GENERAL NOTES (THESE NOTES PERTAIN TO ALL CIVIL DRAWINGS)

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 4. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 6. THE EXISTING TOPOGRAPHY WAS OBTAINED FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY HIGHLAND SURVEY DATED FEBRUARY 2017 AND SUBSURFACE UTILITY DESIGNATING BY A/I/DATA DATED MARCH 2017.
- 7. 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. 31EA AND 31EB WERE USED FOR THIS PROJECT.
- 8. WATER IS PUBLIC.
- SEWER IS PRIVATE
- 10. STORMWATER MANAGEMENT WILL BE PROVIDED BY ENVIRONMENTAL SITE DESIGN (ESD) PRACTICES, INCLUDING SUBMERGED GRAVEL WETLANDS. THESE FACILITIES ARE TO BE PRIVATELY MAINTAINED.
- 11. EXISTING UTILITIES ARE BASED ON SURVEY BY A/I/DATA FROM MARCH 2017 AND HOWARD COUNTY GIS.
- 12. THERE IS NO FLOODPLAIN WITHIN THE LIMIT OF DISTURBANCE. FEMA FLOODPLAIN MAP PANEL #24027C0160D, EFFECTIVE NOVEMBER 6, 2013.
- 13. NO STREAMS, WETLANDS OR THEIR BUFFERS WILL BE IMPACTED BY THIS DEVELOPMENT.
- 14. THE TRAFFIC STUDY FOR THIS PROJECT HAS NOT BEEN PREPARED.
- 15. THE SUBJECT PROPERTY IS ZONED R-20 IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING REGULATION.
- 16. NO GRADING, REMOVAL OF VEGETATIVE COVER OF TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS. STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, IF APPLICABLE.
- 17. LANDSCAPING NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL

18.	ABBREV	ATIONS:
	DDOD	DDODOS

, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
PROP	PROPOSED*	DIP	DUCTILE IRON PIPE
EX	EXISTING	PVC	POLYVINYL CHLORIDE PIPE
BIT	BITUMINOUS	HDPE	HIGH DENSITY POLYETHYLENE PIP
CONC	CONCRETE	CMP	CORRUGATED METAL PIPE
M OR MH	MANHOLE	RCCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN	C&G	CONCRETE CURB & GUTTER
1	INLET	INV	INVERT ELEVATION
SAN	SANITARY SEWER	FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR ELEV	FH	FIRE HYDRANT
BF	BASEMENT FLOOR ELEV	TC	TOP OF CURB
		BC	BOTTOM OF CURB
TS	TOP OF STEP	BS	BOTTOM OF STEP
TW	TOP OF WALL	BW	BOTTOM OF WALL
PC	POINT OF CURVATURE	PS	PARKING SPACE
PT	POINT OF TANGENCY	HC	HANDICAPPED PARKING SPACE
Pi	POINT OF INTERSECTION	TYP	TYPICAL
AGIP	AT-GRADE INLET PROTECTION	CIP	CURB INLET PROTECTION
COIP	COMBINATION INLET PROTECTION	ED	EARTH DIKE
FB	FILTER BAG	IB	INLET BLOCKING
RPS	REMOVABLE PUMPING STATION	SCE	STABILIZED CONSTRUCTION ENTRANC
SFD	SUPER FENCE DIVERSION	SIP	STANDARD INLET PROTECTION
SP	SUMP PIT	SSF	SUPER SILT FENCE
TS	TEMPORARY SWALE	TSOS	TEMPORARY STONE OUTLET STRUCTURE

*PROPOSED MEANS WORK INCLUDED IN THE BASE CONTRACT UNLESS ACCOMPANIED BY THE PHRASES "N.I.C." OR "BY OTHERS."

