INDEX OF DRAWINGS

CONCEPT SEDIMENT & EROSION CONTROL PLAN CONCEPT STORMWATER MANAGEMENT PLAN

APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADING OR BUILDING PERMIT. 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, SITE DEVELOPMENT PLAN OR GRADING AND BUILDING PERMIT STAGES. BE ADVISED, FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLAN.

SITE NOTES

OWNER/APPLICANT:

DOUGAL & ASSOCIATES, LLC 5695 MAIN STREET ELKRIDGE, MARYLAND 21075 410-379-6444

SITE ADDRESS: 6300 WASHINGTON BLVD. ELKRIDGE, MARYLAND 21075

- 1. TOPOGRAPHY AND BOUNDARY SURVEY PREPARED BY KCI FIELD SURVEY ON OR ABOUT AUGUST OF 2017. OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY
- 2. PROPERTY SHOWN HEREON LIES WITHIN ZONE X, AN AREA OF MINIMAL FLOODING, PER FEMA COMMUNITY PANEL NO. 24027C0180D EFFECTIVE DATE NOVEMBER 6, 2013.
- 3. EXISTING UTILITY INFORMATION SHOWN HEREON ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS. PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION.
- 4. THE SUBJECT PROPERTY IS ZONED M-1 IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING REGULATIONS.
- 5. LIMIT OF DISTURBANCE (LOD): 1.65 AC.
- 6. PROPOSED LAND USES WITHIN THE LOD:

BUILDING: 0.65 AC PARKING: 0.19 AC. ROAD: 0.08 AC. OTHER: 0.73 AC.

- EXISTING WETLAND AREA WITHIN LOD = 0.00 AC.
- EXISTING WETLAND BUFFER AREA WITHIN THE LOD = 0.00 AC.
- 9. EXISTING FLOODPLAIN AREA WITHIN LOD = 0.00 AC. 10. EXISTING STREAM BUFFER AREA WITHIN LOD = 0.00 sqft.
- 11. FOREST CONSERVATION WITHIN LOD = 0.00 AC.
- 12. EXISTING STEEP SLOPE AREA (>15%) WITHIN LOD = 0.22 AC.
- 13. HIGHLY ERODIBLE SOILS WITHIN THE LOD = 0.00 AC. 14. ALL STORM DRAIN PIPE IS TO BE HDPE PIPES UNLESS OTHERWISE NOTED.
- 15. NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
- 16. A ONE STORY BUILDING CURRENTLY EXISTS ON SITE AND IS TO BE DEMOLISHED BEFORE CONSTRUCTION OF THE PROPOSED BUILDING.
- . THERE IS NO FLOODPLAIN ON THE SITE. 18. THE SITE IS MEETS THE REDEVELOPMENT CRITERIA SINCE THE EXISTING
- IMPERVIOUS AREA IS GREATER THAN 40% OF THE SITE. 19. THE STORMWATER MANAGEMENT SYSTEM SHOWN ON THESE PLANS IS AN APPROXIMATION OF THE SIZE, SHAPE AND LOCATION. IT IS UNDERSTOOD THAT
- THE MICRO-BIORENTION FACILITIES AND THE UNDERGROUND STORAGE PIPES HAVE NOT BEEN FULLY DESIGNED AND THE ACTUAL DESIGN MAY CHANGE. 20. SINCE THERE ARE NO ENVIRONMENTAL AREAS ON THE SITE, NO WAIVERS ARE REQUIRED FOR THE DISTURBANCE.
- 21. FOREST CONSERVATION WILL BE HANDLED THROUGH A FEE-IN-LEIU.
- 22. AN ADMINISTRATIVE ADJUSTMENT CASE (AA-18-005) HAS BEEN FILED TO REDUCE THE REQUIRED SETBACK ALONG ROUTE 1 FROM 50 FEET TO 40 FEET.

