

PLOT SCALE - 200,000,000:1,000,000

PLOTTED FROM - TRRC12245

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
PROJECT 085-451
U.S. HIGHWAY 85
LAWRENCE COUNTY

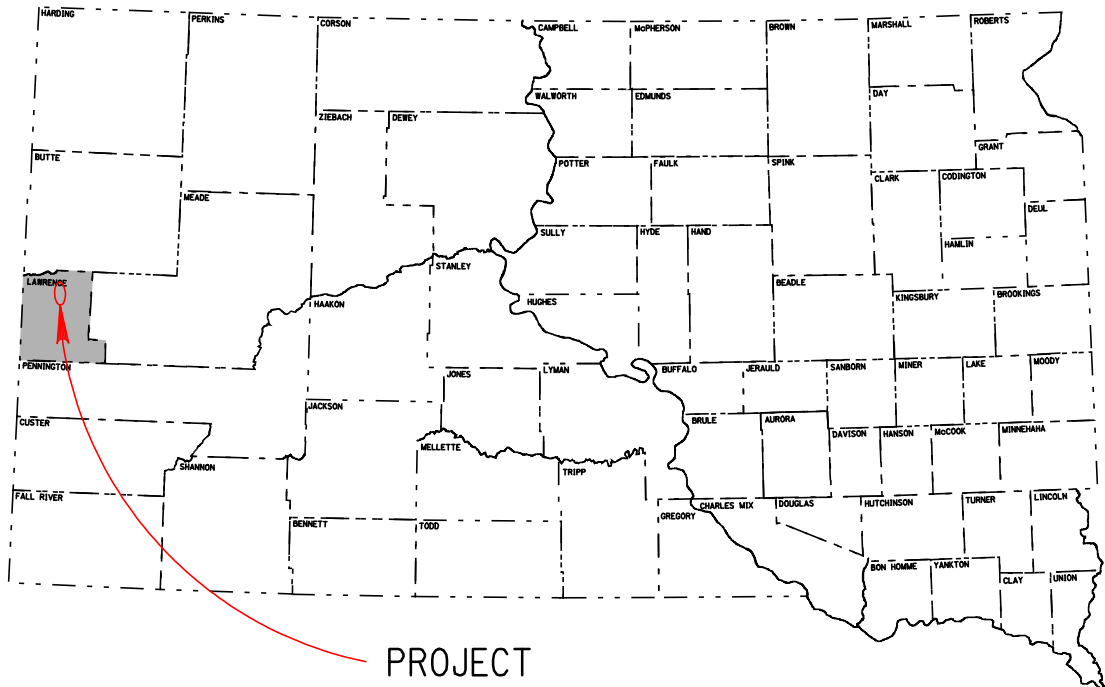
Erosion Control
PCN IIFI

| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
|-----------------------------|---------|-------|-----------------|
| | 085-451 | 01 | 17 |

Plotting Date: 02-JUN-2009

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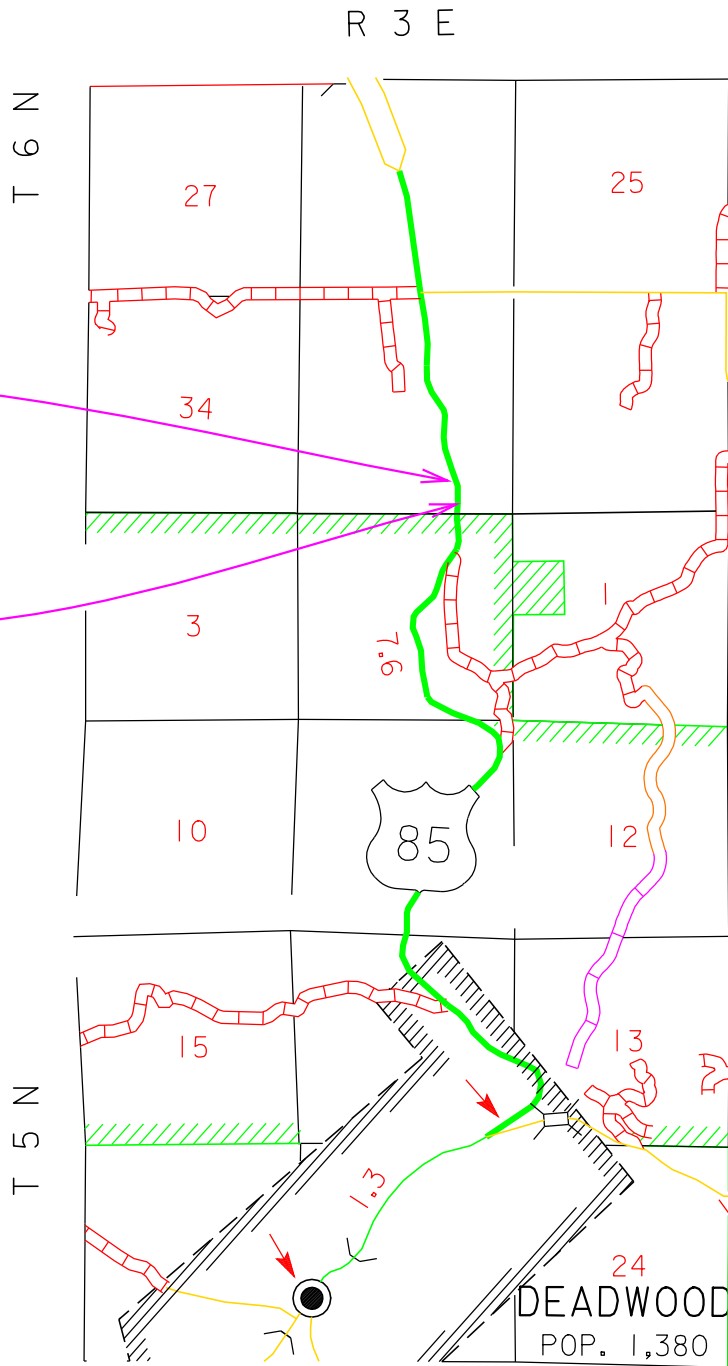
- Sheet No. 1: Title Sheet
Sheet No. 2: Estimate of Quantities
Sheet Nos. 2 - 6: Plan Notes
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PROJECT

END 085-451
MRM 33.000+0.515

BEGIN 085-451
MRM 33.000+0.401



SCALES

PLAN 1"=40'
CROSS SECTIONS (HORIZONTAL: 1"=20', VERTICAL: 1"=10')

DESIGN DESIGNATION

ADT (2008) 5760
ADT (2028) 6825
DHV 1025
D 50%
T DHV 4.6%
T ADT 10.2%
V 55

STORM WATER PERMIT

Major Stream: Polo Creek
Area Disturbed: 0.2 Acres
Project Area: 0.5 Acres

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ESTIMATE OF QUANTITIES

| Bid Item Number | Item | Quantity | Unit |
|-----------------|-------------------------------------|----------|------|
| 009E0010 | Mobilization | Lump Sum | LS |
| 110E1690 | Remove Sediment | 10.0 | CuYd |
| 110E1693 | Remove Erosion Control Wattle | 300 | Ft |
| 110E5451 | Salvage Riprap | 140.0 | Ton |
| 120E0010 | Unclassified Excavation | 721 | CuYd |
| 230E0100 | Remove and Replace Topsoil | Lump Sum | LS |
| 634E0100 | Traffic Control | 119 | Unit |
| 634E0120 | Traffic Control, Miscellaneous | Lump Sum | LS |
| 634E0420 | Type C Advance Warning Arrow Panel | 1 | Each |
| 700E0310 | Class C Riprap | 835.0 | Ton |
| 700E2010 | Place Riprap | 140.0 | Ton |
| 734E0154 | 12" Diameter Erosion Control Wattle | 300 | Ft |
| 831E0110 | Type B Drainage Fabric | 1,021 | SqYd |

SPECIFICATIONS

Standard Specifications for Roads & Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

SCOPE OF WORK

The intent of the work on this project is to install riprap along Polo Creek to provide bank erosion protection for U.S. Highway 85.

GRADING OPERATIONS

Excavation and construction of embankments for grading shall be performed in accordance with Section 120 of the Standard Specifications. Compaction of embankments shall be to the satisfaction of the Engineer.

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment minus Waste. The estimated quantity of Water for Embankment is 1 MGal. No separate payment will be made for the Water for Embankment and all costs associated shall be incidental to the contract unit price per cubic yard of “Unclassified Excavation”.

The Contractor shall move the excavation as called for on the cross section sheets.

The plans quantity for Unclassified Excavation shall be the basis of payment unless changes are directed by the Engineer.

HISTORICAL PRESERVATION OFFICE CLEARANCES

To obtain SHPO clearance, a cultural resources survey may need to be conducted by a qualified archaeologist. In lieu of a cultural resources survey, the Contractor could request a records search from Jim Donohue, State Archaeological Research Center (SARC). Provide SARC with the following: a topographical map or aerial view on which the site is clearly outlined, site dimensions are provided, project number, and PCN are shown. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that no artifacts have been found on the site. The Contractor shall arrange and pay for the cultural resource survey and/or records search.

If any earth disturbing activities occur within the current geographical or historic boundaries of any South Dakota reservation(s), the Contractor shall obtain Tribal Historical Preservation Office (THPO) clearance. If no THPO exists, the required SHPO clearance shall suffice, with documentation of Tribal contact efforts provided to SHPO.

To facilitate SHPO or THPO responses, the Contractor should submit a records search or cultural resources survey report to Tom Lehmkuhl, DOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3721). Allow 30 days from the date this information is submitted to the Environmental Engineer for SHPO/THPO approval. The Contractor is responsible for obtaining all required permits and clearances for staging area(s), borrow site(s), waste disposal site(s) and all material processing sites. The Contractor shall provide the required permits and clearances to the Engineer at the preconstruction meeting.

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WASTE DISPOSAL SITE

The Contractor will be required to furnish a site(s) for the disposal of construction/demolition debris generated by this project.

Construction/demolition debris may not be disposed of within the State ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

The waste disposal site(s) shall not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements shall apply:

- Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating “No Dumping Allowed”.
- Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall be removed from view of the ROW or buried and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) shall be incidental to the various contract items.

STORM WATER

Appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

EROSION CONTROL WATTLE

Erosion control wattles for restraining the flow of runoff and sediment shall be installed along the creek side of the excavation prior to any ground disturbing activities and at locations determined by the Engineer during construction. Refer to Standard Plate 734.06 for details.

The Contractor shall provide certification that the erosion control wattles do not contain noxious weed seeds.

The erosion control wattle provided shall be from the list shown below:

| Product | Manufacturer |
|--|---|
| Curlex Sediment Log AEC Premier Straw Wattles | American Excelsior Company Arlington, TX Phone: 1-800-777-7645 www.amerexcel.com |
| Aspen Excelsior Logs and Excel Straw Logs | Western Excelsior Corporation Mancos, CO Phone: 1-800-833-8573 www.westernexcelsior.com |
| Earth Saver Rice Straw Wattles | R.H. Dyck Inc. Winters, CA Phone: 1-866-928-8537 www.earth-savers.com |
| Amber Waves Straw Wattles | Limpert Environmental Litchfield, MN Phone: 1-320-693-2565 www.limpertenvironmental.com |
| Bio Logs | Flaxtech, LLC Rock Lake, ND Phone: 1-866-444-3529 |
| Stenlog | ECB Bioproducts St. Andrews, MB Phone: 1-866-317-3346 www.erosioncontrolblanket.com |
| Winters Wattles | Winters Excelsior Company Birmingham, AL Phone: 1-800-248-7237 www.wintersexcelsior.com |
| Patriot Wood Fiber Logs and Patriot Straw Wattles | Patriot Environmental Products, Inc. Mesa, AZ Phone: 1-480-345-7293 www.digitaldesigncore.com/patriot/WattleSpecs.pdf |

REMOVE AND REPLACE TOPSOIL

Topsoil shall be salvaged and stockpiled prior to beginning excavation. Limits of this work, depth of salvage, and stockpile location will be directed by the Engineer. Following completion of construction, topsoil shall be spread evenly over the disturbed areas.

