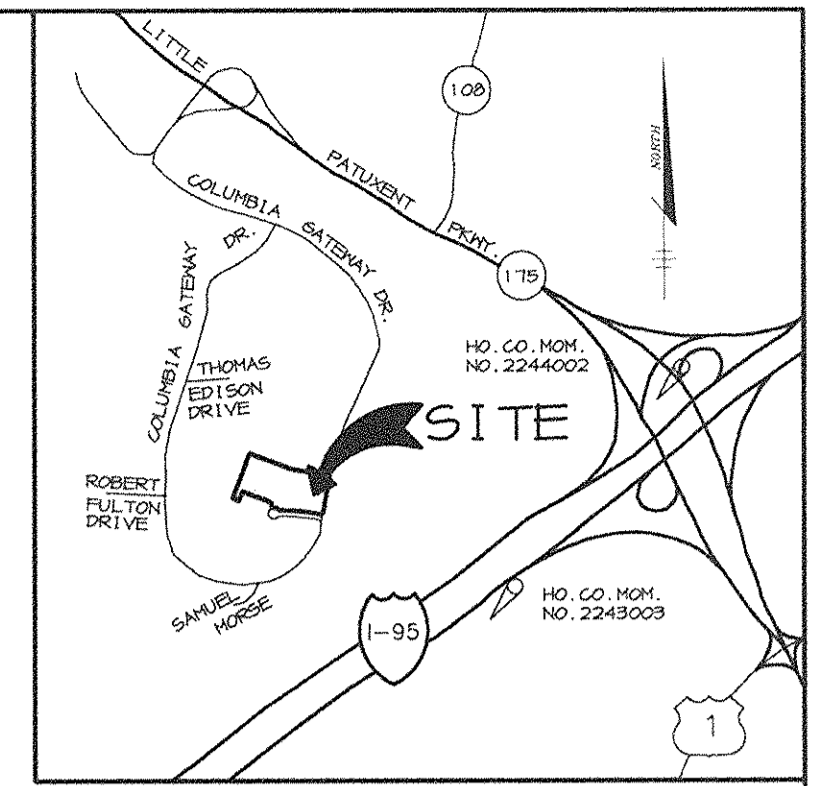


SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	DRAINAGE AREA MAP, GRADING AND SEDIMENT CONTROL PLAN
4	NOTES AND DETAILS
5	PROFILES AND DETAILS
6	LANDSCAPING PLAN

SITE DEVELOPMENT PLAN MIKE'S TRAIN HOUSE BUILDING ADDITION 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

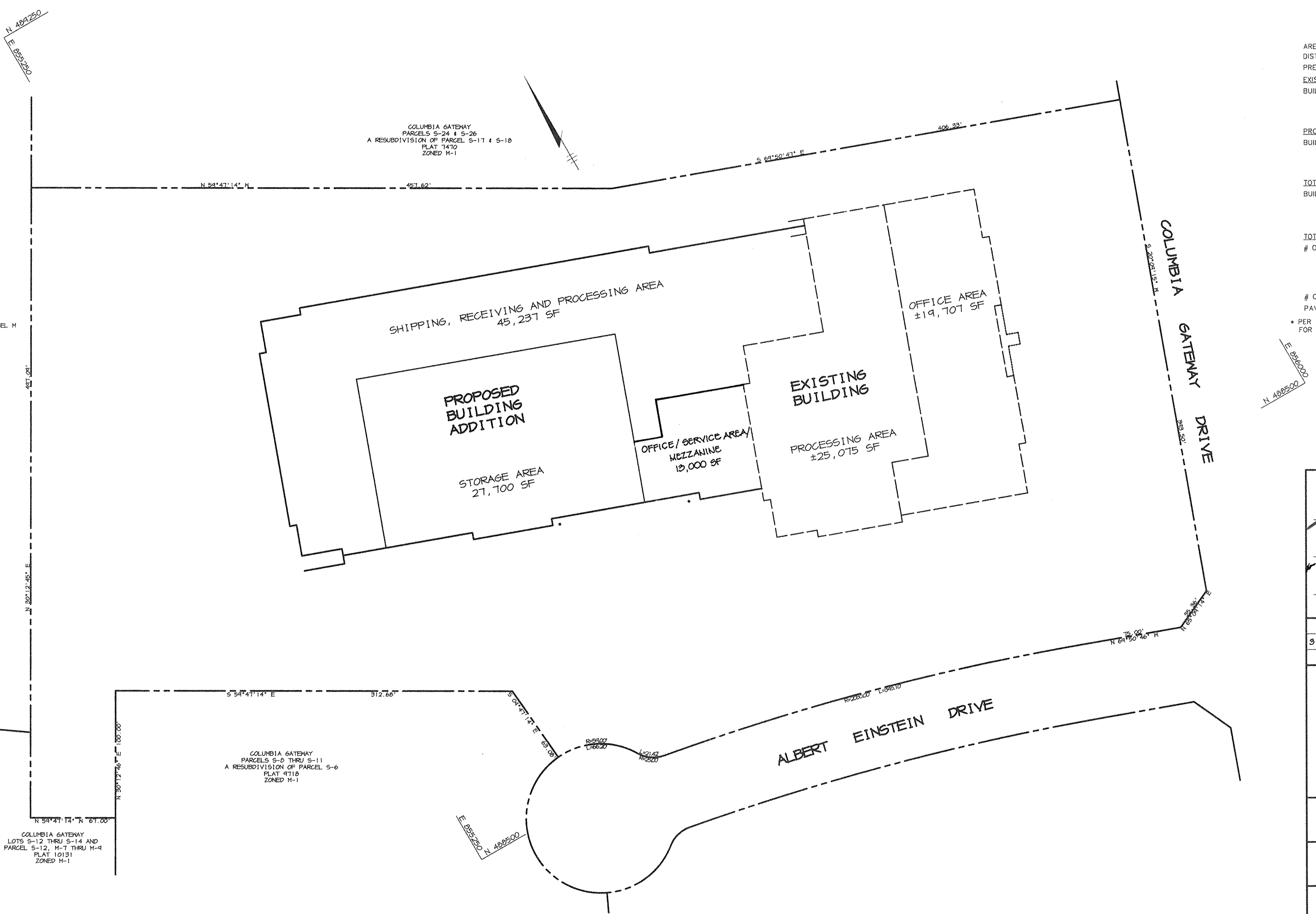
BENCHMARKS

BM #1	ELEV. 329.67
N 488,408.12	E 855,747.99
PIN & CAP	
BM #2	ELEV. 326.04
N 488,498.98	E 855,415.49
PIN & CAP	



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 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.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOC. DATED FEBRUARY, 1998.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. STATION NUMBERS 2343001 & 2244002.
- WATER IS PUBLIC, CONTRACT NO. 24-303B-D.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: DORSEY RUN. TREATMENT PLANT: LITTLE PATUXENT CONTRACT NO. 24-303B-D.
- STORMWATER MANAGEMENT FOR THIS PROJECT IS OFF-SITE UNDER F-87-63 AND GP-87-36. THIS PARCEL IS PART OF THE WESTSIDE WATERSHED AS ANALYZED BY WHITMAN REQUARDT & ASSOC.
- 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.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- NO GEOTECHNICAL STUDY IS REQUIRED FOR THIS PROJECT.
- THE BOUNDARY FOR THIS PROJECT IS BASED ON PLAT NO. 18000D BY GUTSCHICK, LITTLE, AND WEBER.
- SUBJECT PROPERTY ZONED M-1. 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 NO'S F-90-138, F-87-63, F-87-125, GP-87-36, F-97-135 AND SDP-97-89.
- THE CONTRACTOR SHALL TEST PIT 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 LAID 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 1 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, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- THE DEVELOPMENT OF PARCEL S-27 IS SUBJECT TO THE DESIGN AND DEVELOPMENT GUIDELINES FOR COLUMBIA GATEWAY, PER SECTION IV, "GENERAL CRITERIA":
(A)(7) OFF-SITE GRADING WILL NOT BE PERMITTED.
(A)(8) GRADED SLOPES ON THE PROPERTY MUST NOT EXCEED 3:1.
(A)(9) LAWN AREA MUST HAVE SLOPES OF NOT LESS THAN 2%.
(A)(11) DRIVEWAY SLOPES SHOULD NOT EXCEED 7%; PARKING LOTS SHALL NOT EXCEED 5%.
SEE GUIDELINES FOR COMPLETE DESIGN CRITERIA.
- STORM DRAIN PIPE MATERIAL CAN BE EITHER ADS N-12 PIPE OF REINFORCED CONCRETE. ADS N-12 PIPE TO BE INSTALLED ACCORDING TO THE LATEST HOWARD COUNTY DESIGN MANUAL VOL. IV.



