TRAIL CONSTRUCTION NOTES:

1. ALL TRAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE "TYPICAL TRAIL CROSS SECTION AND TRAIL CROSS SECTION TYPES A, B & C" AS SHOWN ON SHEET 5 & 6. TRAIL ALIGNMENT PLANS 12 THROUGH 50, AND OTHER REQUIREMENTS AND DETAILS ON SHEETS 7 THROUGH 11.

LEGEND

- EXISTING ROAD
- EXISTING HIKING TRAIL
- EXISTING SNOWMOBILE/HORSE TRAIL
- CREEK
- INTERSECTION MARKER
- TRAIL SEGMENT MARKER
- PROPOSED TRAILS (SEGMENTS 9, 10, 11, 12, 13, 20)
- FUTURE TRAILS (NOT IN CONTRACT)
- EXISTING MOUNTAIN BIKE TRAILS (NOT IN CONTRACT)
- PARK BOUNDARY
- EXISTING MUNGER PAVED BIKE TRAIL
- EXISTING ATV TRAIL

EXISTING DATA NOTES:
EXISTING TOPOGRAPHIC INFORMATION IS BASED ON ONE FOOT INTERVAL LIDAR DATA PROVIDED BY ST. LOUIS COUNTY THAT WAS FLOWN THE SPRING OF 2011.

ALL OTHER EXISTING CONDITIONS ARE "AS-TRACED" FROM AERIAL PHOTOGRAPHY. THEY ARE NOT TO BE CONSIDERED ACCURATE AND ARE PROVIDED AS A CONVENIENCE TO THE CONTRACTOR.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND NOTIFY OWNER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

LANDSLIDES MAY BE ENCOUNTERED IN THE TRAIL CORRIDOR DUE TO A FLOOD IN THE SPRING OF 2012. KNOWN LANDSLIDES ARE IDENTIFIED AND APPROXIMATELY LOCATED IN THE PLANS. WHEN LANDSLIDES ARE ENCOUNTERED AND THE TRAIL MUST TRAVERSE THROUGH THE CONTRACTOR IS TO CONSULT WITH THE OWNER PRIOR TO CONSTRUCTION CONSTRUCTION THROUGH LANDSLIDES IS INCLUDED IN THE CONTRACTORS UNIT BID PRICE FOR ALL TRAIL TYPES.

ADDITIONAL EROSION CONTROL BEST MANAGEMENT PRACTICE (BMP) MEASURES MAY NEED TO BE IMPLEMENTED FOR LANDSLIDE AREAS AND WILL BE PAID BASED ON THE CONTRACTORS UNIT BID PRICE FOR BMP'S.
GRAVE YARD TRAIL PROJECT #1:
TRAIL SEGMENT 10 = GREEN TRADITIONAL (2 WAY)
GROSS LENGTH SUMMARY: 4,365 LF (10.8 MILES)

TRAIL SLOPE ANALYSIS - GRAVE YARD

<table>
<thead>
<tr>
<th>SLOPE RANGE</th>
<th>TYPE A</th>
<th>TYPE B</th>
<th>TYPE C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15%</td>
<td>40 LF</td>
<td>4,315 LF</td>
<td>0 LF</td>
</tr>
<tr>
<td>15-60%</td>
<td>0.9%</td>
<td>99.1%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

NOTE: CONTRACTOR CANNOT INVOICE FOR BOTH TRAIL CONSTRUCTION, TYPES A, B & C, AND CONSTRUCTED FEATURES OF A GIVEN LINEAR FOOT OF TRAIL.

NOTE: SEE BID WORKSHEET B FOR AN ESTIMATED SUMMARY OF CONSTRUCTED FEATURE QUANTITIES.

POWER LINE TRAIL PROJECT #2:
TRAIL SEGMENT 13 = GREEN TRADITIONAL (2 WAY)
GROSS LENGTH SUMMARY: 10,421 LF (20.0 MILES)

TRAIL SLOPE ANALYSIS - POWER LINE

<table>
<thead>
<tr>
<th>SLOPE RANGE</th>
<th>TYPE A 0-15%</th>
<th>TYPE B 15-60%</th>
<th>TYPE C 61+%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LENGTH</td>
<td>33 LF</td>
<td>10,388 LF</td>
<td>0 LF</td>
</tr>
<tr>
<td>PERCENT OF TRAIL</td>
<td>0.3%</td>
<td>99.7%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

NOTE: CONTRACTOR CANNOT INVOICE FOR BOTH TRAIL CONSTRUCTION, TYPES A, B & C, AND CONSTRUCTED FEATURES OF A GIVEN LINEAR FOOT OF TRAIL.

