

EQUUS WELLFIELD SPURLINE REPLACEMENTS

PHASE III

CITY OF WICHITA PROJECT NO. 448-2022-006890

OCA NO. 639020, W9022

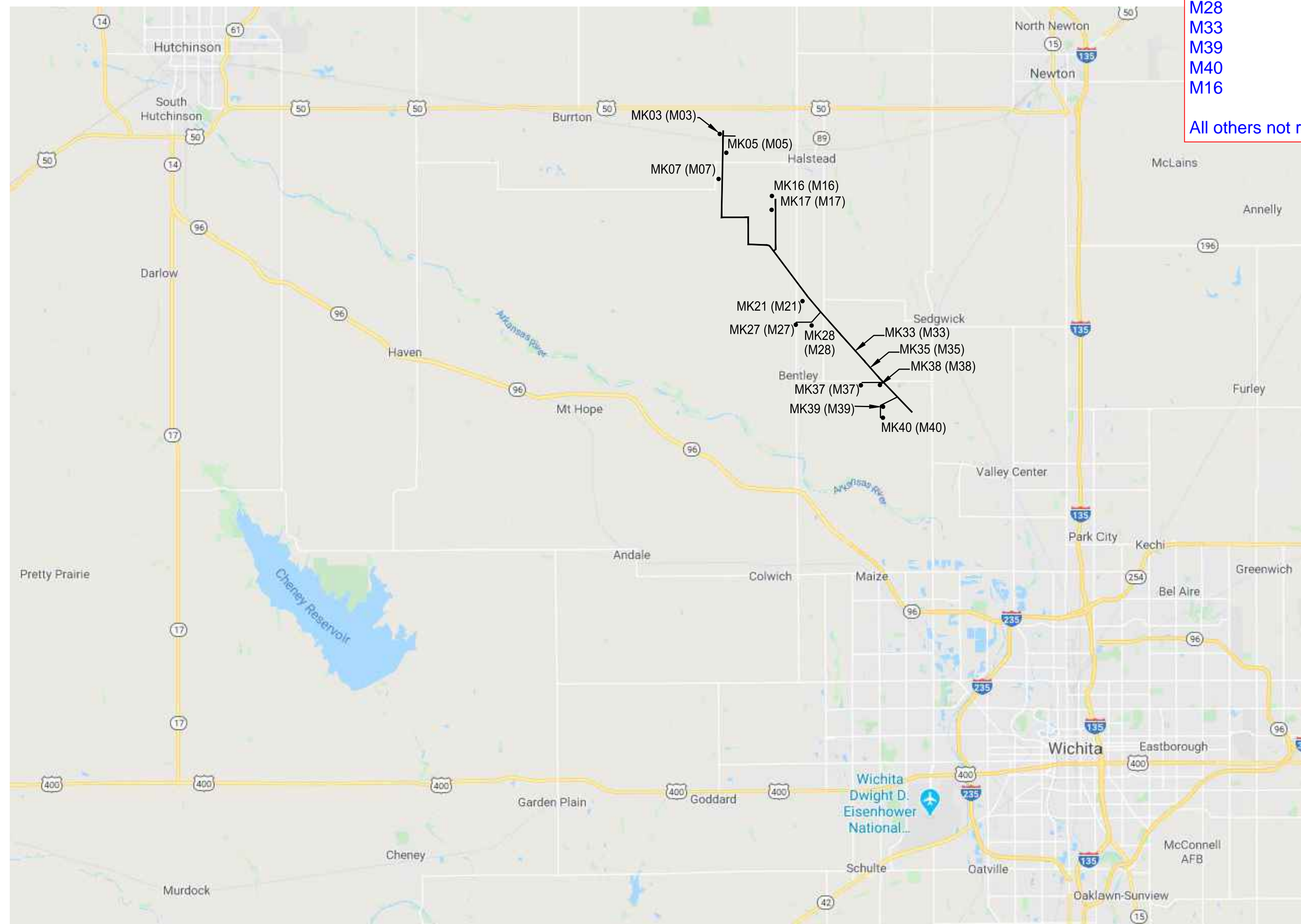
CITY OF WICHITA, KANSAS

GARY, JANZEN, P.E. - CITY ENGINEER

Item	Manufacturer	Size	Quantity
C-900 DR18 PVC	Westlake Pipe/Northern Pipe	12"	2884 LF
C-900 DR18 PVC RJ	Westlake Pipe/Northern Pipe	12"	297 LF
DR18 DICL RJ	United Pipe	12"	24 LF
C-900 DR18 PVC	Westlake Pipe/Northern Pipe	16"	4940 LF
C-900 DR18 PVC RJ	Westlake Pipe/Northern Pipe	16"	708 LF
DR18 DICL RJ	United Pipe	16"	41 LF
Valve Assembly (Gate)	CLOW Valve Company	12"	1 EA
Valve Assembly (Butterfly)	CLOW Valve Company	16"	3 EA
2" Combinaton Air Valve	CLOW Valve Company	2"	2 EA

Inspector	Daniel Swinger
Contractor	Dondlinger & Sons Const.
Superintendent	Brad Reichenberger
Company	City of Wichita

Replaced Spurlines and equipment for
M17
M27
M28
M33
M39
M40
M16
All others not replaced

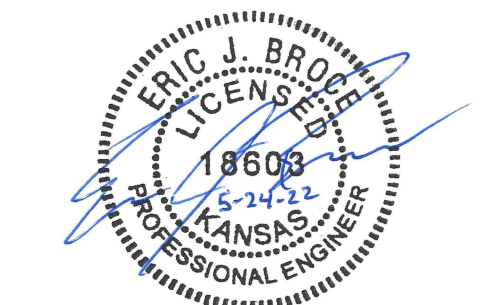


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MAY 2022

Wood Environment & Infrastructure Solutions, Inc.
245 N WACO STREET, SUITE 100
WICHITA, KS 67202
PHONE: (316) 337-5550

wood.



COVER SHEET
SHEET INDEX

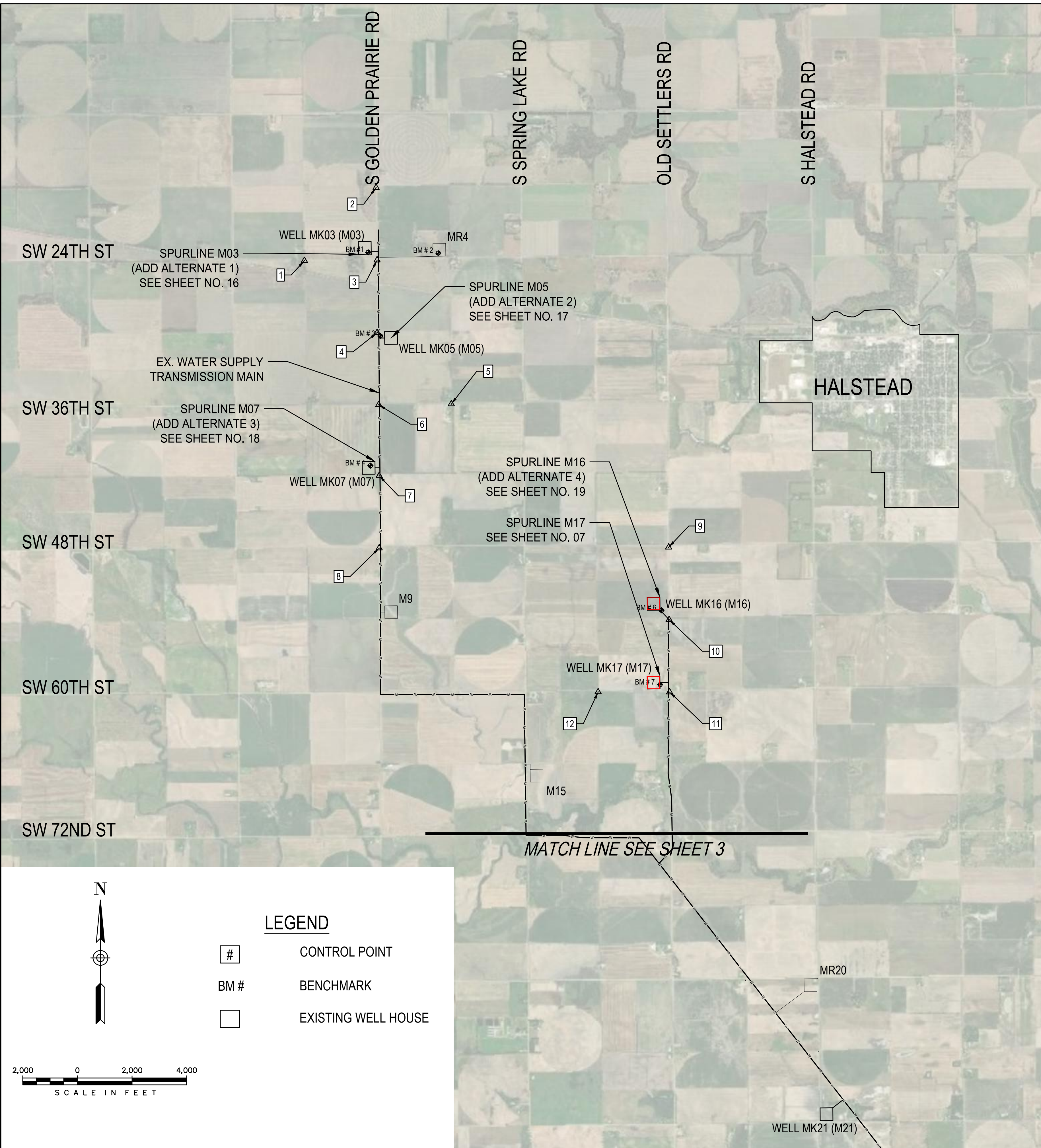
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PROJ.: 639020

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LEGEND

CONTROL POINT

BM # BENCHMARK

□ EXISTING WELL HOUSE

SCALE IN FEET

HORIZONTAL CONTROL POINTS

1. SOUTH QUARTER SECTION CORNER SECTION: 30 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1804282.16 EAST: 1576500.14
 1" SQUARE BAR
 R1: N 01°20'51" E 31.56 FEET TO 1/2" SQUARE BAR
 R2: N 01°34'33" W 29.71 FEET TO NAIL IN TOP OF 6" CORNER FENCE POST
 R3: S 00°52'12" E 26.49 FEET TO NAIL IN TOP OF 6" POST
 R4: S 48°30'56" W 45.53 FEET TO 2 NAILS IN NORTH FACE 18" CEDAR TREE
 R5: N 80°38'15" W 60.86 FEET TO THE SOUTHEAST CORNER CONCRETE FOOT BRIDGE
2. EAST QUARTER SECTION CORNER SECTION: 30 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1806858.71 EAST: 1579123.18
 FOUND 1.5" O.D IRON PIPE
 R1: S 88°08'11" E 40.65 FEET CENTER 3" STEEL CORNER FENCE POST
 R2: S 39°52'24" E 63.78 FEET TO CENTER OF SOUTHERLY 3" STEEL GATE POST
 R3: S 11°31'07" W 128.77 FEET 40D NAIL AND WASHER NORTHWEST FACE POWER POLE
 R4: W 2 FEET TO CENTERLINE OF N-S GRAVEL RD
3. SOUTHEAST SECTION CORNER SECTION: 30 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1804301.65 EAST: 1579159.50
 LIMESTONE WITH PK NAIL IN CENTER
 R1: N 32°21'59" E 50.21 FEET TO GROUND LUG WEST FACE POWER POLE
 R2: N 50°47'59" E 52.69 FEET TO TOP CENTER 9" BOLLARD
 R3: S 20°58'11" W 62.34 FEET TO NAIL AND 2 WASHERS NORTH FACE OF POWER POLE
 R4: S 59°21'44" W 46.10 FEET TO TOP CENTER TELEPHONE PEDESTAL
 R5: N 64°35'04" W 54.81 FEET TO GROUND LUG NORTH FACE POWER POLE
4. WEST QUARTER SECTION CORNER SECTION: 32 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1801645.92 EAST: 1579195.92
 1/2" IRON PIPE PEC CAP
 R1: N 08°30'33" E 168.13 FEET TO GROUND LUG WEST FACE POWER POLE
 R2: S 63°38'44" E 30.53 FEET TO ID TAG NORTH FACE METAL POWER POLE
 R3: S 08°34'08" E 196.07 FEET TO GROUND LUG WEST FACE METAL POWER POLE
5. SOUTH QUARTER SECTION CORNER SECTION: 32 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1799033.030000 EAST: 1581875.250000
 5/8" REBAR 0.7" DEEP
 R1: S 00°17'45" E 35.27 FEET TO LONE HEDGE POST
 R2: S 28°51'08" W 38.73 FEET TO PK NAIL WEST NORTHWEST FACE POWER POLE
 R3: S 42°16'50" W 108.16 FEET TO MAG NAIL NORTH FACE 2" DIAMETER POWER POLE
 R4: S 76°14'57" W 146.23 FEET TO PK NAIL NORTH FACE POWER POLE
6. SOUTHWEST SECTION CORNER SECTION: 32 TOWNSHIP: 23S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1799004.85 EAST: 1579218.83
 1/2" REBAR
 R1: N 40°36'54" E 46.57 FEET MAG NAIL SOUTH FACE CUT OFF POWER POLE
 R2: S 47°59'40" E 50.72 FEET MAG NAIL WEST FACE POWER POLE
 R3: S 41°34'24" E 47.75 FEET TOP CENTER UGT PEDESTAL
 R4: S 76°15'49" W 64.59 FEET "X" CUT TOP CENTER SOUTH HEADWALL
 R5: N 77°21'05" W 64.70 FEET "X" CUT TOP CENTER NORTH HEADWALL
7. EAST QUARTER SECTION CORNER SECTION: 6 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1796407.37 EAST: 1579237.86
 1/2" REBAR
 R1: N 47°59'12" E 32.44 FEET TO MAG NAIL WEST FACE 36" HEDGE TREE
 R2: S 42°34'24" E 40.75 FEET TO MAG NAIL NORTHWEST FACE 15" HEDGE TREE
 R3: N 85°57'16" W 25.22 FEET TO MAG NAIL EAST FACE 18" HEDGE TREE
8. SOUTHEAST SECTION CORNER SECTION: 6 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1793759.79 EAST: 1579235.62
 5/8" REBAR
 RL: N 27°02'01" E 65.11 FEET 40D WEST FACE POWER POLE
 R2: N 67°52'24" E 41.98 FEET TO TOP CENTER UGT PEDESTAL
 R3: S 43°36'52" E 52.59 FEET TO TOP CENTER NORTHWEST 9" BOLLARD
 R4: S 43°22'49" E 52.28 FEET FOUND "X" CUT NORTHEAST FACE 9" BOLLARD
 R5: S 40°23'27" W 35.38 FEET GROUND LUG EAST FACE POWER POLE
 R6: N 24°48'20" W 56.30 FEET GROUND LUG WEST FACE POWER POLE
9. NORTHEAST SECTION CORNER SECTION: 9 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1793790.62 EAST: 1589831.59
 1/2" REBAR
 R1: N 15°02'41" E 60.85 FEET TO "X" CUT TOP 24" RCP
 R2: S 54°25'08" E 33.10 FEET TO TOP CENTER UGT PEDESTAL
 R3: S 15°50'35" E 60.27 FEET TO "X" CUT TOP 18" RCP
 R4: S 14°07'12" W 60.49 FEET TO "X" CUT TOP 18" RCP
 R5: N 13°12'13" W 60.32 FEET TO "X" CUT TOP 24" RCP
10. EAST QUARTER SECTION CORNER SECTION: 9 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1791138.11 EAST: 1589849.32
 5/8" REBAR
 R1: N 87°58'59" E 79.65 FEET PK NAIL IN TOP OF STUMP WEST END HEDGEROW
 R2: S 13°00'47" W 93.99 FEET TO GROUND LUG EAST FACE POWER POLE
 R3: N 52°24'41" W 53.29 FEET TO TOP CENTER SOUTH EAST 9" BOLLARD
 R4: N 14°07'29" W 93.01 FEET TO GROUND LUG EAST FACE POWER POLE
11. SOUTHEAST SECTION QUARTER SECTION: 9 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1788487.91 EAST: 1589867.06
 1" IRON BAR
 R1: N 50°31'07" E 41.69 FEET TO CL UGT PEDESTAL
 R2: N 72°47'16" E 73.98 FEET TO GROUND LUG SOUTH FACE POWER POLE
 R3: S 73°43'17" E 58.04 FEET TO "X" CUT FOUND SOUTH END OF 24" RCP CULVERT
 R4: S 36°37'31" E 41.44 FEET TO MAG NAIL IN THE NORTH EAST FACE OF POWER POLE
 R5: S 26°35'04" W 52.32 FEET TO GROUND LUG WEST FACE POWER POLE
 R6: N 62°56'52" W 50.88 FEET TO TOP CENTER OF WATER LINE MARKER POST
12. SOUTH QUARTER SECTION CORNER SECTION: 9 TOWNSHIP: 24S RANGE: 02W
 STATE PLANE COOR. SYS NORTH: 1788492.52 EAST: 1587250.40
 5/8" REBAR WITH CAP ILLEGIBLE
 R1: N 02°58'22" W 21.54 FEET TO SPIKE TOP CENTER OF CORNER FENCE POST
 R2: S 12°21'57" E 34.43 FEET TO SPIKE TOP CENTER OF BRACE POST
 R3: S 04°09'22" E 30.61 FEET TO TOP CENTER EAST 6" BOLLARD
 R4: S 32°54'09" W 39.70 FEET TO MAG NAIL IN NORTHWEST FACE OF BRACE POST

BENCHMARKS

1. MK03 (M03) SITE BENCHMARK
 "SQUARE" CUT FOUND IN NW/COR CONC PAD.
 ELEV: 1433.02' (NAVD88)
2. MR4 SITE BENCHMARK
 "SQUARE" CUT SET IN SW/COR CONC PAD.
 ELEV: 1428.65' (NAVD88)
3. MK05 (M05) SITE BENCHMARK
 "SQUARE" CUT FOUND IN SE/COR CONC. PAD.
 ELEV: 1434.13' (NAVD88)
4. MK07 (M07) SITE BENCHMARK
 "SQUARE" CUT IN SW/COR CONC. PAD.
 ELEV: 1430.33' (NAVD88)
5. MK16 (M16) SITE BENCHMARK
 "SQUARE" CUT IN SW/COR CONC. PAD.
 ELEV: 1410.91' (NAVD88)
6. MK17 (M17) SITE BENCHMARK
 "SQUARE" CUT IN SE/COR CONC. PAD.
 ELEV: 1408.44' (NAVD88)

WELLNAMES		
KDHE-EPA		LOCAL
MK03		M03
MK05		M05
MK07		M07
MK16		M16
MK17		M17
MK21		M21
MK27		M27
MK28		M28
MK33		M33
MK35		M35
MK37		M37
MK38		M38
MK39		M39
MK40		M40

* Reference to all wells in these construction documents follow the approved KDHE/EPA naming
 ** Naming for the proposed spurlines (pipelines) follow the local, city of Wichita naming convention.

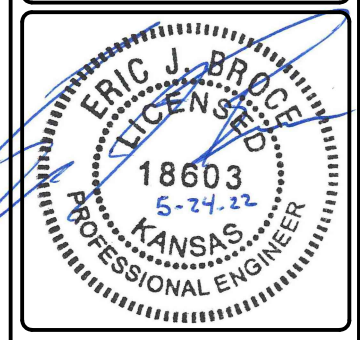
REVISIONS:	

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 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

KEY MAP & CONTROL POINTS -1

EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
02

OF 35

GENERAL NOTES

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS. ALL CONSTRUCTION SHALL BE COMPLETED FOLLOWING CURRENT CITY STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE NOTICE TO UTILITY COMPANIES A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION, AS FOLLOWS:

KANSAS ONE-CALL	687-2470
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THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

AT&T	1-800-246-8464
KANSAS GAS SERVICE	1-888-482-4950
EVERGY	1-800-544-4857
KANSAS FIBER NETWORK	1-913-901-7021
JAYHAWK PIPELINE	1-620-755-1160
SEDGWICK COUNTY ROAD & BRIDGE	1-316-660-1777
HARVEY COUNTY ROAD & BRIDGE	1-316-283-1890
- THE CONTRACTOR SHALL CONTACT THE FOLLOWING AT LEAST 10 DAYS PRIOR TO BEGINNING CONSTRUCTION TO ADVISE THEM OF THE INTENDED WORK AND OF HIS PROPOSED SCHEDULE.

SHAWN MALONEY	1-316-269-4732
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WICHITA ASR
WELLFIELD MANAGER
- EASEMENTS AND RIGHT-OF-WAY PROVIDED BY THE OWNER FOR THE PROJECT ARE SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACQUISITION OF ANY ADDITIONAL TEMPORARY CONSTRUCTION EASEMENTS OR RIGHT-OF-WAY THAT HE DESIRES TO USE COMPLETING THE WORK.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS' NOTICE PRIOR TO START OF CONSTRUCTION.
- UTILITY SERVICE LINES, POLES, ETC. ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND, PROTECT FROM DAMAGE, AND SUPPORT EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY OR EASEMENT WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- IT SHOULD BE NOTED THAT OTHER BURIED LINES AND CABLE MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING TRENCHING OPERATIONS TO AVOID DAMAGING THESE LINES AND CABLES. ANY UTILITIES DAMAGED SHALL BE REPLACED OR REPAIRED IMMEDIATELY AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PROTECT FROM DAMAGE AND SUPPORT EXISTING UTILITIES THROUGH CONSTRUCTION AS APPROVED BY THE UTILITY OWNER AND THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE, AND SITE LOCATION. LOCATIONS, IN THE OPINION OF THE ENGINEER, THAT WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS. OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY OR EASEMENT WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE CITY ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL RESTORE ALL DITCHES, SCALES, ROAD SHOULDERS, AND BANKS TO THEIR ORIGINAL SLOPES AND GRADES. WHERE EXISTING ENTRANCE PIPE, DRAINAGE PIPE, SIGNS, FENCES, ETC., CONFLICT WITH THE PROPOSED WORK HEREIN, THEY SHALL BE REMOVED AND REPLACED OR RESET. THE REPLACEMENT OF ALL THE FOREMENTIONED ITEMS, INCLUDING SEEDING, FERTILIZER AND MULCHING SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
- POSITIVE DRAINAGE SHALL BE PROVIDED FOR ALL AREAS ON OR NEAR SPOIL AREAS. NATURAL DRAINAGE WAYS SHALL BE MAINTAINED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERLY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- THE CONTRACTOR SHALL CONTAIN HIS OPERATIONS TO PERMIT TRAFFIC THROUGH AND ACROSS CONSTRUCTION AT EXISTING ROADWAYS AT ALL TIMES. THE CONTRACTOR SHALL ERECT WARNING SIGNS, FLASHING LIGHTS, AND BARRICADES IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES TO ENSURE SAFETY.
- WATERLINES SHALL HAVE A MINIMUM DEPTH OF BURY OF 48 INCHES UNLESS SHOWN OTHERWISE.
- THE ASR AND WELL FIELD MANAGEMENT STAFF SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, VALVE BOXES OR OTHER STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY CONTRACTOR AT HIS OWN EXPENSE.
- AIR RELEASE VAULTS ARE BASED ON THE TOP ELEVATION OF THE PROPOSED WATER MAIN AND THE APPROXIMATE PROPOSED GROUND ELEVATION AT THE LOCATION OF THE VAULT. THE CONTRACTOR SHALL VERIFY THESE ELEVATIONS PRIOR TO INSTALLING VAULTS. ANY MODIFICATIONS REQUIRED TO THE VAULT DIMENSIONS DUE TO THE CONTRACTOR'S FIELD ADJUSTMENTS TO THE WATER MAIN PROFILE SHALL BE MADE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY. PROPOSED ADJUSTMENTS MUST BE APPROVED BY THE RESIDENT INSPECTOR PRIOR TO CONSTRUCTION.
- CONCRETE THRUST BLOCKING SHALL BE INSTALLED AT ALL HORIZONTAL AND VERTICAL DEFLECTIONS OF 1 1/2 DEGREES OR MORE. UNLESS THE PLANS SPECIFICALLY CALL FOR THE USE OF RESTRAINED JOINT (RJ) PIPE OTHERWISE APPROVED BY THE ENGINEER, THRUST BLOCKING AND RESTRAINED JOINT PIPE SHALL BE SIZED AS SHOWN IN THE DETAILS. COSTS FOR CONCRETE THRUST BLOCKING AND/OR RESTRAINED JOINT PIPING METHODS SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICE FOR PIPE IN PLACE. THE CONTRACTOR MAY UTILIZE RESTRAINED JOINTS FOR THRUST RESTRAINT IF RESTRAINED JOINT METHOD IS ACCEPTABLE BY THE ENGINEER.

- THE HYDROSTATIC TEST PRESSURE FOR THE NEWLY CONSTRUCTED SPURLINE SHALL BE 150 PSI.
- THE CONTRACTOR WILL BE REQUIRED TO DISINFECT THE PIPELINE IN ACCORDANCE WITH KDHE MINIMUM DESIGN STANDARDS, APPENDIX D UTILIZING THE "CONTINUOUS METHOD" OF INJECTING CONCENTRATED CHLORINE SOLUTION TO ACHIEVE A DESIRED 25 MG/L CHLORINE RESIDUAL IN THE PIPELINE AND ALLOWED TO STAND IN THE PIPELINE FOR A 24 HOUR PERIOD, IF THE CHLORINE RESIDUAL IN THE PIPELINE IS NOT LESS THAN 10 MG/L, THE PIPELINE WILL BE CONSIDERED DISINFECTED AND MAY BE FLUSHED AND PUT INTO SERVICE. CONNECTION TO THE EXISTING PIPELINE SHALL BE MADE USING CLEAN, SWABBED PIPE AND FITTINGS. NO BACTERIOLOGICAL TESTING WILL BE REQUIRED.
- THE CONTRACTOR SHALL LAY A TRACER WIRE AND SET TEST STATIONS ALONG ALL WATER PIPE INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS AND TRACER WIRE DETAIL ON DETAIL SHEET WL -101, COST IS SUBSIDIARY TO PIPE INSTALLATION.

"1" CONDULET STYLE TRACER WIRE TEST STATIONS SHALL BE INSTALLED AT THE WARNING SIGN LOCATIONS AND LOCATED WITHIN 2" OF THE WARNING SIGNPOST.
- THE CONTRACTOR SHALL PROVIDE MATERIALS FOR TEMPORARY BLOWOFF OF WATERLINES. CONNECTIONS TO THE EXISTING WATERLINES(S) SHALL BE MADE WITH CLEAN, SWABBED PIPE AND FLUSHED UPON COMPLETION OF TIE-INS.
- REQUESTS FOR SHORT TERM WATER SUPPLY INTERRUPTIONS SHALL BE MADE TO THE ASR AND WELLFIELD MANAGEMENT STAFF AND WILL BE SUBJECT TO THEIR APPROVAL.
- THE CONTRACTOR MUST SCHEDULE THE CONNECTIONS TO THE EXISTING TRANSMISSION MAIN WITH THE ASR AND WELLFIELD MANAGEMENT STAFF SUCH THAT THERE IS A MINIMUM DISRUPTION OF SERVICE. CONNECTIONS SHALL BE MADE DURING PERIODS OF LOW WATER DEMAND. THE CONTRACTOR SHALL SUBMIT HIS PROPOSED SCHEDULE FOR COMPLETING WORK FOR ASR AND WELLFIELD MANAGEMENT STAFF APPROVAL OF AT LEAST 10 DAYS PRIOR TO BEGINNING CONSTRUCTION.
- DEFLECTIONS AT PIPE JOINT OR COUPLINGS SHALL NOT EXCEED THE PIPE MANUFACTURER'S RECOMMENDED MAXIMUM. WHERE DEFLECTIONS ARE GREATER THAN THE MAXIMUM ALLOWED, THE CONTRACTOR SHALL UTILIZE FITTINGS.
- ANY EXISTING JOINT EXPOSED DURING EXCAVATION SHALL BE REPLACED IF WITHIN FOUR FEET OF PROPOSED JOINT.
- IN ALL AREAS AFFECTED BY THE PROPOSED WATERLINE IMPROVEMENTS, THE CONTRACTOR SHALL STRIP TOPSOIL TO A DEPTH OF 12 INCHES AND KEEP FREE FROM ROOTS, STONES, AND OTHER UNDESIRABLE MATERIALS. ALL TOPSOIL SHALL BE STOCKPILED ON SITE AND SHALL BE RESTORED AND GRADE UPON SUBSTANTIAL COMPLETION. ALL SUCH WORK SHALL BE CONSIDERED SUBSIDIARY TO "SITE CLEARING AND RESTORATION".
- ALL BACKFILL FOR OPEN-TRENCH CONSTRUCTION SHALL BE BASED ON CITY OF WICHITA STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL GRASSED AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED WATER LINE SHALL BE REPLANTED WITH GRASS AND FERTILIZED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. EXISTING GRASS AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLANTED WITH THE SAME TYPE OF GRASS AS WAS REMOVED. SEEDING OF PASTURES AND NATIVE GRASSES SHALL BE RESEEDED IN ACCORDANCE WITH THE CRITERIA SHOWN BELOW:

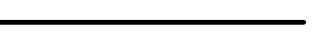
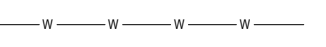



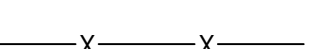






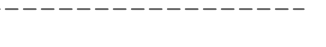
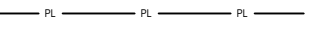
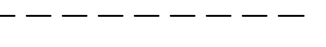








SEED: BLUE TAG CERTIFIED BUFFALO SEED

APPROVED CITY OF WICHITA STANDARD BUFFALO SEED VENDORS:
TEXOKA, SHARP'S IMPROVED, BISON, PLAINS, TATANKA, CODY, OR TOPGUN

APPROVED CITY OF WICHITA SEED APPLICATION:
SEED APPLICATION RATE: 2.5 LBS PLS/1000 SF
FERTILIZER APPLICATION: 5-12-12
APPLICATION RATE: 40#/A
SEEDING SEASON: DEC 1 TO JUNE 1
MULCH: PRAIRIE HAY OR BROMEGRASS HAY
MULCH APPLICATION: 90 LBS/1000 SQ. FT.
- AT LEAST 2 WEEKS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT, FOR THE ENGINEER'S APPROVAL, A CONSTRUCTION SEQUENCE/SCHEDULE.
- CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH OPENINGS OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
- THE CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED AND IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
- CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY FENCING AT THE EASEMENT LINE TO CONTAIN LIVESTOCK DURING CONSTRUCTION ACTIVITIES. UPON 10 DAY NOTIFICATION OF THE LANDOWNER, THE CONTRACTOR MAY REMOVE AND RESET EXISTING FENCES AS DEEMED NECESSARY FOR CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE FENCE OWNER AT LEAST 72 HOURS PRIOR TO REMOVAL. ALL COSTS ASSOCIATED WITH THE REMOVAL AND REPLACEMENT OF FENCES AND ANY TEMPORARY FENCING SHALL BE SUBSIDIARY TO THE LUMP SUM PRICE FOR "SITE CLEARING AND SITE RESTORATION".
- THE CONTRACTOR MUST OBTAIN A COPY OF THE SEDGWICK COUNTY AND HARVEY COUNTY "UTILITY PERMIT AGREEMENT" FOR "USE OF PUBLIC ROAD RIGHT-OF-WAY" PRIOR TO THE START OF CONSTRUCTION. PERMIT WILL BE OBTAINED BY THE CITY.
- THE CONTRACTOR SHALL MAINTAIN ALL ROAD SURFACES DISTURBED DURING CONSTRUCTION TO A CONDITION ACCEPTABLE TO THE ENGINEER. ADDITIONAL AGGREGATE, BASE MATERIAL, SURFACE MATERIAL, COMPACTION, EARTHWORK, GRADING, ETC. REQUIRED FOR THIS MAINTENANCE SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.
- ALL ELEVATIONS SHOWN ARE NAVD 88.
- ALL AREAS DISTURBED DURING CONSTRUCTION THAT WILL NOT BE UNDER PROPOSED PAVEMENT SHALL BE RESTORED TO MATCH EXISTING CONDITIONS.