- 19. EXISTING INFORMATION AND CONDITIONS NOT GUARANTEED; VERIFY AND TEST PIT EXISTING UTILITIES: THE CORRECTNESS AND COMPLETENESS OF THE INFORMATION SHOWING EXISTING CONDITIONS IS NOT GUARANTEED. BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL PERFORM THE FOLLOWING TASKS:
 - (a) NOTIFY MISS UTILITY AT 1-800-257-7777, AND MAKE SURE THEY COMPLETE THE MARKING OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AT LEAST 48 HOURS PRIOR TO INSTALLING SEDIMENT CONTROL MEASURES. MAINTAIN ALL MARKINGS THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL ALSO INCLUDE IN HIS BID PRICE MARKING OF ON-SITE UTILITIES THAT MIGHT NOT BE MARKED BY MISS UTILITY; THE CONTRACTOR SHALL EITHER MARK THESE ON-SITE UTILITIES HIMSELF OR BY SUBCONTRACTING WITH A PRIVATE ON-SITE UTILITY LOCATION COMPANY.
- (b) VERIFY THE GENERAL ACCURACY OF THE EXISTING CONDITIONS SHOWN ON THE SITE DRAWINGS BY VISUAL INSPECTION OF THE SURFACE OF THE SITE AND ALL EXISTING STRUCTURES, PAVING AND UTILITY APPURTENANCES VISIBLE THEREON;
- (c) WITH REGARD TO THE STRUCTURES & APPURTENANCES OBSERVED AS REQUIRED PER ITEM (b) ABOVE, DETERMINE THE TYPE, SIZE, LOCATION AND ELEVATION OF ALL THOSE EXISTING UTILITIES (INCLUDING BUT NOT LIMITED TO ALL STORM DRAINS, SANITARY LINES, WATER LINES, GAS LINES, STEAM LINES, ELECTRIC LINES, TELEPHONE LINES, AND COMMUNICATION DUCTS, AND ALL MANHOLES, INLETS, CLEAN-OUTS, VALVES, HANDHOLES, ETC. RELATED THERETO) WITHIN THE LIMITS OF CONSTRUCTION IN ORDER TO: (I) AVOID DAMAGING OR DISRUPTING SERVICE, AND (II) TO COORDINATE AND FACILITATE CONSTRUCTION OF PROPOSED UTILITIES AND OTHER IMPROVEMENTS. IN ADDITION TO THE CONTRACTOR'S VISUAL OBSERVATION AND THE UTILITY MARKING (AS REQUIRED ABOVE), THE CONTRACTOR SHALL SCHEDULE AND COMPLETE TEST PITTING OF ALL EXISTING UTILITIES (FOR THE PURPOSES SET FORTH ABOVE) AND SHALL DO SO IN A TIMELY MANNER IN ORDER TO ALLOW TIME FOR ANALYSIS AND REDESIGN BY SITE RESOURCES AND/OR OTHER CONSULTANTS, WITHOUT DELAYING THE PROJECT SCHEDULE.
- (d) IMMEDIATELY REPORT TO SITE RESOURCES, INC. THE RESULTS OF STEPS (A), (B) AND (C) WHICH MIGHT INDICATE ANY DISCREPANCY BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN ON THE PLAN, AND ANY POTENTIAL CONFLICTS BETWEEN PROPOSED IMPROVEMENTS AND EXISTING CONDITION.

