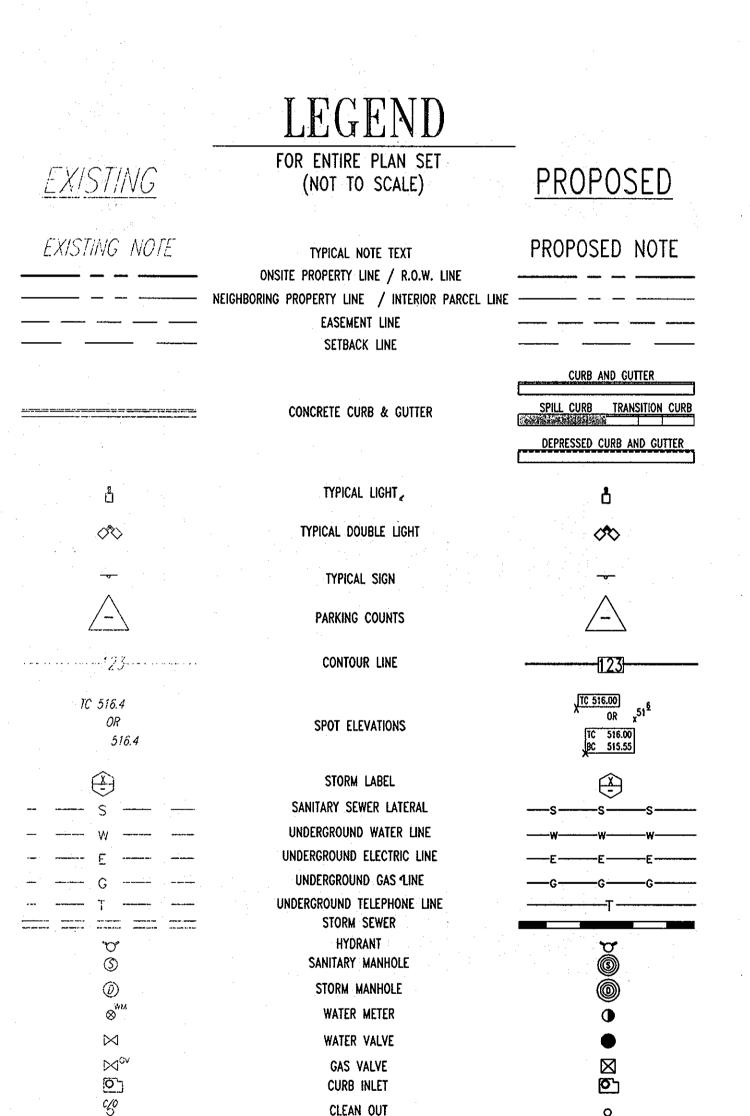
# MCDONALD'S USA, LLC TAX MAP 42, GRID 6, PARCEL 513, LOT A-23



TEST PIT

BENCHMARK

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## SITE ANALYSIS DATA CHART PROJECT AREA: PARCEL 513 = 1.1498 ACRES = 50,086 S.F.

LIMIT OF DISTURBED AREA: 42,400 S.F. (0.98 AC.) PRESENT ZONING: B-2 (BUSINESS GENERAL DISTRICT) PROPOSED USE: RESTAURANTS, FAST FOOD TOTAL FLOOR AREA: 3,886 S.F.

MAXIMUM NUMBER OF EMPLOYEES: 15 PARKING SPACES REQUIRED: 55 (SEE GENERAL NOTE 9 ON THIS SHEET) PARKING SPACES PROVIDED: 49 (INCLUDING 3 HANDICAP SPACES)\* BUILDING COVERAGE OF SITE: 0.09 ACRES (7.78% OF GROSS AREA) APPLICABLE DPZ FILE REFERENCES: SDP-92-113, SDP 92-49, F-92-1001, F-92-140, ZB-915, S-84-44, S-85-55, F-88-91, F-87-96, F-85-55, VP-84-150, VP-85-34, F-90-175, VP-85-35, VP-86-81, VP-88-17, WP-88-63, WP-90-141, AA-91-15, ZB-915, S-92-10, F-92-15, F-92-57, F-92-136, F-92-140 \* SEE GENERAL NOTE 9 ON THIS SHEET FOR DPZ APPROVED PARKING REDUCTION INFORMATION.

ISSUED FOR CONSTRUCTION

THIS DOCUMENT IS NOT ISSUED BY BOHLER ENGINEERING

FOR CONSTRUCTION WITHOUT (4) SIGNATURES

SIGNATURE DATE

SIGNATURE DATE

BEPC PROJECT # \_\_\_

REVISION DATE:

SIGNATURE DATE

SIGNATURE DATE

#### GENERAL NOTES:

- 1. THIS PLAN IS BASED ON A SURVEY BY BOHLER ENGINEERING, ENTITLED: "ALTA/ACSM LAND TITLE SURVEY, MCDONALD'S CORPORATION 9061 SE SNOWDEN RIVER PARKWAY, GATEWAY COMMERCE CENTER, SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND" DATED: 10/24/07 PROJECT NO.: S075639.SR
- 2. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- 3. THE EXISTING TOPOGRAPHY IS BASED ON A FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY BOHLER ENGINEERING DATED 10/24/07.
- 4. EXISTING UTILITIES ARE BASED ON A SURVEY PREPARED BY BOHLER ENGINEERING DATED 10/24/07.
- 5. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY TRAFFIC CONCEPTS, INC., ENTITLED "TRAFFIC IMPACT STUDY, MCDONALD'S CORPORATION, FAST FOOD RESTAURANT, HOWARD COUNTY, MARYLAND." DATED APRIL 2008.
- 6. THE SUBJECT PROPERTY IS ZONED "B-2" IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS DATED 7/28/06.
- EXISTING USE: RESTAURANT RESTAURANTS, FAST FOOD PROPOSED USE: RESTAURANT - RESTAURANTS, FAST FOOD
- 8. BUILDING HEIGHT: 18.25' (MAIN BUILDING PARAPET) MAXIMUM HEIGHT ALLOWED: 40.00'
- 9. PARKING:

REQUIRED -14 SPACES/1,000 SF OF FLOOR AREA  $14 \times (3.886/1,000) = 55 \text{ SPACES}$ TOTAL PARKING REQUIRED = 55 SPACES TOTAL PARKING PROVIDED = 49 SPACES (INCLUDING 3 HANDICAP \* FOLLOWING A REQUEST BY MR. THOMAS MEACHUM, DATED 1/21/09, HOWARD COUNTY DPZ APPROVED A PARKING REDUCTION OF 6 SPACES ON JANUARY 30, 2009.

- 10. ELECTION DISTRICT: 6
- 11. DEED: REFERENCE PARCEL 513 LOT A-23 GATEWAY COMMERCE CENTER, PARCELS A-15 THROUGH A-32
- 12. TAX MAP: 42, GRID: 6, PARCEL: 513, LOT A-23
- 13. PROPERTY IS LOCATED IN COLUMBIA

LIBER 10050, FOLIO 203

14. SETBACKS: USE AND STRUCTURE SETBACKS FRONT (EAST)

REAR (WEST)

- SIDE (SOUTH) (TO R.O.W.) 66.83 SIDE (NORTH) 81.50' PARKING SETBACK: FRONT (EAST) SIDE (SOUTH) (TO R.O.W.) 23.70 SIDE (NORTH) 9.50
- 15. OUTDOOR LIGHTING SHALL BE SHIELDED AND DIRECTED SO THAT IT DOES NOT SHINE DIRECTLY ONTO ANY ADJACENT PROPERTIES, AND SHALL NOT PRODUCE GLARE WHICH WOULD CAUSE A HAZARD FOR MOTOR VEHICLE OPERATIONS IN THE VICINITY OF THE SITE. LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 134 OF THE ZONING REGULATIONS.

<u>PROPOSED</u>

16. UTILITIES: WATER, PUBLIC - AN 8" WATERLINE (CONTRACT # 24-3185) EXISTS ALONG THE EASTERN SIDE OF THE SITE, IN COMMERCE CENTER DRIVE. THE EXISTING

SEWER CONNECTION WILL BE UTILIZED.

CONNECTION WILL BE UTILIZED AND A NEW METER WILL BE INSTALLED. SEWER, PUBLIC - AN 8" SANITARY LINE (CONTRACT # 24-3185) EXISTS ALONG THE EASTERN SIDE OF THE SITE, IN COMMERCE CENTER DRIVE. THE EXISTING

STORM DRAIN - AN 18" RCP STORMDRAIN PIPE IS LOCATED ALONG THE NORTH

- 17. ALL HOWARD COUNTY STORM WATER QUALITY MANAGEMENT REQUIREMENTS WILL BE MET UTILIZING AN UNDERGOUND, FLOW-BASED STORMFILTER. HOWARD COUNTY STORMWATER QUANTITY REQUIREMENTS HAVE BEEN MET UNDER F-92-1001. THE REGIONAL STORMWATER MANAGEMENT FACILITY IS LOCATED ON PARCEL A-14.
- 18. THE SITE IS LOCATED IN ZONE C (AREAS OF MINIMAL FLOODING) PER MAP ENTITLED: "FIRM FLOOD INSURANCE RATE MAP, HOWARD COUNTY, MARYLAND, PANEL 39 OF 45," COMMUNITY PANEL NUMBER 2400440039 B, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, EFFECTIVE DATE DECEMBER 4, 1986.
- 19. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS AND SPECIFICATIONS. IF APPLICABLE.
- 20. 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.
- 21. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- 22. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNAGE 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.
- 23. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

- 24. THERE ARE NO KNOWN BURIAL GROUNDS LOCATED ON-SITE.
- 25. THERE ARE NO WETLANDS ON THIS SITE
- 26. THIS PLAN IS SUBJECT TO THE AMENDED 5TH EDITION OF THE SUBDIVISION REGULATIONS AND THE 07/28/06 ZONING REGULATIONS.
- 27. APPLICABLE DPZ FILE REFERENCES: SDP-92-113, SDP 92-49, F-92-1001, F-92-140, ZB-915, S-84-44, S-85-55, F-88-91, F-87-96, F-85-55, VP-84-150, VP-85-34, F-90-175, VP-85-35, VP-86-81, VP-88-17, WP-88-63, WP-90-141, AA-91-15, ZB-915, S-92-10, F-92-15, F-92-57, F-92-136, F-92-140, WP-92-80, WP-92-113, WP-92-171, F-09-114
- 28. LANDSCAPE SURETY IN THE AMOUNT OF \$7,830.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.
- 29. THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202 (B)(1)(III) OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE THIS SITE HAS A PRELIMINARY SUBDIVISION PLAN APPROVAL PRIOR TO DECEMBER 31, 1992.
- 30. A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE WITH A RANGE OF 4-5' IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY AN OWNER THAT IT IS BEING ACCESSED. (INTEGRATED WITH THE FIRE ALARM SYSTEM NFPA-1 10.12.1)
- 31. REFUSE SHALL BE DISPOSED OF DAILY IN AN OUTDOOR TRASH ENCLOSURE. TRASH REMOVAL WILL BE PRIVATELY CONTRACTED.
- 32. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16-124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- 33. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED. SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED. SQUARE TUBE SLEEVE (12 GAUGE)-3" LONG. A GALVANIZED STEEL POST WILL BE MOUNTED ON TOP OF EACH POST.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 42CA AND 42CMT2 WERE USED FOR THIS PROJECT.

NATURAL GAS AND ELECTRIC

BALTIMORE GAS AND ELECTRIC

SOUTH HANOVER, MD 21076

PHONE: (410) 859-9383

7133 RUTHERFORD ROAD

PHONE: (410) 224-5286

STORMWATER MANAGEMENT

HOWARD COUNTY PLANNING

AND ZONING DEPARTMENT

3430 COURTHOUSE DRIVE

ELLICOTT CITY, MD 21043

PHONE: (410) 313-2350

B-2

SEWER CODE

BALTIMORE, MD 21244

7317 PARKWAY DRIVE

VERIZON

APPROVED: FOR PUBLIC WATER

20700 IDS41

WATER CODE

#### CORNER OF SNOWDEN RIVER PARKWAY AND ROBERT FULTON STATION 42CA HOWARD COUNTY ALUMINUM CAP SET ON A CONCRETE

STATION 42CMT2

MONUMENT ON SNOWDEN RIVER PARKWAY NORTH OF THE RAMP FROM ROBERT FULTON DRIVE

COPYRIGHT ADC THE MAP PEOPLE PERMIT USE NO. 20602153-5 SCALE: 1"=2000' ADC MAP COORDINATES: MAP 16, C12

COUNTY CONTROL INFORMATION

HOWARD COUNTY ALUMINUM CAP WITH REBAR ON SOUTHEAST



COMPONENTS FOR CONSTRUCTION SAFETY. A CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFE AND HEALTH ACT OF 1970 AND ALL RULE AND REGULATIONS THERETO APPURTENANT

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED | 48 HOURS PRIOR TO ANY CONSTRUCTION

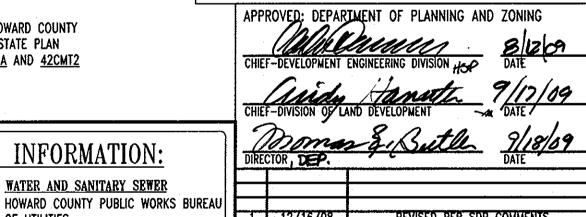
BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

PHONE: (240) 497-3650

## PROFESSIONAL CERTIFICATION

, MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11



1 12/16/08 NO.: DATE REVISED PER SDP COMMENTS DEVELOPER: DEOUDES FAMILY PARTNERSHIP McDONALD'S USA, LLC, C/O DEOUDES - MAGAFAN REALTY. BALTIMORE/WASHINGTON REGION 6903 ROCKLEDGE DRIVE, SUITE 10

PHONE: (410) 313-4910 EROSION AND SEDIMENT CONTRO O WOODMONT AVENUE, SUITE 410 DEPARTMENT OF INSPECTIONS. BETHESDA, MD 20814-7065 LICENSES & PERMITS PHONE: (301) 986-9500 3430 COURTHOUSE DRIVE

ELLICOTT CITY, MD 21043 PHONE: (410) 313-2455

PLANNING AND ZONING HOWARD COUNTY PLANNING AND ZONING DEPARTMENT 3430 COURTHOUSE DRIVE ELLICOTT CITY, MD 21043 PHONE: (410) 313-2350

WATER AND SANITARY SEWER

8250 OLD MONTGOMERY ROAD

COLUMBIA, MD 21045

OF UTILITIES

McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046 AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050. F. 203, PLAT NO. 10538-10543

COVER SHEET

2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

# BOHLER ENGINEERING

810 GLENEAGLES COURT Suite 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

ATE: OPSIGNET BY: C.W.A. PROJECT NO.: MD075006

AND PUBLIC SEWAGE SYSTEMS Brixon for Peter Beileuson 9/9/2009 COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT ADDRESS CHART LOT/PARCEL # STREET ADDRESS PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PERMIT INFORMATION CHART LOT/PARCEL NO. PARCEL 513, LOT A-23 SUBDIVISION NAME SECTION/AREA GATEWAY COMMERCE CENTER CENSUS TRACT

6TH

6067.03

UTILITY CONTACT INFORMATION:

PREPARED BY:

810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987

www.bohlerengineering.com CONTACT: MATTHEW T. ALLEN, P.E.

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIF THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

SCALE: AS NOTED DRAWING NO. 1 OF 25 SDP-08-110

10/24/08

#### SITE PLAN GENERAL NOTES

THIS PLAN IS BASED ON A SURVEY PREPARED BY:

BOHLER ENGINEERING ENTITLED: "ALTA/ACSM LAND TITLE SURVEY MCDONALDS CORPORATION, 9061 SE SNOWDEN RIVER PARKWAY, GATEWAY COMMERCE CENTER, SIXTH ELECTION DISTRICT, HOWARD COUNTY MD." PROJECT NO.: S075639SR

APPLICANT: McDONALD'S USA, LLC. BALTIMORE/WASHINGTON REGION

6903 ROCKLEDGE DRIVE, SUITE 100

DATED: 10/24/07

DEOUDES FAMILY PARTNERSHIP C/O DEOUDES - MAGAFAN REALTY, INC. 7910 WOODMONT AVENUE, SUITE 410 BETHESDA, MD 20814-7065

PHONE: (240) 497-3650 PARCEL DATA:

BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

TAX MAP: 42, GRID: 6, PARCEL: 513, GATEWAY COMMERCE CENTER, LOT: A-23 SITE AREA: 50,086 S.F. OR 1.15 AC.

SPECIFIC RESOURCES, TECHNICAL REPORTS, DESIGN DOCUMENTS, ETC. RELATED TO THIS PROJECT INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING: **GEOTECHNICAL REPORT:** 

PREPARED BY: GILES ENGINEERING ASSOCIATES, INC. ENTITLED: "GEOTECHNICAL ENGINEERING EXPLORATION AND ANALYSIS, PROPOSED MCDONALD'S RESTAURANT, 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MARYLAND, PREPARED FOR: MCDONALD'S CORPORATION, BETHESDA, MARYLAND." PROJECT NO: 3G-0710006 DATED: NOVEMBER 16, 2007

TRAFFIC REPORT:

PREPARED BY: TRAFFIC CONCEPTS, INC. ENTITLED: "TRAFFIC IMPACT STUDY, MCDONALD'S CORPORATION, 9061 SNOWDEN RIVER PARKWAY, FAST-FOOD RESTAURANT, HOWARD COUNTY, MARYLAND," DATED: APRIL, 2008

SITE DEVELOPMENT PLANS: PREPARED BY: GUTSCHICK, LITTLE & WEBER, P.A. ENTITLED: "GATEWAY COMMERCE CENTER: PARCELS A-19 THRU A-23, A-36 THRU A-39, A-27, A-29 & A-32; SNOWDEN RIVER SQUARE." **DATED: JUNE 3, 1992** 

5.	BULK REQUIREMENTS:	ALLOWED/REQUIRE	
	A. MIN. LOT AREA:	NOT SPECIFIED	1.15 AC.
			(50,086 S.F)
	B. MIN. BUILDING SETBACK	-	
	FRONT SETBACK (EAST)	0'	96.00'
	SIDE SETBACK (SOUTH) (TO R.O.W.)	<b>30</b> '	64.07'
	SIDE SETBACK (NORTH)	0'	66.83'
	REAR SETBACK (WEST)	0'	81.50'
	C. MIN. PARKING SETBACK		
	FRONT SETBACK (EAST)	0'	30.00'
	SIDE SETBACK (SOUTH) (TO R.O.W.)	10'	23.70'
	SIDE SETBACK (NORTH)	0'	9.50'
	REAR SETBACK (WEST)	0'	9.20'
	D. MAX IMPERVIOUS	NOT SPECIFIED	72.68%
	E. MIN. PARKING SPACE DIMENSIONS	9'X18'	9'X18'
	F. MAX. BUILDING HT.	40'	18.25' (MAIN BLDG. PARAPET)

G. MIN. DRIVE AISLES

Cou 2:31

PARKING REQUIREMENTS: REQUIRED: 14 SPACES PER 1,000 S.F. OF FLOOR AREA  $3,886 \text{ S.F.}/1,000 \text{ S.F. } \times 14 \text{ SPACES} = 55 \text{ SPACES}$ 

PROVIDED: 49 SPACES (INCLUDING 3 HANDICAP SPACES)\* \*SEE GENERAL NOTE 9 ON SHEET 1 FOR THE DPZ APPROVED PARKING REDUCTION INFORMATION.

- ALL HANDICAP PARKING SPACES SHALL BE CONSTRUCTED TO MEET ADA REQUIREMENTS.
- PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
- THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL GOVERNING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY ISSUANCE, INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES.
- 10. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF HOWARD COUNTY.
- 11. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY BOHLER ENGINEERING IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
- 12. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
- 13. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO BOHLER ENGINEERING AT THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY BOHLER ENGINEERING IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER SITE FEATURES.
- 14. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY BOHLER ENGINEERING IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- . CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS. PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY LOCATIONS.
- 16. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL TOWN, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.

#### SITE PLAN GENERAL NOTES (CONTINUED)

- 17. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTINGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
- 18. CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. THAT ARE TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF PAVEMENT, STRUCTURES, ETC. TO REMAIN, AND TO PROVIDE A SAFE WORK AREA.
- 19. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING ALL EXISTING DAMAGE AND FOR NOTIFYING CONSTRUCTION MANAGER PRIOR TO START OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECT CABLE, CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. REPAIR SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
- 20. ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED IN SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- 21. BOHLER ENGINEERING IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND BOHLER ENGINEERING WHEN A CONFLICT IS IDENTIFIED.
- 22. BOHLER ENGINEERING IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAVE THEY BEEN RETAINED FOR SUCH PURPOSES.
- 23. ALL CONTRACTORS MUST CARRY STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER ENGINEERING AND ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH BOHLER ENGINEERING WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW. INDEMNIFY AND HOLD HARMLESS BOHLER ENGINEERING AND ITS SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
- 24. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER ENGINEERING NOR THE PRESENCE OF BOHLER ENGINEERING OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE. SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO. CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. BOHLER ENGINEERING AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. BOHLER ENGINEERING SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONALLY INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- 25. BOHLER ENGINEERING SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, OR CONSTRUCTION SAFETY PRECAUTIONS, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. BOHLER ENGINEERING'S REVIEW SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT BOHLER ENGINEERING HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER ENGINEERING SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF BOHLER ENGINEERING IN WRITING BY THE CONTRACTOR. BOHLER ENGINEERING SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- 26. IN AN EFFORT TO RESOLVE ANY CONFLICTS THAT ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT OR FOLLOWING THE COMPLETION OF THE PROJECT, BOHLER ENGINEERING AND THE CONTRACTOR MUST AGREE THAT ALL DISPUTES BETWEEN THEM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE PROJECT SHALL BE SUBMITTED TO NONBINDING MEDIATION UNLESS THE PARTIES MUTUALLY AGREE OTHERWISE.
- 27. THE CONTRACTOR MUST INCLUDE A MEDIATION PROVISION IN ALL AGREEMENTS WITH INDEPENDENT SUBCONTRACTORS AND CONSULTANTS RETAINED FOR THE PROJECT AND TO REQUIRE ALL INDEPENDENT CONTRACTORS AND CONSULTANTS ALSO TO INCLUDE A SIMILAR MEDIATION PROVISION IN ALL AGREEMENTS WITH THEIR SUBCONTRACTORS, SUBCONSULTANTS, SUPPLIERS AND FABRICATORS, THEREBY PROVIDING FOR MEDIATION AS THE PRIMARY METHOD FOR DISPUTE RESOLUTION BETWEEN THE PARTIES TO ALL THOSE AGREEMENTS.
- 28. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS. INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND BOHLER ENGINEERING IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND BOHLER ENGINEERING HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
- 29. A CONSTRUCTION, OPERATION AND RECIPROCAL EASEMENT AGREEMENT (COREA) WAS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY IN LIBER 2716, FOLIO 459, ET. SEQ. ON DECEMBER 4, 1992. THAT AGREEMENT CONVEYS A USE IN COMMON WITH OTHERS A NON-EXCLUSIVE PERPETUAL EASEMENT FOR THE PASSAGE AND PARKING OF VEHICLES OVER AND ACROSS THE PARKING, DRIVEWAYS AND SIDEWALK AREAS OF THE PARCEL. PARCEL A-23, AS SHOWN ON THE FINAL SUBDIVISION PLATS OF THE "GATEWAY COMMERCE CENTER, PARCELS A-15 THROUGH A-32, A RESUBDIVISION OF GATEWAY COMMERCE CENTER, PARCEL A-11. ETC." RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND AS PLAT NOS. 10530 THROUGH 10543 IS SUBJECT TO THOSE EASEMENTS AND RESTRICTIONS.
- 30. CONTRACTOR SHALL BE REQUIRED TO MATCH SHOPPING CENTER STANDARD BOLLARD.

#### GRADING NOTES

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- 2. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
- 3. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- 5. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT, ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- 6. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO BOHLER ENGINEERING IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- 8. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
- REFER TO SITE PLAN FOR ADDITIONAL NOTES.
- 10. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS. THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY BOHLER ENGINEERING IN WRITING OF ANY CONFLICTS.
- 11. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.

#### UTILITY NOTES

- 1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO BOHLER ENGINEERING. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. ALL PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY BOHLER ENGINEERING OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY BOHLER ENGINEERING SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- 4. DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- 5. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, BOHLER ENGINEERING IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- 7. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING
- 8. ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
- 9. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
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- 12. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO BOHLER ENGINEERING AND OWNER PRIOR TO INITIATING WORK.

