City of Joliet

Plan Commission

Meeting Agenda

Commission Members
Jason Cox
Jeff Crompton
John Dillon
John Kella
Dominic Orlando
Roberto Perez
Brigette Roehr
Marc Rousonelos
Debbie Radakovich

Thursday, September 19, 2024 **4:00 PM** **City Hall, Council Chambers**

Citizens who are unable to attend the meeting can email comments in advance of the meeting to publiccomment@joliet.gov.

CALL TO ORDER

ROLL CALL

APPROVAL OF MINUTES

Plan Commission Meeting Minutes 8-15-24

Attachments: Plan Commission Meeting Minutes 8-15-24.pdf

CITIZENS TO BE HEARD ON AGENDA ITEMS

This section is for anyone wanting to speak regarding agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Plan Commission members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

OLD BUSINESS: PUBLIC HEARING

During the Public Hearing, members of the public will be allowed to present evidence and ask questions subject to the rules of the meeting.

OLD BUSINESS

NEW BUSINESS: PUBLIC HEARING

During the Public Hearing, members of the public will be allowed to present evidence and ask questions subject to the rules of the meeting.

P-5-24: Preliminary Plat of Laraway ANR Pipeline TC Energy Subdivision. (4101 S. Cherry Hill Road) (Part of PIN #10-11-12-200-002-0000) (COUNCIL DISTRICT #5)

Attachments: P-5-24_TC Energy PP_Staff Report Packet

NEW BUSINESS

NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION

PUBLIC COMMENT

This section is for anyone wanting to speak regarding non-agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Plan Commission members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

ADJOURNMENT

This meeting will be held in an accessible location. If you need a reasonable accommodation, please contact The City Clerk Office, 150 West Jefferson Street, Joliet, Illinois 60432 at (815) 724-3780.

Memo

File #: TMP-7736 **Agenda Date:**9/19/2024

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Meeting Minutes - Pending Approval

Thursday, August 15, 2024

4:00 PM

City Hall, Council Chambers

Plan Commission

Commission Members
Jason Cox
Jeff Crompton
John Dillon
John Kella
Dominic Orlando
Roberto Perez
Brigette Roehr
Marc Rousonelos
Debbie Radakovich

Citizens who are unable to attend the meeting can email comments in advance of the meeting to publiccomment@joliet.gov.

CALL TO ORDER

ROLL CALL

Present John Kella, Jason Cox, Jeff Crompton, Brigette Roehr, Dominic Orlando, John Dillon and Debbie Radakovich

Absent Roberto Perez and Marc Rousonelos

ALSO PRESENT: Community Development Director Dustin Anderson, Planning Director James Torri, Assistant Corporation Counsel Gina LoGalbo, Deputy Director of Public Works Sean Mikos, Civil Engineer Kyle Hinson, Planner Jayne Bernhard, Planner Ray Heitner, and Planner Helen Miller

APPROVAL OF MINUTES

Plan Commission Meeting Minutes 7-18-24 **TMP-7617**

Attachments: Plan Commission Meeting Minutes 7-18-24.pdf

A motion was made by Dominic Orlando, seconded by John Kella, to approve Plan Commission Meeting Minutes 7-18-24. The motion carried by the following vote:

Aye: Kella, Cox, Crompton, Roehr, Orlando, Dillon and Radakovich

Absent: Perez and Rousonelos

CITIZENS TO BE HEARD ON AGENDA ITEMS

None

OLD BUSINESS: PUBLIC HEARING

None

OLD BUSINESS

None

NEW BUSINESS: PUBLIC HEARING

PUD-6-24: Resubdivision of Lots 2, 3 and 4 in Unit 2 of The Boulevard Planned Unit Development Subdivision. (Northwest of I-55 and Route 30) (Pin #06-03-23-401-003-0000, 06-03-23-402-001-0000, and 06-03-23-316-001-0000) (COUNCIL DISTRICT #1) **TMP-7627**

Attachments: PUD-6_Boluevard Resubdivision_Staff Report Packet

Planning Director James Torri read the staff report into the record.

Representative of 55/30 Acquisition, LLC Thomas Williams appeared on behalf of the petition.

In response to Commissioner Orlando's questions, Mr. Williams briefly discussed the property line on the displayed plat, storm water detention, and future lot development.

No one appeared in favor or in opposition to the petition.

A motion was made by John Kella, seconded by Dominic Orlando, to approve PUD-6-24: Resubdivision of Lots 2, 3 and 4 in Unit 2 of The Boulevard Planned Unit Development Subdivision. (Northwest of I-55 and Route 30) (Pin #06-03-23-401-003-0000, 06-03-23-402-001-0000, and 06-03-23-316-001-0000) (COUNCIL DISTRICT #1). The motion carried by the following vote:

Aye: Kella, Cox, Crompton, Roehr, Orlando, Dillon and Radakovich

Absent: Perez and Rousonelos

A-5-24: Annexation of 2800 Mound Road, Classification to I-2 (General Industrial) Zoning District and Approval of an Annexation Agreement. (2800 Mound Road) (Pin #05-06-24-300-004-0000 and 05-06-24-100-006-0020) (COUNCIL DISTRICT #5) **TMP-7626**

Attachments: A-5-24 2800 Mound Road Staff Report Packet

Mr. Torri read the staff report into the record.

Attorney Kenneth Carlson of Tracy, Johnson, and Wilson and John Russ of Go West Family Investments, LLC appeared on behalf of the petition.

Chairman Dillon inquired about the traffic study completion date. Mr. Torri clarified the City Council meeting date. Mr. Carlson responded the study would be complete for the City Council meeting.

At the request of Commissioner Orlando, Mr. Russ explained the property's boundary area.

In response to Commissioner Cox's question, Deputy Director of Public Works Sean Mikos explained the intersection of Houbolt and Mound Road is controlled by IDOT with signal timings and slight traffic variations significantly impact the intersection.

Mr. Carlson clarified the quarry location on the displayed zoning map.

No one appeared in favor or in opposition to the petition.

A motion was made by Dominic Orlando, seconded by Jason Cox, to approve A-5-24: Annexation of 2800 Mound Road, Classification to I-2 (General Industrial) Zoning District and Approval of an Annexation Agreement. (2800 Mound Road) (Pin #05-06-24-300-004-0000 and 05-06-24-100-006-0020) (COUNCIL DISTRICT #5). The motion carried by the following vote:

Aye: Kella, Cox, Crompton, Roehr, Orlando, Dillon and Radakovich

Absent: Perez and Rousonelos

NEW BUSINESS

SN-1-24: Street Name Change for Riverboat Center Boulevard to Rock Creek Boulevard. (Adjacent to 1411 and 1421 Riverboat Center Drive) (Adjacent to Pin #05-06-23-401-003-0000 and 05-06-23-402-004-0000) (COUNCIL DISTRICT #5) **TMP-7618**

Attachments: SN-1-24 (Riverboat Center Blvd) Staff Report Packet

Mr. Torri read the staff report into the record.

There were no questions from the Commissioners.

No one appeared in favor or in opposition to the petition.

A motion was made by Jeff Crompton, seconded by Brigette Roehr, to approve SN-1-24: Street Name Change for Riverboat Center Boulevard to Rock Creek Boulevard. (Adjacent to 1411 and 1421 Riverboat Center Drive) (Adjacent to Pin #05-06-23-401-003-0000 and 05-06-23-402-004-0000) (COUNCIL DISTRICT #5). The motion carried by the following vote:

Aye: Kella, Cox, Crompton, Roehr, Orlando, Dillon and Radakovich

Absent: Perez and Rousonelos

NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION

None

PUBLIC COMMENT

None

ADJOURNMENT

A motion was made by John Kella, seconded by Dominic Orlando, to approve adjournment. The motion carried by the following vote:

Aye: Kella, Cox, Crompton, Roehr, Orlando, Dillon and Radakovich

Absent: Perez and Rousonelos

This meeting will be held in an accessible location. If you need a reasonable accommodation, please contact Christa M. Desiderio, City Clerk, 150 West Jefferson Street, Joliet, Illinois 60432 at (815) 724-3780.

Memo

File #: TMP-7735 **Agenda Date:**9/19/2024

DATE: September 19, 2024

TO: Joliet Plan Commission

FROM: Planning Staff

SUBJECT: P-5-24: Preliminary Plat of Laraway ANR Pipeline TC Energy Subdivision.

GENERAL INFORMATION:

APPLICANT:	Andrew D. Black, representative for ANR Pipeline TC Energy
STATUS OF APPLICANT:	Developer
REQUESTED ACTION:	Approval of a preliminary plat of subdivision.
PURPOSE:	To create a two-lot subdivision for a future gas compressor facility.
EXISTING ZONING:	R-1B (Single-Family Residential)
LOCATION:	4101 S. Cherry Hill Road
SIZE:	Approximately 79 acres
EXISTING LAND USE:	Undeveloped

SURROUNDING LAND USE & ZONING:

NORTH: Agricultural; R1-B (Single-Family Residential)
SOUTH: Agricultural; R-1B (Single-Family Residential)
EAST: Agricultural; County A-1 (Agricultural)
WEST: Agricultural; County A-1 (Agricultural)

SITE HISTORY: The subject property is located at 4101 S. Cherry Hill Road. The property was originally annexed into the city in 2006 at the request of the property owners who intended to develop the property as a future single-family residential subdivision. The property has remained undeveloped agricultural land since its annexation. The requested preliminary plat would create two lots on the existing 79-acre parcel, with future development of a gas compressor facility on the smaller, 20-acre lot (Lot 2).

SPECIAL INFORMATION: The proposed gas compressor facility would be utilized to assist in the transportation of natural gas through an existing pipeline system that crosses the northern portion of the subject property. The facility is a necessary piece of equipment to ensure the continued operation of pipelines and the supply of natural gas to the public. The developer, TC Energy, has stated that the proposed facility is part of a scope to be able to supply an increased volume of natural gas due to increased demand as power plants are converted from coal to natural gas. The underlying zoning designation for the subject property is R-1B (Single-Family Residential). However, the proposed gas compressor facility use is classified as an essential service and is allowed in any district insofar as it is permitted, authorized, or regulated by law or other ordinance.