- a. TAX ID: 176331
- b. TAX MAP/GRID: 38/08 c. PARCEL: 32
- d. DEED: L:15972 F:337 e. AREA: 1.75 ACRES
- PRESENT ZONING: M-1
- g. LOCATION; TAX MAP: 38, GRID 08, PARCEL 32 APPLICABLE DPZ FILE REFERENCES:
- EXISTING USE: INDUSTRIAL
- PROPOSED USE: INDUSTRIAL
- PROPOSED WATER AND SEWER SYSTEMS: COMPLETE

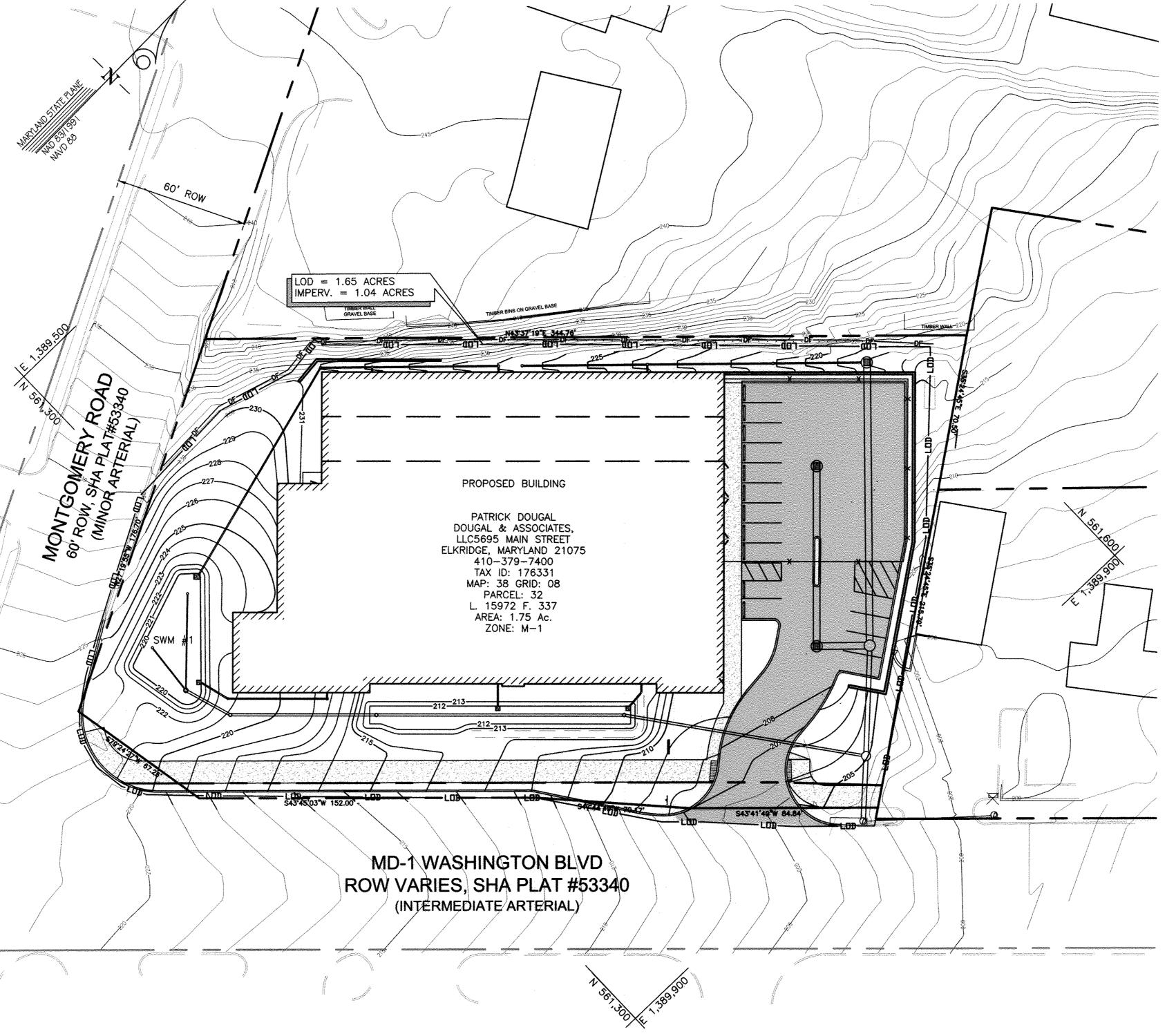
2. AREA TABULATION (PROPOSED CONDITION)

| a. | TOTAL AREA OF SITE | 1.75 | AC. |
|----|---|------|-----|
| b. | AREA OF SITE TO BE DEVELOPED | 1.65 | AÇ. |
| c. | APPROXIMATE AREA OF 100 YEAR FLOODPLAIN WITHIN LOD | 0.00 | AC. |
| d. | APPROX. AREA OF STEEP SLOPES (15% OR MORE) WITHIN LOD | 0.00 | AC. |
| | AREA OF ERODIBLE SOILS WITHIN LOD | | |
| | AREA OF FOREST WITHIN LOD. | | |
| | AREA OF PROPOSED BUILDINGS | | |
| i. | AREA OF GREEN OPEN SPACE WITHIN LOD | 0.61 | AC. |
| | APPROXIMATE AREA OF LIMIT OF DISTURBANCE | 1.65 | AC. |
| | APPROXIMATE AREA OF WETLAND BUFFER WITHIN LOD | | |
| | APPROXIMATE AREA OF WETLAND WITHIN LOD. | | |
| | APPROXIMATE AREA OF IMPERVIOUS COVER WITHIN LOD | | |

