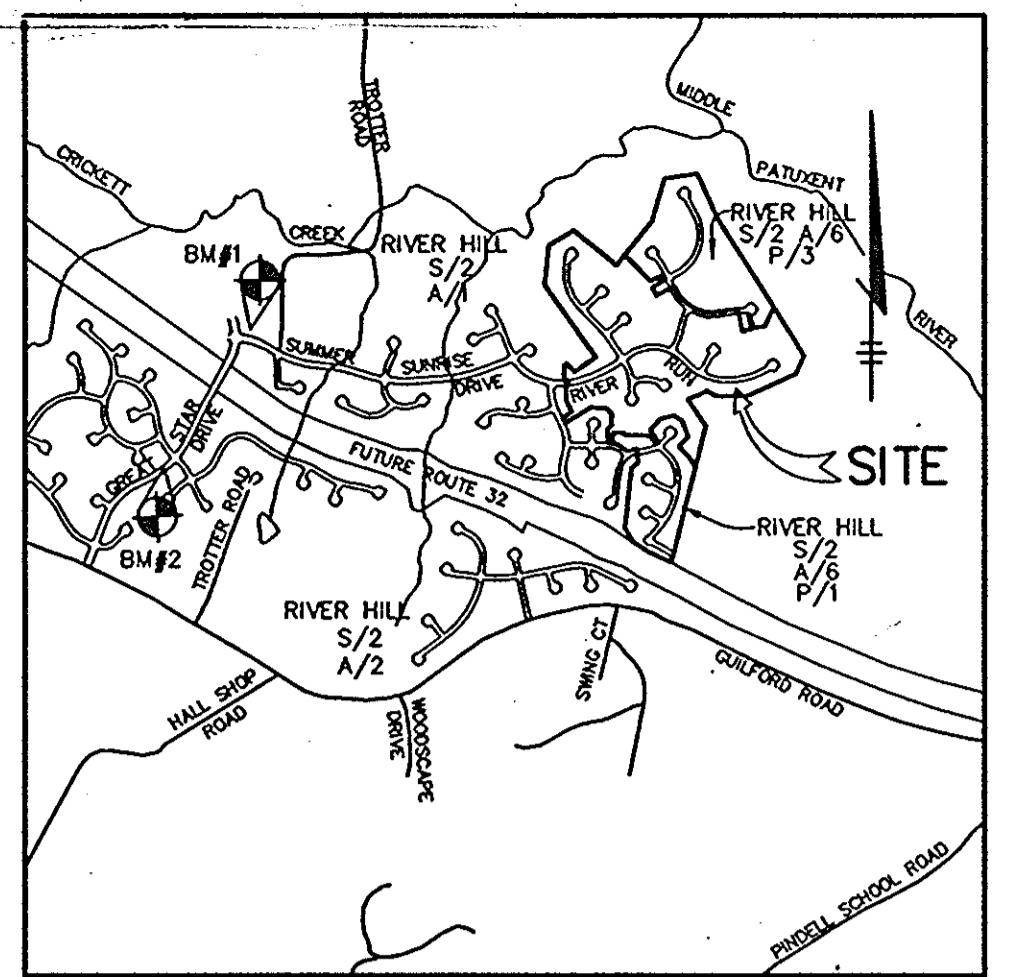


ROADWAYS, STORM DRAINS AND STORMWATER MANAGEMENT

VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2

LOTS 67 - 200

5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

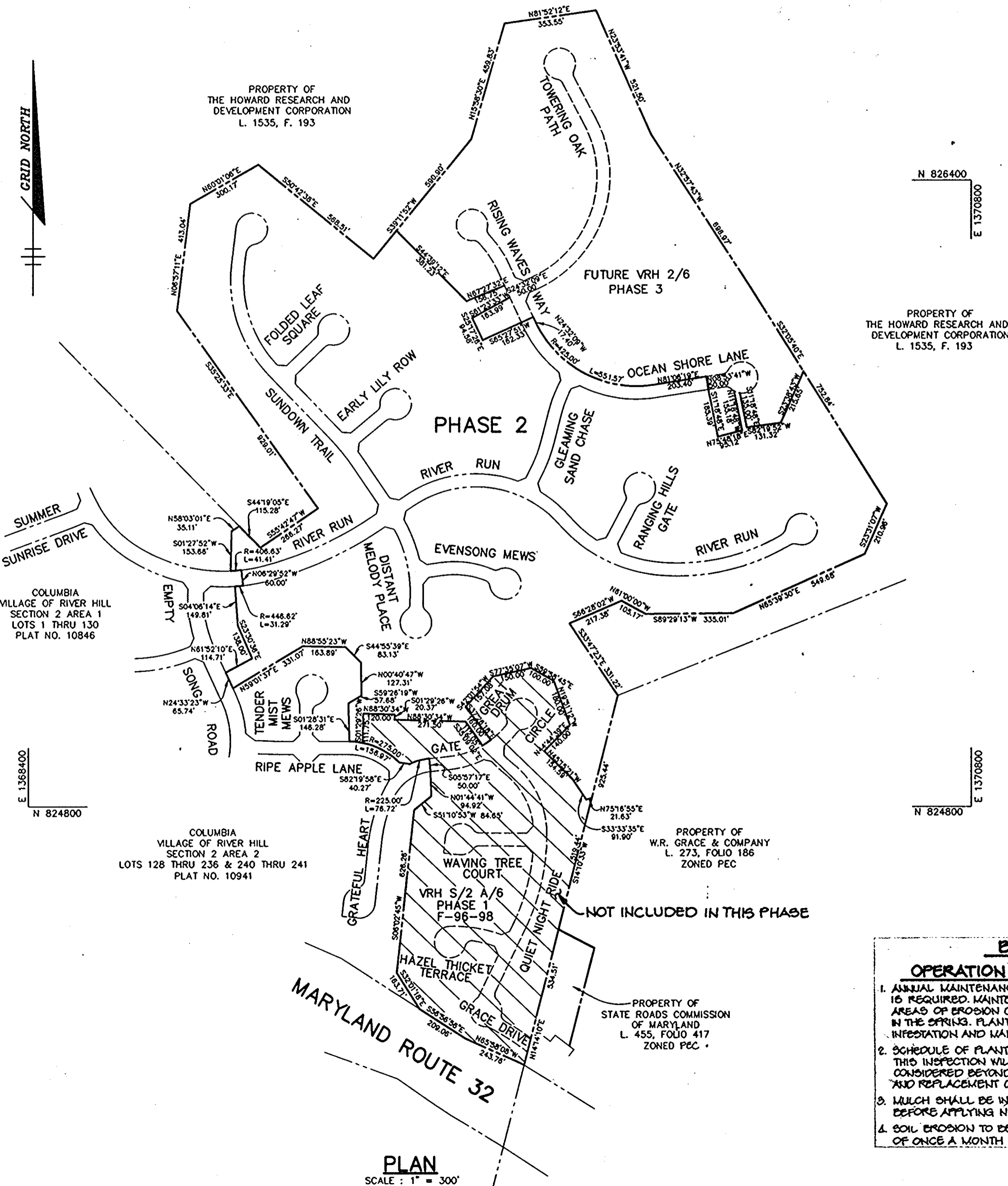


VICINITY MAP
SCALE: 1" = 2000'

SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE OF RIVER RUN STA. 4+00 - STA. 15+00
3	PLAN AND PROFILE OF RIVER RUN STA. 15+00 - STA. 27+00
4	PLAN AND PROFILE OF RIVER RUN STA. 27+00 - END
5	PLAN AND PROFILE OF GLEAMING SAND CHASE AND RANGING HILLS GATE
6	PLAN AND PROFILE OF RISING WAVES WAY
7	PLAN AND PROFILE OF OCEAN SHORE LANE
8	PLAN AND PROFILE OF EARLY LILY ROW AND FOLDED LEAF SQUARE
9	PLAN AND PROFILE OF SUNDOWN TRAIL STA. 0+00 - STA. 9+00
10	PLAN AND PROFILE OF SUNDOWN TRAIL STA. 9+00 - END
11	PLAN AND PROFILE OF DISTANT MELODY PLACE & EVENSONG MEWS
12	DETAIL SHEET
13	DRAINAGE AREA MAP
14	GRADING AND SEDIMENT CONTROL PLAN
15	GRADING AND SEDIMENT CONTROL PLAN
16	GRADING AND SEDIMENT CONTROL PLAN
17	GRADING AND SEDIMENT CONTROL PLAN
18	STORM DRAIN PROFILES
19	STORM DRAIN PROFILES
20	STORM DRAIN PROFILES
21	SEDIMENT CONTROL DETAILS AND NOTES
22	SEDIMENT CONTROL PROFILES AND DETAILS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNS 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.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS, (JUNE 1993)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY MAPPING ASSOCIATES DATED 1989.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 2337001, 2337002 AND 2337003 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. TO BE ASSIGNED.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: MOORE PATUXENT. CONTRACT NO. TO BE ASSIGNED.
- STORMWATER MANAGEMENT QUANTITY CONTROL IS PROVIDED BY THE MD RTE 35 STREAM CROSSINGS. WATER QUALITY IS PROVIDED BY FULFILLING OMBODS ENFORCEMENT AGREEMENT. COLUMBIA ASSOCIATION WILL PROVIDE FOR OFF-HOURS MAINTENANCE FOR HOWARD COUNTY. SEE THE SHEET FOR 48 HOURS MAINTENANCE APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THERE IS NO 100-YEAR FLOODPLAIN AFFECTING THIS PROJECT.
- WETLANDS DELINEATION FOR THIS PROJECT WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES INC. AND WAS APPROVED BY ADJUTANT GENERAL'S OFFICE ON 8-20-93.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY GORRIVE/SLADE ASSOCIATES AND WAS APPROVED UNDER 5-91-03 ON 11-17-91.
- THE NOISE STUDY FOR THIS PROJECT WAS PREPARED BY STAVAN ENGINEERING, INC. AND WAS APPROVED UNDER P-92-13 AND P-92-15 ON 6-26-92 AND 1-6-93 RESPECTIVELY.
- THE GEOTECHNICAL STUDIES FOR THIS PROJECT WERE PREPARED BY ROBERT BALTER COMPANY.
- THE BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY KO, INC. DATED AUGUST 28, 1991.
- SUBJECT PROPERTY ZONED (NEW TOWN) PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS. S-91-03, P-95-17, F-96-98
- THE CONTRACTOR SHALL TEST FIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAD UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, L.S. STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIVISIONS.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL: ALL 50' RIGHT OF WAYS 25 AND 30 M.P.H. ALL 60' RIGHT OF WAYS 35 M.P.H.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T99.
- ALL STREET CURBS RETURNS SHALL HAVE 25' RADI UNLESS OTHERWISE NOTED.
- ALL STREET LIGHTS SHALL BE LOCATED BETWEEN 2'-0" AND 4'-0" BEND FACE OF CURB.
- STREET TREES (333) THE LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS INCLUDING 20' CLEARANCE OF ANY STREET LIGHT AND BOLDERS LANDSCAPE PROGRAMS. ROAD RELEASE IS CONTINGENT UPON SECTION 15.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- PERMANENT LANDSCAPING REQUIREMENTS WILL BE FULFILLED WITH THE RETENTION OF EXISTING TREES ON THE SITE OR ON THE ADJACENT MOORE PATUXENT ENVIRONMENTAL AREA.



SUMMARY
SINGLE FAMILY LOW DENSITY
SINGLE FAMILY MEDIUM DENSITY
OPEN SPACE LOTS

52
76
6

BIO-RETENTION AREAS
OPERATION AND MAINTENANCE GUIDELINES FOR COLUMBIA ASSOC.

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER, AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR, IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DISAPPEARED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRDS.
- MULCH SHALL BE INSPECTED EACH SPRING, REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE A MONTH AND AFTER HEAVY STORMS.

BENCHMARKS
BM#1 RAILROAD SPIKE IN POLE #525680
TROTTER ROAD ELEV. 393.27
N 496697.02 E 822026.81
BM#2 RAILROAD SPIKE IN POPLAR
ELEV. 438.92
N 495551.90 E 820727.80

AS BUILT CERTIFICATE	
DATE	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE: 9-9-96
<i>Andrew M. Ouellet</i> CHIEF, BUREAU OF HIGHWAYS HS	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	DATE: 9/13/96
<i>Richard B. Blair</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH CM	
<i>John D. Muegge</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE: 9/12/96
DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT	
VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200	
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
TITLE SHEET	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE: 8-7-96	S-91-03 P-95-17
DESIGNED BY: C.J.R.	
DRAWN BY: DAM	
PROJECT NO: HOCO\102800 PH2RD1.DWG	
DATE: AUGUST 7, 1996	
SCALE: AS SHOWN	
DRAWING NO. 1 OF 22	

1987

F.96.138

STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
21' LT. CL STA. 9+30 RIVER RUN	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.
20' LT. CL STA. 13+23 RIVER RUN	

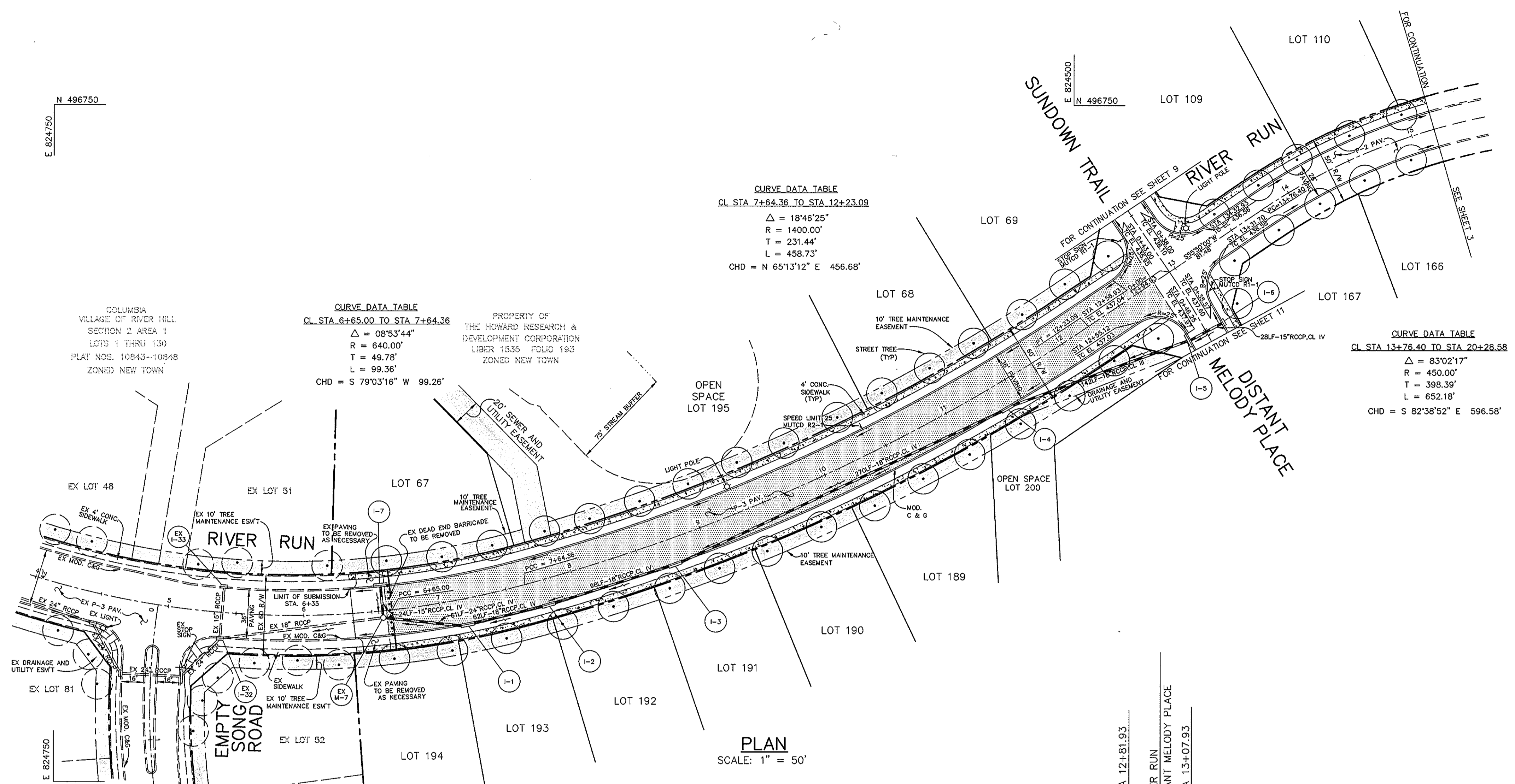
NOTES:
1. STREET LIGHTS SHOWN AS ☆ TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.

LEGEND

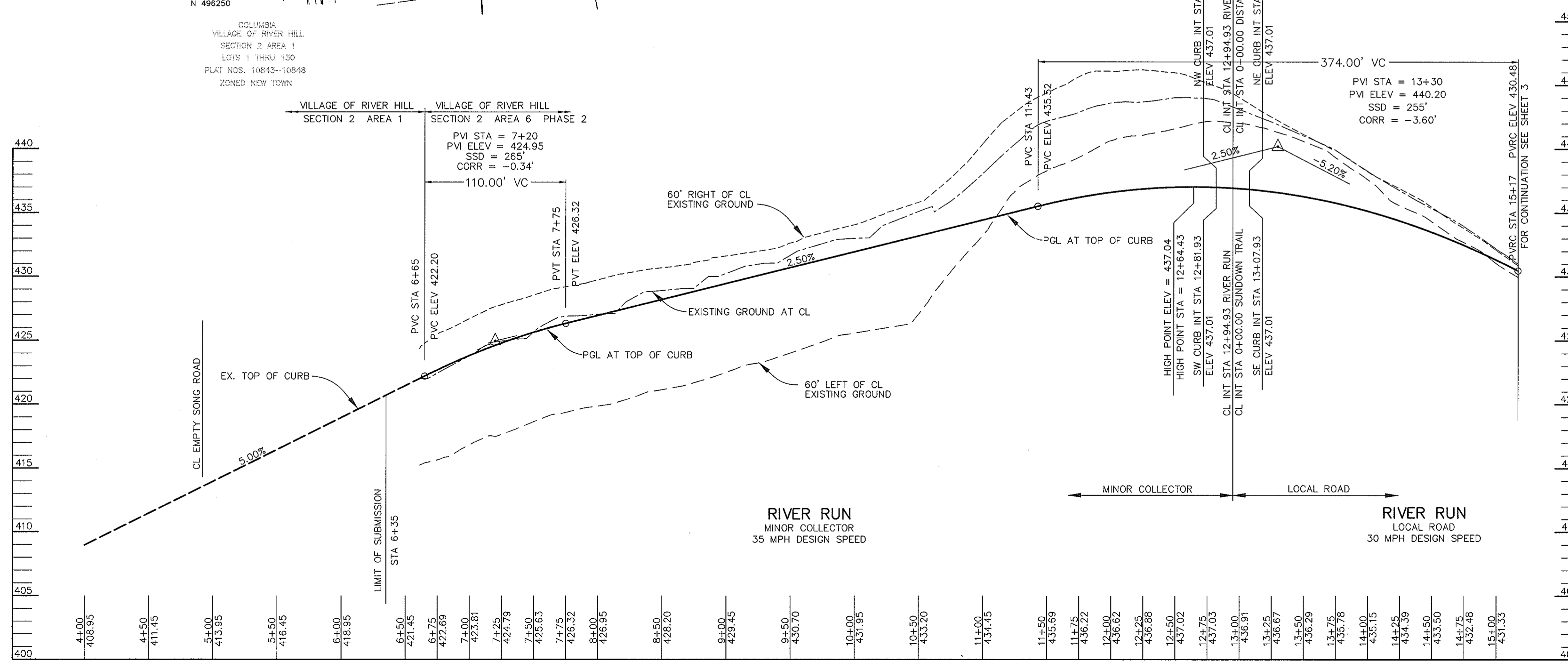
- PROPOSED STREET TREE, SEE PLANT LIST THIS SHEET
- ⊙ EXISTING STREET TREE, F-93-18 VILLAGE OF RIVER HILL S/2 A/1

STREET TREE LIST

KEY	QTY.	BOTANICAL & COMMON NAME	SIZE	REMARKS
PC	333	PYPUS CALLERYANA (CLEVELAND SELECT)	2-1/2"-3" CAL. 12' - 15 HT.	B&B



PLAN
SCALE: 1" = 50'



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



AS BUILT CERTIFICATE

DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Danchev 9-9-96
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
R. Daniel Blood 9/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

Chad Danvers 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT **VILLAGE OF RIVER HILL**
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
PART OF PARCEL 70
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE **PLAN & PROFILE OF RIVER RUN**
FROM STA. 4+00 TO 15+17

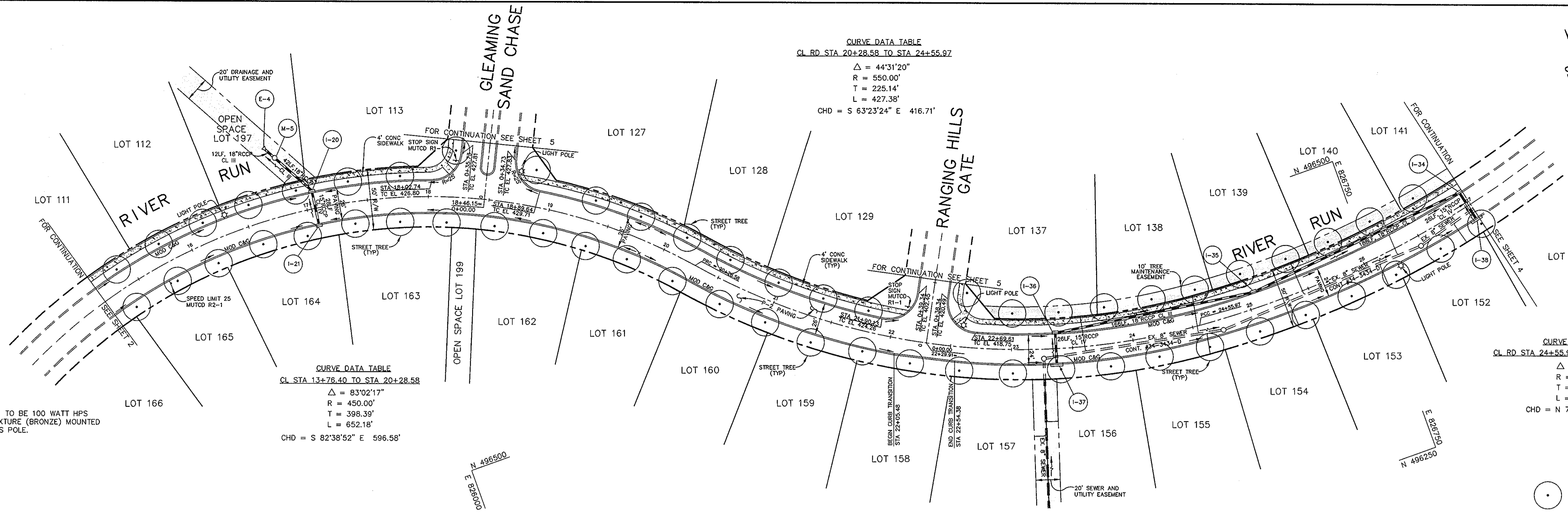
RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE **8-7-96** 5-91-03 P-95-17
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO\102800
PH2RD2.DWG
DATE: AUGUST 7, 1996
SCALE: AS SHOWN
DRAWING NO. 2 OF 22

J. Farrell
JAYKANT D. PAREKH #19148

1487

F.96.138

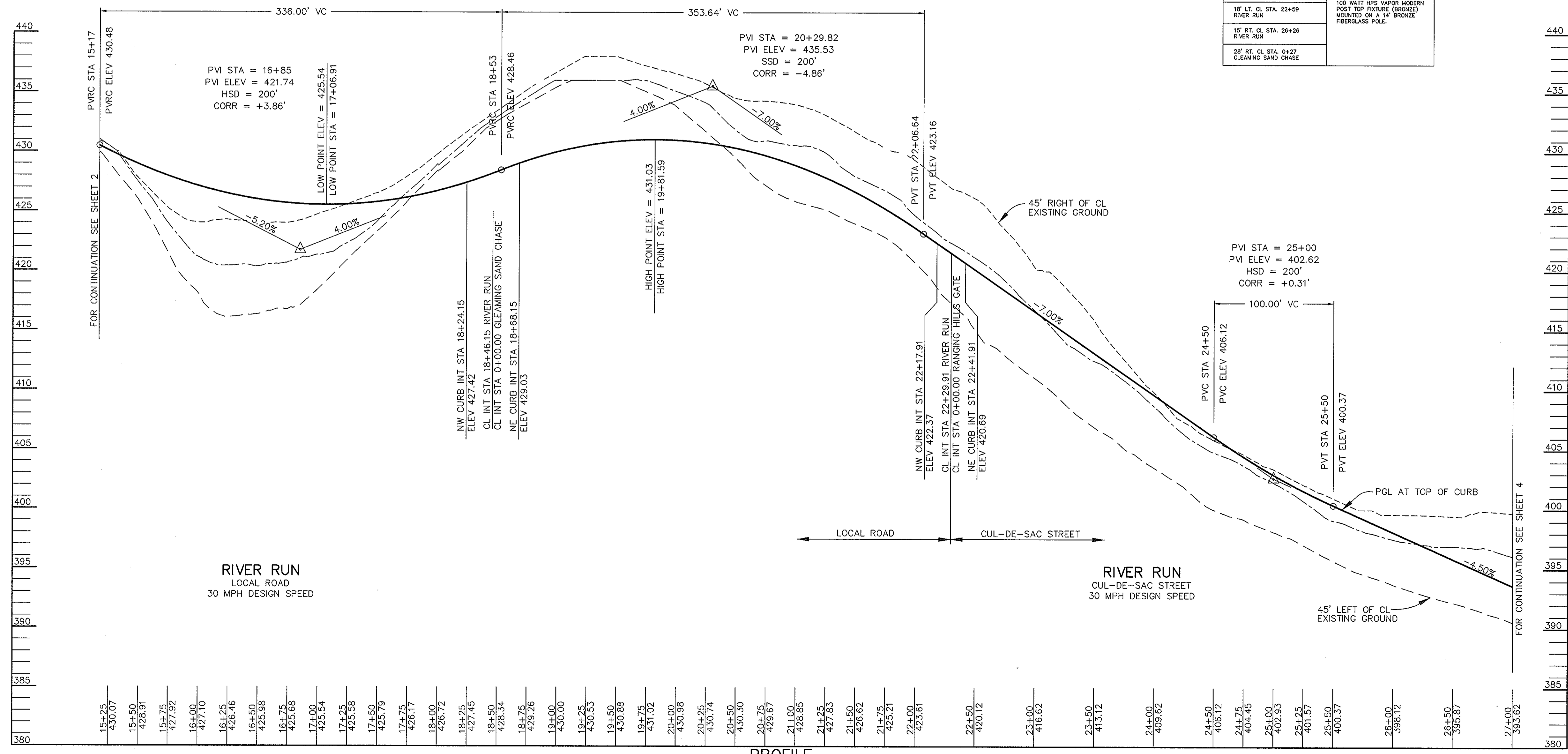


NOTES:
1. STREET LIGHTS SHOWN AS ☆ TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.

LEGEND
○ PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST

PLAN
SCALE: 1" = 50'

STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
16' LT. CL STA. 16+35 RIVER RUN	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.
18' LT. CL STA. 22+59 RIVER RUN	
15' RT. CL STA. 24+26 RIVER RUN	
28' RT. CL STA. 0+27 GLEAMING SAND CHASE	



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

AS BUILT CERTIFICATE

DATE: _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Duncle 9-9-96
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blood 8/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Chad Dammann 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE NO. _____ REVISION _____

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT: **VILLAGE OF RIVER HILL**
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **PLAN & PROFILE OF RIVER RUN FROM STA. 15+17 TO 27+00**

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE: 8-7-96
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO102800 PH2RD3.DWG
DATE: AUGUST 7, 1996
SCALE: AS SHOWN
DRAWING NO. 3 OF 22

JAYKANT D. PAREKH #19148

F.96.138

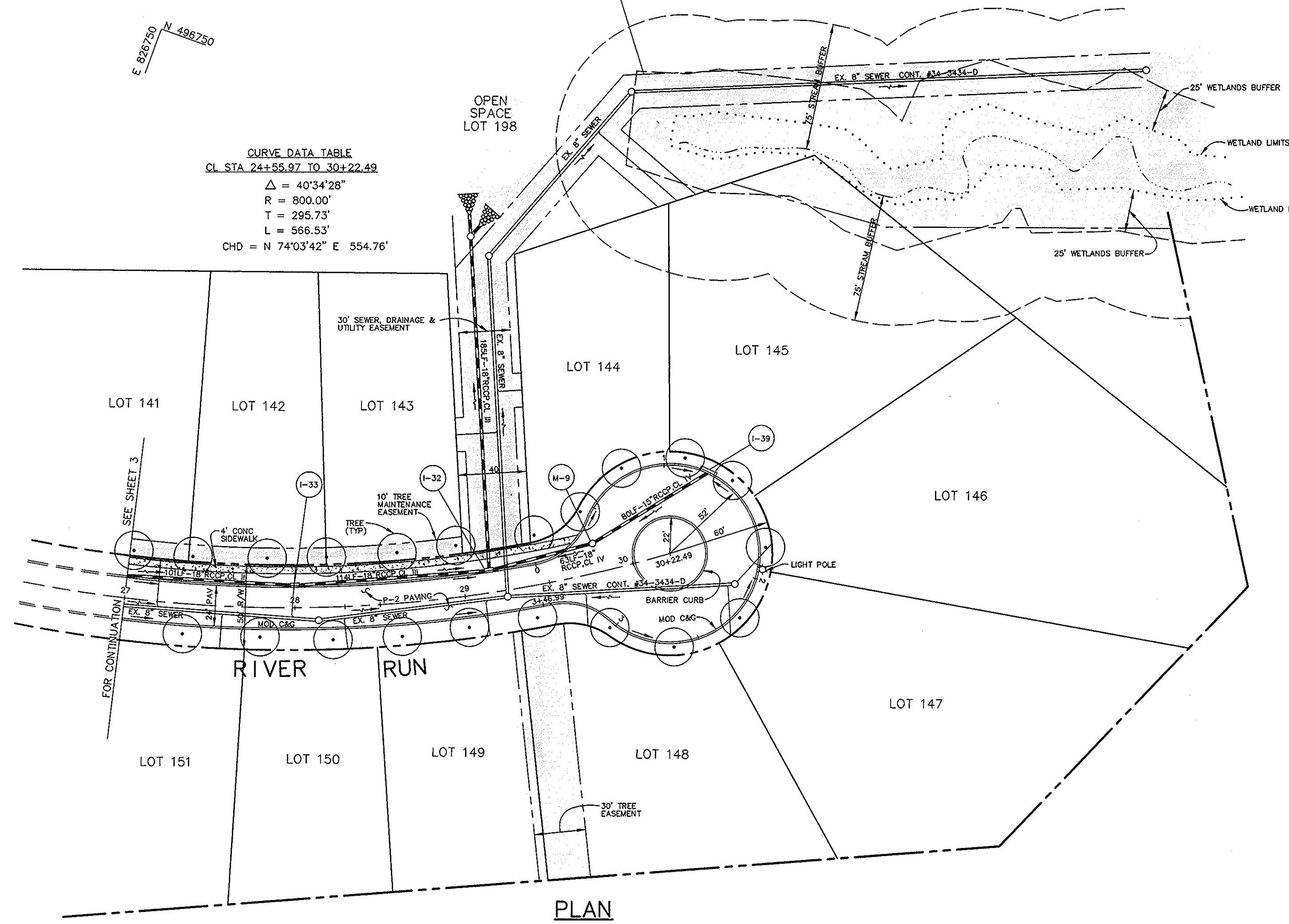
1487

STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
3' LT. LP STA. 1+94 RIVER RUN	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

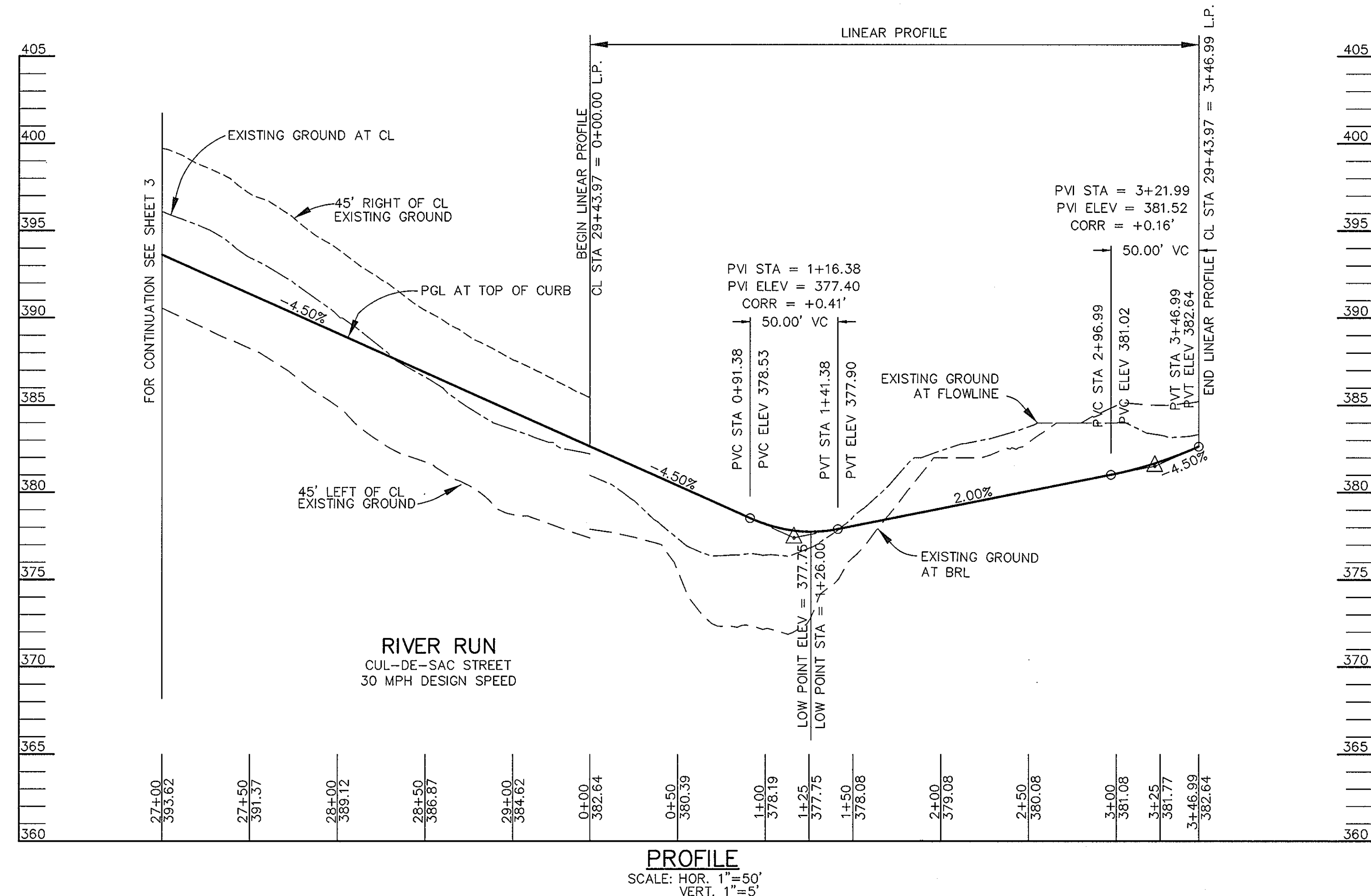
NOTES:
1. STREET LIGHTS SHOWN AS \star TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

LEGEND

○ PROPOSED STREET TREE. SEE SHEET 2 FOR PLANT LIST



PLAN
SCALE: 1" = 50'

