PANERA BREAD BAKERY - CAFE

OAKVIEW - LOT 2 FINAL DEVELOPMENT PLANS

1410 NE DOUGLAS ST.

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI 64086 NE 1/4 OF SEC. 31-48-31

PROJECT LOCATION

LOCATION MAP

NOT TO SCALE

CONTACTS

ENGINEERING

Engineering Primary Ronald L. Cowger, PE

Engineering Alternate

Art Akin, PE

DEVELOPER

STAR DEVELOPMENT, INC. TIM HARRIS, PRESIDENT 244 W. MILL STREET, SUITE 101 LIBERTY, MISSOURI, 64068 (816) 781.3322

Liberty, Missouri 64068 **816.781.4200** ■ fax 792.3666

ы	KEVISION	DAIL
RC/ACA	FOR REVIEW PER CITY COMMENTS DATED 6-5-2020 & PROJECT PLACED ON HOLD DUE TO COVID	6-29-22
RC/ACA	FOR REVIEW	5-21-20

STATUS

FOR PERMIT

op FOR CONSTRUCTION

PLANS CONFORMING TO

CONSTRUCTION RECORDS

SHEET LIST TABLE SHEET NUMBER SHEET TITLE COVER GENERAL NOTES & LEGEND **EXISTING CONDITIONS** SITE PLAN 5 GRADING & EROSION CONTROL PLAN GRADING PLAN - CUT & FILL UTILITY PLAN SPOT ELEVATION PLAN SPOT ELEVATION PLAN CALCULATIONS 11 UTILITY PLAN & PROFILES 12 DETAILS DETAILS 13 DETAILS DETAILS 15 DETAILS L100 LANDSCAPE PLAN

SEE ADDITIONAL PLANS PREPARED BY LK ARCHITECTS (WICHITA, KS.)

McLAUGHLIN MUELLER, INC. HAS SOLE RESPONSIBILITY FOR SHEET 3 AND VSR DESIGN HAS SOLE RESPONSIBILITY FOR SHEET

ENGINEER'S CERTIFICATION:

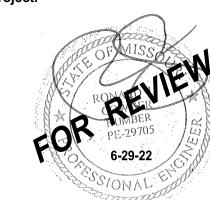
I hereby certify that this project has been designed, and these plans prepared, to meet or exceed the design criteria of City of Lee's Summit, Missouri, in current usage, except as indicated below.

DATE:

6-29-22

1. South parking stalls encroach 4' within the 20' parking setback - 2020 PDP approval included Allow curb & gutter for parking to encroach into the 20' setback along NW Douglas Street by no more than 2 feet and along NW Victoria Drive by no more than 6 feet.

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



Ronald L. Cowger, PE AGC Engineers, Inc.

NOTE:

LEGAL DESCRIPTION

FLOOD NOTE

PERMITS WEBSITE.

UTILITIES AND

CITY OF LEE'S SUMMIT

PUBLIC WORKS

WATER UTILITIES

ELECTRIC

EVERGY

SPIRE

TELEPHONE

CABLE COMCAST

PUBLIC AGENCIES

OF LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

OIL AND GAS WELL NOTE

LOT 2 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

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

THERE WAS NO OIL OR GAS WELLS LOCATED ON PROPERTY PER

MISSOURI DEPARTMENT OF NATURAL RESOURCES OIL AND GAS

REFERENCE SHEET 4 FOR VERTICAL AND HORIZONTAL CONTROL POINTS IN THE PRIVATE DRIVE IMMEDIATELY WEST OF THE SITE.

Dena Mezger

Mark Schaufler

Ron Dejarnette

Brent Jones

Marty Loper

Mark Manion

BENCHMARK AND HORIZONTAL DATA

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.

(816) 969-1800

(816) 969-1900

(816) 347-4316

(816) 399-9633

(816) 275-1550

(816) 325-6516

(816) 795-2255

AGC Engineers, INC.

405 S. Leonard St., Suite D www.agcengineers.com

site at all times:

- 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.pet/development-services/design/design-criteria/design-construction
- 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)
- 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
- 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:

- 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.

- 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 additional cost to the Owner prior to final acceptance of the project.
- 9. All disturbed areas shall be seeded, fertilized and mulched or sodded in accordance with the standards and specifications adopted by the reviewing governing agency and good engineering practices.

EROSION CONTROL NOTES:

- 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 property and/or into jurisdictional waters/waterways.
- 2. Any sediment deposited on public streets shall be removed immediately by Contractor at his sole expense.
- 3. Stockpile excavation materials away from existing channels and grade to drain to adequate erosion control measures.
- 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.
- 5. All disturbed areas shall be seeded, fertilized and mulched, or sodded, in accordance with the Kansas City 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 standards.
- 6. 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 the Contractor's responsibility and shall be included in the bid for the proposed work.
- 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 jurisdictional waters/waterways.
- 8. Contractor shall protect and maintain erosion control measures until a complete stand of grass as defined by Missouri DNR has been established.
- 9. Concrete Washout Areas will be determined onsite by the Job Superintendent.
- 10. At a minimum the following permits/approvals shall be posted on site or as required by the permit terms and 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.
- 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.
- 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 engineering practices.
- 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 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. SWPPP and Missouri DNR Land Disturbance Permit
- 2. Architectural Plans (including but not limited to MEP and Structural Plans)3. Standard drawings and work details supplied by Panera
- Landlord work order list from Star Development Corp

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.
- 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:

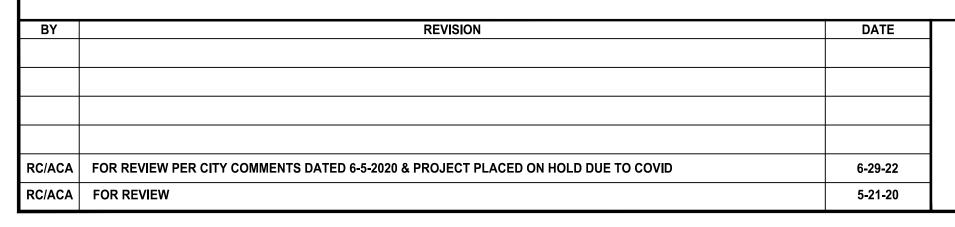
1. Site contractor to install PVC conduit(s) for use by telephone company. Site contractor to coordinate with telephone company for installation of service and location of proposed pedestals, etc. Telephone conduit shall have a minimum cover of 30". Site contractor shall coordinate location with telephone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

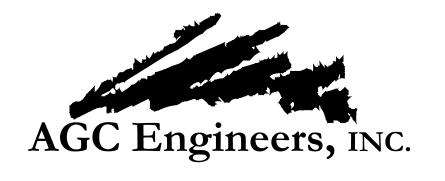
SANITARY NOTES:

- 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.
- Performance testing in accordance with APWA Section 2508. Witness and acceptance by City is required before placing in service.
- 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.
- 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
- 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
- 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.

LEGEND

	EXISTING	PROPOS	<u>SED</u>		
•	SET MONUMENT AS NOTED STAMPED LS 1999141096		SANITARY STRUCTURE	D/E	DRAINAGE EASEMENT
\bigcirc	FOUND 1/2" REBAR LS 1989	CAN	SANITARY SEWER	GM WM	GAS METER WATER METER
0	FOUND MONUMENT AS NOTED	SAN	SANITANT SEWEN	E/E	ELECTRIC EASEMENT
(M)	MEASURED DISTANCE			U/E	UTILITY EASEMENT
	CONTROL POINT		STORM STRUCTURE	B/L	BUILDING LINE SETBACK
<u></u>	DOWN GUY			MH	MANHOLE
•	FIRE HYDRANT		STORM SEWER	R	RADIUS OR RAMP (as it relates to sidewalks)
- 	LIGHT POLE			L	LANDING (as it relates to sidewalks)
¥ ⊚PP	POWER POLE	w	WATERLINE	S/W or SW	SIDEWALK
0	POST		WALKERE	AC	AIR CONDITIONER
•	MANHOLE	WM		MEP	MECHANICAL, ELECTRICAL & PLUMBING
		WM •	WATER METER	WSD	WATER SERVICES DEPARTMENT
⊗	WATER VALVE			D.S.	DOWN SPOUT
B/L	BUILDING LINE		WATER VALVE	TC	TOP OF CURB
D/E	DRAINAGE EASEMENT		WATER VALVE	G	GROUND
-OHP-	AERIAL UTILITY			Р	PAVEMENT
S/E	SANITARY SEWER EASEMENT		GAS LINE	LP	LOW POINT
U/E	UTILITY EASEMENT		O/O LIVE	HP	HIGH POINT
-UGG-	UNDERGROUND GAS				
-UGP-	UNDERGROUND POWER	co _o	CLEANOUT		
-UGT-	UNDERGROUND TELEPHONE				
-UGW-	UNDERGROUND WATER	13	PARKING COUNT		
		780	CONTOUR		

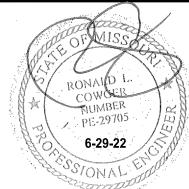




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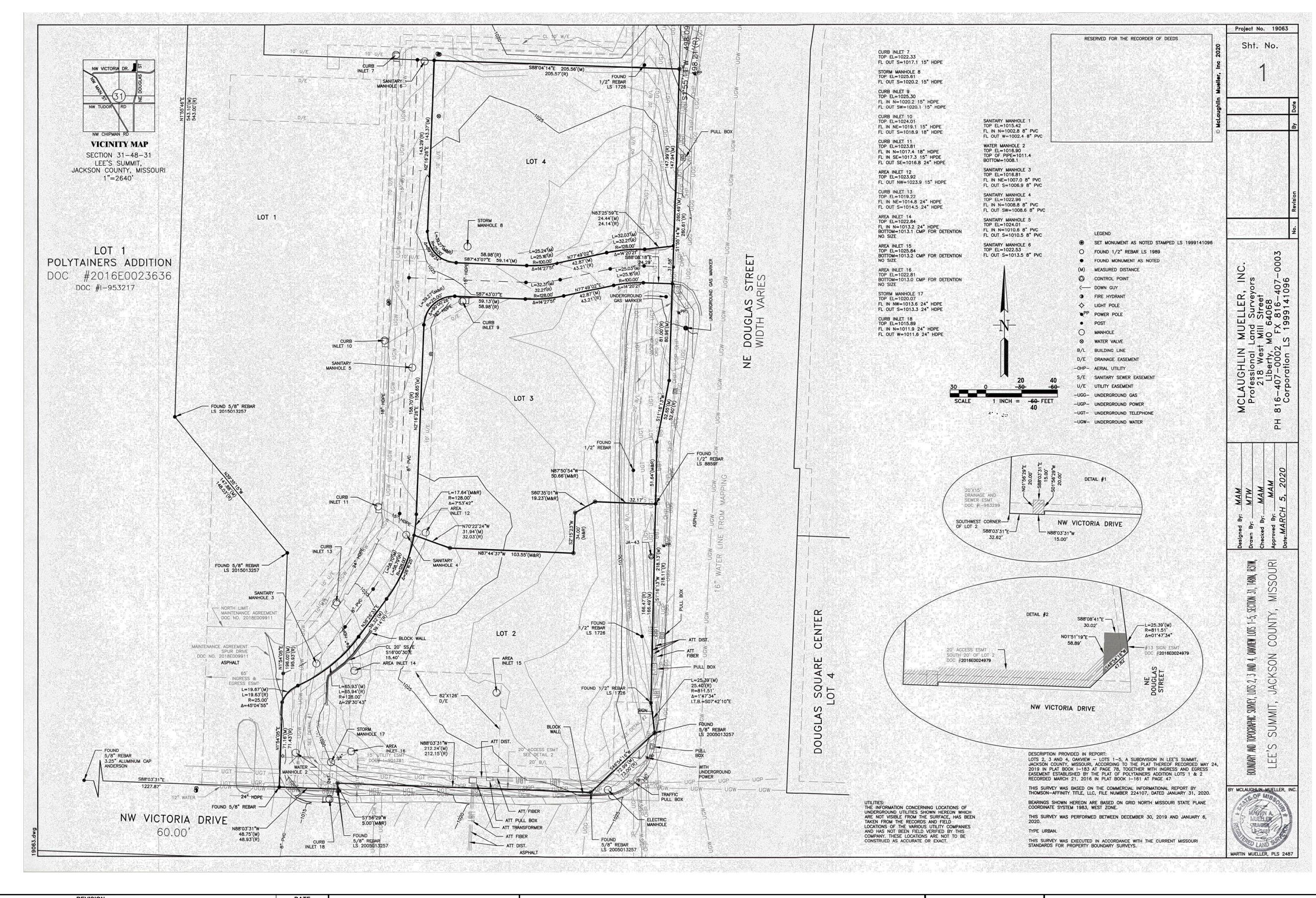
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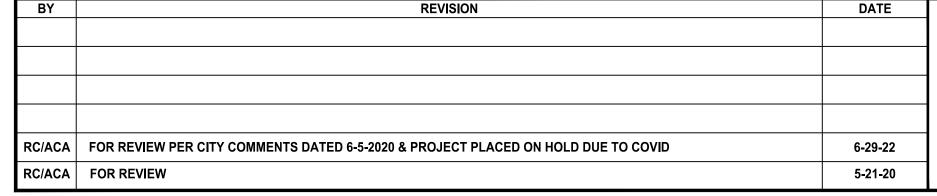
PANERA BREAD BAKERY - CAFE LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

