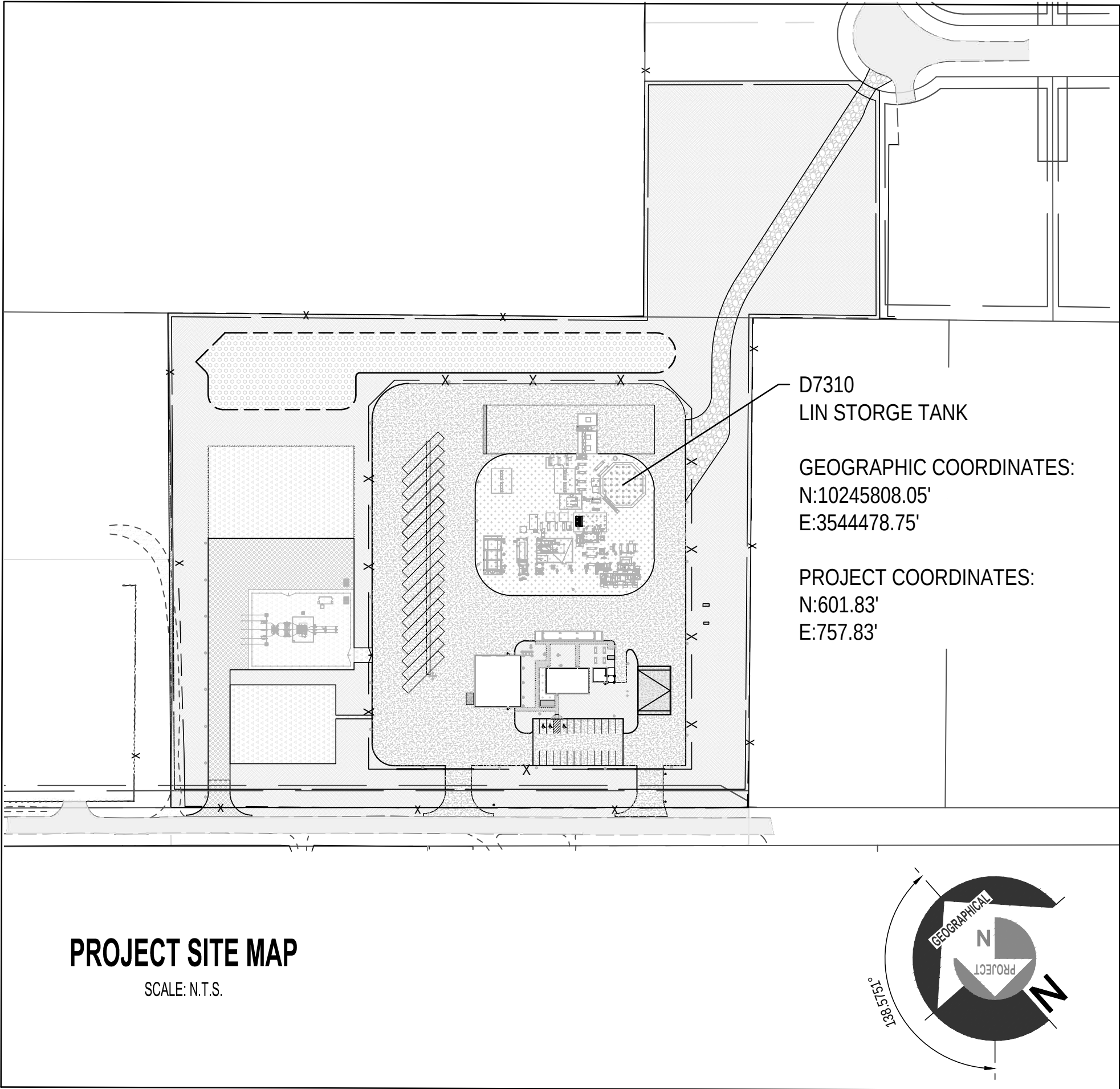


Attachment B

Site Improvement Package

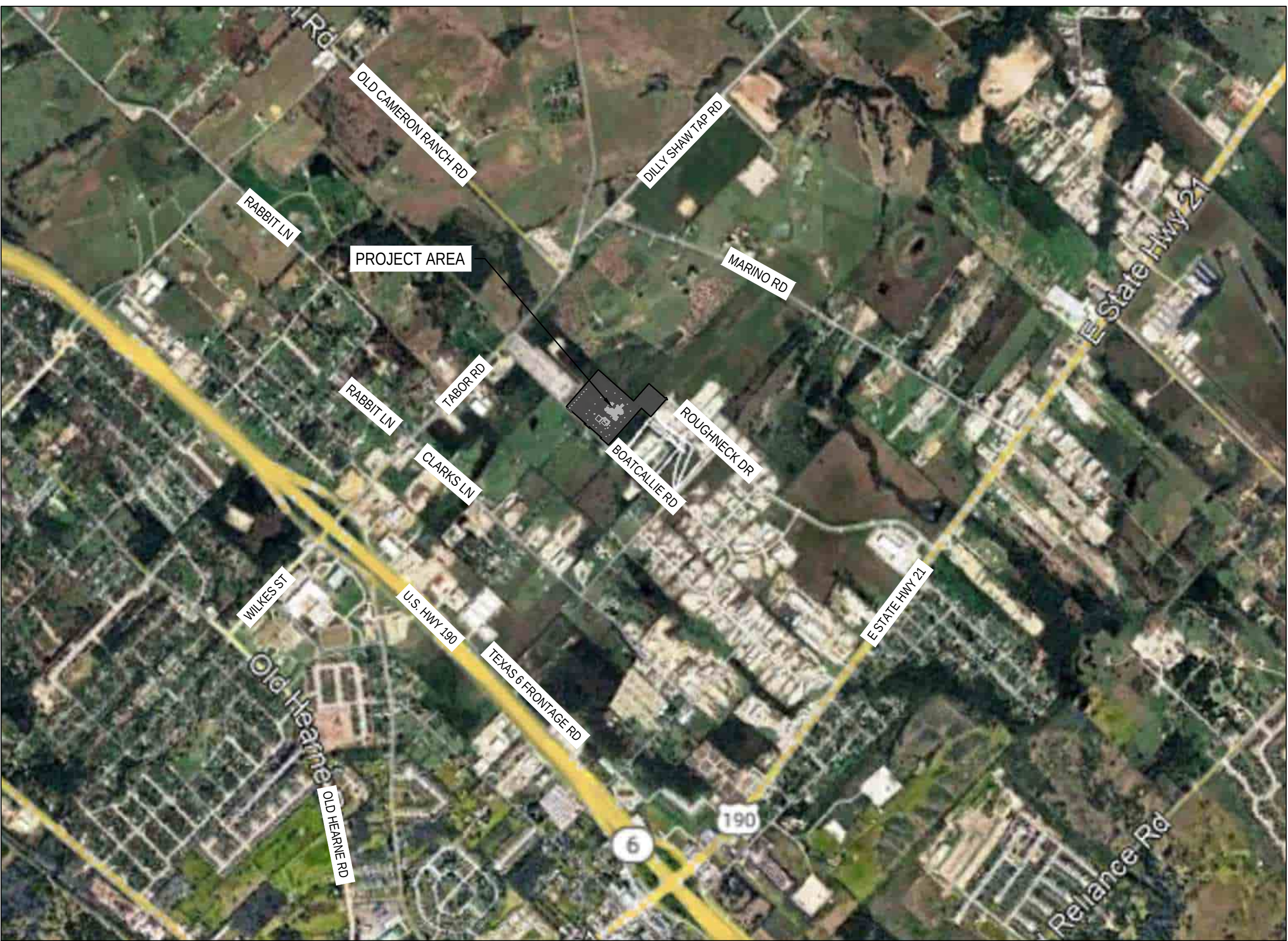
c:\users\seickp\documents\middough\mc\meu2510 - messer - bryan asu\project files\meu2510\middough\05_civil\3d\meu2510_civil-cover-sheet.dwg