PLAN
SCALE: 1" = 50'

SITE ANALYSIS

AREA OF PARCEL	8.74 ACRES (380,714 SF)
DISTURBED AREA	5.60 ACRES (232,134 SF)
PRESENT ZONING	M-1
EXISTING USE	OFFICE/WAREHOUSE FACILITY
BUILDING COVERAGE (EX.)	44,782 SF (11.8% OF SITE)
OFFICE	32,707 SF
SHIPPING & RECEIVING	5,789 SF
STORAGE & PROCESSING	6,286 SF
PROPOSED USE	OFFICE/WAREHOUSE FACILITY
BUILDING COVERAGE (PROP.)	79,437 SF (20.8% OF SITE)
OFFICE (INCL. 2ND FLOOR MEZZANINE)	6,900 SF
SHIPPING & RECEIVING	45,237 SF
STORAGE & PROCESSING	24,900 SF
TOTAL BUILDING COVERAGE	124,219 SF (32.6% OF SITE)
OFFICE	26,207 SF (1ST FLOOR)
SHIPPING & RECEIVING	51,026 SF
STORAGE & PROCESSING	46,986 SF
TOTAL FOR SITE	
# OF PARKING SPACES REQUIRED*	
0.5 SP/1000 SF (SHIPPING/STORAGE AREA)	46 SPACES (FOR 21,912 SF)
3.3 SP/1000 SF (OFFICE AREA)	100 SPACES (FOR 30,071 SF)
TOTAL REQUIRED	176 SPACES
# OF PARKING SPACES PROVIDED **	184 SPACES (INCL. 6 HC)
PAVED AREA	97,259 SF (25.5% OF SITE)

* PER HOWARD COUNTY ZONING REGULATIONS SECT. 133, PG. 249-3(a) & PG. 251-5(a) FOR ENTIRE PARCEL.
** SEE PARKING NEED STUDY DATED MARCH 1, 1998.

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

<i>[Signature]</i>	4/2/98
DIRECTOR	DATE
<i>[Signature]</i>	4/15/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	4/21/98
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

3-24-00	MODIFIED USE SQUARE FOOTAGES AND PARKING
DATE	NO. REVISION
OWNER/DEVELOPER	
MTH ELECTRIC TRAINS 7020 COLUMBIA GATEWAY DRIVE COLUMBIA, MD 21046 (410) 381-2580	

PROJECT	MIKE'S TRAIN HOUSE BUILDING ADDITION
AREA	COLUMBIA GATEWAY PARCEL S-27 A RESUBDIVISION OF PARCEL S-16 & S-25 TAX MAP 43, BLOCK 7, ZONED M-1 6th ELECTION DISTRICT
TITLE	TITLE SHEET

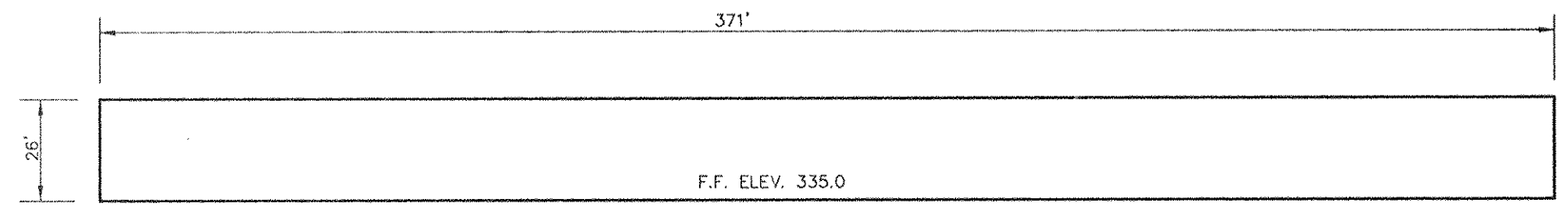
RIEMER MUEGGE & ASSOCIATES, INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, Maryland 21045
tel 410.997.8900 fax 410.997.9282

ADDRESS CHART

PARCEL	STREET ADDRESS
S-27	7020 COLUMBIA GATEWAY DRIVE

SUBDIVISION NAME - COLUMBIA GATEWAY	SECT./AREA -	PARCEL - S-27
PLAT # - 13142	BLOCK # - 7	ZONING - M-1
TAX MAP NO. - 43	ELECT. DIST. - 6th	GENIUS TRACT - 60671.03
WATER CODE - E06	SEWER CODE - 3380000	

DATE	4.10.98
DESIGNED BY :	C.J.R.
DRAWN BY :	DAM
PROJECT NO :	98047 SDP1.DWG
DATE :	APRIL 13, 1998
SCALE :	AS SHOWN
DRAWING NO. 1 OF 6	






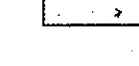

NOTE: SEE ARCHITECTURAL DRAWINGS FOR COMPLETE BUILDING DETAILS AND ELEVATIONS.
EAST BUILDING ELEVATION
NO SCALE

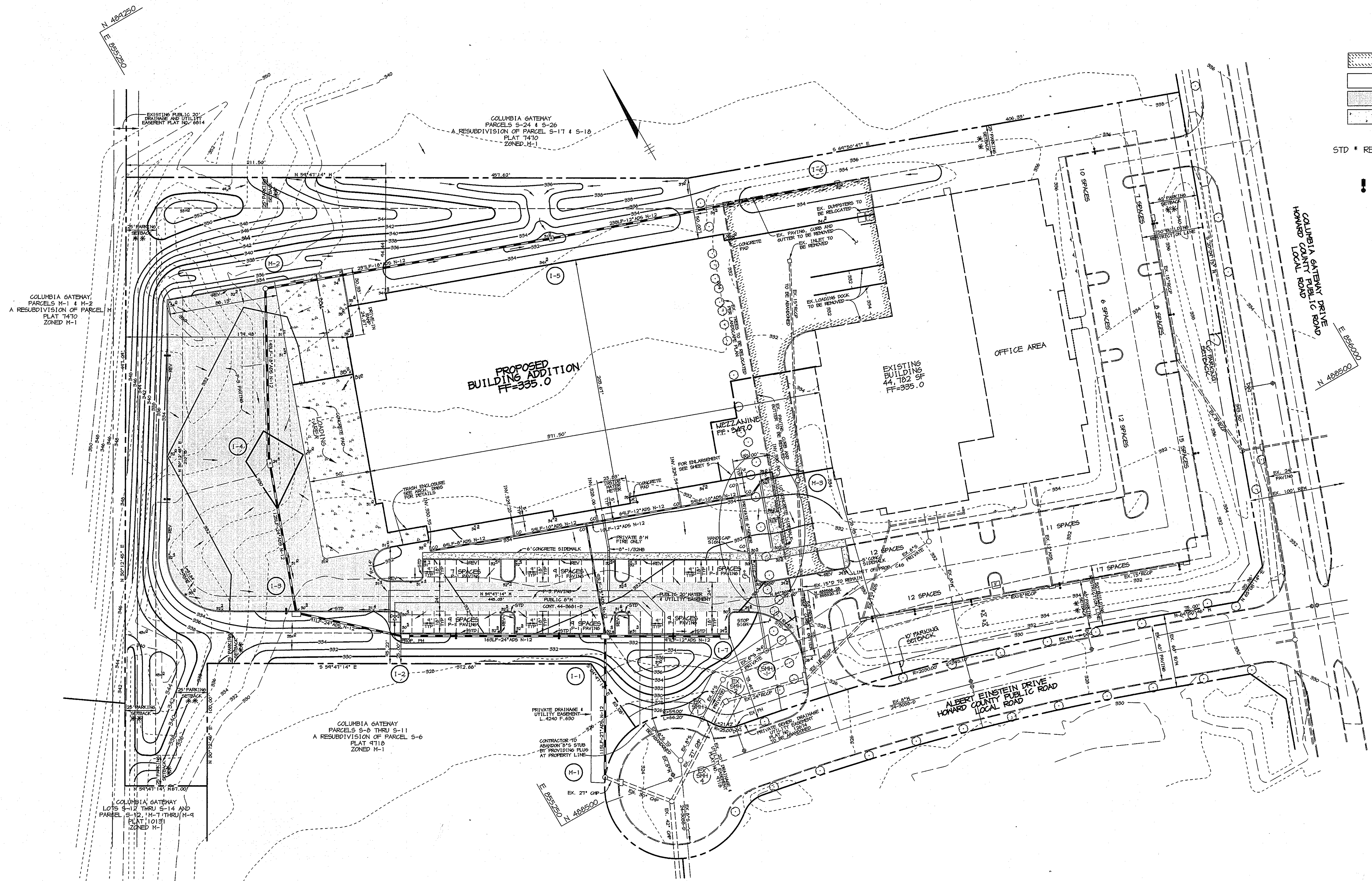
*** NOTE: 25' AND 40' PARKING SETBACKS ARE PER THE DESIGN AND DEVELOPMENT GUIDELINES FOR COLUMBIA GATEWAY.

NOTES:

1. ALL LIGHTS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
2. ALL CURB RADII ARE 5' UNLESS OTHERWISE LABELED.
3. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE SHOWN.
4. ALL ON-SITE ROADS ARE PRIVATE.

LEGEND

-  REMOVAL OF EX. PAVING
-  P-1 PAVING (PARKING BAYS)
-  P-3 PAVING (TRUCK ENTRANCE & COURT)
-  CONCRETE SIDEWALK OR CONCRETE TRUCK PAD (SEE DETAIL SHEET 4)
- STD * REV DENOTES TRANSITION FROM STANDARD TO REVERSE CURB AND GUTTER
-  25' POLE SQUARE STEEL 400 MATT SHOEBOX METAL HALIDE (SEE NOTE 1)



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Paul R. Butler 4/21/98
DIRECTOR DATE

John J. ... 4/16/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Colleen Hamilton 4/21/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER/DEVELOPER

MTH ELECTRIC TRAINS
7020 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046
(410) 381-2580

PROJECT: MIKE'S TRAIN HOUSE BUILDING ADDITION

AREA: COLUMBIA GATEWAY PARCEL S-27
A RESUBDIVISION OF PARCEL S-16 & S-25
TAX MAP 43, BLOCK T, ZONED M-1
8th ELECTION DISTRICT

TITLE: SITE DEVELOPMENT 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

DATE: 4-18-98

DESIGNED BY: C.J.R.

