

# SITE DEVELOPMENT PLANS

## WAL-MART STORES, INC.

### ROUTE 40 AND ROUTE 29 2<sup>ND</sup> ELECTION DISTRICT ELLCOTT CITY, MD HOWARD COUNTY

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#### GENERAL NOTES

- THE PROPERTY IS LOCATED ON TAX MAP 24 PART OF PARCEL 848.
- THE LOCATION OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION AND DEPTH OF ANY EXISTING UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL NOTE THAT IN CASE OF A DISCREPANCY BETWEEN THE SCALED AND FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
- REZONING CASE NUMBER ZB-941, DATED OCTOBER 18, 1993; SKETCH PLAN S-95-01 APPROVED 12/2/94; PRELIMINARY PLAN P-95-21 APPROVED 6/6/95 FINAL PLANS FOR NORTH RIDGE ROAD F-96-01 MASS GRADING PLANS SDP-96-01, F-96-01, F-96-09
- WATER AND SEWER CONTRACT NUMBER 14-3444-D. ALL WATER AND SEWER ARE PROPOSED AS PUBLIC. THIS PROJECT IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THERE ARE NO CONTIGUOUS SLOPES OF 25% OR GREATER WHICH ARE GREATER THAN 20,000 SQ. FT. IN THE AREA.
- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS, WITH THE EXCEPTION OF A STORMWATER MANAGEMENT WAIVER FROM DESIGN MANUAL VOLUME 1, SECTION 10.2.6.5.a AND SECTION 10.2.6.6.a.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- THE EXISTING TOPOGRAPHY ON THESE PLANS IS BASED ON THE MASS GRADING TOPOGRAPHY AS SHOWN ON SDP-96-01.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 24C2 AND 18G1 WERE USED FOR THIS PROJECT.
- STORMWATER MANAGEMENT FOR THE ENTIRE SITE WILL BE PROVIDED IN THE PROPOSED "PRIVATE" FACILITY AS DESIGNED IN SDP-96-01. WATER QUALITY WILL BE PROVIDED BY A STORMWATER SEWER SYSTEM ON THE PARCELS ZONED COMMERCIAL. EXTENDED DETENTION BY FOREBAY WILL PROVIDE WATER QUALITY MANAGEMENT FOR THE RESIDENTIAL SECTION. THE STORMWATER MANAGEMENT POND WILL BE OWNED AND MAINTAINED BY WAL-MART STORES, INC.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED JUNE 7, 1994 WITH A SUPPLEMENT DATED OCTOBER 19, 1994, AND WAS APPROVED ON DECEMBER 2, 1994.
- THERE SHALL BE NO CONSTRUCTION ALLOWED WITHIN THE WETLAND/WETLAND STREAM BUFFER AND/OR FOREST CONSERVATION EASEMENT.
- ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN ARE PART OF SDP 96-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

#### POND HAZARD CLASSIFICATION

CLASS "A" - STRUCTURES LOCATED IN RURAL, AGRICULTURAL OR URBAN AREAS DEDICATED TO REMAIN IN FLOOD TOLERANT USAGES WHERE FAILURE MAY DAMAGE NON-INHABITED BUILDINGS, AGRICULTURAL LAND, FLOODPLANS OR COUNTY ROADS.

#### NOTICE TO BIDDERS

ALL QUESTIONS REGARDING THE GENERAL CONTRACTOR'S PREPARATION OF HIS BID SHALL BE DIRECTED TO THE WAL-MART CONSTRUCTION DEPARTMENT AT (501) 273-4940. SUBCONTRACTORS MUST DIRECT THEIR QUESTIONS THROUGH THE GENERAL CONTRACTOR ONLY. THE CONSULTING ARCHITECT AND/OR THE CONSULTING ENGINEER SHALL NOT BE CONTACTED DIRECT WITHOUT PRIOR AUTHORIZATION FROM WAL-MART.

#### FLOOD CERTIFICATION

THIS PROPERTY IS NOT LOCATED WITHIN ANY PRESENTLY ESTABLISHED 100-YEAR FLOOD PLAIN, AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP FOR THE ELLCOTT CITY, MARYLAND. COMMUNITY PANEL NUMBER 2400440 023 B

#### WETLAND CERTIFICATION

THIS PROJECT DOES NOT REQUIRE A DEPARTMENT OF THE ARMY SECTION 404 PERMIT PER A DETERMINATION BY THE CORPS OF ENGINEERS, BALTIMORE DISTRICT. ALL WETLANDS SHOWN HAVE BEEN FIELD VERIFIED BY THE ARMY CORPS OF ENGINEERS. THE REPORT HAS BEEN PREVIOUSLY REVIEWED BY HOWARD COUNTY.

#### NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. 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.

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
PARCEL B	3200 NORTH RIDGE ROAD

PERMIT INFORMATION CHART				
SUBDIVISION NAME	SECTION/AREA	PARCEL#		
ELLCOTT CITY WAL-MART	N.A.	B		
PLAT# 98-01	BLOCK# 5 & 6	ZONE B-2	TAX/ZONE MAP 24	ELECT. DIST. 2ND
CENSUS TRACT 6026				

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Roberts*  
SIGNATURE OF DEVELOPER  
DATE: 5/31/96

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*John R. Roberts*  
SIGNATURE OF ENGINEER  
DATE: 6/6/96

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Roberts*  
SIGNATURE OF DEVELOPER  
DATE: 6/6/96

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

*E. H. Washburn*  
USDA - NATURAL RESOURCES CONSERVATION SERVICE  
DATE: 6/18/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John R. Roberts*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE: 8/23/11

*John R. Roberts*  
CHIEF, DIVISION OF LAND DEVELOPMENT, DATE: 9/26/11

*Thomas E. Butler*  
DIRECTOR, DATE: 9/27/11

- RESOURCE LIST :**
- SURVEYOR (TOPOGRAPHY)**  
RIEMER MUEGGE AND ASSOCIATES, INC.  
MR. RON ANDERSON  
8818 CENTER PARK DRIVE, SUITE 200  
COLUMBIA, MD 21045  
(410) 997-8900
  - SURVEYOR (EASEMENT PLATS)**  
SET, INC.  
MR. JOHN MOSELEY  
3098 NEWINGTON DR.  
RIVA, MD 21140-1440  
(410) 974-8086
  - BOUNDARY**  
R.M. MOCHI GROUP  
3300 N. RIDGE ROAD, SUITE 235  
ELLCOTT CITY, MD 21043-3305  
(410) 461-0078
  - MARYLAND STATE HIGHWAY ADMIN.**  
ENGINEERING ACCESS PERMITS DIVISION  
707 N. CALVERT STREET  
P.O. BOX 717  
BALTIMORE, MARYLAND 21203  
(410) 333-1350
  - BELL ATLANTIC TELEPHONE**  
MR. JOHN FIDLER  
7133 RUTHERFORD RD.  
2nd FLOOR  
WOODLAWN, MD 21244  
(410) 281-7532
  - DEVELOPMENT ENGINEERING DIVISION**  
MR. CHARLES DAMMERS, P.E.  
(410) 313-3364
  - DEPARTMENT OF PLANNING AND ZONING**  
MS. REGINA TIRINNANZI  
(410) 313-2393
  - DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS DEPARTMENT**  
(410) 313-2455
  - OWNER & DEVELOPER**  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000
  - CONTRACT PURCHASER (SUBDIVISION)**  
MR. LOUIS MANGIONE  
MANGIONE FAMILY ENTERPRISES  
1205 YORK ROAD PENTHOUSE  
LUTHERVILLE, MARYLAND 21093  
(410) 825-8400
  - HOWARD COUNTY**  
GEORGE HOWARD BUILDING  
3430 COURTHOUSE DRIVE  
ELLCOTT CITY, MARYLAND 21043  
(410) 313-2393
  - BALTIMORE GAS & ELECTRIC**  
MS. ELLEN BAUMAN  
7225 WINDSOR BLVD.  
BALTIMORE, MD 21244  
(410) 859-9065

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

*John R. Roberts*  
HOWARD SCD  
DATE: 8-19-11

**ENGINEER'S CERTIFICATE**

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

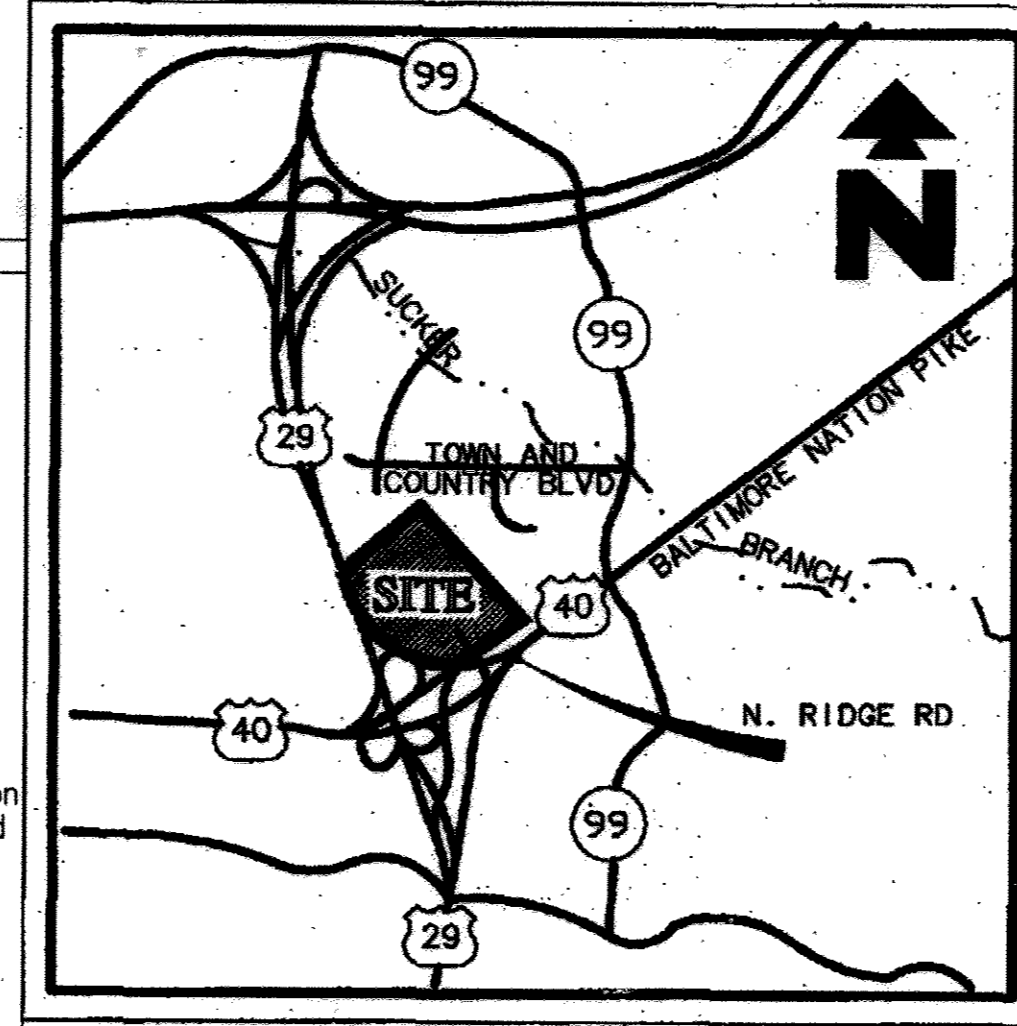
*Jason D. Tobery*  
Signature of Engineer (print name below signature)  
DATE: 7-25-11

**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."

*Frederick Lutz - Dir. of Real Estate*  
Signature of Developer (print name below signature)  
DATE: 8-4-11

NO	DATE	DESCRIPTION	BY
1	07/25/11	BUILDING EXPANSION & PARKING MODIFICATION	JDT



**Vicinity Map**  
SCALE: 1"=2000'

## STORE NUMBER 2412

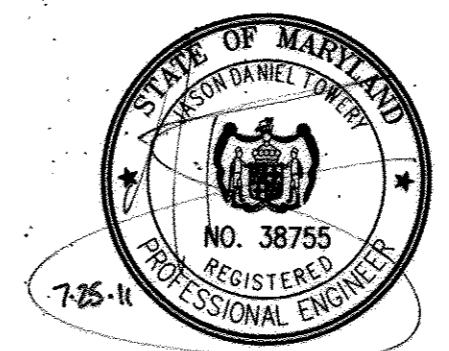
#### SITE ANALYSIS:

AREA OF PARCEL: 799,847 Sq.Ft. OR 18.36 AC  
PRESENT ZONING: B-2 ZONING BOARD CASE ZB-941  
PROPOSED USE OF STRUCTURE: COMMERCIAL/RETAIL  
EXISTING STORE GROSS AREA = 124,622 S.F.  
GROSS AREA OF THE TWO PROPOSED BUILDING ADDITIONS = 26,945 S.F.  
TOTAL EXISTING AND PROPOSED GROSS FLOOR AREA = 151,567 S.F.

FLOOR AREA: (FLOOR AREA EXCLUDING: OUTDOOR GREEN HOUSE AREA.)  
1 BUILDING  
200-250 ASSOCIATES (70% FULL TIME)  
RETAIL 4 sp. /1000 Sq.Ft. - 607 spaces  
RETAIL AREA - 151,567 S.F.  
1 sp./1000 OUTDOOR GREEN HOUSE AREA = 6 sp.  
OUTDOOR GREEN HOUSE AREA - 5,917 Sq. Ft.

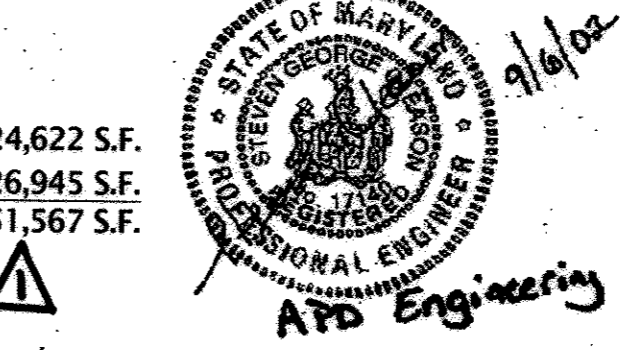
TOTAL # OF UNITS:  
MAXIMUM # OF EMPLOYEES:  
PARKING RATIO:

# OF PARKING SPACES (REQUIRED): 613 sp.  
# OF PARKING SPACES (PROVIDED): 614 sp.  
AREA OF REFORESTATION (REQUIRED): 3.2 AC  
\* AREA OF REFORESTATION (PROV.): SEE SDP-96-01 FOR FOREST CONSERVATION PLAN  
BUILDING COVERAGE OF SITE: 19%  
PAVED PARKING LOT/AREA OF SITE: 28%



**Bowman Consulting Group**  
Modified Parking Numbers, Building Floor Area for Building Expansion. "Modifications Only".

Modified Parking Numbers and areas for Outdoor Green House Area For Modifications Only.



**IAE ENGINEERING ASSOCIATES, INC**

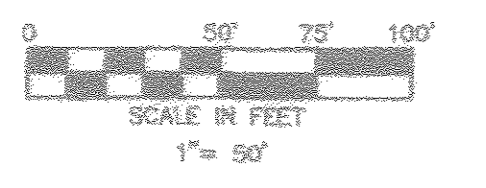
ENGINEERS • PLANNERS • SURVEYORS

9175 Guilford Road, Suite 306 (301) 490-4145  
Columbia, MD 21046 FAX (301) 490-4149

SUBDIVISION "ELLCOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE 1"=50'  
WATER NO. F03  
ECP-11-007  
RECORD PLAT F-98-157  
F-12-023

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 6-6-95  
DATE: SEPTEMBER 6, 1995  
SEWER NOS. 1452800  
APPROVED: 08-06-2010

THIS SHEET IS THE PROPERTY OF HOWARD COUNTY. IT IS NOT TO BE REPRODUCED OR COPIED WITHOUT THE WRITTEN PERMISSION OF HOWARD COUNTY.



WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL D'  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP-98-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

PART OF  
LEONORA K. HOENES  
LIBER 1187 FOLIO 204  
ZONED RA-15

EX. NORTH RIDGE ROAD

"HOWARD COUNTY EXECUTIVE CENTER" PARCEL A-1 PLAT 7322

LEGEND

EXISTING	REINFORCED CONCRETE PIPE
EXISTING	CURB INLET
EXISTING	FENCE-LINE
EXISTING	TREE LINE
EXISTING	STREET LIGHT

NOTE: ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED. ALL RADII ARE 5' UNLESS NOTED.

- GENERAL SITE NOTES
- ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
  - ALL LANDSCAPE AND CONCRETE ISLANDS SHALL RECEIVE TYPE "A" CURB AND GUTTER PER SDP-98-01. UNLESS OTHERWISE NOTED.
  - ALL CURB RETURN RACE SHALL BE 3"-5" OR 10", AS SHOWN TYPICAL ON THIS PLAN, UNLESS OTHERWISE NOTED.
  - UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON OR WITHIN THE SPECIFICATIONS:
    - ALL CURB AND GUTTER ADJACENT TO ASPHALT PAVING SHALL BE INSTALLED PER DETAIL 1A.
    - ALL CURBING ADJACENT TO CONCRETE PAVING SHALL BE INSTALLED PER DETAIL 1B.
    - PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH DETAIL 8A OVER THE DRIVE PAVING LOT AREA AND ALL APPROACH DRIVES.
    - ALL PAVING AND STORMWATER INCLUDING ACCESSIBLE AND VAN ACCESSIBLE SPACES SHALL BE PRINTED PER DETAIL 9A, 9B AND 9C.

- SITE DETAILS
- |     |  |
|-----|--|
| 1A  | TYPE "A" CONCRETE CURB & GUTTER  |
| 1B  | TYPE "B" CONCRETE CURB & GUTTER  |
| 3D  | CONCRETE SIDEWALK  |
| 5A  | GUARD POST (SHOULDER)  |
| 5C  | GUARD POST (SHOULDER/PAVEMENT PROTECTION)  |
| 8A  | REGULAR DUTY PAVING  |
| 8B  | HEAVY DUTY PAVING  |
| 8C  | HEAVY DUTY CONCRETE PAVING   |
| 8E  | REGULAR DUTY CONCRETE PAVING   |
| 9A  | ACCESSIBLE PARKING SIGN  |
| 9B  | 30" PARKING SPACE STRIPING (TYP. - SEE PLAN FOR DETAIL)  |
| 9C  | 30" ACCESSIBLE PARKING SPACE & SIGN (TYP.)   |
| 9D  | 30" VAN ACCESSIBLE PARKING SPACE & SIGN (TYP.)   |
| 10B | STOP BAR (TYP.)  |
| 10C | TWO TRUCK STOP SIGN  |
| 11A | "BLACK ENTRANCE" SIGN (SEE DISCUSSION INDICATED AT SYMBOL)   |
| 11B | "PEDESTRIAN CROSSING" SIGN   |
| 11C | "TRUCK STOP" SIGN  |
| 11D | "BLACK STOP" SIGN (SEE DISCUSSION INDICATED AT SYMBOL)   |
| 11E | "BLACK STOP" SIGN W/ARROW (SEE DISCUSSION INDICATED AT SYMBOL)   |
| 11F | "TABLE" SIGN (FORWARD AT ALL BOUNDS)   |
| 12A | CURT CURB (TO BE FURNISHED BY OTHERS)  |
| 12B | TYPICAL LIGHTING POLE FOUNDATION AND FEATURE WITH SPREADING ELECTRIC CONDUIT ROUTING (SEE DETAIL SHEET FOR LIGHT FIXTURE SPECIFICATIONS) |

- SITE NOTES
- SEEDING GREEN AREA
  - TRANSFORMER PAD (SEE ELEC. CO. AND/OR ARCH. PLANS)
  - CONCRETE TRASH COMPACTOR AREA. CONTRACTOR WILL BE PROVIDED AND INSTALLED BY OTHERS (SEE ARCH. PLANS FOR DIMENSIONS/LOCATIONS)
  - CHAIN LINK STORAGE AREA (SEE ARCH. PLANS)
  - EXIT PORCH (SEE ARCH. PLANS)
  - TRUCK DOCK WITH SEALS (SEE ARCH. PLANS)
  - RETAINING WALLS & TRUCK WALL (SEE ARCH. PLANS)
  - SEWERAGE (PER ARCH. PLANS)
  - SEWER PIPING & VENTILATION (SEE ARCH. PLANS)
  - RAMP IN SIDEWALK (PER ARCH. PLANS)
  - VESTIBULE (SEE ARCH. PLANS)
  - WALKER STORAGE AREA
  - 4" TRAFFIC YELLOW LANE STRIPES (SEE LENGTHS INDICATED AT SYMBOLS)
  - 4" TRAFFIC YELLOW ALIGNMENT STRIPES (TYPICAL)
  - 4" REFLECTIVE WHITE LANE STRIPES (SEE LENGTHS INDICATED AT SYMBOLS)
  - PROFESSIONAL ENGINEER'S WIDE PAINTED YELLOW STRIPES 2.0" O.C. @ 45° (SEE SIZE INDICATED AT SYMBOLS)
  - LIMITS OF HEAVY DUTY CONCRETE PAVING
  - INSTALL TRAY LINE IN CONCRETE TO PROTECT FOR CURBLET. "STOP" SIGN
  - WAL-MART PAVEMENT SIGN (TO BE FURNISHED AND INSTALLED BY OTHERS. CONTRACTOR SHALL INSTALL CONCRETE AND WALKER TO PLACE SIGN AS PART OF THIS CONTRACT)
  - RAMP IN SIDEWALK NOTED IN 4.01 PER HOWARD COUNTY DETAILS

Expanded Garden Center fence Area to Northeast 4152 SF. Relocate sidewalk, Access drive and curb islands along front of store at Garden Center. Added Parking east side of Parking Lot.

APD Engineering  
9/6/02

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

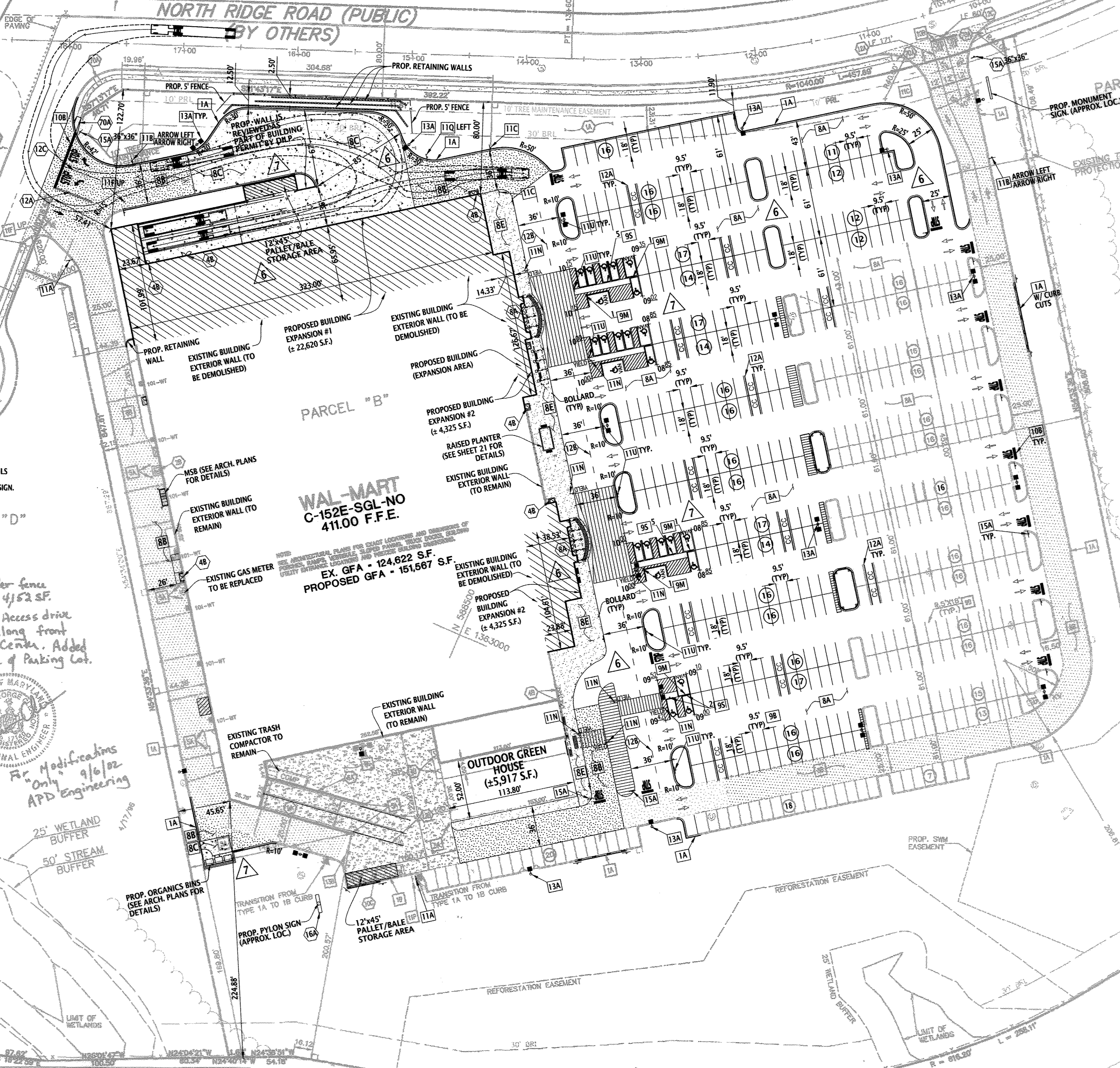
Signature of Developer: *Self*  
DATE: 5/31/02

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: *Thomas J. ...*  
DATE: 6/6/02

APPROVED: DEPARTMENT OF PLANNING AND ZONING

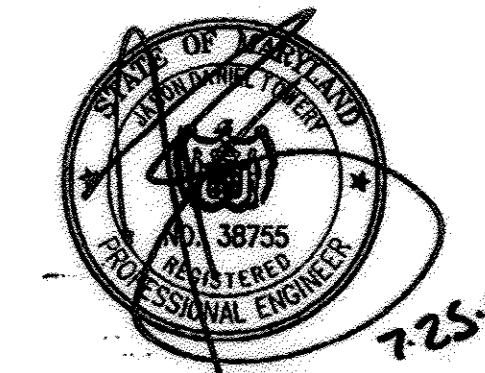
DATE: 1/1/02  
DATE: 1/8/02  
DATE: 1/8/02



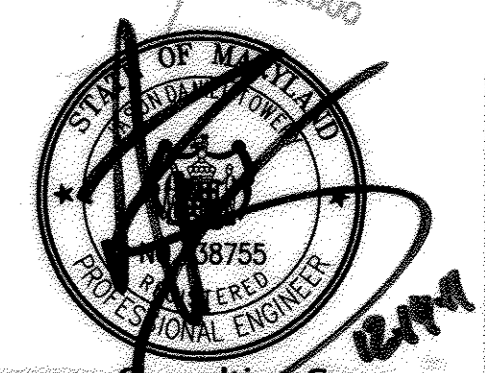
WAL-MART  
C-152E-SGL-NO  
411.00 F.F.E.  
EX. G.F.A. - 124,822 S.F.  
PROPOSED G.F.A. - 151,567 S.F.

OUTDOOR GREEN HOUSE  
(5,917 S.F.)  
113.80'

- PROPOSED - GENERAL SYMBOLS
- PROPERTY LINE
  - RIGHT OF WAY LINE/BOUNDARY LINE
  - CURB INLET
  - PROPOSED PARKING SPACES
  - BUILDING EXPANSION



Bowman Consulting Group  
BUILDING EXPANSION AND PARKING MODIFICATIONS ONLY.



Bowman Consulting Group  
TRASH COMPACTOR REMOVAL AND PARKING MODIFICATIONS ONLY.

OWNER & DEVELOPER  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-023

28-941	F-98-91	F-98-01
S-95-01	SDP-98-01	F-98-09
F-95-21	F-98-09	

INITIAL DESIGN	DATE	PRN	PM	DES	TEAM

WAL-MART STORE #2412  
ELICOTT CITY, WAL-MART, PARCEL B

ENGINEERING ASSOCIATES, INC.  
ENGINEERS PLANNERS SURVEYORS

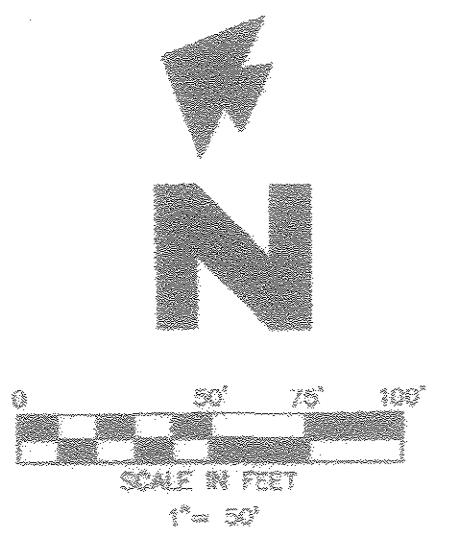
9175 Guilford Road, Suite 308  
Columbia, MD 21046  
PHONE: (410) 486-2000  
FAX: (410) 486-2001

ELICOTT CITY WAL-MART  
SITE PLAN  
DATE: 09-29-98  
SHEET NO. 2 OF 32

SUBDIVISION "ELICOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O PARCEL B48  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800

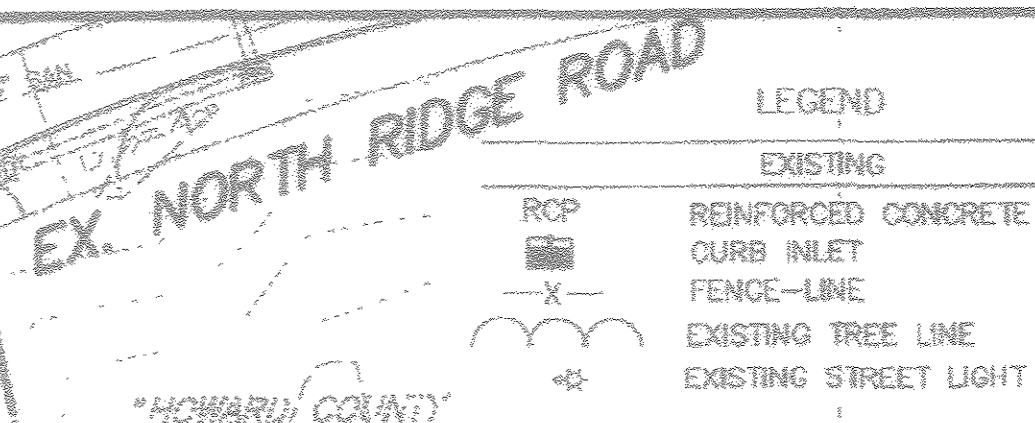
THIS SHEET WILL SUPERSEDE SHEET NUMBER 2 (DATED 11/7/98) APPROVED BY HOWARD COUNTY.



WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL "D"  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP 96-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

PART OF  
LEONORA K. HOENES  
LIBER 1197 FOLIO 204  
ZONED RA-15



NORTH RIDGE ROAD  
(BY OTHERS)

NORTH RIDGE ROAD (PUBLIC)  
(BY OTHERS)

PARCEL "C"

CARLS COURT  
(BY OTHERS)

BULK  
PARCEL "D"

WAL-MART  
C-152E-SGL-NO  
151,567 S.F.  
411,000 F.F.E.

**GENERAL GRADING NOTES**

- A. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- B. **EMERGENCY PRECAUTIONS**  
THE DESIGN REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE USER AT THIS TIME. HOWEVER, WHETHER THE ENGINEER HAS PERSONALLY CAN OR SO MANY THESE DESIGN OR PLANS AS CONSIDERED NECESSARY IN THE FIELD CHASES WHILE THE DESIGNER SUSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTINGENT BASIS AT THE SITE.
- C. **SAFETY HOLES TO CONTRACTOR**  
BY ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS, AND PROPERLY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- D. THE DUTY OF THE ENGINEER OR SURVEYOR TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO THE CONTRACTOR'S SAFETY REQUIREMENTS, IN, ON OR NEAR THE CONSTRUCTION SITE.
- E. ALL SLOPES TO BE GRADED TO 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THIS SHEET.
- F. **ENGINEER'S NOTICE TO CONTRACTOR**  
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/or ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS A BASIS FOR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELIANTLY ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- G. **NOTICE TO CONTRACTOR**  
PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND GULCH/GRATE ALL CROSSINGS AND REMOVE WAL-MART AND THE REMOVAL OF ANY UTILITIES PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER HAS NOT RECEIVED RECORD DRAWINGS.
- H. COORDINATE ALL CONSTRUCTION IN CLOSE HARBOR DEPARTMENT RIGHT-OF-WAY WITH THE HIGHWAY DEPARTMENT MAINTENANCE ENGINEER.
- I. **WETLANDS**  
ANY DEVELOPMENT, CONSTRUCTION, OR FILLING IN A U.S. CORPS OF ENGINEERS DESIGNATED WETLAND IS SUBJECT TO LOCAL, STATE AND FEDERAL APPROVALS. IT IS EXPECTED THAT THE HOWARD SOIL CONSERVATION DISTRICT WILL BE SO DESIGNATED AND NO SUCH WORK SHALL OCCUR IN THESE WETLANDS UNLESS THE HOWARD SOIL CONSERVATION DISTRICT HAS BEEN NOTIFIED AND LOCAL GOVERNMENT AGENCIES HARMLESS AGAINST SUCH VIOLATION.
- J. **REVISIONS**  
ALL REVISIONS WILL BE MADE TO THE MASS GRADING TO CONFORM TO THE PROPOSED WITH THE MASS GRADING PLAN 96-01.
- K. FOR PAID PREP NOTE SEE SHEET 13 OF 13.
- L. ALL SPOT ELEVATIONS ARE TOP OF CURB OR AT BUILDING ELEVATIONS UNLESS OTHERWISE NOTED.

- GRADING DETAILS**
- 1A TYPE "A" CONCRETE CURB & GUTTER
  - 1B TYPE "B" CONCRETE CURB & GUTTER
  - 5A GUARD POST (SINGLE)
  - 5B GUARD POST (GROUP/PURE HYDRAULIC PROTECTION)
  - 15A TYPICAL LIGHTING POLE FOUNDATION AND FIXTURE WITH SYMMETRIC ELECTRIC CONDUIT ROUTING (SEE DETAIL SHEET FOR LIGHT FIXTURE SPECIFICATIONS)
  - ZF TRUCK WELL DRUM
- GRADING NOTES**
- 9C CONDUIT COVER SPECIFIC TO DRAIN PIPE OVER ARCH PLANS FOR EXISTING AND LOCATION OF DOWN SPOUTS
  - 15B EXISTING EXHAUST PIPES
  - 70A RAMP IN GROUND MARKED R 4:01 PER HOWARD COUNTY DETAILS

Revised grading in areas of Garden Center Expansion and access drive re location. Also revised grading in area of added parking on east side.

For Modification 9/15/12  
Aho Engineering

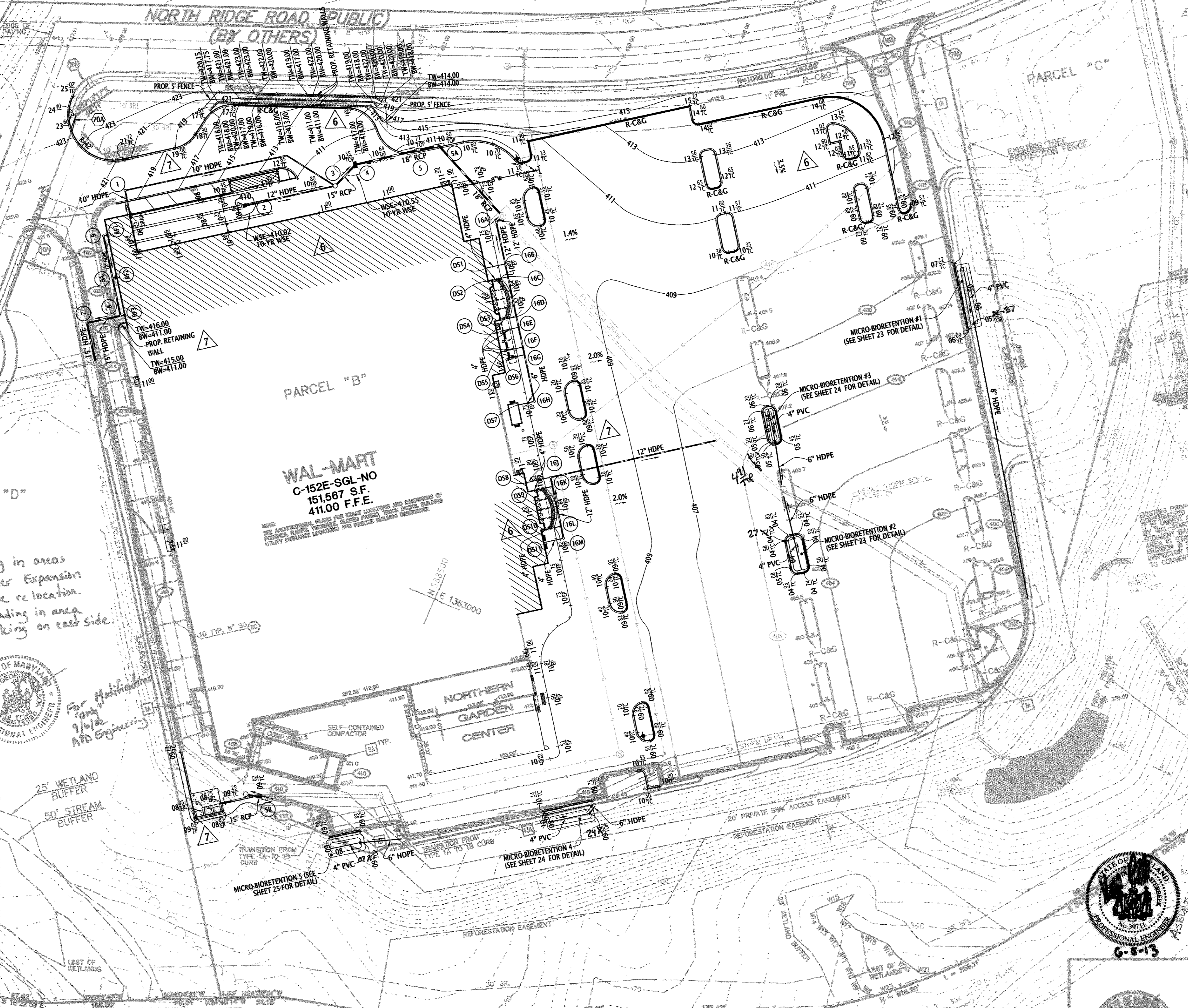
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Developer: *Self*  
DATE: 5/31/16

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: *Chad Phelan*  
DATE: 6/6/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chad Phelan, Chief, Development Engineering Division, 1/11/12  
Katie Steinhilber, Chief, Division of Land Development, 1/13/12  
Thomas J. Rutledge, Director, 2/18/12



Bowman Consulting Group  
TRASH COMPACTOR  
REMOVAL AND PARKING  
MODIFICATIONS ONLY.

Bowman Consulting Group  
BUILDING EXPANSION AND  
PARKING MODIFICATIONS  
ONLY.

**NOTE:**  
DUE TO DIFFERENT VERTICAL DATUM, THERE IS A 1 FT. DIFFERENCE BETWEEN THE ELEVATIONS SHOWN ON THIS REDLINE REVISION DATED 01/14/2011 AND ORIGINAL SITE PLAN SDP 96-11.  
SEE SHEET 27 FOR PROPOSED SEWER PROFILES AND SHEET 28 FOR STORM SEWER COMPUTATIONS.

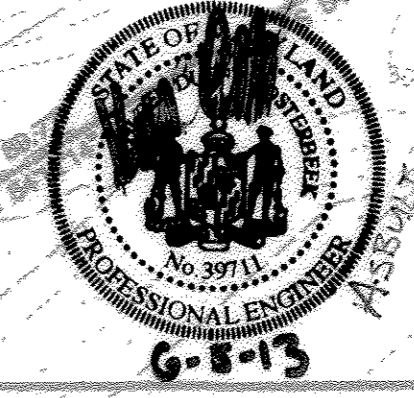
**OWNER & DEVELOPER**  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

NO.	DATE	DESCRIPTION	BY
6	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	8/1/02	Rev. Per H.C. Redline Comments	S&C
4	4-17-98	REVISED PER H. C. REDLINE COMMENTS	SL/A
3	2-13-98	CHANGED PER PEER REVIEW	MAM
2	1-28-98	PRINTED FOR DESIGN CIVLS	MAM
1	1-17-96	REVISED SITE LAYOUT	MAM

CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE ON SITE AND OFF SITE

SUBDIVISION "ELLCOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE 1"=50'  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800



RECORD PLAT F-98-157 & F-12-023

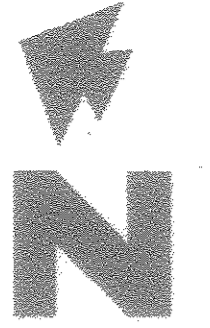
INITIAL DESIGN	DATE	PRN	PM	DES	CADD
	8-29-94	JRG	KLW	TMP	MAM

**WAL-MART STORE #2412**  
ELLCOTT CITY, WAL-MART, PARCEL B

**ENGINEERING ASSOCIATES, INC.**  
ENGINEERS PLANNERS SURVEYORS

9175 Guilford Road, Suite 308  
Columbia, MD 21046  
FAX (301) 490-6149

DATE: 05-20-09  
SHEET NO. 3 OF 32



SCALE IN FEET  
1" = 50'

WILDER BUILDING  
I.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL "D"  
ZONED RA-15

THIS SHEET WILL SUPERSEDE SHEET NUMBER 4  
(DATED 11/7/93) APPROVED BY HOWARD COUNTY.  
PART OF  
LEONORA K. HOENES  
LIBER 1197 FOLIO 204  
ZONED RA-15

FIRE LANES - TO BE INSTALLED  
IN ACCORDANCE WITH FIRE CHIEF'S  
OFFICE STANDARDS.

LEGEND

EXISTING	RCP	REINFORCED CONCRETE PIPE
	CURB INLET	CURB INLET
	FENCE-LINE	FENCE-LINE
	EXISTING TREE LINE	EXISTING TREE LINE
	EXISTING STREET LIGHT	EXISTING STREET LIGHT
	SANITARY SEWER MANHOLE	SANITARY SEWER MANHOLE

PROPOSED - GENERAL SYMBOLS

PROPERTY LINE	---
RIGHT OF WAY LINE/BOUNDARY LINE	---
UNDERGROUND CONDUIT	---
STORM DRAIN	---
SANITARY STRUCTURE IDENTIFIER	⊠
BUILDING EXPANSION	▨

NORTH RIDGE ROAD  
(BY OTHERS)

NORTH RIDGE ROAD (PUBLIC)  
(BY OTHERS)

EX. NORTH RIDGE ROAD  
EX. 12" CAP

"HOWARD COUNTY  
EXECUTIVE CENTER"  
PARCEL A-1  
PLAT 7322

PARCEL "C"

WILDER BUILDING CORP.  
I.M. 17 PARCEL 711  
"HOENES PROPERTY PARCEL D"  
PLAT NO. 9419  
ZONED RA-15

CARLS COURT  
(BY OTHERS)

BULK PARCEL "D"

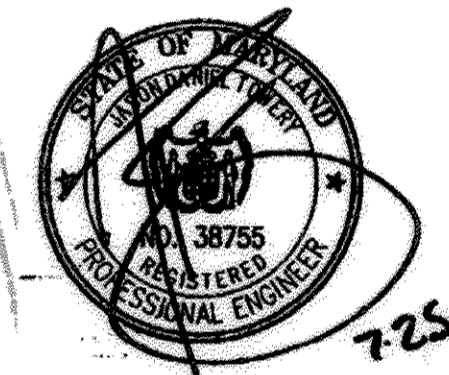
PARCEL "B"

WAL-MART  
C-152E-SGL-NO  
151,567 S.F.  
411.00 F.F.E.

NORTHERN  
GARDEN  
CENTER



Bowman Consulting Group  
TRASH COMPACTOR  
REMOVAL AND PARKING  
MODIFICATIONS ONLY.



Bowman Consulting Group  
BUILDING EXPANSION AND  
PARKING MODIFICATIONS  
ONLY.  
SEE SHEET 28 FOR PROPOSED  
SANITARY SEWER COMPUTATIONS.

OWNER & DEVELOPER  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

- GENERAL NOTES
- ALL EXISTING TELEPHONE AND GAS EXTENSIONS AND SERVICE LINES TO BE MAINTAINED TO THE APPROPRIATE UTILITY COMPANY OPERATIONS. ALL UTILITY DISPOSITIONS TO BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
  - ENGINEER'S NOTICE TO CONTRACTOR: THE CONTRACTOR IS SPECIFICALLY EMPHASIZED THAT THE LOCATION AND/OR DEPTH OF EXISTING UTILITIES AND SERVICE LINES IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND THESE RECORDS MAY BE INCOMPLETE OR INCORRECT. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO VERIFY EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE ALL CONFLICTS WHICH MUST CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
  - NOTICE TO CONTRACTOR: PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND RECORD ALL CROSSINGS AND THE DEPTH OF ANY CROSSINGS PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER IS NOT NOTIFIED OF SUCH CONFLICTS.
  - THE SITE WORK FOR THIS PROJECT SHALL NOT EXCEED THE "MINIMUM STANDARD" SPECIFICATIONS.
  - NOTICE TO CONTRACTOR: CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNLESS WRITTEN APPROVAL HAS BEEN RECEIVED FROM THE ELICOTT CITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
  - SANITARY SEWER AND WATER MAIN CONSTRUCTION ARE PROPOSED UNDER CONSTRUCTION PLAN #14-3444-D.
  - STORM SEWER CONSTRUCTION IS PROPOSED UNDER SDP #6-01.
  - REFER TO FINAL PLAT P-95-01 FOR BEARINGS AND DISTANCES OF ALL NEIGHBORING LOTS, BULKHEAD SETBACKS AND DISTANCES TO ALL EASEMENT BOUNDARIES, S&C PLAT NUMBERS AND VEHICULAR ACCESS RESTRICTIONS.

- SPECIAL NOTES
- ALL WATER LINES TO BE 6" WITH 5.5" MIN. COVER.
  - ALL SANITARY SEWER LINES TO BE 6" WITH 4'-0" MIN. COVER.
  - NOTE TO SPRINKLER CONTRACTOR: THE EXISTING PUBLIC WATER SUPPLY CONSIDERED WITH ASSUMED FIRE PROTECTION HEAD IN ROOM SHOULD YIELD A BASE OF 100 PSI DOWNSTREAM OF AN 8" HIGH SINGLE DETECTOR CHECK FIRE METER OF STARTING PRESSURE = 48 PSI RESTRICTION PRESSURE = 38 PSI AT = 1100 GPM FLOW

UTILITY DETAILS

5A	GUARD POST (CONCRETE)
5B	GUARD POST (CONCRETE/FIRE HYDRANT PROTECTION)
13A	TYPICAL LIGHTING POLE FOUNDATION
34A	RACK FLOW PREVENTER (DIVERS)
36A	FIRE HYDRANT ASSEMBLY - SEE DETAIL FOR BRAND A TYPE
42A	WATER LINE REPAIR
42B	SANITARY SEWER LINE REPAIR

UTILITY NOTES

220	M.A. GATE VALVE WITH ADJUSTABLE VALVE BOX AND THURST BLOTTING (SEE SIZE THIS SHEET)
221	M.A. TEE WITH THURST BLOTTING (SEE SIZE THIS SHEET)
222	M.A. REDUCER (SEE SIZE THIS SHEET)
223	8" M.A. END WITH THURST BLOTTING (SEE SIZE THIS SHEET)
224	4" M.A. END WITH THURST BLOTTING (SEE SIZE THIS SHEET)
225	11-1/2" M.A. END WITH THURST BLOTTING (SEE SIZE THIS SHEET)
226	SPRINKLER ENTRY PER ARCH. PLANS (SEE SIZE THIS SHEET)
227	METERED DOMESTIC WATER SERVICE ENTRY PER ARCH. PLANS (SEE SIZE THIS SHEET)
228	PROPOSED WATER METER (SEE SIZE THIS SHEET)
229	BUILDING SANITARY SEWER SERVICE CLEAN-OUT
230	PROPOSED ELECTRIC TRANSFORMER
231	ELECTRIC SERVICE ENTRY
232	PROPOSED TELEPHONE ENTRY
233	PROPOSED GAS ENTRY
234	PROPOSED GAS METER
235	REPLICATION CONTROLLER AND VALVES LOCATION
75A	REMOVE EX. 2" BOLLARD AND EXTEND WATERLINE

Relocate hydrant at east end of parking. Relocate hydrant and utility bollard to new curb location in front of Garden Center Expansion. 9/6/02 - APD Engineering



I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Selfberg*  
SIGNATURE OF DEVELOPER  
5/31/96  
DATE

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*6/6/96*  
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad Eason*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 1-11-12

*W. J. Stalder*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 1/28/12

*Thomas E. Butler*  
DIRECTOR  
DATE: 4/18/12

NO.	DATE	DESCRIPTION	BY
6	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	9/1/02	REV. FOR H.C. REDLINE COMMENTS	S&C
4	4-17-98	REVISED PER H. C. REDLINE COMMENTS	SLJ/ACL
3	2-13-98	CHANGED PER PEER REVIEW	MAM
2	1-26-96	PRINTED FOR DESIGN CIVLS	MAM
1	1-17-96	REVISED SITE LAYOUT	MAM

7 12/14/11 COMPACTOR REMOVAL & PARKING MOD. JDT 28'09'42" E

THIS SHEET FOR INFORMATION PURPOSES ONLY !!!

WATER AND SEWER MAIN CONSTRUCTION PROPOSED IN C # 14-3444-D.

SUBDIVISION "ELICOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE 1"=50'  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 6-6-95  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800

ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-023

ZB-941	F-96-91	F-96-01
S-95-01	SDP-98-01	SDP-98-01
F-95-21	F-96-09	F-96-09

INITIAL DESIGN	DATE	DATE	DATE	DATE	DATE

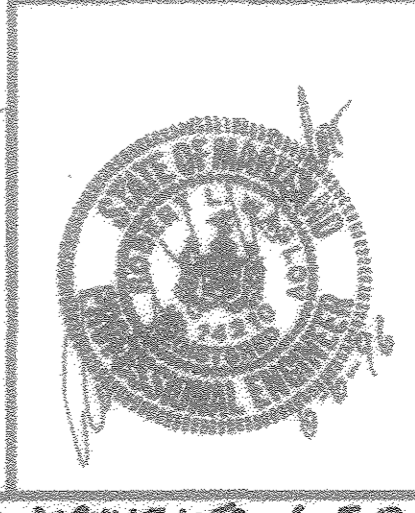
WAL-MART STORE #2412  
ELICOTT CITY, WAL-MART, PARCEL B

ENGINEERING ASSOCIATES, INC.

ENGINEERS PLANNERS SURVEYORS

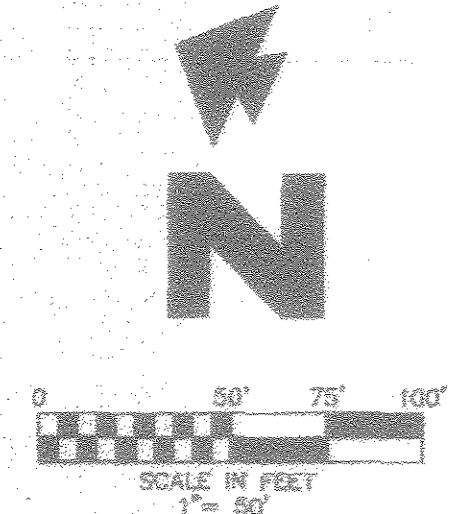
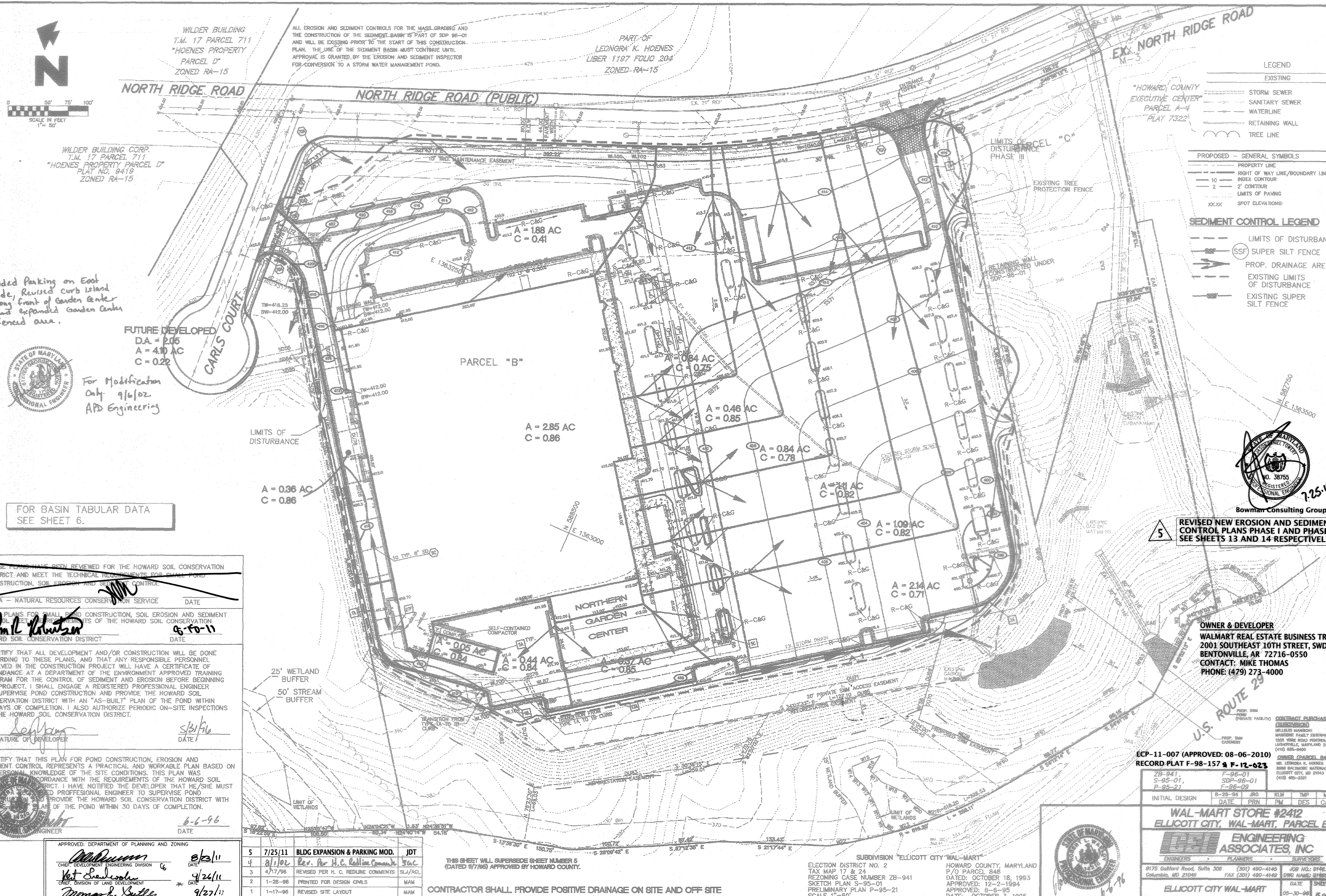
9175 Gullford Road, Suite 306 Columbia, MD 21046 (301) 490-4145 (301) 490-4149 FAX (301) 490-4149

DATE: 05-29-98 SHEET NO: 4 of 32



NO AS-BUILT INFO 6-5-13

SDP-96-11



WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL "D"  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP 96-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

PART OF  
LEONORA K. HOENES  
LIBER 1187 FOLIO 204  
ZONED RA-15

LEGEND

EXISTING	
	STORM SEWER
	SANITARY SEWER
	WATERLINE
	RETAINING WALL
	TREE LINE
PROPOSED - GENERAL SYMBOLS	
	PROPERTY LINE
	RIGHT OF WAY LINE/BOUNDARY LINE
	10' INDEX CONTOUR
	2' CONTOUR
	LIMITS OF PAVING
	SPOT ELEVATIONS

SEDIMENT CONTROL LEGEND

	LIMITS OF DISTURBANCE
	SSF SUPER SILT FENCE
	PROP. DRAINAGE AREAS
	EXISTING LIMITS OF DISTURBANCE
	EXISTING SUPER SILT FENCE

Added Parking on East Side, Revised curb Island along front of Garden Center and expanded Garden Center fenced area.



For Modification Only 9/6/02  
APD Engineering

FOR BASIN TABULAR DATA SEE SHEET 6.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

John L. Rebutzer 6-10-11

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Developer: [Signature] DATE: 6-6-96

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Signature of Engineer: [Signature] DATE: 6-6-96

NO.	DATE	DESCRIPTION	BY
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4	8/1/02	Rev. Per H.C. Redline Comments	SLJ/ACL
3	4/17/98	REVISED PER H. C. REDLINE COMMENTS	SLJ/ACL
2	1-26-96	PRINTED FOR DESIGN CIVILS	MAM
1	1-17-96	REVISED SITE LAYOUT	MAM

THIS SHEET WILL SUPERSEDE SHEET NUMBER 5 (DATED 1/7/96) APPROVED BY HOWARD COUNTY.

CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE ON SITE AND OFF SITE

SUBDIVISION "ELICOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE 1" = 50'  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 6-6-95  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800

REVISED NEW EROSION AND SEDIMENT CONTROL PLANS PHASE I AND PHASE II, SEE SHEETS 13 AND 14 RESPECTIVELY.

OWNER & DEVELOPER  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-623

2B-941	F-96-01	CONTRACT PURCHASER (SUPERSEDED)
S-95-01	SDP-96-01	RELIUS HARRISON
P-95-21	F-96-09	WANTON FAMILY ENTERPRISES
INITIAL DESIGN	DATE	DATE
B-29-94	JRG	KLM
DATE	PRIN	PM
		DES
		CADD

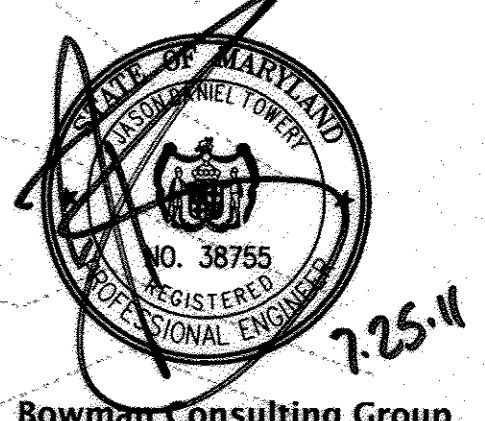
WAL-MART STORE #2412  
ELICOTT CITY, WAL-MART, PARCEL B

ENGINEERING ASSOCIATES, INC.  
ENGINEERS PLANNERS SURVEYORS

9175 Gullford Road, Suite 306 Columbia, MD 21046 (301) 490-4145 (301) 490-4148

ELICOTT CITY WAL-MART  
SEDIMENT AND EROSION CONTROL PLAN PHASE II

DATE: 05-30-96 SHEET NO: 5 of 32



Bowman Consulting Group

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: *[Signature]* DATE: 11/13/95

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: *[Signature]* DATE: 11/14/95

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE: 2/26/96

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/24/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* DATE: 8/24/11  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* DATE: 9/24/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* DATE: 9/27/11  
 DIRECTOR

HOWARD SOIL CONSERVATION DISTRICT  
STANDARD SEDIMENT CONTROL NOTES

- 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. (410-343-1825)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- 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 GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL.1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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.
- SITE ANALYSIS:  
 TOTAL AREA OF SITE: 65.78 ACRES  
 AREA DISTURBED: 46.00 ACRES  
 AREA TO BE ROOFED OR PAVED: N/A ACRES  
 AREA TO BE VEGETATIVELY STABILIZED: 4.04 ACRES  
 TOTAL CUT: 60,000 CU YD  
 TOTAL FILL: 20,000 CU YD  
 OFFSITE WASTE/BORROW AREA LOCATED AT NORTHEASTERN PORTION OF SITE EAST OF NORTH RIDGE.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN 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 THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

HOWARD SOIL CONSERVATION DISTRICT  
PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

- PREFERRED --- APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 800 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (8 LBS./1000 SQ.FT.)
- 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 DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING --- FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 80 LBS PER ACRE (1.4 LBS./1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 80 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 10 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 80 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 (70-90 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 (9 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (9 GAL./1000 SQ.FT.) FOR ANCHORING.

MAINTENANCE --- INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

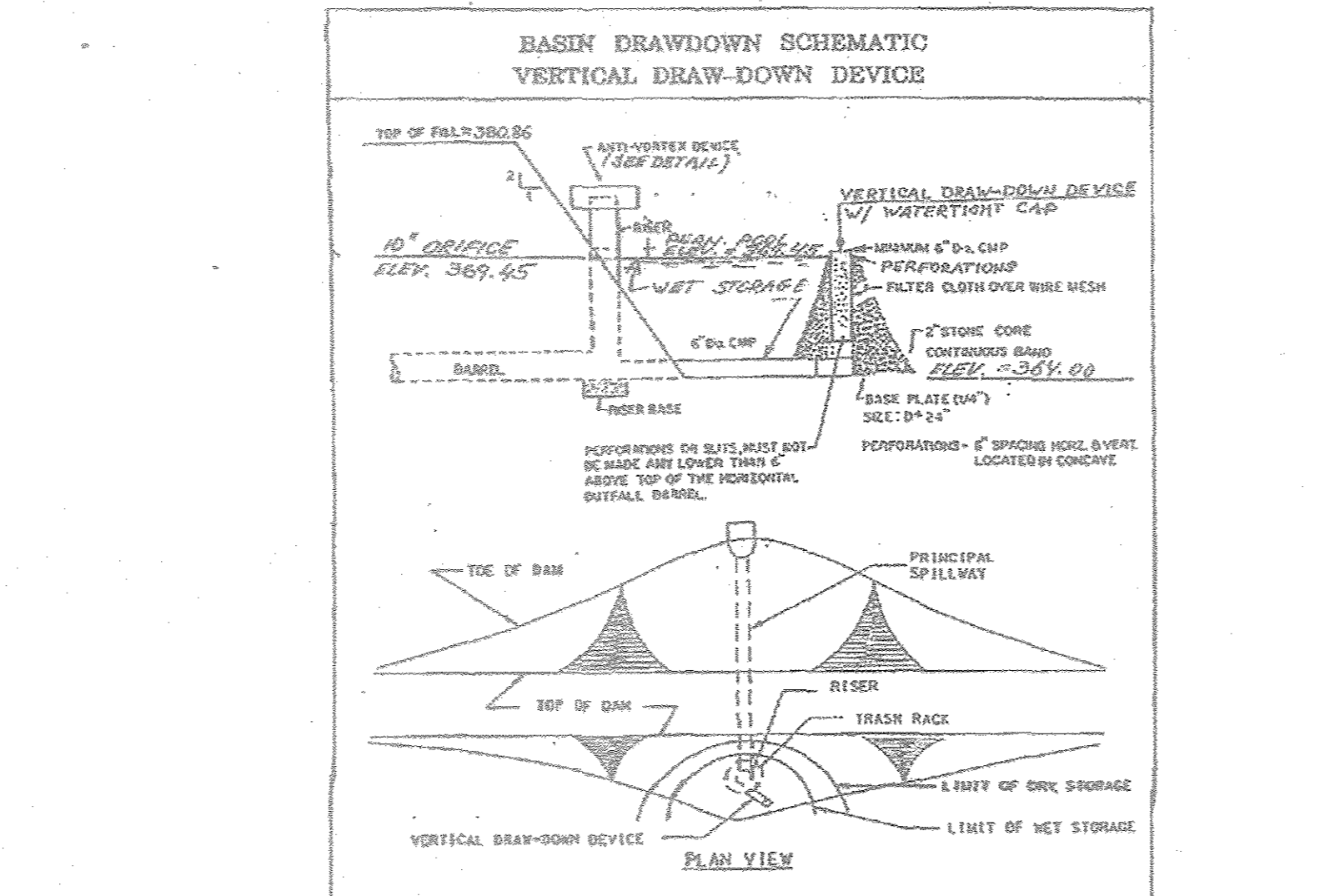
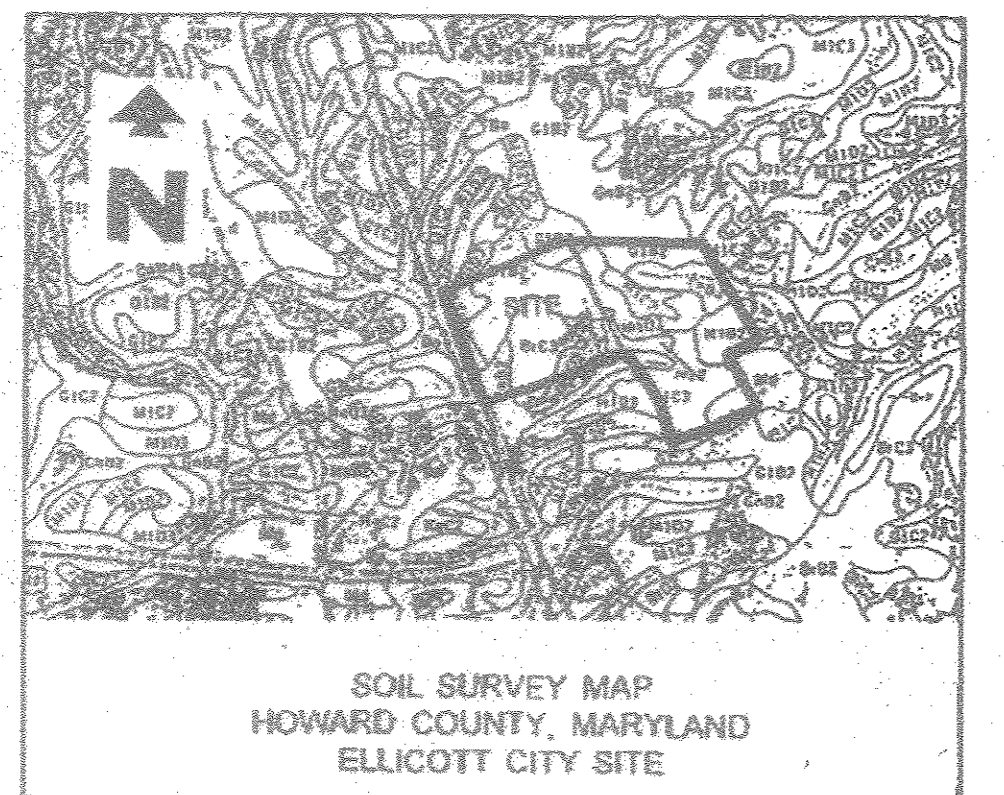
SEEDBED PREPARATION --- LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS --- APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.).

SEEDING --- FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH OCTOBER 15, SEED WITH 2-1/2 BUSHELS 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 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (9 GAL./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL. PER ACRE (9 GAL./1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1995 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.



