

SITE ANALYSIS

EXISTING ZONING -- NEW TOWN -- EMPLOYMENT CENTER
COMMERCIAL

FINAL DEVELOPMENT PLAN PHASE 211

AREA OF PARCEL A = 7.645 ACRES, PARCEL "B" 2.006 ACRES
TOTAL 9.651 ACRES

PARKING SPACES REQUIRED = 2 SPACES/1000 S.F. = 334

▲ PARKING SPACES PROVIDED = 614 (HC=15, COMPACT=285, REGULAR=322, parallel=4)

PROPOSED OFFICE BUILDING FLOOR SPACE:

GROUND LEVEL = 15,935 S.F.
2ND FLOOR = 20,906 S.F.
3RD FLOOR = 22,005 S.F.
4TH FLOOR = 18,022 S.F.
5TH FLOOR = 18,022 S.F.
6TH FLOOR = 18,022 S.F.
7TH FLOOR = 18,022 S.F.
8TH FLOOR = 18,022 S.F.
9TH FLOOR = 18,022 S.F.

TOTAL FLOOR SPACE = 166,978 S.F.

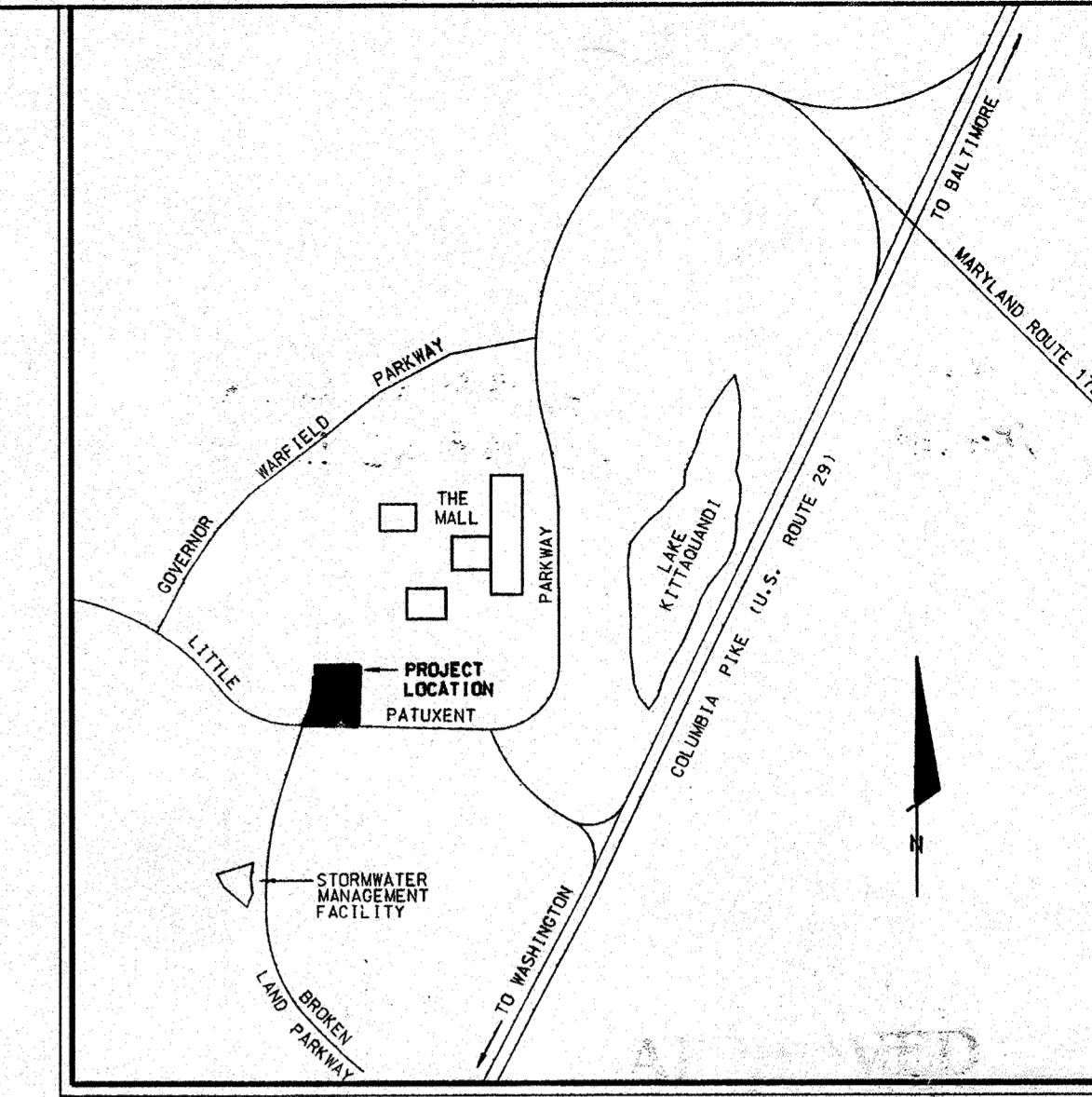
PARCEL A	EXIST. ACRES	%	PROPOSED ACRES	%	PARCEL A TOTALS	%
TOTAL AREA BUILDING & DECK COVERAGE	2.37		5.28		7.65	
PAVED AREA	1.46	62%	1.07	20%	2.53	33%
GREEN AREA TO REMAIN	0.46	19%	3.37	64%	3.83	50%
	0.45	19%	0.84	16%	1.29	17%
PARCEL B						
TOTAL AREA BUILDING & DECK COVERAGE	-	-	2.01	18%		
PAVED AREA	-	-	0.37	58%		
GREEN AREA TO REMAIN	-	-	1.16	24%		
	-	-	0.48			

GENERAL NOTES

- TOPOGRAPHY TAKEN FROM FIELD RUN TOPO PREPARED BY SHANABERGER AND LANE IN OCTOBER, 1984.
- RECORDING REFERENCE IS PLAT # 9512, SEPTEMBER 6, 1990
- SEE ARCHITECTURAL PLANS FOR DETAILS OF PROPOSED OFFICE BUILDING.
- ALL SITE WORK CONSTRUCTION TO BE DONE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL - VOLUME IV STANDARD SPECIFICATIONS AND DETAIL FOR CONSTRUCTION.
- PUBLIC WATER AND PUBLIC SEWER TO BE UTILIZED.
- REFER TO DPZ FILE NOS. S-90-31, WP-90-105, 110 AND F-91-01, SDP-90-213.
- GRADES HAVE BEEN ESTABLISHED TO ENSURE POSITIVE DRAINAGE.
- ONE HANDICAPPED SIGN SHALL BE PLACED AT EACH HANDICAPPED PARKING SPACE IN ACCORDANCE WITH REQUIREMENTS OF THE MARYLAND BUILDING CODE.
- A STORMWATER MANAGEMENT FACILITY HAS BEEN CONSTRUCTED OFF-SITE AT BROKEN LAND PARKWAY UNDER F-85-131. (SEE VICINITY MAP) TO SERVE THESE PARCELS.
- ALL EXISTING FACILITIES ADJACENT TO THIS SITE WERE CONSTRUCTED UNDER SDP 88-157 (50 CCC)
- WATER QUALITY PROVIDED BY IN LINE FACILITY LOCATED DWSTR. OF I-6.
- REFERENCE AND LOCATE EXISTING HOWARD COUNTY MONUMENTS.
- PROPOSED TRASH DUMPSTERS SHALL BE LOCATED WITHIN BUILDING AT LOADING DOCK.
- ▲ This site, which is comprised of Parcels A & B (P.N. 0921 & 0912), C1, C2 & E, is subject to a development rights and responsibilities agreement (DRRA) recorded at L17457 F 165, dated DRRA predates CBA-2011 (effective date of 1/03/2012); therefore, this site is exempt from forest conservation requirements of section 10.1202(B)(1)(iv) of the Howard County code section in accordance with section 10.1202(B)(1)(iv), as codified per CBA-1996, which was in place at the said time DRRA was recorded in February 2011.

SHEET INDEX

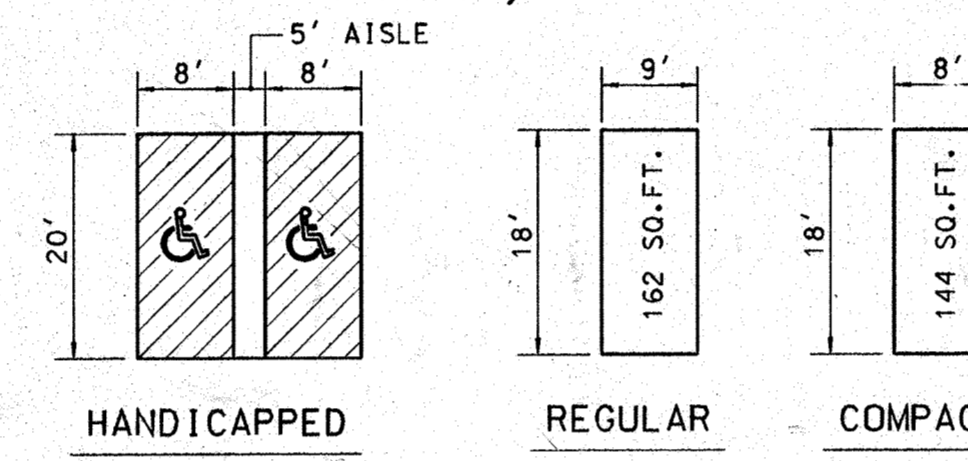
1	TITLE SHEET
2	GRADING AND SITE PLAN
3	LEVEL 1 AND 2 DECK PARKING BUILDING AND DECK SECTION
4	STAKEOUT PLAN
5	UTILITIES, ROAD AND STORM DRAIN DETAILS
6	UTILITIES AND STORM DRAIN PROFILES
7	DRAINAGE AREA MAP
8	SEDIMENT CONTROL PLAN
9	SEDIMENT CONTROL DETAILS
10	LANDSCAPE PLAN
11	WATER QUALITY STRUCTURE AND DETAILS
12	Overview of 2012 Improvements
13	Grading, Sediment Control & Drainage Area Plan for 2012 Improvements
14	Sediment Control Notes & Details for 2012 Improvements
15	Site and Utility Details for 2012 Improvements
16	Landscape Plan for 2012 Improvements
17	Paving Plan and Details



VICINITY MAP
SCALE: 1" = 2000'

ADDRESS CHART

PARCEL	STREET ADDRESS
A & B	11000 BROKEN LAND PARKWAY



TYPICAL PARKING SPACE
NO SCALE

15. For the 2012 site improvements, financial surety for the landscaping shall be posted with the grading permit in the amount of \$9000.00.

Note: A portion of this plan has been updated as part of the revitalization of Newtown Columbia-Warfield Neighborhood, Block W-1. This block is adjacent to the northern limits of this SDP and the required infrastructure improvements overlap with the Gramercy Place (Drive) lane from Broken Land Parkway) roadbed. For details of these improvements, see F 13-015.

COLORS
LEGEND AND BORDER - GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND WHITE

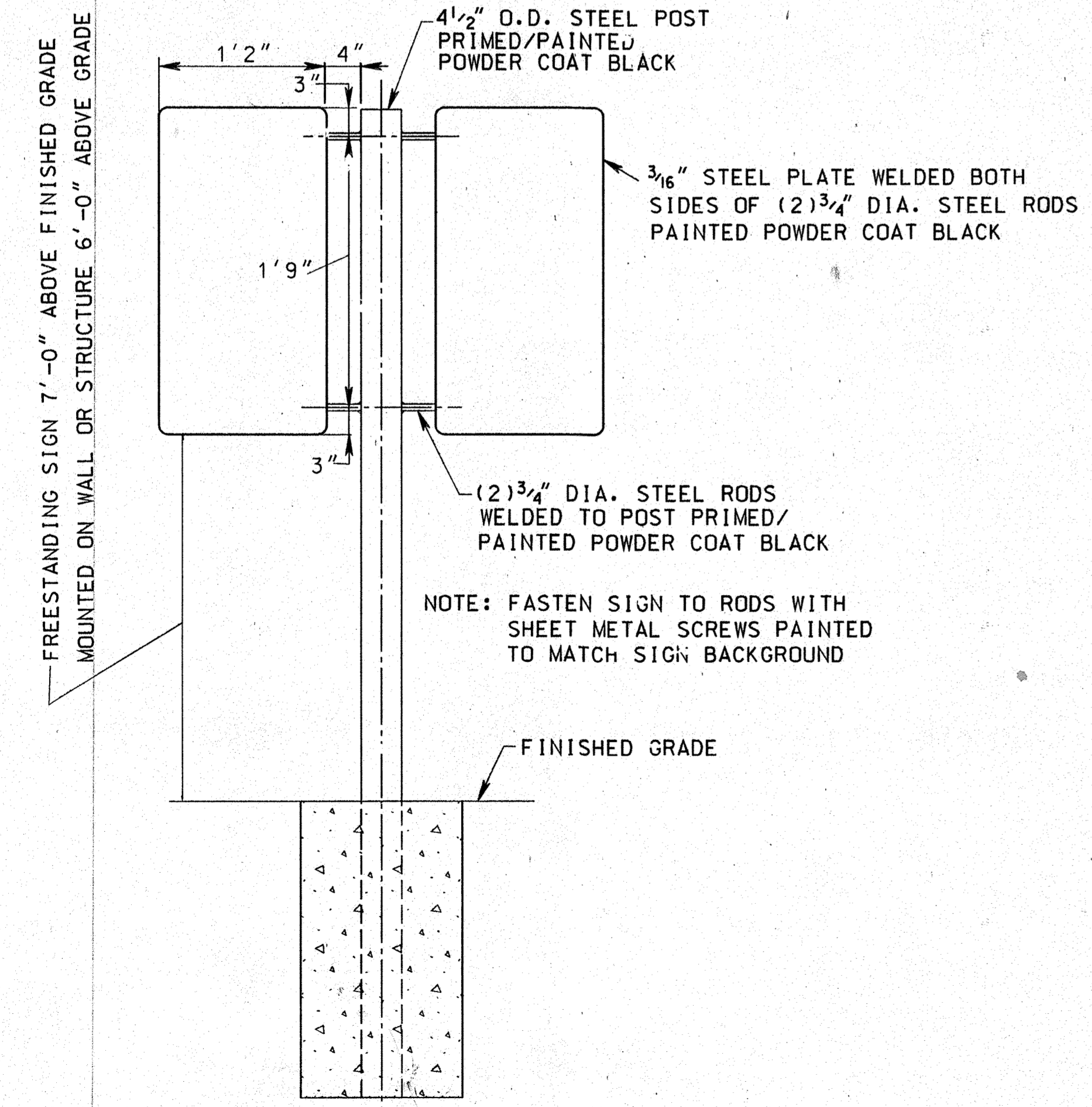
LEGEND

- 380 --- EXISTING CONTOUR
- 380 — PROPOSED CONTOUR
- F.F.000.0 PROPOSED FINISHED FLOOR ELEVATION
- 380X0 PROPOSED SPOT ELEVATION
- UTILITIES NOT IN CONTRACT
- TC/BC TOP CURB / BOTTOM CURB
- CONCRETE WALKS
- EXISTING CURB (TO BE REMOVED)
- PAINTED LINES
- 7" CONCRETE CURB AND GUTTER
- "RESERVED FOR HANDICAPPED PERSONS" (INDICATED)
- HR HANDICAPPED RAMP
- ▽ HANDICAPPED SIGN
- ← BUILDING ENTRANCE
- ← TRAFFIC FLOW

Revisions by GLW
Professional Certification
I hereby certify that these plans were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland. License No. 12975, Expiration Date: May 20, 2012

* REVISIONS NOTED BY ASTERISK REPRESENT NEW S.D.P. ORIGINALS THAT SUPERCEDE THE 10/18/90 SIGNED PLANS

4/2012 Added sheets 12-17 for 2012 improvements (by GLW)					
SUBDIVISION NAME		SECTION/AREA	PARCEL		
TOWN CENTER		1	2/6	A & B	
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
9512	1	NT E.C. COMM.	36	5	6U52-02
WATER CODE			SEWER CODE		
E-31			5321000		

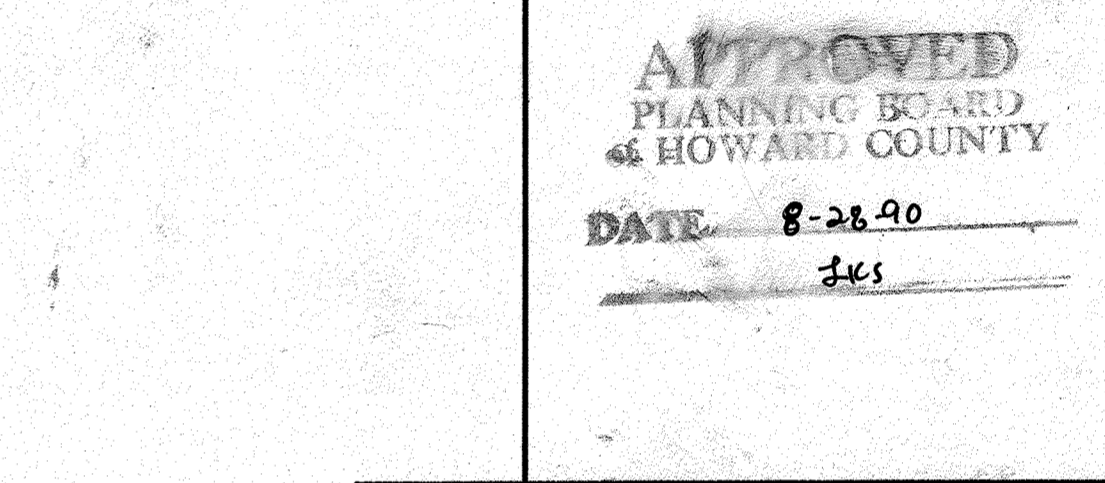


HANDICAPPED SIGN POST

NO SCALE



HANDICAPPED PARKING SIGN



OWNER AND DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shaffer
THOMAS J. SHAFER P.E. NO. 8457

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	
John M. Bogdanus COUNTY HEALTH OFFICER	10-3-91 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
Robert Benjamin DIRECTOR	9-27-91 DATE
William S. Ray CHIEF, BUREAU OF ENGINEERING	9-27-91 DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
Frankie C. Taylor PLANNING DIRECTOR	10/1/91 DATE
Barbara H. Holsomath CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	10/10/91 DATE

NO.	DATE	REVISIONS
2	6-7-91	REVISED PARKING DATA
1	11-1-90	BLDG. S.F. AND PARKING SPACES
DESCRIPTION OF REVISION		
1/7/2012	Add note to reference F 13-015 (by GLW)	
COLUMBIA SITE DEVELOPMENT PLAN TOWN CENTER SECTION 2 AREA 6 PARCELS "A" AND "B" (OFFICE BUILDING AND PARKING DECK)		
TITLE SHEET AND DETAILS		
SHEET 1 OF 11		
ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND DATE: AUGUST 20, 1990		PARCEL TAX MAP NO. 36 SCALE: AS SHOWN

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
Joseph Bodur 11-3-92
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Ruth Bunn 9-22-91
DIRECTOR DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Marsha J. Lange 10/10/91
PLANNING DIRECTOR DATE

Shirley J. Hilden 10/10/91
CHIEF, DIVISION OF COMMUNITY
PLANNING AND LAND DEVELOPMENT DATE

LIMIT OF PAVING, CURB
AND GUTTER UNDER THIS CONTRACT
STATION 0+61

SIDEWALKS WITHIN BROKEN
LAND PARKWAY R/W SHALL
BE CONSTRUCTED AS PART OF
BROKEN LAND PARKWAY ROAD
CONSTRUCTION CONTRACT.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 8-28-90
Sts

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REGARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shaffer
THOMAS J. SHAFER P.E. NO. 8457



SUBDIVISION NAME			SECTION/AREA	PARCEL
TOWN CENTER			2/6	A & B
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.
9512	1	MT E.C. ZONE	36	5
WATER CODE			SEWER CODE	
E-31			5321006	

NOTE: FOR CONTINUATION OF BROKEN LAND
PARKWAY SIDEWALK, SIDEWALK ALONG
L. P. P. ROADWAY LANE WIDENING,
SEE L. P. P. ROAD WIDENING CONTRACT.

NOTE: I.S. = IRRIGATION SLEEVE
PROVIDE 4" PVC SLEEVES AS SHOWN 18"
BELOW THE GUTTER ELEVATION AT THE
CURB. EXTEND THE SLEEVE A MINIMUM
OF 2'-0" BEYOND THE EDGE OF THE
SIDEWALK OR BACK OF CURB. CAP & MARK.

LIGHTING LEGEND

QUANTITY	MFG. & CAT. NO.	HT.	COLOR	REMARKS
7	Garco/Valmont Pole H-400 M.H./ DS. 210-6.6 A 300	30'	Dark Durodic Bronze	Flush Mount
7	Garco/Valmont Pole H-400 M.H./ DS. 210-6.6 A 300	30'	Dark Durodic Bronze	Flush Mount
4	6-7-91	REVISED ROADWAY, GRADING AND DIMENSIONING		
3	2-14-91	ADDED BANK ROAD, STATIONING, DIMENSIONS, GRADING, FRONT OF BUILDING HANDICAPPED RAMPS, REMOVED 4" W RELOCATED 8" W		
2	11-16-90	GENERAL REVISIONS		
1	11-1-90	PARKING, ROAD AND GRADING		
NO.	DATE	DESCRIPTION OF REVISION		

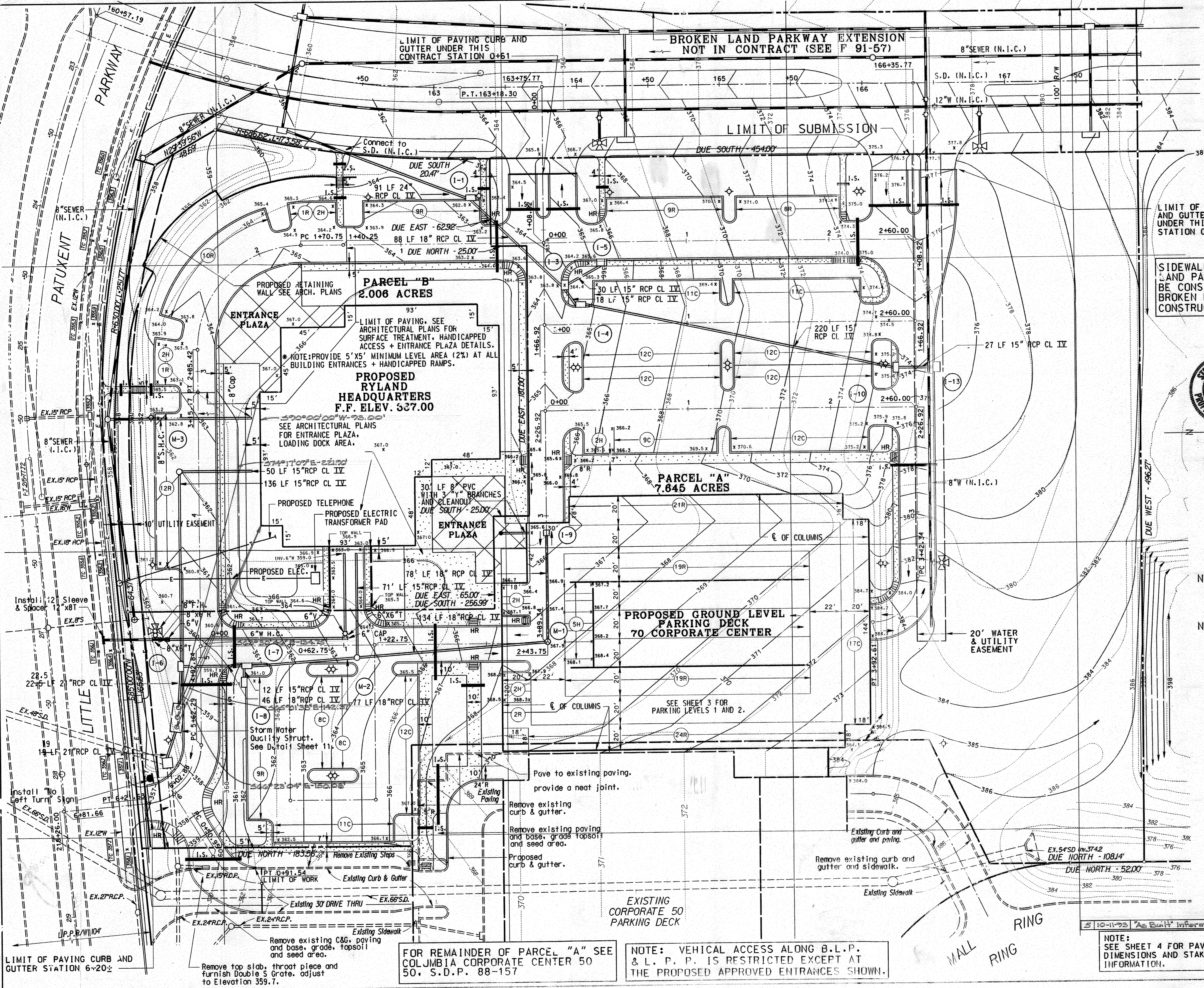
COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)

SITE PLAN

SHEET 2 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 30'



LIMIT OF PAVING CURB AND
GUTTER STATION 6+20

Remove existing C&G, paving
and base, grade, topsoil
and seed area.

FOR REMAINDER OF PARCEL "A" SEE
COLUMBIA CORPORATE CENTER 50
50, S.D.P. 88-157

NOTE: VEHICAL ACCESS ALONG B.L.P.
& L. P. P. IS RESTRICTED EXCEPT AT
THE PROPOSED APPROVED ENTRANCES SHOWN.