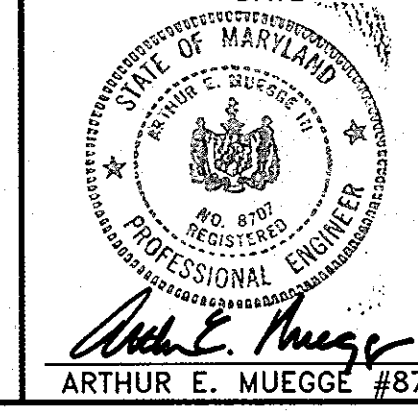
DRAWN BY:

PROJECT NO: 98047
SDP2.DWG






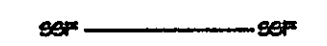
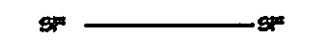

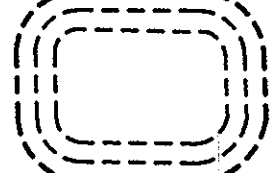

DATE: APRIL 13, 1998

SCALE: 1" = 40'

DRAWING NO. 2 OF 6



LEGEND

-  DRAINAGE AREA DIVIDE
-  LIMIT OF DISTURBANCE
-  FLOW ARROWS
-  CURB INLET PROTECTION
-  STANDARD INLET PROTECTION
-  SUPER SILT FENCE
-  SILT FENCE
-  EARTH DIKE (CLEAR WATER)
-  TEMPORARY INLET TRAP GRADING
-  STABILIZED CONSTRUCTION ENTRANCE

STORM INLET SEDIMENT TRAP #1

DRAINAGE AREA	1.14 AC.
STORAGE VOLUME REQUIRED	2142 C.F. (NET/DRY)
STORAGE VOLUME PROVIDED	2142 C.F. @ 328.01 (NET)
STORAGE VOLUME PROVIDED	2146 C.F. @ 324.40 (DRY)
WEIR ELEV.	324.40
BOTTOM ELEVATION	326.00
CLEANOUT ELEV.	327.01
SIDE SLOPES	2:1
BOTTOM DIMENSIONS	24'x36'
DEPTH	3.4'
DRAIN DOWN DEVICE INVERT:	328.01

DRAINAGE DATA

INLET NOS.	AREA IN ACRES	'C' FACTOR	PERCENT IMPERVIOUS
1	0.21	0.15	62%
2	0.14	0.68	74%
3	0.14	0.54	53%
4	1.14	0.64	75%
5	1.70	0.19	100%
6	1.32	0.19	100%
7	0.15	0.54	60%

STORM INLET SEDIMENT TRAP #2

DRAINAGE AREA	1.70 AC.
STORAGE VOLUME REQUIRED	3060 C.F. (NET/DRY)
STORAGE VOLUME PROVIDED	3144 C.F. @ 328.50 (NET)
STORAGE VOLUME PROVIDED	5178 C.F. @ 331.00 (DRY)
WEIR ELEV.	332.00
BOTTOM ELEVATION	326.00
CLEANOUT ELEV.	328.06
SIDE SLOPES	2:1
BOTTOM DIMENSIONS	18'x45'
DEPTH	5.0'
DRAIN DOWN DEVICE INVERT:	328.50

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] 4/10/98
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] 4-10-98
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] 4/15/98
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] 4/15/98
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[Signature] 4/2/98
DIRECTOR DATE

[Signature] 4/6/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/6/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. REVISION

OWNER/DEVELOPER

MTH ELECTRIC TRAINS
7020 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046
(410) 381-2580

PROJECT MIKE'S TRAIN HOUSE BUILDING ADDITION

AREA COLUMBIA GATEWAY PARCEL S-27
A RESUBDIVISION OF PARCEL S-16 & S-25
TAX MAP 43 BLOCK T ZONED M-1
6th ELECTION DISTRICT

TITLE DRAINAGE AREA MAP, 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

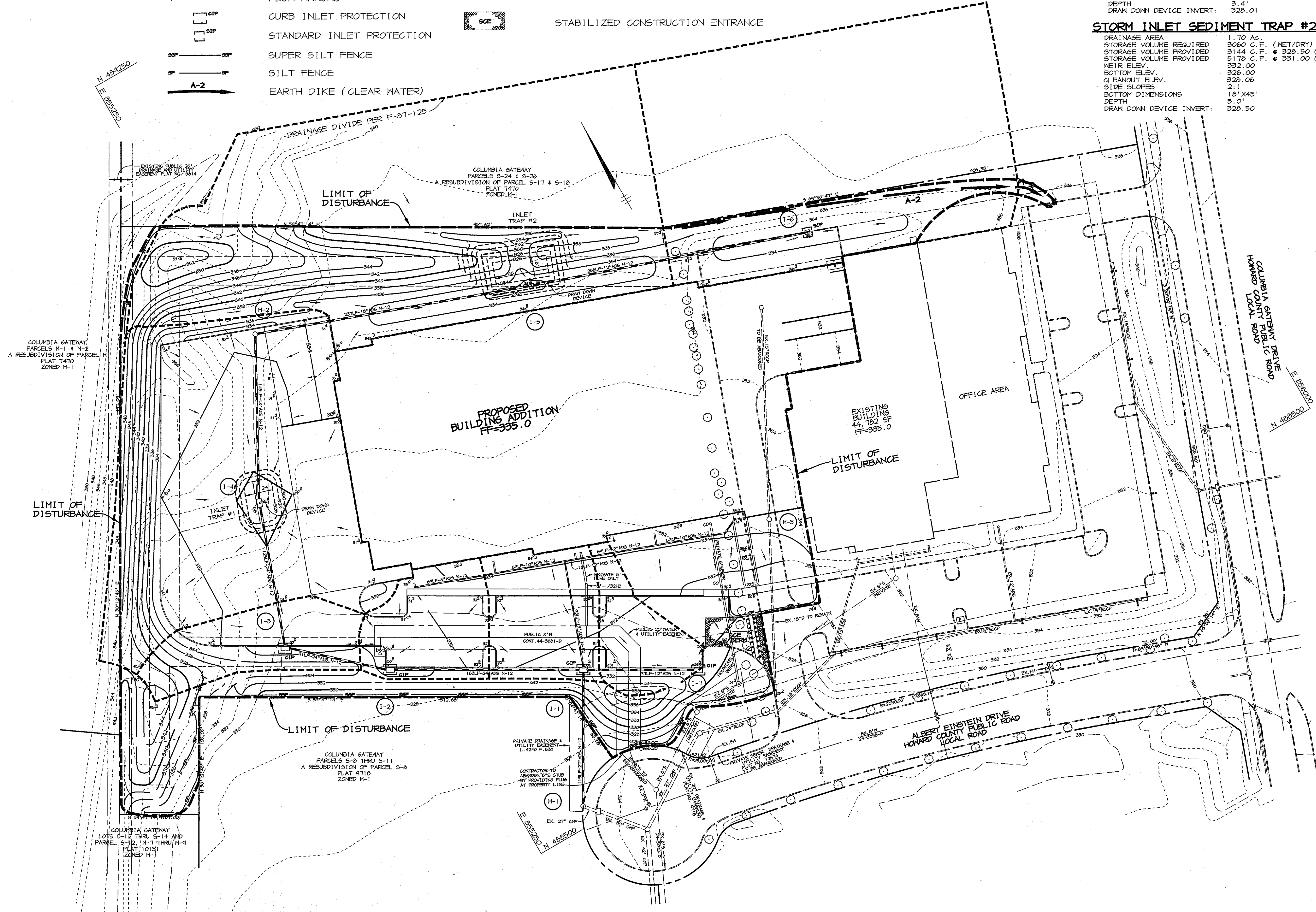
4-10-98
DATE

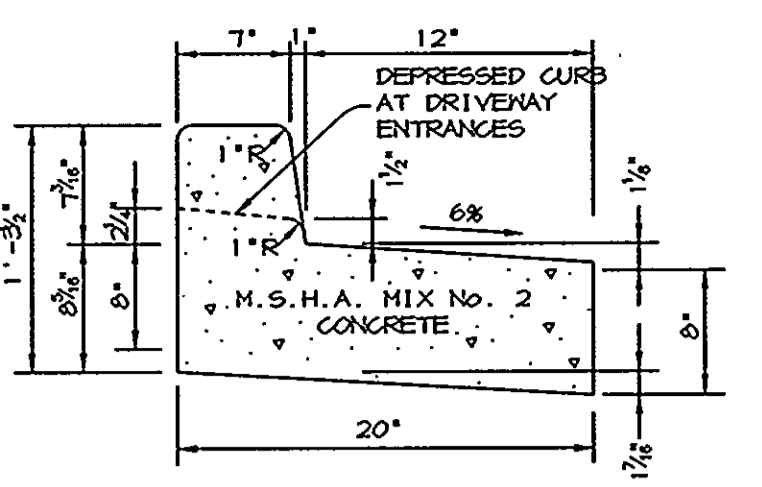


DESIGNED BY : C.J.R.
DRAWN BY: BLW DAM
PROJECT NO : 98047
SDP3.DWG
DATE : APRIL 13, 1998
SCALE : AS SHOWN
DRAWING NO. 3 OF 6