Construction Specifications

- Perforations in the draw-down device may not extend into the wet storage.
- The total area of the perforations must be greater than 2 times the area of the tapered orifice.
- The perforated surface of the draw-down device shall be wrapped with 1/2 inch hardware cloth and protected fabric. The geotextile fabric shall meet the specifications for Geotextile Class C.
- Provide support of draw-down device to prevent sagging and flotation. An acceptable alternative to the support is to stake both sides of draw-down device with 1/2 inch steel angle, or 1" by 4" square or 2" round wooden posts set 3' minimum into the ground then joining them to the device by crossing with 1/2 inch minimum wire.

Figure 2. Temporary Sediment Basin Design Data Sheet

Designed by: T.P. Date: 10/16/11 Checked by: Date: \_\_\_\_\_  
 Project name: ELLICOTT CITY WAL-MART Basis #: \_\_\_\_\_  
 Location: \_\_\_\_\_

Total area draining to basin: 418.11 acres (ac)

Basin Volume Details

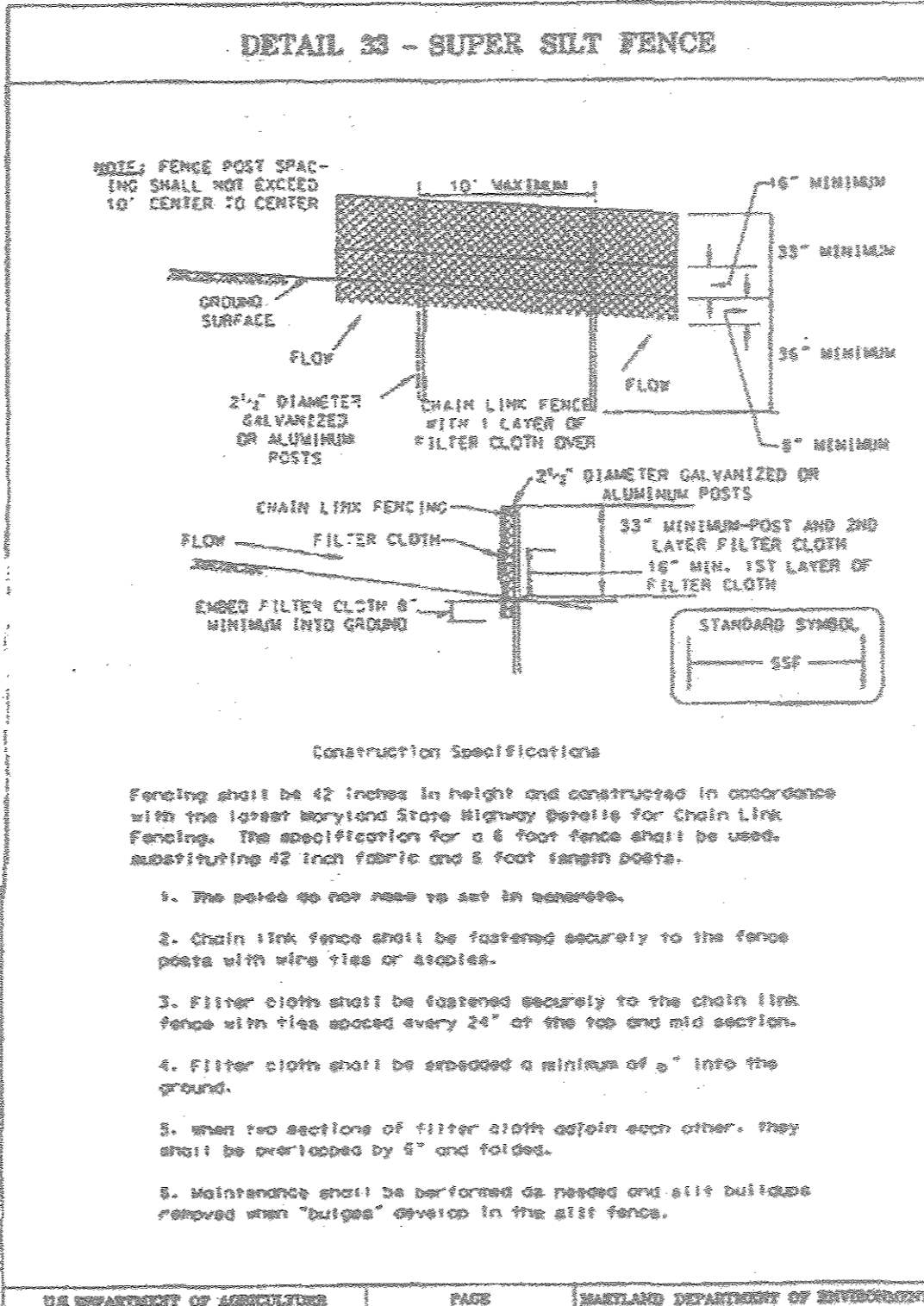
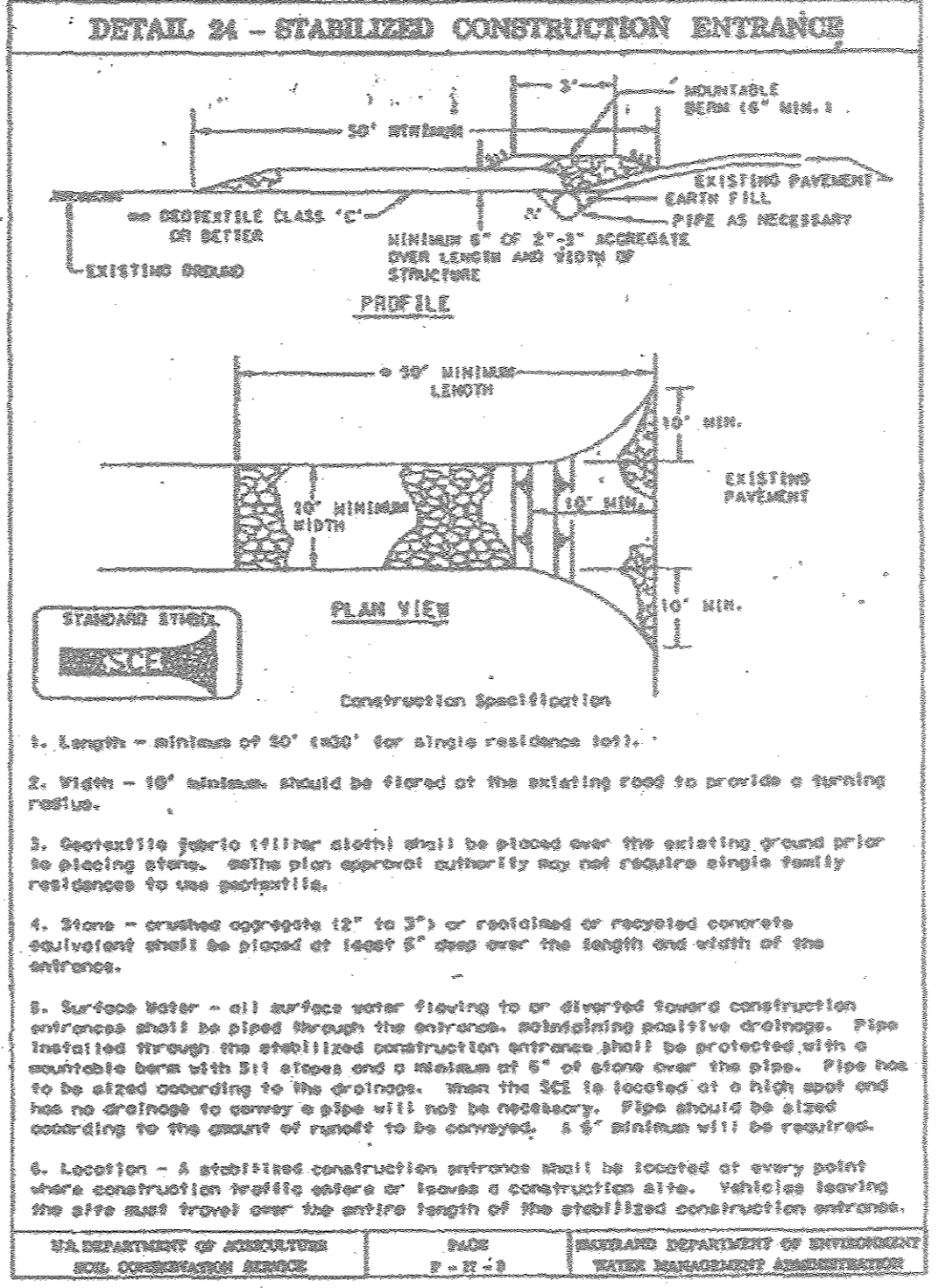
- Min. required vol. = 3600 ft<sup>3</sup> x 4.0 = 14400 ft<sup>3</sup>
- Actual Volume of basin = 3311 ft<sup>3</sup>
- Excess vol. = 11089 ft<sup>3</sup> (to obtain required capacity)
- Vol. at drawdown elev. = 1800 ft<sup>3</sup> x 4.0 = 7200 ft<sup>3</sup>
- Vol. of basin at elevation = 900 ft<sup>3</sup> x 4.0 = 3600 ft<sup>3</sup>
- Excess vol. corresponding to min. required volume of basin (from crest elevation) = 2720 ft<sup>3</sup>
- Retention pool elevation = 387.25 ft.
- Distance from floor crest elevation to permanent pool elevation = 3.25 ft.
- Basin crest elevation = 387.25 ft.
- Distance from floor crest elevation to drawdown elevation = 5.50 ft.

Basin Area Details

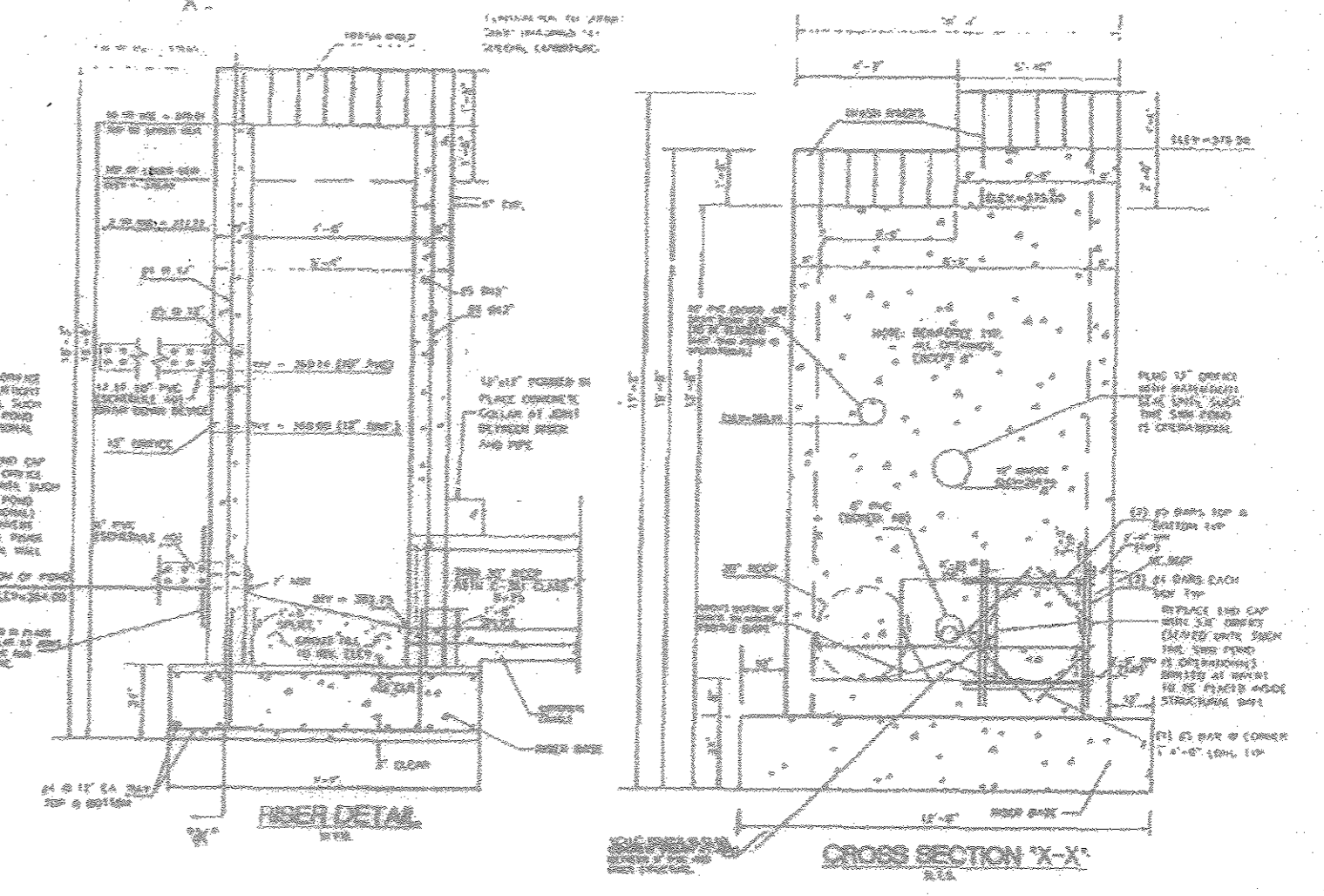
- Min. basin surface area: SA ≥ 0.0035 x Q<sub>2</sub> = 0.0035 x 112 cfs = 0.387 ac.

Draw-down Device

- Draw-down device orifice diameter = 10" (From Table 11)
- A = Total area of perforations = 4.0
- A<sub>1</sub> = (if of perforations/drawdown device area) (30' diameter section length) L<sub>1</sub> = 2.20 ft
- A<sub>2</sub> = Internal orifice area (from Table 11) = 0.55 ft<sup>2</sup>



- SEQUENCE OF CONSTRUCTION
- PHASE IV
- Obtain Grading Permit.
  - Continue Erosion and Sediment Control Measures from the Mass Grading Plans SDP-96-01, Phase III.
  - Stabilize all slopes according to the "seeding on slopes" section of the landscape plan, sheet 7. (2 Days)
  - Complete fine grading of the parking areas to an elevation which will accommodate pavement sections at proposed elevations as shown on the site plan (1 week).
  - Construct curb and gutter (2 weeks).
  - Once the curb and gutter is in place, remove the silt fence that is shown at the top of the fill slopes and the diversion dike near the stormwater management pond (1 day).
  - Remove on-site inlet protection and begin construction of the pavement sections in the parking lot (2 weeks).
  - Once the entire site has been stabilized, and approval is received from the inspector, convert the temporary sediment basin into a stormwater management facility by constructing the forebay, sealing the 16" draw down device and removing the water-tight seals at the 3 inch orifice and 12 inch orifice (1 week).
  - Remove the super silt fence at the toe of 2:1 slope once the reforestation planting has been completed.
- \* Note other plans which utilize the sediment basin must be stabilized before removal of basin.



THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved: *[Signature]* Date: 2-18-11  
 Howard S.C.D.

OWNER & DEVELOPER  
 WALMART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

NO	DATE	DESCRIPTION	BY
1	07/25/11	BUILDING EXPANSION & PARKING MODIFICATION	JDT

SUBDIVISION "ELLICOTT CITY WAL-MART"  
 ELECTION DISTRICT NO. 2  
 TAX MAP 17 & 24  
 REZONING CASE NUMBER ZB-941  
 SKETCH PLAN S-95-01  
 PRELIMINARY PLAN P-95-21  
 SCALE 1"=50'  
 WATER NO. FO3  
 PARCEL "B"

HOWARD COUNTY, MARYLAND  
 P/O PARCEL 848  
 DATED: OCTOBER 18, 1993  
 APPROVED: 12-2-1994  
 APPROVED: 6-5-95  
 DATE: SEPTEMBER 6, 1995  
 SEWER NOS. 1452800

SEE SHEETS 15 AND 16 FOR REVISED NEW EROSION & SEDIMENT CONTROL NOTES & DETAILS

8-29-95 JDC KJM TMP TSV  
 DATE PRN FMI DES DRW

WAL-MART STORES, INC.  
 ELLICOTT CITY, WAL-MART, PARCEL B

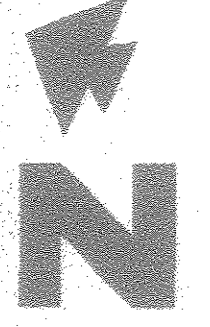
ENGINEERING ASSOCIATES, INC.  
 ENGINEERS PLANNERS SURVEYORS

9175 Guilford Road, Suite 306 (301) 490-4145 JOB NO: 9146  
 Columbia, MD 21046 FAX (301) 490-4148 DPC NAME: 9146SDT

ELLICOTT CITY WAL-MART  
 EROSION AND SEDIMENT DETAILS

DATE: 8-29-94 SHEET NO: 8 of 32

NO ABOUT INFO 4513 SDP-96-11



SCALE IN FEET  
1" = 30'

WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL "D"  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP 95-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

NORTH RIDGE ROAD (BY OTHERS)  
NORTH RIDGE ROAD (PUBLIC) (BY OTHERS)

Added Parking on East End of Parking Lot. Expanded Fenced Garden Center Area and relocated associated Access Road & Curb Islands. Added one Willow Oak and relocated 5 Existing Willow Oaks. For Mod. Locations 9/6/02 APD Engineering



**SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES	614
NUMBER OF TREES REQUIRED (1:50)	31
NUMBER OF TREES PROVIDED	31
SHADE TREES	NONE
OTHER TREES (2:1 SUBST.)	31
NO. OF LANDSCAPE ISLANDS REQ. (31 PROVIDED)	31 (200 FT <sup>2</sup> /ISLAND)

**SCHEDULE A - PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PROPOSED NORTH RIDGE ROAD TYPE 2 BUFFER	ADJACENT TO U.S. ROUTE 29 TYPE 2 BUFFER	BETWEEN LOADING DOCK AND U.S. ROUTE 29 TYPE 2 BUFFER
LINEAR FEET OF PRIMARY FRONTAGE PERIMETER	801.12'	984.57'	130'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO
NUMBER OF PLANTS REQUIRED	21	25	12
SHADE TREES	NONE	NONE	NONE
OTHER TREES (2:1 SUBST.)	21	25	12
NUMBER OF PLANTS PROVIDED	18	37	2
SHADE TREES (2:1 SUBST.)	18	15	0
OTHER TREES (2:1 SUBST.)	0	22	2
NO. OF PLANTS PROVIDED	50	51	NONE

**PLANT LIST**

SYMBOL	QTY.	COMMON NAME	BOTANICAL NAME	ROOT SIZE	REMARKS
OP	14	WILLOW OAK	Quercus Phellos	8-10" CAL.	BRANCHED AT NO LESS THAN 8 FT.
OR	14	RED OAK	Quercus rubra	8-10" CAL.	
AR	24	RED MAPLE	Acer rubrum	8-10" CAL.	
AS	7	SUGAR MAPLE	Acer Saccharum	8-10" CAL.	
OK	2	KOUSA DOGWOOD	Cornus Kousa	8-10" 5-8 FT.	
PS	22	SPREADING WHITE PINE	Pinus Strobus	8-10" 5-8 FT.	
CS	5	DEODAR CEDAR	Cedrus deodora	8-10" 5-8 FT.	
TD	25	SPREADING ENGLISH YEW	Taxus canadensis 'repens'	CONT. 3 GAL.	4'-0" O.C.
VC	10	KORONAVIS/SLY VIBURNUM	Viburnum acerifolium	CONT. 3 GAL.	4'-0" O.C.
JL	20	BAR HARBOR JUNIPER	Juniperus barzantei 'Bar Harbor'	CONT. 3 GAL.	3'-0" O.C.
CS	30	DOUGLASS' GYMNOCEDRUS	Juniperus horizontalis	CONT. 3 GAL.	3'-0" O.C.

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: [Signature] DATE: 5/31/06

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: [Signature] DATE: 6/6/06

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division DATE: 1/11/02

Chief, Division of Land Development DATE: 1/12/02

Director DATE: 1/18/02

NO.	DATE	DESCRIPTION	BY
7	12/14/11	COMPACTOR REMOVAL & PARKING MOD.	JDT
6	07/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	5/1/02	REV. PER H.C. Redline Comments	SAC
4	4-17-96	REVISED PER H. C. REDLINE COMMENTS	SLJ/ACL
3	2-13-96	CHANGED PER P.E. REVIEW	MAM
2	1-28-96	PRINTED FOR DESIGN CIVILS	MAM
1	1-17-96	REVISED SITE LAYOUT	MAM

THIS SHEET IS FOR LANDSCAPE PURPOSES ONLY!!

**LEGEND**

EXISTING

- RCF REINFORCED CONCRETE PIPE
- CURB-INLET
- FENCE-LINE
- EXISTING TREE LINE
- EXISTING STREET LIGHT

PROPOSED

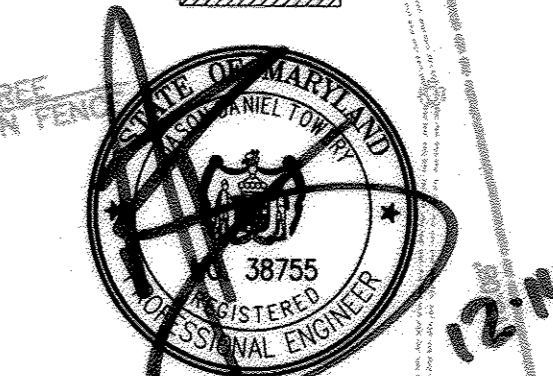
- LIGHT POLE
- KENTUCKY BLUEGRASS SEED
- CROWN VETCH SEED
- SEE REFORESTATION PLAN FOR SEEDING

**LEGEND**

TREES TO BE REPLACED

**GENERAL LANDSCAPE NOTES**

- LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS.
- NOTIFY LANDSCAPE ARCHITECT ON CLIENT REPRESENTATIVE OF ANY LAND USE DISCREPANCIES.
- SUBSIDED HARDWOOD BARK MULCH SHALL BE USED AS A FOUR INCH (4") TOP DRESSING IN ALL PLANTING AREAS AND SHALL BE APPLIED AS AN AS-NEEDS BASIS TO THE EXTERIOR EDGE OF THE SANDER OR LANDSCAPE ISLAND (SEE PLANTING DETAILS).
- ALL TREES SHALL BE STAKED (SEE PLANTING DETAILS).
- ALL EXTERIOR GROUND WITHIN THE LIMITS OF THE CONTRACT, EXCEPT SUBSIDED HARDWOOD BARK MULCH, SHALL BE COVERED WITH MULCH AND SECURED IN PLACE BY A SOIL ANCHOR. STEEL EDGE SHALL BE 1/2" X 4" STEEL EDGING WITH CLIPS AND HOLES SPACED 12" ON CENTER.
- FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH GARDENOTE 14-14-14 TIME RELEASE FERTILIZER.
- NEED MAT SHALL BE USED UNDER ALL PLANTING AREAS NOT TO BE COVERED, OR AS DIRECTED ON THE DRAWINGS. THE MAT SHALL BE COVERED WITH MULCH AND SECURED IN PLACE BY A SOIL ANCHOR.
- STEEL EDGE SHALL BE 1/2" X 4" STEEL EDGING WITH CLIPS AND HOLES SPACED 12" ON CENTER.
- FERTILIZE ALL PLANTS AT THE TIME OF PLANTING WITH GARDENOTE 14-14-14 TIME RELEASE FERTILIZER.
- CONSULT THE PLANT LIST ON THIS DRAWING FOR TYPE, SIZE, VARIETY, AND SPACING OF PLANT MATERIAL.
- PROVIDER LANDSCAPING PLAN IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL PAGE 12 PARAGRAPHS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE "MAYNARD STANDARD SITE WORK SPECIFICATIONS".
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE COVERED WITH MULCH AND FOUR-INCHES OF TOPSOIL APPLIED. IF NECESSARY, TOPSOIL IS NOT AVAILABLE, CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE SOIL SHALL THEN BE SPREAD, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL ROOTS ARE ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO THE COMMENCEMENT OF THE PROJECT SHALL BE COVERED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 15-124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURVEY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$13,000.00.



Bowman Consulting Group  
TRASH COMPACTOR  
REMOVAL AND PARKING  
MODIFICATIONS ONLY.



Bowman Consulting Group  
BUILDING EXPANSION AND  
PARKING MODIFICATIONS  
ONLY.

**NOTES**

- TOTAL 38 TREES ARE BEING IMPACTED BY THE PROPOSED EXPANSION AND ARE BEING REPLACED IN KIND. SEE SHEET 21 FOR LANDSCAPE DETAILS AND PLANTING SCHEDULE.
- SEE SHEETS 23-25 FOR BIO-RETENTION PLANTING PLAN AND SCHEDULE.

**OWNER & DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**CONTRACT PURCHASER**  
(SUBSECTOR)  
WALMART STORE #2412  
1200 YORK ROAD FORTHOUE  
ELLCOTT CITY, MD 21043  
(410) 652-9400

ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-023

2B-941, F-96-91, F-96-01	SDP-96-01
S-95-01, F-95-21	F-96-09

**WAL-MART STORE #2412  
ELLCOTT CITY, WAL-MART, PARCEL B**

**ENGINEERING ASSOCIATES, INC.**

ENGINEERS PLANNERS SURVEYORS

9175 Outburst Road, Suite 308 (301) 490-4145 428 N.W. 91st St. Columbia, MD 21046 FAX (301) 490-4149 410 N.W. 91st St. Ellicott City, MD 21043 (410) 466-2522

DATE: 05-29-06 SHEET NO.: 7 of 32

SDP-96-11

THIS SHEET WILL SUPERSEDE SHEET NUMBER 7 DATED 11/7/98 APPROVED BY HOWARD COUNTY.

SUBDIVISION "ELLCOTT CITY WAL-MART"

ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE: 1"=60'  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
DATE: 6-6-95  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800



SCALE IN FEET  
1" = 50'

WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY"  
PARCEL "D"  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP 96-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

PART OF  
LEONORA K. HOENES  
LIBER 1197 FOLIO 304  
ZONED RA-15

NORTH RIDGE ROAD (BY OTHERS)  
NORTH RIDGE ROAD (PUBLIC)  
NORTH RIDGE ROAD (BY OTHERS)

WILDER BUILDING CORP.  
T.M. 17 PARCEL 711  
"HOENES PROPERTY PARCEL D"  
PLAT NO. 9419  
ZONED RA-15

Add Parking at East End of Parking lot. Expanded Garden Center fenced area, relocated curb islands, access drive and light pole.



For Modification Only  
9/10/02  
APD Engineering

BULK PARCEL "D"

WAL-MART  
C-152E-SGL-NO  
151,567 S.F.  
411.00 F.F.E.

NEW SITE LIGHTING ENTRY

PROVIDE 3" PVC CONDUIT W/ PULLWIRE BELOW GRADE FOR POLE MOUNTED SECURITY CAMERAS

NOTE: THE LIGHTING ON THIS SITE WILL BE DIRECTED AWAY FROM THE ROADWAY IN ACCORDANCE WITH SECTION 133 C.F.1 OF THE ZONING ORDINANCE.

NOTE: WALLPACK LIGHTING TO BE LOCATED ON THE REAR OF THE BUILDING. LOCATION TO BE SPECIFIED ON THE ARCHITECTURAL DRAWINGS.

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30-DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER  
DATE

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

REGISTERED PROFESSIONAL ENGINEER  
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division  
Chief, Division of Land Development  
Director

NO.	DATE	DESCRIPTION	BY
6	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	5/1/02	Rev Per H.C. Redline Comments	SLJ
4	4-17-96	REVISED PER H. C. REDLINE COMMENTS	SLJ/ACL
3	2-13-96	CHANGED PER PEER REVIEW	MAM
2	1-25-96	PRINTED FOR DESIGN CIVLS	MAM
1	1-17-96	REVISED SITE LAYOUT	MAM

NO.	DATE	DESCRIPTION	BY
7	12/14/11	COMPACTOR REMOVAL & PARKING MOD.	JDT

THIS SHEET WILL SUPERSEDE SHEET NUMBER 9 (DATED 11/7/05) APPROVED BY HOWARD COUNTY.

SUBDIVISION "ELICOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800

HOWARD COUNTY, MARYLAND  
P/O PARCEL 848  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 6-6-95  
DATE: OCTOBER 3, 1995  
SEWER NOS. 1452800

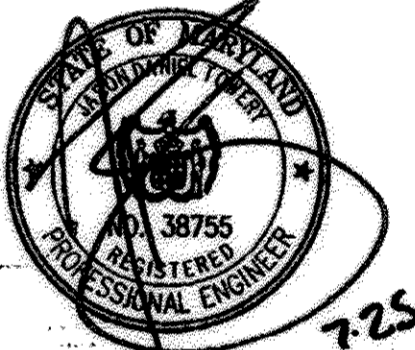
LEGEND

EXISTING	
RCP	REINFORCED CONCRETE PIPE
C	CURB INLET
X	FENCE-LINE
○	EXISTING TREE LINE
○	EXISTING STREET LIGHT

- NOTES
- 13A TYPICAL LIGHTING POLE FOUNDATION AND FIXTURE WITH SUBSEQUENT ELECTRICAL CONNECTIONS (SEE DETAIL SHEET FOR LIGHT FIXTURE DIMENSIONS)
  - 14A CONNECT TO ELECTRICAL JUNCTION BOX
  - 14B NIGHT SECURITY CIRCUIT
  - 14E INSTALL 120V LINE IN CONDUIT TO POLE FOR OUTLET.
- NEW LIGHT POLE / FIXTURE
- CAM POLE MOUNTED SECURITY CAMERA
- X REMOVE EXISTING LIGHT POLE



Bowman Consulting Group  
TRASH COMPACTOR  
REMOVAL AND PARKING  
MODIFICATIONS ONLY.



Bowman Consulting Group  
BUILDING EXPANSION AND  
PARKING MODIFICATIONS  
ONLY.

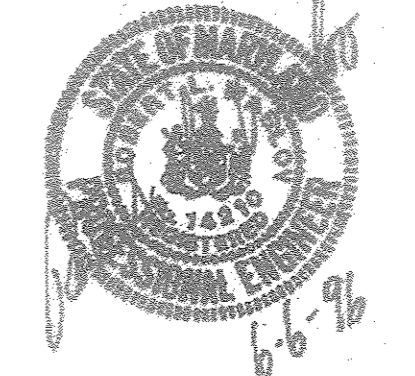
OWNER & DEVELOPER  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-023

INITIAL DESIGN	DATE	PRN	PLM	TMP	MAM

WAL-MART STORE #2412  
ELICOTT CITY, WAL-MART, PARCEL B  
ENGINEERING ASSOCIATES, INC.

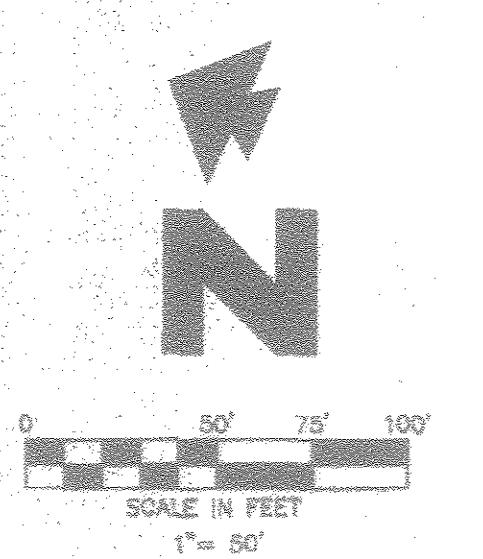
9175 Guilford Road, Suite 308  
Columbia, MD 21046  
FAX (301) 490-4149  
JOB NO.: 9146.0  
DWG NAME: 9146



NO PROJECT INFO 6-5-13

SDP-96-11





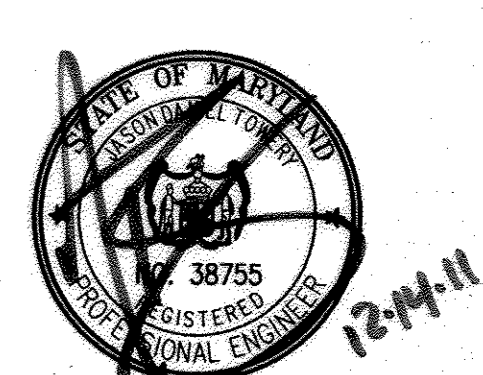
WILDER BUILDING  
T.M. 17 PARCEL 711  
"HOENES PROPERTY  
PARCEL D"  
ZONED RA-15

ALL EROSION AND SEDIMENT CONTROLS FOR THE MASS GRADING AND THE CONSTRUCTION OF THE SEDIMENT BASIN IS PART OF SDP 96-01 AND WILL BE EXISTING PRIOR TO THE START OF THIS CONSTRUCTION PLAN. THE USE OF THE SEDIMENT BASIN MUST CONTINUE UNTIL APPROVAL IS GRANTED BY THE EROSION AND SEDIMENT INSPECTOR FOR CONVERSION TO A STORM WATER MANAGEMENT POND.

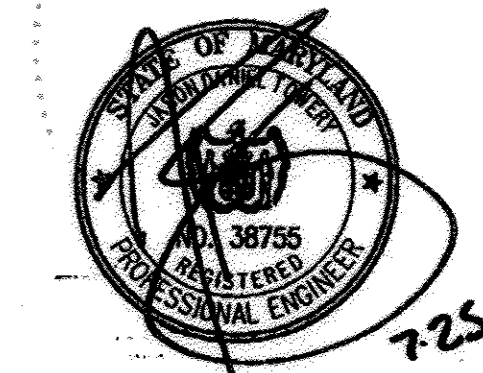
PART OF  
LEONORA K. HOENES  
LIBER 1197 FOLIO 204  
ZONED RA-15

LEGEND

EXISTING	
RCP	REINFORCED CONCRETE PIPE
C	CURB INLET
-	FENCE-LINE
○	EXISTING TREE LINE
○	EXISTING STREET LIGHT



**Bowman Consulting Group**  
**TRASH COMPACTOR**  
**REMOVAL AND PARKING**  
**MODIFICATIONS ONLY.**



**Bowman Consulting Group**  
**BUILDING EXPANSION AND**  
**PARKING MODIFICATIONS**  
**ONLY.**

WILDER BUILDING CORP.  
T.M. 17 PARCEL 711  
"HOENES PROPERTY PARCEL D"  
PLAT NO. 9418  
ZONED RA-15

Add Parking on East end  
of Parking Lot. Expanded  
Garden Center Fenced Area  
and Relocated Access Road  
and Curb along Front.



For Modification Only  
9/6/02  
APD Engineering  
SOILS TABLE

MAP SYMBOL	SOIL NAME	SLOPE	EROSION POTENTIAL
BA	BAILE SILT LOAM	—	—
BFC3	BRANDYWINE LOAM	8 TO 15 PERCENT	SEVERELY ERODED
BrC2	BRANDYWINE LOAM	15 TO 25 PERCENT	MODERATELY ERODED
BrD3	BRANDYWINE LOAM	15 TO 25 PERCENT	SEVERELY ERODED
GIB2	GLENELG LOAM	3 TO 8 PERCENT	MODERATELY ERODED
GIC2	GLENELG LOAM	8 TO 15 PERCENT	MODERATELY ERODED
GIB2	GLENVILLE SILT LOAM	3 TO 8 PERCENT	MODERATELY ERODED
MID3	MANOR LOAM	15 TO 25 PERCENT	SEVERELY ERODED
ME	MANOR LOAM	25 TO 45 PERCENT	—

**BRANDYWINE**  
PIPELINES, MORE THAN 7' TO GNEISS BEDROCK.  
ROAD AND HIGHWAY LOCATION, FAIR SUBSOIL STABILITY; GOOD SUBSTRATUM STABILITY.  
POND AND RESERVOIR SITES, RAPID TO EXCESSIVE SEEPAGE; MORE THAN 7' TO BEDROCK.  
GLENELG  
PIPELINES, 4' TO MORE THAN 10' TO SCHIST BEDROCK.  
ROAD AND HIGHWAY LOCATION, FAIR SUBSOIL STABILITY; GOOD SUBSTRATUM STABILITY; MODERATE SUSCEPTIBILITY TO FROST ACTION.  
ELASTIC.

**GLENVILLE**  
PIPELINES, SEASONAL HIGH WATER TABLE; 4' TO 10' TO MICA SCHIST BEDROCK.  
ROAD AND HIGHWAY LOCATION, SEASONAL HIGH WATER TABLE, FAIR STABILITY; MODERATE SUSCEPTIBILITY TO FROST ACTION.  
POND AND RESERVOIR SITES, MODERATE SUBSOIL SEEPAGE; SLOW SUBSTRATUM SEEPAGE; 4' TO 10' TO BEDROCK.

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

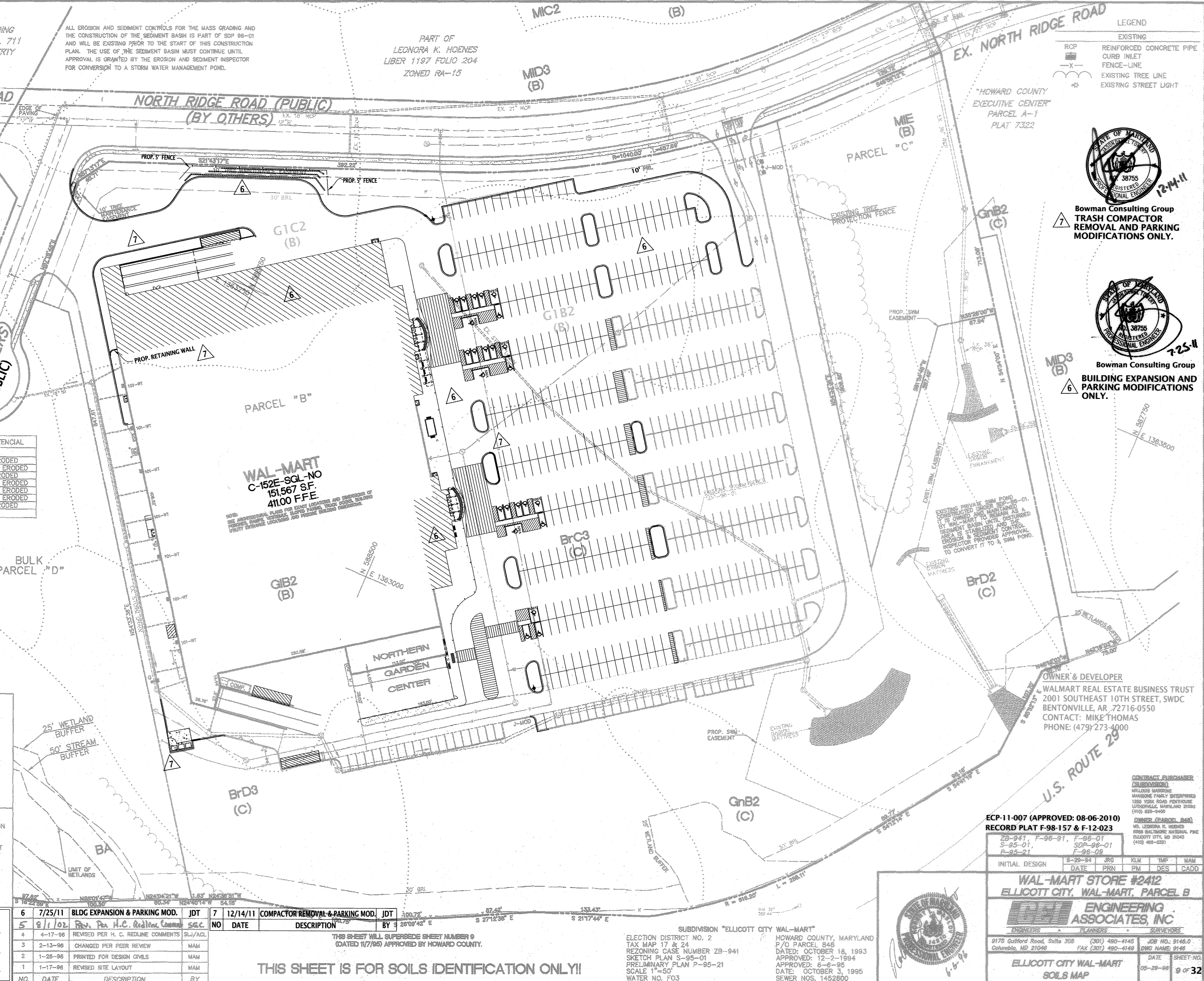
Signature of Developer: *Chad E. ...* DATE: 6/6/06

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature of Engineer: *Chad E. ...* DATE: 6/6/06

APPROVED: DEPARTMENT OF PLANNING AND ZONING

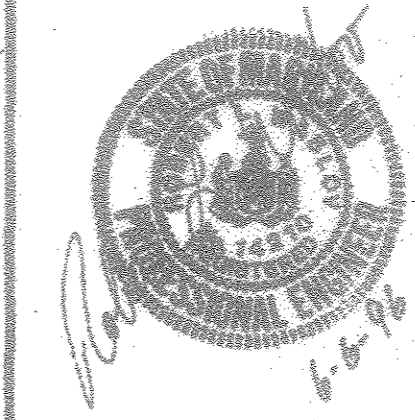
Chad E. ...	1-11-12
Chief, Development Engineering Division	DATE
Kurt She ...	1/18/12
Chief, Division of Land Development	DATE
Thomas J. ...	1/18/12
Director	DATE



NO.	DATE	DESCRIPTION	BY
6	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	8/1/02	REV. PER H.C. REDLINE COMMENTS	SGC
4	4-17-98	CHANGED PER H.C. REDLINE COMMENTS	SLJ/ACL
3	2-13-98	CHANGED PER PEER REVIEW	MAM
2	1-26-98	PRINTED FOR DESIGN CIVILS	MAM
1	1-17-98	REVISED SITE LAYOUT	MAM

THIS SHEET IS FOR SOILS IDENTIFICATION ONLY!!

SUBDIVISION "ELLCOTT CITY WAL-MART"  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SCALE: 1"=50'  
WATER NO. F03



ECP-11-007 (APPROVED: 08-06-2010)  
RECORD PLAT F-98-157 & F-12-023

2B-941, F-96-91, F-96-01	OWNER (PARCEL B48)
S-95-01, SDP-96-01	MS. LEONORA K. HOENES
F-95-21, F-96-09	888 BALTIMORE NATIONAL PARK
	ELLCOTT CITY, MD 21043
	(410) 488-2321

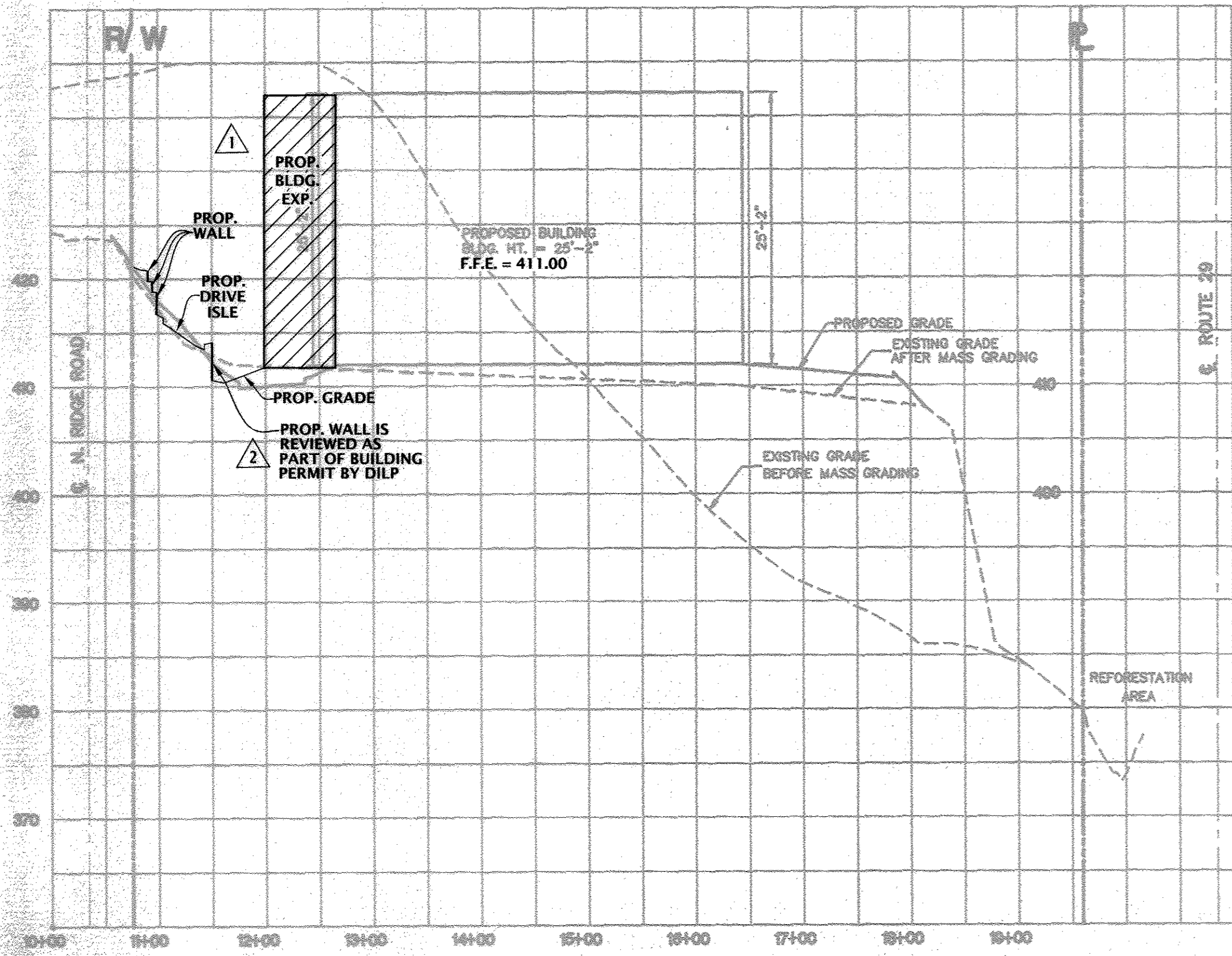
INITIAL DESIGN: [Grid of initials]

**WAL-MART STORE #2412**  
**ELLCOTT CITY, WAL-MART, PARCEL B**

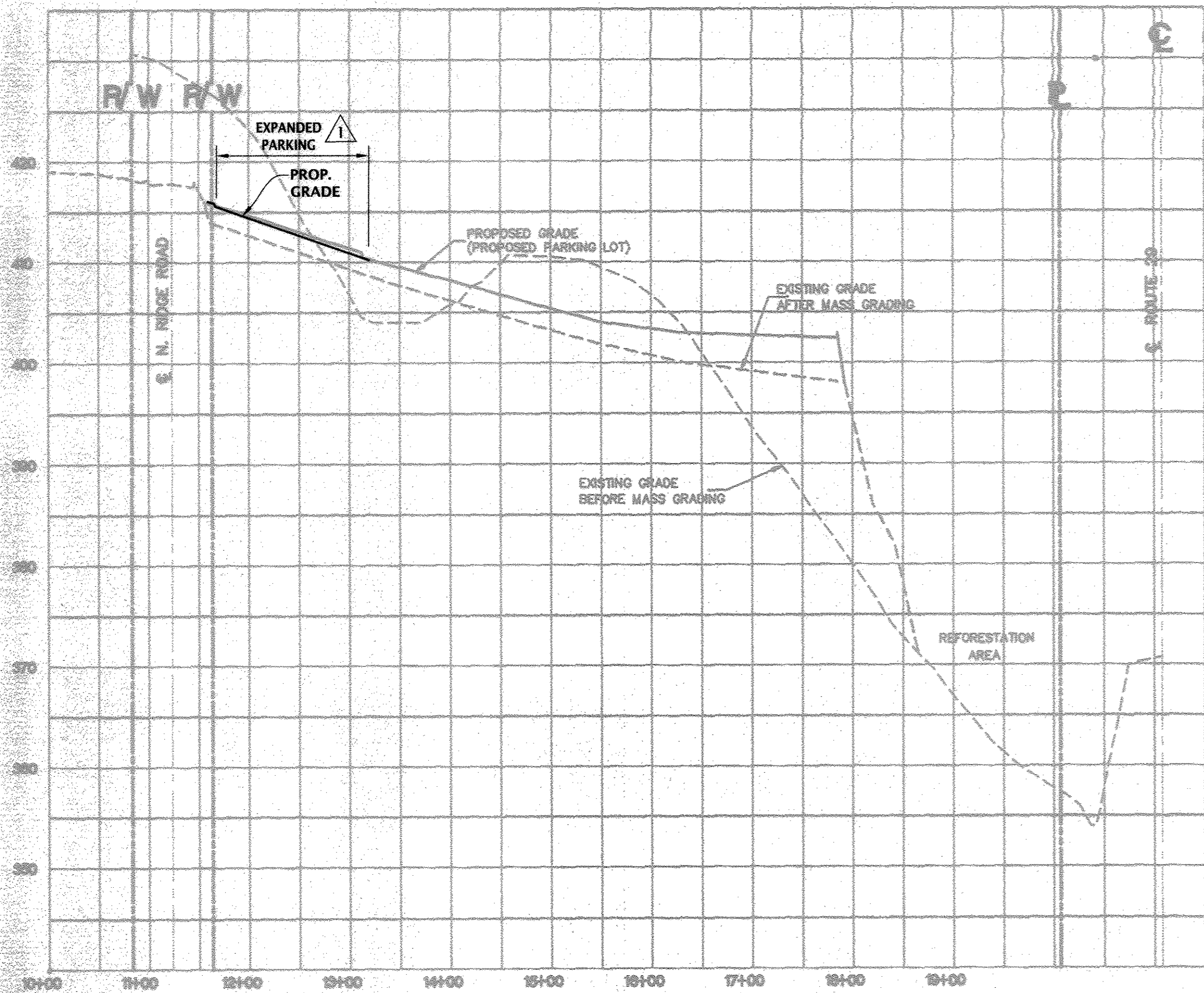
**ENGINEERING ASSOCIATES, INC.**  
ENGINEERS PLANNERS SURVEYORS

9178 Guilford Road, Suite 308 Columbia, MD 21046 (301) 490-6145 FAX (301) 490-6149 JOB NO.: 9148.0 DWG NAME: 9146

DATE: 05-29-98 SHEET NO.: 9 OF 32



CROSS SECTION 1-1  
SCALE: 1"=100' HORIZ.  
1"=10' VERT.

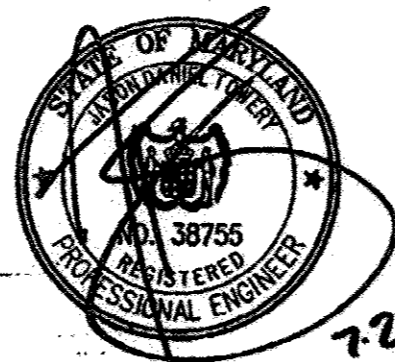


CROSS SECTION 2-2  
SCALE: 1"=100' HORIZ.  
1"=10' VERT.

NO	DATE	DESCRIPTION	BY
2	12/14/11	TRASH COMPACTOR, REMOVAL & PARKING MODIFICATION	JDJ
1	07/25/11	BUILDING EXPANSION & PARKING MODIFICATION	JDJ



2  
Bowman Consulting Group  
TRASH COMPACTOR  
REMOVAL AND PARKING  
MODIFICATIONS ONLY.

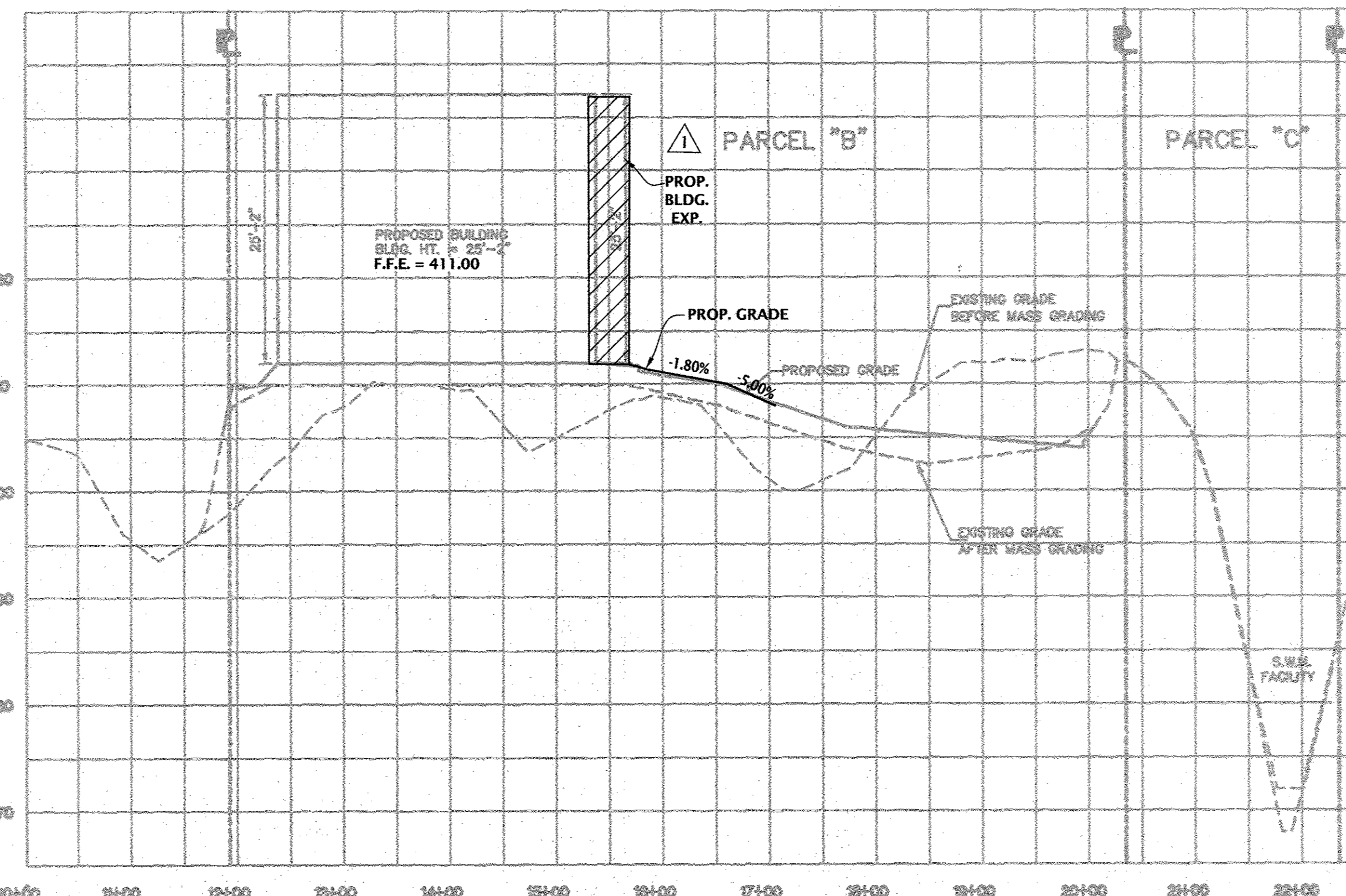


1  
Bowman Consulting Group  
BUILDING EXPANSION AND  
PARKING MODIFICATIONS  
ONLY.

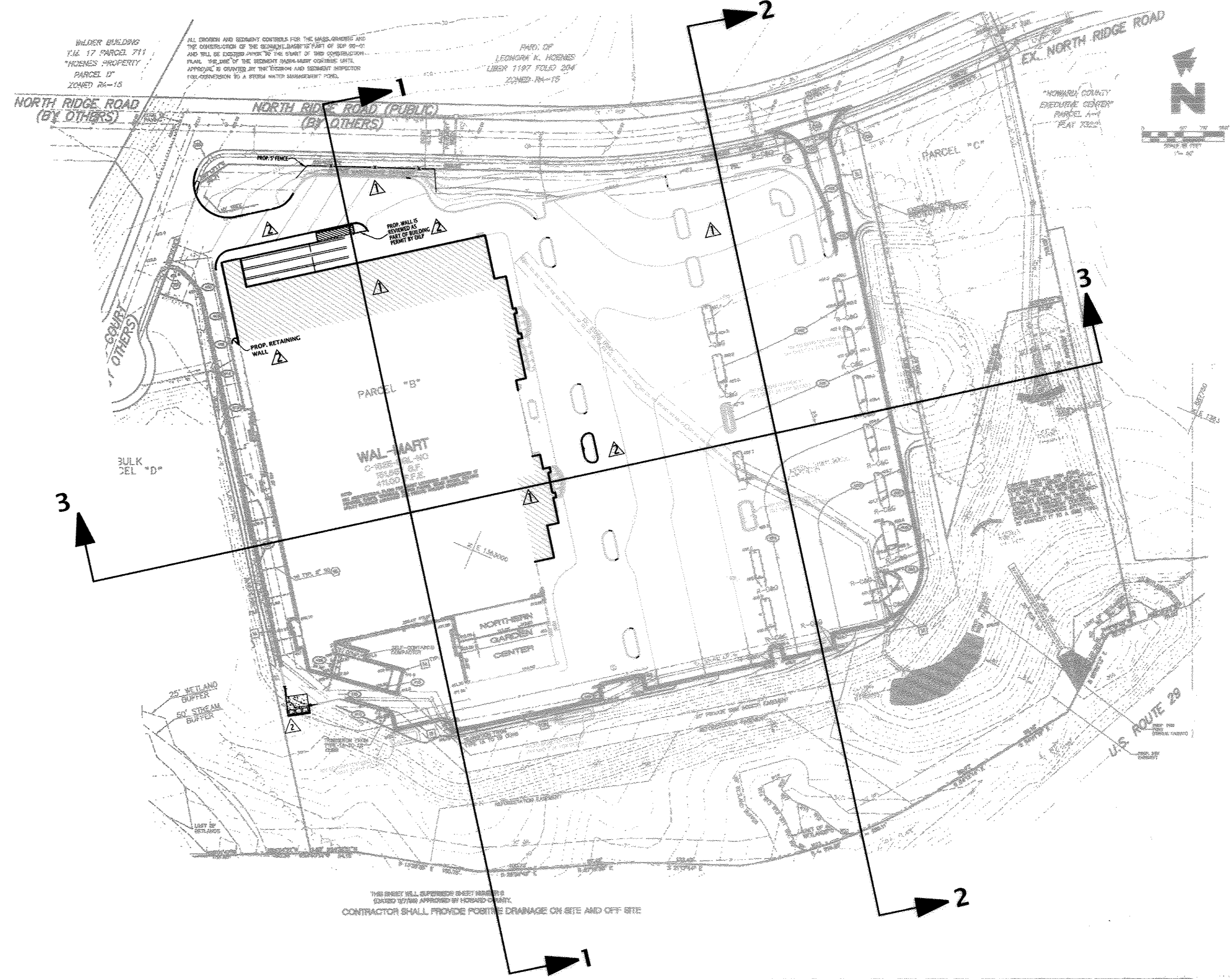
**SUBDIVISION 'ELLICOTT CITY WALMART'**

ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
TAX MAP 17 & 24 P/O TM PARCEL 1085  
REZONING CASE NUMBER ZB-941 DATED: OCTOBER 18, 1993  
SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
PRELIMINARY PLAN P-95-21 APPROVED: 06-06-1995  
SITE PLAN SDP-96-11 APPROVED: 06-21-1996  
MASS GRADING PLAN SDP-96-001 APPROVED: 04-03-1996  
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01 APPROVED: 11-08-1995  
ECP 11-007 APPROVED: 08-06-2010  
FINAL RECORD PLATS F-96-009, F-96-091 & F-98-157  
WATER NO. F03 SEWER NOS. 1452800

OWNER & DEVELOPER  
WALMART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000



CROSS SECTION 3-3  
SCALE: 1"=100' HORIZ.  
1"=10' VERT.



I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: [Signature] DATE: 6-6-96

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: [Signature] DATE: 6-6-96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: [Signature] DATE: 1/11/12  
 Chief, Division of Land Development: [Signature] DATE: 1/10/12  
 Director: [Signature] DATE: 1/10/12

28-941, F-96-01, F-96-01	8-28-94	JRS	KJM	TMP	MAM
3-95-01, SDP-96-01					
8-95-21, F-96-00					

INITIAL DESIGN DATE PRN PM DES CADD

**WAL-MART STORE #2412**  
**ELLICOTT CITY, WAL-MART, PARCEL B**

**ENGINEERING ASSOCIATES, INC.**

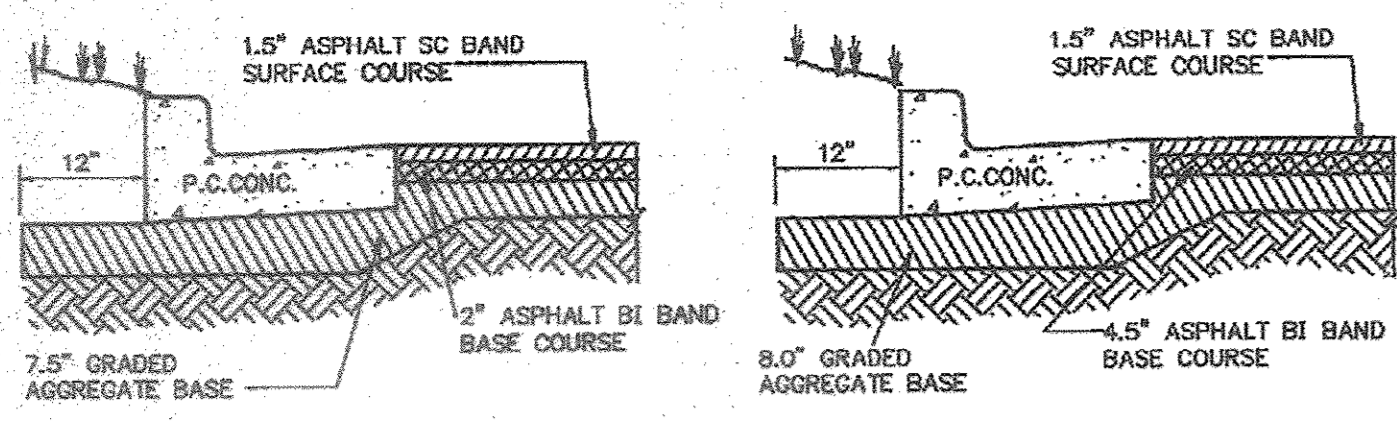
ENGINEERS PLANNERS SURVEYORS

8175 Gullford Road, Suite 306 (301) 480-4145 JOB NO.: 9146.0.306  
 Columbia, MD 21046 FAX (301) 480-4149 DWG NAME: 9146/SEC

ELLICOTT CITY WAL-MART SCHEMATIC PROFILE DATE: 08-29-98 SHEET NO: 10 OF 32

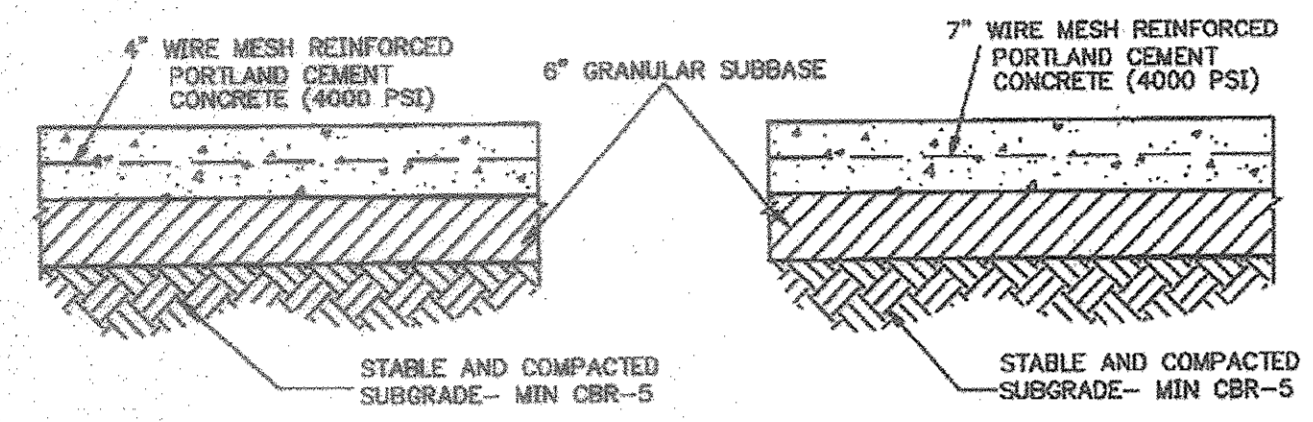
NO AS-BUILT INFO 6-5-13 SDP-96-011

ECP-11-007 (APPROVED: 08-06-2010)  
 RECORD PLAT F-98-157 & F-12-023



REGULAR DUTY PAVING [8A] HEAVY DUTY PAVING [8B]

STANDARD PAVING



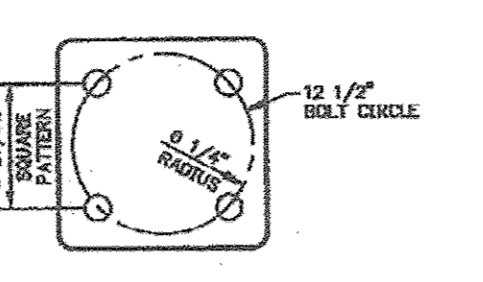
REGULAR DUTY CONCRETE PAVING [8C] HEAVY DUTY CONCRETE PAVING [8D]

OPTION TO STANDARD PAVING

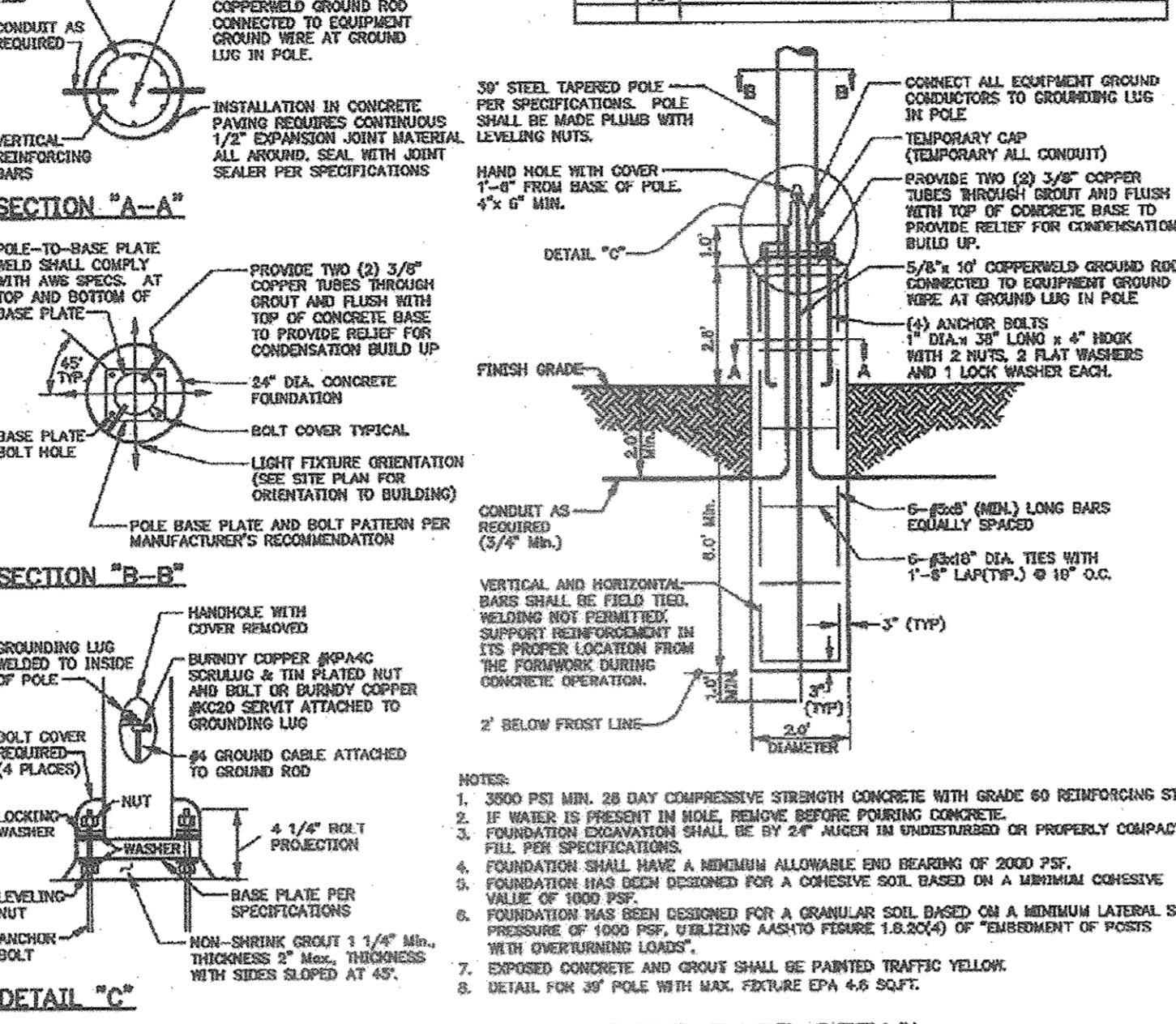
PAVING DETAILS

- FLEXIBLE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ASPHALT PAVEMENT DESIGN GUIDE FOR FLEXIBLE PAVEMENTS.
- ALL IMPORTED FILL MATERIAL IN PAVING AREA MUST BE CAPABLE OF PROVIDING A CBR VALUE OF 5.0 OR GREATER.
- UPPER 1" OF SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D-1557 STANDARD PRACTICE.
- SEE THE GEOTECHNICAL REPORT PREPARED BY EGS, LTD. FOR FULL SPECIFICATIONS.
- CONTRACTOR SHALL PLACE ASPHALT IN A DIRECTION PERPENDICULAR TO BUILDING FRONT.

