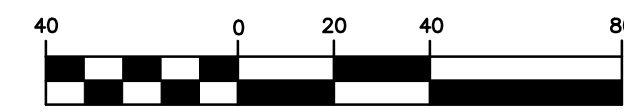
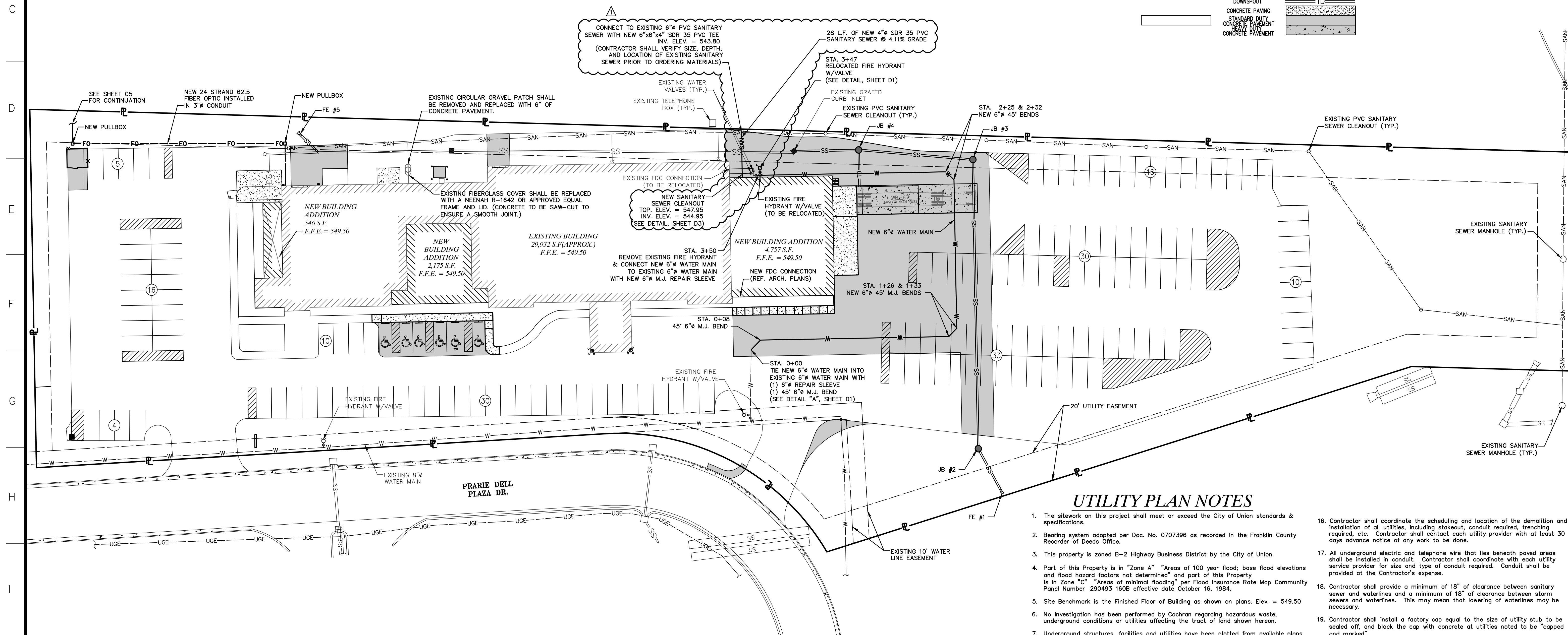


LEGEND	
EXISTING	PROPOSED
	PROPERTY LINE
	RIGHT-OF-WAY
	AERIAL ELECTRIC
	UTILITY POLE / GUY WIRE
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE
	SANITARY SEWER
	SANITARY MANHOLE
	STORM SEWER
	FLARED END SECTIONS
	GAS LINE (SIZE)
	WATER LINE (SIZE)
	FIRE HYDRANTS
	WATER VALVE
	WATER METER
	TREE
	FENCE
	LIGHT
	DOWNSPOUT
	CONCRETE PAVING
	STANDARD DUTY CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT



