GENERAL NOTES

1. THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.

- 2. THE EXISTING TOPOGRAPHY IS A COMBINATION OF AERIAL GIS SURVEY AND FIELD RUN SURVEY WITH 2' CONTOUR INTERVALS PREPARED BY MORRIS & RITCHIE ASSOCIATES, INC. DATED JULY 3, 2008.
- 3. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 35HA AND 35HB WERE USED FOR THIS PROJECT.
- 4. ALL PROPOSED WATER IS PRIVATE, CONNECTING TO EXISTING ONSITE PRIVATE WATER. EXISTING ONSITE PRIVATE WATER IS SERVICED THROUGH AN EXISTING PUBLIC METER OFF OF PUBLIC 12" WATER MAIN (44-3283-D) LOCATED ON GRACE
- 5. ALL PROPOSED SEWER IS PRIVATE, CONNECTING TO EXISTING ONSITE PRIVATE SEWER. EXISTING ONSITE PRIVATE SEWER IS SERVICED BY EXISTING PUBLIC 24" SEWER MAIN, CONT. 30-1002.
- 6. THIS PROJECT UTILIZES ENVIRONMENTAL SITE DESIGN FOR ALL STORM WATER MANAGEMENT PRACTICES. ALL SWM DEVICES WILL BE PRIVATELY OWNED AND MAINTAINED.
- 7. EXISTING UTILITIES ARE BASED ON FIELD RUN SURVEYS BY AI DATA, DATED 9/23/11, AND MORRIS & RITCHIE ASSOCIATES, INC, DATED JULY 3, 2008.
- 8. THERE IS NO FLOODPLAIN ON THIS SITE.