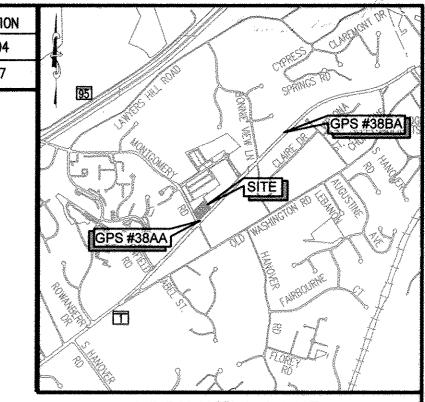
ENVIRONMENTAL CONCEPT PLAN

CUBE SMART STORAGE

SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND



| NT | NORTHING | EASTING | ELEVATION |
|----|-----------|------------|-----------|
| AA | 561158.82 | 1389726.43 | 220.04 |
| ВА | 562553.31 | 1390967.96 | 166.17 |



VICINITY MAP SCALE: 1" = 2000'ADC MAP 20, GRID A4

LEGEND

| | PROPERTY LINE |
|--|---------------------------|
| | ADJOINING PROPERTY LINE |
| | BUILDING OUTLINE |
| anna sianasian 2,00 saanasian saa saasaa | EXISTING CONTOUR |
| and the second the sec | EXISTING TREELINE |
| | EXISTING EDGE OF PAVEMENT |
| LOD | LIMIT OF DISTURBANCE |
| _ | |
| | PROPOSED STORM DRAIN |

STORMWATER MANAGEMENT APPROACH

THE "STORMWATER MANAGEMENT ACT OF 2007" REQUIRES THE IMPLEMENTATION OF AN ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICABLE. ENVIRONMENTAL SITE DESIGN TECHNIQUES PROMOTE GROUNDWATER RECHARGE BY TARGETING RUNOFF CHARACTERISTICS TO MIMIC WOODS IN A GOOD CONDITION AFTER DEVELOPMENT OF THE SITE. EXISTING IMPERVIOUS ON SITE TOTALS 0.96 ACRES OR 55% OF THE SITE AREA. THE SITE IS CONSIDERED IN REDEVELOPMENT SINCE EXISTING IMPERVIOUS

NATURAL RESOURCES: THE PROPOSED DEVELOPMENT WILL BE DESIGNED TO MINIMIZE THE IMPACT TO ANY NATURAL RESOURCES ON SITE. THERE WILL NOT BE ANY NEGATIVE IMPACTS TO WETLANDS OR STREAMS ON SITE. THERE ARE 8,830 SQUARE FEET OF STEEP SLOPES INSIDE OF THE PROPOSED LOD THAT WILL BE PROTECTED THROUGH USE OF STABILIZATION MATTING.

NATURAL FLOW PATTERNS: IN GENERAL EXISTING DRAINAGE PATTERNS WILL REMAIN UNCHANGED IN THE PROPOSED CONDITION. THE ENTIRE SITE WILL CONTINUE TO DRAIN TO THE EXISTING INLET LOCATED ALONG WASHINGTON BLVD. NEW STORMWATER FACILITIES WILL DISCHARGE A STABLE, NON-EROSIVE OUTFALL.

