☒ **AMENDMENT OF SOLICITATION**
☐ **MODIFICATION OF CONTRACT**

City of New Braunfels
Purchasing
551 Landa Street
New Braunfels, Texas 78130

1. Solicitation No.	**2. Contract No.**	**3a. Addendum No. 1**	**4. Effective Date of this Action**
CSP 23-005 **New Braunfels Fire Training Complex Site Infrastructure**		**3b. Modification No.**	**12/16/22**

5. Name and Address of Offeror or Contractor	***6.*** *For Information Call:* (No collect calls or Fax offers accepted) Purchasing: **Barbara Coleman** Phone No.: **830-221-4389** Fax No.: **830-608-2112**	**7.** Amount of Contract/Order is: Increased by: Decreased by: New Total: ☐ **Unchanged**

8. THIS BLOCK APPLIES TO AMENDMENTS OF SOLICITATIONS ONLY:

The above numbered solicitation is amended as set forth in Block 10 below.

☐ **The date and time specified for receipt of offers IS NOT extended.**

☒ **THE DATE AND TIME SPECIFIED FOR RECEIPT OF OFFERS IS CHANGED TO:**

Offerors must acknowledge receipt of this amendment prior to the date and time specified in the solicitation or as amended, by one of the following methods:

(i) By completing Blocks 5 and 11 and returning this Addendum in the number of copies specified for the solicitation;

(ii) By acknowledging receipt of this Addendum on each copy of the bid submitted; or,

(iii) By separate letter, telegram, or fax referencing the solicitation and addendum.

If by virtue of this Addendum offeror desires to change an offer already submitted, such change may be made by letter, telegram, or fax, provided each such notice makes reference to the solicitation AND this Addendum, and is received prior to the date and time specified.

NOTICE: NON-RECEIPT OF YOUR OFFER AND THIS ADDENDUM AT THE DESIGNATED PLACE WITHIN THE DATE AND TIME SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.

9. THIS BLOCK APPLIES TO MODIFICATIONS TO CONTRACTS, DELIVERY OR PURCHASE ORDERS ONLY.

The above numbered Contract, Delivery, or Purchase order is modified as set forth in block 10 below.

☐ This Change Order is issued in accordance with authority granted by instrument referenced in block 2.

☐ The instrument in Block 2 is modified to reflect administrative changes.

☐ This Supplemental Agreement is entered into pursuant to the Authority of:

☐ Other (Specify type of modification and authority): _____.

☐ CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN ONE ORIGINAL.

☐ Contractor is not required to sign this document but is requested to acknowledge receipt.

10. DESCRIPTION OF CHANGES

This Addendum No. 1 provides the minutes to the Pre-proposal Conference hosted on December 7, 2022 and answers to questions received by the question deadline of December 9, 2022.

Clarifications to the Plans are included and attached.

Except as provided herein, all terms and conditions of the document referenced above remain unchanged and in full force and effect.

11a. SIGNATURE OF OFFEROR OR CONTRACTOR		**CITY OF NEW BRAUNFELS, TEXAS**
		"Barbara Coleman"
11b. PRINTED NAME AND TITLE	**11c.** DATE	12/16/2022
		Barbara Coleman — **Date** **Purchasing Manager**

CSP 23-005 New Braunfels Fire Training Complex Site Infrastructure
PRE-PROPOSAL CONFERENCE MINUTES
DECEMBER 7 at 10 a.m.

A. Announcement of Solicitation: CSP 23-005 New Braunfels Fire Training Complex Site Infrastructure

1. Solicitation Schedule:
    1. Date issued: November 16, 2022
    2. Non-mandatory Pre-Proposal Conference: December 7, 2022 at 10:00 A.M. (Central Time) Hosted via zoom:

        Register in advance for this webinar:

        https://us02web.zoom.us/webinar/register/WN_a4clSvXrTcSqxuXBq2SjpA

        After registering, you will receive a confirmation email containing information about joining the webinar. The call in Telephone: (833) 926-2300
    3. All questions must be submitted to **Barbara Coleman** no later than **December 9, 2022** by **5:00 P.M. (Central Time).**
    4. All proposals are due to New Braunfels City Hall, City Secretary Office - Attention: Purchasing, **no later than 3:00 P.M. (Central Time) on January 10, 2022.**
    5. Proposals will be read aloud at City Hall and posted on the city website:
        - City of New Braunfels' website, https://www.nbtexas.org/2694/Solicitations.
    6. **Notice of Award:** It is the City's intent to make its recommendation to City Council for approval in January 2023.

