

SITE ANALYSIS

1. Zone - New Town (Employment Center)
2. Area = 1.439 Acres.
3. Lot 9 was recorded in Plat Book 18 Folio 39
4. This plan is subject to the criteria set forth in Final Development Plan Phase 47-A-VII as recorded in Plat #3054A-1802 thru #3054A-1805
5. Number of Parking Spaces Required: 249
6. Number of Parking Spaces Provided: 263
7. All parking spaces and travelled ways to be privately owned and maintained.
8. The area covered in this submission is located on Tax Map # 36
9. Any Damage to county owned rights of way or paving shall be corrected at the Developer's expense
10. The Developer agrees to work with the Dept. of Licenses and Road Construction Code and Standard Specifications.
11. Installation of traffic control devices, markings and signing shall be in accordance with the Manual of Uniform Traffic Control Devices, latest edition.
12. Building Coverage: 78%

13. Green Area Provided: 22%
 14. Typical Building Dimensions: 96'x120'

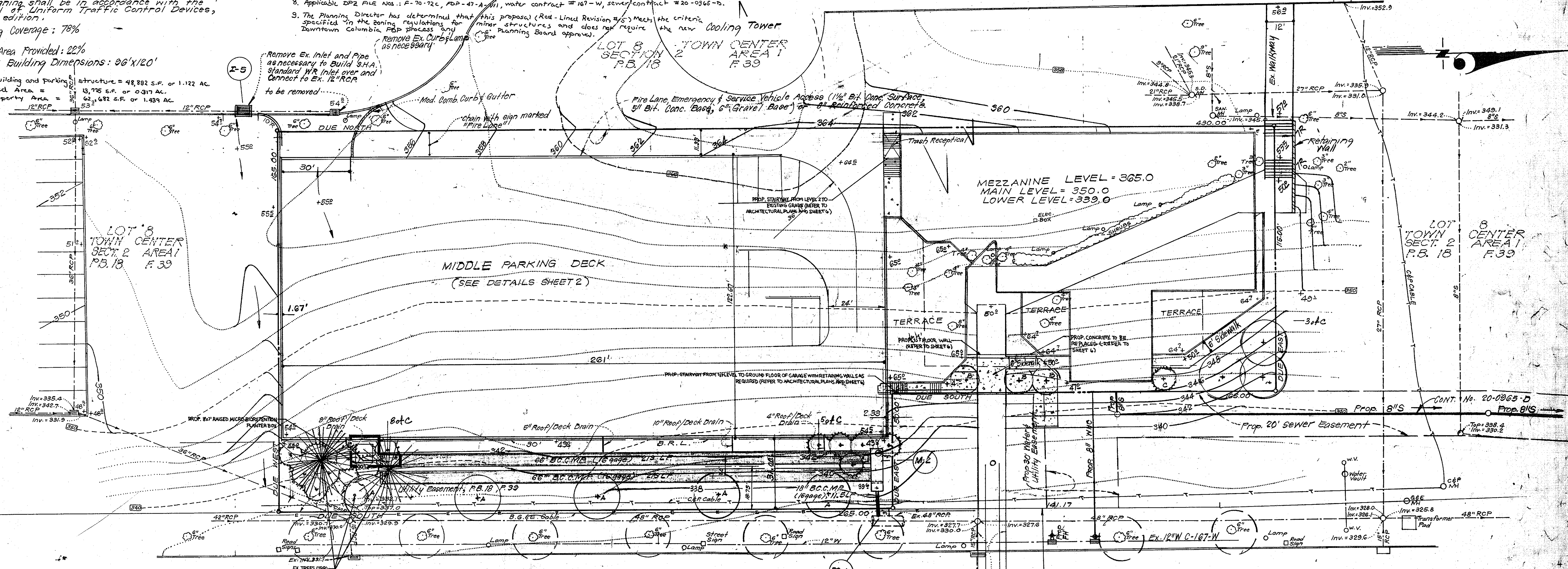
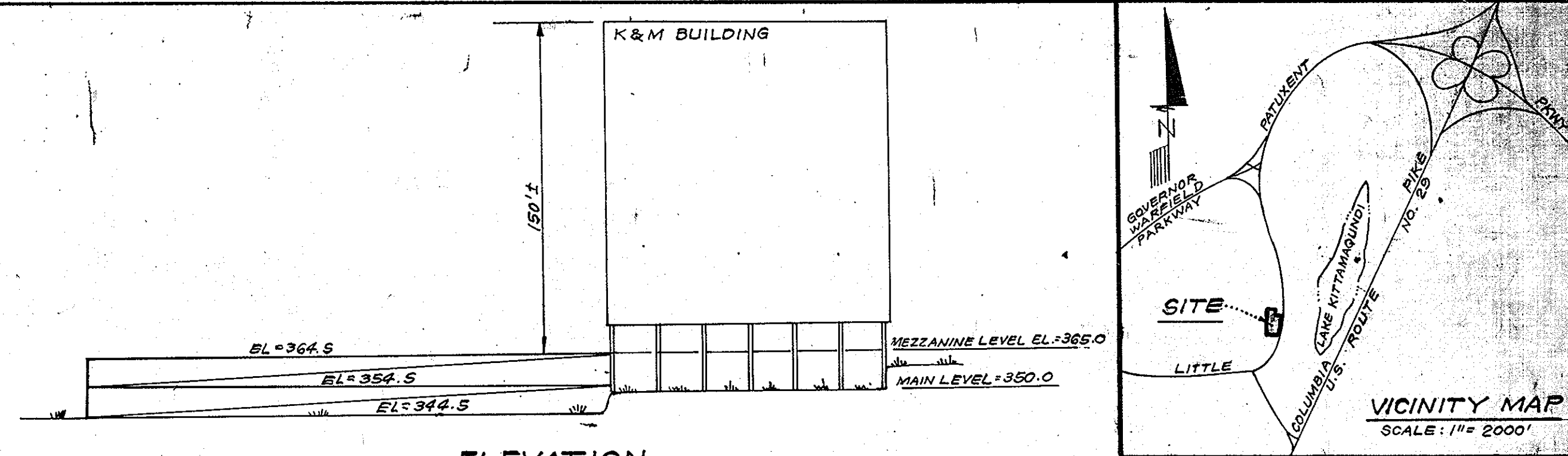
15. Office Building and Parking structure = 48,882 S.F. or 1.122 AC.
 Landscaped Area = 13,715 S.F. or 0.317 AC.
 Total Property Area = 62,597 S.F. or 1.439 AC.

GENERAL NOTES

1. All materials and construction shall be in accordance with the Howard County Road Construction Code and Specifications.
2. All coordinates are based on the Maryland State Grid System. Elevations are based on U.S. Coast and Geodetic Survey Mean Sea Level Datum of 1929.
3. Public Water and Sewer to be utilized.
4. Water and Sewer House Connections shall be installed in accordance with Cont. as approved by the Howard Co. Bureau of Engineering.
5. Storm Drainage from the Upper, Middle & Lower Parking Areas and the roof top drainage from the K&M Building must be collected into the West 66 inch B.C.C.M.P. for Storm Water Management in approx. location shown. See Mech & Plumbing Plans for Drain Details.
6. Vehicular Ingress & Egress is Restricted Along Little Patuxent Parkway except at points approved by the Office of Planning & Zoning.
7. The deadline date for permit application for the features detailed in Revision 5 is one year from the date of Development Engineering Division's letter stating approval of this revision. These proposed features in Revision 5 include two (2) sets of stairs, expansion of the building footprint, and addition of a microretention facility.
8. Applicable DPZ FILE NOS.: F-70-72C, FOP-47-A-111, water contract #167-W, sewer contract #20-0966-D.
9. The Planning Director has determined that this proposal (Red-Lined Revision #5) meets the criteria specified in the zoning regulations for minor structures and does not require the new Cooling Tower.

LEGEND:

1. Contour Interval 2 Ft.
2. Existing Contour
3. Proposed Contour
4. Spot Elevation
5. Direction of Drainage
6. Retaining Wall
7. Exist. Storm Drain
8. Prop. Storm Drain
9. Exist. Sewer Line
10. Exist. Water Line



NOTE: The Developer shall obtain test pits on the Electric and telephone cables prior to any Storm Drainage Construction in the vicinity of structures FC-1

NO.	REVISION	DATE
1	Relocated Fire Lane & Prop Trees	2-10-81
2	Relocated Sewer House Conn.	3-3-81
3	Revised Parking Deck & Fire Lane	3-11-81
4	Added Roof Deck Drains	4-7-81
5	EXPAND LOBBY, ADD STAIRWAYS AND MICRORETENTION FACILITY	5-10-81

LITTLE

PATUXENT

PARKWAY

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 DATE 5-1-81
 APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 5-4-81
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 4-29-81

FOR REVISION 5 ONLY
D.C. WOESSNER
 PROFESSIONAL ENGINEER
 116/109
 I, DAVID C. WOESSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14442, EXPIRATION DATE 5/31/83.

BOHLER ENGINEERING
 301 DULANEY VALLEY ROAD, SUITE 301, TOWSON, MARYLAND 21284
 PH: (410) 821-7900
 FAX: (410) 821-7987
 www.BohlerEngineering.com

PARKING ANALYSIS

NET FLOOR AREA	SPACES REQUIRED	SPACES PROVIDED
RETAIL 3,500 #	3500	17.5
OFFICE 119,463 #	119,463 x 2 = 238,926	238.9
COMMON AREA 39,079 #	1000	NONE REQUIRED
TOTAL: 162,042 #	256.4	263 (3 Handicapped)

PLANT LIST

KEY	PLANT NAME	SIZE
A	Flowering Quince	2 1/2 - 3' Cal. B1B
B	Japanese Quince	12-14" Ht.
C	Amur Elm	2-3 1/2' Cal. B1B
D	Amur Elm	8-10" Ht.
E	Amur Elm	5-6" Ht. D1B

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
TOWN CENTER	SECTION 2, AREA 2	LOT 9 PARCEL 322
PLAT RECORDATION	GRID ZONING	TAX MAP NO.
PB. 18, F. 39	2 NT	36
	ELECT. DIST.	5TH
	CENSUS TRACT	605402

ADDRESS CHART

PARCEL/LOT	STREET ADDRESS
LOT 9	10320 LITTLE PATUXENT PARKWAY, COLUMBIA, HOWARD COUNTY, MD 21046

Plat Reference: P.B. 18, F. 39

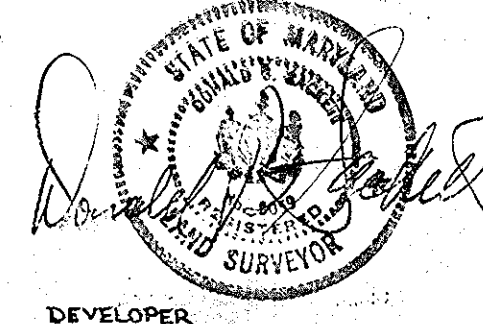
CLARK • FINEROCK & SACKETT
 ENGINEERS • PLANNERS • SURVEYORS
 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