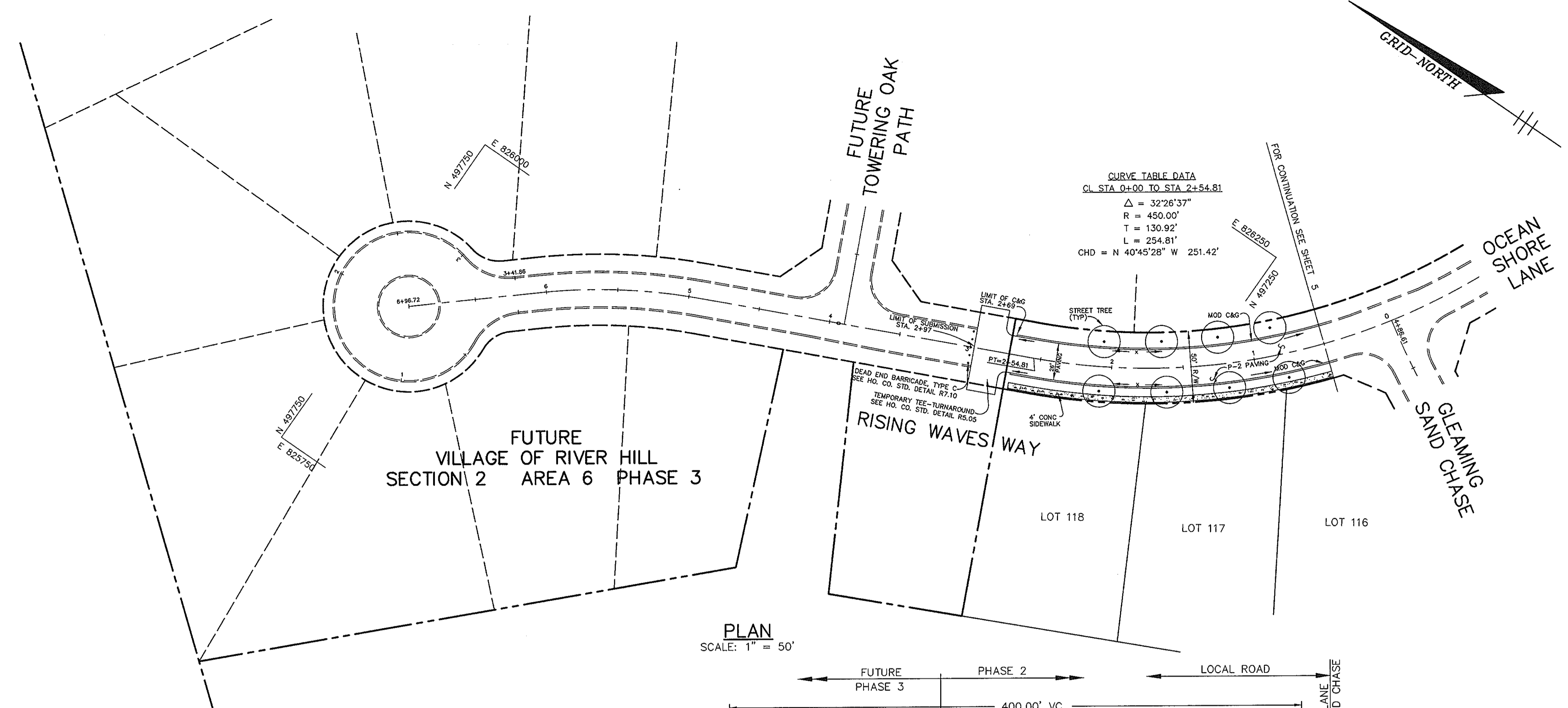
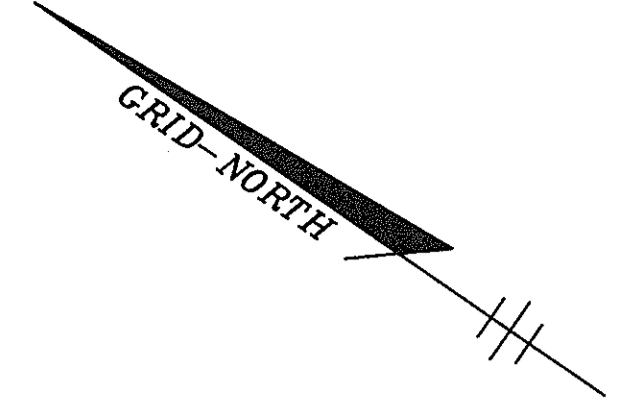


PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

AS BUILT CERTIFICATE	
DATE	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Richard M. Daneker</i> CHIEF, BUREAU OF HIGHWAYS	9-9-96 DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Richard Blood</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/13/96 DATE
<i>John Danvers</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/12/96 DATE
DATE	NO. REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT	
VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200	
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
PLAN & PROFILE OF RIVER RUN FROM STA. 27+00 TO END	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
8-7-96 DATE	DESIGNED BY: C.J.R.
<i>J. Daneker</i>	DRAWN BY: DAM
	PROJECT NO: HOCO_102800 PH2RD4.DWG
	DATE: AUGUST 7, 1996
	SCALE: AS SHOWN
JAYKANT D. PAREKH #19148	DRAWING NO. 4 OF 22

1487

F.96-138

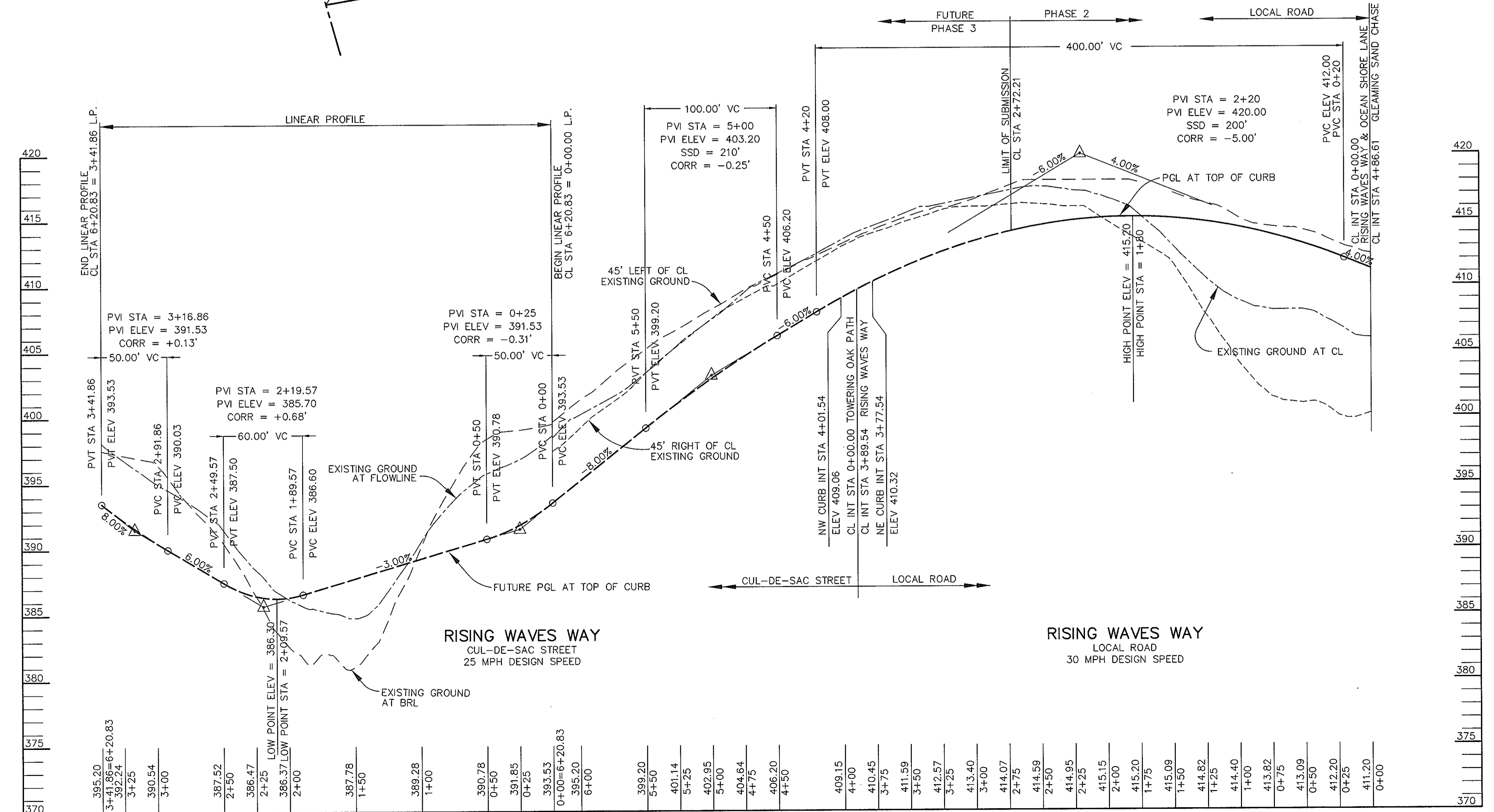


CURVE TABLE DATA
 CL STA 0+00 TO STA 2+54.81
 $\Delta = 32^{\circ}26'37''$
 $R = 450.00'$
 $T = 130.92'$
 $L = 254.81'$
 $CHD = N 40^{\circ}45'28'' W 251.42'$

LEGEND

○ PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST

PLAN
 SCALE: 1" = 50'



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

AS BUILT CERTIFICATE	
DATE _____	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE 9-9-96
<i>Andrew M. Daniels</i> CHIEF, BUREAU OF HIGHWAYS	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	DATE 9/13/96
<i>Richard Blount</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	
DATE 9/12/96	
<i>John D. Pate</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	
DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200	
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE PLAN & PROFILE OF RISING WAVES WAY	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE 8.7.96	DESIGNED BY: C.J.R.
	DRAWN BY: DAM
	PROJECT NO: HOCO\102800 PH2RD6.DWG
DATE: AUGUST-7, 1996	SCALE: AS SHOWN
J. Parekh	DRAWING NO. 6 OF 22
JAYKANT D. PAREKH #19148	

1487



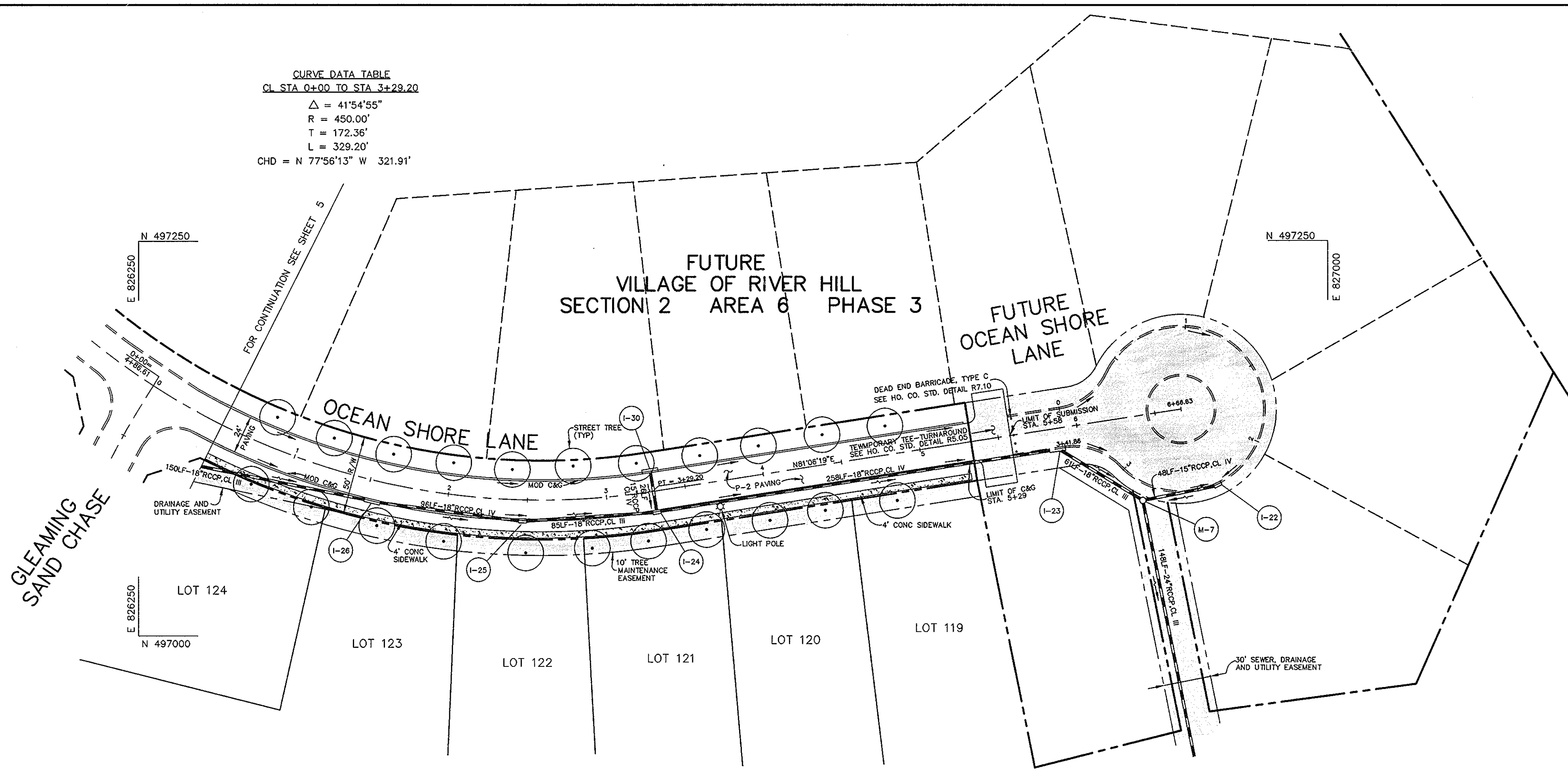
CURVE DATA TABLE
 CL STA 0+00 TO STA 3+29.20
 $\Delta = 41^{\circ}54'55''$
 $R = 450.00'$
 $T = 172.36'$
 $L = 329.20'$
 CHD = N 77^{\circ}56'13" W 321.91'

NOTES:
 1. STREET LIGHTS SHOWN AS \odot TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

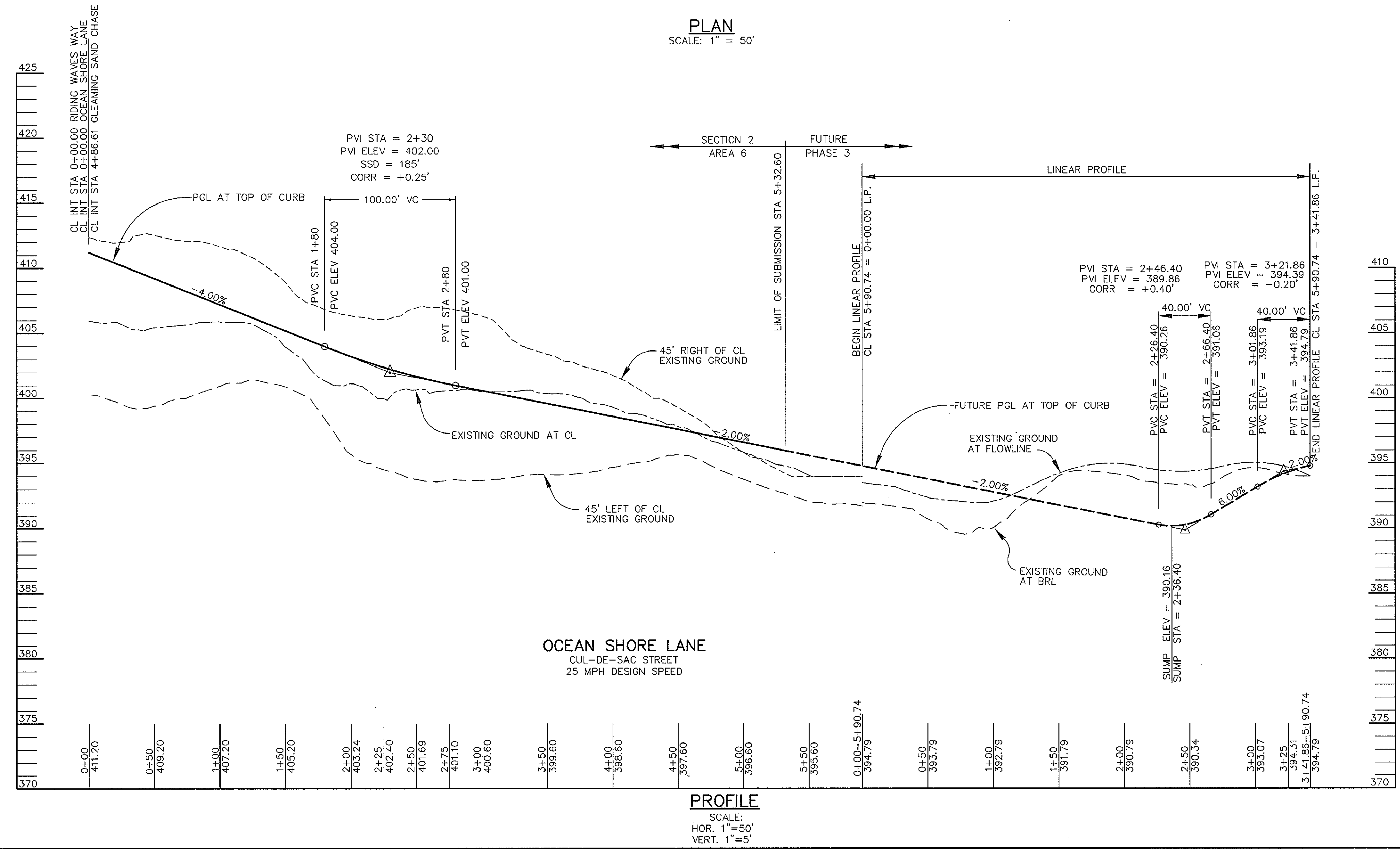
STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
16' RT. CL STA. 3+70 OCEAN SHORE LANE	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

LEGEND

\odot PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST

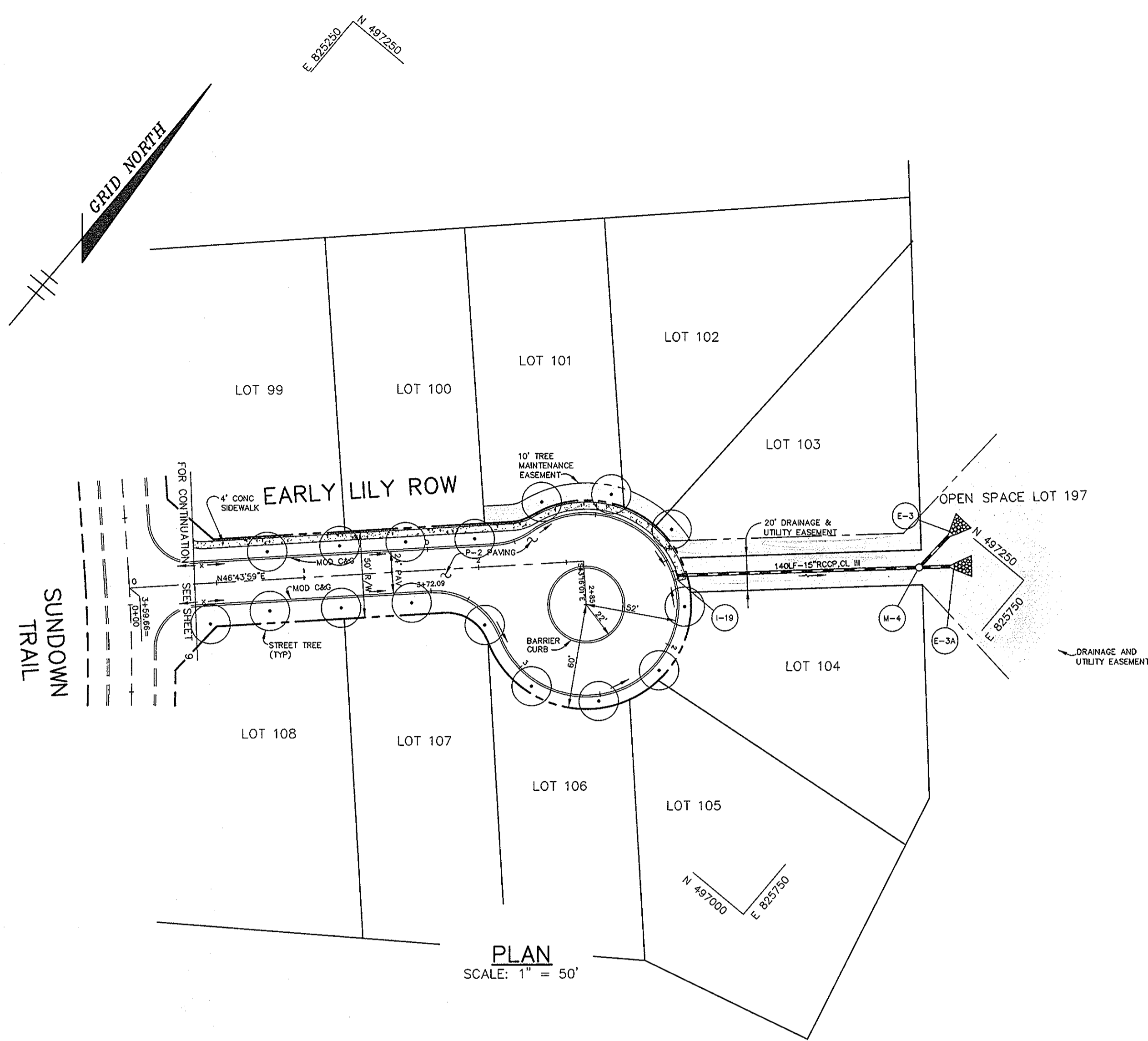


PLAN
 SCALE: 1" = 50'

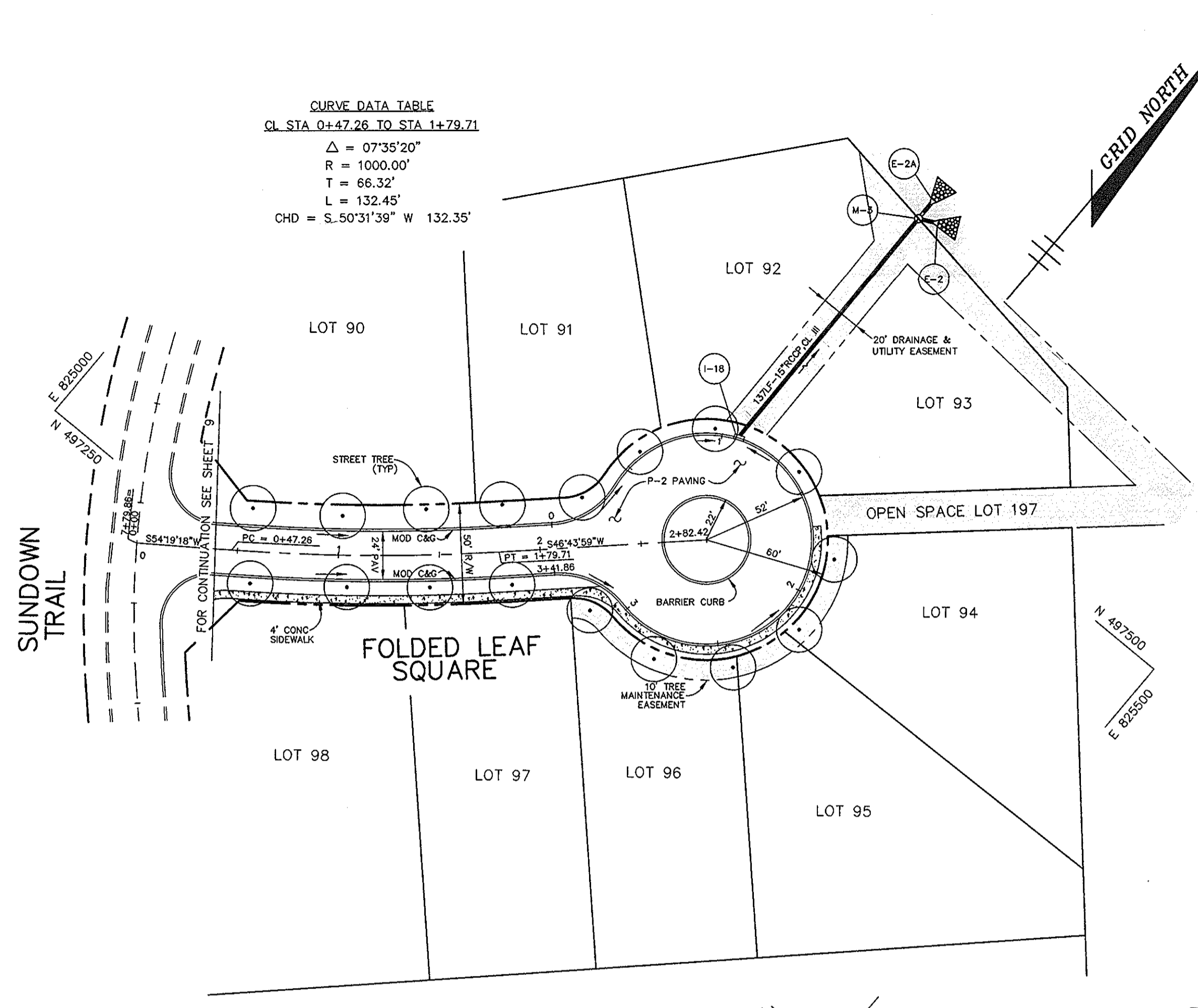


AS BUILT CERTIFICATE	
APPROVED:	DATE
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Richard M. Ducker</i> CHIEF, BUREAU OF HIGHWAYS	9-9-96
APPROVED:	DATE
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Richard B. Reed</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/13/96
<i>John D. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/12/96
DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT	VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200
AREA TAX MAP 35	BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	PLAN & PROFILE OF OCEAN SHORE LANE
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE	DESIGNED BY:
8-7-96	C.J.R.
	DRAWN BY:
	DAM
	PROJECT NO:
	HOCO102800 PH2RD7.DWG
	DATE:
	AUGUST 7, 1996
	SCALE:
	AS SHOWN
	DRAWING NO. 7 OF 22
JAYKANT D. PAREKH #19148	

1487



PLAN
SCALE: 1" = 50'



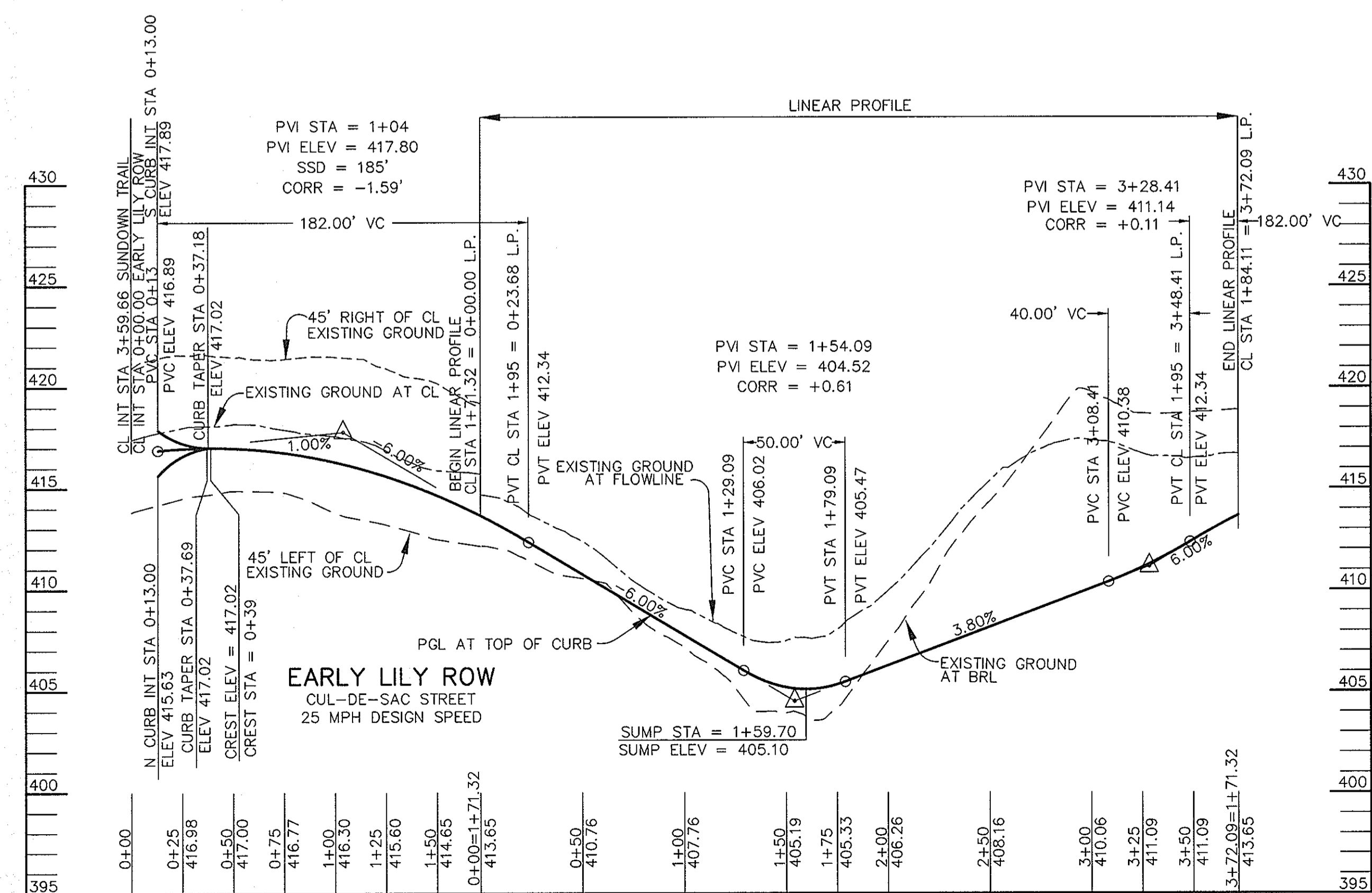
PLAN
SCALE: 1" = 50'

LEGEND

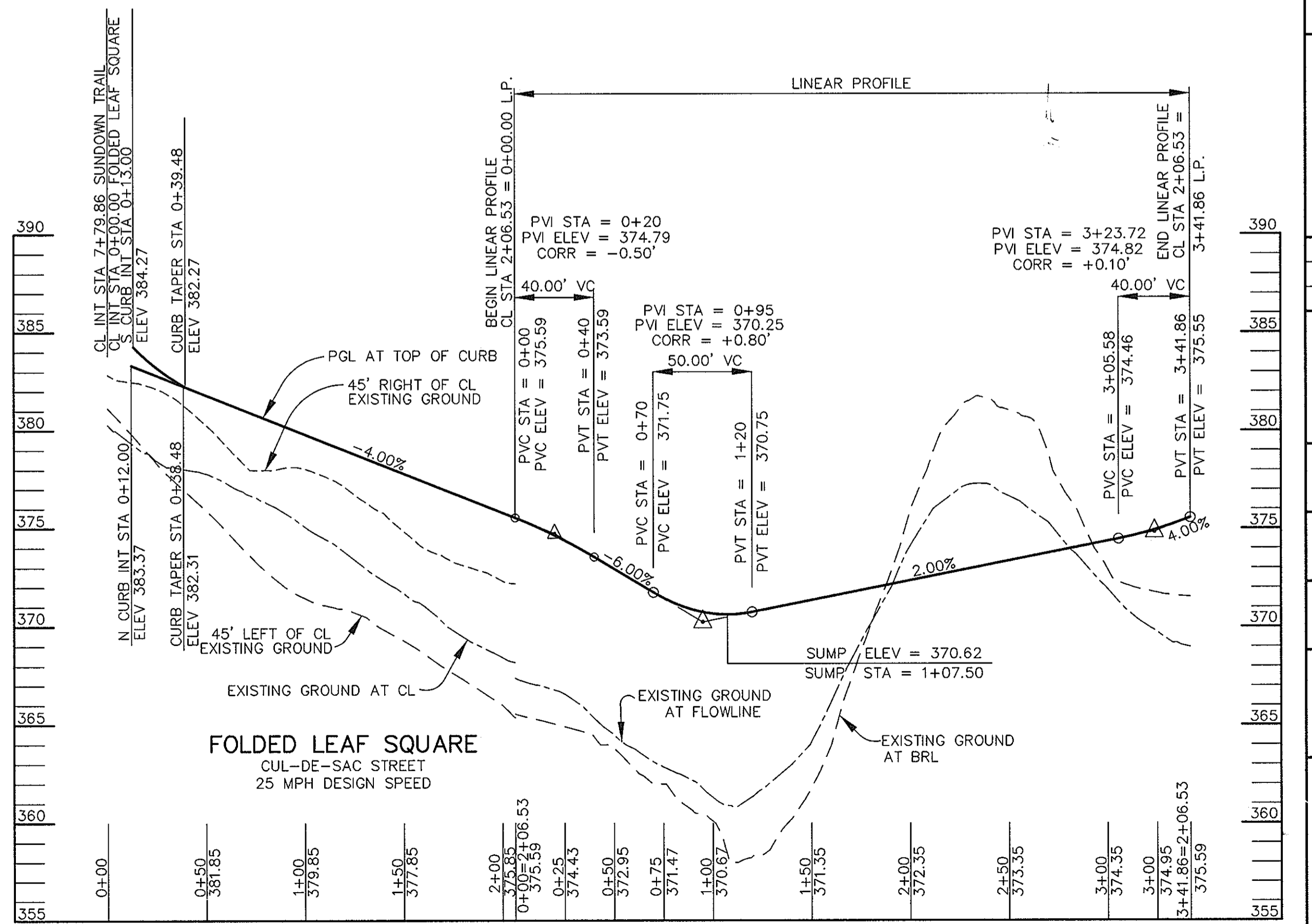
○ PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST

CURVE DATA TABLE
CL STA 0+47.26 TO STA 1+79.71

Δ	= 07°35'20"
R	= 1000.00'
T	= 66.32'
L	= 132.45'
CHD	= S.50°31'39" W 132.35'



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



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

AS BUILT CERTIFICATE		
DATE		
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE	
<i>Richard M. Quaker</i> CHIEF, BUREAU OF HIGHWAYS	9-9-96	
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	DATE	
<i>Richard Blood</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/13/96	
<i>John J. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/12/96	
DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044		
PROJECT		
VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200		
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
PLAN & PROFILE OF EARLY LILY ROW AND FOLDED LEAF SQUARE		
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282		
DATE	DESIGNED BY:	C.J.R.
8-7-96	DRAWN BY:	DAM
	PROJECT NO:	HOCO_102800 PH2R08.DWG
	DATE:	AUGUST 7, 1996
	SCALE:	AS SHOWN
	DRAWING NO.	_B_ OF _22_

1487

1487

CURVE DATA TABLE
 CL STA 7+08.99 TO STA 11+51.88
 $\Delta = 50'45'08''$
 $R = 500.00'$
 $T = 237.16'$
 $L = 442.90'$
 $CHD = N 18'25'24'' W 428.56'$

CURVE DATA TABLE
 CL STA 2+32.59 TO STA 3+67.09
 $\Delta = 09'37'57''$
 $R = 800.00'$
 $T = 67.41'$
 $L = 134.50'$
 $CHD = N 38'58'59'' W 134.34'$

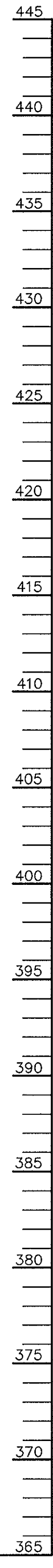
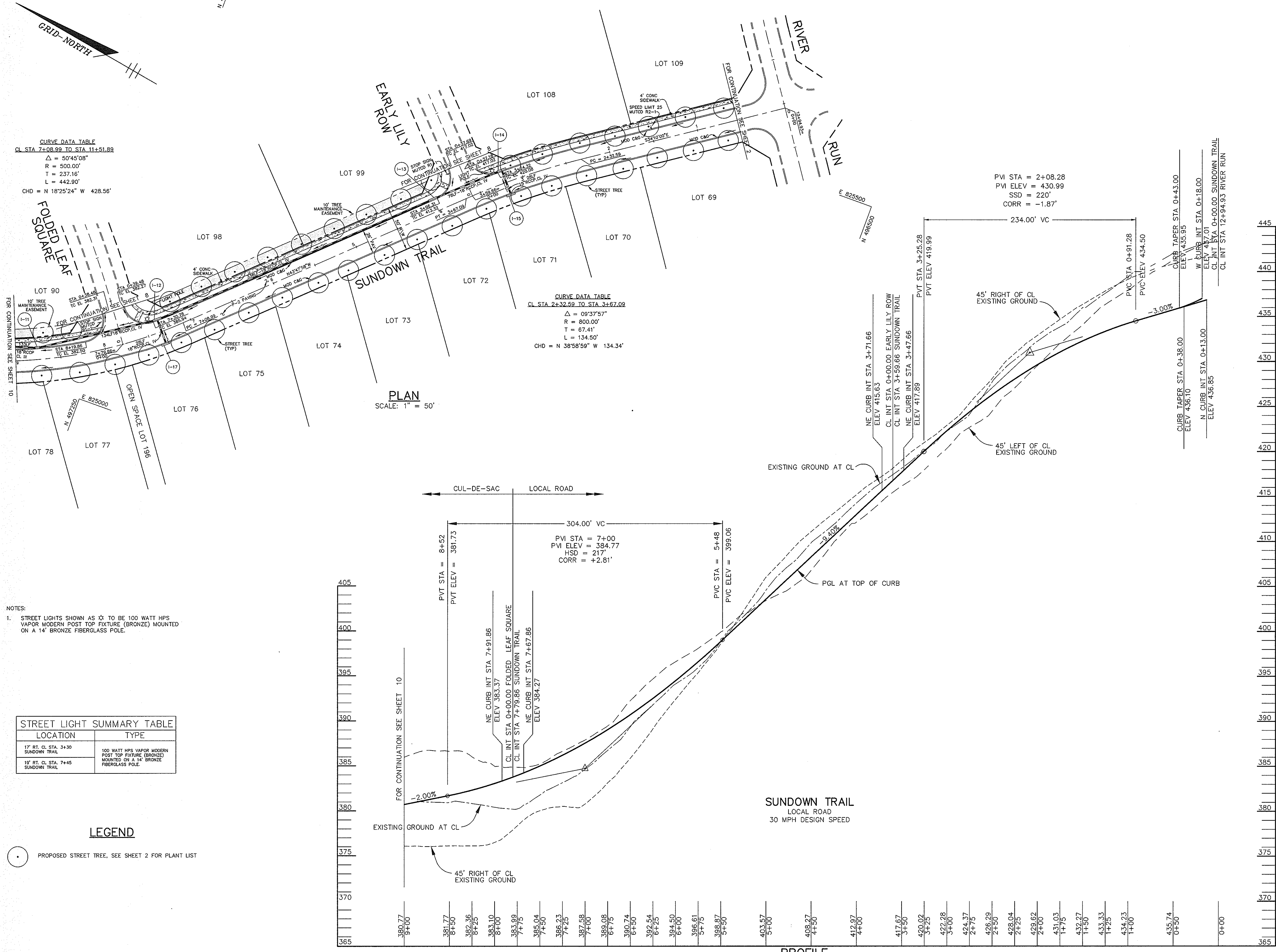
NOTES:
 1. STREET LIGHTS SHOWN AS \odot TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

