#### LEGAL DESCRIPTION

LOT 4 OF THE FINAL PLAT OF OAKVIEW -LOTS 1-5, A REPLAT OF LOT 2, "MINOR PLAT, POLYTAINERS ADDITION, LOTS 1 AND 2" AND PART OF NE DOUGLAS STREET ALL IN THE NE 1/4 OF SEC. 31-48-31 IN THE CITY OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

#### FLOOD NOTE

THIS PROPERTY DOES NOT LIE WITHIN A FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP 29095C0409G. DATED 1/20/2017

#### OIL AND GAS WELL NOTE

THERE WAS NO OIL OR GAS WELLS LOCATED ON PROPERTY PER MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL AND GAS PERMITS WEBSITE.

#### UTILITIES AND PUBLIC AGENCIES

CITY OF LEE'S SUMMIT PUBLIC WORKS	Dena Mezger	(816) 969-1800
WATER UTILITIES	Mark Schaufler	(816) 969-1900
ELECTRIC EVERGY	Ron Dejarnette	(816) 347-4316
GAS SPIRE	Brent Jones	(816) 399-9633
TELEPHONE AT&T	Marty Loper Mark Manion	(816) 275-1550 (816) 325-6516
CABLE COMCAST	Barbara Brown	(816) 795-2255

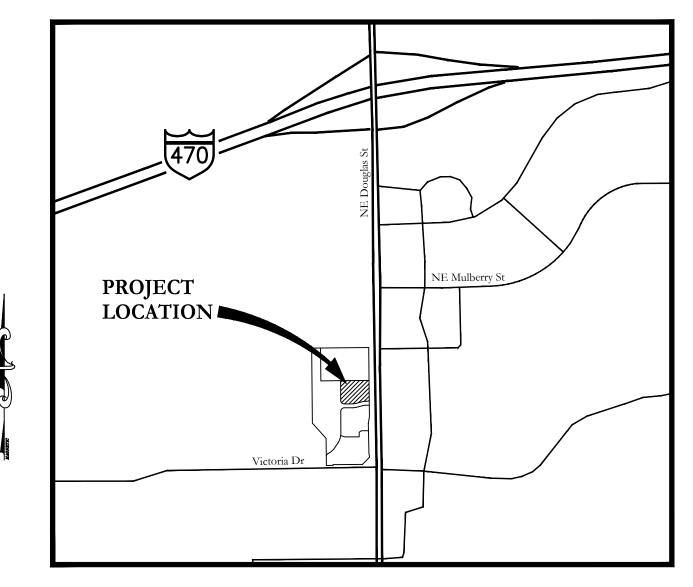


#### NOTE:

Contractor shall be responsible for determining the exact locations of all underground utilities or appurtenances prior to commencing construction. Existing underground utilities shown on the drawings are for reference only, and their accuracy and completeness are not guaranteed. Contractor shall be responsible for repair or replacement of all underground utilities damaged during construction.

# **OAKVIEW - LOT 4** FINAL DEVELOPMENT PLANS

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI NE 1/4 OF SEC. 31-48-31



LOCATION MAP

CONTACTS

#### ENGINEERING

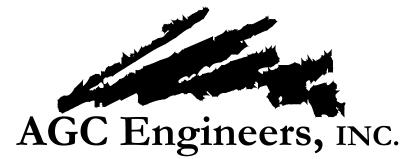
Engineering Alternate 781-4200 Ronald L. Cowger, PE

Engineering Primary Art Akin, PE

#### DEVELOPER

STAR ACQUISITIONS AND DEVELOPMENT, LLC TIM HARRIS 244 W. MILL STREET, SUITE 101 LIBERTY, MISSOURI, 64068 (816) 781.3322

781-4200



405 S. Leonard St., Suite D Liberty, Missouri 64068 www.agcengineers.com 816.781.4200 ■ fax 792.3666

# BY REVISION BY REVISION RC/ACA REVISED PER CITY COMMENTS 3-30-21 RC/ACA PER CITY COMMENTS RC/ACA FOR REVIEW

#### STATUS

- **FOR PERMIT**
- **FOR CONSTRUCTION**
- PLANS CONFORMING TO CONSTRUCTION RECORDS

## PRCOM20204934

SHEET INDEX					
SHEET NUMBER	SHEET TITLE				
1	COVER				
2	<b>GENERAL NOTES &amp; LEGEND</b>				
3	EXISTING CONDITIONS				
4	SITE PLAN				
5	<b>GRADING &amp; EROSION CONTROL PLAN</b>				
6	GRADING PLAN - CUT & FILL				
7	RETAINING WALL DETAILS				
8	UTILITY PLAN				
9	SPOT ELEVATION PLAN				
10	DRAINAGE AREA MAP & CALCS				
11	STORM PLAN & PROFILE				
12	DETAILS				
13	DETAILS				
14	DETAILS				
15	DETAILS				
L100	LANDSCAPE PLAN				
	LIGHTING PLAN				

SEE ADDITIONAL PLANS PREPARED BY SCHARHAG ARCHITECTS.

McLAUGHLIN MUELLER, INC. HAS SOLE RESPONSIBILITY FOR SHEET 3, VSR DESIGN HAS SOLE RESPONSIBILITY FOR SHEET L100 AND PREMIER LIGHTING AND CONTROLS HAS SOLE RESPONSIBILITY FOR THE LIGHTING PLAN.

> RELEASED FOR CONSTRUCTION As Noted on Plans Review

Development Services Department Lee's Summit, Missouri 11/22/2021

#### **ENGINEER'S CERTIFICATION:**

I hereby certify that this project has been designed, and these plans prepared, to meet or exceed the design criteria of City of Lee's Summit, Missouri, in current usage, except as indicated below.

DATE:

4-6-21

\_\_\_\_\_

DATE
4-6-21
3-22-21
12-23-20

1. 0.2' fall through storm structure #10 and #12

2.	
3.	
4	
-7.	

I have not been retained to coordinate as-built drawings for this project.



Ronald L. Cowger, PE AGC Engineers, Inc.

Exceptions:

#### GENERAL PROJECT NOTES:

All required permits

- 1. The Contractor shall, at a minimum, have the following document(s) at the job site at all times: Signed approved plans, **Contract Documents and Project Specifications,** Standard Specifications (Kansas City Metro Chapter-APWA) Storm Water Pollution Plan (SWPPP)
- 2. The Contractor shall reference the City of Lee's Summit Design Criteria, Standard Specifications, Standard Details, Approved Products Lists found at the following website https://cityofls.net/development-services/design/design-criteria/design-construction
- -manual-infrastructure
- 3. This Project shall be constructed in accordance with these Plans, City of Lee's Summit criteria and specifications (listed above), and their absence the Kansas City Metro Chapter of American Public Works Association (most current version) "APWA"
- 4. All work required to complete the project and that is not specifically itemized in the Contractor's proposal shall be considered subsidiary to other work itemized in the proposal.
- 5. All materials and workmanship associated with this project shall be subject to inspection by the City of Lee's Summit and the Owner. The City and/or Owner reserves the right to accept or reject any such materials and workmanship that does not conform to the Standards and Technical Specifications.
- 6. RESERVED
- 7 The Contractor shall notify the Engineer immediately of any discrepancies in the Plans.
- 8. By use of these Plans the Contractor agrees that he shall be solely responsible for the safety and protection of the construction workers and the public.
- 9. Contractor is to obtain the necessary permits for all construction activities.
- 10. Contractor shall be responsible for determining the exact locations of all underground utilities or appurtenances prior to commencing construction. Existing underground utilities shown on the drawings are for reference only, and their accuracy and completeness are not guaranteed. Contractor shall be responsible for repair or replacement of all underground utilities damaged during construction.
- 11. RESERVED
- 12. It shall be the responsibility of the Contractor to control erosion and siltation during all phases of construction.
- 13. Any sidewalk, curb & gutter or pavement disturbed, damaged or destroyed during construction shall be replaced by Contractor at no additional cost to Owner.
- 14. Modified curb shall be used at all locations where pavement drains away from curb.
- 15. The Contractor shall contact the City's Development Service Engineering Inspectors 48 hours prior to any land disturbance work at (816) 969-1200.
- 16. Contractor shall be responsible to install pavement joints on all concrete pavement, slabs, and / or sidewalk. At a minimum, an expansion joint shall be provided along all interfaces of
  - 1. Building to sidewalk
  - 2. Building to concrete pavement
- 3. Sidewalk to concrete pavement Contractor shall submit a joint plan to the Engineer for review.

#### **GRADING NOTES:**

- 1. Erosion protection shall be in place prior to any land disturbance.
- 2. Contours shown are to finished grade.
- 3. The construction area shall be cleared, grubbed, and stripped of topsoil and organic matter from all areas. Excess topsoil shall be stockpiled separately from compactable material. Stripping existing topsoil and organic matter shall be to a minimum depth of six (6) inches.
- 4. Areas to receive fill shall be striped of top soil and other organic material, scarified, and the top eight (8) inch depth compacted to 98% standard proctor density prior to the placement of any fill material. Any unsuitable areas shall be undercut and replaced with suitable material before any fill material can be placed.
- 5. Fill material shall be made in lifts not to exceed nine (9) inches depth compacted to 98% standard proctor density (per ASTM D-698) with a moisture content -3% and +2% optimum moisture. Contractor shall provide (at his/her sole cost) an independent geotechnical report certifying compaction at a sample interval of one (1) sample per 5000 square feet per lift or more frequent if required/recommended by the geotechnical firm. Geotechnical firm shall be approved by Owner prior to beginning fill operations. Fill material may include rock from on-site excavation if carefully placed so that large stones are well disturbed and voids are completely filled with smaller stones, earth, sand or gravel to furnish a solid embankment. No rock larger than three (3) inches in any dimension nor any shale shall be placed in the top 12 inches of embankment.
- 6. In all areas of excavation, if unsuitable soil conditions are encountered, a qualified Geotechnical engineer shall recommend to the Owner on the methods of undercutting and replacement of property compacted, approved fill material.
- 7. All slopes are to be 3:1 or flatter unless otherwise indicated.

- additional cost to the Owner prior to final acceptance of the project.
- specifications adopted by the reviewing governing agency and good engineering practices.

#### **EROSION CONTROL NOTES:**

- 1. property and/or into jurisdictional waters/waterways.
- 3. Stockpile excavation materials away from existing channels and grade to drain to adequate erosion control measures.
- All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Kansas City 5. standards.
- 6. the Contractor's responsibility and shall be included in the bid for the proposed work.
- iurisdictional waters/waterways.
- Missouri DNR has been established.
- 9. Concrete Washout Areas will be determined onsite by the Job Superintendent.
- conditions City of Lee's Summit Land Disturbance Permit.
- 11. Permanent fertilizing, seeding (Type "A") and mulch shall be in accordance with Kansas City Metro Chapter of American Public Works Association. Final acceptance per MoDOT Sections 805.4
- 12. The Contractor shall install Erosion Control Blanket (ECB) on all slopes with 3:1 slope or greater. ECB shall be Landlok CS2 or approved equal.
- 13. Provide temporary silt fencing at all pipe entrances until all site seeding and sodding has been established. Maintain as necessary.
- 14. Immediately remove sediments or other materials tracked onto public roadways.
- 15. Provide and maintain stabilized roadway construction entrance (or entrances as may be required).
- 16. Coordinate site grading with existing and proposed utilities.
- 17. Stock pile waste excavation materials away from existing channels and grade to drain.
- engineering practices.
- included in the bid for the proposed work.

#### WATER NOTES:

- 1. Reference MEP Plans to confirm fire protection main size, domestic water and meter sizes. If a discrepancy exists between the Plans contact the Engineer prior to ordering material.
- 2. Domestic water shall be 1-inch "k" copper conforming to the latest federal specifications or cross-linked polyethylene (PEX) meeting current City Code.
- 3. Minimum cover for water lines shall be 42 inches.
- 4. Install fittings as required. maximum pipe deflection per manufacturers recommendations.
- 5. Install 1-inch water meter at property line (on private property side).
- 6. All water service installation, including back-flow devices, are subject to field verification and approval by City inspector.

#### **REFERENCE DOCUMENTS & DRAWINGS:**

Contractor shall reference the following documents prior to beginning Work 1. Architectural Plans (including but not limited to MEP and Structural Plans) 2. Landlord Work Order list from Star Acquisitions and Development, LLC

BY	REVISION	DATE	
RC/ACA	PER CITY COMMENTS	3-22-21	
RC/ACA	FOR REVIEW	12-23-20	

8. All slopes and areas disturbed by construction shall be graded smooth and a minimum four (4) inches of topsoil applied. If adequate topsoil is not available on-site, the Contractor shall provide topsoil, approved by the Owner, as needed. Any areas disturbed for any reason shall be corrected by the Contractor at no

9. All disturbed areas shall be seeded, fertilized and mulched or sodded in accordance with the standards and

Control of sediment is a very dynamic (ever changing) process. These plans are provided as a basis of anticipated erosion control measures. The Contractor shall modified add or delete with the Owner's permission the erosion control measure shown to prevent the migration of sediment off of the Owner's

2. Any sediment deposited on public streets shall be removed immediately by Contractor at his sole expense.

4. Remove silt build up in temporary sediment basins (if applicable), inlet protection devices and/or silt fence until site is completely stabilized. Verify grade prior to final seeding, lining or rip-rap installation.