SITE DEVELOPMENT PLAN
 LOT 9
 SDP-81-81C
 MERRILL LYNCH BUILDING
 10320 LITTLE PATUXENT PARKWAY
 AREA 2, LOT 9
 SECTION 2
 PB. 18, F. 39 5TH ELEVATION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGNED: WRM/C
 DRAWN: KWC
 CHECKED: WRM/C
 DATE: Nov. 1980

OWNER: FP PATUXENT PARKWAY, LLC
 P.O. BOX 34472
 WASHINGTON, D.C. 20008
 PHONE: (202) 954-9200

SCALE: 1" = 20'
 DRAWING: 1018
 JOB NO.:
 FILE NO.:
SDP-81-81C

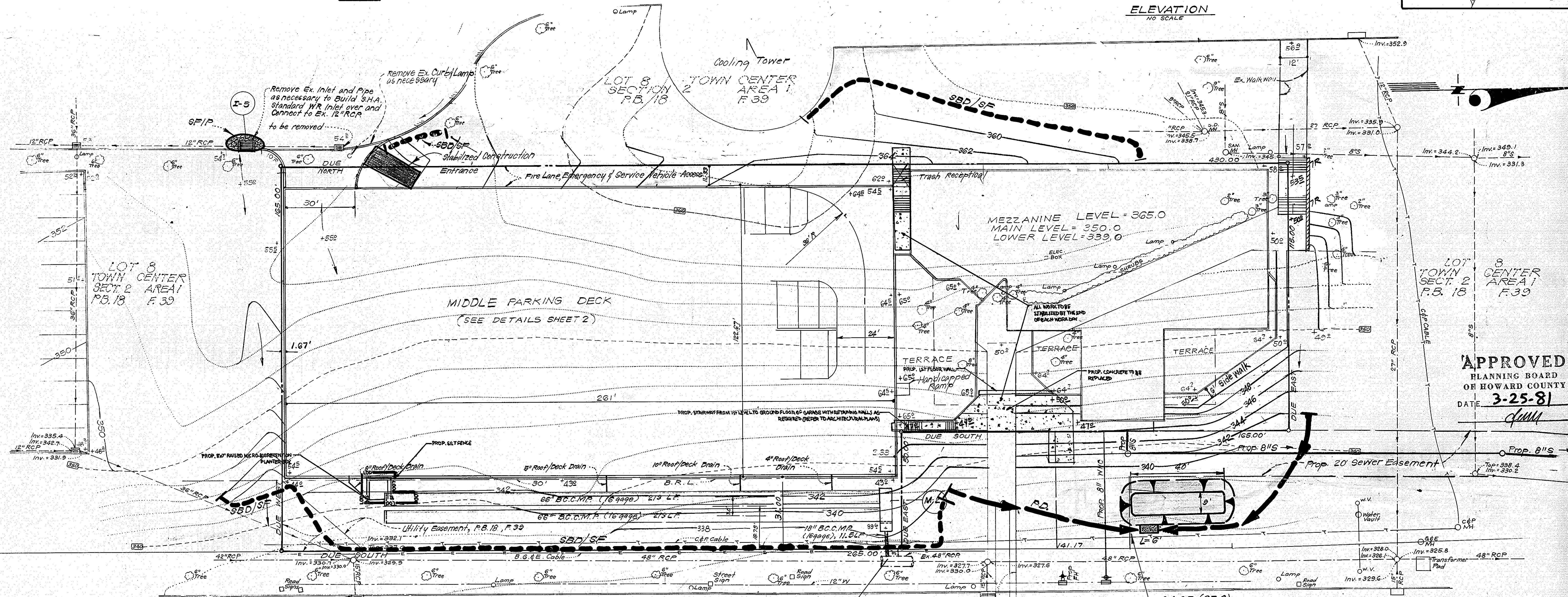
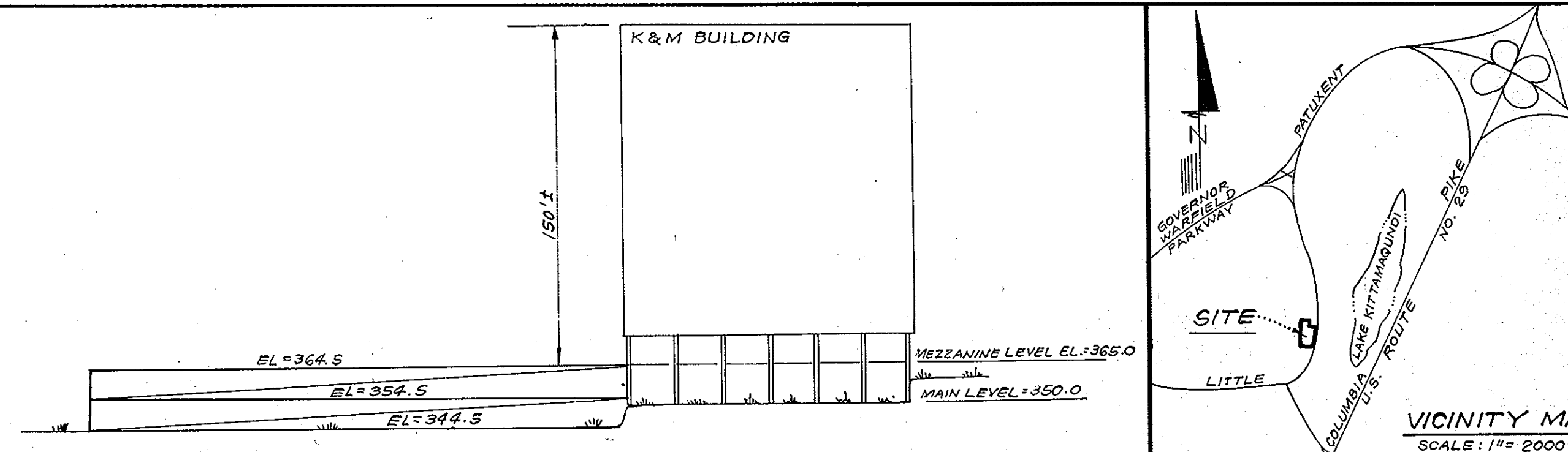


LEGEND:

- 1. Straw Bale Dike or Silt Fence
- 2. Perimeter Dike
- 3. Stone Filter Inlet Protection
- 4. Sediment Trap

LEGEND:

- 1. Contour Interval 2 Ft.
- 2. Existing Contour
- 3. Proposed Contour
- 4. Spot Elevation 40±
- 5. Direction of Drainage
- 6. Retaining Wall
- 7. Exist. Storm Drain
- 8. Prop. Storm Drain
- 9. Exist. Sewer Line
- 10. Exist. Water Line



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 3-25-81
JMM

NOTE: The Developer shall obtain test pits on the Electric and telephone cables prior to any Storm Drainage Construction in the vicinity of structures FC-1

DEVELOPER'S/BUILDER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."
Peter Kuk
Signature of Developer/Builder
1-19-81
Date

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
James Boyd 5-1-81
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING
William Hamish 5-4-81
PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James M. Dun 4/28/81
DIRECTOR DATE

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
James M. Dun
Signature Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED
FOR SOIL EROSION AND SEDIMENT
CONTROL BY THE HOWARD SOIL
CONSERVATION DISTRICT.
William J. Rine 4/28/81
Approved Date

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7800
Fax: (410) 821-7851
www.BohlerEngineering.com

Note: Ex. Storm Drainage in Little Patuxent Parkway was designed to accommodate the run off from this site.

#	REVISION	DATE
1	EXP AND LOBBY, ADD STAIRWAYS AND MICROBIOTREATMENT FACILITY	5/16/72

D.C. WOESSNER
PROFESSIONAL ENGINEER
11/1/2012
PROFESSIONAL CERTIFICATION
I, DAVID C. WOESSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14440, EXPIRATION DATE 5/17/13.

FOR REVISIONS ONLY

ENGINEER'S CERTIFICATE
I hereby 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.
David C. Woessner
1-19-81
Date

11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400

CLARK • FINEROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED: WRMC
DRAWN: K/W
CHECKED: WRMC
DATE: 1-19-81

SEDIMENT & EROSION CONTROL PLAN
LOT 9
SDP-81-81c
TERRILL LYNCH BUILDING
10320 LITTLE PATUXENT PARKWAY (E-70-71.5)
SECTION 2
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OWNER: FP PATUXENT PARKWAY, LLC
P.O. BOX 34472
WASHINGTON, D.C. 20043 PHONE: (301) 896-3200
SDP 81-81c