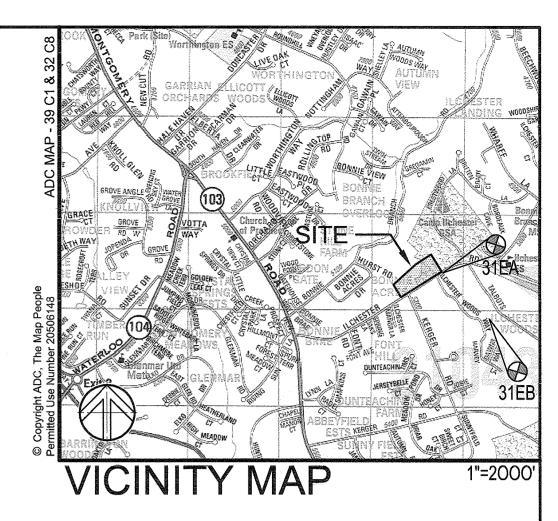
- OF UTILITY TRENCHES DOES NOT CONSTITUTE TEST PITTING. TEST PITTING IS A SEPARATE OPERATION COMPLETED AT LEAST SEVEN DAYS BEFORE UTILITY INSTALLATION IS SCHEDULED TO BEGIN. TEST PITTING MEANS EXCAVATION TO EXPOSE EXISTING UTILITIES IN TWO SITUATIONS: (I) WHERE PROPOSED IMPROVEMENTS CROSS EXISTING UTILITIES (PIPES, LINES, STRUCTURES, APPURTENANCES) AND; (II) WHERE PROPOSED UTILITIES ARE DESIGNED TO CONNECT TO EXISTING UTILITIES. TEST PITTING INCLUDES RECORDING THE TYPE, SIZE, LOCATION AND ELEVATION OF THE EXPOSED UTILITIES, AND FAXING AND MAILING THE RECORD TO SITE RESOURCES, INC. AND THE OWNER. THE RECORD MAY BE A LEGIBLE HAND-WRITTEN FIELD SKETCH.
- 20. EXISTING AND PROPOSED GAS LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION LINES AND OTHER UTILITIES: THESE DRAWINGS INCLUDE INFORMATION AND DEPICTIONS OF BALTIMORE GAS & ELECTRIC COMPANY'S (BGE) ELECTRIC AND/OR GAS UTILITIES LOCATED WITHIN THE GENERAL PROJECT AREA. LOCATIONS, DIMENSIONS, DEPTHS, AND OTHER DETAILS OF ANY SUCH UTILITIES MAY NOT BE AS ACTUALLY CONSTRUCTED, AND THE INFORMATION SHALL NOT BE RELIED UPON WITHOUT FIELD VERIFICATION BY TEST PITTING AS DEFINED ABOVE. EXCAVATORS MUST EMPLOY SAFE DIGGING PRACTICES WHEN APPROACHING BGE ELECTRIC AND/OR GAS UTILITIES AND COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS INCLUDING, BUT NOT LIMITED TO, THE LAW GOVERNING NOTIFICATION OF MISS UTILITY. NO REPRESENTATION, GUARANTEES, OR WARRANTIES EXPRESSED OR IMPLIED ARE MADE BY BGE OR SITE RESOURCES, INC. AS TO THE QUALITY, COMPLETENESS, OR ACCURACY OF THE BGE UTILITY INFORMATION, AND IN ACCEPTING THESE DRAWINGS, THE RECIPIENT EXPRESSLY AGREES THAT IT IS NOT RELYING ON THE ACCURACY OF THE SAME
- EXISTING AND PROPOSED GAS LINES, STEAM LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION DUCTS AND OTHER SUCH UTILITIES ARE NOT PART OF THE SCOPE OF WORK SHOWN ON THESE SITE PLANS AND SITE RESOURCES, INC. HAS NO RESPONSIBILITY FOR DESIGN, SPECIFICATION OR INSTALLATION OF SAID UTILITIES. TO THE EXTENT THAT SOME OR ALL OF SUCH UTILITIES (WHETHER EXISTING OR PROPOSED) APPEAR ON THE SITE DRAWINGS, IT IS PRESENTED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR AND THE CORRECTNESS AND COMPLETENESS OF THE INFORMATION SHOWING THESE UTILITIES IS NOT GUARANTEED.
- 21. COORDINATION BETWEEN PROPOSED UTILITIES: THE CONTRACTOR SHALL ADJUST THE LOCATION AND ELEVATION OF PROPOSED GAS LINES, ELECTRIC LINES, TELEPHONE LINES, COMMUNICATION LINES, AND WATER LINES AS NEEDED TO CONSTRUCT THE PROPOSED STORM DRAINS AND SANITARY SEWER WITH MINIMUM CLEARANCES. COORDINATE WITH THE MECHANICAL/ELECTRICAL DRAWINGS AND SPECIFICATIONS AND APPROPRIATE UTILITY COMPANY.
- 22. RELOCATION OF EXISTING UTILITIES: IN THE EVENT THAT THE LOCATION OR ELEVATION OF EXISTING MINOR UNDERGROUND ELECTRIC LINES AND PHONE LINES CONFLICT WITH PROPOSED STORM DRAINS, SANITARY SEWER LINES OR WATER LINES, THE CONTRACTOR SHALL, WITH THE PERMISSION OF THE OWNER AND WITHOUT AN EXTRA COST TO THE PROJECT, ADJUST THESE LINES TO PERMIT INSTALLATION OF THE NEW UTILITIES. IN THE EVENT THAT ANY OTHER UTILITY IS RELOCATED TO ACCOMMODATE A NEW UTILITY, SAID RELOCATION SHALL BE AN EXTRA COST TO THE PROJECT, SUBJECT TO THE TERMS AND CONDITIONS OF THE CONSTRUCTION CONTRACT.
