

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



SECTION 700
MISCELLANEOUS FACILITIES

LAST REVISION : JULY 2013

A. GENERAL

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THESE STANDARDS, THE LATEST VERSION OF THE CALTRANS STANDARD SPECIFICATIONS (CSS), AND THE LATEST VERSION OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION (SSPWC).
2. WORK SHALL BE DONE IN CONFORMANCE WITH THE MOST RECENT VERSION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. THE TOWN'S REPRESENTATIVE AND ALL OTHER INTERESTED PARTIES SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE START OF WORK.
4. AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION, UNDERGROUND SERVICE ALERT (USA) SHALL BE NOTIFIED AT THE REGIONAL NOTIFICATION CENTER, WITH A REQUEST THAT UTILITY OWNERS MARK OR OTHERWISE INDICATE THE LOCATION OF THEIR FACILITIES. ALL APPROPRIATE UTILITY COMPANIES SHALL ALSO BE CONTACTED. UTILITIES SHALL BE POTHOLED AT CROSSINGS AND TIE-INS PRIOR TO EXCAVATION WORK. ALL MEASURES SHALL BE TAKEN TO PROTECT UTILITIES AND STRUCTURES FOUND AT THE SITE.
5. PRIOR TO BEGINNING CONSTRUCTION ALL REQUIRED PERMITS MUST BE OBTAINED.
6. PRECONSTRUCTION MEETING ARE REQUIRED BEFORE ANY WORK IS TO BEGIN, EXCEPT FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN.
7. WORK IN TOWN OF MAMMOTH LAKES RIGHT OF WAY SHALL COMPLY WITH THE TERMS, CONDITIONS, AND REQUIREMENTS OF THE TOWN ENCROACHMENT PERMIT.
8. THE CONTRACTOR SHALL TAKE ALL SUCH MEASURES NECESSARY TO CONTROL DUST NUISANCE BY CLEANING, SWEEPING, AND SPRINKLING WITH WATER AND USING DUST FENCES OR OTHER METHODS AS DIRECTED BY THE TOWN'S REPRESENTATIVE THROUGHOUT THE CONSTRUCTION OPERATION. ALL EXPOSED SOIL SURFACES SHALL BE MOISTENED AS REQUIRED TO AVOID NUISANCE CONDITIONS AND INCONVENIENCES FOR LOCAL RESIDENTS AND TRAVELERS OF NEARBY ROADWAYS. SUFFICIENT WATER TRUCKS SHALL BE MADE AVAILABLE FOR DUST CONTROL PURPOSES.
9. ANY EVIDENCE OF THE HISTORICAL PRESENCE OF MAN FOUND DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE MAMMOTH LAKES PLANNING DEPARTMENT AND CONSTRUCTION SHALL STOP UNTIL FURTHER NOTICE.
10. TREE REMOVAL SHALL BE PERFORMED BY A LICENSED TIMBER OPERATOR ONLY. TIMBER OPERATOR SHALL NOTIFY CALIFORNIA DEPARTMENT OF FORESTRY (714) 782-4140 PRIOR TO COMMENCING WORK. ALL TREE REMOVAL SHALL CONFORM TO THE APPROVED TIMBER HARVEST PLAN, IF REQUIRED, AND CALIFORNIA DEPARTMENT OF FORESTRY.

B. CONTROL OF WORK:

1. CONSTRUCTION SHALL BE LIMITED TO 7:00 AM TO 8:00 PM MONDAY THROUGH SATURDAY. OPERATIONS ON SUNDAYS AND TOWN HOLIDAYS ARE PERMITTED ONLY ON APPROVAL OF THE TOWN ENGINEER AND LIMITED TO 9:00 AM TO 5:00 PM.
2. THE LIMITS OF CONSTRUCTION SHALL BE CAREFULLY AND FULLY FLAGGED PRIOR TO START OF CONSTRUCTION, AND POSTED SO AS TO PREVENT DAMAGE TO VEGETATION AND DISTURBANCE TO SOILS OUTSIDE OF THE AREA OF CONSTRUCTION.
3. THE CONTRACTOR SHALL SO CONDUCT HIS OPERATIONS AS TO OFFER THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC, AND HE SHALL HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAN HE CAN PROSECUTE PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC. CONVENIENT ACCESS TO DRIVEWAYS, HOUSES, AND BUILDINGS ALONG THE LINE OF WORK SHALL BE MAINTAINED AND TEMPORARY CROSSINGS SHALL BE PROVIDED AND MAINTAINED IN GOOD CONDITION. NO MORE THAN ONE CROSSING OR INTERSECTION STREET OR ROAD SHALL BE CLOSED AT ANY ONE TIME. ACCESS TO BUSINESSES AND RESIDENCES SHALL BE MAINTAINED AT ALL TIMES.