Metro Chapter of American Public Works Association. Seeding/Sodding shall be completed within 14 days after completing the work, in any area. If this is outside of the recommended seeding period, erosion control measures or other similarly effective measure shall remain and be maintained by Contractor until such time that the areas can be seeded and a stand of grass established per Missouri DNR or MoDOT Section 805.4

When sediment deposits reach approximately one-half the height of the BMP, the sediment shall be removed or a second BMP shall be installed. All costs associated with this work, including related incidents, shall be

7. Contractor shall perform BMP inspection once a week and after each rainfall event, and provide Owner a copy of report within 48 hrs. Faulty or inadequate erosion control measures shall be remediated or modified the same day of inspection so as to minimize the risk of sediment discharge from the Owner's property or

8. Contractor shall protect and maintain erosion control measures until a complete stand of grass as defined by

10. At a minimum the following permits/approvals shall be posted on site or as required by the permit terms and

18. Remove silt build up in basin and verify grade prior to final seeding, lining or rip-rap installation and clean up.

19. All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Standards and Specifications adopted by the City of Lee's Summit, MoDOT, MoDNR or other governing agency and good

20. Silt fences, whether straw bales or filter fabric, require maintenance to preserve their effectiveness. All silt fences shall be inspected immediately after each heavy rainstorm and at least daily during prolonged rainfall. Any required repairs shall be made immediately. When sediment deposits reach approximately one-half the height of the silt fence, the sediment shall be removed or a second silt fence shall be installed. All costs associated with this work, including related incidentals, shall be the contractor's responsibility and shall be

#### **STORM NOTES:**

- 1. All HDPE pipe shall be Water-Tight
- 2. All High Density Polyethylene (HDPE) pipe shall conform to AASHTO M294 Type S. Acceptable pipe must come from a Plastic Pipe Institute (PPI) certified manufacturer and have passed the PPI 3rd Party Certification testing. Each individual section of pipe shall be marked in accordance with AASHTO M294 and shall be affixed with the PPI Certification label. HDPE pipe shall be joined with water tight joints meeting the requirements of AASHTO M294 Paragraph 7.9.3.
- 3. Pipe lengths are from inside face to inside face.
- 4. End sections for HDPE pipe shall be metal with concrete toe wall unless noted otherwise.

#### ELECTRIC:

- 1. Contractor to coordinate with Evergy Electric for electrical service.
- 2. Contractor to coordinate with Evergy Electric for location of transformer pad and transformer if required.

#### GAS:

1. Contractor to coordinate with Spire for gas service, and location of meter.

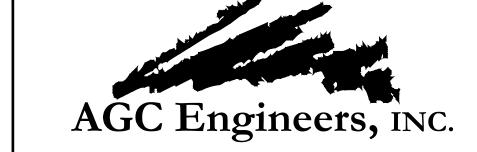
#### **TELEPHONE:**

1. Site contractor to install PVC conduit(s) for use by telephone company. Site contractor to coordinate with telephone company for installation of service and location of proposed pedestals, etc. Telephone conduit shall have a minimum cover of 30". Site contractor shall coordinate location with telephone company representative and locate PVC crossings as necessary. See building plans for entrance locations.

#### LEGEND

#### EXISTING

۲	SET MONUMENT AS NOTED STAMPED LS 1999141096	
$\bigcirc$	FOUND 1/2" REBAR LS 1989	SAN
0	FOUND MONUMENT AS NOTED	541
(M)	MEASURED DISTANCE	
$\bigcirc$	CONTROL POINT	
(	DOWN GUY	
	FIRE HYDRANT	
- <b>\</b> -	LIGHT POLE	
`@ <sup>₽₽</sup>	POWER POLE	
0	POST	
•	MANHOLE	WN
$\otimes$	WATER VALVE	0
B/L	BUILDING LINE	
D/E	DRAINAGE EASEMENT	C C
-OHP-	AERIAL UTILITY	
S/E	SANITARY SEWER EASEMENT	G
U/E	UTILITY EASEMENT	
-UGG-	UNDERGROUND GAS	
-UGP-	UNDERGROUND POWER	ى OO
-UGT-	UNDERGROUND TELEPHONE	
-UGW-	UNDERGROUND WATER	(13



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#### SANITARY NOTES:

- 1. All sanitary stub lines shall be laid on 2.00% grade unless approved otherwise.
- 2. The Contractor shall install and properly maintain a mechanical plug at all connection points with existing lines until such time that the new line is tested and approved.
- 3. Where sanitary sewer lines are to be installed over and across water lines, a minimum of 24 inches of clearance shall be provided. Where clearance is not provided, construct sanitary sewer line of ductile iron pipe for a distance of at least 10 feet in each direction from crossing, with no joint within 6 feet of crossing.
- 4. Performance testing in accordance with APWA Section 2508. Witness and acceptance by City is required before placing in service.
- 5. All service lines shall be PVC (SDR 26) conforming to ASTM D 1764 and F1336 and having a cell classification of 12454B or 12364B as defined in ASTM D 1784 with Push-On joints.
- 6. All pre-cast manholes shall meet or exceed standards and specifications as set forth in ASTM C-478.
- 7. All PVC pipe shall meet or exceed standards and specifications as set forth in ASTM D-3034.
- 8. All proposed and existing street crossings shall be tamped granular backfill (Type 3) from the bottom of the trench to a point that is 15" below the finished grade of the street. All existing street crossings shall be filled with flowable fill per detail STR-011.
- 9. Mandrel testing is required and shall be performed in accordance with APWA 2508.5, at a minimum of 30 days after installation.
- 10. All inspection of sanitary sewer construction shall be performed by the City of Lee's
- 11. It is the responsibility of the contractor to have sanitary sewer lines air tested and sanitary sewer manholes vacuum tested for new construction and modifications to existing. Contractor shall provide city with test results upon completion of construction.
- 12. Areas with less than three (3) feet of depth from existing grade to proposed top of pipe shall be filled to an elevation of three (3) feet above the proposed top of pipe, compacted to 95% density +/-2% prior to trenching or laying of any pipe.
- 13. Sanitary sewer piping material shall be as follows:

0 to 15' depth; SDR-35 PVC 15' to 22' depth; SDR-26 PVC 22' to 30' depth; SDR-21 PVC greater than 30' depth; D.I.P.

6" service laterals; SDR-35 PVC at 2.0% minimum

- 14. All manholes, catch basins, utility valves, and meter pits shall be adjusted or rebuilt to grade as required.
- 15. Service lines shall be extended a minimum of 1 foot past the house side of all utility easements.
- 16. Insert Tee's or Saddles for service lines are not allowed except in special cases with prior City approval and City observation of installation.

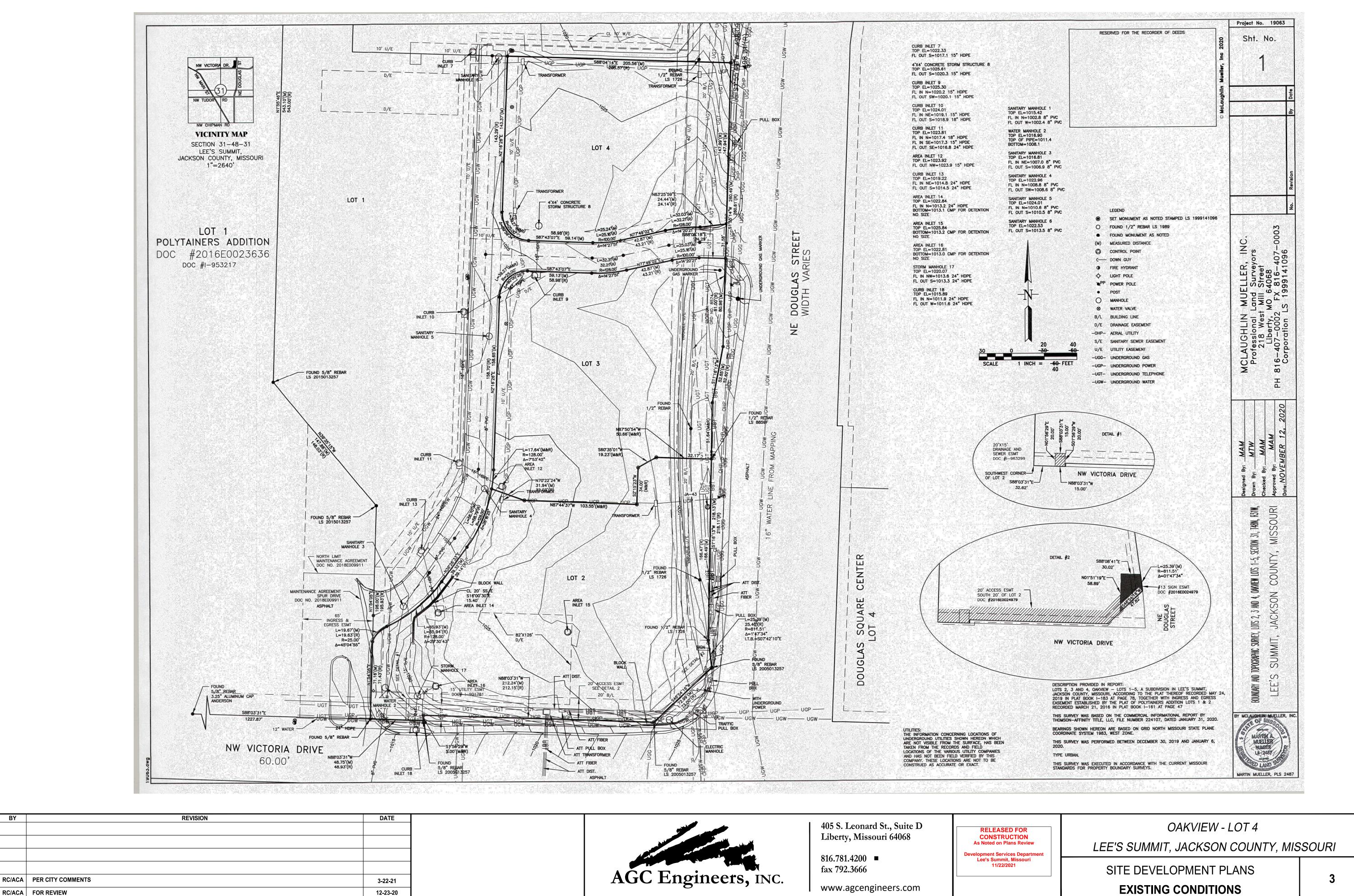
#### PROPOSED

	SANITARY STRUCTURE	D/E	DRAINAGE EASEMENT
		GM	GAS METER
AN	SANITARY SEWER	WM	WATER METER
		E/E	ELECTRIC EASEMENT
	STORM STRUCTURE	U/E	UTILITY EASEMENT
		B/L	BUILDING LINE SETBACK
		МН	MANHOLE
	STORM SEWER	R	RADIUS OR RAMP (as it relates to sidewalks)
		L	LANDING (as it relates to sidewalks)
V	WATERLINE	S/W or SW	SIDEWALK
		AC	AIR CONDITIONER
M		MEP	MECHANICAL, ELECTRICAL & PLUMBING
	WATER METER	WSD	WATER SERVICES DEPARTMENT
		D.S.	DOWN SPOUT
		ТС	TOP OF CURB
	WATER VALVE	G	GROUND
		Р	PAVEMENT
		LP	LOW POINT
G	GAS LINE	HP	HIGH POINT
	CLEANOUT		
0			
3	PARKING COUNT		
80 ———	CONTOUR		
-	LIGHT POLE (SITE PARKING)		
			RELEASED FOR
			CONSTRUCTION
			As Noted on Plans Review
			Development Services Department Lee's Summit, Missouri
			11/22/2021

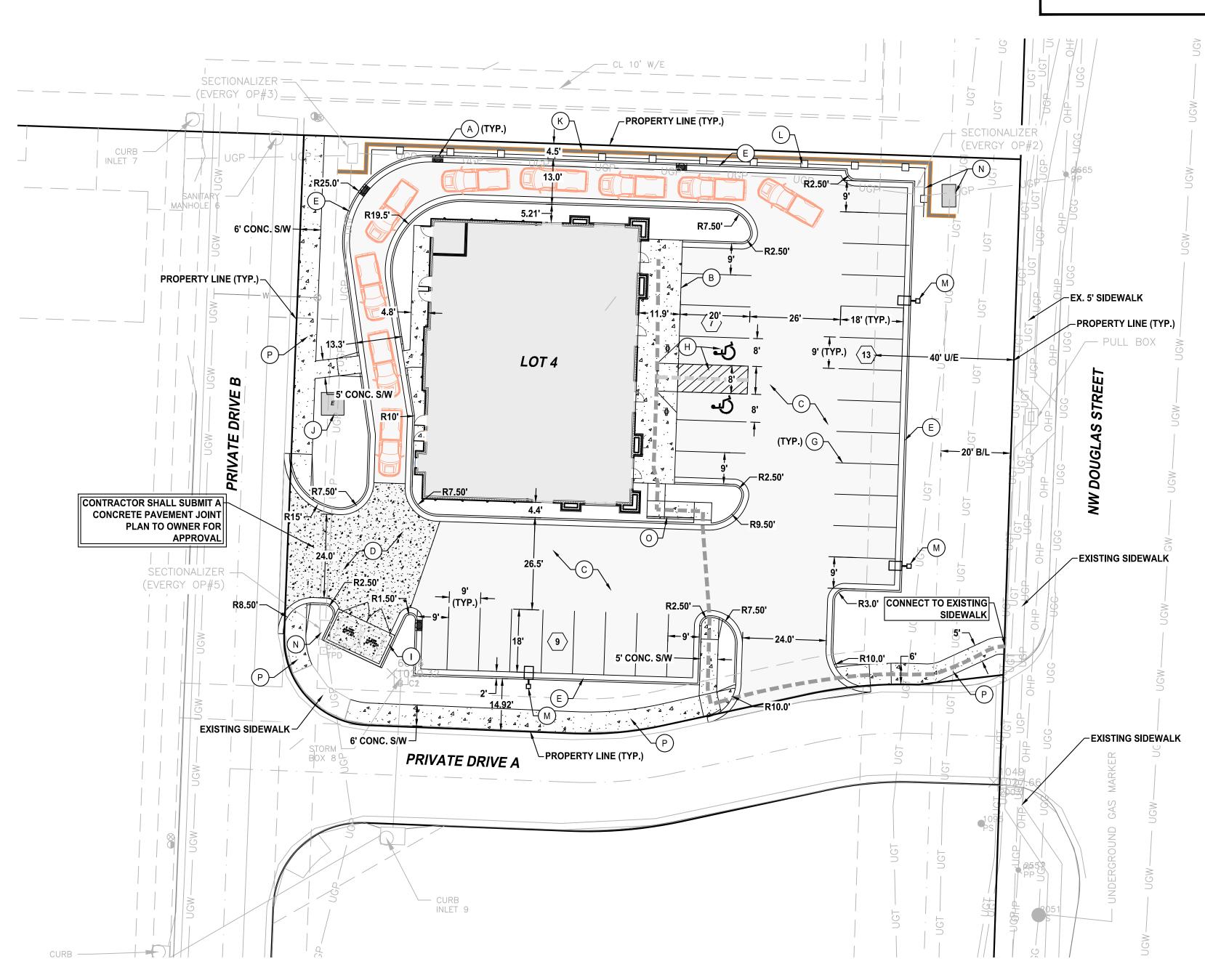
#### LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

