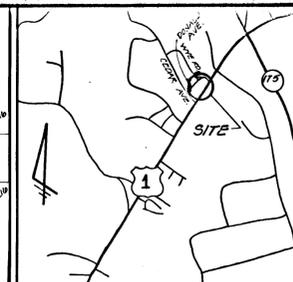


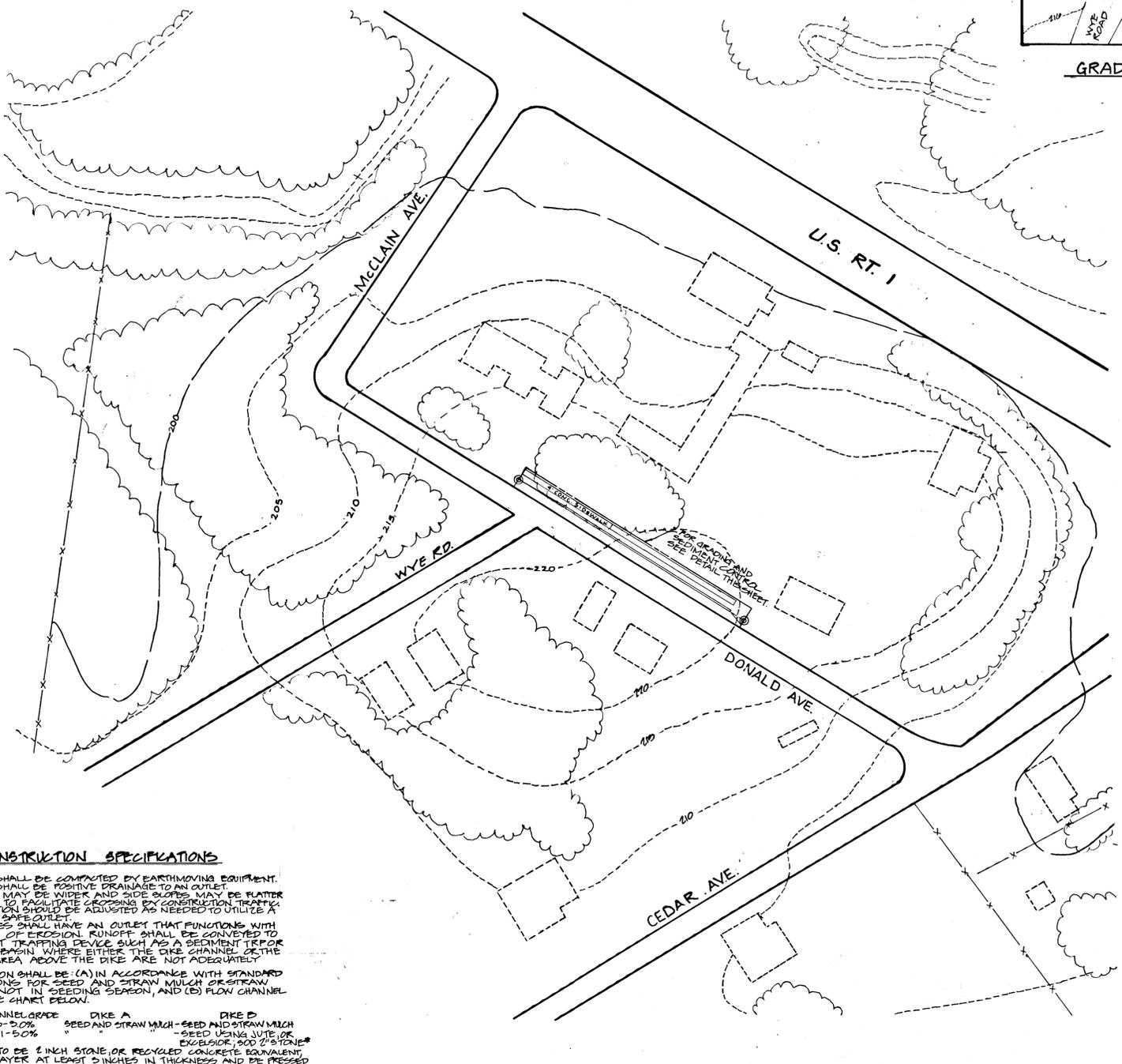
GRADING AND SEDIMENT CONTROL

SCALE: 1"=40'



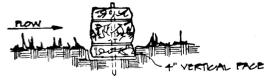
VICINITY MAP

SCALE: 1"=2000'