NOTE:
SEE SHEET 4 FOR PAVEMENT
DIMENSIONS AND STAKEOUT
INFORMATION.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph B. Boyer 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert Benjamin 9-27-91
DIRECTOR DATE

Kevin D. Kelly 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

David C. Johnson 10/10/91
PLANNING DIRECTOR DATE

Amna H. Hammad 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 8-28-90
ds

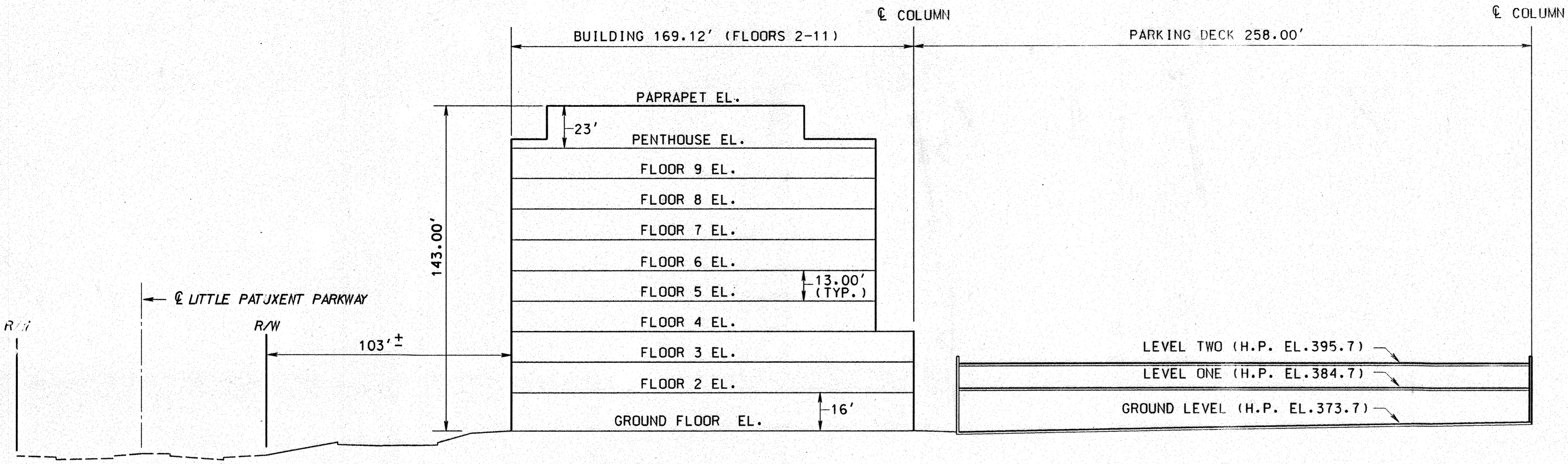
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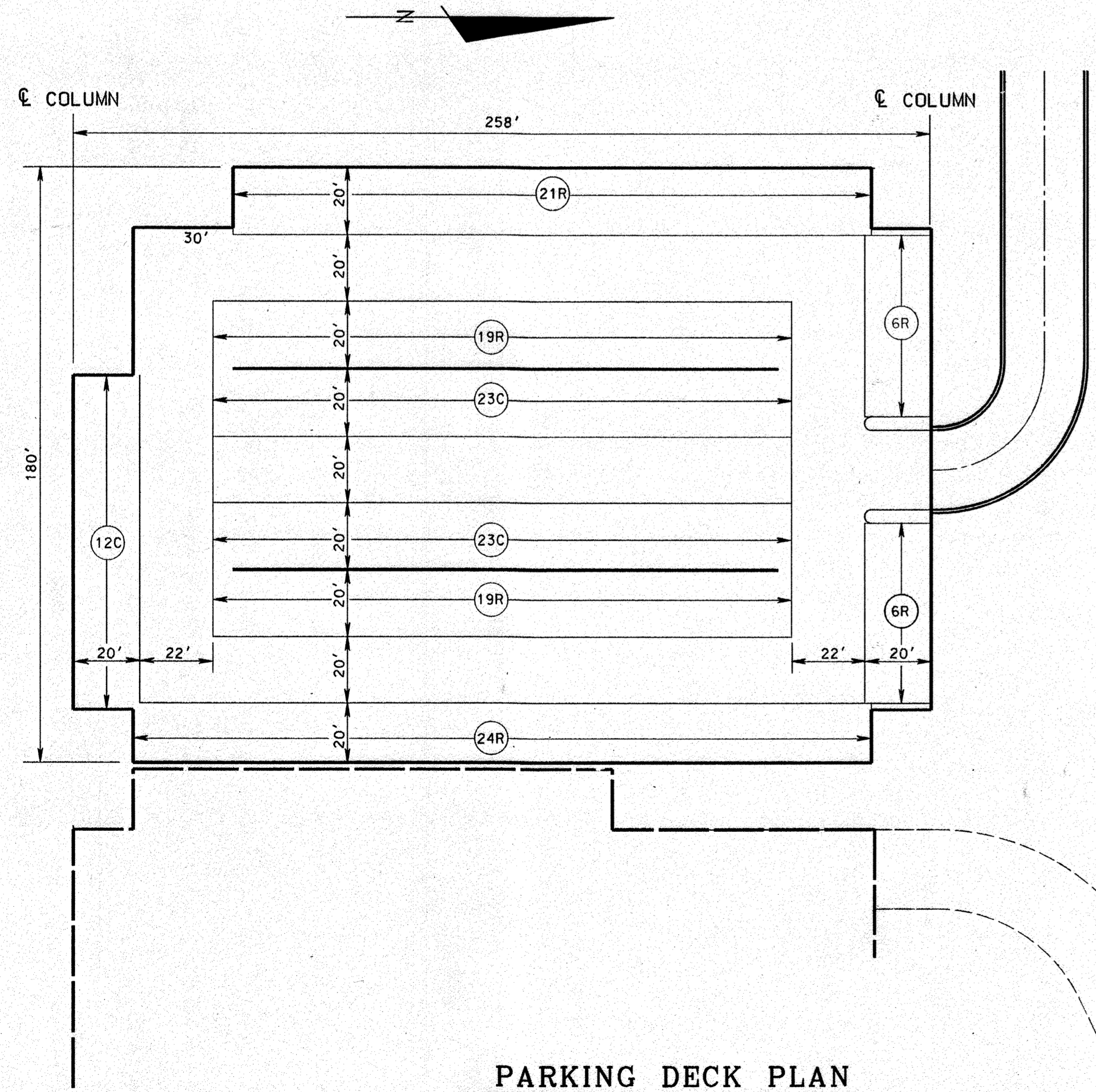
Thomas J. Shaffer
THOMAS J. SHAFFER P.E. NO. 8457



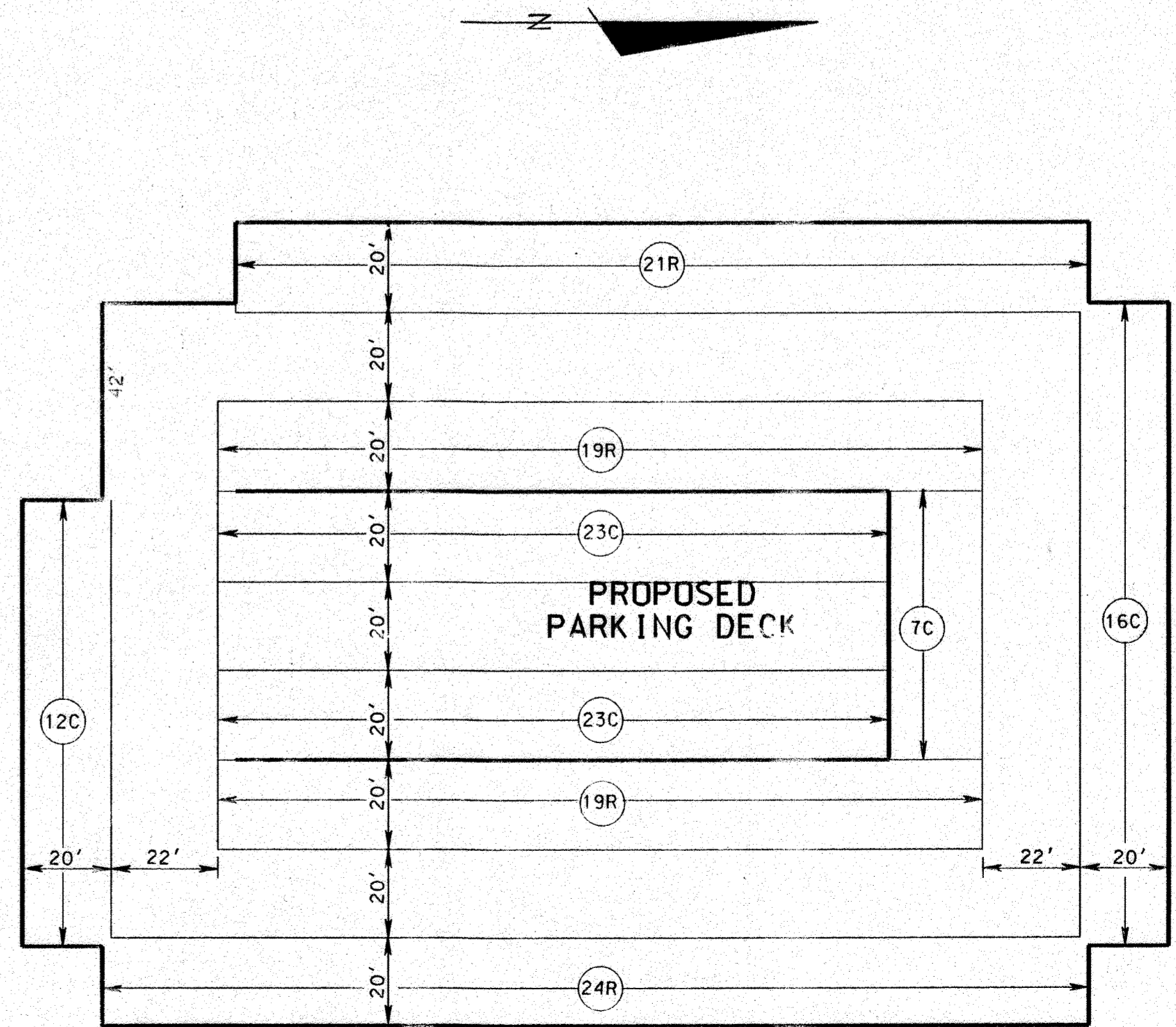
SUBDIVISION NAME TOWN CENTER		SECTION/AREA 2/6	PARCEL A & B
PLAT 9512	BLOCK 1	ZONE NT E.C. COM.	TAX/ZONE MAP 36
WATER CODE E-31		ELEC. DIST. 5	CENSUS TR. 6052-02
		SEWER CODE 5321000	



PROPOSED OFFICE BUILDING AND PARKING DECK
EAST ELEVATION (LOOKING WEST)
SCALE: 1" = 30'



PARKING DECK PLAN
(LEVEL ONE - EL. 384.7 ±)
SCALE: 1" = 30'



PARKING DECK PLAN
(LEVEL TWO - EL. 395.7 ±)
SCALE: 1" = 30'

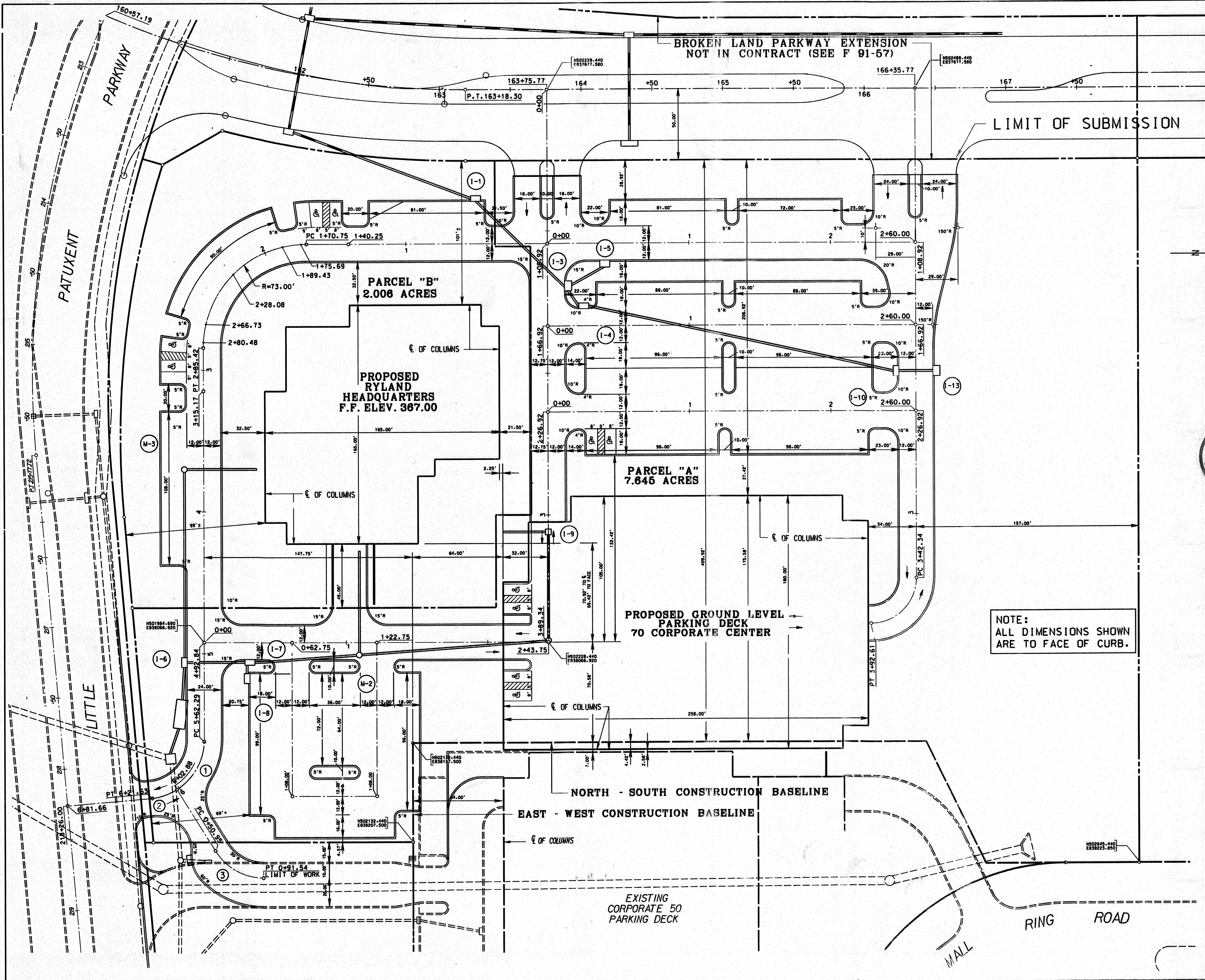
2	6-7-91	REVISED ROADWAY
1	11-1-90	BUILDING, ROADWAY AND PARKING
NO.	DATE	DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
PARKING DECK DETAILS

SHEET 3 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: AS SHOWN



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph M. Boyle 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert Bumpus 9-22-91
DIRECTOR DATE

William E. Kelly 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph M. Boyle 10/10/91
PLANNING DIRECTOR DATE

Anna Klamath 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE: 8-28-90
des

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Safer
THOMAS J. SAFER P.E. NO. 8457



SUBDIVISION NAME				SECTION/AREA	PARCEL
TOWN CENTER				2/6	A & B
PLAY	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
9512	1	NT E.C. COMM.	36	5	6052-32
WATER CODE				SEWER CODE	
E-31				5321000	

ROAD CURVE DATA

PC 5+62.29 TO 6+02.88

① Δ=58°08'08" T=22.23'
R=40.00' CH'D.=38.87'
ARC=40.59' BRG.=S60°55'56"E

6+02.88 TO PT 6+21.63

② Δ=26°51'52" T=9.55'
R=40.00' CH'D.=18.58'
ARC=18.75' BRG.=S18°25'56"E

PC 0+50.95 TO PT 0+91.54

③ Δ=58°08'08" T=22.23'
R=40.00' CH'D.=38.87'
ARC=40.59' BRG.=N29°04'04"E

NOTE:
ALL DIMENSIONS SHOWN
ARE TO FACE OF CURB.

NO.	DATE	DESCRIPTION OF REVISION
4	6-7-91	REVISED ROADWAY AND STATIONING
3	2-14-91	ADDED BANK ROAD, DIMENSIONS, STATIONING
2	11-16-90	GENERAL REVISIONS
1	11-1-90	ROAD, PARKING AND DIMENSIONS

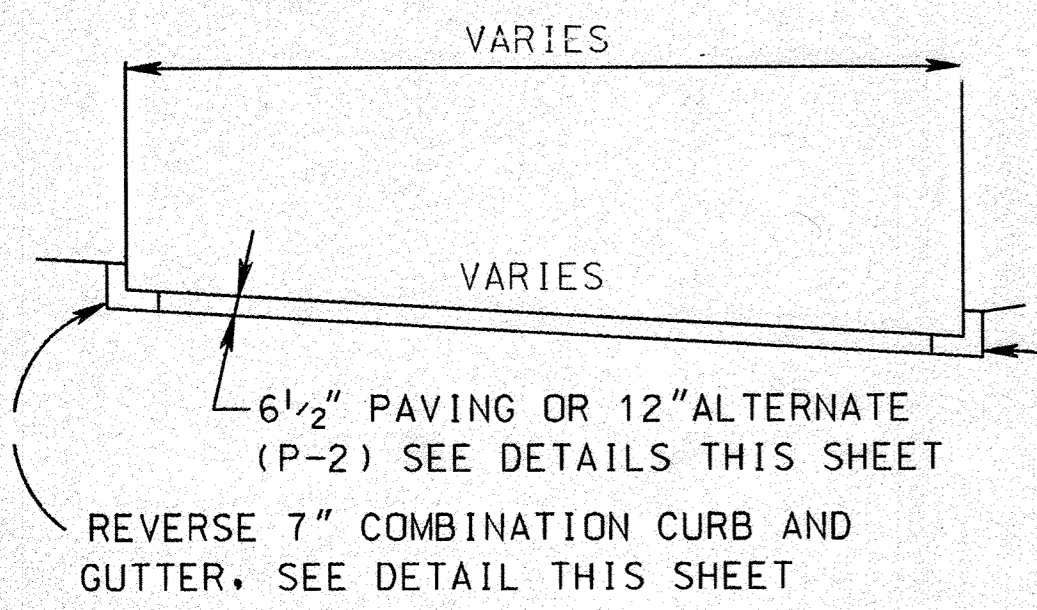
COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)

STAKEOUT PLAN

SHEET 4 OF 11

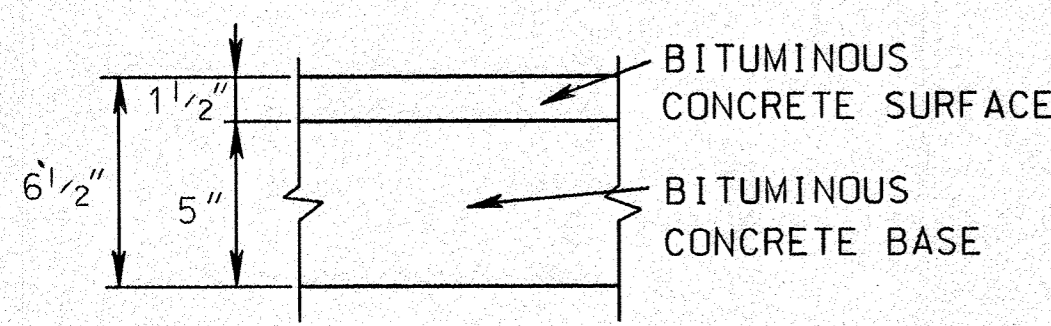
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 30'

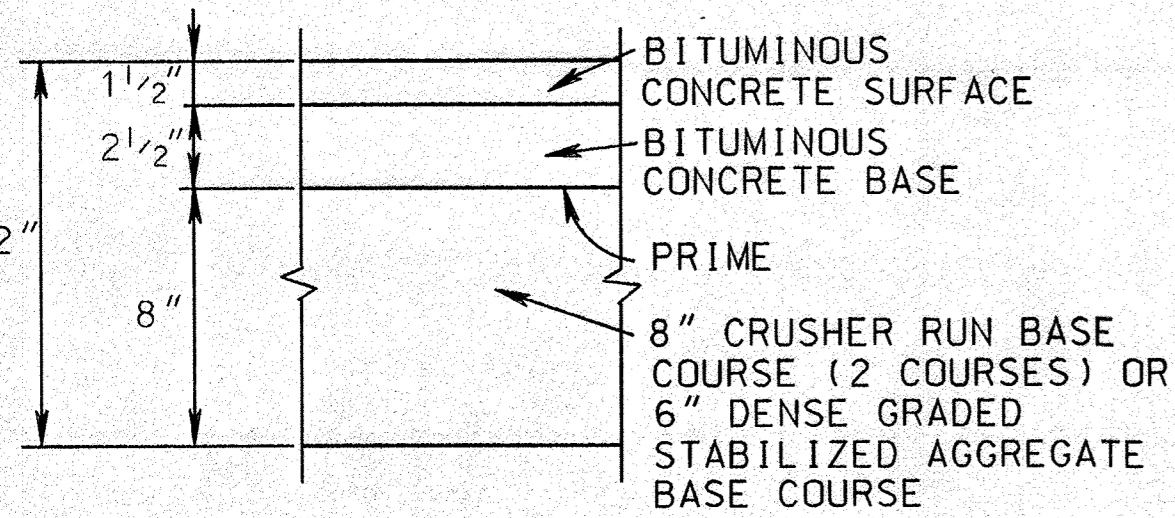


TYPICAL SECTION
PARKING LOT

NO SCALE



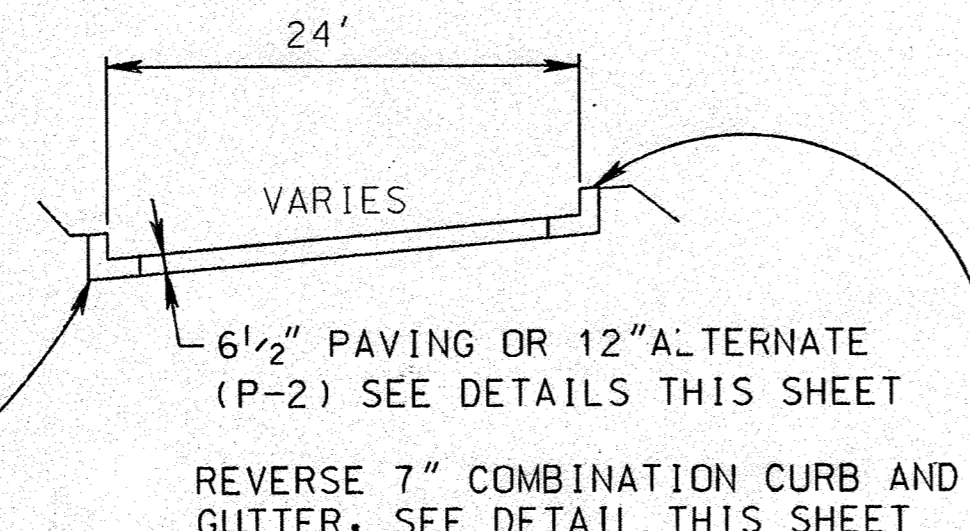
P-2 FULL DEPTH BITUMINOUS CONCRETE



P-2 GRANULAR BASE (ALTERNATE)

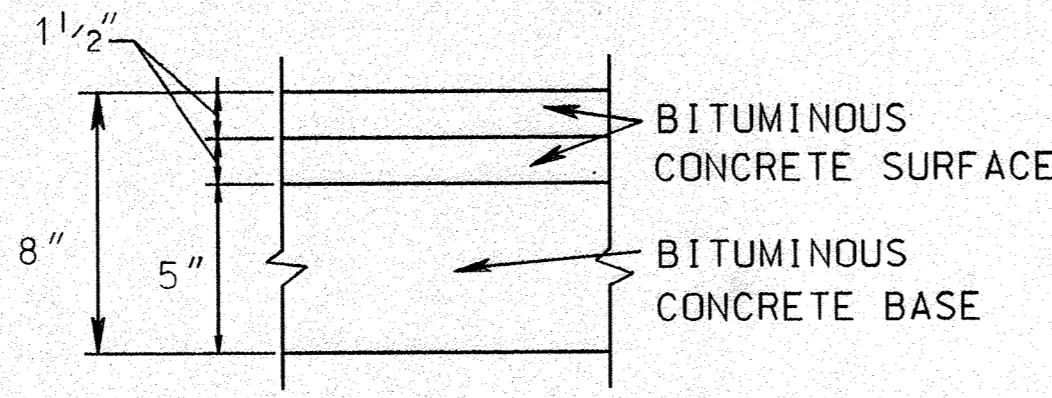
TYPICAL PAVING SECTION
PRIVATE DRIVE

NO SCALE

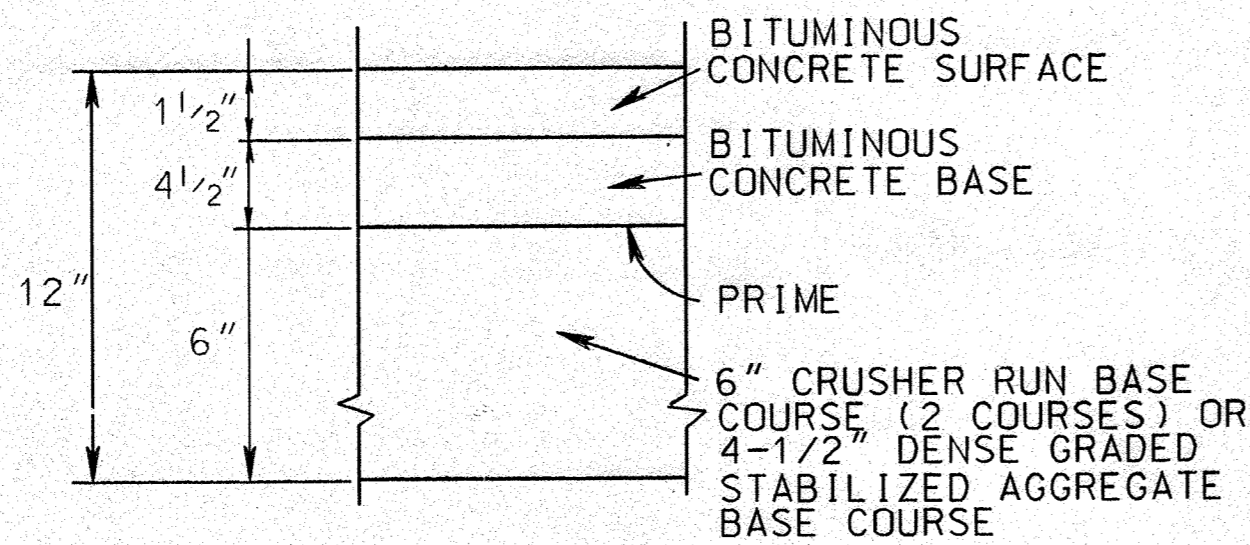


TYPICAL SECTION
24' DRIVEWAYS

NO SCALE



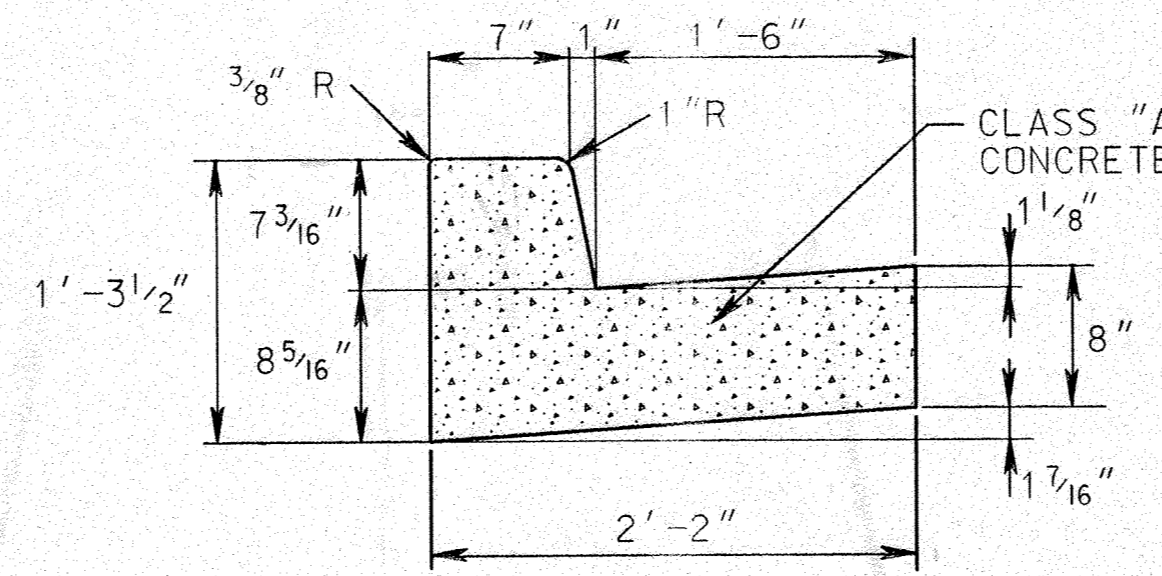
P-3 FULL DEPTH BITUMINOUS CONCRETE



P-3 GRANULAR BASE (ALTERNATE)

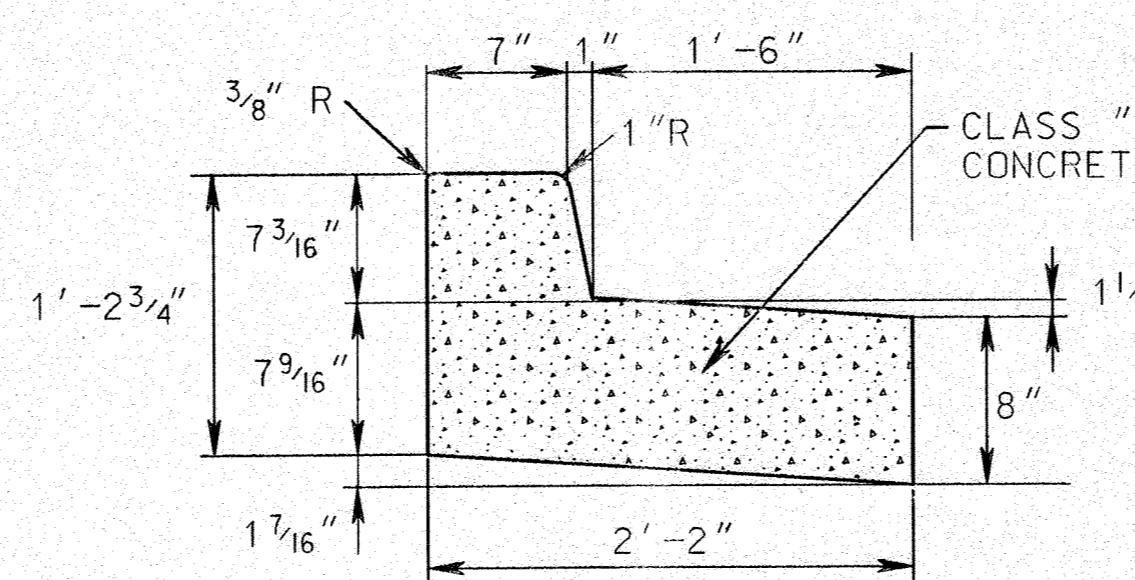
TYPICAL PAVING SECTION
NORTH CONNECTOR RD. ONLY
BETWEEN BLP & MALL RING ROAD

NO SCALE



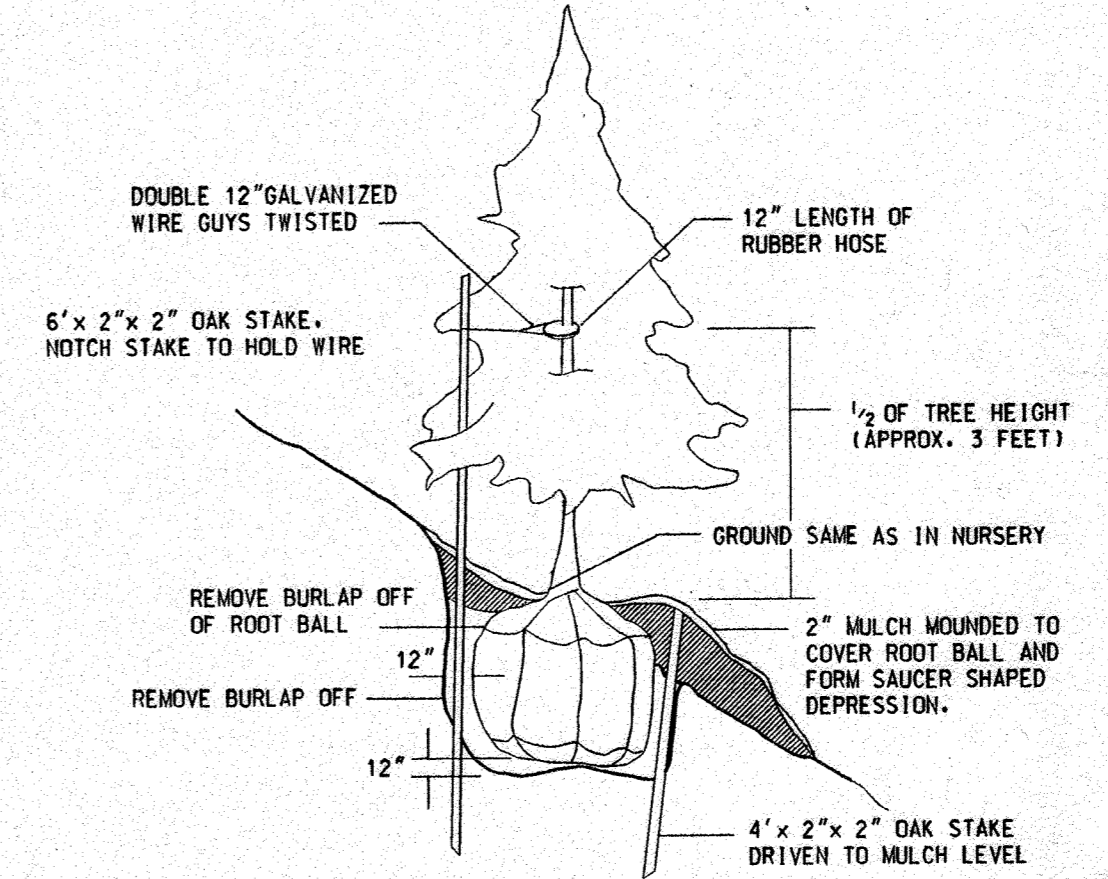
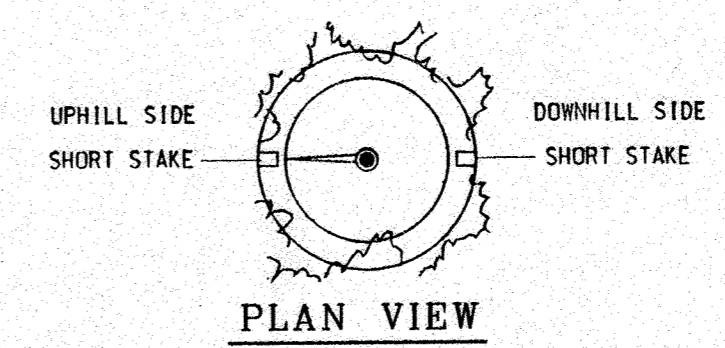
STANDARD 7" COMBINATION CURB AND GUTTER

