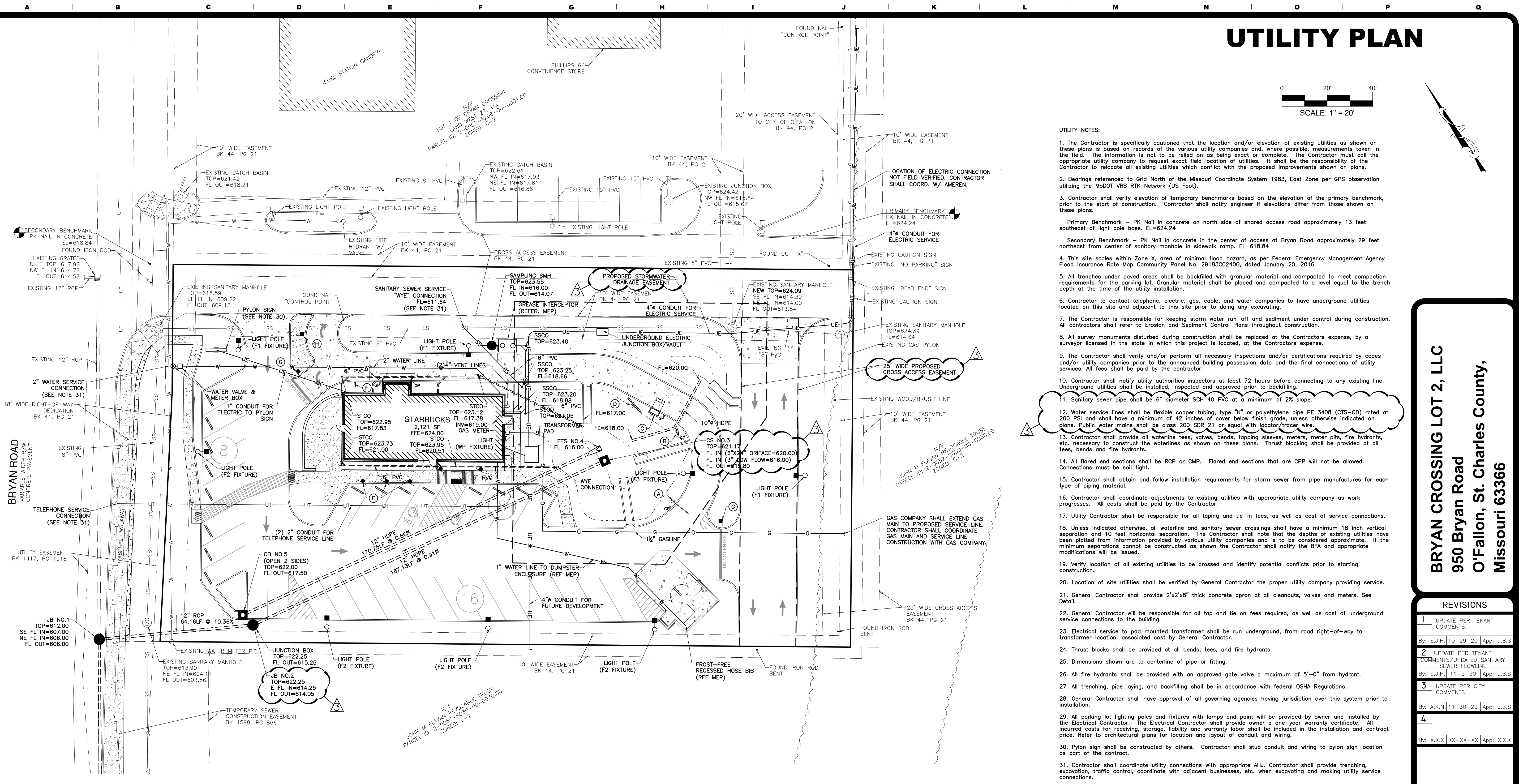
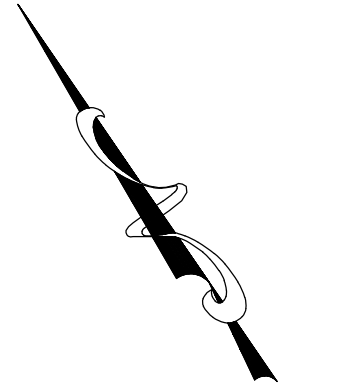
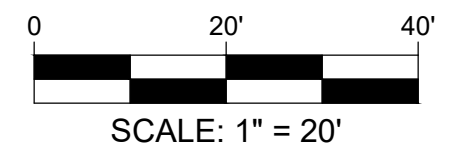