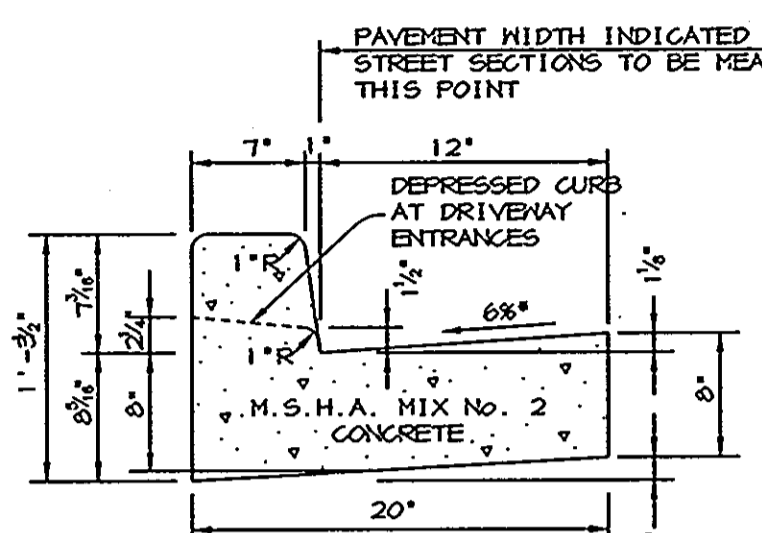
ARTHUR E. MUEGGE #8707

SDP-98-106

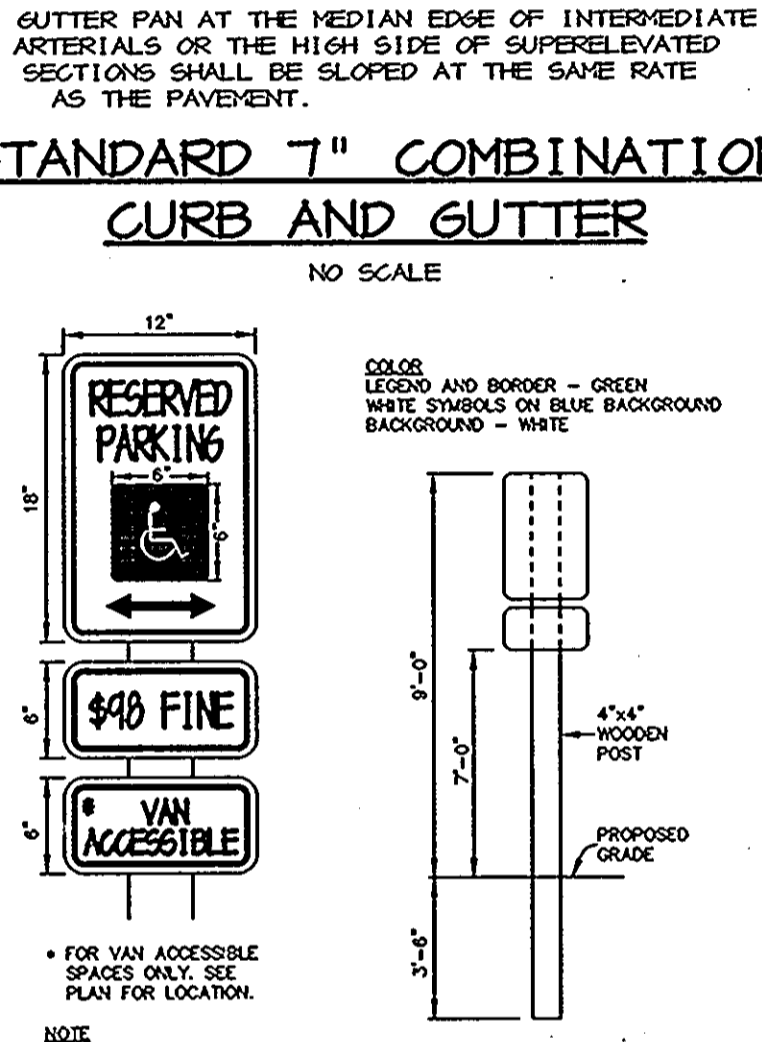




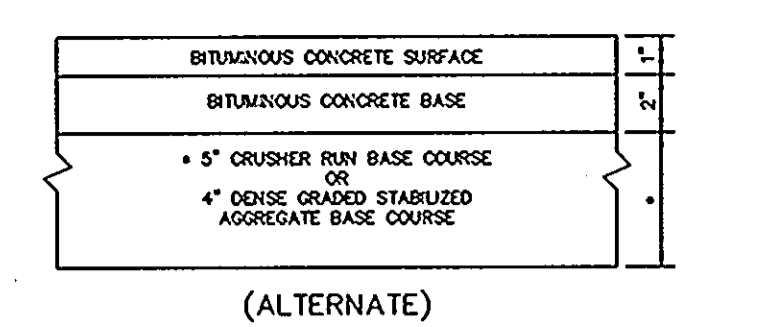
REVERSE 7" COMBINATION CURB AND GUTTER
NO SCALE



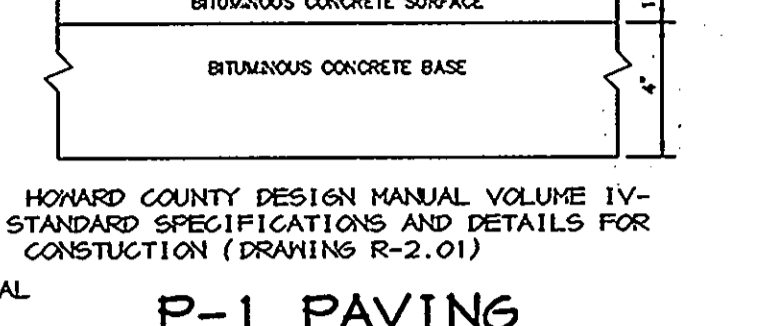
STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