**Cardco Lighting**  
 All Catalog Numbers shown are 480 Volt. Other voltages are available, please specify (120, 240, 208, 277).  
 Cardco Lighting Systems are protected by U.S. Patent #5746554

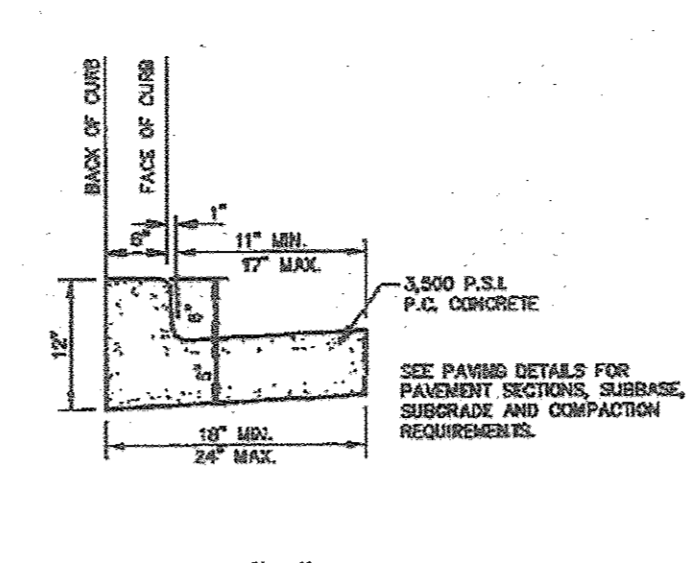


TYPICAL ANCHOR BOLT SPACING



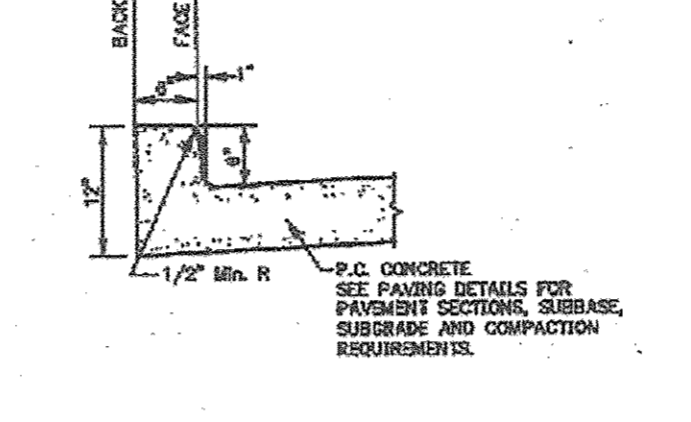
TYPICAL LIGHTING POLE BASE DETAIL [13A]

N.T.S. WAL-MART STORES 13A



TYPE "A" CONCRETE CURB AND GUTTER [14A]

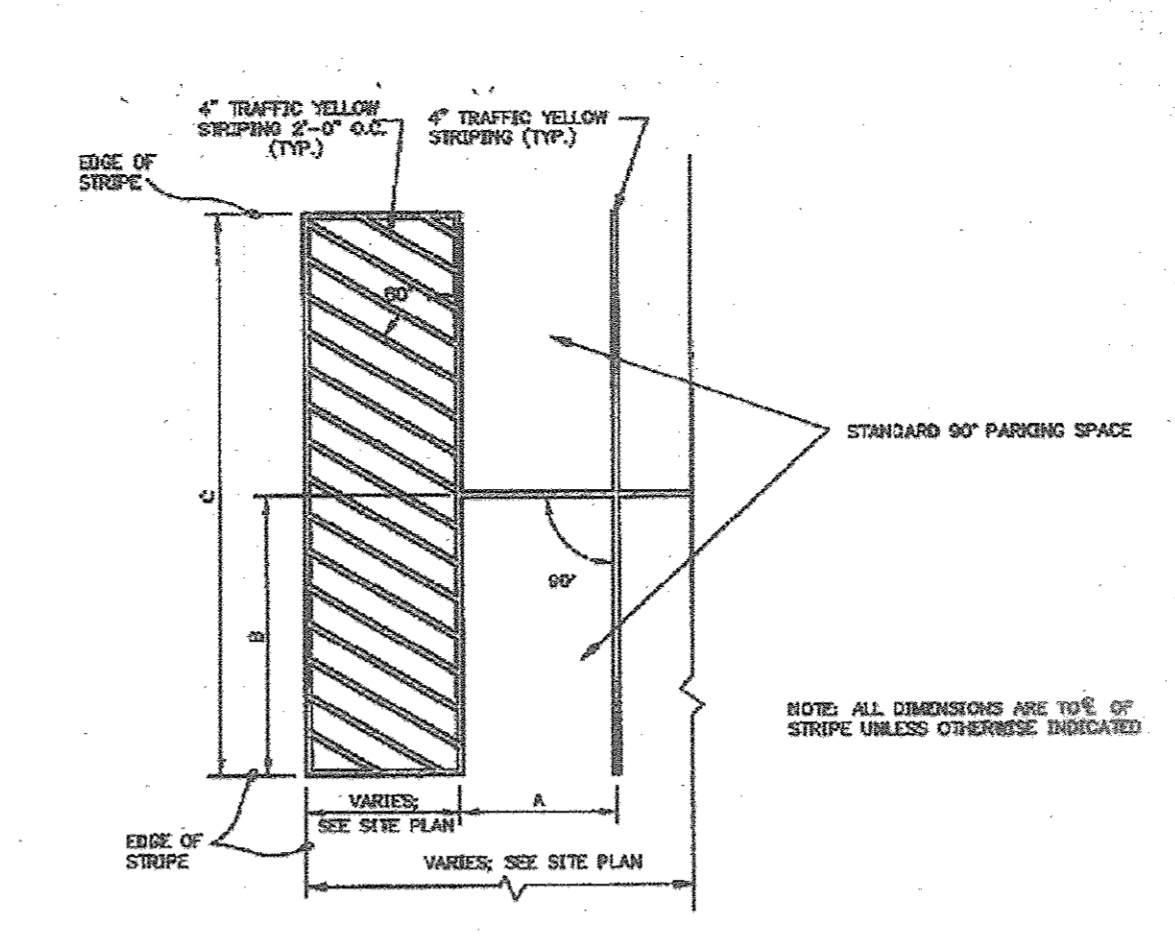
N.T.S. 06-16-95 SLK 14A



TYPE "B" INTEGRAL CURB AND GUTTER [14B]

N.T.S. 06-16-95 SLK 14B

**Bowman Consulting Group**  
**BUILDING EXPANSION AND PARKING MODIFICATIONS.**  
 SEE SHEETS 17 TO 21 FOR MODIFICATIONS DETAILS ONLY.

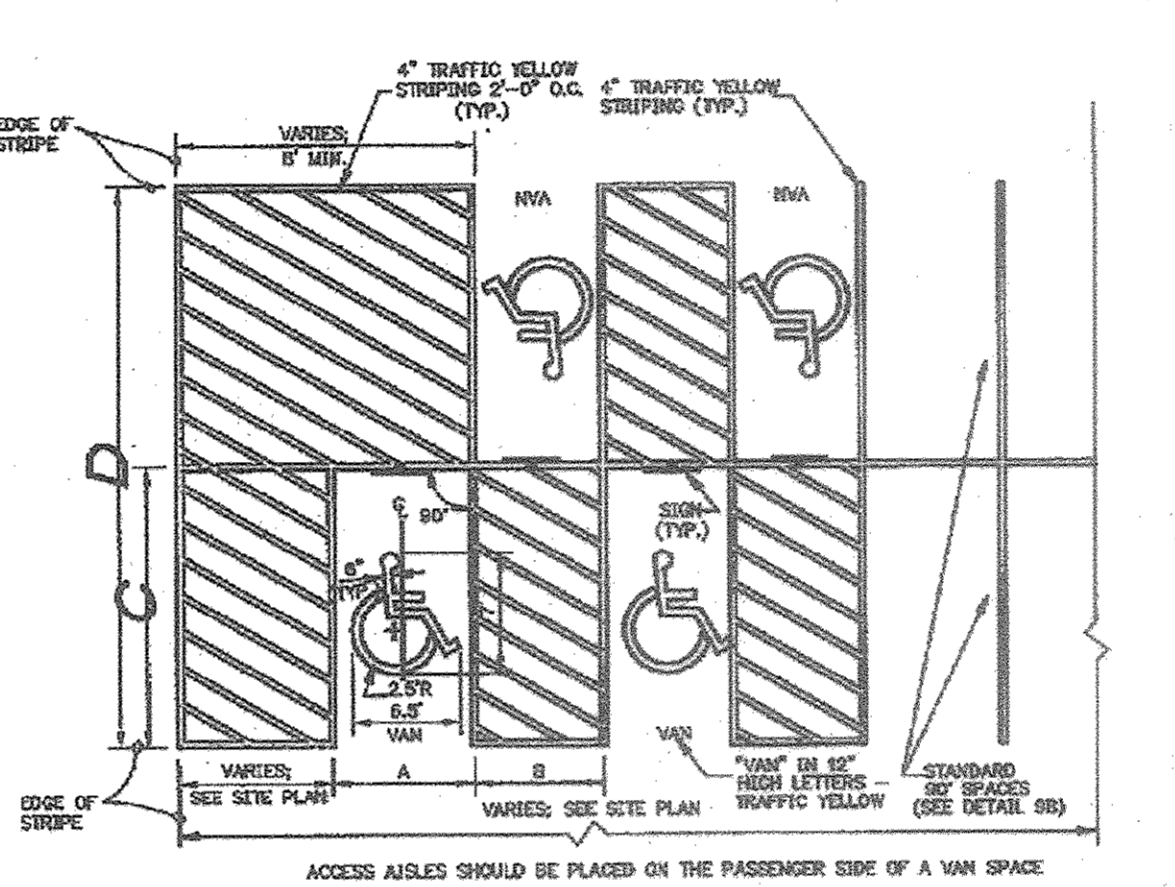


90° PARKING SPACE STRIPING [8E]

DIAMETER CHART

A	9"	9.5"	10"	9"	9.5"	10"	9"	9.5"	10"
B	16"	16"	16"	16"	16"	16"	16"	16"	16"
C	30"	30"	30"	30"	30"	30"	30"	30"	30"

90° ACCESSIBLE PARKING SPACE STRIPING [8F]

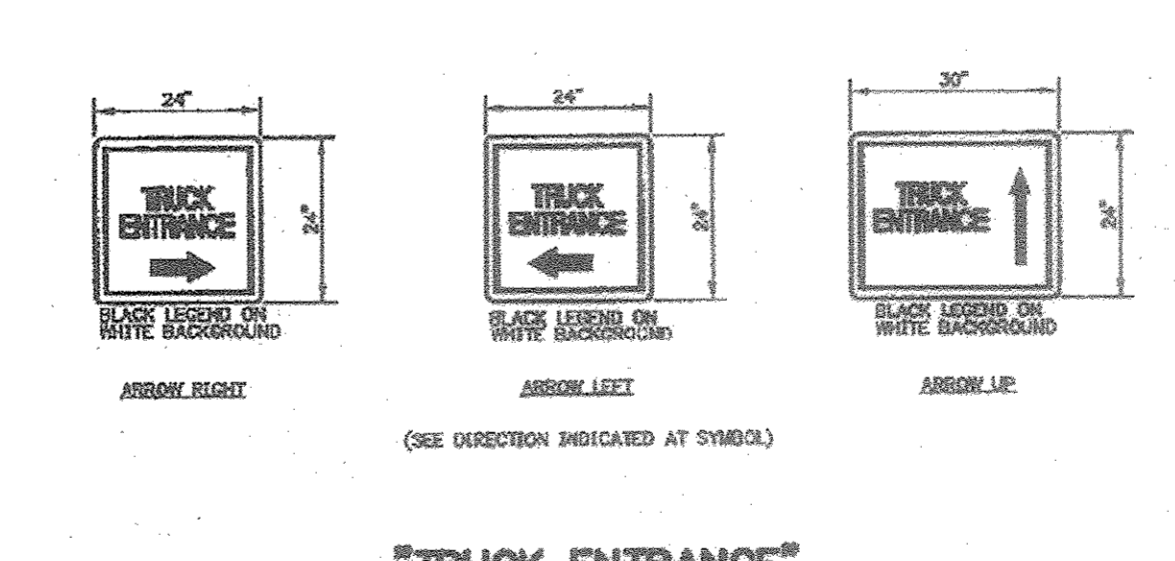


90° VAN ACCESSIBLE PARKING SPACE STRIPING [8G]

DIAMETER CHART

A	9"	9"	9"	9"
B	16"	16"	16"	16"
C	30"	30"	30"	30"

TRUCK ENTRANCE SIGN (W/ARROW) [11F]



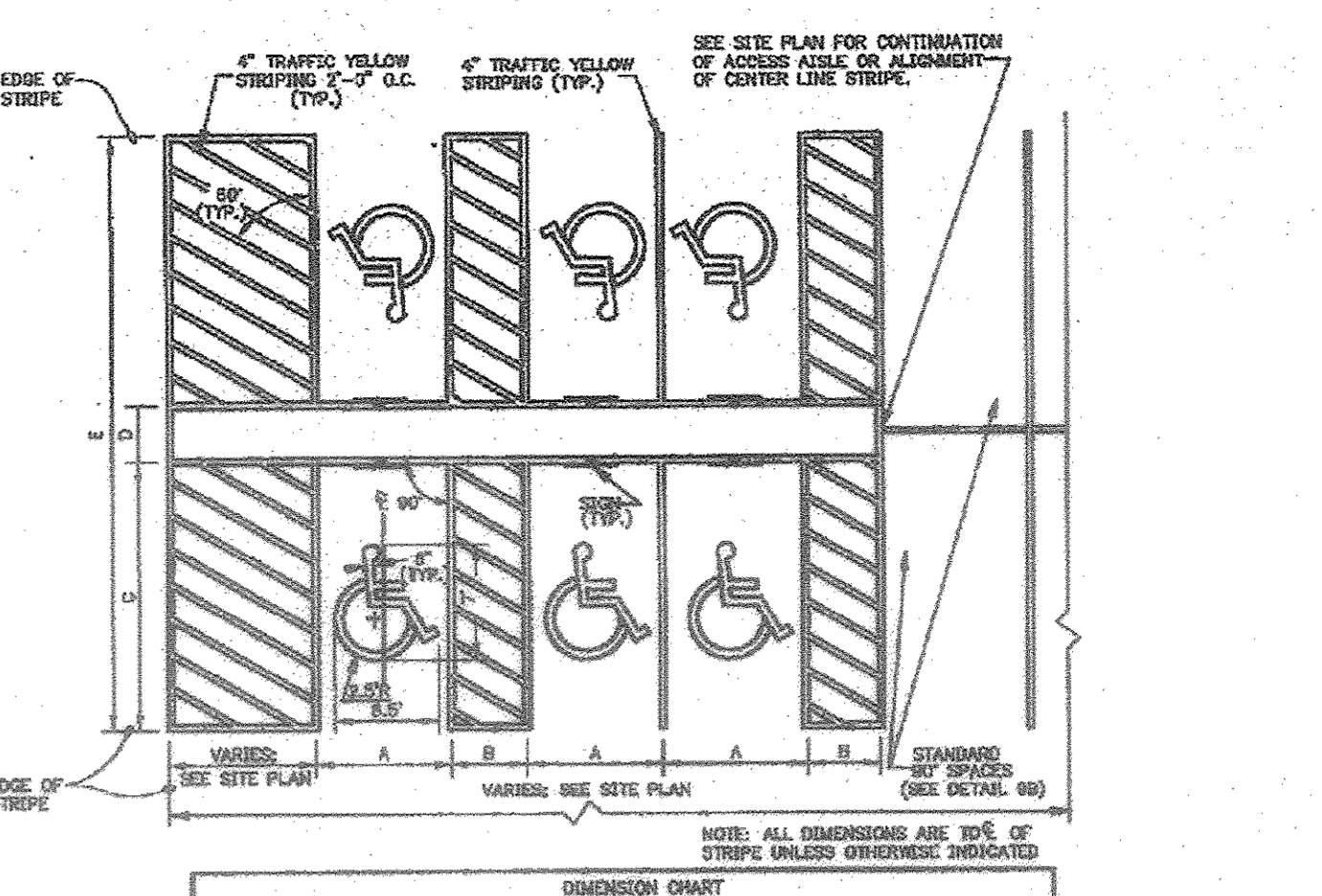
TRUCK ENTRANCE SIGN (W/ARROW) [11F]

SUBDIVISION "ELLCOTT CITY WAL-MART"  
 ELECTION DISTRICT NO. 2  
 TAX MAP 17 & 24  
 REZONING CASE NUMBER ZB-941  
 SKETCH PLAN S-95-01  
 PRELIMINARY PLAN P-95-21  
 SCALE 1"=50'  
 WATER NO. F03

HOWARD COUNTY, MARYLAND  
 P/D PARCEL 848  
 DATED: OCTOBER 18, 1993  
 APPROVED: 12-2-1994  
 APPROVED: 6-6-95  
 DATE: SEPTEMBER 6, 1995  
 SEWER NOS. 1452800

ECP-11-007 (APPROVED: 08-06-2010)  
 RECORD PLAT F-98-157 & F-12-025

NO.	DATE	DESCRIPTION	BY
4	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
3	9-22-95	REVISED PER HOWARD COUNTY	MAM
2	7-24-95	SUBMITTED TO HOWARD COUNTY	
1	7-21-95	REVISED PER PEER REVIEW	



DIAMETER CHART

A	9"	9"	9"	9"	9"	9"	9"	9"	9"
B	16"	16"	16"	16"	16"	16"	16"	16"	16"
C	30"	30"	30"	30"	30"	30"	30"	30"	30"

90° ACCESSIBLE PARKING SPACE STRIPING [8G]

N.T.S. 04-07-94 SLK 08G

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: [Signature]  
 DATE: 11/3/95

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: [Signature]  
 DATE: 11/04/95

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

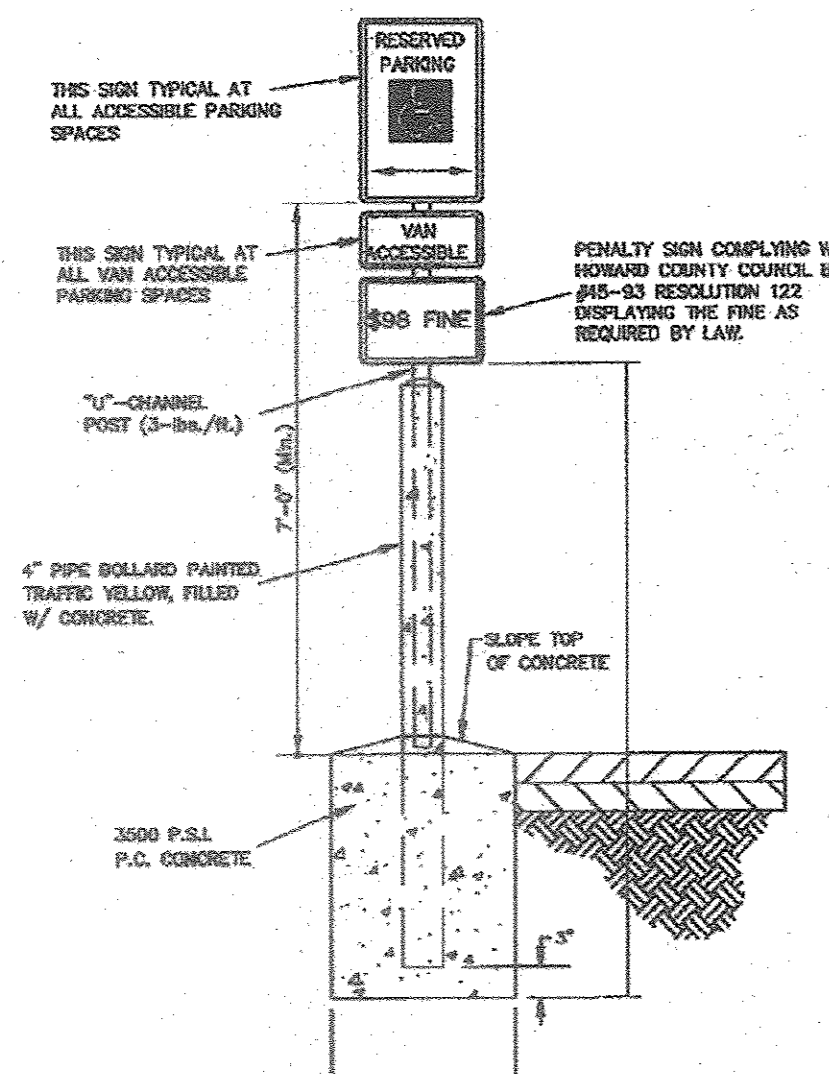
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 8/23/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 9/27/11  
 DIRECTOR: [Signature] DATE: 9/27/11

SEE SHEETS 17 THRU 21 FOR REVISED NEW DETAILS

OWNER & DEVELOPER  
 WALMART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

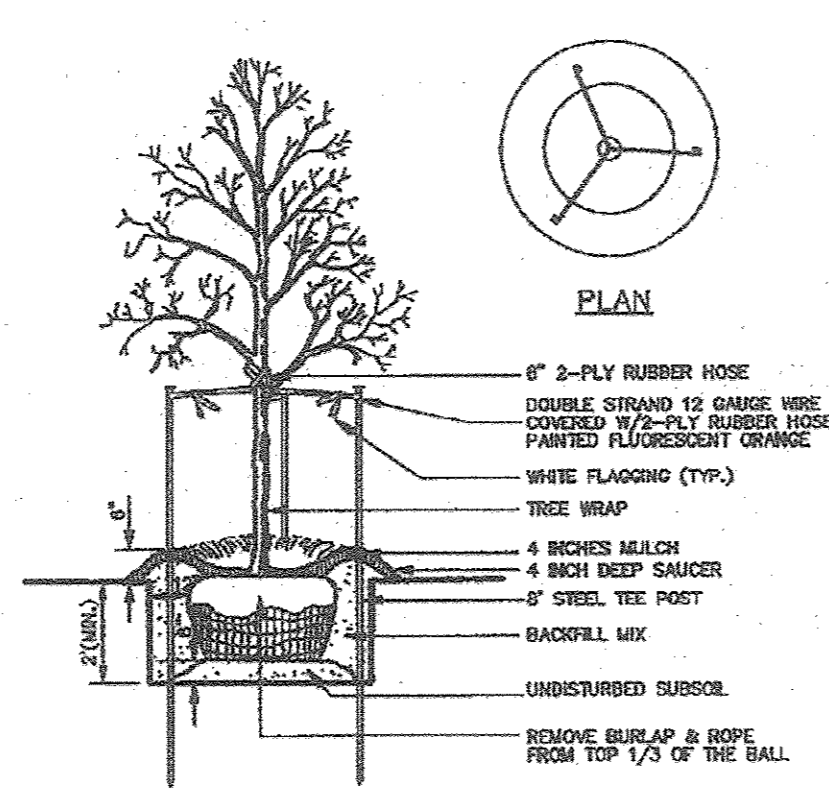
INITIAL DESIGN	8-28-94	JRG	KLM	TMP	MAM
DATE	PRN	PM	DES	CADD	
<b>WAL-MART STORE #2412</b> <b>ELLCOTT CITY, WAL-MART, PARCEL B</b> <b>ENGINEERING ASSOCIATES, INC</b> ENGINEERS PLANNERS SURVEYORS 9175 Gailford Road, Suite 308 (301) 480-4145 JOB NO: 9146.0.350 Columbia, MD 21046 FAX (301) 490-4149 DWG NAME: 9146DETS					
ELLCOTT CITY WAL-MART SITE DETAIL SHEET DATE: 11-7-95 SHEET NO: 11 of 32					

No. 11-7-95 SDP-96-11



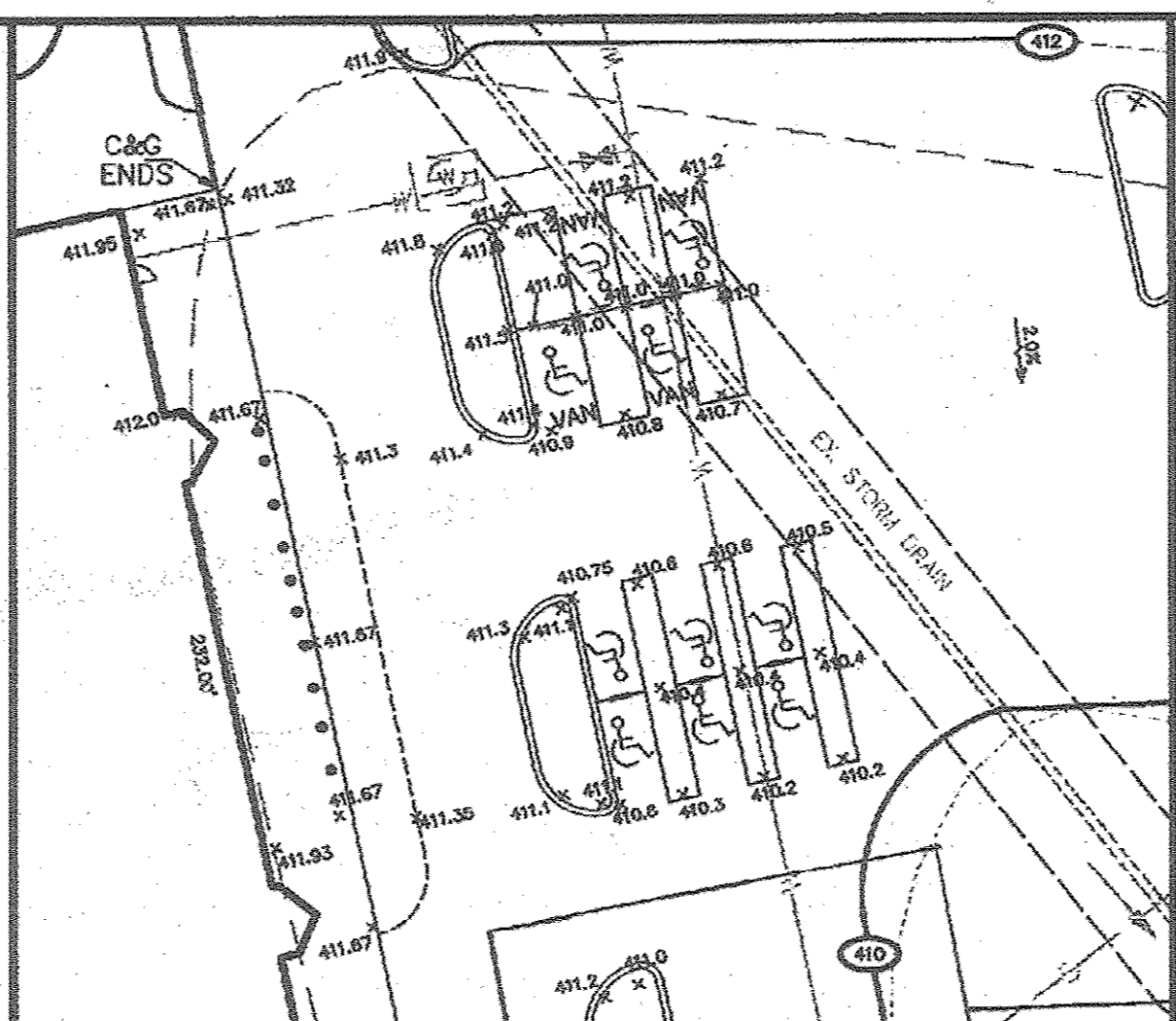
**ACCESSIBLE PARKING SIGN**  
N.T.S.

05-29-95 SLK 1146015



**TREE PLANTING**  
N.T.S.

11-07-95 SLK 504



**HANDICAP PARKING GRADING DETAIL**  
1"=30'

FOUNDATION SUBSURFACE PREPARATION  
WAL-MART  
JOB # 01001306 ELLICOTT CITY, MD

THE FINAL SUBGRADE ELEVATION SHALL BE ESTABLISHED AT 10 INCHES BELOW FINISHED FLOOR ELEVATION TO ALLOW FOR A 4 INCH SLAB AND 6 INCHES OF SUBBASE UNDER A 6 MIL POLYETHYLENE VAPOR BARRIER (PROVIDED BY THE BUILDING CONTRACTOR). SUBBASE SHALL CONFORM TO A GRADED COARSE AGGREGATE OR DENSE GRADED AGGREGATE WITH PARTICLE SIZE NOT EXCEEDING ONE INCH AND LESS THAN 12 PERCENT PASSING THE No. 200 SIEVE. THE SUBBASE LAYER SHALL BE COMPACTED TO 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL CUT AND FILL DEPTHS REQUIRED.

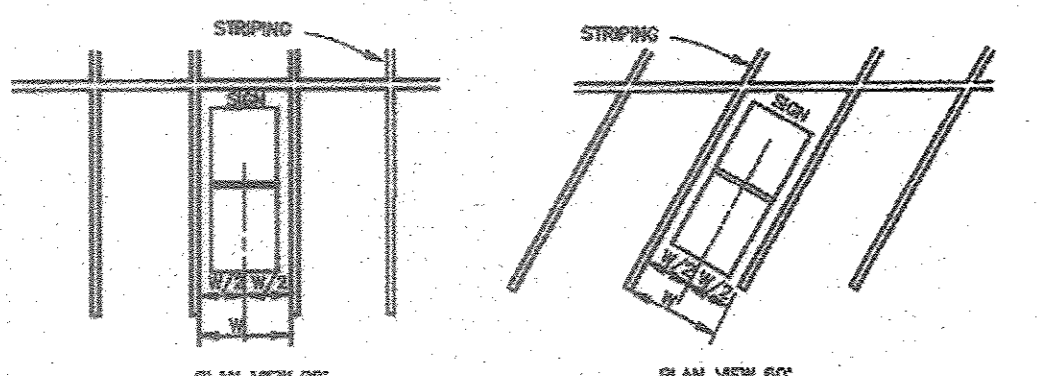
HARD RIPPING AND BLASTING WILL BE REQUIRED TO ACHIEVE FOUNDATION LEVELS IN SOME AREAS OF THE BUILDING PAD. VERY DENSE TO EXTREMELY DENSE AND ROCK TYPE MATERIALS SHALL BE REMOVED TO A MINIMUM OF 12 INCHES BELOW FOUNDATION BEARING LEVEL AND REPLACED WITH PROPERLY COMPACTED ON-SITE GRANULAR MATERIAL.

CLEARING, STRIPPING, PROOFROLLING AND FILLING OPERATIONS SHALL BE MONITORED TO MINIMIZE THE EXCESSIVE REMOVAL AND/OR MIXING OF NON-ORGANIC SUBSOILS WITH TOPSOIL AND OTHER ORGANICS, WHERE REQUIRED.

STRUCTURAL FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, AND COMPACTED TO AT LEAST 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D998) AT A MOISTURE CONTENT WITHIN 3 PERCENT BELOW OPTIMUM TO OPTIMUM. STRUCTURAL FILL SHALL BE CLASSIFIED AS A NON-PLASTIC TO LOW PLASTICITY SM MATERIAL OR BETTER AND HAVE A PLASTICITY INDEX OF 12 OR LESS AND A LIQUID LIMIT OF 35 OR LESS. STRUCTURAL FILL AND ALL EXPOSED SUBGRADE WITHIN THE BUILDING PAD AREA AND EXTENDING A MINIMUM OF 20 FEET BEYOND THE BUILDING LIMITS IN EACH DIRECTION SHALL BE COMPACTED TO THE ABOVE SPECIFICATIONS.

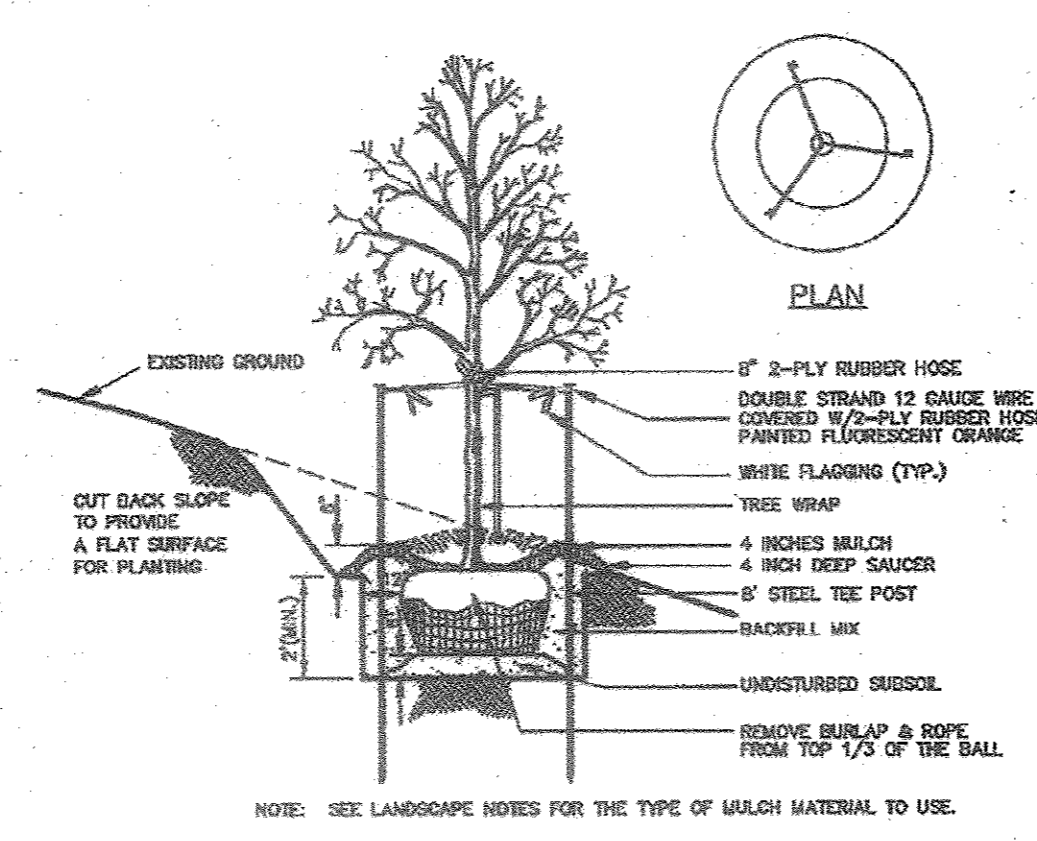
SETTLEMENT PLATES SHALL BE INSTALLED IN AREAS OF DEEP FILL BEFORE AND AFTER THE PLACEMENT OF FILL. THE NUMBER, TYPE AND LOCATION OF SETTLEMENT PLATES SHALL BE AS RECOMMENDED BY THE OWNER'S GEOTECHNICAL REPRESENTATIVE IN THE SOILS REPORT BY ENGINEERING CONSULTING SERVICE, LTD., DATED OCTOBER 14, 1994 OR AS DETERMINED AT THE TIME OF CONSTRUCTION.

THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT COLUMNS AND CONTINUOUS SPREAD FOOTINGS AT WALLS (PROVIDED BY THE BUILDING CONTRACTOR).



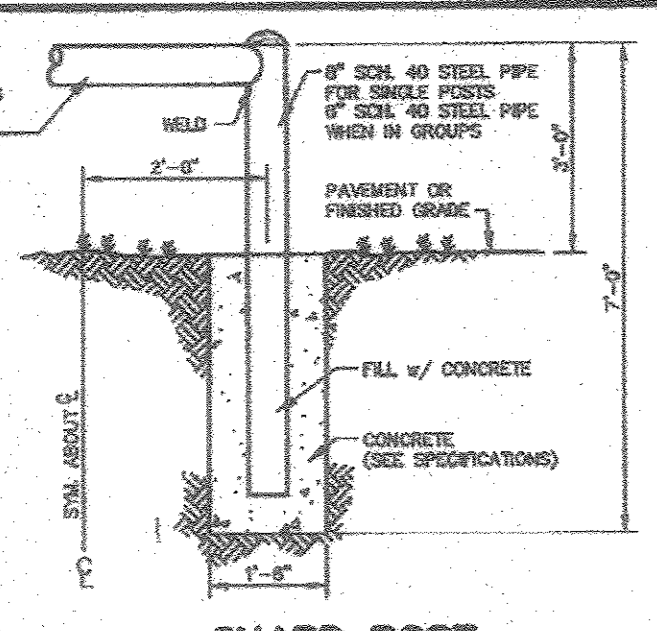
**CART CORRAL**  
N.T.S.

4-07-94 SLK 124



**SHRUB PLANTING ON SLOPE**  
N.T.S.

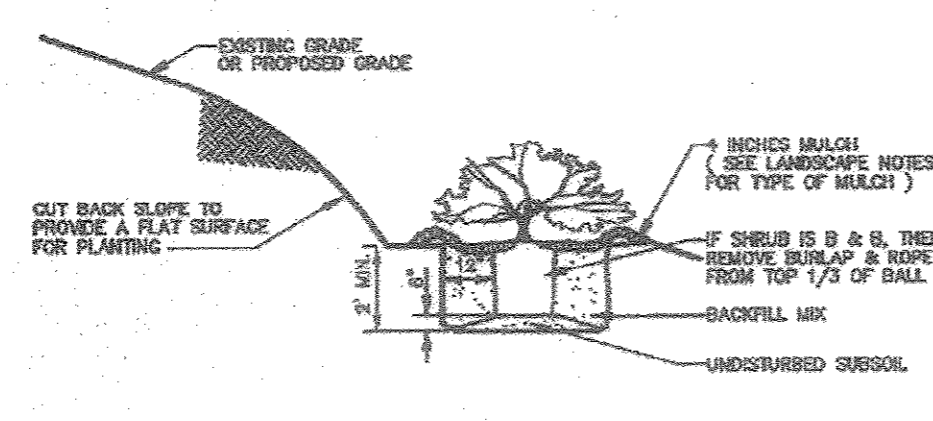
11-07-95 SLK 500



**GUARD POST**  
N.T.S.

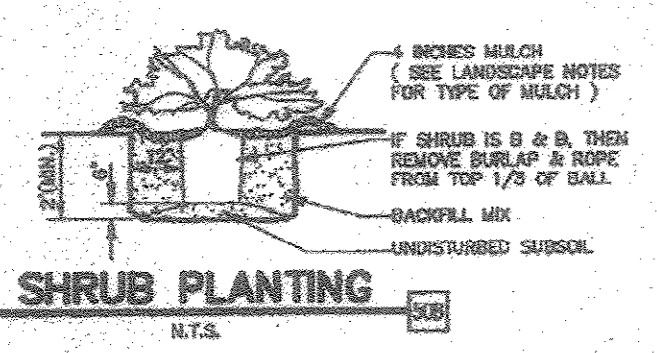
NOTE: ALL PIPES SHALL BE PAINTED TRAFFIC YELLOW

4-07-94 SLK 054



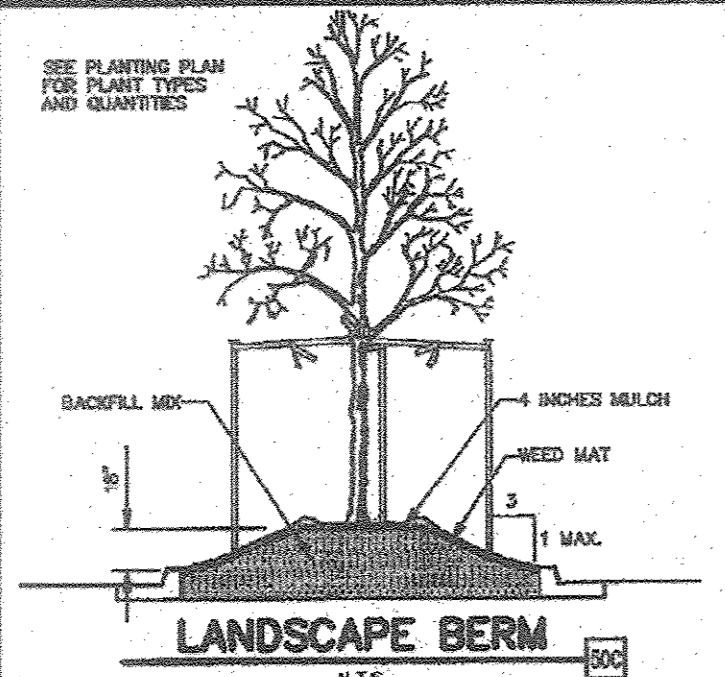
**SHRUB PLANTING ON SLOPE**  
N.T.S.

11-07-95 SLK 500



**SHRUB PLANTING**  
N.T.S.

11-07-95 SLK 158



**LANDSCAPE BERM**  
N.T.S.

11-07-95 SLK 150

THIS SHEET WILL SUPERSEDE SHEET NUMBER 12 (DATED 1/7/95) APPROVED BY HOWARD COUNTY.

FOUNDATION SUBSURFACE PREPARATION  
WAL-MART  
JOB # 01001306 ELLICOTT CITY, MD

THE FINAL SUBGRADE ELEVATION SHALL BE ESTABLISHED AT 10 INCHES BELOW FINISHED FLOOR ELEVATION TO ALLOW FOR A 4 INCH SLAB AND 6 INCHES OF SUBBASE UNDER A 6 MIL POLYETHYLENE VAPOR BARRIER (PROVIDED BY THE BUILDING CONTRACTOR). SUBBASE SHALL CONFORM TO A GRADED COARSE AGGREGATE OR DENSE GRADED AGGREGATE WITH PARTICLE SIZE NOT EXCEEDING ONE INCH AND LESS THAN 12 PERCENT PASSING THE No. 200 SIEVE. THE SUBBASE LAYER SHALL BE COMPACTED TO 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL CUT AND FILL DEPTHS REQUIRED.

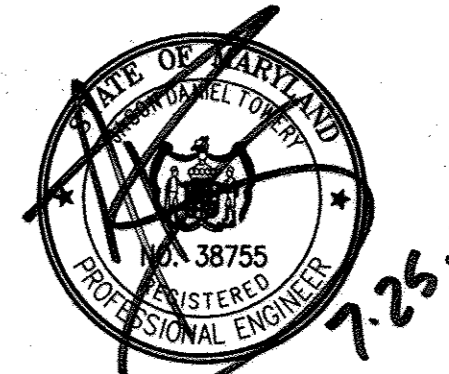
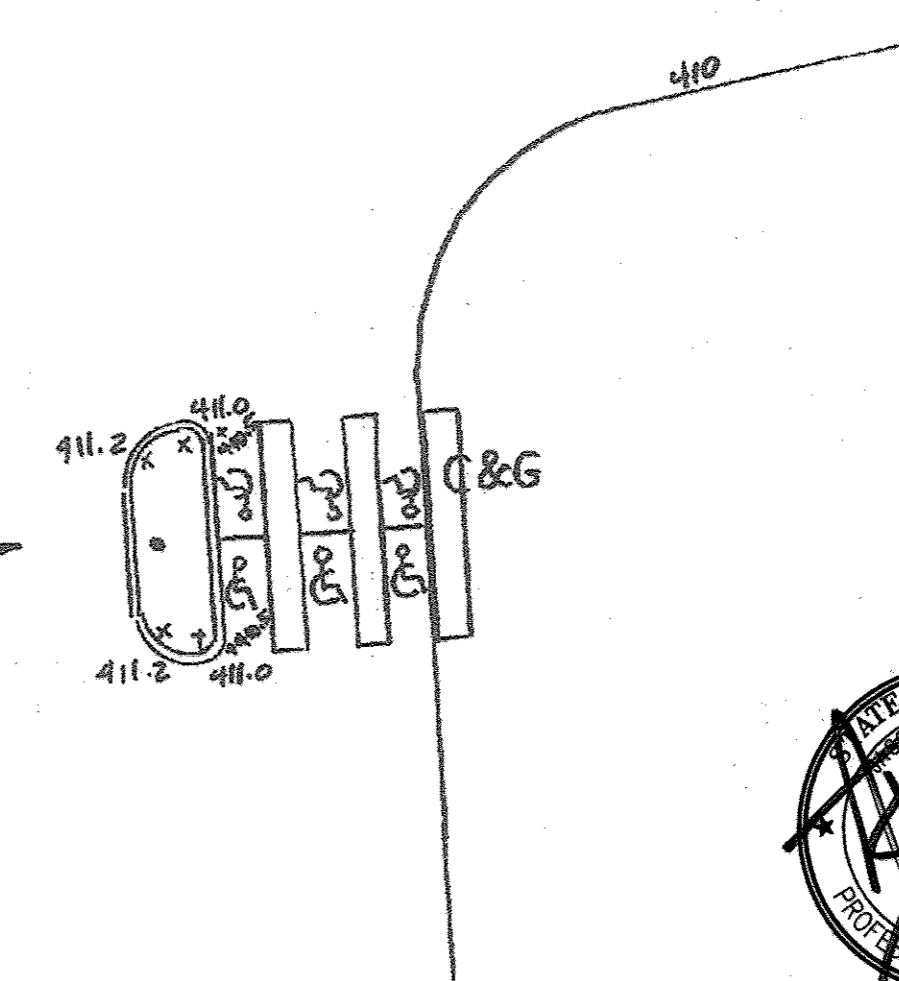
HARD RIPPING AND BLASTING WILL BE REQUIRED TO ACHIEVE FOUNDATION LEVELS IN SOME AREAS OF THE BUILDING PAD. VERY DENSE TO EXTREMELY DENSE AND ROCK TYPE MATERIALS SHALL BE REMOVED TO A MINIMUM OF 12 INCHES BELOW FOUNDATION BEARING LEVEL AND REPLACED WITH PROPERLY COMPACTED ON-SITE GRANULAR MATERIAL.

CLEARING, STRIPPING, PROOFROLLING AND FILLING OPERATIONS SHALL BE MONITORED TO MINIMIZE THE EXCESSIVE REMOVAL AND/OR MIXING OF NON-ORGANIC SUBSOILS WITH TOPSOIL AND OTHER ORGANICS, WHERE REQUIRED.

STRUCTURAL FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS, AND COMPACTED TO AT LEAST 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D998) AT A MOISTURE CONTENT WITHIN 3 PERCENT BELOW OPTIMUM TO OPTIMUM. STRUCTURAL FILL SHALL BE CLASSIFIED AS A NON-PLASTIC TO LOW PLASTICITY SM MATERIAL OR BETTER AND HAVE A PLASTICITY INDEX OF 12 OR LESS AND A LIQUID LIMIT OF 35 OR LESS. STRUCTURAL FILL AND ALL EXPOSED SUBGRADE WITHIN THE BUILDING PAD AREA AND EXTENDING A MINIMUM OF 20 FEET BEYOND THE BUILDING LIMITS IN EACH DIRECTION SHALL BE COMPACTED TO THE ABOVE SPECIFICATIONS.

SETTLEMENT PLATES SHALL BE INSTALLED IN AREAS OF DEEP FILL BEFORE AND AFTER THE PLACEMENT OF FILL. THE NUMBER, TYPE AND LOCATION OF SETTLEMENT PLATES SHALL BE AS RECOMMENDED BY THE OWNER'S GEOTECHNICAL REPRESENTATIVE IN THE SOILS REPORT BY ENGINEERING CONSULTING SERVICE, LTD., DATED OCTOBER 14, 1994 OR AS DETERMINED AT THE TIME OF CONSTRUCTION.

THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT COLUMNS AND CONTINUOUS SPREAD FOOTINGS AT WALLS (PROVIDED BY THE BUILDING CONTRACTOR).



Bowman Consulting Group

**BUILDING EXPANSION AND PARKING MODIFICATIONS.**  
SEE SHEETS 17 THRU 21 FOR MODIFICATIONS DETAILS ONLY.

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: *[Signature]* DATE: 6/31/96

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: *[Signature]* DATE: 6/6/96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 6/25/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 9/26/11  
 DIRECTOR: *[Signature]* DATE: 9/27/10

6 SEE SHEET 17 THRU 21 FOR REVISED NEW DETAILS.

SUBDIVISION "ELLICOTT CITY WAL-MART"  
 ELECTION DISTRICT NO. 2  
 TAX MAP 17 & 24  
 REZONING CASE NUMBER ZB-941  
 SKETCH PLAN S-95-01  
 PRELIMINARY PLAN P-95-21  
 WATER NO. F03

HOWARD COUNTY, MARYLAND  
 P/O PARCEL 848  
 DATED: OCTOBER 18, 1993  
 APPROVED: 12-2-1994  
 APPROVED: 6-6-95  
 DATE: SEPTEMBER-8, 1995  
 SEWER NOS. 1452800

RECORD PLAT F-98-157 & F-12-023  
 ECP-11-007 (APPROVED: 08-06-2010)

NO.	DATE	DESCRIPTION	BY
6	7/25/11	BLDG EXPANSION & PARKING MOD.	JDT
5	4/17/98	REVISED PER H. C. REDLINE COMMENTS	SLW/AOL
4	10-2-95	REVISED DET. 95 PER HOWARD COUNTY	MAM
3	9-22-95	REVISED PER HOWARD COUNTY	MAM
2	7-24-95	SUBMITTED TO HOWARD COUNTY	
1	7-21-95	REVISED PER PEER REVIEW	

OWNER & DEVELOPER  
 WALMART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

INITIAL DESIGN	DATE	PRN	FM	DES	CADD

WAL-MART STORE #2412  
 ELLICOTT CITY, WAL-MART, PARCEL B

**ENGINEERING ASSOCIATES, INC**  
 ENGINEERS PLANNERS SURVEYORS

9175 Oulford Road, Suite 306, Columbia, MD 21046 (301) 480-4145 FAX (301) 480-4148

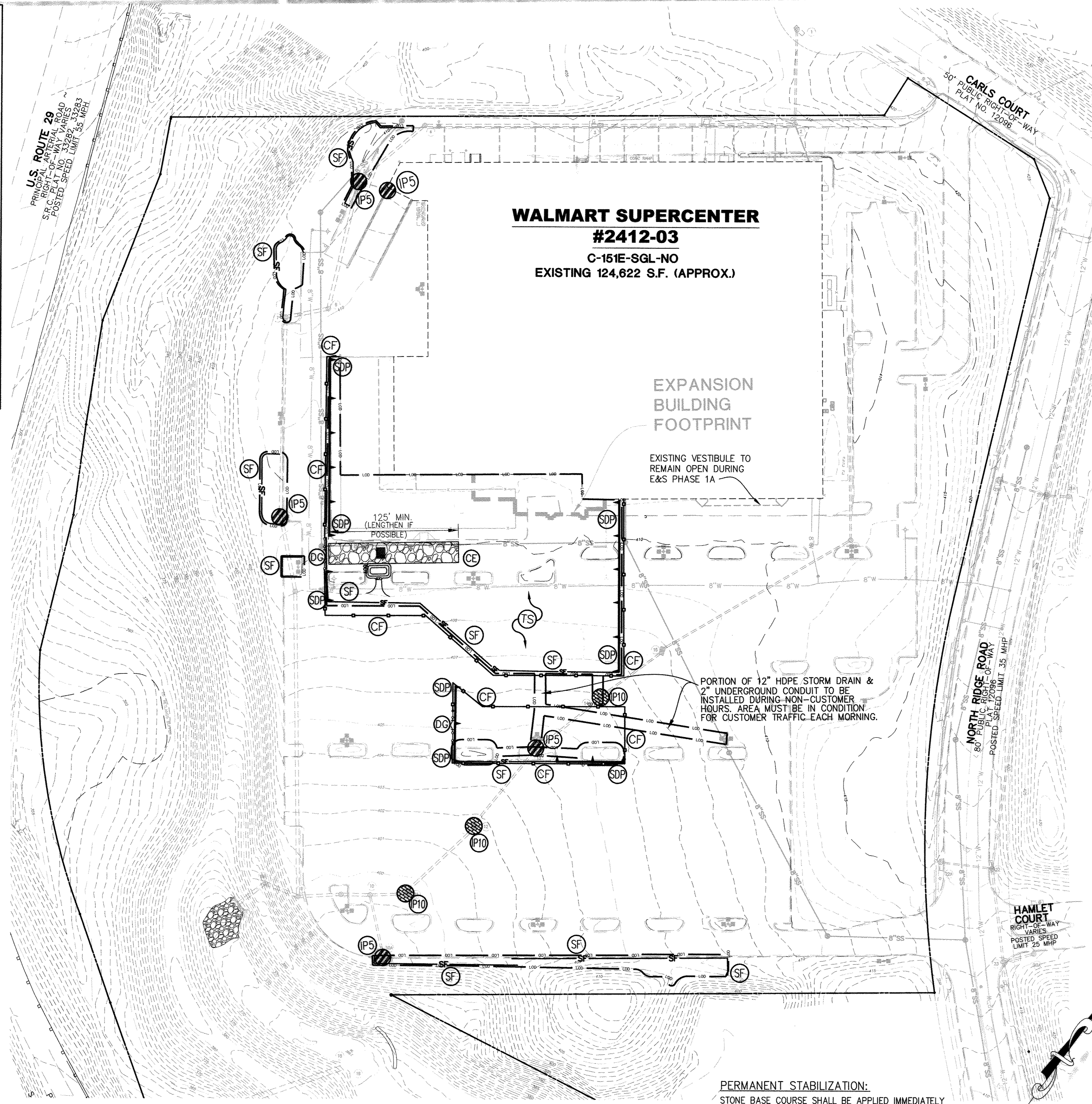
DATE: 05-29-98 SHEET NO: 12 of 32



**EROSION AND SEDIMENT CONTROL LEGEND**

TITLE	KEY	SYMBOL
CONSTRUCTION FENCE	CF	
TEMPORARY STONE CONSTRUCTION ENTRANCE W/WASH RACK	CE	
SILT FENCE	SF	
GRAVEL AND WIRE MESH INLET SEDIMENT FILTER	IP3	
GRAVEL CURB INLET SEDIMENT FILTER	IP5	
BELOW GROUND INLET PROTECTION	IP10	
TEMPORARY CHAIN-LINK FENCE WITH DOUBLE GATE	DG	
SILT DIKE ON PAVEMENT	SDP	
TEMPORARY SEEDING	TS	

NOTE: FOR ALL EROSION AND SEDIMENTATION CONTROL DETAILS SEE SHEETS 15 AND 16.



**PERMANENT STABILIZATION:**  
 STONE BASE COURSE SHALL BE APPLIED IMMEDIATELY FOLLOWING THE GRADING OF THE PARKING AREAS AND TRAVELWAYS. PERMANENT SEEDING AND/OR SODDING SHALL BE APPLIED TO THE PARKING LOT ISLANDS UPON COMPLETION.

**LEGEND**

**SITE FEATURES**

	BOUNDARY LINE
	PROPOSED LIMITS OF DISTURBANCE
	EXISTING CONTOUR ELEVATIONS
	PROPOSED CONTOUR ELEVATIONS
	EXISTING STORM DRAIN
	EXISTING CHAIN LINK FENCE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Roberts* 8-18-11  
 HOWARD SCD DATE

**ENGINEER'S CERTIFICATE**  
 "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
*Jason D. Powery* 7-25-11  
 SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

**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."  
*Frederick L. ...* 8-4-11  
 SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

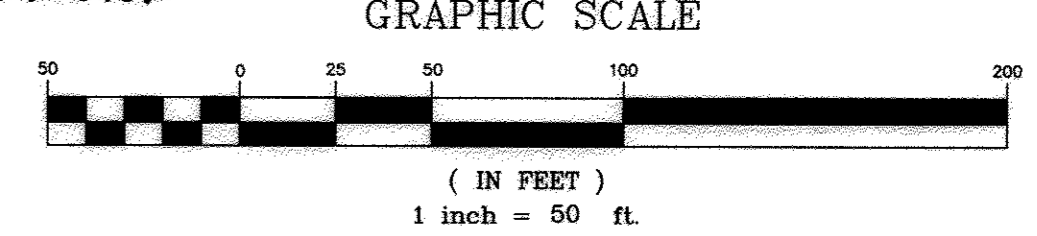
**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
PRELIMINARY PLAN P-95-21	APPROVED: 06-06-1995
SITE PLAN SDP-95-11	APPROVED: 06-21-1996
MASS GRADING PLAN SDP-96-001	APPROVED: 04-03-1996
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01	APPROVED: 11-08-1995
ECP 11-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-98-157
WATER NO. F03	SEWER NOS. 1452800 F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*William ...* 8/23/11  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Robert ...* 9/26/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Thomas ...* 9/22/11  
 DIRECTOR DATE



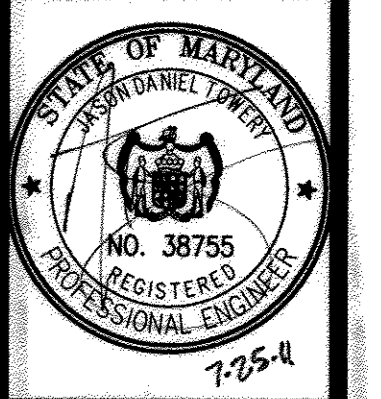
**WALMART STORE #2412-03**  
**ELLCOTT CITY, WALMART, PARCEL B**  
 TM 24, TM GRID 6, P/O TM PARCEL 1085  
 2ND ELECTION DISTRICT, HOWARD COUNTY, MD

<b>EROSION AND SEDIMENT CONTROL PLAN PHASE IA</b>	DATE	<b>SHEET 13</b>
	07/25/11	OF 32 SHEETS

**REVISIONS**

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman CONSULTING**  
 Bowman Consulting Group, Ltd.  
 Telephone: (703) 530-8083  
 Fax: (703) 530-8475  
 www.bowmanconsulting.com  
 9813 Gowlin Drive  
 Manassas, Virginia 20110



SUPERCENTER #2412-03  
 ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
 WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SE 10TH STREET  
 BENTONVILLE, AR 72716

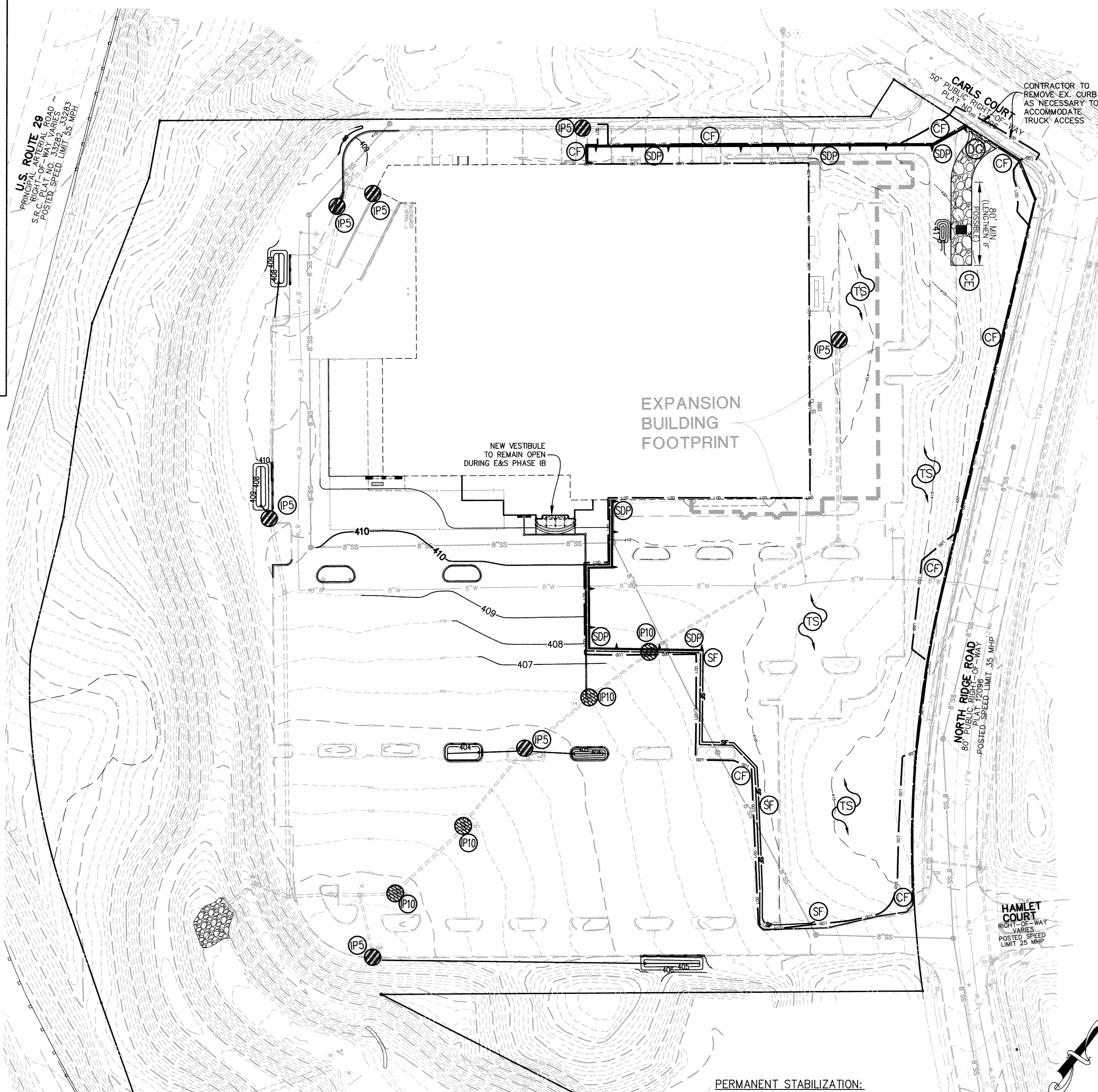


DESIGN DRAWN BY BU KJC  
 CHECKED BY GD  
 DATE 01/14/11  
 SCALE 1"=50'  
 JOB No. 4860-01-002  
 SHEET **13**  
 OF 32 SHEETS

**EROSION AND SEDIMENT CONTROL LEGEND**

TITLE	KEY	SYMBOL
CONSTRUCTION FENCE	CF	
TEMPORARY STONE CONSTRUCTION ENTRANCE W/WASH RACK	CE	
SILT FENCE	SF	
GRAVEL AND WIRE MESH INLET SEDIMENT FILTER	IP3	
GRAVEL CURB INLET SEDIMENT FILTER	IP5	
BELOW GROUND INLET PROTECTION	IP10	
TEMPORARY CHAIN-LINK FENCE WITH DOUBLE GATE	DG	
SILT DIKE ON PAVEMENT	SDP	
TEMPORARY SEEDING	TS	

NOTE: FOR ALL EROSION AND SEDIMENTATION CONTROL DETAILS SEE SHEETS 15 AND 16.



**LEGEND**

**SITE FEATURES**

	BOUNDARY LINE
	PROPOSED LIMITS OF DISTURBANCE
	EXISTING CONTOUR ELEVATIONS
	PROPOSED CONTOUR ELEVATIONS
	EXISTING STORM DRAIN
	EXISTING CHAIN LINK FENCE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Robertson* 8-18-11  
 Signature of Engineer (PRINT NAME BELOW SIGNATURE) DATE

**ENGINEER'S CERTIFICATE**

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

*Jason D. Tolvey* 7-25-11  
 Signature of Engineer (PRINT NAME BELOW SIGNATURE) DATE

**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."

*Michael L. Dyer* 8-4-11  
 Signature of Developer (PRINT NAME BELOW SIGNATURE) DATE

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

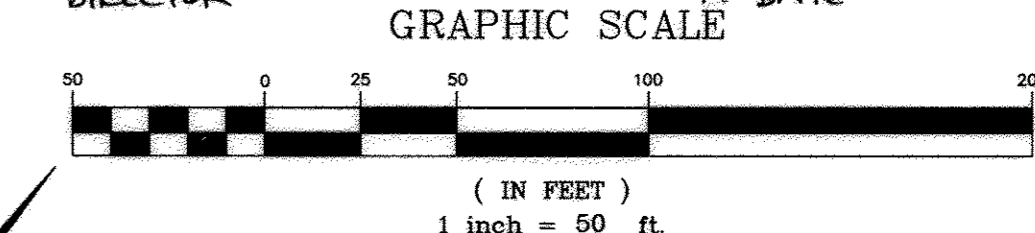
ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
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ECR 11-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-98-157
WATER NO. F03	SEWER NOS. 1452800 F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chris P. ...* 8/23/11  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Karl ...* 9/26/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Thomas ...* 9/27/11  
 DIRECTOR DATE



**WALMART STORE #2412-03**  
**ELLCOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 6, P/O TM PARCEL 1085  
 2ND ELECTION DISTRICT, HOWARD COUNTY, MD

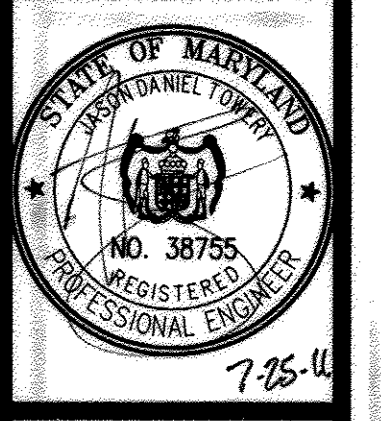
<b>EROSION AND SEDIMENT CONTROL PLAN</b>	DATE	SHEET
	07/25/11	14 OF 32 SHEETS

**PERMANENT STABILIZATION:**  
 STONE BASE COURSE SHALL BE APPLIED IMMEDIATELY FOLLOWING THE GRADING OF THE PARKING AREAS AND TRAVELWAYS. PERMANENT SEEDING AND/OR SODDING SHALL BE APPLIED TO THE PARKING LOT ISLANDS UPON COMPLETION.

