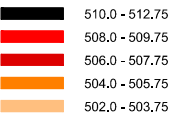
C -1
Drawing No.

- NOTES
1. The Contractor shall verify and be responsible for all dimensions.
 2. Do Not scale the drawing - any errors or omissions shall be reported to Meewasin without delay.
 3. Contractor to verify all underground / overhead utility locations and protect during construction.
 4. Ensure smooth transitions between proposed and existing grades
 5. CONTRACTOR TO LAYOUT TRAIL IN FIELD AND REVIEW WITH CONSULTANT PRIOR TO CONSTRUCTION.

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LEGEND

CONTOURS



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ISSUED FOR REVIEW	NS		18.03.13
ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn.

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
NORTHEAST SWALE
(Phase 2 Trail Development)

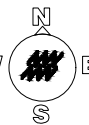
TITLE

EXISTING SITE CONDITIONS

SCALE
11 X17
NTS

DRAWING NO. SHEET SIZE REVISION

L1 11 X17



NOTES:

-ENSURE ALL LOCATES ARE DONE.
DETERMINE ALL PROPERTY LINES
PRIOR TO START OF CONSTRUCTION.

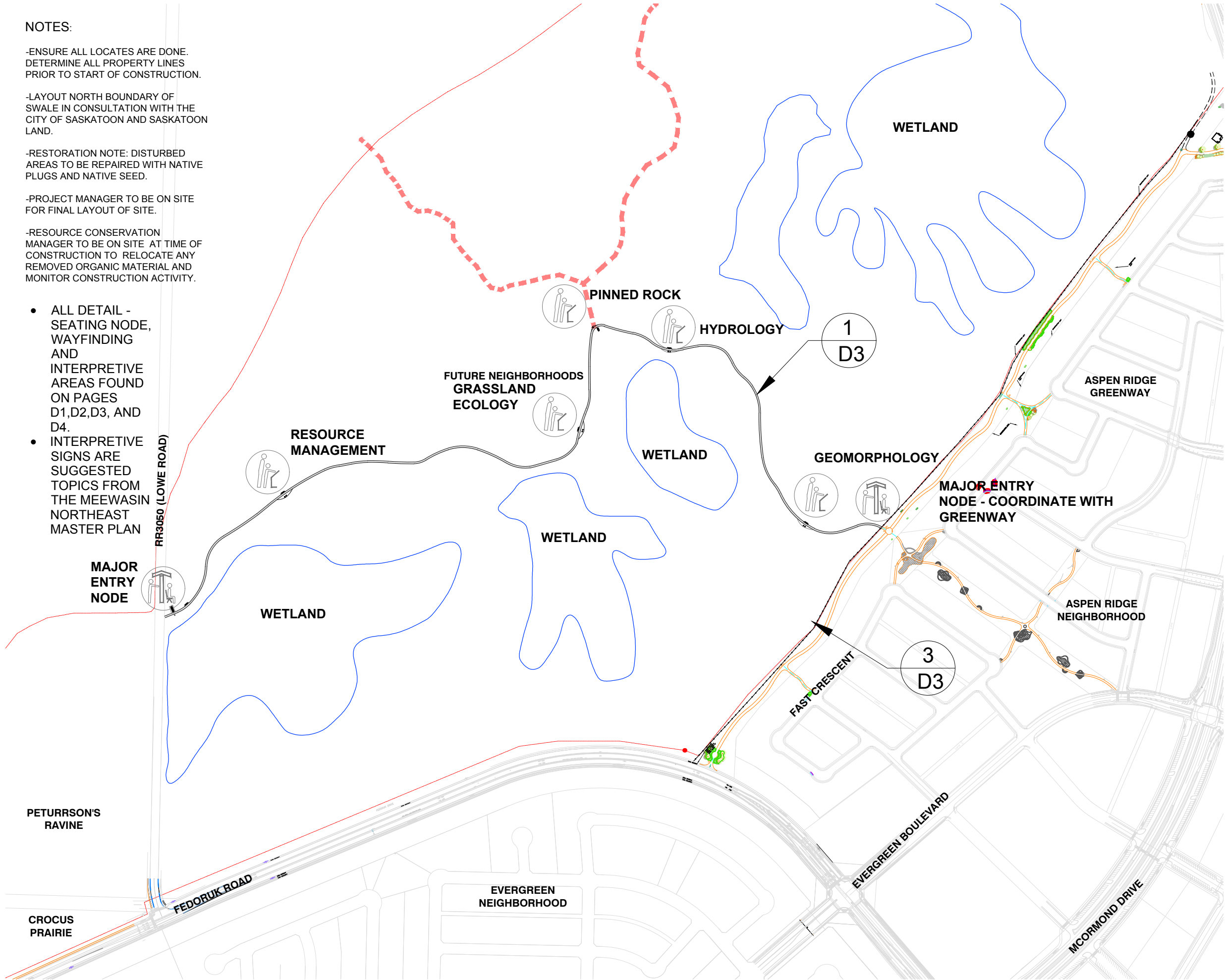
-LAYOUT NORTH BOUNDARY OF
SWALE IN CONSULTATION WITH THE
CITY OF SASKATOON AND SASKATOON
LAND.