- 23. UTILITIES TO REMAIN OPERATIONAL; ADJUSTMENT FOR FINAL GRADE: ALL EXISTING UTILITIES SHALL BE RETAINED UNLESS MARKED OTHERWISE. EXISTING UTILITIES NOT TO BE REMOVED ARE TO REMAIN OPERATIONAL AT ALL TIMES. EXISTING UTILITIES TO BE REPLACED OR RELOCATED SHALL REMAIN IN SERVICE UNTIL REPLACED OR RELOCATED UTILITIES ARE OPERATIONAL. ALL EXISTING UTILITY APPURTENANCES SHALL BE ADJUSTED FOR FINAL GRADE.
- 24. UTILITY TRENCHING, BACKFILL AND COMPACTION: ALL TRENCHING FOR SANITARY SEWER, STORM DRAINS AND WATER MAINS SHALL BE DONE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- 25. UTILITY CERTIFICATION: THE CONTRACTOR SHALL HAVE A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MARYLAND CERTIFY, ON A FORM PROVIDED BY THE OWNER. THAT ALL PROPOSED STORM DRAINS, SANITARY SEWERS AND WATER LINES SHOWN HEREON WERE INSTALLED IN ACCORDANCE WITH THESE PLANS AND HOWARD COUNTY SPECIFICATIONS. IF SAID CERTIFICATION IS NOT POSSIBLE BECAUSE THE UTILITIES WERE NOT INSTALLED IN ACCORDANCE WITH THESE PLANS AND HOWARD COUNTY SPECIFICATIONS, THEN THE OWNER HAS THE OPTION OF WAIVING, IN WRITING, THIS CERTIFICATION, IN WHOLE OR PART. IF THE OWNER DOES NOT ELECT TO WAIVE THE CERTIFICATION, THE CONTRACTOR SHALL ADJUST AND, IF NECESSARY, RECONSTRUCT THE UTILITIES TO BRING THEM IN CONFORMANCE WITH THESE PLANS AND HOWARD COUNTY SPECIFICATIONS.
- 26. UTILITY CAPPING AND PROTECTION: ALL BUILDING CONNECTIONS SHALL BE CAPPED AT UPSTREAM END, 5 FEET FROM PROPOSED BUILDINGS, CAISSONS OR COLUMN FOOTINGS OR AS NOTED, AND SHALL BE PROTECTED BY PROVIDING THREE STAKES (THE HEIGHT BEING A MINIMUM OF 18 INCHES ABOVE PROPOSED GRADE) WITH HIGH VISIBILITY FLAGGING AROUND THE CAPPED END OF THE
- 27. PROPOSED WATER LINES: PROPOSED WATER LINES SHALL HAVE A MINIMUM OF 4'-0" COVER FROM FINISHED GRADE, 1'-0" CLEARANCE FROM STORM DRAINS AND 1'-0" CLEARANCE FROM SANITARY SEWERS, UNLESS INDICATED OTHERWISE ON THE PLANS. ALL WATER MAINS 3" OR LARGER SHALL BE CLASS 54 DIP MEETING AWWA C110/C153. ALL WATER LINES 2" AND SMALLER SHALL BE TYPE K COPPER TUBING MEETING THE MATERIAL, CHEMICAL, AND MECHANICAL REQUIREMENTS OF ASTM B-88.
- 28. PROPOSED STORM DRAINS: UNLESS INDICATED OTHERWISE ON THESE CONSTRUCTION DRAWINGS ALL REINFORCED CONCRETE CULVERT PIPE (RCCP) SHALL BE CLASS IV, ALL PVC SHALL BE SCHEDULE 40, AND ALL HDPE SHALL BE ADS N-12 ST IB OR EQUIVALENT.
- 29. PROPOSED SANITARY SEWERS: UNLESS INDICATED OTHERWISE ON THESE CONSTRUCTION DRAWINGS, ALL PIPE AND FITTINGS FOR SANITARY HOUSE CONNECTION SHALL BE POLYVINYL CHLORIDE (PVC) MEETING MATERIAL REQUIREMENTS OF ASTM D3034, (SDR-35). JOINTS SHALL BE ELASTOMERIC GASKETED.
- 30. SEDIMENT CONTROL: THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL UTILITIES TO AVOID CONSTRUCTION PROBLEMS/CONFLICTS WITH SEDIMENT AND EROSION CONTROL MEASURES. ANY DISTURBANCE TO SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REPAIRED AT THE END OF EACH WORKING DAY. CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE PROJECT, REPAIR AND MAINTAIN EXISTING SEDIMENT CONTROL DEVICES UNTIL ALL AREAS WITHIN LIMITS OF CONSTRUCTION ARE STABILIZED. WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR, ALL SEDIMENT CONTROL DEVICES SHALL BE REMOVED AND AREAS RESTORED AND STABILIZED. ALL SEDIMENT CONTROL MEASURES REFERRED TO ON THESE PLANS SHALL BE IN ACCORDANCE WITH THE PUBLICATION ENTITLED 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

