

SHEET INDEX

- 1 City of O'Fallon Cover Sheet
- 2 City of O'Fallon Commercial Notes
- 3 CVS Civil Specifications
- 4 CVS Civil Specifications
- 5 Demolition Plan
- 6 Site Plan
- 7 ADA Plan
- 8 Grading Plan
- 8.1 Off Site Grading & Utility Plan
- 8.2 Off Site Utility Easement Plan
- 9 Utility Plan
- 9A Utility Plan Water Main Relocation
- 10 Initial Erosion Control Plan
- 11 Intermediate Erosion Control Plan
- 12 Final Erosion Control Plan
- 13 Storm Sewer Profiles
- 14 Detention Basin Sections and Feise Road Entrance Profile
- 15 Sanitary Sewer Profiles
- 16 Entrance Details
- 17 Feise Road Sight Lines and Profiles
- 18 Bryan Road Sight Lines and Profiles
- 19 Pavement Details
- 20 Construction Details
- 21 Construction Details
- 22 Utility Details
- 23 Utility Details
- 24 Utility Details
- 25 Erosion Control Details
- 26 Pre-Developed Drainage Area Map
- 27 Post-Developed Drainage Area Map
- PH-1 Photometric Plan
- LS-1 Landscape Plan
- LS-2 Landscape Details

Conditions of Approval From Planning and Zoning

1. PER SECTION 7 OF THE CITY'S TRAFFIC MANAGEMENT POLICY, AN AGREEMENT SHALL BE RECORDED AT THE ST. CHARLES COUNTY RECORDER OF DEEDS THAT ENSURES THAT THE 34' ACCESS PM BRYAN ROAD WILL BE CONVERTED TO A RIGHT INWRIGHT OUT WHEN LOT 1 TO THE NORTH DEVELOPS.
2. PROVIDE A NOTE ON THE PLAN THAT STATES, "THE FEISE ROAD ENTRANCE MAY NEED ACCELERATION AND DECELERATION LANES DEPENDING ON THE PROJECTED FUTURE TRAFFIC COUNT. IN ADDITION, A SAFETY ZONE FOR PEDESTRIANS MAY BE NEEDED IN THIS ENTRANCE ENLARGES IN THE FUTURE."
3. THE APPLICANT SHALL ABIDE BY THE MUNICIPAL CODE REQUIREMENTS LISTED.

1-800-DIG-RITE
CALL BEFORE YOU DIG!

NOTE:
Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

A SET OF CONSTRUCTION PLANS FOR **CVS/pharmacy**

WATER MAIN RELOCATION WITH PWSD NO.2

CS#69591 STORE#10546
NEC FEISE ROAD AND BRYAN ROAD
O'FALLON, MO 63368
ST. CHARLES COUNTY ID# 2-0067-S006-00-0009.5000000

ONSITE DISTURBED AREA = 3.22 ACRES

Project Directory

OWNER
CVS REALTY, CO.
501 PENNSYLVANIA PARKWAY, SUITE 160
INDIANAPOLIS, IN 46280
(312)-953-6322
CONTACT: MR. RICHARD SMART

DEVELOPER
T.M. CROWLEY & ASSOCIATES
501 PENNSYLVANIA PARKWAY, SUITE 160
INDIANAPOLIS, IN 46280
(317) 819-0116
CONTACT: MR. CRAIG FORGEY

ARCHITECT
NORR, LLC
719 GRISWOLD STREET
DETROIT, MI 48226
(313) 324-3100
CONTACT: MR. JOHN POLSINELLI

CIVIL ENGINEER
PREMIER CIVIL ENGINEERING, LLC
308 TCW COURT
LAKE SAINT LOUIS, MO 63367
(314) 925-7452
CONTACT: MR. MATT FOGARTY

SURVEYOR
PREMIER CIVIL ENGINEERING, LLC
308 TCW COURT
LAKE SAINT LOUIS, MO 63367
(314) 925-7456
CONTACT: MR. DAVID MAXWELL

MUNICIPALITY
CITY OF O'FALLON
(636) 281-2858
CONTACT: MR. DAVID WOODS,
DIRECTOR OF PLANNING DEPT

GEOTECHNICAL/ENVIRONMENTAL ENGINEER
TERRACON
11600 LILBURN PARK ROAD
ST. LOUIS, MO 63146
(314) 692-8811
CONTACT: MR. JONATHAN D. BRUNER

Utility Contacts

Sanitary Sewer
City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
636-281-2858

Water
Public Water Supply District #2
100 Water Drive
O'Fallon, MO. 63368
636-561-3737

Storm Sewer
City of O'Fallon
100 N. Main St.
O'Fallon, MO. 63366
636-379-3808

Ameren UE
200 Callahan Road
Wentzville, MO. 63385
636-327-6203

Gas
Laclede Gas Company
1999 Trade Center Drive East
St. Peters, MO 63376
314-342-0694

Telephone
CenturyLink
1151 Century Tel Dr.
Wentzville, MO. 63385
636-949-1331

Fire Department
O'Fallon Fire Protection District
119 E. Elm St.
O'Fallon, MO. 63366
636-272-3493

Sanitary Sewer
Duckett Creek Sanitary District
3550 Highway K
O'Fallon, MO 63368
636-441-1244

Legal Description

A TRACT OF LAND BEING PART OF SECTION 6, TOWNSHIP 46 NORTH, RANGE 3 EAST, ST. CHARLES COUNTY, MISSOURI

Land Description

A TRACT OF LAND IN SECTION 6, TOWNSHIP 46 NORTH, RANGE 3 EAST OF THE FIFTH PRINCIPAL MERIDIAN, ST. CHARLES COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF "ANNABROOK PLAT TWO", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 36 PAGE 14 OF ST. CHARLES COUNTY RECORDS; THENCE ALONG THE WEST LINE OF SAID "ANNABROOK PLAT TWO" AND THE SOUTHWARDLY EXTENSION THEREOF, SOUTH 00 DEGREES 14 MINUTES 19 SECONDS EAST 1228.33 FEET TO THE NORTH LINE OF PROPERTY CONVEYED TO JOHN AND JANET RICHARDSON BY DEED RECORDED IN BOOK 1093 PAGE 1639 OF SAID RECORDS; THENCE ALONG SAID NORTH LINE OF THE RICHARDSON PROPERTY, AND THE NORTH LINE OF PROPERTY CONVEYED TO WILLIAM AND IMA DENON BY DEED RECORDED IN BOOK 798 PAGE 281 OF THE SAID RECORDS, NORTH 89 DEGREES 19 MINUTES 27 SECONDS WEST 237.29 FEET, THENCE ALONG THE WEST LINE OF SAID DENON PROPERTY, SOUTH 01 DEGREES 24 MINUTES 38 SECONDS WEST 410.72 FEET TO THE NORTH LINE OF RELOCATED FEISE ROAD; THENCE ALONG SAID NORTH LINE OF RELOCATED FEISE ROAD, THE FOLLOWING COURSES AND DISTANCES, ALONG A CURVE TO THE RIGHT WHOSE CHORD BEARS NORTH 85 DEGREES 18 MINUTES 23 SECONDS WEST 337.71 FEET AND WHOSE RADIUS POINT BEARS NORTH 03 DEGREES 12 MINUTES 43 SECONDS EAST 6,529.84 FEET FROM THE LAST MENTIONED POINT, AN ARC DISTANCE OF 337.74 FEET; THENCE NORTH 83 DEGREES 49 MINUTES 29 SECONDS WEST 415.98 FEET, THENCE ALONG A CURVE TO THE LEFT WHOSE CHORD BEARS NORTH 85 DEGREES 20 MINUTES 50 SECONDS WEST 350.41 FEET AND WHOSE RADIUS POINT BEARS SOUTH 06 DEGREES 10 MINUTES 31 SECONDS WEST 6993.49 FEET FROM THE LAST MENTIONED POINT, AN ARC DISTANCE OF 350.44 FEET TO THE POINT OF BEGINNING OF THE DESCRIPTION HEREIN, THENCE CONTINUING ALONG SAID NORTH LINE OF RELOCATED FEISE ROAD, ALONG A CURVE TO THE LEFT WHOSE CHORD BEARS NORTH 88 DEGREES 27 MINUTES 33 SECONDS WEST 365.74 FEET AND WHOSE RADIUS POINT BEARS SOUTH 03 DEGREES 07 MINUTES 48 SECONDS WEST 6593.49 FEET FROM THE LAST MENTIONED POINT, AN ARC DISTANCE OF 365.79 FEET, THENCE SOUTH 89 DEGREES 57 MINUTES 05 SECONDS WEST 38.09 FEET, THENCE NORTH 00 DEGREES 03 MINUTES 14 SECONDS WEST 18.20 FEET, THENCE SOUTH 89 DEGREES 56 MINUTES 46 SECONDS WEST 214.41 FEET, AND ALONG A CURVE TO THE RIGHT WHOSE CHORD BEARS NORTH 44 DEGREES 51 MINUTES 54 SECONDS WEST 49.66 FEET AND WHOSE RADIUS POINT BEARS NORTH 00 DEGREES 03 MINUTES 14 SECONDS WEST 35.00 FEET FROM THE LAST MENTIONED POINT, AN ARC DISTANCE OF 55.21 FEET TO THE EAST LINE OF BRYAN ROAD AS ESTABLISHED BY DOCUMENT RECORDED IN BOOK 1821, PAGE 1792 OF SAID RECORDS; THENCE ALONG THE EAST LINE OF BRYAN ROAD, THE FOLLOWING COURSES AND DISTANCES, NORTH 00 DEGREES 19 MINUTES 26 SECONDS EAST 248.87 FEET; THENCE NORTH 00 DEGREES 47 MINUTES 09 SECONDS EAST 718.86 FEET; THENCE LEAVING SAID EAST LINE OF BRYAN ROAD NORTH 48 DEGREES 20 MINUTES 54 SECONDS EAST 412.94 FEET, THENCE NORTH 84 DEGREES 31 MINUTES 06 SECONDS EAST 351.27 FEET; THENCE SOUTH 00 DEGREES 47 MINUTES 08 SECONDS WEST 1332.78 FEET TO THE POINT OF BEGINNING.

SURVEYORS AUTHENTICATION

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THESE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS, STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS AS SHOWN ON THE SUBDIVISION PLAT WITH THE EXCEPTION OF THE FOLLOWING:

DAVID W. MAXWELL
MISSOURI P.L.S. #200900726
PREMIER CIVIL ENGINEERING
MISSOURI C.O.F.A. #2012007849

ALL PROPOSED UTILITIES AND/OR UTILITY RELOCATIONS SHALL BE LOCATED UNDERGROUND

CITY APPROVAL OF ANY CONSTRUCTION SITE PLANS DOES NOT MEAN THAT ANY BUILDING CAN BE CONSTRUCTED ON THE LOTS WITHOUT MEETING THE BUILDING SETBACKS AS REQUIRED BY THE ZONING CODES.

ALL INSTALLATIONS AND CONSTRUCTION SHALL CONFORM TO THE APPROVED ENGINEERING DRAWINGS. HOWEVER, IF THE DEVELOPER CHOOSES TO MAKE MINOR MODIFICATIONS IN DESIGN AND/OR SPECIFICATIONS DURING CONSTRUCTION, THEY SHALL MAKE SUCH CHANGES AT THEIR OWN RISK, WITHOUT ANY ASSURANCE THAT THE CITY ENGINEER WILL APPROVE THE COMPLETED INSTALLATION OR CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NOTIFY THE CITY ENGINEER OF ANY CHANGES FROM THE APPROVED DRAWINGS. THE DEVELOPER MAY BE REQUIRED TO CORRECT THE INSTALLED IMPROVEMENT SO AS TO CONFORM TO THE APPROVED ENGINEERING DRAWINGS. THE DEVELOPER MAY REQUEST A LETTER FROM THE CONSTRUCTION INSPECTION DIVISION REGARDING ANY FIELD CHANGES APPROVED BY THE CITY INSPECTOR.

LIGHTING VALUES WILL BE REVIEWED ON SITE PRIOR TO THE FINAL OCCUPANCY INSPECTION.

CITY OF O'FALLON
COMMUNITY DEVELOPMENT DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: _____ DATE: _____
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN

FEMA FIRM 25183C0240, PANEL 240 OF 525, ST. CHARLES COUNTY, MISSOURI AND INCORPORATED AREA DATED AUGUST 2, 1996 - THE PROPERTY IS ZONE X (UNSHADED), AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.