STREET LIGHT SUMMARY TABLE

LOCATION	TYPE
17' RT. CL STA. 3+30 SUNDOWN TRAIL	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.
19' RT. CL STA. 7+45 SUNDOWN TRAIL	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

LEGEND

\odot PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST



AS BUILT CERTIFICATE

DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Danek 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blood 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

Chad D... .. 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT **VILLAGE OF RIVER HILL**
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE **PLAN & PROFILE OF SUNDOWN TRAIL**
 FROM STA. 0+00 TO 9+00

RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

DATE **8-7-96**

DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: HOCO102800
 PH2RD9.DWG
 DATE: AUGUST 7, 1996
 SCALE: AS SHOWN
 DRAWING NO. 9 OF 22

JAYKANT D. PAREKH #19148

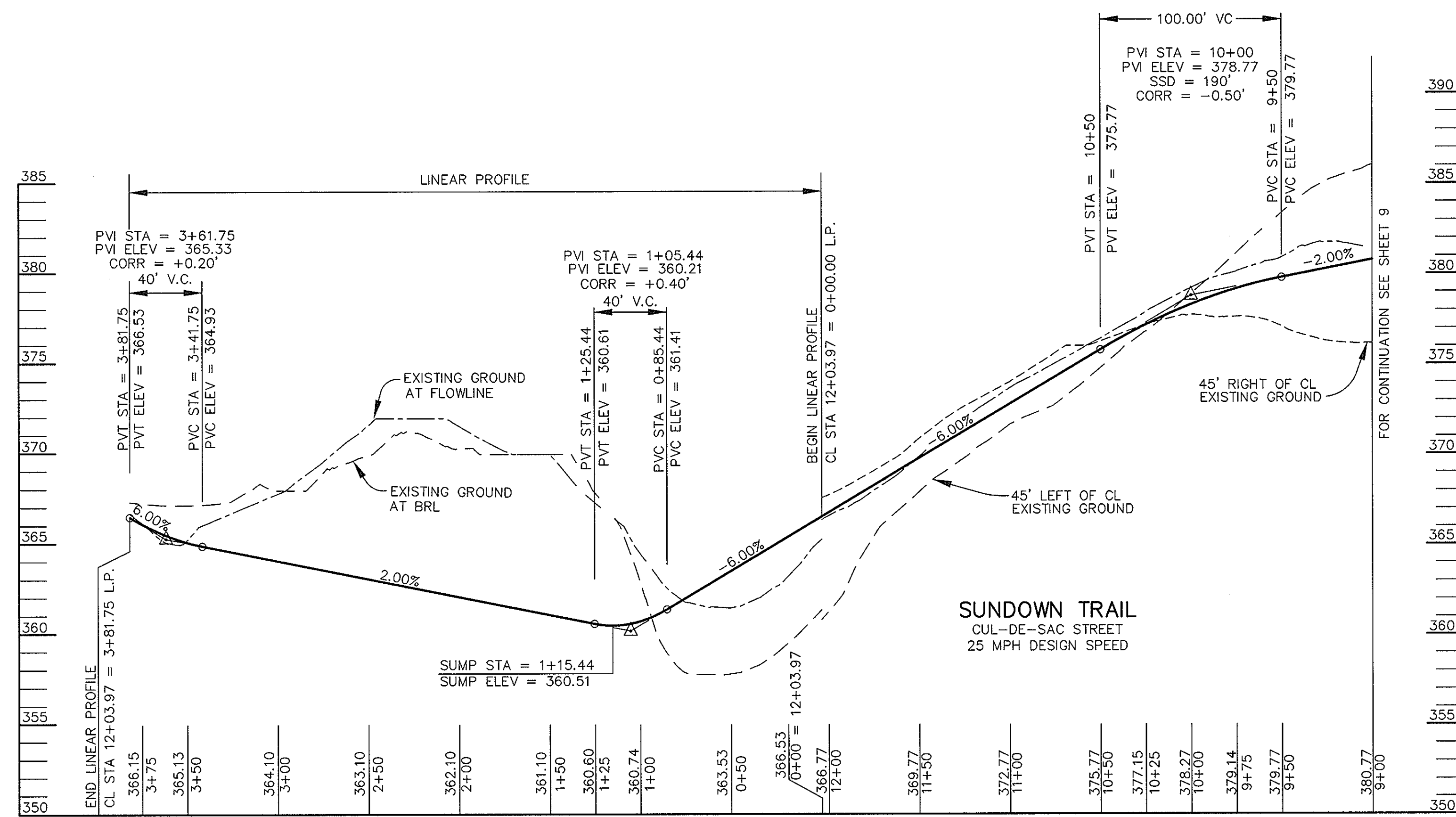
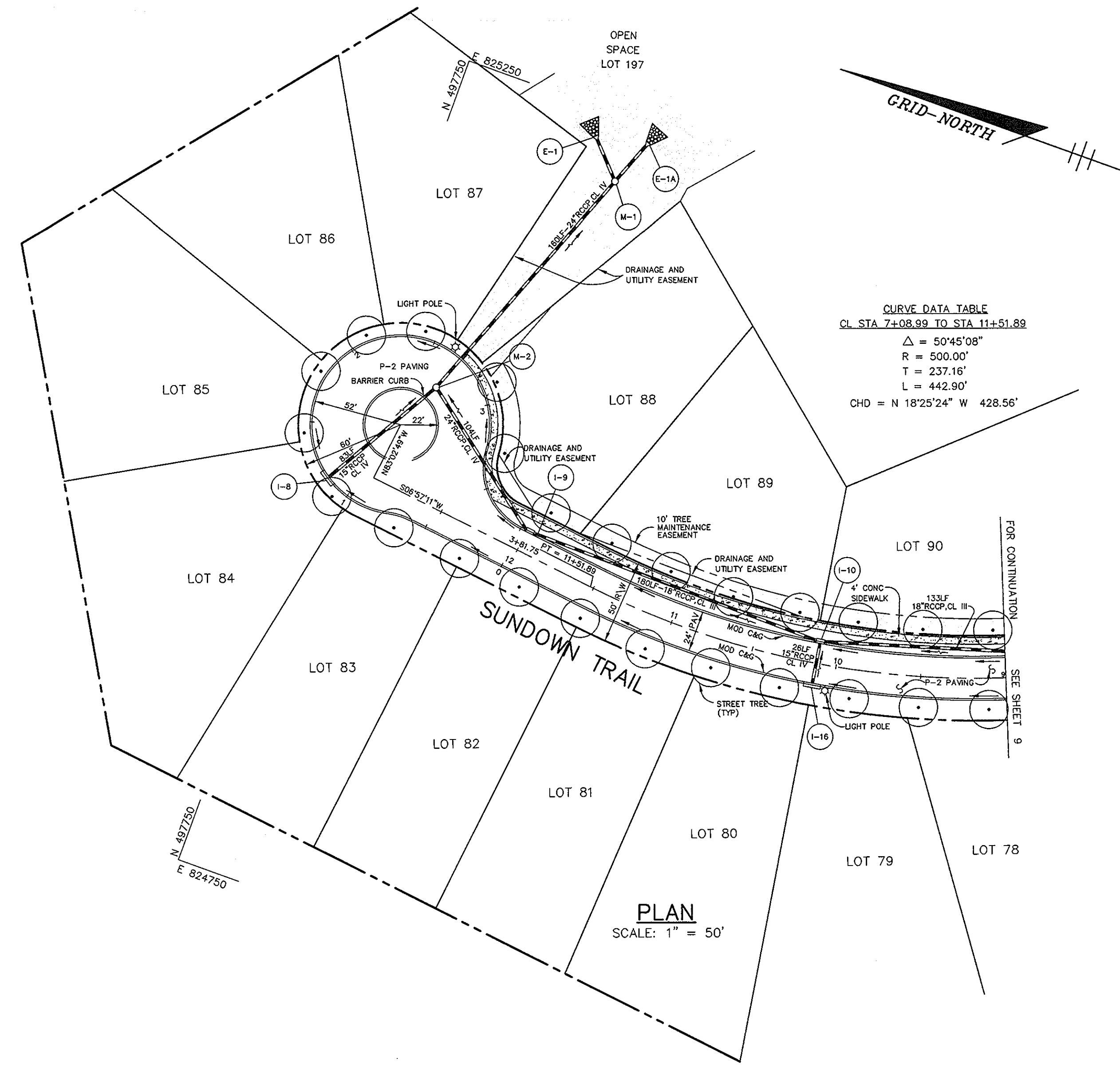
F96.138

NOTES:
 1. STREET LIGHTS SHOWN AS ⚡ TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
15' LT. CL STA. 10+04 SUNDOWN TRAIL	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.
3' LT. LP STA. 2+62 SUNDOWN TRAIL	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14" BRONZE FIBERGLASS POLE.

LEGEND

○ PROPOSED STREET TREE. SEE SHEET 2 FOR PLANT LIST



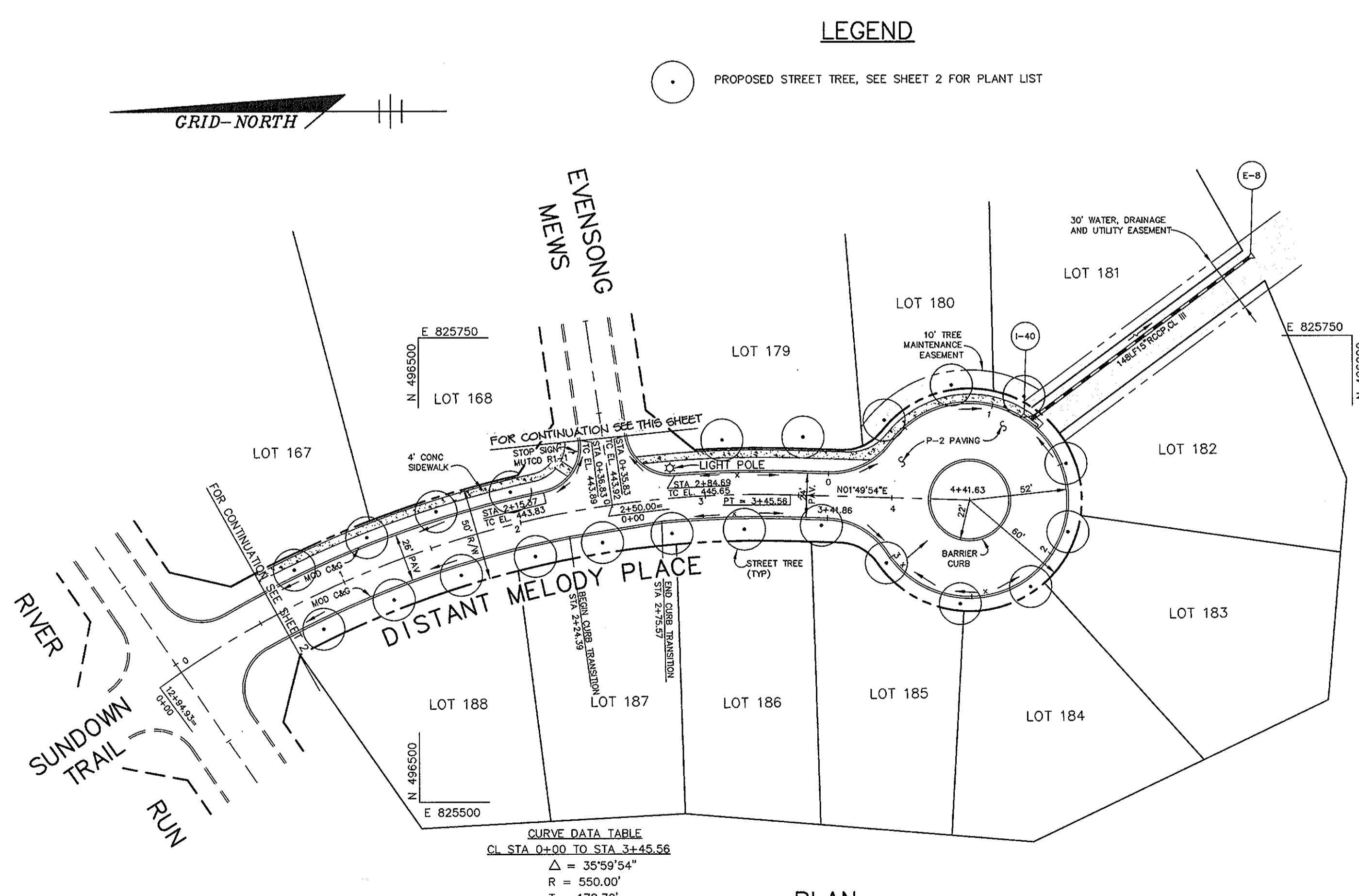
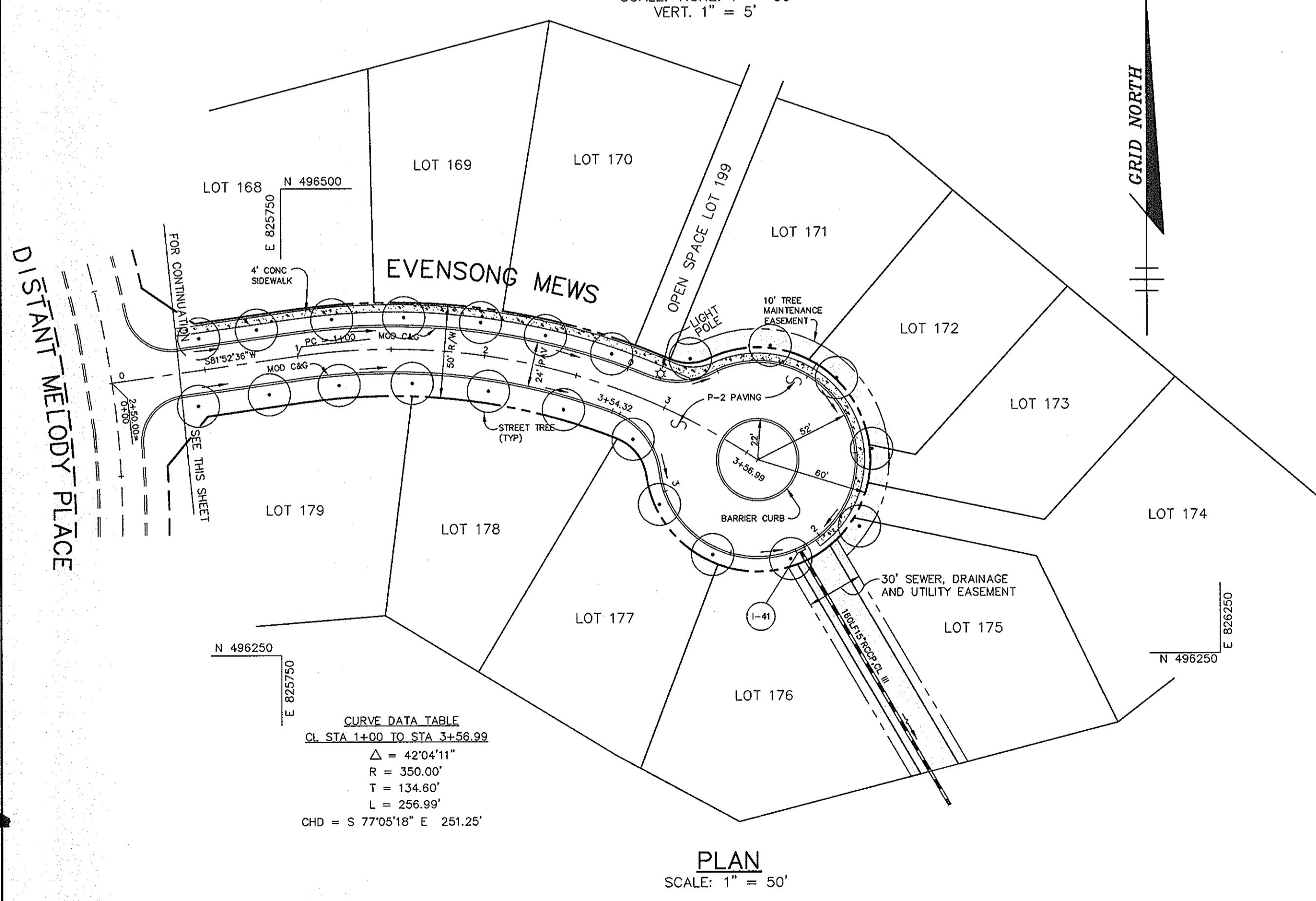
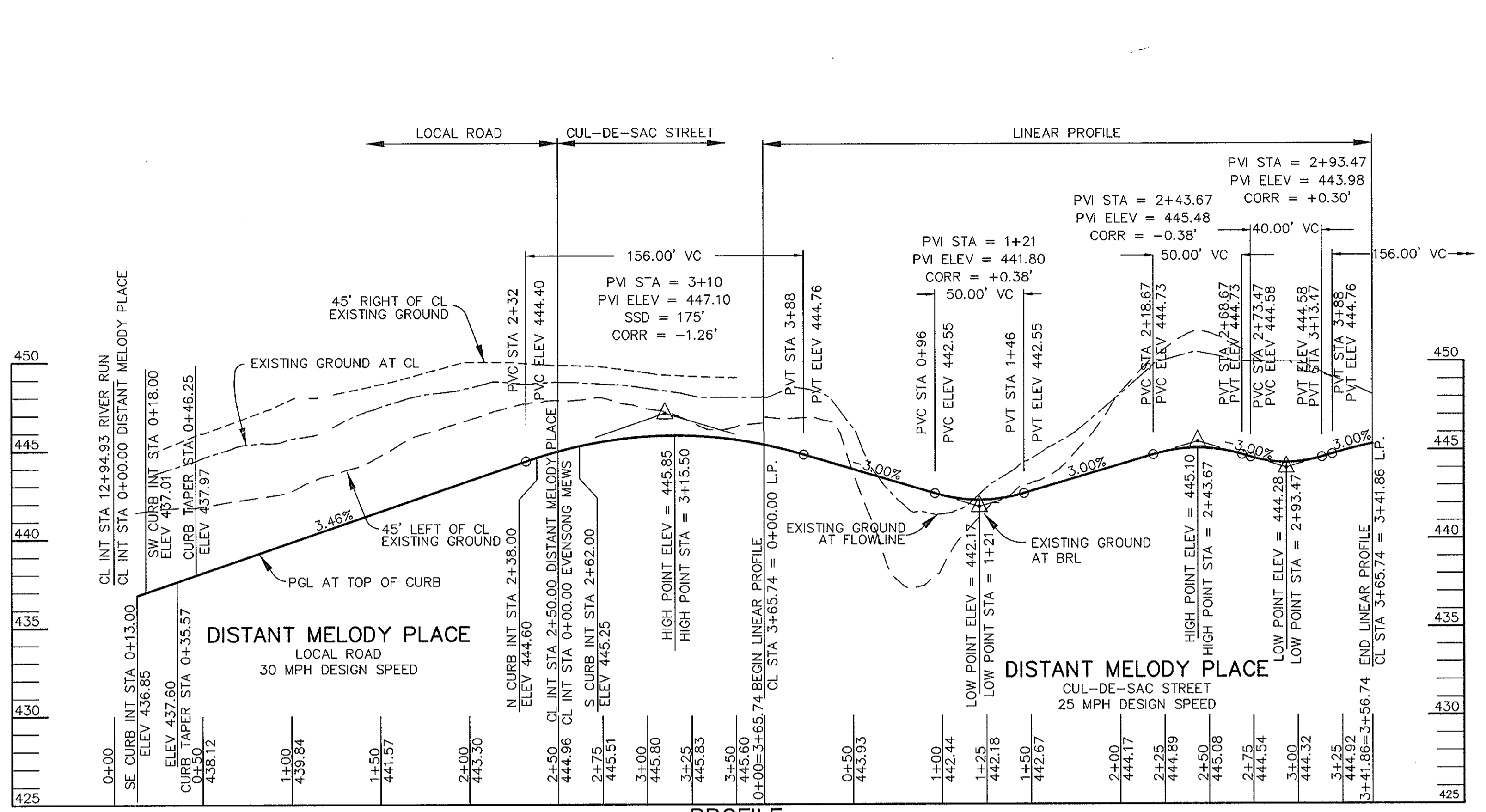
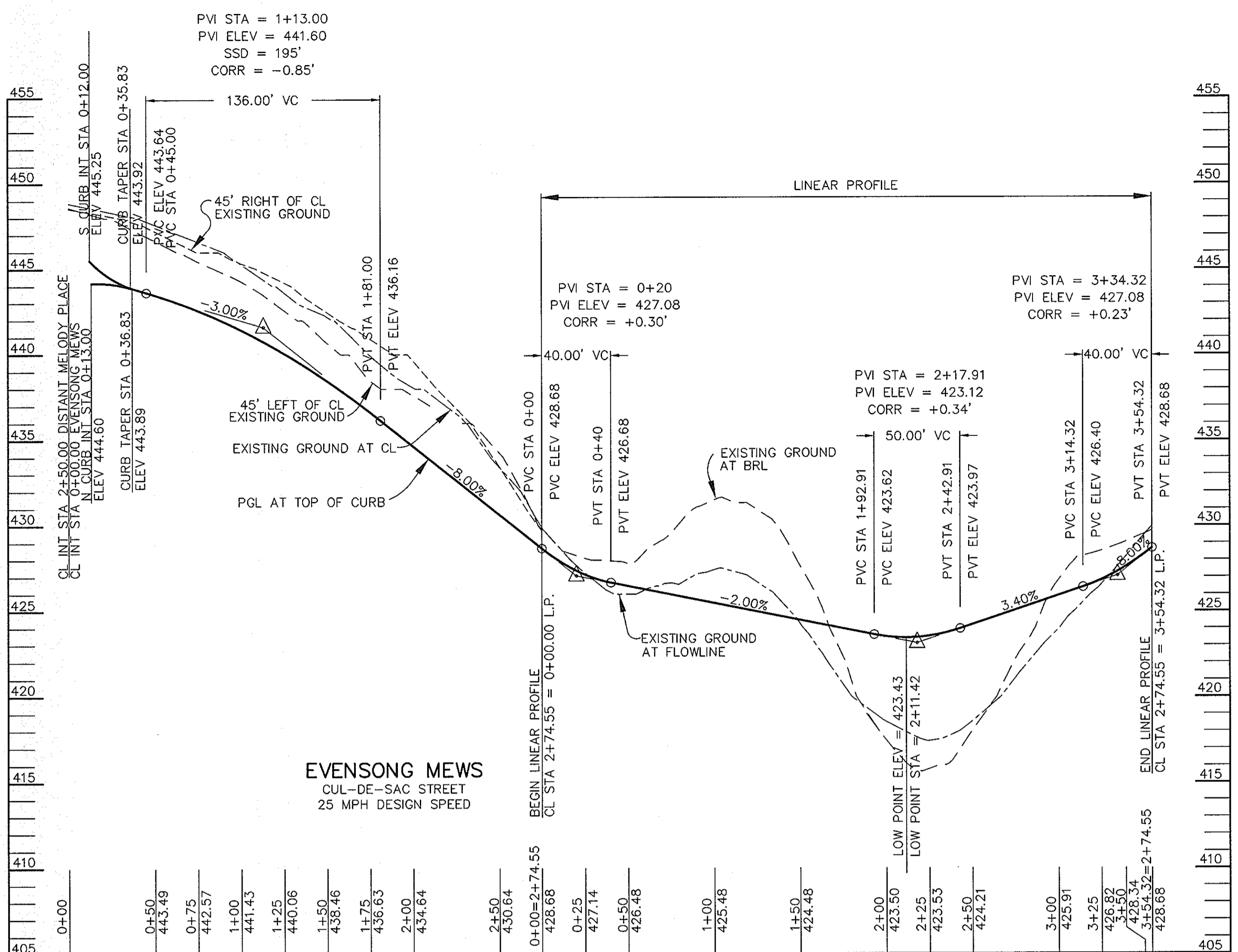
PROFILE

SCALE:
 HOR. 1" = 50'
 VERT. 1" = 5'

AS BUILT CERTIFICATE	
DATE _____	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	<i>Richard M. Decker</i> 9-9-96 CHIEF, BUREAU OF HIGHWAYS DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	<i>Richard Blood</i> 9/13/96 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE
	<i>Allen Dammann</i> 9/12/96 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
DATE NO.	REVISION
OWNER / DEVELOPER THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200	
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE PLAN & PROFILE OF SUNDOWN TRAIL FROM STA. 9+00 TO END	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE 8-7-96	DESIGNED BY: C.J.R.
	DRAWN BY: DAM
	PROJECT NO: HOCO_102800 PH2RD10.DWG
	DATE: AUGUST 7, 1996
	SCALE: AS SHOWN
	DRAWING NO. 10 OF 22

F.96.138

1487



NOTES:
1. STREET LIGHTS SHOWN AS ✱ TO BE 100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.

STREET LIGHT SUMMARY TABLE	
LOCATION	TYPE
16' LT. CL STA. 2+80 DISTANT MELODY PLACE	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.
16' LT. CL STA. 2+91 EVENSONG MEWS	100 WATT HPS VAPOR MODERN POST TOP FIXTURE (BRONZE) MOUNTED ON A 14' BRONZE FIBERGLASS POLE.

LEGEND

○ PROPOSED STREET TREE, SEE SHEET 2 FOR PLANT LIST

AS BUILT CERTIFICATE

DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 9-9-96
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blavel 9/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Bill Dammann 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	NO.	REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT **VILLAGE OF RIVER HILL**
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE **PLAN & PROFILE OF DISTANT MELODY PLACE AND EVENSONG MEWS**

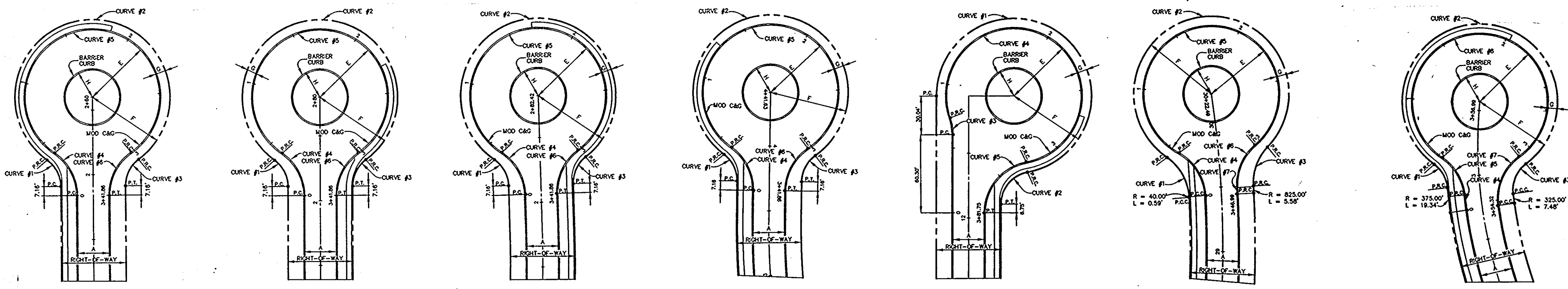
RIEMER MUEGGLE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

DATE 8-7-96
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO\102800 PH2RD11.DWG
DATE: AUGUST 7, 1996
SCALE: AS SHOWN
DRAWING NO. 11 OF 22

JAYKANT D. PAREKH #19148

1487

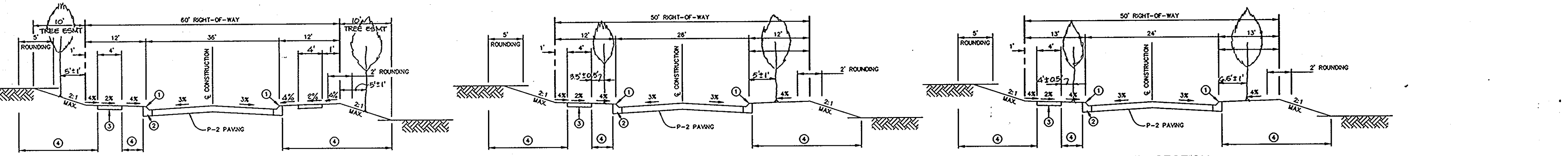
F.96.138



ZONING DISTRICTS	E	F	G	H	R/W	A
RESIDENTIAL	52'	60'	60'	22'	50'	24'

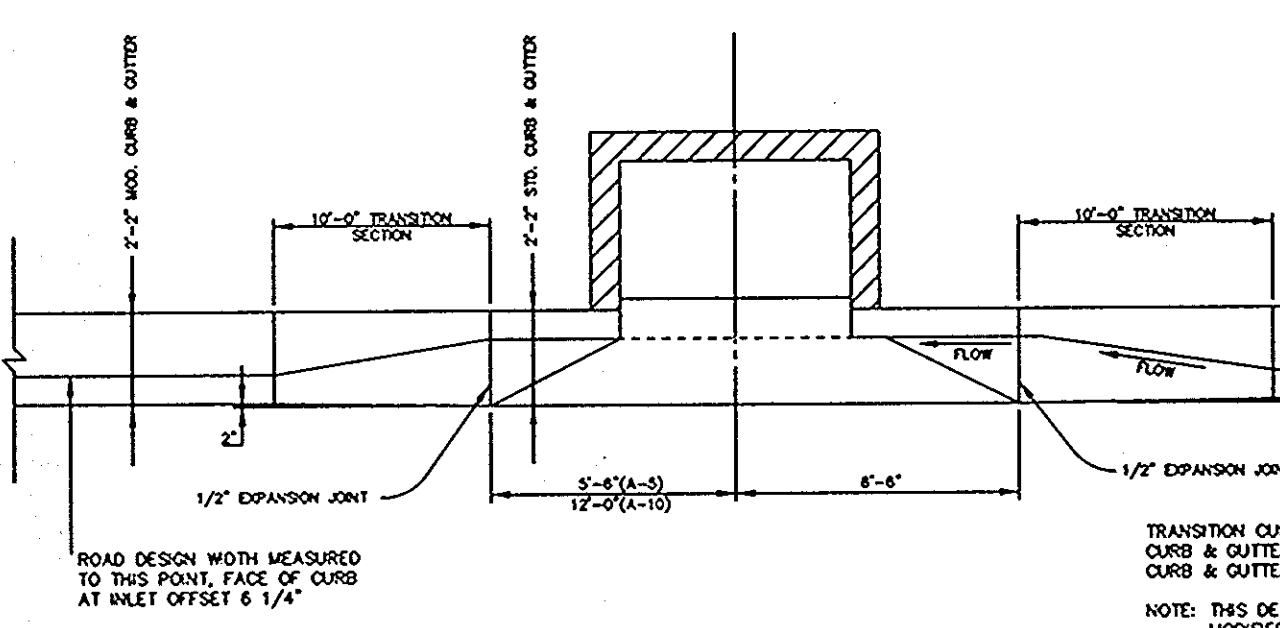
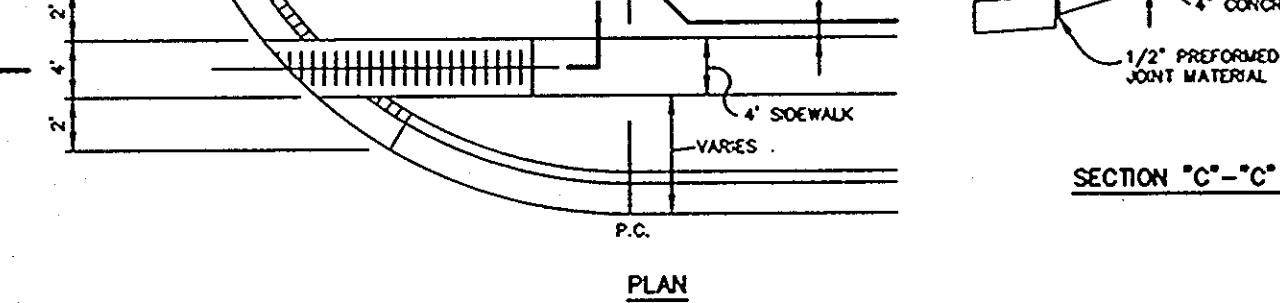
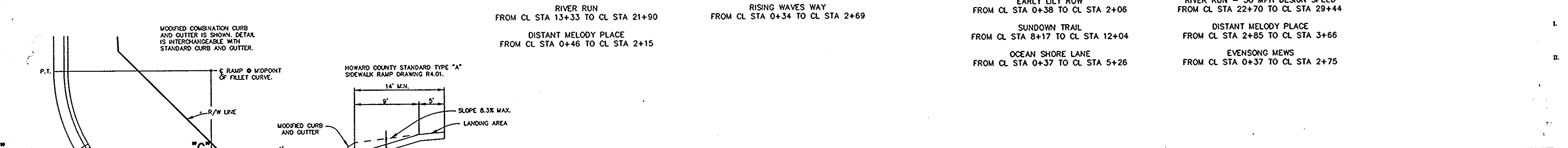
CURVE DATA		CURVE DATA		CURVE DATA		CURVE DATA		CURVE DATA		CURVE DATA		CURVE DATA	
RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)		RESIDENTIAL (24' APPROACH)	
LP=341.85'		LP=341.85'		LP=341.85'		LP=341.85'		LP=341.85'		LP=341.85'		LP=341.85'	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Δ	53.3800'	287.7510'	53.3800'	55.3457'	291.0955'	55.3457'	55.3457'	291.0955'	55.3457'	55.3457'	291.0955'	55.3457'	55.3457'
R	28.00'	60.00'	28.00'	28.00'	40.00'	52.00'	40.00'	40.00'	40.00'	40.00'	40.00'	40.00'	40.00'
T	12.75'	43.84'	12.75'	21.08'	35.63'	21.08'	35.63'	21.08'	35.63'	21.08'	35.63'	21.08'	35.63'
L	23.50'	301.53'	23.50'	38.80'	354.75'	38.80'	38.80'	354.75'	38.80'	38.80'	354.75'	38.80'	38.80'
LC	22.69'	70.59'	22.69'	37.30'	58.78'	37.30'	58.78'	37.30'	58.78'	37.30'	58.78'	37.30'	58.78'

EARLY LILY ROW CUL-DE-SAC DETAIL
RANGING HILLS GATE CUL-DE-SAC DETAIL
FOLDED LEAF SQUARE CUL-DE-SAC DETAIL
DISTANT MELODY PLACE CUL-DE-SAC DETAIL
SUNDOWN TRAIL CUL-DE-SAC DETAIL
RIVER RUN CUL-DE-SAC DETAIL
EVENSONG MEWS CUL-DE-SAC DETAIL

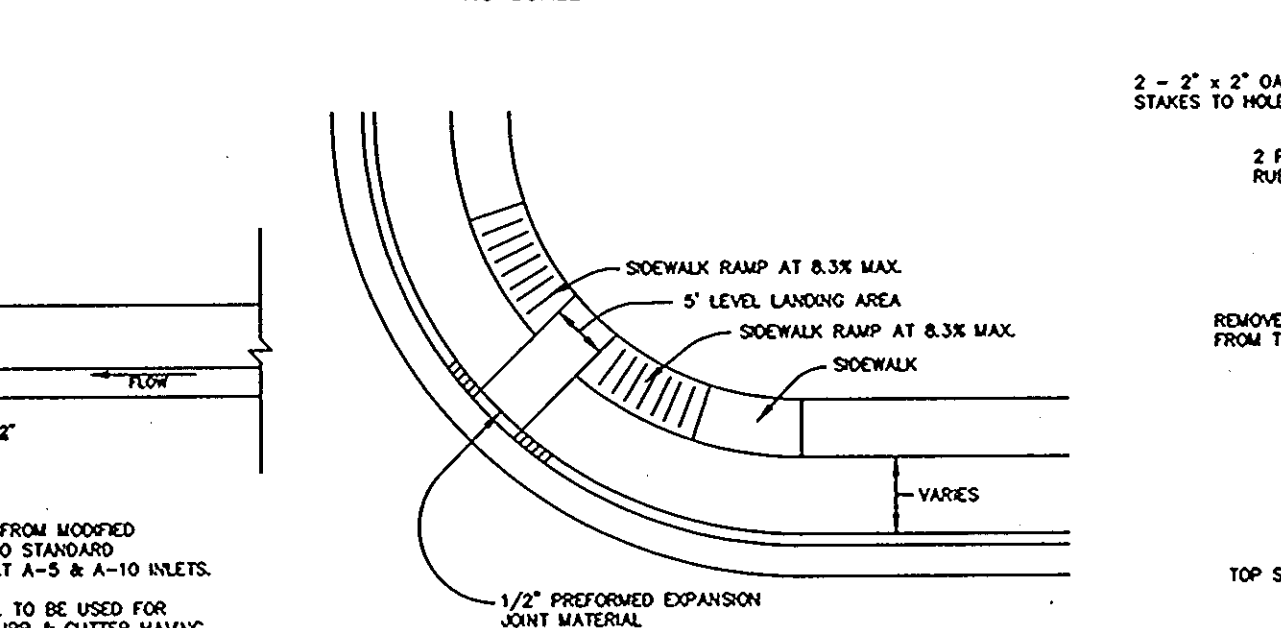
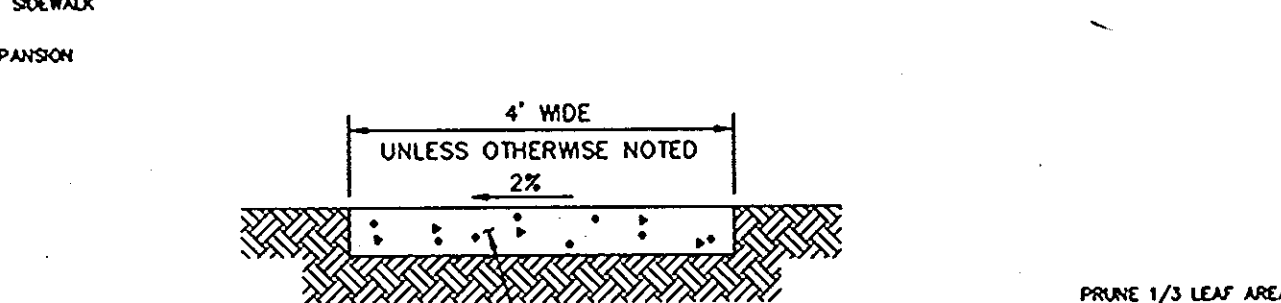


- ① PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
- ② TYPE OF CURB VARIES (MOD. COMB. CURB & GUTTER - SEE DESIGN MANUAL).
- ③ 4" CONCRETE SIDEWALK AS REQUIRED BY SUBDIVISION REGULATIONS (ONE SIDE ONLY).
- ④ INDICATES 2" TOPSOIL, SEED AND MULCH.
- ⑤ DESIGN SPEED = 35 M.P.H.