MISS UTILITY

THIS DRAWING DOES NOT INCLUDE NECESSA COMPONENTS FOR CONSTRUCTION SAFETY. CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFE AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENAN

BEFORE YOU DIG CALL 811 IN MD

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

### PROFESSIONAL CERTIFICATION

MATTHEW T. ALLEN, 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	. 28567, EXPIRA	ATION DATE:	4/16/11	
APP	ROVED: DEPAR	TMENT OF P	LANNING ANI	ZONING
	MAKU	anne		8/2/0
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NO.:	12/16/08 DATE		SED PER SDP REVISION DESC	
OWNE		07115001110	DEVELOPER:	
	OUDES FAMILY PA DEOUDES - MAG INC.		BALTIMORE/	ALD'S USA, LLC, WASHINGTON RE
	WOODMONT AVEN ETHESDA, MD 20		BETHES	DGE DRIVE, SUIT DA, MD 20817 DOHN EIDBERGER
	PHONE: (301) 98			(240) 497-3650
PROJE	ECT		ONALD'S	
ı		PARCEL	513. LOT A+23	<b>)</b>

HOWARD COUNTY, MARYLAND 21046 AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

9061 SNOWDÉN RIVER PARKWAY

GENERAL NOTES

BOHLER ENGINEERING

810 CLENEAGLES COURT Suite 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

PESIGNEL BY: C.W.A. PROJECT NO.: MD075006 10/24/08

PROFESSIONAL ENGINEER NO. 28567

PERMIT INFORMATION CHART SÜBDIVISION NAME GATEWAY COMMERCE CENTER N/A TAX MAP NO. PLAT RECORDATION GRIDA 20700 10541 42 B-2 **REWER CODE** WATER CODE

APPROVED: FOR PUBLIC WATER

HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER

LOT/PARCEL #

PARCEL 513, LOT A-23

AND PUBLIC SEWAGE SYSTEMS

ADDRESS CHART

STREET ADDRESS

9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

6TH

4900000

LOT/PARCEL NO.

PARCEL 513, LOT A-23

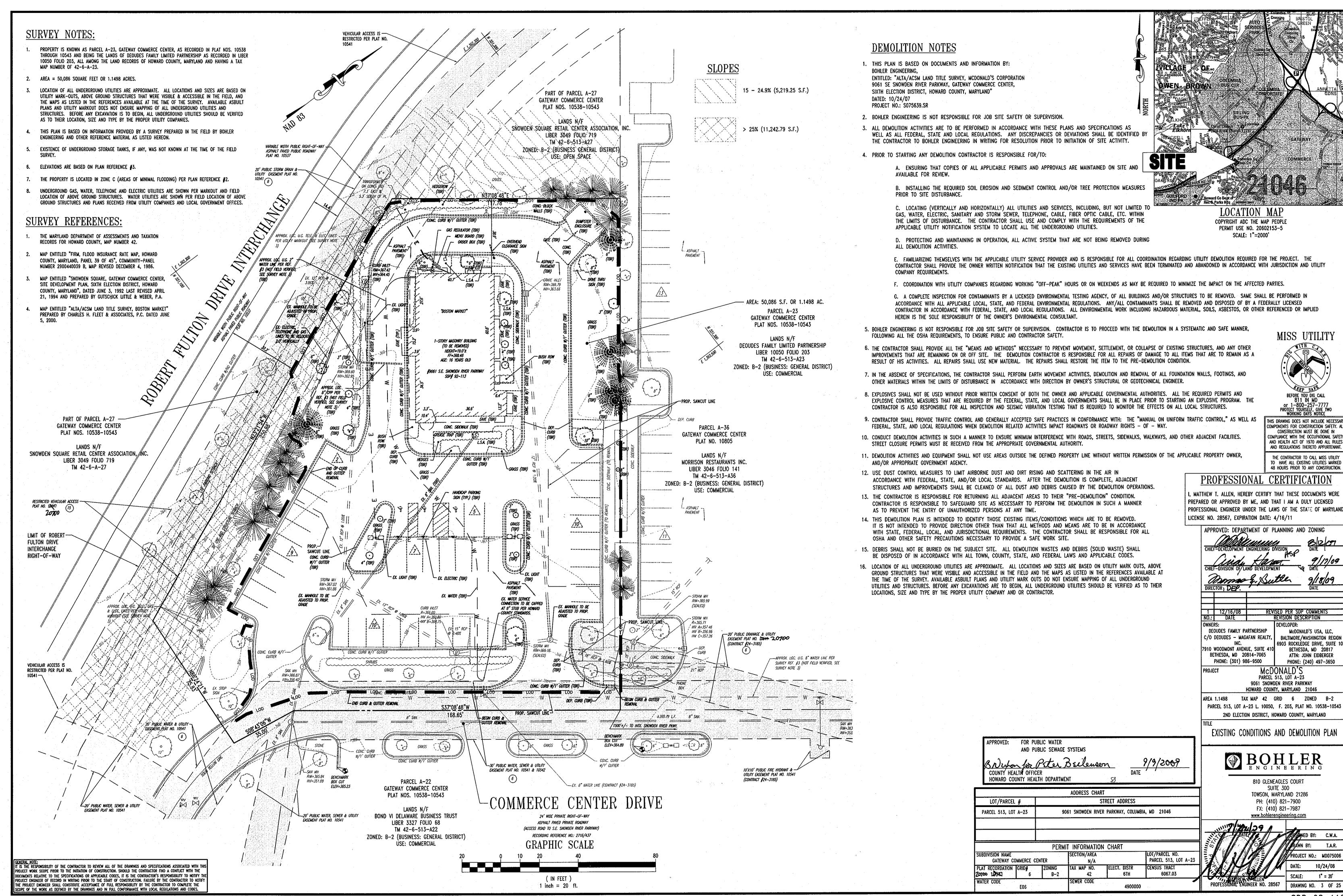
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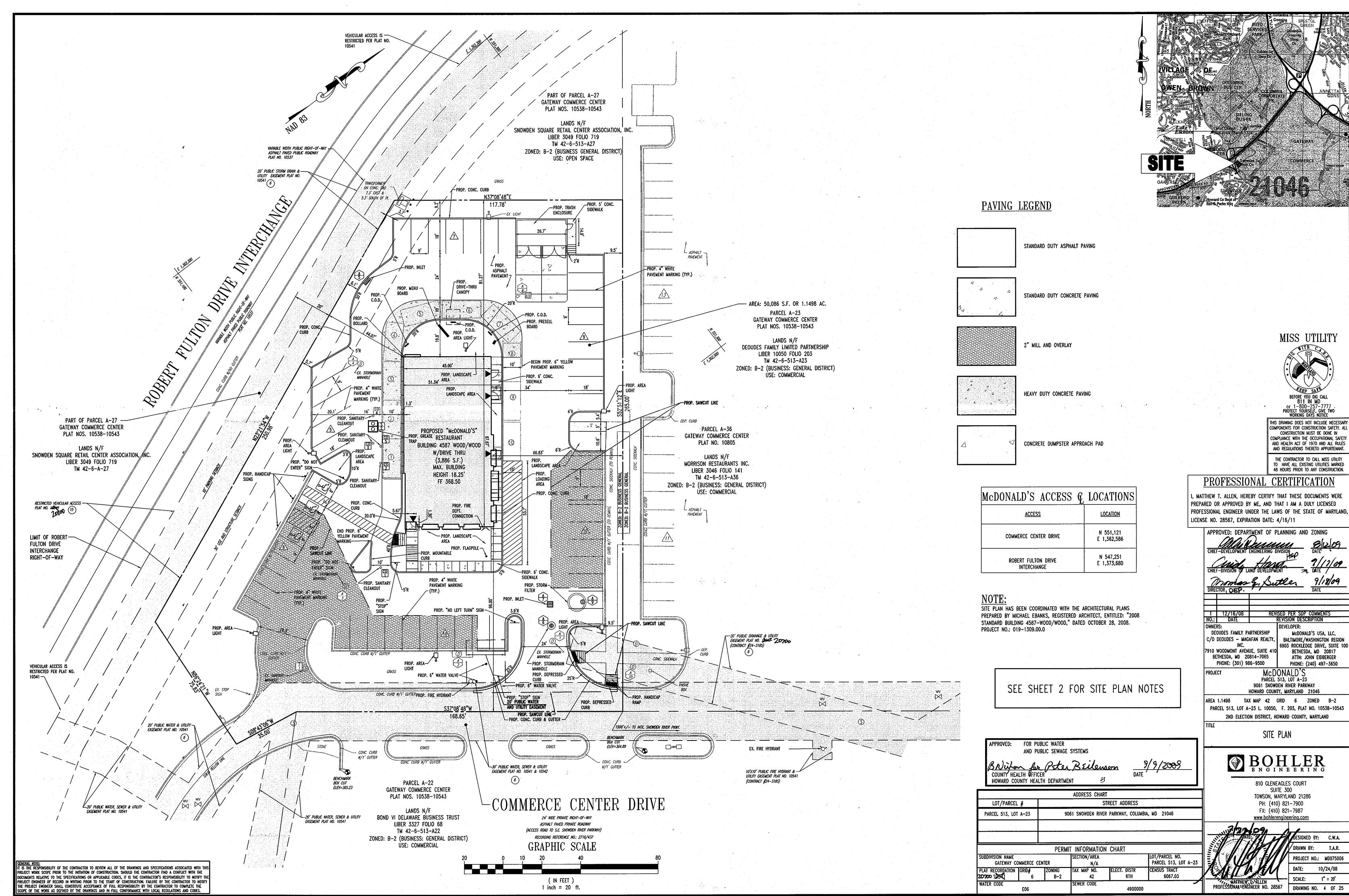
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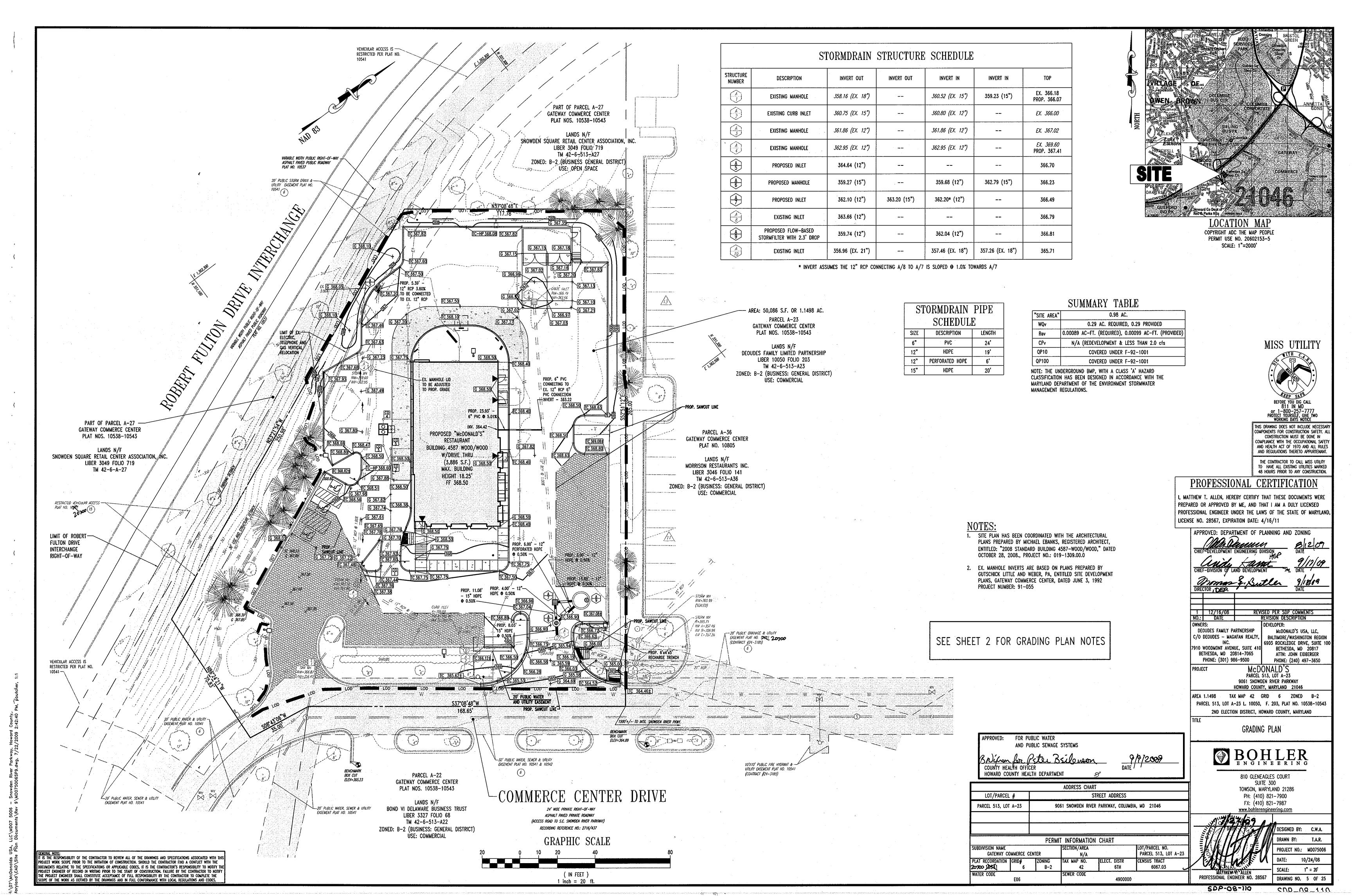
<u>general note:</u> It is the responsibility of the contractor to review all of the drawings and specifications associated with th PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE OCCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THI PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

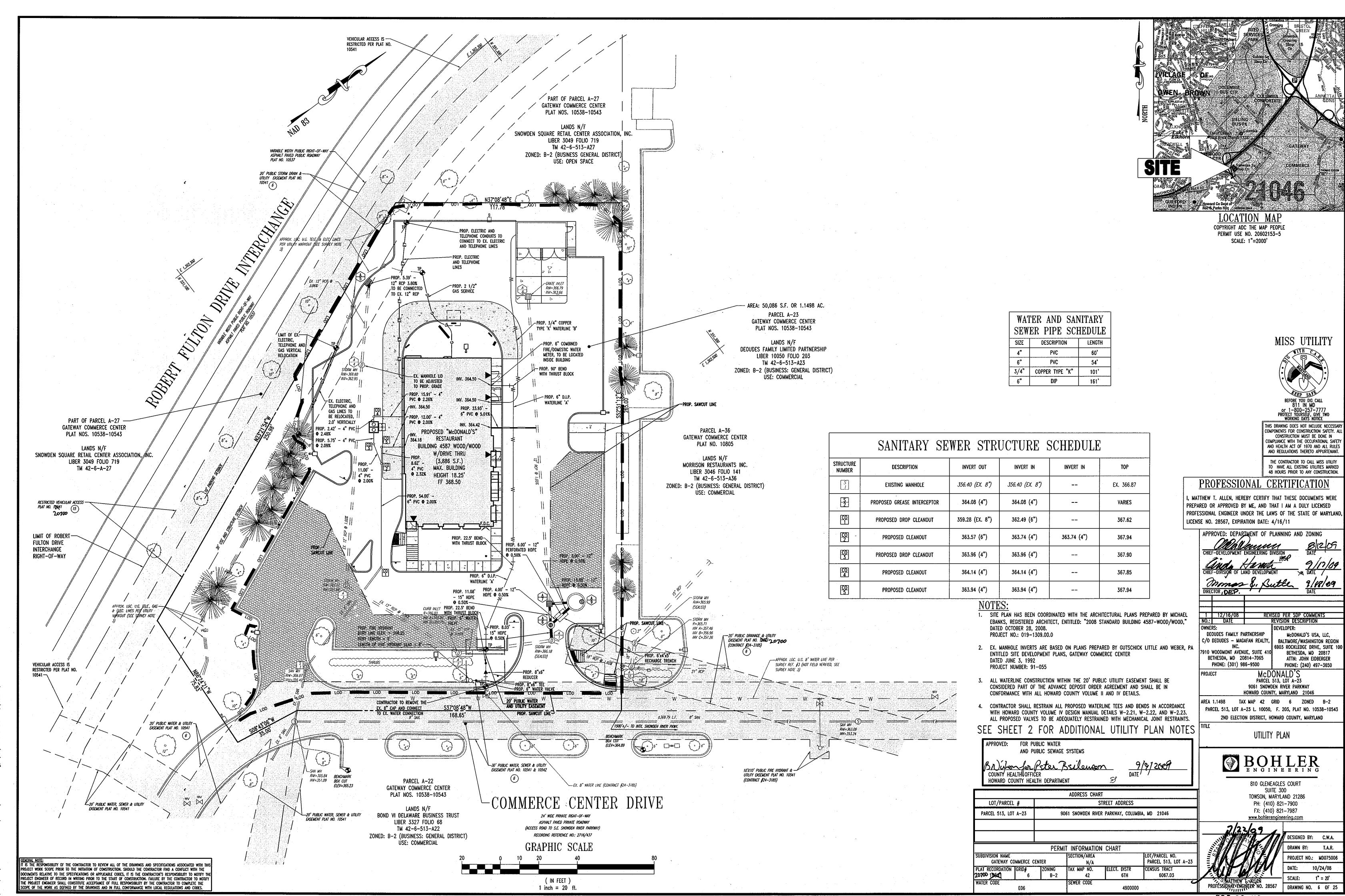
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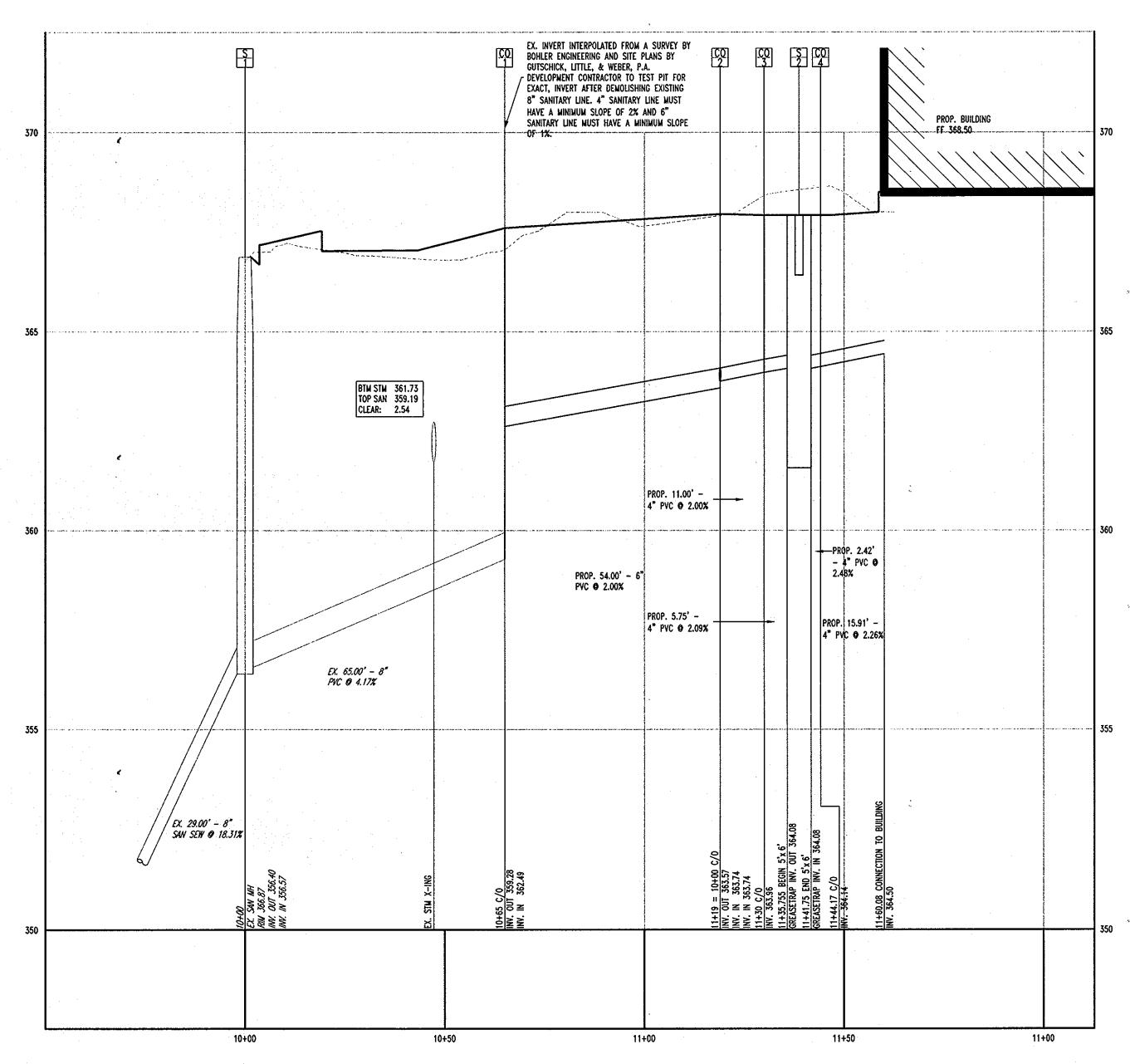
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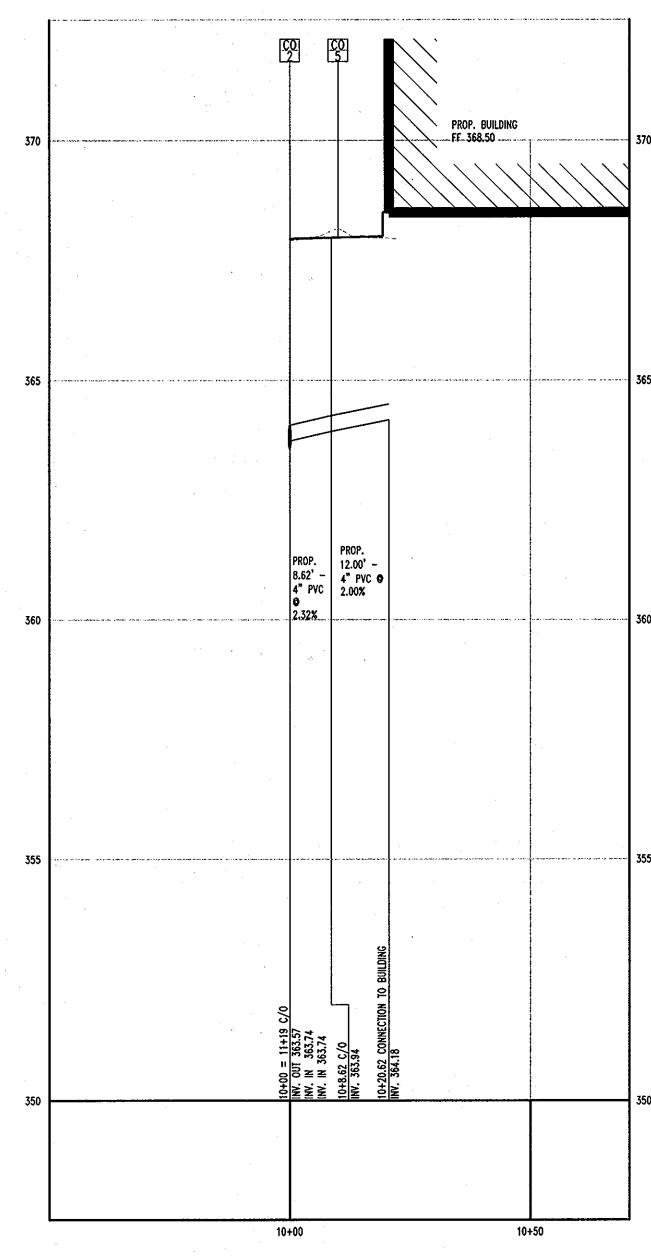








SANITARY PROFILE - EXISTING MANHOLE TO BUILDING SCALE: HORZ. 1"=20' VERT. 1"=2'



SANITARY PROFILE - CLEANOUT 2 TO BUILDING

SCALE: HORZ. 1"=20" VERT. 1"=2'

APPROVED: FOR PUBLIC WATER

LOT/PARCEL #

PARCEL 513, LOT A-23

SUBDIVISION NAME
GATEWAY COMMERCE CENTER

AND PUBLIC SEWAGE SYSTEMS

Brycon for Peter Beilenson

COUNTY HEALTH OFFICER

HOWARD COUNTY HEALTH DEPARTMENT

SP

ZONING B-2

ADDRESS CHART

PERMIT INFORMATION CHART

STREET ADDRESS

9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

ELECT. DISTR 6TH

LOT/PARCEL NO.
PARCEL 513, LOT A-7
CENSUS TRACT
6067.03



THIS DRAWING DOES NOT INCLUDE NECESSAR COMPONENTS FOR CONSTRUCTION SAFETY. AL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFE AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY
TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION

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, MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11