The estimated amount of topsoil to be removed and replaced is 140 CuYd.

All cost associated with removing and replacing the topsoil shall be incidental to the contract lump sum price for "Remove and Replace Topsoil".

RESTORATION SEEDING FOR DISTURBED AREAS

All costs associated with restoration seeding for disturbed areas shall be incidental to the various contract items.

All restoration seeding shall be planted in the topsoil at a depth of ¼" to ½".

All seed broadcast must be raked or dragged in (incorporated) within the top ¼" to ½" of topsoil when possible. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods.

South Dakota native grown seed is an acceptable alternative to any of the seed varieties listed below. South Dakota native grown seeds used as an alternative shall conform to the same specification and requirements for that individual seed type.

All disturbed areas shall be seeded with the following Type F Permanent Seed Mixture:

| Grass Species | Variety | Pure Live Seed (PLS) (Pounds/Acre) |
|--|-----------------------------------|---------------------------------------|
| Western Wheatgrass | Flintlock, Rodan, Rosana | 7 |
| Green Needlegrass | Lodorm | 4 |
| Sideoats Grama | Butte, Killdeer, Pierre, Trailway | 3 |
| Blue Grama | Bad River, Willis | 2 |
| Oats or Spring Wheat: April through July; Winter Wheat: August through November | | 10 |
| Total: | | 26 |

MULCHING (GRASS HAY OR STRAW)

All seeded areas are to be mulched. Hand mulching may be allowed for small areas if approved by the Engineer. All costs associated with mulching shall be incidental to the various contract items.

Bales with noxious weed contamination will be rejected and the Contractor will be required to remove the contaminated bales from the project.

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FERTILIZING

Application of fertilizer will not be required on this project.

TYPE B DRAINAGE FABRIC

Type B Drainage Fabric shall be placed on the newly constructed slope prior to placement of the Riprap. The fabric shall conform to Section 831 of the Standard Specifications.

The Contractor shall cover all excavated slopes with Type B Drainage Fabric at the end of each working day as a temporary erosion control measure. All Type B Drainage Fabric shall be held in place with sandbags until Class C Riprap can be placed.

All labor, equipment, material, and incidental costs associated with placing Type B Drainage Fabric shall be incidental to the contract unit price per square yard for "Type B Drainage Fabric".

CLASS C RIPRAP

Riprap shall be from a Contractor's source. Riprap shall be Class C Riprap. All costs associated with placement of the Class C Riprap including all material, labor, and equipment shall be incidental to the contract unit price per ton for "Class C Riprap".

In addition to the 835 tons of Class C Riprap that will come from a Contractor's source, the Contractor shall salvage and reuse 140 tons of riprap currently in place. All costs associated with salvaging the riprap shall be incidental to the contract unit price per ton for "Salvage Riprap". All costs associated with placing the salvaged riprap shall be incidental to the contract unit price per ton for "Place Riprap". The plans quantity for Salvage Riprap and Place Riprap shall be the basis of payment unless changes are directed by the Engineer.

CONTOUR LINES

The contour lines as shown on the plan sheet depict the original ground contours.

STORM WATER POLLUTION PREVENTION PLAN CHECKLIST

(The numbers right of the title headings are **reference numbers** to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

❖ **SITE DESCRIPTION (4.2 1)**

- **Project Limits: See Title Sheet (4.2 1.b)**
- **Project Description: See Title Sheet (4.2 1.a.)**
- **Site Map(s): See Title Sheet and Plans (4.2 1.f. (1)-(6))**
- **Major Soil Disturbing Activities** (check all that apply)
 - ☐ Clearing and grubbing
 - ☐ Excavation/borrow
 - ☒ Grading and shaping
 - ☐ Filling
 - ☐ Cutting and filling
 - ☐ Other (describe):
- **Total Project Area** 0.5 acres **(4.2 1.b.)**
- **Total Area To Be Disturbed** 0.2 acres **(4.2 1.b.)**
- **Existing Vegetative Cover (%)** 0
- **Soil Properties:** AASHTO Soil Classification **(4.2 1. d.)**
- **Name of Receiving Water Body/Bodies:** Polo Creek **(4.2 1.e.)**

❖ **ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)**

- (Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)
- **Install channel and ditch bottom protection.**
 - **Stabilize disturbed areas.**

❖ **EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f))**

- (Check all that apply)
- **Stabilization Practices (See Detail Plan Sheets)**
 - ☒ Temporary or Permanent Seeding
 - ☐ Sodding
 - ☐ Planting
 - ☐ Mulching (Straw or Cellulose Fiber)
 - ☐ Erosion Control Blankets or Mats
 - ☐ Vegetation Buffer Strips
 - ☐ Roughened Surface (e.g. tracking)
 - ☐ Gabions-Gabion Mattress
 - ☐ Other

➤ **Structural Temporary Erosion and Sediment Controls**

- ☐ Silt Fence
- ☐ Straw Bale Check
- ☐ Temporary Berm
- ☐ Temporary Slope Drain
- ☐ Straw Wattles or Rolls
- ☐ Diversion Channels/Swales
- ☐ Channel Liners (TRM)
- ☒ Stone Rip Rap Sheet
- ☐ Rock Check Dams
- ☐ Sediment Traps/Basins
- ☐ Inlet Protection
- ☐ Outlet Protection
- ☐ Surface Inlet Protection
- ☐ Curb Inlet Protection
- ☐ Stabilized Construction Entrances
- ☐ Other

➤ **Wetland Avoidance**

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes ☐ No ☒ If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

➤ **Storm Water Management (4.2 2.b., (1) and (2))**

Storm water management will be handled by temporary controls outlined in “EROSION AND SEDIMENT CONTROLS” above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.

➤ **Other Storm Water Controls (4.2 2.c., (1) and (2))**

- **Waste Disposal**

All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal, and notices stating proper practices will be posted in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.
- **Hazardous Waste**

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the individual designated as the contractor's on-site representative will be responsible for seeing that these practices are followed.
- **Sanitary Waste**

Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management contractor or as required by any local regulations.

❖ **Maintenance and Inspection (4.2 3. and 4.2 4.)**

- **Maintenance and Inspection Practices**
 - Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.
 - All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.

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➤ **Maintenance and Inspection Practices(Continued)**

- Silt fence will be inspected for depth of sediment and for tears in order to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches $\frac{1}{3}$ of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches $\frac{1}{2}$ the height of the dam.
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The SDDOT Project Engineer and contractor's site superintendent are responsible for inspections. Maintenance, repair activities are the responsibility of the contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

❖ **Non-Storm Water Discharges (3.0)**

- The following non-storm water discharges are anticipated during the course of this project (check all that apply).
- ☐ Discharges from water line flushing.
 - ☐ Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
 - ☐ Uncontaminated ground water associated with dewatering activities.

❖ **Materials Inventory (4.2. 2.c.(2))**

- The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the headings “EROSION AND SEDIMENT CONTROLS” and “SPILL PREVENTION” (check all that apply).
- ☐ Concrete and Portland Cement
 - ☐ Detergents
 - ☐ Paints
 - ☐ Metals
 - ☐ Bituminous Materials
 - ☒ Petroleum Based Products
 - ☐ Cleaning Solvents
 - ☐ Wood
 - ☐ Cure
 - ☐ Texture
 - ☐ Chemical Fertilizers
 - ☐ Other

❖ **Spill Prevention (4.2 2.c.(2))**

➤ **Material Management**

- Housekeeping
 - Only needed products will be stored on-site by the contractor.
 - Except for bulk materials the contractor will store all materials under cover and in appropriate containers.
 - Products must be stored in original containers and labeled.
 - Material mixing will be conducted in accordance with the manufacturer's recommendations.
 - When possible, all products will be completely used before properly disposing of the container off site.
 - The manufacturer's directions for disposal of materials and containers will be followed.
 - The contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
 - Dust generated will be controlled in an environmentally safe manner.
 - Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.
- Hazardous Materials
 - Products will be kept in original containers unless the container is not resealable.
 - Original labels and material safety data sheets will be retained in a safe place to relay important product information.
 - If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
 - Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any storm water system or storm water treatment system.
 - Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, and mixer washout waters will be collected on site and managed to prevent contamination of storm water runoff.

➤ **Product Specific Practices (6.8)**

- Petroleum Products

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.
- Fertilizers

Fertilizers will be applied only in the amounts specified by the SDDOT. Once applied, fertilizers will be worked into the soil to limit the exposure to storm water. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.
- Paints

All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.

- Concrete Trucks

Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.
- **Spill Control Practices (4.2 2 c.(2))**

In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

 - For all hazardous materials stored on site, the manufacturer's recommended methods for spill clean up will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
 - Appropriate cleanup materials and equipment will be maintained by the contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for clean up purposes.
 - All spills will be cleaned immediately after discovery and the materials disposed of properly.
 - The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
 - After a spill a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
 - The contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.
- **Spill Response (4.2 2 c.(2))**

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

 - The contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
 - If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
 - Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the contractor at the site.
 - If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
 - If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SD DENR.

- Personnel with primary responsibility for spill response and clean up will receive training by the contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

❖ **Spill Notification**

In the event of a spill, the contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to DENR immediately **if any one of the following** conditions exists:
 - The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water).
 - The discharge causes an immediate danger to human health or safety.
 - The discharge exceeds 25 gallons.
 - The discharge causes a sheen on surface water.
 - The discharge of any substance that exceeds the ground water quality standards of ARSD (Administrative Rules of South Dakota) chapter 74:54:01.
 - The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:54:01.
 - The discharge of any substance that harms or threatens to harm wildlife or aquatic life.
 - The discharge of crude oil in field activities under SDCL (South Dakota Codified Laws) chapter 45-9 is greater than 1 barrel (42 gallons).

To report a release or spill, call DENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to DENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at (800) 424-8802.

❖ **Construction Changes (4.4)**

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

❖ **CERTIFICATIONS**

➤ **Certification of Compliance with Federal, State, and Local Regulations**

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

➤ **South Dakota Department of Transportation**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Authorized Signature (See the General Permit, Section 6.7.1.C.)

➤ **Prime Contractor**

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Signature

❖ **CONTACT INFORMATION**

➤ **Contractor Information:**

- Prime Contractor Name:
- Contractor Contact Name:
- Address:
- Address:
- City: State: Zip:
- Office Phone: Field:
- Cell Phone: Fax:

➤ **Erosion Control Supervisor**

- Name:
- Address:
- Address:
- City: State: Zip:
- Office Phone: Field:
- Cell Phone: Fax:

➤ **SDDOT Project Engineer**

- Name: SDDOT Rapid City Area Office
- Business Address: PO Box 1970
- Job Office Location: N/A
- City: Rapid City State: SD Zip: 57709
- Office Phone: (605)394-2248 Field: N/A
- Cell Phone: N/A Fax: (605)394-1904

➤ **SD DENR Contact Spill Reporting**

- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➤ **SD DENR Contact for Hazardous Materials.**

- (605) 773-3153

➤ **National Response Center Hotline**

- (800) 424-8802.

TRAFFIC CONTROL

Traffic Control shall at all times be maintained in accordance with applicable MUTCD Standards and Section 634 of the Standard Specifications.

All signs may be portable.