SCALE: 1" = 20'
DRAWING: 40F 8
JOB NO.:
FILE NO.: 80-099-25

LITTLE

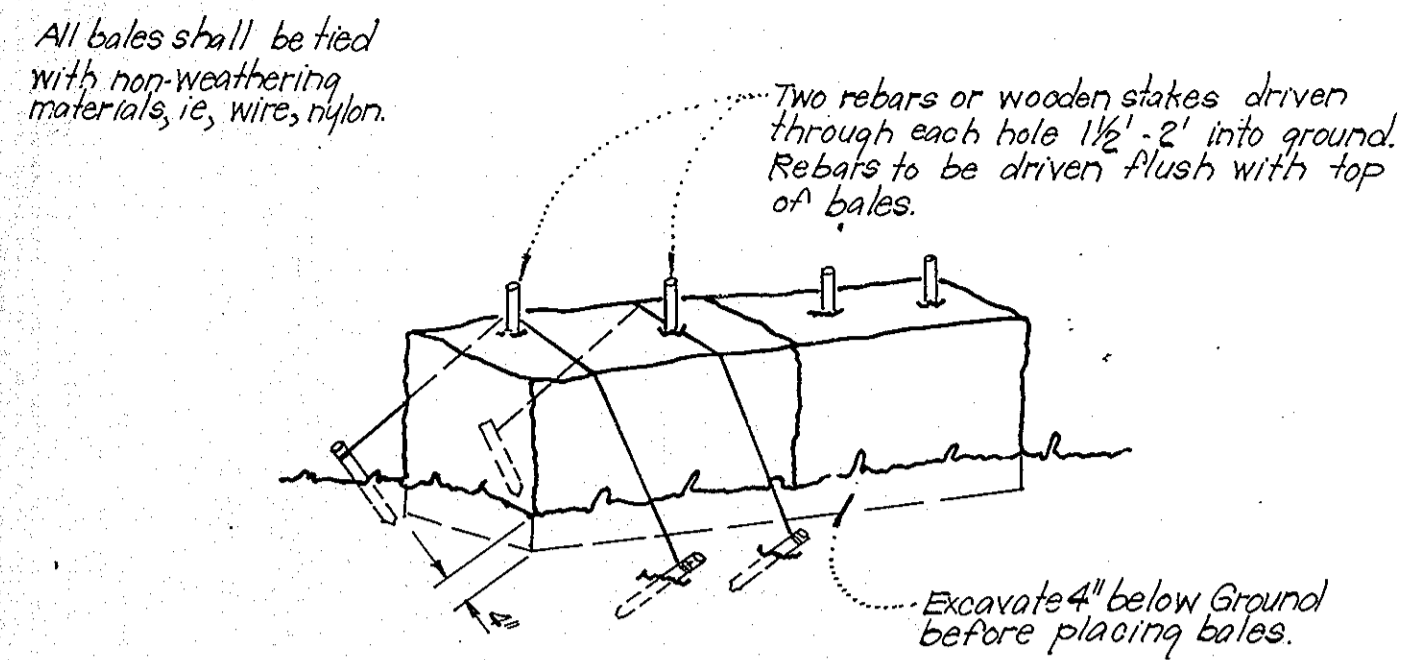
PATUXENT

PARKWAY

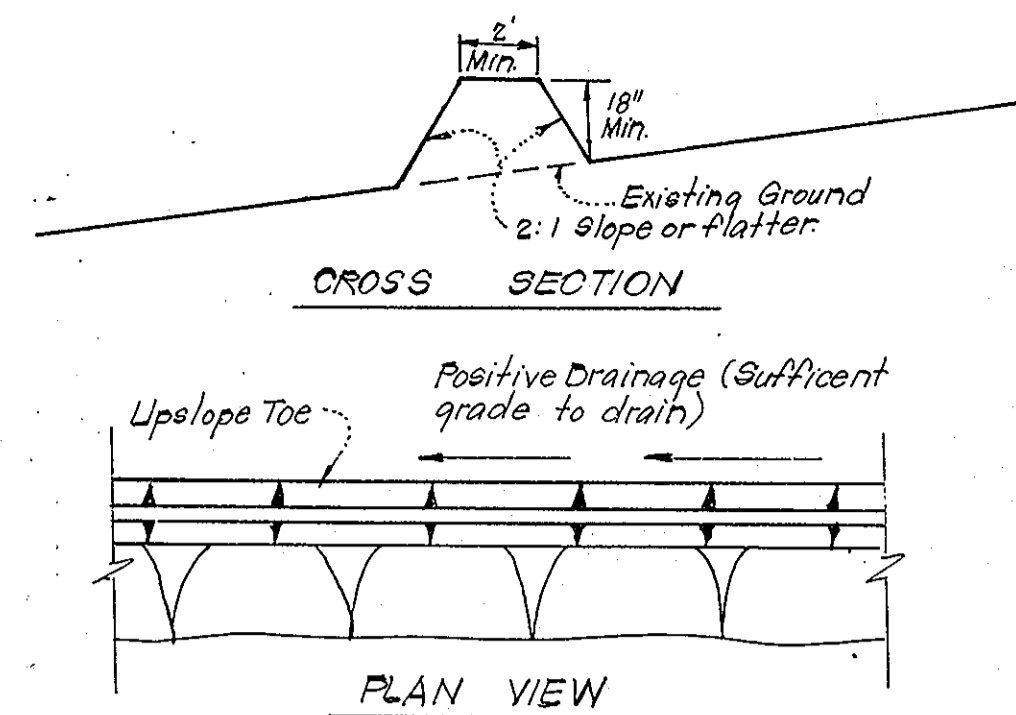
GENERAL NOTES

- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 s.f.
- Notify the Bureau of Inspections and Permits at least 24 hrs before starting any work.
- All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
- Stabilization of Disturbed ground to be done as soon after construction as possible.
- All grading shall be treated in accordance with the following Specifications:
 - Seed - certified 85% germination applied at the rate of 3/lbs/1000s.f. Mixture - 40% Kentucky Blue, 20% Creeping Fescue, 20% Kentucky 31 and 20% annual rye.
 - Fertilizer - 10-10-10 applied at a rate of 13 lbs/1000s.f. Ground Agricultural Lime or Dolomitic Lime apply at a rate of 30 lbs/1000s.f.
 - Mulch - Weed free grain straw applied at a rate of 70-90lbs/1000 s.f. Mulch shall be secured to the ground by any approved method i.e.; asphalt tacks, chemical binder, etc.
 - All Sod used shall be Maryland State Certified.
- All Structural Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Bureau of Inspections and Permits.
- On-Site Inspection and Maintenance of all Sediment Control Measures including clean out of Sediment Traps and dikes, and proper establishment of all planned vegetative measures will be the responsibility of the developer or his representative on the site, on a continuing day to day basis.
- It will be the developers responsibility to provide additional Sediment & Erosion Control Devices to protect stabilized areas during construction.
- The Contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
- Stabilized Construction Entrances shall be placed at all construction entrances.
- If houses are to be constructed on an "As-Sold" basis at random, Single Lot Sediment Control, as shown on this sheet, shall be implemented.
- Total Amount of Straw Bales or Silt Fence shown = 510 LF
- SITE ANALYSIS:

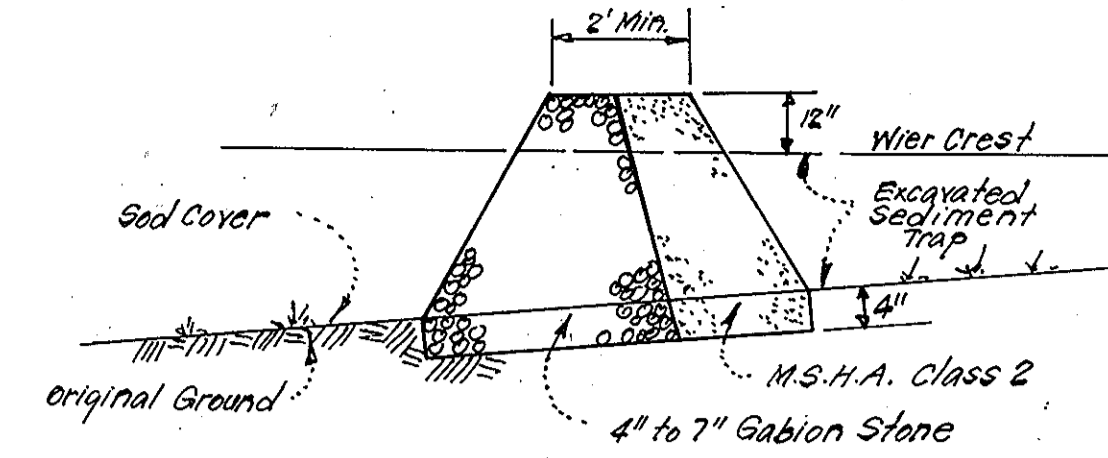
A. Total Area:	1.44	Acres
B. Area to be Roofed:	1.14	Acres
C. Area to be Paved:	.02	Acres
D. Area to be Seeded:	.28	Acres
E. Area Undisturbed:		Acres
- CONSTRUCTION SEQUENCE:
 - Install Sediment & Erosion Control Devices and Stabilize Diversion Dikes.
 - Excavate for Foundations and Rough Grade.
 - Install Stormwater Management, storm Drains & Remove existing, inlet pipe in vicinity streets.
 - Erect Building, Construct Paving, sidewalk & all other Utilities.
 - Final grade and Stabilize in accordance with general Note #c.
 - Remove Sediment Control measures.
 Approval of this plan is conditional upon the approval of Sediment Control Plan for the off-site waste or borrow area prior to the import of any borrow or export of waste to or from this site.