- OPENING AND CLOSING OF WATER VALVES SHALL BE DONE SLOWLY TO PREVENT DAMAGE TO THE WATER DISTRIBUTION SYSTEM FROM WATER HAMMER. ALL VALVES CLOSED BY THE CONTRACTOR MUST BE REOPENED AS NEW CONSTRUCTION PERMITS. THE PROJECT INSPECTOR MUST ASCERTAIN THAT ANY VALVE CLOSED BY THE CONTRACTOR IS REOPENED. THE CONTRACTOR WILL BE PERMITTED TO OPERATE WATER VALVES ONLY WHEN THE PROJECT INSPECTOR ASSIGNED TO THE PROJECT IS PRESENT.
- DUE TO THE ANTICIPATED WATER DEMANDS OF THE CITY, NO MORE THAN THREE WELLHOUSE SITES MAY BE DOWN AT ANY GIVEN TIME. THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF WICHITA ON CONSTRUCTION SEQUENCING. CITY STAFF, WITH COORDINATION FROM THE CONTRACTOR, WILL SHUTDOWN THE EXISTING WELLHOUSE SPURLINE DURING PIPE LAYING OPERATIONS.
- THE CONTRACTOR IS NOT RESPONSIBLE FOR POTENTIAL CROP DAMAGE COMPENSATION WITHIN THE DEFINED RIGHT-OF-WAY FOR EACH PROPOSED WATER LINE.
- MAINTAIN A MINIMUM OF 10-FOOT HORIZONTAL SEPARATION BETWEEN ALL WATER LINES (MANS, SERVICES, AND FIRE HYDRANTS) AND ALL SANITARY SEWER LINES (MANS, SERVICES, AND MANHOLES) ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.
- MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MANS AND SERVICES) AND ALL GRAVITY SANITARY SEWER LINES (MANS, SERVICES, AND MANHOLES) AT CROSSING. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.
- MAINTAIN A MINIMUM OF 2-FOOT VERTICAL SEPARATION BETWEEN ALL WATER LINES (MANS AND SERVICES) AND ALL PRESSURIZED SANITARY SEWER LINES (MANS, SERVICES, AND MANHOLES) AT CROSSINGS. WATERLINES MUST ALWAYS BE PLACED ABOVE PRESSURIZED SANITARY SEWER LINES WHERE THEY CROSS. ALL SEPARATION DISTANCES ARE TO BE MEASURED FROM EDGE-TO-EDGE, AT THE CLOSEST POINT.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY BUILDING PERMITS FROM HARVEY COUNTY FOR WELLHOUSES M3, M5, M7, M16, M17, M21 AND FROM MABCD FOR WELHOUSES M27, M28, M33, M35, M37, M38, M39, AND M40
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL FRENCH DRAINS DAMAGED DUE TO INCIDENTAL CONSTRUCTION. FRENCH DRAINPIPE SHALL BE 3" PERFORATED SCH-40 PVC. ALL FRENCH DRAIN REPLACEMENTS ARE SUBSIDIARY TO OTHER ITEMS OF WORK.

LEGEND

	PROPOSED WATER LINE
	EXISTING WATERLINE
	EXISTING OVERHEAD ELEC. LINE
	EXISTING UNDERGROUND ELEC. LINE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING FENCE LINE
	CROP EDGE
	EDGE OF WATER
	ROAD CENTER LINE
	SECTION LINE
	EXISTING WATER EASEMENT LINE
	EXISTING EASEMENT LINE
	PROPERTY LINE
	ROAD RIGHT OF WAY
	SILT FENCE
	EXISTING POWER LINE POLE
	EXISTING GUY WIRE / DEADMAN
	EXISTING WATER VALVE & TEST STATION
	PIPE BOLLARD
	MONITORING WELL
	TREE
	SHRUBBERY /TREE AREA
	BENCHMARK

REVISIONS:																			
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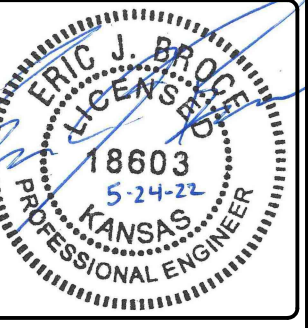
Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711



GENERAL NOTES

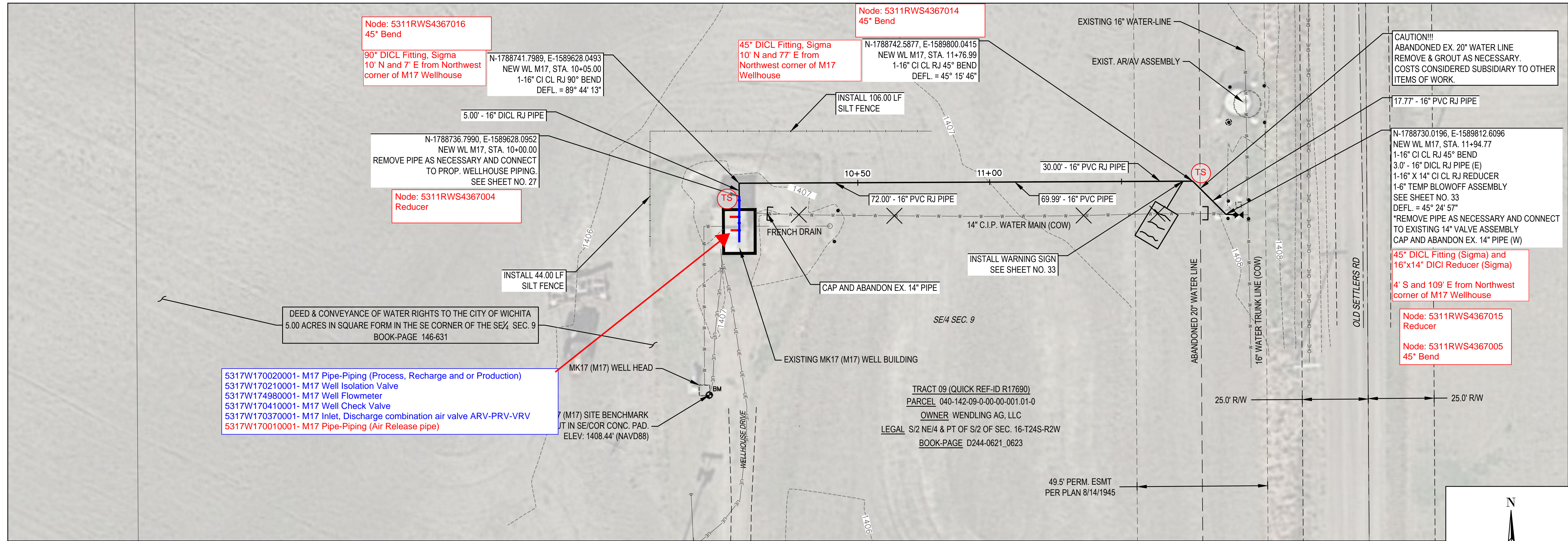
EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
04
OF 35

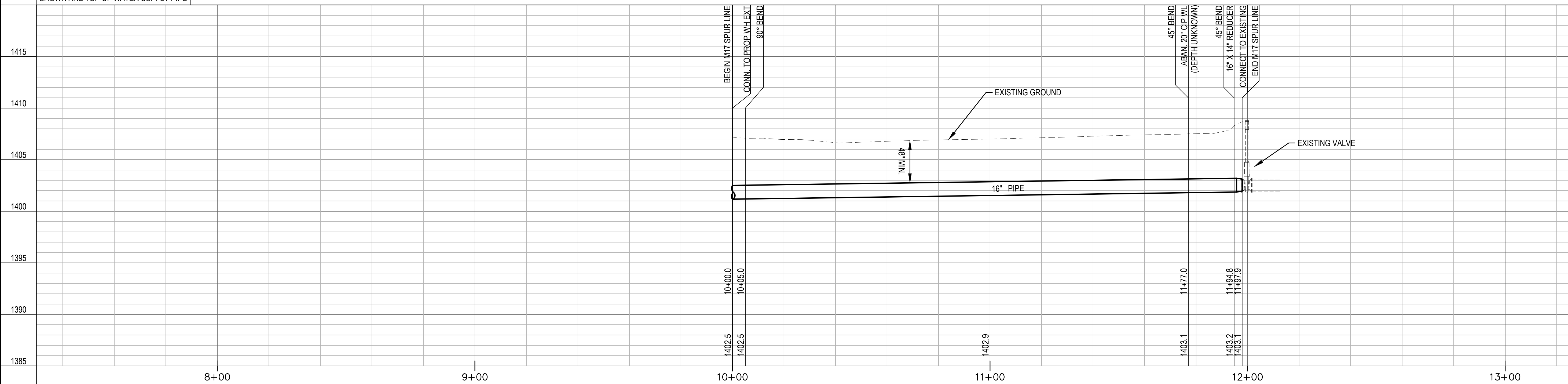
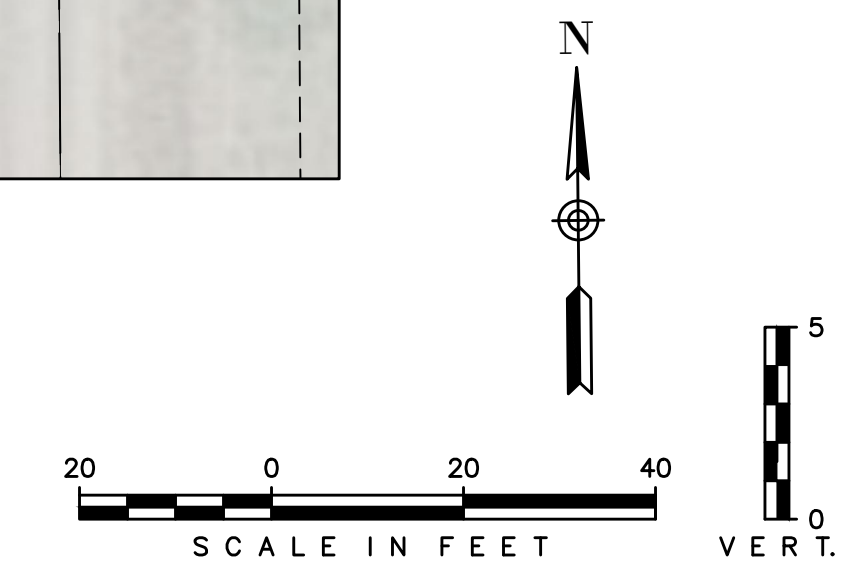


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 11+94.77 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M17 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



REVISIONS:

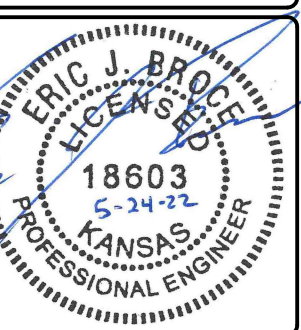
Environment & Infrastructure Solutions, Inc.
245 N. WACO AVENUE, SUITE 110
WICHITA, KANSAS 67202
PHONE: 316-448-2711
FAX: 316-448-2711

wood.

M17 SPURLINE

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

DESIGNED BY: EJB
DRAWN BY: JAN
CHECKED BY: ---
DATE: MAY 24, 2022



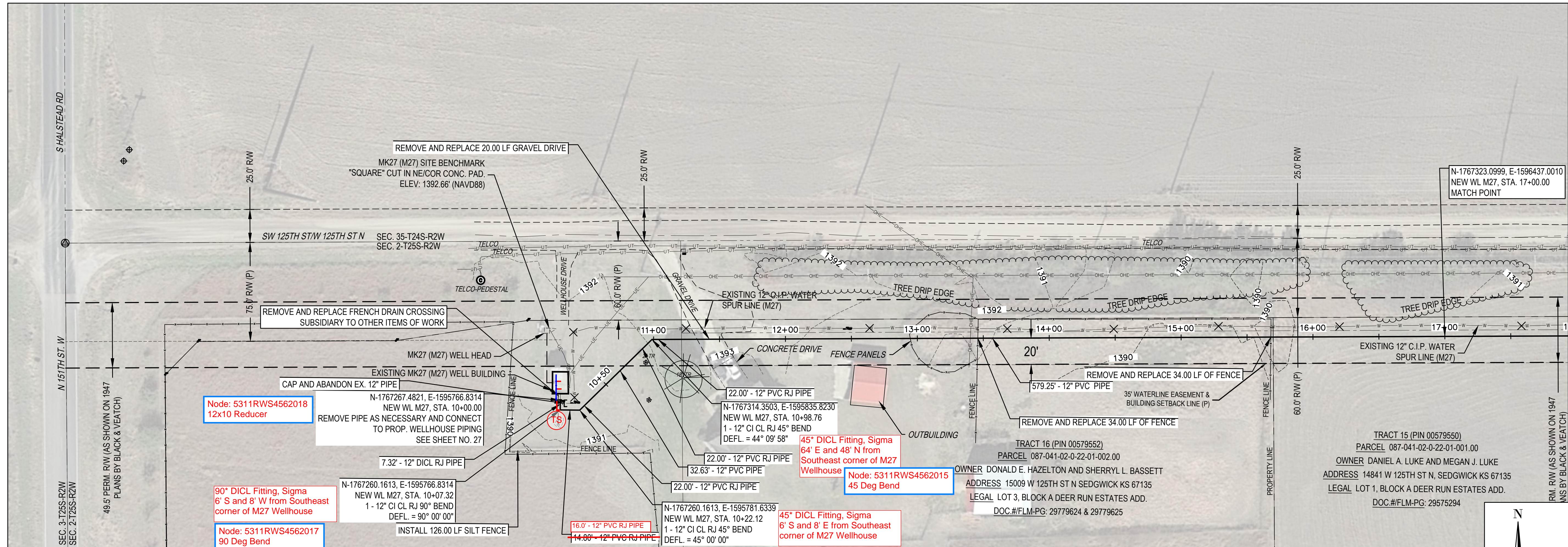
PROJECT NO.
639020

SHEET NO.

05

OF 35

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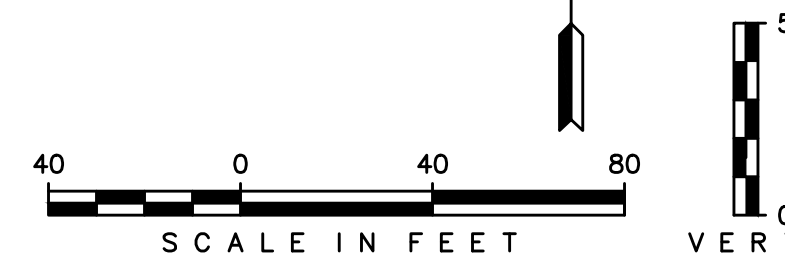
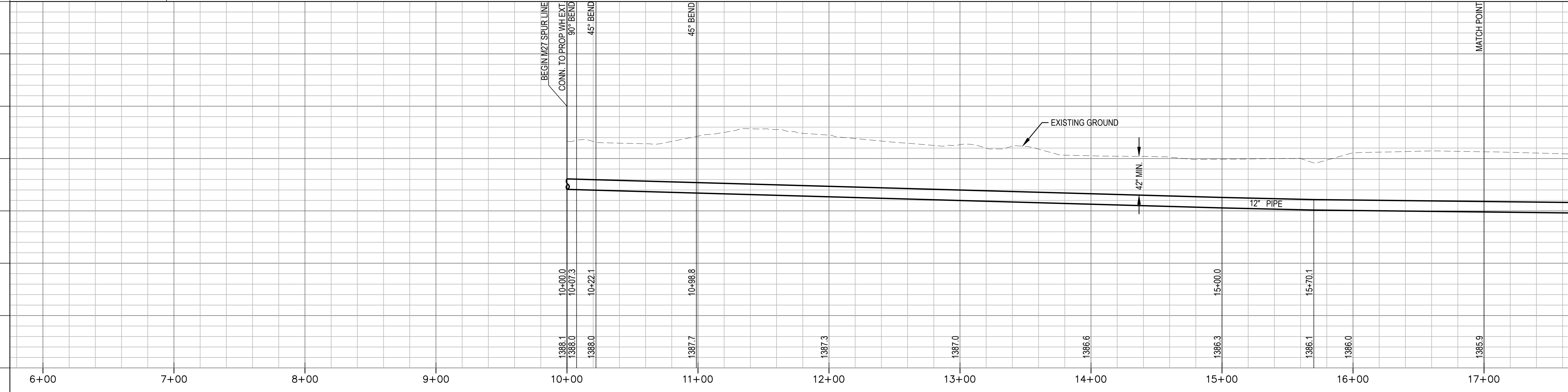


- 5327W270020001- M27 Pipe-Piping (Process, Recharge and or Production)
- 5327W270210001- M27 Well Isolation Valve
- 5327W274980001- M27 Well Flowmeter
- 5327W270410001- M27 Well Check Valve
- 5327W270370001- M27 Inlet, Discharge combination air valve ARV-PRV-VRV
- 5327W270010001- M27 Pipe-Piping (Air Release pipe)

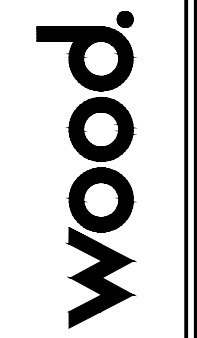
✕ DENOTES PIPE TO BE ABANDONED

M27 & M28 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



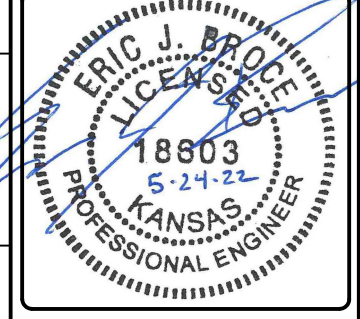
Environment & Infrastructure Solutions, Inc.
245 N. WACO AVENUE, SUITE 110
WICHITA, KANSAS 67202
PHONE: 316-448-2711
FAX: 316-448-2711



M27 & M28 SPURLINE(1)

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

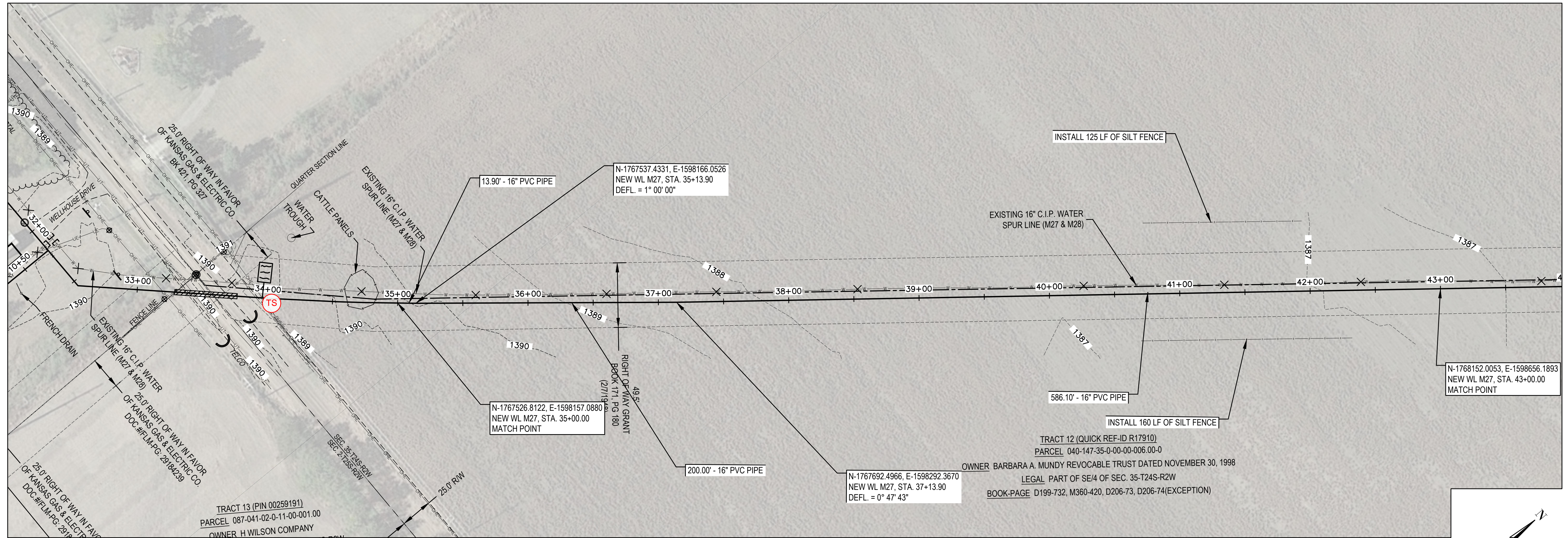
DESIGNED BY: EJB
DRAWN BY: JAN
CHECKED BY: ---
DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
06
OF 35

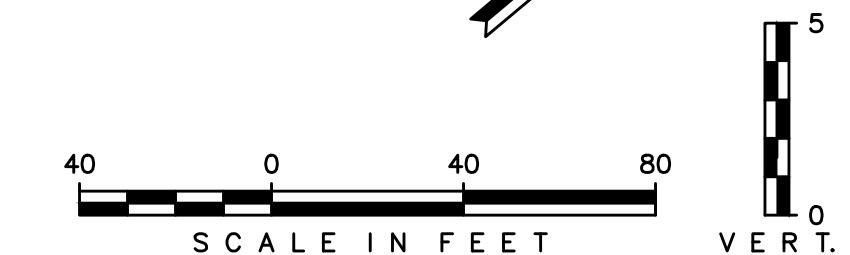
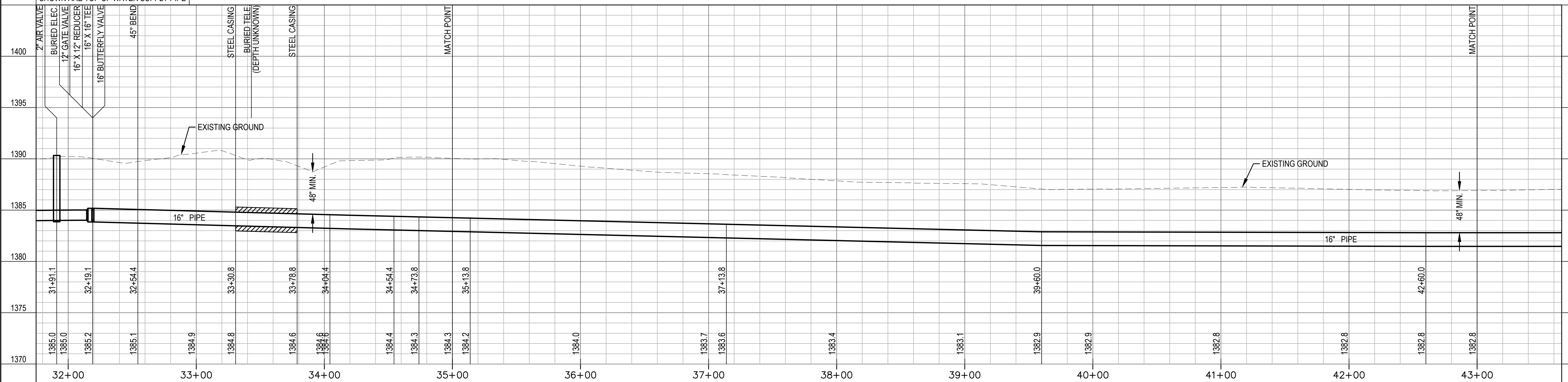
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✕ DENOTES PIPE TO BE ABANDONED

M27 & M28 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

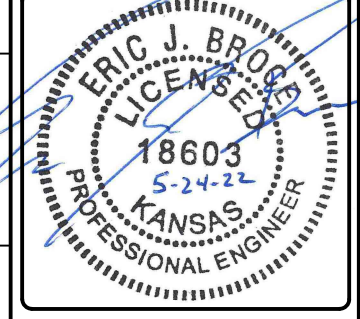


REVISIONS:

Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

M27 & M28 SPURLINE(4)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

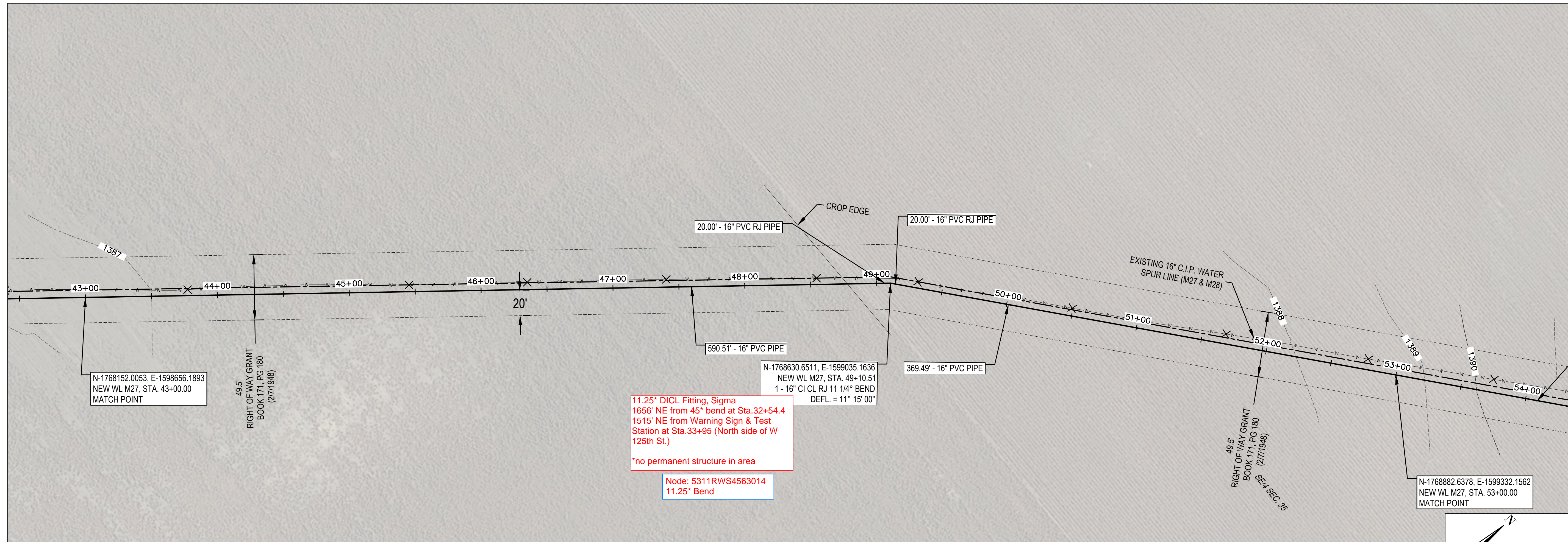
DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
09
OF 35