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



CONSTRUCTION REQUIREMENTS

PUBLIC WORKS
DIRECTOR APPROVAL: 

DATE: May 7, 2014

STANDARD PLAN

700-0

SHEET 1 OF 3

C. SAFETY:

1. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK, AND THE CONTRACTOR SHALL FULLY COMPLY WITH ALL STATE, FEDERAL, AND OTHER LAWS, RULES, REGULATIONS, AND ORDERS RELATING TO SAFETY OF WORKERS AND ALL OTHERS. THIS MAY INCLUDE THE ISSUANCE OF PERSONAL PROTECTIVE EQUIPMENT.
2. CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN ACCORDANCE WITH THE TOWN OF MAMMOTH LAKES ORDINANCES AND STANDARDS AND IN CONFORMANCE OF INDUSTRIAL RELATIONS, DIVISION OF INDUSTRIAL SAFETY.
3. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF GENERAL OSHA STANDARDS FOR THE PROTECTION OF WORKMEN AND THE GENERAL PUBLIC. OSHA PERMITS ARE REQUIRED FOR TRENCHES OVER 5 FEET DEEP. A WORKER PROTECTION PLAN SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE TOWN FOR APPROVAL FOR ALL EXCAVATIONS GREATER THEN 4 FEET.
4. ALL OPERATIONS INVOLVING THE STORAGE AND HANDLING OF EXPLOSIVES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF DIVISION II, PART I, OF THE CALIFORNIA HEALTH AND SAFETY CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES AND REGULATIONS. DRILLING AND BLASTING SHALL ONLY BE DONE UNDER THE DIRECTION OF LICENSED PERSONNEL. ALL PRECAUTIONS NECESSARY FOR THE PROTECTION OF LIFE AND PROPERTY SHALL BE TAKEN DURING BLASTING OPERATIONS AND ADEQUATE WARNING SHALL BE GIVEN TO WORKERS, INSPECTORS, AND PROPERTY OWNERS THAT BLASTING IS IN PROGRESS. THE TOWN SHALL BE NOTIFIED PRIOR TO ANY BLASTING.

D. EXECUTION:

1. ALL CUT AND FILL SLOPES SHALL BE REVEGETATED AND/OR LANDSCAPED TO PREVENT EROSION.
2. CUT AND FILL SLOPES SHALL NOT EXCEED A STEEPNESS OF 3:1, UNLESS OTHERWISE NOTED, AND SHALL BE REVEGETATED TO CONTROL EROSION. STOCKPILED TOPSOIL WILL BE SPREAD EVENLY TO A DEPTH OF 4" MINIMUM OVER SLOPES AND DISTURBED AREAS, THEN LANDSCAPED OR SEED TO PREVENT EROSION WITH THE SEED MIXTURE INDICATED IN THE TECHNICAL PROVISIONS SECTION 20, "EROSION CONTROL AND HIGHWAY PLANTING" OF THE CSS. SEEDED SLOPES SHALL BE STABILIZED BY INSTALLATION OF AN EROSION CONTROL BLANKET, "NORTH AMERICAN GREEN SC150", GEOTEXTILES OR APPROVED EQUAL, SECURED PER MANUFACTURES RECOMMENDATIONS.
3. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID INJURY TO EXISTING IMPROVEMENTS OR FACILITIES, UTILITY FACILITIES, ADJACENT PROPERTY, TREES AND SHRUBBERY THAT ARE NOT TO BE REMOVED. ALL DAMAGE CAUSED TO PUBLIC STREET, INCLUDING HAUL ROUTES, ALLEYS, SIDEWALKS, CURBS, OR STREET FURNISHINGS, OR TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR TO THE SATISFACTION OF THE TOWN'S REPRESENTATIVE. ALL IMPROVEMENTS REMOVED AS A COURSE OF WORK SHALL BE REPLACED AS APPROVED BY THE OWNER AND TOWN REPRESENTATIVE.

E. MATERIALS:

1. AGGREGATE BASE SHALL BE CLASS 2, 19 MM MAXIMUM GRADING, AND SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASES" OF THE CSS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557-00.
2. ASPHALT CONCRETE SHALL BE TYPE B, 12.5 MM MAXIMUM GRADING AND SHALL CONFORM TO THE PROVISIONS IN SECTION 39, "ASPHALT CONCRETE", OF THE CSS. SEAL COAT OF SS-1 OR CSS-1 ASPHALT SHALL BE APPLIED AT 40 TO 70 LITERS PER SQUARE METER TO NEW ASPHALT CONCRETE PAVED SURFACES. TACK COAT BETWEEN PAVEMENT LIFTS (75 MM MAX. LIFT) OR FOR CAPPING EXISTING PAVEMENT SHALL BE CSS-1 OR SS-1 APPLIED AT 45 LITERS PER SQUARE METER PER SECTION 94 " ASPHALTIC EMULSIONS" OF THE CSS.
3. CORRUGATED METAL PIPE CULVERTS SHALL CONFORM TO THE PROVISIONS IN SECTION 66, "CORRUGATED METAL PIPE", OF THE CSS AND SHALL BE 12 GAGE. CORRUGATED STEEL FLARED END SECTIONS SHALL CONFORM TO THE PROVISIONS IN SECTION 75, "MISCELLANEOUS METAL", AND SECTION 70, MISCELLANEOUS FACILITIES" OF THE CSS.
4. PLASTIC PIPE CULVERTS SHALL CONFORM TO THE PROVISIONS IN SECTION 64, "PLASTIC PIPE" OF THE CSS.