APPROVED: DEPARTMENT OF PLANNING AND ZONING

REVISED PER SDP COMMENTS

DEOUDES FAMILY PARTNERSHIP
C/O DEOUDES - MAGAFAN REALTY,
INC.
7910 WOODMONT AVENUE, SUITE 410
BETHESDA, MD 20814-7065

McDONALD'S USA, LLC, BALTIMORE/WASHINGTON REGION ATTN: JOHN EIDBERGER PHONE: (301) 986-9500 PHONE: (240) 497-3650

McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

UTILITY PROFILES

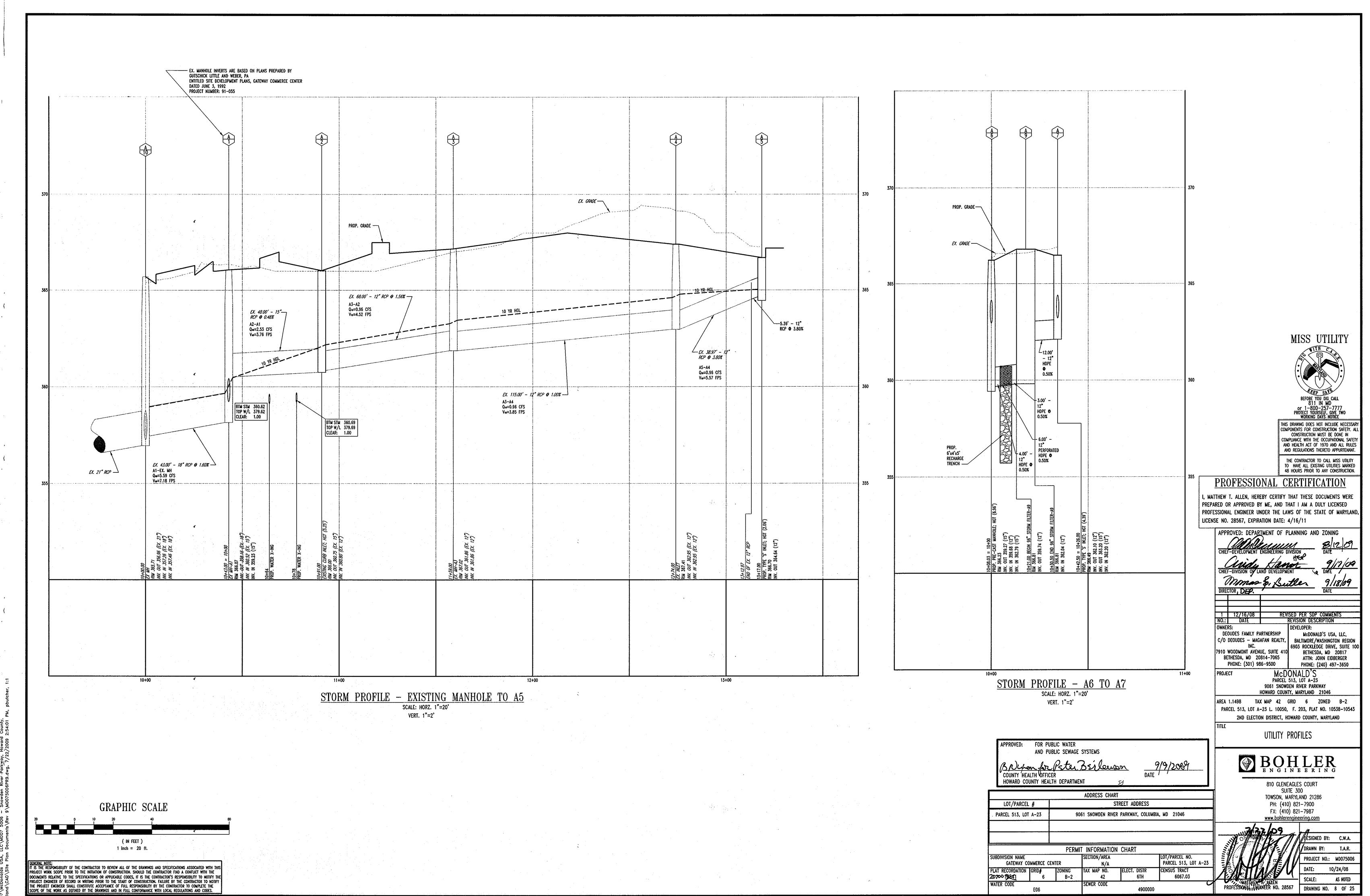
BOHLER BNGINEERING

810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987

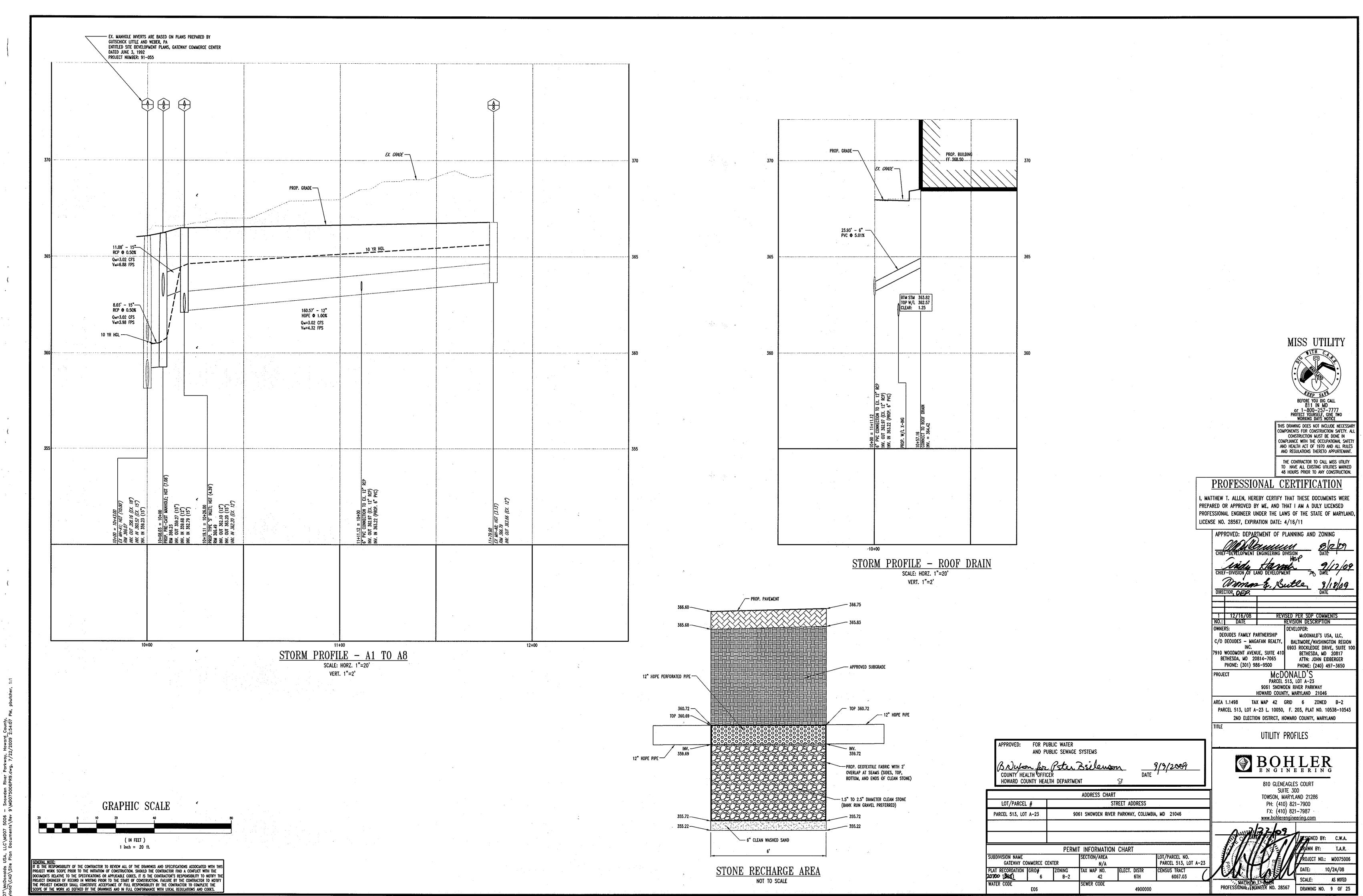
www.bohlerengineering.com

( IN FEET ) 1 inch = 20 ft. GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTRUCTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

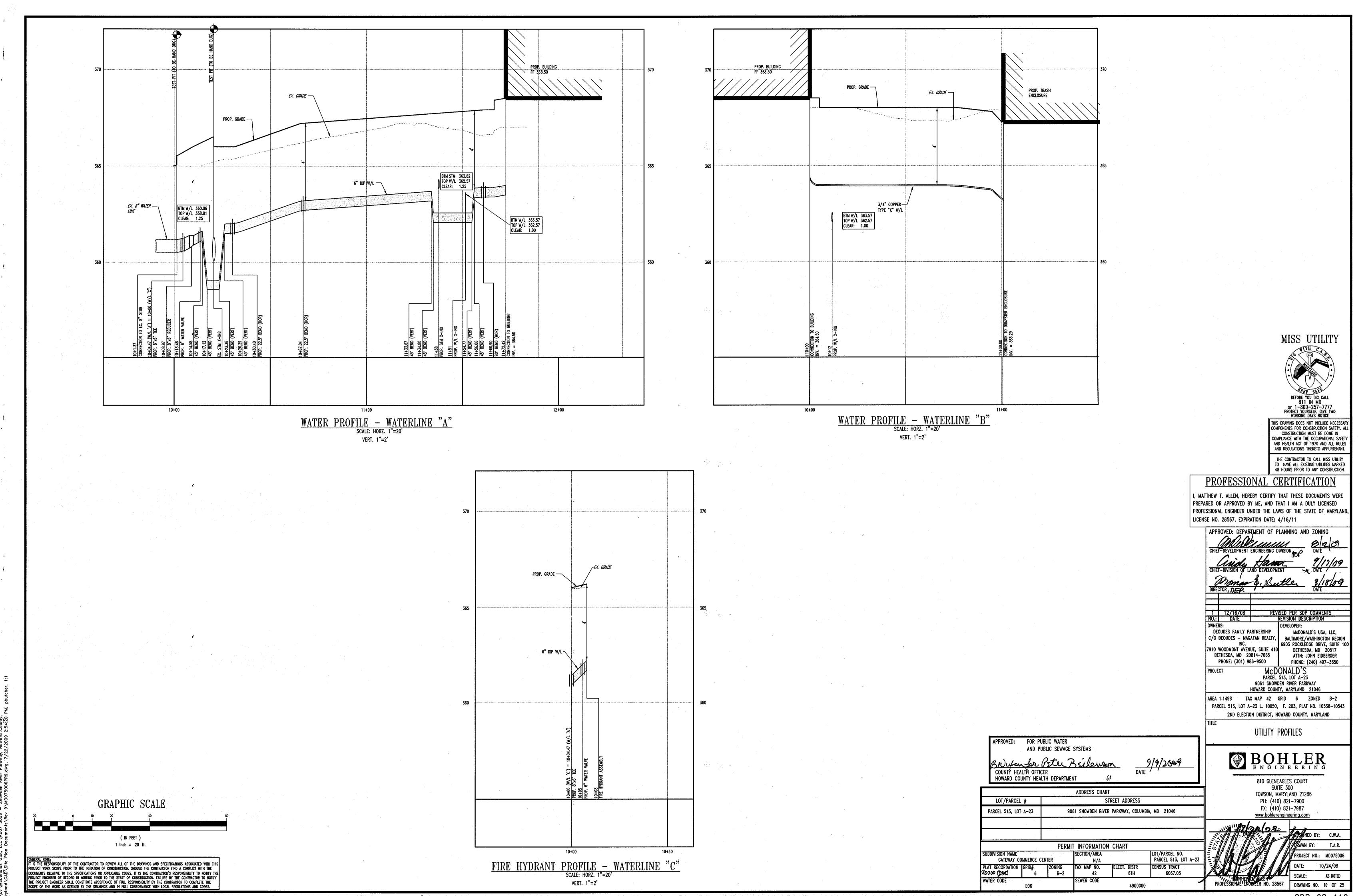
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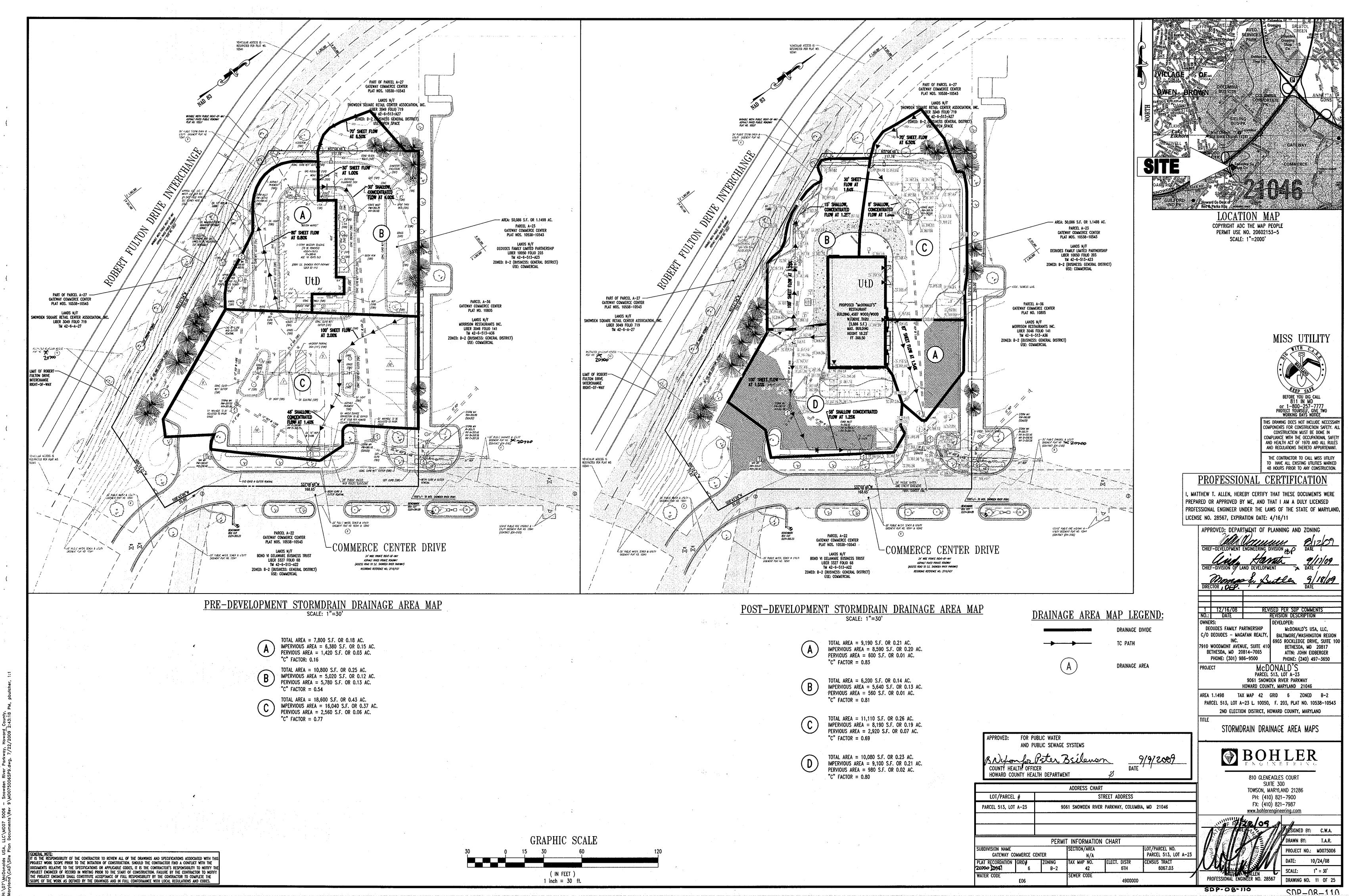


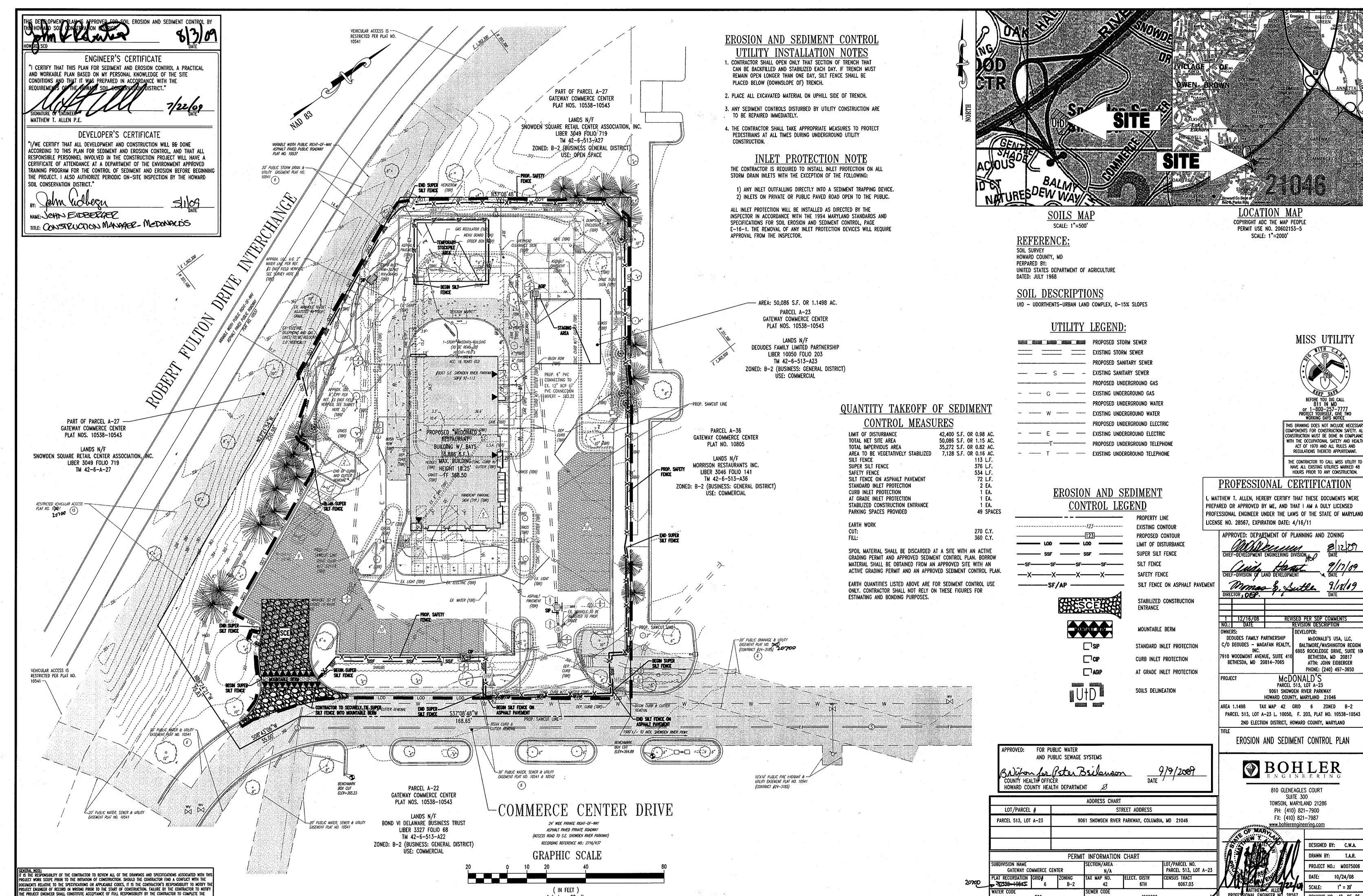
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1 inch = 20 ft.

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OPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

ENGINEER NO. 28567

DRAWING NO. 12 OF 25

1. LENGTH - MINIMUM OF 50' (\*30' FOR SINGLE RESIDENCE LOT).

SCE

2. WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING

3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. \*\*THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.

CONSTRUCTION SPECIFICATION

4. STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.

5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.

6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Unlimited

100 feet

Silt Fence Length

Unlimited

1,500 feet

1,000 feet

(maximum)

SUPER SILT FENCE

Design Criteria

Slope

Steepness

0 - 10:1

10:1 - 5:1

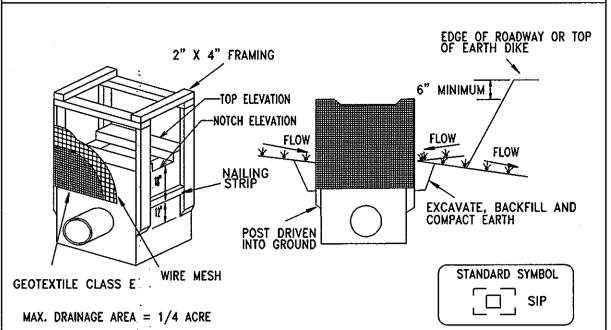
5:1 - 3:1

0 - 10%

20 - 33%

U.S. DEPARTMENT OF AGRICULTURE

DETAIL 23A	_	STANDARD	INLET	PROTECTION
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Construction Specifications

1. Excavate completely around the inlet to a depth of 18" below the notch elevation.

2. Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.

3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a

4. Stretch the Geotextile Class E tightly over the wire mesh with the geotixtile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.

5. Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.

6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.

7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE E - 16 - 5

DETAIL 33 - SUPER SILT FENCE

The lower tension wire, brace and truss rods, drive anchors and post caps are not

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

6. Maintenance shall be performed as needed and silt buildups removed when "bulges"

0.3 gal/ft <sup>1</sup>/minute (max.)

7. Filter cloth shall be fastened securely to each fence post with wire ties or

staples at top and mid section and shall meet the following requirements for

50 lbs/in (min.)

20 lbs/in (min.)

develop in the silt fence, or when silt reaches 50% of fence height

sections of filter cloth adjoin each other, they shall be overlapped

Test: MSMT 509

Test: MSMT 509

Test: MSMT 322

Test: MSMT 322

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

required except on the ends of the fence.

every 24" at the top and mid section.

Tensile Strenath

Filtering Efficiency 75% (min.)

Tensile Modulus

Flow Rate

# 2" X 4" WEIR STONE FILTER CLOTH 2" X 4" WEIR MAX. DRAINAGE AREA = 1/4 ACRE

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir. 3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

6. Form the 1/2 " x 1/2 " wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4 " x 1 1/2 " stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

DETAIL 22 - SILT FENCE

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION E - 16 - 5B

GEOTEXTILE CLASS E PLAN/CUT AWAY VIEW -3/4" - 11/2" STONE ----INLET GRATE -- GEOTEXTILE CLASS E - WIRE TIES — 6" OVERLAP CROSS SECTION STANDARD SYMBOL MAX. DRAINAGE AREA = 1/4 ACRE AGIP

Construction Specifications

DETAIL 23B - AT GRADE INLET PROTECTION

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.

2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration

1. All finished lumber shall be 2" X 4" minimum

silt fence installation.

and Sediment Control.

upright supports.

minimum length.

