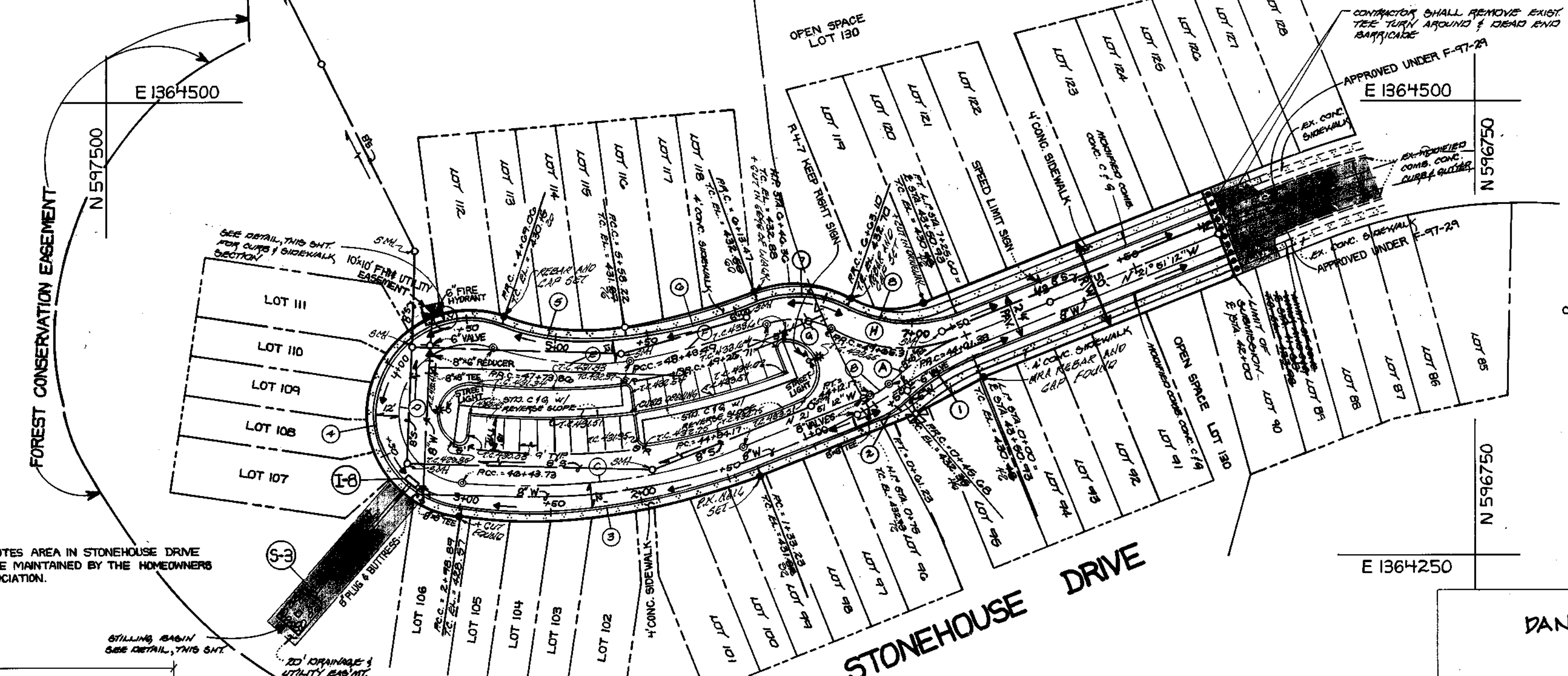
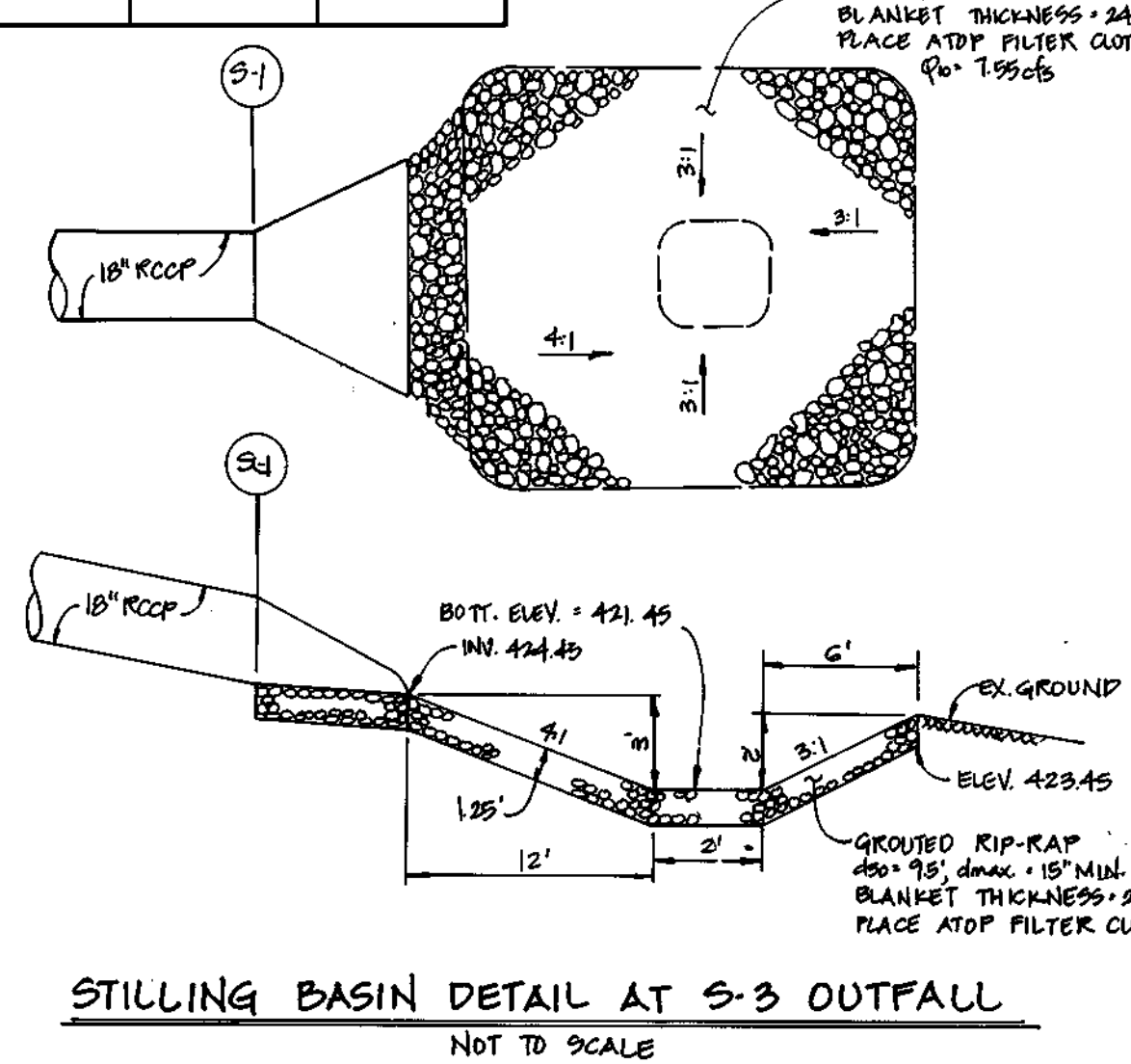
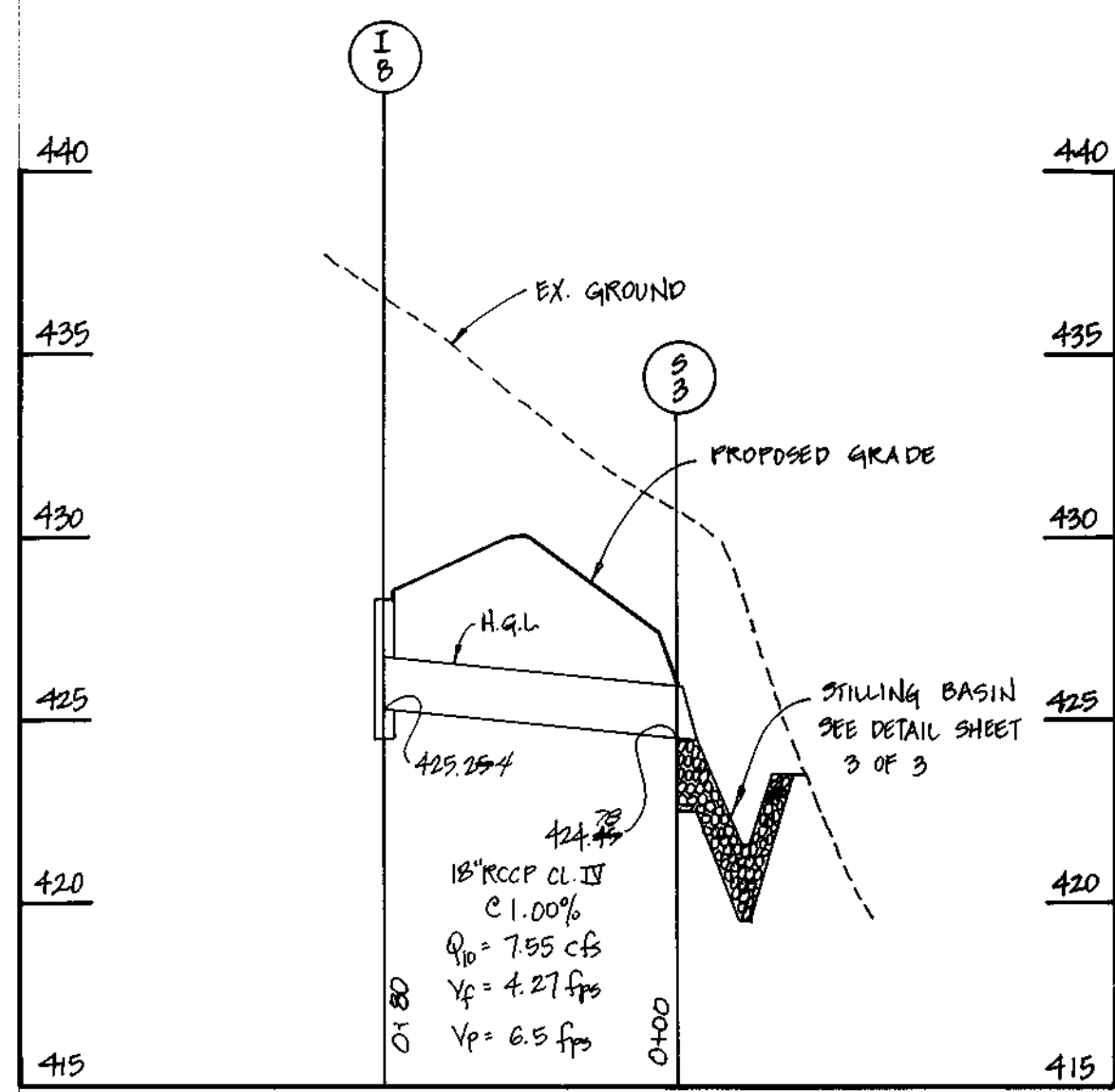


| STRUCTURE SCHEDULE | | | | | | | |
|--------------------|---------------|----------|-----------|------------------|-----------------------|--------|------------------------------|
| STRUCTURE NUMBER | TOP ELEVATION | INN. IN. | INV. OUT. | ROAD NAME | ROAD STA. | OFFSET | REMARKS |
| I-8 | TOP OF GRADE | - | 423.294 | STONEHOUSE DRIVE | L.P. 91A 3130 | - | DOUBLE 'S' W/RETICULAR GRATE |
| S-3 | 426.208 | 424.4978 | 424.4578 | - | N 597305 E 1364230 | - | CONC. END SECTION |

| LINEAR PROFILE CURVE DATA | | | | | | |
|---------------------------|---------|---------|--------------|------------------------|--|--|
| CURVE # | L | Δ | T | CHORD AND DISTANCE | | |
| 1 | 115.03' | 48.08' | 22° 45' 14" | 133° 13' 50" W 46.38' | | |
| 2 | 39.12' | 13.55' | 22° 45' 12" | 123° 13' 48" W 15.45' | | |
| 3 | 322.84' | 103.02' | 22° 45' 12" | 107° 17' 19" W 103.85' | | |
| 4 | 91.00' | 170.17' | 191° 10' 33" | 67° 10' 00" E 101.62' | | |
| 5 | 161.07' | 09.10' | 20° 07' 25" | 6° 05' 23" W 68.60' | | |
| 6 | 804.00' | 78.22' | 14° 10' 29" | 6° 14' 49" E 78.00' | | |
| 7 | 24.00' | 49.03' | 82° 39' 33" | 62° 28' 34" W 41.92' | | |
| 8 | 68.00' | 62.60' | 82° 39' 33" | 62° 28' 34" W 60.52' | | |

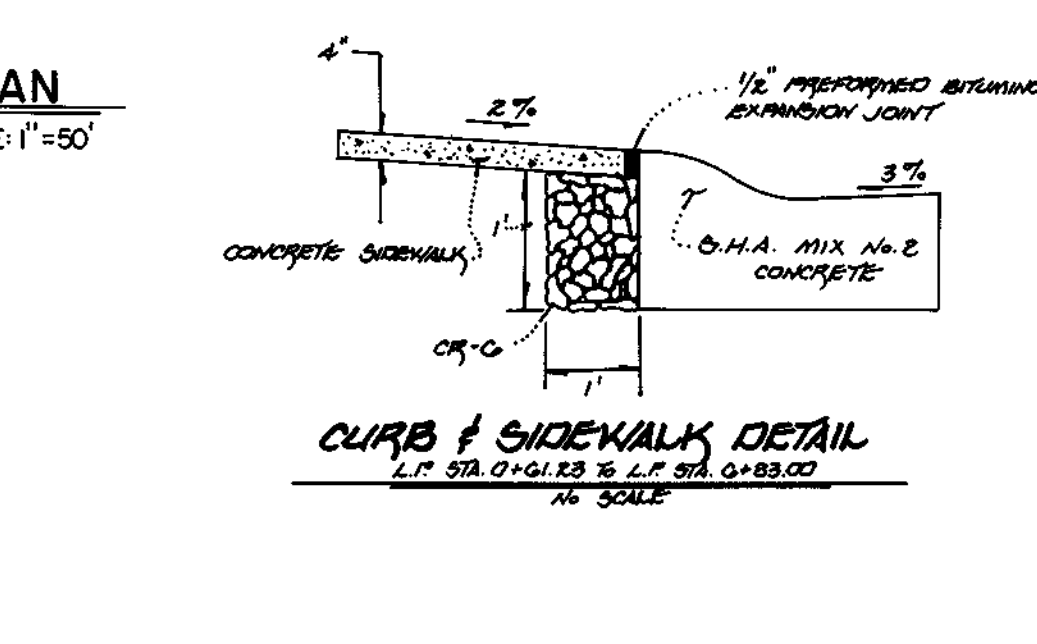
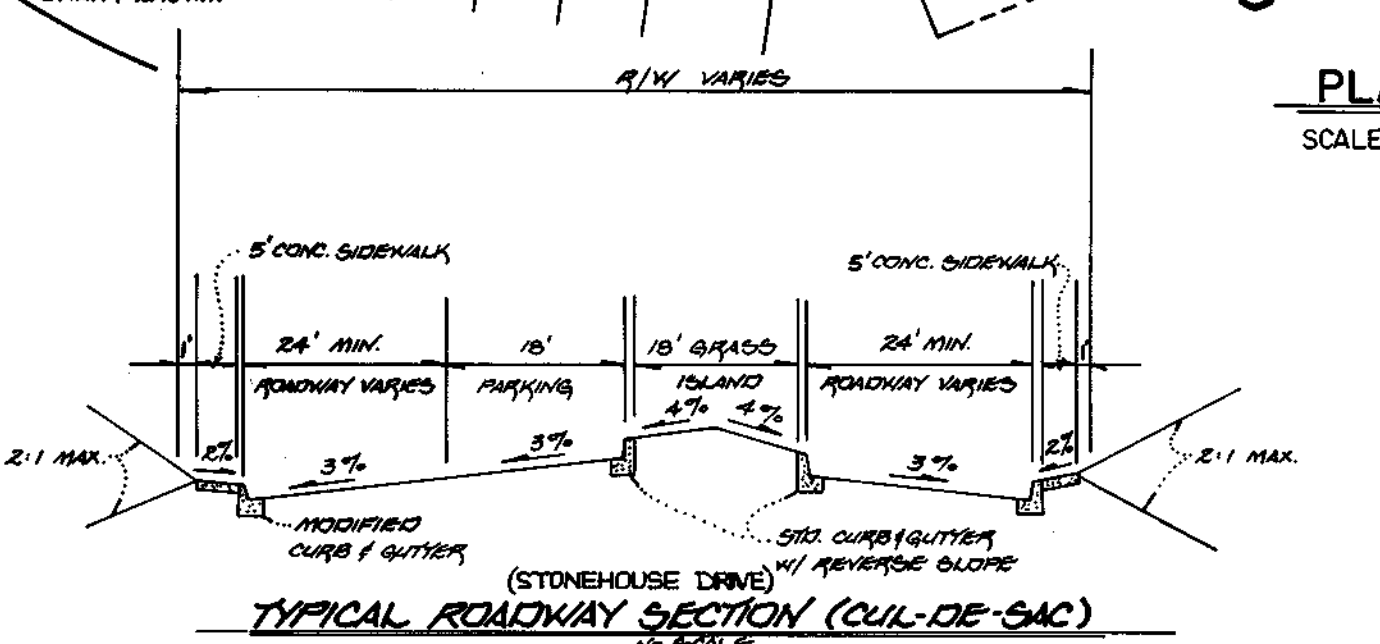
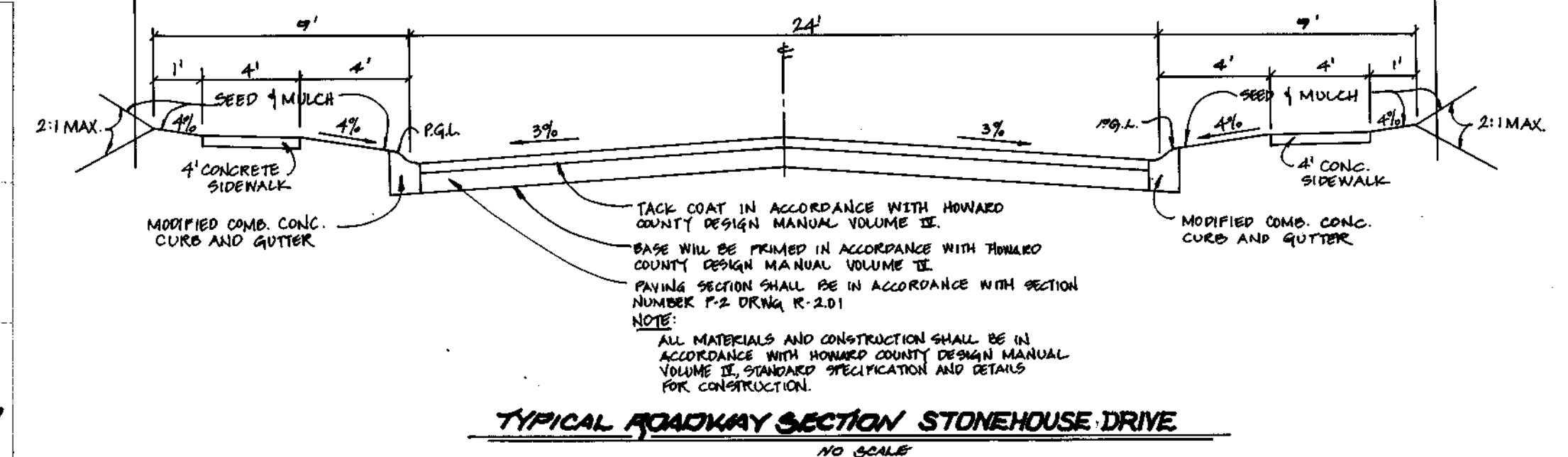
| E CURVE DATA | | | | | | |
|--------------|---------|---------|--------------|-------------------------------|--|--|
| CURVE # | L | Δ | T | CHORD AND DISTANCE | | |
| A | 127.03' | 50.45' | 22° 45' 14" | 26.55' N 33° 13' 50" W 50.12' | | |
| B | 27.16' | 10.79' | 22° 45' 12" | 11° 33' 13' 48" W 10.32' | | |
| C | 313.84' | 103.02' | 22° 45' 12" | 107° 17' 19" W 103.85' | | |
| D | 91.00' | 170.17' | 191° 10' 33" | 67° 10' 00" E 101.62' | | |
| E | 161.07' | 9.10' | 20° 07' 25" | 6° 05' 23" W 68.60' | | |
| F | 316.00' | 78.22' | 14° 10' 29" | 6° 14' 49" E 78.00' | | |
| G | 42.00' | 82.39' | 82° 39' 33" | 62° 28' 34" W 41.92' | | |
| H | 80.00' | 78.22' | 82° 39' 33" | 62° 28' 34" W 70.97' | | |



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard Blood 2/7/97 DATE

Andrew M. Suck 1-20-97 DATE



DANIELS MILL OVERLOOK
SECTION 2 AREA 2
LOTS 85 THRU 130

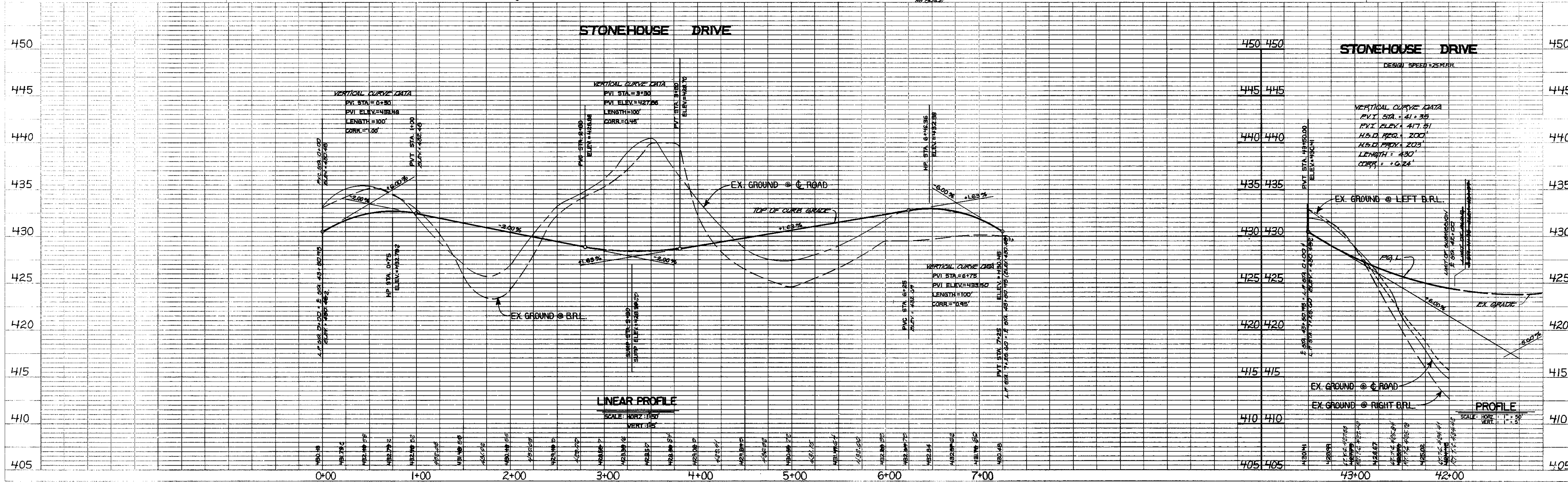
STONEHOUSE DRIVE
PLAN AND PROFILE

OWNER
DANIELS MILL OVERLOOK, LLC
46 MR. MICHAEL DIFFENDAL
SILVER SPRING, MARYLAND 20904

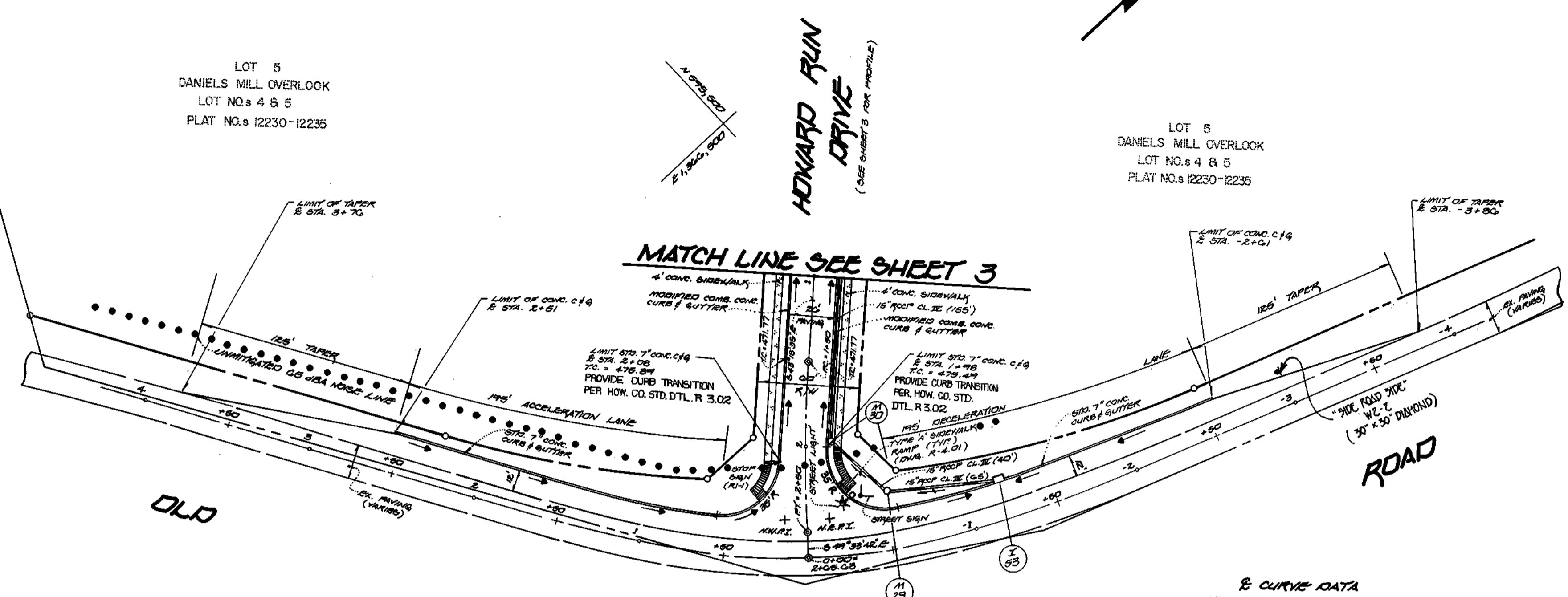
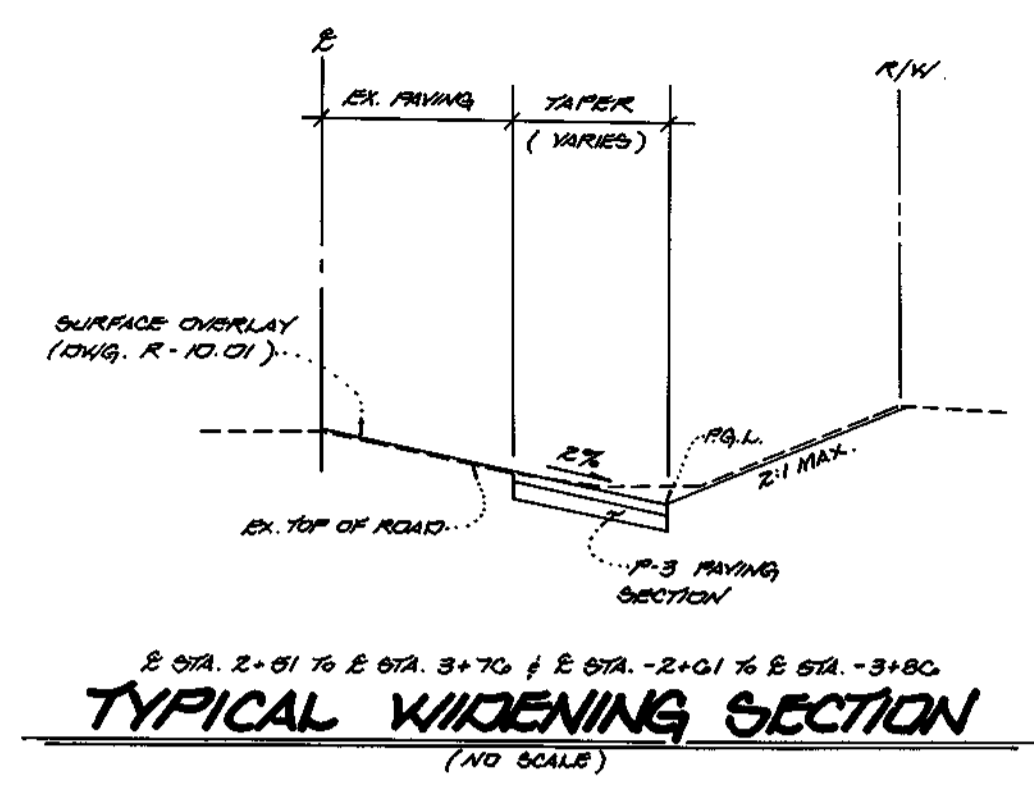
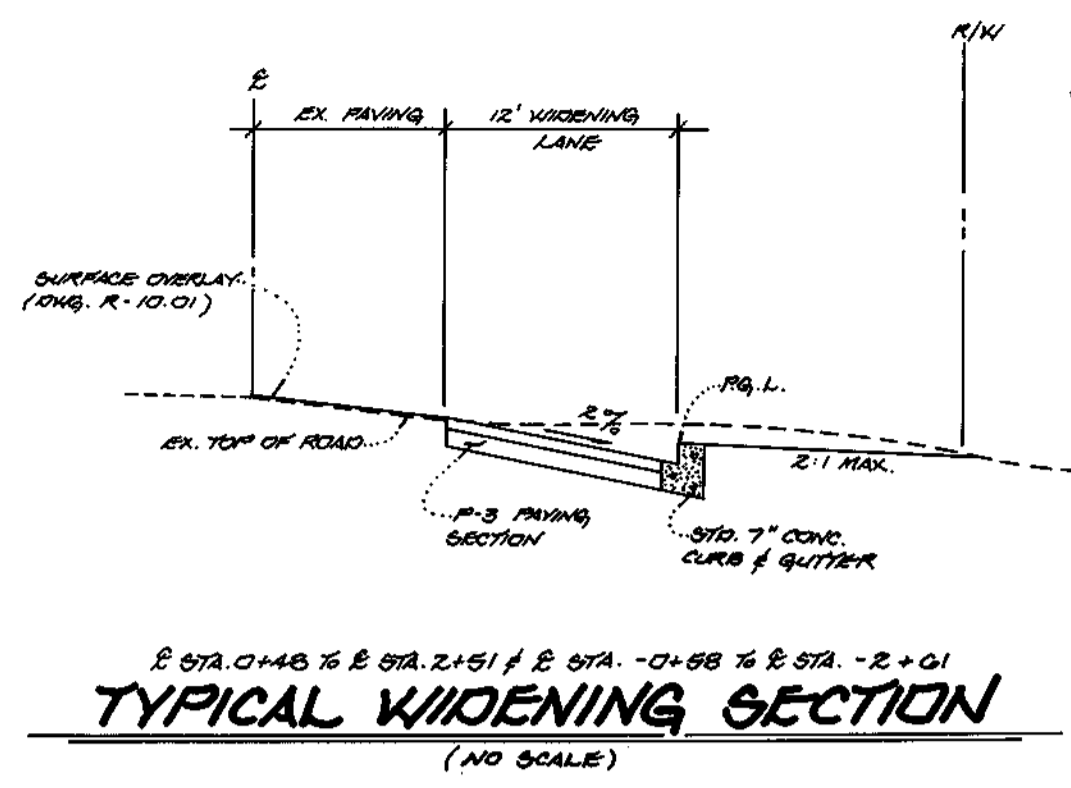
DEVELOPER
THE RYLAND GROUP
c/o MR. CHARLES O DONOVAN
GALLERIA TOWERS
SUITE 6705 1447 YORK ROAD
LUTHERVILLE, MARYLAND 20959

SCALE: AS SHOWN DATE: AUGUST 1996 DWG. NO. 2 OF 3
DES. JAYESH PANCHOLI DRN. LEE MCCULLOUGH C.K.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 20904
410.481.2095



1783



**8 CURVE DATA
HOWARD RUN DRIVE**
 STA. 1+80 TO STA. 2+80
 R = 970.43'
 L = 1003.00'
 Δ = 92° 15' 07"
 T = 60.05'
 CHG. = 340° 00' 00", 99.75'

PLAN
SCALE: 1" = 50'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
John P. ... 2/5/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. ... 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE



DANIELS MILL OVERLOOK
 SECTION 2, AREA 3
 LOTS 131 THRU 176 AND PARCEL 'B'
 SECOND ELECTION DISTRICT HOWARD COUNTY, MD.