INVENTORY OF TRAFFIC CONTROL DEVICES

| SIGN CODE | SIGN SIZE | DESCRIPTION | NUMBER REQUIRED | UNITS PER SIGN | UNITS |
|-------------|-----------|--|-----------------|----------------|-------|
| G20-2A | 36" x 18" | END ROAD WORK | 1 | 17 | 17 |
| W4-2 | 48" x 48" | LEFT OR RIGHT LANE ENDS (SYMBOL) | 1 | 34 | 34 |
| W20-1 | 48" x 48" | ROAD WORK #### FT. OR AHEAD | 1 | 34 | 34 |
| W20-5 | 48" x 48" | LT. OR RT. LANE CLOSED #### FT. OR AHEAD | 1 | 34 | 34 |
| TOTAL UNITS | | | | | 119 |

| | | | |
|-----------------------------|---------|-----------|--------------|
| STATE OF SOUTH DAKOTA | PROJECT | SHEET NO. | TOTAL SHEETS |
| | 085-451 | 07 | 17 |

Polo Creek, US Highway 85 Inslope Erosion Repair

| STATE OF SOUTH DAKOTA | PROJECT | SHEET | TOTAL SHEETS |
|-----------------------------|---------|-------|-----------------|
| | 085-451 | 08 | 17 |

Plotting Date: 02-JUN-2009

QUANTITIES:

- Class C Riprap = 596 cu yd. = 835 ton
- Type B Drainage Fabric = 1021 sq yd.
- Embankment Fill = 80 cu. yd.
- Unclassified Excavation = 721 cu. yd.
- Salvage Riprap = 140 ton



Ronald M. Stearns Revocable
Family Trust

Lot 1 of the W1/2SE1/4 of
Section 35, Township 6 North,
Range 3 East, B.H.M., Lawrence
County, South Dakota

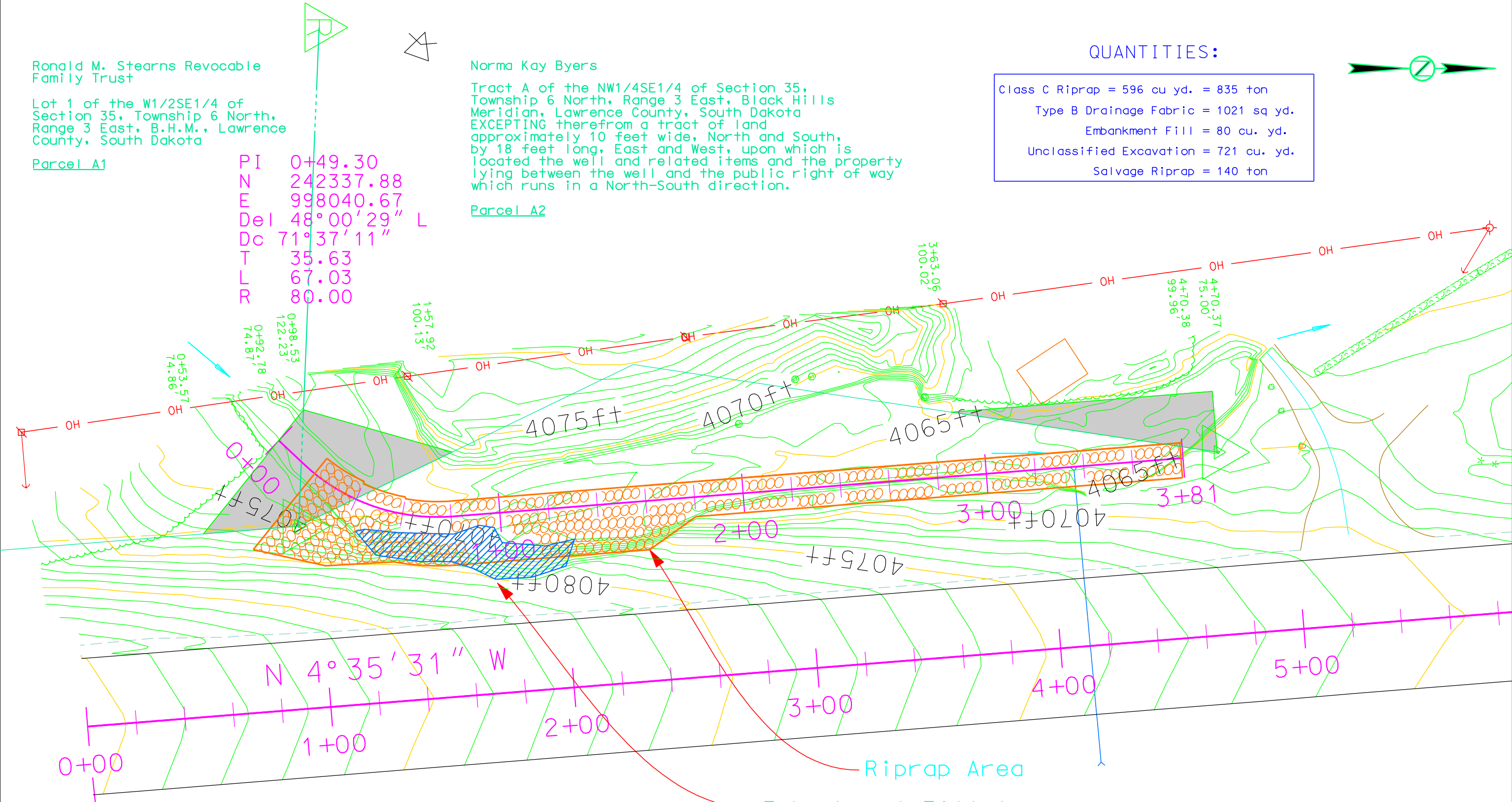
Parcel A1

PI 0+49.30
N 242337.88
E 998040.67
Del 48°00'29" L
Dc 71°37'11" L
T 35.63
L 67.03
R 80.00

Norma Kay Byers

Tract A of the NW1/4SE1/4 of Section 35,
Township 6 North, Range 3 East, Black Hills
Meridian, Lawrence County, South Dakota
EXCEPTING therefrom a tract of land
approximately 10 feet wide, North and South,
by 18 feet long, East and West, upon which is
located the well and related items and the property
lying between the well and the public right of way
which runs in a North-South direction.

Parcel A2



Sta. 0+00
N 24223.727
E 998123.933

Parcel A1
0+53.57 to 0+98.53 L
Temporary easement for
placing Riprap containing
0.1 ac (929 sq ft),
more or less

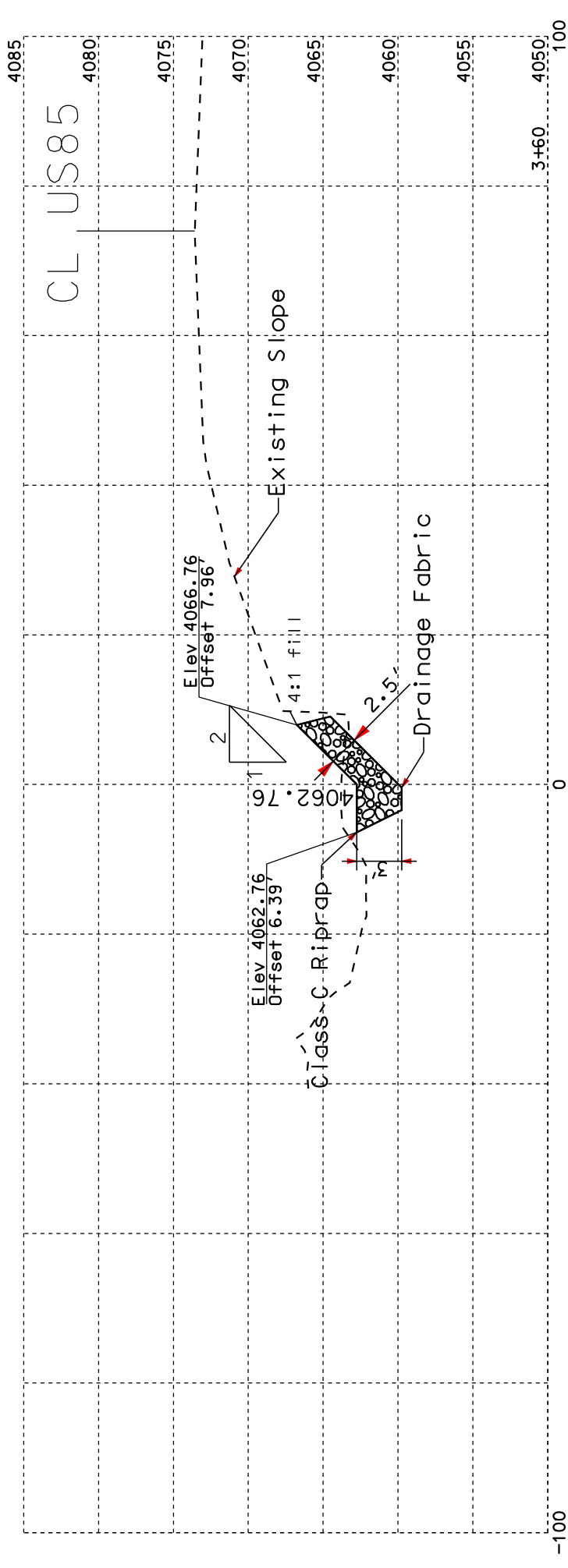
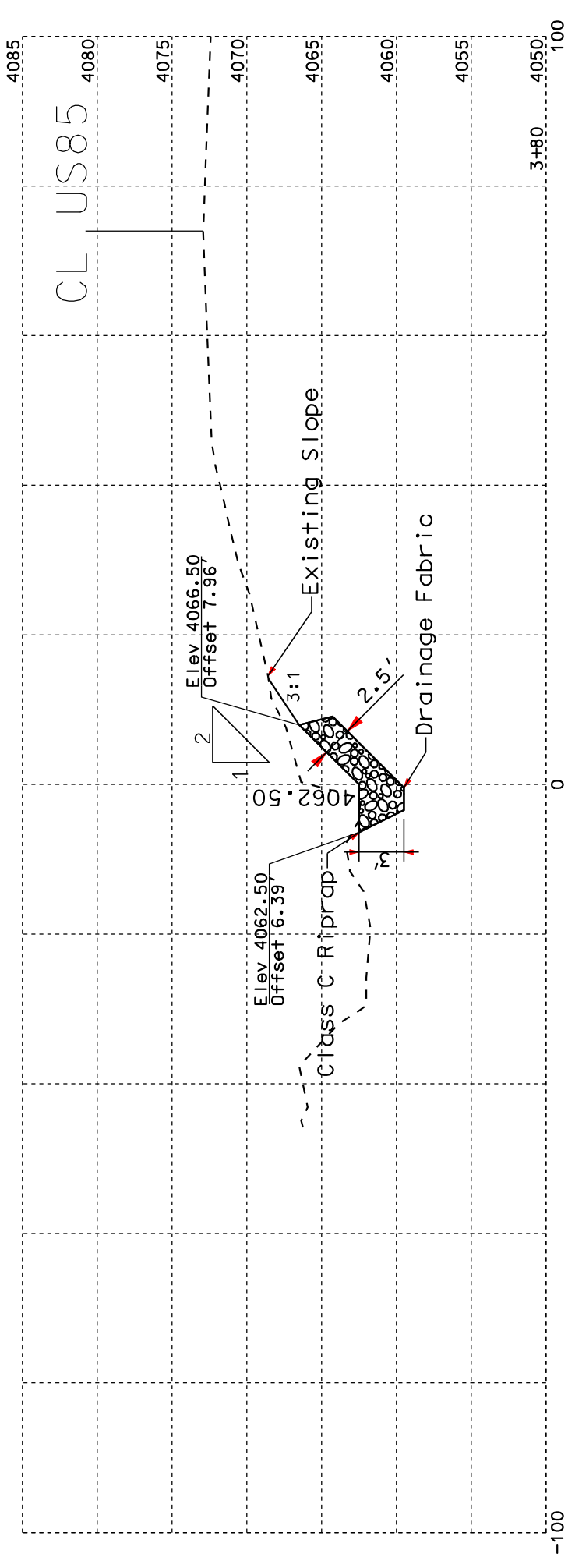
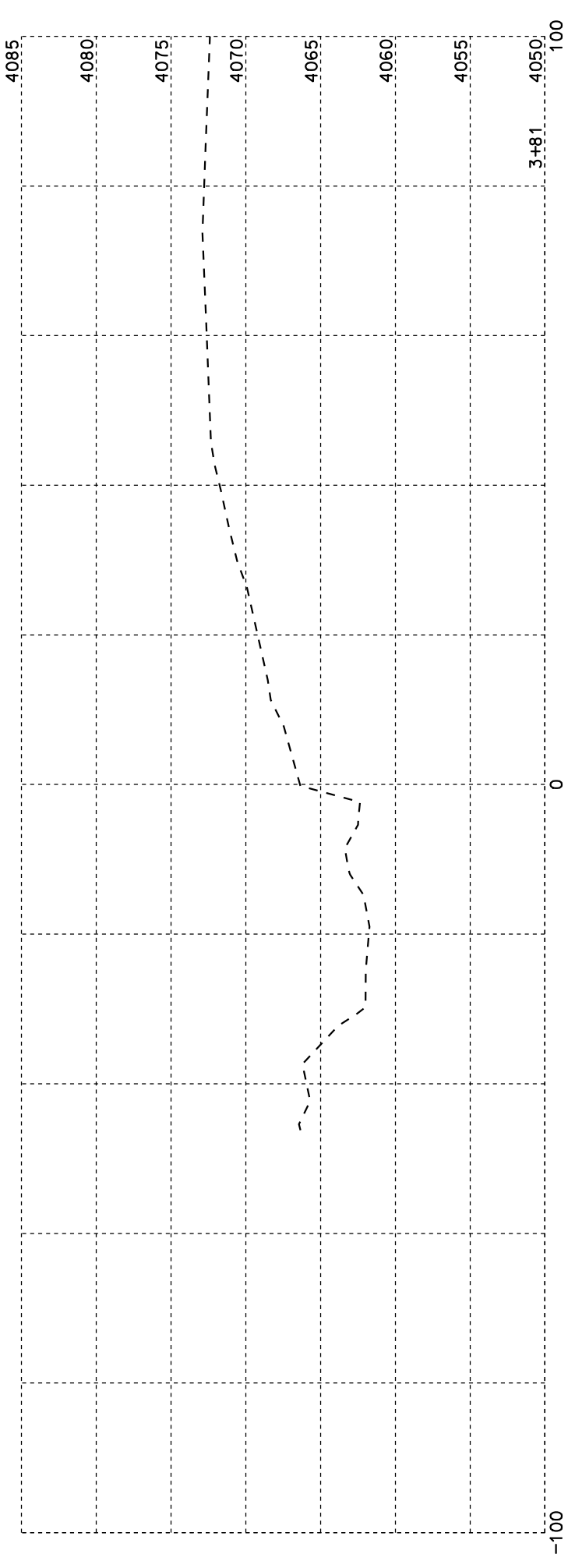
Parcel A2
0+92.78 to 1+57.92 L
Temporary easement for
placing Riprap containing
0.1 ac (1470 sq ft),
more or less

