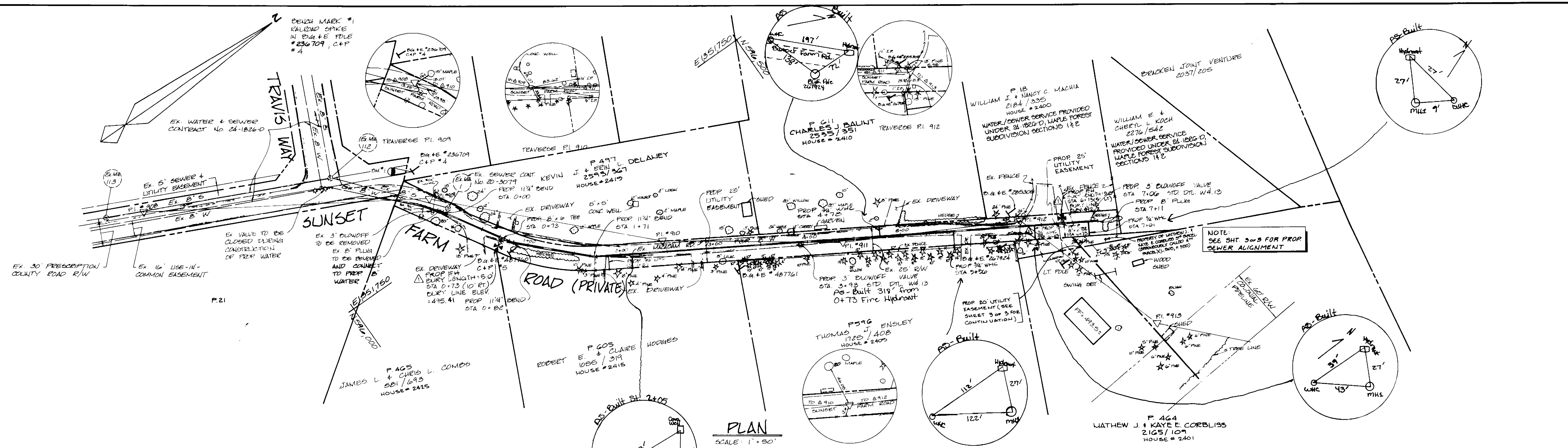


3310 WS/2 SUNSET FARM RD. C.P.# W-8186

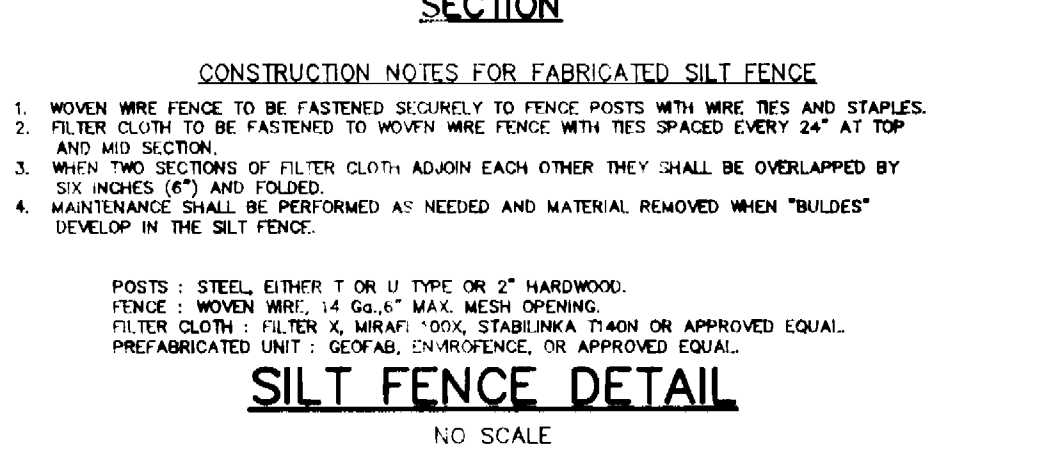
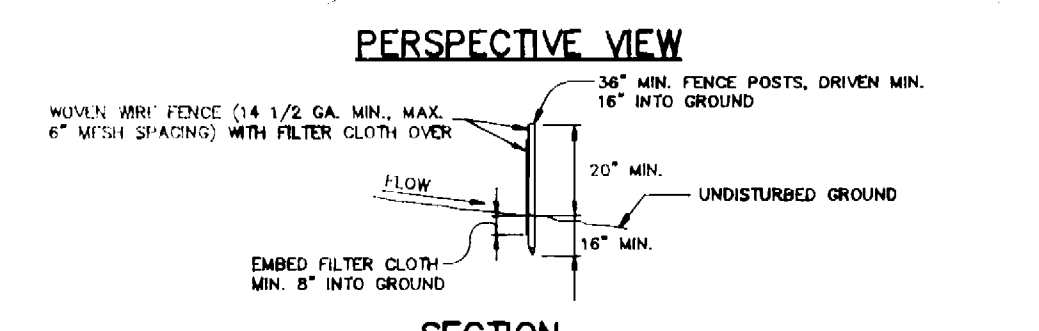
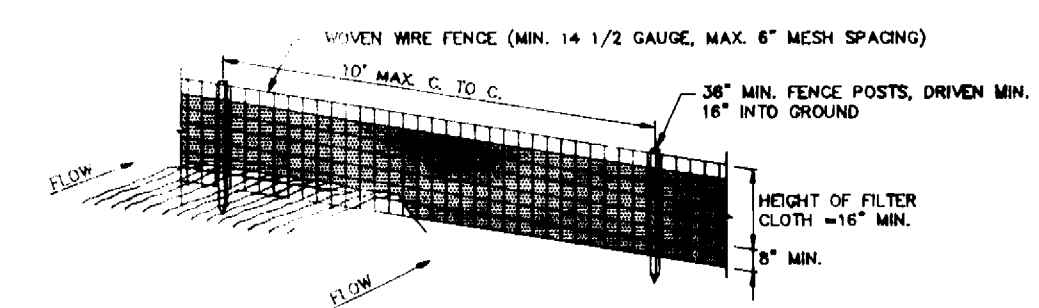