1.2

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

1211

MATE

MMA <u>Chiminal (</u>

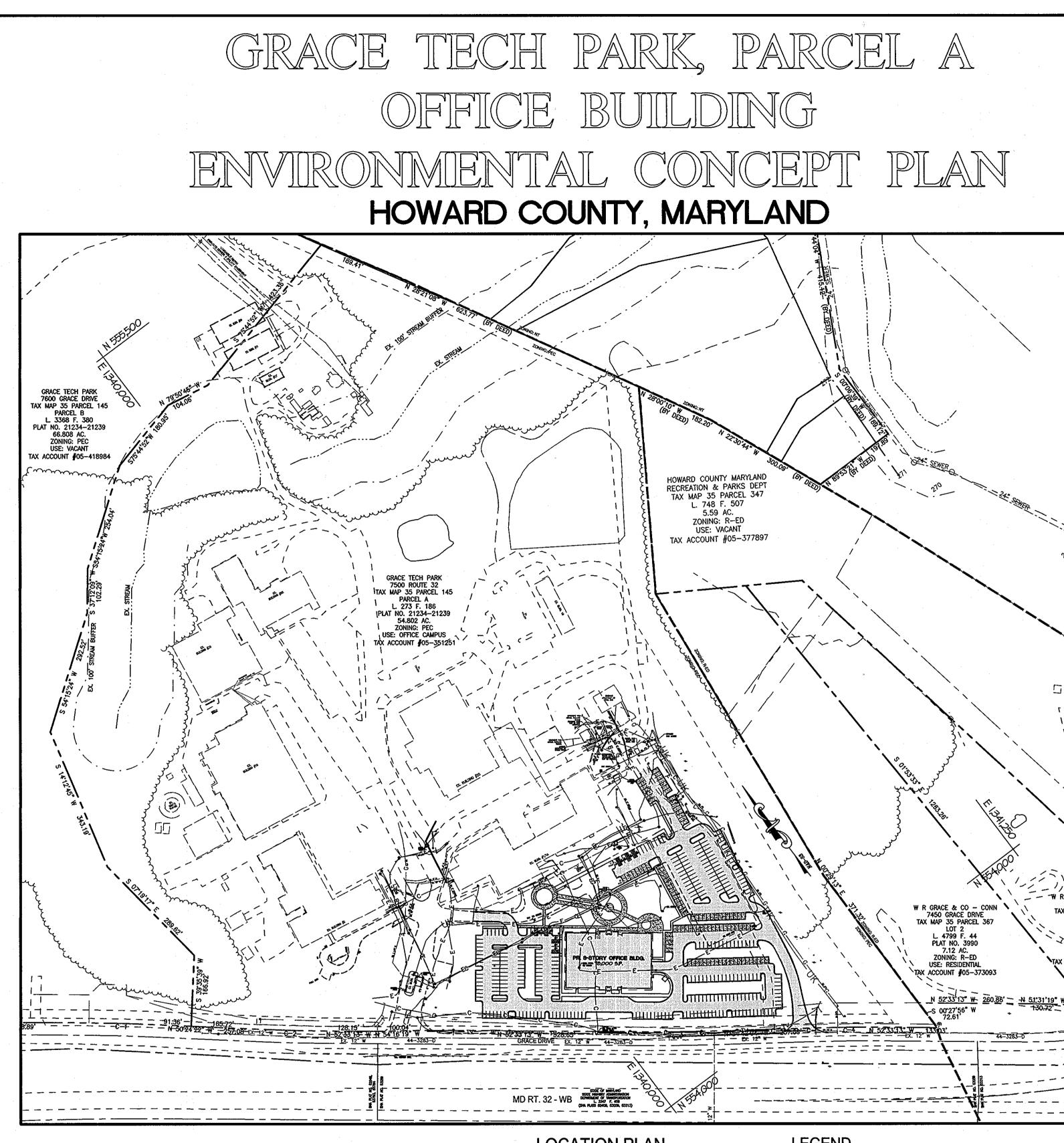
CHIEF, DIVISION & LAND DEVELOPMENT

Keit Shendrook

- 9. THERE ARE NO WETLANDS OR STEEP SLOPES BEING IMPACTED ON THIS PROJECT.
- 10. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED JULY 15, 2011.
- 11. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- 12. THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC., DATED SEPTEMBER 24, 2008.
- 13. BOUNDARY INFORMATION IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY MORRIS & RITCHIE ASSOCIATES, INC. IN NOVEMBER, 2008, AND MDR PLAT NO. 21234, RECORDED AUGUST 12, 2010.
- 14. THE APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE ANY APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAT/PLAN AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAT/PLAN AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PLAN PROCESS. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.

15. THIS ECP IS SUBJECT TO THE CONDITIONS OF APPROVAL FOR WAIVER PETITION WP-09-227, DATED 7/15/09 AS FOLLOWS: A. A COMPLETED FOREST CONSERVATION "DECLARATION OF INTENT FOR SUBDIVISION FOR REAL ESTATE TRANSACTION"

- HAS BEEN SUBMITTED WITH THE FINAL SUBDIVISION PLAT, AND; ANY RESUBDIVISION PLAT SUBMISSION OR SITE DEVELOPMENT PLAN SUBMISSION FOR PARCEL A OR PARCEL B SHALL BE TESTED FOR ADEQUATE ROAD FACILITIES AND INCLUDE FOREST STAND DELINEATION, FOREST CONSERVATION AND LANDSCAPE PLANS FOR THE ENTIRE PARCEL PER THE REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE FINAL PLAN OR SITE DEVELOPMENT PLAN APPLICATION AND CHECKLIST,
- ANY RESUBDIVISION PLAT SUBMISSION OR SITE DEVELOPMENT PLAN SUBMISSION FOR PARCEL A OR PARCEL B SHALL INDICATE/DELINEATE ANY FLOODPLAIN, 100 YEAR FLOODPLAIN, DRAINAGE AND UTILITY EASEMENTS, WETLANDS, WETLAND BUFFERS, STREAMS AND STREAM BUFFERS PER THE REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE FINAL PLAN OR SITE DEVELOPMENT PLAN APPLICATION AND CHECKLIST, AND;
- ALL REGULATIONS AS REQUIRED BY SECTIONS 16.144(B), 16.144(D) AND 16.110(A) SHALL BE COMPLIED WITH UPON RESUBDIVISION AND/OR ADDITIONAL DEVELOPMENT OF THE SUBJECT PROPERTY.