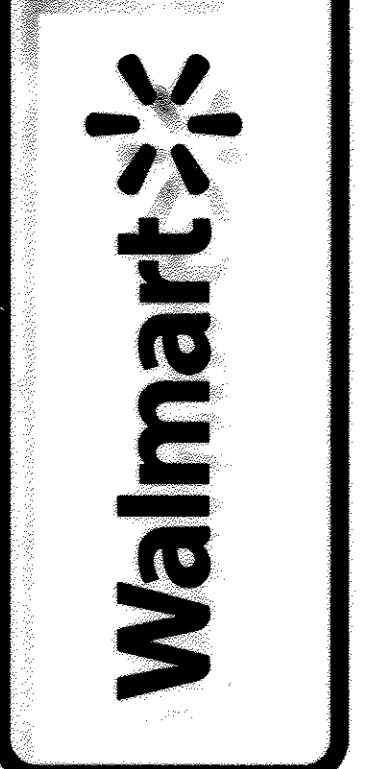
REVISIONS BY

07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

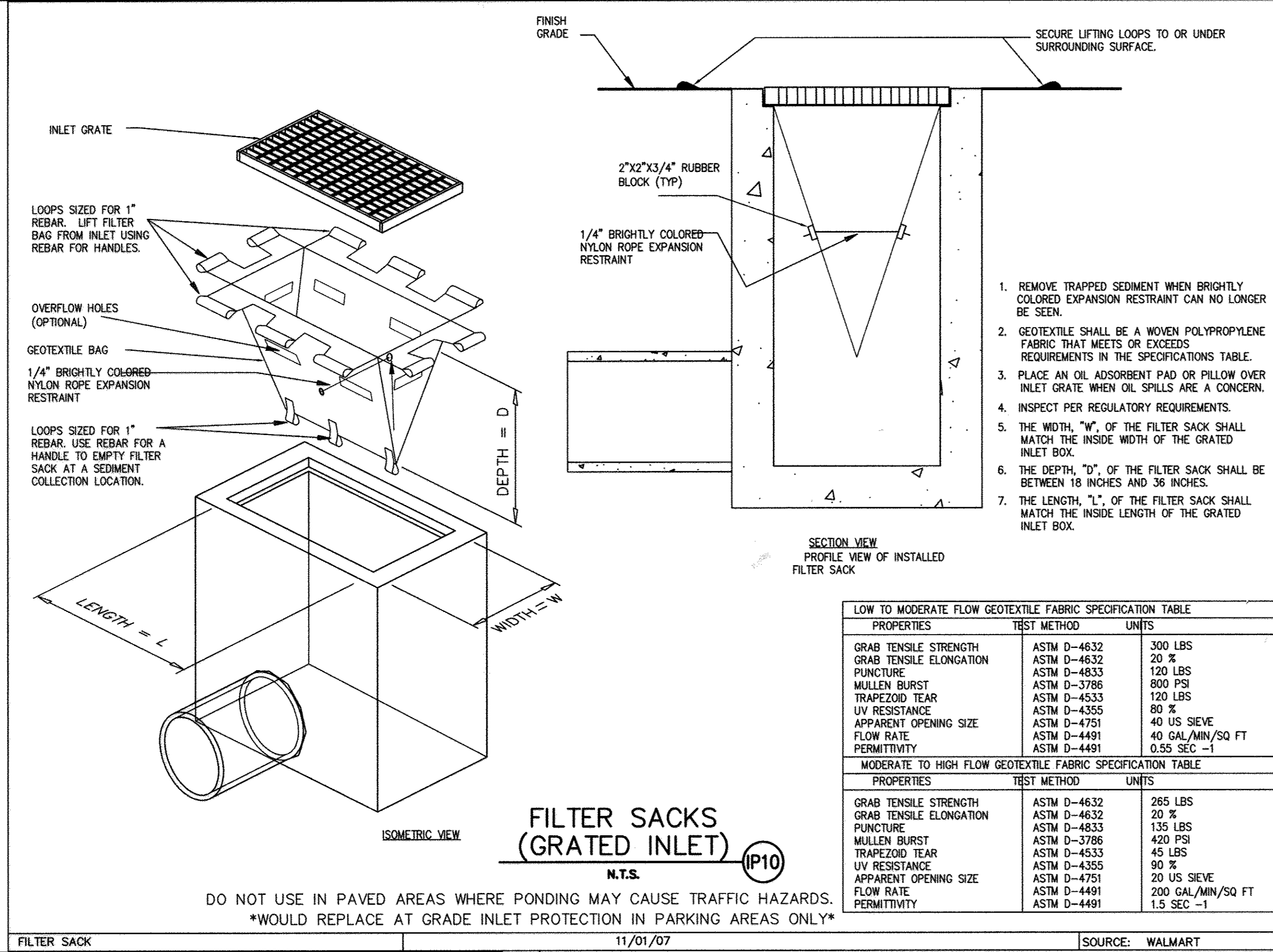
**Bowman CONSULTING**  
 Bowman Consulting Group, Ltd.  
 8913 Godwin Drive  
 Manassas, Virginia 20110  
 Telephone: (703) 530-8993  
 Fax: (703) 530-8475  
 www.bowmanconsulting.com



SUPERCENTER #2412-03  
 ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
 WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SE 10TH STREET  
 BENTONVILLE, AR 72716



DESIGN DRAWN BY BU KJC  
 CHECKED BY GD  
 DATE 01/14/11  
 SCALE 1"=50'  
 JOB No. 4660-01-002  
 SHEET 14 OF 32 SHEETS



LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE			
PROPERTIES	TEST METHOD	UNITS	
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS	
GRAB TENSILE ELONGATION	ASTM D-4632	20 %	
PUNCTURE	ASTM D-4833	120 LBS	
MULLEN BURST	ASTM D-3786	800 PSI	
TRAPEZOID TEAR	ASTM D-4533	120 LBS	
UV RESISTANCE	ASTM D-4355	80 %	
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE	
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT	
PERMITTIVITY	ASTM D-4491	0.55 SEC -1	

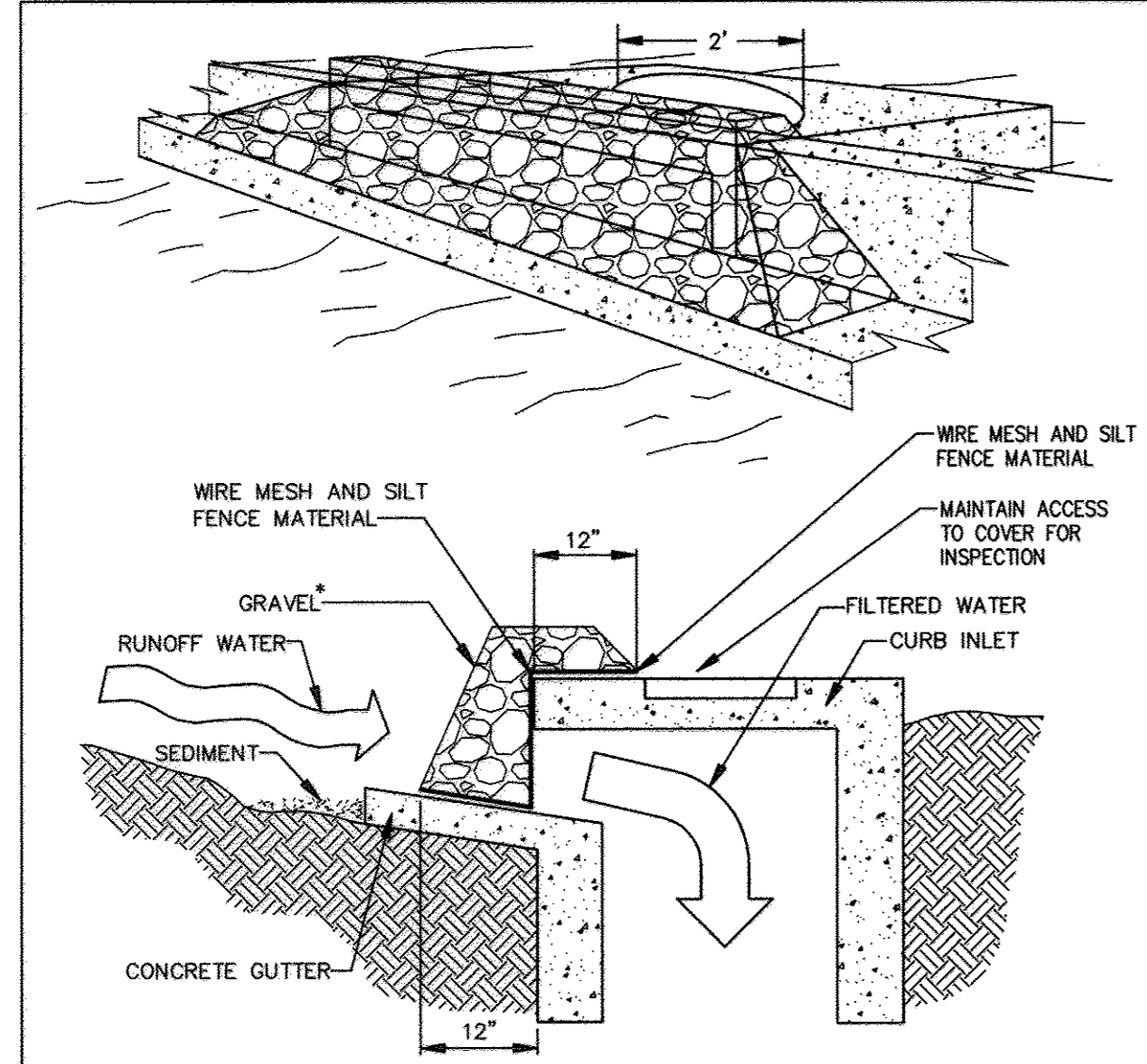
  

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE			
PROPERTIES	TEST METHOD	UNITS	
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS	
GRAB TENSILE ELONGATION	ASTM D-4632	20 %	
PUNCTURE	ASTM D-4833	135 LBS	
MULLEN BURST	ASTM D-3786	420 PSI	
TRAPEZOID TEAR	ASTM D-4533	45 LBS	
UV RESISTANCE	ASTM D-4355	90 %	
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE	
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT	
PERMITTIVITY	ASTM D-4491	1.5 SEC -1	

**FILTER SACKS (GRADED INLET)**  
N.T.S. (IP10)

DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.  
\*WOULD REPLACE AT GRADE INLET PROTECTION IN PARKING AREAS ONLY\*

SOURCE: WALMART 11/01/07

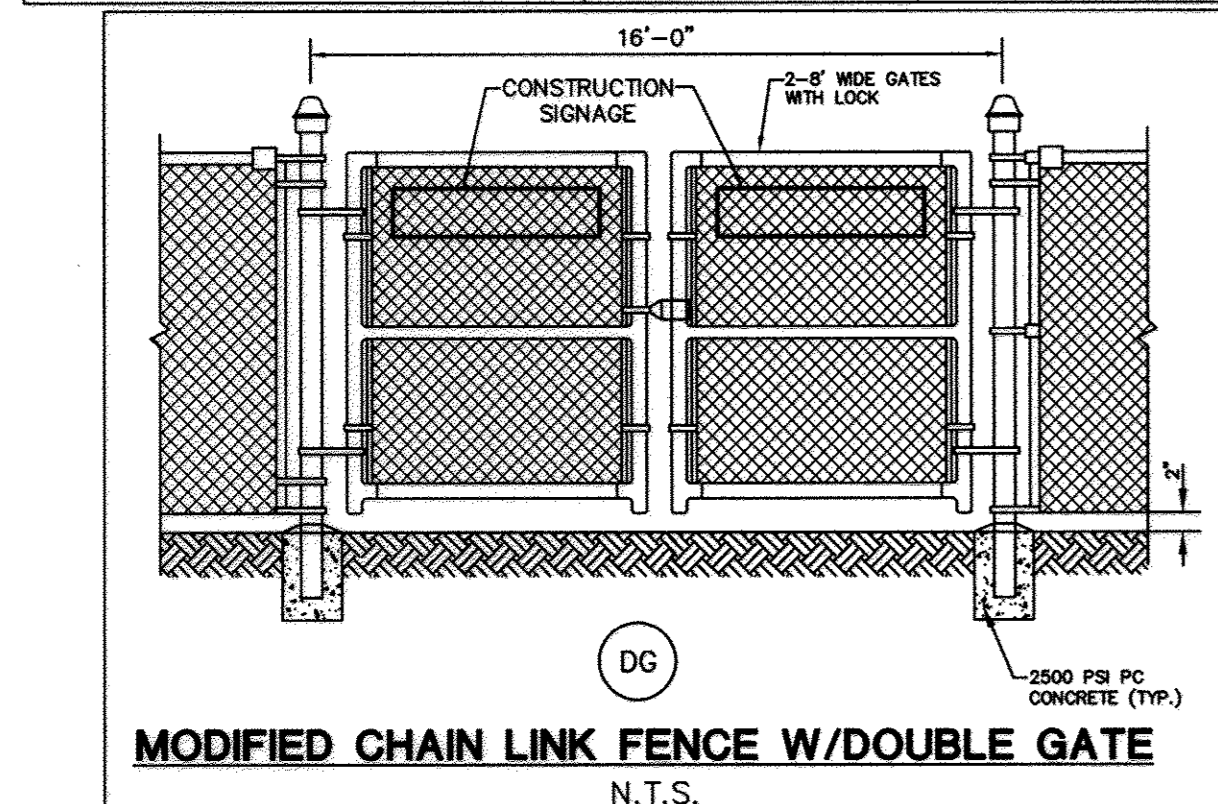


**GRAVEL CURB INLET SEDIMENT FILTER**  
N.T.S. (IP5)

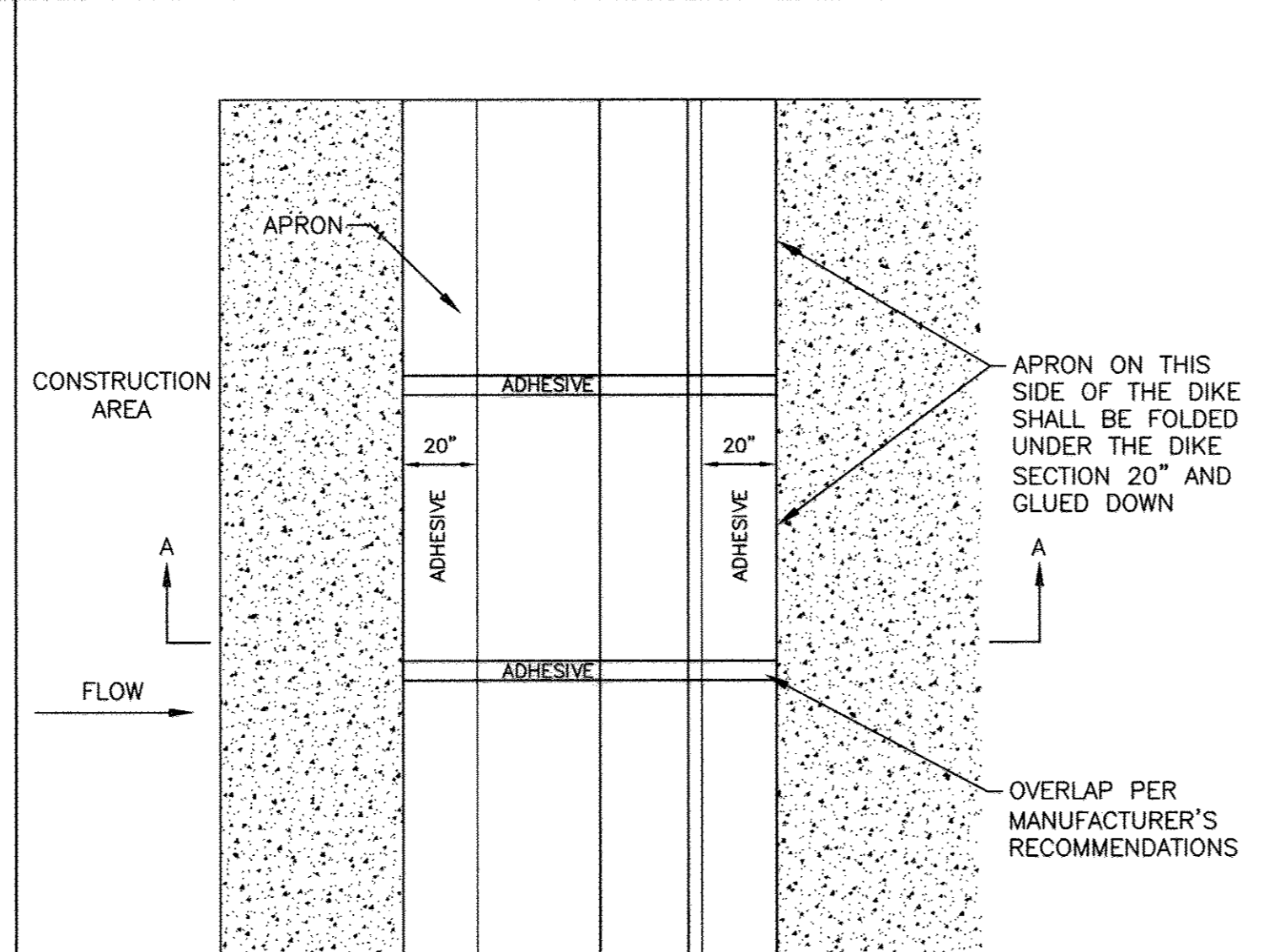
THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

\* GRAVEL SHALL BE 3/4"-2" ANGULAR CLEAN STONE

SOURCE: WALMART 11/01/07



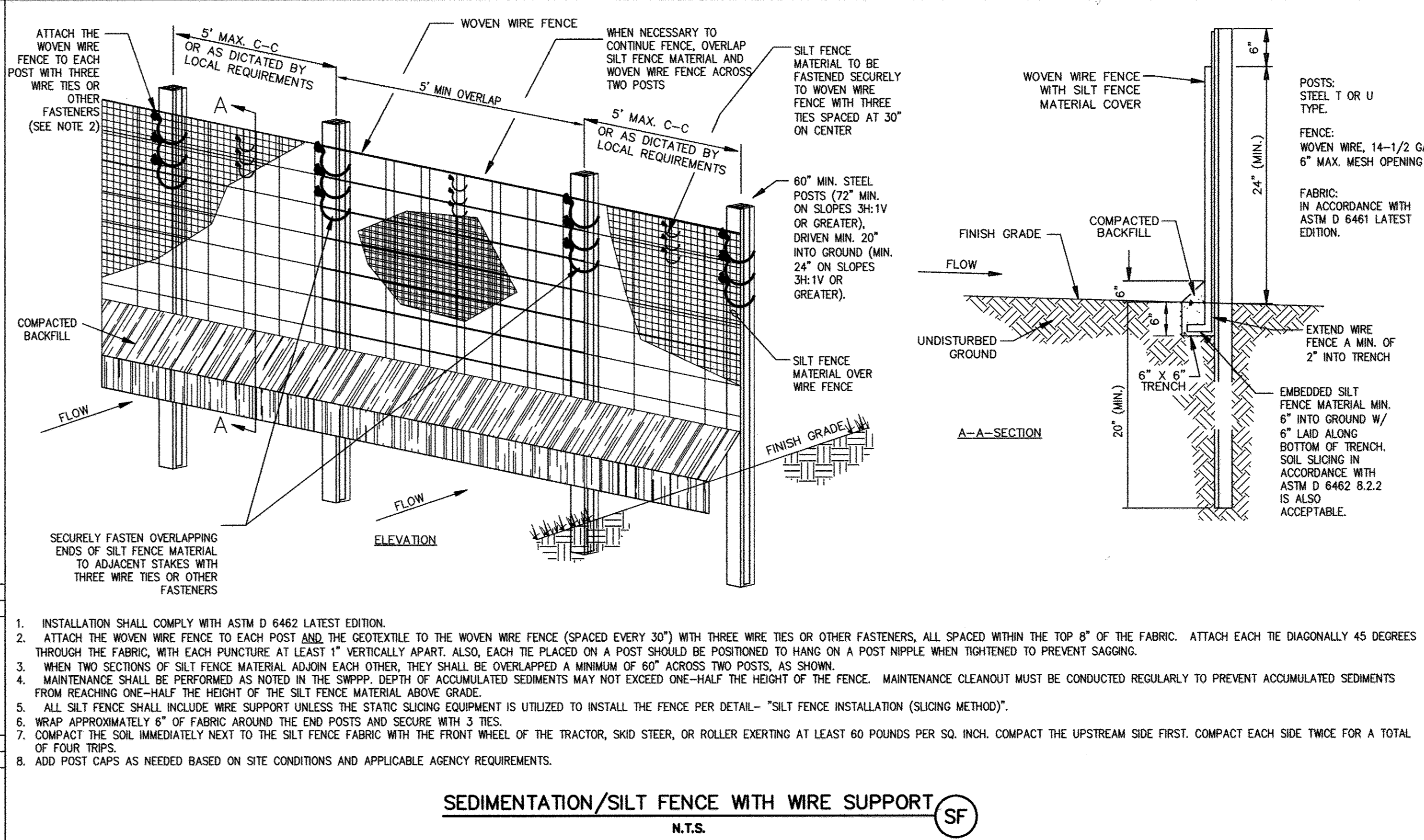
**MODIFIED CHAIN LINK FENCE W/DOUBLE GATE**  
N.T.S. (DG)



NOTES:  
1. INSTALLED SILT DIKE UNIT SHALL HAVE CONTINUOUS AND FIRM CONTACT WITH PAVEMENT.  
2. ADHESIVES SHALL BE LIQUID NAIL OR APPROVED EQUAL FOR CONCRETE PAVEMENT APPLICATIONS AND EMULSIFIED ASPHALT FOR ASPHALT APPLICATIONS. ADHESIVE SHALL BE PLACED WHERE THE UNITS OVERLAP AND A 20\"/>

**SILT DIKE (ON EXISTING PAVEMENT)**  
N.T.S. (SDP)

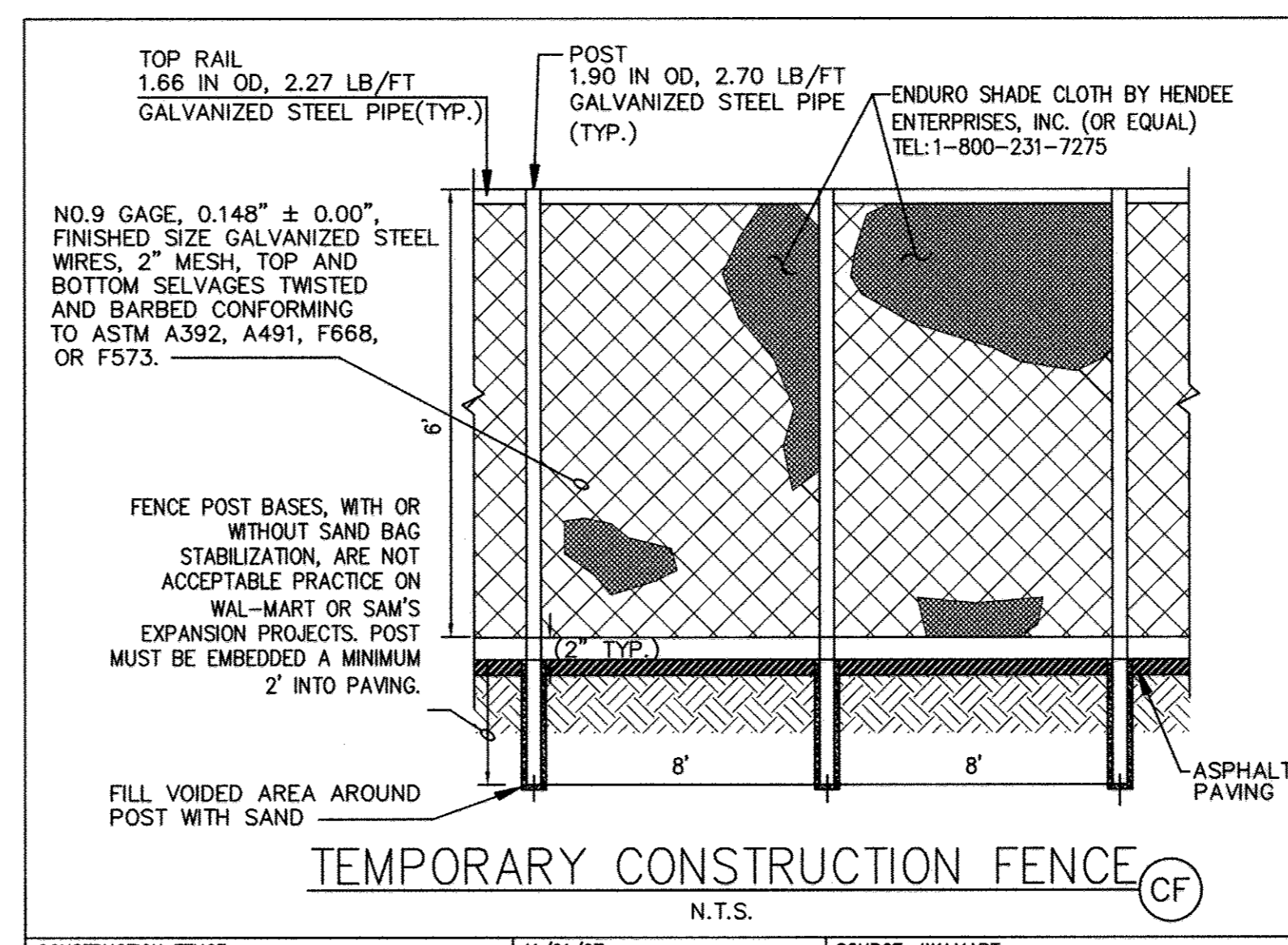
SOURCE: WALMART 11/01/07



**SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT**  
N.T.S. (SF)

- INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
- ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
- WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
- MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-HALF THE HEIGHT OF THE FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
- ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE PER DETAIL- "SILT FENCE INSTALLATION (SLICING METHOD)".
- WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
- COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
- ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

SOURCE: WALMART 11/01/07



**TEMPORARY CONSTRUCTION FENCE**  
N.T.S. (CF)

SOURCE: WALMART 11/01/07

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Robertson*  
HOWARD SCD 8-18-11 DATE

**ENGINEER'S CERTIFICATE**  
"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."  
*Jason D. Towery*  
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) 7-25-11 DATE

**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."  
*Produce List*  
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) 8-4-11 DATE

**OWNER/DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**  
ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
TAX MAP 17 & 24 P/O TM PARCEL 1085  
REZONING CASE NUMBER ZB-941 DATED: OCTOBER 18, 1993  
SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
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MASS GRADING PLAN SDP-96-001 APPROVED: 04-03-1996  
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01 APPROVED: 11-08-1995  
ECP 11-007 APPROVED: 08-06-2010  
FINAL RECORD PLATS F-96-009, F-96-091 & F-98-157  
WATER NO. F03 SEWER NOS. 1452800 F-11-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*John D. ...* 8/24/11 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Veit ...* 9/26/11 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
*Thomas ...* 9/27/11 DATE  
DIRECTOR

**WALMART STORE #2412-03  
ELLCOTT CITY, WALMART, PARCEL B**  
TM 24, TM GRID 8, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD  
**EROSION AND SEDIMENT CONTROL NOTES AND DETAILS**  
DATE: 07/25/11  
SHEET 15 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
9813 Gowlin Drive  
Manassas, Virginia 20110  
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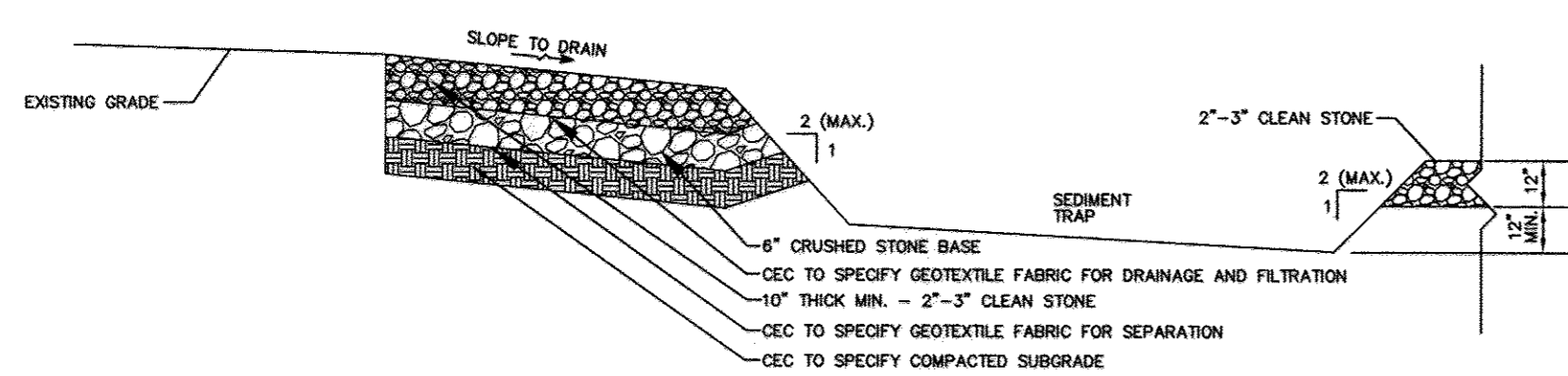
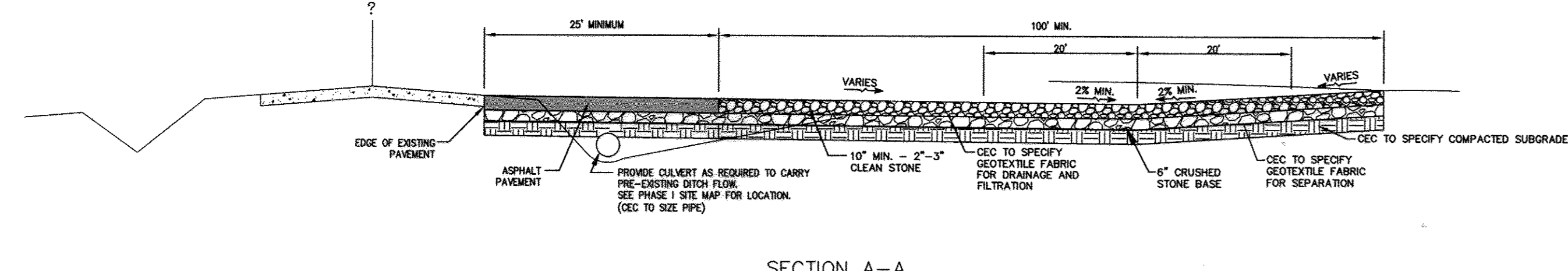
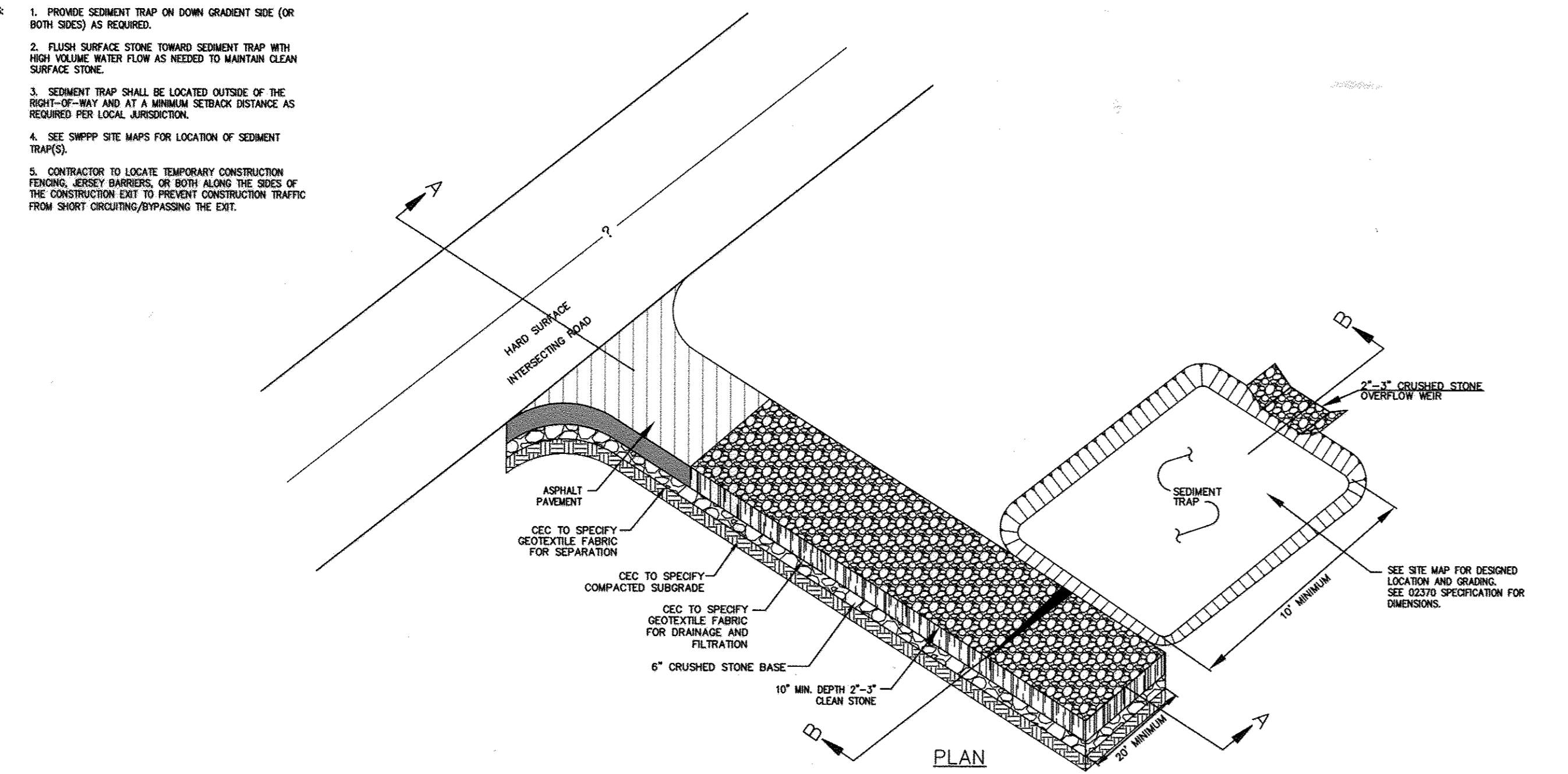
STATE OF MARYLAND  
PROFESSIONAL ENGINEER  
NO. 38755  
REGISTERED PROFESSIONAL ENGINEER  
7-25-11

SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716

**Walmart**

DESIGN DRAWN	BU	KJC
CHECKED	GD	
DATE	07/14/11	
SCALE		
JOB No.	4880-01-002	
SHEET	15	
OF 32 SHEETS		

- NOTES:
1. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED.
  2. FLUSH SURFACE STONE TOWARD SEDIMENT TRAP WITH HIGH VOLUME WATER FLOW AS NEEDED TO MAINTAIN CLEAN SURFACE STONE.
  3. SEDIMENT TRAP SHALL BE LOCATED OUTSIDE OF THE RIGHT-OF-WAY AND AT A MINIMUM SETBACK DISTANCE AS REQUIRED PER LOCAL JURISDICTION.
  4. SEE SWPPP SITE MAPS FOR LOCATION OF SEDIMENT TRAP(S).
  5. CONTRACTOR TO LOCATE TEMPORARY CONSTRUCTION FENCING, ACCESS BARRIERS, OR BOTH ALONG THE SIDES OF THE CONSTRUCTION EXIT TO PREVENT CONSTRUCTION TRAFFIC FROM SHORT CIRCUITING/BYPASSING THE EXIT.



CONSTRUCTION EXIT  
N.T.S.

D:\CONSTR\11\02\07

**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 (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 most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater 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 their perimeter in accordance with Vol 1, Chapter 12 of the 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 (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can 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:
 

Total Area of Site	18.36 Acres
Area Disturbed	4.70 Acres
Area to be roofed or paved	3.97 Acres
Area to be vegetatively stabilized	0.73 Acres
Total Cut	5,624 Cu. Yds.
Total Fill	4,425 Cu. Yds.
Offsite waste/borrow area location:	N/A
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 in 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 this 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 by the end of each work day, whichever is shorter.

Rev. 9/99

**HOWARD SOIL CONSERVATION DISTRICT  
PERMANENT SEEDING NOTES**

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

**Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:

1. Preferred -- Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs/acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq. ft.)
2. Acceptable -- Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs/acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

**Seeding:** For the periods March 1 -- April 30, and August 1 -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 -- February 28, protect site by:

Option 1 -- Two 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 30 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 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

**Maintenance:** Inspect all seeding areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES.**

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.

**Seedbed preparation:** -- Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments:** -- Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

**Seeding:** -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28, protect site by applying 2 tons/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/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.

**CONSTRUCTION SEQUENCE:**

- PHASE IA**
1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE WITH WASH RACK AND WASH RACK'S SEDIMENT TRAP AS SHOWN ON E&S PHASE IA PLAN.
  2. INSTALL CONSTRUCTION FENCING WITH GATES
  3. INSTALL SILT FENCE, SILT DIKES, AND INLET PROTECTION APPROPRIATE TO THE CURRENT LIMITS OF CONSTRUCTION AS SHOWN ON E&S PHASE IA PLAN.
  4. CLEAR AND GRUB WITHIN THE LIMITS OF DISTURBANCE
  5. BEGIN CONSTRUCTION ACTIVITY AS SHOWN ON GRADING AND SITE PLANS
  6. PROVIDE TEMPORARY SEEDING FOR ANY EXPOSED AREAS IN ACCORDANCE WITH HOWARD SOILS CONSERVATION DISTRICT NOTES ON THIS SHEET
  7. UPON COUNTY INSPECTOR APPROVAL, PROCEED WITH PHASE IB ACTIVITIES.

- PHASE IB**
1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE WITH WASH RACK AND WASH RACK'S SEDIMENT TRAP AS SHOWN ON E&S PHASE IB.
  2. INSTALL CONSTRUCTION FENCING WITH GATES
  3. INSTALL SILT FENCE, SILT DIKES, DIVERSION DIKES AND INLET PROTECTION APPROPRIATE TO THE CURRENT LIMITS OF CONSTRUCTION AS SHOWN ON PHASE IB.
  4. CLEAR AND GRUB WITHIN THE LIMITS OF DISTURBANCE
  5. BEGIN CONSTRUCTION ACTIVITY AS SHOWN ON GRADING AND SITE PLANS
  6. PROVIDE TEMPORARY SEEDING FOR ANY EXPOSED AREAS IN ACCORDANCE WITH HOWARD SOILS CONSERVATION DISTRICT NOTES ON THIS SHEET
  7. UPON COUNTY INSPECTOR APPROVAL, PROCEED WITH PHASE IB ACTIVITIES

- PHASE II**
1. ONCE THE PHASE I CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED, CONTRACTOR MAY PROCEED TO E&S PHASE II. MAINTAIN PHASE I EROSION CONTROLS IN AN OPERATIVE CONDITION.
  2. AS THE PROPOSED STORM SEWER IS BEING INSTALLED AND THE INLETS ARE FUNCTIONAL, INSTALL THE INLET PROTECTIONS AS SHOWN ON E&S PHASE II PLAN.
  3. UPON THE COMPLETION OF ALL CONSTRUCTION AND LAND DISTURBING ACTIVITIES, AND WHEN THE DISTURBED AREAS HAVE BEEN STABILIZED, THE EROSION AND SEDIMENT CONTROL MEASURES MAY BE REMOVED WITH THE APPROVAL OF THE COUNTY INSPECTOR.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

*John R. Kolbert* 8-18-11  
HOWARD SCD DATE

**ENGINEER'S CERTIFICATE**

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

*JASON D. POWERY* 7-25-11  
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

**DEVELOPER'S CERTIFICATE**

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*Mike Thomas* 8-4-11  
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
PRELIMINARY PLAN P-95-21	APPROVED: 06-06-1995
SITE PLAN SDP-96-11	APPROVED: 06-21-1996
MASS GRADING PLAN SDP-96-001	APPROVED: 04-03-1996
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01	APPROVED: 11-08-1995
ECP 11-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-96-157
WATER NO. F03	SEWER NOS. 1452800
	<b>F-12-023</b>

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Mike Thomas* 8/22/11  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Kevin D. Lingo* 9/26/11  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Thomas J. Butler* 9/27/11  
DIRECTOR DATE

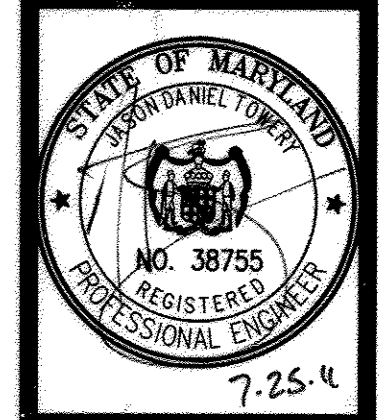
**WALMART STORE #2412-03  
ELLCOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 6, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

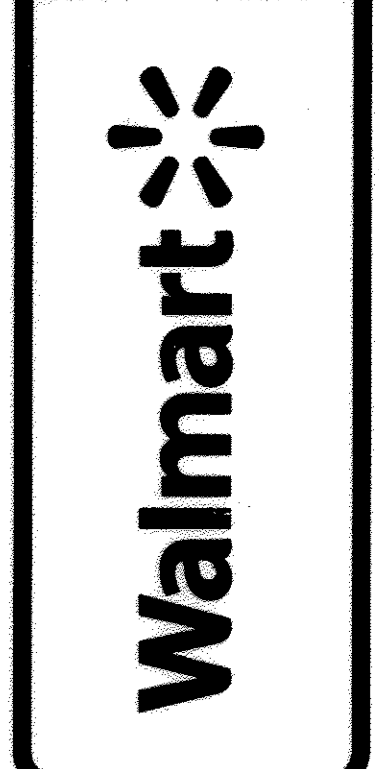
<b>EROSION AND SEDIMENT CONTROL NOTES AND DETAILS</b>	DATE 07/25/11	SHEET 16 OF 32 SHEETS
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REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
9815 Cloomin Drive  
Manassas, Virginia 20110  
www.bowmanconsulting.com  
Telephone: (703) 550-9893  
Fax: (703) 550-9875

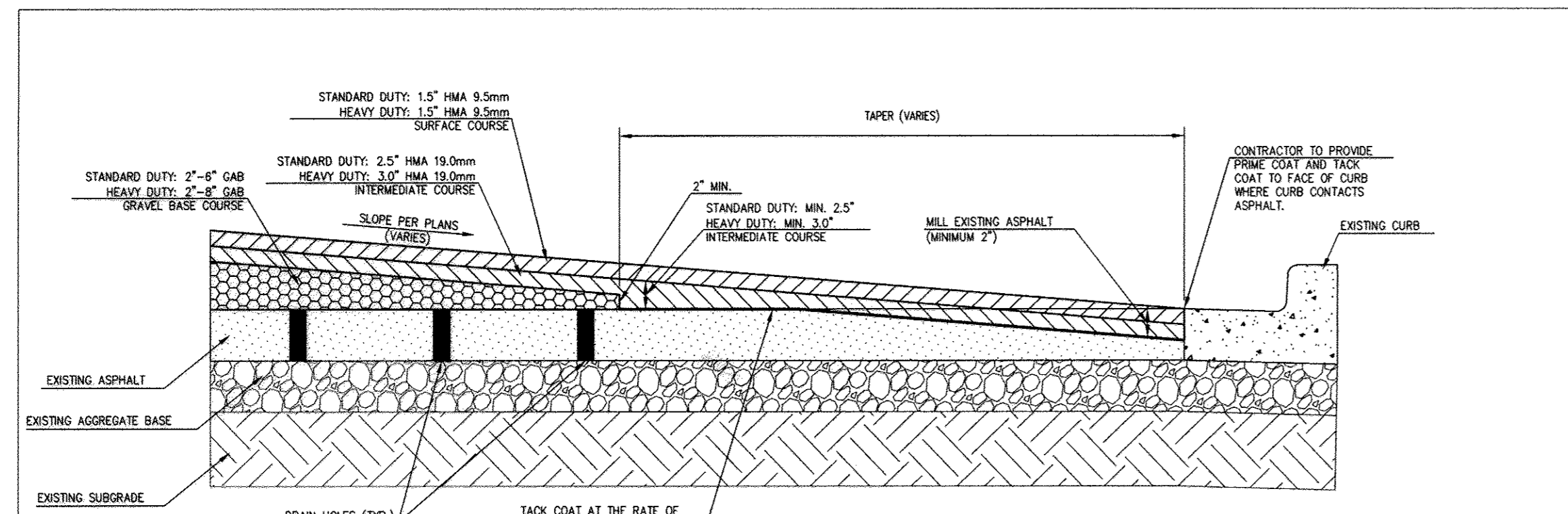


SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716

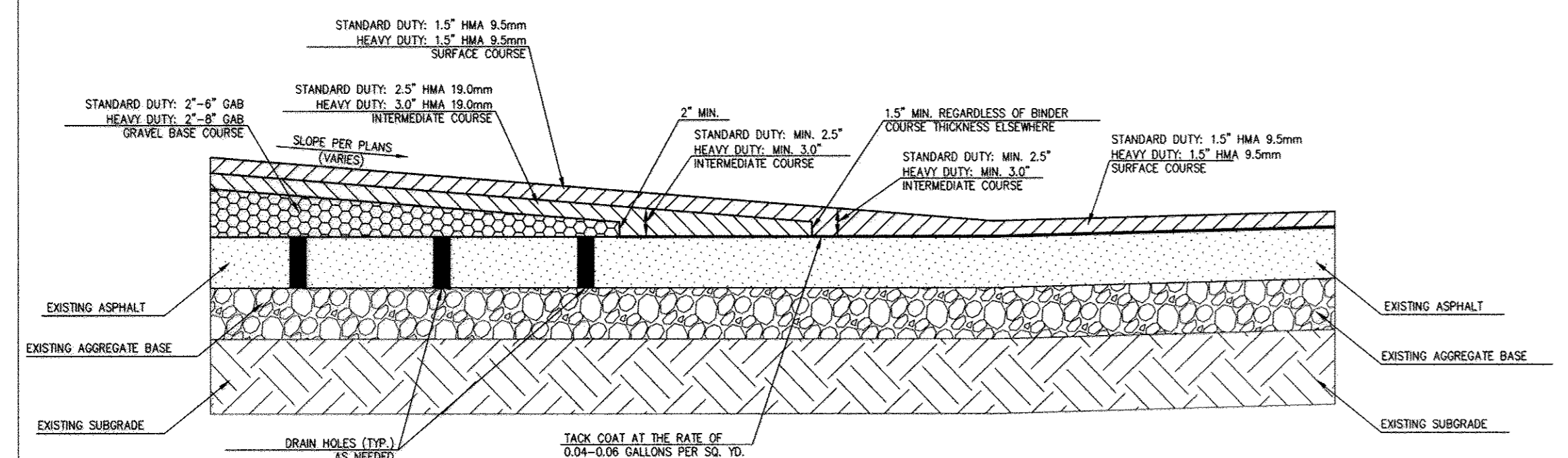


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CHECKED GD  
DATE 01/14/11  
SCALE  
JOB No. 4680-01-002  
SHEET  
**16**  
OF 32 SHEETS  
SDP-96-011

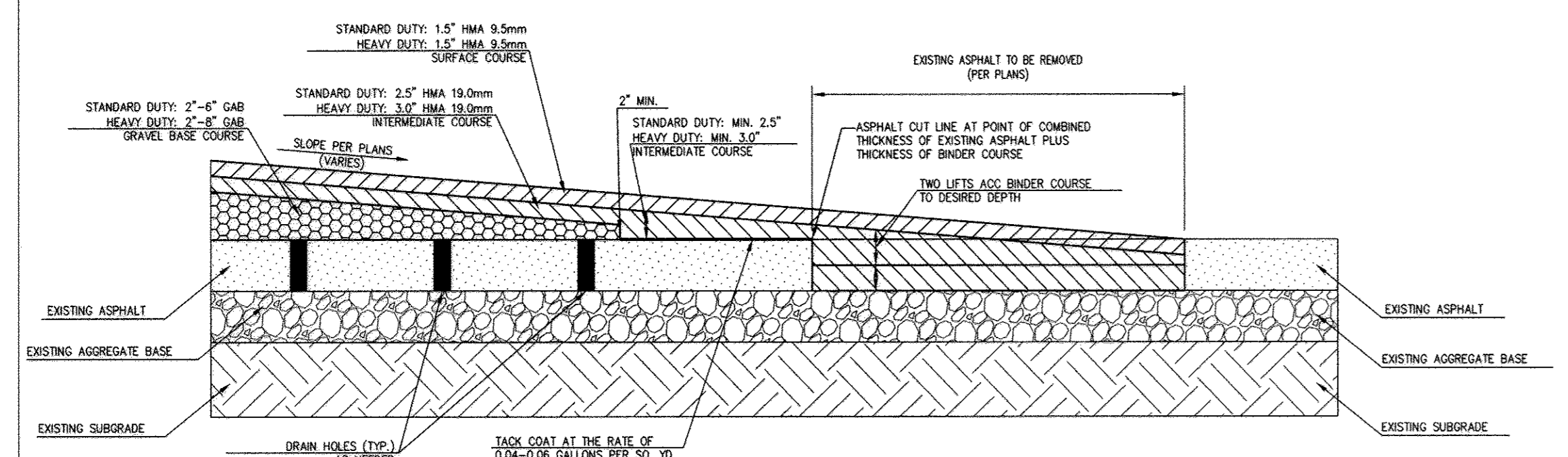




PAVEMENT TRANSITION WEDGE AGAINST CURB



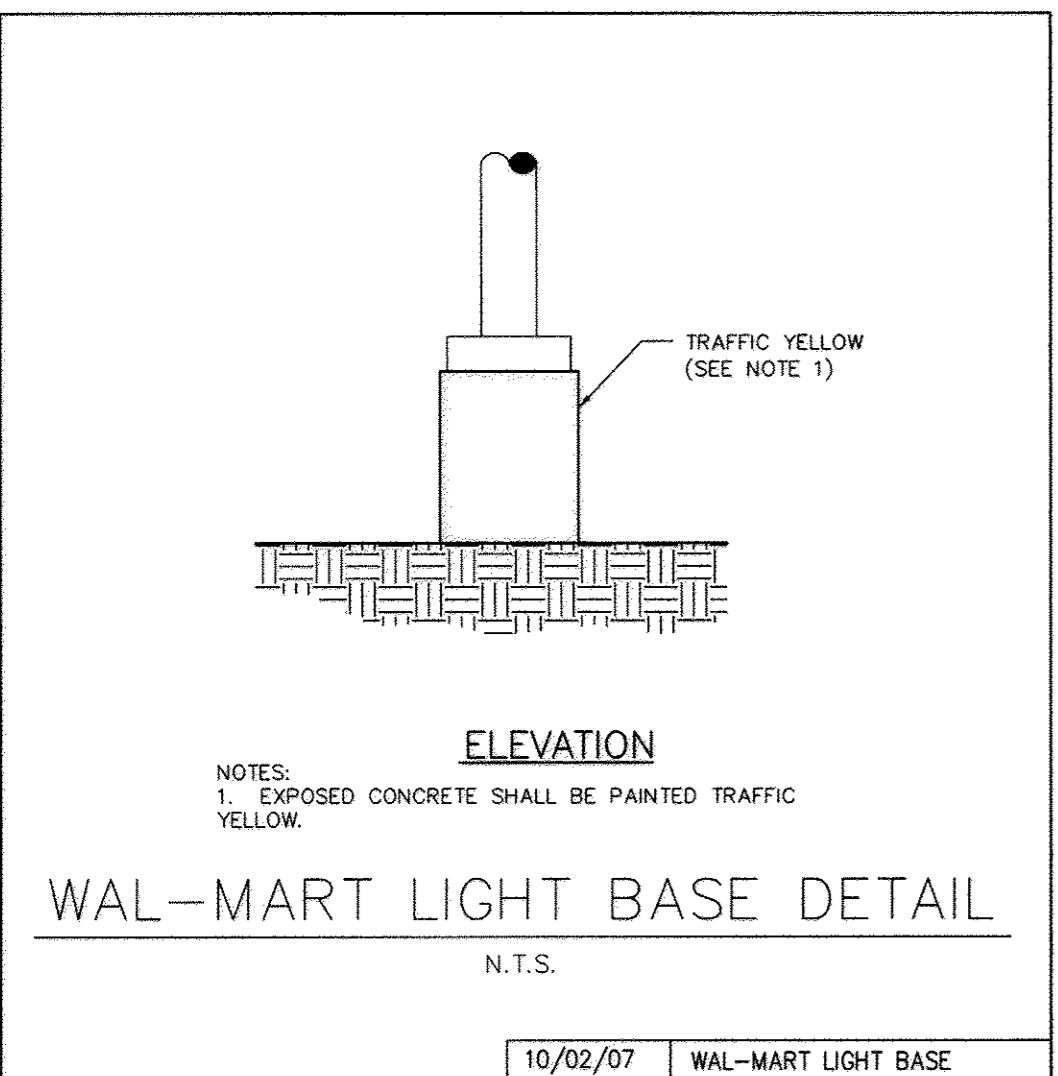
PAVEMENT TRANSITION WITH OVERLAY



PAVEMENT TRANSITION AGAINST EXISTING ASPHALT

PAVEMENT TRANSITION DETAILS

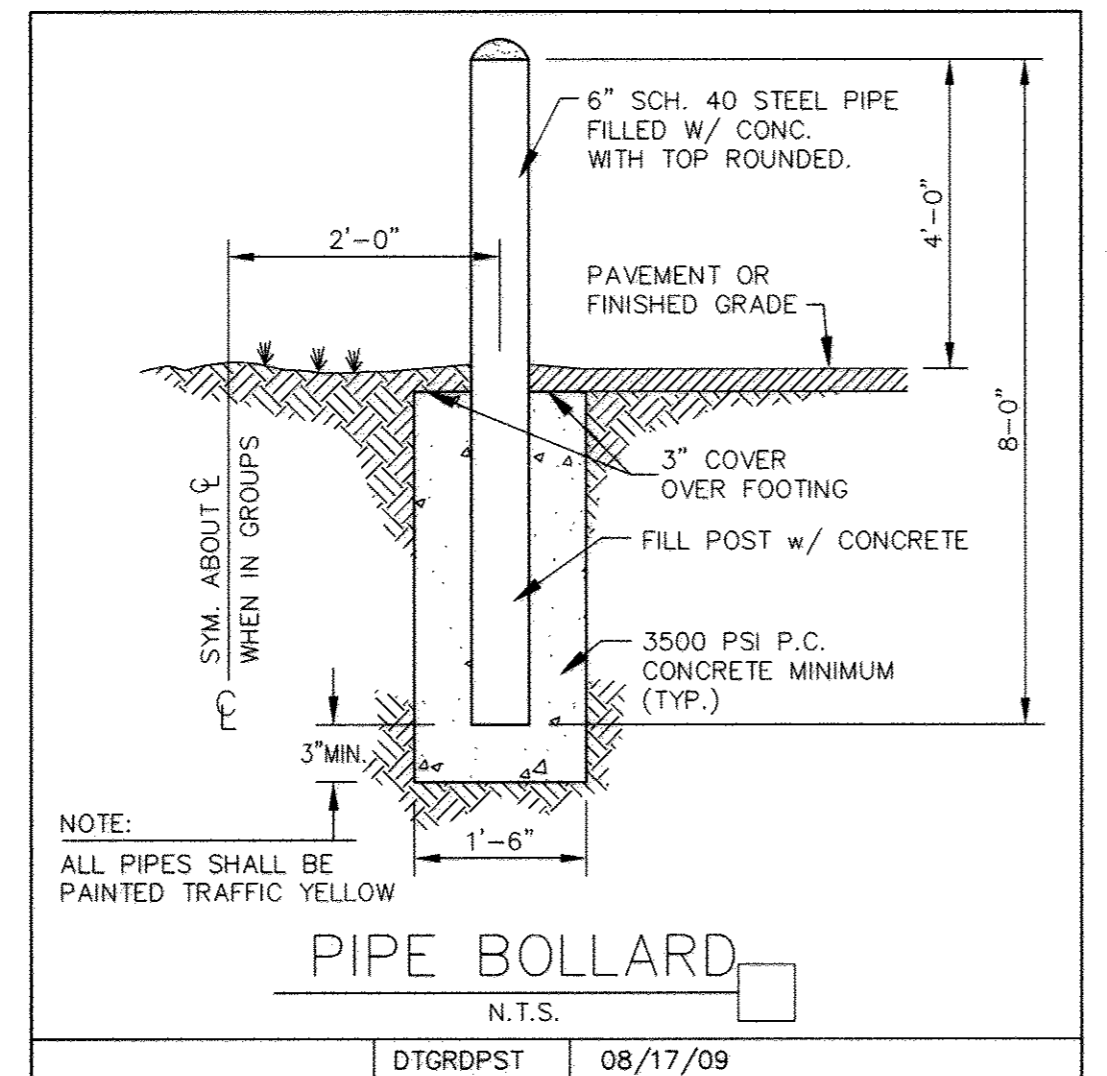
03/11/10 PVMNT TRNS



ELEVATION

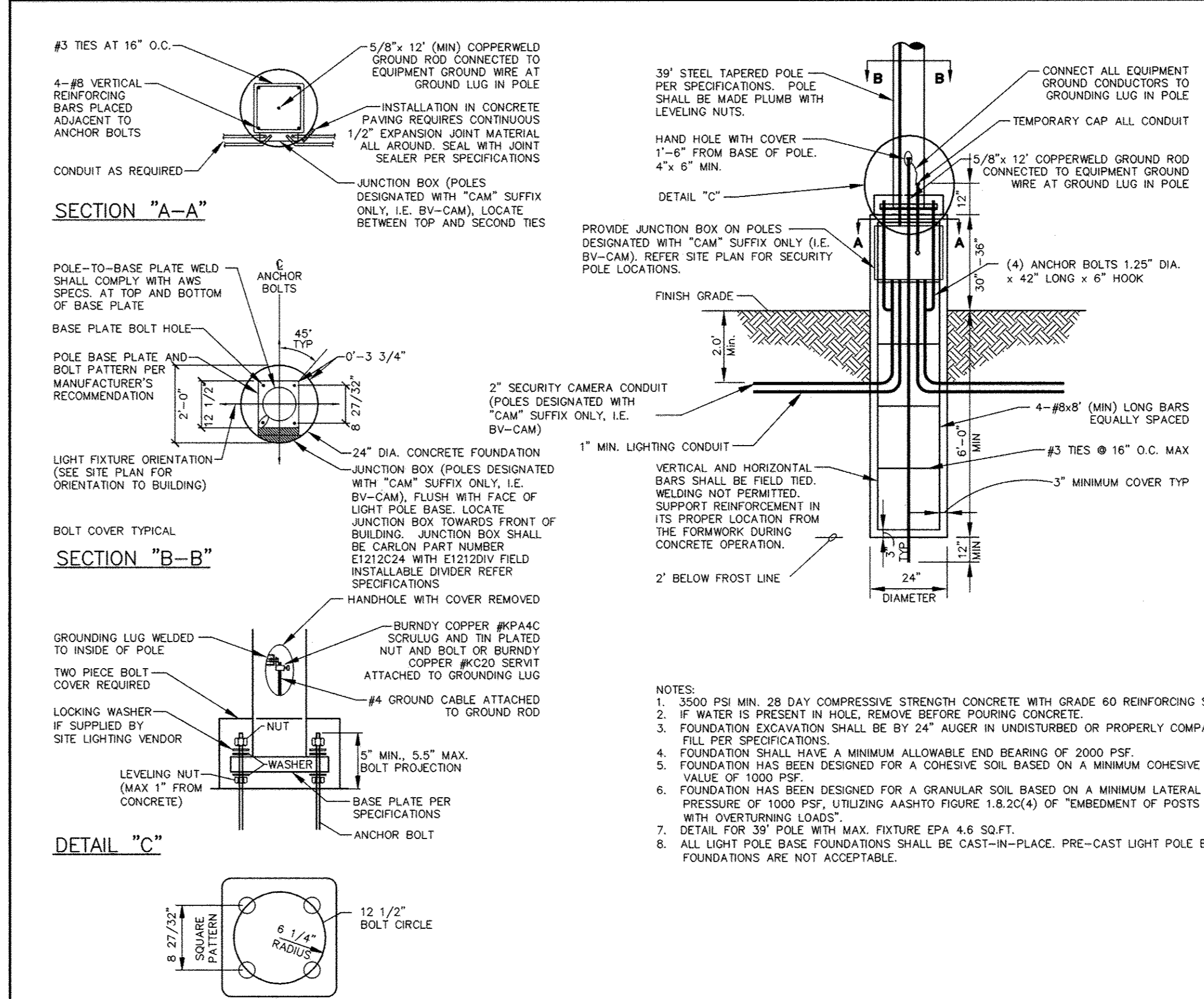
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N.T.S. 10/02/07 WAL-MART LIGHT BASE



PIPE BOLLARD

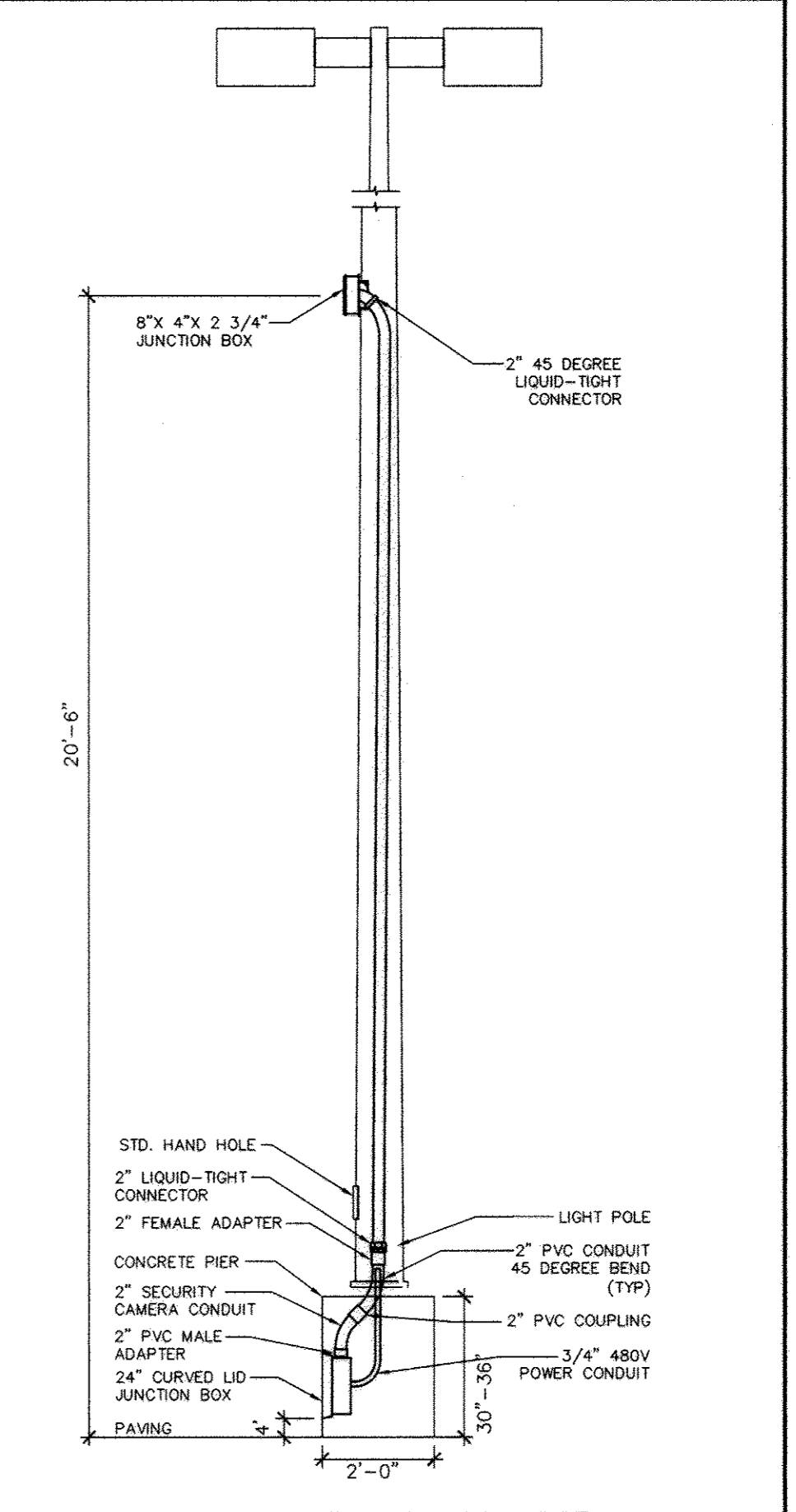
N.T.S. DTGRDPT 08/17/09



TYPICAL ANCHOR BOLT SPACING

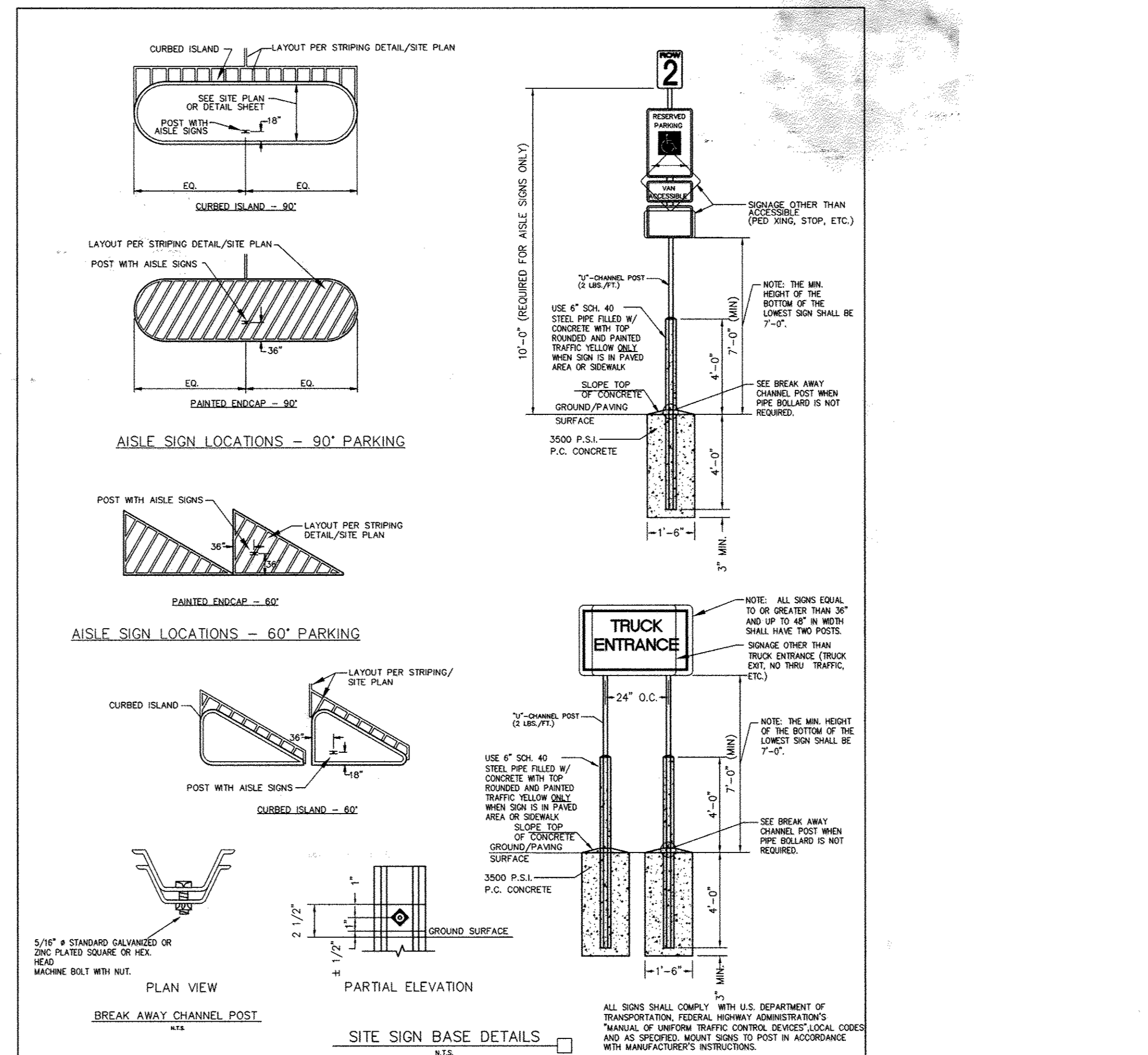
TYPICAL LIGHTING POLE BASE DETAIL

N.T.S. 10/02/07



POLE MOUNTED CAMERA DETAIL

NOTE: ONLY FOR POLE LOCATIONS DESIGNATED WITH 'CAM' SUFFIX ONLY, I.E. BV-CAM. CAMERAS AND WIRING BY OTHERS.



