

ENVIRONMENTAL CONCEPT PLAN DESIGN NARRATIVE

NATURAL RESOURCES PROTECTION, ENHANCEMENT, AND PRESERVATION
 ALL NATURAL FEATURES HAVE BEEN DEPICTED ON THE EXISTING CONDITIONS PLAN. THE SITE CONTAINS AREAS OF WOODED VEGETATION. IMPACTS TO THE EXISTING WOODED AND VEGETATED AREAS WILL BE MINIMIZED DURING DEVELOPMENT.

MAINTENANCE OF NATURAL FLOW PATTERNS
 THE PROPOSED SITE DRAINAGE WILL MAINTAIN THE EXISTING CONDITION OF FLOW PATTERNS WHEREVER FEASIBLE DURING DEVELOPMENT EFFORTS. ALL DRAINAGE FROM THE PROPOSED DEVELOPMENT WILL BE DIRECTED TO THE EXISTING OVERLAND TO THE GRAVEL LEVEL SPREADER TO MAINTAIN SHEET FLOW OUTFALL LOCATIONS.

REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES, AND NON-STRUCTURAL PRACTICES
 THE PROPOSED DEVELOPMENT HAS MINIMIZED IMPERVIOUS SURFACES TO THOSE REQUIRED TO SUPPORT THE INTENDED LAND-USES (HOUSES, PARKING AREAS, DRIVEWAYS, AND ASSOCIATED TIE-INS TO EXISTING ROADS AND PARKING LOTS). THESE AREAS HAVE BEEN MINIMIZED TO PROVIDE MINIMUM ACCESS PATHS FOR VEHICLES AND PARKING AREAS.

INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY
 SOIL EROSION AND SEDIMENT CONTROL PRACTICES HAVE BEEN DEVELOPED IN CONSIDERATION OF THE PROPOSED STORMWATER MANAGEMENT STRATEGIES. THE USE OF A STABILIZED CONSTRUCTION ENTRANCE WILL REDUCE SEDIMENT FROM BEING TRACKED OFF-SITE. TEMPORARY STABILIZATION PRACTICES (SEEDING AND STRAW, EROSION CONTROL MATTING, ETC) WILL BE IMPLEMENTED THROUGHOUT CONSTRUCTION PER SOIL EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS.

IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MEP
 THE PROPOSED ESD PRACTICES WERE LOCATED AND DESIGNED TO PROVIDE TREATMENT AS CLOSE TO THE SOURCE AS FEASIBLE. TO MINIMIZE REQUIRED TREATMENT ON-SITE, SITE PLANNING TECHNIQUES WERE UTILIZED TO MINIMIZE THE PROPOSED IMPERVIOUS SURFACE COVERAGE.

PERMEABLE PAVEMENT IS NOT FEASIBLE DUE TO THE ANTICIPATED LIMITED INFILTRATION RATES OF THE "D"-TYPE SOILS. REQUIRED FILL LOCATIONS, AND CONSTRUCTION DISTURBANCES.

NON-STRUCTURAL PRACTICES (DISCONNECTIONS) HAVE BEEN CONSIDERED NOT FEASIBLE WITHIN THE PROPOSED DEVELOPMENT DUE TO THE EXISTING TOPOGRAPHY AND EXCESSIVE DISCONNECTION LENGTHS THAT WOULD BE REQUIRED. ADDITIONAL DISTURBANCE WOULD BE REQUIRED TO ENSURE PROPER DISCONNECTION SLOPES. THIS IS AN IN-FILL DEVELOPMENT THEREFORE DISCONNECTIONS ARE NOT ALLOWED PER CODE.