2. A mastic seal shall be provided, as shown, to prevent sediment laden water escaping untreated beneath

3. Silt fence shall be taut and securely stapled to face of

4. Nails used to secure boards to pavement shall be 20d X 4"

5. Application design and materials criteria shall be as stated

in the Maryland Standards and Specifications for Soil

U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION E - 16 - 5A

ENGINEER'S CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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." NAME: JOHN ENDRERGOR TITLE: CONSTRUCTION MANAGER - MCDANCOS

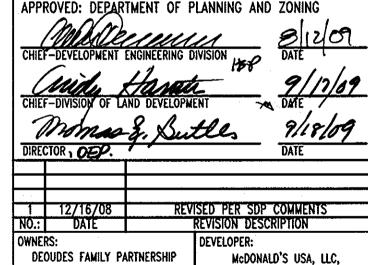
THIS DRAWING DOES NOT INCLUDE NECESSAL COMPONENTS FOR CONSTRUCTION SAFETY. A CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48

HOURS PRIOR TO ANY CONSTRUCTION

## PROFESSIONAL CERTIFICATION

I, MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11



C/O DEOUDES - MAGAFAN REALTY. 7910 WOODMONT AVENUE, SUITE 410

BETHESDA, MD 20817 BETHESDA, MD 20814-7065 ATTN: JOHN EIDBERGER PHONE: (240) 497-3650 McDONALD'S PARCEL 513, LOT A-23

9061 SNOWDEN RIVER PARKWAY

BALTIMORE/WASHINGTON REGION

903 ROCKLEDGE DRIVE, SUITE 10

HOWARD COUNTY, MARYLAND 21046 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543

2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

BOHLER

810 GLENEAGLES COURT SUITE 300

TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987

DESIGNED BY: C.W.A. DRAWN BY: PROJECT NO.: MD075006 DATE:

50P-08-110

DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

## WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION

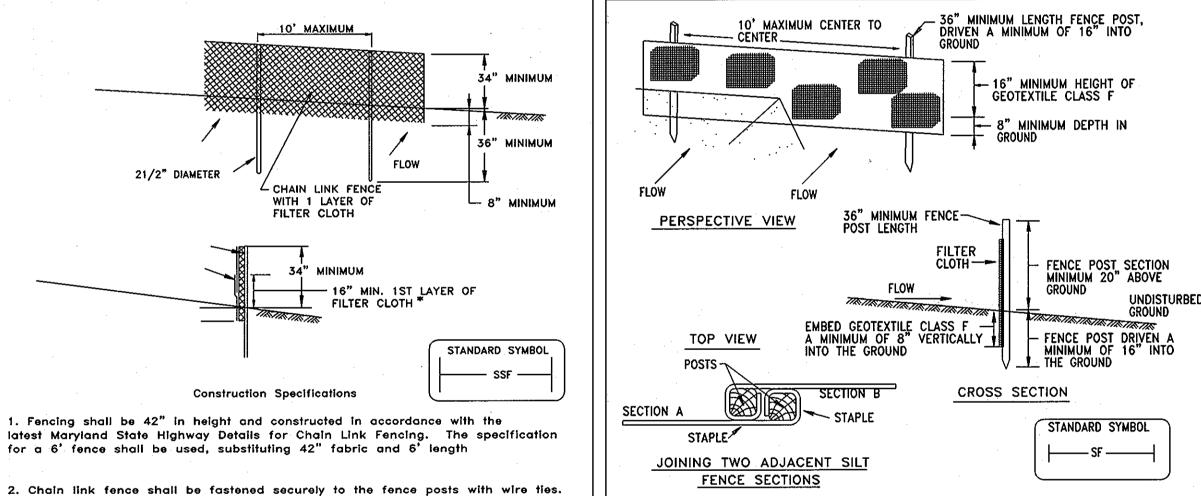
- 1. NOTIFY HOWARD COUNTY'S SEDIMENT CONTROL INSPECTOR AT 410-313-1855 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION. (2 DAYS)
- 2. DO NOT COMMENCE ANY LAND DISTURBING ACTIVITIES PRIOR TO OBTAINING A GRADING PERMIT. (1 DAY)
- 3. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING WITH THE CONSTRUCTION MANAGER AND THE HOWARD COUNTY EROSION AND SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING ANY LAND DISTURBANCE ACTIVITIES. (1 DAY)
- 4. CLEARLY MARK LIMITS OF DISTURBANCE IN THE FIELD PRIOR TO CONSTRUCTION. PERMANENTLY OR TEMPORARILY STABLIZE DISTURBED AREAS ON SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED WITHIN: (2 DAYS)

A. SEVEN CALENDAR DAYS ON SLOPES GREATER THAN 3:1, ALL WATERWAYS AND TO THE SURFACE OF ALL PERIMETER CONTROLS.

B. FOURTEEN CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS OF THE

- 5. INSTALL SUPER SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, SAFETY FENCE, AND INLET PROTECTION. (2 DAYS)
- 6. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITEE MUST OBTAIN WRITTEN APPROVAL FROM THE INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING. (3 DAYS)
- 7. WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, BEGIN DEMOLITION OF SITE. (14 DAYS)
- 8. CONSTRUCT PROPOSED BUILDING, UTILITIES AND STORMFILTER WITHOUT FILTER CARTRIDGES. (90 DAYS)
- 9. FINE GRADE ALL DISTURBED AREAS AND STABILIZE SITE. (14 DAYS)
- 10. INSTALL AGGREGATE BASE AND PAVEMENT BASE COURSE AND STABILIZE ALL DISTURBED AREAS AS NECESSARY. (5 DAYS)
- 11. FINE GRADE ALL REMAINING AREAS. (5 DAYS)
- 12. INSTALL SURFACE PAVING. (5 DAYS)
- 13. INSTALL ALL LANDSCAPING. (5 DAYS)
- 14. FLUSH STORMDRAIN SYSTEM AND INSTALL FILTER CARTRIDGES. (5 DAYS)
- 15. STABILIZE ALL ADDITIONAL DISTURBED AREAS AS REQUIRED AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES. (2 DAYS)

GENERAL MOTE: It is the responsibility of the contractor to review all of the drawings and specifications associated with this ROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strenath Test: MSMT 509 Tensile Modulus Test: MSMT 322 Flow Rate Filtering Efficiency 75% (min.) Test: MSMT 322

Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

- MAINTAIN STOCK PILE SURFACE IN ACCORDANCE WITH TEMPORARY STABILIZATION NOTES (MAXSIDE SLOPE TYP.) CONSTRUCT SILT FENCE-AROUND PERIMETER OF STOCKPILE

TEMPORARY STOCKPILE DETAIL

STANDARD SYMBOL

-SF/AP---SF/AP-

FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT ADDRESS CHART LOT/PARCEL # STREET ADDRESS 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

DATE: 10/0

SCALE: NONE

SILT FENCE

**INSTALLATION ON** 

ASPHALT PAVEMENT

40538-4<del>0543</del>

PARCEL 513, LOT A-23 PERMIT INFORMATION CHART OT/PARCEL NO. GATEWAY COMMERCE CENTER N/A

42

6TH

4900000

B-2

PARCEL 513, LOT A-2 6067.03

DRAWING NO. 13 OF 25 200\_02\_110\_

SCALE:

10/24/08

- 1. CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE
- CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. 2. SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND
- 3. STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE
- 4. INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIERS WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- 5. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT, ITS SURVIVAL.
- 6. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS, SOD NOT TRANSPLANTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO INSTALLATION.

#### SITE PREPARATION:

- FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TEST. UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS INSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B. BELOW.
- A. PRIOR TO SODDING, THE SURFACE SHALLBE CLEARED OF ALL TRASH, DEBRIS AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- B. WHERE THE SOIL IS ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS PER ACRE (100 LBS./1000 SQ. FT.) IN ALL SOILS 1.000 POUNDS PER ACRE OR 25 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- C. ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD PACKED EARTH SHALL BE SCARIFIED PRIOR TO PLACEMENT OF SOD. SOD INSTALLATION:
- A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING
- B. THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH
- EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH, INSURE THAT SOD IS NOT
- ORDER TO PREVENT VOIDS WHICH COULD CAUSE AIR DRYING OF
- LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. SECURE THE SOD BY TAMPING AND PEGGING OR OTHER APPROVED METHODS.
- D. AS SODDING IS COMPLETED IN ANY ONE SECTION. THE ENTIRE AREA SHALL BE ROLLED OR TAMPED TO INSURE SOLID CONTACT OF ROOTS WITH THE SOIL SURFACE. SOD SHALL BE WATERED IMMEDIATELY AFTER OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.

#### SOD MAINTENANCE:

- A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A THE DAY TO PREVENT WILTING.
- B. AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE AND INSURE ESTABLISHMENT.
- C. FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS, GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.
- D. MAINTENANCE OF ESTABLISHED SOD SHOULD FOLLOW SPECIFICATIONS OUTLINED IN TABLE 54-1.

NATURAL GAS AND ELECTRIC

BALTIMORE GAS AND ELECTRIC

SOUTH HANOVER, MD 21076

PHONE: (410) 859-9383

7133 RUTHERFORD ROAD

BALTIMORE, MD 21244

PHONE: (410) 224-5286

HOWARD COUNTY PLANNING

AND ZONING DEPARTMENT

3430 COURTHOUSE DRIVE

ELLICOTT CITY, MD 21043

PHONE: (410) 313-2350

STORMWATER MANAGEMENT

7317 PARKWAY DRIVE

TELEPHONE

VERIZON

UTILITY CONTACTS:

OF UTILITIES

WATER AND SANITARY SEWER

HOWARD COUNTY PUBLIC WORKS BUREAU

**EROSION AND SEDIMENT CONTROL** 

8250 OLD MONTGOMERY ROAD

DEPARTMENT OF INSPECTIONS.

COLUMBIA, MD 21045

LICENSES & PERMITS 3430 COURTHOUSE DRIVE

ELLICOTT CITY, MD 21043

PHONE: (410) 313-2455

HOWARD COUNTY PLANNING

AND ZONING DEPARTMENT

3430 COURTHOUSE DRIVE

ELLICOTT CITY, MD 21043

PHONE: (410) 313-2350

PLANNING AND ZONING

PHONE: (410) 313-4910

## TOPSOIL CONSTRUCTION AND

## MATERIAL SPECIFICATIONS

- I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY. THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- II. TOPSOIL SPECIFICATIONS SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
  - i. TOPSOIL SHALL BE LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS. TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS. ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2' IN
- II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- iii. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS PER ACRE (200-400 LBS./1000 SQ. FT.) PRIOR TO PLACEMENT OF TOPSOIL. LIME SHALL BE DISTURBED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

#### III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 -VEGETATIVE STABILIZATION METHODS AND MATERIALS.

#### IV. TOPSOIL APPLICATION

- i. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- ii. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- iii. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING LBS./1000 SQ. FT.) OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- V. THESE TOPSOIL SPECIFICATIONS HAVE BEEN EDITED FROM THE 1994 EROSION AND SEDIMENT CONTROL STANDARDS TO FIT THIS PROJECT. IT IS STILL THE INTENTION TO FOLLOW THE REFERENCED 1994 EROSION AND SEDIMENT CONTROLS STANDARDS IN THEIR ENTIRETY.

#### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1. PREFERRED APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 AREAFORM FERTILIZER (9 LBS./1000 SQ. FT.)
- 2. ACCEPTABLE APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOILS.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALS./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FALT AREA. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GALS./1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES APPLY TO GRADED OR CLEARED AREA LIKELY TO REDISTURBED WHERE A

SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOILS AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/3 BU. PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ. FT.). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70-90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALS./1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT. OR HIGHER, USE 348 GALLONS PER ACRE (8 GALS./1000 SQ. FT.) FOR ANCHORING.

#### STANDARD AND SPECIFICATIONS FOR TOPSOIL

#### **DEFINITION**

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATION GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS. LOW PH. MATERIALS TOXIC TO PLANTS. AND/OR UNACCEPTABLE SOIL GRADATION.

#### CONDITIONS WHERE PRACTICE APPLIES

- 1. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
- A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- 2. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

#### CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SPECIFIED. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SET FORTH IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- 2. TOPSOIL SPECIFICATIONS- SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
  - A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOIL'S AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
- B. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- C. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1.000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING

#### 3. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES.

- A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I-VEGEATIVE STABILIZATION METHODS AND MATERIALS.
- 4. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
- A. ON SOIL MEETING TOPSOIL SPECIFICATIONS. OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
  - A.1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 THAN 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
  - A.2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
  - A.3. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED. A.4. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
- NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. MAY BE USED IN LIEU OF NATURAL
- B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

#### 5. TOPSOIL APPLICATION

- A. WHEN TOP SOILING. MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS. GRADE STABILIZATION STRUCTURES. EARTH DIKES. SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- B. GRADES ON THE AREAS TO BE TOP SOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- C. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE RESULTING FROM SURFACE TOP SOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- 6. ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS COMMERCIAL BELOW:
- A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- A.1. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT
- OF THE ENVIRONMENT UNDER COMAR 26.04.06. A.2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS
  - A.3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET. B. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.
  - REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE. REVISED 1973.

#### HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION, PRIOR TO THE START OF ANY CONSTRUCTION. (410-313-1855)
- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL". AND REVISIONS THERETO.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7 OF "HOWARD COUNTY DESIGN MANUAL", STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G) TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

#### 7. SITE ANALYSIS:

PARCEL AREA - 50.086 S.F. OR 1.15 AC. AREA DISTURBED - 42,400 S.F. OR 0.98 AC. TOTAL CUT - 270 YDS. TOTAL FILL - 360 YDS.

OFFSITE WASTE/BORROW LOCATION - ALL OFFSITE BORROW SHALL COME FROM A SITE WITH AN APPROVED GRADING PERMIT.

- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 10. ON ALL SITES WITH DISTURBED AREAS EXCESS OF 2 ACRES. APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

#### STANDARDS SEDIMENT CONTROL PLAN NOTES FOR UTILITIES

- 1. ONLY ENOUGH TRENCH WILL BE EXCAVATED THAT CAN BE BACKFILLED DAILY.
- EXCAVATED TRENCH MATERIALS SHALL BE PLACED ON THE HIGH SIDE OF THE
- IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY.
- 4. FULL TRENCH COMPACTION IS REQUIRED.
- MULCHING TO HOWARD SCD SPECIFICATIONS OF ALL DISTURBED AREAS AND DAILY ON BACKFILL WILL BE REQUIRED.
- SUPER SILT FENCE OR STRAW BALE DIKES SHALL BE INSTALLED TEMPORARILY IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY.
- STAGING AREAS FOR EQUIPMENT AND SUPPLIES SHALL BE PROTECTED WITH SILT FENCE.
- ANY SEDIMENT CONTROL PRACTICES WHICH ARE DISTURBED DURING UTILITY CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE END OF EACH WORKING DAY.
- 9. ANY DITCHES OR DRAINAGE WAYS DISTURBED DURING CONSTRUCTION WILL BE RESTORED TO ORIGINAL CONDITION.

MISS UTILITY

MATTHEW T. ALLEN P.E.

9/9/2009

PARCEL 513, LOT A

6067.03

DEVELOPER'S CERTIFICATE

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL A PRACTICAL

AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THE IT WAS PREPARED IN A ROBBER WITH THE REQUIREMENTS OF THE HOWARD SON CONSEDERATION OF RICT."

GENERAL NOTES

A. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL REQUIRED

FROM THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER

B. FOLLOWING INITIAL SOIL DISTURBANCES OR REDISTURBANCE, PERMANENT OR

SEVEN (7) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER

B) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE

PROJECT SITE. THE IN-PLACE SEDIMENT CONTROL MEASURES WILL BE

MAINTAINED ON A CONTINUING BASIS UNTIL THE SITE IS PERMANENTLY

APPROVAL OF THE INSPECTION AGENCY IS REQUESTED UPON COMPLETION OF

INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS BEFORE

D. APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES

PROCEEDING WITH ANY OTHER EARTH DISTURBANCES OR GRADING. OTHER

GUIDING OR GRADING INSPECTION APPROVALS WILL NOT BE AUTHORIZED UNTIL

WITH DISTURBED AREAS IN EXCESS OF TWO (2) ACRES BEFORE REMOVAL OF

GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) AND

CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES

DOWNSTREAM PROPERTIES AFFECTED BY THIS PLAN.

TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

STABILIZED AND ALL PERMIT REQUIREMENTS ARE MET.

THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

EROSION AND SEDIMENT CONTROL MEASURES.

C. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF TWO (2) ACRES,

MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER ONTO OR

ACROSS AND GRADING OR OTHER WORK TO BE PERFORMED ON ADJACENT OR

EASEMENTS, RIGHT AND/OR RIGHTS-OF-WAY PURSUANT TO THE DISCHARGE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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."

BY: Jam Lidlem

FOR PUBLIC WATER

COUNTY HEALTH OFFICER

GATEWAY COMMERCE CENTER

6 B-2

LOT/PARCEL #

PARCEL 513, LOT A-23

UBDIVISION NAME

- <del>10538 - 10543</del>

HOWARD COUNTY HEALTH DEPARTMENT

AND PUBLIC SEWAGE SYSTEMS

ADDRESS CHART

PERMIT INFORMATION CHART

N/A

42

STREET ADDRESS

9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

6TH

4900000

NAME: JOHN EIDBERGER TITLE: CONSTRUCTION MANAGER. MCDONACO'S

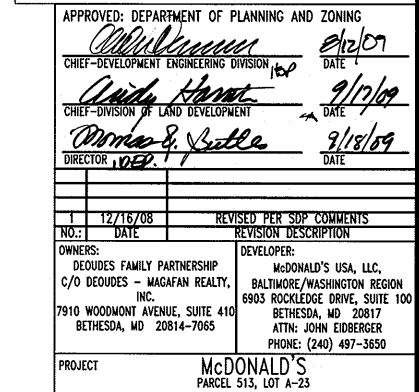
BEFORE YOU DIG CALL 811 IN MD THIS DRAWING DOES NOT INCLUDE NECESSAL COMPONENTS FOR CONSTRUCTION SAFETY, A

CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTI act of 1970 and all rules and REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48

HOURS PRIOR TO ANY CONSTRUCTION. PROFESSIONAL CERTIFICATION

MATTHEW T. ALLEN, 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. 28567. EXPIRATION DATE: 4/16/11



9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046 AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543

2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

BOHLER

810 CLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 bohlere in tering.com

DESIGNED BY: C.W.A. DRAWN BY: T.A.R. PROJECT NO.: MD075006

PROFESSIONAL ENGINEER NO. 28567 SDP-08-110

10/24/08

N/A

DRAWING NO. 14 OF 25

SDP-08-110

SCALE:

PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY TH POJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH TH

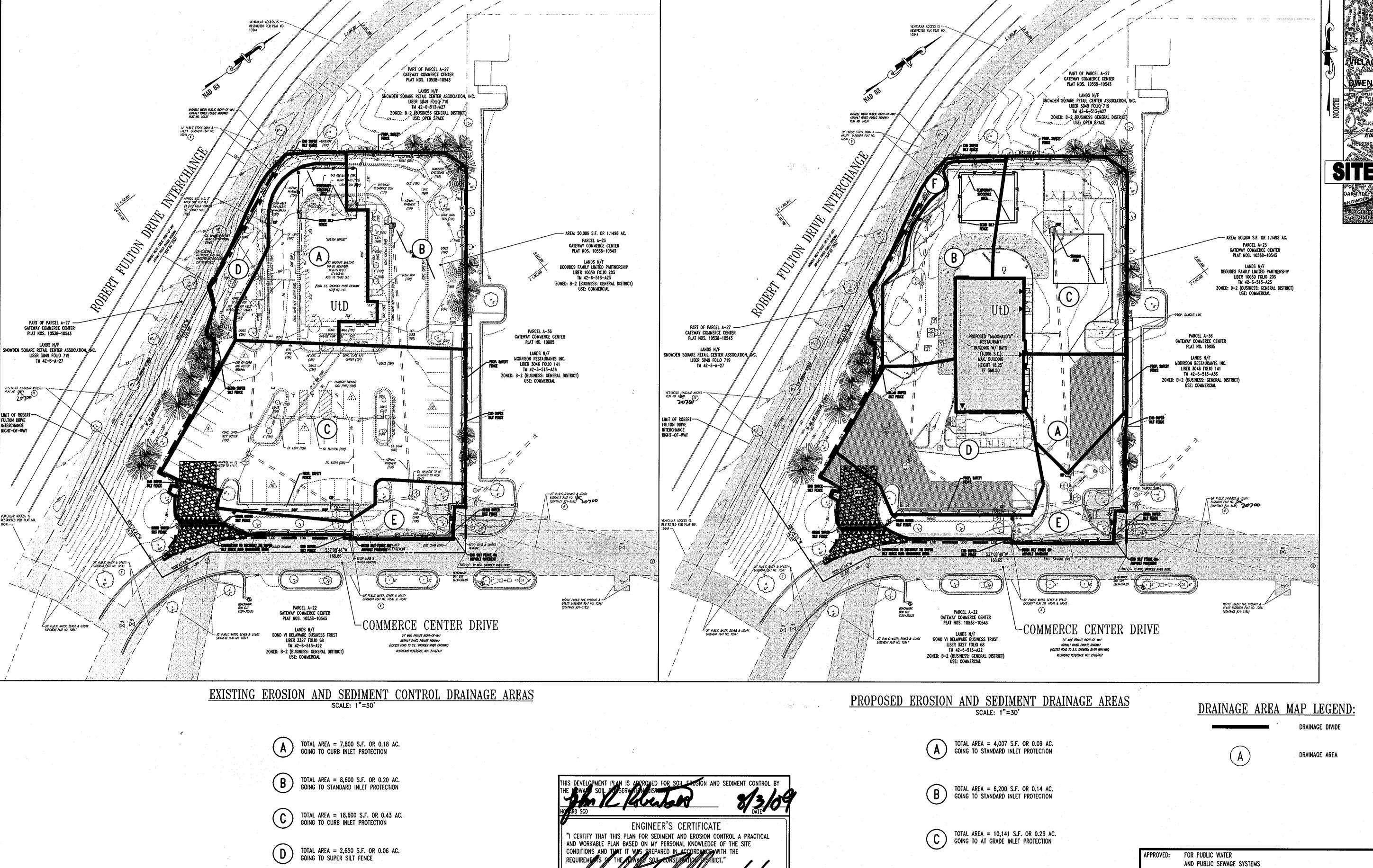
## TEMPORARY SEEDING SHMMARY

TEMI CIVALVI DEDDING DOMINALVI							
	SEED M	FERTILIZER RATE					
NO.	SPECIES	APPLICATION RATE (LBS./AC.)	SEEDING DATES	SEEDING DEPTHS	(10-10-10)	LIME RATE	
1	RYE PLUS BARLEY	150	YEAR ROUND	1"	600 LBS./AC.	2 TONS/AC.	
2	WEEPING LOVEGRASS	4	5/1-8/14	1/4"=1/2"	(15 LB./	(100 LB./	
3	ANNUAL RYGRASS	50	8/15-11/15	1/4"=1/2"	1,000 S.F.)	1,000 S.F.)	

PERMANENT SEEDING SUMMARY

-	SEED MIXTURE (HARDNESS ZONE <u>6b</u> )  (FROM TABLE 25)  FERTILIZER RATE  (10-10-10)							LIME RATE
NO.	SPECIES	APPLICATION RATE (LBS./AC.)	SEEDING DATES	SEEDING DEPTHS	N	P205	K20	LIME RATE
1	85% TALL FESCUE 10% PER. RYEGRASS 5% KENT. BLUEGRASS	125 15 10	3/1-5/15 5/16-8/14 8/15-11/15					
2	83% TALL FESCUE 2% WEEPING LOVEGRASS 15% SERECIA LESPEDEZA	110 3 20	3/1-5/15 5/16-8/14 8/15-11/15		90 LBS./AC. (2.0 LBS./ 1,000 S.F.)	175 LBS./AC. (4.0 LBS./ 1,000 S.F.)	175 LBS./AC. (4.0 LBS./ 1,000 S.F.)	2 TONS/AC. (100 LBS./ 1,000 S.F.)
3	17% WEEPING LOVEGRASS 83% SERICIA LESPEPEDEZA	<b>4</b> 20	3/1-5/15 5/16-8/14					

	SEED M	FERTILIZER RATE	LIME RATE				
NO.	SPECIES	APPLICATION RATE (LBS./AC.)	(10-10-10)	LIME RATE			
1	RYE PLUS BARLEY	150	YEAR ROUND	1"	600 LBS./AC.	2 TONS/AC.	
2	WEEPING LOVEGRASS	4	5/1-8/14	1/4"=1/2"	1 1	(100 LB./	
3	ANNUAL RYGRASS	50	8/15-11/15	1/4"=1/2"	1,000 S.F.)	1,000 S.F.)	



TOTAL AREA = 10,080 S.F. OR 0.23 AC. GOING TO CURB INLET PROTECTION

TOTAL AREA = 6,375 S.F. OR 0.15 AC. GOING TO SUPER SILT FENCE

TOTAL AREA = 1,170 S.F. OR 0.02 AC.
GOING TO SUPER SILT FENCE

DEOUDES FAMILY PARTNERSHIP C/O DEOUDES - MAGAFAN REALTY, 7910 WOODMONT AVENUE, SUITE 410 BETHESDA, MD 20814-7065

> PHONE: (240) 497-3650 McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY

**LOCATION MAP** 

COPYRIGHT ADC THE MAP PEOPLE

PERMIT USE NO. 20602153-5 SCALE: 1"=2000'

> THIS DRAWING DOES NOT INCLUDE NECESSAR COMPONENTS FOR CONSTRUCTION SAFETY, ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT. THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

HOWARD COUNTY, MARYLAND 21046

PROFESSIONAL CERTIFICATION

MATTHEW T. ALLEN, HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,

APPROVED: DEPARIMENT OF PLANNING AND ZONING

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED

LICENSE NO. 28567, EXPIRATION DATE: 4/16/11

1 12/16/08 NO.: DATE

AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-1054 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

REVISED PER SDP COMMENTS

REVISION DESCRIPTION

McDONALD'S USA, LLC,

BALTIMORE/WASHINGTON REGION 6903 ROCKLEDGE DRIVE, SUITE 100

BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

EROSION AND SEDIMENT

CONTROL DRAINAGE AREA MAPS

BOHLER ENGINEERING

810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987

<u>CEMERAL NOTE:</u>
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE OJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES. TOTAL AREA = 4,200 S.F. OR 0.10 AC.
GOING TO SUPER SILT FENCE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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." BY: John wollegy NAME: JOHN ENDRERGER TITLE: CONSTRUCTION MANAGER. MCDONACOS

BNULON for Peter Beilenson COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT

9/9/2009 DATE

6067.03

4900000

	ADDRESS CHART		1
LOT/PARCEL #	STREET ADDR	ESS	
PARCEL 513, LOT A-23	9061 SNOWDEN RIVER PARKWAY,	COLUMBIA, MD 21046	1
			╊
			1 -
	PERMIT INFORMATION CHART		1
DIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	1

GATEWAY COMMERCE CENTER PARCEL 513, LOT A-2 20700 10538-10543 6 6TH 8-2

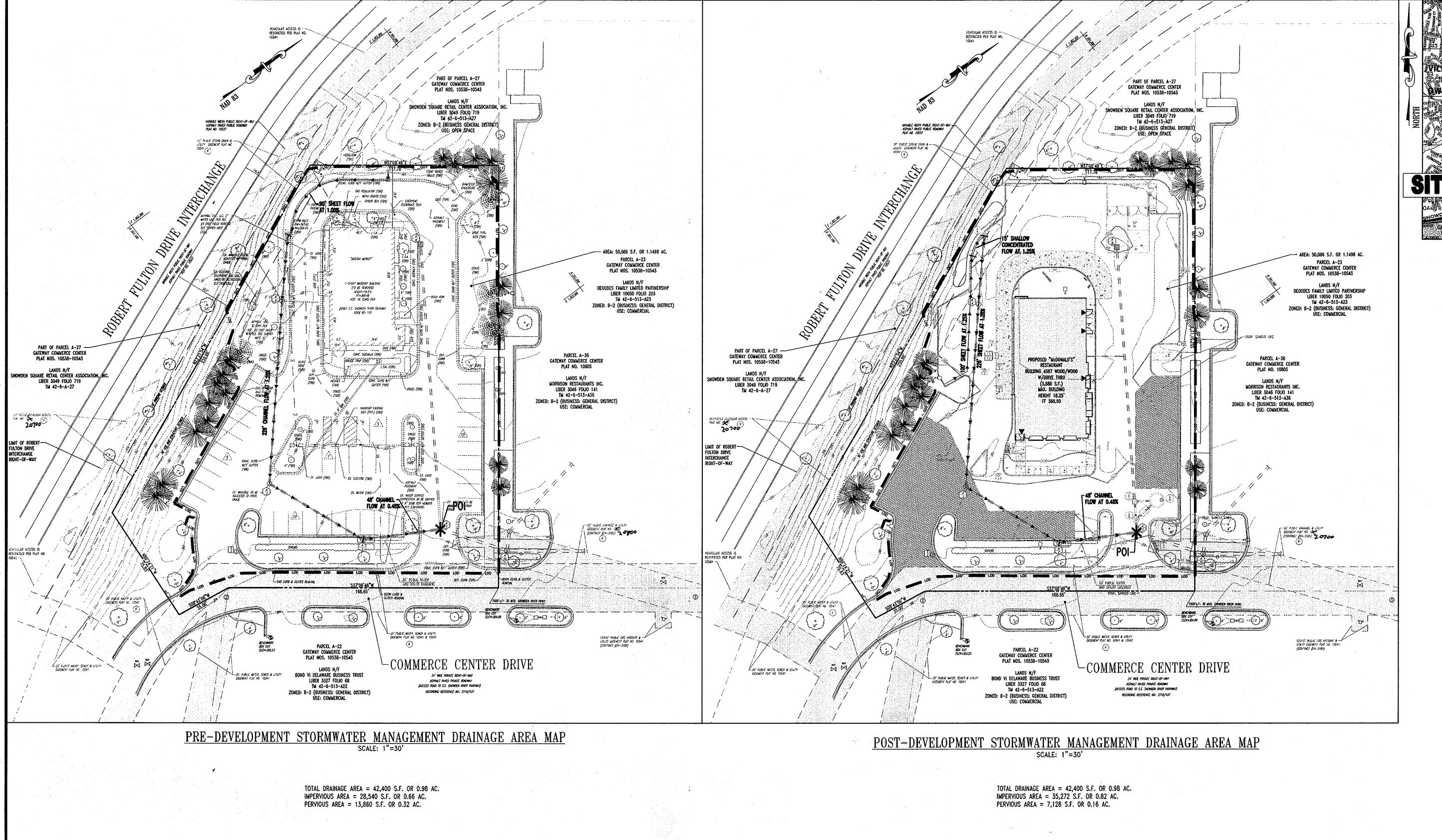
SDP\_08\_110.