AISLE SIGN LOCATIONS - 90° PARKING

AISLE SIGN LOCATIONS - 60° PARKING

TRUCK ENTRANCE

BREAK AWAY CHANNEL POST

SITE SIGN BASE DETAILS

08/27/06

OWNER/DEVELOPER

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

SUBDIVISION 'ELLCOTT CITY WALMART'

ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
TAX MAP 17 & 24 P/O TM PARCEL 1085  
REZONING CASE NUMBER ZB-941 DATED: OCTOBER 18, 1993  
SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
PRELIMINARY PLAN P-95-21 APPROVED: 06-06-1995  
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FINAL RECORD PLATS APPROVED: 08-06-2010  
WATER NO. F03 F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800 F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Michael Thomas* 9/24/11  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Kat Shalinski* 9/24/11  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Thomas J. Butler* 9/25/11  
 DIRECTOR DATE

**WALMART STORE #2412-03**  
**ELLCOTT CITY, WALMART, PARCEL B**  
 TM 24, TM GRID 8, P/O TM PARCEL 1085  
 2ND ELECTION DISTRICT, HOWARD COUNTY, MD

<b>CONSTRUCTION DETAILS</b>	DATE	SHEET
	07/25/11	17 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

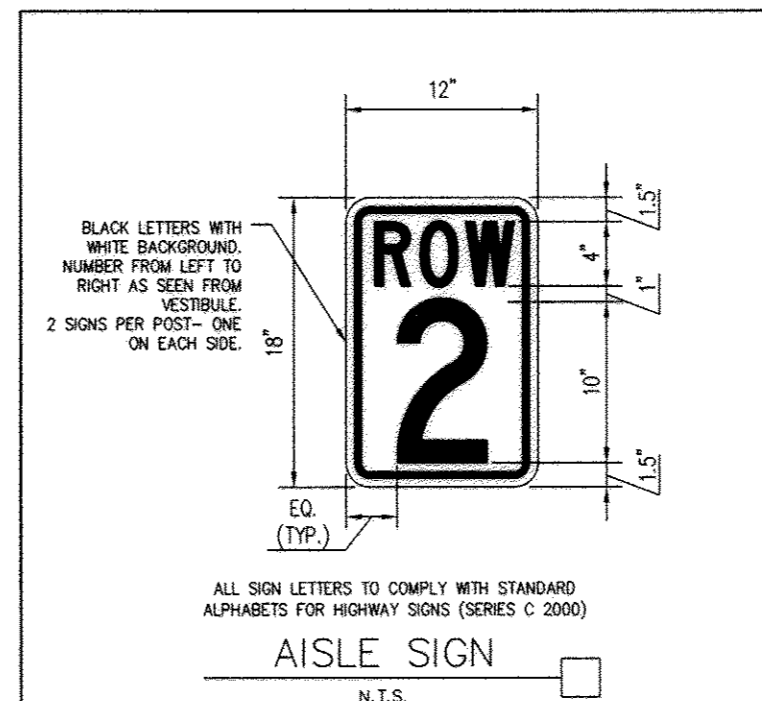
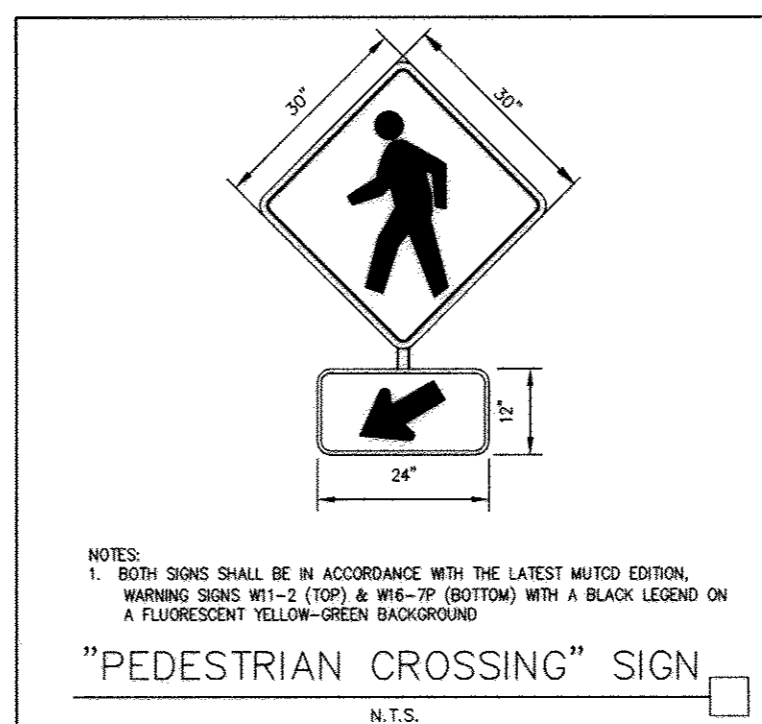
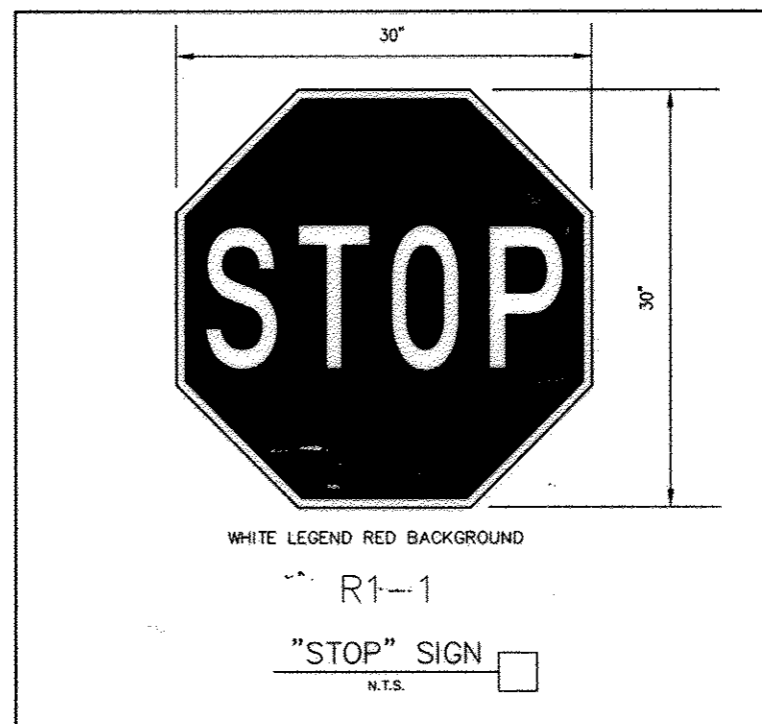
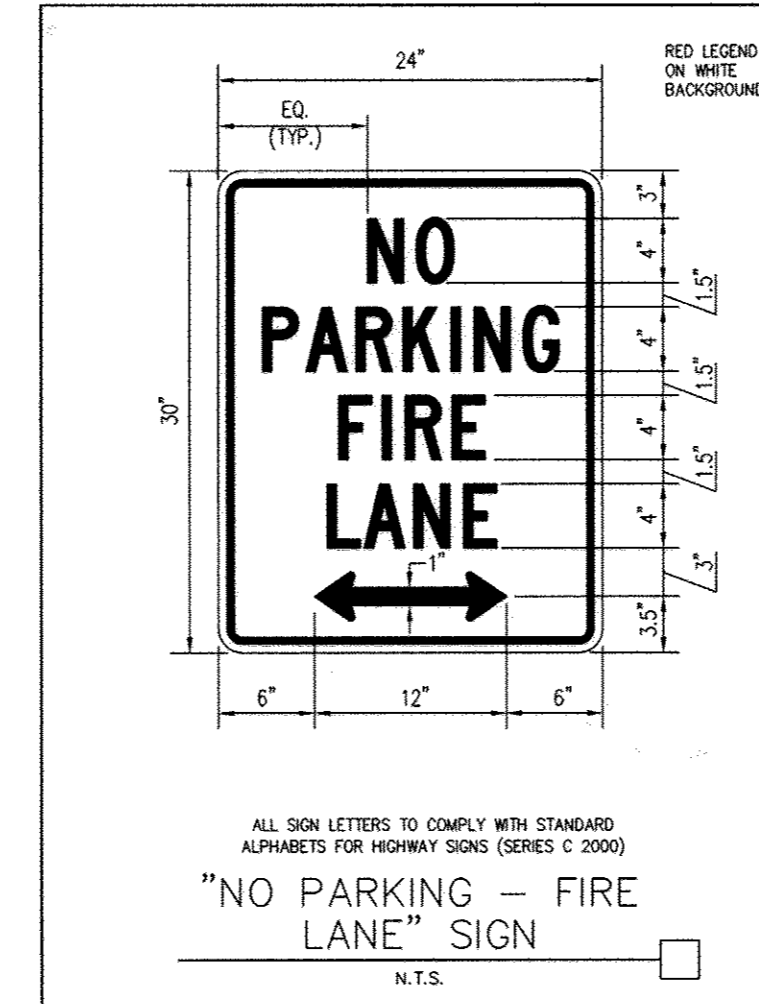
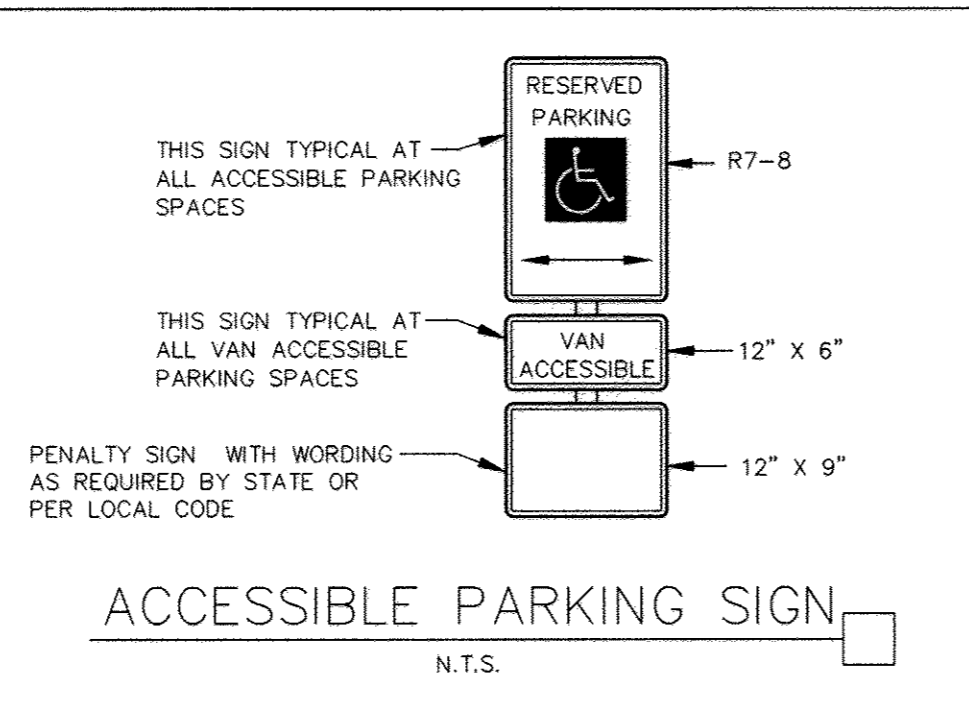
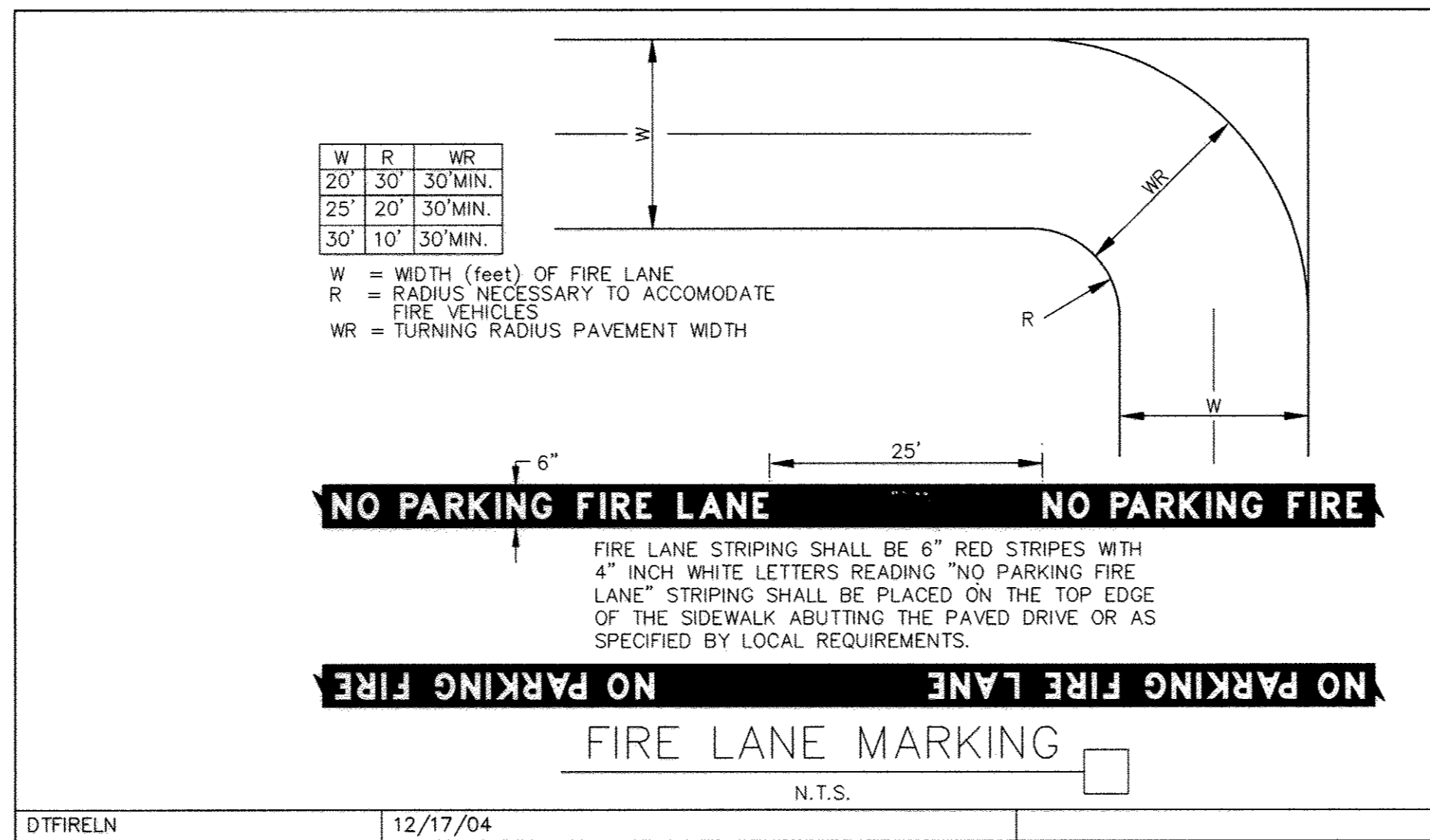
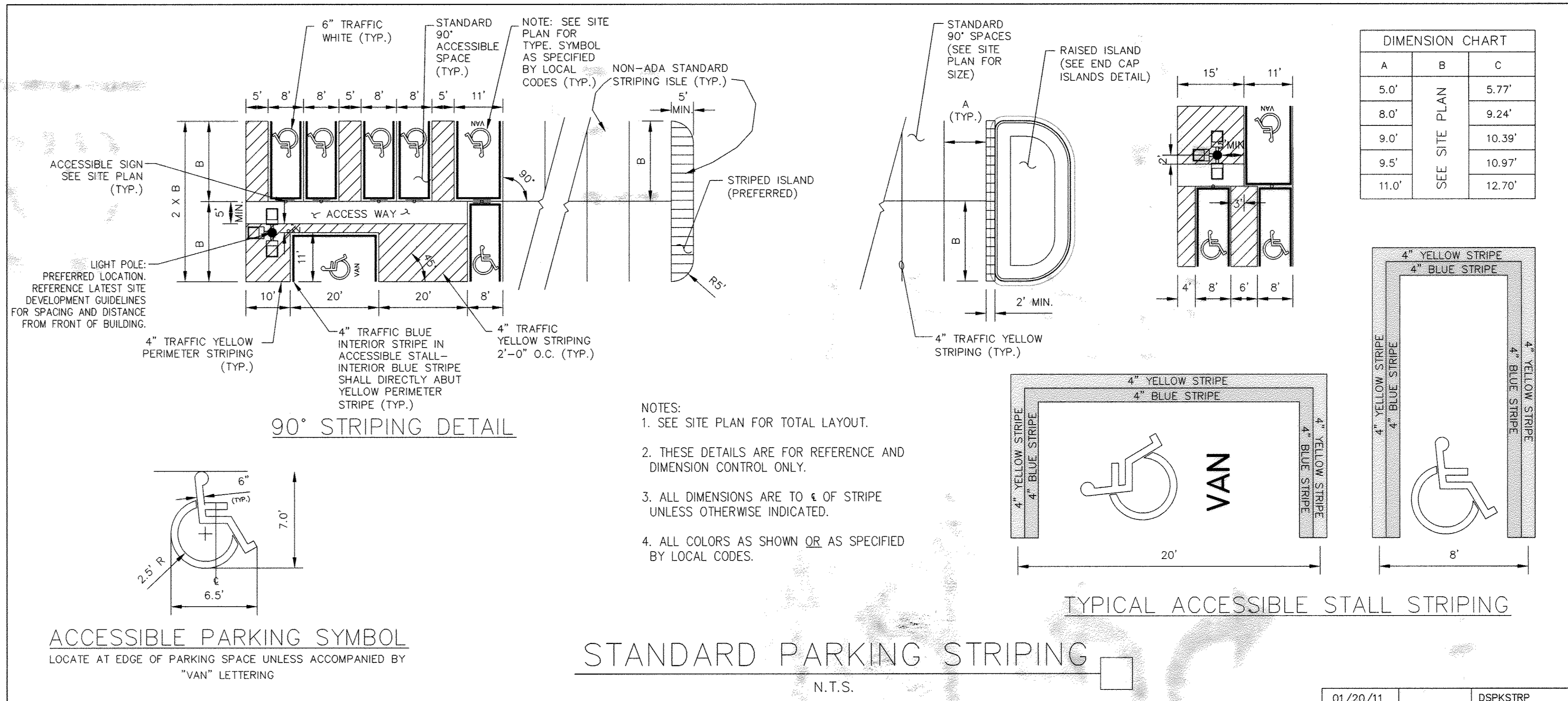
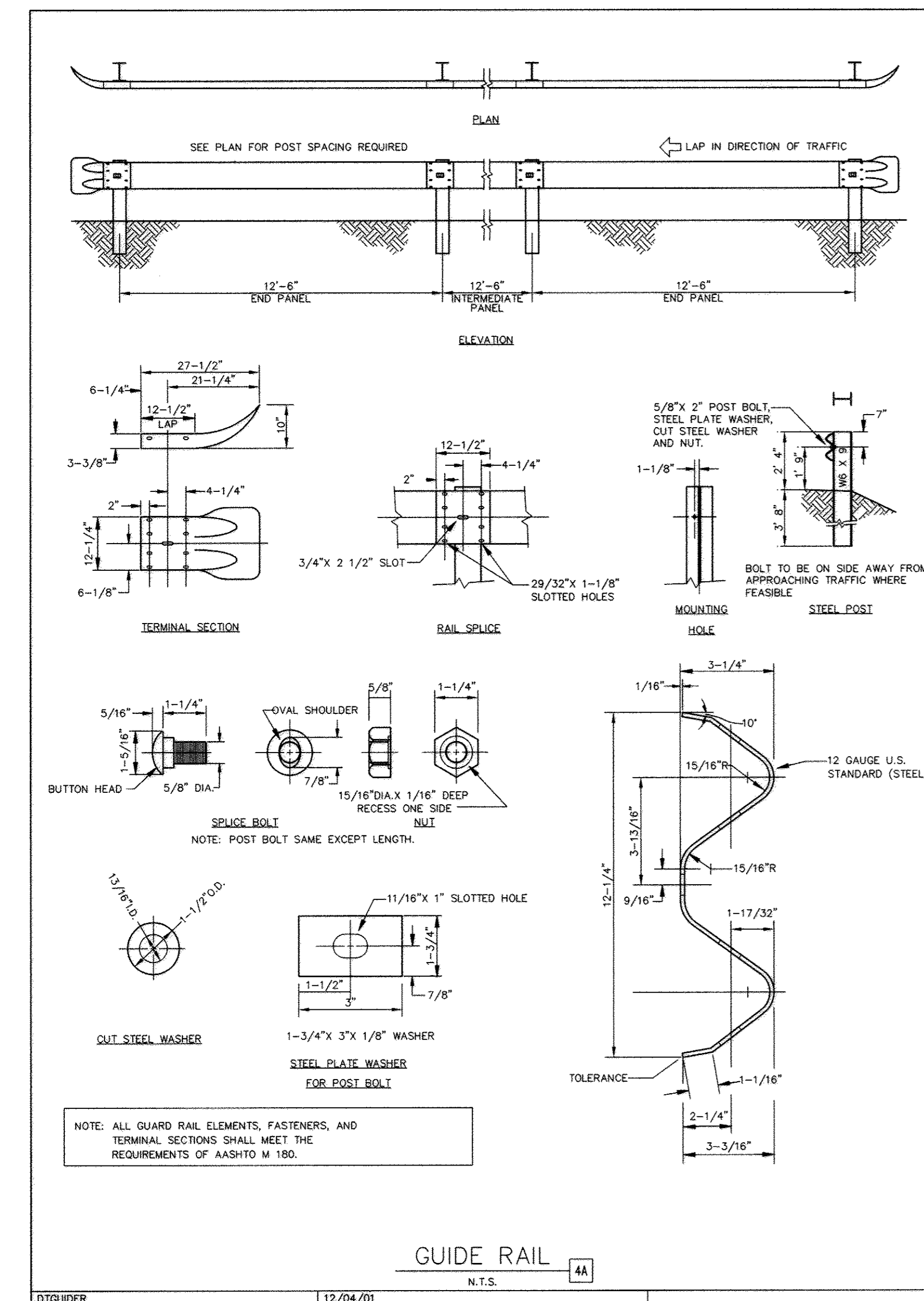
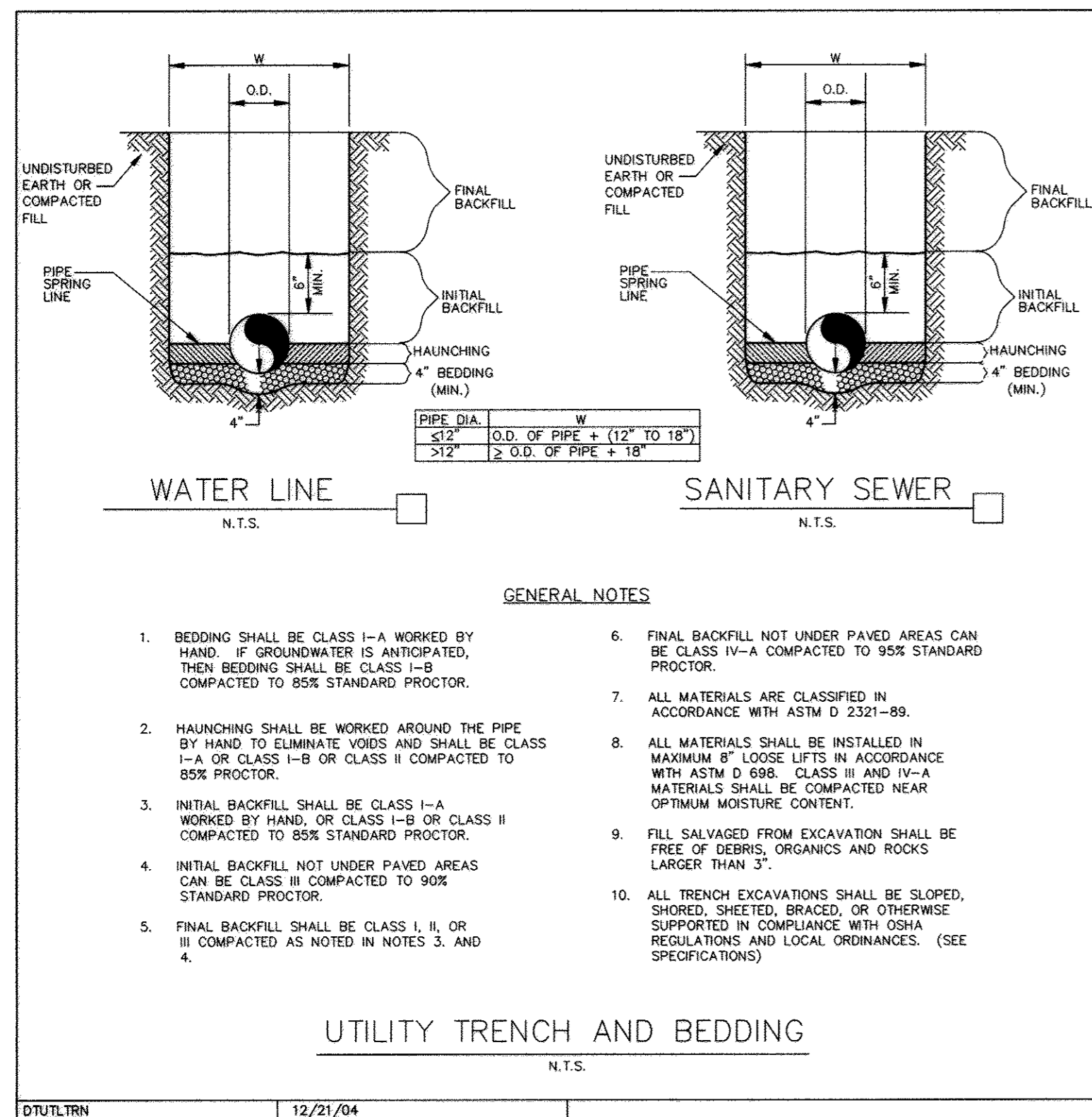
**Bowman CONSULTING**  
 Telephone: (703) 830-8083  
 Fax: (703) 830-8475  
 9813 Gowin Drive  
 Manassas, Virginia 20110  
 www.bowmanconsulting.com  
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**Walmart**  
 SUPERCENTER #2412-03  
 ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
 WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SE 10TH STREET  
 BENTONVILLE, AR 72716

**Walmart**

DESIGN DRAWN BU KJC  
 CHECKED GD  
 DATE 01/14/11  
 SCALE  
 JOB No. 4880-01-002  
 SHEET 17  
 OF 32 SHEETS

P:\1660 - Walmart Ellicott City MD\4660-01-002 (ENG) - Ellicott City, MD Walmart #2412-03\Engineering\Engineering Plans\County Subm17-20 - Site Detail Sheet.dwg, 8/15/2011 11:38:48 AM



**OWNER/DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SHDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SITE PLAN SDP-96-11  
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FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01  
ECP 11-007  
FINAL RECORD PLATS  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O TM PARCEL 1085  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 06-06-1995  
APPROVED: 06-21-1996  
APPROVED: 04-03-1996

APPROVED: 11-08-1995  
APPROVED: 08-06-2010  
F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Mike Thomas* 8/22/11  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Kate Seaman* 9/26/11  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Thomas & Butler* 9/27/11  
DIRECTOR DATE

**WALMART STORE #2412-03  
ELLCOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 8, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

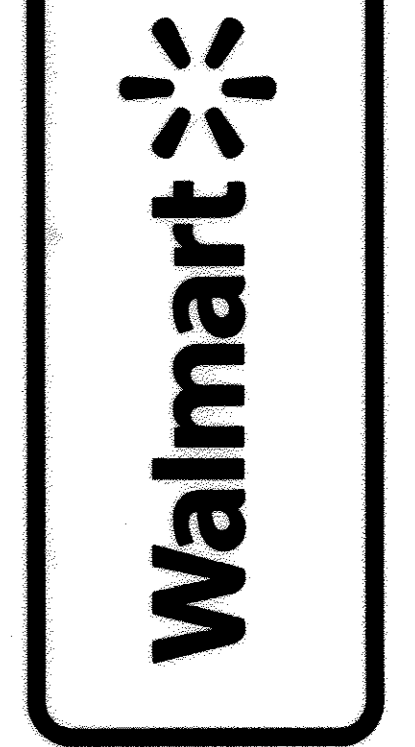
<b>CONSTRUCTION DETAILS</b>	DATE	SHEET
	07/25/11	18 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

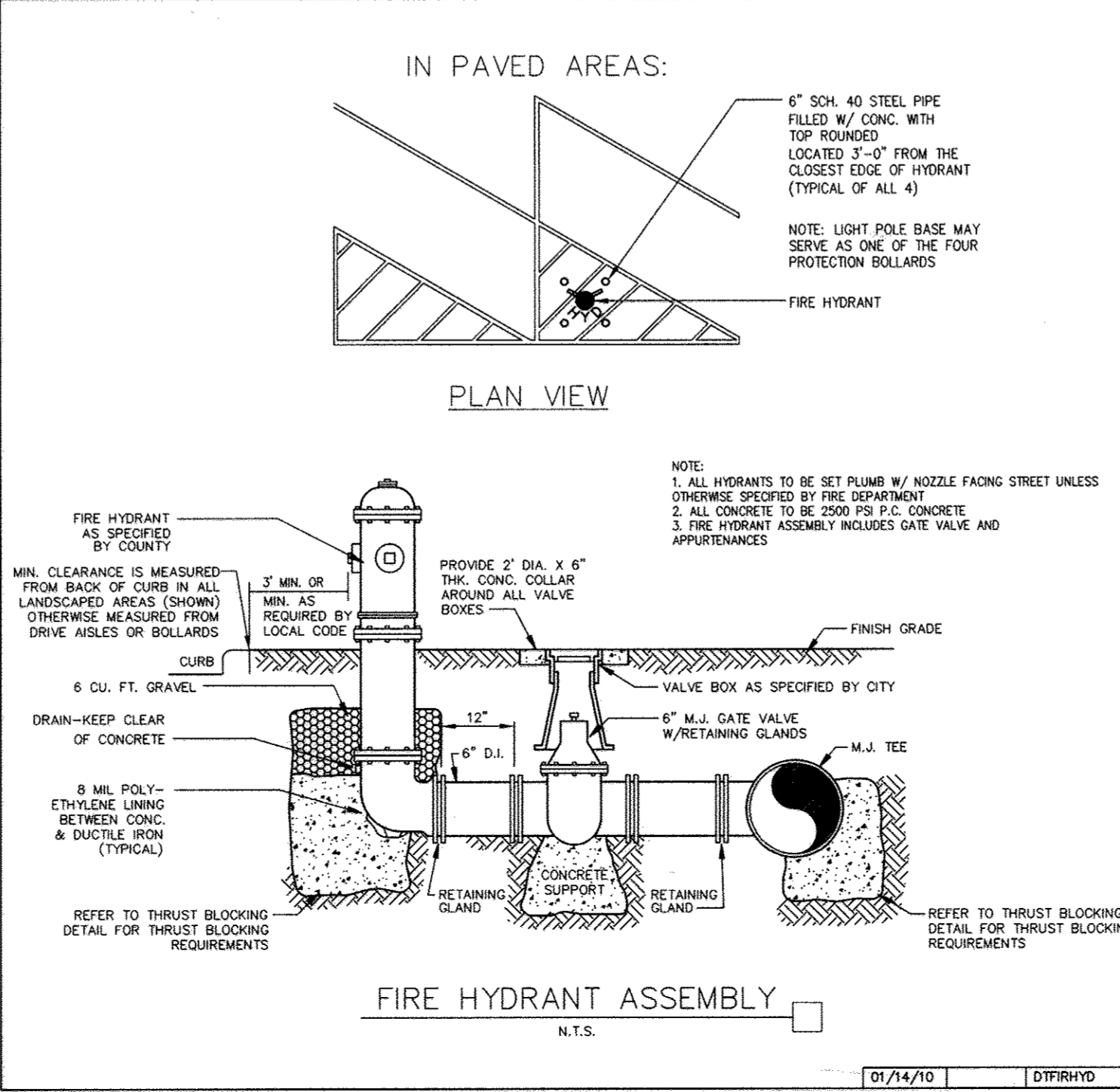
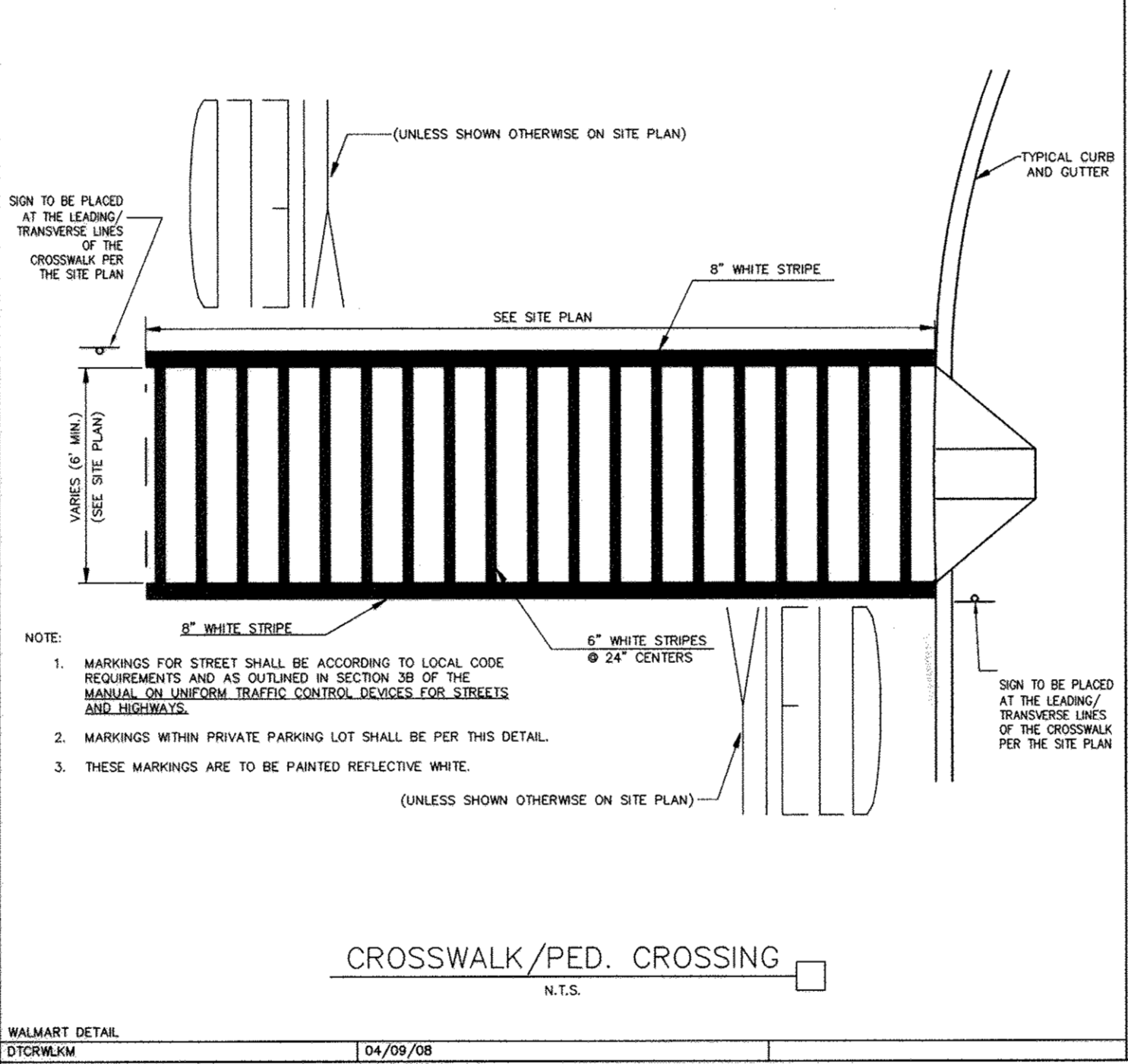
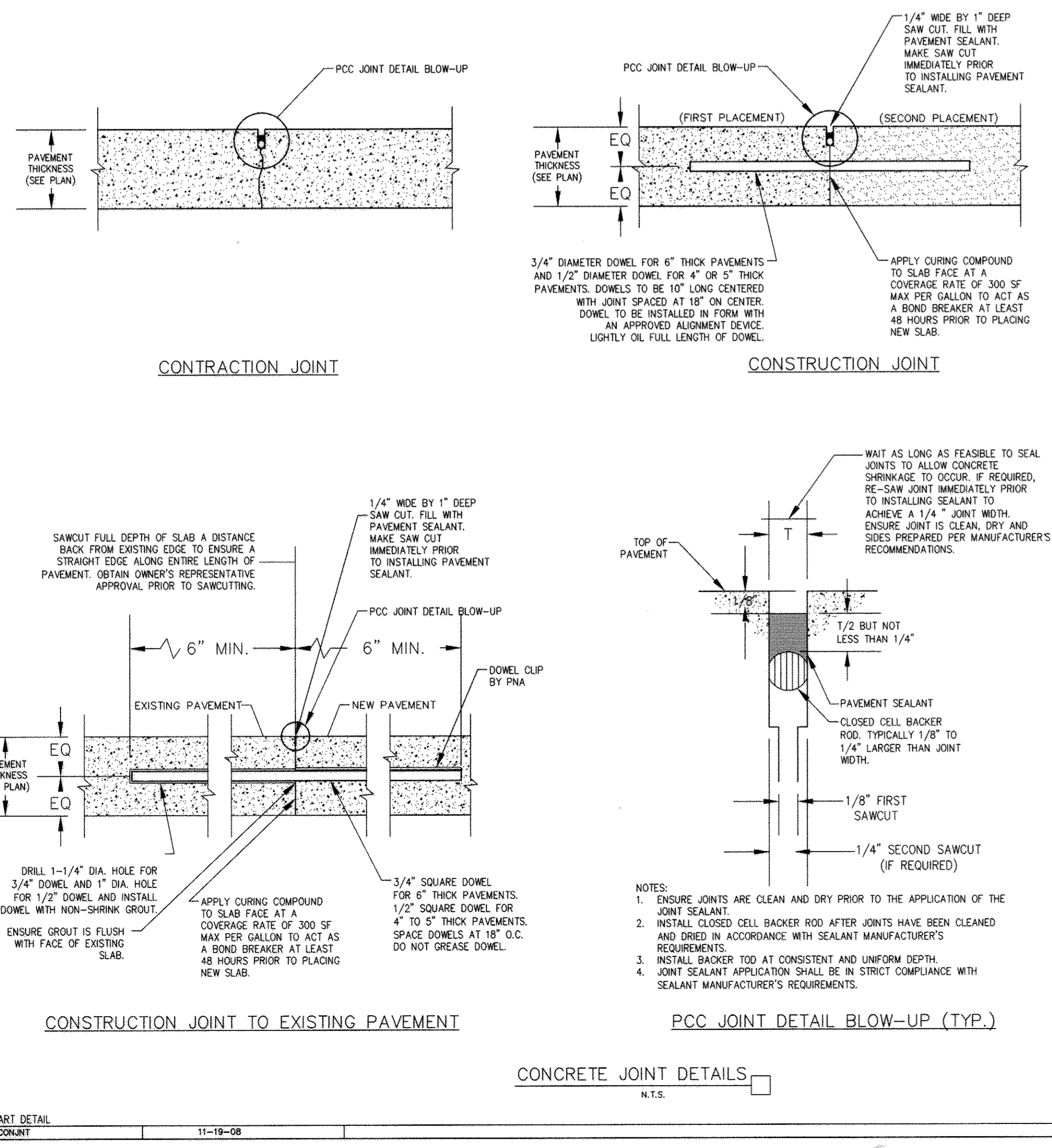
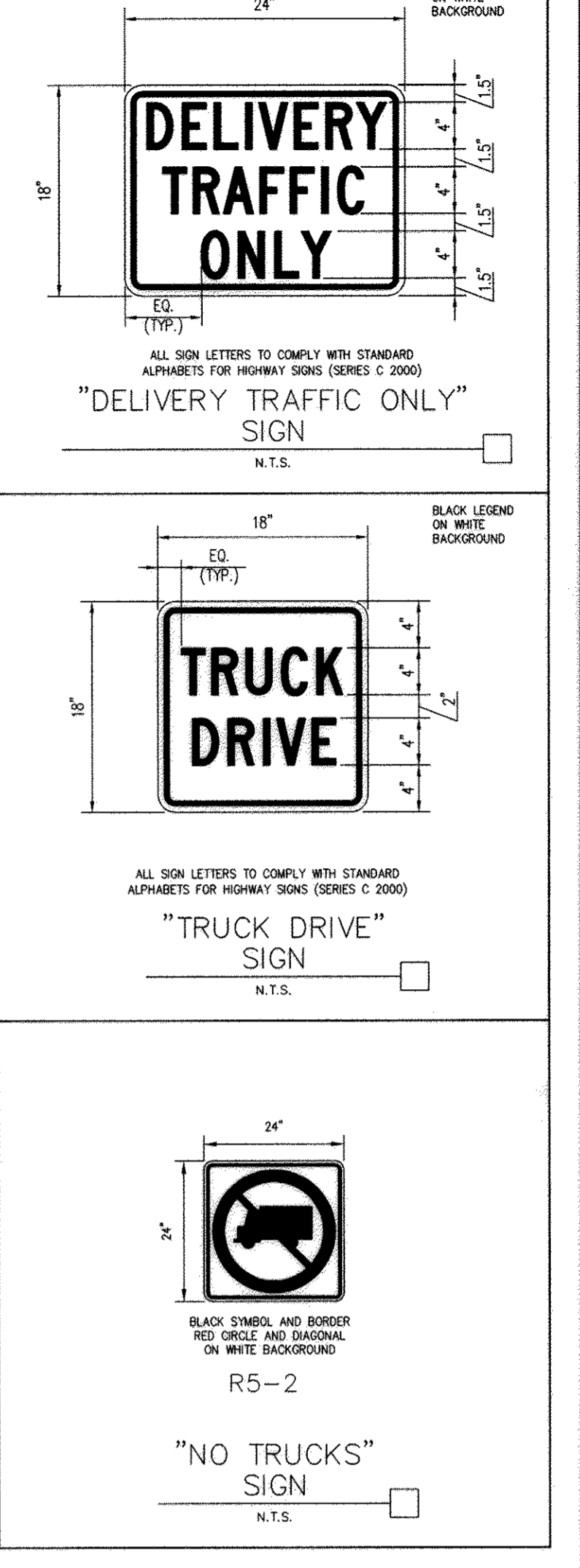
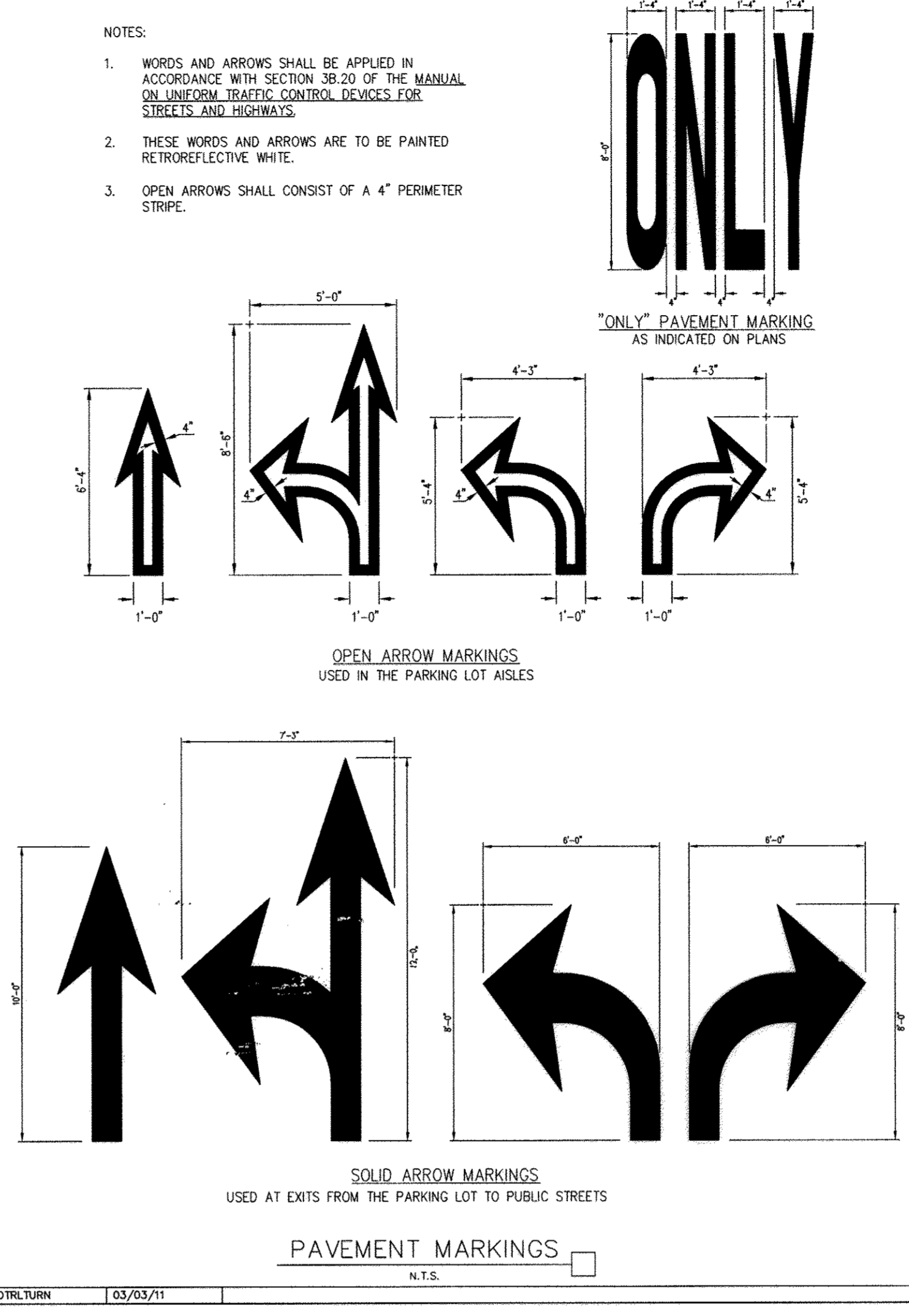
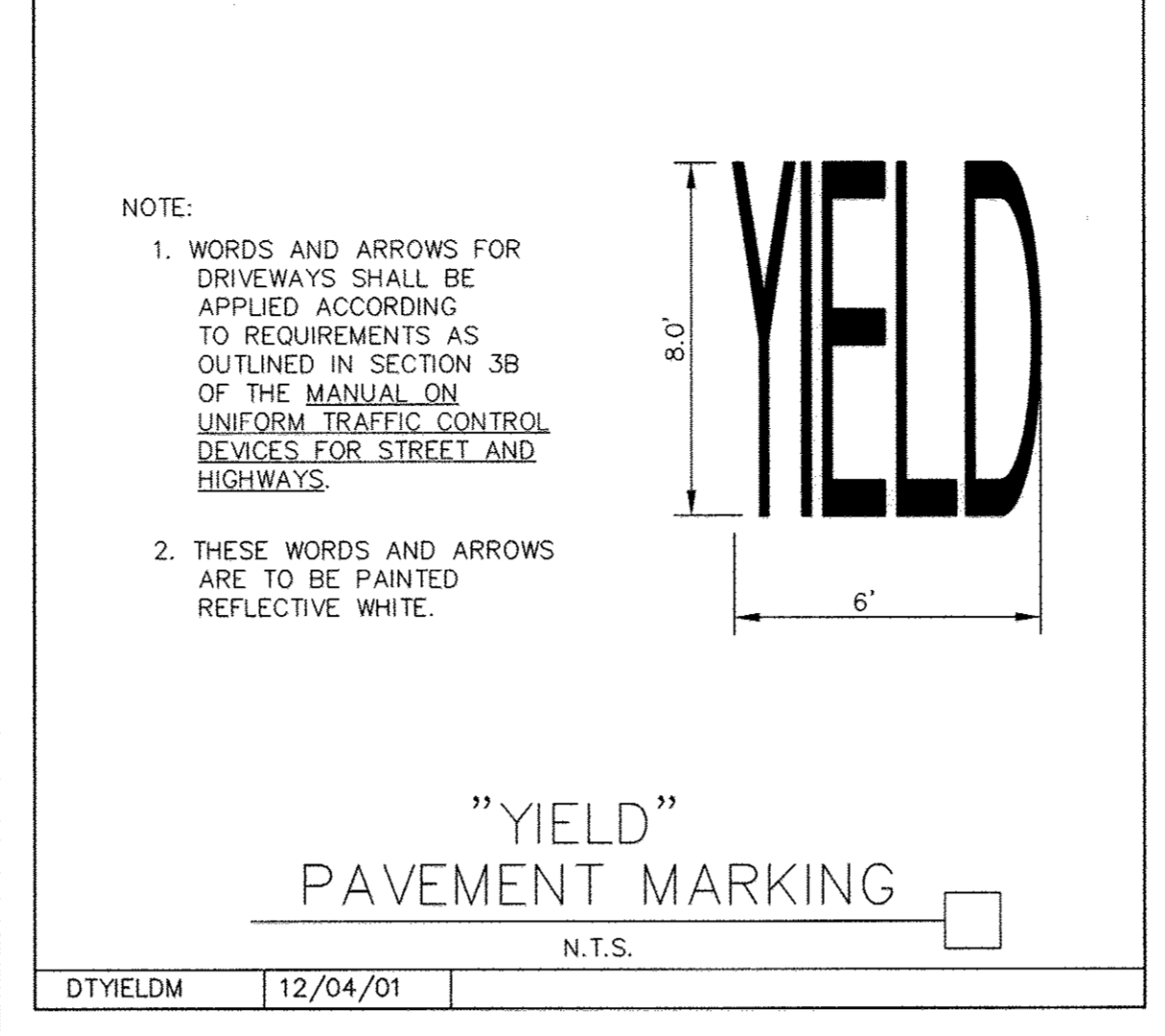
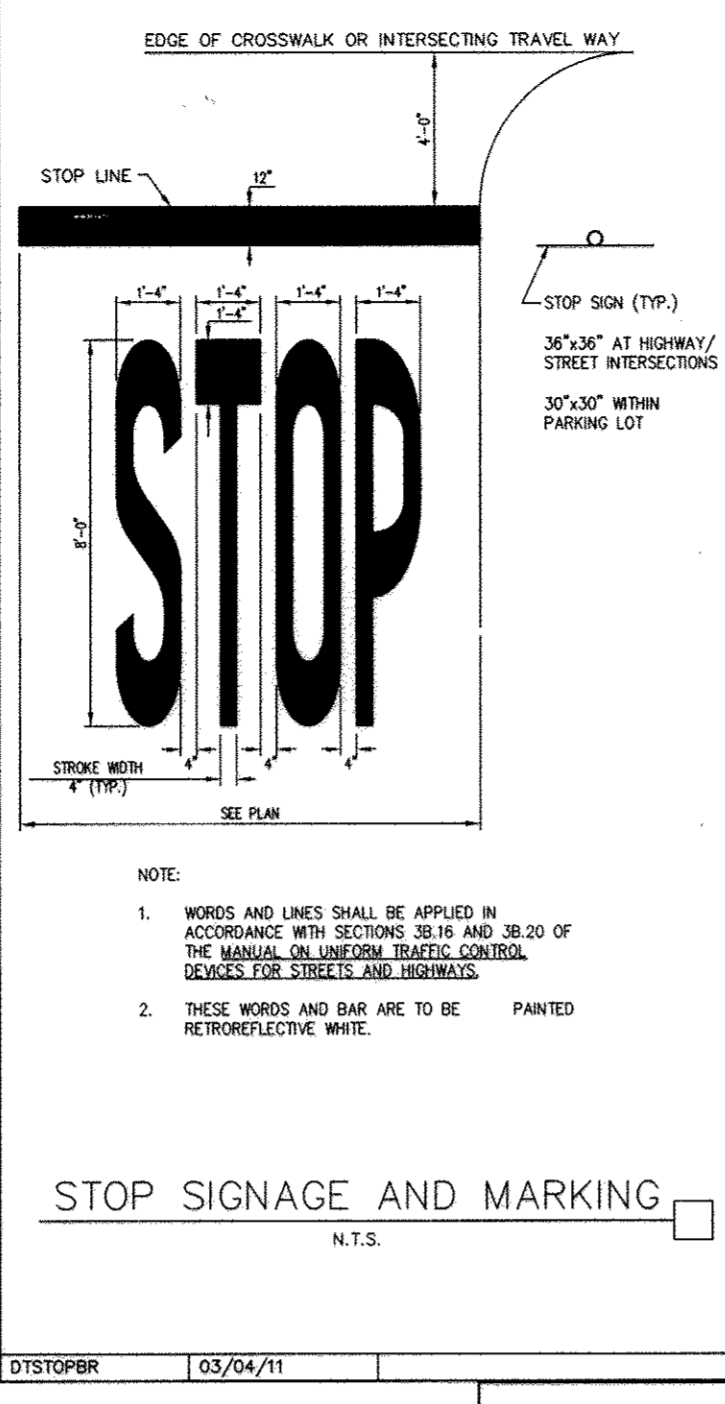
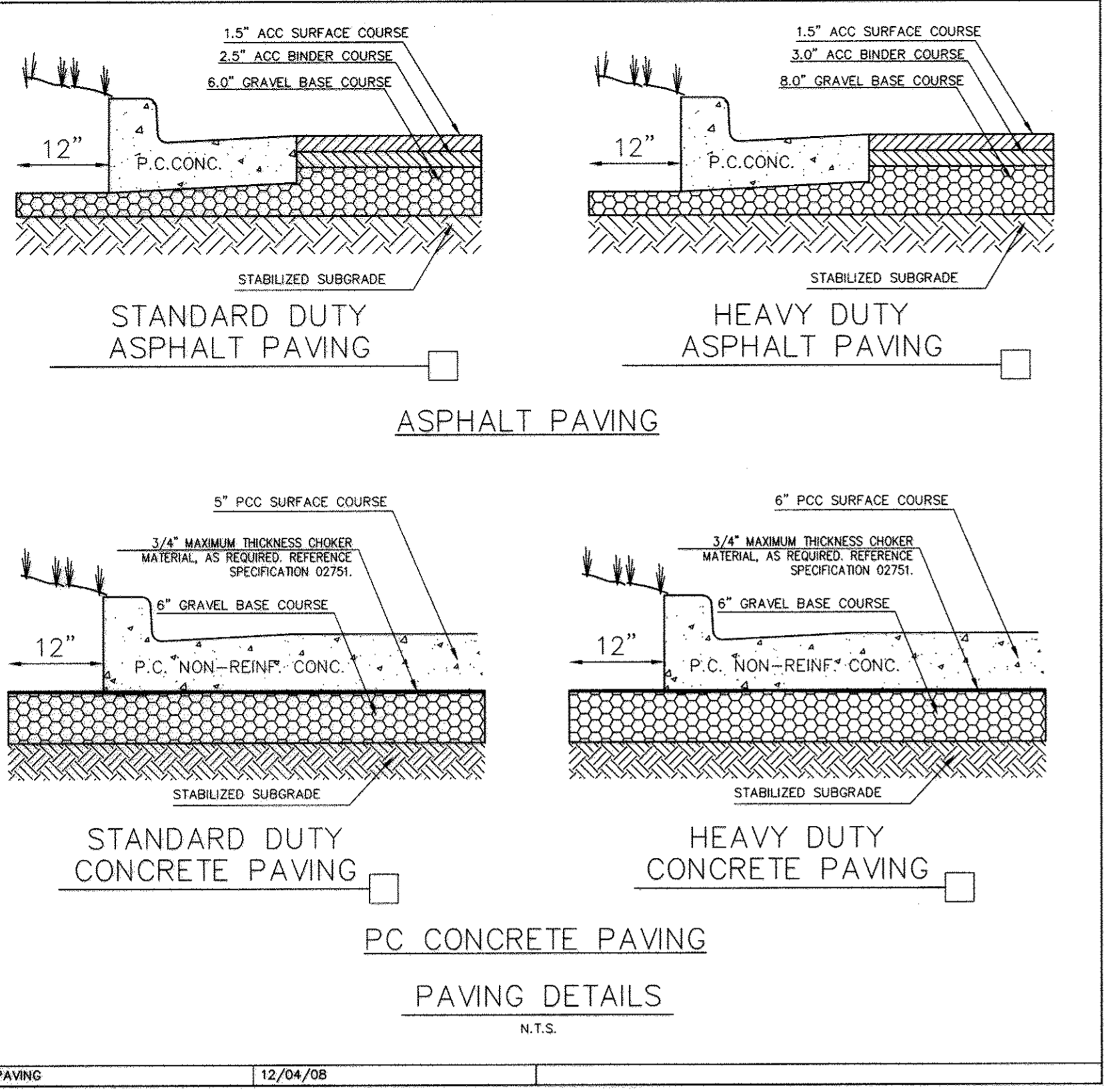
**Bowman CONSULTING**  
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9813 Gowlin Drive  
Manassas, Virginia 20110  
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Telephone: (703) 530-9083  
Fax: (703) 530-9475

STATE OF MARYLAND  
PROFESSIONAL ENGINEER  
No. 38755  
REGISTERED PROFESSIONAL ENGINEER  
7-25-11

SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716



DESIGN DRAWN BU KJC  
CHECKED GD  
DATE 01/14/11  
SCALE  
JOB No. 4880-01-002  
SHEET 18 OF 32 SHEETS



**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
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SITE PLAN SDP-96-11  
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FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01  
ECP 11-007  
FINAL RECORD PLATS  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O TM PARCEL 1085  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 06-06-1995  
APPROVED: 06-21-1996  
APPROVED: 04-03-1996

APPROVED: 11-08-1995  
APPROVED: 08-06-2010  
F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800

F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John P. ...*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 8/23/11

*W. J. ...*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 9/22/11

*Thomas J. Butler*  
DIRECTOR  
DATE: 9/27/11

**WALMART STORE #2412-03**  
**ELLCOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 8, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

**CONSTRUCTION DETAILS**

DATE: 07/25/11

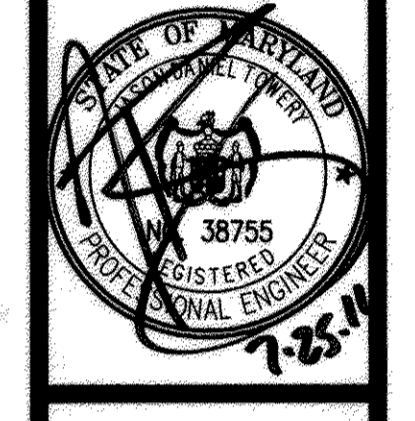
SHEET: 19 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

