# DSUP AMENDMENT LANDMARK MALL MIXED USE CITY OF ALEXANDRIA

JANUARY 2015 - DSUP AMENDMENT #1

#### **ZONING REQUIREMENTS**

	APPROVED WITH DSUP 2013-0004	PROPOSED
ZONING	CRMU-M; CR	CRMU-M; CR
USES	CRMU-M: RETAIL, RESTAURANT, RESIDENTAIL, CINEMA CR: RETAIL	CRMU-M: RETAIL, RESTAURANT, RESIDENTAIL, CINEMA CR: RETAIL
SITE AREA	2,241,885 SF (51.4666 AC)	2,241,885 SF (51.4666 AC)
APPLICATION AREA	487,999.39 SF (11.20 AC)	487,999.39 SF (11.20 AC)
PARCEL/LOT AREAS	SEE TABS ON SHEET 01 (OWNER INFO)	SEE TABS ON SHEET 01 (OWNER INFO)
AVERAGE PARCEL AREA	428,377	428,377
IMPERVIOUS AREA	1,909,671 SF (43.84 AC)	1,909,671 SF (43.84 AC)
DISTURBED AREA	769,875 SF (17.67 AC)	769,875 SF (17.67 AC)
BUILDING SETBACK	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
LOT FRONTAGE	N/A	N/A
FAR	*RETAIL: 0.555; *RESIDENTIAL: 0.810 *TOTAL: 1.365	*RETAIL: 0.649; *RESIDENTIAL: 0.923 *TOTAL: 1.572
FAR (EACH BUILDING)	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
FLOOR AREA	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
BUILDING HEIGHTS	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
AVERAGE FINISHED GRADE	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
DWELLING UNITS	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
UNIT TYPES	SEE SHEET 3 OF DSUP#2013-00004	SEE BUILDING TABULATIONS ON SHEET 03
UNITS PER ACRE	RESIDENTIAL: 7.25	RESIDENTIAL: 7.40
OPEN SPACE (GROUND LEVEL S.F.)	149,990 SF (3.44 AC)	150,189.78 SF (3.45 AC)
OPEN SPACE (GROUND LEVEL %)	30.67%	30.77%
OPEN SPACE (ROOF-TOP S.F.)	50,954 SF (1.16 AC)	49,263.64 SF (1.13 AC)
OPEN SPACE (ROOF-TOP %)	10.43%	10.09%
OPEN SPACE (TOTAL S.F.)	200,172 SF (460 AC)	199,453.42 SF (4.58 AC)
OPEN SPACE (TOTAL %)	41.02%	40.87%
PARKING (TOTAL)	4074	4212
PARKING SPACES (STANDARD)	3971	4140
PARKING SPACES (COMPACT)	103 (2.53%)	72 (1.71%)
PARKING SPACES (TOTAL HANDICAP)	54	54 (INCLUDED IN TOTAL)
PARKING SPACES (STANDARD HANDICAP)	45	45 (INCLUDED IN TOTAL)
PARKING SPACES (VAN HANDICAP)	9	9 (INCLUDED IN TOTAL)
LOADING SPACES	24	24
TRIP GENERATION (ADT)	21,172	21,172

\*VALUES ARE BASED ON THE PROPOSED APPLICATION AREA

#### BUILDING CODE ANALYSIS

	<u> DOIDDING</u>	CODETITIETOIS		
BUILDING	USE GROUP	NUMBER OF STORIES	CONSTRUCTION TYPE	FIRE PROTECTION PLAN
A	A-2, M	2	2A	NFPA-13
В	A-2, M, R-2	6	3A OVER 1-A	NFPA-13
C1	A-2, M, R-2	6	3A OVER 1-A	NFPA-13
C2	A-2, M, R-2	6	3A OVER 1-A	NFPA-13
D	A-2, M, R-2	6	3A OVER 1-A	NFPA-13
E	A-2, M	2	2A	NFPA-13
F	A-1, A-2, M	2	2A	NFPA-13

VICINITY MAP

APPLICANT / DEVELOPER

HOWARD HUGHES CORPORATION 13355 NOEL ROAD 22ND FLOOR DALLAS, TEXAS 75240

1" = 2000'

#### **ATTORNEY**

McGUIRE WOODS, LLP. 1750 TYSONS BOULEVARD SUITE 1800 MCLEAN, VA 22102 1-703-712-5441 CONTACT: JONATHAN P. RAK

### **ARCHITECT**

COOPER CARRY 625 NORTH WASHINGTON STREET SUITE 200 ALEXANDRIA, VA 22314 1-703-519-6152 CONTACT: STEVE JACKSON

#### CIVIL ENGINEER

URBAN LTD. 4200 D TECHNOLOGY CT. CHANTILLY, VA. 20151 1-703-642-2306 CONTACT: CLAYTON TOCK

### TRANSPORTATION ENGINEER

VANASSE HANGEN BRUSTLIN, INC. 8300 BOONE BOULEVARD SUITE 700 VIENNA, VA 22182 1-703-847-3071 CONTACT: KEVIN SITZMAN

#### Sheet List Table Sheet Title COVER SHEET 02 OVERVIEW PLAN SITE TABULATIONS - PROPOSED 04 CONTEXT PLAN 05 **EXISTING CONDITIONS** 06 **EXISTING CONDITIONS** 07 **EXISTING CONDITIONS** EXISTING CONDITIONS **EXISTING CONDITIONS** CONCEPTUAL PLAN - GEOMETRY 15 DIMENSION PLAN DIMENSION PLAN 17 CONCEPTUAL PLAN - GRADING GARAGE PLAN - EXISTING CONDITIONS GARAGE PLAN - EXISTING CONDITIONS GARAGE PLAN - PROPOSED GARAGE PLAN - PROPOSED SWM-BMP-OUTFALL MAP & NARRATIVES SWM-BMP COMPUTATIONS PRELIMINARY SUBDIVISION PLAN A1.08 UNIFIED AREA PLAN-LEVEL 1 A1.09 UNIFIED AREA PLAN-LEVEL 2 SIMPLIFIED AREA PLAN LEVEL 02 PROPOSED SIMPLIFIED AREA PLAN LEVEL 03 PROPOSED SIMPLIFIED AREA PLAN LEVEL LOFT PROPOSEI

## SPECIAL USE PERMITS/MODIFICATIONS APPROVED UNDER DSUP 2013-0004

#### **SPECIAL USE PERMITS FOR:**

- LARGE FORMAT RETAILERS RETAILERS OVER 20,000 SQ. FT.
- A DEVELOPMENT SPECIAL USE PERMIT WITH SITE PLAN TO ALLOW FOR UP TO 2.0 FAR PER SECTION 5-205(C) OF THE CITY'S ZONING ORDINANCE.
- AMUSEMENT ENTERPRISE
- TRANSPORTATION MANAGMENT PLAN

#### ADMINISTRATIVE SPECIAL USE PERMITS FOR:

- A RESTAURANT • OUTDOOR DINING
- OUTDOOR FOOD AND CRAFTS MARKET

#### MODIFICATIONS FOR:

• ZONING ORDINANCE SECTION 8-200(B)(2) LOADING AND UNLOADING AREAS REQUIRED

SPECIAL USE PERMITS/MODIFICATIONS APPROVED UNDER DSUP 2013-0004

**SPECIAL USE PERMITS FOR:** 

• NONE

ADMINISTRATIVE SPECIAL USE PERMITS FOR: • NONE

MODIFICATIONS FOR:

• ZONING ORDINANCE SECTION 8-200(B)(2) LOADING AND UNLOADING AREAS REQUIRED

ESI
PEER REVIEW

**TA** 40101

DSP-1877

	PEER REVIEW	C	
APPROVED SPECIAL USE PERMIT NO. 2015-	-0003		MA DSU
DEPARTMENT OF PLANNING & ZONING			
DIRECTOR	DATE		<b>Ą</b>
DEPARTMENT OF TRANSPORTATION & ENV	/IRONMENTAL SERVICES		
DIRECTOR	DATE		
CHAIRMAN, PLANNING COMMISSION  DATE RECORDED	DATE		SHEET 01 OF 28
INSTRUMENT NO. DEED BOOK NO.			FILE No.

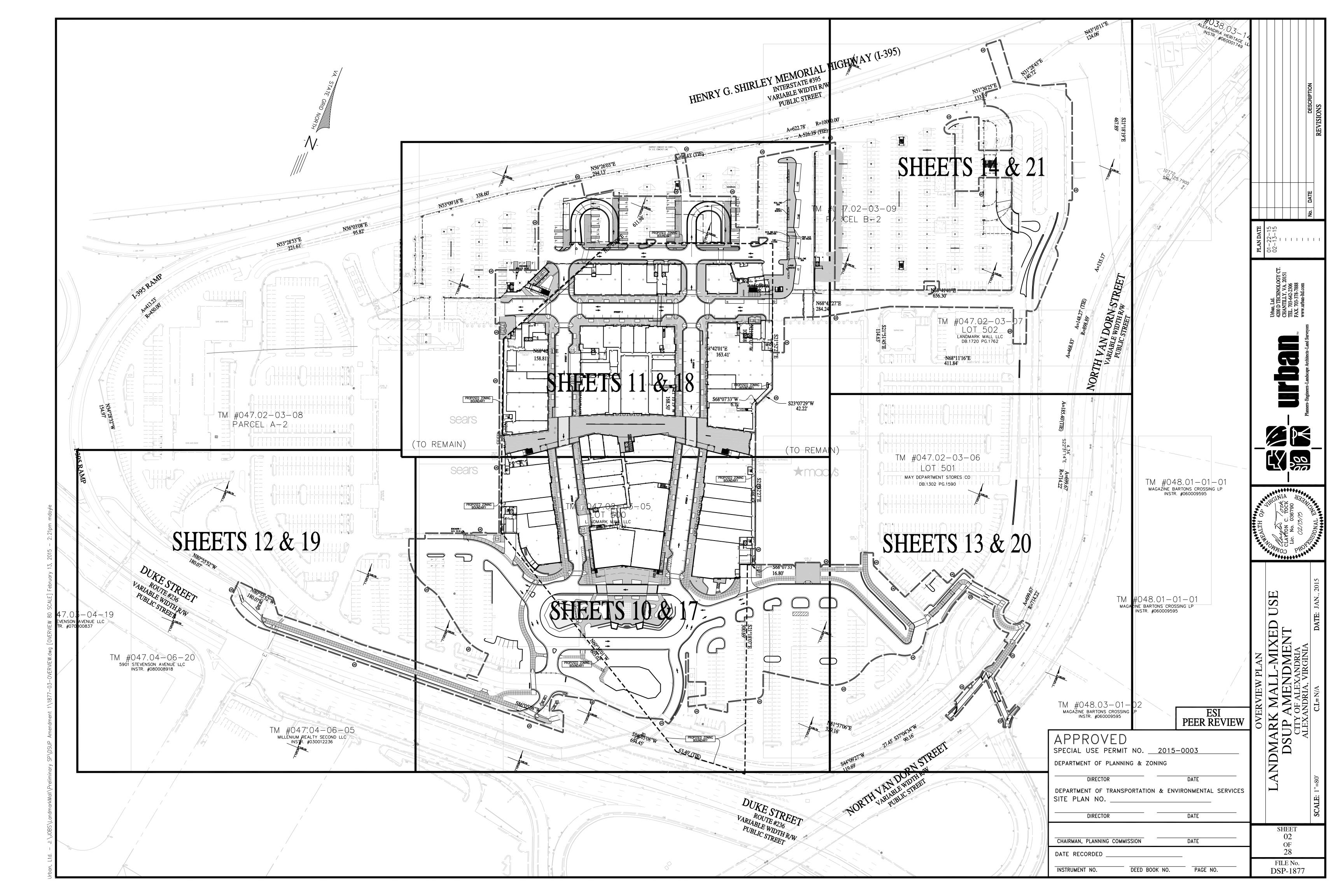
#### PROJECT NARRATIVE:

THIS APPLICATION IS AN AMENDMENT TO DSUP 2013-0004. APPLICANT SEEKS TO INCREASE THE ALLOWABLE RESIDENTIAL SQUARE FOOTAGE APPROVED IN THE DSUP BY 54,569 SQUARE FEET TO A TOTAL OF 450,000 RESIDENTIAL SQUARE FEET. APPLICANT PROPOSES TO INCREASE THE MAXIMUM RETAIL FLOOR AREA TO 335,000 SQUARE FEET AND THE TOTAL MAXIMUM SQUARE FOOTAGE OF THE REDEVELOPMENT, INCLUDING RETAIL, WILL NOT EXCEED 767,000 SQUARE FEET

## **OWNERS:**

SEE SHEET 03 FOR BREAKDOWN OF FLOOR AREA PER BUILDING PER FLOOR

				OWNER	INFORMATION	
OWNED	TAVAADNO	LOT	AF	REA	MAILING ADDDESS	TELEBLIONE
OWNER	TAX MAP NO.	LOT	S.F.	AC	MAILING ADDRESS	TELEPHONE
LANDMARK MALL LLC	047.02-03-05	500	380,320	8.7309	ATTN GENERAL GROWTH PROPERTIES, PO BOX 617905, CHICAGO, IL 606617905	1-703-354-8405
MAY DEPARTMENT STORES CO	047.02-03-06	501	496,605	11.4005	ATTN PROPERTY REAL ESTATE TAX, 7 W SEVENTH ST, CINICINNATI, OH 45202	
LANDMARK MALL LLC	047.02-03-07	502	68,669	1.5764	ATTN GENERAL GROWTH PROPERTIES, PO BOX 617905, CHICAGO, IL 606617905	1-703-354-8405
SEARS ROEBUCK AND CO	047.02-03-08	A2	791,782	18.1768	D768 TAX B2 122A 3333 BEVERLY RD HOFFMAN ESTATES IL 60179	
LANDMARK MALL LLC	047.02-03-09	B-2	504,509	11.5819	ATTN GENERAL GROWTH PROPERTIES, PO BOX 617905, CHICAGO, IL 606617905	1-703-354-8405
	SITE TOT	AL =	2,241,885	51.4666		