PLAN
SCALE: 1" = 50'

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection and Permits prior to the start of any construction (313-1853).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND THE ISLANDS THEREIN.
- Vegetative and structural practices shall be installed in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND THE ISLANDS THEREIN.
- All sediment traps/basins shown must be located and warning signs posted around the perimeter in accordance with Vol. 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified herein in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, for permanent seeding (Sec. 51), and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary protection with mulch alone can only be used on areas where recommended seeding rates do not allow for proper germination and establishment of grass.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Area:

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|------------------------------------|---------------|
| Total Area of Site | 0.75 acres |
| Area Disturbed | 0.15 acres |
| Area to be roofed or paved | 0.25 acres |
| Area to be vegetatively stabilized | 0.35 acres |
| Total Cut | 1000 cu. yds. |
| Total Fill | 1000 cu. yds. |
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- Site grading will begin only after all permanent sediment control measures have been installed and are in functioning condition.
- Sediment will be removed from traps when the height reaches above cut elevation shown on the plans.
- Soil and fill quantities provided under site conditions do not represent bid quantities. These quantities do not distinguish between liquid, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unstable material. The contractor shall furnish a letter with site conditions which may affect the work.
- On all sites with disturbed areas in excess of 2 acres, approval of the Inspection Agency shall be requested upon completion of installation of permanent erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approval may not be required and this notice approval by the Inspection Agency is made.
- Trucks for the construction of utilities is limited to three pipe lengths or that which can be back-filled and stabilized within one working day, whichever is shorter.



- SEQUENCE OF CONSTRUCTION**
- OBTAIN PERMITS.
 - LAYOUT ALIGNMENT CONTROL DEVICES AS REQUIRED BY HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - INSTALL WATER AND SEWER MAINS. CONTRACTOR TO LIMIT OPEN TRENCH TO THREE PIPE LENGTHS OR THAT WHICH WILL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
 - PROVIDE SEEDING OR PAVING STABILIZATION AS APPLICABLE. PAVING TO BE DONE PER SPECIFICATIONS. COMPLETE SITE CLEAN-UP.
 - REMOVE ALL SEDIMENT CONTROLS UPON PERMISSION OF SEDIMENT CONTROL INSPECTOR.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