NO SCALE



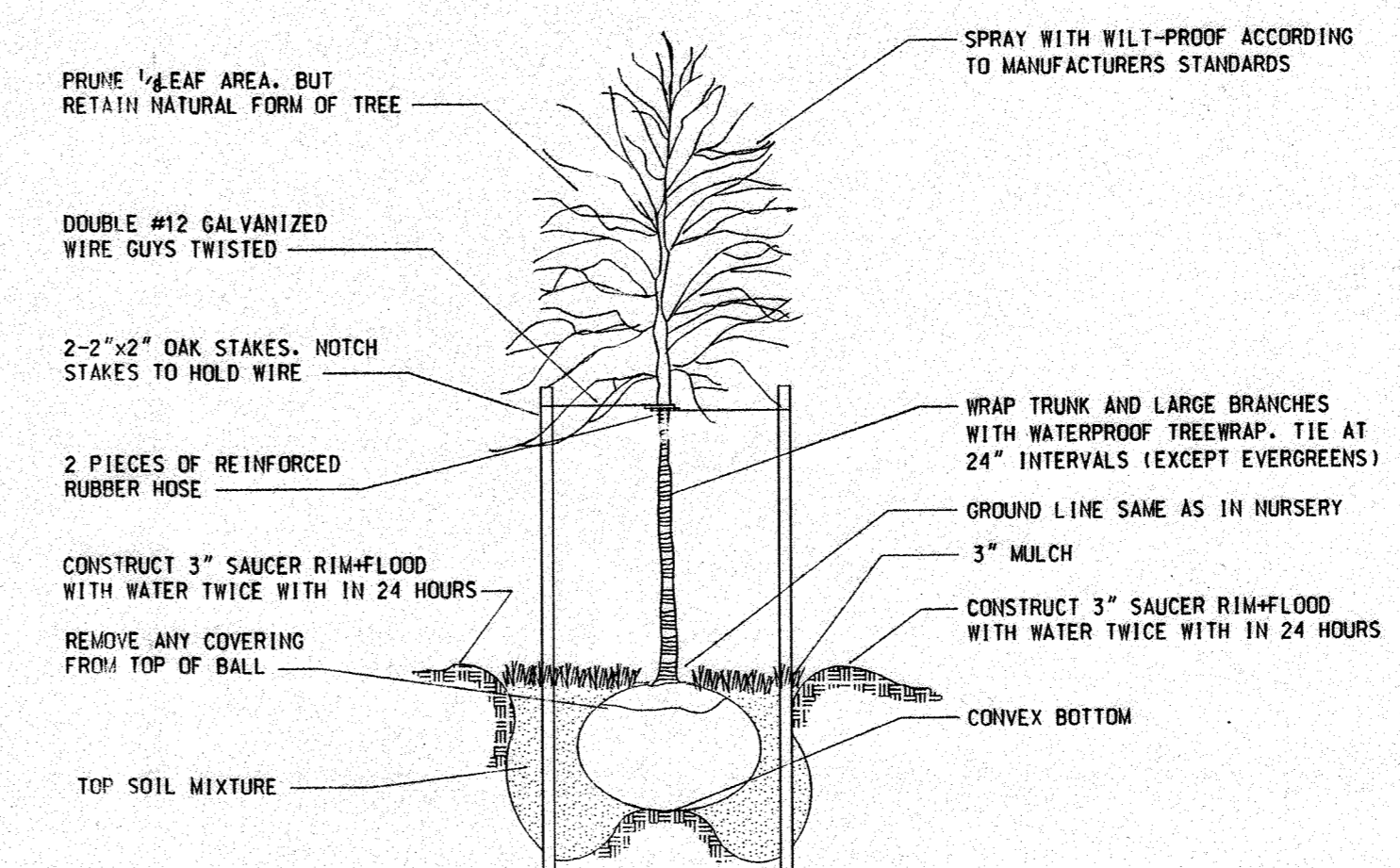
REVERSE 7" COMBINATION CURB AND GUTTER

NO SCALE



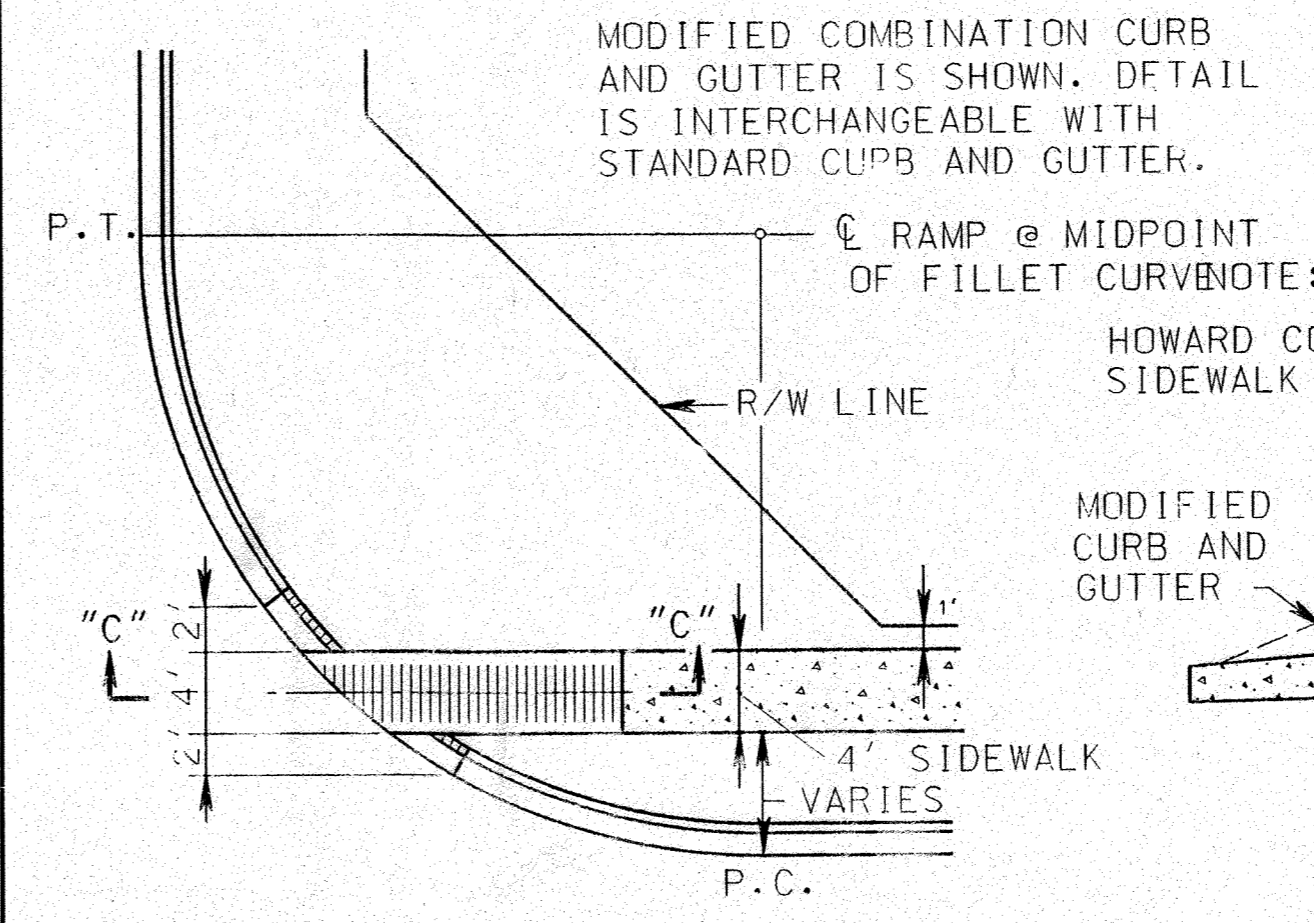
PLANTING DETAIL FOR STEEP SLOPE

NO SCALE



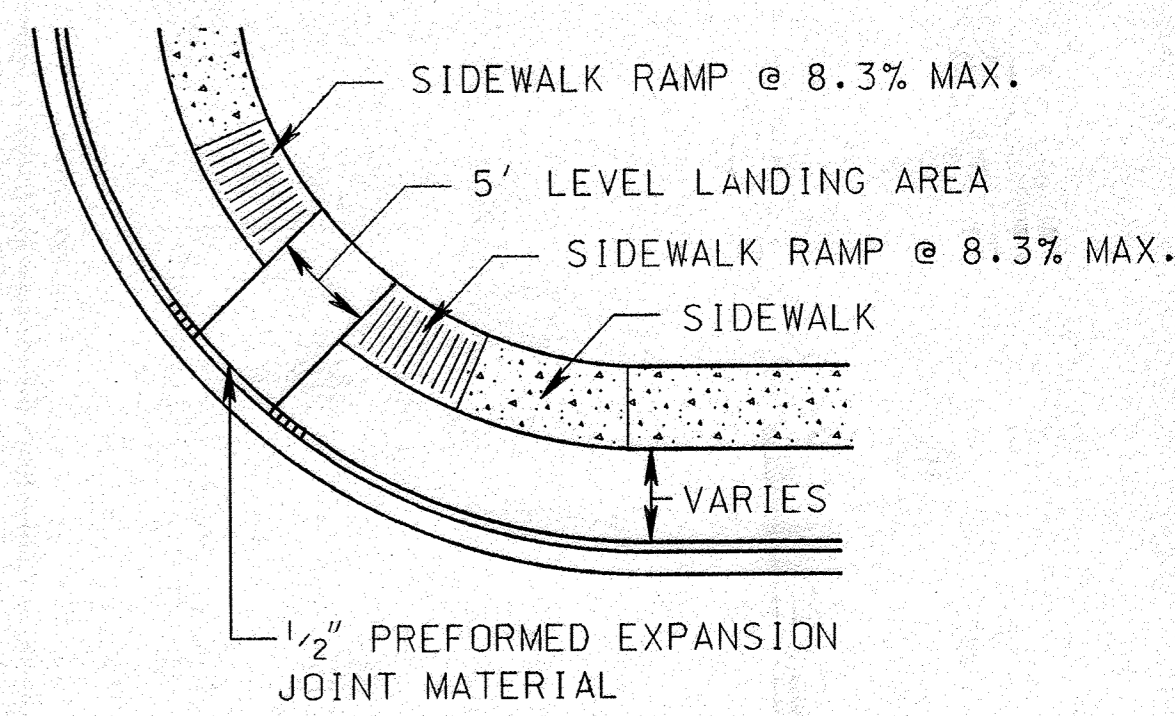
TREE PLANTING DETAIL

NO SCALE



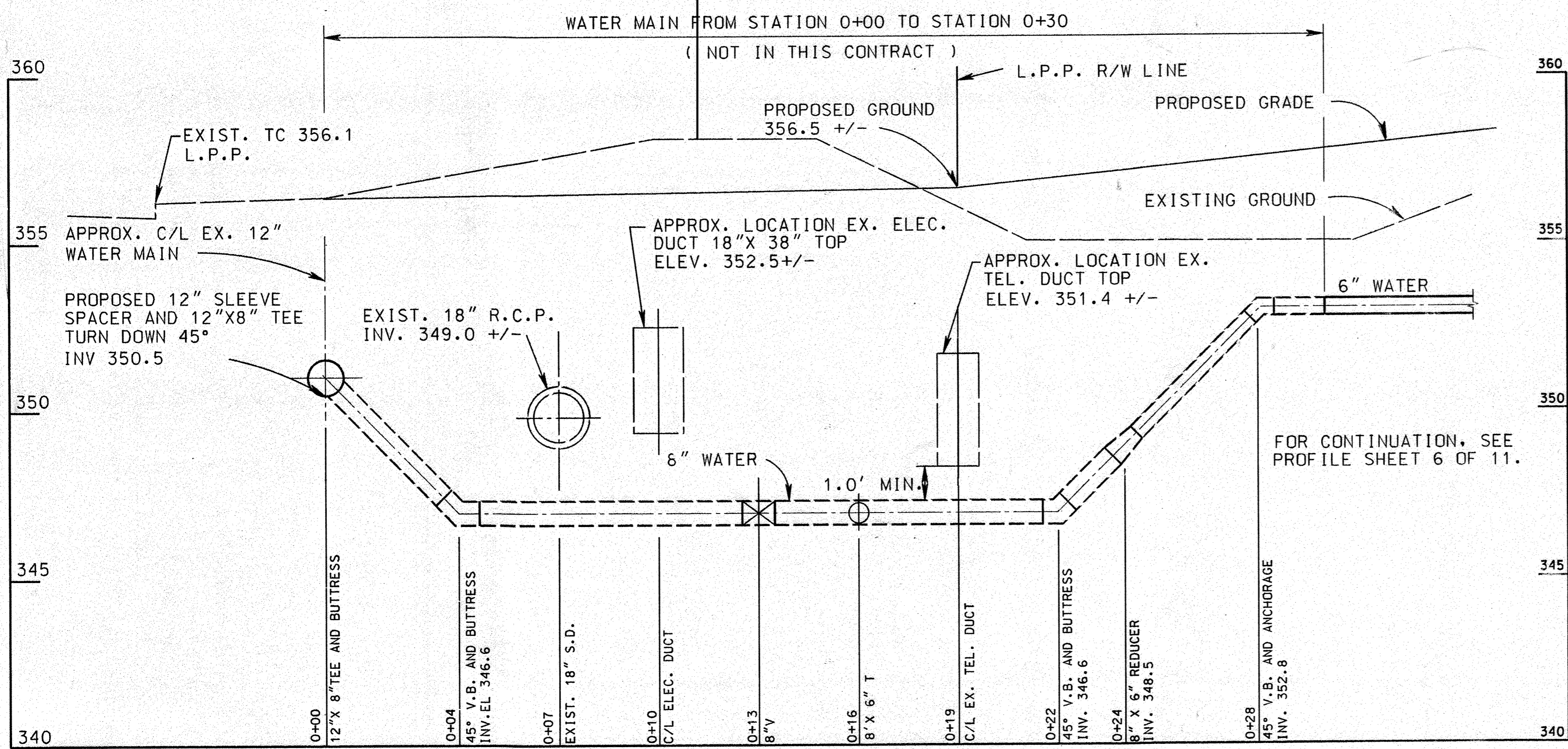
HANDICAP RAMP DETAIL

NO SCALE



HANDICAP RAMP DETAIL

NO SCALE



DETAIL-WATER MAIN-STA. 217+10 +/- L.P.P.

SCALE: 3/8" = 1'-0"

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph Boyer 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert Benjamin 9-27-91
DIRECTOR DATE

William J. Ray 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Frank J. Hays 10/1/91
PLANNING DIRECTOR DATE

Anna H. Hays 10/1/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 8-28-90
SUS

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shaffer
THOMAS J. SHAFER P.E. NO. 8457



SUBDIVISION NAME			SECT./ON./AREA	PARCEL
TOWN CENTER			2/6	A & B
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.
9512	1	NT E.C. COMM.	36	5
WATER CODE			SEWER CODE	
E-31			5321000	

2	6-7-91	ADDED P-3 PAVING SECTION, REARRANGED DETAILS
1	2-14-91	DELETED WATER MAIN 0+00 TO 0+30 FROM CONTRACT
NO.	DATE	DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
UTILITIES, ROAD AND
STORM DRAIN DETAILS

SHEET 5 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: AS SHOWN

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

John Bodino 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

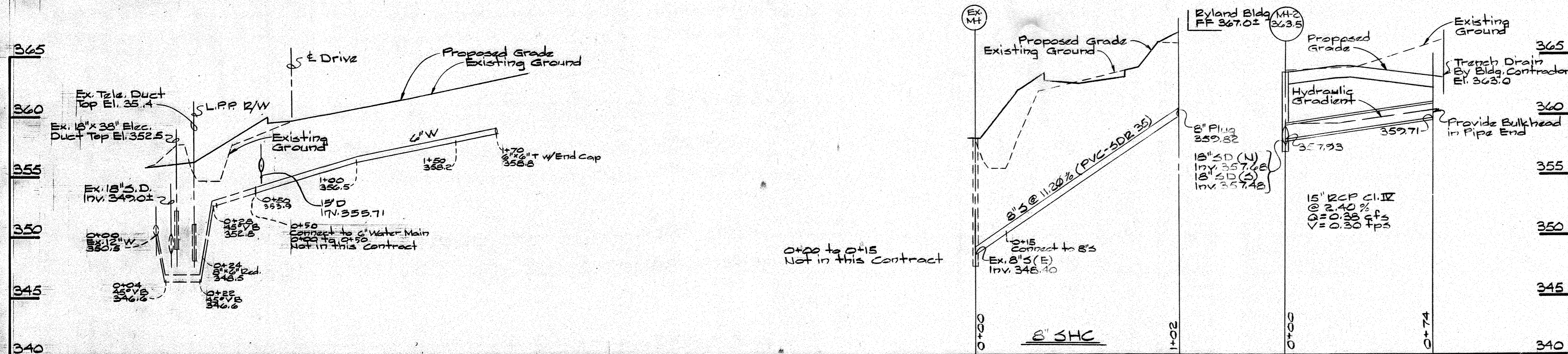
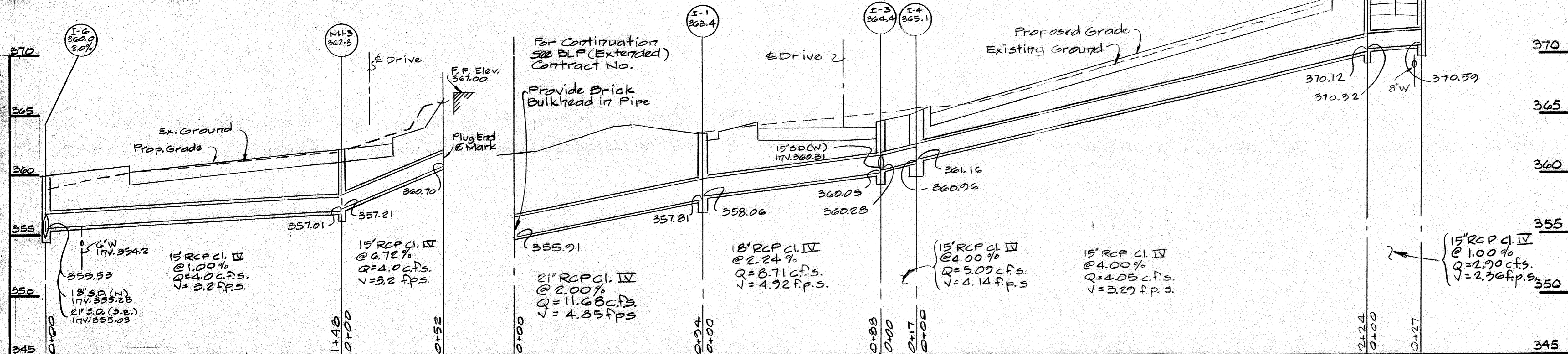
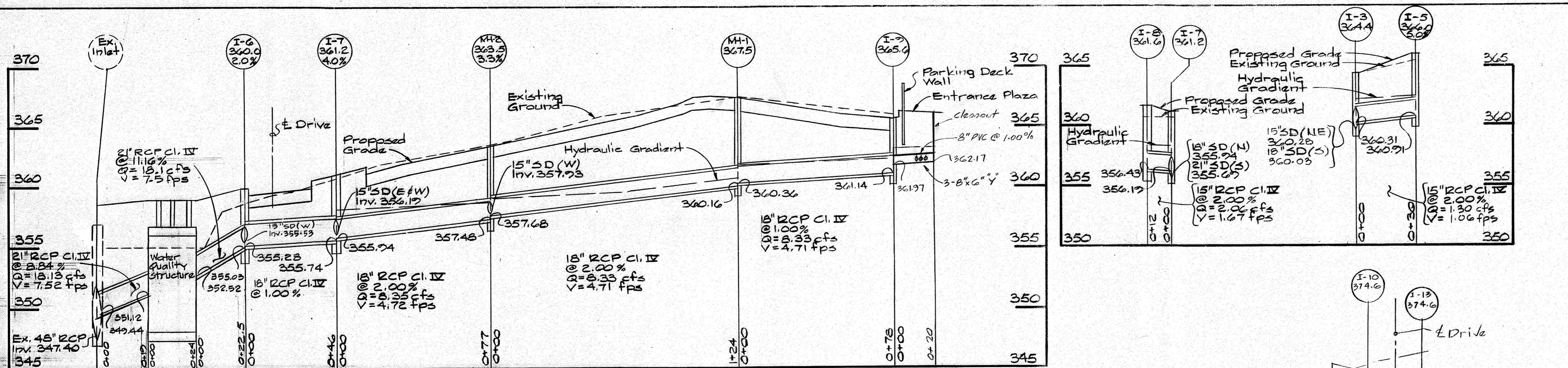
Robert Benner for OMT 9-27-91
DIRECTOR DATE

William S. Ray 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John V. Sawyer 10/10/91
PLANNING DIRECTOR DATE

Thomas J. Shaffer 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 8-28-90

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shaffer
THOMAS J. SHAFFER, P.E. NO. 6457



SUBDIVISION NAME TOWN CENTER				SECTION/AREA 2/6	PARCEL
PLAT 7512	BLOCK 1	ZONE E.C. COMM.	TAX/ZONE MAP 36	ELEC. DIST. 5	CENSUS TR. 6052-02
WATER CODE E-31				SEWER CODE 5321000	

-- STORM DRAIN STRUCTURE SCHEDULE --

NO.	TYPE	TOP ELEV.	INLET INV.	OUTLET INV.	LOCATION
I-1	A-5	363.4	358.06	357.81	31.92' RT. STA. 0+50.00
I-3	A-5	364.4	360.28	360.05	13.92' LT. STA. 1+39.00
I-4	A-5	365.1	361.16	360.96	13.92' LT. STA. 0+25.00
I-5	A-5	366.0	355.28	355.03	13.92' RT. STA. 0+40.00
I-6	A-5	360.0	355.28	355.03	13.92' RT. STA. 5+06.76
I-7	A-5	361.2	355.94	355.74	13.92' RT. STA. 0+32.00
I-8	A-5	361.6	---	356.43	13.92' RT. STA. 0+26.00
I-9	S-GRATE	365.6	361.97	361.14	9' RT. STA. 3+12.00
I-10	A-5	374.6	370.32	370.12	13.92' RT. STA. 2+00.00
I-13	A-5	374.6	---	370.59	13.92' LT. STA. 2+00.00
M-1	---	367.5	360.36	360.16	9' RT. STA. 3+89.34
M-2	---	363.5	357.68	357.48	9' RT. STA. 1+09.00
M-3	---	362.3	357.21	357.01	13.92' RT. STA. 3+58.00

* REVISIONS

NO.	DATE	DESCRIPTION OF REVISION
5	6-7-91	Delete M1-4, Revised Profile I-4 To I-13
4	4-20-91	Revised SD Profile M1-4 to I-13 (Ex Inlet I-2)
3	2-14-91	Added SD into, Revised W/S Profiles
2	11-16-90	Revised Profiles
1	11-1-90	Revised Profile I-1 To I-13.

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6

WATER, SEWER AND
-- STORM DRAIN PROFILES --

SHEET 6 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUG. 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: Horiz. 1" = 30'
Vert. 1" = 5'

CONTRACTOR'S

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph Boyd III 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert Bump 9-27-91
DIRECTOR DATE

Michael R. Ray 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph C. D'Angelo 10/10/91
PLANNING DIRECTOR DATE

Elmural Hilmarat 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE: 8-28-90
8cs

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Sheffer
THOMAS J. SHEFFER P.E. NO. 8457



SUBDIVISION NAME			SECTION/AREA	PARCEL
TOWN CENTER			2/6	A & B
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.
9512	1	NT E.C. COMM.	36	5
WATER CODE			SEWER CODE	
E-31			5321000	

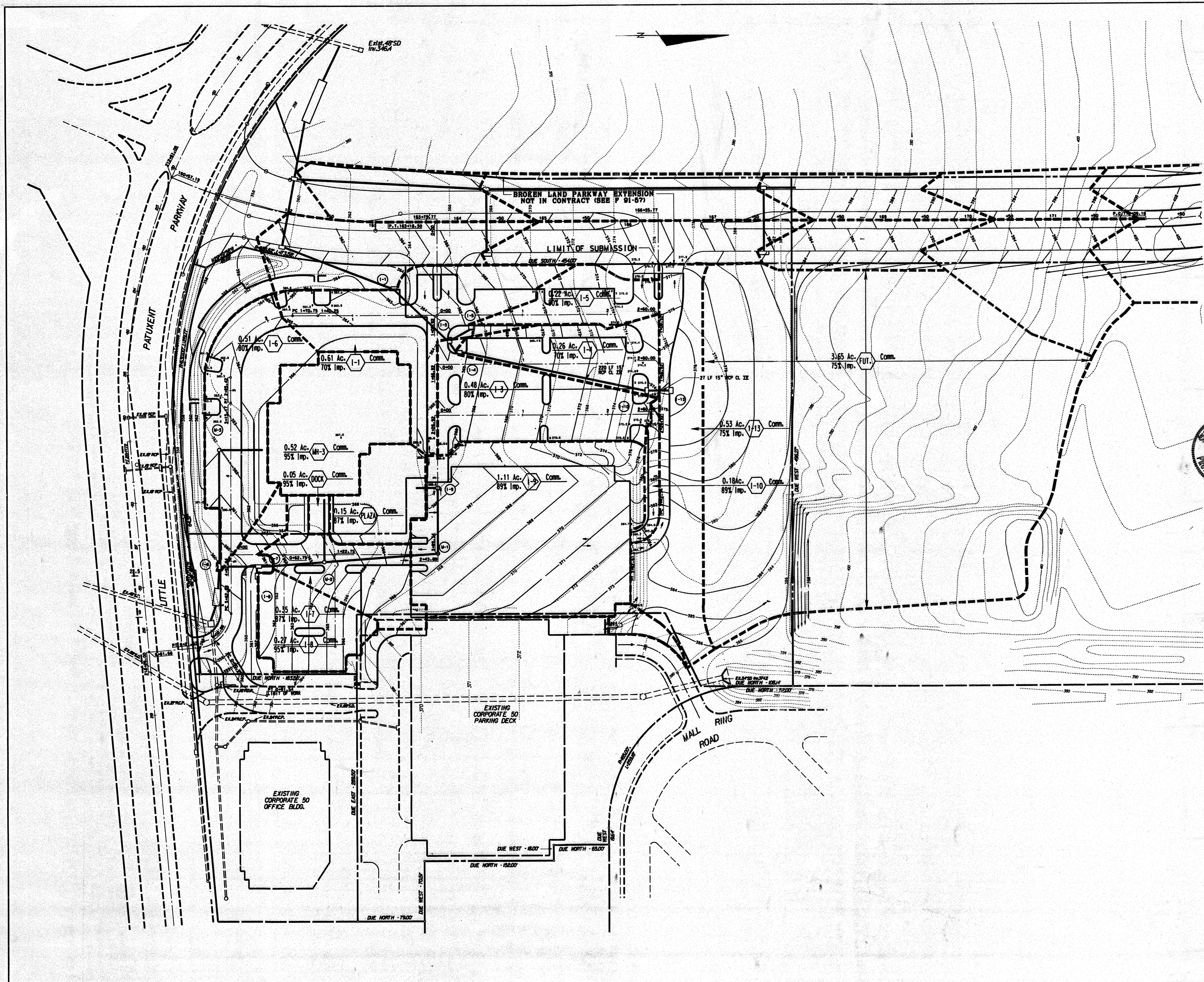
4	8-7-91	REVISED ROADWAY AND DRAINAGE AREAS
3	2-14-91	ADDED BANK ROAD
2	11-18-90	GENERAL REVISIONS
1	11-1-90	PARKING, ROAD AND DRAINAGE AREAS
NO.	DATE	DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
DRAINAGE AREA MAP

SHEET 7 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 50'



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

John P. ... 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert ... 9-27-91
DIRECTOR DATE

William ... 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph ... 10/10/91
PLANNING DIRECTOR DATE

Thomas ... 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE 8-28-90
DATE

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shafer
THOMAS J. SHAFER P.E. NO. 8457



SUBDIVISION NAME TOWN CENTER			SECTION/AREA 2/6	PARCEL A & B
PLAT 9512	BLOCK 1	ZONE NT E.C. COM.	TAX/ZONE MAP 36	ELEC. DIST. 5
WATER CODE E-31			SEWER CODE 5321000	
CENSUS TR. 6052-02				

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE FROM LITTLE PATUXENT PARKWAY AND PARKING DECK ENTRANCE ROAD.
- INSPECT EXISTING DIKES, TRAPS, SILT FENCE AND ALL SEDIMENT CONTROL FACILITIES INSTALLED UNDER SDP-90-213 THAT WILL BE UTILIZED AS PART OF THIS SEDIMENT CONTROL PLAN.
- INSTALL STORM DRAINAGE SYSTEM AND INLETS, BLOCK PERMANENT OUTFALL AND INSTALL TEMPORARY PIPE TO DRAIN TO SEDIMENT BASIN. SEE PLAN.
- INSTALL REMAINING UTILITIES, BUILDING CONSTRUCTION.
- FINE GRADE ROADWAYS AND PARKING AREAS, INSTALL CURB AND GUTTER, SIDEWALK AND PAVING BASE.
- STABILIZE ALL DISTURBED AREAS WITH PERMANENT SEEDING.
- PAVE ROADWAYS AND PARKING AREAS.
- WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL FACILITIES AFTER GRASS IS ESTABLISHED IN THE CONTRIBUTING DRAINAGE AREAS.