				Building Tabulatio	ns - Existing Retail being	Removed					
Building ID	Use		Total Building	Number of Seats	Level 1	Level 2	Level 3	FAR - Site	FAR - App. Area	Building Height	Avg Building Grade
			Floor Area (S.F.)		Floor Area	Floor Area	Floor Area	See note 1	See note 2		
Aall	Retail		643,194 S.F.	0 Seats	321,597 S.F.	321,597 S.F.	0 S.F.	0.287	N/A	2 Stories	
				Building Tabula	tions - Existing Retail to I	    emain					
Building ID	Use		Total Building	Number of Seats	Level 1	Level 2	Level 3	FAR - Site	FAR - App. Area	Building Height	Avg Building Grade
			Floor Area (S.F.)	Number of Seats	Floor Area	Floor Area	Floor Area	See note 1	See note 2	Building Height	Avg building Grade
xisting Sears	Retail		203,596 S.F.	0 Seats	89,487 S.F.	114,109 S.F.	0 S.F.	0.091	N/A	2 Stories	
xisting Sears Tire and Auto	Retail		37,310 S.F.	0 Seats	37,310 S.F.	0 S.F.	0 S.F.	0.017	N/A	1 Story	
xisting Macy's xisting Bank	Retail		185,002 S.F. 3,150 S.F.	0 Seats	81,160 S.F. 3,150 S.F.	103,842 S.F.	0 S.F.	0.083		2 Stories 1 Story	
xisting Arlington Forest Service Center	Bank Retail		5,402 S.F.	0 Seats	5,402 S.F.	0 S.F.	0 S.F. 0 S.F.	0.001	<u> </u>	1 Story	+
Garage Area			35,334 S.F.	0 Seats	17,667 S.F.	17,667 S.F.	0 S.F.	0.016	N/A	2 Stories	
		Subtotal:	469,794 S.F.	0 Seats	234,176 S.F.	235,618 S.F.	0 S.F.	0.210	0.000		
				   Building Ta	 abulation - Proposed Ret	<u> </u> ail					
Building ID	Use		Total Building	Number of Seats	Level 1	Level 2	Level 3	FAR - Site	FAR - App. Area	Building Height	Avg Building Grade
			Floor Area (S.F.)	Trainber of ocuto	Floor Area	Floor Area	Floor Area	See note 1	See note 2		
1	Restaurant	Indoor	4,326 S.F.	265 Seats	4,326 S.F.	0 S.F.	0 S.F.	0.002	0.009	1 Story (17')	199.71
	Retail		41,976 S.F.		19,312 S.F.	22,664 S.F.	0 S.F.	0.019		2 Stories (34')	199.71
	Outdoor Floor Area	Bldg A Subtotal	1,648 S.F. 47,950 S.F.	205 0000	1,302 S.F. 24,940 S.F.	346 S.F. 23,010 S.F.	0 S.F. 0 S.F.	0.001	0.003		
		Didg A Subtotal	47,330 3.F.	265 Seats	24,940 S.F.	25,010 3.F.	U 5.F.	0.021	0.098		+
	Restaurant	Indoor	0 S.F.	0 Seats	0 S.F.	0 S.F.	0 S.F.	0.000	0.000	2 Stories (25')	106.00
<u> </u>	Retail Outdoor Floor Area		20,030 S.F. 823 S.F.		20,030 S.F. 823 S.F.	0 S.F.	0 S.F. 0 S.F.	0.009	0.002		196.00
		Bldg B Subtotal	20,853 S.F.	0 Seats	20,853 S.F.	0 S.F.	0 S.F.	0.009	0.043		
<u> </u>	Restaurant	Indoor	6,185 S.F.	151 Seats	6,185 S.F.	0 S.F.	0 S.F.	0.003	0.013		+
1	Retail		31,176 S.F.		31,176 S.F.	0 S.F.	0 S.F.	0.014	0.064	2 Stories (25')	196.00
	Outdoor Floor Area	Bldg C1 Subtotal	1,085 S.F.	1F1 C+-	1,085 S.F.	0 S.F.	0 S.F.	0.000	0.002		
	_	ning of annifolgi	38,446 S.F.	151 Seats	38,446 S.F.	0 S.F.	0 S.F.	0.017	0.079		+
2	Restaurant	Indoor	15,579 S.F. 1,229 S.F.	550 Seats	15,579 S.F. 1,229 S.F.	0 S.F.	0 S.F.	0.007	0.032	2 Stories (25')	196.00
2	Retail Outdoor Floor Area		1,229 S.F. 3,741 S.F.		1,229 S.F. 3,741 S.F.	0 S.F.	0 S.F.	0.001	0.003		130,00
		Bldg C2 Subtotal	20,549 S.F.	550 Seats	20,549 S.F.	0 S.F.	0 S.F.	0.009	0.042		
											_
)	Restaurant	Indoor	0 S.F.	0 Seats	0 S.F.	0 S.F.	0 S.F.	0.000	0.000		+
)	Retail		27,691 S.F.		27,691 S.F.	0 S.F.	0 S.F.	0.012		2 Stories (25')	196.00
	Outdoor Floor Area	Bldg D Subtotal	728 S.F. 28,419 S.F.	0.0	728 S.F. 28,419 S.F.	0 S.F.	0 S.F.	0.000	0.001		_
		Diug D Subtotal	28,419 3.F.	0 Seats	28,419 S.F.	0 S.F.	0 S.F.	0.013	0.058		+
	Restaurant	Indoor	5,244 S.F.	295 Seats	5,244 S.F.	0 S.F.	0 S.F.	0.002		1 Story (19')	197.40
	Retail Outdoor Floor Area		55,604 S.F. 1,329 S.F.		26,090 S.F. 931 S.F.	29,514 S.F. 398 S.F.	0 S.F.	0.025	0.114	2 Stories (36')	197.40
		Bldg E Subtotal	62,177 S.F.	295 Seats	32,265 S.F.	29,912 S.F.	0 S.F.	0.028	0.127		
	Pactaurant	Indoor	12,406 S.F.	455 Seats	12,406 S.F.	0 S.F.	0 S.F.	0.006	0.035	2 Stories (44')	196.50
	Restaurant Retail	Indoor	35,578 S.F.	455 Seats	35,578 S.F.	0 S.F.	0 S.F.	0.006		2 Stories (37')	196.50
	Cinema		44,642 S.F.	800 Seats	0 S.F.	44,642 S.F.	0 S.F.	0.020		2 Stories (37')	196.50
	Outdoor Floor Area	Bldg F Subtotal	2,858 S.F. 95,484 S.F.	1,255 Seats	2,232 S.F. 50,216 S.F.	626 S.F. 45,268 S.F.	0 S.F. 0 S.F.	0.001	0.006		_
		Diag i Subtotai	33,404 3.1 .	1,233 Seats	30,210 3.1 .	43,200 3.1 .	U 3.r.	0.043	0.196		+
Garage Additional Floor Area to be distributed	varies		3,699 S.F.		3,699 S.F. 0 S.F.	0 S.F.	0 S.F.	0.002	0.008		
Additional Floor Area to be distributed		Subtotal:	317,577 S.F.	2,516 S.F.	219,387 S.F.	98,190 S.F.	0 S.F.	0.142	0.6508		+
		Retail Total:	787,371 S.F.	2,516 Seats	453,563 S.F.	333,808 S.F.	0 S.F.	0.351			
				 Building Tabu	<u>।</u> ılation - Proposed Reside	l ntial					
Building ID	Use	Level	Floor area		1 Bedroom	2 Bedroom	3 Bedroom	Desnity - Site	Density- App. Area		
				Total No. of Units				See note 1 units / acre	See note 2 units/acre	Building Height	Avg Building Grade
<u> </u>	Residential	1	1,315	0	0 UNITS	0 UNITS	0 UNITS				196.00
		2	16,469	16	9 UNITS	7 UNITS	0 UNITS				196.00
		4	16,468 16,437	15 16	8 UNITS 9 UNITS	7 UNITS 7 UNITS	0 UNITS 0 UNITS				196.00 196.00
		5	16,437	16	9 UNITS	7 UNITS	0 UNITS				196.00
		6	17,720	16	9 UNITS	7 UNITS	0 UNITS			C Charles Jern	196.00
		Subtotal	84,846	79	44	35	0	1.53	7.05	6 Stories (85')	+
21	Residential	1	1,269	0	0 UNITS	0 UNITS	0 UNITS				196.00
		2	29,463	15	8 UNITS	7 UNITS	0 UNITS				196.00
		3	27,728 29,432	27 28	14 UNITS 14 UNITS	13 UNITS	0 UNITS 0 UNITS				196.00 196.00
		5	29,432	28	14 UNITS	14 UNITS	0 UNITS				196.00
		6	32,547	28	14 UNITS	14 UNITS	0 UNITS			C Charles Johnson	196.00
		Subtotal	149,871	126	64	62	0	2.45	11.25	6 Stories (85')	+
2	Residential	1_	2,085	0	0 UNITS	0 UNITS	0 UNITS				196.00
		2	17,057	14	9 UNITS	5 UNITS	0 UNITS				196.00
		3	20,125 17,057	14	9 UNITS	5 UNITS	0 UNITS				196.00 196.00
	1	5	17,057	14	9 UNITS 9 UNITS	5 UNITS 5 UNITS	0 UNITS 0 UNITS				196.00
		<del> </del>	18,685	14	9 UNITS	5 UNITS	0 UNITS				196.00
		6			45	25	0	1.36	6.25	6 Stories (85')	
		Subtotal	92,066	70		1	<b>1</b>				196.00
		Subtotal		0	0 UNITS	0 UNITS	0 UNITS	1		1	
)	Residential	Subtotal  1 2	1,433 22,871		0 UNITS 8 UNITS	0 UNITS 14 UNITS	0 UNITS 0 UNITS				196.00
		Subtotal  1 2 3	1,433 22,871 23,052	0 22 22	8 UNITS 8 UNITS	14 UNITS 14 UNITS	0 UNITS 0 UNITS				196.00
		Subtotal  1 2 3 4	1,433 22,871 23,052 23,052	0 22 22 22 22	8 UNITS 8 UNITS 8 UNITS	14 UNITS 14 UNITS 14 UNITS	0 UNITS 0 UNITS 0 UNITS				196.00 196.00
		5 Subtotal  1 2 3 4 5 6	1,433 22,871 23,052	0 22 22	8 UNITS 8 UNITS	14 UNITS 14 UNITS	0 UNITS 0 UNITS				196.00
	Residential	1 2 3 4 5 6 Subtotal	1,433 22,871 23,052 23,052 23,052 25,662 119,122	0 22 22 22 22 22 22 22	8 UNITS 8 UNITS 8 UNITS 8 UNITS 8 UNITS 40	14 UNITS 14 UNITS 14 UNITS 14 UNITS 14 UNITS 14 UNITS 70	0 UNITS 0 UNITS 0 UNITS 0 UNITS 0 UNITS 0 UNITS	2.14	9.82	6 Stories (85')	196.00 196.00 196.00
	Residential	1 2 3 4 5	1,433 22,871 23,052 23,052 23,052 25,662 119,122 445,905	0 22 22 22 22 22 22	8 UNITS 8 UNITS 8 UNITS 8 UNITS 8 UNITS 8 UNITS	14 UNITS 14 UNITS 14 UNITS 14 UNITS 14 UNITS 14 UNITS	0 UNITS 0 UNITS 0 UNITS 0 UNITS 0 UNITS	2.14 7.48	9.82 34.37	6 Stories (85')	196.00 196.00 196.00

						Original Parkii	ng Tabulation for P	ortions of Mall to Remain (pe	•									T
Building		Level	Floor Area	N.F.A.				Required	Parking Spaces Spaces/1000 s.f.	Spaces Require	ed Required	Loading Spaces Spaces/1000 s.f.	Spaces Req.	Comments				
								·										
Sears		2		89,487 114,109				1.2/230 1.2/330	5.217 3.636	467 415	1/20000	0.050 0.050	6					
				27 240														
Sears Tire & Auto		1		37,310														
Macy's		1		81,160 103,842				1.2/230 1.2/330	5.217 3.636	423 378	1/20000 1/20000	0.050 0.050	5					Z
		2						1.2/550	3.030	5/6	1/20000	0.050	0					SCRIPTION
Bank		1		3,150				1.2/210	5.714	18	N/A							SCRI
Arlington Forest Service Cen	nter	1		5,402				1.2/230	5.217	28	N/A							DE.
Existing Garage Area		1		17,667						0								
Existing datage Area		2		17,667						0								
	Subtotal			469,794						1729			22					
							Proposed	Parking Tabulations - Retail										
Building	Use	Level	Floor Area	Seats				Required	Parking Spaces Spaces/1000 s.f.	Spaces Require	ed Required	Loading Spaces Spaces/1000 s.f.	Spaces Req.	Comments				
A	Restaurant	1	4,326	159 seats				1/4 seats	Spacesy 1000 3.1.	40	1/20000	0.050	1	1 seat per 15 sf net. Assume net is 55% of Gross				
A	Retail Retail	2	19,312 22,664					1.2/230 1.2/330	5.217 3.636	101 83	1/20000	0.050 0.050	2				+++	+
Ā	Outdoor Floor Area	1	1,302					1.2/230	5.217	7	1/20000	0.050	1					
A	Outdoor Floor Area Outdoor Seating Area	2 1	346 1,168	65 seats				1.2/230 1/4 seats	5.217	2 17	1/20000	0.050 0.050	1 1	1 seat per 18 sf net.				DA
A	Outdoor Canopy	1	0	00000				1.2/230	5.217	0	1/20000	0.050	0					No.
B	Restaurant Retail	1	20,030	0 seats				1/4 seats 1.2/230	5.217	0 105	1/20000	0.050 0.050	0 2	1 seat per 15 sf net. Assume net is 55% of Gross	┢	╅		
В	Retail	2	0					1.2/330	3.636	0	1/20000	0.050	0			-15 -15		
B	Outdoor Floor Area Outdoor Seating Area	1	823	0 seats				1.2/230 1/4 seats	5.217	5	1/20000	0.050 0.050	0	1 seat per 18 sf net.		-22	Ī	l I
В	Outdoor Canopy	1	0					1.2/230	5.217	0	1/20000	0.050	0			07	1 1 1	
C1 C1	Restaurant Retail	1	6,185 31,176	227 seats				1/4 seats 1.2/230	5.217	57 163	1/20000	0.050 0.050	2	1 seat per 15 sf net. Assume net is 55% of Gross	╀			
C1	Retail	2	0					1.2/330	3.636	0	1/20000	0.050	0			Ĺ	CHANTILLY, VA. 20151 TEL. 703-642-2306 FAX. 703-378-7888	
C1 C1	Outdoor Floor Area Outdoor Seating Area	1	1,085	0 seats				1.2/230 1/4 seats	5.217	6 0	1/20000	0.050 0.050	0	1 seat per 18 sf net.	$\dashv$	Y OGY	1. 201. 16 18	∄
C1	Outdoor Canopy	1	0					1.2/230	5.217	0	1/20000	0.050	0			IONH	Y, V; 12-230 78-788	-JIH.
C2 C2	Restaurant Retail	1	15,579 1,229	571 seats				1/4 seats 1.2/230	5.217	143 7	1/20000	0.050 0.050	1 1	1 seat per 15 sf net. Assume net is 55% of Gross	$\dashv$	Ltd. TEC	77711. 703-64 703-37	HVar
C2	Retail	2	0					1.2/330	3.636	0	1/20000	0.050	0			Jrban, 200 D	HAN.	W W W
α	Outdoor Floor Area Outdoor Seating Area	1	3,741 0	0 seats				1.2/230 1/4 seats	5.217	20	1/20000	0.050 0.050	0	1 seat per 18 sf net.	-	1		, 
C2	Outdoor Canopy	1	0	2				1.2/230	5.217	0	1/20000	0.050	0	4 contracts from Assume and FFM of Cons	4		¥.	rveyor
D D	Restaurant Retail	1	0 27,691	0 seats				1/4 seats 1.2/230	5.217	0 145	1/20000	0.050 0.050	0 2	1 seat per 15 sf net. Assume net is 55% of Gross	1			and Sur
D	Retail	2	0					1.2/330	3.636	0	1/20000	0.050	0					cts•La
D	Outdoor Floor Area Outdoor Seating Area	1	728 0	0 seats				1.2/230 1/4 seats	5.217	0	1/20000	0.050 0.050	0	1 seat per 18 sf net.			53	Archite
D	Outdoor Canopy	1	0	400				1.2/230	5.217	0	1/20000	0.050	0	4		_		cape /
E	Restaurant Retail	1	5,244 26,090	192 seats				1/4 seats 1.2/230	5.217	49 137	1/20000	0.050 0.050	2	1 seat per 15 sf net. Assume net is 55% of Gross	-			·Lands
E	Retail	2	29,514					1.2/330	3.636	108	1/20000	0.050	2			Ì		ineers
E	Outdoor Floor Area Outdoor Floor Area	2	931 398					1.2/230 1.2/230	5.217 5.217	3	1/20000 1/20000	0.050 0.050	1 1					rs•Eng
E	Outdoor Seating Area Outdoor Canopy	1	1,436 0	80 seats				1/4 seats 1.2/230	5.217	20	1/20000	0.050 0.050	1	1 seat per 18 sf net.				Nanner .
F	Restaurant	1	12,406	455 seats				1/4 seats	5.217	114	1/20000	0.050	1	1 seat per 15 sf net. Assume net is 55% of Gross				
F	Retail Retail	1 2	35,578 0					1.2/230 1.2/330	5.217 3.636	186 0	1/20000 1/20000	0.050 0.050	2				2 6	<b>2</b>
F	Cinema	2	44,642	800 seats				1.2/330	3.636	163	1/20000	0.050	3					
F	Outdoor Floor Area Outdoor Seating Area	1	2,858	124 seats				1.2/230 1/4 seats	5.217	15 31	1/20000 1/20000	0.050 0.050	1 1	1 seat per 18 sf net.	-	_		ਔ.
F	Outdoor Canopy		0	124 3683				1.2/230	5.217	0	1/20000	0.050	0					3
	Garage Additional Floor Area to be distributed		3,031					1.2/230	5.217	0	1/20000	0.050	0	Area not included for parking	-			<b>7</b>
	Flex Area (Not Included in Retail Area)		18,000					1.2/230	5.217	94	1/20000	0.050	1				<u> </u>	
R	Outdoor Kiosks Retail Subtotal:		0 316,909	2,672	0	0	0	1.2/230	5.217	0 1830	1/20000	0.050	37			_B000	444444	 امه <sup>ا</sup>
			,	,			-								┨,	IRCIN	$\widetilde{A} \times 0$	W
*Garage area not required fo	or parking						1		Parking Spaces			Loading Spaces			- 3	4	CLAYTON C. TOCK VICE I.ic. No. 036790	
Building	Use	Level	Floor Area	Seats	1 Bedroom	2 Bedroom	3 Bedroom	Required	Spaces/1000 s.f.	Spaces Require	ed Required	Spaces/1000 s.f.	Spaces Req.	Comments			) (2) (3) (4)	
В	Residential	2	1,315 16,469		0 units 9 units	0 units 7 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3								747	NO S	ć
		3	16,468		8 units	7 units	0 units	1.3/1, 1.75/2, 2.2/3								The state of the s	CLA)	KY.
		5	16,437 16,437		9 units 9 units	7 units 7 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3							=	NW	OO PR	
CI	Residential	6	17,720 1,269		9 units	7 units	0 units	1.3/1, 1.75/2, 2.2/3							-		A4444	$\neg$
<u> </u>	кезпения	2	29,463		0 units 8 units	0 units 7 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3										
		3	27,728 29,432		14 units 14 units	13 units 14 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3							4			
		5	29,432		14 units	14 units	0 units	1.3/1, 1.75/2, 2.2/3								(II)		
C2	Residential	6	32,547 2,085		14 units 0 units	14 units 0 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3							-	SE		
	world by the Mil	2	17,057		9 units	5 units	0 units	1.3/1, 1.75/2, 2.2/3										
		3 4	20,125 17,057		9 units 9 units	5 units 5 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3						Includes residential bridges				
		5	17,057		9 units	5 units	0 units	1.3/1, 1.75/2, 2.2/3							Ţ	XED		
D	Residential	6 1	18,685 1,433		9 units 0 units	5 units 0 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3									r ·	abla
		2	22,871		8 units	14 units	0 units	1.3/1, 1.75/2, 2.2/3							PROPOSED	M		$\mathbf{Z}$
		3 4	23,052 23,052		8 units 8 units	14 units 14 units	0 units 0 units	1.3/1, 1.75/2, 2.2/3 1.3/1, 1.75/2, 2.2/3							-		MENT ANDRIA	5
		5	23,052 25,662		8 units	14 units	0 units	1.3/1, 1.75/2, 2.2/3									¥ N	VII,
	Additional Floor Area to be distributed	6	4,095		8 units	14 units	o units	1.3/1, 1.75/2, 2.2/3 1.2/230	5.217	22	1/20000	0.050	23					
Residential Subtotal:			445,905		193	192	0			587					按 <	<b>⁴</b>		$ \mathbf{RL} $
	Mixed Use Total:		1,236,703							4146			82		┨È		IEND OF ALE	]
				Parking Provided - Mixed Us	:e									ESI PEER REVIEW			AMEN CITY OF	KAL
				Elimination of Parking		Addition	al Parking Sp	aces						PEER REVIEW				$\Xi$
	Level	E	xisting Parking Cou	unt Spaces	S	tandard		Compact	Total Provide	ed   <b>Г</b>	APPR		$\bigcap$				C	AL
		+				<u> </u>		·						2015 2027	STTT.	DM	JP	
Suface Parking	1		1743	230		73		8	1594					2015-0003			<u> </u>	
											DEPARTMEN	T OF PLAN	INING & Z	CONING				
Structured Parking	1	<u> </u>	910	166		0		0	744			DIRECTOR		DATE				
	2		980	82		0		0	898				ICDART * T'					
	3		1021	119		9		64	975					ON & ENVIRONMENTAL SERVICES				
TOTALS:			4654	597		82		72	4211		SITE FLAN	. 110			1			
										•						1		