1" = 30"

SDP-08-110

DESIGNED BY: C.W.A. 10/24/08

DRAWING NO. 15 OF 25



DRAINAGE AREA MAP LEGEND:

TC PATH POI **\*** 

FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS Bruton for Poter Beilenson COUNTY HEALTHOFFICER 9/9/20<del>09</del> HOWARD COUNTY HEALTH DEPARTMENT ADDRESS CHART LOT/PARCEL # STREET ADDRESS PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PERMIT INFORMATION CHART SECTION/AREA SUBDIVISION NAME GATEWAY COMMERCE CENTER

PROJECT AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND STORMWATER MANAGEMENT BOHLER LOT/PARCEL NO. PARCEL 513, LOT A-2

CENSUS TRACT

SCALE:

COPYRIGHT ADC THE MAP PEOPLE

PERMIT USE NO. 20602153-5

SCALE: 1"=2000'

THIS DRAWING DOES NOT INCLUDE NECESSAR COMPONENTS FOR CONSTRUCTION SAFETY. A CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFET AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT

THE CONTRACTOR TO CALL MISS UTILITY
TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

REVISED PER SDP COMMENTS

McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

DRAINAGE AREA MAPS

810 GLENEAGLES COURT

SUITE 300

TOWSON, MARYLAND 21286

PH: (410) 821-7900

FX: (410) 821-7987

www.bohlerengineering.com

McDONALD'S USA, LLC,

BALTIMORE/WASHINGTON REGION 903 ROCKLÈDGE DRIVE, SUITE 100

BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

PHONE: (240) 497-3650

PROFESSIONAL CERTIFICATION

, MATTHEW T. ALLEN, HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,

APPROVED: DEPARTMENT OF PLANNING AND ZONING

PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED

LICENSE NO. 28567, EXPIRATION DATE: 4/16/11

NO.: DATE

DEOUDES FAMILY PARTNERSHIP

C/O DEOUDES - MAGAFAN REALTY,

7910 WOODMONT AVENUE, SUITE 410 BETHESDA, MD 20814-7065

PHONE: (301) 986-9500

DRAWING NO. 16 OF 25 SDP-08-110

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THI Project work scope prior to the initiation of construction. Should the contractor find a conflict with the DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO MOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

DRAINAGE DIVIDE

POINT OF INTREST

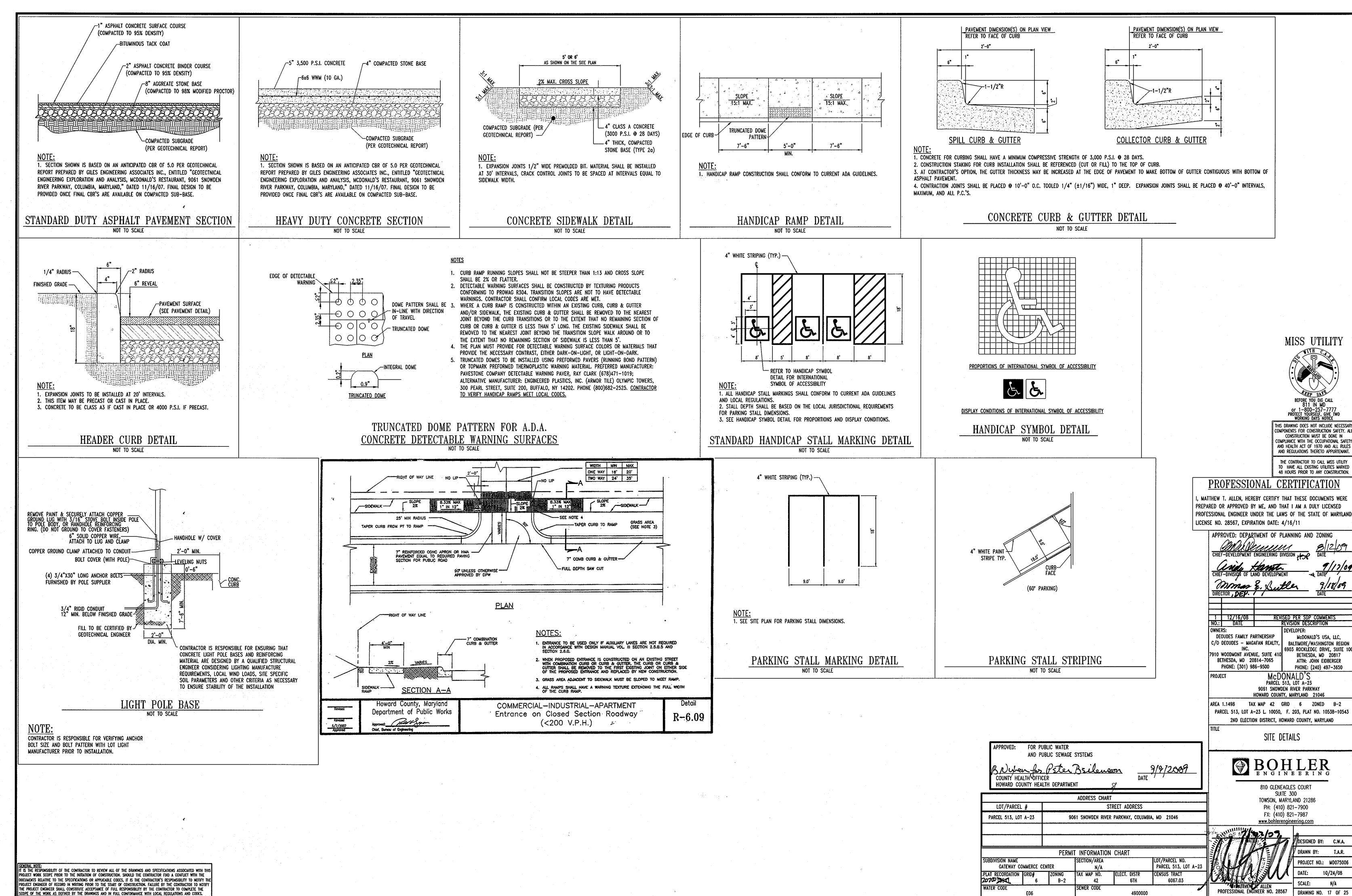
20700 > 40541

B-2 6067.03 42 6TH SEWER CODE

50P-08-110

10/24/08

1" = 30"



DRAWING NO. 17 OF 25

DATE:

SCALE:

CDD\_02\_110

DESIGNED BY: C.W.A.

PROJECT NO.: MD075006

McDONALD'S USA, LLC,

BALTIMORE/WASHINGTON REGION

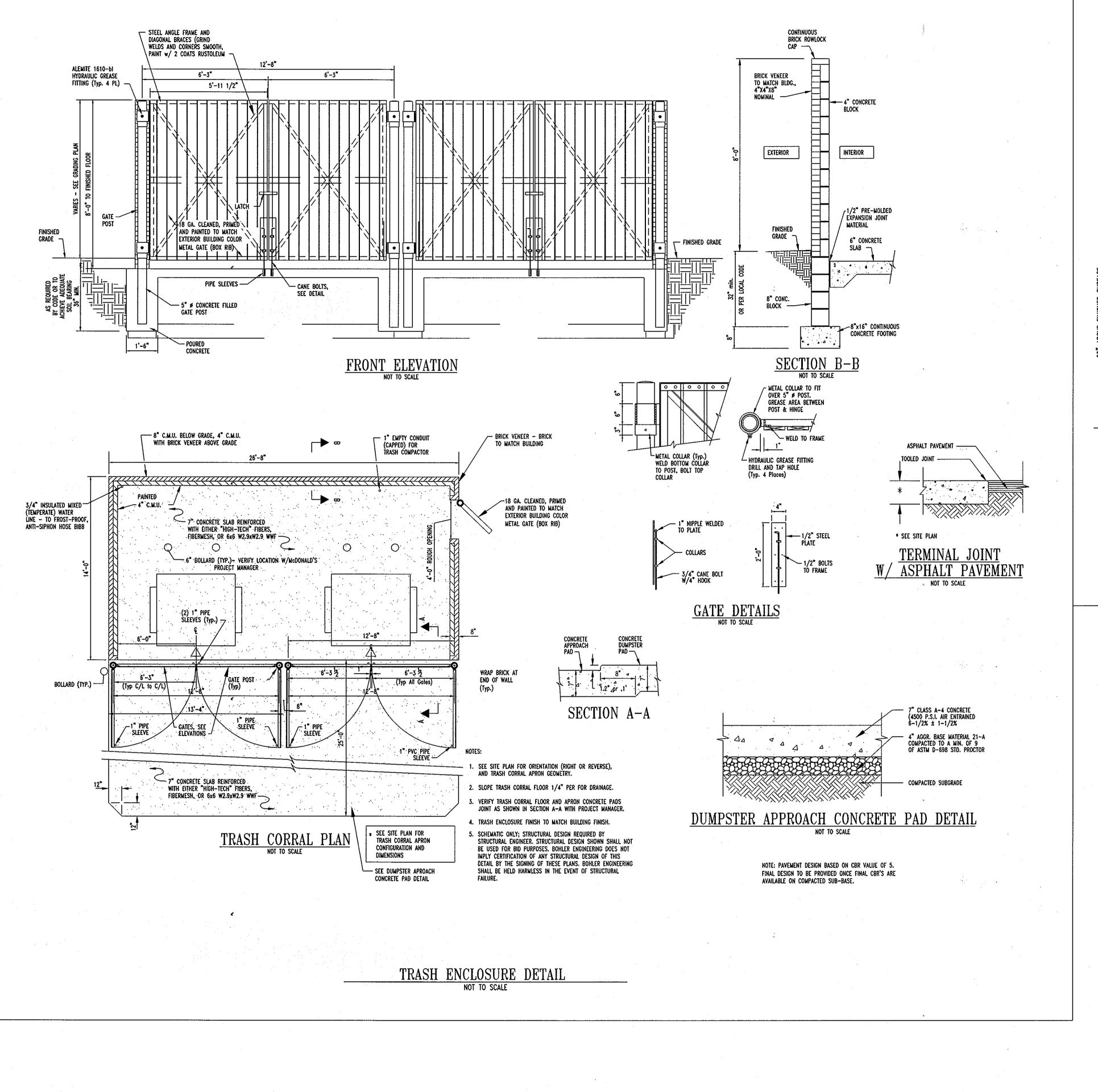
3903 ROCKLEDGE DRIVE, SUITE 10

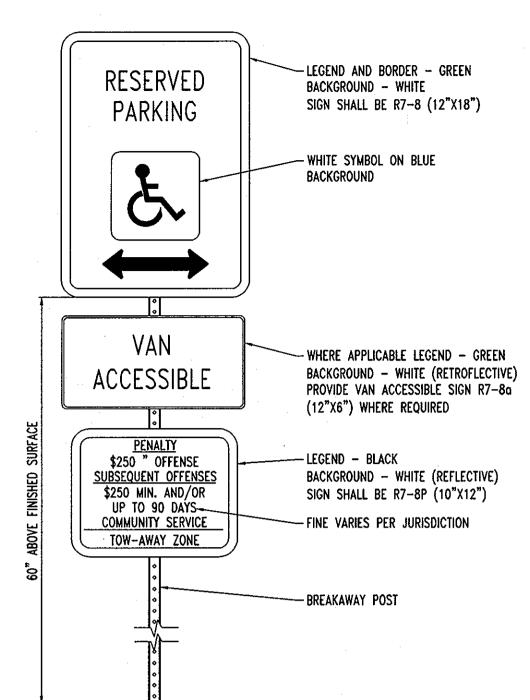
BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

PHONE: (240) 497-3650

MISS UTILITY





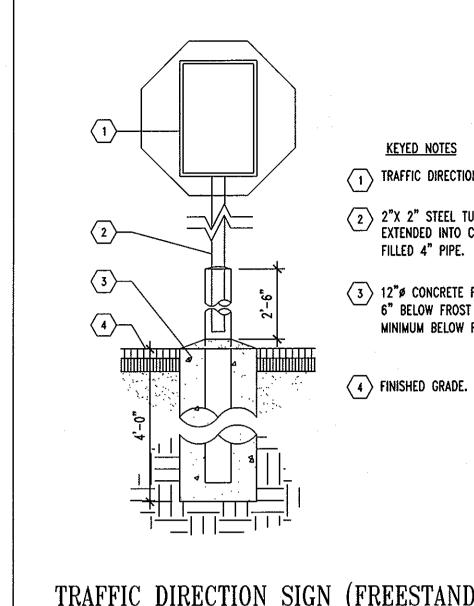
1. SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. 2. SIGNS ATTACHED WITH ACORN NUT TYPE FASTENERS

**BOLLARD DETAIL** 

NOT TO SCALE

HANDICAP PARKING SIGN DETAIL NOT TO SCALE

24" DIA. CONCRETE FOOTING.



<u>KEYED NOTES</u> TRAFFIC DIRECTIONAL SIGN.

2 2"X 2" STEEL TUBE EXTENDED INTO CONCRETE

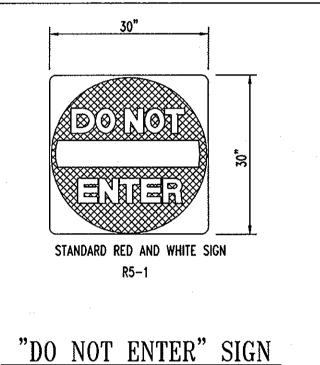
(3) 12" © CONCRETE FOUNDATION 6" BELOW FROST LINE (4 FT. MINIMUM BELOW FIN. GRADE).

4 FINISHED GRADE.

WHITE LEGEND RED BACKGROUND R1-1

"STOP" SIGN NOT TO SCALE

TRAFFIC DIRECTION SIGN (FREESTANDING) NOT TO SCALE



NOT TO SCALE

MISS UTILITY

THIS DRAWING DOES NOT INCLUDE NECESSA COMPONENTS FOR CONSTRUCTION SAFETY. A CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFE AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENAN THE CONTRACTOR TO CALL MISS UTILITY

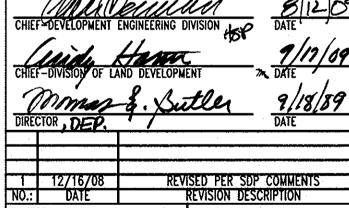
48 HOURS PRIOR TO ANY CONSTRUCTION.

ATTN: JOHN EIDBERGER

PHONE: (240) 497-3650

## PROFESSIONAL CERTIFICATION

, MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11



APPROVED: DEPARIMENT OF PLANNING AND ZONING

DEOUDES FAMILY PARTNERSHIP McDONALD'S USA, LLC, C/O DEOUDES - MAGAFAN REALTY, BALTIMORE/WASHINGTON REGION 6903 ROCKLEDGE DRIVE, SUITE 10 7910 WOODMONT AVENUE, SUITE 410 BETHESDA, MD 20817 BETHESDA, MD 20814-7065

> McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SITE DETAILS

PHONE: (301) 986-9500

810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

MATTING T. ALEN
PROFESSIONAL ENGINEER NO. 28567 SCALE:

SDP-08-110

DRAWING NO. 18 OF 25 SDP\_NR\_110

FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT

ADDRESS CHART LOT/PARCEL # STREET ADDRESS 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PARCEL 513, LOT A-23

9/9/2004

4900000

PERMIT INFORMATION CHART LOT/PARCEL NO. PARCEL 513, LOT A-23 SUBDIVISION NAME GATEWAY COMMERCE CENTER CENSUS TRACT 6TH 6067.03 20700 10541

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND COOES.

Vault, Cast-In-Place, and Linear Units Important: These guidelines should be used

as a part of your site stormwater

#### management plan. Description

The Stormwater Management StormFilter® (StormFilter) is a passive, flow-through, stormwater filtration system. The system is comprised of one or more vaults that house rechargeable, media-filled, filter cartridges The StormFilter works by passing stormwater through the media-filled cartridges, which trap particulates and adsorb materials such as dissolved metals and hydrocarbons. Once filtered through the media, the treated stormwater is directed to a collection pipe or discharged into an open channel drainage way.

The StormFilter is offered in multiple configurations, including vault, linear, catch basin, manhole, and cast-in-place. The vault, linear, manhole, and catch basin models utilize pre-manufactured units to ease the design and installation processes The cast-in-place units are customized for larger flows and may be either covered or uncovered underground units.

PART 1

1.1 Description

1.2. Manufacturer

1.3 Related Sections

1.4 Submittals

Section [

2.1 Internal Components

Management, Inc.

fittings shall meet ASTM D1785.

maximum of 15 gpm at system design head.

in the StormFilter data block, or by the Engineer:

retained on a U.S. Standard #8 sieve.

The StormFilter is a passive, flow-through, stormwater filtration system designed to improve the quality of stormwater runoff from the urban environment before it enters receiving waterways. It is intended to function as a Best Management Practice (BMP) to meet federal, state, and local requirements for treating runoff in

GENERAL

Through independent third party studies, it has been demonstrated that the StormFilter is highly effective for treatment of first flush flows and for treatment of flow-paced flows during the latter part of a storm. In general the StormFilter's efficiency is highest when pollutant concentrations are highest. The primary non-point source pollutants targeted for removal by the StormFilter are: suspended solids (TSS), oil and grease, soluble metals, nutrients, organics, and trash and debris.

The StormFilter is sized to treat the peak flow of a water quality design storm. The peak flow is determined from calculations based on the contributing watershed hydrology and from a design storm magnitude set by the local stormwater management agency. The particular size o a StormFilter unit is determined by the number of filter cartridges (see Figure 1) required to treat this peak flow.

The flow rate through each filter cartridge is adjustable, allowing control over the amount of contact time between the influent and the filter media. The maximum flow rate through each cartridge can be adjusted to between 5 and 15 gpm using a calibrated restrictor disc at the base of each filter cartridge. Adjustments to the cartridge flow rate will affect the number of cartridges required to treat the peak flow.

#### **Basic Function**

The StormFliter is designed to siphon stormwater runoff through a filter cartridge containing media. A variety of filter media is available and can be customized for each site to target and remove the desired levels sediments, dissolved phosphorus dissolved metals, organics, and oil and grease. In many cases, a combination of compliance with the Clean Water Act. media is recommended to maximize the

The Stormwater Management StormFilter® Specifications

PRECAST FILTER UNIT

The Contractor shall furnish and install the Stormwater Management StormFilter®

stormwater treatment system, complete and operable as shown and as specified

herein, in accordance with the requirements of the plans and contract documents.

StormFilter stormwater treatment system shall consist of an underground Precast

The siphon actuated radial flow filter cartridges shall be rechargeable and shall

of the filter media and to reduce the accumulation of material on the cartridge

incorporate a self actuated surface cleaning mechanism to increase the effective life

Each radial flow filter cartridge shall operate at a predetermined flow rate through the

use of an integrated flow control orifice located within each filter cartridge outlet

The StormFilter stormwater treatment system shall be of a type that has been

stormwater treatment system shall be supplied by Stormwater360<sup>TM</sup>, 12021-B NE

Submit shop drawings for StormFilter stormwater treatment system vault with

filter cartridges and accessory equipment. Drawings shall include principal

Submit StormFilter stormwater treatment system Operation and Maintenance

All internal components including ABS and PVC manifold piping, filter cartridge(s),

Engineer), flow spreaders, and energy dissipators shall be provided by Stormwater

ABS manifold pipe and fittings shall meet ASTM F628. PVC manifold pipe and

linear low-density polyethylene (LLDPE). Filter cartridge screen shall consist of

galvanized 1" x ½" welded wire fabric (16 gauge minimum) with a bonded

priming float shall be constructed from linear high-density polyethylene. All

An orifice plate shall be supplied with each cartridge to restrict flow rate to a

source. Filter media shall consist of one or more of the following, as specified

Perlite Media: Perlite media shall be made of natural siliceous

volcanic rock free of any debris or foreign matter. The perlite media

shall have a bulk density ranging from 6.5 to 8.5 lb/ft<sup>3</sup> and particle

CSF Media: CSF media shall be made exclusively of composted fallen

the time of installation. The CSF leaf media shall have a bulk density

passing through a 0.50 inch screen to that retained on a U.S. Standard

ranging from 40 to 50 lb/ft3 and particle sizes ranging from that

composted fallen deciduous leaves. Filter media shall be granular.

have a bulk density ranging from 40 to 50 lb/ft<sup>3</sup> and particle sizes

ranging from that passing through a U.S. Standard #8 sieve to that

Media shall be dry at the time of installation. The Metal Rx media shall

Metal Rx Media: Metal Rx media shall be made exclusively of

deciduous leaves. Filter media shall be granular. Media shall be dry at

sizes ranging from that passing through a 0.50 inch screen and

Filter media shall be provided by STORMWATER360 or approved alternate

miscellaneous nuts, bolts, screws, and other fasteners shall be stainless steel

Filter cartridge bottom pan, inner ring, and hood shall be constructed from

PVC coating. Internal parts shall consist of ABS or PVC material. Siphon-

filter media (as specified on the plans in the StormFilter data block or by the

dimensions, filter placement, location of piping and unit foundation.

installed and in use successfully for a minimum of five (5) or more years. Si

Airport Way, Portland, OR 97220 (800/548-4667), without exception.

structure that houses passive siphon-actuated, radial-flow media-filled filter

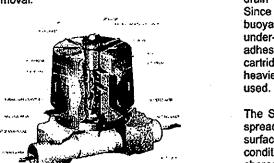
#### Priming System Function

When stormwater in the StormFilter unit enters a StormFilter cartridge, it percolates horizontally through the cartridge's filte media and collects in the center tube of the cartridge, where the float in the cartridge is n a closed (downward) position.

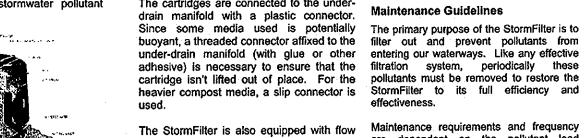
Water continues to pass through the filte media and into the cartridge's center tube The air in the cartridge is displaced by the water and purged from beneath the filter hood through the one-way check valve located in the cap. Once the center tube is filled with water (approximately 18 inches deep), there is enough buoyant force on the float to onen the float valve and allow the treated water in the center tube to flow into the under-drain manifold. This causes the

check valve to close, initiating a siphon that draws polluted water throughout the full surface area and volume of the filter. Thus, the entire filter cartridge is used to filter water throughout the duration of the storm, regardless of the water surface elevation in the unit. This siphon continues until the water surface elevation drops to the elevation of the hood's scrubbing

effectiveness of the stormwater pollutant



The cartridges are connected to the under-



flow that overcomes the overflow capacity of the system. This is especially important for precast systems. Base flow bypasses are Types of Maintenance sometimes installed to bypass continuous inflows caused by ground water seepage, Presently, procedures have been developed

overflow. The overflow operates when the

capacity of the filter cartridges.

storm events.