TYPICAL STRAW BALE DIKE DETAIL (S.B.D.)
No Scale

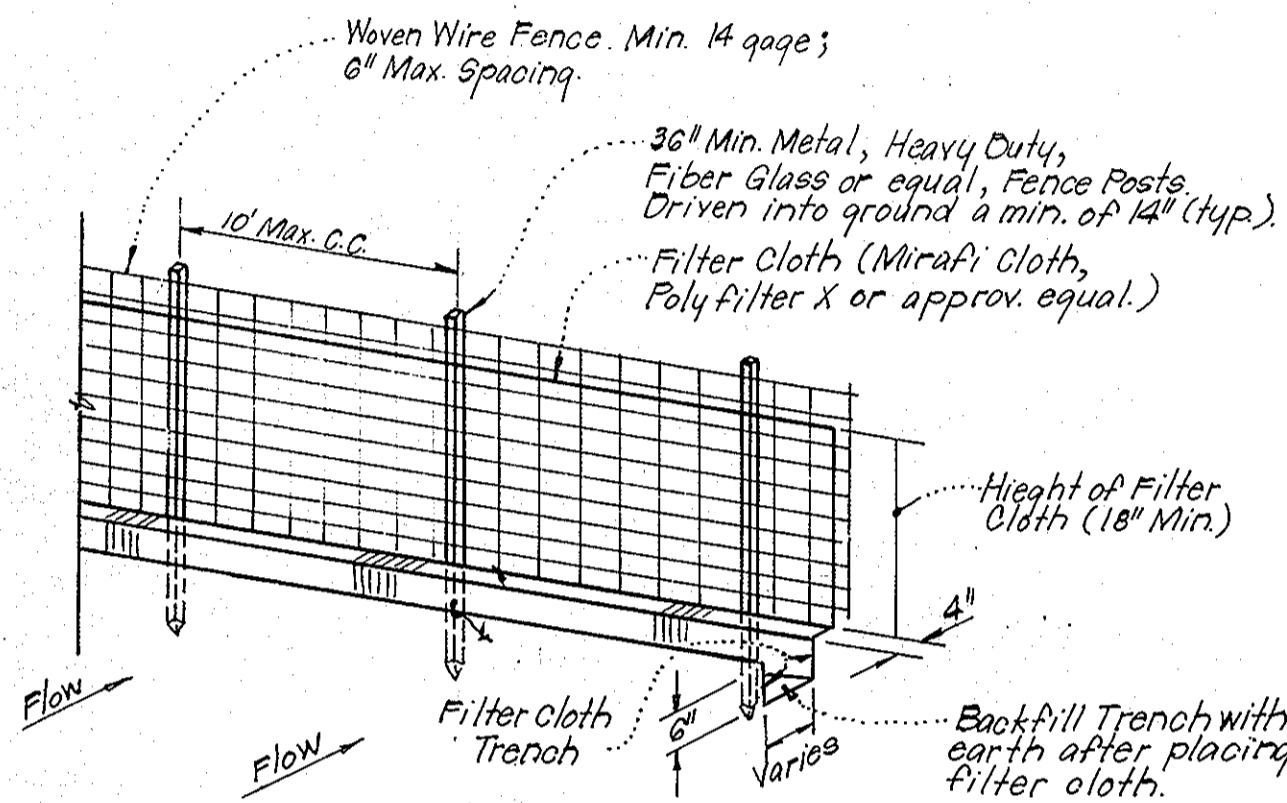


TYPICAL PERIMETER DIKE DETAIL (PD)
No Scale



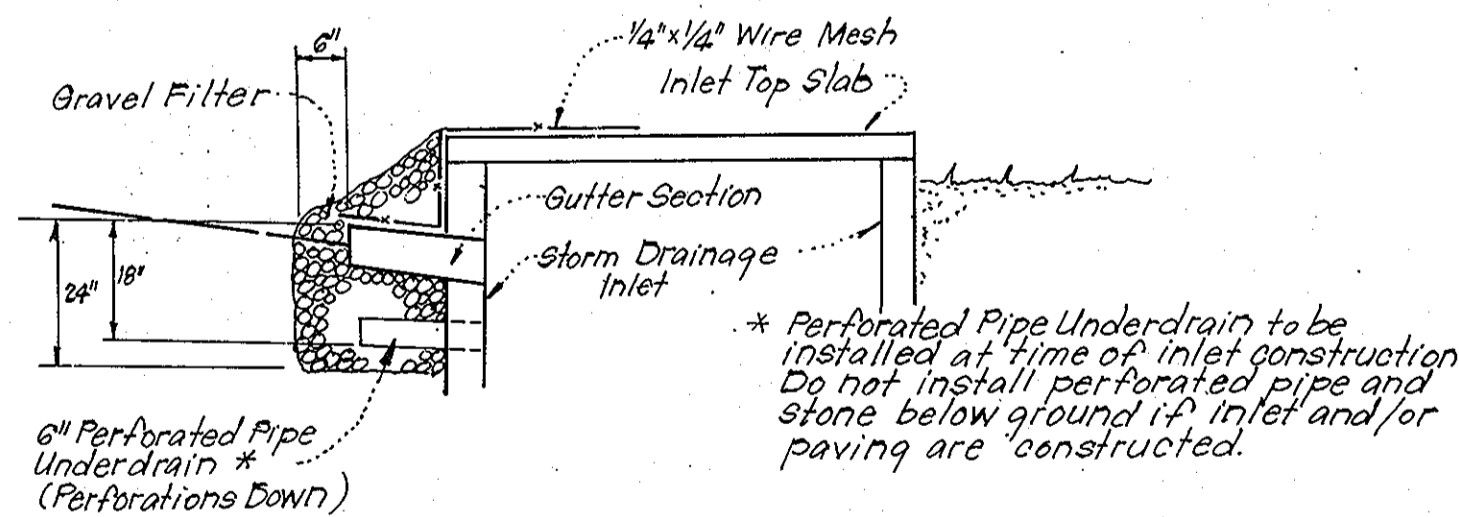
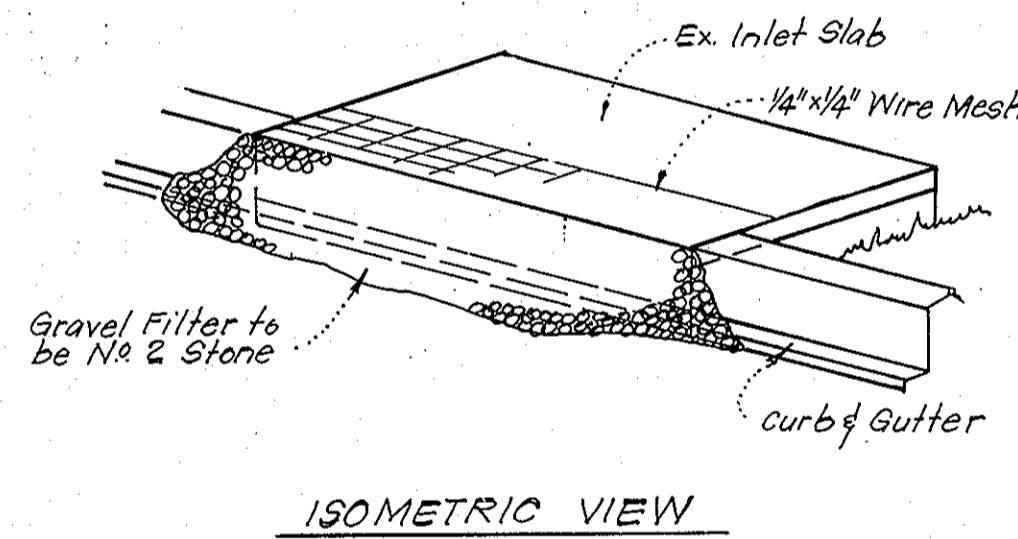
DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)
No Scale

- Notes:
- Sediment Trap to be cleaned out when sediment reaches a level of 1 ft. below crest of stone outlet.
 - Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
 - Stone Outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

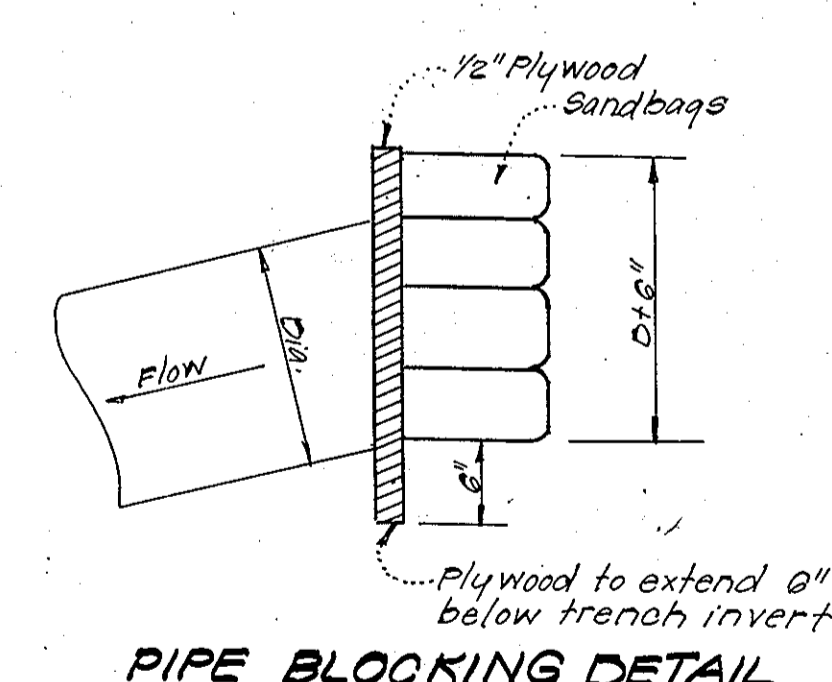


TYPICAL SILT FENCE DETAIL (S.F.)
No Scale

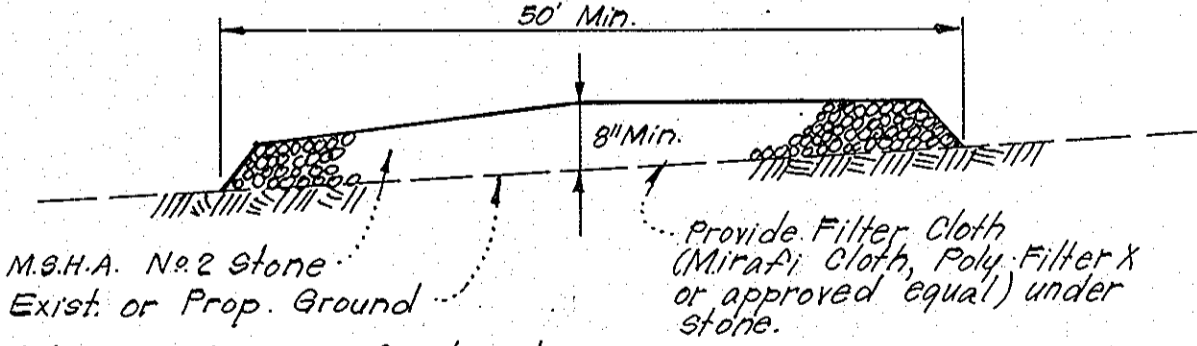
- Notes:
- Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
 - Filter Cloth to be fastened securely to Woven Wire, by use of wire ties spaced every 24 inches x 24 inches.



STONE FILTER INLET PROTECTION (S.F.I.P.)
No Scale



PIPE BLOCKING DETAIL
No Scale



STABILIZED CONSTRUCTION ENTRANCE
No Scale

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: 3-25-81
[Signature]

DEVELOPER'S/BUILDER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."
Peter Kule
Signature of Developer/Builder
12-1-80
Date

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 5-1-81
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 5-1-81
PLANNING DIRECTOR DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 4/30/81
DIRECTOR DATE

CHIEF BUREAU OF ENGINEERING
[Signature] 4/29/81
DATE

Reviewed for: *Howard* S.C.D.
and meets Technical Requirements
[Signature] 4/8/81
Signature Date
U.S. Soil Conservation Service

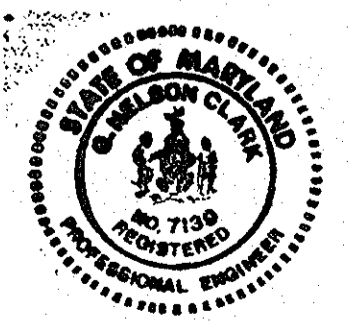
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/8/81
Approved Date

FOR REVISION 5 ONLY

D.C. WOODSNER
PROFESSIONAL ENGINEER
1, DAVID C. WOODSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12446, EXPIRATION DATE 5/31/81

BOHLER ENGINEERING
801 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7800
Fax: (410) 921-7887
www.BohlerEngineering.com

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
[Signature] 4/1/81
Date



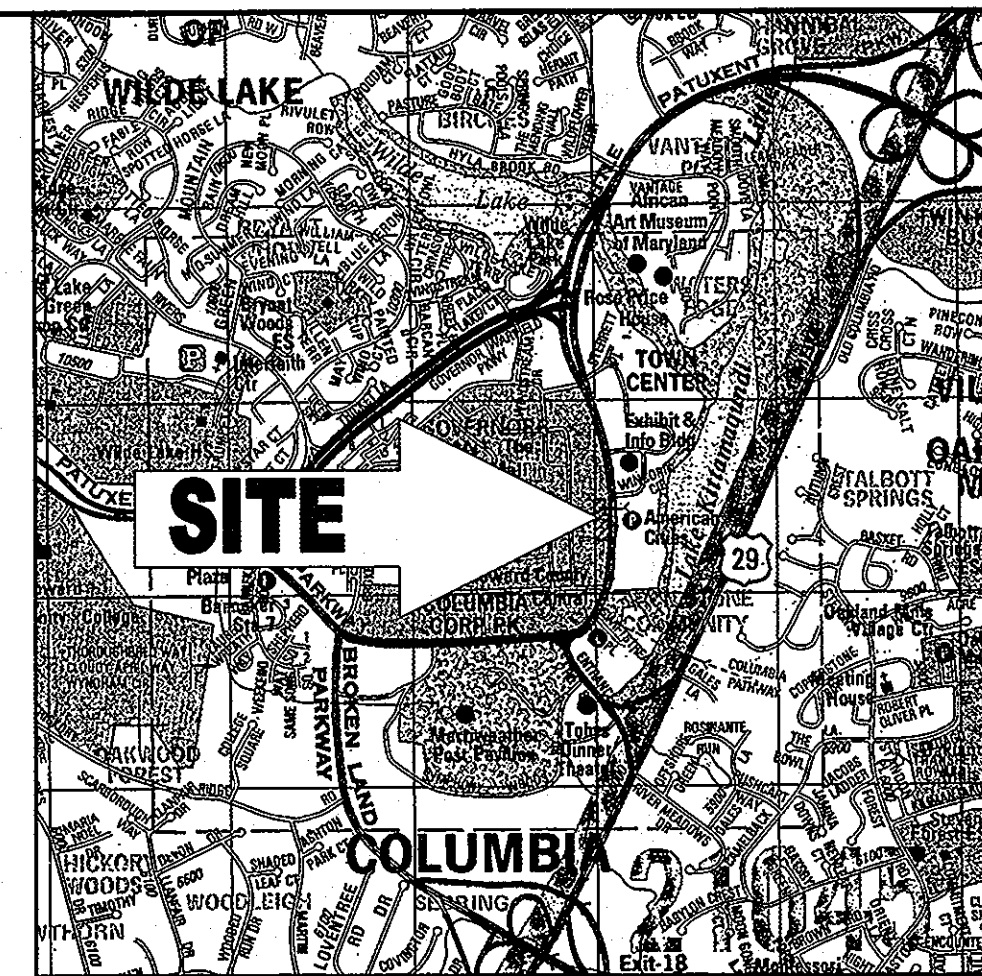
CLARK • FINEBROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
1115 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3600