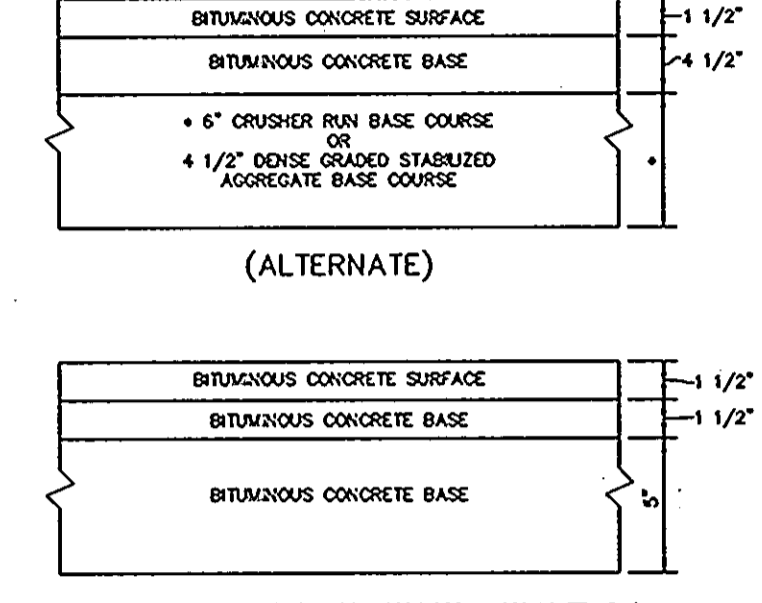
HANDICAP SIGN DETAIL
NO SCALE



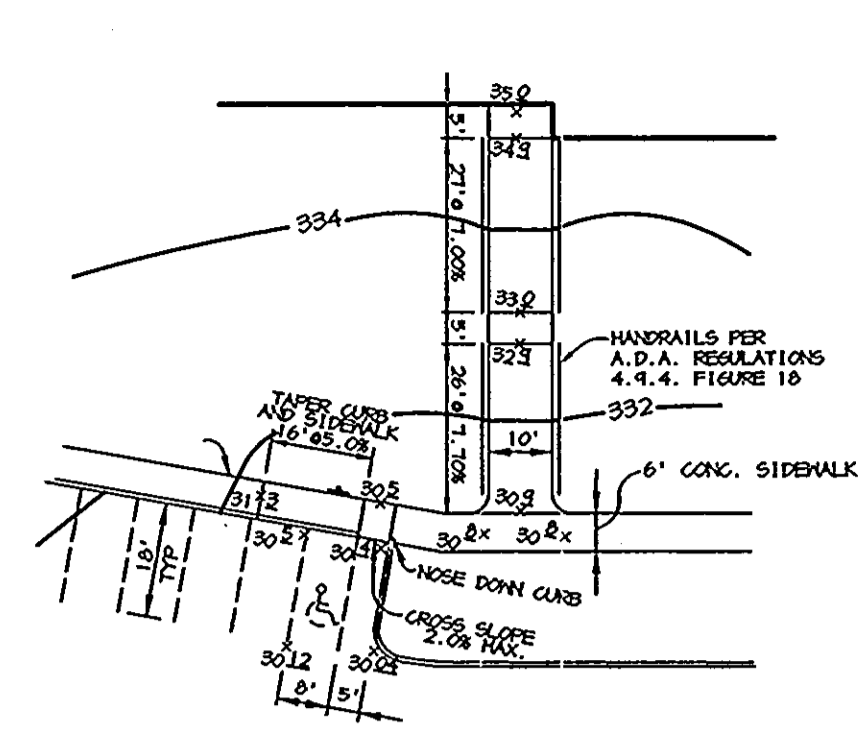
P-1 PAVING
NO SCALE



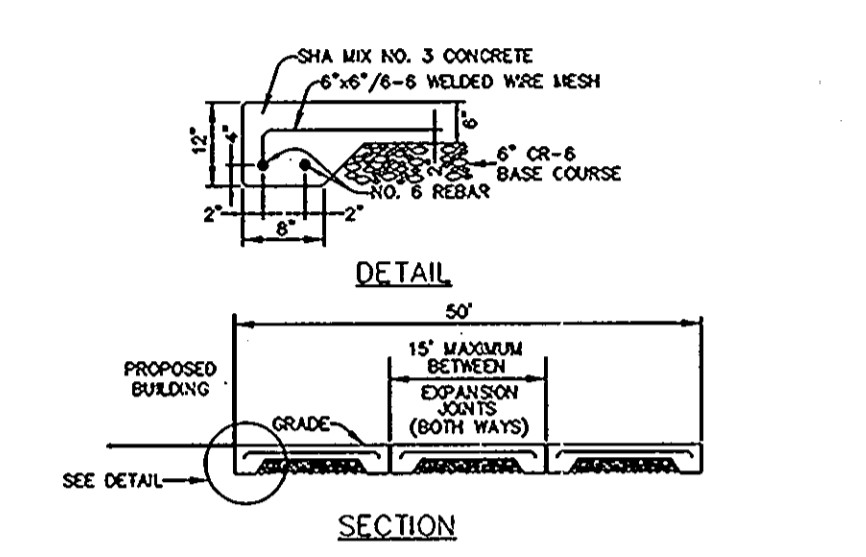
P-3 PAVING
NO SCALE



SIDEWALK DETAIL
NO SCALE

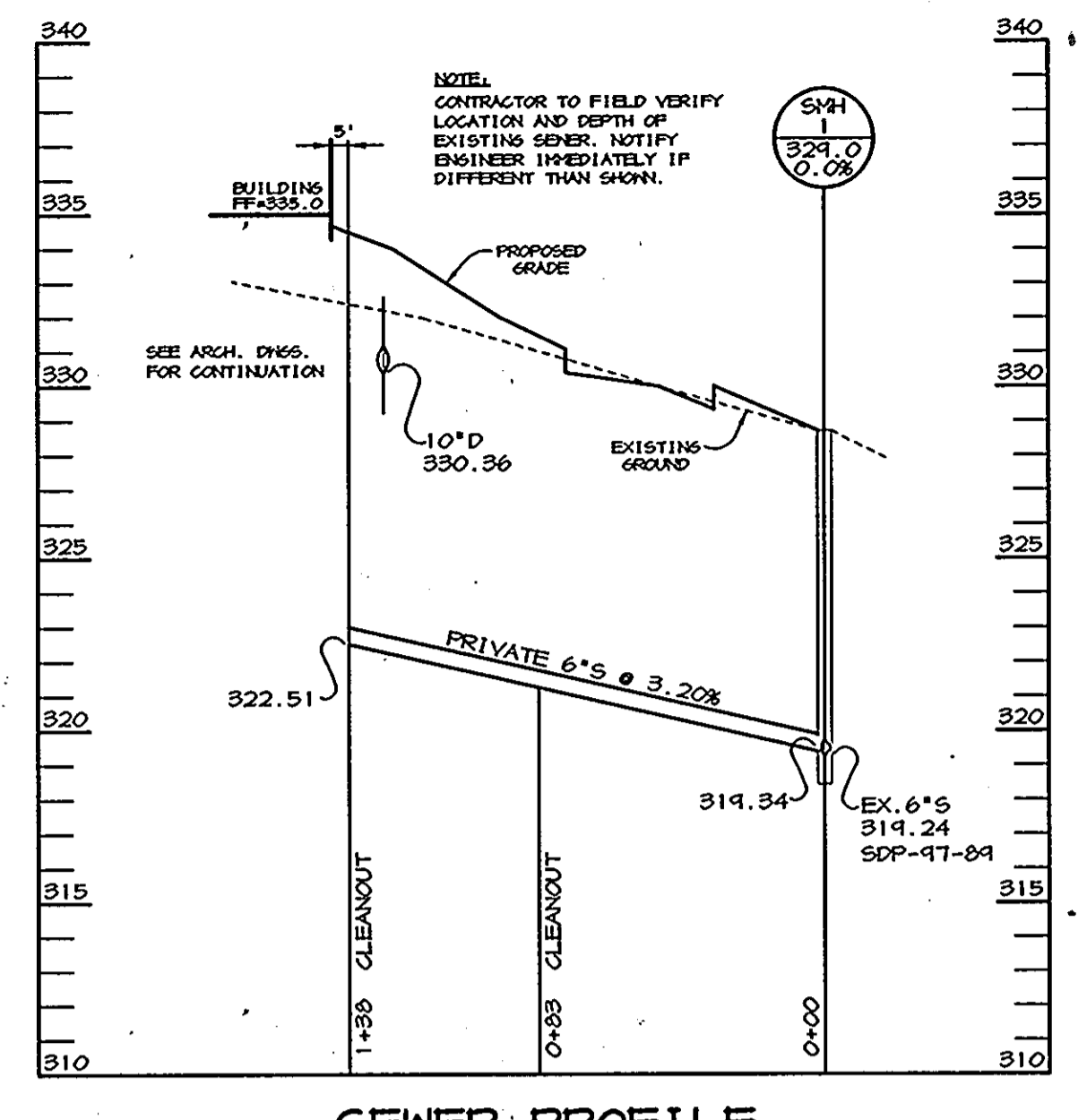


HANDICAP ACCESS DETAIL
SCALE: 1" = 30"

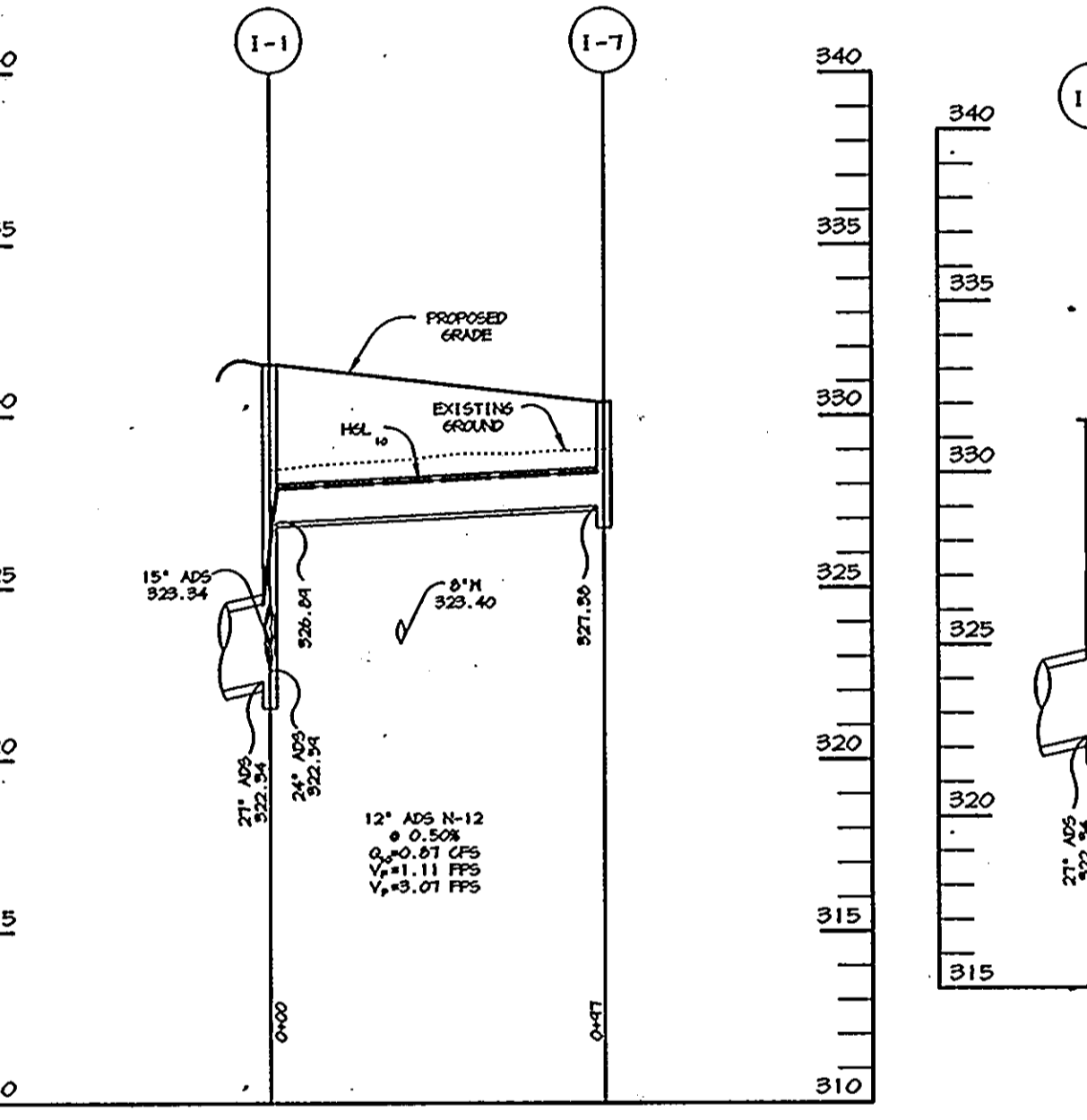


CONCRETE PAVING DETAIL
NO SCALE

1. SAW JOINTS AT 15' SPACINGS IN BOTH DIRECTIONS WITH DEPTH AT JOINT EQUAL TO 1/4 DEPTH OF SLAB.
2. CONSTRUCTION JOINTS AS NEEDED, USING 3/4" DIA. SMOOTH DONELS COATED TO PREVENT BOND @ 12" O/C (MAX.) WITH SMOOTH CUT EDGES. DONELS EXTEND 8" INTO CONCRETE ON EACH SIDE OF JOINT.