- TEST PITTING DEFINED: FOR THE PURPOSES OF THIS CONTRACT, EXCAVATION 31. DISTURBED AREAS: ALL AREAS DISTURBED BY THE CONTRACTOR DURING OR PRIOR TO CONSTRUCTION, NOT DESIGNATED TO RECEIVE PAVING, MULCH OR SOLID SOD SHALL BE FINE GRADED, SEEDED AND MULCHED IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES AND SPECIFICATIONS SHOWN ON THE SEDIMENT CONTROL DRAWINGS.
 - 32. REPAIR AND REPLACEMENT OF DAMAGE CAUSED BY CONTRACTOR AND SUBCONTRACTORS: IN THE EVENT THAT THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS DAMAGE ANY EXISTING CURB, GUTTER, PAVING, UTILITIES, SIDEWALKS, TREES, SHRUBS, LAWNS, OR ANY OTHER EXISTING CONDITIONS (NOT INDICATED TO BE DEMOLISHED), OR ANY NEWLY INSTALLED PROPOSED IMPROVEMENT, THE GENERAL CONTRACTOR SHALL REPAIR AND REPLACE SAID DAMAGE TO OWNER'S SATISFACTION, AT GENERAL CONTRACTOR'S SOLE COST AND EXPENSE.
 - 33. BENCHMARKS: SEE SURVEY NOTES ON THIS SHEET.
 - 34. ELEVATION AND LABELING: ALL SPOT GRADE ELEVATIONS IN ROADWAYS AND PARKING LOTS ARE FOR BOTTOM OF CURB UNLESS OTHERWISE NOTED. ELEVATIONS ON HARD SURFACES (ROADS, WALKS, WALLS, STEPS, MANHOLES, INLETS, ETC.) ARE LABELED TO THE HUNDREDTH OF A FOOT (E.G. 245.45). ELEVATIONS ON PROPOSED LAWN AND PLANTING AREAS ARE LABELED TO THE TENTH OF A FOOT (E.G. 245.5).
 - 35. DIMENSIONS: UNLESS OTHERWISE NOTED ON THE DRAWING, ALL DIMENSIONS SHOWN ON THE SITE DRAWINGS FOLLOW THESE CONVENTIONS: (a) DIMENSIONS TO A BUILDING OR RETAINING WALL ARE TO THE FACE OF THE WALL
 - (b) DIMENSIONS TO A CURB ARE TO THE FACE (NOT THE BACK) OF THE CURB; (c) DIMENSIONS TO A FENCE ARE TO THE CENTERLINE OF THE FENCE; (d) DIMENSIONS FOR SIDEWALKS ABUTTING A CURB ARE FROM THE FACE OF CURB TO THE BACK EDGE OF THE WALK;
 - (e) DIMENSIONS FOR OTHER SIDEWALKS OR OPEN PAVING SECTIONS ARE MEASURED TO THE EDGE OF PAVING;
 - (f) DIMENSIONS TO A MANHOLE, INLET, CLEANOUT, PIPE BEND, VALVE, FIRE HYDRANT OR OTHER UTILITY APPURTENANCE ARE TO THE CENTER OF THE STRUCTURE;
 - (g) DIMENSIONS FOR STEPS ARE TO THE OUTER EDGE OF THE STAIRCASE AND THE NOSE OF THE TOP OR BOTTOM STEP;
 - (h) LAYOUT OF SEDIMENT CONTROL MEASURES AND PLANT MATERIAL SHALL BE SCALED.
 - 36. GRADING: IT IS THE INTENT OF THE GRADING DESIGN TO ACHIEVE POSITIVE DRAINAGE AND AESTHETICALLY PLEASING VERTICAL CURVES AND LINES. TRANSITIONS BETWEEN EXISTING AND PROPOSED PAVEMENT SHALL BE SMOOTH AND JOINTS FLUSH. UNLESS OTHERWISE EXPRESSLY NOTED ON THE PLAN (BY ARROW WITH THE PERCENT SLOPE LABELED), ALL PROPOSED BITUMINOUS PAVING SHALL HAVE A SLOPE OF AT LEAST 2 PERCENT AND ALL CONCRETE SHALL HAVE A MINIMUM SLOPE OF 1.5 PERCENT IN THE DIRECTION INDICATED BY PROPOSED CONTOURS. UNPAVED AREAS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT AND A MAXIMUM SLOPE OF 2:1. FINAL GRADING SHALL ACHIEVE POSITIVE SURFACE DRAINAGE AWAY FROM BUILDINGS AND TOWARD DRAINAGE FACILITIES (SWALES, GUTTERS, INLETS, ETC.).