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



CONSTRUCTION REQUIREMENTS

PUBLIC WORKS
DIRECTOR APPROVAL: 

DATE: May 7, 2014

STANDARD PLAN

700-1

SHEET 2 OF 3

5. SLURRY CEMENT BACKFILL SHALL CONFORM TO THE PROVISIONS IN SECTION 19-3.062, "SLURRY CEMENT BACKFILL", OF THE CSS.
6. PORTLAND CEMENT CONCRETE SHALL BE CLASS I IN ACCORDANCE WITH SECTION 90 OF THE CSS. AGGREGATE USED FOR CONCRETE SHALL BE NON-REACTIVE. CONCRETE SHALL CONTAIN 5% ENTRAINED AIR. CONCRETE SHALL BE SEALED WITH SILICONE-BASED SEALER, "SYNAK" OR APPROVED EQUAL, IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. ALL SITE CONCRETE (USED FOR SIDEWALKS, CURBS, SWALES AND EXPOSED UTILITY RIMS) SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 34.5MPA (5000 P.S.I.). REINFORCING STEEL, IF REQUIRED, SHALL BE DEFORMED BILLET-STEEL BARS CONFORMING TO THE SPECIFICATIONS OF ASTM A 615 GRADE 40 OR 60.
8. INSTALLATION OF TRAFFIC STRIPES AND PAVEMENT MARKINGS WILL BE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 84, "TRAFFIC STRIPES AND PAVEMENT MARKINGS", OF THE CSS.

F. INSPECTION:

1. CONTRACTOR SHALL NOTIFY THE FOLLOWING COMPANIES/AGENCIES AT LEAST 48 HOURS IN ADVANCE FOR REQUESTING SERVICE/INSPECTION:
 A) CONSTRUCTION STAKING:
 B) INSPECTION: TOWN OF MAMMOTH LAKES - PUBLIC WORKS DEPARTMENT (760) 934-8989
 C) SOILS ENGINEER:
2. SOILS TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY. SHOULD ANY COMPACTION TEST FAIL TO MEET THE MINIMUM REQUIRED DENSITY AS SPECIFIED ON THE PLANS OR IN THE GEOTECHNICAL REPORT, THE DEFICIENCY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE SOILS ENGINEER. THE EXPENSE OF RETESTING SUCH AN AREA SHALL BE BORNE BY THE CONTRACTOR, AT NO COST TO THE OWNER.

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



CONSTRUCTION REQUIREMENTS

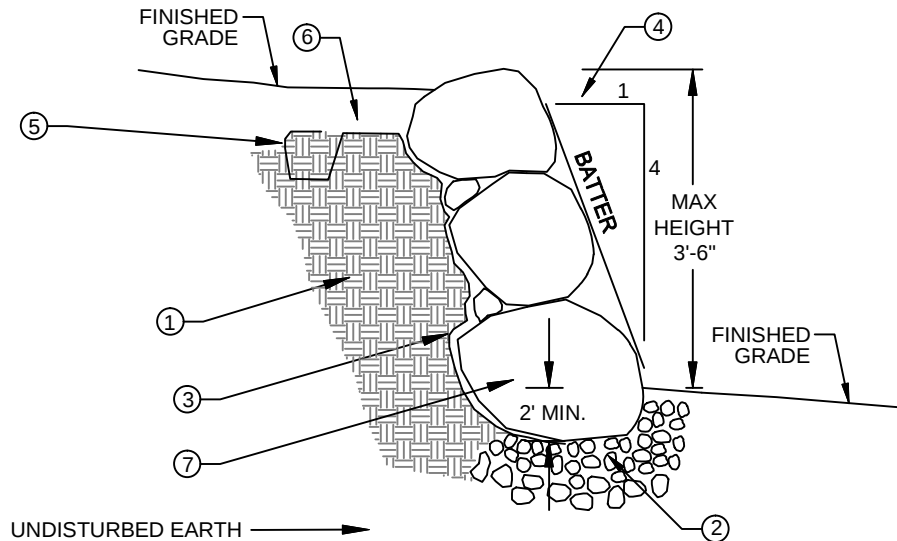
PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: May 7, 2014

STANDARD PLAN

700-0

SHEET 3 OF 3



CONSTRUCTION NOTES FOR STACKED STONE WALL

1. COMPACTED BACKFILL.
2. 12" MIN DEPTH COMPACTED CLASS B ROAD BASE OR OTHER APPROVED BASE MATERIAL.
3. EROSION CONTROL FABRIC AS SPECIFIED. INSTALL PER MANUFACTURER'S INSTRUCTIONS. BOULDERS SHOULD SIT DIRECTLY AGAINST FABRIC.
4. BATTER FACE OF WALL 3" / FOOT MIN OR AS DIRECTED BY THE TOWN ENGINEER.
5. DIG TRENCH AND LAY FABRIC INSIDE. FILL WITH SOIL AND FOLD FABRIC OVER TOP.
6. COMPACTED 4" TOP SOIL OR OTHER SURFACE MATERIAL AS INDICATED.
7. INITIAL ROCK SHALL BE MINIMUM OF 2.5' DIAMETER & 900 - 2000 LB.