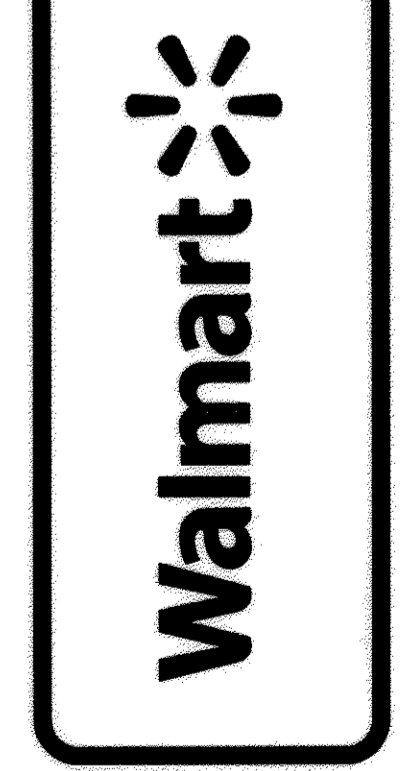
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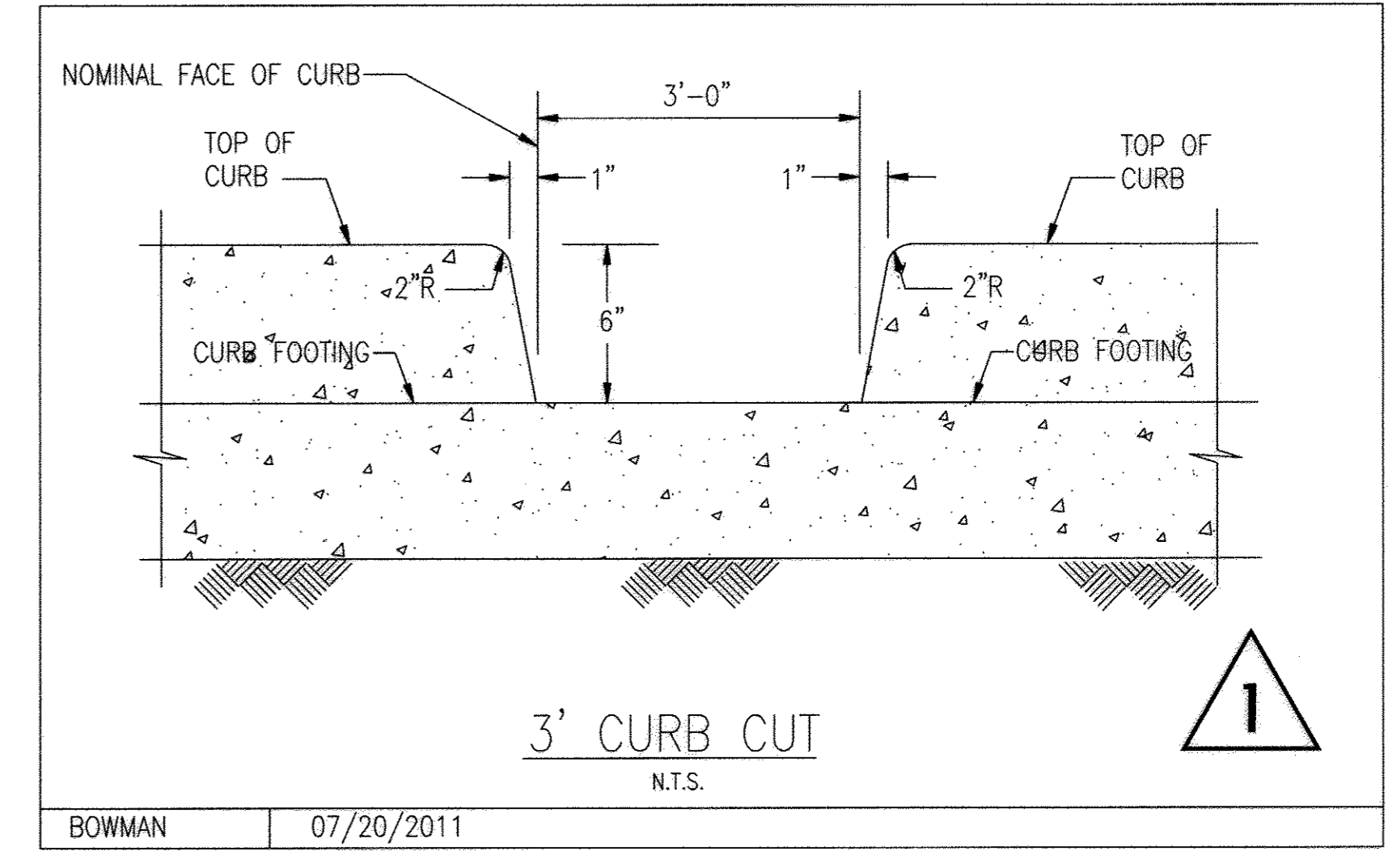
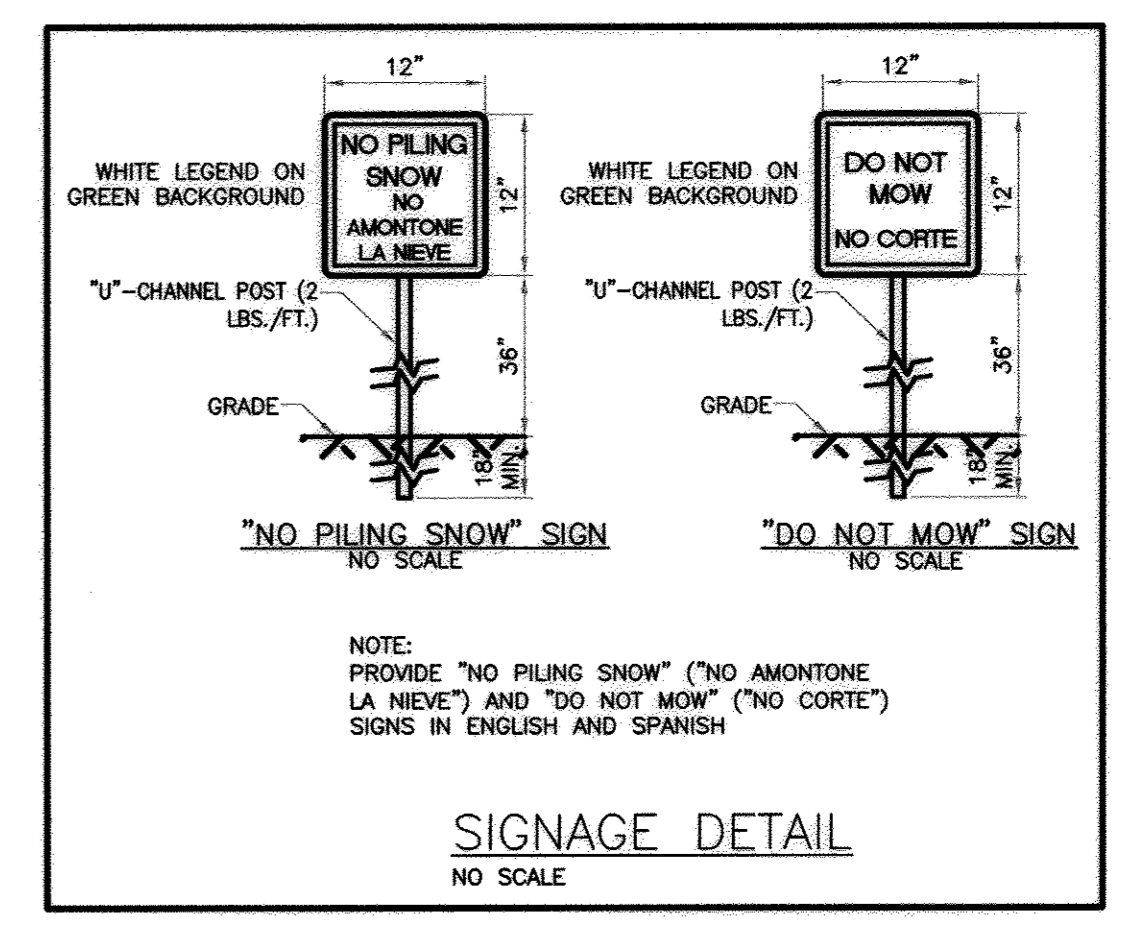
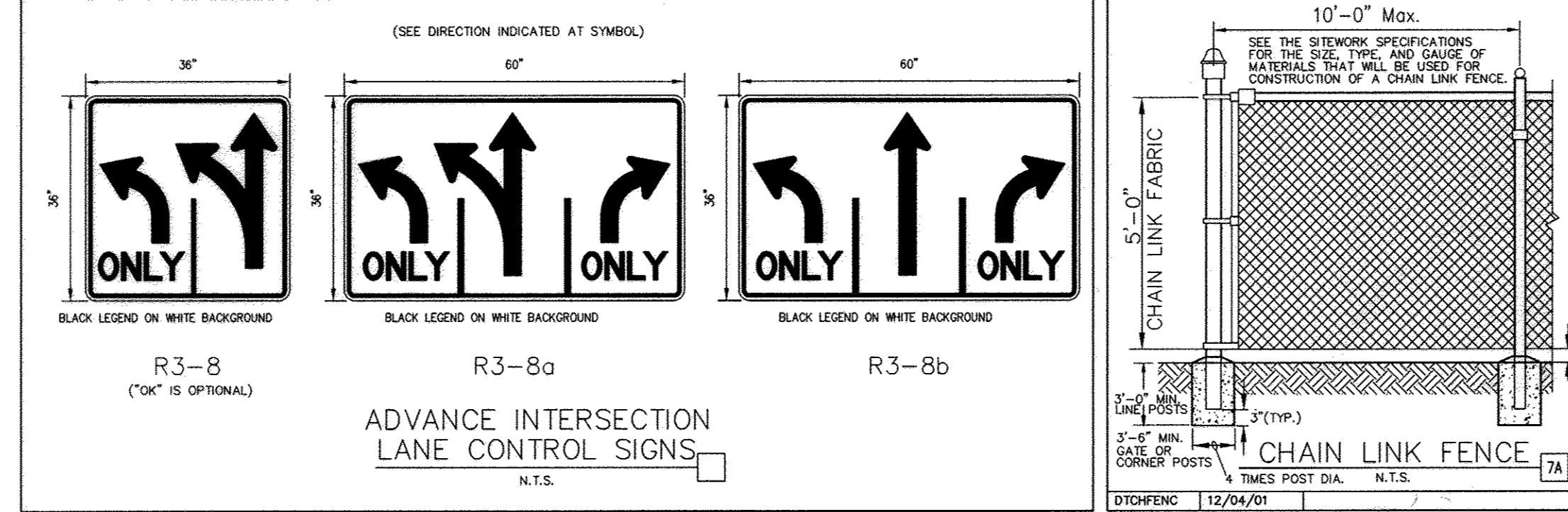
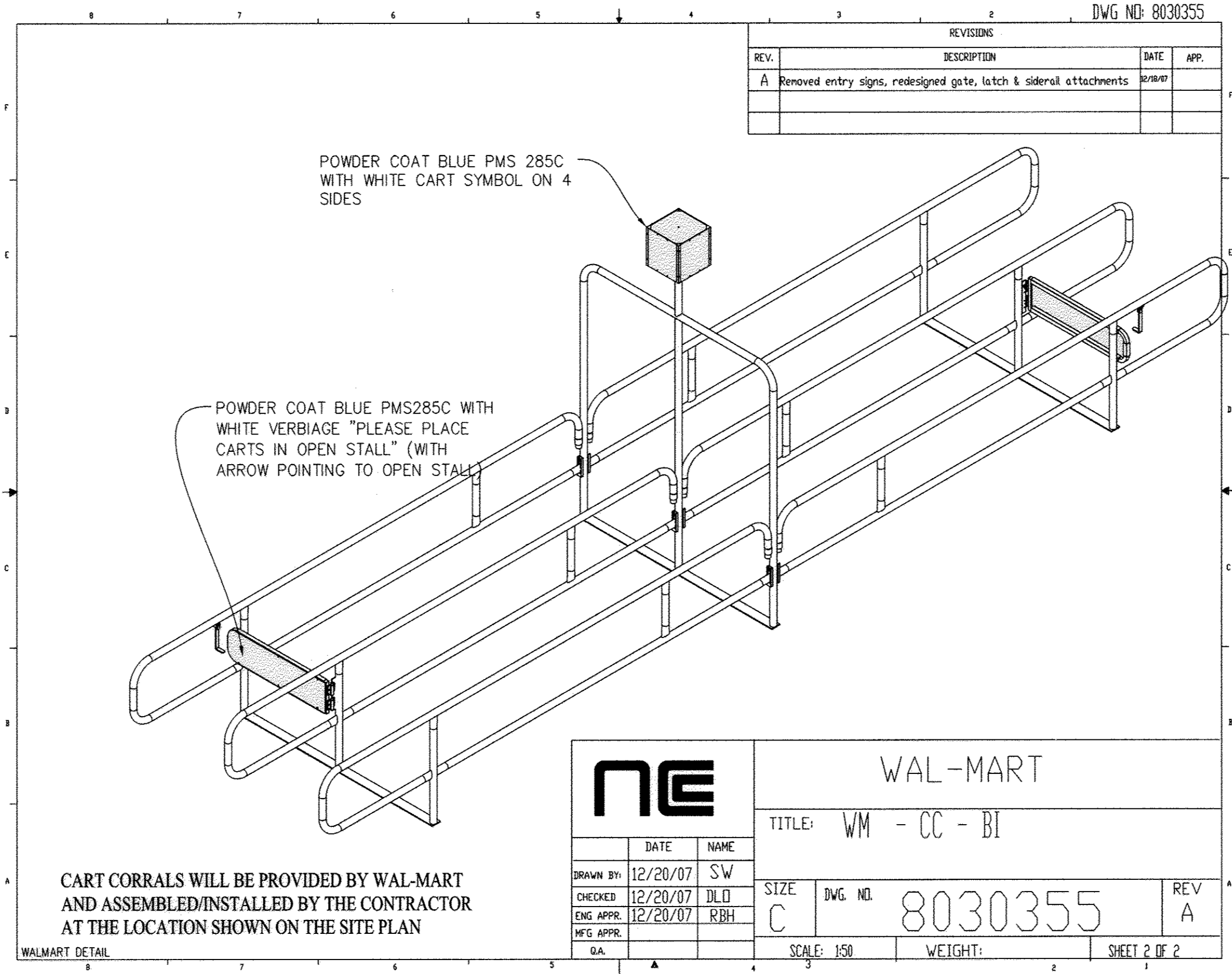
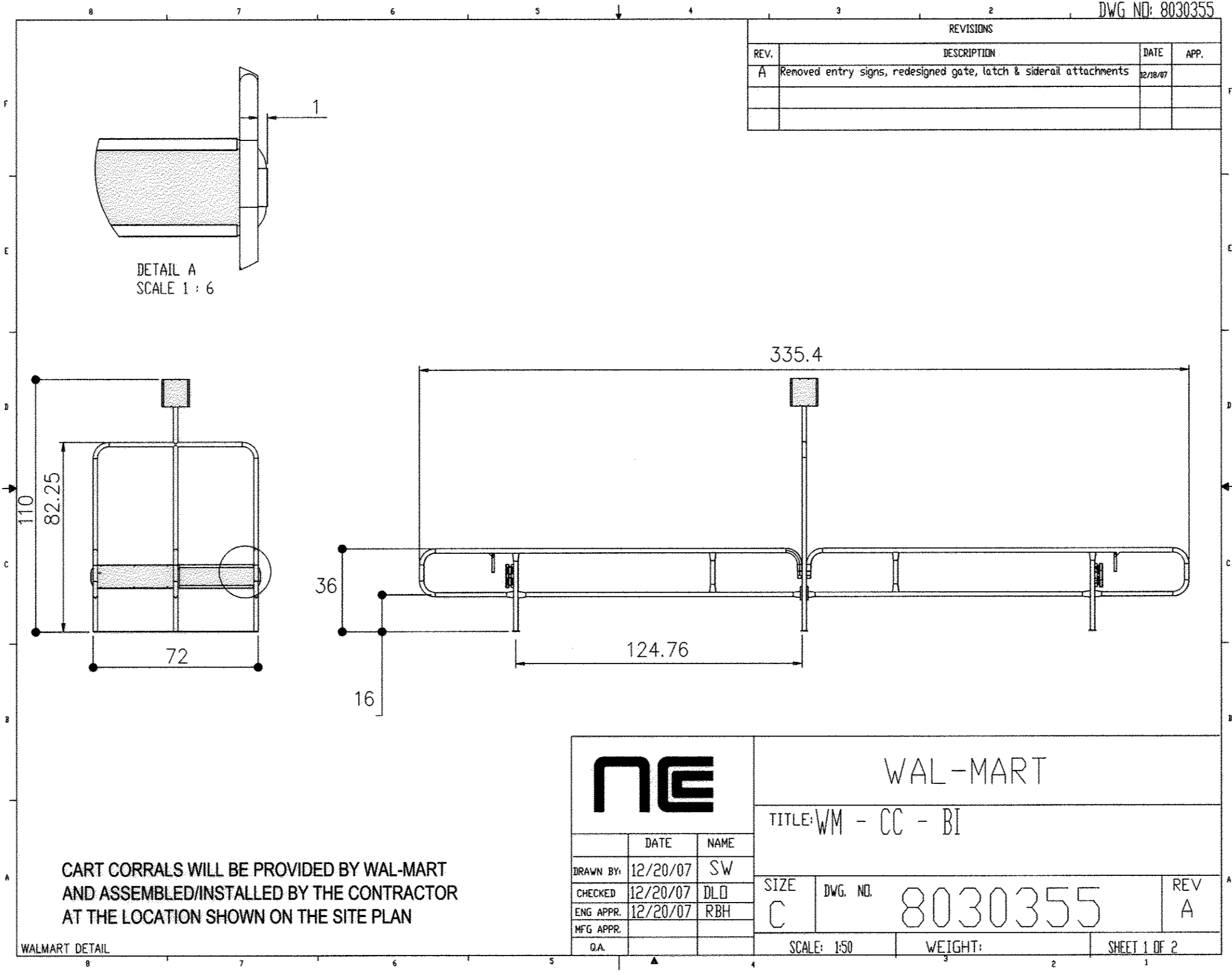
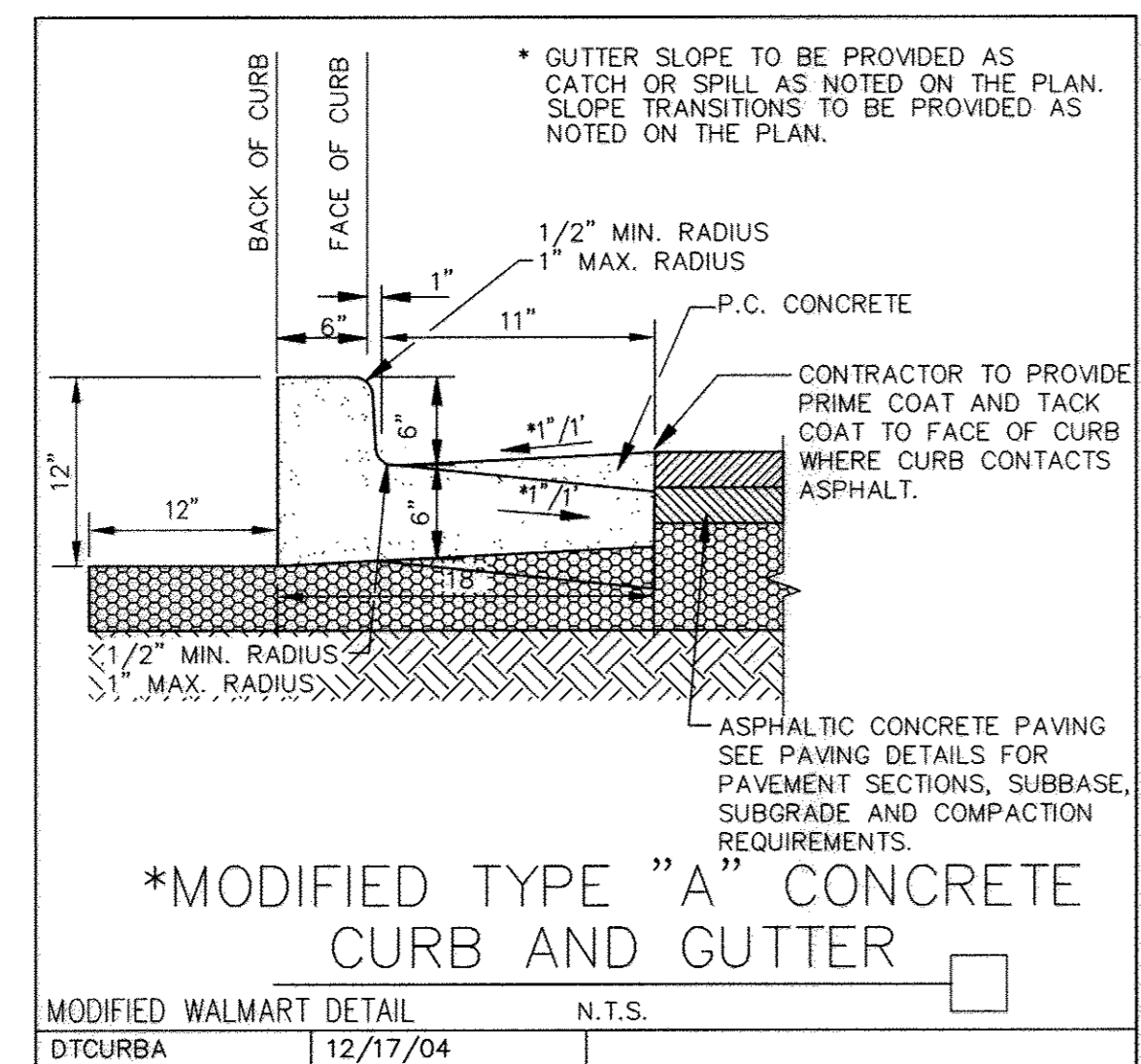
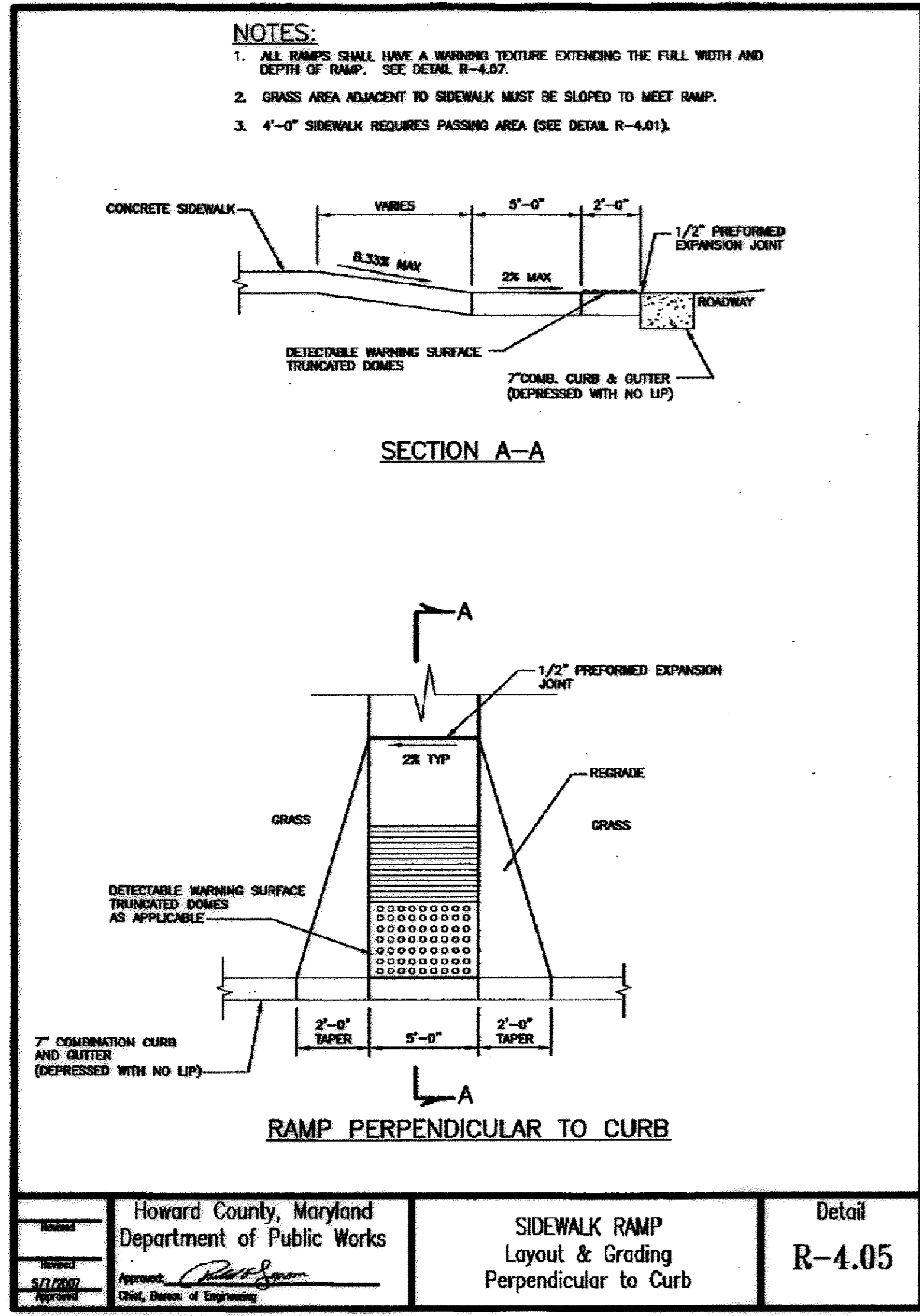


SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716



DESIGN DRAWN BY: KJC  
CHECKED BY: GD  
DATE: 01/14/11  
SCALE:  
JOB No. 4680-01-002  
SHEET 19 OF 32 SHEETS

P:\4680 - Walmart Ellicott City MD\4680-01-002 (ENG) - Ellicott City, MD Walmart #2412-03\Engineering\Engineering Plans\County Subm17-20 -Site Detail Sheet.dwg, 8/15/2011 11:58:45 AM



**OWNER/DEVELOPER**

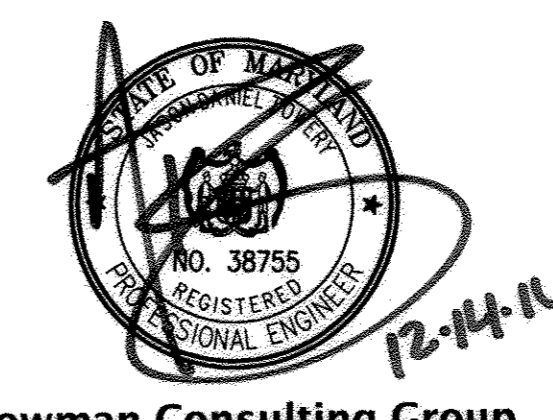
WAL-MART REAL ESTATE BUSINESS TRUST  
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**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
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FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01  
ECP 11-007  
FINAL RECORD PLATS WATER NO. F03

HOWARD COUNTY, MARYLAND  
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F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800 F-12-023



**Bowman Consulting Group**

**WALL DRAIN DETAIL REMOVED & CURB CUT DETAIL ADDED. MODIFICATIONS ONLY.**

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>Chad Edwards</i>	1/11/12
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Keith Standen</i>	1/18/12
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Monica S. Butler</i>	1/18/12
DIRECTOR	DATE

NO	DATE	DESCRIPTION	BY
1	12/14/11	COMPACTOR REMOVAL & PARKING MOD.	JDT

<b>WALMART STORE #2412-03 ELLCOTT CITY, WALMART, PARCEL B</b>			
TM 24, TM GRID 8, P/O TM PARCEL 1085 2ND ELECTION DISTRICT, HOWARD COUNTY, MD			
<b>CONSTRUCTION DETAILS</b>	DATE	SHEET	
	12/14/11	20 OF 32 SHEETS	

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman Consulting Group, Ltd.**

38755  
PROFESSIONAL ENGINEER

7-25-11

**Walmart**

SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716

**Walmart**

DESIGN DRAWN  
BU KJC

CHECKED  
GD

DATE  
01/14/11

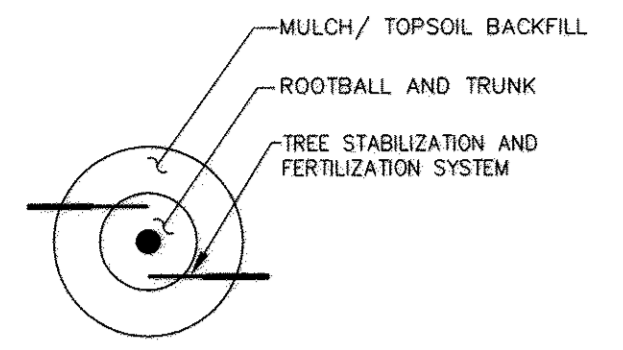
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JOB No.  
4800-01-002

SHEET  
**20**

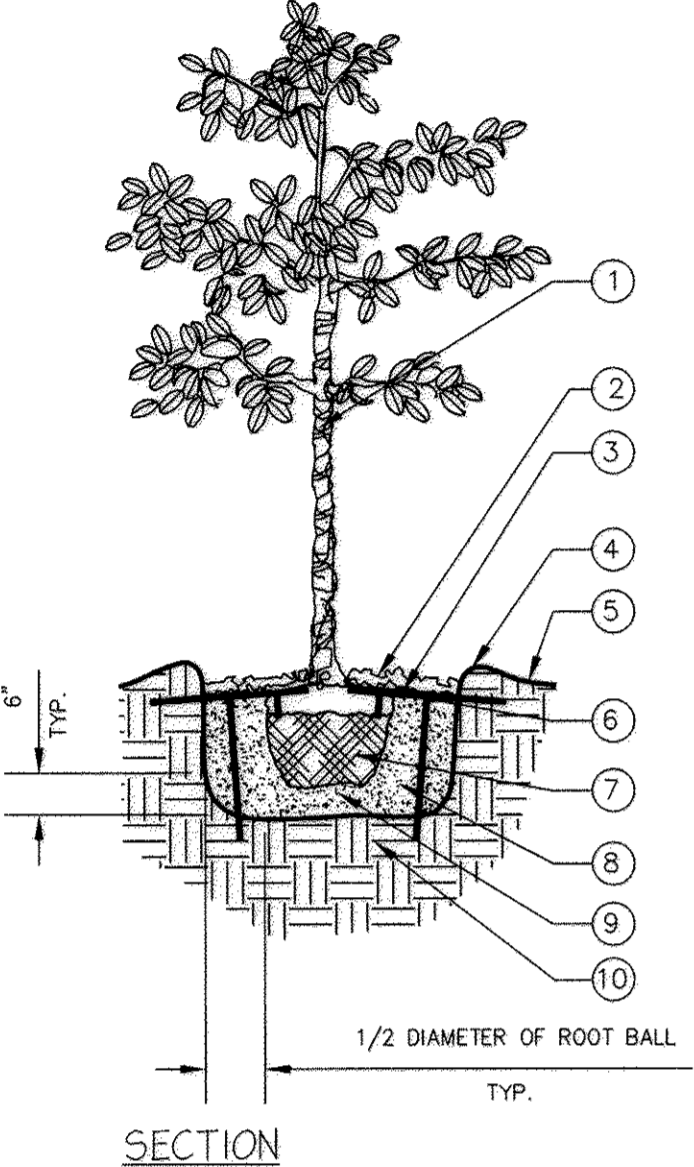
OF 32 SHEETS

SDP-96-011



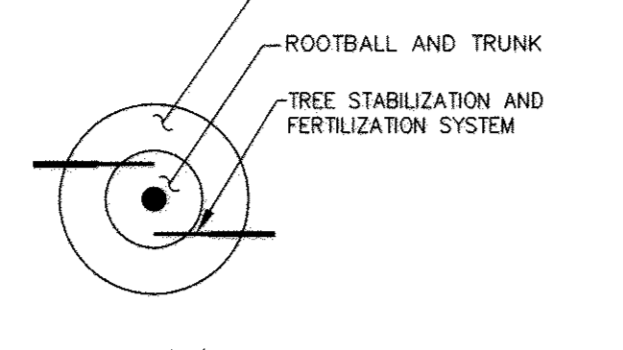
- TREE WRAP
- 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
- STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEMARK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS. GUY AS NECESSARY IN EXTREME WIND CONDITIONS WITH #10 GAUGE WIRE.
- 3" HIGH SOIL BERM TO HOLD WATER.
- FINISHED GRADE (SEE GRADING PLAN)
- TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
- B & B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
- PREPARED PLANTING SOIL AS SPECIFIED.
- ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
- UNDISTURBED SUBSOIL

- NOTES:
- FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
  - REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GRIDDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
  - SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
  - PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.
  - BRANCHING HEIGHT TO A.A.N. STANDARDS.



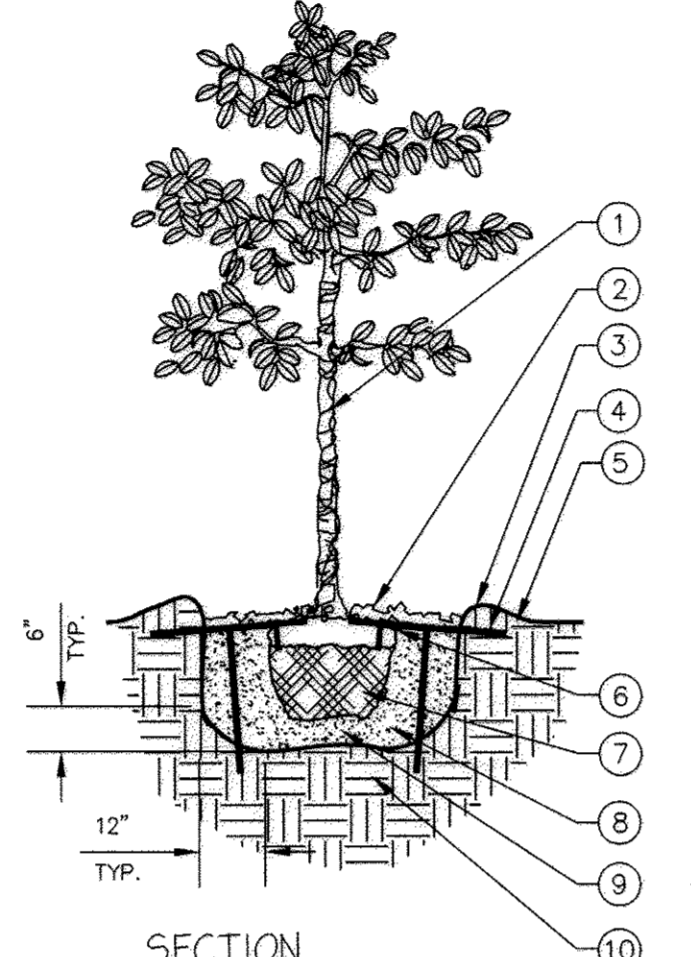
**LARGE TREE PLANTING (14' OR GREATER)**  
N.T.S.

07/03/08 LG TR PLNTG



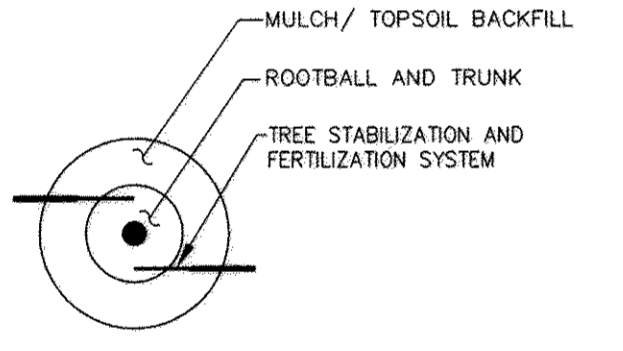
- TREE WRAP
- 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
- 3" HIGH SOIL BERM TO HOLD WATER.
- STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEMARK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS. GUY AS NECESSARY IN EXTREME WIND CONDITIONS WITH #10 GAUGE WIRE.
- FINISHED GRADE (SEE GRADING PLAN)
- TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
- B & B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
- PREPARED PLANTING SOIL AS SPECIFIED.
- ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
- UNDISTURBED SUBSOIL

- NOTES:
- FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
  - REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GRIDDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
  - SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
  - PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.
  - BRANCHING HEIGHT TO A.A.N. STANDARDS.



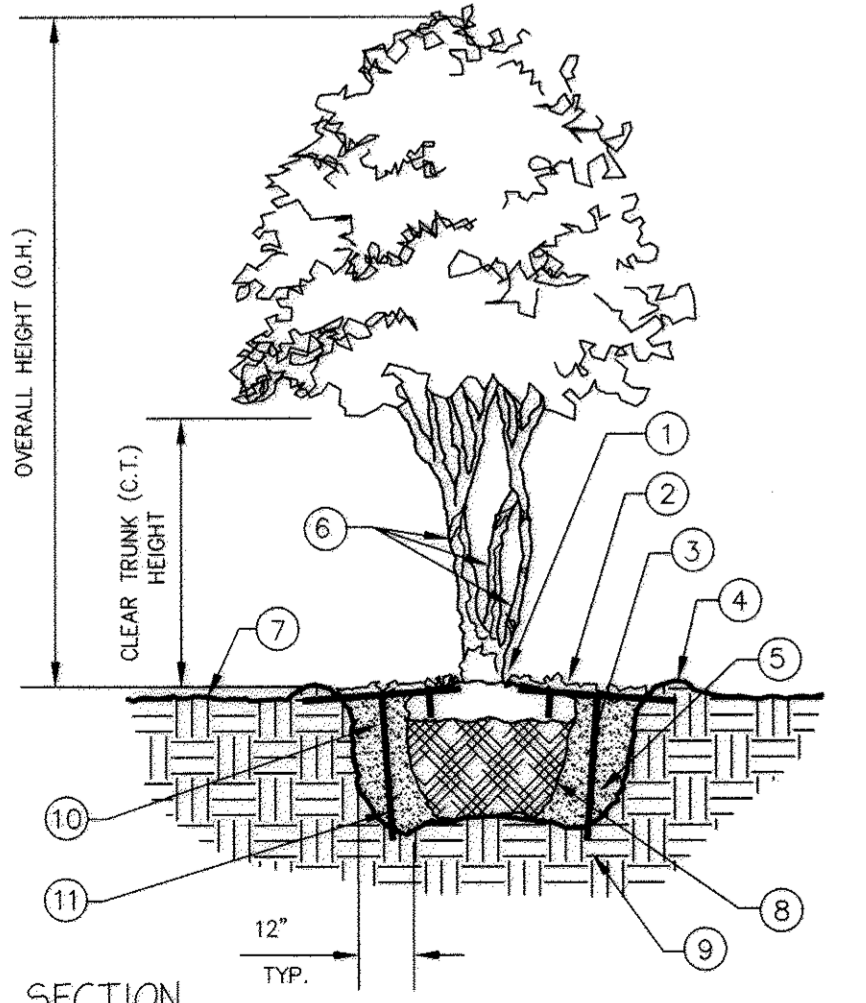
**SMALL TREE PLANTING (14' OR LESS)**  
N.T.S.

07/03/08 SM TR PLNTG



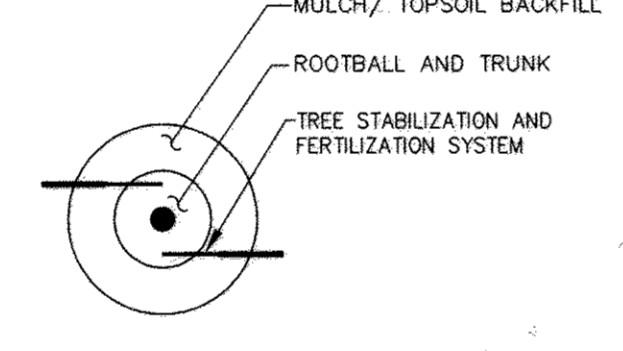
- BASE OF TREE SHALL BE PLANTED SLIGHTLY ABOVE (1" MIN.) ADJACENT FINISH GRADE. REMOVE ALL TWINE & STRAPS & CUT BURLAP FROM TOP 1/3 OF ROOTBALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
- 4" SHREDDED HARDWOOD BARK MULCH OR APPROVED EQUAL
- DIAMETER OF TREE PIT TO BE TWICE THE DIAMETER OF ROOTBALL-ROUGHEN SIDES OF TREE PIT.
- 3" HIGH SOIL BERM TO HOLD WATER.
- TOPSOIL MIX BACKFILL
- TREE WRAP
- 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN)
- ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
- UNDISTURBED SUBSOIL
- PREPARE PLANTING SOIL AS SPECIFIED.
- STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEMARK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS. GUY AS NECESSARY IN EXTREME WIND CONDITIONS WITH #10 GAUGE WIRE.

- NOTES:
- FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
  - SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GRIDDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
  - SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
  - PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT
  - BRANCHING HEIGHT TO A.A.N. STANDARDS
  - IF SITE CONDITIONS REQUIRE GUYING OF THE TREE, FASTEN #10 GUY WIRE TO STRONGEST TRUNK AT THE CENTER OF THE MULTI-TRUNK TREE.



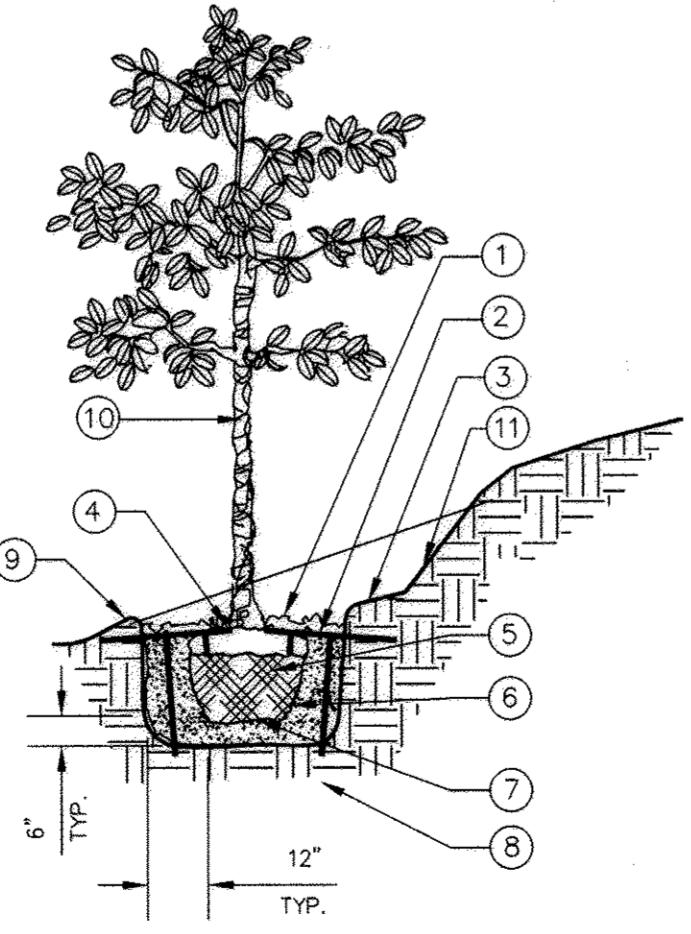
**MULTI-TRUNK TREE PLANTING**  
N.T.S.

07/03/08 MULT TRNK PLNTG



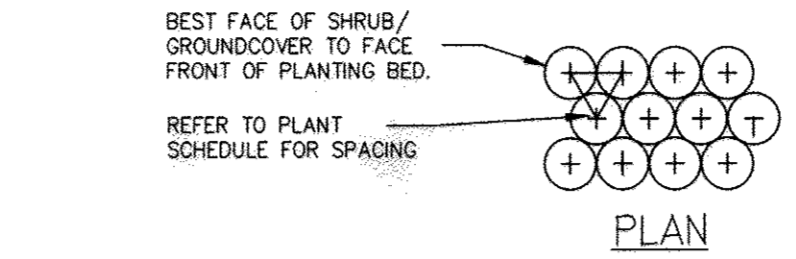
- 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
- STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEMARK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS. GUY AS NECESSARY IN EXTREME WIND CONDITIONS WITH #10 GAUGE WIRE.
- 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN)
- TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
- B&B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
- PREPARE PLANTING SOIL AS SPECIFIED.
- ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
- UNDISTURBED SUBSOIL
- 3" HIGH SOIL BERM TO HOLD WATER.
- TREE WRAP
- CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

- NOTES:
- FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
  - REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GRIDDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
  - SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
  - PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT
  - BRANCHING HEIGHT TO A.A.N. STANDARDS.

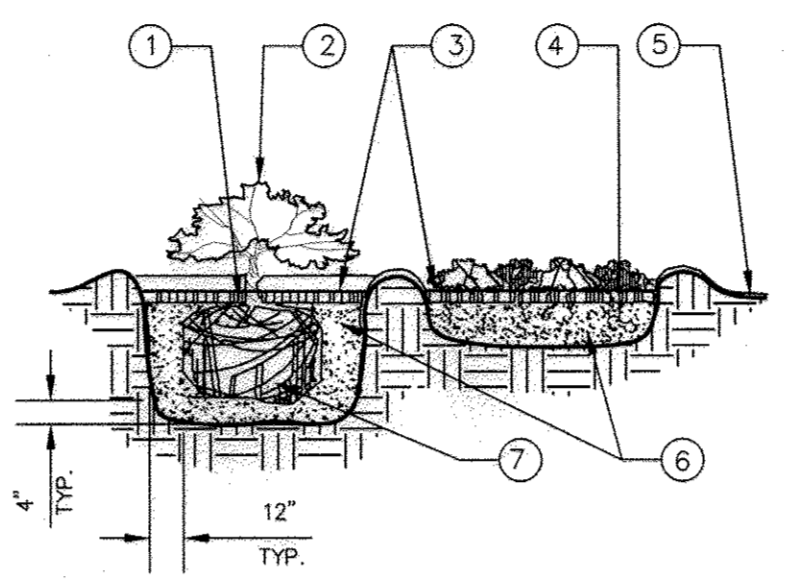


**TREE PLANTING ON SLOPE**  
N.T.S.

07/03/08 TR PLNTG SLP

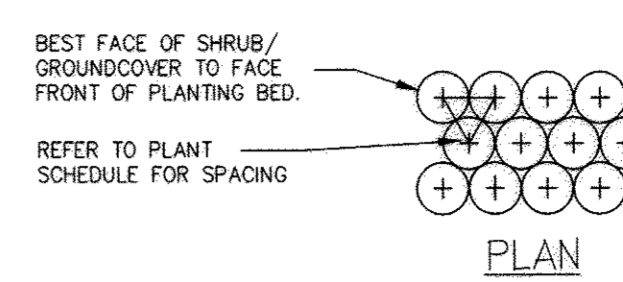


- TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
- WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
- 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
- EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
- 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
- PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
- SCARIFY ROOTBALL SIDES AND BOTTOM.

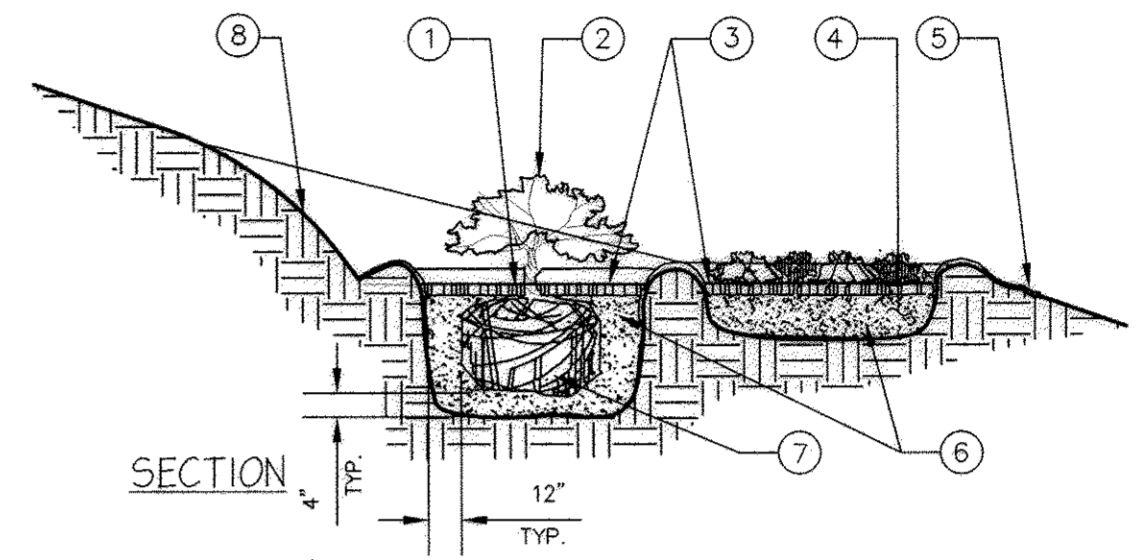


**SHRUB/GROUNDCOVER PLANTING**  
N.T.S.

05/20/08 SHR PLNTG



- TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
- WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
- 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
- EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
- 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
- PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
- SCARIFY ROOTBALL SIDES AND BOTTOM.
- CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.



**SHRUB/GROUNDCOVER PLANTING ON SLOPE**  
N.T.S.

05/20/08 SHR PLNTG SLP

**PLANT SCHEDULE**

KEY	QTY. (Ea)	BOTANICAL NAME	COMMON NAME	SIZE CAL./HT.	ROOT COND.
<b>TREES</b>					
<b>Large Deciduous</b>					
AR	4	ACER RUBRUM	RED MAPLE	2" CAL	B&B
AS	4	ACER SACCHARUM	SUGAR MAPLE	3" CAL	B&B
QP	16	QUERCUS PHELLOS	WILLOW OAK	2" CAL	B&B
QR	7	QUERCUS RUBRA (BOREALIS)	RED OAK	3" CAL	B&B
LIN	1	LAGERSTROEMIA X NATCHEZ	NATCHEZ	1" CAL	B&B
<b>Large Evergreen</b>					
PS	7	PINUS STROBUS	EASTERN WHITE PINE	5-6 FT.	B&B
<b>SHRUBS</b>					
TB	26	SPREADING ENGLISH YEW	TAXUS BACCATA 'REPANDENS'	CONT. 3-GAL	B&B
LSX	62	LIRIOPIS SPICATA	LILLYTURF	1 GAL	B&B
SSA	14	SEDUM TELEPHIUM 'AUTUMN JOY'	AUTUMN JOY SEDUM	1 GAL (12" HT.)	B&B
SJP	10	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	18" - 24" HT.	B&B
IVN	6	ILEX VOMITORIA 'NANA'	DWARF YA UPON HOLLY	18" - 24" HT.	B&B

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
PRELIMINARY PLAN P-95-21  
SITE PLAN SDP-96-11  
MASS GRADING PLAN SDP-96-001  
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01  
ECP 11-007  
FINAL RECORD PLATS  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O TM PARCEL 1085  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 06-06-1995  
APPROVED: 06-21-1996  
APPROVED: 04-03-1996

APPROVED: 11-08-1995  
APPROVED: 08-06-2010  
F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800 F-17-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Mike Thomas*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 8/23/11

*W. J. ...*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 9/26/11

*Thomas & Butcher*  
DIRECTOR  
DATE: 9/27/11

**WALMART STORE #2412-03  
ELLCOTT CITY, WALMART, PARCEL B**

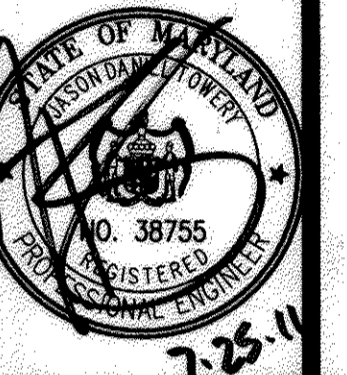
TM 24, TM GRID 6, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

<b>SITE DETAILS</b>	DATE	SHEET
	07/25/11	21 OF 32 SHEETS

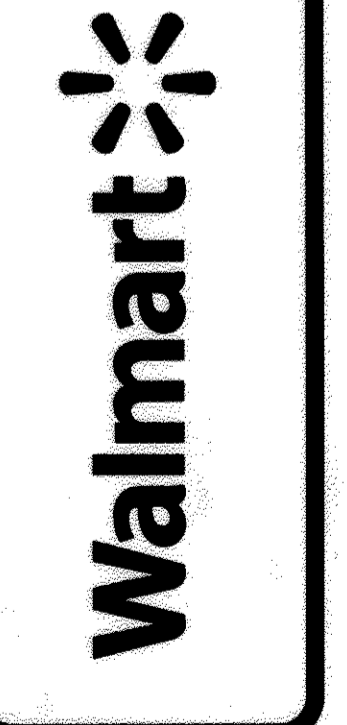
REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
9813 Gowdin Drive  
Manassas, Virginia 20110

Telephone: (703) 530-9983  
Fax: (703) 530-9475  
www.bowmanconsulting.com



SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716

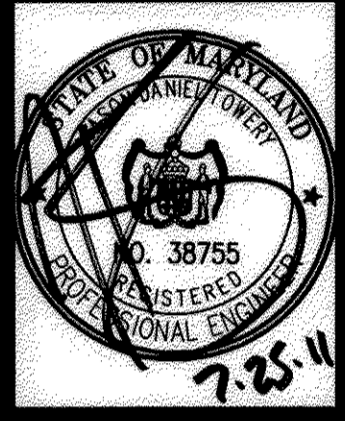


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SHEET 21 OF 32 SHEETS

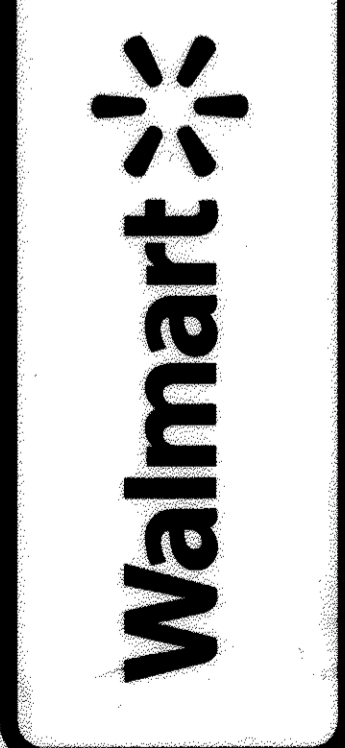
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REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

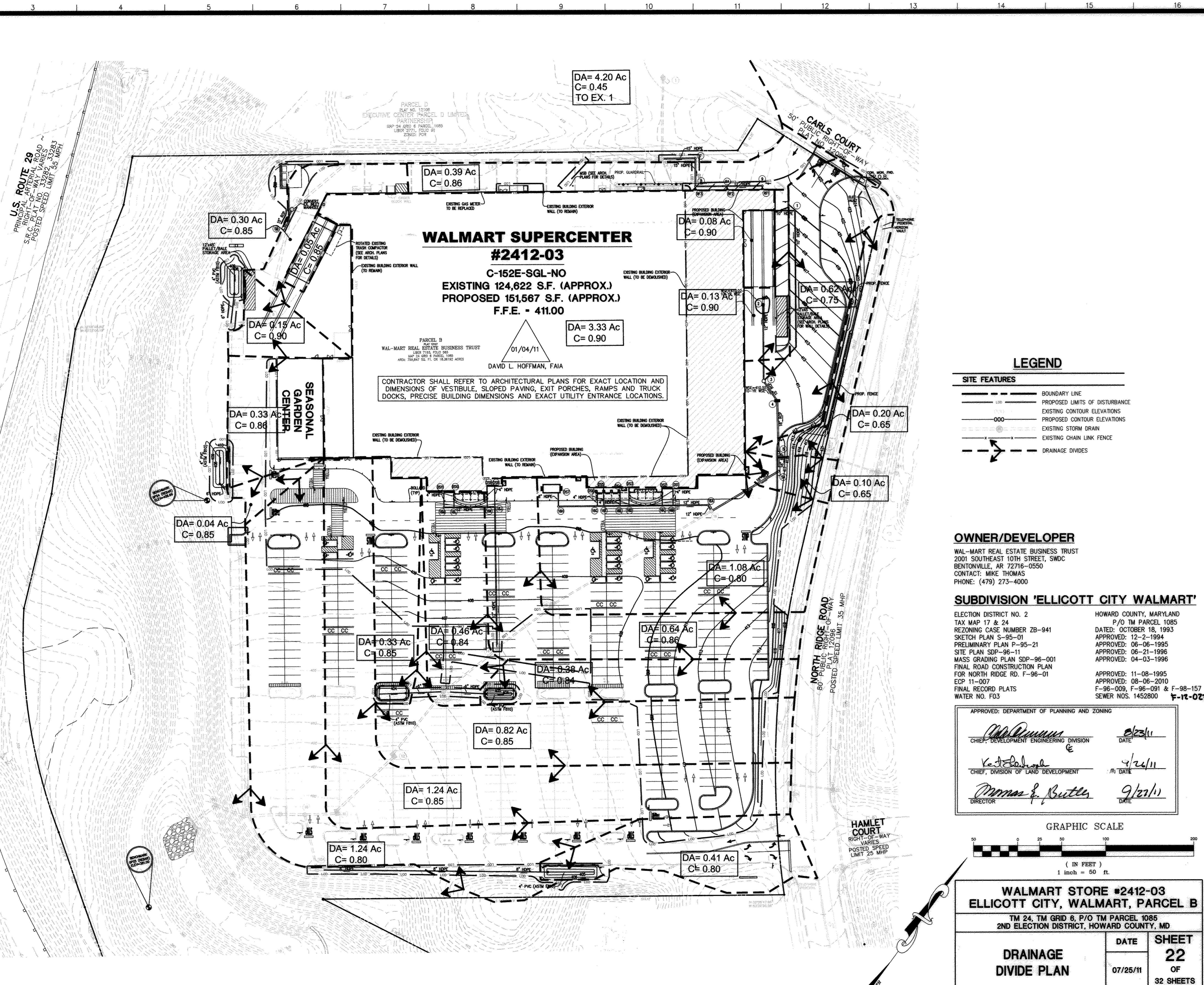
**Bowman CONSULTING**  
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 Manassas, Virginia 20110



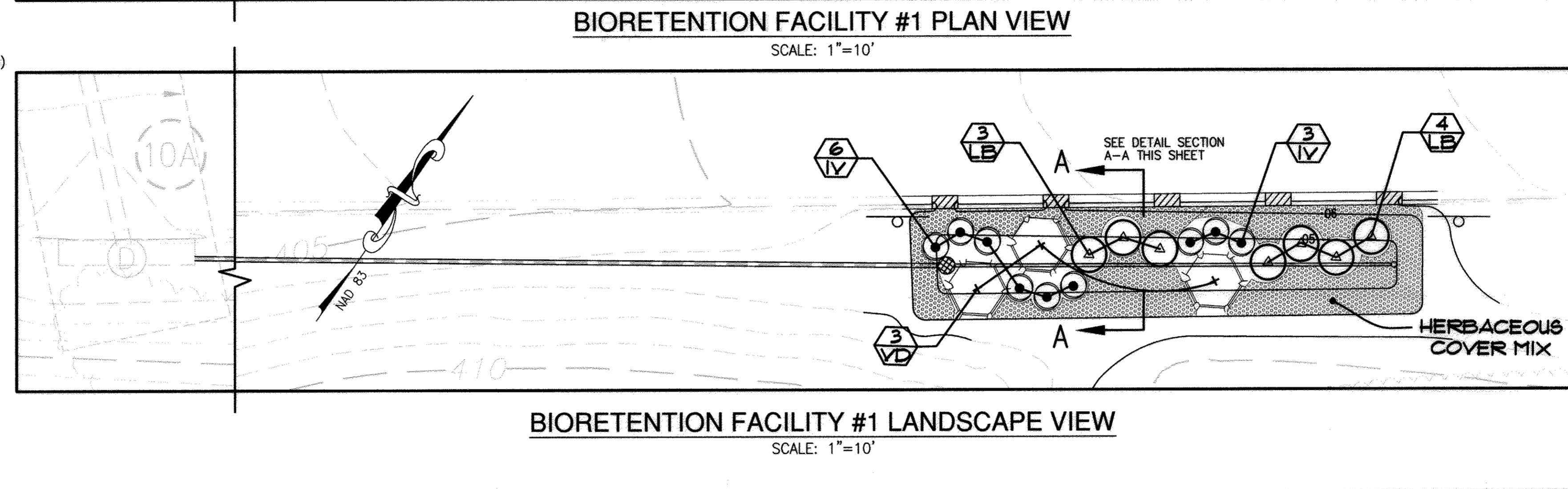
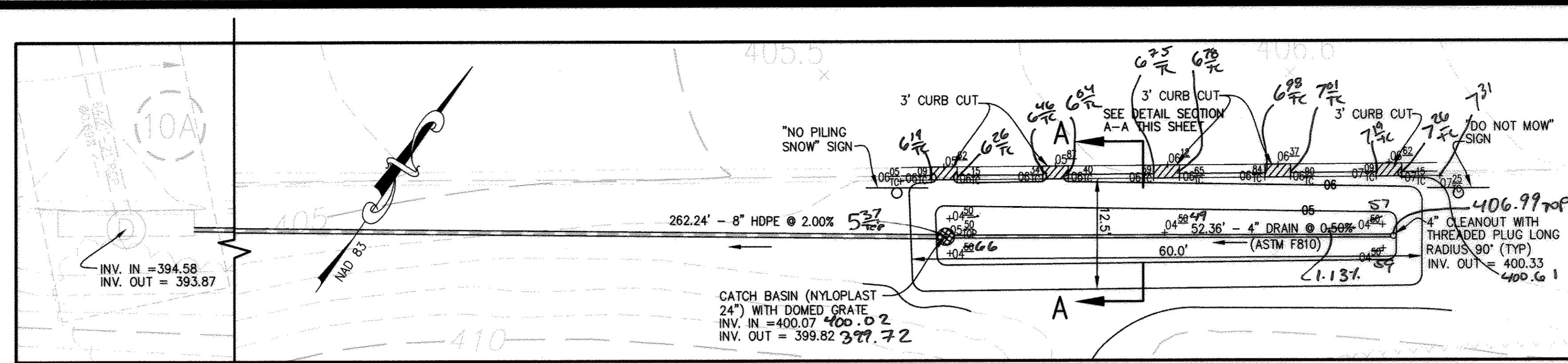
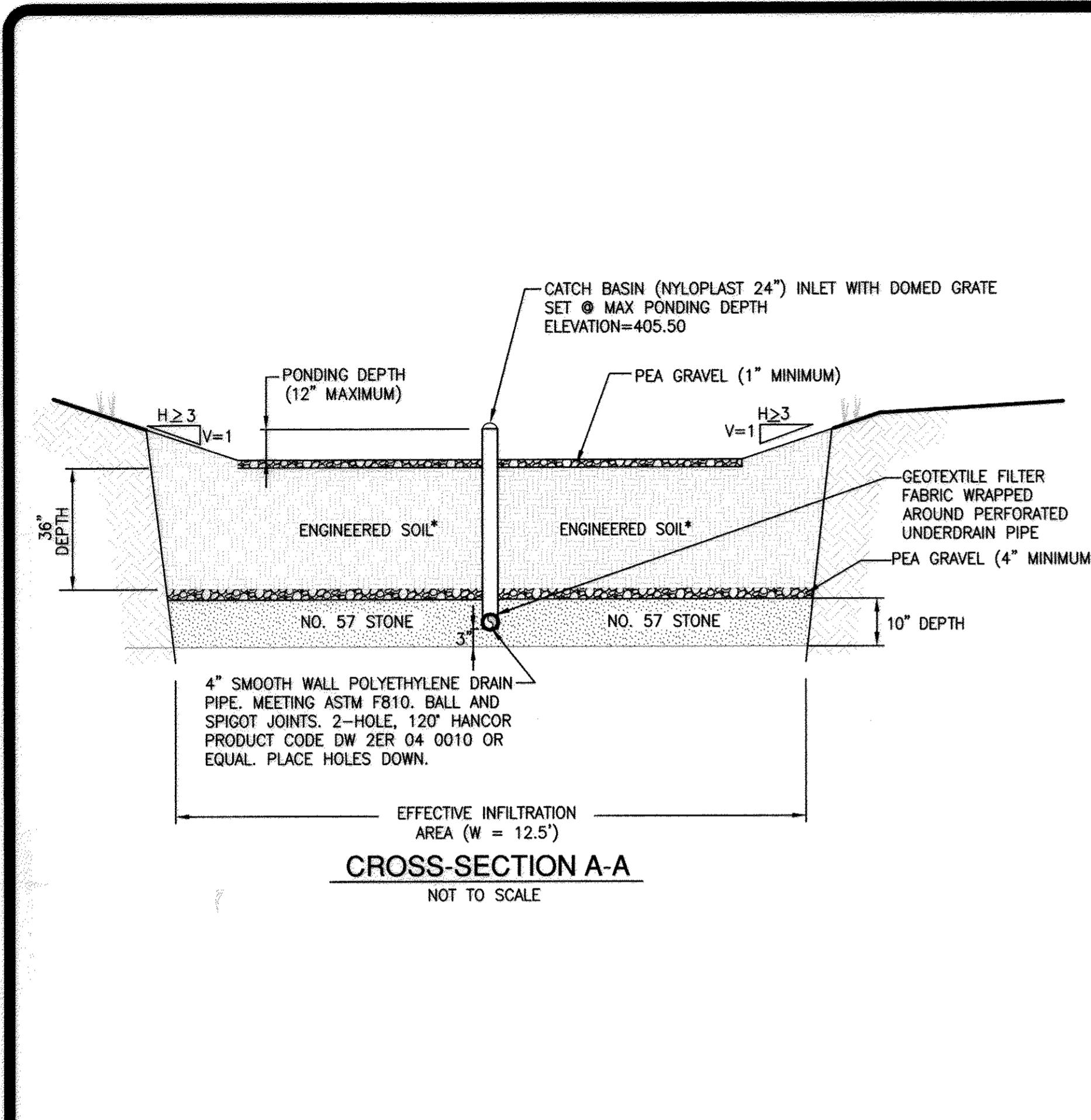
**Walmart**  
 SUPERCENTER #2412-03  
 ELLICOTT CITY, HOWARD COUNTY, MARYLAND  
 WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SE 10TH STREET  
 BENTONVILLE, AR 72716



DESIGN DRAWN	BU	KJC
CHECKED	GD	
DATE	01/14/11	
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JOB No.	4660-01-002	
SHEET	22	
OF 32 SHEETS		

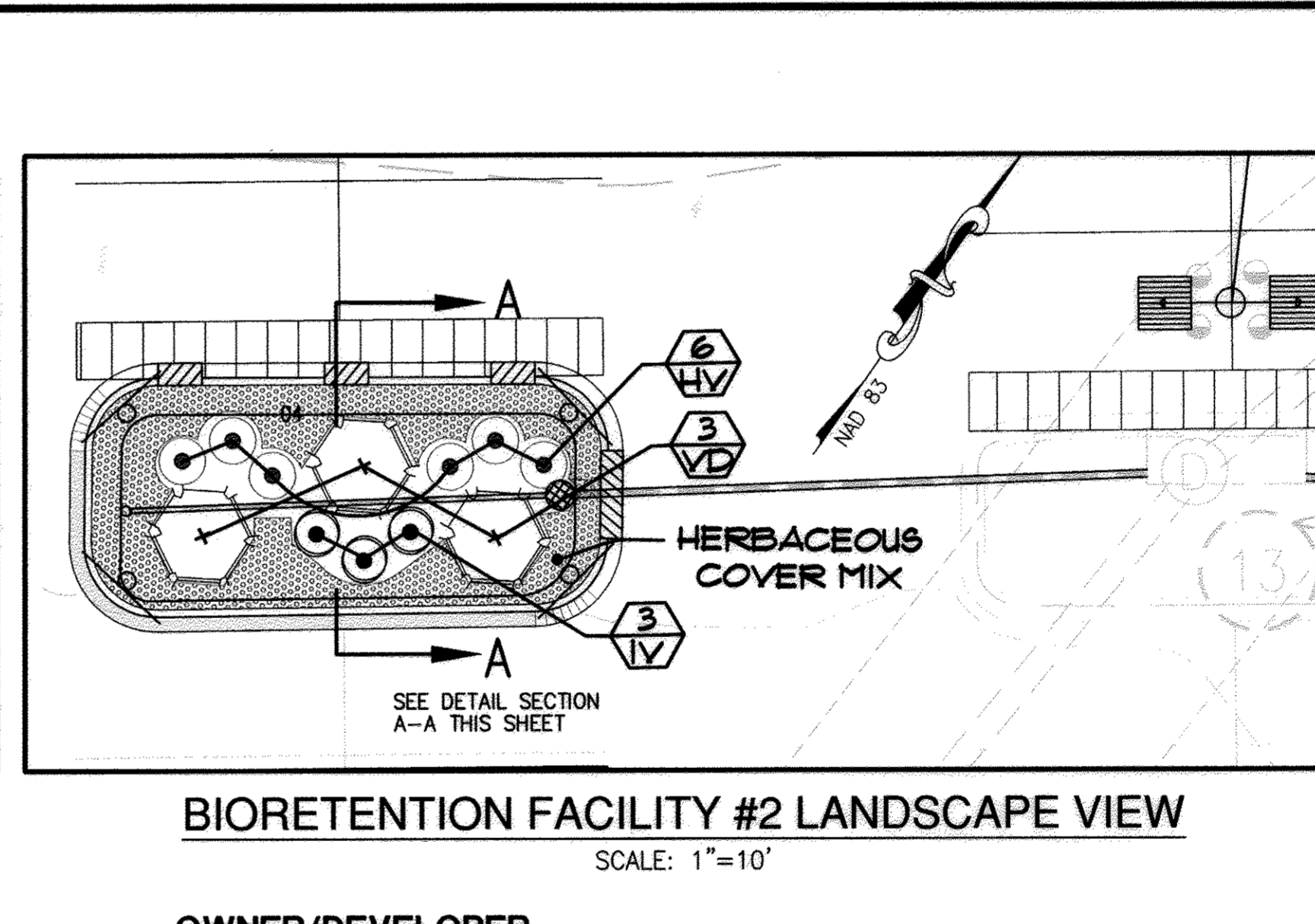
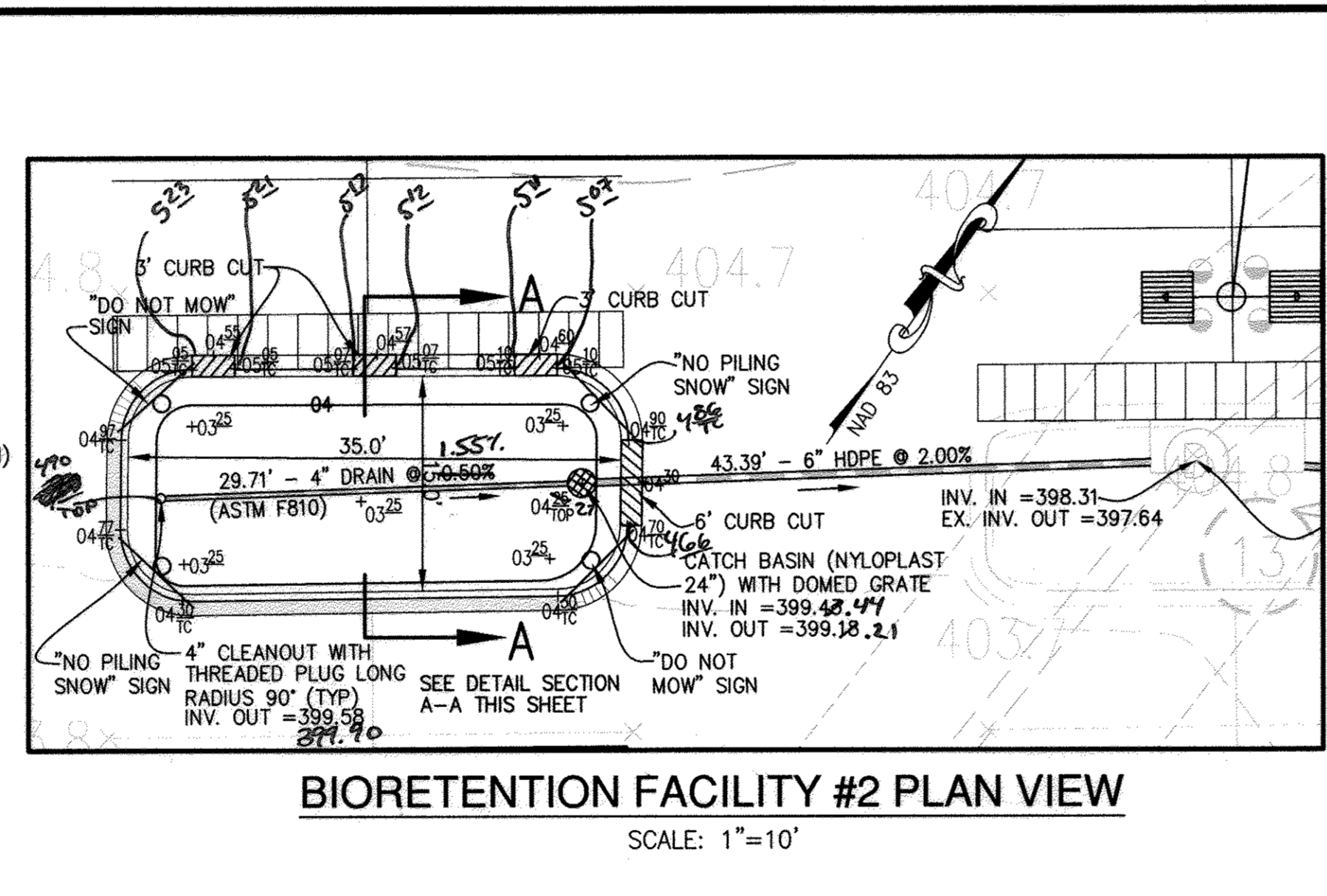
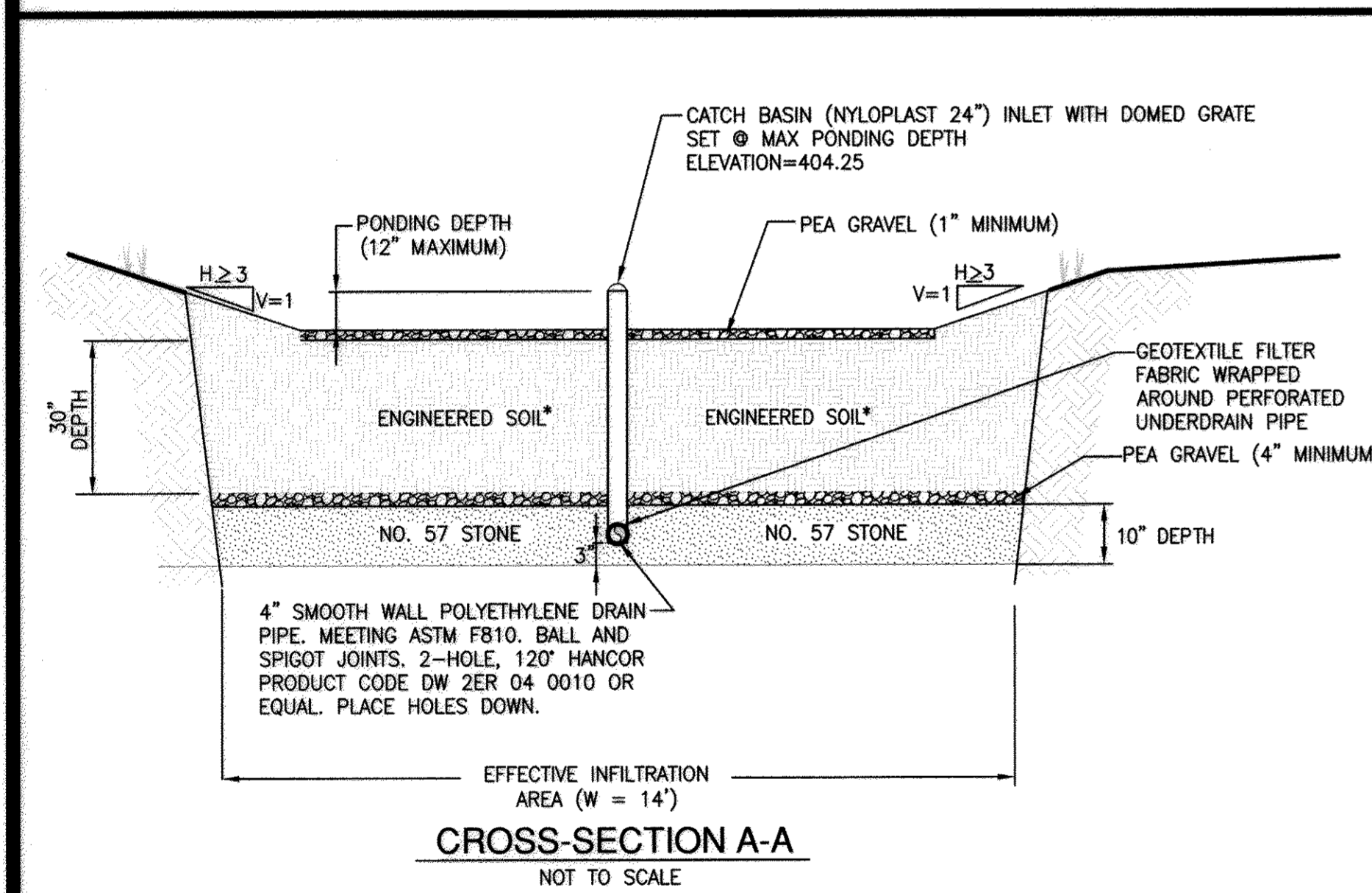