B. Introductions (Staff)

1. Barbara Coleman, Purchasing Manager – ***primary point of contact until the contract is awarded***.
   Phone: (830) 221-4389 Email: bcoleman@nbtexas.org
2. Adam Michie, City Project Manager – Project Contact
   Phone: (830) 221-4079 Email: AMichie@nbtexas.org
3. Design Engineer, Brown Reynolds Watford Architects, Inc.

C. Description of Work:

The City is seeking a construction company for the facilities included in the New Braunfels Fire Training Sit Infrastructure plans with quality experience in site development, utility and drainage infrastructure construction.

Technical description will be discussed during this meeting.

D. Review of Bidding Procedures

1. Solicitation documents may be obtained at:
    - The BidNet Direct website, https://www.bidnetdirect.com/texas/city-of-new-braunfels
    - The City of New Braunfels' website, https://www.nbtexas.org/2694/Solicitations

2. **Submission:** Proposer must follow proposal instructions notated within Sections 1 through 5 of the solicitation documents to provide consistency for the evaluation committee.
    a. Deadline for submittal of Questions and Requests for clarifications will be **Dec. 9, 2022** at 5:00 p.m.

b. All proposals are due to New Braunfels City Hall, City Secretary Office - Attention: Purchasing, **no later than 3:00 P.M. (Central Time) on January 10, 2023.**
c. All proposals must be time stamped by the City Secretary's Office at the New Braunfels City Hall.
d. Proposals received after the time and date set for submission will be returned, unopened, upon request.
e. Label as follows:

Delivery Address	Labeled:
Purchasing Department	**CSP 23-005**
City of New Braunfels	**NB Fire Training Complex Site Infrastructure**
550 Landa Street	**Due: Jan. 10, 2023 – 3pm**
New Braunfels, TX 78130	

E. Required Proposal Documents:

TAB 1 – Solicitation and Offer Form; completed and signed.
TAB 1 – Acknowledgment of Addenda, if applicable.
TAB 2 – Cover Letter: Name and address of the Proposer, as well as a brief description of the firm and its history.
TAB 3 – Executive Summary: A brief summary highlighting the most important points of the proposal.
TAB 4 – Cost Proposal Form (Exhibit 1A & Exhibit 1B)
TAB 5 – Qualifications of Proposer – as required in Section 04.10.C.
TAB 6 – Vendor Certifications (Exhibit 4**)**
TAB 7 - Plan and Schedule as required in Section 4.10.C.3 and Vendor Certifications (Exhibit 4)
TAB 8 – Acceptable Documentation

- Bond Form - Proposal Guaranty/Bid Bond in an amount no less than five percent (5%) of price proposal (Exhibit 2).
- One copy of Certificate of Insurance completed and signed (Section 4.17).
- Conflict of Interest (Section 4.18.13).
- Certificate of Interested Parties; Form 1295 (Section 4.18.12).

TAB 8 – Required information indicated in Drawings, if applicable.
Required January 11, 2023 – completed Schedule of Values (Exhibit 1B)
****Note-** To be submitted no later than January 11, 2023 at 3:00 P.M. (CST) via email to Barbara Coleman, Purchasing Manager at BColeman@nbtexas.org

Required after contract award – Performance and Payment Bonds (Exhibit 1B).

F. General Information

1. **CONTRACT TIMES:**

a. Days to Achieve Substantial Completion and Final Payment: The Work will be substantially completed within **120** calendar days after the date when the Contract Times commence to run
b. Days to completed and ready for final payment within **150** calendar days after the date when the Contract Times commence to run.

c. The substantial completion schedule will be further defined with the final contract.

2. **Liquidated Damages: *$500*** for each calendar day that expires after the time specified.