DESIGN NARRATIVE

NATURAL AREA PRESERVATIONS THE PROPERTY IS 54.802 ACRES, BUT ONLY 8.54 ACRES IS PROPOSED TO BE DISTURBED. THE EXISTING NATURAL AREAS WITHIN THE PROPERTY VARIES FROM STREAM CHANNELS, GRASS SWALES, SHEET FLOW TO WOODED AREAS, AND CONCENTRATED FLOWS THROUGH CLOSED STORM DRAIN SYSTEMS. FLOWS FROM THE SITE DISCHARGES INTO THE MIDDLE PATUXENT WATERSHED WHICH IS LOCATED ON THE NORTH EASTERLY PORTION OF THE SITE. THE NATURAL DRAINAGE PATTERNS WITHIN THE LIMIT OF DISTURBANCE WILL BE THREE DISTINCTIVE SITE OUTFALL WITH CONCENTRATED FLOWS STORM DRAINS, IMPERVIOUS AREAS, AND DRAINAGE CHANNEL. EVERY EFFORT WAS MADE TO CONSERVE AND ENHANCED THE NATURAL DRAINAGE PATTERNS FROM PRE TO POST CONDITION. ESD STORMWATER REQUIREMENTS & ARCHEIVEMENT THE STORM WATER MANAGEMENT REQUIREMENT FOR THIS 8.54 ACRE LIMIT OF DISTURBANCE WITHIN THE 54.802 ACRE SITE IS MET THROUGH THE IMPLEMENTATION OF VARIOUS ESD MICRO SCALE PRACTICES TO THE MEP. THE ESD ANALYSIS TO MEET THE REQUIRED WQV, REV, AND CPV FOR THE ENTIRE SITE IS PE=1.8", WITH A REQUIRED ESDV OF 24,716 CF, AND A REQUIRED FILTER (AF) OF 44,640 SF. THE ULTIMATE GOAL IS TO ACHIEVE "WOODS IN GOOD HYDROLOGICAL CONDITION" WHILE MAINTAINING THE NATURAL FLOW PATTERNS, RESOURCES PROTECTION, AND CONVEYING RUNOFF THROUGHOUT THE SITE AT A NON-EROSIVE VELOCITY.

PROPOSED SWM PRACTICES WITHIN THE LIMIT OF DISTURBANCE FOR THE PROPOSED IMPROVEMENT CONSIST OF VARIOUS MICRO-SCALE PRACTICES OF BIO-SWALES, MICRO-BIORETENTION FACILITIES, POROUS PAVEMENTS, AND RAINWATER HARVESTING. ALL THE MICRO-BIORETENTION FACILITIES AND BIO-SWALES WILL HAVE OVERFLOW INLETS TO CONVEY PEAK FLOWS TO THE SITE OUTFALLS IN A NON-EROSIVE VELOCITY. THE ESD MICRO-SCALE PRACTICES ARE DESIGNED TO MEET THE STORM WATER MANAGEMENT REQUIREMENT OF ESD TO THE MEP. THESE FACILITIES PROVIDE TREATMENT FOR WATER QUALITY, GROUNDWATER RECHARGE AND CHANNEL PROTECTION VOLUME.

LOCATION PLAN SCALE: 1" = 150'

LEGEND

----- EX. PROPERTY LINE EX. EASEMENT EX. ZONING LINE ----- EX. BUILDING — — — — — EX. CONCRETE ------ EX. PAVEMENT ------------------------ EX. FENCE _____ OH-____ ____. ____ · ___ · ____ ------ E------₩ * _____ G_____ _____ _____c____ ----- FO ------_____ ĭv_____

----- EX. ADJACENT PROPERTY LINE - EX. RIGHT OF WAY

OH	EX. OVERHEAD LINE
	EX. WATER LINE
	EX. SEWER LINE
	EX. STREAM
· ·	EX. STREAM BUFFER
\dots	EX. TREE LINE
	EX. GUARD RAIL
E	EX. ELECTRIC CONDUIT
¥ *	EX. LIGHT POLES
G	EX. GAS LINE
	EX. STORM DRAIN
c	EX. CONDUIT
FO	EX. FIBER OPTIC
ĭv	EX. TV LINE
	PR. BUILDING FOOTPRINT
	PR. BUILDING OVERHANG
	PR. BUILDING SETBACK
	PR. EDGE OF CONCRETE PR. CURB
	PR. SIDEWALK
	PR. RETAINING WALL
	PR. POROUS PAVEMENT
understanding and a second	FR. FURUUS PAVEMENT