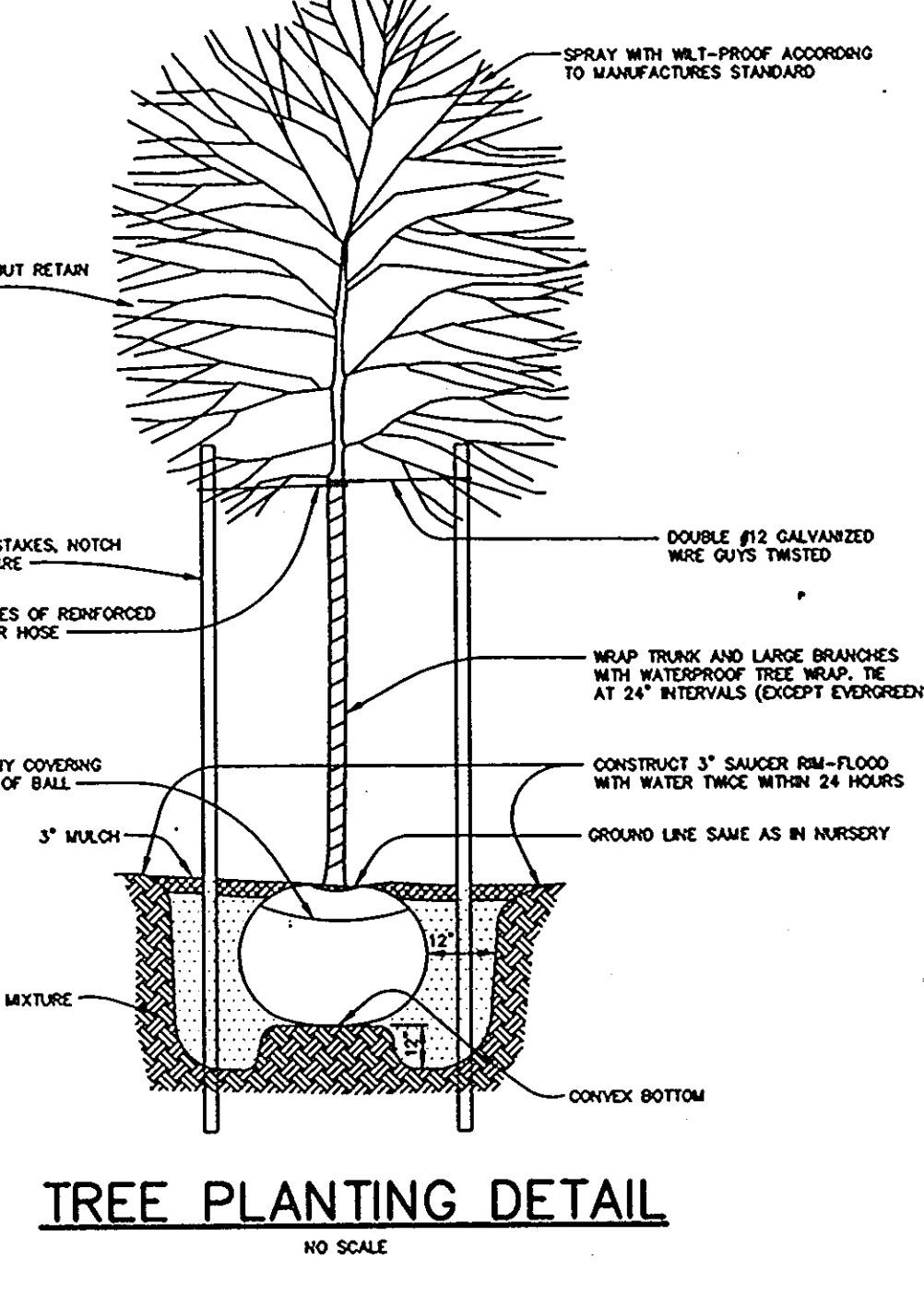
TYPICAL SECTION MINOR COLLECTOR
TYPICAL SECTION LOCAL ROAD
TYPICAL SECTION CUL-DE-SAC STREET



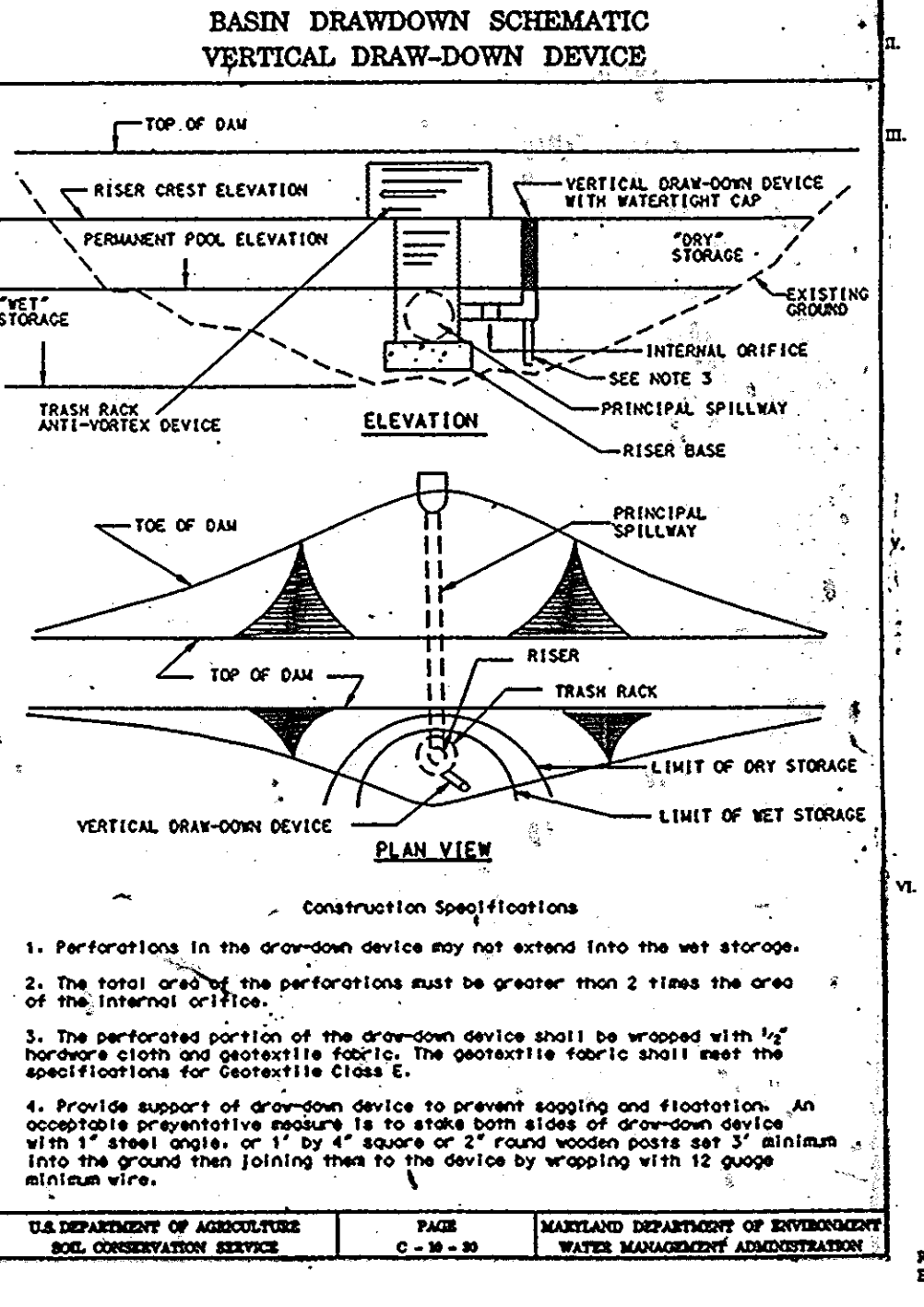
MODIFIED COMBINATION CURB AND GUTTER TRANSITION CURB SECTION AT "A" TYPE INLETS
HANDICAP RAMP DETAIL



HANDICAP RAMP DETAIL



TREE PLANTING DETAIL



BASIN DRAWDOWN SCHEMATIC VERTICAL DRAW-DOWN DEVICE

U.S. STANDARD SPECIFICATIONS
EDS
TOPSOIL
DEFINITION

Provision of topsoil over a proposed subsoil prior to establishment of permanent vegetation.

Basins
 To provide a suitable soil condition for vegetative growth. Soils of various low moisture content, low nutrient levels, low pH, marginal soils to plant, and/or unworkable soil gradation.

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The nature of the proposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing supplies of nutrients and plant sections.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plan.

Construction and Material Specifications

- Topsoil imported from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be imported for a given soil type may be found in the representative soil profile sections in the 5-1 Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, heavy sand. Other soil may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Fragments, rocks, gravel, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, dandelion, or others as specified.
 - When the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 40 pounds (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Limestone shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain wet results (dissolving fertilizer and lime amendments required to bring the soil into compliance with the following):
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, artificial lime shall be purchased to raise the pH to 6.3 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with soil conditioners or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- Topsoil Application
 - When topsoiling, materials needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Eddies, Slope Stix, Fences and Sediment Traps and Basins.
 - On the area to be topsoiled, which has been previously established, shall be maintained, about 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and evenly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or sodding on ground will be maintained as indicated on the plan. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pools.
 - Topsoil shall not be placed when the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Alternative for Permanent Sodding - Instead of applying the full amount of lime and commercial fertilizer, composted dredge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be used to provide nutrients and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be applied by, or originate from, a person or persons that are permitted (in the case of application of the compost) by the Maryland Department of the Environment under 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate quantities must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 to 2 tons/1,000 square feet.
 - Composted sludge shall be amended with a phosphorus fertilizer applied at the rate of 4 to 8 lbs/1,000 square feet, applied 1/2 to 1 inch over the normal lime application rate.

Reference: Odorous Specifications, Soil Preparation and Sodding, 3RD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute. Revised 1975.

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

J. Parekh 8/19/96
 DEVELOPER DATE

BY THE ENGINEER:
 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.

J. Parekh 8/19/96
 ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

J. H. Warfield 8/27/96
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Robertson 8/27/96
 HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Daniels 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

John P. Robertson 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE DETAIL SHEET

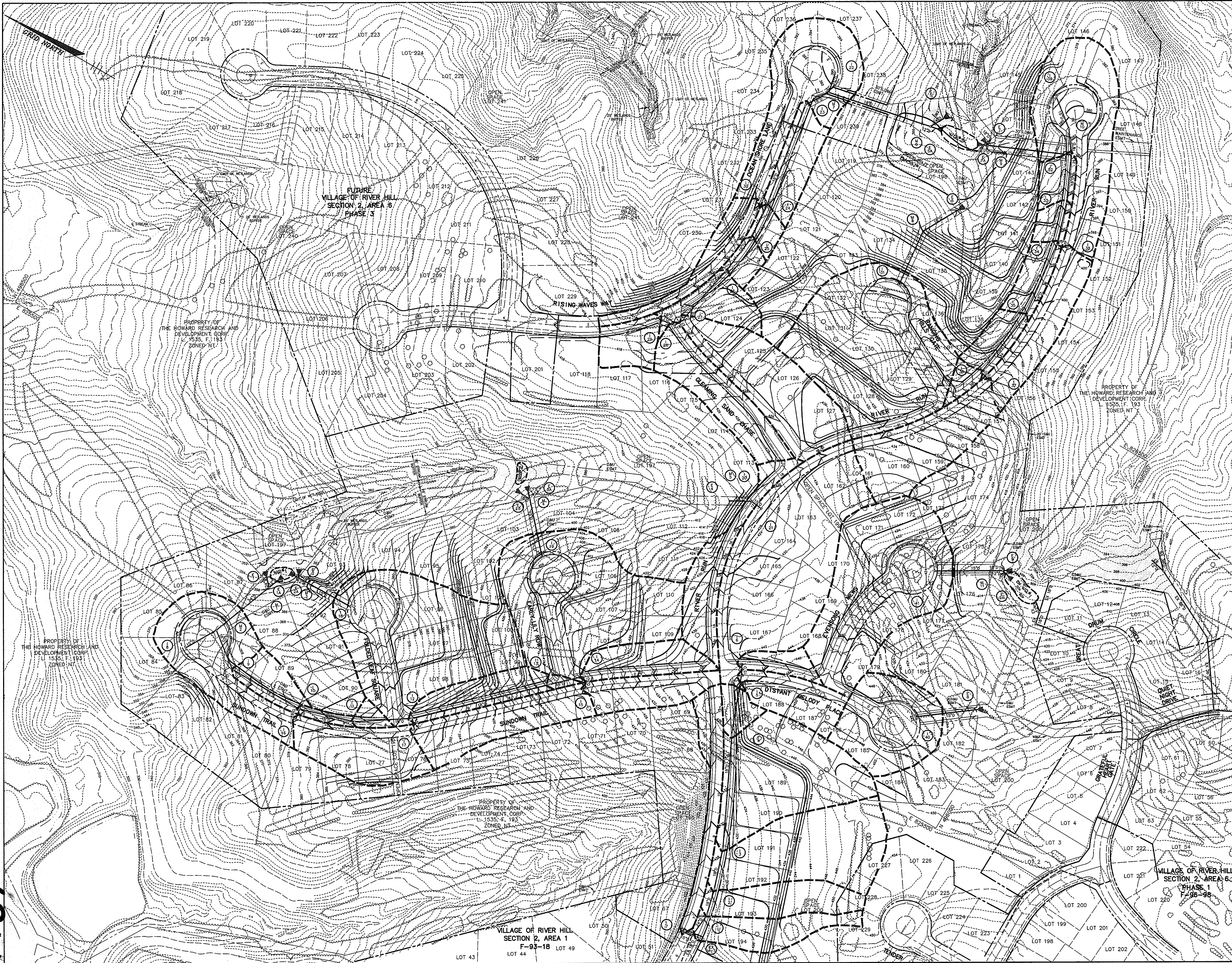
RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

8-7-96 DATE
 S-91-03 P-95-17

DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: HOCO\102800
 PH2RD14.DWG
 DATE: AUGUST 7, 1996
 SCALE: AS SHOWN
 DRAWING NO. 12 OF 22

J. Parekh
 JAYKANT D. PAREKH #19148

1987



DRAINAGE AREA DATA

INLET NO.	DRAINAGE AREA (A.C.)	'C' FACTOR	% IMP.
I-1	0.6	0.43	33
I-1A	0.6	0.43	33
I-2	1.5	0.42	32
I-3	1.0	0.45	37
I-4	0.9	0.44	34
I-5	0.5	0.49	42
I-6	0.2	0.57	55
I-7	0.4	0.67	70
I-8	1.3	0.52	47
I-9	0.3	0.49	43
I-10	0.1	0.54	50
I-11	0.1	0.54	50
I-12	0.5	0.51	46
I-13	0.1	0.60	60
I-14	0.5	0.50	44
I-15	0.5	0.51	46
I-16	0.8	0.46	38
I-17	0.9	0.47	39
I-18	2.4	0.46	39
I-19	2.4	0.47	39
I-20	0.7	0.55	51
I-21	2.7	0.45	36
I-22	1.4	0.50	26
I-23	0.4	0.54	50
I-24	0.1	0.47	40
I-25	0.1	0.48	40
I-26	0.4	0.51	45
I-27	1.3	0.51	46
I-28	0.8	0.50	49
I-29	0.4	0.47	40
I-30	0.5	0.55	52
I-31	2.6	0.48	41
I-32	0.2	0.51	45
I-33	0.2	0.47	40
I-34	0.3	0.52	47
I-35	0.3	0.52	47
I-36	0.1	0.54	50
I-37	1.1	0.45	36
I-38	0.6	0.52	47
I-39	1.5	0.50	44
I-40	1.1	0.47	40
I-41	2.1	0.49	43

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Daniels 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood 8/12/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

William J. ... 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE DRAINAGE AREA MAP

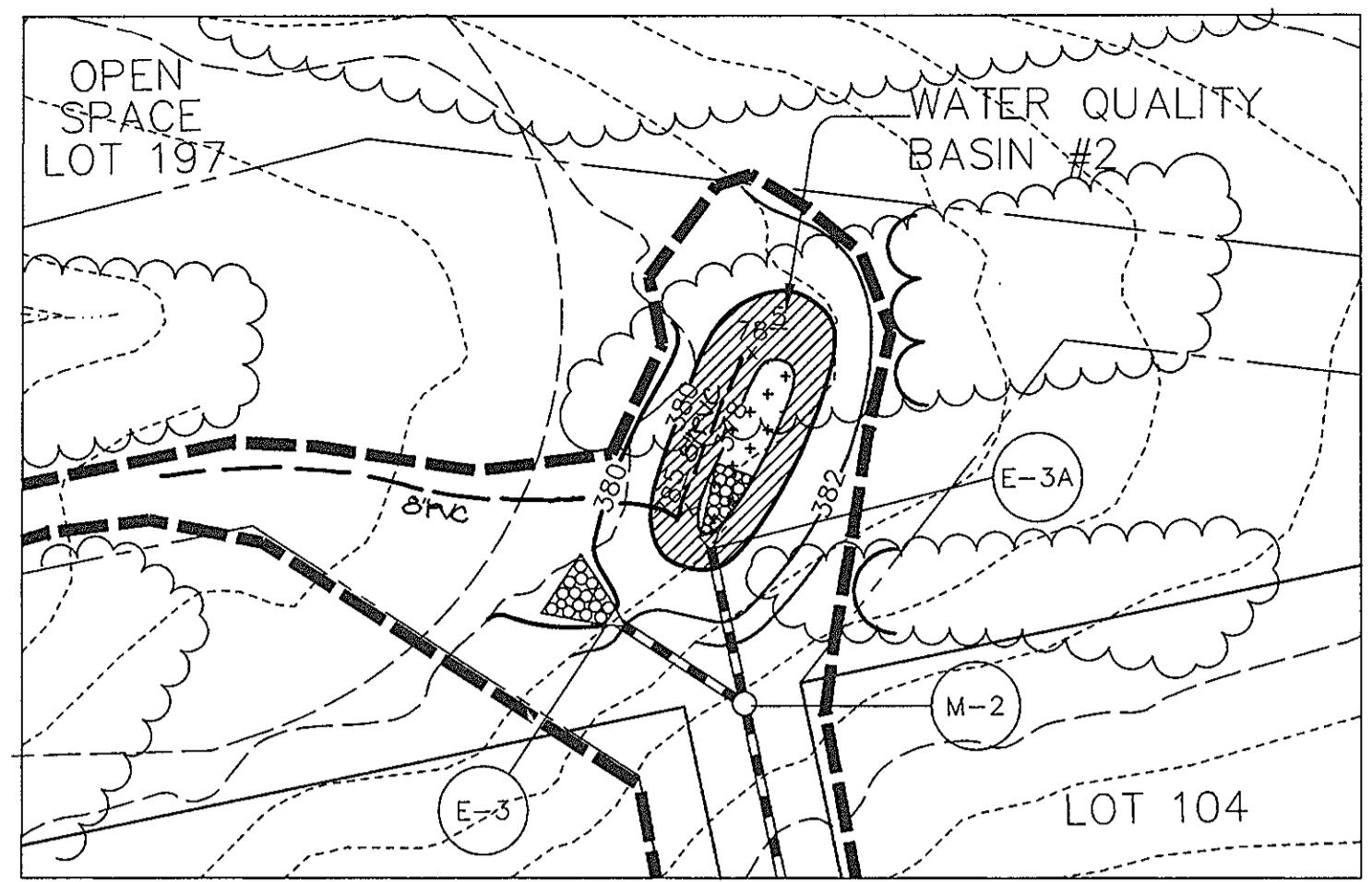
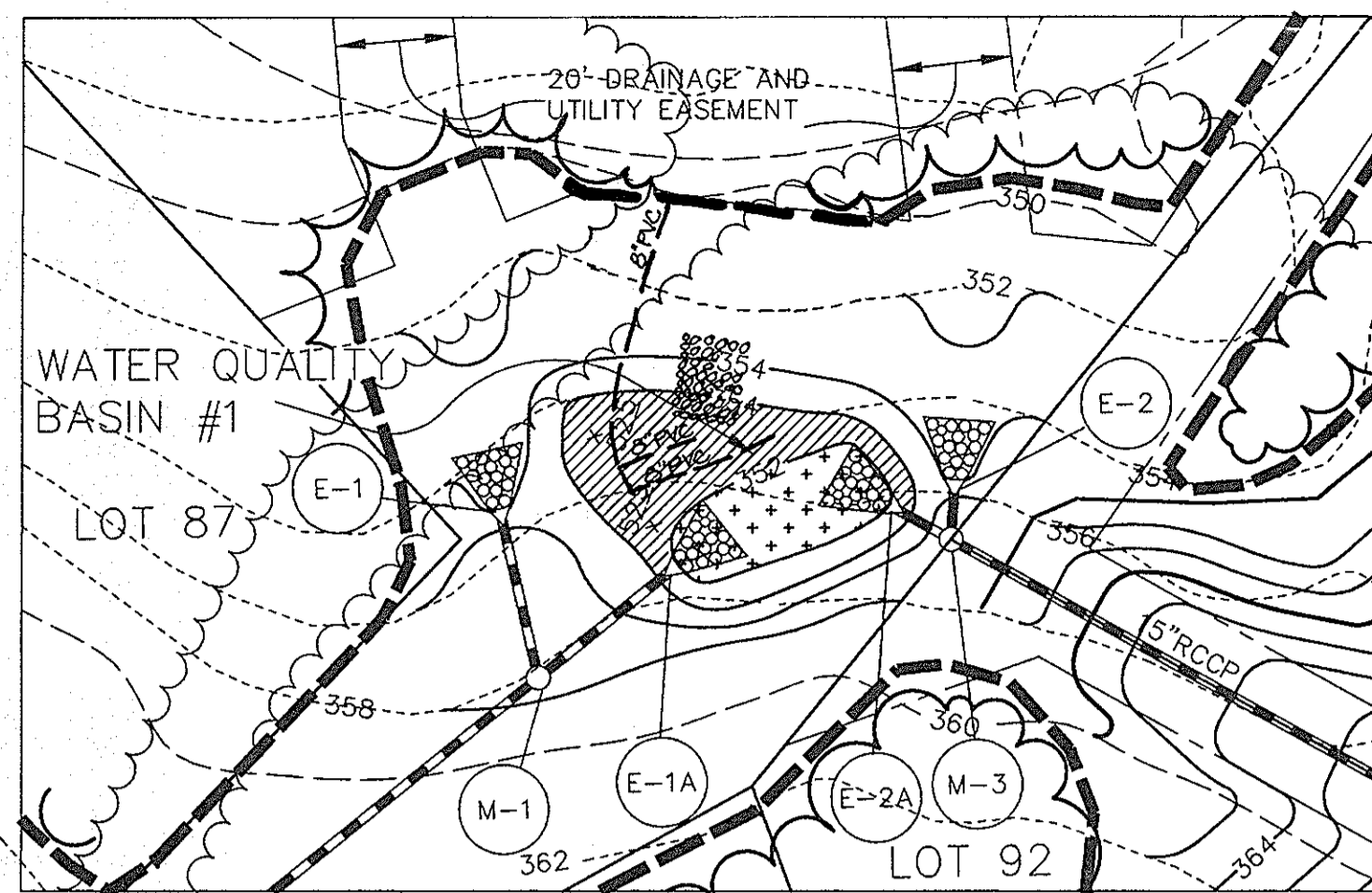
RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

8-7-96 DATE
 DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: HOCO\102800 PH2RD12B.DWG
 DATE: AUGUST 7, 1996
 SCALE: 1" = 100'
 DRAWING NO. 13 OF 22

JAYKANT D. PAREKH #19148

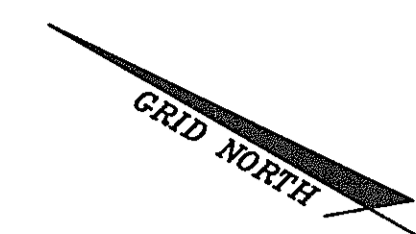
M187

F.96.138



WATER QUALITY PLANTING ENLARGEMENT
SCALE: 1"=50'

SEE SHEET 22 OF 22 FOR PLANTING SPECIFICATIONS AND PLANT SCHEDULE.



BY THE DEVELOPER :
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

J. Saeth 8/7/96
DEVELOPER DATE

BY THE ENGINEER :
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.

J. Saeth 8/7/96
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

J. H. Worfield 8/27/96
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 8/27/96
HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE
DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Andrew M. Daniels 9-9-96
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Richard Blood 9/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

John D. ... 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION
OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
PART OF PARCEL 70
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE GRADING, SEDIMENT CONTROL AND LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

8-7-96 DATE
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO\102800 PH2RD15.DWG
DATE: AUGUST 7, 1996
SCALE: 1" = 50'
DRAWING NO. 14 OF 22



NOTE: ALL EXISTING SEDIMENT CONTROLS CONSTRUCTED UNDER GP-97-24 WILL BE USED UNDER THIS FINAL PLAN.

1987

F.96.138



BY THE DEVELOPER :
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 8/7/96
 DEVELOPER DATE

BY THE ENGINEER :
 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] 8/7/96
 ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

[Signature] 8/27/96
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] 8/27/96
 HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

[Signature] 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT
 VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
 GRADING AND
 SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

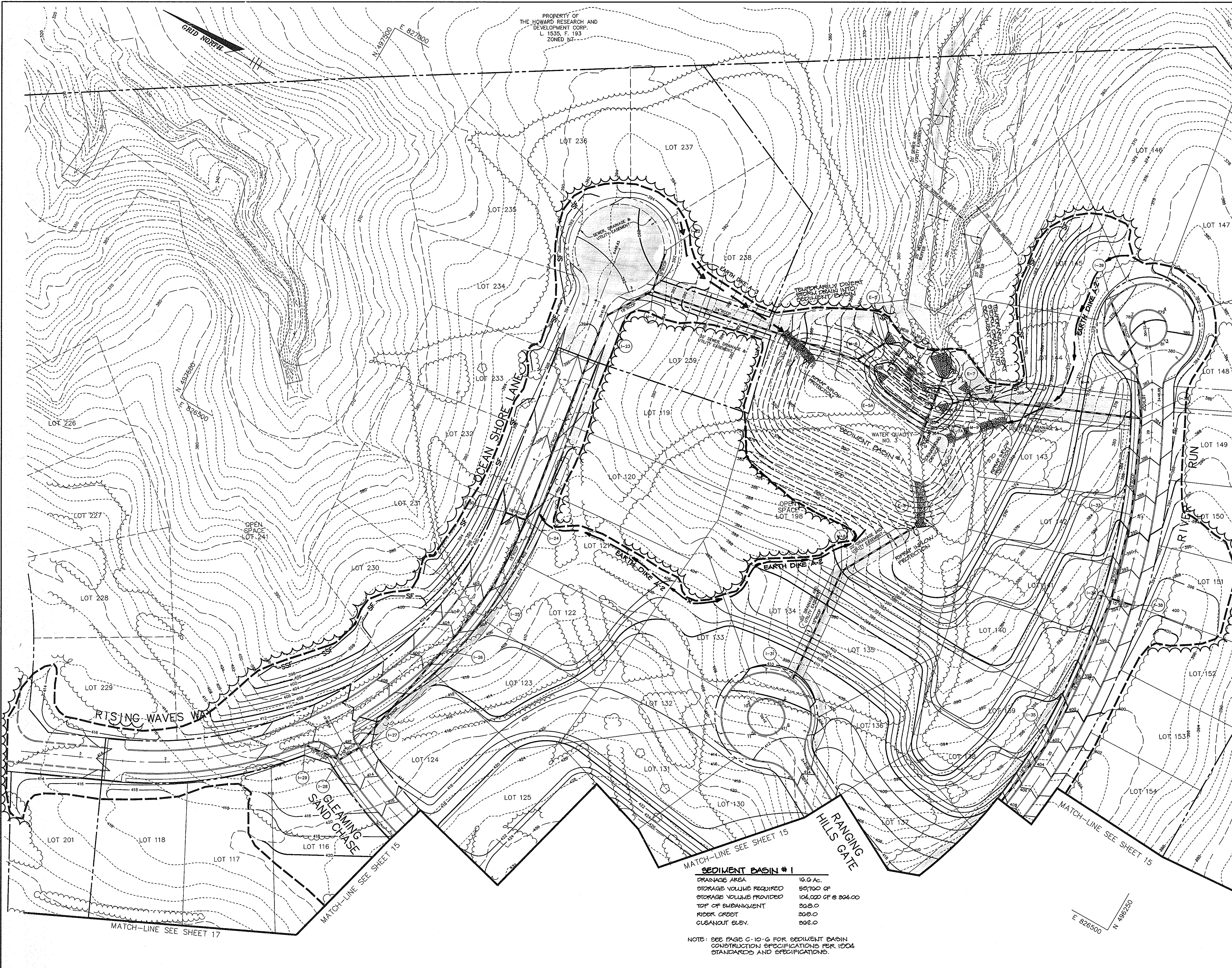
8/7/96 DATE	S-91-03 P-95-17
DESIGNED BY: C.J.R.	
DRAWN BY: DAM	
PROJECT NO: HOCO\102800 PH2RD16.DWG	
DATE: AUGUST 7, 1996	
SCALE: 1" = 50'	
<i>[Signature]</i> JAYKANT D. PAREKH #19148	
	DRAWING NO. 15 OF 22

NOTE: ALL EXISTING SEDIMENT CONTROLS CONSTRUCTED UNDER GP-07-24 WILL BE USED UNDER THIS FINAL PLAN.

1487

F-96-138

PROPERTY OF
THE HOWARD RESEARCH AND
DEVELOPMENT CORP.
L 1535, F 193
ZONED NR-...



NOTE: ALL EXISTING SEDIMENT CONTROLS
CONSTRUCTED UNDER GP-07-24 WILL BE
USED UNDER THIS FINAL PLAN.

BY THE DEVELOPER :
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION
WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE
PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL
CONSERVATION DISTRICT.

Plan 8/7/96
DEVELOPER DATE

BY THE ENGINEER :
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.

J. Farrell 8/7/96
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL
CONSERVATION DISTRICT AND MEET THE TECHNICAL
REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

J. M. Warfield 8/27/96
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robertson 8/27/96
HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC
WORKS
Andrew M. Dwyer 9-9-96
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING
AND ZONING
Richard Blood 9/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

Chris Dammers 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
PART OF PARCEL 70
5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE GRADING AND
SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

8/7/96
DATE
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO102800
PH2R017.DWG
DATE: AUGUST 7, 1996
SCALE: 1" = 50'
DRAWING NO. 16 OF 22

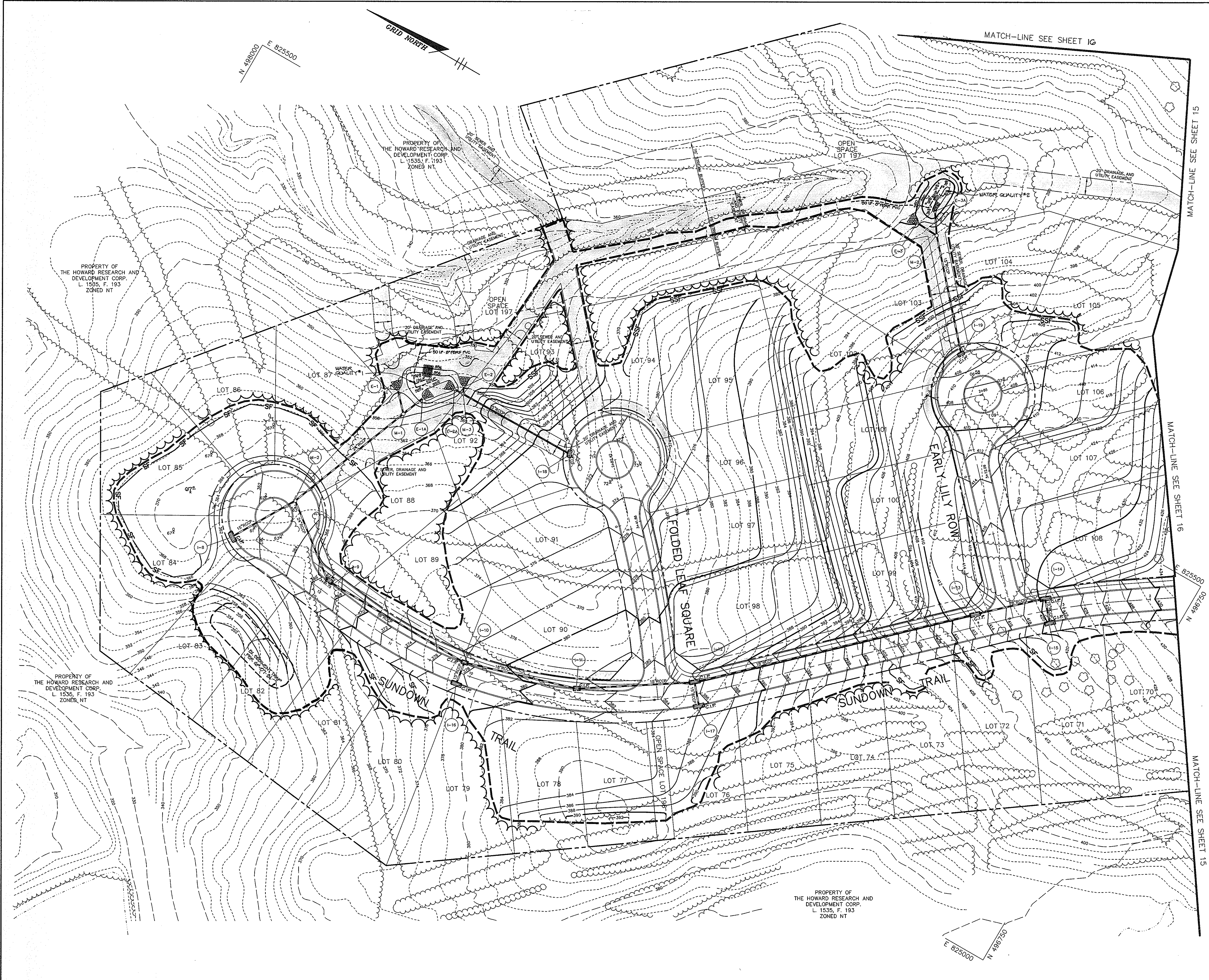
SEDIMENT BASIN # 1

DRAINAGE AREA	16.6 Ac.
STORAGE VOLUME REQUIRED	59,700 CF
STORAGE VOLUME PROVIDED	104,000 CF @ 204.0
TOP OF EMBANKMENT	308.0
RISER CREST	309.0
CLEANOUT ELEV.	302.0

NOTE: SEE PAGE C-10-G FOR SEDIMENT BASIN
CONSTRUCTION SPECIFICATIONS PER 1004
STANDARDS AND SPECIFICATIONS.

