

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	WATER AND SEWER PLAN
3	WATER AND SEWER PROFILES

3/4 FENCE LAYOUT PLAN

# EMERSON PARCEL G

TAX MAP 47

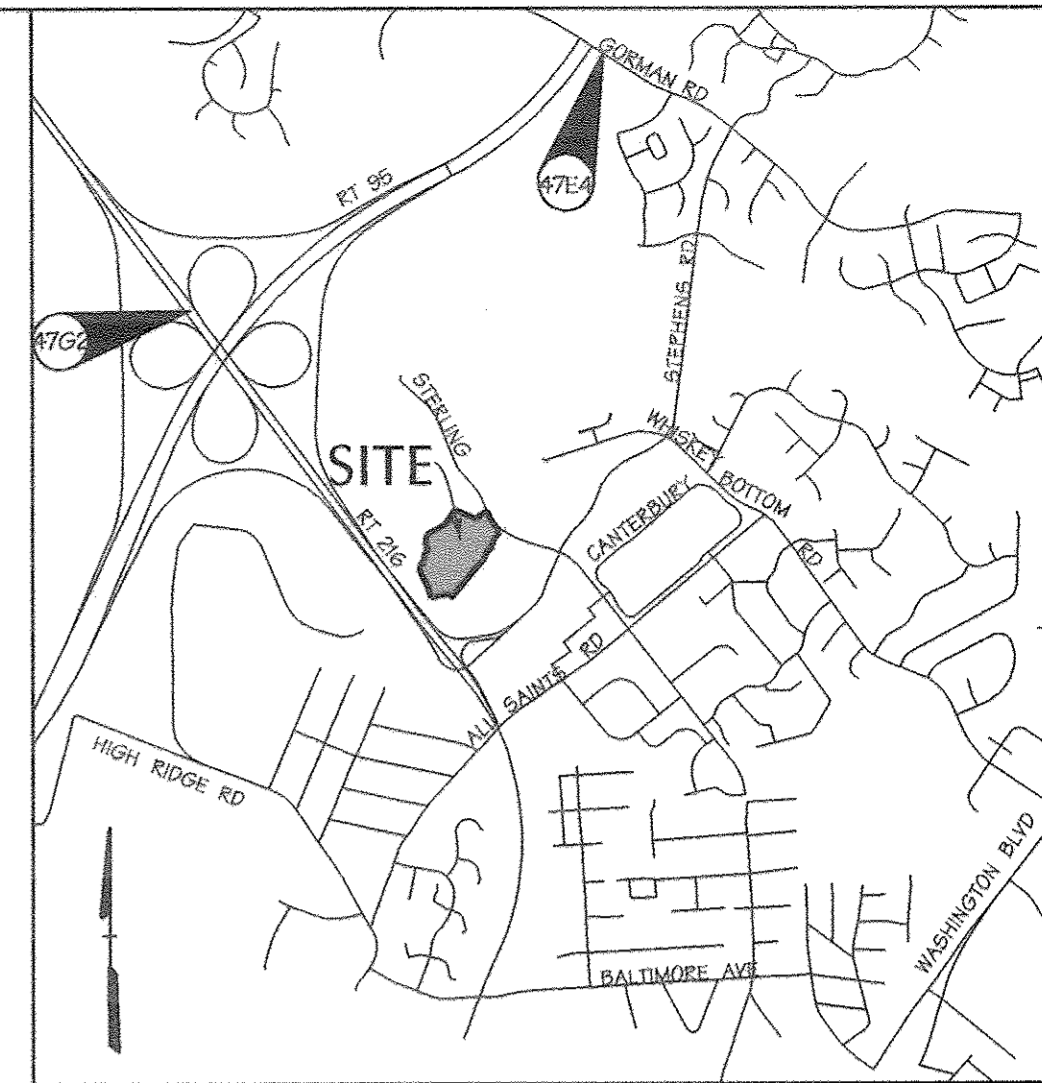
PARCEL 165

6th ELECTION DISTRICT

## WATER & SEWER CONSTRUCTION PLANS

Howard County, Maryland Department of Public Works

### CONTRACT NO. 24-4698-D



LOCATION MAP

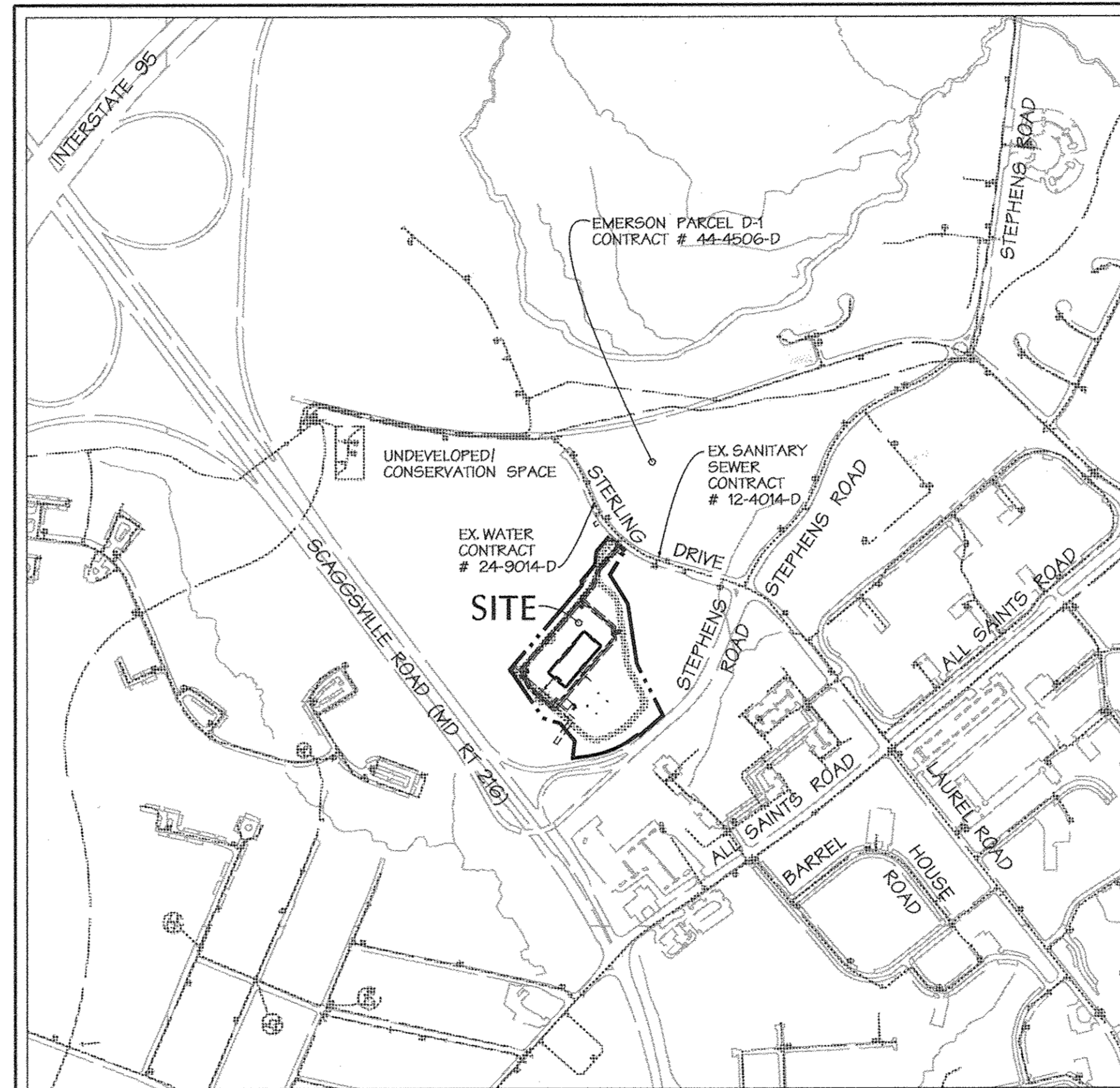
Scale: 1"=2000'  
HOWARD COUNTY ADC MAP NUMBER 19, BLOCK H9

ITEMS	QUANTITIES ESTIMATED	AS-BUILT		
		QUANTITIES	TYPE	MANUFACTURER / SUPPLIER
6" WATER	100 LF	91	DIP	GRIFFIN PIPE
8" WATER	1802 LF	1791	DIP	" "
8" x 6" TEE	4	4	DIP	STAR PIPE
8" x 8" TEE	2	2	DIP	" "
8" VALVE	5	5	MUELLER	" "
6" VALVE	4	4	" "	" "
8" 1/8" HORIZ BEND	7	7	STAR PIPE	" "
8" 1/8" HORIZ BEND	4	4	" "	" "
8" CAP	1	NOT USED	" "	" "
6" FIRE HYDRANT	4	4	MUELLER	" "
8" DIP SEWER	25	25	DIP	GRIFFIN PIPE
SEWER MANHOLE	1	1	ATLANTIC CONCRETE PROD.	" "