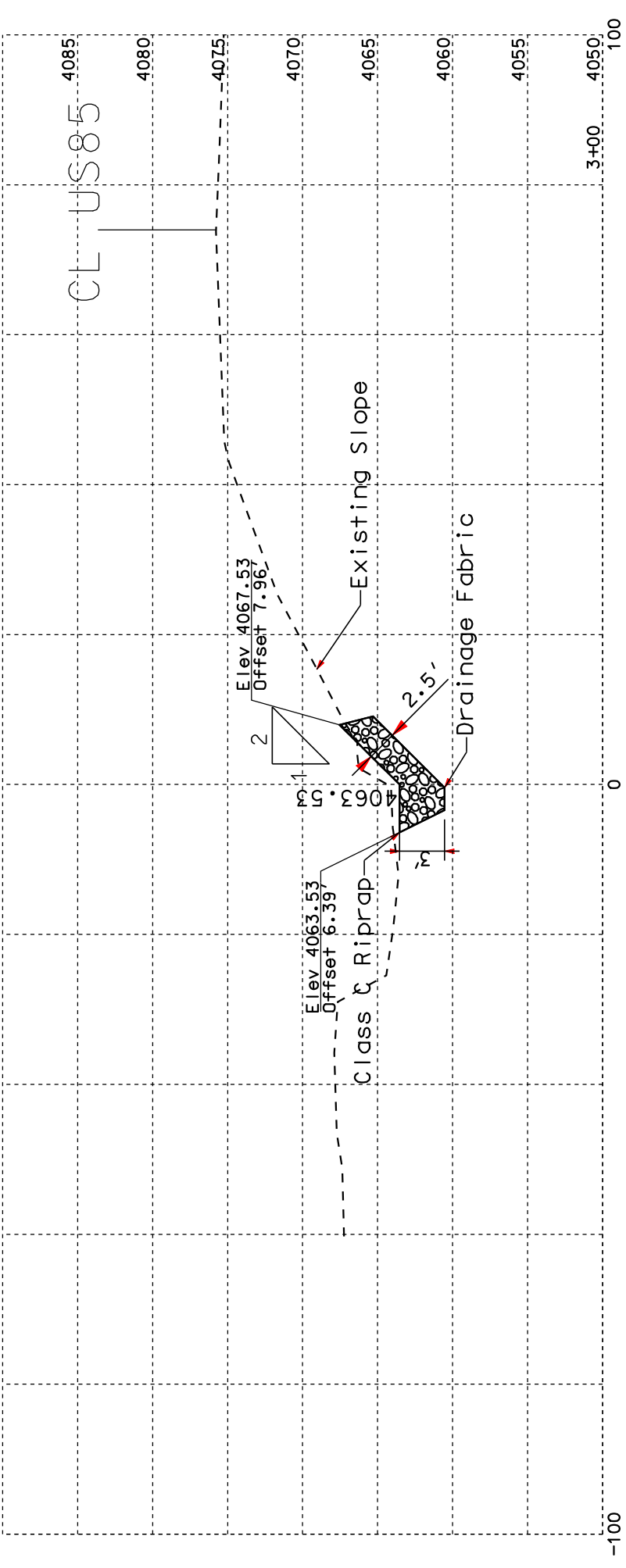
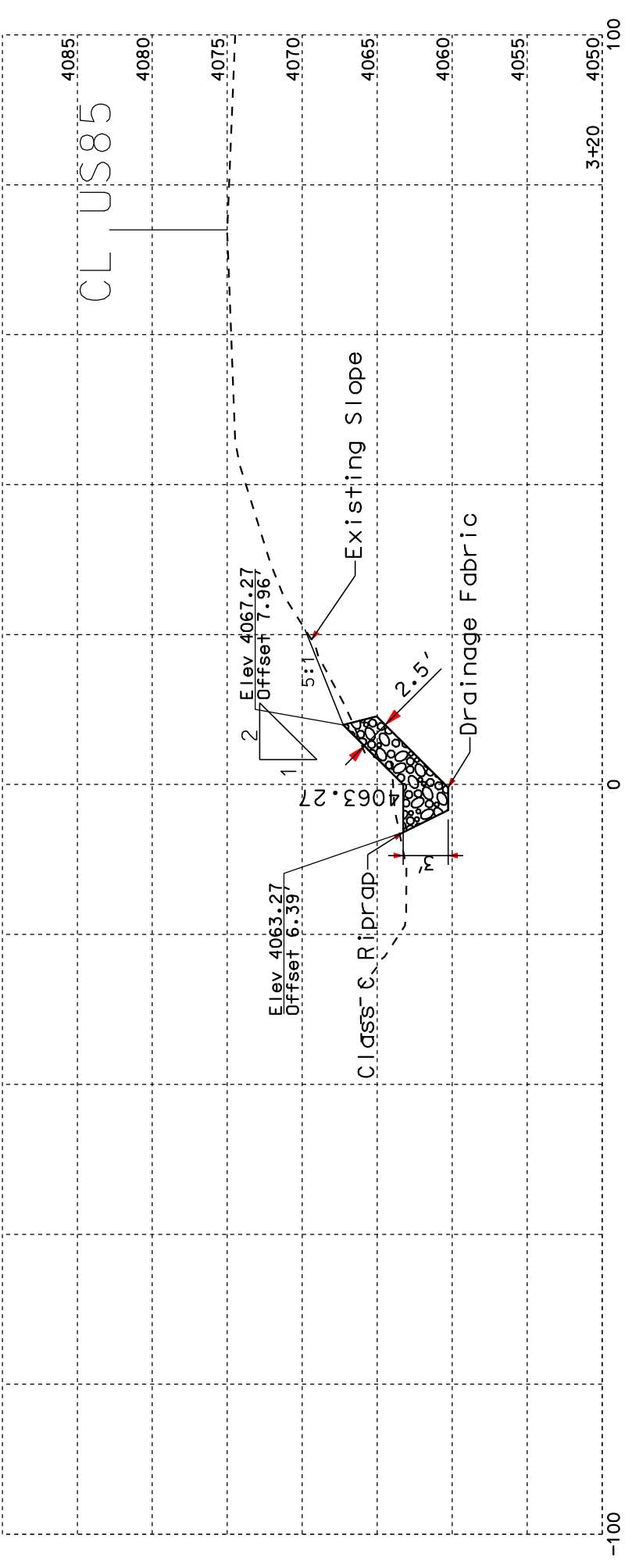
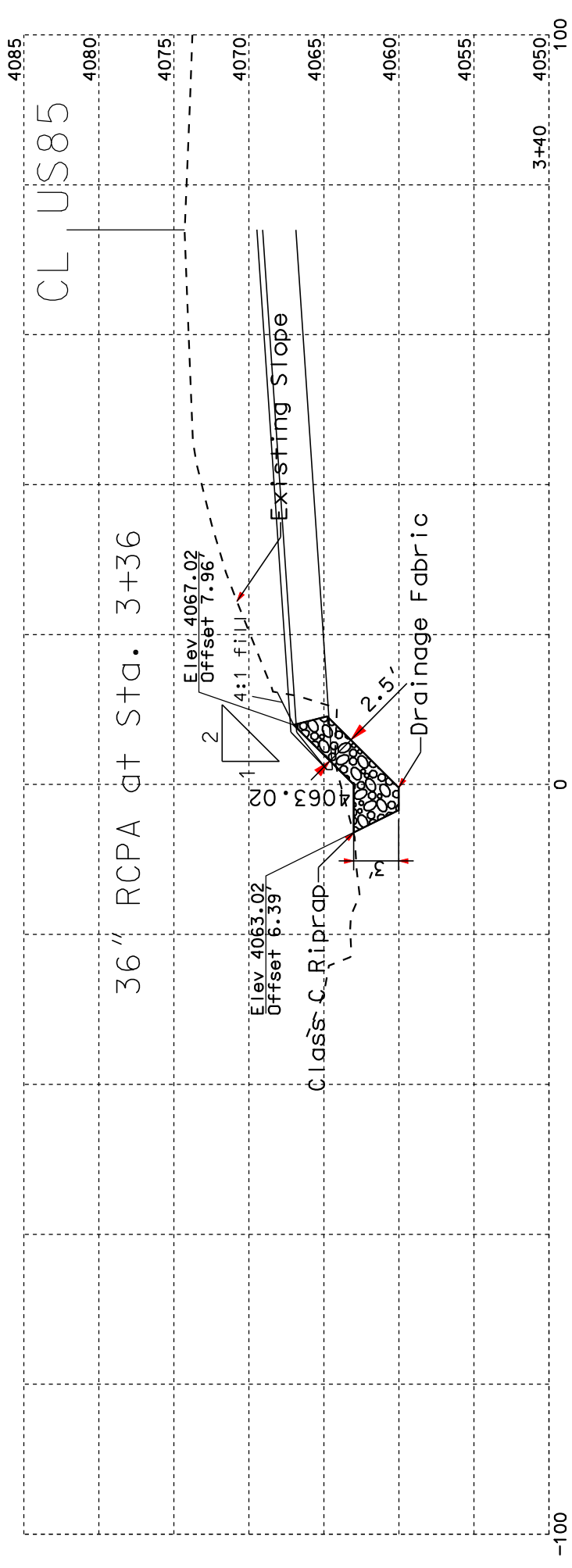
Parcel A2
3+63.06 to 4+70.38 L
Temporary easement for
placing Riprap containing
0.1 ac (1340 sq ft),
more or less