-RESTORATION NOTE: DISTURBED
AREAS TO BE REPAIRED WITH NATIVE
PLUGS AND NATIVE SEED.

-PROJECT MANAGER TO BE ON SITE
FOR FINAL LAYOUT OF SITE.

-RESOURCE CONSERVATION
MANAGER TO BE ON SITE AT TIME OF
CONSTRUCTION TO RELOCATE ANY
REMOVED ORGANIC MATERIAL AND
MONITOR CONSTRUCTION ACTIVITY.

- ALL DETAIL -
SEATING NODE,
WAYFINDING
AND
INTERPRETIVE
AREAS FOUND
ON PAGES
D1,D2,D3, AND
D4.
- INTERPRETIVE
SIGNS ARE
SUGGESTED
TOPICS FROM
THE MEEWASIN
NORTHEAST
MASTER PLAN



PHASE 2 - ECOLOGICAL CORE TRAIL DEVELOPMENT

NOTES

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4. Ensure smooth transitions between proposed and existing grades
5. CONTRACTOR TO LAYOUT TRAIL IN FIELD AND REVIEW WITH CONSULTANT PRIOR TO CONSTRUCTION.

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LEGEND

-  FUTURE TRAILS
-  PROPOSED TRAILS
-  MINOR NODE
-  MAJOR NODE

1st	By	Appd.	YY.MM.DD
REVISION			
ISSUED FOR REVIEW	SP		17.03.15
ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn.

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
NORTHEAST SWALE
(Phase 2 Development)

TITLE

TRAIL LAYOUT, SEATING & INTERPRETIVE
NODES

SCALE
11 X17
NTS

DRAWING NO. SHEET SIZE REVISION

NOTES

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2. Do Not scale the drawing - any errors or omissions shall be reported to Meewasin without delay.
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LEGEND

- MEEWASIN WAYFINDING SIGN (PRIMARY)
- MEEWASIN WAYFINDING SIGN (SECONDARY)
- MEEWASIN INTERPRETIVE ROCK/ SIGNAGE
- MEEWASIN RUSTIC BENCH
- MEEWASIN TRASH UNIT

1st			
REVISION	By	Appd.	YY.MM.DD
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ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn.

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
NORTHEAST SWALE
(Phase 1 Development)

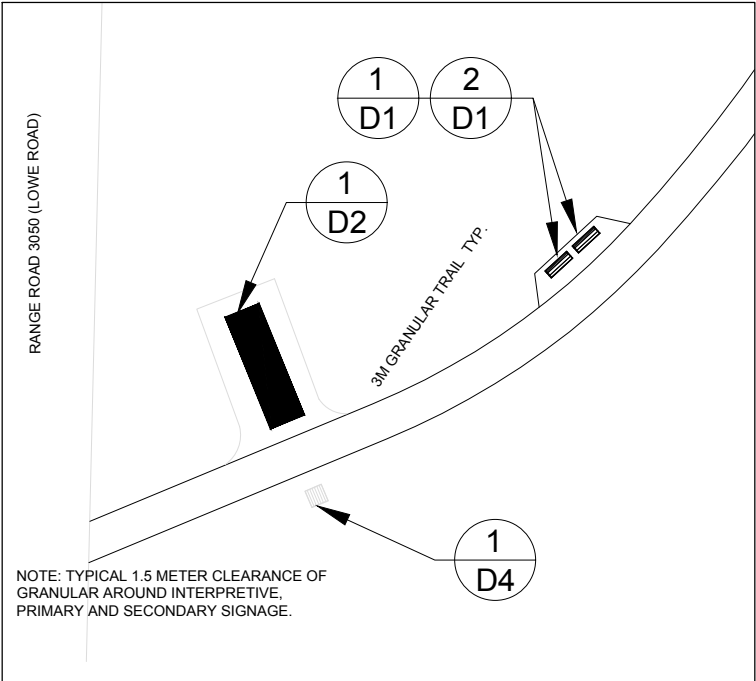
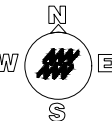
TITLE

