

ZONING INFORMATION

1. ZB 779. A REQUEST FOR RE-ZONING FROM R-20 TO POR. PETITION WAS WITHDRAWN AND ZONING GRANTED BY COMPREHENSIVE ZONING ON AUGUST 2, 1985.
2. BA 95-64V. A REQUEST FOR REDUCTION OF THE 50 FOOT STRUCTURE AND USE SETBACK FROM A RESIDENTIAL DISTRICT WAS GRANTED ON FEBRUARY 6, 1996. NOT APPLICABLE PER ZB 977M.
3. ZB 977M. A REQUEST FOR RE-ZONING OF LOT FROM POR TO M-1. PETITION WAS GRANTED ON JANUARY 29, 1997. A SPECIAL EXCEPTION FOR THE GASOLINE STATION WAS ALSO GRANTED.
4. BA97-24V. ON JUNE 26, 1997, THE BOARD OF APPEALS APPROVED PETITIONER'S REQUEST FOR A VARIANCE TO REDUCE THE REQUIRED 50 FOOT USE SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY TO 30 FEET FOR A LOADING AREA, AND THE NUMEROUS VARIANCES TO REDUCE THE REQUIRED 100 FOOT STRUCTURE AND USE SETBACK FROM A RESIDENTIAL DISTRICT AS FOLLOWS:

USE:	TO SE PROPERTY LINE:	TO SW PROPERTY LINE:
VEHICLE CIRCULATION AREA & CAR WASH STACKING LANE.....	32 FEET	20 FEET
CONVENIENCE STORE BUILDING	80 FEET	69 FEET
CAR WASH BUILDING	80 FEET	69 FEET
PUMP ISLAND CANOPY	-----	54 FEET
TWO GASOLINE PUMP ISLANDS	-----	65 FEET AND 91 FEET
FUELING SPACES	-----	54, 69, 81 AND 95 FEET
FUEL PUMP STACKING SPACES	-----	54, 69, 81 AND 95 FEET
FOUR PARKING SPACES	-----	69 FEET
VACUUM SERVICE SPACES & AIR/WATER UNIT	81 FEET	38 FEET

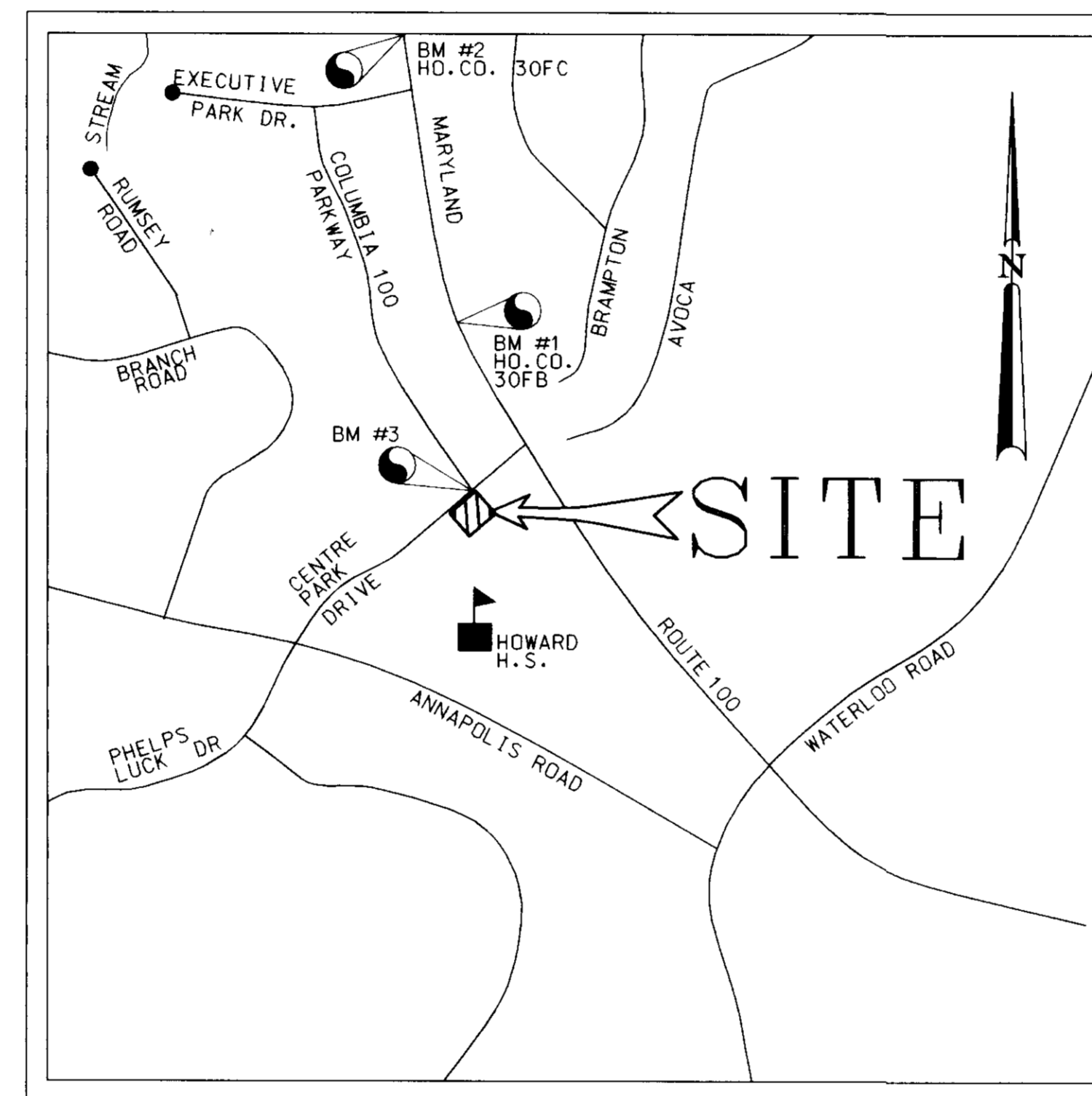
ON THE SUBJECT 1.221 ACRE PROPERTY FOR THE CONSTRUCTION OF GASOLINE SERVICE STATION WITH ONE CONDITION THAT THE VARIANCES APPROVED APPLY SOLELY TO THE DEVELOPMENT OF THE PROPERTY PURSUANT TO THE VARIANCE PLAN DATED APRIL 29, 1997, AND THE DOCUMENTED SITE PLAN APPROVED BY THE ZONING BOARD IN CASE ZB 977M AND TO NO OTHER STRUCTURES AND/OR USES.

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION LATEST EDITION" AND MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE LOCATION AND ELEVATIONS OF THE EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF EXISTING UTILITIES IN THE WORK AREA AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING FREDERICK WARD ASSOC., INC. AT (410)-879-2090 IN THE EVENT OF ANY DISCREPANCIES ON THE PLAN OR IN THE RELATIONSHIP OF EXISTING GRADES WITH PROPOSED GRADES PRIOR TO BEGINNING WORK.
4. THE CONTRACTOR SHALL NOTE THAT IN THE CASE OF A DISCREPANCY BETWEEN A SCALED DIMENSION AND A FIGURED DIMENSION SHOWN ON THE PLANS, THE FIGURED DIMENSION SHALL GOVERN.
5. IT SHALL BE DISTINCTLY UNDERSTOOD THAT THE FAILURE TO MENTION SPECIFICALLY, WORK THAT WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT, SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
6. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING WORK:
 MISS UTILITY: 1-800-257-7777
 C&P TELEPHONE CO. 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES 313-2366
 AT&T CABLE LOCATION DIVISION 393-3553
 BG&E 685-0123
 NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO START (313-1855)
 HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410) 313-1880
7. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS STATED OTHERWISE.
8. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
9. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
10. THE PURPOSE OF THIS SITE DEVELOPMENT PLAN IS TO CONSTRUCT A GASOLINE STATION, CONVENIENCE STORE, AND CAR WASH.
11. THE STORMWATER QUANTITY MANAGEMENT FOR THIS SITE IS PROVIDED BY AN OFF-SITE REGIONAL FACILITY ON PARCEL B-2 OF THE COLUMBIA 100 OFFICE RESEARCH PARK (SDP F-87-13). WATER QUALITY WILL BE PROVIDED ON-SITE BY WAY OF A STORMCEPTOR AND WILL BE PRIVATELY OWNED AND MAINTAINED.
12. SECTION 404 OF THE MD DEPARTMENT OF NATURAL RESOURCES DOES NOT APPLY NOR ARE ANY WETLANDS PERMITS REQUIRED FOR THIS PROJECT.
13. ALL WASTE MATERIAL WHICH HAS BEEN GENERATED AS A RESULT OF THE CONVENIENCE STORE SHALL BE EITHER STORED ON SITE AND LATER SHIPPED FOR RECYCLING OR PROPERLY DISPOSED OF AT A COUNTY APPROVED LANDFILL.
14. ALL DETERGENT USED IN THE CAR WASH FACILITY SHALL BE "PHOSPHATE FREE" AS PER HOWARD COUNTY REGULATIONS.
15. PUBLIC WATER AND SEWER WILL BE UTILIZED. A 2" WATER METER SHALL BE LOCATED WITHIN THE CAR WASH AND WILL MEET ALL HOWARD COUNTY STANDARDS. ON SITE WATER AND SEWER SHALL BE PRIVATELY MAINTAINED.
16. 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.
17. ALL SITE LIGHTING MUST BE DIRECTED AWAY FROM THE ADJACENT PUBLIC RIGHT OF WAY AND THE VICINAL RESIDENTIAL PROPERTIES. PROPOSED LIGHTING SHOWN ON THIS PLAN IS IN COMPLIANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
18. THERE ARE NO BODIES OF WATER COURSES, WETLANDS OR FLOODPLAINS ON THIS SITE (RECORD PLAT NO. 7537)
19. BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY FREDERICK WARD ASSOCIATES, INC. ON JUNE 13, 1996.



CENTRE PARK DRIVE
ELLICOTT CITY, MARYLAND 21043
RAS# 2-0337



LOCATION MAP

SCALE: 1"=1000'
HOWARD COUNTY ADC MAP
PAGE NUMBER 16
GRID NUMBER D4

BENCHMARK INFORMATION

1. BENCHMARK #1: HOWARD COUNTY CONTROL 30FB: ALUMINUM DISC SET ON 3/4" REBAR.
N 570134.2861
E 1365194.1370
ELEV. 500.632
2. BENCHMARK #2: HOWARD COUNTY CONTROL 30FC: ALUMINUM DISC SET ON 3/4" REBAR.
N 572916.5352
E 1364670.1717
ELEV. 386.927
3. BENCHMARK #3: PIN/CAP SET NEAR NORTHWEST CORNER OF INTERSECTION OF COLUMBIA 100 PARKWAY AND CENTRE PARK DRIVE.
N 568830.6665
E 1365209.7283
ELEV. 504.69

SUBDIVISION PLANS AND PLATS

PLAT NO. 7032, F-87-13: COLUMBIA 100 OFFICE RESEARCH PARK, SECT. 1, PARCELS A-F, REC. 12-31-86
 PLAT NO. 11832, F-96-05: REVISION PLAT COLUMBIA 100 OFFICE RESEARCH PARK, SECT. 1, AREA 1, PARCELS A-2 AND A-3, REC. 8-9-95
 PLAT NO. 12535, F-97-106: REVISION PLAT COLUMBIA 100 OFFICE RESEARCH PARK, SECT. 1, AREA 1, PARCELS A-4 AND A-5, REC. 12-30-96
 SDP F-87-13: CENTRE PARK DRIVE ROAD AND STORM DRAIN PLANS, APPROVED 11-12-86
 CONTRACT NO.: 44-1037, PROJECT NO. W-8098: OAKLAND RIDGE ELEVATED WATER TANK, APPROVED 1-25-83
 CONTRACT NO.: 24-1561-D: WATER AND SEWER MAINS FOR COLUMBIA 100 OFFICE RESEARCH PARK, APPROVED 11-18-86
 CONTRACT NO.: 24-1988-D: WATER AND SEWER MAIN FOR COLUMBIA 100-SOVRAN BANK, APPROVED 11-29-89
 CONTRACT NO.: 24-3594-D: SEWER MAIN FOR PARCEL A-4-EXXON, APPROVAL PENDING
 SITE DEVELOPMENT PLAN NO.: 97-62: SITE PLANS FOR EXXON ON PARCEL A-4, APPROVAL PENDING

SHEET INDEX

SHEET NUMBER	DRAWING TITLE
1	COVER SHEET
2	EXISTING CONDITIONS AND DEMOLITION PLAN
3	SITE LAYOUT PLAN
4	SITE GRADING PLAN
5	SITE UTILITY AND PIPING PLAN
6	WATER QUALITY STORMCEPTOR NOTES AND DETAILS
7	STORM DRAIN PROFILES AND DETAILS
8	STORM DRAIN PROFILES AND DETAILS
9	SEDIMENT AND EROSION CONTROL PLAN
10	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
11	RETAINING WALL PROFILES AND DETAILS
12	LANDSCAPE PLAN
13	BUILDING AND SIGNAGE PLAN
14	SITE DETAILS
15	SEDIMENT CONTROL, WATER QUALITY AND STORM DRAIN INFORMATION SHEET

SITE ANALYSIS

1. AREA OF PARCEL: 1.221 ACRES, 53,186.76 SQ.FT.
2. ZONING: M-1
ZONING INFORMATION: SEE UPPER RIGHT CORNER, THIS SHEET
3. EXISTING USE: VACANT LOT
PROPOSED USE: GASOLINE SERVICE STATION WITH CONVENIENCE STORE AND CARWASH
4. FLOOR SPACE:
a. CONVENIENCE STORE:
GROSS AREA: 2,160 SQ.FT. (TOTAL BUILDING SQ.FT.)
RETAIL AREA: 1,620 SQ.FT.
STORAGE AREA: 540 SQ.FT.
b. CARWASH: GROSS AREA: 782 SQ.FT.
5. MAXIMUM NUMBER OF EMPLOYEES: 3
6. PARKING:
a. REQUIRED:
2 SPACES PER 1000 SQ FT RETAIL AREA = 2,160 SQ.FT. x 2 /1000 = 5 SPACES
STATION WITH CARWASH = 4 SPACES
REQUIRED PARKING = 9 SPACES, INCLUDING 1 HANDICAP SPACE
b. PROVIDED:
9 SPACES (INCLUDING 1 HANDICAP SPACE)
7. BUILDING COVERAGE:
a. CONVENIENCE STORE : 2,160 SQ.FT
b. CANOPY : 4,339 SQ.FT.
c. CARWASH AND STORAGE BLDG: 1,016 SQ.FT.
TOTAL BUILDING COVERAGE: 7,515 SQ.FT. (14.13%)
TOTAL BUILDING COVERAGE PERMITTED: 26,593.38 SQ.FT. (50%)
8. OPEN SPACE (LANDSCAPING)
a. REQUIRED: 20% FOR ENTIRE SITE = 10,639 SQ.FT.
b. PROVIDED: 42.8% FOR ENTIRE SITE = 22,764 SQ.FT.
9. CARWASH STACKING:
a. REQUIRED: 15 SPACES
b. PROVIDED: 15 SPACES

ADDRESS CHART	
PARCEL	STREET ADDRESS
A-4	8850 CENTRE PARK DRIVE

PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECT./AREA	LOT/PARCEL NO.
COLUMBIA 100 OFFICE RESEARCH PARK	1/1	A-4
PLAT NO. 12535 F-97-106	BLOCK NO. 18	ZONE M-1
	TAX/ZONE 30	ELECT. DIST. 2
		CENSUS TR. 6023.02
WATER CODE	SEWER CODE	
602	5651400	

SDP# 97-62
PLANNING BOARD APPROVAL

HOWARD S.C.D. DATE

OWNER: MJF ASSOC. LTD. PARTNERSHIP
C/O MDC COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT McCLEAN
PHONE: (410) 730-9091

DEVELOPER: EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. ROBERT CASERTA
PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410)879-2090

RAS NO. 2-0337
FWA JOB NUMBER 9608 FWA DRAWING FILE NAME PETITILE.DGN

CENSUS TRACT NO. 6023.02 WATER CODE: 602
PLAT NO. 12535 SEWER CODE: 5651400

TAX MAP 30 PARCEL 260
ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

TITLE: 8860 CENTRE PARK DRIVE ELLICOTT CITY, MARYLAND 21043 OFFICE RESEARCH PARK

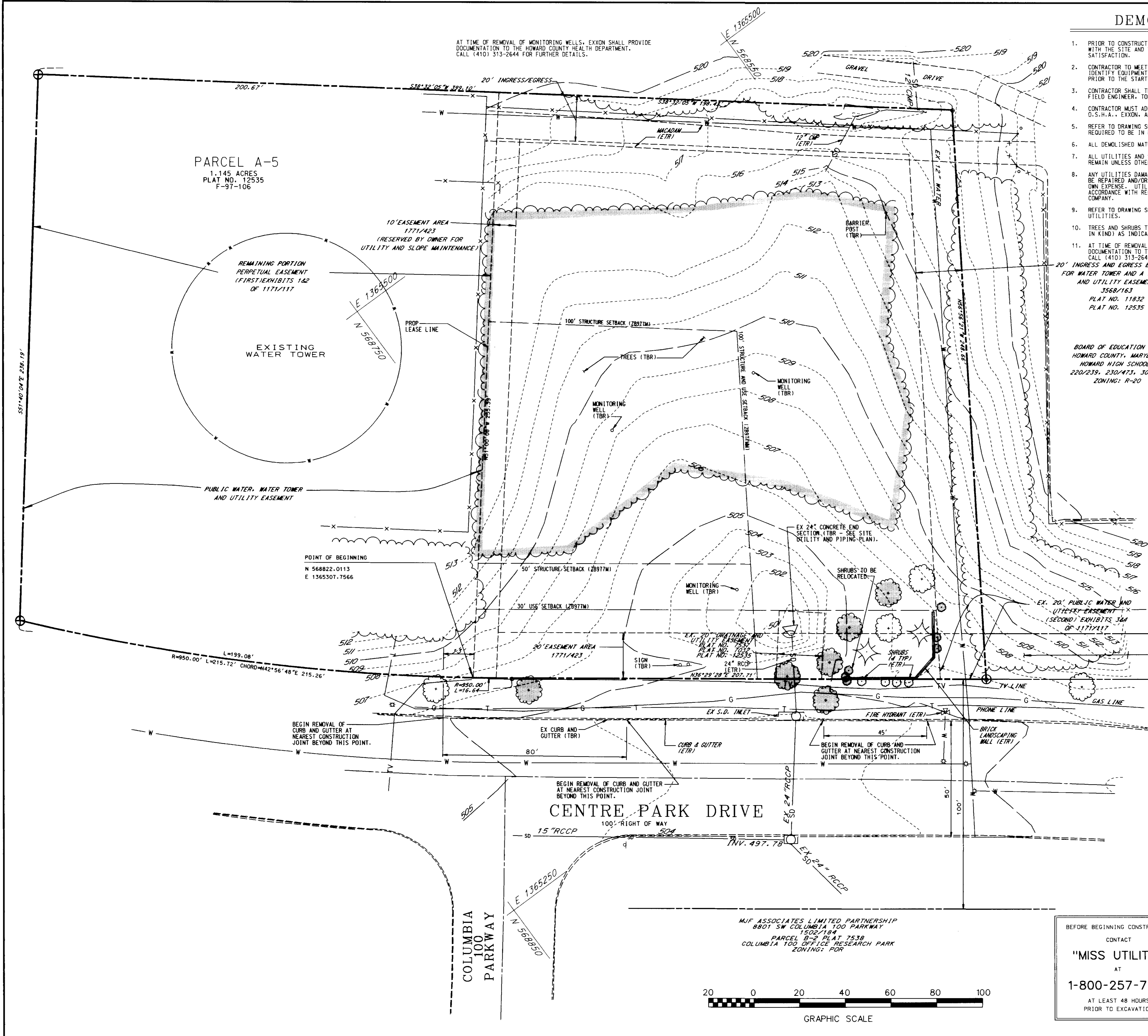
COVER SHEET

DESIGN BY: JRG SCALE: AS SHOWN PROJECT NO.:
DRAWN BY: KNL/ DATE: 07/14/97 DRAWING NUMBER
CHECKED BY: TFW APPROVED: 1 OF 15

DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		CHIEF DEVELOPMENT ENGINEERING DIVISION
9/20/97	9	DATE
		CHIEF DIVISION OF LAND DEVELOPMENT
10/6/97	10	DATE
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
		COUNTY HEALTH OFFICER
10-3-97	11	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 OF ENGINEER
8/13/97	12	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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."		
		SIGNATURE OF DEVELOPER
8/20/97	13	DATE
REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.		
U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE		
THIS DEVELOPMENT PLAN IS AS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.		
HOWARD S.C.D. DATE		

SDP-97-62

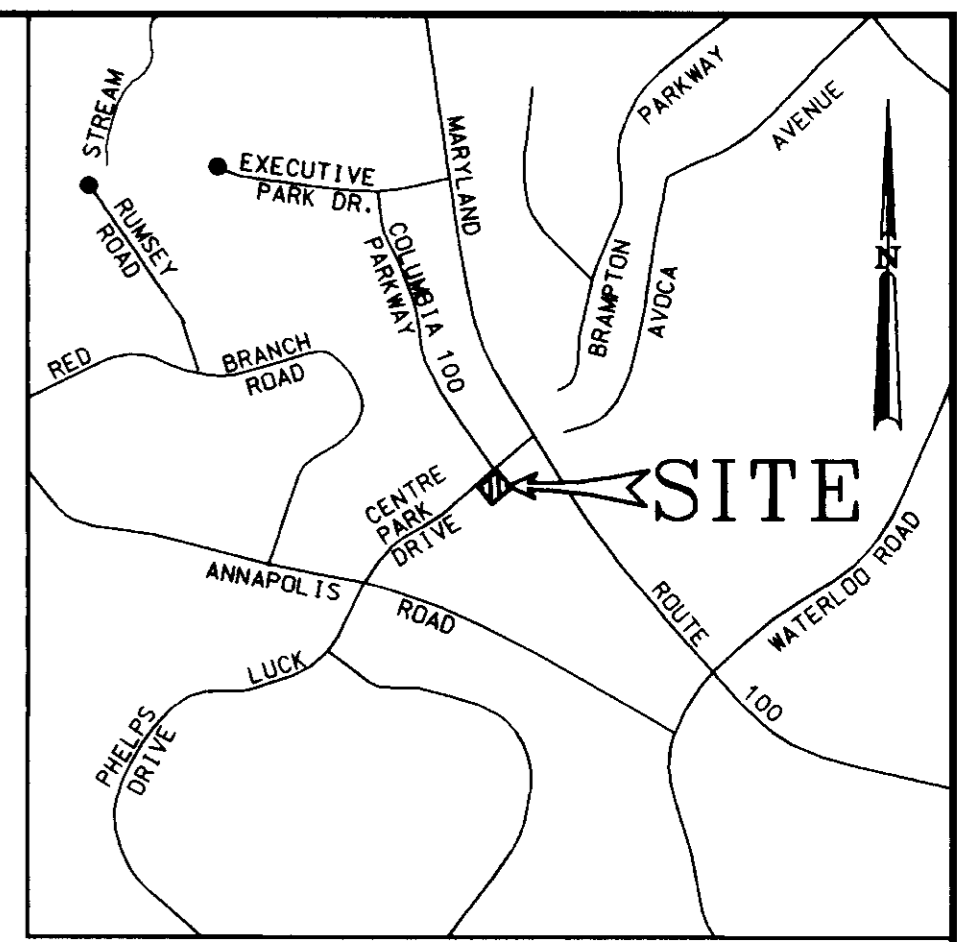
SDP 97-62



DEMOLITION NOTES

- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND VERIFY EXISTING SITE CONDITIONS TO HIS SATISFACTION.
- CONTRACTOR TO MEET WITH EXXON FIELD ENGINEER ON JOB SITE TO IDENTIFY EQUIPMENT, SIGNS, AND ITEMS TO BE REMOVED OR RETAINED PRIOR TO THE START OF DEMOLITION.
- CONTRACTOR SHALL TRANSPORT EQUIPMENT, AS DESIGNATED BY EXXON FIELD ENGINEER, TO A LOCAL EXXON INVENTORY STORAGE AREA.
- CONTRACTOR MUST ADHERE TO ALL SAFETY REGULATIONS GIVEN BY O.S.H.A., EXXON, AND HOWARD COUNTY.
- REFER TO DRAWING SHEET #9 AND #10 FOR SEDIMENT CONTROL DEVICES REQUIRED TO BE IN PLACE PRIOR TO DEMOLITION WORK.
- ALL DEMOLISHED MATERIAL TO BE REMOVED TO AN APPROVED LOCATION.
- ALL UTILITIES AND STRUCTURES WITHIN PUBLIC RIGHTS-OF-WAY SHALL REMAIN UNLESS OTHERWISE NOTED.
- ANY UTILITIES DAMAGED DURING DEMOLITION AND CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED IN KIND BY THE CONTRACTOR AT HIS OWN EXPENSE. UTILITY REMOVAL AND/OR RELOCATION SHALL BE IN ACCORDANCE WITH REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
- REFER TO DRAWING SHEET 5 FOR GENERAL NOTES PERTAINING TO UTILITIES.
- TREES AND SHRUBS TO BE RELOCATED SHALL BE REPLANTED (OR REPLACED IN KIND) AS INDICATED ON DRAWING SHEET 12, THE LANDSCAPE PLAN.
- AT TIME OF REMOVAL OF MONITORING WELLS, EXXON SHALL PROVIDE DOCUMENTATION TO THE HOWARD COUNTY HEALTH DEPARTMENT. CALL (410) 313-2644 FOR FURTHER DETAILS.

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20



VICINITY MAP

1"=2000'

LEGEND

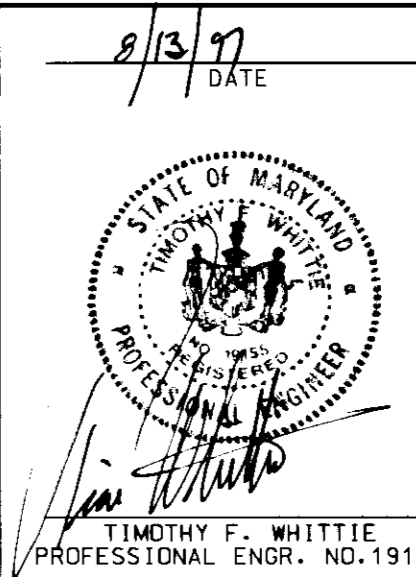
EVERGREEN TREE (ETR)	EXISTING TO REMAIN
DECIDUOUS TREE (TBR)	TO BE REMOVED
FIRE HYDRANT	SANITARY CLEAN OUT
LIGHT POLE	WATER METER
WATER VALVE	GAS VALVE
GROUND SPOT SHOT	SIGN
STORM DRAIN	PROPERTY CORNER
WATER LINE	TRAVERSE POINT
UNDERGROUND GAS	LIMIT OF TREE REMOVAL
UNDERGROUND ELECTRIC	TREES TO BE RELOCATED
TREE LINE	
SANITARY SEWER	

DATE	NUMBER	REVISION DESCRIPTION
APPROVED:	DEPARTMENT OF PLANNING AND ZONING	
9/12/97		DATE
10/6/97		DATE
10/7/97		DATE

OWNER: M/J ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCCUAN
PHONE: (410) 730-3091

FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410) 879-2090	
CENSUS TRACT NO.: 6023-02 PLAT NO.: 12535	WATER CODE: 602 SEWER CODE: 5857400
TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND	
TITLE: 8850 CENTRE PARK DRIVE FOR AN EXXON STATION AT PARCEL A-5 COLUMBIA 100 OFFICE RESEARCH PARK EXISTING CONDITIONS AND DEMOLITION PLAN	
DESIGN BY: JBG	SCALE: 1"=20'
DRAWN BY: KNA/LF	DATE: 07/14/97
CHECKED BY: TFW	APPROVED: [Signature]
PROJECT NO.: 96098	DRAWING NUMBER: 2 OF 15

BEFORE BEGINNING CONSTRUCTION
CONTACT
"MISS UTILITY"
AT
1-800-257-7777
AT LEAST 48 HOURS
PRIOR TO EXCAVATION

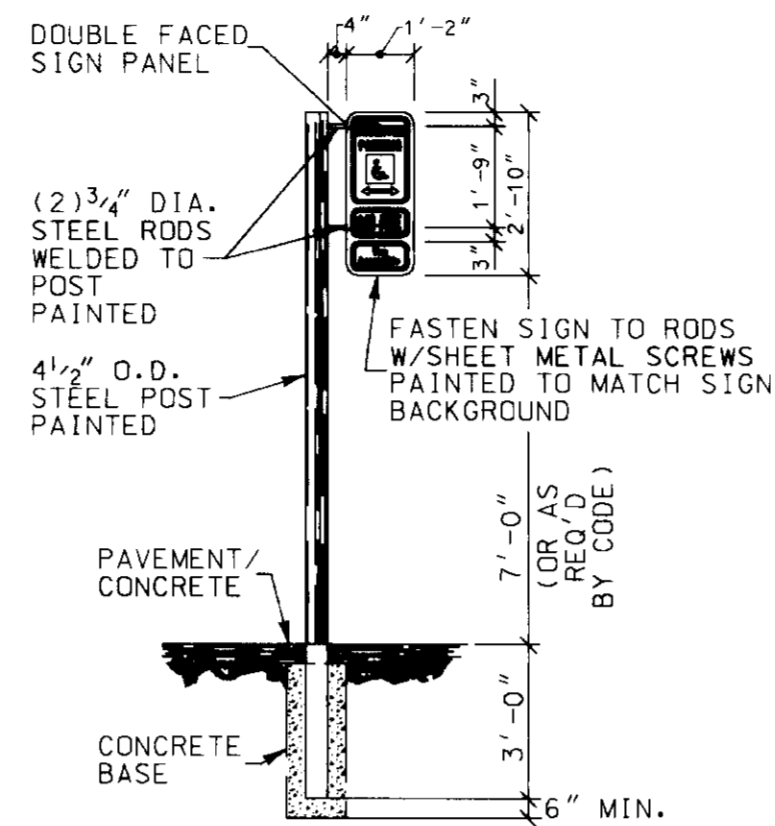


FWA FILE NO.: 96098/DEMOL



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

NOTE:
 1.) ONE SIGN TO BE APPLIED TO METAL SIGN BOARD MOUNTED TO METAL POST.
 2.) FREE STANDING SIGN 7'-0" ABOVE FINISHED GRADE.
 3.) MOUNTED ON WALL OR STRUCTURE 6'-0" ABOVE GRADE.