MICRO-SCALE PRACTICES HAVE BEEN IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE. THE PARKING AREA AND MAIN DRIVE AISLE ARE TO BE TREATED BY A PROPOSED LANDSCAPE INFILTRATION FACILITY. THE DRIVEWAY BETWEEN THE TWO PROPOSED HOUSES IS TO BE TREATED BY TWO MICRO-BIRETENTION FACILITY. FOR ALL OF THE MICRO-SCALE PRACTICES, DRAINAGE AREAS HAVE BEEN MINIMIZED TO THE PRACTICES TO ENSURE PROPER FUNCTION. PER HOWARD COUNTY STORMWATER MANAGEMENT REQUIREMENTS, NO ESDV WILL BE COUNTED IN THE SOIL MEDIA, ONLY IN THE PONDING ABOVE THE MEDIA.

AFTER EXHAUSTING THE IMPLEMENTATION OF MICRO-SCALE FACILITIES, ADDITIONAL CHAPTER 3 PRACTICES MAY BE UTILIZED TO MEET THE REMAINING STORMWATER MANAGEMENT REQUIREMENTS FOR THE SITE, INCLUDING QUANTITY CONTROL REQUIREMENTS.

STORMWATER QUALITY TREATMENT - ENVIRONMENT SITE DESIGN
 AS ADOPTED BY THE HOWARD COUNTY STORMWATER MANAGEMENT, GRADING, EROSION AND SEDIMENT CONTROL ORDINANCE, THE MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL STATES THAT BECAUSE THE PROJECT IS RESIDENTIAL, THE DEVELOPMENT DOES NOT QUALIFY FOR REDEVELOPMENT BASED ON THE PROPOSED 0.23 ACRES OF IMPERVIOUS AREAS TO BE DEVELOPED AS PART OF THIS PROJECT. THE IMPERVIOUS AREA REQUIRING TREATMENT WILL BE 0.23 AC (REFER TO APPENDIX D). BASED ON THE PROPOSED IMPERVIOUS AREAS AND THE UNDERLYING SOIL CONDITIONS, THE ESDV VOLUME ASSOCIATED WITH THIS AREA IS 1,572 CF. REFER TO APPENDIX C FOR ENVIRONMENTAL SITE DESIGN COMPUTATIONS. WATER QUALITY TREATMENT SHALL BE PROVIDED THROUGH THE IMPLEMENTATION OF ENVIRONMENTAL SITE DESIGN.

ENVIRONMENTAL SITE DESIGN NON-STRUCTURAL PRACTICES WILL BE IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE (MEP). HOWEVER, IN AREAS WHERE PROPOSED LAND USE, ENVIRONMENTAL CONSTRAINT, OR ADDITIONAL EASEMENT AND/OR RIGHT-OF-WAY CONSTRAINTS LIMIT ESD IMPLEMENTATION, NON-STRUCTURAL WATER QUALITY BMP'S SHALL BE IMPLEMENTED TO TREAT THE REMAINING IMPERVIOUS AREAS.

THE STORMWATER FACILITIES WILL BE OWNED AND MAINTAINED BY THE OWNERS OF EACH INDIVIDUAL PROPOSED LOT.

STORMWATER QUANTITY CONTROL - CHANNEL PROTECTION VOLUME
 AS THE PROPOSED PROJECT IMPLEMENTS ENVIRONMENTAL SITE DESIGN (ESD) TO THE MAXIMUM EXTENT PRACTICABLE, BUT SINCE THE PROJECT IS WITHIN THE DEEP RUN WATERSHED, EXTRA STORAGE WILL BE REQUIRED. EXTRA STORAGE HAS BEEN PROVIDED IN SWM 2 AND SWM 3 TO PROVIDE CHANNEL PROTECTION VOLUME.

STORMWATER QUANTITY CONTROL - OVERBANK FLOOD AND EXTREME STORM
 THOUGH RUNOFF FROM THE SITE WILL INCREASE BASED ON THE INCREASE OF IMPERVIOUS COVER, EXTRA STORAGE HAS BEEN PROVIDED WITHIN THE SURFACE STORAGE OF THE FACILITIES. THEREFORE, THERE IS ADEQUATE OUTFALL AND NO ADDITIONAL SITE ATTENUATION IS REQUIRED. THE PROJECT IS WITHIN THE DEEP RUN WATERSHED, EXTRA STORAGE HAS BEEN PROVIDED FOR 100 YR AND Q1 HAS BEEN MANAGED.