Legend

EXISTING LEGEND	PROPOSED LEGEND
○ FOUND IRON PIPE	○ UTILITY POLE
○ SET IRON PIPE (2012007849)	○ FIRE HYDRANT
□ FOUND STONE MONUMENT	○ WATER VALVE
○ WATER VALVE	○ WATER METER VAULT
○ WATER METER VAULT	○ GAS METER
○ IRRIGATION CONTROL VALVE	○ LIGHT STANDARD
○ GAS VALVE	○ CLEAN OUT
○ GAS METER	○ MONITORING WELL
○ LIGHT STANDARD	○ SANITARY SEWER MANHOLE
○ SANITARY SEWER MANHOLE	○ STORM SEWER MANHOLE
○ STORM SEWER MANHOLE	○ GRATE INLET
○ STORM SEWER INLET	○ DOUBLE CURB INLET
○ PIPE BOLLARD	○ PIPE BOLLARD
○ SIGN	○ SIGN
○ BUSH	○ UNDERGROUND ELECTRIC
○ TREE	○ UNDERGROUND TELEPHONE
○ TRAFFIC SIGNAL BOX	○ 1.5" WATER MAIN
○ MONITORING WELL	○ 6" WATER MAIN
○ TEST HOLE	○ 8" WATER MAIN
○ PEDESTRIAN SIGNAL	○ GAS LINE
○ ELECTRIC METER	○ CONTROLLER LINE
○ STORM CURB INLET	○ BIKE RACK
○ STORM DOUBLE CURB INLET	○ TRANSFORMER PAD
○ AIR CONDITIONER	
○ DOWN SPOUT	
○ BACK OF CURB	

Benchmark

MISSOURI DEPARTMENT OF TRANSPORTATION VRS NETWORK, NAVD 88.
SITE BENCHMARK: "O" IN "OPEN" ON EXISTING FIRE HYDRANT LOCATED ON THE EAST RIGHT-OF-WAY LINE OF BRYAN ROAD APPROXIMATELY 305 FEET NORTH OF THE NORTH LINE OF FEISE ROAD.

Site Coverage Calculations

Existing Site = 1.84 Acres
Existing Green Space = 1.84 Acres
Proposed Site = 1.84 Acres
Proposed Impervious Area Parking Lot and Building = 1.01 Acres of Parking Area and 0.30 Acres of Building
Proposed Green Space = 0.53 Acres
Proposed percent of Impervious Area Coverage = 71%
Proposed Impervious Areas = 1.31 Acres @ 3.85 = 5.04 cfs
Proposed Grass Areas = 0.53 Acres @ 1.87 = 0.99 cfs
Total Run-off = 6.03 cfs
Differential Run-off: 6.03 cfs - 3.22 cfs = 2.81 cfs
Detention for this site has been provided within a temporary detention basin located to the North of the proposed site.

PCE PROJECT NO. 136101

REVISIONS:			
NO.	DESCRIPTION	INITIALS:	DATE:
1	SHEETS 3, 6, 8, 1, 10-14, 16-22 AND L-1 PER CITY OF O'FALLON COMMENTS, SHEETS 2, 3, 9 & 15 PER DUCKETT CREEK SANITARY DISTRICT	D.L.S.	3-11-15
2	SHEETS 6, 8, 1 & 20 PER CITY OF O'FALLON & DUCKETT CREEK SANITARY DISTRICT COMMENTS	D.L.S.	4-2-15
3	SHEETS PER CITY OF PUBLIC WATER SUPPLY DISTRICT NO. 2 COMMENTS	D.L.S.	4-28-15
4	ADDED SHEET 5A PER CITY OF PUBLIC WATER SUPPLY DISTRICT NO. 2 COMMENTS	D.L.S.	4-30-15

CVS pharmacy
NORTHERN 13,225-RIGHT CHAMFER DRIVE-THRU
STORE NUMBER: 10546
NEC FEISE ROAD AND BRYAN ROAD O'FALLON, MO
PROJECT TYPE: NEW CONSTRUCTION
DEAL TYPE: Fee for Service
CS PROJECT NUMBER: 69591

NORR
ARCHITECTS ENGINEERS PLANNERS
719 Griswold Street
Suite 1000
Detroit, MI 48226
(313) 924-9113

PREMIER CIVIL ENGINEERING
308 TCW Court
Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031
Missouri Certificate of Authority # LS-2012007849

STEVE MARSH P.E.
ENGINEER
PC200907196

Developer / Owner Information
T.M. CROWLEY & ASSOCIATES
DEMOLITION PLAN

P+Z No. 01-15 & 01.15.01
APPROVED 1-15-15
City No.
Sheet Number:
C-0
PCE PROJECT NO. 136101

AS-BUILTS

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLANS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS, STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THAT THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS SHOWN ON THE SUBDIVISION PLAN WITH THE EXCEPTION OF THE FOLLOWING:

DAVID W. MAXWELL
 MISSOURI P.L.S. #2008000726
 PREMIER CIVIL ENGINEERING, INC.
 MISSOURI C.O.A. #2012007849

SEE SHEET 8.1 FOR CONTINUATION OF
 SANITARY SEWER EXTENSION

THE WATER DISTRICT REQUIRES ONE (1) WEEK NOTICE PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE INSPECTIONS

APPROXIMATELY 65' OF EXISTING 12" WATER MAIN TO BE LOWERED TO MAINTAIN 42" MINIMUM (72" MAXIMUM) COVER. CONTRACTOR SHALL VERIFY ACTUAL DEPTH PRIOR TO CONSTRUCTION IF ACTUAL DEPTH IS SUFFICIENT. LOWERING WILL NOT BE REQUIRED.

2" GAS SERVICE PIPING TO BE INSTALLED BY LACLEDE GAS. TRENCHING AND EXCAVATION BY GENERAL CONTRACTOR PER LACLEDE GAS COMPANY SPECIFICATIONS. COORDINATE CONNECTION AND LOCATION WITH LACLEDE GAS COMPANY.

(2) 4" PVC PHONE UNDERGROUND CONDUITS WITH PULL STRINGS TO BE INSTALLED BY GENERAL CONTRACTOR PER CENTURYLINK PHONE COMPANY SPECS. LOCATION TO BE COORDINATED WITH PHONE COMPANY.

GENERAL CONTRACTOR SHALL ENSURE THAT INSTALLATION OF PROPOSED UTILITIES DOES NOT CONFLICT WITH PROPOSED STORM SEWERS

TRANSFORMER PAD AND BOLLARDS SHALL BE FURNISHED AND INSTALLED BY GENERAL CONTRACTOR PER AMEREN UE SPECIFICATIONS. AMEREN UE WILL PROVIDE THE TRANSFORMER PAD AND MULE TAPE FOR THE CONTRACTOR TO INSTALL IN THE CONDUIT RUN.

G.C. AND/OR ELECTRICAL SUBCONTRACTOR SHALL PROVIDE TRENCHING, EXCAVATION AND PIPE FOR 24" ELECTRIC SERVICE PRIMARY CONDUITS IN TRENCH 36" DEEP WITH GRANULAR BACKFILL. G.C. AND/OR ELECTRICAL SUBCONTRACTOR TO COORDINATE WITH AMEREN UE SPECIFICATIONS.

WATER SERVICE PER PWSD#2 SPECIFICATIONS
 1-6" TAP
 1-6" FIRE SERVICE DETECTOR CHECK
 1-1 1/2" DOMESTIC WATER METER
 1-2" IRRIGATION TEE WITH 2" DBL. BACKFLOW PREVENTOR CAPPED FOR EXTENSION BY LANDSCAPE CONTRACTOR

1-6" WATER SERVICE TAP PER PWSD#2 SPECS. RESTORE ALL AREAS DISTURBED BY WATER TAP TO PREVIOUS OR BETTER CONDITIONS.

PROPOSED FIRE HYDRANT AND VALVE SHALL BE CONSTRUCTED PER CITY OF OFALLON FIRE PROTECTION DISTRICT REQUIREMENTS (PRIVATE)

PROPOSED LIGHT STANDARD SEE DESIGN AND DETAILS BY OTHERS (TYP)

EXISTING 10" PVC WATER SERVICE

FEISE ROAD
 PUBLIC (VARIABLE WIDTH) R.O.W.
 8,620 V.P.D. (2011) 35 M.F.H.
 (CONCRETE PAVEMENT)

- UTILITY NOTES:**
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
 - CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
 - CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3'-6" COVER ON ALL WATERLINES AND 3'-6" ON ALL SANITARY SEWER LINES.
 - CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND TELEPHONE COMPANY FOR EXACT LOCATIONS OF TELEPHONE ENTRY TO THE BUILDING. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CONDUITS, PULL WIRES, TRENCHING, BACKFILL, ETC. REQUIRED BY TELEPHONE CO.
 - EXISTING UTILITIES SHALL BE FIELD VERIFIED PRIOR TO INSTALLATION OF ANY NEW LINES.
 - REFER TO INTERIOR MECHANICAL, ELECTRIC AND PLUMBING DRAWINGS FOR TIE-IN LOCATIONS FOR UTILITIES.
 - 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 COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 - ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
 - CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND LACLEDE GAS CO. FOR EXACT LOCATION OF GAS ENTRY. G.C. TO INCLUDE IN BID FOR CONTRACTOR ANY GAS PIPING, CONDUITS, TRENCHING, BACKFILLING, ETC. REQUIRED BY LACLEDE GAS CO.
 - CONTRACTOR SHALL COORDINATE WITH BUILDING ARCHITECT AND AMEREN UE FOR EXACT LOCATION OF ELECTRIC ENTRY. G.C. SHALL INCLUDE FOR ANY CONDUITS, TRENCHING, BACKFILLING, CABLES, ETC. REQUIRED BY ELECTRIC COMPANY IN HIS/HER BID.
 - SEE MEP PLANS FOR GAS SERVICE SIZING.
 - ALL UTILITY SEWER TRENCH BACKFILL SHALL HAVE GRANULAR BACKFILL AND BE MECHANICALLY COMPACTED.
 - THE CONTRACTOR SHALL VERIFY THE LOCATION, CONDITION AND ELEVATION OF ALL PROPOSED SEWER CONNECTION POINTS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT WOULD INTERFERE WITH THE PROPOSED SEWER DESIGN SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - THE EXISTING INLETS NOTED ARE TO BE INSPECTED BY THE CITY OF OFALLON AND A DETERMINATION MADE IF REPLACEMENT IS NEEDED. EXISTING TOP OF STRUCTURES AND ALL FLOWLINES OF STRUCTURES ARE TO BE REPLICATED PER PLANS IF REPLACEMENT IS REQUIRED. CONTRACTOR TO INCLUDE REMOVAL AND REPLACEMENT OF STRUCTURES IN BID.
 - ALL PERMIT FEES AND COSTS ASSOCIATED WITH BRINGING UTILITY, SEWER AND WATER SERVICES TO THE BUILDING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FEES AND COSTS SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
 - G.C. IS TO PROVIDE TRENCH, WIRE, AND CONDUIT FOR TELEPHONE AND ELECTRICAL SERVICES. BACKFILL AND GRADE SMOOTH FOR A COMPLETE TELEPHONE AND ELECTRIC INSTALLATION.
 - G.C. TO PROVIDE OPENING FOR PUBLIC WATER SUPPLY DISTRICT #2 TO MAKE TAP. G.C. IS ALSO TO PROVIDE TRENCH BACKFILL, AND GRADE SMOOTH FOR A COMPLETE WATER LINE INSTALLATION.
 - ALL LANDSCAPE ISLANDS AND GREEN SPACE INCLUDING THE RIGHT-OF-WAY, SHALL BE IRRIGATED.
 - THE CONTRACTOR SHALL INCLUDE FOR TELEPHONE INSTALLATION COSTS BY THE LOCAL PHONE COMPANY IN HIS/HER BID.
 - THE CONTRACTOR SHALL INCLUDE THE COST ESTIMATE PROVIDED BY AMEREN UE IN HIS/HER BID FOR THE RELOCATION OF ANY OVERHEAD ELECTRIC OR GUY WIRES.
 - ALL HDPE PIPE PROPOSED SHALL BE N-12 PIPE AS APPROVED BY THE METROPOLITAN ST. LOUIS SEWER DISTRICT OR APPROVED EQUAL.
 - IRRIGATION SLEEVES SHALL BE INSTALLED AT A MINIMUM OF 1' DEEP.
 - EXISTING SANITARY SEWER SERVICE SHALL NOT BE INTERRUPTED.
 - CONSTRUCTION OF SANITARY MAINS AND CONNECTION TO DC SD SANITARY MAINS REQUIRED DCSD INSPECTION. CONTACT STEVE OVERSEY, DCSD CHIEF INSPECTOR AT 636-441-1244 48 HOURS PRIOR TO CONSTRUCTION START-UP TO SCHEDULE INSPECTION.
 - ANY DISTURBED SIDEWALK SHALL BE REPLACED WITH FULL SLABS.
 - CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION.
 - PWSD #2 WILL REQUIRE ONE (1) WEEK NOTICE PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTIONS.