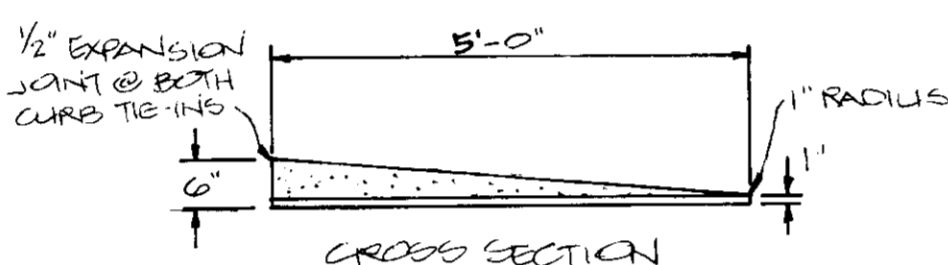
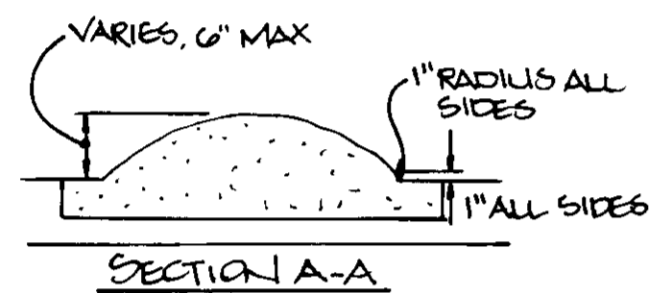


NOTE:
 APPLY HANDICAP SIGNS TO SIGN PANELS
 1" SPACE BETWEEN SIGNS WITH A 1" MARGIN AROUND SIGN PANEL

HANDICAP SIGN DETAILS

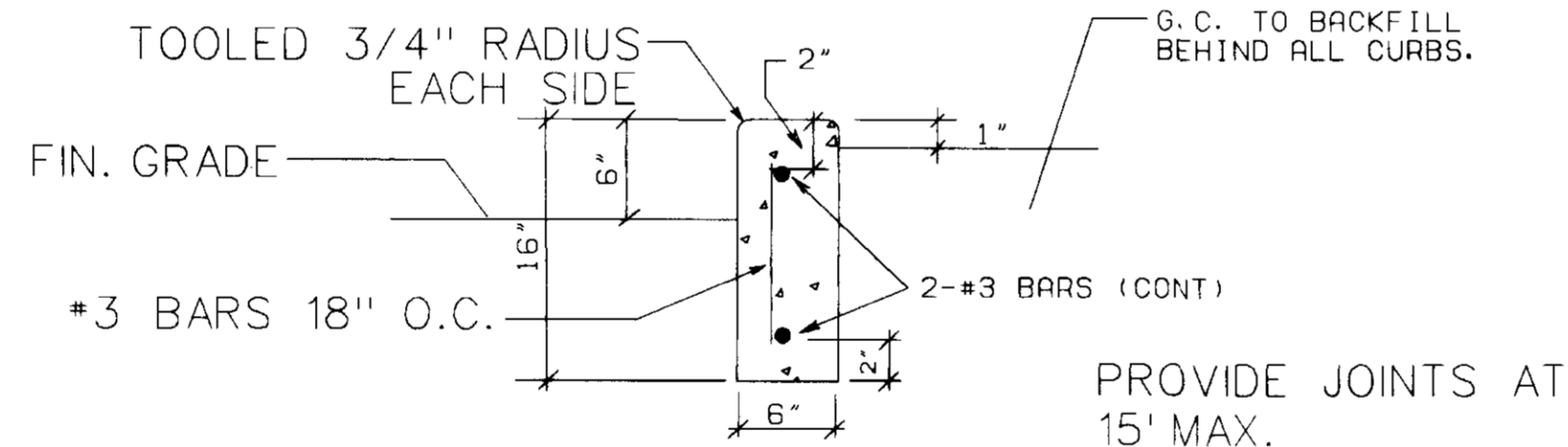
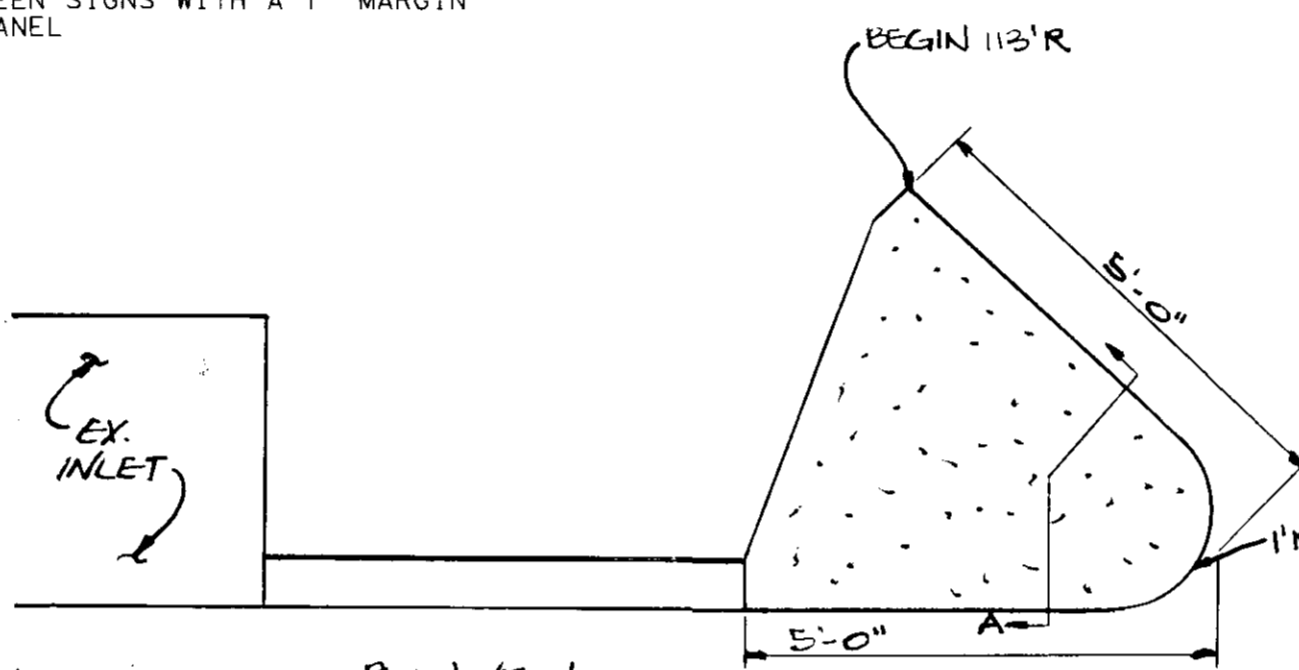
NOT TO SCALE

NOTE: CONSTRUCTION TO BE IN ACCORDANCE WITH CHA STANDARD GAS.03



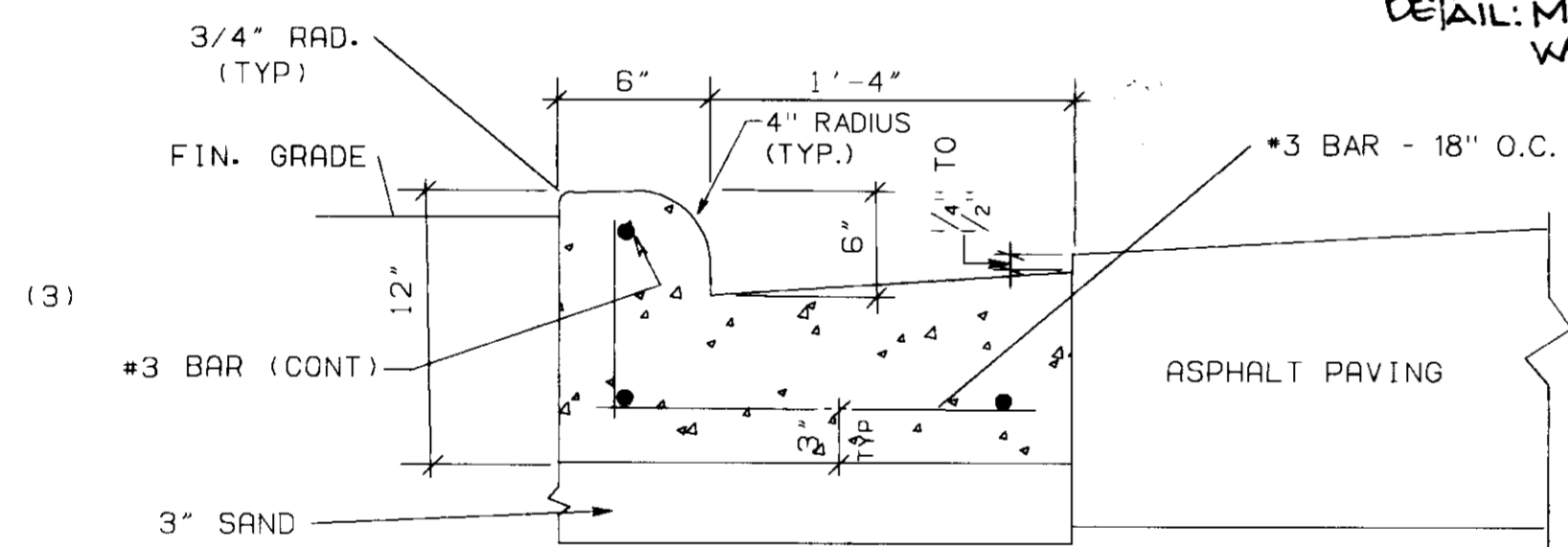
DETAIL: MONOLITHIC CONCRETE ROLLER CURB

PLAN VIEW



6"X16" CONCRETE CURB

NOT TO SCALE

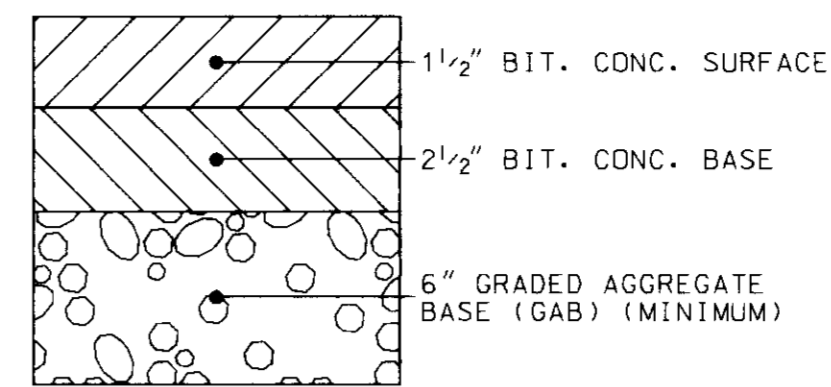
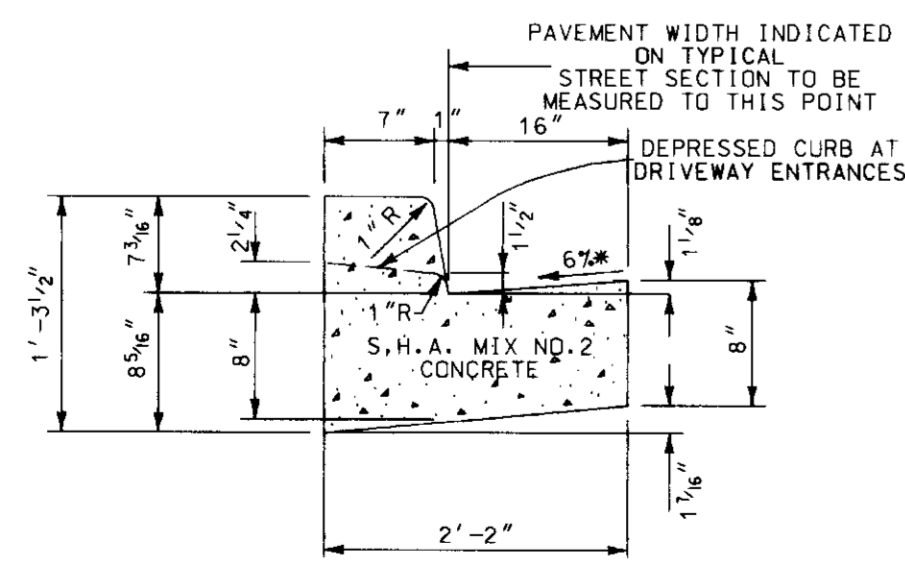


ON-SITE CURB AND GUTTER

NOT TO SCALE

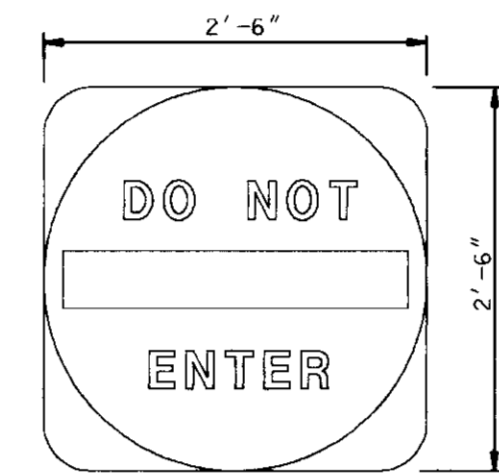
STANDARD 7" COMBINATION CURB AND GUTTER

HOWARD COUNTY STD. DETAIL R-3.01
 NOT TO SCALE



ON-SITE PAVING SECTION

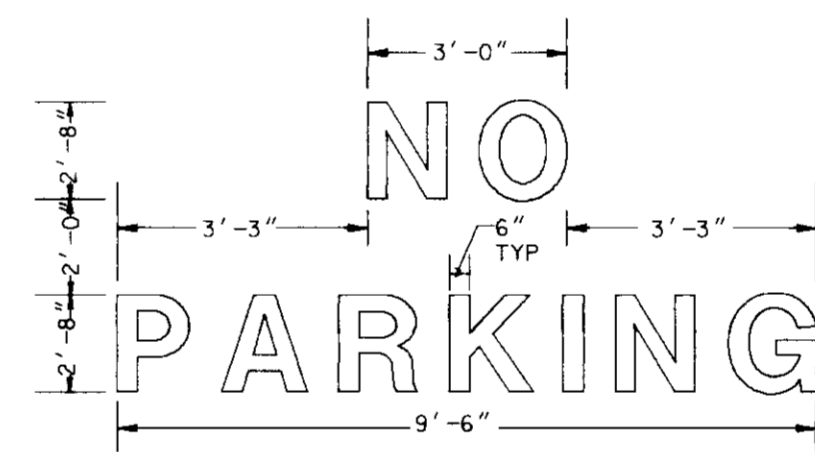
HOWARD COUNTY STD. DETAIL R-2.01
 SECTION NUMBER P-2
 NOT TO SCALE



NOTE: MOUNT SIGN ON STEEL POST TO SAME HEIGHT AS HANDICAP SIGN.

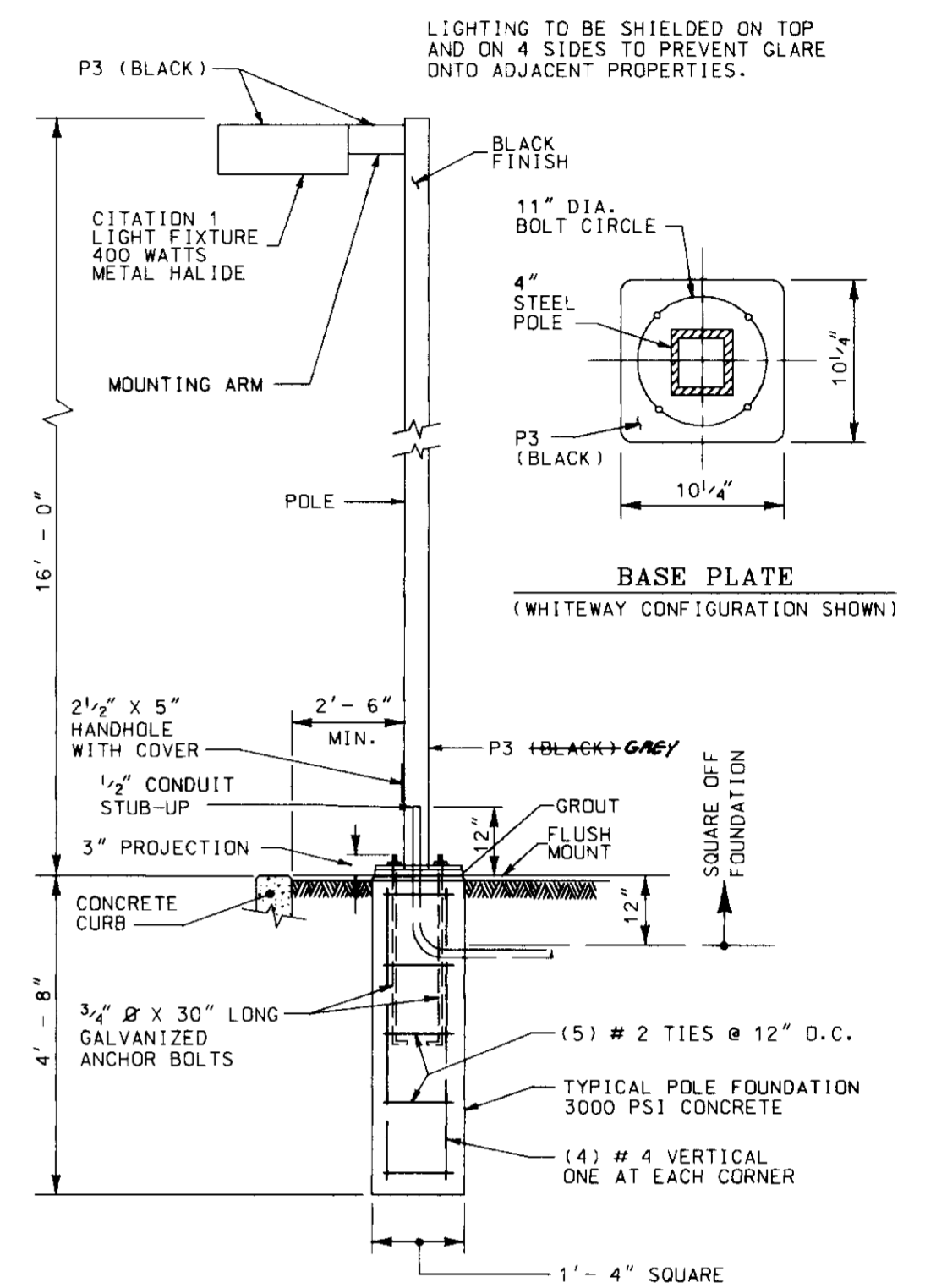
DO NOT ENTER SIGN

NOT TO SCALE



"NO PARKING" PAVEMENT MARKING DETAIL

NOT TO SCALE



ELEVATION

TYPICAL YARD LIGHT DETAIL

NOT TO SCALE

SDP# 97-62
 PLANNING BOARD APPROVAL

OWNER: MJF ASSOC. LTD. PARTNERSHIP
 C/O MDG COMPANIES
 5550 STERRETT PLACE, SUITE 312
 COLUMBIA, MARYLAND 21044
 ATTN: MR. PAT McCUAN
 PHONE: (410) 730-9091

DEVELOPER: EXON COMPANY, U.S.A.
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: MR. ROBERT CASERTA
 PHONE: (301) 513-7511

12-2-97
 DATE: NUMBER REVISION DESCRIPTION
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF-DEVELOPMENT ENGINEERING DIVISION 9/29/97
 CHIEF-DIVISION OF LAND DEVELOPMENT 10/6/97
 DIRECTOR 10/7/97

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT.
 COUNTY HEALTH OFFICER MR 10-3-97
 DATE

FREDERICK WARD ASSOCIATES INC.
 ENGINEERS ARCHITECTS SURVEYORS
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410) 879-2090

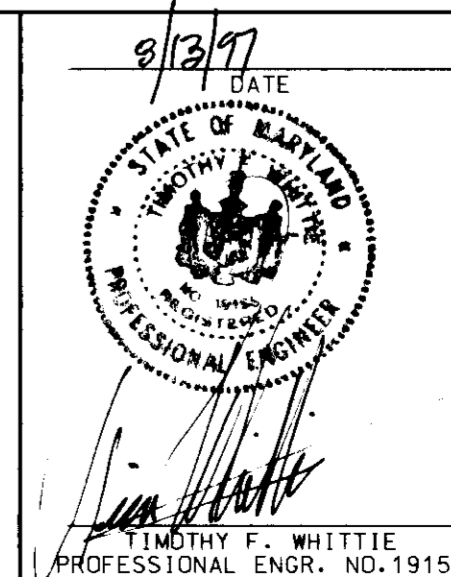
RAS NO: 2-0537 FWA JOB NUMBER 96098 FWA DRAWING FILE NAME PESTDLDGN
 CENSUS TRACT NO.: 6023.02 WATER CODE: G02
 PLAT NO. 12535 SEWER CODE: 5657400

TAX MAP 30 PARCEL 260
 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

TITLE: FOR AN EXON STATION AT SECT. 1 AREA 1
 8800 CENTRE PARK DRIVE PARCEL 4.4 COLUMBIA 100
 BELLCOTT CITY, MARYLAND 21043 OFFICE RESEARCH PARK

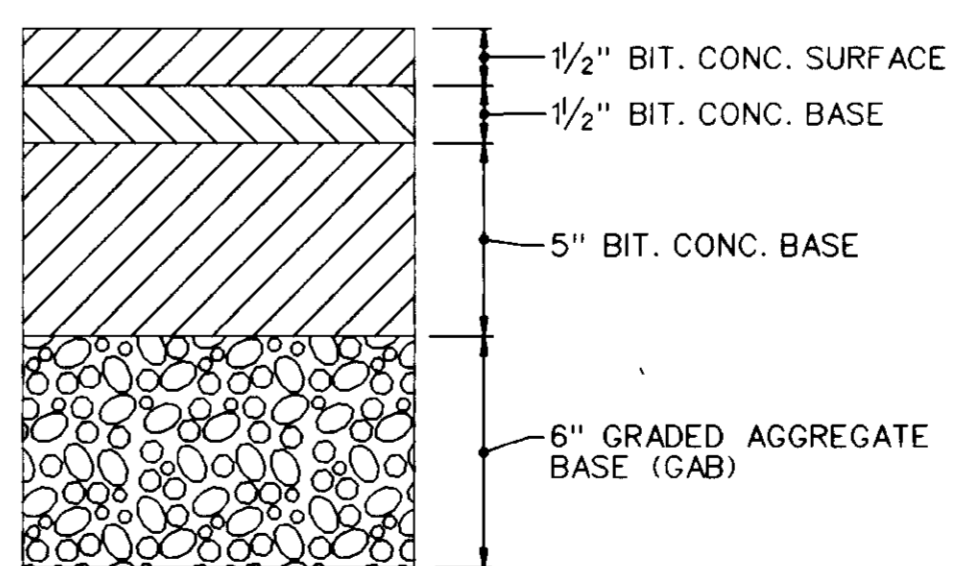
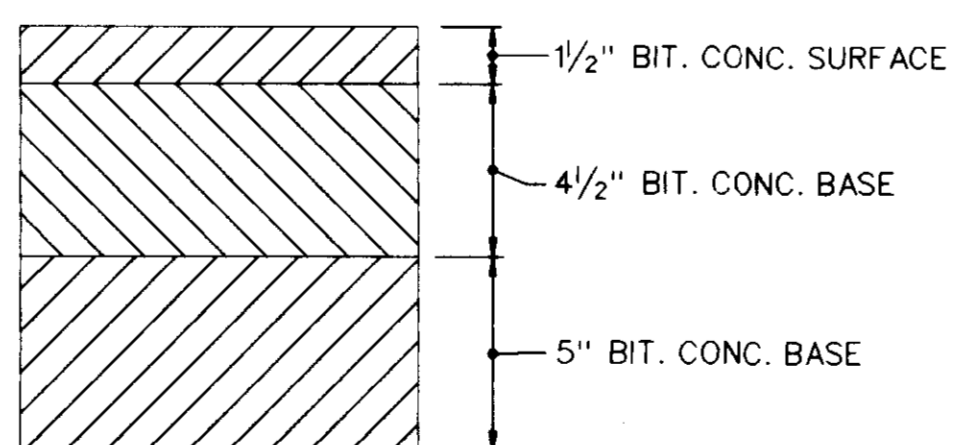
SITE DETAILS

DESIGN BY: JBG SCALE: AS SHOWN PROJECT NO.: 96098
 DRAWN BY: KM/LF DATE: 07/15/97 DRAWING NUMBER
 CHECKED BY: TFW APPROVED: 14 OF 15

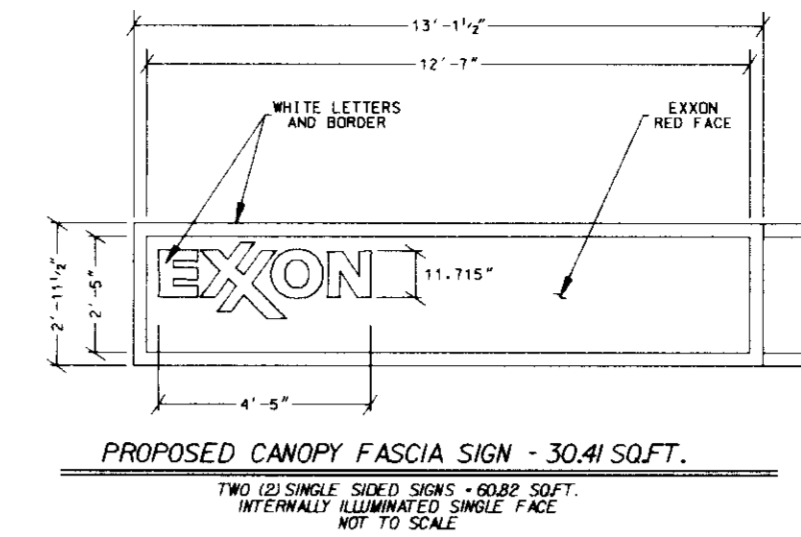
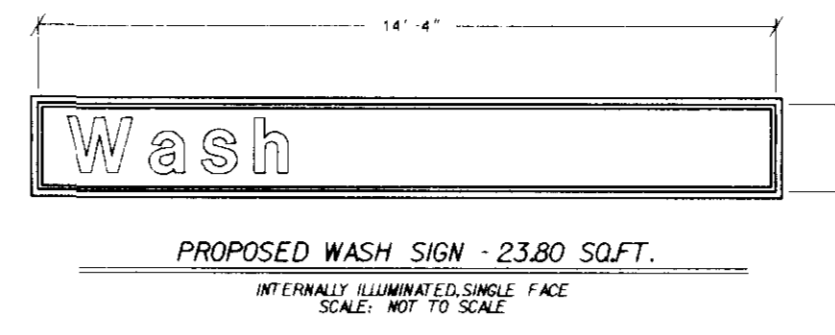
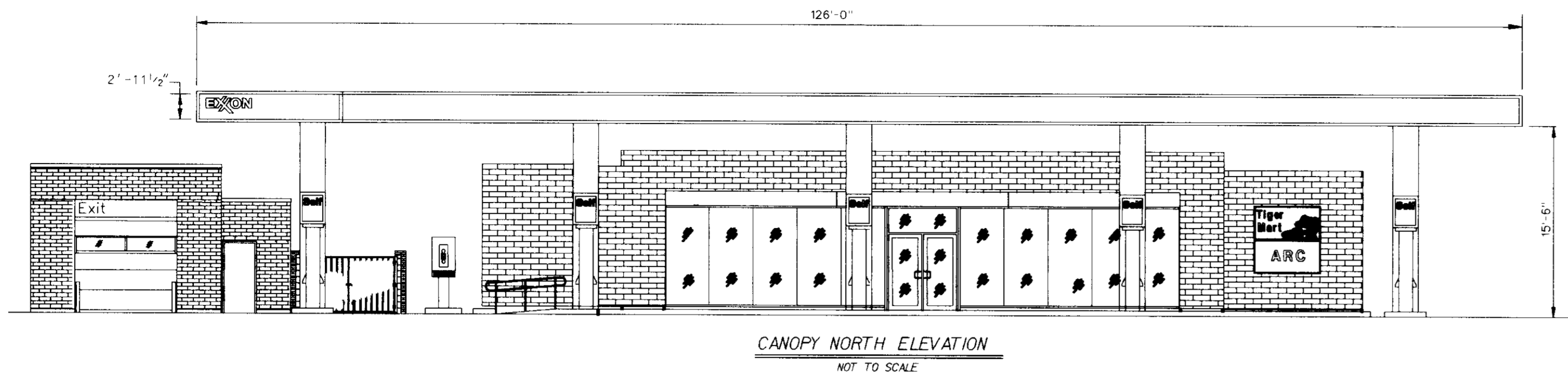


OFF SITE PAVING SECTIONS

HOWARD CO. STD. PAVING P-5
 NOT TO SCALE



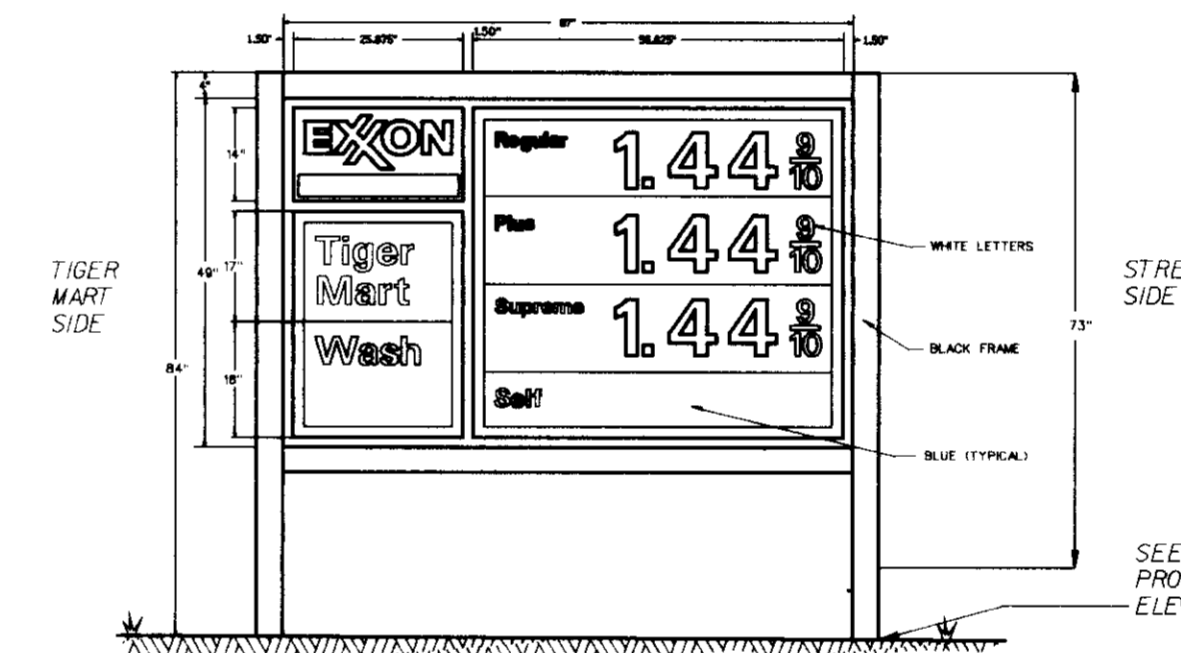
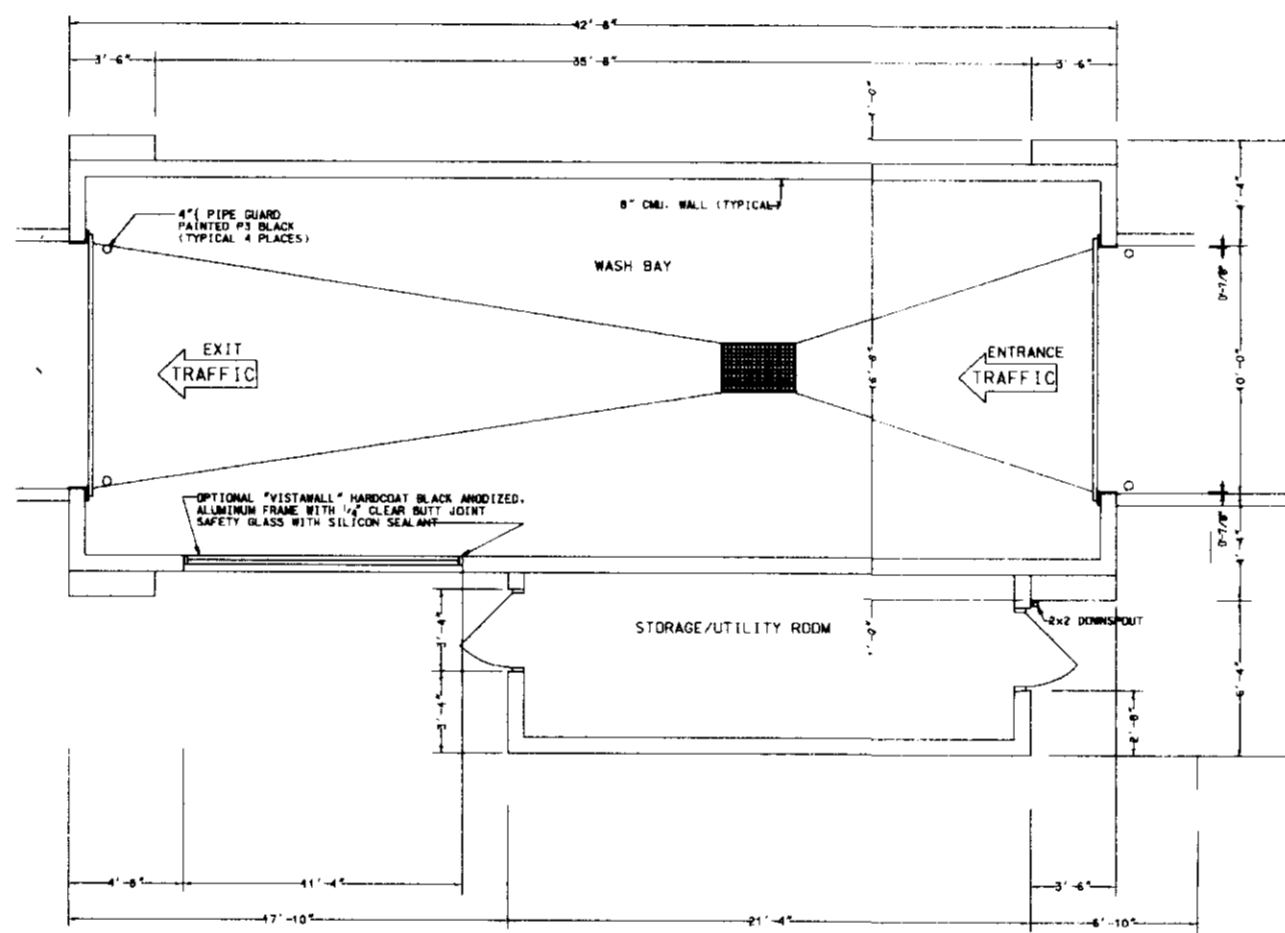
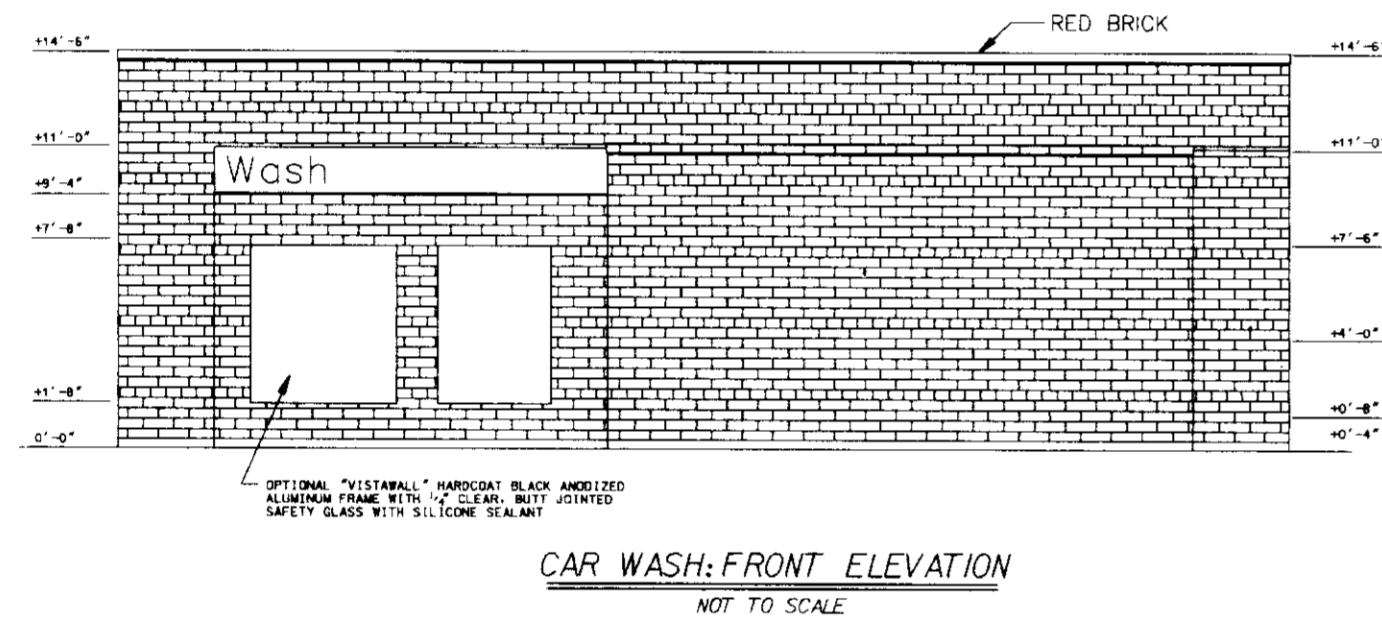
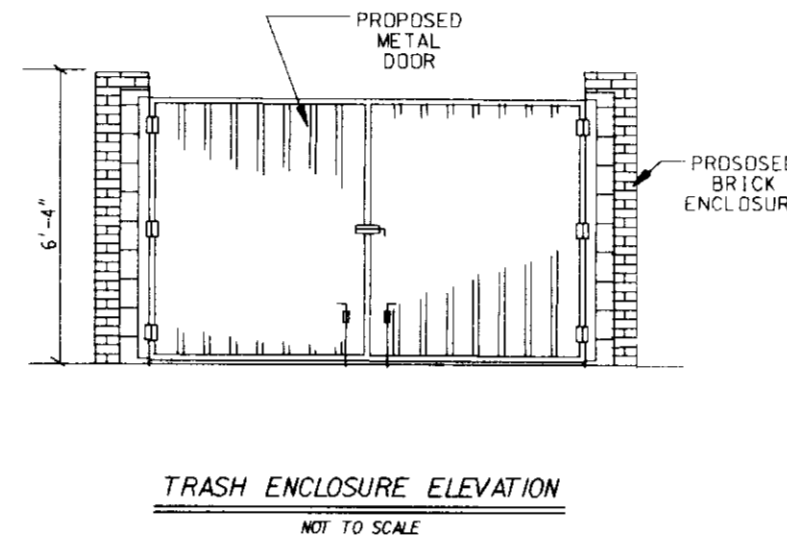
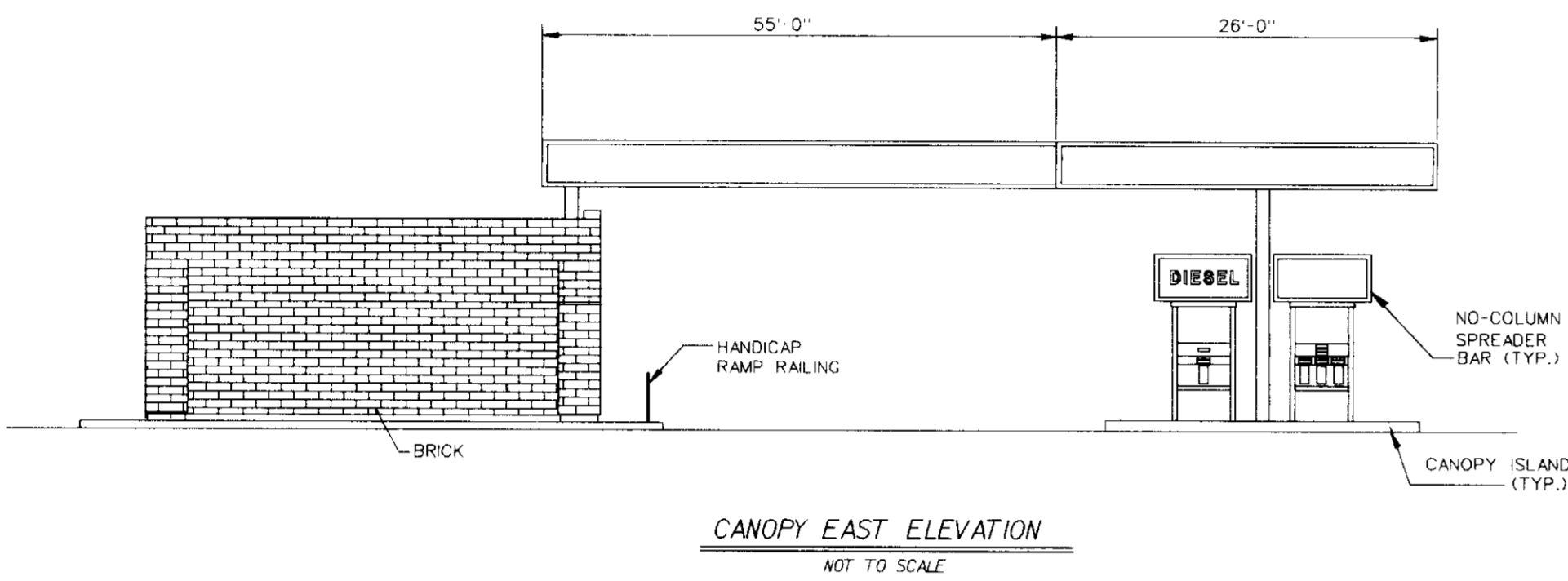
OR



