

ROAD CONSTRUCTION, STORM DRAINAGE AND GRADING PLANS FOR WEST FRIENDSHIP ESTATES

SECTION 2 LOTS 57 THRU 99, PARCELS 'E' THRU 'Q' THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

APPROVED:
DEPARTMENT OF PLANNING AND ZONING
Anna Swinmank 3/8/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH SA DATE

John P. ... 3/7/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED:
DEPARTMENT OF PUBLIC WORKS
Andrew M. ... 3-5-96
CHIEF, BUREAU OF HIGHWAYS HS DATE

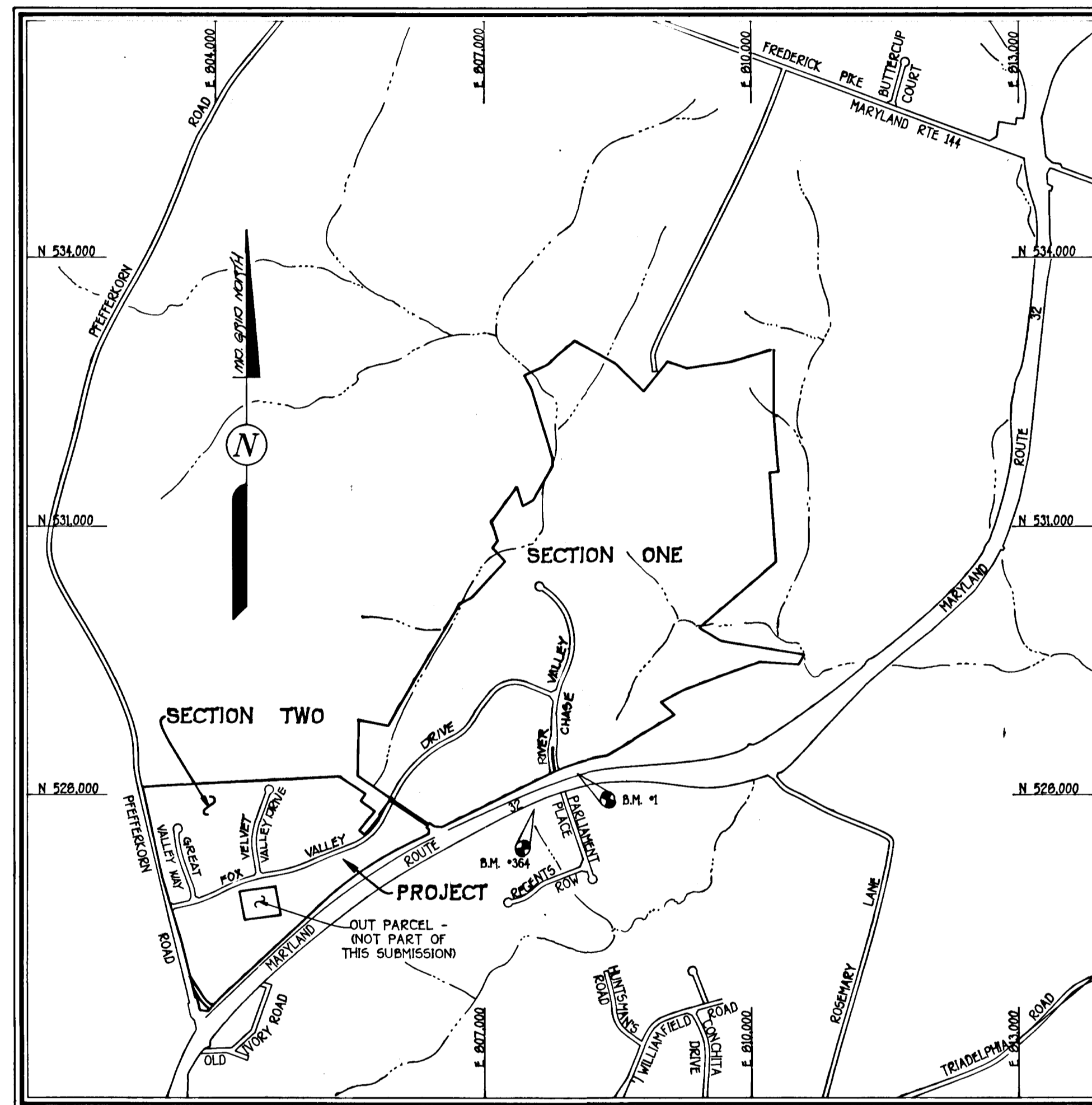
BENCH MARKS

B.M. #1 ELEVATION 544.36
HOWARD COUNTY CONCRETE MONUMENT No. 335001.
N 528.079
E 807.971

B.M. #364 ELEVATION 540.647
P.K. NAIL SET
N 527.846.1089
E 807.521.3350

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3. FOR VALLEY DRIVE PLAN AND PROFILE
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20. LANDSCAPE PLAN



-VICINITY MAP-
SCALE: 1" = 1200'

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTORS SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. PROJECT BACKGROUND:
LOCATION: MARYLAND ROUTE 32; TAX MAP No.: 15 AND 22
PARCEL: 32, 42 AND 533
ZONING: RC-DEO
ELECTION DISTRICT: THIRD
SECTION: TWO
TOTAL TRACT AREA: 427 AC± (SECTIONS ONE AND TWO)
SECTION AREA: 98.04 AC± (SECTION TWO)
NUMBER OF PROPOSED LOTS: 46 (SECTION TWO)
DATE OF SKETCH PLAN APPROVAL: (S93-03) APPROVED: DECEMBER 21, 1992
DATE OF PRELIMINARY PLAN APPROVAL: (P94-13) APPROVED: OCTOBER 20, 1994.
5. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
6. TOPOGRAPHIC SURVEY BY PHOTO SCIENCE, INC. ON OR ABOUT MARCH 28, 1990. TWO (2) FOOT CONTOUR INTERVAL.
7. HORIZONTAL AND VERTICAL DATUM BASED ON HOWARD COUNTY CONTROL.
8. PRIVATE WATER AND PRIVATE SEWER TO BE UTILIZED.
9. STORM WATER MANAGEMENT IS PROVIDED FOR THE INCREASE IN RUN-OFF RESULTING FROM THE ROAD IMPERVIOUS AREAS. ALL STORM WATER MANAGEMENT PONDS ARE PUBLIC STORM WATER MANAGEMENT. POND No. 1 IS A RETENTION FACILITY AND STORM WATER MANAGEMENT POND Nos. 2 AND 3 ARE DETENTION FACILITIES.
10. WETLANDS DELINEATION STUDY PREPARED BY EXPLORATION RESEARCH, INC. AND APPROVED UNDER S93-03 ON DECEMBER 21, 1992.
11. TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, INC. ON SEPTEMBER 30, 1992 AND APPROVED UNDER S93-03 ON DECEMBER 21, 1992.
12. GEOTECHNICAL REPORT PREPARED BY G.T.A., INC. ON DECEMBER 21, 1992 AND APPROVED UNDER P94-13 ON OCTOBER 20, 1994.
13. EXISTING UTILITIES WERE LOCATED BY A SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. ON JULY 2, 1993.
14. AREA OF PROPOSED LOTS: 54.82 AC±
15. AREA OF PROPOSED ROADS: 3.79 AC±
16. SECTION 18.116 (c) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PROHIBITS CLEARING, GRADING OR CONSTRUCTION ACTIVITY WITHIN THE REQUIRED WETLAND OR STREAM BANK BUFFERS.
17. ALL LANDSCAPING REQUIRED, STREET TREES AND PERIMETER LANDSCAPE EDGES, ARE PROVIDED WITHIN THIS SUBMITTAL. SEE GRADING SHEETS FOR REQUIREMENTS.

OWNER
WEST FRIENDSHIP NEW TOWN COMPANY
11900 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
NEW TOWN COMPANY
c/o LAND DESIGN & DEVELOPMENT, INC.
10805 HICKORY RIDGE ROAD, SUITE 210
COLUMBIA, MARYLAND 21044



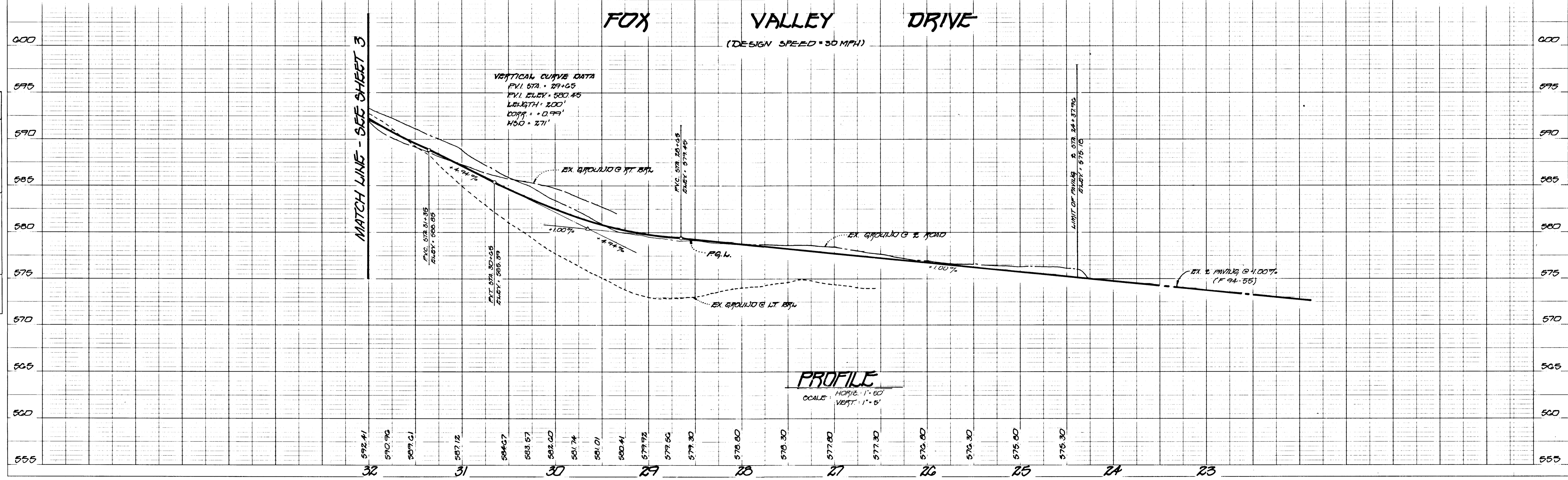
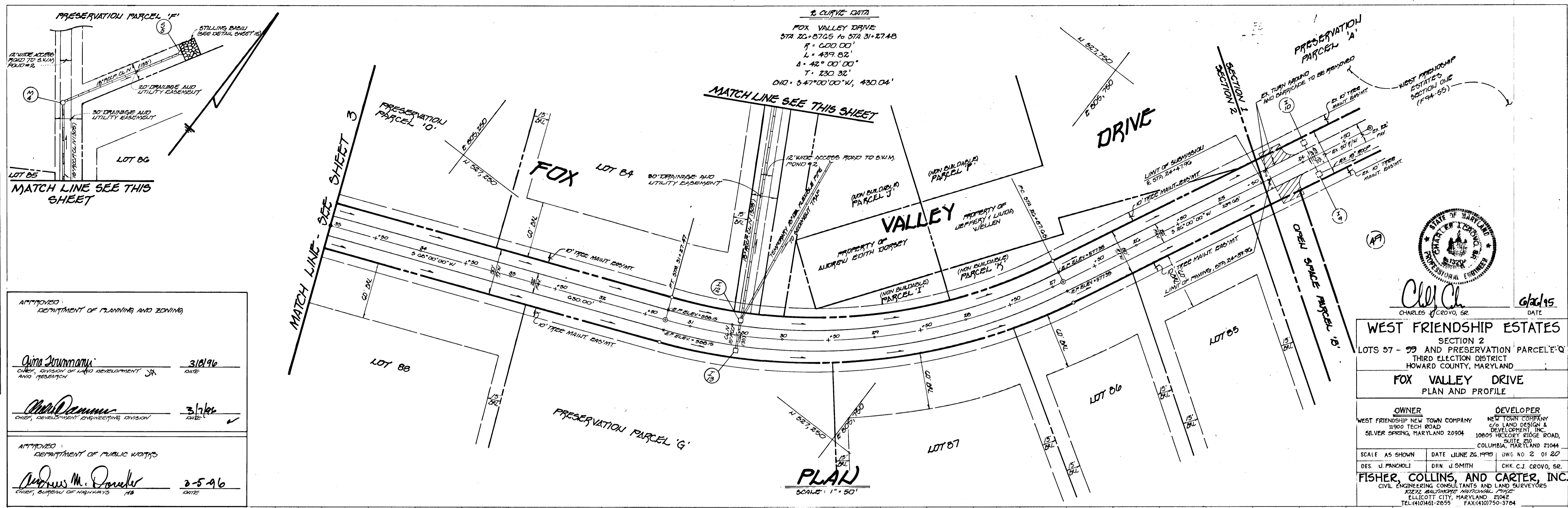
Charles J. Grovo, Sr.
CHARLES J. GROVO, SR.
DATE

6/6/95
DATE

FISHER, COLLINS & CARTER, INC.
LAND ENGINEERING, SURVEYING & LAND SURVEYORS
1022 N. ...
ELLSWORTH CITY, MARYLAND 20625
1000 ...

DATE
BY
SURVEYED
ALIGNMENT CHECKED
RET. OF WAY CHECKED
NOTE BOOK
NO.

DATE
BY
SURVEYED
GRADES CHECKED
STRUCTURE NOTATIONS CHECKED
NOTE BOOK
NO.



406

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

Charles J. Crovo, Sr.
DATE 6/24/95

WEST FRIENDSHIP ESTATES
SECTION 2
LOTS 57 - 99 AND PRESERVATION PARCELS 'Q'
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOX VALLEY DRIVE
PLAN AND PROFILE

OWNER
WEST FRIENDSHIP NEW TOWN COMPANY
1900 TECH ROAD
SILVER SPRING, MARYLAND 20904

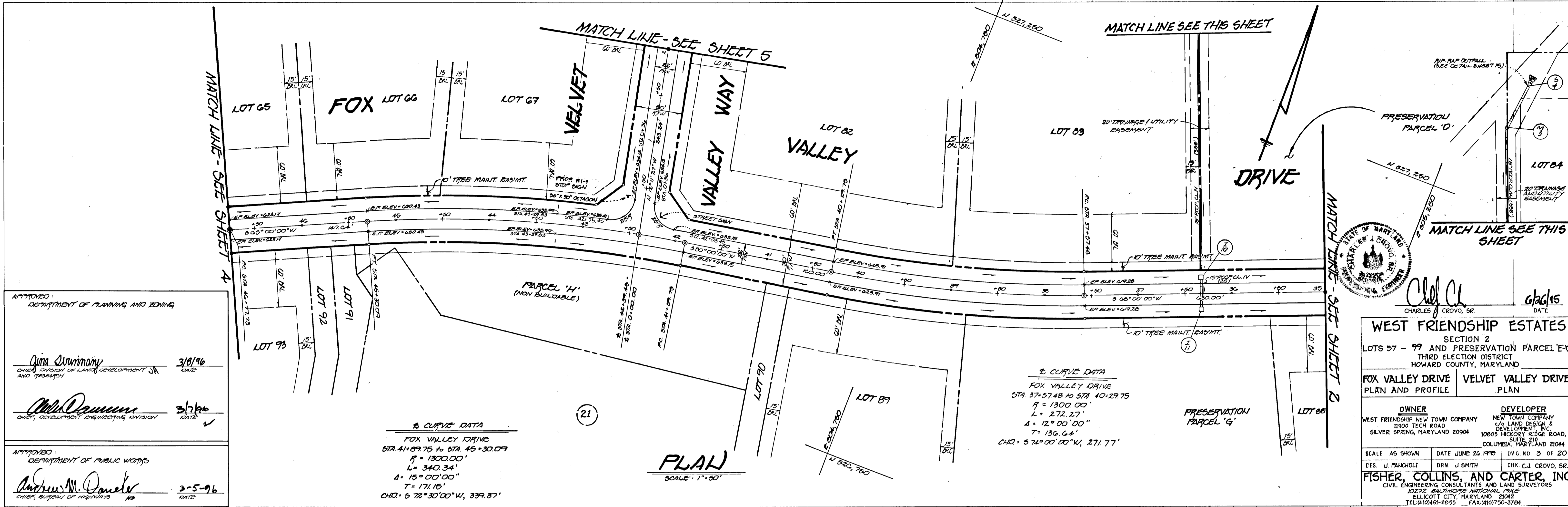
DEVELOPER
NEW TOWN COMPANY
C/O LAND DESIGN & DEVELOPMENT, INC.
10805 HICKORY RIDGE ROAD, SUITE 210
COLUMBIA, MARYLAND 21044

SCALE AS SHOWN | DATE JUNE 26, 1995 | DWG. NO. 2 OF 20
DES. J. PANCHOLI | DRN. J. SMITH | CHK. C.J. CROVO, SR.

FISHER, COLLINS, AND CARTER, INC.
CIVIL ENGINEERING CONSULTANTS AND LAND SURVEYORS
10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
TEL: (410) 461-2655 FAX: (410) 750-3784

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	RT. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



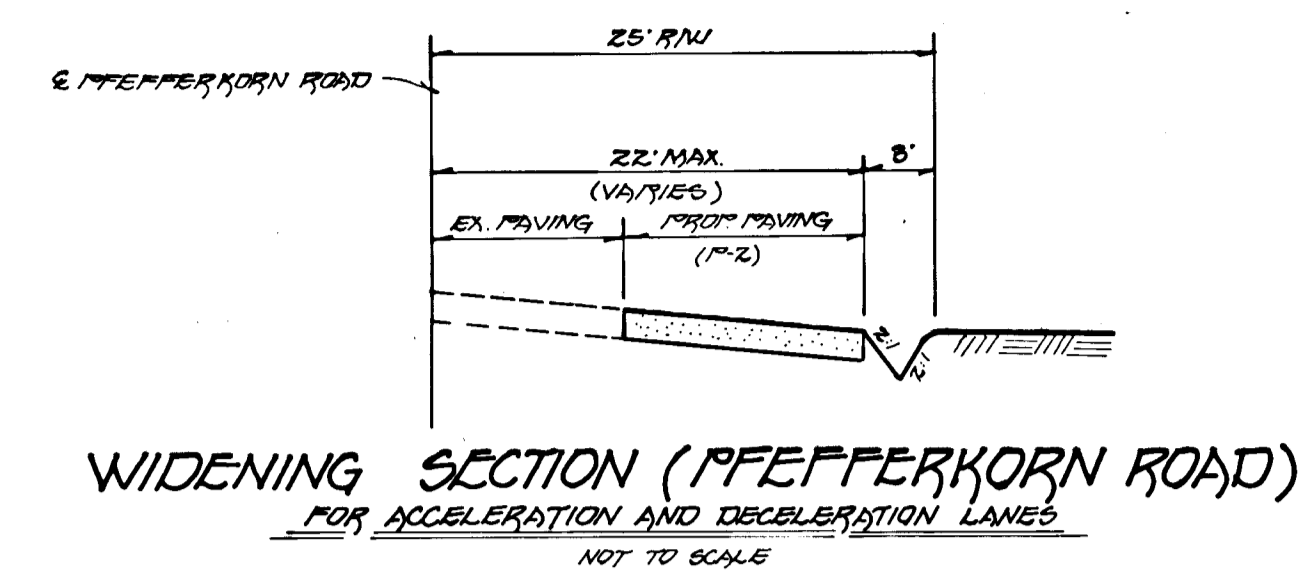
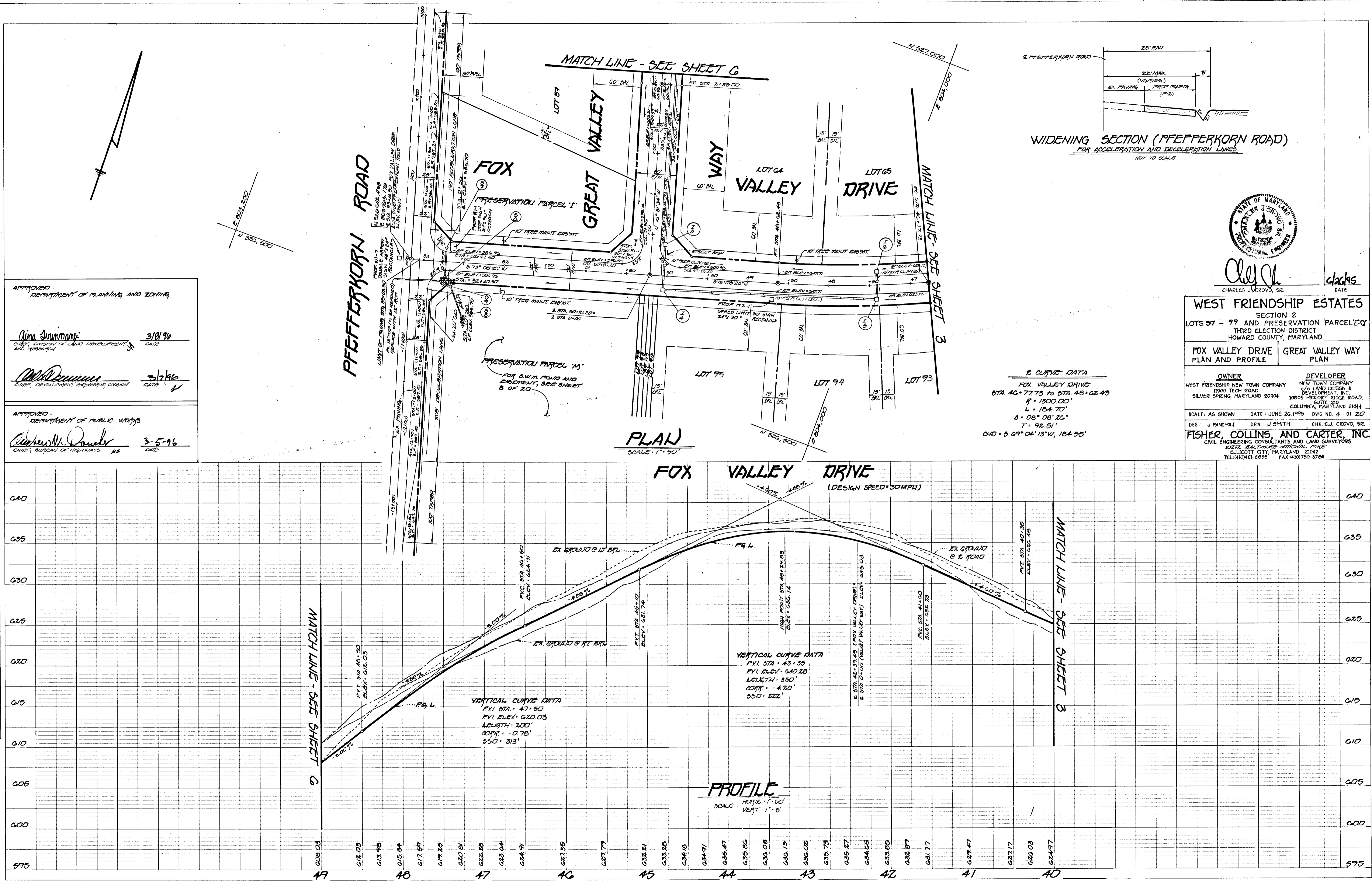
PLAN	SURVEYED	DATE
	ALIGNED	BY
	PLOTTED	
	NOTE BOOK	
	NO. OF WAT. CHECKED	

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Dina Summani 3/8/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND HOUSING

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Pruebs 3-5-96
 CHIEF, BUREAU OF HIGHWAYS

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	NOTE BOOK	
	NO. OF NOTATIONS CHECKED	

406



CHARLES J. CROVO, SE
 DATE

WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57 - 99 AND PRESERVATION PARCELS 'Q'
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOX VALLEY DRIVE GREAT VALLEY WAY
 PLAN AND PROFILE

OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 C/O LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044

SCALE: AS SHOWN DATE: JUNE 26, 1995 DWG. NO. 4 OF 20
 DES: J. PANCHOLI DRN: J. SMITH CHK: C.J. CROVO, SE

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS AND LAND SURVEYORS
 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 TEL: (410) 61-2855 FAX: (410) 750-3704

DEVELOPER'S CERTIFICATE
 I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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.