The facility would consist of a main building where the gas compression would take place, in addition to a few small accessory buildings for storage and potentially another building for staff operations. All compression would take place within the main compression building, however, certain above-ground piping, and equipment adjacent to the main building would be necessary. Buildings within the site would be serviced with well water and septic infrastructure since both water and sanitary sewer mains for the city are over two miles from the site. County approval of well and septic infrastructure on the site will be required. The petitioner has stated that the site would be staffed by no more than 10 employees at any time, and that vehicular traffic to and from the site would be minimal. The staff report packet contains images of a comparable facility that was recently built in Sandwich, Illinois.

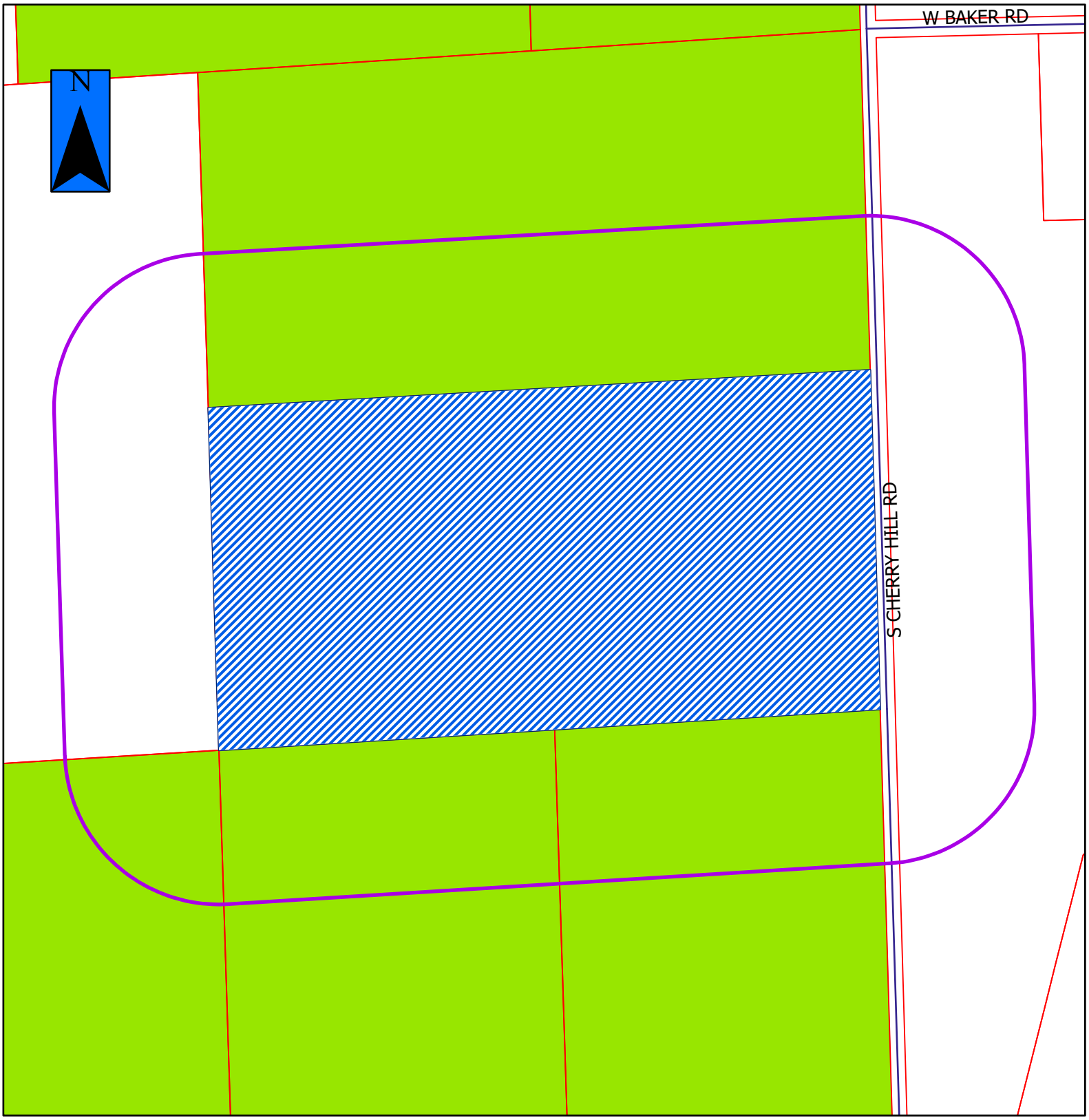
Fire and gas protection systems would be put in place at the facility to alert on-site personnel of a fire or natural gas leak. These systems are designed to address hazardous conditions by automatically stopping the compressor units before dangerous incidents occur. The facility would be required to meet standards for its equipment from the Environmental Protection Agency (EPA) to reduce emissions of greenhouse gases and smog-forming volatile organic compounds (VOC's). Noise levels from the facility would not be allowed to exceed a day-night average level of 55 decibels pursuant to interstate system regulation standards. Noise at this level is comparable to normal conversation or moderate rainfall.

The subject property is surrounded by farmland on all sides. The facility as proposed would be located approximately .6 miles west of an existing residential neighborhood in the Village of Manhattan. Another neighborhood in unincorporated Jackson Township is approximately .5 miles southwest of the proposed site. I-1 (Light Industrial) zoning districts can be found further north and to the southwest of the site. It is unlikely that the properties surrounding the subject location will develop with single-family residential housing as was originally planned when these properties were annexed into the City of

Joliet in 2006. The closest residential subdivision within the City of Joliet is located over 2.5 miles to the west of the subject location.

Lot 2 on the attached preliminary plat would host the proposed gas compressor facility. Lot 2 would be a 20-acre portion of the existing 79-acre parent parcel. The plat shows one point of access to and from Lot 2. City staff review of the overall site plan, landscaping plan, and building design will be required prior to issuance of building permits. The petitioner is working with city staff to produce concepts for building exteriors that will result in a more rural and less industrial aesthetic. The petitioner will be required to submit final and recording plats for the proposed subdivision. At the time of final platting, the city will require an escrow for ½ road public improvements for South Cherry Hill Road, located east of the site, and Breen Road, a future extension of which would be located south of the subject property. Water main extension costs within these ½ road improvements will be included in the proposed escrow amounts.

ANALYSIS:
Approval of the Preliminary Plat of the Laraway ANR Pipeline TC Energy Subdivision will allow the petitioner to proceed with preparation of the site's final and recording plats, in addition to construction drawings and finalizing cost estimates for public improvements. Upon approval of the final and recording plats, the petitioner would be allowed to develop Lot 2 for future use of a gas compressor facility. The preliminary plat petition was discussed at the July 24, 2024, Land Use and Economic Development Committee meeting. Minutes of that meeting have been included in the staff report packet.