JANUARY, 2016



1. The sitework on this project shall meet or exceed the City of Union standards & specifications.
2. Bearing system adopted per Doc. No. 0707396 as recorded in the Franklin County Recorder of Deeds Office.
3. This property is zoned B-2 Highway Business District by the City of Union.
4. Part of this Property is in "Zone A" "Areas of 100 year flood; base flood elevation and flood hazard factors not determined" and part of this Property is in "Zone C" "Areas of minimal flooding" per Flood Insurance Rate Map Community Panel Number 290493 160B effective date October 16, 1984.
5. Site Benchmark is the Finished Floor of Building as shown on plans. Elev. = 549.50
6. No investigation has been performed by Cochran regarding hazardous waste, underground conditions or utilities affecting the tract of land shown herein.
7. Underground structures, facilities and utilities have been plotted from available plans and observed evidence. Therefore, their locations must be considered approximate only. There may be others, the existence of which is presently not known.
8. Contractor to contact telephone, electric, gas, water and cable companies to have underground utilities located on this site and adjacent to this site prior to doing an excavating.
9. All unsurfaced areas are to receive 4 inches of topsoil. Contractor to sod, mulch, fertilize and maintain all areas outside of paved areas that were disturbed during construction until an acceptable stand of grass is established. The Contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
10. 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 the best 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 locate all existing utilities, which conflict with the new improvements shown on plans.
11. All trenches under paved areas shall be backfilled with granular material and compacted to meet compaction requirements for the road/parking lot.
12. Utility Contractor shall provide concrete apron at all water valves and sanitary sewer cleanouts and storm sewer cleanouts outside of building.
13. Utility Contractor will be responsible for all tapping and tie-in fees required, as well as cost of underground service connections and meters to the building.
14. New water lines 4" and larger shall be C-900, DR 18 PVC pipe. New waterlines less than 4" shall be SDR 21 Class 200 PVC pipe or Type "K" Copper. All waterlines constructed shall be a minimum of 42 inches of cover below finished grade, unless otherwise indicated on plans.
15. Contractor shall coordinate adjustments to existing utilities with appropriate utility company as work progresses.

16. Contractor shall coordinate the scheduling and location of the demolition and installation of all utilities, including stakeout, conduit required, trenching required, etc. Contractor shall contact each utility provider with at least 30 days advance notice of any work to be done.
17. All underground electric and telephone wires that lies beneath paved areas shall be installed in conduit. Contractor shall coordinate with each utility service provider for size and type of conduit required. Conduit shall be provided at the Contractor's expense.
18. Contractor shall provide a minimum of 18" of clearance between sanitary sewer and waterlines and a minimum of 18" of clearance between storm sewers and waterlines. This may mean that lowering of waterlines may be necessary.
19. Contractor shall install a factory cap equal to the size of utility stub to be sealed off, and block the cap with concrete at utilities noted to be "capped and marked"
20. Location of site utilities shall be verified by contractor from the proper utility company providing service.
21. Contractor shall submit shop drawings for sanitary sewer, water main, and storm sewer structures to Cochran for review and approval prior to fabrication of any structures.
22. Water main construction requires that thrust blocks shall be provided at all bends, tees, and fire hydrants.
23. All trenching, pipe laying, and backfilling shall be in accordance with Federal OSHA Regulations.
24. Utility Contractor shall have approval of all governing agencies having jurisdiction over this system prior to installation.
25. Refer to Fire Protection Sheets for location and detail of Fire line lead-in.
26. All necessary inspections, testing, and/or certifications required by codes, the County, and/or utility service companies shall be performed prior to announced building possession and the final connection of services.
27. Contractor shall provide Cochran an as-built survey of the sanitary sewer service, water service, and detention basin prior to project completion. As-built survey shall include location and elevations of all manholes, cleanouts, fire hydrants, valves, structures, etc. Contractor shall also provide copies of all inspections and testing reports.
28. Contractor to ensure all water main materials, all water service materials, and all installation procedures shall meet or exceed City Utilities specifications and requirements.
29. Storm and sanitary sewer plan information depicts pipe lengths and grades measured from the center of all structures. Flared ends are included in pipe lengths.

630-584-0540 (Tel.)
630-584-0540 (Fax)
mail@cochran.com
www.cochran.com

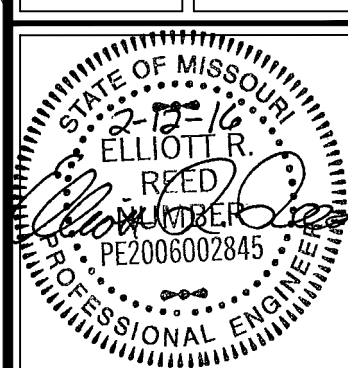
530A E. Independence Dr.
Naperville, IL 60563
530845

COCHRAN

Missouri State Certificate of
Authority Numbers:
Survey 000380
Engineering 001655
Architecture 2002014240

Our written data prior to
the start of any excavation
project is the only information
that can be relied on to verify
location information.

All OSHA rules & regulations
established for the type of
excavation required by these
plans must be followed
(i.e. trenching, blasting, etc.)



Elliott R Reed, PE
MO# PE-2006002845

*EAST CENTRAL COLLEGE
CENTER FOR ADVANCED MANUFACTURING
AND WORKFORCE TRAINING
UNION, MISSOURI 63084*

UTILITY PLAN	DATE:		REVISED:		APPROVED BY:
	2-12-16		(Addendum #3)		ERR
	DRAWN BY:	WRJ	CHECKED BY:		
	SCALE:	1" = 30'	APPROVED BY:	ERR	
	PROJECT NO.:	15-6038			
	DWG. NO.:				

C4