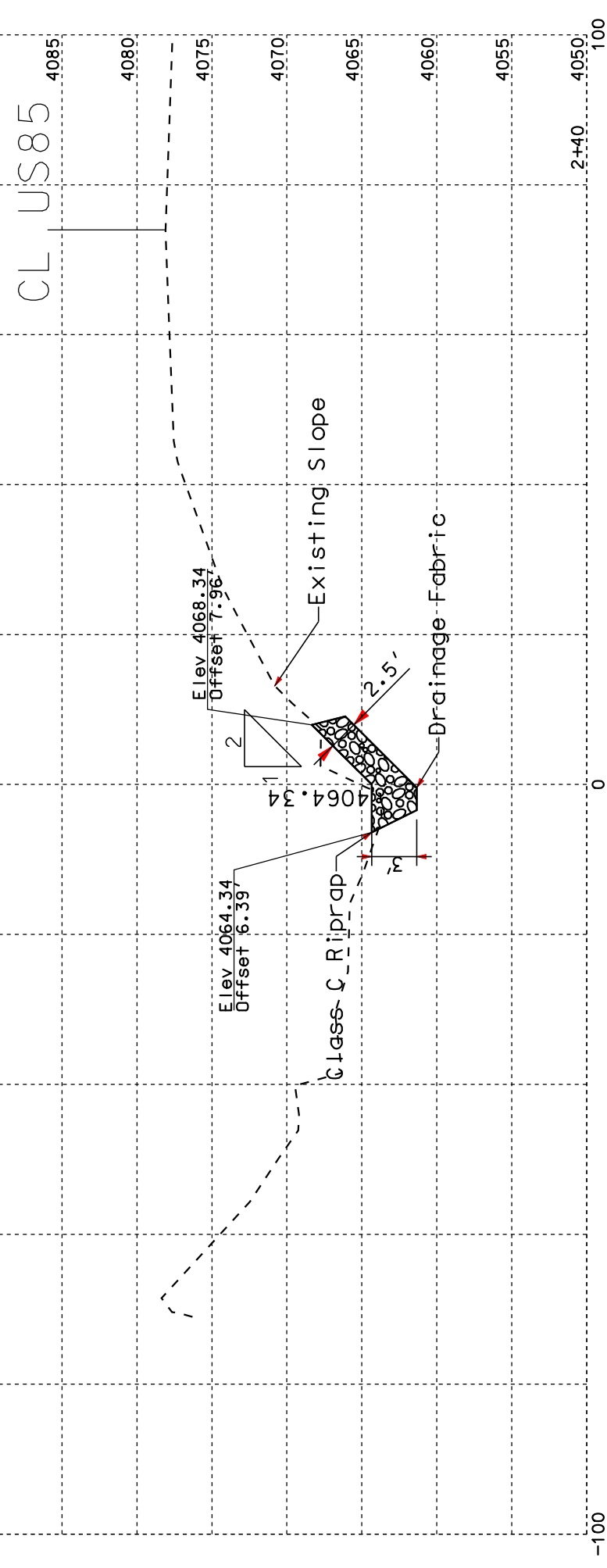
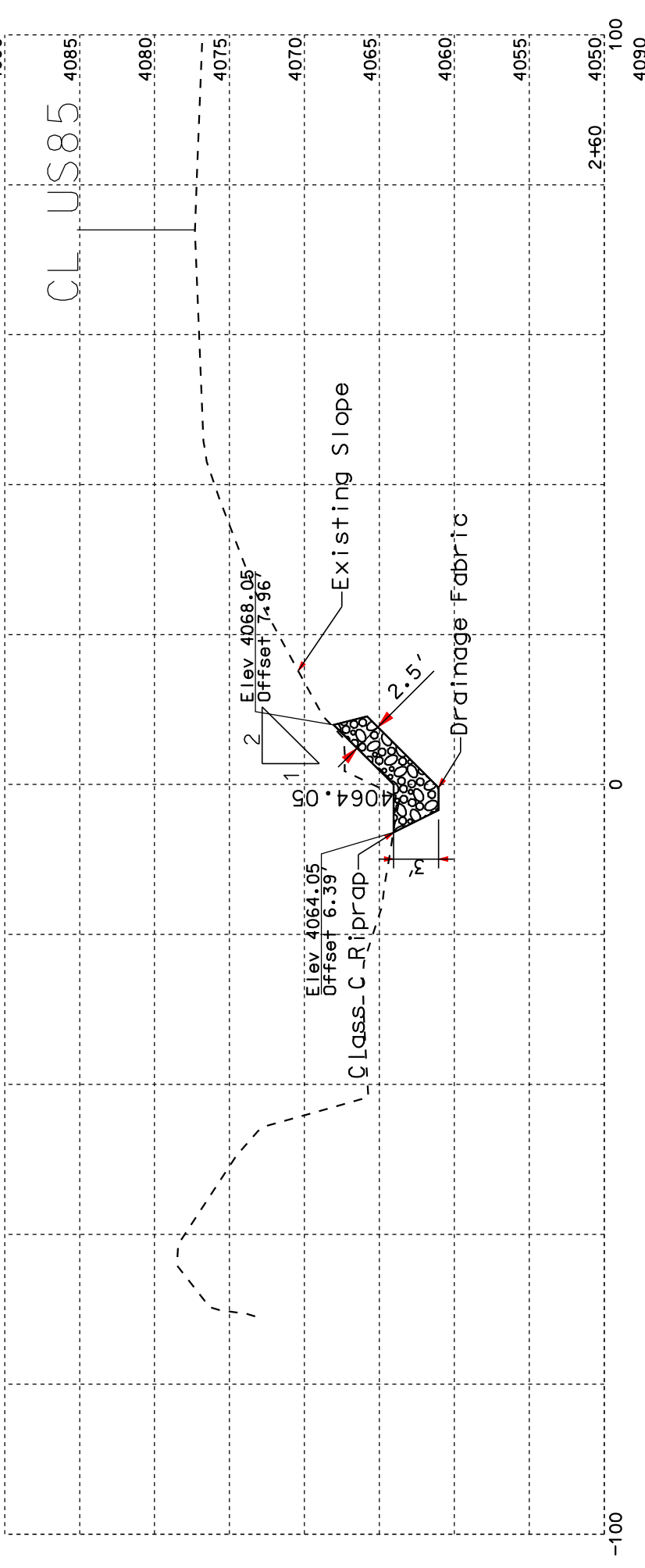
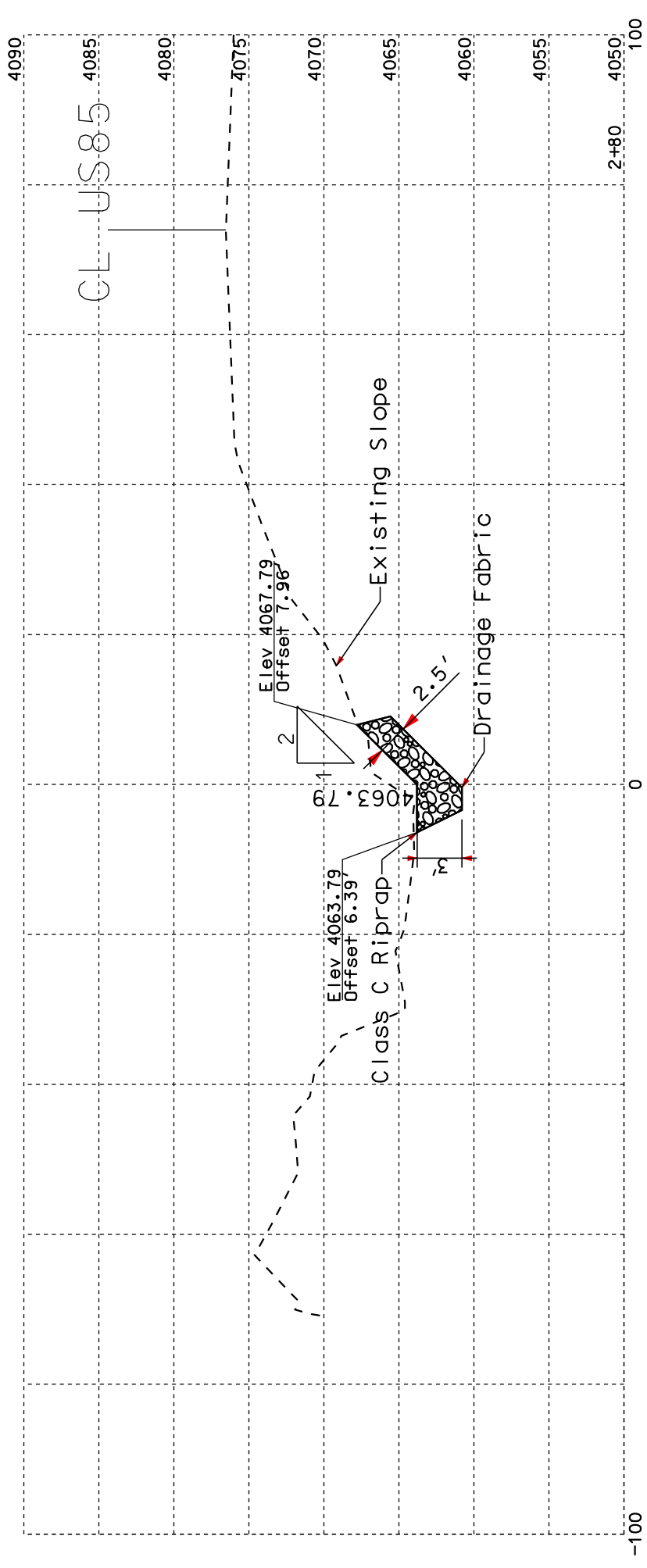
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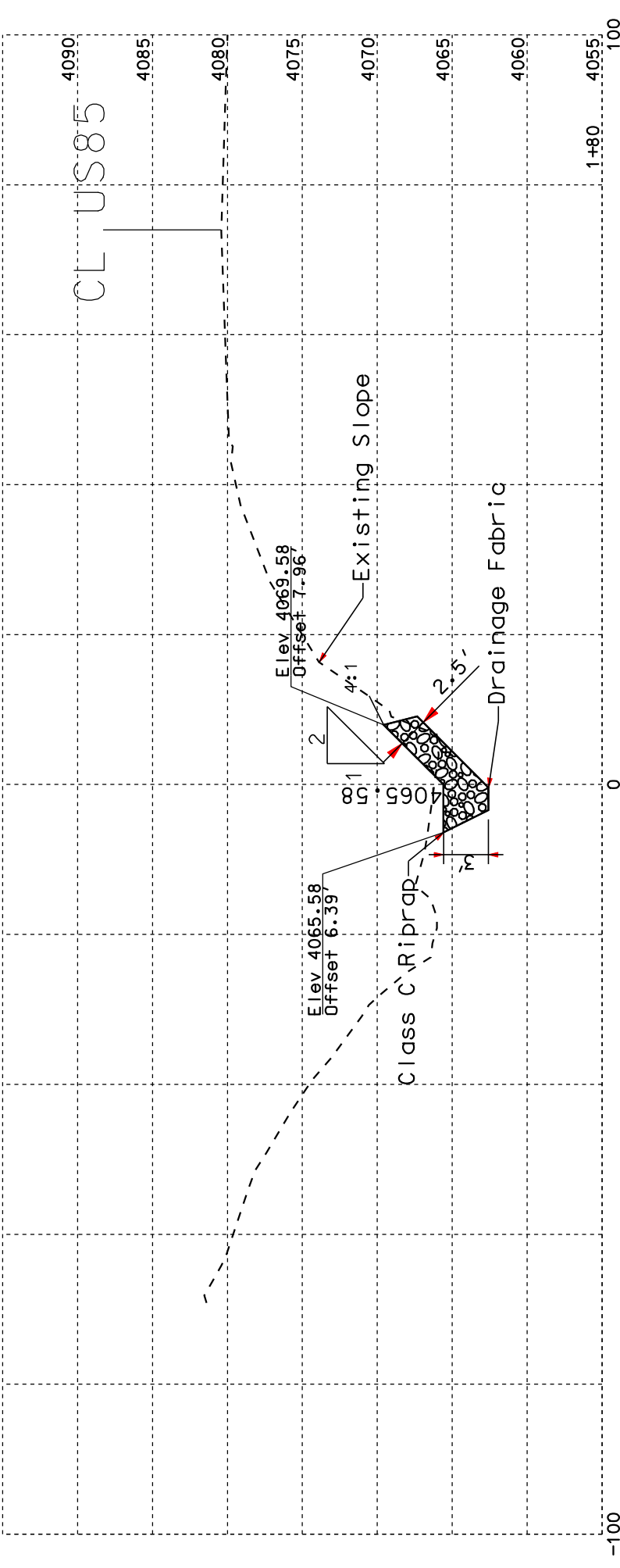
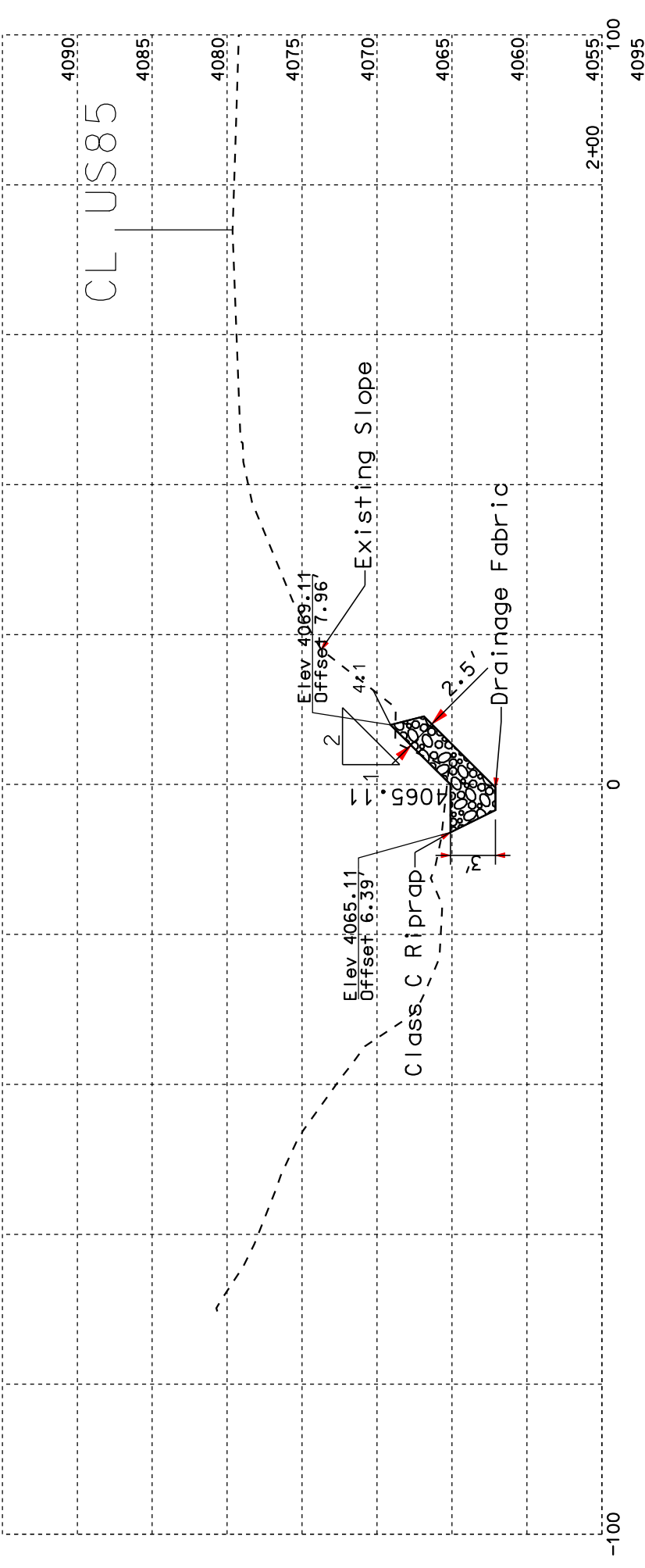
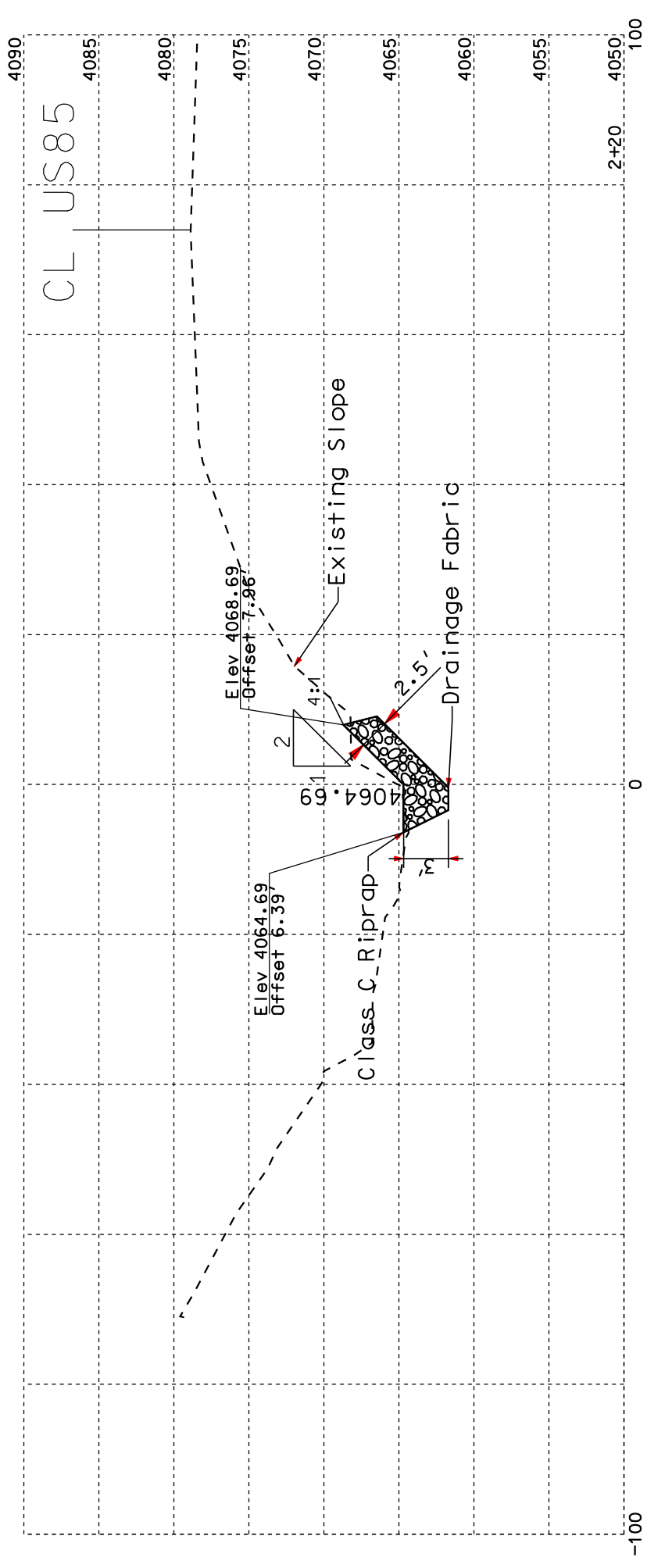
PLOTTED FROM - TRRC12245