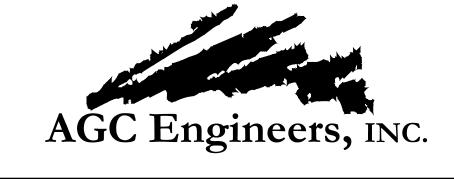
SITE DEVELOPMENT PLANS

GENERAL NOTES & LEGEND

LIGHT POLE (SITE PARKING)







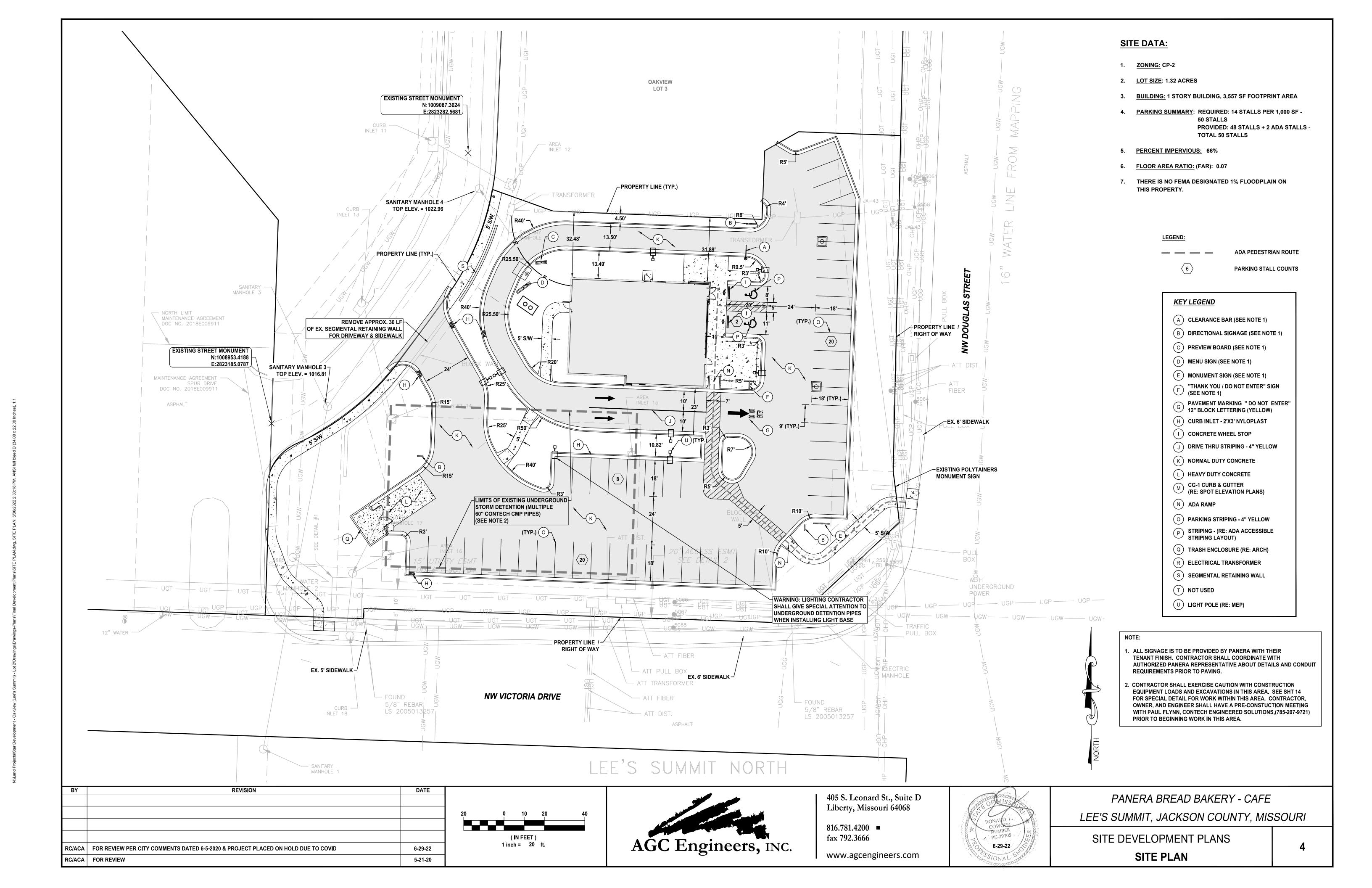
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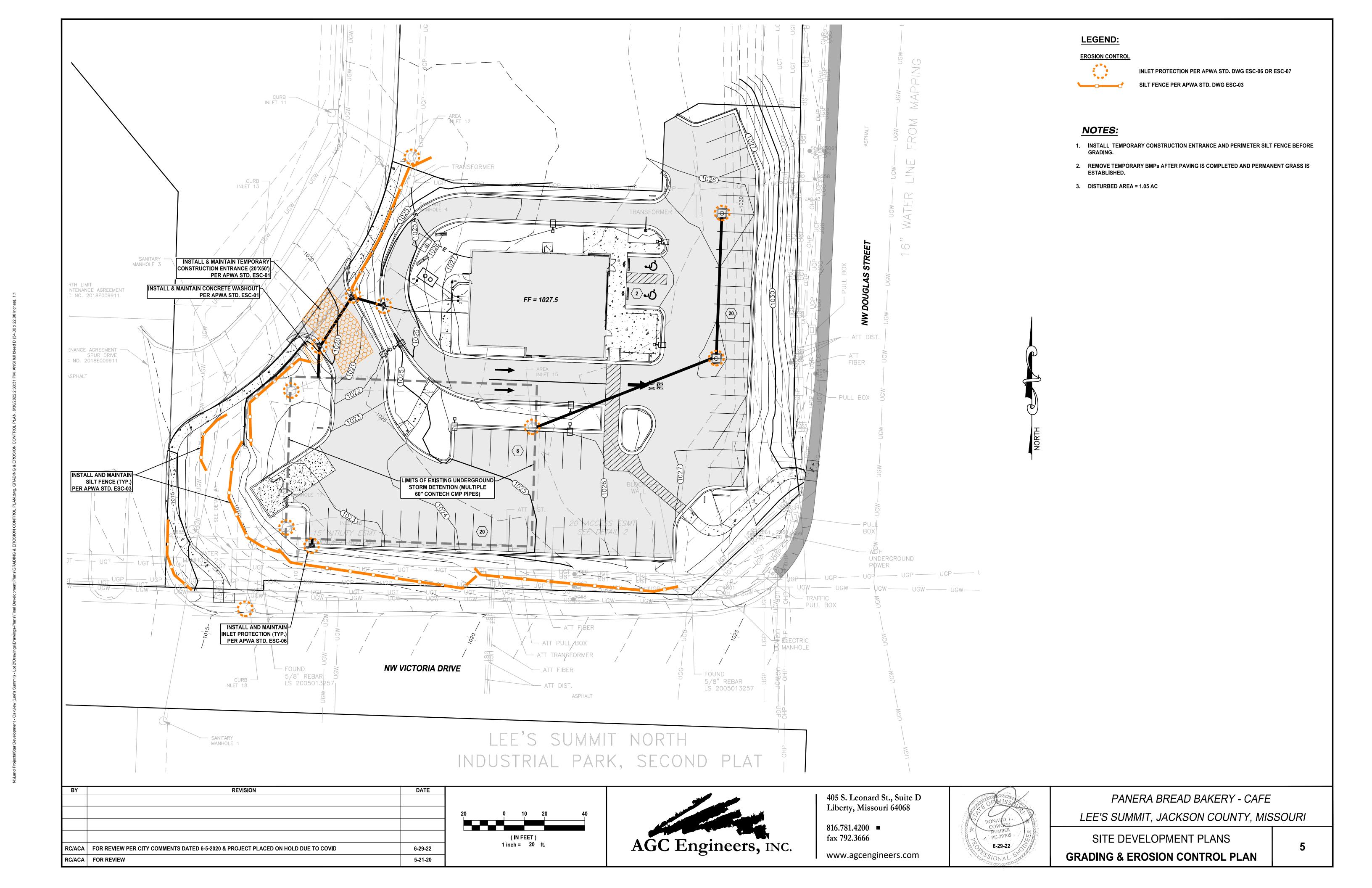
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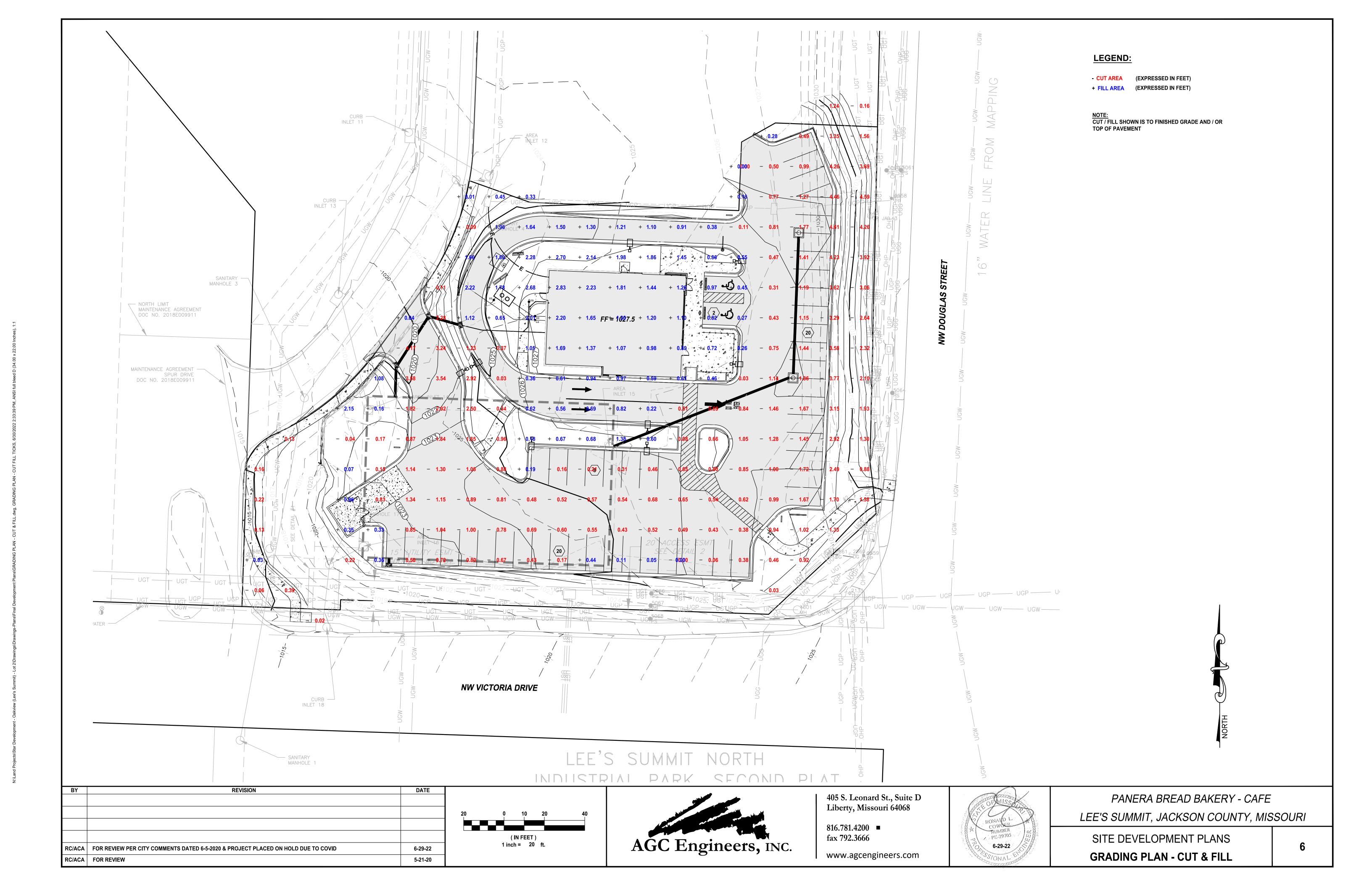
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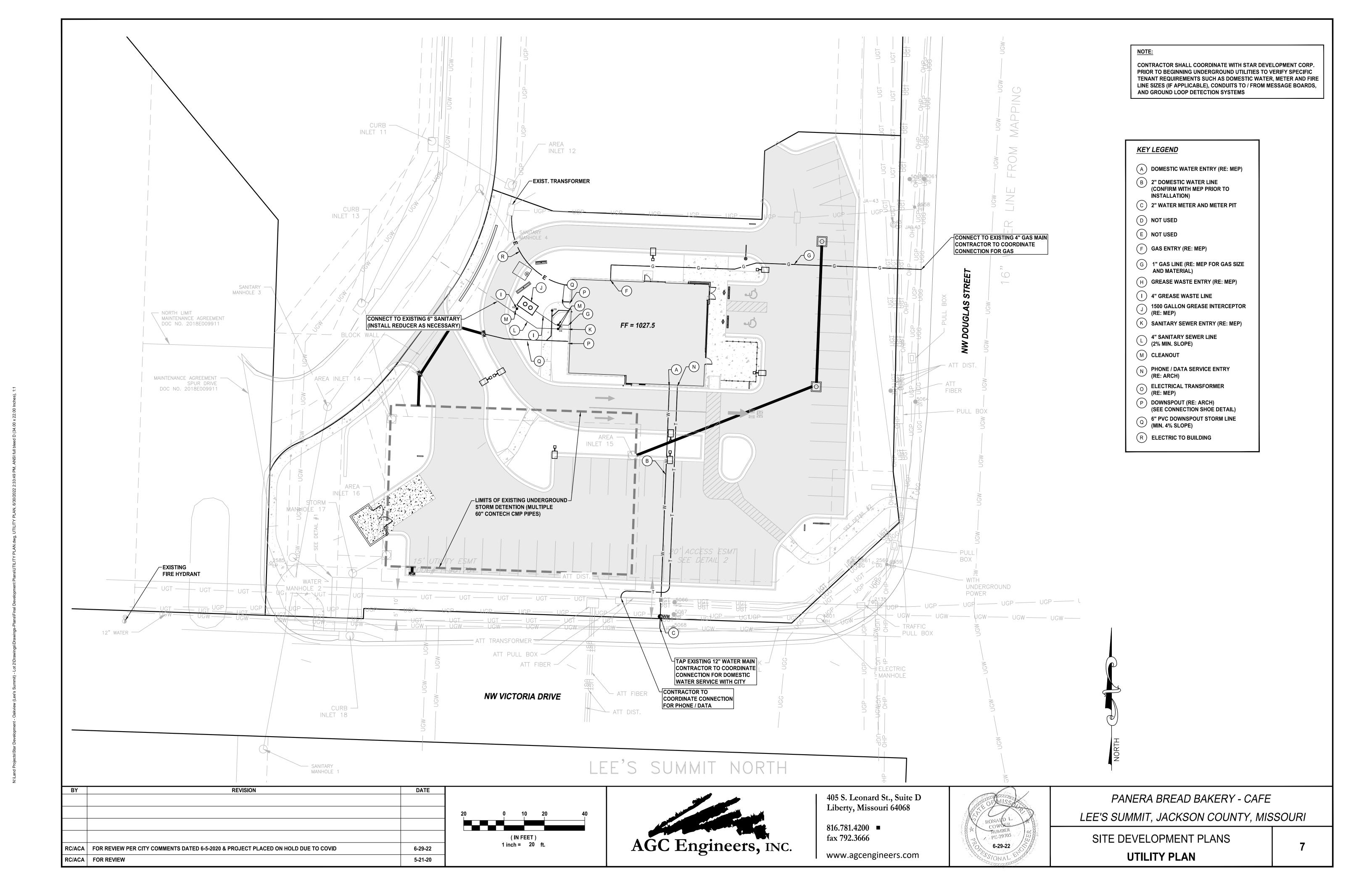
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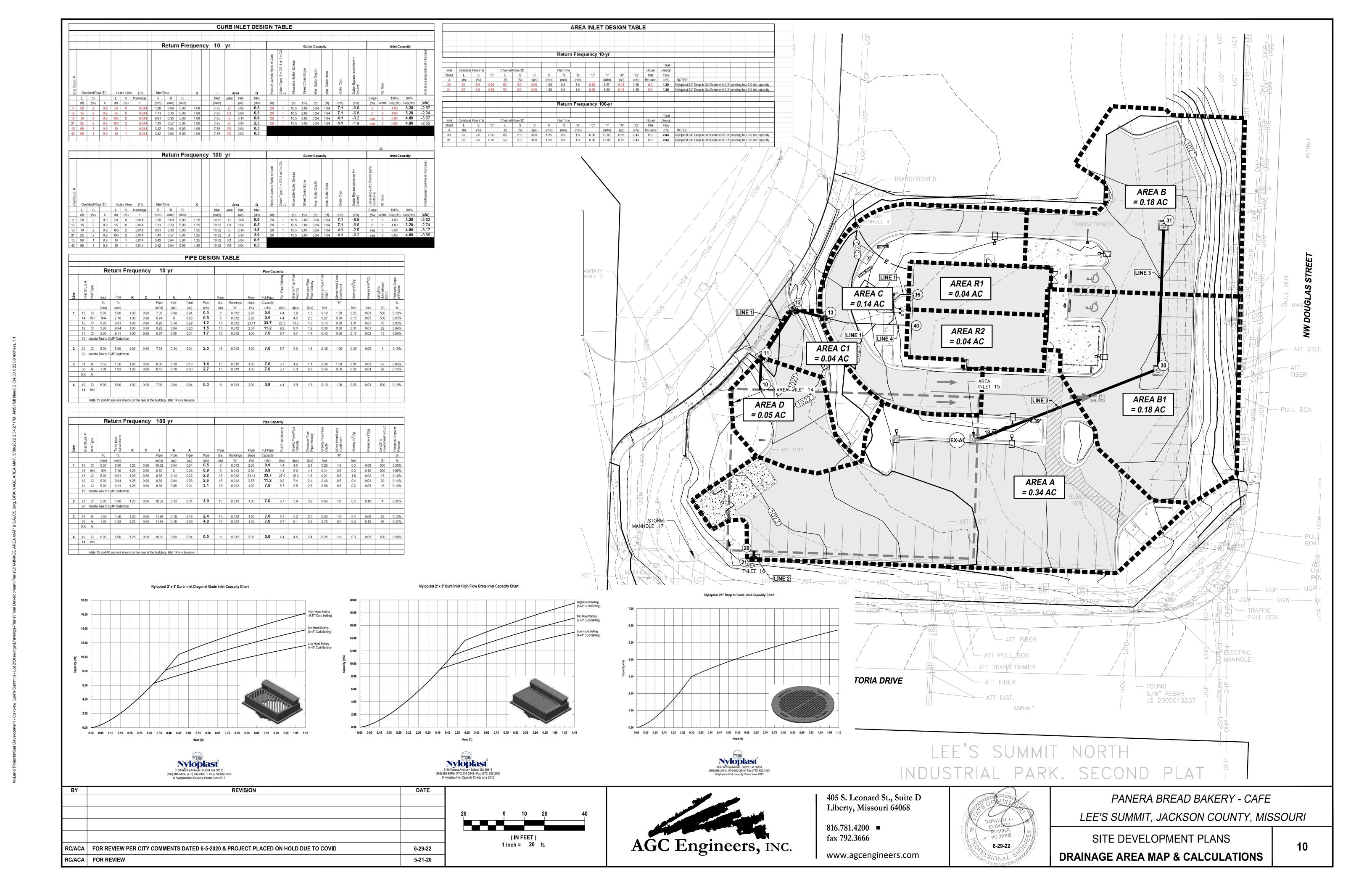
SITE DEVELOPMENT PLANS **EXISTING CONDITIONS**