GENERAL NOTES FOR ROCK STACK RETAINING WALL

1. CHINK BOULDERS WITH SMALLER ROCKS AS NECESSARY. CHINKING SHOULD NOT BE VISIBLE FROM FACE OF WALL.
2. SLOPES ABOVE ROCK WALL SHALL NOT EXCEED 3:1.
3. CHOCK SPACES BETWEEN BOULDERS FROM BEHIND WITH STONES AND COBBLES PRIOR TO BACKFILLING.
4. LOWEST ROCK SHALL BE KEYED A MINIMUM OF 2' DEEP OR 5' HORIZONTALLY TO DAYLIGHT, WHICHEVER IS GREATEST.
5. WALL SECTIONS ABOVE 3' HEIGHT ARE TO BE INSTALLED UNDER FULL TIME INSPECTION BY QUALIFIED GEOTECHNICAL ENGINEER AN INSPECTION REPORT SHALL BE FILED BY THE GEOTECHNICAL ENGINEER WITH THE TOWN OF MAMMOTH LAKES.
6. STAGGER JOINTS BETWEEN ROCKS ON SUCCEEDING LEVELS.
7. ANY OVER EXCAVATIONS SHALL BE COMPARED TO 95% RELATIVE DENSITY.
8. ROCK USED FOR WALLS SHALL BE "LOCAL GRANITE".
9. MIX BOULDER SIZES THROUGHOUT HEIGHT OF WALL.
10. MINIMUM BOULDER SIZE SHALL BE 12"x12"x24".

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



ROCK STACK RETAINING WALL

PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: May 7, 2014

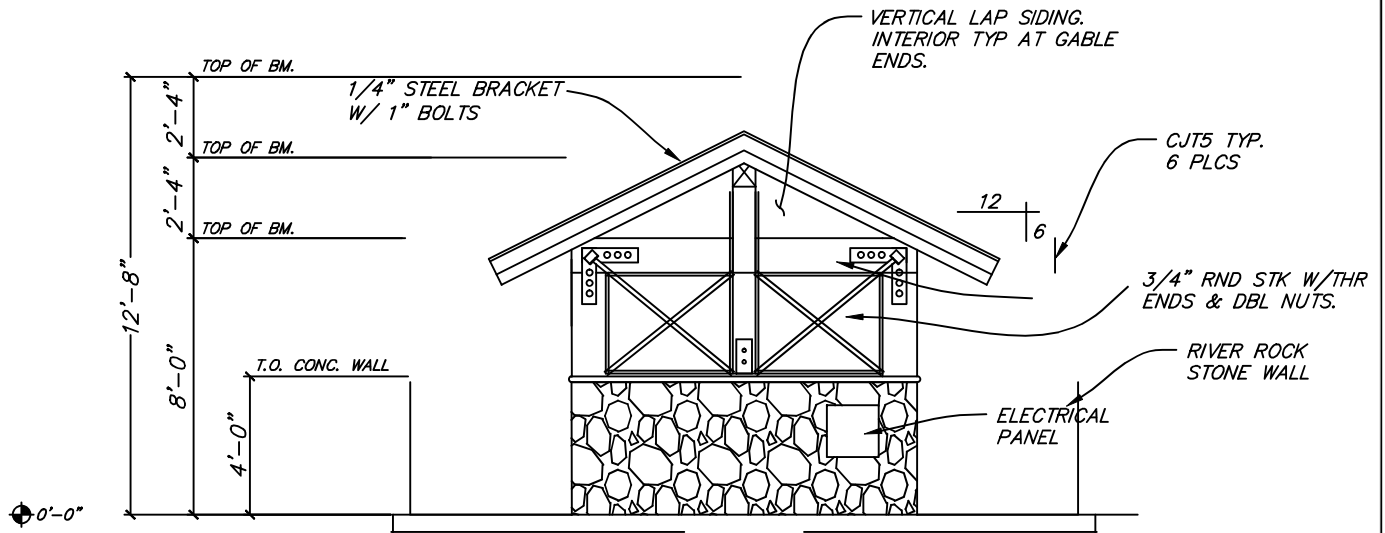
STANDARD PLAN

701-0

SHEET 1 OF 1



DATE: May 7, 2014



BACK

NOTES:

1. DO NOT SCALE FROM DRAWINGS
2. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. IF ANY INCONSISTENCIES ARE FOUND, THEY MUST BE REPORTED TO THE RESIDENT ENGINEER.
3. ALL WORK TO LATEST EDITION UBC, LOCAL CODES AND BYLAWS.
4. THESE DRAWINGS ARE NOT FOR CONSTRUCTION UNTIL THEY ARE STAMPED BY AN ENGINEER.
5. COUNTER SINK ALL ANCHOR BOLTS IN SILL PLATE
6. ALL STRUCTURAL PLATES AND HARDWARE SHALL BE PAINTED BLACK.
7. ALL WOOD SHALL BE COATED WITH A CABOTS CLEAR OIL STAIN. COLOR SELECTED BY THE TOWN.