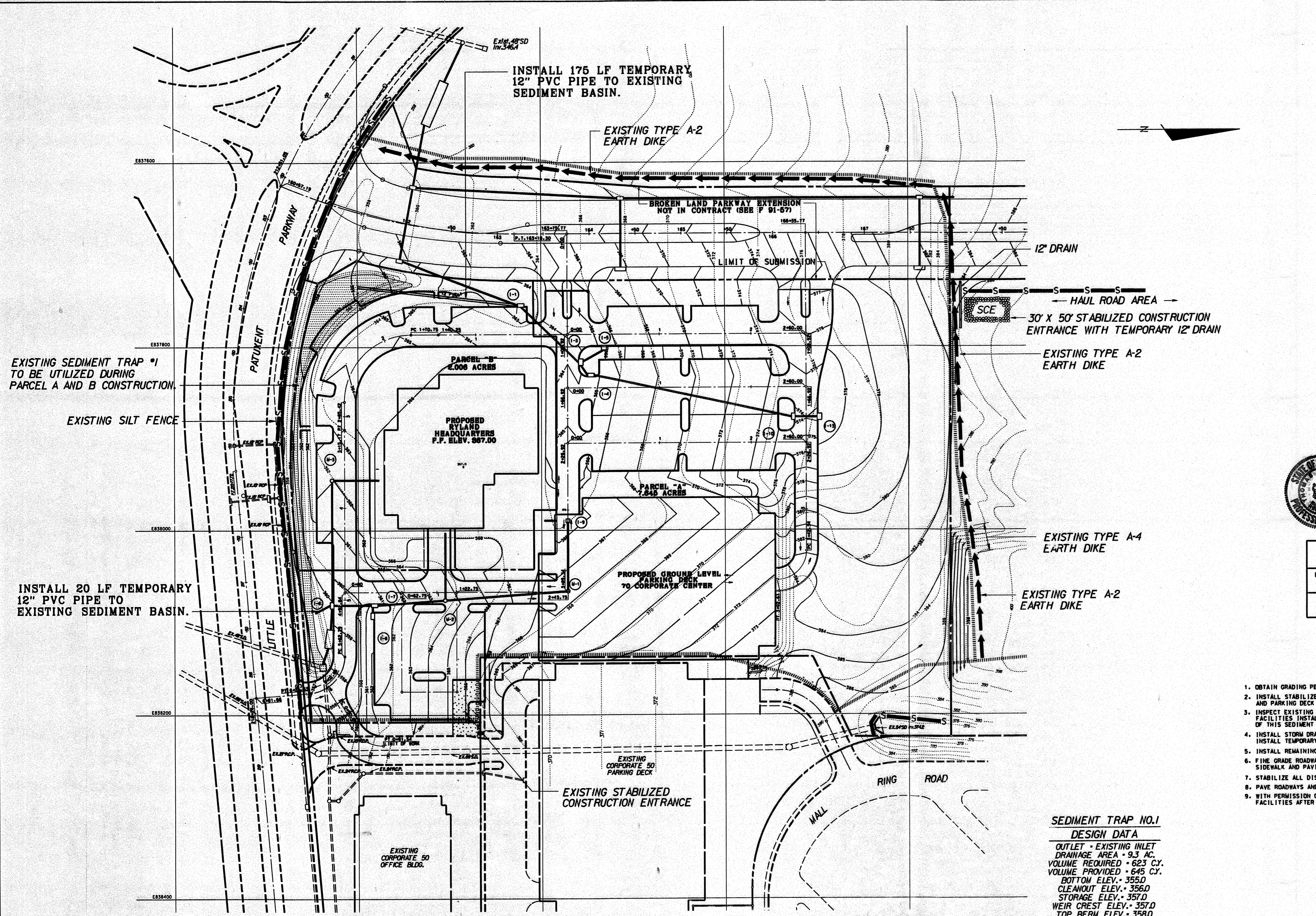
4	6-7-91	REVISED ROADWAY AND GRADING
3	2-14-91	ADDED BANK ROAD
2	11-16-90	GENERAL REVISIONS
1	11-1-90	PARKING, ROAD AND GRADING
NO.	DATE	DESCRIPTION OF REVISION

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
SEDIMENT CONTROL PLAN

SHEET 8 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: 1" = 50'



SEDIMENT TRAP NO. 1
DESIGN DATA

OUTLET - EXISTING INLET
DRAINAGE AREA - 9.3 AC.
VOLUME REQUIRED - 623 CY.
VOLUME PROVIDED - 645 CY.
BOTTOM ELEV. - 355.0
CLEANOUT ELEV. - 356.0
STORAGE ELEV. - 357.0
WEIR CREST ELEV. - 357.0
TOP BERM ELEV. - 358.0
AREA @ ELEV. 355.0 - 0.15AC.
AREA @ ELEV. 357.0 - 0.25AC.

NOTE:
THE EXISTING EARTH DIKES, SILT FENCE, SEDIMENT TRAPS INSTALLED UNDER SDP-90-213 "GRADING AND SEDIMENT CONTROL PLAN" SHEETS 1 THRU 3 SHALL BE UTILIZED AS PART OF THE SEDIMENT CONTROL PLAN FOR THIS CONTRACT.

REVIEWED FOR HOWARD S.C.D. AND MEETS THE TECHNICAL REQUIREMENTS.

Gregory ... 9/12/91
DATE

HOWARD SOIL CONSERVATION DISTRICT

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

Gregory ... 9/12/91
DATE

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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Gregory ... 9-13-91
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."

Thomas J. Shafer 9-6-91
THOMAS J. SHAFER P.E. NO. 8457 DATE



TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

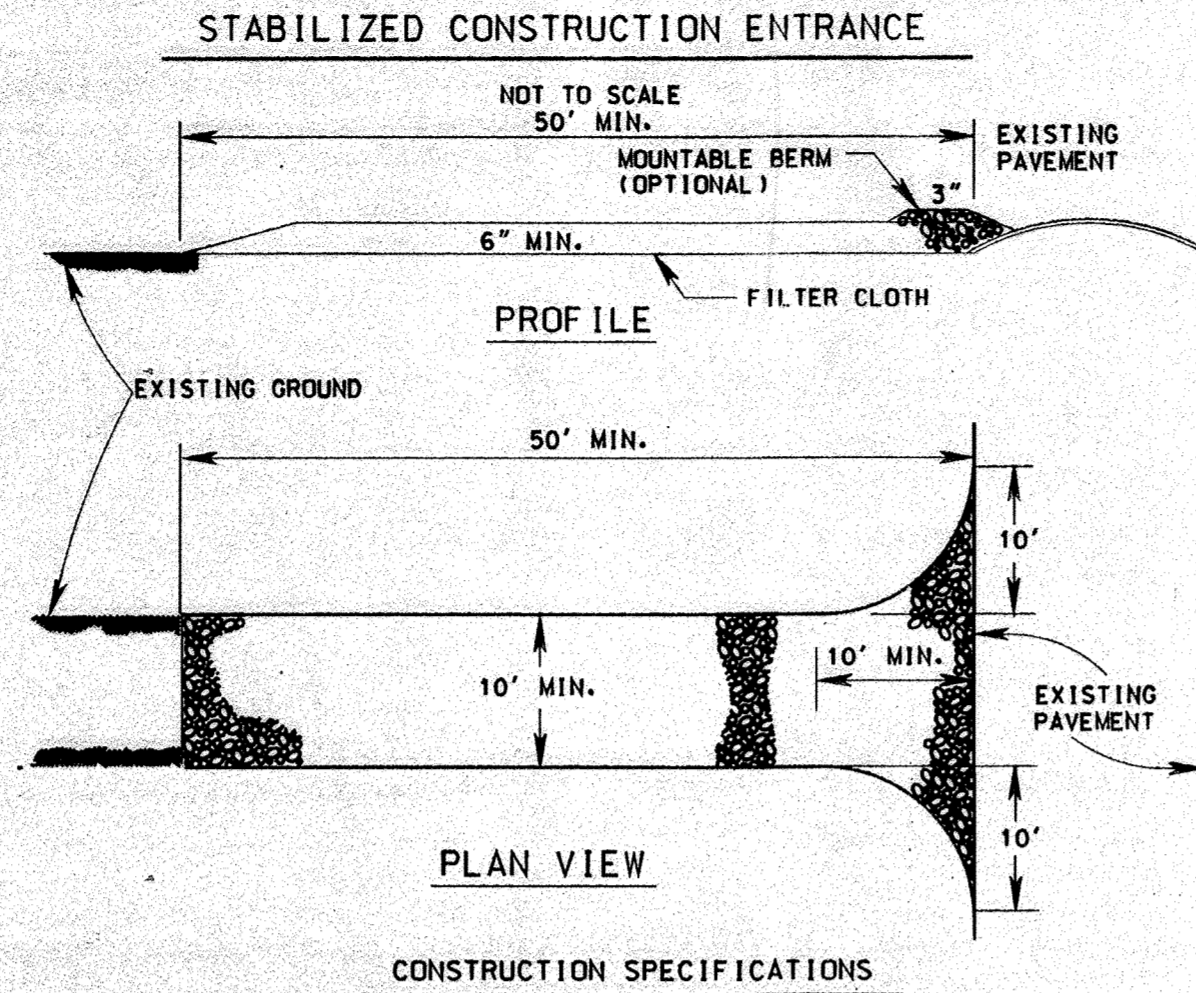
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER. (14LBS/1000 SO FT)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SO FT). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEE WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (1.07 LBS/1000 SO FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SO FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SO FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SO FT) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO A APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (892-2437)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES GREATER THAN 3:1, (b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNINGS SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 511) SOD (SEC. 547), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	14.3 ACRES
AREA DISTURBED	13.4 ACRES
AREA TO BE ROOFED OR PAVED	5.9 ACRES
AREA TO BE VEGETATIVELY STABILIZED	8.4 ACRES
TOTAL CUT	0 CU. YDS.
TOTAL FILL	0 CU. YDS.

 REFER TO SDP-90-213 FOR QUANTITIES
 OFF-SITE WASTE/BORROW AREA LOCATION REFER TO SDP-90-213 FOR QUANTITIES (TO SPOIL AREA)
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY OR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING. INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

CONSTRUCTION SPECIFICATIONS

- | | | |
|---|----------------------|---|
| 1. HIGH STRENGTH POLYPROPYLENE NETTING OR WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES | POST: | STEEL EITHER T OR U TYPE OR 1 1/2" X 1 1/4" HARDWOOD |
| 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACE EVERY 24" AT TOP AND MID SECTION. | FENCE: | WOVEN WIRE, 14 GA 6" MAX. MESH OPENING OR HIGH STRENGTH POLYPROPYLENE NETTING |
| 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. | FILTER CLOTH: | FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL. |
| 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. | PRE-FABRICATED UNIT: | GEOFAB, ENVIROFENCE OR APPROVED EQUAL. |

STANDARD SYMBOL



SILT FENCE

REVIEWED FOR HOWARD S.C.D. AND MEETS THE TECHNICAL REQUIREMENTS.

James H. ... 9/12/91 DATE

SOIL CONSERVATION SERVICE

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

Jeff W. ... 9/12/91 DATE

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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

Gregory R. Klar 9-13-91 DATE

GREGORY R. KLAR, Agent for H.R.D. Corp.

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 COUNTY SOIL CONSERVATION DISTRICT."

Thomas J. Shafer 9-6-91 DATE

THOMAS J. SHAFER, P.E. NO. 8457



PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

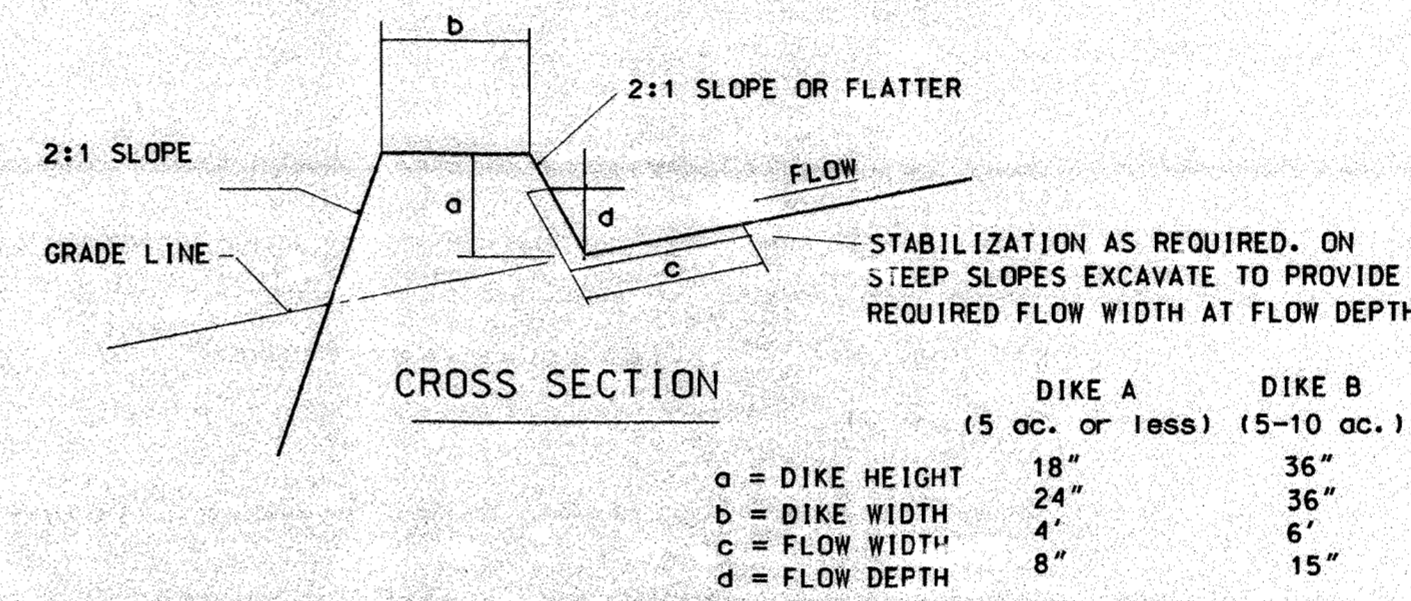
- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SO FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SO FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SO FT).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SO FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SO FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 50 LBS PER ACRE (1.4 LBS/1000 SO FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SO FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

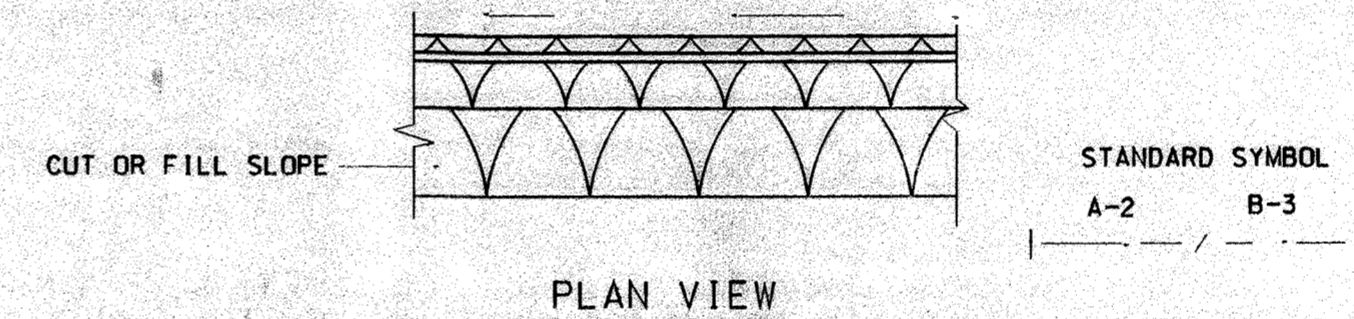
MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SO FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SO FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SO FT) FOR ANCHORING.

MAINTENANCE - INSPECTION ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

EARTH DIKE



POSITIVE DRAINAGE - GRADE SUFFICIENT TO DRAIN



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 - ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 - TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
 - FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
 - EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
 - STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON. (B) FLOW CHANNEL AS PER THE CHART BELOW.
- | TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|-------------------|---------------|----------------------------------|--|
| 1 | 5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.1-5.0% | SEED AND STRAW MULCH | SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE |
| 3 | 5.1-8.0% | SEED WITH JUTE, OR SOD; 2" STONE | LINED RIP-RAP 4-8" |
| 4 | 8.1-20% | LINED RIP-RAP 4-8" | ENGINEERING DESIGN |
- A. STONE TO BE 2 INCH STONE OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
 B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

FLOW CHANNEL STABILIZATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph ... 10-3-91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Robert ... 9-27-91 DATE

... 9-27-91 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

... 10/10/91 DATE

Anna ... 10/10/91 DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE: 8-28-90

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND
DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shafer
THOMAS J. SHAFER P.E. NO. 8457



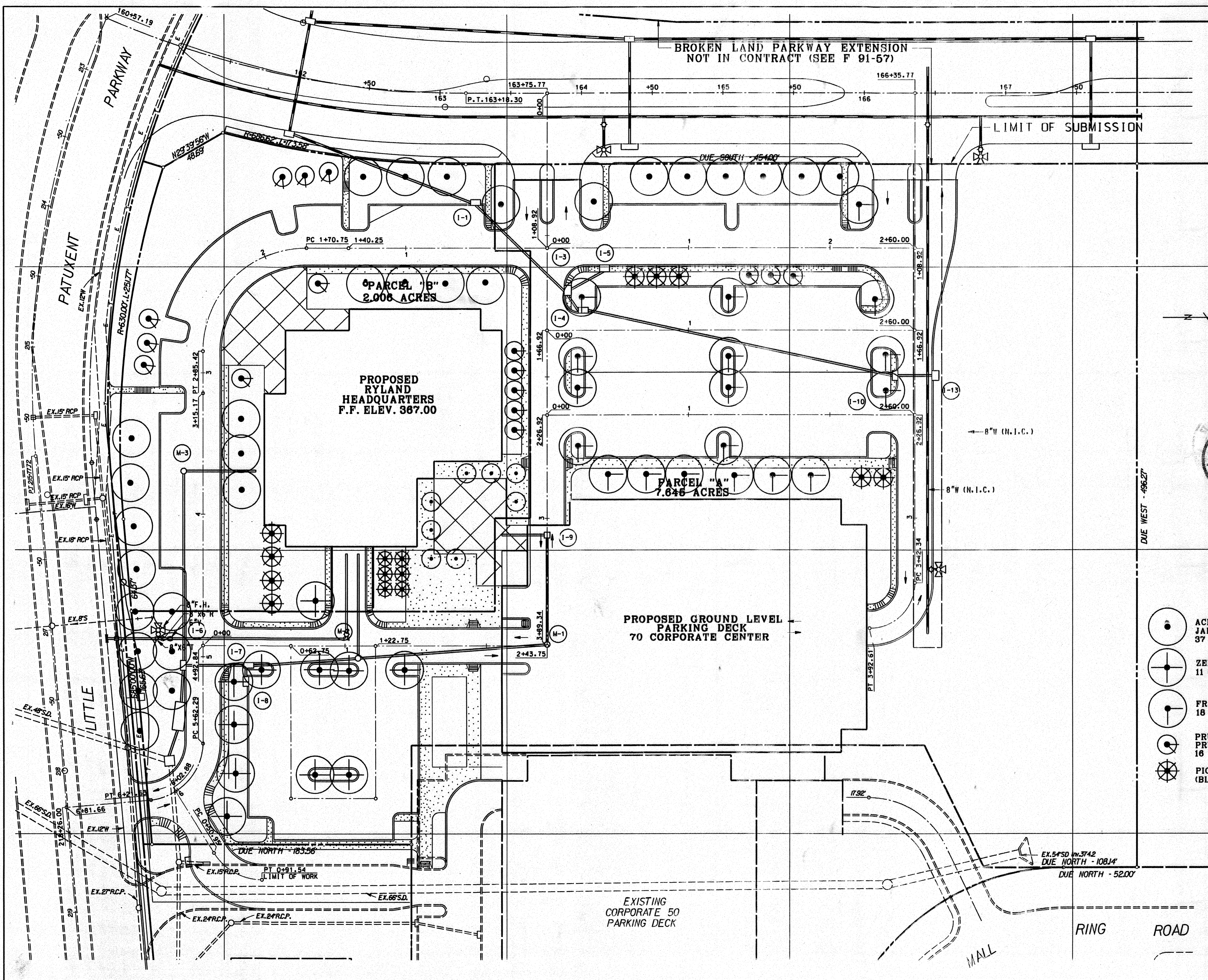
NO.	DATE	DESCRIPTION OF REVISION
1	6-7-91	None

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
SEDIMENT CONTROL
DETAILS

SUBDIVISION NAME TOWN CENTER		SECTION/AREA 2/6	PARCEL A & B
PLAT 9512	BLOCK 1	ZONE E.C. COMM.	TAX/ZONE MAP 36
ELEC. DIST. 5		CENSUS TR. 6052-02	
WATER CODE E-31		SEWER CODE 5.321000	

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL
TAX MAP NO. 36
SCALE: AS SHOWN



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joseph B. ... 10-3-91
COUNTY HEALTH OFFICER DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Ruth ... 9-27-91
DIRECTOR DATE

... 9-27-91
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

... DATE
PLANNING DIRECTOR

... 10/10/91
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 8-28-90
DATE

OWNER AND DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. ...
THOMAS J. BRAFER P.E. NO. 8457

SUBDIVISION NAME		SECTION/AREA	PARCEL
TOWN CENTER		2/6	A & B
PLAT 9512	BLOCK 1	ZONE 36	TAX/ZONE MAP ELEC. DIST. 5 CENSUS TR. 6052-02
WATER CODE E-31		SEWER CODE 5321000	

PLANT LIST

- ACER SACCHARUM (SUGAR MAPLE) OR SOPHORA JAPONICA (JAPANESE PAGODATREE)
37 @ 2 1/2" - 3" CAL. 12' - 14' HT.
- ZELKOVA s. "VILLAGE VASE" (GREEN VASE ZELKOVA)
11 @ 2 1/2" - 3" CAL. 12' - 14' HT.
- FRAXINUS p. "PATEMORE" OR ACER r. "SUNSET"
18 @ 2 1/2" - 3" CAL. 12' - 14' HT. (PATEMORE ASH)
- PRUNUS c. "NEWPORT" (PURPLE LEAF PLUM) OR PRUNUS YEDOENSIS (YOSHINO CHERRY)
16 @ 2" - 2 1/2" CAL. 8' - 10' HT.
- PICEA PUNGENS GLAUCA - 15 @ 8' - 10' HT. (BLUE SPRUCE)

NO.	DATE	DESCRIPTION OF REVISION
4	6-9-91	REVISED ROADWAY AND WATERMAIN
3	2-14-91	ADDED BANK ROAD, RELOCATED WATERMAIN
2	11-16-90	GENERAL REVISIONS
1	11-1-90	ROAD, PARKING AND LANDSCAPING

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)

LANDSCAPE PLAN

SHEET 10 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL TAX MAP NO. 36
SCALE: 1" = 30'

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

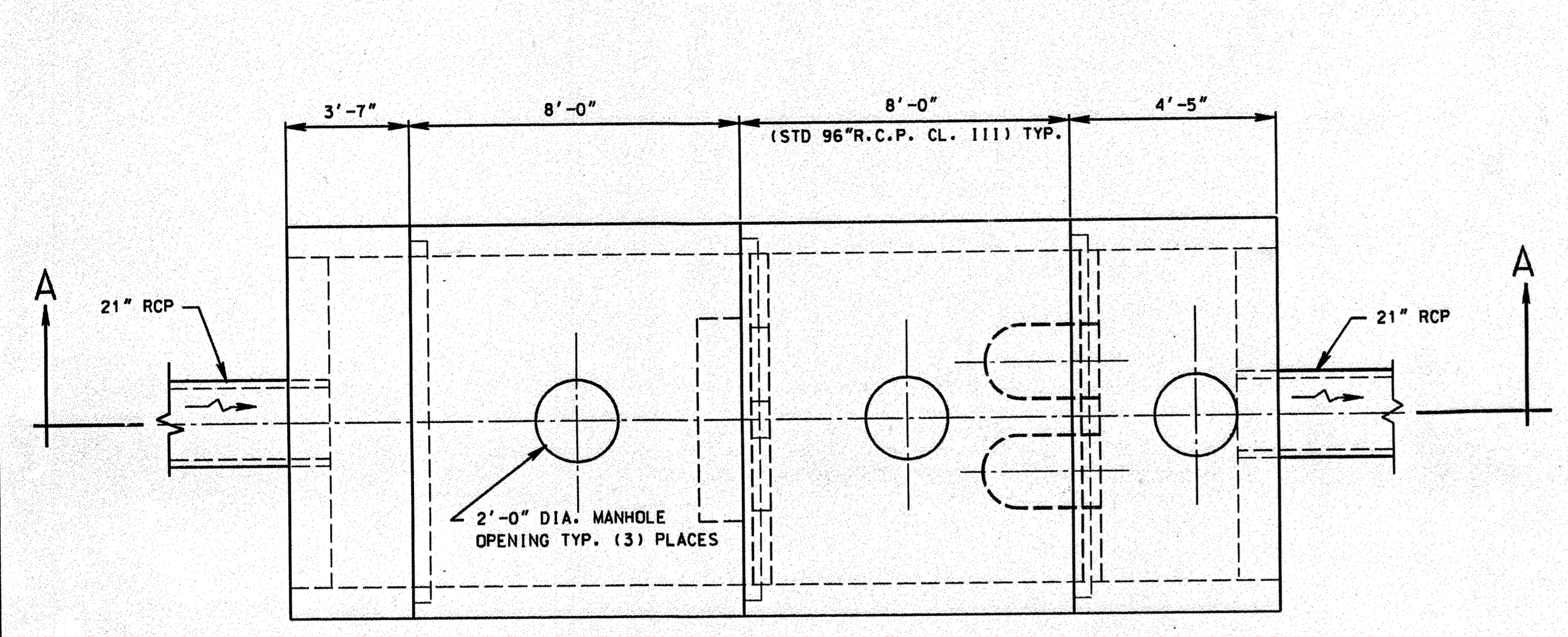
COUNTY HEALTH OFFICER *[Signature]* 10-3-91 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