DESIGNED: D.A.B. SCALE: As Shown
DRAWN: K.L.W. DRAWING: PE 18/E 39
CHECKED: D.A.B. DATE: 1-19-81

OWNER: PE PATIENT PARKWAY, LLC FILE NO. 80-089
P.O. Box 24172
MANASSAS, VA 20109
PHONE: (801) 986-3200

SECTION 2
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SDP-81-81c SDP 81-81C



LOCATION MAP
 COPYRIGHT ADC THE MAP PEOPLE
 PERMIT USE NO. 20602153-5
 SCALE: 1"=2000'

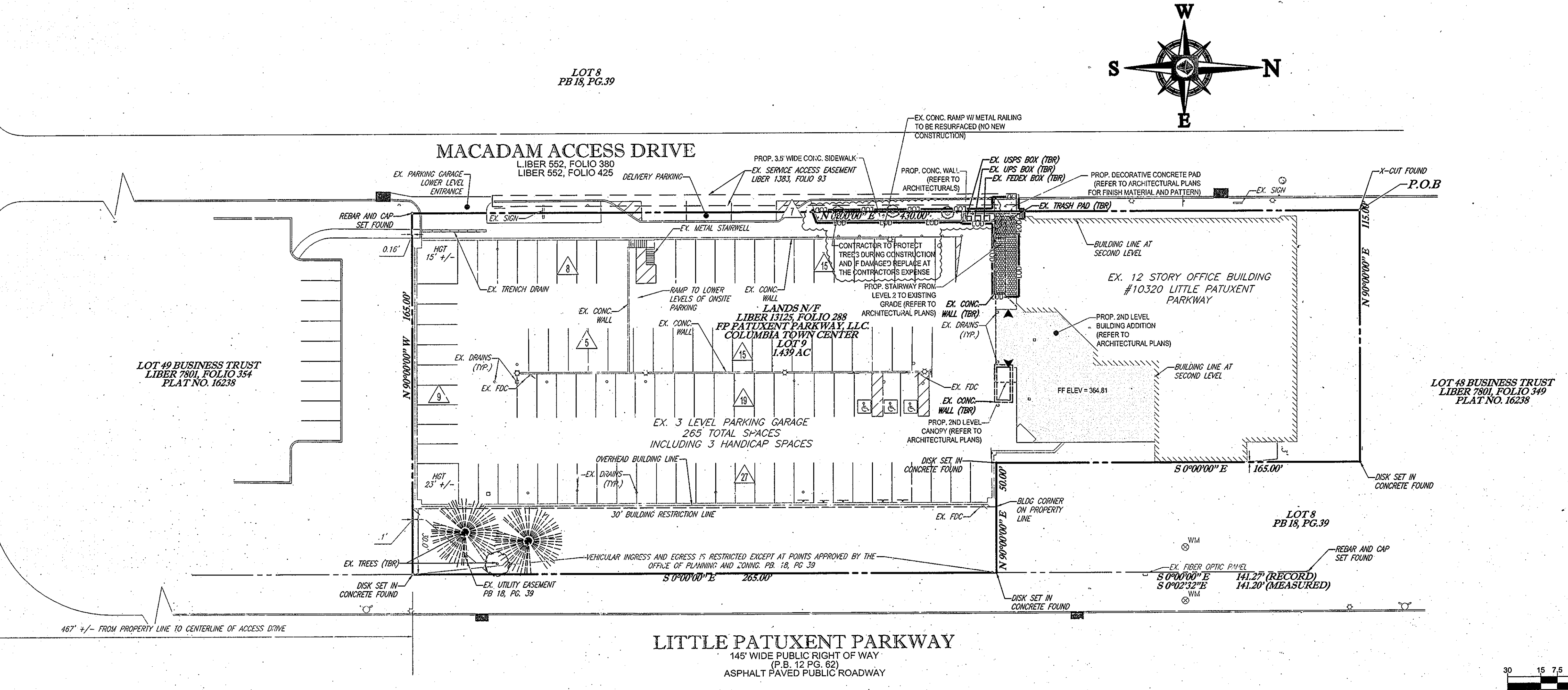
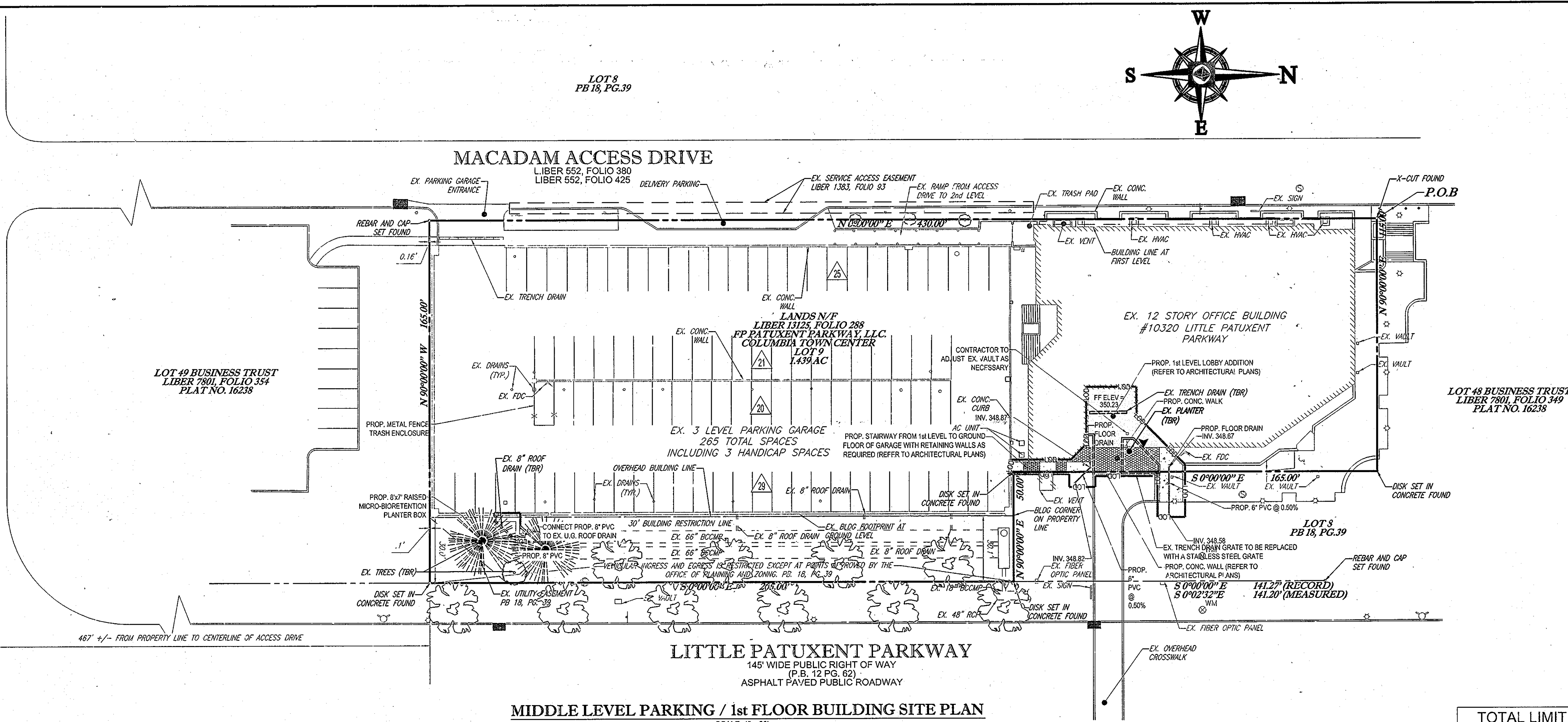
LEGEND

- LOD — LIMIT OF DISTURBANCE
- ▨ CONCRETE SIDEWALK
- ▨ STRUCTURAL CONCRETE (REFER TO ARCHITECTURAL PLANS)

TOTAL LIMIT OF DISTURBANCE: 2,800 S.F. OR 0.06 AC.

ACCESS DRIVE TO "COLUMBIA MALL"
 LIBER 552, FOLIO 390
 LIBER 552, FOLIO 425

ACCESS DRIVE TO "COLUMBIA MALL"
 LIBER 552, FOLIO 390
 LIBER 552, FOLIO 425



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 DATE: 7/26/12
 DIRECTOR OF PLANNING AND ZONING
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 CHIEF DIVISION OF LAND DEVELOPMENT

NO.	DATE	REVISION DESCRIPTION
7	6/25/12	ADDENDUM 3 - ARC REVIEW 6/25/12
6	6/6/12	BID SET
5	5/10/12	EXPAND LOBBY, ADD STAIRWAYS AND MICROBIO. FACILITY

OWNER:
 LOT 9
 FP PATUXENT PARKWAY, LLC.
 P.O. BOX 34472
 WASHINGTON, D.C. 20043
 PHONE: (301) 986-9200

DEVELOPER:
 FIRST POTOMAC MANAGEMENT, LLC.
 1739 COPPERMINE DRIVE
 MANASSAS, VA 20109
 PHONE: (301) 988-9200

PROJECT TITLE:
 SDP 81-81C
 MERRILL LYNCH BUILDING
 10320 LITTLE PATUXENT PARKWAY
 TOWN CENTER SECTION 2, AREA 2, LOT 9

TAX MAP: 36 GRID: 2 PARCEL: 322 ZONED: NT
 PLAT BOOK 18 / FOLIO 39 (F-70-72)