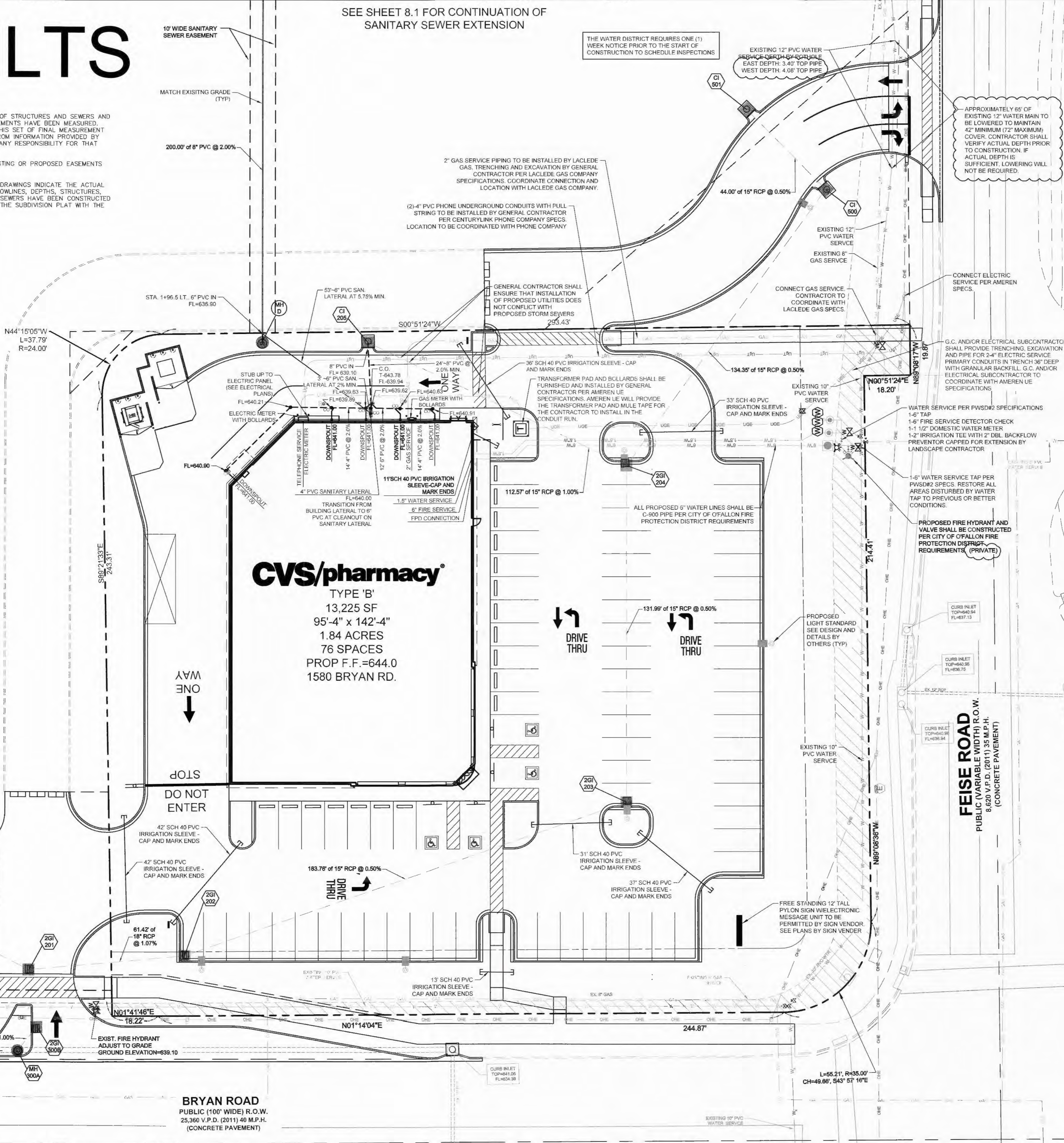
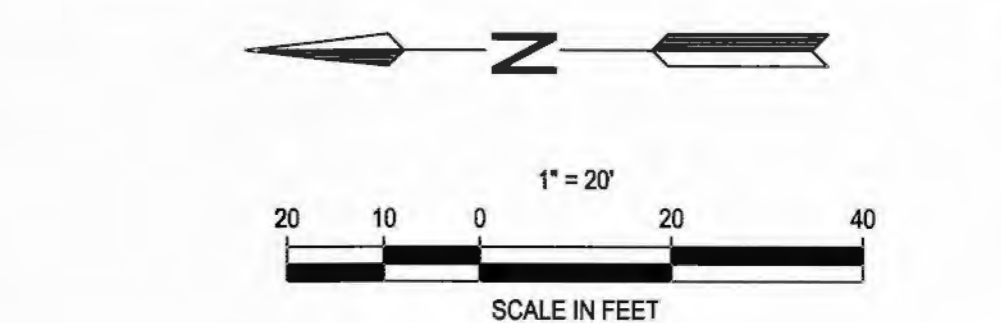
ELECTRIC, TELEPHONE AND CATV NOTES:

- COORDINATION WITH THE ELECTRIC, TELEPHONE AND CATV COMPANIES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND SHALL BE CONDUCTED IN A MANNER THAT RESULTS IN AN EFFICIENT AND TIMELY RELOCATION AND REMOVAL OF THE EXISTING FACILITIES.
- GROUND ELEVATIONS SHALL BE WITHIN 6" OF THE FINAL PROPOSED ELEVATIONS PRIOR TO THE START OF ELECTRIC, TELEPHONE AND CATV RELOCATIONS OR INSTALLATIONS OF NEW SERVICE.

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF HIS/HER BIDS TO CONFIRM THAT THE SITE CONDITIONS ARE AS SHOWN ON THESE PLANS. ANY CONDITION THAT IS DIFFERENT THAN WHAT IS SHOWN ON THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMITTAL OF BIDS.

ALLOWANCES

- THE GENERAL CONTRACTOR SHALL INCLUDE IN BID:
- \$2,500 NATURAL GAS SERVICE ALLOWANCE.
 - \$2,500 TELEPHONE SERVICE ALLOWANCE.
 - PRIMARY ELECTRIC SERVICE TRANSFORMER AND WIRE FEED AND CONNECTIONS BID ALLOWANCE IS ZERO AND SHALL BE PAID BY CVS SERVICE AGREEMENT. HOWEVER G.C. FULLY RESPONSIBLE FOR ALL EXCAVATION AND CONDUITS, BACKFILL, ETC. AS REQUIRED FOR ALL ELECTRIC SERVICE. G.C. TO FURNISH, INSTALL, AND CONNECT ALL SECONDARY ELECTRIC SERVICE WORK.
 - THE G.C. SHALL INCLUDE IN HIS/HER BID \$50,000 FOR UNSUITABLE SOILS.
 - \$15,000 ALLOWANCE FOR OFFSITE SPEC. UPGRADES.
 - \$25,000 ALLOWANCE FOR INTERIM ASPHALT PAVING IN PARKING AREAS TO AVOID WEATHER DELAYS.



CVS/pharmacy
 TYPE 'B'
 13,225 SF
 95'-4" x 142'-4"
 1.84 ACRES
 76 SPACES
 PROP F.F.=644.0
 1580 BRYAN RD.

BRYAN ROAD
 PUBLIC (100' WIDE) R.O.W.
 25,360 V.P.D. (2011) 40 M.F.H.
 (CONCRETE PAVEMENT)

SEE SHEET 8.1 FOR OFF-SITE WORK NORTH OF SITE



NOTE:
 Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.



PROJECT TITLE
 NORTHERN 13,225-RIGHT CHAMFER DRIVE-THRU
STORE NUMBER: 10546
 NEC FEISE ROAD AND BRYAN ROAD OFALLON, MO
PROJECT TYPE NEW CONSTRUCTION
DEAL TYPE Fee for Service
CS PROJECT NUMBER: 69591



PREMIER CIVIL ENGINEERING
 308 TCW Court
 Lake Saint Louis, MO 63367
 Phone: (314) 925-7444 Fax: (314) 925-7457
 Missouri Certificate of Authority # E-2011000031
 Missouri Certificate of Authority # LS-2012007849

ENGINEERS AUTHENTICATION
 This is a true and correct copy of the original as shown on the drawings and is not to be used for any other project without the written consent of the engineer. The engineer's signature is required for all work. The engineer's name and license number are shown on the drawings. The engineer's name and license number are shown on the drawings.

STEVE MARION P.E.
 ENGINEER
 P20000785

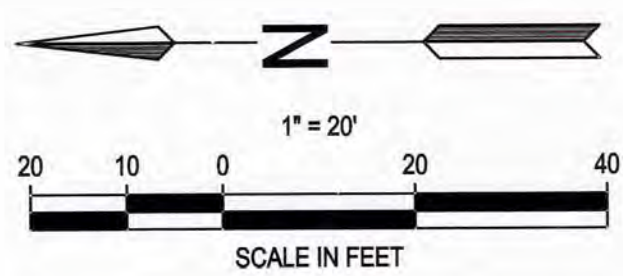
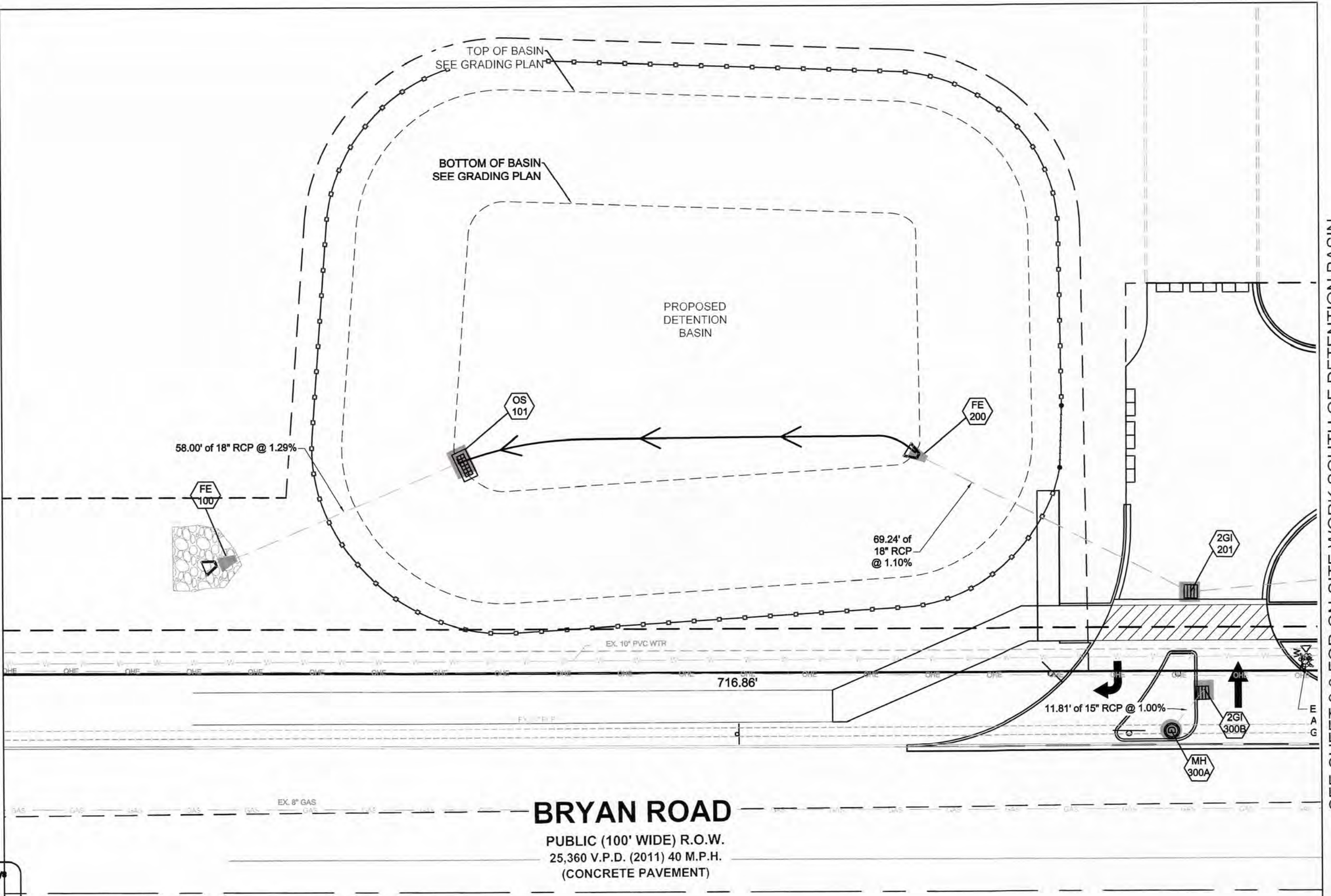
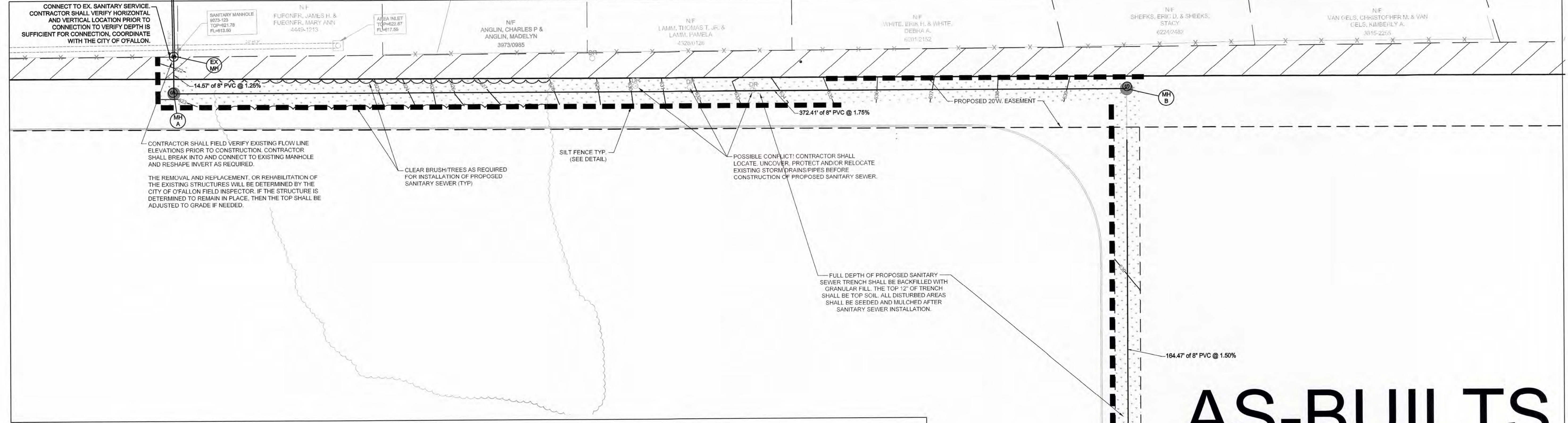
Developer / Owner information
 T.M.
CROWLEY & ASSOCIATES
Utility Plan

P+Z No. 01-15 & 015.01
APPROVED 1-15-15
 City No.