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**BIORETENTION FILTER CALCULATIONS (BIORETENTION FILTER #1)**

DRAINAGE AREA (MAXIMUM 20,000 SF)	A <sub>DRN</sub> 17860 ft <sup>2</sup>
SIZE RATIO (LENGTH / WIDTH)	R <sub>LW</sub> 5.45:1
SIDE SLOPE OF PONDING AREA (MAXIMUM 3:1)	S <sub>SIDE</sub> 3.0:1
DEPTH OF SOIL (MAXIMUM 4')	D <sub>SOIL</sub> 3.0 ft
LENGTH OF BASIN (MINIMUM 15')	L <sub>BASIN</sub> 60.0 ft
WIDTH OF BASIN (MINIMUM 10')	W <sub>BASIN</sub> 12.5 ft
AREA AT TOP OF PONDING (MINIMUM 150ft <sup>2</sup> )	A <sub>TOP</sub> 750.0 ft <sup>2</sup>
VOLUME OF PONDING (MAXIMUM 1' DEEP)	V <sub>POND</sub> 550.5 ft <sup>3</sup>
STORAGE VOLUME OF SOIL (SOIL POROSITY 0.30)	V <sub>SOIL</sub> 734.9 ft <sup>3</sup>
TOTAL FACILITY VOLUME	V <sub>BASIN</sub> 1285.4 ft <sup>3</sup>

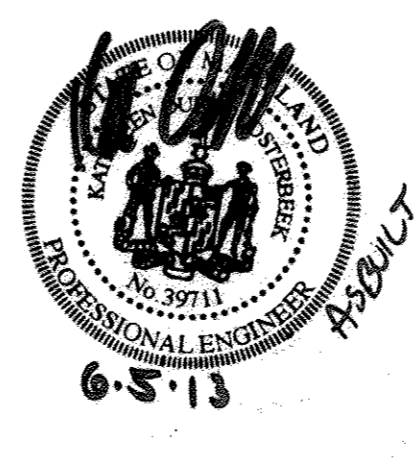


**BIORETENTION FILTER CALCULATIONS (BIORETENTION FILTER #2)**

DRAINAGE AREA (MAXIMUM 20,000 SF)	A <sub>DRN</sub> 14375 ft <sup>2</sup>
SIZE RATIO (LENGTH / WIDTH)	R <sub>LW</sub> 2.33:1
SIDE SLOPE OF PONDING AREA (MAXIMUM 3:1)	S <sub>SIDE</sub> 3.0:1
DEPTH OF SOIL (MAXIMUM 4')	D <sub>SOIL</sub> 2.5 ft
LENGTH OF BASIN (MINIMUM 15')	L <sub>BASIN</sub> 35.0 ft
WIDTH OF BASIN (MINIMUM 10')	W <sub>BASIN</sub> 14.0 ft
AREA AT TOP OF PONDING (MINIMUM 150ft <sup>2</sup> )	A <sub>TOP</sub> 490.0 ft <sup>2</sup>
VOLUME OF PONDING (MAXIMUM 1' DEEP)	V <sub>POND</sub> 361.0 ft <sup>3</sup>
STORAGE VOLUME OF SOIL (SOIL POROSITY 0.30)	V <sub>SOIL</sub> 406.2 ft <sup>3</sup>
TOTAL FACILITY VOLUME	V <sub>BASIN</sub> 767.2 ft <sup>3</sup>

**OWNER/DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**  
ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
TAX MAP 17 & 24 P/O TM PARCEL 1085  
REZONING CASE NUMBER ZB-941 DATED: OCTOBER 18, 1993  
SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
PRELIMINARY PLAN P-95-21 APPROVED: 06-06-1995  
SITE PLAN SDP-96-11 APPROVED: 06-21-1996  
MASS GRADING PLAN SDP-96-001 APPROVED: 04-03-1996  
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01 APPROVED: 11-08-1995  
ECP 11-007 APPROVED: 08-06-2010  
FINAL RECORD PLATS F-96-009, F-96-091 & F-98-157  
WATER NO. F03 SEWER NOS. 1452800 **F-12-023**



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Michael J. Thomas* 9/22/11  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Kevin J. Shindler* 9/22/11  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Thomas J. Rutler* 9/22/11  
DIRECTOR DATE

**WALMART STORE #2412-03  
ELLCOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 6, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

<b>BIO-RETENTION DETAILS</b>	DATE	SHEET
	07/25/11	23 OF 32 SHEETS

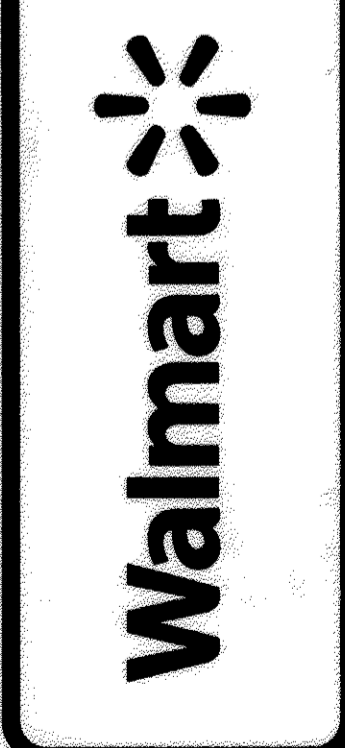
SEE SHEET 25 FOR PLANT SCHEDULE & ESD VOLUME COMPUTATIONS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

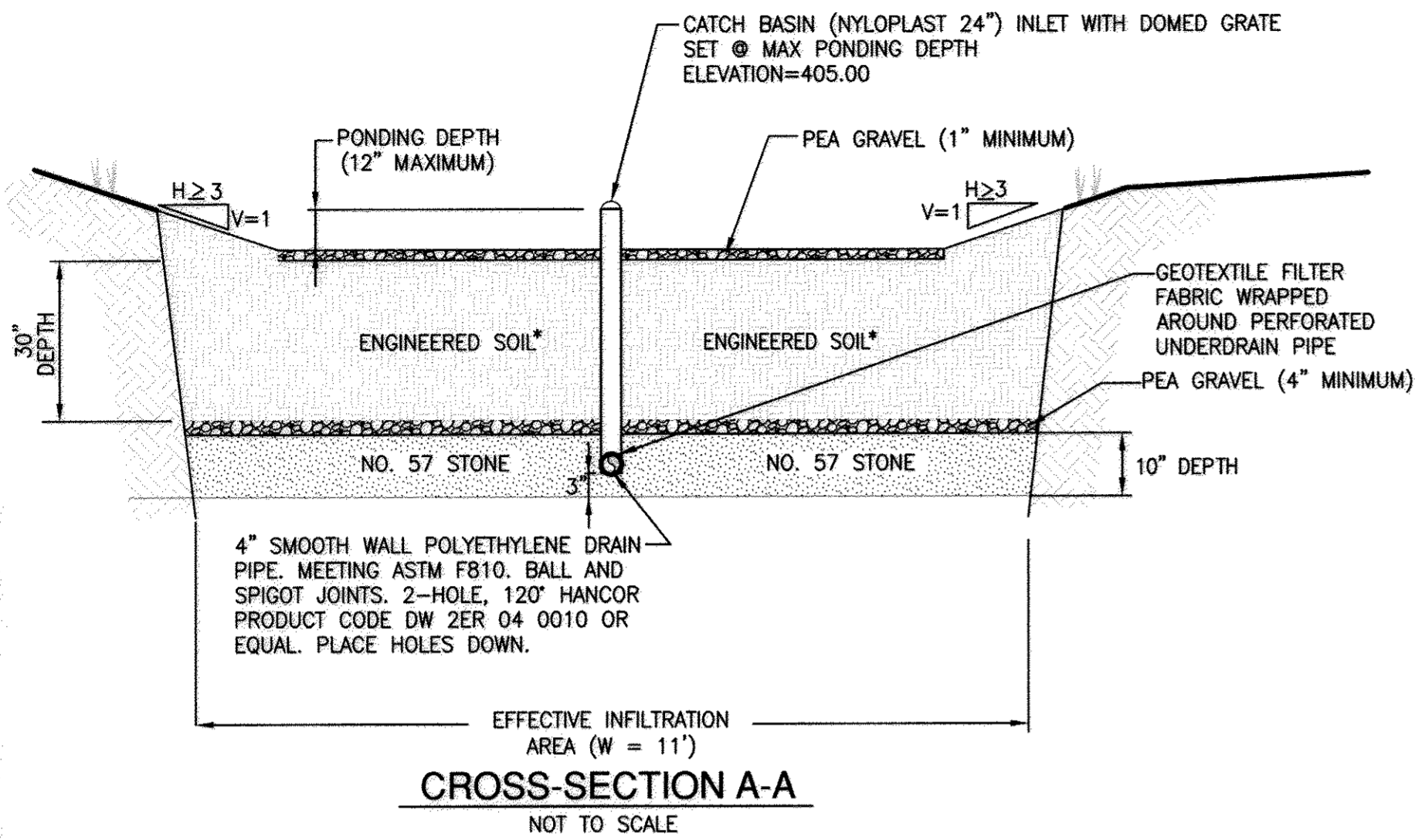
**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
Telephone: (703) 530-8993  
Fax: (703) 530-8475  
9813 Gowman Drive  
Manassas, Virginia 20110  
www.bowmanconsulting.com

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
No. 38755  
7.25.11

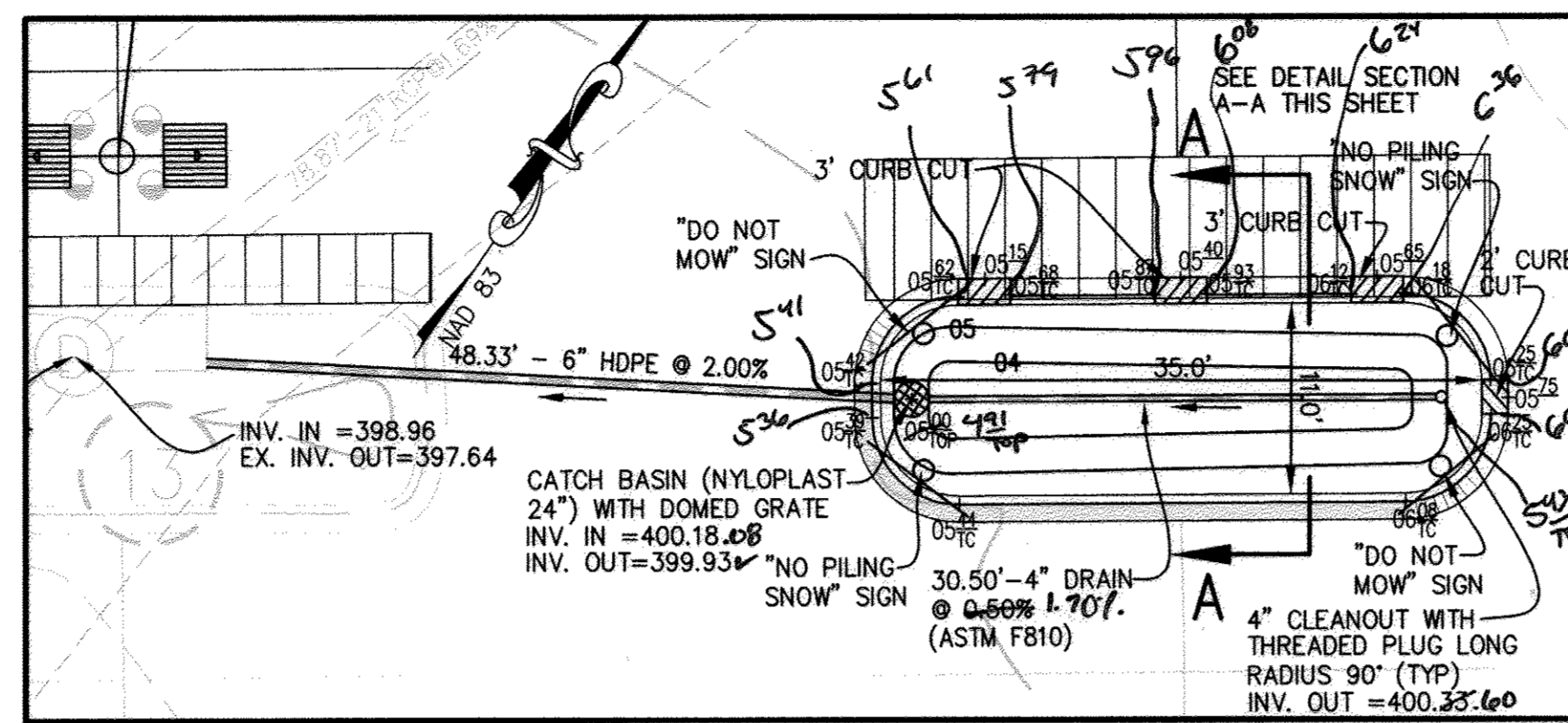
SUPERCENTER #2412-03  
ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716



DESIGN DRAWN	BU	KJC
CHECKED	GD	
DATE	01/14/11	
SCALE	N/A	
JOB No.	4660-01-002	
SHEET	23	
OF 32 SHEETS		

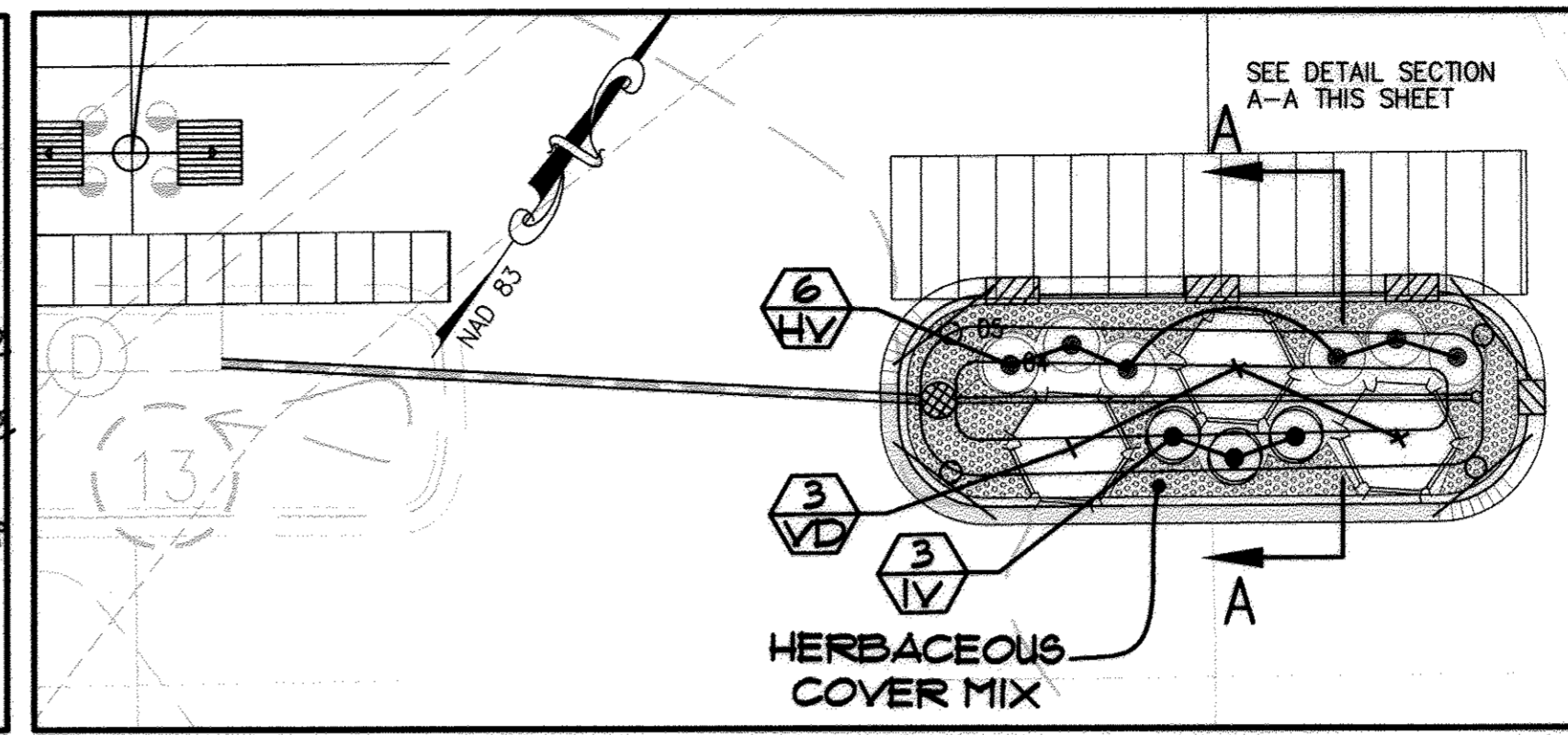


CROSS-SECTION A-A  
NOT TO SCALE



BIORETENTION FACILITY #3 PLAN VIEW

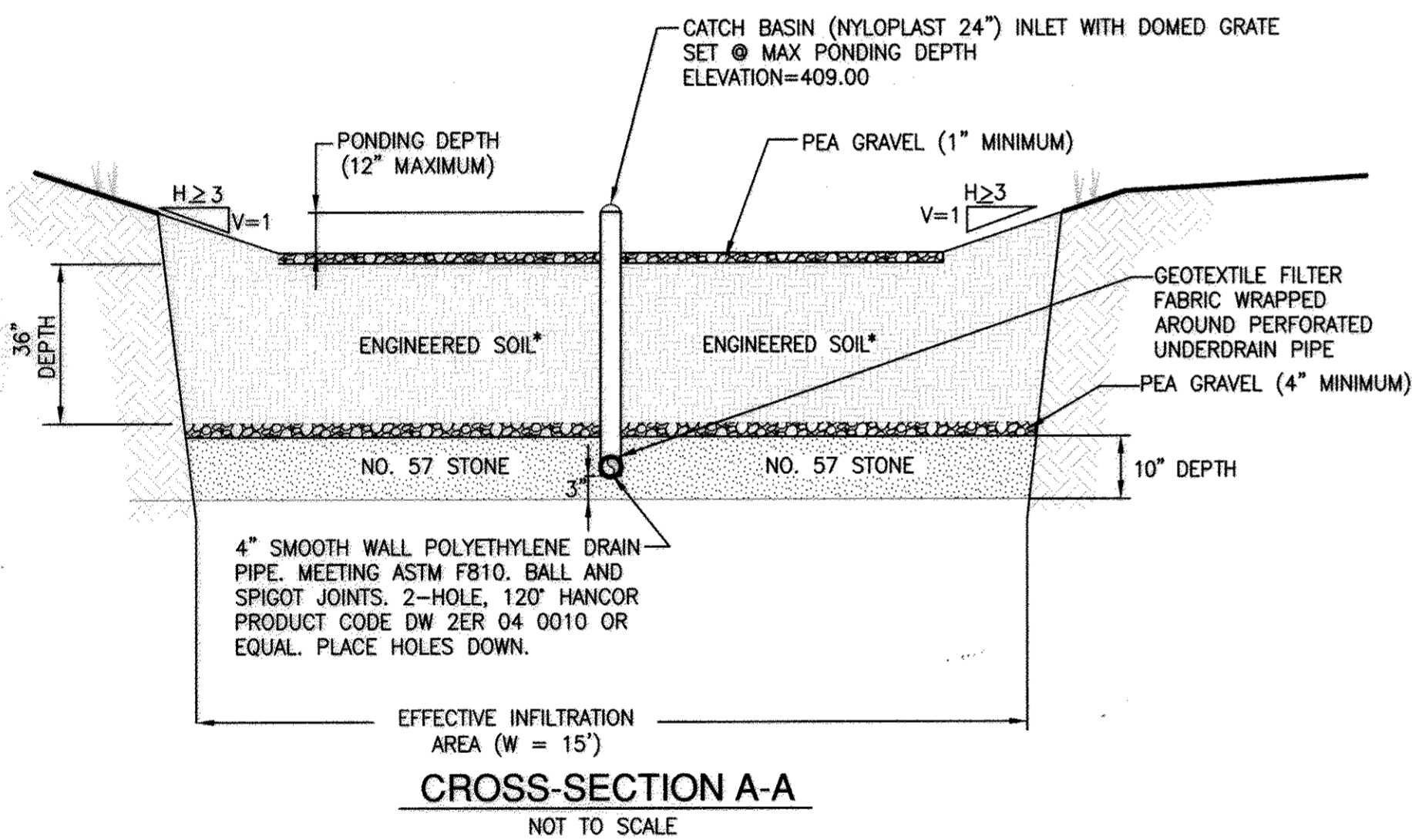
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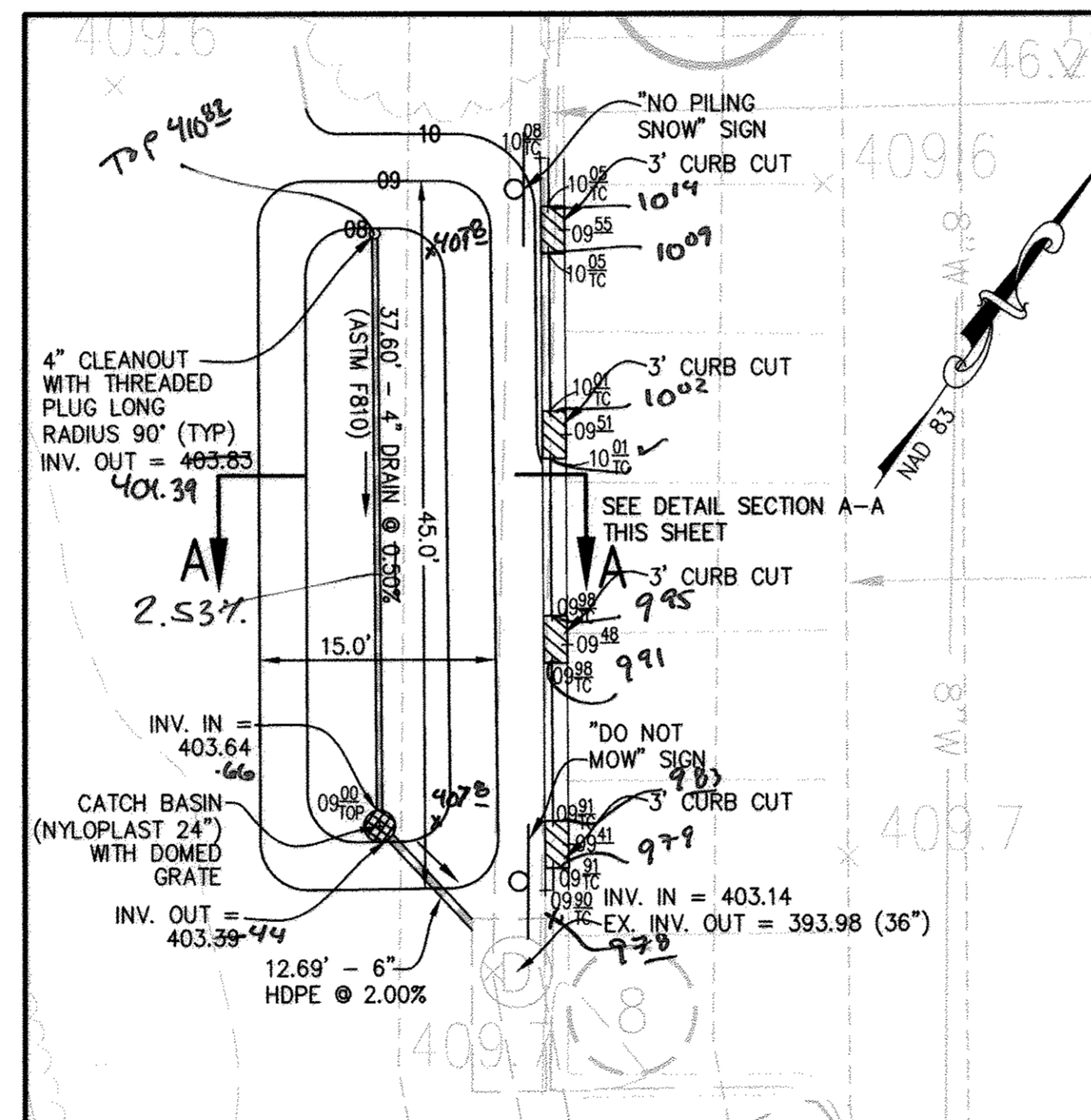
BIORETENTION FACILITY #3 LANDSCAPE VIEW

SCALE: 1"=10'

BIORETENTION FILTER CALCULATIONS (BIORETENTION FILTER #3)	
DRAINAGE AREA (MAXIMUM 20,000 SF)	$A_{DRN} = 16553 \text{ ft}^2$
SIZE RATIO (LENGTH / WIDTH)	$R_{L/W} = 3.18 : 1$
SIDE SLOPE OF PONDING AREA (MAXIMUM 3:1)	$S_{SIDE} = 3.0 : 1$
DEPTH OF SOIL (MAXIMUM 4')	$D_{SOIL} = 2.5 \text{ ft}$
LENGTH OF BASIN (MINIMUM 15')	$L_{BASIN} = 35.0 \text{ ft}$
WIDTH OF BASIN (MINIMUM 10')	$W_{BASIN} = 11.0 \text{ ft}$
AREA AT TOP OF PONDING (MINIMUM 1500 $\text{ft}^2$ )	$A_{TOP} = 385.0 \text{ ft}^2$
VOLUME OF PONDING (MAXIMUM 1' DEEP)	$V_{POND} = 265.0 \text{ ft}^3$
STORAGE VOLUME OF SOIL (SOIL POROSITY 0.30)	$V_{SOIL} = 324.8 \text{ ft}^3$
TOTAL FACILITY VOLUME	$V_{BASIN} = 589.8 \text{ ft}^3$

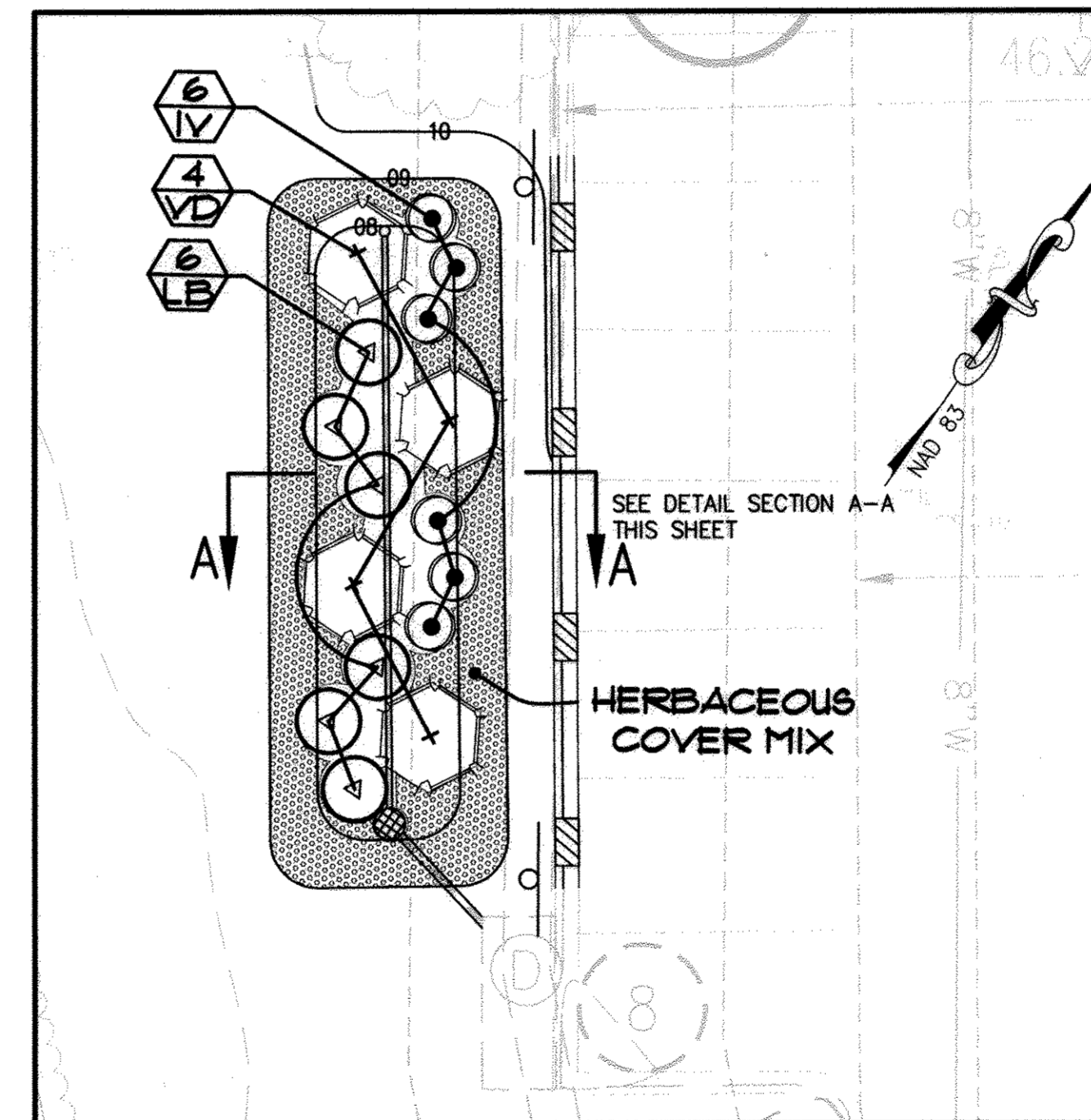


CROSS-SECTION A-A  
NOT TO SCALE



BIORETENTION FACILITY #4 PLAN VIEW

SCALE: 1"=10'



BIORETENTION FACILITY #4 LANDSCAPE PLAN

SCALE: 1"=10'

BIORETENTION FILTER CALCULATIONS (BIORETENTION FILTER #4)	
DRAINAGE AREA (MAXIMUM 20,000 SF)	$A_{DRN} = 14375 \text{ ft}^2$
SIZE RATIO (LENGTH / WIDTH)	$R_{L/W} = 3.00 : 1$
SIDE SLOPE OF PONDING AREA (MAXIMUM 3:1)	$S_{SIDE} = 3.0 : 1$
DEPTH OF SOIL (MAXIMUM 4')	$D_{SOIL} = 3.0 \text{ ft}$
LENGTH OF BASIN (MINIMUM 15')	$L_{BASIN} = 45.0 \text{ ft}$
WIDTH OF BASIN (MINIMUM 10')	$W_{BASIN} = 15.0 \text{ ft}$
AREA AT TOP OF PONDING (MINIMUM 1500 $\text{ft}^2$ )	$A_{TOP} = 675.0 \text{ ft}^2$
VOLUME OF PONDING (MAXIMUM 1' DEEP)	$V_{POND} = 513.0 \text{ ft}^3$
STORAGE VOLUME OF SOIL (SOIL POROSITY 0.30)	$V_{SOIL} = 656.1 \text{ ft}^3$
TOTAL FACILITY VOLUME	$V_{BASIN} = 1169.1 \text{ ft}^3$

SEE SHEET 25 FOR PLANT SCHEDULE & ESD VOLUME COMPUTATIONS

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELlicOTT CITY WALMART'**

ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
PRELIMINARY PLAN P-95-21	APPROVED: 06-06-1995
SITE PLAN SDP-96-11	APPROVED: 06-21-1996
MASS GRADING PLAN SDP-96-001	APPROVED: 04-03-1996
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01	APPROVED: 11-08-1995
FCP 11-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-98-157
WATER NO. F03	SEWER NOS. 1452800

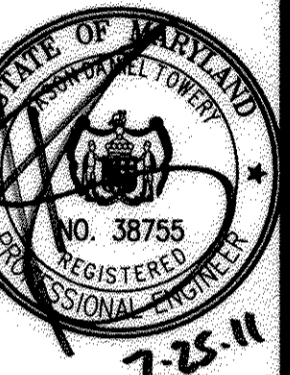
<b>WALMART STORE #2412-03 ELlicOTT CITY, WALMART, PARCEL B</b>	
TM 24, TM GRID 8, P/O TM PARCEL 1085 2ND ELECTION DISTRICT, HOWARD COUNTY, MD	
<b>BIO-RETENTION DETAILS</b>	DATE 07/25/11
	SHEET 24 OF 32 SHEETS

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 8/26/11
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 9/26/11
<i>[Signature]</i> DIRECTOR	DATE 9/27/11



REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman Consulting**  
Bowman Consulting Group, Ltd.  
9813 Goodwin Drive  
Manassas, Virginia 20110  
Telephone: (703) 530-8083  
Fax: (703) 530-8475  
www.bowmanconsulting.com

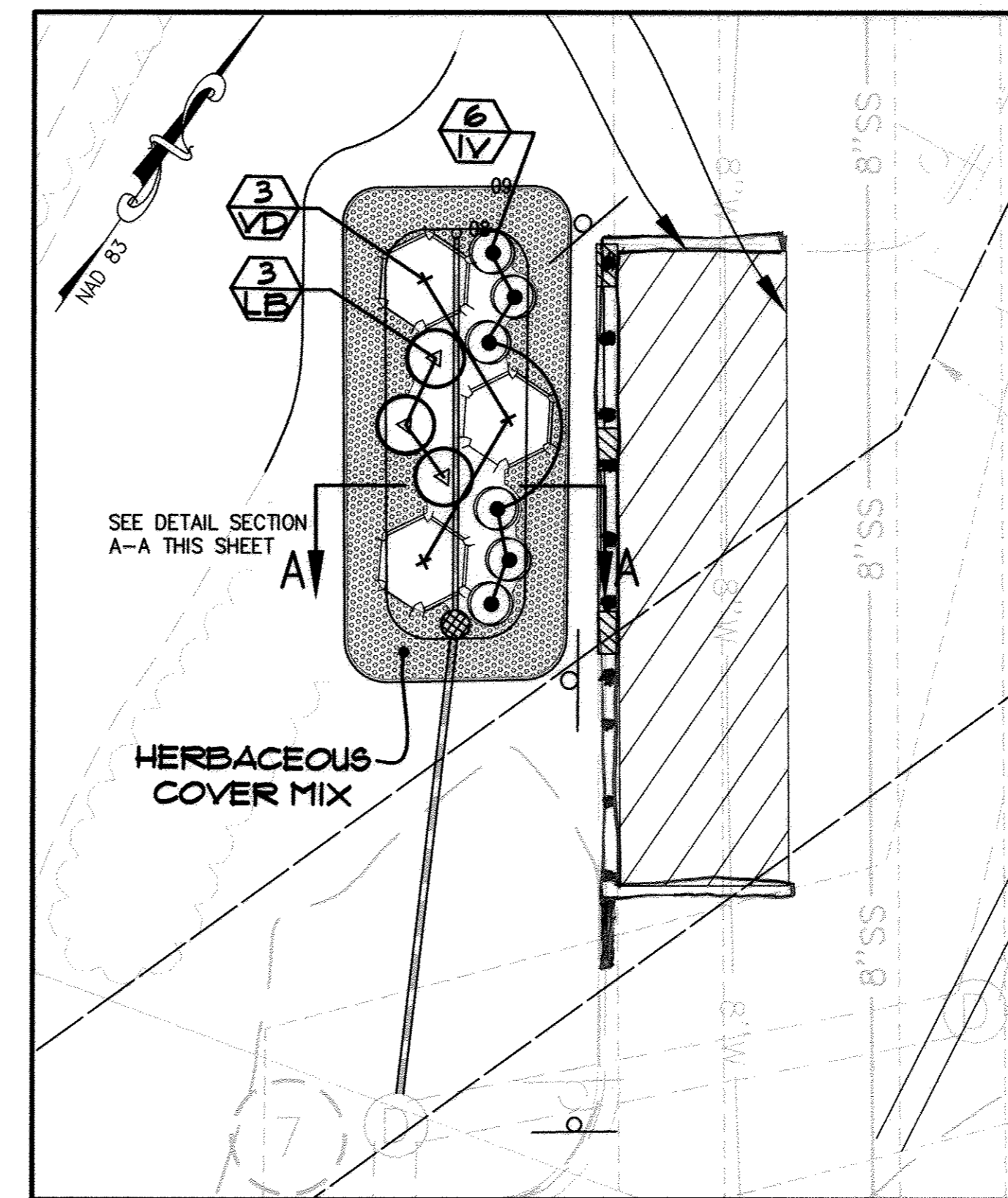
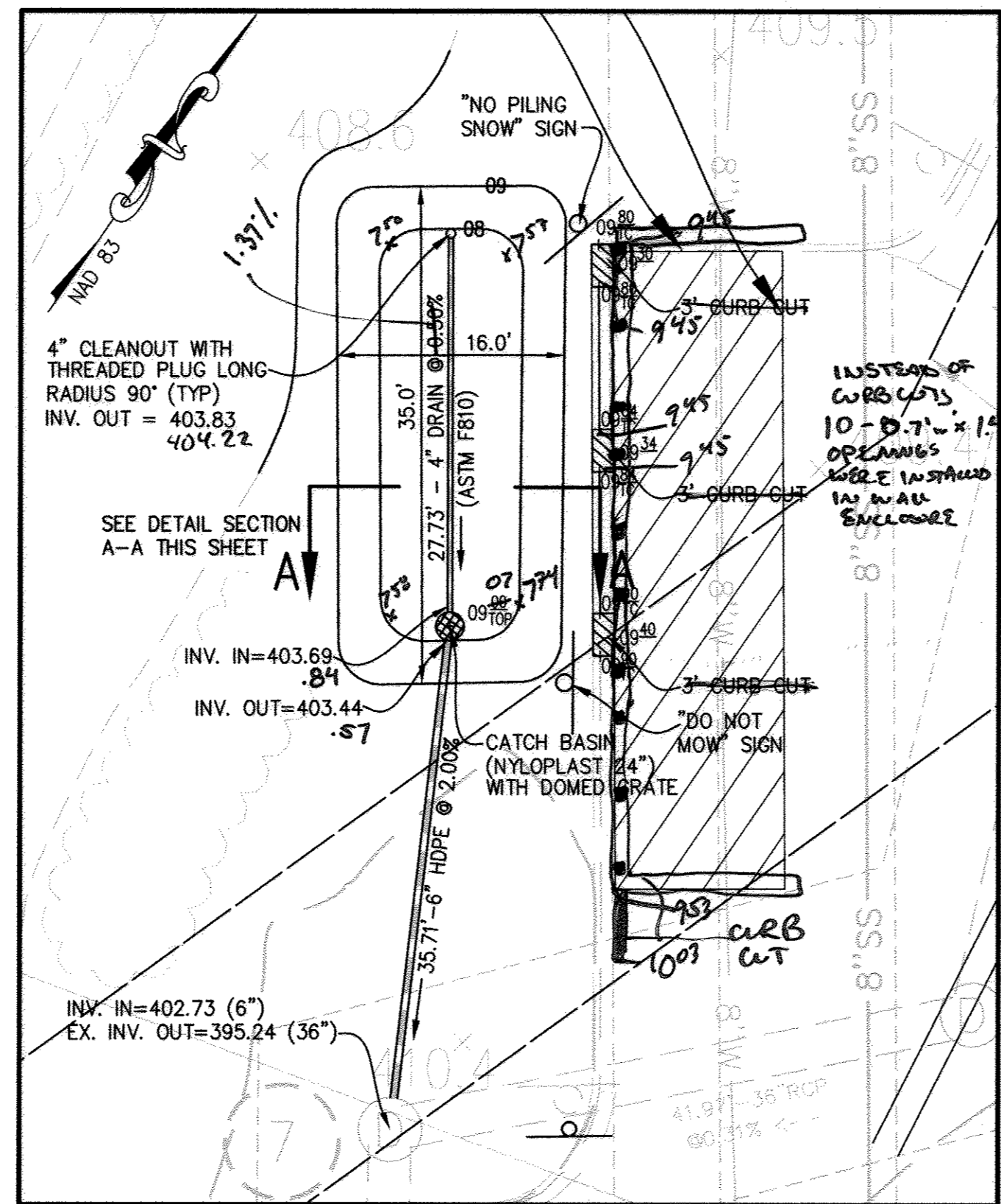
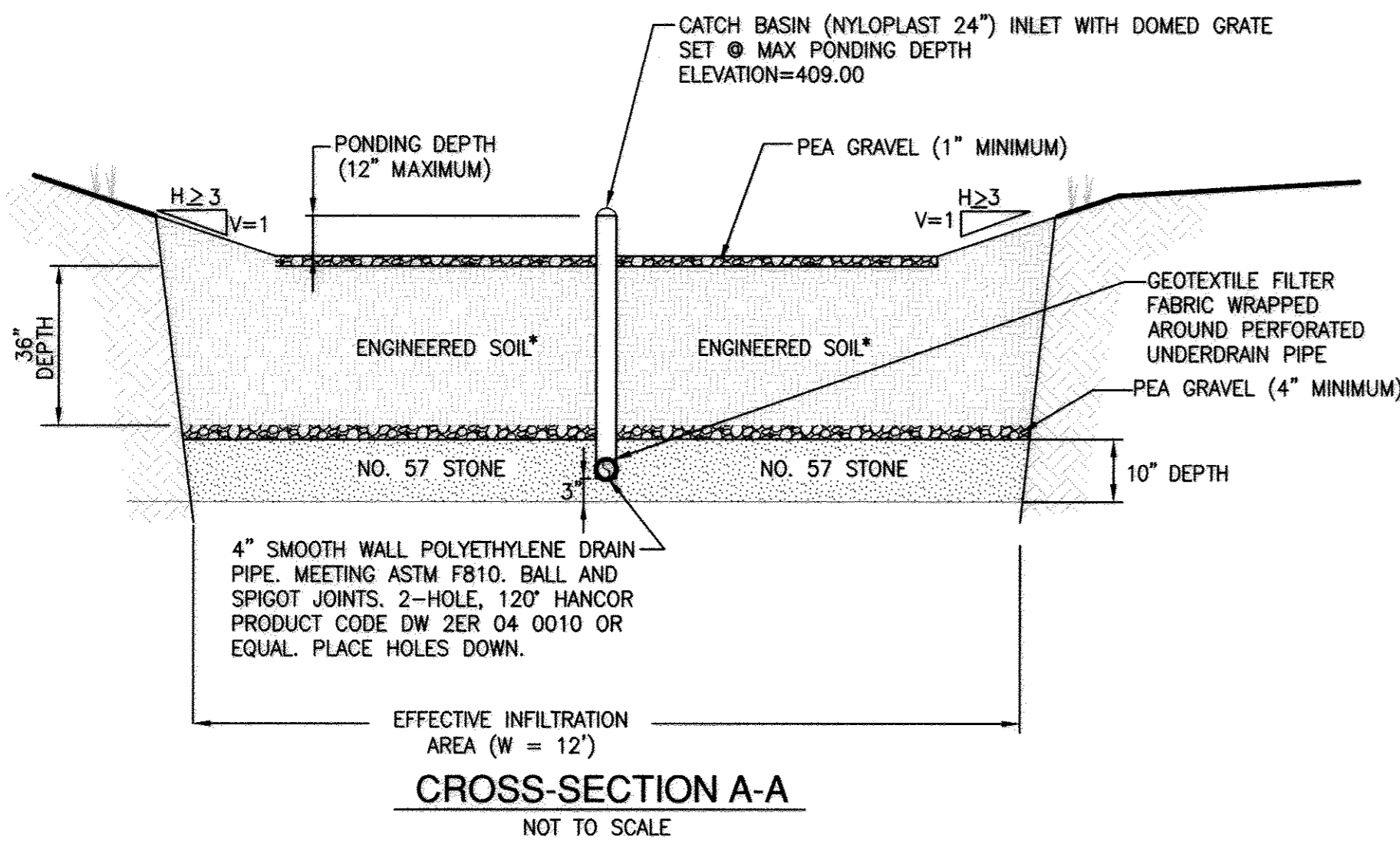


SUPERCENTER #2412-03  
ELlicOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716



DESIGN DRAWN BU	CHECKED KJC
DATE 01/14/11	SCALE N/A
JOB No. 4860-01-002	SHEET 24
OF 32 SHEETS	





**BIORETENTION FILTER CALCULATIONS**  
(BIORETENTION FILTER #5)

DRAINAGE AREA (MAXIMUM 20,000 SF)	A <sub>DRN</sub> 6534 ft <sup>2</sup>
SIZE RATIO (LENGTH / WIDTH)	R <sub>LW</sub> 3.75 : 1
SIDE SLOPE OF PONDING AREA (MAXIMUM 3:1)	S <sub>SIDE</sub> 3.0 : 1
DEPTH OF SOIL (MAXIMUM 4')	D <sub>SOIL</sub> 3.0 ft
LENGTH OF BASIN (MINIMUM 15')	L <sub>BASIN</sub> 35.0 ft
WIDTH OF BASIN (MINIMUM 10')	W <sub>BASIN</sub> 16.0 ft
AREA AT TOP OF PONDING (MINIMUM 150ft <sup>2</sup> )	A <sub>TOP</sub> 560.0 ft <sup>2</sup>
VOLUME OF PONDING (MAXIMUM 1' DEEP)	V <sub>POND</sub> 425.0 ft <sup>3</sup>
STORAGE VOLUME OF SOIL (SOIL POROSITY 0.30)	V <sub>SOIL</sub> 544.5 ft <sup>3</sup>
TOTAL FACILITY VOLUME	V <sub>BASIN</sub> 969.5 ft <sup>3</sup>

**ESD VOLUME COMPUTATIONS**

SITE CONDITIONS				RCN COMPUTATIONS			
DEVELOPABLE AREA (Ac.) = 4.81				<b>BEFORE CREDIT</b>			
HYDROLOGIC SOIL TYPES	RCN*	AREA (Ac.)	PERCENT	RCN = (4.17 ac)*(98)+(0.64 ac)*(61)			
A	38	0.00	0%	4.81			
B	55	3.48	72%	RCN <sub>BEFORE CREDIT</sub> = 93			
C	70	1.33	28%	<b>WITH RE-DEVELOPMENT</b>			
D	77	0	0%	RCN = (2.67 ac)*(98)+(0.64 ac)*(61)			
* RCN for "Woods in good condition" per Table 2.2 of TR-55				3.31			
<b>REDEVELOPMENT</b>				RCN <sub>W/REDEVELOPMENT</sub> = 91			
EXISTING IMPERVIOUS AREA (Ac.)	=	3.01		<b>"WOODS IN GOOD CONDITION" (Targeted RCN Value)</b>			
PROPOSED IMPERVIOUS AREA (Ac.)	=	4.17		RCN = (1.51 ac)*(98)+(1.98 ac)*(55)+(1.33)*(70)			
INCREASE IN IMPERVIOUSNESS (Ac.)	=	1.16		4.81			
50% EXISTING IMPERVIOUS AREA (Ac.)	=	1.51		RCN <sub>WOODS GOOD</sub> = 73			
SITE IMPERVIOUSNESS (%)	=	60%		<b>RCN WITH ESD PRACTICES APPLIED</b>			
Prop. Impervious over Ex. Green (Ac.)	=	1.16		RCN = (1.07 ac)*(98)+(0.92 ac)*(55)+(0.68)*(70)+(0.64)*(61)			
Because this is a redevelopment, 50% of the existing impervious area within LOD only requires WQv (1") treatment and proposed impervious area over existing green area requires full WQv (2.6") to be treated. A weighted P <sub>e</sub> will be used for ESDv facility sizing.				3.31			
Weighted P <sub>e</sub> = (1.16)(2.6")+(1.51)(1") / (4.81-1.51)				RCN <sub>W/ESD APPLIED</sub> = 73			
Weighted P <sub>e</sub> = 1.37							
<b>ESDv SIZING COMPUTATIONS</b>							
AREA TREATED BY ESD - B SOILS (Ac.)	=	0.92	Rv = 0.05 + 0.009 * ( 60 )	ESDv = ( 1.37 ) * ( 0.59 ) * ( 1.6 Ac. )			
AREA TREATED BY ESD - C SOILS (Ac.)	=	0.68	Rv = 0.59	12			
PERVIOUS AREA (Ac.)	=	0.64		ESDv = 0.1075 Ac-ft ESDv = 4681 cf			

ESDv REQUIRED - 4,681 CF.  
ESDv PROVIDED - 4,780 CF.  
47% provided as built.  
4746 > 4681

**[OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3) MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIORETENTION SWALE (M-8), ENHANCED FILTERS (M-9)]**

- The Owner shall maintain the plant material, mulch layer and soil layer annually. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland Stormwater Design Manual Volume II, Table A.4.1 and 2.
- The Owner shall perform a plant in the spring and in the fall of each year. During the inspection, the Owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs, and replace all deficient stakes and wires.
- The Owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

**STORMWATER MANAGEMENT DESIGN NARRATIVE**

THE PROJECT CONSISTS OF APPROXIMATELY 26,800 SQUARE FEET EXPANSION TO THE EXISTING WALMART STORE #2412 AND CONSTRUCTION OF ADDITIONAL PARKING SPACES AT 3200 NORTH RIDGE ROAD, ELLICOTT CITY, HOWARD COUNTY, MARYLAND. THE SUBJECT SITE IS APPROXIMATELY 18.36 ACRES, AND IS BOUNDED BY COLUMBIA PIKE (RT. 29) TO THE WEST, UNDEVELOPED PROPERTY TO THE NORTH, NORTH RIDGE ROAD TO THE EAST, AND AN EXISTING OFFICE BUILDING WITH SURFACE PARKING TO THE SOUTH.

THE SUBJECT SITE CURRENTLY HAS AN EXISTING RETAIL BUILDING AND ASSOCIATED PARKING LOT. THERE ARE SOME AREAS WITH STEEP SLOPES OF 25% OR MORE LOCATED ALONG THE WESTERN BOUNDARY OF THE SITE HOWEVER THE REST OF THE SITE HAS GRADUAL SLOPES SINCE THE MAJORITY OF THE SITE IS ALREADY DEVELOPED. ON-SITE EXISTING VEGETATION CONSISTING OF TREES AND SHRUBS ARE LOCATED AT THE WESTERN AND SOUTHERN PORTION OF THE SITE. THERE IS ALSO 1.5 ACRES FOREST CONSERVATION AREA DEDICATED AT THE WESTERN PART OF THE SITE. THE SUBJECT SITE HAS B AND C HYDROLOGIC SOIL TYPES.

ON-SITE EXISTING IMPERVIOUS COVER INCLUDES EXISTING ONE-STORY RETAIL BUILDING AND PARKING LOT. THE EXISTING BUILDING FOOTPRINT IS 124,622 SQUARE FOOT AND OVERALL EXISTING IMPERVIOUS COVER FOR THE SUBJECT SITE EQUALS TO 9.84 ACRES. THIS PROJECT PROPOSES AN EXPANSION OF 26,800 SQUARE FOOT TO THE EXISTING BUILDING, AN ADDITIONAL LOADING DOCK AND PARKING SPACES, WHICH ACCUMULATES 1.16 ACRES INCREASE IN IMPERVIOUS AREA AND BRINGS THE TOTAL PROPOSED SITE IMPERVIOUSNESS TO 11 ACRES.

NON-STRUCTURAL MICRO-BIORETENTION FACILITIES HAVE BEEN SELECTED AS ESD TO THE MEP IN ORDER TO MEET THE STORMWATER MANAGEMENT REQUIREMENTS. MICRO-BIORETENTION FACILITIES ARE STRATEGICALLY LOCATED ON-SITE AROUND THE EXISTING PARKING LOT AND IN THE PARKING LOT ISLANDS IN ORDER TO RECEIVE A SHEET FLOW FROM GRADUAL SLOPES (< 5%) AND FROM DRAINAGE AREAS NOT MORE THAN 20,000 SQUARE FEET. DEPRESSED CURB CUTS HAVE BEEN PLACED ALONG THE CURBS WHERE THE MICRO-BIORETENTION FACILITIES ARE LOCATED TO PROVIDE SUFFICIENT INFLOW OF STORM WATER INTO THE FILTERING BED AND OUTFLOW CLEANOUTS ARE PROVIDED WITHIN THE MICRO-BIORETENTION FACILITIES IN ORDER TO CONVEY THE EXCESSIVE STORMWATER ABOVE ESDv LEVEL INTO THE EXISTING STORM DRAIN SYSTEM. UNDERDRAIN SYSTEMS ARE ALSO PLACED FOR EACH BIO-RETENTIONS FACILITY TO DISCHARGE TREATED STORMWATER SAFELY DOWNSTREAM. EXISTING STORM DRAIN SYSTEM ON SITE ADEQUATELY CONVEYS THE TREATED STORMWATER FROM MICRO-BIORETENTION FACILITIES AND THE INTERCEPTED STORMWATER BY STORM STRUCTURES INTO THE EXISTING POND LOCATED AT THE SOUTHERN PORTION OF THE PROPERTY. AS SHOWN ON THE CONCEPT PLAN, EXISTING DRAINAGE DIVIDES AND ON-SITE NATURAL FLOW PATTERNS HAVE BEEN HONORED BY THE PROPOSED DEVELOPMENT. REQUIRED ESD VOLUME FOR THE MICRO-BIORETENTION FACILITIES HAVE BEEN DETERMINED AND ASSOCIATED SIZING COMPUTATIONS HAVE BEEN SHOWN ON THIS SHEET.

IT'S OUR OPINION THAT STORMWATER MANAGEMENT REQUIREMENTS UNDER GOVERNING REDEVELOPMENT REGULATIONS HAVE BEEN MET AND THE REQUIRED WATER QUALITY TREATMENT FOR THE SUBJECT SITE HAS BEEN ACHIEVED BY PROPOSED ON-SITE MICRO-BIORETENTION FACILITIES.