Loading Provided-Mixed Use

Elimination of Loading Spaces

0

**Existing Loading Spaces** 

18

Loading Spaces

DIRECTOR

CHAIRMAN, PLANNING COMMISSION

DEED BOOK NO. PAGE NO.

DATE RECORDED \_\_\_

INSTRUMENT NO.

03 OF 28

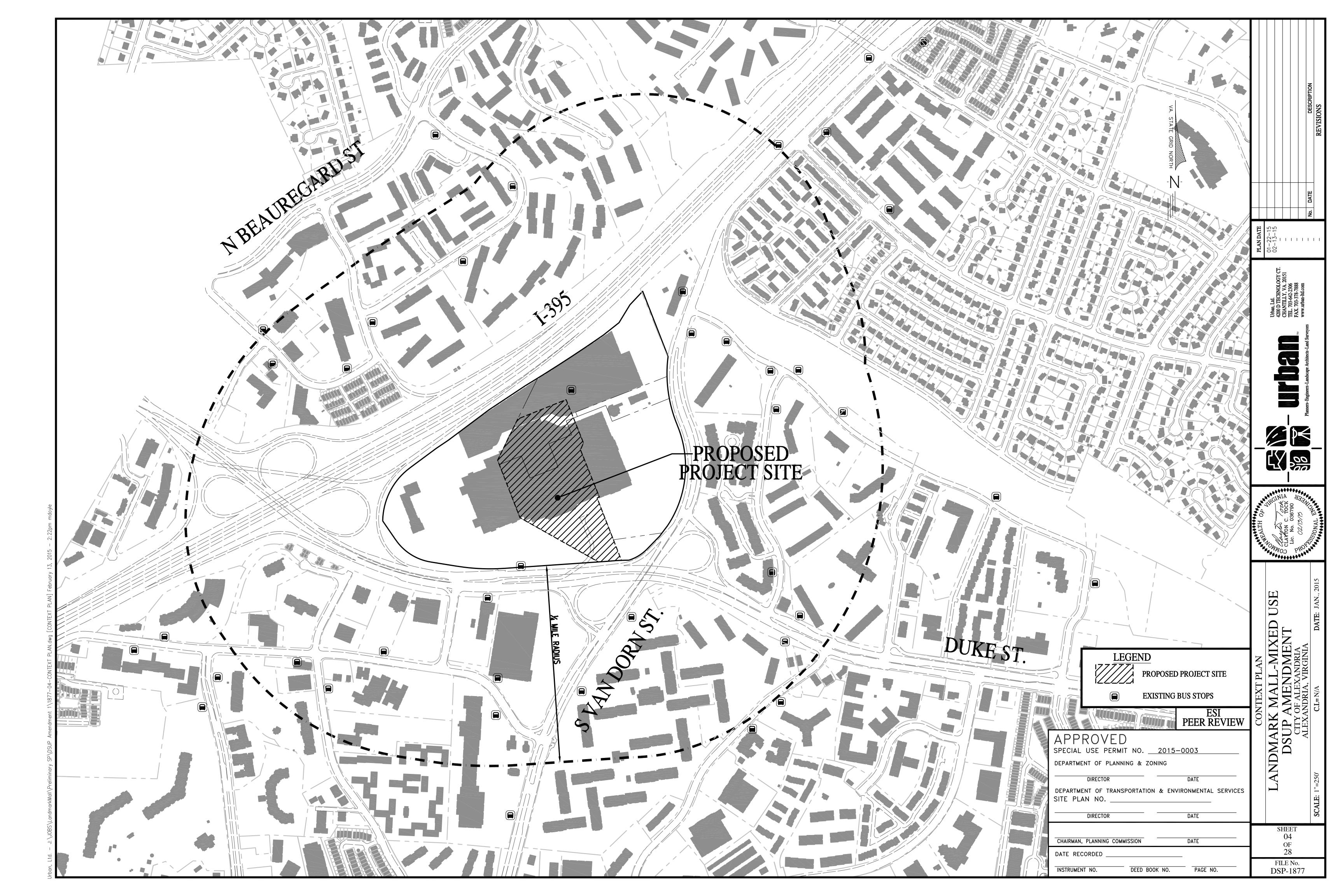
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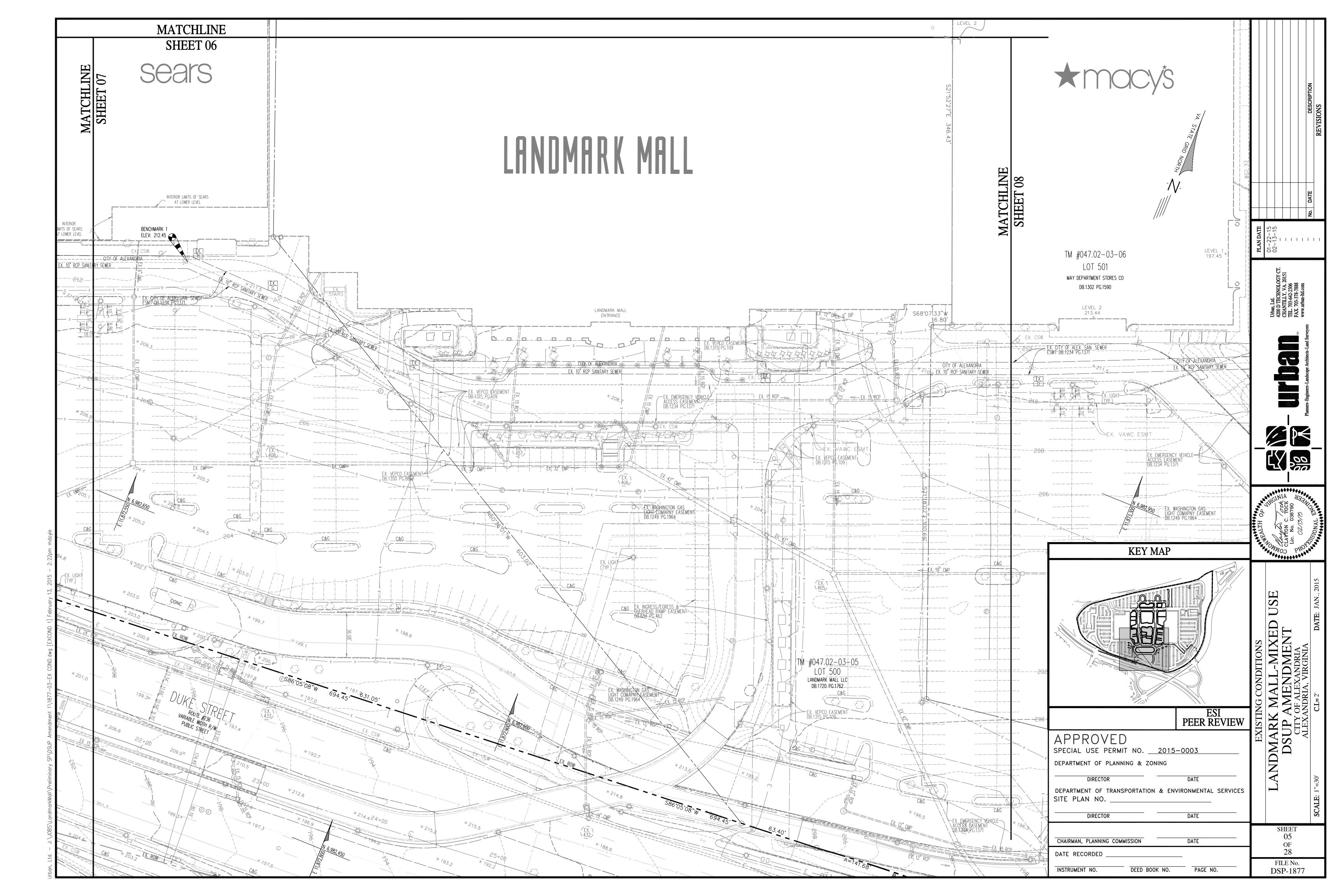
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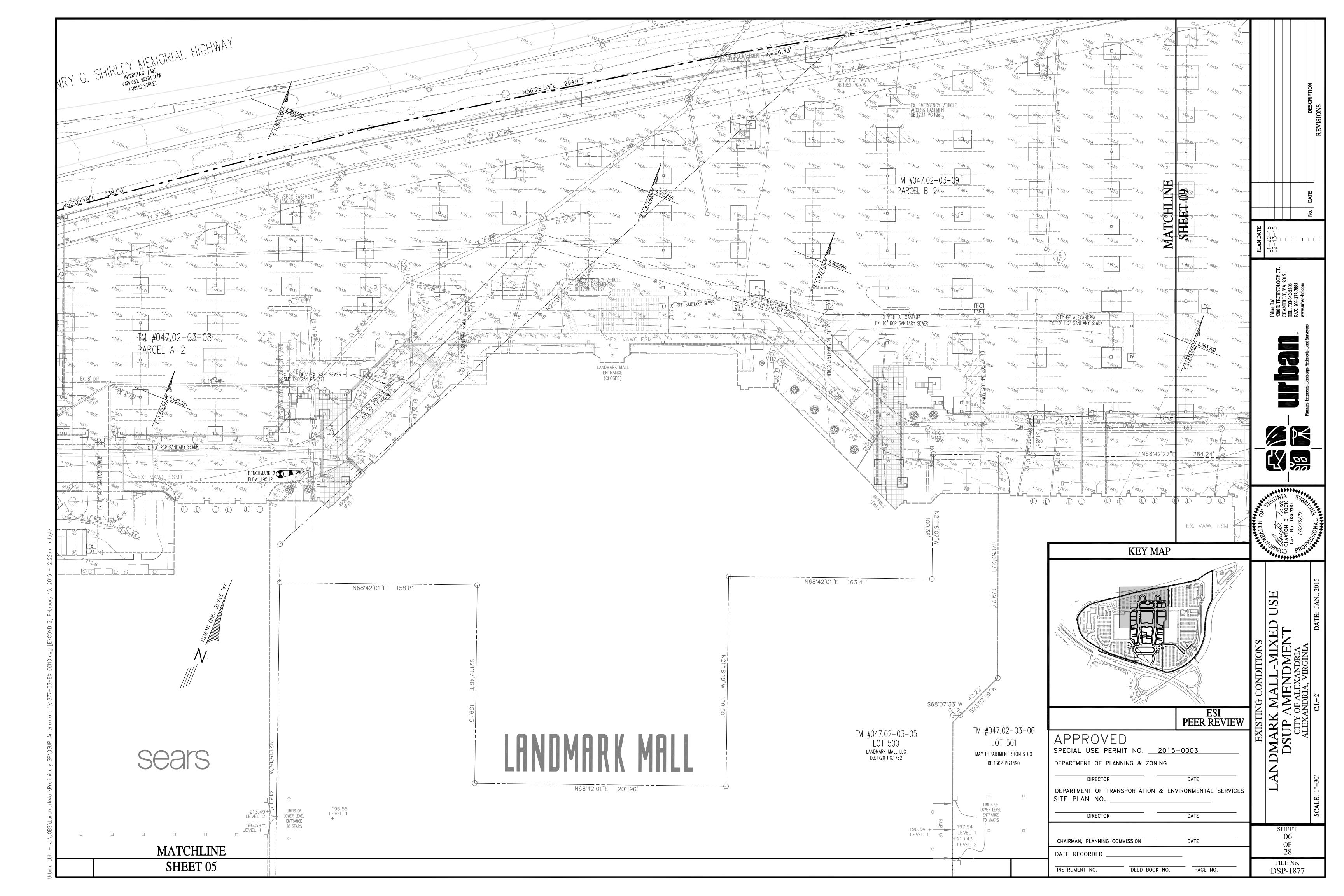
24