SIGNAGE CALCULATIONS

- I. BUILDING SIGNAGE
 - A. ALLOWABLE SIGNAGE (CENTRE PARK DRIVE)
 1. C-STORE : 2 SF/LF X 80' = 160.00 SF
 2. CAR WASH : 2 SF/LF X 16' = 32.00 SF
 TOTAL ALLOWABLE SIGN AREA = 192.00 SF
 - B. PROPOSED SIGNAGE
 - TIGER MART SIGN / ARC SIGN = 36.00 SF
 - WASH SIGN: 14'-4" X 1'-8" = 23.80 SF
 TOTAL PROPOSED BUILDING SIGNAGE = 59.80 SF
- II. CANOPY SIGNAGE
 - A. ALLOWABLE SIGNAGE: (0.10) (26'-0") (126'-0") = 327.60 SF
 - B. PROPOSED SIGNAGE:
 - CANOPY FASCIA SIGNS: (30.41 SF) X 2 = 60.82 SF
 - TOP HATS WITH EXXON LOGO: (12.48 SF) X 2 = 24.96 SF
 TOTAL PROPOSED CANOPY SIGNAGE = 85.78 SF
- III. GROUND MOUNTED SIGNAGE
 - A. ALLOWABLE SIGNAGE: THE HEIGHT OF THE SIGN MAY NOT EXCEED 1 FOOT FOR EACH 2 FEET THE SIGN IS SET BACK FROM THE RIGHT-OF-WAY. THE MAXIMUM HEIGHT OF THE SIGN IS 7'-0". THE MAXIMUM SIGNAGE ALLOWED IS 1 SQ. FT. FOR EVERY 1' OF SETBACK FROM THE BUILDING RESTRICTION LINE. MAXIMUM SIGNAGE IS 10 SQ. FT.
 - B. PROPOSED SIGNAGE:
 - 1.D. SIGN: 2.52 SF (PROPOSED)
 - TIGER MART/WASH: 8.02 SF (PROPOSED)
 - PRICE: 23.21 SF (PROPOSED) (SEE NOTE BELOW)
 TOTAL PROPOSED GROUND MOUNTED SIGNAGE = 10.54 SF

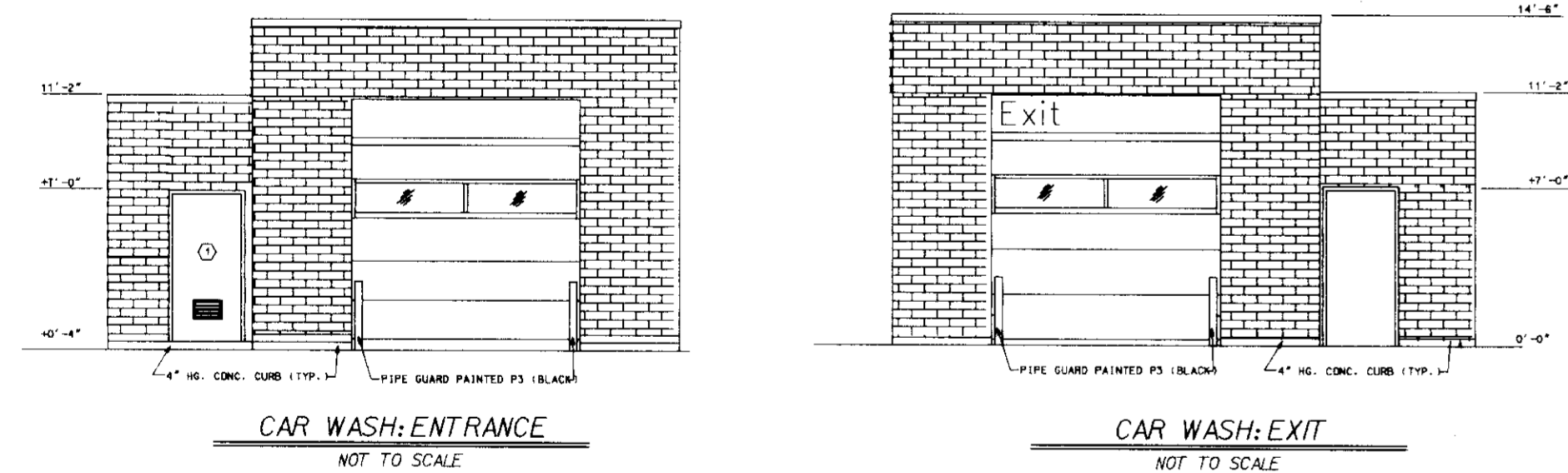
NOTE: PRICE SIGN NOT COUNTED TOWARD TOTAL SIGN SQUARE FOOTAGE SINCE PRICE SIGNS ARE REQUIRED BY LAW.



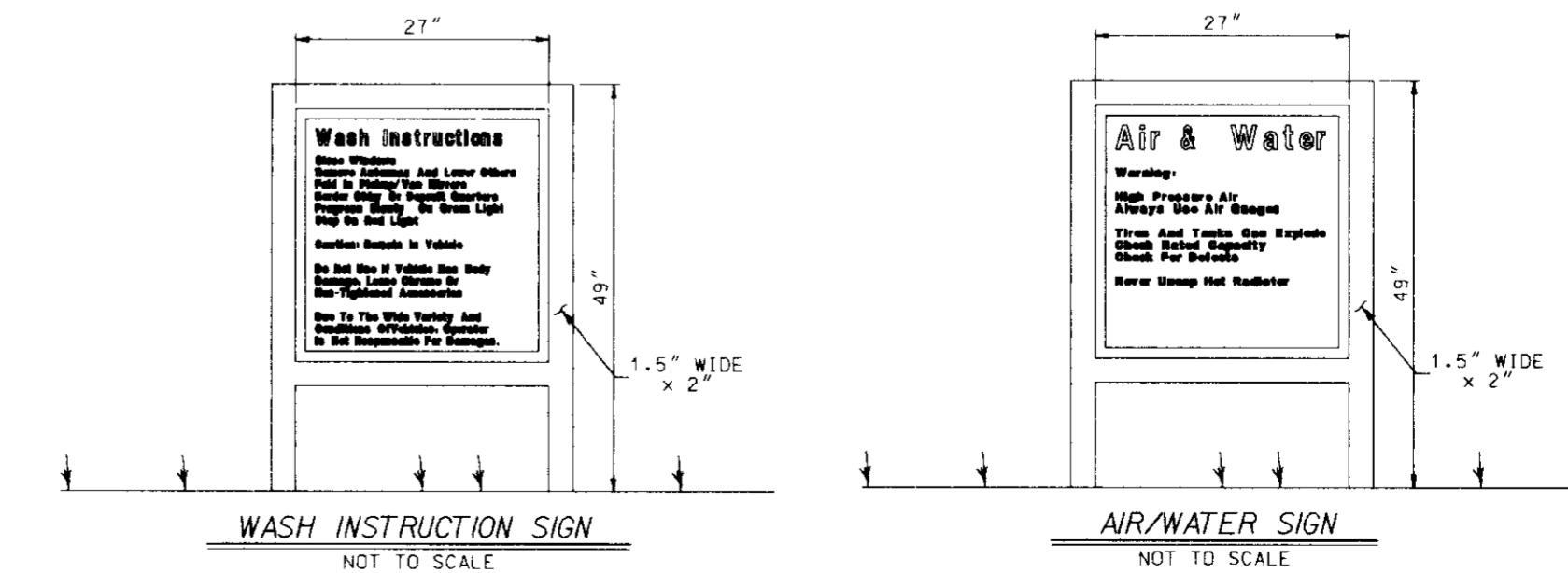
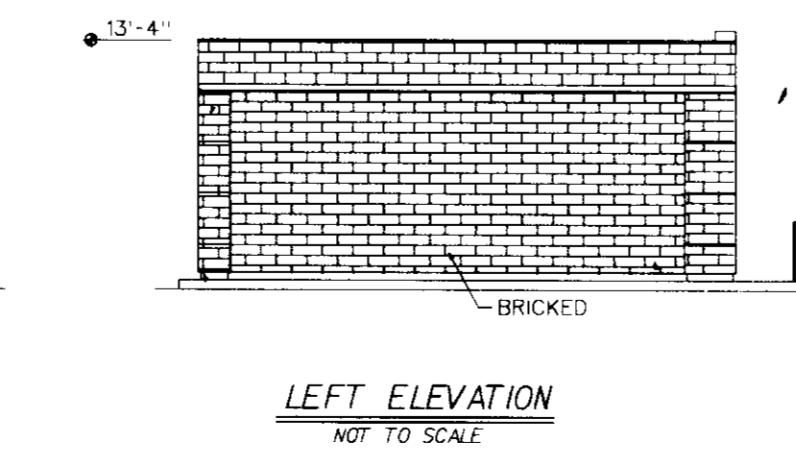
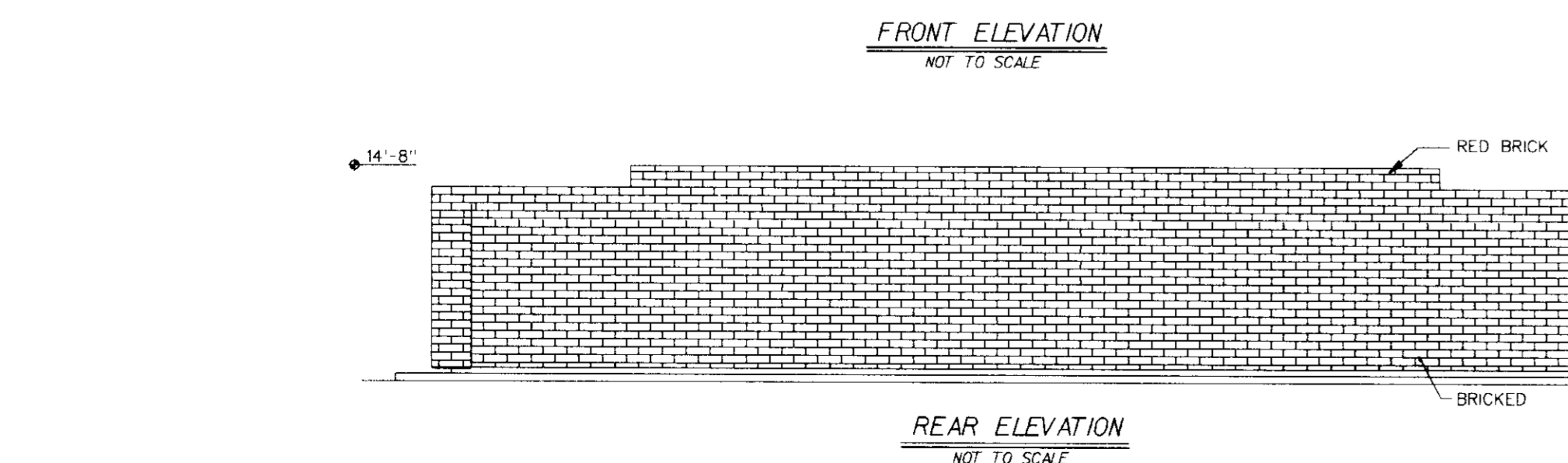
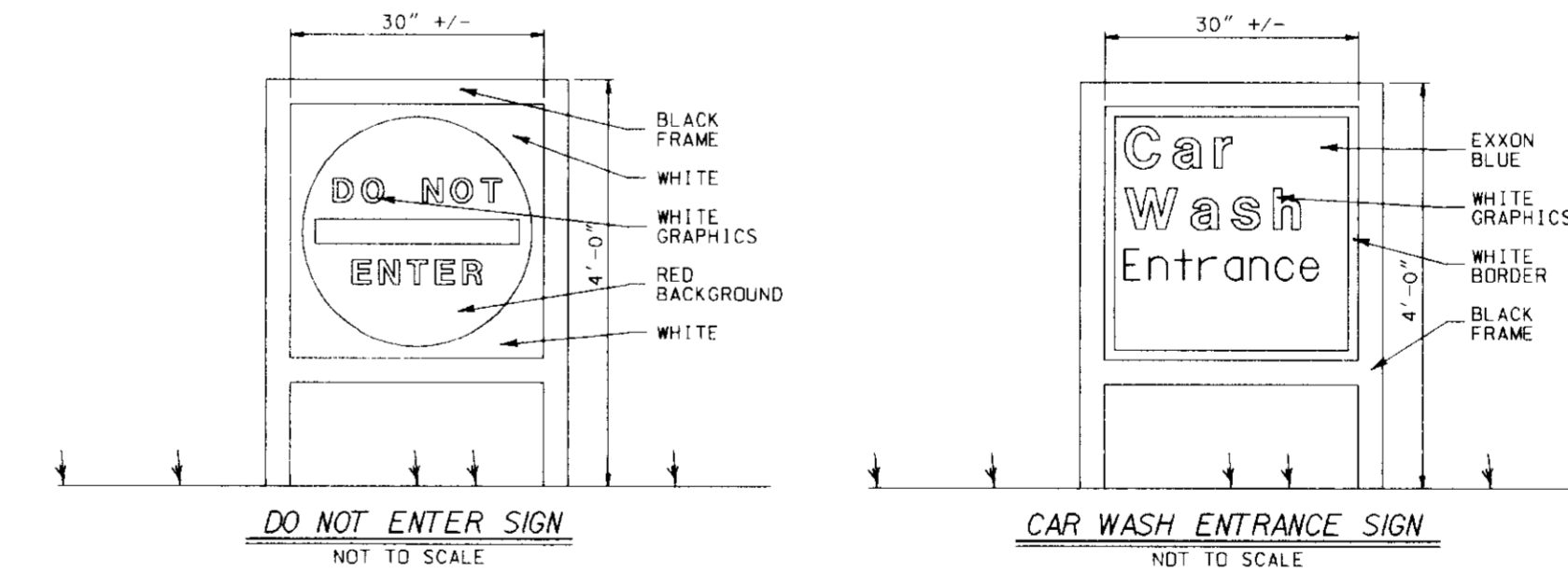
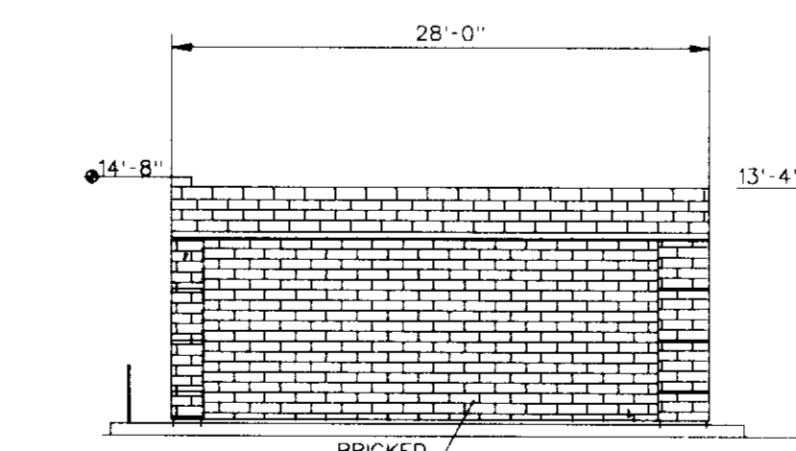
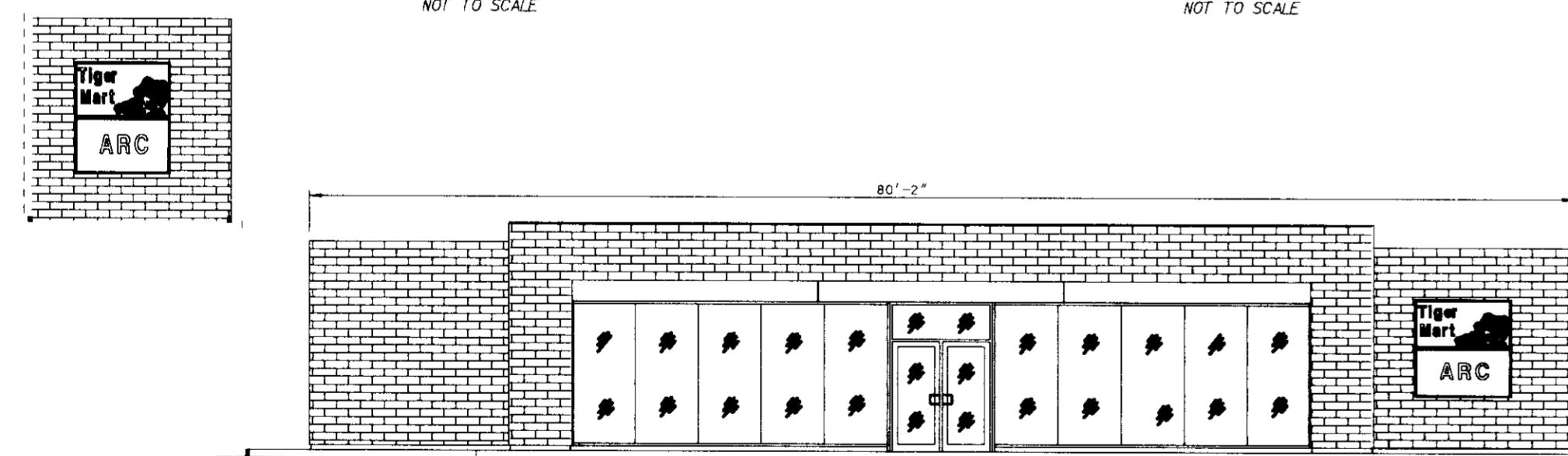
SDP# 97-62
PLANNING BOARD APPROVAL

8/13/97
DATE

TIMOTHY F. WHITTLE
PROFESSIONAL ENGR. NO. 19155

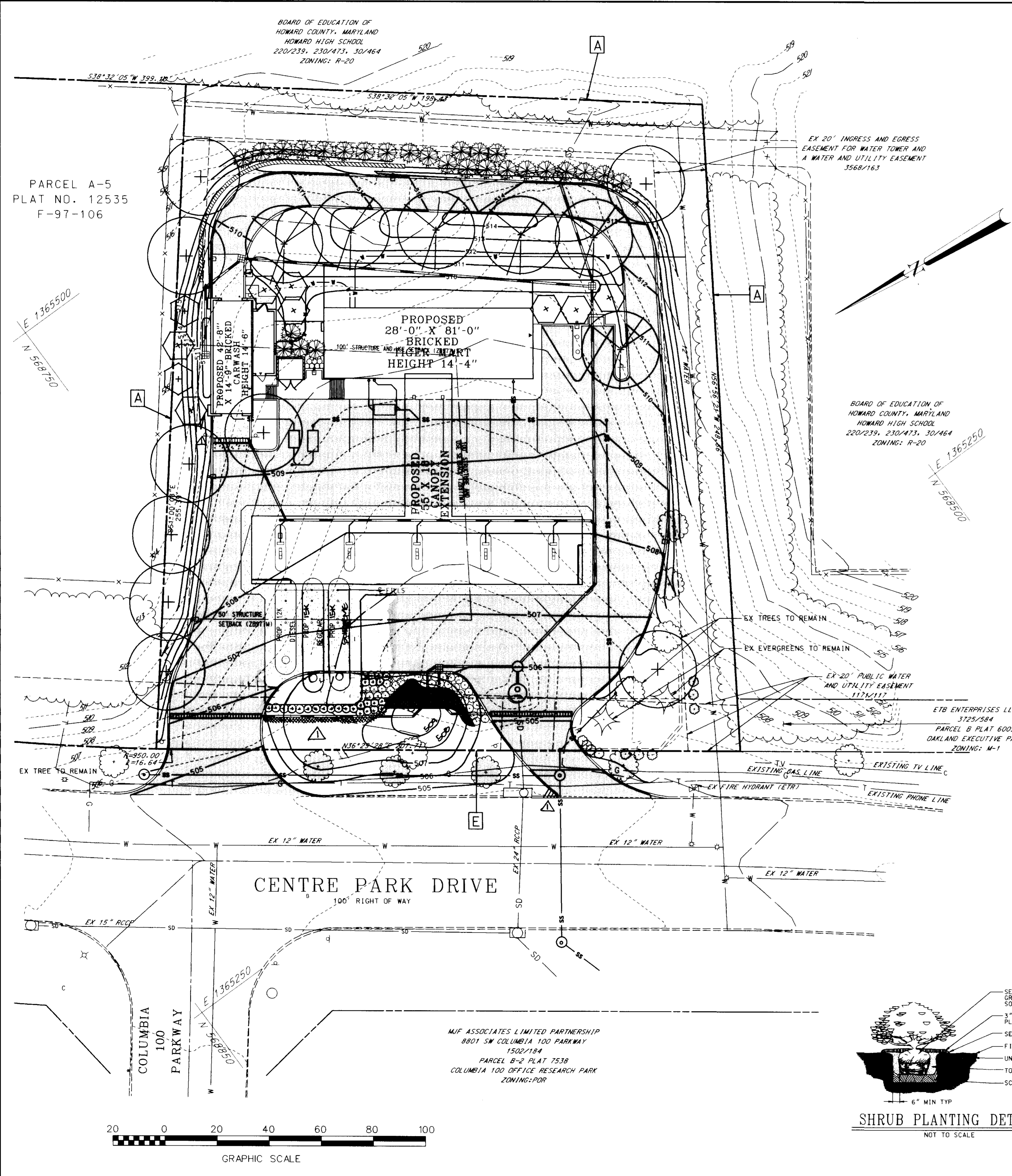


PL-2-97	CHANGED SIGNAGE CALCULATIONS
DATE:	NUMBER
APPROVED:	DEPARTMENT OF PLANNING AND ZONING
CHIEF DEVELOPMENT ENGINEERING DIVISION	9/24/97 DATE
CHIEF DIVISION OF LAND DEVELOPMENT	10/6/97 DATE
DIRECTOR	10/7/97 DATE
APPROVED:	FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.	
OWNER	MJF ASSOC. LTD. PARTNERSHIP
DEVELOPER	EXXON COMPANY, U.S.A.
ENGINEERS	FREDERICK WARD ASSOCIATES INC.
CENSUS TRACT NO.:	6023.02
PLAT NO.:	12535
TAX MAP 30	PARCEL 260
ELECTION DISTRICT 2	HOWARD COUNTY, MARYLAND
TITLE	FOR AN EXXON STATION AT
DESIGN BY:	JBG
DRAWN BY:	KM/LF
CHECKED BY:	TFW



OWNER	MJF ASSOC. LTD. PARTNERSHIP
DEVELOPER	EXXON COMPANY, U.S.A.
ENGINEERS	FREDERICK WARD ASSOCIATES INC.
CENSUS TRACT NO.:	6023.02
PLAT NO.:	12535
TAX MAP 30	PARCEL 260
ELECTION DISTRICT 2	HOWARD COUNTY, MARYLAND
TITLE	FOR AN EXXON STATION AT
DESIGN BY:	JBG
DRAWN BY:	KM/LF
CHECKED BY:	TFW

8850 CENTRE PARK DRIVE	SECTION 1 AREA 1
PARCEL A-4	COLUMBIA 100
KILGOTT CITY, MARYLAND 21048	OFFICE RESEARCH PARK
BUILDING AND SIGNAGE PLAN	
SCALE: AS SHOWN	PROJECT NO.: 96098
DATE: 07/14/97	DRAWING NUMBER
APPROVED:	13 OF 15



PARCEL A-5
PLAT NO. 12535
F-97-106

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20

EX 20' INGRESS AND EGRESS
EASEMENT FOR WATER TOWER AND
A WATER AND UTILITY EASEMENT
3568/163

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20

ETB ENTERPRISES LLC
3125/584
PARCEL B PLAT 6009
DAKLAND EXECUTIVE PARK
ZONING: M-1

MJF ASSOCIATES LIMITED PARTNERSHIP
8801 SW COLUMBIA 100 PARKWAY
1502/184
PARCEL B-2 PLAT 7538
COLUMBIA 100 OFFICE RESEARCH PARK
ZONING: POR

- General Planting Notes
- All plant material shall conform to the sizes given in the plant list and shall be nursery grown in accordance with the USA Standard for Nursery Stock, latest edition.
 - All planting shall be in accordance with standard American Association of Nurserymen procedures and specifications.
 - Contractor and Owner's Representative shall verify the correct location of all underground utilities in the field prior to installation of any plant materials.
 - Plant material location to be staked in the field and approved by the Landscape Architect prior to planting.
 - All plant beds and planting areas to be mulched to a depth of 3" unless otherwise noted on drawings or specifications.
 - All areas disturbed by planting operations shall be fine graded and sodded.
 - Obtain approval from Architect's or Owner's Representative before making any substitutions or changes.
 - All plant beds shall be contained with a spaced edge unless otherwise noted on drawings.
 - Quantities shown on plant list are for the Contractor's convenience only and are not guaranteed to be accurate. In the event of a discrepancy between quantities shown on the plan and quantities shown on the plant list, the quantities on the plan shall apply.
 - This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Landscape Manual.
 - Financial surety for the required landscaping must be posted as part of the Developers Agreement in the amount of \$2,000.00 by Exxon.
 - ⊙ Represent proposed relocation of existing trees and bushes.

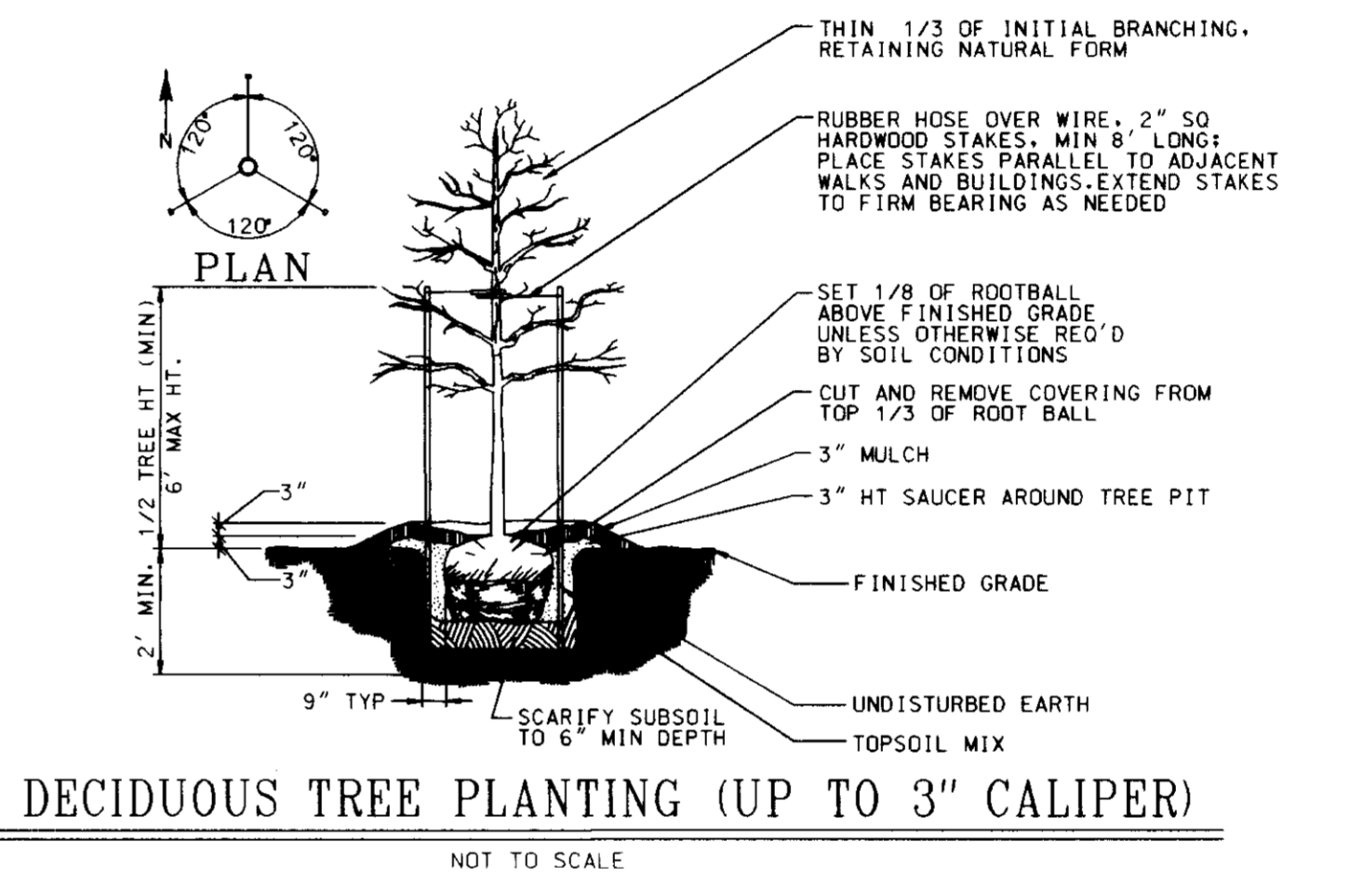
SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	E	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	147.71	702.48
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	2 DEC TREES TO REMAIN 2 TREES TO BE RELOCATED 2 EVERGREENS TO REMAIN 10 SHRUBS TO REMAIN	NONE
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NONE	NONE
NUMBER OF PLANTS REQUIRED	1:40 = 4	1:60 = 12
SHADE TREES	-	-
EVERGREEN TREES	1:4 = 39	-
SHRUBS	-	-
NUMBER OF PLANTS PROVIDED	(2 EX.)	12
SHADE TREES	-	29
EVERGREEN TREES	-	10
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	54	10
* 1 TREE PER 20' PARKING SPACES = 1 TREE PROVIDED WITHIN 200 SF ISLAND ADJ. TO HANDICAPPED SPACE.		
* 4 TREES TO BE RELOCATED TO FULFILL STREET TREE REQUIREMENT		

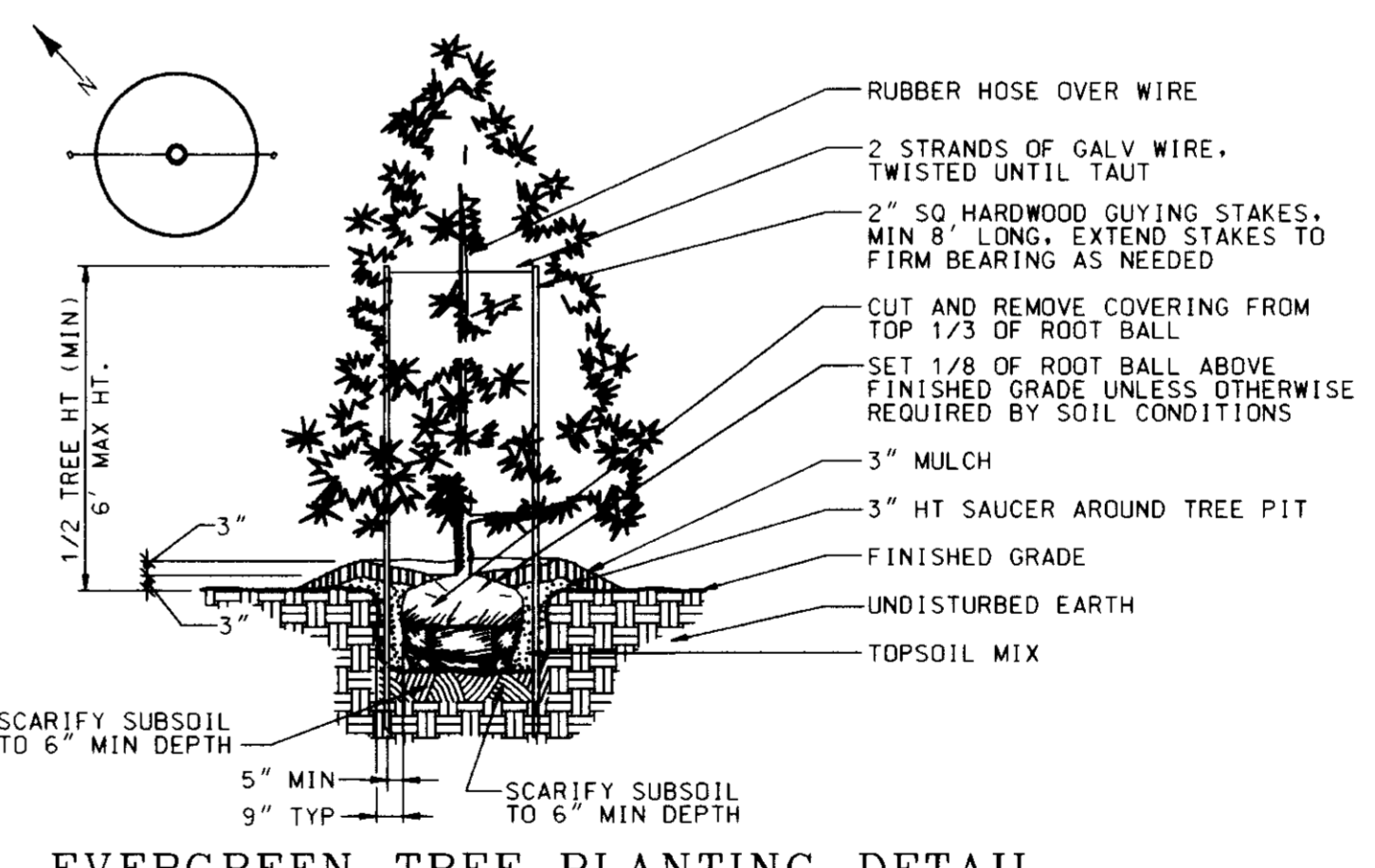
LANDSCAPE PLANTINGS

SYMBOL	QUANTITY	BOTANICAL/Common NAME	SIZE	REMARKS
⊙	* 8	ZELKOVA SERRATA JAPANESE ZELKOVA	2-2 1/2" CAL 10-12" HT	BAR FULL
⊙	6	QUERCUS PALUSTRIS PIN OAK	2-2 1/2" CAL 12-14" HT	BAR FULL
⊙	10	PRUNUS SERRULATA 'KAWANAN' KAWANAN CHERRY	6-8" HT	BAR FULL
⊙	29	CUPRESSOCYPARIS LELANDII LEYLAND CYPRESS	5-6" HT	BAR FULL
⊙	61	BURBERRIS THUNBERGII JAPANESE BARBERY	2-2 1/2" HT 2-2 1/2" SPO	BAR FULL 3" O.C.
⊙	7	CORNUS SERICEA REDOSIER DOGWOOD	2-3" HT 2-3" CANES	BAR FULL 3" O.C.
⊙	200	PETUNIA X HYBRIDA 'RED & WHITE' RED & WHITE PETUNIA	4" POT	8" O.C.