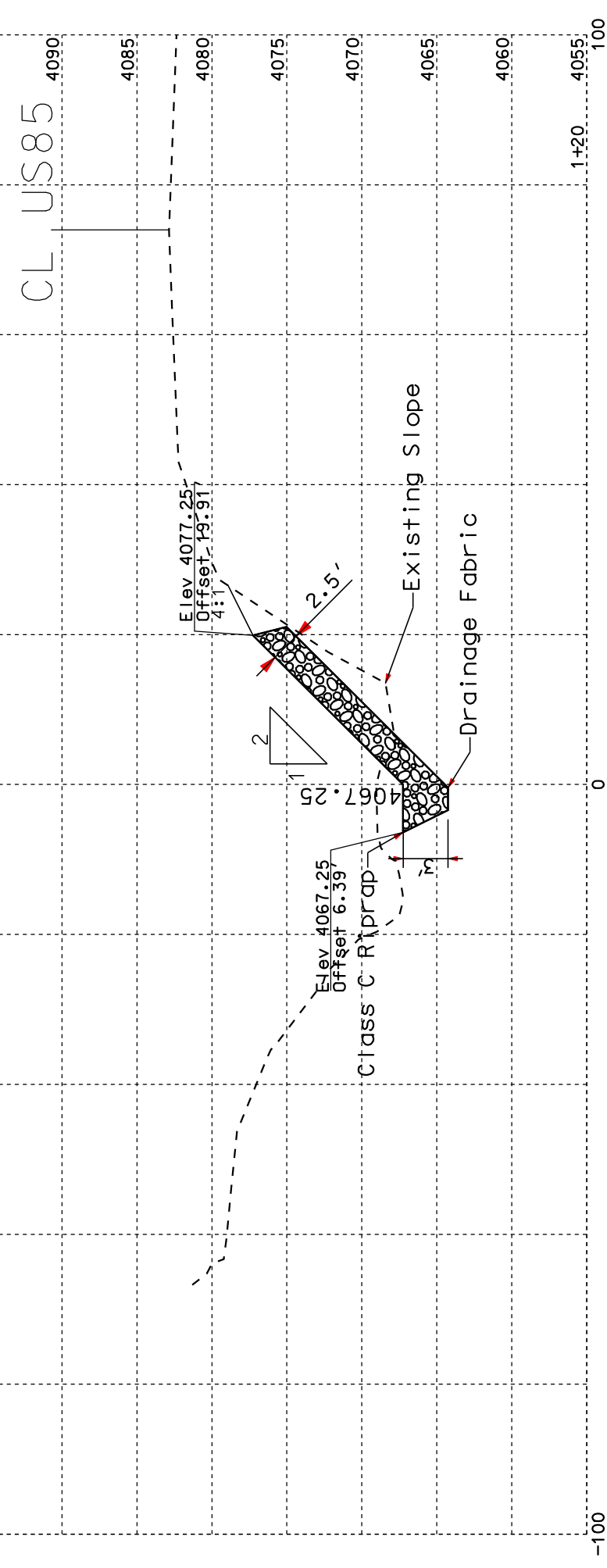
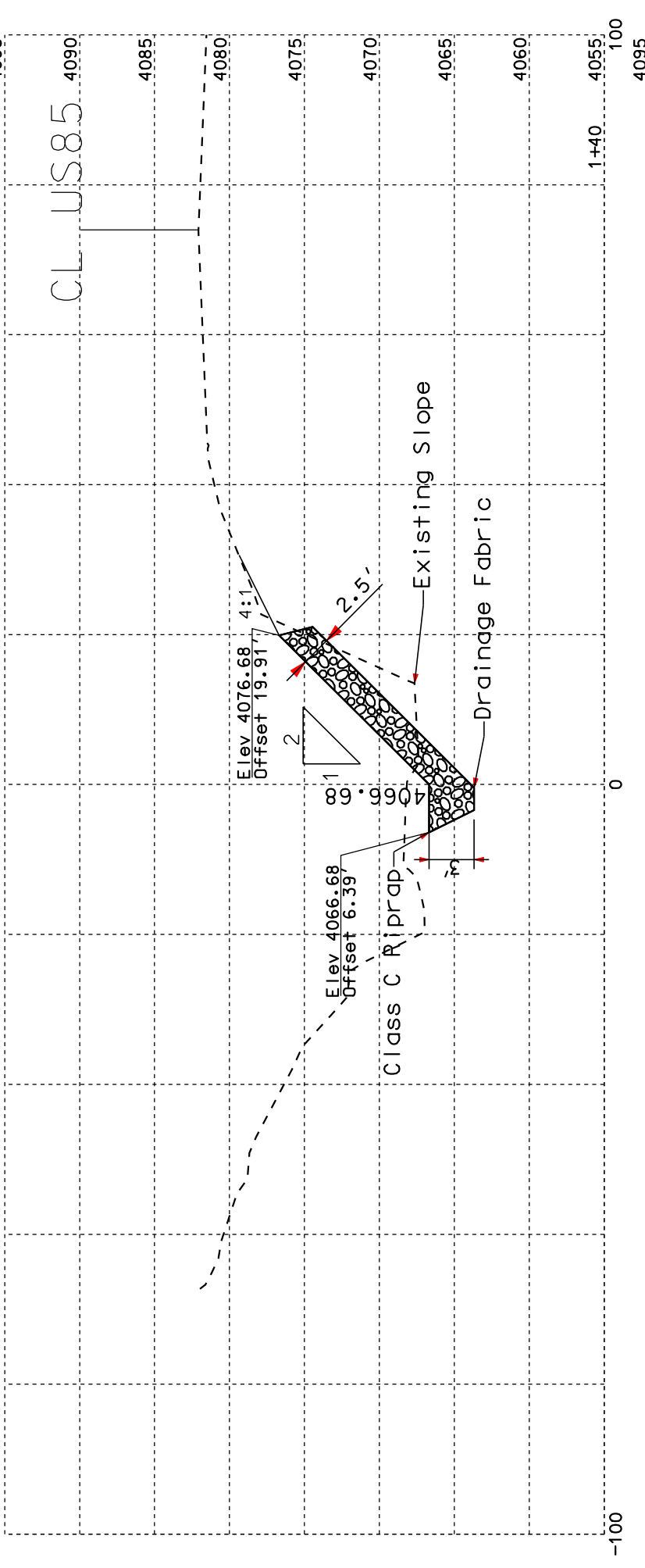
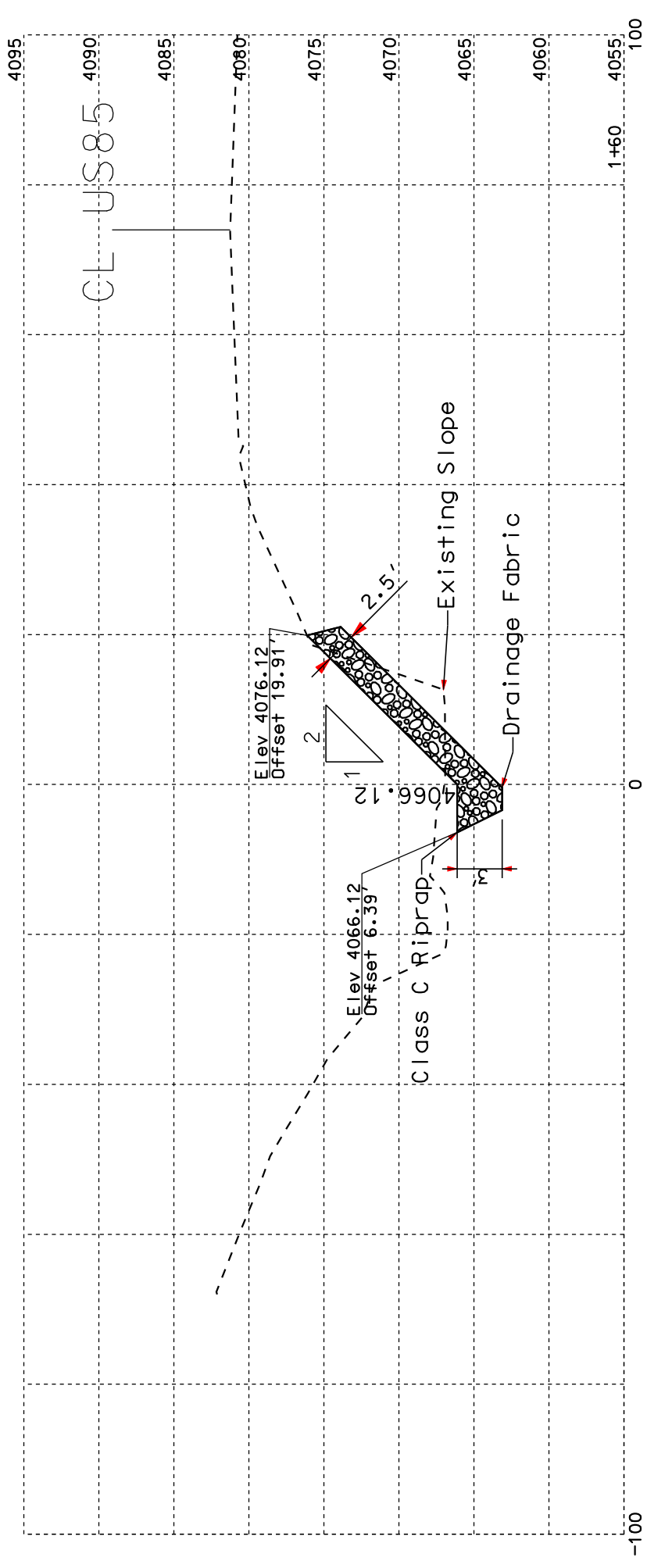
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