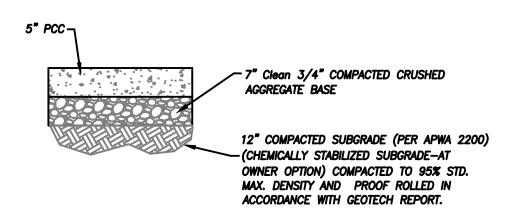






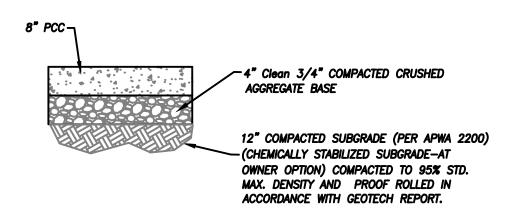






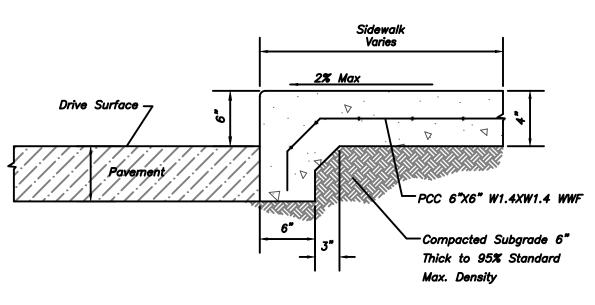
NORMAL DUTY CONCRETE SECTION

NOT TO SCALE



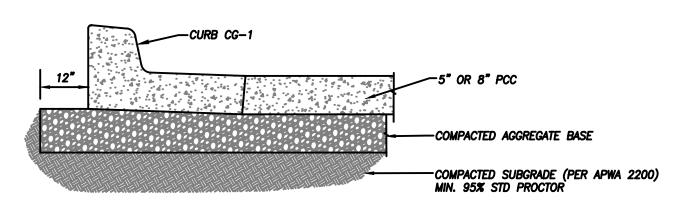
HEAVY DUTY CONCRETE SECTION

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INTEGRAL SIDEWALK / CURB DETAIL

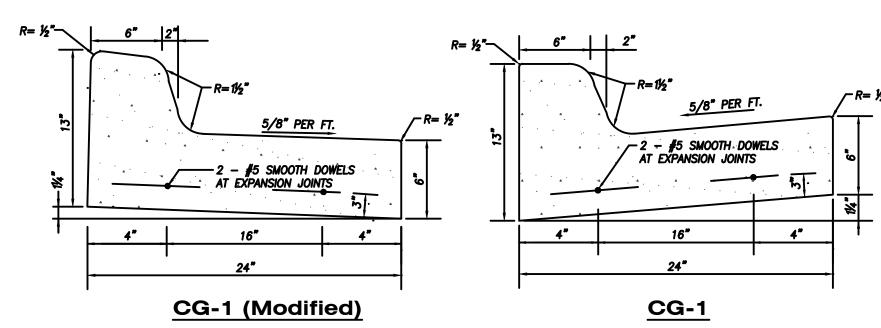
NOT TO SCALE



- EXTEND BASE SECTION 12" BEHIND CURB
- SEE PAVEMENT SECTIONS FOR TYPE & THICKNESS

CURB & GUTTER BASE SECTION

NOT TO SCALE



NOT TO SCALE

1. EXPANSION JOINTS SHALL BE FORMED BY A ONE—HALF (1/2) INCH THICK PREFORMED JOINT FILLER, CUT TO THE CONFIGURATION OF THE FULL SIZE OF THE CURB AND GUTTER SECTION AND BEING SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS. THE EDGES OF THESE JOINTS SHALL BE ROUNDED WITH AN EDGING TOOL ONE—EIGHTH

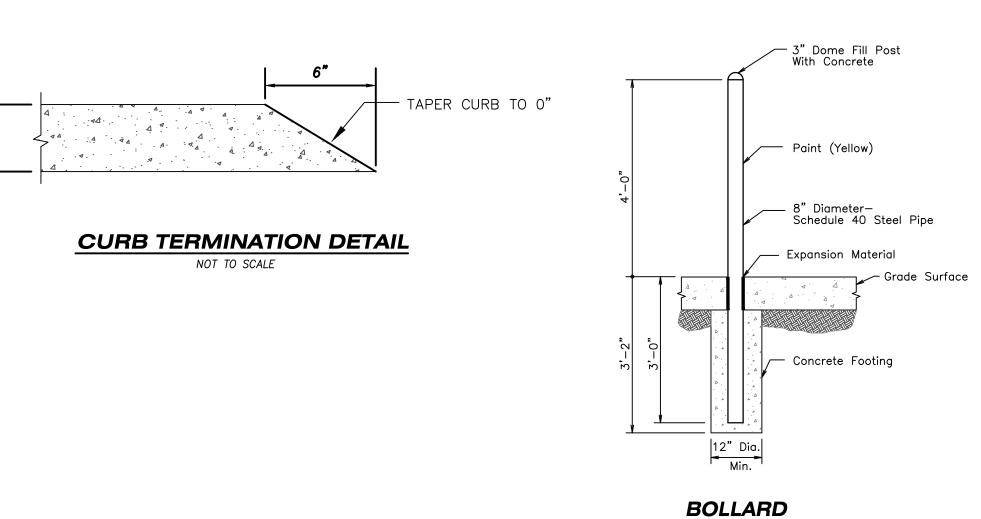
2. EXPANSION JOINTS SHALL BE PLACED WHERE CURB AND GUTTER ABUTS OTHER STRUCTURES AND AT ALL TANGENT POINTS TO CURBS. EXPANSION JOINTS SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID CURB AND GUTTER AND NOT MORE THAN 100 FEET APART FOR MACHINE LAID CURB AND GUTTER PROVIDED 3/4 INCH THICK JOINT FILLER IS USED. ALL JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE CURB AND GUTTER.