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

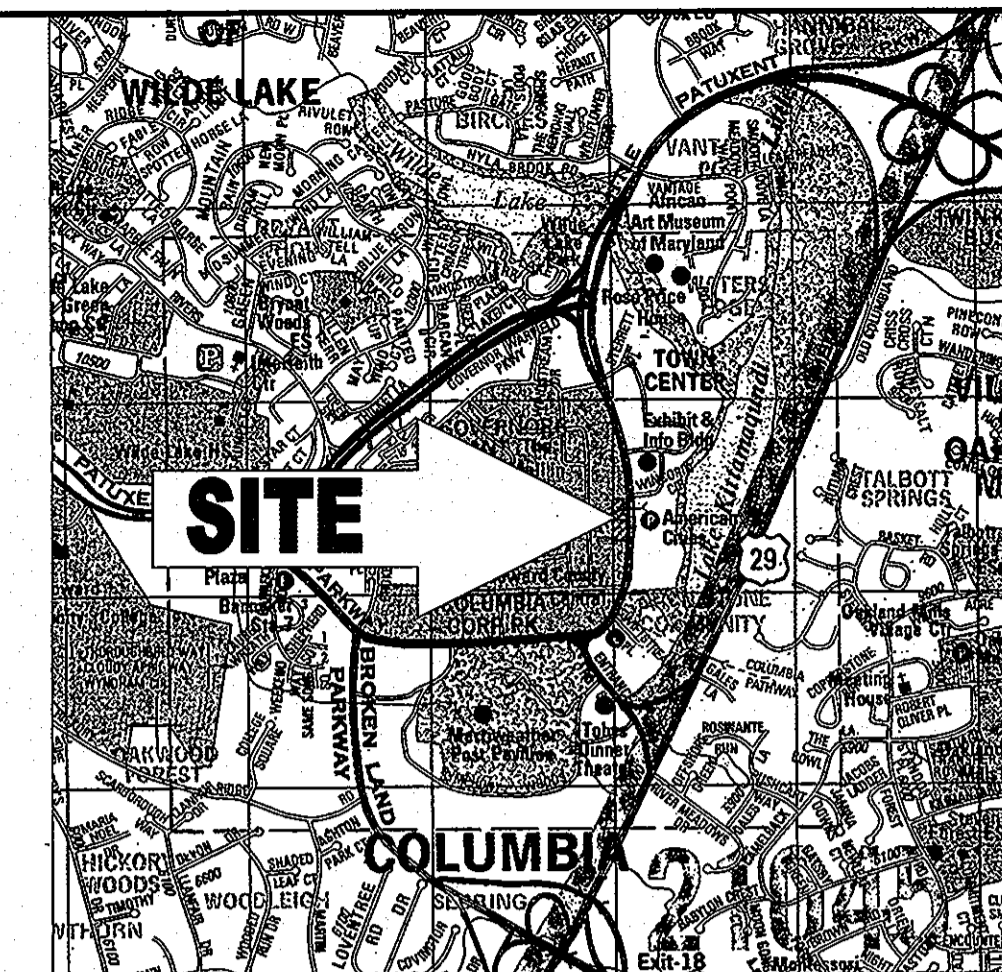
SHEET TITLE
SITE PLAN

BOHLER ENGINEERING
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7887
 www.BohlerEngineering.com

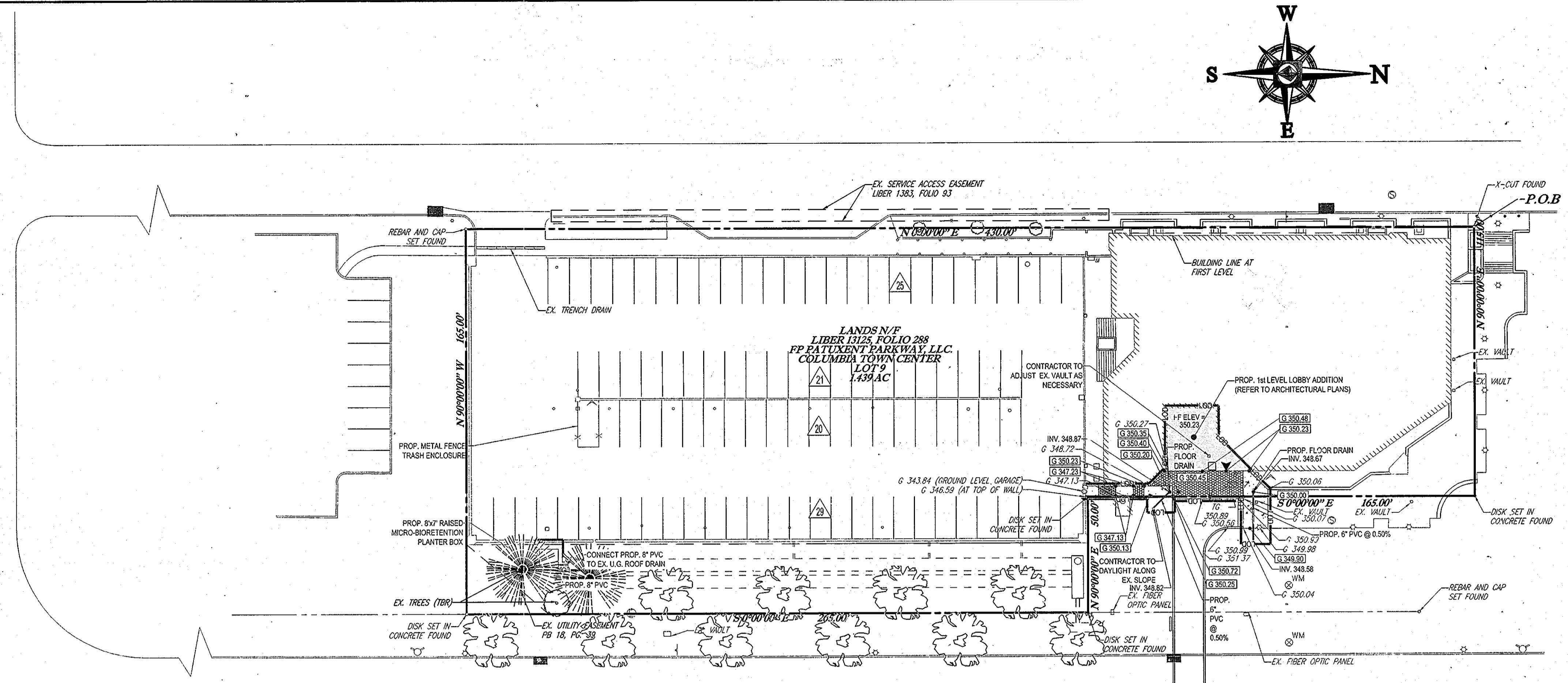
DESIGNED BY: MJG
 DRAWN BY: RMS
 PROJECT NO.: MD122020
 DATE: 5/10/12
 SCALE: 1"=30'
 DRAWING NO.: 6 OF 8

PROFESSIONAL CERTIFICATION
 I, DAVID C. WOESSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14440, EXPIRATION DATE: 5/19/13.

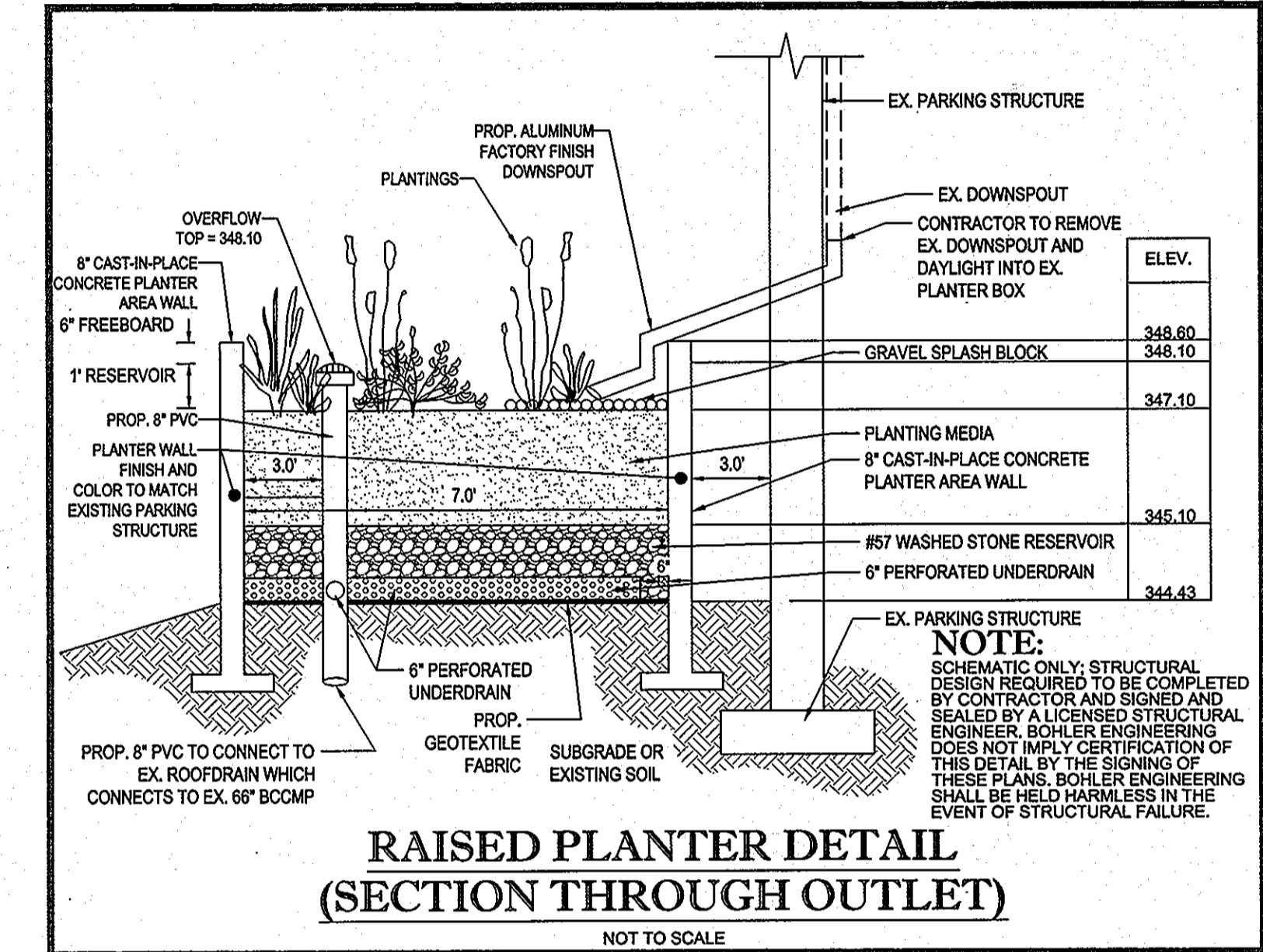
SDP-81-81



LOCATION MAP
 COPYRIGHT ADC THE MAP PEOPLE
 PERMIT USE NO. 20602153-5
 SCALE: 1"=2000'