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



STEEL BUS SHELTER

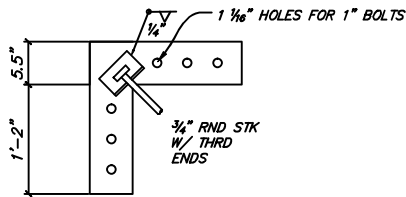
PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: May 7, 2014

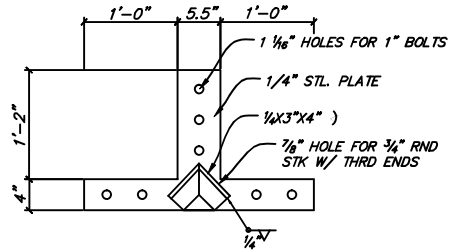
STANDARD PLAN

702-0

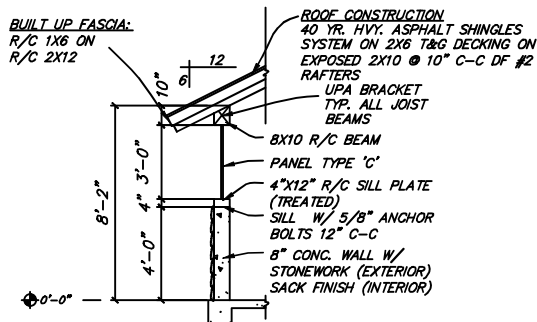
SHEET 3 OF 4



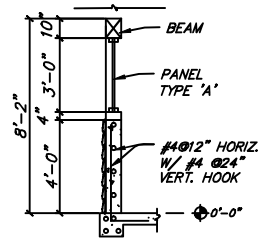
L' BRACKET
NTS
(T' BRACKET SIMILAR)



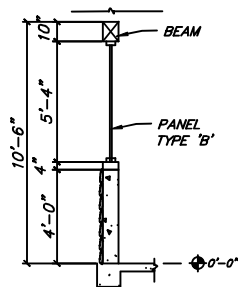
T' BRACKET
NTS
(SIDE 'L' SIMILAR)



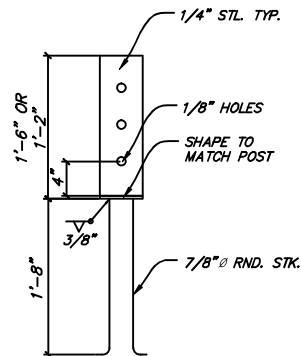
DETAIL 1
NTS



DETAIL 2
NTS



DETAIL 3
NTS



BLADE BRACKET
NTS
(TYP. ALL COLUMNS/POSTS)

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



DETAILS

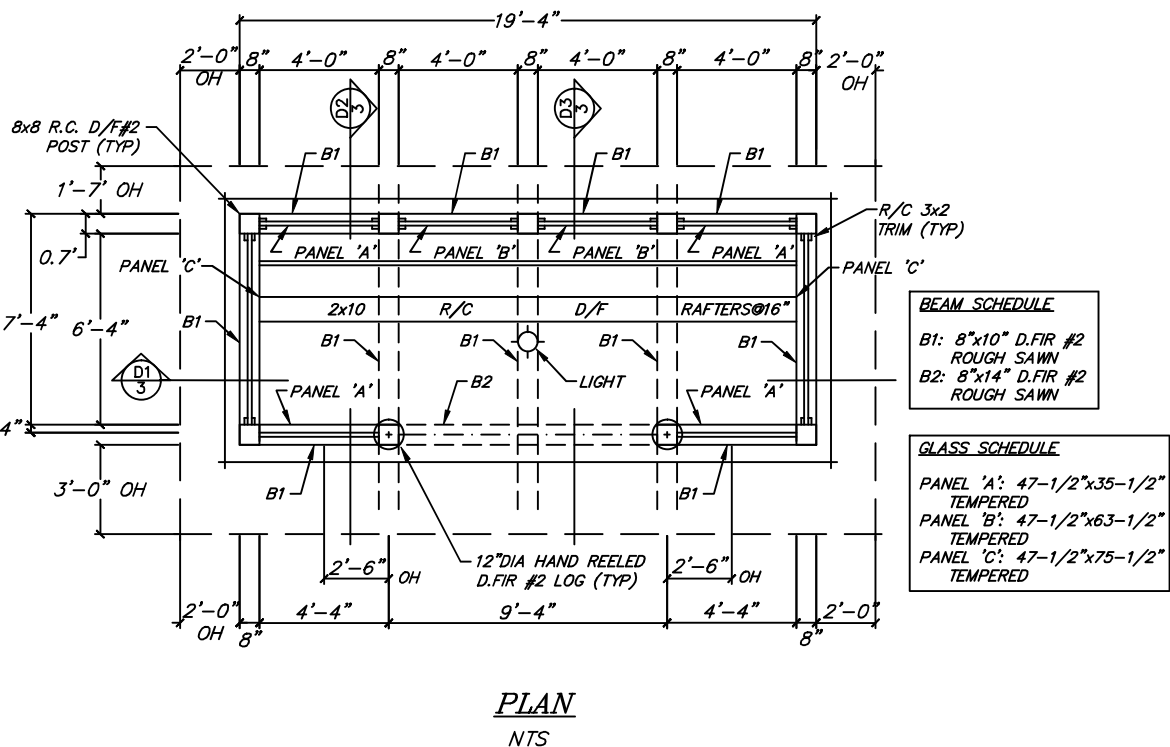
PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: May 7, 2014