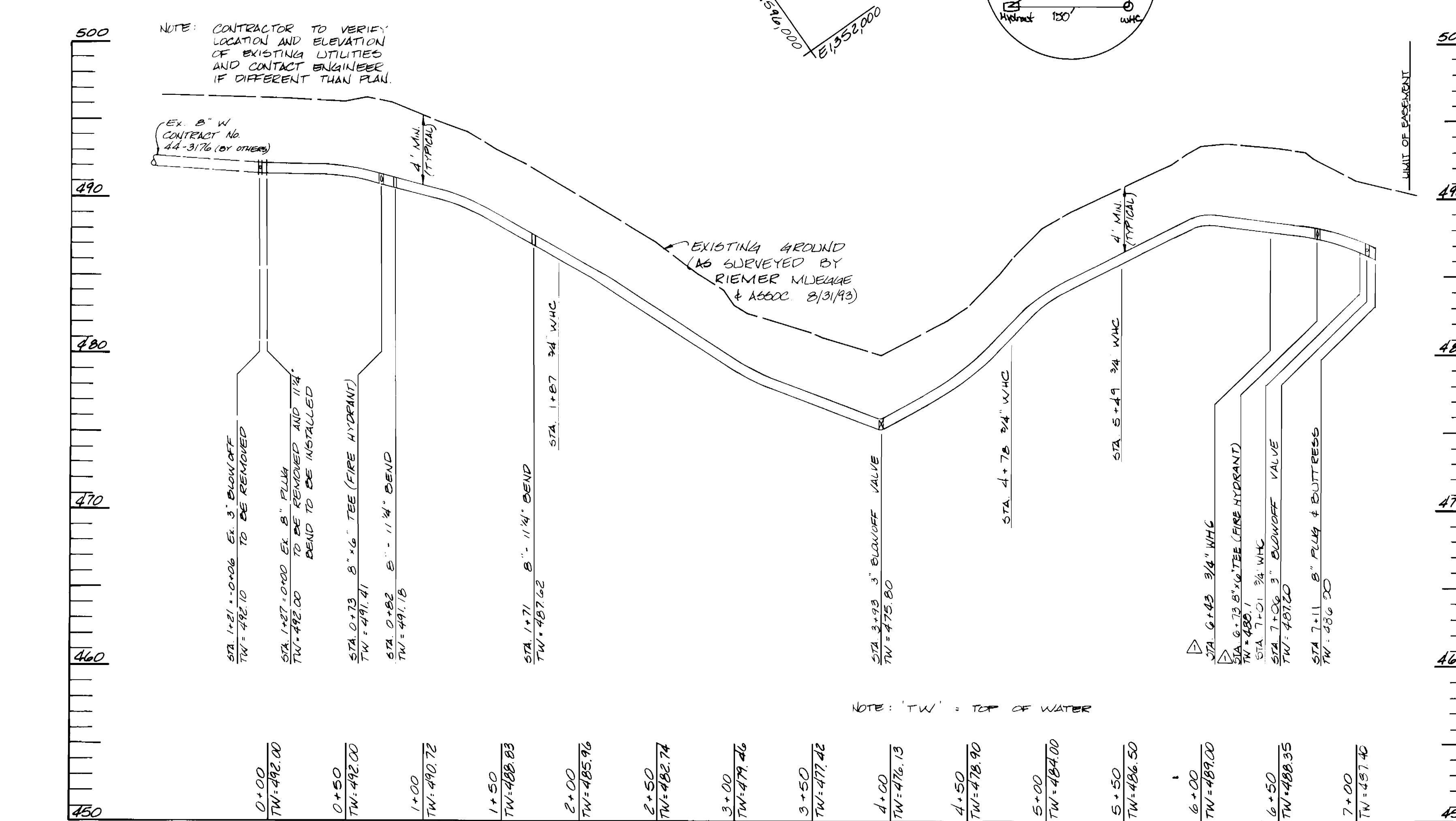
Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 500 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (3.2 lbs. per 1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of meadow lupine (0.07 lbs. per 1000 sq. ft.). For the period November 16 thru January 28, protect site by sowing 2 tons per acre of well conditioned straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq. ft.) of unrotted small grain straw immediately after seeding. Another mulch immediately after application using fully maturing leaf or 218 gal. per acre (5 gal. per 1000 sq. ft.) of mulched chaff on flat areas. On slopes, 8 ft. or higher, use 247 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.