INTERPRETIVE NODE LAYOUTS

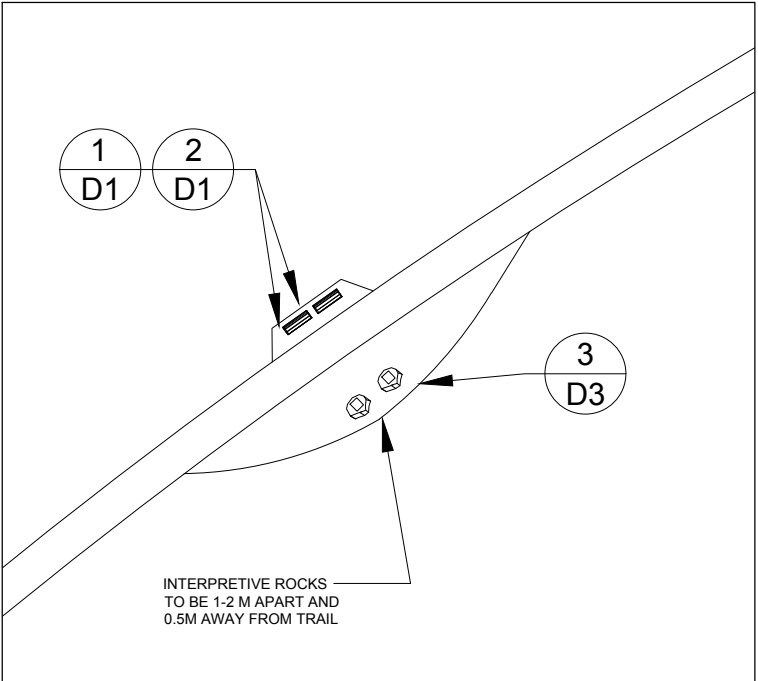
SCALE
11 X17
NTS

DRAWING NO. SHEET SIZE REVISION

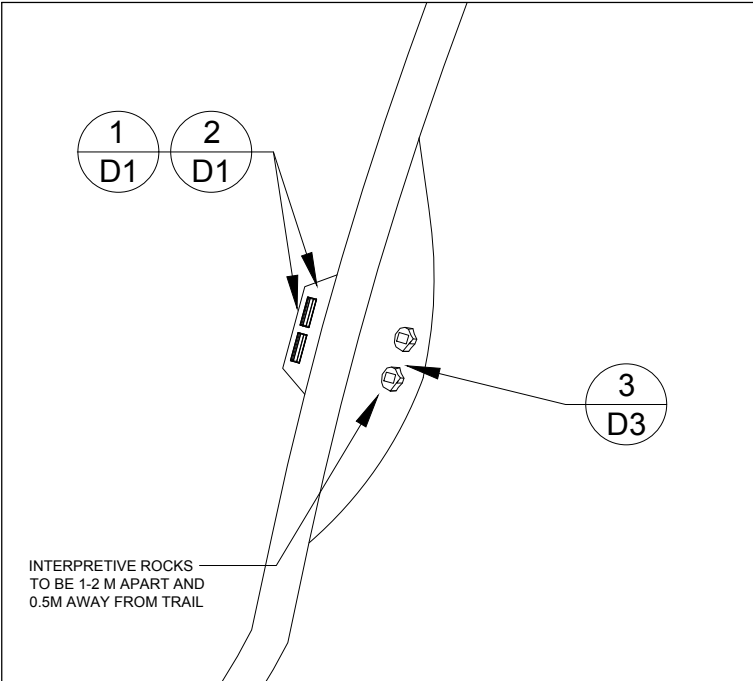
L3 11 X17



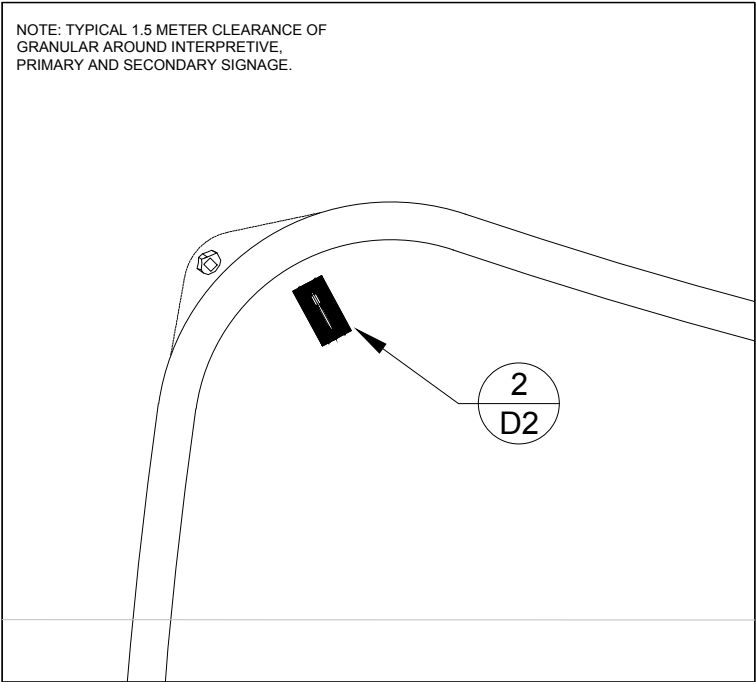
1
L3
NODE 1 (PRIMARY WAYFINDING AND SEATING)
1:500



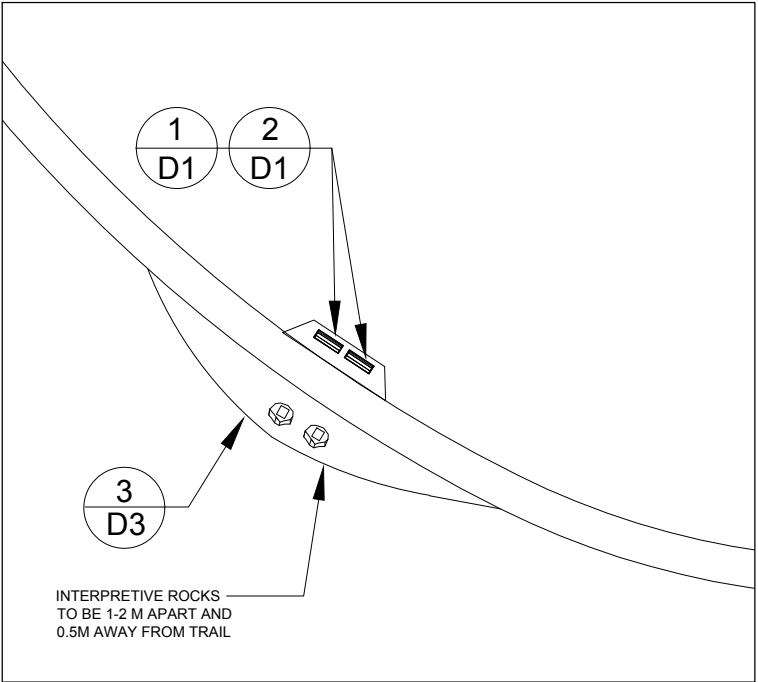
2
L3
NODE 2 (INTERPRETIVE AND SEATING)
1:500