OAKVIEW - LOT 4

#### SITE DEVELOPMENT PLANS **GENERAL NOTES & LEGEND**

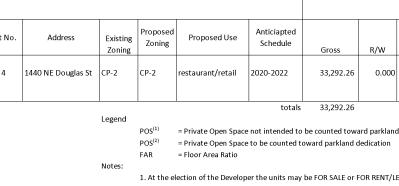


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#### SITE DATA:





Land Area (sf)					Parking Data						
POS <sup>(1)</sup>	POS <sup>(2)</sup>	Parkland	Net	Proposed Building Area (sf)	No. Stories	FAR	Criteria Used	as compared to UDO	required parking	provided parking	Acreage Impervious / % Imperviou
							25% Smoothie King (primarily				
0.000	0.000	0.000	33,292.26	4,800	1	0.14	drive thru -use 12.5/1000)	reduced 1.5/1000 (2 stalls)	15.00	29	
							75% retail/office (use 3.9/1000	reduced 1.1/1000 (4 stalls)	14.04		0.25 AC / 32%
							-		29.04	29	
							Special Parking Notes:				
edication							1. UDO parking ratios				
								drive thru/sit down	14/1000		
								drive thru only	2/1000 + 1/em	nployee at ma	x shift
								office	4/1000		
SE.								retail	5/1000		

#### LEGEND:

ADA PEDESTRIAN ROUTE

6

\_ \_ \_ \_

PARKING STALL COUNTS

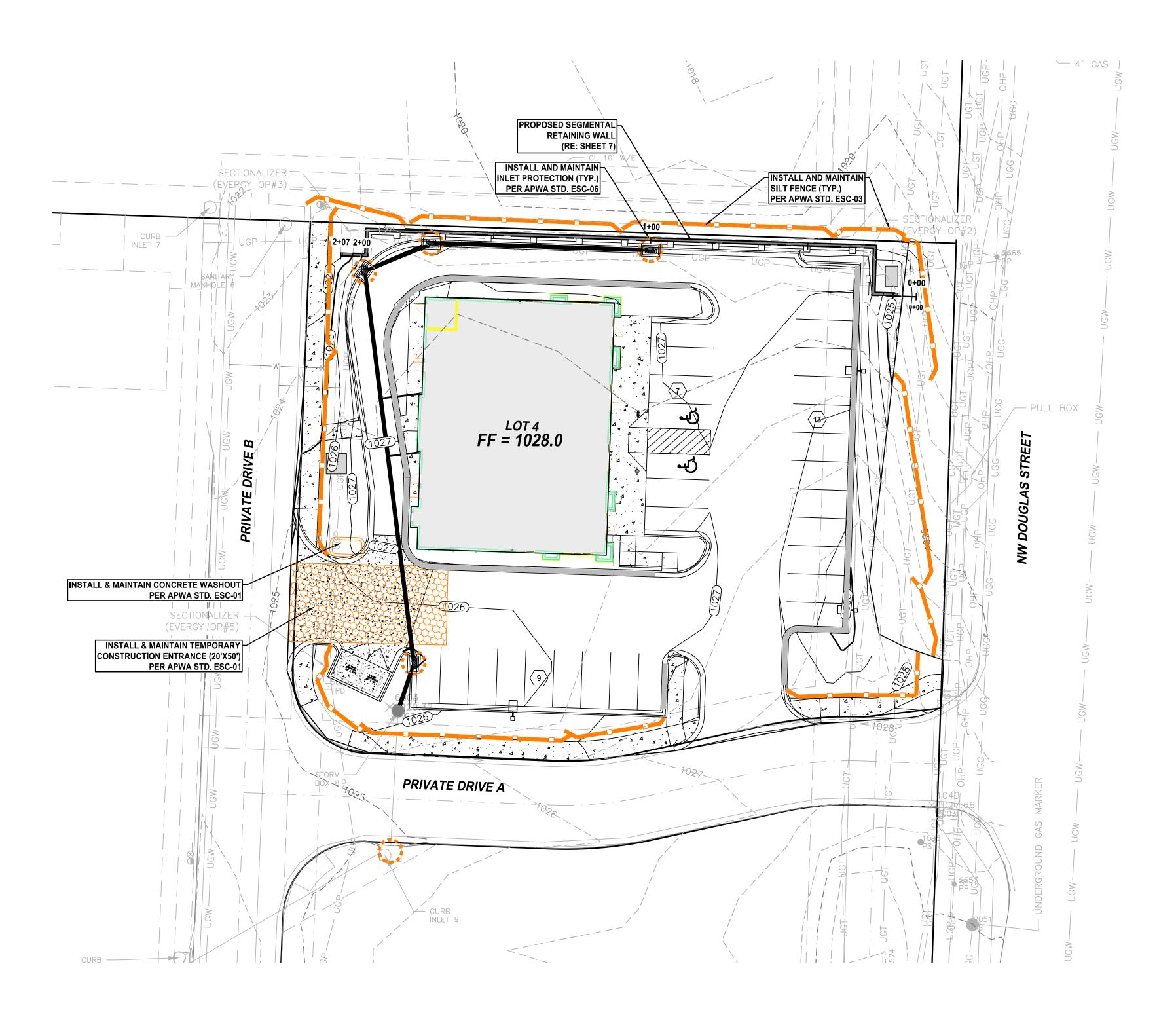
KE	Y LEGEND
A	CURB INLET - 2'X3' NYLOPLAST
В	) INTEGRAL SIDEWALK / CURB
С	CONCRETE PAVEMENT
D	HEAVY DUTY CONCRETE
E	CG-1 CURB & GUTTER (RE: SPOT ELEVATION PLANS)
F	) NOT USED
G	) PARKING STRIPING - 4" YELLOW
H	STRIPING - (RE: ADA ACCESSIBLE STRIPING LAYOUT)
	) TRASH ENCLOSURE (RE: ARCH)
J	) ELECTRICAL TRANSFORMER
K	SEGMENTAL BLOCK WALL (RE: SHEET 7)
Ĺ	) 4' STEEL FENCE (RE: SHEET 7)
M	) LIGHT POLE (RE: MEP)
N	) RELOCATE EVERGY FACILITIES
0	HANDRAIL
P	) PROPOSED CONCRETE SIDEWALK



RELEASED FOR CONSTRUCTION As Noted on Plans Review Development Services Department Lee's Summit, Missouri 11/22/2021

#### OAKVIEW - LOT 4 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS SITE PLAN



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INLET PROTECTION PER APWA STD. DWG ESC-06 SILT FENCE PER APWA STD. DWG ESC-03

#### NOTES:

- 1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND PERIMETER SILT FENCE BEFORE GRADING.
- 2. REMOVE TEMPORARY BMPs AFTER PAVING IS COMPLETED AND PERMANENT GRASS IS ESTABLISHED.
- 3. DISTURBED AREA = 0.71 AC

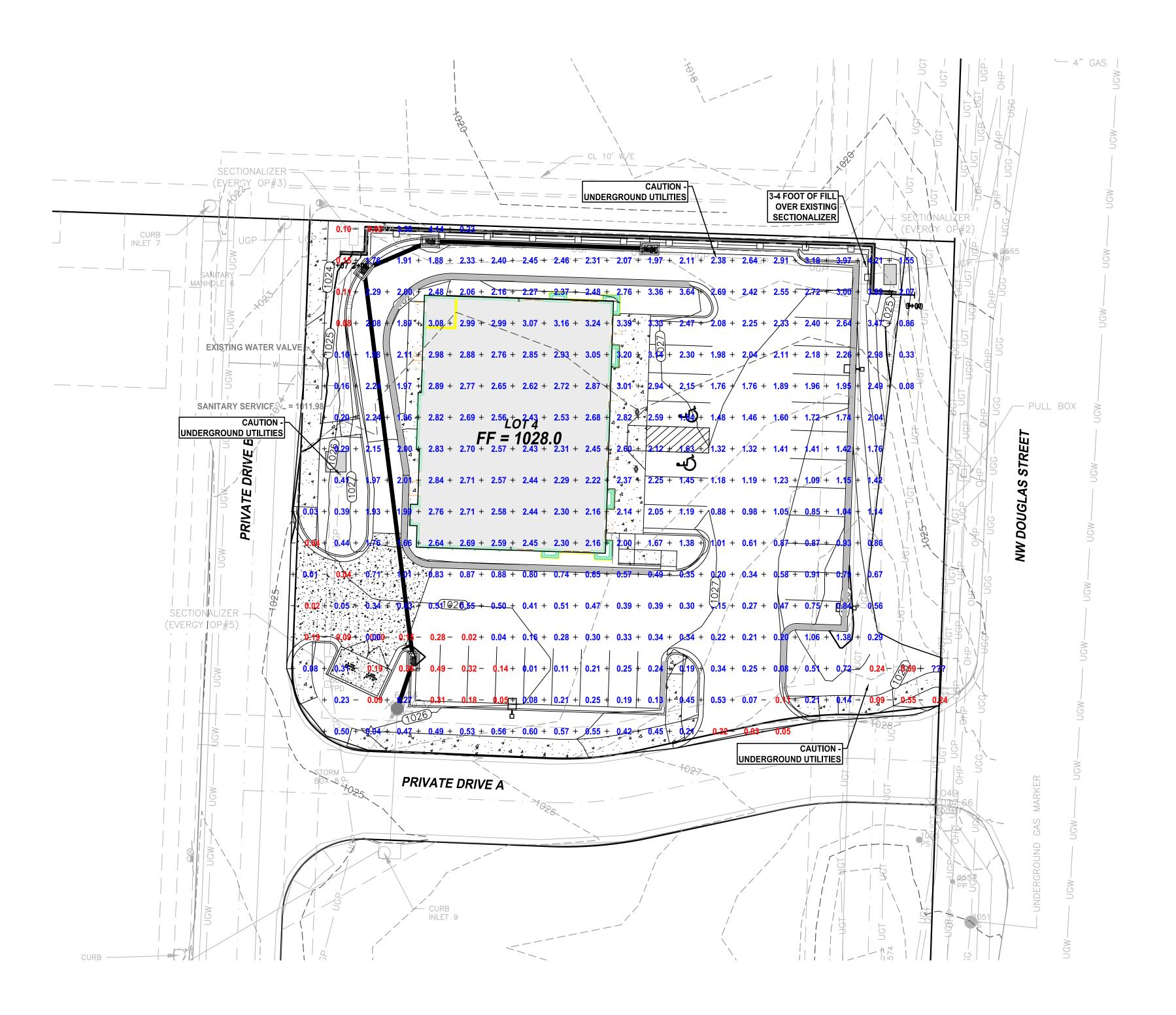






OAKVIEW - LOT 4 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **GRADING & EROSION CONTROL PLAN** 



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#### LEGEND:

#### - CUT AREA

+ FILL AREA

<u>NOTE:</u> CUT / FILL SHOWN IS TO FINISHED GRADE AND / OR TOP OF PAVEMENT



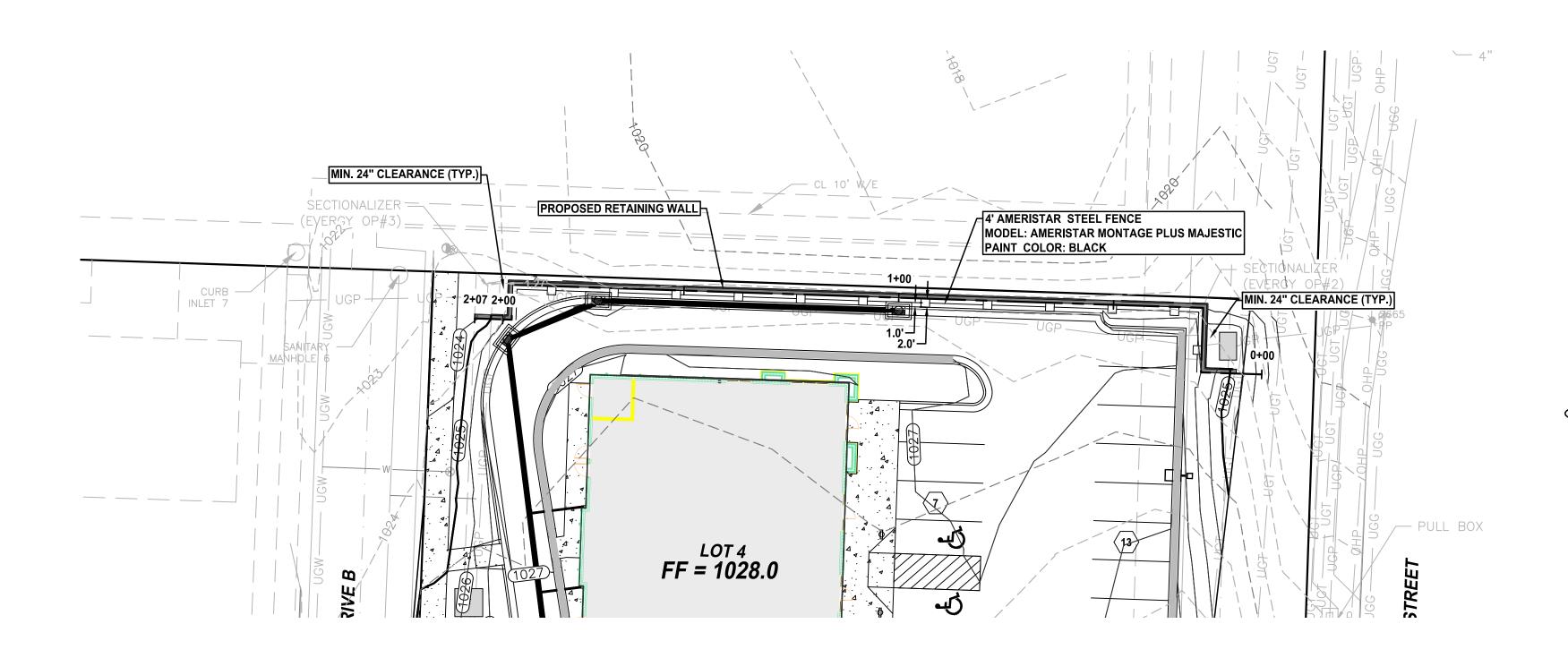


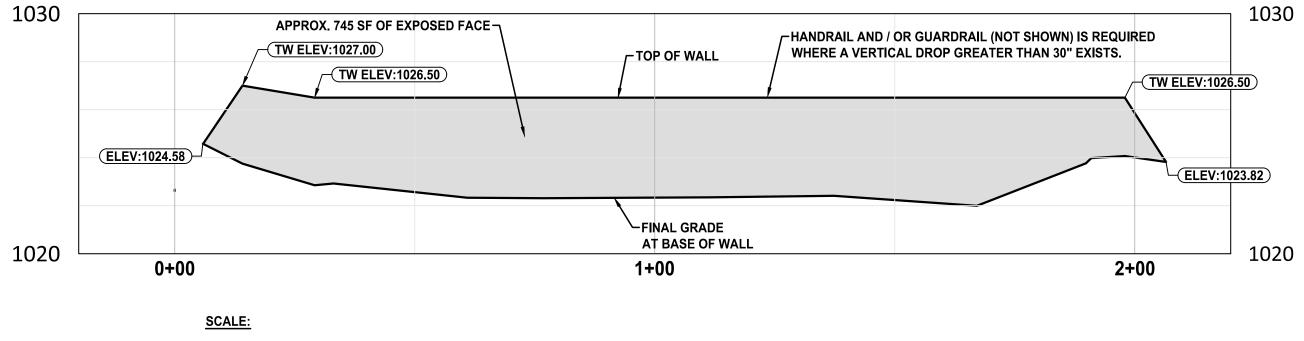


LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

OAKVIEW - LOT 4

SITE DEVELOPMENT PLANS **GRADING PLAN - CUT & FILL** 





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### **RETAINING WALL** (FRONT FACE)

1" = 20' HORIZ 1" = 4' VERTICAL

NOTE: GRADE AT BOTTOM OF WALL REPRESENTS THE EXPOSED WALL. CONTRACTOR SHOULD UNDERSTAND THAT REQUIRED FOUNDATIONS AND / OR FOOTERS REQUIRED FOR THE WALL SYSTEM SUPPLIED IS NOT SHOWN OR ACCOUNTED FOR IN THE WALL AREAS SHOWN. DUE TO THE BLOCK CHOSEN, LAYOUT AREAS MAY VARY.



- RETAINING WALL NOTES: 1. CONTRACTOR SHALL BE RESPONSIBLE FOR WALL DESIGN DEPENDING ON THE WALL SYSTEM PROPOSED. COST OF SEALED ENGINEERING DESIGN, CALCULATIONS AND DETAILS SHALL BE INCLUDED IN BASE BID. BASE BID SHALL INCLUDE ALL APPURTENANCES FOR A COMPLETE INSTALLATION. INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

ENGINEERING CONSTRUCTION LAYOUT EXCAVATION LEVELING PAD / FOOTER GRAVEL, BACKFILL AND GEOGRID (AS REQUIRED) PIN OR OTHER ANCHORING SYSTEMS CAP BLOCKS CLEAN-UP AND BLOCK CLEANING (AS REQUIRED)

- 2. GRADE AT BOTTOM OF WALL REPRESENTS THE FINAL GRADE AT BASE OF WALL. CONTRACTOR SHOULD UNDERSTAND THAT **REQUIRED FOUNDATIONS AND / OR FOOTERS REQUIRED TO THE** WALL SYSTEM SUPPLIED IS NOT SHOWN OR ACCOUNTED FOR IN THE AREAS SHOWN. DUE TO THE BLOCK CHOSEN, LAYOUT AREAS MAY VARY.
- 3. HANDRAIL AND / OR GUARDRAIL IS REQUIRED WHERE A VERTICAL DROP GREATER THAN 30" EXISTS.
- 4. WALL LOCATIONS ARE SHOWN TO EXPOSED FRONT FACE.

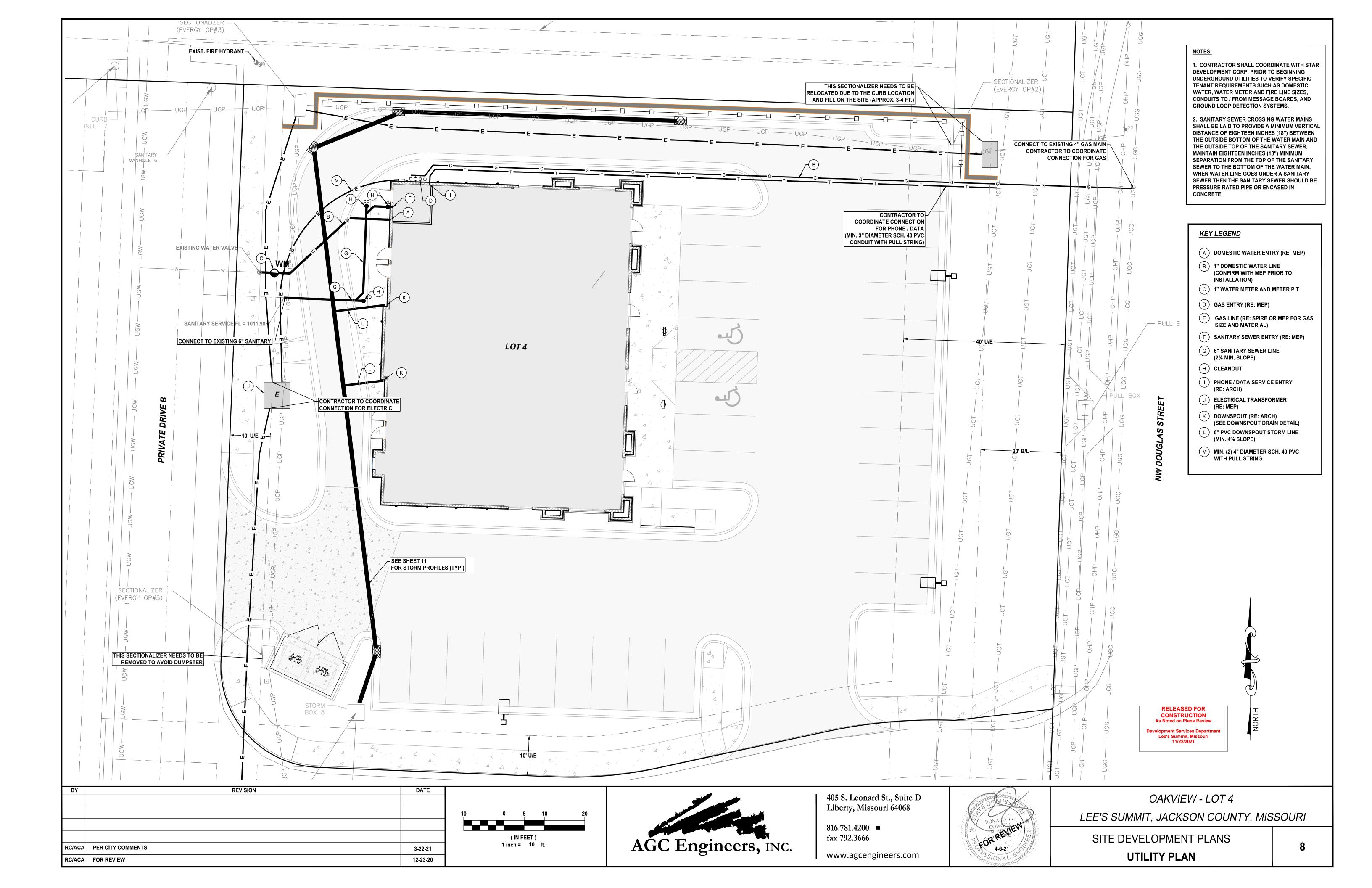


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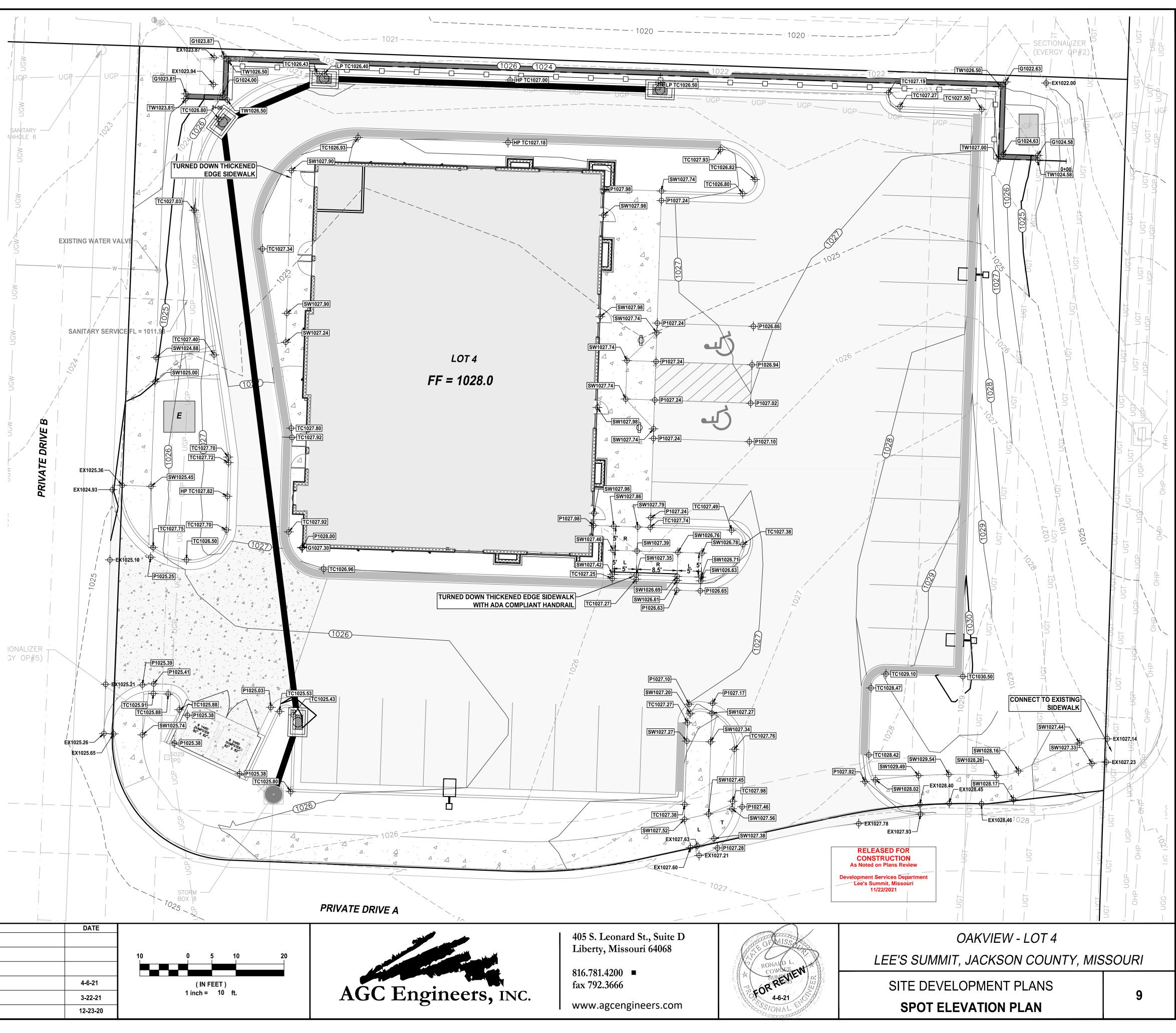


OAKVIEW - LOT 4 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS	
<b>RETAINING WALL DETAILS</b>	