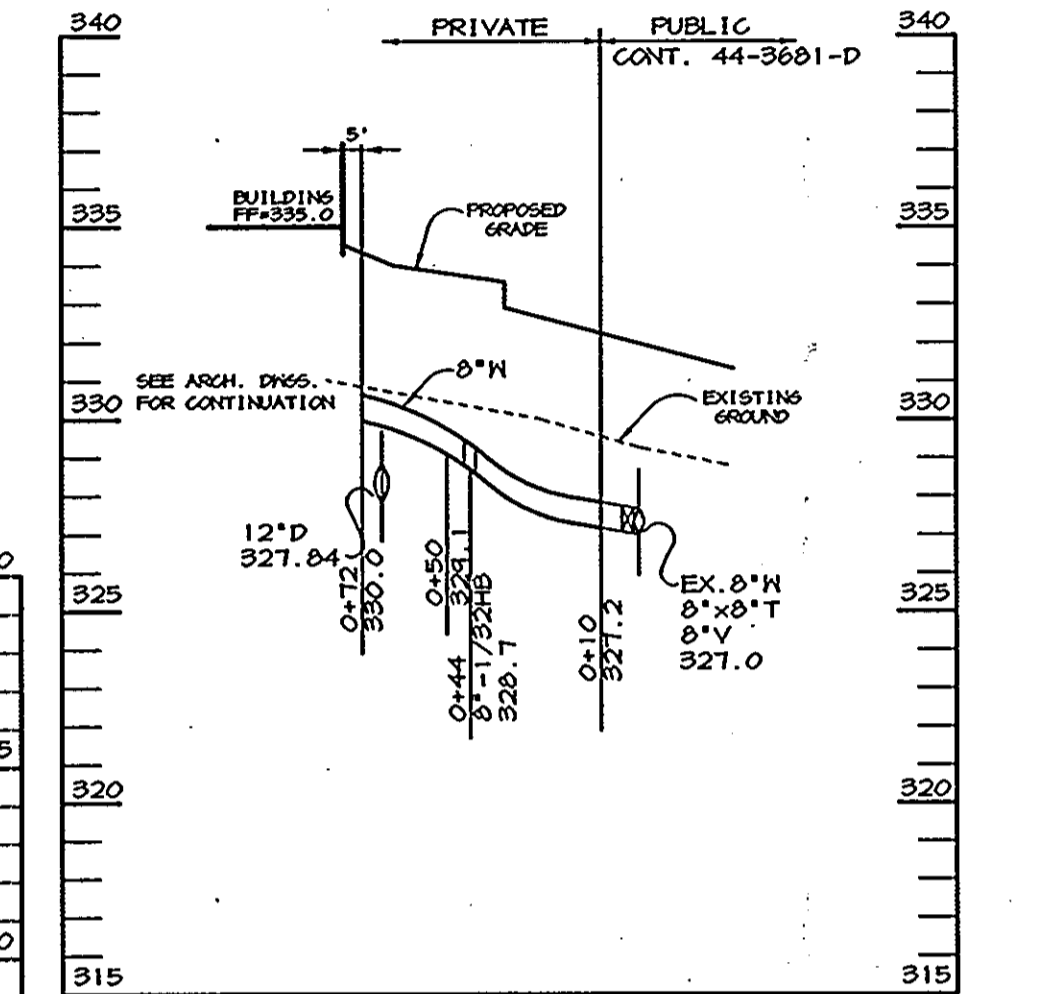
SEWER PROFILE
SCALE: HOR. - 1" = 50', VERT. - 1" = 5'



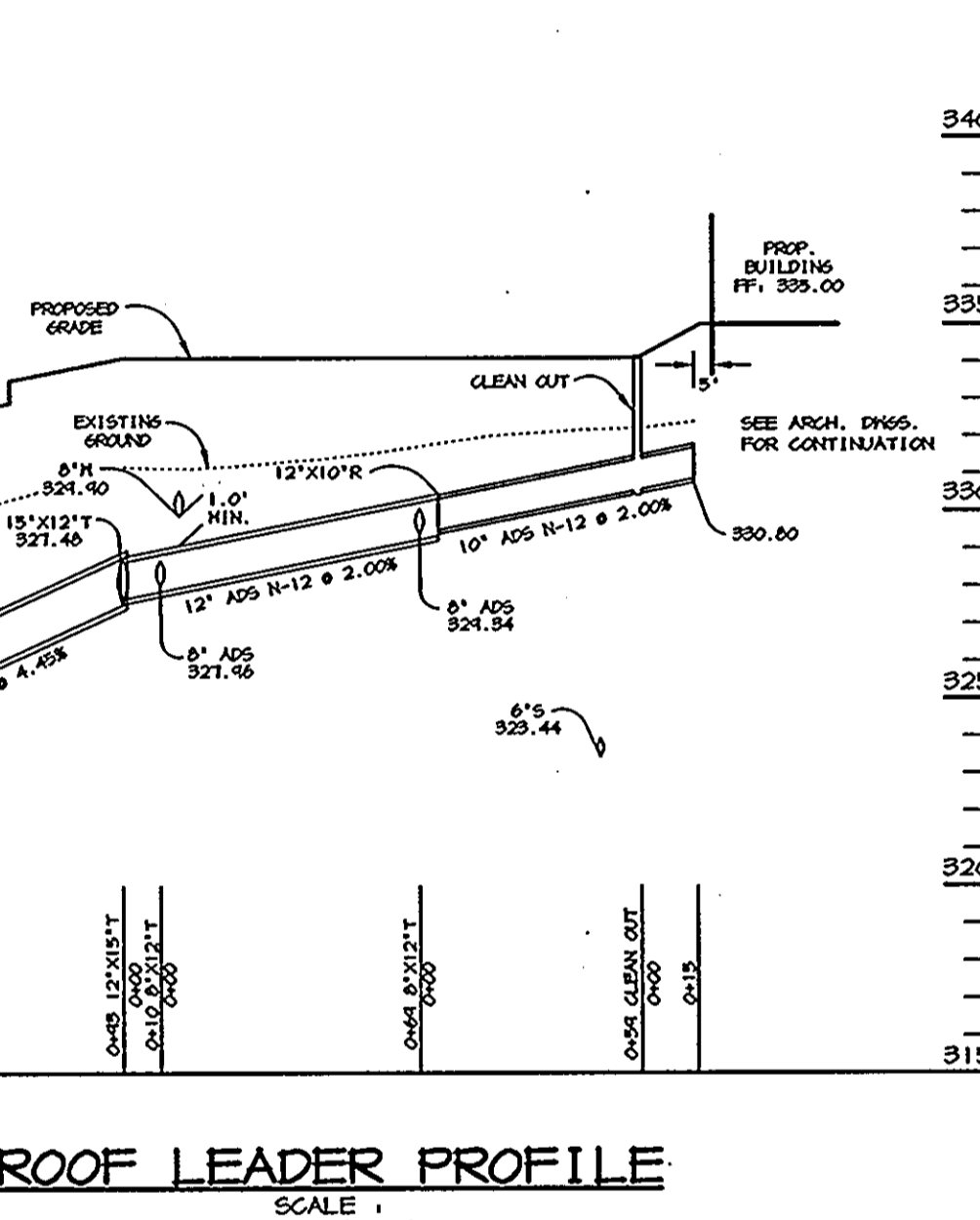
STORM DRAIN PROFILE
SCALE: HOR. - 1" = 50', VERT. - 1" = 5'

STRUCTURE SCHEDULE						
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	A-5	N 480,618.44 E 855,959.91	322.54(24") 326.84(12") 323.34(15")	322.84	331.48	HOCO. STD. DETAIL SD 4.01
I-2	A-5	N 480,700.47 E 855,219.04	323.51	323.41	331.08	HOCO. STD. DETAIL SD 4.01
I-3	A-5	N 480,760.63 E 855,151.49	324.06	323.96	330.88	HOCO. STD. DETAIL SD 4.01
I-4	DOUBLE 5 WITH RETICULAR GRATE	N 480,875.84 E 855,193.29**	325.19	324.64	324.40	HOCO. STD. DETAILS SD 4.23 AND SD 4.93
I-5	D	N 480,919.71 E 855,483.74	327.64	327.19	331.00*	HOCO. STD. DETAIL SD 4.11
I-6	D	N 480,841.85 E 855,707.91	-	328.88	332.00*	HOCO. STD. DETAIL SD 4.11
I-7	A-5	N 480,564.63 E 855,443.72	-	327.38	330.38	HOCO. STD. DETAIL SD 4.01
M-1	5" MH	N 480,516.84 E 855,300.78	314.75	316.08 +/-	324.40 +/-	HOCO. STD. DETAIL 6 5.13
M-2	4" MH	N 480,001.18 E 855,261.76	326.00	325.40	332.80	HOCO. STD. DETAIL 6 5.12
M-3	4" MH	N 480,647.98 E 855,558.32	-	325.14(EX.)	334.20	HOCO. STD. DETAIL 6 5.12
SMH-1	4" MH	N 480,540.42 E 855,466.16	314.24(EX.)	314.84	324.00	HOCO. STD. DETAIL 6 5.12