STATE HIGHWAY COORDINATION
 BASED ON COORDINATION WITH SHA, MDOT SHA WILL NOT REQUIRE DEDICATION OF THE ULTIMATE R/W WITH THE SUBDIVISION PLAN. WHEN THE PROPOSAL IS PUT FORTH TO DEMOLISH THE EXISTING STRUCTURE AND PROPOSE NEW RESIDENTIAL USES OUTSIDE OF THE ULTIMATE R/W, MDOT SHA WILL REQUIRE DEDICATION OF THE ULTIMATE R/W AT THAT TIME.

Existing Natural Resources:

Federal	State	Local	Site Areas and Uses
N/A	Wetlands	N/A	Tidal and Nontidal Wetlands
N/A	Major Waterways	N/A	Wetlands of Special State Concern
N/A	Floodplains	N/A	Wetland Buffers
		N/A	Stream Buffers
		N/A	Perennial Streams
		N/A	Floodplains
		N/A	Forest
		N/A	Forest Buffers
		N/A	Critical Areas
		N/A	Bedrock/Geology
		N/A	Existing Drainage Areas
N/A	Not applicable, feature not present on site.		No, feature present on site but not shown due to lack of information
Y	Yes, feature present on site and shown		

STANDARD STABILIZATION NOTE
 FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
 a. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
 b. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

- GENERAL NOTES:**
- ALL EXISTING CONDITIONS ARE PROVIDED BY HOWARD COUNTY GIS DATA, AERIAL IMAGERY, PREVIOUSLY RECORDED PLATS, AND PREVIOUSLY APPROVED SITE DEVELOPMENT PLANS.
 - PROPERTY LINE OF SUBJECT PROPERTY IS ACCORDING TO RECORDED PLAT OF BADART SUBDIVISION LOTS 1 AND 2 (PLAT #9357).
 - SANITARY SEWER EASEMENT LOCATED ON SUBJECT PROPERTY IS ACCORDING TO RECORDED PLAT OF BADART SUBDIVISION LOTS 1 AND 2 (PLAT #9357).
 - SUBJECT PROPERTY IS EXEMPT FROM HOWARD COUNTY FOREST CONSERVATION REGULATIONS BECAUSE THE EXISTING LOT IS LESS THAN 40,000SF.
 - ACCORDING TO GIS DATA AND AERIAL IMAGERY, THERE IS NO OBSERVABLE EVIDENCE OF WETLAND AREAS, WETLAND BUFFERS, STREAMS, STREAM BUFFERS, FLOODPLAIN, NOR FOREST STANDS.
 - APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION PLAN 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.

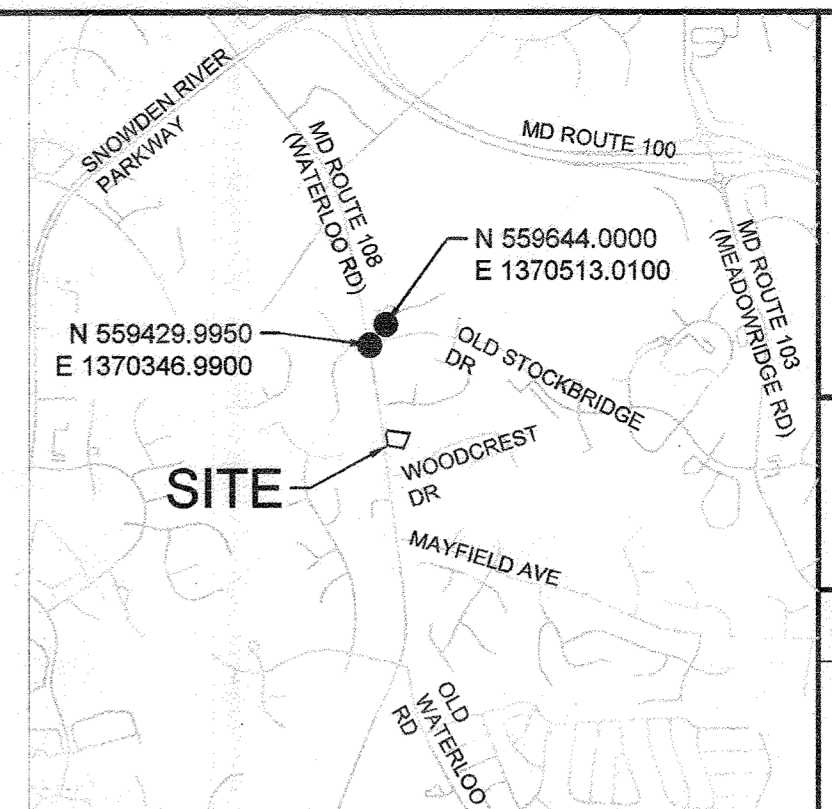
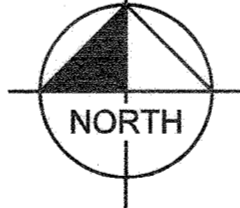
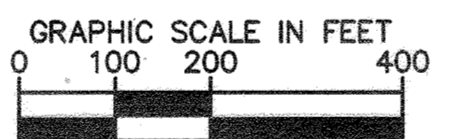
ENVIRONMENTAL CONCEPT PLAN