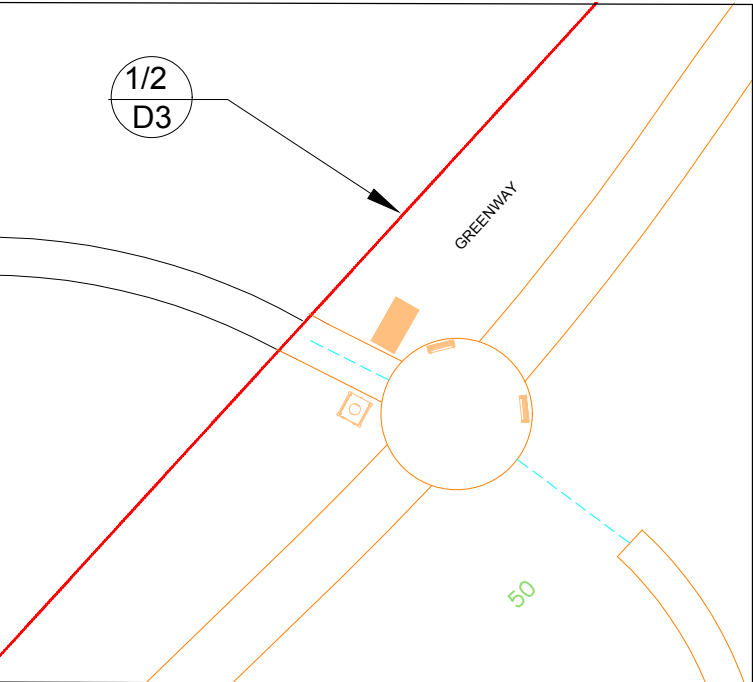
3
L3
NODE 4 (INTERPRETIVE AND SEATING)
1:500



4
L3
NODE 5 (SECONDARY WAYFINDING & INTERPRETIVE)
1:500



5
L3
NODE 3 (INTERPRETIVE AND SEATING)
1:500

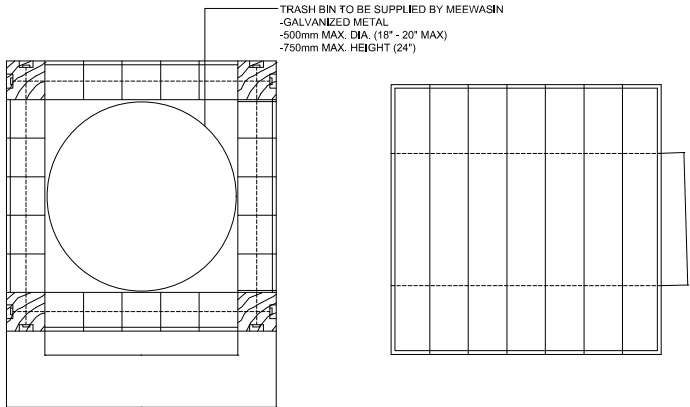


6
L3
NODE 6 (COORDINATE WITH GREENWAY)
1:500

- NOTES
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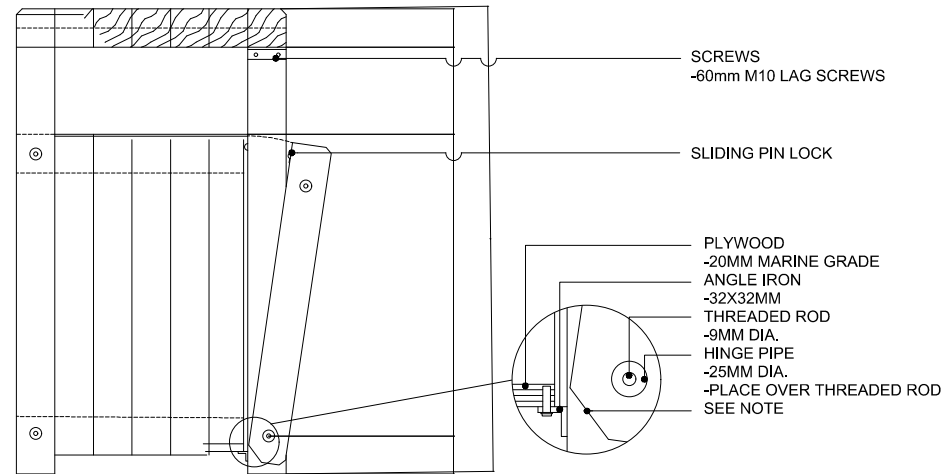
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LEGEND