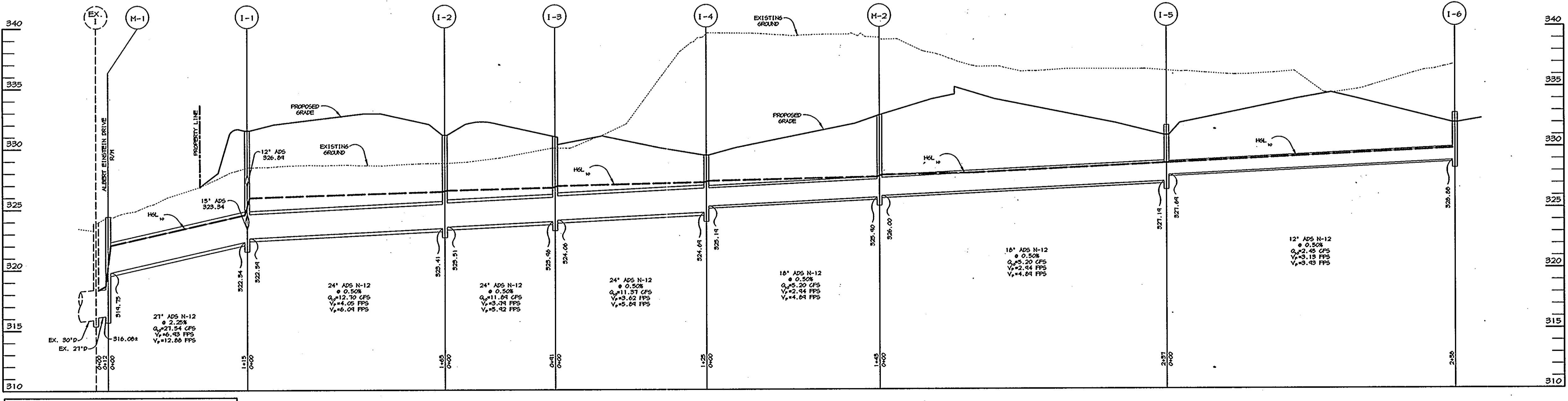
NOTES:
 * LOCATION IS AT CENTER OF THROAT OPENING AT FACE OF CURB FOR INLETS.
 TOP ELEVATION IS TOP OF CURB/GRATE/RIM.
 ** ELEVATION IS AT THROAT OPENING.
 ** LOCATION IS AT CENTER OF STRUCTURE.



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



ROOF LEADER PROFILE
SCALE: HOR. - 1" = 50', VERT. - 1" = 5'



STORM DRAIN PROFILE
SCALE: HOR. - 1" = 50', VERT. - 1" = 5'

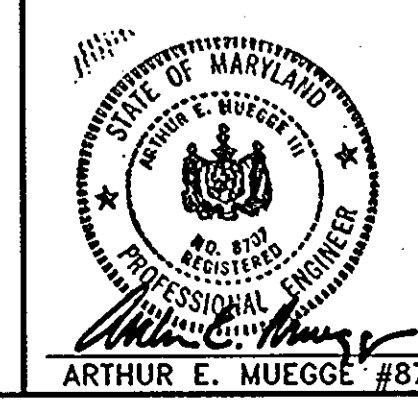
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 DIRECTOR: [Signature] 4/2/98 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] 4/2/98 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] 4/2/98 DATE

DATE NO. REVISION
 OWNER/DEVELOPER
 MTH ELECTRIC TRAINS
 7020 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MD 21046
 (410) 381-2500

PROJECT: MIKE'S TRAIN HOUSE BUILDING ADDITION
 AREA: COLUMBIA GATEWAY PARCEL S-27
 A RESUBDIVISION OF PARCEL S-16 & S-25
 TAX MAP 43, BLOCK T, ZONED M-1
 6th ELECTION DISTRICT

TITLE: DETAILS AND 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: 4-10-98
 DESIGNED BY: C.J.R.
 DRAWN BY: BLW
 PROJECT NO: 98047
 DATE: APRIL 13, 1998
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 6



SCHEDULE A PERIMETER LANDSCAPE EDGE						
PERIMETER	ADJACENT TO ROADWAYS			ADJACENT TO PERIMETER PROPERTIES		
	1	2	3	4	5	6
LANDSCAPE TYPE	E	C	C	C	C	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	± 105'	± 220'	± 522'	± 441'	± 100'	± 201'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERRI (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED						
SHADE TREES	1/40' = 3	1/40' = 6	1/40' = 8	1/40' = 12	1/40' = 5	1/60' = 5
EVERGREEN TREES	0	0	0	0	0	0
SHRUBS	1/4' = 25	1/20' = 11	1/20' = 16	1/20' = 25	1/20' = 4	0
NUMBER OF PLANTS PROVIDED						
SHADE TREES	1	3	2	1	5	11
EVERGREEN TREES	0	0	0	0	0	0
SHRUBS	0	0	0	0	0	0

LANDSCAPE SCHEDULE NOTES

SUBSTITUTION / CREDIT NOTES:
 PERIMETER LANDSCAPE EDGE, SCHEDULE A
 PERIMETER 1:
 SUBSTITUTE (1) FLOWERING TREES FOR 25 SHRUBS.
 PERIMETER 2:
 SUBSTITUTE (5) EVERGREEN TREES FOR (3) SHADE TREES.
 SUBSTITUTE (50) SHRUBS FOR (5) TREES.
 PERIMETER 4:
 SUBSTITUTE (2) EVERGREEN TREES FOR (5) SHADE TREES.

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	55
NUMBER OF SHADE TREES REQUIRED @ 1 S.T./20 SPACES	2.75
NUMBER OF TREES PROVIDED	4
OTHER TREES (2) SUBSTITUTION	0
NUMBER OF ISLANDS REQUIRED (1 ISLAND/20 SPACES)	2.75
NUMBER OF ISLANDS PROVIDED	4

ALTERNATE COMPLIANCE REQUIRED

COLUMBIA GATEWAY TREE REQUIREMENTS

OFFICE 5-10 ACRES
 30 SHADE TREES OR EQUIVALENT PER GROSS ACRE
 8.74 ACRES X 30 S.T./ACRE = 262 SHADE TREES

PROVIDED PREVIOUSLY (SDP 97.04)
 DEMOLISHED BY EXPANSION
 EXISTING

148 SHADE TREES
 22 SHADE TREES
 125 SHADE TREES

PLANT MATERIAL LIST						
KEY	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT	REMARKS	
SHADE TREES						
AR	7	Acer rubrum 'October Glory'	2 1/2' - 3' Cal.	B + B	Full Crown Central Leader	
AS	6	Acer saccharum 'Green Mountain'	2 1/2' - 3' Cal.	B + B	Full Crown Central Leader	
ZS	20	Zelkova serrata 'Village Green'	2 1/2' - 3' Cal.	B + B	Full Crown	
QP	14	Quercus petraea	2 1/2' - 3' Cal.	B + B	Full Crown	
PB	14	Platanus x acerifolia 'Bloodgood'	2 1/2' - 3' Cal.	B + B	Full Crown	
FLOWERING TREES						
CN	11	Cercis canadensis 'Harter's'	1 1/2' - 2' Cal.	B + B	Single-stemmed Specimen	
MP	6	Malva X Prunella 'Prohibition'	1 1/2' - 2' Cal.	B + B	Full Crown Specimen	
PS	7	Prunus serrulata 'Sargent's Cherry'	1 1/2' - 2' Cal.	B + B	Multi-stemmed Specimen	
EVERGREEN TREES						
IN	2	Ilex X Helleborus 'Stevens'	5' - 6' Hr.	B + B	Full form	
PA	71	Picea canadensis 'Norway Spruce'	8' - 10' Hr.	B + B	Full form	
PK	72	Prunus laurocerasus 'Nana'	6' - 8' Hr.	B + B	Full form	
PT	10	Prunus thibetica 'Japanese Black Pine'	6' - 8' Hr.	B + B	Full form	
SHRUBS, PERENNIALS & GROUNDCOVER						
FI	175	Forseythia intermedia	2' - 2 1/2' Hr.	B + B	6' O.C.	
VC	1	Viola x cornuta 'Fragrant Vexillum'	2 1/2' - 3' Hr.	B + B	N/A	
EA	20	Euonymus alatus 'Compactus'	2 1/2' - 3' Hr.	B + B	4' O.C.	
IC	61	Ilex compacta 'Rotundifolia'	2 1/2' - 3' Hr.	B + B	4' O.C.	
PL	11	Prunus laurocerasus 'Otto Luyken'	2 1/2' - 3' Hr.	B + B	4' O.C.	
MS	10	Miscanthus sinensis 'variegatus'	2 gal.	Cont.	3' O.C.	

NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE ALTERNATE COMPLIANCE WITH THE HOWARD COUNTY RESEARCH AND DEVELOPMENT.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVM AGREEMENT IN THE AMOUNT OF \$10,000.00.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERRIS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

DEVELOPER'S/BUILDER'S CERTIFICATE:

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: [Signature] DATE: 4/10/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: [Signature] DATE: 4/10/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 4/10/98

CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 4/10/98

DATE	NO.	REVISION
4/6/98	1	PERIMETER LANDSCAPING AND SCHEDULE CHANGES

OWNER/DEVELOPER
 MTH ELECTRIC TRAINS
 7020 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MD 21046
 (410) 381-2580

PROJECT
 MIKE'S TRAIN HOUSE
 BUILDING ADDITION

AREA
 COLUMBIA GATEWAY PARCEL: S-27
 A RESUBDIVISION OF PARCEL S-16 & S-25
 TAX MAP 43, BLOCK 7, ZONED M-1
 6th ELECTION DISTRICT

TITLE
 LANDSCAPING 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

DATE: 4-10-98

DESIGNED BY: D.T.D.

DRAWN BY: A.J.L.