P-5-24

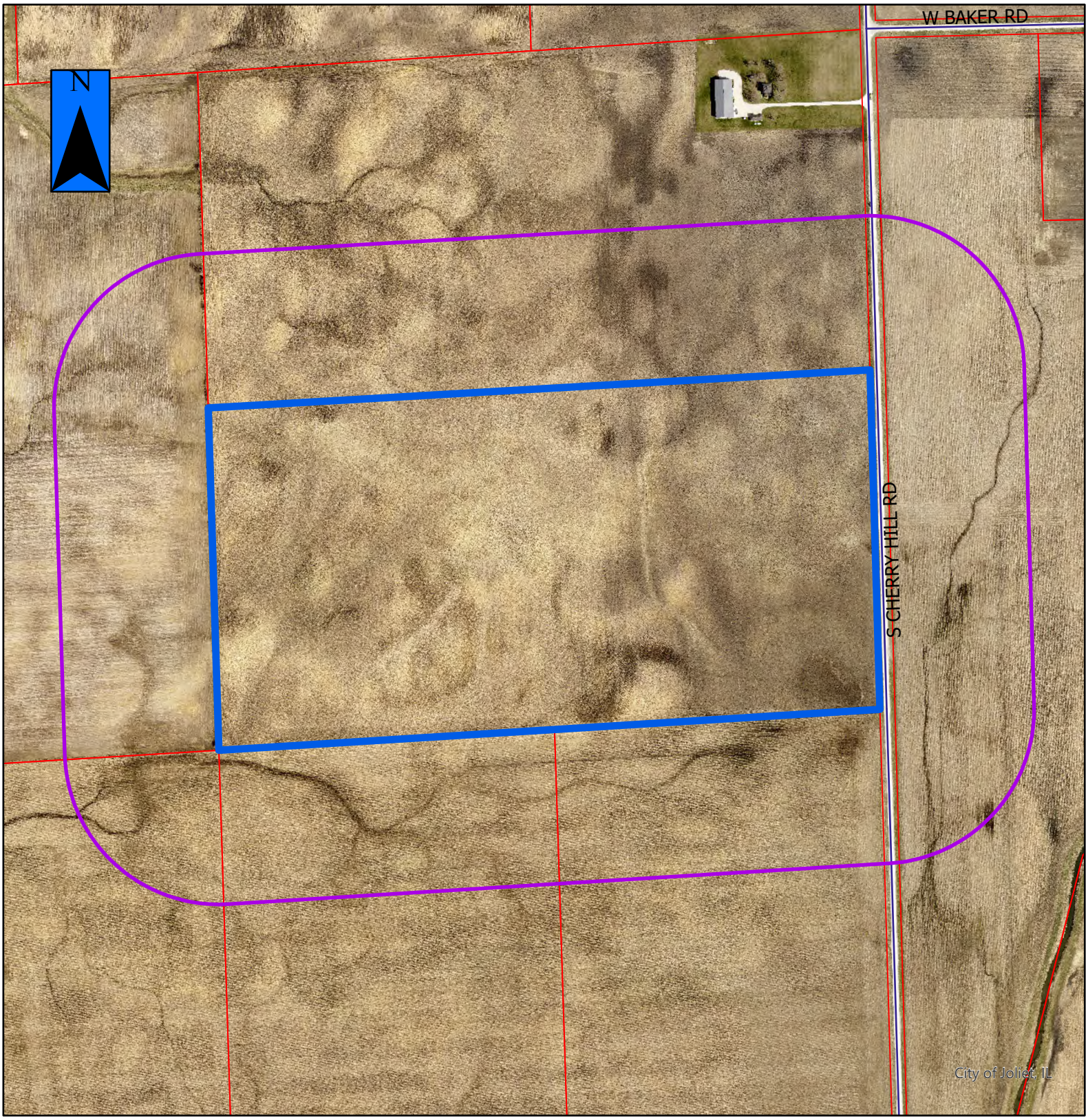
JOLIET PLANNING DIVISION

= Property in Question

= 600' Public Notification Boundary

Legend

B-1	I-TA	R-2
B-2	I-TB	R-2A
B-3	I-TC	R-3
I-1	R-1	R-4
I-2	R-1A	R-5
I-T	R-1B	R-B



P-5-24a

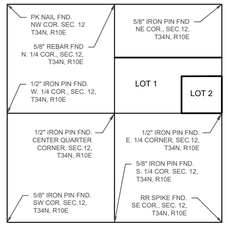
JOLIET PLANNING DIVISION
DIVISIÓN DE PLANIFICACIÓN

= Property in Question / Propiedad en cuestión

= 600' Public Notification Boundary /
Límite de notificación pública de 600 ft (180 m)

PRELIMINARY PLAT OF
LARAWAY ANR PIPELINE TC ENERGY SUBDIVISION

THE SOUTH HALF OF THE NORTHEAST QUARTER SECTION 12, TOWNSHIP 34 NORTH,
RANGE 10 EAST, WILL COUNTY, ILLINOIS, 3RD P.M.



SECTION 12, TWP. 34 N. R.10E.

VICINITY MAP
NOT TO SCALE

SURVEY NOTES

1. BEARINGS AND COORDINATES SHOWN ARE BASED ON THE ILLINOIS STATE PLANE, EAST COORDINATE SYSTEM, NAD 83. DISTANCES SHOWN HEREON ARE BASED ON GRID MEASUREMENTS, TO CONVERT GRID TO GROUND DISTANCES, DIVIDE BY THE COMBINED SCALE FACTOR. THE COMBINED SCALE FACTOR FOR THIS PROJECT IS 1.00004328.
2. THESE EASEMENTS ON THIS SURVEY WERE BASED ON THE OWNERSHIP REPORT, PROJECT NO. AHP-LARAWAY CS SITE #10, PROJECT TRACT NO. IL-WL-004.999. KEYSTONE CONSULTANTS HAS NOT PERFORMED ANY OTHER EASEMENT RESEARCH ON THE PROPERTY.
3. SITE IS CURRENTLY ZONED R-1B (SINGLE-FAMILY RESIDENTIAL DISTRICTS)
4. THE SUBJECT TRACT IS SHOWN TO BE IN FLOOD ZONE X, FLOOD INSURANCE RATE MAP PANEL NO.17197C0285G, DATED FEBRUARY 15, 2019

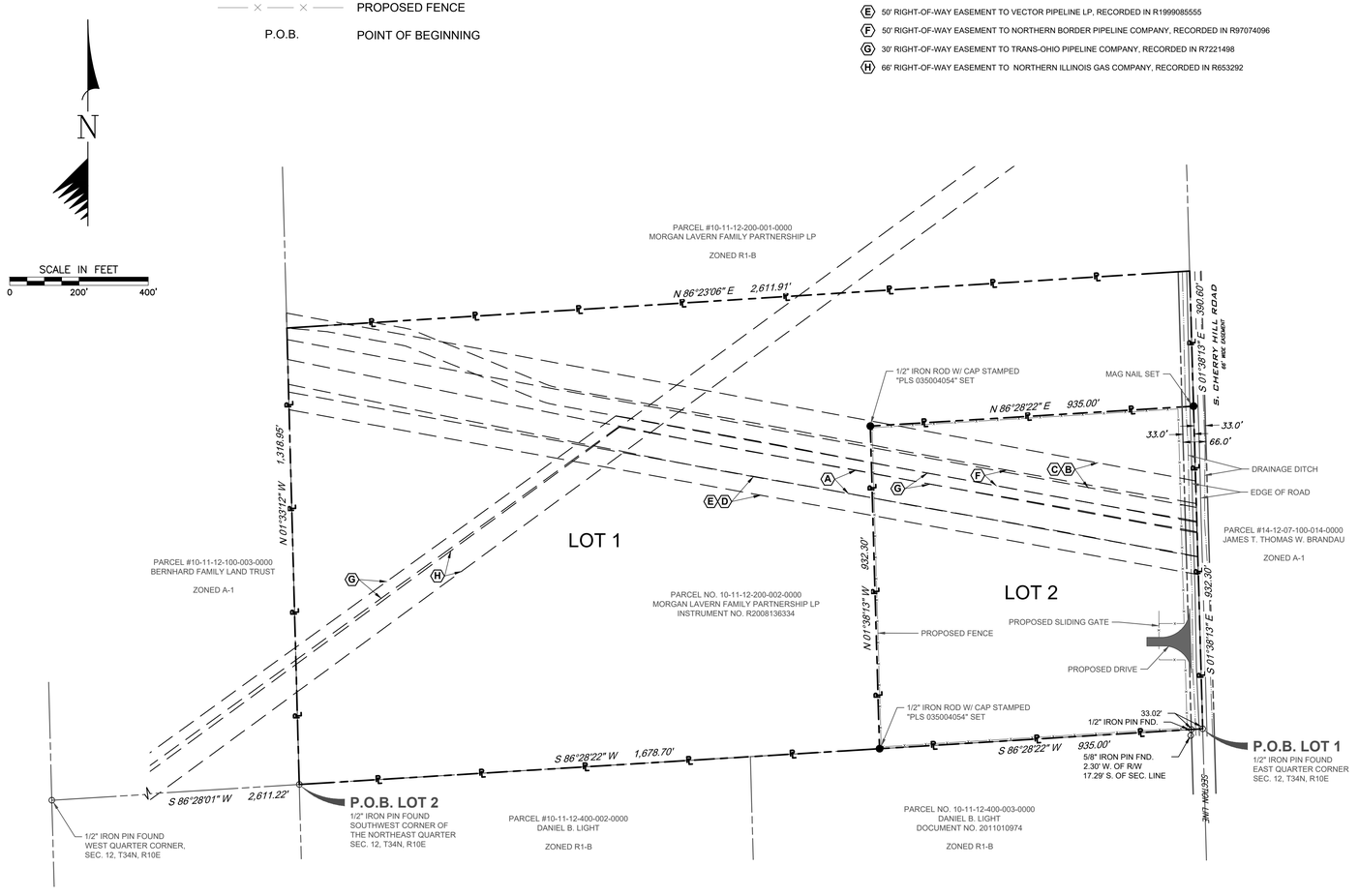
   THE ABOVE STATEMENT IS MEANT FOR FLOOD INSURANCE DETERMINATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S).

LEGEND

○	SURVEY MONUMENT FOUND AS NOTED
●	SURVEY MONUMENT SET AS NOTED
——— – – ———	SECTION LINE
– – —℄— – –	PROPOSED PROPERTY LINE
———|———|———	EXISTING PIPELINE
——— × ——— × ———	PROPOSED FENCE
P.O.B.	POINT OF BEGINNING

EASEMENT LEGEND

- (A) 70' RIGHT-OF-WAY EASEMENT TO MICHIGAN WISCONSIN PIPELINE COMPANY RECORDED IN R75021509
- (B) 75' RIGHT-OF-WAY EASEMENT TO MICHIGAN WISCONSIN PIPELINE COMPANY RECORDED IN 1833/253 AND 899171
- (C) 75' RIGHT-OF-WAY EASEMENT TO MICHIGAN WISCONSIN PIPELINE COMPANY RECORDED IN 1266/1 AND 660628
- (D) 50' RIGHT-OF-WAY EASEMENT TO VECTOR PIPELINE LP, RECORDED IN R2000065721
- (E) 50' RIGHT-OF-WAY EASEMENT TO VECTOR PIPELINE LP, RECORDED IN R1999085555
- (F) 50' RIGHT-OF-WAY EASEMENT TO NORTHERN BORDER PIPELINE COMPANY, RECORDED IN R97074096
- (G) 30' RIGHT-OF-WAY EASEMENT TO TRANS-OHIO PIPELINE COMPANY, RECORDED IN R7221498
- (H) 66' RIGHT-OF-WAY EASEMENT TO NORTHERN ILLINOIS GAS COMPANY, RECORDED IN R653292



LEGAL DESCRIPTION

BEING THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 12, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, ILLINOIS, BEING A CALLED 80.00 ACRE TRACT OF LAND DESCRIBED IN INSTRUMENT NO. R2008136334 IN THE RECORDERS OFFICE, WILL COUNTY, ILLINOIS; SAID TRACT OF LAND BEING SPLIT INTO TWO LOTS AS SURVEYED BY KEYSTONE CONSULTANTS BEING DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

LOT 1:

BEGINNING AT A 1/2-INCH IRON PIN FOUND AT THE SOUTHWEST CORNER OF THE NORTHEAST QUARTER OF SAID SECTION 12, FOR THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE NORTH 01°33'12" WEST, ALONG THE WEST LINE OF SAID NORTHEAST QUARTER, A DISTANCE OF 1,318.95 FEET TO THE NORTHWEST CORNER OF THE SOUTH HALF OF SAID QUARTER SECTION, FOR THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE NORTH 86°23'06" EAST, ALONG THE NORTH LINE OF THE SOUTH HALF OF SAID NORTHEAST QUARTER, 2,611.91 FEET TO THE NORTHEAST CORNER OF THE SOUTH HALF OF SAID NORTHEAST QUARTER, FOR THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 01°38'13" EAST ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 390.60 FEET TO A MAG NAIL SET FOR THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 86°28'22" WEST, A DISTANCE OF 935.00 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED "PLS 035004054" SET FOR A SOUTH CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 01°38'13" EAST, A DISTANCE OF 932.30 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED "PLS 035004054" SET IN THE SOUTH LINE OF SAID NORTHEAST QUARTER, FOR A SOUTH CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 86°28'22" WEST ALONG THE SOUTH LINE OF SAID NORTHEAST QUARTER, A DISTANCE OF 1,678.79 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND, CONTAINING 59.184 ACRES (2,578,043 SQUARE FEET) OF LAND, MORE OR LESS.