SITE IMPROVEMENT PACKAGE

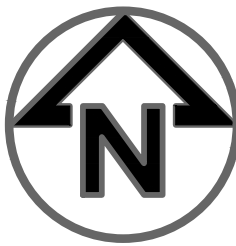
MESSER
AIR SEPARATION UNIT
BRYAN ASU

1096 BOATCALLIE ROAD
BRYAN, TEXAS 77808



SOURCE:
GOOGLE EARTH

LOCATION MAP
(N.T.S.)
LATITUDE: 30.714429°
LONGITUDE: -96.362163°



SHEET INDEX	
SITE IMPROVEMENT PACKAGE	
DRAWING TITLE	DRAWING NUMBER
CIVIL COVER SHEET - SITE IMPROVEMENT PACKAGE	566901-C-D-001-001
EXISTING CONDITIONS PLAN	566901-C-D-002-001
SITE PREPARATION PLAN	566901-C-D-003-001
SITE PLAN - GEOGRAPHICAL SOUTH AREA	566901-C-D-004-001
SITE PLAN - GEOGRAPHICAL NORTH AREA	566901-C-D-004-002
SITE PLAN - TABLES	566901-C-D-004-003
SITE PLAN - SITE FENCING PLAN	566901-C-D-004-004
GRADING PLAN - OVERALL SITE	566901-C-D-005-001
GRADING PLAN - GEOGRAPHICAL SOUTH AREA	566901-C-D-005-101
GRADING PLAN - GEOGRAPHICAL NORTH AREA	566901-C-D-005-102
UNDERGROUND UTILITY PLAN - OVERALL SITE	566901-C-D-006-001
UNDERGROUND UTILITY PLAN - STORM SEWER - GEOGRAPHICAL SOUTH AREA	566901-C-D-006-101
UNDERGROUND UTILITY PLAN - STORM SEWER - GEOGRAPHICAL NORTH AREA	566901-C-D-006-102
STORM SEWER PROFILES	566901-C-D-006-103
STORM SEWER PROFILES	566901-C-D-006-104
UNDERGROUND UTILITY PLAN - WASTEWATER	566901-C-D-006-201
UNDERGROUND UTILITY PLAN - WASTEWATER	566901-C-D-006-202
WASTEWATER PROFILES	566901-C-D-006-203
UNDERGROUND UTILITY PLAN - WATER - GEOGRAPHICAL SOUTH AREA	566901-C-D-006-301
UNDERGROUND UTILITY PLAN - WATER - GEOGRAPHICAL NORTH AREA	566901-C-D-006-302
WATER PROFILES	566901-C-D-006-303
WATER PROFILES	566901-C-D-006-304
CIVIL NOTES AND DETAILS	566901-C-D-008-001
CIVIL NOTES AND DETAILS	566901-C-D-008-002
CIVIL NOTES AND DETAILS	566901-C-D-008-003
CIVIL NOTES AND DETAILS	566901-C-D-008-004
CIVIL NOTES AND DETAILS	566901-C-D-008-005
CIVIL NOTES AND DETAILS	566901-C-D-008-006
CIVIL NOTES AND DETAILS	566901-C-D-008-007
CIVIL NOTES AND DETAILS	566901-C-D-008-008
CIVIL NOTES AND DETAILS	566901-C-D-008-009
CIVIL NOTES AND DETAILS	566901-C-D-008-010
CIVIL NOTES AND DETAILS	566901-C-D-008-011



SCOPE OF WORK:
THE SCOPE OF WORK FOR THE SITE IMPROVEMENT PACKAGE INCLUDES DRAWINGS, DETAILS, SPECIFICATIONS AND NOTES FOR LAND DISTURBING ACTIVITIES RELATED TO PROPOSED INFRASTRUCTURE INCLUDING:
A. MASS GRADING/FINAL GRADING
B. ROADWAYS AND PAVING
C. SITE FENCING
D. CIVIL UNDERGROUND UTILITIES (STORM SEWER, DOMESTIC SANITARY SEWER, PROCESS INDUSTRIAL WASTEWATER, DOMESTIC (POTABLE) WATER, PROCESS (NON-POTABLE) WATER, FIRE PROTECTION WATER).

STORMWATER POLLUTION PREVENTION PLANS INDEX	
DRAWING TITLE	DRAWING NUMBER
STORMWATER POLLUTION PREVENTION PLAN - COVER SHEET	566901-C-D-009-001
STORMWATER POLLUTION PREVENTION PLAN - SITE PLAN - PHASE A	566901-C-D-009-002
STORMWATER POLLUTION PREVENTION PLAN - SITE PLAN - PHASE B	566901-C-D-009-003
STORMWATER POLLUTION PREVENTION PLAN - DETAILS AND SPECIFICATIONS	566901-C-D-009-004
STORMWATER POLLUTION PREVENTION PLAN - DETAILS AND SPECIFICATIONS	566901-C-D-009-005
STORMWATER POLLUTION PREVENTION PLAN - DETAILS AND SPECIFICATIONS	566901-C-D-009-006
STORMWATER POLLUTION PREVENTION PLAN - DETAILS AND SPECIFICATIONS	566901-C-D-009-007
STORMWATER POLLUTION PREVENTION PLAN - DETAILS AND SPECIFICATIONS	566901-C-D-009-008
REFERENCE DRAWINGS	
DRAWING TITLE	DRAWING NUMBER
GEOGRAPHICAL/PROJECT COORDINATE TRANSFORMATION	566901-ZD-D-001-001
SITE VICINITY PLAN	566901-ZD-D-900-001
SITE PLOT PLAN	566901-ZD-D-900-002
CONSTRUCTION ACCESS PLAN	566901-ZD-D-900-003
PRELIMINARY GRADING PLAN	566901-ZD-D-900-004
PRELIMINARY UTILITY PLAN - UTILITY COORDINATION	566901-ZD-D-900-005
VEHICLE TURN PLAN - EMERGENCY VEHICLES	566901-ZD-D-900-006
VEHICLE TURN PLAN - CONSTRUCTION ACCESS	566901-ZD-D-900-007
VEHICLE TURN PLAN - OPERATIONS TRUCK ROUTING	566901-ZD-D-900-008
VEHICLE TURN PLAN - OPERATIONS TRUCK ROUTING	566901-ZD-D-900-009
TOPOGRAPHIC EXHIBIT BY KERR SURVEYING, DATED: 12/10/2025	25-0712-S (SHEET 1 OF 2)
TOPOGRAPHIC EXHIBIT BY KERR SURVEYING, DATED: 12/10/2025	25-0712-S (SHEET 2 OF 2)
ALT/NSPS LAND TITLE SURVEY PLAT BY KERR SURVEYING, DATED: 01/13/2026	25-0712-ALTA

CITY OF BRYAN SPECIFICATIONS INDEX	
DOCUMENT TITLE	DOCUMENT NUMBER
CEMENT STABILIZED SAND BACKFILL	SECTION 31 23 23.53
MAIN LINE VALVES	SECTION 33 12 16
FIRE HYDRANTS	SECTION 33 12 19
SEEDING FOR EROSION CONTROL	SECTION 32 92 19
POLYVINYLCHLORIDE PIPE AND FITTINGS	SECTION 33 05 01
DUCTILE IRON PIPE	SECTION 33 05 02
MIDDOUGH SPECIFICATIONS INDEX	
DOCUMENT TITLE	DOCUMENT NUMBER
SUBDRAINAGE	566901-C-S-334600-001
FACILITY SANITARY SEWERS	566901-C-S-221313-001
CONCRETE PAVING	566901-C-S-321313-001
TURF AND GRASSES	566901-C-S-329200-001
SITE WATER DISTRIBUTION PIPING	566901-C-S-331415-001
STORMWATER CONVEYANCE	566901-C-S-334200-001
MESSER SPECIFICATIONS INDEX	
DOCUMENT TITLE	DOCUMENT NUMBER
PVC PIPING MATERIAL SPECIFICATION	00000-P-S-001/1P1
HDPE PIPING MATERIAL SPECIFICATION - 150# (1P4)	00000-P-S-001/1P4
SPECIFICATIONS FOR UNDERGROUND PIPING TRACER WIRE	00000-P-S-747
CLEANING STANDARD FOR PIPING, VESSELS AND COMPONENTS	00000-P-S-084-00-1
PIPING SYSTEM PRESSURE AND LEAK TESTING SPECIFICATION	00000-P-S-104
PIPING SYSTEM HYDROSTATIC TESTING SPECIFICATION	00000-P-S-105

CITY CONTACT:
CITY OF BRYAN PUBLIC WORKS
979-209-5900

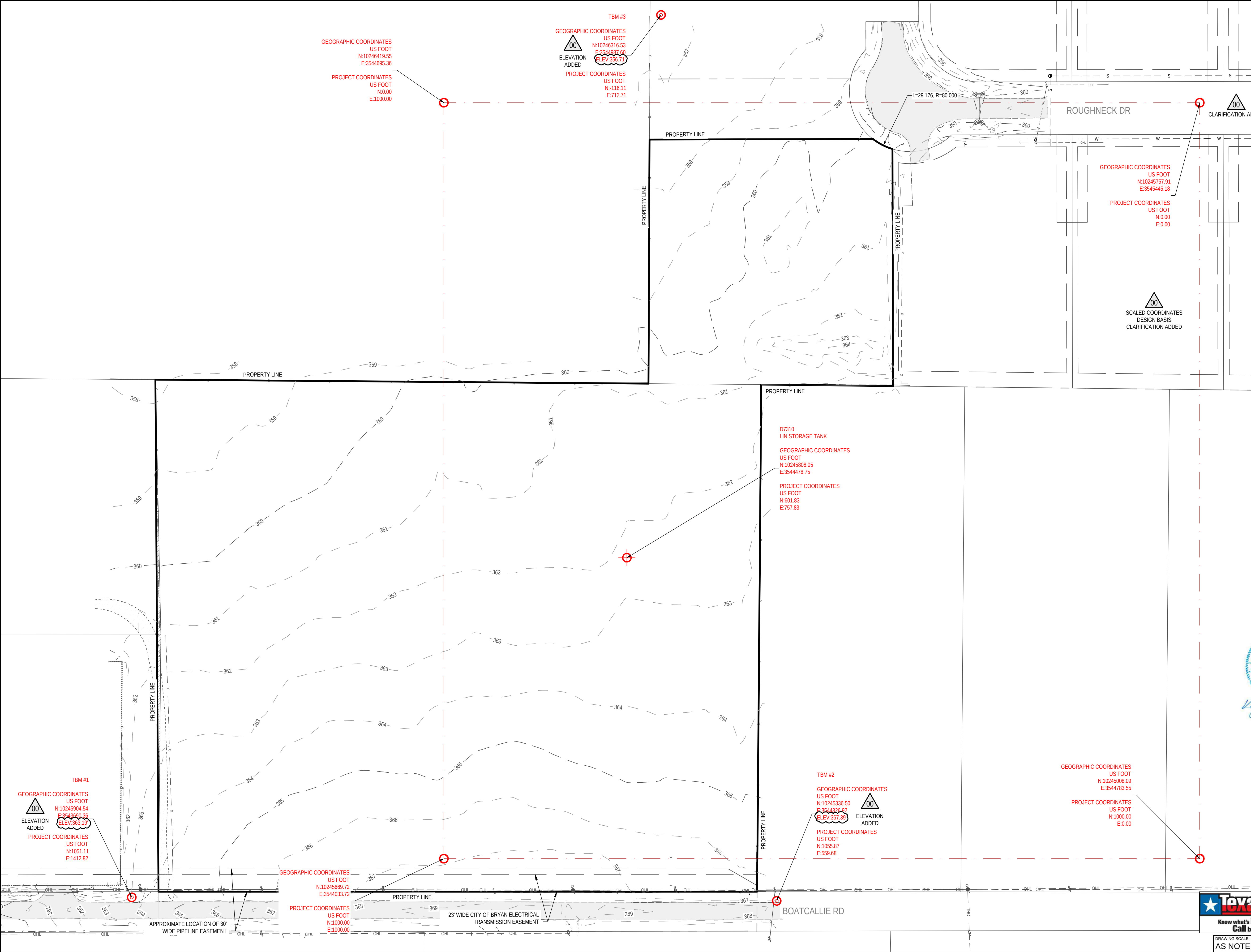
ENGINEER'S CONTACT:
MIDDOUGH
1901 EAST 13TH STREET, SUITE 400
CLEVELAND, OHIO 44114
(216) 367-6163
JOSEPH KHATER, PE
JOSEPH.KHATER@MIDDOUGH.COM