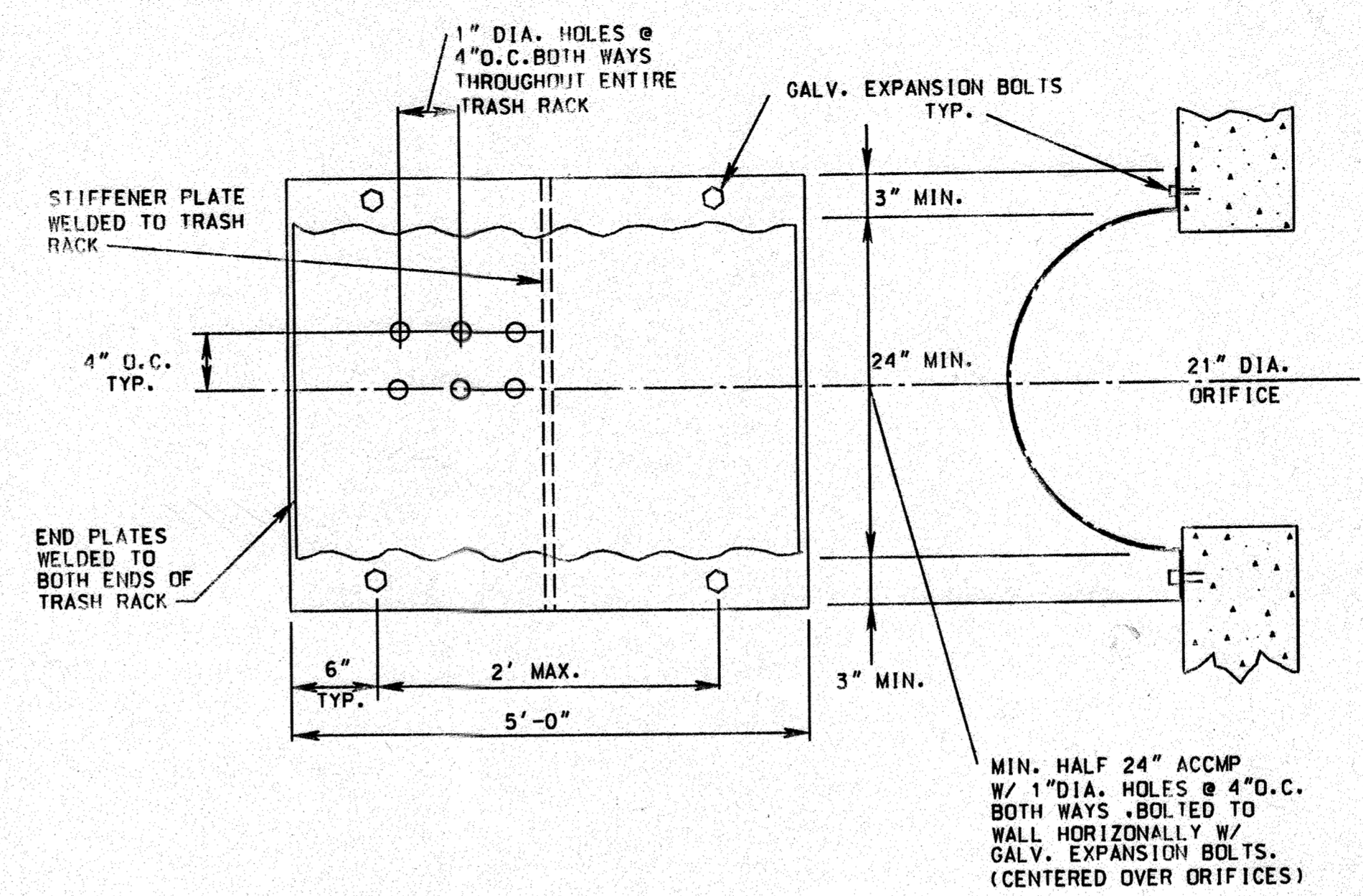
DIRECTOR *[Signature]* 9-27-91 DATE
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

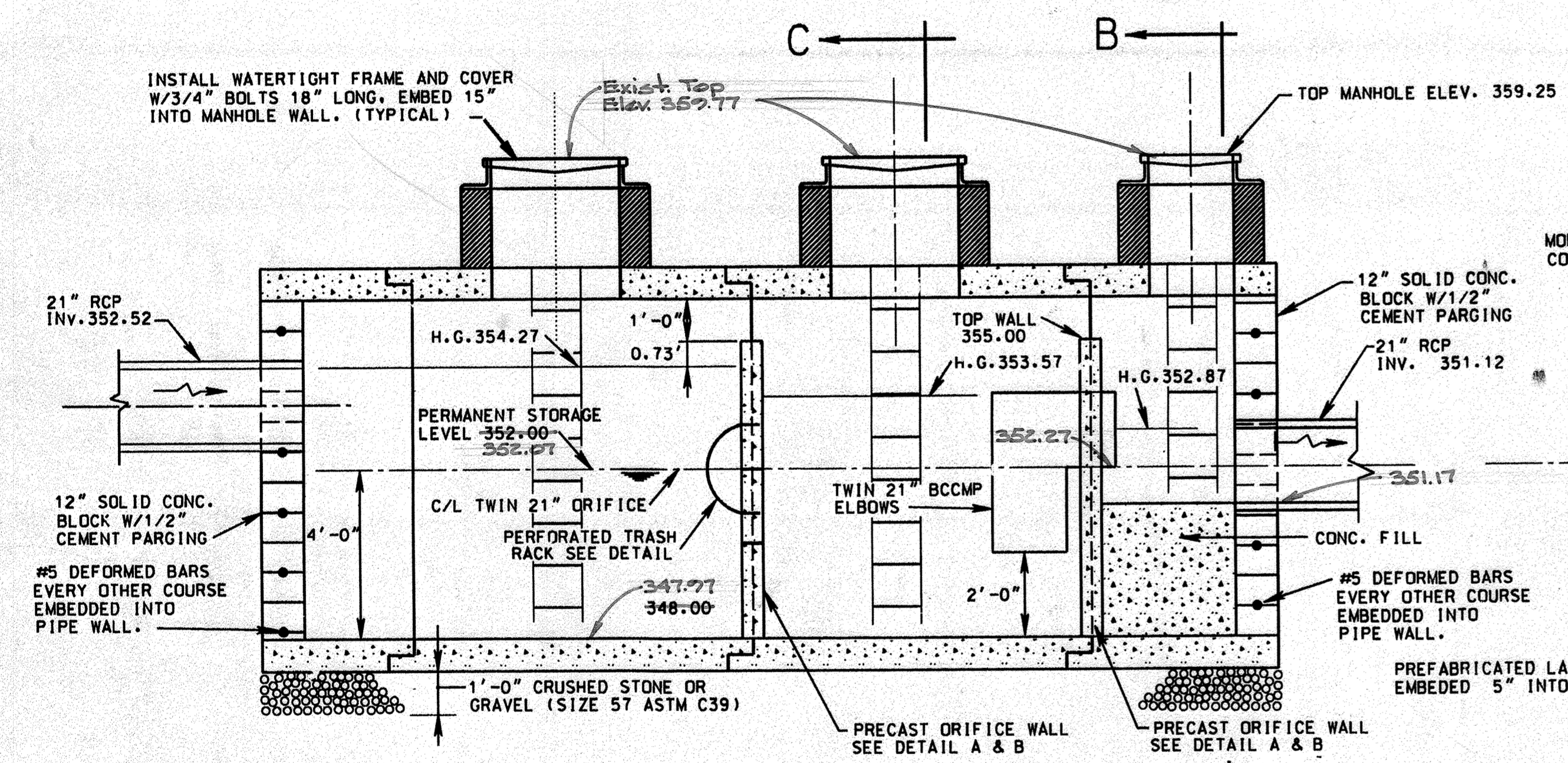
PLANNING DIRECTOR *[Signature]* 10/10/91 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



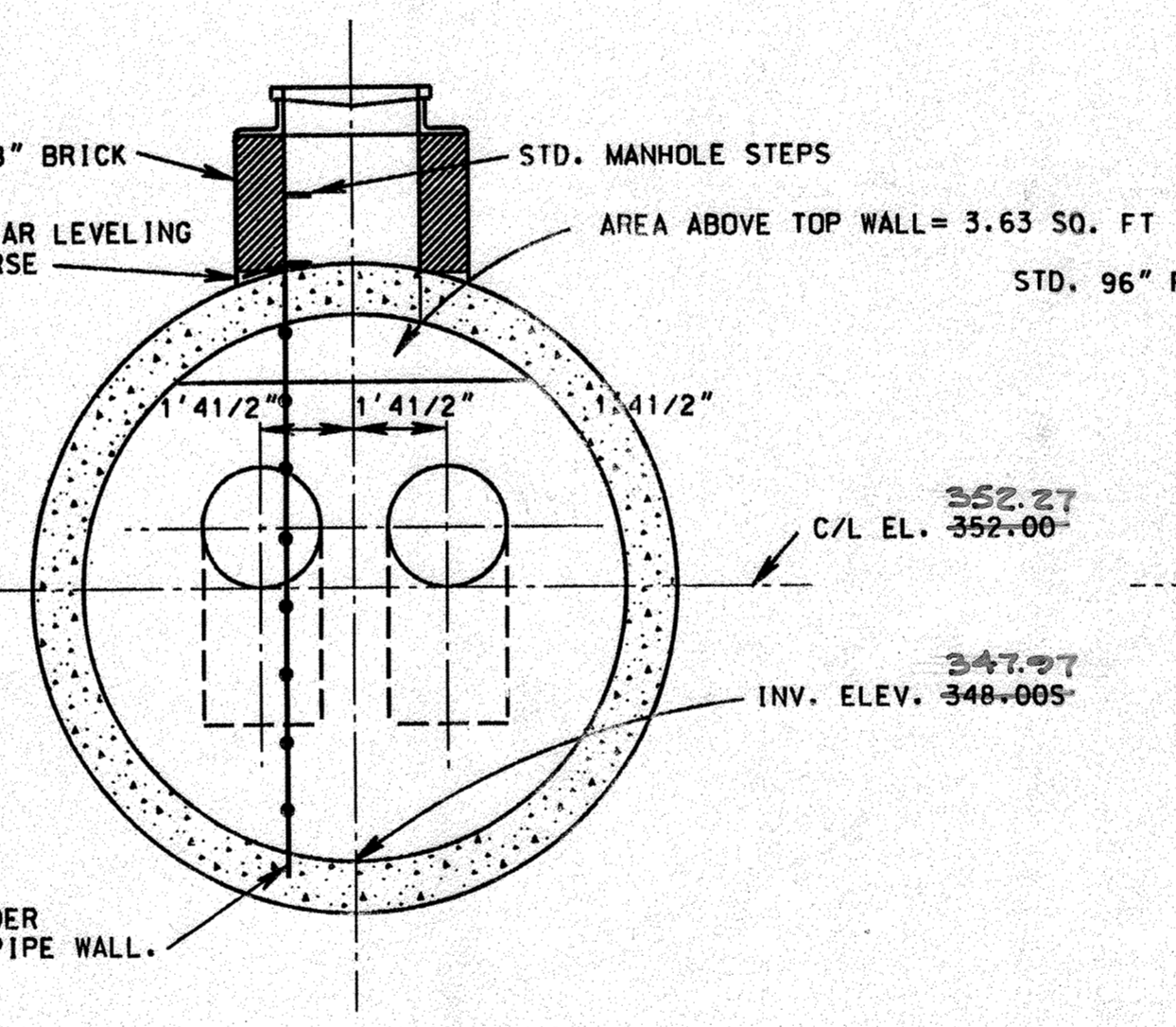
PLAN
SCALE: 3/8"=1'-0"



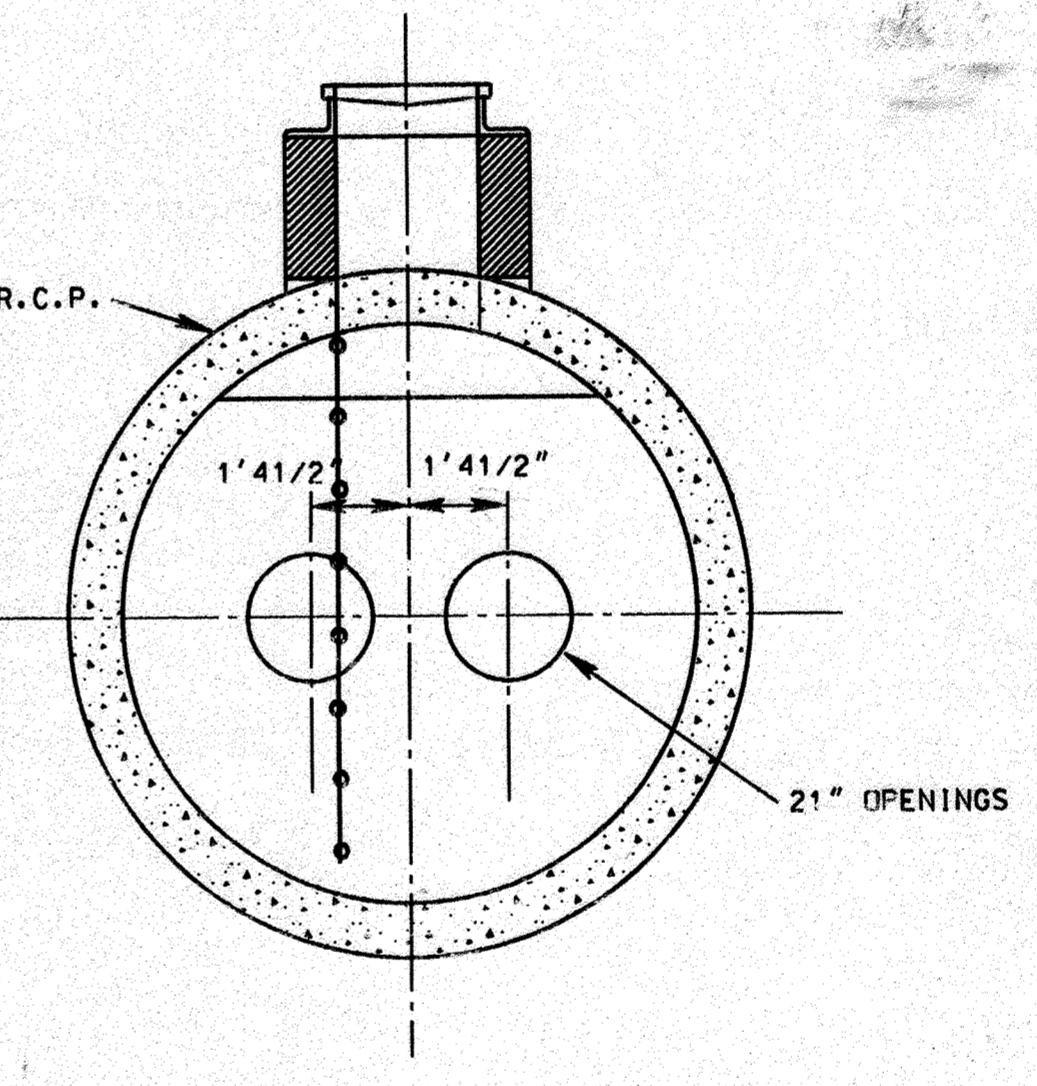
ACCMP TRASH RACK
NOT TO SCALE



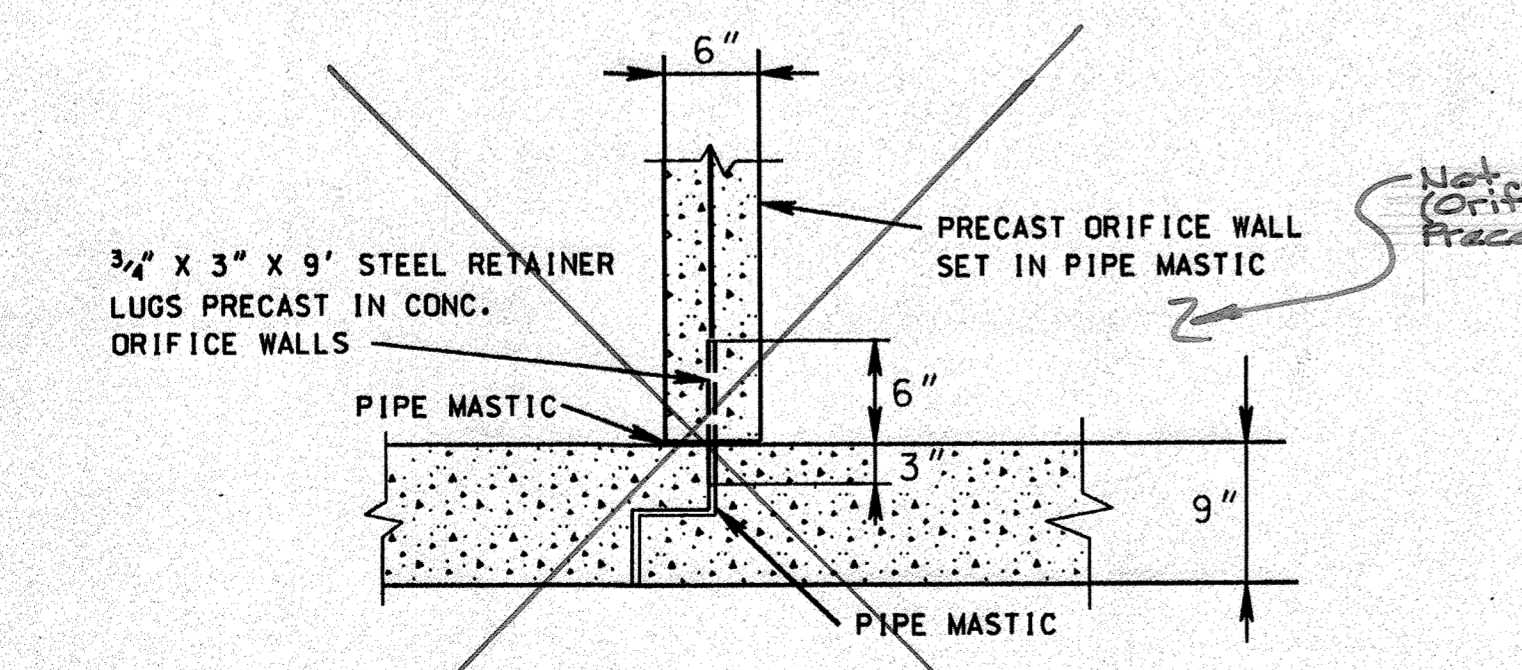
SECTION A-A
SCALE: 3/8"=1'-0"



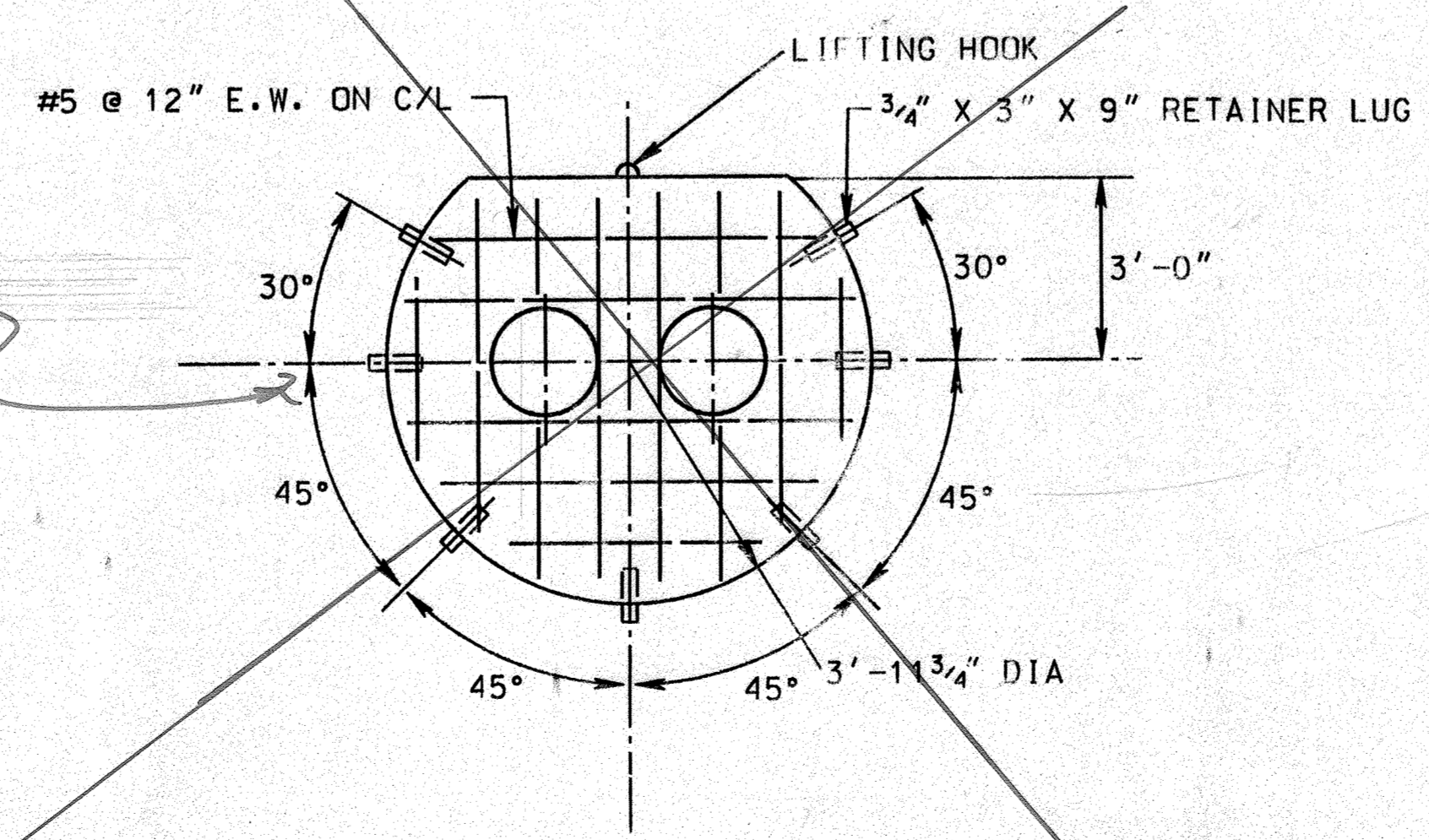
SECTION B-B
SCALE: 3/8"=1'-0"



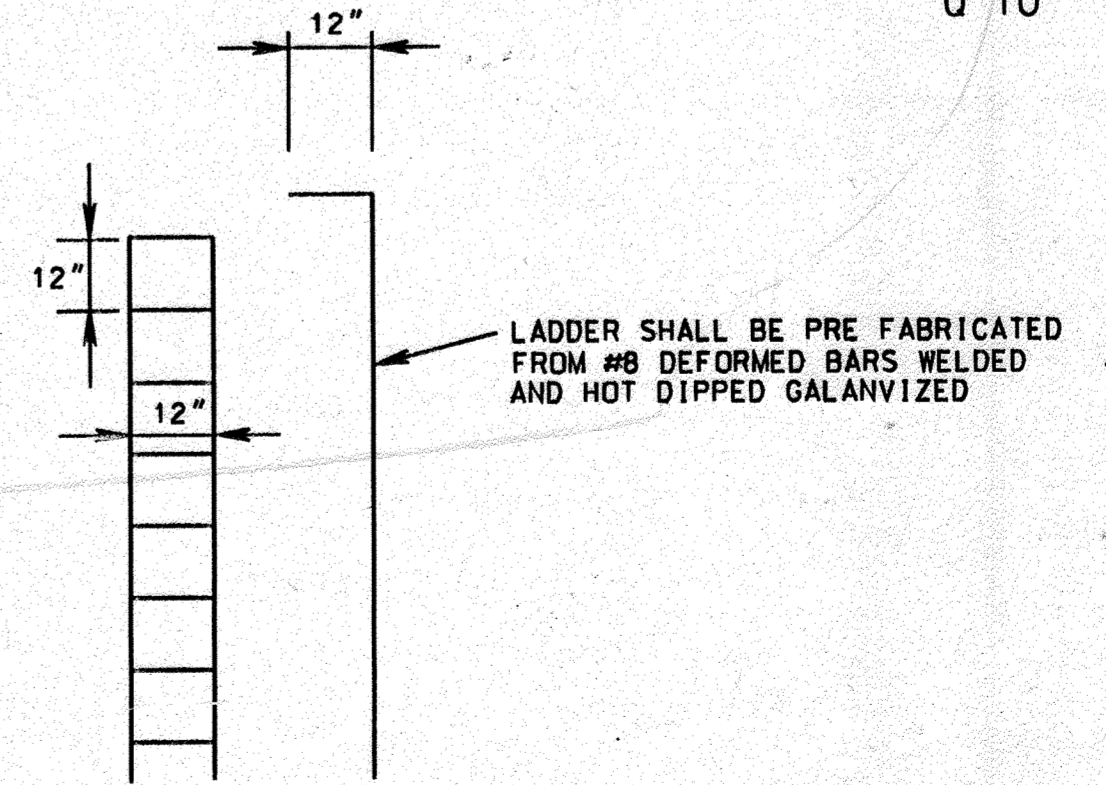
SECTION C-C
SCALE: 3/8"=1'-0"



DETAIL A ORIFICE WALL SETTING
SCALE: 1"=1'-0"



DETAIL B ORIFICE WALL REINFORCING AND RETAINER LUG LOCATION
SCALE: 3/8"=1'-0"



LADDER DETAIL
SCALE: 3/8"=1'-0"



OWNER AND DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21043

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 SAINT PAUL STREET
BALTIMORE, MARYLAND 21218

Thomas J. Shaffer
THOMAS J. SHAFER P.E. NO. 8457

SUBDIVISION NAME		SECTION/AREA	PARCEL		
TOWN CENTER		2/6	A & B		
PLAT	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
9512	1	NT E.C. COM.	36	5	6052-02
WATER CODE			SEWER CODE		
E-31			5321000		

DESIGN DATA

TOTAL IMPERVIOUS AREA = 2.15 ACRES
STORAGE REQUIRED 2.15AC X 200 C.F. = 430 C.F.
STORAGE PROVIDED 445 C.F.
STORAGE PROVIDED CHAMBER 1 = 258 C.F.
STORAGE PROVIDED CHAMBER 2 = 187 C.F.
Q 10 19.31 C.F.S.

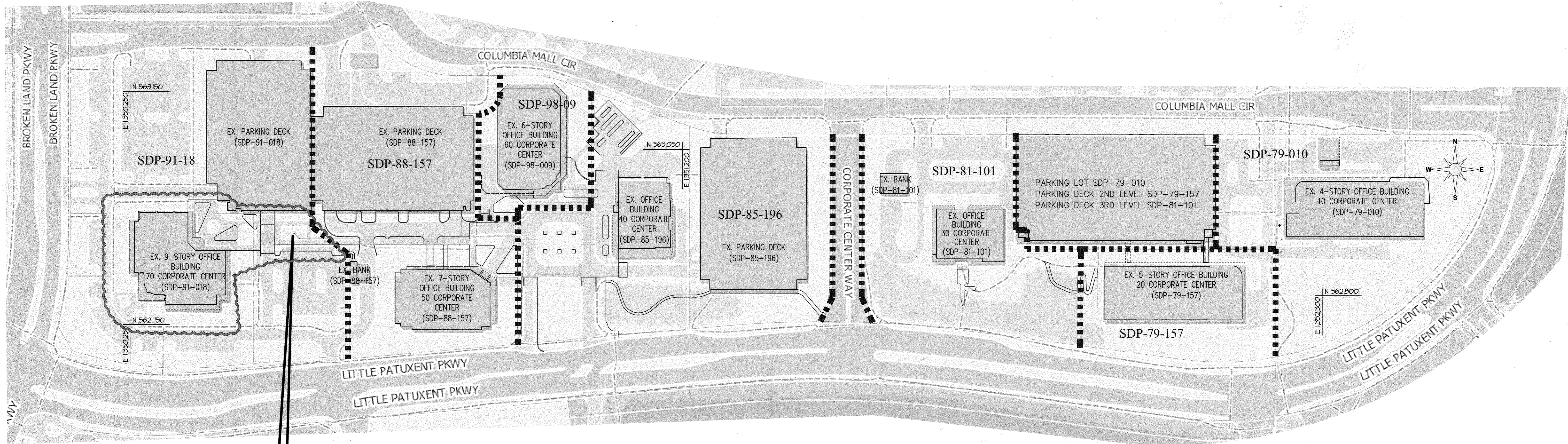
NO.	DATE	DESCRIPTION OF REVISION
3	10-11-90	"As Built" Information
2	6-7-91	CHANGED MANHOLE DIAMETER
1	2-14-91	ADDED WATERTIGHT FRAME & COVER, GRAVEL UNDER PIPE.
1	2-14-91	TRASH RACK DETAIL, REBARS IN CONC. BLOCK WALLS
1	2-14-91	REVISED LADDER DETAIL

COLUMBIA
SITE DEVELOPMENT PLAN
TOWN CENTER
SECTION 2 AREA 6
PARCELS "A" AND "B"
(OFFICE BUILDING AND PARKING DECK)
WATER QUALITY STRUCTURE AND DETAILS

SHEET 11 OF 11

ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND
DATE: AUGUST 20, 1990

PARCEL TAX MAP NO. 36
SCALE:



FOR IMPROVEMENTS SHOWN WITHIN CLOUDED AREA SEE SHEETS 13-17 OF THIS SDP

SITE ANALYSIS for the 2022 IMPROVEMENT REDLINES
 THIS SITE ANALYSIS IS FOR THE 2022 IMPROVEMENTS SHOWN ON THE RED LINE REVISIONS TO SDP-85-196, SDP-88-157, SDP-91-018 AND SDP-98-009

- PROJECT BACKGROUND:
 ZONING: NEW TOWN (PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN)
 ELECTION DISTRICT: FIFTH
 PROPOSED SITE USE: MIXED USE
- APPLICABLE DPZ FILE REFERENCE:
 SDP-79-157, SDP-79-010, SDP-81-101, SDP-85-196, SDP-88-157, SDP-90-213, SDP-91-018, SDP-98-009, S-85-024, FDP-211, FDP-192-A, FDP-217-A-1, P.N. 7896, P.N. 8577, P.N. 6321, P.N. 9512, P.N. 4965 & P.N. 4542
- THIS SITE WHICH IS COMPRISED OF PARCELS A, B (PLAT 6321 & 9512), C1, C4 AND E, PARCELS A-2 & A-4 AND A-6 & A-7 IS SUBJECT TO A DEVELOPMENT RIGHTS AND RESPONSIBILITIES AGREEMENT (DRRA) RECORDED AT L. 17457 F. 265. SAID DRRA PREDATES CB66-2021 (EFFECTIVE DATE OF 01/03/2022). THEREFORE, THIS SITE IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1202(B)(1)(i), AS CODIFIED PER CB4-1996, WHICH WAS IN PLACE AT THE TIME SAID DRRA WAS RECORDED ON FEBRUARY, 2017.
- THIS AREA IS WITHIN THE DOWNTOWN REVITALIZATION BOUNDARY. ALL FURNISHINGS SHOULD REFLECT THE DESIGN PRINCIPLES AND STYLES OUTLINE IN THE DOWNTOWN-WIDE DESIGN GUIDELINES.
- THERE ARE NO ENVIRONMENTAL FEATURES ON THE SITE.
- THE SITE IS A RE-DEVELOPMENT OF AN EXISTING OFFICE PARK. ALL STEEP SLOPES IN THE VICINITY OF THE LIMIT OF DISTURBANCE (LOD) ARE MAN MADE.
- PARKING GAIN/LOSS ANALYSIS:

SDP #'s	NUMBER OF EXCESS SPACES (Prior to Redline)	SPACES LOST (with Redline)	SPACES GAINED (with Redline)	NET NUMBER
SDP-85-196	4	0	8	12
SDP-88-157	148	16	10	142
SDP-91-018	288	12	4	280
SDP-98-009	NO PARKING CHANGES WITH 2022 IMPROVEMENTS			

AS A RESULT OF THE 2022 IMPROVEMENTS WE WILL STILL HAVE EXCESS PARKING FOR EACH OF THE SITE DEVELOPMENT PLANS.