NAME OF UTILITY CONTRACTOR: CAMER CONCRETE  
SURVEY AND DRAFTING DIVISION AS-BUILT DATE: 4-7-14

LEGEND

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. ROADS AND WALKS
- 280 --- EX. MAJOR CONTOUR
- --- EX. MINOR CONTOUR
- FCE --- FOREST CONSERVATION EASEMENT
- PROP. BUILDING
- PROP. CURB / EDGE OF PAVING
- PROP. DEPRESSED CURB
- PROP. GROUP LIGHT
- PROP. SINGLE LIGHT
- PROP. LIGHT
- PROP. WATER
- EX. WATER LINE WITH FIRE HYDRANT
- PROP. SANITARY SEWER AND MANHOLE/CLEANOUT
- EX. SANITARY SEWER WITH MANHOLE



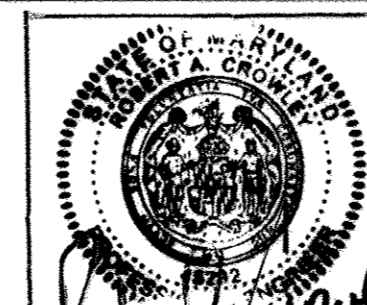
TYPE OF BUILDING: OFFICE BUILDING  
NO. OF PARCELS: 1  
NO. OF WATER CONNECTIONS: 1  
NO. OF SEWER CONNECTIONS: 1  
DRAINAGE AREA: LITTLE PATUXENT  
TREATMENT PLANT: LITTLE PATUXENT WATER QUALITY MANAGEMENT CENTER  
WATER ZONE: 400  
TEST GRADIENT: 550

OWNER/DEVELOPER  
EMERSON DEVELOPMENT V,LLC  
1 TEXAS STATION COURT, SUITE 200  
TIMONIUM, MARYLAND 21093-8288  
Project background information:  
Subdivision Name: Revitz Property Parcel F  
Tax Map: 47  
Lot/Parcel: 165  
Zoning: PEC  
Election District: 6  
Total Parcel Area: 9.70 Acres  
File Numbers: Plat #18684, 18685, F-07-055, 5-99-12, FB 339 and 2B 979M, FB-359, F-02-111, SP-01-12, F-02131, F-07-95, F-11-019.

PLAT #21278

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 308 OF THE SPECIFICATIONS AND WITH SDP-10-096

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. 45292, EXPIRATION DATE: 05-21-2016



THE PURPOSE OF REDLINE REVISION #1 IS:  
1. SHOW THE PROPOSED EMERSON CAMPUS FENCE  
2. ADD AN ADDITIONAL DRAWING SHEET ASSOCIATED WITH THE PROPOSED EMERSON CAMPUS SECURITY FENCE.

JACOBS

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. 45292, EXPIRATION DATE: 05/21/2016

GENERAL NOTES

A. STANDARD GENERAL NOTES

- Approximate location of existing utility mains are shown. The contractor shall take all necessary precautions to protect existing mains and services and maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Owner at the contractor's expense.
- Topographic field surveys were performed by Shanaberger and Lane on January 2005, and field verified in April 2010 by Daft McCune Walker Inc.
- The horizontal coordinates shown on the drawings are based on Maryland State Reference System NAD83/01 as projected by Howard County Geodetic Control Stations No. #315a and No. #376A.
- All vertical controls are based on NGVD 88. Vertical controls provided on the drawings are 4764 N5359-046.138, E1355-431.196, Elev. 338.909', 4762 N5329-038.964, E1351224.095, Elev. 364.210'.
- All pipe elevations shown are invert elevations unless otherwise noted.
- Clear all utilities by a minimum of 12". Clear all poles by 5' - 0" minimum or tunnel as required unless otherwise noted. The owner has contacted the utility companies and has made arrangements for bracing of poles as shown on the drawings. In the event the contractor's work requires the bracing of additional poles, any cost incurred by the owner for bracing of additional poles or damages shall be deducted from monies owed the contractor. The contractor shall coordinate with the utility companies to schedule the bracing of the poles.
- For details not shown on the drawings and for materials and construction methods use Howard County Design Manual, Volume IV, Standard Specifications and Detail for Construction (latest edition). The contractor shall have a copy of Volume IV on the job.
- Where test pits have been made on existing utilities, they are noted by the symbol □ at the locations of the test pits. A note or notes containing the results of the test pit or pits are included on the drawings. Existing utilities in the vicinity of the proposed work for which test pits have not been dug shall be located by the contractor two weeks in advance of construction operations at his own expense.
- The contractor shall notify the following utility companies or agencies at least five working days before starting work shown on these plans:  
 Miss. Utility 1-800-257-7777  
 BG&E (Construction Services) 410-850-4620  
 State Highway Administration 410-531-5533  
 AT&T 1-800-252-1133  
 BG&E (Emergency) 410-685-1400  
 Bureau of Utilities 410-313-4900  
 Colonial Pipeline CO. 410-795-1390  
 Verizon 1-800-742-0033/410-224-9210
- Trees and shrubs are to be protected from damage to the maximum extent. Trees and shrubs located within the construction strip are not to be removed or damaged by the contractor.
- The contractor shall remove trees, stumps, and roots along line of excavation. Payment for such removal shall be included in the unit price bid for construction of the main.
- The contractor shall notify the Bureau of Highways, Howard County, at (410) 313 7450 at least five working days before any open cut of any county road or boring/jacking of any County roads for laying water/sewer mains or house connections. The approval of these drawings will constitute compliance with DPW requirements per section 18.114(a) of the Howard County code.