StormFilter units are designed with an • Inspection/minor maintenance

inflow rate is greater than the treatment 

• Major maintenance. Inspection/minor maintenance activities are combined since minor maintenance does not require special equipment and typically little or no materials are in need of disposal

> Inspection/minor maintenance typically involves: · Inspection of the vault itself

 Removal of vegetation and trash and debris.

Major maintenance typically includes:

 Cartridge replacement Sediment removal

during all maintenance activities. **Maintenance Activity Timing** 

effectiveness.

sediment accumulation that may be caused by localized erosion in the drainage area. It may be necessary to adjust the maintenance activity schedule depending on the actual operating conditions encountered by the system.

sedimentation.

be performed.

maintenance will occur in late summer to

Maintenance Activity Frequency

Two scheduled inspections/maintenance

activities should take place during the year.

First, an inspection/minor maintenance

activity should be done. During the minor

maintenance activity (routine inspection.

debris removal), the need for major

maintenance should be determined and, if

disposal during major maintenance will be

required, samples of the sediments and

Second, if required, a major maintenance

activity (replacement of the filter cartridges

and associated sediment removal) should

In addition to these two scheduled activities,

it is important to check the condition of the

StormFilter unit after major storms for

damage caused by high flows and for high

media should be obtained.

develop a database to properly manage StormFilter maintenance programs. Prior to the development of the maintenance database, the following

A properly functioning system will remove

solids from water by trapping particulates in

the porous structure of the filter media. The

flow through the system will naturally

decrease as more and more solids are

trapped. Eventually the flow through the

system will be low enough to require

replacement of the cartridges. It may be

possible to extend the usable span of the

cartridges by removing sediment from

instream trapping devices on an as-needed

basis in order to prevent material from being

re-suspended and discharged to the

Site conditions greatly influence

maintenance requirements. StormFilter

construction should be inspected and

maintained more often than those in fully

The maintenance frequency may be

adjusted as additional monitoring

information becomes available during the

inspection program. Areas that develor

frequently than areas that demonstrate no

problems, particularly after large storms.

known problems should be inspected more

Ultimately, inspection and maintenance

activities should be scheduled based on the

historic records and characteristics of an

individual StormFilter system. It is

recommended that the maintenance agency

stabilized areas.

units located in areas with erosion or active

Inspection/minor maintenance One time per year After Major Storms

Major maintenance One time per year

Frequencies should be updated as required

inspection/minor maintenance is two times per year for precast units. StormFilter units should be inspected after all major storms. Sediment removal and cartridge replacement on an annual basis i

Once an understanding of site characteristics has been established, maintenance may not be needed for one to two years, but inspection is warranted.

recommended until further knowledge is

gained about a particular system.

The primary goal of a maintenance inspection is to assess the condition of the

cartridges relative to the level of sediment loading. It may be desirable to conduct this inspection during a storm to observe the relative flow through the filter cartridges. If the submerged cartridges are severely plugged, large amounts of sediments will be discharged from the drainage pipes. If this is the case, it is likely that the cartridges

arning: In the case of a spill, the worker should abort maintenance activities until the proper guidance is obtained. Notify the Stormwater360. immediately.

maintenance:

by a utility worker familiar with StormFilter

defects/problems.

1. If applicable, set up safety equipment to protect pedestrians from fall hazards due to open vault doors or when work is being done near walkways or roadways. Visually inspect the external condition of the unit and take notes concerning temporarily capping the manifold

The recommended initial frequency for 3. Open the doors to the vault and allow the system to air out for 5-10 minutes.

the site. Information concerning how to Without entering the vault, inspect the inside of the unit, including components

. Take notes about the external and internal condition of the vault. Be sure to record the level of sediment build-up on the floor of the vault, in the forebay, and on top of the cartridges. If flow is occurring, note the level of water and estimate the flow rate per drainage

pipe. Record all observations. 6. Remove large loose debris and trash using a pole with a grapple or net on the

maintenance visits, and schedule

Depending on the configuration of the

particular system, a worker may be required

contained during this operation by

cartridge replacement if needed

7. Close and fasten the door.

 Remove safety equipment ). Make notes about the local drainage area relative to ongoing construction erosion problems, or high loading of other materials to the system. 10. Finally, review the condition reports from the previous minor and major

to enter the vault to perform some tasks. To conduct an inspection and/or minor

Important: If vault entry is required, OSHA Important: Maintenance must be performed rules for confined space entry must be

> Filter cartridge replacement should occur during dry weather. It may be necessary to plug the filter inlet pipe if base flows exist. Standing water present in the vault should be regarded as polluted and should be

obtain the replacement cartridges is

available from Stormwater360 Warning: in the case of a spill, the worker should abort maintenance activities until the proper guidance is obtained. Notify the attachment devices. local hazard control agency and

Stormwater360 immediately. To conduct cartridge replacement and

2. Visually inspect the external condition of

Replacement cartridges will be delivered to Method 1:

sediment removal maintenance: 1. If applicable, set up safety equipment to protect pedestrians from fall hazards due to open vault doors or when work is being done near walkways or roadways.

the unit and take notes concerning defects/problems. 3. Open the doors to the vault and allow the system to air out for 5-10 minutes.

Without entering the vault, give the Inside of the unit, including components, a general condition inspection. avoid damaging the cartridges during removal and installation. Th Make notes about the external and cost of repairing components internal condition of the vault.

Give particular attention to recording the level of sediment build-up on the floor of the vault, in the forebay, and on top of the internal components.

Remove large loose debris and trash using a pole with a grapple or net on the

Using a boom, crane, or other device (dolly and ramp), offload the replacement cartridges (up to 150 lbs. each) and set aside.

Important: This activity will require that workers enter the vault to remove the cartridges from the drainage system.

StormFilter Major Maintenance/Cartridge Replacement Data Sheet

Residuals (debris, sediment) Disposal Methods:\_\_\_\_\_

using one of the following methods:

Remove used cartridges from the vault

a. Using an appropriate sling, attach the cable from the boom, crane, or tripod to the cartridge being removed. Contact SMI for specifications on appropriate

This activity will require that workers enter the vault to remove the cartridges from the drainage system and place them under the vaul opening for lifting.

to damage the manifold connectors

all cartridges have been removed.

important: Note that cartridges containing media other than the lea media require unscrewing from their hreaded connectors. Take care no

aside or load onto the hauling truck. This connector should remai installed in the manifold and cappe f. Continue steps a through e until (Performed on an as-needed basis) all cartridges have been removed.

Method 2:

a. Unscrew the cartridge cap.

b. Remove the cartridge hood

c. Tip the cartridge on its side.

Important: Note that cartridge

containing media other than the leaf

media require unscrewing from their

threaded connectors. Take care not

to damage the manifold connectors.

This connector should remain

if necessary.

installed in the manifold and capped

d. Empty the cartridge onto the vault

e. Set the empty, used cartridge

b. Remove the used cartridges 9. Remove deposited sediment from the (250 lbs. each) from the vault. floor of the vault and, if large amounts The entire system may include catch are present, from the forebay. This can basins, detention vaults, sedimentation Important: Care must be used to usually be accomplished by shoveling vaults and manholes, detention/retentithe sediment into containers, which, ponds, swales, artificial wetlands, and other once full, are lifted mechanically from the vault and placed onto the hauling In order for maintenance of the StormFilter damaged during maintenance will be truck. If Method 2 in Step 8 is used to to be successful, it is imperative that all the responsibility of the owner empty the cartridges, or in cases of other components be properly maintained. unless Stormwater360 performs the extreme sediment loading, a vactor. The maintenance/repair of upstream maintenance activities and damage Is not related to discharges to the

10. Once the sediments are removed. assess the condition of the vault and the In addition to considering upstream c. Set the used cartridge aside or condition of the manifold and facilities, it is also important to correct any connectors. The connectors are short sections of 2-inch schedule 40 PVC, or Drainage area concerns may include: d. Continue steps a through c until

the connectors. This ensures a

watertight connection between the

cartridge and the drainage pipe.

b. Replace any damaged connectors.

threaded schedule 80 PVC that should erosion problems, heavy oil and grease protrude above the floor of the vault. loading, and discharges of inappropriate a. If required, apply a light coating of FDA approved silicon grease to the outside of the exposed portion of

11. Using the boom, crane, or tripod, lower

and install the new cartridges. Once

12. Close and fasten the door.

other materials to the system.

miscellaneous components.

in accordance with applicable

regulations. Make arrangements

return the used cartridges

again, take care not to damage

stormwater treatment and conveyance systems must be handled and disposed of in a manner that will not allow the materia to affect surface or ground water. It is measurable concentrations of heavy metal 14 Make notes about the local drainage and organic chemicals (such as pesticides area relative to ongoing construction, and petroleum products). Areas with the greatest potential for high pollutant loading erosion problems, or high loadings of include industrial areas and heavily travele 15. Finally, dispose of the residual materials

The accumulated sediment found

Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. It is not appropriate to discharge untreated materials back to the

stormwater drainage system. Related Maintenance Activities Part of arranging for maintenance to occur should include coordination of disposal of StormFilter units are often just one of many solids (landfill coordination) and liquid components in a more comprehensive (municipal vacuum truck decant facility local wastewater treatment plant, on-site

treatment and discharge).

Owners should contact the local public works department and inquire about how the department disposes of their street waste residuals. Stormwater360 wi determine disposal methods or reuse of the media contained in the cartridges. If the material has been contaminated with any unusual substance, the cost of special

facilities should be carried out prior to StormFilter maintenance activities. handling and disposal will be the responsibility of the owner.



THIS DRAWING DOES NOT INCLUDE NECESS COMPONENTS FOR CONSTRUCTION SAFETY. CONSTRUCTION MUST BE DONE IN

THE CONTRACTOR TO CALL MISS UTILITY

48 HOURS PRIOR TO ANY CONSTRUCTION

#### PROFESSIONAL CERTIFICATION

MATTHEW T. ALLEN, 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,

NU.	20007	, EXPIRA	HUN DA	(IE; 4/	10/11			
PPR	OVED:	DEPART	MENT (	OF PLA	NNING	AND :	ZONING	
(	M	WI	MI	Ull	11		DATE	8
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IREC	TOR, D	BP.	/				DATE	

REVISED PER SDP COMMENTS DEVELOPER: McDONALD'S USA, LLC,

DEOUDES FAMILY PARTNERSHIP C/O DEOUDES - MAGAFAN REALTY,

9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543

PARCEL 513, LOT A-23

STORMWATER MANAGEMENT NOTES



810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900

SDP-08-110

Bryton for Pster Bsilenson COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT

FOR PUBLIC WATER

ADDRESS CHART STREET ADDRESS 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

PERMIT INFORMATION CHART SUBDIVISION NAME LOT/PARCEL NO. GATEWAY COMMERCE CENTER PARCEL 513, LOT A-23 PLAT RECORDATION GRID# CENSUS TRACT TAX MAP NO.

AND PUBLIC SEWAGE SYSTEMS

LOT/PARCEL # PARCEL 513, LOT A-23

6067.03 20700 (054) B-2 42 6TH 6

DRAWING NO. 19 OF 25

DESIGNED BY: C.W.A. 10/24/08

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH TI

retained on a U.S. Standard #14 sieve.

## Figure 1. The StormFilter Cartridge

Important: Applicable safety (OSHA) and disposal regulations should be followed

clinoptilolite, which has a geological structure of potassium-calcium-

sodium aluminosilicate. The zeolite media shall have a bulk density

ranging from 44 to 48 lb/ft3, particle sizes ranging from that passing

through a U.S. Standard #4 sieve to that retained on a U.S. Standard #6 sieve, and a cation exchange capacity ranging from 1.0 to 2.2 5. Granular Activated Carbon: Granular activated carbon (GAC) shall be made of lignite coal that has been steam activated. The GAC media shall have a bulk density ranging from 28 to 31 lb/ft³ and particle

4. Zeolite Media: Zeolite media shall be made of naturally occurring

sizes ranging from that passing through a U.S. Standard #4 sieve to that retained on a U.S. Standard #8 sieve. 6. Zeolite-Perlite-Granular Activated Carbon (ZPG): ZPG is a mixed media that shall be composed of a 1.3 ft<sup>3</sup> outer layer of 100% Perlite (see above) and a 1.3 ft<sup>3</sup> inner layer consisting of a mixture of 90% Zeolite

(see above) and 10% Granular Activated Carbon (see above).

7. Zeolite-Perlite (Zeo/Perl): Zeo/Perl is a mixed media that shall be composed of a 1.3 ft<sup>3</sup> outer layer of 100% Perlite (see above) and a 1.3 ft<sup>3</sup> inner layer consisting of 100% Zeolite.

8. CSF - Granular Activated Carbon (CSF/GAC): CSF/GAC is a mixed

9. Perlite - Metal Rx: Perlite/Metal Rx is a mixed media that shall be

media that shall be composed of a 1.3 ft3 outer layer of 100% CSF media (see above) and a 1.3 ft<sup>3</sup> inner layer consisting of 100%

composed of a 1.3 ft3 outer layer of 100% Perlite (see above) and a 1.3 ft<sup>3</sup> inner layer consisting of 100% Metal Rx (see above).

D. Flow spreader shall be constructed of LLDPE. E. Energy dissipater shall be constructed of polyolefins.

2.2 Precast Concrete Vault Components

A. Precast concrete vault shall be provided according to ASTM C857 and C858.

B. Vault joint sealant shall be Conseal CS-101 or approved equal.

interior vault walls and floor with a polyurethane construction sealant rated for use below the waterline, SikaFlex 1a or equal. Contractor to provide sealant material and installation unless completed prior to shipment.

If interior concrete baffle walls are provided, baffle walls shall be sealed to the

Frames and covers shall be gray cast iron and shall meet AASHTO H-20 loading requirements, and shall be provided according to ASTM A48. Doors shall have hot-dipped galvanized frame and covers. Covers shall have diamond plate finish. Each door to be equipped with a recessed lift handle.

Doors shall meet H-20 loading requirements for incidental traffic at a

Steps shall be constructed of copolymer polypropylene conforming to ASTM D-4101. Steps shall be driven into preformed or drilled holes once concrete is cured. Steps shall meet the requirements of ASTM C-478 and AASHTO M-

G. Ladders shall be constructed of aluminum and steel reinforced copolymer

199. The 1/2" Grade 60 deformed reinforcing bar shall meet ASTM A-615.

polypropylene conforming to ASTM D-4101. Ladder shall bolt in place.

Ladder shall meet all ASTM C-497 load requirements. Ladders provided upon request or where required.

2.3 Contractor Provided Components All contractor-provided components shall meet the requirements of this section, the plans specifications and contract documents. In the case of conflict, the more stringent specification shall apply.

Crushed rock base material shall be six-inch minimum layer of 34-inch minus rock. Compact undisturbed sub-grade materials to 95% of maximum density at +/-2% of optimum moisture content. Unsuitable material below sub-grade shall be replaced to engineer's approval. Concrete shall have an unconfined compressive strength at 28 days of at

be placed within 90 minutes of initial mixing. Silicone Sealant shall be pure RTV silicone conforming to Federal

least 3000 psi, with 3/4-inch round rock, a 4-inch slump maximum, and shall

Specification Number TT \$001543A or TT \$00230C or Engineer approved.

Grout shall be non-shrink grout meeting the requirements of Corps of Engineers CRD-C588. Specimens molded, cured and tested in accordance with ASTM C-109 shall have minimum compressive strength of 6,200 psi. Grout shall not exhibit visible bleeding.

Backfill material shall be 34-inch minus crushed rock, or approved equal.

EXECUTION PART 3 3.1 Precast Concrete Vault

spreaders that trap floating debris and are dependent on the pollutant load surface films, even during overflow characteristics of each site. characteristics, some systems are equipped with high and/or base flow bypasses. High flow bypasses are installed when the event of a chemical spill or due to excessive sediment leading. flow bypasses are installed when the excessive sediment loading from site calculated peak storm event generates a practice to inspect the system after severe

which usually do not require treatment. All for two levels of maintenance:

In general, minor maintenance activities will occur late in the rainy season, and major early fall when flows into the system are not

> The primary factor controlling timing of maintenance for the StormFilter maintenance frequencies should be

. In the event of a chemical spill

StormFilter Minor Maintenance and Inspection Data Sheet A. Set precast yoult on crushed rock base material that has been placed in maximum 12-inch lifts, loose thickness, and compacted to at least 95-percent of the maximum dry density as determined by the standard Proctor

B. Vault floor shall slope 1/4 inch maximum across the width and slope downstream 1 inch per 12 foot of length. Vault top finish grade shall be even with surrounding finish grade surface unless otherwise noted on plans.

Inlet and outlet pipes shall be stubbed in and connected to precast concrete vault according to Engineer's requirements and specifications.

protruding up to 2 inches into interior of vault.

and/or outlet piping. Provide 12" clearance from outside diameter of pipes. 3.3 Clean Up

3.4 Filter Cartridges A. Filter cartridges shall be delivered with the vault. Contractor shall take

during construction. Methods for protecting the cartridges include but are not

If vault is equipped with underdrain bypass piping, Contractor may leave cartridges in the vault and allow stormwater entering collection system to bypass filter bay through underdrain bypass piping.

The method ultimately selected shall be at Contractor's discretion and Contractor's risk.

with system activation and/or inspect the system for proper installation once site is clean and stabilized.

**END OF SECTION** 

compaction test, ASTM D698, at moisture content of +/-2% of optimum water D. If grout is used, Contractor to grout all inlet and outlet pipes flush with or

When required, ballast shall be placed to the dimensions specified by the engineer and noted on the data block. Ballast shall not encase the inlet

A. Remove all excess materials, rocks, roots, or foreign material, leaving the site in a clean, complete condition approved by the engineer. All filter components shall be free of any foreign materials including concrete and

appropriate action to protect the cartridges from sediment and other debris

Remove cartridges from the vault and store appropriately. Cartridges shall be reinstalled to operate according to 3.4 B (see below).

Leave cartridges in the vault and plug inlet and outlet pipe to prevent stormwater from entering the vault.

Filter cartridges shall not be placed in operation until the vault is clean and the project site is clean and stabilized. The project site includes any surface that contributes storm drainage to the StormFilter. All impermeable surfaces shall be clean and free of dirt and debris. All catch basins, manholes and pipes shall be free of dirt and sediments. Contact Stormwater360 to assist

System Observations Media Months in Service: Oil and Grease in Forebay: Yes No \_\_\_\_\_ Sediment Depth in Forebay:\_\_\_\_\_ Sediment Depth on Vault Floor: Estimated Flow from Drainage Pipes (if available): Cartridges Submerged: Yes No How Deep:\_\_\_\_\_ StormFilter Minor Maintenance Activities (check off if done and give description) Minor Structural Repairs: \_\_\_\_ **Drainage Area Report** Excessive Oil and Grease Loading: Yes No Source: Items Needing Further Work:

Review the condition reports from the previous minor and major maintenance visits.

System Type: Vault Cast-In-Place Linear System Type: Vault Cast-In-Place Linear List Safety Procedures and Equipment Used: Media Months in Service:\_\_\_\_\_ Oil and Grease in Forebay: Yes No \_\_\_\_\_ Sediment Depth in Forebay: Sediment Depth on Vault Floor: Structural Damage: Excessive Oil and Grease Loading: Yes No Source: Sediment Accumulation on Pavement: Yes No Source: Erosion of Landscaped Areas: Yes No StormFilter Cartridge Replacement Maintenance Activities Remove Trash and Debris: Yes No Details: Quantity of Sediment Removed (estimate?):\_\_\_

COMPLIANCE WITH THE OCCUPATIONAL SAFE AND HEALTH ACT OF 1970 AND ALL RULE AND REGULATIONS THERETO APPURTENANT

## TO HAVE ALL EXISTING UTILITIES MARKED

E NO. 28567, EXPIRATION DATE: 4/16/11		
APPROVED: DEPARTMENT OF PLANNING	AND	ZONING
Malenne		BATE DATE
CHIEF-DEVELOPMENT ENGINEERING DIVISION	<del>7</del>	DATE
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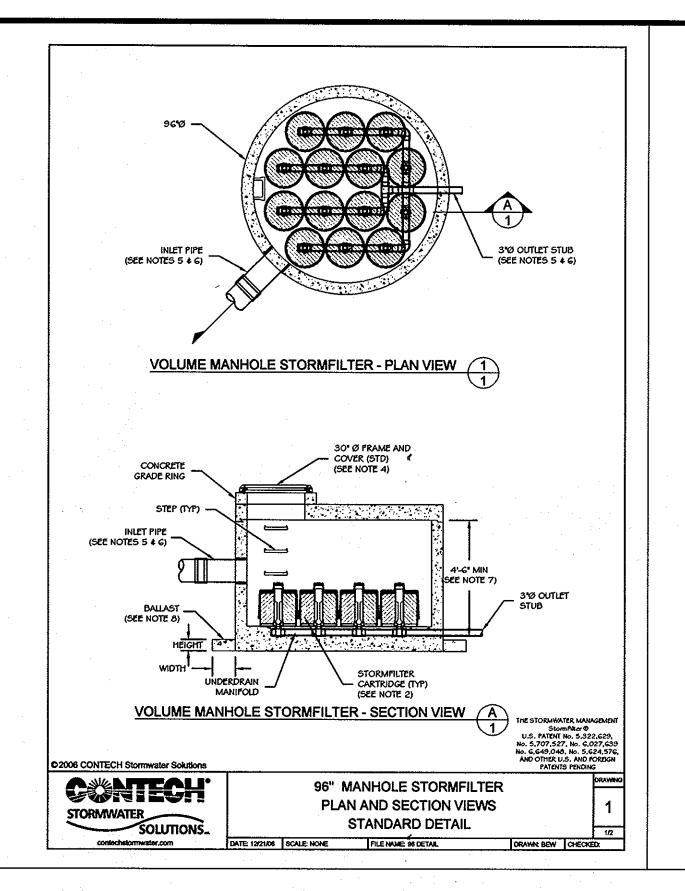
BALTIMORE/WASHINGTON REGION 6903 ROCKLEDGE DRIVE, SUITE 100 7910 WOODMONT AVENUE, SUITE 410 BETHESDA, MD 20817 BETHESDA, MD 20814-7065 ATTN: JOHN EIDBERGER PHONE: (301) 986-9500 PHONE: (240) 497-3650 McDONALD'S

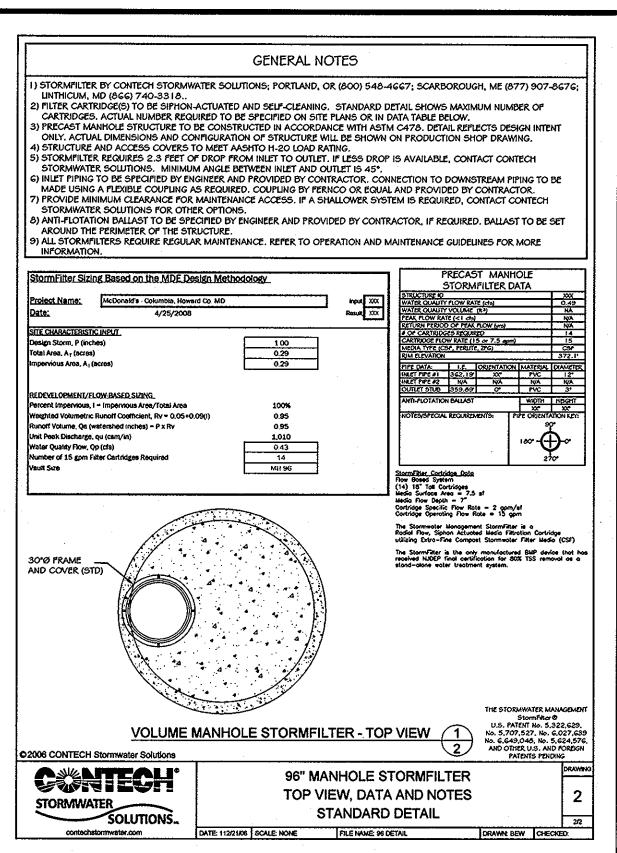
AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

