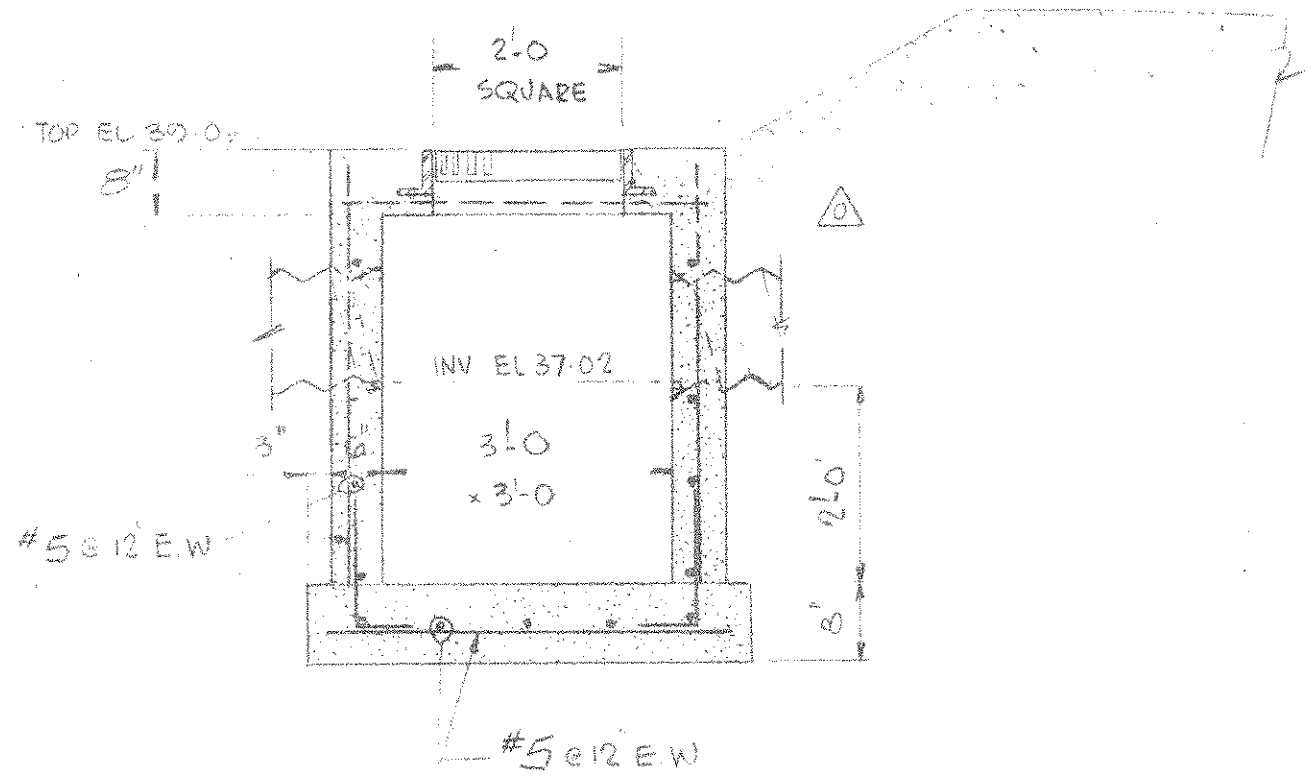
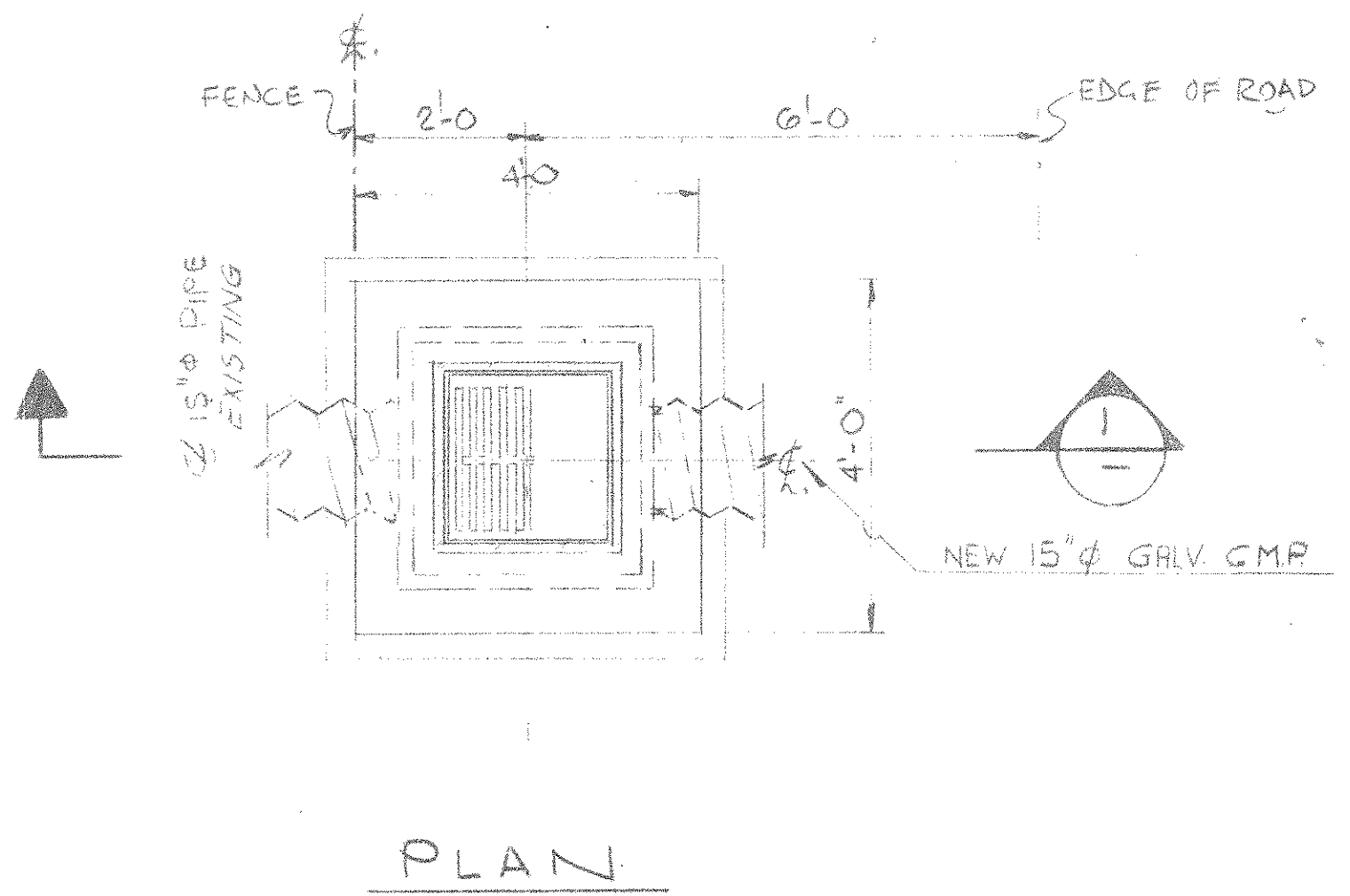