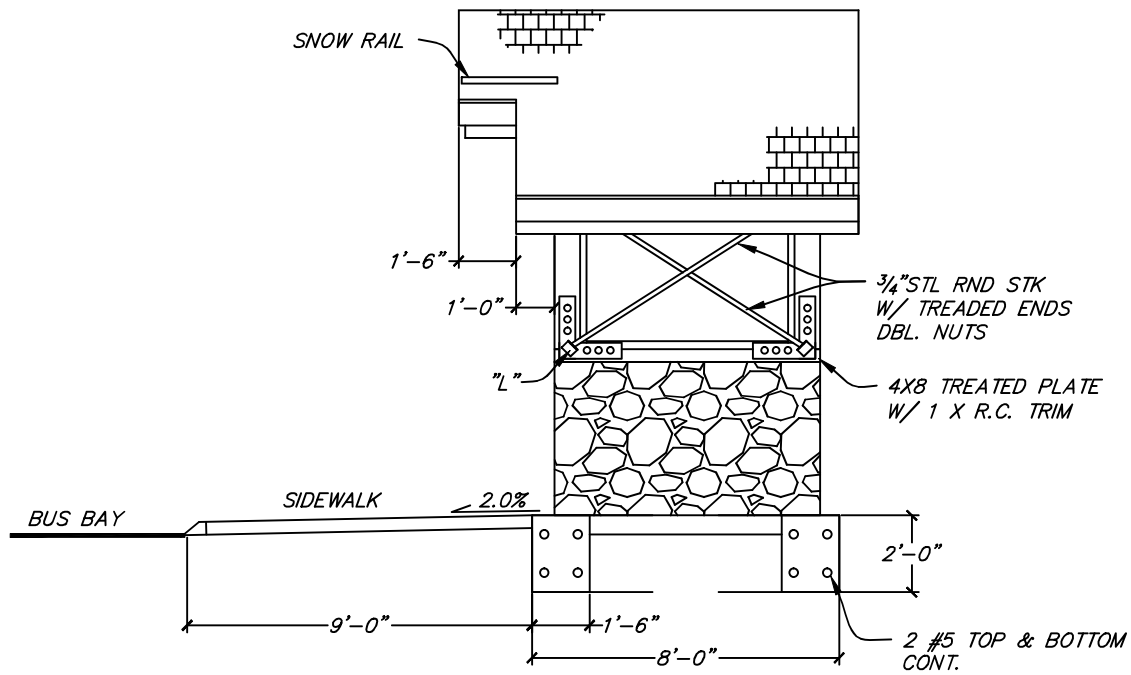
STANDARD PLAN

702-0

SHEET 4 OF 4

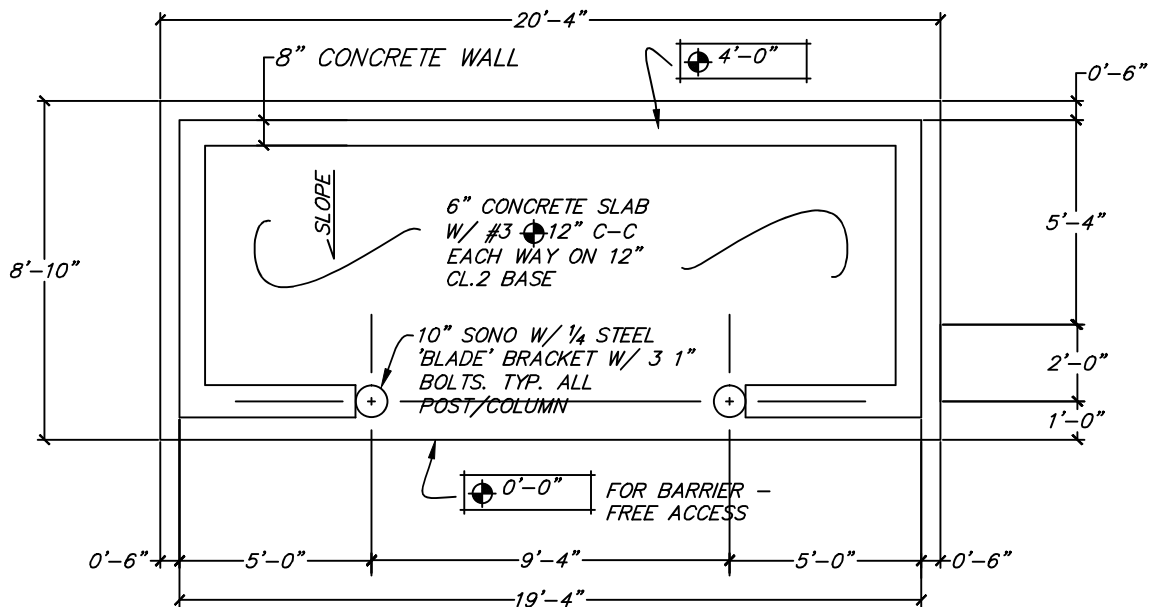


DATE: May 7, 2014



RIGHT-SIDE VIEW

NTS



FOUNDATION

NTS

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



WOOD BUS SHELTER

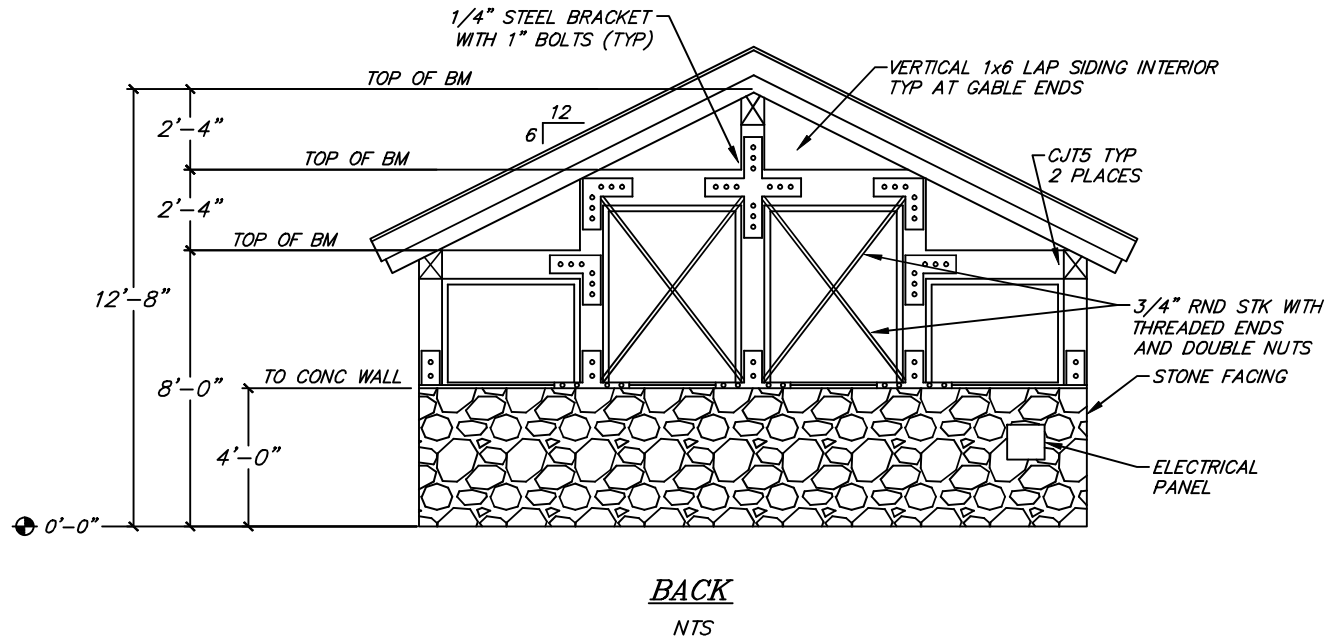
PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: May 7, 2014

STANDARD PLAN

703-0

SHEET 2 OF 4



NOTES

1. DO NOT SCALE FROM DRAWINGS.
2. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. IN ANY INCONSISTENCIES ARE FOUND, THEY MUST BE REPORTED TO THE RESIDENT ENGINEER.