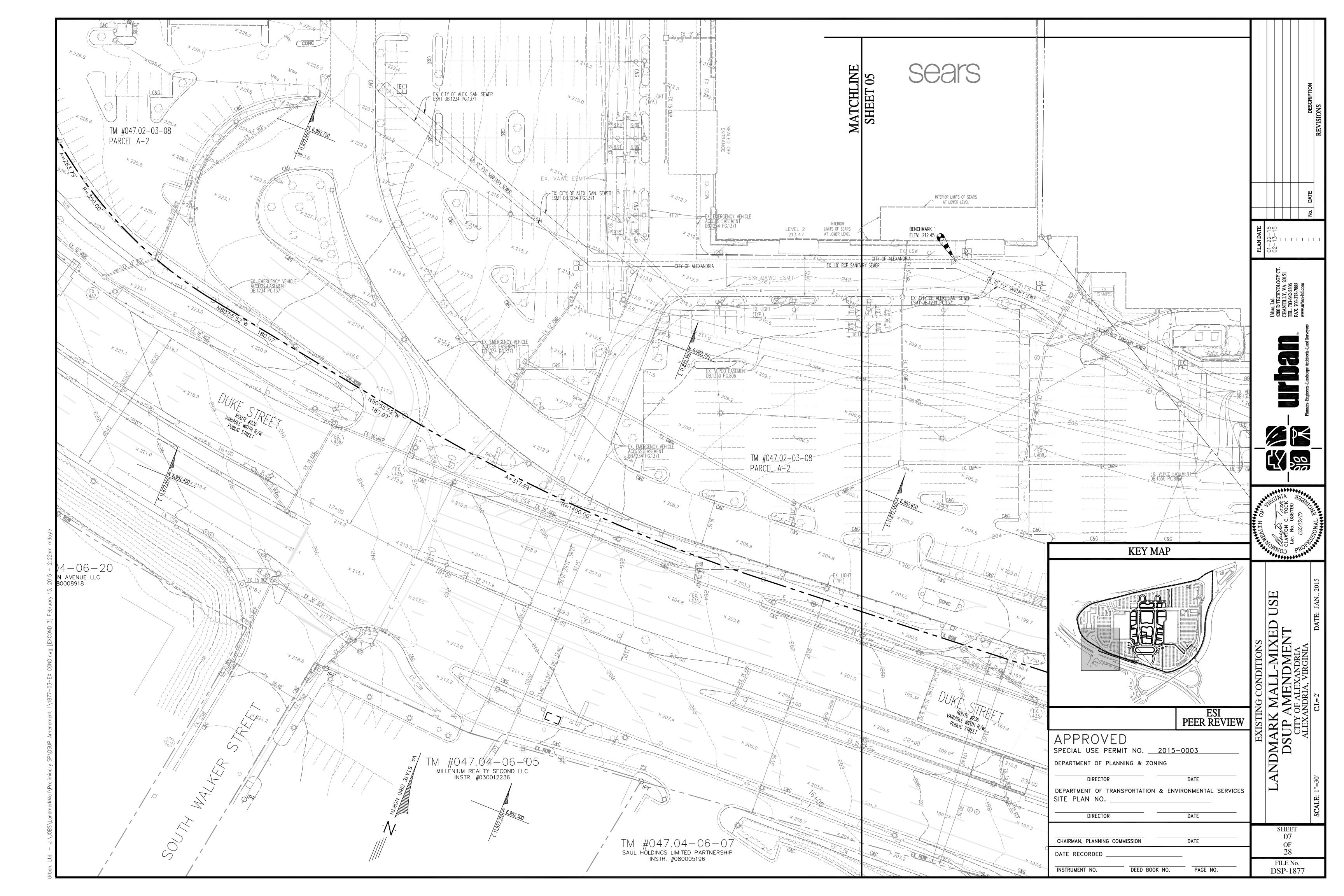
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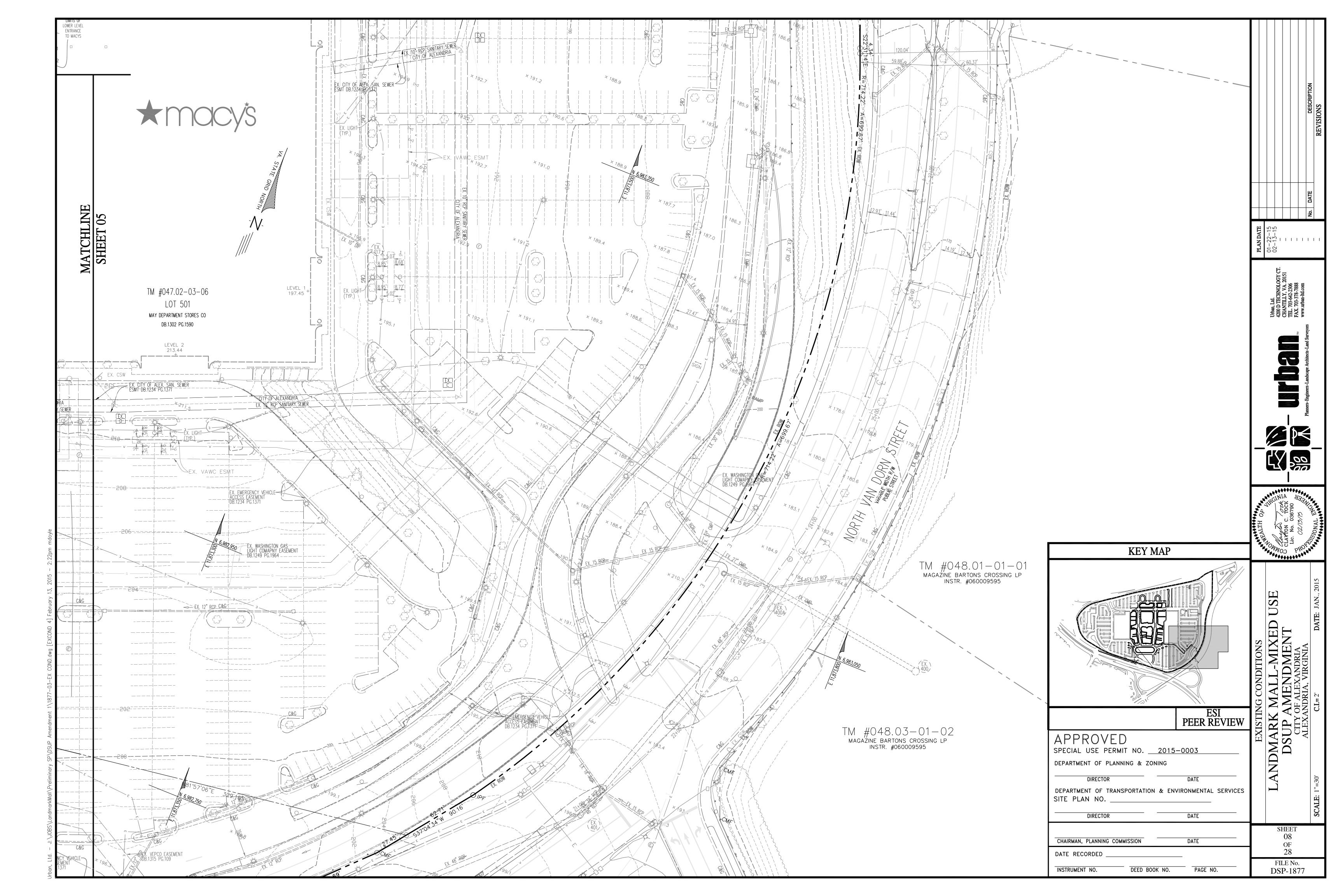
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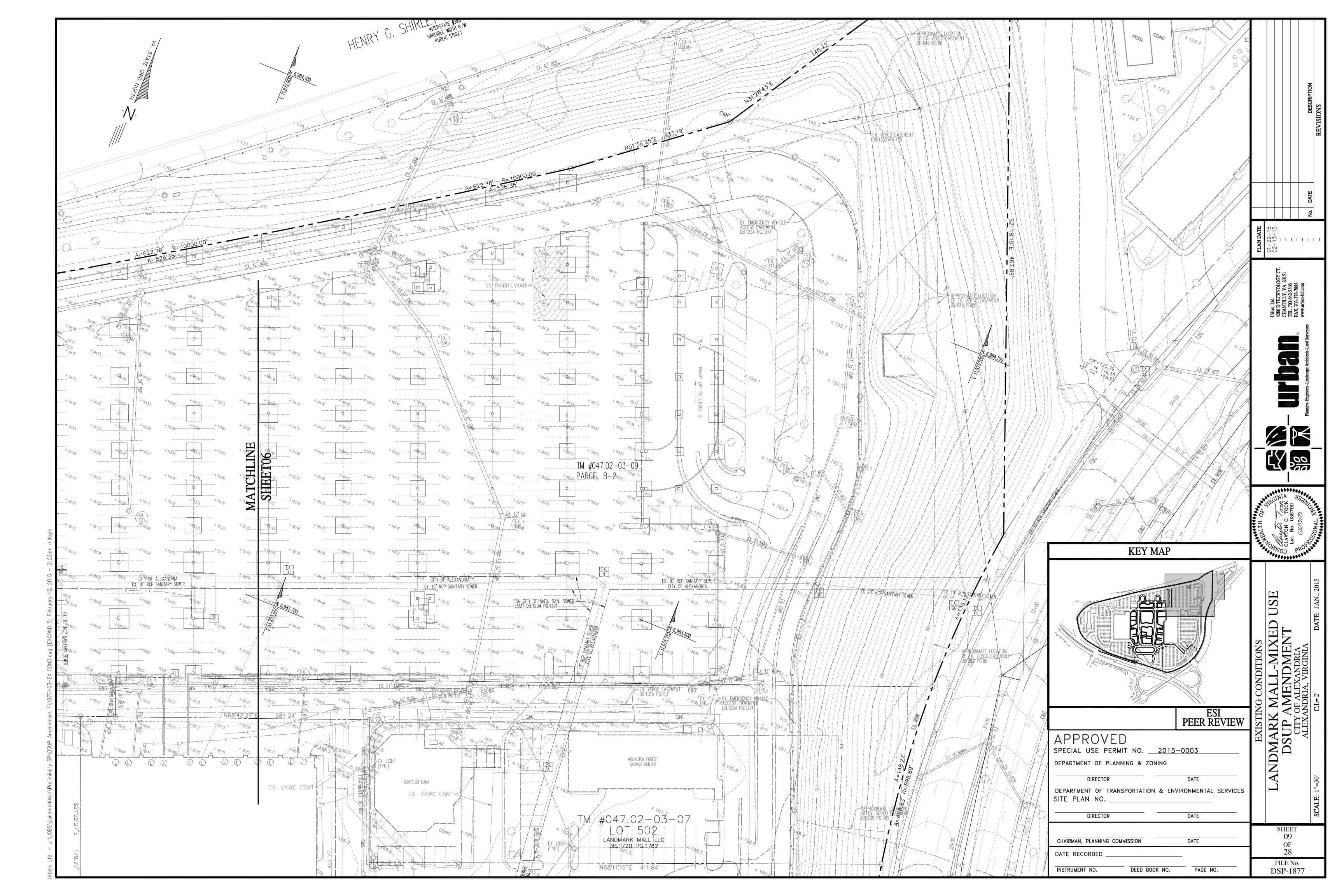