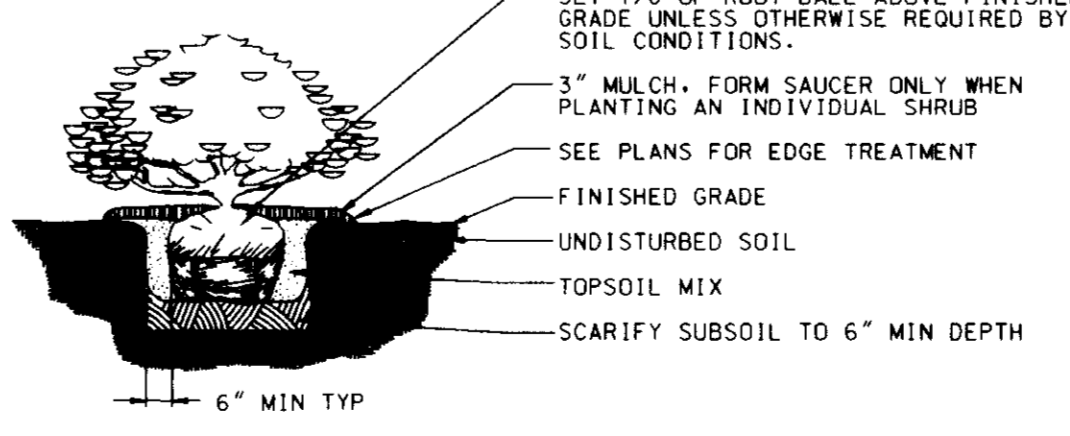
6"-9" WIDE RIVER ROCK (2-3" SIZE) EDGING AROUND ALL FLOWER BEDS



DECIDUOUS TREE PLANTING (UP TO 3" CALIPER)
NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL



SHRUB PLANTING DETAIL
NOT TO SCALE

12-2-97
DATE: NUMBER REVISION DESCRIPTION
APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF-DEVELOPMENT ENGINEERING DIVISION 8/16/97 DATE
CHIEF-DIVISION OF LAND DEVELOPMENT 10/1/97 DATE
DIRECTOR 10/7/97 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.
Jorge M. Dept. Mgr. F-5 10-3-97 DATE
COUNTY HEALTH OFFICER

OWNER MJF ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCCUAN
PHONE: (410) 730-9091

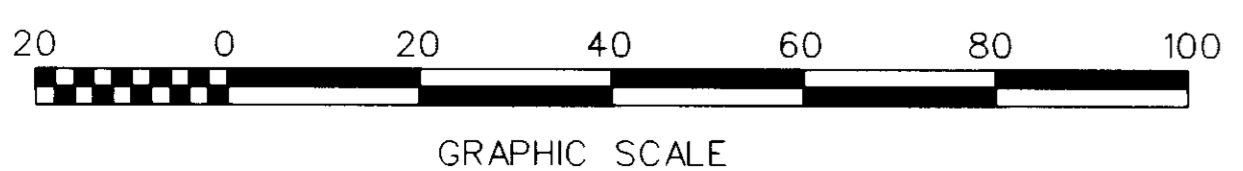
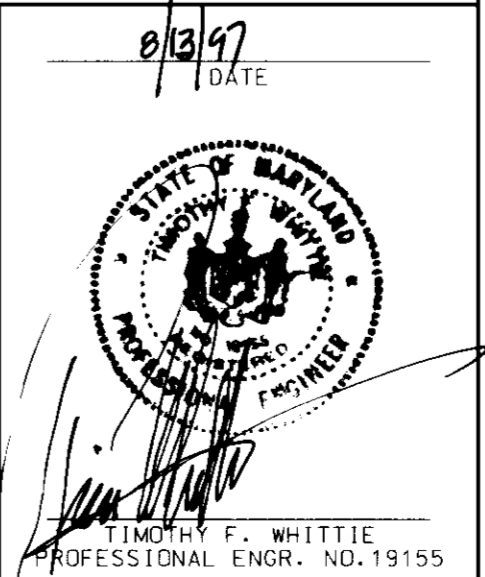
DEVELOPER EXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. ROBERT CASERTA
PHONE: (301) 513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090

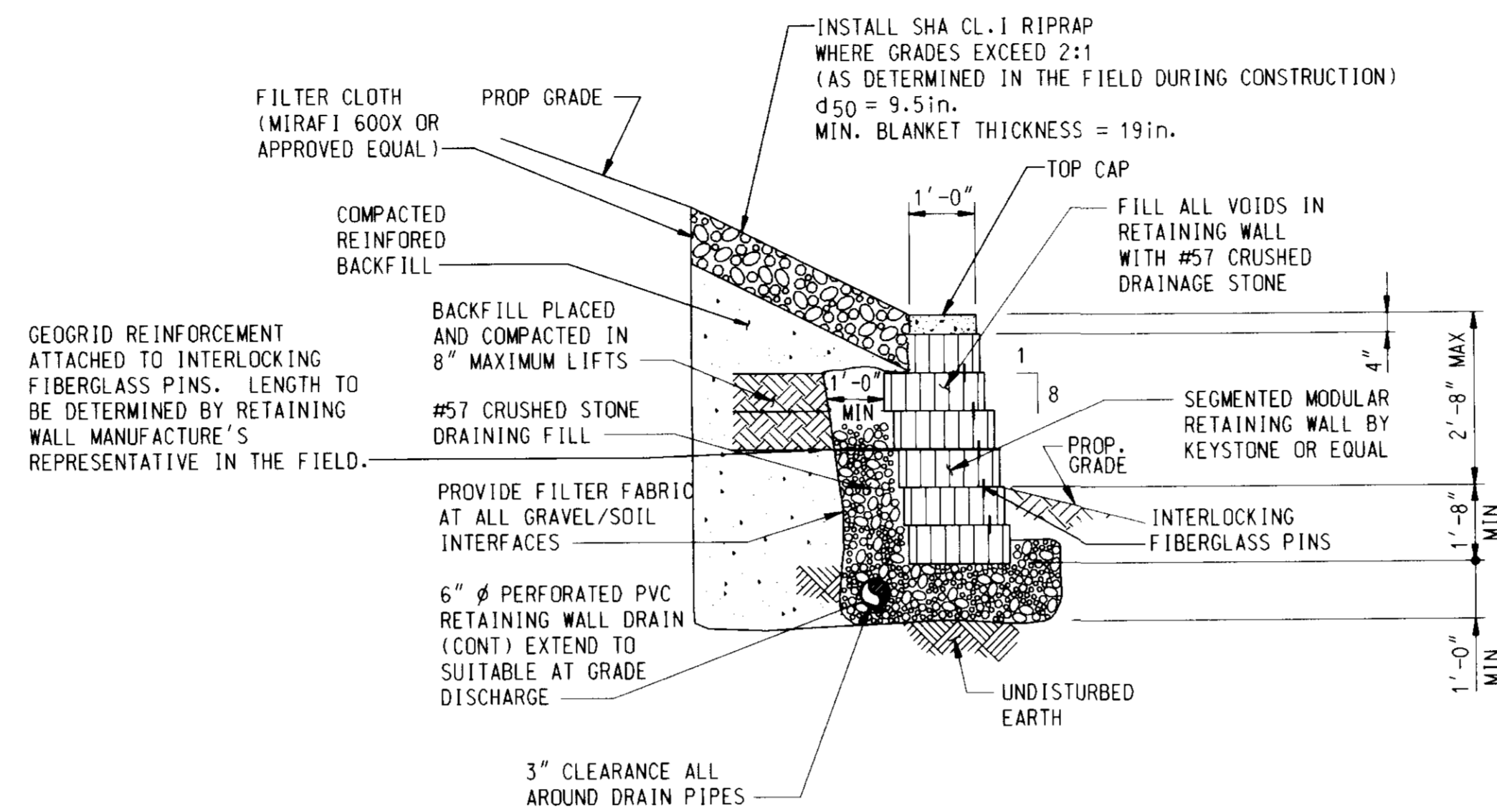
TAX MAP 30 PARCEL 260
ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

TITLE FOR AN EXON STATION AT
8800 CENTRE PARK DRIVE PARCEL A-4
BILLCOTT CITY, MARYLAND 21048 OFFICE RESEARCH PARK
SITE LANDSCAPE PLAN

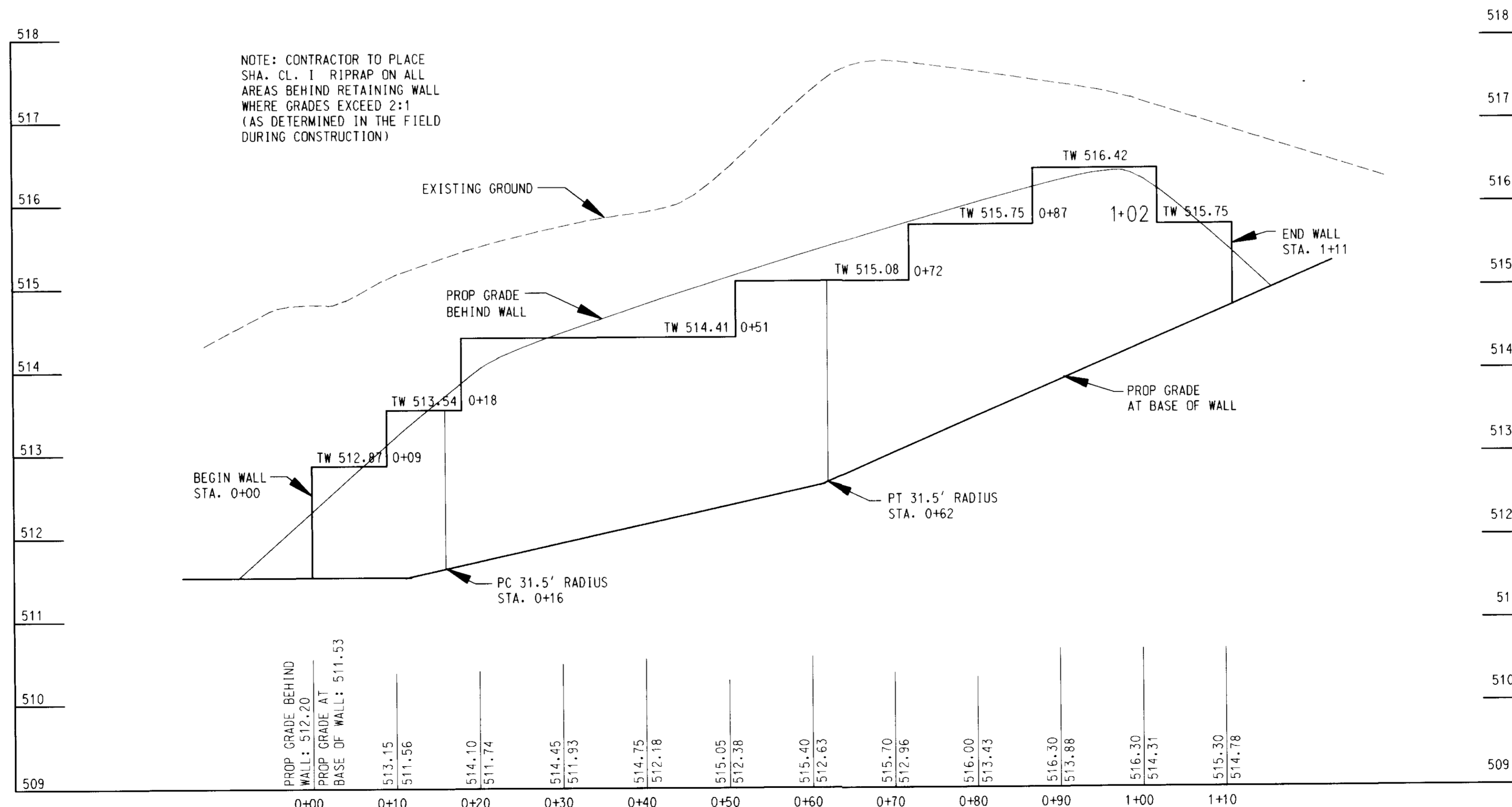
DESIGN BY: JBG SCALE: 1" = 20' PROJECT NO.: 96098
DRAWN BY: KN/LF DATE: 07/15/97 DRAWING NUMBER
CHECKED BY: TFW APPROVED: 12 OF 15



FWA FILE NO.: 80088/PELAND/00



**SECTION: SITE SEGMENTED
MODULAR RETAINING WALL**
NOT TO SCALE



PROFILE: RETAINING WALL
SCALE: HORIZ. 1" = 10'
VERT. 1" = 1'

NOTE: CONTRACTOR SHALL CONTACT RETAINING WALL SUPPLIER TO REVIEW PROJECT DESIGN AND REQUIREMENTS PRIOR TO INSTALLATION OF RETAINING WALL.

SDP# 96-62
PLANNING BOARD APPROVAL

DATE: 8/13/97

STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 19155

APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF-DEVELOPMENT ENGINEERING DIVISION
Cindy Hamilton
CHIEF-DIVISION OF LAND DEVELOPMENT
DATE: 9/29/97
DATE: 1/6/97
DATE: 10/2/97

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M. Bond, M.D.
COUNTY HEALTH OFFICER
DATE: 10-3-97

OWNER: MJF ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCGUIN
PHONE: (410) 730-9091

DEVELOPER: EXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. ROBERT CASERTA
PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 779-2090

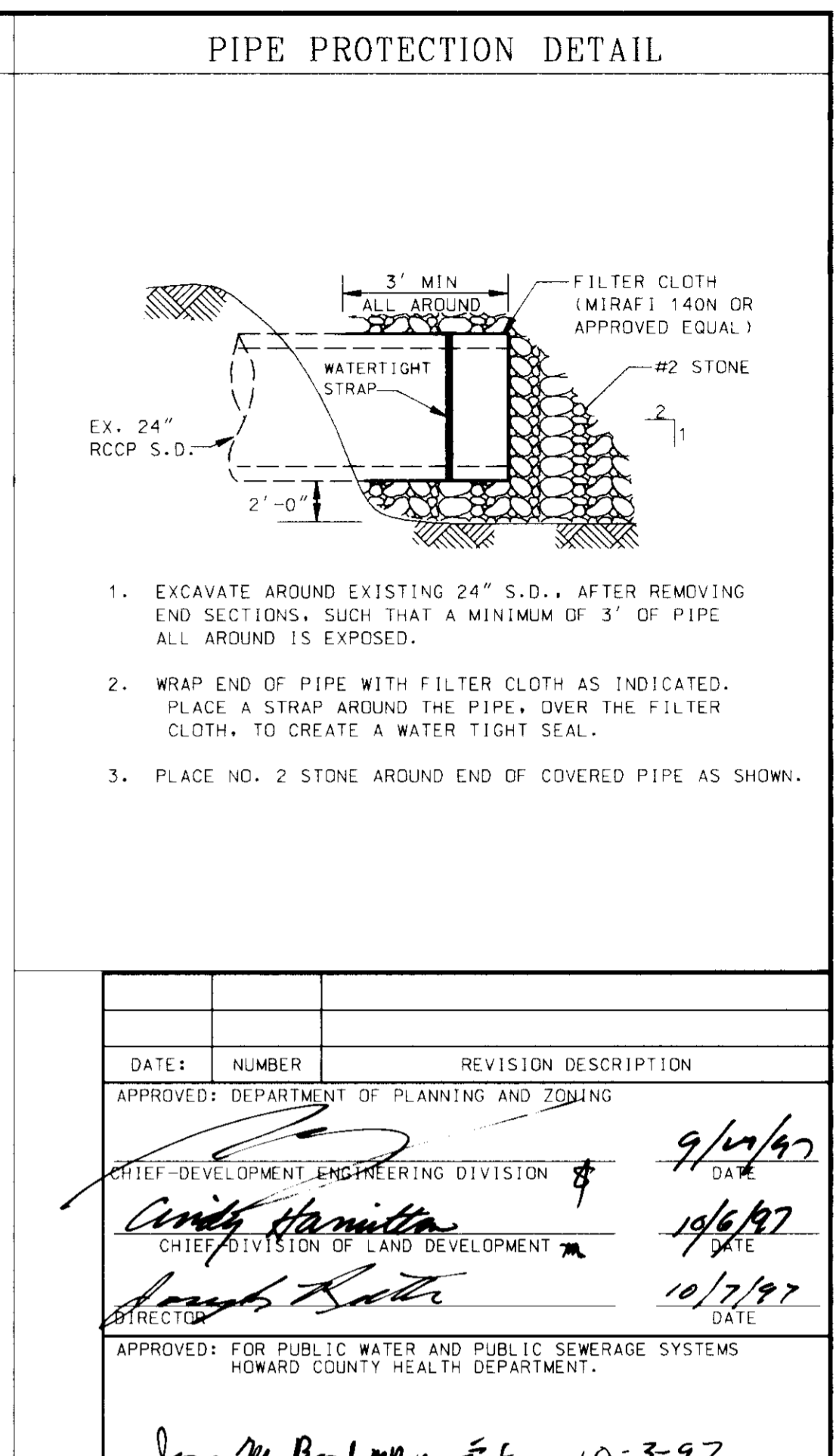
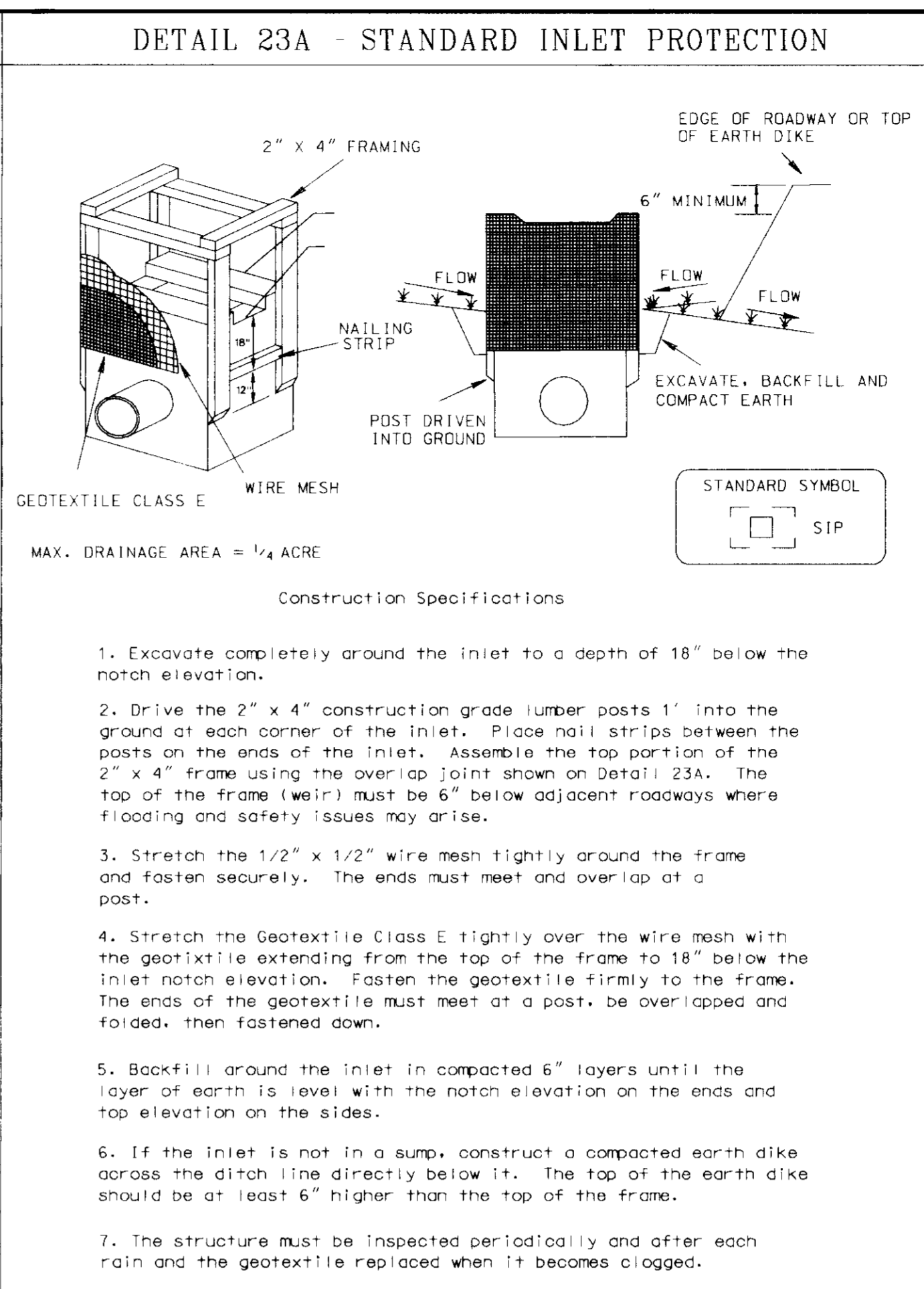
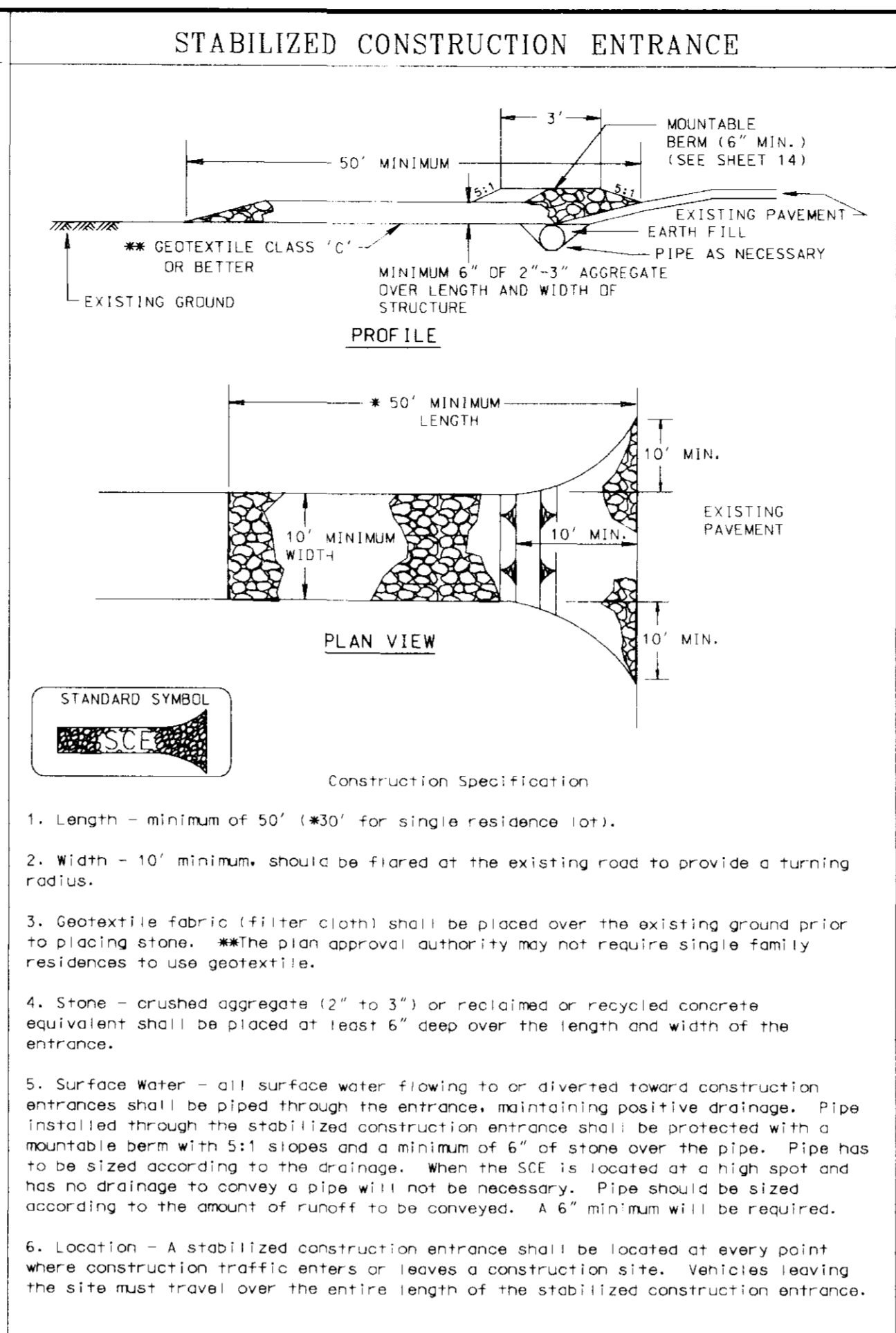
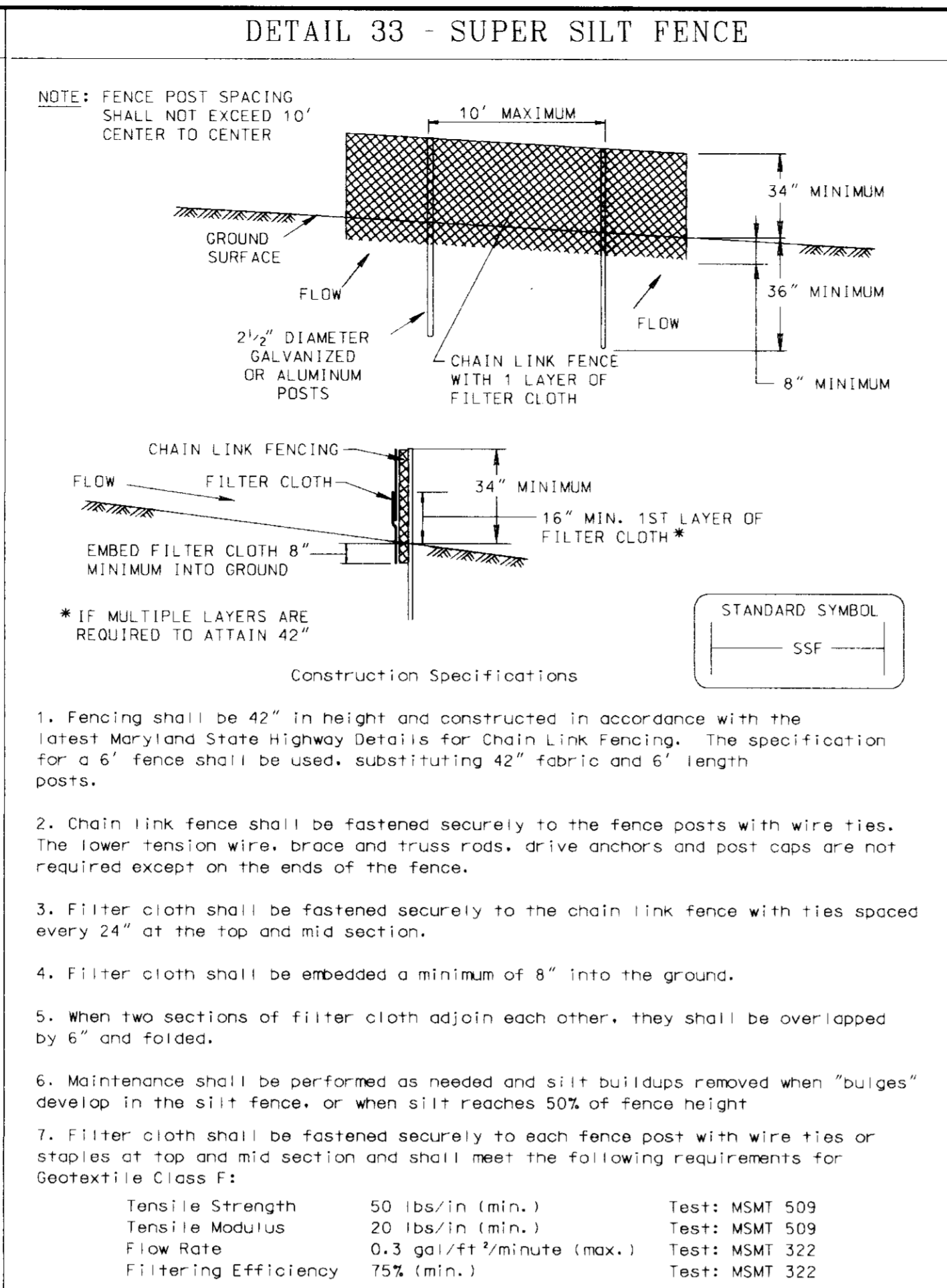
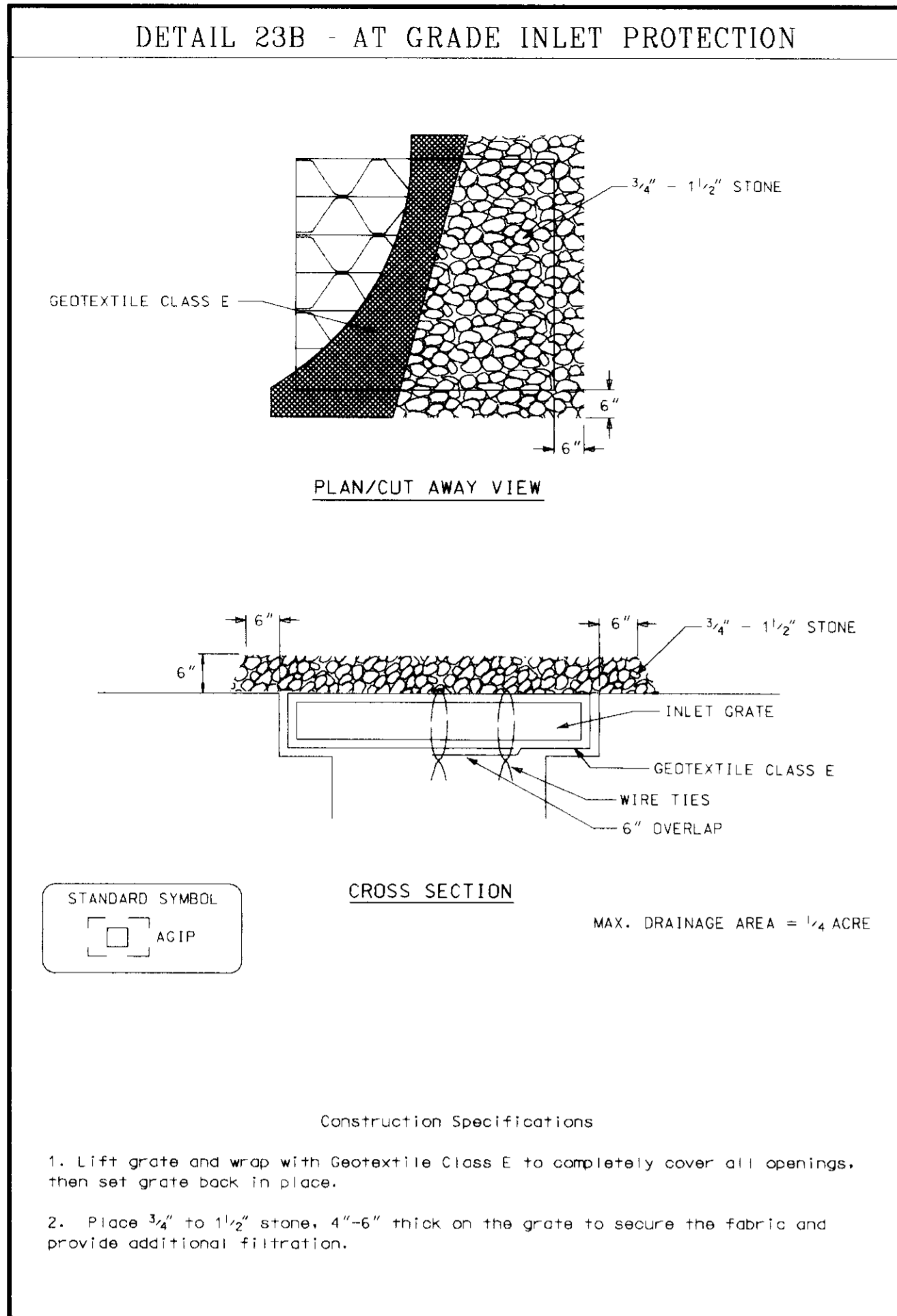
PAS NO. 2-0357 FWA JOB NUMBER 96098 FWA DRAWING FILE NAME PEWALL.DGN

CENSUS TRACT NO.: 6023.02 WATER CODE: 602
PLAT NO. 12535 SEWER CODE: 3551400

TAX MAP 30 PARCEL 260
ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

TITLE: RETAINING WALL DETAIL PLAN

DESIGN BY: JRG SCALE: AS SHOWN PROJECT NO.: 96098
DRAWN BY: KN/LF DATE: 07/15/97 DRAWING NUMBER
CHECKED BY: TFW APPROVED: 11 OF 15



STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION WITH SOD

SPECIFICATIONS

- CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
- INDIVIDUAL PICES OF SOD SHALL BE CUT TO THE SUPPLIER'S WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- SOD SHALL NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
- SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO ITS INSTALLATION.

SITE PREPARATION

FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TEST. UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS INSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B, BELOW.

- PRIOR TO SOODING, THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- WHERE THE SOIL IS ADO OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS PER ACRE (1400 POUNDS PER ACRE) OR 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD-PACKED EARTH SHALL BE SCARIFIED PRIOR TO PLACEMENT OF SOD.

SOD INSTALLATION

- DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD.
- THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. INSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
- ON SLOPING AREAS WHERE EROSION MAY BE A PROBLEM, SOD SHALL BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. SECURE THE SOD BY TAMING AND PEGGING OR OTHER APPROVED METHODS.
- AS SOODING IS COMPLETED IN ANY ONE SECTION, THE ENTIRE AREA SHALL BE ROLLED OR TAMPED TO INSURE SOLID CONTACT OF ROOTS WITH THE SOIL SURFACE. SOD SHALL BE WATERED IMMEDIATELY AFTER ROLLING OR TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THROUGHLY WET. THE OPERATIONS OF LAYING, TAMING AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.

SOD MAINTENANCE

- IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATERING SHOULD BE DONE DURING THE HEAT OF THE DAY TO PREVENT WILTING. AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE AND INSURE ESTABLISHMENT.
- FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.
- MAINTENANCE OF ESTABLISHED SOD SHOULD FOLLOW SPECIFICATIONS OUTLINED IN TABLE 54-1.

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 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

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

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30, AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BU. PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WHEERING LOWGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THROUGH 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 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2/8 GAL. PER ACRE (5 GALS./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FT. OR HIGHER, USE 3/8 GAL. PER ACRE (8 GALS./1000 SQ.FT.) FOR ANCHORING.