G. Other Instructions

1. **Evaluation Criteria –**

Percent	Description
70	**Cost Proposal Price**
20	**Experience and Qualifications**
10	**Plan and Schedule**
Optional 10	**Optional Interview**

2. **Retainage:** (5%)
   - **Bonding & Insurance –** Bid Bond (5%)
   - Performance (100%) Equal to Contract Amount
   - Payment (100%) Equal to Contract Amount
   - Insurance and Liability Coverage – Section 4.17

3. **Prevailing wage rates:** Davis Bacon Wage Rates – Exhibit 3 – Prevailing Wage Schedule
4. **General Contractor Registration with the City:** Section 04.11, 05.23
5. **Anti-Lobbying:** Section 4.18.10

H. Proposal Form – Exhibit 1A –

- Line-item proposal is provided in Excel Form with the solicitation.

I. Technical Discussion – Project Manager and Engineer:

Statement of Work:

- Extend road pavement through to neighborhood.
- Demolition of existing trees and regrading of subgrade.
- Installation of a landscaped detention / retention pond.
- Construction of concrete paving and parking lot improvements including wheel stops and striping.
- Installation of a grate inlet and underground reinforced concrete storm pipe to tie-in to existing storm sewer.
- Install privacy and security fencing and motorized gates.
- Run utilities to site and to areas of future building locations.
- Contractor shall coordinate all work, inspections, and approvals with the City of New Braunfels.
- Project shall comply with the United States Occupational Safety & Health Administration regulations.
- Methods & Means of construction shall be compliant with all applicable Federal, State, and Local regulations. This includes obtaining all necessary permits and inspections.

- Contractor to adhere to City of New Braunfels construction administration procedures.
- Maintain and submit all project records such as record drawings, project manuals, and warranties for approval by the City of New Braunfels.

J. Questions and Answers:

1. What size casing should be quoted for the sanitary bore?
   The answer to this question is Item 10 under clarifications to the Plans included in this addendum 1.

2. What is the Project Cost?
   The Estimated Project Costs is $5.2M

3. How will the city support Generator lead times?
   The proposers should identify long lead items and include strategies to mitigate delays in their submittal.

Attendee Report

Report Generated: 12/16/2022 10:26

Topic	Webinar ID	Actual Start Time	Actual Duration (minutes)	# Registered
Pre-Proposal Conference	867 6697 2311	12/7/2022 9:52	27	6

Attendee Details

Attended	User Name (Original Nam	First Name	Last Name	Email
Yes	Eddie Whitworth	Eddie	Whitworth	eddie@tegrity-contractor
Yes	Cade Deines	Cade	Deines	cdeines@hjdcapital.com
Yes	John Kovar	John	Kovar	johnk@dwilsonconstructi
Yes	Jose Dominguez	Jose	Dominguez	j.dominguez@dsconcrete
Yes	Raul Scott	Raul	Scott	rauljr@apgc.pro
No	Mike	Mike	Guy	mguy@dntconstruction.c

BROWN REYNOLDS WATFORD
ARCHITECTS BRW

175 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
979-694-1791
WWW.BRWARCH.COM

ADDENDUM NO. 01

PROJECT: NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE

LOCATION: NEW BRAUNFELS, TEXAS

PROJECT NO: 219065.00

DATE: DECEMBER 14, 2022

The Construction Documents on the above referenced project, dated 11/01/2022, shall be revised as follows:

DRAWINGS

Item No. 1 (RE: Sheet AS1.5, Detail 2) – Architectural Site Details
- A. The 8 bollards on the west side of the propane tank have been revised to be removable. Product listed as Postguard 6" x 36" Removable Steel Bollard RMB636Y EMB6x12

Item No. 2 (RE: Sheet C1.0) – Site Plan
- A. The water line loop around the training facility was expanded to accommodate the future training facility.
- B. One of the 8"x6" tee connections to the 8" loop was removed and relocated to branch off of the 6" fire water line stub out running to the building instead.
- C. The easement was also adjusted to follow the new routing of the water line.

Item No. 3 (RE: Sheet C4.0) – Utility Plan
- A. The water line loop around the training facility was expanded to accommodate the future training facility.
- B. One of the 8"x6" tee connections to the 8" loop was removed and relocated to branch off of the 6" fire water line stub out running to the building instead.
- C. The easement was also adjusted to follow the new routing of the water line.
- D. The irrigation meter was reduced to a 1.5" meter, and callouts for valves were added to the water lines for clarity.