B. STANDARD WATER MAIN GENERAL NOTES

- All water mains to be D.I.P. Class 54 unless otherwise noted.
- Tops of all water mains to have a minimum of 3'-6" of cover unless otherwise noted.
- Valves adjacent to tees shall be strapped to tees.
- All fittings shall be buttressed or anchored with concrete in accordance with the Standard Details unless otherwise provided for on the drawings.
- Fire hydrants shall be set to the bury line elevations shown on the drawings. All fire hydrants shall be installed and buttressed with concrete in accordance with Standard Details. The soil around the fire hydrant shall be compacted in accordance with section 1000 and 1005 of the Standard Specifications.
- The contractor shall not operate any water main valves on the existing water system.
- For sprinkler system for all town homes or multi-family dwelling units should have a minimum of 1-1/2" connection with a 1" outside meter setting.

C. STANDARD SEWER MAIN GENERAL NOTES

- All sewer mains shall be DIP or P.V.C. unless otherwise noted.
- All manholes shall be 4'-0" inside diameter unless otherwise noted.
- Force mains shall be D.I.P. only.
- Manholes shown with 12" and 16" walls are for brick manholes only.
- Manholes designated W.T. in plan and profile shall have watertight frame and covers, Standard Detail G5.52. Where watertight frame and cover is used, set top of frame 1'-6" above finished grade unless otherwise noted on the drawings.

BENCHMARK

DESCRIPTION

COORDINATES IN MARYLAND NAD83(99) (HORIZONTAL) AND NGV828 (VERTICAL) DATUMS.  
4762 NORTHING: 162040.1212 4764 NORTHING: 163326.2295  
EASTING: 418533.9279 EASTING: 413336.2850  
ELEVATION: 364.210' ELEVATION: 338.909'

A. STANDARD GENERAL NOTES (CONTINUED)

13. A VARIANCE (RESOLUTION NO. 118-2011) PURSUANT TO SECTIONS 16.301 AND 16.200(G) OF THE HOWARD COUNTY CODE WAS GRANTED ON JULY 28, 2011 FOR GOVERNMENT USES FROM THE STRUCTURE AND USE SETBACK FOR A FENCE.

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

APPROVED: *John R. Robertson* 5/17/11  
HOWARD S.C.D. DATE

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
*John C. Sauer* 5/17/11  
CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
HOWARD COUNTY, MARYLAND  
*Paul M. Johnson* 6/11/11  
CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

DMW  
DAFT MCCUNE WALKER INC.  
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410.296.3333 F: 410.296.4705 WWW.DMW.COM  
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS.  
*Paul M. Johnson* 5-17-11