00	09/10/26	ISSUED FOR CONSTRUCTION	
00D	07/29/26	ISSUED FOR PERMIT	
NO.	DATE	REVISIONS	
MESSER Gases for Life		 PROJECT DEVELOPMENT FIRM NUMBER: F-4433	
CLIENT: MESSER NA		CLIENT PROJ #: 566901	
PROJECT: BRYAN ASU			
DESCRIPTION: CIVIL COVER SHEET			
DRAWN BY: MIDD	CHECKED BY: KPS	APPROVED BY:	SHEET ISSUE DATE: 10/17/2025
DRAWING NO.: 566901-C-D-001-001			REV.: 00

DRAWING SCALE:
AS NOTED

c:\users\seickp\documents\middough\nc\meu2510\middough05_civil\3d\meu2510_civil-layouts.dwg



EXISTING CONDITIONS AND CAD MODELING:
THE TSPS STANDARD LAND AND TOPOGRAPHIC SURVEY PLAT BY KERR SURVEYING, DATED 6/18/2025, PRODUCED USING CONVENTIONAL GROUND SURVEY TECHNIQUES AND SUPPLEMENTED WITH ORTHO-RECTIFIED IMAGERY AND SURFACE INFORMATION OBTAINED BY AERIAL DRONE LIDAR METHODS WERE USED FOR THE PREPARATION OF THE EXISTING CONDITIONS CAD MODELING FOR THIS PROJECT.

GEOGRAPHICAL COORDINATES:
PER THE TSPS STANDARD LAND AND TOPOGRAPHIC SURVEY PLAT, THE BEARING SYSTEM IS BASED ON THE TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203), GRID NORTH AS ESTABLISHED FROM GPS OBSERVATION USING THE LEICA SMARTNET VAD83 (NAD2011) EPOCH 2010 MULTI-YEAR COBS SOLUTION 2 (MVC52). SCALED DRAWING COORDINATES FOR TEMPORARY BENCHMARKS HAVE BEEN PROVIDED ON THE PLAT.

VERTICAL ELEVATION DATUM:
THE VERTICAL ELEVATION DATUM USED IS NAVD 1988 (GEOID12B).

GEOGRAPHICAL AND PROJECT HORIZONTAL COORDINATES AND ELEVATION DATUM:
PROJECT COORDINATES AND ELEVATIONS HAVE BEEN ESTABLISHED IN ADDITION TO THE GEOGRAPHICAL COORDINATES AND ELEVATIONS. THE CIVIL SERIES DRAWINGS UTILIZE THE GEOGRAPHICAL COORDINATE SYSTEM. THE REMAINDER OF THE DISCIPLINE SPECIFIC DRAWINGS UTILIZE THE PROJECT COORDINATE SYSTEM. CIVIL DRAWINGS USE THE NAVD88 ELEVATION DATUM AND THE OTHER MIDDOUGH DISCIPLINE DRAWINGS USE THE PROJECT ELEVATION DATUM.

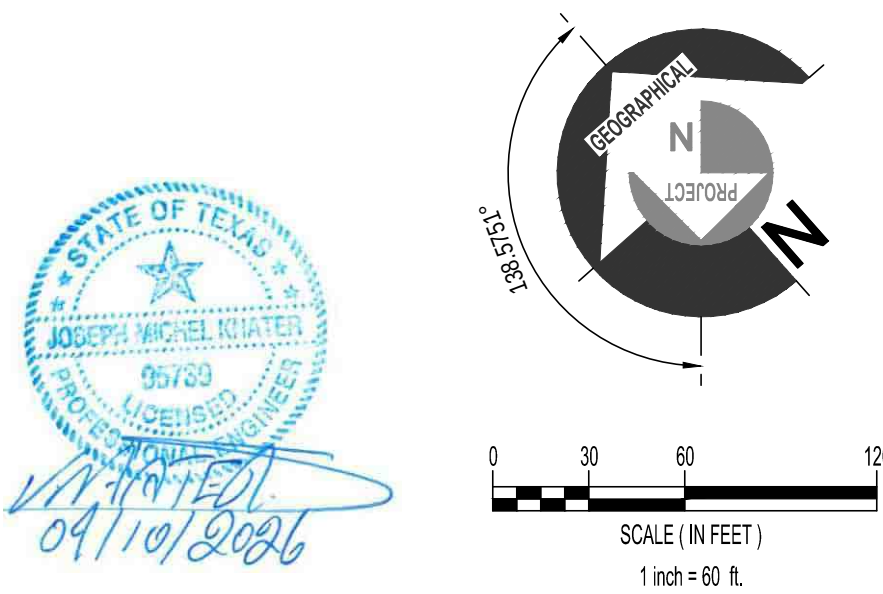
366.75' (NAVD 88) = 100.00' (PROJECT)
SUBTRACT 266.75 FEET FROM GEOGRAPHICAL ELEVATIONS TO OBTAIN PROJECT ELEVATIONS.
ADD 266.75 FEET TO PROJECT ELEVATIONS TO OBTAIN GEOGRAPHICAL ELEVATIONS.

THE PROJECT COORDINATE GRID SYSTEM, IDENTIFIED BY COORDINATES (0,0), (0,1000), (1000,0) & (1000,1000) ARE SET RELATIVE TO PROJECT CONDITIONS (PROPERTY LINES, ETC.) AND THE CENTER OF THE D7310 LIN STORAGE TANK. NO PHYSICAL CONTROL POINTS HAVE BEEN SET IN THE FIELD FOR THESE PROJECT COORDINATES SHOWN.

CONTROL POINTS:
AS SHOWN ON THIS DRAWING, THREE TEMPORARY CONTROL POINTS (TBM #1, TBM #2, AND TBM #3) HAVE BEEN SET BY KERR SURVEYING. PER THE TSPS STANDARD LAND AND TOPOGRAPHIC SURVEY PLAT, GEOGRAPHICAL SCALED COORDINATES HAVE BEEN REPORTED FOR THESE CONTROL POINTS AS THE BASIS FOR THE CIVIL DESIGN. PROJECT COORDINATES HAVE ALSO BEEN ASSIGNED TO THESE POINTS TO AID THE CONTRACTOR IN ESTABLISHING THE PROJECT COORDINATE GRID SYSTEM. THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE PROVIDED COORDINATES, BY SURVEYING METHODS, PRIOR TO CONSTRUCTION. IT SHALL ALSO BE THE CONTRACTORS RESPONSIBILITY TO ESTABLISH HIS OWN PERMANENT CONTROL POINTS/BENCHMARKS FOR CONSTRUCTION PURPOSES.

UTILITY SYMBOL LEGEND	
EXISTING	DESCRIPTION
W	WATER
G	NATURAL GAS
OHL	STORM SEWER
S	AERIAL POWER/COMMUNICATION
WW	SANITARY SEWER
WW	PROCESS WASTEWATER

SURFACE COVER LEGEND	
PATTERN	DESCRIPTION
	EXISTING ASPHALT PAVEMENT



00	09/10/26	ISSUED FOR CONSTRUCTION
00C	04/17/26	ISSUED FOR PERMIT
NO.	DATE	REVISIONS
MESSER Gases for Life		middough PROFESSIONAL ENGINEERING FIRM NUMBER: F-4433
CLIENT: MESSER NA		CLIENT PROJ #: 566901
PROJECT: BRYAN ASU		
DESCRIPTION: EXISTING CONDITIONS PLAN		
DRAWN BY: MIDD	CHECKED BY: KPS	APPROVED BY:
DRAWING NO.: 566901-C-D-002-001	SHEET ISSUE DATE: 10/17/2025	
DRAWING SCALE: AS NOTED		REV: 00

MIDDOUGH PROJ #: MEU2510

SITE PREPARATION PLAN KEYED NOTES:

- A** SEQUENCE EQUIPMENT CONSTRUCTION OPERATIONS TO FACILITATE THE FLAT BOTTOM TANK FOUNDATION AS AN EARLY PHASE OF CONSTRUCTION. SEE THE GEOTECHNICAL REPORT FOR THE SITE PREPARATION REQUIREMENTS.
- B** SEQUENCE BUILDING CONSTRUCTION OPERATIONS TO FACILITATE THE COMPLETION OF THE TRUCK MAINTENANCE BUILDING AS AN EARLY PHASE OF CONSTRUCTION FOR STORAGE PURPOSES.
- C** CONSTRUCT TEMPORARY CONTRACTOR PARKING LOT.
- D** CONSTRUCT PERMANENT DRIVEWAY.
- E** CONSTRUCT TEMPORARY CONSTRUCTION HAUL ROAD.
- F** CONSTRUCT TEMPORARY SUBSTATION LAYDOWN AND TRAILER AREA.
- G** CONSTRUCT TEMPORARY FLAT BOTTOM TANK LAYDOWN AREA AND FABRICATION AREA. FUTURE EQUIPMENT OR PIPE LAYDOWN AREA AS NEEDED. (PROVIDE SPACE TO FABRICATE TWO 60' DIAMETER ROOFS).
- H** CONSTRUCT TEMPORARY ELECTRICAL LAYDOWN AREA.
- I** TEMPORARY MESSER CONSTRUCTION TRAILER. SEE DRAWINGS BY OTHERS.
- J** TEMPORARY CONSTRUCTION TRAILER. SEE DRAWINGS BY OTHERS.
- K** CONSTRUCT TEMPORARY EQUIPMENT LAYDOWN AREA.
- L** CONSTRUCT TEMPORARY WELD HOOCH
- M** PERMANENT ONE-WAY FACILITY DRIVE ACCESS.
- N** STORMWATER MANAGEMENT BASIN.
- O** STORMWATER MANAGEMENT BASIN OUTFALL -001.
- P** POTENTIAL SOIL IMPROVEMENT AREAS. SEE SOIL IMPROVEMENT NOTE.