UTILITY PLAN



- UTILITY NOTES:**
- The Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Contractor must call the appropriate utility company to request exact field location of utilities. It shall be the responsibility of the Contractor to relocate all existing utilities which conflict with the proposed improvements shown on plans.
 - Bearings referenced to Grid North of the Missouri Coordinate System 1983, East Zone per GPS observation utilizing the MoDOT VRS RTK Network (US Foot).
 - Contractor shall verify elevation of temporary benchmarks based on the elevation of the primary benchmark, prior to the start of construction. Contractor shall notify engineer if elevations differ from those shown on these plans.
 Primary Benchmark - PK Nail in concrete on north side of shared access road approximately 13 feet southeast of light pole base. EL=624.24
 Secondary Benchmark - PK Nail in concrete in the center of access at Bryan Road approximately 29 feet northeast from center of sanitary manhole in sidewalk ramp. EL=618.84
 - This site is within Zone X, area of minimal flood hazard, as per Federal Emergency Management Agency Flood Insurance Rate Map Community Panel No. 291830C240G, dated January 20, 2016.
 - All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the parking lot. Granular material shall be placed and compacted to a level equal to the trench depth at the time of the utility installation.
 - Contractor to contact telephone, electric, gas, cable, and water companies to have underground utilities located on this site and adjacent to this site prior to doing any excavating.
 - The Contractor is responsible for keeping storm water run-off and sediment under control during construction. All contractors shall refer to Erosion and Sediment Control Plans throughout construction.
 - All survey monuments disturbed during construction shall be replaced at the Contractor's expense, by a surveyor licensed in the state in which this project is located, at the Contractor's expense.
 - The Contractor shall verify and/or perform all necessary inspections and/or certifications required by codes and/or utility companies prior to the announced building possession date and the final connections of utility services. All fees shall be paid by the contractor.
 - Contractor shall notify utility authorities inspectors at least 72 hours before connecting to any existing line. Underground utilities shall be installed, inspected and approved prior to backfilling.
 - Sanitary sewer pipe shall be 6" diameter SCH 40 PVC at a minimum of 2% slope.
 - Water service lines shall be flexible copper tubing, type "K" or polyethylene pipe PE 3408 (CTS-OD) rated at 200 PSI and shall have a minimum of 42 inches of cover below finish grade, unless otherwise indicated on plans. Public water mains shall be class 200 SDR 21 or equal with locator/tracer wire.
 - Contractor shall provide all watertight tees, valves, bends, tapping sleeves, meters, meter pits, fire hydrants, etc. necessary to construct the waterlines as shown on these plans. Thrust blocking shall be provided at all tees, bends and fire hydrants.
 - All flared end sections shall be RCP or CMP. Flared end sections that are CPP will not be allowed. Connections must be soil tight.
 - Contractor shall obtain and follow installation requirements for storm sewer from pipe manufacturers for each type of piping material.
 - Contractor shall coordinate adjustments to existing utilities with appropriate utility company as work progresses. All costs shall be paid by the Contractor.
 - Utility Contractor shall be responsible for all taping and tie-in fees, as well as cost of service connections.
 - Unless indicated otherwise, all waterline and sanitary sewer crossings shall have a minimum 18 inch vertical separation and 10 feet horizontal separation. The Contractor shall note that the depths of existing utilities have been plotted from information provided by various utility companies and is to be considered approximate. If the minimum separations cannot be constructed as shown the Contractor shall notify the BFA and appropriate modifications will be issued.
 - Verify location of all existing utilities to be crossed and identify potential conflicts prior to starting construction.
 - Location of site utilities shall be verified by General Contractor the proper utility company providing service.
 - General Contractor shall provide 2'x2'x8" thick concrete apron at all cleanouts, valves and meters. See Detail.
 - General Contractor will be responsible for all top and tie on fees required, as well as cost of underground service connections to the building.
 - Electrical service to pad mounted transformer shall be run underground, from road right-of-way to transformer location, associated cost by General Contractor.
 - Thrust blocks shall be provided at all bends, tees, and fire hydrants.
 - Dimensions shown are to centerline of pipe or fitting.
 - All fire hydrants shall be provided with an approved gate valve a maximum of 5'-0" from hydrant.
 - All trenching, pipe laying, and backfilling shall be in accordance with federal OSHA Regulations.
 - General Contractor shall have approval of all governing agencies having jurisdiction over this system prior to installation.
 - All parking lot lighting poles and fixtures with lamps and paint will be provided by owner and installed by the Electrical Contractor. The Electrical Contractor shall provide owner a one-year warranty certificate. All incurred costs for receiving, storage, liability and warranty labor shall be included in the installation and contract price. Refer to architectural plans for location and layout of conduit and wiring.
 - Pylon sign shall be constructed by others. Contractor shall stub conduit and wiring to pylon sign location as part of the contract.
 - Contractor shall coordinate utility connections with appropriate AHJ. Contractor shall provide trenching, excavation, traffic control, coordinate with adjacent businesses, etc. when excavating and making utility service connections.
 - All sanitary sewer installation is to be in accordance with M.S.D. Standards and Specifications except as modified by the City of O'Fallon ordinance.