STORMWATER MANAGEMENT FOR THE 2022 IMPROVEMENT REDLINES
 STORMWATER MANAGEMENT HAS BEEN PROVIDED FOR THE 2022 IMPROVEMENTS SHOWN ON THE RED LINE REVISIONS TO SDP-85-196, SDP-88-157, SDP-91-018 AND SDP-98-009.

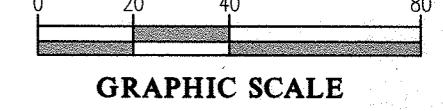
THE REQUIRED VOLUMES AND THE MANNER IN WHICH THOSE VOLUMES HAVE BEEN PROVIDED ARE:

- SITE AREA: 14.4 ACRES
- LIMIT OF DISTURBANCE: 2.6 ACRES
 THE LIMIT OF DISTURBANCE INCLUDES ALL OF THE AREAS IN WHICH GRADING, PAVING, OR MILL AND OVERLAY OPERATIONS WILL NEED TO TAKE PLACE IN ORDER FOR THE GRADES AND IMPROVEMENTS SHOWN ON THESE PLANS TO BE ESTABLISHED.
- STORMWATER MANAGEMENT STUDY AREA: 2.1 ACRES
 THE STUDY AREA IS LESS THAN THE LIMIT OF DISTURBANCE DUE TO A DECISION MADE BY THE DEVELOPMENT ENGINEERING DIVISION THAT SOME OF THE IMPROVEMENTS SHOWN WOULD BE CONSIDERED "REMOVE AND REPLACE" AND WOULD NOT BE INCLUDED WHEN DETERMINING THE STORMWATER MANAGEMENT OBLIGATION FOR THE PROPOSED IMPROVEMENTS.
- EXISTING IMPERVIOUS AREA: 56,808 S.F.
- PROPOSED IMPERVIOUS AREA: 61,775 S.F.
- INCREASED IMPERVIOUS AREA: 4,967 S.F.
- TOTAL VOLUME REQUIRED: 3,035 C.F.
- TOTAL VOLUME PROVIDED:
 STONE RESERVOIR UNDER PERMEABLE PAVERS: 1,169 C.F.
 STORMCYPERS: 1,866 C.F.
 TOTAL: 3,035 C.F.

LEGEND

■■■■■■■■■■ SDP DELINEATION LINE

==== 2022 IMPROVEMENTS



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Angi Conner* 7-17-22
 Date

Chief, Division of Land Development: *Blaise* 8/16/22
 Date

Chief, Development Engineering Division: *PK* 8-11-22
 Date

GLW
 PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
 PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:	DATE:	REVISION:	BY:	APPR.:
KLP	4/2022	ADDITIONAL SHEET ADDED TO SHOW OVERVIEW OF 2022 IMPROVEMENTS		
CKG				

PREPARED FOR:
 THE HOWARD HUGHES CORPORATION
 10960 GRANCHESTER WAY, SUITE 110
 COLUMBIA, MD 21044
 ATTN: WILLIAM ROWE

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975
 EXPIRATION DATE: MAY 28, 2024

5/12/22 *CKG*

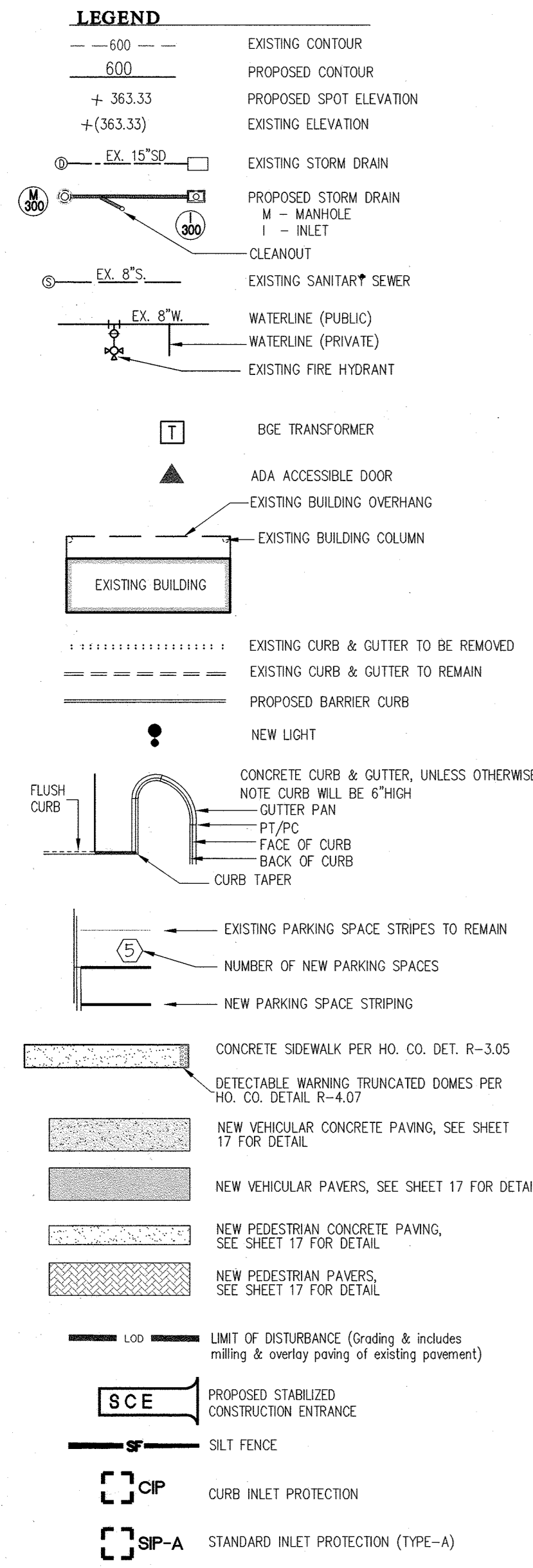


(REVISED) OVERVIEW OF 2022 IMPROVEMENTS

COLUMBIA TOWN CENTER
 Section 2 Area 6
 Parcel B (PLAT No. 9512) and Parcel E (Plat No. 14022)
 (Office Building and Parking Deck)

ELECTION DISTRICT No. 5

SCALE	ZONING	GLW FILE No.
1"=80'	NT	21119
DATE	TAX MAP - GRID	SHEET
APRIL 2022	36-1&2	12 OF 17



NOTES:

- UNLESS NOTED OTHERWISE, PROPOSED SPOT ELEVATIONS ALONG THE CONCRETE CURB & GUTTER ARE TO THE FLOW LINE (BOTTOM OF CURB) AT THE PC'S/PTS, CORNERS AND TERMINUSES.
- UNLESS NOTED OTHERWISE, ALL PLAN DIMENSIONS ARE TO THE FACE OF STRUCTURE (CURB, ETC.). DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIAL BETWEEN ITEMS, UNLESS NOTED OTHERWISE.
- ALL ON-SITE PAVING IS PRIVATE.

LIGHTING SCHEDULE

SYMBOL	MANUFACTURER / CAT. NUMBER	NUMBER OF LEDS	LUMENS/WATTS	MOUNTING
●	VSR-5-15-16L-35-40K-SINGLE	16	18	14' POLE

STORM DRAIN PIPE SIZE & L.F. CHART

FROM NO.	TO NO.	DIA. (IN.) & TYPE OF PIPE	L (ft)
I-110	I-109	6" HDPE	16
I-109	I-108	6" HDPE	49
I-108	FC-105	6" HDPE	77
I-111	FC-106	6" HDPE	24

C FACTOR COMPUTATIONS

STRUCTURE	AREA (AC.)	C	IMPERVIOUS
I-111	0.18	0.40	25%
I-110 / 109	0.08	0.62	60%
I-108	0.07	0.62	60%
EX. I-7	0.19	0.81	87%
EX. I-8	0.27	0.81	95%

NOTE: 'D' TYPE SOILS ASSUMED FOR ALL DRAINAGE AREAS DUE TO MASS GRADING.

SOILS LEGEND

SOIL	NAME	CLASS	K' FACTOR
Uub	Urban Land-Udorthents complex, 0 to 8 percent slopes	D	0.28

ENGINEER'S CERTIFICATE

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

CLM 5/12/22
DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR 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 MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE DISTRICT.

Alvander Bitchie 5.17.2022
SIGNATURE OF DEVELOPER/BUILDER DATE

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

Alvander Bitchie 07/26/22
HOWARD S.C.D. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Greg Gove 8-17-22
Director Date

Blutze
Chief, Division of Land Development Date

RSX 8.11.22
Chief, Development Engineering Division Date

GLW
PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-860-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY: _____

DRAWN BY: KLP

CHECKED BY: _____

DATE: 4/2022

ADDITIONAL SHEET ADDED FOR NEW PLAZA AREA

REVISION _____

BY _____

APPR. _____

PREPARED FOR:

THE HOWARD HUGHES CORPORATION
10960 GRANCHESTER WAY, SUITE 110
COLUMBIA, MD 21044
ATTN: WILLIAM ROWE

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975

EXPIRATION DATE: MAY 28, 2024

5/12/22

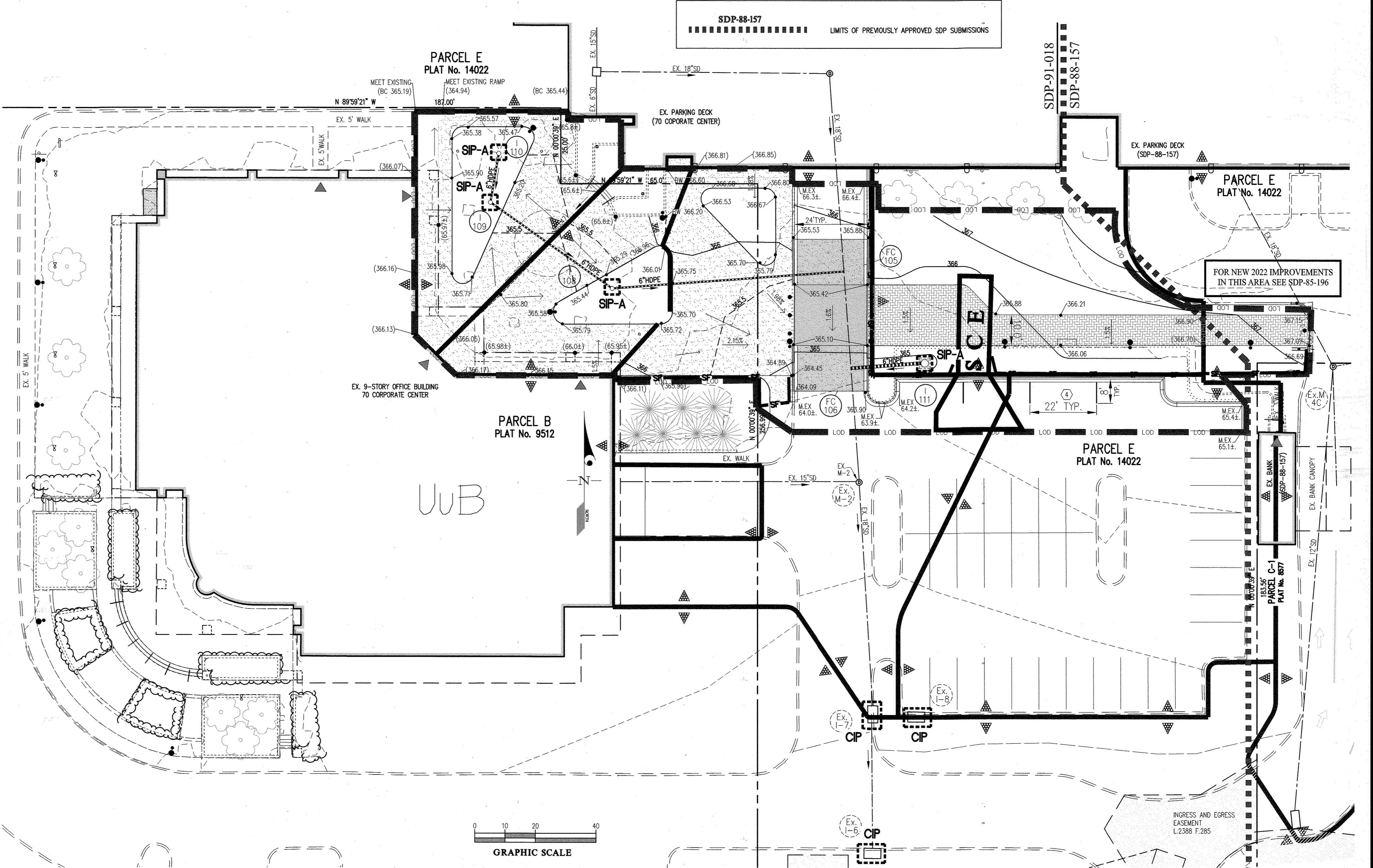


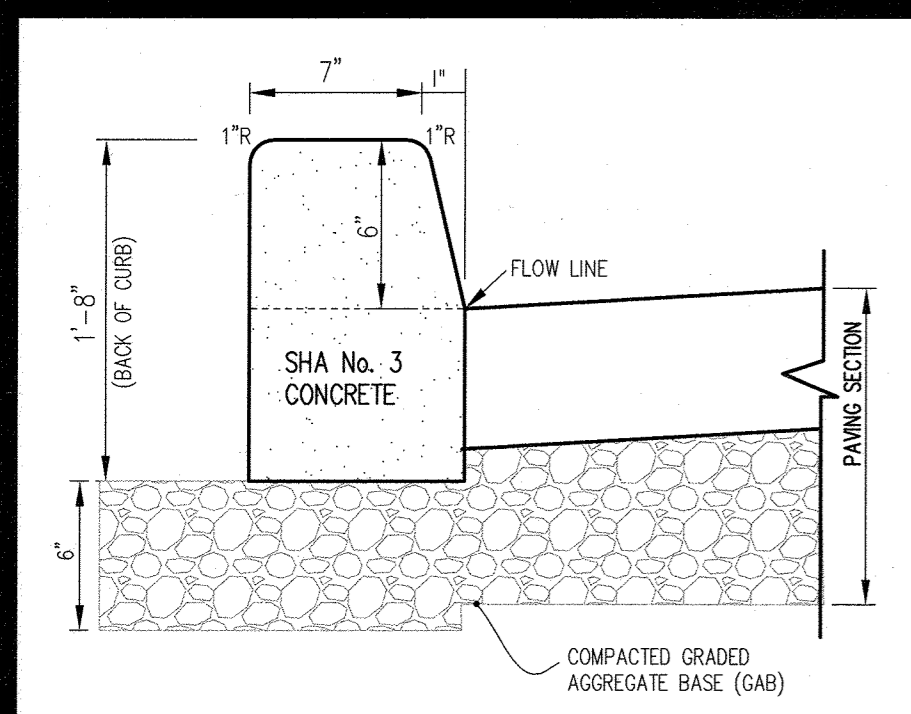
(REVISED) GRADING, SEDIMENT CONTROL and DRAINAGE AREA PLAN FOR 2022 IMPROVEMENTS

COLUMBIA TOWN CENTER
Section 2 Area 6
Parcel B (PLAT No. 9512) and Parcel E (Plat No. 14022)
(Office Building and Parking Deck)

ELECTION DISTRICT No. 5

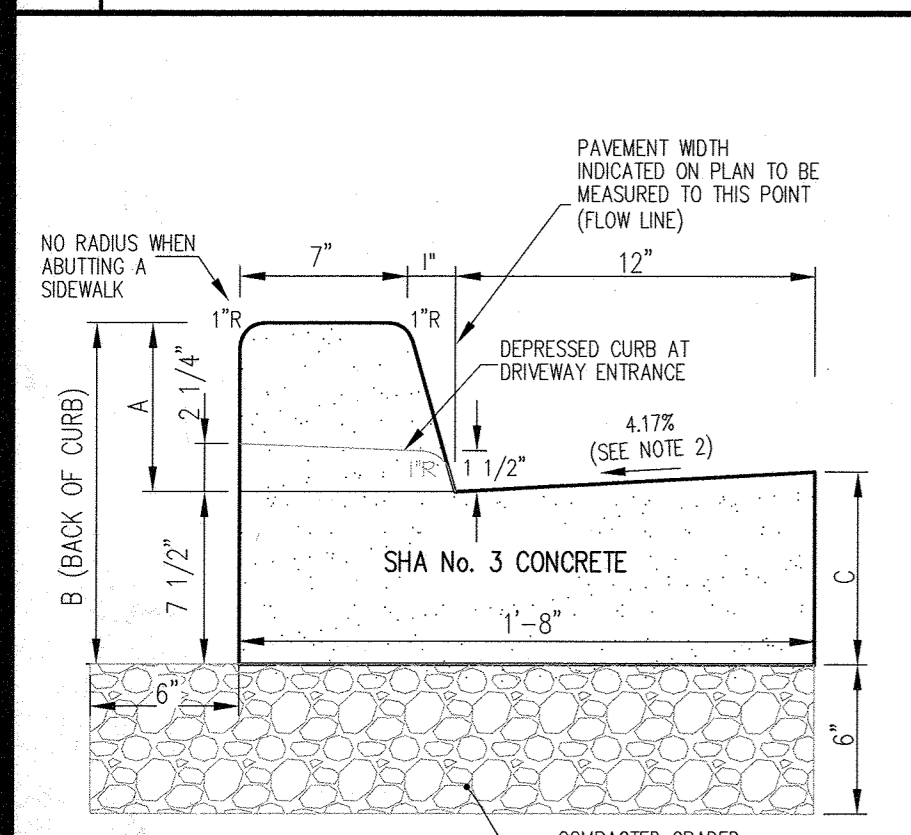
SCALE	ZONING	GLW FILE No.
1"=20'	NT	21119
DATE	TAX MAP - GRID	SHEET
APRIL 2022	36-1&2	13 OF 17





REF. HOWARD COUNTY DPW DETAILS R-3.03

1 7" CONCRETE BARRIER CURB NO SCALE



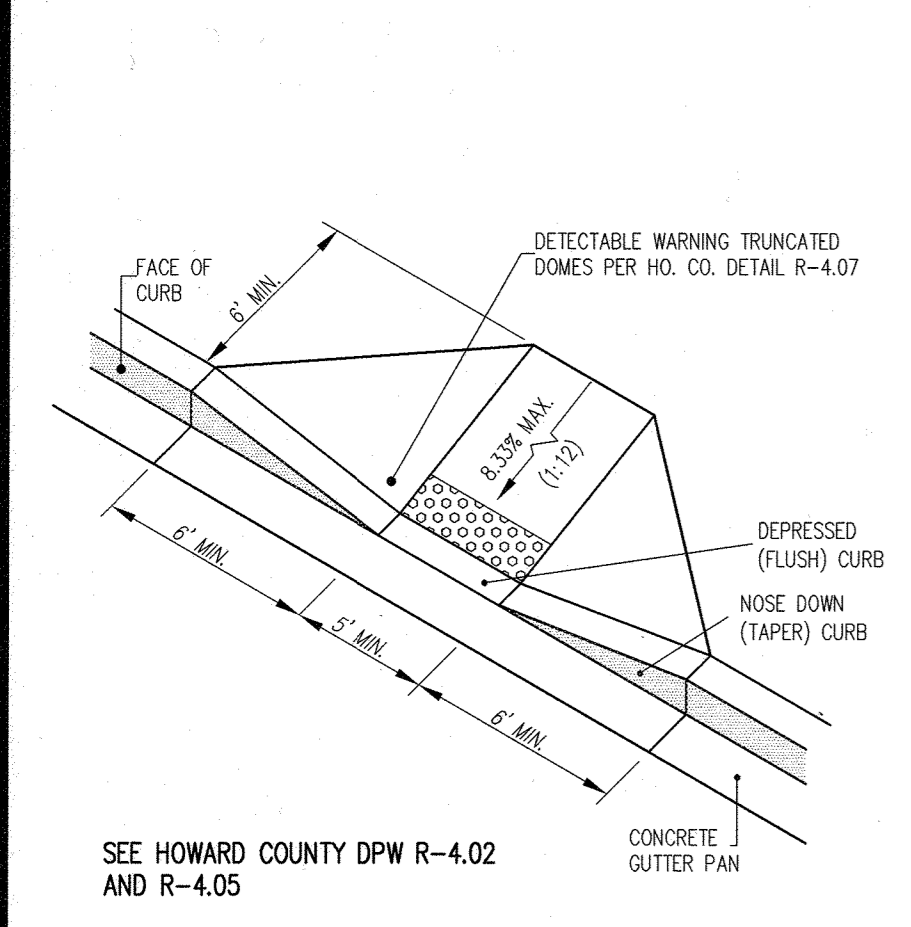
STANDARD COMBINATION CURB AND GUTTER

- A REVERSE CUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS CREATES A HAZARDOUS CONDITION.
- GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.
- A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
- POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.
- 50' MAX. BETWEEN EXPANSION JOINTS & 10' MAX. BETWEEN CONTROL JOINTS.
- UNLESS NOTED OTHERWISE, ALL ON-SITE CURB & GUTTER SHALL BE 6" HIGH. (CURB & GUTTER IN PUBLIC RIGHT-OF-WAY SHALL BE 7" TYPE)

CURB TYPE	A	B	C
6" (R-9.01)	6"	1'-1 1/2"	7"
7" (R-3.01)	7 3/16"	1'-2 11/16"	8"

REF. HOWARD COUNTY DPW DETAILS R-3.01 & R-9.01

2 TYPE-A CONCRETE CURB AND GUTTER NO SCALE



SEE HOWARD COUNTY DPW R-4.02 AND R-4.05

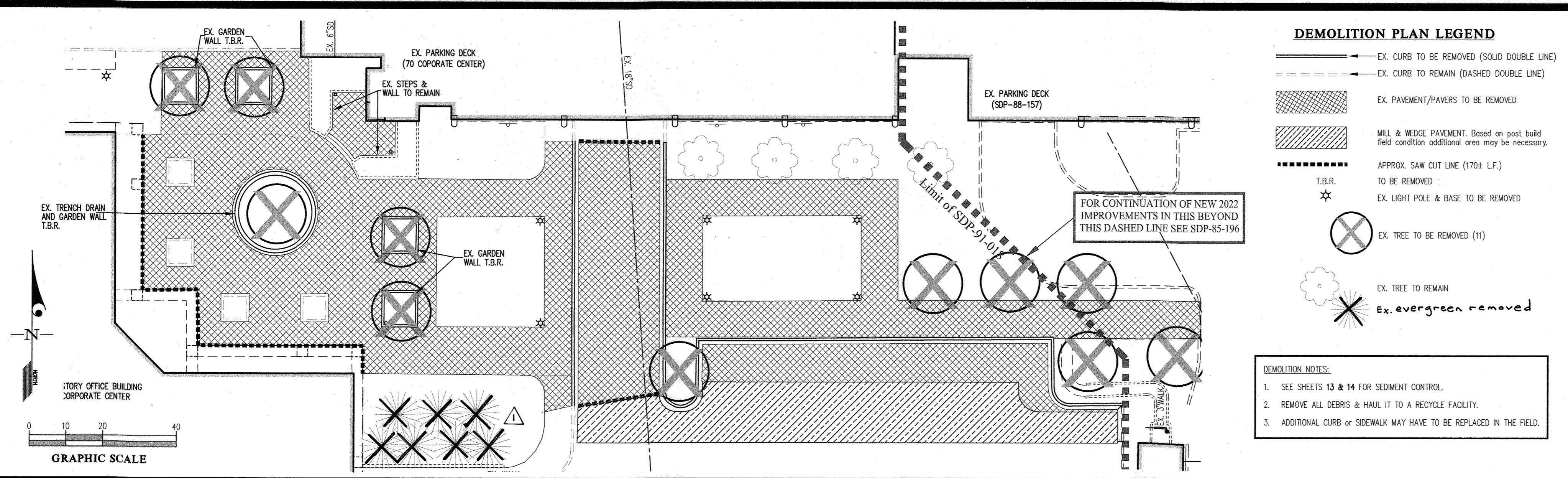
3 TYPE-B HANDICAP RAMP DETAIL NO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 8-17-22

Chief, Division of Land Development: *[Signature]* Date: 8-11-22

Chief, Development Engineering Division: *[Signature]* Date: 8-11-22

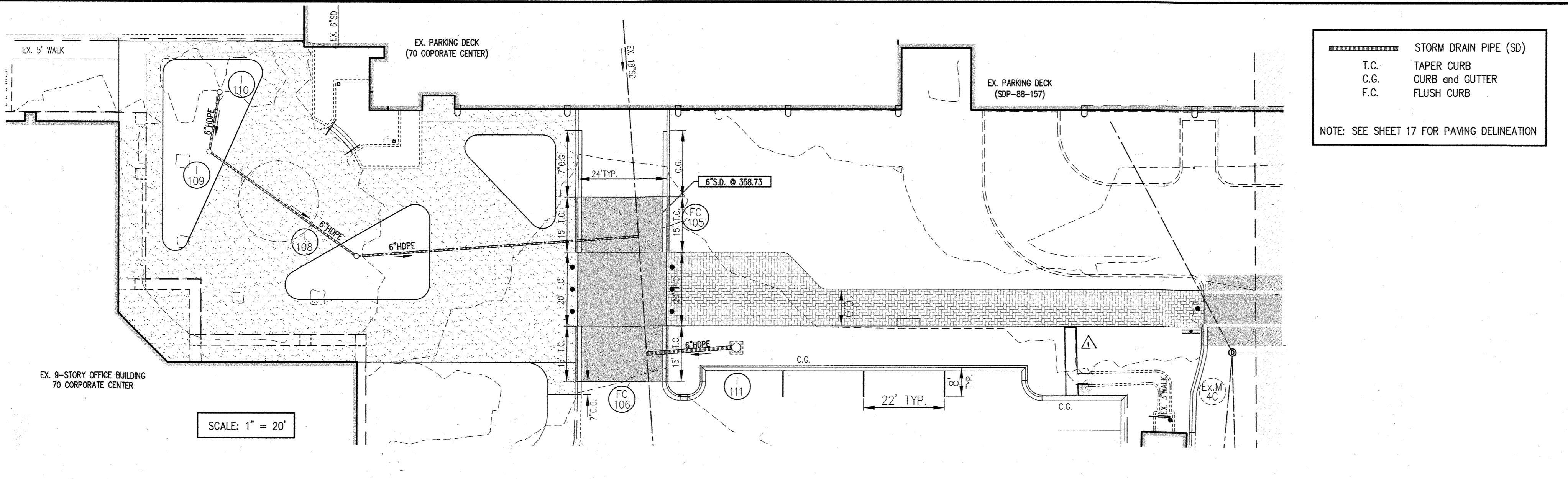


DEMOLITION PLAN LEGEND

- EX. CURB TO BE REMOVED (SOLID DOUBLE LINE)
- EX. CURB TO REMAIN (DASHED DOUBLE LINE)
- EX. PAVEMENT/PAVERS TO BE REMOVED
- MILL & WEDGE PAVEMENT. Based on post build field condition additional area may be necessary.
- APPROX. SAW CUT LINE (170± L.F.)
- TO BE REMOVED
- EX. LIGHT POLE & BASE TO BE REMOVED
- EX. TREE TO BE REMOVED (11)
- EX. TREE TO REMAIN
- EX. EVERGREEN REMOVED

- DEMOLITION NOTES:
- SEE SHEETS 13 & 14 FOR SEDIMENT CONTROL.
 - REMOVE ALL DEBRIS & HAUL IT TO A RECYCLE FACILITY.
 - ADDITIONAL CURB OR SIDEWALK MAY HAVE TO BE REPLACED IN THE FIELD.