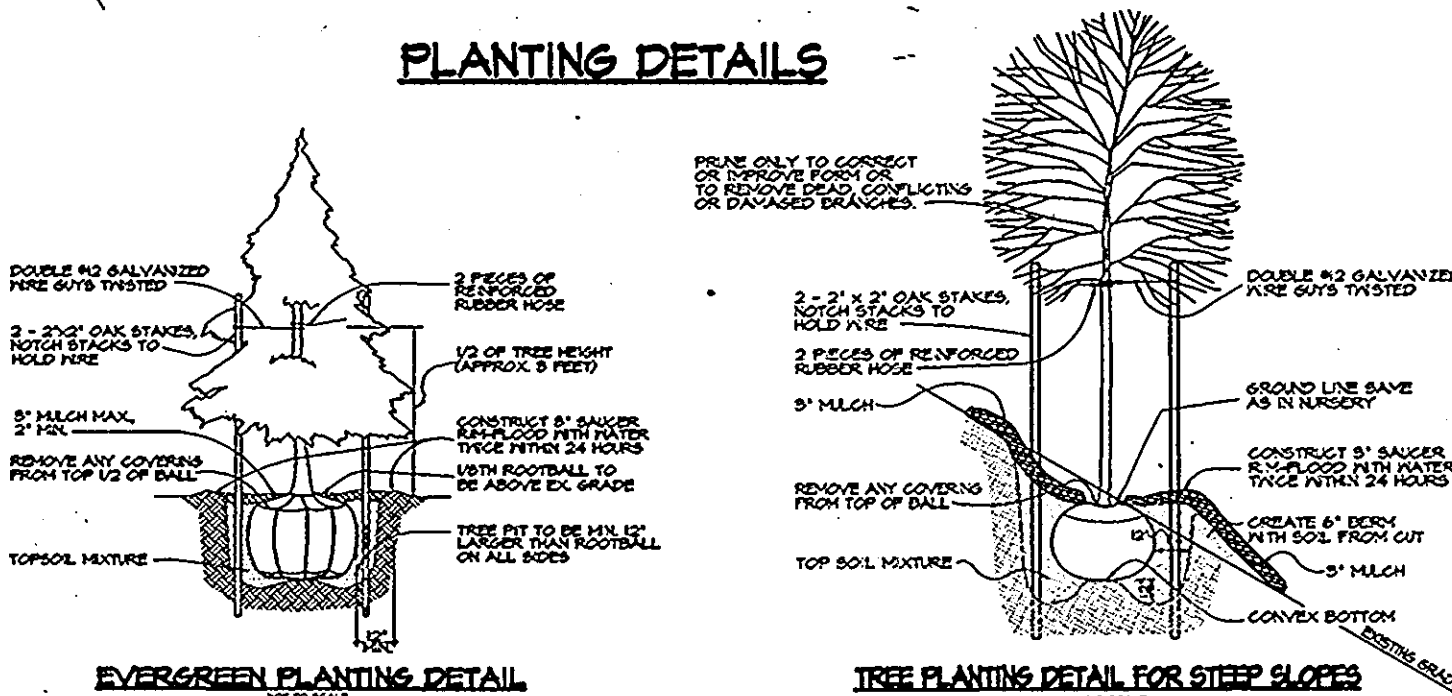
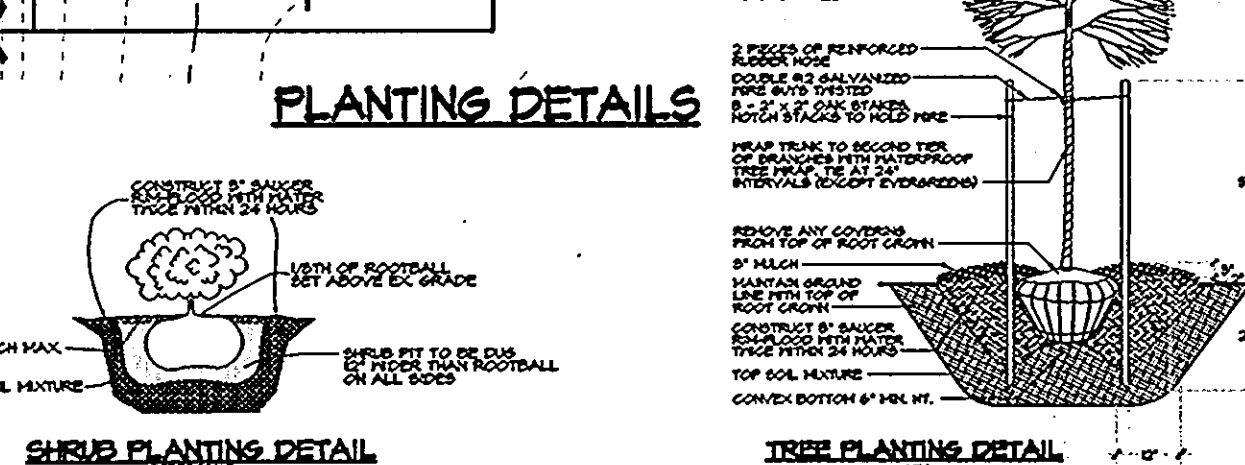
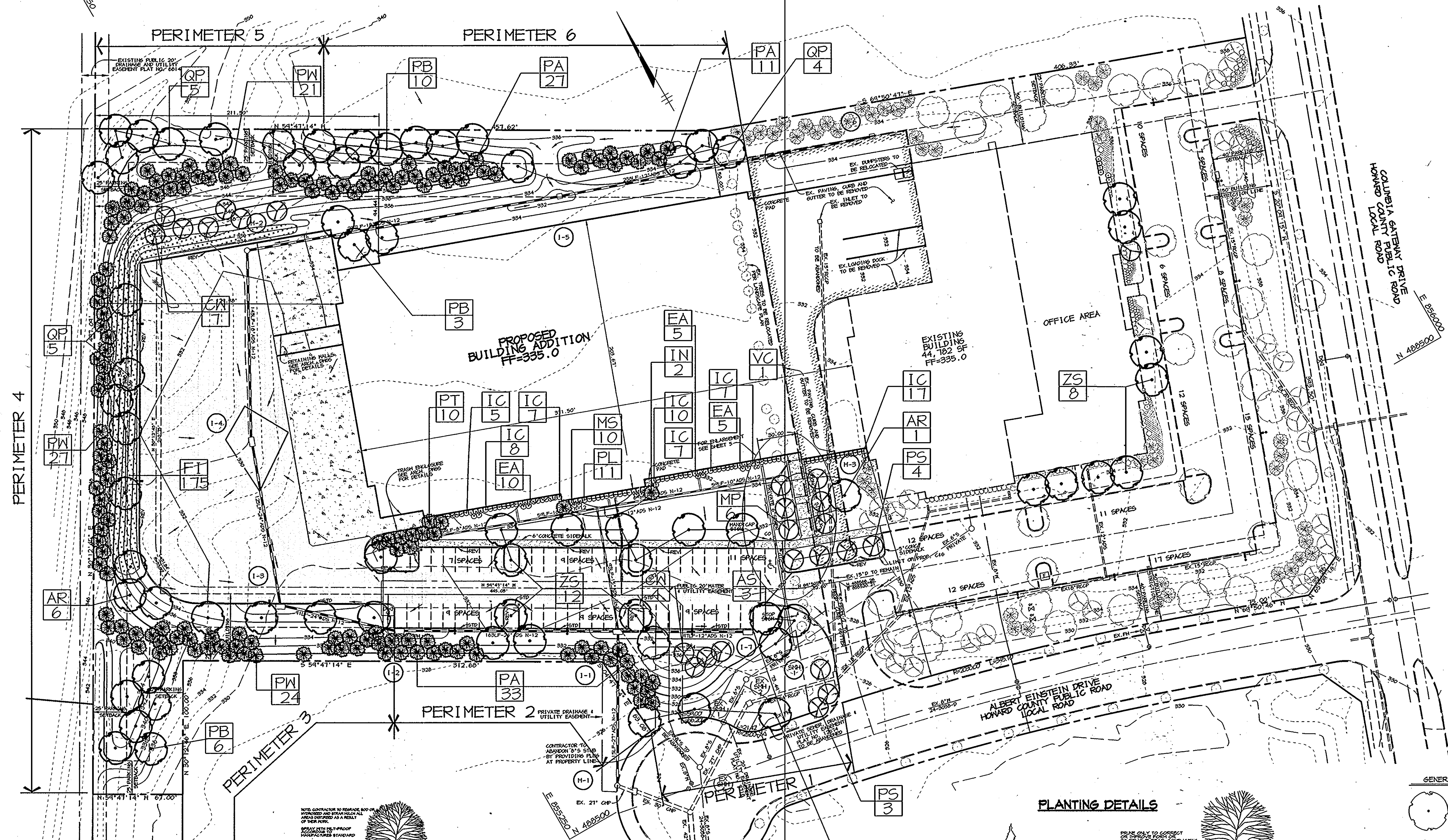
PROJECT NO: 98047
 LSCP2

DATE: APRIL 13, 1998

SCALE: 1" = 40'

DRAWING NO. 6 OF 6

DAVID T. DOWS #830



GENERAL LEGEND

(Symbol)	PROPOSED SHADE TREE
(Symbol)	PROPOSED FLOWERING TREE
(Symbol)	PROPOSED EVERGREEN TREE
(Symbol)	PROPOSED SHRUB
(Symbol)	EXISTING SHRUB
(Symbol)	PROPOSED GROUND COVER
(Symbol)	EXISTING SHRUB PERENNIALS