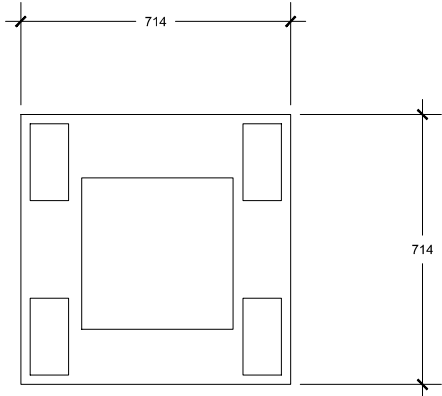
SECTION

PLAN
VIEW



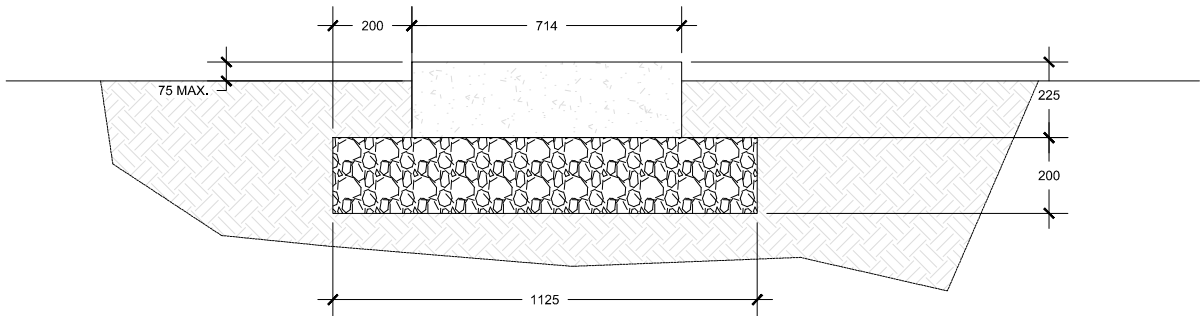
Detail

- NOTES:
- ALL WOOD TO BE 102X102mm (ACTUAL SIZE)
 - ALL NUTS ON THE THREADED ROD ARE TO BE COUNTER SUNK 15mm
 - CHAMFER ON GATE IS TO CLEAR ANGLE IRON WHEN GATE IS OPENED
 - ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE
 - GALVANIZED CAN INSERTS TO BE 16.5" IN DIA. (CONFIRM DIMENSIONS WITH CoS PARKS DEPARTMENT



ATTACHMENT

- NOTES
- ALL WOOD TO BE 102X102mm
 - ALL NUTS ON THE THREADED ROD ARE TO BE COUNTER SUNK 15mm
 - CHAMFER ON GARE IS TO CLEAR ANGLE IRON WHEN GATE IS OPENED.
 - GALVANIZED CAN INSERTS TO BE 16.5" IN DIA.



CONCRETE FOOTING

1st			
REVISION	By	Appd.	YY.MM.DD
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File Name	Dwn.	Chkd.	Dsgn.

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
ECOLOGICAL ZONE
(Phase Trail Development)

TITLE

DETAILS - WASTE RECEPTACLE

SCALE
11 X17
1:20

DRAWING NO. SHEET SIZE REVISION

D4 11 X17

NOTES

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LEGEND

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ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn.

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
ECOLOGICAL ZONE
(Phase 2 Trail Development)