ROUND TOP AND CORRECT METHOD INCORRECT METHOD BOTTOM OF SLOPES.

- 37. COMPACTION: ALL EARTH FILL MATERIAL UNDER SLABS, FOOTINGS AND PAVED AREAS SHALL BE PLACED IN 8" LOOSE LAYERS AND COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557. REFER TO THIS PROJECT'S GEOTECHNICAL REPORT FOR FURTHER REQUIREMENTS. FILL UNDER TURF, PLANTED AREAS AND UNPAVED AREAS CAN BE 85%.
- 38. HEADINGS: THE HEADINGS CONTAINED IN THESE GENERAL NOTES ARE FOR THE CONVENIENCE OF THE READER ONLY AND SHALL NOT LIMIT THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLETING SUCH WORK.
- 39. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES): IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPLEMENT ALL THE PROVISIONS AND REQUIREMENTS OF THE NPDES PERMIT. THE PERMIT HAS BEEN APPLIED FOR BY THE OWNER, BUT NO LAND DISTURBANCE IS PERMITTED UNTIL THE NPDES PERMIT HAS BEEN ISSUED.
- 40. ALL SIDEWALKS, PATHS AND OTHER PAVED AREAS SHALL BE FINISH GRADED WITH A MAXIMUM LONGITUDINAL SLOPE OF 5% (1:20) AND A MAXIMUM CROSS SLOPE OF 2% (1:50) UNLESS OTHERWISE NOTED.
- 41. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL SITE ELEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE ADA 2010 STANDARDS FOR ACCESSIBLE DESIGN AND CURRENT LOCAL REQUIREMENTS.
- 42. TO THE EXTENT THAT QUANTITIES MAY BE LISTED ON THESE PLANS, THEY ARE FOR PERMITTING PURPOSES ONLY AND NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL FORM HIS OWN CONCLUSIONS ABOUT THE QUANTITIES OF ALL MATERIALS AND OPERATIONS NECESSARY TO COMPLETE THE PROJECT.
- 43. SWM AS-BUILT NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY, ON BEHALF OF THE OWNER. TO ENGAGE A LICENSED PROFESSIONAL ENGINEER TO CERTIFY THE STORMWATER MANAGEMENT FACILITIES AND TO PREPARE, SUBMIT AND PROCESS AS-BUILT DRAWINGS TO HOWARD COUNTY.
- 44. HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS PLAN WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.
- 45. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR THE COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. 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.
- 46. FIELD VERIFICATION: A PLAN OF NATURAL RESOURCES WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC ON MARCH 13, 2018.