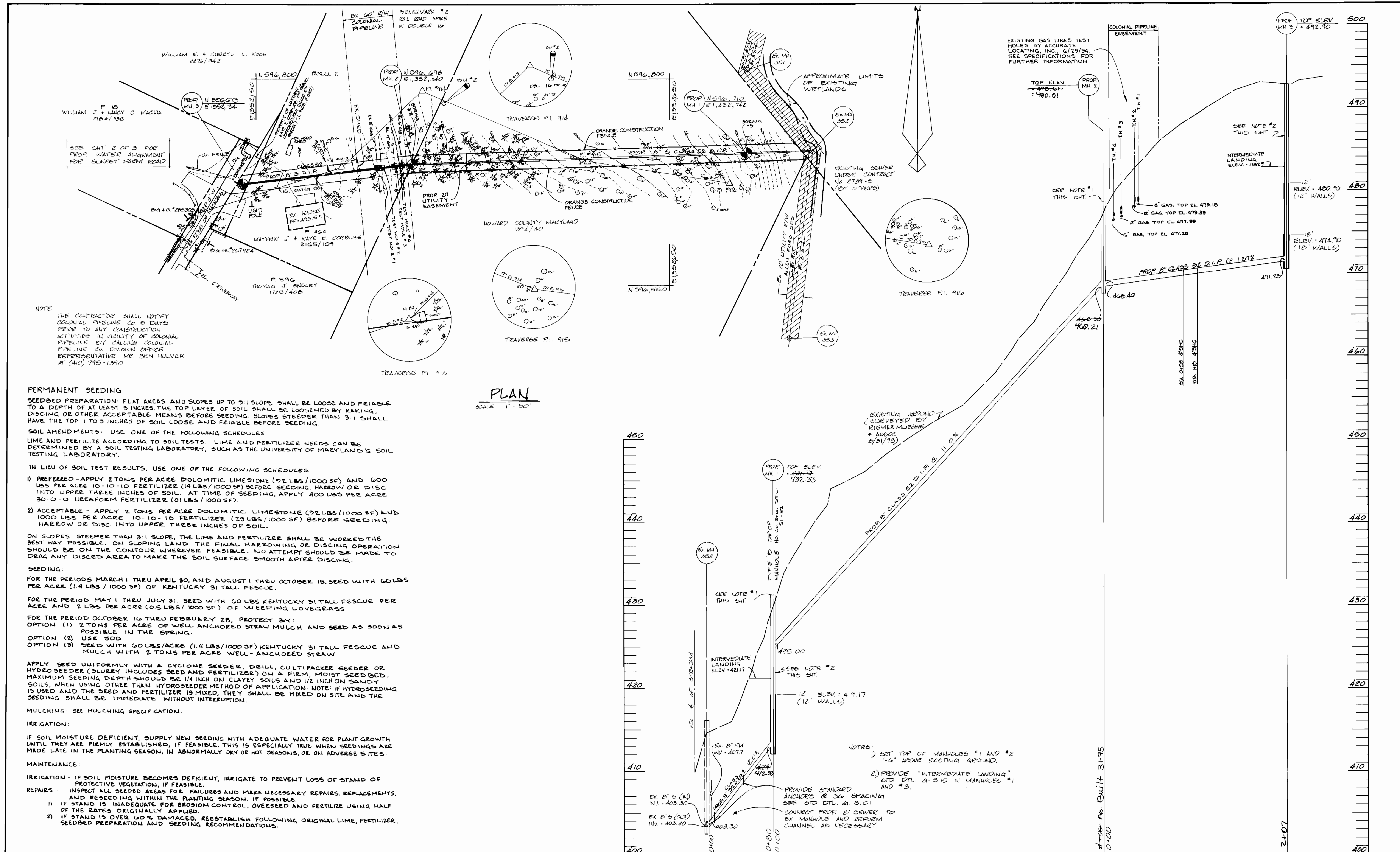
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

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|---|--|---|--|---|--|--|--|--|--|--------------------------------|--|
| DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: Robert Sawyer 6-13-94 Chief, Bureau of Engineering: [Signature] 6-7-94 Chief, Water & Sewer Design Division: [Signature] 6-7-94 | | RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8816 Centre Park Drive • Suite 200 • Columbia, Md. 21045 410-997-8900 FAX: 410-997-9282 | | DES: C.M. DRN: C.M. CHK: J.O. DATE: 5-28-96 BY: [Signature] NO. [Signature] | | WATER PLAN AND PROFILE DATE: 11-1-95 HAD: [Signature] NO. [Signature] | | WATER & SEWER SUNSET FARM ROAD 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT No. 20-3310 CAPITAL PROJECT No. W-8186 | | SCALE AS SHOWN SHEET 2 OF 3 | |
|---|--|---|--|---|--|--|--|--|--|--------------------------------|--|