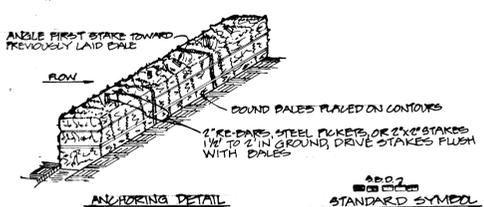


DRAINAGE AREA MAP

SCALE: 1"=50'



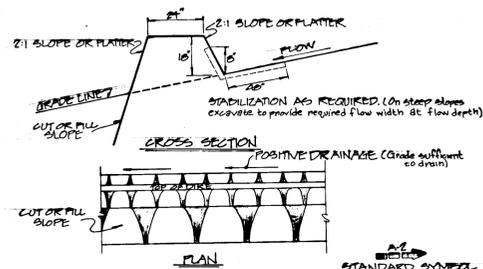
BEDDING DETAIL



STRAW BALE DIKE DETAIL

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES AND PLACED SO THE BUILDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH TO THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.



EARTH DIKE DETAIL

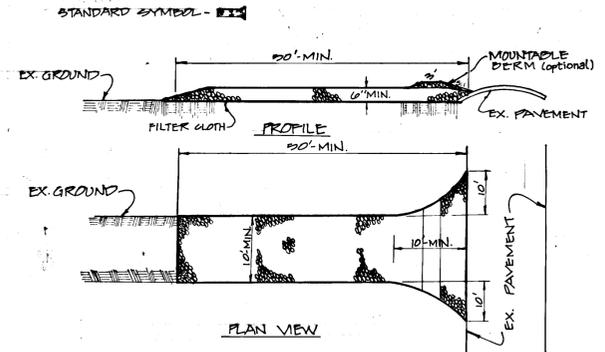
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTHMOVING EQUIPMENT.
 2. ALL DIKES SHALL BE 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 LOCATIONS SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVERTED 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 ADEQUATE.
 6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, AND (B) FLOW CHANNEL AS PER THE CHART BELOW.
- | TYPE | CHANNEL GRADE | DIKE A | DIKE B |
|------|---------------|----------------------|----------------------|
| 1. | 1-5% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2. | 21-50% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
- * STONE TO BE 2 INCH STONE OR RECYCLED CONCRETE EQUIVALENT IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE TOP SOIL WITH CONSTRUCTION EQUIPMENT (Approved equivalents may be substituted for any of the above materials.)
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND PROVIDE OTHER SEDIMENT CONTROL DEVICES - 4 DAYS
3. RAUGH GRADE SITE. IMMEDIATELY STABILIZE WITH TEMPORARY SEEDING AND MULCHING - 2 DAYS
4. CONSTRUCT CURB, GUTTERS, SIDEWALKS, AND PAVING FOR DONALD AVENUE WIDENING - 7 DAYS
5. AFTER ALL CONSTRUCTION HAS BEEN COMPLETED AND WITH THE APPROVAL OF THE HOWARD COUNTY SOILS DISTRICT, REMOVE ALL SEDIMENT CONTROL DEVICES AND CLEAR SITE OF ANY AND ALL DEBRIS - 2 DAYS
6. STABILIZE ALL DISTURBED AREAS - 2-3 DAYS



STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE: USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 20 FOOT MIN LENGTH WOULD APPLY)
3. THICKNESS: NOT LESS THAN 8 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 INVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE FILTERED AT THE ENTRANCE. IF PILING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5" SLOPES WILL BE PERMITTED.
7. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND 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 WHEN DRAINING INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

DEVELOPMENT FACILITATORS, INC.
504 BALTIMORE ANNAPOLIS BLVD.
SEVERNA PARK, MD. 21146
(301) 647-2727

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
NO. 9358
JPL
3/16/87
DATE

DEVELOPER'S CERTIFICATE
I, JAMES C. HADWORTH, CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

JAMES C. HADWORTH
3-7-87
DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
D. Helms
3-12-87
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED:
STEPHEN L. HALM
3-12-87
HOWARD SOIL CONSERVATION DISTRICT DATE

OFFICE OF PLANNING & ZONING:
APPROVED:
3-12-87
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
D. R. ...
3-12-87
DATE

SUBDIVISION NAME	RED ROOF #11N	SECTION/AREA	PARCEL
PLAT No.	8	TAX / ZONE MAP 43	ELEC. DIST. 6
WATER CODE		SEWER CODE	CENSUS TR. 178