1487

F.96.138



NOTE: ALL EXISTING SEDIMENT CONTROLS CONSTRUCTED UNDER GP. 07-24 WILL BE USED UNDER THIS FINAL PLAN.

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Plan 8/7/96
 DEVELOPER DATE

BY THE ENGINEER:
 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.

J. Farkel 8/7/96
 ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

J. H. Wafar 8/28/96
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Robertson 8/27/96
 HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Dwyer 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

Chris P... .. 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT: VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: GRADING AND SEDIMENT CONTROL PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

8/7/96 DATE

DESIGNED BY: C.J.R.

DRAWN BY: DAM

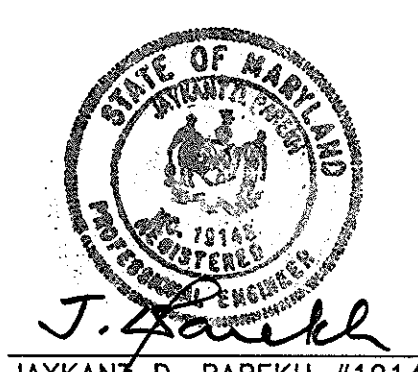
PROJECT NO: HOCO102800 PH2RD18.DWG

DATE: AUGUST 7, 1996

SCALE: 1" = 50'

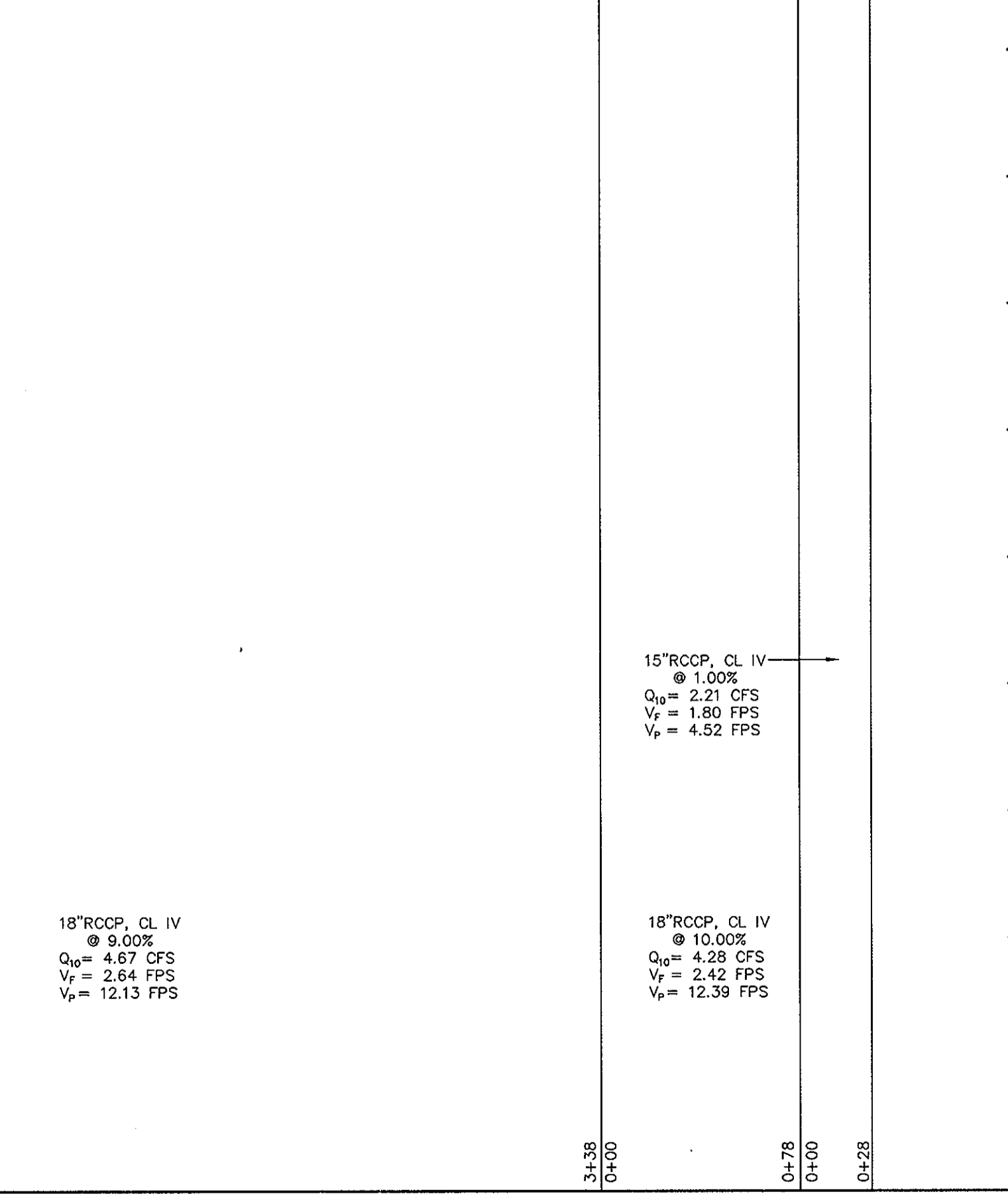
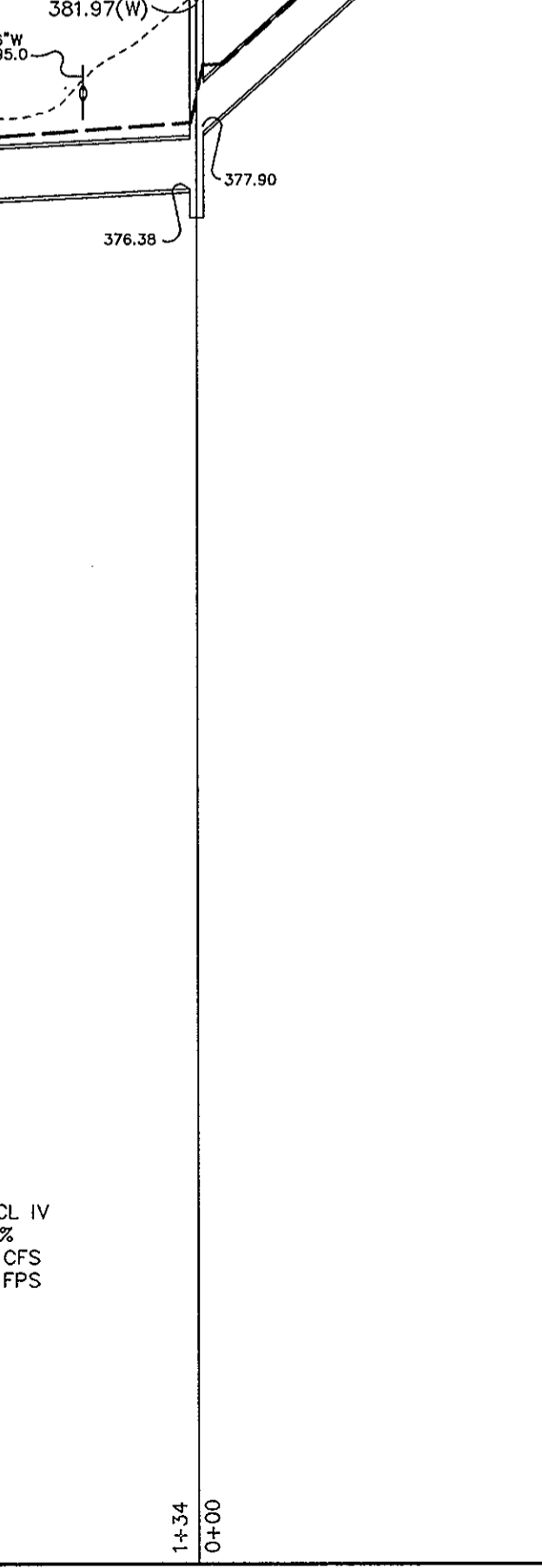
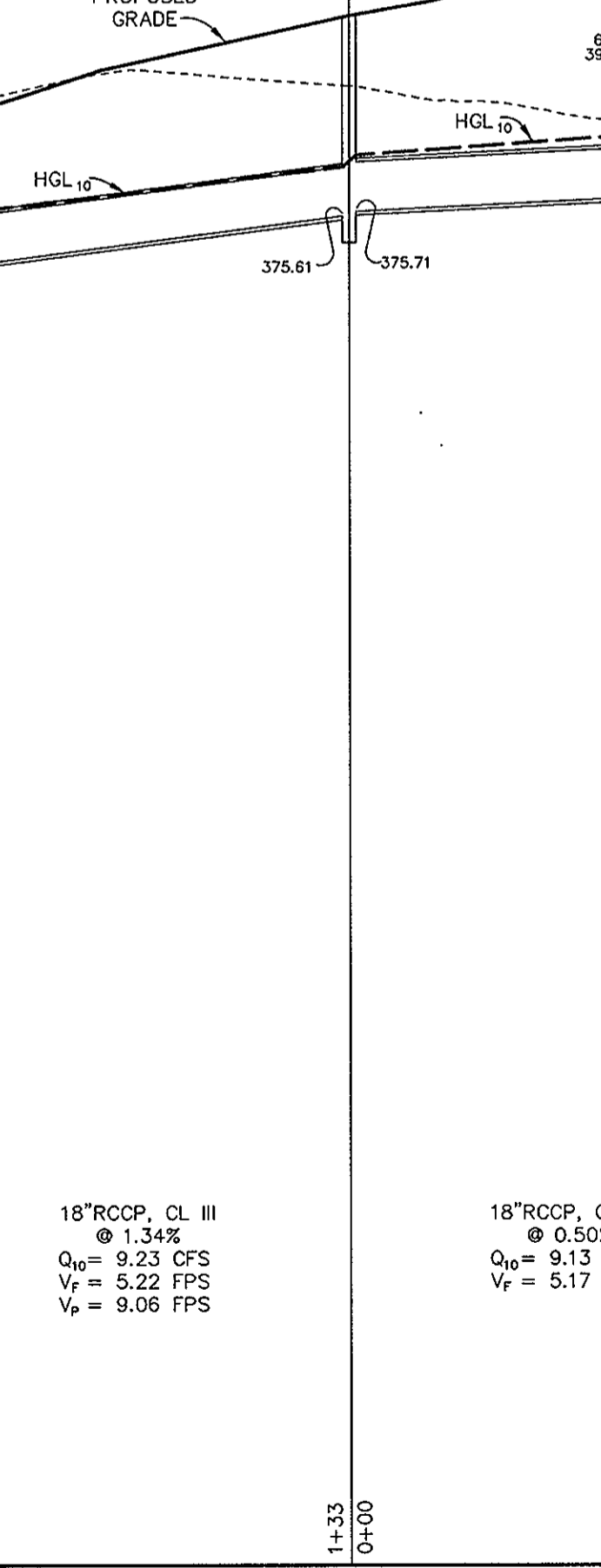
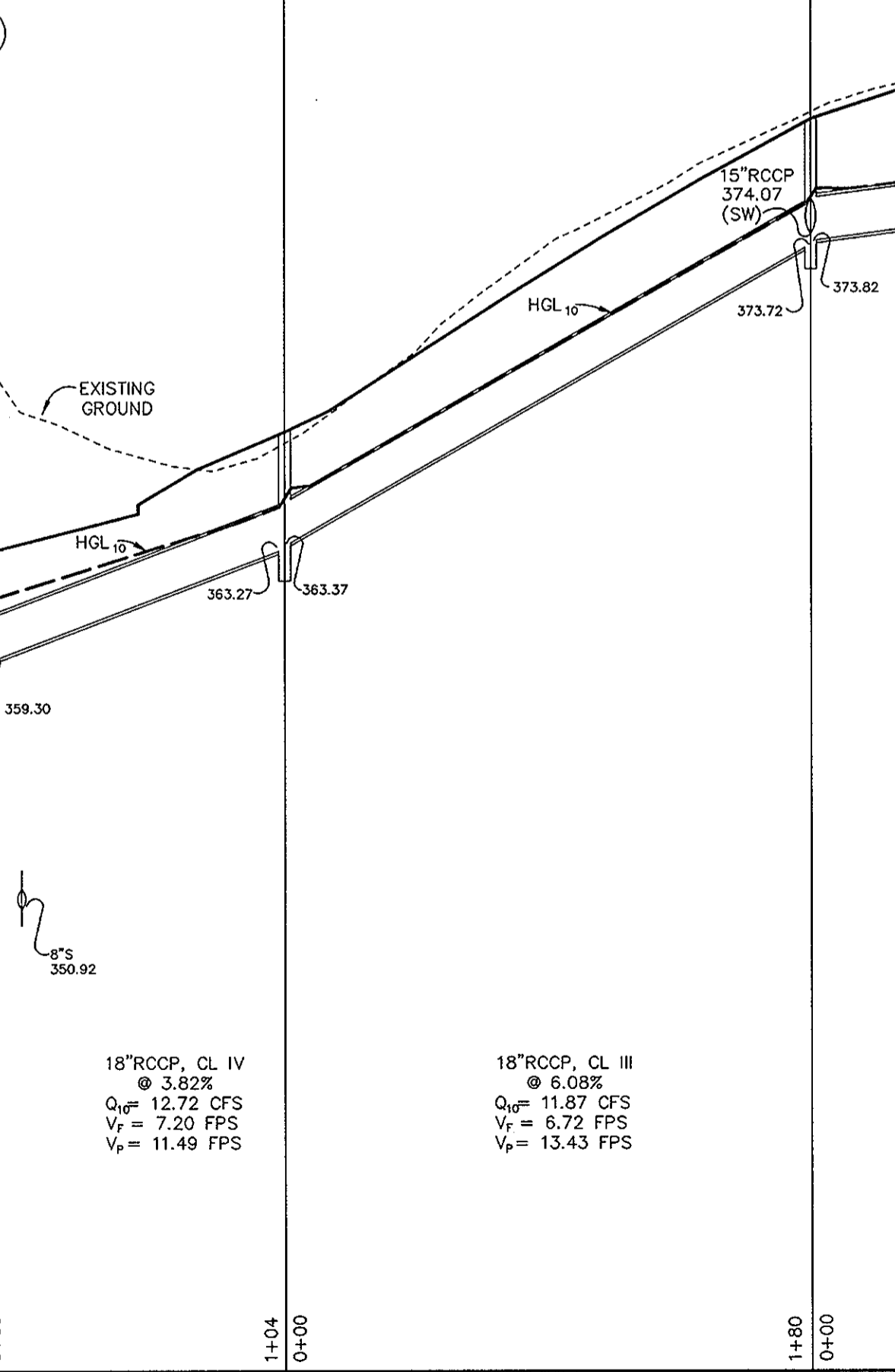
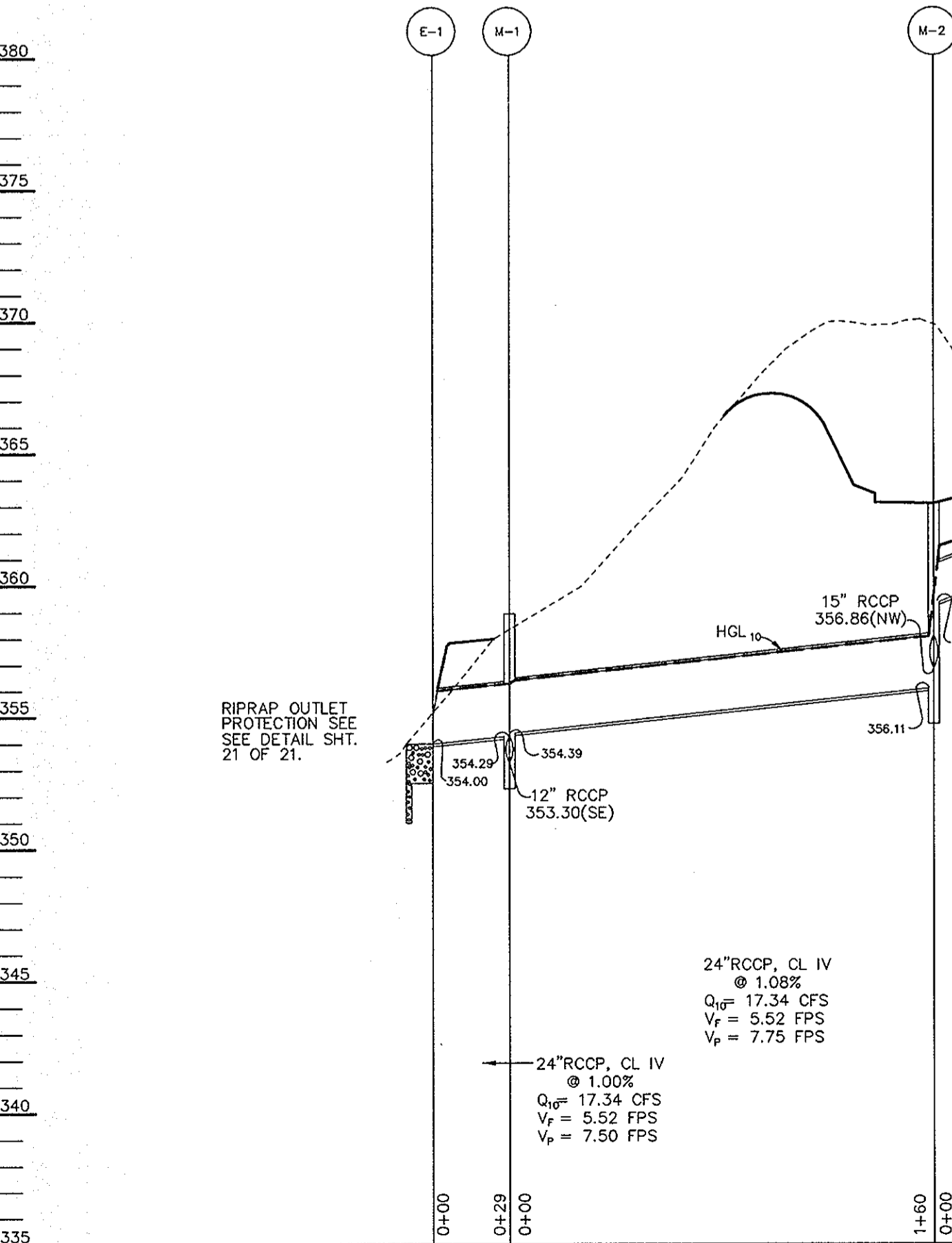
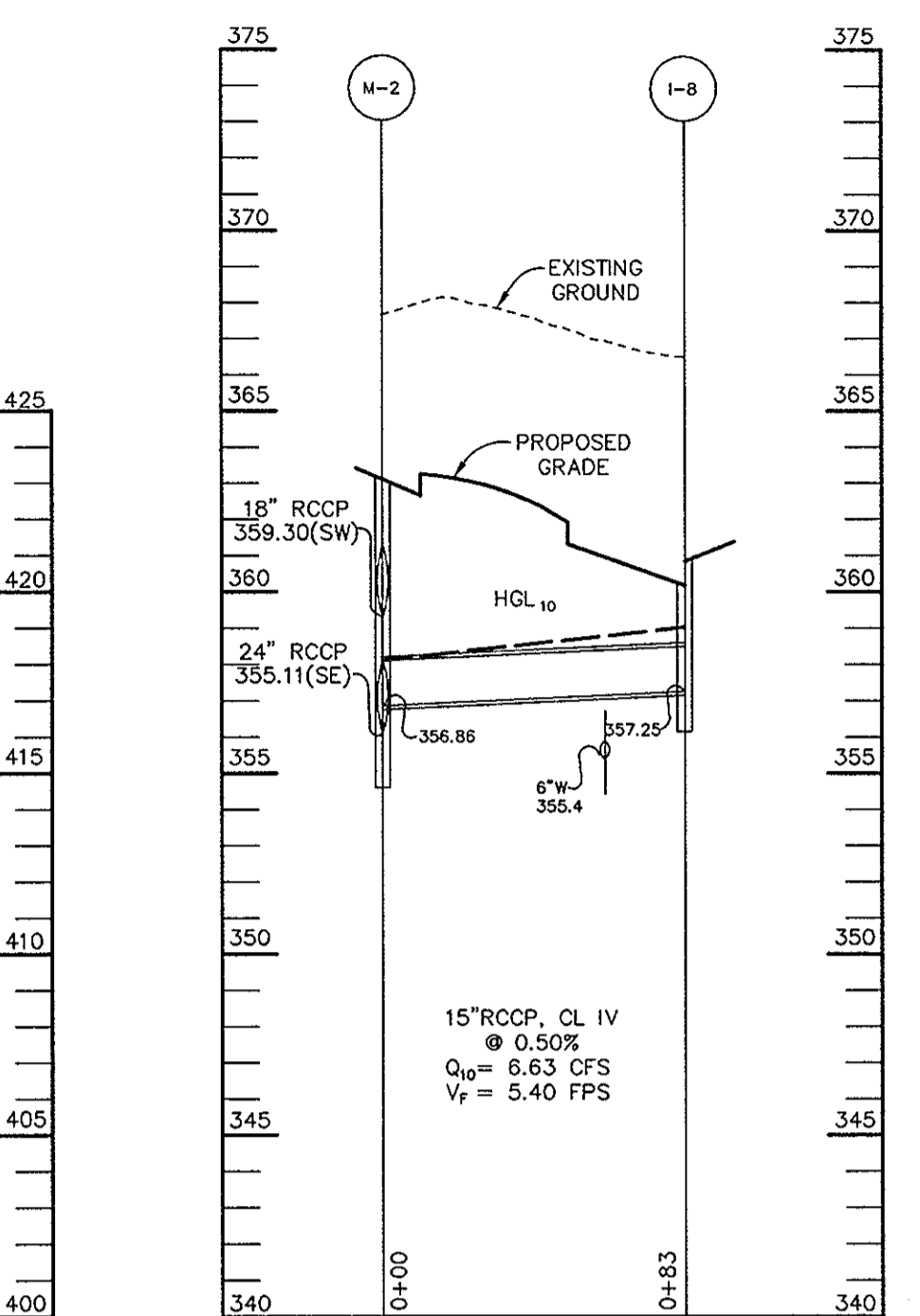
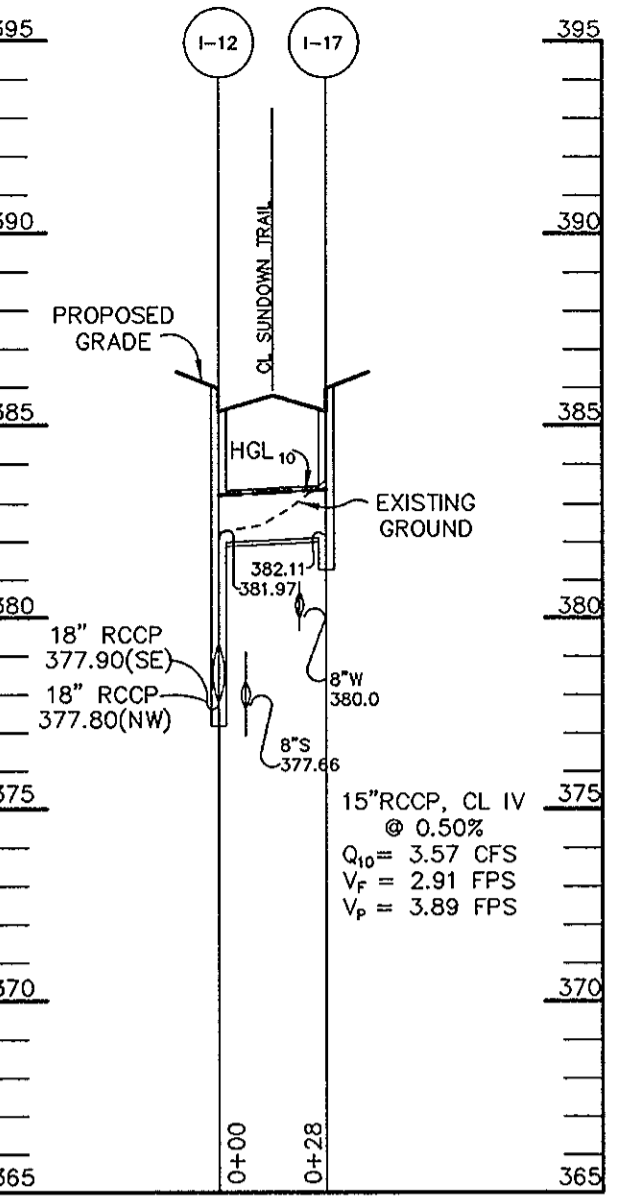
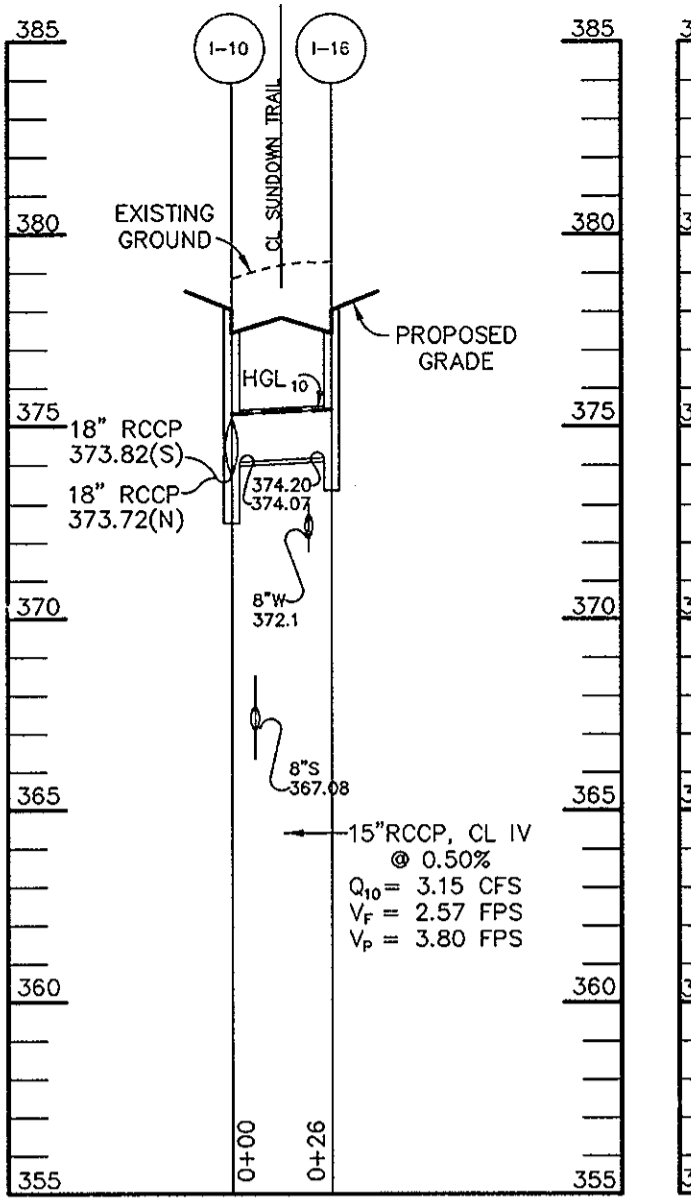
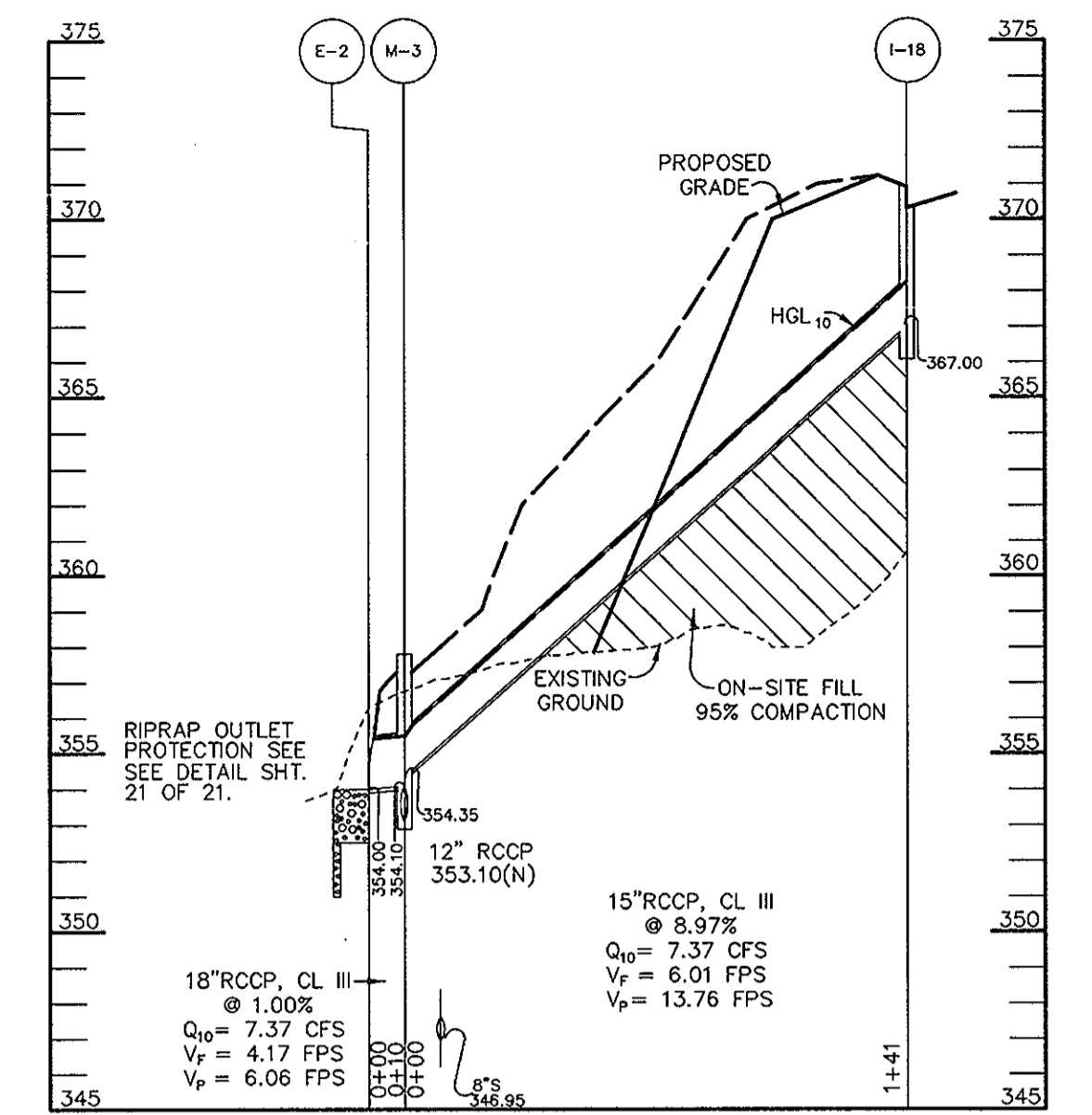
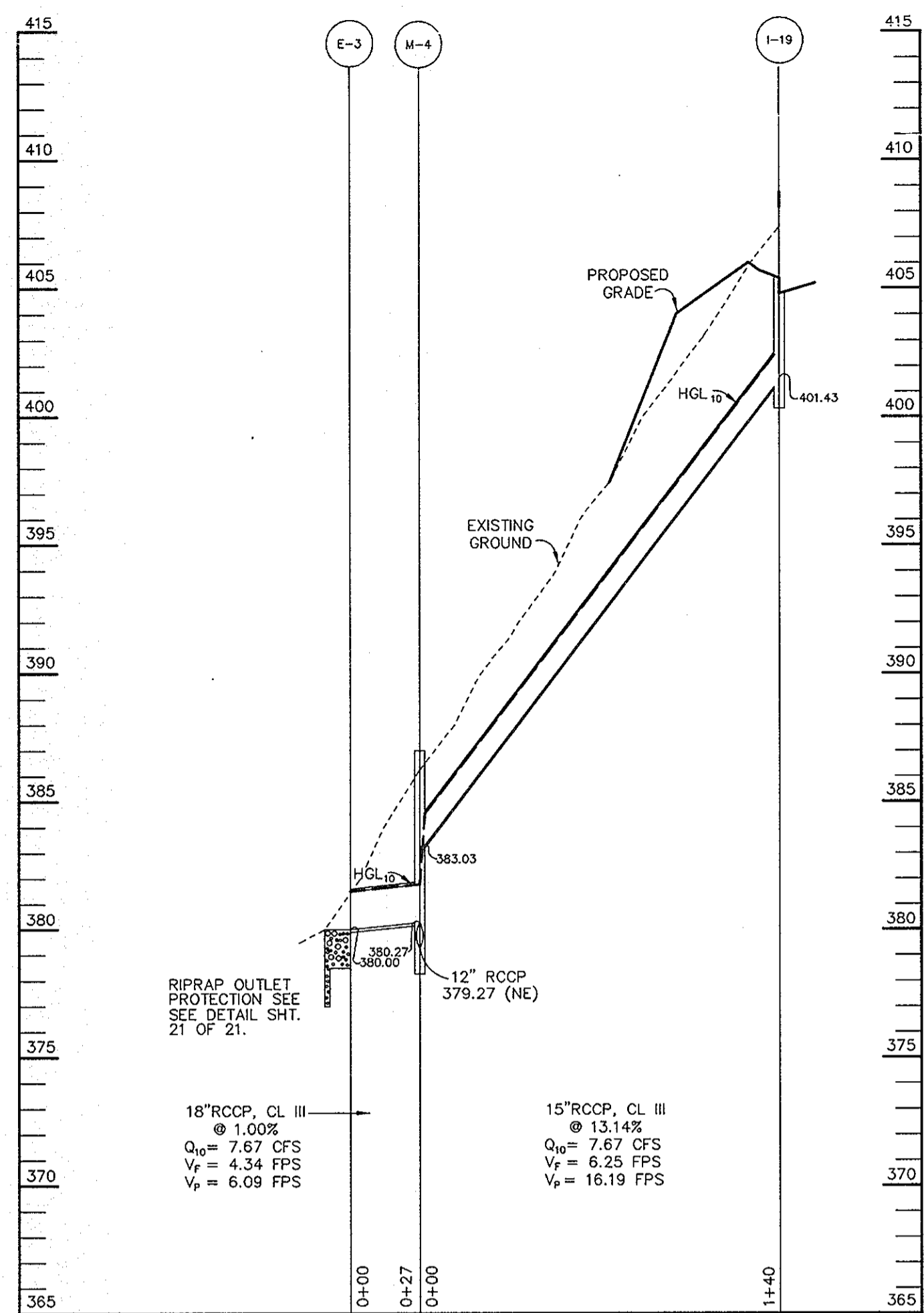
DRAWING NO. 17 OF 22

J. Farkel
 JAYKANT D. PAREKH #19148



1487

F.96.138



AS BUILT CERTIFICATE

DATE: _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blouel 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

John P. ... 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT
 VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN
 PART OF PARCEL 70
 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