3. ALL WORK SHALL BE TO THE LATEST EDITION OF THE U.B.C. ALL LOCAL CODES AND BYLAWS
4. THESE DRAWING ARE NOT FOR CONSTRUCTION UNTIL THEY ARE STAMPED BY THE ENGINEER.
5. COUNTERSINK AND ANCHOR BOLTS IN SILL PLATE.
6. ALL STRUCTURAL PLATES AND HARDWARE SHALL BE PAINTED BLACK.
7. ALL WOOD SHALL BE COATED WITH A CABOTS CLEAR OIL STAIN. COLOR SELECTED BY TOWN.

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



WOOD BUS SHELTER

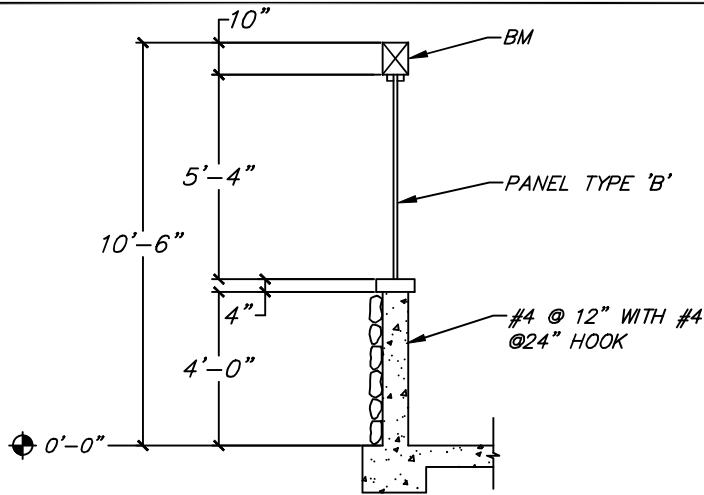
PUBLIC WORKS
DIRECTOR APPROVAL: 