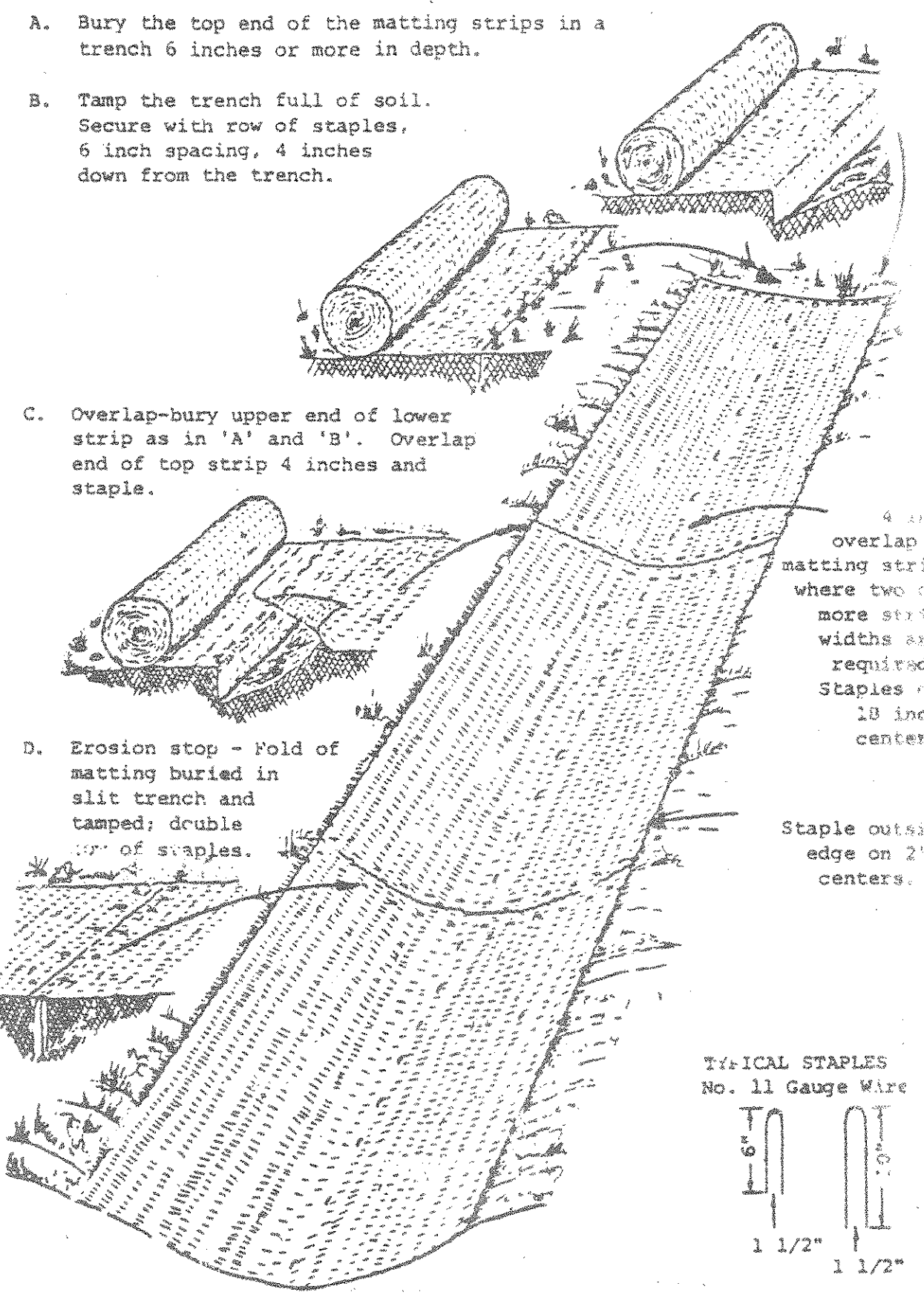