BRYAN CROSSING LOT 2, LLC
 950 Bryan Road
 O'Fallon, St. Charles County,
 Missouri 63366

REVISIONS	
1	UPDATE PER TENANT COMMENTS. By: E.J.H. 10-29-20 App: J.B.S.
2	UPDATE PER TENANT COMMENTS/UPDATED SANITARY SEWER FLOWLINE. By: E.J.H. 11-5-20 App: J.B.S.
3	UPDATE PER CITY COMMENTS. By: A.K.N. 11-30-20 App: J.B.S.
4	 By: X.X.X. XX-XX-XX App: X.X.X.

UTILITY PLAN LEGEND		
DESCRIPTION	PROPOSED	EXISTING
AERIAL ELECTRIC	—AE—	—AE—
UNDERGROUND ELECTRIC	—UE—	—UE—
UTILITY POLE	•	•
GAS LINE	—G—	—G—
GUARD POST	⌘	⌘
SANITARY SEWER	—SS—	—SS—
SANITARY MANHOLE	•	•
STORM SEWER	=====	=====
CATCH BASIN	■	■
JUNCTION BOX	•	•
FLARED END SECTION	⌘	⌘
CLEANOUT	•	•
GRATED INLET	■	■
WATERLINE	—W—	—W—
WATER VALVE	•	•
FIRE HYDRANT	•	•
EASEMENT	---	---

STRUCTURE ABBREVIATION LEGEND	
ABBREVIATION	DESCRIPTION
JB	JUNCTION BOX
CS	CONTROL STRUCTURE
STCO	STORM SEWER CLEANOUT
FES	FLARED END SECTION
SMH	SANITARY MANHOLE
SSCO	SANITARY SEWER CLEANOUT

- SITE LEGEND**
- (A) CLEARANCE BAR
 - (B) PRE-MENU BOARD
 - (C) ORDER CANOPY
 - (D) MENU BOARD
 - (E) "MOBILE ORDER PARKING ONLY" SIGN
 - (F) "THANK YOU/EXIT ONLY" SIGN
 - (G) "DO NOT ENTER" SIGN
 - (H) "RIGHT TURN ONLY" SIGN

SITE LIGHTING:
 REFER TO SITE LIGHTING PLAN FOR ADDITIONAL INFORMATION REGARDING LIGHT POLES AND FIXTURES.

NOTE:
 CONTRACTOR SHALL REFER TO THE ARCHITECT AND MEP PLANS FOR ELECTRIC CONDUIT TO DRIVE-THRU ORDER STATION EQUIPMENT, LIGHTING, SIGNAGE, ETC.

NOTE:
 THE ESTIMATED SANITARY FLOW IN GALLONS PER DAY IS 700 GAL/DAY TO 900 GAL/DAY.

Three working days prior to the start of any excavation on this site the Contractor shall contact 1-800-344-7483 for utility location information.

The contractor shall verify and implement all the required Federal Occupational Safety and Health Administration (OSHA) and/or OSHA approved state-plan regulations established for the type of construction required by these plans.

PERMIT SET

RICK G. ROHLFING, P.E. #E-29409
 State of Missouri
 Registered Professional Engineer
 for BFA, Inc. Professional Engineer Corporation #000472

11/30/20
 Date

bfaeng.com TELEPHONE: (636) 239-4751

BFA
 Engineering-Surveying

103 ELM STREET WASHINGTON, MISSOURI 63090

DRAWN
 C.C.B.
 CHECKED
 R.G.R.
 DATE
 11/30/2020
 SCALE
 1"=20'
 JOB No.
 5918
 SHEET NAME
 UTILITY PLAN
 UT-1