**BIORETENTION FACILITY PLANT SCHEDULE**

QTY.	SYM	SCIENTIFIC NAME	COMMON NAME	TYPE	SIZE
<b>HERBACEOUS COVER MIX</b>					
30%		Andropogon Virginicus	Broomsedge	HERBACEOUS	
25%		Eupatorium Perpurea	Joe Pye Weed	HERBACEOUS	
25%		Lobelia Cardinalis	Cardinal Flower	HERBACEOUS	
20%		Panicum Virgatum	Switchgrass	HERBACEOUS	
<b>SHRUBS</b>					
16	LB	Lindera Benzoin	Spicebush	SHRUB	30"-36"
27	IV	Ilex Verticillata	Winterberry	SHRUB	30"-36"
16	VD	Viburnum Dentatum	Arrow-wood	SHRUB	30"-36"
12	HV	Hamamelis Virginiana	Witch Hazel	SHRUB	30"-36"

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELICOTT CITY WALMART'**

ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
PRELIMINARY PLAN P-95-21	APPROVED: 06-06-1995
SITE PLAN SDP-96-11	APPROVED: 06-21-1996
MASS GRADING PLAN SDP-96-001	APPROVED: 04-03-1996
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01	APPROVED: 11-08-1995
ECP 11-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-98-157
WATER NO. F03	SEWER NUMBER 1452800

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Mike Thomas*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 8/23/11

*Tommy J. Buttle*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 9/26/11

*Tommy J. Buttle*  
DIRECTOR  
DATE: 9/27/11

**WALMART STORE #2412-03**  
**ELICOTT CITY, WALMART, PARCEL B**

TM 24, TM GRID 6, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD

<b>BIO-RETENTION DETAILS</b>	DATE	SHEET
	07/25/11	25 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
8913 Godwin Drive  
Manassas, Virginia 20110  
Telephone: (703) 530-8093  
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www.bowmanconsulting.com

PROFESSIONAL ENGINEER  
38755  
2-25-11

SUPERCENTER #2412-03  
ELICOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716

**Walmart**

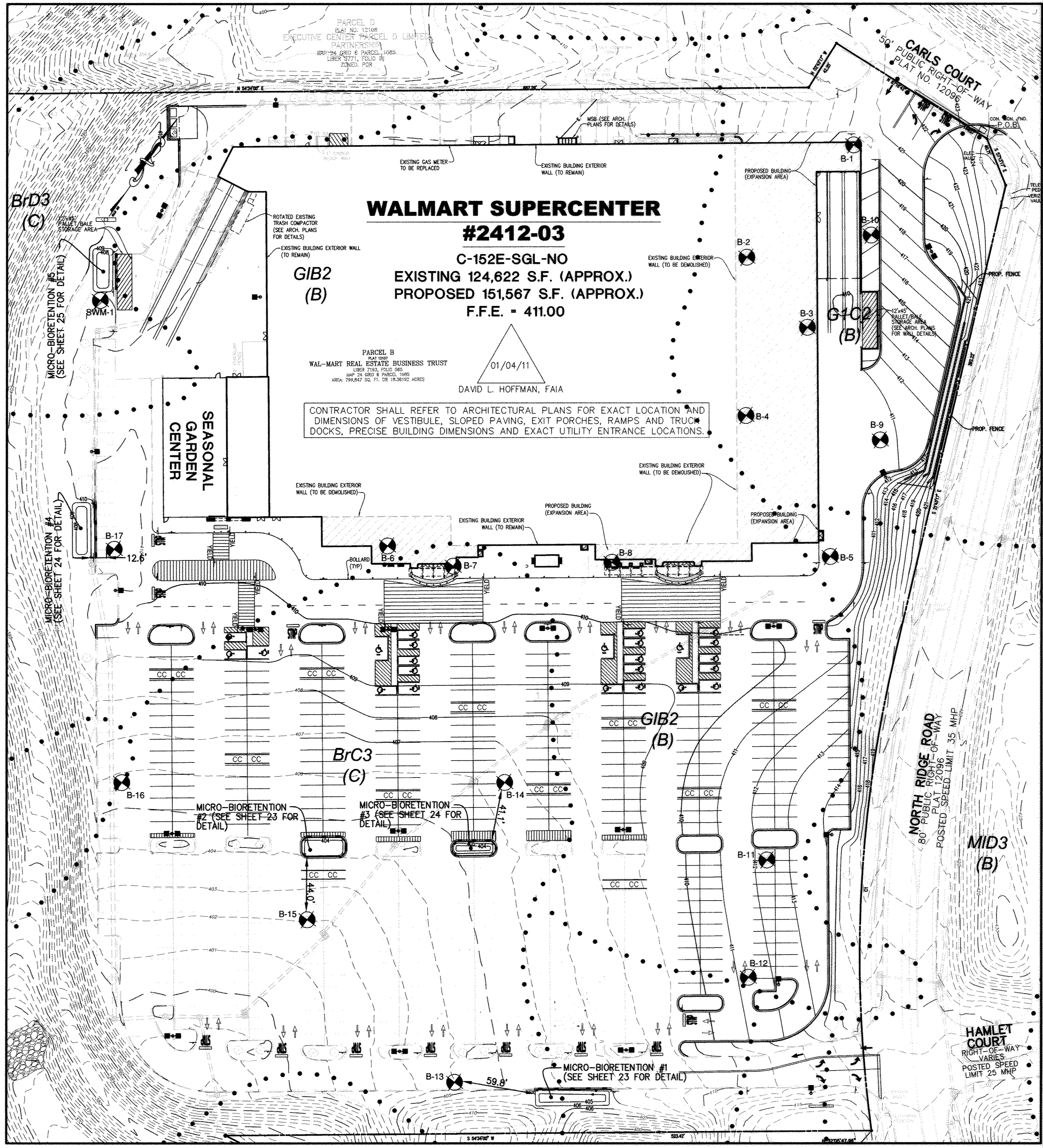
DESIGN DRAWN BY BU, KJC  
CHECKED BY GD  
DATE 01/14/11  
SCALE N/A  
JOB No. 4680-01-002  
SHEET 25 OF 32 SHEETS  
SDP-96-011

CLIENT Bowman Consulting Group Ltd	JOB # 5340	BORING # B-12	SHEET 1 OF 1	ECS MID-ATLANTIC
PROJECT NAME Wal Mart # 2412-03	ARCHITECT-ENGINEER			
SITE LOCATION North Ridge Road				
Elicott City, Howard County, Maryland				
DESCRIPTION OF MATERIAL		ENGLISH UNITS		
SURFACE ELEVATION 414.0		ROCK QUALITY DESIGNATION & RECOVERY		
TOPSOIL DEPTH 3"		Silty SAND, Trace Rock Fragments, Contains Mica, Dark Gray, Moist, Firm, (SM/Possible FM)		
Silty SAND, Trace Rock Fragments, Contains Mica, Dark Gray and Tan, Moist, Medium Dense, (SM)		SILT, With Sand, Trace Clay, Brown, Moist, Vary SHFF, (ML)		
SILT, With Sand, Trace Clay, Brown, Moist, Vary SHFF, (ML)		END OF BORING @ 10.00'		
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL				
NO DRY BORING STARTED 01/12/10				
NO DRY BORING COMPLETED 01/12/10				
CAVE IN DEPTH @ 5.67'				
REV CME 750/DORIAN T. COVINGTON/RELLING METHOD HSA				

CLIENT Bowman Consulting Group Ltd	JOB # 5340	BORING # B-15	SHEET 1 OF 1	ECS MID-ATLANTIC
PROJECT NAME Wal Mart # 2412-03	ARCHITECT-ENGINEER			
SITE LOCATION North Ridge Road				
Elicott City, Howard County, Maryland				
DESCRIPTION OF MATERIAL		ENGLISH UNITS		
SURFACE ELEVATION 402.0		ROCK QUALITY DESIGNATION & RECOVERY		
Asphalt Depth 4"		Silty SAND, Contains Mica, Dark Gray, Moist, Medium Dense, (SM)		
Gravel Depth 6"		Silty SAND, Contains Mica, Brown and Dark Gray, Moist, Medium Dense, (SM)		
END OF BORING @ 5.00'				
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL				
NO DRY BORING STARTED 01/12/10				
NO DRY BORING COMPLETED 01/12/10				
CAVE IN DEPTH @ 5.00'				
REV CME 750/DORIAN T. COVINGTON/RELLING METHOD HSA				

CLIENT Bowman Consulting Group Ltd	JOB # 5340	BORING # B-14	SHEET 1 OF 1	ECS MID-ATLANTIC
PROJECT NAME Wal Mart # 2412-03	ARCHITECT-ENGINEER			
SITE LOCATION North Ridge Road				
Elicott City, Howard County, Maryland				
DESCRIPTION OF MATERIAL		ENGLISH UNITS		
SURFACE ELEVATION 406.0		ROCK QUALITY DESIGNATION & RECOVERY		
Asphalt Depth 2"		Sandy SILT, Brown, Moist, Medium Dense, (ML/FLL)		
Gravel Depth 2"		Silty SAND, Contains Mica, Greenish Gray and Tan, Moist, Medium Dense, (SM)		
END OF BORING @ 5.00'				
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL				
NO DRY BORING STARTED 01/13/10				
NO DRY BORING COMPLETED 01/13/10				
CAVE IN DEPTH @ 5.00'				
REV CME 750/DORIAN T. COVINGTON/RELLING METHOD HSA				

CLIENT Bowman Consulting Group Ltd	JOB # 5340	BORING # B-13	SHEET 1 OF 1	ECS MID-ATLANTIC
PROJECT NAME Wal Mart # 2412-03	ARCHITECT-ENGINEER			
SITE LOCATION North Ridge Road				
Elicott City, Howard County, Maryland				
DESCRIPTION OF MATERIAL		ENGLISH UNITS		
SURFACE ELEVATION 404.0		ROCK QUALITY DESIGNATION & RECOVERY		
Asphalt Depth 6"		SAND, With Silt, Contains Mica, Trace Rock Fragments, Dark Gray and Tan, Moist, Dense to Extremely Dense, (SM)		
Gravel Depth 6"		Decomposed Rock, Sampled as SAND, With Silt, Contains Mica Trace Rock Fragments, Dark Gray and Tan, Moist, Extremely Dense, (WR)		
END OF BORING @ 5.00'				
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL				
NO DRY BORING STARTED 01/12/10				
NO DRY BORING COMPLETED 01/12/10				
CAVE IN DEPTH @ 4.00'				
REV CME 750/DORIAN T. COVINGTON/RELLING METHOD HSA				



SOIL BORING LOCATIONS - PLAN VIEW

SCALE: 1"=50'

BORING LOCATION

ECS Mid-Atlantic, LLC  
Baltimore, MD  
Boring Log Details

Printed on (date): December 28, 2010

Project Number: 5340-A  
Boring Number: SWM-1  
Boring Depth: 3.00  
Surface Elevation:

Depth (FT)	Description of Material (Visual Classification)	Sample No.	Sample Type	Sample Dist.(IN)	Recovery (IN)	N Value	Tests Ordered	Depth (FT)
1	Surface Material -> Topsoil Depth [3.00']							1
2	Silty Micaceous SAND, Trace Gravel, Brown, Moist, (SM)							2
3	AR @ 3.00'							3

**OWNER/DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SMDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELlicOTT CITY WALMART'**  
ELECTION DISTRICT NO. 2  
TAX MAP 17 & 24  
REZONING CASE NUMBER ZB-941  
SKETCH PLAN S-95-01  
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FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01  
ECP 11-007  
FINAL RECORD PLATS  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O TM PARCEL 1085  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
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APPROVED: 04-03-1996  
  
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APPROVED: 08-06-2010  
F-96-009, F-96-091 & F-98-157  
SEWER NOS. 1452800  
F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
[Signature]  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 8/22/11  
[Signature]  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 9/20/11  
[Signature]  
DIRECTOR  
DATE: 9/27/11

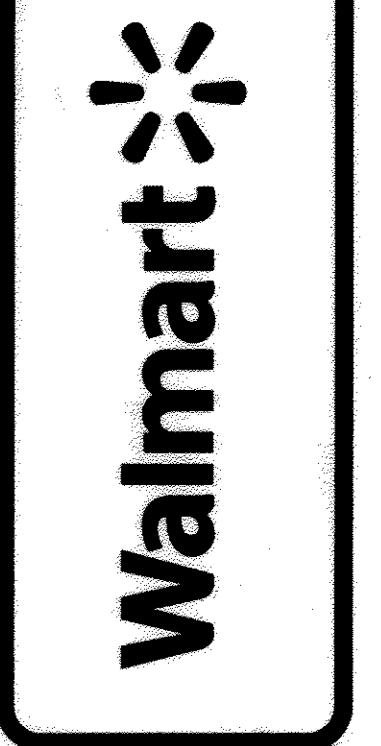
**WALMART STORE #2412-03**  
**ELlicOTT CITY, WALMART, PARCEL B**  
TM 24, TM GRID 6, P/O TM PARCEL 1085  
2ND ELECTION DISTRICT, HOWARD COUNTY, MD  
**SOIL BORINGS**  
DATE: 07/25/11  
SHEET: 26 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2nd SUBM	BU/GD

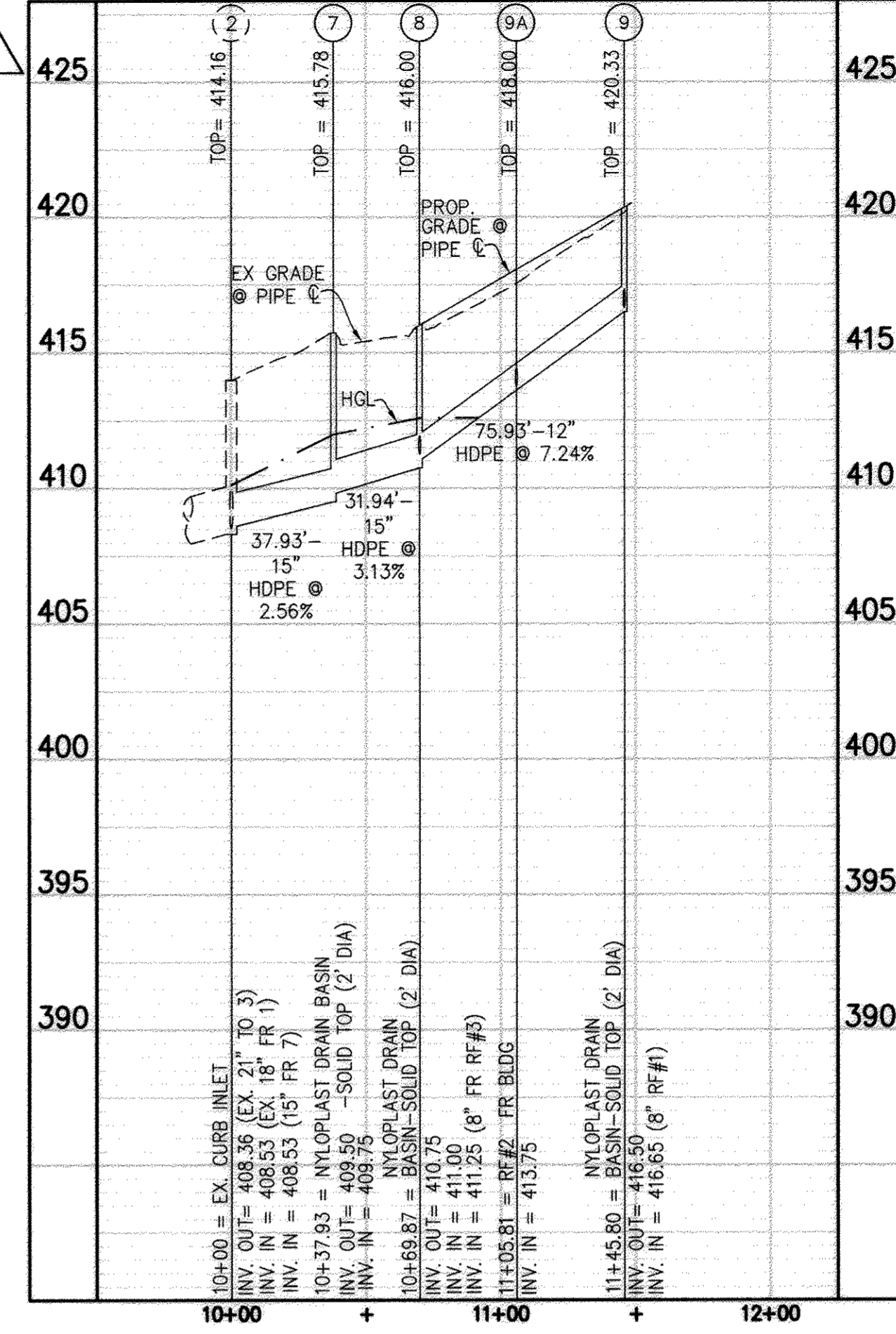
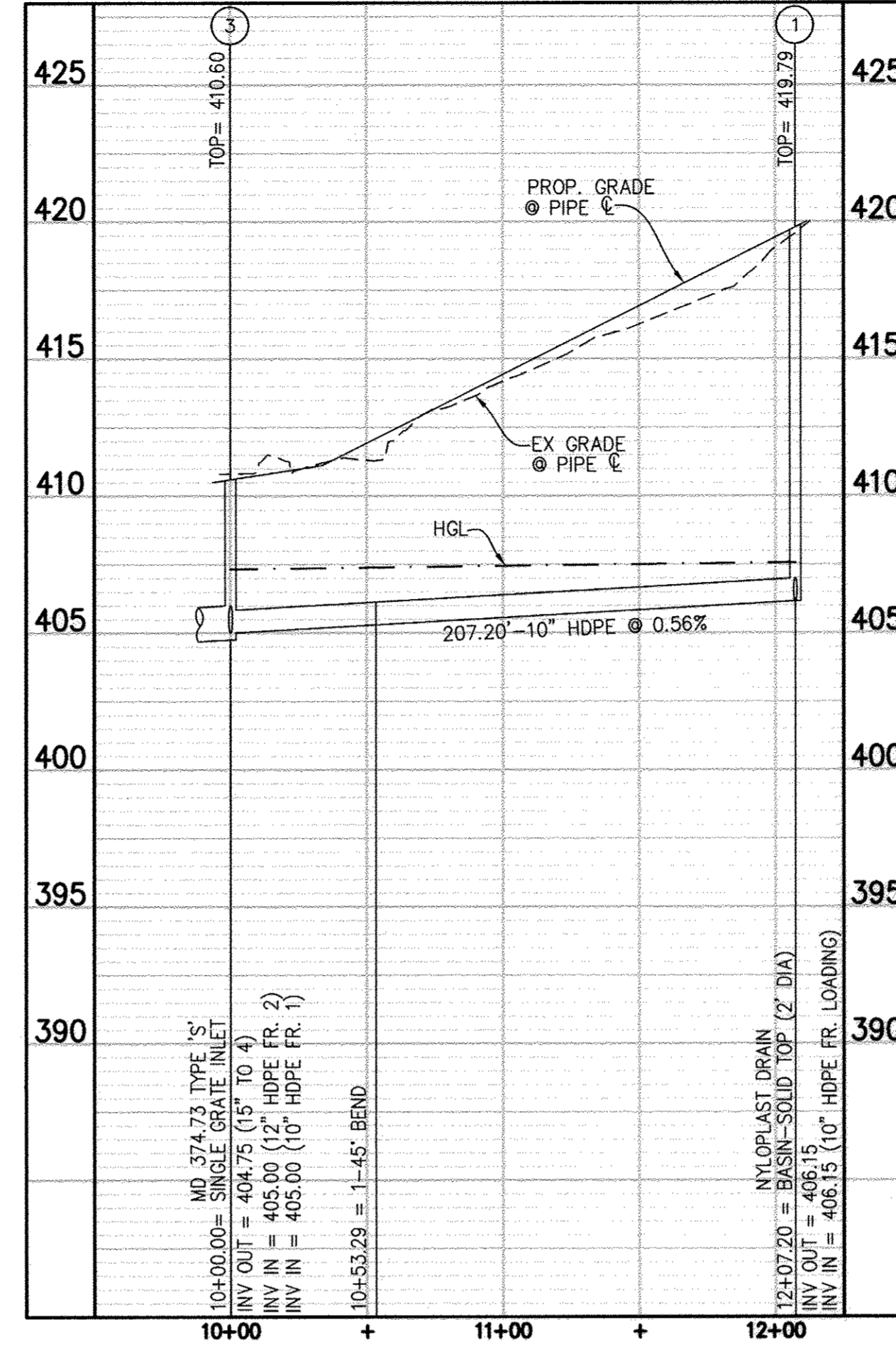
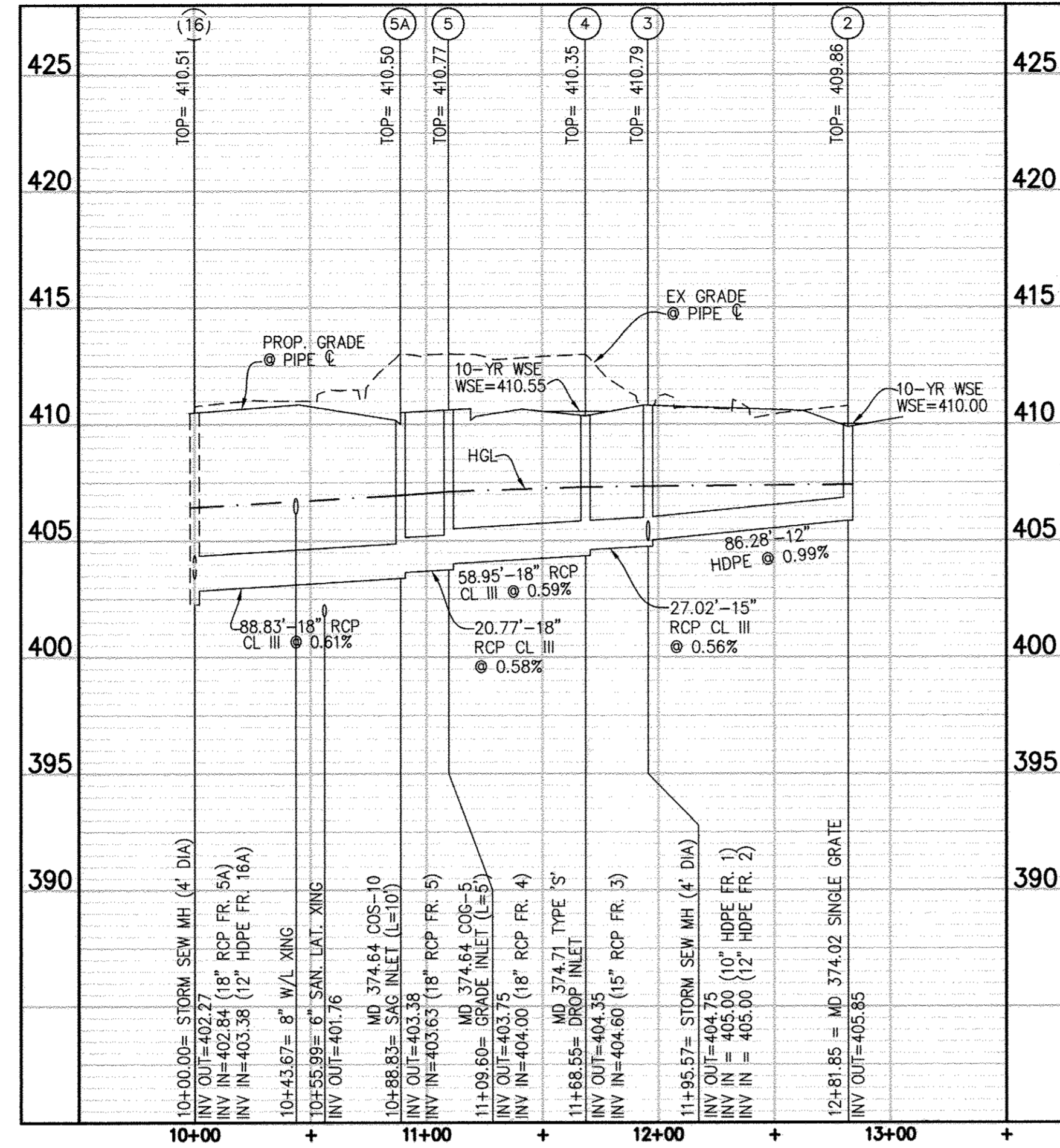
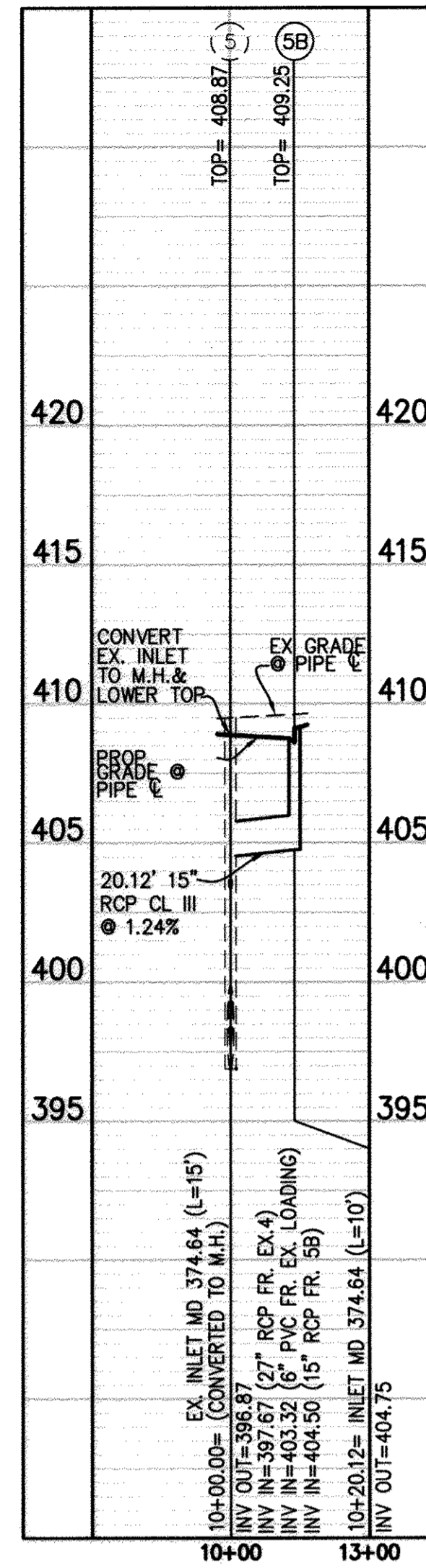
**Bowman CONSULTING**  
Bowman Consulting Group, Ltd.  
9813 Gowlin Drive  
Manassas, Virginia 20110  
Telephone: (703) 530-8083  
Fax: (703) 530-8475  
www.bowmanconsulting.com

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
No. 38755  
7-25-11

SUPERCENTER #2412-03  
ELlicOTT CITY, HOWARD COUNTY, MARYLAND  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SE 10TH STREET  
BENTONVILLE, AR 72716



DESIGN DRAWN BU KJC	CHECKED GD
DATE 01/14/11	SCALE AS SHOWN
JOB No. 4660-01-002	SHEET 26
	OF 32 SHEETS



**Bowman Consulting Group**  
**TRASH COMPACTOR**  
**REMOVAL AND PARKING**  
**MODIFICATIONS ONLY.**



NO	DATE	DESCRIPTION	BY
1	12/14/11	COMPACTOR REMOVAL & PARKING MOD.	JDT

**OWNER/DEVELOPER**

WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SOUTHEAST 10TH STREET, SWDC  
 BENTONVILLE, AR 72716-0550  
 CONTACT: MIKE THOMAS  
 PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**

ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
 TAX MAP 17 & 24 P/O TM PARCEL 1085  
 REZONING CASE NUMBER ZB-941 DATED: OCTOBER 18, 1993  
 SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
 PRELIMINARY PLAN P-95-21 APPROVED: 06-06-1995  
 SITE PLAN SDP-96-11 APPROVED: 06-21-1996  
 MASS GRADING PLAN SDP-96-001 APPROVED: 04-03-1996  
 FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01 APPROVED: 11-08-1995  
 ECP 11-007 APPROVED: 08-06-2010  
 FINAL RECORD PLATS F-96-009, F-96-091 & F-98-157 APPROVED: 08-06-2010  
 WATER NO. F03 SEWER NOS. 1452800 F-12-023

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Chad Edwards</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	1/11/12 DATE
<i>Keith Sheehy</i> CHIEF, DIVISION OF LAND DEVELOPMENT	1/18/12 DATE
<i>Thomas J. Fuller</i> DIRECTOR	1/18/12 DATE

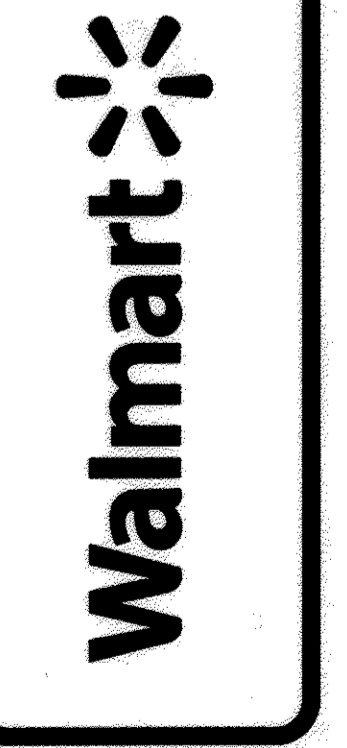
<b>WALMART STORE #2412-03</b> <b>ELLCOTT CITY, WALMART, PARCEL B</b>	
TM 24, TM GRID 8, P/O TM PARCEL 1085 2ND ELECTION DISTRICT, HOWARD COUNTY, MD	
DATE	SHEET
12/14/11	27 OF 32 SHEETS

REVISIONS	BY
07/15/10-CONCEPT	BU/GD
01/14/11-1ST SUBM	BU/GD
07/25/11-2ND SUBM	BU/GD

**Bowman Consulting Group, Ltd.**  
 Telephone: (703) 550-9989  
 Fax: (703) 530-8475  
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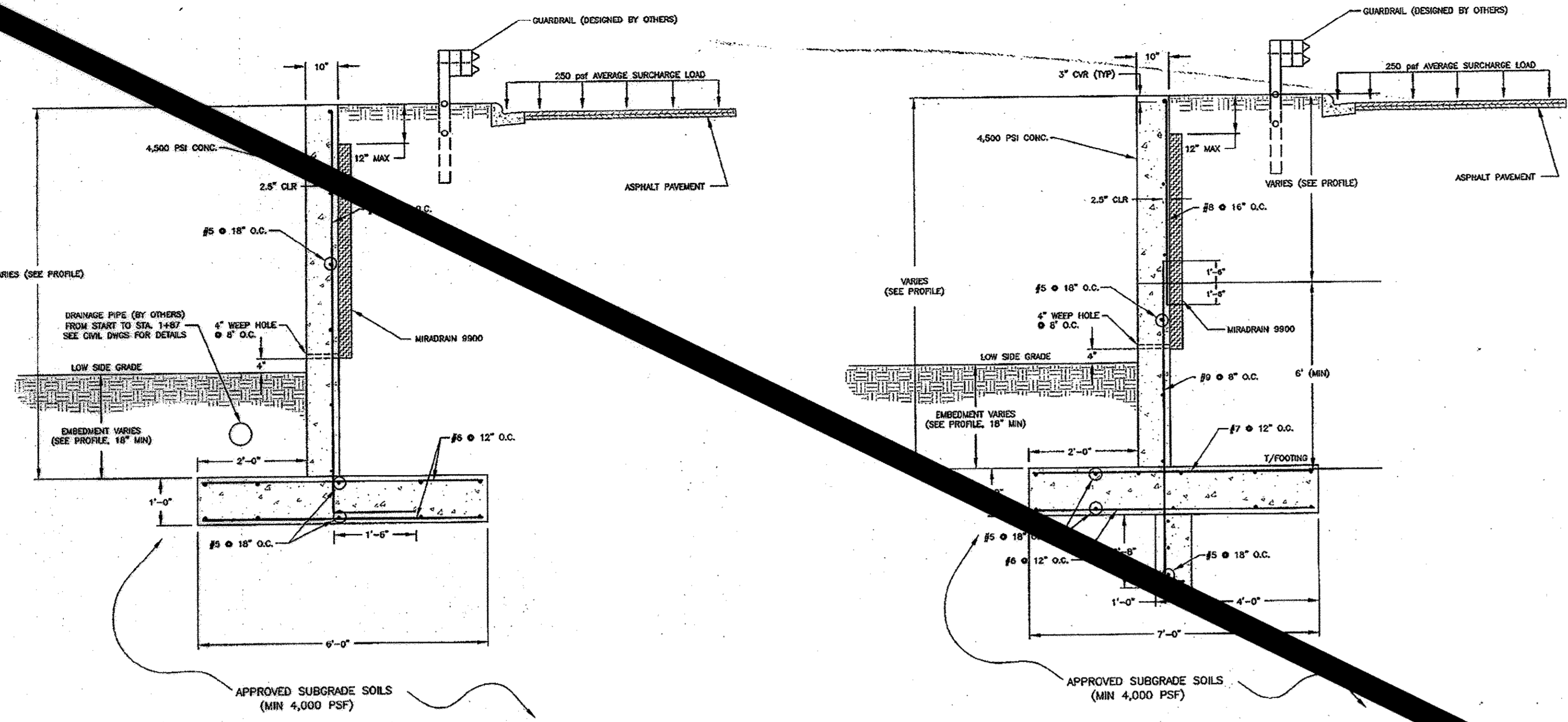
**STATE OF MARYLAND**  
**PROFESSIONAL ENGINEER**  
 No. 38755  
 MICHAEL THOMAS

SUPERCENTER #2412-03  
 ELLCOTT CITY, HOWARD COUNTY, MARYLAND  
 WAL-MART REAL ESTATE BUSINESS TRUST  
 2001 SE 10TH STREET  
 BENTONVILLE, AR 72716

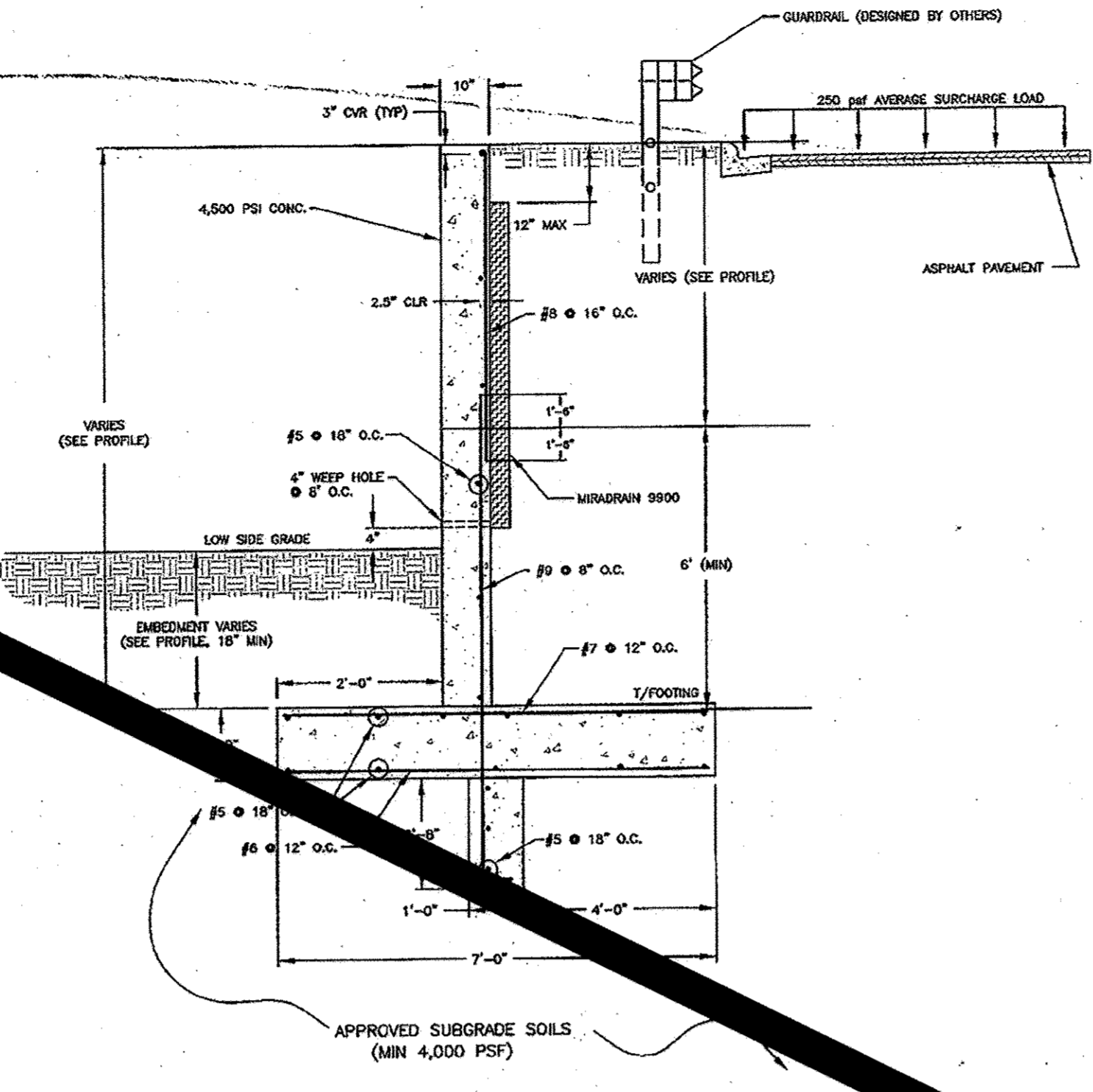


DESIGN DRAWN	BU
CHECKED	KJC
DATE	01/14/11
SCALE	HOR. 1"=50' VER. 1"=5'
JOB No.	4880-01-002
SHEET	27
OF 32 SHEETS	

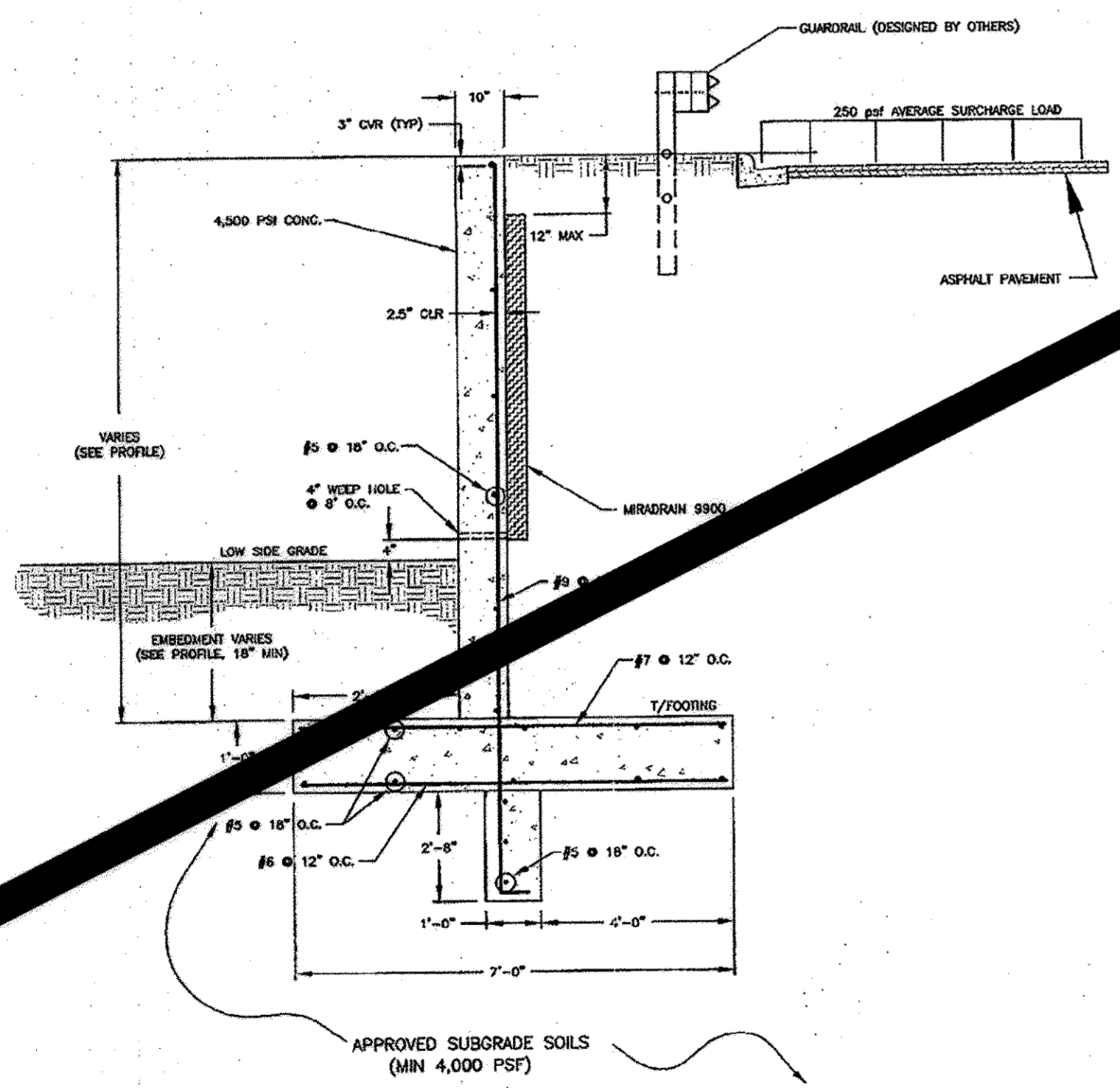




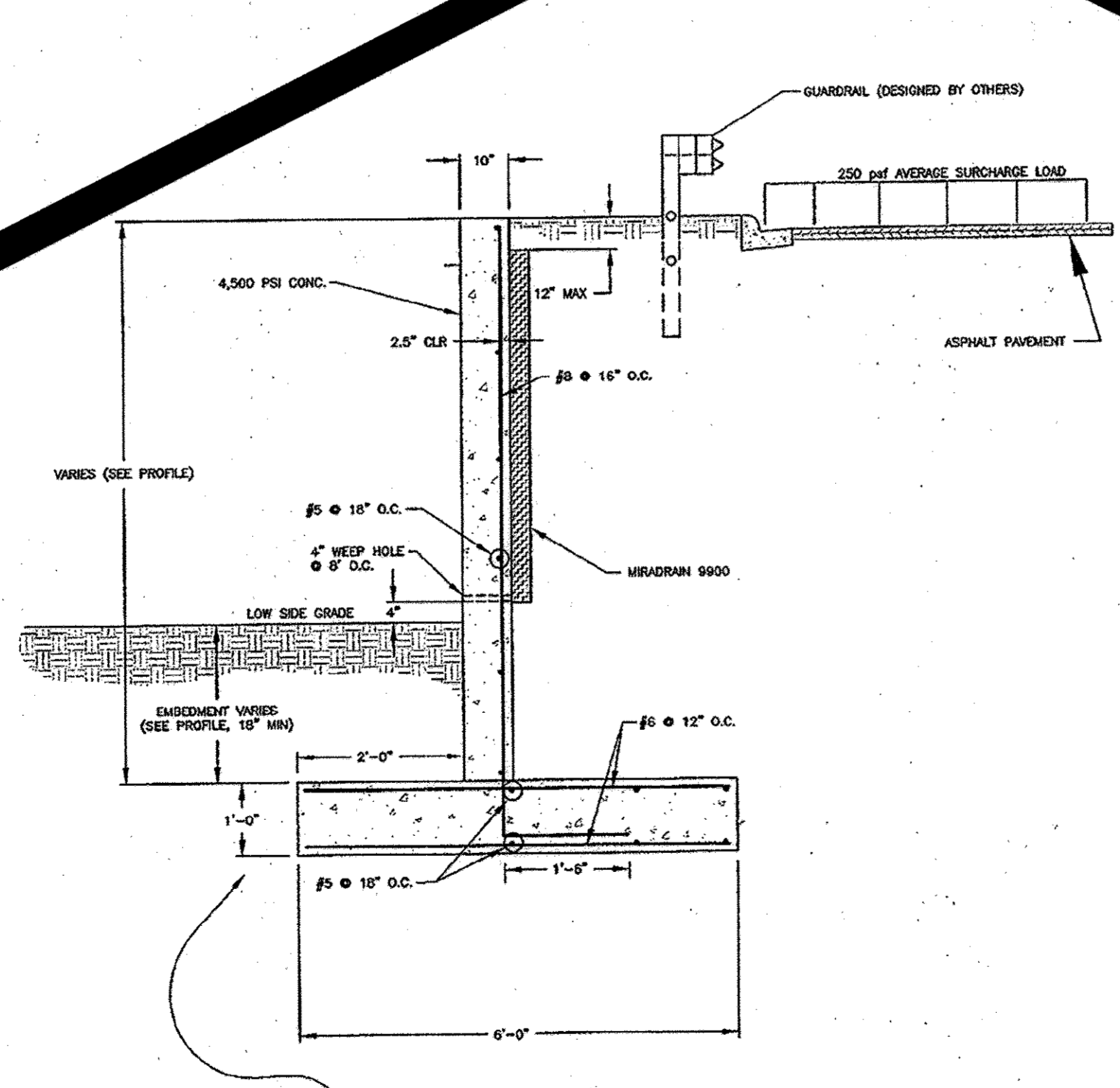
**WALL 4 TYPICAL SECTION**  
(START - STA. 1+00)  
NTS



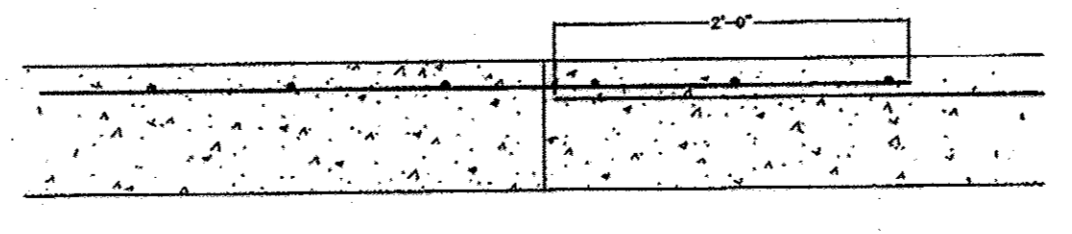
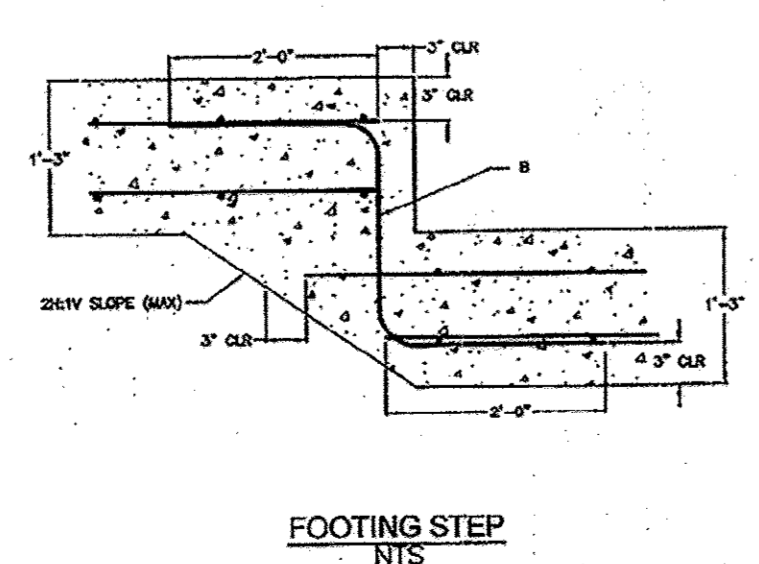
**WALL 4 TYPICAL SECTION**  
(STA. 1+00 - STA. 1+97.4; STA 2+21 - STA. 3+00)  
NTS



**WALL 4 TYPICAL SECTION (CANOPY AREA)**  
(STA. 1+97.4 - STA 2+21)  
NTS



**WALL 4 TYPICAL SECTION**  
(STA. 3+00 - END)  
NTS



**Retaining Wall Specifications and Guidelines**

**Part 1: General**

**1.01 Description**

A. Retaining walls must be constructed under the supervision of a Maryland Registered Professional Engineer.

B. Work includes preparation of foundation soils, furnishing all materials, and installing all materials to the lines and grades shown on the construction drawings.

**1.02 Codes and Standards**

A. "International Building Code -- 2006", International Code Council, Inc.

B. "ACI Manual of Concrete Practice -- Parts 1 Through 5 -- 2001"

C. "Manual of Standard Practice -- Concrete Steel Reinforcing Institute"

D. "American Society for Testing and Materials"

**1.03 Damage, Storage, and Handling**

A. The Contractor shall check the materials upon delivery to assure that the proper materials have been received.

B. The Contractor shall properly handle and store the materials to prevent damage to the materials. Damaged materials shall not be used in the wall.

**1.04 Quality Assurance**

A. The Owner shall engage a qualified testing agency to provide observation and testing services as described below.

B. **Concrete Placement**

1. The agency shall inspect the formwork and reinforcing steel placement for compliance with the contract documents. Reinforcing steel should be inspected for correct size, quantity, and spacing.

2. Fresh concrete shall be sampled in accordance with ASTM C 172, and tested for slump, air entrainment, and temperature.

3. Test cylinders shall be molded in accordance with ASTM C 31. Four test cylinders shall be molded for each day's pour, or for every 50 cubic yards of concrete placed, whichever is greater.

C. **Fill Placement**

1. All soil fills shall be tested in accordance with ASTM D 2922.

2. A minimum of one compaction test per lift should be made per 2,500 square feet of area, but not fewer than two tests per lift should be made.

3. The elevations and locations of the field density tests should be clearly identified on the drawings of fill placement and compaction.

**Part 2: Materials**

**2.01 Concrete**

A. Concrete shall conform to Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414.

B. Concrete shall have a minimum 28-day compressive strength of 4,500 psi.

C. Concrete shall have a maximum slump of 6 inches and shall be entrained to 6% (+/- 1%) by volume.

D. Concrete shall have a minimum density of 145 pcf and a maximum water-to-cement ratio of 0.50.

**2.02 Steel Reinforcement**

A. Steel reinforcing shall conform to ASTM A 615, Grade 60.

B. Submit shop drawings at least 15 business days before date reviewed submittals will be needed. Shop drawings shall bear the contractor's stamp of approval which shall constitute that he has verified all field measurements, construction criteria, materials, and similar data, and has checked each drawing for completeness, coordination, and compliance with contract documents.

**2.03 Soil Backfill**

A. Material should consist of soil classified as SM, SC, or more granular, in accordance with ASTM D 2487.

B. Material should be free of particles larger than 2.5 inches and shall contain at least 30 percent, by weight, retained on the U.S. No. 200 sieve.

C. Materials should have a Liquid Limit less than 40, and a Plasticity Index less than 12.

D. Materials should have a minimum friction angle of 30 degrees and a minimum dry unit weight of 118 pcf.

E. The Contractor shall submit samples of the proposed backfill soils to the Geotechnical Engineer of Record for approval prior to their use.

**2.04 Drainage Board**

A. Drainage board used behind the walls shall consist of Miradrain 9900.

**Part 3: Construction**

**3.01 General**

A. All existing underground utilities shall be properly marked, and relocated if necessary, prior to construction.

B. All proposed underground utilities or structures in the general wall area shall be completely installed prior to the construction of the wall.

C. Protect all existing and/or new structures from damage by construction equipment. Immediately repair any damage that may occur.

**3.02 Foundation**

A. The wall foundation shall be excavated to the grades and lines as shown on the construction drawings. Contractor should take care not to disturb foundation soils beyond the lines and grades shown.

B. The foundation shall bear on the minimum embedment depths indicated, as measured from the final grade at the front of the wall.

C. The foundation subgrade soils shall be tested by a qualified representative of the Geotechnical Engineer to verify the availability of the design bearing pressure of 4,000 pcf.

D. If unsuitable soils are encountered at design foundation levels, the unsuitable soils shall be removed and the over-excavated areas shall be replaced with compacted structural fill.

**3.03 Steel Reinforcement**

A. All steel reinforcing shall have a minimum clear cover of 3 inches unless otherwise noted on the contract documents.

B. Where applicable, splices for reinforcing steel shall be made by contact tension lap splices.

C. Welding and field-bending of reinforcing steel is not permitted.

D. Furnish all accessories, chairs, space bars, supports, etc. necessary to secure reinforcing.

**3.04 Cast-in-Place Concrete**

A. **Footing Concrete**

1. The vertical faces of the footing and key excavation may be used as forms for placement of foundation concrete.

2. Foundation concrete, or protective mud mats, should be placed the same day that the foundation subgrade is approved.

3. Provide concrete protection against freezing during placement and for 5 days thereafter.

B. **Wall Concrete**

1. Formwork shall not be removed until concrete has cured to the lines and grades shown on the construction drawings.

2. Locate construction joints as to not impair the strength of the structure, but not more than 60 feet in any direction. Provide continuous bentonite strip waterstop at all construction joints.

3. Make stops in concrete pours using vertical bulkheads.

4. All reinforcing shall be continuous through joints and bulkheads.

5. Corner exposed concrete shall be finished 3/4" by 3/4" minimum.

6. Provide 4" diameter weep holes every 8 feet along the bottom of the wall and at wall ends. The weep holes should be formed in place prior to concrete placement by using PVC pipe. Weep hole locations must not interfere with reinforcing, and shall be no greater than 4 inches above final grade at the front of the wall.

7. Where a fence is required, it is recommended that the fence posts be installed during wall concrete placement. The fence posts shall have a minimum of 24 inches of embedment into the wall, and be located along the center of the wall. Alternatively, provide 4 inch diameter by 24 inch deep post holes at the designated fence post locations along the centerline of the wall. The post holes should be formed in place prior to concrete placement by using PVC pipe.

8. Wall shall be finished with straight smooth face paint as specified with Sherwin Williams #7689 "Row House Tan" paint.

**3.05 Backfilling**

A. All soil backfill shall conform to the material requirements of section 2.03, and shall be placed in accordance with ASTM D-698.

B. Backfill shall be moisture conditioned to within 2 percentage points of optimum moisture content, as determined in accordance with ASTM D-698.

C. Backfill shall be placed in loose lifts, not exceeding 8 inches in thickness, and shall be compacted to at least 95 percent of the maximum dry density, as determined in accordance with ASTM D-698.

D. Backfilling shall not occur against the wall until the wall concrete has attained at least 75 percent of the 28-day design strength, and no earlier than 3 days after placement.

E. Where feasible, maintain equal grades on each side of the wall during backfilling to prevent overturning and lateral movements. When the grade differential at the wall exceeds 12 inches, only hand-operated compaction equipment shall be allowed.

F. Drainage boards shall be placed against the wall, extending from the weep hole up within 12 inches of final grade at the top of the wall.

**3.06 Finish**

A. Final grades of the wall shall be established by the Contractor in accordance with the most recent approved grading plans.

B. Final grades shall be stabilized and seeded per the approved civil plans unless noted otherwise on the approved grading plans.

C. Install fence at the top of the wall in accordance with project documents. If fence posts are installed subsequent to wall construction, the fence posts shall be grouted into the PVC post holes using 3,000 psi non-shrink grout.

D. See Architectural or Landscape plans and specifications for additional fence details.

**OWNER/DEVELOPER**  
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
DENTONVILLE, AR 72715-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

**SUBDIVISION 'ELLCOTT CITY WALMART'**  
ELECTION DISTRICT  
TM MAP 17 & 24  
REZONING CASE NUMBER 28  
SKETCH PLAN S-98-01  
PRELIMINARY PLAN P-95-21  
SITE PLAN SDP-96-11  
CLASS GRADING PLAN SDP-96-001  
FINAL ROAD CONSTRUCTION PLAN  
FOS NORTH RIDGE RD. F-96-01  
ECP-11-207  
FINAL RECORD PLATS  
WATER NO. F03

HOWARD COUNTY, MARYLAND  
P/O TM PARCEL 1085  
DATED: OCTOBER 18, 1993  
APPROVED: 12-2-1994  
APPROVED: 06-06-1995  
APPROVED: 06-21-1996  
APPROVED: 04-03-1998  
APPROVED: 08-08-1995  
APPROVED: 08-11-1997  
F-98-005; F-98-010; F-98-157  
SEWER NOS. 143261-143262



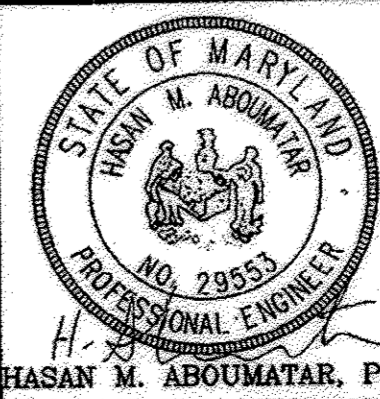
**Bowman Consulting Group**  
**CONCRETE RETAINING WALL (WALL 4)**  
**IS REMOVED. PLEASE SEE SHEET 30A**  
**FOR PROPOSED WALL.**

NO.	REVISIONS	DATE
1	CONCRETE RETAINING WALL (WALL 4) REMOVED	12-14-2011

**CONCRETE RETAINING WALL (WALL 4)**  
Walmart Store #2412-03, Ellicott City, Walmart, Parcel B  
TM 24, TM Grid 6, P/O TM Parcel 1085  
2nd Election District, HOWARD COUNTY, MD

**BOWMAN CONSULTING GROUP, LTD**  
DMA DMA 08-15-11 5340-A 29 OF 32

**ECS MID-ATLANTIC, LLC**  
1340 CHARWOOD ROAD, SUITE P  
HANOVER, MARYLAND 21076  
OFFICE (410) 850-4300  
FAX (410) 850-4384  
"Setting The Standard For Service"



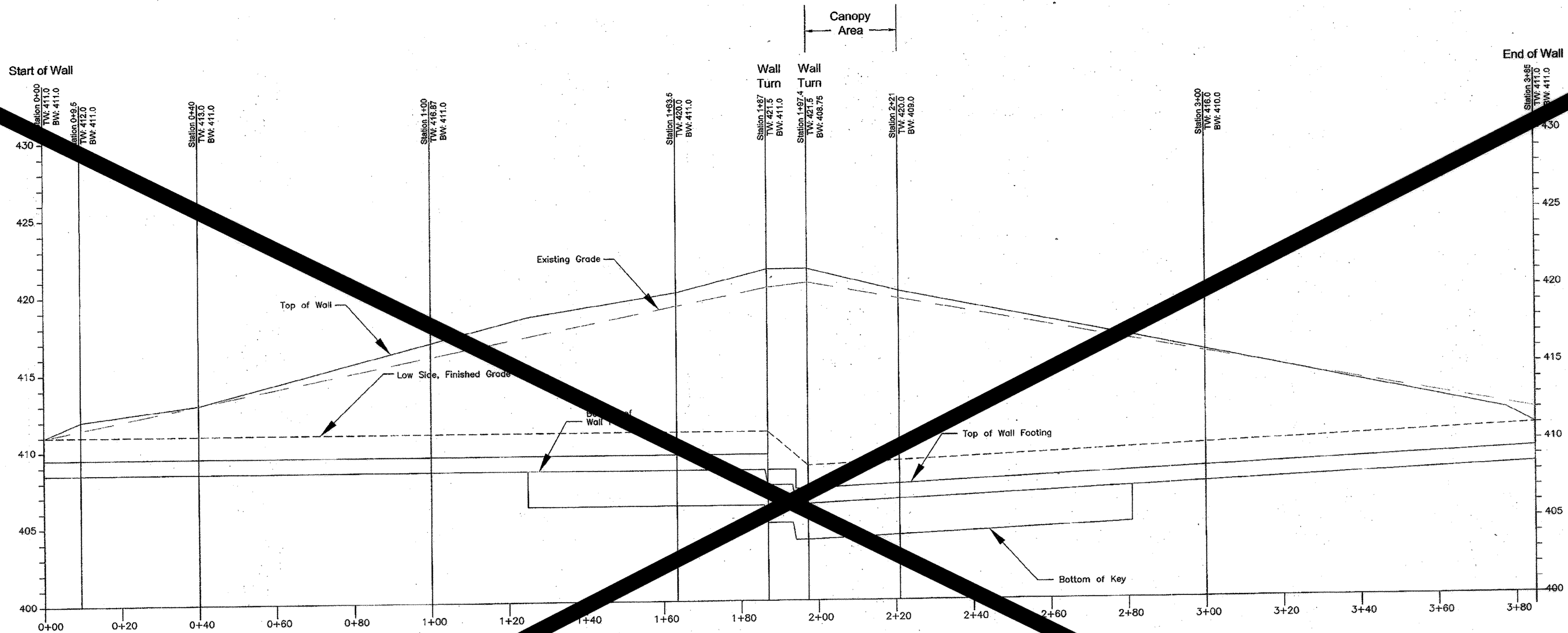
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 29553, Expiration Date: 12/31/11

APPROVED: DEPARTMENT OF PLANNING AND ZONING

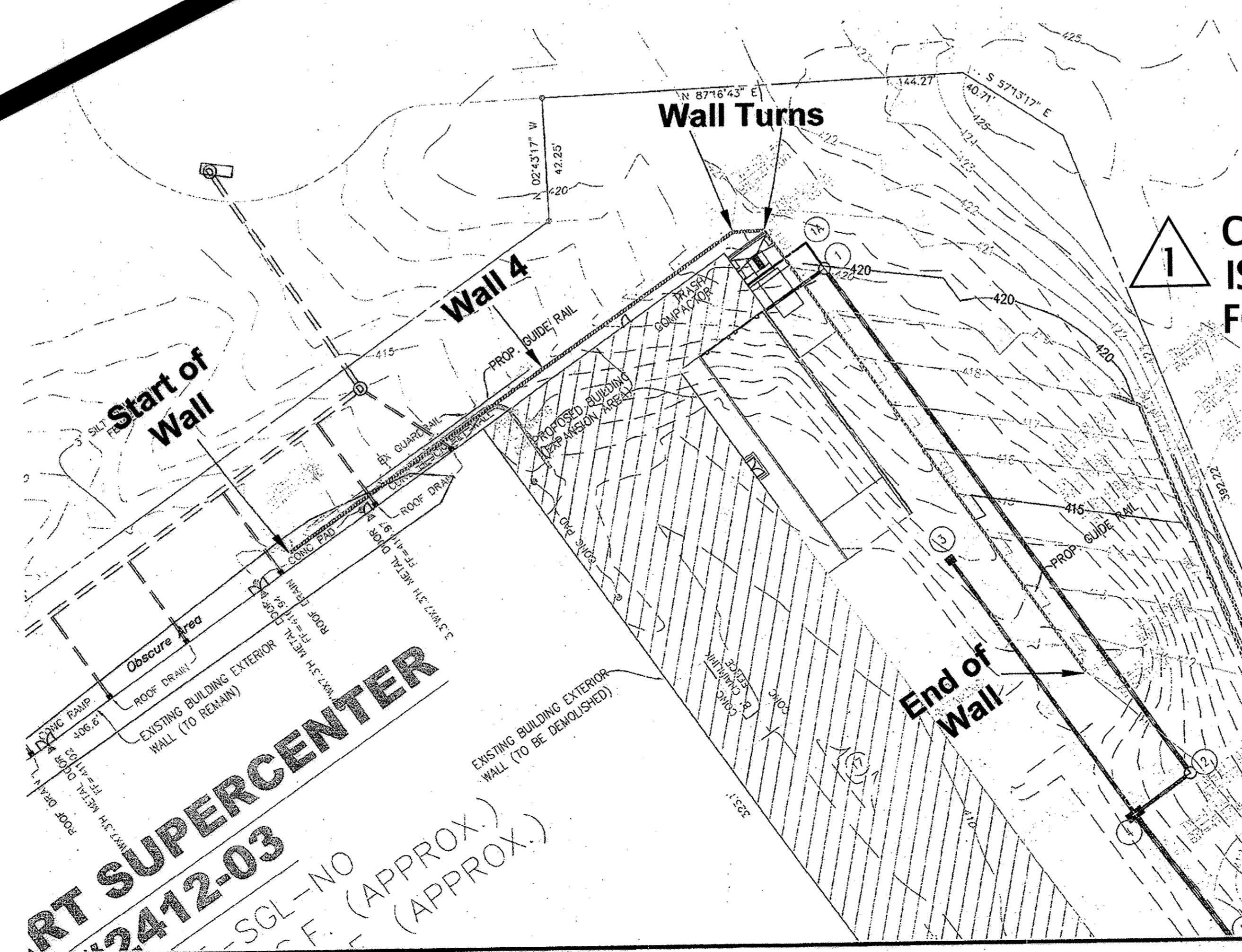
*Chad Edwards* 1/11/12  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Val Shuler* 1/18/12  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Thomas P. Sauter* 1/18/12  
DIRECTOR DATE



**WALL 4 PROFILE**



Bowman Consulting Group

**CONCRETE RETAINING WALL (WALL 4) IS REMOVED. PLEASE SEE SHEET 30A FOR PROPOSED WALL.**

OWNER / DEVELOPER

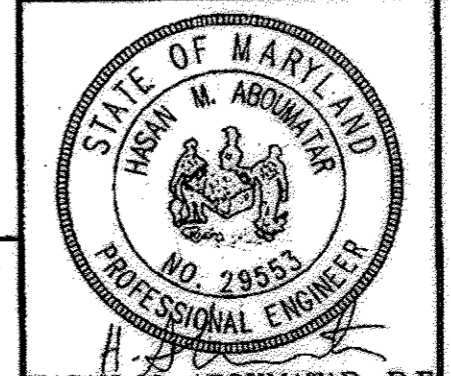
WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SUOC  
ANNAPOLIS, MD 21403-0893  
PROJ. NO. 273-6000

SUBDIVISION: ELICOTT CITY WALMART

ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND  
TAX MAP 17 & 24 P/O TM PARCEL 1085  
REZONING CASE NUMBER ZB-941 DATED: OCTOBER 15, 1993  
SKETCH PLAN S-95-01 APPROVED: 12-2-1994  
PRELIMINARY PLAN P-95-21 APPROVED: 05-30-1995  
SITE PLAN SDP-96-11 APPROVED: 08-21-1996  
MASS GRADING PLAN SDP-96-001 APPROVED: 08-21-1996  
FINAL ROAD CONSTRUCTION PLAN FOR NORTH REISE RD. F-96-01 APPROVED: 06-06-1997  
ECP-11-007 APPROVED: 06-06-1997  
FINAL RECORD PLATS WATER NO. P03 SEWER NOS. 1452800

Scale: 1"=30'

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Chad Edwards* 1/11/12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Ket Shulman* 1/18/12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Thomas J. Smith* 1/18/12  
 DIRECTOR DATE



HASAN M. ABOUMATAR, P.E.

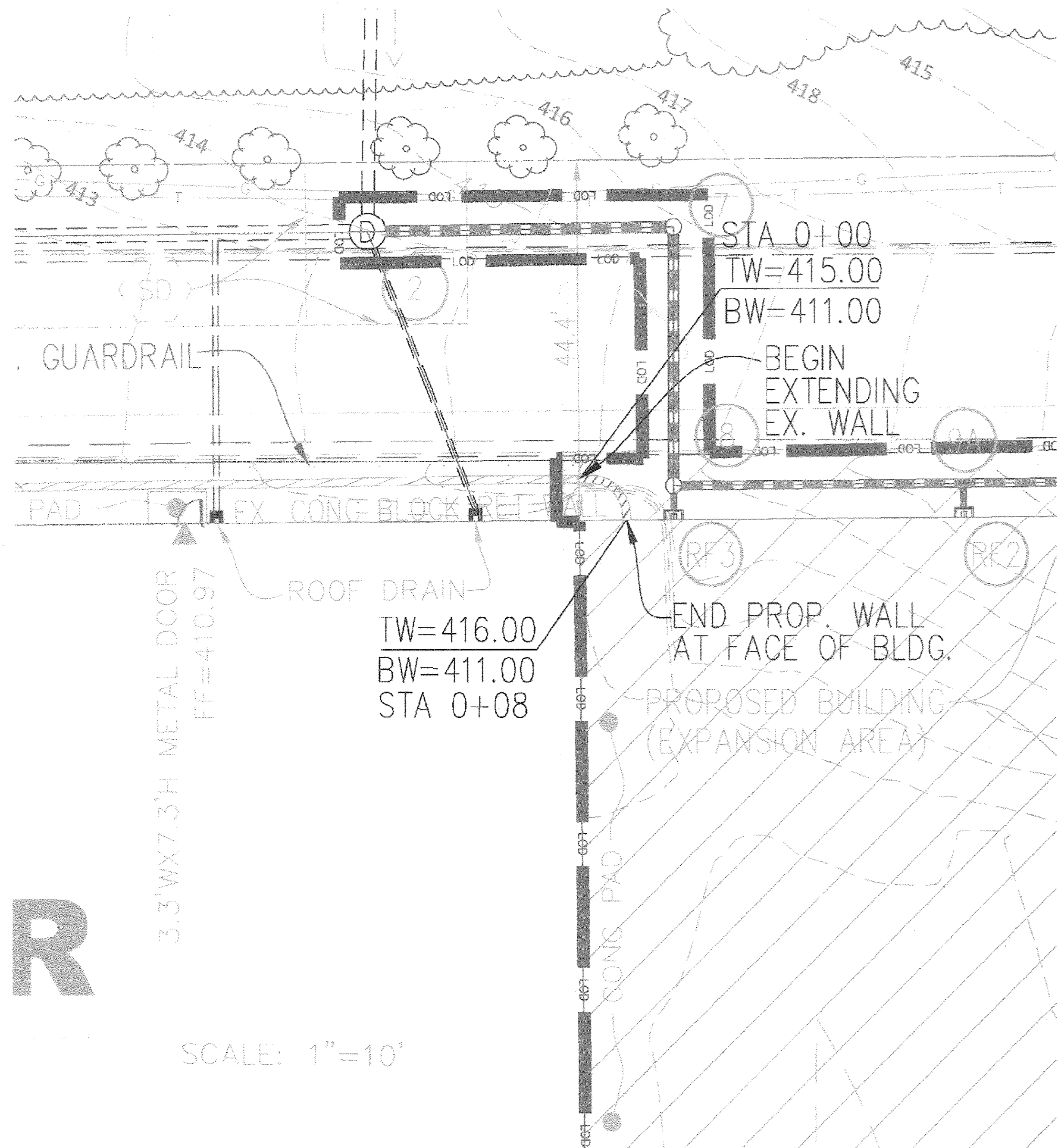
NO.	REVISIONS	DATE
1	CONCRETE RETAINING WALL (WALL 4) REMOVED	12-14-2011

**CONCRETE RETAINING WALL (WALL 4)**  
Walmart Store #2412-03, Ellicott City, Walmart, Parcel B  
TM 24, TM Grid 6, P/O TM Parcel 1085  
2nd Election District, HOWARD COUNTY, MD

BOWMAN CONSULTING GROUP, LTD  
 DMA DMA 08-15-11 6340-A 30 OF 32

ECS MID-ATLANTIC, LLC  
 1340 CHARWOOD ROAD, SUITE P  
 HANOVER, MARYLAND 21076  
 OFFICE (410) 859-4300  
 FAX (410) 859-4324  
 "Setting The Standard For Service"



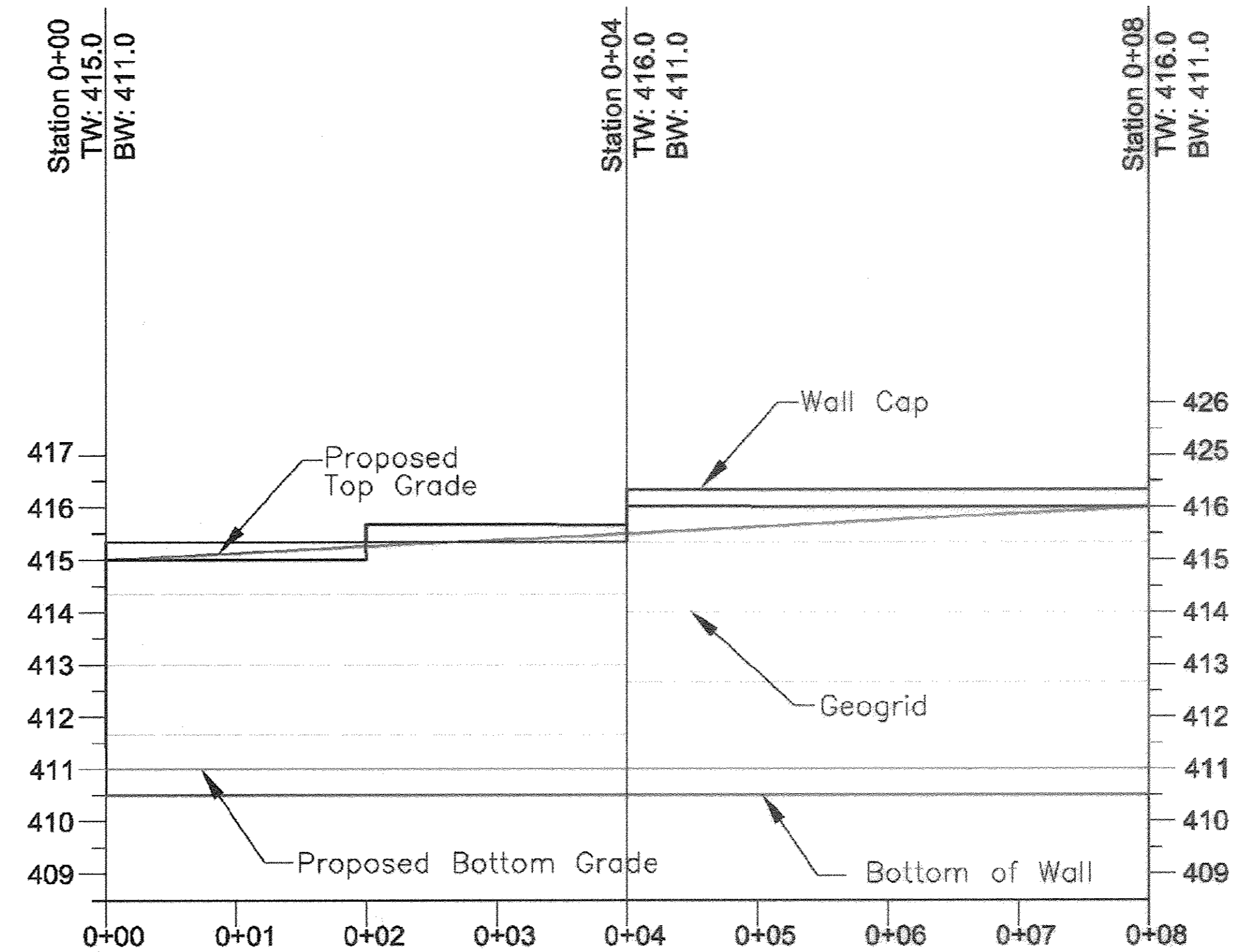


**R**

SCALE: 1"=10'

Start of Wall  
Start of Curve

End of Wall  
End of Curve



## WALL 4

All geogrids shall be Mirafi 5XT and shall be 5 ft long

### OWNER/DEVELOPER

WAL-MART REAL ESTATE BUSINESS TRUST  
2001 SOUTHEAST 10TH STREET, SWDC  
BENTONVILLE, AR 72716-0550  
CONTACT: MIKE THOMAS  
PHONE: (479) 273-4000

### SUBDIVISION 'ELLCOTT CITY WALMART'

ELECTION DISTRICT NO. 2	HOWARD COUNTY, MARYLAND
TAX MAP 17 & 24	P/O TM PARCEL 1085
REZONING CASE NUMBER ZB-941	DATED: OCTOBER 18, 1993
SKETCH PLAN S-95-01	APPROVED: 12-2-1994
PRELIMINARY PLAN P-95-21	APPROVED: 06-06-1995
SITE PLAN SDP-96-II	APPROVED: 06-21-1996
MASS GRADING PLAN SDP-96-001	APPROVED: 04-03-1996
FINAL ROAD CONSTRUCTION PLAN FOR NORTH RIDGE RD. F-96-01	APPROVED: 11-08-1995
ECP II-007	APPROVED: 08-06-2010
FINAL RECORD PLATS	F-96-009, F-96-091 & F-98-157
WATER NO. F03	SEWER NOS. 1452800 F-12-023

NO.	REVISIONS	DATE

Segmental Retaining Wall 4  
Walmart Store #2412-03, Ellicott City, Walmart, Parcel B  
TM 24, TM Grid 6, P/O TM Parcel 1085  
2nd Election District, HOWARD COUNTY, MD

Bowman Consulting Group, Ltd.

DMA	DMA	06-29-11	5340-A	30A of 32
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ECS MID-ATLANTIC, LLC

1340 CHARWOOD ROAD, SUITE P  
HANOVER, MARYLAND 21076

OFFICE (410) 868-4300  
FAX (410) 868-4324

"Setting The Standard For Service"



NO ASBUILT WFO 0-5-0

SDP-96-011

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>Chad Enoch</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE: 1/11/12
<i>Robert S. DeLoach</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE: 1/18/12
<i>William P. Butler</i> DIRECTOR	DATE: 1/16/12

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 28553, Expiration Date: 12/31/13