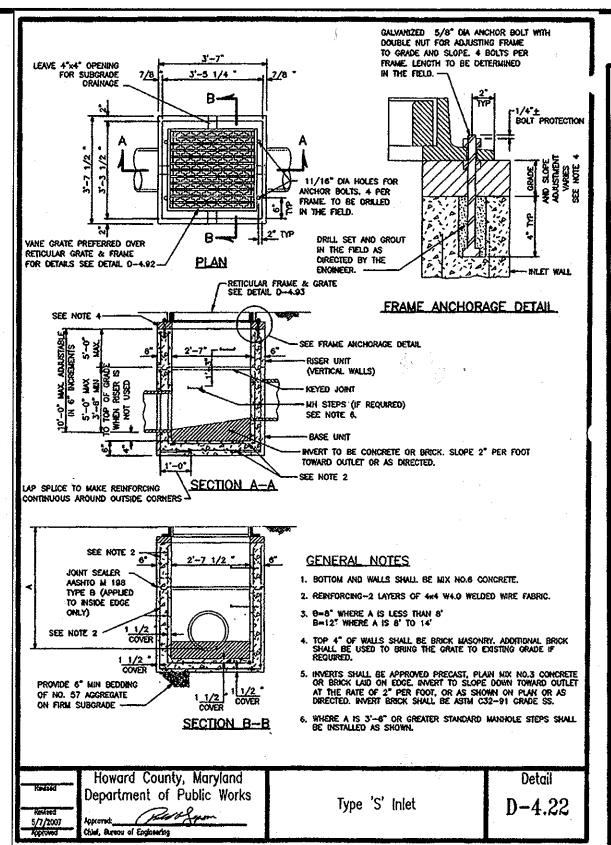
FX: (410) 821-7987 www.bohlerengineering.com

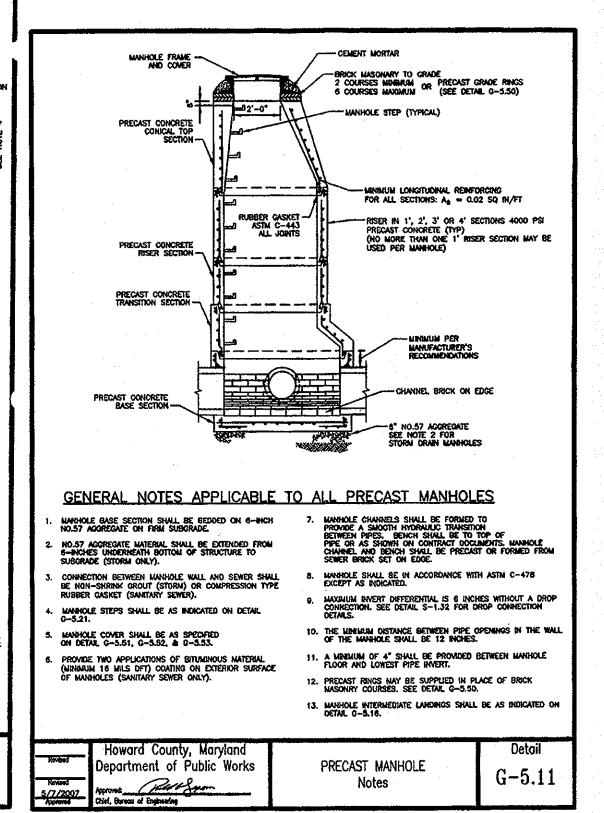
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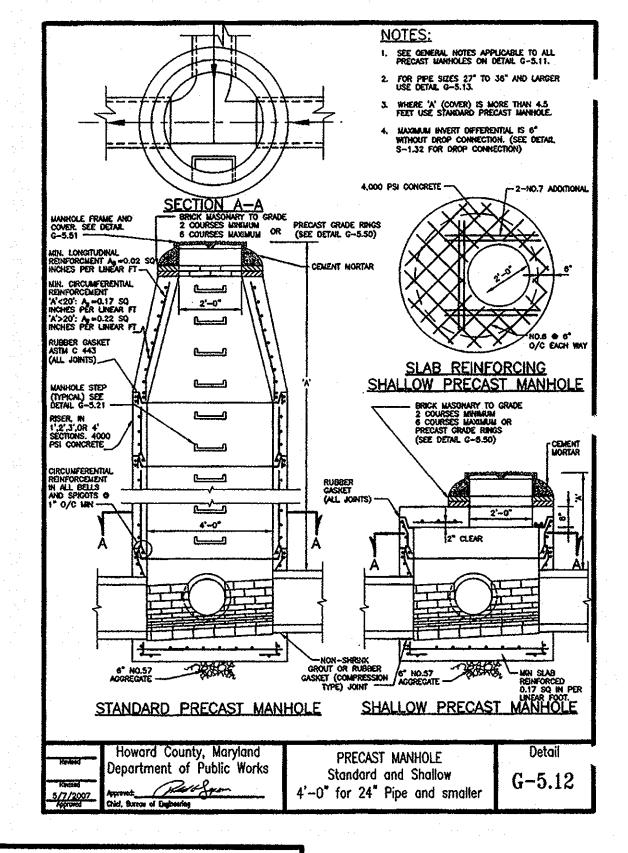
PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY TH PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

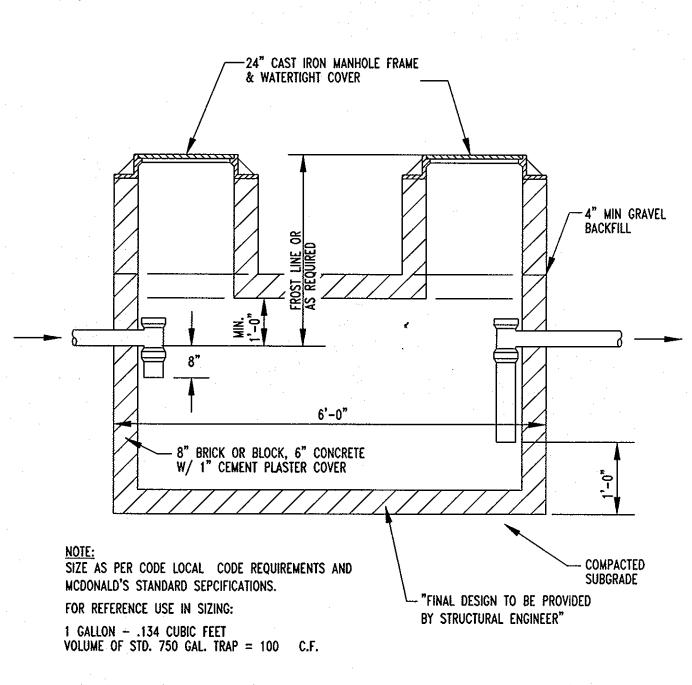




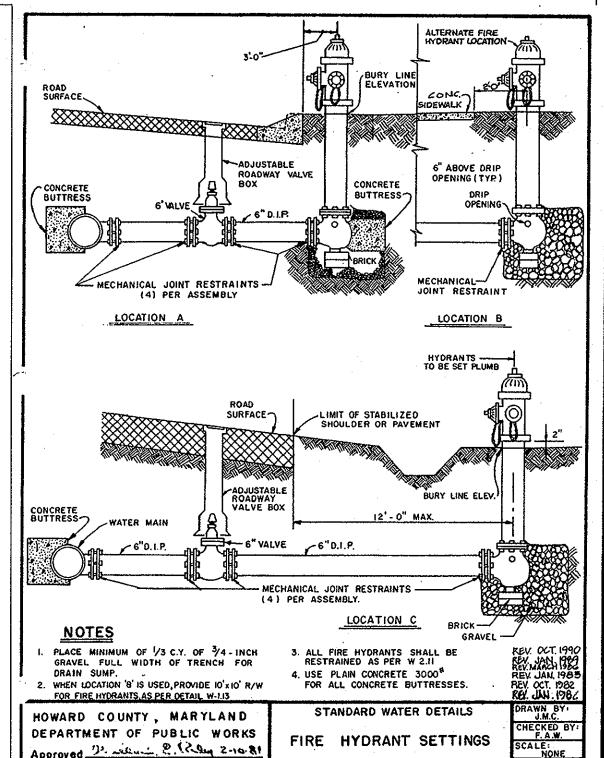




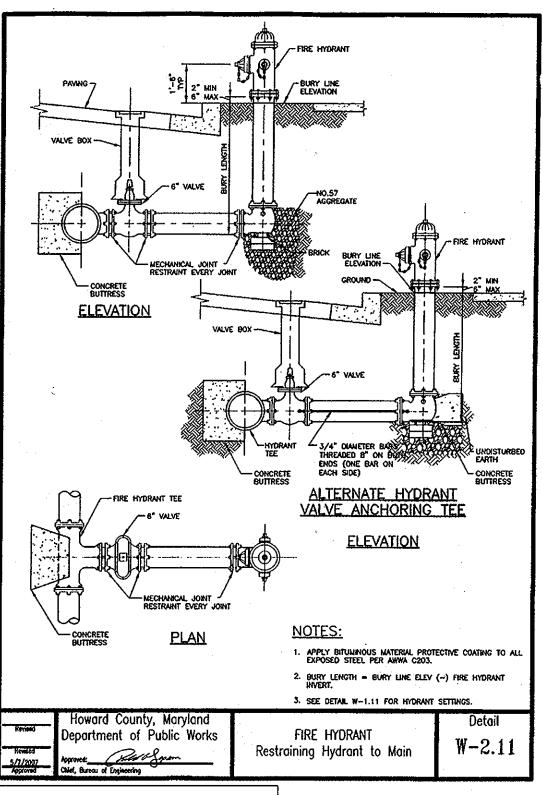


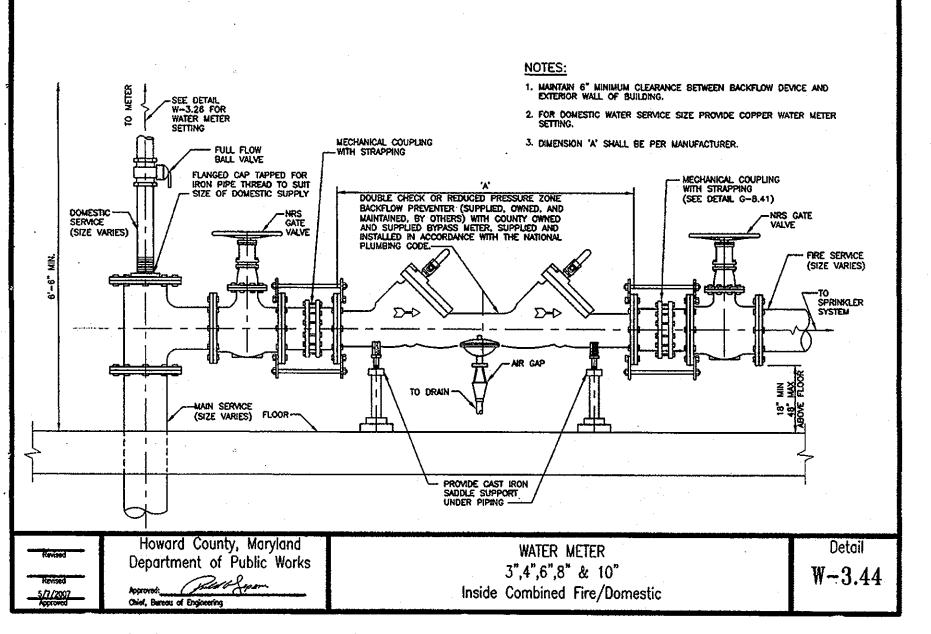


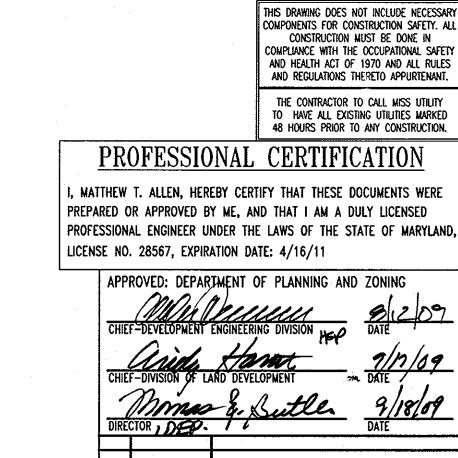




Chief - Bureau of Engineering







1 12/16/08 REVISED PER SDP COMMENTS DEOUDES FAMILY PARTNERSHIP McDONALD'S USA, LLC, C/O DEOUDES - MAGAFAN REALTY, BALTIMORE/WASHINGTON REGION 6903 ROCKLEDGE DRIVE, SUITE 1

BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

MISS UTILITY

BEFORE YOU DIG CALL 811 IN MD

PHONE: (301) 986-9500 PHONE: (240) 497-3650 McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

7910 WOODMONT AVENUE, SUITE 410

BETHESDA, MD 20814-7065

AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

UTILITY DETAILS

# BOHLER

810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

DESIGNED BY: C.W.A. LOT/PARCEL NO. PARCEL 513, LOT A-23 SCALE:

9/9/2009

CENSUS TRACT

6TH

4900000

6067.03

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT ADDRESS CHART LOT/PARCEL # STREET ADDRESS 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PARCEL 513, LOT A-23 PERMIT INFORMATION CHART SUBDIVISION NAME GATEWAY COMMERCE CENTER 20700 19541 B-2

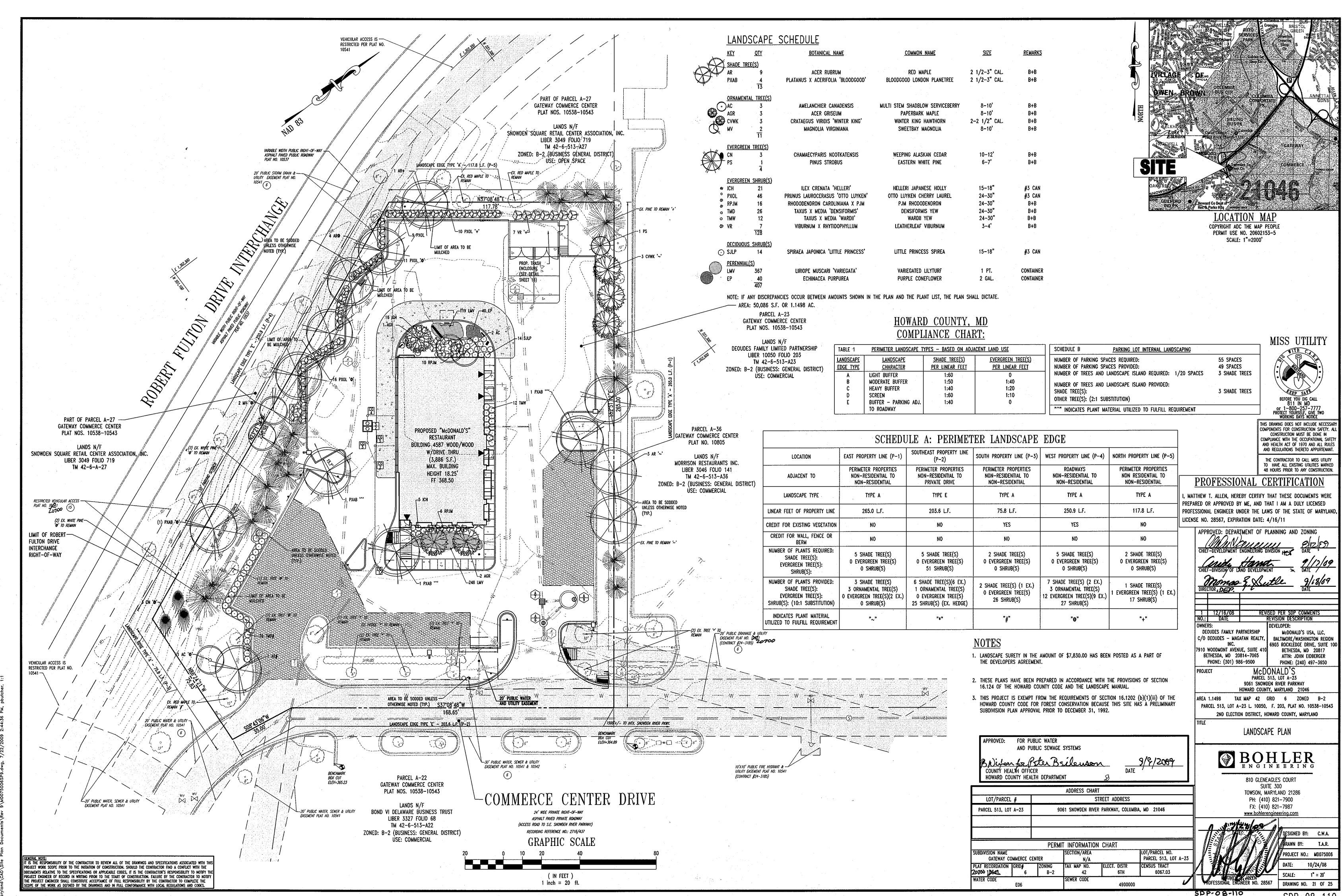
— 24"x24" 3,300 P.S.I. CONC. PAD TO BE PROVIDED IN LANDSCAPED AREAS ONLY. FINISHED GRADE 4 4 - TRAFFIC RATED COVER - PIPE SIZE & CLASS AS REQ'D PER GRADING PLAN APPROVED BEDDING MATERIAL (SEE DETAIL) -CLEANOUT DETAIL

NOT TO SCALE

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION, FAILURE BY THE CONTRACTOR TO MOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

vay, Howard County, 7/22/2009 2:35:40

DRAWING NO. 20 OF 25 SDP-08-110



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

## NOTES FOR DICIDUOUS AND EVERGREEN TREE PLANTINGS:

- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
- REMOVE ALL ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 1/3 FROM TOP OF ROOT BALL.
- PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.

POST-CONSTRUCTION SOIL CONDITION

COMPACTED SOIL (NOT PREVIOUSLY GRADED, TOPSOIL LAYER

GRADED SUBSOILS AND CLEAN FILLS WITH CLAY

POOR QUALITY FILLS, HEAVY CLAY SOILS, SOILS

CONTAMINATED WITH RUBBLE OR TOXIC MATERIAL

GOOD SOIL (NOT PREVIOUSLY GRADED OR

COMPACTED, TOPSOIL LAYER INTACT)

DISTURBED BUT NOT ELIMINATED)

CONTENT BETWEEN 5 & 35%

PLANT SHALL BE TRANSPLANTED AT THE SAME

PRIOR TO BALLING AND BURLAPPING. CUT AND

GRADE AS IT BORE IN THE NURSERY PLOT

REMOVE BURLAP FROM TOP ONE-THIRD OF

1 PART PEAT MOSS

3 PARTS TOPSOIL

PLANTING MIXTURE WILL CHANGE

WITH SOIL CONDITIONS.

1 PART COW MANURE

BEFORE PLANTING, ADD 3 TO 4" OF

RECYCLED YARD WASTE TO BED AND

TILL INTO TOP 6" OF PREPARED SOIL.

GENERAL NOTE: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH TH

THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

ROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION, SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE

OCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MOTIFY TH ROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY

24" MINIMUM

WELL-COMPOSTED LEAVES AND

ROOT BALL AS SHOWN.

PLANTING MIX:

- THOUROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW
- SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.

## PLANTING NOTES:

- 1. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED; INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS, AND CLEAN-UP.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT 2. MATERIALS SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
- CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
- 6. INSOFAR AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD WILL BE REJECTED.
- 7. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (REV. 2001) "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
- 8. ALL PLANTS SHALL BE PLANTED IN AMENDED TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
- 9. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
- 10. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH 'WILT-PRUF' OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
- 11. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
- 12. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.
- 13. ALL INJURED ROOTS SHALL BE PRUNED TO MAKE CLEAN ENDS BEFORE PLANTING UTILIZING CLEAN, SHARP TOOLS. IT IS ADVISABLE TO PRUNE APPROXIMATELY 1/3 OF THE GROWTH OF LARGE TREES (2" CALIPER AND OVER) BY THE REMOVAL OF SUPERFLUOUS BRANCHES, THOSE WHICH CROSS, THOSE WHICH RUN PARALLEL. ETC. MAIN LEADER OF TREES WILL NOT BE CUT BACK. LONG SIDE BRANCHES. HOWEVER, MUST BE SHORTENED.
- 14. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS.
- 15. ALL EXISTING TREES SHALL BE FERTILIZED WITH A REGULAR GARDEN FERTILIZER (5-10-5) UPON COMPLETION OF WORK. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR TO ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH SHARP TOOLS AND FILLED AROUND WITH TOPSOIL, COMPLETELY SATURATE THESE AREAS WITH WATER. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR IS TO PROTECT ALL EXISTING TREES TO REMAIN BY ERECTING TREE PROTECTION FENCE AT THE DRIP LINE. THIS WILL ENSURE NO COMPACTION OF THE ROOT MASS.
- 16. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH.
- 17. NEW PLANTING AREAS AND SOD SHALL BE ADEQUATELY IRRIGATED OR WATERED TO ESTABLISH THE PROPOSED PLANTS AND LAWN.
- FOR CONTAINER-GROWN SHRUBS, USE FINGER OR SMALL 18. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE AS SHOWN ON THE APPROVED LANDSCAPE PLAN MUST BE INSTALLED, INSPECTED AND APPROVED BY THE HOWARD COUNTY LANDSCAPE ARCHITECT. THE HOWARD COUNTY ENGINEER AND LANDSCAPE ARCHITECT SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER AS REQUIRED BY OR ASSOCIATED WITH A SUBDIVISION OR SITE PLAN APPROVAL BY THE PLANNING BOARD OR ZONING BOARD OF ADJUSTMENT SHALL BE INSTALLED DURING THE FOLLOWING PLANTING SEASONS:

**PLANTS** LAWN

HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER

LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY

-ROOTS THAT CIRCLE THE PERIMETER OF THE CONTAINER.

3" SHREDDED PINE BARK MULCH (DO NOT PUT

FINISHED GRADE

- PLACE SHRUB ON

BOTTOM OF HOLE.

FIRM SOIL IN

UNDISTURBED

SUBGRADE

- SOIL SURFACE ROUGHENED

TO BIND WITH NEW SOIL.

MULCH AGAINST THE BASE OF THE PLANT).

DATES 3/15 TO 12/15 3/15 TO 6/15 9/15 TO 12/1

FURTHERMORE, THE FOLLOWING TREE VARIETIES SHALL NOT BE PLANTED DURING THE FALL PLANTING SEASON DUE TO THE HAZARDS ASSOCIATED WITH PLANTING

ACER RUBRUM BETULA VARIETIES CARPINUS VARIETIES KOELREUTERIA

POPULUS VARIETIES PRUNUS VARIETIES PYRUS VARIETIES QUERCUS VARIETIES TILIA TOMENTOSA ZELKOVA VARIETIES

ANY PLANTINGS INSTALLED IN CONFLICT WITH THIS REQUIREMENT MUST RECEIVE THE WRITTEN APPROVAL OF THE HOWARD COUNTY ENGINEER OR LANDSCAPE

- 19. ALL DISTURBED AREAS TO BE TREATED WITH 4" TOPSOIL & SEEDED IN ACCORDANCE WITH PERMANENT STABILIZATION METHODS INDICATED WITHIN THE
- 20. THE CONTRACTOR IS TO PROVIDE AN IRRIGATION DESIGN FOR BOTH LAWN AND BED AREAS. DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE ARCHITECT REDUCING DEVICES REQUIRED TO MEET MAXIMUM PRESSURE REQUIREMENT. METERS AND CONTROLLERS. ALL SLEEVES IN PAVEMENT AREAS MUST BE SHOWN.

SCOPE OF WORK THIS WORK SHALL CONSIST OF PERFORMING, CLEARING AND SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL LABOR. MATERIALS. TOOLS. EQUIPMENT, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT.

GENERAL - ALL MATERIALS SHALL MEET OR EXCEED

SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION (D.O.T.) MANUAL OF ROADWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) OR APPROVED EQUAL. B. PLANTS - ALL PLANTS SHALL BE HEALTHY OR NORMAL GROWTH, WELL ROOTED, FREE FROM DISEASE AND INSECTS. C. TOPSOIL - LOAMY SILT, HAVING AN ORGANIC CONTENT NOT LESS

THAN 5%, pH RANGE BETWEEN 4.5 - 7. BE FREE OF DEBRIS, ROCKS LARGER THAN TWO INCHES (2"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

D. MULCH - DOUBLE SHREDDED HARDWOOD BARK MULCH.

FERTILIZER AND SOIL CONDITIONER - PLANTED AREAS A. ORGANIC FERTILIZER - SHALL BE PROCESSED SEWER SLUDGE WITH MINIMAL CONTENT OF 1% NITROGEN AND 2% PHOSPHORIC ACID, EQUAL TO 'NITROHUMIS'. B. ORGANIC FERTILIZER AND SOIL CONDITIONER - SHALL BE

'GRO-POWER' AND ORGANIC BASE MATERIALS COMPRISED OF DECOMPOSED ANIMAL AND VEGETABLE MATTER AND COMPOSTED TO SUPPORT BACTERIAL CULTURES, CONTAINING NO POULTRY OR HUMAN WASTE. GUARANTEED ANALYSIS (5-3-1): NITROGEN 5%. PHOSPHATE 3%, POTASH 1%. 50% HUMUS AND 15% HUMIC ACIDS.

GENERAL WORK PROCEDURES

A. LANDSCAPE WORK SHALL COMMENCE AS SOON AS THOSE PORTIONS OF THE SITE ARE AVAILABLE. CONTRACTOR TO UTILIZE WORKMANLIKE STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH DAYS WORK. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STOCKPILED OR DISPOSED OF, ALL PAVED SURFACES SHALL BE SWEPT CLEAN AT THE END OF EACH DAYS WORK.