REFERENCES:

- REFERENCE APPLICABLE SPECIFICATION FOR ALL WORK UNDER THIS INSTALLATION. SEE SPECIFICATIONS INDEX ON CIVIL COVER SHEET DRAWING, 566901-C-D-001-001.
- REFERENCE DRAWING 566901-C-D-002-001 FOR THE INFORMATION RELATED TO COORDINATES AND DATUM INFORMATION INCLUDING REFERENCE POINTS, CONTROL POINTS, AND BENCHMARKS.
- REFERENCE THE UNDERGROUND UTILITY PLANS, 566901-C-D-006 SERIES DRAWINGS.
- REFERENCE THE CIVIL NOTES AND DETAILS, 566901-C-D-008 SERIES DRAWINGS.
- REFERENCE THE STORMWATER POLLUTION PREVENTION PLANS, 566901- C-D-009 SERIES DRAWINGS.
- REFERENCE STRUCTURAL DRAWINGS FOR THE TOP OF EQUIPMENT PAD ELEVATIONS.
- REFERENCE THE GEOTECHNICAL REPORT FOR ALL WORK UNDER THIS PROJECT.

TBM #3
GEOGRAPHIC COORDINATES
US FOOT
N:10246316.53
E:3544987.60
ELEV:356.71'

PROJECT COORDINATES
US FOOT
N:116.11
E:712.71

ROUGH GRADE ELEVATION TABLE		
AREA	THICKNESS FROM ROUGH GRADE TO FINAL SURFACE	FINAL SURFACE COVER
ASU AREA	9"	AGGREGATE
SUBSTATION ENTRANCE DRIVE	14"	AGGREGATE
TEMPORARY CONSTRUCTION TRAILERS TEMPORARY EQUIPMENT LAYDOWN AREA TEMPORARY ELECTRICAL LAYDOWN AREA TEMPORARY FLAT BOTTOM TANK LAYDOWN AREA	23"	RIGID PAVEMENT
TEMPORARY CONSTRUCTION ROAD TEMPORARY SUBSTATION LAYDOWN TEMPORARY CONTRACTOR PARKING	14"	LAWN
GENERAL LAWN AREAS STORMWATER MANAGEMENT BASIN AREAS	6"	LAWN
SUBSTATION AREA		BY OTHERS

SITE GRADING SCOPE AND INTENT:

- STRIPPING SURFACE PHASE:
NOTE: THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR DETERMINING ALL STRIPPING DEPTHS.
- REMOVE FROM THE PROPOSED CONSTRUCTION AREA THE FOLLOWING:
 - ALL DELETERIOUS AND SURFICIAL ORGANIC MATERIALS INCLUDING TOPSOIL.
 - ALL BROWN, HIGH PLASTICITY (FAT), CLAY SOILS FROM THE ASU AREA AND BENEATH ALL PROPOSED BUILDINGS.
 - STRIP SURFACE MATERIALS FROM THE STORMWATER MANAGEMENT BASIN AREA AS NECESSARY FOR BASIN CONSTRUCTION.
 - PROVIDE POSITIVE DRAINAGE TO THE STORMWATER MANAGEMENT BASIN.
- ROUGH GRADE SURFACE:
- ESTABLISH THE ROUGH GRADE SURFACE ELEVATION BY EXCAVATION OR EMBANKMENT TO MEET THE ROUGH GRADE ELEVATIONS. SEE ROUGH GRADE ELEVATION TABLE ON THIS DRAWING FOR INTENDED ELEVATIONS.
 - CONTINUE TO PROVIDE POSITIVE DRAINAGE TO THE STORMWATER MANAGEMENT BASIN.
 - REFERENCE THE FINAL SURFACE ELEVATIONS ON THE GRADING PLANS, DRAWINGS 566901-C-D-005-001, 566901-C-D-005-101 AND 566901-C-D-005-102.
 - CONSIDER THE TOTAL PROPOSED SURFACING SECTION THICKNESS AND SUBBASE AGGREGATE LAYER THICKNESS (SITE PREPARATION SUBBASE) IN ORDER TO ESTABLISH THE ROUGH GRADE ELEVATION. REFERENCE THE SITE PREPARATION SECTION AND FINAL SURFACING SECTIONS ON THE NOTE AND DETAIL DRAWING, 566901-C-D-008-004.

SOIL IMPROVEMENT NOTE:

THE GEOTECHNICAL REPORT INDICATES RECOMMENDATIONS FOR SOIL IMPROVEMENT PRACTICES RELATED TO LIGHTLY LOADED BUILDING/EQUIPMENT FOUNDATIONS WITH RESPECT TO THE IN-SITU SOILS AND POTENTIAL VERTICAL RISE (PVR). THE STRUCTURAL ENGINEER RESPONSIBLE FOR THE DESIGN OF THE FOUNDATIONS IN THE SHADED AREAS SHALL REVIEW THE GEOTECHNICAL REPORT AND INTEGRATE THE DESIGN OF THE AFFECTED FOUNDATIONS TOGETHER WITH ANY NECESSARY SOIL IMPROVEMENTS IN THOSE AREAS. ALL COORDINATION SHALL BE PRESENTED ON THE FOUNDATION DESIGN DRAWINGS.

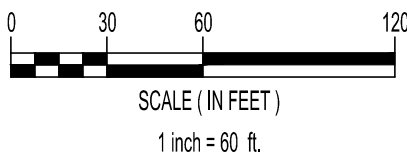
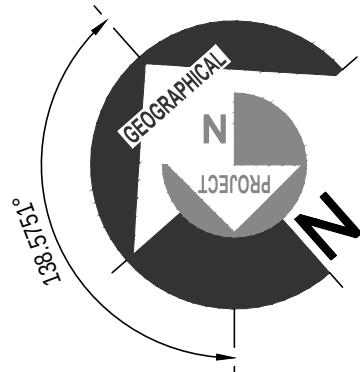
PRIOR TO CONSTRUCTION, THE EARTHWORK CONTRACTOR IS RESPONSIBLE TO REVIEW ALL STRUCTURAL FOUNDATION DESIGNS TO EVALUATE ANY AND ALL NECESSARY SOIL IMPROVEMENTS. THE CONTRACTOR SHALL COORDINATE THE DIVISION OF SCOPE BETWEEN THEIR CONTRACT AND OTHER FOUNDATION PACKAGES/CONTRACTORS AND THE SCHEDULING OF SOIL IMPROVEMENT WORK WITH MESSER.

SURFACE COVER LEGEND	
PATTERN	DESCRIPTION
	PROPOSED TEMPORARY AGGREGATE DRIVEWAY (CONSTRUCTION ACCESS) TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION.
	PROPOSED CONCRETE PAVEMENT
	EXISTING ASPHALT PAVEMENT
	PROPOSED AGGREGATE (TEMPORARY SUBSTATION LAYDOWN AREA, TEMPORARY CONTRACTOR PARKING AREA). TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION
	AGGREGATE BY OTHERS (SUBSTATION AREA)
	PROPOSED PERMANENT AGGREGATE ACCESS DRIVEWAY (SERVING THE TEMPORARY SUBSTATION LAYDOWN AREA, TEMPORARY CONTRACTOR PARKING AREA AND PERMANENT SUBSTATION AREA)
	PROPOSED PERMANENT AGGREGATE (ASU AREA)
	PROPOSED SEEDED AREA
	PROPOSED CONCRETE SIDEWALK
	PROPOSED STORMWATER MANAGEMENT BASIN
	PROPOSED LAYDOWN AREA

UTILITY SYMBOL LEGEND	
EXISTING	DESCRIPTION
	WATER
	NATURAL GAS
	STORM SEWER
	AERIAL POWER/COMMUNICATION
	SANITARY SEWER
	PROCESS WASTEWATER

SITE PREPARATION PLAN NOTES:

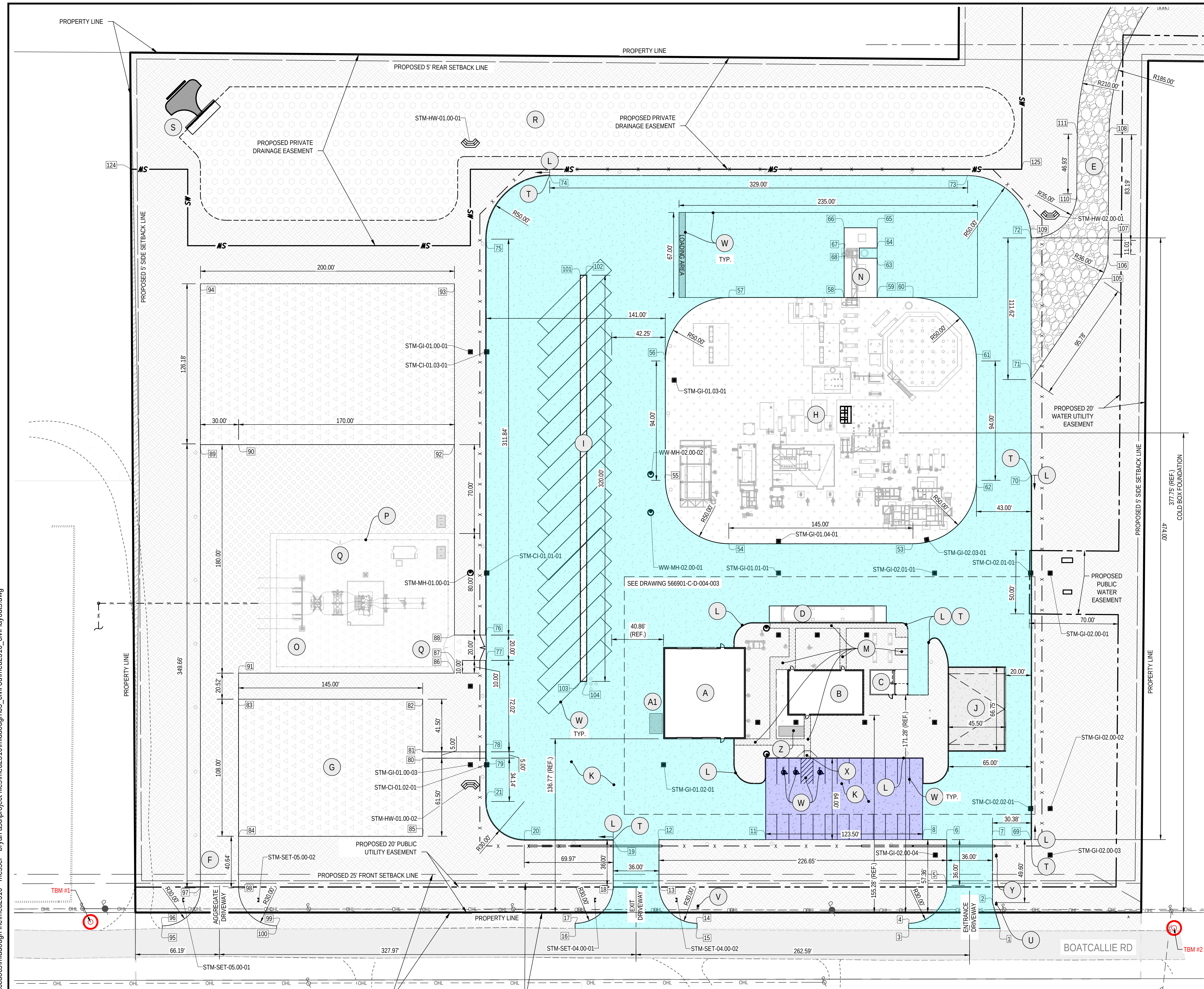
- THIS DRAWING DEPICTS THE WORK REQUIRED DURING THE CIVIL SITE PREPARATION PACKAGE PHASE RELATED TO THE GENERAL SITE AREAS DURING CONSTRUCTION OPERATIONS (IDENTIFIED BY THE KEYED NOTES). SEE ALSO THE RELATED DRAWINGS INCLUDED AS PART OF THE COMPLETE CIVIL SITE IMPROVEMENT PACKAGE FOR THE REMAINDER SCOPE OF THE CIVIL WORK.
- GRADING AND GENERAL EARTHWORK AS PART OF THE SITE PREPARATION PACKAGE IS COVERED UNDER THIS DRAWING. THE STORMWATER POLLUTION PREVENTION PLAN (PHASE A), THE CIVIL SITE DETAILS AND SPECIFICATIONS, THE PROJECT SPECIFICATIONS, AND THE PROJECT GEOTECHNICAL REPORT.
- SOIL IMPROVEMENTS AS MAY BE NECESSARY FOR STRUCTURAL FOUNDATIONS AT EQUIPMENT AND AT ANCILLARY BUILDINGS ON THE PROJECT ARE NOT DEPICTED. REFERENCE THE STRUCTURAL DRAWINGS, THE BUILDING VENDOR DRAWINGS AND THE GEOTECHNICAL REPORT.
- THE CIVIL SITE PREPARATION PACKAGE AND THE CIVIL SITE IMPROVEMENT PACKAGE DO NOT CONVEY THE ENTIRE WORK SCOPE FOR THE FACILITY. THE CONTRACTOR SHALL COORDINATE WORK AS SHOWN ON THE DRAWINGS (INCLUDING INTERFACING ELEMENTS) WITH OTHER PROJECT DRAWINGS.
- THE BACKGROUND SITE DESIGN SHOWN HEREON IS FOR REFERENCE PURPOSES ONLY. SEE RELATED PROJECT DRAWINGS FOR ALL SUCH WORK.
- ALL EARTHWORK, INCLUDING SITE PREPARATION (EX. SOIL REMOVALS/PROOF-ROLLING), APPROVED FILL MATERIALS, SUBGRADE PREPARATION, DRAINAGE AND OTHER SOIL IMPROVEMENT RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER OF RECORD SHALL BE FOLLOWED IN THEIR ENTIRETY AS PART OF THIS CONTRACT.
- THE GEOTECHNICAL ENGINEER OF RECORD SHALL BE ENGAGED FOR ONSITE INSPECTION AND THE REVIEW AND APPROVAL OF ALL GEOTECHNICAL-RELATED CONSTRUCTION WORK TO BE IN ACCORDANCE WITH GEOTECHNICAL REPORT AND RELEVANT PLANS AND SPECIFICATIONS.
- MATERIALS SUBMITTALS AND QUALITY CONTROL DOCUMENTATION FOR RELATED WORK SHALL BE PRESENTED TO THE GEOTECHNICAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL.



00	09/10/26	ISSUED FOR CONSTRUCTION
00D	07/29/26	ISSUED FOR PERMIT
NO.	DATE	REVISIONS
MESSER Gases for Life		middough FIRM NUMBER: F-4433
CLIENT: MESSER NA		CLIENT PROJ #: 566901
PROJECT: BRYAN ASU		
DESCRIPTION: SITE PREPARATION PLAN		
DRAWN BY: MIDD	CHECKED BY: KPS	APPROVED BY:
DRAWING NO.:		SHEET/ISSUE DATE: 10/17/2025
DRAWING SCALE: AS NOTED		REV:
566901-C-D-003-001		00

MIDDOUGH PROJ.#: MEU2510

c:\users\sc\appdata\local\temp\mddough05_civil\3dmeu2510_civil-layouts.dwg - messer - bryan asu\project files\meu2510\mddough05_civil\3dmeu2510_civil-layouts.dwg



SITE PLAN NOTES:

- THE CIVIL SITE IMPROVEMENT DRAWING PACKAGE DOES NOT CONVEY THE ENTIRE CIVIL WORK SCOPE FOR THE FACILITY. COORDINATE WORK AS SHOWN ON THE DRAWINGS (INCLUDING INTERFACING ELEMENTS) WITH OTHER PROJECT DRAWINGS.
- ALL MINIMUM BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH THE CITY OF BRYAN CODE OF ORDINANCES.
- THE SUBJECT PROPERTY IS ZONED PLANNED DEVELOPMENT - INDUSTRIAL DISTRICT (PD-I) PER ORDINANCE NO. 2764 WHICH WAS PASSED BY THE BRYAN CITY COUNCIL ON NOVEMBER 18, 2025.

UTILITY SYMBOL LEGEND	
EXISTING	DESCRIPTION
---	OHL
---	AERIAL POWER/COMMUNICATION

PARKING CALCULATION TABLE	
PARKING SPACE COUNT REQUIREMENT	
PER CITY OF BRYAN INTERPRETATION: 1 PARKING SPACE REQUIRED PER 400 SQUARE FEET (SF) OF GROSS FLOOR AREA (GFA)	
PARKING SPACE COUNT CALCULATIONS	
ATTRIBUTABLE BUILDING AREAS (GFA): TRUCK MAINTENANCE BUILDING - 4,463 SF ADMINISTRATION SUBSTATION AREA (BY OTHERS) WORKSHOP BUILDING - 350 SF 4,463 SF + 2,560 SF + 350 SF = 7,373 SF 7,373 SF X 1 PARKING SPACE / 400 SF = 18.4, SAY 19 PARKING SPACES REQUIRED	
PARKING SPACES PROVIDED	
STANDARD VEHICLE PARKING SPACES: 22 ACCESSIBLE PARKING SPACES: 3 TOTAL PARKING SPACES: 25	