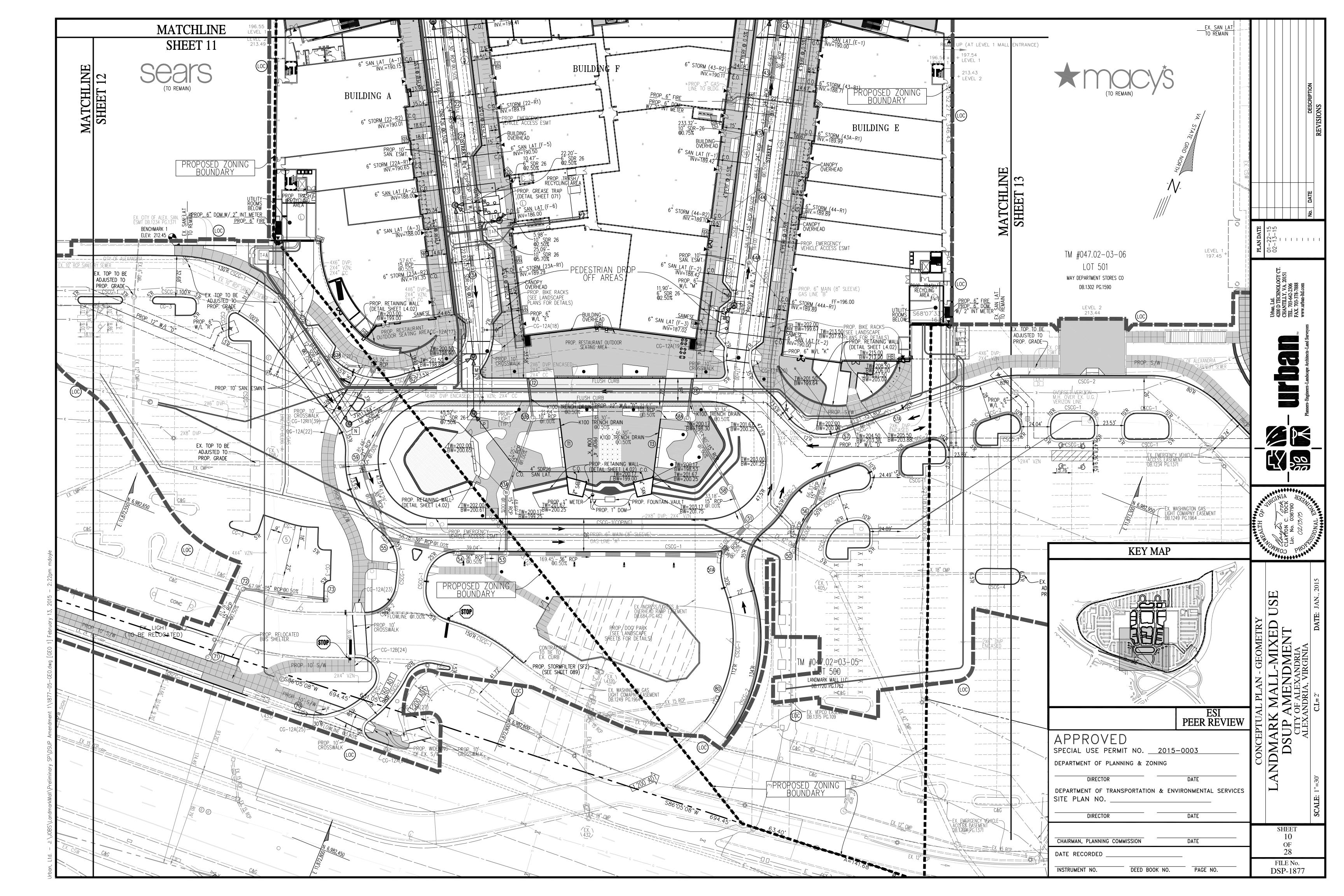


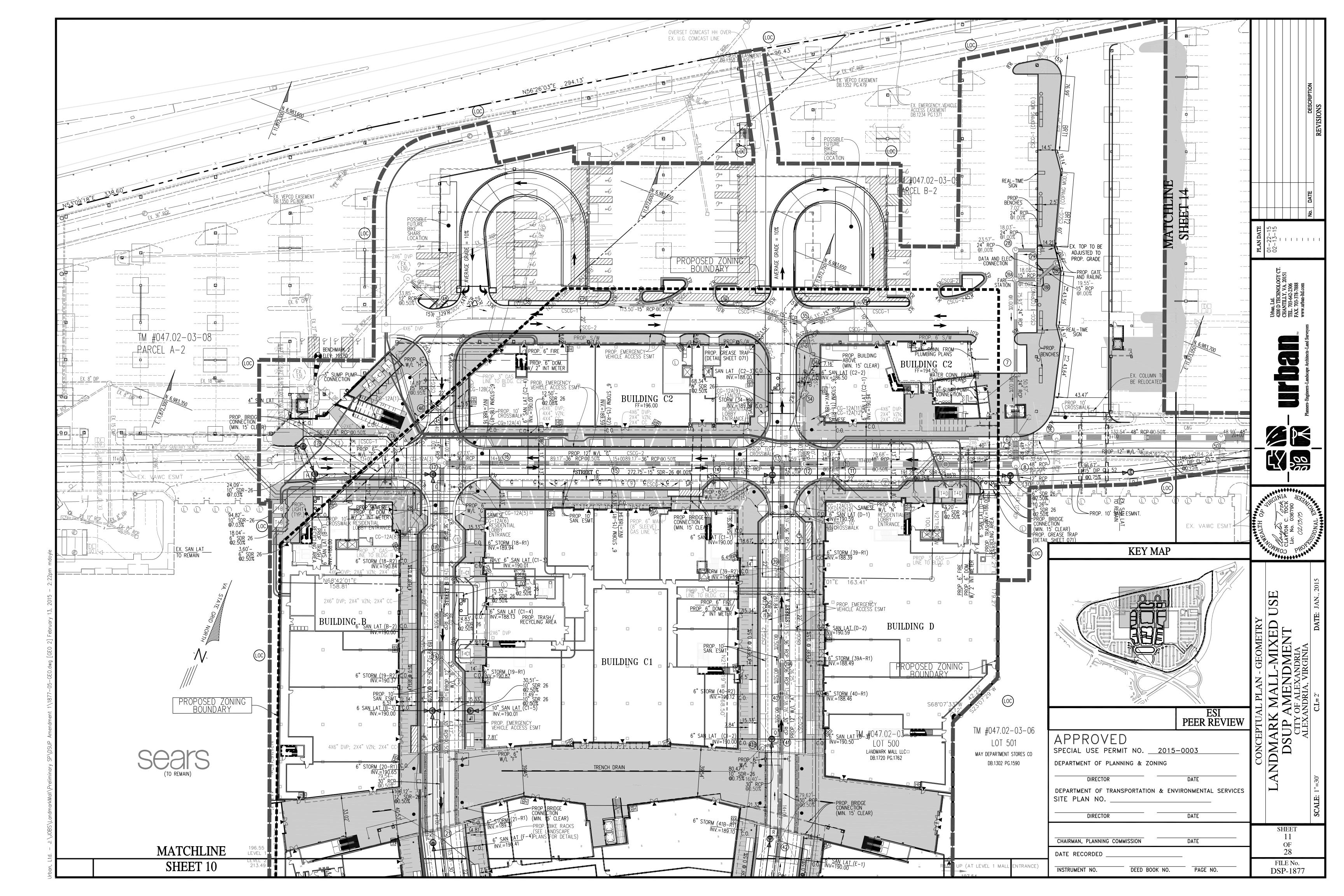


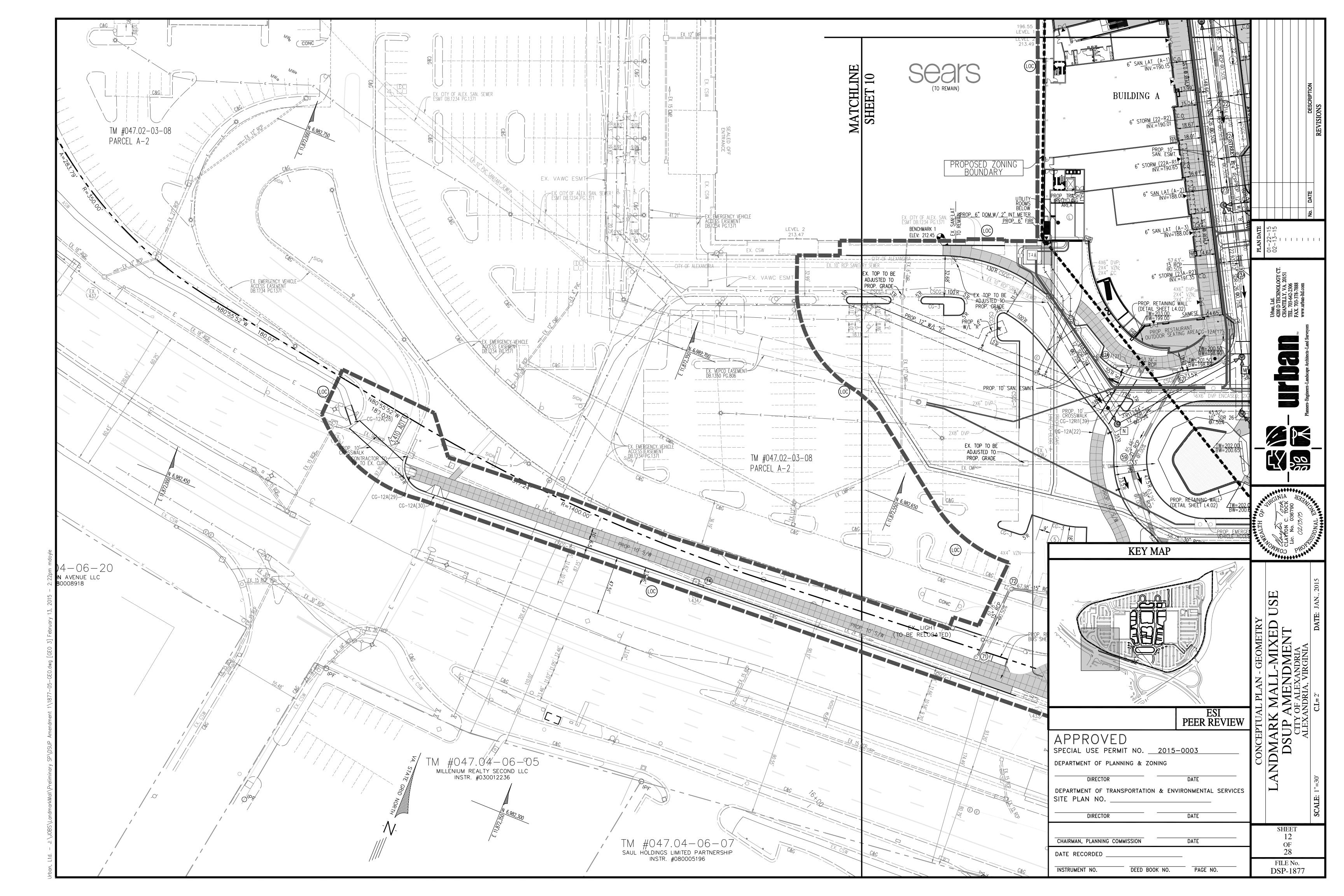


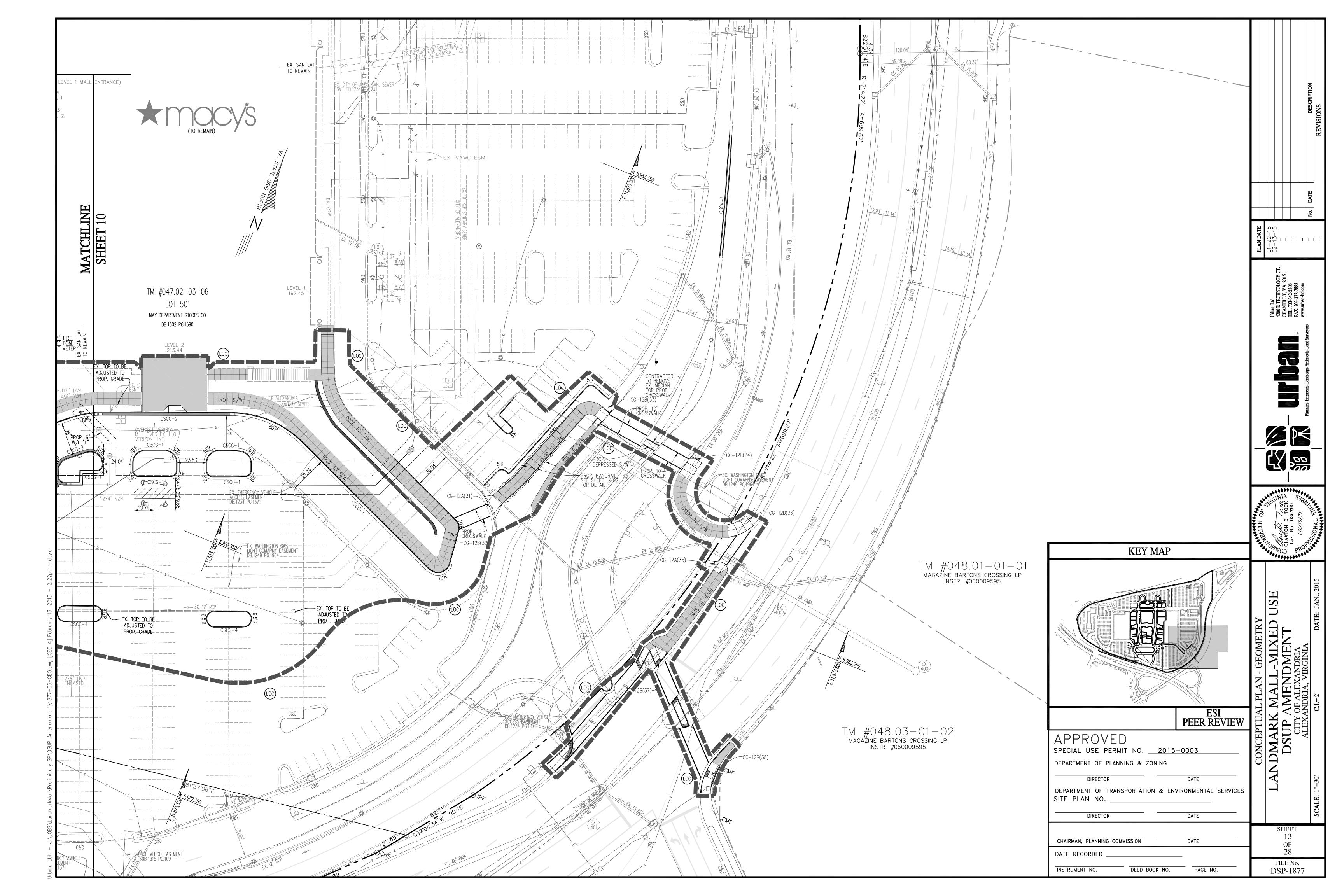


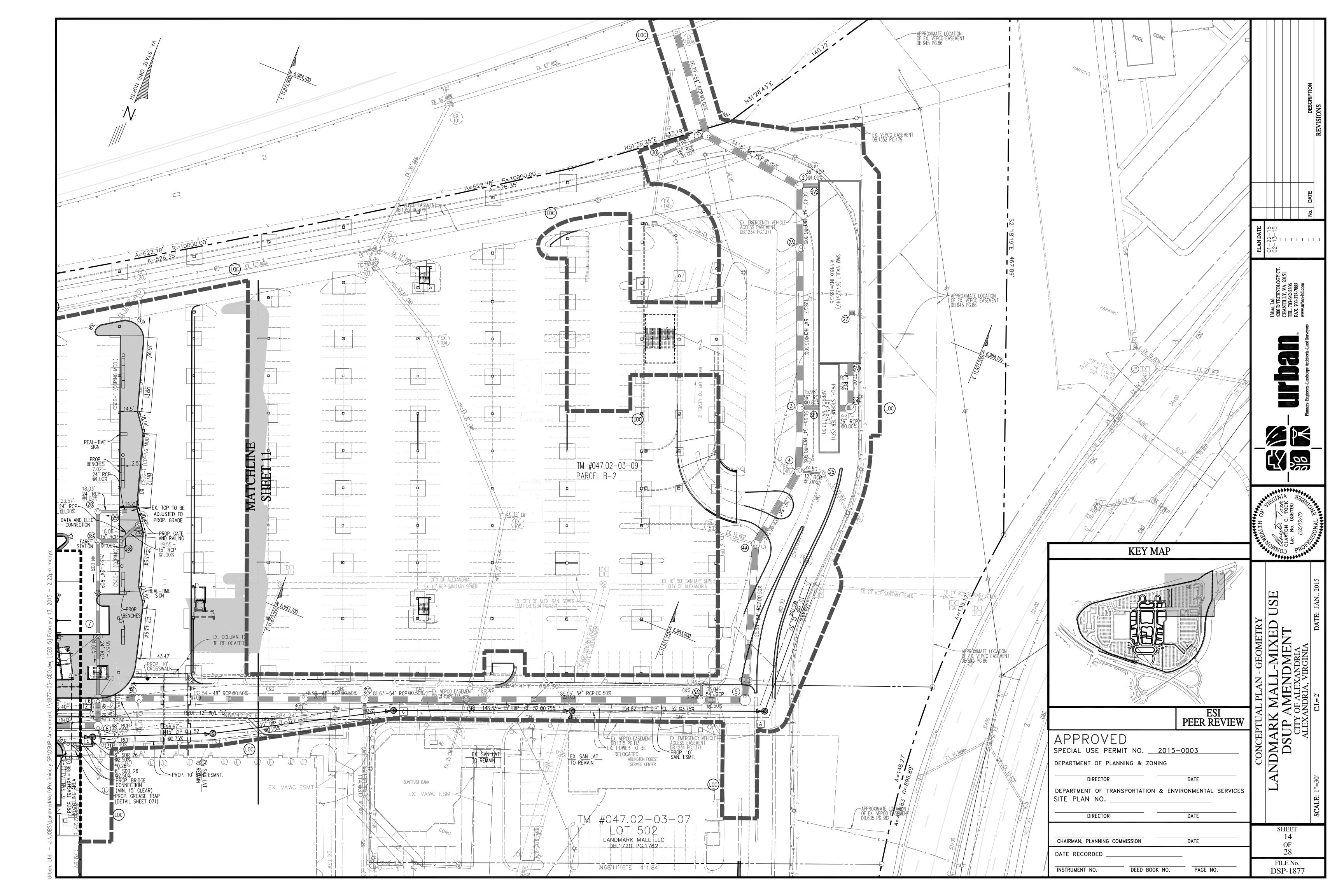


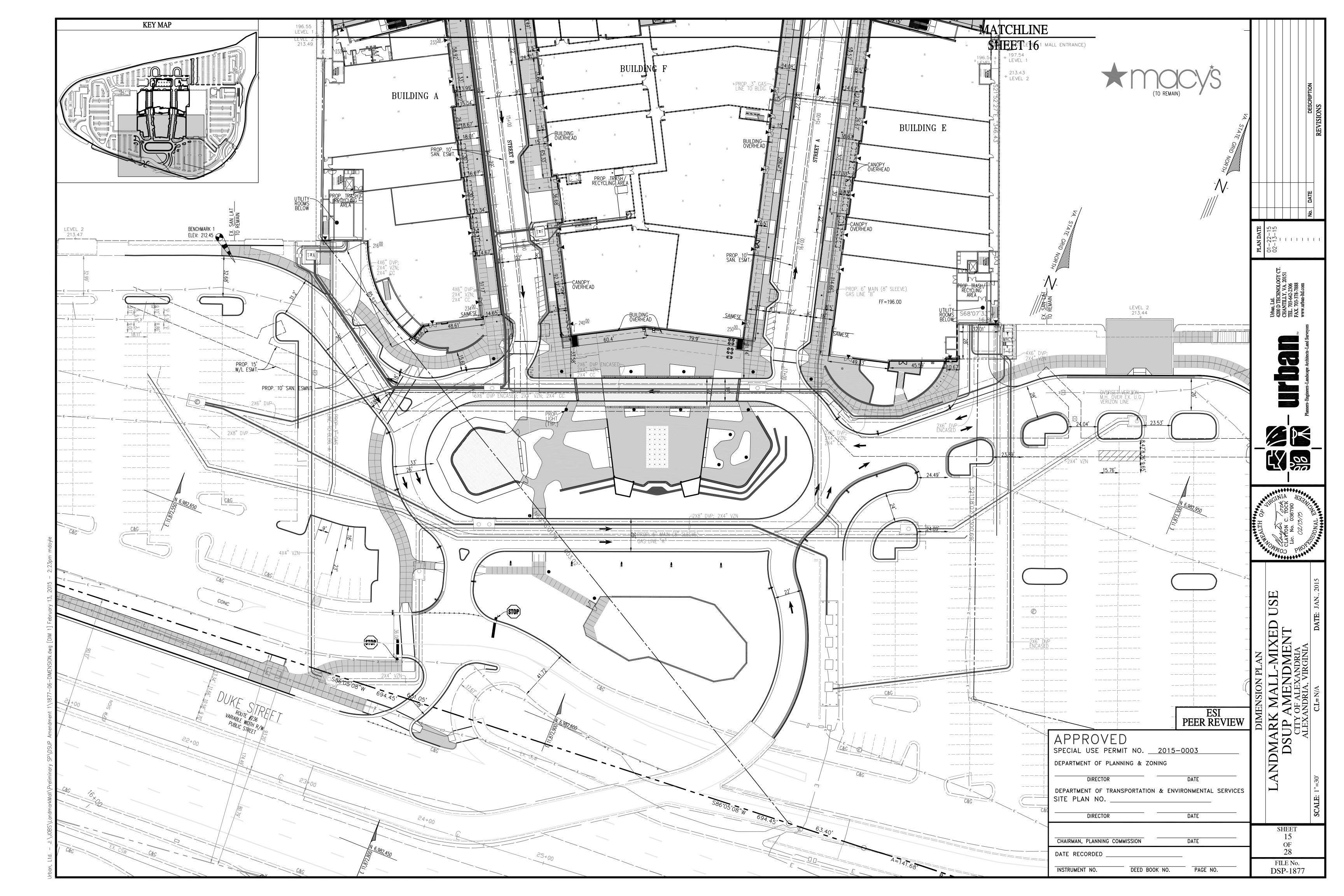


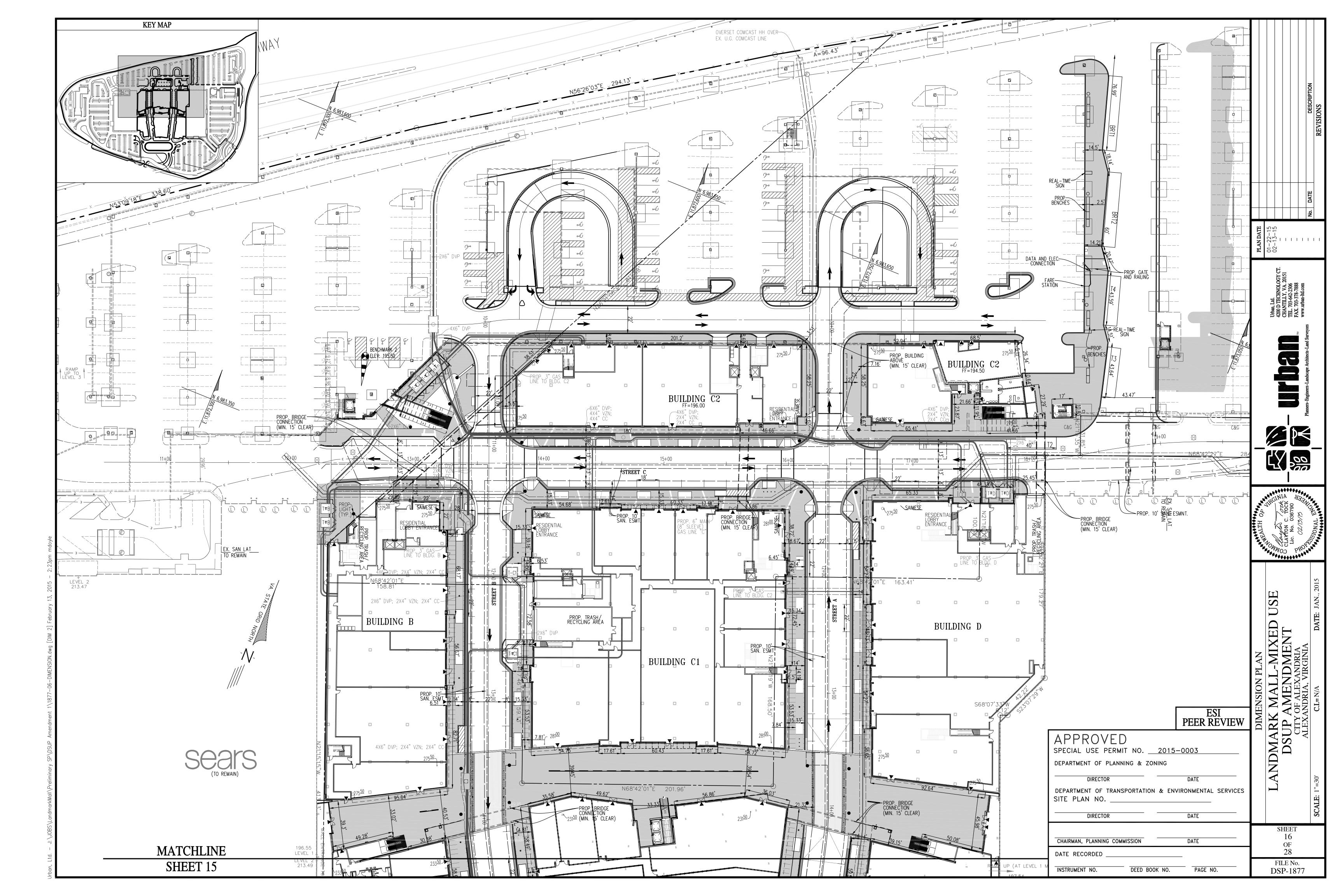


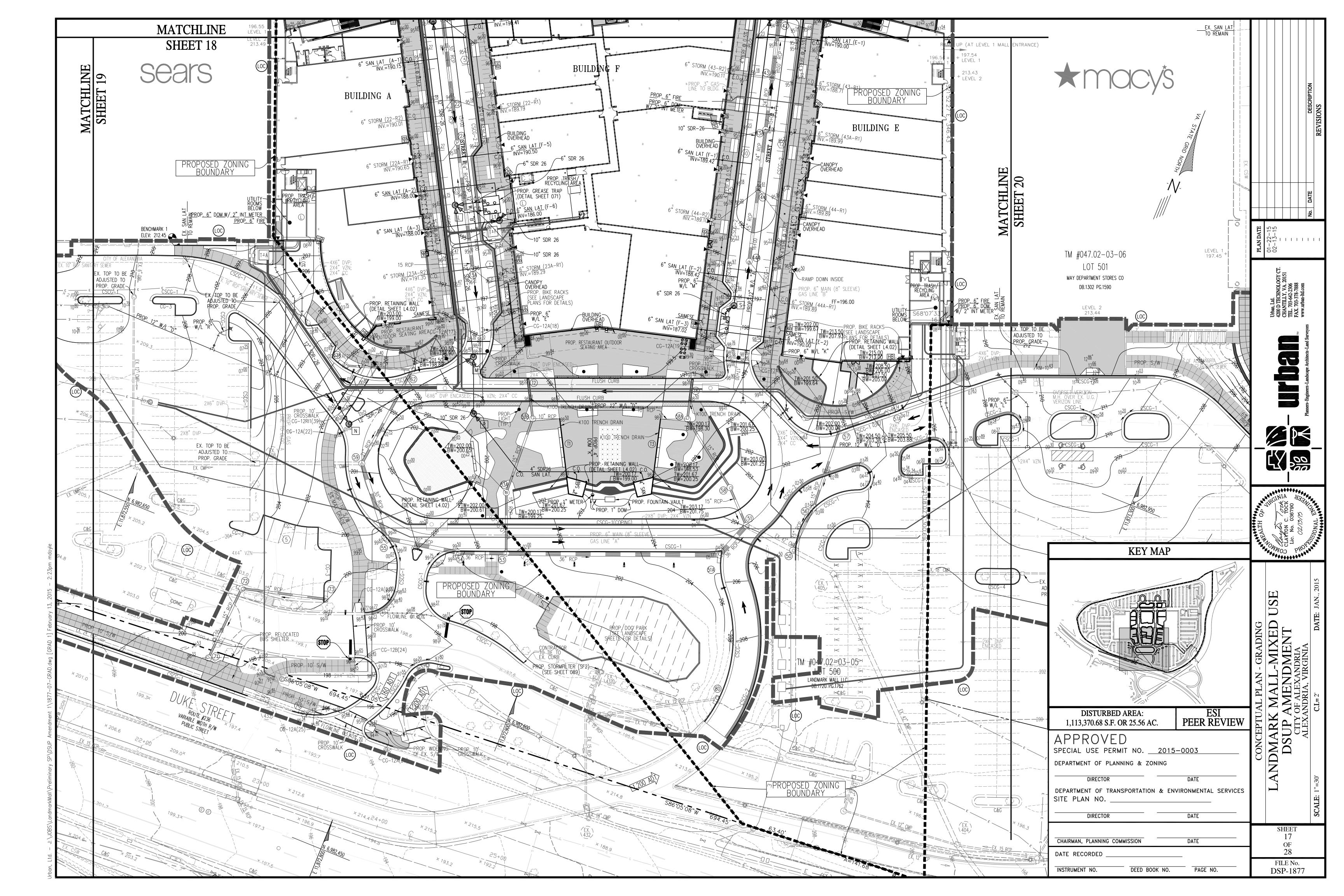


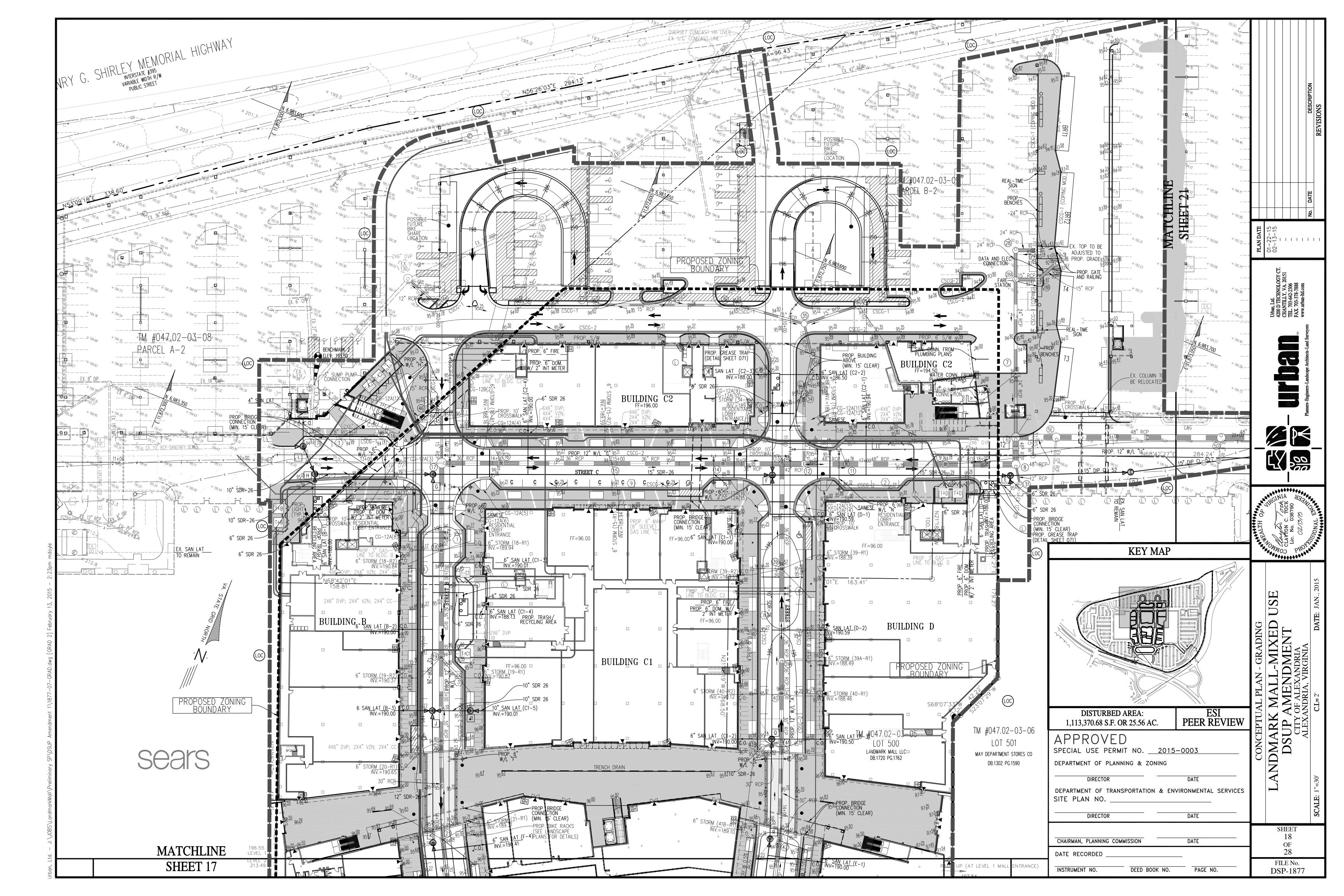


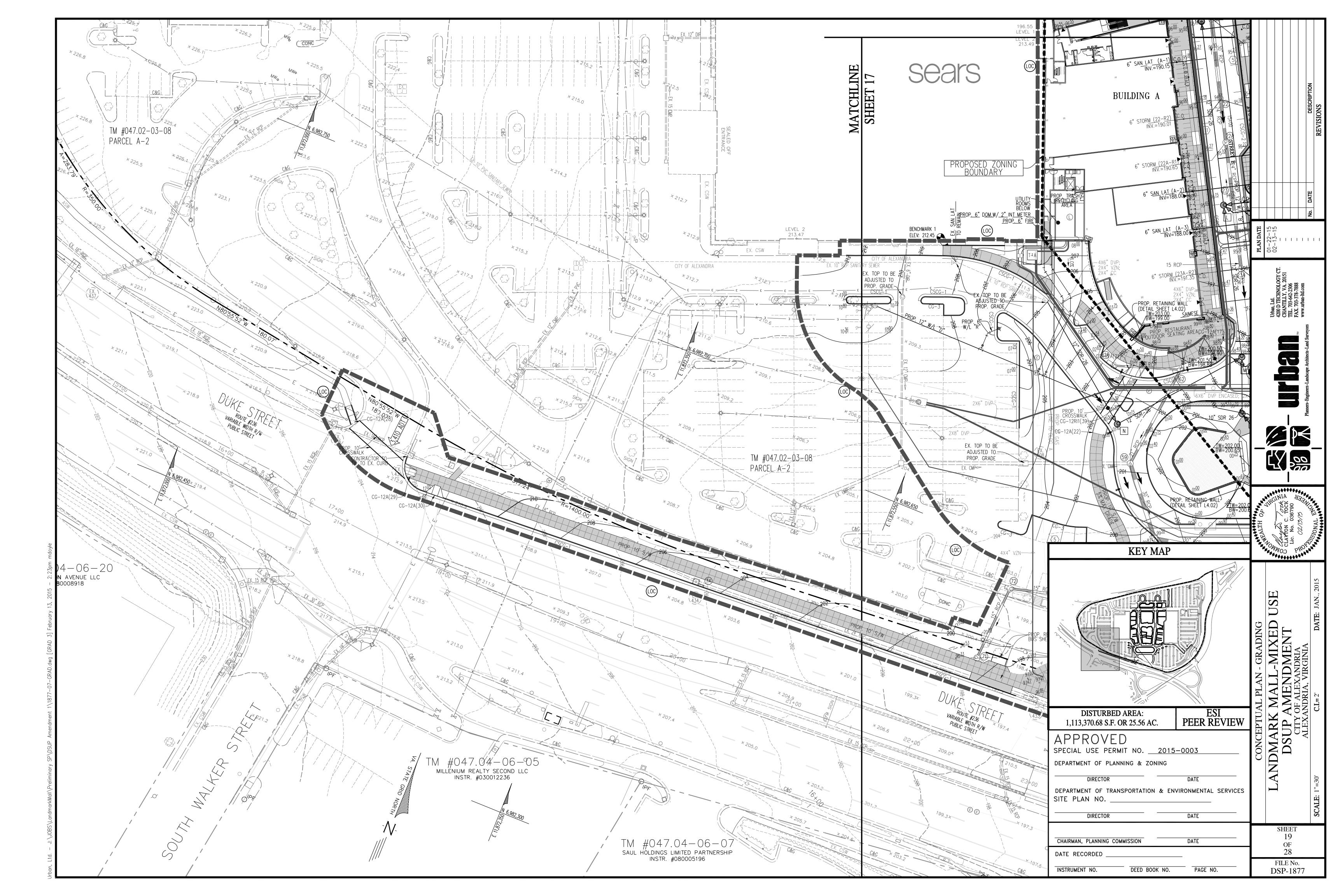


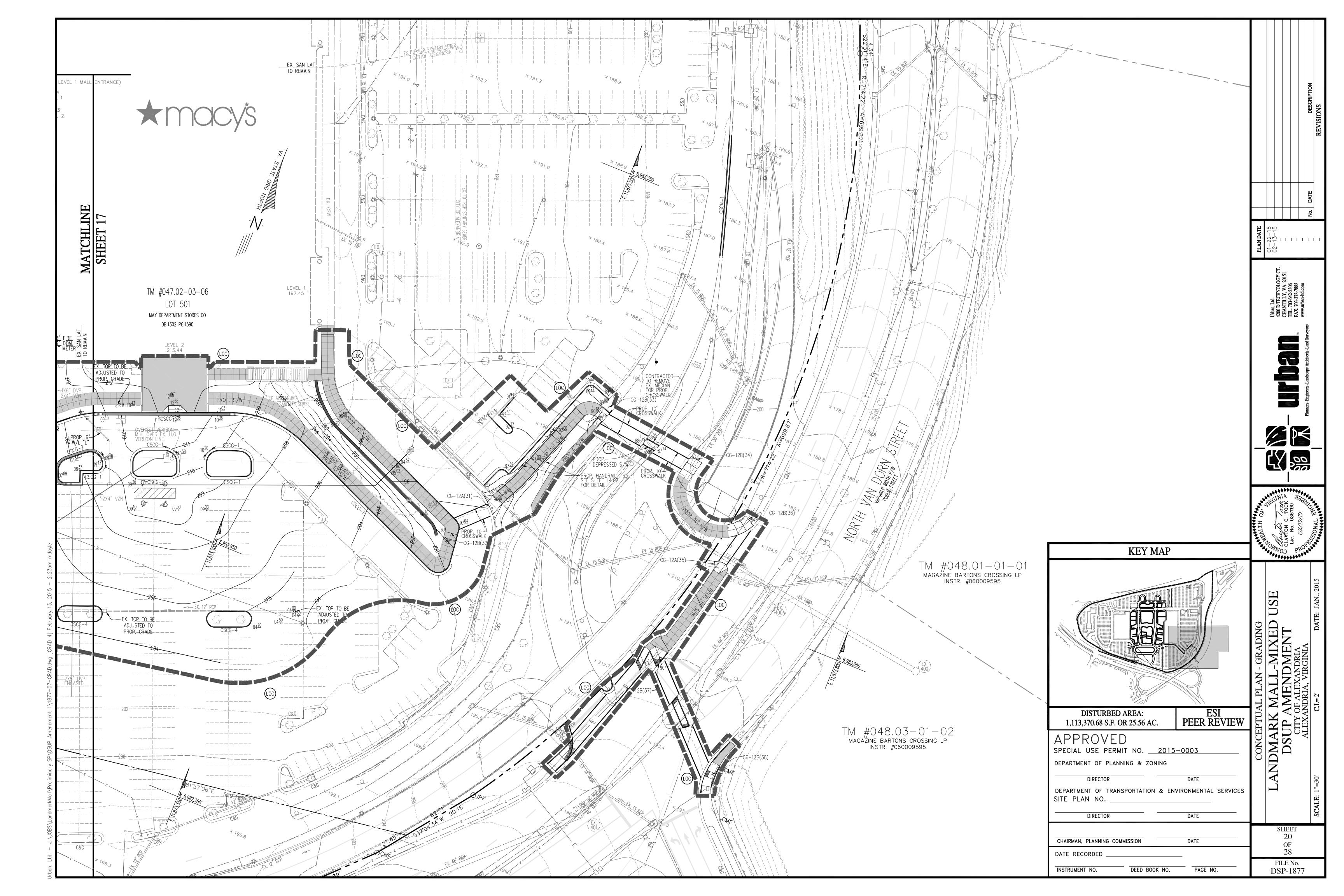


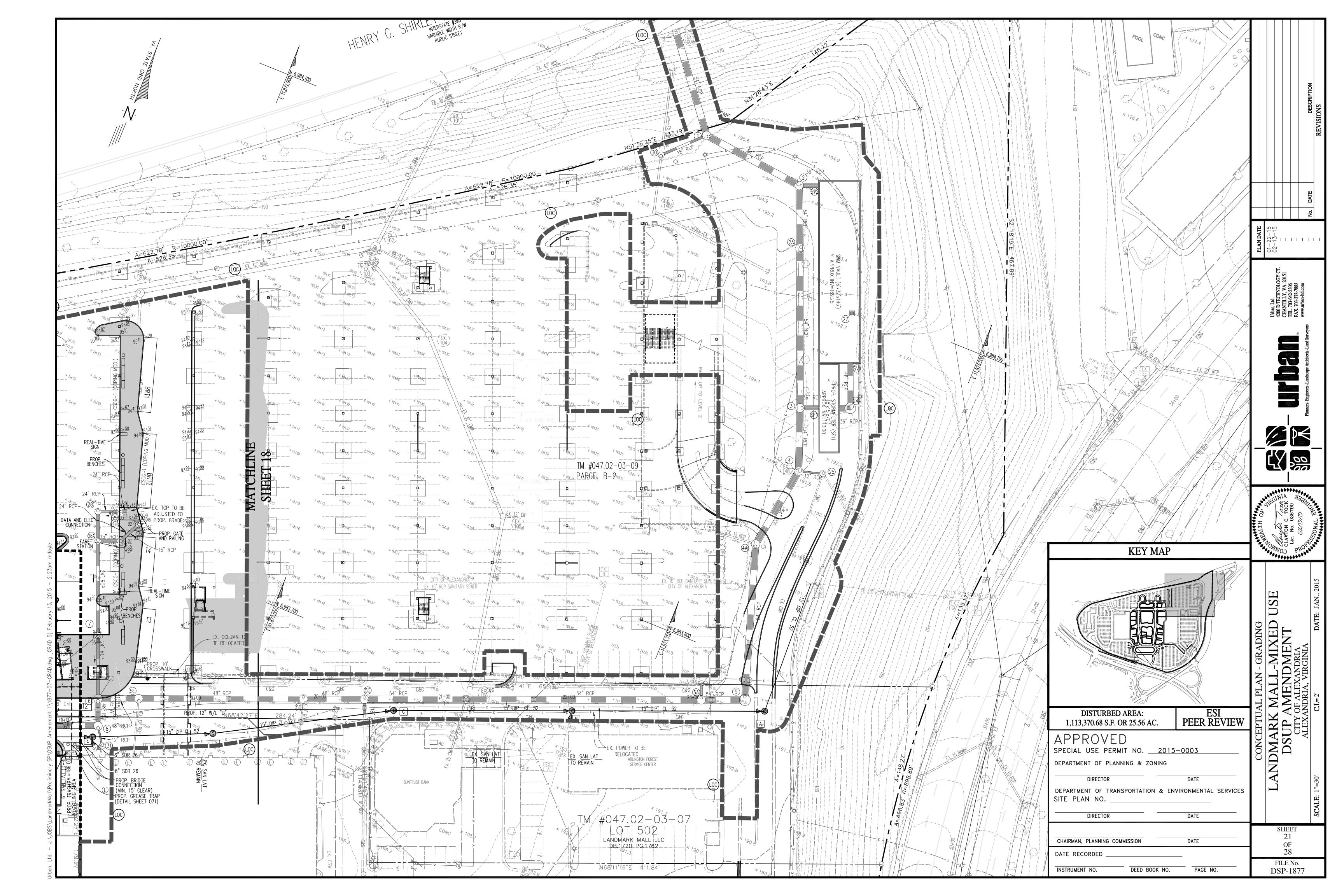


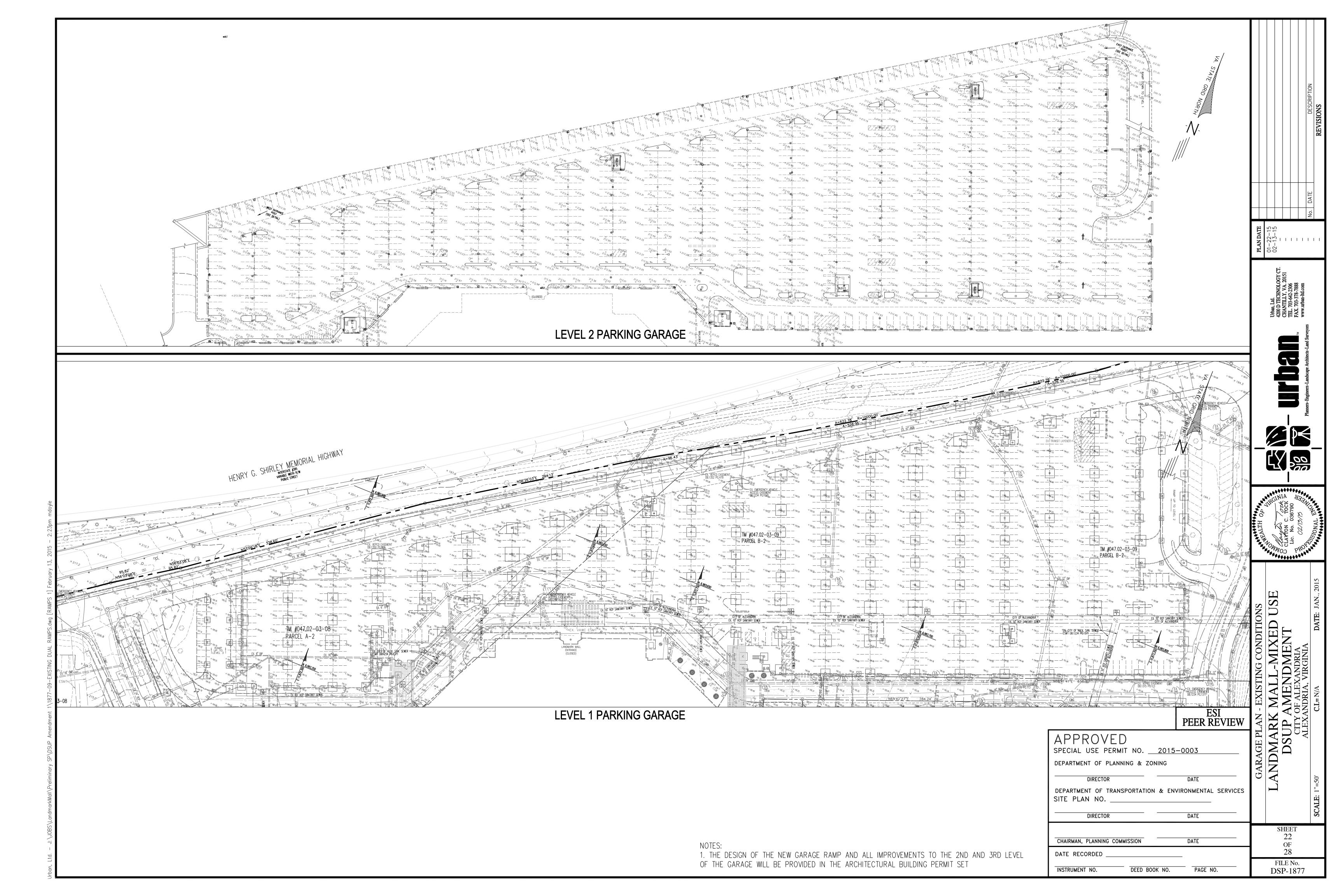


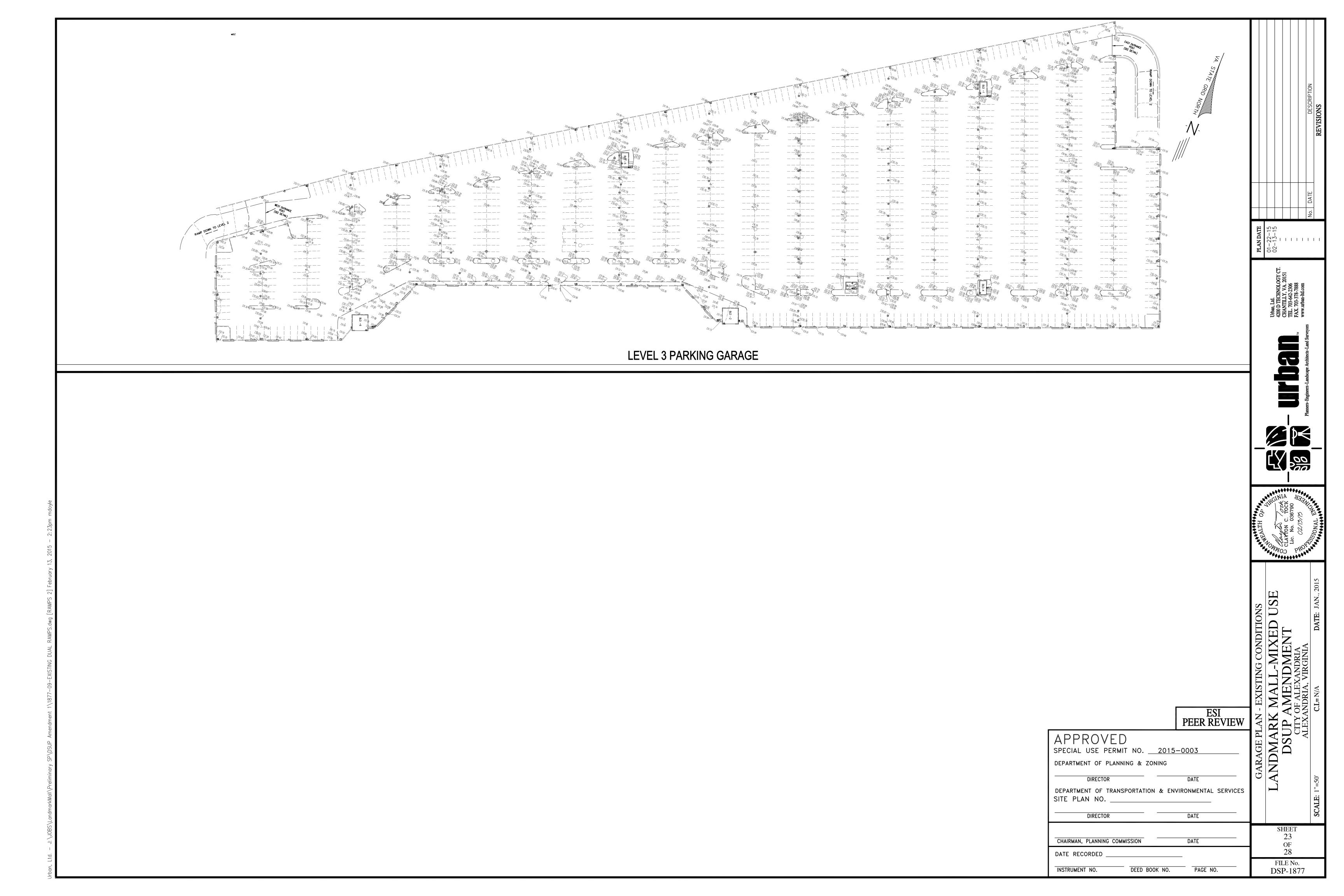


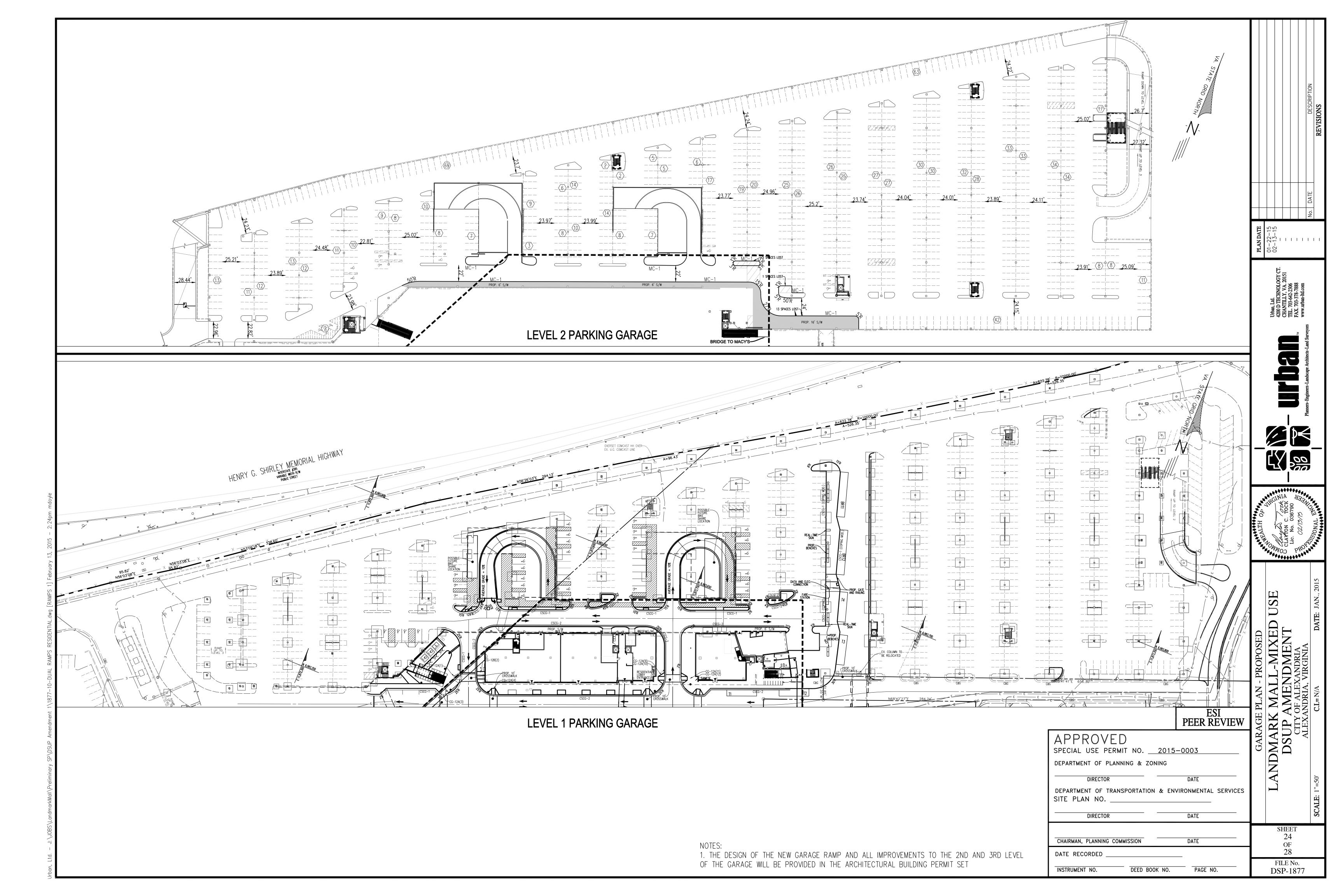


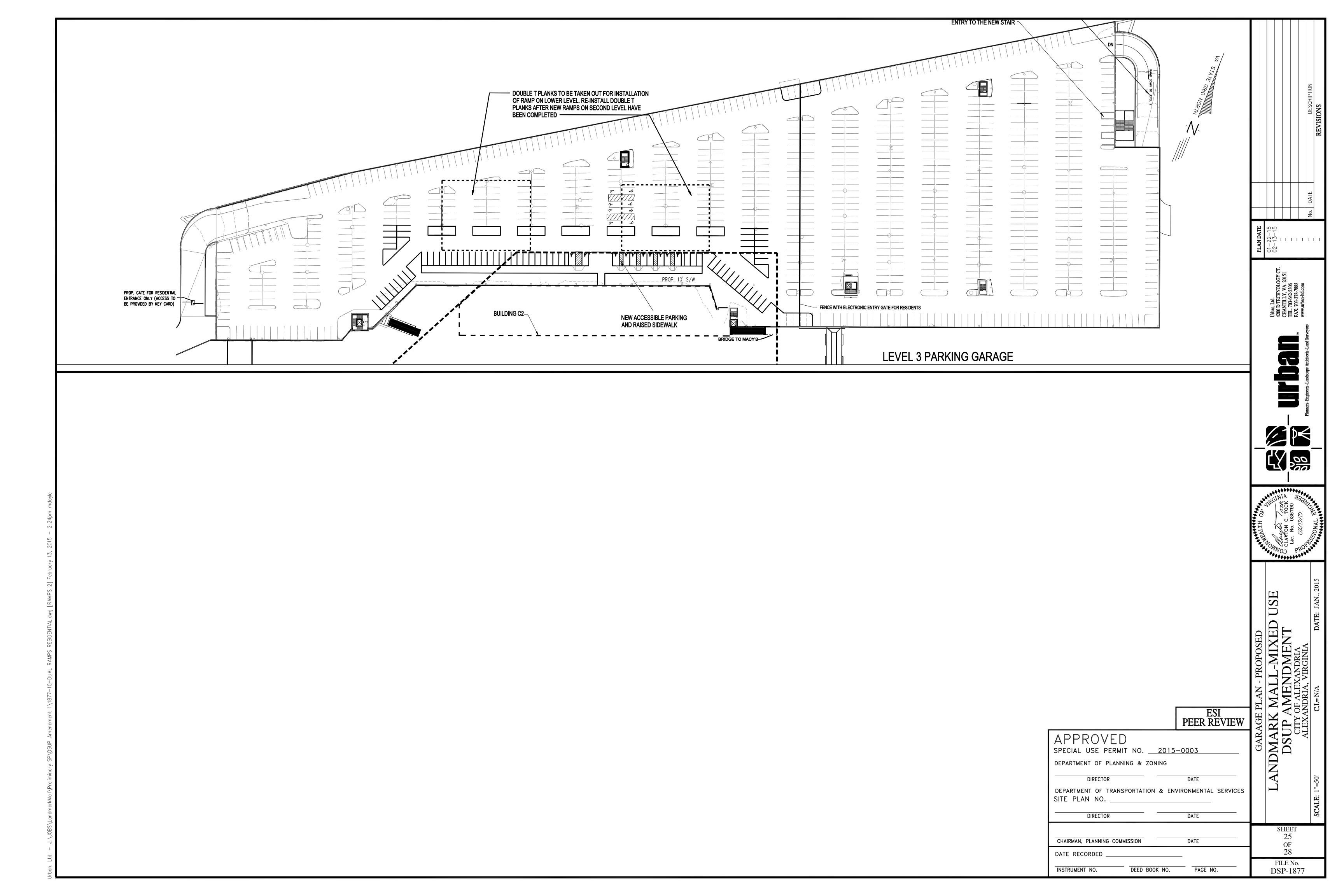


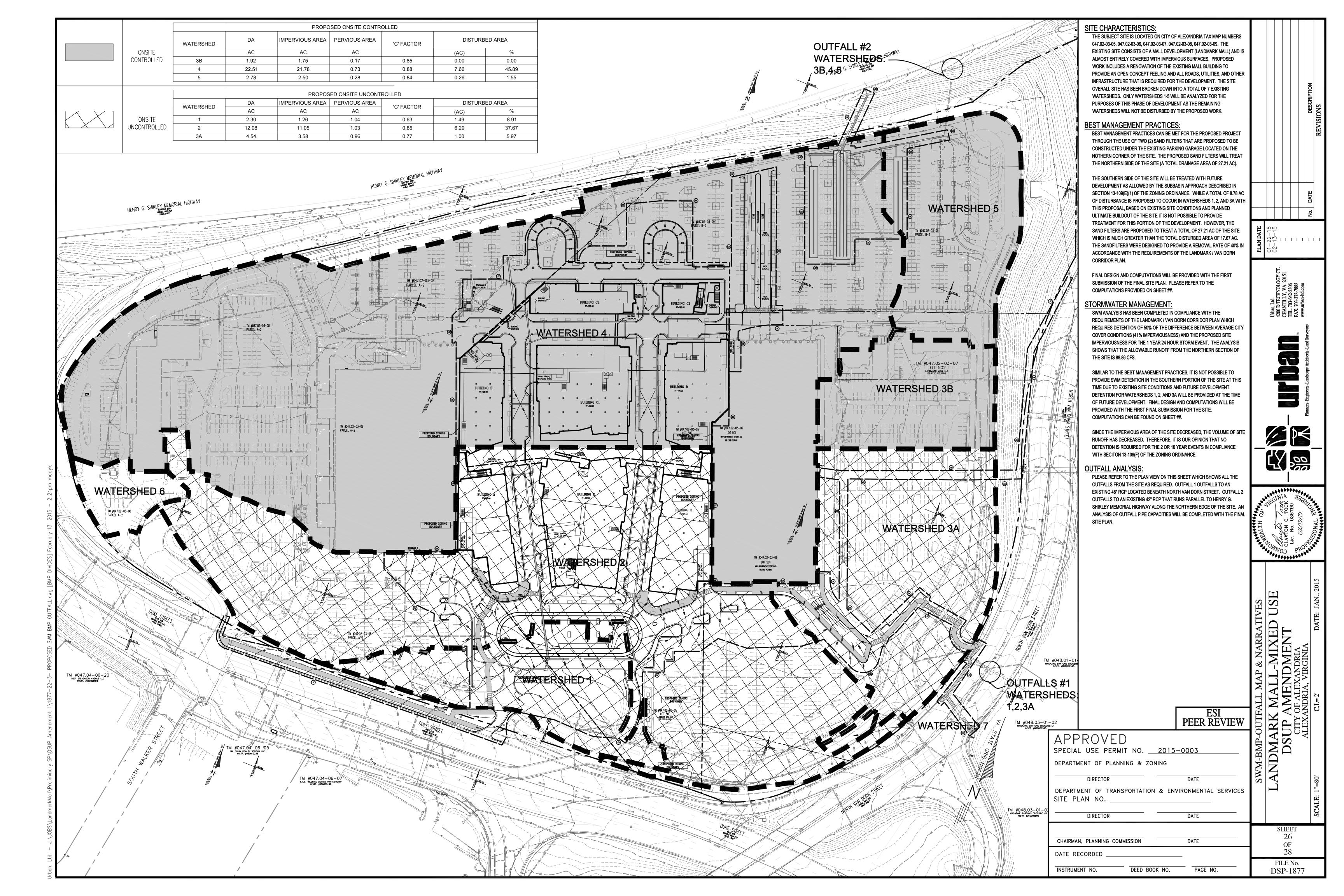












	PER	LANDMA	ARK VAN	N DORN SMALL AREA PLAN				
WORKSHE	ET A: NEW D	EVELOPME	NT (LANDM	MARK MALL - FULL SITE)				
Compile site-specific data and determine site imperviousness (Isite).								
POST-DEVELOPMENT								
Α	Site	=	14.79	acres				

14.10

SIDEWALK = acres Rwatershed is embedded in the formula in Step 4.

Rv-post =

Rv-post = 0.91

0.05+0.009 (Isite)

Total la 14.10 acres

acres

(Total la/A) x 100 (percent expressed in whole numbers)

Determine need to continue.

STRUCTURES

PARKING LOT =

CONTINUE - I site > I watershed

3. Select C-values (Cpre and Cpost)

0.26 mg/l when I < 20 mg/I when I ≥ 20

1.08

Since Iwatershed is > 20%, Cpre = 1.08 mg/l

3.69 x A = 54.5751 pounds per year

WORKSHEET A: NEW DEVELOPMENT (LANDMARK MALL - FULL SITE)

5. Calculate the pollutant removal requirement (RR).

Calculate the pre-development load (Lpre).

= 8.16 x Rv x C x A = 118.35 pounds per year

. Calculate the pollutant removal requirement (RR).

= Lpost - Lpre

63.78 pounds per year

To determine the overall BMP efficiency required (%RR) when selecting BMP options:

= RR/Lpost x 100

53.89 %

WORKSHEET C: NEW DEVELOPMENT (LANDMARK MALL - WATERSHED 4A)

Select BMP options using screening tools and list them below. Then calculate the load removal for each option. DO NOT LIST BMPs IN SERIES HERE.

Fraction of CBPA

		Removal*		ge Area				
	Selected Option	Efficiency x	(expressed	ved I in decimal m)	x	Lpost =	Load R	emoved