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 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

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

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

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. PER ACRE (14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. PER ACRE AND 2 LBS. PER ACRE (0.5 GALS./1000 SQ.FT.) OF WHEERING LOWGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH 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 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2/8 GAL. PER ACRE (5 GALS./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREA, ON SLOPES 8 FEET OR HIGHER, USE 3/8 GALLONS PER ACRE (8 LBS./1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

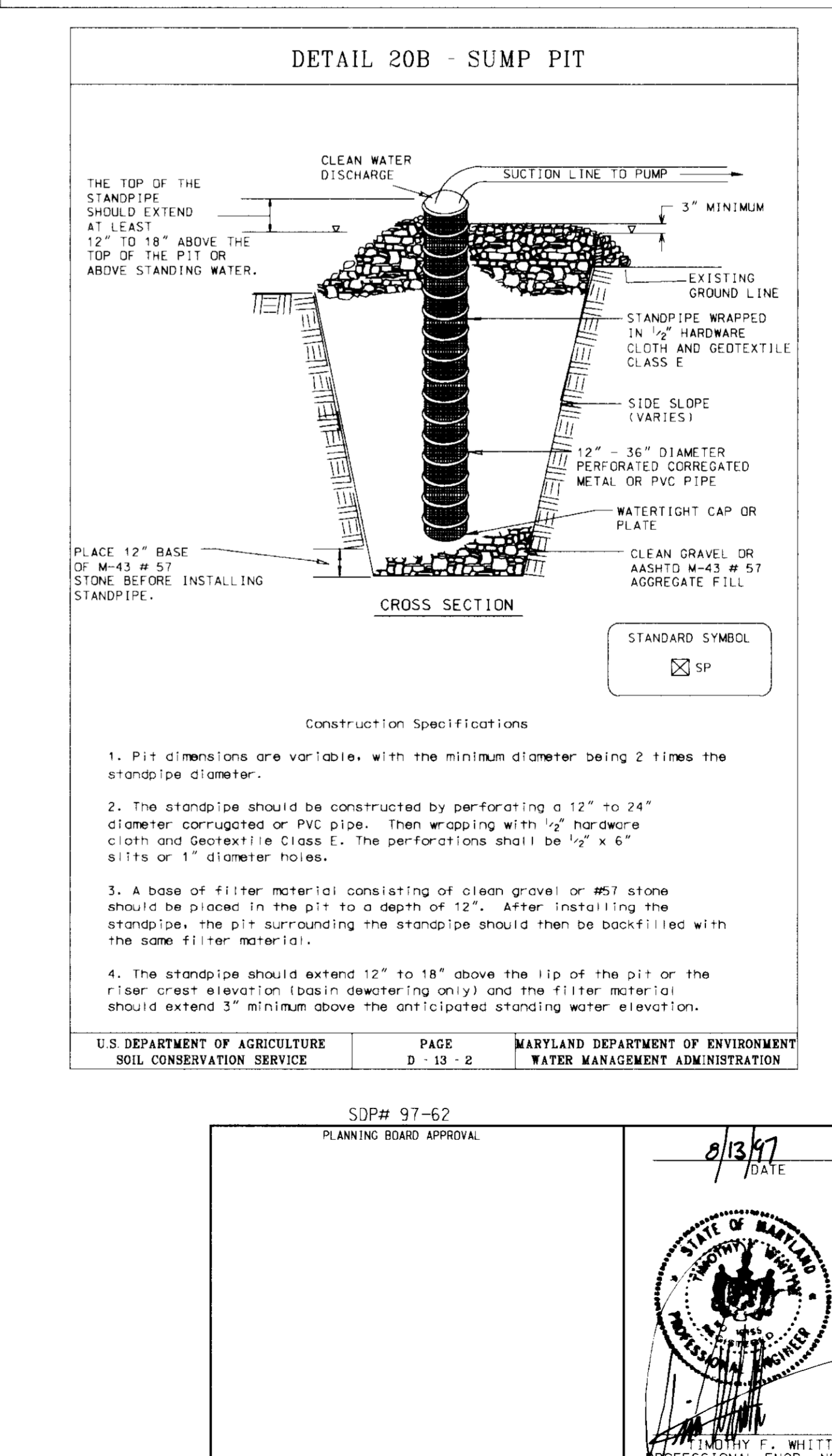
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION, PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," AND REVISIONS THERETO.
- 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 AND ALL SLOPES STEEPER THAN 3:1. B) 4 SLOPES AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENTS TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7 OF "HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE."
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," AND REVISIONS THERETO.
- 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	1.22 ACRES
AREA DISTURBED	1.22 ACRES
AREA TO BE ROOFED OR PAVED	0.74 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.48 ACRES
TOTAL CUT	1490 CUBIC YARDS
TOTAL FILL	1490 CUBIC YARDS

 OFFSITE WASTE/BORROW LOCATION TO BE DETERMINED, BUT MUST BE A SITE WITH AN ACTIVE GRADING PERMIT.

TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SLET LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1/2" IN DIAMETER.
 - TOPSOIL SHALL BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES:
 - FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
 - FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SALT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" HIGHER IN ELEVATION.
 - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.
 - THESE TOPSOIL SPECIFICATIONS HAVE BEEN EDITED FROM THE 1994 EROSION AND SEDIMENT CONTROL STANDARDS TO FIT THIS PROJECT. IT IS STILL THE INTENTION TO FOLLOW THE REFERENCED 1994 EROSION AND SEDIMENT CONTROL STANDARDS IN THEIR ENTIRETY.



DATE: NUMBER REVISION DESCRIPTION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF-DEVELOPMENT ENGINEERING DIVISION 8/16/97 DATE

CHIEF DIVISION OF DEVELOPMENT 10/6/97 DATE

DIRECTOR 10/7/97 DATE

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

10-3-97 DATE

BY THE ENGINEER: 8/13/97 DATE

BY THE DEVELOPER: 8/10/97 DATE

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

9/25/97 DATE

U.S. NATURAL RESOURCES CONSERVATION SERVICE

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

9/2/97 DATE

OWNER: MJF ASSOC. LTD. PARTNERSHIP

670 WDC COMPANIES

5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044

ATTN: MR. PAT MCCUJAN PHONE: (410) 730-9091

EXXON COMPANY, U.S.A.

6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770

ATTN: MR. ROBERT CASERTA PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS

5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410)873-2090

CENSUS TRACT NO.: 6023.02 WATER CODE: GDS

PLAT NO.: 12535 SEWER CODE: 3857400

TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

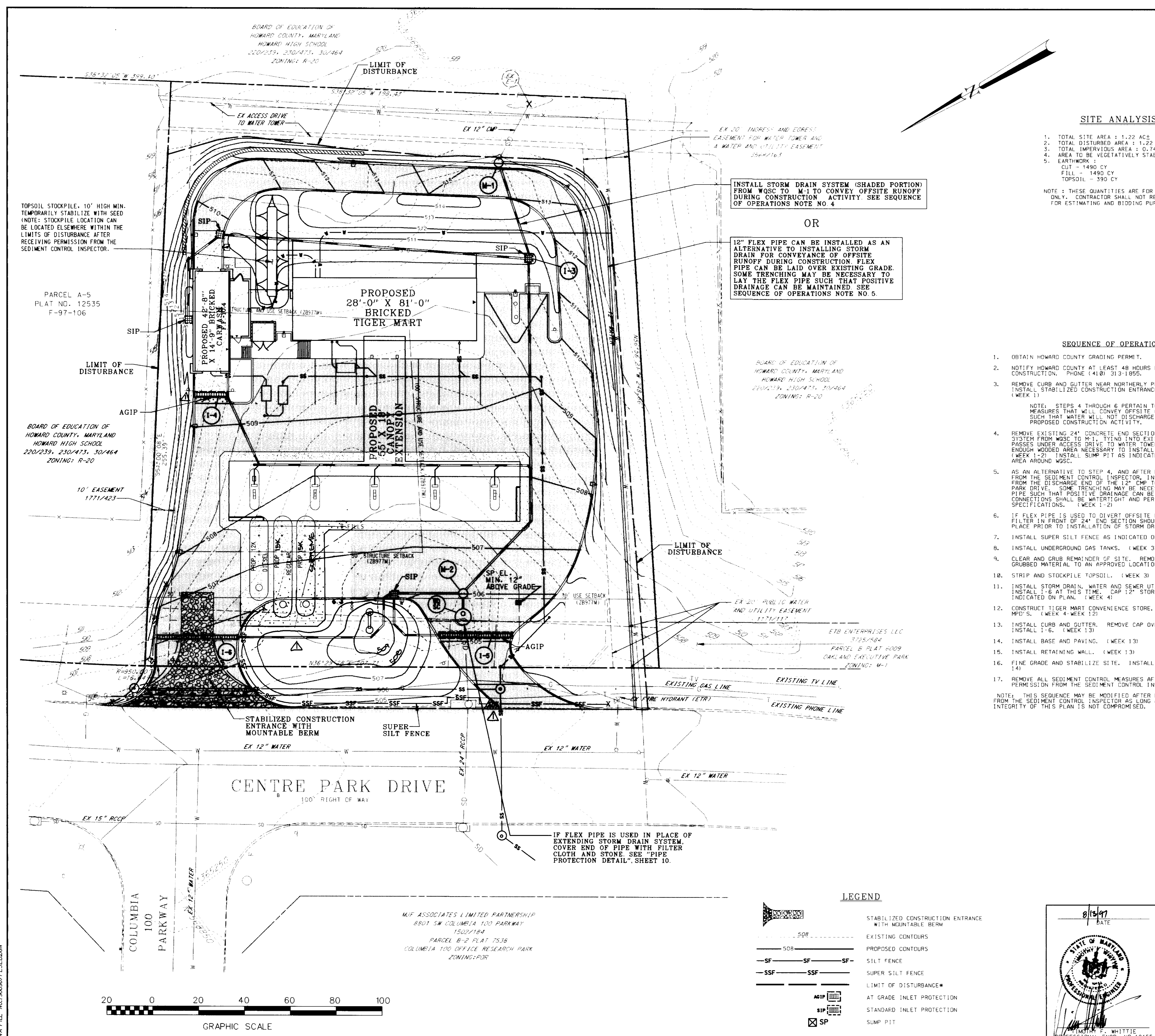
TITLE: FOR AN EXXON STATION AT 8850 CENTRE PARK DRIVE, PARCEL A-4, ELLICOTT CITY, MARYLAND 21043 OFFICE: RESEARCH PARK SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

DESIGN BY: JBG SCALE: 1"=20' PROJECT NO.: 96098

DRAWN BY: KN/LF DATE: 07/15/97 DRAWING NUMBER: 10 OF 15

CHECKED BY: TFW APPROVED: PROFESSIONAL ENGR. NO. 19155

SDP-97-62



SITE ANALYSIS DATA

- TOTAL SITE AREA : 1.22 AC±
- TOTAL DISTURBED AREA : 1.22 AC±
- TOTAL IMPERVIOUS AREA : 0.742 AC±
- AREA TO BE VEGETATIVELY STABILIZED : 0.48 AC±
- EARTHWORK :
 CUT - 1490 CY
 FILL - 1490 CY
 TOPSOIL - 390 CY

ESTIMATE OF SEDIMENT CONTROL QUANTITIES

STABILIZED CONSTR. ENTR. : 1 EA
 INLET PROTECTION : 5 EA
 STABILIZATION : 0.48 AC±
 SUPER SILT FENCE : 180 LF

NOTE : THESE QUANTITIES ARE FOR SEDIMENT CONTROL USE ONLY. CONTRACTOR SHALL NOT RELY ON THESE QUANTITIES FOR ESTIMATING AND BIDDING PURPOSES.

INSTALL STORM DRAIN SYSTEM (SHADED PORTION) FROM WOSC TO M-1 TO CONVEY OFFSITE RUNOFF DURING CONSTRUCTION ACTIVITY SEE SEQUENCE OF OPERATIONS NOTE NO 4

OR

12" FLEX PIPE CAN BE INSTALLED AS AN ALTERNATIVE TO INSTALLING STORM DRAIN FOR CONVEYANCE OF OFFSITE RUNOFF DURING CONSTRUCTION FLEX PIPE CAN BE LAID OVER EXISTING GRADE. SOME TRENCHING MAY BE NECESSARY TO LAY THE FLEX PIPE SUCH THAT POSITIVE DRAINAGE CAN BE MAINTAINED SEE SEQUENCE OF OPERATIONS NOTE NO 5.

SEQUENCE OF OPERATION

- OBTAIN HOWARD COUNTY GRADING PERMIT.
- NOTIFY HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. PHONE (410) 313-1855.
- REMOVE CURB AND GUTTER NEAR NORTHERLY PROPERTY CORNER. INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM. (WEEK 1)
- REMOVE EXISTING 24" CONCRETE END SECTION. INSTALL STORM DRAIN SYSTEM FROM WOSC TO M-1, TYING INTO EXISTING 12" CMP THAT PASSES UNDER ACCESS DRIVE TO WATER TOWER. CLEAR AND GRUB ONLY ENOUGH WOODED AREA NECESSARY TO INSTALL STORM DRAIN SYSTEM. (WEEK 1-2) INSTALL SUMP PIT AS INDICATED FOR DEWATERING THE AREA AROUND WOSC.
- AS AN ALTERNATIVE TO STEP 4, AND AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, INSTALL 12" FLEX PIPE FROM THE DISCHARGE END OF THE 12" CMP TO THE CURB IN CENTRE PARK DRIVE. SOME TRENCHING MAY BE NECESSARY TO LAY THE FLEX PIPE SUCH THAT POSITIVE DRAINAGE CAN BE MAINTAINED. ALL CONNECTIONS SHALL BE WATERTIGHT AND PER MANUFACTURER'S SPECIFICATIONS. (WEEK 1-2)
- IF FLEX PIPE IS USED TO DIVERT OFFSITE RUNOFF, INSTALL STONE FILTER IN FRONT OF 24" END SECTION SHOULD ROUGH GRADING TAKE PLACE PRIOR TO INSTALLATION OF STORM DRAIN SYSTEM. (WEEK 1-2)
- INSTALL SUPER SILT FENCE AS INDICATED ON PLANS. (WEEK 2)
- INSTALL UNDERGROUND GAS TANKS. (WEEK 3)
- CLEAR AND GRUB REMAINDER OF SITE. REMOVE ALL CLEARED AND GRUBBED MATERIAL TO AN APPROVED LOCATION. (WEEK 3)
- STRIP AND STOCKPILE TOPSOIL. (WEEK 3)
- INSTALL STORM DRAIN, WATER AND SEWER UTILITIES. DO NOT INSTALL S-6 AT THIS TIME. CAP 12" STORM DRAIN THAT IS INDICATED ON PLAN. (WEEK 4)
- CONSTRUCT TIGER MART CONVENIENCE STORE, CARWASH, CANOPY, AND MFD'S. (WEEK 4, WEEK 13)
- INSTALL CURB AND GUTTER. REMOVE CAP OVER 12" STORM DRAIN, AND INSTALL S-6. (WEEK 13)
- INSTALL BASE AND PAVING. (WEEK 13)
- INSTALL RETAINING WALL. (WEEK 13)
- FINE GRADE AND STABILIZE SITE. INSTALL LANDSCAPING. (WEEK 14)
- REMOVE ALL SEDIMENT CONTROL MEASURES AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR. (WEEK 14)

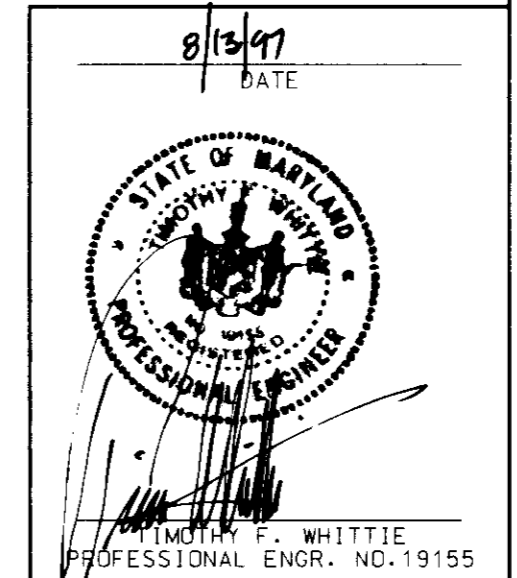
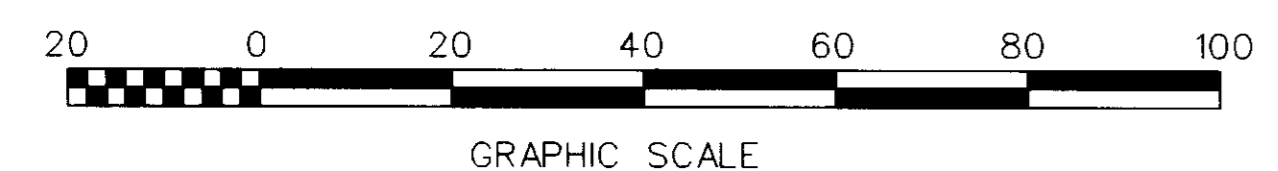
NOTE: THIS SEQUENCE MAY BE MODIFIED AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR AS LONG AS THE INTENTION AND INTEGRITY OF THIS PLAN IS NOT COMPROMISED.

12-297	REVISED	REVISED	REVISED
DATE:	NUMBER:	REVISION:	DESCRIPTION:
APPROVED: DEPARTMENT OF PLANNING AND ZONING			
CHIEF DEVELOPMENT ENGINEERING DIVISION			9/24/97
CHIEF DIVISION OF LAND DEVELOPMENT			10/6/97
DIRECTOR			10/7/97
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.			
COUNTY HEALTH OFFICER			10-5-97
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 OF ENGINEER			8/13/97
BY THE DEVELOPER:			
"I 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."			
SIGNATURE OF DEVELOPER			8/20/97
REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.			
U.S. NATURAL RESOURCES CONSERVATION SERVICE			9/25/97
THIS DEVELOPMENT PLAN IS AS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.			
HOWARD S.C.D.			9/24/97

NOTE:
THIS PLAN FOR SEDIMENT CONTROL USE ONLY

LEGEND

- STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
- EXISTING CONTOURS
- PROPOSED CONTOURS
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- AT GRADE INLET PROTECTION
- STANDARD INLET PROTECTION
- SUMP PIT



OWNER: MJF ASSOC. LTD. PARTNERSHIP
 C/O MDG COMPANIES
 5550 STERRETT PLACE, SUITE 312
 COLUMBIA, MARYLAND 21044
 ATTN.: MR. PAT MCCUAN
 PHONE: (410) 730-9091

DEVELOPER: EXON COMPANY, U.S.A.
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN.: MR. ROBERT CASERTA
 PHONE: (301) 513-7511

DATE: 8/13/97

SDPH 97-62
 PLANNING BOARD APPROVAL

FREDERICK WARD ASSOCIATES INC.
 ENGINEERS ARCHITECTS SURVEYORS
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)875-2000

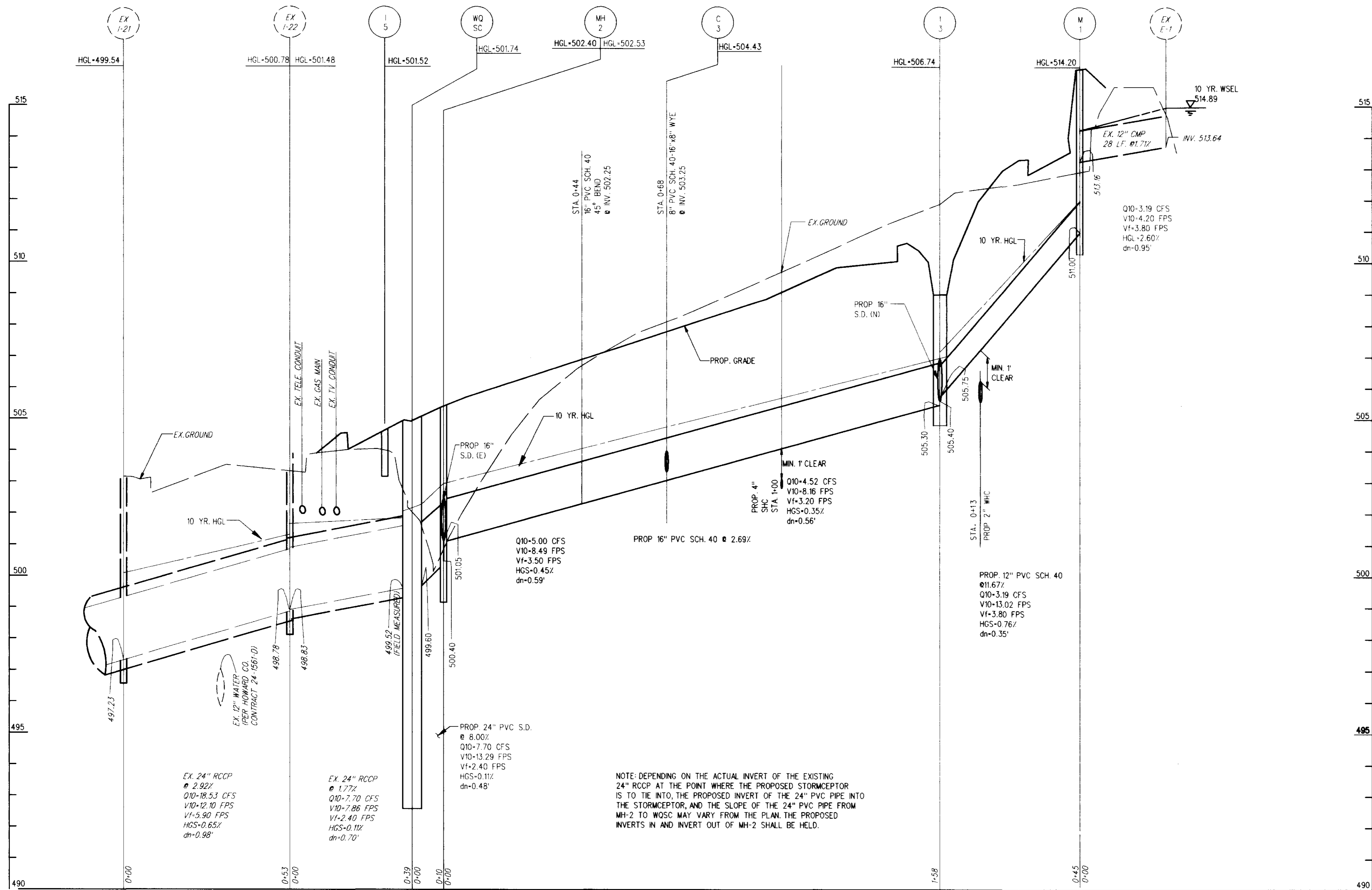
CENSUS TRACT NO.: 6023.02
 PLAT NO.: 12535
 WATER CODE: 502
 SEWER CODE: 5657400

TAX MAP 30 PARCEL 260
 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

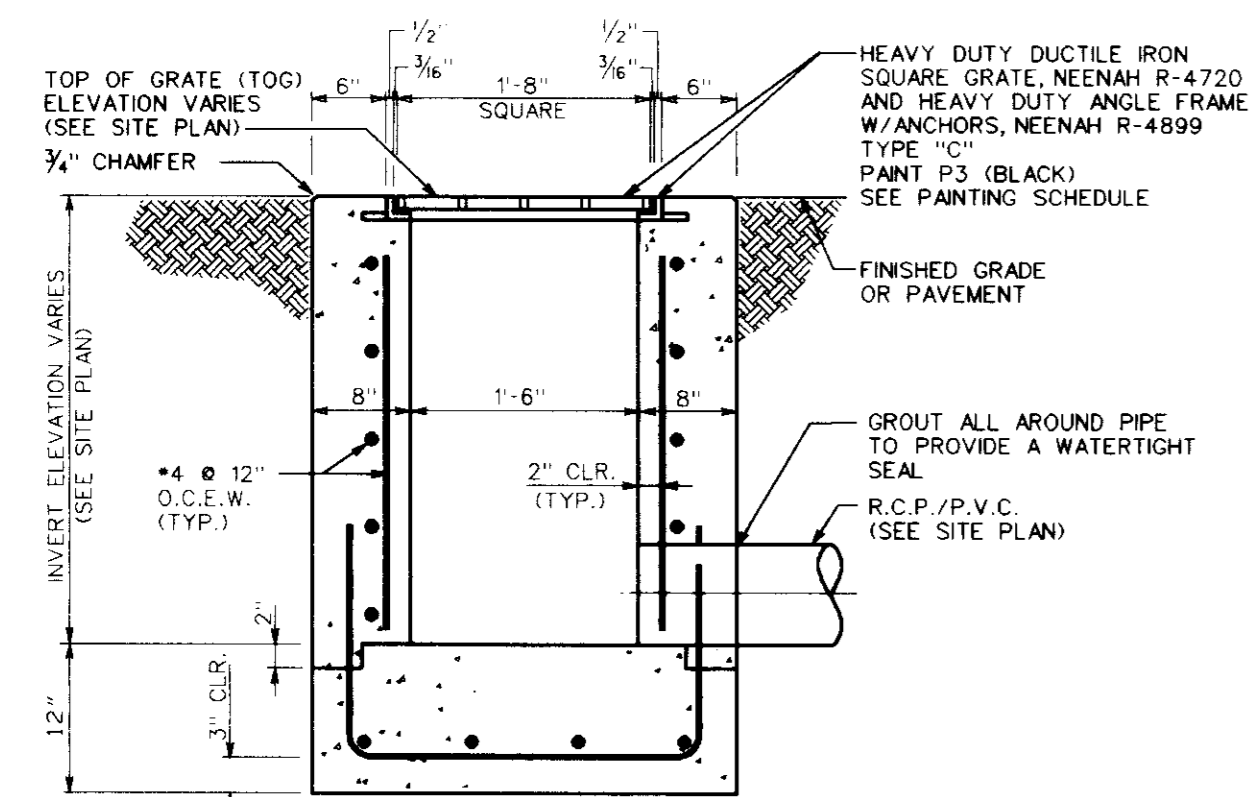
TITLE: FOR AN EXON STATION AT
 8800 CENTRE PARK DRIVE
 PARCEL A-4
 BELLIOTT CITY, MARYLAND 21043
 OFFICE: RESEARCH PARK
 SEDIMENT AND EROSION CONTROL PLAN

DESIGN BY: JBC SCALE: 1" = 20' PROJECT NO.: 96098
 DRAWN BY: KN/LF DATE: 07/15/97 DRAWING NUMBER
 CHECKED BY: FFW APPROVED: 9 OF 15

PWA FILE NO.: 96098/PSESD009

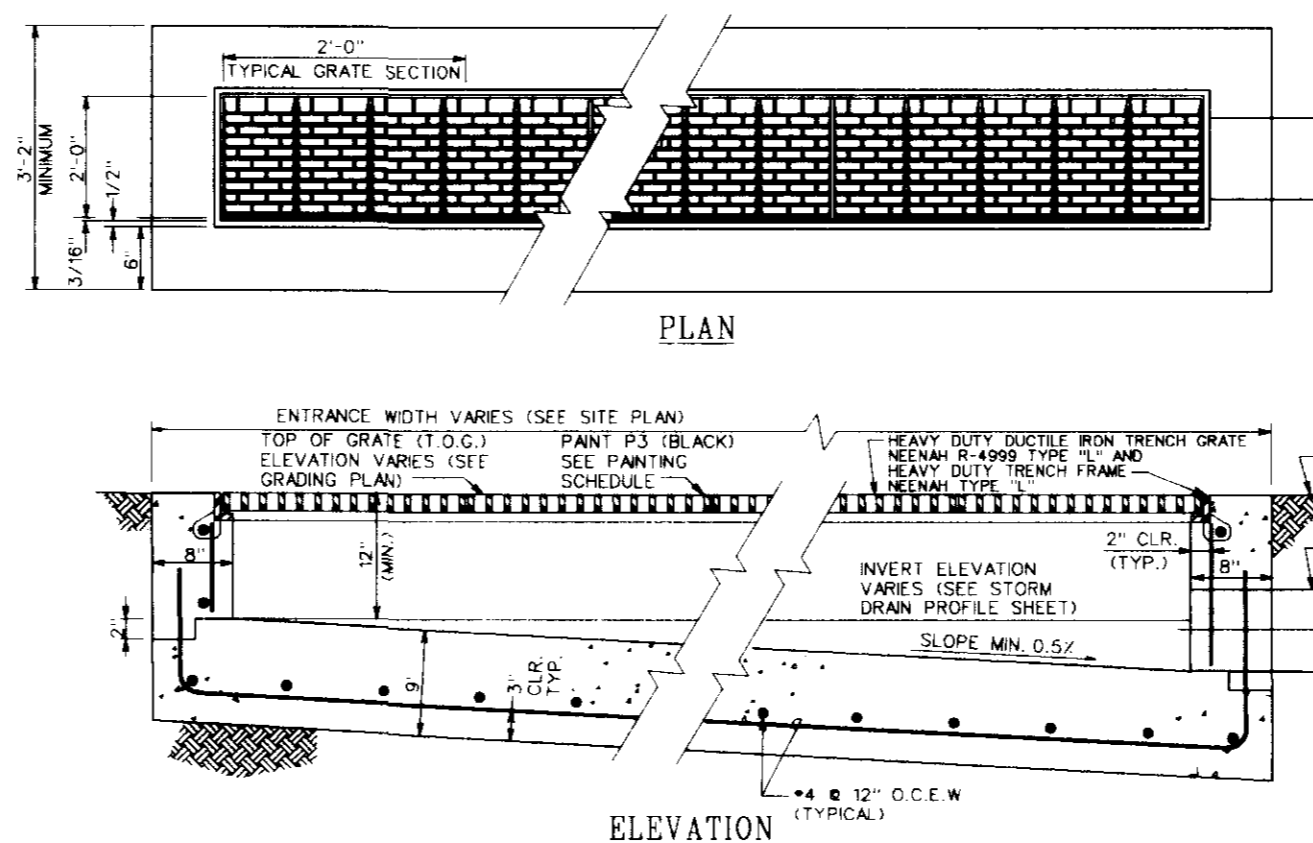


STORM DRAIN PROFILE
SCALE: HORIZ. 1" = 20'
VERT. 1" = 2'

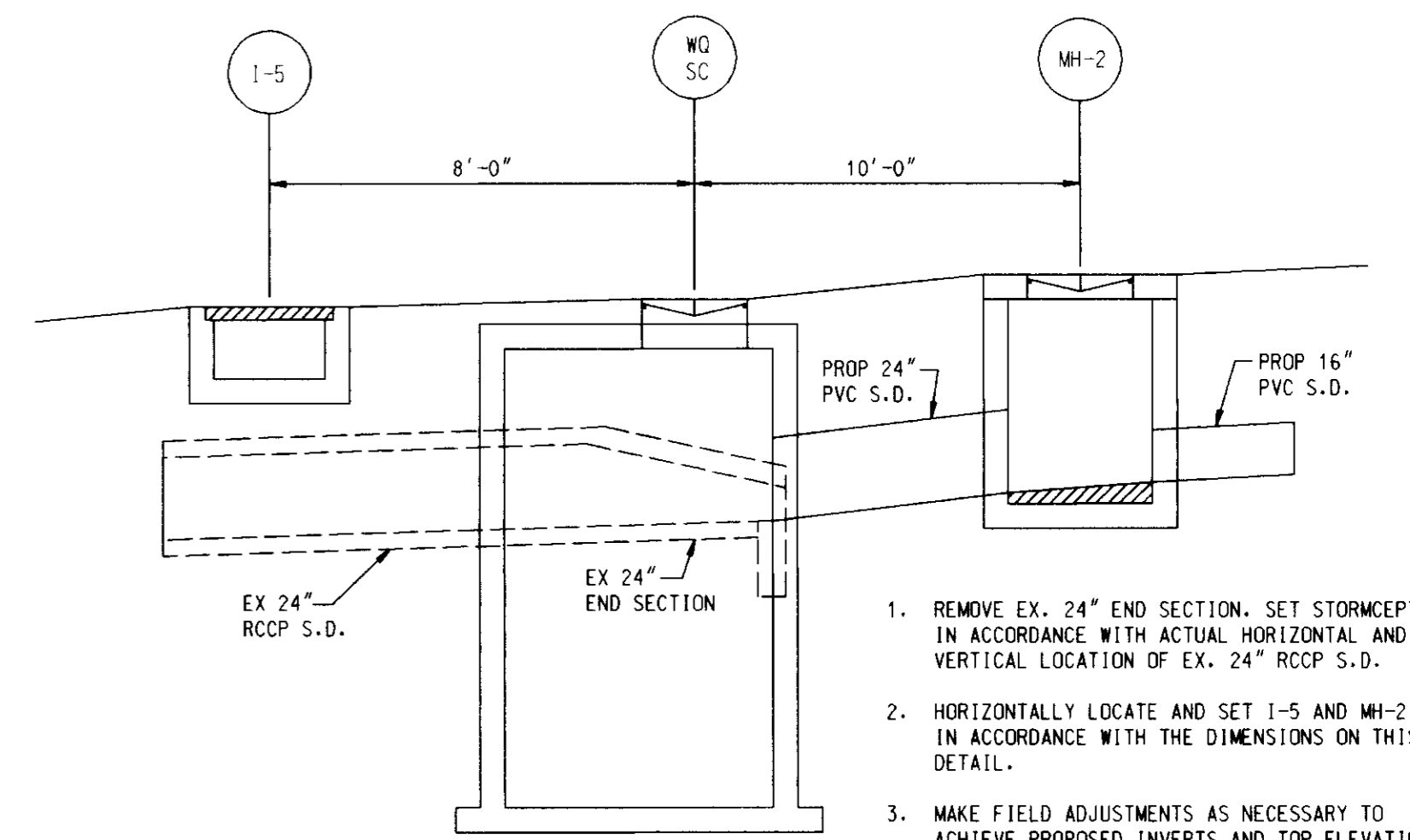


TYPICAL CATCH BASIN DETAIL
NOT TO SCALE

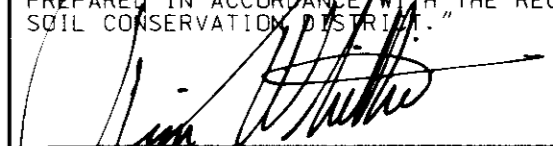

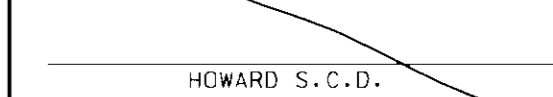
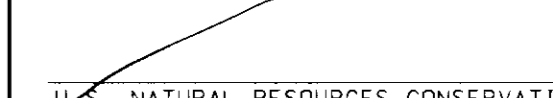


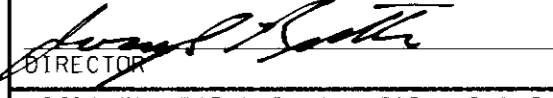

NEENAH TYPE L GRATE DETAIL
NOT TO SCALE



TYPICAL TRENCH DRAIN DETAIL
PIPE INLET AND OUTLET LOCATION MAY VARY (SEE SITE PLAN)
SCALE: N.T.S.