Item No. 4 (RE: Sheet C7.0) – Water Plan
- A. The water line loop around the training facility was expanded to accommodate the future training facility.
- B. One of the 8"x6" tee connections to the 8" loop was removed and relocated to branch off of the 6" fire water line stub out running to the building instead.
- C. The easement was also adjusted to follow the new routing of the water line.
- D. The irrigation meter was reduced to a 1.5" meter, and callouts for valves were added to the water lines for clarity.

Item No. 5 (RE: Sheet C7.1) – Water Profile
- A. Callouts for valves were added to the water lines for clarity.

Item No. 6 (RE: Sheet L1.3, Legend) – Irrigation Plan and Details

B. The Irrigation Manufacturer has been changed to state "Manufacturer must be acceptable per the New Braunfels Parks Specifications" see attached.

Item No. 7 (RE: Sheet MEP1.0) – MEP Site Plan

A. An underground communications conduit has been added to run from the modular building location and connecting the owner provided cameras to be mounted at the light poles on the east and west sides of the burn building locations.

Item No. 8 (RE: Sheet MEP2.0) – MEP Site Plan – Lift Station

A. New Generator has been shifted over to the West of the existing generator for the NBU facility.

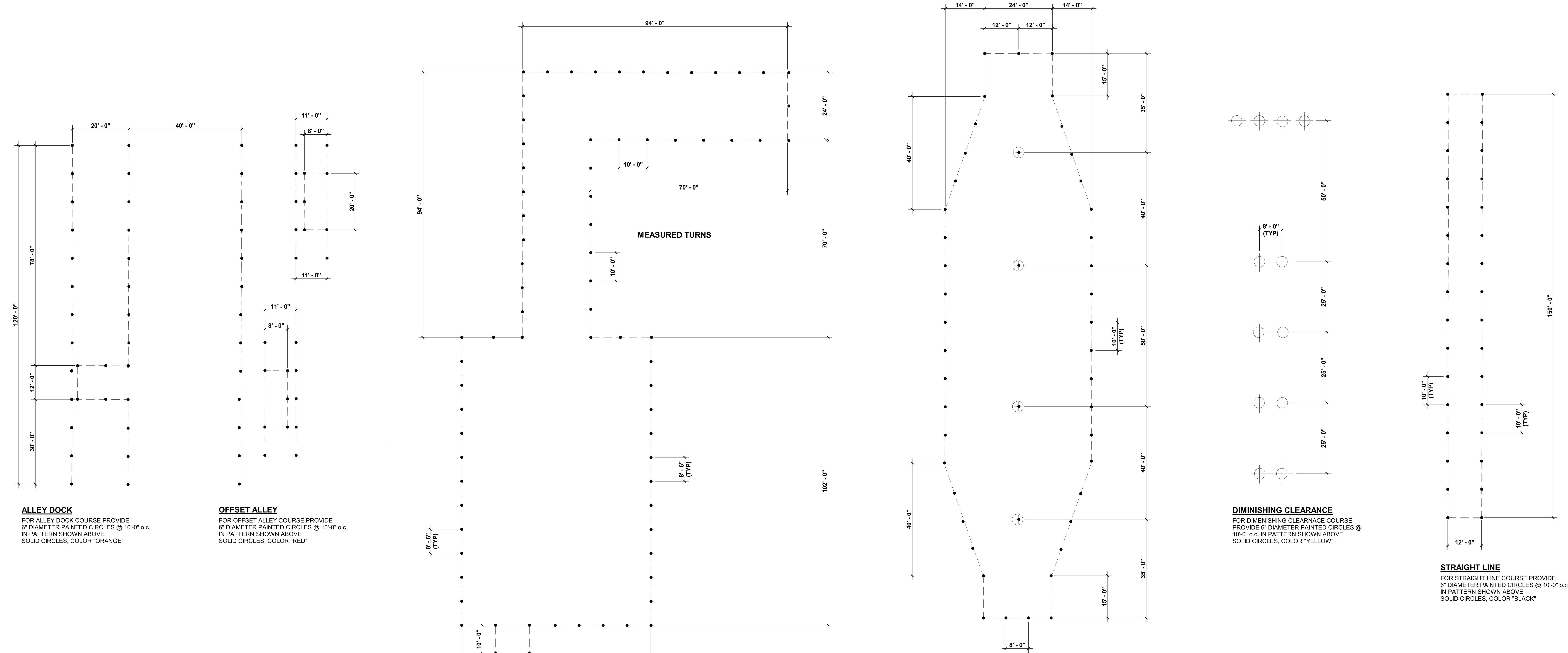
CLARIFICATIONS

Item No. 9 The generator shown on sheet MEP2.0 is a new generator that will serve the lift station for the detention pond at the east end of the site. This generator does not replace or tie into the existing generator.

Item No. 10 The casing required for the sanitary bore shown on sheet C6.0, Sanitary Sewer Plan should follow the AWWA recommendation of a 14" casing for a 6" pipe. The 14" casing should span from the pit to 15' before to the proposed public sanitary manhole. Refer to Casing Detail on sheet C10.1

Attachments: AS1.5, C1.0, C4.0, C7.0, C7.1, L1.3, MEP1.0, MEP2.0
NEW BRAUNFELS PARKS DEPARTMENT IRRIGATION COMPONENTS SPECS

END OF ADDENDUM NO. 01 *



ALLEY DOCK
FOR ALLEY DOCK COURSE PROVIDE
6" DIAMETER PAINTED CIRCLES @ 10'-0" o.c.
IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "ORANGE"

OFFSET ALLEY
FOR OFFSET ALLEY COURSE PROVIDE
6" DIAMETER PAINTED CIRCLES @ 10'-0" o.c.
IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "RED"

MEASURED TURNS

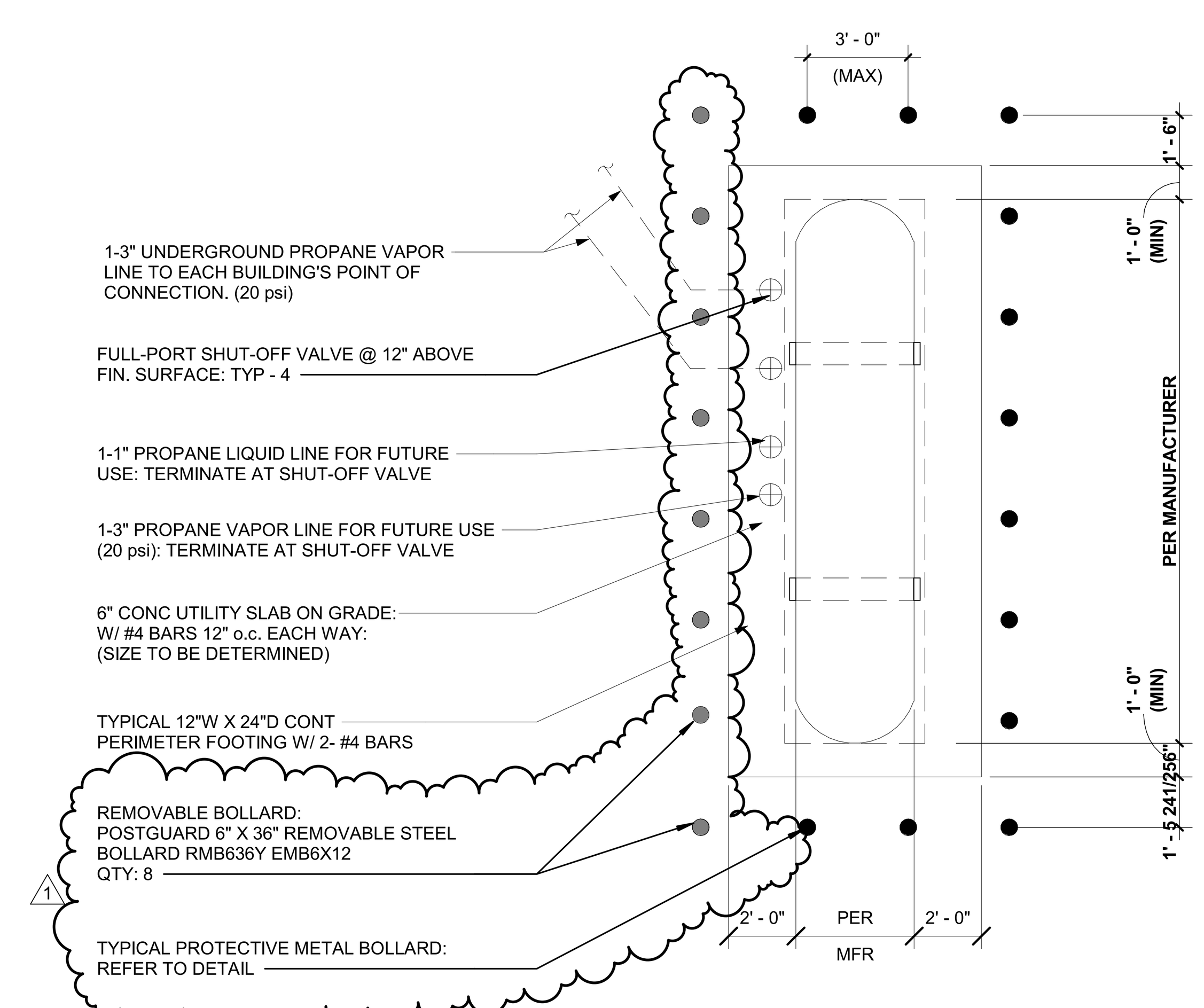
CONFINED SPACE
FOR CONFINED SPACE COURSE PROVIDE
6" DIAMETER PAINTED CIRCLES @ 10'-0" o.c.
IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "BLUE"