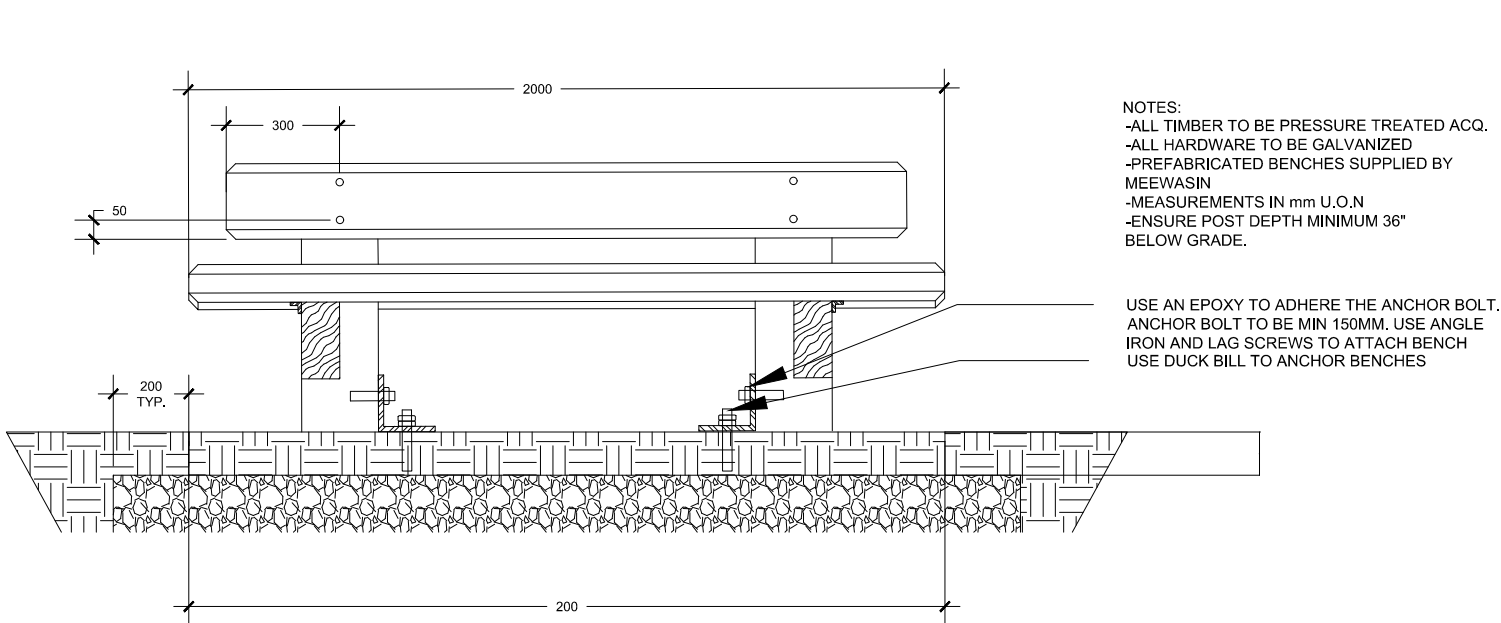
TITLE

DETAILS - RUSTIC BENCH

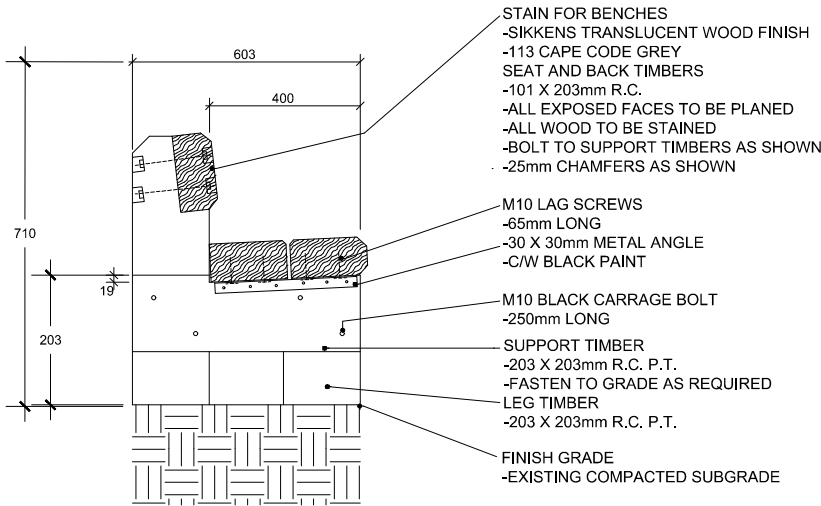
SCALE
11 X17
NTS

DRAWING NO. SHEET SIZE REVISION