Signature: *David R. Fisher* DATE: *6/27/96*
 DEVELOPER

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

Signature: *John A. Wainwright* DATE: *2/27/96*
 ENGINEER

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 Signature: *John A. Wainwright* DATE: *2/27/96*
 REVIEWER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *Heather Schminz* DATE: *2/27/96*
 DISTRICT SUPERVISOR

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *Andrew M. Davelos* DATE: *3-5-96*
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *Anna Sturmann* DATE: *3/8/96*
 CHIEF, DIVISION AND LAND DEVELOPMENT AND RESEARCH

Signature: *John A. Wainwright* DATE: *2/27/96*
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

N 827,760
 E 800,000

SEE SHEET 9
 MATCH LINE

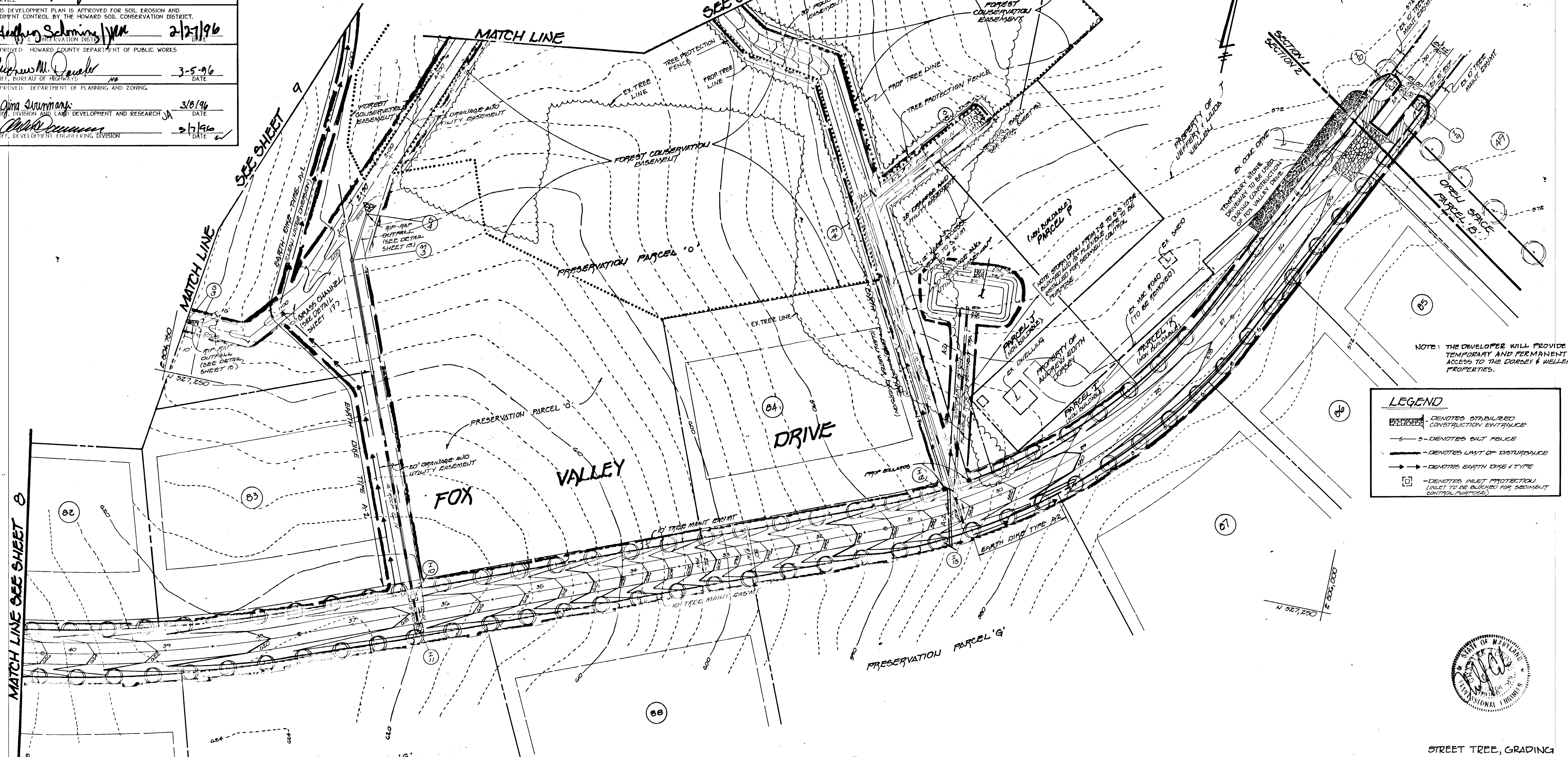
SEE SHEET 10
 MATCH LINE

STONE OUTLET SEDIMENT TRAP #1
 CAPACITY AREA = 2,200 SF
 STORAGE REQUIRED = 7920 CF
 STORAGE PROVIDED = 8200 CF
 BOTTOM DIMENSION = 70' x 30'
 STORAGE DEPTH = 5'
 BOTTOM ELEV = 571.0
 CROWN OUT ELEV = 572.5
 TRAP LENGTH = 9'
 CHEST ELEV = 574.0'

NOTE: THE DEVELOPER WILL PROVIDE BOTH TEMPORARY AND PERMANENT DRIVEWAY ACCESS TO THE DORSEY & WELLEN PROPERTIES.

LEGEND

- DENOTES STABILIZED CONSTRUCTION ENTRANCE
- o-o- DENOTES BUILT FENCE
- - - DENOTES LIMIT OF DISTURBANCE
- DENOTES EARTH DIME TYPE
- DENOTES INLET PROTECTION (INLET TO BE BUSHED FOR SEDIMENT CONTROL PURPOSES)



MATCH LINE SEE SHEET 8

PLAN
 SCALE: 1" = 50'



STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
WEST FRIENDSHIP ESTATES SECTION 2
 LOTS 57 - 99 AND PARCELS 'E' - 'Q'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 7 OF 20

FISHER, COLLINS & CARTER, INC.
 ENGINEERS, ARCHITECTS & PLANNERS
 670 BALTIMORE NATIONAL TRAIL, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 (301) 461-2855

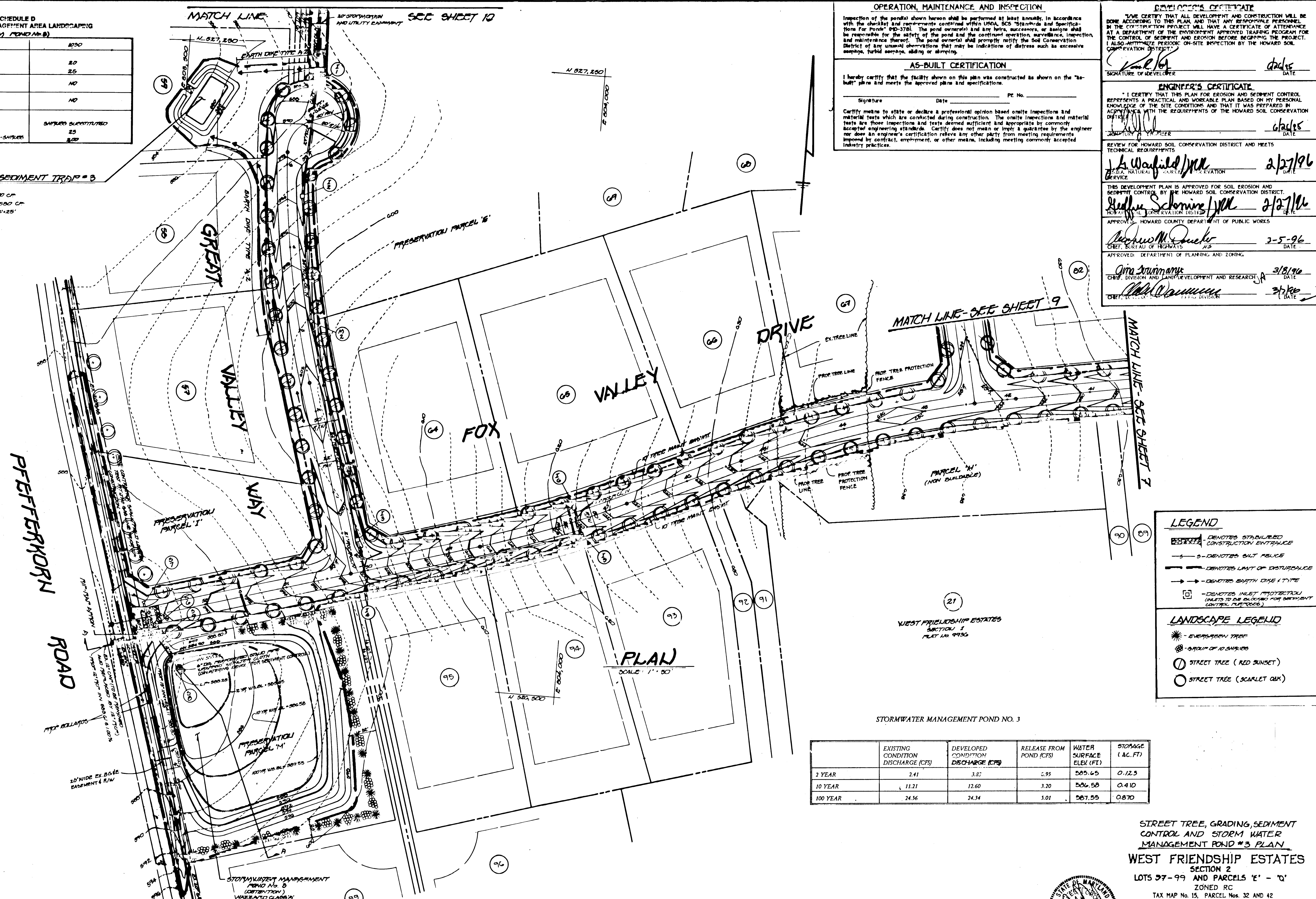
OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044

SCHEDULE D
STORMWATER MANAGEMENT AREA LANDSCAPING
(300M POND NO. 3)

Linear Feet of Perimeter	1000
Number of Trees Required	20
Shade Trees	25
Evergreen Trees	25
Credit for Existing Vegetation (No, Yes and %)	NO
Credit for Other Landscaping (No, Yes and %)	NO
Number of Trees Provided	SAMPLES SUBSTITUTED
Shade Trees	25
Evergreen Trees	25
Other Trees (0:1 substitution) - SAMPLES	200

STONE OUTLET SEDIMENT TRAP #3
DRAINAGE AREA - 15 AC.
STORAGE REQUIRED - 3400 CF
STORAGE PROVIDED - 5500 CF
BOTTOM DIMENSION - 54'x25'
STORAGE DEPTH - 5'
BOTTOM ELEV - 500.0
CREST ELEV - 503.0
CREST LENGTH - 9'
CLEANOUT ELEV - 501.5



OPERATION, MAINTENANCE AND INSPECTION
Inspection of the ponds shown hereon shall be performed at least annually, in accordance with the checklist and requirements contained within UMDL, SCS "Standards and Specifications for Ponds" (9D-376). 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, silt or slumping.

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 _____ Date _____ PE No. _____

Certify means to state or declare a professional opinion based 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.

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO ANTICIPATE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature _____ Date 2/26/96
SIGNATURE OF DEVELOPER

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

Signature _____ Date 2/27/96
SIGNATURE OF ENGINEER

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
Signature _____ Date 2/27/96
SUE A. NATURAL RESOURCES CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature _____ Date 2/27/96
HOWARD SOIL CONSERVATION DISTRICT

APPROVED - HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Signature _____ Date 2-5-96
CHIEF, BUREAU OF HIGHWAYS

APPROVED - DEPARTMENT OF PLANNING AND ZONING
Signature _____ Date 3/8/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Signature _____ Date 3/7/96
CHIEF, DIVISION OF PLANNING

MATCH LINE - SEE SHEET 9

MATCH LINE - SEE SHEET 7

- LEGEND
- DENOTES STABILIZED CONSTRUCTION ENTRANCE
 - - - DENOTES BUILT FENCE
 - DENOTES LIMIT OF DISTURBANCE
 - DENOTES BATH DIME TYPE
 - ☐ DENOTES INLET PROTECTION (INLET TO BE BUILT FOR SEDIMENT CONTROL PURPOSES)
- LANDSCAPE LEGEND
- * - EVERGREEN TREE
 - ⊗ - GROUP OF 10 SAMPLES
 - ⊙ - STREET TREE (RED SUNSET)
 - ⊙ - STREET TREE (SCARLET OAK)

STORMWATER MANAGEMENT POND NO. 3

	EXISTING CONDITION DISCHARGE (CFS)	DEVELOPED CONDITION DISCHARGE (CFS)	RELEASE FROM POND (CFS)	WATER SURFACE ELEV. (FT)	STORAGE (AC. FT)
2 YEAR	2.41	3.82	0.95	505.45	0.125
10 YEAR	11.21	12.60	3.20	506.50	0.410
100 YEAR	24.56	24.34	5.01	507.55	0.870

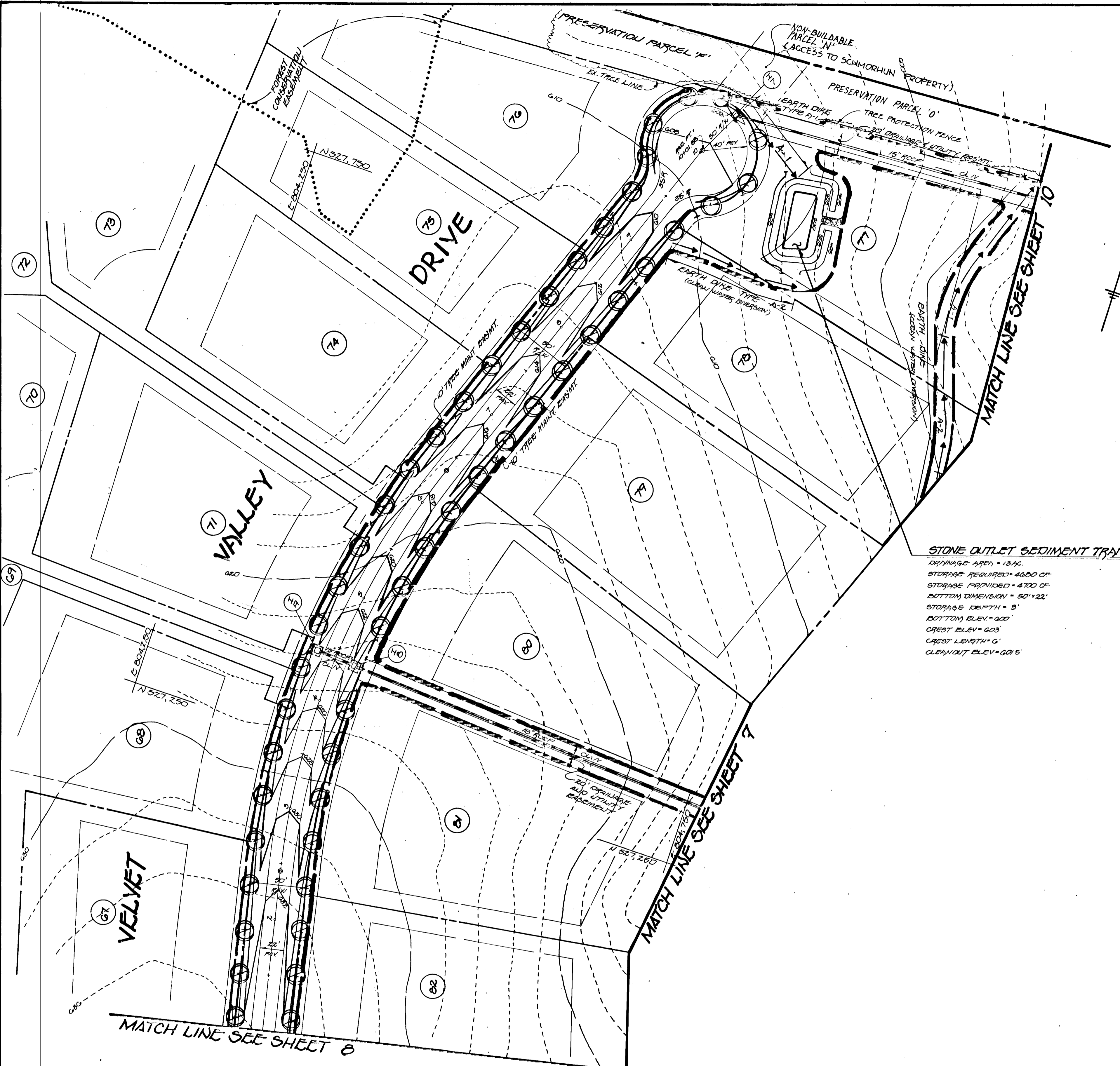
STREET TREE, GRADING, SEDIMENT CONTROL AND STORM WATER MANAGEMENT POND #3 PLAN
WEST FRIENDSHIP ESTATES SECTION 2
LOTS 97-99 AND PARCELS 'E' - 'O'
ZONED RC
TAX MAP No. 15, PARCEL Nos. 32 AND 42 AND
TAX MAP No. 22, PARCEL No. 533
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JUNE 26, 1995
SHEET 6 OF 20

FISHER, COLLINS & CARTER, INC.
CIVIL, ENVIRONMENTAL, CONSULTANTS & LAND SURVEYORS
971 BALTIMORE NATIONAL PKWY. SUITE 300
ELKLOTT CITY, MARYLAND 21242
301-461-2959

OWNER
WEST FRIENDSHIP NEW TOWN COMPANY
11900 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
NEW TOWN COMPANY
c/o LAND DESIGN & DEVELOPMENT, INC.
10805 HICKORY RIDGE ROAD, SUITE 210
COLUMBIA, MARYLAND 21044





STONE OUTLET SEDIMENT TRAP #2
 DRAINAGE AREA = 13.46
 STORAGE REQUIRED = 4600 CF
 STORAGE PROVIDED = 4700 CF
 BOTTOM DIMENSION = 50' x 22'
 STORAGE DEPTH = 5'
 BOTTOM ELEV = 600'
 CREST ELEV = 603'
 CREST LENGTH = 6'
 CLEANOUT ELEV = 603.5'

PLAN
 SCALE: 1" = 50'

LEGEND

	DENOTES STABILIZED CONSTRUCTION ENTRANCE
	DENOTES SALT FENCE
	DENOTES LIMIT OF DISTURBANCE
	DENOTES EARTH DIKE & TYPE
	DENOTES INLET PROTECTION (INLET TO BE BUILT FOR SEDIMENT CONTROL PURPOSES)

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. PREPARED AND SUBMITTED FOR SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Developer: *[Signature]* Date: 6/26/95

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

Signature of Engineer: *[Signature]* Date: 6/26/95

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS:
[Signature] 2/27/96

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT:
[Signature] 2/27/96

APPROVED DEPARTMENT OF PLANNING AND ZONING
 Jim Summerville 3/10/96

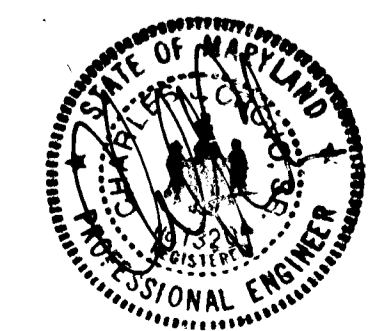
APPROVED DEPARTMENT OF PLANNING AND ZONING
 [Signature] 3/1/96

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Andrew M. Queller 3-5-96

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57 - 99 AND PARCELS 'E' - 'O'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 9 OF 20

OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



FISHER, COLLINS & CARTER, INC.
 LAND ENGINEERING, SURVEYING & LAND SURVEYORS
 871 BALTIMORE NATIONAL, P.O. BOX 100
 ELICOTT CITY, MARYLAND 21042
 (301) 461-2855

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY REVISIONS PROPOSED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINS THE PROJECT. I ALSO AUTHORIZE THE DEPARTMENT OF THE ENVIRONMENT TO CONDUCT SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *[Signature]* Date: *6/20/96*
 Signature: *[Signature]* Date: *6/20/96*

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

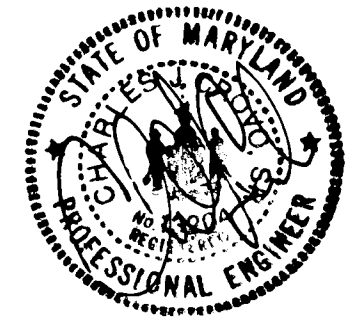
Signature: *[Signature]* Date: *6/20/96*
 Signature: *[Signature]* Date: *6/20/96*

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
 Signature: *[Signature]* Date: *2/27/96*
 Signature: *[Signature]* Date: *2/27/96*

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: *3-5-96*
 Signature: *[Signature]* Date: *3/8/96*
 Signature: *[Signature]* Date: *3/7/96*

DESIGN POINT	"C" FACTOR	"I" 10 YR. INTENSITY (IN./HR.)	"A" D.A. (AC.)	"Q-CIA" (CF8)
I-1	0.32	5.7	4.90	8.94
I-2	0.36	5.4	1.65	3.21
I-3	0.44	7.9	0.86	2.99
I-4	0.45	6.1	0.53	1.45
I-5	0.48	7.5	0.50	1.80
I-6	0.60	7.5	0.30	1.35
I-7	0.45	5.4	1.70	4.13
I-8	0.47	6.8	0.58	1.85
I-9	0.41	6.6	0.95	2.57
I-10	0.56	6.9	0.48	1.85
I-11	0.54	6.5	0.69	2.42
I-12	0.59	6.6	0.49	1.91
I-13	0.56	6.9	0.52	2.01

NOTE: THIS SHEET IS TO BE USED FOR DRAINAGE AREA MAP ONLY.