Last Saved by: alex.mckean Plotted By: Mckean, Alex Plot Date/Time: 5/24/2022 1:27 PM
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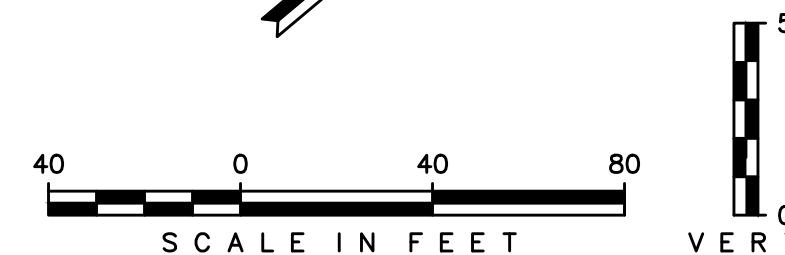
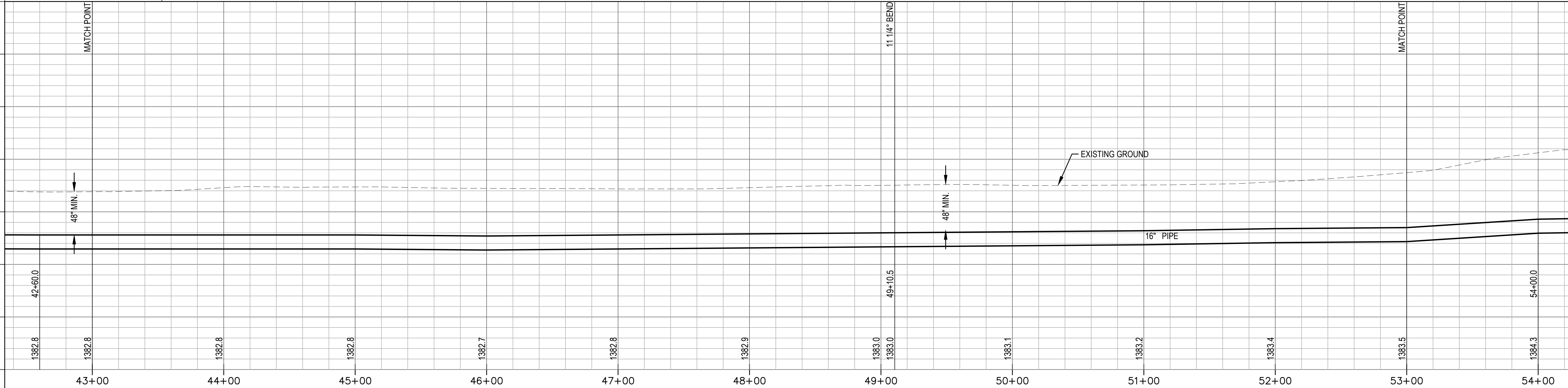
11.25° DI CL Fitting, Sigma
 1656' NE from 45° bend at Sta.32+54.4
 1515' NE from Warning Sign & Test
 Station at Sta.33+95 (North side of W
 125th St.)
 *no permanent structure in area

Node: 5311RWS4563014
 11.25° Bend

✕ DENOTES PIPE TO BE ABANDONED

M27 & M28 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS
 SHOWN ARE TOP OF WATER SUPPLY PIPE

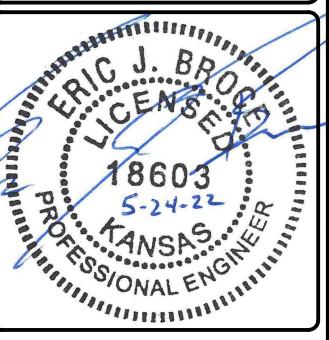


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 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

M27 & M28 SPURLINE(5)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

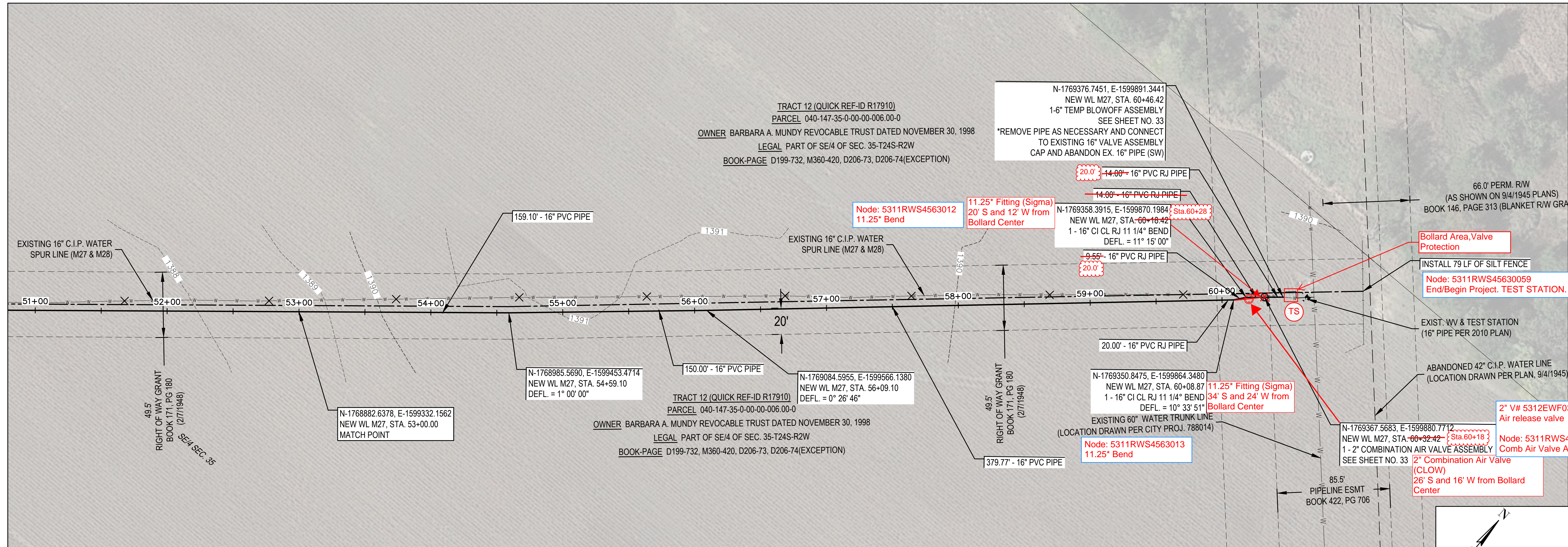


PROJECT NO.
 639020

SHEET NO.
10
 OF 35

OF 35

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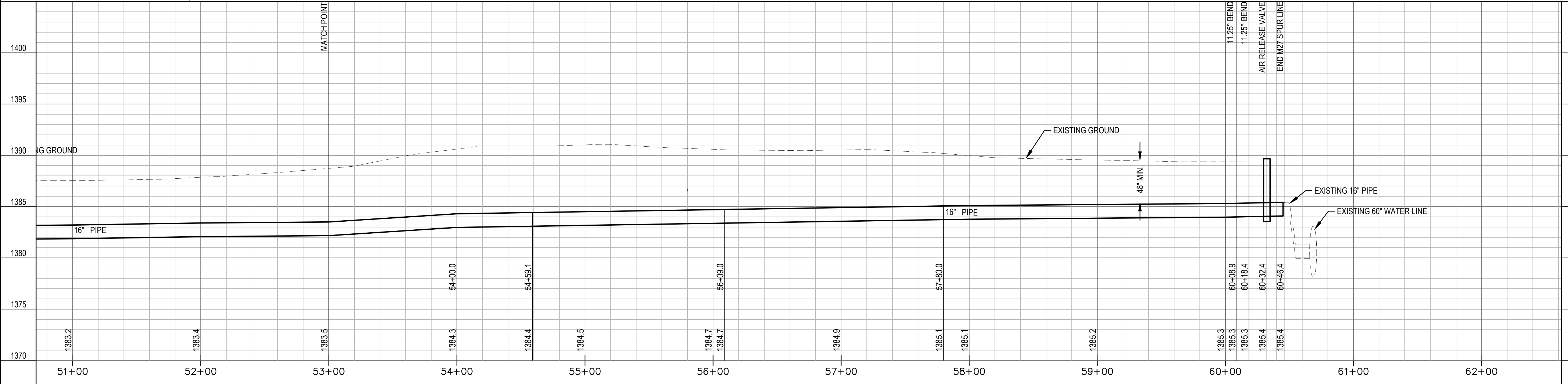


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 60+46.42 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M27 & M28 SPUR LINE

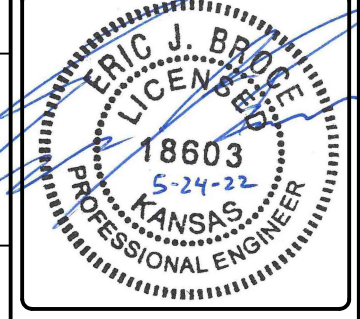
UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



Environment & Infrastructure Solutions, Inc.
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 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

M27 & M28 SPURLINE(6)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

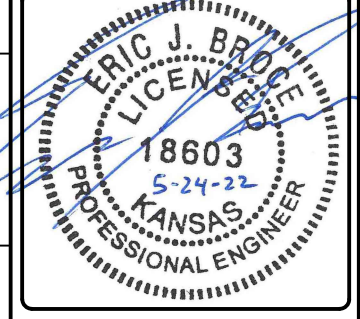
SHEET NO.
11
OF 35

REVISIONS:



Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

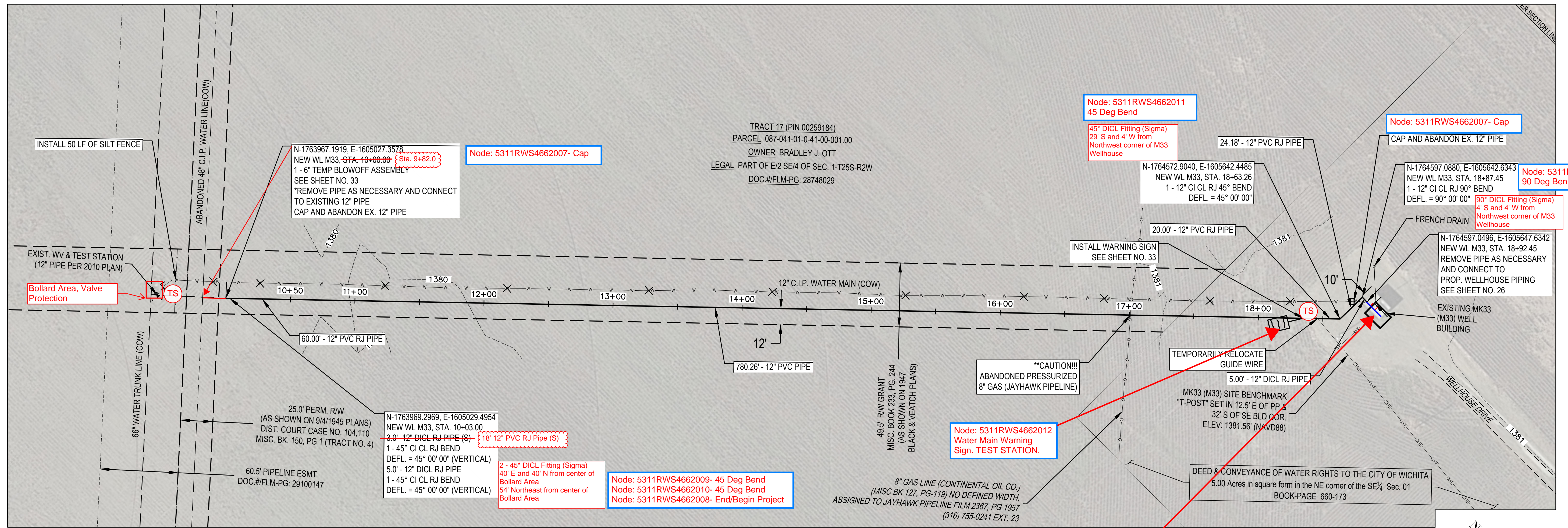
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 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
11
OF 35

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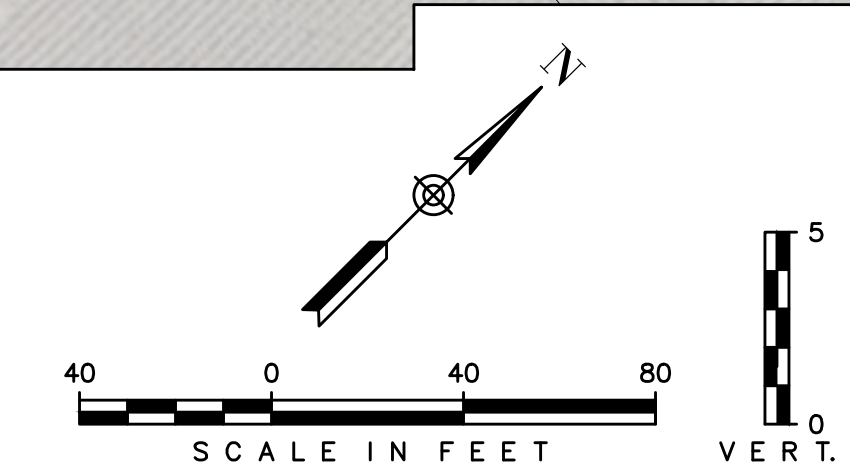
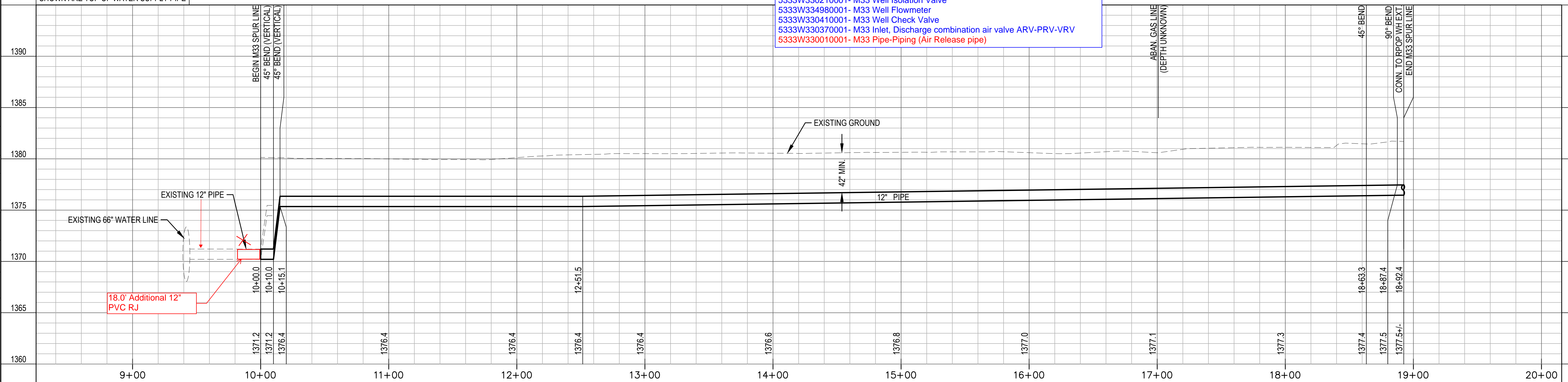


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 10+00.00 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

** PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8" GAS LINE (ABANDONED) AT STA. 17+00.9 AND REPORT VERTICAL INFORMATION TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. CONTRACTOR SHALL ALSO COORDINATE WITH JAYHAWK PIPELINE AT (316)-755-0241 EXT. 23 FOR CUTTING AND CAPPING THEIR ABANDONED PIPELINE IF NECESSARY.

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



REVISIONS:

Environment & Infrastructure Solutions, Inc
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

wood.

M33 SPURLINE
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

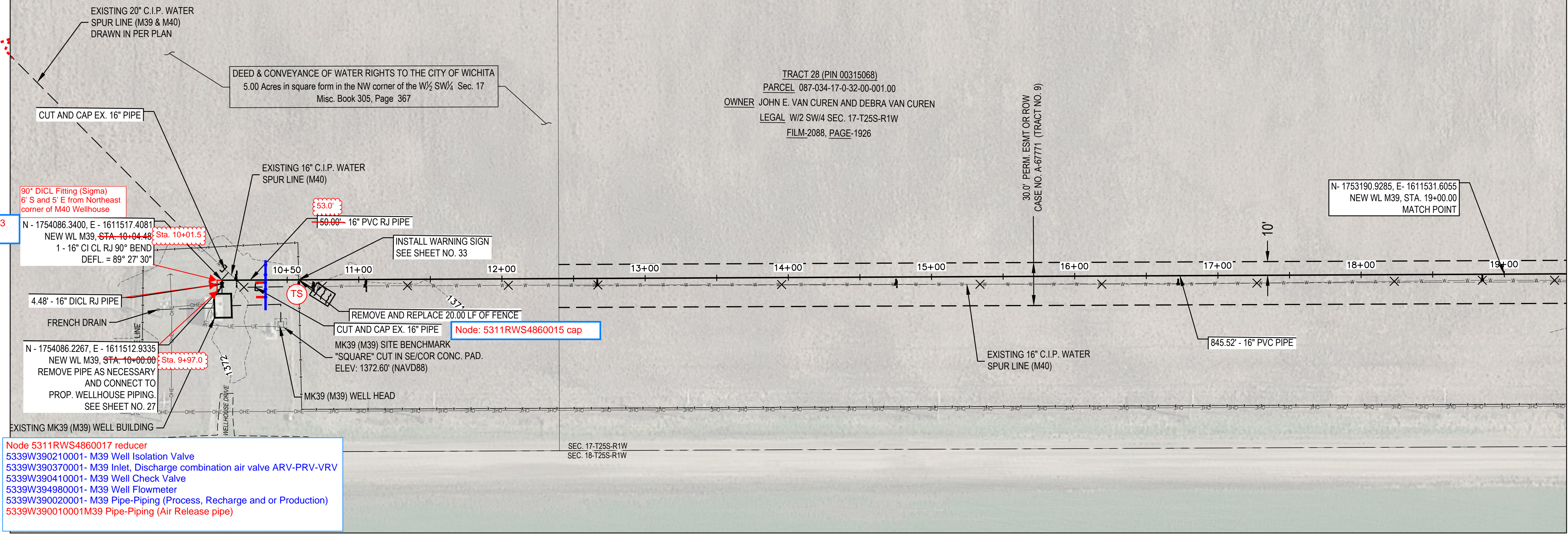
ERIC J. BRADLEY
 LICENSED PROFESSIONAL ENGINEER
 18603
 5-24-22
 KANSAS

PROJECT NO.
 639020

SHEET NO.
 12
 OF 35

Last Saved by: alex.mckean Plotted By: Mckean, Alex Plot Date/Time: 5/24/2022 1:30 PM File: L:\8275000373 Wichita Spurline\05_CAD\Sheets\Bid Package_6\M33.dwg

Valve: 5312EWF0240001 shut off and capped
 Pipe: 5311RWS4860024 cut & capped
 Node: 5311RWS4860018 cap
 Node: 5311RWS4860005 cap
 Pipe: 5311RWS4860019 abandon/capped



Node 5311RWS4860013
90

90° DICL Fitting (Sigma)
6' S and 5' E from Northeast
corner of M40 Wellhouse

N - 1754086.3400, E - 1611517.4081
NEW WL M39, STA. 10+04.48
1 - 16" CI CL RJ 90° BEND
DEFL. = 89° 27' 30"

N - 1754086.2267, E - 1611512.9335
NEW WL M39, STA. 10+00.00
REMOVE PIPE AS NECESSARY
AND CONNECT TO
PROP. WELLHOUSE PIPING.
SEE SHEET NO. 27

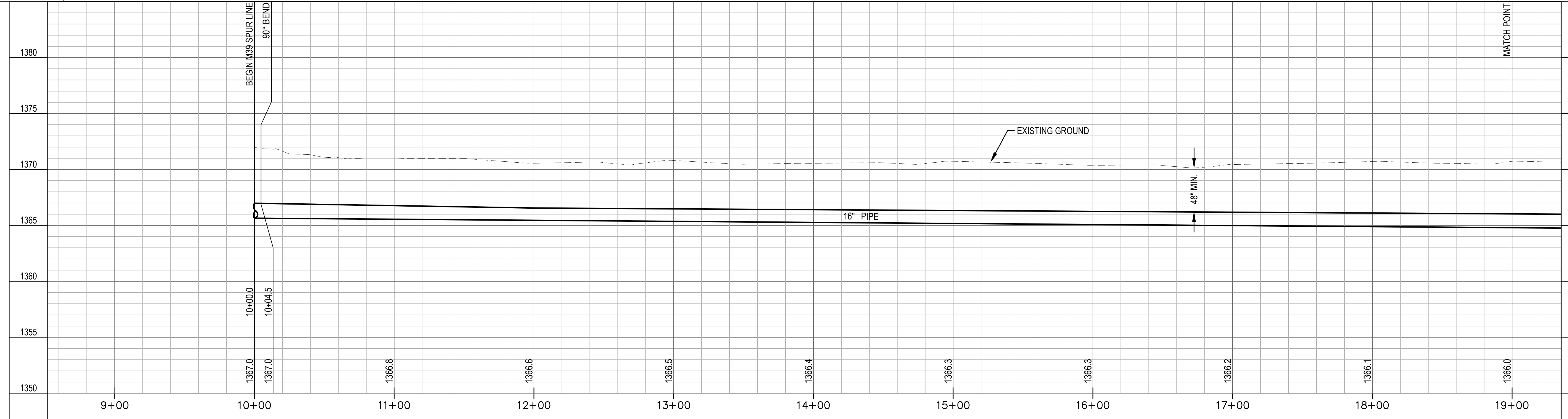
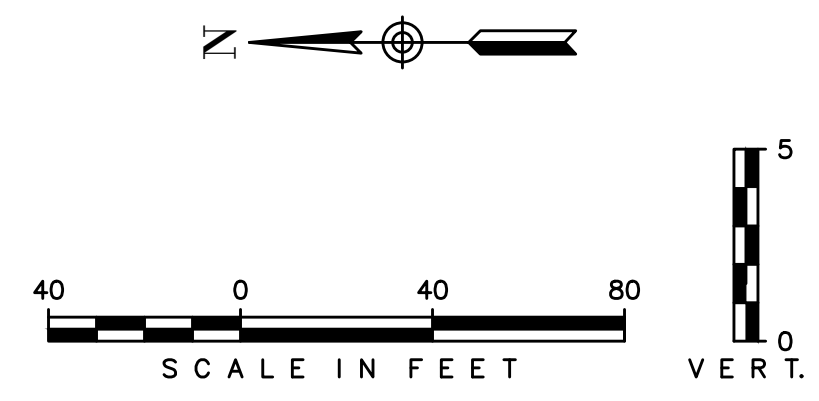
Node 5311RWS4860017 reducer
5339W390210001 - M39 Well Isolation Valve
5339W390370001 - M39 Inlet, Discharge combination air valve ARV-PRV-VRV
5339W390410001 - M39 Well Check Valve
5339W394980001 - M39 Well Flowmeter
5339W390020001 - M39 Pipe-Piping (Process, Recharge and or Production)
5339W390010001 M39 Pipe-Piping (Air Release pipe)

Node: 5311RWS4860015 cap

✕ DENOTES PIPE TO BE ABANDONED

M39 & M40 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

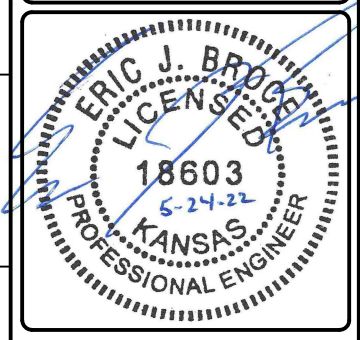


NO.	REVISIONS

Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

M39 & M40 SPURLINE(1)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

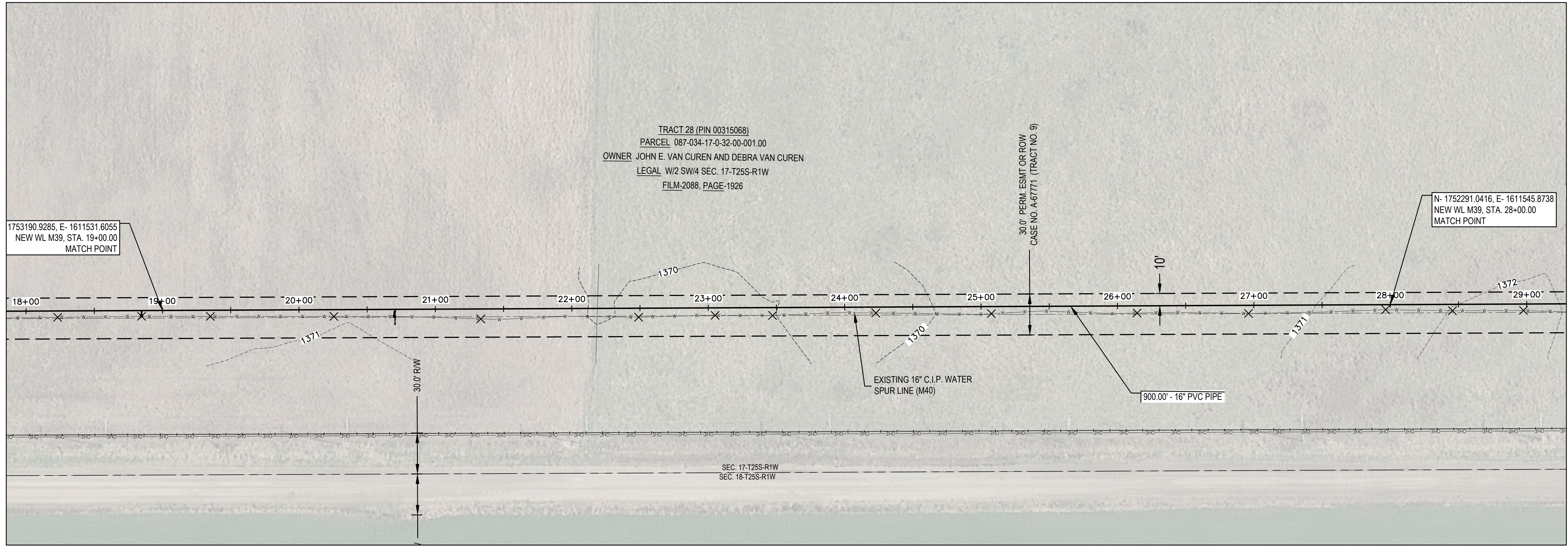
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 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
13
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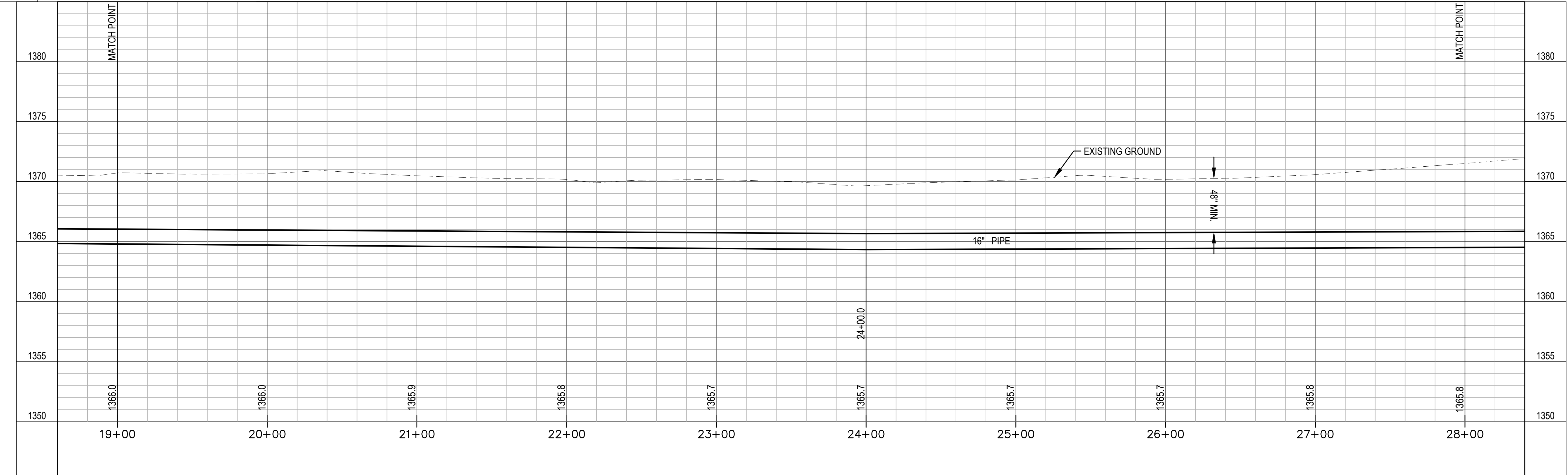
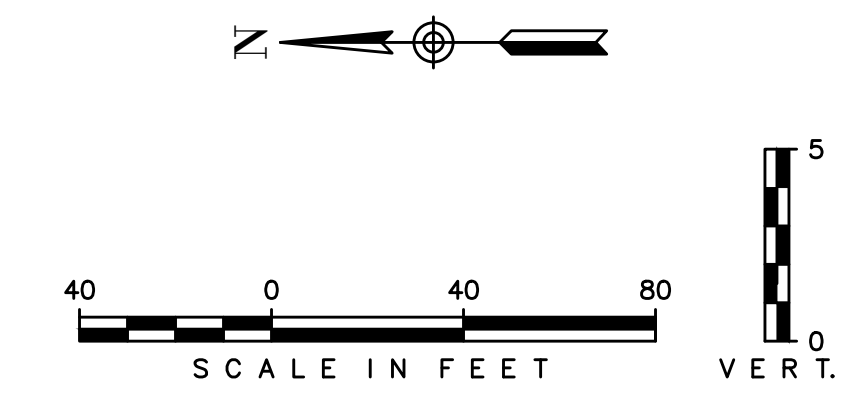
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✕ DENOTES PIPE TO BE ABANDONED