DESIGN BY: JDF  
DRAWN BY: JSS  
CHECKED BY: JDF  
DATE: 5/17/11

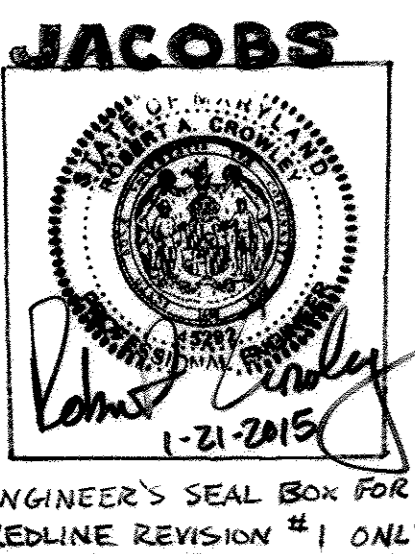
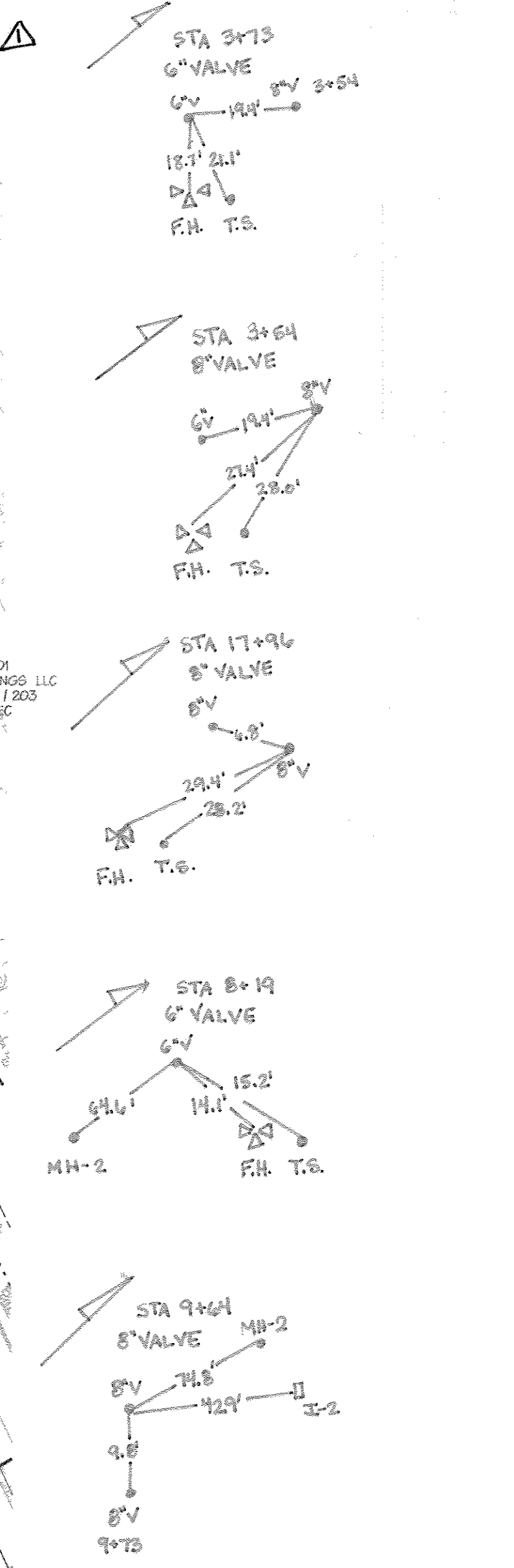
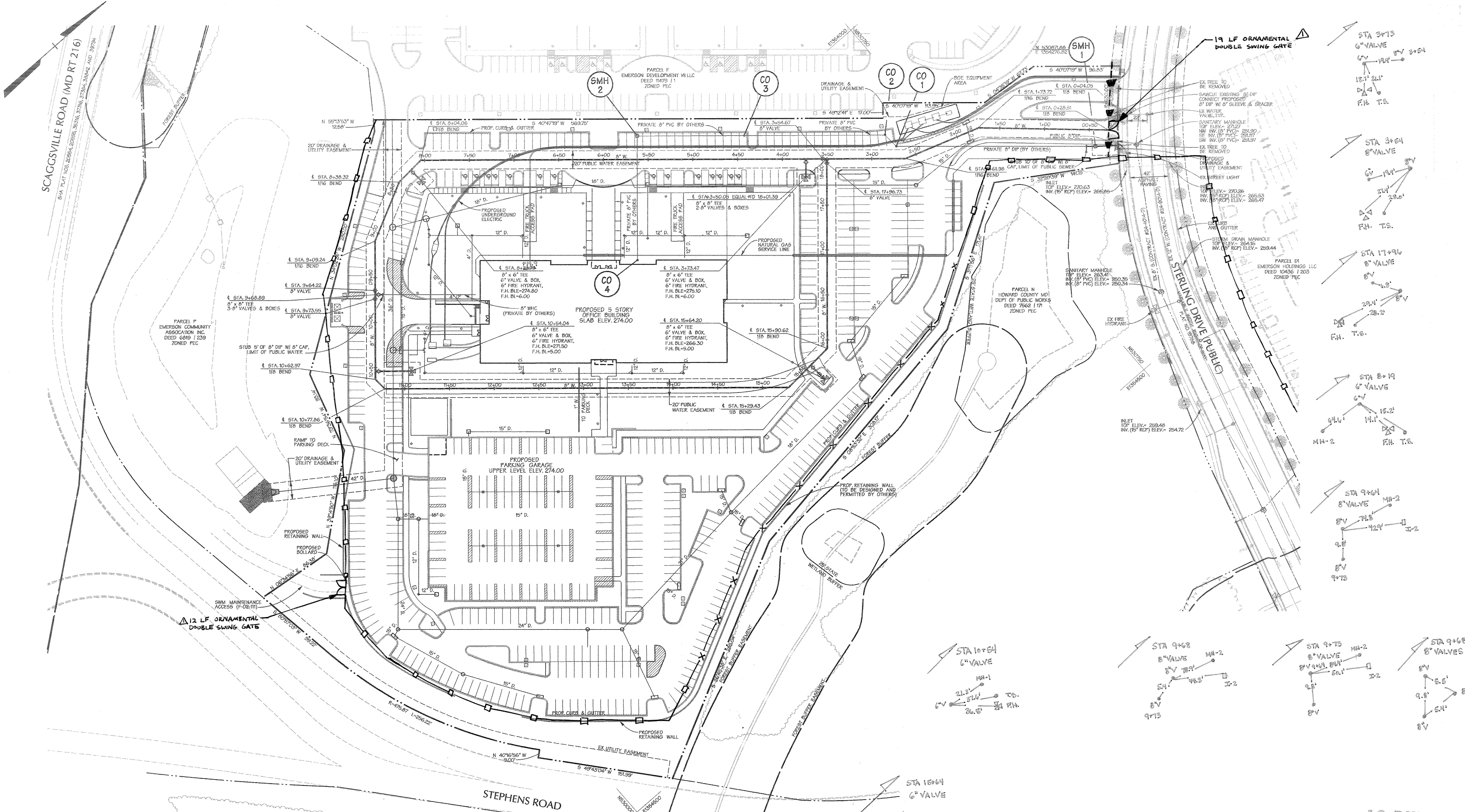
BY	NO.	REVISION	DATE
JACOBS	1	CAMPUS PERIMETER SECURITY FENCE	5/17/11