Sheet Number:
 9

PCE PROJECT NO. 136101

\\vault-pc\va\civil_3d\PROJECTS\2013\136101_NEC_FEISE_AND_BRYAN\BRYAN\AS-BUILT\SEWER\OFFALLON\UTILITY PLAN.dwg



AS-BUILTS

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS, STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THAT THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS AS SHOWN ON THE SUBDIVISION PLAT WITH THE EXCEPTION OF THE FOLLOWING:

David Maxwell
 DAVID W. MAXWELL
 MISSOURI P.L.S. #200800728
 PREMIER CIVIL ENGINEERING
 MISSOURI C.O.F.A. #2012007849



PROJECT TITLE
 NORTHERN 13,225-RIGHT
 CHAMFER DRIVE-THRU
 STORE NUMBER: 10546
 NEC FEISE ROAD AND BRYAN ROAD
 OFFALLON, MO
PROJECT TYPE NEW CONSTRUCTION
DEAL TYPE Fee for Service
CS PROJECT NUMBER: 69591

NORR
 ARCHITECTS ENGINEERS PLANNERS
 718 Greenwood Street
 Suite 1000
 Chester, MO 64308
 (913) 924-8118

PREMIER CIVIL ENGINEERING
 308 TCW Court
 Lake Saint Louis, MO 63367
 Phone: (314) 925-7444 Fax: (314) 925-7457
 Missouri Certificate of Authority # E-2011000031
 Missouri Certificate of Authority # LS-2012007849

UNREGISTERED AUTHENTICATION
 This document is the property of Premier Civil Engineering. It is to be used only for the project and location identified on this drawing. No other reproduction, distribution, or use is permitted without the express written consent of Premier Civil Engineering.

STEVE MARION P.E.
 ENGINEER
 PE 200607195

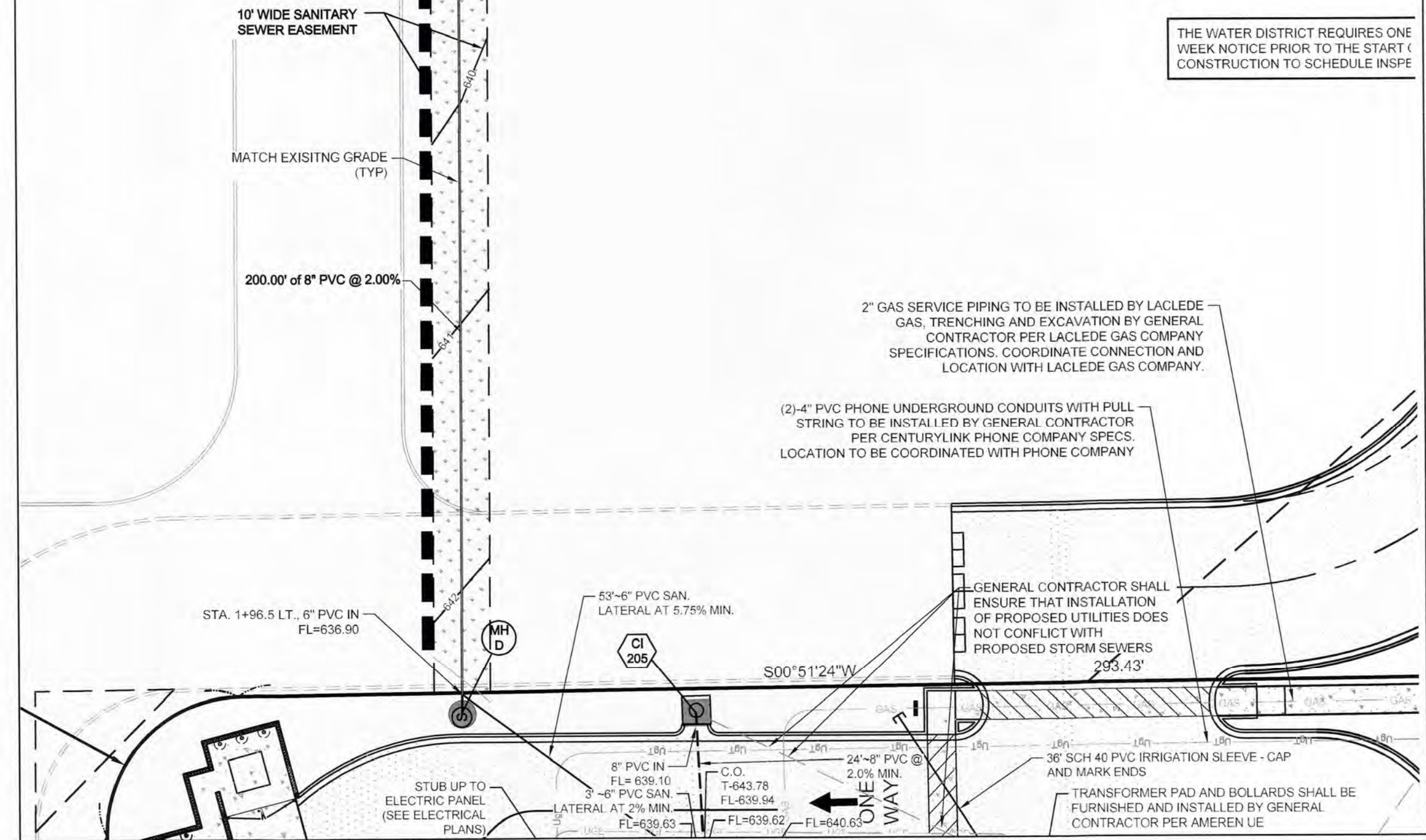
Developer / Owner Information
 T.M.
CROWLEY & ASSOCIATES
Off Site Utilities

P+Z No. 01-15 & 01:05
APPROVED 1-15-15
 City No.

Sheet Number:
 9.1
 PCE PROJECT NO. 136101



NOTE:
 Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.



THE WATER DISTRICT REQUIRES ONE WEEK NOTICE PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE INSPECTION.

SEE SHEET 9.0 FOR ON-SITE WORK FOR CVS PROJECT



PROJECT TITLE
NORTHERN 13,225-RIGHT
CHAMFER DRIVE-THRU
STORE NUMBER: 10546

PROJECT LOCATION
NEC FEISE ROAD AND BRYAN ROAD
OF FALLON, MO

PROJECT TYPE
NEW CONSTRUCTION

DEAL TYPE
Fee for Service

CS PROJECT NUMBER
69591

NORR
ARCHITECTS ENGINEERS PLANNERS
716 Oriskany Street
Detroit, MI 48226
(313) 324-9118

PREMIER CIVIL ENGINEERING
308 TCW Court
Lake Saint Louis, MO 63367
Phone: (314) 925-7444 Fax: (314) 925-7457
Missouri Certificate of Authority # E-2011000031
Missouri Certificate of Authority # LS-2012007849

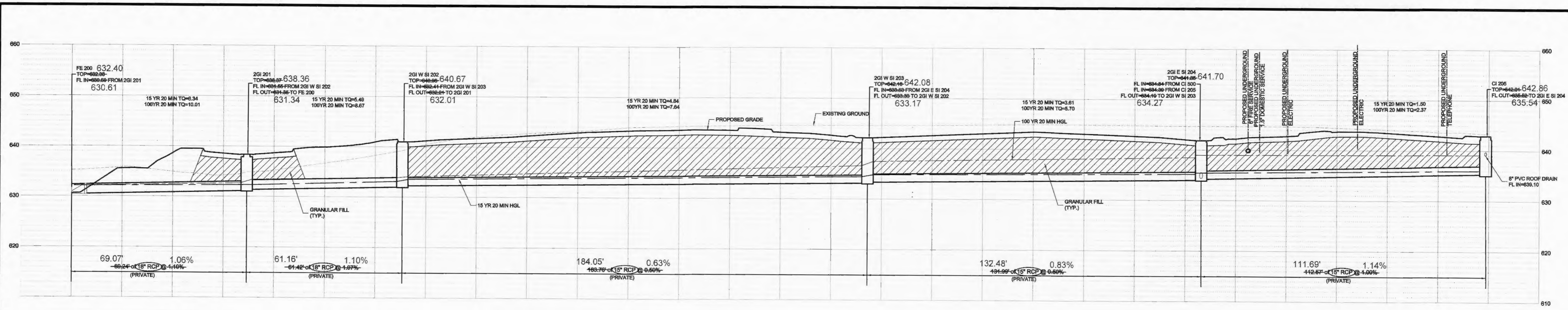
ENGINEERS AUTHENTICATION
I, the undersigned, being a duly licensed Professional Engineer in the State of Missouri, do hereby certify that the work shown on these plans was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer in the State of Missouri.
STEVE MARION P.E.
ENGINEER
PE200607196

Developer / Owner Information
T.M.
CROWLEY & ASSOCIATES
Storm Sewer Profiles

P-1Z No. 01-15 & 0115-01
APPROVED 1-15-15
City No.