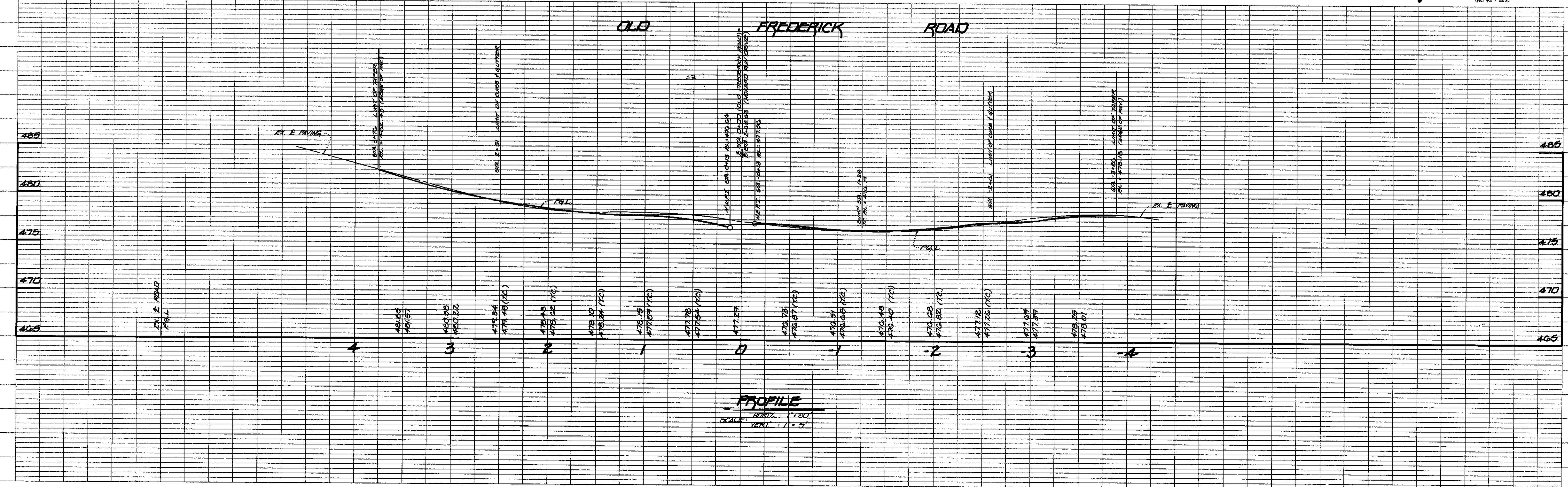
OLD FREDERICK ROAD
 PLAN & PROFILE
HOWARD RUN DRIVE
 PLAN

OWNER
 DANIELS MILL OVERLOOK, LLC
 5600 WOODBURN DRIVE
 SILVER SPRING, MD 20904

DEVELOPER
 THE PINLAND GROUP
 c/o MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE #705 1947 YORK ROAD
 LUTHERVILLE, MARYLAND 21058

SCALE: AS SHOWN DATE: AUG 27, 1996 DWG. NO. 2 OF 25
 DES. B.J.K. DRN. J.C.L. CHK. C.J.C.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL Pk.
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2855



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

1783

8 CURVE DATA
STONEHOUSE DRIVE
STA. 14+07.30 TO STA. 24+70.97
R = 625.00'
L = 1027.21'
Δ = 112° 00' 10"
T = 830.95'
CHD. = N 60° 04' 59" W, 871.02'

8 CURVE DATA
STONEHOUSE DRIVE
STA. 7+95.50 TO STA. 12+30.75
R = 600.00'
L = 441.19'
Δ = 42° 07' 30"
T = 231.10'
CHD. = S 70° 29' 11" W, 431.82'

8 CURVE DATA
STONEHOUSE DRIVE
STA. 7+95.50 TO STA. 13+67.77
R = 600.00'
L = 502.21'
Δ = 55° 41' 14"
T = 303.05'
CHD. = S 70° 42' 30" W, 541.87'

LOT 5
DANIELS MILL OVERLOOK
LOT NO.s 4 & 5
PLAT NO.s 12230 - 12235

PROPERTY OF
LAUREN A. & GLEN T. SWANGER
L. 3245 F.50

8 CURVE DATA
WATER WHEEL COURT
STA. 0+44.85 TO STA. 2+05.05
R = 310.00'
L = 220.72'
Δ = 40° 01' 12"
T = 119.08'
CHD. = S 14° 34' 07" W, 210.20'

PLAN
SCALE: 1" = 50'

NOTE: CURB TRANSITION AT STORM DRAIN INLETS SHALL BE PROVIDED PER HO. CO. STD. DETAIL R-3.06



DANIELS MILL OVERLOOK
SECTION 2, AREA 3
LOTS 131 THRU 176 AND PARCEL 'B'
SECOND ELECTION DISTRICT HOWARD COUNTY, MD.

STONEHOUSE DRIVE CARROLL WIND DRIVE
PLAN 1 PROFILE

WATER WHEEL COURT
PLAN

| OWNER | DEVELOPER |
|--|---|
| DANIELS MILL OVERLOOK, LLC 5% MR. MICHAEL O'DONOVAN 11700 TERN ROAD SILVER SPRING, MD 20904 | THE RIVLAND GROUP C/O MR. CHARLES O'DONOVAN GALLERIA TOWERS SUITE # 705 147 YORK ROAD LUTHERVILLE, MARYLAND 21092 |

SCALE: AS SHOWN DATE: AUG. 27, 1990 DWG. NO. 4 OF 25
DES. B.J.K. DRN. J.C.L. CHK. C.J.C.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDORRE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
4100-901 - 2995

APPROVED: DEPARTMENT OF PLANNING AND ZONING

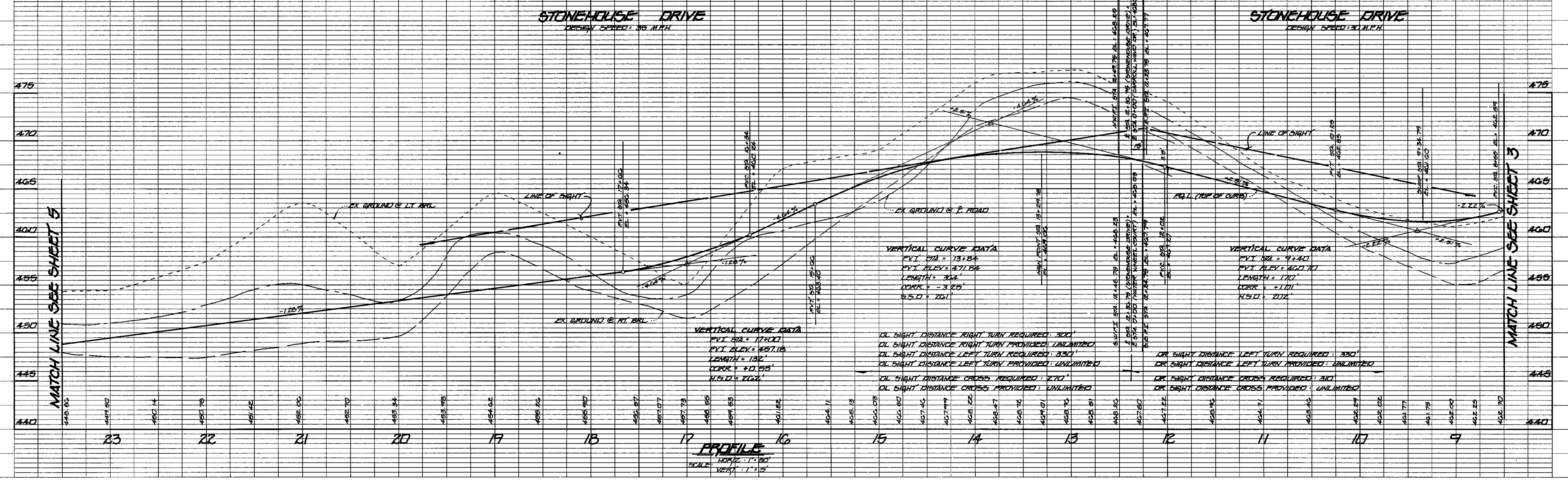
Richard Blood 3/5/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

W.D. Dammann 2/25/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Richard M. Damer 2-20-97
CHIEF, BUREAU OF HIGHWAYS DATE

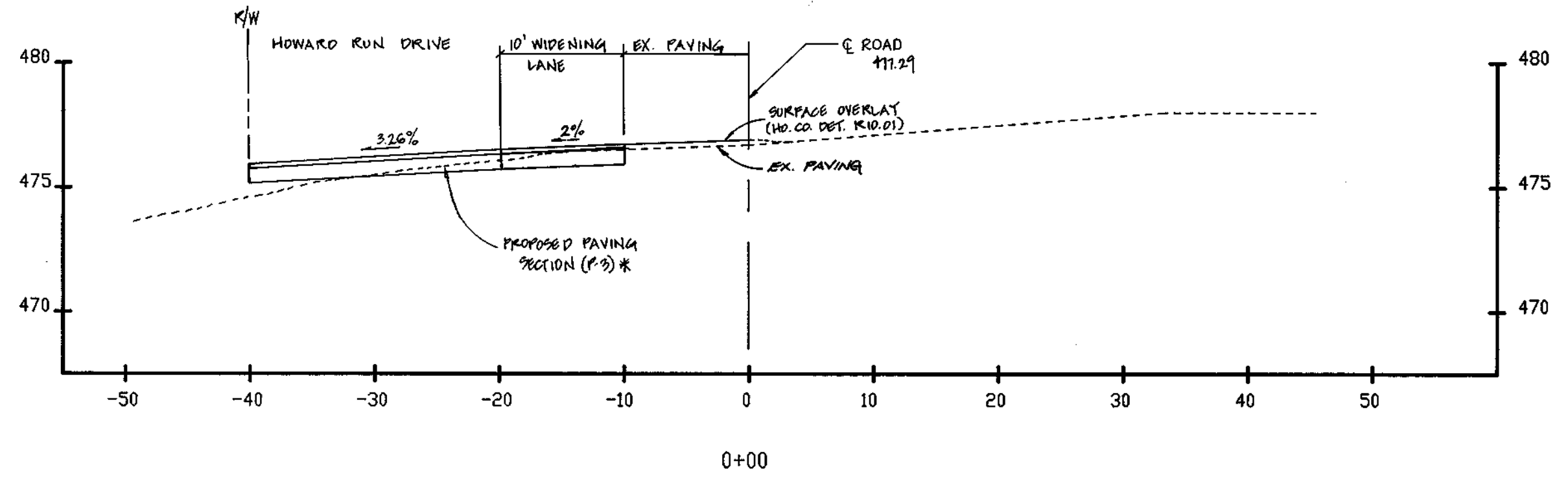
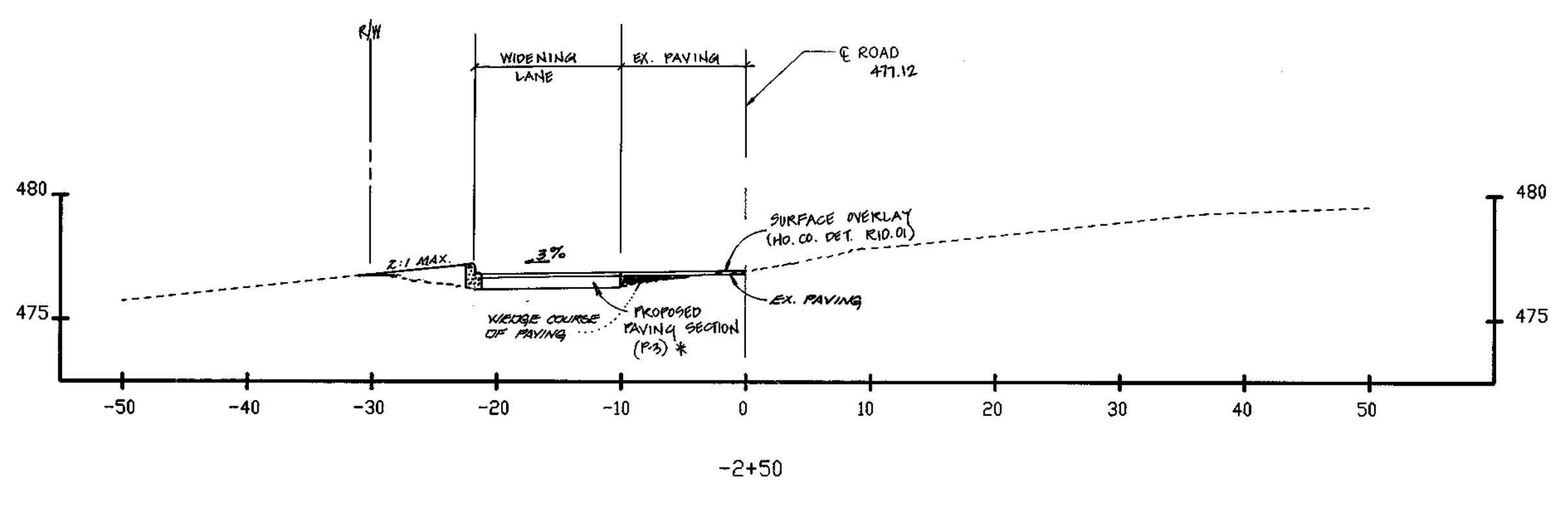
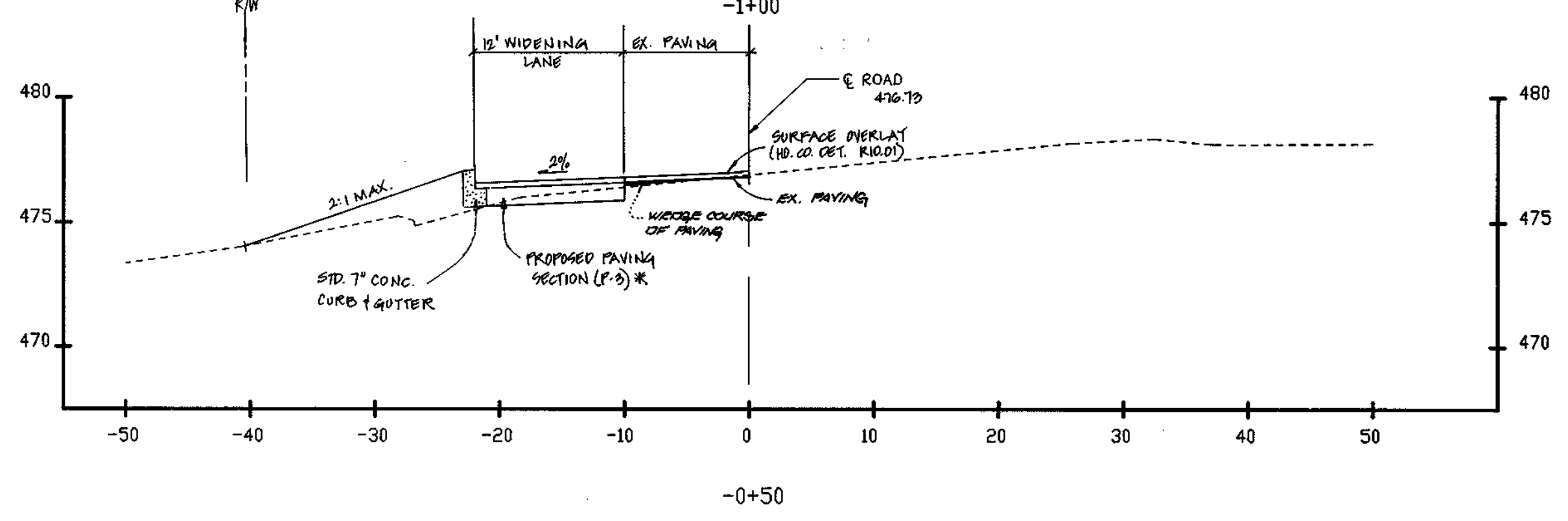
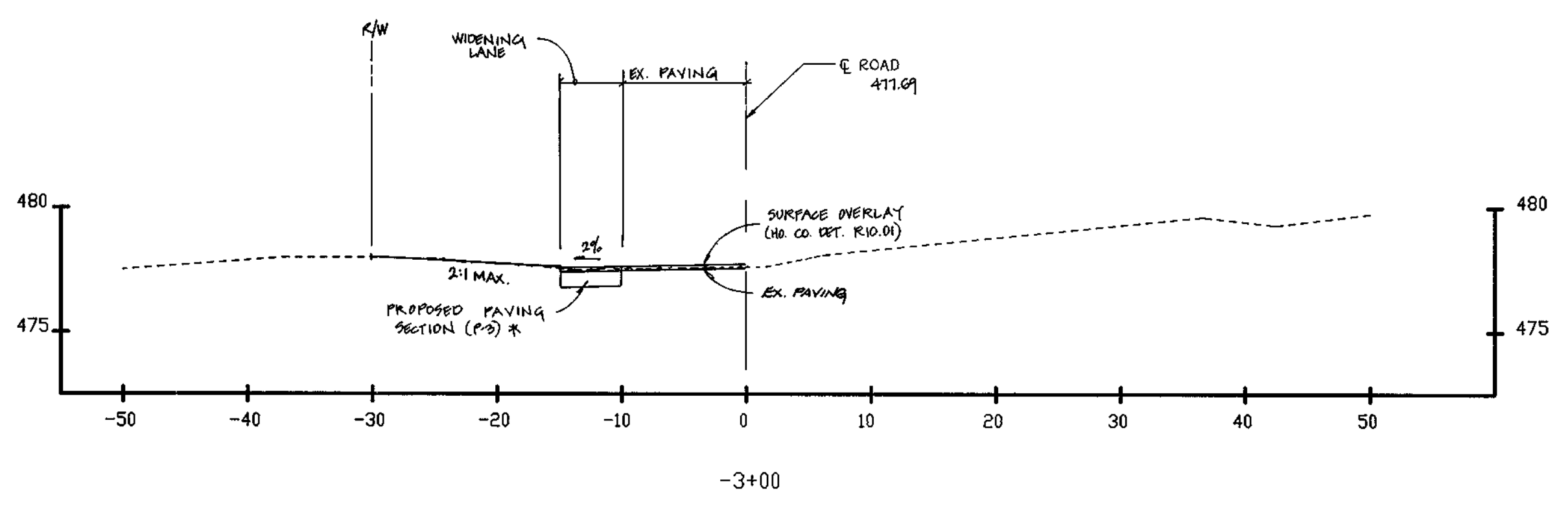
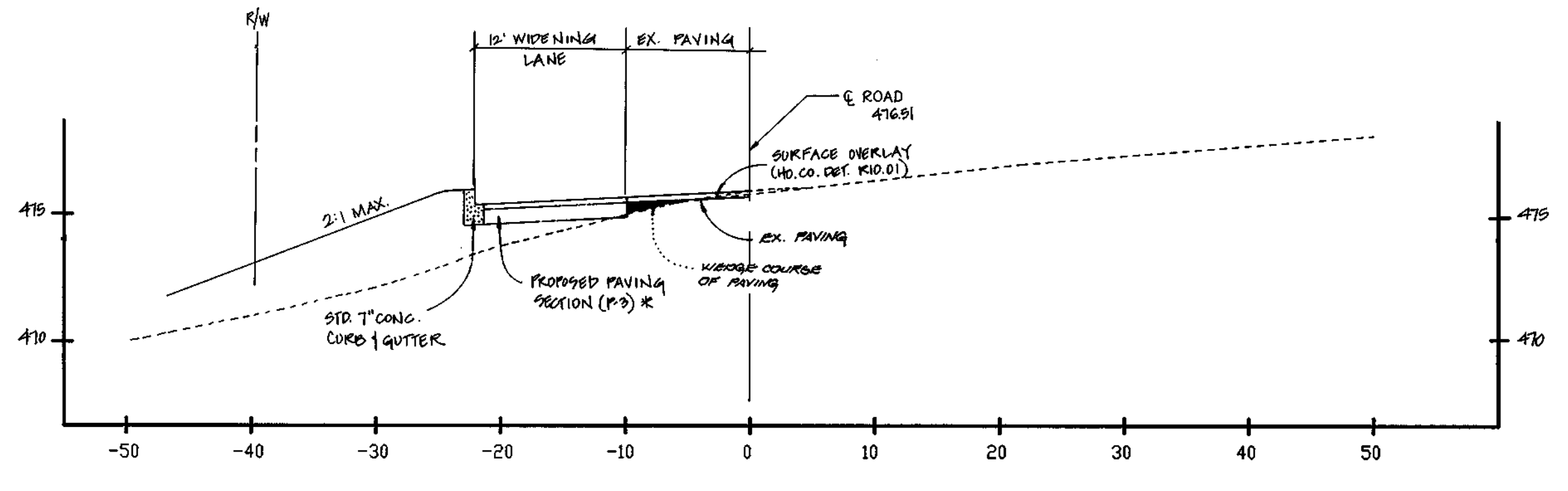
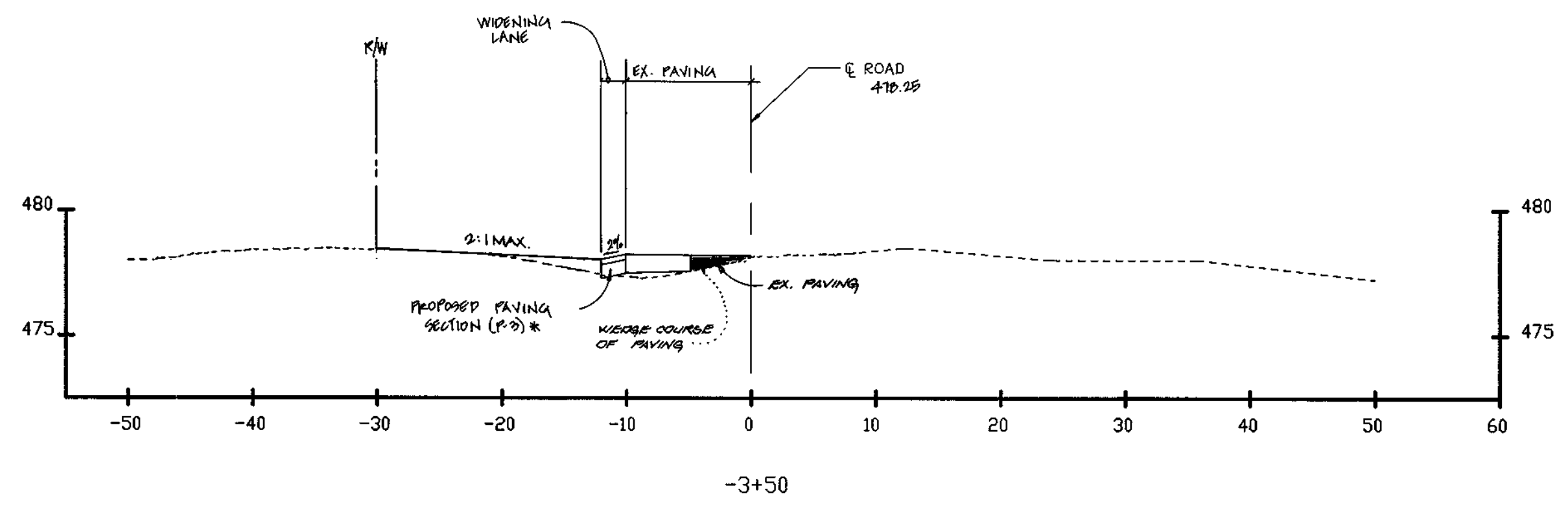
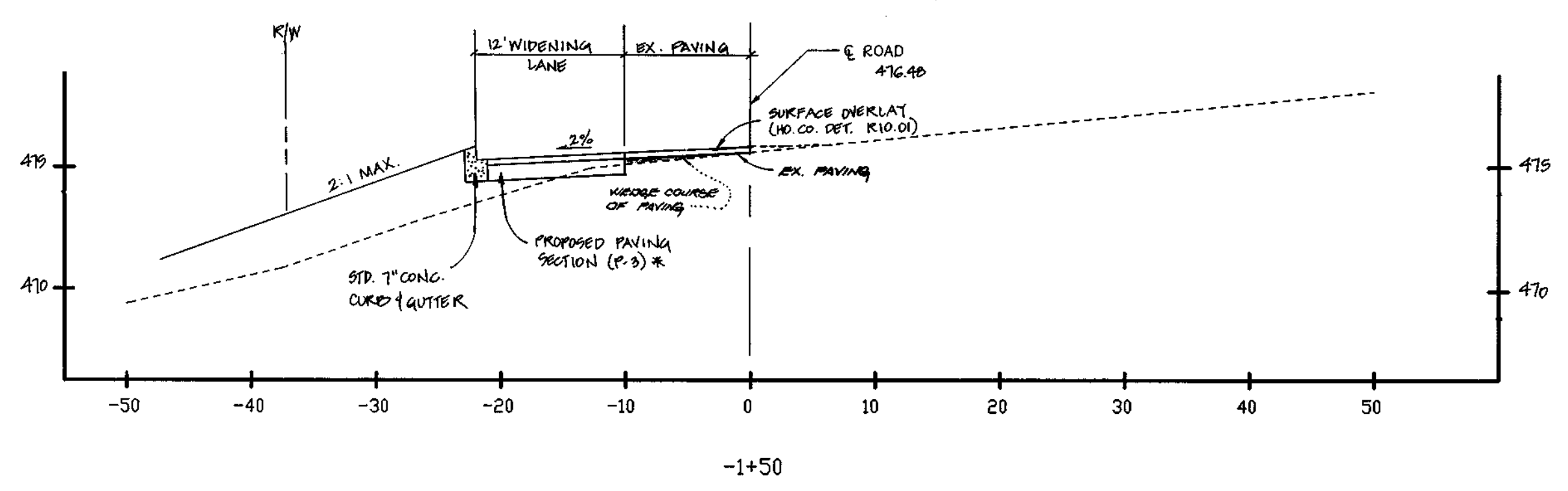
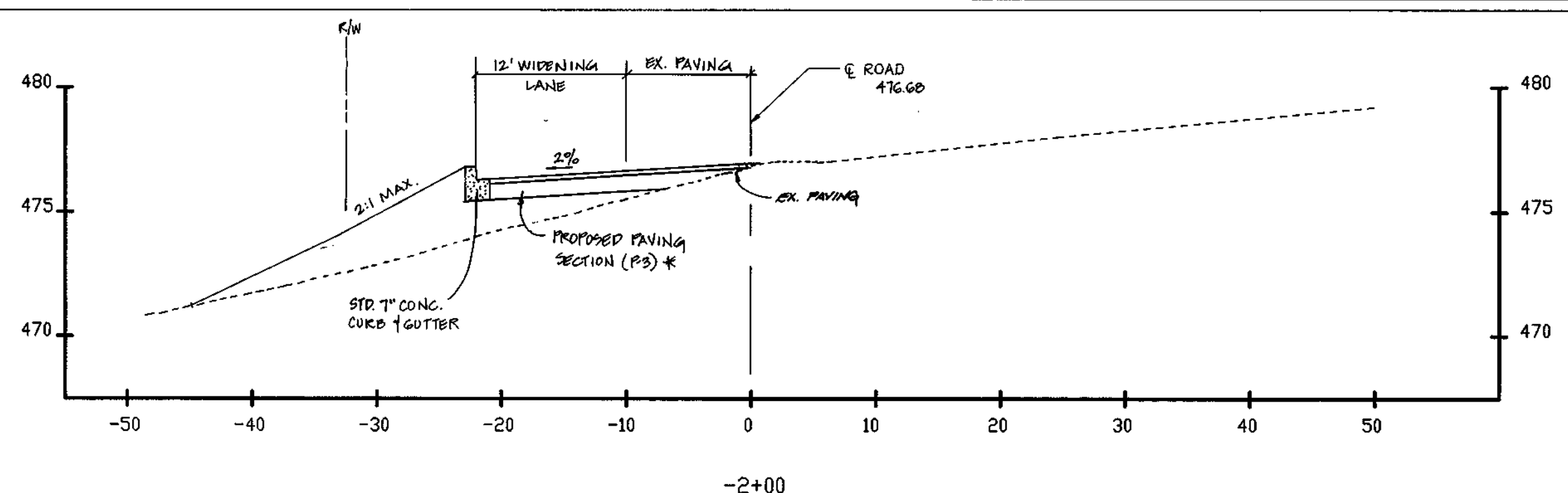


1783
1781

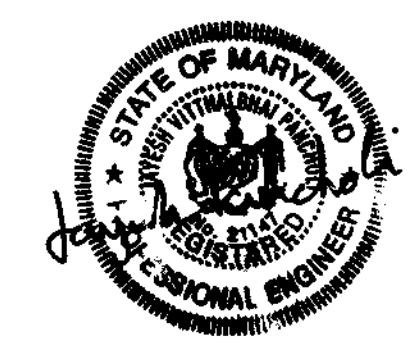
APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daulton 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Michael Blood 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John Deane 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



* PAVING SECTION TO BE (P.S.) PER HOWARD COUNTY DETAIL R2.01



1783

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTHAZAR NATIONAL PIKE
 ELLETTT CITY, MARYLAND 21114
 (410) 461-2000

OWNER
 DANIELS MILL OVERLOOK, L.L.C.
 C/O MR. MICHAEL DIFFENDAL
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE RYLAND GROUP
 C/O MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE 705 WHIT YORK ROAD
 LUTHERVILLE, MARYLAND 21095

CROSS SECTIONS - OLD FREDERICK ROAD
 DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 191 THRU 176 AND PARCEL 'B'