M39 & M40 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



REVISIONS:

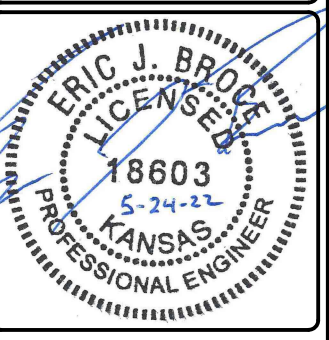
Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711



M39 & M40 SPURLINE(2)

EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

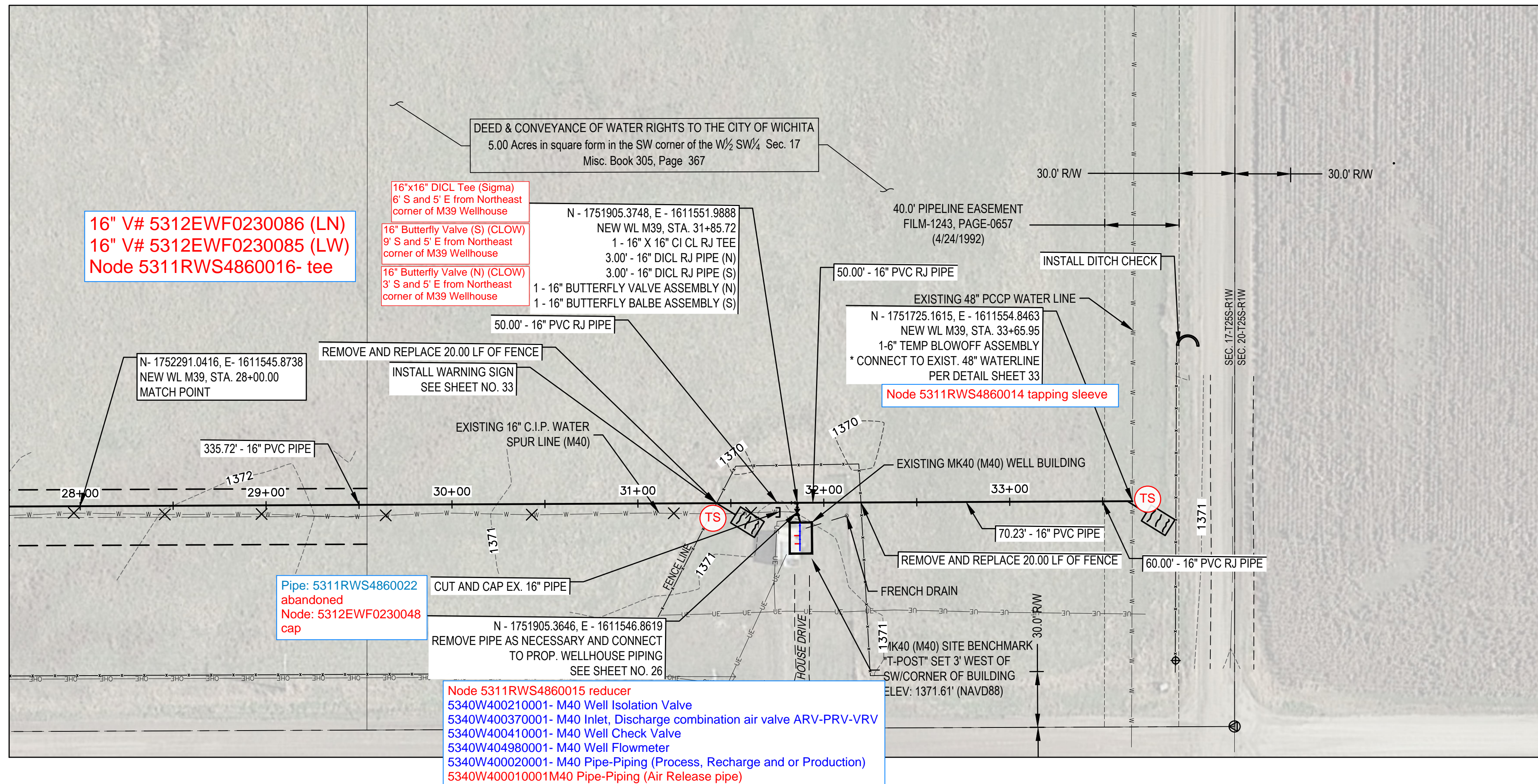
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 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
14
OF 35

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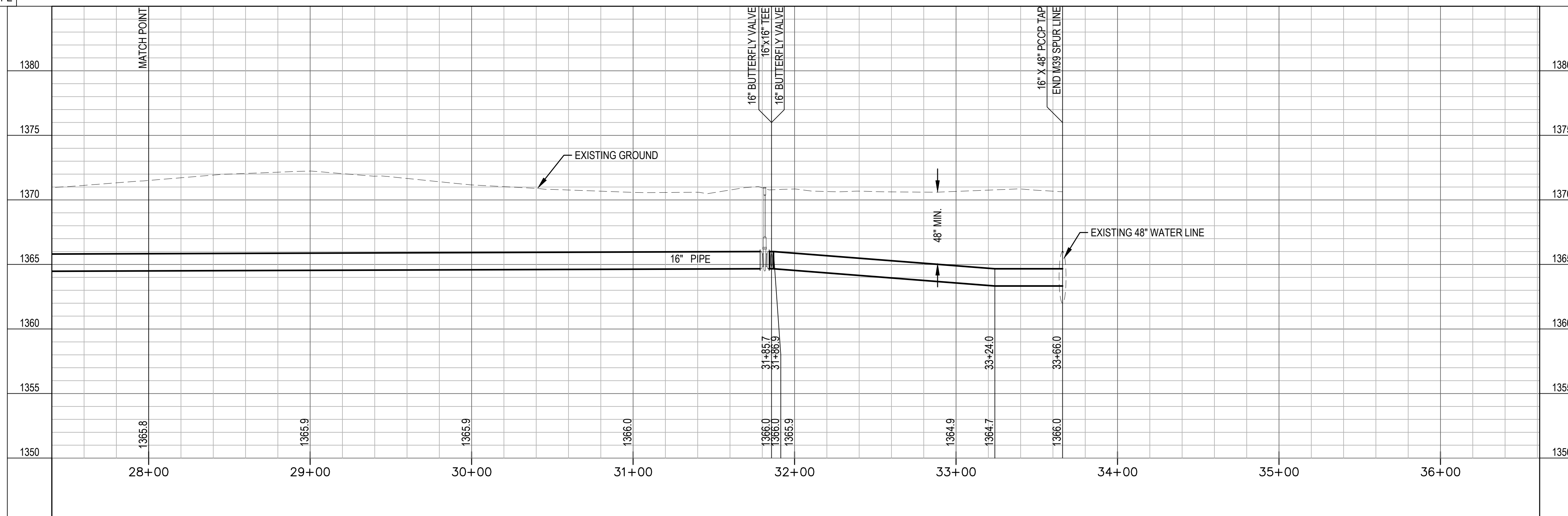


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 33+65.95 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M39 & M40 SPUR LINE

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



REVISIONS:

Environment & Infrastructure Solutions, Inc.
245 N. WACO AVENUE, SUITE 110
WICHITA, KANSAS 67202
PHONE: 316-448-2711
FAX: 316-448-2711

wood.

M39 & M40 SPURLINE(3)

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

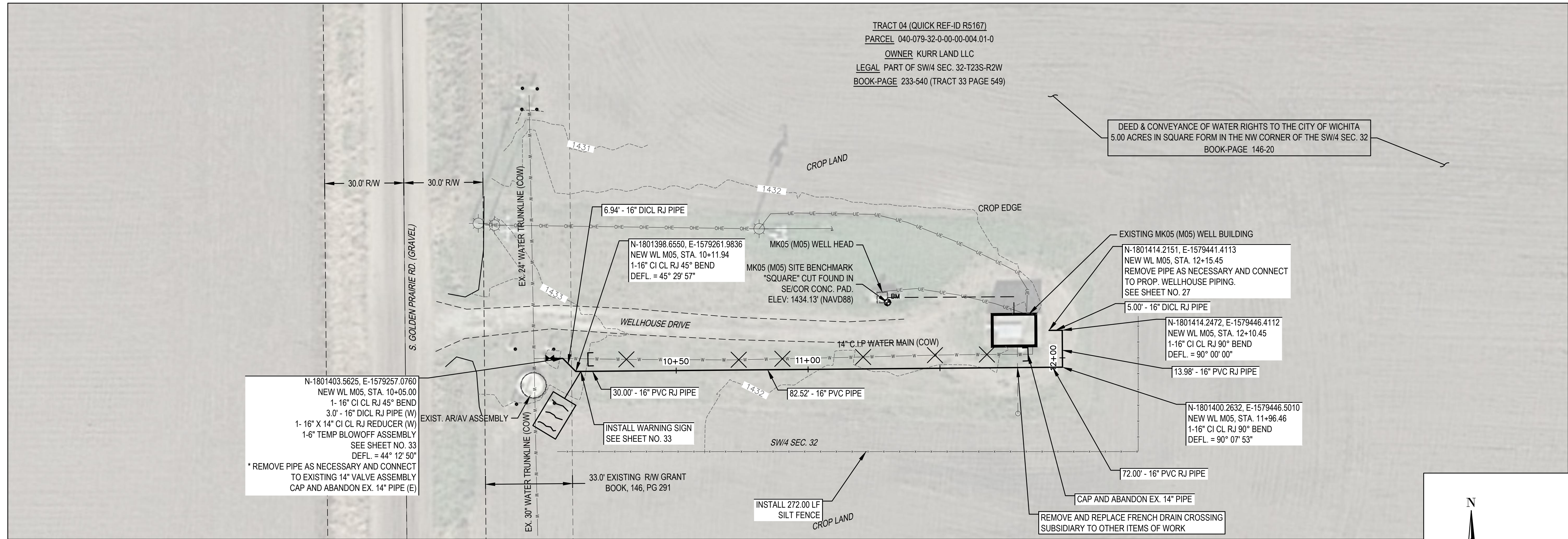
DESIGNED BY: EJB
DRAWN BY: JAN
CHECKED BY: ---
DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
15
OF 35

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TRACT 04 (QUICK REF-ID R5167)
 PARCEL 040-079-32-0-00-004.01-0
 OWNER KURR LAND LLC
 LEGAL PART OF SW/4 SEC. 32-T23S-R2W
 BOOK-PAGE 233-540 (TRACT 33 PAGE 549)

DEED & CONVEYANCE OF WATER RIGHTS TO THE CITY OF WICHITA
 5.00 ACRES IN SQUARE FORM IN THE NW CORNER OF THE SW/4 SEC. 32
 BOOK-PAGE 146-20

N-1801403.5625, E-1579257.0760
 NEW WL M05, STA. 10+05.00
 1- 16" CI CL RJ 45° BEND
 3.0' - 16" DI CL RJ PIPE (W)
 1- 16" X 14" CI CL RJ REDUCER (W)
 1-6" TEMP BLOWOFF ASSEMBLY
 SEE SHEET NO. 33
 DEFL. = 44° 12' 50"
 * REMOVE PIPE AS NECESSARY AND CONNECT
 TO EXISTING 14" VALVE ASSEMBLY
 CAP AND ABANDON EX. 14" PIPE (E)

N-1801398.6550, E-1579261.9836
 NEW WL M05, STA. 10+11.94
 1-16" CI CL RJ 45° BEND
 DEFL. = 45° 29' 57"

N-1801414.2151, E-1579441.4113
 NEW WL M05, STA. 12+15.45
 REMOVE PIPE AS NECESSARY AND CONNECT
 TO PROP. WELLHOUSE PIPING.
 SEE SHEET NO. 27

N-1801414.2472, E-1579446.4112
 NEW WL M05, STA. 12+10.45
 1-16" CI CL RJ 90° BEND
 DEFL. = 90° 00' 00"

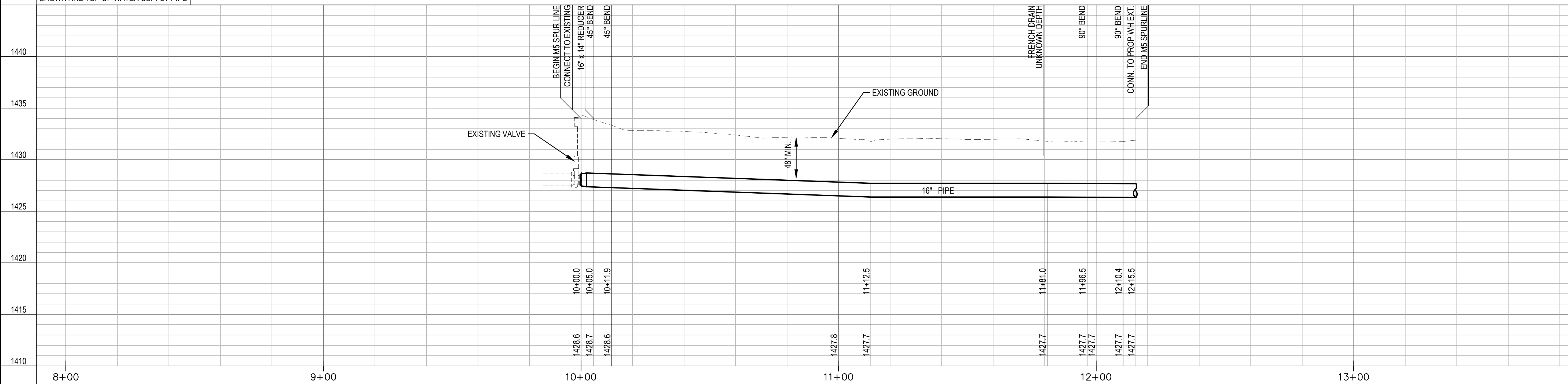
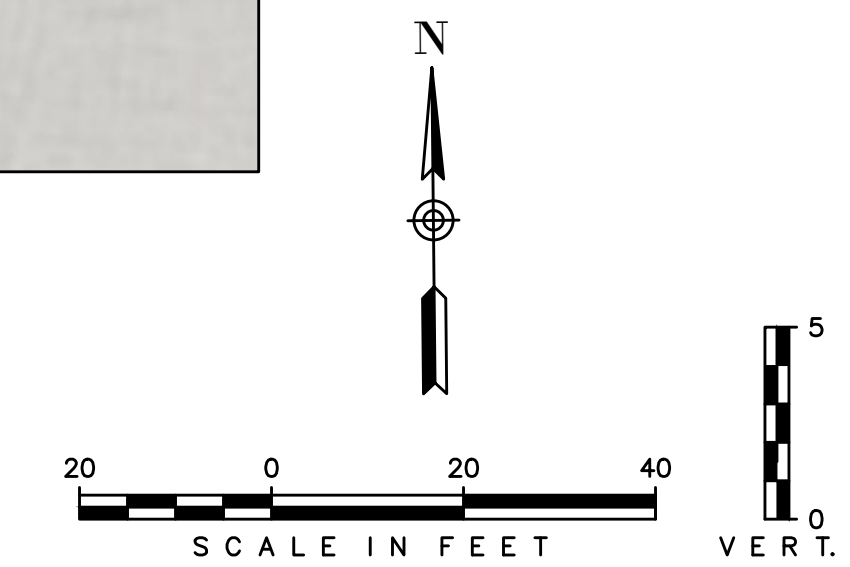
N-1801400.2632, E-1579446.5010
 NEW WL M05, STA. 11+96.46
 1-16" CI CL RJ 90° BEND
 DEFL. = 90° 07' 53"

* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE
 EXISTING WATERLINE AT STA. 10+00.00 TO VERIFY PIPE SIZE, TYPE, FITTINGS, &
 HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS
 TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE.
 ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION
 SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M05 SPUR LINE (ADD ALTERNATE 2)

UNLESS NOTED OTHERWISE, ELEVATIONS
 SHOWN ARE TOP OF WATER SUPPLY PIPE



REVISIONS:

Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

wood.

M05 SPURLINE (ADD ALT. 2)

EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



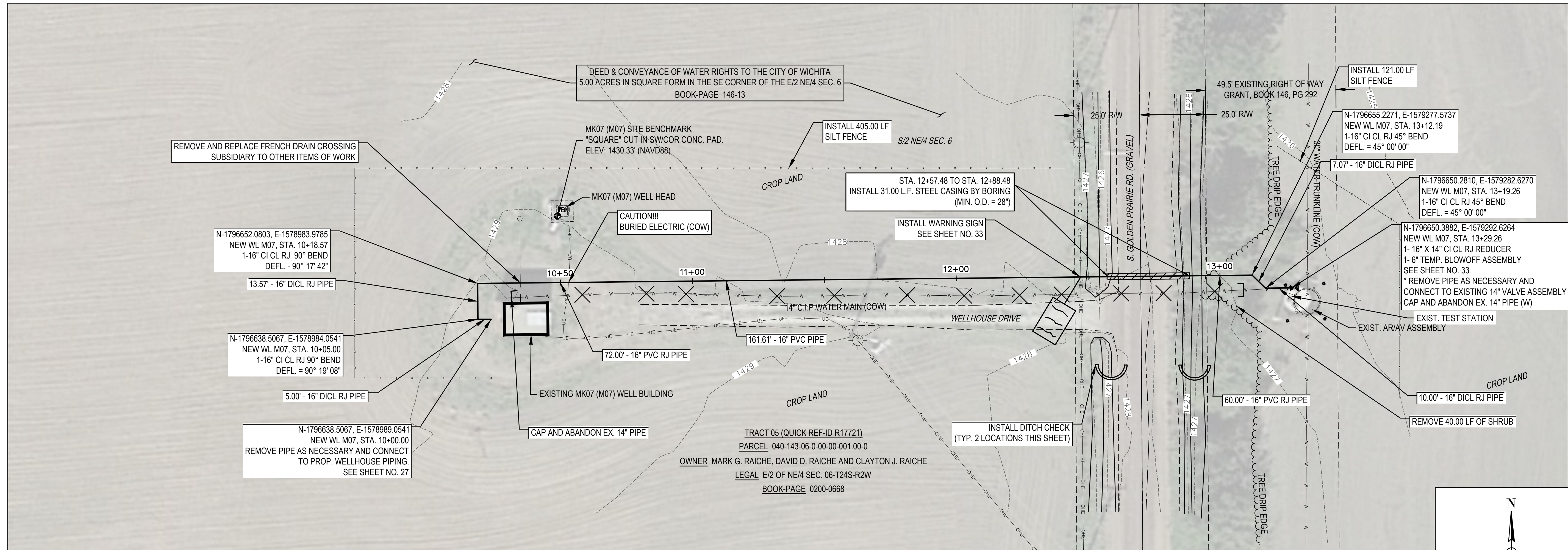
PROJECT NO.
639020

SHEET NO.

17

OF 35

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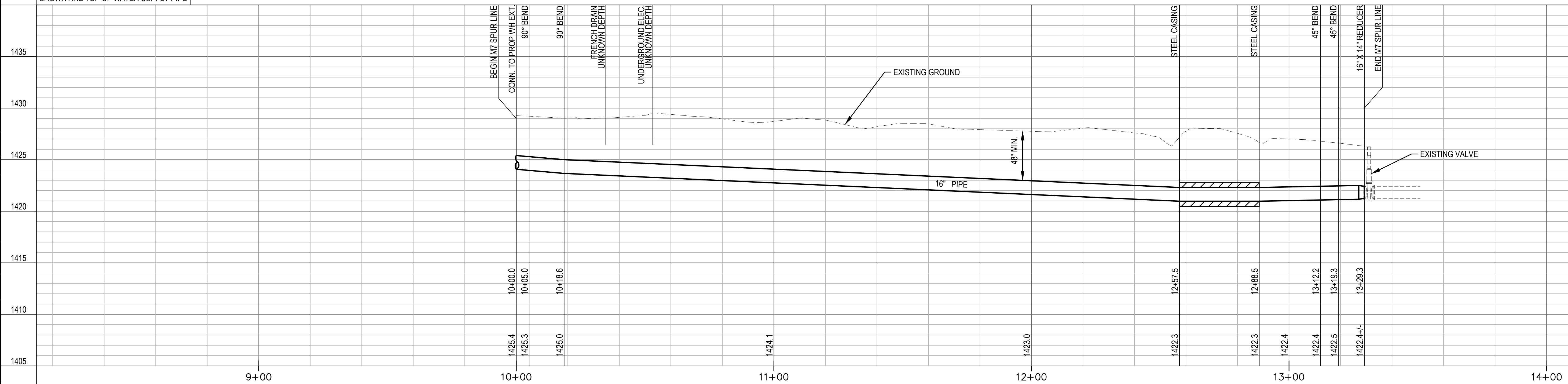


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 13+29.26 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M07 SPUR LINE (ADD ALTERNATE 3)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

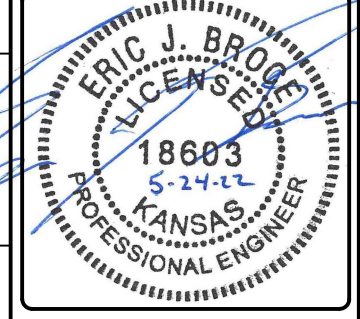


REVISIONS:

Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

M07 SPURLINE (ADD ALT. 3)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

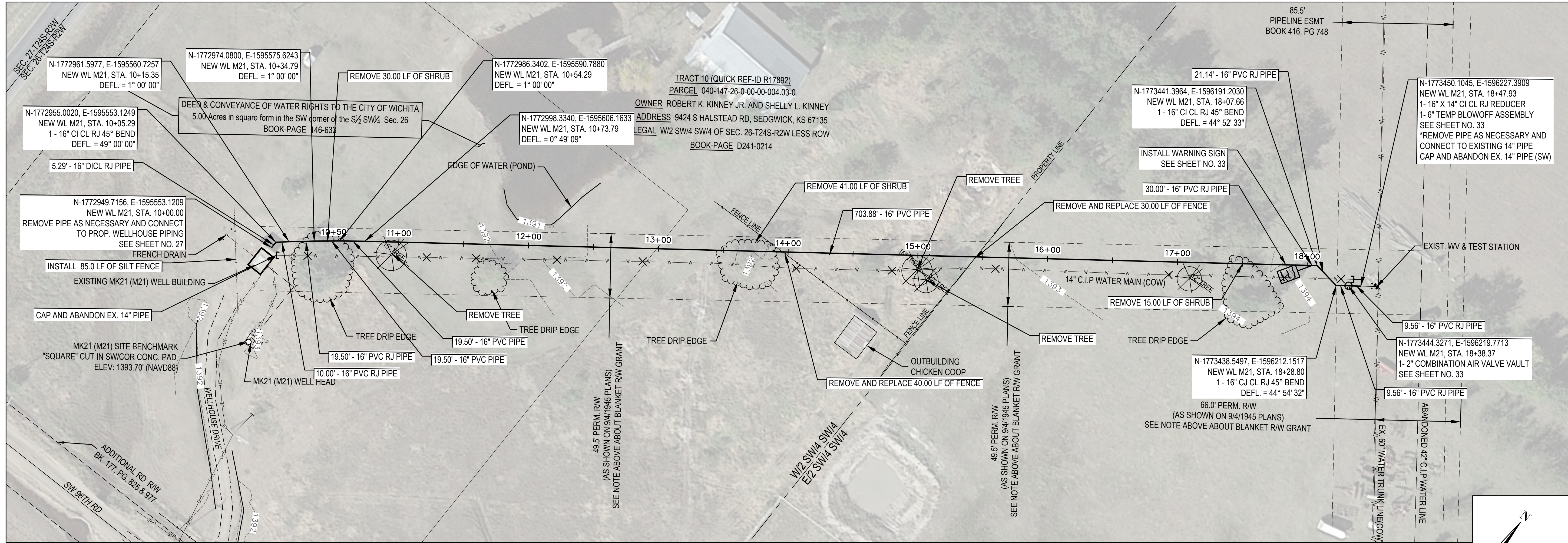


PROJECT NO.
639020

SHEET NO.
18
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wood.

Last Saved by: alex.mckean - Plotted By: Mckean, Alex Plot Date/Time: 5/24/2022 1:35 PM
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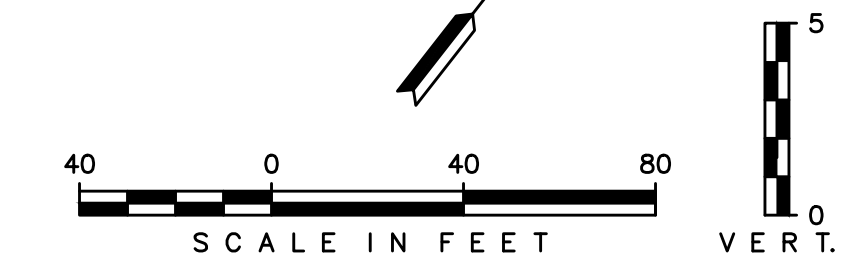
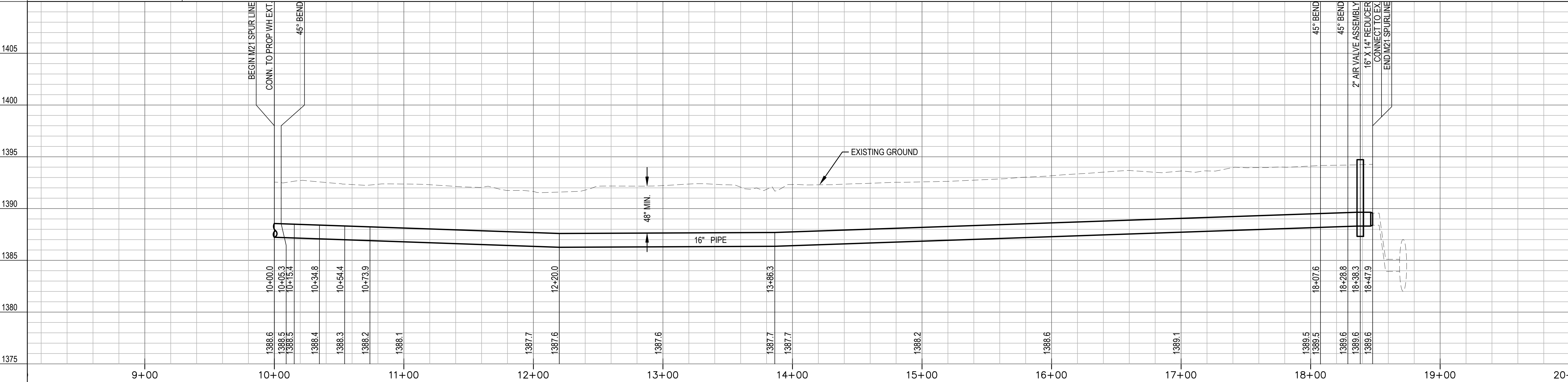


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 18+47.93 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M21 SPUR LINE (ADD ALTERNATE 5)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

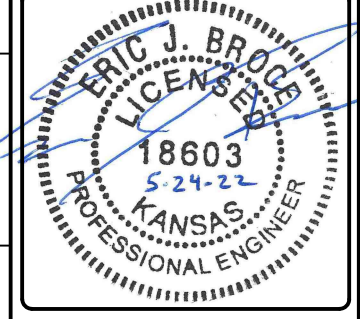


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Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

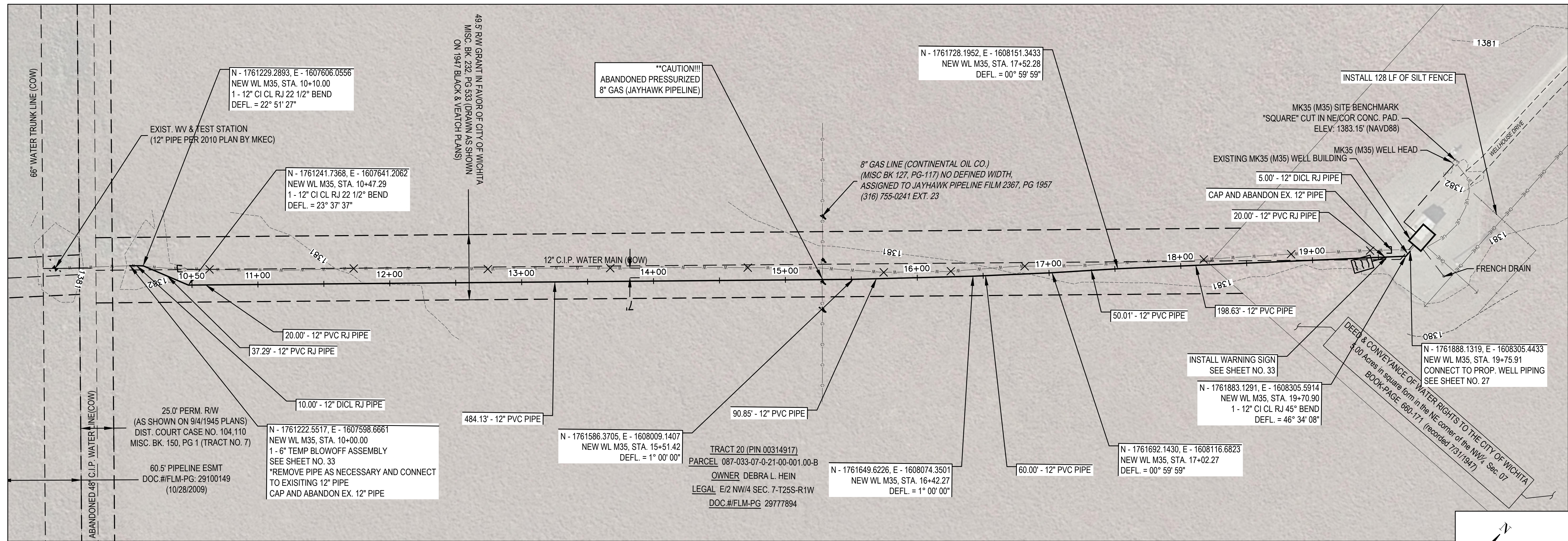
M21 SPURLINE (ADD ALT. 5)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
20
OF 35