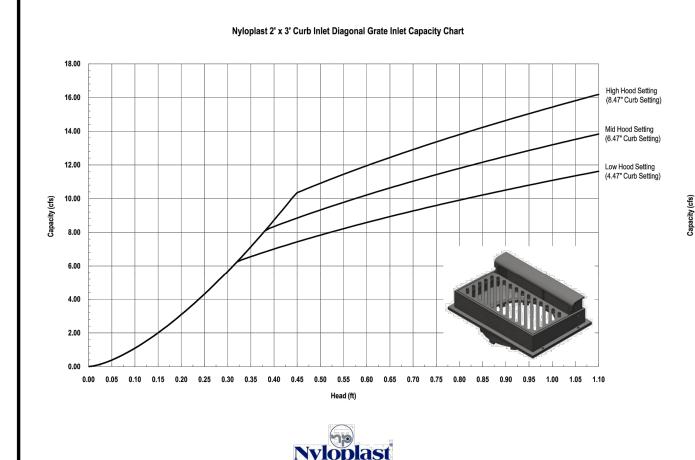


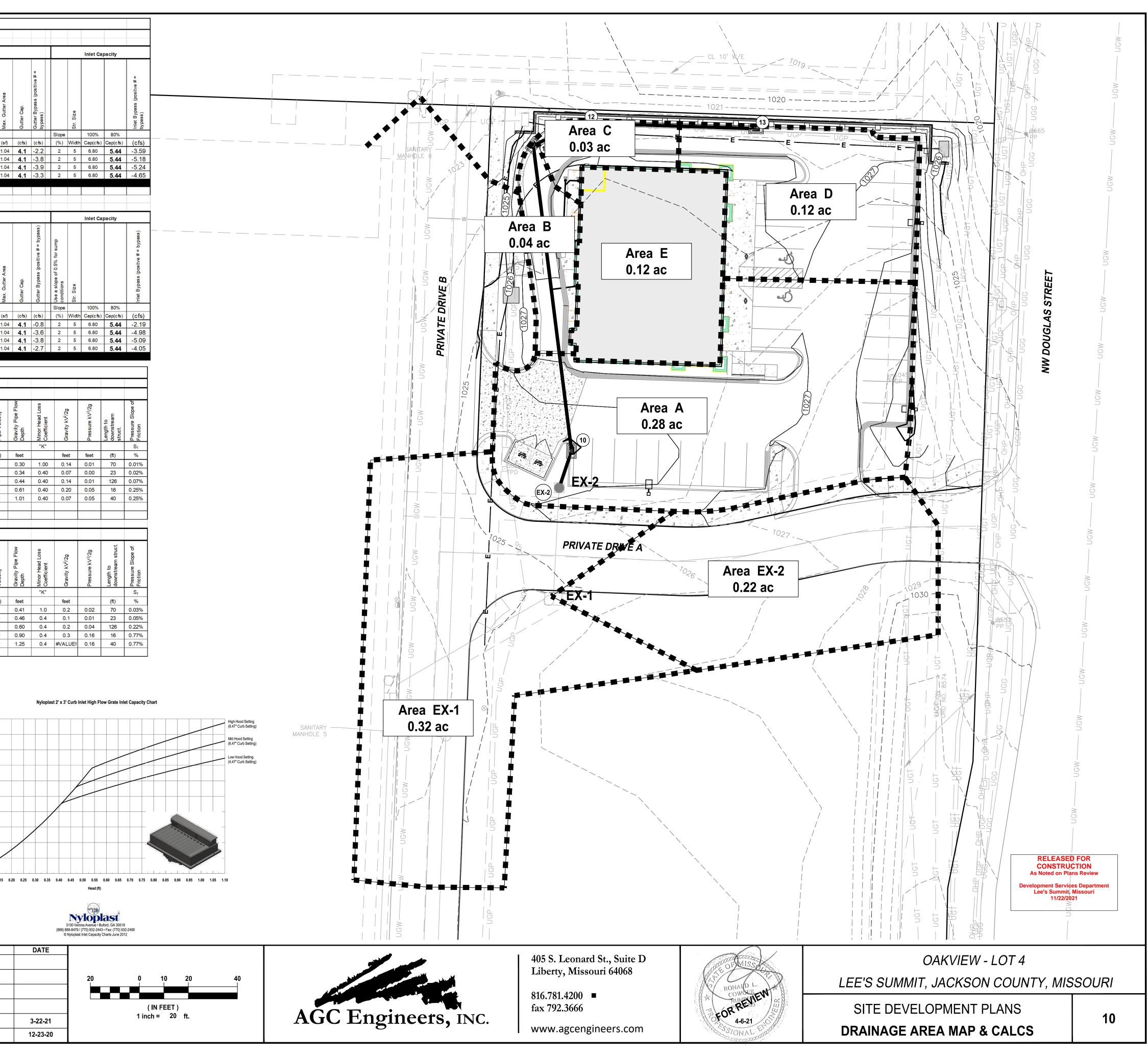
LEGEN	D
	EXISTING
<del>ф</del> -ех800	EXISTING GROUND ELEVATION
	PROPOSED
- <del>  G800</del>	GROUND ELEVATION
- <b>P800</b>	PAVEMENT ELEVATION
<del>- ф [тс800</del> ]	TOP OF CURB ELEVATION
- ф [тw800]	TOP OF WALL ELEVATION
- <del> </del> [	LOW POINT
<del>-   НР800</del>	HIGH POINT
- <del> SW800</del> ]	SIDEWALK ELEVATION
- <b>ф</b> [sw/тс800]	SIDEWALK/TOP OF CURB
- <b>\$</b> [\$W/P800]	SIDEWALK/TOP OF PAVEMENT
	CG-1 CURB AND GUTTER
	CG-1 MODIFIED CURB AND GUTTER
R	RAMP
L	LANDING
т	TRANSITION
	GRADE BREAK

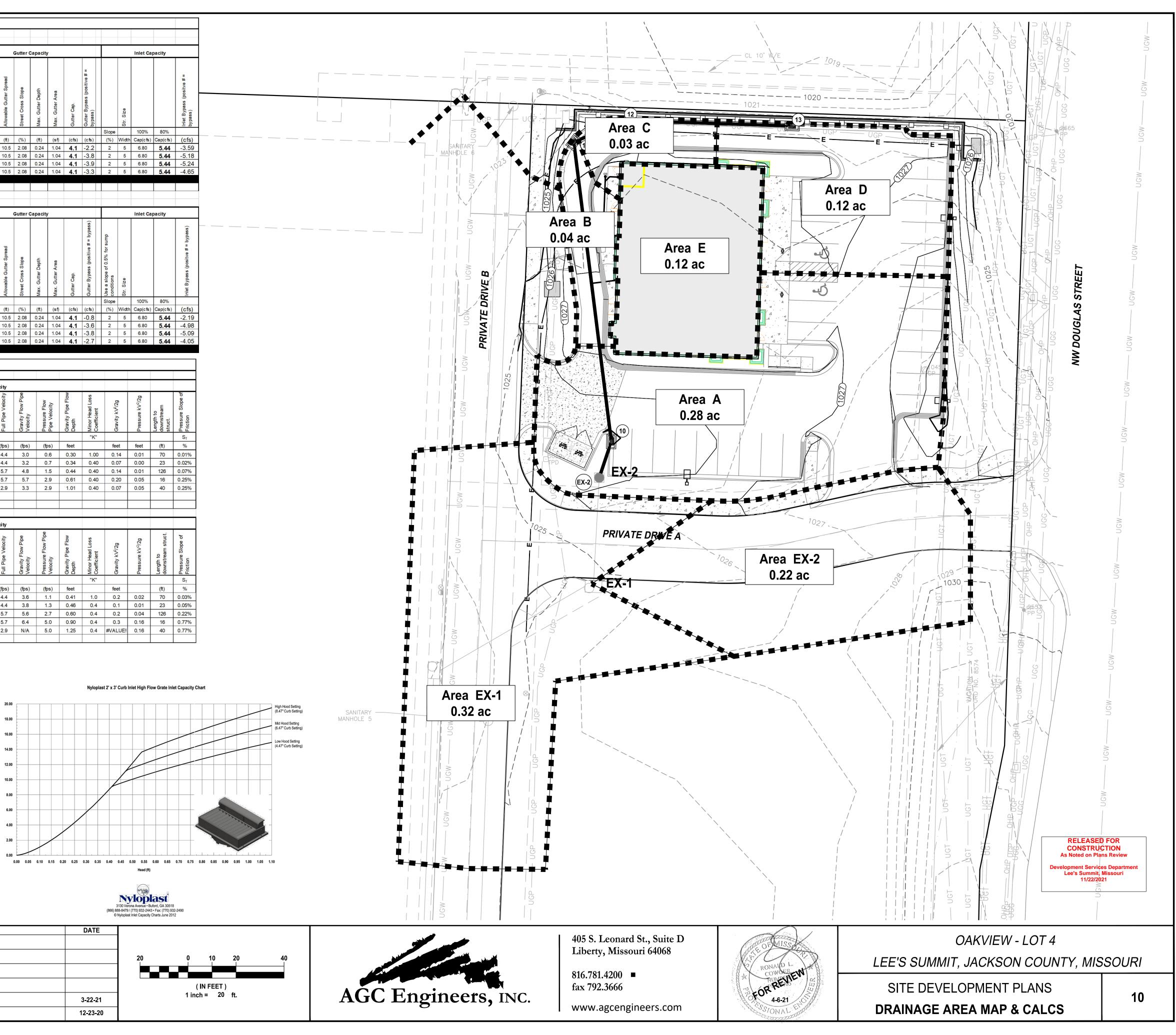


BY	REVISION	DATE	
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RC/ACA	REVISED PER CITY COMMENTS 3-30-21	4-6-21	
RC/ACA	PER CITY COMMENTS	3-22-21	
RC/ACA	FOR REVIEW	12-23-20	

	[										CU	RB IN	ILET	DESI	GN T	ABL	. <u>E</u>											_
									- 4			. 10																
+								R	etur	n Fred	luenc	y 10	yr				U		Gutter C	apacity						Inlet Ca	pacity	Т
0 1 2 3	Overla (ft) 10 10 10 55	and Flo S (%) 2 2 2 2 0.5	w (Ti) C 0.9 0.9 0.9 0.9 0.9	Gutt L (ft) 140 50 30 80 5	er Flow <u>S</u> (%) 2 2 2 2 0.5	(Tt) Manning 0.0 0.0 0.0 0.0 0.0	14 14 14 14 14	Inlet Tir Ti (min) 0.91 0.91 0.91 3.36	ne Tt (min) 0.42 0.15 0.09 0.24 0.00	Tc (min) 5.00 5.00 5.00 5.00 5.00	к 1.00 1.00 1.00 1.00 1.00	I Inlet (in/hr 7.35 7.35 7.35 7.35 7.35	Labe	Area Inlet (ac) 0.28 0.04 0.03 0.12 0.12	Q Inlet (cfs) 1.9 0.3 0.2 0.8 0.8		88         83         83         84           88         83         83         84           1         88         83         84           1         1         85         84           1         1         1         1           1         1         1         1	Allowable         Output           (ft)         10.5           10.5         10.5           10.5         10.5	et cost cost cost cost cost cost cost cos	(ft) Wax. Ontter Debth 0.24 0.24 0.24	Max. Gutter Area 1.04 1.04 1.04	Cap. (cfs) 4.1 4.1 4.1 4.1	C.         C.         Gutter Bypass (positive # =           C. C.         C.         C.         C.           C. C.         C.         C.         C.           D. Dypass         Dypass)         Dypass         Desitive # =	Slope (%) 2 2 2 2 2 2	est: Size St: Size 5 5 5	100% Cap(cfs) 6.80 6.80 6.80	80% Cap(cfs) 5.44 5.44 5.44	
								R	etur	n Fred	uenc	y 100	) yr						Gutter C	apacity			-			Inlet Ca	pacity	_
Inlet Struct. #	Overla	and Flo	w (Ti)	Gutt	er Flow	(Tt)		Inlet Tir	ne		к			Area	Q	90 A000 of Herry 30	Curp to back	Allowable Gutter Spread	Street Cross Slope	Max. Gutter Depth	Max. Gutter Area	Gutter Cap.	Gutter Bypass (positive # = bypass)	Use a slope of 0.5% for sump conditions	Str. Size			
_	L (ft)	S (%)	С	L (ft)	S (%)	Manning n	ls	Ti (min)	Tt (min)	Tc (min)		Inlet (in/hr	Labe	Inlet (ac)	Inlet (cfs)		ft)	(ft)	(%)	(ft)	(sf)	(cfs)	(cfs)	Slope	Width	100% Cap(cfs)	80% Cap(cfs)	
	10	2	0.9	140	2	0.0	14	0.91	0.42	5.00	1.25	10.32	A	(ac) 0.28	3.3		28 1	10.5	2.08	0.24	1.04	4.1	-0.8	2	5	6.80	5.44	
1	10 10	2	0.9	50 30	2	0.0	_	0.91 0.91	0.15	5.00 5.00	1.25 1.25	10.32		0.04	0.5		28 1 28 1	10.5 10.5	2.08	0.24 0.24	1.04 1.04	4.1 4.1	-3.6 -3.8	2	5 5	6.80 6.80	5.44 5.44	
3 D	10 55	2 0.5	0.9	80 5	2 0.5	0.0		0.91	0.24	5.00 5.00	1.25 1.25	10.32		0.12	1.4 1.4	2	28 1	10.5	2.08	0.24	1.04	4.1	-2.7	2	5	6.80	5.44	
	55	0.0	0.0		0.0	0.0	17	0.00	0.00	0.00	1.20		•	ESIG		BLF	-											
			De		- Ene				0.10																			
			Re	lum	FIE	que	псу		0 yı								Pipe Ca	1	<sup>i</sup> pe			Mo	SS			g		T
Line	Inlet Struct. #	Inlet Type	Inlet Tc	Pipe	2	к	с	I Pipe	e	A	A	Pipe	Pipe dia.	Manning	Pip js slop		<sup>-</sup> ull Pipe Capacity	Full Pipe Velocity	Gravity Flow Pipe Velocity	Pressure Flow	Pipe Velocity	Gravity Pipe Flow Depth		Gravity k/8/20		Pressure kV <sup>2</sup> /2g	Length to downstream struct.	
	10	0	(min)	(min	-			(in/h	-		(ac)	(cfs)	(in)	"n"	(%		(cfs)	(fps)	(fps)	(fp		feet		fee	_	feet	(ft)	ļ
1	13 12	CI CI	5.00 5.00	5.00 5.39	_	1.00 1.00	0.84 0.84	7.3			0.12 0.15	0.7 0.9	15 15	0.0			5.4 5.4	4.4 4.4	3.0 3.2	0. 0.		0.30 0.34	1.00 0.40			0.01	70 23	+
	11	CI	5.00	5.50		1.00	0.84	7.20	_		0.31	1.9	15 15	0.0			7.0	5.7	4.8 5.7	1.		0.44	0.40			0.01	126	_
_		JB	5.00 N/A	5.94 5.99		1.00	0.84 0.84	7.07			0.59 0.59	3.5 3.5	15	0.0			7.0 3.5	5.7 2.9	3.3	2.		0.61 1.01	0.40			0.05 0.05	16 40	_
	EX-1	CI																										_
			Re	turn	Fre	que	ncy	10	0 yı	1							Pipe Ca	pacity		Q								+
пле	Inlet Struct. #	Inlet Type		Tc for pipe calculations		к	с			A	A		Pipe		Pip		- Full Pipe	Full Pipe Velocity	Gravity Flow Pipe Velocity	Pressure Flow Pipe	/elocity	Gravity Pipe Flow Depth	Minor Head Loss Coefficient	Gravity k//2/2m	1411J VV 129	Pressure kV <sup>2</sup> /2g	Length to downstream struct.	
-	_	_	Tc	Tc	,		-	Pipe	e F		Pipe	Pipe	dia.	Manning			Capacity		02				<u>≥</u> 0 "K"		,	ш.	0	
1	13 (	CI	(min) 5.00	(min 5.00		1.25	0.84	(in/h 10.3			(ac) 0.12	(cfs) 1.3	(in) 15	"n" 0.0	(%		(cfs) 5.4	(fps) 4.4	(fps) 3.6	(fp 1.		feet 0.41	1.0	fee 0.		0.02	(ft) 70	+
_	12 (	CI	5.00	5.39	_	1.25	0.84	10.3	_		0.12	1.6	15	0.0	-		5.4	4.4	3.8	1.		0.41	0.4			0.02	23	+
	11 ( 10 (		5.00 5.00	5.50 5.94		1.25 1.25	0.84 0.84	10.1 9.95	_		0.31	3.3 6.2	15 15	0.0			7.0	5.7 5.7	5.6 6.4	2. 5.		0.60	0.4		_	0.04	126 16	+
		JB	N/A	5.99		1.25	0.84	9.93			0.59	6.2	15	0.0			3.5	2.9	N/A	5.		1.25	0.4			0.16	40	+