PR. IMPERVIOUS AREA

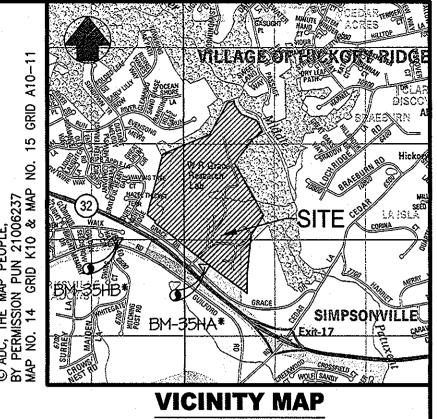


<u>BM_35HA*</u> N 553,966.7457 E 1,340,476.9524 NAD 83 (Adj 07) NAVD 88 ELEV. 404.584

BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP OF A 3 FOOT DEEP COLUMN OF CONCRETE APPROXIMATELY 90'± NORTH OF GRACE DRIVE AND 160'± EAST OF THE EASTERN MOST ENTRY DRIVE FOR THE PROPERTY. (ALSO KNOWN AS "R-109" AND "0068").

BM_35HB* N 554,836.4156 E 1,337,888.3861 NAD 83 (Adj 07) NAVD 88 ELEV. 449.699

BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP OF A 3 FOOT DEEP COLUMN OF CONCRETE AT THE INTERSECTION OF GUILFORD ROAD AND WHITEGATE ROAD, APPROXIMATELY 5' \pm NORTH OF GUILFORD ROAD.



SCALE: 1" = 2,000'

SHEET INDEX

1 COVER SHEET 2 EXISTING FEATURES & NATURAL RESOURCES MAP 3 DEVELOPMENT CONCEPT PLAN

SITE ANALYSIS DATA CHART

- TOTAL PROJECT AREA: AREA OF PLAN SUBMISSION:
- LIMIT OF DISTURBANCE: PRESENT ZONING:
- PROPOSED USE:
- PROPOSED FLOOR SPACE:
- TOTAL NUMBER OF PARKING SPACES REQUIRED: (149 SPACES FOR EX. BUILDING TO BE REMOVED AND REPLACED) (258 SPACES REQUIRED FOR BLDG. ADDITION FOR OFFICE
- © 3.3 SPACES/1,000 SF) PARKING SPACES PROVIDED:

9. DPZ FILE REFERENCES:

W R GRACE & CO 7440 GRACE DRIVE

TAX MAP 35 PARCEL 36

ZONING: R-ED USE:-RESIDENTIAL

4799 F. 44 PLAT NO. 3990

ACCOUNT #05-385504

N 39'55'17" W

10. SANITARY SEWER/WATER SERVICE:

MD_PROFESSIONAL CERTIFICATION:

1 HEREBY CERTIFY THAT

THESE DOCUMENTS WERE

PREPARED OR APPROVED B

ME, AND THAT I AM A DULY

ENGINEER UNDER THE LAWS

OF THE STATE OF MARYLAND,

LICENSED PROFESSIONAL

LICENSE NO. 29203,

EXPIRATION DATE: 06/16/2013.

418 INCL. 12 HC SPACES (12 REQUIRED)

54.80 ACRES 8.54 ACRES

PEC

8.54 ACRES

OFFICE CAMPUS

78,000 S.F.±

AND 60 SMALL CAR (COMPACT) PARKING SPACES F-10-023, P.N. 21234-21239 WP-09-227 PUBLIC/PUBLIC

ADDRESS CHART LOT/PARCEL # STREET ADDRESS PARCEL A, TM PARCEL 145 7500 GRACE DRIVE

					×		
	PER	MIT INF	ORMATIO	N CH	ART		
		ISION NA TECH PA			····		PARCEL NO. PARCEL A
PLAT # OR L/F PLAT #21234-21239	GRID # 22	ZONING PEC	TAX MAP 35	NO.	ELECT. 5	DIST.	CENSUS TRAC 6055.11
WAT	ER CODE:	• • •		:	SEW	ER CO	DE:

ECP-01 MORRIS & RITCHIE ASSOCIATES, INC ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 14280 PARK CENTER DRIVE LAUREL, MD 20707 (410) 792-9792 / (301) 776-1690

