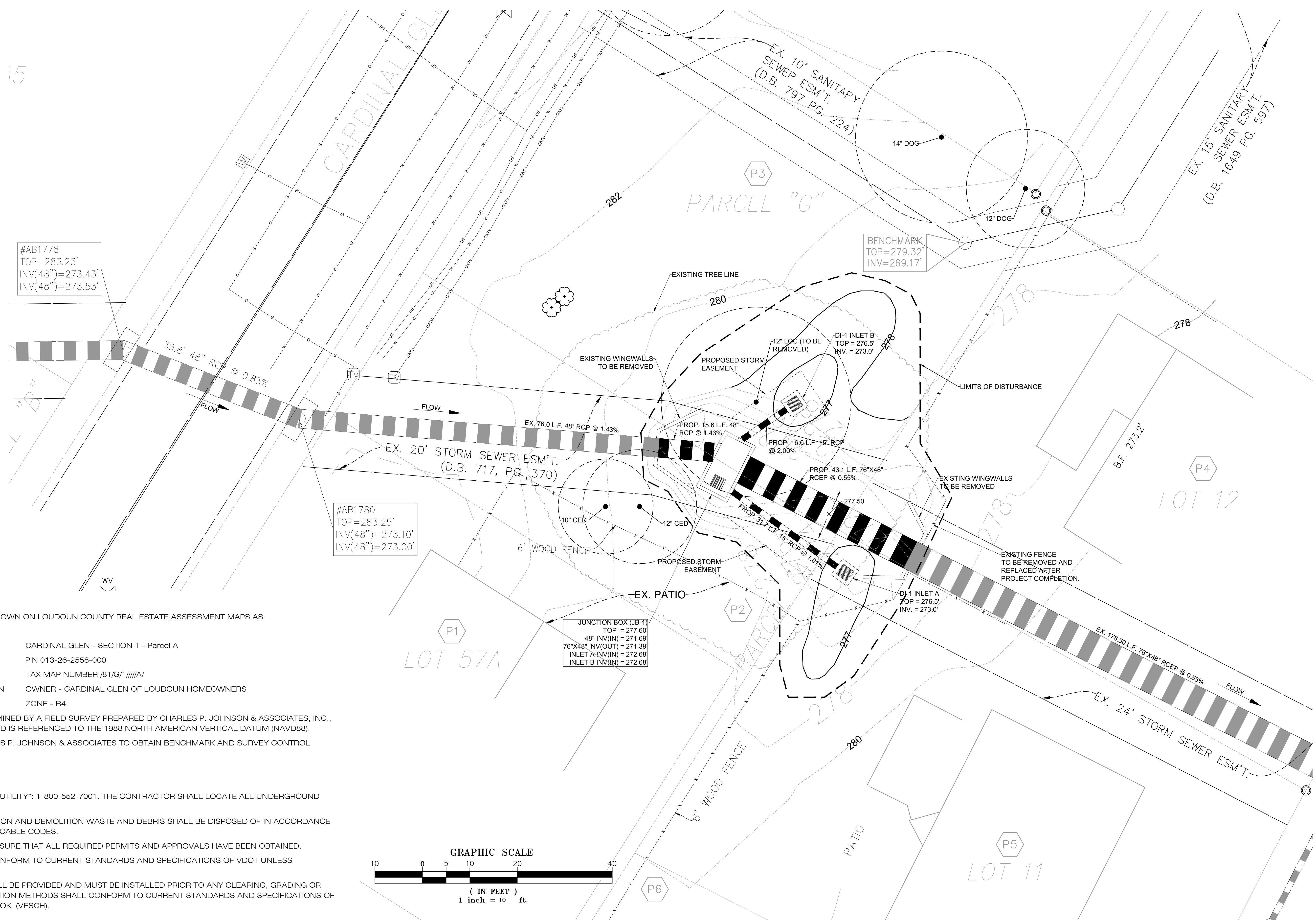


LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING PROPERTY LINE
- EXISTING TREES
- EXISTING TREE LINE
- EXISTING BUILDING
- EXISTING STORM SEWER
- PROPOSED STORM SEWER

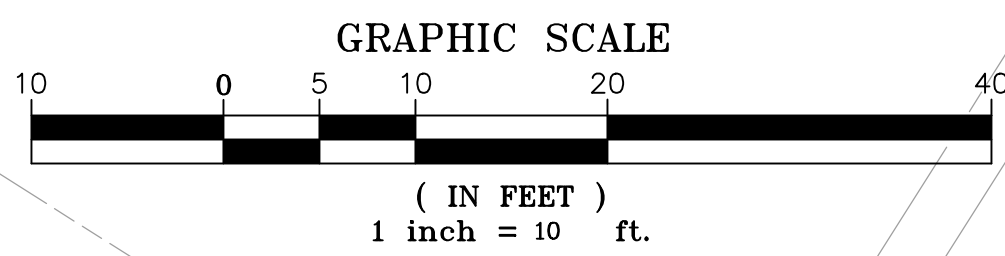


1. THE PROPERTIES ASSOCIATED WITH THIS PROJECT ARE SHOWN ON LOUDOUN COUNTY REAL ESTATE ASSESSMENT MAPS AS:

CARDINAL GLEN - SECTION 2 - PARCEL G
PIN 013-36-7642-000
TAX MAP NUMBER /B1/G/2/IIII/G/
OWNER - NUMBER TWO CARDINAL GLEN L.H. ASSOCIATION
ZONE - R4