DETAILS AREA MAP
WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57 - 77 AND PARCELS 'E' - 'Q'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42
 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN, DATE JUNE 26, 1995
 SHEET 12 OF 20
 5-93-03

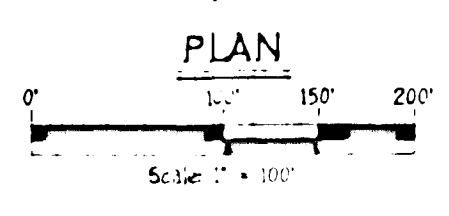
LEGEND

- DENOTES EXISTING FENCE LINE
- DENOTES EXISTING WETLAND AREA
- DENOTES EXISTING TREE LINE
- DENOTES EXISTING HEDGE ROW
- DENOTES APPROXIMATE LOCATION OF DWELLING
- DENOTES APPROXIMATE LOCATION OF WELL
- DENOTES LIMITS OF EXISTING FLOOD PLAN

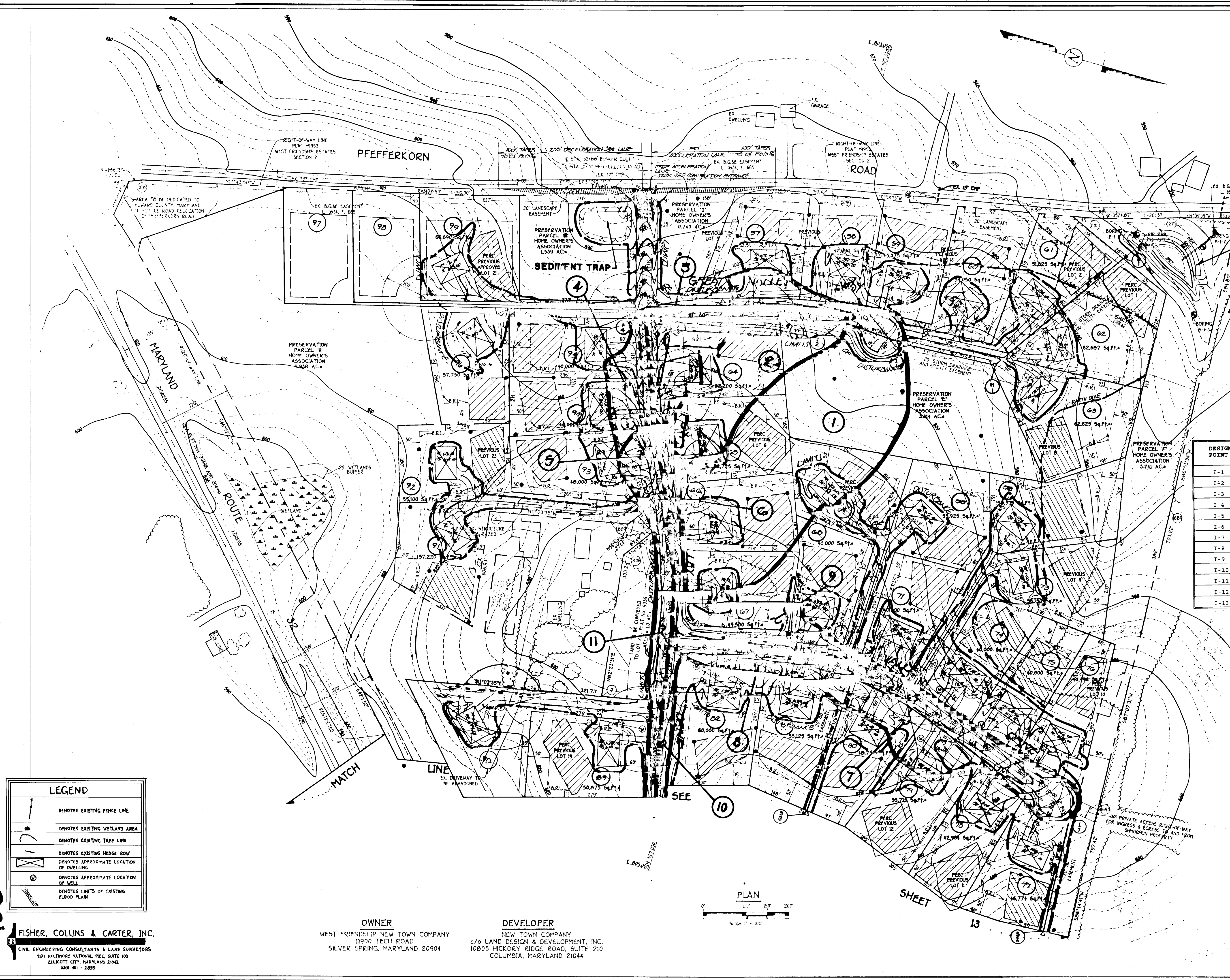
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 3171 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 MD 91 - 2855

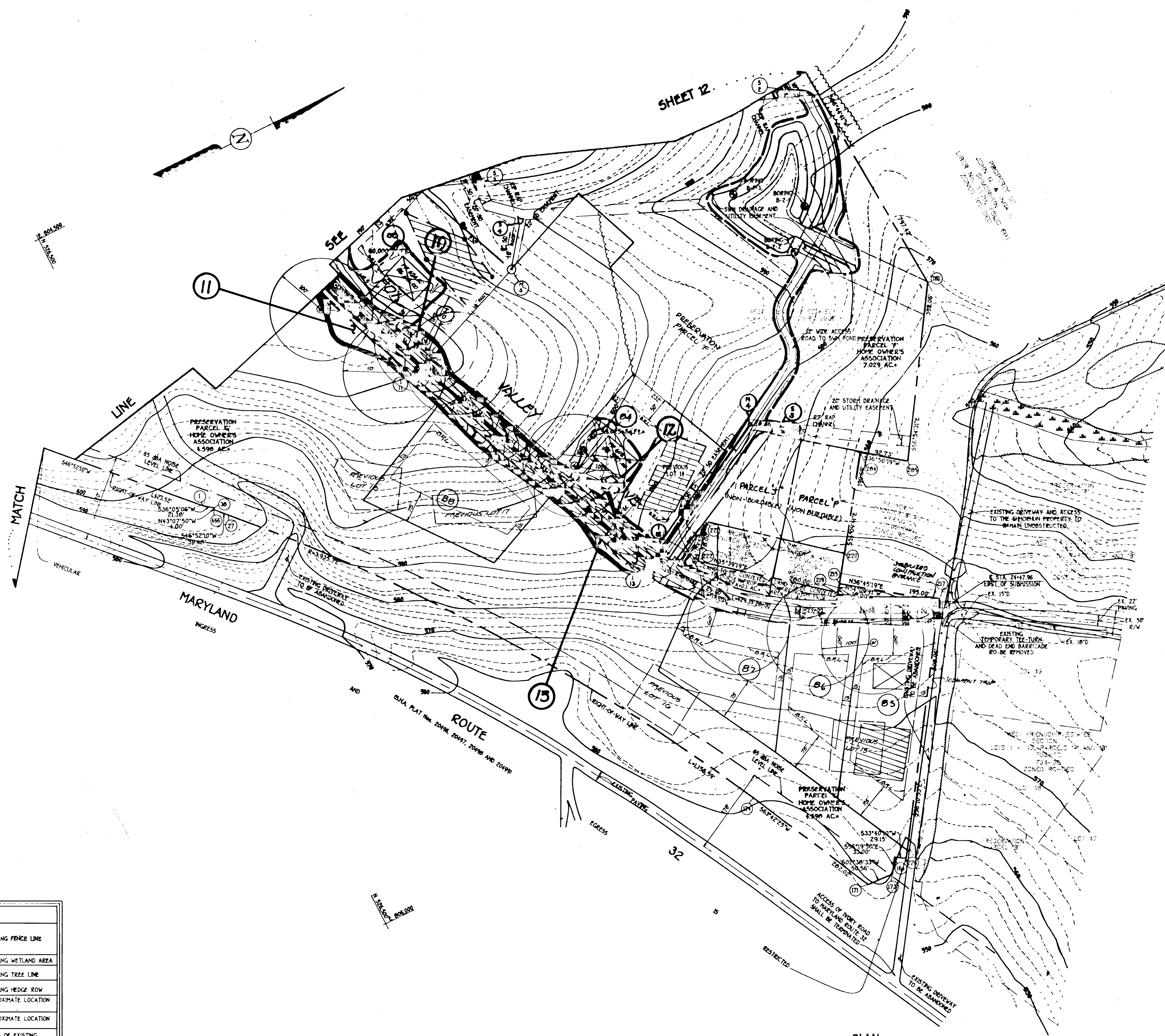
OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



406





DEFINITIONS OF CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE IN ACCORDANCE WITH THIS PLAN AND THAT ANY REQUIRED PERMITS IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A BEST EFFORTS OF THE DEVELOPER APPROVED TREATMENT PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINS THE PROJECT. I ALSO AUTHORIZE PERMITS OR OTHER ACTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 6/26/96
 DATE

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

[Signature] 6/26/96
 DATE

REVIEW FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
[Signature] 2/27/96
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 2/27/96
 DATE

APPROVED BY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 3-5-96
 DATE

APPROVED BY DEPARTMENT OF PLANNING AND ZONING
[Signature] 3/18/96
 DATE

APPROVED BY DEPARTMENT OF VEGETATION AND RESEARCH
[Signature] 3/7/96
 DATE

NOTE: THIS SHEET IS TO BE USED FOR DRAINAGE AREA MAP ONLY.

LEGEND

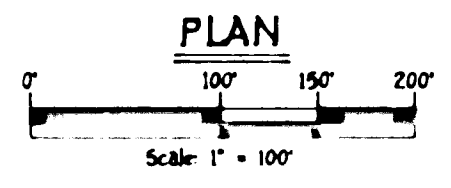
	DENOTES EXISTING FENCE LINE
	DENOTES EXISTING WETLAND AREA
	DENOTES EXISTING TREE LINE
	DENOTES EXISTING HEDGE ROW
	DENOTES APPROXIMATE LOCATION OF DWELLING
	DENOTES APPROXIMATE LOCATION OF WELL
	DENOTES LIMITS OF EXISTING FLOOD PLAIN

406

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 971 BALTIMORE NATIONAL PKWY. SUITE 100
 ELLETTT CITY, MARYLAND 21042
 (410) 441-2855

OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



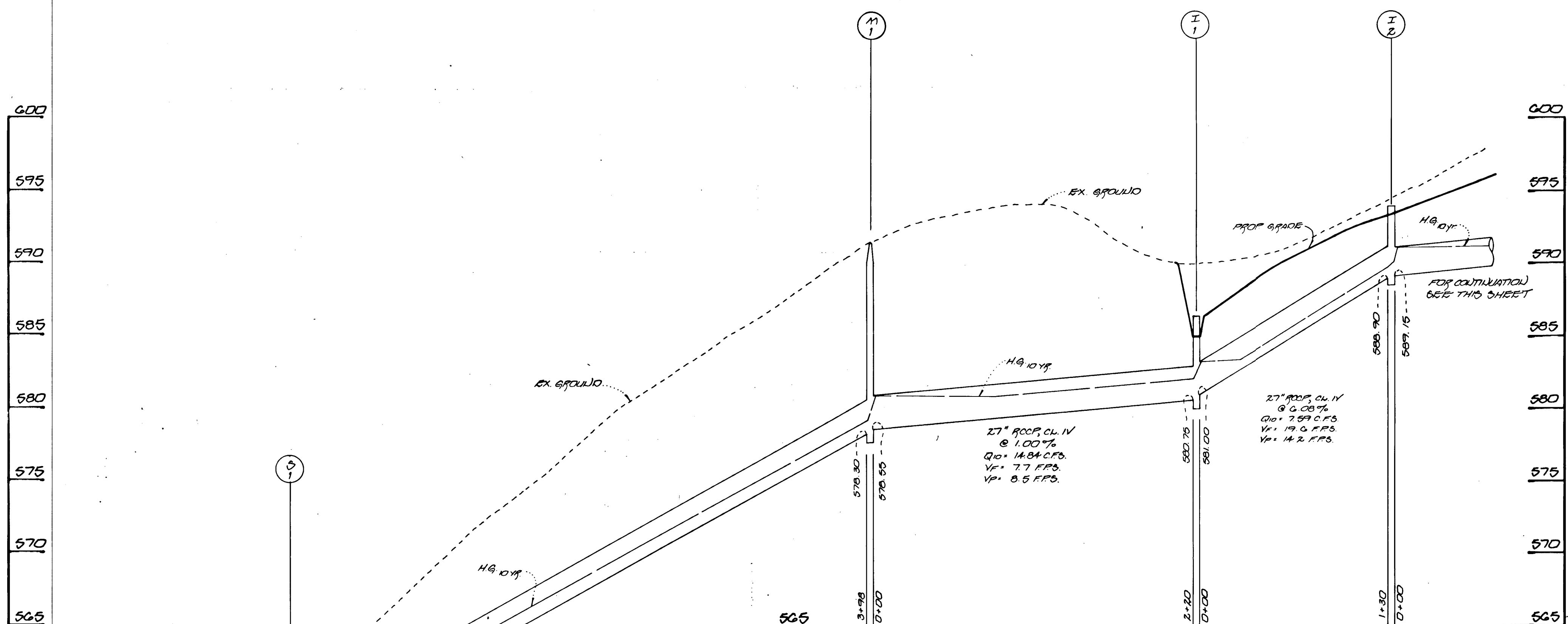
DRAINAGE AREA MAP
WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57-79 AND PARCELS 'E' - 'Q'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42
 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 18 OF 20
 5-93-03

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND RESEARCH
 CHIEF DIVISION AND DEVELOPMENT AND RESEARCH
 APPROVED: PROFESSIONAL ENGINEERING DIVISION

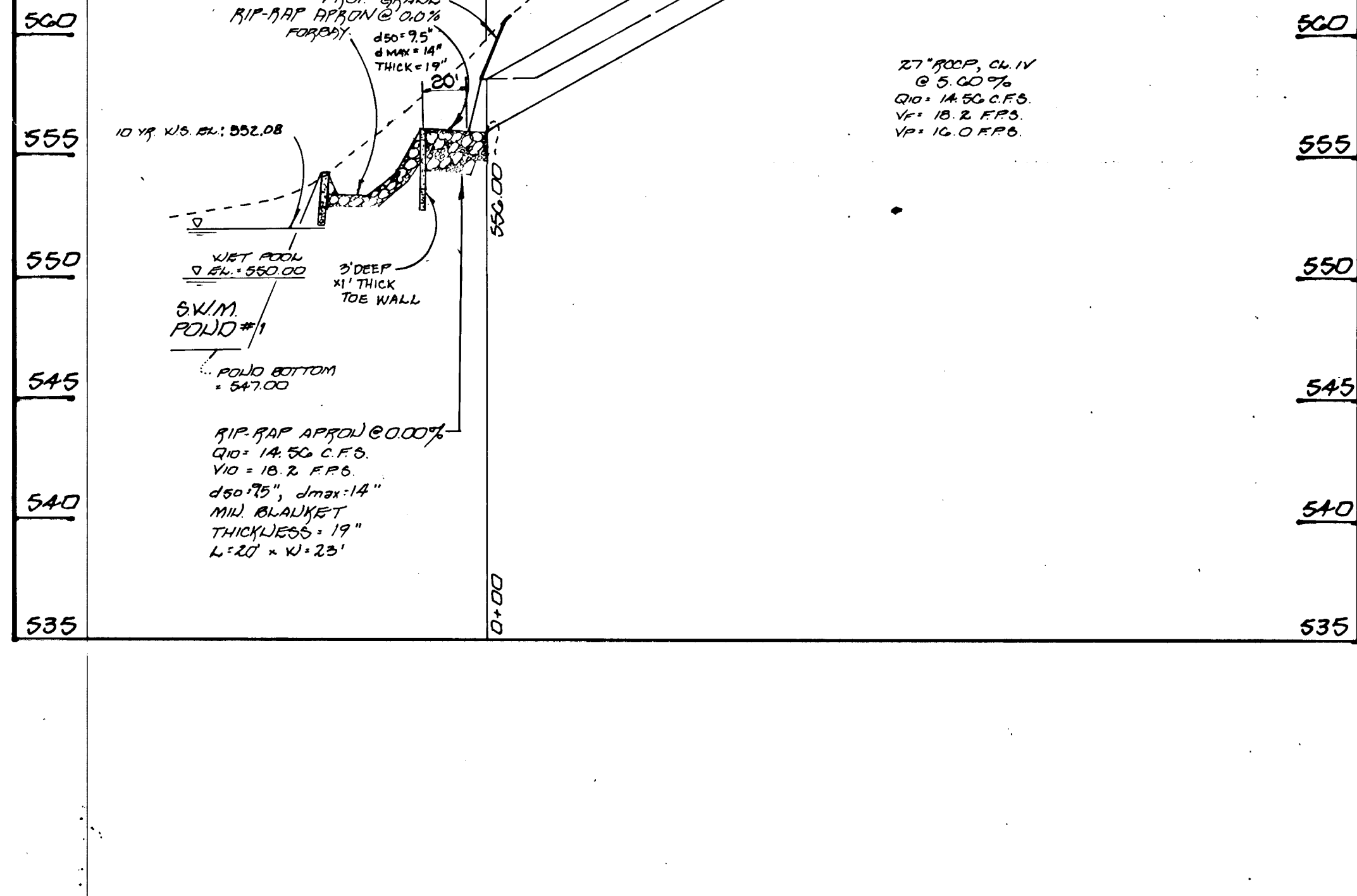
Andrew M. Daniels 3-5-96
Anna Surman 3/9/96
Robert D. ... 3/7/96

STRUCTURE SCHEDULE

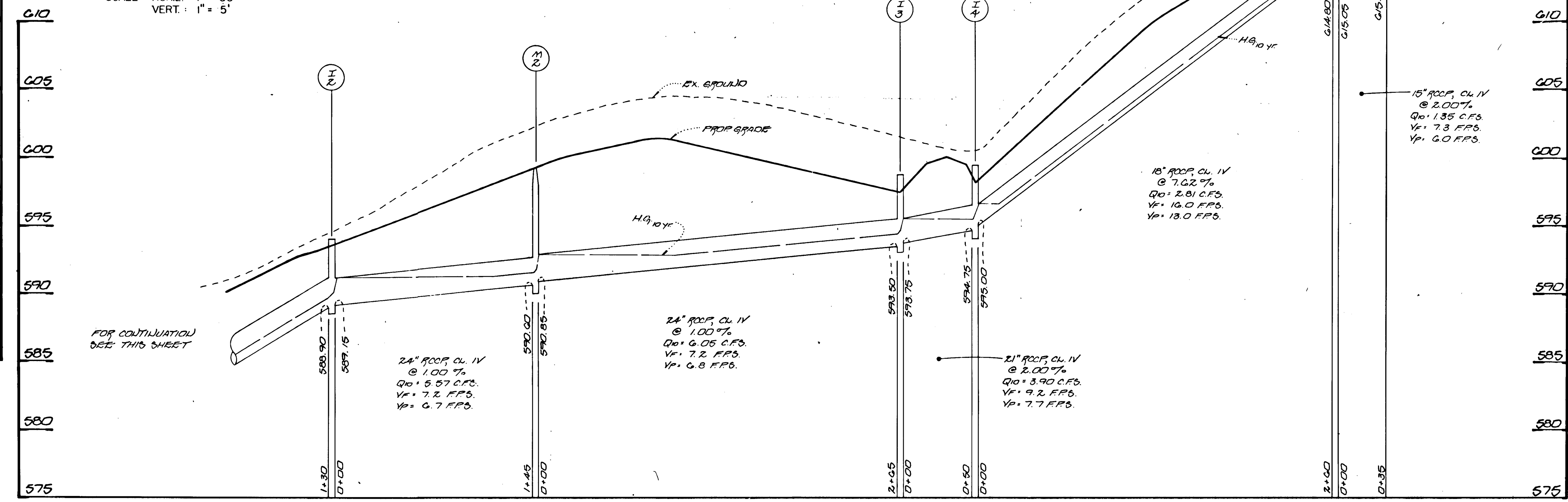
STRUCTURE	TOP ELEV.	THROAT ELEV.	INV. IN	INV. OUT	ROAD NAME	& ROAD STA.	OFFSET	TYPE	NO. OF STEPS	DETAIL
I-1	586.25	585.0	585.00	580.75	GREAT VALLEY WAY	1+46	6' LT.	'K' INLET	8 D. 4.13	
I-2	594.75	593.5	589.15	588.90	GREAT VALLEY WAY	5+12	19' RT.	'K' INLET	8 D. 4.13	
I-3	598.75	597.5	593.75	593.50	GREAT VALLEY WAY	0+39	19' RT.	'K' INLET	8 D. 4.13	
I-4	599.45	598.2	594.75	595.00	FOX VALLEY DRIVE	30+04	21' LT.	'K' INLET	8 D. 4.13	
I-5	619.25	618.0	615.05	614.80	FOX VALLEY DRIVE	47+42	21' LT.	'K' INLET	8 D. 4.13	
I-6	619.25	618.0	615.75	615.50	FOX VALLEY DRIVE	47+42	21' RT.	'K' INLET	8 D. 4.13	
I-7	606.55	605.3	602.50	602.50	VELVET VALLEY DRIVE	1+36	6' LT.	'K' INLET	8 D. 4.13	
I-8	623.45	622.2	619.15	618.90	VELVET VALLEY DRIVE	4+40	19' RT.	'K' INLET	8 D. 4.13	
I-9	623.45	622.2	619.50	619.50	VELVET VALLEY DRIVE	4+40	19' LT.	'K' INLET	8 D. 4.13	
I-10	617.45	616.2	613.15	612.90	FOX VALLEY DRIVE	36+32	21' RT.	'K' INLET	8 D. 4.13	
I-11	617.45	616.2	613.50	613.50	FOX VALLEY DRIVE	36+32	21' LT.	'K' INLET	8 D. 4.13	
I-12	584.25	583.0	579.90	579.65	FOX VALLEY DRIVE	10+46	21' RT.	'K' INLET	8 D. 4.13	
I-13	584.25	583.0	580.25	580.25	FOX VALLEY DRIVE	10+46	21' LT.	'K' INLET	8 D. 4.13	
M-1	592.00	590.8	588.55	588.30	GREAT VALLEY WAY	1+10	19' RT.	STD. MH	6 5.12	
M-2	599.80	598.6	596.60	596.60	GREAT VALLEY WAY	1+10	19' RT.	STD. MH	6 5.12	
M-3	601.2	599.7	597.48	597.48	GREAT VALLEY WAY	1+10	19' RT.	STD. MH	6 5.12	
M-4	578.00	576.5	570.10	570.10	GREAT VALLEY WAY	1+10	19' RT.	STD. MH	6 5.12	
S-1	558.25	556.0	556.0	556.0	CONC. END SECT.			CONC. END SECT.	5.52	
S-2	593.25	592.0	592.0	592.0	CONC. END SECT.			CONC. END SECT.	5.52	
S-3	612.50	611.0	611.0	611.0	CONC. END SECT.			CONC. END SECT.	5.52	
S-4	618.50	617.0	617.0	617.0	CONC. END SECT.			CONC. END SECT.	5.52	
S-5	568.00	566.5	566.5	566.5	CONC. END SECT.			CONC. END SECT.	5.52	