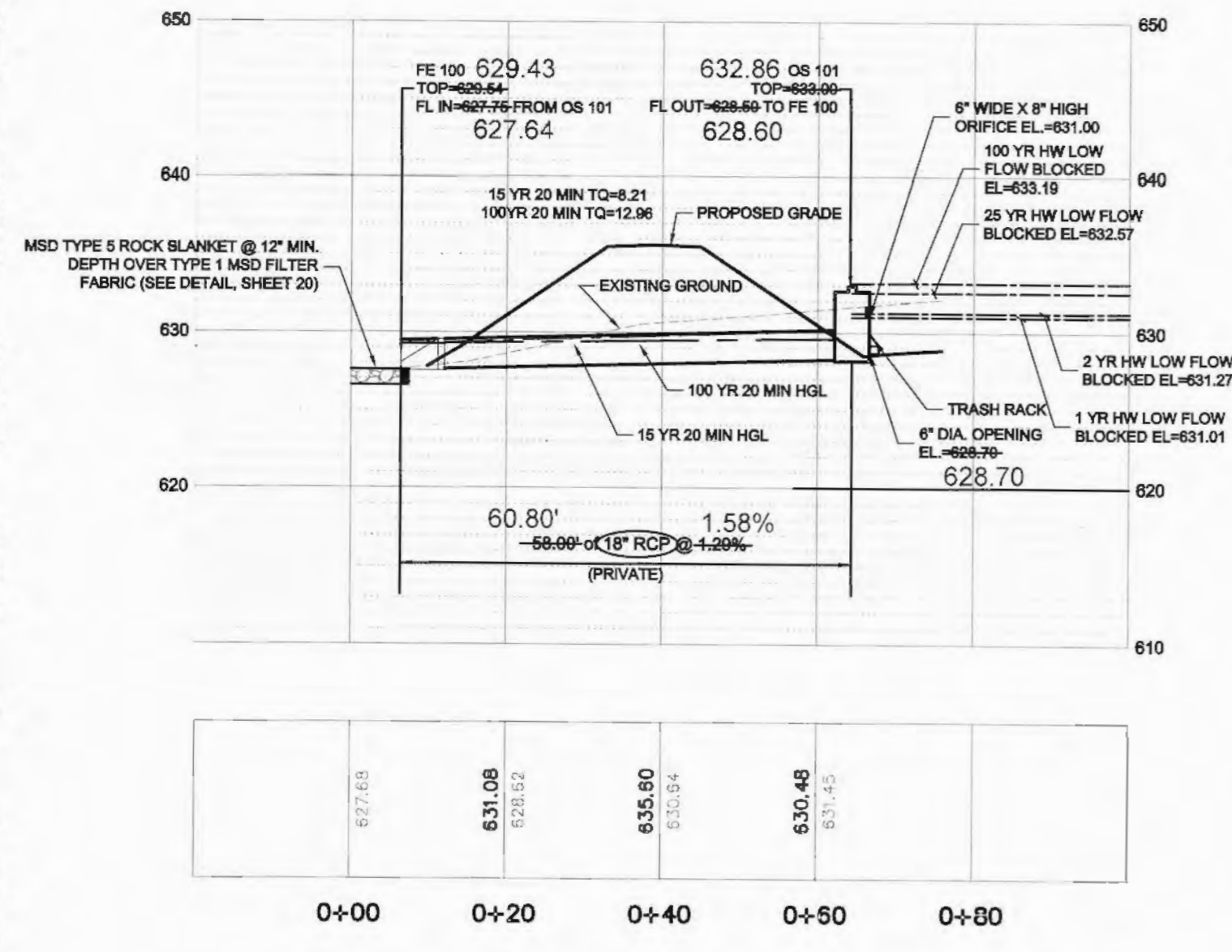
Sheet Number:
13

PCE PROJECT NO. 136101



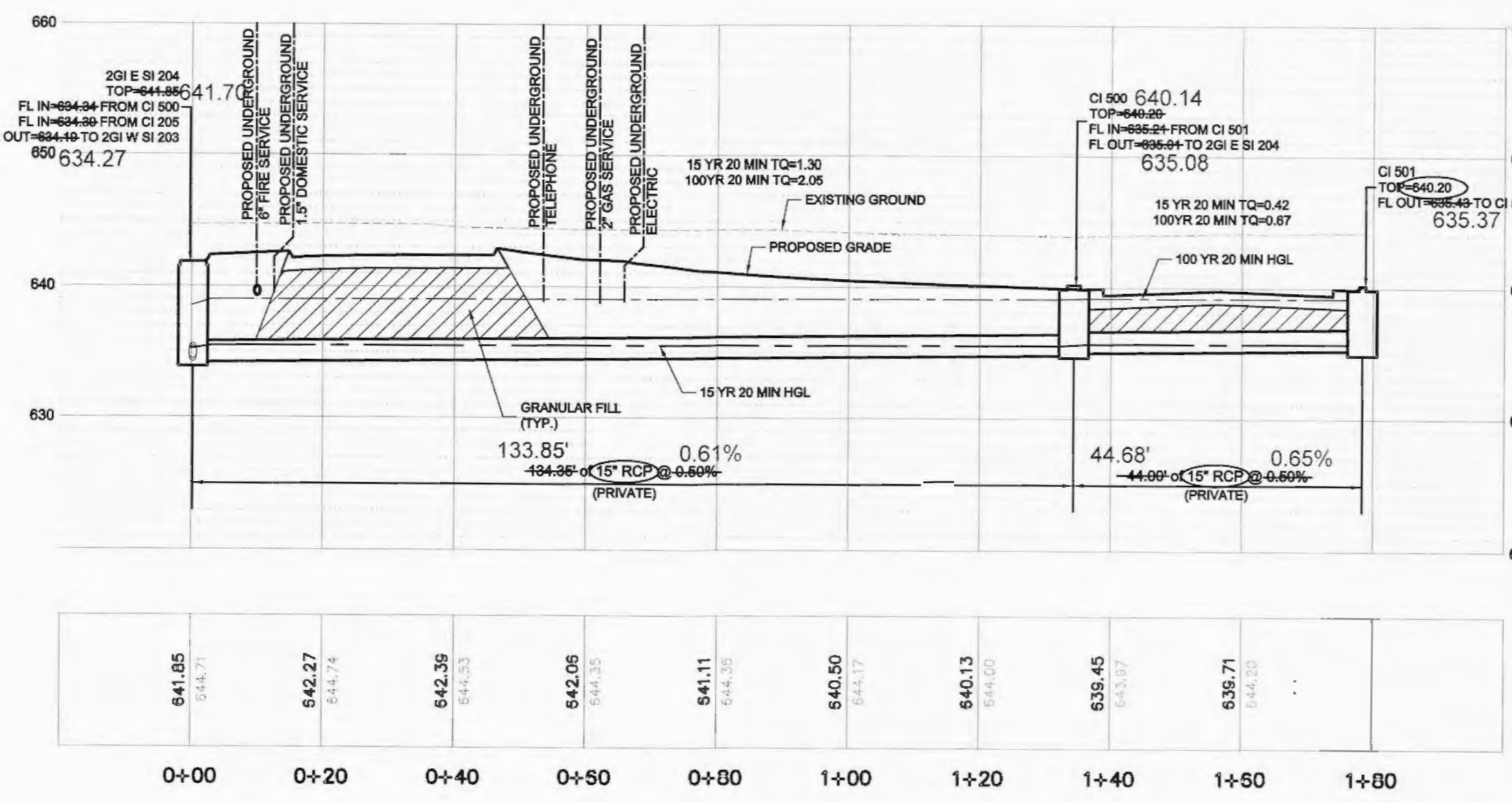
630.55	630.54	630.66	630.58	630.69	630.90	640.97	641.22	641.71	642.25	642.92	643.32	643.55	643.55	643.20	642.66	642.25	642.65	643.05	643.45	643.07	642.67	642.04	642.24	642.77	643.72	643.50	642.84	
0+00	0+20	0+40	0+60	0+80	1+00	1+20	1+40	1+60	1+80	2+00	2+20	2+40	2+60	2+80	3+00	3+20	3+40	3+60	3+80	4+00	4+20	4+40	4+60	4+80	5+00	5+20	5+40	5+50

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



627.69	631.08	628.62	635.60	630.54	630.48	630.45
0+00	0+20	0+40	0+60	0+80	0+80	0+80

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'



641.05	644.71	642.27	644.74	642.39	644.33	642.05	644.35	641.11	644.35	640.50	644.17	640.13	644.07	639.45	643.37	639.71	644.03
0+00	0+20	0+40	0+60	0+80	1+00	1+20	1+40	1+60	1+80	1+80	1+80	1+80	1+80	1+80	1+80	1+80	1+80

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

AS-BUILTS

LineNo.	LineID	InletID	LineLength	LineSize	InvertUp	InvertDn	d/Rim/Min	Depth	HGLUp	HGLDn	Rim-Ha	RunoffCoeff	VelDn	VelDn	J-LossCoeff	EnergyLoss	MinorLoss	CrossSlope	CapacityFull	DrainageArea	KnownD	FlowRate	QCaptured	InterEst	
1	200-201	201	76.448	18	631.35	630.59	631.35	0.757	631.35	630.59	0.757	0.37	0.57	0.57	0.000	0.000	0.000	0.00	10.47	0	0.85	6.34	0.76	89	
2	201-202	202	65.94	18	632.21	631.55	632.21	0.666	632.21	631.55	0.666	0.37	0.55	0.55	0.000	0.000	0.000	0.00	10.47	0	0.85	5.49	0.63	94	
3	202-203	203	183.763	15	633.33	642.36	633.33	0.903	633.33	642.36	0.903	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	4.64	0.45	36	
4	203-204	204	131.965	15	634.19	641.85	634.19	0.660	634.19	641.85	0.660	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	3.60	0.72	89	
5	204-205	205	112.568	15	635.52	642.91	635.52	0.387	635.52	642.91	0.387	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	1.5	1.5	4.69	33
6	204-500	CI 500	134.35	15	635.01	634.39	635.01	0.62	635.01	634.39	0.62	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	3.37	0.42	34	
7	500-501	CI 501	43.934	15	635.42	635.21	635.42	0.21	635.42	635.21	0.21	0.27	0.00	0.00	0.00	0.00	0.00	0.00	10.47	0	0.85	0.67	0.32	48	
8	100-101	OS 101	53.995	18	638.5	627.75	638.5	1.111	638.5	627.75	1.111	0.37	0.59	0.59	0.000	0.000	0.000	0.00	11.94	0	1.29	12.36	2.56	20	

LineNo.	LineID	InletID	LineLength	LineSize	InvertUp	InvertDn	d/Rim/Min	Depth	HGLUp	HGLDn	Rim-Ha	RunoffCoeff	VelDn	VelDn	J-LossCoeff	EnergyLoss	MinorLoss	CrossSlope	CapacityFull	DrainageArea	KnownD	FlowRate	QCaptured	InterEst	
1	200-201	201	76.448	18	631.35	630.59	631.35	0.757	631.35	630.59	0.757	0.37	0.57	0.57	0.000	0.000	0.000	0.00	10.47	0	0.85	6.34	0.76	89	
2	201-202	202	65.94	18	632.21	631.55	632.21	0.666	632.21	631.55	0.666	0.37	0.55	0.55	0.000	0.000	0.000	0.00	10.47	0	0.85	5.49	0.63	94	
3	202-203	203	183.763	15	633.33	642.36	633.33	0.903	633.33	642.36	0.903	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	4.64	0.45	36	
4	203-204	204	131.965	15	634.19	641.85	634.19	0.660	634.19	641.85	0.660	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	3.60	0.72	89	
5	204-205	205	112.568	15	635.52	642.91	635.52	0.387	635.52	642.91	0.387	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	1.5	1.5	4.69	33
6	204-500	CI 500	134.35	15	635.01	634.39	635.01	0.62	635.01	634.39	0.62	0.27	1.48	0.59	0.39	0.00	0.00	0.00	10.47	0	1.33	3.37	0.42	34	
7	500-501	CI 501	43.934	15	635.42	635.21	635.42	0.21	635.42	635.21	0.21	0.27	0.00	0.00	0.00	0.00	0.00	0.00	10.47	0	0.85	0.67	0.32	48	
8	100-101	OS 101	53.995	18	638.5	627.75	638.5	1.111	638.5	627.75	1.111	0.37	0.59	0.59	0.000	0.000	0.000	0.00	11.94	0	1.29	12.36	2.56	20	

LineNo.	LineID	InletID	LineLength	LineSize	InvertUp	InvertDn	d/Rim/Min	Depth	HGLUp	HGLDn	Rim-Ha	RunoffCoeff	VelDn	VelDn	J-LossCoeff	EnergyLoss	MinorLoss	CrossSlope	CapacityFull	DrainageArea	KnownD	FlowRate	QCaptured	InterEst
1	300A-EX CI	MH 300A	347.564	24	630.99	624.05	630.99	0.557	630.99	624.05	0.557	0.27	0.81	0.81	0.000	0.000	0.000	0.00	31.96	0	1.26	2.53	---	---
2	300A-300B	300B	13.814	15	631.41	631.31	631.41	0.10	631.41	631.31	0.10	0.27	0.36	0.36	0.000	0.000	0.000	0.00	6.51	0	0.8	0.8	0.72	89

- NOTES:
- ALL NEW STORM SEWERS ARE PRIVATE.
 - WATER TIGHT A-LOCK JOINTS SHALL BE PROVIDED ON ALL STORM SEWERS.
 - THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF HIS/HER BIDS TO CONFIRM THAT THE SITE CONDITIONS ARE AS SHOWN ON THESE PLANS. ANY CONDITION THAT IS DIFFERENT THAN WHAT IS SHOWN ON THESE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMITTAL OF BIDS.

- STORM SEWER PROFILE NOTES**
- MH.....DENOTES MANHOLE
GI.....DENOTES GRATE INLET
EP.....DENOTES END OF PIPE
FE.....DENOTES FLARED END SECTION
SD.....DENOTES SLOTTED DRAIN
OS.....DENOTES OUTFALL STRUCTURE
TQ.....TOTAL TO PIPE
+.....DENOTES SURCHARGED HGL
J.....DENOTES HYDRAULIC JUMP IN INLET OR LINE
 - ALL DIMENSIONS ARE TO THE CENTERLINE OF STRUCTURE TO THE END OF FLARED END SECTION OR TO THE END OF PIPE AT EP'S
 - BACK FILL REQUIREMENTS FOR ADS N-13 IS CLASS 3 @ 95% STANDARD PROCTOR DRY DENSITY DEEPER THAN 10 FEET BELOW FINISHED GRADE, AT LEAST 98% OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY.

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS OF STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THAT THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS AS SHOWN ON THE SUBDIVISION PLAT WITH THE EXCEPTION OF THE FOLLOWING:

DAVID W. MAXWELL
MISSOURI P.E. #2019000726
PREMIER CIVIL ENGINEERING
MISSOURI C of A, #2012007849



NOTE:
Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

Channel Report

Hydrow Express Extension for AutoCAD: Chk 3DS by Autodesk, Inc. Monday, Feb 2 2015

EX CHANNEL ANALYSIS

Triangular
 Side Slopes (z:1) = 3.00, 3.00
 Total Depth (ft) = 3.00
 Invert Elev (ft) = 615.00
 Slope (%) = 2.70
 N-Value = 0.150
Calculations
 Compute by: Q vs Depth
 No. Increments = 10

Highlighted
 Depth (ft) = 3.00
 Q (cfs) = 55.51
 Area (sqft) = 27.00
 Velocity (ft/s) = 2.06
 Wetted Perim (ft) = 18.97
 Crit Depth, Yc (ft) = 1.85
 Top Width (ft) = 18.00
 EGL (ft) = 3.07