NOTE: SEE BID WORKSHEET B FOR AN ESTIMATED SUMMARY OF CONSTRUCTED FEATURE QUANTITIES.

APPROXIMATE LANDSLIDE LOCATIONS

APPROXIMATE PROPERTY LIMITS CONTRACTORS TO STAY WITHIN BOUNDARY

CULTURALLY SENSITIVE AREA - NO CONSTRUCTION ALLOWED WITHIN BOUNDARY (KEEP OUT)

LOCATOR MAP-GRAVE YARD TRAIL (SHEETS 12-17)
NOT TO SCALE

LOCATOR MAP - POWER LINE TRAIL (SHEETS 18-30)
NOT TO SCALE

CITY OF DULUTH PROJECT NO. 1323 DRAWN BY: TTP SHEET NO. 3 OF 50
VEGETATION CLEARING ZONE
REFER TO TRAIL SPECIFICATION
FOR MORE DETAILS. CORRIDOR
CLEARING LIMITS VARY BETWEEN
DIFFERENT TRAIL SPECIFICATIONS

TYPICAL TRAIL DESIGN CROSS-SECTION

NOT TO SCALE

24" WIDE OF LOW VEGETATION ALONG TRAIL

24" WIDE OF LOW VEGETATION ALONG TRAIL

GRADES AREA LIMITED TO
ONLY AS NECESSARY TO
PREPARE DOWNSLOPES AS PER
TYPE A-C TRAIL CROSS-SECTIONS

GRADES AREA LIMITED TO
ONLY AS NECESSARY TO
PREPARE BACKSLOPES AS PER
TYPE A-C TRAIL CROSS-SECTIONS

ADDITIONAL CLEARANCE
AS REQUIRED TO ALLOW FOR GRADING OF BACKSLOPE AREAS

TYPICAL TRAIL DESIGN CROSS-SECTION

TYPCA. TRAIL DESIGN NOTES:

1. THE GRAPHIC ON THIS SHEET ILLUSTRATES A TYPICAL TRAIL CROSS-SECTION
HIGHLIGHTING TREAD AND VEGETATION CLEARANCE ZONE WIDTHS.

2. IN SELECT SITUATION THE TRAIL WIDTH MAY BE MODIFIED IN RESPONSE TO THE
TERRAIN OR TO CREATE A TRAIL FEATURE.

3. SEE SPECIFICATIONS FOR FURTHER DETAILS ON TREAD AND CORRIDOR
CLEARING AND TYPICAL TRAIL DESIGN CROSS-SECTIONS.

4. ALL DISTURBED AREAS NOT PART OF ACTIVE TREAD TO BE SEEDED AND
MUDDIED WITHIN 7 DAYS OF NOT BEING WORKED. SEE (SWPPP) STORM WATER
POLLUTION PREVENTION PLAN FOR DETAILS.

5. SEE SWPPP & SPECIFICATIONS FOR SEED MIX DETAILS AND NECESSARY BEST
MANAGEMENT PRACTICES FOR EROSION CONTROL MEASURES.

6. AFTER COMPLETION OF ALL GRADING, THE TRAIL TREAD SHALL BE
MECHANICALLY COMPACTED TO ITS SPECIFIED WIDTH USING A VIBRATORY
PILTE, SHEEP'S FOOT, OR OTHER APPROVED COMPACTOR.

7. CU BRUSH AND SAGE MUST BE DISPOSED OF IN AN UPLAND LOCATION AND MUST
BE KEPT OUT OF STREAMS. SULLIES, SWALES, WETLANDS AND LOW AREAS. SEE
SPECIFICATIONS FOR DETAILS.

8. NO EXCAVATION OR FILL PERMITTED IN WET & LOWLAND AREAS. IT IS THE
RESPONSIBILITY OF THE CONTRACTOR TO CONSULT WITH THE OWNER PRIOR TO
DOING ANY WORK WITHIN SUSPECTED WET & LOWLAND AREAS.