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



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



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

406

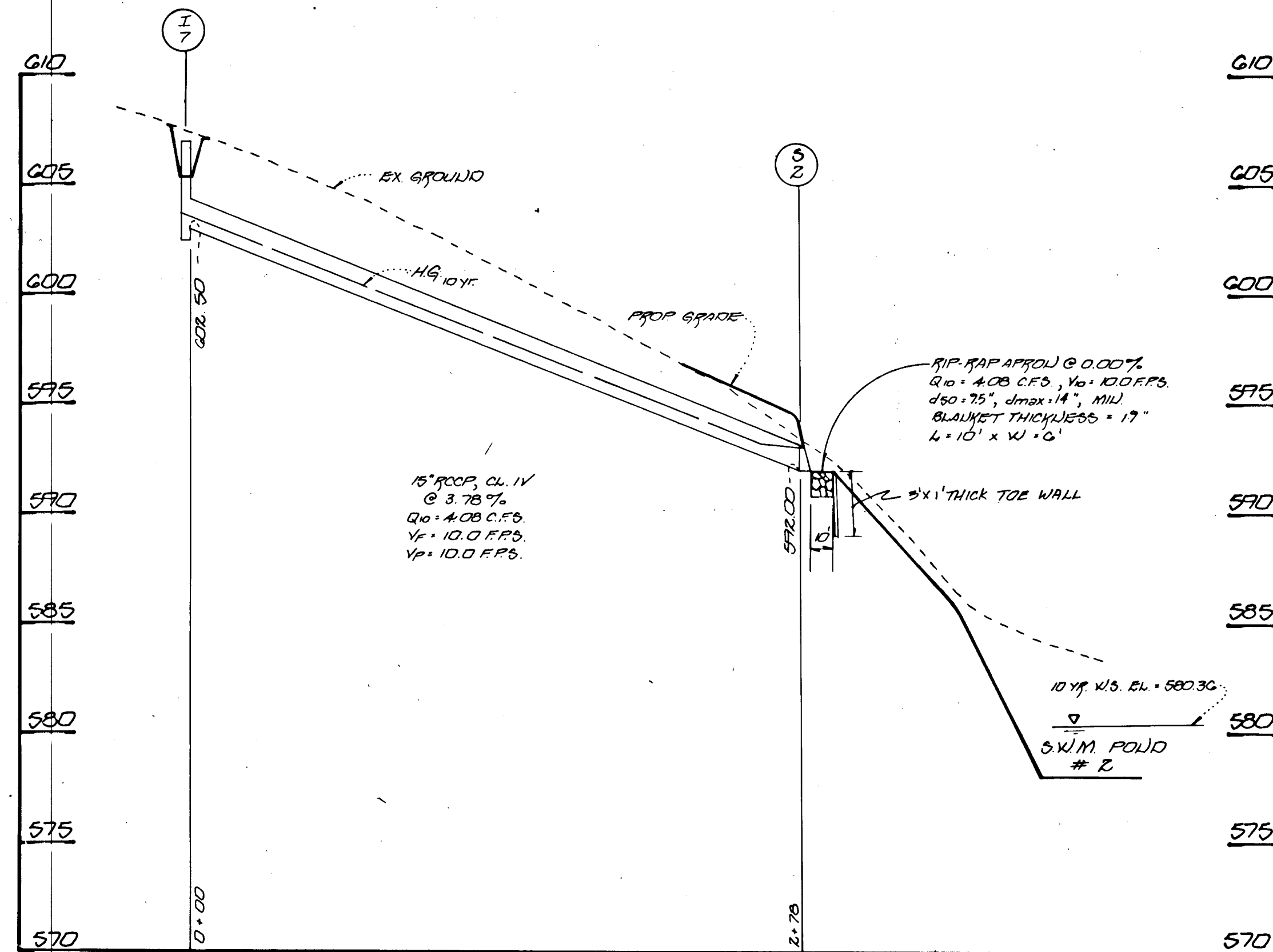
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 9771 BALTIMORE NATIONAL PIKE, SUITE 100
 ELICOTT CITY, MARYLAND 21042
 (301) 461-2855

OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

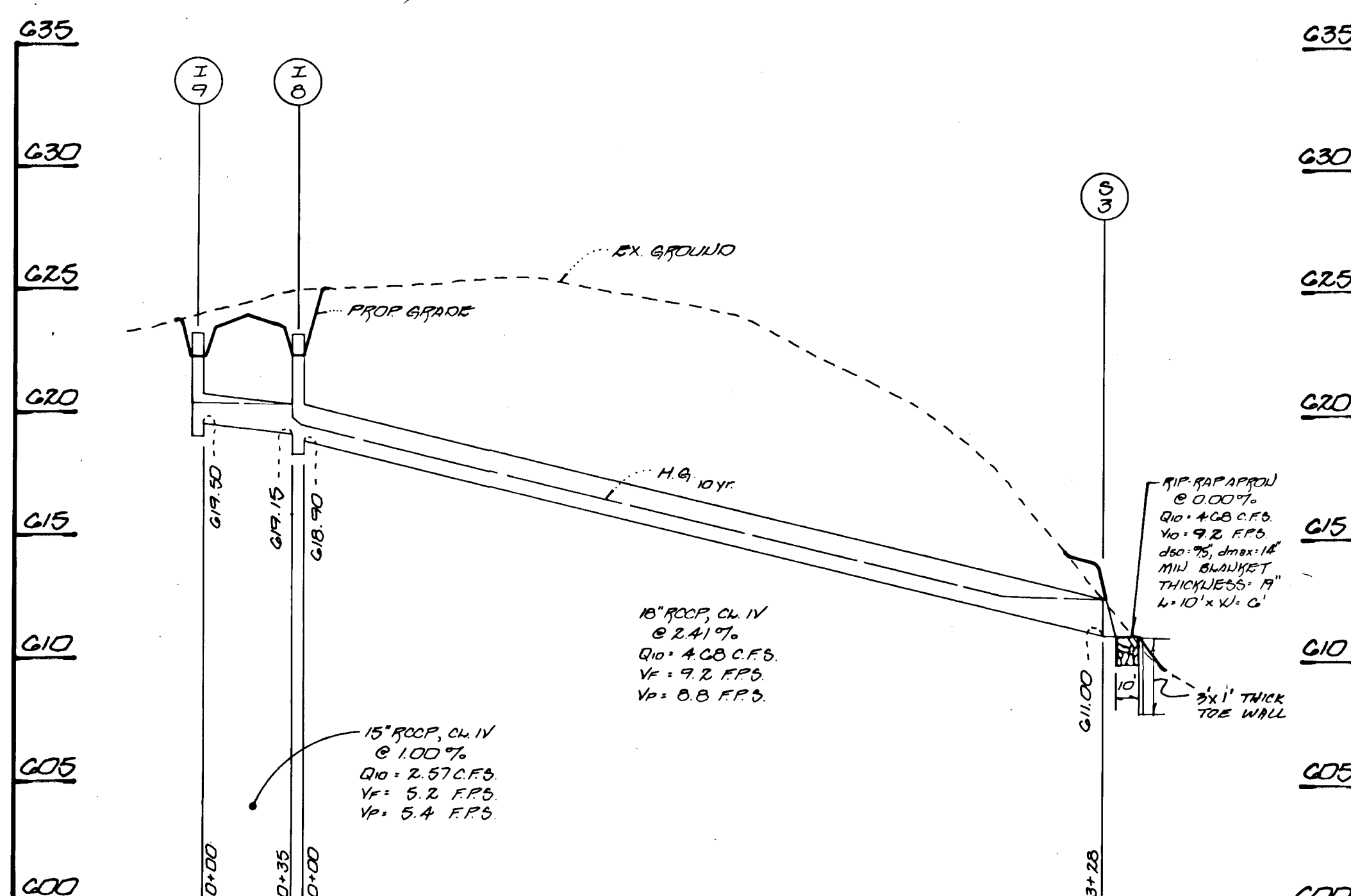
DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



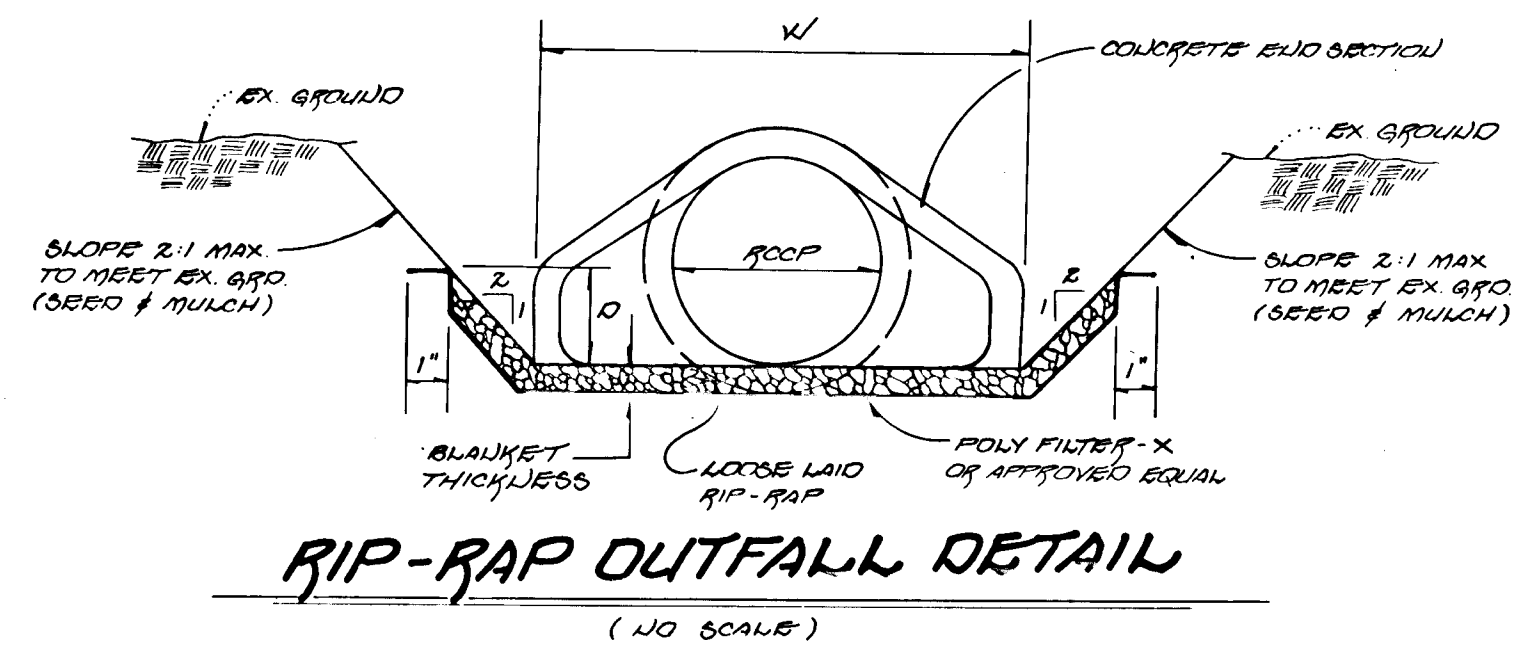
STORM DRAIN PROFILES
WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57 - 99 AND PARCELS 'E' - 'G'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42
 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 14 OF 20



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



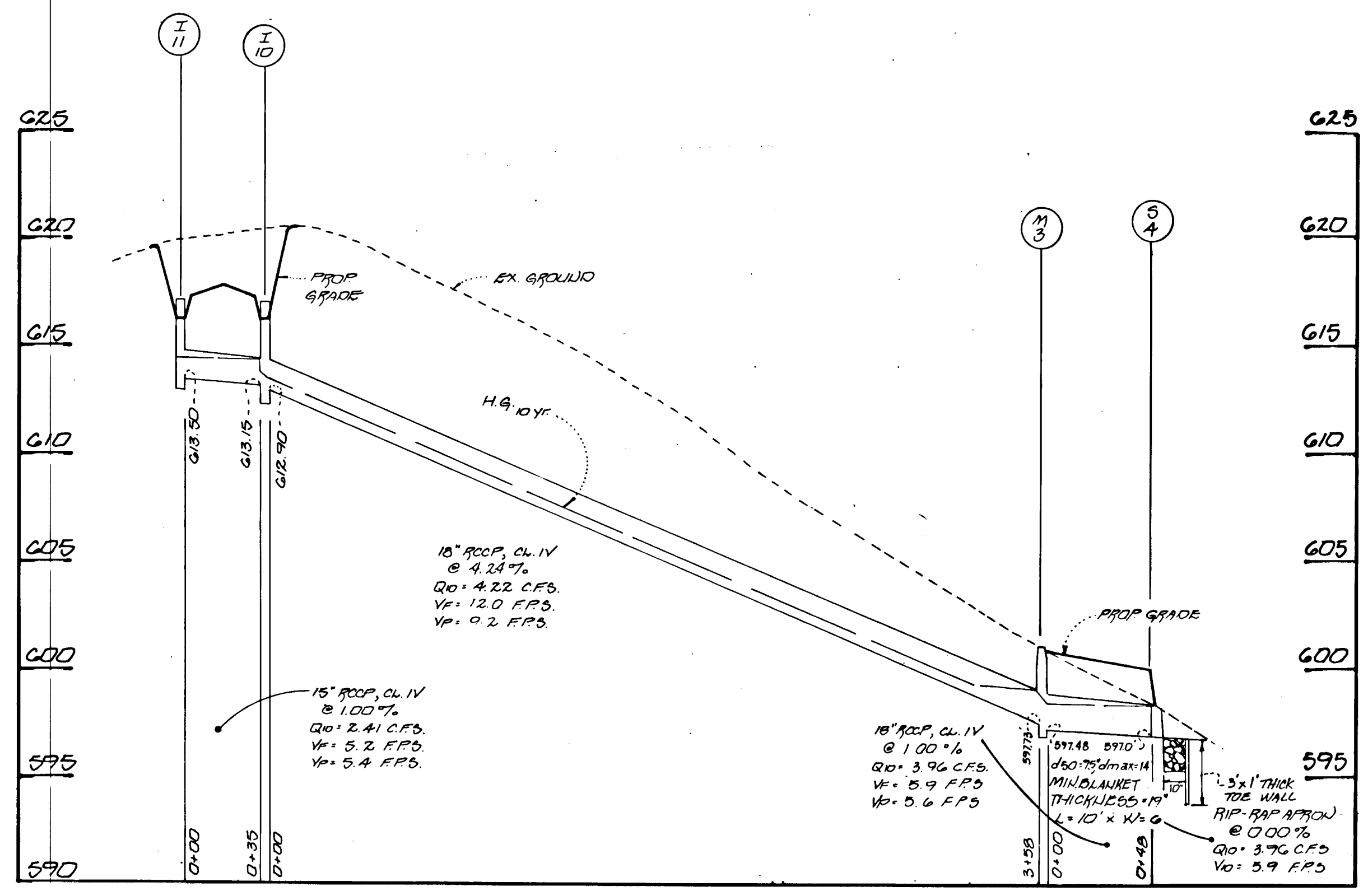
PROFILE
 SCALE: HORIZ: 1" = 50"
 VERT: 1" = 5'



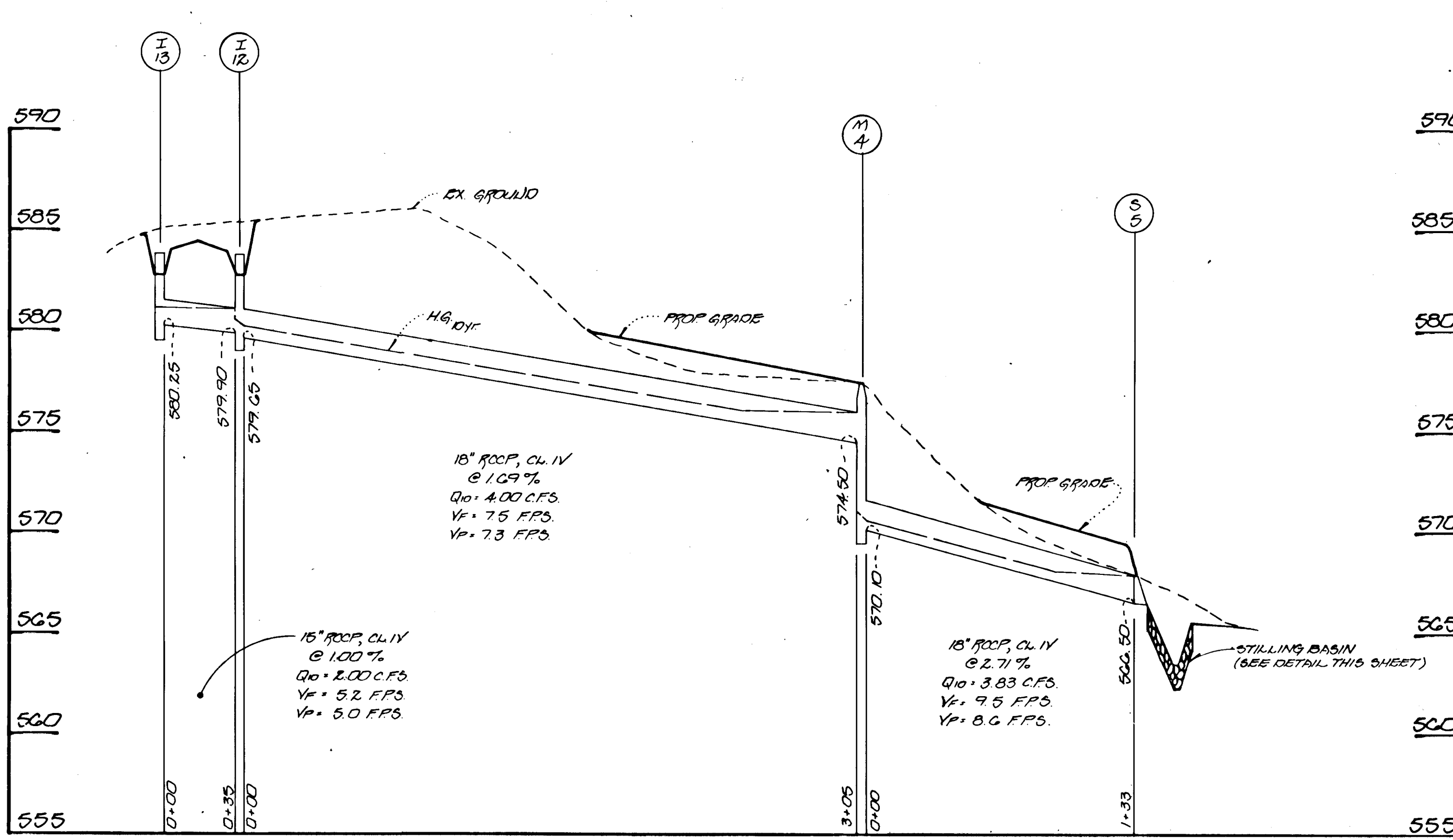
RIP-RAP CHANNEL DESIGN DATA

STRUCTURE	AREA (S.F.)	WETTED PERIMETER (Ft)	R (Ft)	R ^{2/3} (Ft ^{2/3})	S ^{1/2}	V (FPS)	Q (CFS)	BLANKET THICKNESS
5-1	7.03	4.75	0.721	0.804	0.005	0.707	5.5	0.95
5-2	2.70	4.09	0.443	0.681	0.005	0.707	3.5	0.58
5-3	2.99	4.59	0.454	0.691	0.005	0.707	4.0	0.58
5-4	2.08	3.37	0.421	0.561	0.005	0.707	4.0	0.53
5-5	2.62	4.33	0.414	0.555	0.005	0.707	4.0	0.52