- 47. THE NATURAL RESOURCES INVENTORY FOR THIS ECP WAS PERFORMED IN AND AROUND THE ILLUSTRATED LIMITS OF DISTURBANCE ON THE PLANS. THE PROPOSED DESIGN WITHIN THE PROPOSED LIMITS OF DISTURBANCE DOES NOT IMPACT ANY OF THE ENVIRONMENTALLY SENSITIVE AREAS ON THE PROPERTY. INCREASING THE DEVELOPMENT SIZE AND INCREASING THE LOD BEYOND WHAT IS PROVIDED ON THE PLANS WITH FUTURE SUBMISSIONS MAY REQUIRE ADDITIONAL EXAMINATION, AND SUBMISSION OF NEW PLANS FOR REVIEW TO THE DEPARTMENT OF PLANNING AND ZONING.
- 48. THE EXISTING IMPERVIOUS COVERAGE OF THIS PROJECT SITE 15 79 % AND MEETS REDEVELOPMENT CRITERIA



DATA SOURCES

EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON HOWARD COUNTY GIS, PREVIOUS SITE DEVELOPMENT PLANS, A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY HIGHLAND SURVEY DATED 2/14/17 AND SUBSURFACE UTILITY DESIGNATING PERFORMED BY A/I/DATA DATED 3/1/17.

ALL HORIZONTAL SURVEY DATA SHOWN HEREON IS DERIVED FROM STATIC GPS (OPUS) OBSERVATIONS AND ARE REFERENCED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM, NAD 83 (2011). ALL VERTICAL SURVEY CONTROL DATA SHOWN HEREON IS DERIVED BY DIFFERENTIAL LEVELING FROM HOWARD COUNTY SURVEY CONTROL PT. 31EA. ELEV. 468.88' NAVD 88

STATION	NORTH	EAST	ELEV	DESCRIPTION
31EA	569641.138	1374816.086	468.877	DISC IN CONCRETE
31EB	568730.995	1376273.635	452.657	DISC IN CONCRETE

DRAWING INDEX

Sheet Number	Sheet Title
1	ECP-001 COVER SHEET
2	ECP-002 EXISTING CONDITION PLAN
3	ECP-003 CONCEPT SWM PLAN
4	ECP-004 CONCEPT ESC PLAN

SITE ANALYSIS DA	TA	
UTILITY SERVICE CENTER		
39.40 ± AC		
8.20 ± AC		
TOTAL WITHIN PROPERTY	TOTAL WITHIN LOD	
11.59 ± AC	0.00 ± AC	
0.07 ± AC	0.00 ± AC	
3.55 ± AC	0.00 ± AC	
12.24 ± AC	6.48 ± AC (79%)	
11.50 ± AC	5.74 ± AC (70%)	
15.57 ± AC	1.72 ± AC	
16.31 ± AC	2.46 ± AC	
4.55 ± AC	0.35 ± AC	
9.29 ± AC	0.75 ± AC	
	UTILITY SERVICE CENTER 39.40 ± AC 8.20 ± AC TOTAL WITHIN PROPERTY 11.59 ± AC 0.07 ± AC 3.55 ± AC 12.24 ± AC 11.50 ± AC 15.57 ± AC 16.31 ± AC 4.55 ± AC	