TRAIL BEDDING NOTES:

1. TREE REMOVAL, STUMP REMOVAL, BRUSH REMOVAL, AND LIMB TRIMMING IS
INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL CONSTRUCTION
TYPES "A, B & C." (SEE SPECIFICATION FOR FURTHER DETAILS)

2. TRAIL TREAD GRAZING AND COMPACTING IS INCLUDED IN THE CONTRACTORS
UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES "A, B & C." (SEE SPECIFICATION
FOR FURTHER DETAILS)

3. PUSHING ADEQUATE ROCKS OR FRAGMENTED STONE ENCOUNTERED WHILE GRAZING
THE TRAIL IS INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL
CONSTRUCTION TYPES "A, B & C." (SEE SPECIFICATIONS FOR FURTHER DETAILS)

4. GRAZING THROUGH LOW SPOTS, FLATTER AREAS, EARTHIEN PILES, LANDSLIDES,
MISCELLANEOUS DEBRIS, AND FALLEN WOODY MATERIALS IS INCLUDED IN THE
CONTRACTOR'S UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES "A, B & C."
(SEE SPECIFICATIONS FOR FURTHER DETAILS)

5. ALL TURNS NOT DEFINED AS A BERM OR SLOPE IS TO BE INLOPED
TURNS AS SPECIFIED. INLOPED TURNS ARE INCLUDED IN THE CONTRACTOR'S
UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES "A, B & C." (SEE
SPECIFICATIONS FOR FURTHER DETAILS)

6. GRADE REVERSALS ARE REQUIRED AT A MINIMUM EVERY 100 LF. GRADE
REVERSALS ARE INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL
CONSTRUCTION TYPES "A, B & C." (SEE SPECIFICATIONS FOR FURTHER DETAILS)
CONSTRUCTION NOTE:

1. PARTIAL BENCH CUT IS ALLOWED WHEN DONE PROPERLY WITH A DOWNHILL RETAINING WALL AND COMPACTED BACKFILL. REFER TO PAGE 156 OF (TRAIL SOLUTIONS: NASA'S GUIDE TO BUILDING BETTER SINGLETRACK).

2. GRADE THROUGH LOW SPOTS, FLATTER AREAS, EARThEN PILES, LANDSLIDES, MISCELLANEOUS DEBRIS, AND FALLEN WOODY MATERIALS IS INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES "A, B & C." (SEE SPECIFICATIONS FOR FURTHER DETAILS)

3. CONTRACTOR IS EXPECTED TO CREATE FREQUENT GRADE REVERSALS REGARDLESS OF THE LOCAL LANDSCAPE. THIS MAY REQUIRE LOCALIZED TOPOGRAPHY MODIFICATION WHEN BUILDING THROUGH LANDSCAPES WITH LOW SLOPE ANGLES AND FLATTER AREAS SUCH AS TYPE "A" TRAIL.

NOTE: CONTRACTOR CANNOT INVOICE FOR BOTH TRAIL CONSTRUCTION TYPES A, B & C, AND CONSTRUCTED FEATURES OF A GIVEN LINEAR FOOT OF TRAIL.
Flagging:

In this project, the centerline of a 50' wide trail corridor has been flagged by IMBA for the Owner. The plans and specifications are based on this trail corridor. Final trail design is the responsibility of the Contractor within this corridor.

Final trail design consists of a one-time 300 LF pin flagged trail segment flagged by the Contractor prior to the start of construction for each trail specification type. This project has three trail specification types: Traditional Green Bike Optimized Singletrack, Traditional Blue Bike Optimized Singletrack, and Traditional Black Bike Optimized Singletrack. Final design pin flagging must reside within the approved corridor. This is to communicate design intent to the Owner for each trail specification type that is identified in the plans. Upon approval of the pin flagged segment by the Owner, the Contractor can proceed with project construction within the 50' corridor following the requirements of the specifications. The Owner can require an additional 300 LF section of pin flagging and approval if the results of the first effort do not meet the trail specification requirements.

Corridor is marked with pink and/or orange hanging flags. Archeologically sensitive areas have been identified in the plans and must be avoided by 100 LF in all directions. Final trail design should be at least fifty feet (50') from property boundaries unless otherwise authorized by Owner or identified in the plans. Contractor shall mark with flagging tape all trees over six inches (6") DBH that are to be removed. Final determination on removal lies with the Owner. The trail should have a grade reversal a minimum of every one-hundred feet (100'). Trail should follow a rolling contour alignment and abide by the Half Rule. Grades must match the trail type defined by the specifications for a specific segment.
TRAIL TREAD ROCK ARMORING AND SIDESLOPE ARMORING DETAIL

NOT TO SCALE

ENSURE THAT THE EROSION CONTROL BLANKETS ARE IN DIRECT CONTACT WITH THE SOIL BENEATH THEM AND SECURELY ATTACHED WITH 11 GAUGE STAPLES ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION.