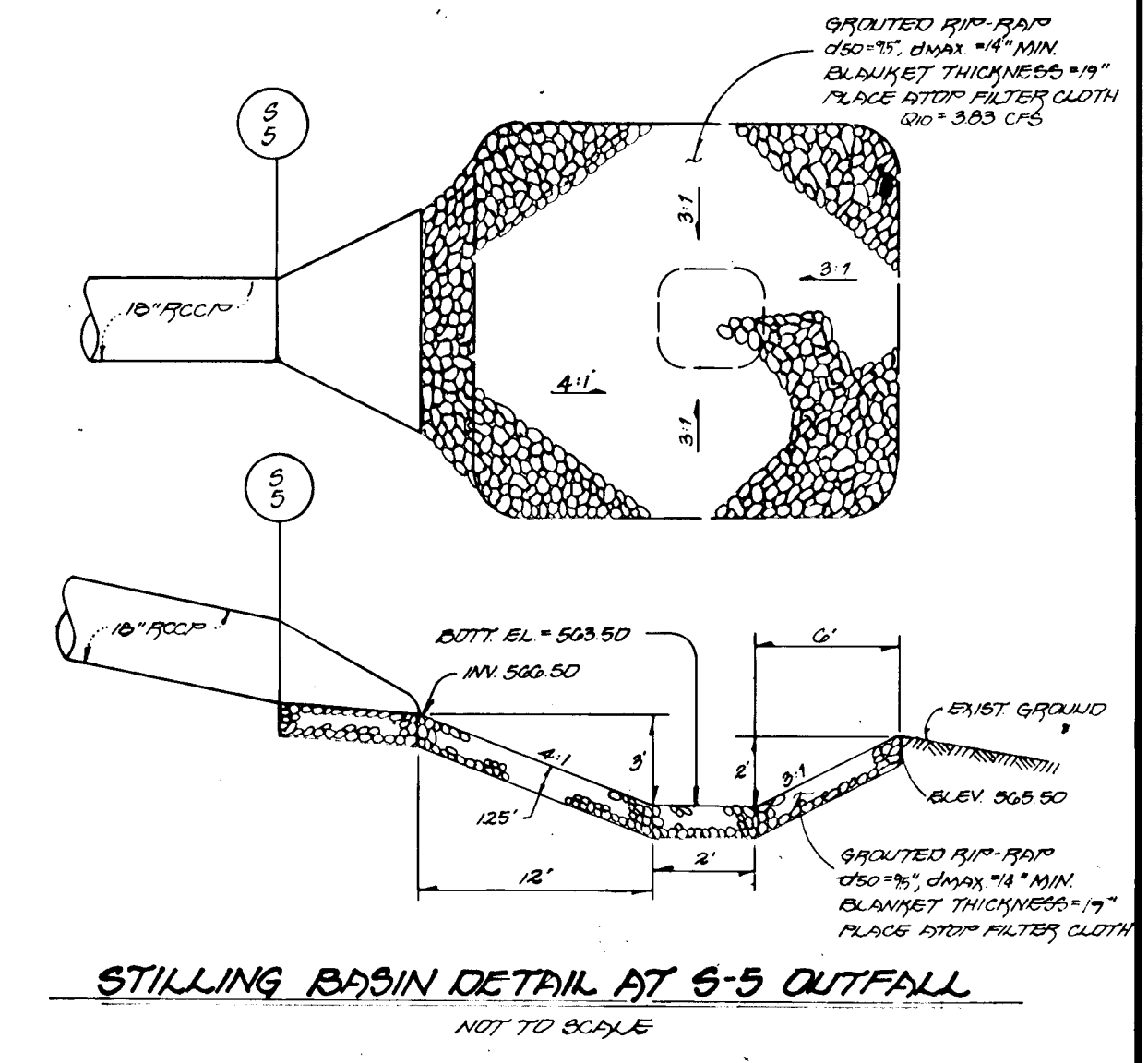
* 0.5% SLOPE USED FOR COMPUTATIONS, ACTUAL SLOPE IS 0.0%.



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



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



STORM DRAIN PROFILES
WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57 -- 77 AND PARCELS 'E' - 'Q'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42
 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 15 OF 20

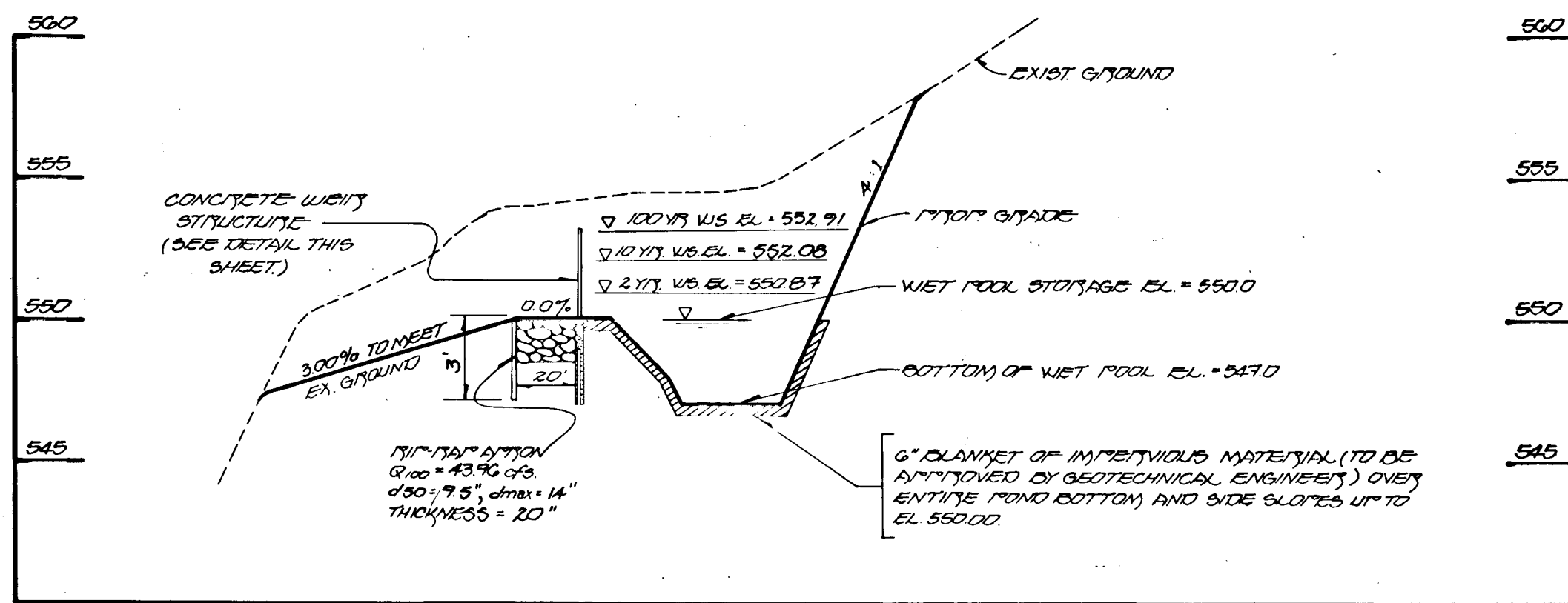
406

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1001 NATIONAL SQUARE, OFFICE 302, PARK - 100212 BALTIMORE NATIONAL PKWY.
 ELLICOTT CITY, MARYLAND 21042
 4109 461 - 2555

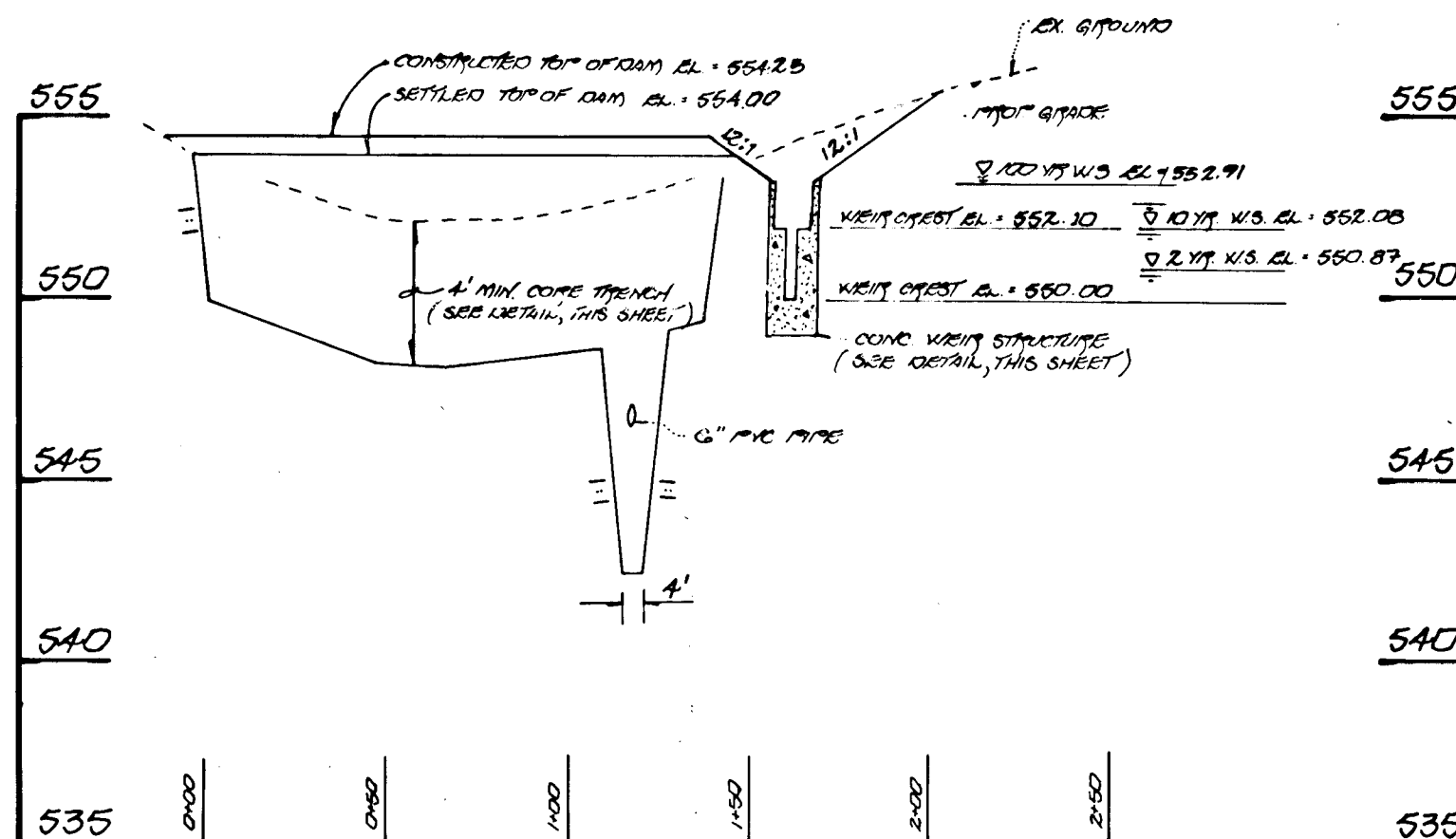
OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 1900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



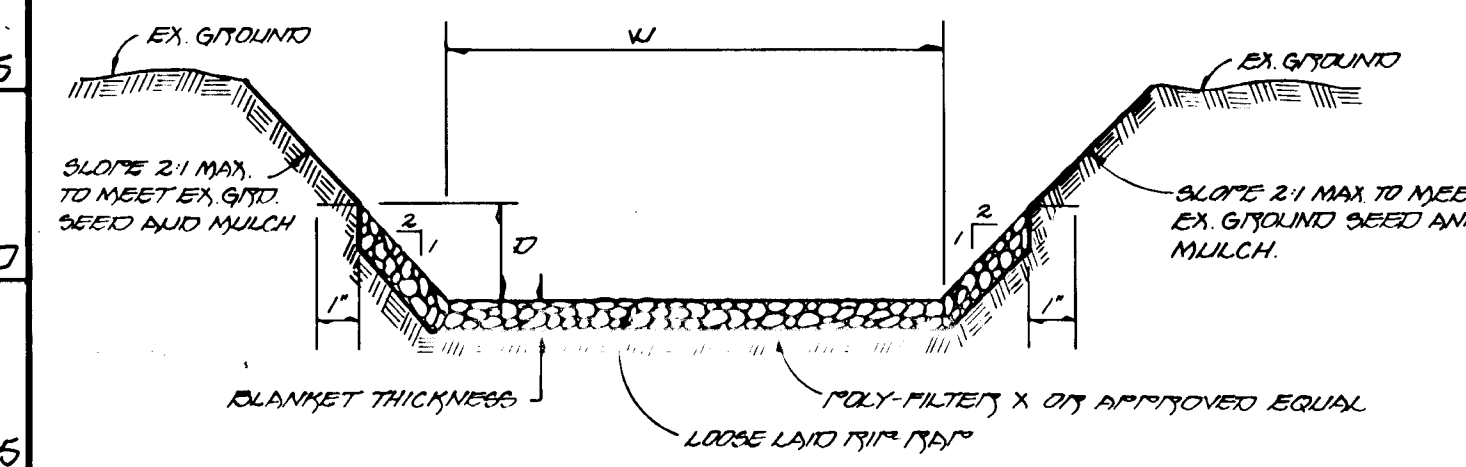


SECTION A-A
SCALE: 1"=30' HORIZ.
1"=5' VERT.

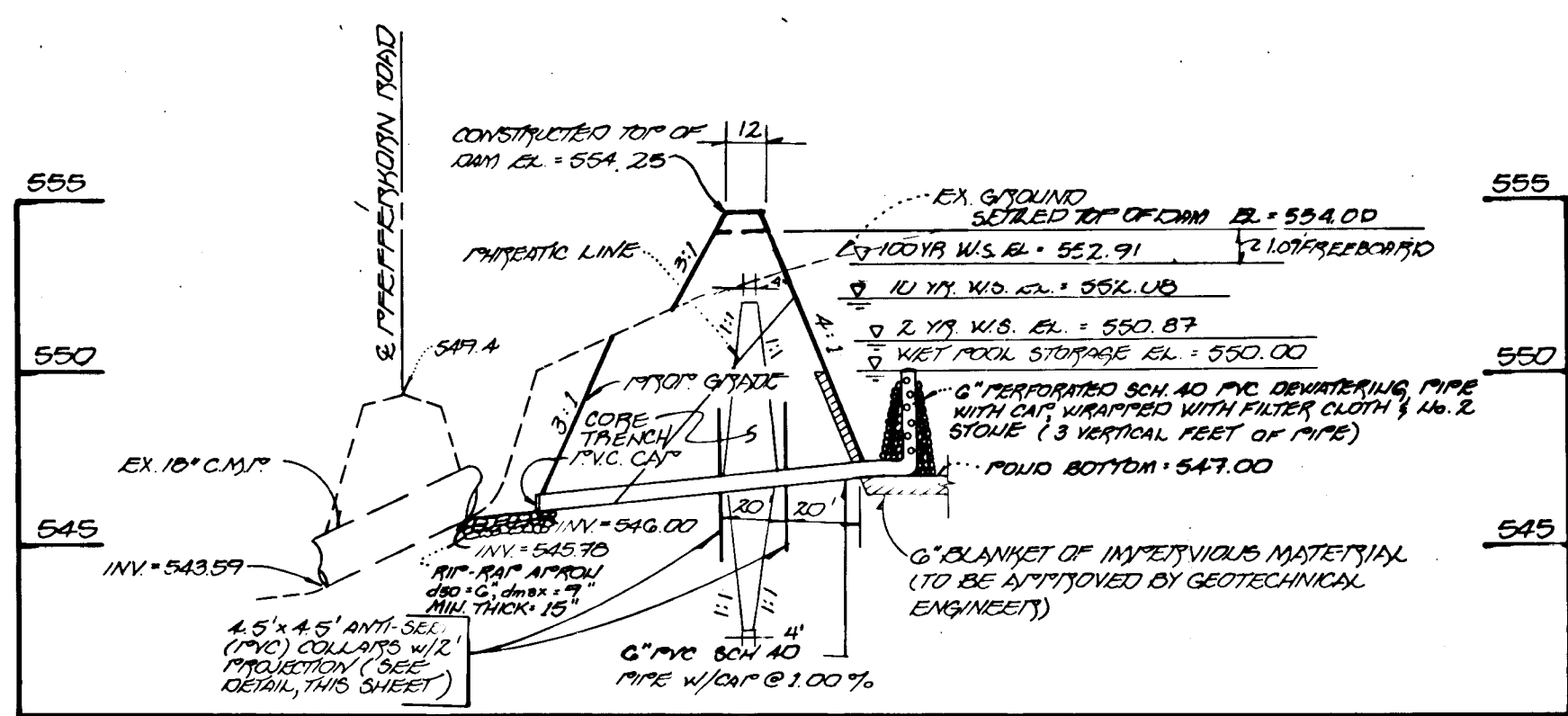


PROFILE ALONG E DAM POND No. 1
SCALE: 1"=50' HORIZ.
1"=5' VERT.

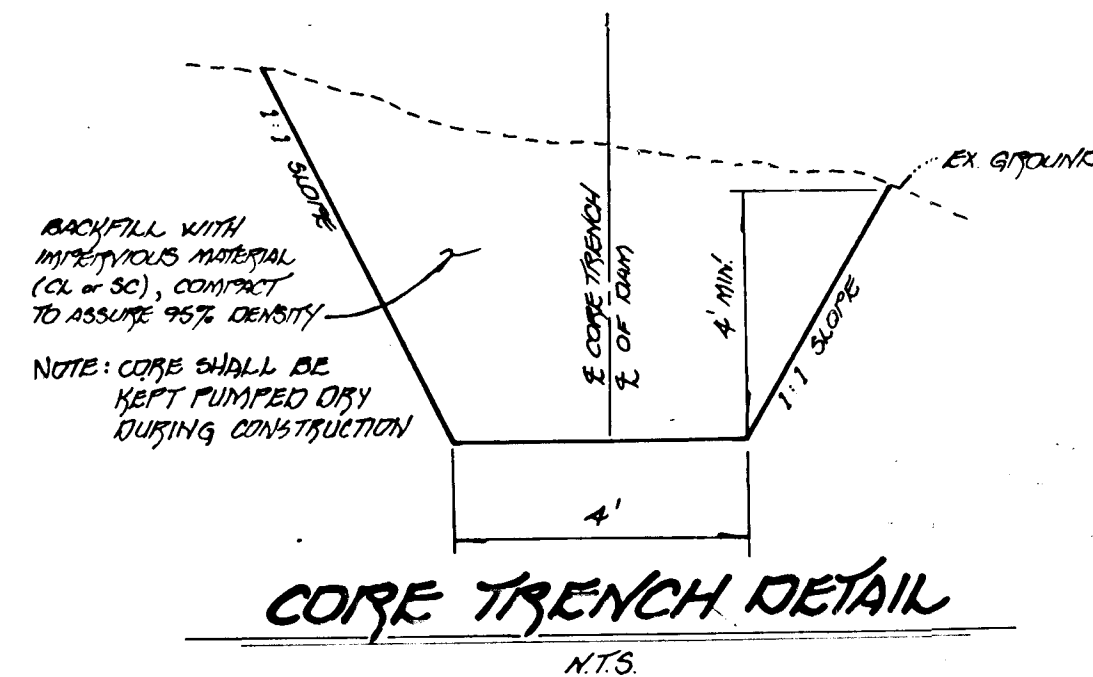
TRIPLEX CHANNEL DESIGN DATA												
STRUCTURE	AREA	PERIMETER	W	H	S	W	D	V	W	W	W	W
TRIPLEX CHANNEL (SLOPE 1:1)	2.82	7.29	0.345	0.492	0.10	0.30	55	0.40	0.04	5.79	1.85	16' 19"