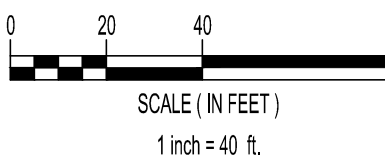
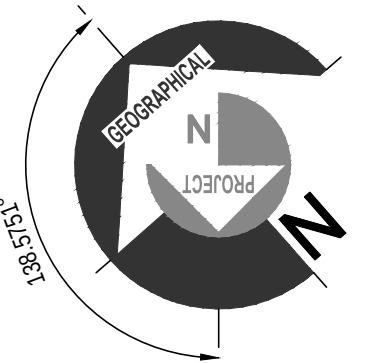
SURFACE COVER LEGEND		
PATTERN		DESCRIPTION
	STANDARD DUTY	PROPOSED TEMPORARY AGGREGATE DRIVEWAY (CONSTRUCTION ACCESS) TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION.
	HEAVY DUTY	PROPOSED CONCRETE PAVEMENT
		EXISTING ASPHALT PAVEMENT
		PROPOSED AGGREGATE (TEMPORARY SUBSTATION LAYDOWN AREA, PERMANENT SUBSTATION AREA (BY OTHERS), TEMPORARY CONTRACTOR PARKING AREA), TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION
		AGGREGATE BY OTHERS (SUBSTATION AREA)
		PROPOSED PERMANENT AGGREGATE ACCESS DRIVEWAY (SERVING THE TEMPORARY SUBSTATION LAYDOWN AREA, TEMPORARY CONTRACTOR PARKING AREA AND PERMANENT SUBSTATION AREA)
		PROPOSED PERMANENT AGGREGATE (ASU AREA)
		PROPOSED SEEDED AREA
		PROPOSED CONCRETE SIDEWALK
		PROPOSED STORMWATER MANAGEMENT BASIN

REFERENCES:

- REFERENCE DRAWING 566901-C-D-002-001 FOR THE INFORMATION RELATED TO COORDINATES AND DATUM INFORMATION INCLUDING REFERENCE POINTS, CONTROL POINTS, AND BENCHMARKS.
- REFERENCE THE UNDERGROUND UTILITY PLANS, 566901-C-D-006 SERIES DRAWINGS.
- REFERENCE THE CIVIL NOTES AND DETAILS, 566901-C-D-008 SERIES DRAWINGS.
- REFERENCE THE STORMWATER POLLUTION PREVENTION PLANS, 566901- C-D-009 SERIES DRAWINGS.
- REFERENCE STRUCTURAL DRAWINGS FOR THE TOP OF EQUIPMENT PAD ELEVATIONS.
- REFERENCE THE GEOTECHNICAL REPORT FOR ALL WORK UNDER THIS PROJECT.

SITE PLAN KEYED NOTES:

- (A) TRUCK MAINTENANCE BUILDING (APPROXIMATELY 4,463 SQUARE FEET), REFERENCE BUILDING DRAWINGS.
- (B) ADMINISTRATION BUILDING (APPROXIMATELY 2,560 SQUARE FEET), REFERENCE BUILDING DRAWINGS.
- (C) WORKSHOP BUILDING (APPROXIMATELY 350 SQUARE FEET), REFERENCE BUILDING DRAWINGS.
- (D) TRUCK WEIGH SCALE, REFERENCE STRUCTURAL DRAWINGS.
- (E) CONSTRUCT TEMPORARY CONSTRUCTION HAUL ROAD.
- (F) CONSTRUCT AGGREGATE DRIVE.
- (G) CONSTRUCT TEMPORARY CONTRACTOR PARKING.
- (H) AIR SEPARATION UNIT (ASU).
- (I) INSTALL SEMI TRUCK TRAILER PAD, REFERENCE DRAWING 566901-S-D-124-01 FOR TRAILER PAD DETAIL.
- (J) DIESEL FUEL SYSTEM INCLUDING EQUIPMENT, CONCRETE PAD, CANOPY AND SECONDARY CONTAINMENT SYSTEM (REFERENCE FUEL SYSTEM VENDOR DRAWINGS).
- (K) CONSTRUCT STANDARD DUTY AND HEAVY DUTY PAVEMENT. SEE RIGID PAVEMENT SECTION, DRAWING 566901-C-D-008-004.
- (L) CONSTRUCT MONOLITHIC CONCRETE CURB.
- (M) CONSTRUCT CONCRETE SIDEWALK.
- (N) CONSTRUCT TRUCK LOADING AREA PAD, REFERENCE STRUCTURAL DRAWINGS.
- (O) MESSER SUBSTATION BY OTHERS.
- (P) PROPOSED SUBSTATION FENCE BY OTHERS.
- (Q) PROPOSED SWING GATE BY OTHERS.
- (R) PROPOSED STORMWATER MANAGEMENT BASIN.
- (S) PROPOSED STORMWATER MANAGEMENT BASIN OUTFALL -001.
- (T) TRANSITION CURB FROM 6" REVEAL TO 0" REVEAL OVER 36" LENGTH.
- (U) INSTALL SIGN - "TRUCK AND PASSENGER VEHICLE ENTER ONLY".
- (V) INSTALL SIGN - "EXIT ONLY - DO NOT ENTER".
- (W) APPLY PAVEMENT MARKINGS.
- (X) CONSTRUCT ACCESSIBLE RAMP.
- (Y) INSTALL SIGNS - "FIRE LANE-DESIGNATED PARKING ONLY" & "TOW-AWAY ZONE".
- (Z) INSTALL TORNADO SHELTER. REFERENCE VENDOR DRAWINGS BY OTHERS.
- (A1) SOLID WASTE CONTAINMENT AREA.



00	09/10/26	ISSUED FOR CONSTRUCTION
00E	07/29/26	ISSUED FOR PERMIT
NO.	DATE	REVISIONS
MESSER Gases for Life		middough FIRM NUMBER: F-4433
CLIENT: MESSER NA		CLIENT PROJ #: 566901
PROJECT: BRYAN ASU		
DESCRIPTION: SITE PLAN GEOGRAPHICAL SOUTH AREA		
DRAWN BY: MIDD	CHECKED BY: KPS	APPROVED BY: 10/17/2025
DRAWING NO.: 566901-C-D-004-001	REV: 00	

DRAWING SCALE:
AS NOTED

MIDDOUGH PROJ.#: MEU2510

SURFACE COVER LEGEND	
PATTERN	DESCRIPTION
	PROPOSED TEMPORARY AGGREGATE DRIVEWAY (CONSTRUCTION ACCESS) TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION.
	PROPOSED CONCRETE PAVEMENT
	EXISTING ASPHALT PAVEMENT
	PROPOSED AGGREGATE (TEMPORARY SUBSTATION LAYDOWN AREA, PERMANENT SUBSTATION AREA (BY OTHERS), TEMPORARY CONTRACTOR PARKING AREA), TEMPORARY AGGREGATE TO BE CONVERTED TO SEEDED AREA FOLLOWING CONSTRUCTION
	AGGREGATE BY OTHERS (SUBSTATION AREA)
	PROPOSED PERMANENT AGGREGATE ACCESS DRIVEWAY (SERVING THE TEMPORARY SUBSTATION LAYDOWN AREA, TEMPORARY CONTRACTOR PARKING AREA AND PERMANENT SUBSTATION AREA)
	PROPOSED PERMANENT AGGREGATE (ASU AREA)
	PROPOSED SEEDED AREA
	PROPOSED CONCRETE SIDEWALK
	PROPOSED STORMWATER MANAGEMENT BASIN

UTILITY SYMBOL LEGEND	
EXISTING	DESCRIPTION
	AERIAL POWER/COMMUNICATION

SITE PLAN NOTES:

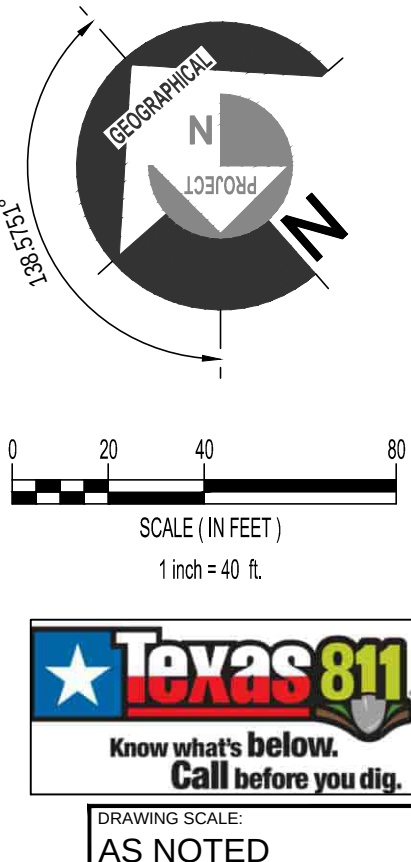
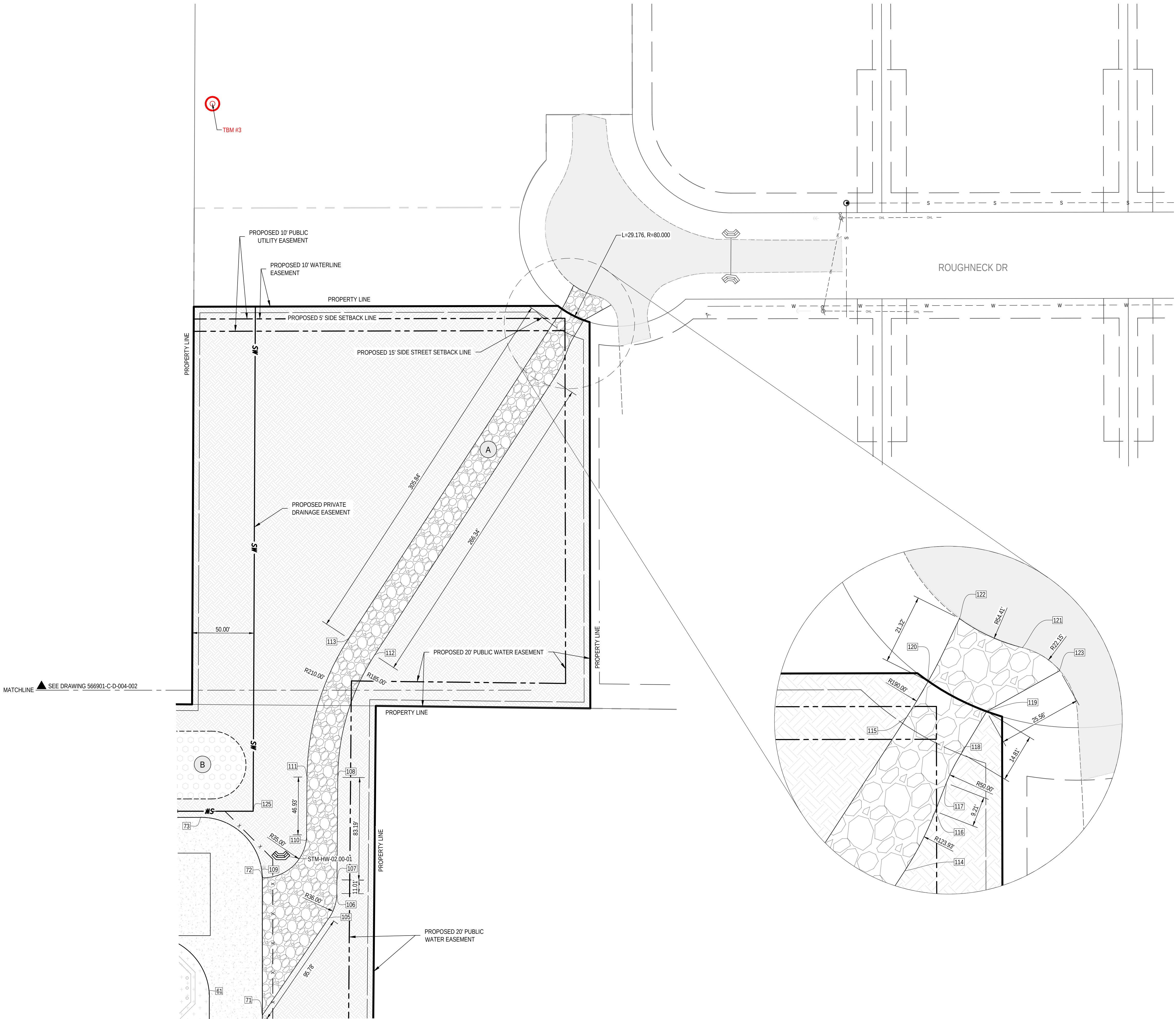
- THE CIVIL SITE IMPROVEMENT DRAWING PACKAGE DOES NOT CONVEY THE ENTIRE CIVIL WORK SCOPE FOR THE FACILITY. COORDINATE WORK AS SHOWN ON THE DRAWINGS (INCLUDING INTERFACING ELEMENTS) WITH OTHER PROJECT DRAWINGS.