BLANKETS SHALL OVERLAP AT ALL JOINTS (HORIZONTAL AND LONGITUDINAL) A MINIMUM OF 6" - STAPLE OVERLAPS AT MINIMUM 10" INTERVALS.

ANCHOR TRENCH AT TOP OF SLOPES, SEE DETAIL BELOW FOR ADDITIONAL INFORMATION.

WOOD FIBER BLANKET DETAIL

NOT TO SCALE

EROSION CONTROL BLANKET:
CATEGORIES:
1. FOR DISTURBED AREAS WITH SLOPES BETWEEN 3:1 AND 2:1, COVER WITH COCONUT / 70% STRAW BLEND, SUCH AS WESTERN EXCELSIOR EXCEL SS-2 WITH ALL NATURAL NETTING (OR APPROVED EQUIVALENT). MEETING THE MWDOT SPECIFICATION SECTION 3885 REQUIREMENTS.

CATEGORIE 2:
FOR DISTURBED AREAS WITH SLOPES OF 2:1 OR LOWER, COVER WITH COCONUT / 70% STRAW BLEND, SUCH AS WESTERN EXCELSIOR EXCEL SS-3 WITH ALL NATURAL NETTING (OR APPROVED EQUIVALENT). MEETING THE MWDOT SPECIFICATION SECTION 3885 REQUIREMENTS.

CONSTRUCTION NOTE:
BACKFILL SEDIMENT MATERIAL SHALL BE 3" BY 6" CRUSHED ROCK. THE SAME CRUSHED ROCK CAN BE UTILIZED FOR FILL BETWEEN THE SET ROCKSTONE.
1/2" MINIMUM ROCKSTONE SET DEPTH.
SEAMS RUNNING IN THE DIRECTION OF TRAVEL SHALL BE MINIMIZED IN BOTH LENGTH AND WIDTH. SEAM WIDTH SHALL BE MINIMIZED AND SEAM STAGGERING SHALL BE USED WHERE POSSIBLE.

STONE SHALL EXTEND FAR ENOUGH UP THE SLOPE TO ENSURE WATER DOES NOT FLOW AROUND THE ROCK CHECK.
1" X 2" X 24" LONG WOODEN STAKES TO BE DRIVEN THROUGH THE COR ROLLS AT MAX. 12" O.C. SPACING AND AT A 45 DEGREE ANGLE WITH THE TOP OF THE STAKE POINTING UPSTREAM. STAKES SHALL EXTEND A MINIMUM OF 8" INTO SOIL.

COIR ROLL DETAIL
NOT TO SCALE

SEED MIX NOTE:
USE TEMPORARY EROSION CONTROL SEED MIX AND MULCH FOR DISTURBED AREAS THAT ARE LACKING ADEQUATE DUFF COVER TO USE AS MULCH.
USE PERMANENT EROSION CONTROL SEED MIX AND EROSION CONTROL BLANKET FOR LAND SLIDE AREAS AND AREAS OF HEAVY DISTURBANCE.
SEE SWPPP FOR SEED MIX SPECIES DETAILS.

CITY OF DULUTH PROJECT NO. 1323
DRAWN BY: TTP
SHEET NO. 8 OF 50

ARCHITECTURAL RESOURCES INC.
- ARCHITECTURE
- ENGINEERING
- LANDSCAPE ARCHITECTURE
- INTERIOR DESIGN
WEB SITE: www.arinc.com
DE ECT SUPERIOR STREET DULUTH, MINNESOTA 55802 cell: 218-721-1995
FAX: 218-721-9156
EMAIL: info@arinc.com

DULUTH TRAVERSE TRAIL MISSION CREEK PHASE II DULUTH, MINNESOTA
PROJECT NO. 13-10087
DATE: FEB 17 2014
DRAWN BY: TTP
REVISIONS:
TOP OF BERM

SEED AND MULCH
BACKSLOPE

TOPSLOPE GRADED
3:1 OR LESS TO DRAIN
AWAY FROM BERM

BYPASS TRAIL

18" MIN

FACE OF BERM

INCOMING AND
OUTGOING TREAD

THROUGHOUT TURN

PAYMENT NOTE:

PAYMENT FOR BERMS WILL BE ON A LINEAL FOOT BASIS. PAYMENT FOR (SWITCH)BERMS PAYMENT WILL BE ON A PER UNIT BASIS. IN CASES WHERE TRAIL IS ROUTED WHERE AN EXISTING EMBANKMENT OR SIDE HILL IS USED FOR A TURN, NO EXTRA PAYMENT WILL BE PROVIDED.