DATE: **May 7, 2014**

STANDARD PLAN

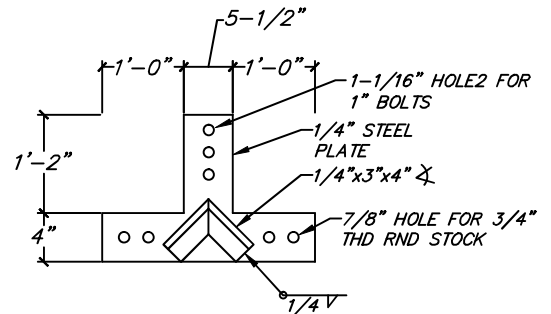
703-0

SHEET 3 OF 4



DETAIL 3

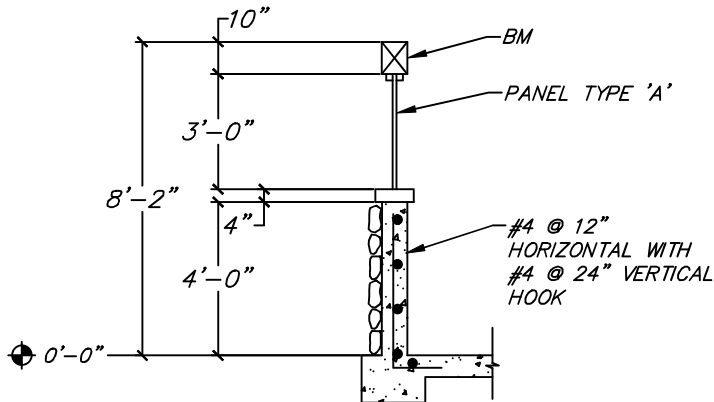
NTS



"T" BRACKET

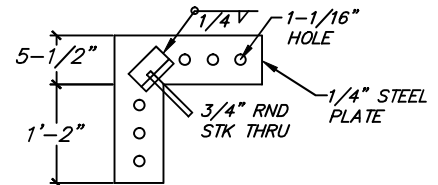
SIDE "L" BRACKET SIMILAR

NTS



DETAIL 2

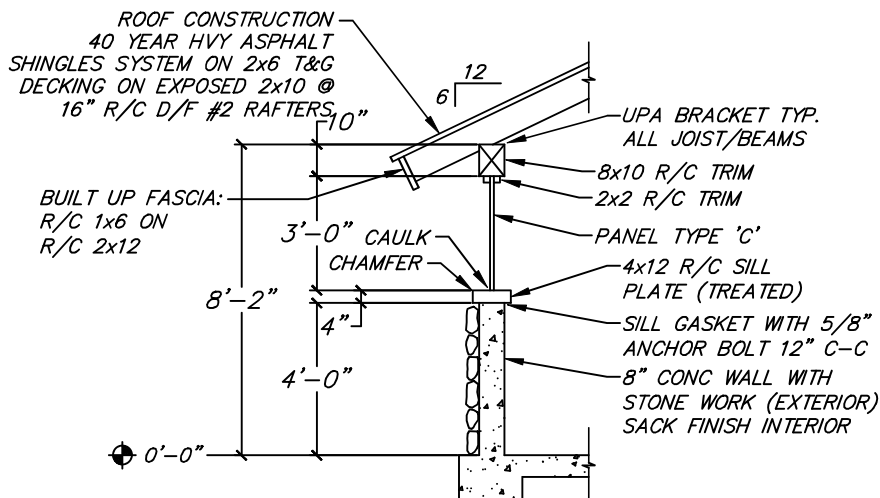
NTS



"L" BRACKET

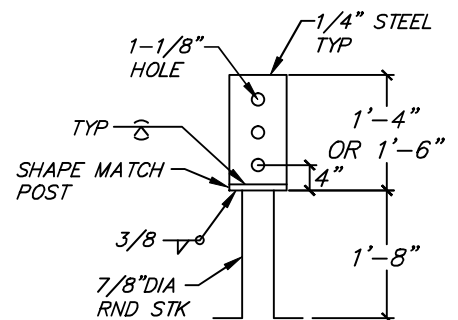
"+" BRACKET SIMILAR

NTS



DETAIL 1

NTS



BLADE BRACKET

NTS

(TYP ALL COLUMN POSTS)

TOWN OF MAMMOTH LAKES - DEPARTMENT OF PUBLIC WORKS



DETAILS

PUBLIC WORKS
DIRECTOR APPROVAL: *[Signature]*

DATE: **May 7, 2014**

STANDARD PLAN

703-0

SHEET 4 OF 4