LOT 2:

BEGINNING AT A 1/2-INCH IRON PIN FOUND AT THE EAST QUARTER CORNER OF SAID SECTION 12, FOR THE SOUTHEAST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 86°28'22" WEST, ALONG THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 12, PASSING A 1/2-INCH IRON PIN AT A DISTANCE OF 33.02 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF 935.00 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED "PLS 035004054" SET, FOR THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE NORTH 01°38'13" WEST, OVER AND ACROSS SAID TRACT OF LAND DESCRIBED IN INSTRUMENT NO. R2008136334, A DISTANCE OF 932.30 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED "PLS 035004054" SET, FOR THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE NORTH 86°28'22" EAST, A DISTANCE OF 935.00 FEET, TO A PK NAIL SET IN THE EAST LINE OF SAID SECTION 12, FOR THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 01°38'13" EAST, ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 932.30 FEET, TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND, CONTAINING 20.000 ACRES (871,221 SQUARE FEET) OF LAND, MORE OR LESS.

LOT AREA		
LOT 1	59.184 ACRES	2,578,043 SQUARE FEET
LOT 2	20.000 ACRES	871,221 SQUARE FEET

OWNER
LAVERN J. MORGAN FAMILY PARTNERSHIP LP
2701 CHESSINGTON DR
NEW LENOX, IL 60451
CONTACT:
EMAIL
PHONE NUMBER:

ENGINEER
R-S-H ENGINEERING, INC.
909 N. 18TH STREET, SUITE 200
MONROE, LA 71201
CONTACT: CLINT EWING
CLINTE@RSH.COM
318-361-3099

SURVEYOR
KEYSTONE CONSULTANTS, LLC
2245 TEXAS DRIVE, SUITE 200
SUGAR LAND, TEXAS 77479
CONTACT: TERRY ROWE
TROWE@KEYSTONECONSULTANTS.NET
281-853-5260

PREPARED BY
KEYSTONE
A CLS COMPANY
2245 TEXAS DRIVE, SUITE 200
SUGAR LAND, TX 77479
Ph: (281) 716-5855
www.keystoneconsultants.net

PRELIMINARY SUBDIVISION PLAT OF LARAWAY ANR PIPELINE TC ENERGY SUBDIVISION

THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 12, TWP. 34 N, RANGE 10 E
WILL COUNTY, ILLINOIS

DRAWN BY: DB
CHECKED BY: ER
SCALE: 1"=200'
DATUM: NAD83/NAVD88
DATE: 08/13/2024
DWG NAME: 4287.24.25_ALTA_LARAWAY.DWG

SHEET NO.
1 OF 1

PURPOSE

This Standard defines requirements for the design of permanent fire and gas detection systems at new facilities and Retrofit activities at existing facilities. It is to be used by design teams in the development of related projects or facility modifications.

SCOPE

This Standard applies to permanent fire and gas detection systems, including fixed combustible Gas Detectors, at all new construction and Retrofits of existing installations at onshore natural gas facilities in the U.S. Where full implementation of this Standard is not functionally possible for installations at existing facilities, consult with the Company.

This Standard does not apply to the following:

- portable or personal fire and gas detection
- hand-held fire suppression systems
- toxic Gas Detectors

This Standard does not apply to fire and gas detection systems at the following locations:

- meter stations, apart from meter stations located at gas transmission facilities
- oil transmission and storage facilities

Note:

Contact Measurement Engineering for fire and gas detection systems at meter stations.

This Standard is not intended to force immediate Retrofits at existing facilities. Rather, it is expected that these facilities will be upgraded to the current standard on an ongoing basis as part of managed programs or in response to equipment failure.

This Standard is intended for internal and external use.

Within an Engineering Standards Collection document, the following terms and definitions apply for requirements:

- 'Company' means the TC Energy entity for whom work, services and/or materials are being provided.
- 'Must' or a similar term (e.g., 'shall') is used to express a mandatory requirement. All statements in this document must be interpreted as mandatory requirements unless clearly stated as optional. A formally approved Variance Request is required to deviate from a mandatory requirement.
- 'Should' or 'may' is used to express an optional recommendation or that which is advised or permissible but not required.

Wherein governmental or regulatory requirements conflict with this Standard, the more stringent requirement shall govern except in cases where use of an alternate requirement is mandated by regulation.

Table of Contents

List of Tables

1 GLOSSARY

Term	Definition
Audible Indication	Audible means of indicating to the controller that equipment or processes are outside operator-defined safety-related parameters.
AHJ	Authority Having Jurisdiction
BSD	Building Shutdown
Cone of Coverage	Dimensional area and space the transmitter can see in.
Control System	Device into which fire and gas detection instruments are marshalled, and which initiates any consequential action, typically the Station or ESD PLC. In legacy installations, a standalone panel may have been used.
De-energize-to-Alarm	Set of alarm contacts (circuit) entering a PLC Digital Input. When power is removed from the associated circuit an alarm event will be triggered by the PLC.
ESD	Emergency Shutdown
Fault Alarm	Indicates the gas transmitter has failed or the unit is being calibrated.
Flame Detector	Detects the presence of fire by flame. Flame detectors increase life safety and reduce property damage. Early fire detection provides quick response, quick suppression, and reduced risk while the fire is small. Most fires generated from a solid or a liquid combustible develop in four stages: incipient, smoke, flame, and intense heat. Fires generated from combustible gases typically develop in two stages: flame (flash) and intense heat.
Factory Mutual	Factory Mutual is a loss prevention company that performs industrial and commercial product certification.
Gas Detector	Detects high concentrations of gas, permitting the hazardous condition to be addressed before an incident can occur. At gas transmission facilities, the most commonly found combustible gas is methane. Methane is lighter than air and requires that detection equipment be placed in the upper levels of buildings. Some sites also contain propane or butane, which are heavier than air and require that detection equipment be placed in the lower levels of buildings.
High Alarm	Used to shut down equipment and take other appropriate actions.
High Gas Condition	Occurs when gas at or above 10% LEL is detected. A High Gas Condition triggers an alarm. When gas at or above 40% LEL is detected, an ESD is triggered.
HMI	Human Machine Interface is a SCADA interface used to visualize the Control System for operations personnel. The HMI is located locally at the gas transmission facility and is typically a computer workstation.

Term	Definition
IR	Infrared is a type of Gas Detector that has sensitivity superior to catalytic bead detectors. In addition, infrared sensors are not susceptible to gas poisoning and are fail-safe, meaning the sensor is able to detect and indicate conditions in which it is blind to gas. The life expectancy of IR detectors is significantly longer than that of catalytic bead detectors, and maintenance intervals are doubled from 6 to 12 months.
Latch	Electrical circuit or device that contains an interlocking circuit designed to be activated on an event. When an event occurs, the interlocking circuit is activated, and the interlocking circuit changes from its normal operating state to a conditional state based on the event. For example, when a high-pressure event occurs, the electrical circuit changes from its normal operating state to a safety state. The interlocking circuit remains in the conditional state (latched) until a physical reset of the interlocking circuit is performed.
LEL	Lower Explosive Limit is where gas concentration levels are defined in percentage of LEL. The LEL of methane is approximately 5% concentration in air by volume (e.g., a methane level of 50% LEL would indicate a concentration in air of 2.5%. The LEL of butane and propane are 1.8% and 2.1% respectively).
Low Alarm	Used to warn personnel of a significant gas leak.
NC	Normally Closed
NO	Normally Open
NPT	National Pipe Thread
Pipe in Pipe Heat Exchanger	In its simplest form, a Pipe in Pipe Heat Exchanger is where one pipe is held concentrically inside of a larger pipe. The inner pipe acts as a conductive barrier, where one fluid flows through the inner pipe and another flows around it through the outer pipe, forming an annulus shape. The outside or shell-side flow passes over the inside or tube-side flow, which causes heat exchange through the inner tube's walls.
PLC	Programmable Logic Controller
Retrofits	Process by which an existing facility receives upgrades or modification to the existing fire and gas system. These upgrades include but are not limited to new, transmitters and detectors, PLC related equipment, and/or BSD installations. Retrofits do not include like and kind equipment change outs and or maintenance related work.

Term	Definition
Shell and Tube Heat Exchanger	Shell and Tube Heat Exchanger is a class of heat exchanger designs. Most common type of heat exchanger used in oil refineries and other large chemical processes and is suited for higher-pressure applications. Shell and Tube Heat Exchangers consist of a shell (a large pressure vessel) with a bundle of tubes inside it. One fluid runs through the tubes, and another fluid flows over the tubes (through the shell) to transfer heat between the two fluids. The set of tubes is called a tube bundle and may be composed of several types of tubes (e.g., plain, longitudinally finned).
Smart Transmitter	Single Modular Auto-ranging Remote Transducer Transmitter is an intelligent transmitter that has an analog output and simultaneously provides digital communication signal based on HART protocol or FOUNDATION FIELDBUS or PROFIBUS.
Smoke Detector	Detects the presence of fire via products emitted during the combustion process, such as smoke.
UV	Ultraviolet
UV/IR	UV/IR Flame Detectors consists of UV and IR sensors that are joined together in a single apparatus. UV sensors work by detecting the UV radiation emitted by the flame and are sensitive to a wide range of flammable fuels including hydrocarbons, sulfur, hydrazine, and ammonia.
Visible Indication	Visible means of indicating to the controller that equipment or processes are outside operator-defined safety-related parameters.
Vote/Voting	Feature of the standard gas detection system is the capability to Vote for a shutdown of the entire building when multiple sensor alarms occur. When multiple sensors are in alarm simultaneously it is indicative of a significant gas leak that is spreading throughout the building. In many instances, simply shutting down one unit is not sufficient to eliminate the danger present in the building from other operating units with hot piping and ignition sources. The gas transmitter's 4-20 mA signal will be used for the voting data, and the logic will be performed in the station's Control System. Implementing a voting system does not eliminate the normal compressor unit shutdown from each gas transmitter's high gas alarm contact.
Zone	Area or a room (e.g., an office or Motor Control Center room).