BERM LENGTH IS MEASURED AT THE POINT ON EACH END OF THE TURN WHERE THE HEIGHT EXCEEDS 12" ABOVE THE BYPASS TRAIL GRADE.

SWITCHBERMS ARE BILLED BY THE UNIT. THE UNIT STARTS AT THE INITIATION OF THE UPHILL AND COMPLETION OF THE DOWNHILL DRAINAGE STRUCTURE.

SEED AND MULCH IF NECESSARY ARE INCLUDED IN THE UNIT BID PRICE FOR TURNS.

BERMED ROLLERS OR (BROLLERS) ARE DEFINED AS TILTED TREAD SURFACE THAT IS INSLORFED IN EXCESS OF THE STANDARD TREAD CROSS SLOPE OF 3%. BROLLERS DO NOT RESULT IN A CHANGE OF TRAIL DIRECTION ACROSS THE LANDSCAPE AND DO NOT CROSS THE FALL LINE. BROLLERS ARE INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES A, B & C AND ARE NOT CONSIDERED BERMS OR TURNS.

NOTE:

1. ACTUAL TURN SIZES, LENGTHS, AND RADIUS WILL BE BASED ON TRAIL TYPE SPECIFICATIONS FOUND IN THE TRAILS SPECIFICATION MATRIX.

2. TURNS SHALL BE BLENDED INTO THE EXISTING TOPOGRAPHIC FEATURES OF THE SITE.

3. PROPER DRAINAGE OF THE INCOMING AND OUTGOING TRAIL TREAD AND THE INSIDE OF A TURN IS ESSENTIAL. CAREFUL ATTENTION MUST BE PAID TO ENSURE POSITIVE DRAINAGE AWAY FROM THE TURN.

4. GRADE DIPS BEFORE AND AFTER TURNS ARE INCLUDED IN THE UNIT BID PRICE.

TRAIL FEATURES PLACEMENT NOTE:

FELLED TREES AND ROCKS ENCOUNTERED ALONG THE TRAIL SHALL, AT THE DISCRETION OF THE OWNER'S REPRESENTATIVE, CAN BE USED AS A TRAIL FEATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACEMENT OF FELLED TREES AND MOVEABLE ROCKS ON THE EDGE OF THE TRAIL AS DIRECTED BY THE OWNER'S REPRESENTATIVE. MOVEMENT OF ROCKS WILL BE LIMITED TO WITHIN 5 FEET OF ORIGINAL LOCATION. THIS WORK SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT BID PRICE FOR TRAIL CONSTRUCTION TYPES A, B & C.

18" TO 36" GAP AS DIRECTED
BY OWNER'S REPRESENTATIVE

FELLED TREES USED AS TRAIL FEATURES

ROCKS USED AS TRAIL FEATURES

BACKSLOPE SLOPED
3:1 OR LESS TO DRAIN
AWAY FROM BERM

SECTION VIEW

ROCKS AND FELLED TREES AS TRAIL FEATURES DETAIL

NOT TO SCALE
1. LUMBER SHALL BE SIZED TO THE FULL DIMENSIONS SHOWN ON THE PLANS UNLESS NOTED OTHERWISE. ALL LUMBER SHALL BE A ROT-RESISTANT SPECIES OR TREATED ACCORDING TO THE OPTIONS INDICATED IN THE SPECIFICATIONS.

2. ROT-RESISTANT TREATMENTS OTHER THAN THOSE LISTED MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ORDERING.

3. LEVELING GRADE BEAMS SHALL BE SHIMMED AS NECESSARY TO MEET DESIRED PITCH OF STRUCTURE.

4. SELECT FASTENERS AND HARDWARE IN ACCORDANCE WITH THE SPECIFICATIONS.

5. SIZES, LENGTHS AND EXTENT OF ALL BOARDWALKS, ROCK HARDENED TREAD, BRIDGES AND BEAMS TO BE FIELD FIT AT TIME OF CONSTRUCTION.