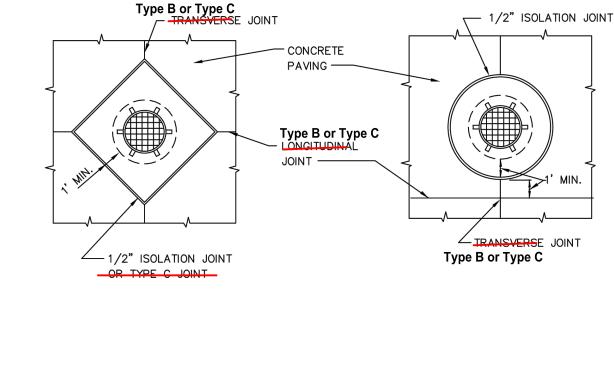
3. CONTRACTION JOINTS SHALL BE CONSTRUCTED BY SAWING THROUGH THE CURB AND GUTTER TO A DEPTH OF NOT LESS THAN ONE AND ONE—FOURTH (1 1/4) INCHES BELOW THE SURFACE AND TO A WIDTH NOT TO EXCEED THREE—EIGHTHS (3/8) INCH OR THEY MAY BE FORMED BY INSERTING A REMOVABLE METAL TEMPLATE IN THE FRESH CONCRETE, OR BY OTHER METHODS APPROVED BY THE ENGINEER. SEALING OF JOINTS IS NOT REQUIRED. CONTRACTION OR CONSTRUCTION JOINTS SHALL BE LOCATED APPROXIMATELY 10 FEET APART.

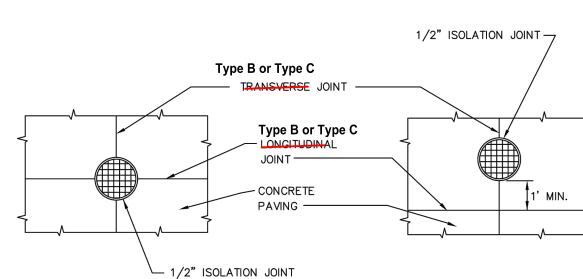
4. EXTEND 6" THICK AGGREGATE BASE MINIMUM 12" BEHIND BACK OF CURB.

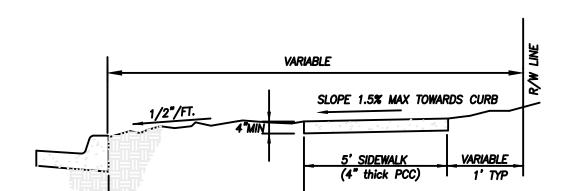
CURB AND GUTTER

NOT TO SCALE

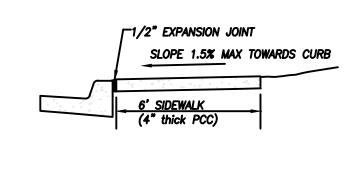








VARIABLE (5' TYP)

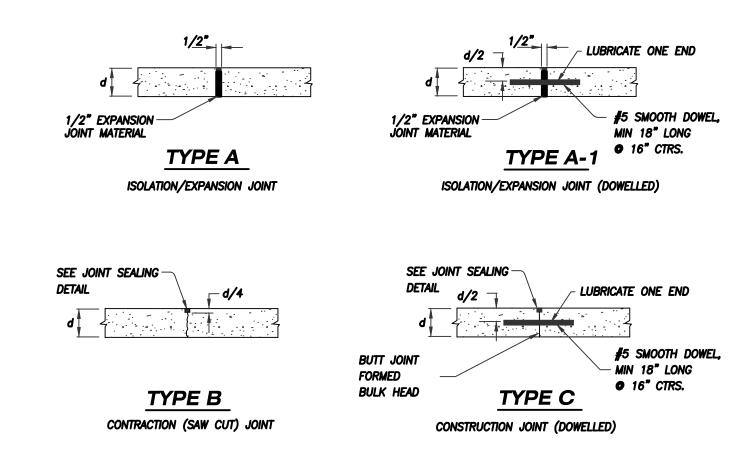


NOTES: 1. JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE SIDEWALK AND TO THE DEPTHS INDICATED BELOW.

- 2. THE SIDEWALK SHALL BE MARKED OFF INTO SQUARE SECTIONS (PICTURE FRAMED) BY CONTRACTION JOINTS. CONTRACTION JOINTS SHALL BE ONE-EIGHTH (1/8) INCH WIDE BY ONE (1) INCH DEEP AND SHALL BE FORMED BY TOOLING.
- 3. EXPANSION JOINTS SHALL BE FORMED BY A ONE—HALF (1/2) INCH THICK PREFORMED JOINT FILLER, EXTENDING THE FULL DEPTH OF THE SLAB, AND SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS.
- 4. EXPANSION JOINTS SHALL BE PLACED WHERE SIDEWALK ABUTS OTHER STRUCTURES AND SHALL NOT BE SPACED MORE THAN 50 FT APART ON STRAIGHT RUNS FOR HAND LAID SIDEWALK AND NOT MORE THAN 100 FT APART ON STRAIGHT RUNS FOR MACHINE LAID SIDEWALKS.
- 5. SIDEWALK TO BE INSTALLED ON COMPACTED SUBGRADE (MIN 95% STD PROCTOR). CONTRACTOR MAY ELECT TO INSTALL AGGREGATE LEVEL COURSE.

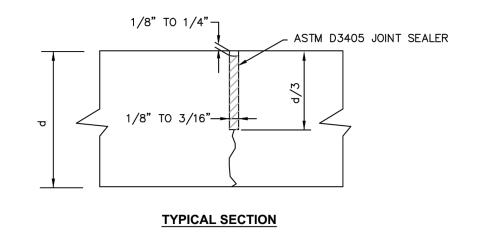
SIDEWALK DETAILS

NOT TO SCALE



CONCRETE JOINT DETAILS NOT TO SCALE

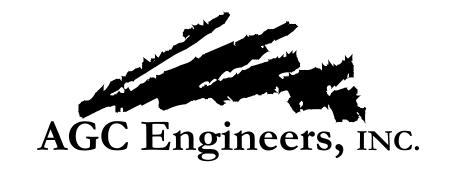
CONCRETE PAVING ISOLATION JOINTS



- 1. JOINT SEALING MATERIAL SHALL CONFORM TO ASTM D3405 AND SHALL BE APPLIED IN ACCORDANCE WITH MATERIAL MANUFACTURER'S RECOMMENDATIONS.
- 2. d = DEPTH OF SLAB

CONCRETE PAVING JOINT SEALING

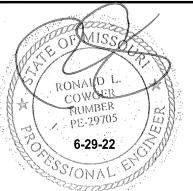
	NOT TO SCALE	
BY	REVISION	DATE
RC/ACA	FOR REVIEW PER CITY COMMENTS DATED 6-5-2020 & PROJECT PLACED ON HOLD DUE TO COVID	6-29-22
RC/ACA	FOR REVIEW	5-21-20



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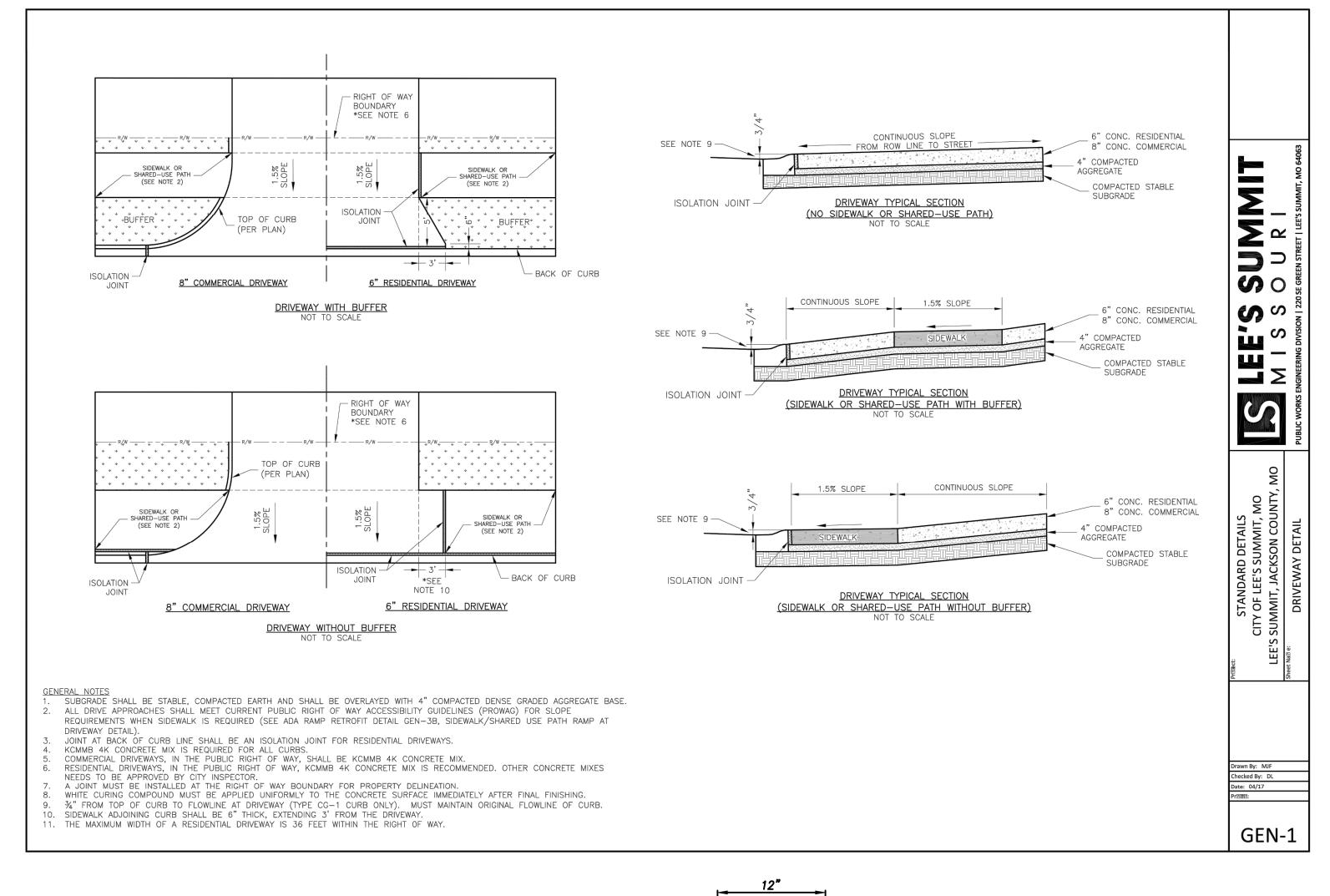
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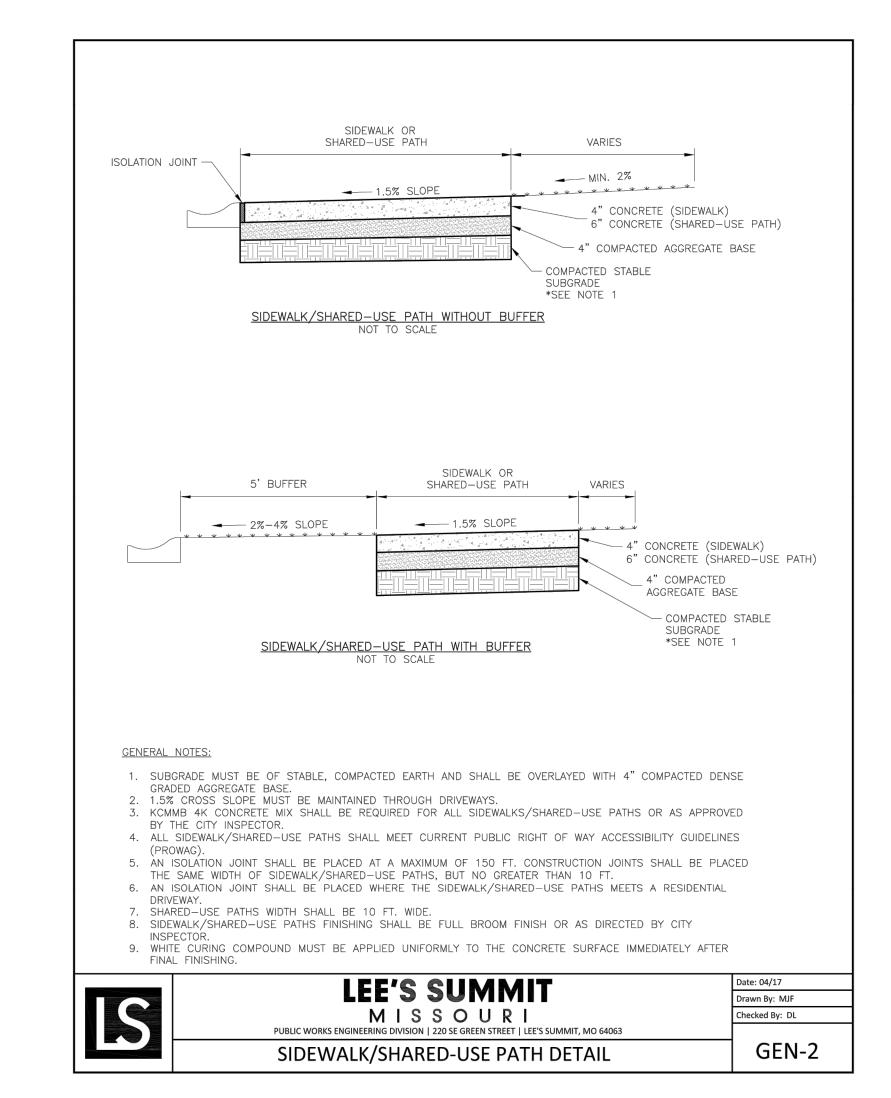