BADART SUBDIVISION

HOWARD COUNTY, MD



LOCATION PLAN
 SCALE: 1"=200'



VICINITY MAP
 SCALE 1"=2000'
 ADC MAP GRID # 4936-C9

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA:	0.757 ACRES (32,962SF)
ZONING:	R-SC (RESIDENTIAL-SINGLE CLUSTER)
EXISTING USES:	1 MULT-FAMILY RESIDENTIAL BUILDING (6 UNITS)
PROPOSED USES:	1 MULT-FAMILY RESIDENTIAL BUILDING (8 UNITS) AND 2 SINGLE-FAMILY DETACHED HOMES
LOD AREA:	0.61 ACRES
GREEN OPEN AREA:	0.38 ACRES
PROPOSED IMPERVIOUS AREA:	0.23 ACRES
WETLAND AREA:	0 ACRES
WETLAND BUFFER AREA:	0 ACRES
STREAM AREA:	0 ACRES
STREAM BUFFER AREA:	0 ACRES
FLOODPLAIN AREA:	0 ACRES
STEEP SLOPE AREA (>15%):	0.07 ACRES

Kimley Horn

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 WWW.KIMLEY-HORN.COM

GLOBAL NOVARE, INC.
 P.O. BOX 27098
 BALTIMORE, MD 21230
 PHONE: 443-668-2527

NO.	REVISIONS	DATE	BY

6205 WATERLOO ROAD
 HOWARD COUNTY, MARYLAND
 TAX MAP NO. 37 PARCEL 122
 ZONING: R-SC
 FIRST ELECTION DISTRICT

KHA PROJECT NO.: 114033000
 SCALE: AS SHOWN
 DATE: 05/22/2018
 DESIGNED BY: KMR
 DRAWN BY: KMR
 CHECKED BY: NJL



PROFESSIONAL CERTIFICATION. I 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. 51977 EXP: 12/12/23

ENVIRONMENTAL CONCEPT PLAN

BADART SUBDIVISION
 ZONING - R-SC
 6205 WATERLOO RD
 PREPARED FOR
 GLOBAL NOVARE, INC.

HOWARD COUNTY MARYLAND

COVER SHEET

SHEET NUMBER
1 OF 3

SHEET INDEX

Sheet Number	Sheet Title
1 OF 3	COVER SHEET
2 OF 3	EXISTING CONDITIONS AND INITIAL SESC PLAN
3 OF 3	CONCEPT SWM AND FINAL SESC PLAN

SOILS LEGEND

UdB	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX, 0 TO 5 PERCENT SLOPES (HSG C)
UdD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPES (HSG D)