TITLE SHEET  
600 SCALE MAP NO. 47 BLOCK NO. 20

EMERSON PARCEL G  
TAX MAP 47 PARCEL G-1  
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND  
CONTRACT NO. 24-4698-D

SCALE: As Shown  
SHEET 1 of 4

AS BUILTS  
BY: DFI DATE: 4-7-14



**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. 45292 EXPIRATION DATE: 05/21/2016

**FENCE LEGEND**  
 -X- CHAINLINK FENCE  
 - - - DECORATIVE FENCE (NON-RATED)  
 - - - DECORATIVE FENCE (R2-RATED)

NOTE: CONTRACTOR TO TEST FIT FOR EXISTING WATER CONNECTION AND SEWER CONNECTION FOR THIS PARCEL AND CONFIRM ITS SIZE PRIOR TO MAKING CONNECTION IN FIELD.  
 ANY DISTURBANCE TO THE EX. PAVING CURB AND/OR SIDEWALK ALONG STERLING DRIVE SHALL BE REPAIRED TO HOWARD COUNTY SPECIFICATIONS AS PART OF THIS CONTRACT.  
 CONTRACTOR TO MAINTAIN TRAFFIC ALONG STERLING DRIVE WHEN MAKING CONNECTIONS.

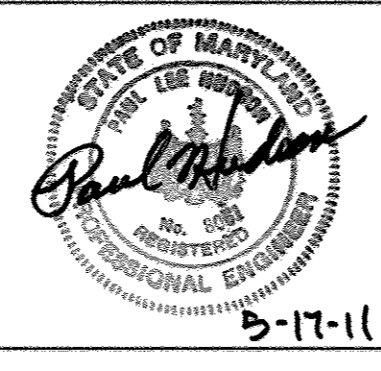
**AS BUILTS**  
 BY: DFI DATE: 4-7-14

**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. 8061, EXPIRATION DATE: 02-26-2011

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND  
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**DMW**  
 DAFT MCCUNE WALKER INC  
 200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
 P: 410 296 3333 F: 410 296 4706 WWW.DMW.COM  
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,  
 ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS



DESIGN BY:	JDF
DRAWN BY:	JSS
CHECKED BY:	PLH
DATE:	5/17/11
BY:	JACOBS
NO.:	CAMPUS PERIMETER SECURITY FENCE
REVISION:	
DATE:	5/17/11