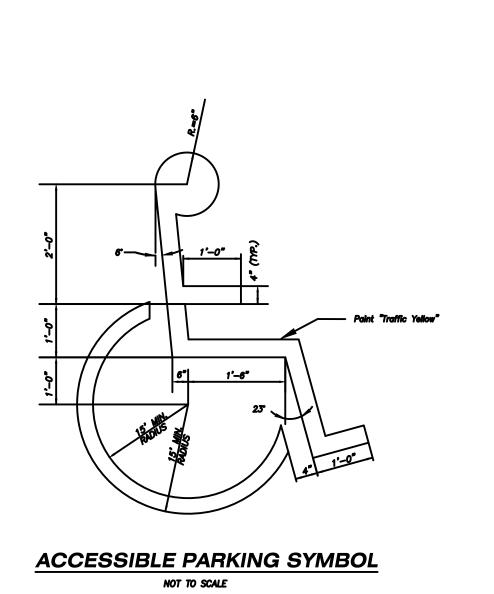
PANERA BREAD BAKERY - CAFE LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

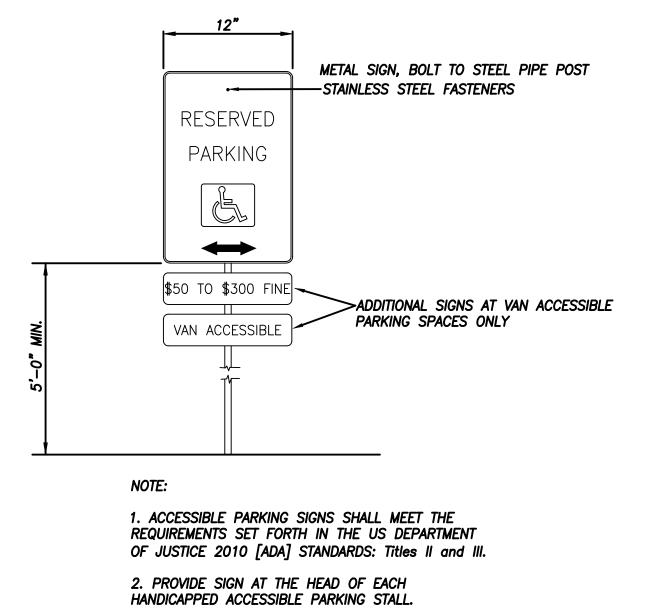
SITE DEVELOPMENT PLANS

DETAILS

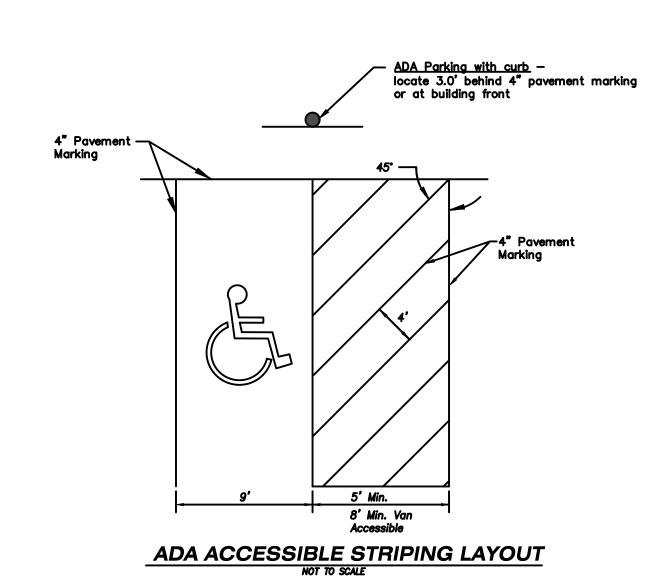








HANDICAP SIGN NOT TO SCALE



AGC Engineers, INC.

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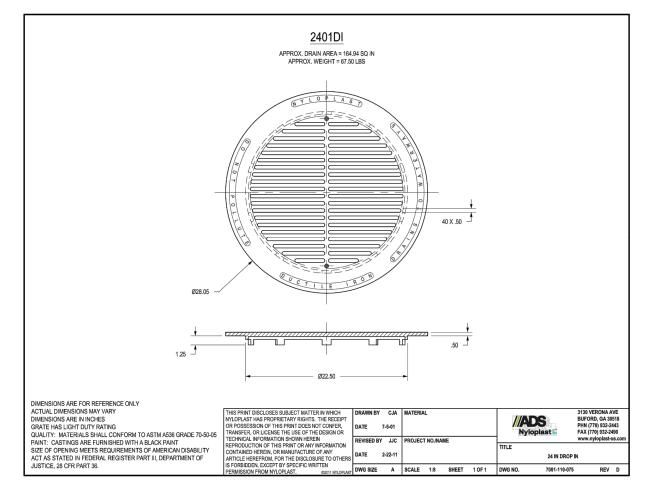
816.781.4200 **■** fax 792.3666

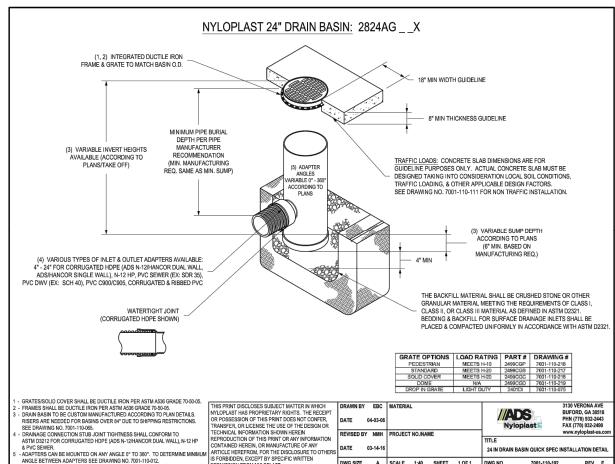
6-29-22

PANERA BREAD BAKERY - CAFE LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **DETAILS**

BY	REVISION	DATE	
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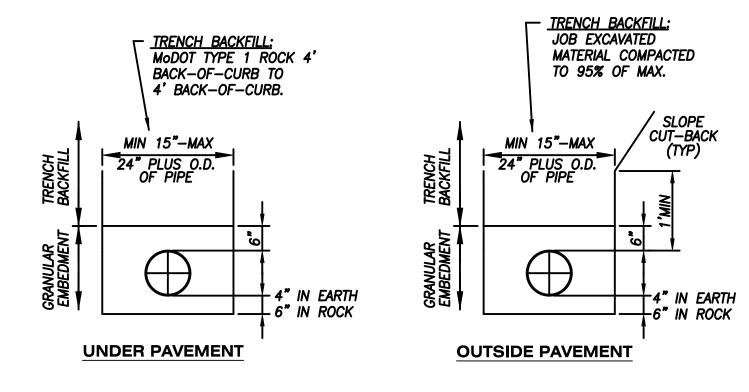
(taken from Contech Engineered Solutions CMP Detention and Infiltration Installation Guide)

Final Cover Placement and Construction Loading

Construction loads often exceed design highway loading. During construction, keep heavy construction equipment that exceeds leg highway loads off the pipe. Light construction equipment on tracks such as a D-3 dozer for lighter weighth may cross over the pipe when a minimum of 12° of compacted backfill is over pipe. When construction equipment that exceeds legal highway loads must cross over pipe, an additional thickness of compacted fill, beyond that required for planned cover is required. Since construction equipment varies from job to job, it is best to address equipment varies from job to job, it is best to address equipment varies.

AT PRELIMINARY UTILITY INSPECTION TO BE LOWERED TO -FINAL GRADE AT TIME OF PLUMBER'S TIE—IN NON-PAVED AREAS 18" x 18" x 6" CONCRETE COLLAR; (2) #4 BARS CONTINUOUS AND (4) #4 BARS DIAGONAL **34" EXPANSION** JOINT AROUND CAP FLUSH WITH SLAB SEWER BRANCH WYE -6" SANITARY LATERAL **→** FLOW MINIMUM SLOPE

> **CLEAN-OUT DETAIL** NOT TO SCALE



EMBEDMENT AND BACKFILL FOR SANITARY SEWERS NOT TO SCALE

— UNDISTURBED TRENCH

WALL (TYP.)