		(100%)	101	111)		(lbs/yr)	(lbs	s/yr)
	Sand Filter	0.6	0.8	398		118.35	63	.78
Ī					Total Load I	Removed =	63	.78
Ī					Removal	Required =	63	.78
				То	tal Load Re	moved % =	53	.89
					Removal Re	equired % =	53	.89
					SI	TE AREA =	14.	.79
				SITE AREA	REQ. TRE	ATMENT =	48	.40
					IMPERVIOL	JS AREA =	14	.10
			IMPERV	IOUS AREA	REQ. TRE	ATMENT =	12	.66
Ī								
		WQV =	1816	х	la	=	WQV	

WQV = 1816 x 12.66 = 22997 CF

### BMP ANALYSIS - SANDFILTER #2 (WATERSHEDS 3B, 4B, 5)

PER LANDMARK VAN DORN SMALL AREA PLAN WORKSHEET A: NEW DEVELOPMENT (LANDMARK MALL - WATERSHEDS 3B, 4B, 5) Compile site-specific data and determine site imperviousness (Isite). POST-DEVELOPMENT 12.42 acres la STRUCTURES = Rv-post = 0.05+0.009 (Isite)11.93 Rv-post = 0.91PARKING LOT = acres SIDEWALK = acres Rwatershed is embedded in the formula in Step 4. Total la 11.93 acres (Total la/A) x 100 (percent expressed in whole numbers) 2. Determine need to continue.

Select C-values (Cpre and Cpost)

0.26 mg/l when I < 20 1.08 mg/l when I ≥ 20

Since Iwatershed is > 20%, Cpre = 1.08 mg/l

CONTINUE - I site > I watershed

1.08

. Calculate the pre-development load (Lpre).

3.69 x A

45.8298 pounds per year

WORKSHEET A: NEW DEVELOPMENT (LANDMARK MALL - FULL SITE)

. Calculate the pollutant removal requirement (RR).

8.16 x Rv x C x A

100.10 pounds per year

. Calculate the pollutant removal requirement (RR).

= Lpost - Lpre

54.27 pounds per year

To determine the overall BMP efficiency required (%RR) when selecting BMP options:

= RR/Lpost x 100

WORKSHEET C: NEW DEVELOPMENT (LANDMARK MALL - WATERSHEDS 3B,4, 5)

Select BMP options using screening tools and list them below. Then calculate the load removal for each option. DO NOT LIST BMPs IN SERIES HERE.

	Load Removed (lbs/yr) 54.27
Selected Option    Compared to the content of the c	(lbs/yr)
form) (lbs/yr)	
(100%) (lbs/yr)	
Sand Filter 0.6 0.904 100.10	54.27
Total Load Removed =	54.27
Removal Required =	54.27
Total Load Removed % =	54.21
Removal Required % =	54.21
SITE AREA =	12.42
SITE AREA REQ. TREATMENT =	48.99
IMPERVIOUS AREA =	11.93
IMPERVIOUS AREA REQ. TREATMENT =	10.78
WQV = 1816 x la = \	WQV
WQV = 1816 x 10.78 = 1	19576 CF