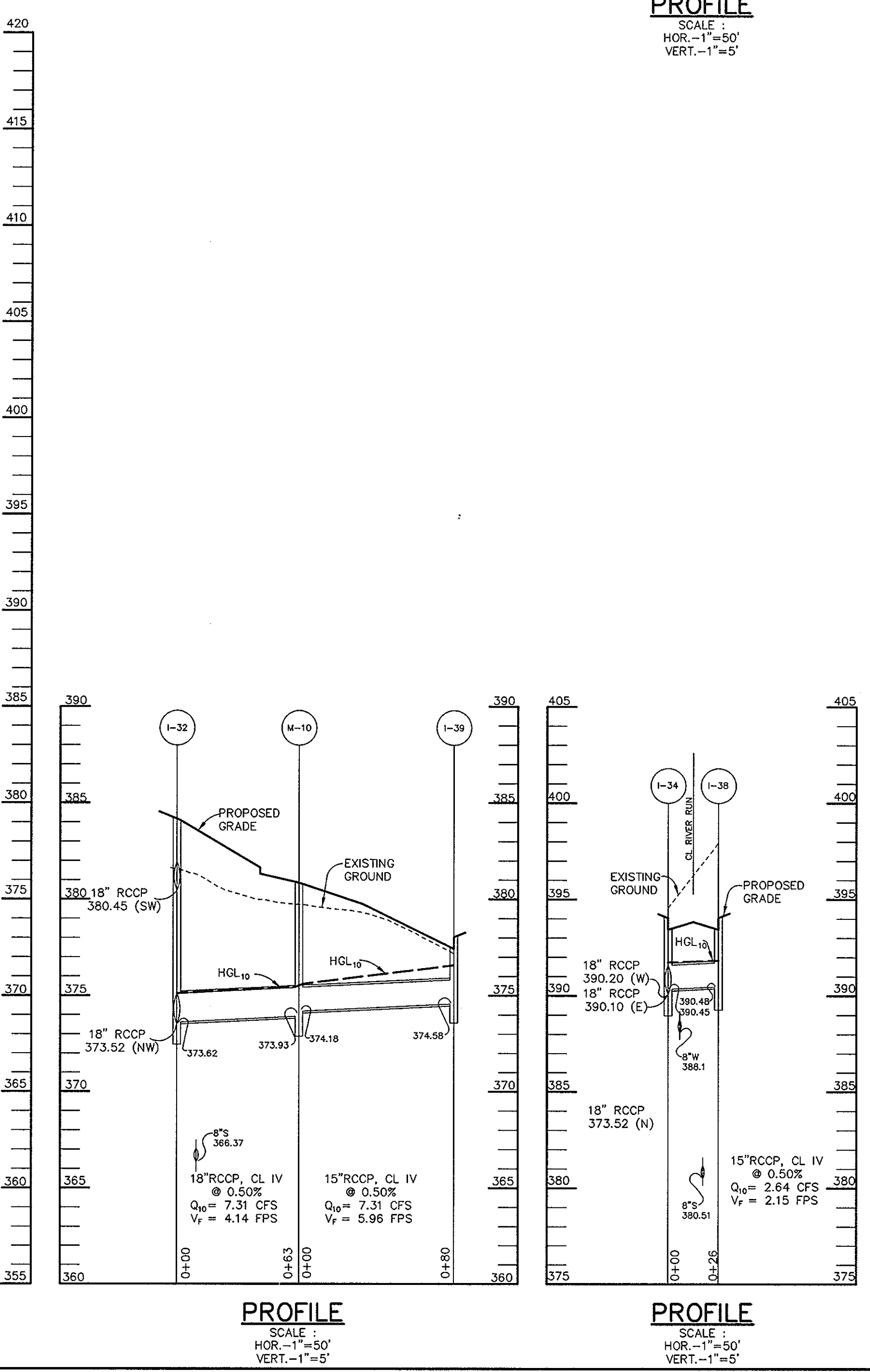
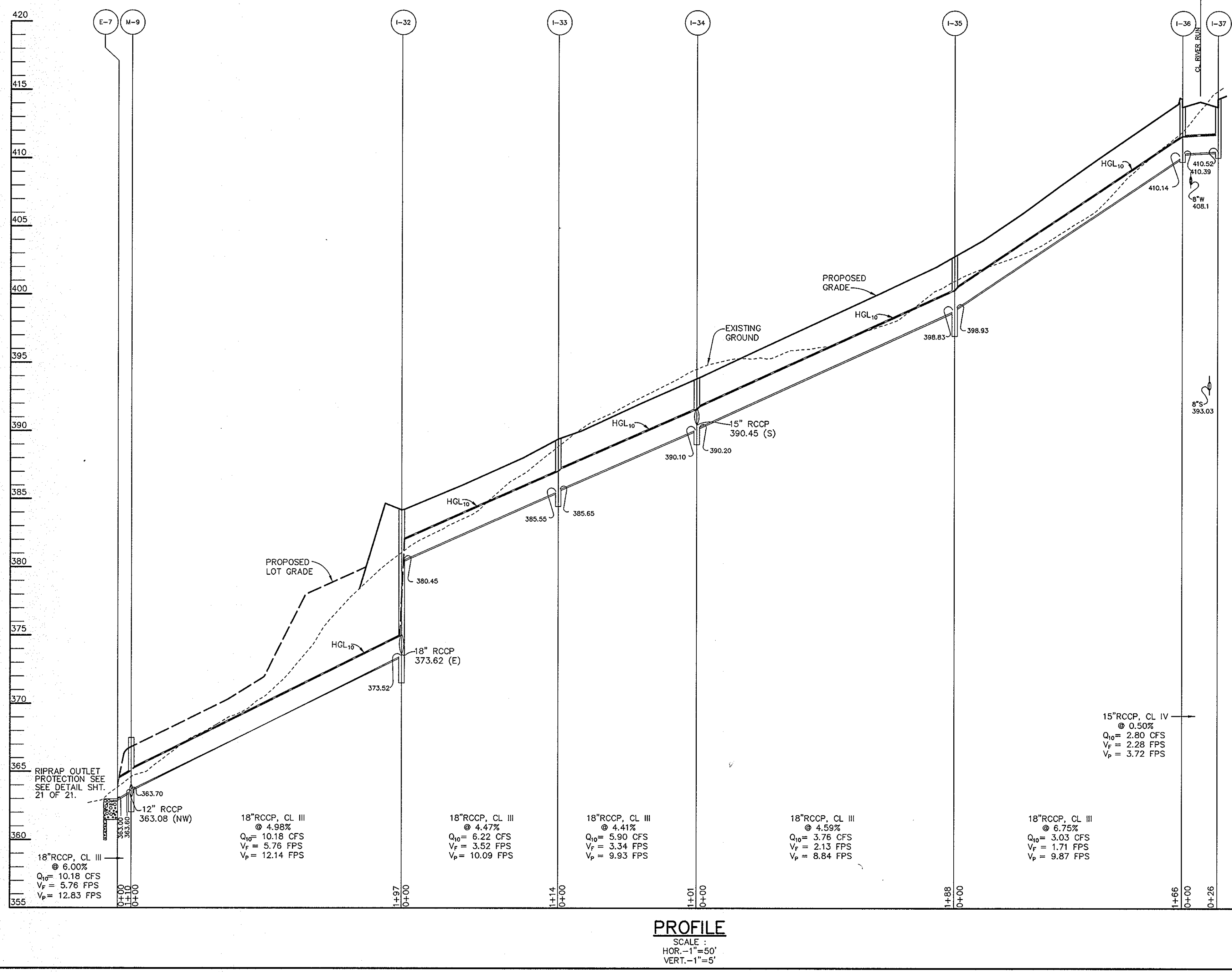
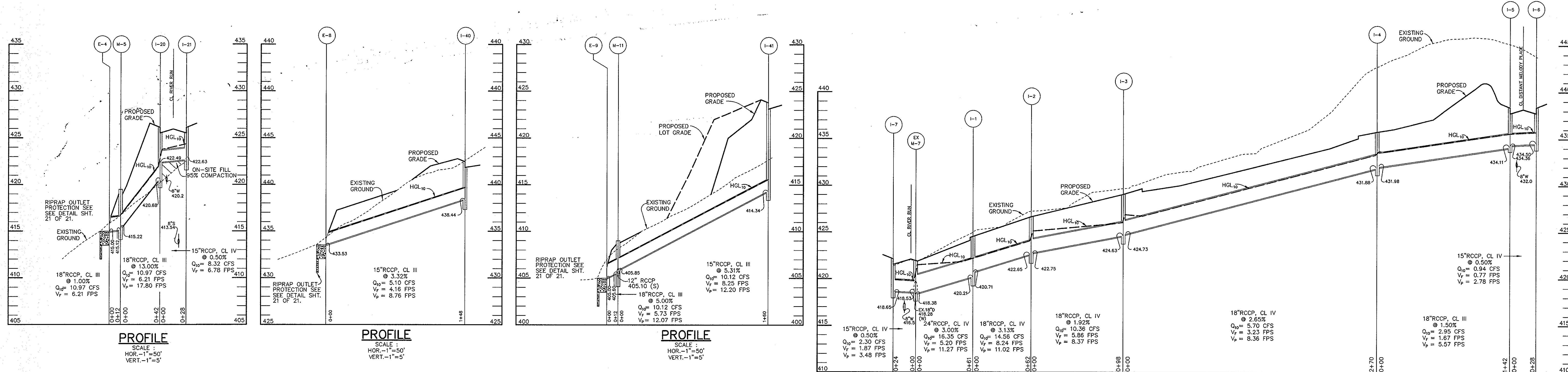
TITLE
 STORM DRAIN PROFILES

RIEMER MUEGGEL & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Centre Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

8/7/96 DATE
 S-91-03 P-95-17

DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: HOCO102800 PH2RD19.DWG
 DATE: AUGUST 7, 1996
 SCALE: AS SHOWN
 JAYKANT D. PAREKH #19148 DRAWING NO. 18 OF 22

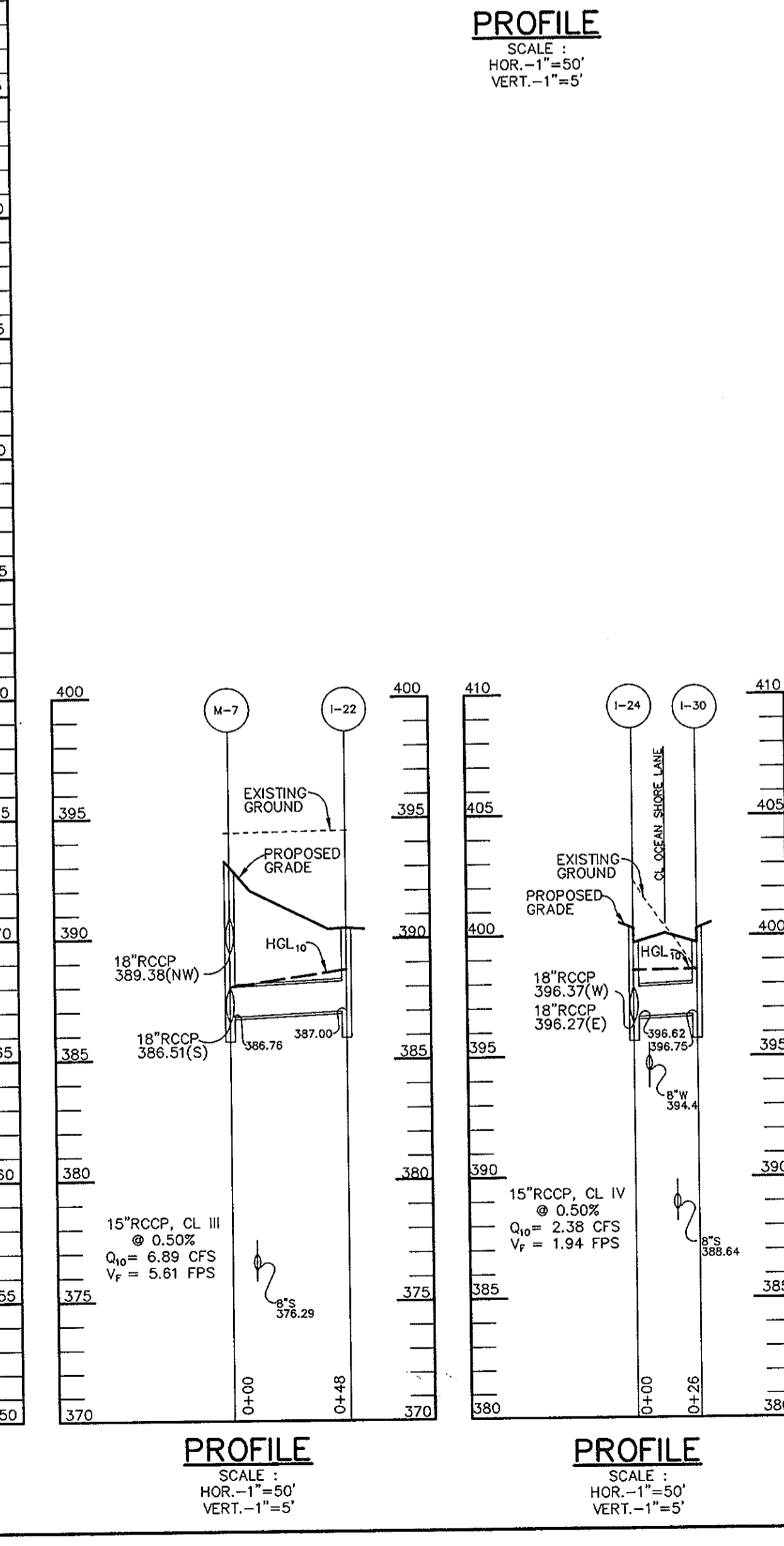
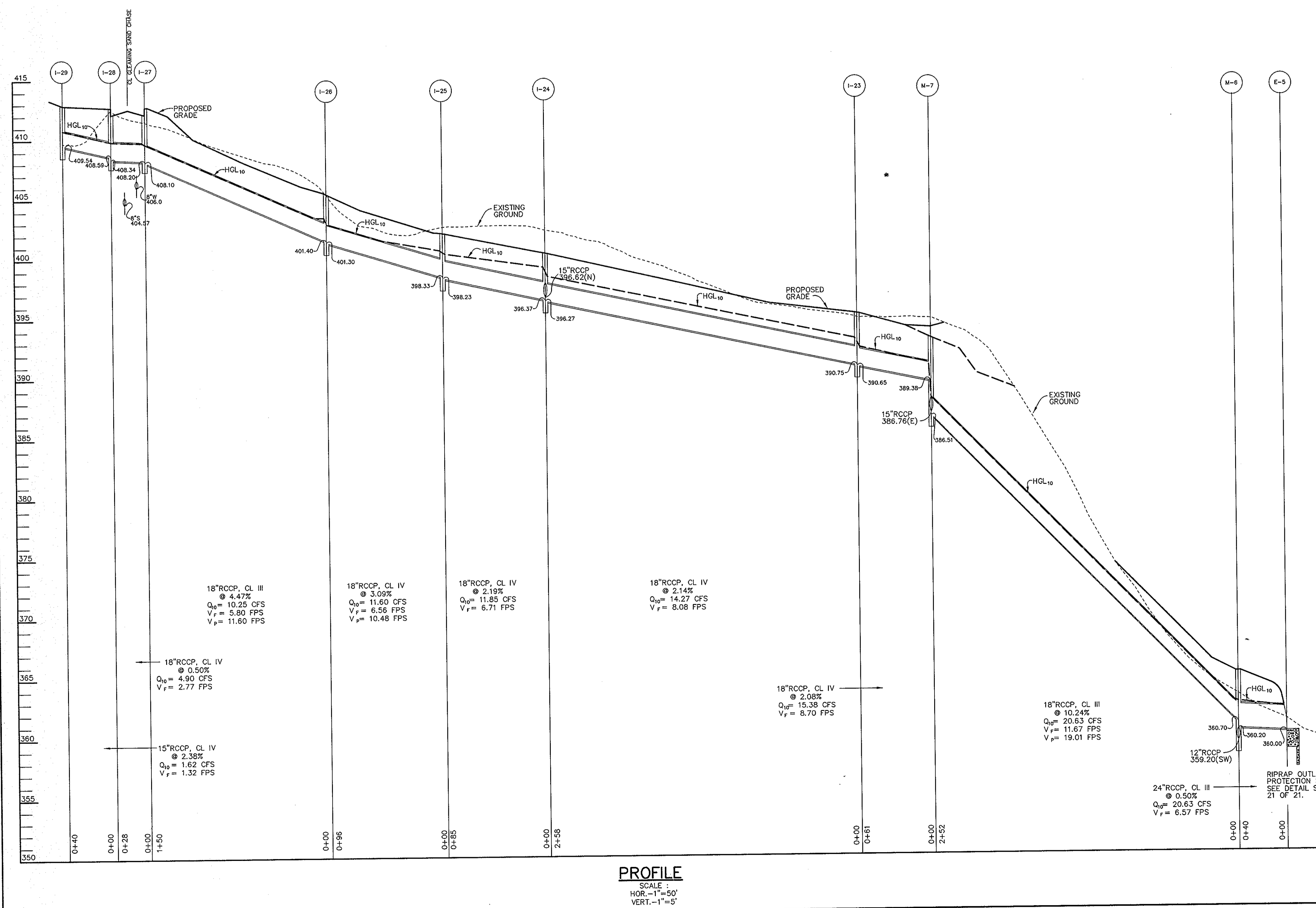
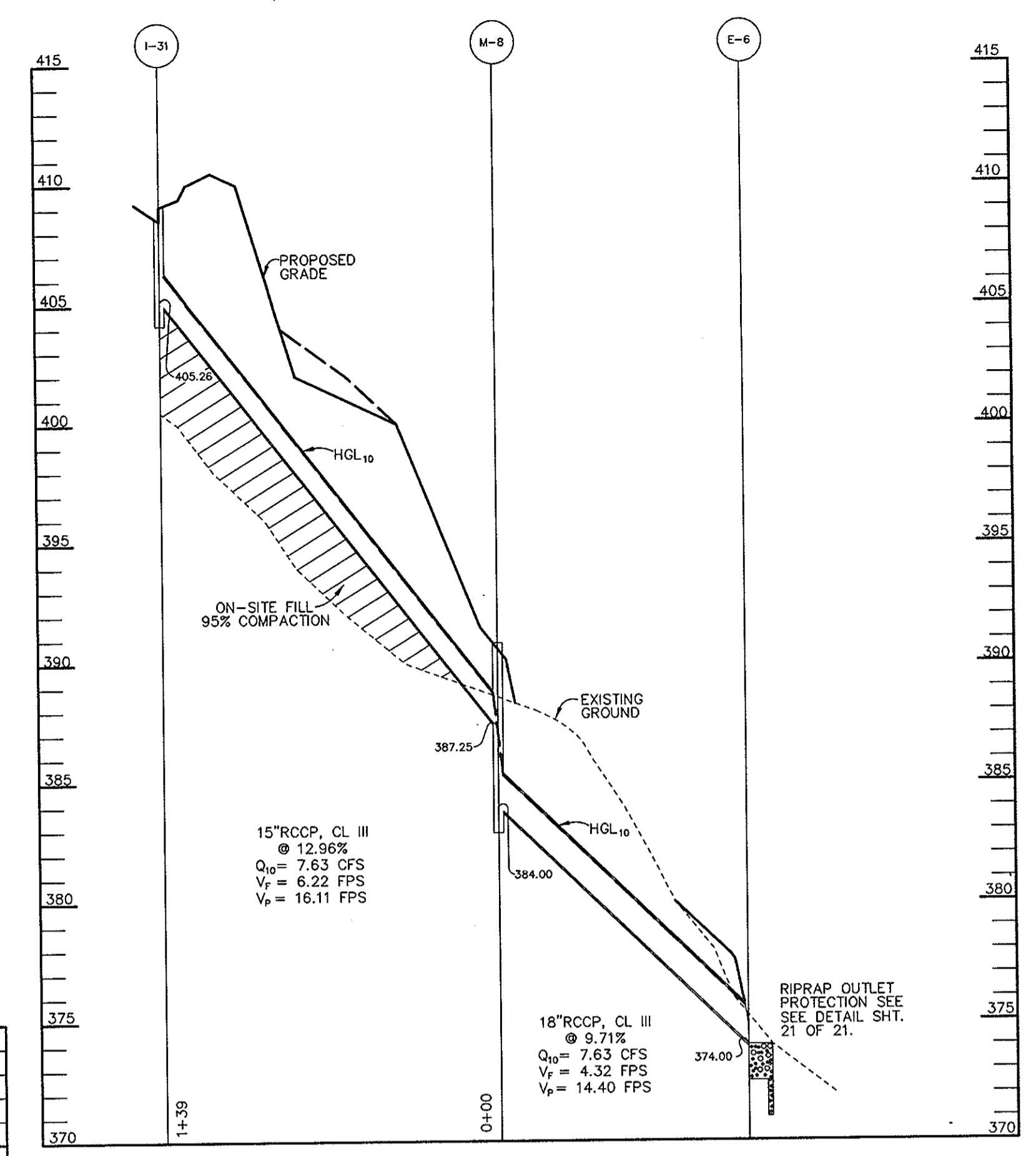
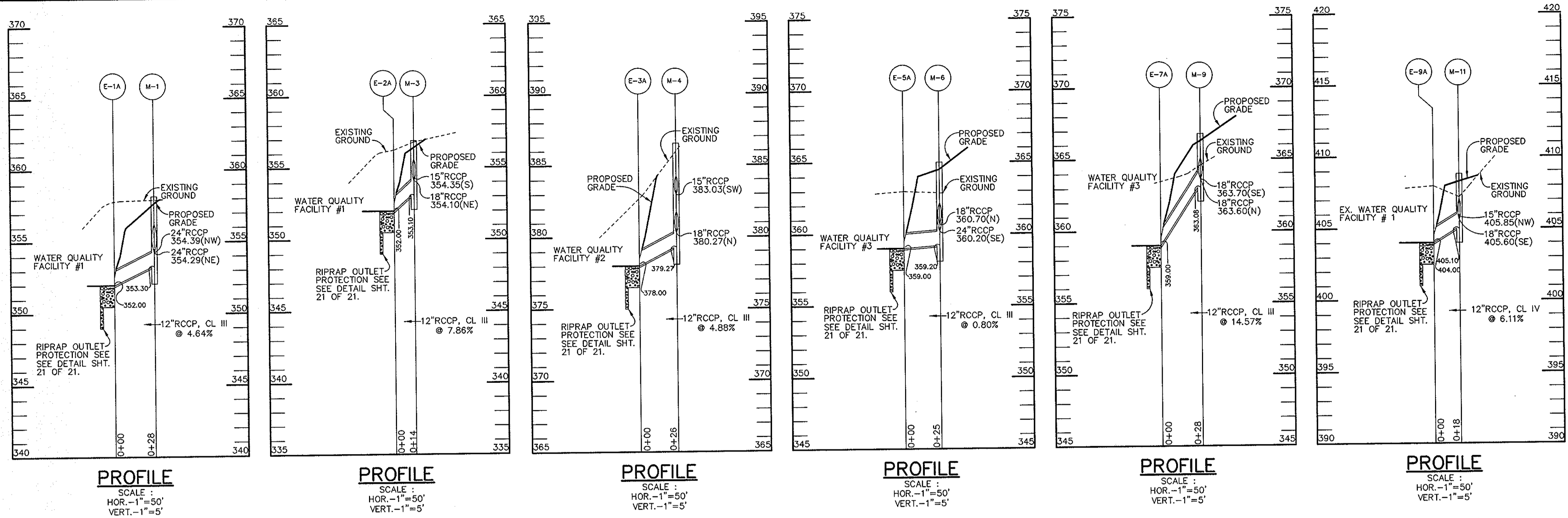
1487



AS BUILT CERTIFICATE	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE
<i>Richard M. Dwyer</i> CHIEF, BUREAU OF HIGHWAYS	9-9-96
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	DATE
<i>Richard Blood</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH	9/13/96
APPROVED: ENGINEERING DIVISION	DATE
<i>Alan D...</i>	9/12/96
DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044	
PROJECT	
VILLAGE OF RIVER HILL SECTION 2 AREA 6 PHASE 2 LOTS 67 THRU 200	
AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
STORM DRAIN PROFILES	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE	5-91-03 P-95-17
8/7/96	
DESIGNED BY: C.J.R.	
DRAWN BY: DAM	
PROJECT NO: HOCO102800 PH2RD20.DWG	
DATE: AUGUST 7, 1996	
SCALE: AS SHOWN	
JAYKANT D. PAREKH #19148	DRAWING NO. 19 OF 22

1487

1487



AS BUILT CERTIFICATE

DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Danesh 9-9-96
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blood 9/13/96
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

John Danesh 9/12/96
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 THE ROUSE BUILDING
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

PROJECT
 VILLAGE OF RIVER HILL
 SECTION 2 AREA 6 PHASE 2
 LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
 STORM DRAIN PROFILES

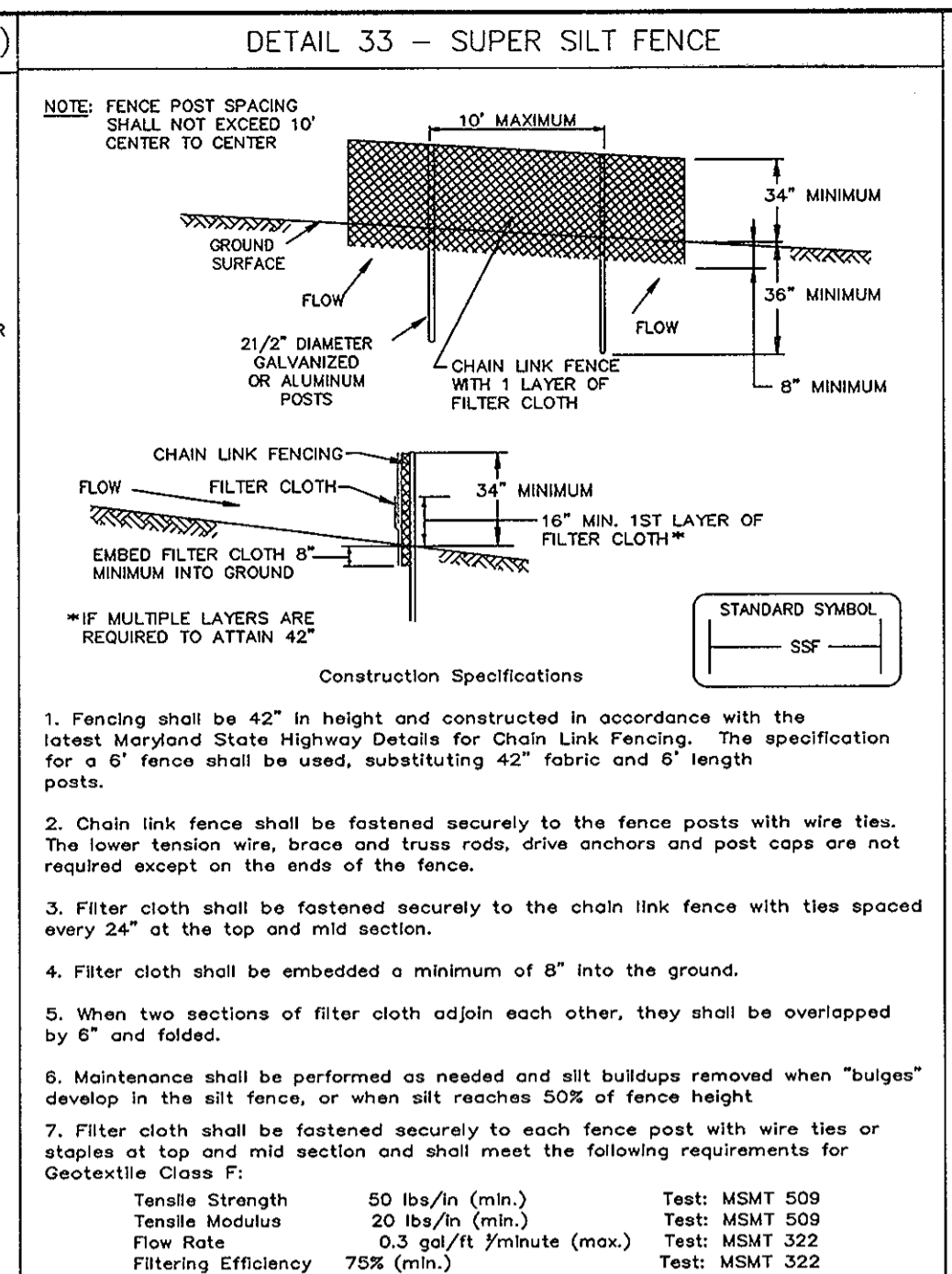
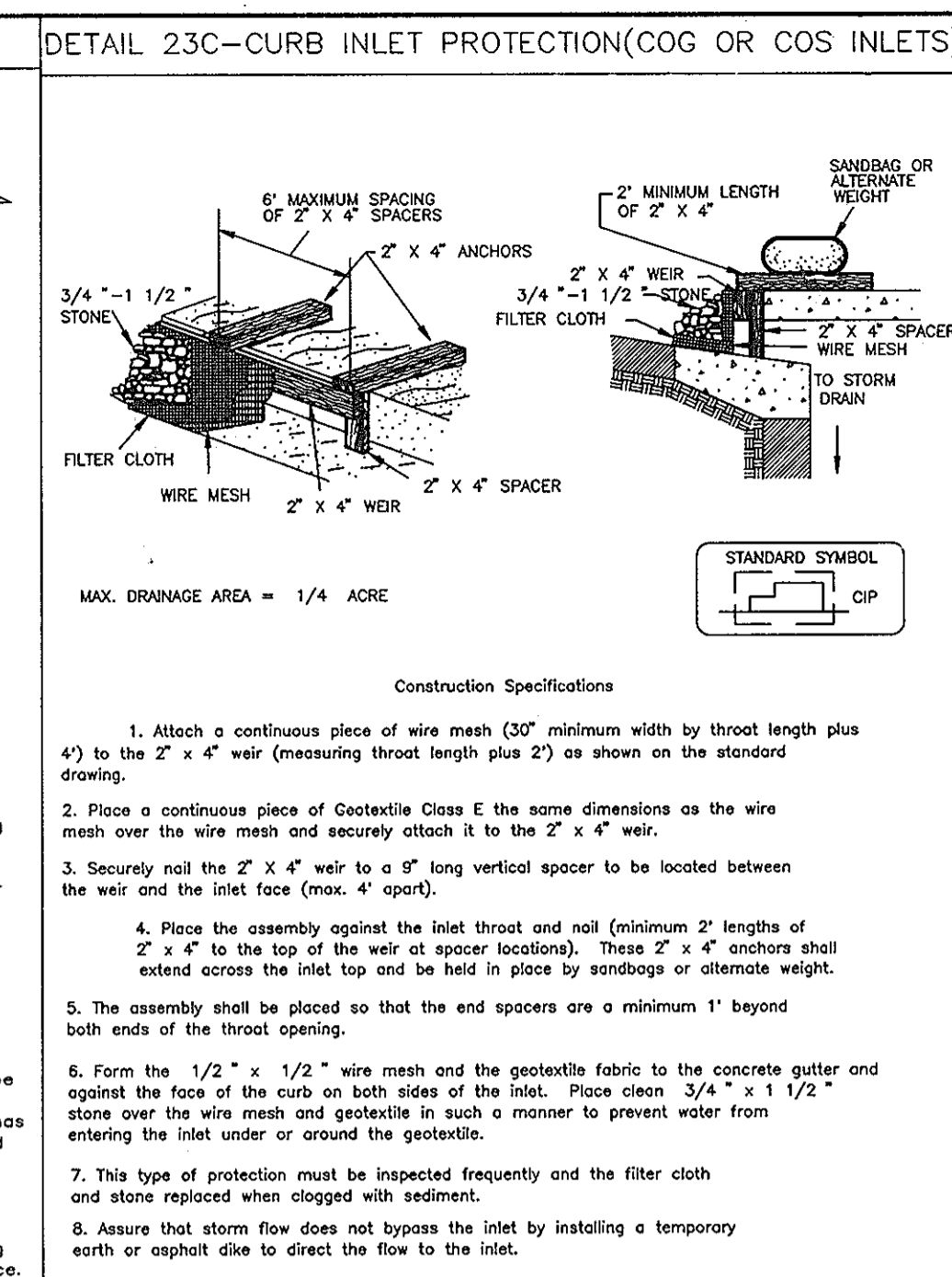
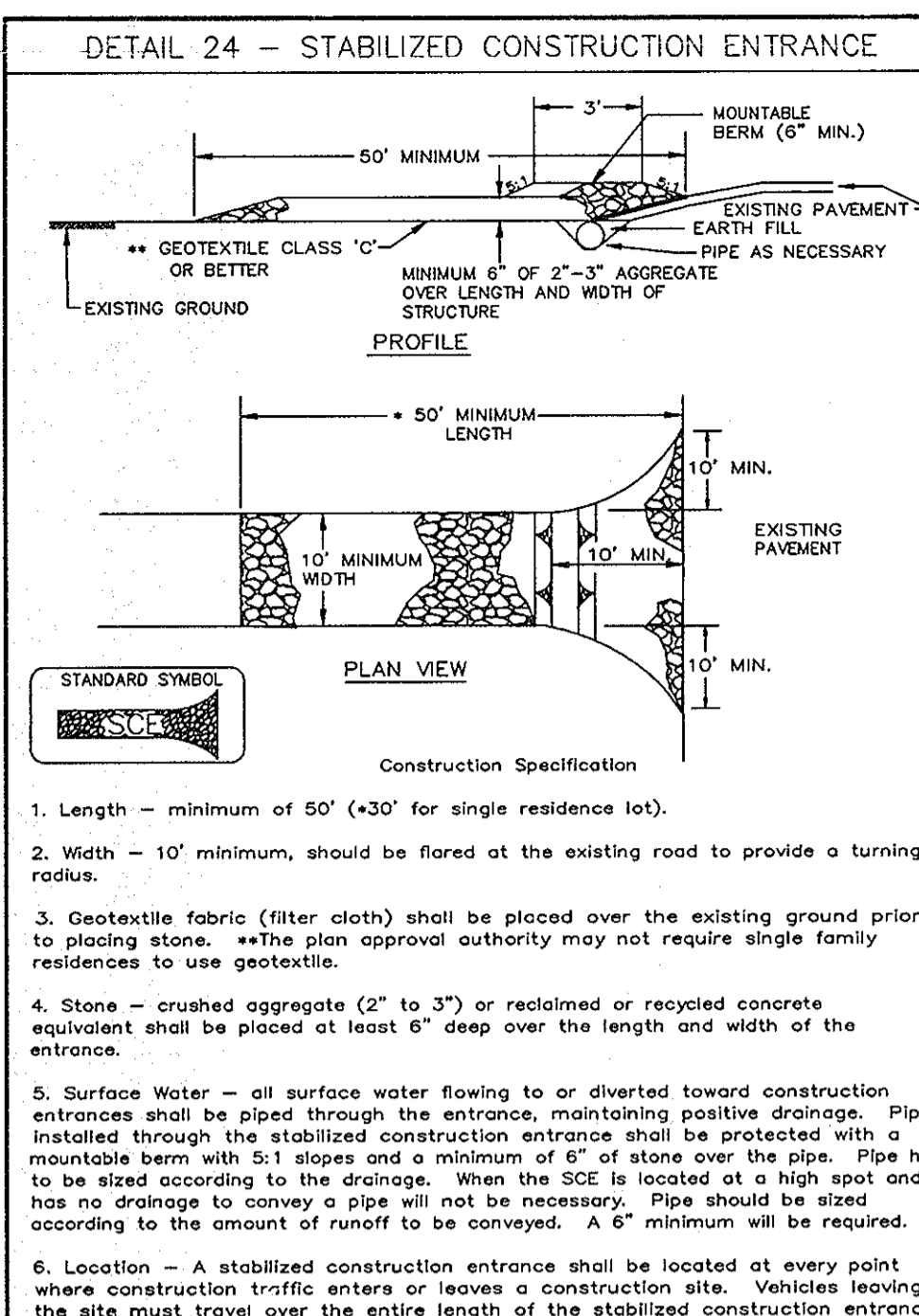
RIEMER MUEGGE & ASSOCIATES, INC.
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
 8818 Cent Park Drive, Columbia, Maryland 21045
 tel 410.997.8900 fax 410.997.9282

8/7/96 DATE

DESIGNED BY: C.J.R.
 DRAWN BY: DAM
 PROJECT NO: HOCO\102800 PH2RD21.DWG
 DATE: AUGUST 7, 1996
 SCALE: AS SHOWN
 DRAWING NO. 20 OF 22