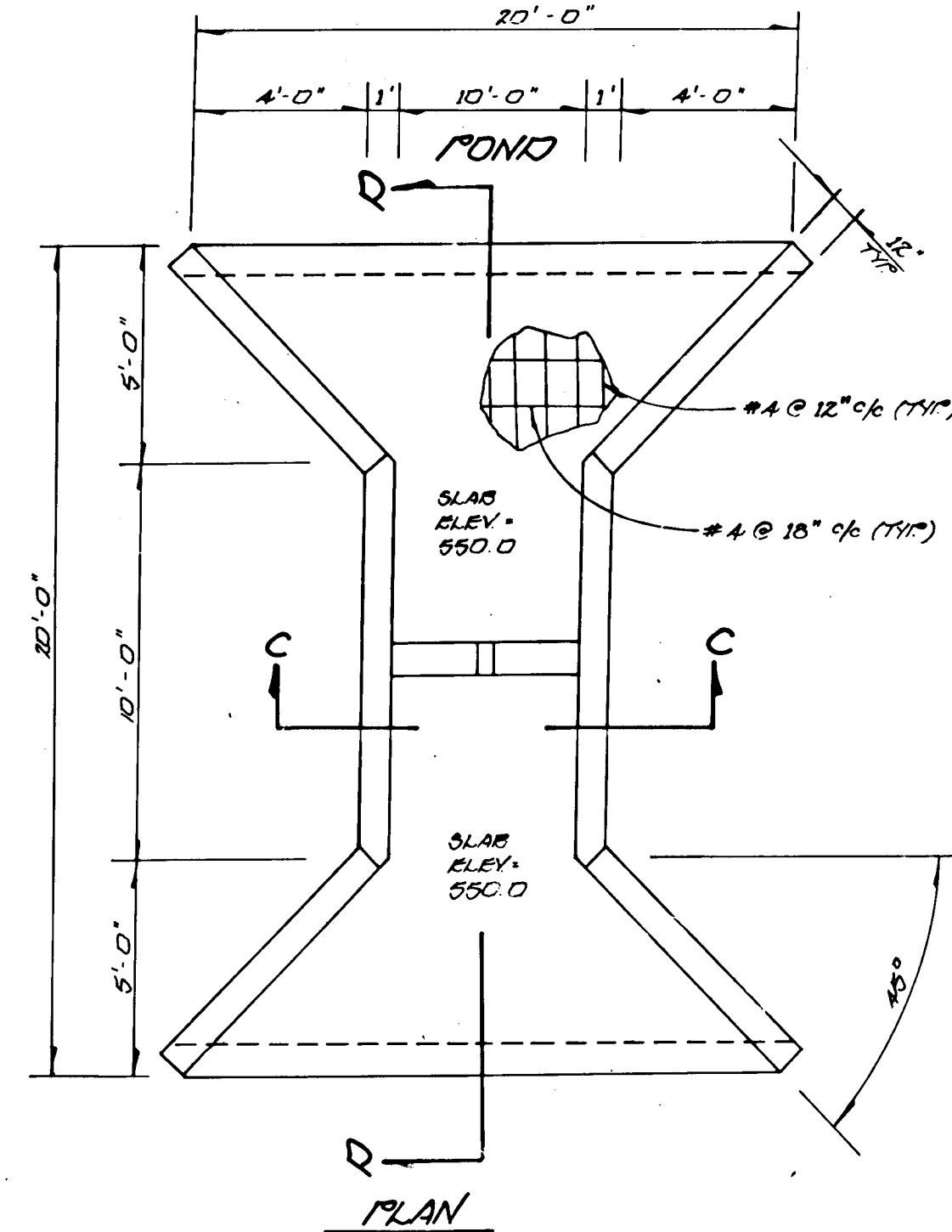
TRIPLEX CHANNEL DETAIL
NOT TO SCALE



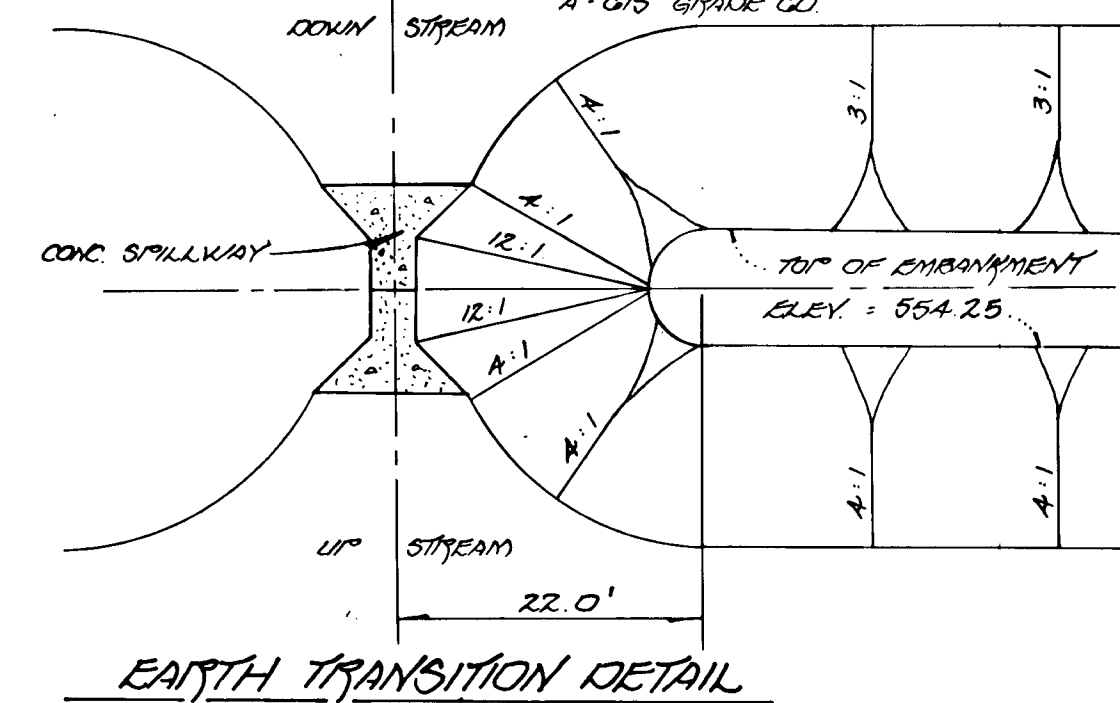
SECTION B-B
SCALE: 1"=30' HORIZ.
1"=5' VERT.



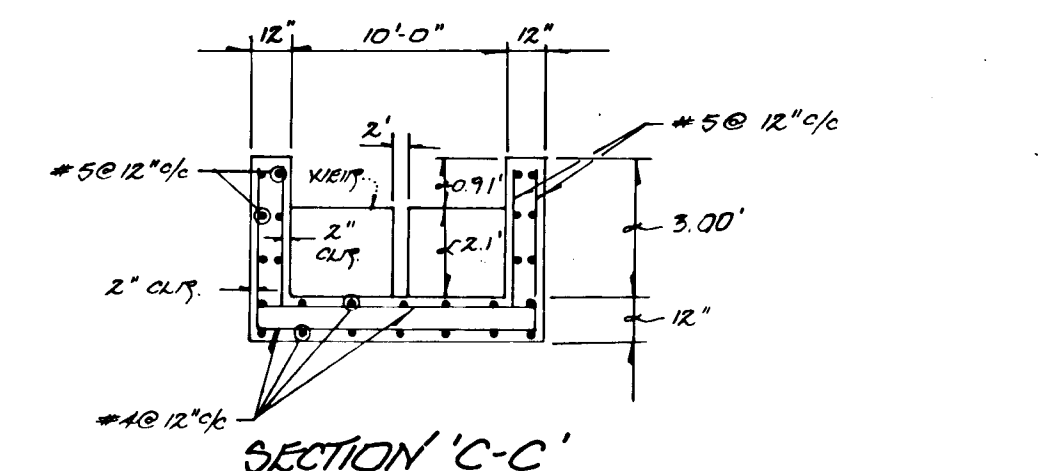
CORE TRENCH DETAIL
NTS.



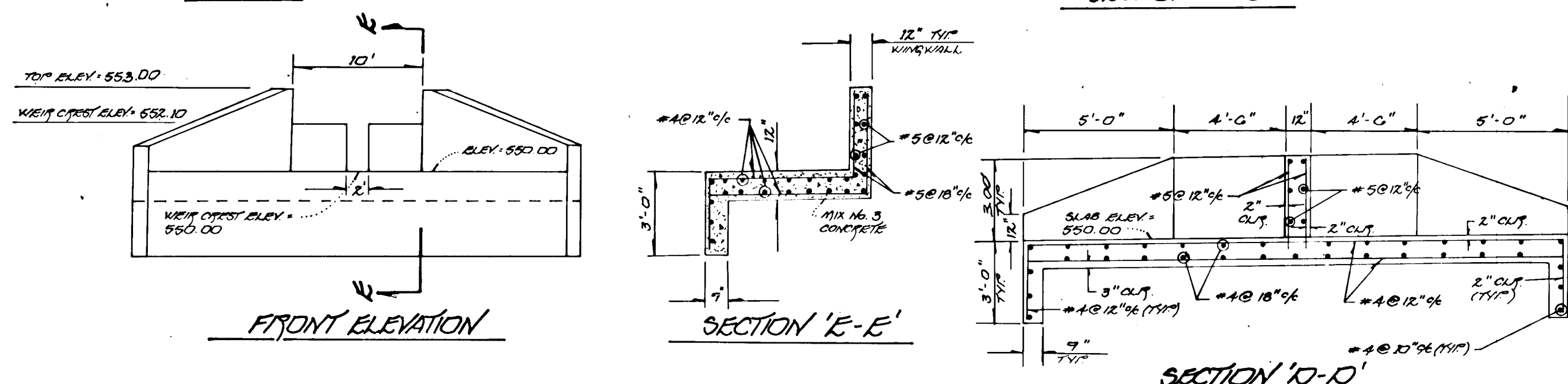
PLAN



EARTH TRANSITION DETAIL



SECTION C-C

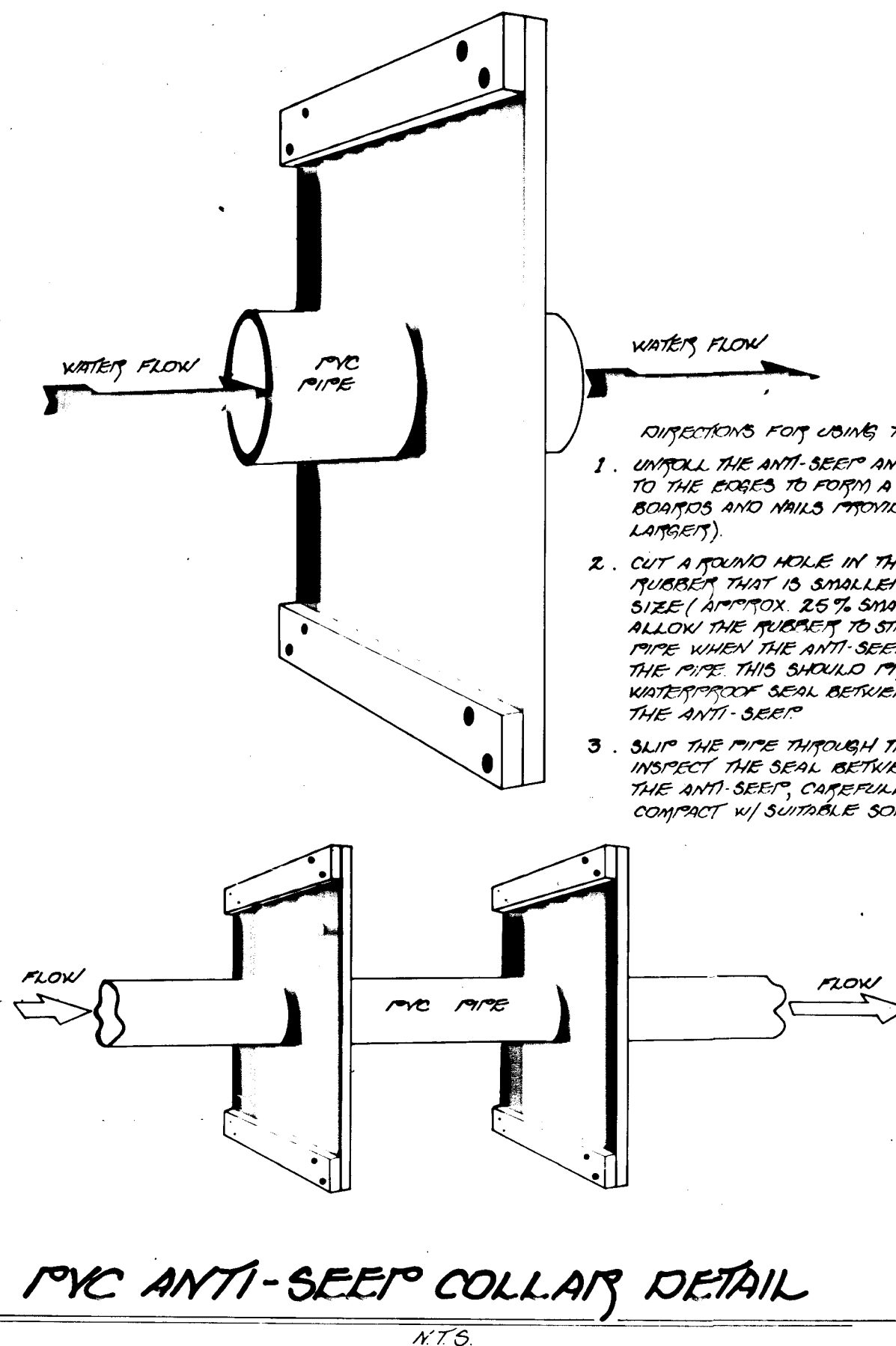


FRONT ELEVATION

SECTION E-E

SECTION D-D

CONCRETE WEIR STRUCTURE DETAIL
(MODIFIED HOWARD COUNTY STA. INT. S.D. 7.00)
NTS.

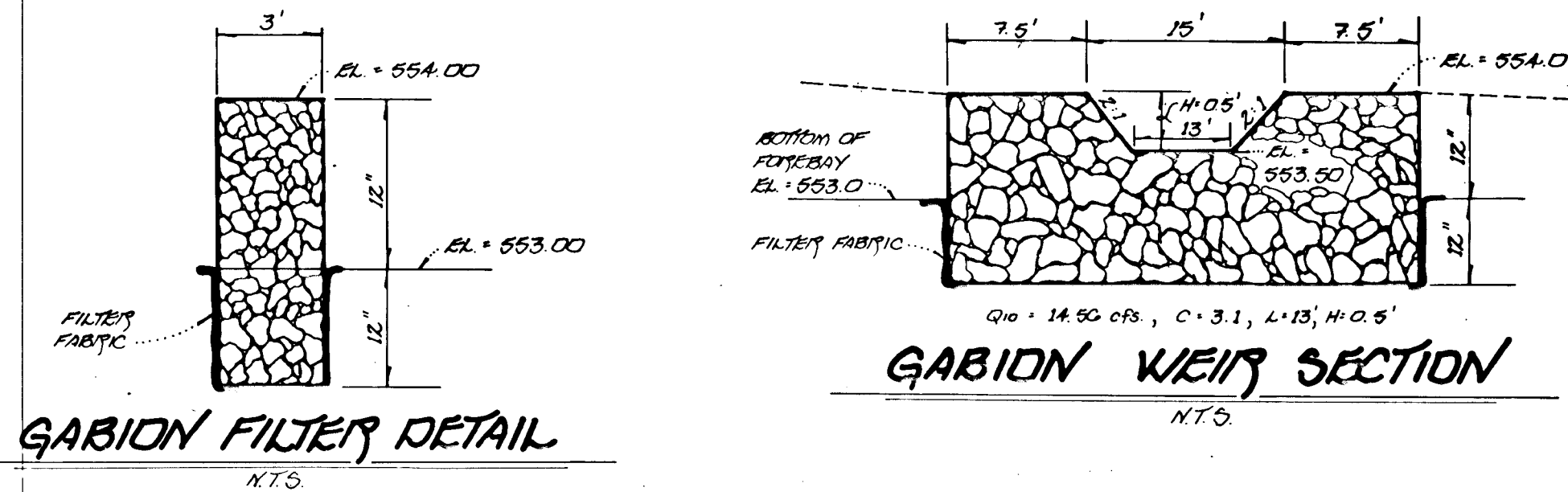


PVC ANTI-SEEP COLLAR DETAIL
NTS.

**OPERATION AND MAINTENANCE SCHEDULE
OF HOME OWNERS ASSOCIATION OWNED AND MAINTAINED
STORMWATER MANAGEMENT FACILITY
WET POND**

HOME OWNERS ASSOCIATION'S MAINTENANCE RESPONSIBILITIES:

- Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, and maintenance access should be mowed as needed.
- Debris and litter shall be removed during regular mowing operations and as needed.
- When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.



GABION FILTER DETAIL
NTS.

GABION WEIR SECTION
NTS.