NOTE: BMP TREATMENT FOR WATERSHEDS 1, 2, AND 3A WILL BE PROVIDED WITH FUTURE DEVELOPMENT IN COMPLIANCE WITH THE WATERSHED APPROACH AS DETAILED IN SECTION 13-109(E)(1) OF THE ZONING ORDINANCE.

#### 1 YEAR STORM - SWM ANALYSIS PER LANDMARK VAN DORN SMALL AREA PLAN

SWM CALCULATIONS: OUTFALL #1: WATERSHEDS 1,2,3A 1. SITE DESCRIPTION LOCATION (WATERSHED): **HOLMES RUN** TOTAL SITE AREA = 18.92 AC 5.00 MINUTES TIME OF CONCENTRATION (Tc) = **RAINFALL INTENSITY:** 1 YEAR = 4.60 IN/HR 2. PRE-DEVELOPMENT ONSITE RUNOFF: AREA = 18.92 AC IMPERVIOUS AREA = 11.82 AC C FACTOR = 0.68 Q1 (C\*I2\*A) =58.74 CFS 3. POST-DEVELOPMENT ONSITE RUNOFF: AREA = 18.92 AC IMPERVIOUS AREA = 15.89 AC C FACTOR = 0.80 Q1 (C\*I2\*A) =69.96 CFS 4. SITE RUNOFF RATE REDUCTION: Q(REDUCTION) = Q(PRE) - Q(ONSITE) Q1 REDUCTION = -19.11% -11.23 CFS SWM DETENTION IS REQUIRED TO REDUCE THE RUNOFF FROM THE PROPOSED SITE WATERSHED APPROACH DETAILED IN SECTION 13-109(E)(1) OF THE ZONING ORDINANCE. SWM CALCULATIONS:

THIS DETENTION WILL BE PROVIDED WITH FUTURE DEVELOPMENT IN ACCORDANCE WITH THE

OUTFALL #2: WATERSHEDS 3B, 4, 5 1. SITE DESCRIPTION:

> LOCATION (WATERSHED): HOLMES RUN TOTAL SITE AREA = 27.21 AC TIME OF CONCENTRATION (Tc) = 5.00 MINUTES

**RAINFALL INTENSITY:** 1 YEAR =

2. PRE-DEVELOPMENT ONSITE RUNOFF:

27.21 AC AREA = IMPERVIOUS AREA = 18.59 AC C FACTOR = 0.71 Q1 (C\*I1\*A) =88.86 CFS

4.60 IN/HR

3. POST-DEVELOPMENT ONSITE RUNOFF:

AREA = 27.21 AC IMPERVIOUS AREA = 26.03 AC C FACTOR = 0.87 109.38 CFS Q1 (C\*I1\*A) =

4. SITE RUNOFF RATE REDUCTION:

Q(REDUCTION) = Q(PRE) - Q(ONSITE)

Q1 REDUCTION = -20.52 CFS -23.09%

SWM DETENTION IS REQUIRED TO REDUCE THE RUNOFF FROM THE PROPOSED SITE THIS DETENTION IS BEING PROPSED WITH THIS DEVELOPMENT

SWM CALCULATIONS:

OVERALL SITE: ALL WATERSHEDS

1. SITE DESCRIPTION:

HOLMES RUN LOCATION (WATERSHED): TOTAL SITE AREA = 46.13 AC TIME OF CONCENTRATION (Tc) = 5.00 MINUTES

> **RAINFALL INTENSITY:** 1 YEAR = 4.60 IN/HR

2. PRE-DEVELOPMENT ONSITE RUNOFF:

46.13 AC IMPERVIOUS AREA = 30.41 AC 0.70 C FACTOR =

Q1 (C\*I1\*A) =

147.60 CFS

3. POST-DEVELOPMENT ONSITE RUNOFF:

46.13 AC IMPERVIOUS AREA = 41.92 AC C FACTOR = 0.85 Q1 (C\*I1\*A) =179.35 CFS

4. SITE RUNOFF RATE REDUCTION:

Q(REDUCTION) = Q(PRE) - Q(ONSITE)Q1 REDUCTION = -31.75 CFS -21.51%

SWM DETENTION IS REQUIRED TO REDUCE THE RUNOFF FROM THE PROPOSED SITE

## 2 & 10 YEAR STORM - SWM ANALYSIS

PER ZONING ORDINANCE SECTION 13-109-F SWM CALCULATIONS: OVERALL SITE 1. SITE DESCRIPTION: LOCATION (WATERSHED): HOLMES RUN TOTAL SITE AREA = 46.13 AC 5.00 MINUTES TIME OF CONCENTRATION (Tc) = RAINFALL INTENSITY 6.20 IN/HR 2 YEAR = 9.00 IN/HR 10 YEAR = 2. PRE-DEVELOPMENT ONSITE RUNOFF: 46.13 AC AREA = IMPERVIOUS AREA = 42.74 AC C FACTOR = 0.86 Q2 (C\*I2\*A) =244.79 CFS 355.34 CFS Q10 (C\*I10\*A) = 3. POST-DEVELOPMENT ONSITE RUNOFF: 46.13 AC AREA = IMPERVIOUS AREA = 41.92 AC C FACTOR = 0.85 241.73 CFS Q2 (C\*I2\*A) =Q10 (C\*I10\*A) =350.89 CFS

3.06 CFS

4.44 CFS

In addition to BMP worksheets found in the BMP handbook that required to be included for the project, the following tables must also be included and submitted in the final plans.

Q(REDUCTION) = Q(PRE) - Q(ONSITE)

Q2 REDUCTION =

Q10 REDUCTION =

NO DETENTION IS REQUIRED AS THE SITE RUNOFF IS NOT INCREASED DUE TO

SITE DEVELOPMENT

Project Description

Dedevelopment

4. SITE RUNOFF RATE REDUCTION:

Development or Redevelopm	епі		
Drainage Area	Impervious	Pervious	Total
Site Area	26.03	1.18	27.2
On-Site Treated	23.44	0.26	25.7
Off-Site Treated	0	0	0
Total Treated	23.44	0.26	25.7
On-Site Impervious Areas Disconnected by a Vegetated Buffer			
Total Treated or Disconnected			25.7

#### Water Treatment on site

BMP Type	Area treated by BMP (acres)	Impervious area treated by BMP (acres)	BMP efficiency (%)
SAND FILTER 1	13.28	12.66	60
SAND FILTER 2	12.42	10.78	60
TOTAL	25.70	23.44	60

Detention on site:

INSTRUMENT NO.

Project is within which watershed? HOLMES RUN Project discharges to which body of water? HOLMES RUN

PEER REVIEW

APPROVED SPECIAL USE PERMIT NO. 2015-0003 DEPARTMENT OF PLANNING & ZONING DIRECTOR DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES SITE PLAN NO. \_\_\_\_\_ DIRECTOR CHAIRMAN, PLANNING COMMISSION DATE RECORDED \_\_\_\_

DEED BOOK NO. PAGE NO.

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1.25%

1.25%







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FILE No. DSP-1877