JAYKANT D. PAREKH #19148

F.96-138



SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MAINTENANCE STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 37 CALENDAR DAYS FOR ALL PERMITS. SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES AND ALL SLOPES SHALL BE STABILIZED WITHIN 14 DAYS AS TO OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL (SECTION 50) AND MULCHING (SECTION 52). TEMPORARY STABILIZATION WITH MULCH 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	70.73 ACRES
AREA DISTURBED	36.3 ACRES
AREA TO BE ROOFED OR PAVED	4.9 ACRES
AREA TO BE VEGETATIVELY STABILIZED	31.8 ACRES
TOTAL FILL	128,400 CU.YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE GRADING WILL BE ONLY AFTER ALL PERMITS REACHED CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT SO QUANTITIES. THESE QUANTITIES DO NOT REPRESENT BETWEEN TOSPA, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATIONS FOR UNDER 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 CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	REV. IN	REV. OUT	TOP ELEV.	REMARKS
1-1	A-10	18.52' RT OF CL STA 7+18	420.71	420.21	424.81	HO. CO. STD. DETAIL SD-4-41
1-2	A-10	18.52' RT OF CL STA 7+77	422.75	422.65	426.66	HO. CO. STD. DETAIL SD-4-41
1-3	A-10	18.52' RT OF CL STA 8+73	424.73	424.63	429.06	HO. CO. STD. DETAIL SD-4-41
1-4	A-10	18.52' RT OF CL STA 11+41	431.98	431.88	435.76	HO. CO. STD. DETAIL SD-4-41
1-5	A-10	13.52' RT OF CL STA 0+51	434.36	434.11	438.42	HO. CO. STD. DETAIL SD-4-41
1-6	A-5	13.52' LT OF CL STA 0+51	-	434.50	438.42	HO. CO. STD. DETAIL SD-4-40
1-7	A-10	18.52' LT OF CL STA 6+58	-	418.65	422.13	HO. CO. STD. DETAIL SD-4-41
1-8	A-10	LP STA 1+15.44	-	357.25	360.79	HO. CO. STD. DETAIL SD-4-41
1-9	A-5	12.52' RT OF CL STA 11+98	363.37	363.27	367.17	HO. CO. STD. DETAIL SD-4-40
1-10	A-5	12.52' RT OF CL STA 10+12	374.05 (15")	373.72	378.04	HO. CO. STD. DETAIL SD-4-40
1-11	A-5	12.52' RT OF CL STA 8+75	377.13	377.03	381.55	HO. CO. STD. DETAIL SD-4-40
1-12	A-10	13.52' RT OF CL STA 7+35	381.87 (15")	377.80 (18")	386.02	HO. CO. STD. DETAIL SD-4-41
1-13	A-10	13.52' RT OF CL STA 4+01	408.42	408.32	413.16	HO. CO. STD. DETAIL SD-4-41
1-14	A-10	13.52' RT OF CL STA 3+19	416.47	416.22	420.86	HO. CO. STD. DETAIL SD-4-41
1-15	A-10	13.52' LT OF CL STA 3+19	-	416.75	420.86	HO. CO. STD. DETAIL SD-4-41
1-16	A-10	12.52' LT OF CL STA 10+12	-	374.20	378.04	HO. CO. STD. DETAIL SD-4-41
1-17	A-10	13.52' LT OF CL STA 7+35	-	382.11	386.02	HO. CO. STD. DETAIL SD-4-41
1-18	A-5	LP STA 1+17.50	-	367.00	370.90	HO. CO. STD. DETAIL SD-4-40
1-19	A-5	FOLDED LEAF SQUARE LP STA 1+82.05	-	401.43	405.38	HO. CO. STD. DETAIL SD-4-40
1-20	A-5	13.52' LT OF CL STA 17+06.91	422.49	420.68	426.08	HO. CO. STD. DETAIL SD-4-40
1-21	A-5	13.52' RT OF CL STA 17+06.91	-	422.63	426.08	HO. CO. STD. DETAIL SD-4-40
1-22	A-5	LP STA 2+36.40	-	387.00	390.44	HO. CO. STD. DETAIL SD-4-41
1-23	A-10	OCEAN SHORE LANE	390.75	390.65	395.16	HO. CO. STD. DETAIL SD-4-41
1-24	A-5	12.52' RT OF CL STA 5+86	396.62 (15")	396.27	400.30	HO. CO. STD. DETAIL SD-4-40
1-25	A-5	OCEAN SHORE LANE	396.37 (18")	398.33	402.00	HO. CO. STD. DETAIL SD-4-40
1-26	A-10	OCEAN SHORE LANE	401.40	401.30	405.32	HO. CO. STD. DETAIL SD-4-41
1-27	A-10	13.52' RT OF CL STA 4+42	408.20	408.10	412.80	HO. CO. STD. DETAIL SD-4-41
1-28	A-10	13.52' LT OF CL STA 4+42	408.59	408.34	412.80	HO. CO. STD. DETAIL SD-4-41
1-29	A-10	GLEAMING SAND CHASE	-	409.54	413.00	HO. CO. STD. DETAIL SD-4-41
1-30	A-10	12.52' LT OF CL STA 3+29	396.75	396.75	400.30	HO. CO. STD. DETAIL SD-4-41
1-31	A-10	OCEAN SHORE LANE LP STA 2+32.65	-	405.26	409.11	HO. CO. STD. DETAIL SD-4-41
1-32	A-5	12.52' LT OF CL STA 29+16	380.45 (18")	373.62 (18")	384.18	HO. CO. STD. DETAIL SD-4-40
1-33	A-5	12.52' LT OF CL STA 28+00	385.65	385.55	389.40	HO. CO. STD. DETAIL SD-4-40
1-34	A-5	12.52' LT OF CL STA 26+97	390.45 (15")	390.10 (18")	394.04	HO. CO. STD. DETAIL SD-4-40
1-35	A-5	12.52' LT OF CL STA 25+06	398.93	398.83	402.87	HO. CO. STD. DETAIL SD-4-40
1-36	A-5	12.52' LT OF CL STA 23+37	410.39	410.14	414.37	HO. CO. STD. DETAIL SD-4-40
1-37	A-10	12.52' RT OF CL STA 23+37	-	410.52	414.37	HO. CO. STD. DETAIL SD-4-41
1-38	A-10	12.52' RT OF CL STA 26+97	-	390.48	394.04	HO. CO. STD. DETAIL SD-4-41
1-39	A-10	LP STA 1+26.00	-	374.58	378.03	HO. CO. STD. DETAIL SD-4-41
1-40	A-5	LP STA 1+21.00	-	438.44	442.45	HO. CO. STD. DETAIL SD-4-40
1-41	A-10	DISTANT MELODY PLACE LP STA 2+11.42	-	414.34	423.71	HO. CO. STD. DETAIL SD-4-41
M-1		SEE SHEET 17	354.39	353.30(12")	358.2	HO. CO. STD. DETAIL G-5-11
M-2		SEE SHEET 17	359.30(18")	356.11(24")	363.1	HO. CO. STD. DETAIL G-5-11
M-3		SEE SHEET 17	356.86(15")	353.10(12")	358.0	HO. CO. STD. DETAIL G-5-11
M-4		SEE SHEET 17	383.03	379.27(12")	384.0	HO. CO. STD. DETAIL G-5-11
M-5		SEE SHEET 17	415.22	415.12	419.5	HO. CO. STD. DETAIL G-5-11
M-6		SEE SHEET 17	360.75	359.20(12")	365.0	HO. CO. STD. DETAIL G-5-11
M-7		SEE SHEET 17	389.38(18")	386.76(15")	392.5	HO. CO. STD. DETAIL G-5-11
M-8		SEE SHEET 17	387.25	384.00	390.0	HO. CO. STD. DETAIL G-5-11
M-9		SEE SHEET 17	365.20	364.10(12")	368.8	HO. CO. STD. DETAIL G-5-11
M-10		SEE SHEET 17	374.18	373.93	380.9	HO. CO. STD. DETAIL G-5-11
M-11		SEE SHEET 15	405.85	405.10 (12")	408.8	HO. CO. STD. DETAIL G-5-11
E-1		SEE SHEET 17	354.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-1A		SEE SHEET 17	352.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-2		SEE SHEET 17	354.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-2A		SEE SHEET 17	352.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-3		SEE SHEET 17	380.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-3A		SEE SHEET 17	378.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-4		SEE SHEET 17	415.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-5		SEE SHEET 17	360.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-5A		SEE SHEET 17	359.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-6		SEE SHEET 17	374.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-7		SEE SHEET 17	363.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-7A		SEE SHEET 16	359.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-8		SEE SHEET 15	433.53	-	-	HO. CO. STD. DETAIL SD-5-51
E-9		SEE SHEET 15	405.00	-	-	HO. CO. STD. DETAIL SD-5-51
E-9A		SEE SHEET 15	404.00	-	-	HO. CO. STD. DETAIL SD-5-51

NOTE: ALL EXISTING SEDIMENT CONTROLS CONSTRUCTED UNDER GP-07-24 WILL BE USED UNDER THIS FINAL PLAN.

BY THE DEVELOPER:

DATE: 8/7/96

BY THE ENGINEER:

DATE: 8/7/96

ENGINEER: J. J. Farrell

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

DATE: 8/27/96

AS BUILT CERTIFICATE

DATE: 8/27/96

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

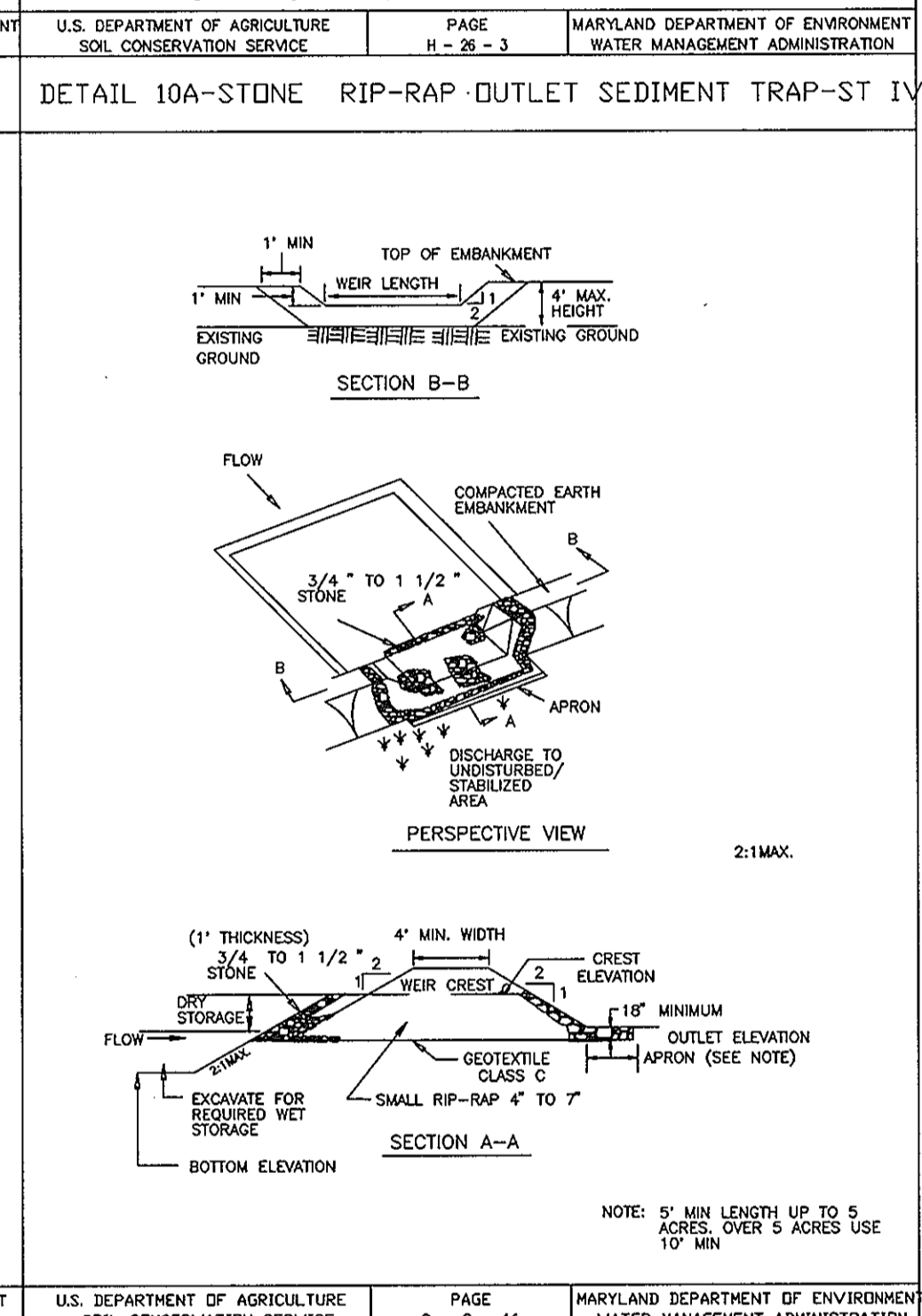
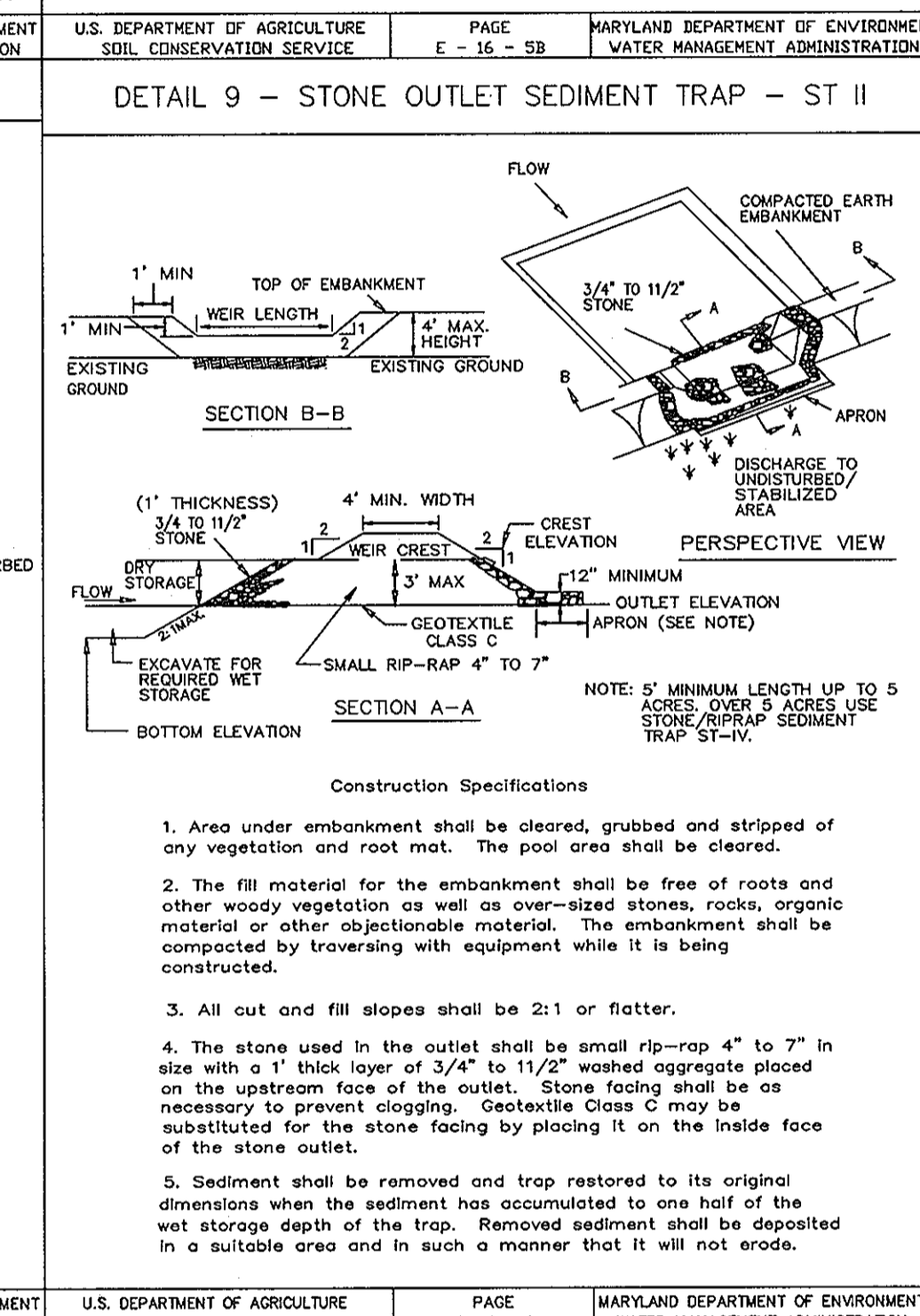
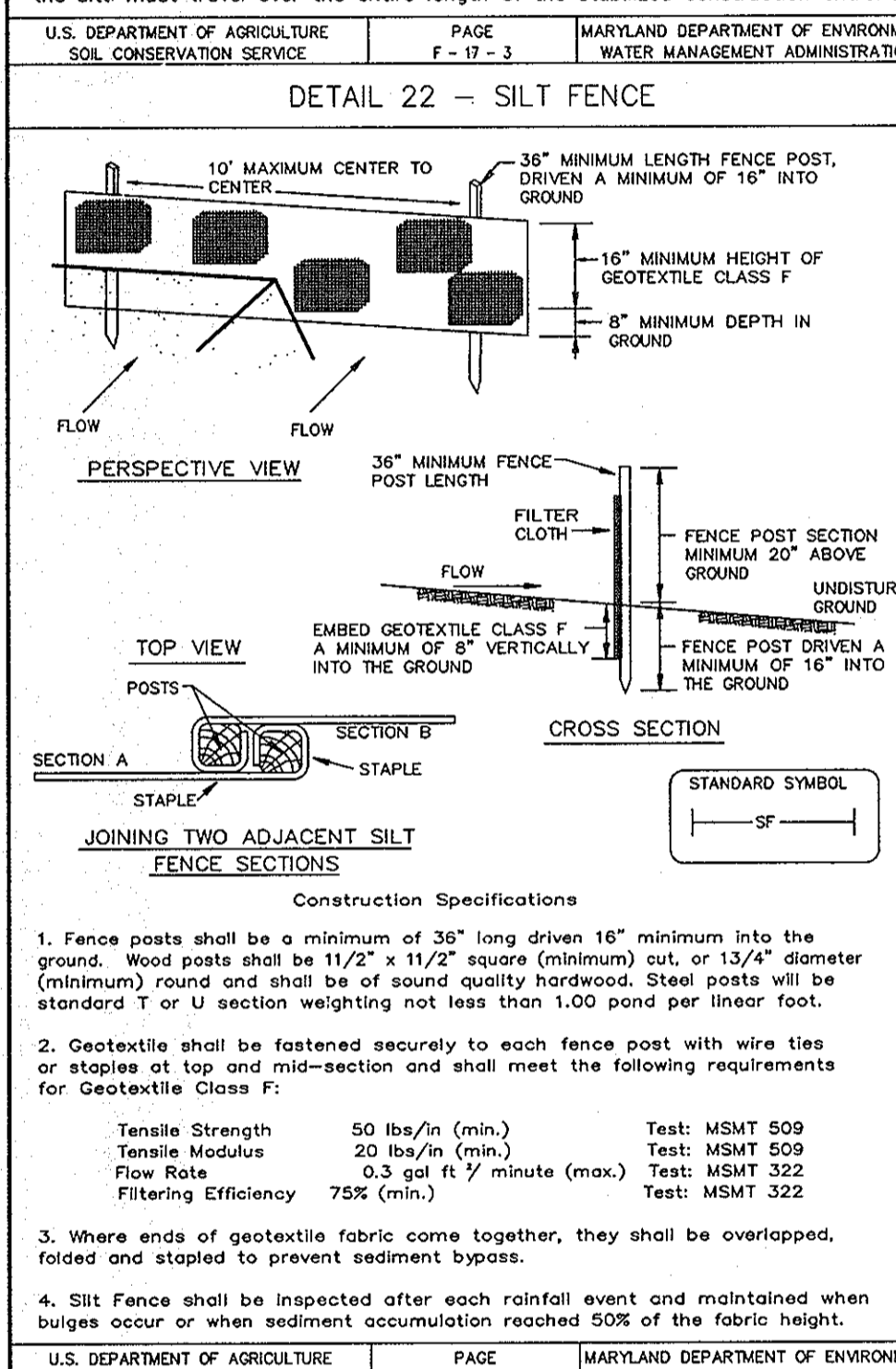
DATE: 9-9-96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 9/13/96

DATE: 9/12/96

DATE: 9/12/96



PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

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

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (4 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (4 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following options:

- 1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- 2) Use sod.
- 3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

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

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (4 lbs. per 1000 sq.ft.).

Seeding: For periods March 1 thru April 30 and from August 1 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (8.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (10.0 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

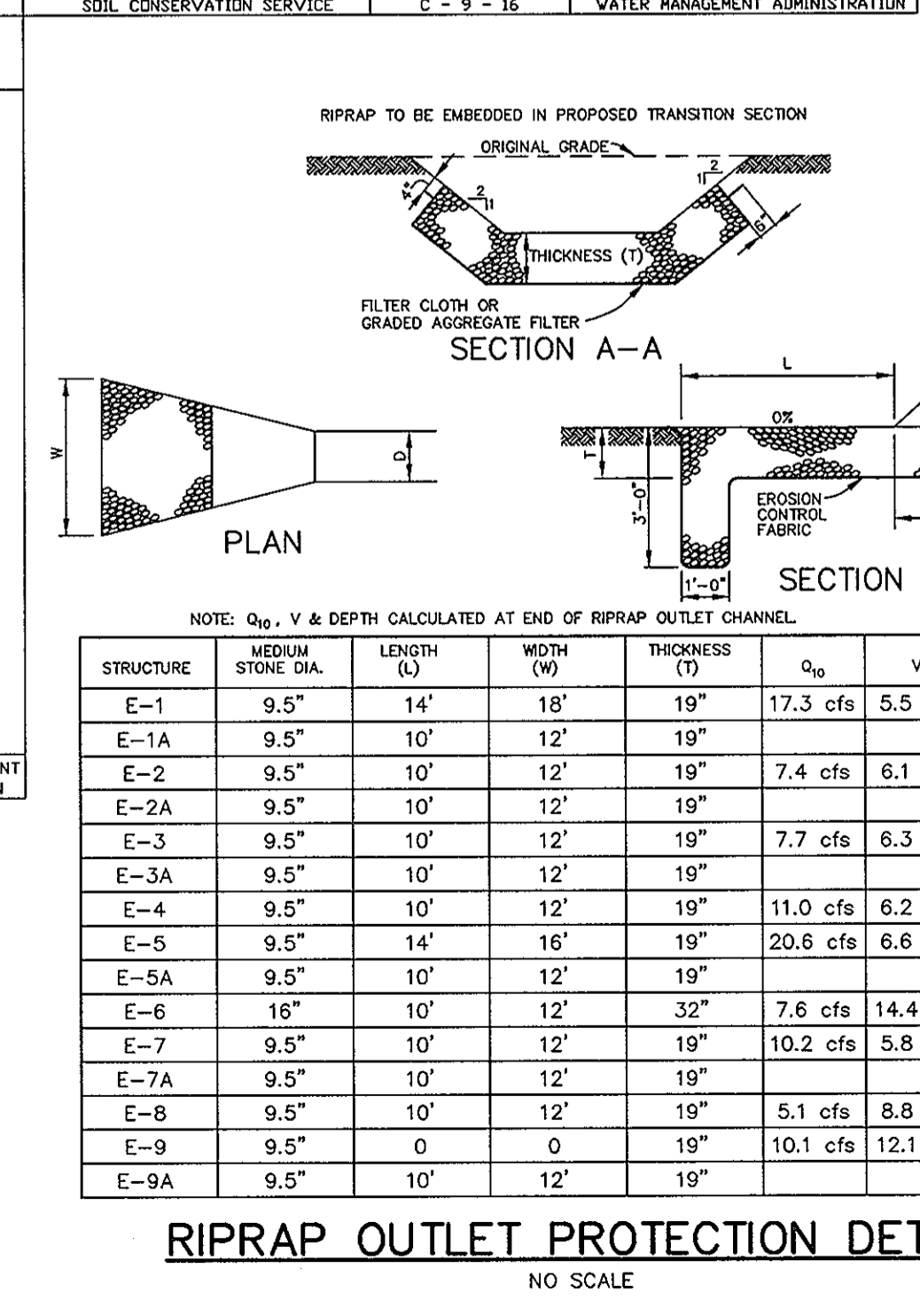
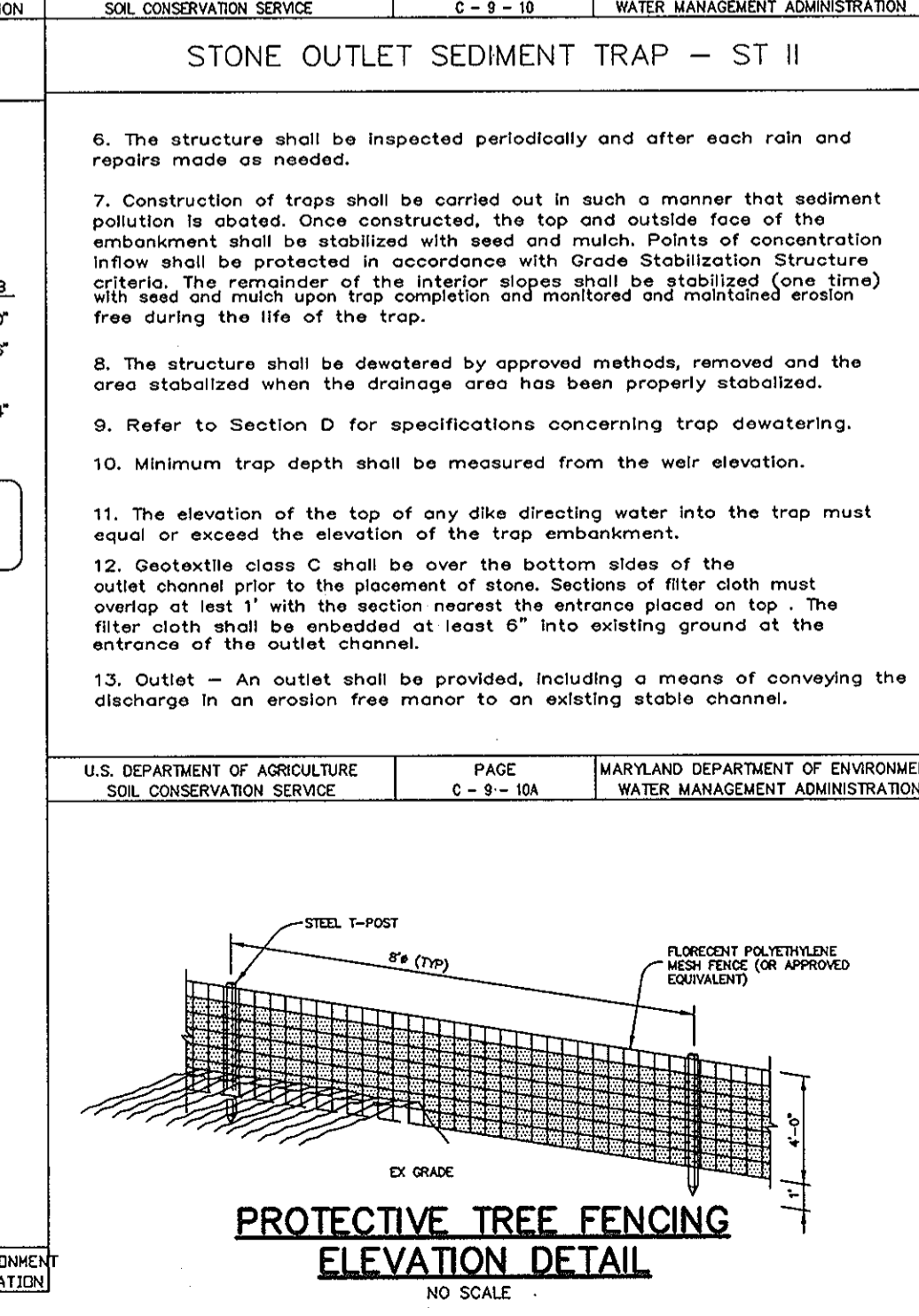
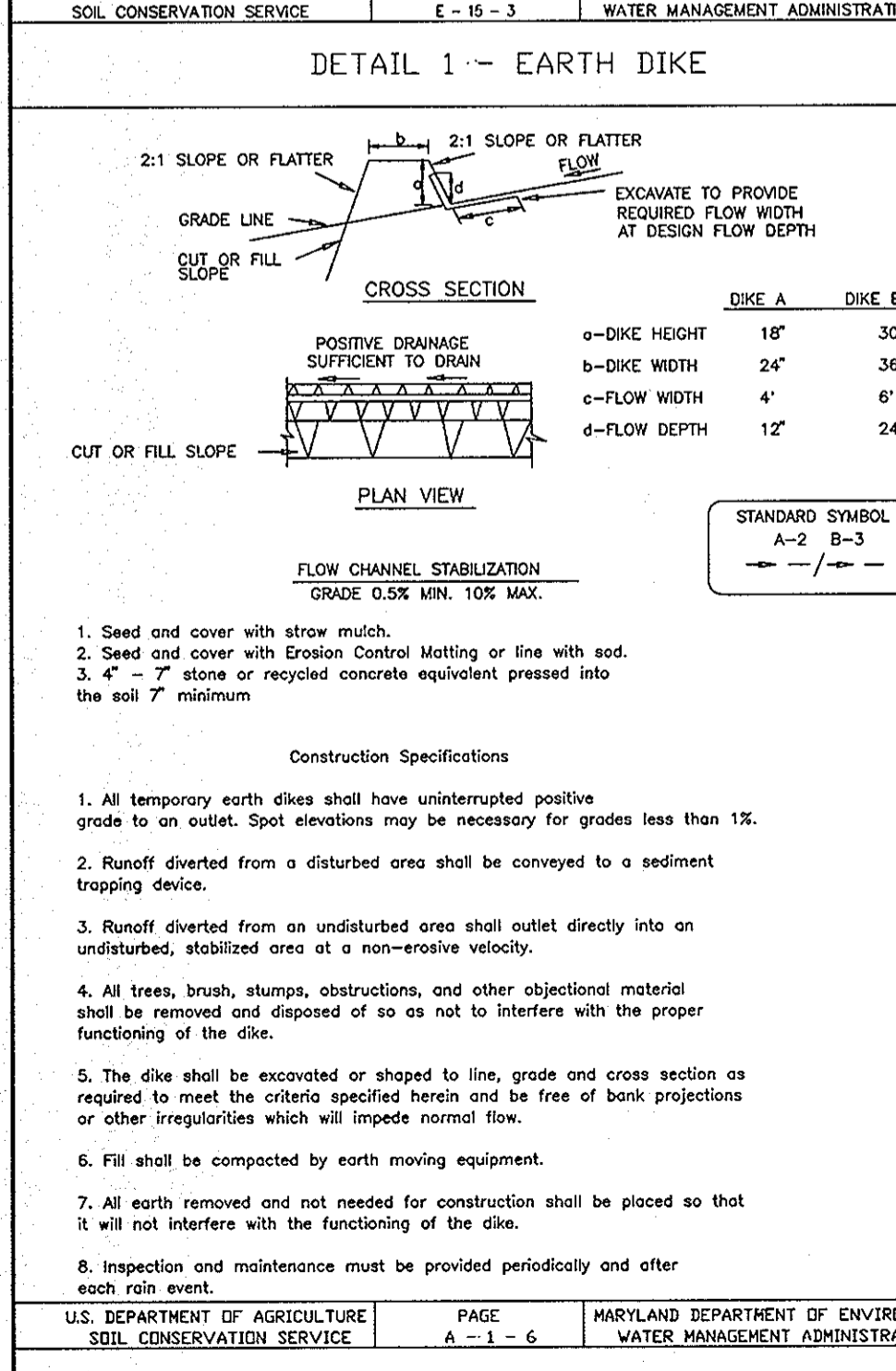
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DATE: 9/12/96

DATE: 9/12/96

DATE: 9/12/96



PROTECTIVE TREE FENCING ELEVATION DETAIL

STRUCTURE	STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)	Q ₆₀	V	DEPTH
E-1	9.5"	14'	18"	19"	17.3 cfs	5.5 fps	1.1'
E-1A	9.5"	10'	12'	19"	-	-	-
E-2	9.5"	10'	12'	19"	7.4 cfs	6.1 fps	0.7'
E-2A	9.5"	10'	12'	19"	-	-	-
E-3	9.5"	10'	12'	19"	7.7 cfs	6.3 fps	0.7'
E-3A	9.5"	10'	12'	19"	-	-	-
E-4	9.5"	10'	12'	19"	11.0 cfs	6.2 fps	0.9'
E-5	9.5"	14'	16'	19"	20.6 cfs	6.6 fps	1.2'
E-5A	9.5"	10'	12'	19"	-	-	-
E-6	16"	10'	12'	32"	7.6 cfs	14.4 fps	0.7'
E-7	9.5"	10'	12'	19"	10.2 cfs	5.8 fps	0.9'
E-7A	9.5"	10'	12'	19"	-	-	-
E-8	9.5"	10'	12'	19"	5.1 cfs	8.8 fps	0.6'
E-9	9.5"	0	0	19"	10.1 cfs	12.1 fps	0.9'
E-9A	9.5"	10'	12'	19"	-	-	-

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, SILT FENCE, EARTH DIKE, SEDIMENT BASINS AND TREE PROTECTION FENCE. (7 DAYS)
- PERFORM CLEARING AND GRUBBING AS NECESSARY AND START ROUGH GRADING. (20 DAYS)
- AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL STORM DRAINS, WATER AND SEWER UTILITIES, ADD STONE FILTER INLET PROTECTION ON INLETS AS NECESSARY, TEMPORARILY INVERT RUNOFF PIPES TO 1-1/2' TO 1-3/4' TO SEGMENT BASIN.
- INSTALL CURB AND GUTTER AND PAVE ROADWAYS. (20 DAYS)
- STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.
- UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROLS INCLUDING SEDIMENT BASIN, TEMPORARY PIPES, COMPLETE STORM DRAINS (CONSTRUCT STORM DRAINS FROM STA 2+2 TO 1+7 AND 6+7 TO 5+2) AND INSTALL WATER QUALITY FACILITIES. STABILIZE ALL REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES. (5 DAYS)
- INSTALL STREET LIGHTS, STREET TREES AND SIGNS AS REQUIRED. (5 DAYS)

DATE: 8/7/96

DESIGNED BY: C.J.R.