6. BOARDWALK & BRIDGE CONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND SUBMITTED TO THE OWNER FOR APPROVAL.

7. ALL DISTURBED AREAS NOT PART OF ACTIVE TREAD TO BE SEEDED AND MULCHED WITHIN 7 DAYS OF NOT BEING WORKED SEE (BAPP) STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS.

8. CUT BRUSH AND SLAG MUST BE DISPOSED IN AN UPLAND LOCATION AND MUST BE KEPT OUT OF STREAMS, GULLIES, SWALLEG, WET AREAS, AND LOW AREAS. SEE SPECIFICATIONS FOR DETAILS.

9. NO EXCAVATION OR FILL PLACED IN WET AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSULT WITH THE OWNER PRIOR TO DOING ANY WORK WITHIN SUSPECTED WET AREAS.

10. WOOD RAMPS OR STONE PITCHING MAY BE REQUIRED BEFORE AND AFTER BRIDGES AND BOARDWALKS. APPLICATION WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND MUST BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION. PAYMENT FOR RAMPS WILL BE ADDED TO THE TOTAL LENGTH OF THE BOARDWALK AND PAYMENT FOR STONE PITCHING WILL BE PER THE UNIT BID PRICE OF ROCK ARMORING.

TYPICAL ELEVATION DETAIL FOR BRIDGE (CREEK CROSSINGS)

START

SOME BRIDGES WILL HAVE RAILINGS, SOME WILL NOT. BRIDGES WITH RAILINGS SHALL BE 6'-0" IN WIDTH SEE PLANS FOR LOCATIONS.

LOOP 1/4" STAINLESS STEEL CABLE AROUND 2X12 STRINGER ON UPSTREAM SIDE OF BRIDGE AND TETHERING TO TREE.

DO NOT PUT TENSION IN CABLE. LAY LOOSELY ON GROUND AND LOOSELY WRAP AROUND BASE OF TREE AT GROUND LEVEL TO PREVENT GIRTLING.

LOOP 1/4" STAINLESS STEEL CABLE AROUND TREE UPSTREAM OF BRIDGE. SELECT ONLY TREES THAT ARE HEALTHY & FREE OF DEFECTS OR DYING BRANCHES.

WOOD RAMP OR STONE PITCHING

2X6 DECK BOARDS
2X8 STRINGERS
6X8 TIMBERS
2X6 CROSS BRACE - ATTACH TO PIERS WITH 3/8" DIA. X 6" LONG LAG SCREW (4 PER BRACE)
4'-0" LONG 6X6 LEVELING GRADE BEAM

10" DIA PRE-DRILLED HOLE AND #4 REBAR W WASHER WELDED TO TOP AND DRIVEN TO A DEPTH OF 36"

TYPICAL PLAN DETAIL FOR BRIDGE (CREEK CROSSINGS)

NOT TO SCALE

16'-0" MAXIMUM SPAN AT 16'-0" O.C. FOR 2X12 STRINGERS

FENCE 42" HEIGHT, RAILINGS TO BE CONSTRUCTED WITH 2X6 AND POSTS TO BE CONSTRUCTED WITH 4X4

FENCE 42" HEIGHT, RAILINGS TO BE CONSTRUCTED WITH 2X6 AND POSTS TO BE CONSTRUCTED WITH 4X4

2X6 DECK BOARDS WITH 1" GAP BETWEEN BOARDS
2X12 STRINGER
4X4 POST
(2) 7" LONG LAG BOLTS PER POST WITH WASHERS AND NUTS

WOOD - TRAIL FEATURE DETAILS
LANDSLIDE AREA EXTENT OF EROSION CONTROL FABRIC AND SEED TO BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION. CONSULT WITH OWNER PRIOR TO TRAIL CONSTRUCTION.
LANDSLIDE AREA, EXTENT OF EROSION
CONTROL FABRIC AND SEED TO BE
DETERMINED IN THE FIELD AT THE TIME
OF CONSTRUCTION. CONSULT WITH
OWNER PRIOR TO TRAIL CONSTRUCTION.

VALLEY WEST TRAIL SEGMENT 12

HIKING TRAIL TO SHARE NEW
NEARLY CONSTRUCTED
MULTIUSE TRAIL FROM THIS
POINT

JUNCTION J

- OLD TRAIL MARKERS (BY OWNER)
- TRAIL MAP SIGN (BY OWNER)

33 LF BOARDWALK

SWITCH BERM TYPE "B"