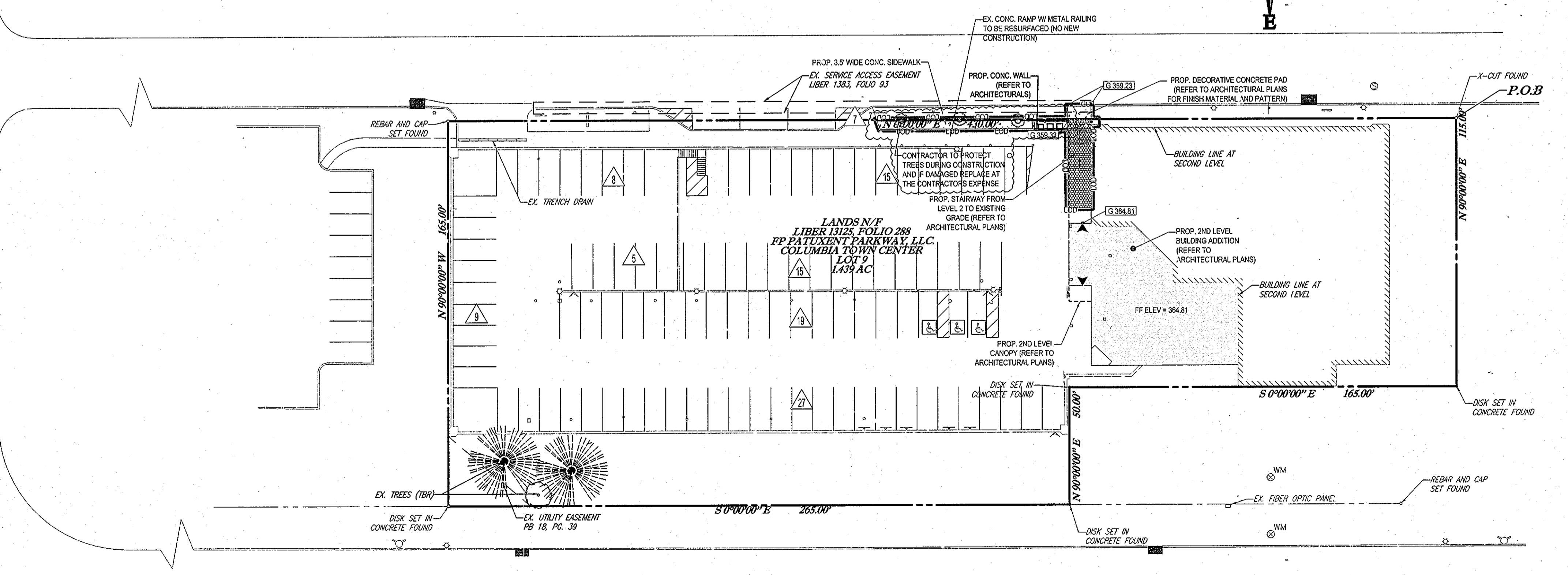
MIDDLE LEVEL PARKING / 1st FLOOR BUILDING GRADING PLAN
 SCALE: 1" = 30'



RAISED PLANTER DETAIL (SECTION THROUGH OUTLET)
 NOT TO SCALE

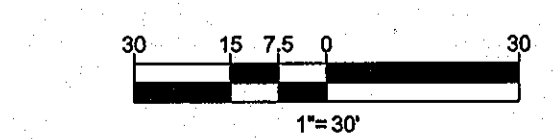
LEGEND
 —LOO— LIMIT OF DISTURBANCE

TOTAL LIMIT OF DISTURBANCE: 2,550 S.F. OR 0.06 AC.



UPPER LEVEL PARKING / 2nd FLOOR BUILDING GRADING PLAN
 SCALE: 1" = 30'

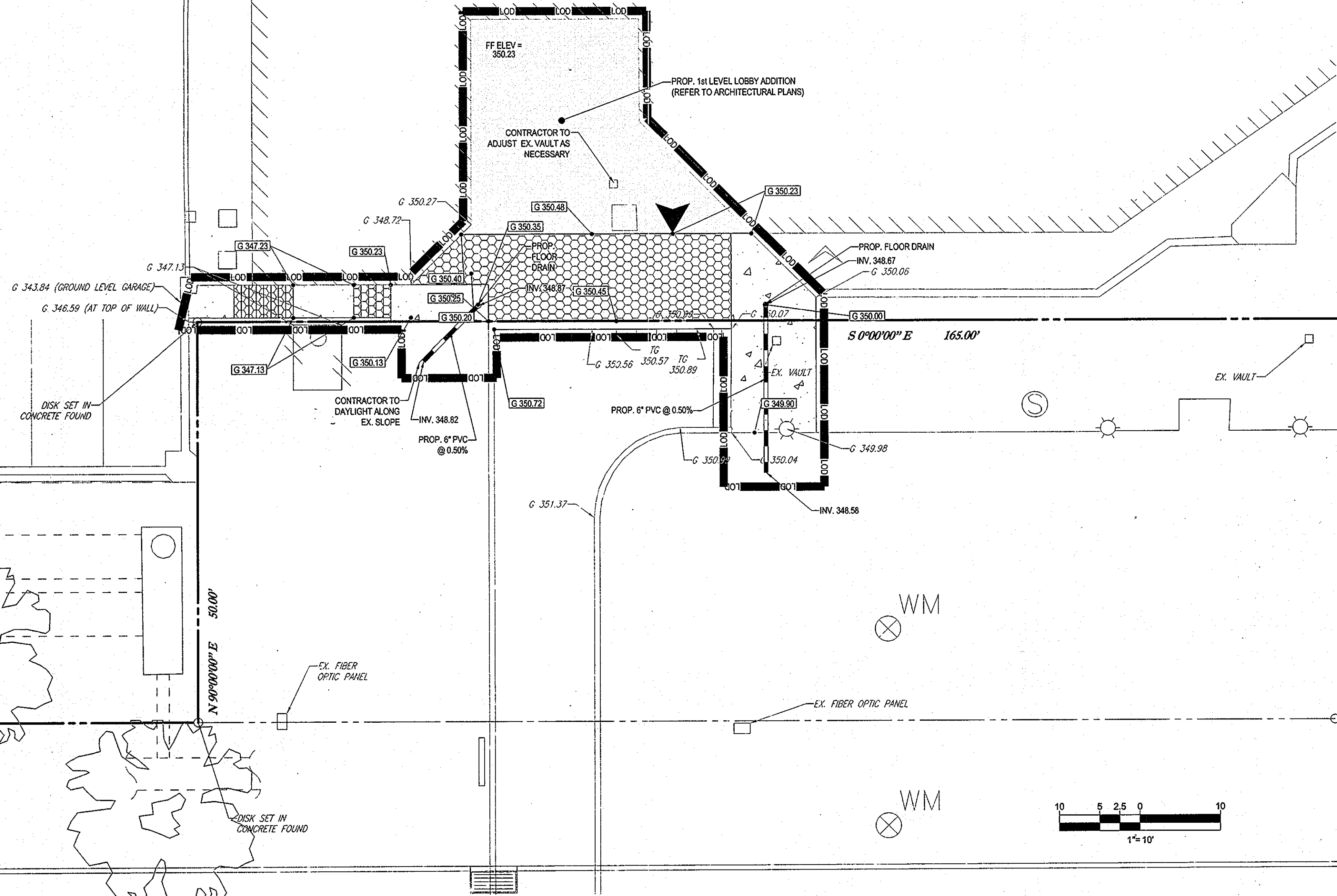
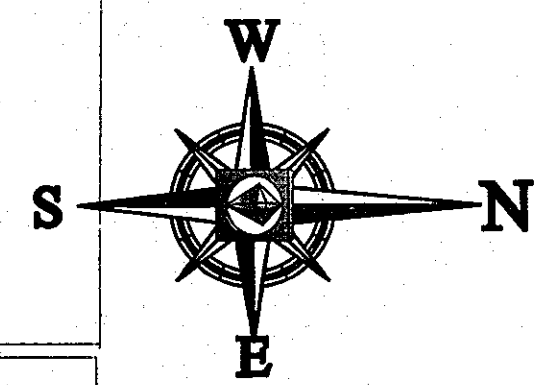
APPROVED: DEPARTMENT OF PLANNING AND ZONING
David A. Wyle 7/6/12
 DIRECTOR OF PLANNING AND ZONING
William J. Johnson 7/6/12
 CHIEF DEVELOPMENT ENGINEERING DIVISION
Jeff Schuler 7/30/12
 CHIEF DIVISION OF LAND DEVELOPMENT



PROFESSIONAL CERTIFICATION
 I, DAVID C. WOESSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14446, EXPIRATION DATE: 5/19/13.

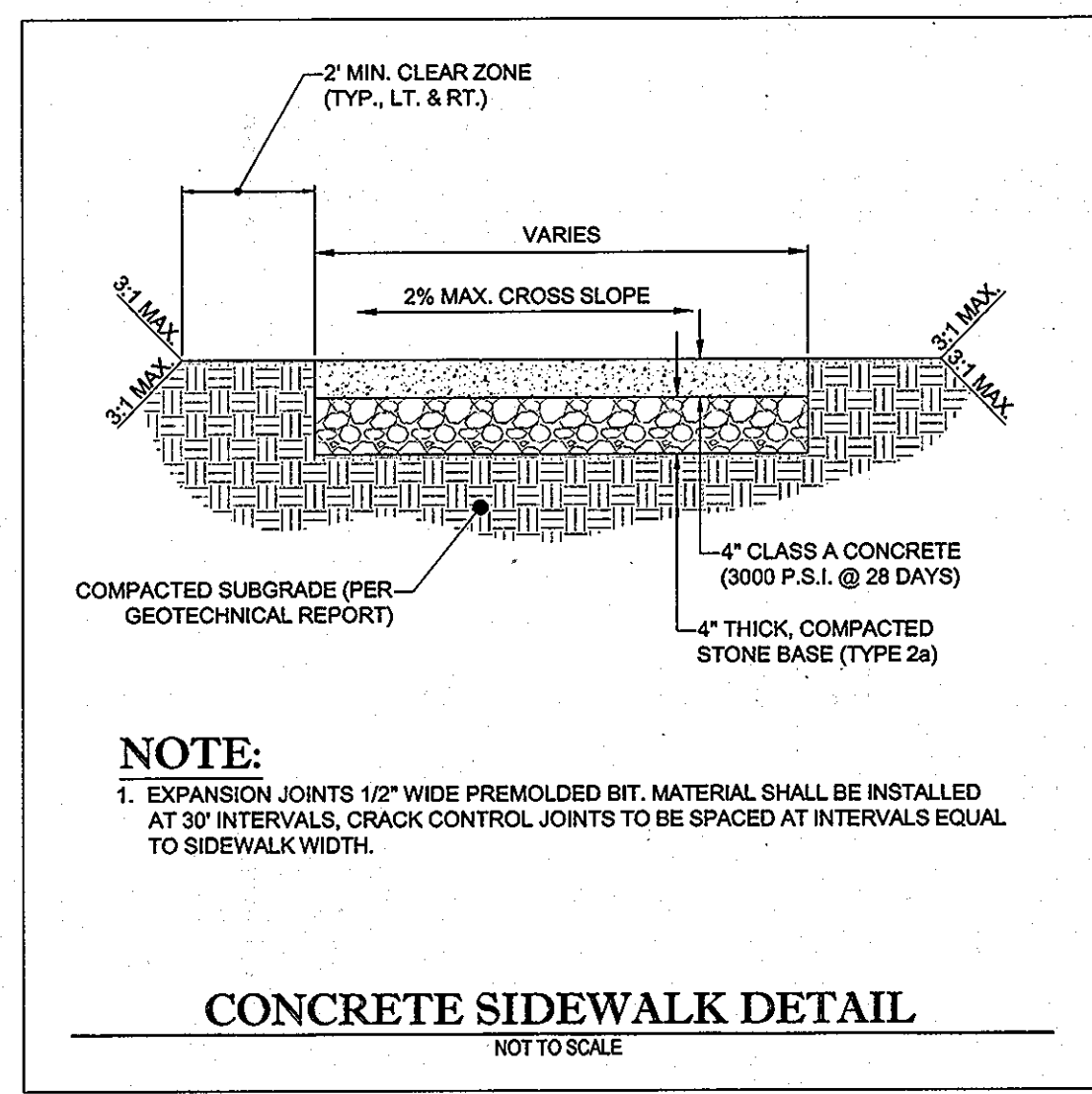
BOHLER ENGINEERING
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7880
 Fax: (410) 821-7887
 www.BohlerEngineering.com