D1 11 X17

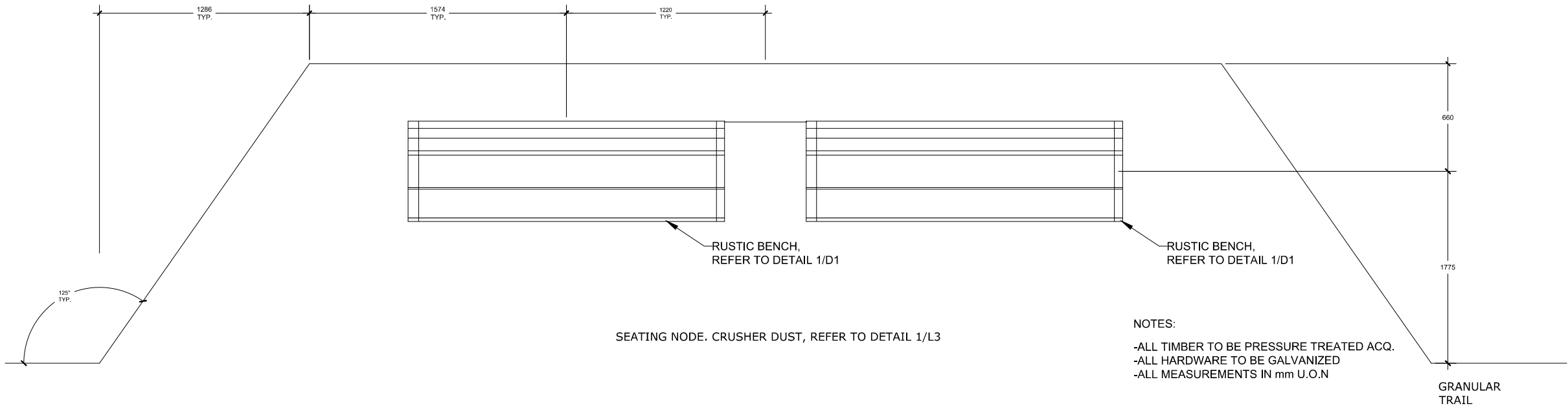


ELEVATION

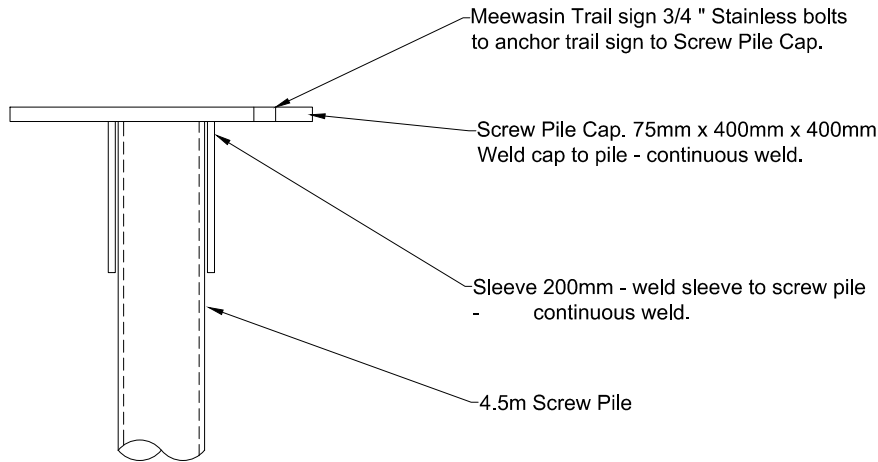
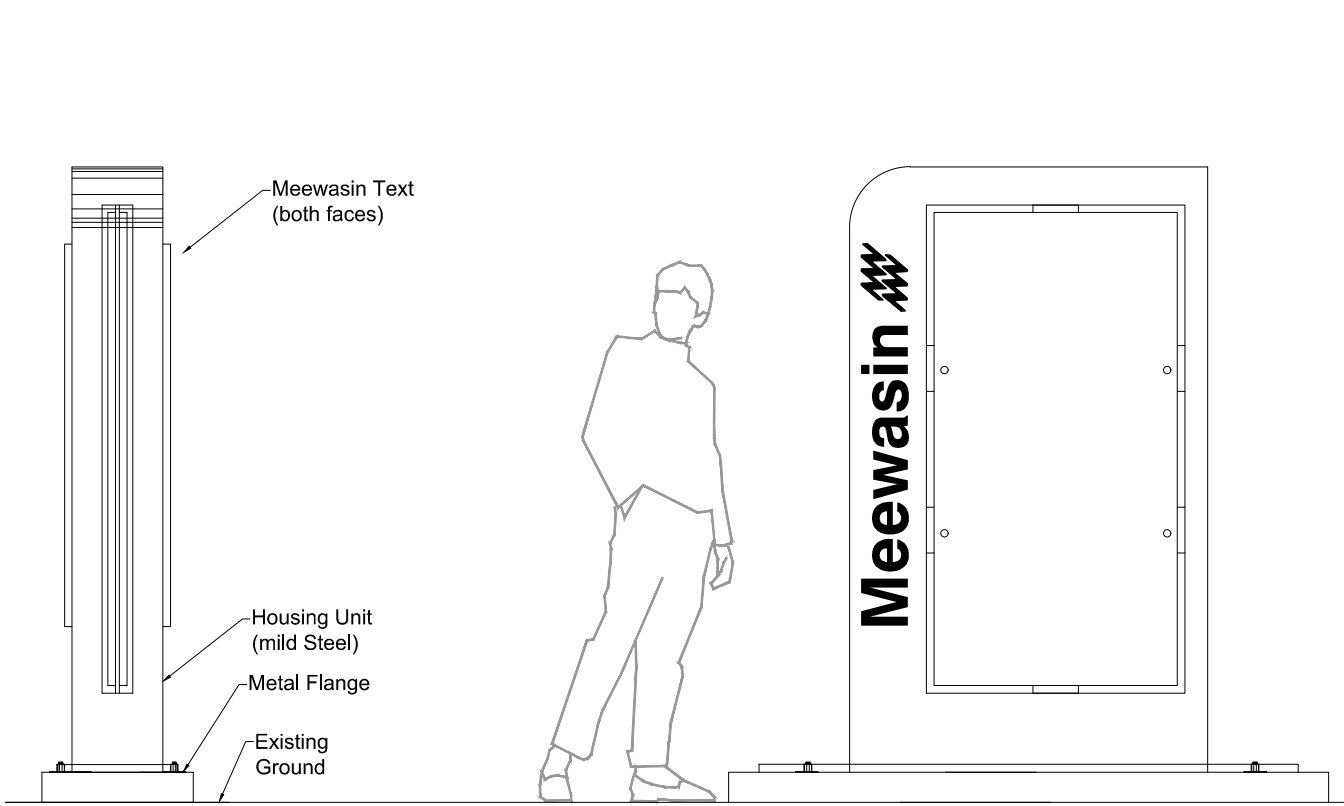