APPROVED: DEPARTMENT OF PLANNING AND ZONING

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 CHIEF DEVELOPMENT ENGINEERING DIVISION 8/19/22
 DATE

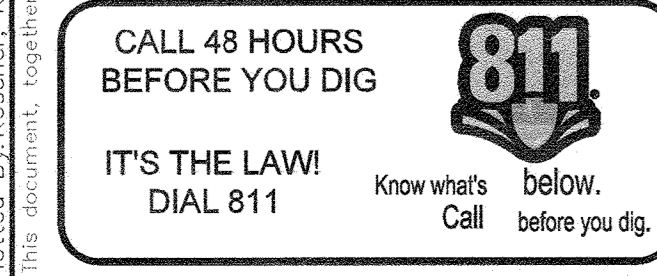
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 DATE

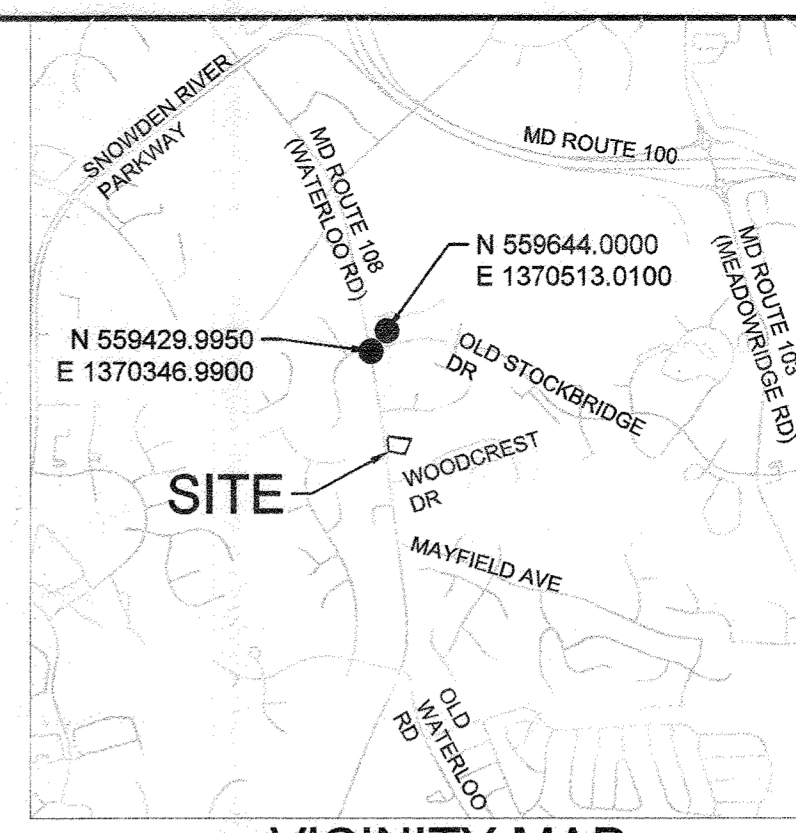
ADDRESS CHART

LOT/PARCEL #	STREET ADDRESS
PARCEL 122, LOT 2	6205 WATERLOO ROAD, ELLICOTT CITY, MD 21043

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
BADART SUBDIVISION		PARCEL 122, LOTS 2
PLAT # OR L/F #9357	GRID # 14	ZONING R-SC
TAX MAP NO. 37	ELECT DISTRICT 1	CENSUS TRACT 601108
WATER CODE EXISTING SERVICE	SEWER CODE EXISTING SERVICE	





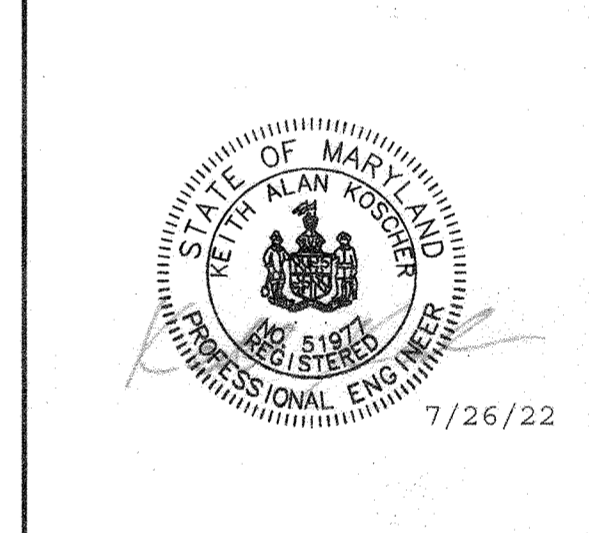
VICINITY MAP
SCALE 1"=2000'
ADC MAP GRID # 4936-C9