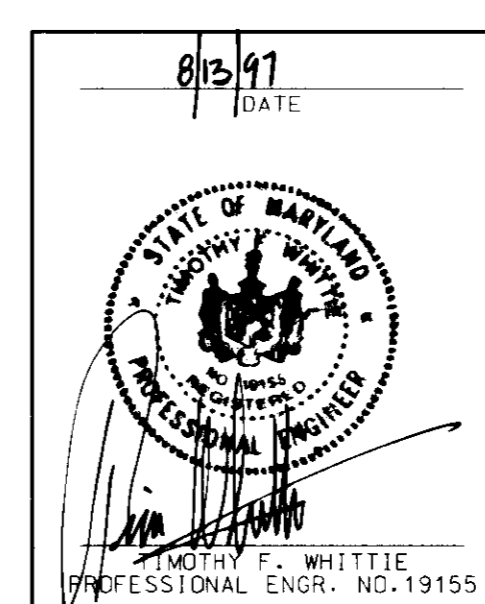
DETAIL: LAYOUT OF WQSC, I-5, AND M-2
NOT TO SCALE


DATE	NUMBER	REVISION DESCRIPTION
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 OF ENGINEER		0/13/97 DATE
BY THE DEVELOPER:		
"I AM 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."		
 SIGNATURE OF DEVELOPER		8/20/97 DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.		
 HOWARD S.C.D.		DATE
REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.		
 U.S. NATURAL RESOURCES CONSERVATION SERVICE		DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
 CHIEF-DEVELOPMENT ENGINEERING DIVISION		9/20/97 DATE
 CHIEF DIVISION OF LAND DEVELOPMENT		10/6/97 DATE
 DIRECTOR		10/3/97 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		
 COUNTY HEALTH OFFICER		10-3-97 DATE

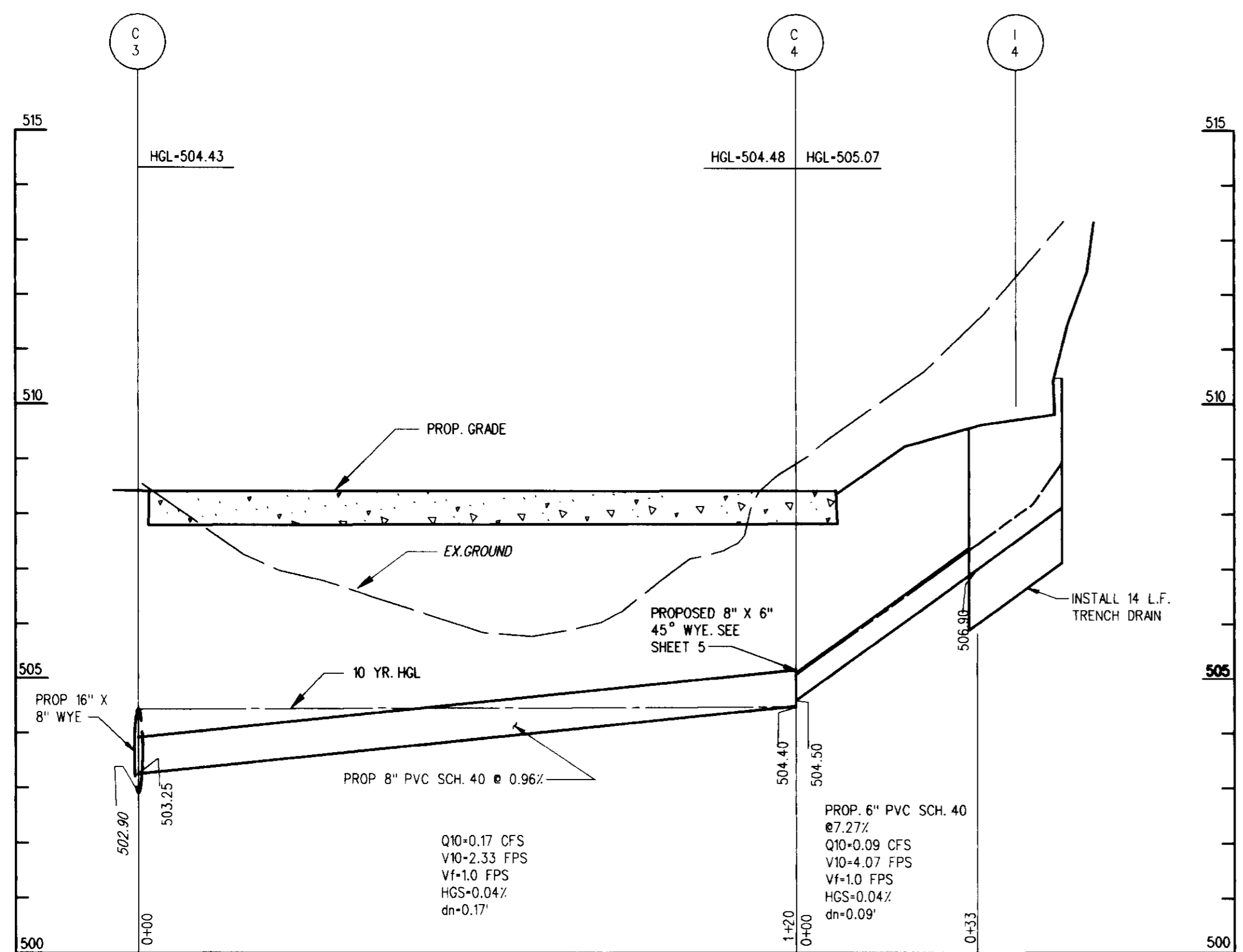
OWNER MJF ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCCUAN
PHONE: (410) 730-9091

DEVELOPER EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. ROBERT CASERTA
PHONE: (301)-513-7511

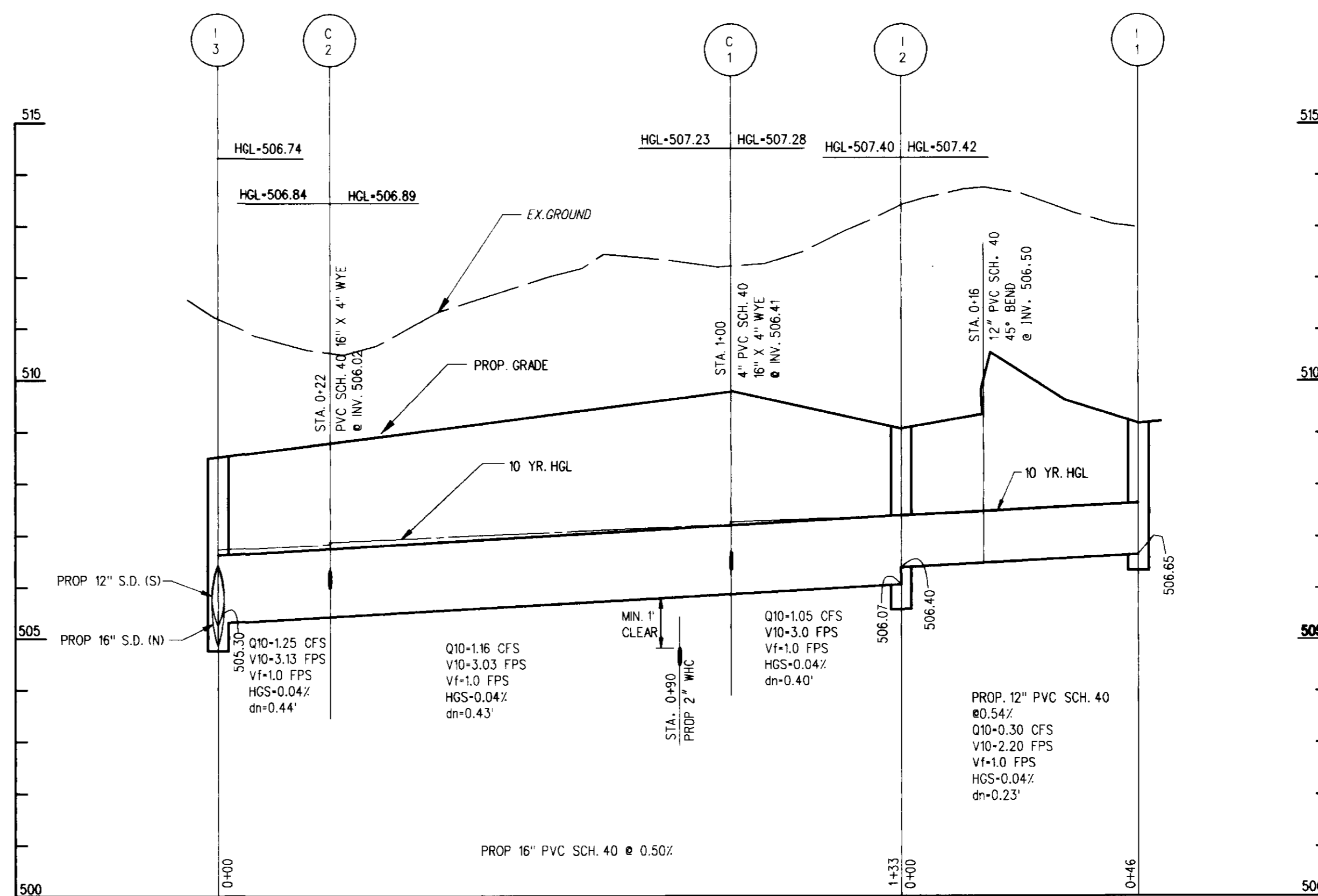
SDP# 97-62
PLANNING BOARD APPROVAL



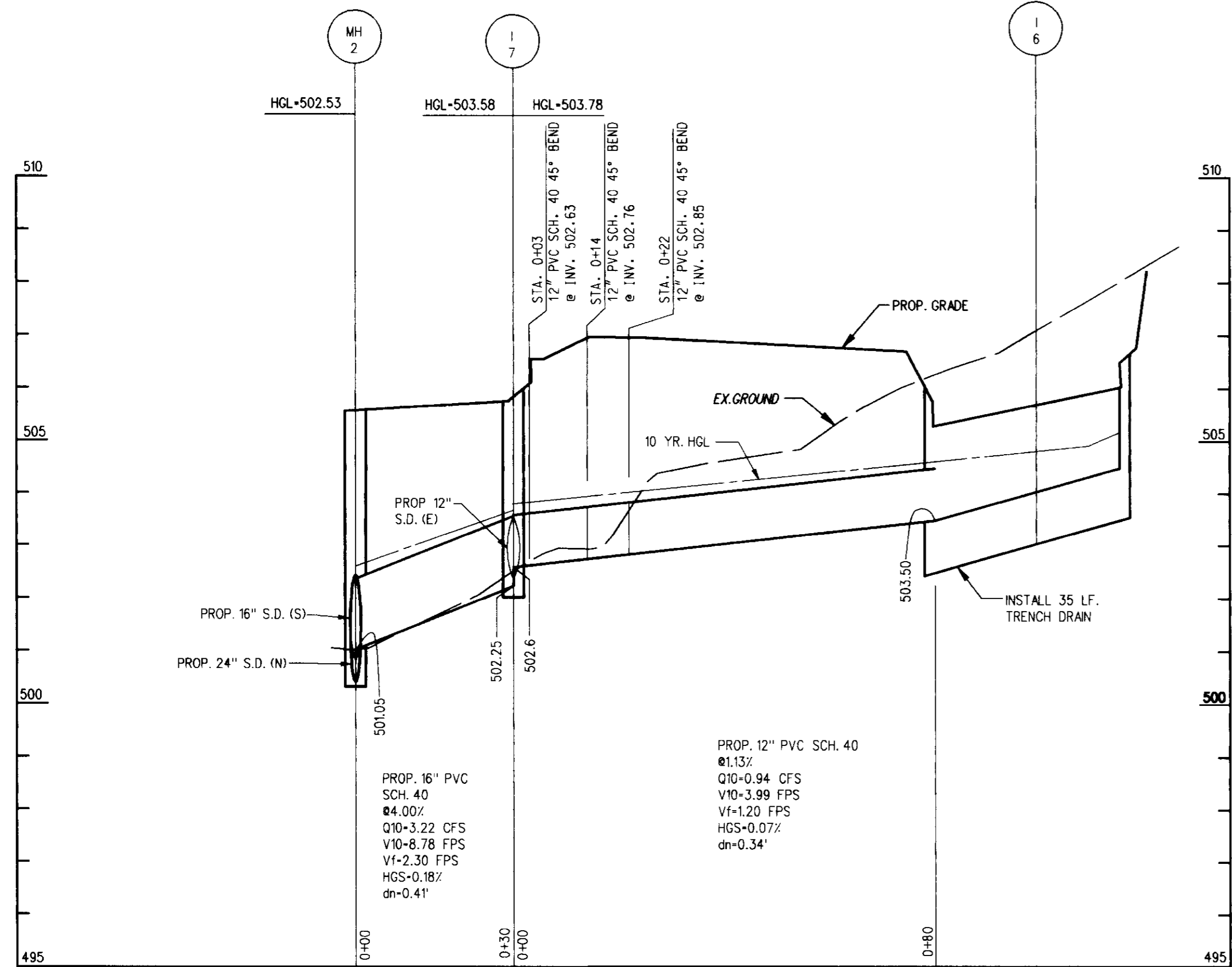
 FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090		TITLE: FOR AN EXXON STATION AT PARCEL A-2 PARCEL A-4 ELLICOTT CITY, MARYLAND 21040 OFFICE: BERRYARCH PARK
CENSUS TRACT NO. 6023.02 PLAT NO. 12535	WATER CODE: 606 SEWER CODE: 3667400	TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND
DESIGN BY: JRG	SCALE: AS NOTED	PROJECT NO.: 96098
DRAWN BY: KN/LF	DATE: 07/14/97	DRAWING NUMBER
CHECKED BY: TFW	APPROVED: .	8 OF 15



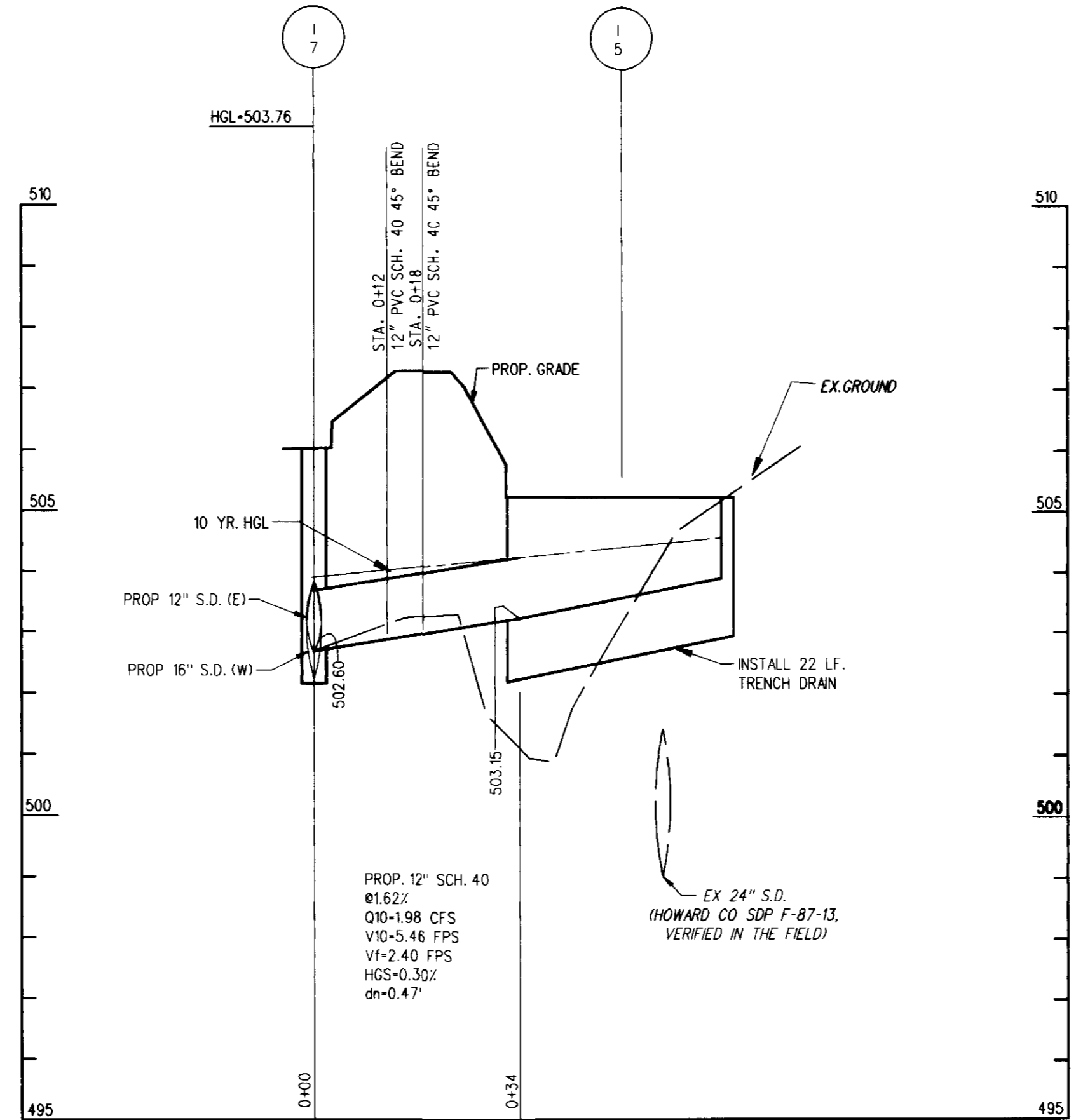
STORM DRAIN PROFILE
SCALE: HORIZ. 1" = 20'
VERT. 1" = 2'



STORM DRAIN PROFILE
SCALE: HORIZ. 1" = 20'
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 SIGNATURE OF ENGINEER		8/13/97 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."		
 SIGNATURE OF DEVELOPER		8/20/97 DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.		
 HOWARD S.C.D.		DATE
REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.		
U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE		
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
 CHIEF-DEVELOPMENT ENGINEERING DIVISION		9/24/97 DATE
 CHIEF-DIVISION OF LAND DEVELOPMENT		10/16/97 DATE
 DIRECTOR		10/7/97 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		
 COUNTY HEALTH OFFICER		10-3-97 DATE
OWNER: MJF ASSOC. LTD. PARTNERSHIP C/O MDG COMPANIES 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 ATTN: MR. PAT MCCUAN PHONE: (410) 730-9091		
DEVELOPER: EXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. ROBERT CASERTA PHONE: (301) 513-7511		
SDP# 97-62 PLANNING BOARD APPROVAL		
 DATE: 8/13/97		
 ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090		
CENSUS TRACT NO. 6023.02 WATER CODE: 502 PLAT NO. 12535 SEWER CODE: 3637400 TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND		
TITLE: 0650 CENTRE PARK DRIVE SECT. 1, AREA 1 PARCEL A-1 COLUMBIA 100 ELLIOTT CITY, MARYLAND 21045 OFFICE: RESEARCH PARK		
STORM DRAIN PROFILES AND DETAILS		
DESIGN BY: JBG	SCALE: AS NOTED	PROJECT NO.: 96098
DRAWN BY: KN/LF	DATE: 07/15/97	DRAWING NUMBER
CHECKED BY: TFW	APPROVED:	7 OF 15

GENERAL NOTES

- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- VARIOUS TYPES OF EQUIPMENT ARE AVAILABLE COMMERCIALY FOR THE CLEANOUT OF SYSTEMS. THE MOST COMMONLY USED EQUIPMENT AND TECHNIQUES USED FOR CLEANING SUBSURFACE SYSTEMS ARE VACUUM PUMP & WATERJET SPRAY. BOTH SYSTEMS ARE GENERALLY MOUNTED ON A SELF-CONTAINED VEHICLE AND CAN EFFECTIVELY REMOVE STONES, LEAVES, LITTER, AND SEDIMENT DEPOSITS FROM SUMPS AND CHAMBERS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED UNIT PRIOR TO THE ORDER AND INSTALLATION OF THE STORMCEPTOR.
- CONTRACTOR MAY USE A FIBERGLASS STORMCEPTOR (STA 1200) IN LIEU OF A CONCRETE STORMCEPTOR WITH PERMISSION FROM THE HOWARD COUNTY DEVELOPMENT ENGINEERING DIVISION.

WATER QUALITY OPERATIONS AND MAINTENANCE NOTES

- INSPECT THE STORMCEPTOR ON A MONTHLY BASIS AND NOTE SEDIMENT AND OIL ACCUMULATIONS. MORE FREQUENT INSPECTIONS ARE APPROPRIATE WHERE OIL SPILLS OCCUR REGULARLY. HYDRO-CONDUIT CAN PROVIDE ADVICE ON SAMPLING EQUIPMENT.
- SEDIMENT SHOULD BE REMOVED ANNUALLY, OR WHENEVER THE ACCUMULATION REACHES 50% OF THE OPERATING DEPTH, FROM BASE TO DRAIN INVERT. MORE FREQUENT REMOVAL OF SEDIMENTS MAY BE NECESSARY IN AREAS OF NEW CONSTRUCTION, OR WHERE VEGETATION HAS NOT YET BEEN ESTABLISHED.
- VACUUM TRUCKS ARE USED TO REMOVE THE SEDIMENT AND OIL FROM THE STORMCEPTOR TREATMENT CHAMBER. OIL LEVELS GREATER THAN 2.5 CM SHOULD BE REMOVED IMMEDIATELY BY A LICENSED WASTE MANAGEMENT FIRM, AND SIGNIFICANT SPILLS MUST BE REPORTED TO THE APPROPRIATE REGULATORY AGENCY.
- THE PIPES AND STRUCTURAL PARTS SHALL BE CLEANED AND REPAIRED AS NEEDED. REPAIR AND/OR REPLACEMENT OF PARTS SHALL BE IN KIND.
- ALL MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR BY THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.
- MINIMIZE SURFACE EROSION FROM PAVEMENT SURFACES AT ALL TIMES: MAINTAIN GRASS, SOO, AND/OR MULCH COVERAGE UPON LANDSCAPINGS.
- REMOVE DEBRIS ON TOP OF INLET GRATES AFTER EVERY RAINFALL.
- AT INTERVALS NOT EXCEEDING 1 YEAR, OR AS NEEDED, REMOVE ALL GREASE AND OILS, SILTS AND AGGREGATES, AND DEBRIS FROM ALL INLETS AND STRUCTURES.
- THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
 - ALL LIQUID MATERIAL IN THE SEPARATOR INLET SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
 - THE SOLID MATERIAL SHALL BE DELIVERED TO AN APPROVED SANITARY LANDFILL.

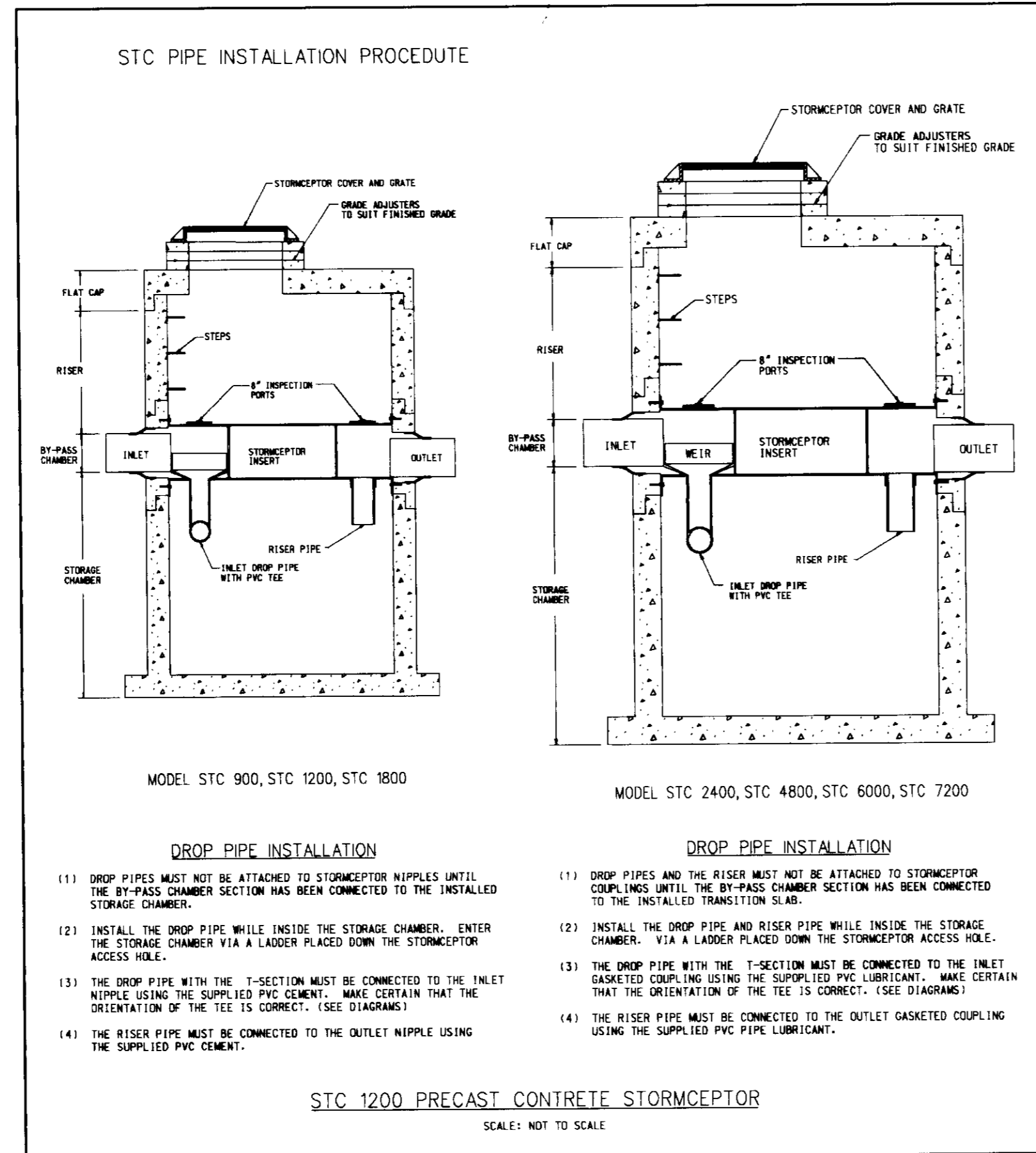
REQUIRED PROCEDURES AND INSPECTIONS FOR INGROUND WATER QUALITY FACILITY

THE FOLLOWING INSPECTIONS ARE REQUIRED DURING CONSTRUCTION: (ADDITIONAL INSPECTIONS MAY BE REQUIRED AND NOTED BY THE INSPECTOR.)

- PRECONSTRUCTION MEETING: AN OPPORTUNITY TO REVIEW SITE PLANS, DISCUSS THE PURPOSE OF THE FACILITY AND TO ANSWER QUESTIONS REGARDING CONSTRUCTION AND/OR INSPECTION PROCEDURES.
- CONSTRUCTION: INSPECTIONS WILL BE MADE DURING THE CONSTRUCTION OF THE FACILITY TO ENSURE ACCORDANCE WITH THE PERMITS. SPECIFIC INSPECTION REQUIREMENTS WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING. INSPECTIONS TO BE MADE AT, BUT NOT LIMITED TO, THE FOLLOWING INSTALLATION STEPS:
 - INSTALLATION OF SUBGRADE AND SUBBASE
 - FINAL INSPECTION

CONTRACTOR INSTALLATION INSTRUCTIONS: PRECAST CONCRETE STORMCEPTOR

- STAKE-OUT THE LOCATION OF THE STORMCEPTOR AND EXCAVATE HOLE. EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. INSTALL A 12" DEEP (OR AS REQUIRED) LAYER OF COMPACTED (95% STANDARD PROCTOR DENSITY OR LOCAL AND STATE REQUIREMENTS, AS DIRECTED BY THE INSPECTOR) AGGREGATE SUBBASE AT BOTTOM OF EXCAVATION. INSTALL MALE OR SHORTING AS NEEDED.
- CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM BASE OF THE STORAGE CHAMBER (BOTTOM OF UNIT'S SLAB) TO THE INVERT OF STORMCEPTOR BYPASS CHAMBER INLET ELEVATION (IF FIBERGLASS INSERT) OR TO THE INVERT OF SUBGRADE PRIOR TO POURING. CHECK ELEVATION OF TOP OF SUBBASE ELEVATION. CHECK ELEVATION OF INSTALLED SUBBASE AND ADJUST AS NEEDED. SECURE INSPECTOR APPROVAL OF SUBGRADE AND SUBBASE.
- INSTALL STORAGE CHAMBER. INSTALL SCREW INSERTS INTO BASE OF STORAGE CHAMBER. ATTACH CABLES OR CHAINS TO ALL 3 LIFTING LUGS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE LIFT AND PLACE THE BASE SECTION OF THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE. MAKE SURE THAT THE BASE IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. INSTALL RUBBER GASKET ON BASE UNIT AND COAT WITH LUBRICATING GREASE (PROVIDED IN SHIPMENT). IF NOT PRELUBRICATED, INSTALL ADDITIONAL STORAGE CHAMBER SECTIONS, AS REQUIRED (PROCEDURE IS SAME AS STEP 3.).
- INSTALL REDUCING SLAB. STORMCEPTOR MODELS STC-2400, STC-3600, STC-4800, STC-6000 AND STC-7200) CHECK THAT SECTION IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. INSTALL RUBBER GASKET ON TRANSITION SLAB SPIGOT AND COAT WITH LUBRICATING GREASE (PROVIDED IN SHIPMENT).
- INSTALL BYPASS CHAMBER OF STORMCEPTOR WITH FACTORY INSTALLED STORMCEPTOR INSERT. LIFT BYPASS SECTION AND INSTALL, WHILE CHECKING ALIGNMENT AND GRADE OF INLET AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS CHAMBER MUST BE DISCONNECTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIRS (INSIDE INSERT). INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE, IF NOT PRELUBRICATED.
- INSTALL STORMCEPTOR DROP PIPES ACCORDING TO STC PIPE INSTALLATION PROCEDURE.
- INSTALL RISER SECTION. LIFT RISER SECTION AND INSTALL, WHILE CHECKING THAT SECTION IS SET FLUSH AND IS AT PROPER ELEVATION AND THAT UNIT IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS REQUIRED IF STEPS ARE INCLUDED. ALIGN STEPS ABOVE INLET INSPECTION PORT. NOTE: FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.
- INSTALL TOP CAP WITH OPENING FOR STORMCEPTOR COVER. IF OPENING IS OFFSET (NOT CENTERED) THE TOP CAP OPENING SHOULD BE ORIENTED ABOVE THE STORMCEPTOR INLET INSPECTION PORT (PLUG). BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL SHOULD BE COMPACTED TO 95% STANDARD PROCTOR DENSITY, OR LOCAL AND STATE REQUIREMENTS, AS DIRECTED BY THE INSPECTOR.
- INSTALL AND SET GRADE ADJUSTING RINGS, AS NEEDED.
- INSTALL INLET AND OUTLET STORM DRAIN PIPES. CONNECT INLET AND OUTLET STORM DRAIN PIPES WITH FLEXIBLE BOOTS (WHEN PROVIDED) AND WITH NON-SHRINK GROUT WHEN NO FLEXIBLE BOOTS ARE PROVIDED. THE INVERT OF THE INLET AND OUTLET PIPE IS TO MATCH WITH THE INVERT OF THE STORMCEPTOR INSERT. FLEXIBLE BOOT INSTALLATION PROCEDURES: CENTER THE PIPE IN THE BOOT OPENING. LUBRICATE THE OUTSIDE OF THE PIPE AND/OR THE INSIDE OF THE BOOT IF THE PIPE OUTSIDE DIAMETER IS THE SAME AS THE INSIDE DIAMETER OF THE BOOT. POSITION THE PIPE CLAMP IN THE GROOVE OF THE BOOT WITH THE SCREW AT THE TOP. TIGHTEN THE PIPE CLAMP SCREW TO 60 INCH POUNDS. IF THE PIPE IS MUCH SMALLER THAN THE BOOT, LIFT THE BOOT SUCH THAT IT CONTACTS THE BOTTOM OF THE PIPE WHILE TIGHTENING THE CLAMP TO ENSURE EVEN CONTRACTION OF THE RUBBER. MOVE THE PIPE HORIZONTALLY AND/OR VERTICALLY TO BRING IT TO GRADE.
- THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN THE SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED).
- FINAL INSPECTION.



DROP PIPE INSTALLATION

- DROP PIPES MUST NOT BE ATTACHED TO STORMCEPTOR NIPPLES UNTIL THE BY-PASS CHAMBER SECTION HAS BEEN CONNECTED TO THE INSTALLED TRANSITION SLAB.
- INSTALL THE DROP PIPE WHILE INSIDE THE STORAGE CHAMBER. ENTER THE STORAGE CHAMBER VIA A LADDER PLACED DOWN THE STORMCEPTOR ACCESS HOLE.
- THE DROP PIPE WITH THE T-SECTION MUST BE CONNECTED TO THE INLET NIPPLE USING THE SUPPLIED PVC CEMENT. MAKE CERTAIN THAT THE ORIENTATION OF THE TEE IS CORRECT. (SEE DIAGRAMS)
- THE RISER PIPE MUST BE CONNECTED TO THE OUTLET NIPPLE USING THE SUPPLIED PVC CEMENT.

STC 1200 PRECAST CONCRETE STORMCEPTOR

SCALE: NOT TO SCALE

SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR SMM FACILITIES

STAGE	DEVELOPER'S/ENGINEER APPROVAL	INSPECTOR'S APPROVAL
	INITIALS DATE	INITIALS DATE
1. PRE-CONSTRUCTION MEETING *		
2. INSTALLATION OF STRUCTURES AND ASSOCIATED STORM DRAINAGE: A. FOOTING SUBGRADE PRIOR TO POURING. *		
3. SITE IS PERMANENTLY STABILIZED, SEDIMENT CONTROL MEASURES REMOVED AND ALL SEDIMENT AND DEBRIS REMOVED FROM THE STRUCTURE. *		
4. FINAL INSPECTION *		

NOTE: SEE CONSTRUCTION SPECIFICATIONS FOR DETAILED REQUIREMENTS.
* MANDATORY NOTIFICATION/APPROVAL OF INSPECTOR PRIOR TO PROCEEDING WITH NEXT STAGE.