BEFORE AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

A. CONTRACTOR TO PROVIDE FOUR INCHES (4") MINIMUM THICK TOPSOIL LAYER IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO PRODUCE A FOUR INCH (4") COMPACTED THICKNESS. TOPSOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE TOPSOIL UTILIZED IN ALL PLANTING AREAS. ADJUST DH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM.

SOIL CONDITIONING

A. CULTIVATE ALL AREAS TO BE PLANTED TO A DEPTH OF 6". ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. SPREAD EVENLY IN ALL PLANTING AREAS AND TILL (2 DIRECTIONS) INTO TOP

> 4" WITH THE FOLLOWING PER 1,000 SQ. FT.: 20 POUNDS 'GRO-POWER' 100 POUNDS AGRICULTURAL GYPSUM

20 POUNDS NITROFORM (COURSE) 38-0-0 BLUE CHIP

THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6 TO 12 IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. USE COMPOSTED BARK, RECYCLED YARD WASTE OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A DH HIGHER THAN 7.5.

MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND 13. CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.

MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACK FILLED WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:

1 PART PEAT MOSS 1 PART COW MANURE BY VOLUME

3 PARTS TOPSOIL BY VOLUME 21 GRAM 'AGRIFORM' PLANTING TABLETS AS FOLLOWS: 2 TABLETS PER 1 GAL. PLANT

3 TABLETS PER 5 GAL. PLANT 4 TABLETS PER 15 GAL. PLANT

LARGER PLANTS (2) TWO TABLETS PER 1/2" DIAM. OF TRUNK CALIPER

#### PLANTING SPECIFICATIONS:

PREPARED SOIL SHALL BE TAMPED FIRMLY AT BOTTOM OF PIT. FILL PREPARED SOIL AROUND BALL OF PLANT 1/2 WAY, AND INSERT PLANT TABLETS. COMPLETE BACK FILL AND WATER THOROUGHLY.

ALL PLANTS SHALL BE SET SO THAT, THEY BEAR THE SAME RELATION TO THE REQUIRED GRADE AS THEY BORE TO THE NATURAL GRADE BEFORE BEING TRANSPLANTED.

PREPARE RAISED EARTH BASIN AS WIDE AS PLANTING HOLE OF EACH TREE.

WATER IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACK FILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.

F. PRUNE ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS TO A MIN. OF 7' BRANCHING HEIGHT.

GROUND COVER

A. ALL GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING GROUND COVER.

B. SPACING AND VARIETY OF GROUND COVER SHALL BE AS SHOWN ON

C. IMMEDIATELY AFTER PLANTING GROUND COVER, CONTRACTOR SHALL THOROUGHLY WATER GROUND COVER.

D. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT BEFORE FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEEDED PRIOR TO APPLYING PRE-EMERGENT. PRE-EMERGENT TO BE APPLIED AS PER MANUFACTURER'S RECOMMENDATION.

A. ALL AREAS WILL BE RECEIVED BY THE CONTRACTOR AT SUBSTANTIALLY PLUS/MINUS .1 FOOT OF FINISH GRADE.

B. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH. EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. SOIL AREAS ADJACENT TO THE BUILDINGS SHALL SLOPE AWAY.

C. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.

A. CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM ACCEPTANCE OF JOB. OWNER TO SECURE A MAINTENANCE BOND FROM THE CONTRACTOR FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE COMMENCEMENT OF THE GUARANTEE PERIOD AND PASSES A FINAL INSPECTION BY THE OWNER OR OWNERS REPRESENTATIVE.

FOR PUBLIC WATER

COUNTY HEALTH OFFICER

GATEWAY COMMERCE CENTER

E06

6

LOT/PARCEL #

PARCEL 513, LOT A-23

UBDIVISION NAME

20700 18541

PLAT RECORDATION G

HOWARD COUNTY HEALTH DEPARTMENT

AND PUBLIC SEWAGE SYSTEMS

B-2

ADDRESS CHART

PERMIT INFORMATION CHART

42

STREET ADDRESS

9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046

6TH

4900000

A. UPON THE COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

MAINTAIN TREES, SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY WITH HERBICIDE AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE.

MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

MAINTENANCE (ALTERNATE BID) COST PER MONTH AFTER INITIAL 90-DAY MAINTENANCE PERIOD. MISS UTILITY

HIS DRAWING DOES NOT INCLUDE NECESSAI COMPONENTS FOR CONSTRUCTION SAFETY. A CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFET AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENAN

REVISION DESCRIPTION

McDONALD'S USA, LLC.

BALTIMORE/WASHINGTON REGION

THE CONTRACTOR TO CALL MISS UTILITY TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

PROFESSIONAL CERTIFICATION

MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11

APPROVED: DEPARTMENT OF PLANNING AND ZONING U Dunelle CHIEF DEVELOPMENT ENGINEERING DIVISION IRECTOR, DEP.

1 12/16/08 REVISED PER SDP COMMENTS DEOUDES FAMILY PARTNERSHIP C/O DEOUDES - MAGAFAN REALTY,

6903 ROCKLEDGE DRIVE, SUITE 10 7910 WOODMONT AVENUE. SUITE 410 BETHESDA, MD 20817 BETHESDA, MD 20814-7065 ATTN: JOHN EIDBERGER PHONE: (301) 986-9500 PHONE: (240) 497-3650 McDONALD'S

HOWARD COUNTY, MARYLAND 21046 AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

PARCEL 513, LOT A-23

9061 SNOWDEN RIVER PARKWAY

LANDSCAPE NOTES AND DETAILS

BOHLER

810 GLENEAGLES COURT Suite 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

ESIGNED BY: C.W.A. DRAWN 8Y: T.A.R. PROJECT .O.: MD075008 DATE: SCALE:

SDP-08-110

7/9/2009

PARCEL 513, LOT A-2

6067.03

CENSUS TRACT

DRAWING NO. 22 OF 2 SDP-08-110

10/24/08

N/A

GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16-124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

SEEDING SPECIFICATIONS

2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND

DEBRIS LARGER THAN 2" DIAMETER.

PERENNIAL RYEGRASS

KENTUCKY BLUEGRASS

FERTILIZER (20:10:10)

SPREADING FESCUE

RED FESCUE

MULCH

ESTABLISHED BY OWNER.

GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS

MIN. / WIDTH PREPARED SOIL FOR TREES (X)

6 FT. OR TWICE THE WIDTH OF THE ROOT

15 FT.

20 FT.

20 FT.

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

PREPARE SOIL IN THE ENTIRE BED USING

PROCEDURES OUTLINED IN SOIL CHART

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

BALL. WHICHEVER IS GREATER

INSTRUCTIONS.

SEEDING RATES:

PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL

1/2 LB/1,000 SQ FT

1 1/2 LBS/1,000 SQ FT

1 1/2 LBS/1,000 SQ FT

14 LBS/1,000 SQ FT

90 LBS/1,000 SQ FT

1 LB/1,000 SQ FT

GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR

TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS

TYPE OF PREPARATION

DETAILS ABOVE.

LOAM TOPSOIL.

RUBBLE OR TOXIC MATERIAL

LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN IN

LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN IN

MINIMUM TREATMENT: LOOSEN EXISTING SOIL TO WIDTHS AND DEPTHS

DETAILS ABOVE; ADD COMPOSTED ORGANIC CONTENT UP TO 5% DRY WEIGHT

SHOWN. ADD COMPOSTED ORGANIC MATTER TO BRING ORGANIC CONTENT UP

EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN, ADD 8-10 IN. OF

REMOVE EXISTING SOILS TO THE WIDTHS AND DEPTHS CONTAMINATED WITH

TO 5% DRY WEIGHT. OPTIMUM TREATMENT : REMOVE TOP 8-10 IN. OR THE

2. LANDSCAPE SURETY IN THE AMOUNT OF \$7,830.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.

3. THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202 (B)(1)(III) OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION AND MASS GRADING BECAUSE THIS SITE HAS A FINAL SUBDIVISION PLAN APPROVAL PRIOR TO DECEMBER 31, 1992. THE FINAL PLAT (PLAT #10541) WAS RECORDED ON OCTOBER 8, 1992.

THESE TREES IN THIS SEASON.

CRATEGUS VARIETIES LIQUID AMBER STYRACIFLUA

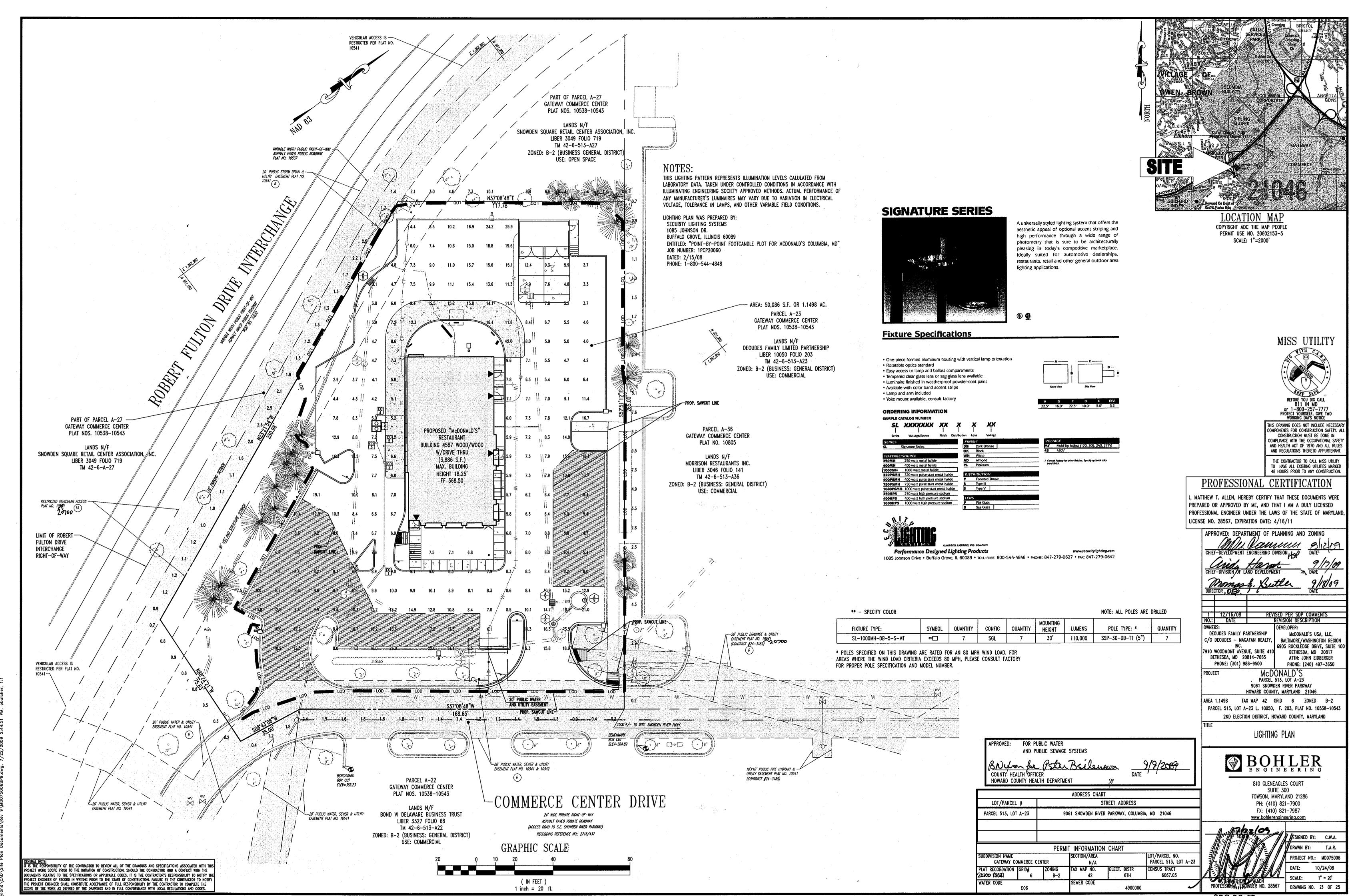
PLATANUS ACERFOLIA

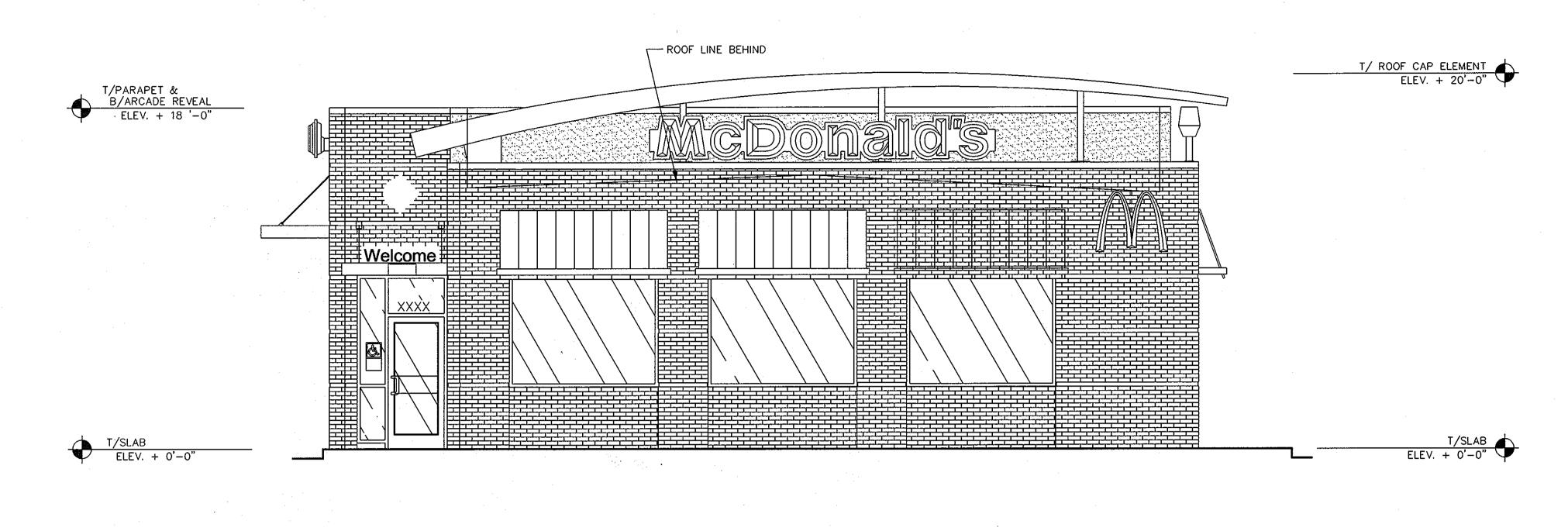
SALIX WEEPING VARIETIES

ARCHITECT, PRIOR TO PLANTING. FAILURE TO COMPLY WITH THESE REQUIREMENTS WILL REQUIRE THE REMOVAL OF THE PLANTING IN QUESTION. THIS REQUIREMENT DOES NOT APPLY TO SEEDING OR SODDING OR PLANTINGS SPECIFICALLY FOR SOIL STABILIZATION PURPOSES. THE PLANTING ASSOCIATED WITH ANY LOT GIVEN A CERTIFICATE OF OCCUPANCY OUTSIDE THESE PERIODS SHALL BE PROVIDED DURING THE PREVIOUS OR NEXT APPROPRIATE SEASON.

FOR REVIEW AND APPROVAL. THE CONTRACTOR IS TO VERIFY STATIC PRESSURE PRIOR TO DESIGN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY PRESSURE SYSTEM DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACK FLOW PREVENTION,

SOIL EROSION AND SEDIMENT CONTROL NOTES.





FRONT ELEVATION

ROOF LINE BEHIND T/BLOCKING PARAPET ELEV. + 18'-3" T/ARCADE BLOCKING @ PARAPET ELEV. + 15'-4"

> ACCESSIBILITY SIGNAGE SEE GEN NOTE #6 ON A1.0 BUILDING ADDRESS 6"H. CHARACTERS

AND 3/4" STROKE

NON-DRIVE-THRU ELEVATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS Briton for Peter Beilanson COUNTY HEALTH OFFICER

HOWARD COUNTY HEALTH DEPARTMENT ADDRESS CHART LOT/PARCEL # STREET ADDRESS 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PARCEL 513, LOT A-23

PERMIT INFORMATION CHART LOT/PARCEL NO. PARCEL 513, LOT A-23 SUBDIVISION NAME GATEWAY COMMERCE CENTER TAX MAP NO. 42 CENSUS TRACT 6067.03 ELECT. DISTR 6TH 20700 10543 B-2

MISS UTILITY



THIS DRAWING DOES NOT INCLUDE NECESSAF COMPONENTS FOR CONSTRUCTION SAFETY. AI CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFI AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERETO APPURTENANT

THE CONTRACTOR TO CALL MISS UTILITY
TO HAVE ALL EXISTING UTILITIES MARKED 48 HOURS PRIOR TO ANY CONSTRUCTION.

## PROFESSIONAL CERTIFICATION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

, MATTHEW T. ALLEN, 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. 28567, EXPIRATION DATE: 4/16/11

	CTOR, DEP.		ENT 74	9-17-02 DATE 2/18/04 DATE
7	12/16/08		SED PER SDP	
NO.:	DATE		REVISION DESCR	RIPTION
OWNER	<b>?S</b> :		DEVELOPER:	•
DEC	DUDES FAMILY P	ARTNERSHIP	McDONAL	D'S USA, LLC.
C/0	DEOUDES - MAG	GAFAN REALTY,	BALTIMORE/W	ASHINGTON REG
·	INC.		6903 ROCKLEDO	
	WOODMONT AVEN		• • • • • • • • • • • • • • • • • • • •	A, MD 20817
BE	THESDA, MD 2	0814-7065	ATTN: JO	HN EIDBERGER

PHONE: (301) 986-9500 PHONE: (240) 497-3650 McDONALD'S PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

ARCHITECTURAL ELEVATIONS



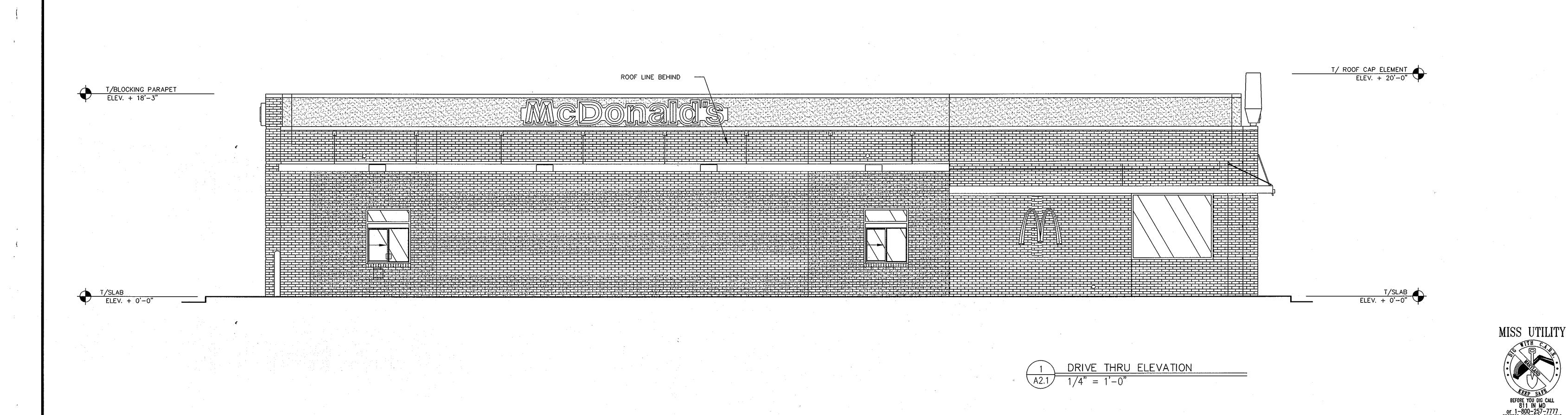
810 GLENEAGLES COURT SUITE 300 TOWSON, MARYLAND 21286 PH: (410) 821-7900 FX: (410) 821-7987 www.bohlerengineering.com

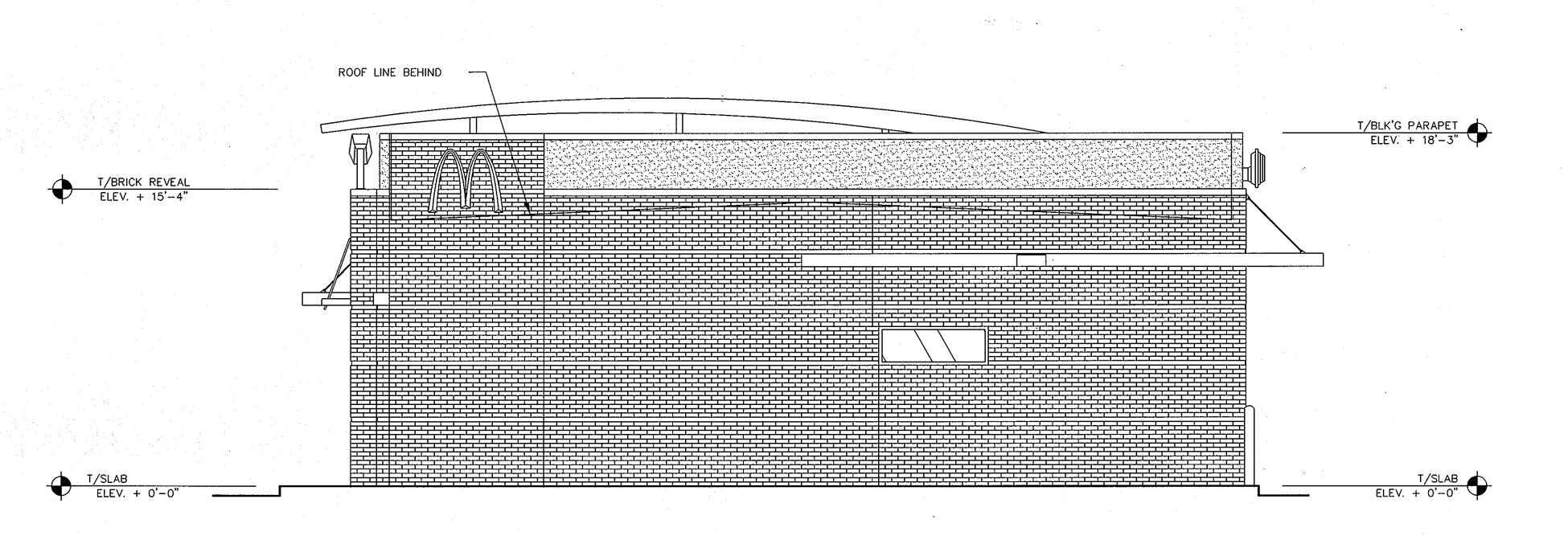
MITRIZOS DESIGNED BY: C.W.A. SCALE:

SDP-08-110

DRAWING NO. 24 OF 25 SDP\_08\_110

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.





REAR ELEVATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWAGE SYSTEMS BNULON for Peter Belenson COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT

B-2

4900000

ADDRESS CHART STREET ADDRESS LOT/PARCEL # 9061 SNOWDEN RIVER PARKWAY, COLUMBIA, MD 21046 PARCEL 513, LOT A-23 PERMIT INFORMATION CHART. LOT/PARCEL NO. PARCEL 513, LOT A-23 SUBDIVISION NAME GATEWAY COMMERCE CENTER CENSUS TRACT 6067.03 TAX MAP NO. 42 ELECT. DISTR 6TH

SCALE: DRAWING NO. 25 OF 25

SDP-08-110

COMPONENTS FOR CONSTRUCTION SAFETY. ALL
CONSTRUCTION MUST BE DONE IN
COMPLIANCE WITH THE OCCUPATIONAL SAFETY
AND HEALTH ACT OF 1970 AND ALL RULES
AND REGULATIONS THERETO APPURTENANT.

THE CONTRACTOR TO CALL MISS UTILITY
TO HAVE ALL EXISTING UTILITIES MARKED
48 HOURS PRIOR TO 'NY CONSTRUCTION.

REVISED PER SDP COMMENTS
REVISION DESCRIPTION

C/O DEOUDES - MAGAFAN REALTY, BALTIMORE/WASHINGTON REGION

AREA 1.1498 TAX MAP 42 GRID 6 ZONED B-2 PARCEL 513, LOT A-23 L. 10050, F. 203, PLAT NO. 10538-10543 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

ARCHITECTURAL ELEVATIONS

810 GLENEAGLES COURT SUITE 300

TOWSON, MARYLAND 21286 PH: (410) 821-7900

FX: (410) 821-7987

www.bohlerengineering.com

PARCEL 513, LOT A-23 9061 SNOWDEN RIVER PARKWAY HOWARD COUNTY, MARYLAND 21046

McDONALD'S USA, LLC,

BETHESDA, MD 20817

ATTN: JOHN EIDBERGER

PHONE: (240) 497-3650

PROFESSIONAL CERTIFICATION

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PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,

APPROVED: DEPARTMENT, OF PLANNING AND ZONING

LICENSE NO. 28567, EXPIRATION DATE: 4/16/11

DEOUDES FAMILY PARTNERSHIP

7910 WOODMONT AVENUE, SUITE 410

BETHESDA, MD 20814-7065

PHONE: (301) 986-9500

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