**WATER & SEWER PLAN**  
 600 SCALE MAP NO. 47 BLOCK NO. 20

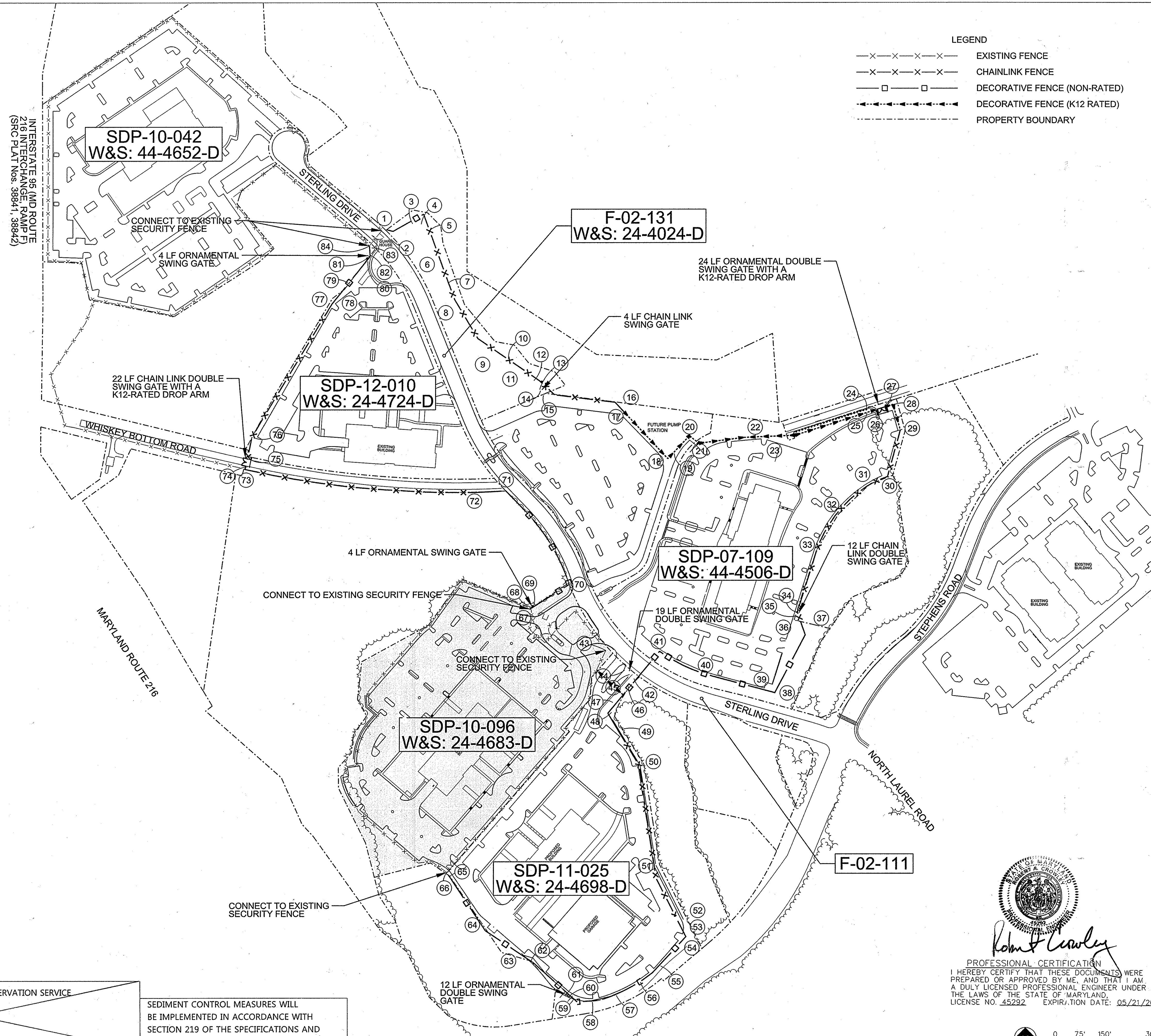
**EMERSON PARCEL G**  
 TAX MAP 47 PARCEL G-1  
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND  
 CONTRACT NO. 24-4698-D