REFERENCES:

- REFERENCE DRAWING 566901-C-D-002-001 FOR THE INFORMATION RELATED TO COORDINATES AND DATUM INFORMATION INCLUDING REFERENCE POINTS, CONTROL POINTS, AND BENCHMARKS.
- REFERENCE THE UNDERGROUND UTILITY PLANS, 566901-C-D-006 SERIES DRAWINGS.
- REFERENCE THE CIVIL NOTES AND DETAILS, 566901-C-D-008 SERIES DRAWINGS.
- REFERENCE THE STORMWATER POLLUTION PREVENTION PLANS, 566901- C-D-009 SERIES DRAWINGS.
- REFERENCE STRUCTURAL DRAWINGS FOR THE TOP OF EQUIPMENT PAD ELEVATIONS.
- REFERENCE THE GEOTECHNICAL REPORT FOR ALL WORK UNDER THIS PROJECT.

SITE PLAN KEYED NOTES:

- A** CONSTRUCT TEMPORARY CONSTRUCTION HAUL ROAD.
- B** PROPOSED STORMWATER MANAGEMENT BASIN.



00 09/10/26 ISSUED FOR CONSTRUCTION	
00D 07/29/26 ISSUED FOR PERMIT	
NO.	DATE
REVISIONS	
MESSER middough	
CLIENT: MESSER NA	
CLIENT PROJ #: 566901	
PROJECT: BRYAN ASU	
DESCRIPTION: SITE PLAN GEOGRAPHICAL NORTH AREA	
DRAWN BY: MIDD	CHECKED BY: KPS
APPROVED BY:	SHEET ISSUE DATE: 10/17/2025
DRAWING NO.: 566901-C-D-004-002	REV: 00

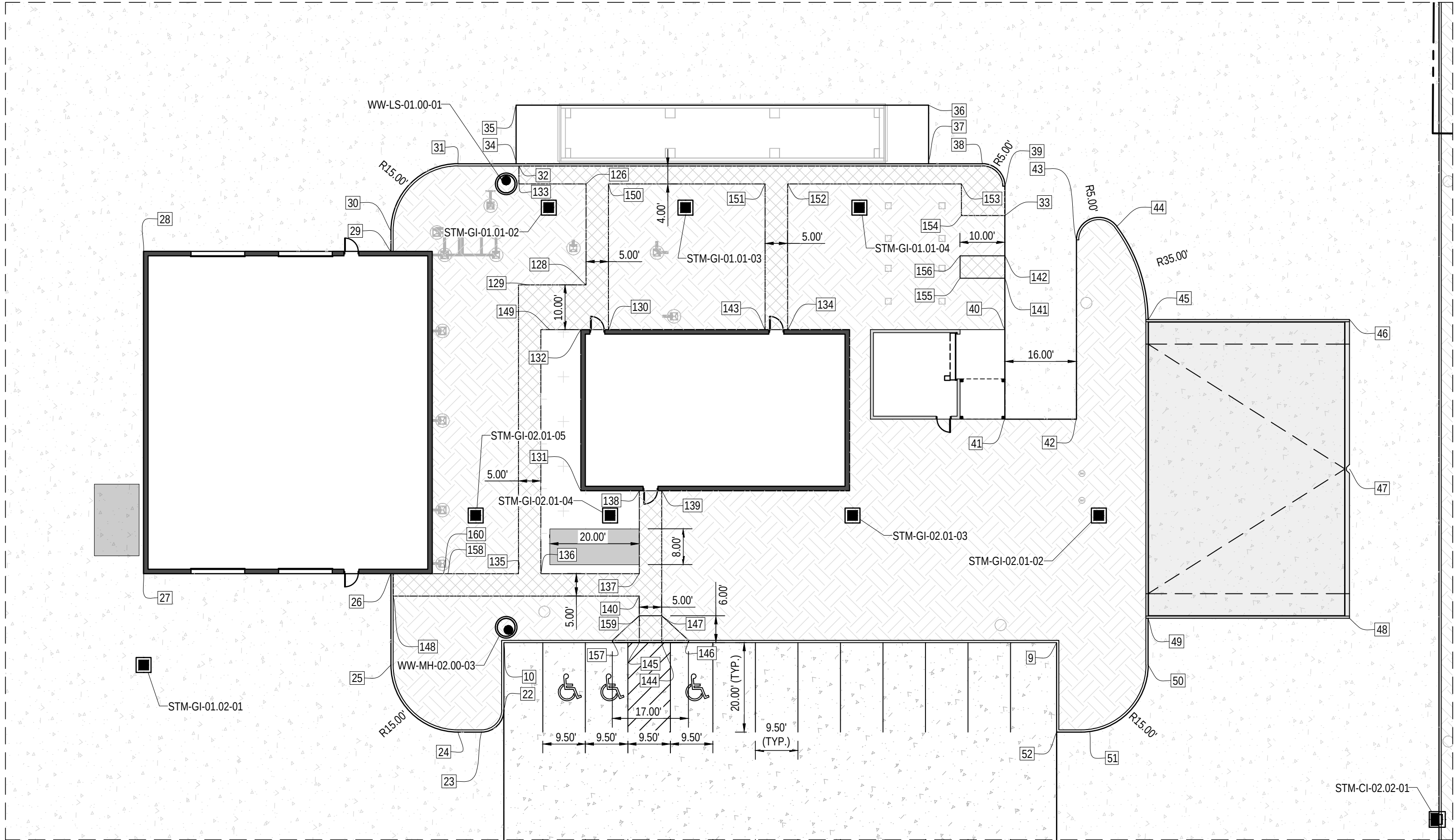
MIDDOUGH PROJ #: MEU2510

c:\users\sc\k\p\dc\acc\docs\middough\nc\meu2510\middough05_civil\3d\meu2510_civil-layouts.dwg