SECTION

1 RUSTIC BENCH DETAIL
D1 1:20



2 DOUBLE RUSTIC BENCH LAYOUT
D1 1:40



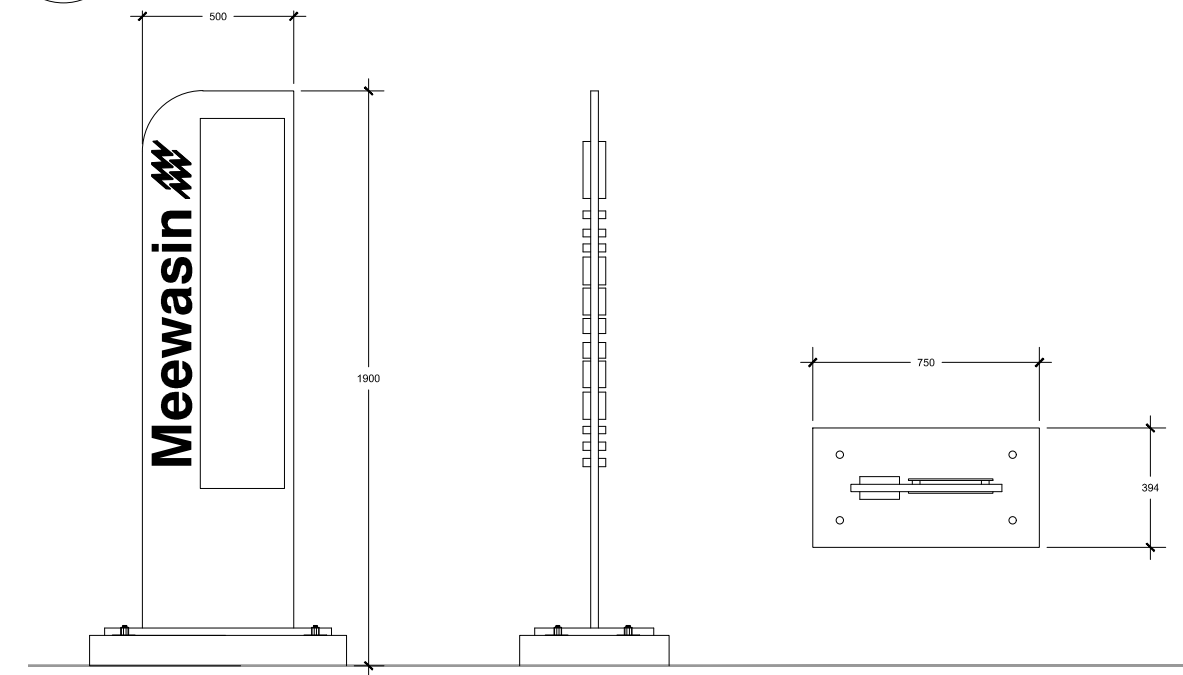
PILE DESIGN SPECIFICATIONS

1. Pile design loads (service or working loads):
 - As Per CCMC Report 13691-R
2. Design Criteria
 - a) Soil assumed to be generally as follows:
 - Soil Layer
 - Stiff clay or dense sand
3. Pile installer to use calibrated equipment and create pile installation report (including torque and depth readings) (SEE ALMITA PILE DESIGN)
 - Maximum install torque - 27.1 kN-m (20.0 ft-kip)
 - Minimum install torque - 5.4 kN-m (4.0 ft-kip)
 - Minimum embedment - 2.1m (7.0 ft)
4. If minimum torque is not achieved extensions should be added to achieve greater embedment and/or greater torque.
5. Minimum pile per embedment helix must be situated below maximum frost penetration depth.
6. Tolerances:
 - pile top to be located within 40mm (1.5 in) of centre of applied load.

- pile to be installed within 1.5 degrees of vertical
7. Structural steel members shall conform to:
 - CAN/CSA S16-14 - Design of steel structures.
 - Pipe Shaft - minimum ASTM A252 Grade 3 Steel Pipe, seamless or straight welded. Helix Plate - ASTM A36 or CSA G40.21 W44 hot rolled structural steel plate.
 8. Welding to conform to:
 - CSA W59 and CSA W47.1
 - Weld tensiel strength = 490 MPa (71.1 ksi)
 - All welds to be $\frac{5}{16}$ " (7.9) fillet welds unless noted otherwise.
 9. Fabrication shall be carried out in accordance with standard practices and all applicable codes.
 11. Above design and components shall conform to the latest editions of the building code, N.B.C. and applicable building codes.

- Note:
- this design and information is special to Almita's product and is non-transferable to other manufacturers.
 - Maximum allowable load is 265.0 kN (59.6 kips)

1 PRIMARY WAYFINDING (MEEWASIN) AND PRIMARY WAYFINDING FOOTING
D2 N.T.S.



2 SECONDARY WAYFINDING (MEEWASIN) & SECONDARY WAYFINDING SCREW PILE DETAIL
D2 N.T.S

Meewasin

Meewasin Valley Authority
402 Third Avenue South
Saskatoon, SK S7K 3G5
Tel 306-665-6887
Fax 306-665-6117

- NOTES
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LEGEND

1st			
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ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn. YY.MM.DD

PERMIT / SEAL

CLIENT / PROJECT

MEEWASIN NORTHEAST SWALE
ECOLOGICAL ZONE
(Phase 2 Trail Development)

TITLE

DETAILS - WAYFINDING

SCALE
11 X17
NTS

DRAWING NO. SHEET SIZE REVISION

D2 11 X17



1st			
REVISION	By	Appd.	YY.MM.DD
ISSUED FOR REVIEW	NAS	-	18.03.11
ISSUED	By	Appd.	YY.MM.DD
File Name	Dwn.	Chkd.	Dsgn.
			YY.MM.DD

DRAWING NO.	SHEET SIZE	REVISION
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D3 11 X17