FAX: (410) 792-7395	
MRAGTA.COM	

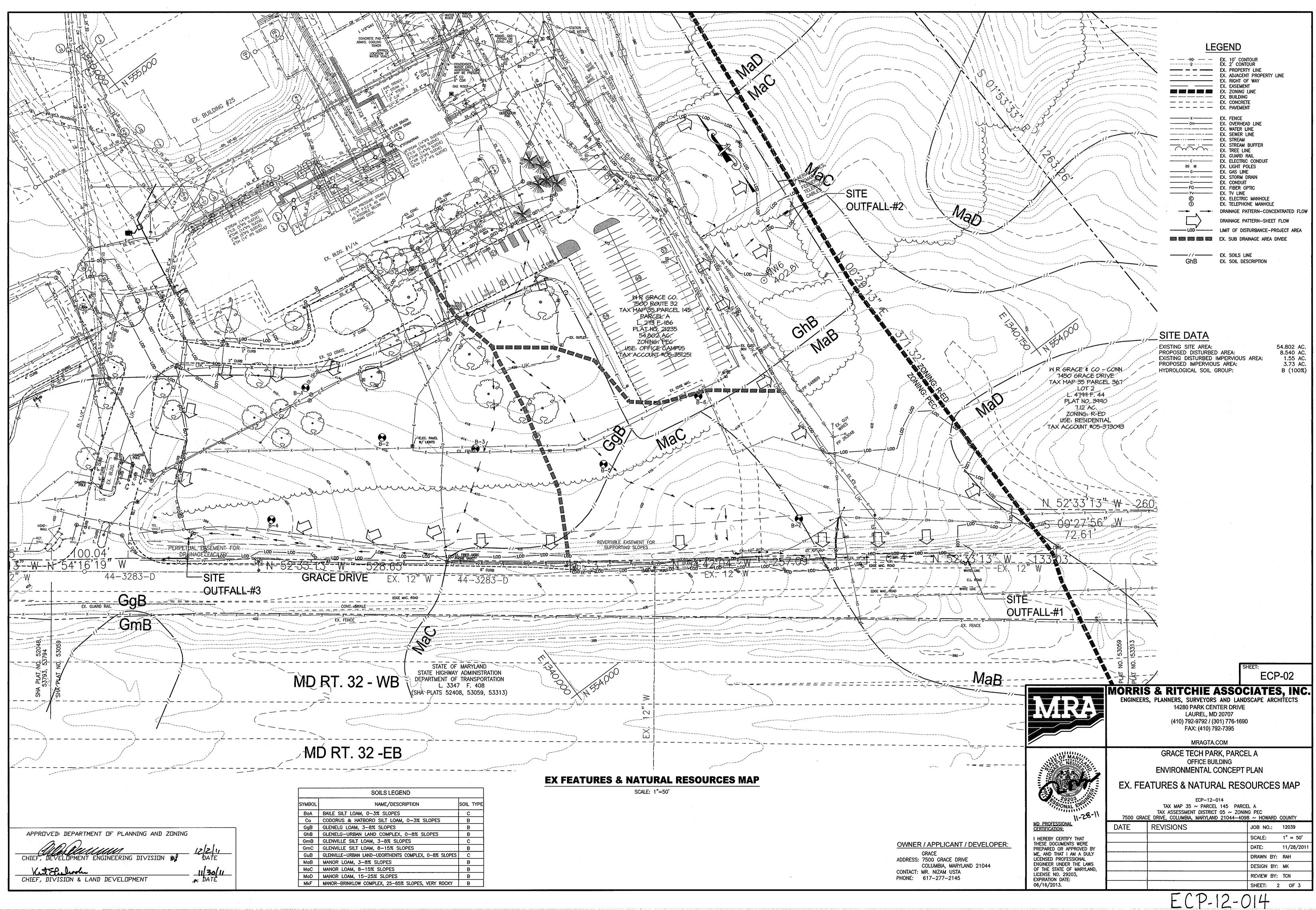
GRACE TECH PARK, PARCEL A **OFFICE BUILDING** ENVIRONMENTAL CONCEPT PLAN

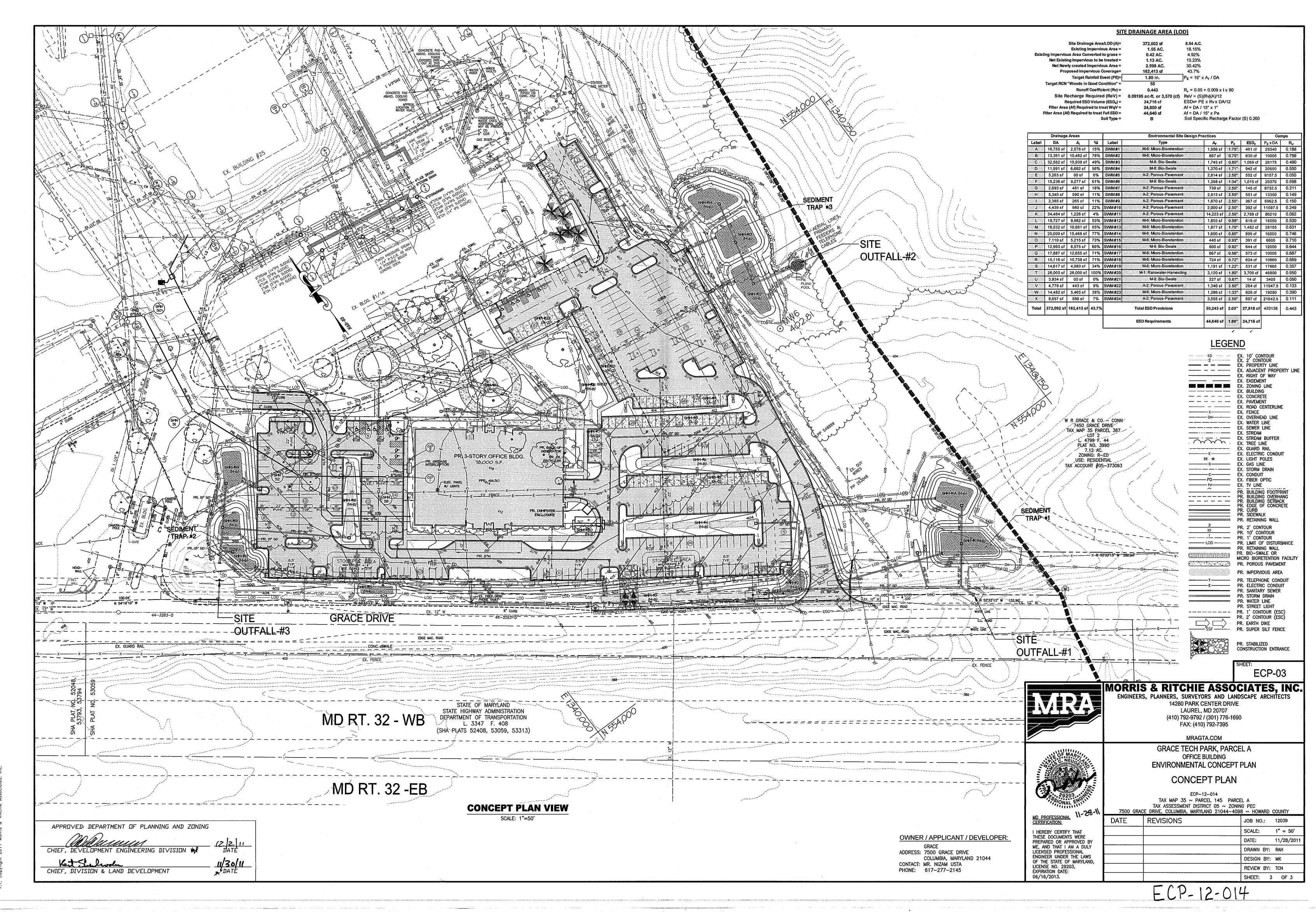
COVER SHEET

ECP-12-014 TAX MAP 35 ~ PARCEL 145 PARCEL A TAX ASSESSMENT DISTRICT 05 ~ ZONING PEC 7500 GRACE DRIVE, COLUMBIA, MARYLAND 21044-4098 ~ HOWARD COUNTY						
DATE	REVISIONS	JOB NO .:	12039			
		SCALE:	AS SHOWN			
		DATE:	11/28/2011			
		DRAWN BY:	RAH			
		DESIGN BY:	МК			
		REVIEW BY:	TCN			
		SHEET: 1	OF 3			

ECP-12-014

OWNER / APPLICANT / DEVELOPER: GRACE ADDRESS: 7500 GRACE DRIVE COLUMBIA, MARYLAND 21044 CONTACT: MR. NIZAM USTA PHONE: 617-277-2145





0J/12039 GRACE\PLANS\LDE\ECP\PLOT\PLAN_SETS\ECP\12039-ECP-03-CONCEPT.dwg, 11/28/2011_10:29:47_AM, mk