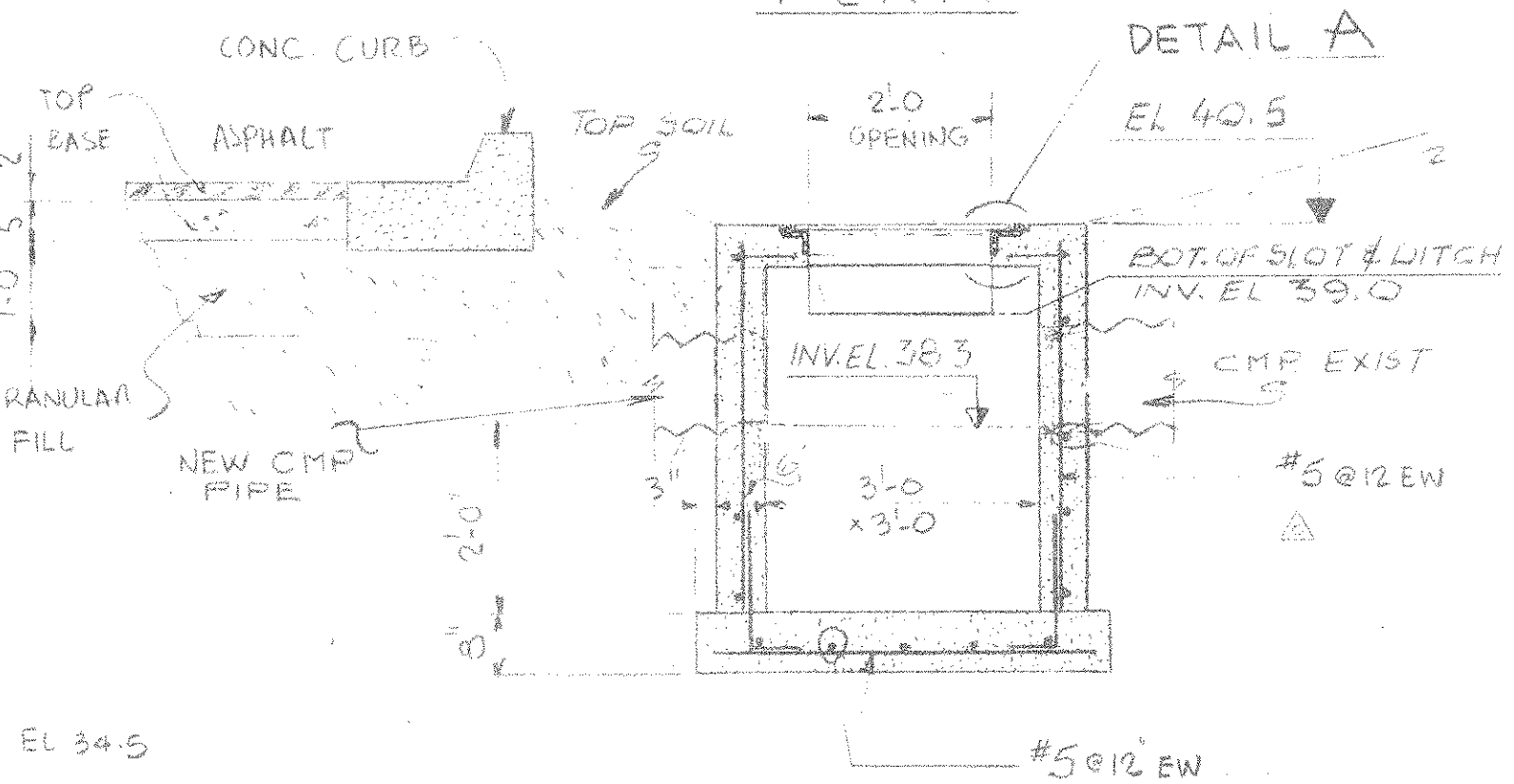
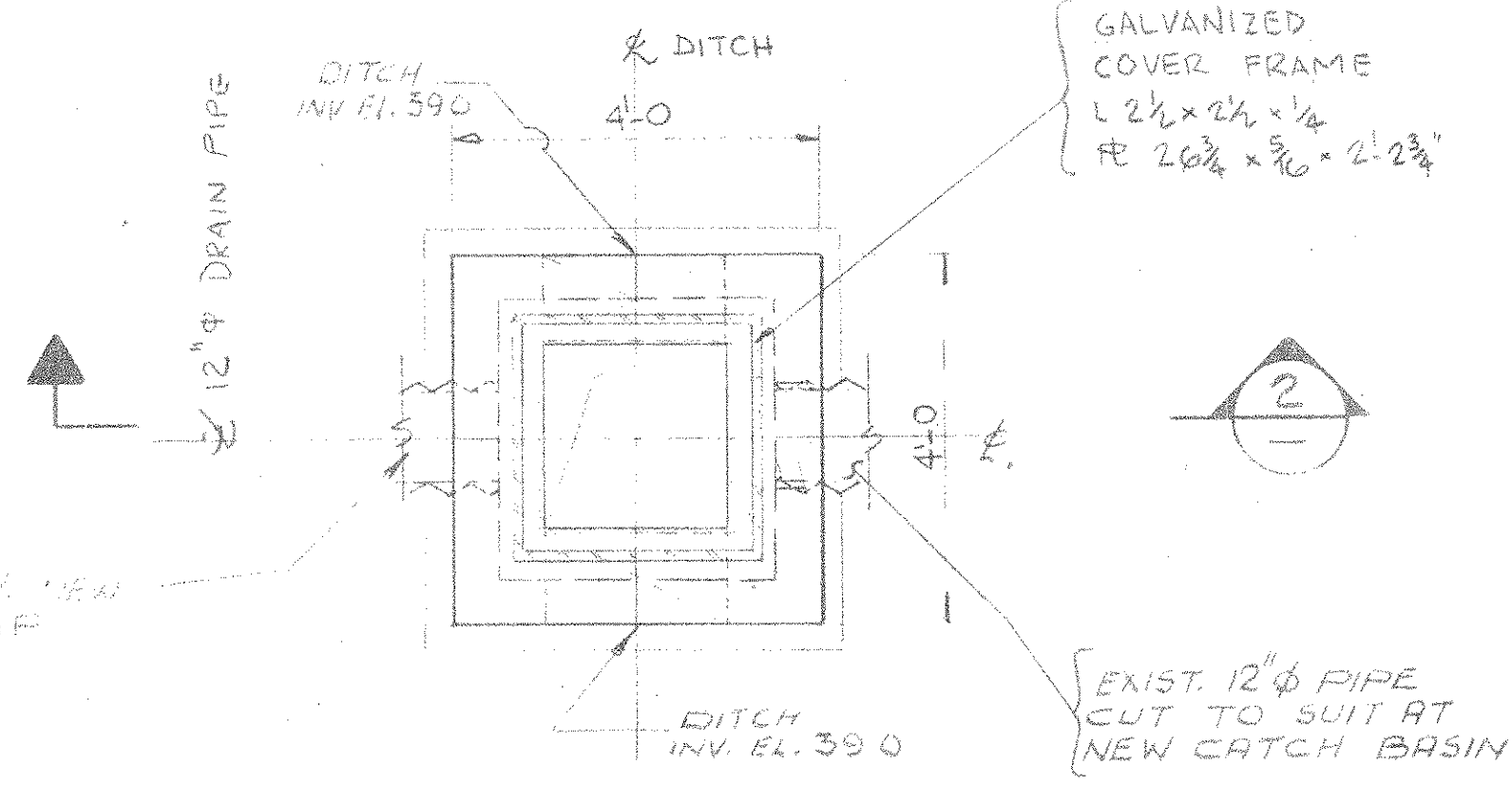
- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
  2. Length - As required, but not less than 10 feet (except on a single residence lot where a 30 foot minimum length would apply).
  3. Thickness - Not less than six (6) inches.
  4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
  5. Filter Cloth - will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
  6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
  7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
  8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
  9. Periodic inspection and needed maintenance shall be provided after each rain.

**DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSION MATTINGS**



**SECTION 1**  
**DETAILS CATCH BASIN 1.**  
(SEE DWG. NO. 41D2-004)

1. Jute mat shall be cloth of a uniform plain weave of natural and undyed fibers, 48 inches in width plus or minus 1 inch and weighing an average of 1.2 pounds per linear yard of cloth with a minimum of 100 ends per yard, 48 ends per inch, and 100 ends per inch of cloth. The yarn shall be of a closely related construction having an average twist of not less than 1.5 turns per inch and shall not vary in thickness by more than one-half the normal diameter.
2. Excelsion mat shall be wool excelsior, 48 inches in width plus or minus 1 inch and weighing 1.2 pounds per square yard plus or minus 10 percent. The excelsion material shall be covered with a matting to facilitate handling and to increase strength.
3. High density matting of broad cloth plain weave with an average fiber diameter of 6 to 12 microns, 2 to 4 inch strands of fiber, bonded with phenol formaldehyde resin. Mat shall be roll type, water permeable, minimum thickness 1/4 inch, maximum thickness 1/2 inch, density not less than 1.2 pounds per cubic foot.
4. Staples - staples for anchoring soil stabilizing materials shall be No. 11 gauge wire or heavier. Their length shall not be less than 1 1/2 inches. Use the Tamp Staples on 6 inch centers.