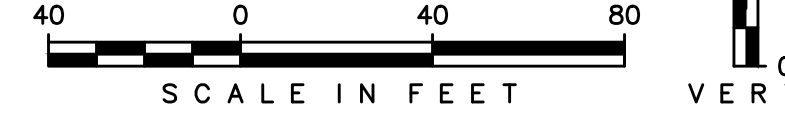
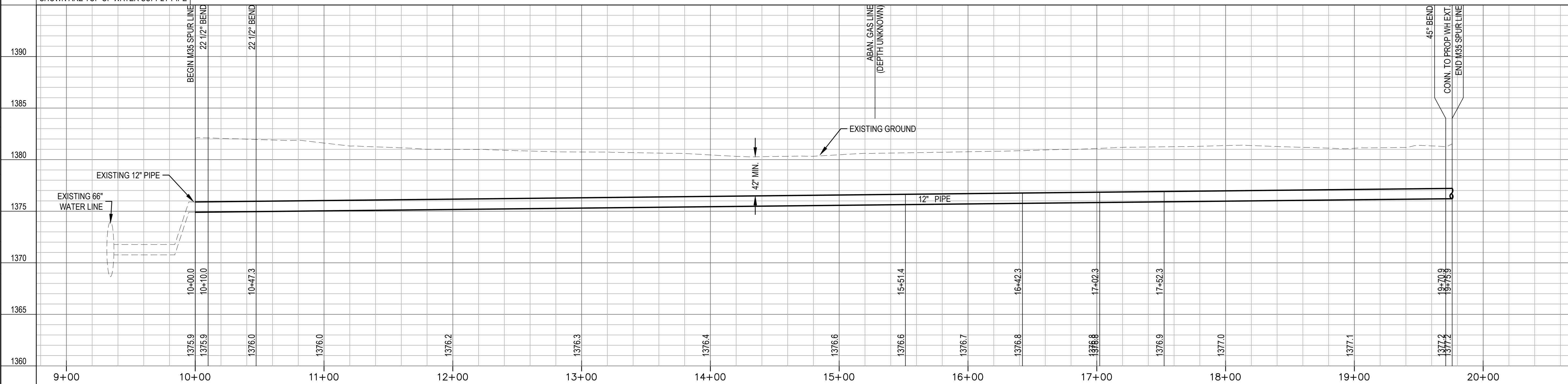
* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 10+00.00 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M35 SPUR LINE (ADD ALTERNATE 6)

** PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING 8\"/>

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

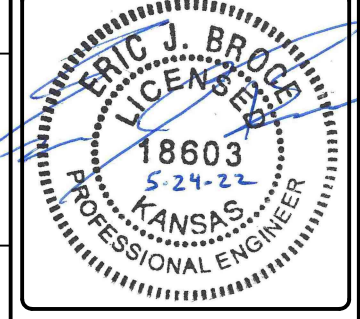


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Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
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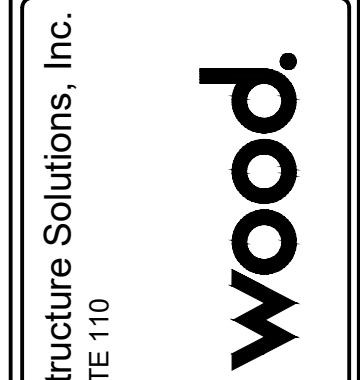
M35 SPURLINE (ADD ALT. 6)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

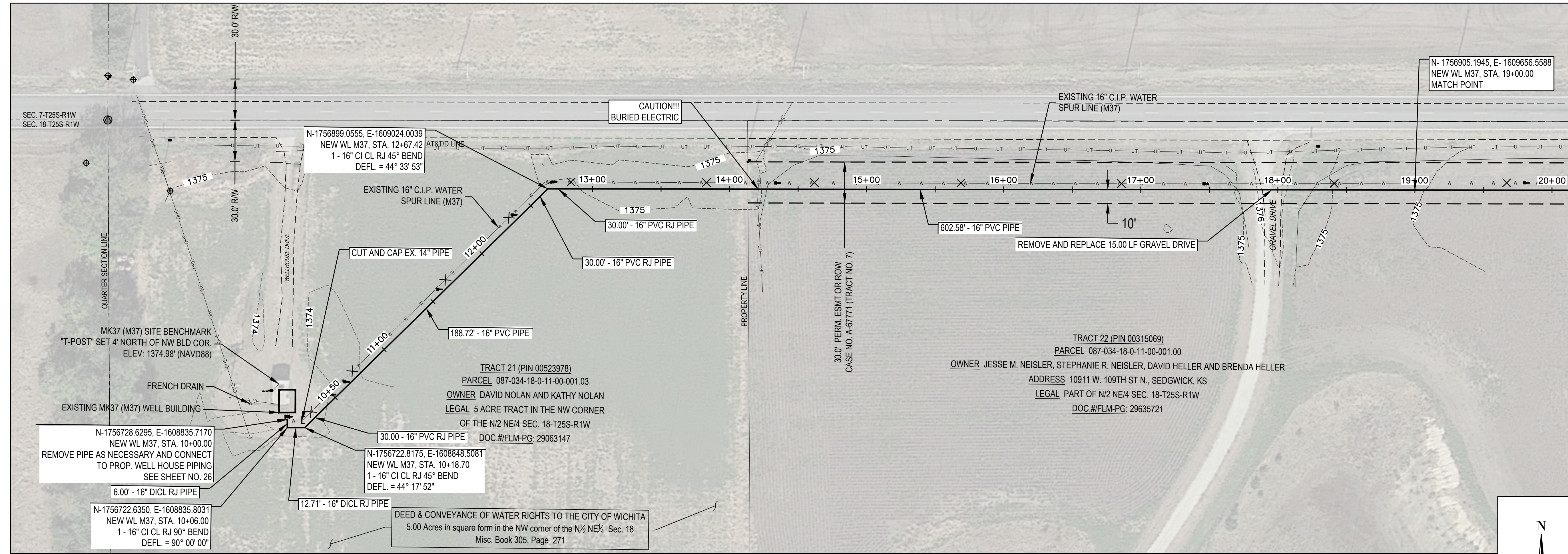


PROJECT NO.
639020

SHEET NO.
21
OF 35



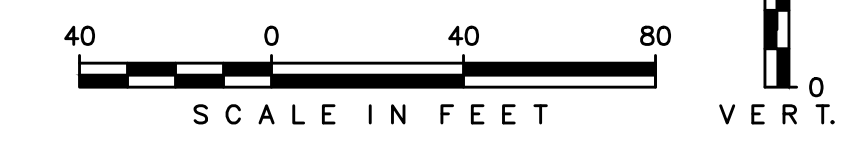
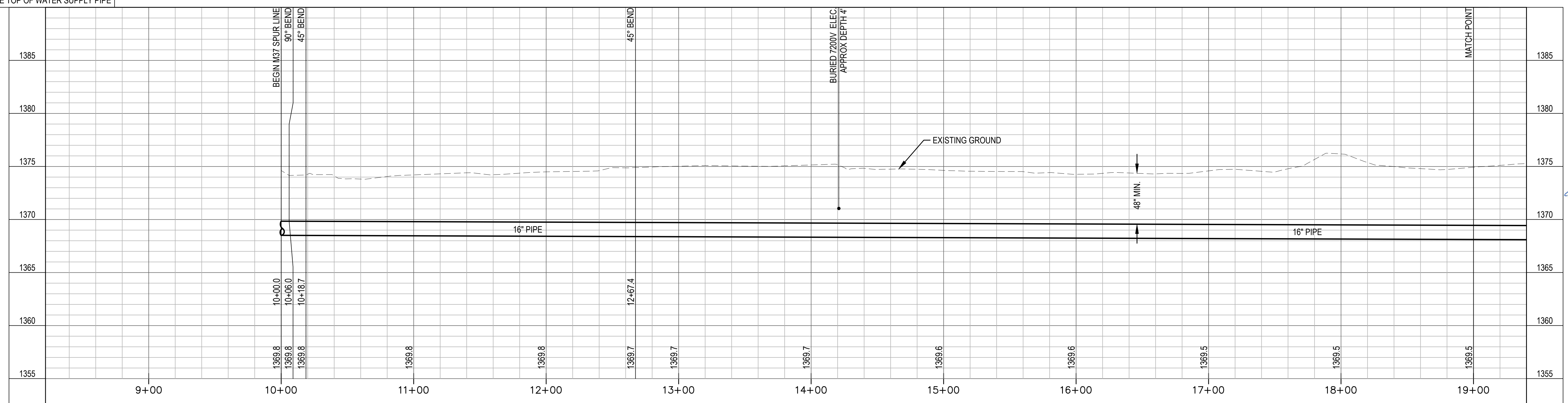
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✕ DENOTES PIPE TO BE ABANDONED

M37 & M38 SPUR LINE (ADD ALTERNATE 7)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

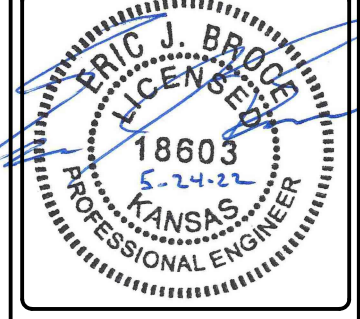


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Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

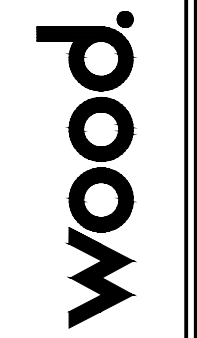
M37 & M38 SPURLINE (ADD ALT. 7)(1)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

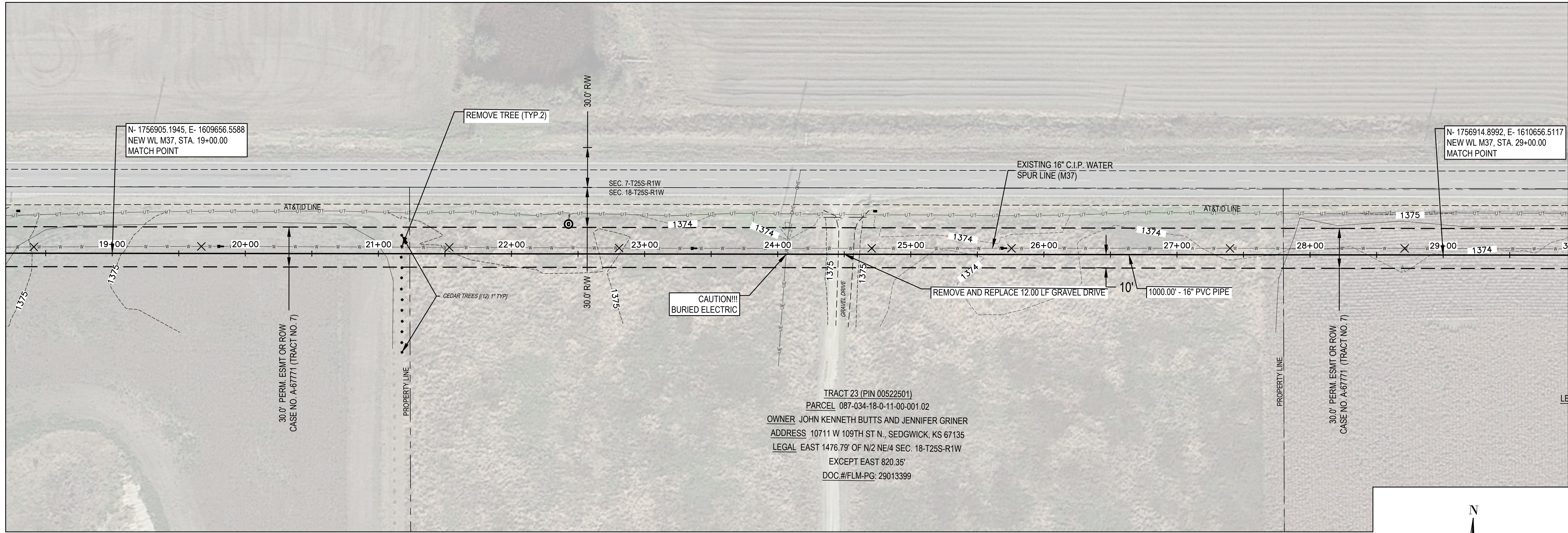


PROJECT NO.
639020

SHEET NO.
22
OF 35



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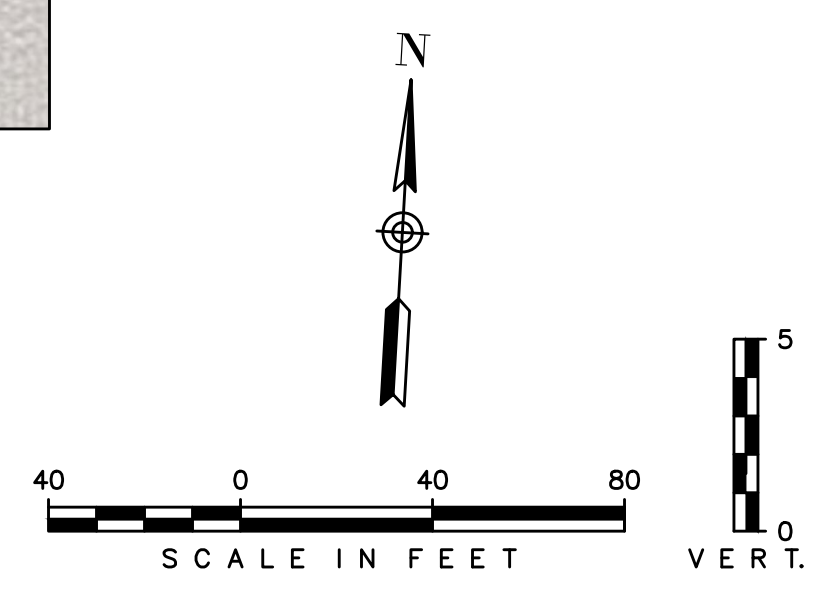
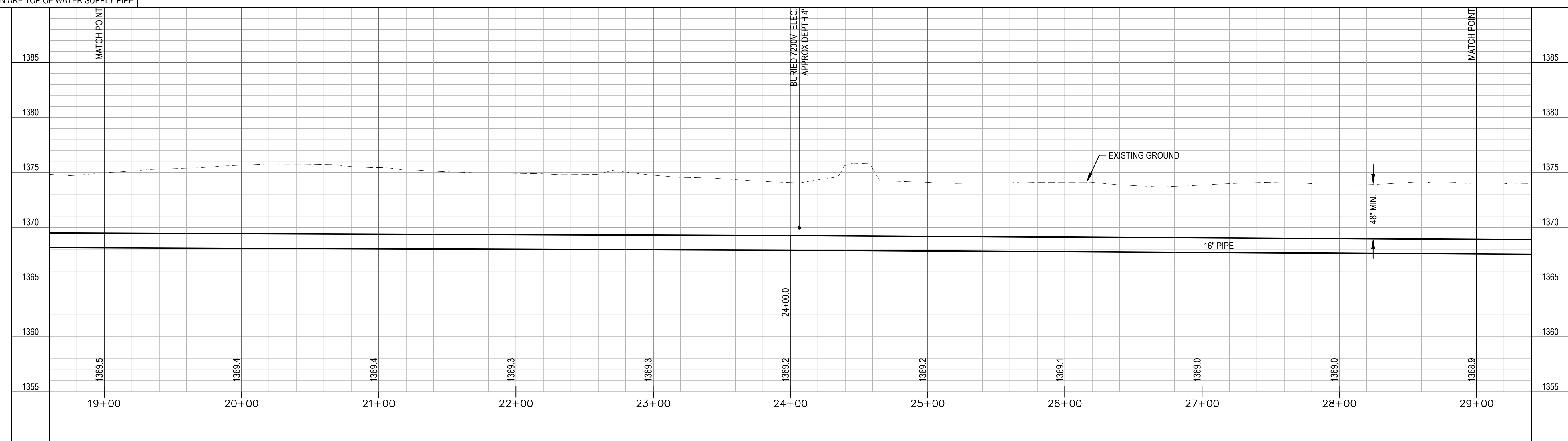


TRACT 23 (PIN 00522501)
 PARCEL 087-034-18-0-11-00-001.02
 OWNER JOHN KENNETH BUTTS AND JENNIFER GRINER
 ADDRESS 10711 W 109TH ST N., SEDGWICK, KS 67135
 LEGAL EAST 1476.79' OF N/2 NE/4 SEC. 18-T25S-R1W
 EXCEPT EAST 820.35'
 DOC.#/FLM-PG: 29013399

✕ DENOTES PIPE TO BE ABANDONED

M37 & M38 SPUR LINE (ADD ALTERNATE 7)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE

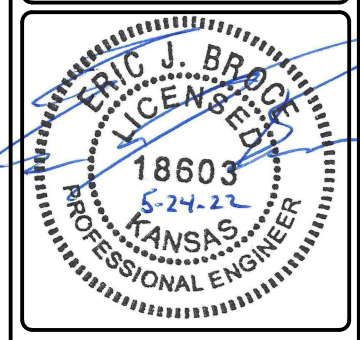


REVISIONS:

Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

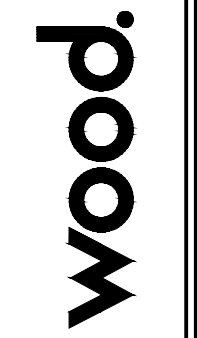
M37 & M38 SPURLINE (ADD ALT. 7)(2)
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022

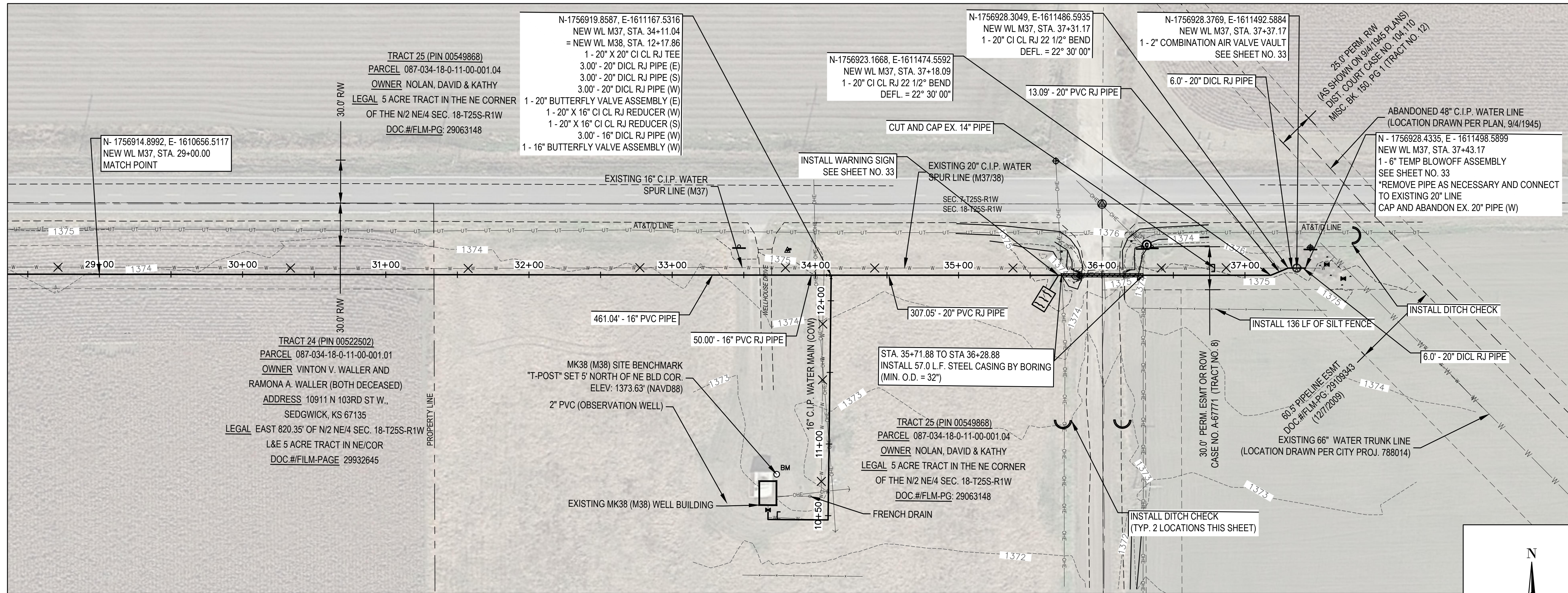


PROJECT NO.
639020

SHEET NO.
23
OF 35



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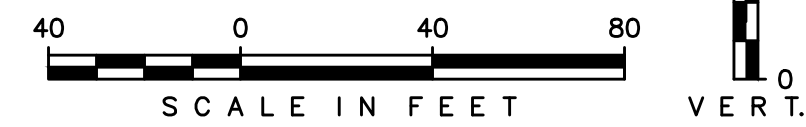
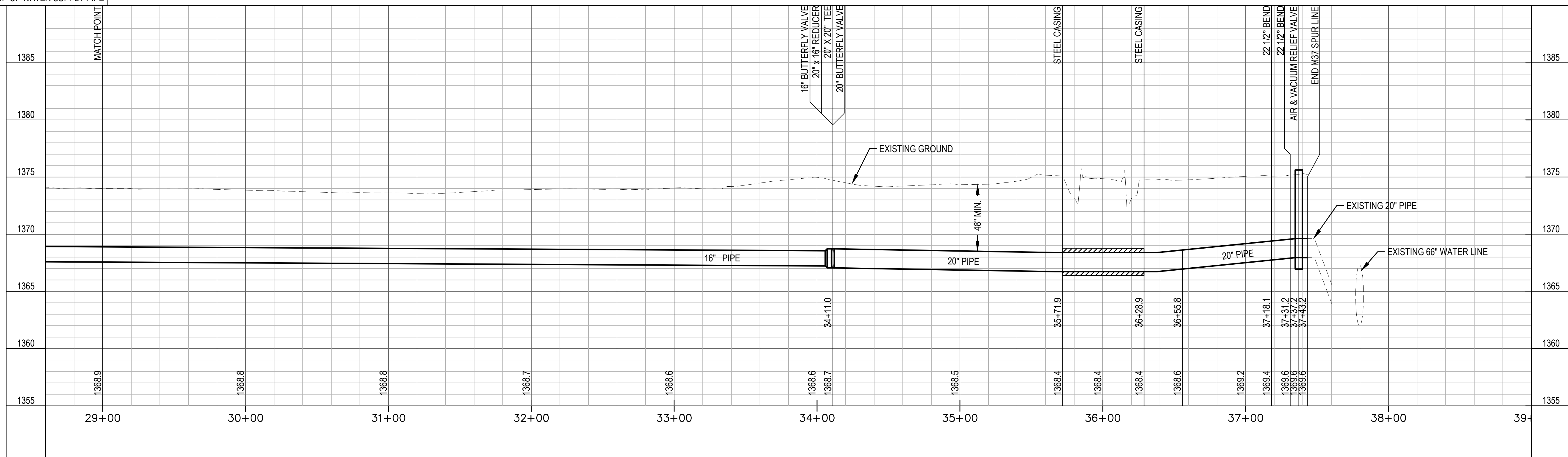


* PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE THE EXISTING WATERLINE AT STA. 37+43.17 TO VERIFY PIPE SIZE, TYPE, FITTINGS, & HORIZONTAL & VERTICAL LOCATION. THE CONTRACTOR SHALL REPORT HIS FINDINGS TO THE ENGINEER SO THAT ANY NECESSARY PLAN MODIFICATIONS MAY BE MADE. ANY ADDITIONAL LABOR OR MATERIALS NECESSARY TO COMPLETE THE CONNECTION SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT.

✕ DENOTES PIPE TO BE ABANDONED

M37 & M38 SPUR LINE (ADD ALTERNATE 7)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



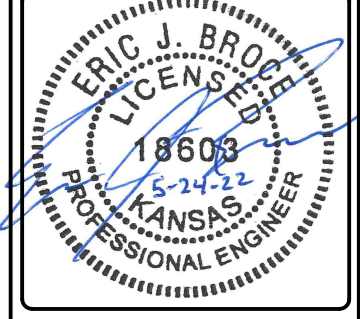
Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711

wood.

M37 & M38 SPURLINE (ADD ALT. 7)(3)

EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

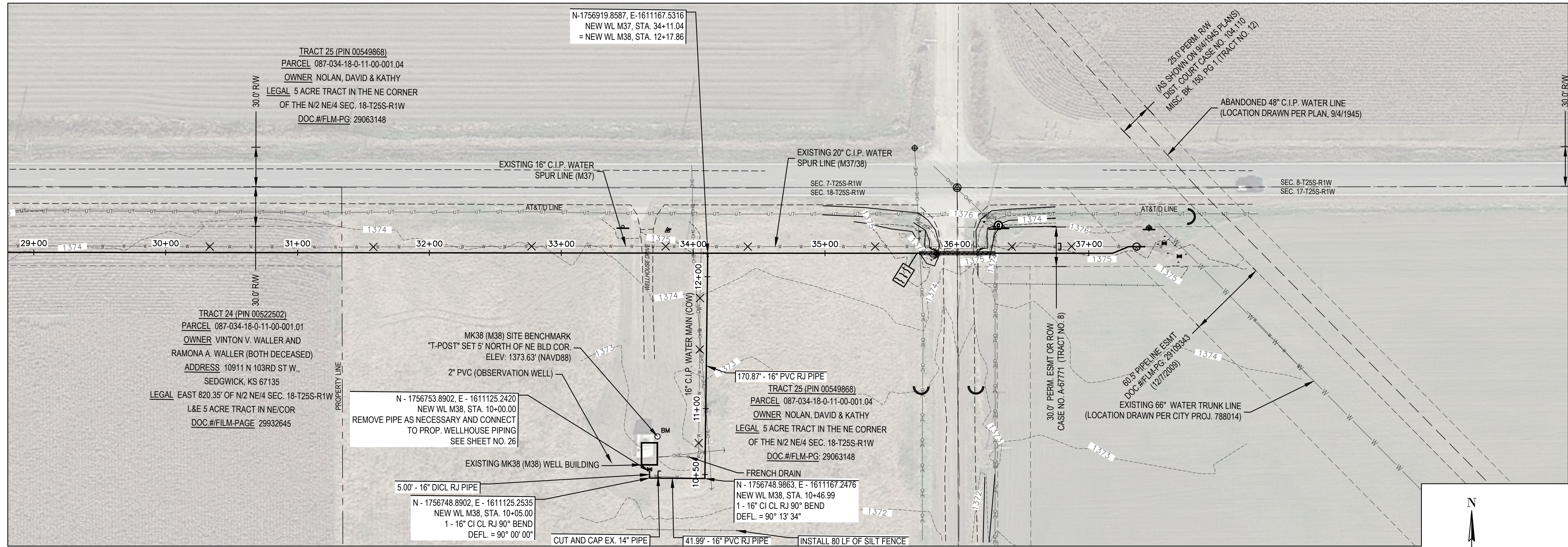
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 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
24
OF 35

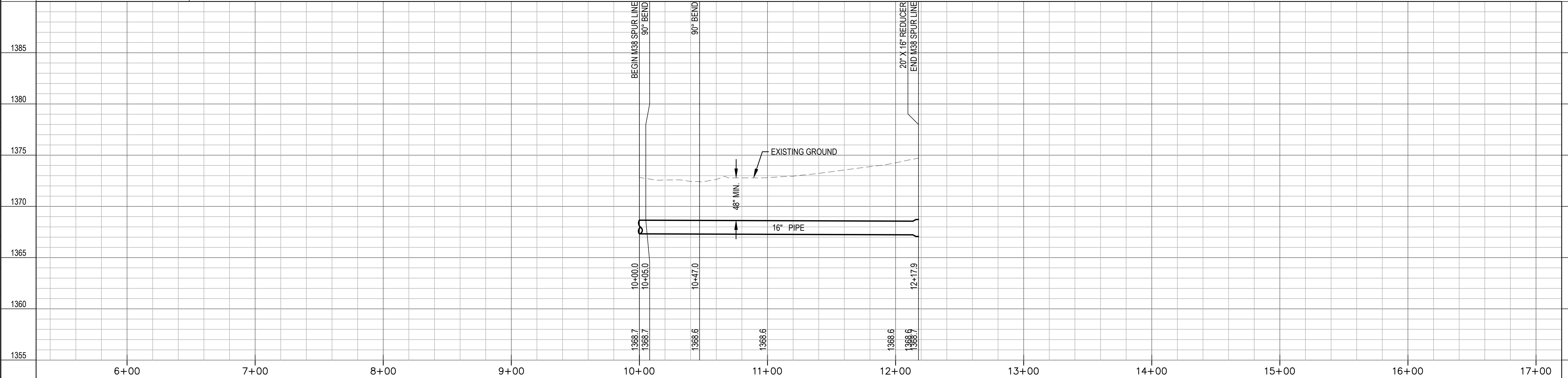
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X DENOTES PIPE TO BE ABANDONED

M37 & M38 SPUR LINE (ADD ALTERNATE 7)