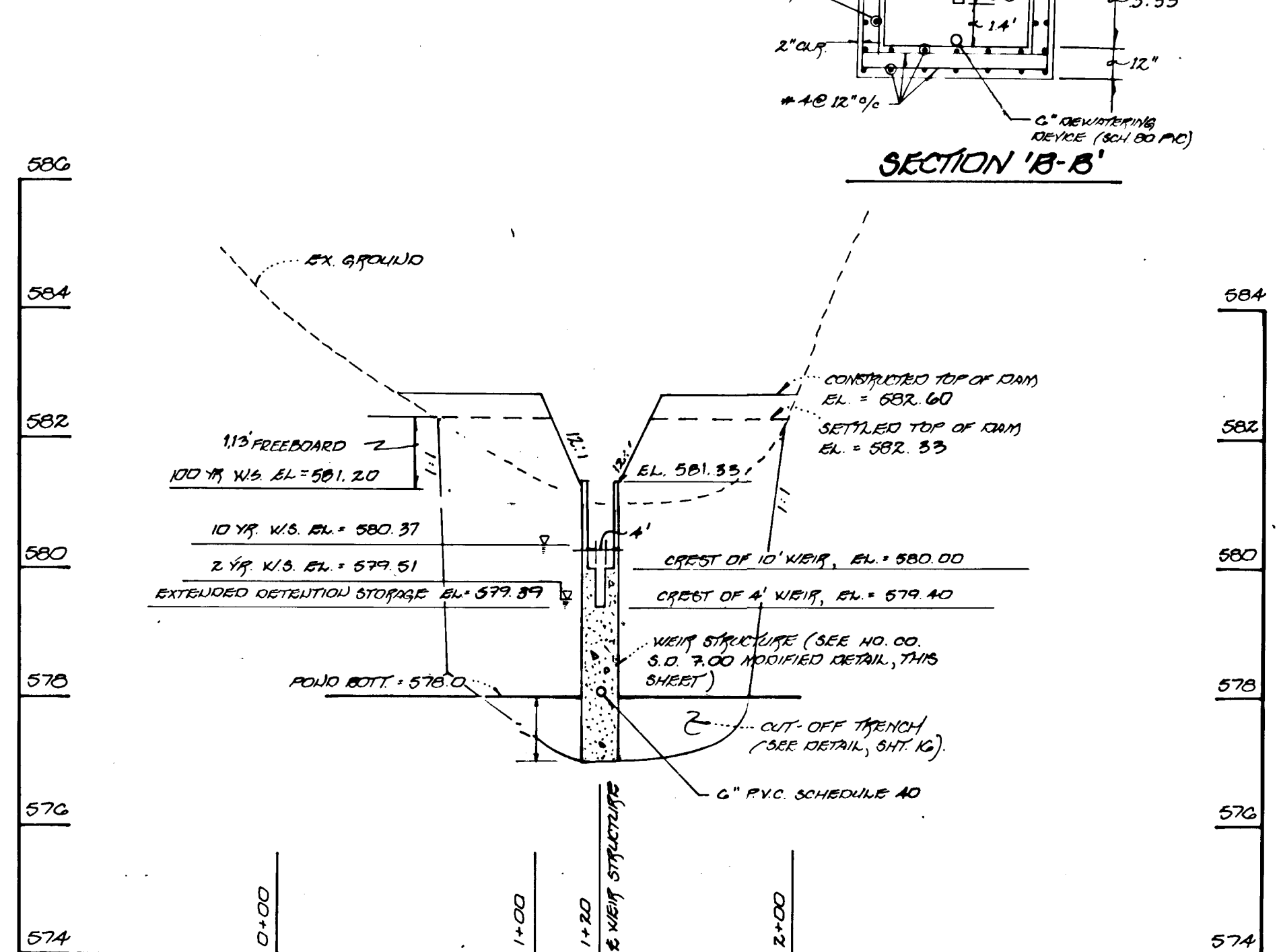
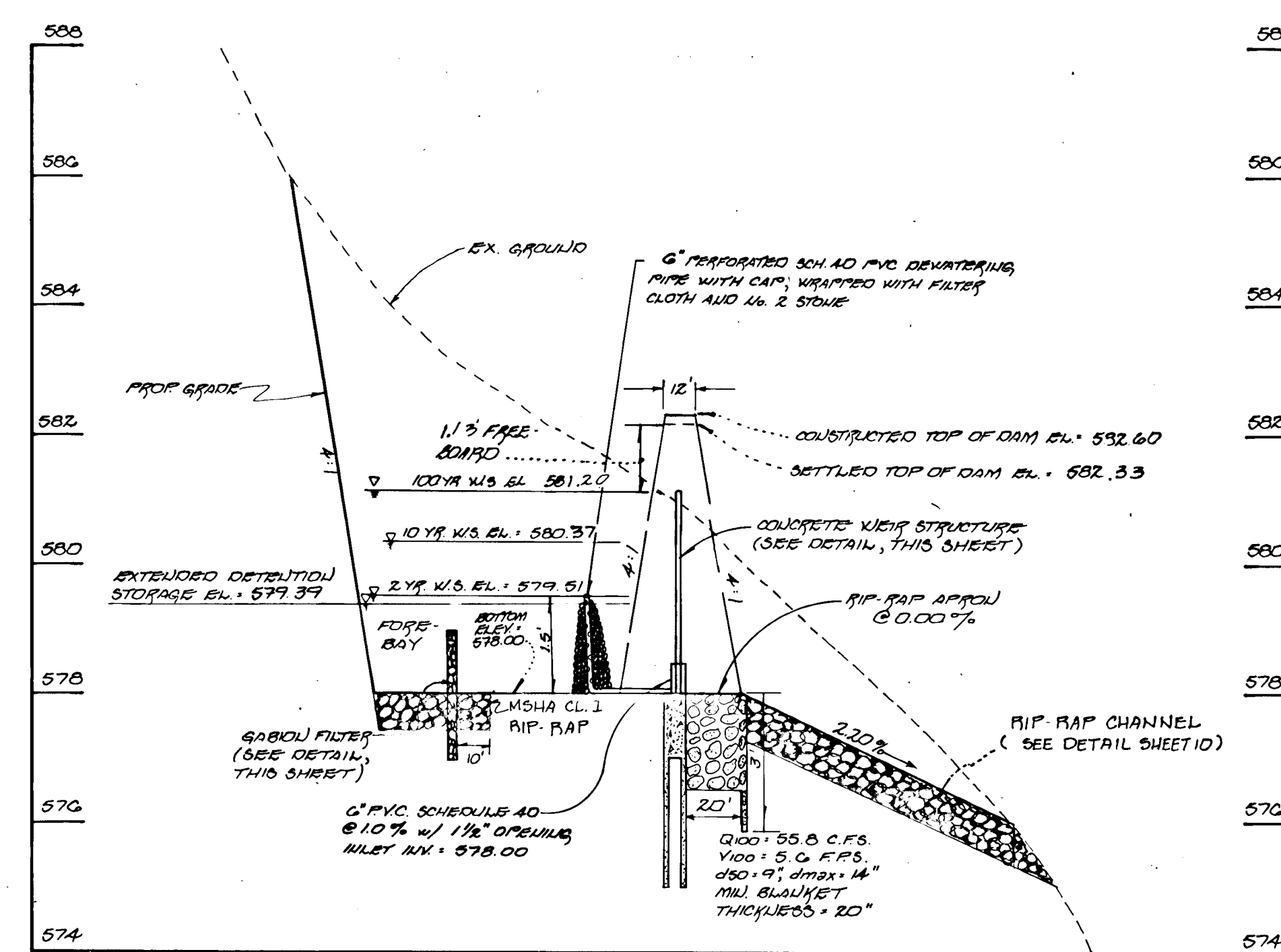
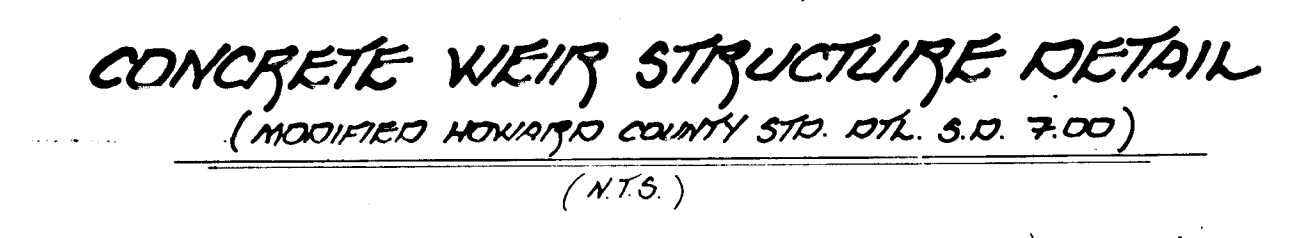
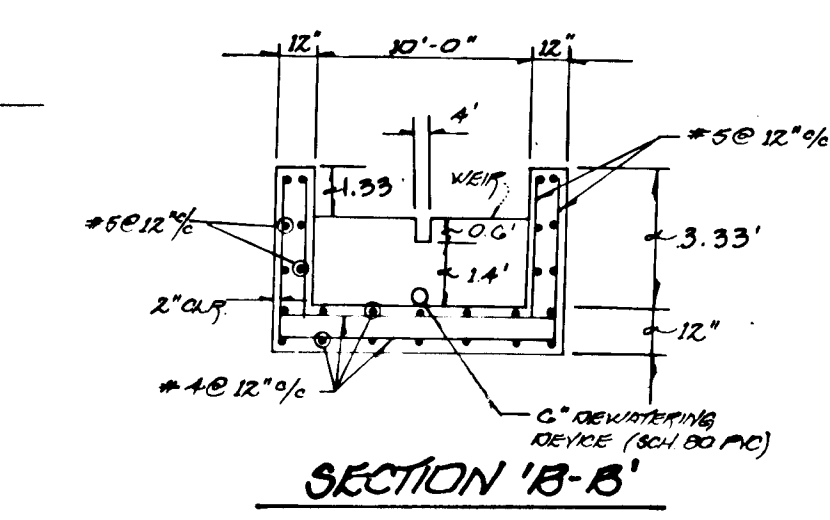
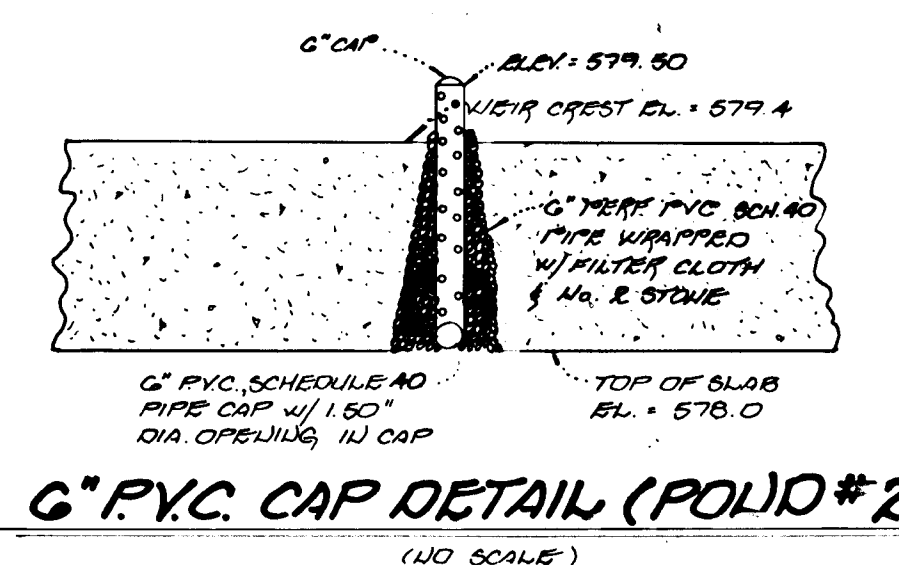
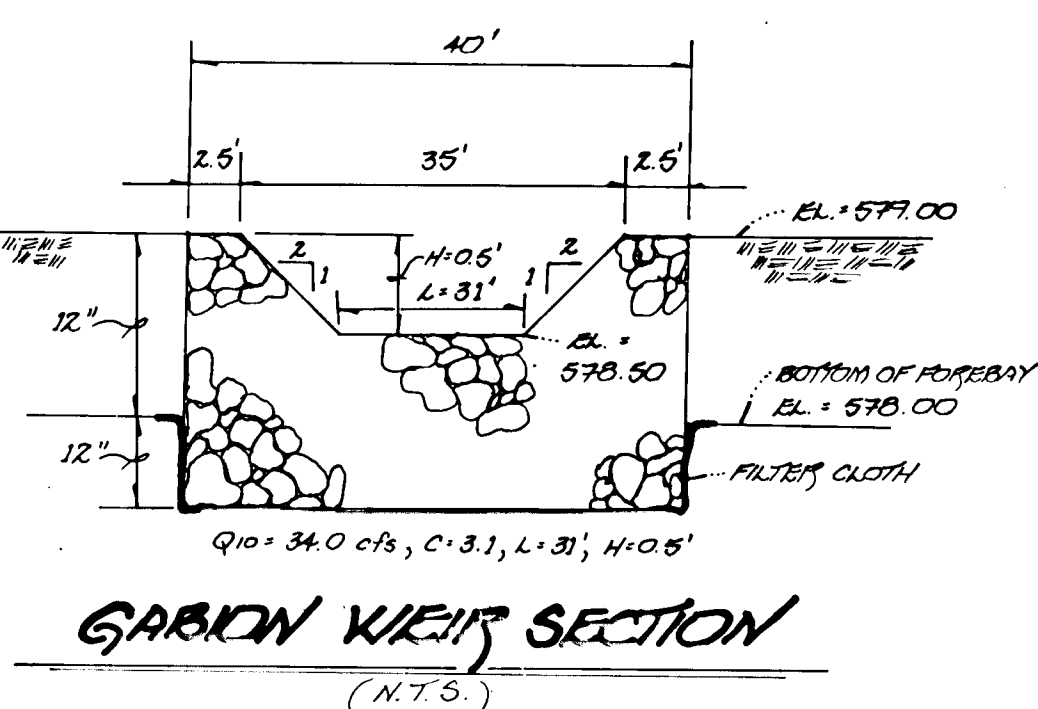
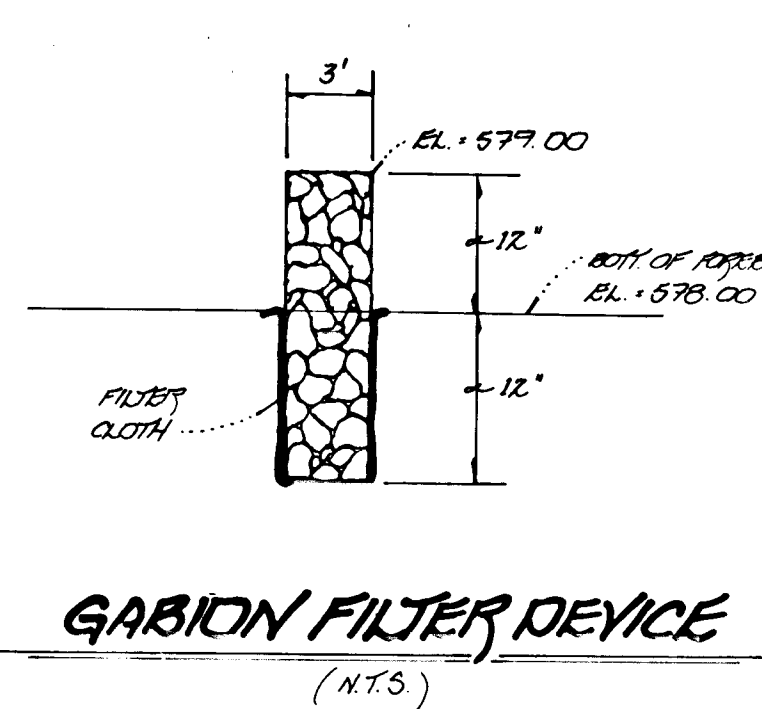
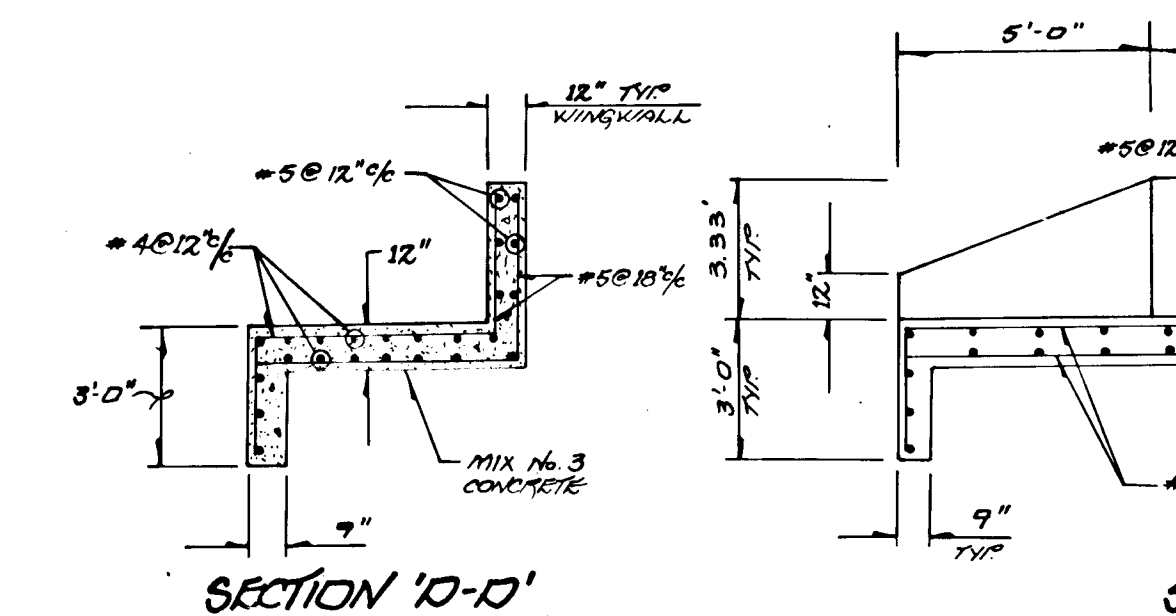
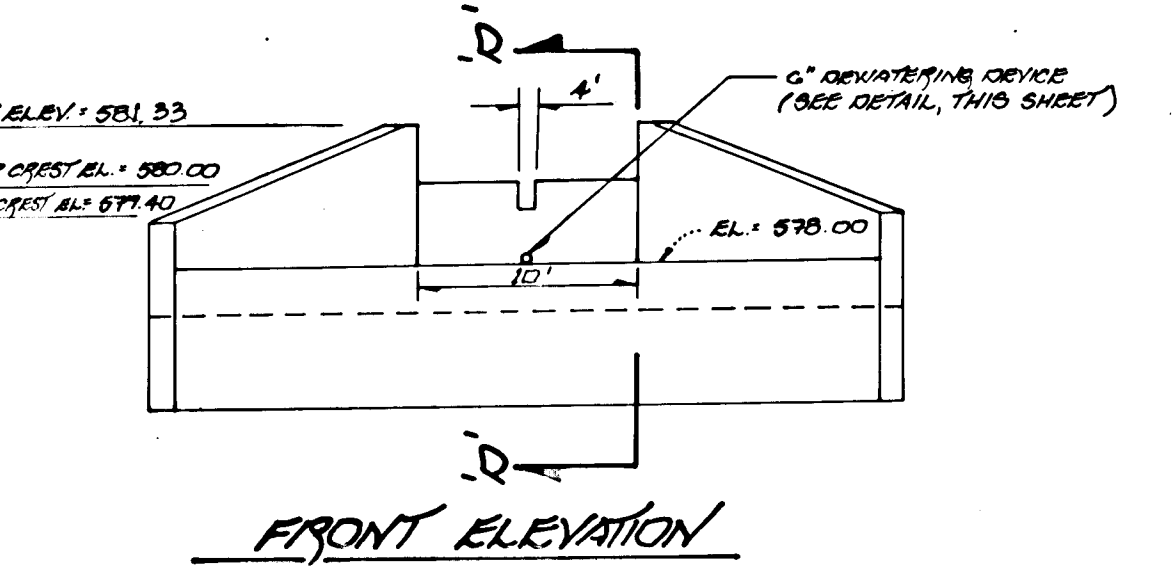
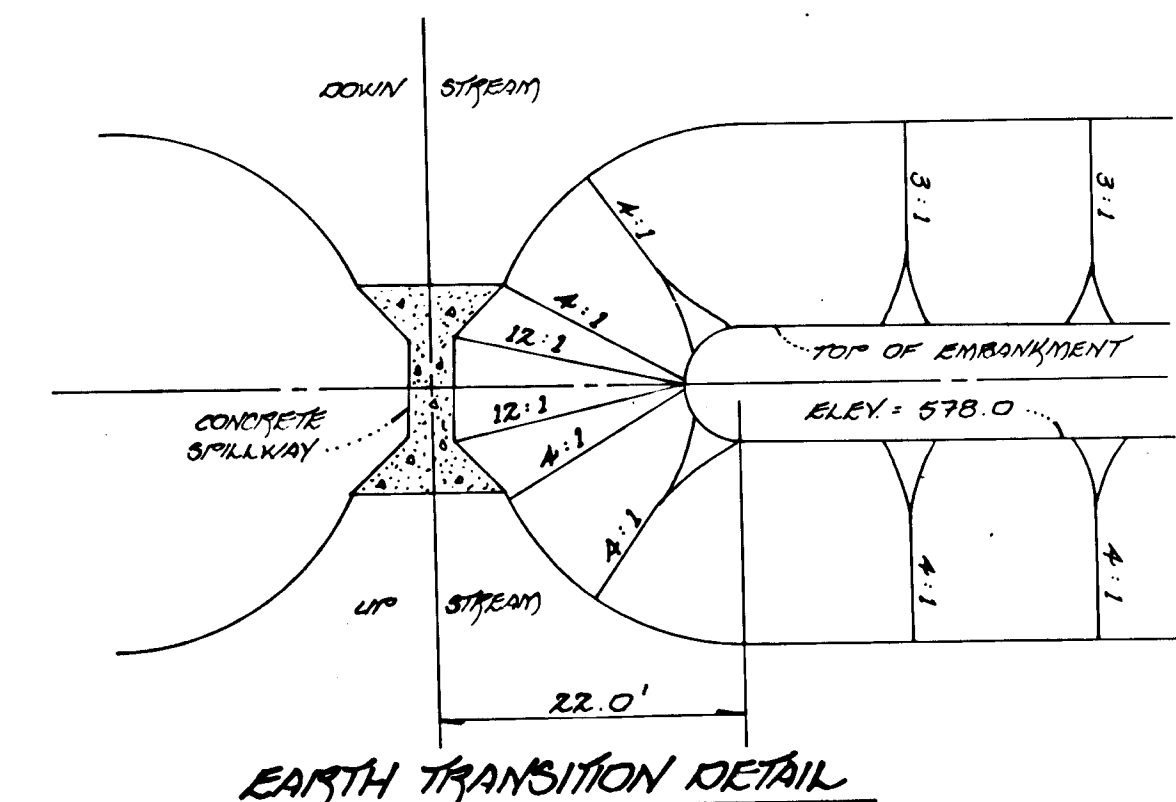
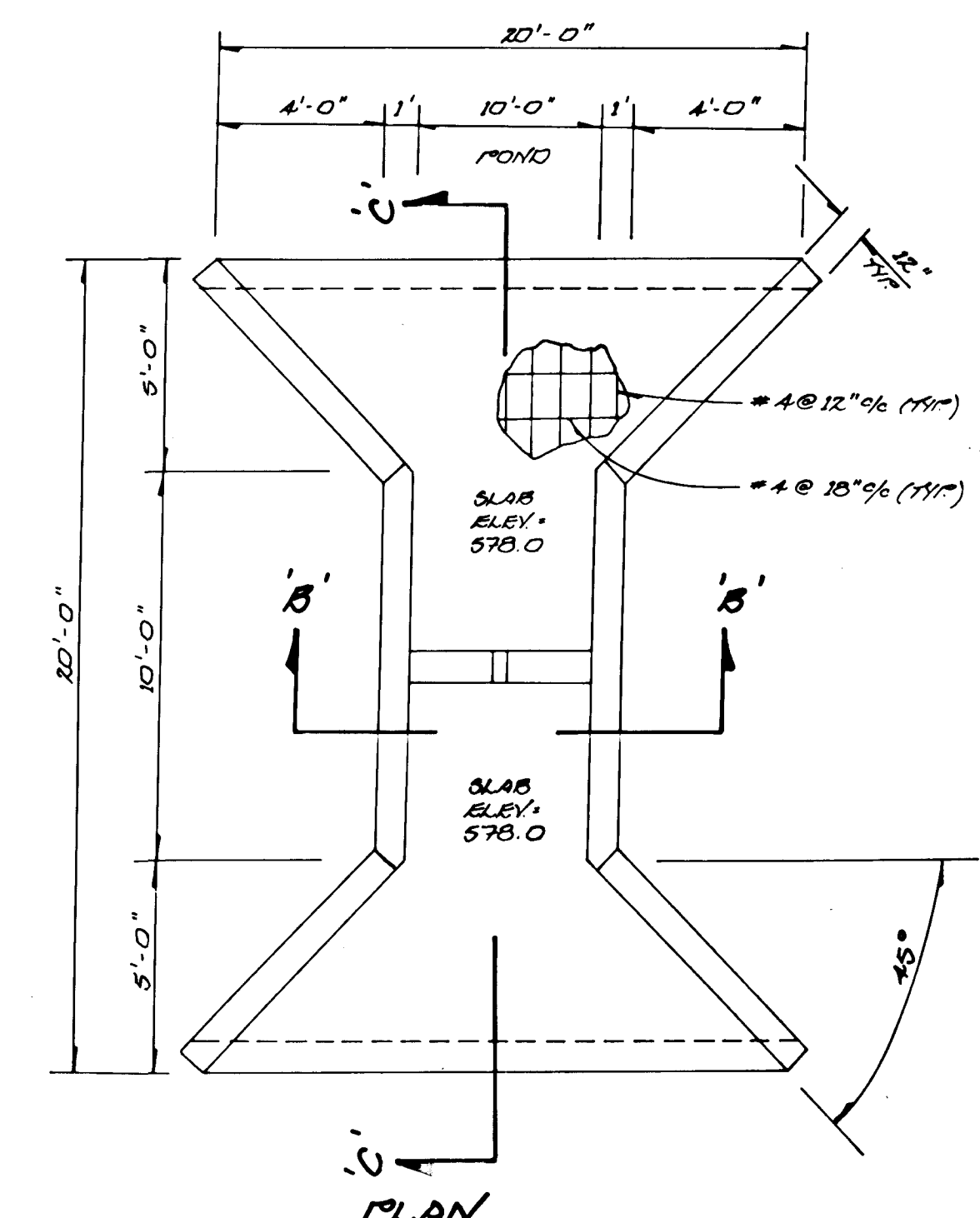
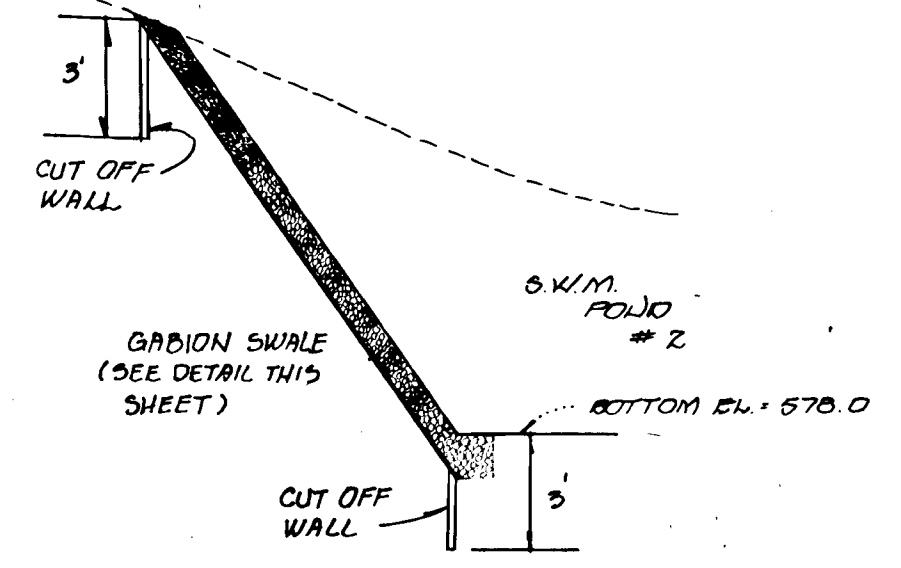
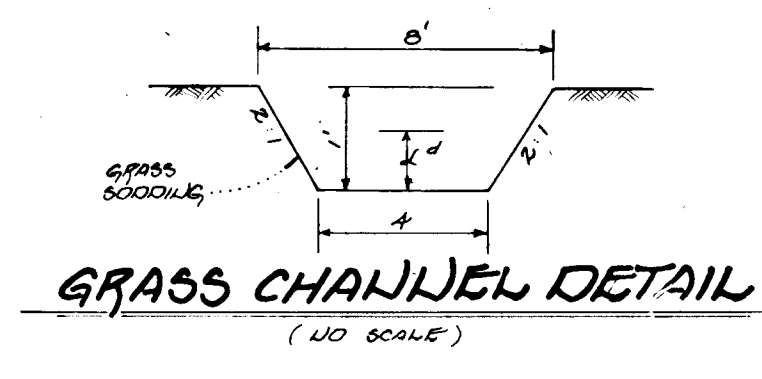
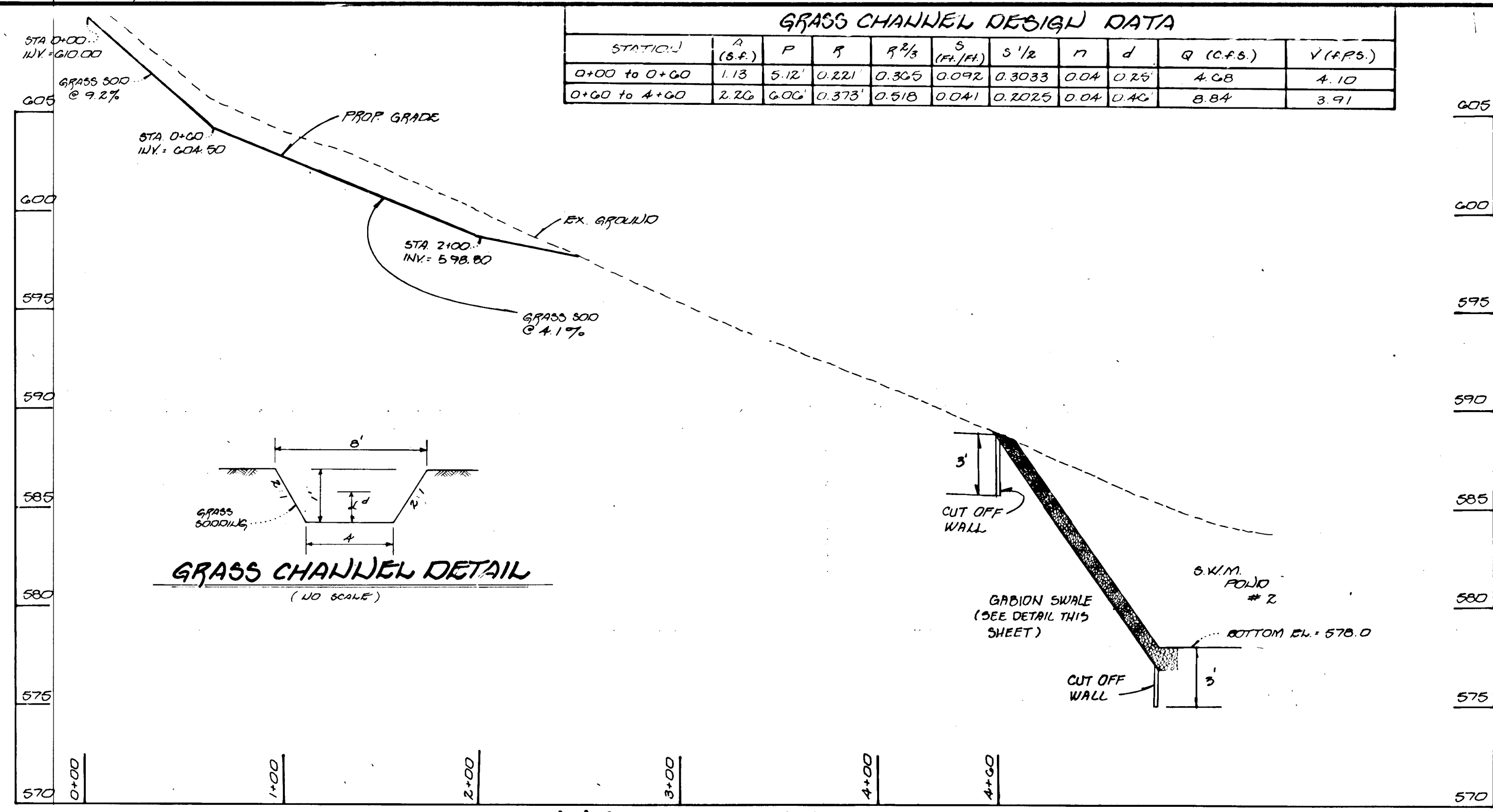
**STORMWATER MANAGEMENT POND No. 1
PROFILES AND DETAILS**
WEST FRIENDSHIP ESTATES
SECTION 2-
AND PARCELS "E" - "Q"
ZONED RC
TAX MAP No. 15, PARCEL Nos. 32 AND 42
AND
TAX MAP No. 22, PARCEL No. 533
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JUNE 26, 1995
SHEET 10 OF 20