**SECTION 2**  
**DETAILS OF CATCH BASIN 2.**  
(SEE DWG. NO. 41D2-004)

**EARTH DIKE**  
NOT TO SCALE

**CROSS SECTION**

2:1 SLOPE OR FLATTER  
GRADE LINE  
POSITIVE DRAINAGE - GRADE SUFFICIENT TO DRAIN  
STABILIZATION AS REQUIRED. ON STEEP SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH

**CONSTRUCTION SPECIFICATIONS**

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. FLOWAGE SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
5. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

TYPE OF TREATMENT	CHANNEL GRADE	FLOW CHANNEL STABILIZATION	
		DIKE A	DIKE B
1	1.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSTOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-5"
4	8.1-20%	LINED RIP-RAP 4-5"	ENGINEERING DESIGN

**A.** STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.  
**B.** RIP-RAP TO BE 4-5 INCHES IN A LAYER AT LEAST 3 INCHES THICKNESS AND PRESSED INTO THE SOIL.  
**C.** APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.  
**7.** PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

U.S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
COLLEGE PARK, MARYLAND

**EARTH DIKE**

STANDARD DRAWING  
ED-1

**STANDARD RESPONSIBILITY NOTES:**

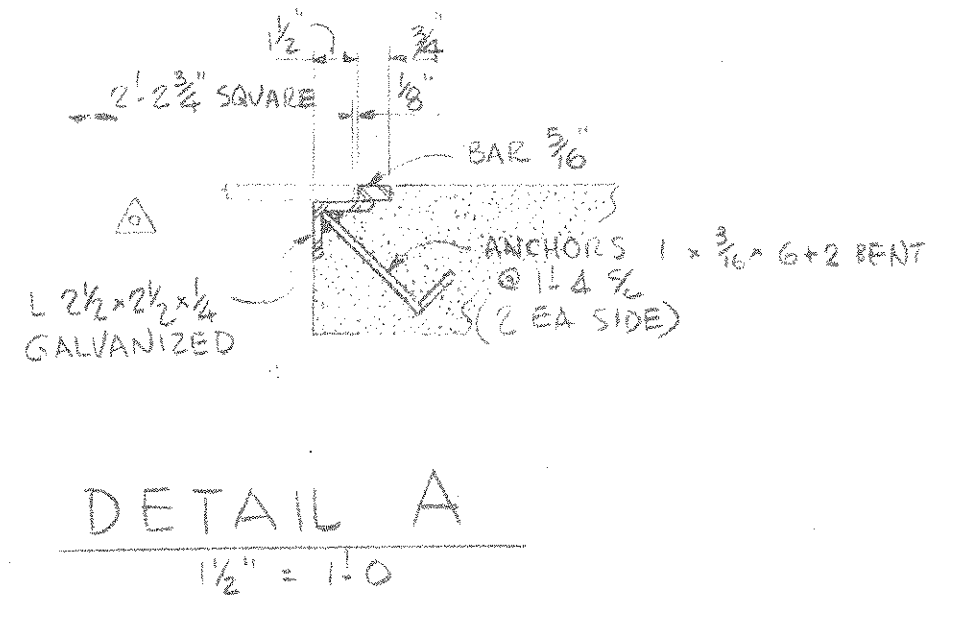
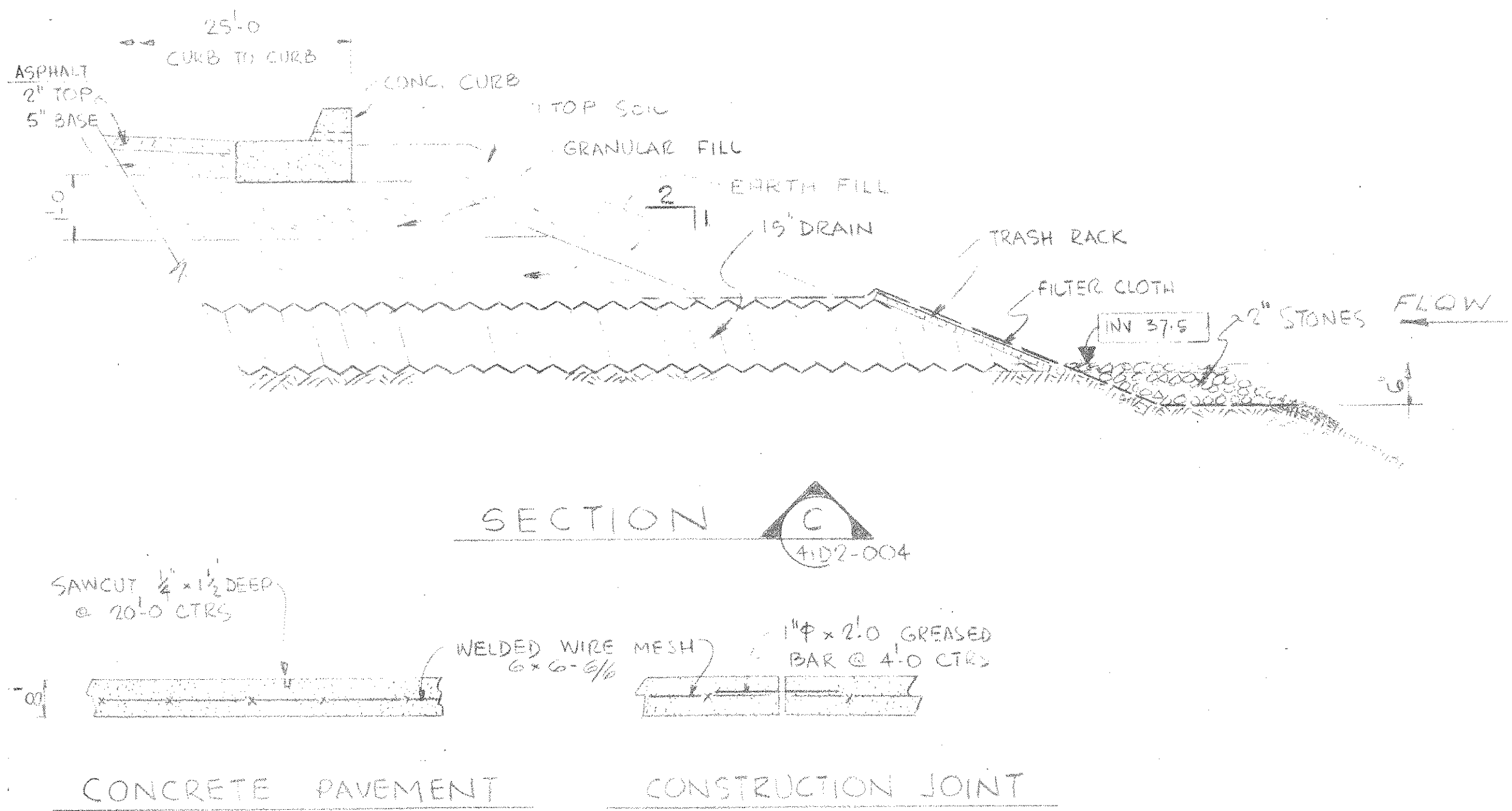
1. DEVELOPER'S CERTIFICATION:  
I (WE) CERTIFY THAT:  
A) All development and construction will be done in accordance with this Sediment and Erosion Control Plan, and further, authorize the right of entry for periodic on-site evaluation by the State of Maryland, Department of Natural Resources, Water Resources Administration Inspectors.  
B) Any Responsible Personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project.