UNLESS NOTED OTHERWISE, ELEVATIONS SHOWN ARE TOP OF WATER SUPPLY PIPE



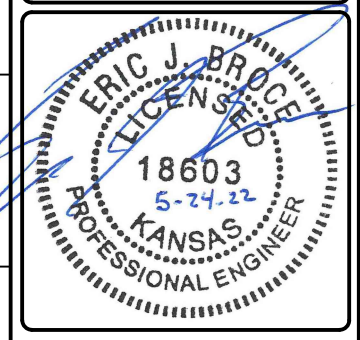
Environment & Infrastructure Solutions, Inc.
 245 N. WACO AVENUE, SUITE 110
 WICHITA, KANSAS 67202
 PHONE: 316-448-2711
 FAX: 316-448-2711



M37 & M38 SPURLINE (ADD ALT. 7)(4)

EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

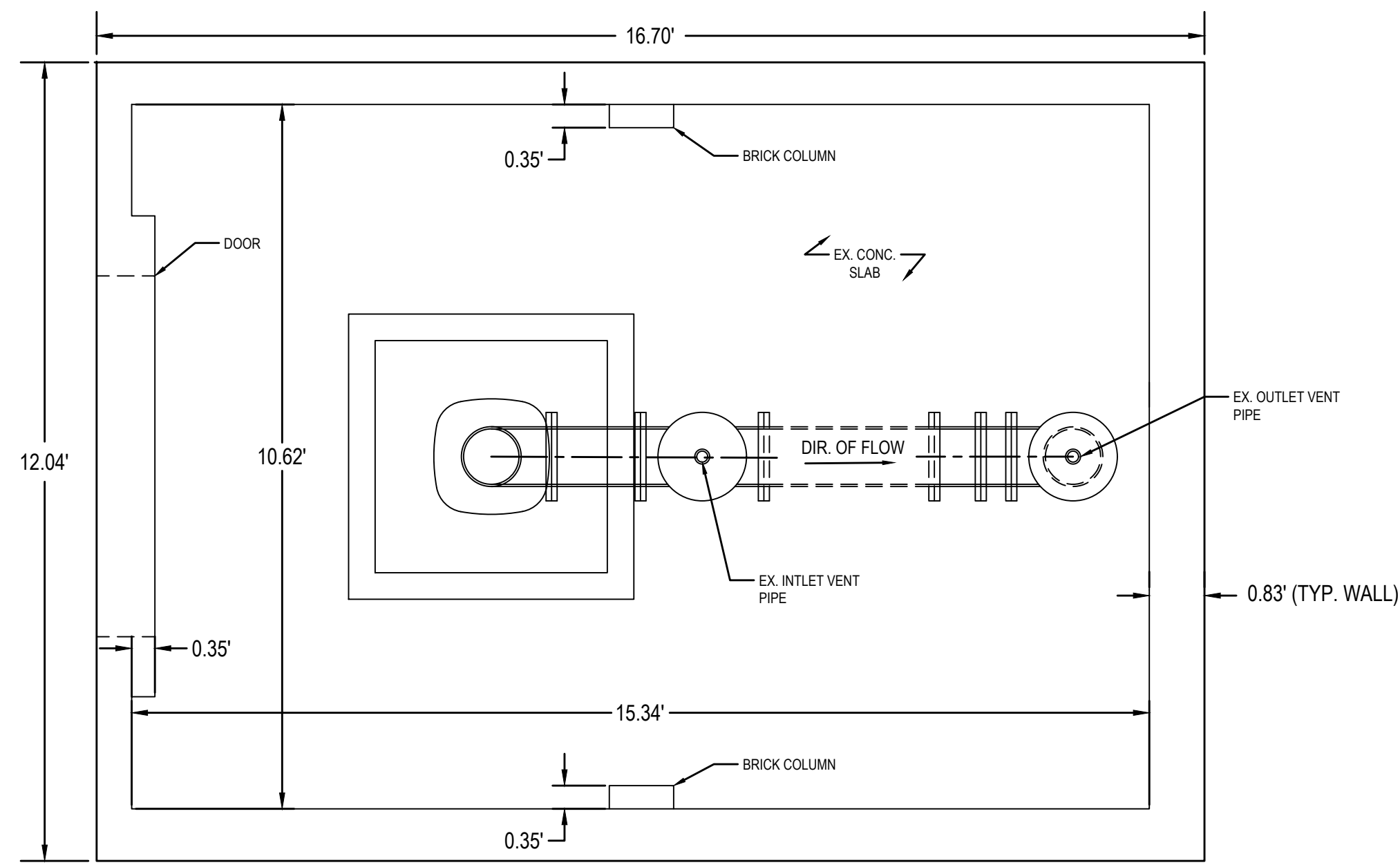
DESIGNED BY: EJB
 DRAWN BY: JAN
 CHECKED BY: ---
 DATE: MAY 24, 2022



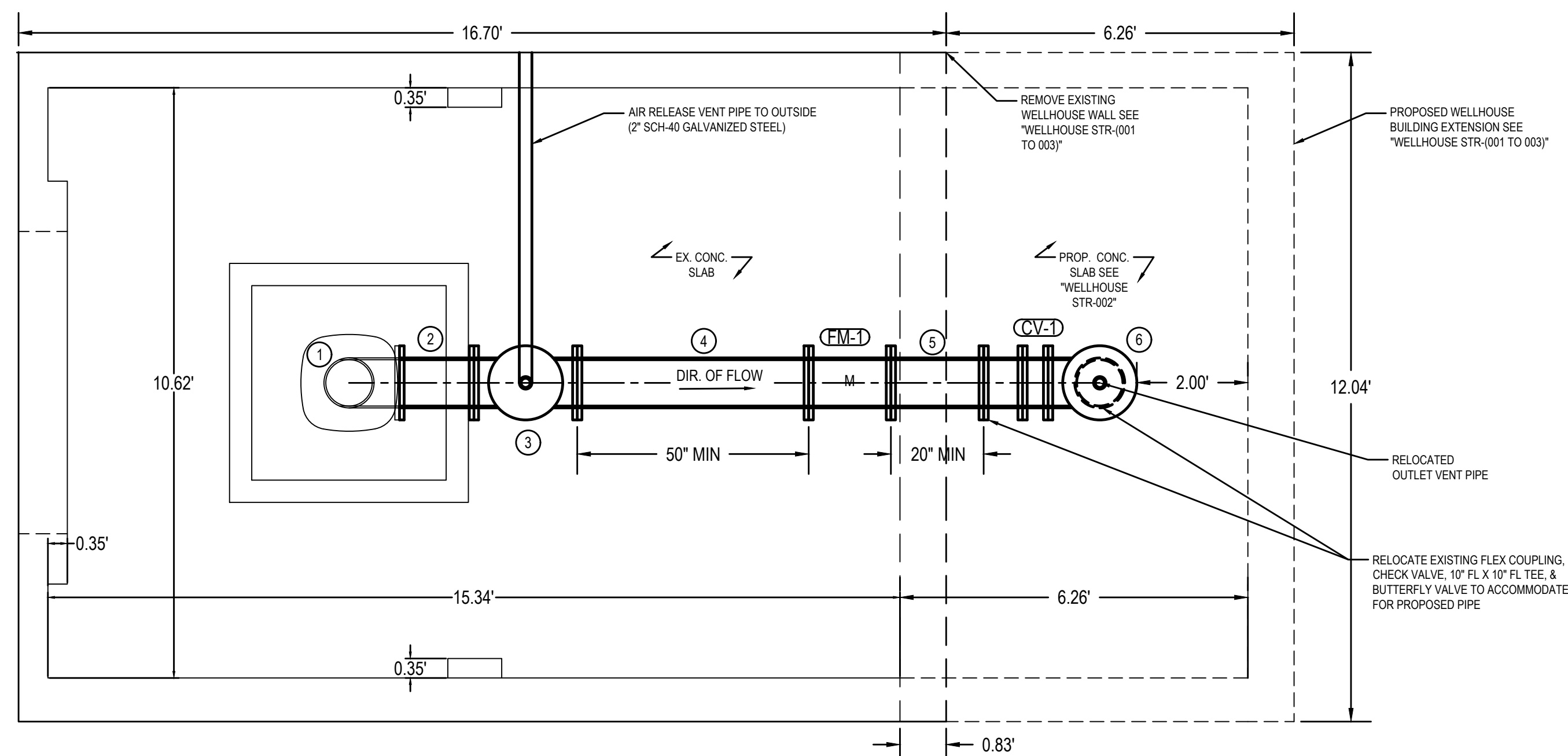
PROJECT NO.
639020

SHEET NO.
25
OF 35

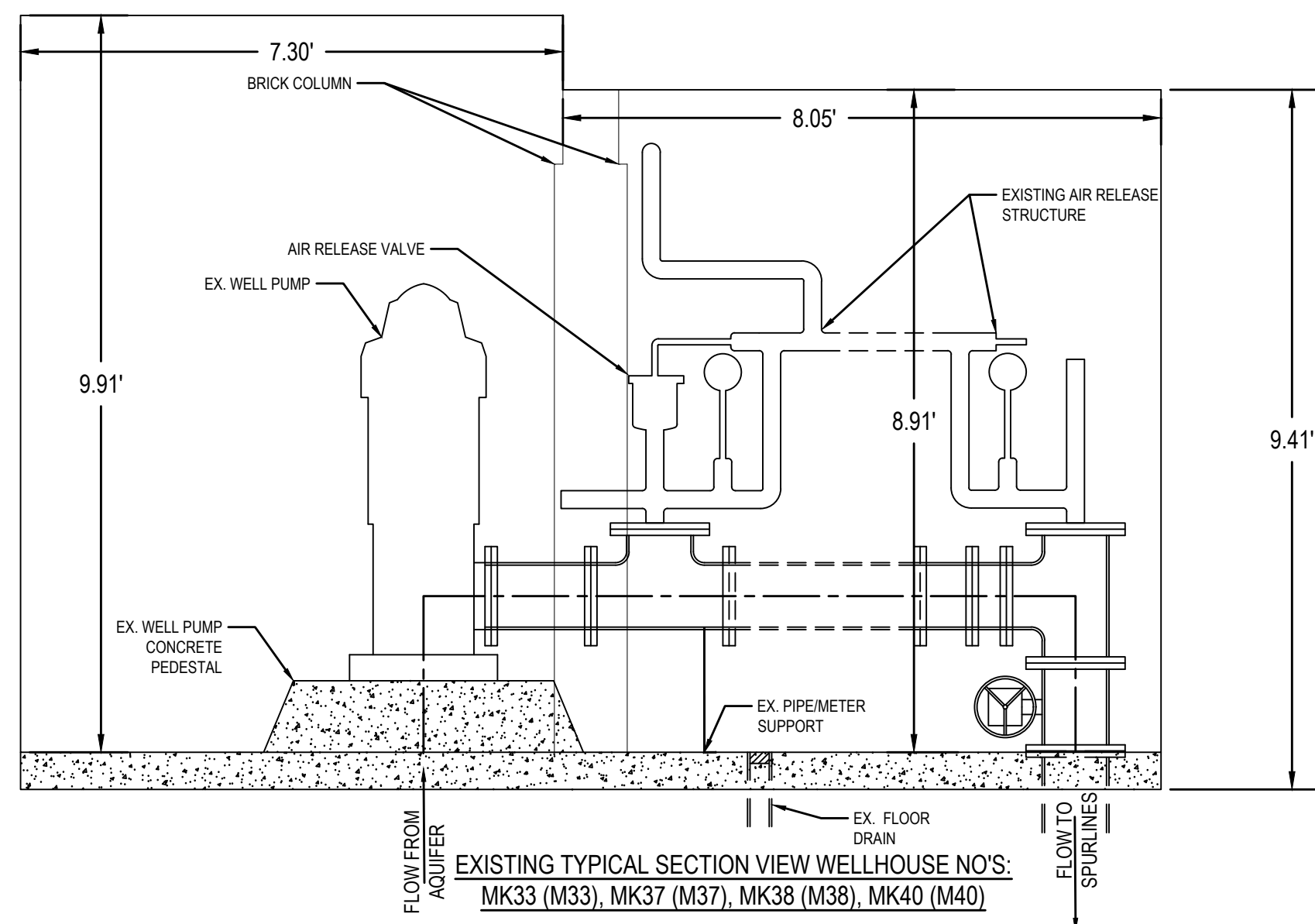
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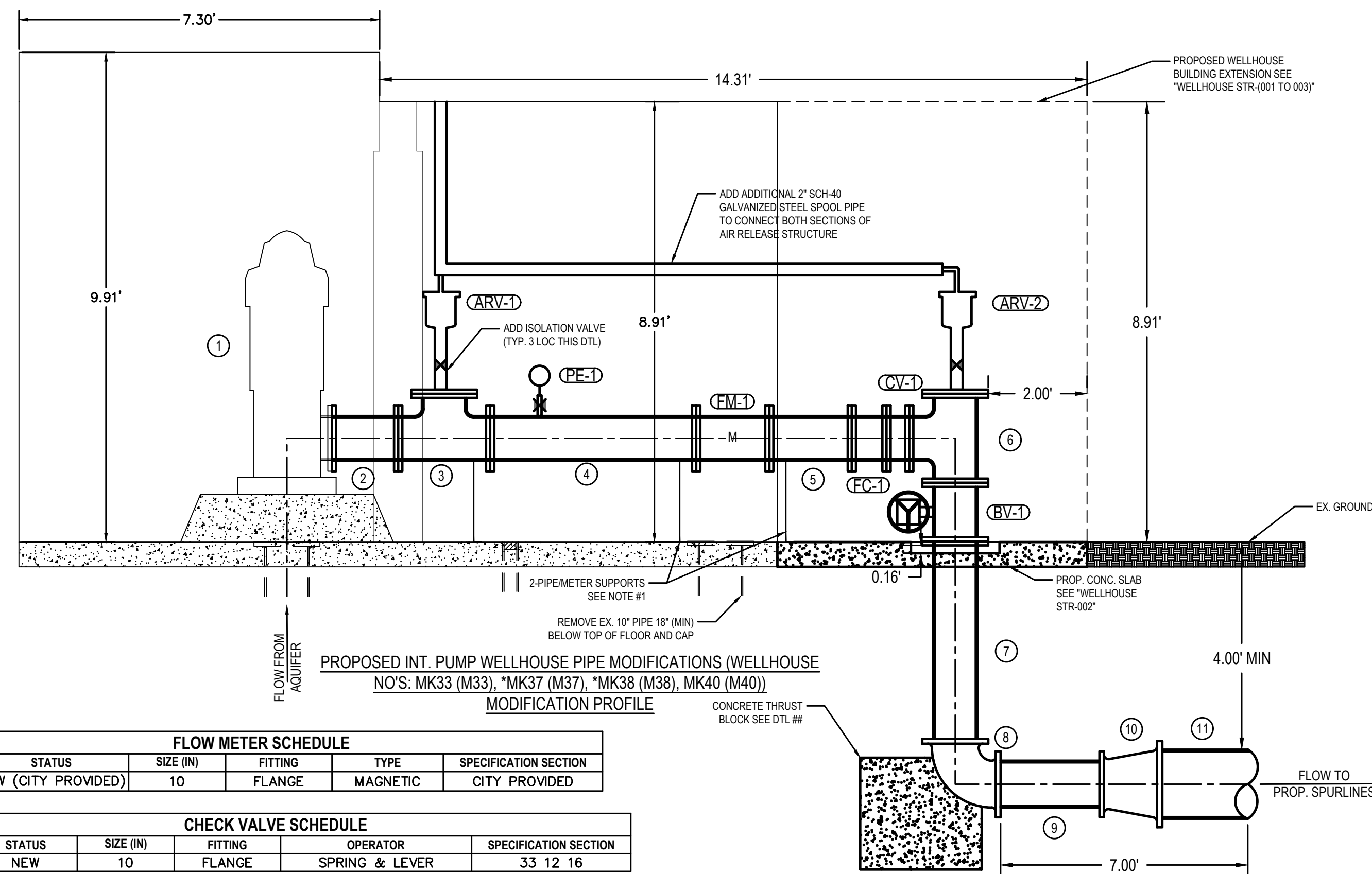
EXISTING TYPICAL PLAN VIEW WELLHOUSE NO'S: MK33 (M33), MK37 (M37), MK38 (M38), MK40 (M40)



PROPOSED INT. PUMP WELLHOUSE PIPE MODIFICATIONS (WELLHOUSE NO'S: MK33 (M33), *MK37 (M37), *MK38 (M38), MK40 (M40)) MODIFICATION PLAN



EXISTING TYPICAL SECTION VIEW WELLHOUSE NO'S: MK33 (M33), MK37 (M37), MK38 (M38), MK40 (M40)



PROPOSED INT. PUMP WELLHOUSE PIPE MODIFICATIONS (WELLHOUSE NO'S: MK33 (M33), *MK37 (M37), *MK38 (M38), MK40 (M40)) MODIFICATION PROFILE

FITTING SCHEDULE			
ITEM	DESC.	EX./NEW	NOTE
1	PUMP	EX.	
2	10" FL X FL DICL SPOOL	NEW	LENGTH AS REQUIRED
3	10" FL X 10" FL TEE	NEW	INCLUDES FLANGE CAP FOR AIR RELEASE STRUCTURE
4	10" FL X FL DICL SPOOL	NEW	LENGTH = 50"
5	10" FL X FL DICL SPOOL	NEW	LENGTH = 20"
6	10" FL X 10" FL TEE	NEW	INCLUDES FLANGE CAP FOR AIR RELEASE STRUCTURE
7	10" FL X PE DICL SPOOL	NEW	LENGTH AS REQUIRED
8	10" DICL RJ 90° BEND	NEW	
9	10" SPOOL PIPE	NEW	LENGTH AS REQUIRED
10	DICL RJ REDUCER	NEW	SEE REDUCER SCHEDULE THIS SHEET
11	PVC C900 PIPE	NEW	LENGTH AS REQUIRED & SEE REDUCER SCHEDULE THIS SHEET FOR DOWNSTREAM PIPE DIA.

FLOW METER SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	TYPE	SPECIFICATION SECTION
FM-1	NEW (CITY PROVIDED)	10	FLANGE	MAGNETIC	CITY PROVIDED

CHECK VALVE SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	OPERATOR	SPECIFICATION SECTION
CV-1	NEW	10	FLANGE	SPRING & LEVER	33 12 16

BUTTERFLY VALVE SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	OPERATOR	SPECIFICATION SECTION
BV-1	NEW	10	FLANGE	GEARED W/ HANDWHEEL	33 12 16

AIR RELEASE VALVE SCHEDULE				
MARK	STATUS	SIZE	FITTING	SPECIFICATION SECTION
ARV-1	NEW	2"	THREADED	33 12 16
ARV-2	NEW	2"	THREADED	33 12 16

PRESSURE ELEMENT SCHEDULE									
MARK	STATUS	INDICATOR	TRANSMITTER	PS-LOW	PS-HIGH	BALL VALVE	DIAPHRAGM	RANGE (PSI)	SPECIFICATION SECTION
PE-1	NEW	X	X			X		0-150	43 21 31

FLEX COUPLING SCHEDULE				
MARK	STATUS	SIZE (IN)	FITTING	SPECIFICATION SECTION
FC-1	NEW	10	FLANGE	43 21 31

INT. PUMP WELLHOUSE REDUCER SCHEDULE		
LINE NO.	REDUCER	DOWNSTREAM PIPE DIA. (IN)
M33	10" X 12" RJ REDUCER	12
M37	10" X 16" RJ REDUCER	16
M38	10" X 16" RJ REDUCER	16
M40	10" X 16" RJ REDUCER	16

*DENOTES AN ADD ALTERNATE WELLHOUSE

REVISIONS:

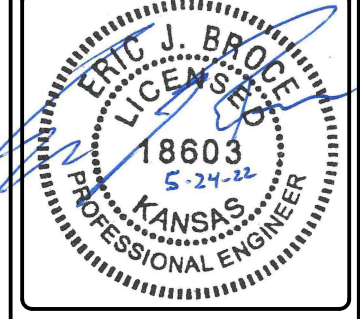
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245 N. WACO AVENUE, SUITE 110
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PHONE: 316-448-2711
FAX: 316-448-2711

wood.

INTERIOR PUMP WELLHOUSE MODIFICATIONS

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

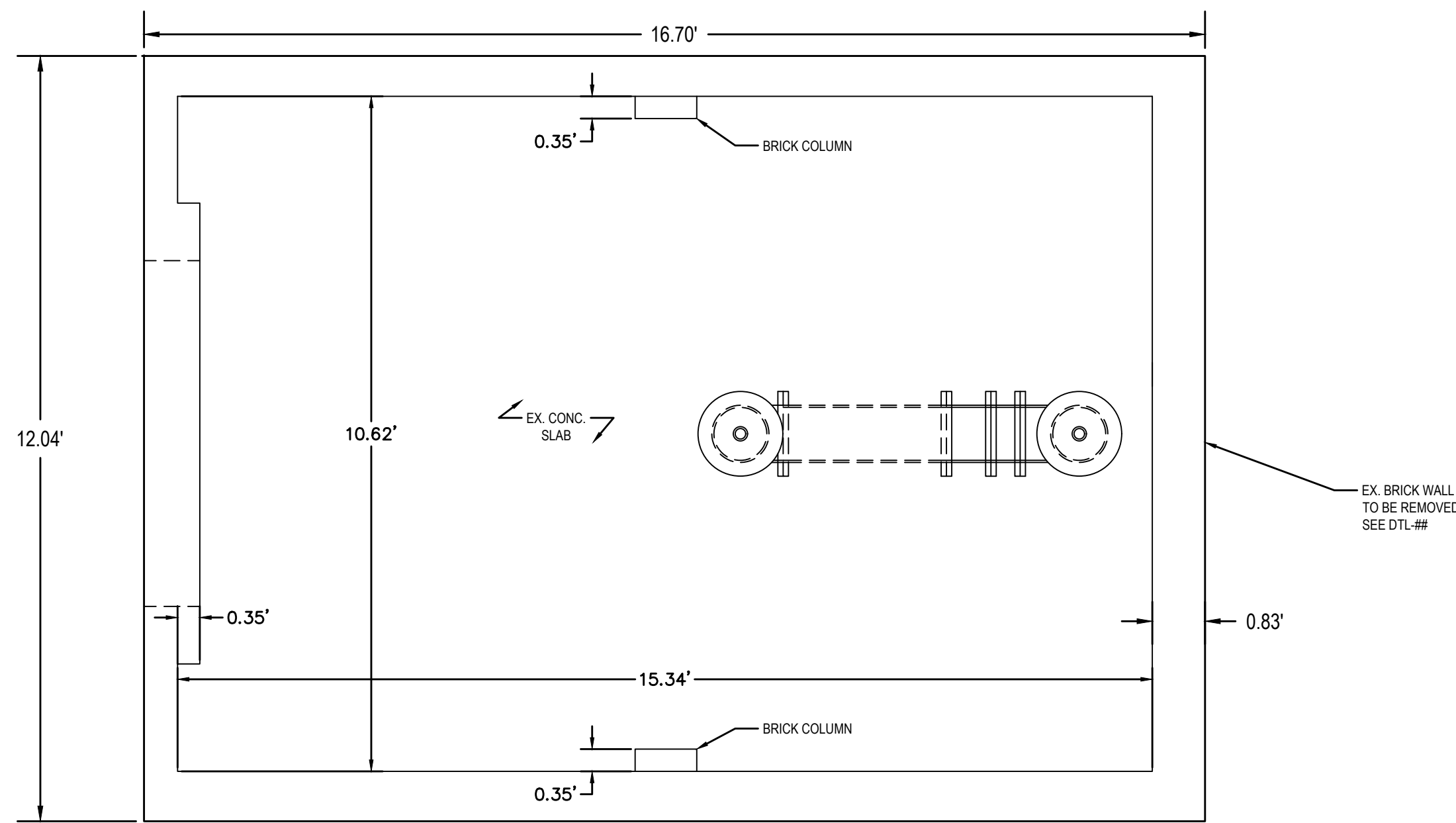
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DRAWN BY: AJM
CHECKED BY: ---
DATE: MAY 24, 2022



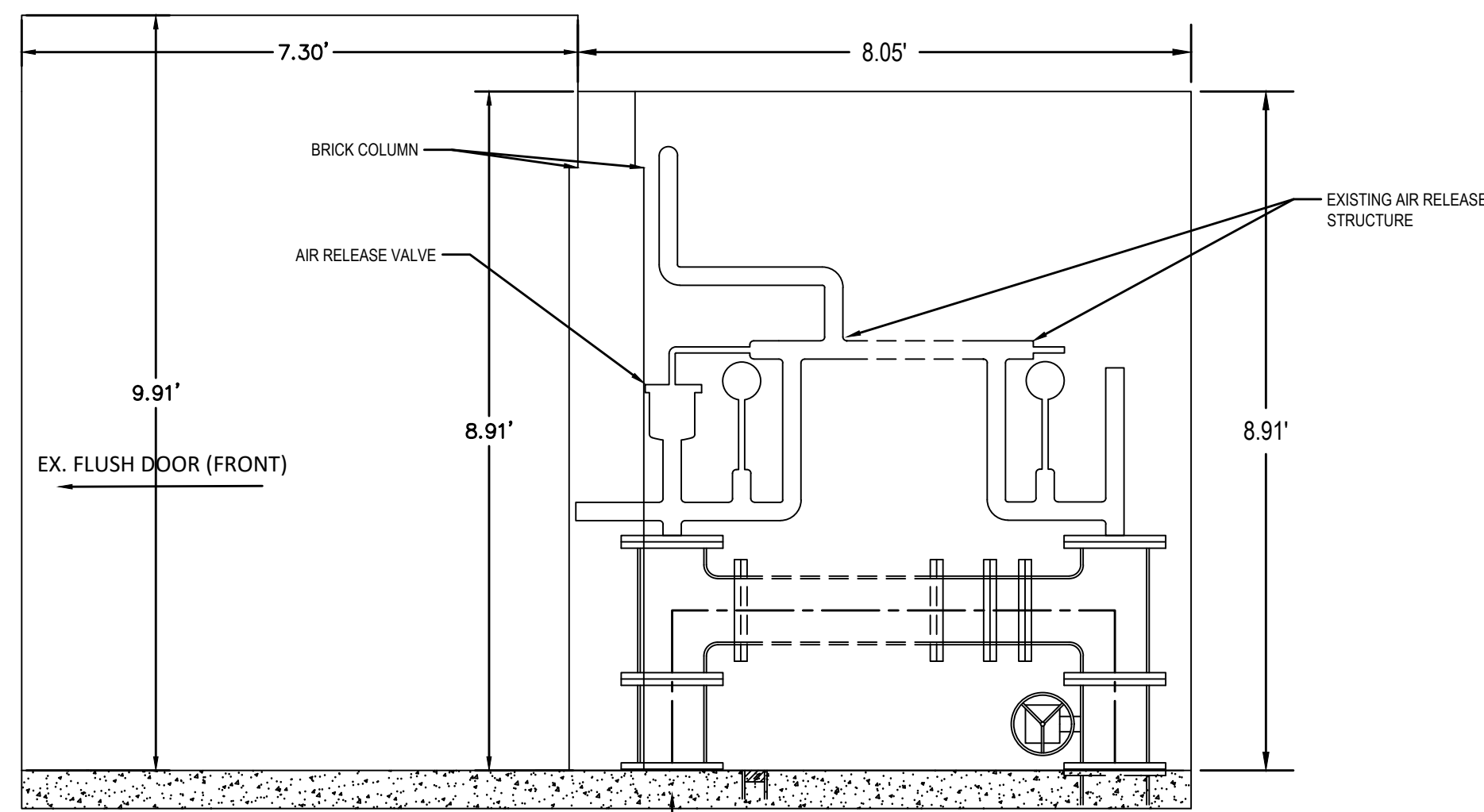
PROJECT NO.
639020

SHEET NO.
26
OF 35

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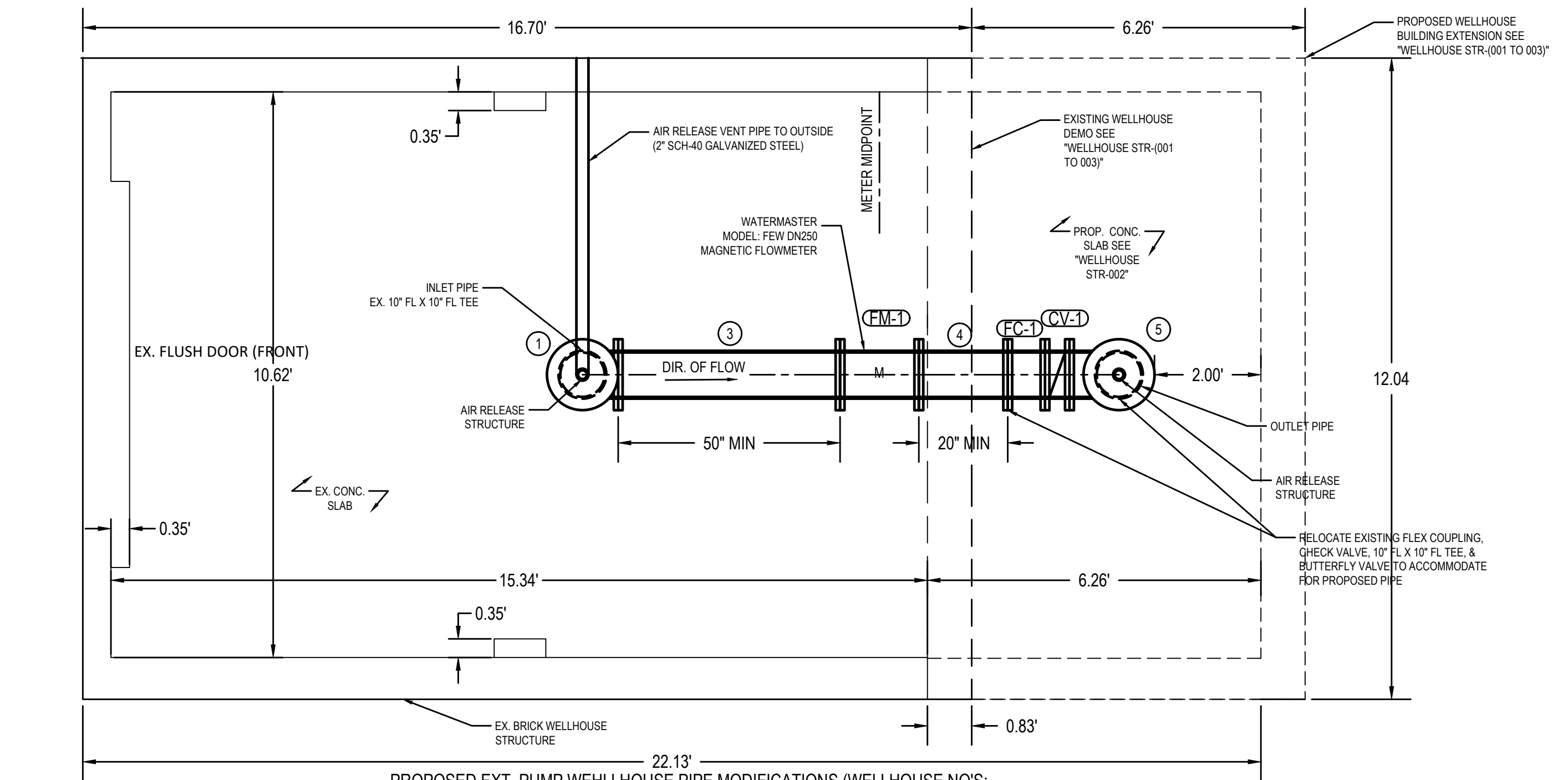


