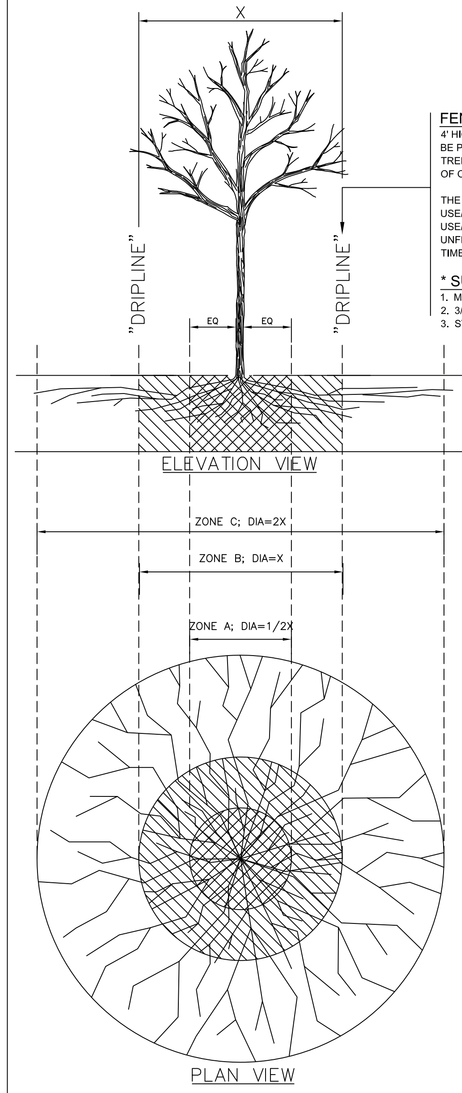


TREE PROTECTION DETAIL

FENCING/ROOT PROTECTION

4' HIGH ORANGE POLY CONSTRUCTION FENCING SHALL BE PROVIDED AND MAINTANED AT THE DRIPLINE OF EACH TREE OR AROUND A GROUP OF TREES AT THE DRIPLINE OF OUTSIDE TREES.

THE ENGINEER'S APPROVAL IS REQUIRED FOR USE/ACCESS WITHIN ZONE B. PERMISSION FOR USE/ACCESS REQUIRES SURFACE PROTECTION FOR ALL UNFENCED, UNPAVED SURFACES WITHIN ZONE B AT ALL TIMES.

* SURFACE PROTECTION MEASURES

1. MULCH LAYER, @ 6"-8"DEPTH
2. 3/4" PLYWOOD
3. STEEL PLATES

Trenching / Excavation

Zone A (Critical Root Zone)
[Defined as trunk diameter multiplied by 0.5]

1. No disturbance allowed without site-specific inspection and approval of methods to minimize root damage
2. Severance of roots larger than 2 inches in diameter requires an engineer's approval
3. Tunnelling required to install lines 3 feet below grade or deeper

Zone B (Dripline (define))
[Maximum width of branch extension on tree]