OWNER
WEST FRIENDSHIP NEW TOWN COMPANY
11900 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
NEW TOWN COMPANY
c/o LAND DESIGN & DEVELOPMENT, INC.
10805 HICKORY RIDGE ROAD, SUITE 210
COLUMBIA, MARYLAND 21044

GRASS CHANNEL DESIGN DATA										
STATION	A (S.F.)	P	q	q ^{2/3}	S (ft/ft)	1/2	n	d	Q (C.F.S.)	V (FPS)
0+00 to 0+40	1.78	5.12	0.221	0.325	0.092	0.3033	0.04	0.25	4.68	4.10
0+40 to 4+00	2.26	6.00	0.373	0.510	0.041	0.2025	0.04	0.40	8.84	3.91



- OPERATION AND MAINTENANCE SCHEDULE**
- STORMWATER MANAGEMENT FACILITY**
EXTENDED DETENTION POND
- Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, the bottom of the pond, and maintenance access should be mowed as needed.
 - Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
 - When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.

DEVELOPER'S CERTIFICATE

I HAVE CERTIFIED THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD COUNTY DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN THIRTY (30) DAYS OF COMPLETION. I ALSO WILL MAINTAIN THE POND WITHIN THE PROVISIONS OF THE HOWARD COUNTY CONSERVATION DISTRICT.

DATE: 2/27/96

ENGINEER'S CERTIFICATE

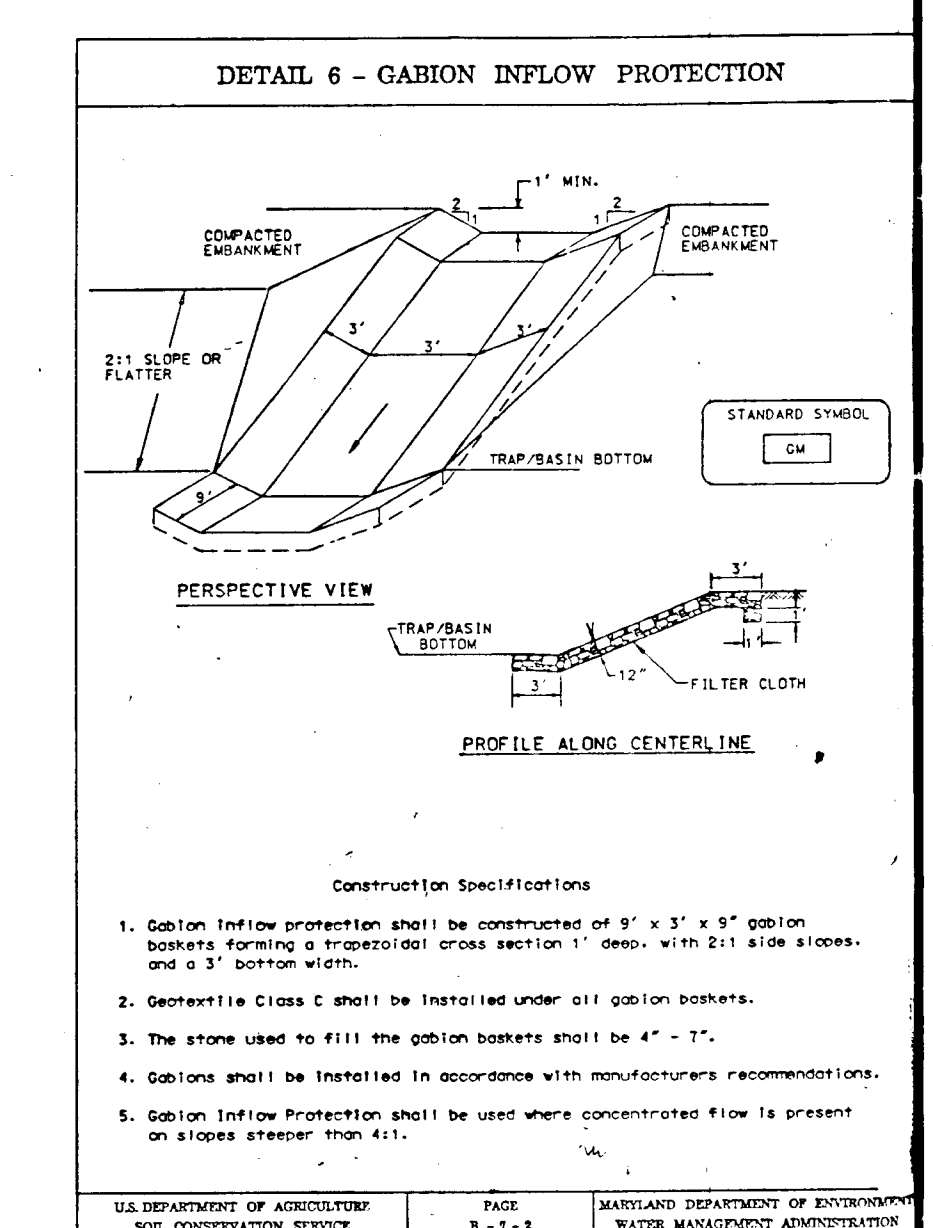
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD COUNTY CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN THIRTY (30) DAYS OF COMPLETION.

DATE: 2/27/96

APPROVED DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
DATE: 3/5/96

APPROVED DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
DATE: 2/27/96

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS
DATE: 3-5-96



STORMWATER MANAGEMENT POND NO. 2
PROFILES AND DETAILS

WEST FRIENDSHIP ESTATES
SECTION 2
LOTS 37 - 99 AND PARCELS 'E' - 'Q'

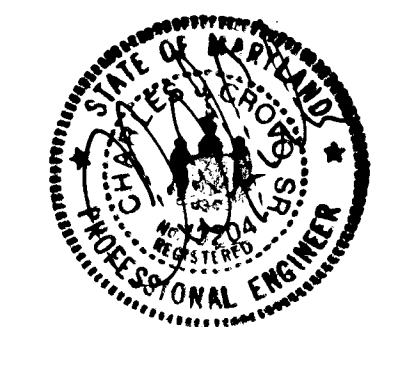
ZONED RC
TAX MAP No. 15, PARCEL Nos. 32 AND 42
AND
TAX MAP No. 22, PARCEL No. 533
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JUNE 26, 1995
SHEET 17 OF 20

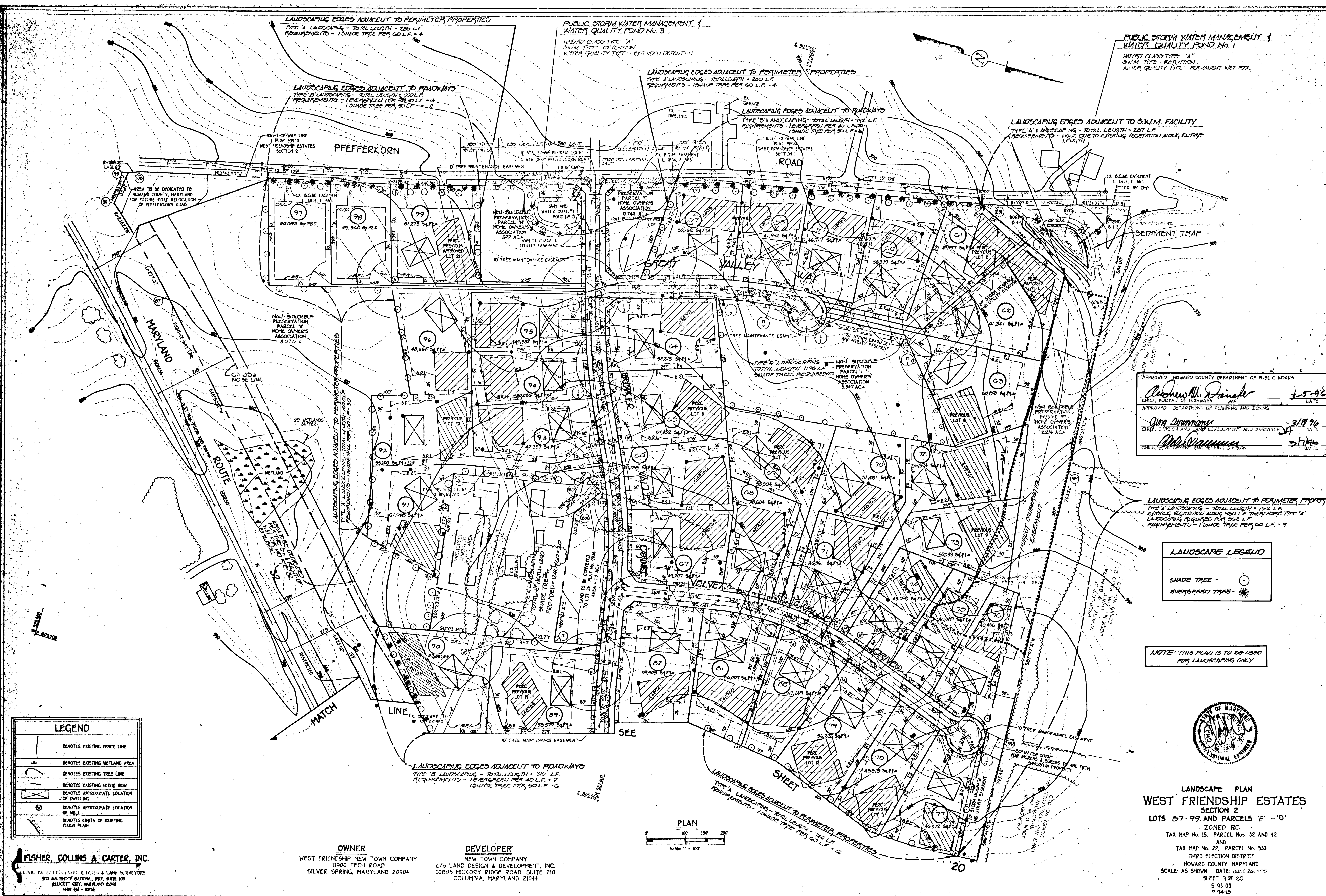
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FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1700 W. BROADWAY, SUITE 200, BALTIMORE, MD 21201
ELKORT CITY, MARYLAND 21226
(410) 461-2855

OWNER
WEST FRIENDSHIP NEW TOWN COMPANY
11900 TECH ROAD
SILVER SPRING, MARYLAND 20904

DEVELOPER
NEW TOWN COMPANY
c/o LAND DESIGN & DEVELOPMENT, INC.
10805 HICKORY RIDGE ROAD, SUITE 210
COLUMBIA, MARYLAND 21044





LANDSCAPING EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH - 285 L.F.
 REQUIREMENTS - 1 SHADE TREE PER 60 L.F. - 4

PUBLIC STORM WATER MANAGEMENT #1
 WATER QUALITY FOND No. 3
 HAZARD CLASS TYPE 'A'
 SWIM TYPE - DETENTION
 WATER QUALITY TYPE - EXTENDED DETENTION

PUBLIC STORM WATER MANAGEMENT #1
 WATER QUALITY FOND No. 1
 HAZARD CLASS TYPE - 'A'
 SWIM TYPE - RECREATION
 WATER QUALITY TYPE - PERVAHOUT KRET POOL

LANDSCAPING EDGES ADJACENT TO ROADWAYS
 TYPE 'B' LANDSCAPING - TOTAL LENGTH - 850 L.F.
 REQUIREMENTS - 1 EVERGREEN PER 40 L.F. - 14
 1 SHADE TREE PER 50 L.F. - 11

LANDSCAPING EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH - 260 L.F.
 REQUIREMENTS - 1 SHADE TREE PER 60 L.F. - 4

LANDSCAPING EDGES ADJACENT TO SWIM FACILITY
 TYPE 'A' LANDSCAPING - TOTAL LENGTH - 287 L.F.
 REQUIREMENTS - 1 SHADE TREE PER 60 L.F. - 4

NON-BUILDABLE PRESERVATION PARCEL 19 HOME OWNERS ASSOCIATION 807 1/2 AC

NON-BUILDABLE PRESERVATION PARCEL 17 HOME OWNERS ASSOCIATION 822 AC

NON-BUILDABLE PRESERVATION PARCEL 18 HOME OWNERS ASSOCIATION 224 AC

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 1-5-96 DATE
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Qua Simmons 3/19/96 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
John W. ... 3/17/96 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

LANDSCAPING EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH - 1592 L.F.
 EXISTING VEGETATION ALONG 950 L.F. THEREFORE TYPE 'A' LANDSCAPING REQUIRED FOR 642 L.F.
 REQUIREMENTS - 1 SHADE TREE PER 60 L.F. - 9

LANDSCAPE LEGEND
 SHADE TREE - (circle with dot)
 EVERGREEN TREE - (starburst)

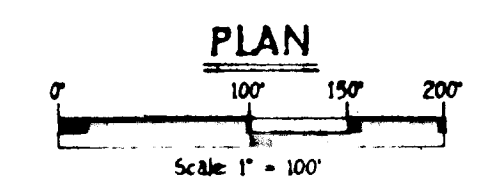
NOTE: THIS PLAN IS TO BE USED FOR LANDSCAPING ONLY

LEGEND
 DENOTES EXISTING FENCE LINE
 DENOTES EXISTING WETLAND AREA
 DENOTES EXISTING TREE LINE
 DENOTES EXISTING HEDGE ROW
 DENOTES APPROXIMATE LOCATION OF DWELLING
 DENOTES APPROXIMATE LOCATION OF WELL
 DENOTES LIMITS OF EXISTING FLOOD PLAN

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERS, ARCHITECTS & LAND SURVEYORS
 871 BALTIMORE NATIONAL PKY, SUITE 100
 BELLGATE CITY, MARYLAND 20842
 410-818-8998

OWNER
 WEST FRIENDSHIP NEW TOWN COMPANY
 11900 TECH ROAD
 SILVER SPRING, MARYLAND 20904

DEVELOPER
 NEW TOWN COMPANY
 c/o LAND DESIGN & DEVELOPMENT, INC.
 10805 HICKORY RIDGE ROAD, SUITE 210
 COLUMBIA, MARYLAND 21044



LANDSCAPE PLAN
 WEST FRIENDSHIP ESTATES
 SECTION 2
 LOTS 57-99 AND PARCELS 'E' - 'O'
 ZONED RC
 TAX MAP No. 15, PARCEL Nos. 32 AND 42
 AND
 TAX MAP No. 22, PARCEL No. 533
 THIRD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JUNE 26, 1995
 SHEET 19 OF 20
 5-93-03
 P 94-15

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chia J. J. J. 2/8/96
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Michael J. J. 2/1/96
 CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Robert M. J. 3-5-96
 CHIEF BUREAU OF HIGHWAYS DATE

PUBLIC STORM WATER MANAGEMENT & WATER QUALITY POND No. 2
 HEAVY CLASS TYPE 'A'
 SWIM TYPE DETENTION
 WATER QUALITY TYPE INFILTRATION

SHEET 19

STREET TREE REQUIREMENTS		
NO. OF STREET TREES REQUIRED	228	
STREET TREES PROVIDED:	SYMBOL	NO. OF TREES
QUERCUS COCCINEA (SCARLET OAK)	(Symbol)	140
AXER RUBRUM (RED SUNSET)	(Symbol)	80
(GREAT VALLEY WAY & VELVET VALLEY WAY)		

STREET TREES ARE SHOWN ON SHEETS 7, 8 & 9.

TOTAL LANDSCAPE OBLIGATION	
PERIMETER LANDSCAPE EDGE:	
SHADE TREES = 44 + 121 = 165 (AXER RUBRUM, RED SUNSET) EVERGREEN TREES = 55 (PINUS NIGRA, AUSTRALIAN PINE)	
STORMWATER MANAGEMENT AREA LANDSCAPE:	
SHRUBS (1:1) SUBSTITUTION FOR 1:1 SHADE TREES 40 + 107 = 147 100 (ELAEAGNUS PARVIFLORA, FRAXINUS, VIBURNUM OLIVE) 110 (VIBURNUM CRISTATUM, ARDISIA, VIBURNUM) 110 (LONICERA TARTARICA, RUSSIA, VIBURNUM) EVERGREEN TREES = 5 + 9 + 25 = 39 (PINUS NIGRA, AUSTRALIAN PINE)	

SCHEDULE A PERIMETER LANDSCAPE EDGE		
Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Linear Part of Roadway Frontage / Perimeter	2235	10087
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	No	Yes 1590
Credit for Wall, Fence, or Berm (Yes, No, Linear Feet) (Describe below if needed)	No	No
Number of Plants Required		
Shade Trees	44	141
Evergreen Tree	55	141
Shrubs		
Number of Plants Provided		
Shade Trees	44	
Evergreen Trees	55	
Shrubs (1:1 substitution)		
Owner Trees (1:1 substitution)		
Shrubs (1:1 substitution)		

NOTE: LANDSCAPE FINANCIAL SURETY FOR 310 REQUIRED LANDSCAPE TREES IN THE AMOUNT OF \$3,000 WILL BE PROVIDED AS PART OF THE DEVELOPER'S AGREEMENT.

NOTE: THIS PLAN IS TO BE USED FOR LANDSCAPE ONLY

LANDSCAPE LEGEND	
SHADE TREE -	(Symbol)
EVERGREEN TREE -	(Symbol)



LANDSCAPE PLAN
 WEST FRIENDSHIP ESTATES
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 S 93-03
 P 94-15

LANDSCAPE EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH = 430 LF
 REQUIREMENTS - 1 SHADE TREE PER 60 LF = 7

LANDSCAPE EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH = 113 LF
 REQUIREMENTS - 1 SHADE TREE PER 60 LF = 11

LANDSCAPE EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH = 108 LF
 REQUIREMENTS - 1 SHADE TREE PER 60 LF = 3

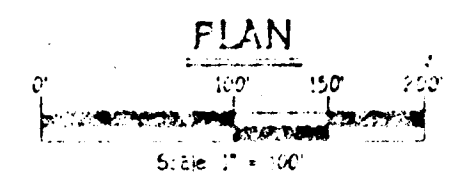
LANDSCAPE EDGES ADJACENT TO PERIMETER PROPERTIES
 TYPE 'A' LANDSCAPING - TOTAL LENGTH = 440 LF
 REQUIREMENTS - 1 SHADE TREE PER 60 LF = 7

LEGEND	
(Symbol)	DENOTES EXISTING FENCE LINE
(Symbol)	DENOTES EXISTING WETLAND AREA
(Symbol)	DENOTES EXISTING TREE LINE
(Symbol)	DENOTES EXISTING HEDGE ROW
(Symbol)	DENOTES APPROXIMATE LOCATION OF DWELLING
(Symbol)	DENOTES APPROXIMATE LOCATION OF WELL
(Symbol)	DENOTES LIMITS OF EXISTING FLOOD PLAIN

FISHER, COLLINS & CARTER, INC.
 971 BALTHASORE NATIONAL PARK, SUITE 100
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