EXISTING TYPICAL PLAN VIEW WELLHOUSE NO'S:
 MK03 (M03), MK05 (M05), MK07 (M07), MK16 (M16),
 MK17 (M17), MK21 (M21), MK27 (M27), MK28 (M28),
 MK35 (M35), & MK39 (M39)

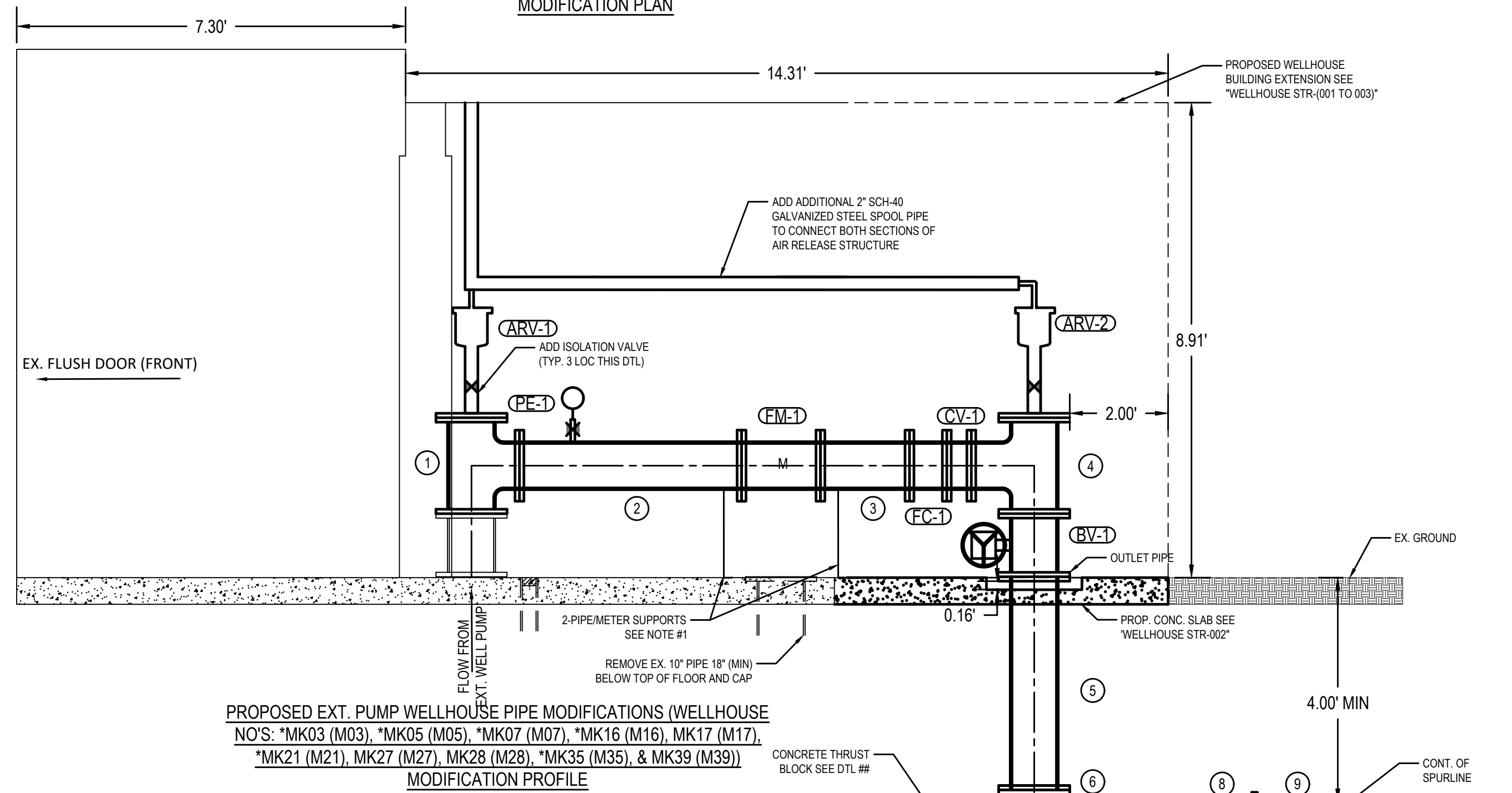


EXISTING TYPICAL SECTION VIEW WELLHOUSE NO'S:
 MK03 (M03), MK05 (M05), MK07 (M07), MK16 (M16),
 MK17 (M17), MK21 (M21), MK27 (M27), MK28 (M28),
 MK35 (M35), & MK39 (M39)

FITTING SCHEDULE			
ITEM	DESC.	EX./NEW	NOTE
1	10" FL X 10" FL TEE	NEW	INCLUDES FLANGE CAP FOR AIR RELEASE VALVE
2	10" FL X FL DICL SPOOL	NEW	LENGTH = 50"
3	10" FL X FL DICL SPOOL	NEW	LENGTH = 20"
4	10" FL X 10" FL TEE	NEW	INCLUDES FLANGE CAP FOR AIR RELEASE VALVE
5	10" FL X PE DICL SPOOL	NEW	LENGTH AS REQUIRED
6	10" DICL RJ 90° BEND	NEW	
7	10" PE X PE SPOOL PIPE	NEW	LENGTH AS REQUIRED
8	DICL RJ REDUCER	NEW	SEE REDUCER SCHEDULE THIS SHEET
9	PVC C900 PIPE	NEW	LENGTH AS REQUIRED & SEE REDUCER SCHEDULE THIS SHEET FOR DOWNSTREAM PIPE DIA.



PROPOSED EXT. PUMP WELLHOUSE PIPE MODIFICATIONS (WELLHOUSE NO'S:
 *MK03 (M03), *MK05 (M05), *MK07 (M07), *MK16 (M16), MK17 (M17), *MK21 (M21), MK27
 (M27), MK28 (M28), *MK35 (M35), & MK39 (M39))
 MODIFICATION PLAN



PROPOSED EXT. PUMP WELLHOUSE PIPE MODIFICATIONS (WELLHOUSE NO'S: *MK03 (M03), *MK05 (M05), *MK07 (M07), *MK16 (M16), MK17 (M17), *MK21 (M21), MK27 (M27), MK28 (M28), *MK35 (M35), & MK39 (M39)) MODIFICATION PROFILE

FLOW METER SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	TYPE	SPECIFICATION SECTION
FM-1	NEW (CITY PROVIDED)	10"	FLANGE	MAGNETIC	CITY PROVIDED

CHECK VALVE SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	OPERATOR	SPECIFICATION SECTION
CV-1	NEW	10"	FLANGE	SPRING & LEVER	33 12 16

BUTTERFLY VALVE SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	OPERATOR	SPECIFICATION SECTION
BV-1	NEW	10"	FLANGE	GEARED W/ HANDWHEEL	33 12 16

AIR RELEASE VALVE SCHEDULE					
MARK	STATUS	SIZE (IN)	FITTING	SPECIFICATION SECTION	
ARV-1	NEW	2"	THREADED	33 12 16	
ARV-2	NEW	2"	THREADED	33 12 16	

PRESSURE ELEMENT SCHEDULE									
MARK	STATUS	INDICATOR	TRANSMITTER	PS-LOW	PS-HIGH	BALL VALVE	DIAPHRAGM	RANGE (PSI)	SPECIFICATION SECTION
PE-1	NEW	X	X			X		0-150	43 21 31

FLEX COUPLING SCHEDULE				
MARK	STATUS	SIZE (IN)	FITTING	SPECIFICATION SECTION
FC-1	NEW	10"	FLANGE	43 21 31

*DENOTES AN ADD ALTERNATE WELLHOUSE

- NOTES:
- METER SUPPORTS MAY BE POURED IN PLACE OR MECHANICAL PIPE SUPPORTS AS MANUFACTURED BY ITT GRINNELL OR APPROVED EQUAL ON 2" CONCRETE PADS.
 - ALL PIPE, APPURTENANCES, AND OTHER ITEMS REQUIRED TO COMPLETE THE WELL HOUSE MODIFICATIONS AS SHOWN SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR AND SHALL BE INCLUDED IN THE BID FOR
 - UPON INSTALLATION OF PROP. CONCRETE SLAB (OUTLINED IN DTL #4) CONTRACTOR SHALL VERIFY WATER FLOWS TO EX. DRAIN.
 - COORDINATE PUMP OPERATIONS WITH WELLFIELD STAFF.
 - NEW PIPING SHALL BEGIN AT THE FIRST FLANGED FITTING ABOVE THE FLOOR AND CONNECTED TO THE EXISTING FLANGED PIPING GOING THROUGH THE FLOOR.
 - EXISTING HEATER AND POWER OUTLET SHALL BE RELOCATED TO THE NEW BACK WALL.
 - ARV-1 SHALL BE A 2" A.R.L. D-060-C HF OR APPROVED EQUAL.
 - ARV-2 SHALL BE A 2" A.R.L. D-060-C HF NS OR APPROVED EQUAL.

EXT. PUMP WELLHOUSE REDUCER SCHEDULE		
LINE NO.	REDUCER	DOWNSTREAM PIPE DIA. (IN)
M03	10" X 16" RJ REDUCER	16
M05	10" X 16" RJ REDUCER	16
M07	10" X 16" RJ REDUCER	16
M16	10" X 16" RJ REDUCER	16
M17	10" X 16" RJ REDUCER	16
M21	10" X 16" RJ REDUCER	16
M27	10" X 12" RJ REDUCER	12
M28	10" X 12" RJ REDUCER	12
M35	10" X 12" RJ REDUCER	12
M39	10" X 16" RJ REDUCER	16

Environment & Infrastructure Solutions, Inc.
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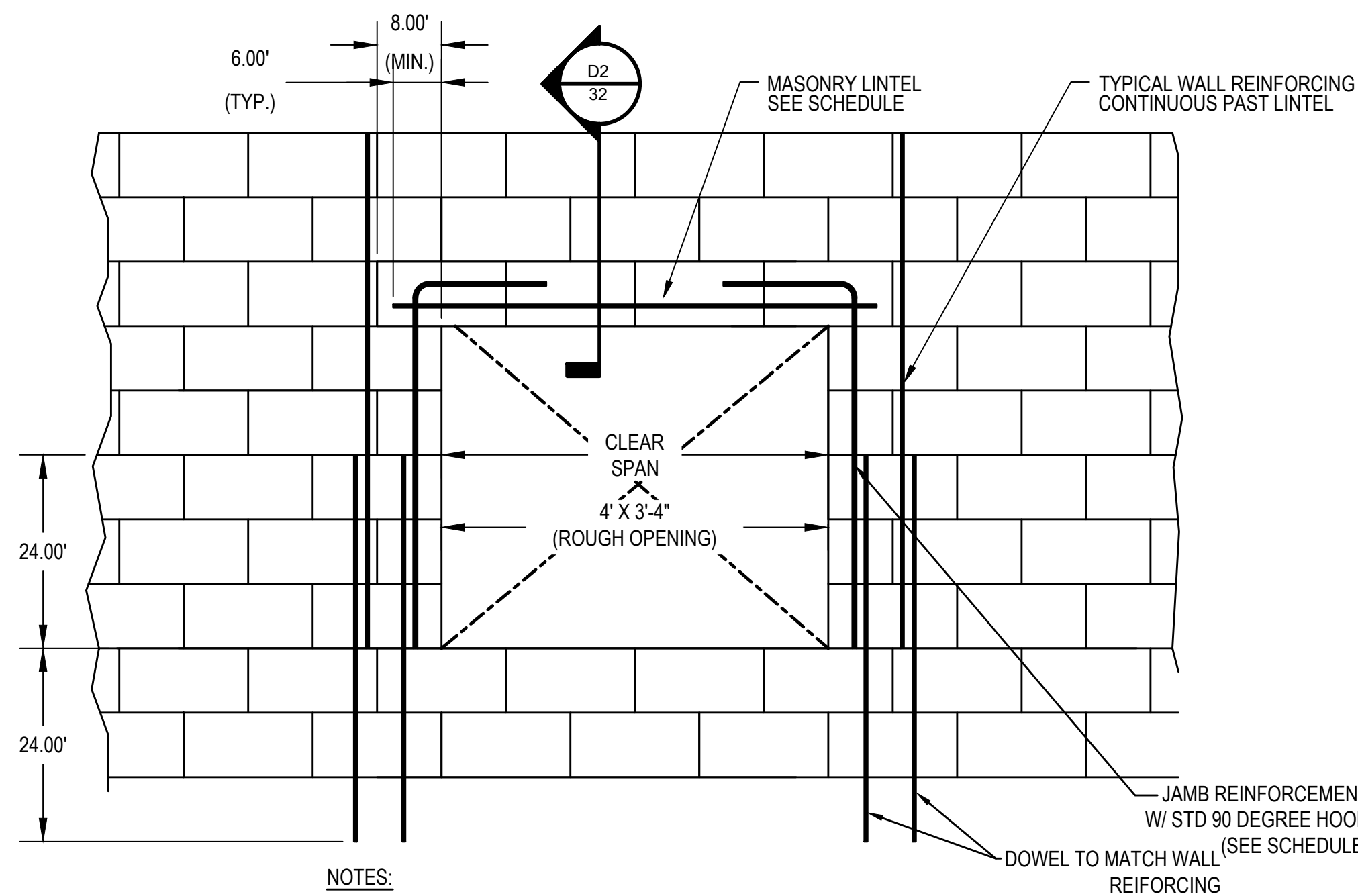
EXTERIOR PUMP WELLHOUSE MODIFICATIONS
 EQUUS WELLFIELD SPURLINE REPLACEMENT
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA

DESIGNED BY: EJB
 DRAWN BY: AJM
 CHECKED BY: ---
 DATE: MAY 24, 2022



PROJECT NO.
 639020
 SHEET NO.
 27
 OF 35

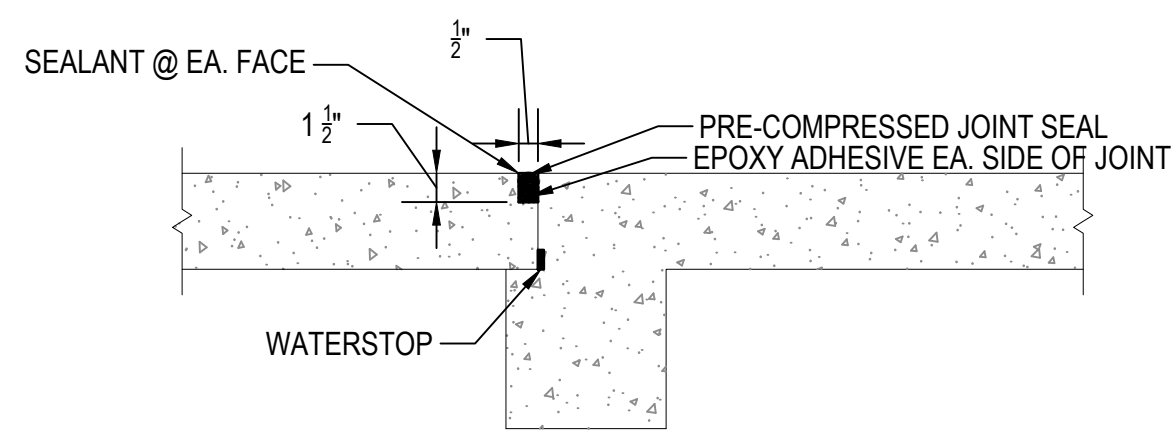
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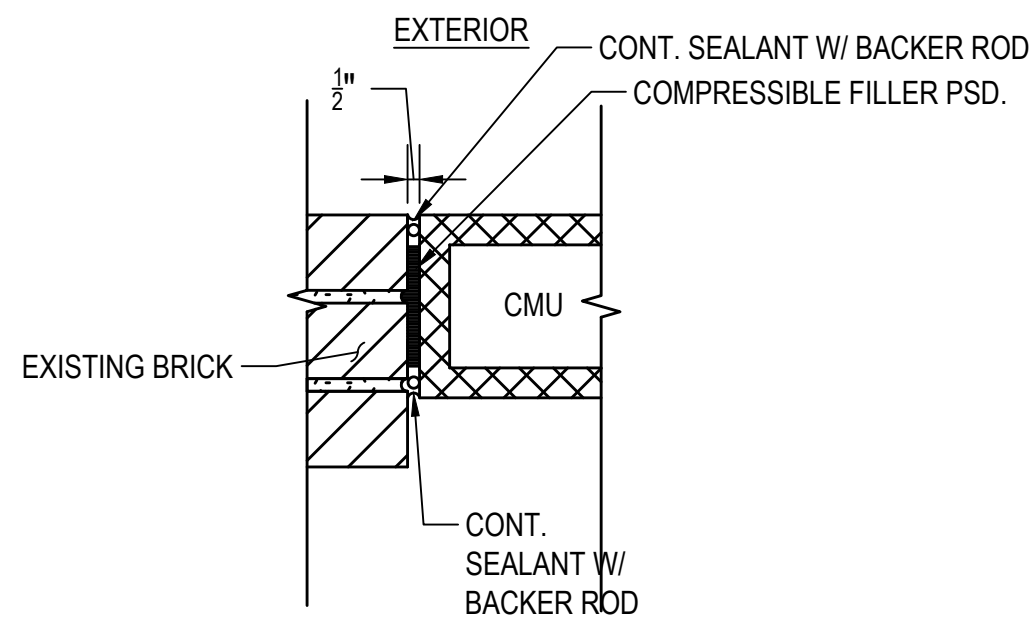
NOTES:

1. THIS DETAIL TYPICAL AT MASONRY OPENINGS U.N.O.
2. ALL VERTICAL CMU REINFORCING SHALL HAVE MATCHING DOWELS IN FOUNDATION WALL (TYP.)
3. SEE PLAN AND TYPICAL SECTIONS FOR VERTICAL AND HORIZONTAL REINFORCING.
4. CLEAR SPAN SHALL BE SUFFICIENT TO INSTALL A 48" X 48" WINDOW. NEW WINDOW SHALL BE A DOUBLE HUNG, HURRICANE RATED, FIBERGLASS FRAMED WINDOW.

D1
32
TYPICAL MASONRY LINTEL ELEVATION
1" = 1'-0"

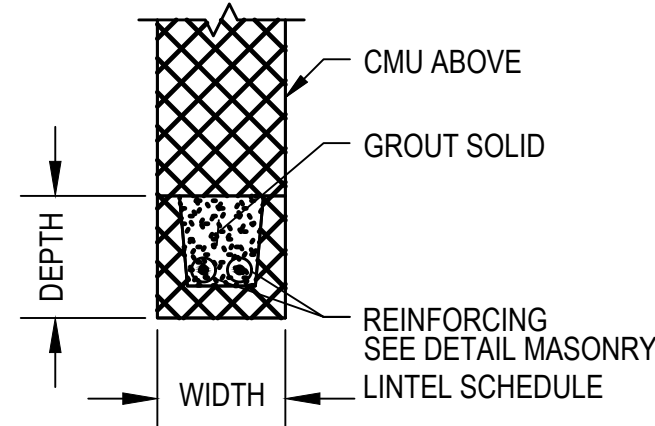


D7
32
SEALANT JOINT AT ROOF SLAB CONNECTION
NTS

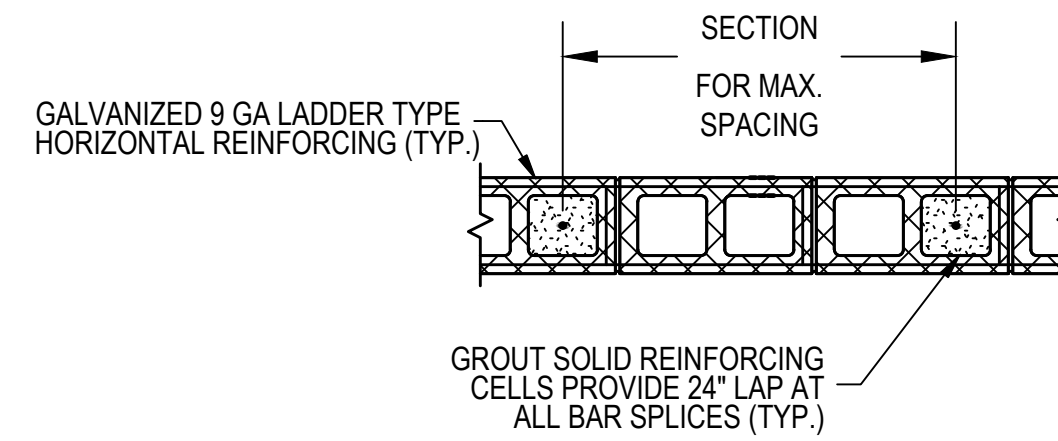


D11
32
SEALANT JOINT BETWEEN EXISTING BRICK AND CMU
NTS

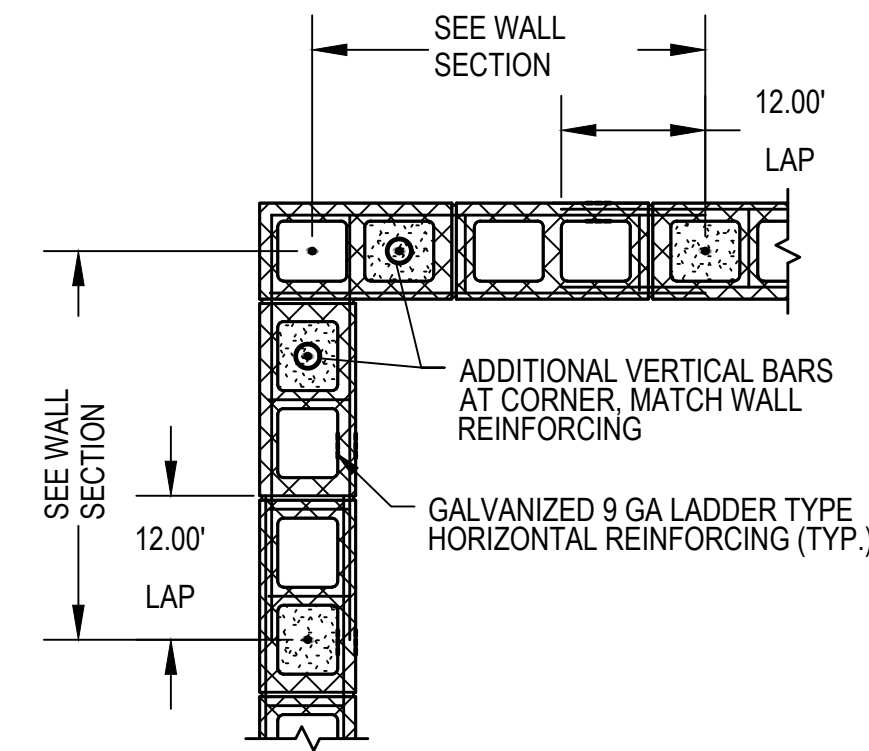
MASONRY LINTEL SCHEDULE			
CLEAR SPAN	WIDTH	DEPTH	LINTEL REINF
≤ 10'-0"	8"	16"	(2) #5 CONT
≤ 10'-0"	12"	16"	(2) #5 CONT



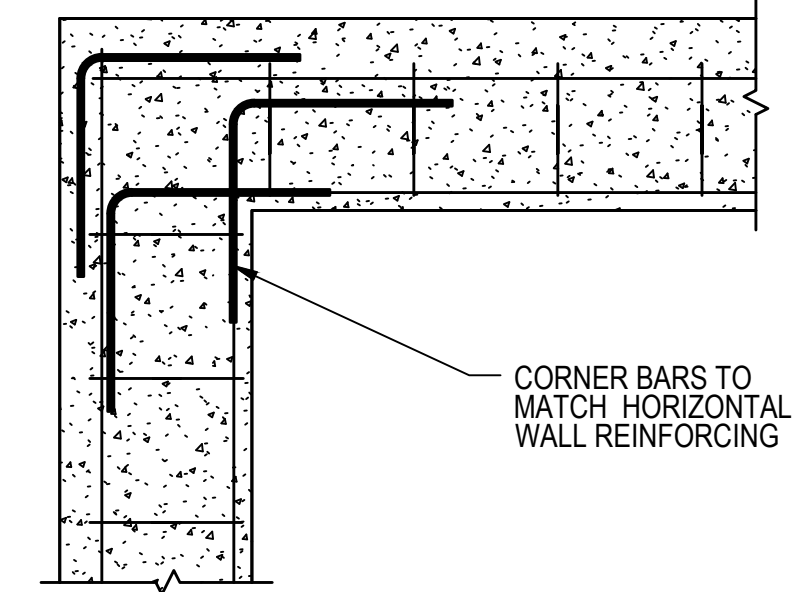
D2
32
SECTION AT MASONRY LINTEL
1" = 1'-0"



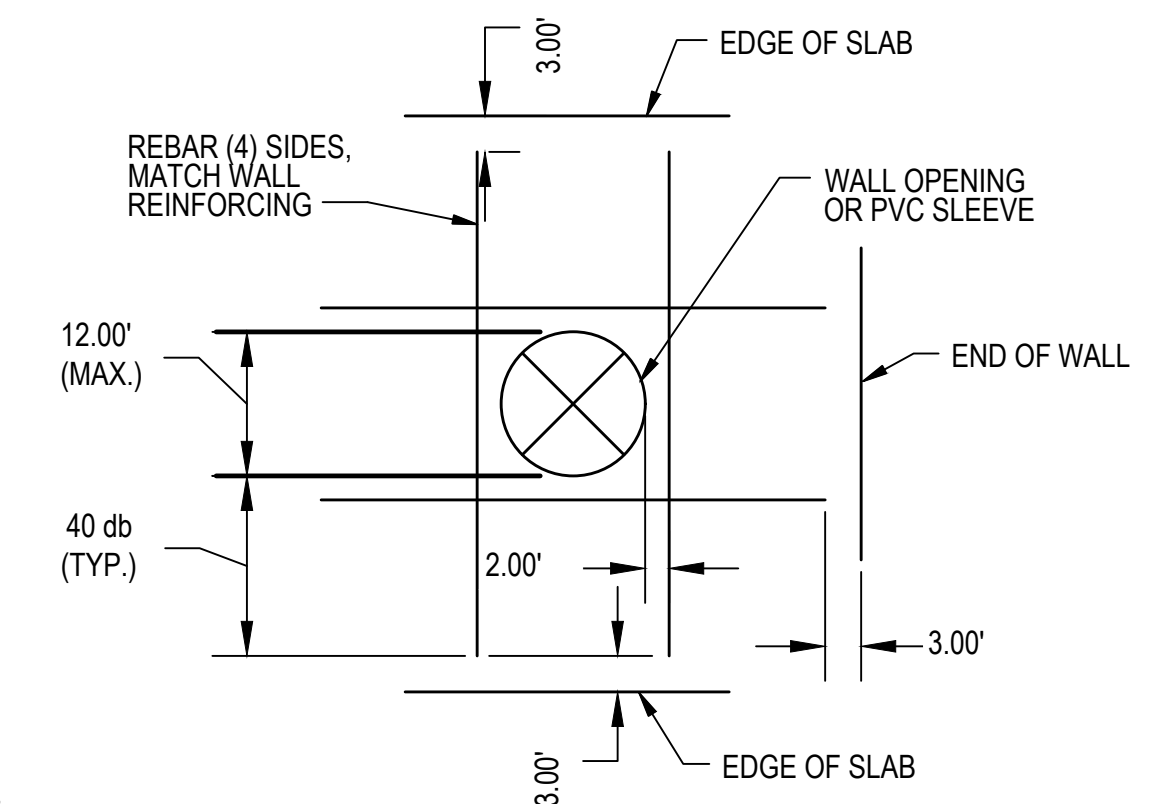
D4
32
TYPICAL MASONRY WALL DETAIL
1/2" = 1'-0"