EXISTING CONDITIONS AND INITIAL SESC LEGEND

- PROPERTY LINE (ON-SITE)
- PROPERTY LINE (OFF-SITE)
- - - EXISTING EASEMENT
- - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - EXISTING PAVEMENT EDGE
- - - SOIL TYPE BOUNDARY
- - - EXISTING TREE LINE
- - - EXISTING WATER LINE
- - - EXISTING SANITARY SEWER LINE
- ⊕ EXISTING SANITARY SEWER MANHOLE
- ⊕ EXISTING TREE
- ▭ EXISTING BUILDING
- ▭ SLOPES, 15-25%
- ▭ SLOPES >25%
- LOD LIMITS OF DISTURBANCE
- SSF PROPOSED SUPER SILT FENCE
- DF PROPOSED DIVERSION FENCE
- ⊕ PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED SWALE

NO.	REVISIONS	DATE	BY

6205 WATERLOO ROAD HOWARD COUNTY, MARYLAND TAX MAP NO. 37 PARCEL 122 ZONING: R-SC FIRST ELECTION DISTRICT
KHA PROJECT NO.: 114033000
SCALE: AS SHOWN
DATE: 05/22/2018
DESIGNED BY: KMR
DRAWN BY: KMR
CHECKED BY: NJL



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ENVIRONMENTAL CONCEPT PLAN

BADART SUBDIVISION
ZONING - R-SC
6205 WATERLOO RD
PREPARED FOR
GLOBAL NOVARE, INC.

HOWARD COUNTY MARYLAND

EXISTING CONDITIONS AND INITIAL SESC PLAN

SHEET NUMBER
2 OF 3

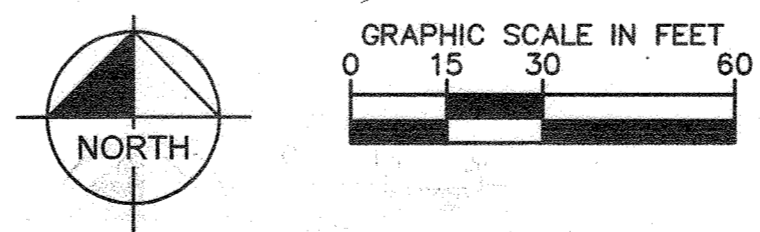
APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4 8/19/22 DATE

[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT 4 8/19/22 DATE

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WATER CODE	SEWER CODE	EXISTING SERVICE		



EXISTING CONDITIONS AND INITIAL SESC PLAN
SCALE: 1"=30'



TAG	SPECIES	SCIENTIFIC NAME	DBH	TREE CONDITION	STATUS	% IMPACT
AS	AMERICAN SYCAMORE	PLANTANUS OCCIDENTALIS	48"	GOOD	TO REMAIN	23%

*TREE PROTECTION MEASURES WILL BE PLACED DURING CONSTRUCTION. WILL BE DESIGNED WITH FINAL PLAN

CALL 48 HOURS BEFORE YOU DIG
811
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.

Plotted by: Kocber, Keith. Sheet Set: 6205 WATERLOO ECP. Layout: 2 OF 3 EXISTING CONDITIONS AND INITIAL SESC PLAN. Date: 05/22/2018. 01:31:59pm. K:\BAL-CIV\114033000-6205 Waterloo Road\CAD\PlanSheets\ECP\2 OF 3- EXISTING CONDITIONS AND INITIAL SESC PLAN.dwg
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