CARDINAL GLEN - SECTION 1 - Parcel A
PIN 013-26-2558-000
TAX MAP NUMBER /B1/G/1/IIII/A/
OWNER - CARDINAL GLEN OF LOUDOUN HOMEOWNERS
ZONE - R4

2. THE LOCATION OF THE IMPROVEMENTS HAS BEEN DETERMINED BY A FIELD SURVEY PREPARED BY CHARLES P. JOHNSON & ASSOCIATES, INC., DATED AUGUST, 2011. THE TOPOGRAPHY IS FIELD RUN AND IS REFERENCED TO THE 1988 NORTH AMERICAN VERTICAL DATUM (NAVD88).
3. CONTRACTOR TO CONTACT THOMAS HANNON AT CHARLES P. JOHNSON & ASSOCIATES TO OBTAIN BENCHMARK AND SURVEY CONTROL INFORMATION (703)-385-7555.
4. CONTOUR INTERVAL FOR THE SURVEY IS TWO FOOT.
5. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING "MISS UTILITY": 1-800-552-7001. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY.
6. DEBRIS SHALL NOT BE BURIED ON SITE. ALL CONSTRUCTION AND DEMOLITION WASTE AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES.
7. PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED.
8. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF VDOT UNLESS OTHERWISE NOTED.
9. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROVIDED AND MUST BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR OTHER CONSTRUCTION. ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).

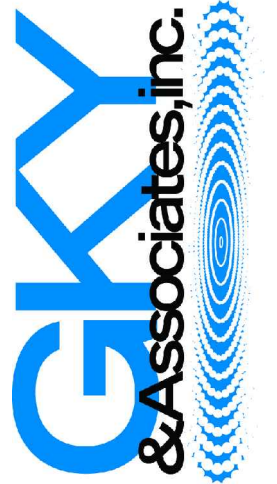
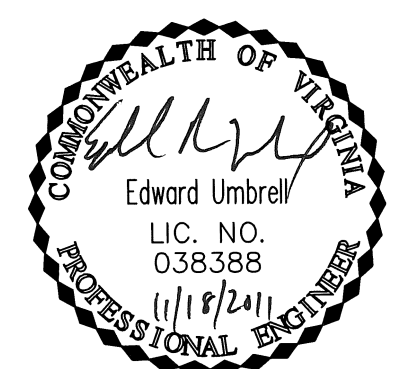


STORM SEWER COMPUTATIONS

FROM POINT	TO POINT	DRAINAGE AREA ACRES	RUNOFF COEFF. C	CA		INLET TIME (MIN)	RAINFALL INTENSITY (IN/HR)	RUNOFF Q (CFS)	INVERT ELEVATIONS (FT)		LENGTH (FT)	SLOPE (FT/FT)	PIPE DIAMETER (IN)	MANNINGS 'n'	CAPACITY (CFS)	VELOCITY (FPS)	FLOW TIME (SEC)	Q/Q _{full}	V/V _{full}	V _{full}	NOTES
				INCREM.	ACCUM.				UPPER	LOWER											
AB1779	AB1778	47.44	0.55	26.09	26.09	15.00	5.10	133.07	275.67	273.53	158.10	0.0135	48.00	0.013	167.12	14.7	10.8	0.80	1.10	13.30	
AB1778	AB1780	9.21	0.55	5.07	31.16	15.00	5.10	158.90	273.43	273.10	39.80	0.0083	48.00	0.013	130.80	10.4	3.8	1.21	1.00	10.41	
AB1780	JB-1	3.14	0.55	1.73	32.88	15.00	5.10	167.71	273.00	271.69	91.60	0.0143	48.00	0.013	171.78	15.6	5.9	0.98	1.14	13.67	
	JB-1	ME309	0.00	0.55	0.00	33.14	15.00	169.03	271.39	270.19	221.60	0.0054	48 x 76	0.013	191.65	11.0	20.2	0.88	1.13	9.76	
INLET A	JB-1	0.23	0.55	0.13	0.13	15.00	5.10	0.65	273.00	272.68	31.70	0.0101	15.00	0.013	6.49	0.2	155.9	0.10	0.62	0.33	
INLET B	JB-1	0.24	0.55	0.13	0.13	15.00	5.10	0.67	273.00	272.68	16.00	0.0200	15.00	0.013	9.14	0.3	59.6	0.07	0.58	0.47	

PROPERTY OWNER INFORMATION

PARCEL	OWNER	D.B.	PG.
P1	JIMMY Q. TRAN & SANDY K. LAM	1711	598
P2	CARDINAL GLEN OF LOUDOUN HOA	717	387
P3	NUMBER TWO CARDINAL GLEN OF LOUDOUN HOA	797	244
P4	WALY & NATALYA TOKHI	200906010035038	
P5	KEVIN A. & DEIRDRE BROWN	1801	583
P6	WESTERLY HOA	1649	618



GKY & ASSOCIATES, INC.
4229 LAFAYETTE CENTER DRIVE, SUITE 1850
CHANTILLY, VIRGINIA 20151
(703)970-7000 FAX (703)942-5567
http://www.gky.com

DRAINAGE IMPROVEMENTS
CARDINAL GLEN
LOUDOUN COUNTY, VA

GRADING AND UTILITY
PLAN

H SCALE: 1" = 10'
V SCALE: 1" = 2'
CONTOUR: 2'
DATE: 09-30-2011
DESIGNED: SC
DRAFTED: SC
CHECKED: EU
PROJECT#: 2009-001
CONTRACT#: TO #23
SHEET: 2 OF 3