**STANDARD STABILIZATION NOTE:**

"Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within seven calendar days as to the surface of all perimeter controls, dikes, walls, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); and fourteen days as to all other disturbed or graded areas on the project site."

**NOTIFICATION:**

The contractor shall notify the Enforcement Division of Maryland Department of Natural Resources Water Resource Administration 5 days prior to starting construction.



**W.P. LONDON AND ASSOCIATES LIMITED**  
CONSULTING ENGINEERS  
NIAGARA FALLS

HARFORD COUNTY RESOURCE RECOVERY FACILITY - HARFORD COUNTY, MARYLAND

**PAVING AND DRAINAGE DETAILS**

Consumat Systems, Inc.  
RICHMOND, VIRGINIA U.S.A.

1	ORIGINAL TRANSFERRED TO C.S.I.	NOV 19/86	K.L.
0	ISSUED FOR CONSTRUCTION	JULY 9/86	K.L.
P3	ISSUED FOR APPROVAL & PRICING	JUNE 23/86	K.L.
P2	NOTE RE: NOTIFICATION ADDED	JUNE 5/86	ASK
N#	REVISION	DATE#	BY

SCALE 1/4" = 1'-0"  
DRAWN ASK  
DATE: JUNE 2/86  
DO NOT SCALE

DRAWING NO. 1624-000-41D2-004  
SHEET 3 OF 3