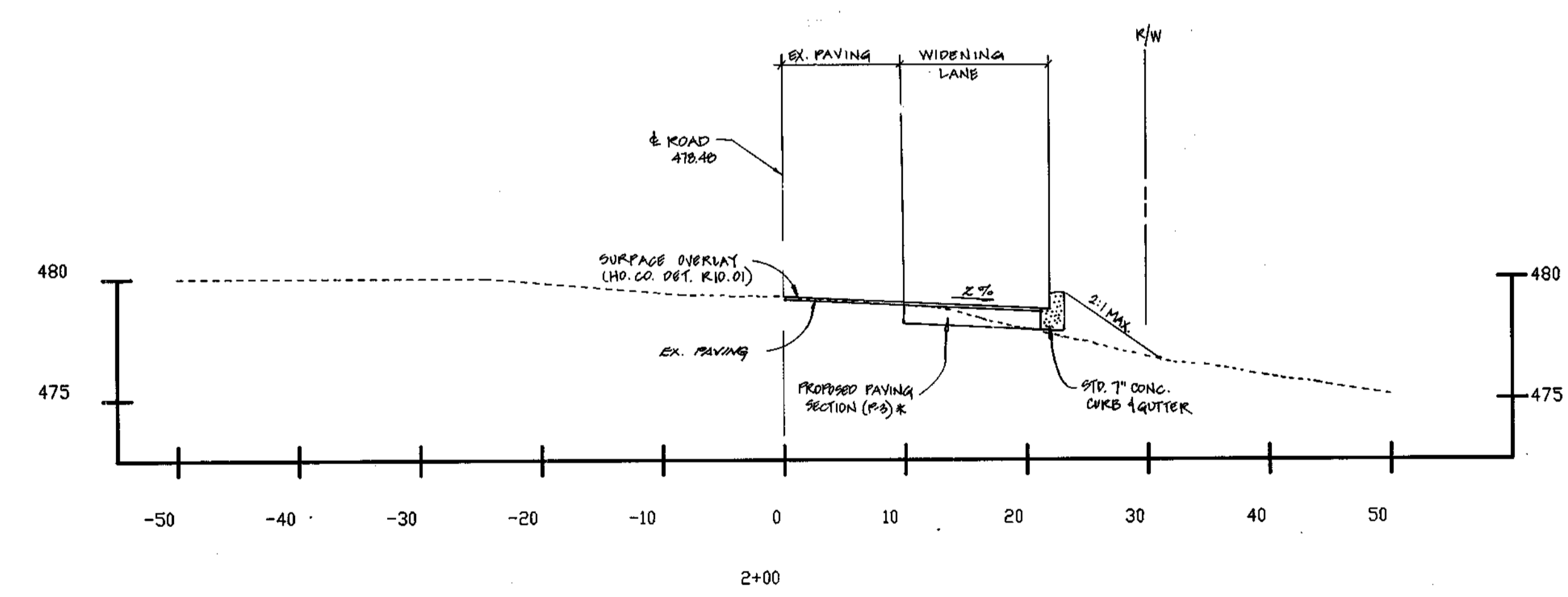
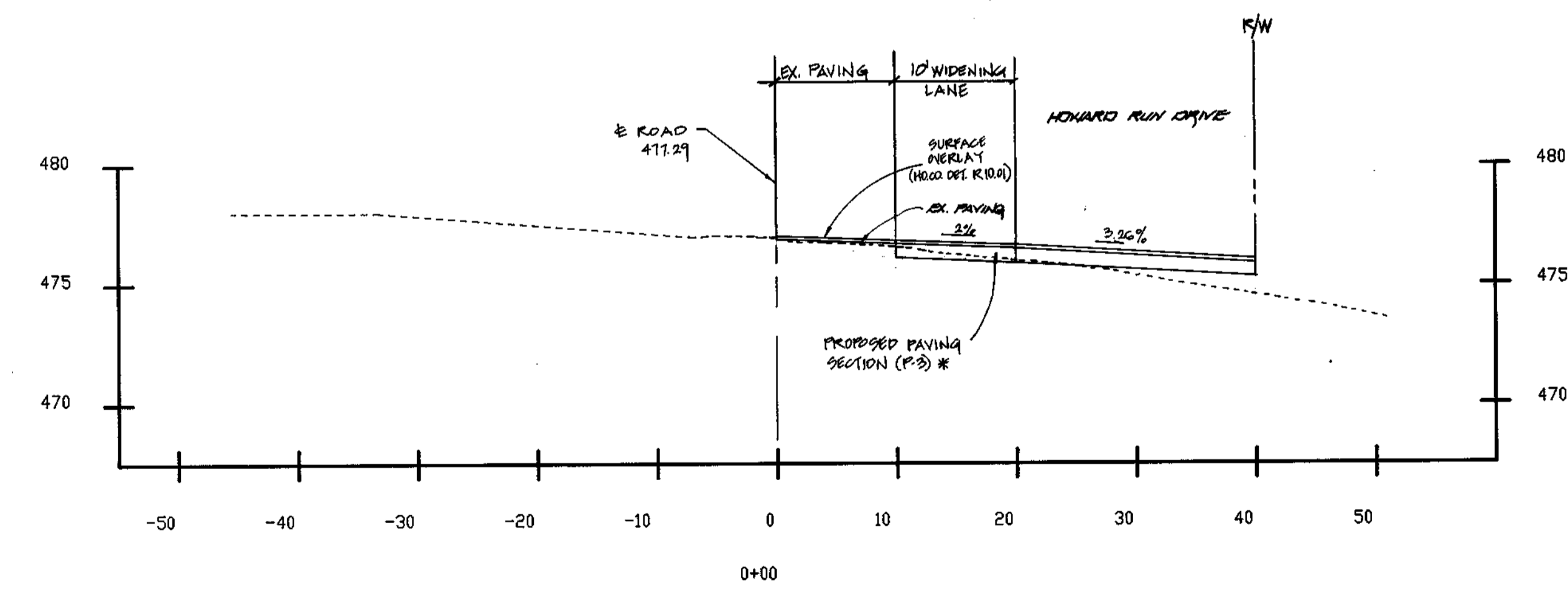
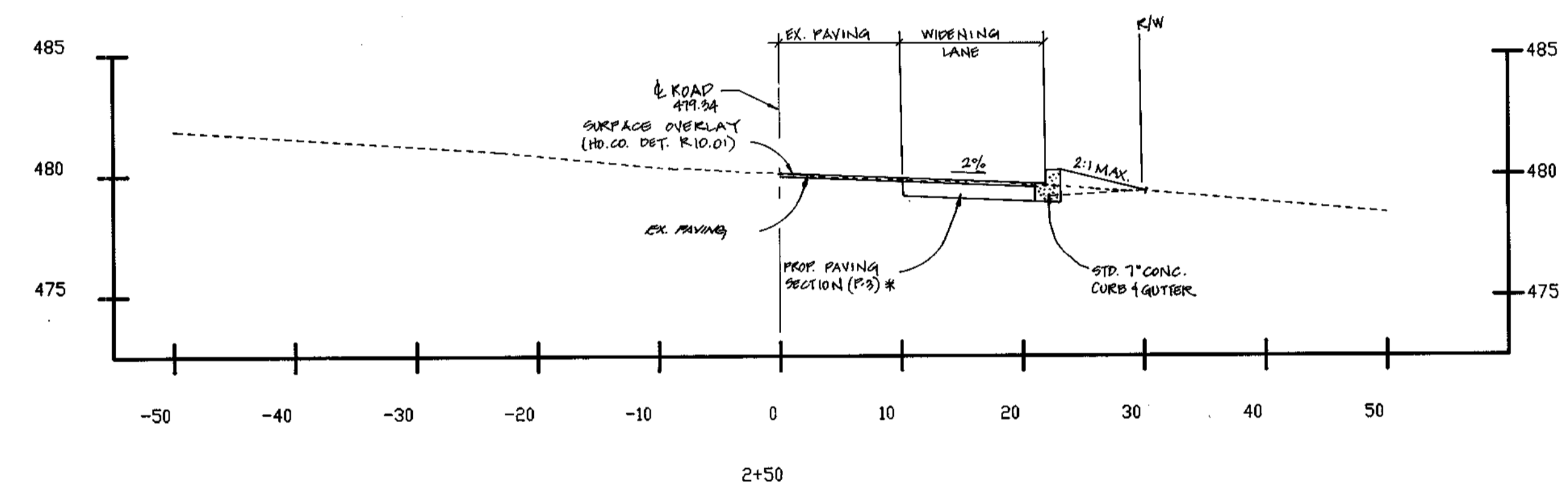
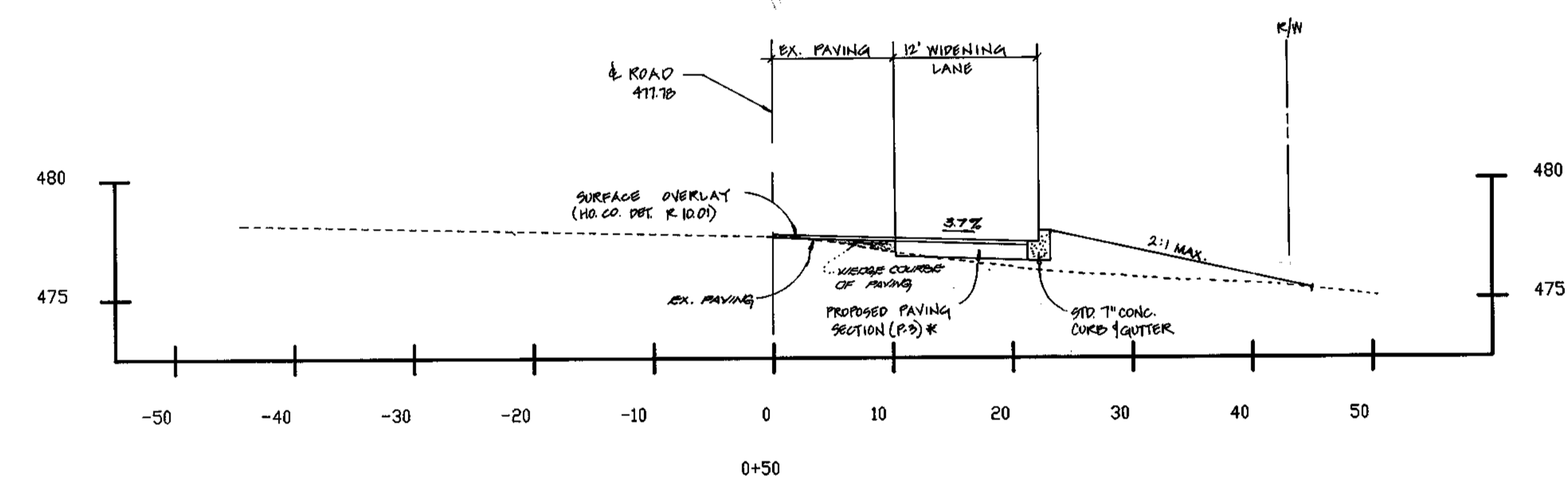
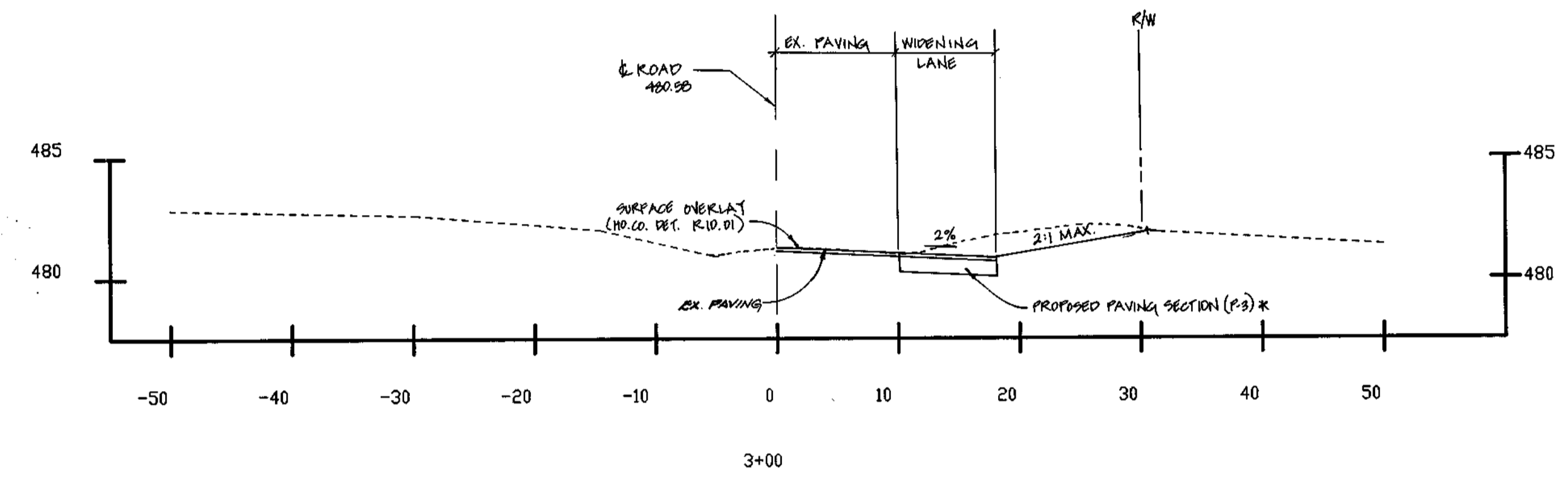
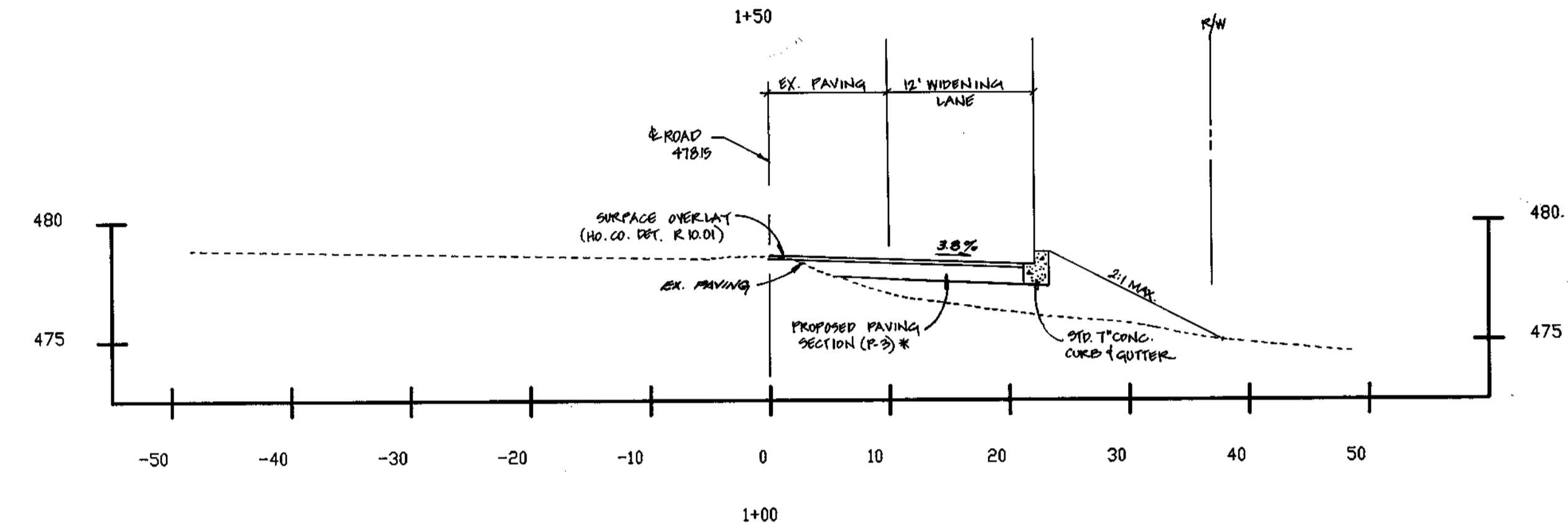
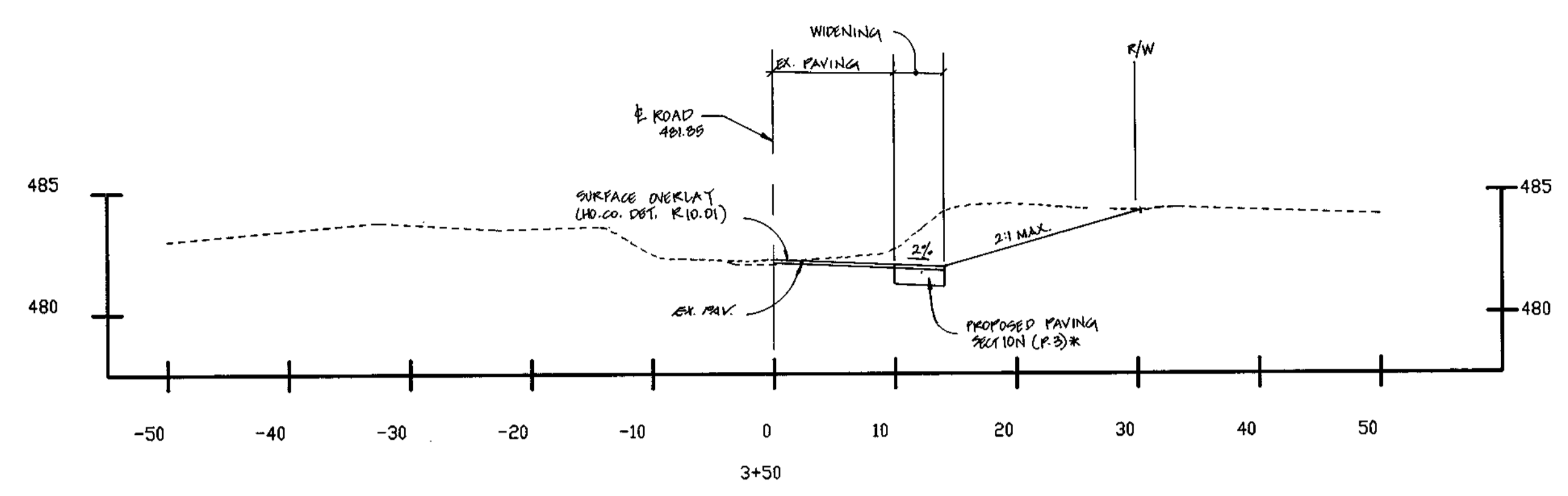
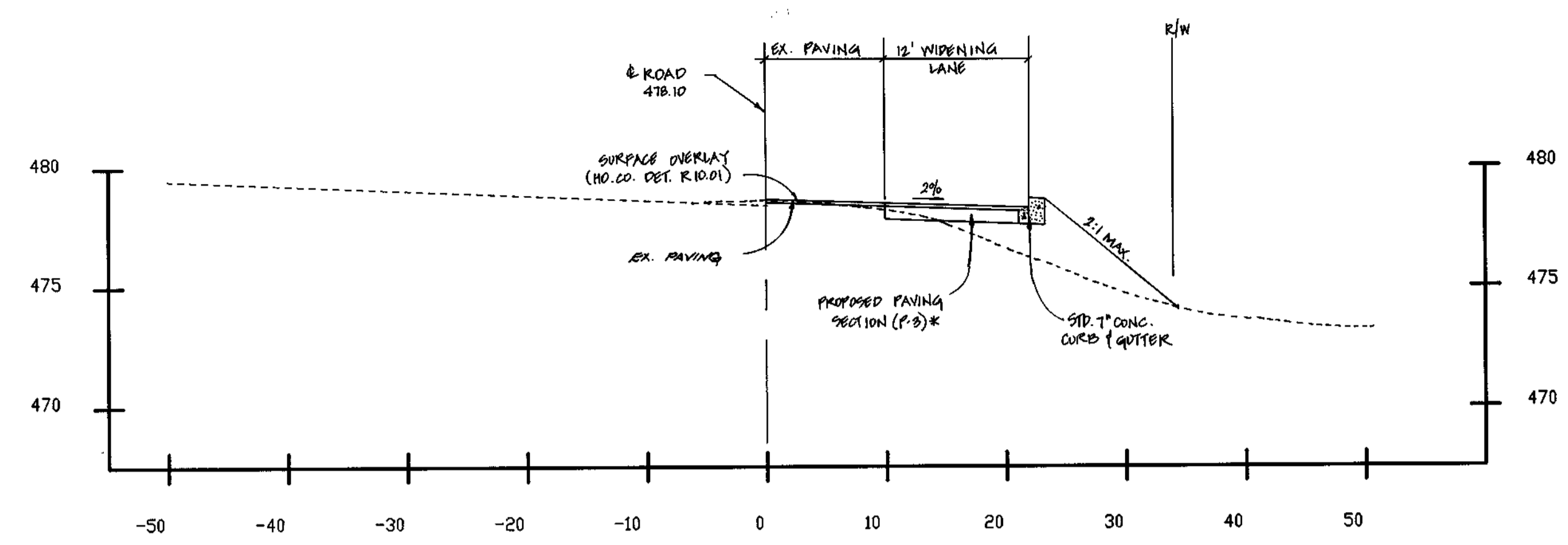
ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 8 OF 25

SCALE: AS SHOWN DATE: AUG. 27, 1996

APPROVED DEPARTMENT OF PUBLIC WORKS
Richard M. Savelle 2-28-97
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT TC DATE

W.D. [Signature] 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION VSC DATE



* PAVING SECTION TO BE (P.3) PER HOWARD COUNTY DETAIL R2.01

CROSS SECTIONS
 SCALE: HORIZ. 1" = 10'
 VERT. 1" = 5'



CROSS SECTIONS - OLD FREDERICK ROAD
DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 131 THRU 176 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 9 OF 25
 SCALE: AS SHOWN DATE: AUG. 27, 1996

OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL DUFFIN
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE RYLAND GROUP
 c/o MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE # 705 HWY 708K ROAD
 LUTHERVILLE, MARYLAND 21095

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTONAL SQUARE OFFICE PARK - 10275 BALTHORE NATIONAL PKE
 ELLICOTT CITY, MARYLAND 21042
 4109 48 - 2855

1783

NOTE: SEE SHEETS 13-26 FOR WATER QUALITY PLAN VIEWS & DETAILS.

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Joseph P. Bunchi
SIGNATURE OF ENGINEER
8/28/96
DATE

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Chris Dwyer
SIGNATURE OF DEVELOPER
8-28-96
DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

Clay Simmons
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE
2/12/97
DATE

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

APPROVED:
John F. Blanton
DISTRICT HOWARD SOIL CONSERVATION DIST.
2/12/97
DATE

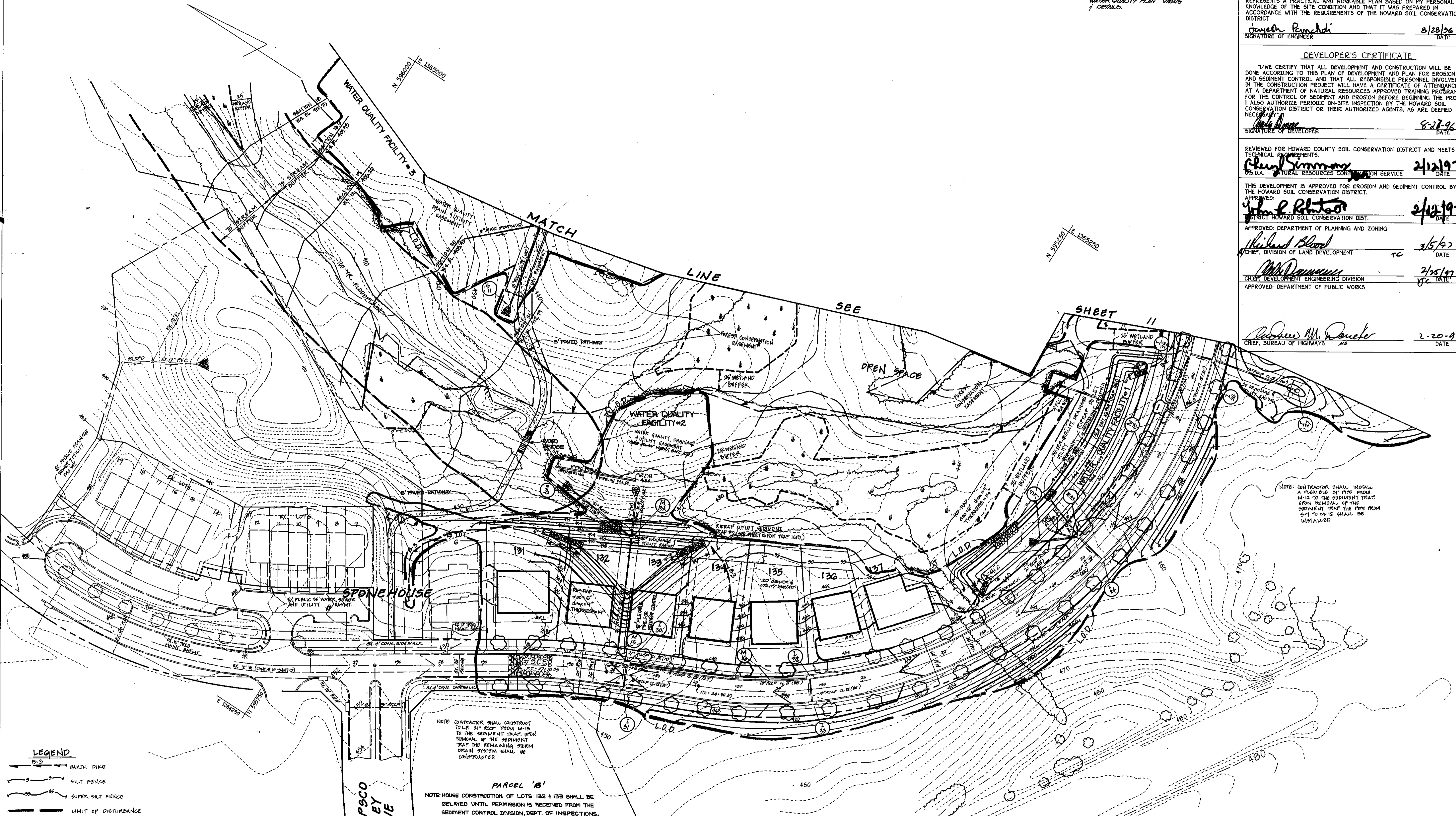
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Michael Blood
CHIEF, DIVISION OF LAND DEVELOPMENT
2/5/97
DATE

Mr. Damouris
CHIEF, DEVELOPMENT ENGINEERING DIVISION
2/5/97
DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

Andrew M. Dwyer
CHIEF, BUREAU OF HIGHWAYS
2-20-97
DATE



NOTE: CONTRACTOR SHALL INSTALL A FLEXIBLE 24" PIPE FROM 1/2" TO THE SEDIMENT TRAP UPON REMOVAL OF THE SEDIMENT TRAP THE PIPES FROM 5'-1" TO 14'-12" SHALL BE INSTALLED

NOTE: CONTRACTOR SHALL CONSTRUCT TO L.F. 21' KEEP FROM 1/2" TO THE SEDIMENT TRAP UPON REMOVAL OF THE SEDIMENT TRAP THE REMAINING SPDRH DRAIN SYSTEM SHALL BE CONSTRUCTED

NOTE: HOUSE CONSTRUCTION OF LOTS 132 & 133 SHALL BE DELAYED UNTIL PERMISSION IS RECEIVED FROM THE SEDIMENT CONTROL DIVISION, DEPT. OF INSPECTIONS, LICENCES & PERMITS TO REMOVE SEDIMENT TRAP #2.

STREET TREE SCHEDULE

| SYMBOL | BOTANICAL AND COMMON NAME | SIZE | COMMENTS |
|--------|--|---------------------|-------------------------|
| | ACER RUBRUM, 'OCTOBER GLORY' RED MAPLE | 2 1/2" - 3" CALIPER | 40' APART ON PUBLIC R/W |

NOTE: STREET TREES ARE ONLY A RECOMMENDATION. THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.
TOTAL NUMBER OF STREET TREES
46 STREET TREES (THIS SHEET)

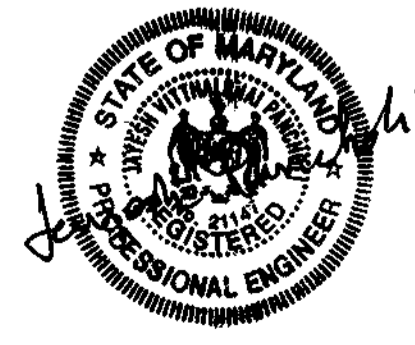
- LEGEND
- BARTH DIKE
 - SILT FENCE
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - TREE PROTECTION FENCE

1783

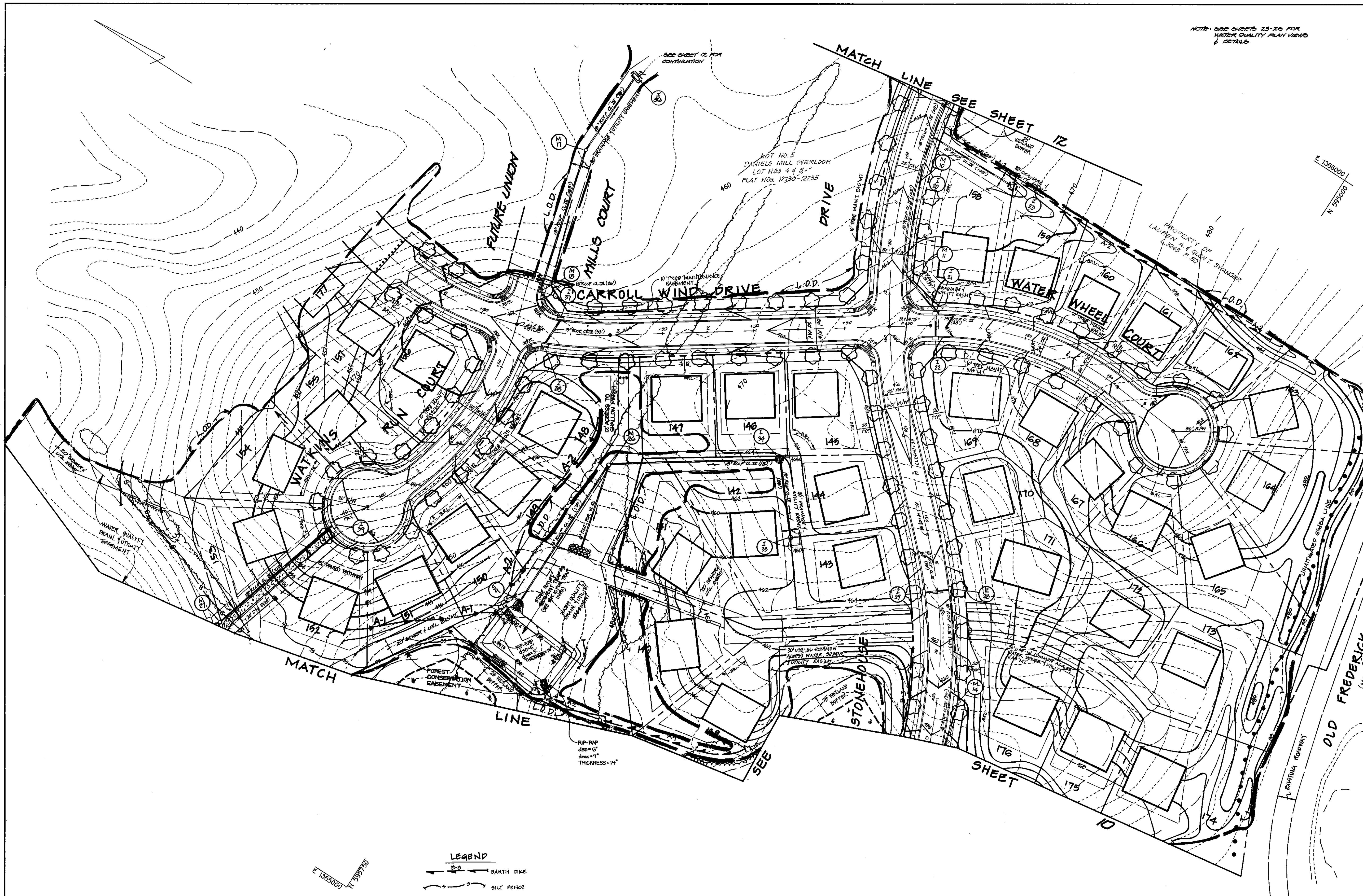
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410 461 - 2955

DEVELOPER
THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE #705
1447 YORK ROAD
LUTHERVILLE, MARYLAND 21045

OWNER
DANIELS MILL OVERLOOK, LLC
C/O MR. MICHAEL DIFFENDAL
11900 TEOR ROAD
SILVER SPRING, MARYLAND 20904



STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
DANIELS MILL OVERLOOK
SECTION 2 AREA 3
LOTS 131 THRU 176
AND PARCEL 'B'
TAX MAP No: 17 PARCEL: 41 & 547
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: A5 SHOWN DATE: AUG. 27, 1996
SHEET 10 OF 25



NOTE: SEE SHEETS 23-25 FOR WATER QUALITY PLAN VIEWS & DETAILS.

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
James P. Burchell 8/28/96
 SIGNATURE OF ENGINEER DATE

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
Charles Simms 8-27-96
 SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
John P. Blanton 4/12/97
 APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT DATE

APPROVED DEPARTMENT OF PLANNING AND ZONING
Richard Board 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John P. Blanton 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
Richard M. Daveler 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE

- LEGEND**
- EARTH DIKE
 - SILT FENCE
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - INLET PROTECTION
 - STABILIZED CONSTRUCTION ENTRANCE
 - TREE PROTECTION FENCE

STREET TREE SCHEDULE

| SYMBOL | BOTANICAL AND COMMON NAME | SIZE | COMMENTS |
|--------|--|---------------------|-------------------------|
| | ACER RUBRUM, 'OCTOBER GLORY' RED MAPLE | 2 1/2" - 5" CALIPER | 40' APART ON PUBLIC R/W |

NOTE: STREET TREES ARE ONLY A RECOMMENDATION. THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.
 TOTAL NUMBER OF STREET TREES
 - 21 STREET TREES (THIS SHEET)

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 131 THRU 176
 AND PARCEL 'B'
 TAX MAP NO: 17 PARCEL: 41 & 547
 ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: AUG. 27, 1996
 SHEET 11 OF 25



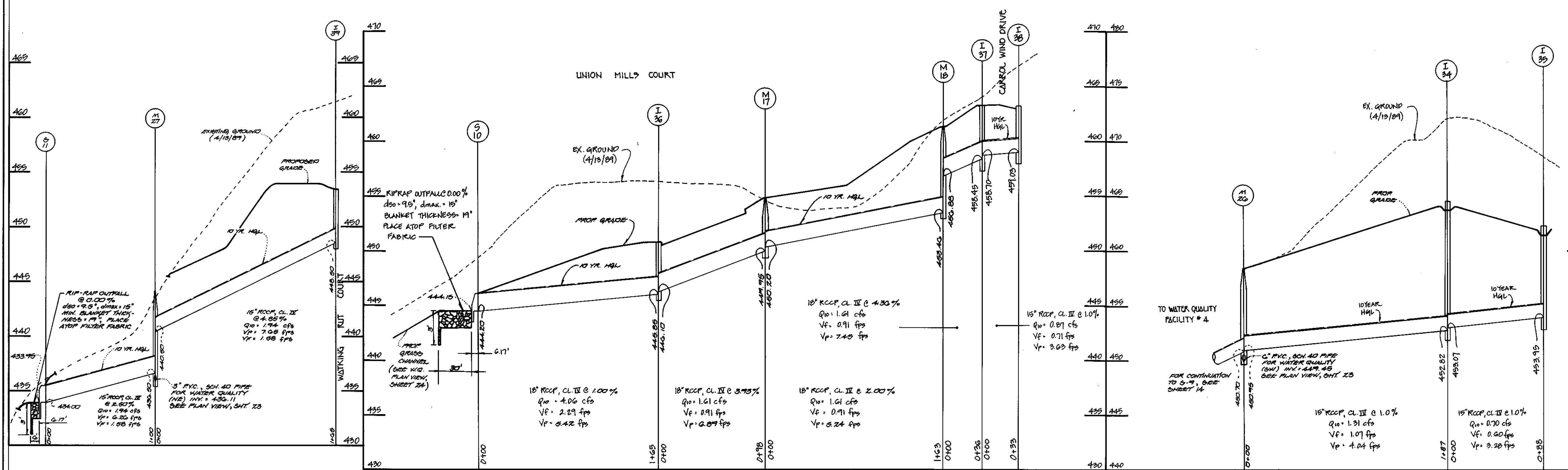
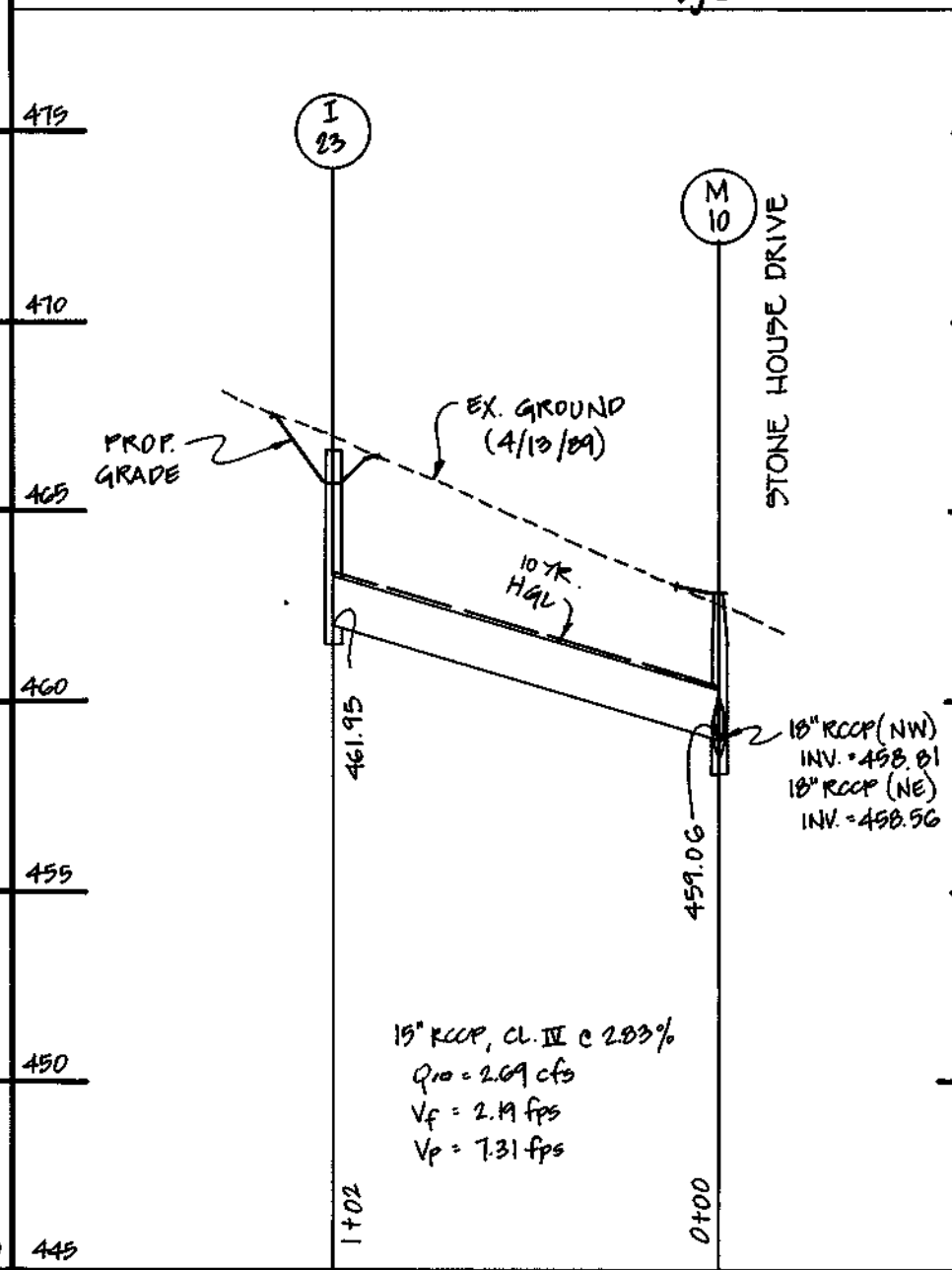
DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE #705
 1417 YORK ROAD
 LUTHERVILLE, MARYLAND 21093

OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL DIFFENDAL
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

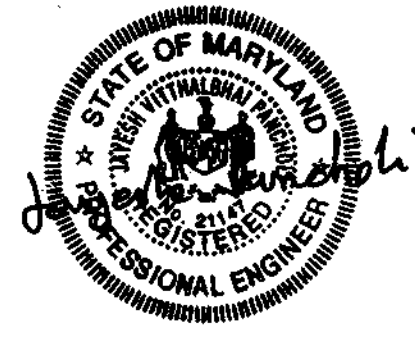
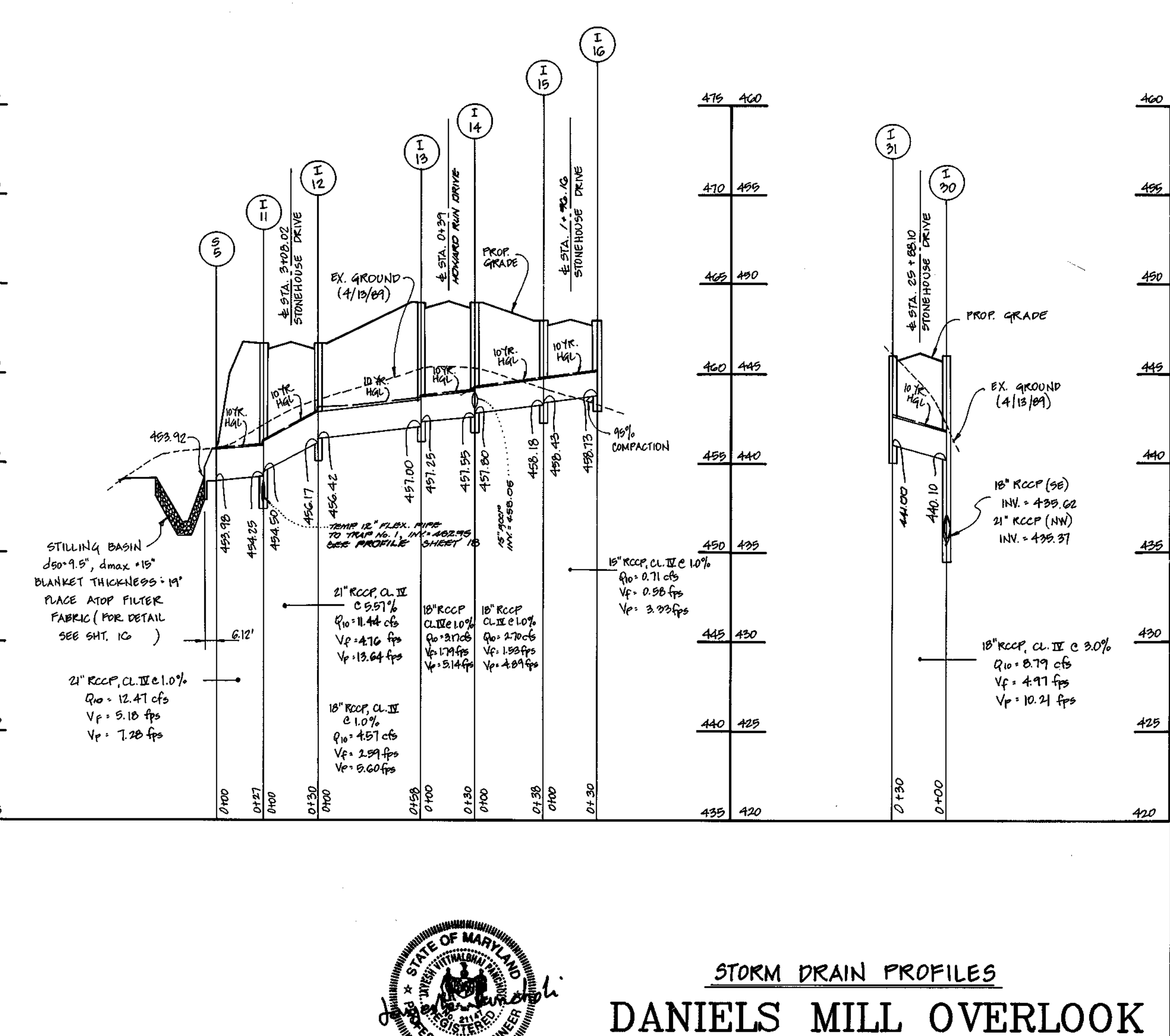
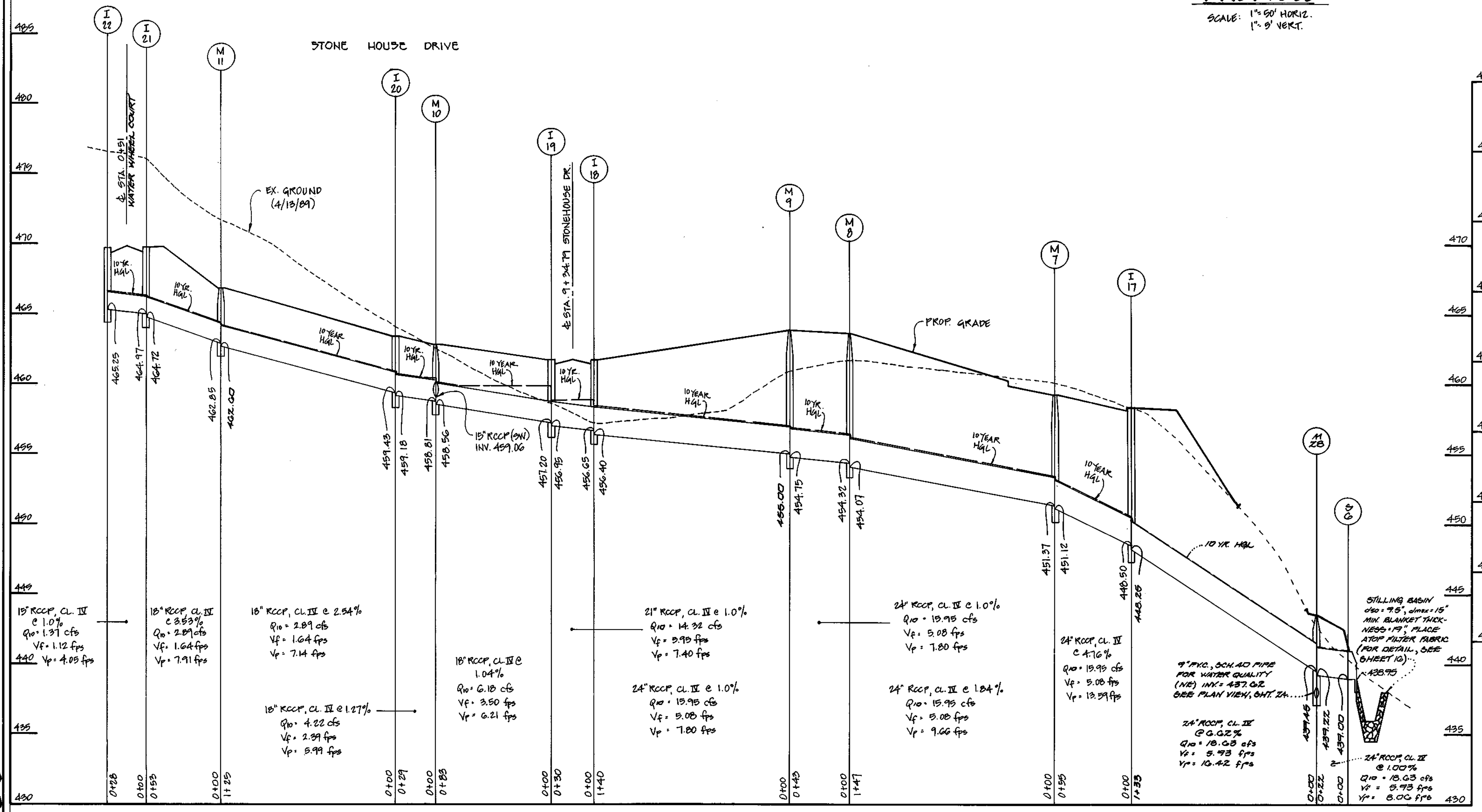
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK • 10272 BALTIMORE NATIONAL PRIZ
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2895

1785

APPROVED DEPARTMENT OF PUBLIC WORKS
 APPROVED DEPARTMENT OF PLANNING AND ZONING
 APPROVED DEPARTMENT OF LAND DEVELOPMENT
 APPROVED DEPARTMENT OF ENGINEERING DIVISION



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



STORM DRAIN PROFILES
DANIELS MILL OVERLOOK
 SECTION 2 AREA 33
 LOTS 131 THRU 176 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 13 OF 25

OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL O'DONOVAN
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

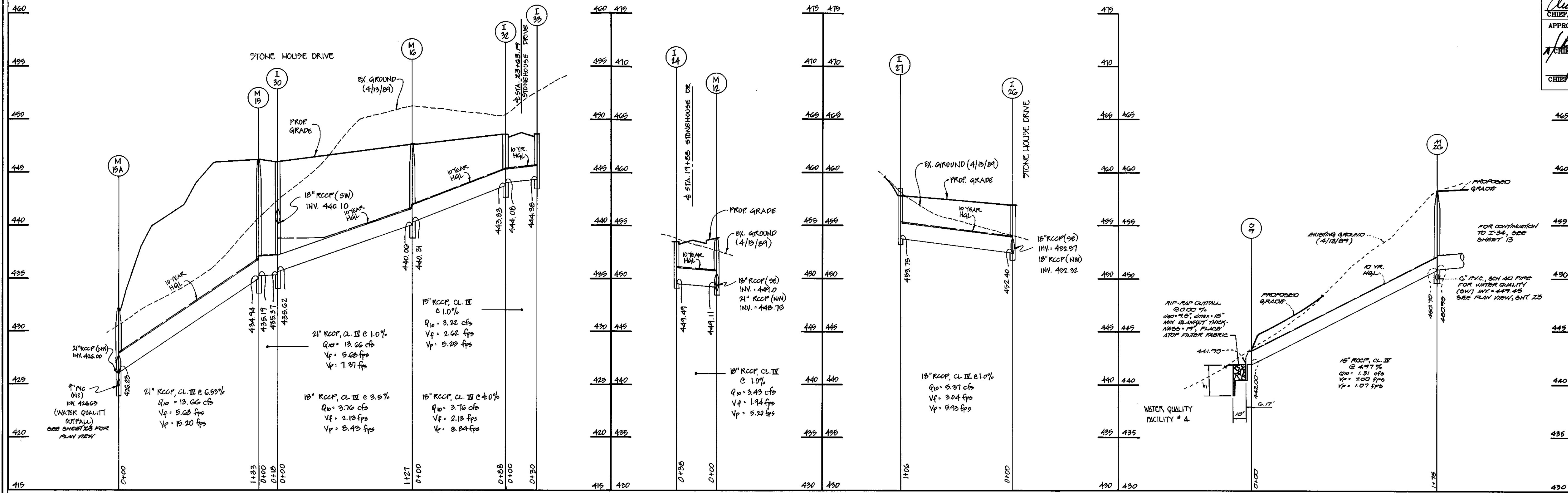
DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE # 705
 1447 YORK ROAD
 LUTHERVILLE, MARYLAND 21075

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 481-3500

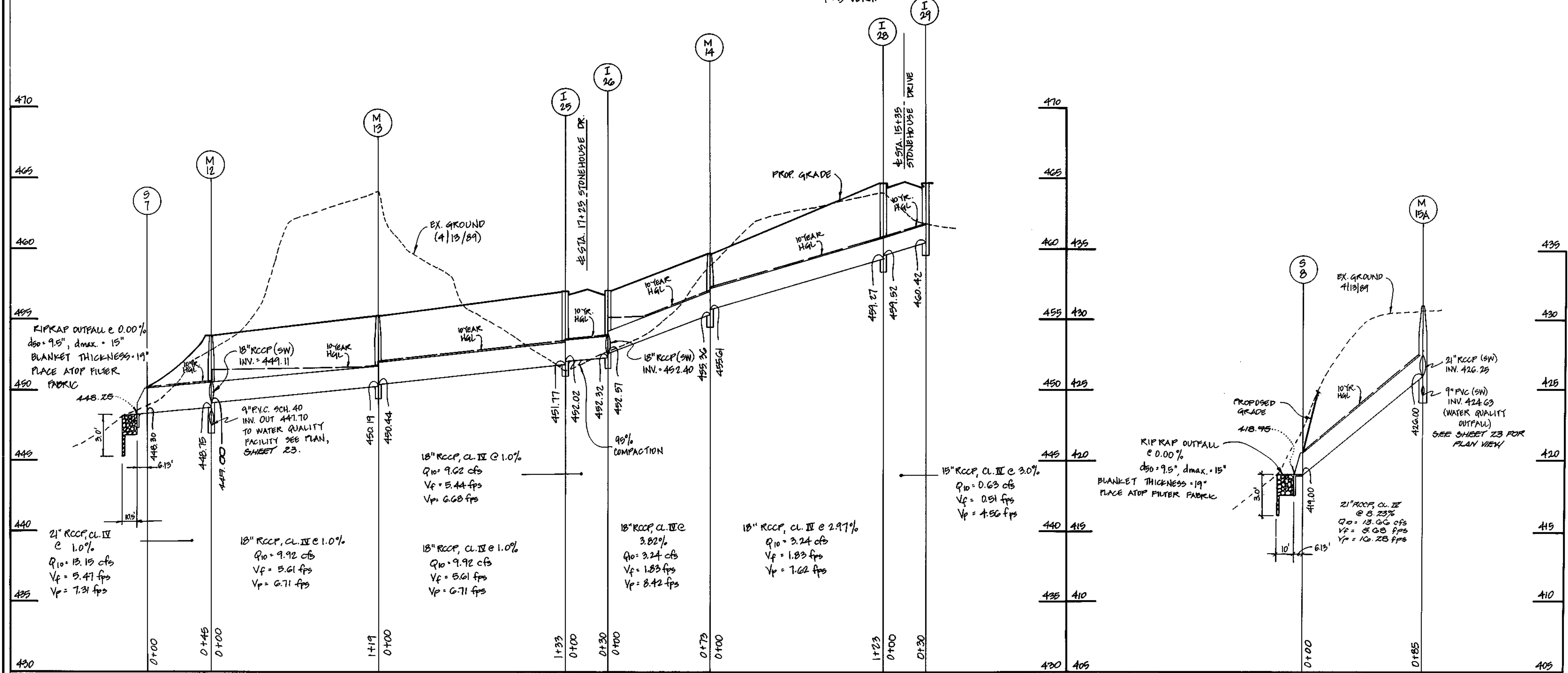
SCALE: AS SHOWN DATE: AUG. 27, 1996

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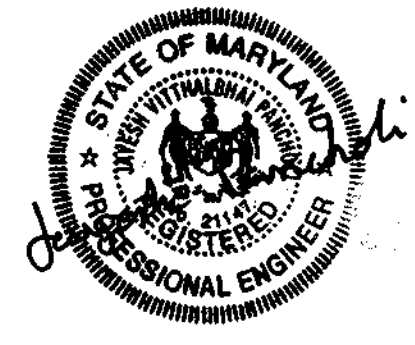
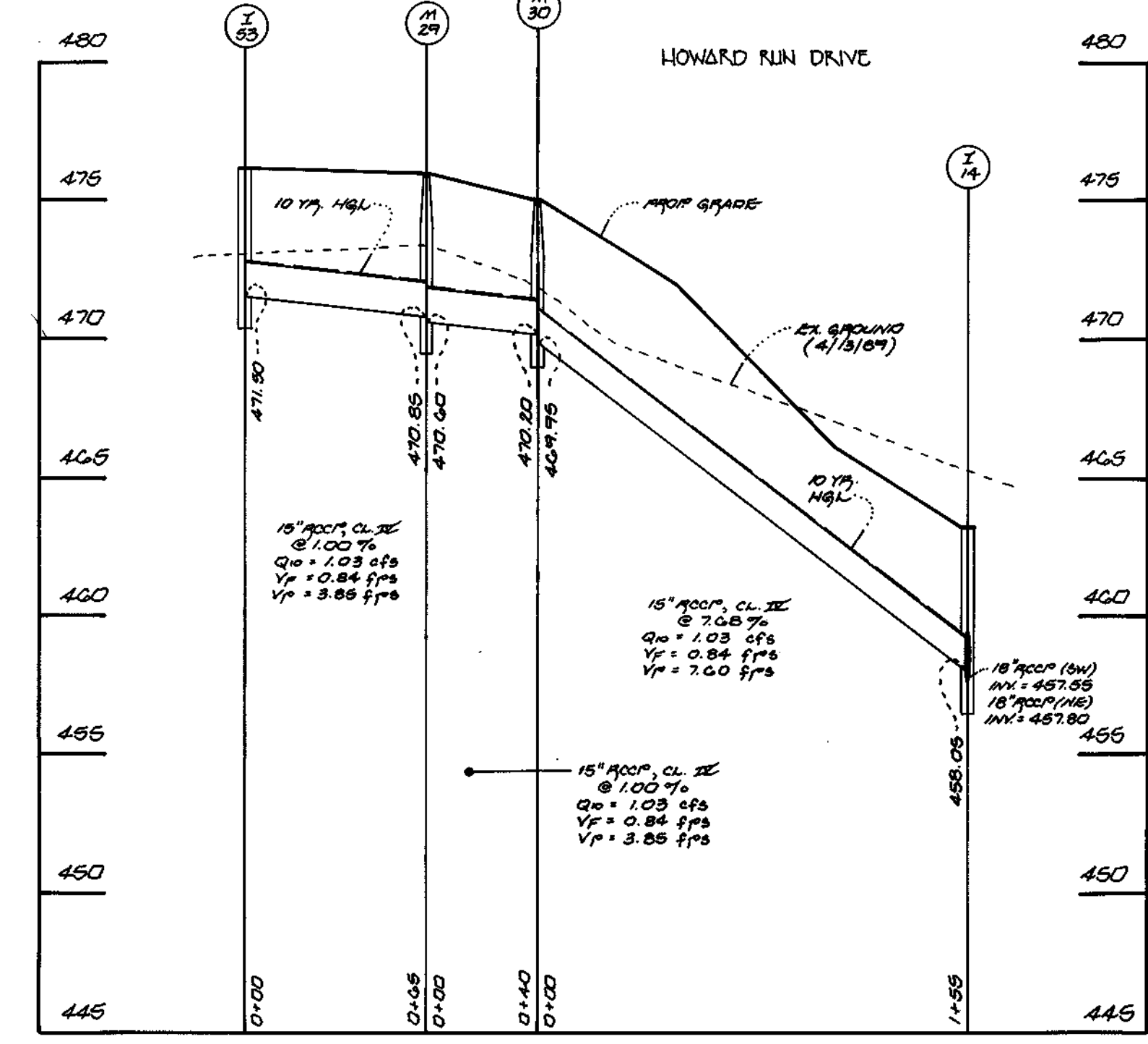
APPROVED DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways *Richard M. Daniels* 2-20-97
 DATE
 APPROVED DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development *Richard Blund* 3/5/97
 DATE
 Chief, Development Engineering Division *John J. O'Donovan* 2/25/97
 DATE



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



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



STORM DRAIN PROFILES
DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 131 THRU 176 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 14 OF 25

OWNER
 DANIELS MILL OVERLOOK, L.L.C.
 C/O MR. MICHAEL O'DONOVAN
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE TRYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE #705
 1447 YORK ROAD
 LUTHERVILLE, MARYLAND 21093

SCALE: AS SHOWN DATE: AUG. 27, 1996

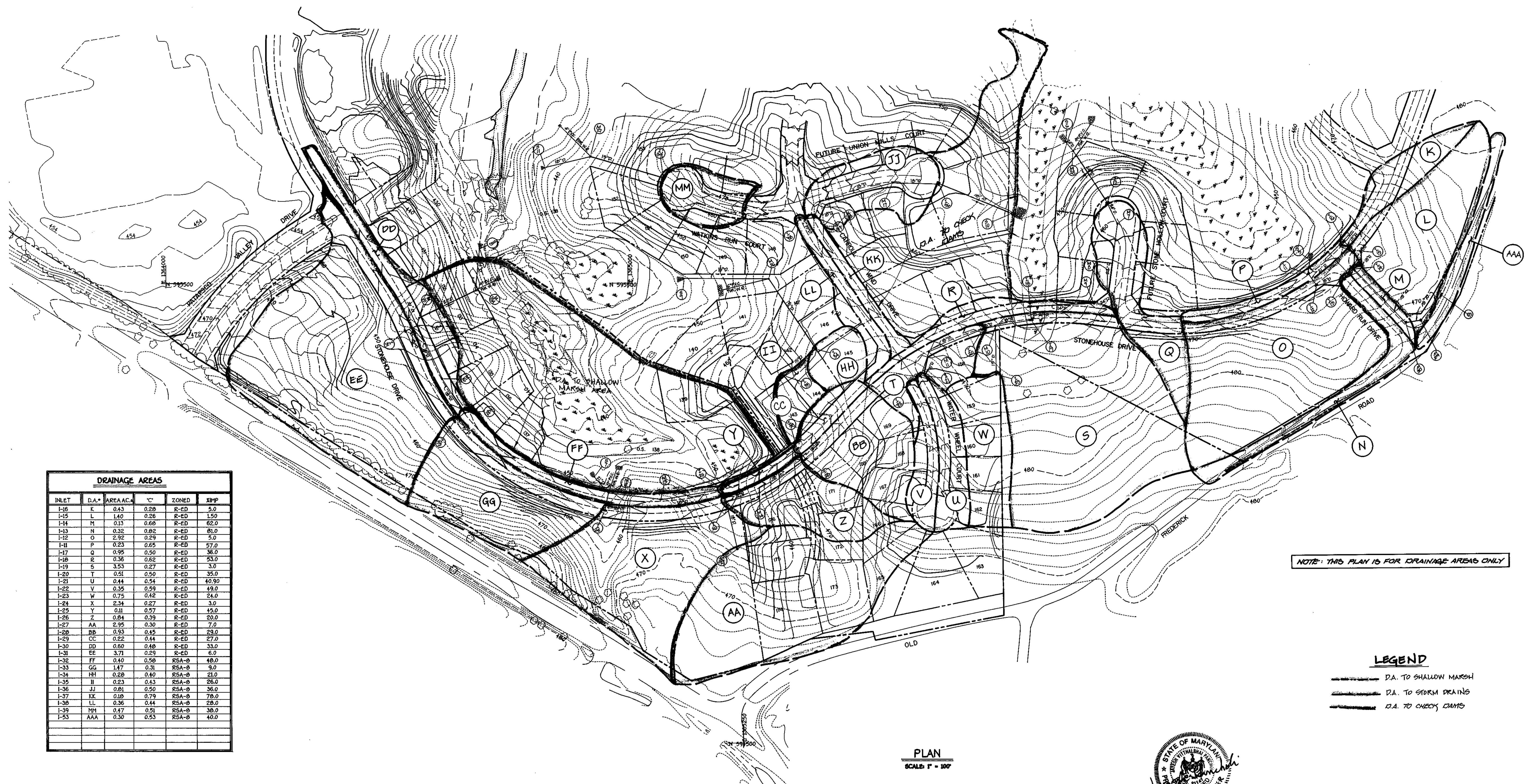
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10072 BALTIMORE NATIONAL PIKE
 ELKLOFF CITY, MARYLAND 21042
 (410) 461-7868

17881

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Daniels 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

W.D. Dummer 2/15/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



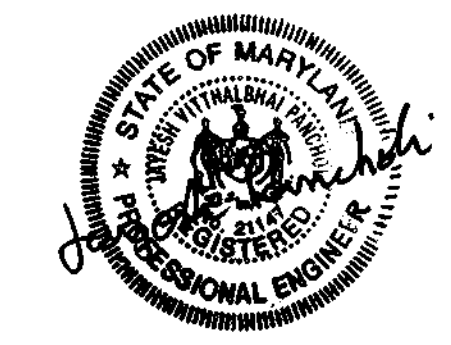
| DRAINAGE AREAS | | | | | |
|----------------|------|----------|------|-------|-------|
| INLET | D.A. | AREA AC. | C | ZONED | XMP |
| I-16 | K | 0.43 | 0.29 | R-ED | 5.0 |
| I-15 | L | 1.40 | 0.26 | R-ED | 15.0 |
| I-14 | M | 0.13 | 0.60 | R-ED | 62.0 |
| I-13 | N | 0.32 | 0.82 | R-ED | 81.0 |
| I-12 | O | 2.92 | 0.29 | R-ED | 5.0 |
| I-11 | P | 0.23 | 0.65 | R-ED | 57.0 |
| I-17 | Q | 0.95 | 0.50 | R-ED | 36.0 |
| I-18 | R | 0.36 | 0.62 | R-ED | 53.0 |
| I-19 | S | 3.53 | 0.27 | R-ED | 3.0 |
| I-20 | T | 0.51 | 0.50 | R-ED | 35.0 |
| I-21 | U | 0.44 | 0.54 | R-ED | 40.90 |
| I-22 | V | 0.35 | 0.59 | R-ED | 49.0 |
| I-23 | W | 0.75 | 0.42 | R-ED | 24.0 |
| I-24 | X | 2.34 | 0.27 | R-ED | 3.0 |
| I-25 | Y | 0.11 | 0.57 | R-ED | 45.0 |
| I-26 | Z | 0.84 | 0.39 | R-ED | 20.0 |
| I-27 | AA | 2.95 | 0.30 | R-ED | 7.0 |
| I-28 | BB | 0.93 | 0.45 | R-ED | 29.0 |
| I-29 | CC | 0.22 | 0.44 | R-ED | 27.0 |
| I-30 | DD | 0.60 | 0.48 | R-ED | 33.0 |
| I-31 | EE | 3.71 | 0.29 | R-ED | 6.0 |
| I-32 | FF | 0.40 | 0.50 | RSA-B | 48.0 |
| I-33 | GG | 1.47 | 0.31 | RSA-B | 9.0 |
| I-34 | HH | 0.28 | 0.40 | RSA-B | 21.0 |
| I-35 | II | 0.23 | 0.43 | RSA-B | 26.0 |
| I-36 | JJ | 0.81 | 0.50 | RSA-B | 36.0 |
| I-37 | KK | 0.19 | 0.79 | RSA-B | 78.0 |
| I-38 | LL | 0.36 | 0.44 | RSA-B | 28.0 |
| I-39 | MM | 0.47 | 0.51 | RSA-B | 36.0 |
| I-53 | AAA | 0.30 | 0.53 | RSA-B | 40.0 |

NOTE: THIS PLAN IS FOR DRAINAGE AREAS ONLY

LEGEND

- D.A. TO SHALLOW MARSH
- D.A. TO STORM DRAINS
- D.A. TO CHECK DAMS

PLAN
 SCALE: 1" = 100'



DRAINAGE AREA MAP
DANIELS MILL OVERLOOK

SECTION 2 AREA 3
 LOTS 131 THRU 176 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 15 OF 25

SCALE: AS SHOWN DATE: AUG. 27, 1996

1783

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 9771 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 (410) 401-1000

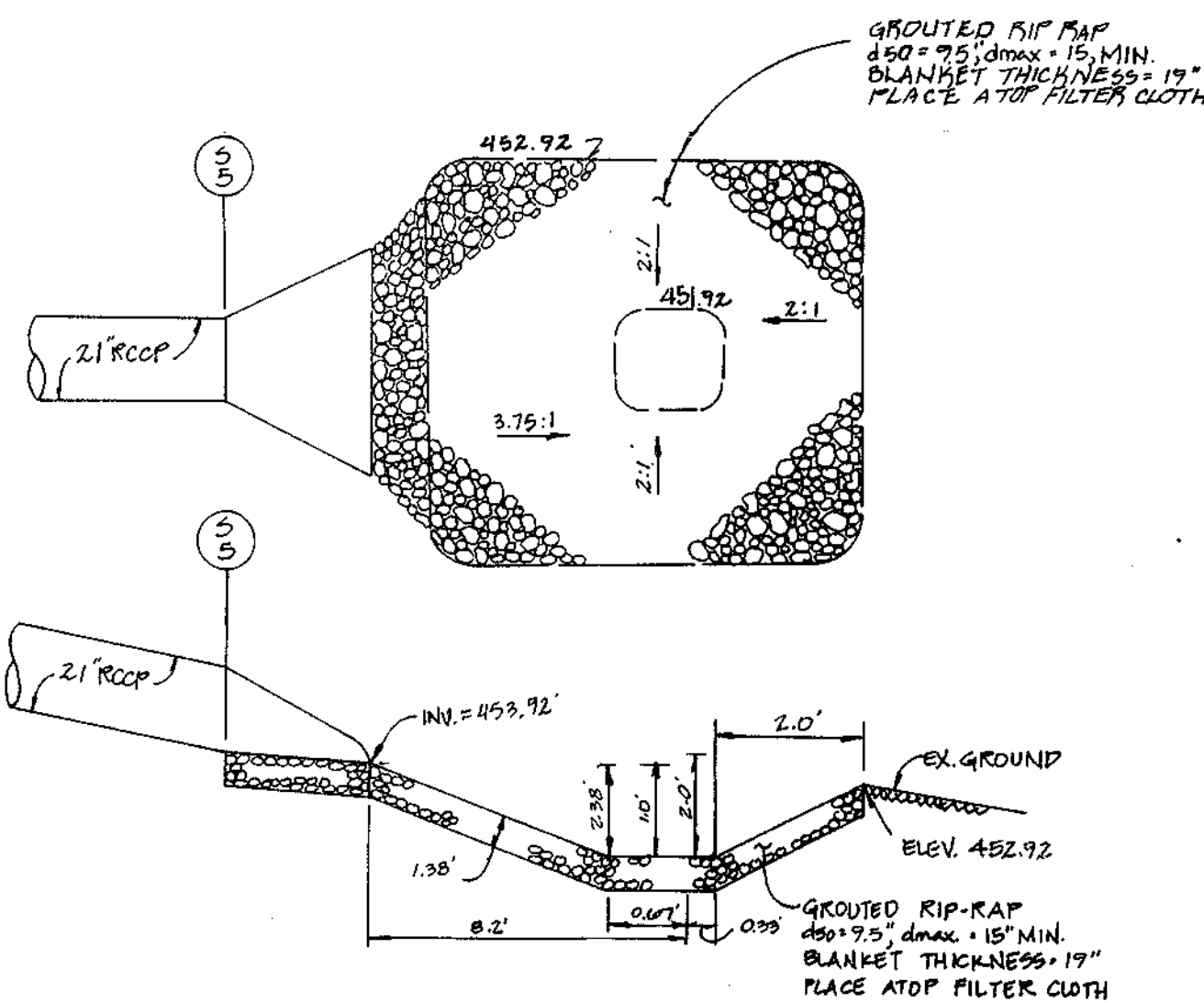
OWNER
 DANIELS MILL OVERLOOK, LLC
 c/o MR. MICHAEL OFFORDAL
 1800 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE #702
 1417 YORK ROAD
 LUTHERVILLE, MARYLAND 21048