DESIGNED BY: MJG
 DRAWN BY: RMS
 PROJECT NO.: MD122020
 DATE: 5/10/12
 SCALE: 1"=30'
 DRAWING NO. 7 OF 8



MIDDLE LEVEL PARKING / 1st FLOOR BUILDING DETAIL PLAN

SCALE: 1" = 10'

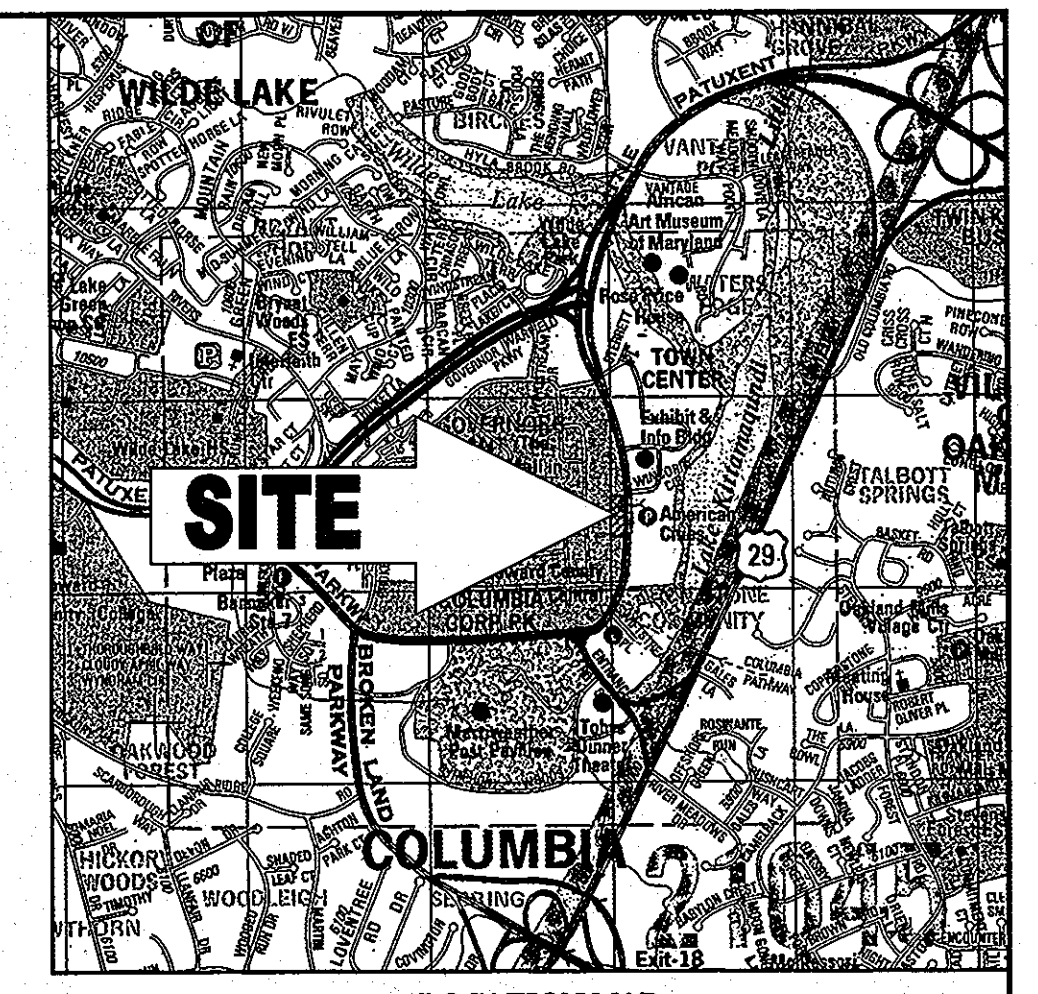


CONCRETE SIDEWALK DETAIL
NOT TO SCALE

Table B.3.2 Materials Specifications for Bioretention

Item	Specification	Notes	Plantings are site-specific
Plantings	see Appendix A, Table A.4	n/a	USDA soil types loamy sand, sandy loam or loam
Planting soil (2.5' to 4' deep)	sand 55 - 60% silt 30 - 55% clay 10 - 25%	n/a	aged 6 months, minimum
pea gravel diaphragm and curtain drain	should be hand-sorted pea gravel - ASTM D-448	pea gravel: No. 6 No. 8	
geotextile	should be non-woven Class "C" - approval opening size (ASTM D-4751), grab tensile strength (ASTM-D-4820), puncture resistance (ASTM-D-4833)	n/a	for use as necessary beneath underdrains only
underdrain gravel	AASHTO M-43	0.375" to 0.75"	
underdrain piping	F 758, Type F8 28 or AASHTO M-295	4" to 8" rigid schedule 40 PVC or SDR35	3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes
poured in place concrete (if required)	MSHA Mix No. 3; F _c = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 308.3R-89; vertical loading (H-10 or H-20); allowable horizontal loading (based on soil pressure); and analysis of potential cracking.
soil (1' deep)	AASHTO M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Groggstone 410 are not acceptable. No cement, carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

Appendix A.3. Contractor Specifications for Sand Filter, Bioretention and Open Channels



LOCATION MAP
COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 20602153-5
SCALE: 1"=2000'

7	6/25/12	ADDENDUM 3 - ARC REVIEW 6/25/12
6	6/6/12	BID SET
5	5/10/12	EXPAND LOBBY, ADD STAIRWAYS AND MICROBIO. FACILITY
NO.	DATE	REVISION DESCRIPTION

OWNER:
LOT 9
FP PATUXENT PARKWAY, LLC.
P.O. BOX 34472
WASHINGTON, D.C. 20043
PHONE: (301) 986-9200

DEVELOPER: FIRST POTOMAC MANAGEMENT, LLC.
7329 COPPERMINE DRIVE
MANASSAS, VA 20109
PHONE: (301) 986-9200

PROJECT TITLE: SDP 81-31C
MERRILL LYNCH BUILDING
10320 LITTLE PATUXENT PARKWAY
TOWN CENTER SECTION 2, AREA 2, LOT 9

TAX MAP: 36 GRID: 2 PARCEL: 322 ZONED: NT
PLAT BOOK 18 / FOLIO 39 (F-70-72)

5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SHEET TITLE: DETAIL SHEET

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21284
Phone: (410) 821-7900
Fax: (410) 821-7887
www.BohlerEngineering.com

DESIGNED BY: MJG
DRAWN BY: RMS
PROJECT NO.: MD122020
DATE: 5/10/12
SCALE: AS NOTED
DRAWING NO. 8 OF 8

APPROVED: DEPARTMENT OF PLANNING AND ZONING
7/6/12
DIRECTOR OF PLANNING AND ZONING
7/24/12
CHIEF-DEVELOPMENT ENGINEERING DIVISION
7/30/12
CHIEF-DIVISION OF LAND DEVELOPMENT

CAST STAINLESS STEEL FLOOR DRAINS

JOSAM

ROUND ADJUSTABLE STRAINER, THREADED OUTLET
SERIES 7000
SERIES 7000-1A-1-6S 2" 5" 0.75" - 2.1"
SERIES 7000-1A-1-6S 3" 5" 0.75" - 2.1"
SERIES 7000-1A-1-6S 4" 5" 0.75" - 2.1"
SERIES 7000-1A-1-6S 5" 6" 1.5" - 2.4"
SERIES 7000-1A-1-6S 6" 6" 1.5" - 2.4"
SERIES 7000-1A-1-6S 7" 7" 1.5" - 2.9"
SERIES 7000-1A-1-6S 8" 7" 1.5" - 2.9"
SERIES 7000-1A-1-6S 9" 7" 1.5" - 2.9"
SERIES 7000-1A-1-6S 10" 8" 1.5" - 2.9"
SERIES 7000-1A-1-6S 12" 8" 1.5" - 2.9"
SERIES 7000-1A-1-6S 14" 8" 1.5" - 2.9"

SQUARE ADJUSTABLE STRAINER, THREADED OUTLET
SERIES 8000
SERIES 8000-1A-1-6S 2" 5" 0.75" - 2.1"
SERIES 8000-1A-1-6S 3" 5" 0.75" - 2.1"
SERIES 8000-1A-1-6S 4" 5" 0.75" - 2.1"
SERIES 8000-1A-1-6S 5" 6" 1.5" - 2.4"
SERIES 8000-1A-1-6S 6" 6" 1.5" - 2.4"
SERIES 8000-1A-1-6S 7" 7" 1.5" - 2.9"
SERIES 8000-1A-1-6S 8" 7" 1.5" - 2.9"
SERIES 8000-1A-1-6S 9" 7" 1.5" - 2.9"
SERIES 8000-1A-1-6S 10" 8" 1.5" - 2.9"
SERIES 8000-1A-1-6S 12" 8" 1.5" - 2.9"
SERIES 8000-1A-1-6S 14" 8" 1.5" - 2.9"

30000-SS OPTIONS
-21 4" Diameter Funnel
-22 6" Diameter Funnel
-23 10" Filter Top Connection
-24 Stainless Steel Perforated Basket
-25 Sealed Gate

9" x 12" ROUND TOP, SCH 40 BUTT WELD OUTLET
SERIES 9000
SERIES 9000-1A-1-6S 2" 9" 8.4" 12.0" 2.4" 5.3"
SERIES 9000-1A-1-6S 3" 9" 8.4" 12.0" 2.4" 5.3"
SERIES 9000-1A-1-6S 4" 9" 8.4" 12.0" 2.4" 5.3"
SERIES 9000-1A-1-6S 5" 12.5" 11.0" 17.0" 0.38" 6.0"
SERIES 9000-1A-1-6S 6" 12.5" 11.0" 17.0" 0.38" 6.0"
SERIES 9000-1A-1-6S 8" 12.5" 11.0" 17.0" 0.38" 6.0"

www.josam.com

PROFESSIONAL CERTIFICATION
I, DAVID C. WOESSNER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14440, EXPIRATION DATE: 8/18/15.