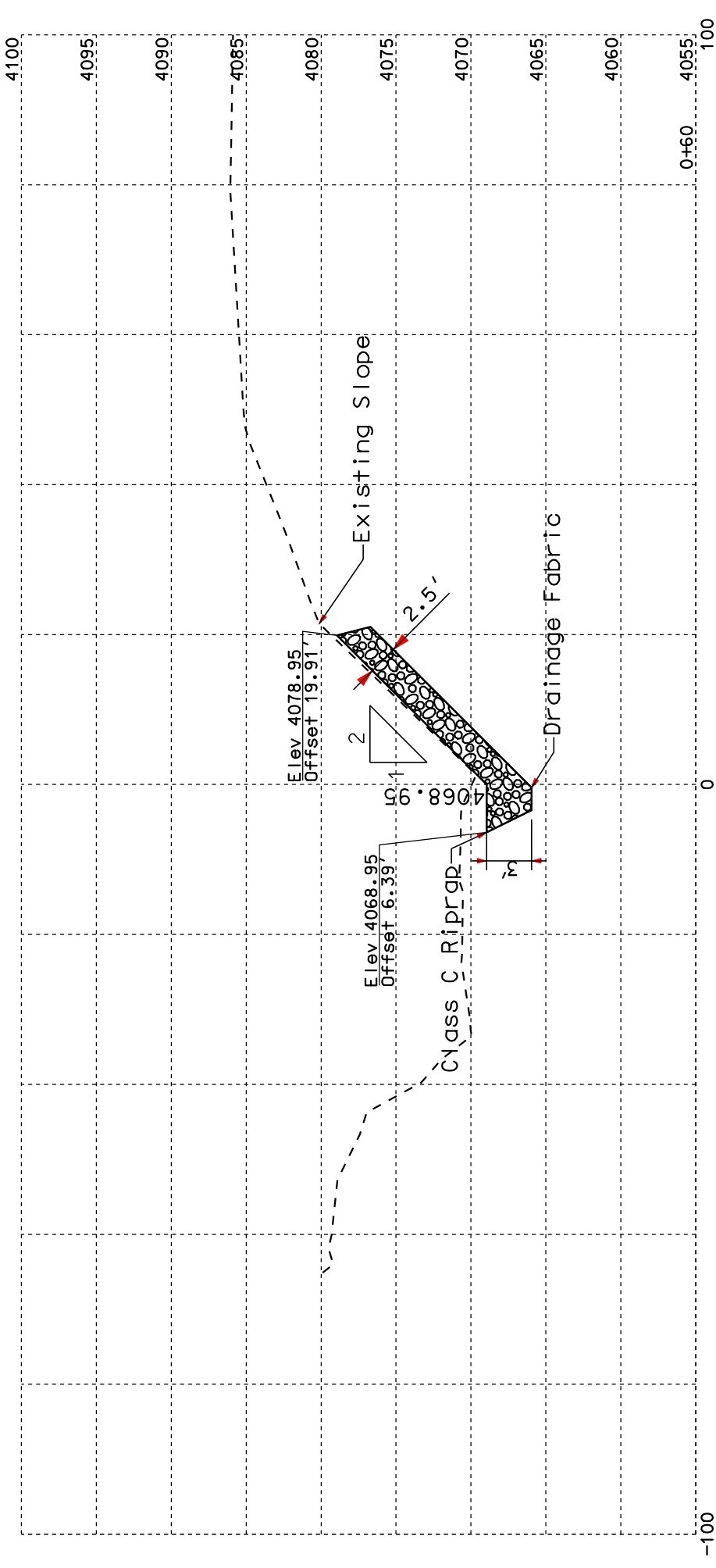
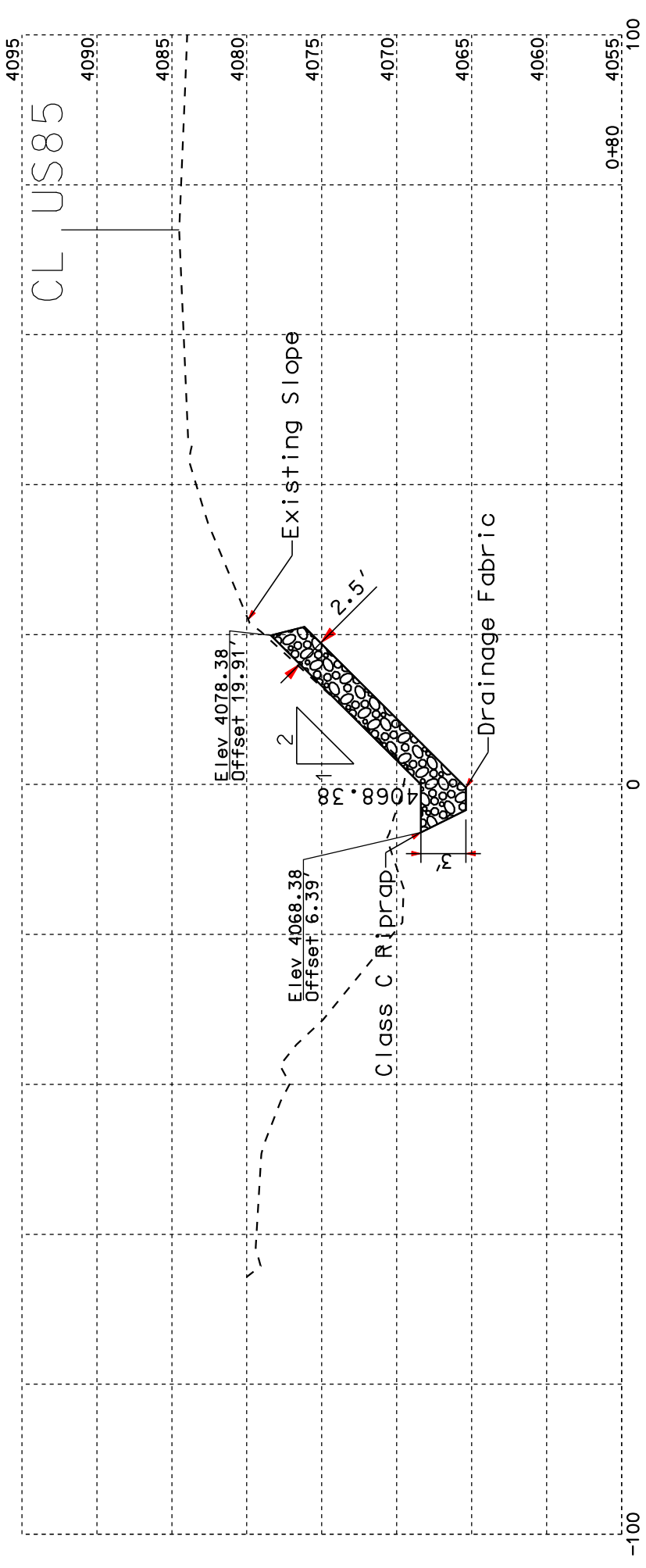
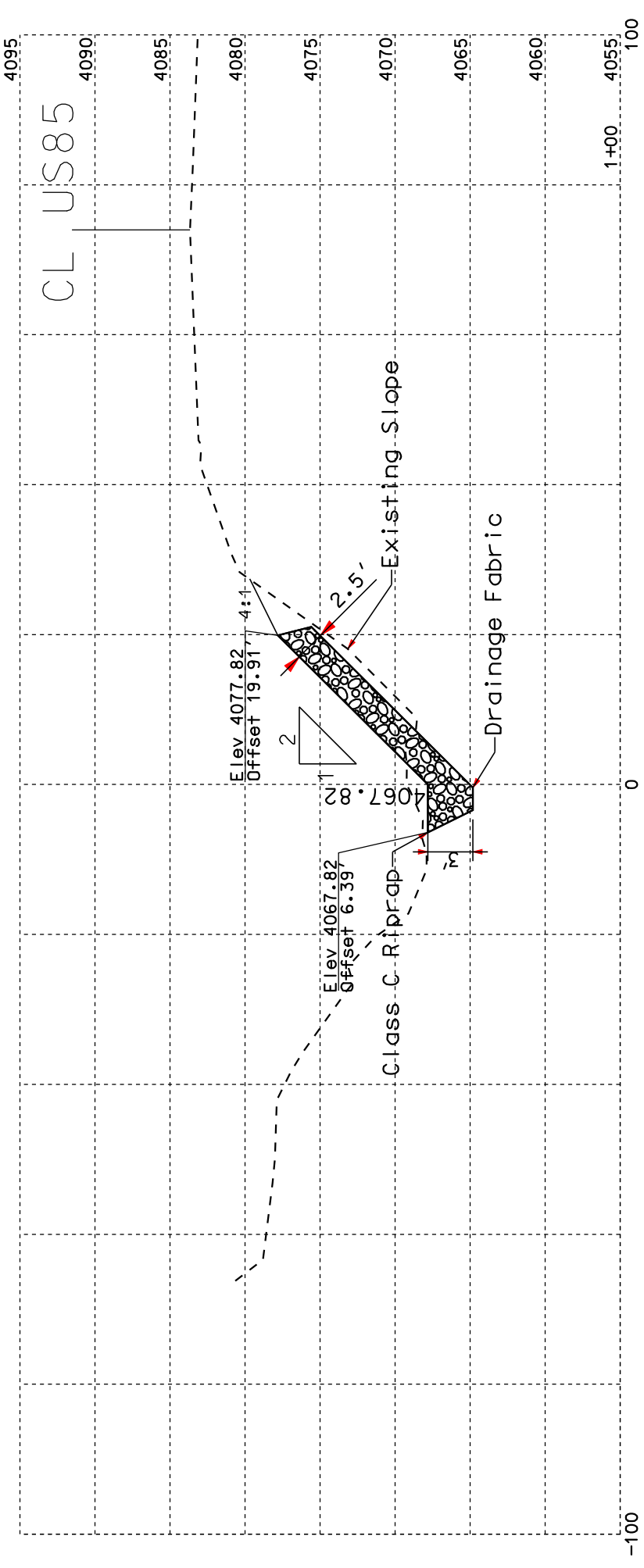