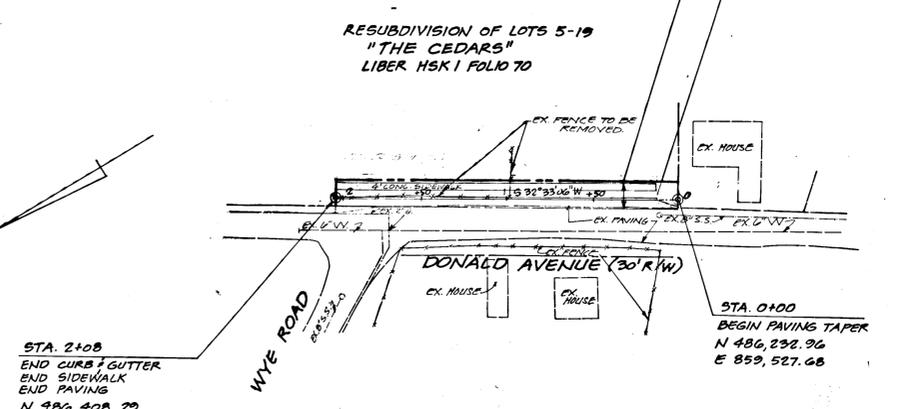
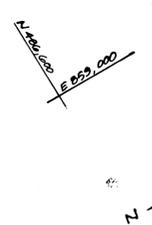
ROAD CONSTRUCTION PLAN
R/W WIDENING
DONALD AVENUE

DESIGNED: JPL
DRAFTING: JPL
SCALE: AS SHOWN
SHEET 1 OF 2

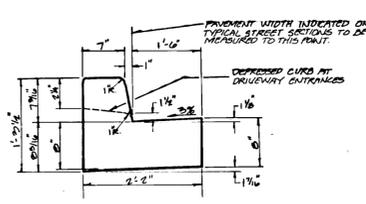
BLOCK & PARCEL 178

1251

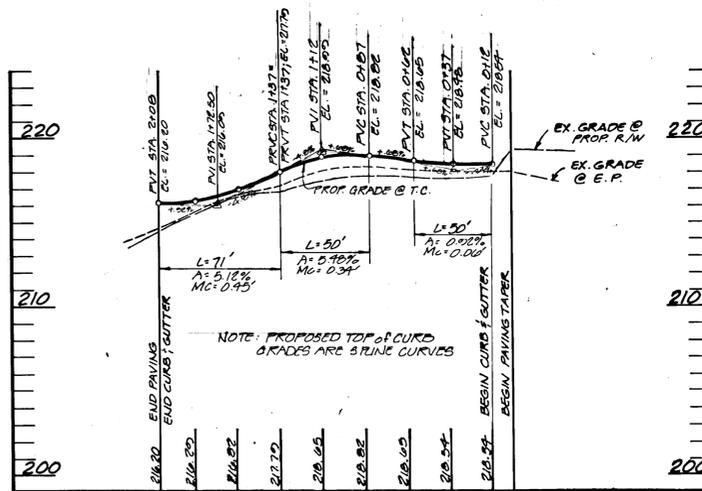
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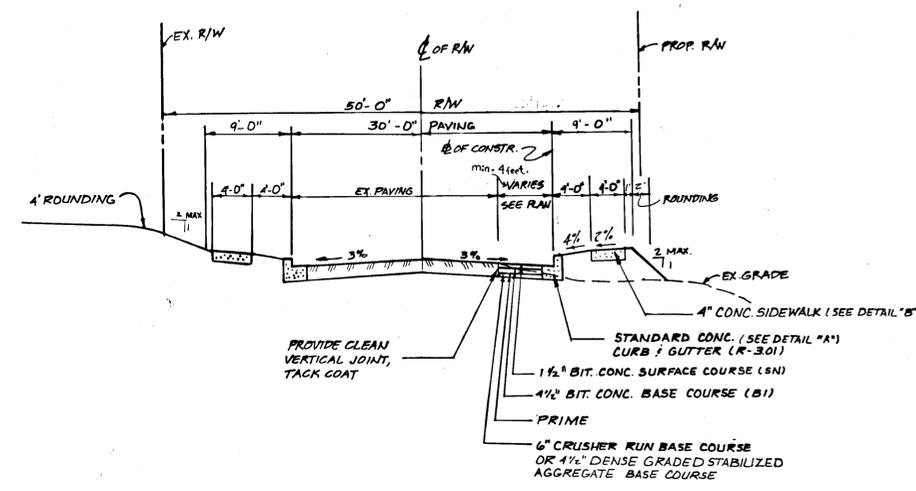
PLAN
Scale: 1"=50'