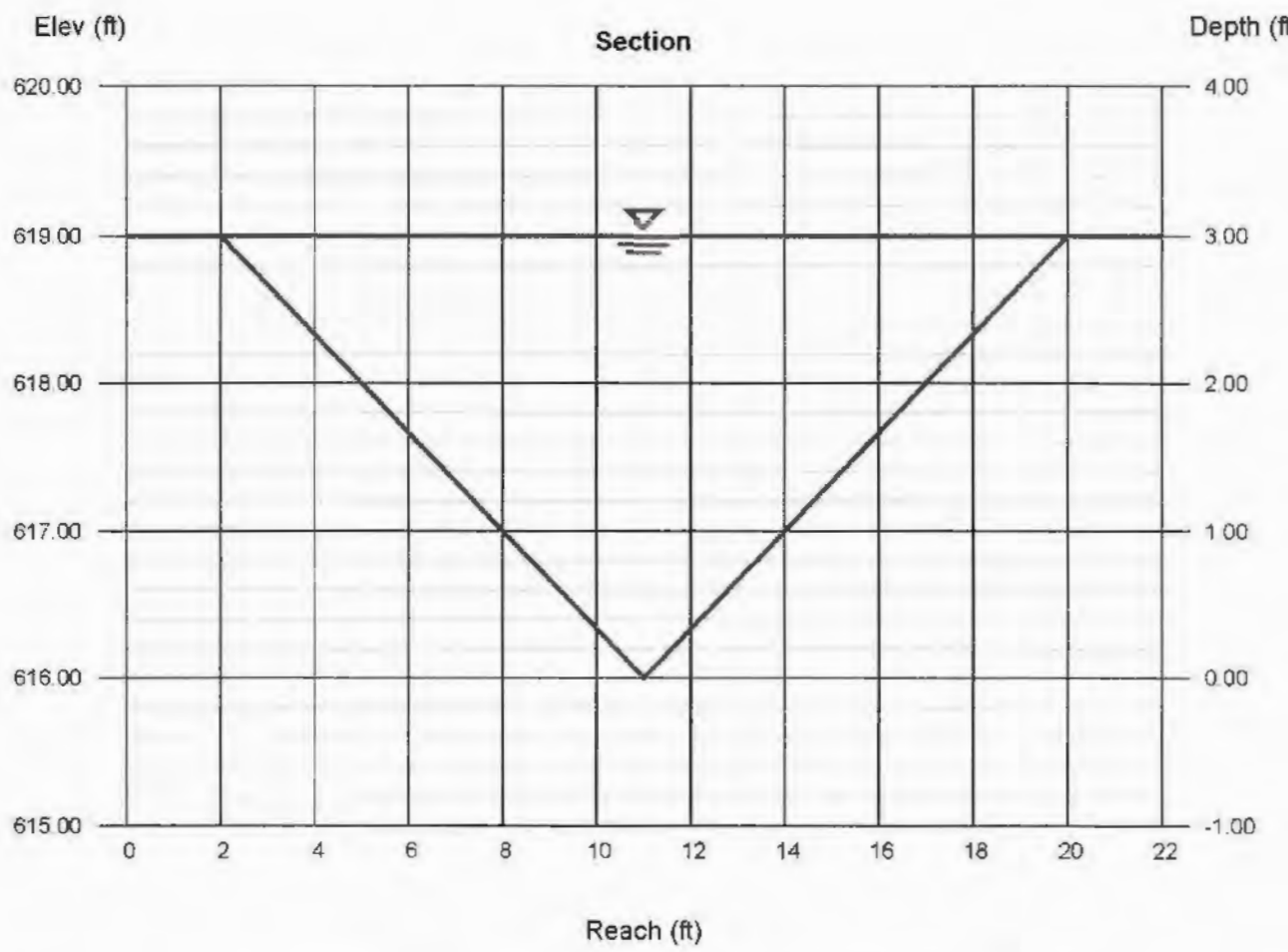
AS-BUILTS

THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

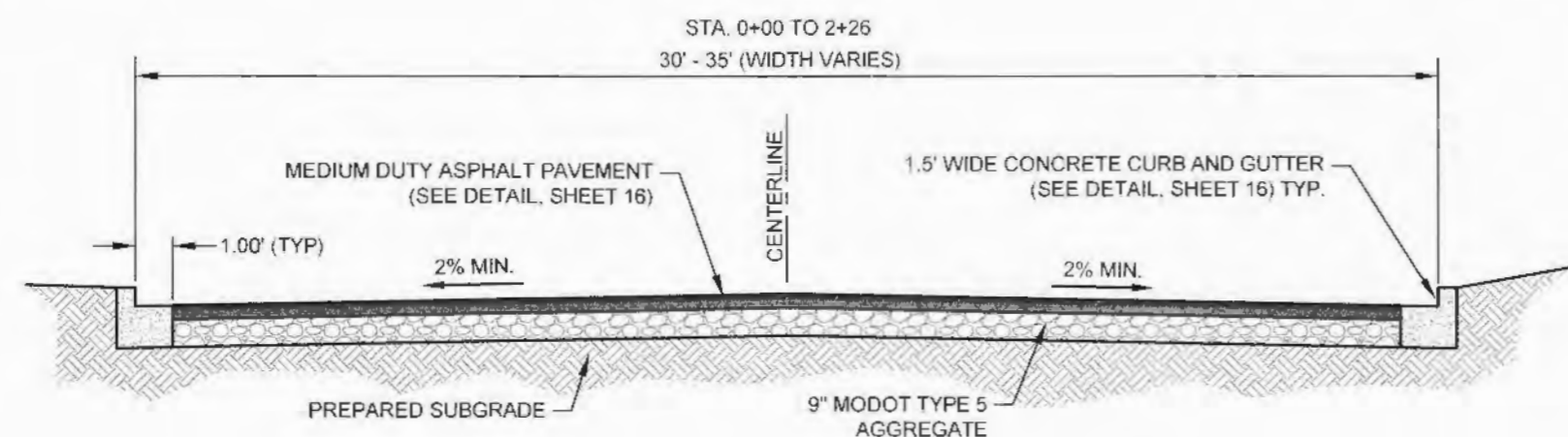
ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS, STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THAT THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS AS SHOWN ON THE SUBDIVISION PLAT WITH THE EXCEPTION OF THE FOLLOWING:

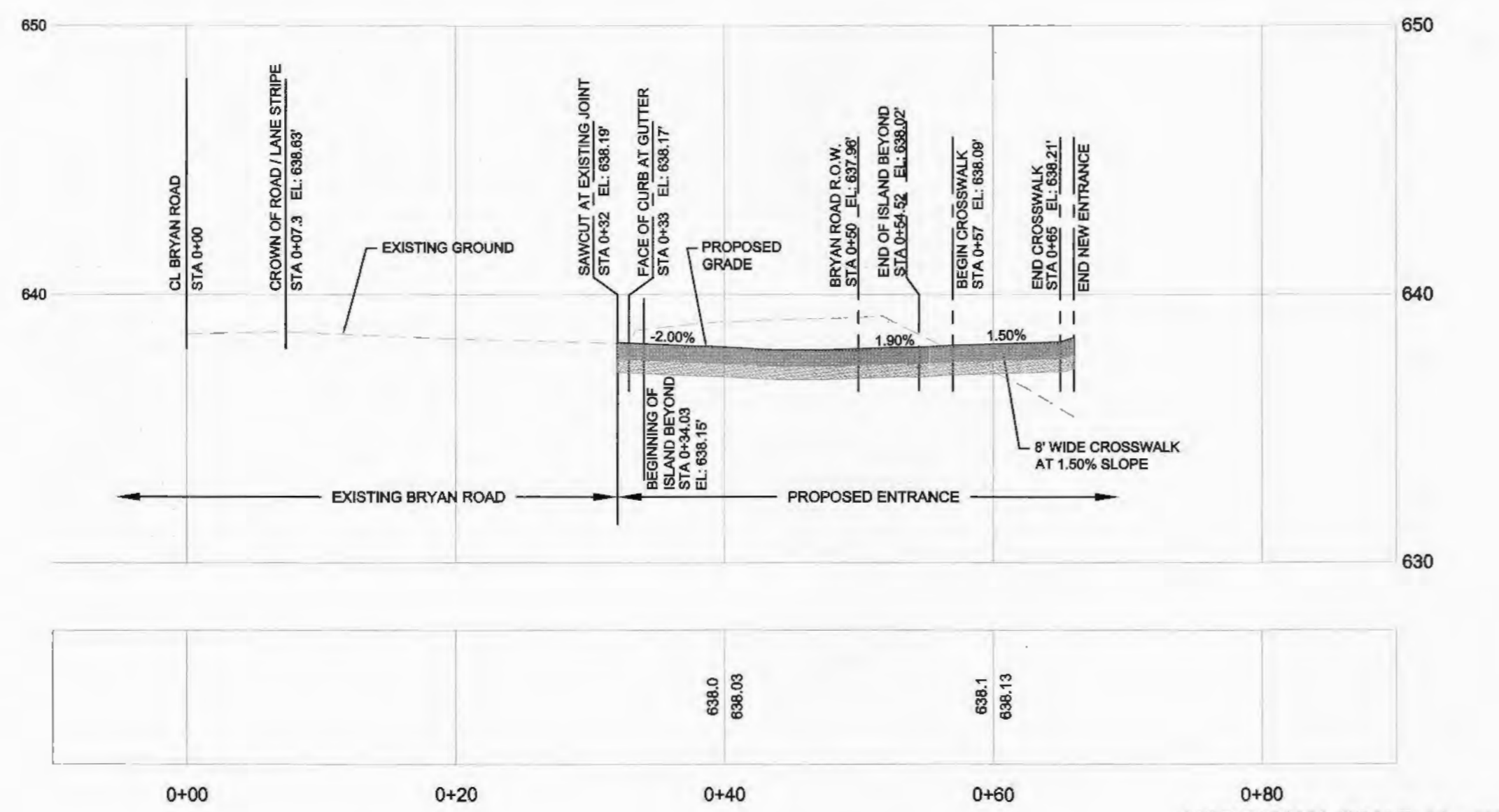
DAVID W. MAXWELL
 MISSOURI P.L.S. #2000600726
 PREMIER CIVIL ENGINEERING
 MISSOURI C.of A. #2012007B49



**DOWNSTREAM DITCH FROM FE 200
 MAX Q ANALYSIS**



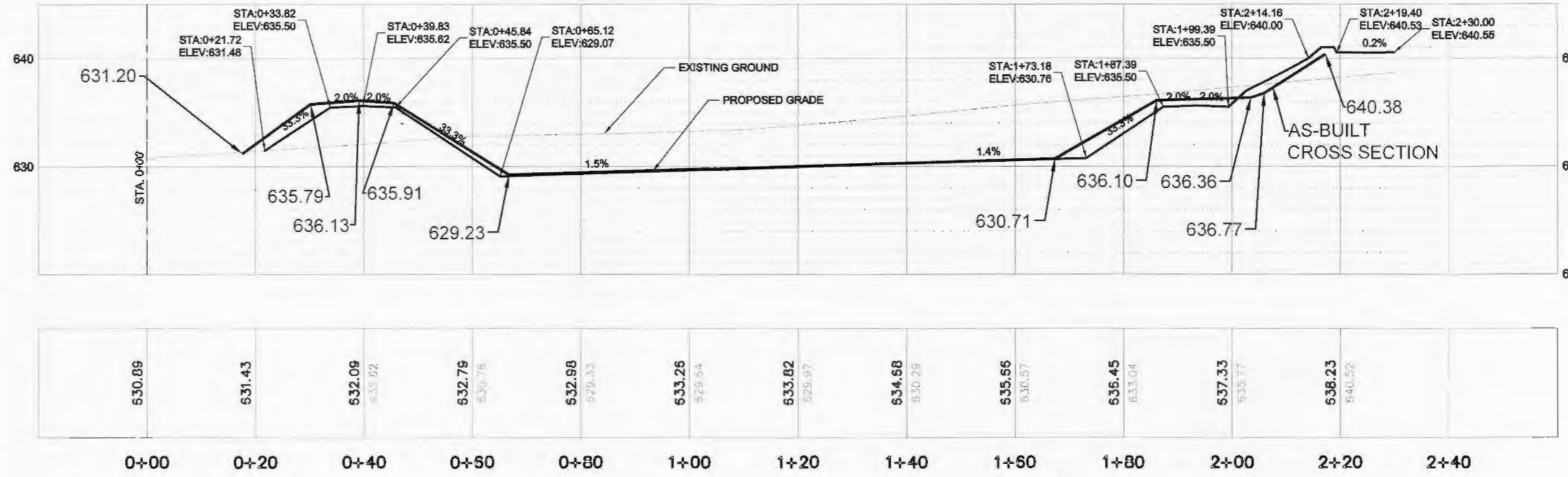
**TYPICAL FEISE ROAD ENTRANCE
 PAVEMENT SECTION
 (ON-SITE)**
 1" = 5'



BRYAN ROAD ENTRANCE CENTERLINE PROFILE

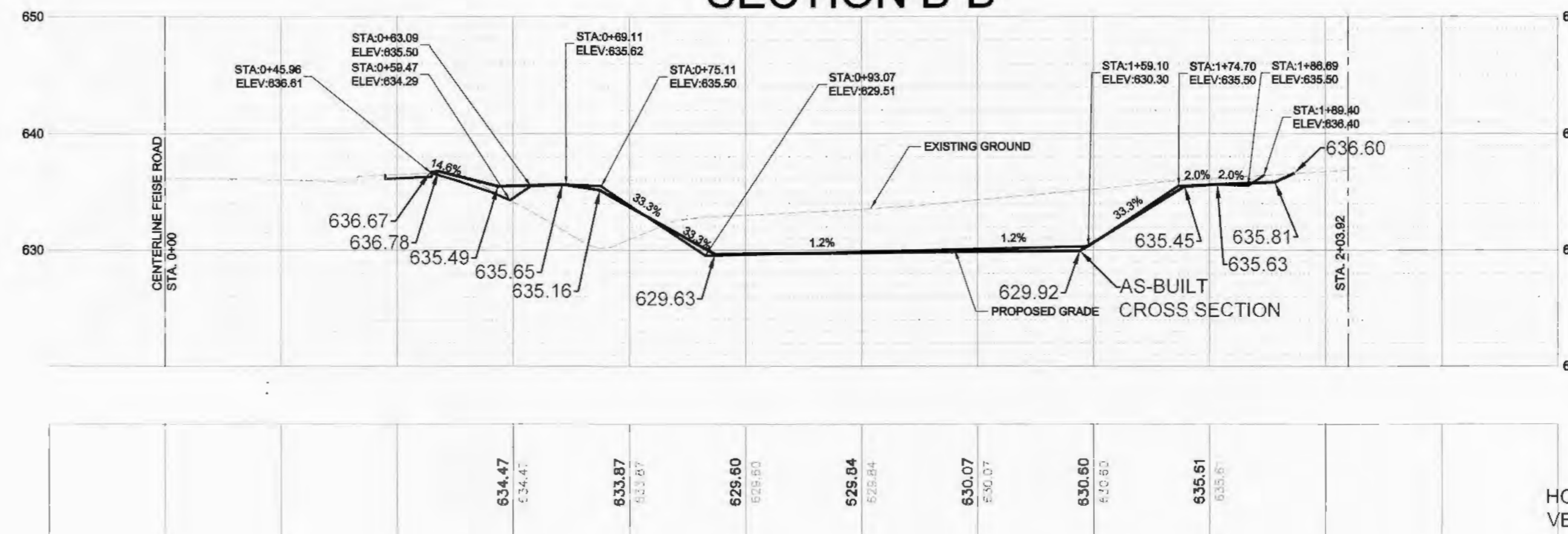
HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'