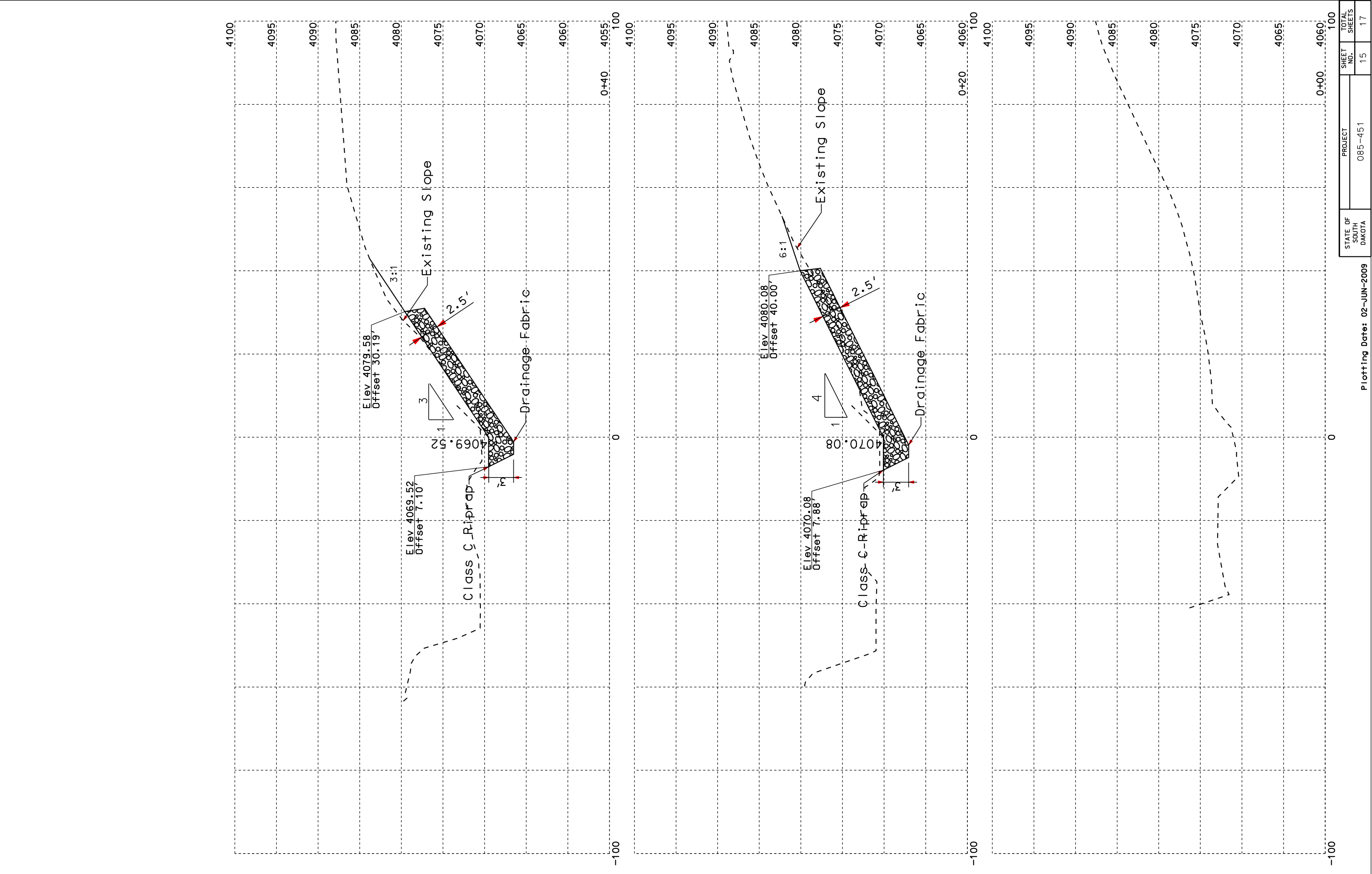












Plotting Date: 02-JUN-2009

The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



| Posted Speed Prior to Work (M.P.H.) | Spacing of Advance Warning Signs (Feet) (A) |
|---|--|
| 0 - 30 | 200 |
| 35 - 40 | 350 |
| 45 - 50 | 500 |
| 55 | 750 |
| 60 - 75 | 1000 |



A



July 1, 2005

| Posted Speed Prior to Work (M.P.H.) | Spacing of Advance Warning Signs (Feet) | | | Taper Length (Feet) (L) | Spacing of Channelizing Devices (Feet) (G) |
|---|--|-----|-----|----------------------------------|--|
| | (A) | (B) | (C) | | |
| 0 - 30 | 200 | | | 180 | 25 |
| 35 - 40 | 350 | | | 320 | 25 |
| 45 - 50 | 500 | | | 600 | 50 |
| 55 | 750 | | | 660 | 50 |
| 60 - 65 | 1000 | | | 780 | 50 |

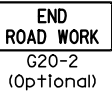
■ Channelizing Device

Drums or Type II Barricades shall be used if required overnight.

42" cones may be used along centerline

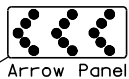
Longitudinal dimensions may be adjusted to fit project conditions such as horizontal curves, vertical curves, and other site restrictions.

Four inch white temporary pavement marking shall be used if traffic control must remain overnight or longer.

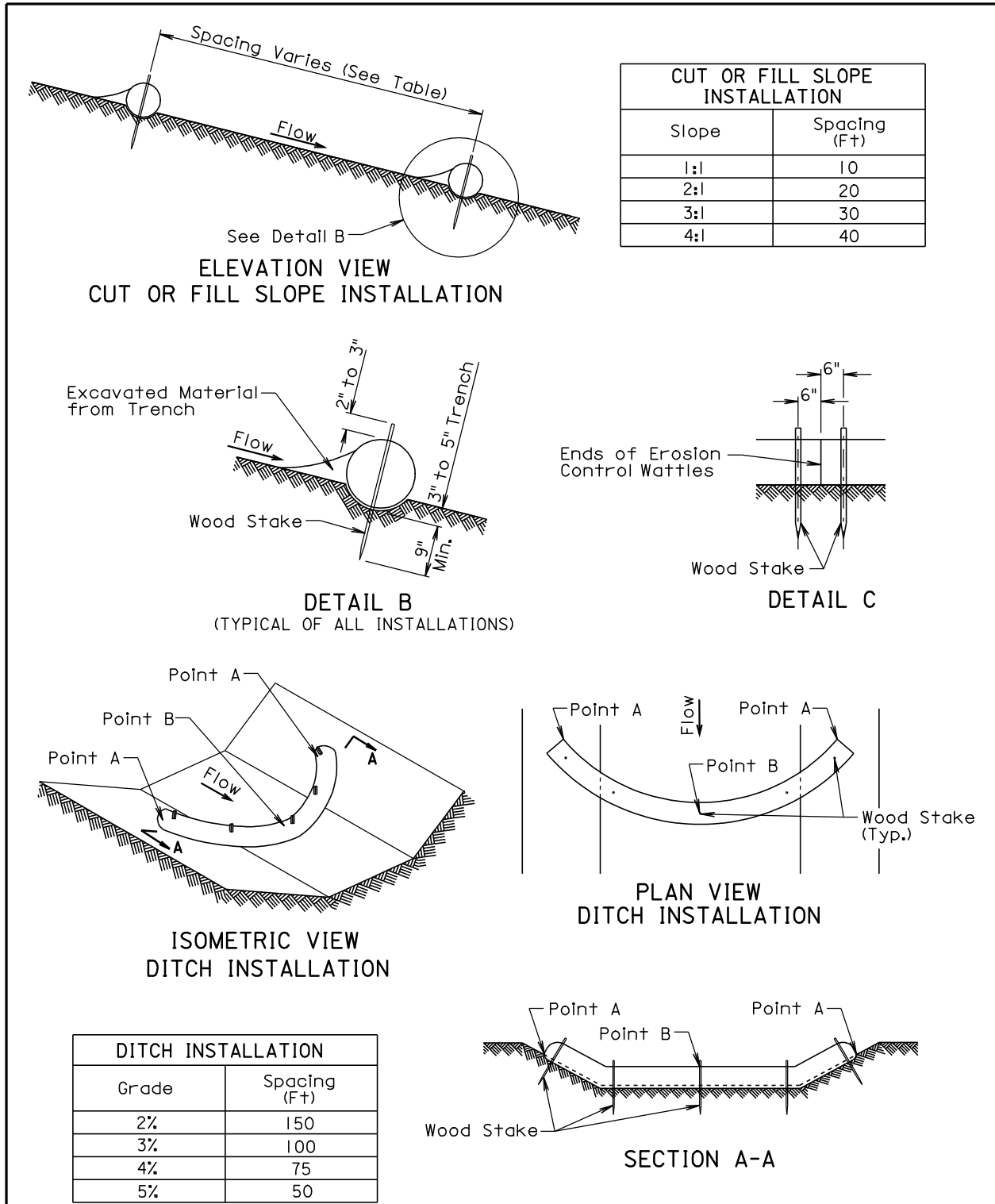


100'

26'



April 1, 2008



December 23, 2004

GENERAL NOTES:

At cut or fill slope installations, wattles shall be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor shall dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes shall be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes shall be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles shall be 3' to 4'.

Where installing running lengths of wattles, the Contractor shall butt the second wattle tightly against the first and shall not overlap the ends. See Detail C.

The Contractor and Engineer shall inspect the erosion control wattles once every week and within 24 hours after every rainfall event greater than 1/2". The Contractor shall remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

Sediment removal, disposal, or necessary shaping shall be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping shall be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials shall be incidental to the contract unit price per foot for the corresponding erosion control wattle bid item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials shall be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

December 23, 2004