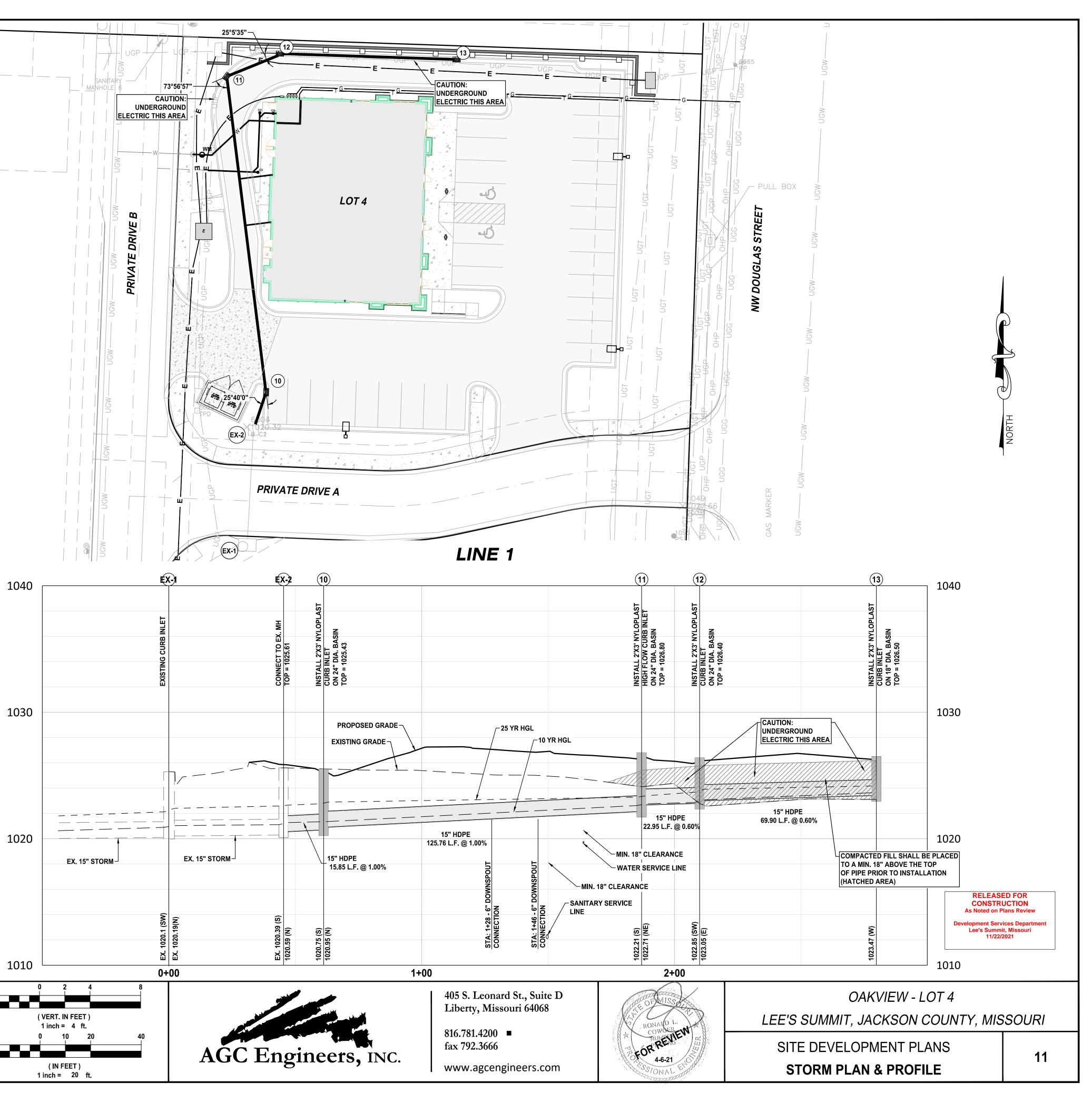


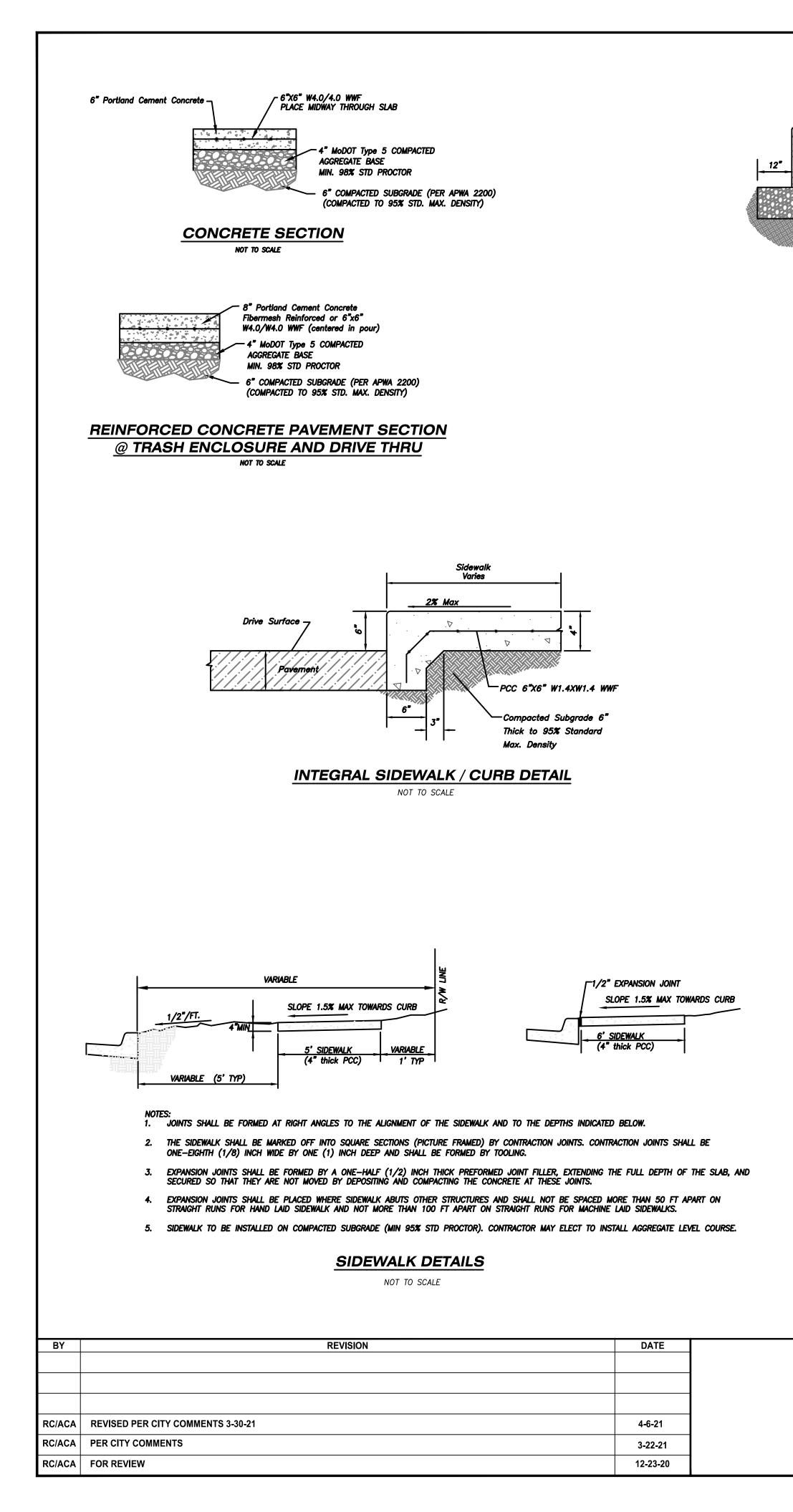


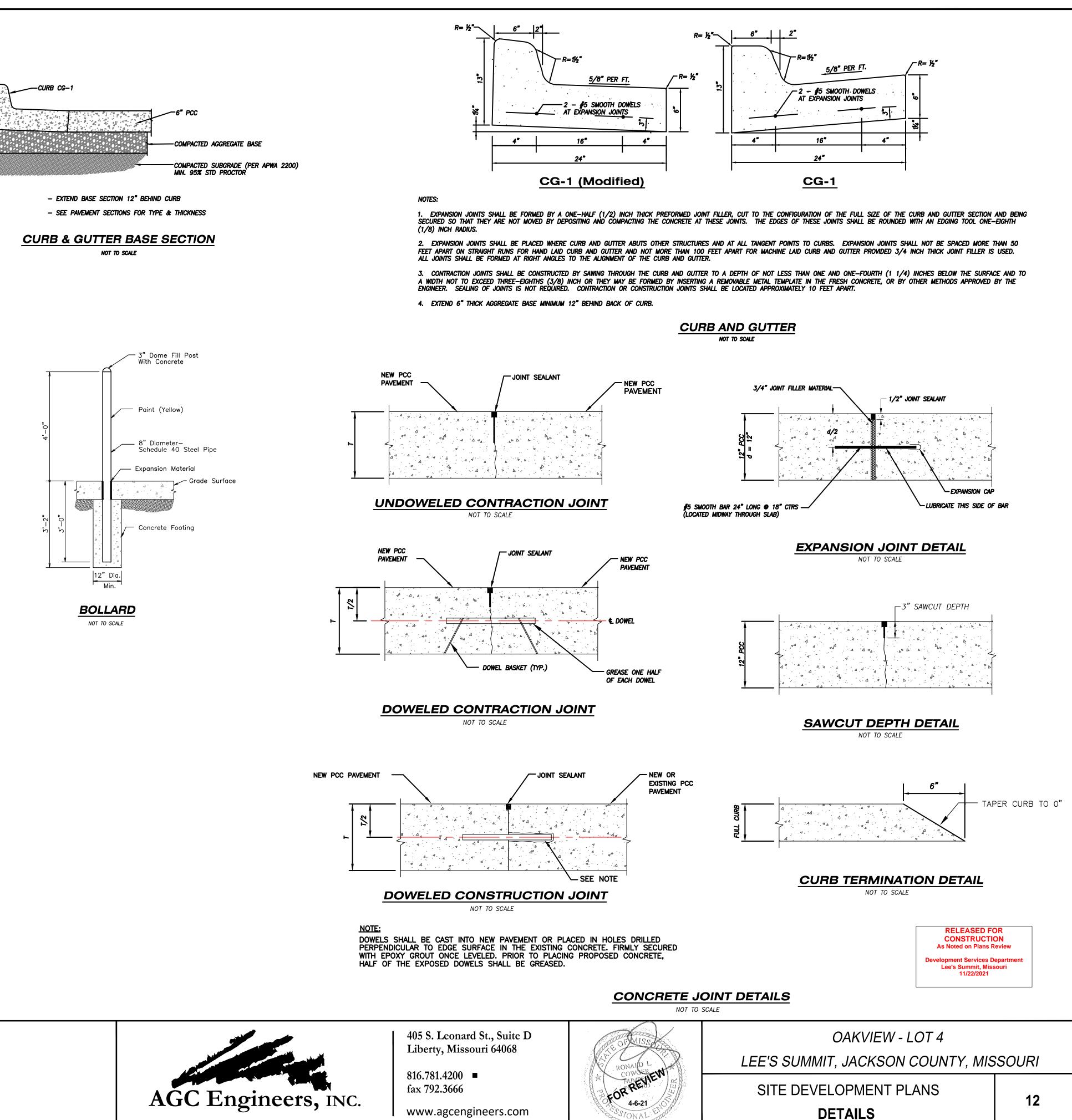


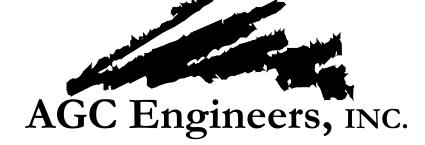
	3130 Verona Avenue • Buford, GA 30518 (866) 888-8479 / (770) 932-2443 • Fax: (770) 932-2490 © Nyloplast Inlet Capacity Charts June 2012	3130 Verona Ave (866) 888-8479 / (770) © Nyloplast Inlet C
BY	REVISION	DATE
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RC/ACA	PER CITY COMMENTS	2 00 04
		3-22-21
RC/ACA	FOR REVIEW	12-23-20