SITE DESIGN: THE EXISTING BUILDING AND PARKING LOT WILL BE DEMOLISHED AND REPLACED WITH A 5-STORY STORAGE FACILITY (TWO FLOORS BELOW GRADE, THREE ABOVE). TWO OF THE EXISTING ENTRANCES WILL BE REMOVED AND ONLY ONE ENTRANCE FROM WASHINGTON BLVD WILL BE PROPOSED. NEW CURB AND GUTTER WILL BE CONSTRUCTED ALONG THE ROAD WAY AND A 10 FOOT WIDE SIDEWALK WILL BE PROVIDED ALONG WASHINGTON BLVD. (M-6)-MICRO-BIORETENTION FACILITIES WILL BE USED TO TREAT THE REQUIRED REDEVELOPMENT ESD AND RECHARGE VOLUMES. THE BUILDING FOOTPRINT WAS MINIMIZED BY BUILDING VERTICAL TO REDUCE IMPERVIOUS AREA. **EROSION & SEDIMENT CONTROL:**

A CONCEPTUAL EROSION & SEDIMENT CONTROL PLAN IS INCLUDED TO DEMONSTRATE THAT SEDIMENT CONTROL PRACTICES WILL BE PROVIDED TO EFFECTIVELY MANAGE SEDIMENT LADEN RUNOFF DURING CONSTRUCTION WITHOUT IMPACTING THE STORMWATER MANAGEMENT PRACTICES. THE MICRO-BIORETENTION FACILITIES WILL BE SURROUNDED BY SILT FENCE DURING THE ENTIRETY OF CONSTRUCTION TO PREVENT COMPACTION. ALL DISTURBED AREAS WILL BE TEMPORARILY STABILIZED AT THE END OF EACH WORK DAY AND ANY STEEP SLOPE DISTURBANCE WILL BE STABILIZED WITH STABILIZATION MATTING.

ESD PLANNING TECHNIQUES:

THE PROJECT IS CONSIDERED REDEVELOPMENT SO THE IMPERVIOUS AREA REQUIRED FOR TREATMENT SHALL BE REDUCED. THE WATER QUALITY TREATMENT PROVIDED IS FOR 50% OF THE EXISTING IMPERVIOUS AREA WITHIN THE LOD. THE NET INCREASE IN IMPERVIOUS AREA WILL BE TREATED BY (M-6)-MICRO-BIORETENTION FACILITIES. THESE FACILITIES COMBINED WILL STORE AND TREAT THE REQUIRED ESD VOLUME. THE MICRO-BIORETENTION FACILITY 1 WILL TREAT HALF OF THE BUILDINGS ROOF AS WELL AS THE AREA TO THE SOUTHWEST OF THE BUILDING. MICRO-BIORETNTION #2 WILL TREAT THE RUNOFF FROM A SMALLER SECTION OF THE ROOF. THE REST OF THE ONSITE RUNOFF WILL BE ROUTED THROUGH A CONTROL MANHOLE THAT WILL SLOW THE PROPOSED FLOW TO THE EXISTING INLET. THE EXISTING RUNOFF FROM THE SITE AREA IS 11.02 CFS AND IN THE PROPOSED CONDITIONS THE FLOW WILL BE LOWERED TO 10.54 CFS.

SOILS TABLE

| SYMBOL | DESCRIPTION | HYDROLOGIC SOILS GROUP | K-VALUE |
|--------|---|---------------------------|---------|
| UŧD | URBAN LAND-UDORTHENTS COMPLEX, 0 TO 15 PERCENT SLOPES | D | 0.28 |

LOCATION MAP SCALE: 1"=30"

CHARLES & WILLIAM PHELPS 6300 WASHINGTON BLVD ELKRIDGE MD, 21075 410-796-2222 DEVELOPER PATRICK DOUGAL **DOUGAL & ASSOCIATES** SCALE: 1"=30" 5695 MAIN STREET

ELKRIDGE MD, 21075

PLANNERS SCIENTISTS **TECHNOLOGIES**

APPROVED: HOWARD COUNTY DEPARTMENT PLANNING AND ZONING Construction Managers 11830 WEST MARKET PLACE, SUITE F FULTON, MD 20759 TELEPHONE: (410) 792-8086 FAX: (410) 792-7419

CHIEF, DEVELOPMENT ENGINEERING DIVISION 2004 CHIEF, DIVISION OF LAND DEVELOPMENT NH

REVISIONS 04-26-2018 DESCRIPTION NO. DATE 1"=30' ESIGNED BY BRA RAWN BY FIRST ELECTION DISTRICT

6300 WASHINGTON BLVD ELKRIDGE, MD 21075 ENVIRONMENTAL CONCEPT PLAN

TITLE SHEET

ZONING: M-1 TAX MAP: 38 GRID: 3 PARCEL: 39

APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LITENSE NO 1153772 EXP. DATE: 06/16/2019

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

SHEET 1 OF 3

KCI JOB NUMBER

HOWARD COUNTY, MARYLAND