2 GENERAL REQUIREMENTS

2.1 General

2.1.1 Fire and gas detection instruments installed at Company facilities must monitor areas for the presence of smoke, flame, and hazardous atmosphere within buildings.

2.1.2 Detection instruments must initiate alarms to alert station personnel and control centers of a fire or natural gas leak.

2.1.3 Detection equipment must provide electrical signals to the Control System to initiate emergency consequential action to remove combustible fuel sources from areas where hazardous conditions are detected, and to activate fire suppression equipment if applicable.

3 ENGINEERING DRAWING REQUIREMENTS

3.1 General

3.1.1 The drawings described in this section must be formal Engineering documents authenticated in accordance with *Practice of Engineering (POE) Program (Cdn-US-Mex)* (Item ID 003672108) and as required by the AHJ at the location in which the facility is located.

3.2 Detector Coverage Drawings

3.2.1 Each building containing smoke or gas detection equipment must have the location of the detectors shown upon a plan view drawing of the building.

3.2.2 Each building containing flame detection equipment must have each detector's location and Cone of Coverage shown upon a plan view drawing of the building.

3.2.3 Detector coverage must be derived from Manufacturer-provided coverage information.

3.2.4 If multiple detector types are shown on the same plan view drawing, the drawing must be clear and legible.

3.2.5 Each detector must have the following information provided on the location/coverage drawings:

- device identification number
- elevation above floor
- detector viewing angle (Flame Detectors only)
- detector Manufacturer model number
- mounting hardware requirements

3.3 Fire and Gas Matrix

3.3.1 The Designer must modify *TEF-AE-PFGD-G Permanent Fire and Gas Detection Cause and Effect Matrix* (Item ID 1020085713) for the project, to be reviewed by the Company, and include the following information:

- list of detection instruments
- possible actionable outputs for each instrument
- list of possible consequential actions when a hazardous condition is detected

3.3.2 If an ESD matrix is also developed for the facility, the content of the ESD and fire and gas detection instrument matrices may be combined into a single matrix.

3.3.3 The fire and gas matrix must be a formal Engineering document authenticated in accordance with *Practice of Engineering (POE) Program (Cdn-US-Mex)* (Item ID 003672108) and as required by the AHJ at the location in which the facility is located.

4 DESIGN REQUIREMENTS – COMMON TO ALL EQUIPMENT

4.1 Common Design Requirements

4.1.1 All detection equipment must be Factory Mutual or Underwriters Laboratories approved, at a minimum.

4.1.2 All detection and indication equipment must be rated for the hazardous area classification in which it is installed in accordance with *TEN-EL-HAZLOC-GLE Hazardous Location Classification (CAN-US-MEX)* (Item ID 008023390). The overall design of detection equipment must be in compliance with 49 CFR 192.736.

4.1.3 All detection equipment must be rated for the maximum expected temperature of the building or enclosure in which it is installed. The equipment must be capable of operation in ambient temperatures from 20°F to 167°F.

4.1.4 All detection equipment must have immunity to electromagnetic/radio frequency and solar interference. Equipment must be suited for operation in direct proximity to hand-held portable radios.

4.1.5 All detection equipment must be powered by an uninterruptible 24 VDC power supply in accordance with *TES-EL-UPS-G Uninterruptible Power Supply for Compressor Stations (US)* (Item ID 1020045188).

4.1.6 All equipment must be connected directly to the Control System. The use of intermediate standalone fire or gas control modules, used to marshal multiple gas or Flame Detectors prior to connection to the Control System, is not permitted.

4.1.7 All detection equipment described in this Standard must be rated for proper operation in 0% to 95% relative humidity.

4.1.8 Detection equipment must be installed such that it may be accessed safely for maintenance and repair activities.

4.1.9 If detection equipment is installed in elevated locations, fall arrest anchors or other accessibility devices must be incorporated. These engineering controls should be developed in consultation with the Company's Civil Engineering and Health & Safety departments.

4.1.10 Fire and gas detection equipment enclosures must be composed of aluminum housing with 3/4 in. NPT conduit entry.

4.1.11 Detection equipment must be supplied with adjustable mounts for installation.

4.1.12 Detection equipment must remain powered during an ESD. DC power to Gas Detector must not be shunt tripped.

4.1.13 All detection equipment in the compressor building must be wired to the BSD panel in that building.

4.1.14 Fire and Gas Detectors in auxiliary buildings must be wired to the station control panel and/or associated station remote I/O panel.

5 FIRE DETECTION SYSTEM REQUIREMENTS

5.1 Fire Detection System Design Requirements

5.1.1 The following instruments must be used to detect fire:

- Flame Detectors
- Smoke Detectors

5.1.2 Flame Detectors must be equipped with sensors for UV and IR (UV/IR).

5.1.3 Use of technology other than UV/IR must be approved on a per-case basis by the Company.

5.1.4 Flame Detectors must operate in such a way that both UV and IR spectrums must be present to initiate an alarm. Neither UV nor IR alone must initiate an alarm.

5.1.5 All new compressor buildings must have Flame Detectors installed. Other buildings will be evaluated on a case-by-case basis.

5.1.6 At gas transmission facilities, Flame Detectors must be strategically located in compressor buildings such that full coverage is achieved over all areas where there is a potential for fire and must be aimed at the potential sources of flame on the unit (e.g., lube oil, fuel gas). These coverage requirements must be determined on a per-case basis through the engineering drawings described in section 3.

5.1.7 Flame detection equipment must be installed in a manner that prevents obstructions such as piping, cable trays, and structural members from interfering with the detectors' Cone of Coverage.

5.1.8 Flame detection equipment must have a minimum 90 deg horizontal field of view.

5.1.9 Flame Detectors must be mounted directly to structures to avoid vibration.

Note:

If no structures are available, a separate stand that has been stiffened to avoid vibration may be used with Company approval.

5.1.10 Flame Detectors should be installed such that each compressor unit is observed by at least two detectors in the building.

5.1.11 The Cone of Coverage drawings developed must provide the necessary number of detectors required to cover all areas of the associated unit with no blind spots.

5.1.12 For buildings with a BSD panel, the Flame Detector must be wired to the BSD panel.

5.1.13 For buildings without a BSD panel, the Flame Detector must be wired to the Station ESD/Fire and Gas panel.

Note:

The BSD will have a hardwired common fire indication wired to the ESD PLC and/or station ESD solenoid.

5.1.14 The flame detection system must be Smart Transmitters where the detector and electronics are self-contained within one physical instrument enclosure.

5.1.15 All Flame Detector contacts and analog signals must be wired to the BSD panel.

5.1.16 An analog 4-20 mA or 0-20 mA signal must be used to transmit Flame Detector diagnostic status to the Control System.

5.1.17 The analog signal must convey the various Flame Detector conditions for diagnostics, including test mode, detector malfunction, and alarm status.

5.1.18 Flame Detectors equipped with relay contacts for signaling must meet the following:

- rated for at least 5 A at 30 VDC
- available to indicate fire alarm (form C contact), fault (normally energized form A contact), and auxiliary (form C contact)

5.1.19 Flame Detectors must be equipped with automatic continuous optical integrity checking.

5.1.20 A test lamp suitable for testing the Flame Detectors must be provided at each compressor station.

5.1.21 Flame Detectors that cannot be tested with a test lamp must be provided with the appropriate test equipment.

5.1.22 All Flame Detectors must be provided with a swivel-type mounting bracket that may be field adjusted.

5.2 Fire Detection System Operational Requirements

5.2.1 Upon detection of fire, the Control System must:

1. Activate an alarm to the local HMI and to Gas Control.
2. Isolate the affected building from all sources of gas including fuel gas, vent all gas headers, and activate a BSD.
3. If the fire condition persists for 30 to 60 seconds (design condition determined) after a BSD is initiated, activate a station ESD.
4. If piping configuration is such that full building isolation cannot be achieved, initiate a station ESD.
5. Deactivate building or enclosure intake and exhaust fans and close building or enclosure louvers.
6. Activate Audible Indication devices.
7. Latch the fire condition within the Control System software until it is manually reset from the operator interface.

5.2.2 A request to deactivate building ventilation upon detection of fire must supersede a request to activate building ventilation due to high gas.

5.2.3 If a detector signal failure occurs on the 4-20 mA or 0-20 mA analog signal, or if a detector malfunction alarm is generated, the following actions must be taken:

- Failure of one detector – a critical call-out alarm must be generated to Gas Control and to the local HMI.
- Failure of two or more detectors – must be treated as a Fire event and initiate the corresponding BSD action.
- If fuel gas isolation is not possible, a BSD must be performed to reduce the quantity of gas in the building. The facility must not be ESD for this condition.

5.2.4 A software maintenance switch must be provided on the operator interface for each building's fire detection system to allow maintenance activities.

5.2.5 The software maintenance switch must cause all Flame Detectors within the building to be bypassed, preventing the consequential action within the Control System.

5.2.6 The software maintenance switch must not mask any alarms associated with the detection of flame.

5.2.7 An alarm must be generated when the maintenance switch is enabled.

6 GAS DETECTION SYSTEM REQUIREMENTS

6.1 Gas Detection System Design Requirements

6.1.1 IR combustible Gas Detector must be chosen for hydrocarbon gas detection at Company facilities.

Note:

Catalytic bead-type Gas Detectors are permitted only when approved by the Company.