3 DEMOLITION PLAN SCALE: 1" = 20'

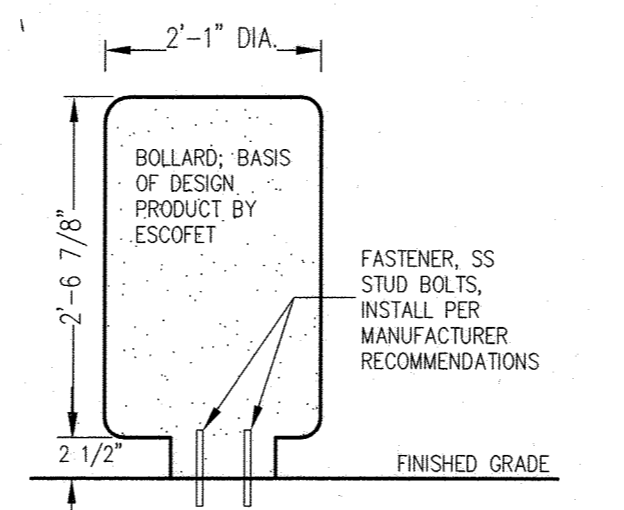


- STORM DRAIN PIPE (SD)
 - T.C. TAPER CURB
 - C.G. CURB AND GUTTER
 - F.C. FLUSH CURB
- NOTE: SEE SHEET 17 FOR PAVING DELINEATION

4 BITUMINOUS PAVING SECTIONS NO SCALE

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)						
		3 TO <5	5 TO <7	≥ 7	3 TO <5	5 TO <7	≥ 7	
P-1	PAVING BASE: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	PAVEMENT MATERIAL (INCHES)		MIN. SUPERPAVE ASPHALT MIX WITH GAB		SUPERPAVE ASPHALT MIX WITH CONSTANT GAB		
		SUPERPAVE ASPHALT MIX FINE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE (GAB)		NA	NA	NA	NA	NA
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	3.5	3.0
P-2	PARKING DRIVE AREAS: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS ACCESS PLACE, ACCESS STREET CUL-DE-SAC RESIDENTIAL	SUPERPAVE ASPHALT MIX FINE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	3.5	2.0
		GRANDED AGGREGATE BASE (GAB)		8.0	4.0	3.0	4.0	4.0
P-3	PARKING DRIVE AREAS: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS ACCESS PLACE, ACCESS STREET CUL-DE-SAC NON-RESIDENTIAL MINOR COLLECTORS RESIDENTIAL	SUPERPAVE ASPHALT MIX FINE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.5	1.5	1.5	1.5	
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		1.0	1.0	1.0	1.0	
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		3.0	3.0	3.0	4.5	3.0
		GRANDED AGGREGATE BASE (GAB)		10.0	6.0	3.0	6.0	6.0
P-4	MINOR COLLECTORS: NON-RESIDENTIAL MAJOR COLLECTORS	SUPERPAVE ASPHALT MIX FINE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	2.0	
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 9.5 MM PG 64-22S, LEVEL 1 (ESAL)		2.0	2.0	2.0	2.0	
		SUPERPAVE ASPHALT MIX BASE 18.0 MM PG 64-22S, LEVEL 1 (ESAL)		4.0	4.0	3.0	6.0	3.0
		GRANDED AGGREGATE BASE (GAB)		13.0	7.0	4.0	6.0	6.0

- NOTES:
- HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARAGE TRUCKS.
 - SUPERPAVE ASPHALT MIX LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 18.0 MM BASE (2.0" MIN. TO 4.0" MAX.), 9.5 MM SURFACE (1.0" MIN. TO 2.0" MAX.), AND 9.5 MM SURFACE (1.0" MIN. TO 2.0" MAX.).
 - GRANDED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX. COMPACTED THICKNESS LAYERS.
 - THE INTERMEDIATE SURFACE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUPERPAVE COMPLETION INSPECTION AND SUBMITTAL.
 - IN LIEU OF PLACING THE INTERMEDIATE SURFACE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY, THE INTERMEDIATE SURFACE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.
 - THE CONSTRUCTION DIMENSIONS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.



5 BOLLARD DETAIL NO SCALE

STRUCTURE SCHEDULE (STORM DRAIN)

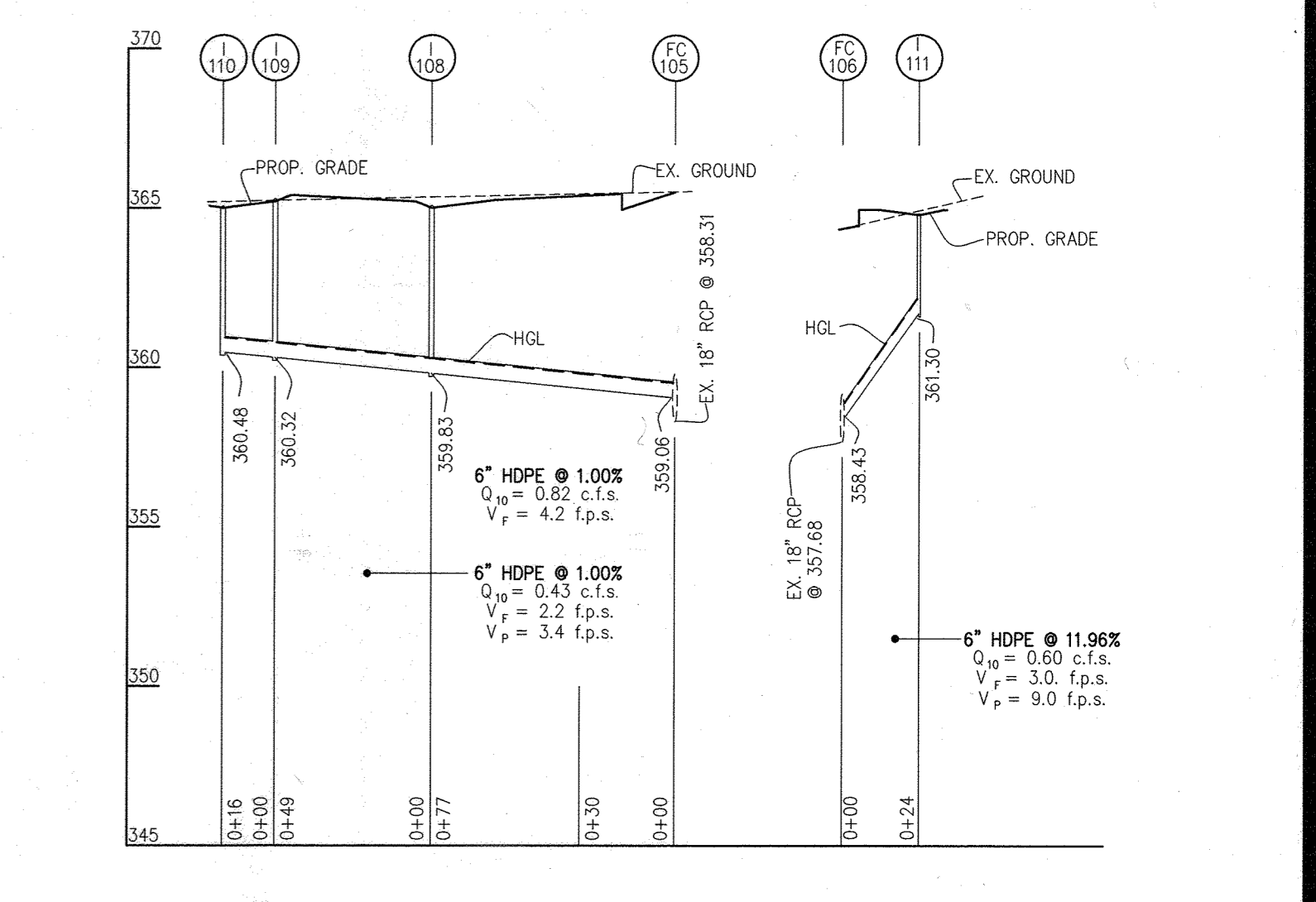
NO	TYPE	WIDTH (INSDC)	TOP ELEVATION	UPPER	LOWER	INVERT	LOWER	STD. DETAIL	LOCATIONS	REMARKS
1-108	15" NYLOPLAST DRAIN	1'-3"	365.00	---	360.08	359.83	---	ASIS 18" round / dome grate or equal	N 562,805 E 1,350,414	
1-109	15" NYLOPLAST DRAIN	1'-3"	365.20	---	360.57	360.32	---		N 562,834 E 1,350,374	
1-110	15" NYLOPLAST DRAIN	1'-3"	365.00	---	---	360.48	---		N 562,850 E 1,350,376	
1-111	TYPE 'D' INLET	2'-6"	364.80	---	---	361.30	---	HO. CO. D-4.11	N 562,881 E 1,350,518	

COORDINATE POINT GIVEN FOR NYLOPLAST DRAINS IS TO THE CENTER OF STRUCTURE.

PIPE SCHEDULE (STORM DRAIN)

SIZE	TYPE	QUANTITY (L.F.)	REMARKS
6"	HDPE	166	N-12 DUAL WALL

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



6 STORM DRAIN PROFILES

GLW PLANNING | ENGINEERING | SURVEYING

3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20866 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY: KLP

CHECKED BY: *[Signature]* DATE: 4/20/22

REVISION: ADDITIONAL SHEET ADDED FOR NEW PLAZA AREA

PREPARED FOR:
THE HOWARD HUGHES CORPORATION
10960 GRANCHESTER WAY, SUITE 110
COLUMBIA, MD 21044
ATTN: WILLIAM ROWE

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19222.

EXPIRATION DATE: MAY 28, 2024

5/12/22 *[Signature]*

(REVISED) SITE and UTILITY DETAILS FOR 2022 IMPROVEMENTS

COLUMBIA TOWN CENTER
Section 2 Area 6
Parcel B (PLAT NO. 9512) and Parcel E (Plat No. 14022)
(Office Building and Parking Deck)

ELECTION DISTRICT No. 5

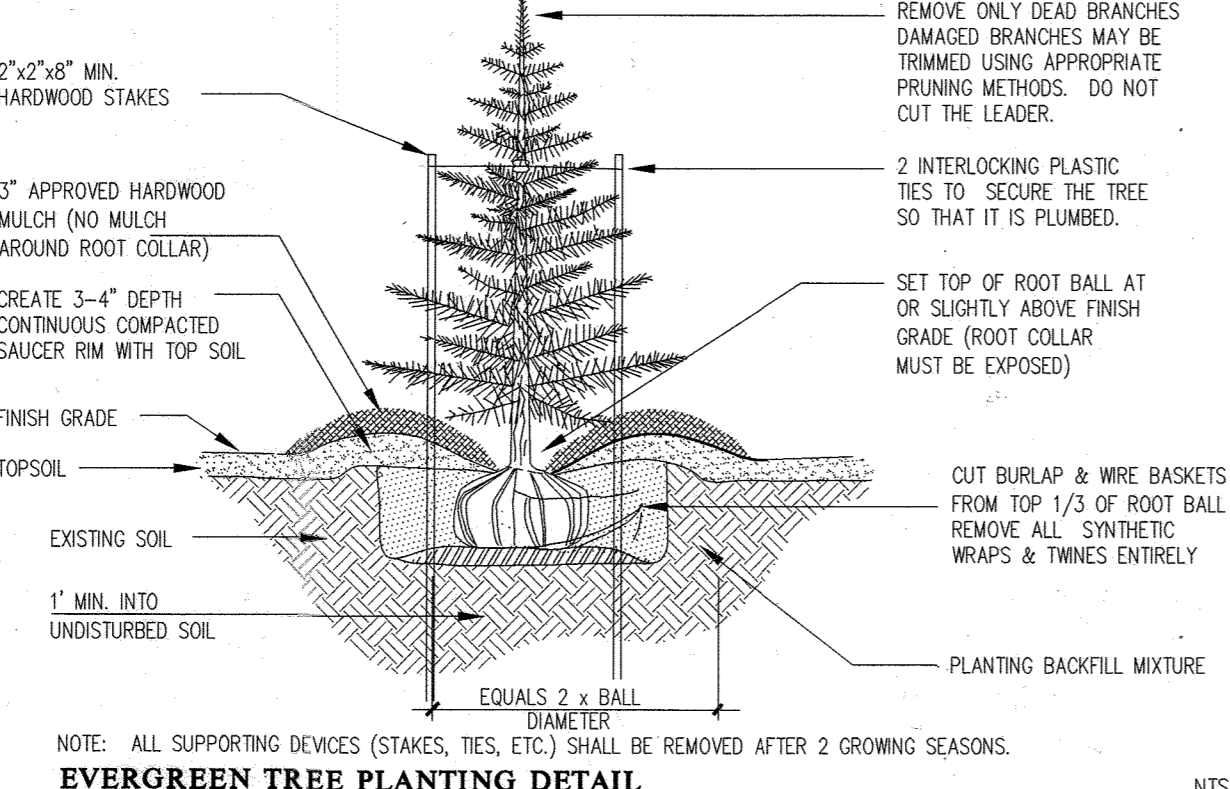
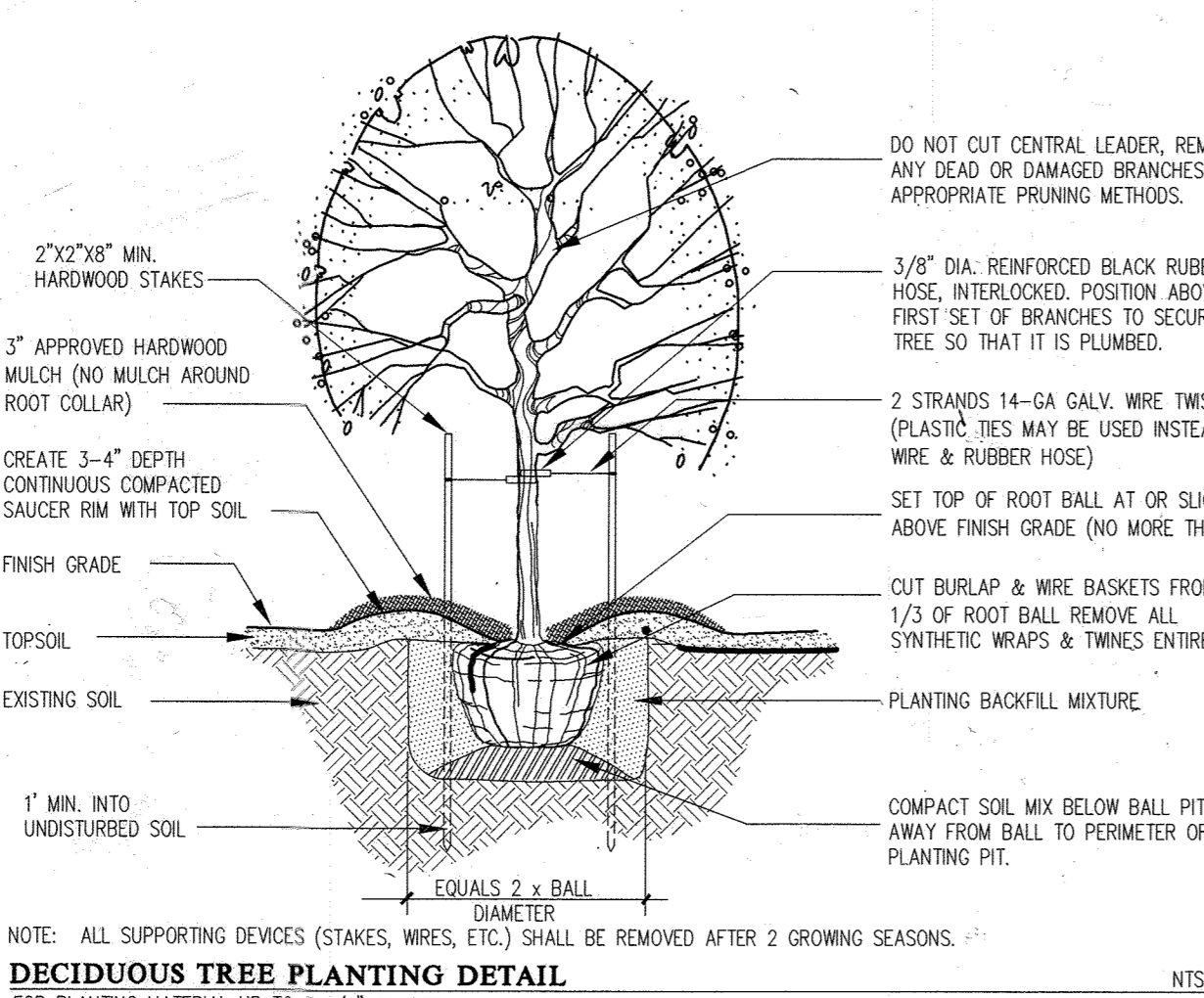
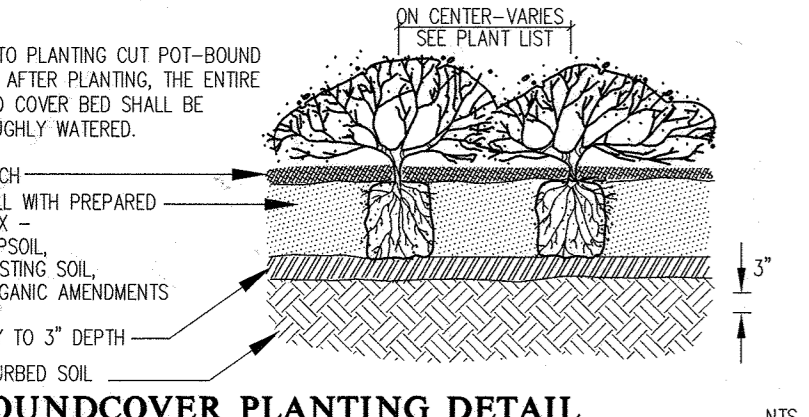
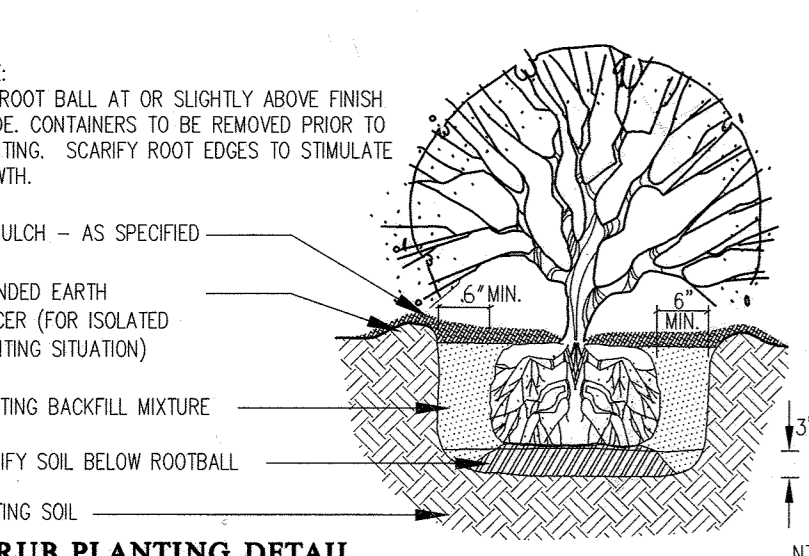
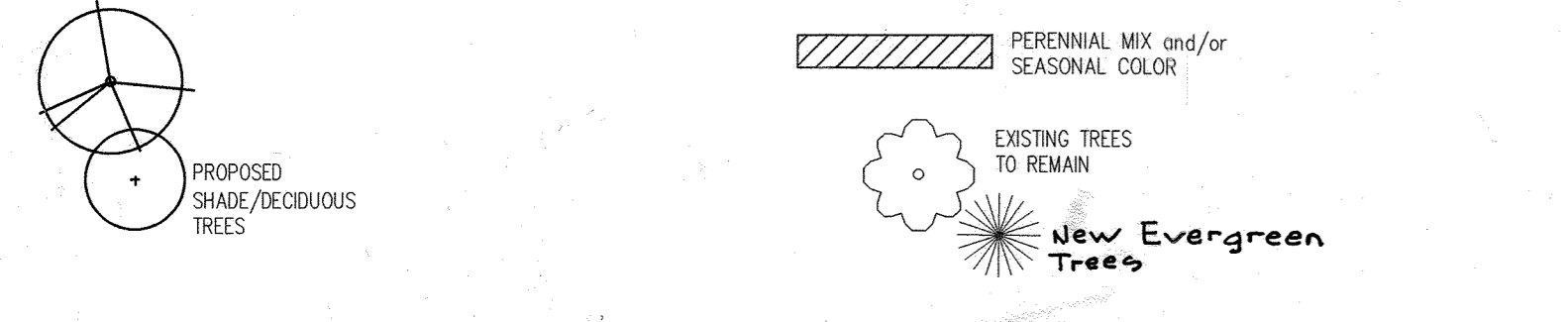
SCALE	ZONING	GLW FILE No.
AS SHOWN	NT	21119
DATE	TAX MAP - GRID	SHEET
APRIL 2022	36-1&2	15 OF 17

LANDSCAPE NOTES

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE & THE HOWARD COUNTY LANDSCAPE MANUAL.
- CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST (5) FIVE DAYS BEFORE STARTING WORK. ALL GENERAL NOTES, ESPECIALLY THOSE REGARDING UTILITIES, ON SHEET No.1 SHALL APPLY.
- FIELD VERIFY UNDERGROUND UTILITY LOCATIONS AND EXISTING CONDITIONS BEFORE STARTING PLANTING WORK. CONTACT CONSTRUCTION MANAGER OR OWNER IF ANY RELOCATIONS ARE REQUIRED.
- PLANT QUANTITIES SHOWN ON THE PLAN LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL TAKE PRECEDENCE.
- ALL PLANT MATERIAL SHALL BE FULL HEAVY, WELL FORMED, SYMMETRICAL, AND CONFORM TO THE A.A.N. SPECIFICATIONS. IN ADDITION, ALL REQUIRED PLANTING FOR THE LANDSCAPE ISLANDS IN THE PARKING LOT SHALL CONFORM TO THE HOWARD COUNTY LANDSCAPE MANUAL. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THIS PLAN. SEE SHEET 21 FOR PLANTING DETAILS.
- NO SUBSTITUTION SHALL BE MADE WITHOUT PRIOR APPROVAL FROM HOWARD COUNTY DPZ AND THE OWNER OR HIS REPRESENTATIVE.
- ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BUT NOT OTHERWISE PLANTED, PAVED, OR MULCHED SHALL BE SOODED OR SEEDED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATION. A MINIMUM OF 4" OF TOPSOIL SHALL BE PROVIDED TO ALL PLANTING AREAS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING IF HE/SHE ENCOUNTERS SOIL DRAINAGE CONDITIONS THAT MAY BE DETRIMENTAL TO THE GROWTH OF THE PLANTS.
- ALL EXPOSED EARTH WITHIN THE LIMITS OF PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER THE PLANTING DETAILS.
- DO NOT PLANT WITHIN THE PUBLIC WATER, SEWER AND UTILITY EASEMENT.
- VERIFY THE LOCATION AND DEPTH OF THE COMMUNICATION LINE(S) WITHIN THE AT&T R/W PRIOR TO ANY PLANTING WITHIN THIS R/W. THE CONTRACTOR SHALL CONTACT GLW FOR ANY NECESSARY RELOCATION OF PLANT MATERIALS.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING SHALL BE POSTED WITH THE grading permit application in the amount of \$9800.00 for the following plant quantities:
 6 ornamental trees at \$150.00/tree = \$900.00
 12 shade trees at \$200.00/tree = \$2400.00
 quantities shown here are more than what was planted (see plant list & plan view for quantities planted) total surety of \$9800.00 remains the same.

PLANT LIST				
SYMBOL	QUANT.	SIZE (MIN.)	NAME (BOTANICAL/COMMON) OF PLANTS FOR SELECTION BY OWNER/BUYER	COMMENTS
SHADE/DECIDUOUS TREES				
	8	6'-8" HT.	Taxodium distichum var. Distichum / BALD CYPRESS	ALL B&B, WELL FORMED W/CENTRAL LEADER
	14	2.5' - 3' CAL.	GLEDTISIA TRICANTHOS / THORNLESS HONEYLOCUST	ALL B&B, WELL FORMED W/CENTRAL LEADER
ORNAMENTAL TREES				
	4	8' HT.	CORNUS FLORIDA / FLOWERING DOGWOOD	ALL B&B
	2	8' HT.	MAGNOLIA STELLATA/ MAGNOLIA STAR or MAGNOLIA X SOULAGIANA/ MAGNOLIA SAUCER	MULTI-STEM

PLANTING LEGEND



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 LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *W. Rowe* DATE: *5/17/2022*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *Greg Gove* DATE: *8-17-22*

Chief, Division of Land Development: *Blanca* DATE: *8-11-22*

Chief, Development Engineering Division: *HA* DATE: *8-11-22*

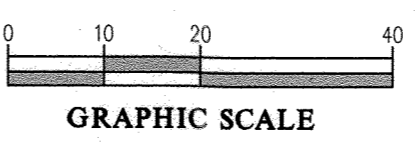
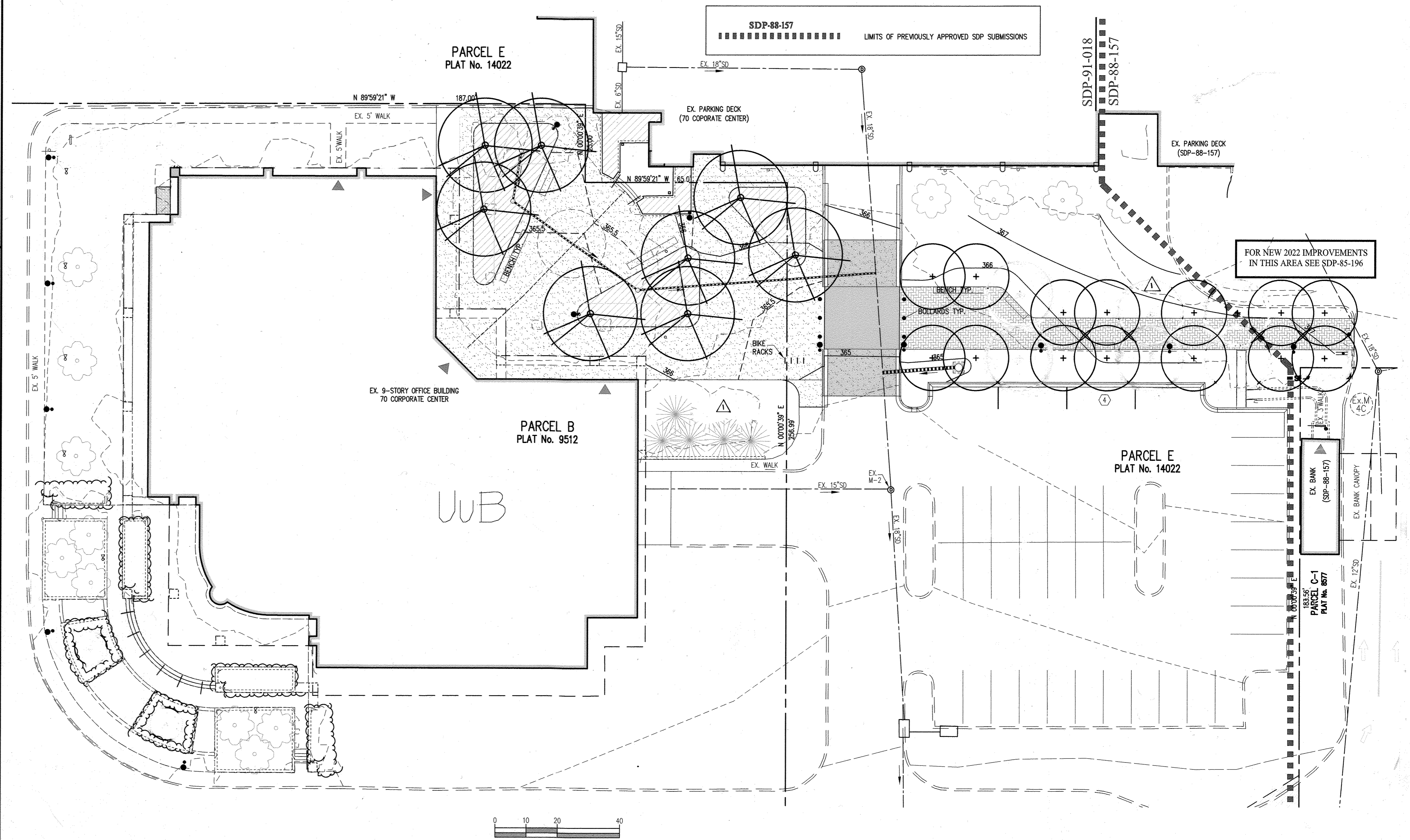
SPECIFICATIONS: PLANT MATERIALS AND PLANTING METHODS