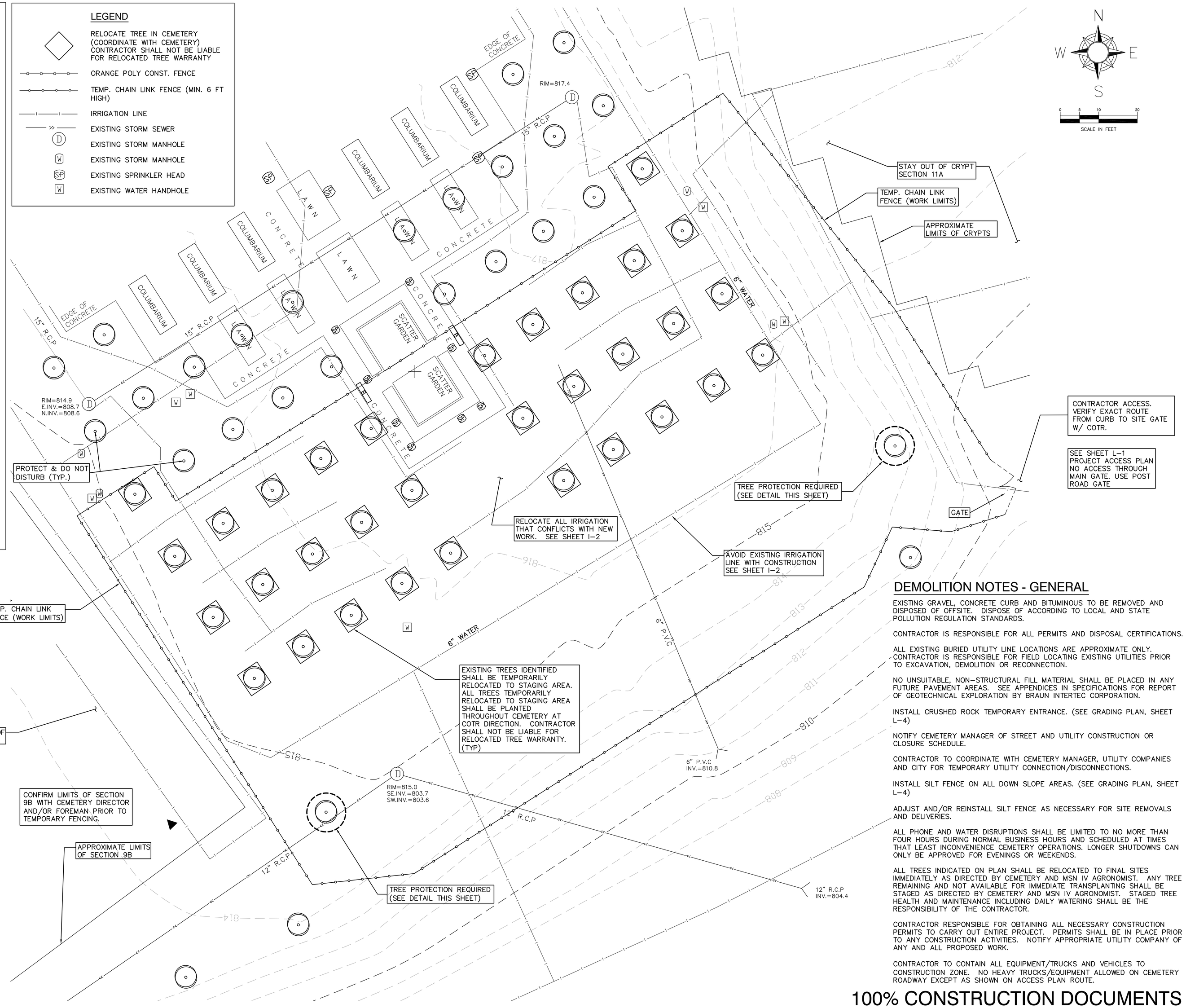
1. Operation of heavy equipment and/or stockpiling of materials subject to (specify individual) approval
2. Surface protection measures required
   Trenching allowed as follows:
   – Excavation by hand or with hand-driven trencher may be required
   – Limit trench width. Do not disturb Zone A (Critical Root Zone) maintain 2/3 or more of Zone B (Dripline) in undisturbed condition
3. Tunnelling may be required for trenches deeper than 3 foot
4. Use of pneumatic air wand and excavation may be considered where the trench depth does not exceed 4 feet

Zone C (Absorbing Root Zone)
[Defined as trunk diameter multiplied by 2.0]

1. Operation of heavy equipment and or stockpiling of materials subject to (specify individual) approval
2. Surface protection measures may be required and is to be determined by (specify individual)
   Trenching with heavy equipment allowed as follows:
   – Minimize trench width
   – Maintain 2/3 or more of Zone C in undisturbed condition
   – Or as specified by (specify individual)

LEGEND

- RELOCATE TREE IN CEMETERY (COORDINATE WITH CEMETERY) CONTRACTOR SHALL NOT BE LIABLE FOR RELOCATED TREE WARRANTY
- ORANGE POLY CONST. FENCE
- TEMP. CHAIN LINK FENCE (MIN. 6 FT HIGH)
- IRRIGATION LINE
- EXISTING STORM SEWER
- EXISTING STORM MANHOLE
- EXISTING STORM MANHOLE
- EXISTING SPRINKLER HEAD
- EXISTING WATER HANDHOLE



DEMOLITION NOTES - CONSTRUCTION

1. SEE SHEET I-2 FOR DETAILED IRRIGATION REMOVALS AND DEMOLITION.

DEMOLITION NOTES - GENERAL

EXISTING GRAVEL, CONCRETE CURB AND BITUMINOUS TO BE REMOVED AND DISPOSED OF OFFSITE. DISPOSE OF ACCORDING TO LOCAL AND STATE POLLUTION REGULATION STANDARDS.

CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND DISPOSAL CERTIFICATIONS.

ALL EXISTING BURIED UTILITY LINE LOCATIONS ARE APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING EXISTING UTILITIES PRIOR TO EXCAVATION, DEMOLITION OR RECONNECTION.

NO UNSUITABLE, NON-STRUCTURAL FILL MATERIAL SHALL BE PLACED IN ANY FUTURE PAVEMENT AREAS. SEE APPENDICES IN SPECIFICATIONS FOR REPORT OF GEOTECHNICAL EXPLORATION BY BRAUN INTERTEC CORPORATION.

INSTALL CRUSHED ROCK TEMPORARY ENTRANCE. (SEE GRADING PLAN, SHEET L-4)

NOTIFY CEMETERY MANAGER OF STREET AND UTILITY CONSTRUCTION OR CLOSURE SCHEDULE.

CONTRACTOR TO COORDINATE WITH CEMETERY MANAGER, UTILITY COMPANIES AND CITY FOR TEMPORARY UTILITY CONNECTION/DISCONNECTIONS.

INSTALL SILT FENCE ON ALL DOWN SLOPE AREAS. (SEE GRADING PLAN, SHEET L-4)

ADJUST AND/OR REINSTALL SILT FENCE AS NECESSARY FOR SITE REMOVALS AND DELIVERIES.

ALL PHONE AND WATER DISRUPTIONS SHALL BE LIMITED TO NO MORE THAN FOUR HOURS DURING NORMAL BUSINESS HOURS AND SCHEDULED AT TIMES THAT LEAST INCONVENIENCE CEMETERY OPERATIONS. LONGER SHUTDOWNS CAN ONLY BE APPROVED FOR EVENINGS OR WEEKENDS.

ALL TREES INDICATED ON PLAN SHALL BE RELOCATED TO FINAL SITES IMMEDIATELY AS DIRECTED BY CEMETERY AND MSN IV AGRONOMIST. ANY TREE REMAINING AND NOT AVAILABLE FOR IMMEDIATE TRANSPLANTING SHALL BE STAGED AS DIRECTED BY CEMETERY AND MSN IV AGRONOMIST. STAGED TREE HEALTH AND MAINTENANCE INCLUDING DAILY WATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

CONTRACTOR RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS TO CARRY OUT ENTIRE PROJECT. PERMITS SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES. NOTIFY APPROPRIATE UTILITY COMPANY OF ANY AND ALL PROPOSED WORK.

CONTRACTOR TO CONTAIN ALL EQUIPMENT/TRUCKS AND VEHICLES TO CONSTRUCTION ZONE. NO HEAVY TRUCKS/EQUIPMENT ALLOWED ON CEMETERY ROADWAY EXCEPT AS SHOWN ON ACCESS PLAN ROUTE.

CALL 48 HOURS BEFORE DIGGING
Utilities Underground Location Center
DIAL 811
Know what's below, Call before you dig.

100% CONSTRUCTION DOCUMENTS

Revisions	Date

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: MICHAEL B. BRANDVOLD, P.E.
SIGNATURE:
DATE MARCH 15, 2011 LICENSE # 41258

Anderson Engineering of Minnesota, LLC
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NATIONAL CEMETERY ADMINISTRATION

Drawing Title: DEMOLITION PLAN	Project Title: FORT SNELLING NATIONAL CEMETERY MEMORIAL MARKER WALL		Date: 3-15-2011
			Project No.
Approved: Director, Office of Construction Management	Building Number	Checked / Drawn	DRAWING NO. D-1
Approved: Director, Project Management Service	Location: 7601 34th AVENUE, SOUTH MINNEAPOLIS, MINNESOTA		Dwg. 3 Of 20