6.1.2 IR Gas Detectors must be point-type. Open-path technology may be used only when specifically required and approved by the Company.

6.1.3 Gas detection equipment must be capable of detecting all types of combustible gases that have been identified as being present in the area being protected.

6.1.4 At gas transmission facilities, individual combustible Gas Detectors must be dedicated to each of the following areas:

- compressor building
- utility gas buildings, except for skid-type enclosures
- station recycle valve building
- acoustic enclosure
- boiler or mechanical rooms, electrical generator rooms/buildings, and pipeline control valve facilities where odorized gas is not used.

6.1.5 Gas Detectors must be mounted in an accessible location above the unit to which they are assigned.

Note:

Gas Detectors do not need to be directly over the units and can be offset to increase accessibility.

6.1.6 Gas Detectors must be located no more than 2 ft below the roof peak. If the Gas Detector cannot be installed within 2 ft of the roof peak, contact the Company for assistance.

6.1.7 On new construction, Gas Detectors must be located near the roof exhaust vents. Additional Gas Detectors may be located closer to the unit where required.

Note:

Gas Detectors must be elevated as methane is lighter than air.

6.1.8 Gas Detectors must not be located in dead air space.

6.1.9 The minimum number of Gas Detectors installed must meet the quantities stated in Table 6-1.

Table 6-1: Minimum Gas Detector Quantities

Location	Required Number of Detectors
Less than 10,000 hp reciprocating compressor units	One detector per unit. The Company may dictate more detectors.
Greater than 9,999 hp reciprocating compressor units	Two detectors per unit. The Company may dictate more detectors.
Less than 4,700 hp turbine compressor unit	One detector per unit.
4,700 hp and above turbine compressor unit	Two detectors per unit.
Basements below a solid compressor building floor	One detector per unit within 2 ft of piping.
Basements below a floor with a significant amount of grating	No detectors required.
Auxiliary building	One detector above gas utilization equipment where gas is not odorized.
Fuel gas building	No detectors required if the utility gas is less than 50 psig and gas is odorized.
Warehouse building	One detector at ceiling level where gas utilization equipment is present and gas is not odorized.
Office building	One detector located in the kitchen if gas utilization appliances are present and gas is not odorized.

6.1.10 The gas transmitter must provide a plant floor display of % LEL, and a place to perform calibration checks and performance testing.

6.1.11 The detector and transmitter must be located in a protected building.

6.1.12 The transmitter must provide a dry contact output for each alarm point (i.e., low, high, and fault).

6.1.13 The transmitter must provide a 4-20 mA output proportional to 0% to 100% LEL for remote alarm indication and/or voting.

6.1.14 An analog 4-20 mA or 0-20 mA signal must be used to transmit Gas Detector status to the Control System. The analog signal must convey the current gas concentration in percentage of LEL.

6.1.15 Gas Detectors equipped with relay contacts for auxiliary signaling must have the following contacts rated for 5 A at 30 VDC:

- one low gas alarm NO contact
- one high gas alarm NO contact
- one fault NC contact
- 4-20 mA gas level signal from each gas transmitter used for remote indication of the gas level

6.1.16 All contacts and analog signals must be wired to the BSD panel.

6.1.17 Standalone detectors must be used.

6.1.18 In auxiliary buildings, offices, and warehouses, the signal must be wired to the station control panel for remote monitoring.

6.1.19 The calibration test panel must consist of a regulator, lockable hand valve, and test ports to allow for either calibration gas or clean air on the sensor from the plant floor.

Note:

Calibration panels are not required in basements or where the sensor is not more than 8 ft above floor level.

6.1.20 Testing tubing must be UV-resistant plastic in areas that require extreme flexibility. In all other cases, stainless steel tubing must be used.

6.1.21 Stainless steel tubing must run from the calibration test panel to a nozzle on the gas sensor. The Company must be consulted regarding tubing dimensions and specifications.

6.1.22 A gas calibration kit, complete with one cylinder with 2.5% methane in air mixture (50% LEL) and one cylinder with air only (0% LEL), must be provided for each new facility where Gas Detectors are installed.

6.2 Gas Detection Operational Requirements

6.2.1 Upon detection of a gas concentration in excess of 10% LEL, the Control System must perform the following actions:

1. Activate an alarm to the local HMI and to Gas Control.
2. Activate Audible Indication and Visible Indication devices in the appropriate pattern (see section 8).
3. Start the building ventilation fans and open the building louvers.

6.2.2 The BSD must perform the voting functions in Table 6-2.

Note:

The voting functions in Table 6-2 ensure that all voting systems operate in the same manner and will provide consistency from one station to another.

Table 6-2: Voting Function Requirements

Condition	Description	Action by BSD PLC
1	One gas sensor on a compressor unit in the Low Alarm state	• Alarm to notify people in the building or about to enter the building of the presence of gas. • Turn building ventilation equipment on high rate, if so equipped.
2	One sensor in Low Alarm for more than 10 minutes continuously	• Shut down the compressor unit beneath the sensor. • Isolate and blowdown the unit, if possible. • Maintain building ventilation on at high rate, if so equipped.
3	One sensor on a compressor unit in the High Alarm state	• Shut down the compressor unit beneath the sensor. • Isolate and blowdown the unit, if possible. • Turn building ventilation equipment to high rate, if so equipped.
4	Two gas sensors on different units with one in Low Alarm and one in High Alarm state	• Shut down all compressor units in the building. • Isolate and blowdown the units, if possible. • Turn building ventilation equipment to high rate, if so equipped.
5	One sensor in High Alarm for more than 5 minutes continuously	• Shut down all compressor units in the building. • Isolate and blowdown the units, if possible. • Turn building ventilation equipment to high rate, if so equipped.
6	Any sensor has a Fault Alarm	• Annunciate the alarm on the station HMI. • Disable the low and high gas alarms for that sensor. • Trigger a gas sensor fault as a major station alarm.

Note:

Generally, the ESD system should not be tripped from the gas detection system. However, this is permissible where a station has no other means of blocking and blowing down a compressor building. Stations requiring an ESD should use an interposing relay connected to the ESD solenoid or an output from the BSD panel.

6.2.3 All gas detection alarms must be annunciated in auxiliary buildings on a touchscreen or HMI computer.

6.2.4 Gas detection alarms should be logged with time and date stamping by the station HMI computer or touchscreen.

6.2.5 If a fuel gas Shell and Tube Heat Exchanger is used to preheat the fuel gas, a gas detection system must be installed on the glycol side of the heat exchanger.

6.2.6 A 10% LEL concentration alarm generated by the fuel gas heat exchanger Gas Detector controller must initiate a signal to close the fuel gas heat exchanger glycol isolation valves. The preference is to use a Pipe in Pipe Heat Exchanger where the probability of natural gas leaking into the glycol side is remote.

6.2.7 A software maintenance switch must be provided on the operator interface for each building's gas detection system to allow maintenance activities.

6.2.8 The maintenance switch must cause all Gas Detectors within that building to be bypassed, preventing the consequential action within the Control System.

6.2.9 The maintenance switch must not mask any alarms associated with the detection of gas.

6.2.10 An alarm must be generated when the maintenance switch is enabled.

6.2.11 Any alarm or fault on any sensor must be communicated over the Controls network back to Gas Control. The alarm must appear at Gas Control as a major station alarm.

6.2.12 The Gas Detector high and Low Alarm relays must be programmed for De-energize-to-Alarm operation.

6.2.13 The low and High Alarm relays must be wired using the NO contact.

6.2.14 The fault relay must be programmed for fail-safe operation and wired using the NC contact.

Note:

This will result in fail-safe alarming of the gas detection and alarm system.

6.2.15 The gas detection and alarm system must communicate with a station PLC to notify of High Gas Conditions or system faults.

6.2.16 Each gas transmitter in the building must provide a dry contact to activate the building strobe lights. The contact must be open during normal conditions.

6.2.17 The contact must close when a low gas alarm is detected.

6.2.18 All gas alarm contacts in the building must be wired to a BSD or ESD panel. The gas transmitter must generate three separate alarms: two representing gas levels, and one representing the operational integrity of the Gas Detector. See the station's Control Philosophy for the alarm setpoints.

7 SMOKE DETECTION SYSTEM REQUIREMENTS

7.1 Smoke Detection Installation and Operational Requirements

7.1.1 At gas transmission facilities, combination smoke detection must be provided in all general-purpose buildings and control room buildings.

7.1.2 Smoke detection must not be used inside compressor buildings.

7.1.3 Smoke Detectors within a Zone may be wired in parallel, however, each Zone must be wired as an independent input directly to the station control panel.

7.1.4 Standalone Smoke Detector panels must not be used unless specialized Engineering requirements exist, and the Company approves their use. If a standalone panel is used, the panel must be equipped with a malfunction contact.

7.1.5 Smoke Detectors must provide smoke alarm and malfunction dry contacts for input into the station control panel.

7.1.6 Smoke Detector alarm contacts must be NC contacts that open upon detection of smoke.

7.1.7 Malfunction contacts must be NC contacts that open upon detector malfunction.

7.1.8 Smoke Detector alarm contacts must be of the non-latching type.

7.1.9 Smoke Detectors must be suitable for ceiling or side wall mounting.

7.1.10 Smoke Detectors must be equipped with an LED indicating if the detector is operating correctly.

7.1.11 Smoke Detectors must be equipped with a magnetically operated function test switch which enables operating personnel to test the detector electronics and put the unit into alarm.

7.1.12 A smoke alarm or a malfunction alarm must initiate a station alarm indicating the Zone in which smoke is detected.

7.1.13 A smoke alarm must be latched within the Control System until it is manually reset from the operator interface. In the event of smoke detection, an alarm must be issued on the operator interface and to Gas Control.