- PLANT MATERIALS**
THE LANDSCAPE CONTRACTOR SHALL FURNISH AND INSTALL AND/OR DIG, BALL, BURLAP AND TRANSPANT ALL OF THE PLANT MATERIALS CALLED FOR ON DRAWINGS AND/OR LISTED IN THE PLANT SCHEDULE.
- PLANT NAMES**
PLANT NAMES USED IN THE PLANT SCHEDULE SHALL CONFORM WITH "AAN" STANDARDS.
- PLANT STANDARDS**
ALL PLANT MATERIAL SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK" LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERMEN (HERE- AFTER REFERRED TO AS AAN STANDARDS). ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE FIRST QUALITY, SOUND, VIGOROUS, WELL-BRANCHED AND WITH HEALTHY, WELL-FURNISHED ROOT SYSTEMS. THEY SHALL BE FREE OF DISEASE, INSECT PESTS AND MECHANICAL INJURIES.
- PLANT MEASUREMENTS**
ALL PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED IN THE PLANT SCHEDULE.
 A. CALIPER MEASUREMENTS SHALL BE TAKEN SIX INCHES (6") ABOVE GRADE FOR TREES UP TO FOUR-INCH (4") CALIPER AND TWELVE (12") ABOVE GRADE FOR TREES GREATER THAN FOUR INCHES (4") IN CALIPER.
 B. MINIMUM BRANCHING HEIGHT FOR ALL SHADE TREES SHALL BE SIX FEET (6'), MAXIMUM DIGHT FEET (8').
 C. CALIPER, HEIGHT, SPREAD AND SIZE OF BALL SHALL BE GENERALLY AS FOLLOWS:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
2" - 2.5"	12'-14'	5'-6'	28" DIAMETER
3" - 3.5"	14'-16'	6'-8'	32" DIAMETER
3.5" - 4"	14'-16'	8'-10'	36" DIAMETER
4" - 4.5"	16'-18'	8'-10'	40" DIAMETER
4.5" - 5"	16'-17'	10'-12'	44" DIAMETER
5" - 5.5"	16'-20'	10'-12'	48" DIAMETER
5.5" - 6"	18'-20'	12'-14'	52" DIAMETER
- PLANT IDENTIFICATION**
LEGIBLE LABELS SHALL BE ATTACHED TO ALL SHADE TREES, MINOR TREES, SPECIMEN SHRUBS AND BUNDLES OR BOXES OF OTHER PLANT MATERIAL GIVING THE BOTANICAL AND COMMON NAMES, SIZE AND QUANTITY OF EACH. EACH SHIPMENT OF PLANTS SHALL BEAR CERTIFICATES OF INSPECTION AS REQUIRED BY FEDERAL, STATE AND COUNTY AUTHORITIES.
- PLANT INSPECTION**
THE OWNER MAY REQUEST, AT LEAST TEN (10) DAYS PRIOR TO THE INSTALLATION OF ANY PROPOSED PLANT MATERIAL, TO INSPECT ALL PROPOSED PLANT MATERIAL AT THE SOURCE OF ORIGIN.
- PLANTING METHODS**
ALL PROPOSED PLANT MATERIALS THAT MEET THE SPECIFICATIONS IN SECTION A ARE TO BE PLANTED IN ACCORDANCE WITH THE FOLLOWING METHODS DURING THE PROPER PLANTING SEASONS AS DESCRIBED IN THE FOLLOWING:
 1. **PLANTING SEASONS**
THE PLANTING OF DECIDUOUS TREES, SHRUBS AND VINES SHALL BE FROM MARCH 1ST TO JUNE 15TH AND FROM SEPTEMBER 15TH TO DECEMBER 15TH. PLANTING OF DECIDUOUS MATERIAL MAY BE CONTINUED DURING THE WINTER MONTHS PROVIDING THERE IS NO FROST IN THE GROUND AND FROST-FREE TOPSOIL PLANTING MIXTURES ARE USED.
 THE PLANTING OF EVERGREEN MATERIAL SHALL BE FROM MARCH 15TH TO JUNE 15TH AND FROM AUGUST 15TH TO DECEMBER 15TH. NO PLANTING SHALL BE DONE WHEN THE GROUND IS FROZEN OR EXCESSIVELY MOIST. NO FROZEN OR WET TOPSOIL SHALL BE USED AT ANY TIME.
 2. **DIGGING**
ALL PLANT MATERIAL SHALL BE DIG, BALLED AND BURLAPPED (B&B) IN ACCORDANCE WITH THE "AAN STANDARDS".
 3. **EXCAVATION OF PLANT PITS**
THE LANDSCAPING CONTRACTOR SHALL EXCAVATE ALL PLANT PITS, VINE PITS, HEDGE TRENCHES AND SHRUB BEDS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:
 A. LOCATIONS OF ALL PROPOSED PLANT MATERIAL SHALL BE STAKED AND APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT BEFORE ANY OF THE PROPOSED PLANT MATERIAL IS INSTALLED BY THE LANDSCAPE CONTRACTOR.
 B. ALL PITS SHALL BE GENERALLY CIRCULAR IN OUTLINE, VERTICAL SIDES, DEPTH SHALL NOT BE LESS THAN 6" DEEPER THAN THE ROOT BALL, DIAMETER SHALL NOT BE LESS THAN TWO TIMES THE DIAMETER OF THE ROOT BALL AS SET FORTH IN THE FOLLOWING SCHEDULE.
 C. IF AREAS ARE DESIGNATED AS SHRUB BEDS OR HEDGE TRENCHES, THEY SHALL BE EXCAVATED TO AT LEAST 18" DEPTH MINIMUM. AREAS DESIGNATED FOR GROUND COVERS AND VINES SHALL BE EXCAVATED TO AT LEAST 12" IN DEPTH MINIMUM.
 D. DIAMETER AND DEPTH OF TREE PITS SHALL GENERALLY BE AS FOLLOWS:

PLANT SIZE	ROOT BALL	PIT DIA.	PIT DEPTH
2" - 2.5" CAL.	28"	56"	24"
3" - 3.5" CAL.	32"	64"	28"
3.5" - 4" CAL.	36"	72"	32"
4" - 4.5" CAL.	40"	80"	36"
4.5" - 5" CAL.	44"	88"	40"
5" - 5.5" CAL.	48"	96"	44"
5.5" - 6" CAL.	52"	104"	48"

 A 20% COMPACTION FIGURE OF THE SOIL TO BE REMOVED IS ASSUMED AND WILL BE ALLOWED IN CALCULATION OF EXTRA TOPSOIL. THE TABULATED PIT SIZES ARE FOR PURPOSES OF UNIFORM CALCULATION AND SHALL NOT OVERRIDE THE SPECIFIED DEPTHS BELOW THE BOTTOMS OF THE ROOT BALLS.
 4. **STAKING, CUYING AND WRAPPING**
 ALL PLANT MATERIAL SHALL BE STAKED OR CUYED, AND WRAPPED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS
 A. STAKES: SHALL BE SOUND WOOD 2" X 2" ROUGH SAWN OAK OR SIMILAR DURABLE WOODS, OR LENGTHS, MINIMUM 7'-0" FOR MAJOR TREES AND 5'-0" MINIMUM FOR MINOR TREES.
 B. WIRE AND CABLE: WIRE SHALL BE #10 GA. GALVANIZED OR BETHANIZED ANNEALED STEEL WIRE, FOR TREES OVER 3" CALIPER, PROVIDE 5/16" TURN BUCKLES, EYE AND EYE WITH 4" TAKE-UP. FOR TREES OVER 5" CALIPER, PROVIDE 3/16", 7 STRAND CABLE CADMIUM PLATED STEEL, WITH GALVANIZED "EYE" THIMBLES OF WIRE AND HOSE ON TREES UP TO 3" IN CALIPER.
 C. HOSE: SHALL BE NEW, 2 PLY REINFORCED RUBBER HOSE, MINIMUM 1/2" I.D. "PLASTIC LOCK TIES" OR "PAUL'S TREES BRACES" MAY BE USED IN PLACE OF WIRE AND HOSE ON TREES UP TO 3" IN CALIPER.
 D. ALL TREES UNDER 3" IN CALIPER ARE TO BE PLANTED AND STAKED IN ACCORDANCE WITH THE ATTACHED PLANTING DETAILS.
 5. **PLANT PRUNING, EDGING AND MULCHING**
 A. EACH TREE, SHRUB OR VINE SHALL BE PRUNED IN AN APPROPRIATE MANNER TO ITS PARTICULAR REQUIREMENTS, IN ACCORDANCE WITH ACCEPTED STANDARD PRACTICE. BROKEN OR BRUISED BRANCHES SHALL BE REMOVED WITH CLEAN CUTS FLUSH WITH THE ADJACENT TRUNK OR BRANCHES. ALL CUTS OVER 1" IN DIAMETER SHALL BE PAINTED WITH AN APPROVED ANTISEPTIC TREE WOUND DRESSING.
 B. ALL TRENCHES AND SHRUB BEDS SHALL BE EDGED AND CULTIVATED TO THE LINES SHOWN ON THE DRAWING. THE AREAS AROUND ISOLATED PLANTS SHALL BE EDGED AND CULTIVATED TO THE FULL DIAMETER OF THE PIT. SOO WHICH HAS BEEN REMOVED AND STACKED SHALL BE USED TO TRIM THE EDGES OF ALL EXCAVATED AREAS TO THE NEAT LINES OF THE PLANT PIT SAUCERS, THE EDGES OF SHRUB AREAS, HEDGE TRENCHES AND VINE POCKETS.
 C. AFTER CULTIVATION, ALL PLANT MATERIALS SHALL BE MULCHED WITH A 3" LAYER OF FINE, SHREDDED PINE BARK, PEAT MOSS, OR ANOTHER APPROVED MATERIAL OVER THE ENTIRE AREA OF THE BED OR SAUCER.
 6. **PLANT INSPECTION AND ACCEPTANCE**
 THE DESIGN REVIEW COMMITTEE SHALL BE RESPONSIBLE FOR INSPECTING ALL PLANTING PROJECTS ON A PERIODIC BASIS TO ASSURE THAT ALL WORK IS PROCEEDING IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
 7. **PLANT GUARANTEE**
 ALL PLANT MATERIAL SHALL BE GUARANTEED FOR THE DURATION OF ONE FULL GROWING SEASON, AFTER FINAL INSPECTION AND ACCEPTANCE OF THE WORK IN THE PLANTING PROJECT. PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWING CONDITION AT THE END OF THE GUARANTEE PERIOD.
 A. FOR THIS PURPOSE, THE "GROWING SEASON" SHALL BE THAT PERIOD BETWEEN THE END OF THE "SPRING" PLANTING SEASON, AND THE COMMENCEMENT OF THE "FALL" PLANTING SEASON.
 B. GUARANTEE FOR PLANTING PERFORMED AFTER THE SPECIFIED END OF THE "SPRING" PLANTING SEASON, SHALL BE EXTENDED THROUGH THE END OF THE NEXT FOLLOWING "SPRING" PLANTING SEASON.
 8. **SOODING**
 ALL SOODING SHALL BE IN ACCORDANCE TO THE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" LATEST EDITION, APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS.
 ALL SOO SHALL BE STRONGLY ROOTED SOO, NOT LESS THAN TWO YEARS OLD AND FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES. PROVIDE ONLY SOO CAPABLE OF GROWTH DEVELOPMENT WHEN PLANTED AND IN STRIPS NOT MORE THAN 18" WIDE X 4' LONG. PROVIDE SOO COMPOSED PRINCIPALLY OF IMPROVED STRAIN KENTUCKY BLUEGRASS, SUCH AS, COLUMBIA, VICTA, OR ESCORT.



THIS PLAN IS FOR PLANTING PURPOSES ONLY

GLW
PLANNING | ENGINEERING | SURVEYING
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4186

DESIGNED BY:	
DRAWN BY:	KLP
CHECKED BY:	LJL/10/14
DATE:	4/2022
REVISION:	Update tree quantities in plan & plant list (total surety amount remains the same) KLP
DATE:	4/2022
BY:	APPR.

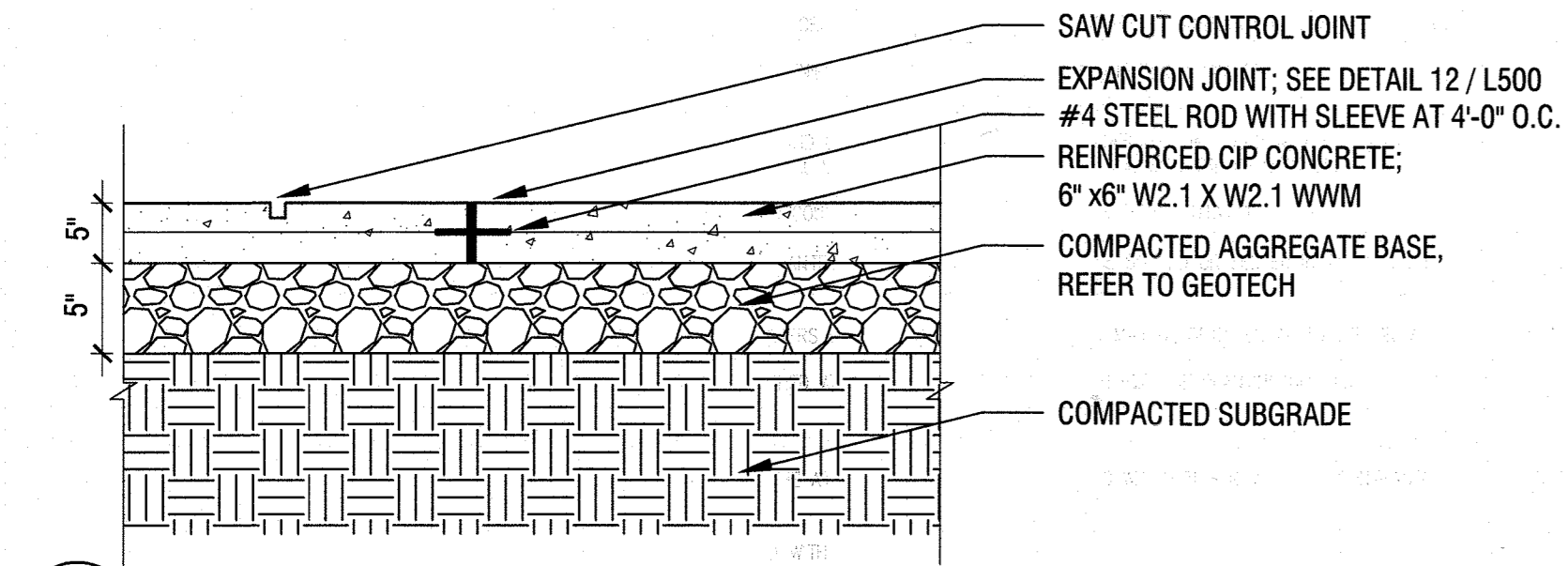
PREPARED FOR:
THE HOWARD HUGHES CORPORATION
10960 GRANCHESTER WAY, SUITE 110
COLUMBIA, MD 21044
ATTN: WILLIAM ROWE

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 189225.
EXPIRATION DATE: MAY 28, 2024.
5/12/22

(REVISED) LANDSCAPE PLAN FOR 2022 IMPROVEMENTS
COLUMBIA TOWN CENTER
Section 2 Area 6
Parcel B (PLAT No. 9512) and Parcel E (Plat No. 14022)
(Office Building and Parking Deck)
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

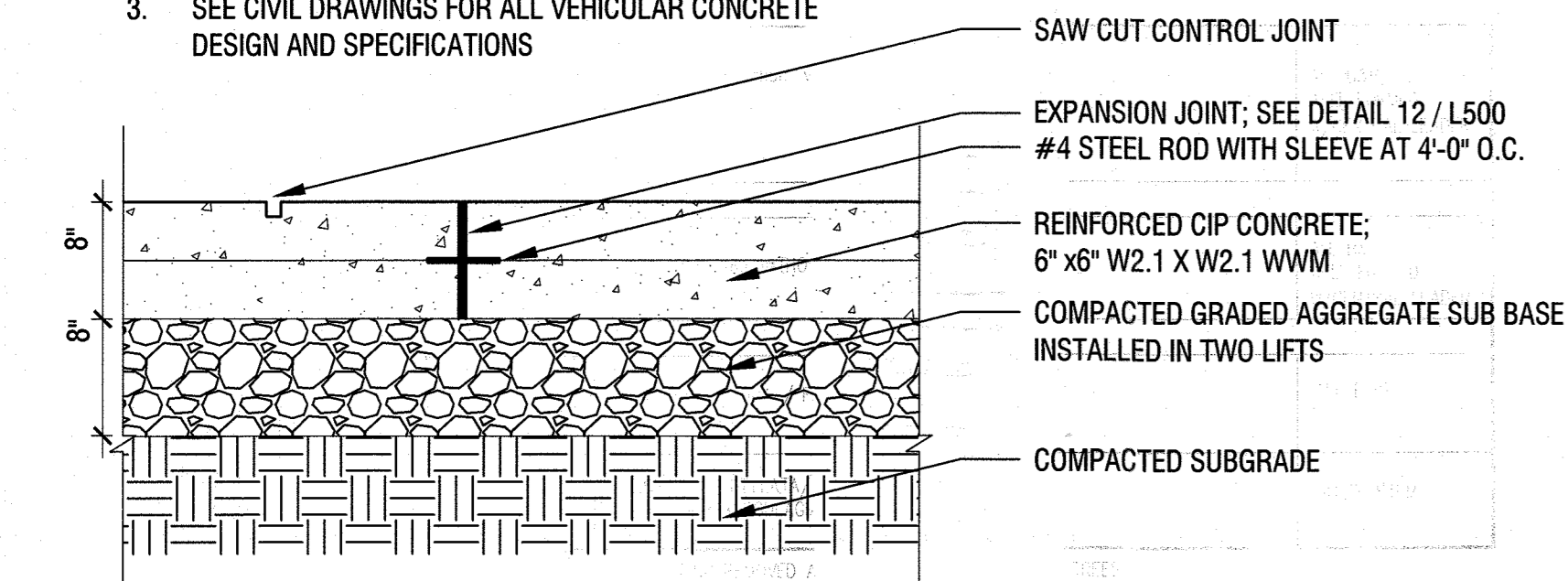
SCALE	ZONING	GLW FILE No.
1"=20'	NT	21119
DATE	TAX MAP - GRID	SHEET
APRIL 2022	36-1&2	16 OF 17

PAVING DETAILS

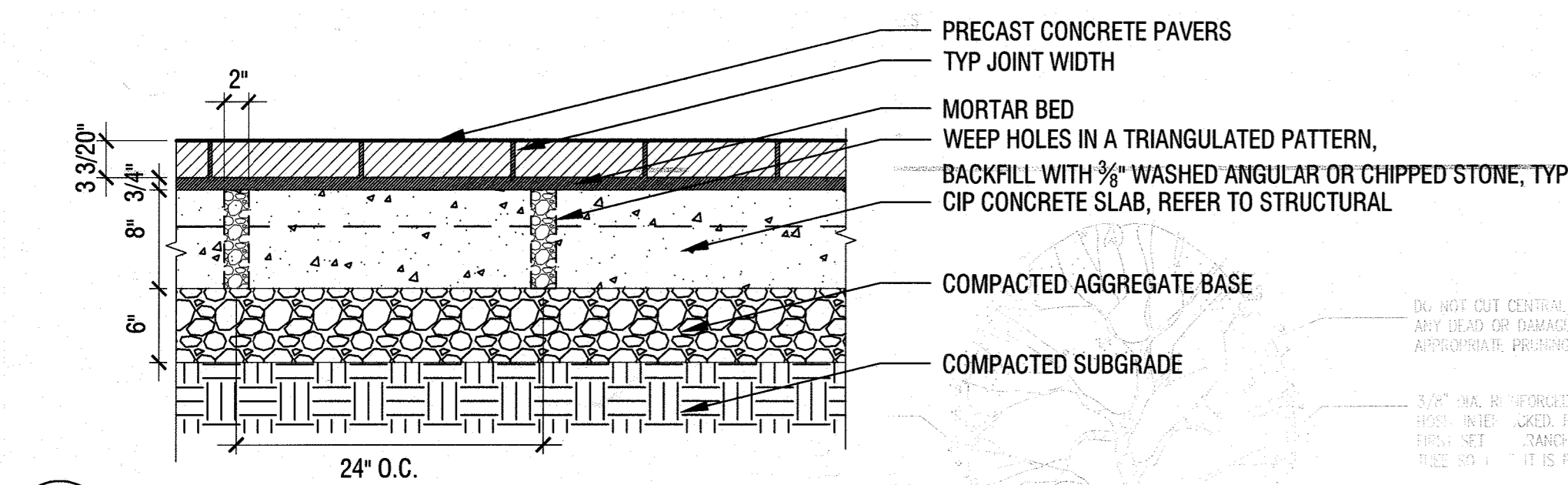


1 CIP CONCRETE PAVING - PEDESTRIAN
SCALE: 1" = 1'-0"

- NOTES:**
- 1/2" EXPANSION JOINTS AT 15' O.C. AND WHEN CONCRETE ABUTS A RIGID SURFACE SUCH AS BUILDINGS, WALLS, OR CHANGES IN MATERIAL OR CONCRETE DEPTH.
 - SEE CIVIL ENGINEER'S SPECIFICATIONS FOR CONCRETE
 - SEE CIVIL DRAWINGS FOR ALL VEHICULAR CONCRETE DESIGN AND SPECIFICATIONS

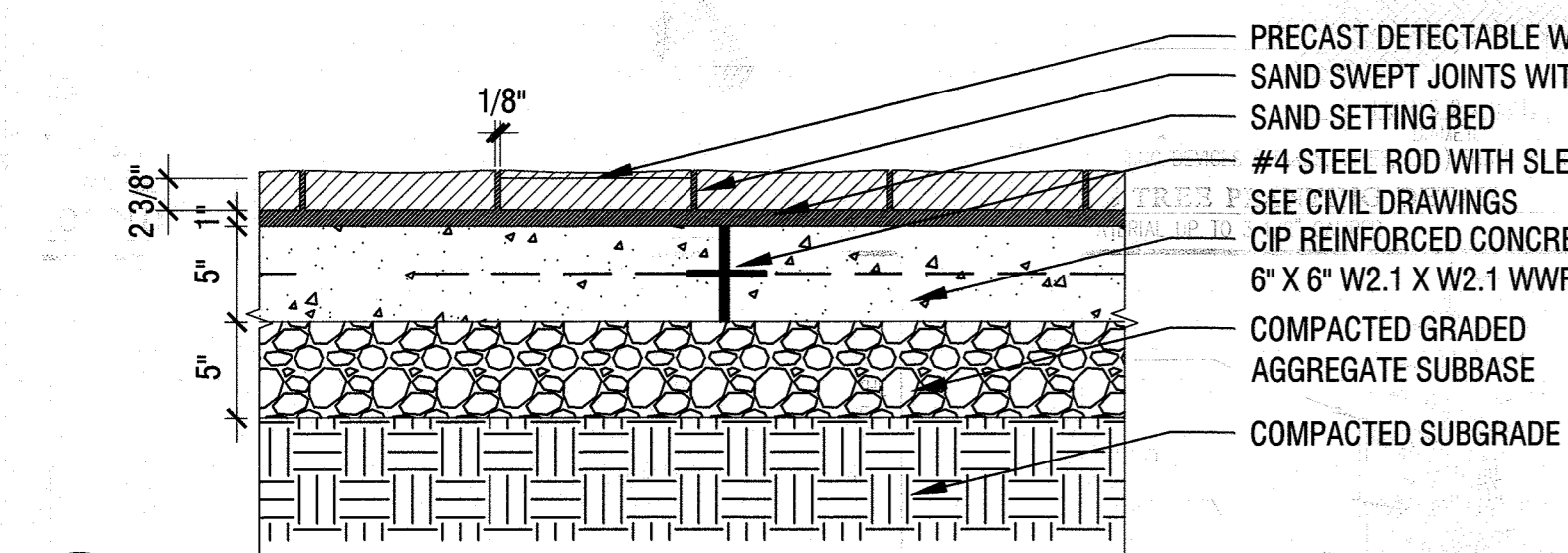


2 CIP CONCRETE PAVING - VEHICULAR
SCALE: 1" = 1'-0"



3 PAVER ON CONCRETE BASE - VEHICULAR
SCALE: 1" = 1'-0"

- NOTES:**
1. PROVIDE EXPANSION JOINT IN CONCRETE BASE @ 10' O.C. MAX
 2. EXPANSION JOINT TO GO THROUGH CONCRETE BASE ONLY



4 DETECTABLE WARNING PAVERS
SCALE: 1" = 1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 8-17-22

Chief, Division of Land Development: *[Signature]* Date: 8-11-22

Chief, Development Engineering Division: *[Signature]* Date: 8-11-22

Unknown Studio

2219 Saint Paul Street / Baltimore, MD 21218
P: 410.246.2946

DESIGNED BY:	CA/SP		
DRAWN BY:	SP/LDR		
CHECKED BY:	ES/CA	2/2022	ADDITIONAL SHEET ADDED FOR NEW PLAZA AREA
DATE:		REVISION	
BY:		APPR:	

PREPARED FOR:

THE HOWARD HUGHES CORPORATION
10960 GRANCHESTER WAY, SUITE 110
COLUMBIA, MD 21044
ATTN: WILLIAM ROWE



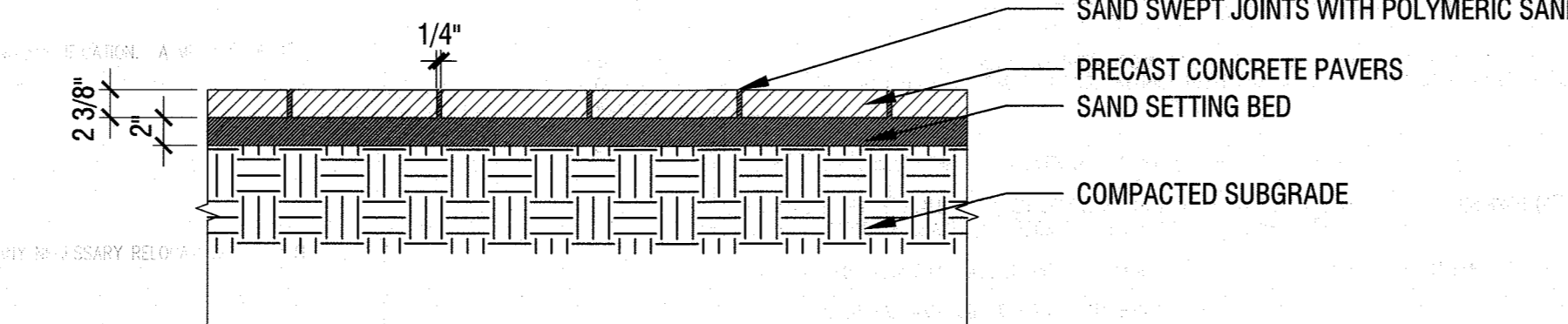
(REVISED) PAVING PLAN AND DETAILS (ELEMENTS)

COLUMBIA TOWN CENTER
SECTION 2 AREA 6
Parcel B (PLAT No. 9512) and Parcel E (Plat No. 14022)
(Office Building and Parking Deck)

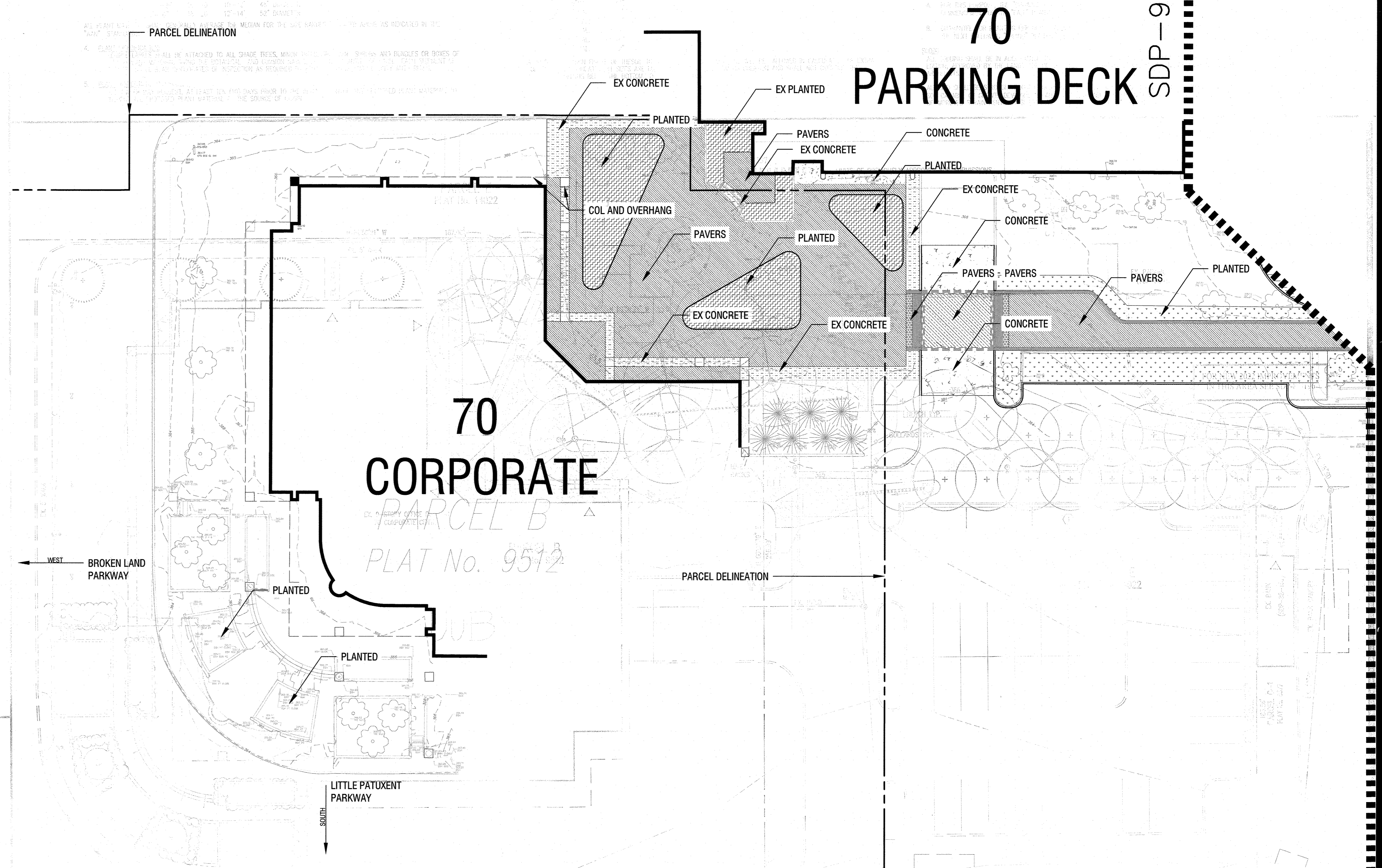
HOWARD COUNTY, MARYLAND

SCALE	ZONING	FILE No.
1"=20'	NT	
DATE	TAX MAP - GRID	SHEET
FEB. 2022	36-1&2	17 OF 17

NOTE: PROVIDE METAL EDGE ON BOTH SIDES OF SAND-SET PAVERS, TYP.



5 PAVER ON SAND BASE
SCALE: 1" = 1'-0"



PARCEL E
PLAT No. 14022

70 PARKING DECK

70 CORPORATE

PARCEL B
PLAT No. 9512

SDP-91-18