DETENTION BASIN SECTION A-A

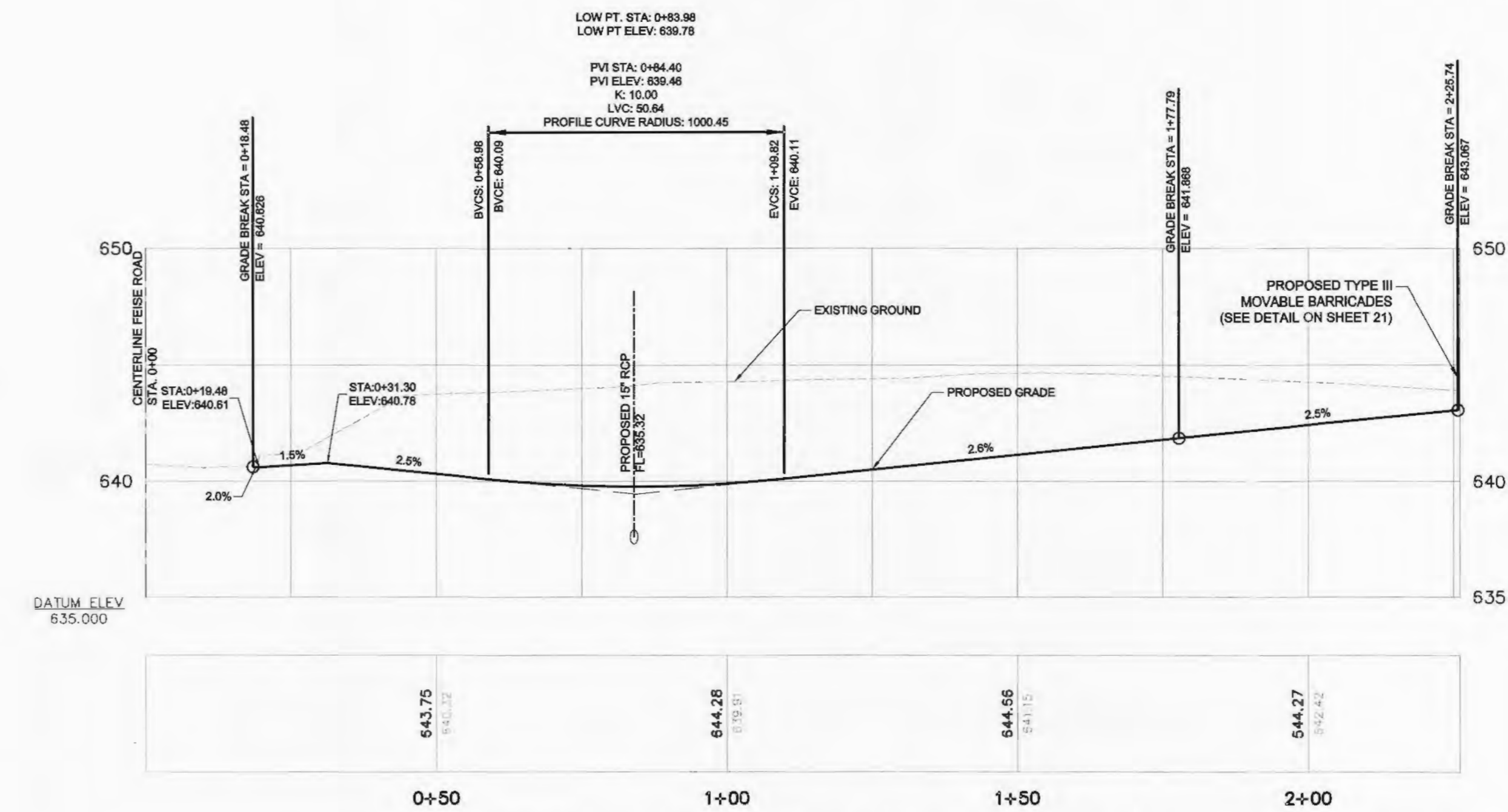


HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

DETENTION BASIN SECTION B-B



HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'



FEISE ROAD ENTRANCE CENTERLINE PROFILE

HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'



NOTE:
 Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.



PROJECT TITLE
 NORTHERN 13,225-RIGHT CHAMFER DRIVE-THRU STORE NUMBER: 10546
PROJECT TYPE
 NEW CONSTRUCTION
 DEAL TYPE Fee for Service
CS PROJECT NUMBER
 69591



PREMIER CIVIL ENGINEERING



308 TCW Court
 Lake Saint Louis, MO 63367
 Phone: (314) 925-7444 Fax: (314) 925-7457
 Missouri Certificate of Authority # E-201000031
 Missouri Certificate of Authority # LS-201207949

ENGINEERS AUTHENTICATION
 I, the undersigned, do hereby certify that the drawings and specifications on this set of plans are true and correct to the best of my knowledge and belief, and that I am a duly licensed professional engineer in the State of Missouri.

STEVE MARSON P.E.
 ENGINEER
 #E200002155

Developer / Owner Information

T.M.
CROWLEY & ASSOCIATES

**Detention Basin Sections and Feise Road
 Entrance Profile**

P+Z No. 01-15 & 01.15.01
 APPROVED 1-15-15
 City No.

Sheet Number:

14

PCE PROJECT NO. 136101

AS-BUILTS

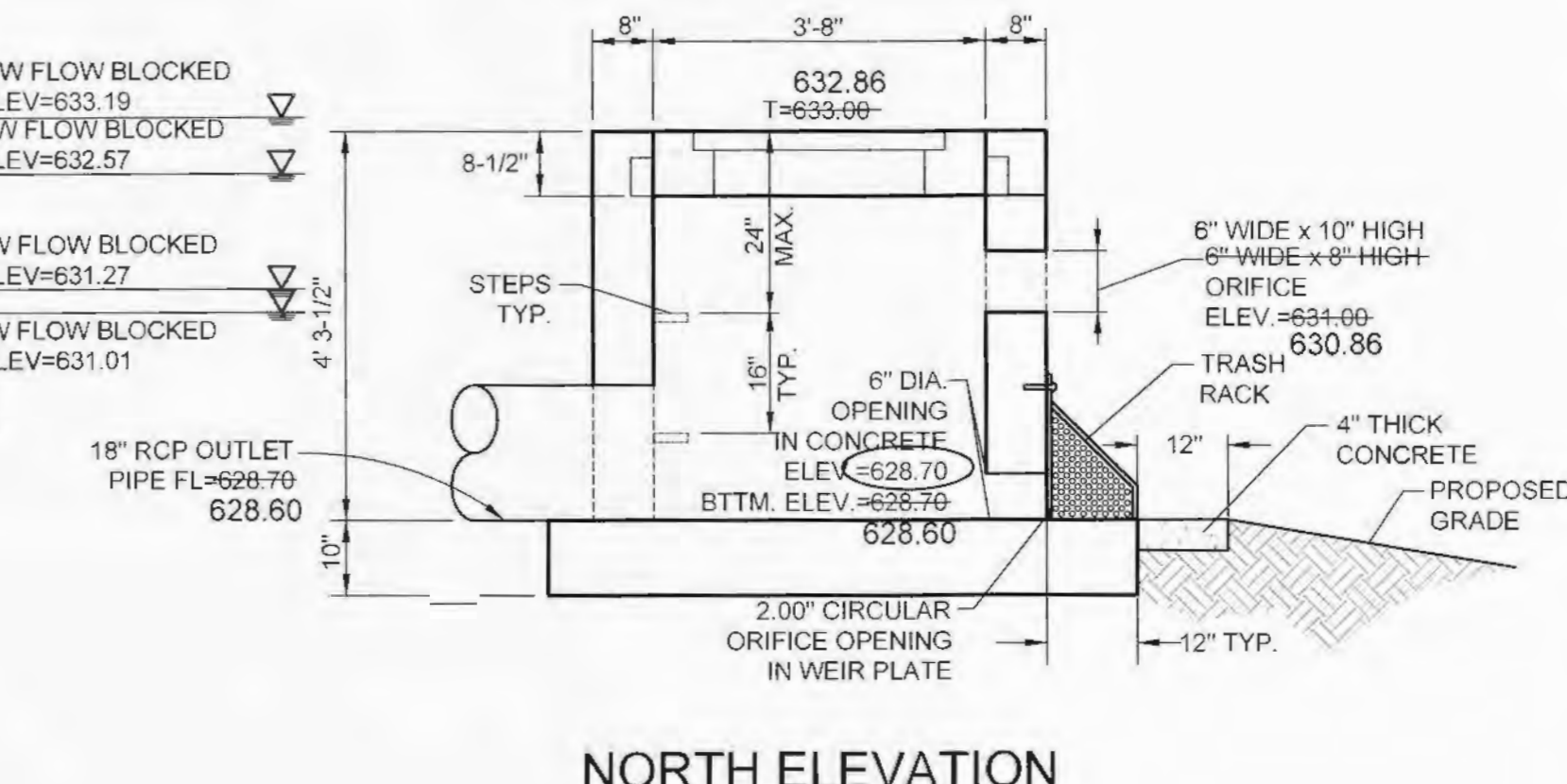
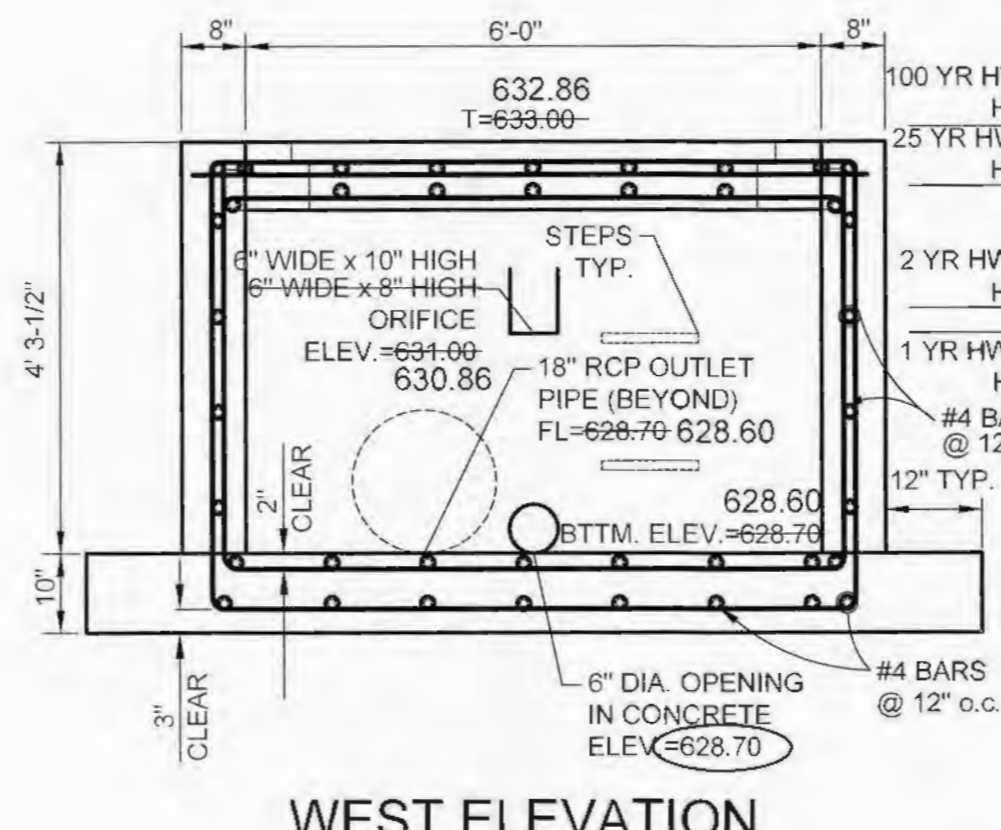
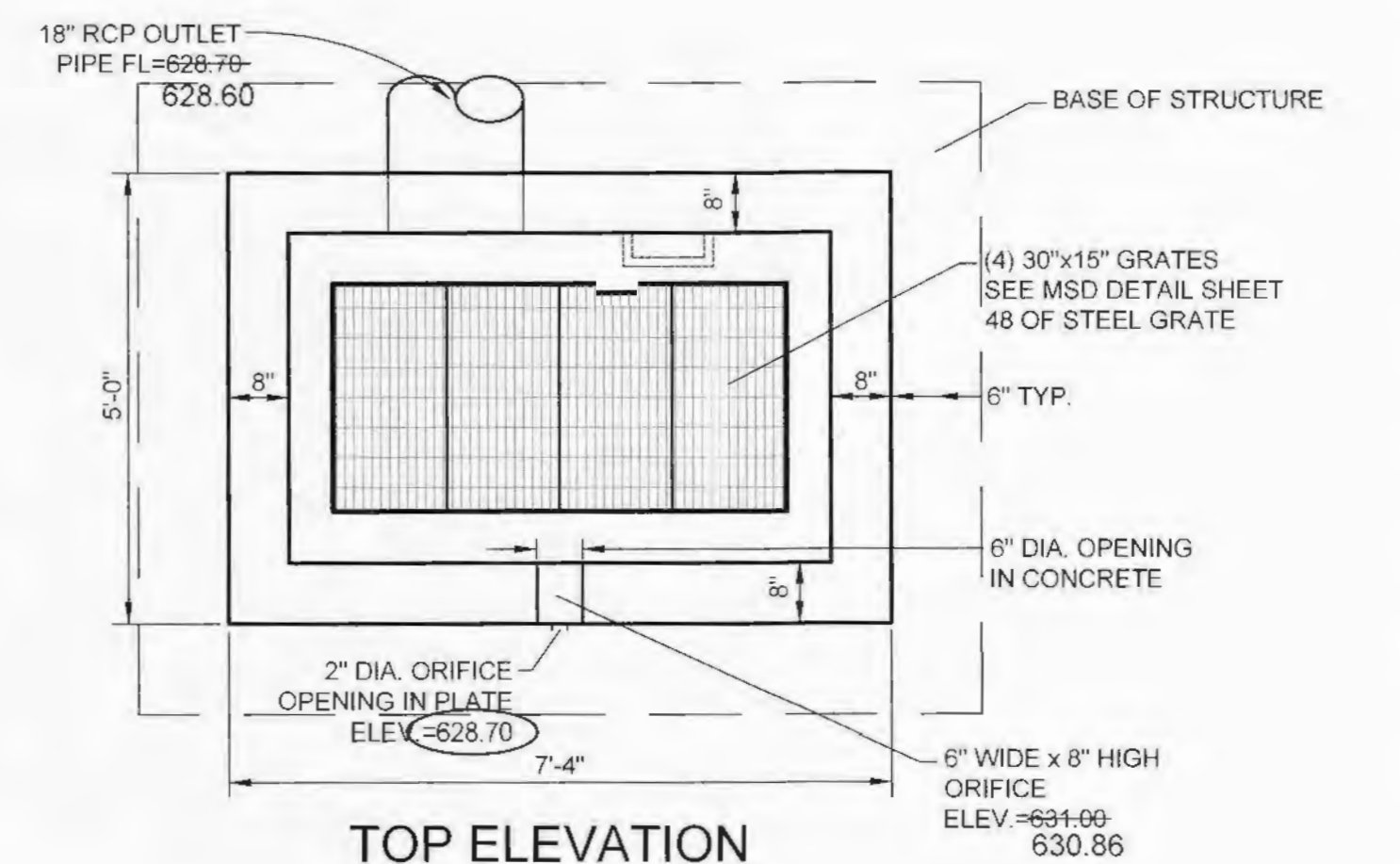
THE EXISTING SEWER LENGTHS, SIZES, FLOWLINES, DEPTHS OF STRUCTURES AND SEWERS AND LOCATIONS WITH RESPECT TO EXISTING OR PROPOSED EASEMENTS HAVE BEEN MEASURED. THE RESULTS OF THOSE MEASUREMENTS ARE SHOWN ON THIS SET OF FINAL MEASUREMENT PLATS. SINCE THE WYE LOCATIONS HAVE BEEN PLOTTED FROM INFORMATION PROVIDED BY THE SEWER CONTRACTOR OR OTHER SOURCES, I DISCLAIM ANY RESPONSIBILITY FOR THAT SPECIFIC INFORMATION.