MINIMUM RECOMMENDED COVER 12" (24" FOR 60" PIPE)*

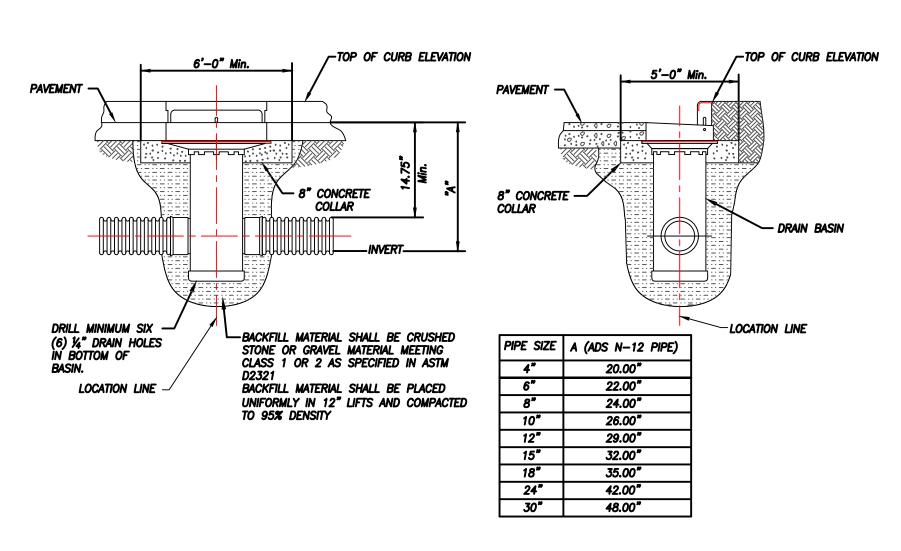
12" (24" FOR 60" PIPE)

1. <u>FOUNDATION</u>: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I OR II MATERIAL AS DEFINED IN ASTM D2321, "STANDARD PRACTICE FOR INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY—FLOW APPLICATIONS," LATEST EDITION: AS AN ALTERNATIVE AND AT THE DISCRETION OF THE ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING WOVEN 2. <u>BEDDING</u>: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4"; FOR 4"-24" DIA. HDPE; 6" FOR 30"-60" DIA. HDPE. 3. <u>Haunching and initial backfill</u>: Suitable material shall be class i, ii or iii and installed as required in astm d2321, latest edition.

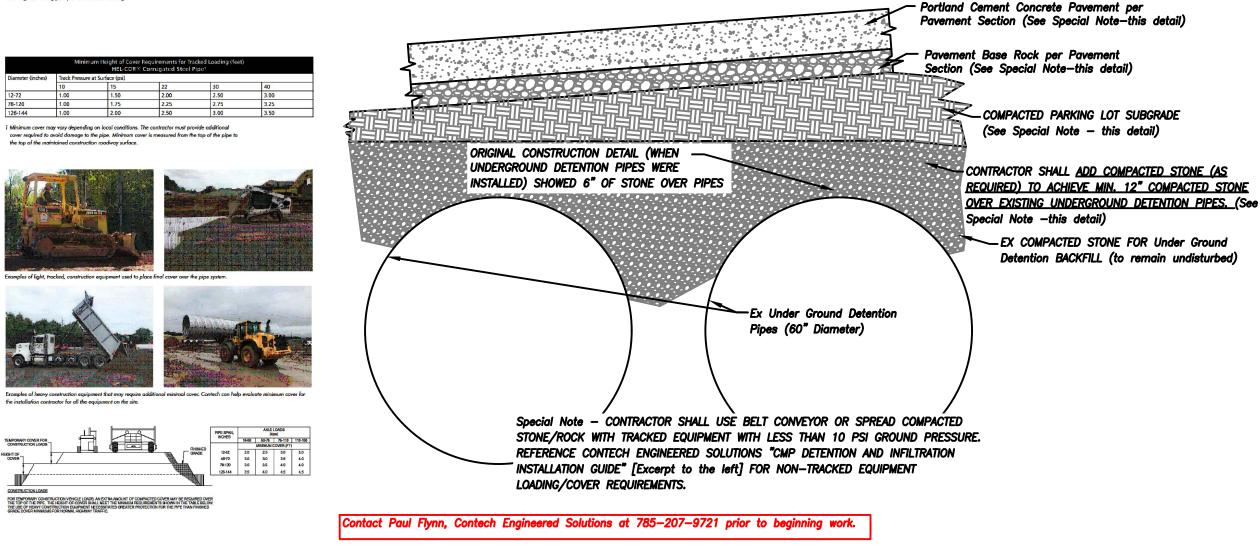
> 4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM TRENCH WIDTHS SHALL BE AS FOLLOWS: MIN. RECOMMENDED <u>TRENCH WIDTH</u>

HEAVY CONSTRUCTION 48" 5. <u>MINIMUM COVER</u>: MINIMUM RECOMMENDED DEPTHS OF COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF THE PIPE TO THE GROUND SURFACE.

HDPE (HIGH DENSITY POLYETHYLENE) PIPE INSTALLATION DETAIL NOT TO SCALE

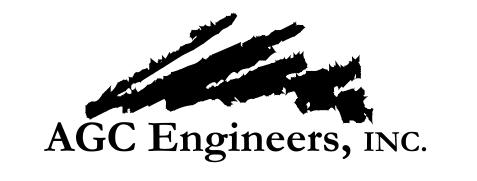


NYLOPLAST DRAIN BASIN - TYPICAL INSTALLATION



SPECIAL DETAIL FOR WORK OVER UNDERGROUND DETENTION AREA

BY	REVISION	DATE
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COMPACTED TRENCH BACKFILL 95% OF

STANDARD PROCTOR. UNDER PAVEMENT OR

FUTURE PAVEMENT USE COMPACTED GRANULAR BACKFILL

COMPACTED

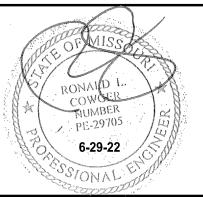
GRANULAR BEDDING & BACKFILL

> SURFACE LIVE LOADING CONDITION H25 (FLEXIBLE PAVEMENT)

H25 (RIGID PAVEMENT)

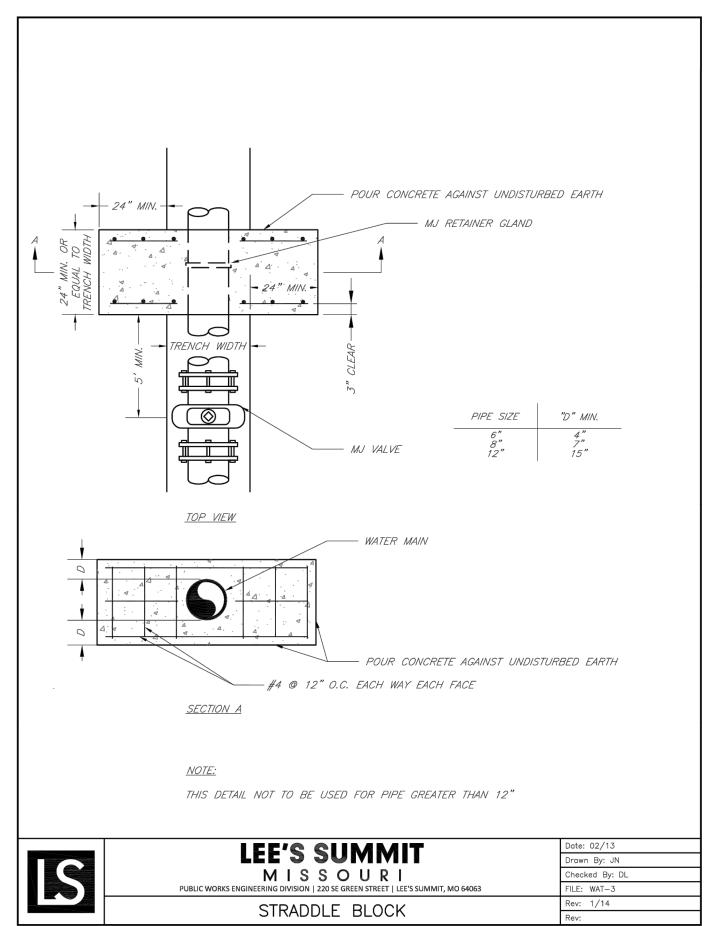
E80 RAILWAY

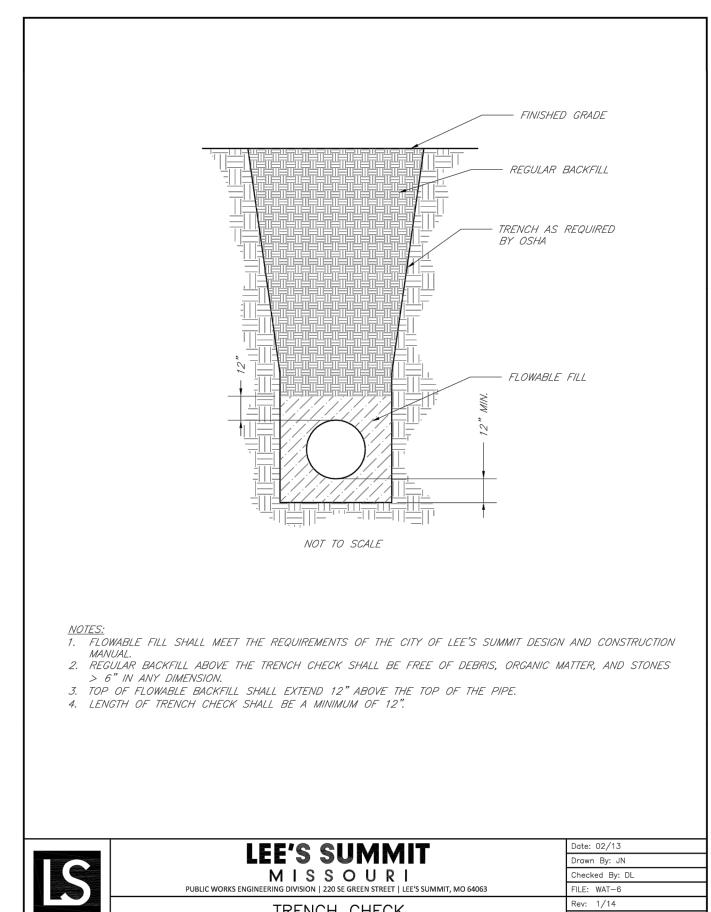
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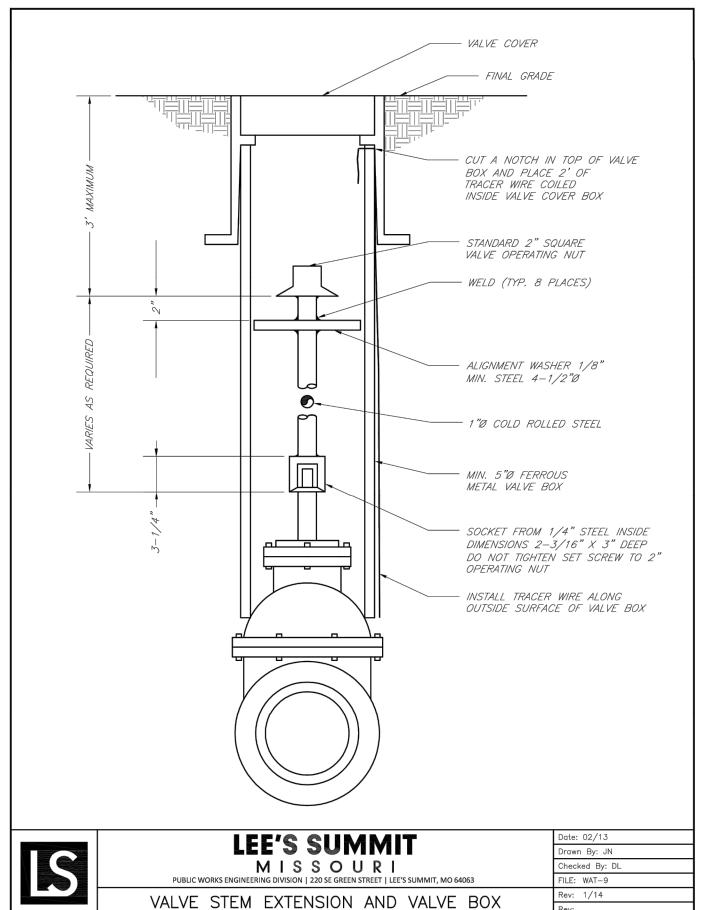
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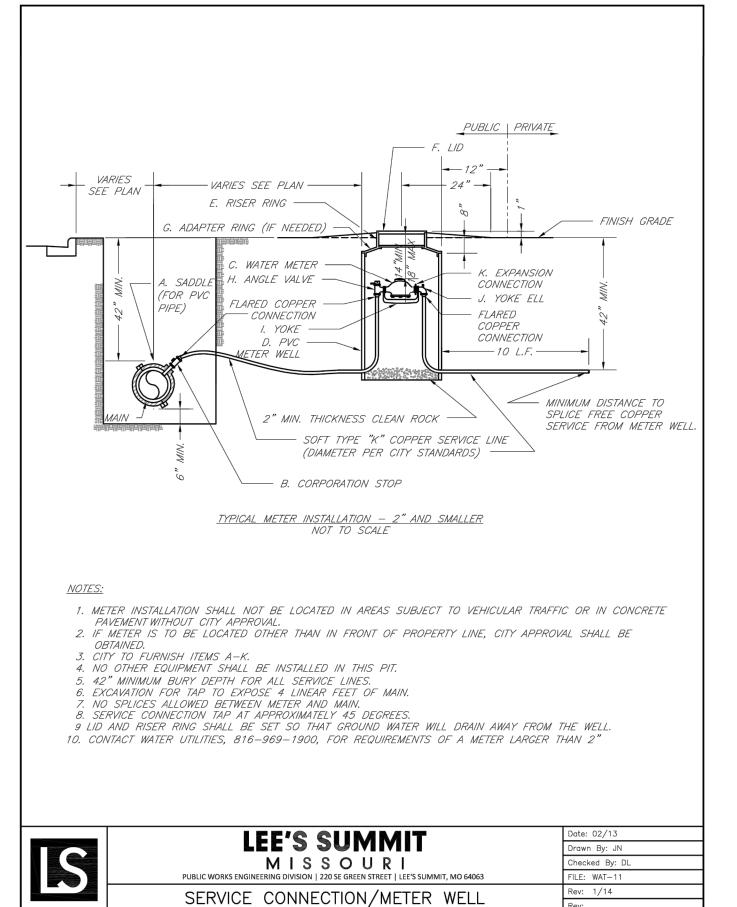
SITE DEVELOPMENT PLANS **DETAILS**