SCALE:  
 1"=50'  
 SHEET:  
 2 of 4



	COORDINATE ID	NORTHING	EASTING	FEET OFFSET FROM PROPERTY LINE
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	1	532233.7	1353530.0	9.3
	2	532207.6	1353557.9	7.5
	3	532254.3	1353623.0	32.3
	4	532253.0	1353648.8	37.7
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER	5	532232.6	1353672.5	35.5
	6	532150.6	1353690.4	37.6
	7	532074.1	1353729.9	25.6
	8	531998.0	1353749.7	30.5
	9	531857.1	1353847.0	43.8
	10	531845.2	1353912.5	39.6
	11	531802.7	1353938.5	45.9
	12	531778.8	1353989.5	44.9
	13	531751.5	1354006.8	68.9
	14	531747.9	1354009.1	69.3
	15	531733.7	1354018.0	6.9
	16	531703.5	1354263.8	6.2
	17	531681.1	1354261.0	28.8
	8' HIGH IMPASSE K12 RATED ORNAMENTAL FENCE	18	531559.4	1354378.6
19		531557.3	1354413.3	132.7
20		531610.8	1354459.0	73.8
21		531594.4	1354480.8	0.3
22		531612.3	1354683.4	44.4
23		531600.0	1354722.0	51.8
24		531686.8	1354994.2	6.0
25		531678.9	1354996.7	14.2
26		531689.1	1355028.8	14.2
27		531696.4	1355051.5	14.2
28		531704.0	1355075.4	14.2
29		531625.6	1355097.0	14.4
30		531487.3	1355058.4	2.5
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER		31	531466.2	1355003.9
	32	531375.2	1354908.7	2.5
	33	531266.0	1354845.0	0.0
	34	531075.5	1354783.8	0.0
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	35	531053.8	1354780.1	0.0
	36	531045.8	1354774.3	6.0
	37	531033.3	1354827.1	6.0
	38	530846.1	1354723.0	50.0
8' HIGH IMPASSE K12 RATED ORNAMENTAL FENCE	39	530837.3	1354691.9	33.0
	40	530891.5	1354495.6	34.4
	41	530953.0	1354360.7	26.5
	42	530874.1	1354291.6	14.5
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	43	530959.6	1354206.6	13.4
	44	530900.0	1354263.2	12.8
	45	530886.4	1354277.9	10.0
	46	530854.5	1354274.0	7.5
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	47	530802.1	1354227.0	20.0
	48	530771.7	1354223.7	12.3
	49	530720.0	1354255.0	2.0
	50	530615.3	1354318.4	2.0
8' HIGH CHAIN LINK FENCE WITH 1' DOUBLE OUTRIGGER	51	530308.5	1354367.5	2.0
	52	530158.1	1354440.4	4.7
	53	530119.5	1354450.4	13.0
	54	530090.6	1354444.4	31.4
	55	530001.4	1354372.7	40.2
	56	529952.2	1354311.7	29.6
	57	529912.6	1354238.4	28.6
	58	529892.6	1354166.4	31.3
	59	529903.4	1354111.0	51.6
	60	529912.9	1354100.1	46.3
	61	529920.8	1354091.1	36.4
	62	530016.4	1353981.6	0.0
	63	530042.7	1353942.5	14.2
	64	530141.4	1353928.3	2.2
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	65	530275.8	1353737.0	1.9
	66	530286.0	1353726.9	4.4
	67	531084.8	1353977.6	3.7
	68	531089.6	1353984.8	0.0
	69	531092.0	1353988.4	0.0
	70	531164.5	1354095.9	0.9
	71	531443.9	1353905.8	0.9
	72	531440.2	1353802.7	0.0
	73	531508.5	1353124.3	0.0
	74	531518.5	1353126.4	10.2
	75	531540.6	1353131.8	7.0
	76	531605.3	1353145.4	6.4
	77	532012.6	1353378.9	5.7
	78	532035.8	1353407.9	10.0
79	532070.3	1353434.3	4.4	
8' HIGH IMPASSE NON-RATED ORNAMENTAL FENCE	80	532140.6	1353488.1	4.7
	81	532155.9	1353492.3	1.1
	82	532160.1	1353493.5	2.7
	83	532181.5	1353499.4	7.9
	84	532187.4	1353492.6	8.5

INTERSTATE 95 (MD ROUTE 216) INTERCHANGE RAMP (S) (SRC PLAT NOS. 38841, 38942)



**LEGEND**  
 -x-x-x-x-x- EXISTING FENCE  
 -x-x-x-x-x- CHAINLINK FENCE  
 -□-□-□-□- DECORATIVE FENCE (NON-RATED)  
 -□-□-□-□- DECORATIVE FENCE (K12 RATED)  
 ..... PROPERTY BOUNDARY

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

REVIEWED FOR NATURAL RESOURCES CONSERVATION SERVICE AND MEETS TECHNICAL REQUIREMENT

SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE SPECIFICATIONS AND WITH ROAD CONSTRUCTION PLANS F-10-16

**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. 45292 EXPIRATION DATE: 05/21/2016

*John J. Crowley*  
 PROFESSIONAL ENGINEER

HOWARD S.C.D. DATE SIGNATURE DATE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*John C. Coen*  
 CHIEF - BUREAU OF UTILITIES - DATE

DEPARTMENT OF PLANNING & ZONING  
 HOWARD COUNTY, MARYLAND

*John J. Crowley*  
 CHIEF - DEVELOPMENT ENGINEERING DIVISION - DATE

**JACOBS**

1100 NORTH GLEBE ROAD SUITE 500 ARLINGTON, VA 22201  
 P. 703-218-1000 F. 703-218-1600

DESIGN BY:	M. WERDER
DRAWN BY:	M. WERDER
CHECKED BY:	R. CROWLEY
DATE:	JANUARY 5, 2015
BY NO.	Δ
REVISION	CAMPUS PERIMETER SECURITY FENCE
DATE	

EMERSON-CAMPUS FENCE  
 FENCE LAYOUT PLAN

600 SCALE MAP NO. 47 BLOCK NO. 20

**EMERSON PARCEL F**  
 OWNER DEVELOPER: EMERSON DEVELOPMENT VII LLC  
 1 TEXAS STATION COURT, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 680-8000

JACOBS CONTRACT NO. 31435

SCALE: 1"=150'  
 SHEET 4 of 4

SDP-10-096 24-4683-D