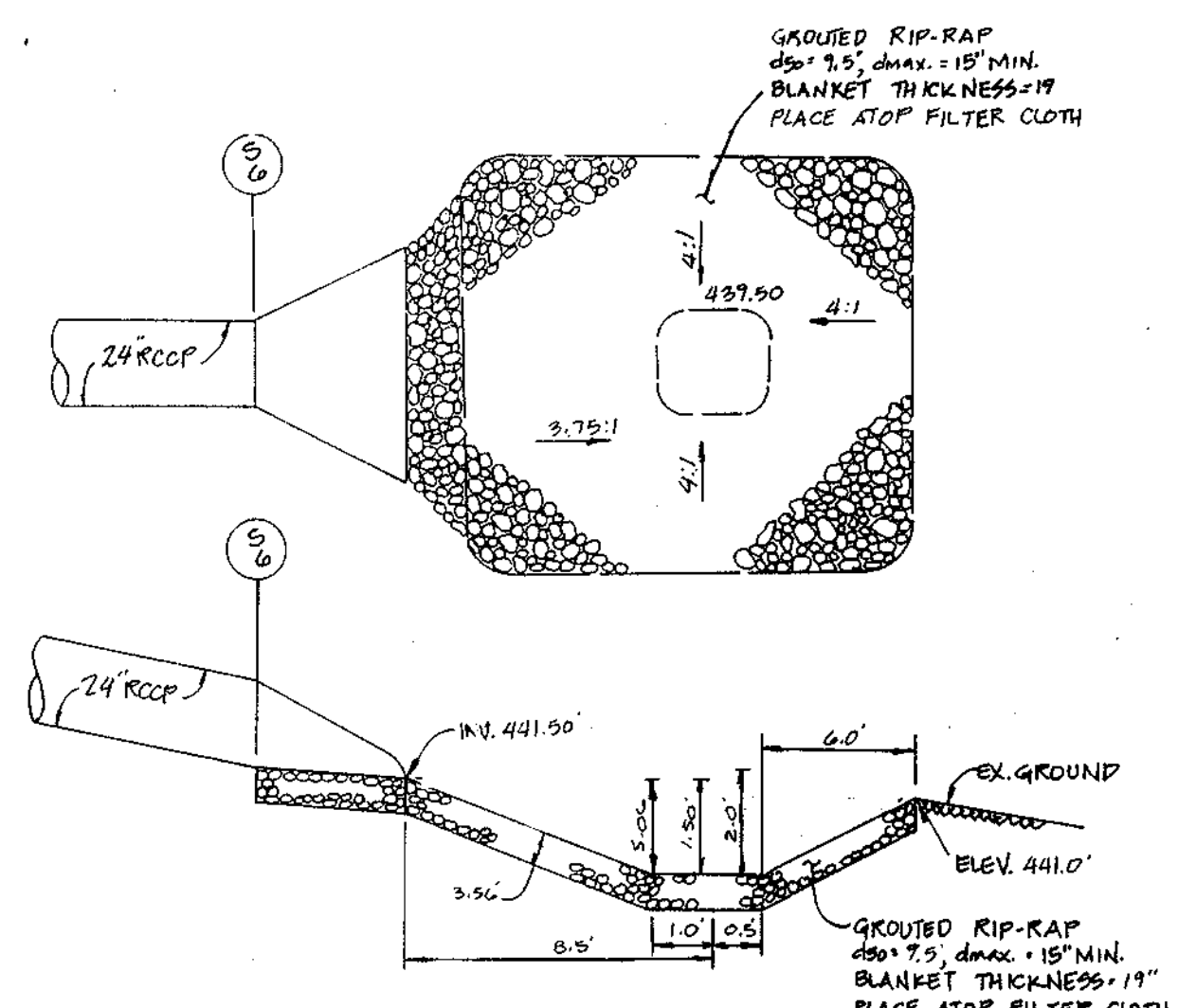
APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Paul 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blund 2/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris D... 2/5/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



STILLING BASIN DETAIL AT S-5 OUTFALL
 NOT TO SCALE



STILLING BASIN DETAIL AT S-6 OUTFALL
 NOT TO SCALE

| TRAP DATA | | | | | | |
|------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|
| TRAP NO. | STONE OUTLET ST II TRAP #1 | RIPRAP OUTLET ST IV TRAP #2 | RIPRAP OUTLET ST IV TRAP #3 | STONE OUTLET ST II TRAP #4 | STONE OUTLET ST II TRAP #5 | STONE OUTLET ST II TRAP #6 |
| DRAINAGE AREA | 4.93 AC± | 5.306 AC± | 7.78 AC± | 3.98 AC± | 3.62 AC± | 4.58 AC± |
| STORAGE REQUIRED | 17,748 C.F. | 28,652 C.F. | 42,012 C.F. | 14,328 C.F. | 13,032 C.F. | 16,488 C.F. |
| STORAGE PROVIDED | 18,100 C.F. | 32,665 C.F. | 42,500 C.F. | 14,761 C.F. | 13,672 C.F. | 17,710 C.F. |
| WEIR CREST ELEV. | 455.00 | 435.00 | 449.00 | 445.00 | 441.0 | 441.00 |
| BOTTOM ELEV. | 451.00 | 428.00 | 441.00 | 441.00 | 437.0 | 434.00 |
| DEPTH | 4' | 11' | 8' | 4' | 4' | 7' |
| SIDE SLOPES | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 | 2:1 |
| TOP EMBANKMENT | 456.00 | 436.00 | 450.00 | 446.00 | 442.0 | 442.00 |
| WEIR LENGTH | 20' | 22' | 32' | 16' | 15' | 18' |
| CLEANOUT ELEV. | 453.00 | 433.50 | 445.00 | 443.00 | 439.0 | 437.50 |

| STRUCTURE SCHEDULE | | | | | | | | |
|--------------------|---------------|---------|----------|--------------------|--------------------|-----------|-----------------|-----------|
| STRUCTURE NO. | TOP ELEVATION | INV. IN | INV. OUT | ROAD NAME | ROAD STA. | OFFSET | TYPE | REMARKS |
| I-11 | 461.40 | 454.50 | 454.25 | STONEHOUSE DRIVE | C.L. STA. 3+08.02 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-12 | 461.40 | 456.42 | 456.17 | STONEHOUSE DRIVE | C.L. STA. 3+08.02 | 15' LT | A-5 INLET | S.D. 4.40 |
| I-13 | 463.19 | 457.25 | 457.00 | HOWARD RUN DRIVE | C.L. STA. 0+43.00 | 15.35' RT | A-10 INLET | S.D. 4.41 |
| I-14 | 463.19 | 457.80 | 457.55 | HOWARD RUN DRIVE | C.L. STA. 0+43.00 | 15.35' LT | A-5 INLET | S.D. 4.40 |
| I-15 | 462.98 | 458.43 | 458.18 | STONEHOUSE DRIVE | C.L. STA. 1+90.10 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-16 | 462.98 | 458.73 | 458.48 | STONEHOUSE DRIVE | C.L. STA. 1+90.10 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-17 | 457.56 | 448.50 | 448.25 | STONE HOLLOW COURT | L.P. STA. 1+31 | ----- | A-5 INLET | S.D. 4.40 |
| I-18 | 461.00 | 456.65 | 456.40 | STONEHOUSE DRIVE | C.L. STA. 9+34.79 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-19 | 461.00 | 457.20 | 456.95 | STONEHOUSE DRIVE | C.L. STA. 9+34.79 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-20 | 463.43 | 459.43 | 459.18 | STONEHOUSE DRIVE | C.L. STA. 10+49 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-21 | 469.75 | 464.97 | 464.72 | WATER WHEEL COURT | C.L. STA. 0+51 | 14' LT | A-10 INLET | S.D. 4.41 |
| I-22 | 469.75 | 465.25 | 465.00 | WATER WHEEL COURT | C.L. STA. 0+51 | 14' RT | A-10 INLET | S.D. 4.41 |
| I-23 | 465.70 | 452.02 | 451.77 | STONEHOUSE DRIVE | C.L. STA. 17+25 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-24 | 453.49 | 452.02 | 449.49 | STONEHOUSE DRIVE | C.L. STA. 17+25 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-25 | 457.07 | 452.57 | 452.32 | STONEHOUSE DRIVE | C.L. STA. 17+25 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-26 | 457.07 | 452.57 | 452.32 | STONEHOUSE DRIVE | C.L. STA. 17+25 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-27 | 457.75 | 452.57 | 452.32 | STONEHOUSE DRIVE | C.L. STA. 17+25 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-28 | 464.67 | 459.52 | 459.27 | STONEHOUSE DRIVE | C.L. STA. 15+35 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-29 | 464.67 | 459.52 | 459.27 | STONEHOUSE DRIVE | C.L. STA. 15+35 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-30 | 446.90 | 435.62 | 435.37 | STONEHOUSE DRIVE | C.L. STA. 25+00.10 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-31 | 446.90 | 441.0 | 440.75 | STONEHOUSE DRIVE | C.L. STA. 25+00.10 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-32 | 446.09 | 444.08 | 443.83 | STONEHOUSE DRIVE | C.L. STA. 23+03.19 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-33 | 446.09 | 444.30 | 444.05 | STONEHOUSE DRIVE | C.L. STA. 23+03.19 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-34 | 463.73 | 453.07 | 452.82 | STONEHOUSE DRIVE | C.L. STA. 23+03.19 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-35 | 461.50 | 453.95 | 453.70 | STONEHOUSE DRIVE | C.L. STA. 23+03.19 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-36 | 460.00 | 446.10 | 445.85 | UNION MILLS COURT | L.P. STA. 1+49.67 | ----- | A-5 INLET | S.D. 4.40 |
| I-37 | 463.40 | 458.70 | 458.45 | CARROLL WIND DRIVE | C.L. STA. 3+05 | 15' RT | A-5 INLET | S.D. 4.40 |
| I-38 | 463.40 | 458.70 | 458.45 | CARROLL WIND DRIVE | C.L. STA. 3+05 | 15' LT | A-10 INLET | S.D. 4.41 |
| I-39 | 453.47 | 448.50 | 448.25 | WATKINS RUN COURT | L.P. STA. 1+30 | ----- | A-5 INLET | S.D. 4.40 |
| I-53 | 476.19 | 471.50 | 471.25 | OLD FREDERICK ROAD | C.L. STA. -1+25 | 22' LT | A-5 INLET | S.D. 4.40 |
| M-7 | 459.37 | 451.37 | 451.12 | STONE HOLLOW COURT | C.L. STA. 0+51.43 | 23' LT | STD. MANHOLE | G - 5.01 |
| M-8 | 464.02 | 454.32 | 454.07 | STONE HOLLOW COURT | C.L. STA. 0+51.43 | 23' RT | STD. MANHOLE | G - 5.01 |
| M-9 | 464.17 | 455.00 | 454.75 | STONEHOUSE DRIVE | C.L. STA. 7+99.04 | 24' RT | STD. MANHOLE | G - 5.01 |
| M-10 | 462.81 | 459.06 | 458.81 | STONEHOUSE DRIVE | C.L. STA. 10+19 | 16.1' LT | STD. MANHOLE | G - 5.05 |
| M-11 | 462.72 | 462.85 | 462.60 | STONEHOUSE DRIVE | C.L. STA. 11+77 | 16.1' LT | STD. MANHOLE | G - 5.05 |
| M-12 | 463.09 | 449.11 | 449.00 | STONEHOUSE DRIVE | C.L. STA. 19+88 | 25' RT | STD. MANHOLE | G - 5.05 |
| M-13 | 455.21 | 450.44 | 450.19 | STONEHOUSE DRIVE | C.L. STA. 18+62 | 16.1' RT | STD. MANHOLE | G - 5.05 |
| M-14 | 469.89 | 455.61 | 455.36 | STONEHOUSE DRIVE | C.L. STA. 16+50 | 24' LT | STD. MANHOLE | G - 5.05 |
| M-15 | 446.40 | 435.19 | 434.94 | STONEHOUSE DRIVE | C.L. STA. 25+12.05 | 26' RT | STD. MANHOLE | G - 5.01 |
| M-15A | 432.00 | 426.25 | 426.00 | STONEHOUSE DRIVE | C.L. STA. 25+12.05 | 26' LT | STD. MANHOLE | G - 5.01 |
| M-16 | 447.85 | 440.31 | 440.06 | STONEHOUSE DRIVE | C.L. STA. 24+53 | 16.1' RT | STD. MANHOLE | G - 5.01 |
| M-17 | 464.80 | 450.20 | 449.95 | UNION MILLS COURT | L.P. STA. 2+66.76 | 3.1' LT | STD. MANHOLE | G - 5.05 |
| M-18 | 461.42 | 456.88 | 456.63 | UNION MILLS COURT | C.L. STA. 0+43 | 15.1' RT | STD. MANHOLE | G - 5.01 |
| M-26 | 458.33 | 450.95 | 450.70 | UNION MILLS COURT | C.L. STA. 0+43 | 15.1' LT | STD. MANHOLE | G - 5.01 |
| M-27 | 444.10 | 440.50 | 436.50 | UNION MILLS COURT | C.L. STA. 0+43 | 15.1' RT | STD. MANHOLE | G - 5.01 |
| M-28 | 443.60 | 439.45 | 439.22 | UNION MILLS COURT | C.L. STA. 0+43 | 15.1' LT | STD. MANHOLE | G - 5.05 |
| M-29 | 476.00 | 470.85 | 470.60 | OLD FREDERICK ROAD | C.L. STA. -0+50 | 35' LT | STD. MANHOLE | G - 5.01 |
| M-30 | 479.00 | 470.20 | 469.95 | HOWARD RUN DRIVE | C.L. STA. 1+98 | 15.5' LT | STD. MANHOLE | G - 5.01 |
| S-5 | 460.73 | 453.98 | 453.72 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-6 | 441.00 | 439.00 | 438.95 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-7 | 460.05 | 448.30 | 448.25 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-8 | 460.75 | 449.00 | 448.95 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-9 | 443.25 | 442.00 | 441.95 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-10 | 446.70 | 444.20 | 444.15 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-11 | 439.25 | 434.00 | 433.95 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |
| S-15 | 469.50 | 468.25 | 468.20 | CONC. END SECT. | C.L. STA. 1+98 | 15.5' LT | CONC. END SECT. | S.D. 5.52 |



SEDIMENT TRAP DATA, STILLING BASIN DETAILS AND STRUCTURE SCHEDULE

DANIELS MILL OVERLOOK

SECTION 2 AREA 3
 LOTS 131 THRU 176 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 16 OF 25

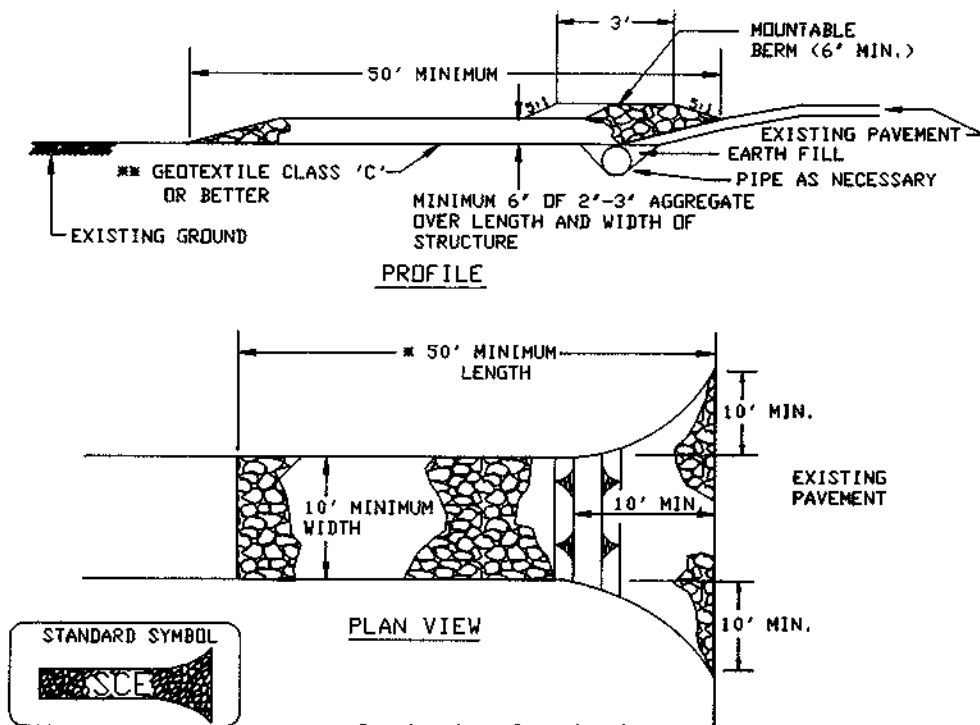
SCALE: AS SHOWN DATE: AUG 27, 1996

1783

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK
 BELLEVILLE CITY, MARYLAND 21042
 (410) 461-2865

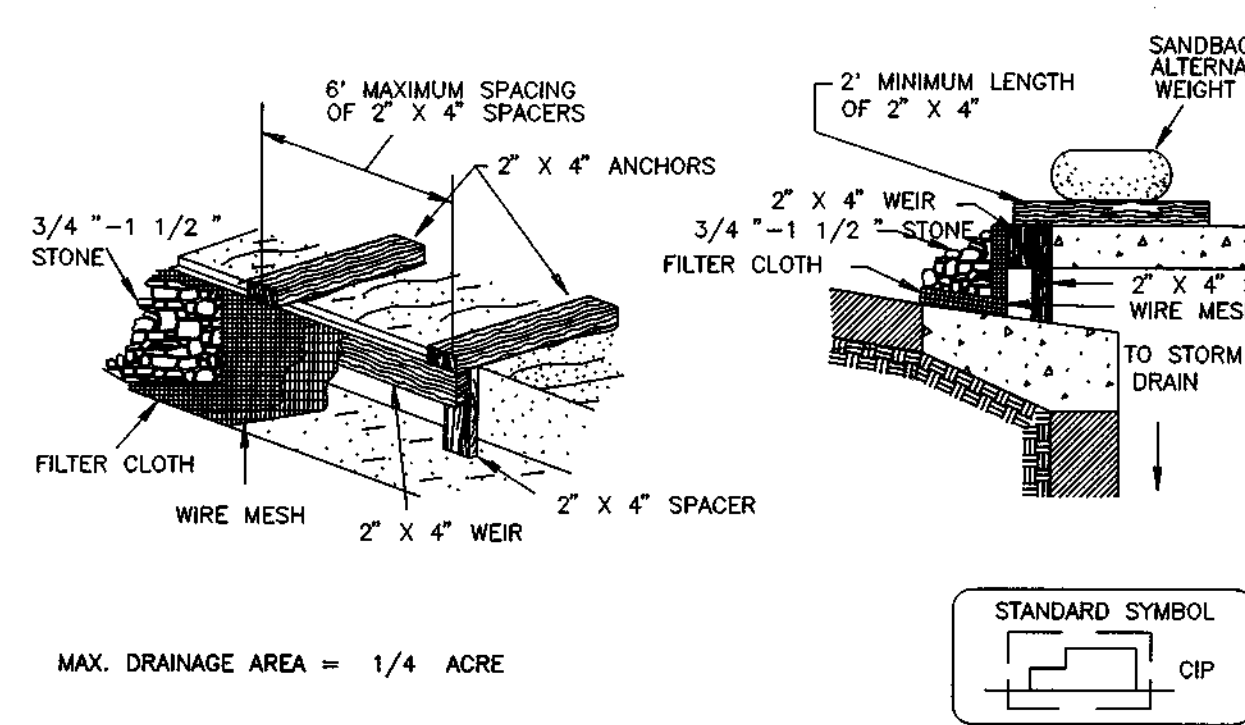
OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL O'DONOVAN
 1500 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLETIA TOWERS
 SUITE # 705
 8117 YORK ROAD
 LUTHERVILLE, MARYLAND 21095



- Construction Specifications**
- Length - minimum of 50' (40' for single residence lot).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 2:1 slope and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SGE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

STABILIZED CONSTRUCTION ENTRANCE - 2
NOT TO SCALE



- Construction Specifications**
- Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 - Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
 - Securely nail the 2" x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart).
 - Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 - The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 - Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
 - This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 - Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

STANDARD CURB INLET PROTECTION
NOT TO SCALE

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Using vegetation as cover for barren soil to protect it from forces that cause erosion. Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeded preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

- SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS**
- Site Preparation**
 - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
 - Soil Amendments (Fertilizer and Lime Specifications)**
 - Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
 - Lime materials shall be ground limestone (hydrated or burnt lime may be substituted which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
 - Seeded Preparation**
 - Temporary Seeding**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
 - Permanent Seeding**
 - Minimum seed conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0.
 - Soil shall contain less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay, but enough fine grained material (D300 silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loesslike or seccidic loesslike soils are to be planted, then a sandy soil (D300 silt plus clay) would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seeded preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (greater than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 3-5" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

EARTH DIKE
NOT TO SCALE

SEED SPECIFICATIONS

- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
- Incoculant - The incoculant for treating legume seed in the seed mixtures shall be a pure culture of *Pisum sativum* normally not more than 2% of the seed mixture. Incoculant shall not be used later than the date indicated on the container. Add fresh incoculant as directed on package. Use four times the recommended amount. Note: is very important to keep incoculant as cool as possible as soon as possible after use. Temperatures above 75-80° F. can weaken bacteria and make the inoculant less effective.

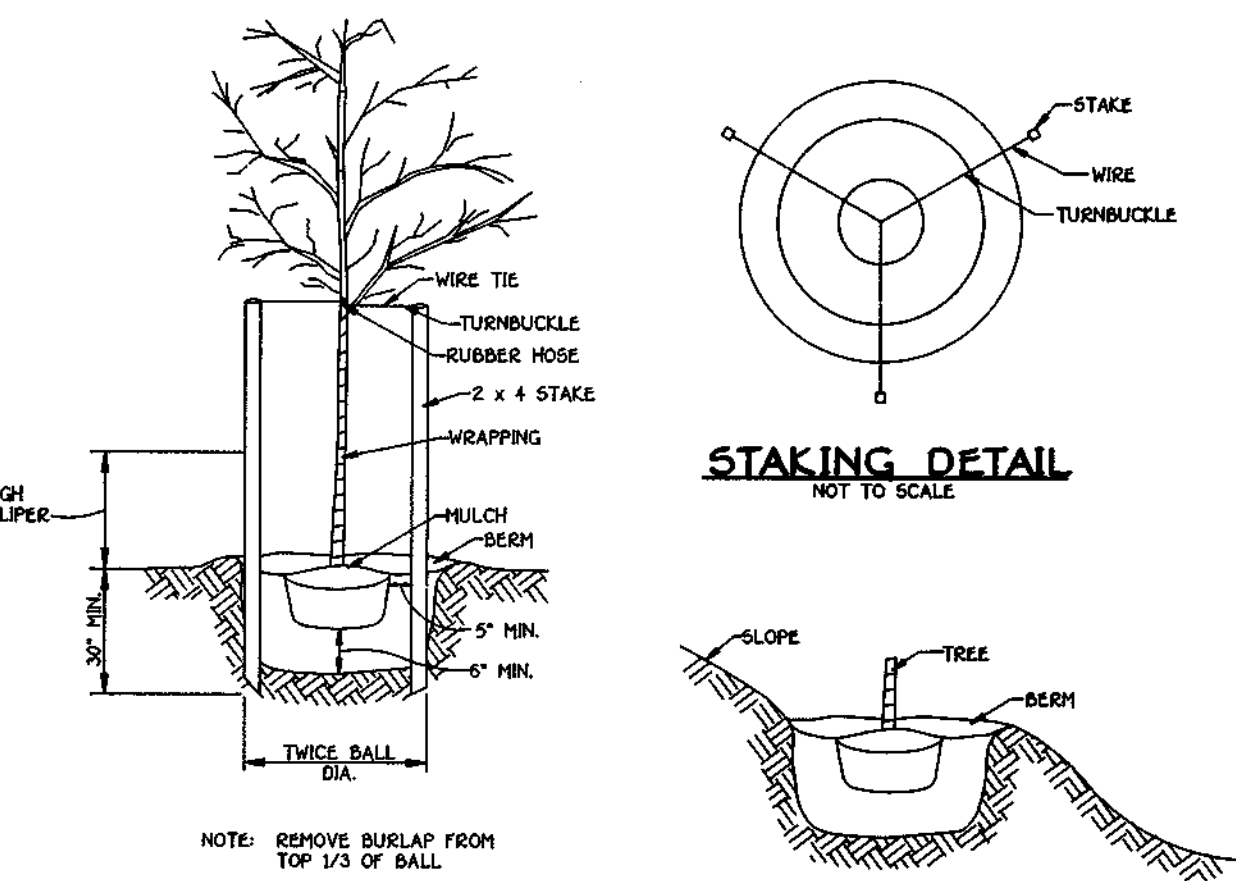
METHODS OF SEEDING

- Hydroseeding** - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cutspreader.
 - If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: Nitrogen - maximum of 100 lbs. per acre total of soluble nitrogen; P205 (phosphorous); 200 lbs./ac; K2O (potassium); 200 lbs./ac.
 - Lime - use only ground agricultural limestone, up to 3 tons per acre may be applied by hydroseeding. Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
- Dry Seeding** - This includes use of conventional drop or broadcast spreaders.
 - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 266. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Drill or Cutspreader Seeding** - Mechanized seeders that apply and cover seed with soil.
 - Cutspreader seeding - application of seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- Flow Channel Stabilization**

| TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|-------------------|---------------|--|---|
| 1 | 5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3:1-5.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 3 | 5:1-8.0% | SEED AND STRAW MULCH OR SOIL EXCELSDUR 500; 2" STONE | SEED AND STRAW MULCH OR EXCELSDUR 500; 2" STONE |
| 4 | 8:1-20% | LINED RIP-RAP 4"-8" | ENGINEERING DESIGN |

 - 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.
 - RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 6 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 - APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
- Periodic Inspection and Required Maintenance** MUST BE PROVIDED AFTER EACH RAIN EVENT.



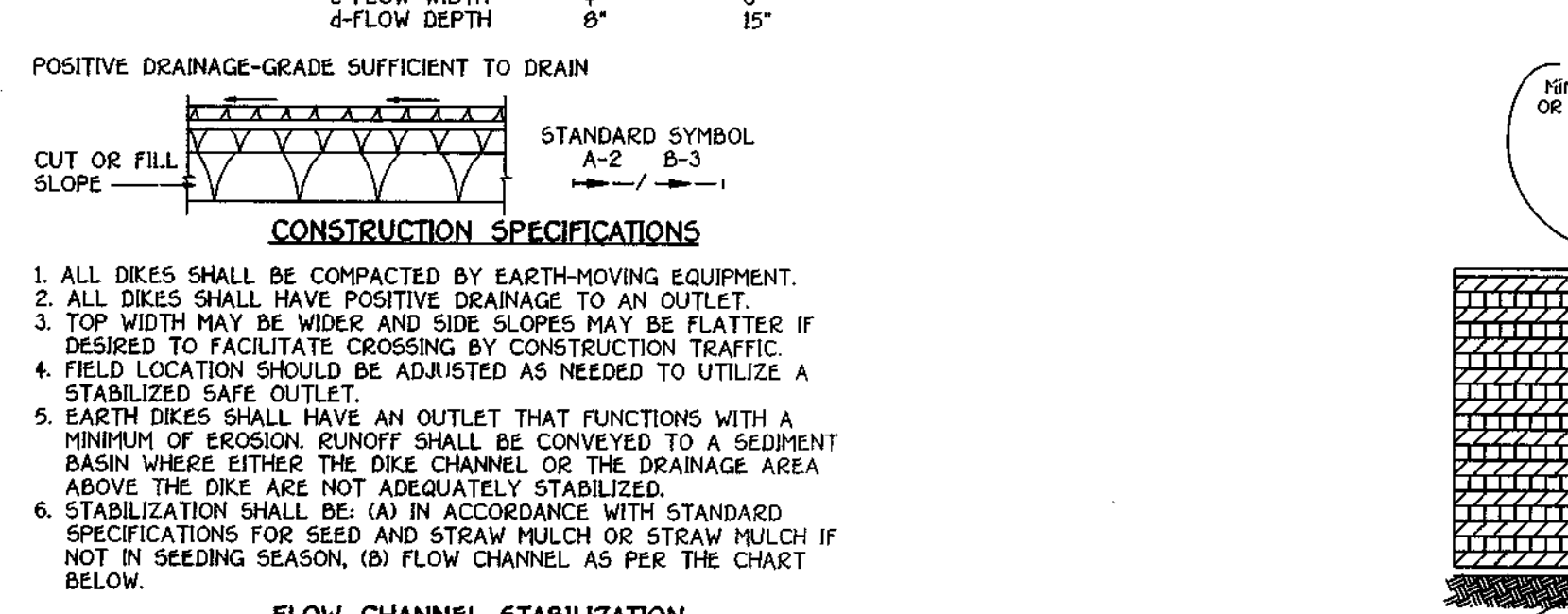
TREE PLANTING
NOT TO SCALE

GRADING FOR PLANTING ON SLOPES
NOT TO SCALE

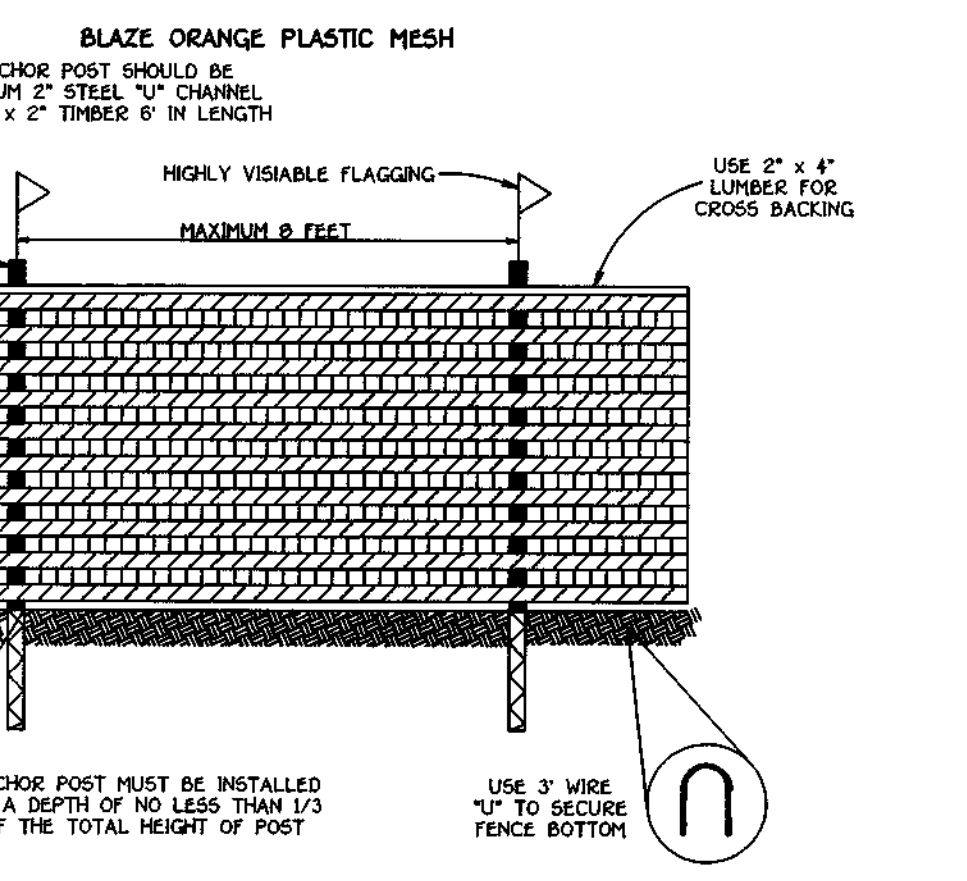
- SEDIMENT CONTROL NOTES**
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (331-1859).
 - ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER FENCES AND ALL SLOPES STEEPER THAN 3:1; b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR 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 ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDING (SEC. 51), SOIL (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.
 - 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 ANALYSIS**

| | |
|--|----------------|
| TOTAL AREA OF SITE | 25,873 ACRES |
| AREA TO BE ROOFED OR PAVED | 14,960 ACRES |
| AREA TO BE VEGETATIVELY STABILIZED | 1,55 ACRES |
| TOTAL CUT | 35,000 CU.YDS. |
| TOTAL OFFSITE WASTE/BORROW AREA LOCATION | N/A 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, ON ALL SITES WITH UNDISTURBED AREAS IN EXCESS OF 2 ACRES.
 - APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
 - TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKE
ELLCOTT CITY, MARYLAND 21042
410.481.2255



- CONSTRUCTION SPECIFICATIONS**
- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 - ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 - TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
 - 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 RUNOFF SHALL BE CONVEYED TO A SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DIKE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
 - STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR EXCELSDUR 500 IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.
- FLOW CHANNEL STABILIZATION**
- | TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|-------------------|---------------|--|---|
| 1 | 5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3:1-5.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 3 | 5:1-8.0% | SEED AND STRAW MULCH OR SOIL EXCELSDUR 500; 2" STONE | SEED AND STRAW MULCH OR EXCELSDUR 500; 2" STONE |
| 4 | 8:1-20% | LINED RIP-RAP 4"-8" | ENGINEERING DESIGN |
- 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.
 - RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 6 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 - APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE** MUST BE PROVIDED AFTER EACH RAIN EVENT.