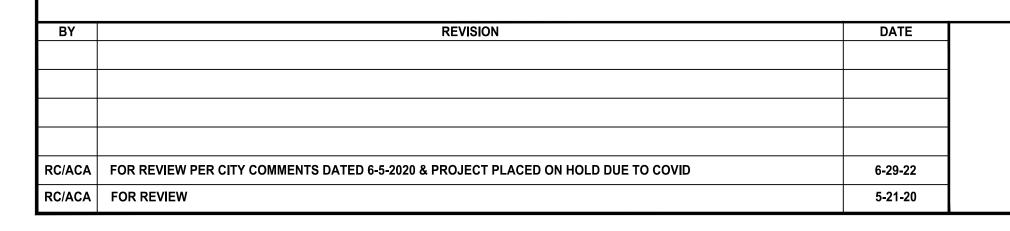


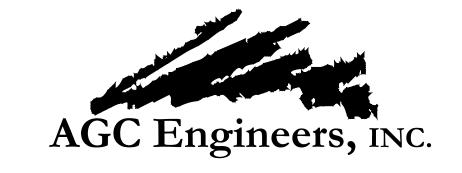


TRENCH CHECK





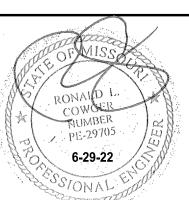




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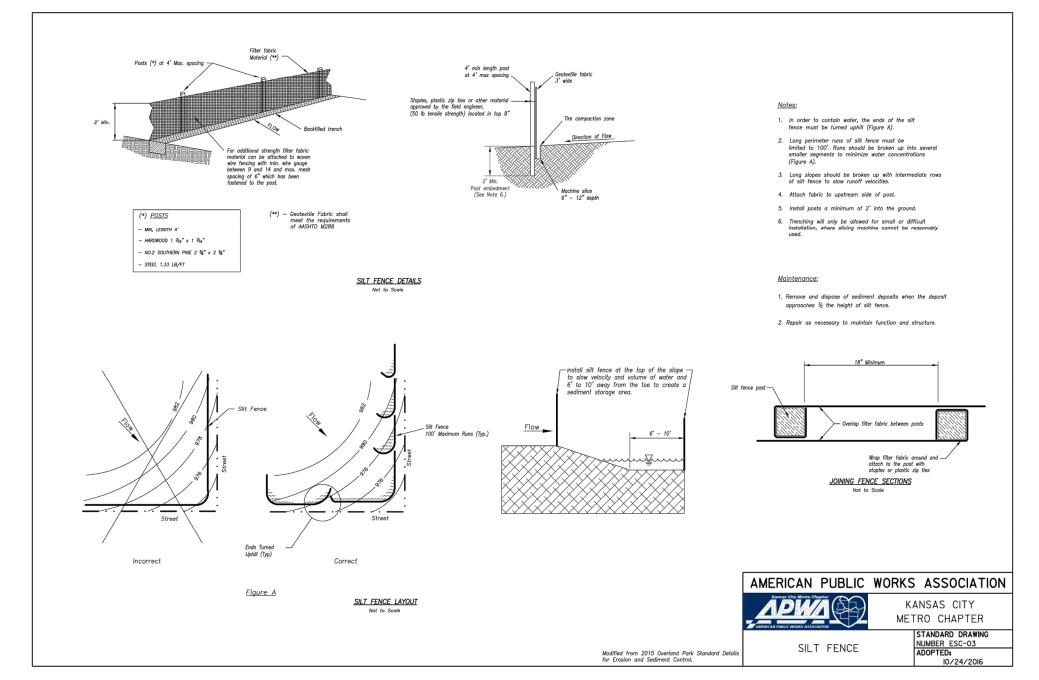
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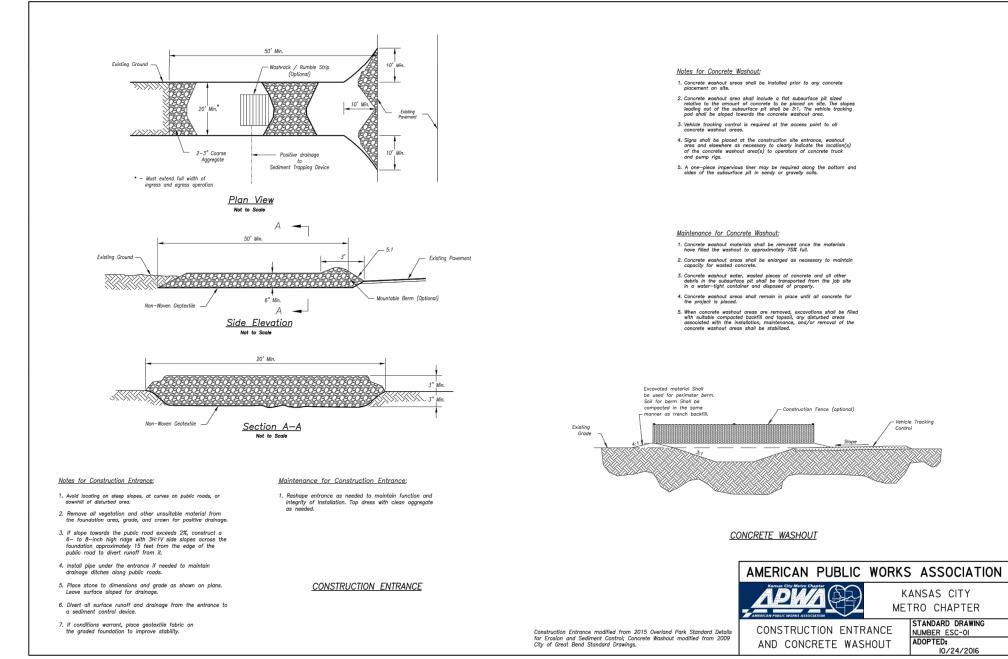
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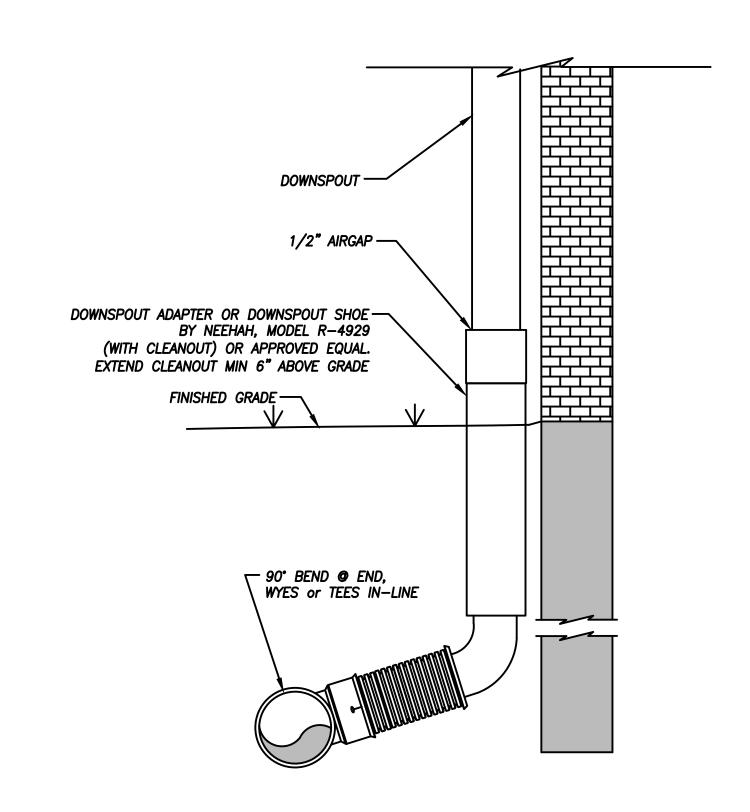


PANERA BREAD BAKERY - CAFE LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **DETAILS**

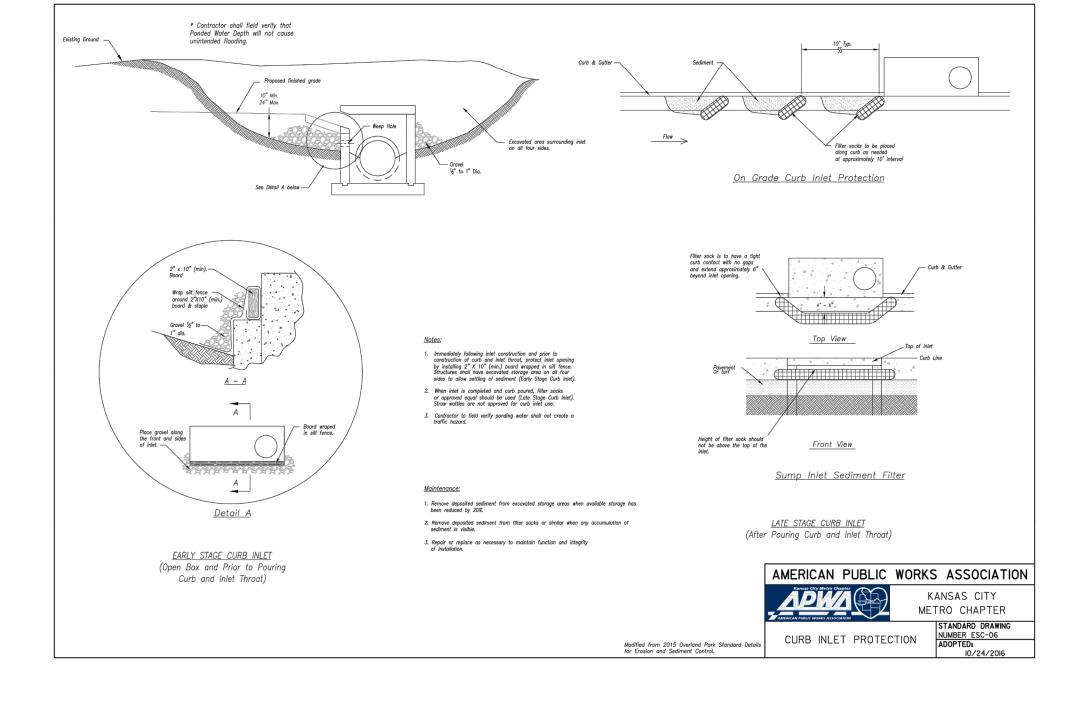




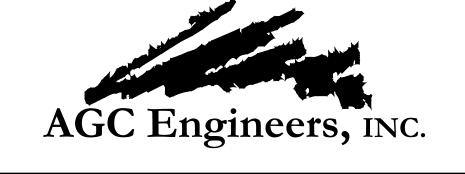


DOWNSPOUT DRAIN DETAIL

NOT TO SCALE



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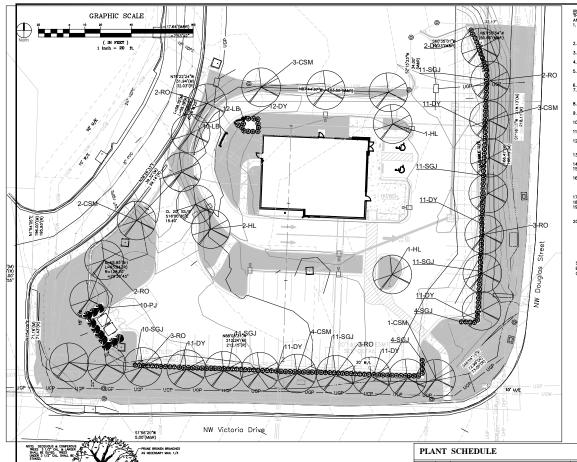
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RONALD L. COWGER NUMBER PE-29705 6-29-22

PANERA BREAD BAKERY - CAFE
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SITE DEVELOPMENT PLANS **DETAILS**



6.29.2022

VSR FINAL DEVELOPMENT PLAN FOR CITY REVIEW

INDICATION PERFORMANCE SPECIFICATION:

INTER COLLOWING CRITERIA SHALL BE CONSIDERED MINIMUM STANDARDS FOR DESIGN AND INSTALLATION OF LANDSCAFE BRIGATION SYSTEM AND INSTALLATION.