3310 W-8186 C.P.# W-8186 SUNSET FARM RD. WS/3



NOTE:
THE CONTRACTOR SHALL NOTIFY COLONIAL PIPELINE CO 5 DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES IN VICINITY OF COLONIAL PIPELINE BY CALLING COLONIAL PIPELINE CO DIVISION OFFICE REPRESENTATIVE MR. BEN HULVER AT (410) 795-1390

PERMANENT SEEDING
SEEDBED PREPARATION: FLAT AREAS AND SLOPES UP TO 3:1 SLOPE SHALL BE LOOSE AND FRIBLE TO A DEPTH OF AT LEAST 3 INCHES THE TOP LAYER OF SOIL SHALL BE LOOSEND BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. SLOPES STEEPER THAN 3:1 SHALL HAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIBLE BEFORE SEEDING.
SOIL AMENDMENTS: USE ONE OF THE FOLLOWING SCHEDULES.
LIME AND FERTILIZE ACCORDING TO SOIL TESTS. LIME AND FERTILIZER NEEDS CAN BE DETERMINED BY A SOIL TESTING LABORATORY, SUCH AS THE UNIVERSITY OF MARYLAND'S SOIL TESTING LABORATORY.
IN LIEU OF SOIL TEST RESULTS, USE ONE OF THE FOLLOWING SCHEDULES
1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SF) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (01 LBS/1000 SF).
2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SF) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (28 LBS/1000 SF) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.
ON SLOPES STEEPER THAN 3:1 SLOPE, THE LIME AND FERTILIZER SHALL BE WORKED THE BEST WAY POSSIBLE. ON SLOPING LAND THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE CONTOUR WHEREVER FEASIBLE. NO ATTEMPT SHOULD BE MADE TO DRAG ANY DISCED AREA TO MAKE THE SOIL SURFACE SMOOTH AFTER DISCING.
SEEDING:
FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS / 1000 SF) OF KENTUCKY 31 TALL FESCUE.
FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.5 LBS / 1000 SF) OF WEEPING LOVEGRASS.
FOR THE PERIOD OCTOBER 16 THRU FEBRUARY 28, PROTECT BY:
OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING.
OPTION (2) USE SOD
OPTION (3) SEED WITH 60 LBS/ACRE (1.4 LBS/1000 SF) KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL-ANCHORED STRAW.
APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED. MAXIMUM SEEDING DEPTH SHOULD BE 1/4 INCH ON CLAYEY SOILS AND 1/2 INCH ON SANDIY SOILS, WHEN USING OTHER THAN HYDROSEEDER METHOD OF APPLICATION. NOTE: IF HYDROSEEDING IS USED AND THE SEED AND FERTILIZER IS MIXED, THEY SHALL BE MIXED ON SITE AND THE SEEDING SHALL BE IMMEDIATE WITHOUT INTERRUPTION.
MULCHING: SEE MULCHING SPECIFICATION.
IRRIGATION:
IF SOIL MOISTURE DEFICIENT, SUPPLY NEW SEEDING WITH ADEQUATE WATER FOR PLANT GROWTH UNTIL THEY ARE FIRMLY ESTABLISHED, IF FEASIBLE. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.
MAINTENANCE:
IRRIGATION - IF SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION, IF FEASIBLE.
REPAIRS - INSPECT ALL SEEDED AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDING WITHIN THE PLANTING SEASON, IF POSSIBLE.
1) IF STAND IS INADEQUATE FOR EROSION CONTROL, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED.
2) IF STAND IS OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS.

PLAN
SCALE: 1" = 50'

PROFILE
SCALE HORIZ: 1" = 50'
VERT: 1" = 5'

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|--|--|--|--|--|--|---|--|---|--|--------------------------------|
| DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: [Signature] DATE: 6-13-94 CHIEF, BUREAU OF UTILITIES: [Signature] DATE: 6-13-94 | | RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md. 21045 410-997-8900 FAX: 410-997-9282 CHIEF, WATER & SEWER DESIGN DIVISION DATE: 6-7-94 | | DES: C.M. DRN: C.M. CHK: J.O. DATE: 5-25-90 | | SEWER PLAN AND PROFILE 600 SCALE MAP NO. 17 BLOCK NO. B | | WATER & SEWER SUNSET FARM ROAD 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND CONTRACT No. 20-3310 CAPITAL PROJECT No. W-8186 | | SCALE AS SHOWN SHEET 3 OF 3 |
|--|--|--|--|--|--|---|--|---|--|--------------------------------|