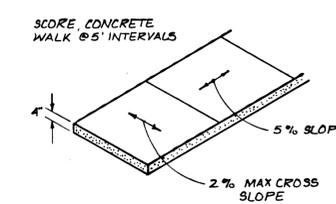
DETAIL - A
STANDARD 7" COMBINATION CURB AND GUTTER



ROAD PROFILE DONALD AVENUE
SCALE: HORIZ. 1"=30'
VERT. 1"=5'



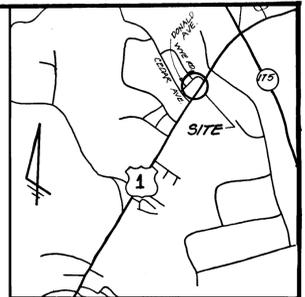
DONALD AVENUE TYPICAL HALF SECTION 50' R/W
NOT TO SCALE



TYPICAL SIDEWALK - DETAIL 'B'
(NOT TO SCALE)

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (892-2437)
 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1 (B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAP. 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
 6. 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.
 7. SITE ANALYSIS:
 - TOTAL AREA OF SITE: 9,800 sq. ft. (.044 ac.)
 - AREA DISTURBED: 6,272 sq. ft. (.144 ac.)
 - AREA TO BE PAVED: 800 sq. ft. (.021 ac.)
 - AREA TO BE VEGETATIVELY STABILIZED: 4,116 sq. ft. (.094 ac.)
 - TOTAL CUT: 156 cu. yd.
 - TOTAL FILL: 276 cu. yd.
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.



GENERAL NOTES

1. ALL PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION AND SPECIFICATIONS OF HOWARD COUNTY # MSHA.
2. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF MAINS BY DIGGING TEST PITS, BY HAND, AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF CONSTRUCTION.
3. ALL UTILITY COMPANIES SHALL NOTIFIED 24 HRS. IN ADVANCE OF CONSTRUCTION.
4. ALL TRAFFIC SERVICES, PARKING & SIGNING TO BE DONE IN ACCORDANCE WITH THE "MANUAL OF TRAFFIC CONTROL DEVICES", 1978 EDITION.
5. SAG AND CREST VERTICAL CURVES WERE DESIGNED IN ACCORDANCE WITH THE "HO. CO. DESIGN MANUAL", VOL. III.
6. THE CONTRACTOR/DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION 24 HRS. IN ADVANCE OF COMMENCEMENT OF WORK. PH. 772-7272.

PERMANENT SEEDING NOTES

- APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG LIVED VEGETATIVE COVER IS NEEDED.
- SEEDBED PREPARATION**
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
- SOIL AMENDMENTS**
IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES PREFERRED. APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREA FORM FERTILIZER (9 LBS/1000 SQ. FT.) ACCEPTABLE. APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.
- SEEDING**
FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 40 LBS PER ACRE (14 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 40 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE 2,06 LBS/1000 SQ. FT.) OF WEEPING LOVEGRASS DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28. PROTECT SITE 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 40 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.
- MULCHING**
APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GALS PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.
- MAINTENANCE**
INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
- SEEDBED PREPARATION**
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
- SOIL AMENDMENTS**
APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)
- SEEDING**
FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS/1000 SQ. FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (07 LBS/1000 SQ. FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED 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/1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.
- NOTE: REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

DEVELOPMENT FACILITATORS, INC.
504 BALTIMORE ANNAPOLIS BLVD.
SEVERNA PARK, MD. 21146
(301) 647-2727

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature]
SIGNATURE OF ENGINEER
DATE: 3/12/87

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

[Signature]
SIGNATURE OF DEVELOPER
DATE: 3-7-87

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENT.

[Signature]
U.S. SOIL CONSERVATION SERVICE
DATE: 3-12-87

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED:
[Signature]
HOWARD SOIL CONSERVATION DISTRICT
DATE: 3/12/87

OFFICE OF PLANNING & ZONING
SUPERVISOR, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION.

[Signature]
DATE: 3-12-87

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER AND SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

[Signature]
DATE: 3-11-87

CHIEF, BUREAU OF ENGINEERING

SUBDIVISION NAME	SECTION/AREA	PARCEL
RED ROOF INN		178
PLAT NO.	BLOCK NO./ZONE	ELEC. DIST./CONSUS TR.
	8	MAP 43 6
WATER CODE	SEWER CODE	

ROAD CONSTRUCTION PLAN R/W WIDENING DONALD AVENUE

DESIGNED: JPL
DRAFTING: CD/LT
SCALE: AS SHOWN
SHEET 2 OF 2

BLOCK 8, PARCEL 178

1251