DRAWN BY: DAM

PROJECT NO: HOCO 102800 PH2RD22.DWG

DATE: AUGUST 7, 1996

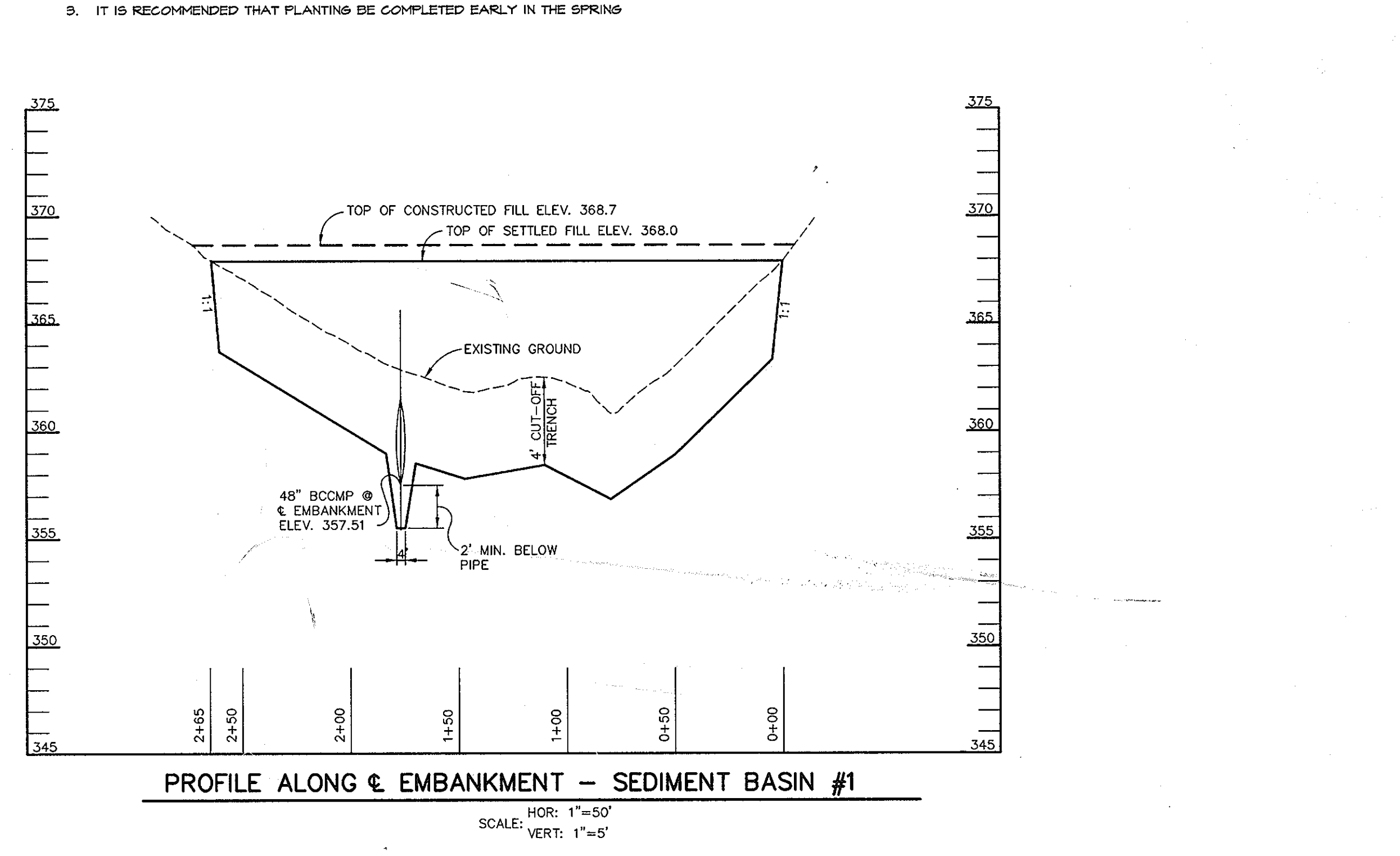
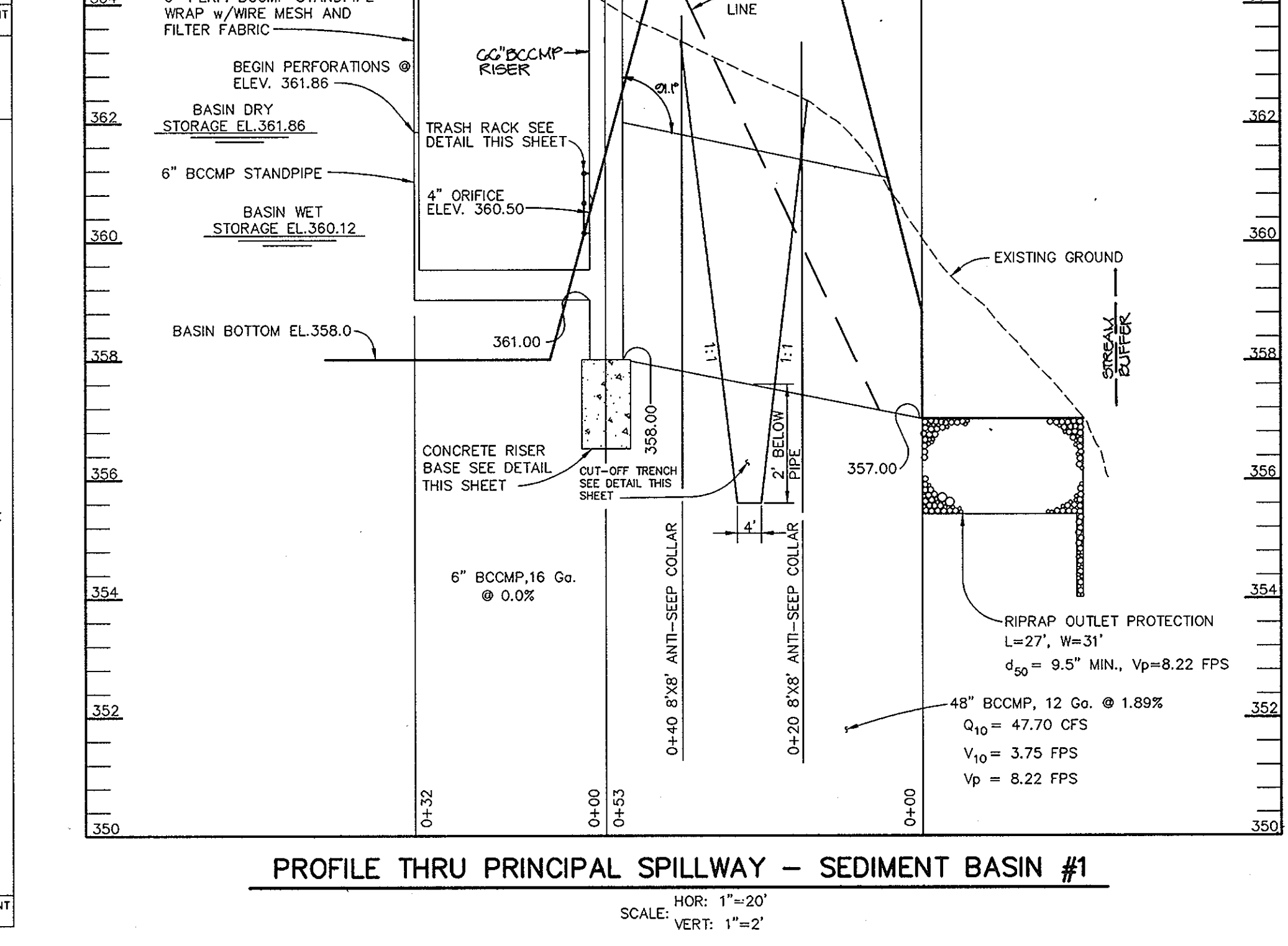
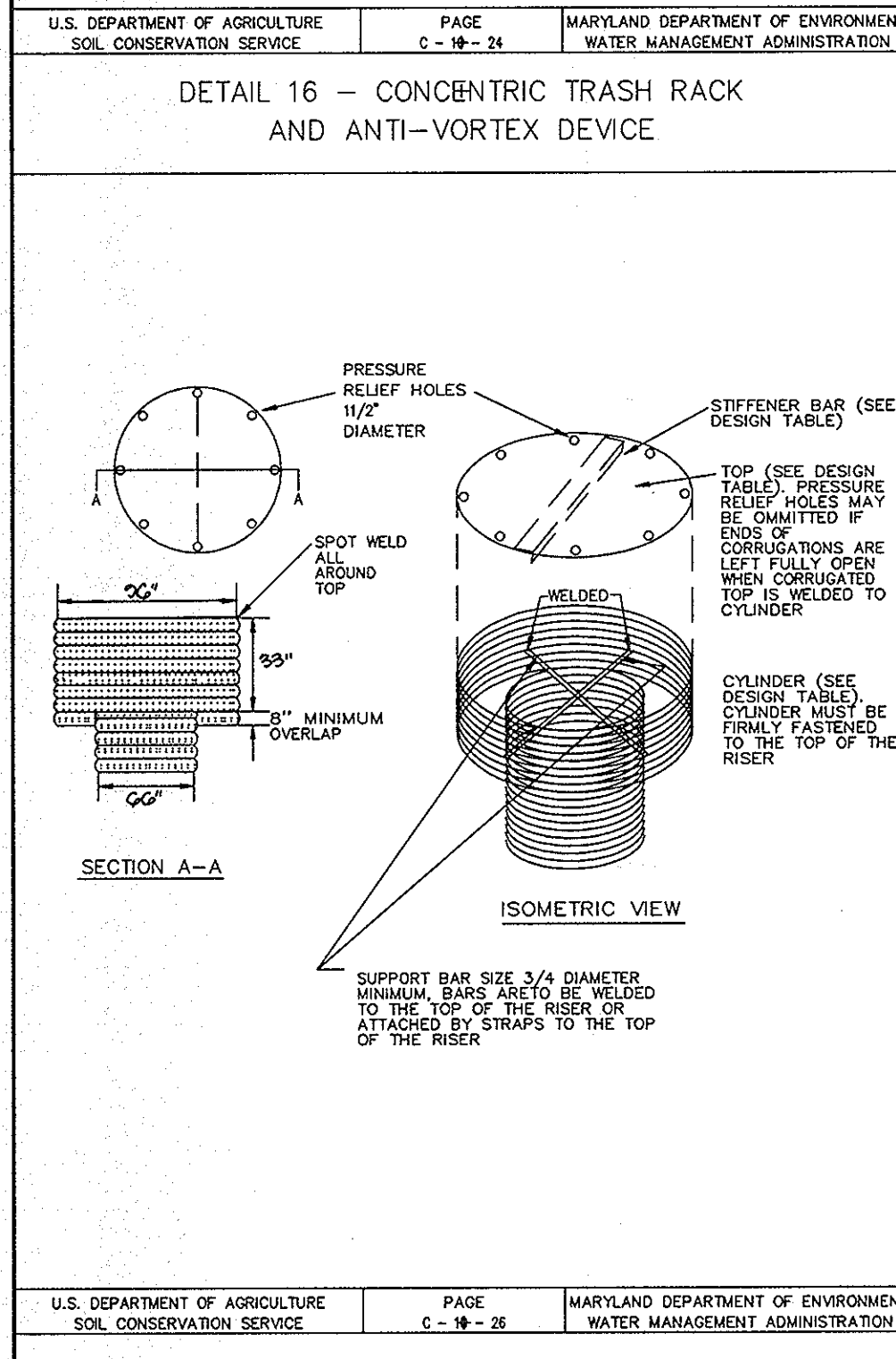
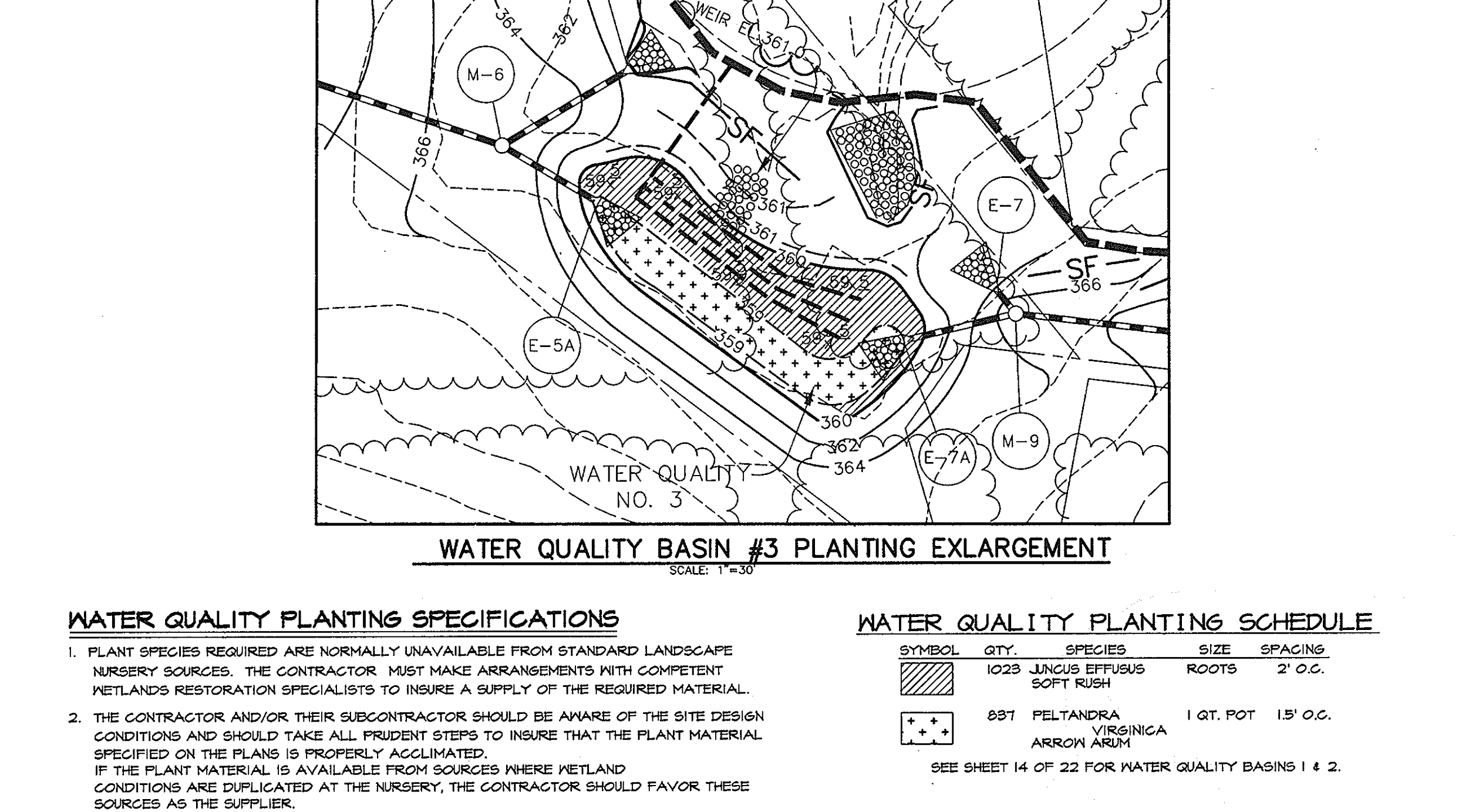
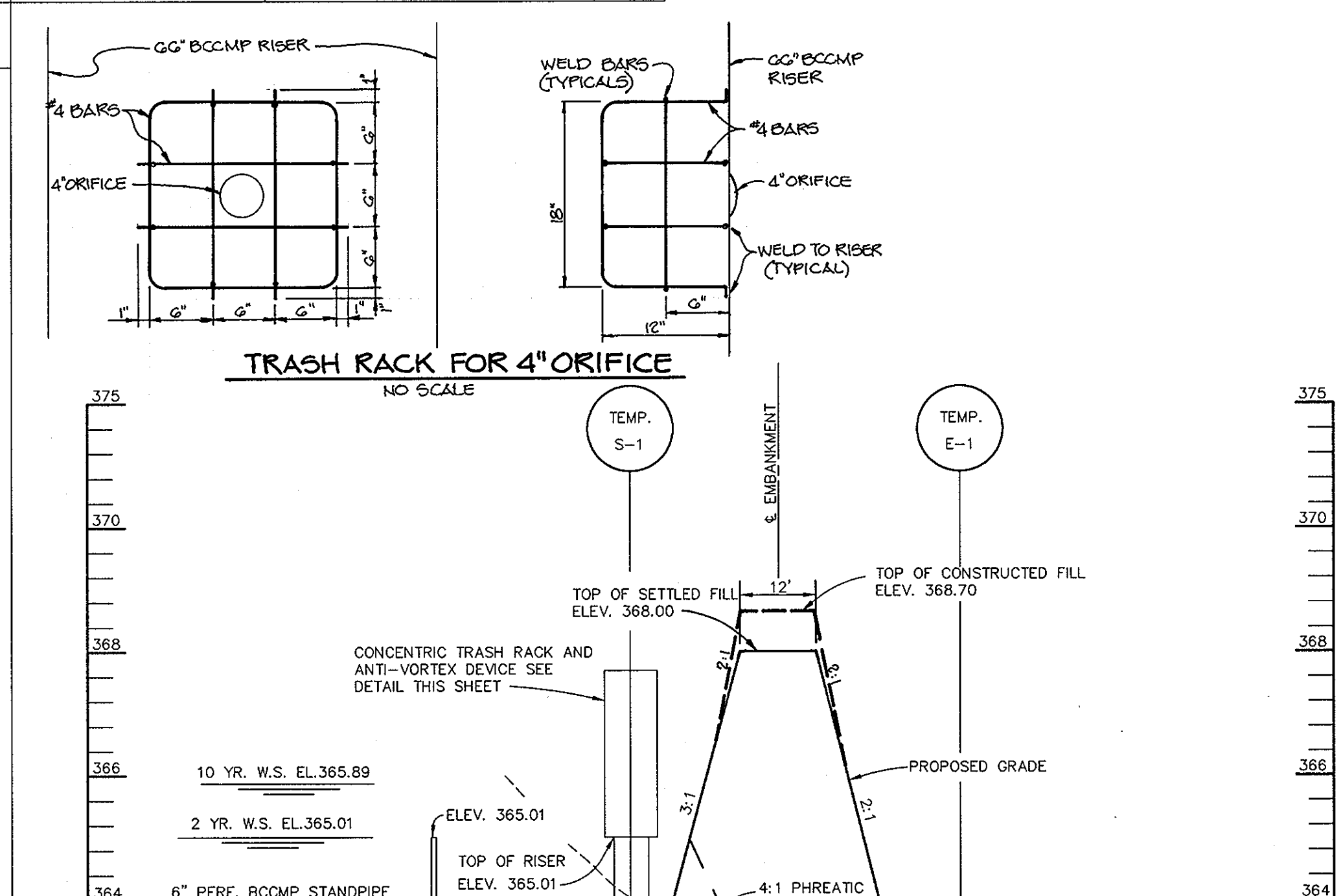
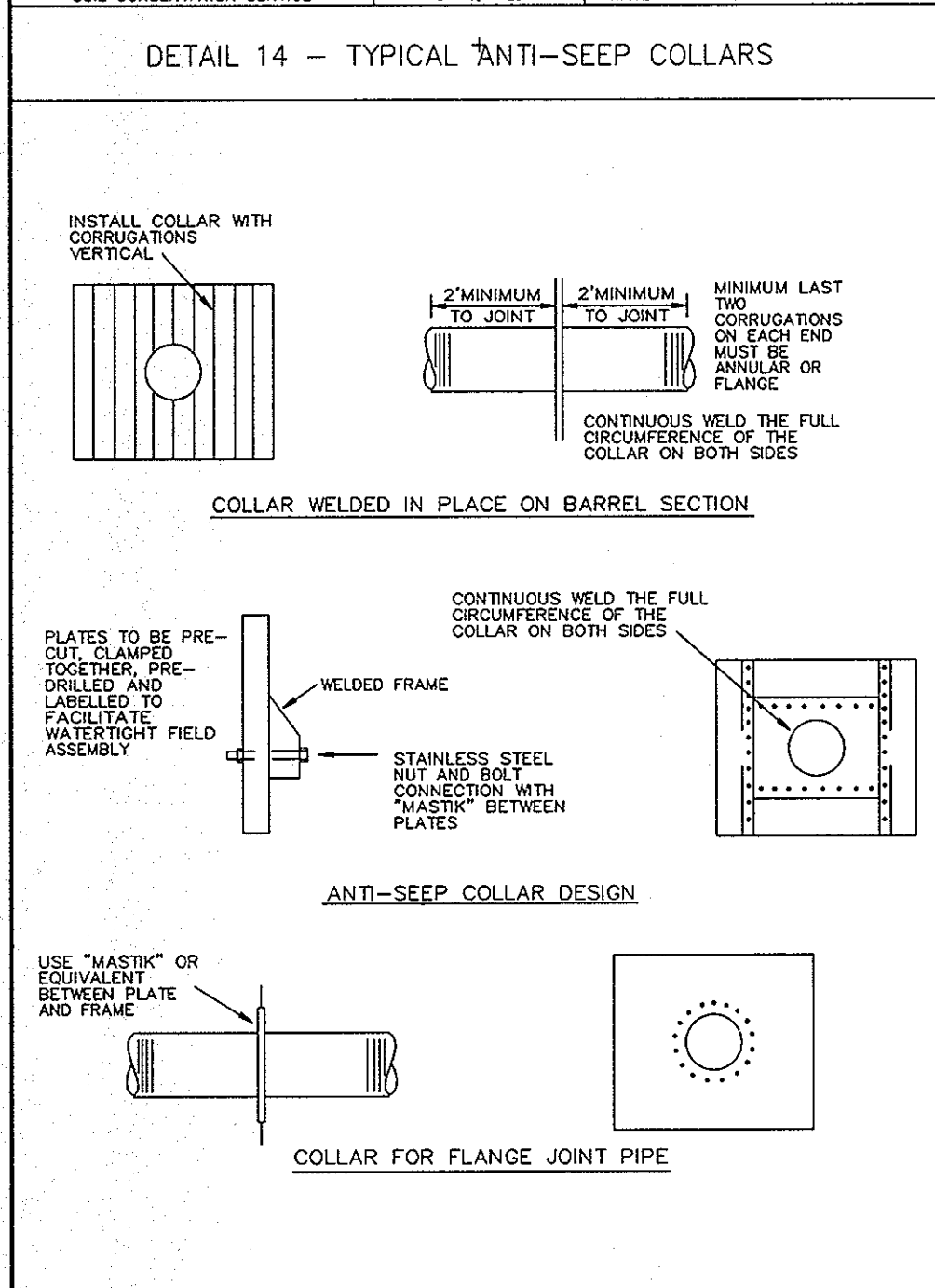
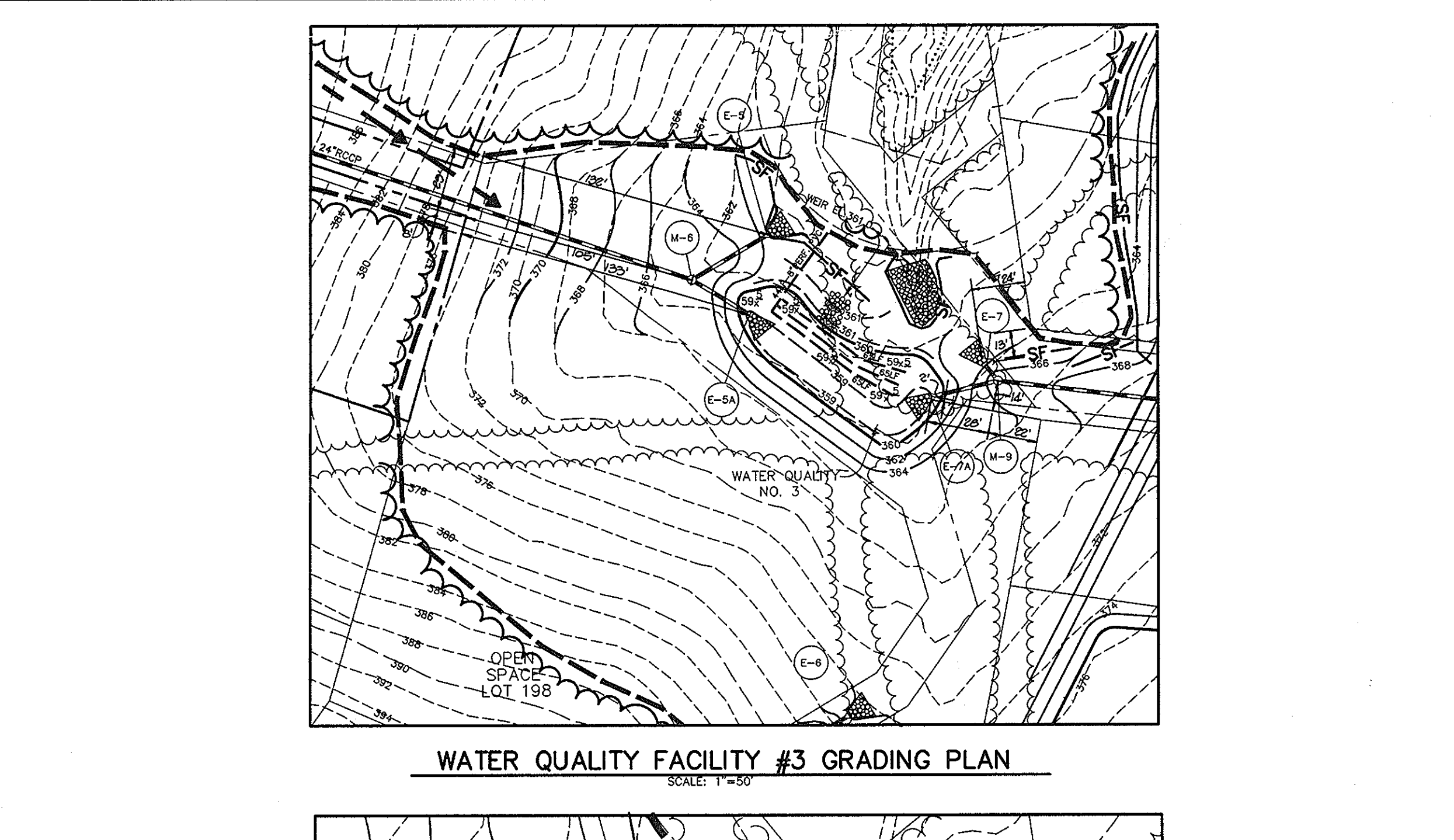
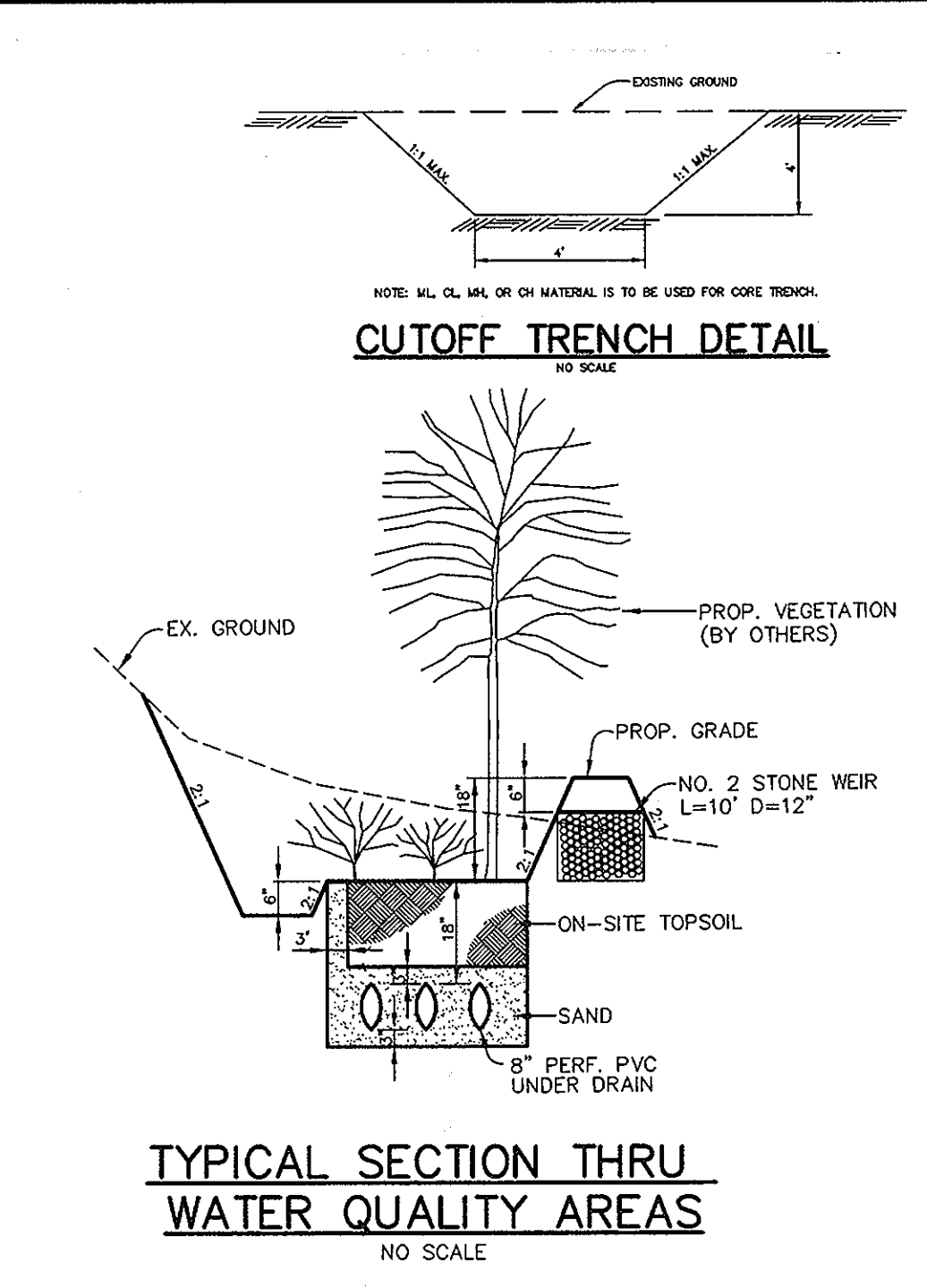
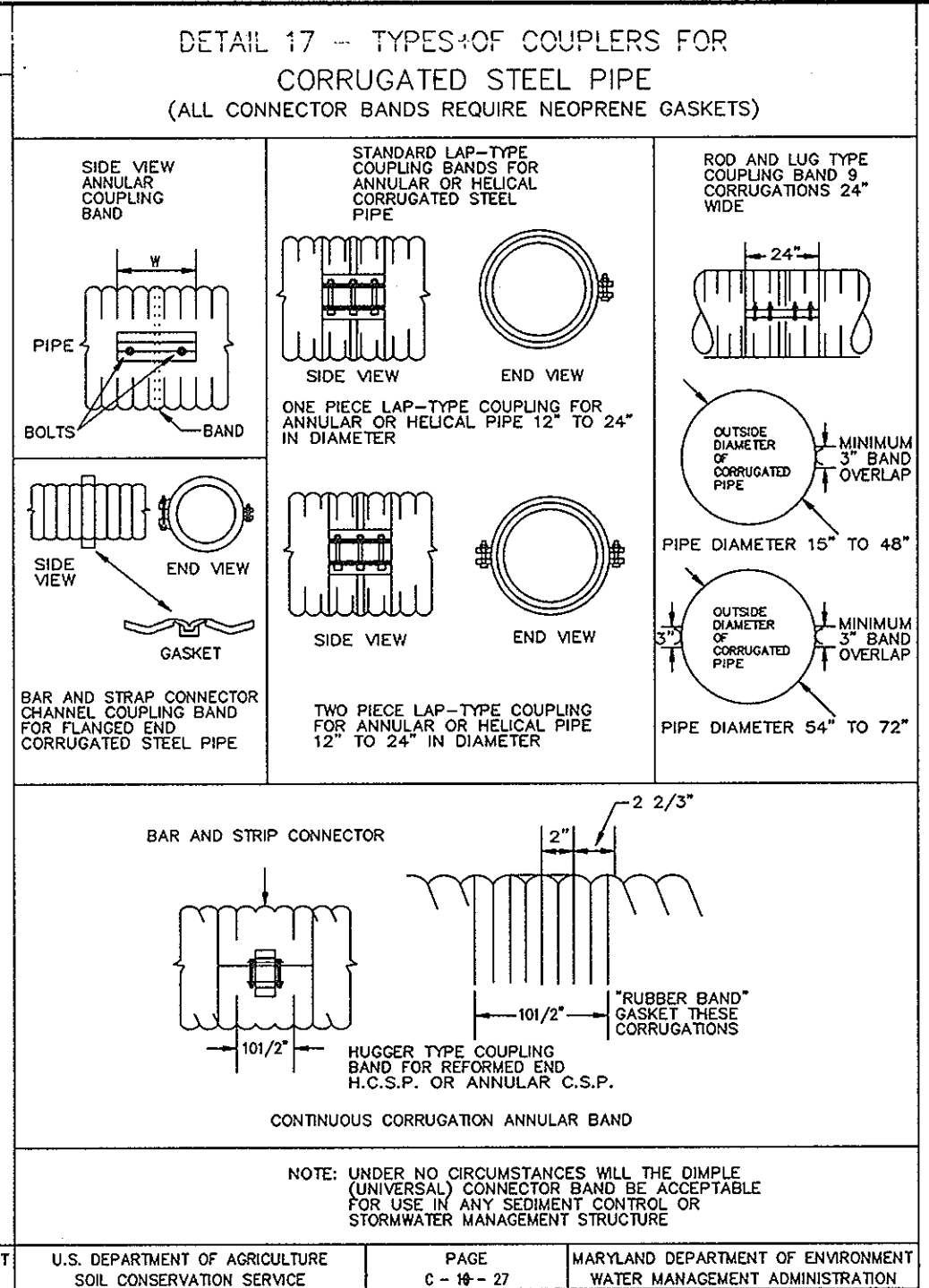
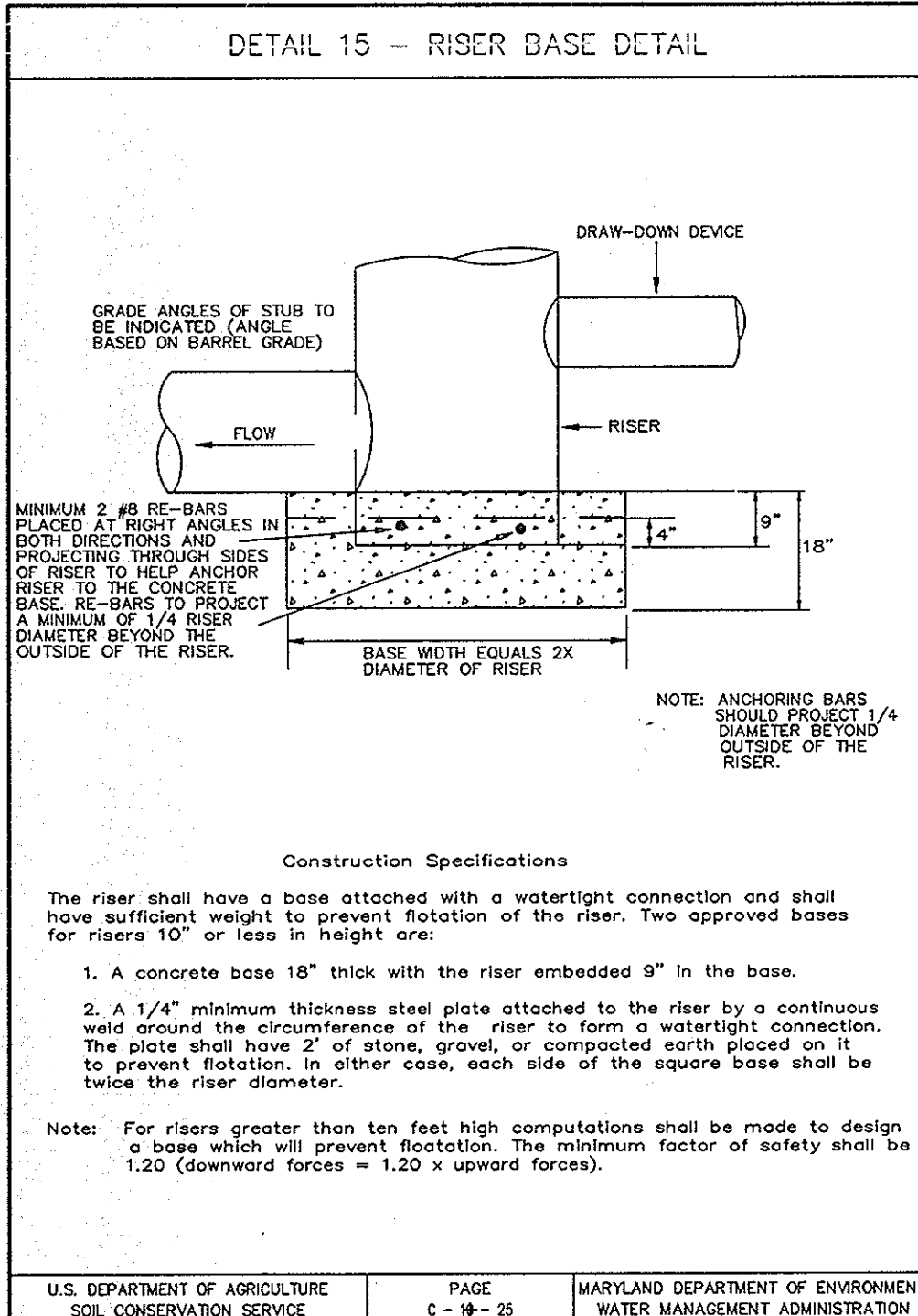
SCALE: AS SHOWN

DRAWING NO. 21 OF 22

JAYKANT D. PAREKH #19148

1487

F-96-138



NOTE: ALL EXISTING SEDIMENT CONTROLS CONSTRUCTED UNDER GP 07-24 WILL BE USED UNDER THIS FINAL PLAN.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *J. Larell* 8/7/96

BY THE ENGINEER:

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.

ENGINEER: *J. Larell* 8/7/96

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

J. E. Winkler 8/27/86
NATURAL RESOURCES CONSERVATION SERVICE

John R. Roberts 8/27/96
HOWARD SOIL CONSERVATION DISTRICT

AS BUILT CERTIFICATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Andrew M. Danley 9-9-96
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Richard Blood 9/13/96
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Alvin D. Danley 9/12/96
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE NO. REVISION

OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044

PROJECT
VILLAGE OF RIVER HILL
SECTION 2 AREA 6 PHASE 2
LOTS 67 THRU 200

AREA TAX MAP 35 BLOCKS 15 & 21 ZONED NEW TOWN PART OF PARCEL 70 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
SEDIMENT CONTROL PROFILES AND DETAILS AND LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
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8/7/96 DATE
DESIGNED BY: C.J.R.
DRAWN BY: DAM
PROJECT NO: HOCO\102800 PH2RD23.DWG
DATE: AUGUST 7, 1996
SCALE: AS SHOWN
DRAWING NO. 22 OF 22

JAYKANT D. PAREKH #19148

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