8 AUDIBLE AND VISIBLE INDICATION DESIGN REQUIREMENTS

8.1 Audible and Visible Indication Installation Requirements

8.1.1 Visible Indication strobes or beacons that indicate the presence of natural gas concentrations above the 10% LEL level must be installed as follows:

- outside, within the station yard, such that at least one Visible Indication device is visible at the entrance to each building containing high pressure natural gas
- within each building that may contain high-pressure natural gas, such that personnel in the building are visually warned if a hazardous condition exists
- strobes both inside and outside each compressor building in compliance with 49 CFR 192.736 to warn personnel both inside and about to enter the building of the danger

  Note:

  Plant horn systems may also be used to supplement the strobes, but not replace them.

8.1.2 Audible Indication horns or equivalent devices that annunciate upon the detection of hazardous conditions must be installed such that they are audible at all points within the station yard when any or all units are running.

8.1.3 Control signals for Audible Indication and Visible Indication devices must be wired to the Control System.

8.1.4 Audible Indication and Visible Indication devices must be powered by 24 VDC unless otherwise approved by the Company.

8.1.5 Visible Indication devices must be clear color only and must be visible in full sunlight.

8.1.6 Globe must be installed with the reflector in the up position to prevent collection of moisture inside the housing.

8.1.7 Audible Indication and Visible Indication devices that are not intrinsically weatherproof must be mounted within an enclosure that provides weatherproofing and which does not impede device functionality.

8.2 Audible Indication and Visual Indication Operational Requirements

8.2.1 The Control System must activate Visible Indication devices upon the detection of a High Gas Condition.

8.2.2 The Control System must activate Audible Indication devices upon the detection of a fire or High Gas Condition. The tone pattern used must be a single tone (blast) and must be reserved for fire/high gas/ESD alarming only. The tone pattern must not be used by any other alarms (e.g., station operating alarms).

8.2.3 When the facility is unattended, Audible Indication devices must be disabled. Time out must not occur when the facility is attended.

8.2.4 Once activated, Visible Indication must remain asserted until verification that no hazardous condition exists. Once the condition has been remediated and the sensor readings have returned to normal levels the alarm must be reset from the HMI to deactivate the Visible Indication.

8.2.5 An alarm that has been acknowledged, but has not been reset, must continue to activate Visual Indication devices.

8.2.6 Individual test switches must be provided for each Audible Indication and Visible Indication device.

8.2.7 Each test switch must be a software switch located on the local HMI and must activate the corresponding Audible Indication or Visible Indication device such that proper operation may be verified.

8.2.8 Compressor building exteriors with only one entrance must have a strobe light on the outside of the building above the main entrance.

8.2.9 Compressor building exteriors with more than one entrance must have strobe lights on the outside wall at two diagonally opposite corners, provided that a strobe is readily visible from each entrance.

8.2.10 Compressor building interiors must have strobes installed for visibility over the entire building area. The Company must identify the quantity and location.

8.2.11 If the compressor building has a basement, one or more strobe lights must be installed in the basement such that they can be seen from all locations in the basement. The Company must identify the quantity and location.

8.2.12 The location and mounting of strobe lights must be designed to be readily visible from all locations in the building.

8.2.13 Strobe lights may be mounted on walls or columns as required.

9 LOCATION OF EQUIPMENT – METER STATIONS OR INSTRUMENT BUILDINGS

9.1 General

9.1.1 Fire and gas detection at meter stations located at gas transmission facilities must be evaluated on an individual project-specific basis.

10 VARIANCES

Any deviation from this Standard's requirements must follow the Company *Controlled Document Library Variance Procedure (CDN-US-MEX)* (Item ID 007728702). To initiate a variance request, external parties (e.g., contractors and manufacturers) must contact the Company.

11 ROLES AND RESPONSIBILITIES

Table 11-1 outlines the roles and responsibilities required for the use of this Standard.

Table 11-1: Roles and Responsibilities

Role	Responsibilities
Company	• Approve or reject the use of permanent fire and gas detection equipment. • Assist with the locations of Gas Detectors if they cannot be located as required in this Standard. • Assess the number of Gas Detectors required for reciprocating compressor units and inform the Designer of same. • Consult on and approve alternate power for Audible Indication and Visible Indication devices if required. • Identify the quantity and location of strobes.
Company's Civil Engineering and Health & Safety departments	Approve the development of engineered controls for fall arrest anchors or other accessibility devices.
Designer	• Design and implement fire and gas detection systems in accordance with the requirements in this Standard. • Designer may be the Company or a Contractor, depending on the project.

12 REFERENCES

This document relies on a number of references to regulation, industry codes and standards, general industry guidance and internal references. These documents are listed in Table 12-1, Table 12-2 and Table 12-3.

Table 12-1: Regulatory References

Organization	Title
U.S. Department of Transportation	49 CFR 192.736 *Compressor stations: Gas detection*

Table 12-2: External Industry References

Organization	Title
For this Standard, there are no specific External Industry References.	

Table 12-3: Internal References

Item ID	Title
007728702	*Controlled Document Library Variance Procedure (CDN-US-MEX)*
003672108	*Practice of Engineering (POE) Program (Cdn-US-Mex)*
1020085713	*TEF-AE-PFGD-G Permanent Fire and Gas Detection Cause and Effect Matrix*
008023390	*TEN-EL-HAZLOC-GLE Hazardous Location Classification (CAN-US-MEX)*
1020045188	*TES-EL-UPS-G Uninterruptible Power Supply for Compressor Stations (US)*

13 DOCUMENTATION AND RECORDKEEPING

All technical document submittal requirements are provided in the Vendor Technical Document Requirements List included with the proposal request or purchase order.

The deliverables listed in Table 13-1 are required to implement this Standard. Each deliverable must be transmitted to (or stored in) the associated listed repository.

Table 13-1: Documentation Requirements

Documentation Description	Repository
Completed *TEF-AE-PFGD-G Permanent Fire and Gas Detection Cause and Effect Matrix* (Item ID 1020085713)	Project SharePoint site

14 DOCUMENT HISTORY

Rev.		
00	**Description**	**Effective Date**
	New document.	2021-Nov-01
	Rationale Statement	**Document Contact**
	This document was developed to provide the design requirements for fire and gas detection systems at onshore natural gas facilities.	Christopher Scurlock
	Impact Assessment Summary	**Document Owner**
	This document replaces *TES-5470-FG Specification for Fire and Gas Detection Instruments at Gas Transmission Facilities (CDN-US-MEX)* (Item ID 008066141). Current installation practices are already following this guideline.	U.S. Gas Technical and Operations Services Automation and Electrical USGO

15 DESCRIPTION OF CHANGE

Section	Description of Change
Regulatory	
N/A	N/A
Industry Standards	
N/A	N/A
General	
N/A	This Standard is a new document.

16 APPROVALS

Document Contact	Christopher Scurlock U.S. Gas Technical and Operations Services Automation and Electrical USGO
Document Owner Manager	Brian Sloan U.S. Gas Technical and Operations Services Automation and Electrical USGO
Discipline Checker	John Hand Engineering Execution
Approving Engineer	Christopher Scurlock U.S. Gas Technical and Operations Services Automation and Electrical USGO  Signature/Date

Legend

- Property Shape
- Fee Purchase +/- 20 Acres
- ANR Pipelines

PRELIMINARY

NOTES:
1. EXHIBIT PROVIDED FOR GENERAL DISCUSSION PURPOSES ONLY AND IS NOT ISSUED FOR RECORDING.
2. EXHIBIT IS NOT A SURVEY PRODUCT.
3. EXHIBIT SHOULD NOT BE USED FOR AUTHORITATIVE DEFINITION OF LEGAL BOUNDARY OR PROPERTY TITLE.

ANR Heartland Project

PARCEL ID: 10-11-12-200-002-0000

0 0.03 0.05 0.1 0.15 0.2 Miles

TC Energy

ANR Pipeline
Sandwich Compressor

Legend

- ANR Pipeline
- Sandwich station

Millhurst Rd
Millhurst Rd
Millhurst Rd IL-KL-001.900
Millhurst Rd
Millhurst Rd
PL1-MP0.0
B-1
Sandwich station
Sandy Bluff Rd
Stoage
Staff Building
Compressor Building
ANR Pipeline
Sandy Bluff Rd
Sandy Bluff Rd

Google Earth
Image © 2024 Airbus

N

500 ft

TC Energy

ANR Pipeline
Sandwich Compressor

Legend

- ANR Pipeline
- Sandwich station

5.32 ft

CASE NO. P-5-24, FP-5-24

DATE FILED: 8/16/24

CITY PLAN COMMISSION
JOLIET, ILLINOIS

PETITION FOR APPROVAL OF (Check One):

__X__ **Preliminary Plat**
_____ **Final Plat**
_____ **Recording Plat**

NAME OF SUBDIVISION: _____

NAME OF PETITIONER: Andrew D Black representative for ANR Pipeline TC Energy

CELL #: 607.207.8794 **E-MAIL:** andrewblack@ohiovalleyacquisition.com

HOME ADDRESS: _____

CITY, STATE, ZIP: _____

HOME PHONE: _____

BUSINESS ADDRESS: 210 N Walkup Ave

CITY, STATE, ZIP: Crystal Lake IL 60014

BUSINESS PHONE: _____

INTEREST OF PETITIONER: _____

NAME OF LOCAL AGENT: _____

ADDRESS: _____ PHONE: _____

OWNER: Lavern J Morgan Family Partnership

HOME ADDRESS: 2701 Chessington Dr PHONE: 815.474.6478

CITY, STATE, ZIP: New Lenox, IL 60451

BUSINESS ADDRESS: _____ PHONE: _____

CITY, STATE, ZIP: _____

CELL #: _____ **E-MAIL:** _____

ENGINEER: Allan Clement

ADDRESS: 700 Lousiana, Suite 700 Huston TX 77002 PHONE: 832.374.2430

LAND SURVEYOR: Terry Rowe

ADDRESS: _____ PHONE: 281.853.5260

ATTORNEY: _____

ADDRESS: _____ PHONE: _____

LEGAL DESCRIPTION OF PROPERTY: Listed On ALTA Survey

COMMON ADDRESS: 4101 S Cherry Hill Rd, Manhattan IL 60442

PERMANENT INDEX NUMBER (Tax No.): _____

SIZE: 20 Acres

NO. OF LOTS: 1

PRESENT USE: Agricultural EXISTING ZONING: R1B

USES OF SURROUNDING PROPERTIES: North: Agricultural

South: Agricultural

East: Agricultural

West: Agricultural

Name of Park District: _____

Date Contacted Park District: _____

Is any open space/park site being offered as part of a preliminary plat? _____

If yes, what amount? _____

(Acknowledgment by Park District Official) _____

Has the Zoning Board of Appeals granted any variance, exception, or special permit concerning this property?