Stormceptor® Order Request Form

Contractor Information

Name: _____ Address: _____ City: _____ State: _____ Zip Code: _____ Contact: _____ Phone: _____ Fax: _____

Owner Information

Name: EXXON COMPANY, USA Phone: (301) 513-7511 Fax: (301) 513-7532

Stormceptor® Model

STA	Model	Insert Size
900	3600	22"
1200	4800	32"
1800	6000	44"
2400	7200	Custom

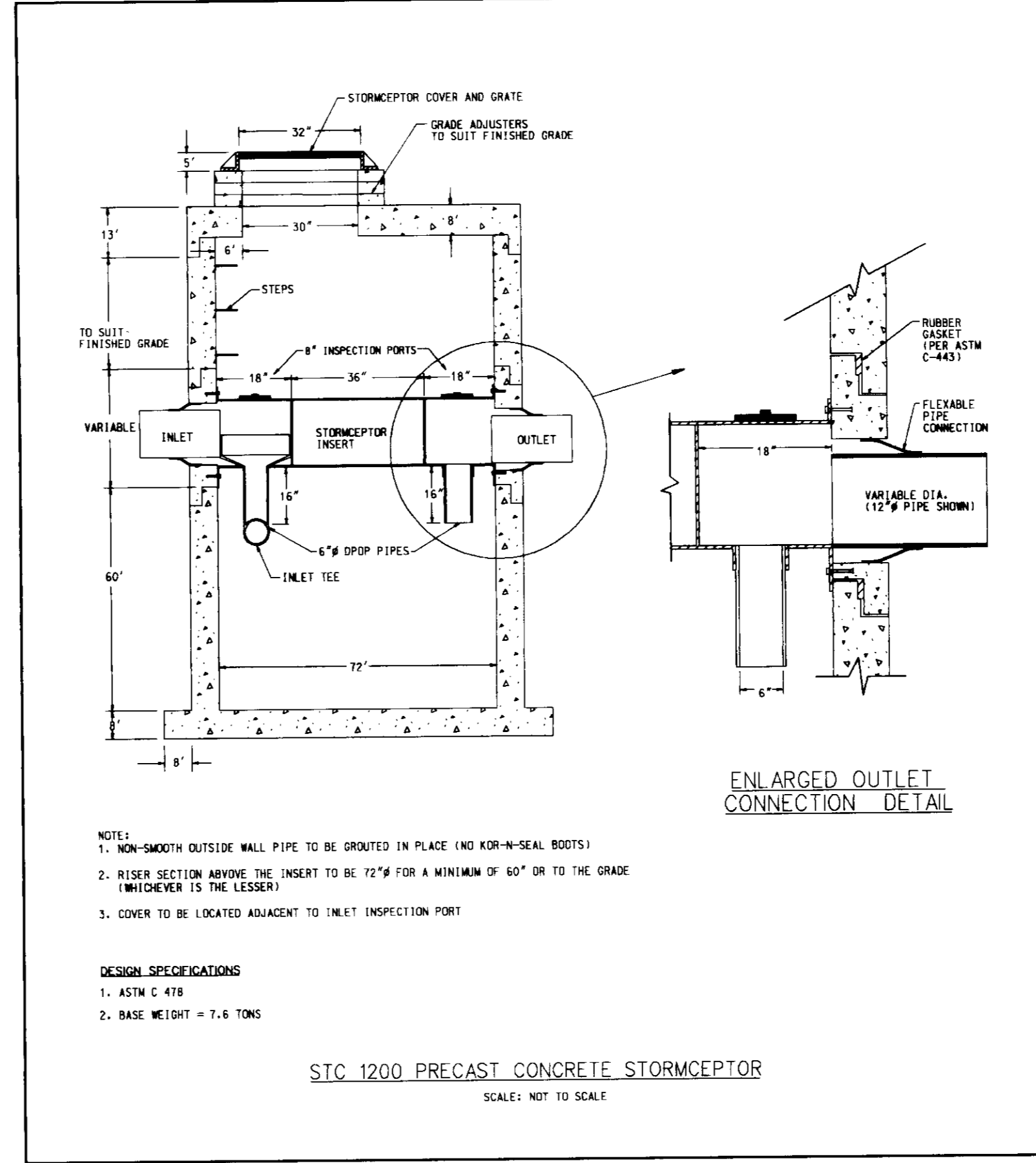
Insert Size

Monrovia, MD 50 Top Elevation (ft.) 505.50 Inlet Pipe Invert (ft.) 499.50 Outlet Pipe Invert (ft.) 495.52 Pipe Type: RCP CL. IV / PVC Pipe Inside Diameter (in) [10] 24" Pipe Outside Diameter (in) [00] 32"

Project Name: EXXON - CENTRE PARK DRIVE
Approximate time frame until required delivery (weeks): _____
Delivery Address: Street _____ City _____ State _____ Zip Code _____
Designer Company: FREDERICK WARD ASSOCIATES, INC.
Designer Contact: JOHN GONZALEZ Phone: (410) 838-7900 Fax: (410) 853-1243

Please fax this sheet back to Hydro Conduit/Virginia Precast at (804) 798-3426
Attn: Dave Brinner/Bryant Lowery (Phone: 1-800-999-2278)

For credit information/Applications contact Carol Broadus at (804) 798-6068
For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1-800-762-4703



- NOTES:**
- NON-SMOOTH OUTSIDE WALL PIPE TO BE GROUDED IN PLACE (NO KDF-N-SEAL BOOTS)
 - RISER SECTION ABOVE THE INSERT TO BE 72" FOR A MINIMUM OF 60" OR TO THE GRADE (WHICHEVER IS THE LESSER)
 - COVER TO BE LOCATED ADJACENT TO INLET INSPECTION PORT

DESIGN SPECIFICATIONS

- ASTM C 478
- BASE WEIGHT = 7.4 TONS

STC 1200 PRECAST CONCRETE STORMCEPTOR

SCALE: NOT TO SCALE

THE PRECAST CONCRETE STORMCEPTOR (STC)

SCALE: NOT TO SCALE

FLOW AND CAPACITIES*

MODEL	MAX. TREATED FLOW RATE (gpm)	SEDIMENT CAPACITY (CY)	OIL CAPACITY (US GALS)	TOTAL CAPACITY (US GALS)
STC 900	285	70	280	910
STC 1200	285	110	280	1230
STC 1800	285	195	280	1860
STC 2400	475	210	560	2405
STC 3600	475	390	560	3720
STC 4800	800	515	675	5030
STC 6000	800	675	675	6205
STC 7200	1110	800	680	7510

* APPROXIMATE
** WITHOUT BY-PASSING

DIMENSIONS*

MODEL	DIAM (ft)	DROP PIPE DIAM. (in) (DP)	HL (ft)	Tot (ft)	Wt (lbs)
STC 900	6	6	42	8	8
STC 1200	6	6	60	8	8
STC 1800	6	6	96	8	8
STC 2400	8	8	76	8	0
STC 3600	8	8	118	8	0
STC 4800	10	10	106	12	0
STC 6000	10	10	130	12	0
STC 7200	12	12	114	14	0

FLOW AND CAPACITIES**

PIPE DIAMETER D (in)	PIPE MATERIAL	MIN H (in)	H (in)	L (in)
10	PVC	22	36	8
10	CONC / PE RIB	22	36	7
12	PVC / PE RIB	22	36	9
12	CONCRETE	22	42	11
15	PVC / PE RIB	22	42	9.5
15	CONCRETE	22	48	11.5
18	PVC / PE RIB	22	48	10
18	CONCRETE	22	48	11
21	PVC / PE RIB	32	48	9.5
21	CONCRETE	32	54	11.5
24	PVC	32	48	9
24	PE RIBBED	32	54	10
24	CONCRETE	32	54	11
27	PVC	32	54	8.5
27	CONCRETE	44	60	11.5
30	CONCRETE	44	60	12
33	CONCRETE	44	60	12.5
36	CONCRETE	44	60	13

NOTES:

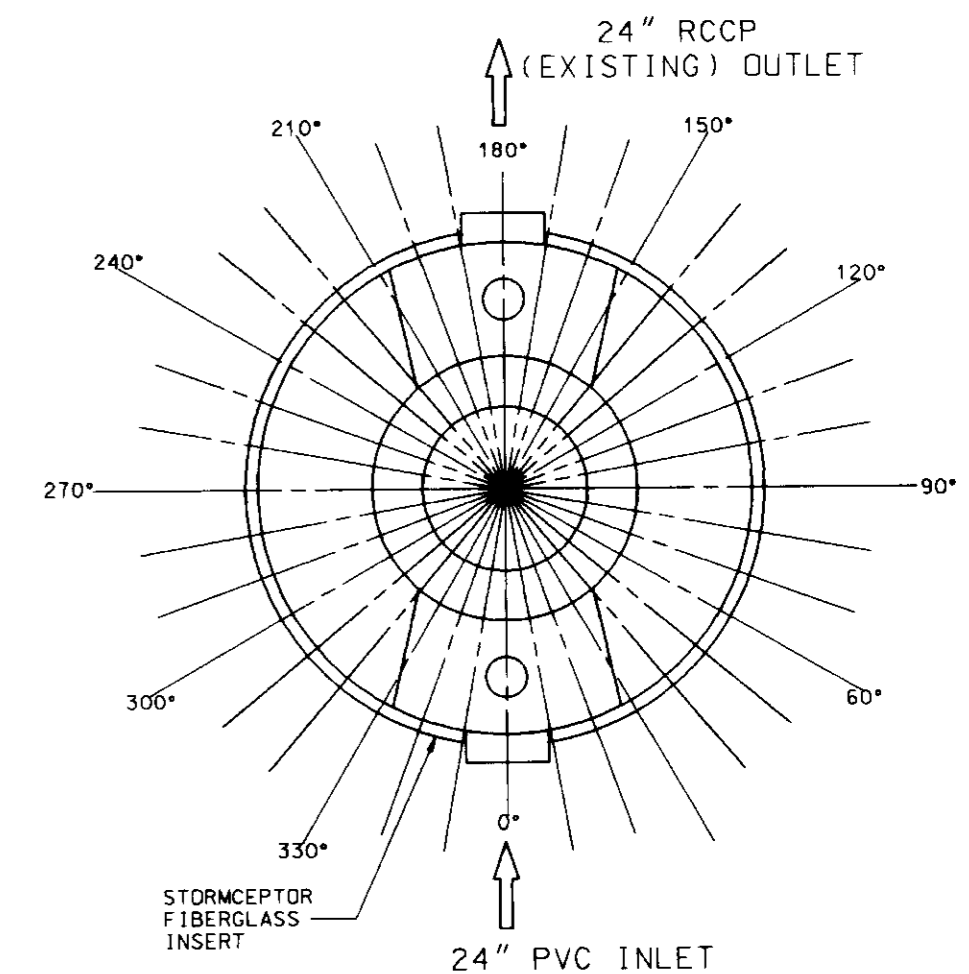
- THE STORMCEPTOR IS PROTECTED BY U.S. PATENT NO. 4,985,148
- CAST IRON FRAME A COVER TO BE APPROVED BY STORMCEPTOR CORPORATION. STORMCEPTOR TO BE EMBEDDED ON COVER.
- BEFORE BACKFILL AND GENERAL INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND A PROFESSIONAL ENGINEER BASED ON SITE SPECIFIC SOIL CONDITIONS, SUBJECT TO THE APPROVAL OF THE REGULATORY AGENCIES.
- SIZING OF THE STORMCEPTOR SHALL BE IN ACCORDANCE WITH THE GUIDELINES PROVIDED BY STORMCEPTOR CORPORATION, SUBJECT TO THE APPROVAL OF THE REGULATORY AGENCIES.
- THE STORMCEPTOR SHOULD BE MAINTAINED ANNUALLY AND IMMEDIATELY FOLLOWING ANY KNOWN SPILLS.
- THE STORMCEPTOR CONFORMS TO ASTM C 478 DESIGN SPECIFICATIONS / STANDARDS.
- THE 12" DIAMETER SECTION SHOULD EXTEND A MIN. OF 5' ABOVE THE INSERT OR TO THE SURFACE FOR ACCESS TO THE INSPECTION PORTS.
- A MINIMUM OF 1 STEP IS TO BE USED IN THE ACCESS WAY.
- COVER TO BE SET 6" FROM ACCESS WALL ADJACENT TO INLET INSPECTION PORT.
- NON-SMOOTH WALL O.D. PIPE TO BE GROUDED IN PLACE IMMEDIATELY UPON FALL FROM INLET TO OUTLET.
- FOR FURTHER TECHNICAL INFORMATION IS AVAILABLE FROM STORMCEPTOR CORPORATION (1-800) 762-4703

PROPOSED OUTLET END TO TIE INTO EXISTING 24" RCP. INLET INVERT AND TOP ELEVATION STATED ON PLANS TO BE ADJUSTED ACCORDINGLY.

STORMCEPTOR SEPARATOR SPECIFICATIONS (CONCRETE)

SEE STORM DRAIN PROFILES ON SHEET 6 FOR INLET INVERT.

SEE NOTES 8 AND 9 IN CONTRACTOR INSTALLATION INSTRUCTIONS, THIS SHEET.



STORMCEPTOR INSERT OUTLET LOCATION

NOT TO SCALE

DATE:	NUMBER:	REVISION DESCRIPTION:
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
CHIEF-DEVELOPMENT ENGINEERING DIVISION	8	9/26/97 DATE
CHIEF-DIVISION OF LAND DEVELOPMENT		10/6/97 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		10/1/97 DATE
COUNTY HEALTH OFFICER	10-3-97	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: _____ DATE: 8/13/97

SIGNATURE OF ENGINEER DATE

BY THE DEVELOPER:

I 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: _____ DATE: 8/20/97

SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD S.C.D. DATE

OWNER: M/JF ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCCLELLAN
PHONE: (410) 730-9091

DEVELOPER: EXXON COMPANY, U.S.A.
6301 IYV LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: (301)-513-7511

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS

5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090

PAS NO: 2-0337 FWA JOB NUMBER: 96098 FWA DRAWING FILE NAME: STORM

CENSUS TRACT NO.: 6023.02 WATER CODE: 002
PLAT NO. 12535 SEWER CODE: 557400

TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

TITLE: 8800 CENTRE PARK DRIVE FOR AN EXXON STATION AT BULLCOTT CITY, MARYLAND 21048 OFFICE: RESEARCH PARK

DESIGN BY: JBC SCALE: AS SHOWN PROJECT NO.: 96098 DRAWING NUMBER: 6 OF 15

DRAWN BY: K/W/F DATE: 07/15/97 CHECKED BY: T/W APPROVED: _____

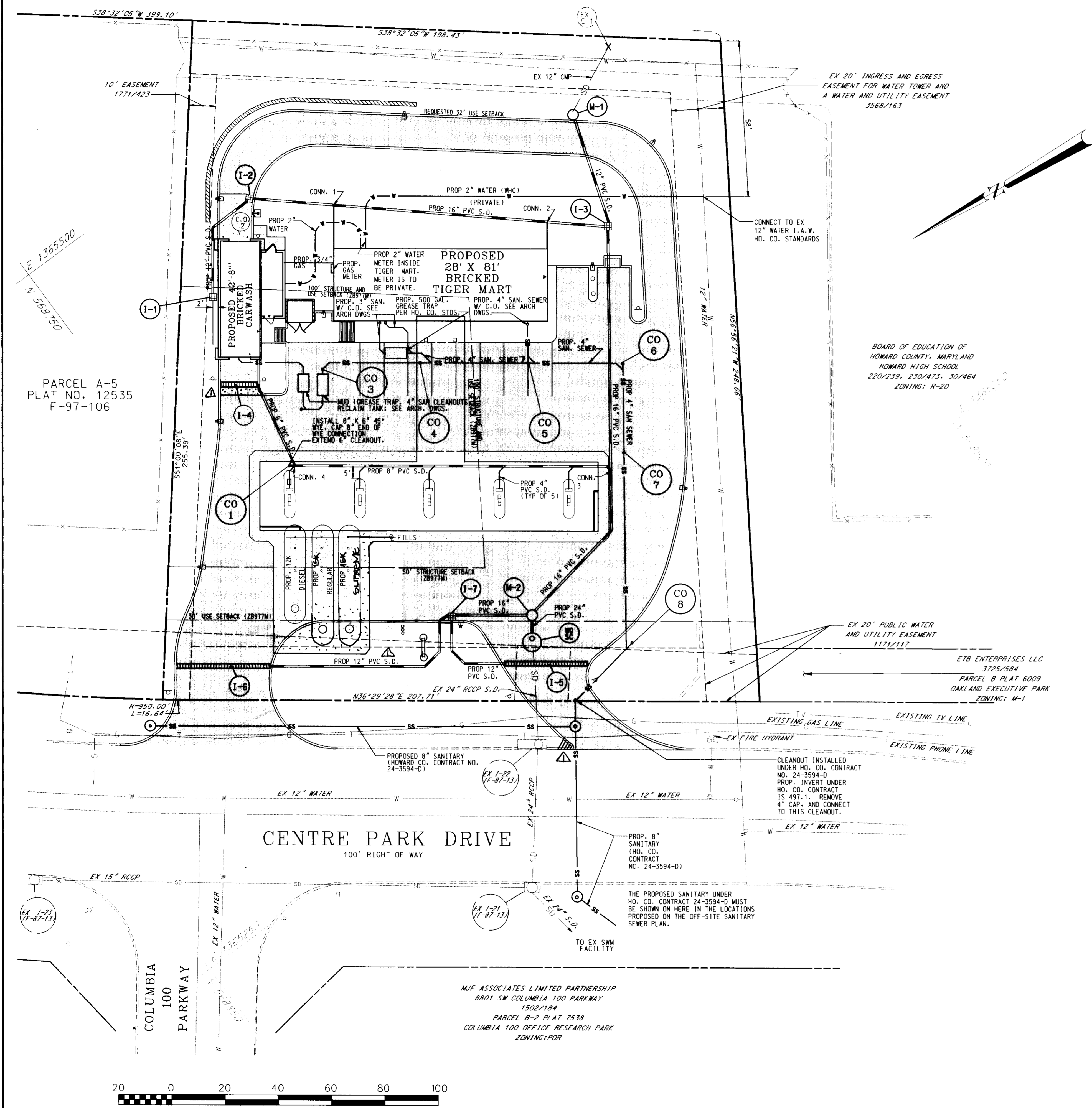
SDPH 97-62
PLANNING BOARD APPROVAL

8/13/97 DATE

STATE OF MARYLAND PROFESSIONAL ENGINEER

MICHAEL F. WHITTE
PROFESSIONAL ENGR. NO. 19155

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20



GENERAL NOTES FOR UTILITY CONSTRUCTION

1. INFORMATION CONCERNING THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES WAS TAKEN FROM RECORDS PROVIDED BY UTILITY COMPANIES AND HOWARD COUNTY DPW. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. FREDERICK WARD ASSOCIATES, INC. MAKES NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF UTILITIES AND THEIR LOCATIONS, SHOWN OR NOT SHOWN, ON THESE DRAWINGS. SUCH INFORMATION PROVIDED ON THESE PLANS IS FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE CONTRACTOR SHALL VERIFY THE PRESENCE, ABSENCE, AND LOCATIONS OF ALL UTILITIES, TO HIS SATISFACTION, PRIOR TO ANY WORK UNDER THIS CONTRACT.
2. THE CONTRACTOR IS TO NOTIFY MISS UTILITY AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION AND EXCAVATION. PHONE 1-800-257-7777.
3. PRIOR TO ANY CONSTRUCTION UNDER THIS CONTRACT, CONTRACTOR SHALL TEST PIT TO VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WHERE UTILITY TIE-INS AND CROSSINGS WILL BE ENCOUNTERED. ANY DISCREPANCIES IN HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DRAWINGS, PARTICULARLY AT PROPOSED STORM DRAIN, SANITARY, AND WATER CONNECTIONS, SHALL BE IMMEDIATELY REPORTED TO FREDERICK WARD ASSOCIATES PRIOR TO CONTINUATION OF WORK UNDER THIS CONTRACT. THIS IS FOR THE PURPOSE OF IDENTIFYING ANY CONFLICTS WHICH MAY IMPACT THE PROPOSED DESIGN, AND RESOLUTION OF SAID CONFLICTS PRIOR TO CONTINUATION OF WORK.
4. ANY EXISTING UTILITIES AND AMENITIES WHICH ARE DAMAGED DUE TO TEST PITTING AND UTILITY CONSTRUCTION SHALL BE REPAIRED IN KIND AT THE SOLE EXPENSE OF THE CONTRACTOR.
5. ANY SEDIMENT CONTROL MEASURES REMOVED FOR THE PURPOSE OF UTILITY CONSTRUCTION SHALL BE REPLACED IN KIND AT THE END OF THE DAY BY THE UTILITY CONTRACTOR.
6. ALL STORM DRAIN, WATER, SEWER, AND PRODUCT PIPING UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION, AND EXXON SPECIFICATIONS.
7. ANY PROPOSED GAS AND ELECTRIC SERVICE TO BE COORDINATED IN THE FIELD BY THE EXXON FIELD ENGINEER WITH BGE FOR LOCATION AND SIZE OF SERVICE.
8. WATER SERVICE AND METER, AND SANITARY SERVICE ARE TO BE PRIVATE SYSTEMS.
9. INVERTS IDENTIFIED AS BEING MEASURED OR VERIFIED IN THE FIELD WERE DONE SO BY EITHER TEST PITTING OR INTERPOLATING GRADES BETWEEN STRUCTURES SURVEYED. CONTRACTOR SHALL VERIFY THE SAME TO HIS SATISFACTION, AS THIS INFORMATION IS SHOWN SOLELY FOR THE CONTRACTOR'S CONVENIENCE.

GENERAL NOTES FOR WATER AND SEWER CONSTRUCTION

1. WATER METER LID AND SANITARY CLEANOUT TOPS TO BE ADJUSTED TO MATCH CROSS-PITCH AND SLOPE OF PROPOSED GRADES. CLEANOUT TOPS TO BE IDENTIFIED AS SANITARY CLEANOUTS, THREADED, AND CONTAIN COUNTERSUNK PLUGS.
2. UTILITIES SHALL MAINTAIN A MINIMUM 12-INCH CLEARANCE WHEN CROSSING EXISTING AND PROPOSED UTILITIES ON AND OFF SITE.
3. WATER SERVICES SHALL HAVE A MINIMUM 3.5 FOOT COVER OVER CROWN OF PIPE.
4. WATER SERVICE SHALL BE TYPE K COPPER TUBING OR AS APPROVED BY HOWARD COUNTY. SANITARY SEWER PIPE SHALL BE PVC SCH. 40, OR AS APPROVED BY HOWARD COUNTY.
5. WATER AND SEWER SERVICES TO BE INSTALLED TO 12" INSIDE FACE OF BUILDING, WHEREIN CONNECTION TO BUILDING UTILITIES SHALL BE COORDINATED WITH THE BUILDING CONTRACTOR.

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

1. INSTALL EXPANSION JOINTS BETWEEN CONCRETE APRONS AND TRENCH DRAINS.
2. REFER TO SITE GRADING PLAN FOR TRENCH DRAIN GRADE ELEVATIONS.
3. TRENCH DRAIN GRATES AT I-4, I-5, AND I-6 SHALL BE 14 FEET, 30 FEET, AND 35 FEET LONG RESPECTIVELY. WARP OUTER PANS DRAINING TO THESE DRAINS SUCH THAT RUNOFF WILL NOT BYPASS DRAINS. TRENCH DRAIN GRATES AT I-5 AND I-6 SHALL EXTEND FROM FACE OF CURB TO FACE OF CURB.
4. MANHOLE LIDS AND INLET GRATES SHALL BE TRAFFIC BEARING AND BICYCLE SAFE.
5. ALL MANHOLE LIDS, INLET GRATES AND CLEANOUT TOPS TO BE ADJUSTED TO MATCH CROSS-PITCH AND SLOPE OF PROPOSED GRADES. CLEANOUT TOPS TO BE THREADED AND CONTAIN COUNTERSUNK PLUGS.
6. STORM DRAIN PIPE TO BE PVC SCH. 40, OR AS APPROVED BY HOWARD COUNTY.
7. REFER TO STORM DRAIN PROFILES ON SHEETS 7 AND 8 FOR SIZE AND TYPE OF STORM DRAINS.

STRUCTURE SCHEDULE

NO.	DESCRIPTION	INV. IN	INV. OUT	GRATE EL.
I-1	CATCH BASIN EXXON STD., 1090-6	-	506.65	509.50
I-2	TYPE 'S' INLET HO. CO. STD. S.D. - 4.22	506.4	506.07	509.40
I-3	TYPE 'S' INLET HO. CO. STD. S.D. - 4.22	505.75 (E) 505.40 (N)	505.30	509.00
I-4	TRENCH DRAIN EXXON STD., 1090-6	-	506.90	SEE GRADING PLAN
I-5	TRENCH DRAIN EXXON STD., 1090-6	-	503.15	SEE GRADING PLAN
I-6	TRENCH DRAIN EXXON STD., 1090-6	-	503.5	SEE GRADING PLAN
I-7	PRECAST WR INLET HO. CO. STD S.D. - 4.35	502.60 (N & W)	502.25	506.10
M-1	MANHOLE SHA STD MD. 383.00	EX 513.16	511.00	517.50
M-2	MANHOLE SHA STD MD. 383.00	501.05 (N & E)	500.40	505.90*
WG SC	STC 1200 STORMCEPTOR SHEET 6 OF 15 (PRIVATE SYSTEM)	499.60	EX 499.52	505.50

* MANHOLE FRAME AND COVER TO BE SET INSIDE TOP SLAB, WHICH SHALL BE FABRICATED TO SUPPORT H-20 LOADINGS.

STORM DRAIN AND SANITARY SEWER CLEANOUT SCHEDULE

C.O. NO.	SIZE, IN.	INV.	TOP ELEV.
1 (S.D.)	6	504.50	508.50
2 (SAN.)	4	505.70	509.10
3 (SAN.)	4	505.40	509.60
4 (SAN.)	4	504.60	509.60
5 (SAN.)	4	503.65	509.60
6 (SAN.)	4	502.50	509.10
7 (SAN.)	4	502.25	508.50
8 (SAN.)	4	500.00	506.00

PARCEL A-5
PLAT NO. 12535
F-97-106

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20

12-2-97	REVISION DESCRIPTION
DATE:	NUMBER
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
DATE:	9/24/97
DATE:	10/6/97
DATE:	10/2/97
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.	
DATE:	10-3-97

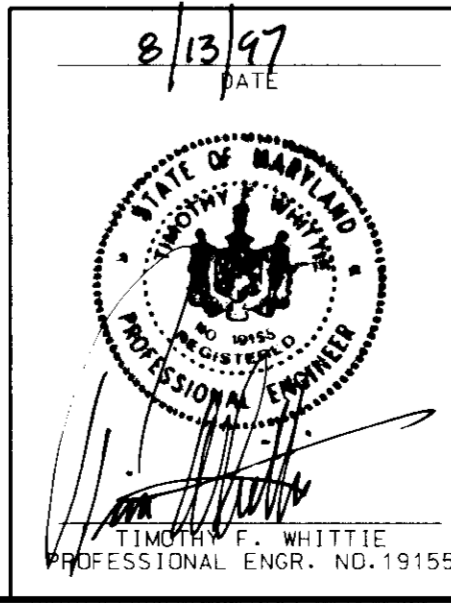
OWNER: MJF ASSOC. LTD. PARTNERSHIP
C/O MDG COMPANIES
5550 STERRETT PLACE, SUITE 312
COLUMBIA, MARYLAND 21044
ATTN: MR. PAT MCCUAN
PHONE: (410) 730-9091

DEVELOPER: EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. ROBERT CASERTA
PHONE: (301) 513-7511

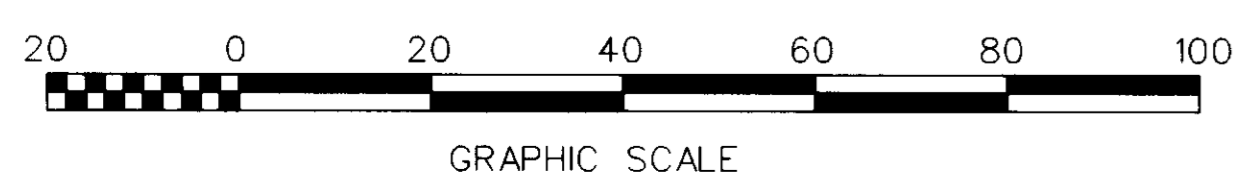
FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAN STREET BEL. AVE. MARYLAND 21014 (410) 879-2090

CENSUS TRACT NO.: 6023.02 WATER CODE: G02
PLAT NO. 12535 SEWER CODE: 5657400
TAX MAP 30 PARCEL 260
ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND

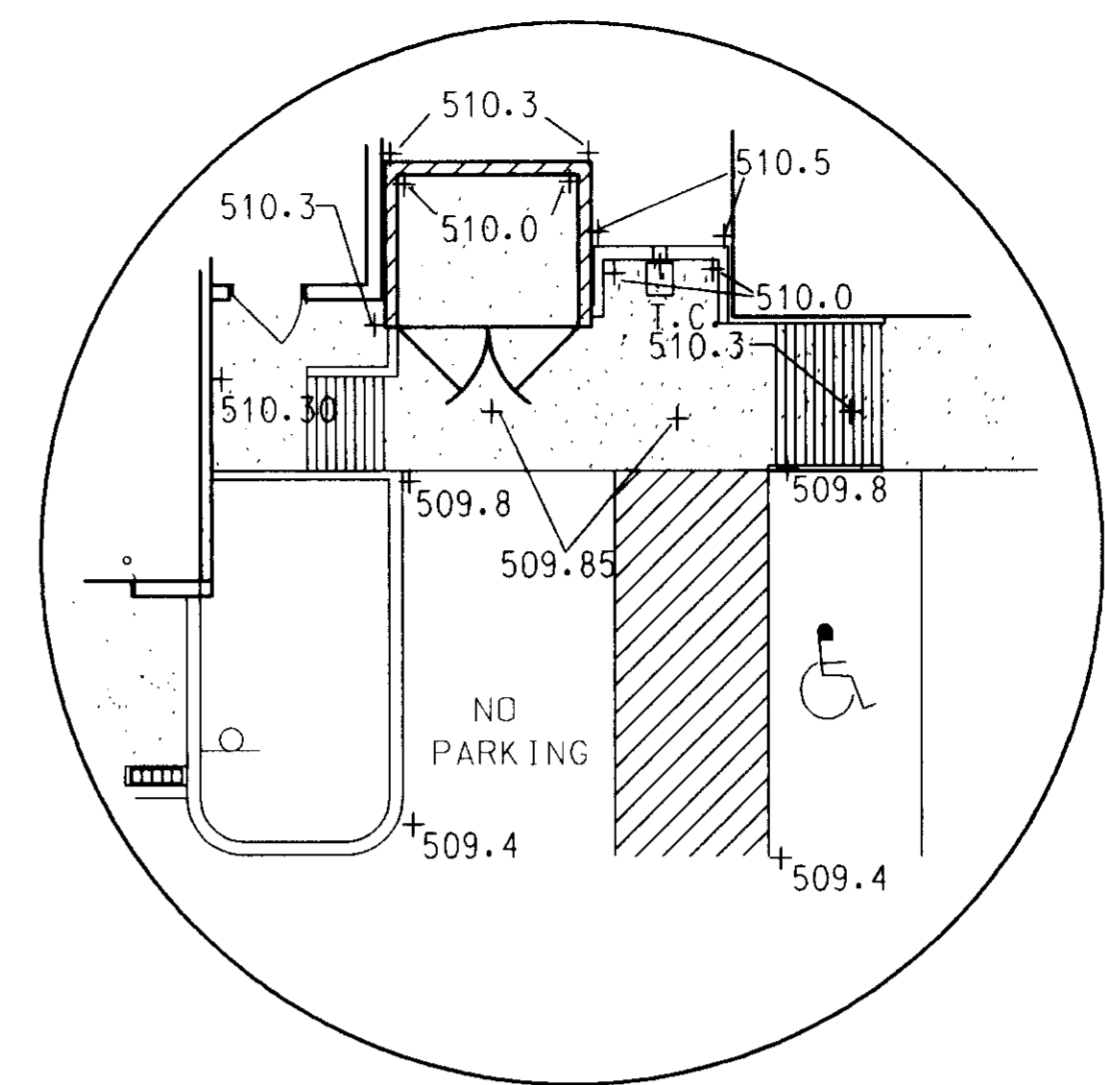
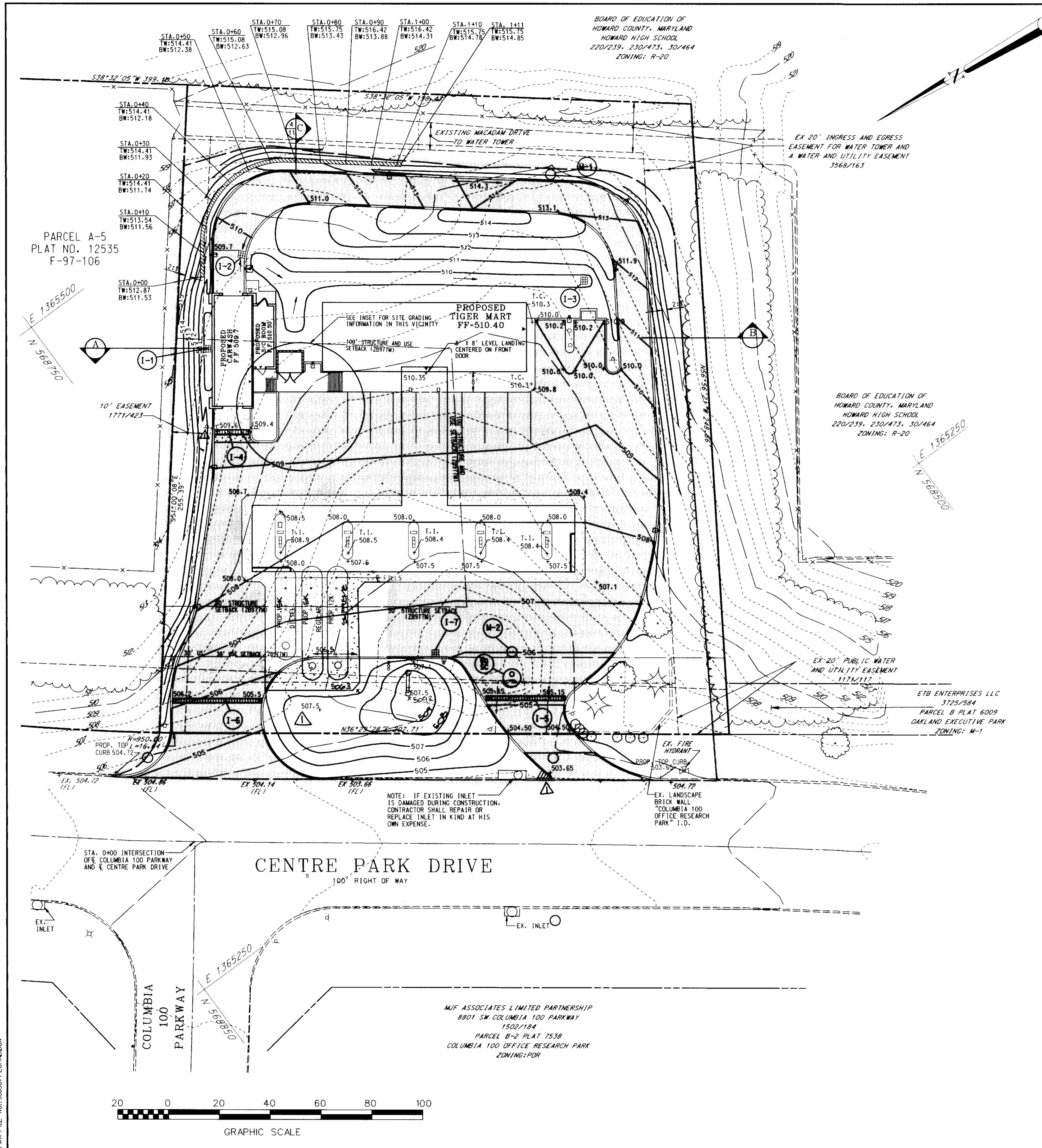
TITLE: 8850 CENTRE PARK DRIVE FOR AN EXXON STATION AT
PARCEL A-4 COLUMBIA 100
BELLICOTT CITY, MARYLAND 21049 OFFICE RESEARCH PARK
SITE UTILITY AND PIPING PLAN
DESIGN BY: JBG SCALE: 1" = 20' PROJECT NO.: 96098
DRAWN BY: KNLV DATE: 07/15/97 DRAWING NUMBER
CHECKED BY: TFW APPROVED: 5 OF 15



SDP# 97-62
PLANNING BOARD APPROVAL

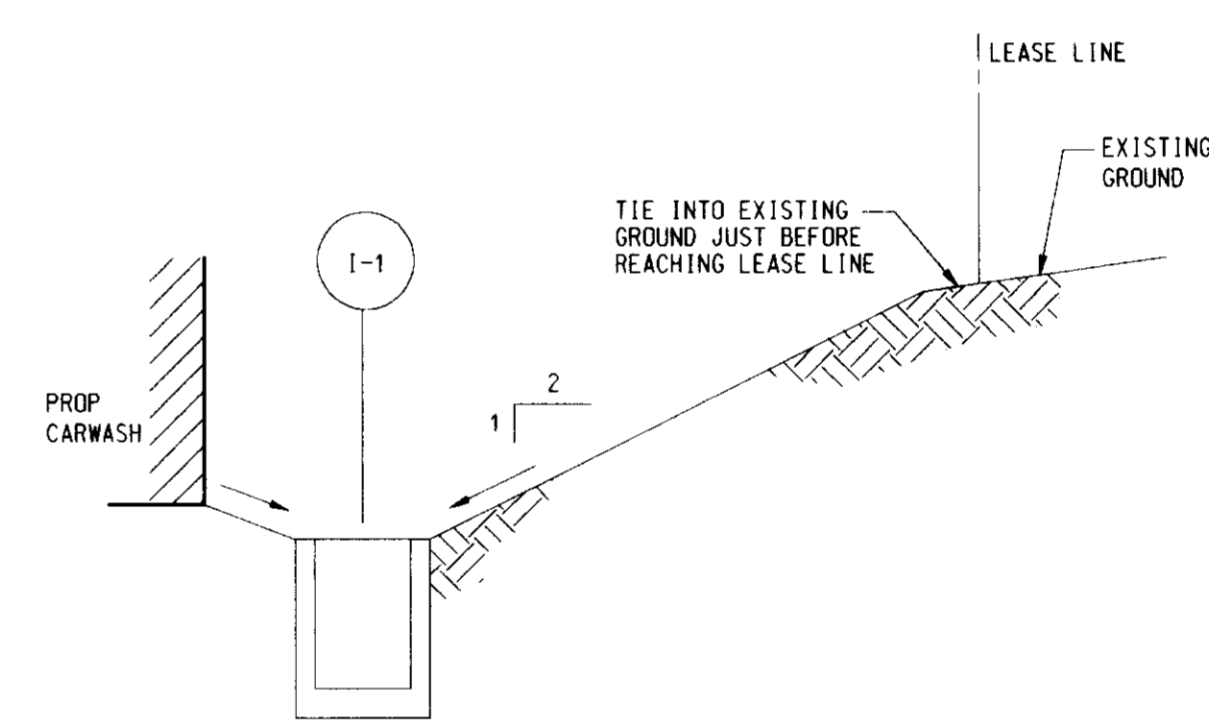


FWA FILE NO.: 96098/P/PEL/TL/DGN

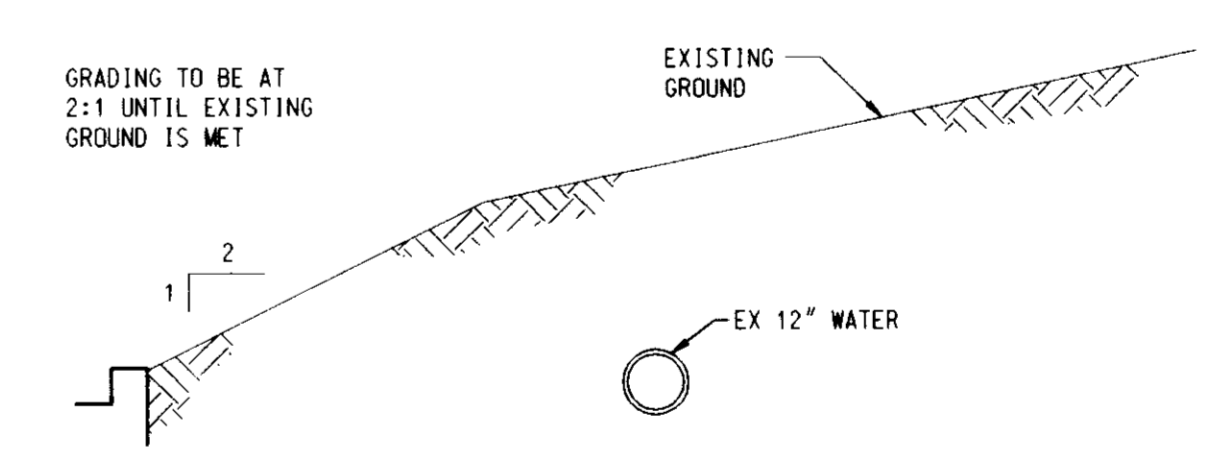


INSET: SITE GRADING OF AMENITIES BETWEEN TIGER MART AND CARWASH

SCALE: 1" = 10'



SECTION THRU CARWASH AT I-1
NOT TO SCALE



SECTION THRU SLOPE ON WEST SIDE
NOT TO SCALE

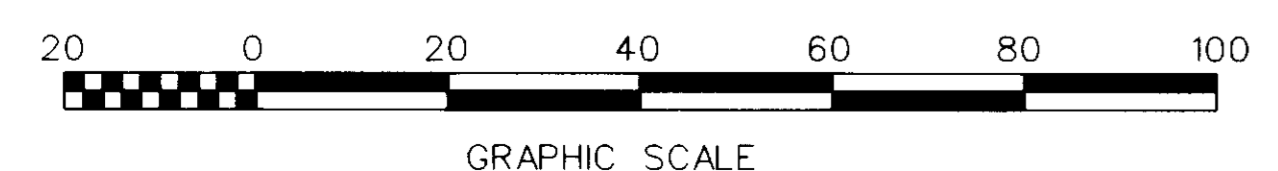
GRADING NOTES

- TOTAL SITE AREA: 1.221 AC
- TOTAL DISTURBED AREA: 1.22 AC
- REFER TO SEDIMENT AND EROSION CONTROL PLAN ON SHEET 9 OF 15 FOR SITE ANALYSIS OF EARTHWORK QUANTITIES.
- FILL MATERIAL SHALL BE COMPACTED AT 95% TO MEET AASHTO T-180 SPECIFICATIONS. REFER TO EXCON STANDARD DRAWINGS 1090 AND GEOTECHNICAL ENGINEER FOR COMPACTION REQUIREMENTS UNDER IMPERVIOUS AREAS AND BUILDING SLABS AND FOUNDATIONS.
- BENCHMARK: SEE COVER SHEET
- REFER TO STRUCTURE SCHEDULE ON SITE UTILITY AND PIPING PLAN SHEET 5 FOR TOP L.I.D., TOP OF CLEANOUT, AND TOP GRATE ELEVATIONS, WITH THE EXCEPTION OF TRENCH DRAINS.
- REFER TO SHEET 11 FOR RETAINING WALL PROFILE WHICH HAS PROPOSED TOP AND BOTTOM WALL ELEVATIONS.