DESIGN NARRATIVE

THE PROPOSED DEVELOPMENT SITE KNOWN AS THE BGE HOWARD SERVICE CENTER IS LOCATED AT 5130 ILCHESTER ROAD. THE DEVELOPMENT INCLUDES (2) BUILDINGS, (2) COVERED PARKING STRUCTURE, (1) COVERED LOADING DOCK STRUCTURE, AND ASSOCIATED SITE/LANDSCAPE IMPROVEMENTS. THE PROPOSED DEVELOPMENT WILL PROTECT NATURAL RESOURCES BY NOT IMPACTING THE 100-YR FLOODPLAIN, ANY FOREST, WETLANDS, PERENNIAL AND INTERMITTENT STREAMS, NOR THEIR ASSOCIATED BUFFERS. IN ADDITION, THE PROPOSED PLANTING PALETTE CONSIST OF NATIVE SPECIES THAT ULTIMATELY ENHANCE THE AREA'S BIODIVERSITY

THE PROPOSED SITE DESIGN REORGANIZES EXISTING SITE USES TO PROVIDE MORE EFFICIENT CIRCULATION. AS A RESULT, THE PROPOSED IMPERVIOUS COVERAGE IS REDUCED FROM EXISTING SITE CONDITION. THE SITE DESIGN MAINTAINS NATURAL FLOW PATTERNS AND DOES NOT INVOLVE SIGNIFICANT GRADE CHANGES THAT WOULD DIVERT RUNOFF AWAY FROM ITS EXISTING DRAINAGE AREA.

THE ENVIRONMENT SITE DESIGN PRACTICES PROPOSED ARE SUBMERGED GRAVEL WETLANDS AND MICRO-BIORETENTION. THE SUBMERGED GRAVEL WETLANDS ACCOMMODATE A LARGER DRAINAGE AREA IN THE SITE WHERE SPACE IS LIMITED FOR ESD. THE MICRO-BIORETENTION ALLOWS FOR THE REMAINING TOTAL VOLUME OF RUNOFF TO BE CAPTURED AND TREATED.

EROSION AND SEDIMENT CONTROL WILL BE INTEGRATED INTO THE STORMWATER MANAGEMENT STRATEGY FOR THE DESIGN OF THIS PROJECT BY PROVIDING PERIMETER CONTROLS DURING CONSTRUCTION, AND FINAL CONDITIONS BY ALLOWING RUNOFF TO ENTER, FLOW THROUGH, AND EXIT THE PROPOSED ESD FACILITIES IN A SAFE AND NON-EROSIVE **MANNER**

APPROVED: DEPARTMENT OF PLANNING & ZONING 8-16-13 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 8/10/18

CHIEF, DIVISION OF LAND DEVELOPMENT NA

BALTIMORE GAS & ELECTRIC BGE HOWARD SERVICE CENTER

5130 ILCHESTER ROAD

ELLICOTT CITY, MD 21043

ATTN: CHRISTA WILLIAMS, 410-470-5032

SITERESOURCES Creative Design. Successfully Engineer 14315 Jarrettsville Pike, Phoenix, MD 21131-0249



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2310				
REBY CEANAGE TO THE PROTECTION OF THE PARED OR APPROVED WHE AND THAT I AM A				
/ LICENSED PROFESSIONAL ENGINEER UNDER THE 8 OF THE STATE OF MARYLAND, LICENSE NO. 5, EXPIRATION DATE: 07/18/2019.				

ADDRESS CHART PERMIT INFORMATION CHART PROJECT NAME SECTION/AREA LOT/PARCEL NO MAP/GRID/PARCEL STREET ADDRESS BGE HOWARD SERVICE CENTER AP 0031/GRID 0020 5130 ILCHESTER RD., ELLICOTT CITY, MD 21043 PLAT # OR L/F GRID # ZONING TAX MAP NO. ELECT DISTRICT CENSUS TRACT PARCEL 0557 00140/00451 20 R-20 WATER CODE SEWER CODE PROPERTY IMPROVEMENT NEW SERVICE CENTER AND FLEET MAINTENANCE BUILDINGS

ECP COVER SHEET

ECP-001