INDICATE TO BUILDINGS, SPRAY LEADS IN THE PRIVATE SHALL THROW AWAY FROM THE PERMETTER OF THE PARKING LOSS SHALL THROW AWAY FROM THE PERMETTER OF THE PARKING LOSS SHALL THROW AWAY FROM THE PERMETTER OF THE PARKING LOSS SHALL THROW AWAY FROM THE PERMETTER OF THE PARKING LOSS SHALL THROW AWAY FROM THE PERMETTER OF THE PARKING LOSS SHALL THROW AND STOCK FREE OF DEFECTS AND CARRY A MINIMUM CARE YEAR AND LOCAL LAWS GOVERNING DESIGN AND INSTALLATION.

ALL MATERIALS SHALL BE FROM NEW STOCK FREE OF DEFECTS AND CARRY A MINIMUM CAN YEAR WARRANTY FROM THE DATE OF SUBSTAINANT COMPLETED.

THAT ALL SYSTEM COMPONENTS OPERATE WITHIN THE QUIDELINES ESTABLISHED BY THE MAINFACHTER.

PROVIDE WATER TAP, METER ST, METER VALUET AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TAP, METER ST, METER VALUET AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TOP METER ST, METER VALUET AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TOP METER ST, METER VALUET AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TOP METER ST, METER VALUET AND ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TOP METER TOP METER OF THE OTHER TOP ALL OTHER OPERATIONS NECESSARY TO PROVIDE WATER TOP METER TOP ALL THROW THE TOP TOP TOP TOP TO THE TOP TO THE OTHER TO THE OTHER TOP TO THE OTHER TOP TO THE OTHER TOP TO THE OTHER T

- LANDSCAPING NOTES:

 1. LOCATE ALL UTILITIES BEFORE LANDSCAPE CONSTRUCTION BEGINS.

 2. MOTHEY OWNER REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES.

 3. ALL EXTERIOR GROUND WITHIN THE LIMITS OF THE CONTRACT, EXCEPT FOR SUMPLES COLUMBED BY BUILDINGS, STRUCTURES, PANNIC, AND AS DIRECTED ON THE DROBANGS AS UNDSTURBED, SHALL BE FILLED WITH SIX INCHES AND AS DIRECTED ON THE DROBANGS AS UNDSTURBED, SHALL BE FILED WITH SIX INCHES AND ASSESSED OF THE CONTRACT OF THE PROPERTY OF THE PROPE

- (8") OF TOPSOIL.

 ALL DISTURBED AREAS NOT DESIGNATED FOR OTHER PLANTING SHALL BE SOUDED. SOD SHALL CONSIST OF 90% TUBE TYPE TALL FESCUE 10% BEFERRAL BE USED UNDER ALL PLANTING AREAS NOT TO BE SOUDED OR AS DIRECTED ON THE DRAWINGS. THE MAT SHALL BE COVERED WITH MULCH AND SECURED IN PLACE BY A SOIL ANCHOR.

 5. QUANTITIES INDICATED IN PLANT LIST ARE FOR CONVENENCE ONLY.

 ON THE PLAN RESPONSIBLE FOR PLANT QUANTITIES AS ILLUSTRATED.
- ON THE PLAN.

 7. SHREDDED HARDWOOD MULCH SHALL BE USED AS THREE INCH (3*) TOP SHREUDED HARDWOOD MULCH SHALL BE USED AS INKE INCH (3) TOP DRESSING IN ALL PLANT BEDS AND AROUND ALL TREES, SINGLE TREES OR SHRUBS SHALL BE MULCHED TO THE OUTSIDE EDGE OF SAUCER OR LANDSCAPE ISJAND (SEE PLANTING DETAILS).
 PROVIDE STEEL EDDING AROUND ALL SHRUB AND GROUNDCOVER BEDS. STEEL EDDING SHALL BE 1/8" x 4" WITH CUIPS AND REBAR STAKES FIVE

- STEEL EURING SHAEL DE ./V FEETÉS DO CEMER .

 9. FERTIUZ NO CEMER.

 9. FERTIUZE ALL PLANTS AT THE TIME OF PLANTING WITH TIME-RELEASE FERTILIZER/3-4 SLOW-RELEASE TABLETS/PELLETS).

 10. IF LEANING OCCURS WITHIN ONE YEAR, TREES SHALL BE RE-STAKED (SEE

- FERRILIZER(3-4 SLOW-RELEASE TABLETS/PELLETS).

 IF LENNING COCIONS WITHIN ONE YEAR, TREES SHALL BE RE—STAMED (SEE J. FLOW).

 PLANTING DEFILIANCE, STAKE ALL PLANT MATERIALS PRIOR TO INSTALLATION. FOR THE PROPOSE OF DETERMINING CONFLICTS WITH ROCK, UTILITIES, ETC. NO PLANTS CAN BE PLANTED DIRECTLY ON ROCK OR UTILITIES. NOTIFY ARCHITECT/PRIORIBER/OWNER AT ONCE IF ANY CONFLICTS COCUR. CONTRACTOR WILL BE REQUIRED TO ADJUST PLANT LOCATIONS AT NO ADJUST PLANT LOCATIONS AND OWNER HAS OCCUPIED THE BUILDING. IN PROVIDE TO SEPSENDING FOR WITH CONTROL AND OWNER HAS OCCUPIED THE BUILDING.

 J. PROVIDE COLIDE DEGOSION OUT OF MAT, NORTH AMERICAN GREEN SCISOBN OWNER OCCUPIES THE BUILDING. WITH THE PROVIDE AND WASHING OWNER PROVIDED OWNER WITH CONTROL WAS THE LOCATION OF THE PROVIDE AND WASHING TO SEPSENDING TO PROVIDE THE SECOND OWNER PROVIDE AND WASHING TO PROVIDE AND WASHING THE PROVIDE AND INSTALL 13 OPETH OF 17 THE TABLES PER MANUFACTURER. PROVIDE AND INSTALL 13 OPETH OF 17 THE TABLES PER MANUFACTURER. PROVIDE AND INSTALL 13 OPETH OF 17 THE TABLES PER MANUFACTURER PROVIDE AND INSTALL 3 OPETH OF 17 THE TABLES PER MANUFACTURER PROVIDE AND INSTALL 3 OPETH OF 17 THE TABLES PER MANUFACTURER PROVIDE AND INSTALL 3 OPETH OF 17 THE TABLES PER MANUFACTURER GRAVEL, SUBMIT COLOR SAMPLE TO OWNER FOR APPROVAL.

LANDSCAPE WORKSHEET

8.720.A.1 Street Frontage	ORDINANCE REQUIRMENT	REQUIRED FOR THIS SITE	PROPOSED (EXISTING AND NEW LANDSCAPE) 8 trees
Trees (NW Douglas)	street frontage	/30= 8 trees required	0 11000
8.720.A.2 Street Frontage Green Strip (NW Douglas)	20 feet	20 feet	20 feet
8.720.A.3 Street Frontage Shrubs (NW Douglas)	1 shrub per 20 feet of street frontage	229 ft. of street frontage /20= 12 shrubs required	16 shrubs
8.720.A.1 Street Frontage Trees (NW Victoria)	1 tree per 30 feet of street frontage	297 ft. of street frontage /30= 10 trees required	10 new trees
8.720.A.2 Street Frontage Green Strip (NW Victoria)	20 feet	20 feet	20 feet
8.720.A.3 Street Frontage Shrubs (NW Victoria)	1 shrub per 20 feet of street frontage	297 ft. of street frontage/20= 15 shrubs required	15 shrubs
8.790.B.1 Open Yard Shrubs	2 shrubs per 5000 sq. ft. of total lot area excluding building footprint.	23,300 sq. ft./5000 x 2=10 shrubs.	12 shrubs
8.790.B.2 Open Groundcover	Open area not covered with other materials shall be covered with sod.		Sod
8.790.B.3 Open Yard Trees	1 tree per 5000 sq. ft. of total lot area excluding building and parking.	23,300 sq. ft./5000=5 trees.	5
8.810.A Parking Lot Landscape Islands	5% of entire parking area (spaces, aisles & drives); 1 Island at end of every parking bay, min. 9' wide	25,153 sq.ft. of parking area x .05 = 1,257 sq.ft. of landscape parking lot islands required	1,714 sq.ft.
8.820 Screening of Parking Lot, NW Douglas	12 shrubs per 40 linear feet (must be 2.5 feet tall; berms may be combined with shrubs)	229 linear feet/40 x 12 69 shrubs required	69 shrubs
8.820 Screening of Parking Lot, NW Victoria.	12 shrubs per 40 linear feet (must be 2.5 feet tall; berms may be combined with shrubs)	240 linear feet/40 x 12 72 shrubs required	72 shrubs

MOID ROOMAN & COMPANION STATE OF THE STATE OF THE SHOOM SHANCHES SHOULD BE AND STATE OF THE SHOOM SHANCHES SHOULD BE AND STATE OF THE SHOOM SHOWN SHANCHES SHOULD BE AND STATE OF THE SHOOM SHOWN SHOW	PLA	NT	SCHEDULE			
FRUMEN HOSE OR NYLON STRAP	KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE/REMARKS	7
(Figure 1976) (Contactors of this) (Figure 1976) (Figure 1	TREES	•				71
	CSM	13	ACER SACHARUM 'AUTUMN SPLENDOR'	CADDO SUGAR MAPLE	2" CAL. B&B	
12 OA, OALY, TE WISE W/ (3) WOOD PRINT BEET SOA. PLANESCENT FLACTIONS FACE THEMSELECT SOA. FACE THE WISE W/ (3) WOOD FLACTION IN LABORITHMEN SOA.	HL	4	GLEDITISA TRIACANTHOS 'SKYLINE'	SKYLINE HONEYLOCUST	2" CAL. B&B	
PAINT WITH THE OWN THAT THE THE OWN ALL RUSH ON THE A MONTH THE HEAD OWNER. THEN THAT WAS SEEN ON THE HEAD OWNER. DO NOT THAT SEEN ON THE HEAD OWNER.	RO	15	QUERCUS RUBRA	RED OAK	2" CAL. B&B	
-3" HAMSONGOO MULCH (SETTLED DEPTH)						
PINISHED GRADE 1/2 DISTING SOU, 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL, 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL, 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON SIDES 1/2 DISTING SOL ON SIDES 1/2 DISTING SOL 1/2 TOPSOL SALESP SOL ON	PJ	10	JUNIPEROUS CHINENSIS 'PERFECTA'	PERFECTA JUNIPER	6" HT. B&B	
e eottow or Pri						
DOUBLE BOUMAN OR - ACCOPTABLE CONVOLUDIT (1) MICH PRINTED	SHRUB	S/GRAS	SES/GROUNDCOVER			
MACE RODINAL ON INDICAMATE OF	SGJ	73	JUNIPEROUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	2 GAL. min. 18" HT	
EPPER AROUND PERMETER. 2 to 3 x ROOT BALL TO 75 OF BALL ALL OF LINCHTURBED SUBSOL.	TX	80	TAXUS x MEDIA 'DENSIFORMIS'	DENSIFORMIS YEW	2 GAL. min. 18" HT	.
TREE PLANTING NOT 10 SCALE SHRUB PLANTING NOT TO SCALE	LB	22	PENNISETUM ALOPECURIODES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	1 GAL]
BY REVISION DATE						



PANERA BREAD BAKERY - CAFE

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

FINAL DEVELOPMENT PLANS LANDSCAPE PLAN

L100