Yes _____ No X If yes, list the Case number and name: _____

Is any variance from the Subdivision Regulations being requested? Yes _____ No _____

If yes, describe: _____

Attach ten (10) copies of the plat to this petition.

List all contiguous holdings in the same ownership (as defined in the Subdivision Regulations) by permanent index numbers: 1011122000010000

Attached hereto is an affidavit of ownership indicating the dates the respective holdings of land were acquired, together with the book and page of each conveyance to the present owner as recorded in the Will County Recorder of Deeds office. This affidavit shall indicate the legal owner of the property, the contract owner of the property, and the date the contract of sale was executed.

In the event the property is held in trust: A list of all individual beneficial owners of the trust must be attached.

In the event of corporate ownership: A list of all directors, officers, and stockholders of each corporation owning more than five percent (5%) of any shares of stock must be attached.

STATE OF ~~ILLINOIS~~ OHIO) ss
COUNTY OF ~~WILL~~ STARK)

I, Andrew D Black, hereby depose and say that all of the above statements and the statements contained in the papers submitted herewith are true. I agree to be present in person or by representation when this is heard by the Plan Commission.

Date: 9 August 2024

Petitioner's Name

Subscribed and sworn to before me this 9th day of August, 20 24

Notary Public

My Commission Expires: December 14, 2027

VALERIE D DODLEY
Notary Public
State of Ohio
My Comm. Expires
December 14, 2027

CITY OF JOLIET OWNERSHIP DISCLOSURE FORM

The City of Joliet requires that applicants for zoning relief, subdivision approval, building permits and business licenses disclose the identity of all persons having an ownership interest in the business and the real property associated with the application. A copy of this form must be completed and submitted with other application materials. Failure to properly complete and submit this form may result in the denial of the application.

I. *INFORMATION ABOUT THE APPLICATION*

This form is submitted as part of an application for the following (check all that apply):

- ☒ Rezoning, Special Use Permit, Variation, or Other Zoning Relief (Complete Sections II and III)
- ☐ Preliminary Plat, Final Plat, or Record Plat of Subdivision (Complete Sections II and III)
- ☐ Building Permit (Complete Sections II and III)
- ☐ Business License (Complete All Sections)

II. *INFORMATION ABOUT THE PROPERTY*

The address and PIN(s) of the real property associated with this application are:

PIN(s): 10-11-12-200-002-0000

III. *PROPERTY OWNERSHIP*

Select the type of owner of the real property associated with this application and fill in the appropriate contact information below:

☒	**Individual:**	State the names, addresses, and phone #'s of the individual owner(s)
☐	**Corporation:**	State the names, addresses, and phone #'s of all persons holding 3% or more of the stock of the corporation and the percentage of shares held by such stockholders
☐	**Limited Liability Company:**	State the names, addresses, and phone #'s of all members of the company along with the percentage of ownership held by each member
☐	**Land Trust:**	State the names, addresses, and phone #'s of the trustee(s) and all beneficiaries
☒	**Partnership:**	State the names, addresses, and phone #'s of all partners
☐	**Other type of organization:**	State the names, addresses, and phone #'s of all persons having a legal or equitable ownership interest in the organization or the right to direct the affairs of the organization

Lavern J Morgan Family Partnership LP, Thomas J O'Connor and Kim

2701 Chessington Dr New Lenox, IL 60451

815.474.6478

E-MAIL: andrewblack@ohiovalleyacqu FAX:

IV. BUSINESS OWNERSHIP

If the owner of the business is different than the owner of the real property associated with the application, then the following information must be provided:

Select the type of business owner associated with this application and fill in the contact information below:

☐	**Individual:**	State the names, addresses, and phone #'s of the individual owner(s)
☐	**Corporation:**	State the names, addresses, and phone #'s of all persons holding 3% or more of the stock of the corporation and the percentage of shares held by such stockholders
☐	**Limited Liability Company:**	State the names, addresses, and phone #'s of all members of the company along with the percentage of ownership held by each member
☐	**Partnership:**	State the names, addresses, and phone #'s of all partners
☐	**Other type of organization:**	State the names, addresses, and phone #'s of all persons having a legal or equitable ownership interest in the organization

_____

_____

_____

_____

E-MAIL:_____ **FAX**:_____

NOTE:
If a stockholder, member, beneficiary or partner disclosed in Section III or Section IV is not an individual, then the individuals holding the legal or equitable title to the real property or business associated with the application must also be disclosed. For example, if the real property associated with an application is owned by a land trust, and the beneficiary of the land trust is a limited liability company, then the members of the limited liability company must be disclosed. If one of the members of the limited liability company is a partnership, then the identity of the partners must be disclosed. If one of the partners is a corporation, then all persons owning 3% or more of the issued stock must be disclosed.

SIGNED:_____

DATE: 9 August 2024

Name, Title, and Telephone Numbers of Person Completing and Submitting This Form:

Andrew D Black Representative of ANR Pipeline TC Energy

_____

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Meeting Minutes - Final

Wednesday, July 24, 2024

9:00 AM

City Hall, Council Chambers

Land Use & Economic Development Committee

Committee Members
Councilman Cesar Cardenas, Chairperson
Councilman Cesar Guerrero
Councilman Pat Mudron

Citizens who are unable to attend the meeting can email comments in advance of the meeting to publiccomment@joliet.gov.

ROLL CALL

Present Councilman Cesar Cardenas and Councilman Pat Mudron

Absent Councilman Cesar Guerrero

ALSO PRESENT: Planning Director James Torri, Economic Development Director Paulina Martínez, Interim Corporation Counsel Chris Regis, Planner Ray Heitner, and Planner Helen Miller

Councilman Guerrero arrived at approximately 9:05 a.m.

APPROVAL OF MINUTES

Land Use & Economic Development Committee Meeting Minutes - 6/26/24 **TMP-7543**

Attachments: Land Use & Economic Development Committee Minutes 06-26-24.pdf

A motion was made by Councilman Pat Mudron, seconded by Councilman Cesar Cardenas, to approve Land Use & Economic Development Committee Meeting Minutes - 6/26/24. The motion carried by the following vote:

Aye: Councilman Cardenas and Councilman Mudron

Absent: Councilman Guerrero

CITIZENS TO BE HEARD ON AGENDA ITEMS

None

AGENDA ITEMS

TC Energy - Laraway Compressor Station **TMP-7546**

Attachments: Land Use & Economic Development_Staff Report_TC Energy.pdf
TC Energy Map.pdf
TC Energy - Site Plan - 17014A-M-SK-001.pdf
Sandwich Compressor
Sandwich Compressor 2

Planning Director James Torri read the staff report into the record.

Non-Environmental Permit Coordinator Andrew Black of TC Energy appeared on behalf of the proposal.

In response to the Committee's questions, there was a lengthy discussion about

essential service zoning requirements, a required subdivision, the surrounding agricultural area, compressor station piping location, and possibility of a labor agreement.

A brief discussion was held regarding the role of the Committee, in which Interim Corporation Counsel Chris Regis described the Council Committee as an advisory committee.

Councilman Mudron highlighted the location of the compressor station.

Vista Ridge Residential Subdivision Proposal **TMP-7547**

Attachments: Land Use & Economic Development_Staff Report_Vista Ridge.pdf
Vista Ridge Map.pdf
2024-06-18-SP_RENDERING-Copy-Vista Ridge

Mr. Torri read the staff report into the record.

John Barry of McNaughton Development, LLC and Mark Fields of Ryan Homes appeared on behalf of the proposal. Mr. Fields gave a brief overview of the types of houses that will be built in Vista Ridge Subdivision.

In response to Councilman Mudron's questions, Mr. Torri and Mr. Fields explained the precedence for lot size change in other subdivisions, the number of units in the multi-family townhouses, and townhouse ownership.

Councilman Cardenas highlighted more houses being built as a sign of Joliet's growth.

Councilman Mudron inquired about the strain on infrastructure in the area. Mr. Torri responded that the developer and staff have given no indications that the proposal would cause strain on facilities.

Sales-Tax Sharing Agreement with World Automotive for Expansion and Retention **TMP-7549**

Attachments: World_Automotive_Sharing_Memo_27JUNE2024.pdf
World_Automotive_Schedule.pdf
World_Automotive_Renderings.pdf
World_Automotive_Signage.pdf
World_Automotive_Agreement.pdf

Economic Development Director Paulina Martínez gave a brief overview of the Sales Tax Sharing Agreement with World Automotive.

General Manager of World Kia Josh Falcone appeared on behalf of the proposal.

In response to the Committee's questions, Ms. Martínez explained that the sales-tax breakdown was in line with other dealerships, how the 25% Joliet resident workforce condition would be monitored, and confirmed the workforce condition applied to all employees and positions.

Councilman Cardenas highlighted the project as good for the City of Joliet and thanked World Automotive for remaining in Joliet.

NEW OR OLD BUSINESS - NOT FOR FINAL ACTION OR RECOMMENDATION

None

PUBLIC COMMENT

None

ADJOURNMENT

A motion was made by Councilman Cesar Guerrero, seconded by Councilman Pat Mudron, to approve adjournment. The motion carried by the following vote:

Aye: Councilman Cardenas, Councilman Guerrero and Councilman Mudron

This meeting will be held in an accessible location. If you need a reasonable accommodation, please contact Christa M. Desiderio, City Clerk, 150 West Jefferson Street, Joliet, Illinois 60432 at (815) 724-3780.