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED FLOW ARROWS INDICATING DIRECTION OF FLOW
- LIMIT OF DISTURBANCE (L.O.D. ALSO PROPERTY LINE)

12-29-97	REVISED GRADING
DATE:	NUMBER:
APPROVED: DEPARTMENT OF PLANNING AND ZONING	REVISION DESCRIPTION:
CHIEF-DEVELOPMENT ENGINEERING DIVISION	9/26/97
DATE:	DATE:
CHIEF-DIVISION OF LAND DEVELOPMENT	10/6/97
DATE:	DATE:
DIRECTOR	10/7/97
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS	HOWARD COUNTY HEALTH DEPARTMENT.
10-3-97	DATE:
COUNTY HEALTH OFFICER	DATE:
OWNER:	MJF ASSOC. LTD. PARTNERSHIP
	C/O MDG COMPANIES
	5550 STERRETT PLACE, SUITE 312
	COLUMBIA, MARYLAND 21044
	ATTN: MR. PAT McCUAN
	PHONE: (410) 730-9091
DEVELOPER:	EXCON COMPANY, U.S.A.
	6301 IVY LANE
	SUITE 700
	GREENBELT, MARYLAND 20770
	ATTN: MR. ROBERT CASERTA
	PHONE: (301)-513-7511
SDP# 97-62 PLANNING BOARD APPROVAL	
ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090	
RAS NO: 2-0337 FWA JOB NUMBER 96098 FWA DRAWING FILE NAME PEGRAD.DGN	
CENSUS TRACT NO.: 6023.02 WATER CODE: 602 PLAT NO. 12535 SEWER CODE: 5651400	
TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND	
TITLE: 8800 CENTRE PARK DRIVE FOR AN EXCON STATION AT PARCEL A-5 SECT. 1 AREA 1 BELLICOTT CITY, MARYLAND 21043 OFFICE RESEARCH PARK	
SITE GRADING PLAN	
DESIGN BY: JBG	SCALE: 1" = 20'
DRAWN BY: KN/LF	DATE: 07/14/97
CHECKED BY: TEW	APPROVED: [Signature]
PROJECT NO.: 96098	DRAWING NUMBER
	4 OF 15



MJF ASSOCIATES LIMITED PARTNERSHIP
8801 SW COLUMBIA 100 PARKWAY
15021194
PARCEL B-2 PLAT 7538
COLUMBIA 100 OFFICE RESEARCH PARK
ZONING: POR

ETB ENTERPRISES LLC
3725/584
PARCEL B PLAT 6009
OAKLAND EXECUTIVE PARK
ZONING: M-1

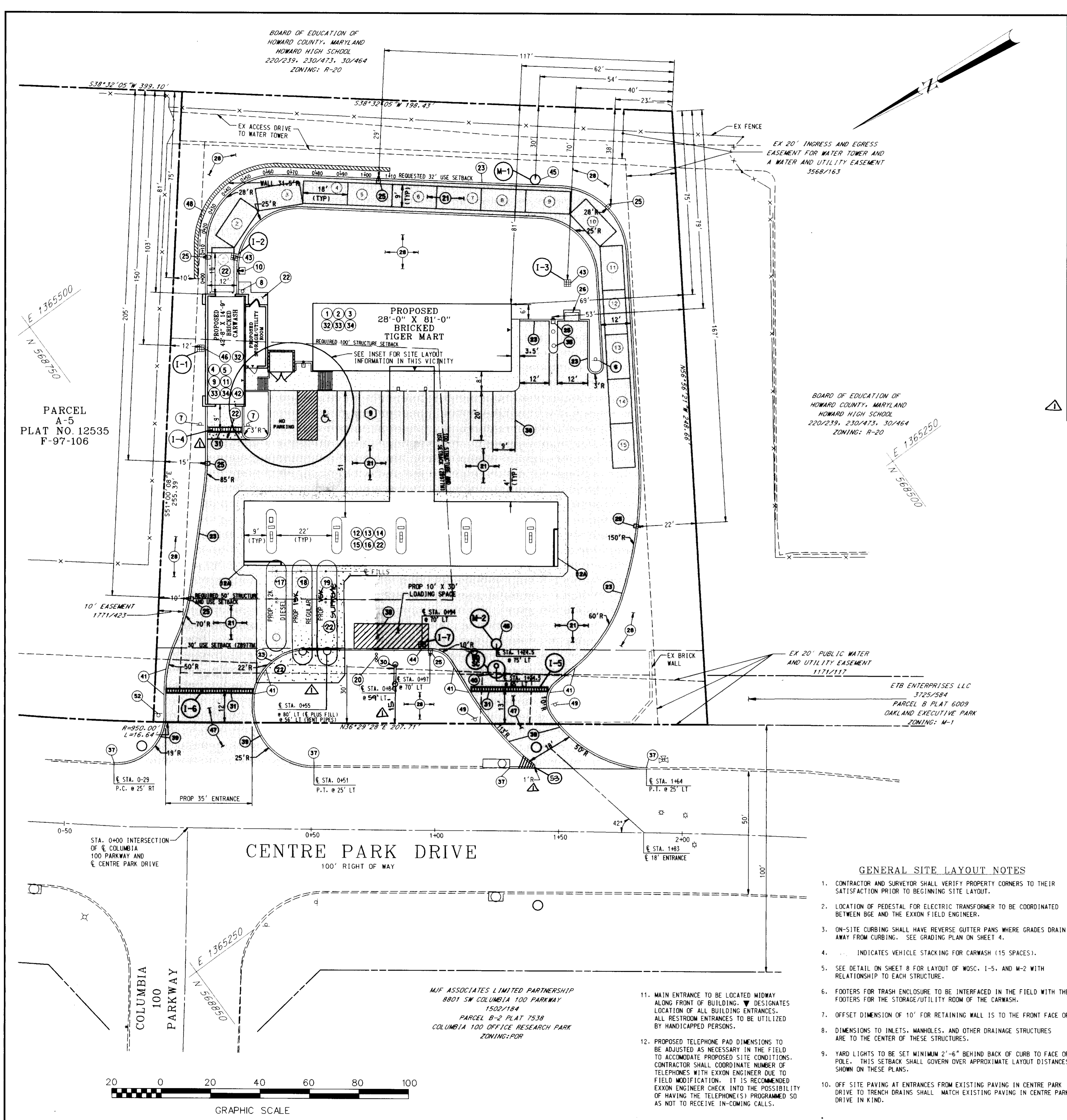
BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20

BOARD OF EDUCATION OF
HOWARD COUNTY, MARYLAND
HOWARD HIGH SCHOOL
220/239, 230/473, 30/464
ZONING: R-20

FWA FILE NO.: 96098/PEGRA.DGN

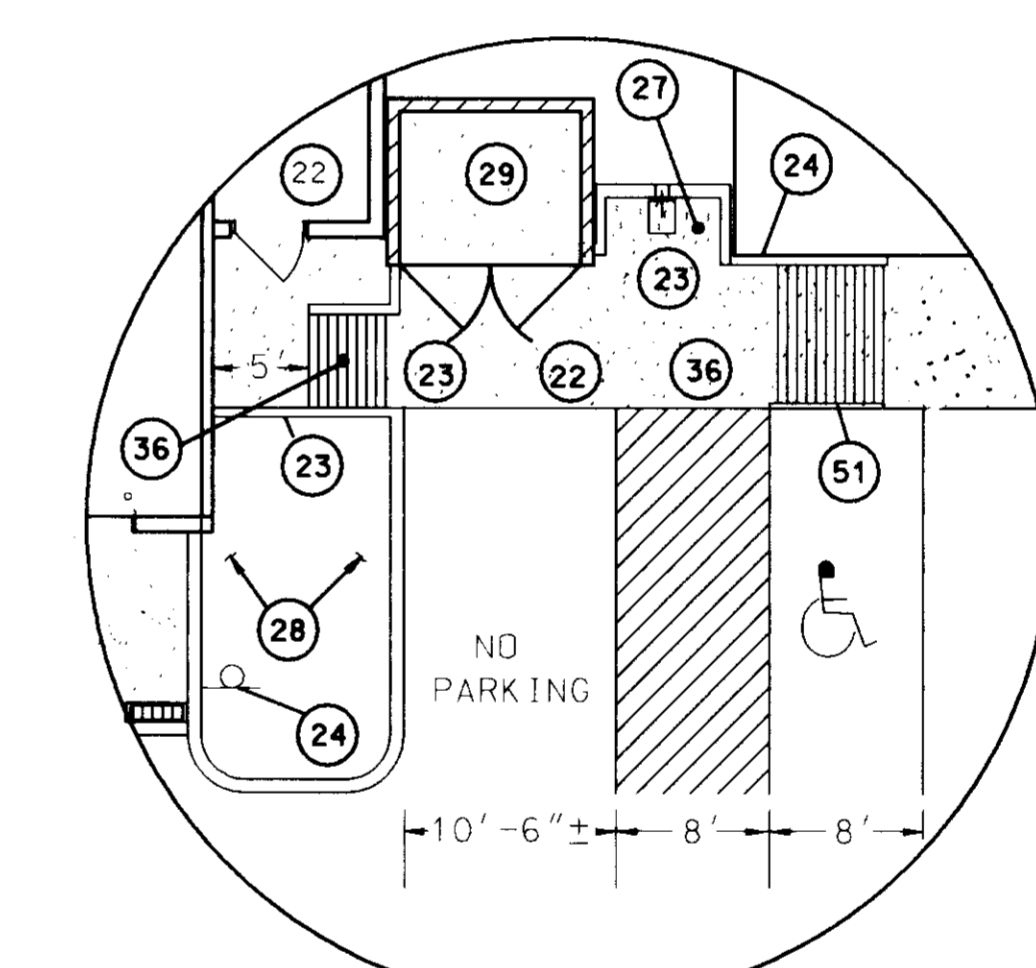
8/13/97
DATE

 TIMOTHY F. WHITTLE
PROFESSIONAL ENGR. NO. 19155



GENERAL NOTES

18	E	GC	ENVIROFLEX PIPING	7006 G
19	GC	GC	VAPOR RECOVERY SYSTEM (STAGE I AND II)	7006 G
20	GC	GC	VENT AREA - OTHER	7006 G
21	GC	GC	ON-SITE ASPHALT PAVING PER HOWARD COUNTY SPECIFICATIONS (10" DEPTH) PER EXXON ENGINEER	SHT 14 OF 15
22	GC	GC	6" CONCRETE W/AS REBAR 18" O.C. EACH WAY	1090 1-4
23	GC	GC	6" CURB WITH 16" GUTTER	SHT 14 OF 15
24	GC	GC	INSTALL (1) HANDICAPPED PARKING ONLY SIGN PER ADA & LOCAL CODE (MOUNT ON EXTERIOR OF C-STOR)	SHT 14 OF 15
25	E	GC	(1) NEW YARD LIGHTS, FIXTURES & POLES (NOT INCL. LIGHT AT PHONE)	1090 1-4
26	E/DC	GC	AIR/WATER W/ INFORMATION SIGN (NO LIGHT) W/ FROST-FREE HOSE BIBB	1090 1-4
27	E/DC	GC	3" W/ 4" REINFORCED CONCRETE MAT W/ CONDUIT FOR PUBLIC TELEPHONES, WITH YARD LIGHT	1090 1 & 2
28	GC	GC	LANDSCAPE / IRRIGATION	1090 1 & 2
29	GC	GC	TRASH ENCLOSURE ON 6" REINFORCED CONCRETE SLAB.	1090 1 & 2
30	E	GC	MAJOR I.D. SIGN (PROPOSED)	SHT 13 OF 15
31	GC	GC	EXXON TRENCH DRAIN W/NEENAH R-4999 TYPE L GRATE, GUTTER PANS TO BE WARPED TO PROVIDE POSITIVE DRAINAGE TO TRENCH DRAINS	SHT 5 OF 15
32	GC	GC	BUILDING SAN. SEWER SERVICE TIE INTO EXISTING SAN. SEWER LINE PER EXXON'S FIELD ENGINEER & PER HO. CO. DPM CODES.	1090 2
33	GC	GC	BUILDING 2" WATER SUPPLY PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W. CODES. (1" FOR CARWASH)	SHT 5 OF 15
34	GC	GC	BUILDING ELECTRICAL & TELEPHONE SERVICE ROUTE UNDERGROUND PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W.	SHT 5 OF 15
35	E	GC	VACUUMS (2) TRASH RECEPTILES (2)	1090 7
36	GC	GC	HANDICAP RAMP PER COUNTY CODES.	SHT 11 OF 15
37	GC	GC	MATCH EXISTING CURB AND GUTTER FOR GRADE AND LOCATION	SHT 11 OF 15
38	GC	GC	PAINT STRIPING	HO. CO. STD. R-3.01
39	GC	GC	OFF-SITE CURB AND GUTTER PER HOWARD COUNTY STANDARDS	SHT 6 OF 15
40	GC	GC	STORMCEPTOR WATER QUALITY STRUCTURE	SHT 10 OF 15
41	GC	GC	10' TRANSITION FORM HO. CO. STD. CURB & GUTTER TO EXXON STD CURB & GUTTER	SHT 10 OF 15
42	GC	GC	2" METER I.A.W. HO. CO. STDS (INSIDE CAR WASH STORAGE ROOM)	HO. CO. STD. W3.29
43	GC	GC	TYPE "S" INLET	5-2-14-22
44	GC	GC	PRECAST WR INLET	HO. CO. STD. SD-4.35
45	GC	GC	STANDARD PRECAST MANHOLE	SHA STD. MD-383.00
46	GC	GC	CATCH BASIN	EXXON STD. 1090-6
47	GC	GC	OFF-SITE PAVING PER HO. CO. PAVING SECTION P-5	SHT 13 OF 15
48	GC	GC	SEGMENTED MODULAR RETAINING WALL (KEystone WALL UNITS, OR APPROVED EQUAL)	SHT 14 OF 15
49	GC	GC	"DO NOT ENTER" SIGNS FOR ACCESS OFF CENTRE PARK DRIVE	SHT 14 OF 15
50	GC	GC	"NO PARKING" PAVEMENT MARKING	SHT 14 OF 15
51	GC	GC	HANDRAIL	SEE BLDG. PLANS
52	GC	GC	30" X 30" STOP SIGN	MUTCO STD. R1-1
53	GC	GC	ROLLOVER CURB	ENT. 14 OF 15
17	E	GC	PROPOSED TANKS FOR MOTOR FUELS (1) 110' X 1' REGULAR (1) 110' X 1' REGULAR (1) 1/2 HP	7006 G, 1-5 7033.1



INSET: SITE LAYOUT OF AMENITIES BETWEEN TIGER MART AND CARWASH
SCALE: 1" = 10'

- #### GENERAL SITE LAYOUT NOTES
- CONTRACTOR AND SURVEYOR SHALL VERIFY PROPERTY CORNERS TO THEIR SATISFACTION PRIOR TO BEGINNING SITE LAYOUT.
 - LOCATION OF PEDESTAL FOR ELECTRIC TRANSFORMER TO BE COORDINATED BETWEEN BOE AND THE EXXON FIELD ENGINEER.
 - ON-SITE CURBING SHALL HAVE REVERSE GUTTER PANS WHERE GRADES DRAIN AWAY FROM CURBING. SEE GRADING PLAN ON SHEET 4.
 - INDICATES VEHICLE STACKING FOR CARWASH (15 SPACES).
 - SEE DETAIL ON SHEET 8 FOR LAYOUT OF WOSC, I-5, AND M-2 WITH RELATIONSHIP TO EACH STRUCTURE.
 - FOOTERS FOR TRASH ENCLOSURE TO BE INTERFACED IN THE FIELD WITH THE FOOTERS FOR THE STORAGE/UTILITY ROOM OF THE CARWASH.
 - OFFSET DIMENSION OF 10' FOR RETAINING WALL IS TO THE FRONT FACE OF WALL.
 - DIMENSIONS TO INLETS, MANHOLES, AND OTHER DRAINAGE STRUCTURES ARE TO THE CENTER OF THESE STRUCTURES.
 - YARD LIGHTS TO BE SET MINIMUM 2'-6" BEHIND BACK OF CURB TO FACE OF POLE. THIS SETBACK SHALL GOVERN OVER APPROXIMATE LAYOUT DISTANCES SHOWN ON THESE PLANS.
 - OFF SITE PAVING AT ENTRANCES FROM EXISTING PAVING IN CENTRE PARK DRIVE TO TRENCH DRAINS SHALL MATCH EXISTING PAVING IN CENTRE PARK DRIVE IN KIND.
 - MAIN ENTRANCE TO BE LOCATED MIDWAY ALONG FRONT OF BUILDING. W DESIGNATES LOCATION OF ALL BUILDING ENTRANCES. ALL RESTROOM ENTRANCES TO BE UTILIZED BY HANDICAPPED PERSONS.
 - PROPOSED TELEPHONE PAD DIMENSIONS TO BE ADJUSTED AS NECESSARY IN THE FIELD TO ACCOMMODATE PROPOSED SITE CONDITIONS. CONTRACTOR SHALL COORDINATE NUMBER OF TELEPHONES WITH EXXON ENGINEER DUE TO FIELD MODIFICATION. IT IS RECOMMENDED EXXON ENGINEER CHECK INTO THE POSSIBILITY OF HAVING THE TELEPHONE(S) PROGRAMMED SO AS NOT TO RECEIVE IN-COMING CALLS.

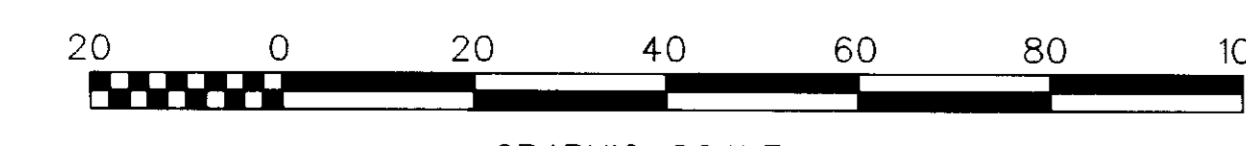
SDP# 97-62
PLANNING BOARD APPROVAL

8/13/97
DATE

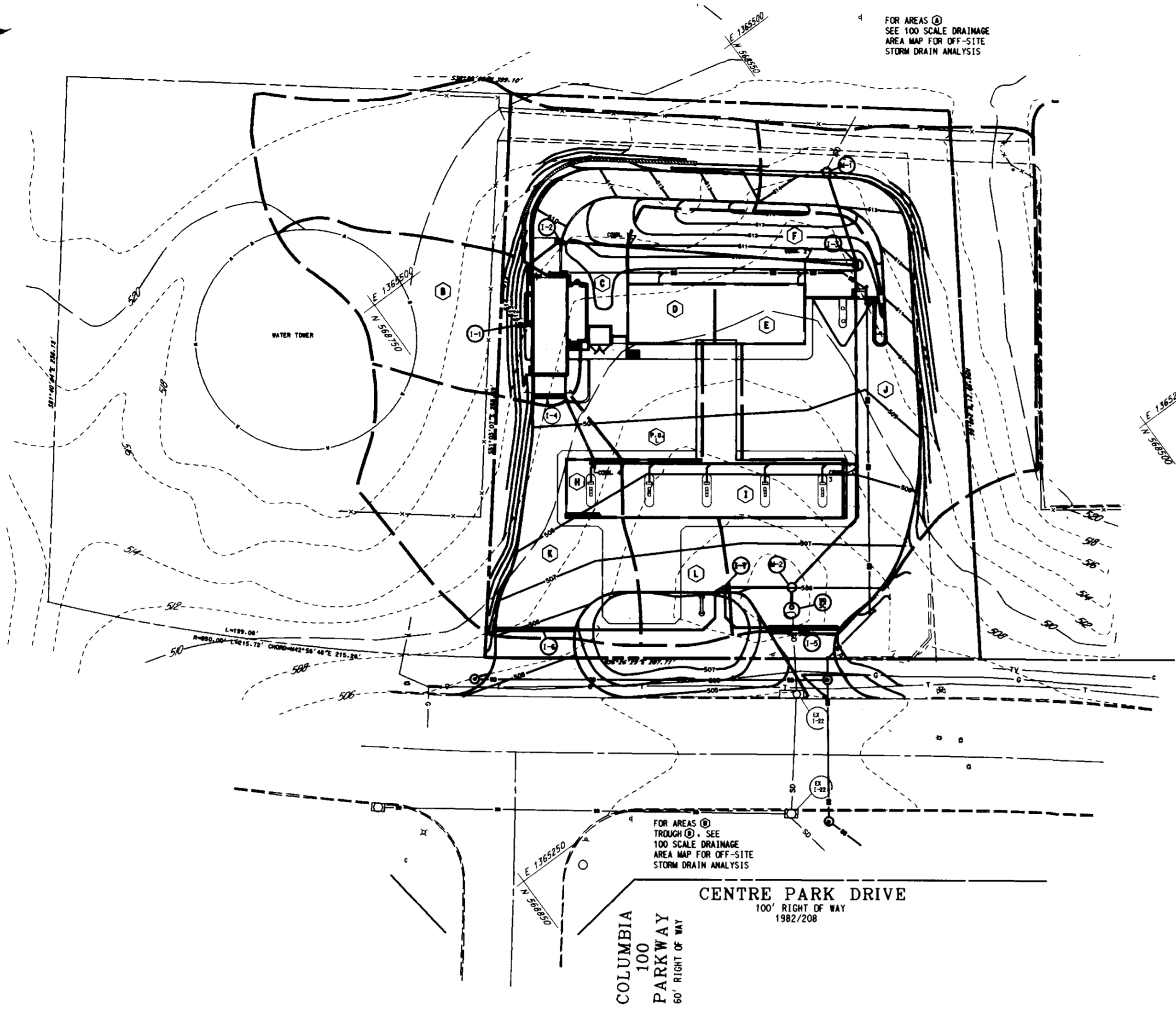
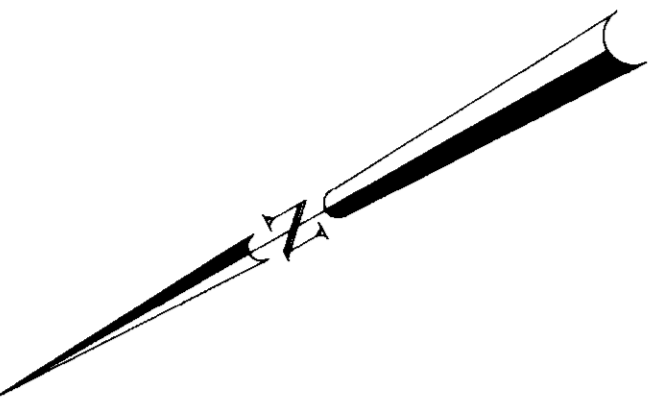
ROBERT CASERTA
PROFESSIONAL ENGR. NO. 19155

12-2-97	REVISION	REV. PARKING, CARWASH, TIGER MART, ROLLER CURB, SIGNAGE, ETC.
DATE:	NUMBER:	REVISION DESCRIPTION:
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
		9/24/97 DATE
		10/6/97 DATE
		10/7/97 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		
		10-3-97 DATE
OWNER: MJF ASSOC. LTD. PARTNERSHIP C/O MDG COMPANIES 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 ATTN: MR. PAT MCCUAN PHONE: (410) 730-9091		
DEVELOPER: EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. ROBERT CASERTA PHONE: (301) 513-7511		
ENGINEERS: FREDERICK WARD ASSOCIATES INC. 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410) 879-2090		
CENSUS TRACT NO.: 6023.02	PLAT NO.: 12535	WATER CODE: 502 SEWER CODE: 3687400
TAX MAP 30, PARCEL 260	ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND	
TITLE: 8850 CENTRE PARK DRIVE PARCEL A-4 BILLCOTT CITY, MARYLAND 21043		
SITE LAYOUT PLAN		
DESIGN BY: JBC	SCALE: 1" = 20'	PROJECT NO.: 96098
DRAWN BY: KN/LF	DATE: 07/22/97	DRAWING NUMBER
CHECKED BY: TFW	APPROVED:	3 OF 15

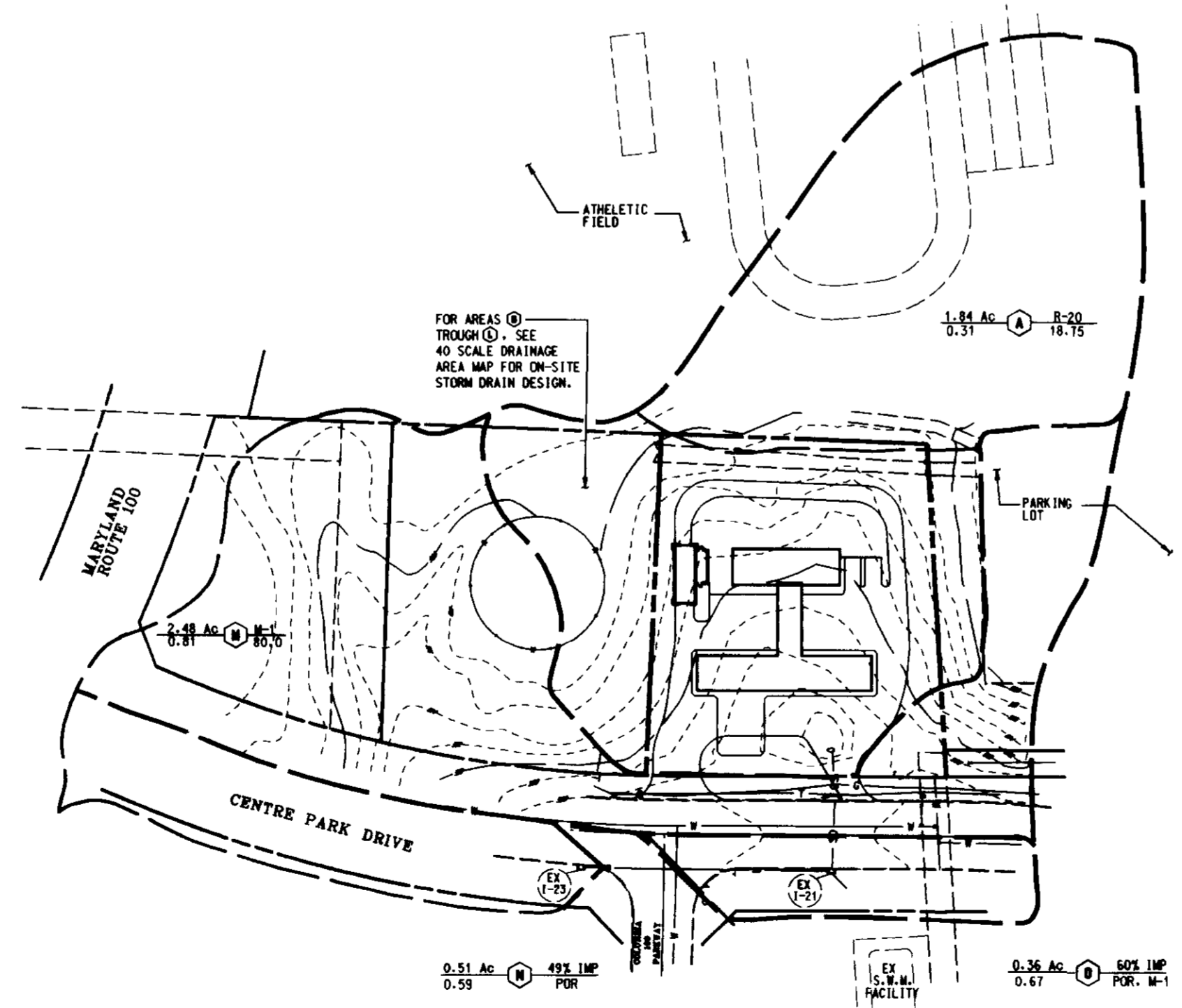
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GRAPHIC SCALE



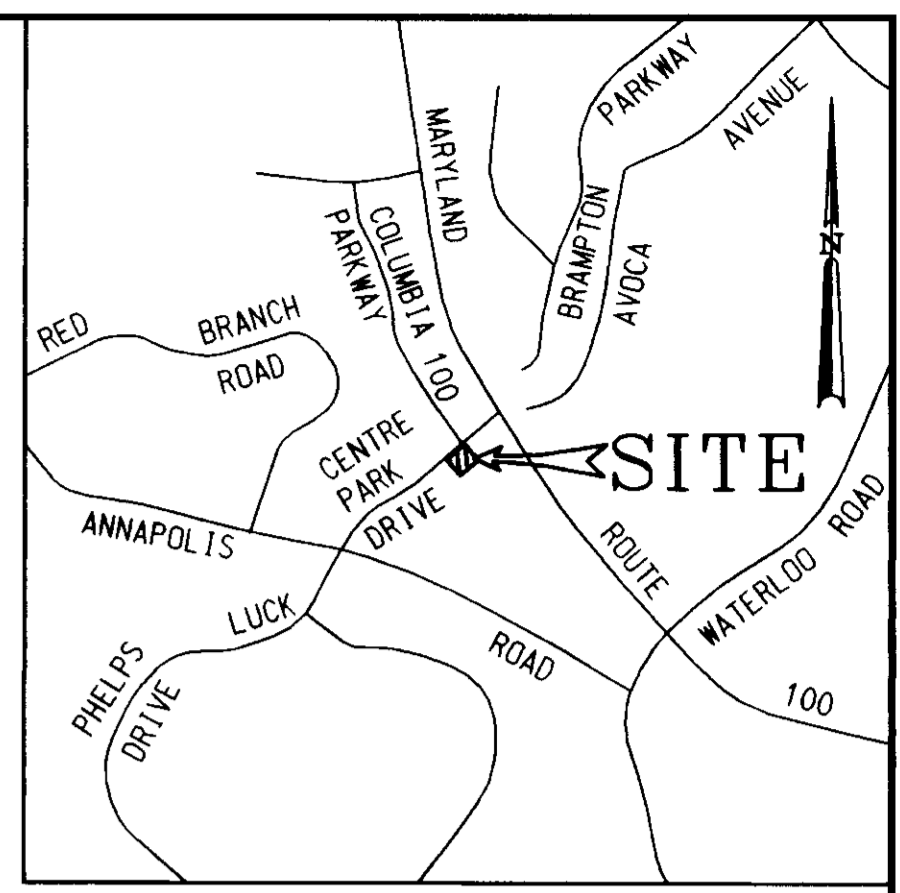
DRAINAGE AREA MAP FOR ON-SITE STORM DRAIN DESIGN
SCALE: 1" = 40'



DRAINAGE AREA MAP FOR OFF-SITE STORM DRAIN DESIGN
SCALE: 1" = 100'

AREA AND "C" FACTOR TABULATION

PHASE	INLET #	ZONING	SUBAREA	AREA (ac)	"C" FACTOR	% IMPERVIOUS
	I-1	M-1	B	0.15	0.33	13.71
	I-2	M-1	C	0.32	0.41	32.83
	CONN. 1	M-1	D	0.02	0.86	100.00
	CONN. 2	M-1	E	0.02	0.86	100.00
	I-3	M-1	F	0.09	0.24	0.00
	I-4	M-1	G	0.01	0.87	72.97
	CONN. 4	M-1	H	0.01	0.86	100.00
	CONN. 3	M-1	I	0.08	0.86	100.00
	I-5	M-1	J	0.51	0.58	55.96
	I-6	M-1	K	0.24	0.46	36.84
	I-7	M-1	L	0.12	0.66	70.15



VICINITY MAP
1" = 2000'

DATE:	NUMBER:	REVISION DESCRIPTION:
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
CHIEF-DEVELOPMENT ENGINEERING DIVISION	8	9/24/97 DATE
CHIEF-DIVISION OF LAND DEVELOPMENT	10/6/97	7 DATE
DIRECTOR	10/7/97	DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		
COUNTY HEALTH OFFICER	ME	10-3-97 DATE
OWNER M/J ASSOC. LTD. PARTNERSHIP C/O MDC COMPANIES 5550 STERRETT PLACE, SUITE 312 ATTN: MR. PAT MCCUAN COLUMBIA, MARYLAND 21044 PHONE: (410) 730-9091		
DEVELOPER EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. ROBERT CASERTA PHONE: (301) 513-7511		
SDP# 97-62 PLANNING BOARD APPROVAL		
FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET DEL. MAR. MARYLAND 21034 (410)879-2090 FAS NO: 2-0337 FWA JOB NUMBER: 96098 FWA DRAWING FILE NAME: PEDRAN.DGN CENSUS TRACT NO. 12535 WATER CODE: 502 PLAT NO. 12535 SEWER CODE: 5657400 TAX MAP 30 PARCEL 260 ELECTION DISTRICT 2 HOWARD COUNTY, MARYLAND TITLE FOR AN EXXON STATION AT 8850 CENTRE PARK DRIVE PARCEL A-1 SECT. 1 AREA 1 ELLICOTT CITY, MARYLAND 21043 COLUMBIA 100 OFFICE RESEARCH PARK DRAINAGE AREA MAPS DESIGN BY: JBC SCALE: AS NOTED PROJECT NO.: 96098 DRAWN BY: KN/LF DATE: 07/15/97 DRAWING NUMBER CHECKED BY: JBC APPROVED: 15 OF 15		

FVA FILE NO. 96098/PEDRAN.DGN