- NOTES:**
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 - ROOT DAMAGE SHOULD BE AVOIDED.
 - PROTECTIVE SIGNAGE MAY ALSO BE USED.
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.
- TREE PROTECTION DETAIL**
NOT TO SCALE

Incremental Stabilization - Cut Slopes

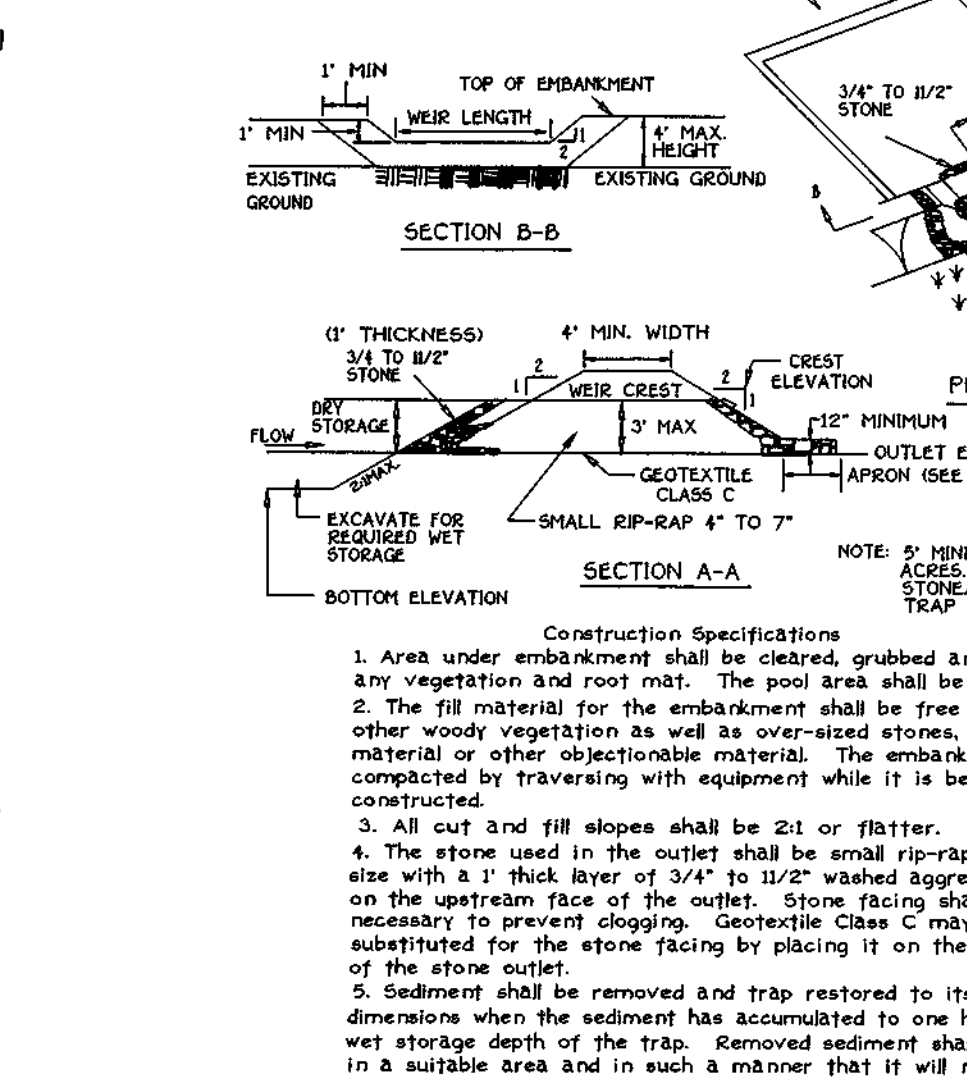
- All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
- Construction sequence (Refer to Figure 3 below):
 - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
 - Perform Phase 1 excavation, dress, and stabilize.
 - Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as necessary.
 - Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

Incremental Stabilization - Fill Slopes

- Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the fill. Construction site fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
- At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.
- Construction sequence - Refer to Figure 4 (below):
 - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff around the fill.
 - Place Phase 1 embankment, dress and stabilize.
 - Place Phase 2 embankment, dress and stabilize.
 - Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.



- DETAIL 9 - STONE OUTLET SEDIMENT TRAP - ST II**
- Construction Specifications**
- Area under embankment shall be cleared, grubbed and stripped of all vegetation and root mat. The pool area shall be cleared.
 - The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traveling with equipment while it is being constructed.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small rip-rap 4" to 7" in size with a 1" thick layer of 3/4" to 1 1/2" washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent sloughing. Geotextile Class C may be substituted for the stone facing by placing it on the inside face of the stone outlet.
 - Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND THAT ANY RESPONSIBLE PERSONNEL 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 ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Signature of Developer: _____ DATE: 8-27-96

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

Signature of Engineer: _____ DATE: 8/29/96

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Signature: _____ DATE: 2/12/97

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

Signature: _____ DATE: 2/12/97

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: _____ DATE: 3/5/97

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: _____ DATE: 2/25/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: _____ DATE: 2-20-97

CHIEF, BUREAU OF HIGHWAYS

SEDIMENT CONTROL NOTES AND DETAILS

DANIELS MILL OVERLOOK
SECTION 2 AREA 3
LOTS 131 THRU 176 AND PARCEL 'B'

ZONED: R-ED
TAX MAP NO. 17 PARCEL NOS. 41 AND 547
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUG. 27, 1996
SHEET 17 OF 25

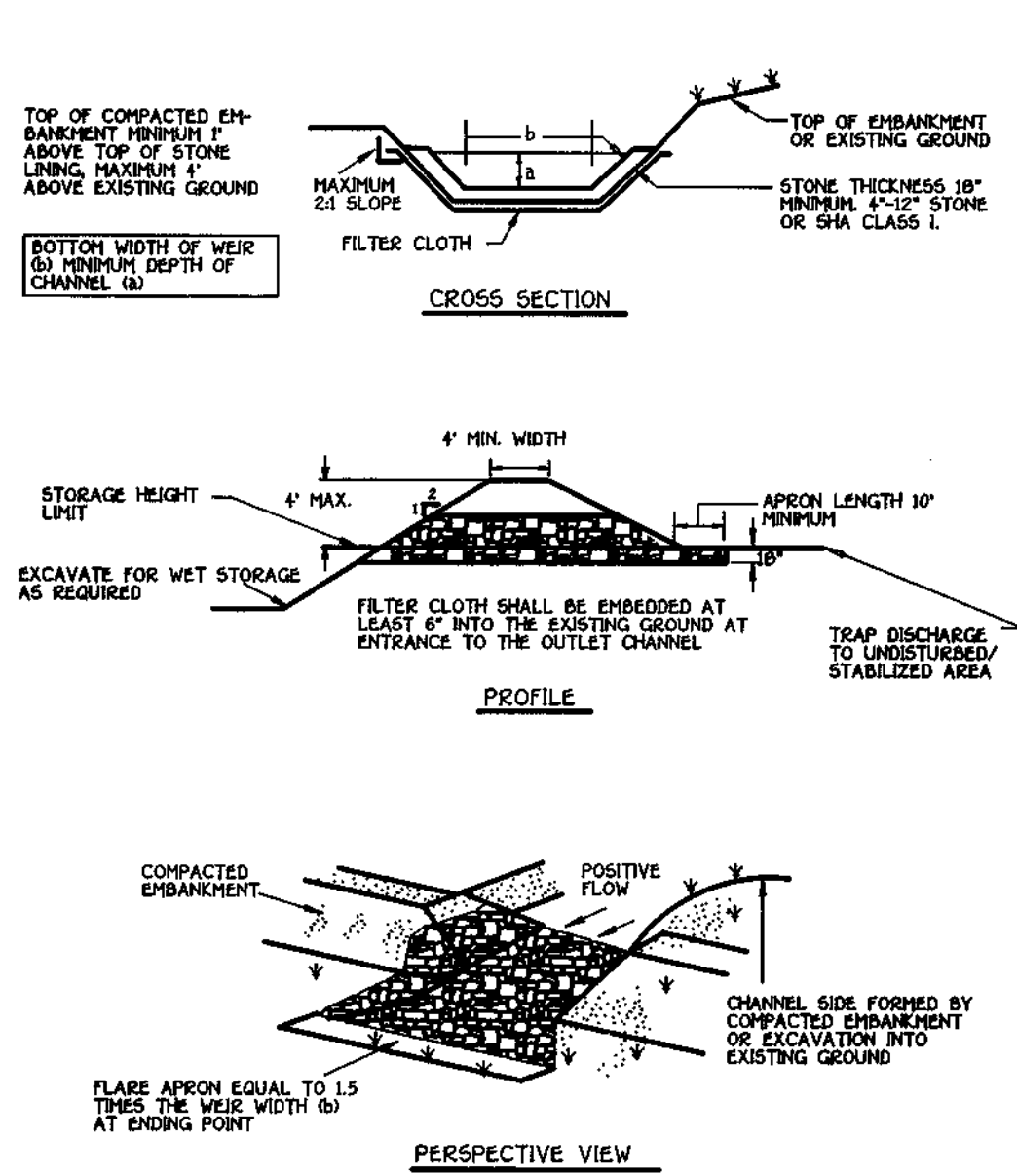
OWNER
DANIELS MILL OVERLOOK, LLC
C/O MR. MICHAEL DIFFENDAL
1890 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
THE INLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE 705
HART WOOD ROAD
LUTHERVILLE, MARYLAND 21095

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER

1783

DETAIL 10 - RIP-RAP OUTLET SEDIMENT TRAP - ST III



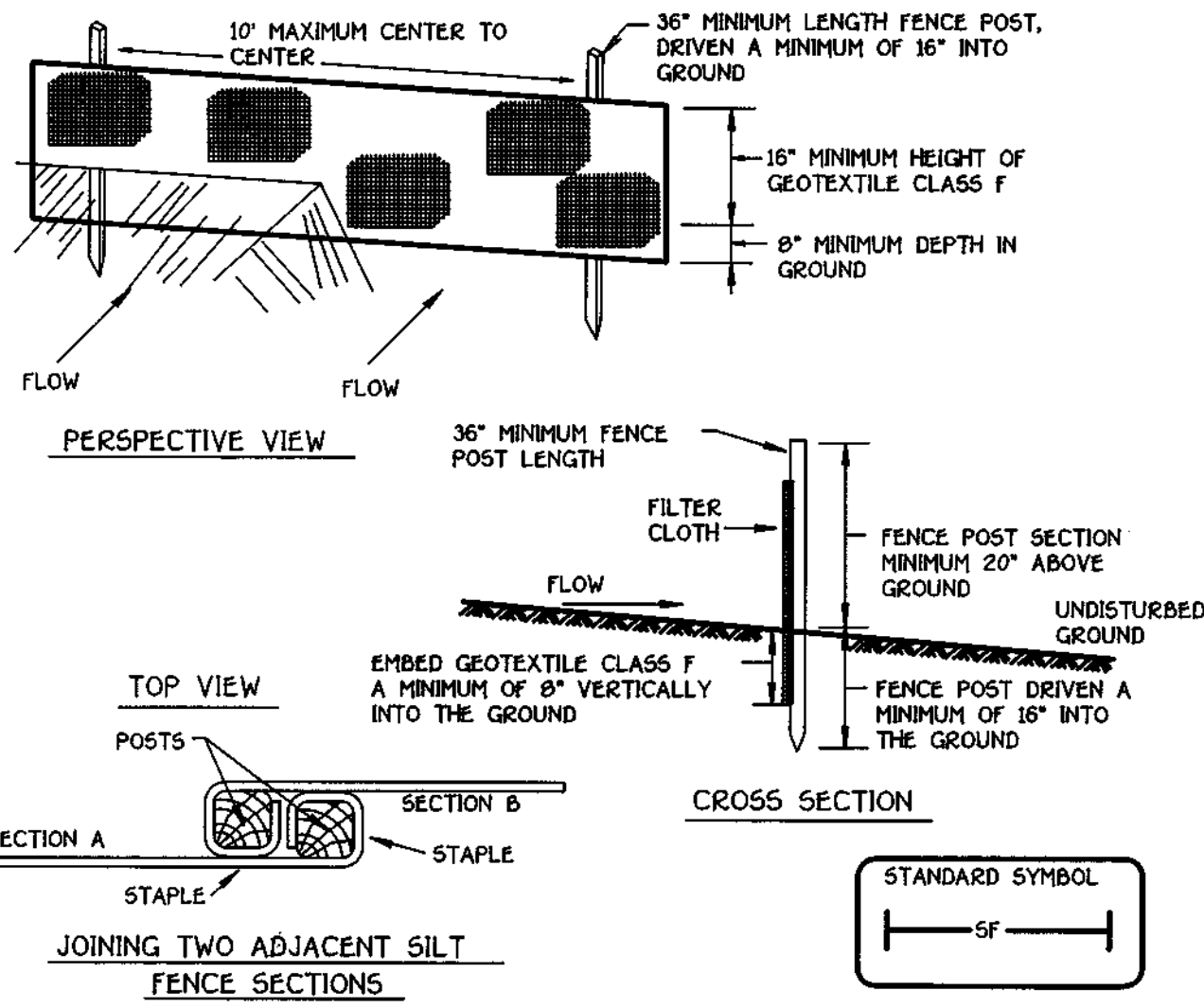
NOTE: MAXIMUM DRAINAGE AREA = 10 ac.

RIP-RAP OUTLET SEDIMENT TRAP - ST III

Construction Specifications

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
- The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.
- All cut and fill slopes shall be 2:1 or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.
- Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 10).
- Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
- Stone used in the outlet channel shall be 4" - 12" placed 18" thick.
- Outlet - An outlet shall be provided, which includes a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge end shall be provided as necessary.
- Outlet channel must have positive drainage from the trap.
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/4 of the wet storage depth of the trap (1350 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected periodically after each rain and repaired as needed.
- Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.
- The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

DETAIL 22 - SILT FENCE



Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

| | | |
|----------------------|---------------------------|----------------|
| Tensile Strength | 50 lbs/in (min) | Test: MSMT 509 |
| Tensile Modulus | 20 lbs/in (min) | Test: MSMT 509 |
| Flow Rate | 0.3 gal/ft / minute (max) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min) | Test: MSMT 322 |

- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

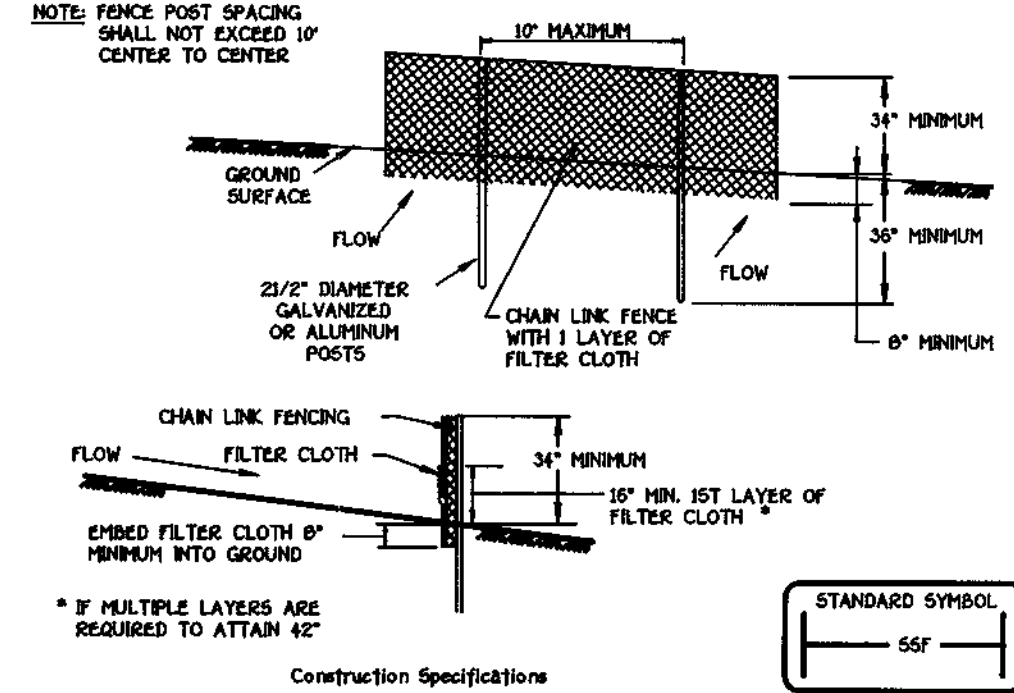
SILT FENCE

Silt Fence Design Criteria

| Slope Steepness | (Maximum) Slope Length | (Maximum) Silt Fence Length |
|-------------------|------------------------|-----------------------------|
| Flatter than 50:1 | unlimited | unlimited |
| 50:1 to 10:1 | 125 feet | 1,000 feet |
| 10:1 to 5:1 | 100 feet | 750 feet |
| 5:1 to 3:1 | 60 feet | 500 feet |
| 3:1 to 2:1 | 40 feet | 250 feet |
| 2:1 and steeper | 20 feet | 125 feet |

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

DETAIL 33 - SUPER SILT FENCE



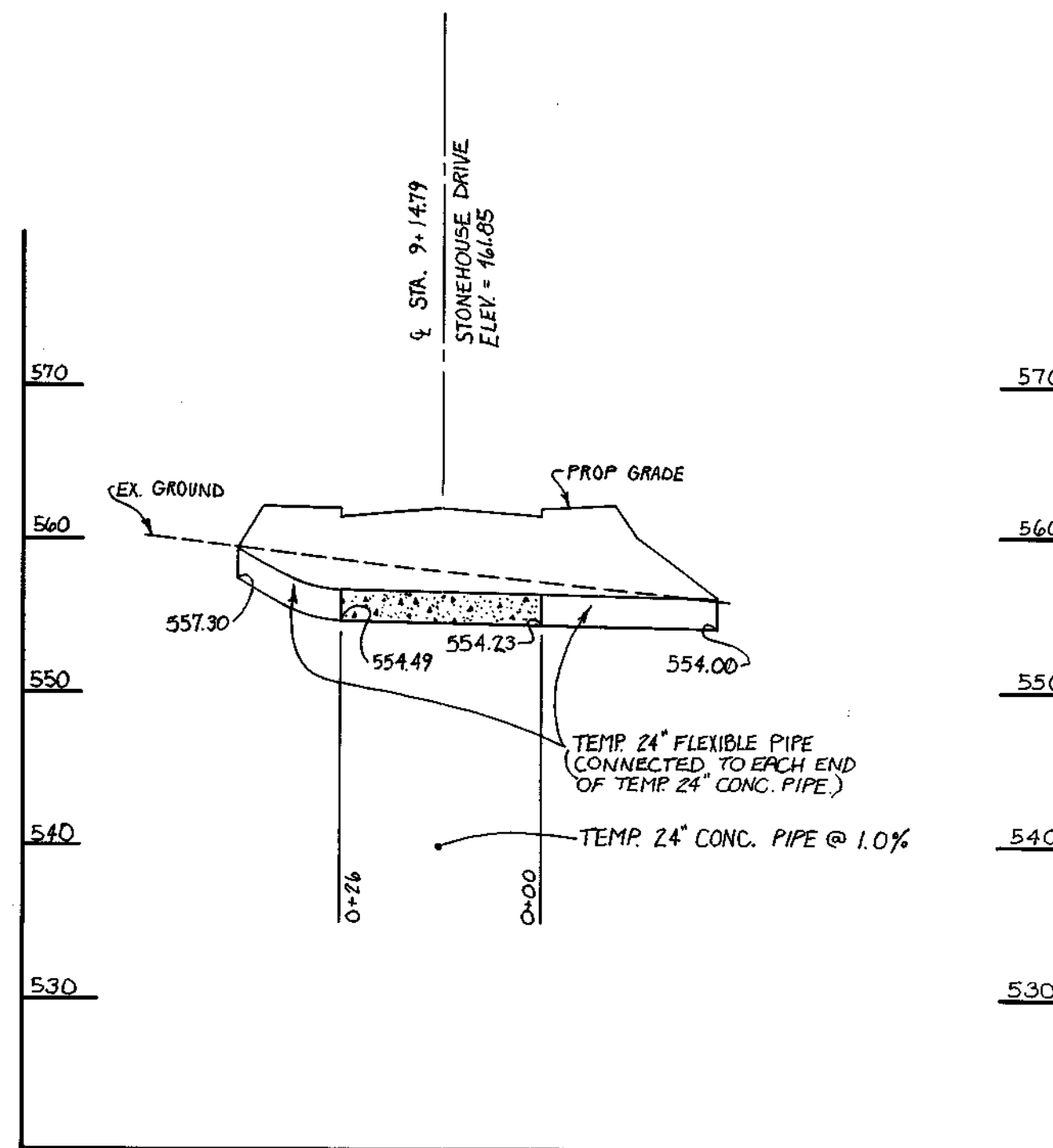
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the inside of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt bulges removed when 'bulges' develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

| | | |
|----------------------|---------------------------|----------------|
| Tensile Strength | 50 lbs/in (min) | Test: MSMT 509 |
| Tensile Modulus | 20 lbs/in (min) | Test: MSMT 509 |
| Flow Rate | 0.3 gal/ft / minute (max) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min) | Test: MSMT 322 |

SUPER SILT FENCE

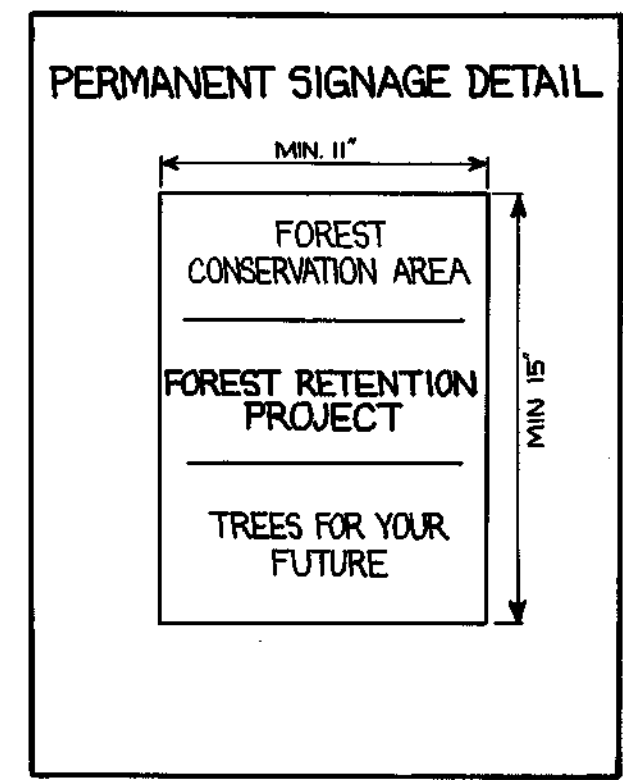
Design Criteria

| Slope | Slope Steepness | Slope Length (maximum) | Silt Fence Length (maximum) |
|----------|-----------------|------------------------|-----------------------------|
| 0 - 10% | 0 - 10:1 | Unlimited | Unlimited |
| 10 - 20% | 10:1 - 5:1 | 200 feet | 1,500 feet |
| 20 - 33% | 5:1 - 3:1 | 100 feet | 1,000 feet |
| 33 - 50% | 3:1 - 2:1 | 100 feet | 500 feet |
| 50% + | 2:1 + | 50 feet | 250 feet |



TEMP FLEXIBLE PIPE PROFILE

SCALE HORIZ: 1" = 20' VERT: 1" = 10'



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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: *Joseph P. Remelek* DATE: 8/28/96

DEVELOPER'S CERTIFICATE

I HEREBY 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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Signature of Developer: *John P. O'Leary* DATE: 8-27-96

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

Signature: *Clayton Summers* DATE: 8/21/97

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

Signature: *John P. O'Leary* DATE: 8/21/97

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *Michael Blood* DATE: 8/15/97

Signature: *John P. Remelek* DATE: 8/25/97

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *Christopher M. Danek* DATE: 2-20-97

Signature: *Christopher M. Danek* DATE: 2-20-97

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT (1 DAY).
- NOTIFY "MISS UTILITY" 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION (410) 313-1870, 24 HOURS BEFORE STARTING ANY WORK (1 DAY).
- INSTALL SEDIMENT CONTROL MEASURES: STONE CONSTRUCTION ENTRANCE, STONE OUTLET SEDIMENT TRAPS, EARTH DIKES AND SILT FENCE, STABILIZE TRAPS AND DIKES WITH TEMPORARY SEEDING (1 WEEK).
- GRADE SITE TO SUBGRADE, STABILIZE AND INSTALL STORM DRAINS AND INSTALL INLET PROTECTIONS (3 WEEKS).
- THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.
- SEDIMENT SHALL BE REMOVED FROM THE STONE OUTLET SEDIMENT TRAPS ONCE THE CLEANOUT ELEVATIONS HAVE BEEN REACHED, SEDIMENT MUST BE PLACED UPHILL FROM THE TRAPS. SEE PLANS FOR CLEANOUT ELEVATIONS (1 DAY).
- INSTALL ROAD BASE COURSE (5 DAYS).
- INSTALL FOREBAY AND SHALLOW MARSH FACILITY (1 WEEK).
- REMOVE SEDIMENT FROM ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED AND STABILIZE ALL DISTURBED AREAS (2 DAYS).
- REMOVE INLET PROTECTIONS AND FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT.
- APPLY TRUCK COAT TO SUB-BASE AND LAY SURFACE COURSE (4 DAYS).
- REMOVE ALL SEDIMENT CONTROL MEASURES UPON SEDIMENT CONTROL INSPECTORS APPROVAL (2 DAYS).
- ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING (2 DAYS).



SEDIMENT CONTROL NOTES AND DETAILS DANIELS MILL OVERLOOK

SECTION 2 AREA 3
LOTS 131 THRU 176 AND PARCEL 'B'
ZONED: E-1
TAX MAP No. 17 PARCEL Nos. 41 and 547
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SHEET 18 OF 25

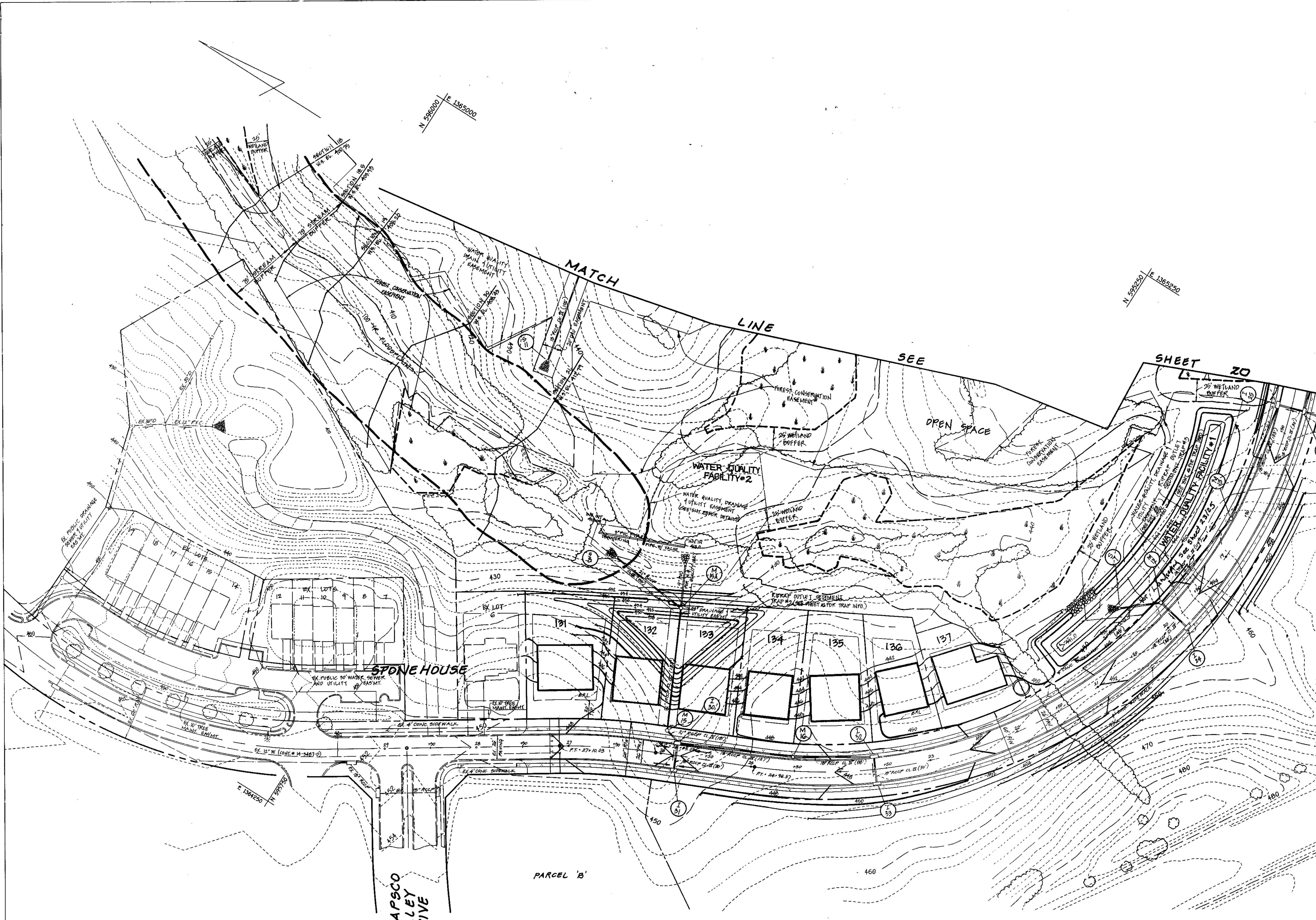
SCALE: AS SHOWN DATE: AUG. 27, 1996

OWNER
DANIELS MILL OVERLOOK, LLC
C/O MR. MICHAEL DIFFENDAL
1590 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE #705
1447 YORK ROAD
LUTHERVILLE, MARYLAND 20913

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
PENTAGONAL SQUARE OFFICE PARK - 1672 BALTIMORE NATIONAL FIRE
BLICOTT CITY, MARYLAND 20912
301-661-2855

1783



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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Engineer: *Joseph P. Bouché* DATE: 8/28/96

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
 Signature of Developer: *Michael D. ...* DATE: 8-27-96

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Signature: *Carol Summers* DATE: 2/12/97
 U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *John R. Blanton* DATE: 2/12/97
 DISTRICT HOWARD SOIL CONSERVATION DIST.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *Richard Blod* DATE: 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *...* DATE: 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: *Andrew M. ...* DATE: 2-20-97
 CHIEF, BUREAU OF HIGHWAYS

LANDSCAPE PLAN
DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 131 THRU 176
 AND PARCEL 'B'
 TAX MAP No: 17 PARCEL: 41 B 547
 ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: AUG. 27, 1996
 SHEET 19 OF 25

DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLERIA TOWERS
 SUITE #705
 1447 YORK ROAD
 LUTHERVILLE, MARYLAND 21093

OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL DIFFENDAL
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904



1783
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21117
 (410) 491-2000

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A FEASIBLE AND WORKABLE PLAN BASED ON THE BEST AVAILABLE KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Joseph P. Fenech 8/28/96
SIGNATURE OF ENGINEER DATE

DEVELOPER'S CERTIFICATE

I HAVE CERTIFIED 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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

John D. Simon 8-27-96
SIGNATURE OF DEVELOPER DATE

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

Clayton Simon 2/12/97
S.D.A. - NATURAL RESOURCES CONSERVATION DISTRICT DATE

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

John P. Austin 2/12/97
DISTRICT HOWARD SOIL CONSERVATION DISTRICT DATE

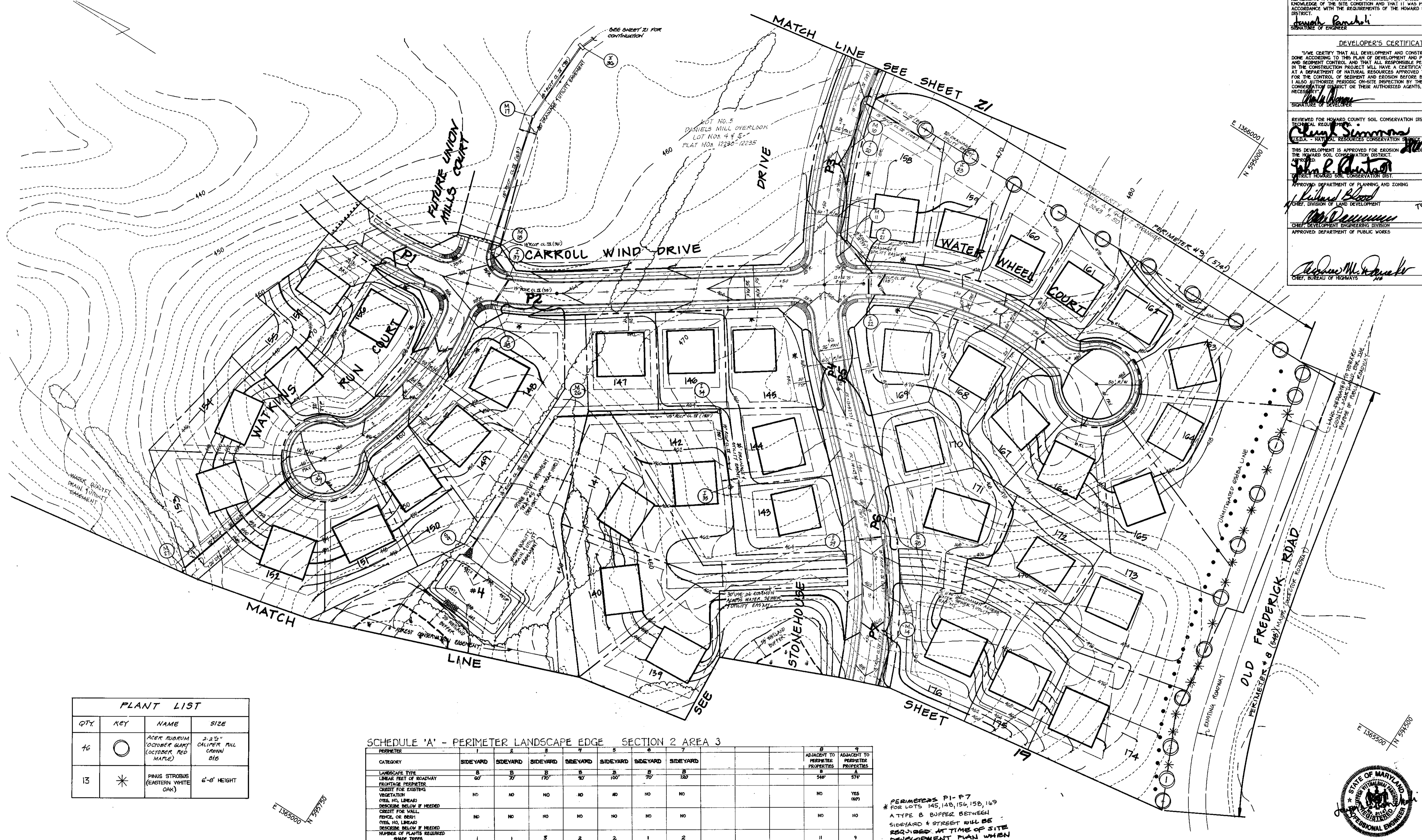
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard Blood 3/5/97
COMMISSIONER OF LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

John Deane 2/6/97
CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

Richard M. Deane 2-28-97
CHIEF, BUREAU OF HIGHWAYS DATE



| PLANT LIST | | | |
|------------|-----|---|---|
| QTY | KEY | NAME | SIZE |
| 16 | ○ | ACER RUPIRUM OCTOBER BLUNT (OCTOBER RED MAPLE) | 2-2 1/2" CALIFORNIA FULL CROWN D1B |
| 13 | * | PINUS STROBUS (EASTERN WHITE OAK) | 6'-8" HEIGHT |

SCHEDULE 'A' - PERIMETER LANDSCAPE EDGE SECTION 2 AREA 3

| CATEGORY | PERIMETER | | | | | | | 8 ADJACENT TO PERIMETER PROPERTIES | 9 ADJACENT TO PERIMETER PROPERTIES |
|---|-----------|---------|---------|---------|---------|---------|---------|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| LANDSCAPE TYPE | B | B | B | B | B | B | B | B | A |
| LINEAR FEET OF ROADWAY | 60' | 70' | 170' | 30' | 100' | 80' | 120' | 340' | 574' |
| PERCENTAGE PERIMETER CREDIT FOR EXISTING VEGETATION | NO | NO | NO | NO | NO | NO | NO | NO | 167 |
| YES, NO, LINEAD DESCRIBE BELOW IF NEEDED | | | | | | | | | (167) |
| CREDIT FOR WALL, FENCE, OR BUSH | NO | NO | NO | NO | NO | NO | NO | NO | NO |
| YES, NO, LINEAD DESCRIBE BELOW IF NEEDED | | | | | | | | | |
| NUMBER OF PLANTS REQUIRED | 1 | 1 | 3 | 2 | 2 | 1 | 2 | 11 | 9 |
| SHADE TREES | | | | | | | | 11 | 9 |
| EVERGREEN TREES | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 15 | 9 |
| SHRUBS | - | - | - | - | - | - | - | - | - |
| NUMBER OF PLANTS PROVIDED | | | | | | | | 11 | 9 |
| SHADE TREES | | | | | | | | 11 | 9 |
| EVERGREEN TREES | | | | | | | | 15 | 9 |
| OTHER TREES (ON SUBST) | | | | | | | | - | - |
| SHRUBS (ON SUBST) | | | | | | | | - | - |
| DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED | | | | | | | | | |
| INSTALLED BY * | BUILDER | BUILDER | BUILDER | BUILDER | BUILDER | BUILDER | BUILDER | DEVELOPER | DEVELOPER |

PERIMETERS P1-P7 FOR LOTS 145, 146, 156, 158, 169 A TYPE B BUFFER BETWEEN SIDEYARD & STREET WILL BE REQUIRED AT TIME OF SITE DEVELOPMENT PLAN WHEN GRADING & ORIENTATION OF HOUSE ARE ESTABLISHED.

*THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 18.08 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE (10) 1 REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$5,000 - \$15,000.00

DEVELOPER
THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLIA TOWERS, SUITE 705
1947 YORK ROAD
LUTHERVILLE, MARYLAND 21095

OWNER
DANIEL'S MILL OVERLOOK, LLC
C/O MICHAEL DIFFENDAL
1900 TECH ROAD
SILVER SPRING, MARYLAND 20904

LANDSCAPE PLAN
DANIELS MILL OVERLOOK
SECTION 2 AREA 3
LOTS 131 THRU 176
AND PARCEL 'B'
TAX MAP No: 17 PARCEL: 41 & 547
ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUG. 27, 1996
SHEET 20 OF 25



1783

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2895

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *Joseph P. Rando* DATE: 8/28/96
 SIGNATURE OF ENGINEER DATE

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 EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
 Signature: *John A. ...* DATE: 8-27-96
 SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Signature: *Clayton Summers* DATE: 2/2/97
 SIGNATURE OF DISTRICT ENGINEER DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 Signature: *John P. ...* DATE: 2/2/97
 SIGNATURE OF DISTRICT ENGINEER DATE

APPROVED DEPARTMENT OF PLANNING AND ZONING
 Signature: *Richard Blood* DATE: 2/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Signature: *William ...* DATE: 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Signature: *Andrew M. ...* DATE: 2-20-97
 CHIEF, BUREAU OF HIGHWAYS DATE

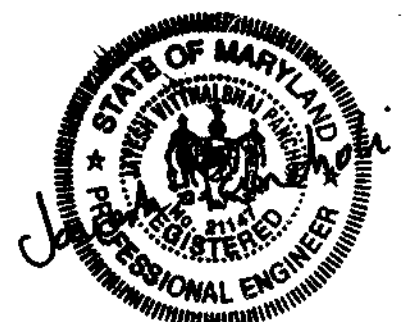
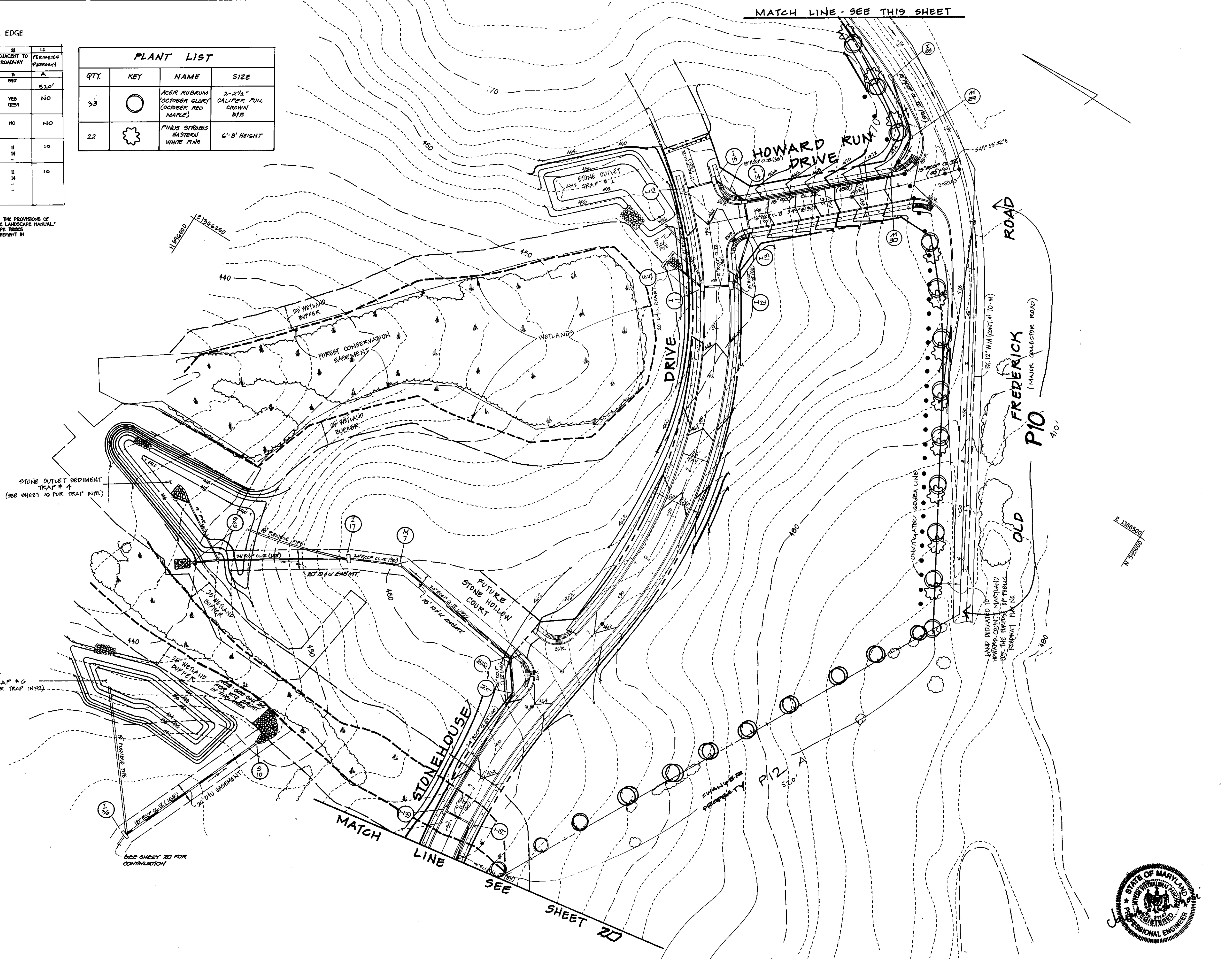
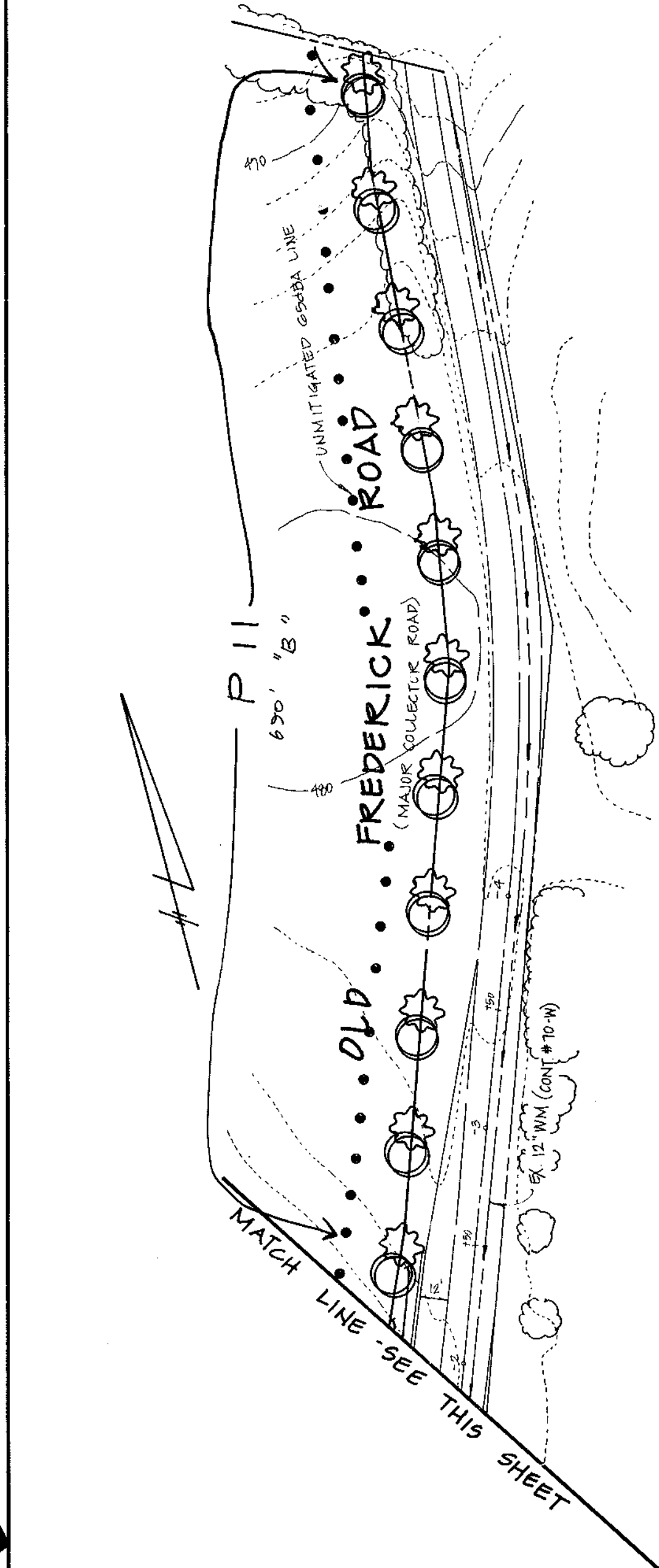
SCHEDULE 'A' - PERIMETER LANDSCAPE EDGE
 SECTION 2 AREA 3

| PERIMETER CATEGORY | # ADJACENT TO ROADWAY | # ADJACENT TO ROADWAY | # PERIMETER PER ACRE |
|---|-----------------------|-----------------------|----------------------|
| LANDSCAPE TYPE | B | B | A |
| LINEAR FEET OF ROADWAY FRONTAGE PERIMETER | 110' | 950' | 52.0' |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR) DESCRIBE BELOW IF NEEDED | NO | YES 0297 | NO |
| CREDIT FOR WALL, FENCE, OR BERRY (YES, NO, LINEAR) DESCRIBE BELOW IF NEEDED | NO | NO | NO |
| NUMBER OF PLANTS REQUIRED | 0 | 11 | 10 |
| SHADE TREES | 0 | 11 | 10 |
| EVERGREEN TREES | 0 | 11 | 10 |
| SHRUBS | 0 | 11 | 10 |
| NUMBER OF PLANTS PROVIDED | 0 | 11 | 10 |
| SHADE TREES | 0 | 11 | 10 |
| EVERGREEN TREES | 0 | 11 | 10 |
| OTHER TREES (20' SUBST.) | - | - | - |
| SHRUBS (20' SUBST.) | - | - | - |
| DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED | - | - | - |

PLANT LIST

| QTY. | KEY | NAME | SIZE |
|------|-----|---|----------------------------------|
| 33 | ○ | ACER RUBRUM OCTOBER GLORY (OCTOBER RED MAPLE) | 2-2 1/2" CALIPER FULL CROWN 8'8" |
| 22 | ⊛ | PINUS STROBILIS EASTERN WHITE PINE | 6'-8" HEIGHT |

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 18.24 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE (40%) REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$62,200 + 1% BCC/GC"



LANDSCAPE PLAN
DANIELS MILL OVERLOOK
 SECTION 2 AREA 3
 LOTS 131 THRU 136
 AND PARCEL 'B'
 TAX MAP No: 17 PARCEL: 41 B 547
 ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: AUG. 27, 1996
 SHEET 21 OF 25

DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLIA TOWERS, SUITE # 705
 1900 TECH ROAD
 LUTHERVILLE, MARYLAND 20948

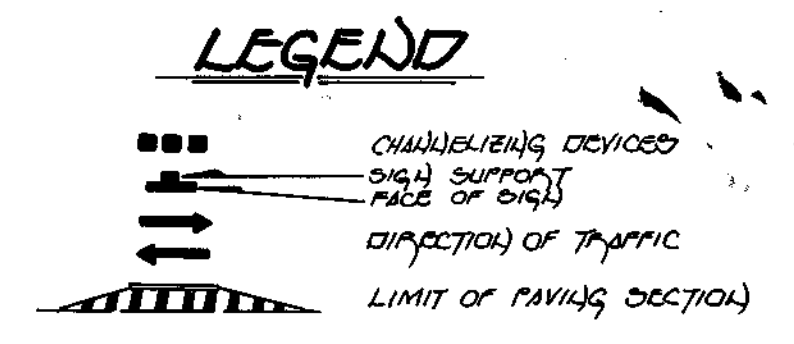
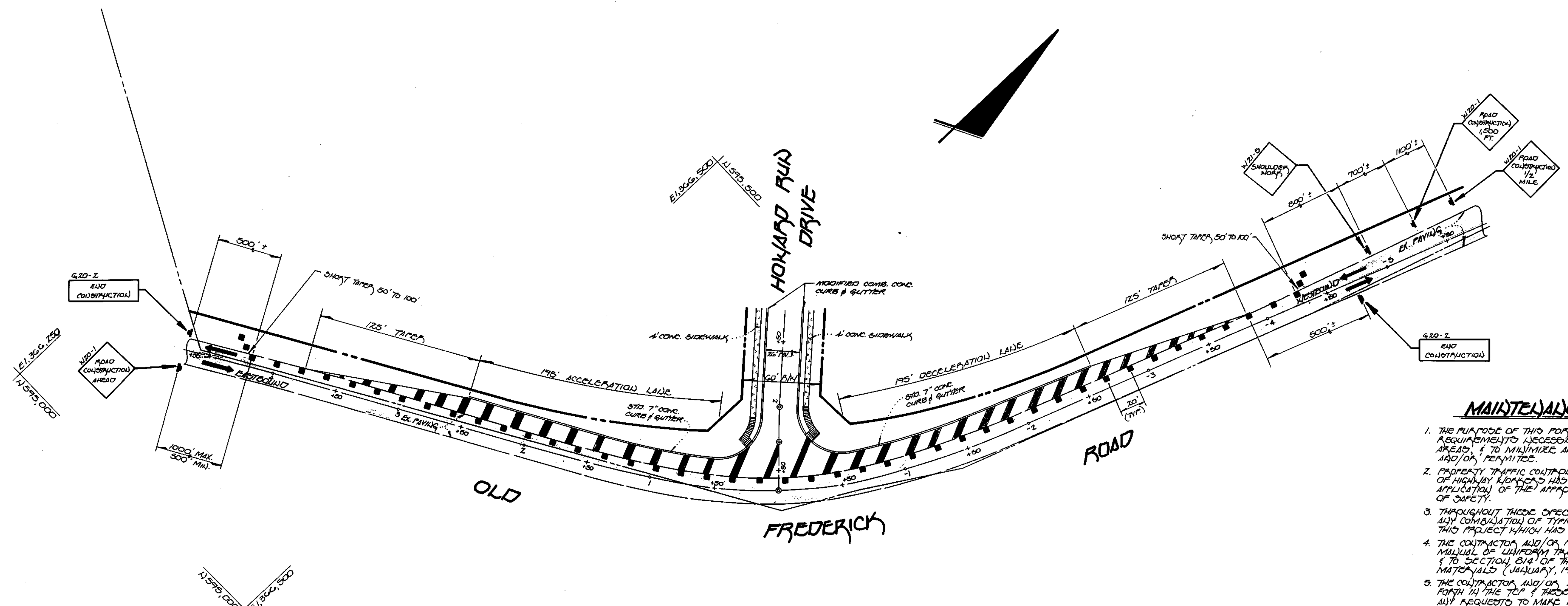
OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL DIFFENDAL
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

1783
 FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1100 NATIONAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FIRE

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Savelle 2-20-97
 CHIEF, BUREAU OF HIGHWAYS NS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
 CHIEF, DIVISION OF LAND DEVELOPMENT KC DATE

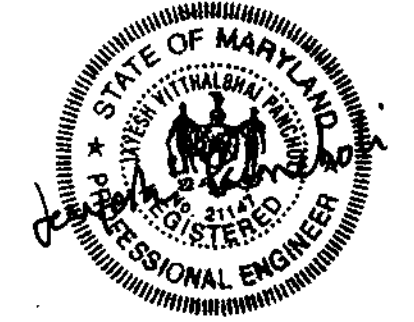
Michael J. ... 2/25/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JJC DATE



PLAN
 SCALE 1" = 50'

MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS

1. THE PURPOSE OF THIS PORTION OF THE SPECIAL PROVISIONS IS TO OBTAIN THE TRAFFIC CONTROL REQUIREMENTS NECESSARY FOR THE SAFE & EFFICIENT MAINTENANCE TO TRAFFIC WITHIN WORK AREAS & TO MINIMIZE ANY INCONVENIENCE TO THE TRAVELING PUBLIC & THE CONTRACTOR AND/OR PERMITTEE.
2. PROPER TRAFFIC CONTROL THROUGH WORK AREAS IS ESSENTIAL FOR ASSURING THE SAFETY & THAT OF HIGHWAY EMPLOYEES HAS THE HIGHEST PRIORITY OF ALL TASKS WITHIN THIS PROJECT. THE PROPER APPLICATION OF THE APPROVED TRAFFIC CONTROL PLAN (TCP) WILL PROVIDE THE DESIRED LEVEL OF SAFETY.
3. THROUGHOUT THESE SPECIAL PROVISIONS, ANY PORTION OF THE TCP SHALL BE IMPLIED TO INCLUDE ANY CONSULTATION OF TYPICAL TRAFFIC CONTROL STANDARDS WHICH FORM THE OVERALL TCP FOR THIS PROJECT WHICH HAS BEEN APPROVED BY THE APPROPRIATE CHD TRAFFIC ENGINEER.
4. THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE PROVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 1988 EDITION, ESPECIALLY PART VI, & TO SECTION 614 OF THE MARYLAND DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION & MAINTENANCE (JANUARY, 1988), INCLUDING ALL REVISIONS & SUPPLEMENTS TO EACH.
5. THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE REQUIREMENTS SET FORTH IN THE TCP & THESE SPECIAL PROVISIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY REQUESTS TO MAKE MINOR CHANGES TO THE TCP OR THE SPECIAL PROVISIONS WITH REGARD TO TRAFFIC CONTROL ITEMS SHALL BE MADE IN WRITING TO THE ENGINEER. A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE PROPOSED SCHEDULING CHANGE. THE CONTRACTOR AND/OR PERMITTEE SHALL HAVE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO THE IMPLEMENTATION OF ANY CHANGE.
6. NO WORK SHALL BEGIN ON ANY WORK ACTIVITY OR WORK PHASE UNTIL ALL REQUIRED TRAFFIC CONTROL PATTERNS & DEVICES INDICATED ON THE TCP FOR THAT ACTIVITY OR PHASE ARE COMPLETELY & CORRECTLY IN PLACE & HAVE BEEN CHECKED FOR APPROVED USAGE.
7. GENERAL & SPECIFIC WARNING SIGNS SHALL ONLY BE IN PLACE WHEN SPECIFIC WORK TASKS ACTIVITIES ARE ACTUALLY UNDERWAY OR CONDITIONS EXIST THAT POSE A POTENTIAL HAZARD TO THE PUBLIC AND ANY ADDITIONAL SIGNS HAS BEEN APPROVED BY THE APPROPRIATE CHD TRAFFIC ENGINEER. NOTE: THE PRACTICE OF PLACING SIGNS & OTHER TRAFFIC CONTROL DEVICES IN ADDITION TO THOSE INDICATED ON THE APPROVED TCP IS NOT PERMITTED.
8. THE CONTRACTOR AND/OR PERMITTEE SHALL PROVIDE, MAINTAIN IN GOOD CONDITION, & MOVE WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER, ALL TRAFFIC CONTROL DEVICES USED FOR THE GUIDANCE & PROTECTION OF MOTORISTS, PEDESTRIANS, & WORKERS.
9. ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE TCP SHALL BE KEPT IN GOOD CONDITION, FULLY REPAIRABLE AS SET FORTH IN THE MUTCD AND FOR SECTION 614 OF THE SPECIAL PROVISIONS. FOR REFLECTIVE DEVICES, A PARTICULAR DEVICE IS ASSUMED TO HAVE FAILED TO MEET MINIMUM OPERATIONAL STANDARDS WHICH THE DEVICE IS ASSUMED TO HAVE REFLECTANCE CAPABILITY OF AT LEAST 50% OF THE SPECIFIED MINIMUM VALUE OVER AT LEAST 70% OF THE VISIBLE SURFACE.
10. ALL TRAFFIC CONTROL DEVICES NOT REQUIRED FOR THE SAFE CONDUCT OF TRAFFIC SHALL BE PROMPTLY REMOVED, COMPLETELY COVERED, OR REMOVED AWAY FROM TRAFFIC, OR OTHERWISE TAKEN OUT OF SERVICE. IT IS INTENDED THAT NO TRAFFIC CONTROL DEVICE IS TO BE IN SERVICE WHEN THERE IS NO CLEAR CUT REASON FOR THE DEVICE.
11. THROUGHOUT THE PERIOD(S) OF WORK ACTIVITIES, TRAFFIC SHALL BE MAINTAINED BY IMPLEMENTING THE APPROVED TCP. IN LIEU OF THE TCP PREPARED FOR THIS PROJECT, AND/OR INDIVIDUAL TYPICAL TRAFFIC CONTROL STANDARDS, THE CONTRACTOR AND/OR PERMITTEE HAS THE OPTION OF PREPARING & SUBMITTING A TCP KNOWLEDGEABLE IN PART OF HIS/HER OWNERS FOLLOWING GUIDELINES SET FORTH IN THE MUTCD & PRESCRIBED BY THE ADMINISTRATION. A TCP DEVELOPED BY THE CONTRACTOR AND/OR PERMITTEE SHALL NOT BE IMPLEMENTED UNTIL APPROVED WRITTEN APPROVAL IS OBTAINED. THESE SPECIAL PROVISIONS MAY BE IMPLEMENTED WITHIN A SINGLE PROJECT OR JOINTLY BETWEEN TWO OR MORE PROJECTS. IN SITUATIONS WHERE TCP'S ARE JOINTLY IMPLEMENTED, CARE SHALL BE EXERCISED TO PREVENT CONFLICT & WORK COMPLICATIONS TO THE TRAVELING PUBLIC.
12. THROUGHOUT THESE SPECIAL PROVISIONS, WHERE SPEED OF TRAFFIC IS NOTED THIS MEANS THE POSTED SPEED OR MAXIMUM TRAVEL SPEED, WHICHEVER IS HIGHER, UNLESS OTHERWISE NOTED.
13. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT, UNLESS OTHERWISE NOTED AS TRAVEL LANE(S) OTHER THAN THOSE DESIGNATED FOR POSSIBLE CLOSURE. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM APPROVAL FROM THE ENGINEER. ALL WORKERS TO BE EMPLOYED ON THE WORK AREAS BY THE CONTRACTOR AND/OR PERMITTEE SHALL BE PERFORMED WITH THE FLOW OF TRAFFIC.



**TRAFFIC CONTROL PLAN
 DANIELS MILL OVERLOOK**

SECTION 2 AREA 3
 LOTS 131 THRU 136 AND PARCEL 'B'
 ZONED: R-ED
 TAX MAP No. 17 PARCEL Nos. 41 and 547
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SHEET 22 OF 25

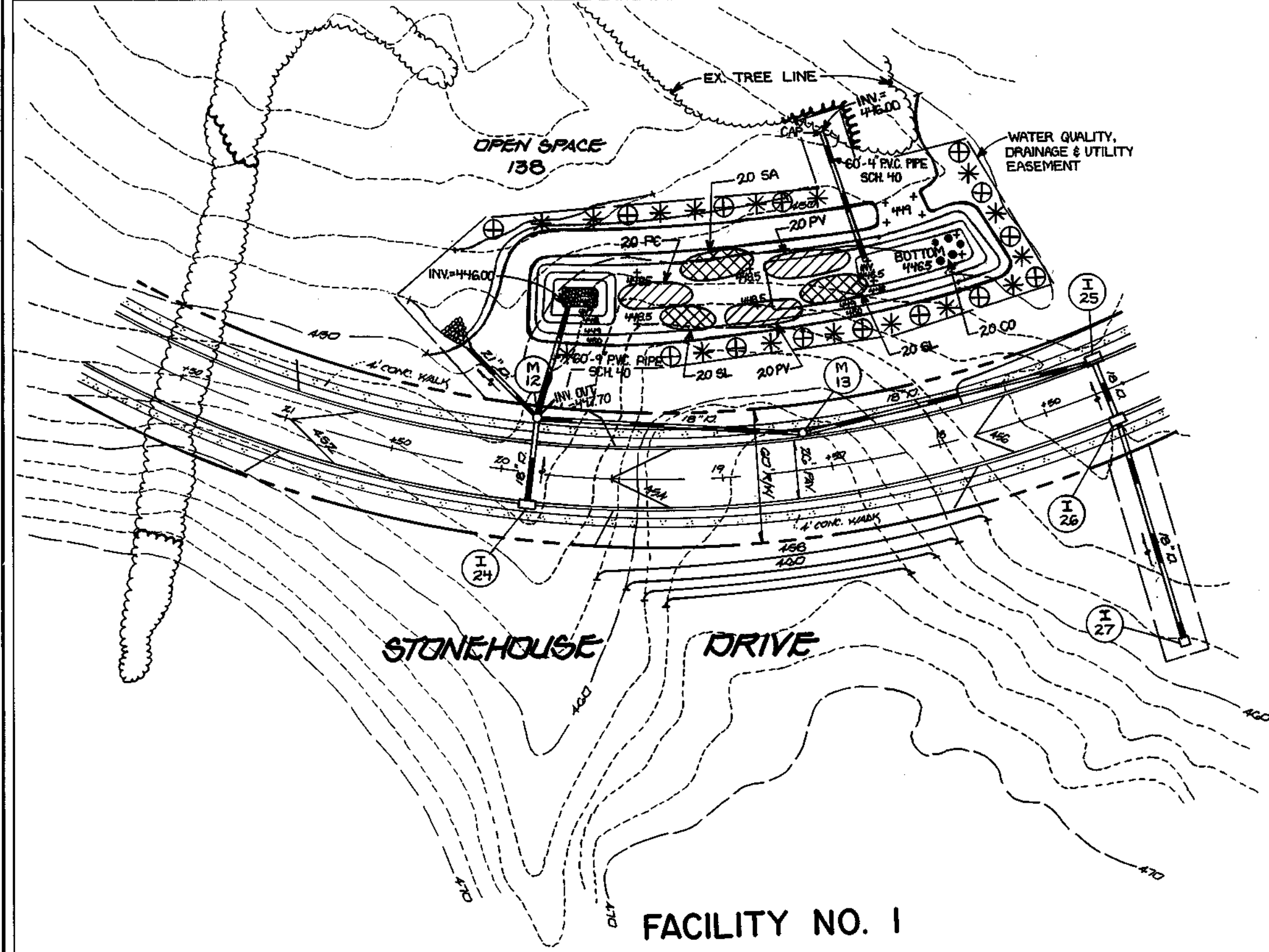
SCALE: AS SHOWN DATE: AUG. 27, 1996

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLETTT CITY, MARYLAND 21114
 410-461-2995

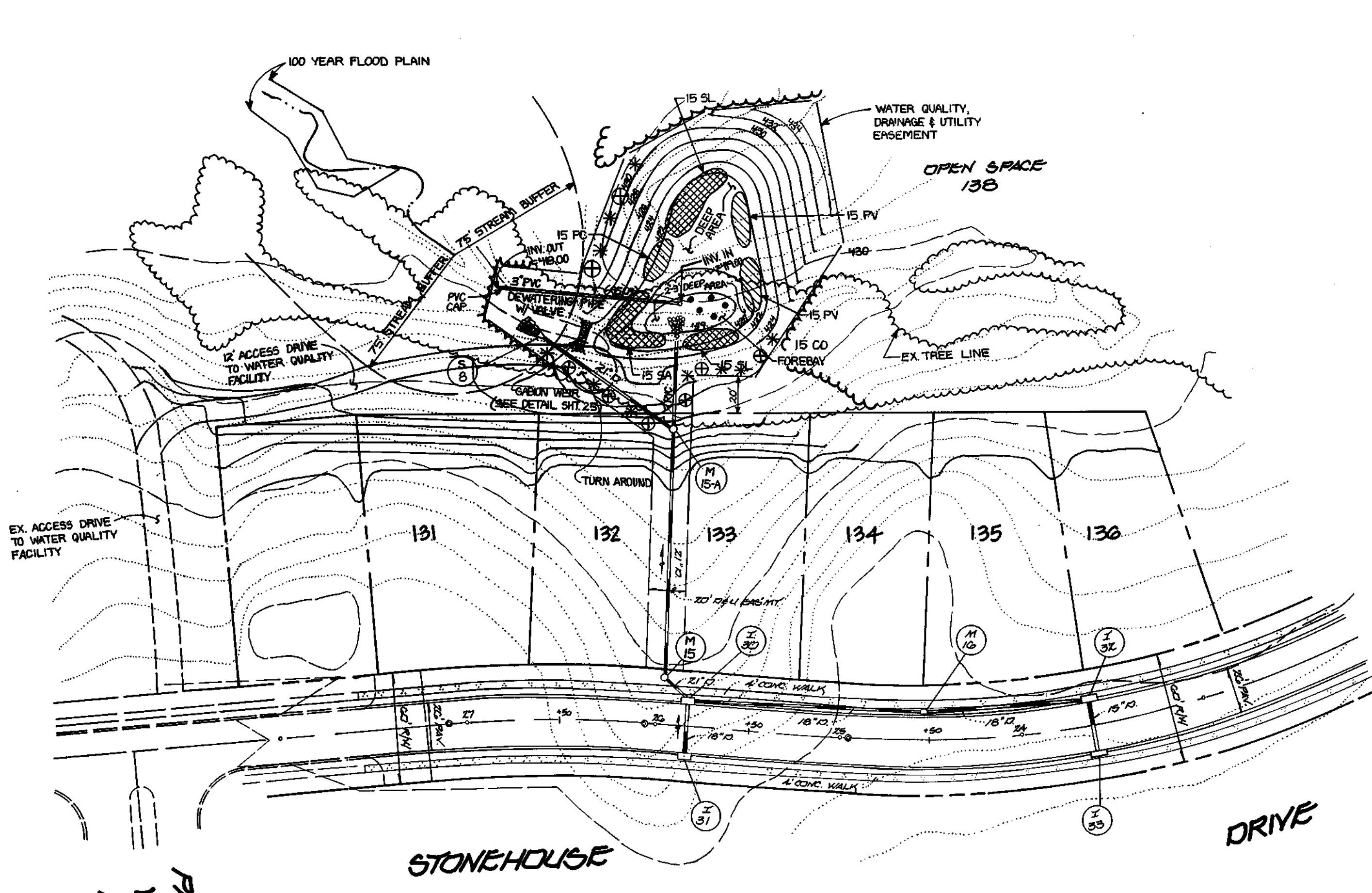
OWNER
 DANIELS MILL OVERLOOK, LLC
 C/O MR. MICHAEL DIFFENDAL
 1960 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 THE RYLAND GROUP
 ATTENTION: MR. CHARLES O'DONOVAN
 GALLIA TOWERS, SUITE #705
 1447 YORK ROAD
 LUTHERVILLE, MARYLAND 21033