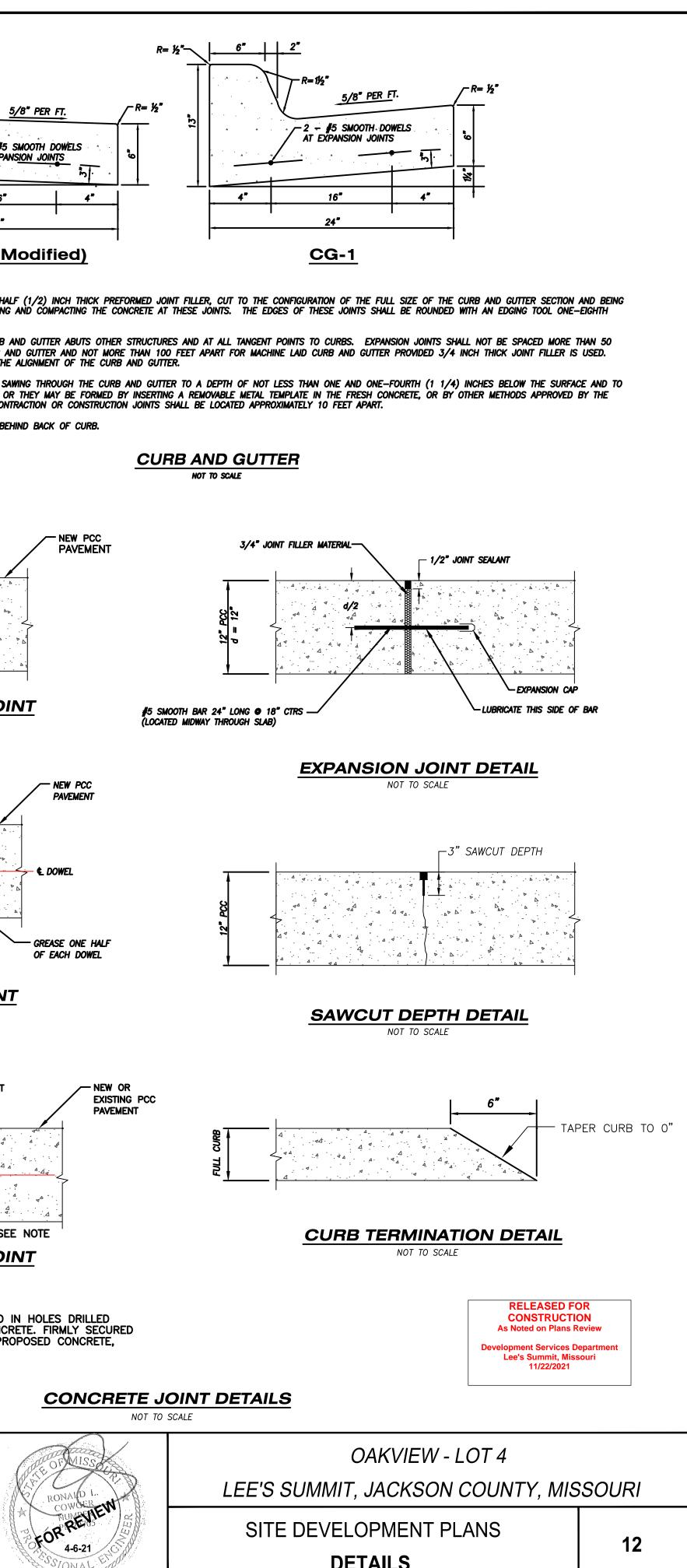
BY	REVISION	DATE	4
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RC/ACA	PER CITY COMMENTS	3-22-21	
RC/ACA	FOR REVIEW	12-23-20	