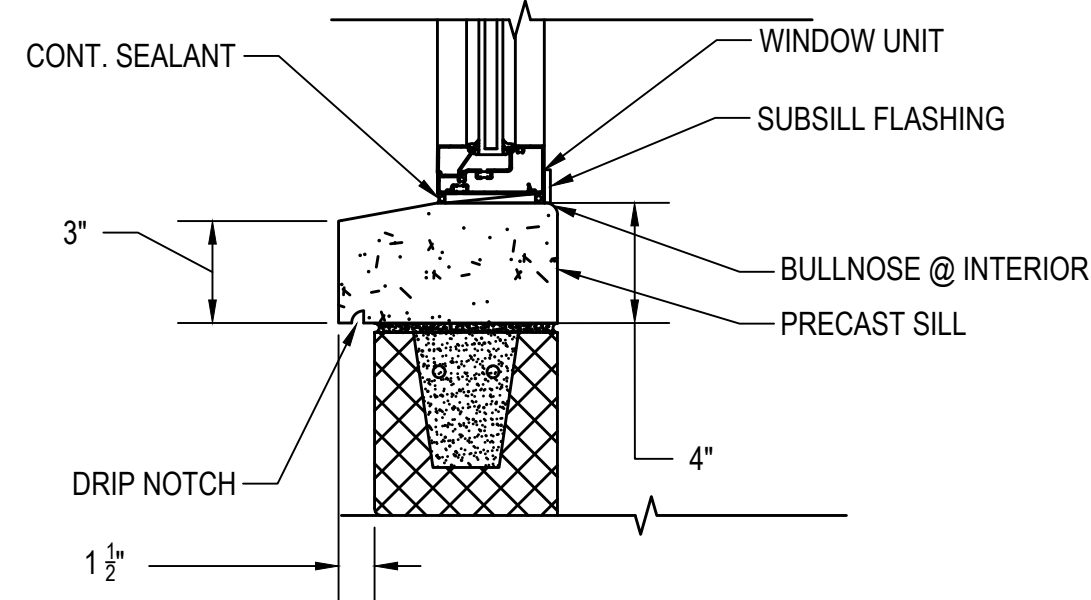
D3
32
MASONRY WALL AT CORNER
1/2" = 1'-0"



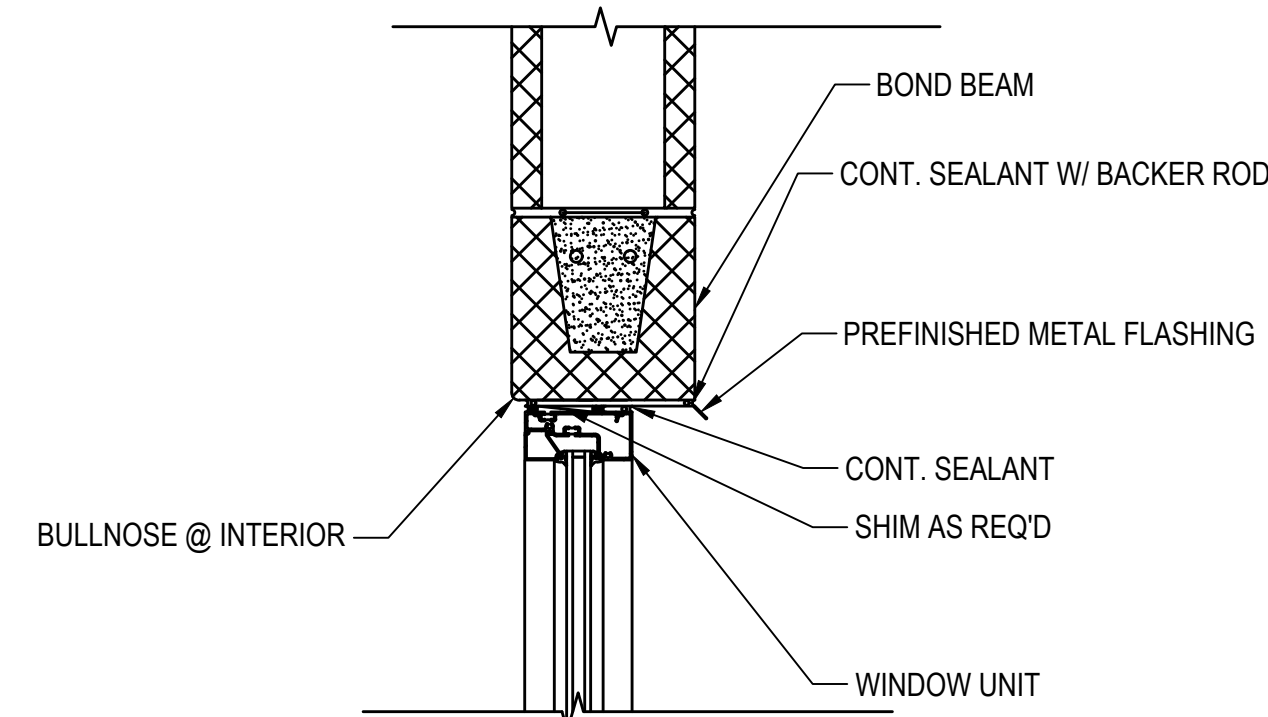
D5
32
TYPICAL CORNER REINFORCEMENT DETAIL
1/2" = 1'-0"



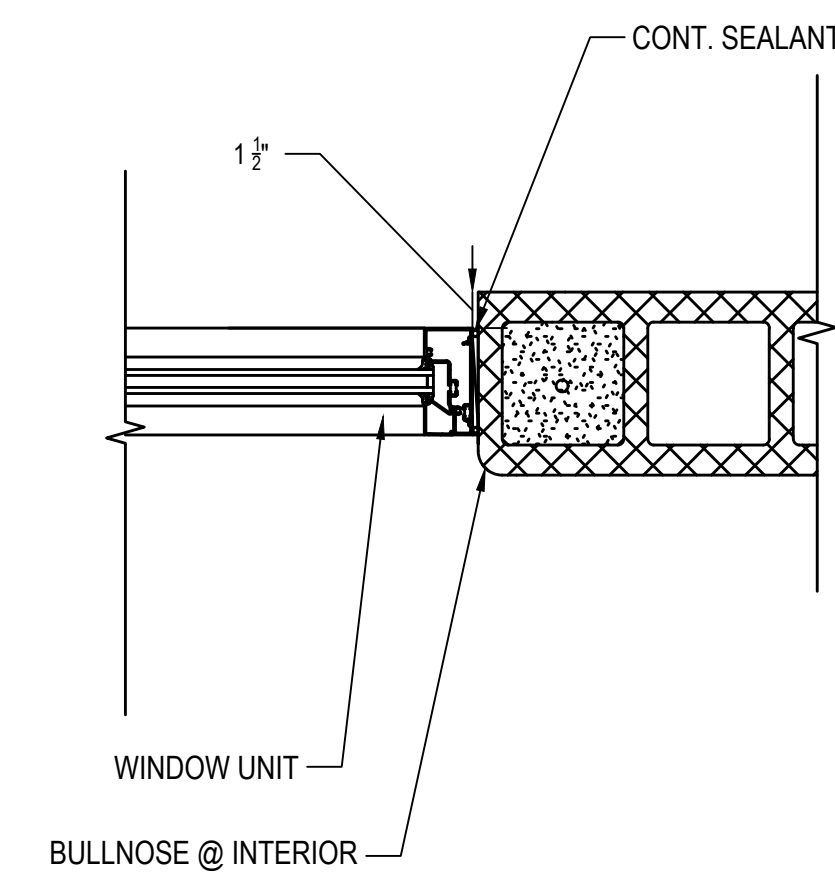
D6
32
TYPICAL ROUND PENETRATION DETAIL
1/2" = 1'-0"



D8
32
WINDOW SILL
NTS



D9
32
WINDOW HEAD
NTS



D10
32
WINDOW JAMB
NTS

REVISIONS:

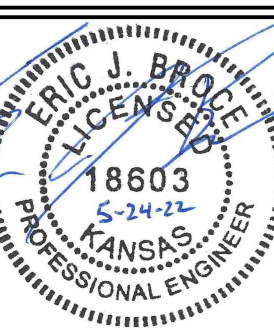
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WICHITA, KANSAS 67202
PHONE: 316-448-2711
FAX: 316-448-2711

wood.

WELLHOUSE STR-003

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

DESIGNED BY: EJB
DRAWN BY: AJM
CHECKED BY: ---
DATE: MAY 24, 2022

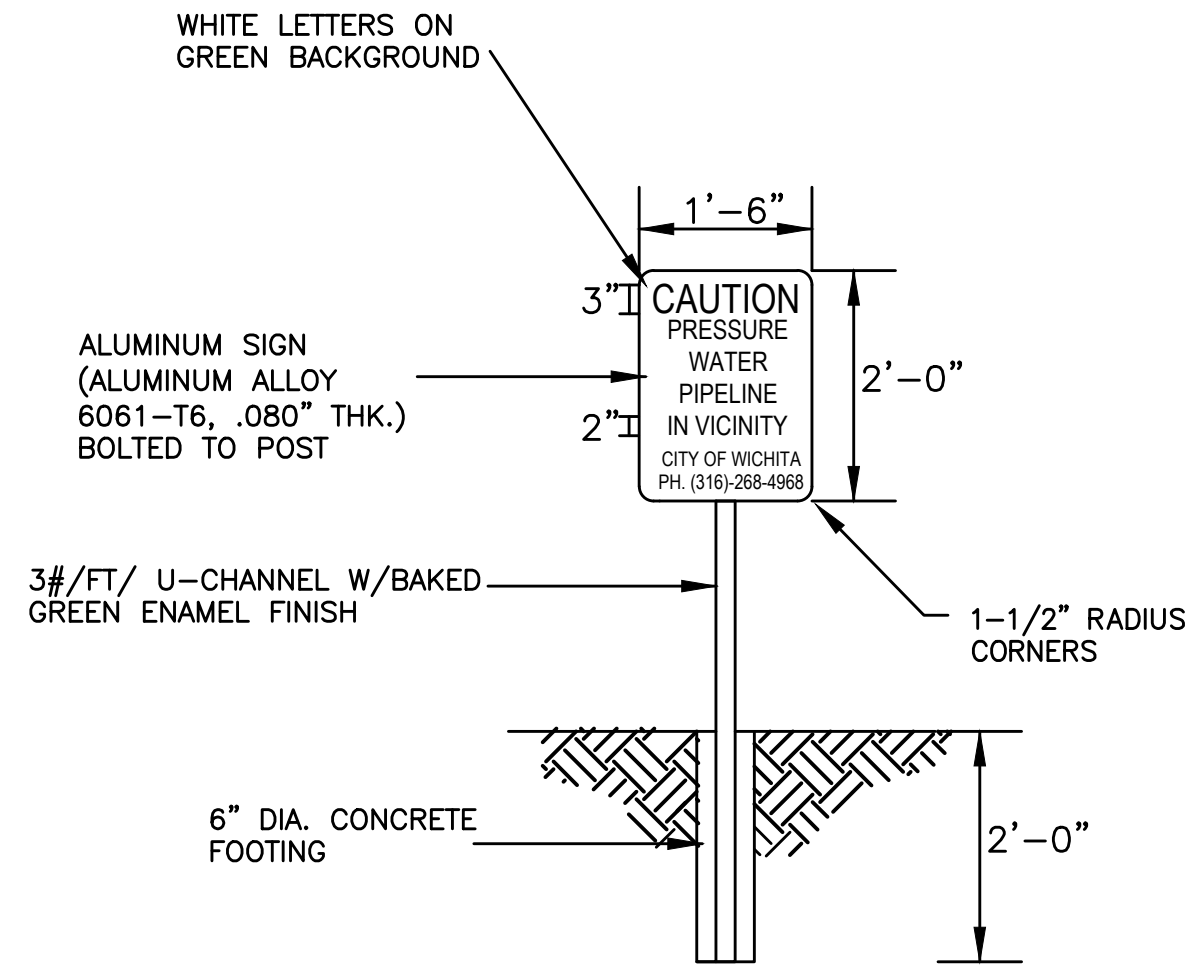


PROJECT NO.
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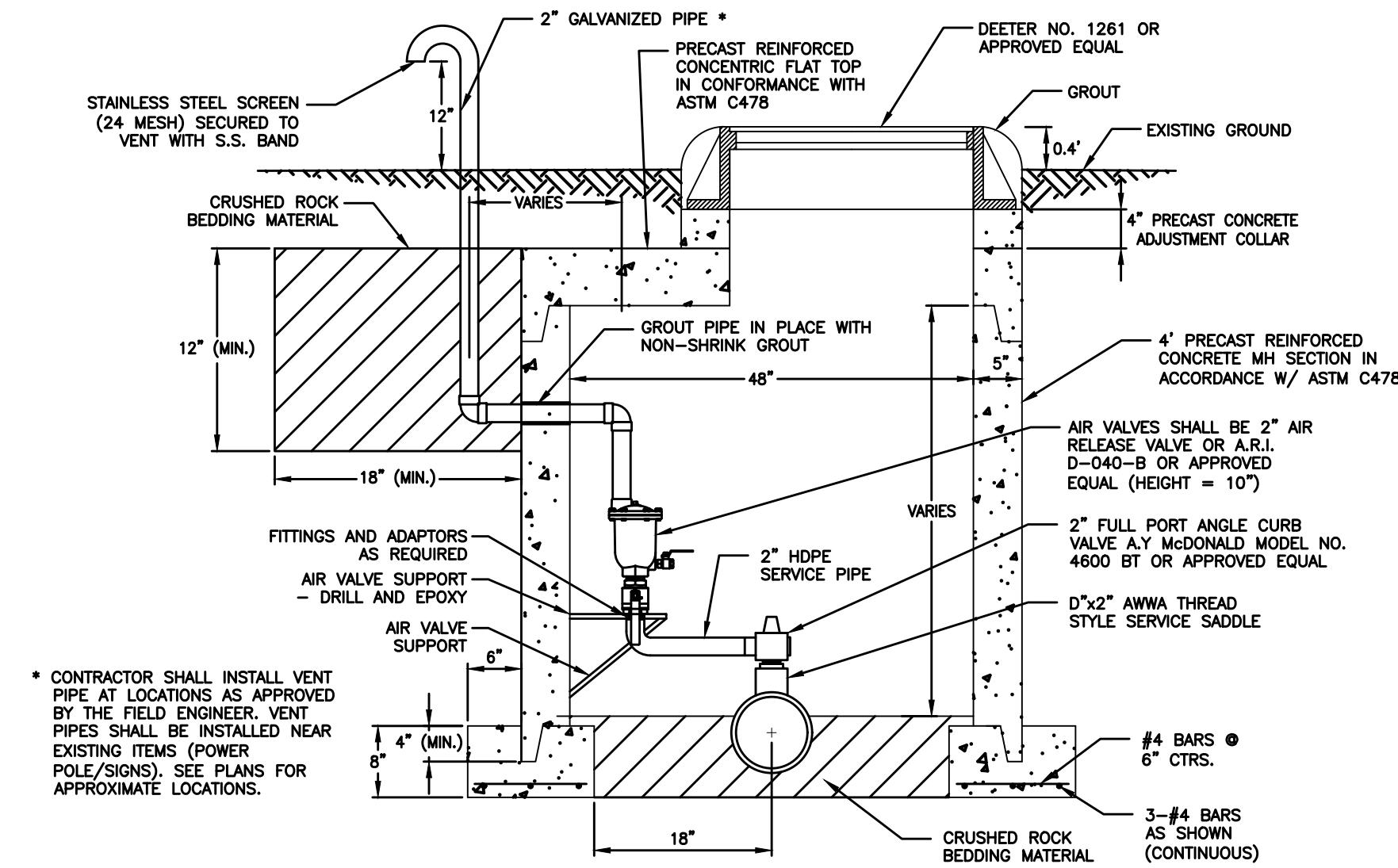
SHEET NO.

30

OF 35



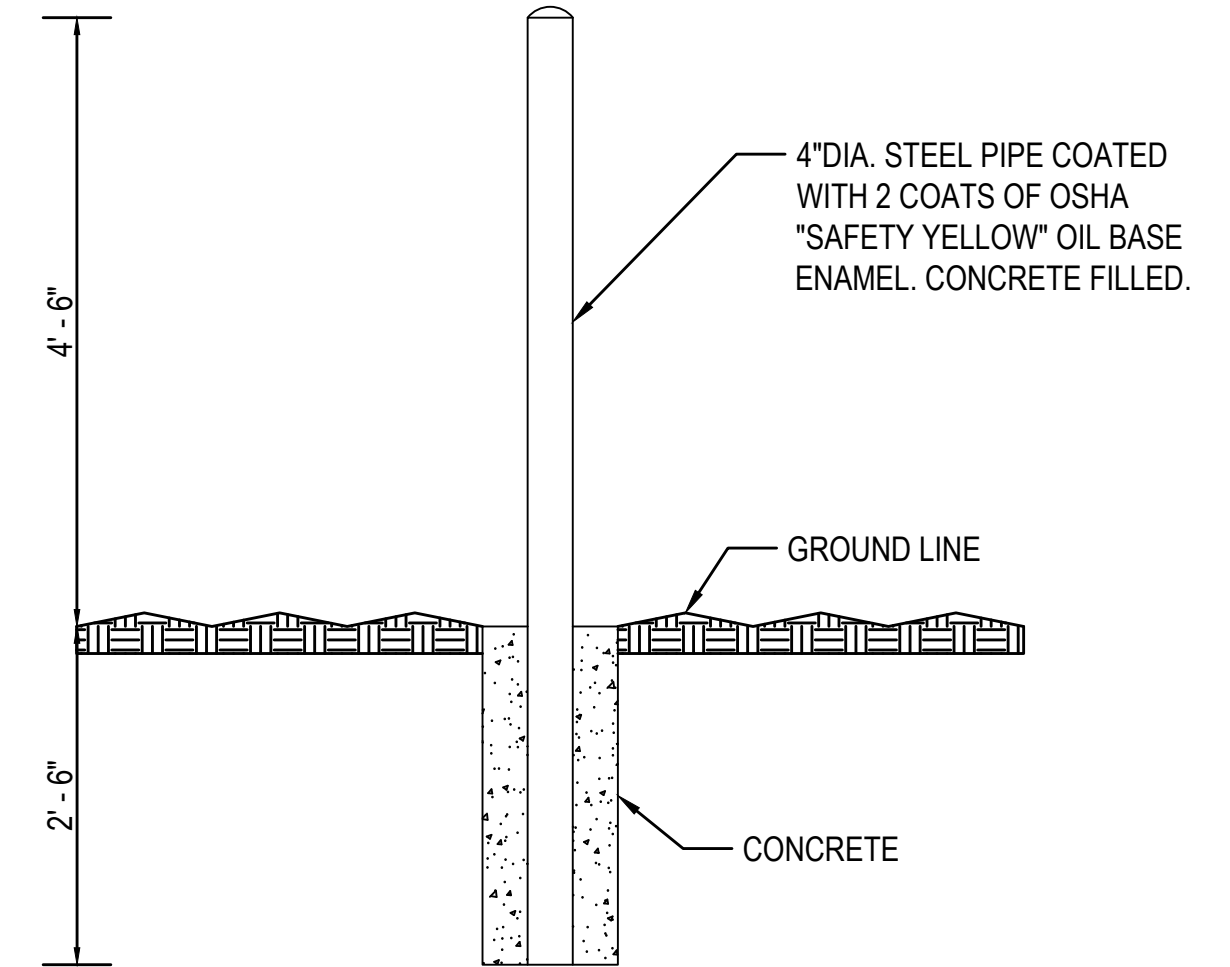
WATER MAIN WARNING SIGN DETAIL (NTS)



CONTRACTOR SHALL INCLUDE 2 WRAPS OF MASTIC OR RUBBER GASKETS (NATURAL OR SYNTHETIC) AT EACH JOINT IN THE MANHOLE. PROVIDE EXTERIOR BITUMINOUS COATING. (ONE COAT VALSPAR HIGH-BUILD BITUMINOUS COATING 35-J-10, OR TNE MEC 46-450 HEAVY TNE MEC OR APPROVED EQUAL.

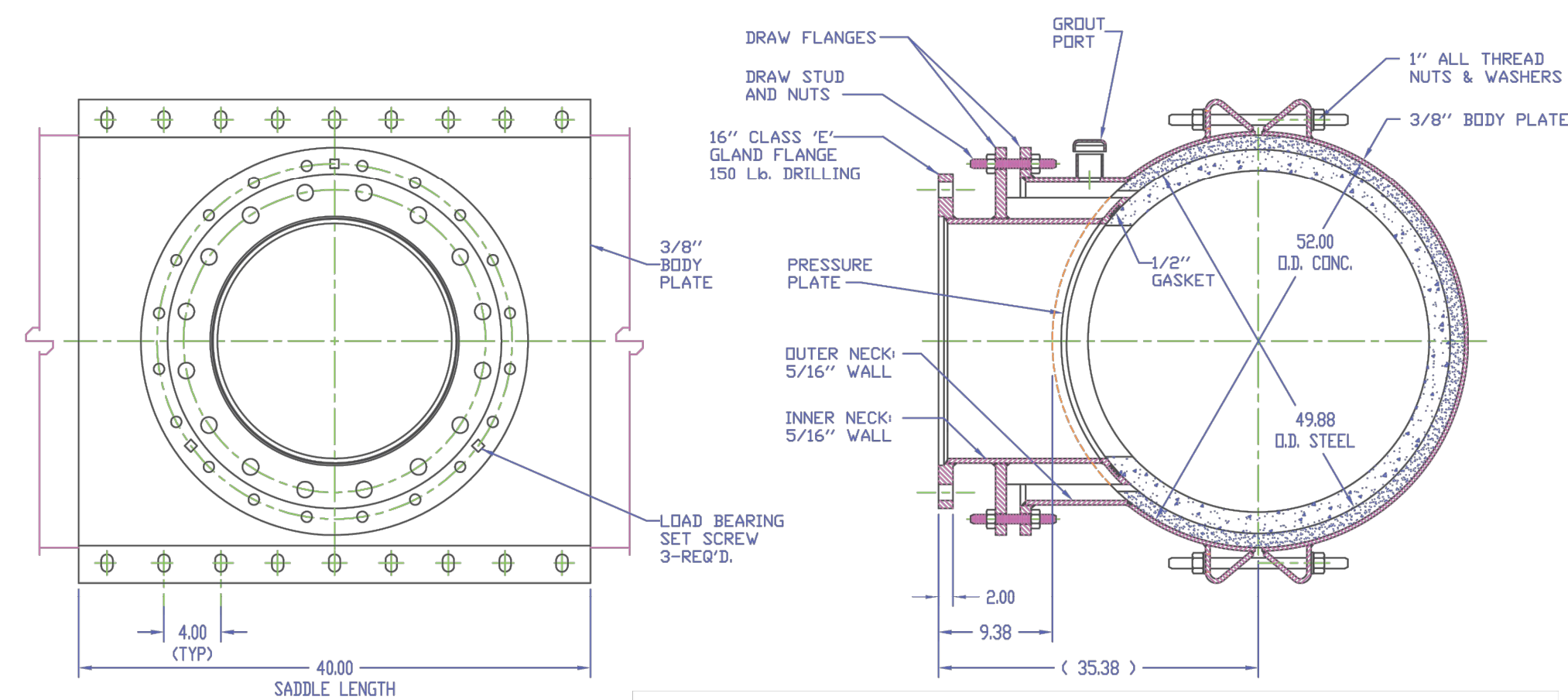
NOTE: 6"x12"x4" SOLID CONCRETE BLOCKS (TYP.) IN 6 PLACES MAY BE SUBSTITUTED FOR "CAST-IN-PLACE" BASE SHOWN HERE.

COMBINATION AIR VALVE DETAIL (NTS)



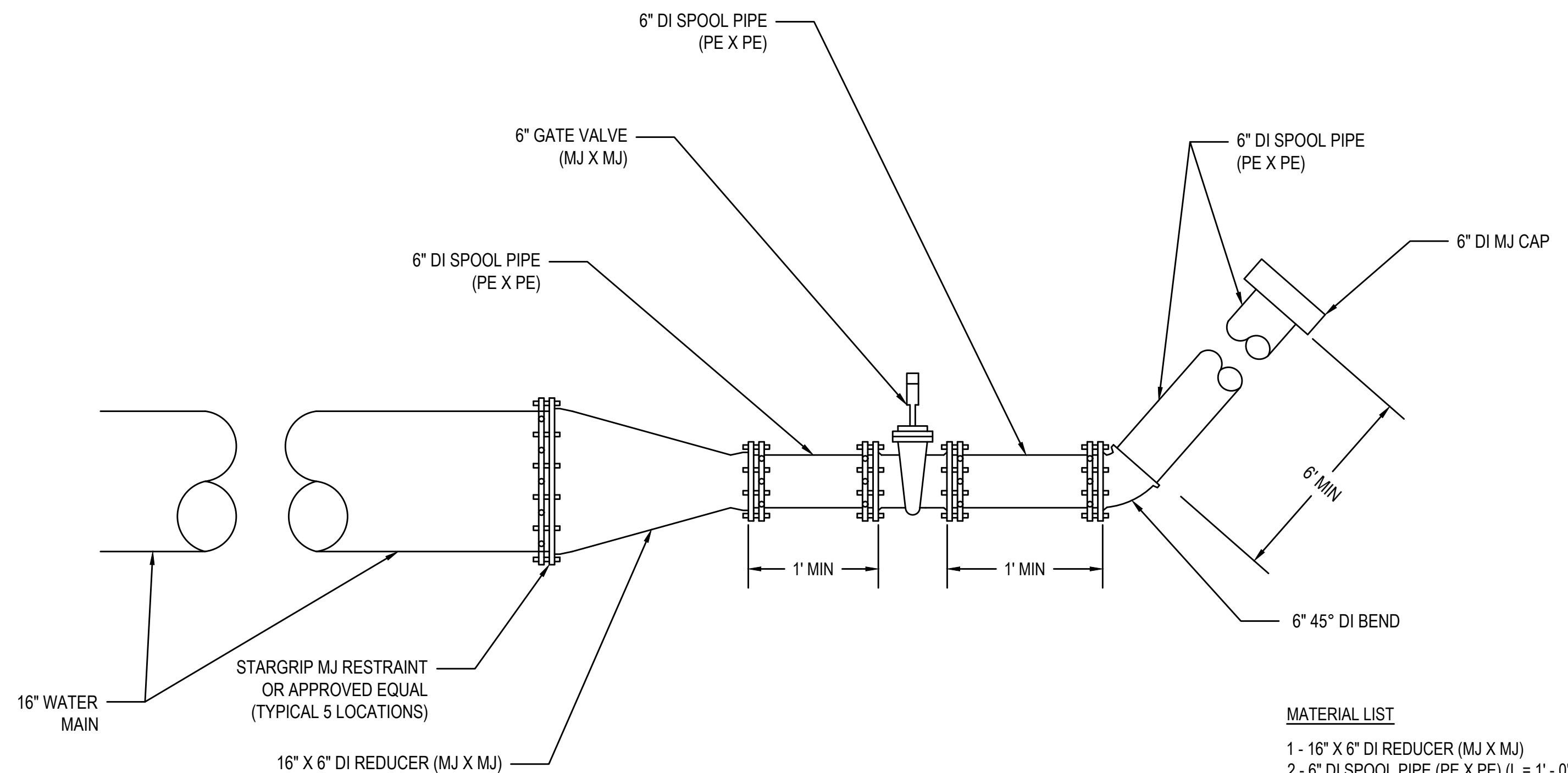
NOTE
1. EACH COMBINATION AIR VALVE STRUCTURE WILL REQUIRE 4 BOLLARDS

PIPE BOLLARD DETAIL (NTS)



NOTES:
1. ALL WELDS PER AWWA STANDARDS.
2. WORKING PRESSURE: 200 PSI.
3. FINISH: EPOXY COAT
4. 304 SS FASTENERS
5. PIPE O.D.'S TO BE VERIFIED
6. VALVE TO BE VERIFIED
7. FULL SIZE CUTTER = 16.00

PCCP TAPPING DETAIL (NTS)



MATERIAL LIST
1 - 16" X 6" DI REDUCER (MJ X MJ)
2 - 6" DI SPOOL PIPE (PE X PE) (L = 1' - 0" MIN)
1 - 6" GATE VALVE (MJ X MJ)
1 - 6" 45° DI BEND (MJ X MJ)
1 - 6" DI SPOOL PIPE (PE X PE) (L = 6' - 0" MIN)
1 - 6" DI MJ CAP
5 - STARGRIP MJ RESTRAINT OR APPROVED EQUAL

6" TEMPORARY BLOWOFF ASSEMBLY (NTS)

REVISIONS:

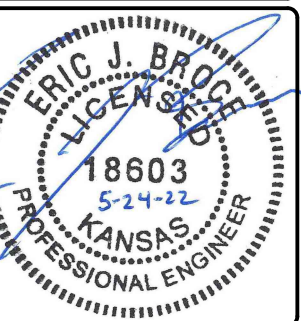
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245 N. WACO AVENUE, SUITE 110
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PHONE: 316-448-2711
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wood.

SIGN & HOT TAP DETAIL

EQUUS WELLFIELD SPURLINE REPLACEMENT
GARY JANZEN, P.E. - CITY ENGINEER
CITY OF WICHITA

DESIGNED BY: EJB
DRAWN BY: JAN
CHECKED BY: ---
DATE: MAY 24, 2022



PROJECT NO.
639020

SHEET NO.
33
OF 35