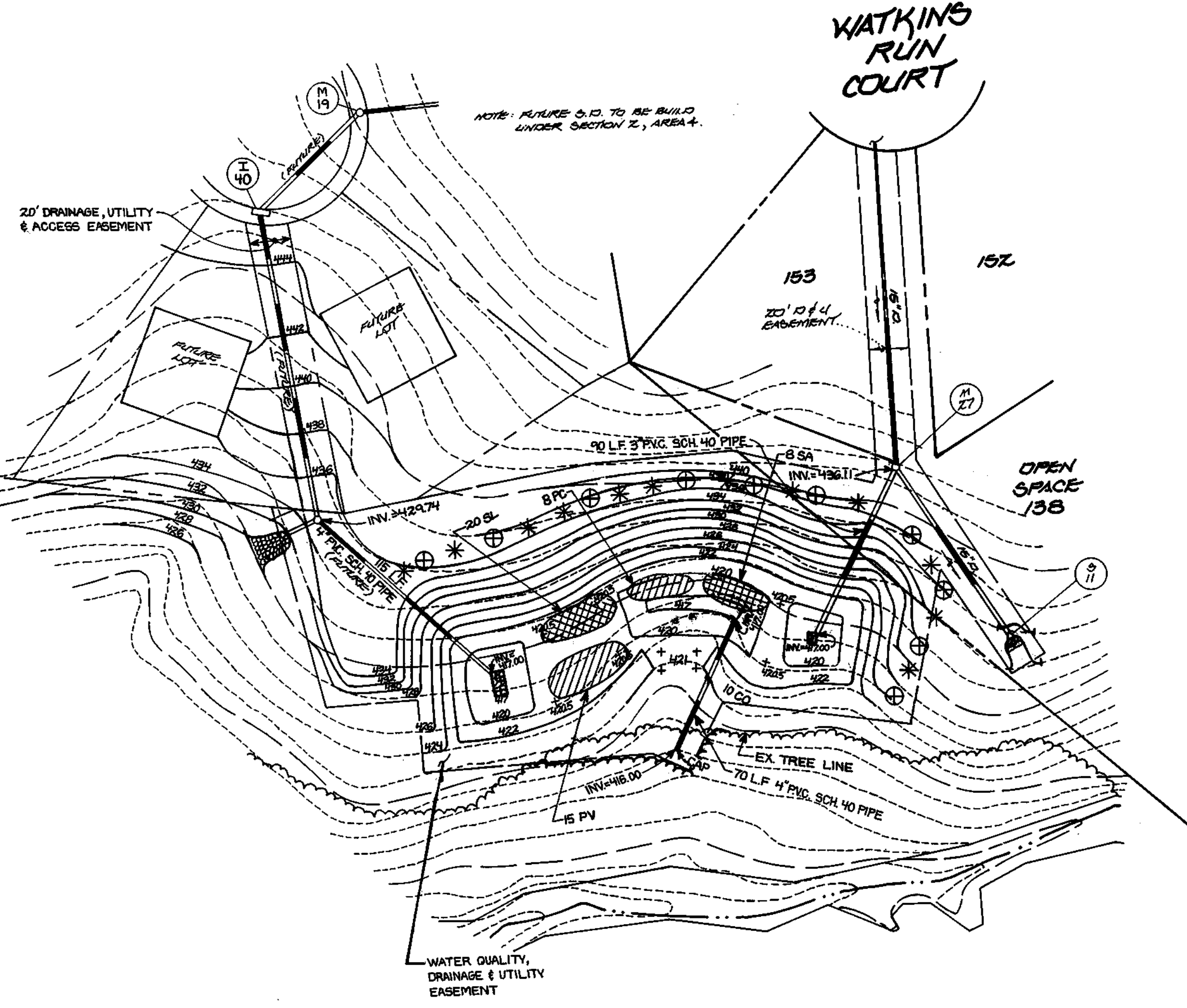
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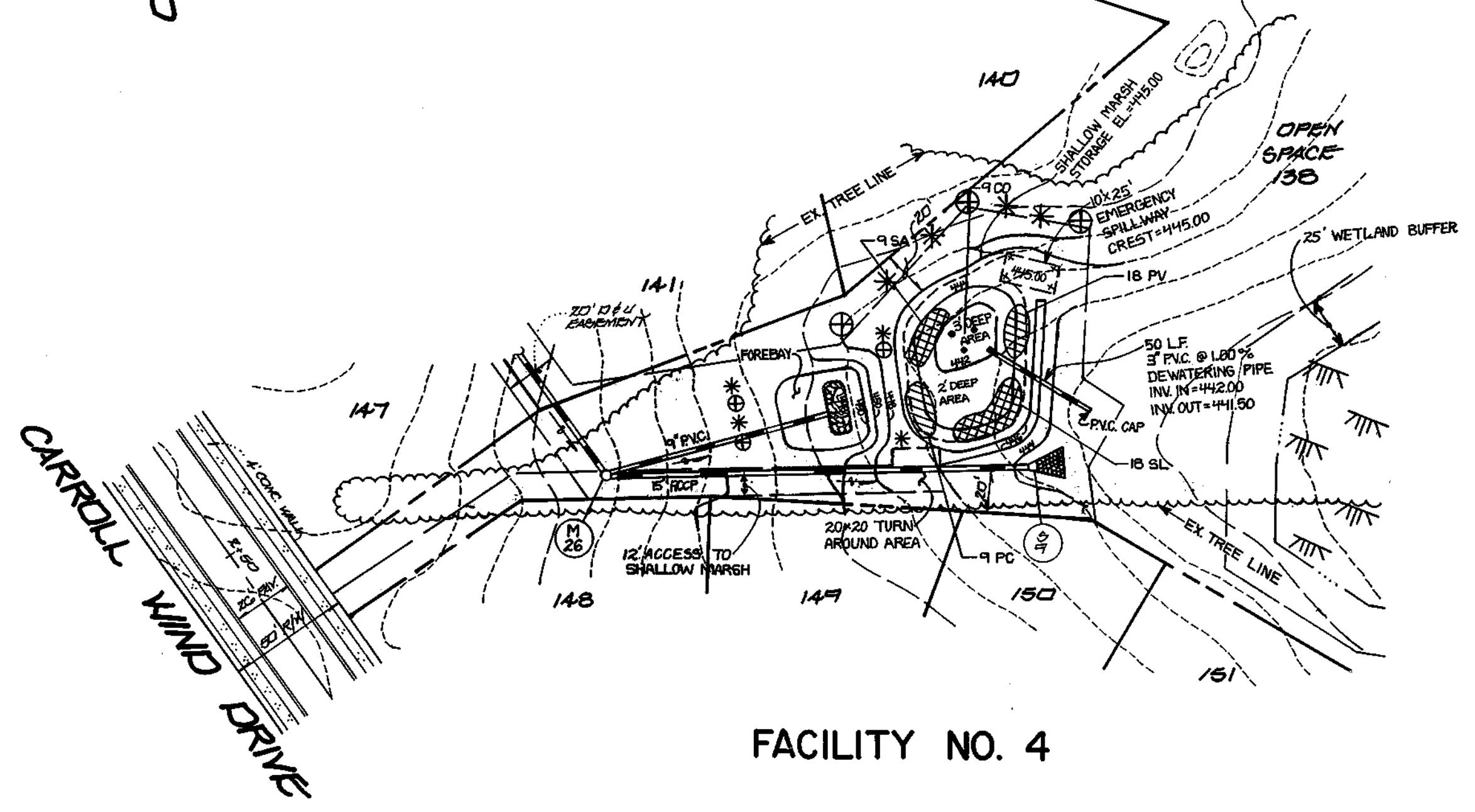
FACILITY NO. 1



FACILITY NO. 2



FACILITY NO. 3



FACILITY NO. 4

WATER QUALITY FACILITIES

PLANS

SCALE: 1"=50'

OWNER

DANIELS MILL OVERLOOK, LLC
C/O MR. MICHAEL DIFFENDAL
1500 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER

THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE #705
1447 YORK ROAD
LUTHERVILLE, MARYLAND 21045

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Joseph Panchadi 8/28/96
SIGNATURE OF ENGINEER DATE

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR ITS AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

John Danner 8-27-96
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Cheryl Simmons 2/12/97
S.O.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John L. Blunt 2/12/97
DISTRICT HOWARD SOIL CONSERVATION DIST. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

W.D. Danner 2/25/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
APPROVED: DEPARTMENT OF PUBLIC WORKS

Andrew M. Panchadi 2-20-97
CHIEF, BUREAU OF HIGHWAYS DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ PE. NO. _____
DATE _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEANOR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF PONDS(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNERS(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNERS(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

HOMEOWNER'S ASSOCIATION MAINTENANCE RESPONSIBILITIES FOR SHALLOW HARSH

- INSPECTION FOREBAY AFTER EACH STORM - IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF HIGHWAYS TO FACILITATE CLEANOUT OPERATIONS.
- REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
- ANNUAL INSPECTION AND REPAIR OF THE GABION STRUCTURES, AS NEEDED. VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANYTIME.
- CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
- NOTE: THIS FACILITY IS TO BE JOINTLY MAINTAINED BY THE H.O.A. FOR DANIELS HILL OVERLOOK AND THE DEPARTMENT OF PUBLIC WORKS.

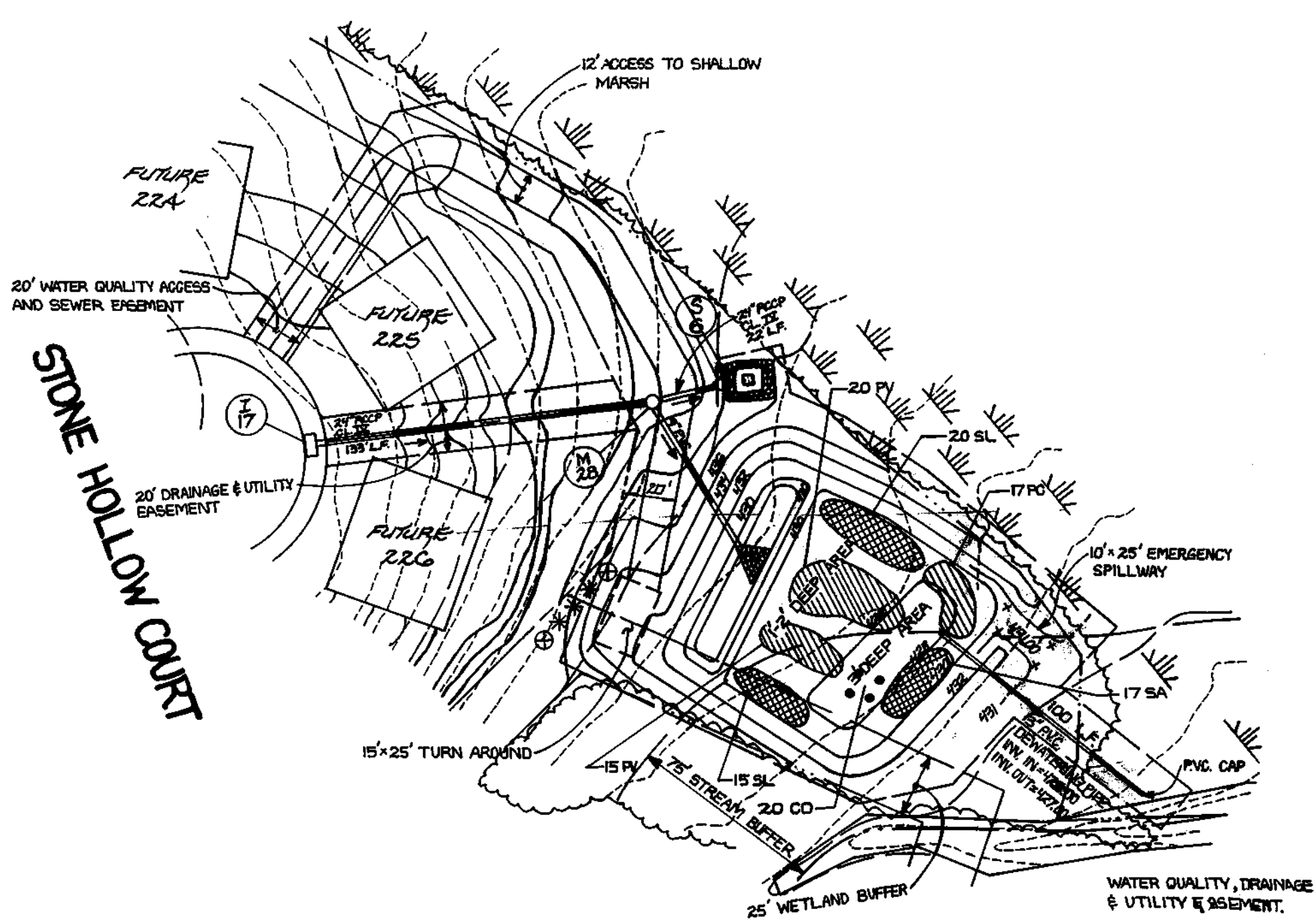


WATER QUALITY DANIELS MILL OVERLOOK

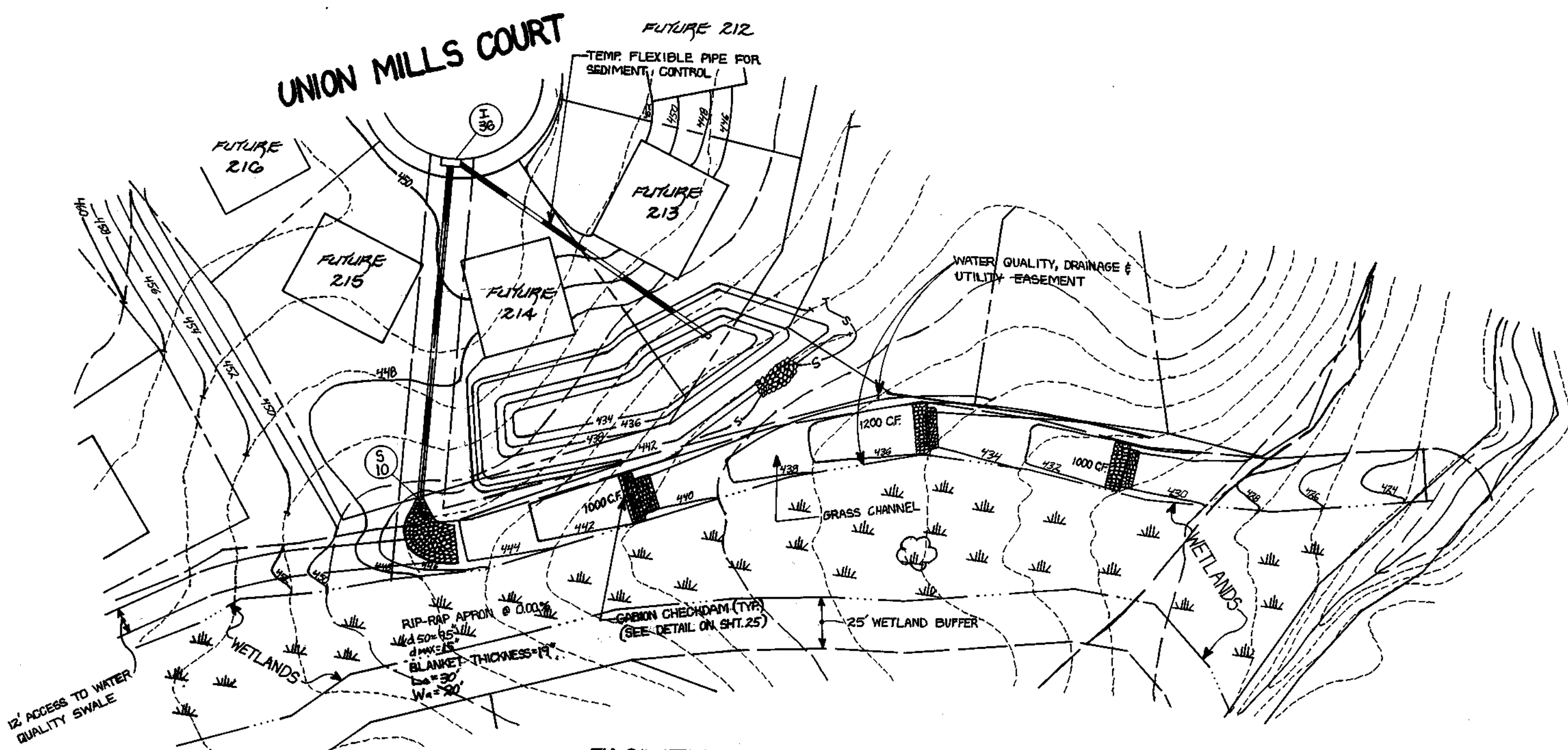
SECTION 2 AREA 3
LOTS 131 THRU 176 AND PARCEL 'B'
ZONED: R-ED
TAX MAP No. 17 PARCEL No. 41 and 547
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SHEET 23 OF 25
DATE: AUGUST 27, 1996

1783

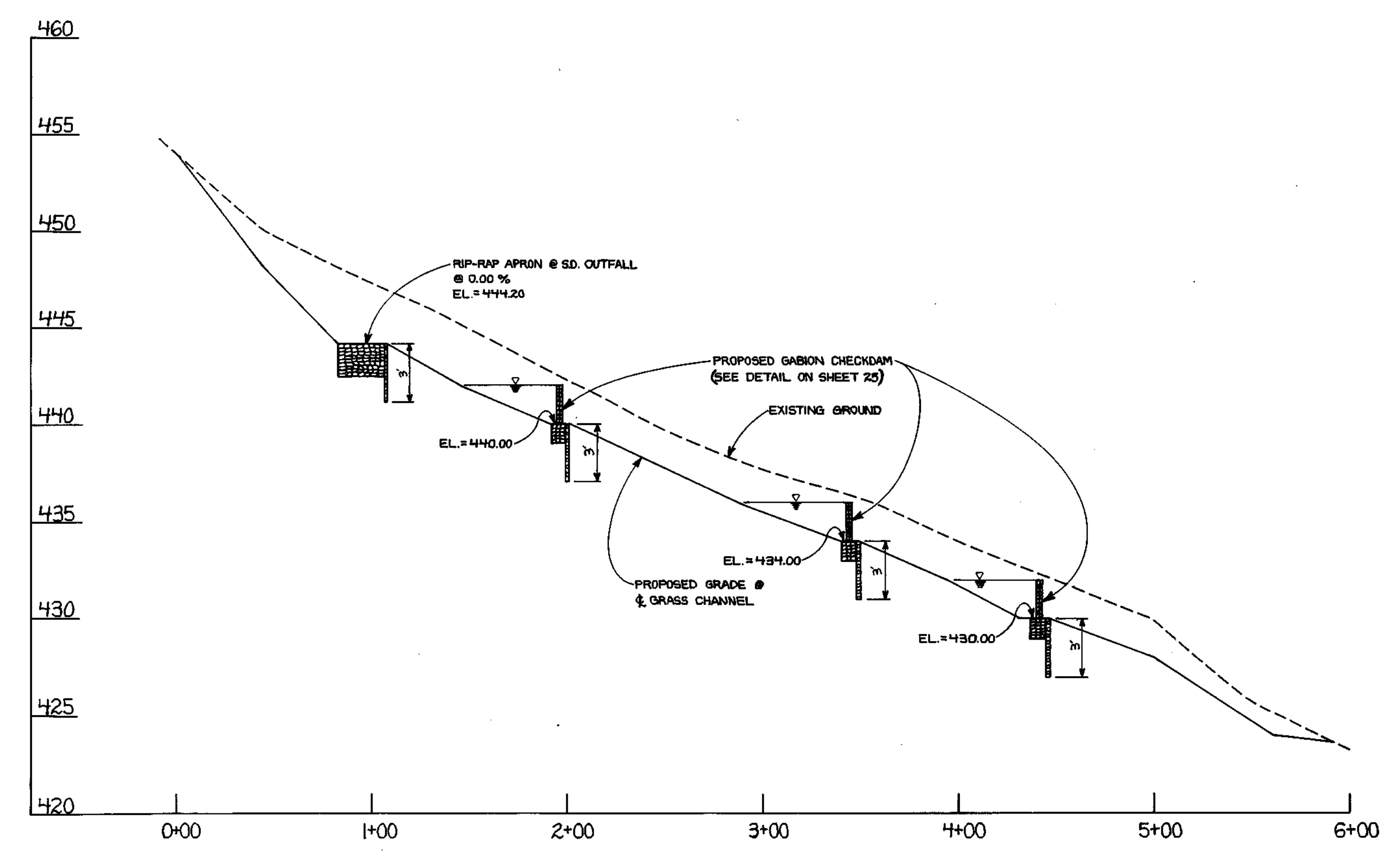
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21041
4100 441 - 2895



FACILITY NO. 5



FACILITY NO. 6



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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Joseph R. Kuchel 8/28/96
SIGNATURE OF ENGINEER DATE

DEVELOPER'S CERTIFICATE

I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Paul Dwyer 8-27-96
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS. 2/12/97
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. APPROVED: *John R. Chuteau* 2/12/97
DISTRICT HOWARD SOIL CONSERVATION DIST. DATE

APPROVED DEPARTMENT OF PLANNING AND ZONING: *Richard Blood* 3/5/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED DEPARTMENT OF PUBLIC WORKS: *Chris Dammicus* 2/5/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Andrew M. Decker 2-20-97
CHIEF, BUREAU OF HIGHWAYS DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ PE NO. _____
DATE _____

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF PONDS(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SC5 "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

HOMEOWNER'S ASSOCIATION MAINTENANCE RESPONSIBILITIES FOR SHALLOW MARSH

- INSPECTION FOREBAY AFTER EACH STORM - IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF HIGHWAYS TO FACILITATE CLEANOUT OPERATIONS.
- REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
- ANNUAL INSPECTION AND REPAIR OF THE GABBION STRUCTURES, AS NEEDED. VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANYTIME.
- CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
- NOTE: THIS FACILITY IS TO BE JOINTLY MAINTAINED BY THE H.O.A. FOR DANIELS MILL OVERLOOK AND THE DEPARTMENT OF PUBLIC WORKS.



DANIELS MILL OVERLOOK SECTION 2 AREA 3

ZONED: R-1D
TAX MAP No. 17 PARCEL Nos. 41 and 547
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SHEET 24 OF 25
DATE: AUG 27, 1996

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21041
410 661 - 2855

OWNER
DANIELS MILL OVERLOOK, L.L.C.
C/O MR. MICHAEL OTTENDAL
1500 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE # 705
1417 YORK ROAD
LUTHERVILLE, MARYLAND 21045

1783

WATER QUALITY CONSTRUCTION SPECIFICATIONS

SPECIFICATIONS

I SITE PREPARATION: AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1.

AREAS TO BE COVERED BY THE POND OR RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCE, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREE BRUSH AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 50 FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.

ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE DAM AND RESERVOIR AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. WHEN SPECIFIED, SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

II EARTH FILL:

MATERIAL: THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREA OR AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, OVERSIZE STONES, FROZEN OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUT OFF TRENCH SHALL CONFORM TO UNITED SOIL CLASSIFICATION GC, SC, CH, OR CL. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGN AND CONSTRUCTION ARE SUPERVISED BY A GEOTECHNICAL ENGINEER.

PLACEMENT: AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN 8-INCH MAXIMUM THICKNESS (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.

COMPACTION: THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER Tired OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WILL NOT CRUMBLE YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.

WHERE A MINIMUM REQUIRED DENSITY IS SPECIFIED, IT SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN ±2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY ASHTO METHOD T-99.

STRUCTURE BACKFILL: BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE PIPE UNLESS THERE IS A COMPACTED FILL OF TWENTY-FOUR INCHES OR GREATER OVER THE STRUCTURE OR PIPE.

PIPE CONDUITS: ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.

POLYVINYL CHLORIDE (PVC) PIPE - ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR POLYVINYL CHLORIDE (PVC) PIPE:

- MATERIALS - PVC PIPE SHALL BE PVC-1120 OR PVC-1220 CONFORMING TO ASTM D-1785 OR ASTM D-2241.
- JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATER TIGHT.
- BEDDING - THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTED TO PROVIDE ADEQUATE SUPPORT.
- BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".
- OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC) SHALL BE AS SHOWN ON THE DRAWINGS.

CONCRETE
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 608, MIX NO. 3.

ROCK RIPRAP
ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 905.

THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN THE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE REASONABLY HOMOGENEOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 912.

CARE OF WATER DURING CONSTRUCTION
ALL WORK ON PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DICES, LEVEES, COFFERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE OCCUPIED BY THE PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM THE VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION, AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN THE STABILITY OF THE EXCAVATED SLOPES AND BOTTOM OF REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTION OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER TO SUMPS FROM WHICH THE WATER SHALL BE PUMPED.

STABILIZATION: ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SLIGHTLY UNIFORM CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL, AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING AS REQUIRED IN ACCORDANCE WITH THE MARYLAND SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-312) OR AS SHOWN ON THE ACCOMPANYING DRAWINGS.

EROSION & SEDIMENT CONTROL: CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED & WATER & AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.

| KEY | WATER QUALITY FACILITY NUMBER | | | | |
|-----|-------------------------------|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 |
| SL | 40 | 30 | 20 | 18 | 35 |
| SA | 20 | 15 | 8 | 9 | 17 |
| CO | 20 | 15 | 10 | 9 | 20 |
| PV | 40 | 30 | 15 | 18 | 35 |
| PC | 20 | 15 | 8 | 9 | 17 |

| PLANT SPECIES | SIZE | REMARKS |
|---|-------|---------|
| PRIMARY WETLAND VEGETATION | | |
| SAGITTARIA LATIFOLIA DUCK POTATO | ROOTS | 36" OC |
| SCIRPUS AMERICANUS COMMON THREE SQUARE | ROOTS | 36" OC |
| SECONDARY WETLAND VEGETATION | | |
| CEPHALATHUS OCCIDENTALIS BUTTON BUSH | ROOTS | 36" OC |
| PELTANDRA VIRGINICA ARROW-ARUM | ROOTS | 36" OC |
| PONTEDERIA CORDATA PICKEREL WEED | ROOTS | 36" OC |

- NOTES:**
- ALL PLANT MATERIAL TO BE WET GROWN OR ADAPTED TO WETLAND CONDITIONS
 - ALTERATIONS TO THE PROPOSED GRADING SHOWN MAY AFFECT THE SUCCESS OF THE PLANT MATERIAL.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.

STORM WATER MANAGEMENT AREA LANDSCAPING (SCHEDULE 'D')

| WATER QUALITY FACILITY NUMBER | 1 | 2 | 3 | 4 | 5 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| LINEAR FEET OF PERIMETER | 760' | 590' | 760' | 670' | 600' |
| NUMBER OF TREES REQUIRED | BASED ON 700 L.F. | BASED ON 400 L.F. | BASED ON 510 L.F. | BASED ON 590 L.F. | BASED ON 190 L.F. |
| SHADE TREES | 14 | 8 | 10 | 10 | 2 |
| EVERGREEN TREES | 17 | 10 | 12 | 13 | 3 |
| CREDIT FOR EXISTING VEGETATION (NO, YES AND %) | 60' | 140' | 250' | 140' | 170' |
| CREDIT FOR OTHER LANDSCAPING (NO, YES AND %) | --- | --- | --- | --- | --- |
| NUMBER OF TREES PROVIDED | 14 | 8 | 10 | 10 | 2 |
| SHADE TREES | ⊕ | ⊕ | ⊕ | ⊕ | ⊕ |
| EVERGREEN TREES | * | * | * | * | * |
| OTHER TREES (2:1 SUBSTITUTION) | --- | --- | --- | --- | --- |

| QTY. | KEY | NAME | SIZE |
|------|-----|------------------------------------|----------------------------------|
| 44 | ⊕ | ACER FRUBRUM (OCTOBER GLORY MAPLE) | 2"-2 1/2" CALIBER FULL CROWN B&B |
| 55 | * | PINUS STROBUS (EASTERN WHITE PINE) | 6'-8' HEIGHT |

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE (49) REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$2,100.00."

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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

James P. Panchik 8/28/96
SIGNATURE OF ENGINEER DATE

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 ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Richard Blood 8-27-96
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS THE REQUIREMENTS OF THE DISTRICT. 2/12/97
DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. 2/12/97
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Blood 3/5/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard Blood 2/25/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
Richard M. Panchik 2-20-97
CHIEF, BUREAU OF HIGHWAYS DATE

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE _____ PE NO. _____
DATE _____

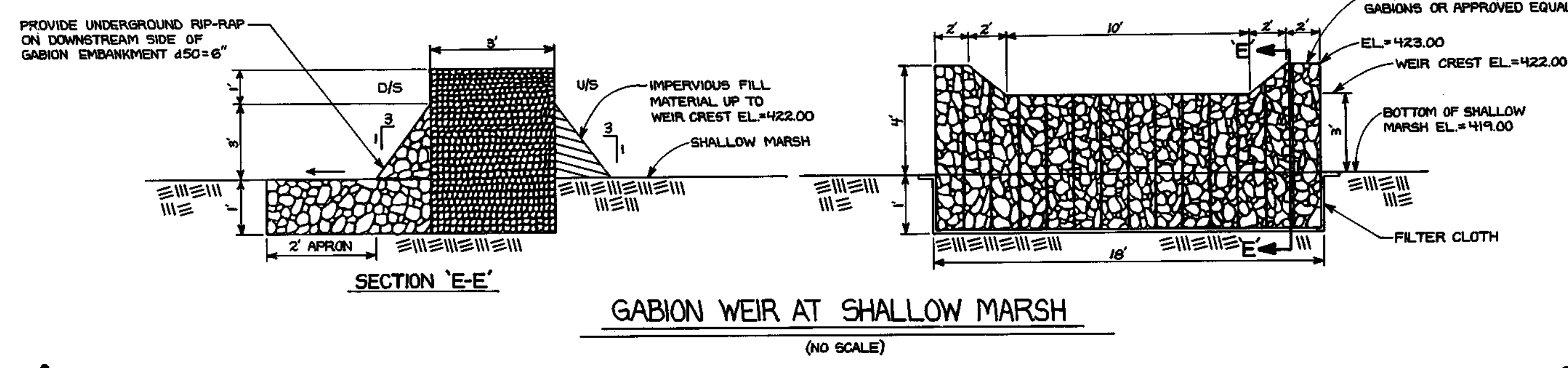
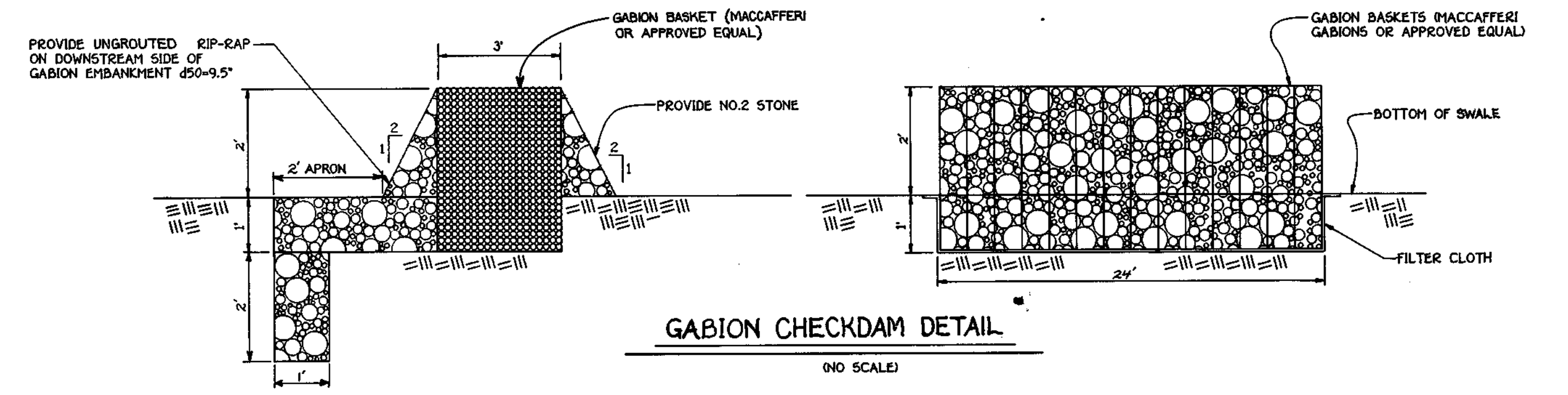
CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SC5 "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATIONS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

HOMEOWNER'S ASSOCIATION MAINTENANCE RESPONSIBILITIES FOR SHALLOW MARSH

- INSPECTION FOREBAY AFTER EACH STORM - IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF HIGHWAYS TO FACILITATE CLEANOUT OPERATIONS.
- REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
- ANNUAL INSPECTION AND REPAIR OF THE GABION STRUCTURES, AS NEEDED. VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANYTIME.
- CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
- NOTE: THIS FACILITY IS TO BE JOINTLY MAINTAINED BY THE H.O.A. FOR DANIELS HILL OVERLOOK AND THE DEPARTMENT OF PUBLIC WORKS.



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CORPORATE SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL PkE
ELICOTT CITY, MARYLAND 21042
410 461-2855

OWNER
DANIELS HILL OVERLOOK, LLC
C/O MR. MICHAEL DIFFENDAL
1500 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
THE RYLAND GROUP
ATTENTION: MR. CHARLES O'DONOVAN
GALLERIA TOWERS
SUITE 4705
1447 YORK ROAD
LUTHERVILLE MARYLAND 21045



**WATER QUALITY
DANIELS MILL OVERLOOK**
SECTION 2 AREA 3
LOTS 131 THRU 176 AND PARCEL 'B'
ZONED: R-2D
TAX MAP No. 17 PARCEL Nos. 41 and 547
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SHEET 25 OF 25
DATE: AUG. 27, 1996

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