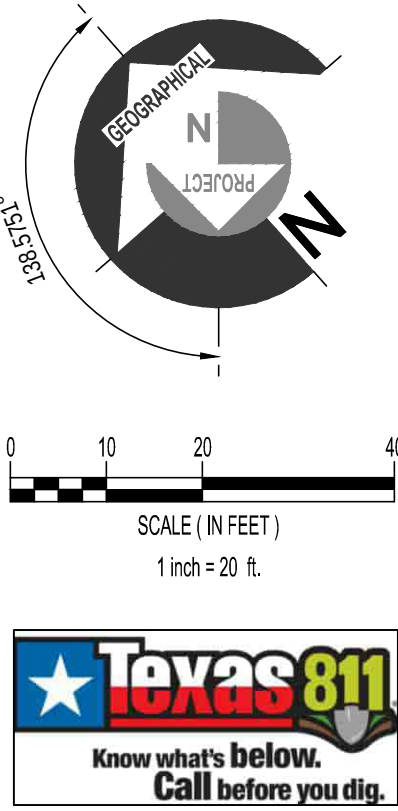
SITE PLAN POINT TABLE				
POINT ID	GEOGRAPHIC NORTHING	GEOGRAPHIC EASTING	PROJECT NORTHING	PROJECT EASTING
1	10245426.82	3544223.98	1056.26	696.62
2	10245446.08	3544232.98	1035.86	702.62
3	10245474.46	3544169.99	1056.26	768.62
4	10245477.45	3544172.64	1052.26	768.62
5	10245480.10	3544214.98	1022.26	738.62
6	10245507.09	3544238.80	986.26	738.62
7	10245483.27	3544265.80	986.26	702.62
8	10245519.68	3544224.54	986.26	757.65
9	10245567.67	3544266.88	922.26	757.65
10	10245649.39	3544174.27	922.26	881.16
11	10245601.40	3544131.93	986.26	881.16
12	10245657.05	3544068.85	986.26	965.27
13	10245630.06	3544045.03	1022.26	965.27
14	10245587.72	3544047.68	1052.26	935.27
15	10245584.72	3544045.03	1056.26	935.27
16	10245648.23	3543973.05	1056.26	1031.27
17	10245651.23	3543975.70	1052.26	1031.27
18	10245653.88	3544018.04	1022.26	1001.27
19	10245680.87	3544041.86	986.26	1001.27
20	10245727.17	3543989.40	986.26	1071.24
21	10245769.51	3543986.75	956.26	1101.24
22	10245638.14	3544164.35	937.26	881.16
23	10245637.70	3544157.29	942.26	886.16
24	10245641.16	3544153.37	942.26	891.38
25	10245662.33	3544152.05	927.26	906.38
26	10245677.64	3544165.55	906.84	906.38
27	10245714.19	3544124.13	906.84	961.63
28	10245768.18	3544171.76	834.84	961.63
29	10245731.62	3544213.19	834.84	906.38
30	10245735.06	3544216.23	830.26	906.38
31	10245736.39	3544237.40	815.26	891.38
32	10245727.00	3544247.27	815.76	877.77
33	10245646.89	3544321.33	826.83	769.24
34	10245728.25	3544247.52	814.66	878.42
35	10245737.63	3544255.79	802.16	878.42
36	10245676.65	3544324.90	802.16	786.25
37	10245667.27	3544316.63	814.66	786.25
38	10245658.88	3544325.23	815.26	774.24
39	10245651.82	3544325.68	820.26	769.24
40	10245627.77	3544304.45	852.33	769.24
41	10245612.77	3544291.22	872.33	769.24
42	10245602.19	3544303.22	872.33	753.24
43	10245632.24	3544329.73	832.26	753.24
44	10245628.53	3544338.46	829.26	744.24
45	10245608.30	3544329.94	850.07	737.24
46	10245578.52	3544363.68	850.07	692.24
47	10245553.49	3544341.60	883.45	692.24
48	10245528.47	3544319.52	916.82	692.24
49	10245558.24	3544285.78	916.82	737.24
50	10245550.42	3544278.87	927.26	737.24
51	10245547.77	3544259.20	942.26	750.24
52	10245552.68	3544253.64	942.26	757.66
53	10245699.42	3544373.00	753.25	765.24
54	10245795.35	3544264.28	753.25	910.24
55	10245865.93	3544259.87	703.25	960.24
56	10245936.41	3544322.06	609.26	960.24
57	10245940.82	3544392.64	559.26	910.24
58	10245880.80	3544460.71	559.22	819.48
59	10245863.57	3544480.19	559.26	793.48
60	10245844.88	3544501.36	559.26	765.24
61	10245774.31	3544505.77	609.26	715.24
62	10245703.83	3544443.58	703.25	715.24
63	10245886.77	3544500.66	528.31	793.48
64	10245892.77	3544505.96	520.31	793.48
65	10245904.77	3544516.54	504.31	793.48
66	10245921.97	3544497.05	504.31	819.48
67	10245909.97	3544486.46	520.31	819.48
68	10245903.97	3544481.17	528.31	819.48
69	10245463.17	3544288.57	986.26	672.24

SITE PLAN POINT TABLE				
POINT ID	GEOGRAPHIC NORTHING	GEOGRAPHIC EASTING	PROJECT NORTHING	PROJECT EASTING
70	10245678.37	3544478.46	699.26	672.24
71	10245734.88	3544528.36	623.87	672.22
72	10245818.60	3544602.18	512.26	672.25
73	10245888.41	3544597.12	463.26	722.24
74	10245610.09	3544350.43	463.26	1051.24
75	10246101.68	3544279.86	513.26	1101.24
76	10245867.86	3544073.53	825.10	1101.24
77	10245852.86	3544060.30	845.10	1101.24
78	10245798.86	3544012.65	917.12	1101.24
79	10245795.11	3544009.34	922.12	1101.24
80	10245828.19	3543971.85	922.12	1151.24
81	10245831.94	3543975.15	917.12	1151.24
82	10245863.06	3544002.61	875.62	1151.24
83	10245959.00	3543893.89	875.62	1296.24
84	10245878.02	3543822.43	983.62	1296.24
85	10245782.08	3543931.16	983.62	1151.24
86	10245861.90	3544034.94	855.10	1126.24
87	10245869.40	3544041.55	845.10	1126.24
88	10245884.40	3544054.78	825.10	1126.24
89	10246129.20	3544004.07	675.10	1326.24
90	10246109.35	3544026.56	675.10	1296.24
91	10245974.38	3543907.47	855.10	1296.24
92	10245996.87	3544154.03	675.10	1126.24
93	10246091.86	3544237.85	548.41	1126.24
94	10246224.19	3544087.88	548.41	1326.24
95	10245863.24	3543729.37	1056.27	1356.24
96	10245864.75	3543730.70	1054.26	1356.24
97	10245867.39	3543773.05	1024.26	1326.24
98	10245847.54	3543795.54	1024.26	1296.24
99	10245805.20	3543798.19	1054.26	1266.24
100	10245803.69	3543796.87	1056.26	1266.23
101	10246031.32	3544316.66	541.67	1027.09
102	10246028.01	3544320.40	541.67	1022.09
103	10245791.37	3544104.93	861.67	1027.09
104	10245788.06	3544108.68	861.67	1022.09
105	10245758.27	3544621.23	544.89	618.06
106	10245768.99	3544639.11	525.03	611.75
107	10245777.14	3544646.51	514.01	611.59
108	10245839.08	3544702.05	430.82	610.92
109	10245818.28	3544602.53	512.26	671.79
110	10245820.83	3544652.11	477.55	636.30
111	10245855.77	3544683.44	430.62	635.92
112	10245893.75	3544790.05	331.60	581.12
113	10245917.83	3544783.33	317.99	602.09
114	10245965.35	3545046.59	108.18	436.13
115	10246000.05	3545077.91	61.44	435.60
116	10245972.82	3545065.59	90.01	426.82
117	10245977.05	3545073.78	81.42	423.48
118	10245980.78	3545083.29	72.33	418.82
119	10245985.26	3545097.40	59.63	411.20
120	10246003.92	3545090.18	50.42	428.96
121	10245992.63	3545118.44	40.19	400.30
122	10246011.95	3545109.94	31.33	419.46
123	10245980.03	3545122.38	47.03	389.01
124	10246327.99	3544106.51	458.26	1380.95
125	10245864.00	3544632.35	458.26	679.68
126	10245714.08	3544255.88	819.76	862.77
128	10245697.15	3544240.94	842.33	862.77
129	10245705.84	3544231.10	842.33	875.90
130	10245686.35	3544238.07	852.33	857.77
131	10245663.43	3544209.63	888.33	863.94
132	10245690.43	3544233.45	852.33	863.94
133	10245724.01	3544244.63	819.76	877.77
134	10245659.88	3544268.06	852.33	817.77
135	10245658.79	3544186.91	906.84	877.90
136	10245655.48	3544190.66	906.84	872.90
137	10245640.92	3544207.16	906.85	850.90
138	10245654.80	3544219.41	888.33	850.90
139	10245651.50	3544223.16	888.33	845.90

SITE PLAN POINT TABLE				
POINT ID	GEOGRAPHIC NORTHING	GEOGRAPHIC EASTING	PROJECT NORTHING	PROJECT EASTING
140	10245637.17	3544203.85	911.85	850.90
141	10245636.40	3544312.06	840.83	769.24
142	10245640.14	3544315.37	835.83	769.24
143	10245663.19	3544264.31	852.33	822.77
144	10245626.06	3544200.71	922.26	845.90
145	10245629.37	3544196.96	922.26	850.90
146	10245622.46	3544205.54	921.76	839.90
147	10245630.56	3544204.68	916.26	845.90
148	10245673.56	3544162.62	911.84	905.88
149	10245695.03	3544228.23	852.33	870.90
150	10245710.77	3544259.62	819.76	857.77
151	10245687.62	3544285.87	819.76	822.77
152	10245684.31	3544289.62	819.76	817.77
153	10245658.61	3544318.74	819.76	778.94
154	10245653.01	3544314.05	826.83	778.94
155	10245643.01	3544304.56	840.83	779.24
156	10245646.76	3544307.87	835.83	779.24
157	10245633.71	3544192.79	921.76	856.90
158	10245669.22	3544175.10	906.84	893.66
159	10245633.87	3544200.93	916.26	850.90
160	10245669.88	3544174.35	906.84	894.66



ENLARGED SITE PLAN
SCALE: 1"=20'



00	09/10/26	ISSUED FOR CONSTRUCTION	
00D	07/29/26	ISSUED FOR PERMIT	
NO.	DATE	REVISIONS	
MESSER Gases for Life		 middough. PROFESSIONAL ENGINEER FIRM NUMBER: F-4433	
CLIENT: MESSER NA		CLIENT PROJ #: 566901	
PROJECT:		BRYAN ASU	
DESCRIPTION:			
SITE PLAN TABLES			
DRAWN BY: MIDD	CHECKED BY: KPS	APPROVED BY:	SHEET/ISSUE DATE: 10/17/2025
DRAWING NO.: 566901-C-D-004-003			REV.: 00

DRAWING SCALE:
AS NOTED