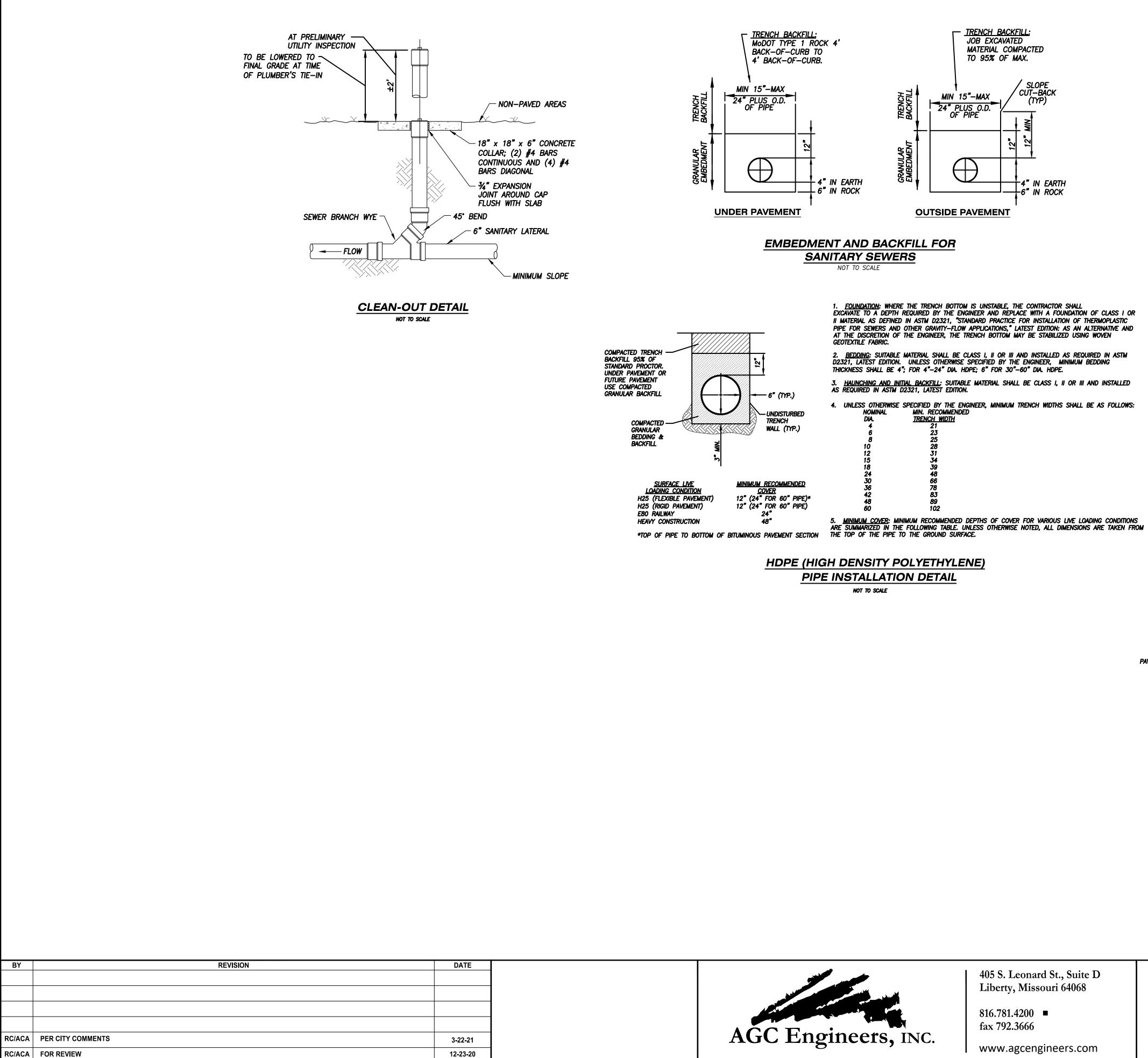


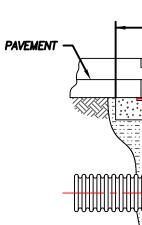








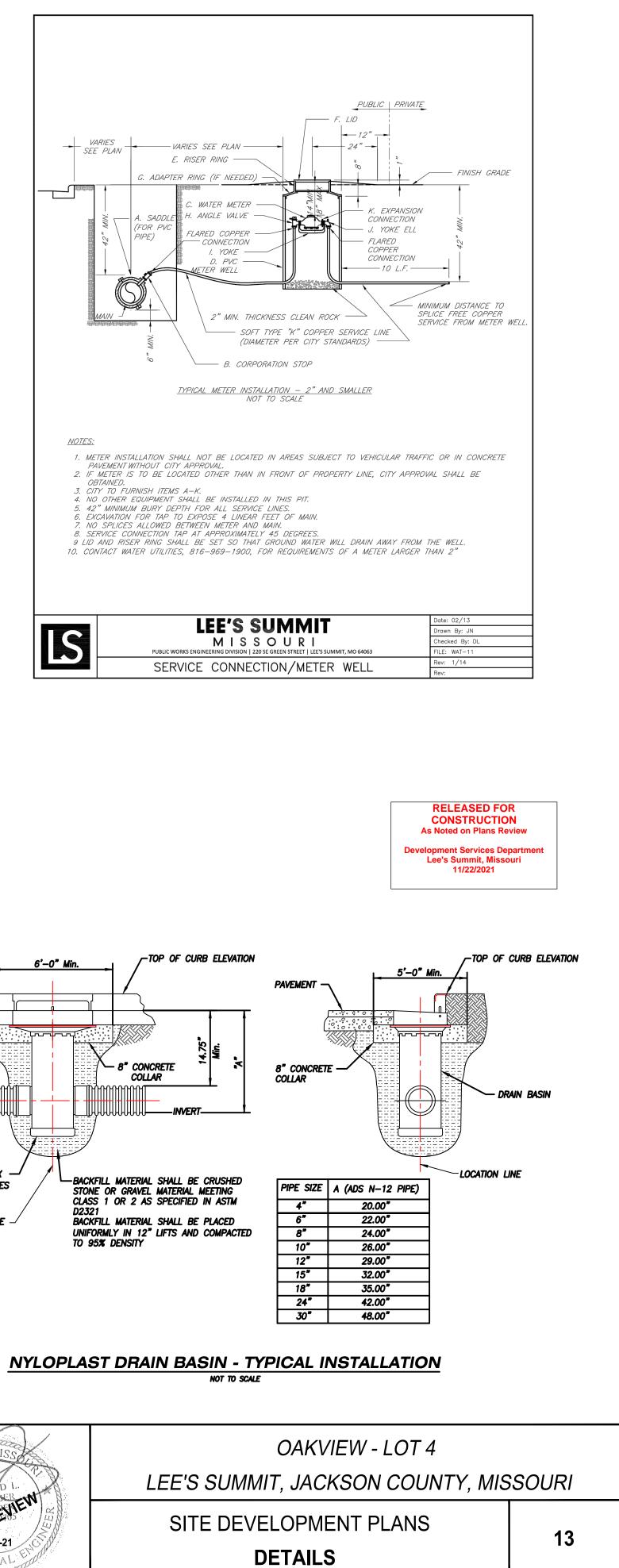


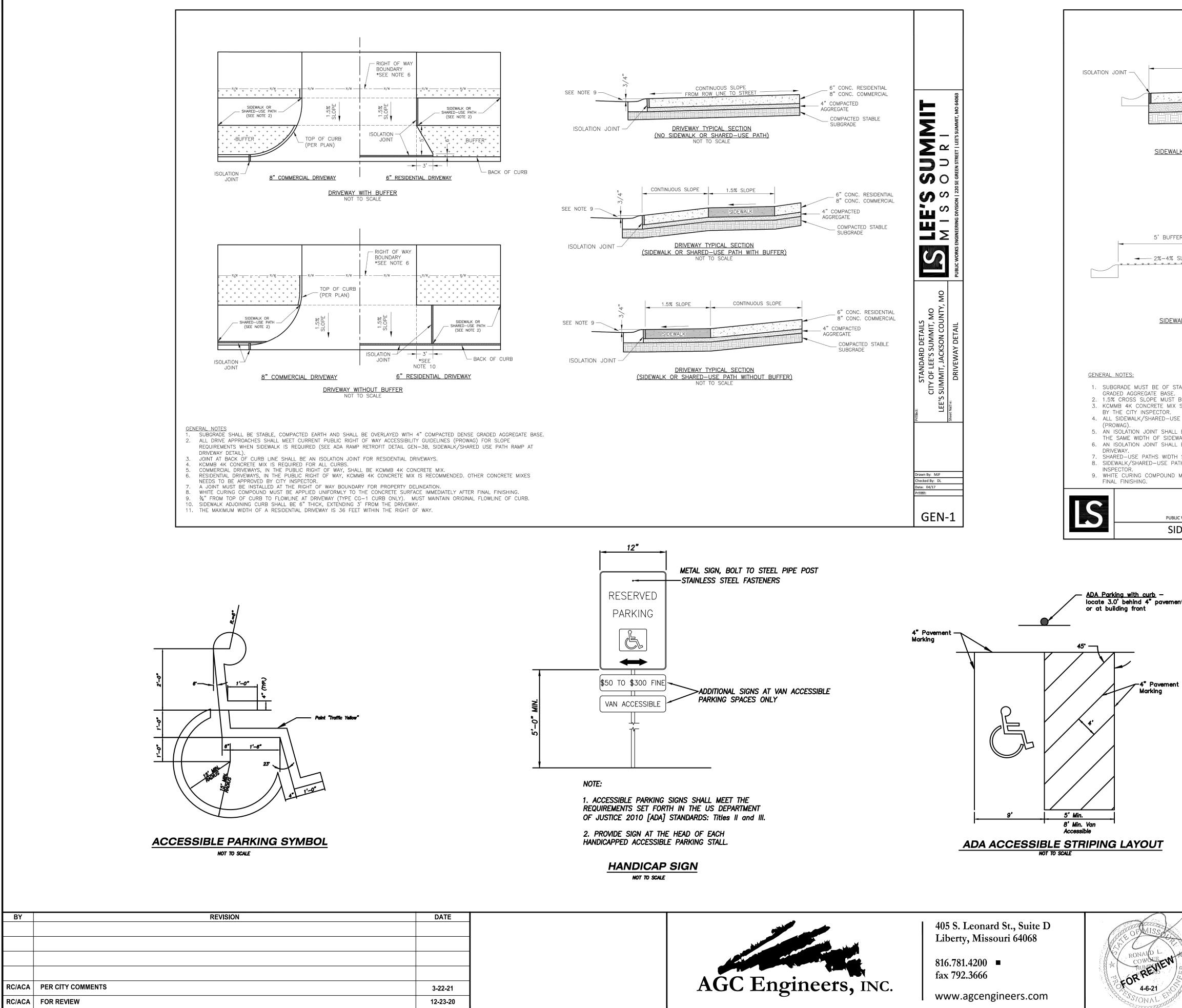


DRILL MINIMUM SIX — (6) ¼" DRAIN HOLES IN BOTTOM OF BASIN LOCATION LINE -



FINIS





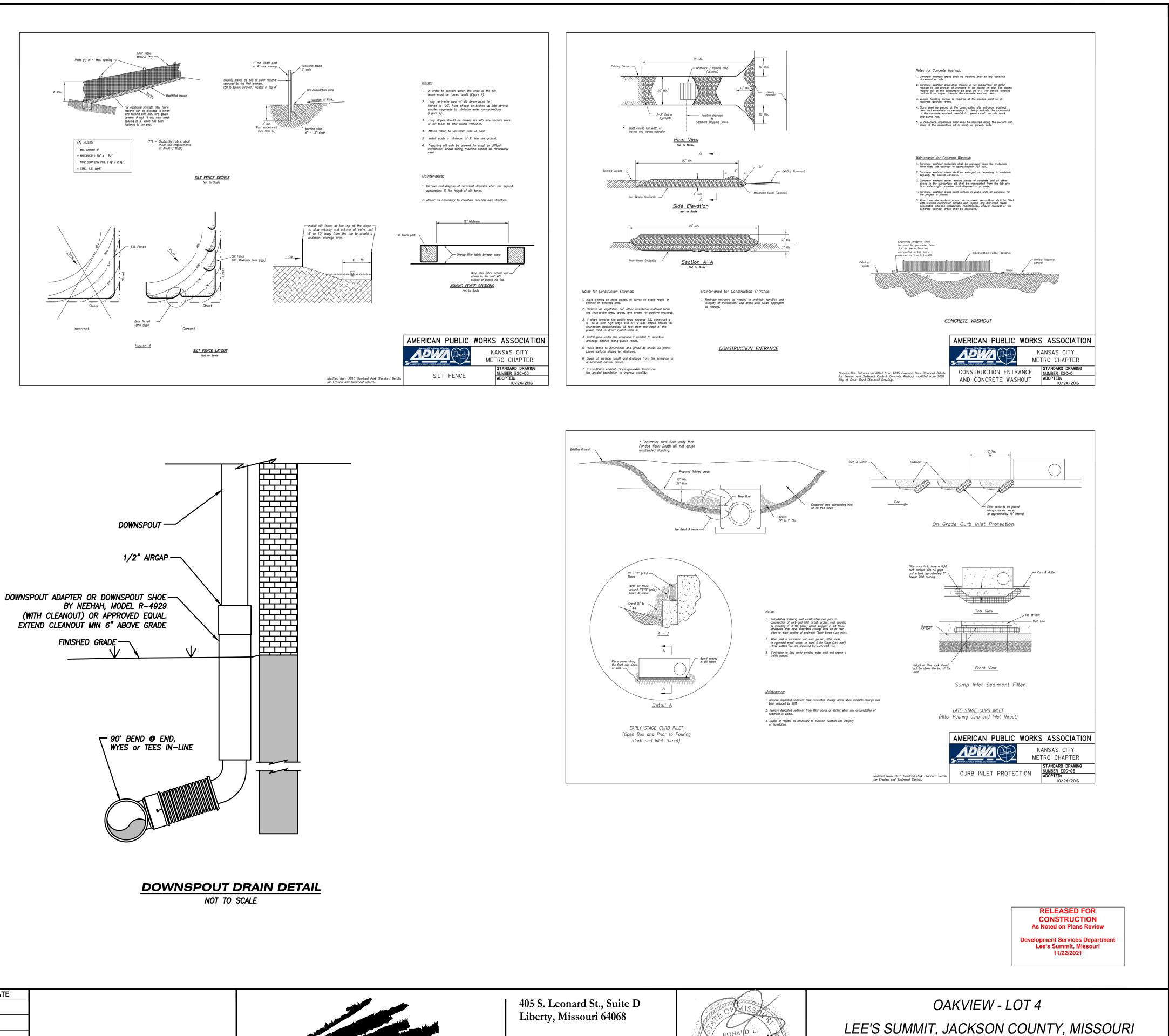
	DEWALK OR D-USE PATH	VARIES	
an a	- 1.5% SLOPE		
		4" CONCRETE (SIDEWA 6" CONCRETE (SHAREI 4" COMPACTED AGGREGA – COMPACTED STABLE	D-USE PATH)
DEWALK/SHARE	D <u>—USE PATH WITHOUT BUFFE</u> NOT TO SCALE	SUBGRADE *SEE NOTE 1	
5' BUFFER	SIDEWALK OR SHARED-USE PATH	VARIES	
%-4% SLOPE		4" CONCRETE (	SIDEWALK)
		6" CONCRETE ( 4" COMPACT	SHARED-USE PATH) ED
	<u>┠┰┰╔╪┵╞┰┰╔┥┙┠┯┯┯┥╵┠┯┯┥</u> ╵┠┯┯┥╵┠┯┯┥		TED STABLE
SIDEWALK/SHAR	<u>ED–USE PATH WITH BUFFER</u> NOT TO SCALE	SUBGRAI *SEE NO	DE
BASE. MUST BE MAINTAII	PACTED EARTH AND SHALL BE O		
CTOR.	REQUIRED FOR ALL SIDEWALKS/S		
F SIDEWALK/SHARE	D AT A MAXIMUM OF 150 FT. CO D-USE PATHS, BUT NO GREATER	R THAN 10 FT.	
WIDTH SHALL BE			IAL
	NG SHALL BE FULL BROOM FINI: PPLIED UNIFORMLY TO THE CON		TER
L	EE'S SUMMI	T	Date: 04/17 Drawn By: MJF
	MISSOURILEERING DIVISION   220 SE GREEN STREET   LEI		Checked By: DL
SIDEWAL	K/SHARED-USE PATI	H DETAIL	GEN-2
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LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

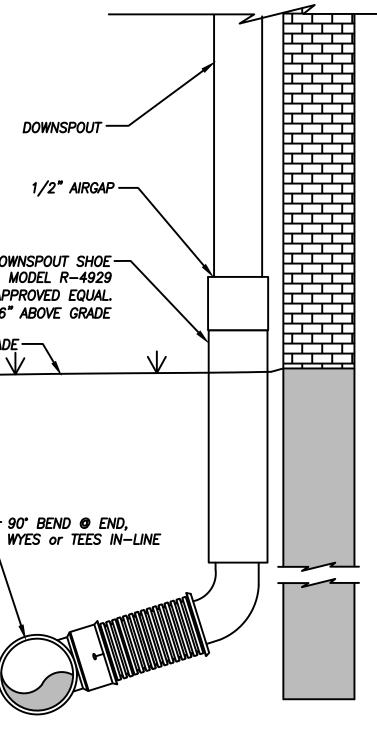
SITE DEVELOPMENT PLANS

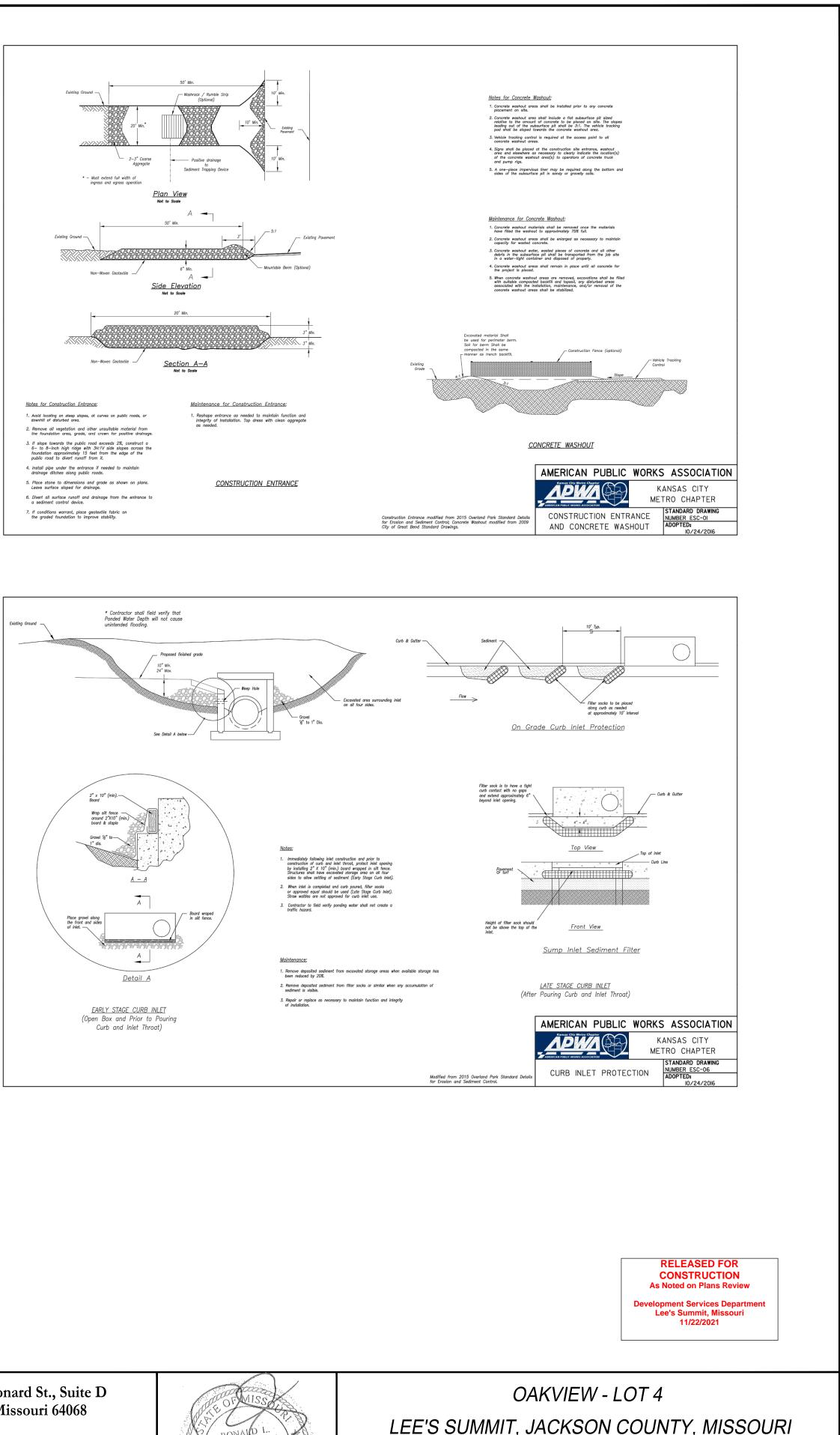
DETAILS

RELEASED FOR CONSTRUCTION As Noted on Plans Review Lee's Summit, Missouri 11/22/2021



BY		REVISION	DATE
RC/ACA	PER CITY COMMENTS		3-22-21
RC/ACA	FOR REVIEW		12-23-20
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AGC Engineers, INC.

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SITE DEVELOPMENT PLANS	15
DETAILS	15