ALL PUBLIC SEWERS ARE LOCATED WITHIN DESIGNATED EXISTING OR PROPOSED EASEMENTS EXCEPT AS FOLLOWS:

AS OF JANUARY 2016, I CERTIFY THAT THESE "AS-BUILT" DRAWINGS INDICATE THE ACTUAL LOCATIONS, LENGTHS, SIZES, TYPE AND CLASS OF PIPE, FLOWLINES, DEPTHS, STRUCTURES, WYE LOCATIONS, AS APPROPRIATE, AND THAT THE PUBLIC SEWERS HAVE BEEN CONSTRUCTED WITHIN EXISTING OR PROPOSED EASEMENTS SHOWN ON THE SUBDIVISION PLAT WITH THE EXCEPTION OF THE FOLLOWING:

David Maxwell
 DAVID W. MAXWELL
 MISSOURI P.L.L.C. #2008030726
 PREMIER CIVIL ENGINEERING
 MISSOURI C.O.A. #2012007849

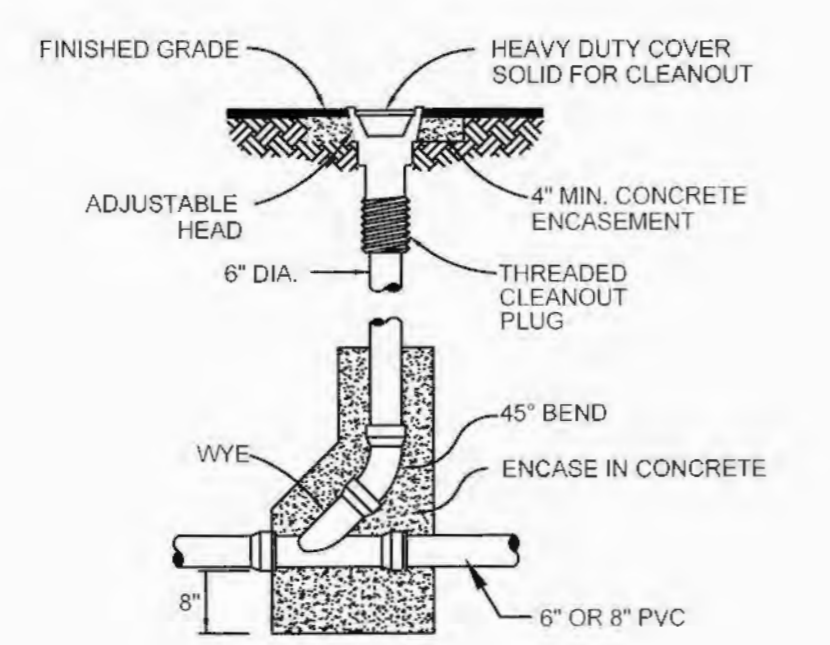
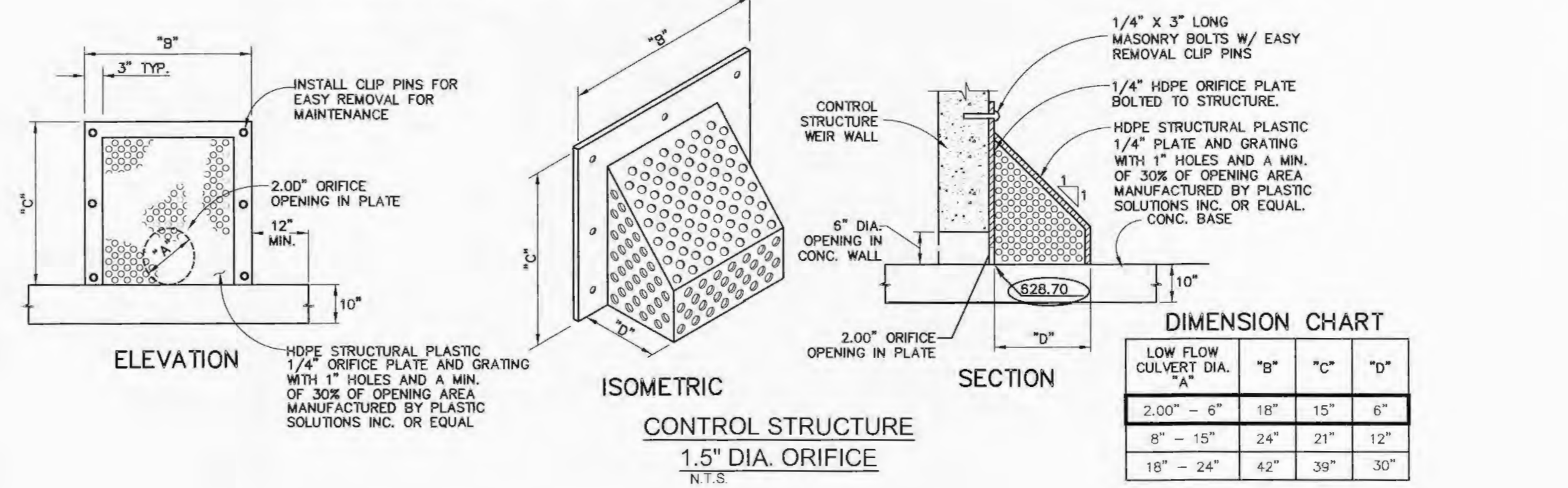
STATE OF MISSOURI
 PROFESSIONAL ENGINEER
 NUMBER PLS-2008030726
 2-11-16



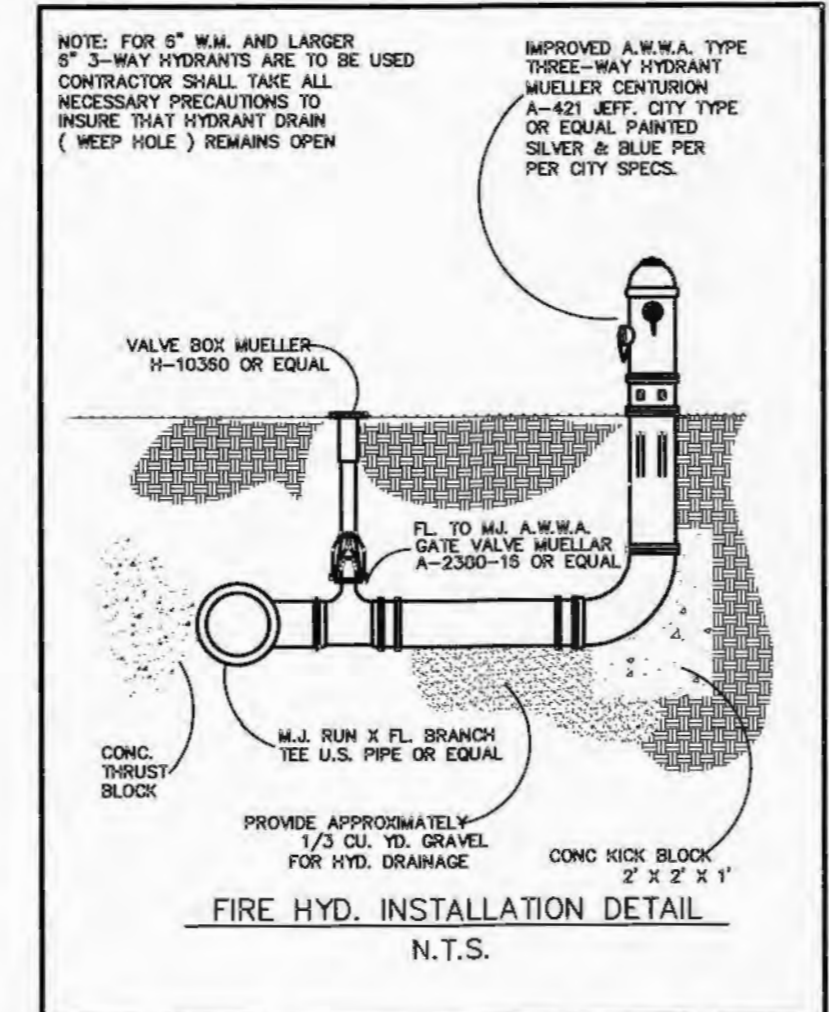
OUTFALL STRUCTURE OS 201 DETAIL

SCALE: 1" = 2'

SHOP DRAWING REVIEW NOTE:
 ENGINEER APPROVED, SIGNED AND SEALED SHOP DRAWINGS
 MUST BE SUBMITTED TO THE CITY OF OFFALLON ENGINEER PRIOR TO CONSTRUCTION OF THIS STRUCTURE. CONTACT: JAY HERIGODT, ASSISTANT CITY ENGINEER. AT 636-379-5416



CLEANOUT DETAIL
 N.T.S.



FIRE HYD. INSTALLATION DETAIL
 N.T.S.



NOTE:
 Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

CVS pharmacy
 PROJECT TITLE: NORTHERN 13,225-RIGHT CHAMFER DRIVE-THRU
 STORE NUMBER: 10546
 PROJECT TYPE: NEW CONSTRUCTION
 DEAL TYPE: Fee for Service
 CS PROJECT NUMBER: 69591

NORR
 ARCHITECTS ENGINEERS PLANNERS
 718 Griswold Street
 Suite 1000
 Detroit, MI 48226
 (313) 554-1113

PREMIER CIVIL ENGINEERING
 308 TOWN Court
 Lake St. Louis, MO 63367
 Phone: (314) 826-7444 Fax: (314) 925-7457
 Missouri Certificate of Authority # E-2011000031
 Missouri Certificate of Authority # LS-2012007849

ENGINEERS AUTHENTICATION
 I, STEVE MARION P.E., ENGINEER, certify that I am the author of the design and construction of the above project and that I am duly licensed and qualified to perform the services herein. My license number is PF200007195.

Developer / Owner Information
T.M. CROWLEY & ASSOCIATES
 Utility Details

P+Z No. 01-15 & 01.01
 APPROVED 1-15-15
 City No.
 Sheet Number:
 23
 PCE PROJECT NO. 136101

I:\vault-pc\va\civil\3D PROJECTS\20131136101 NEC FEISE AND BRYAN SURVEY\AS-BUILT\SEWER\OFFALLON\Erosion Control Details.dwg