SERPENTINE
FOR SERPENTINE COURSE PROVIDE
6" DIAMETER PAINTED CIRCLES @ 10'-0" o.c.
IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "GREEN"

DIMINISHING CLEARANCE
FOR DIMINISHING CLEARNACE COURSE
PROVIDE 6" DIAMETER PAINTED CIRCLES @
10'-0" o.c. IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "YELLOW"

STRAIGHT LINE
FOR STRAIGHT LINE COURSE PROVIDE
6" DIAMETER PAINTED CIRCLES @ 10'-0" o.c.
IN PATTERN SHOWN ABOVE
SOLID CIRCLES, COLOR "BLACK"

1 DRIVING COURSE SKILLS
1/16" = 1'-0"



PROPANE TANK GENERAL NOTES

1. 2,000 GALLON PROPANE TANK TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR, INCLUDING ALL REQUIRED AGENCY PERMITS AND APPROVALS.
2. CONTRACTOR TO CONFIRM PHYSICAL TANK SIZE WITH PROVIDER PRIOR TO PLACEMENT OF SHOWN UTILITY PAD.
3. ONLY FULL-PORT SHUT-OFF VALVES AT POINTS OF TERMINATION FOR PROPANE LINES SHALL BE USED. SET SHUT-OFF VALVES INSIDE THE AREA OF UTILITY PAD.
4. CONCRETE PAD SHALL BE SLOPED TO DRAIN AT A MINIMUM OF 1/4" PER LINEAR FOOT. FINISHED SURFACE OF PAD TO BE 2" ABOVE ADJACENT GRADE: REFER TO CIVIL.
5. INSTALLATION OF UNDERGROUND POLYETHYLENE SUPPLY LINES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE CURRENT EDITIONS OF THE IBC AND NFPA.
6. CONTRACTOR SHALL PROVIDE FINAL CONNECTION AND TESTING FROM ABOVE GROUND SHUT-OFF VALVES TO TANK PORTS UPON PLACEMENT OF TANK. PIPING SHALL BE AS FOLLOWS:
   A. FOR VAPOR LINES (TOP OF TANK) 3" DIAMETER SUPPLY.
   B. FOR LIQUID LINES (BOTTOM OF TANK) 1" DIAMATER SUPPLY.

2 PROPANE TANK
1/4" = 1'-0"
0 2' 4' 8'

11/01/2022

BROWN REYNOLDS WATFORD ARCHITECTS
173 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
979-694-1791
WWW.BRWARCH.COM

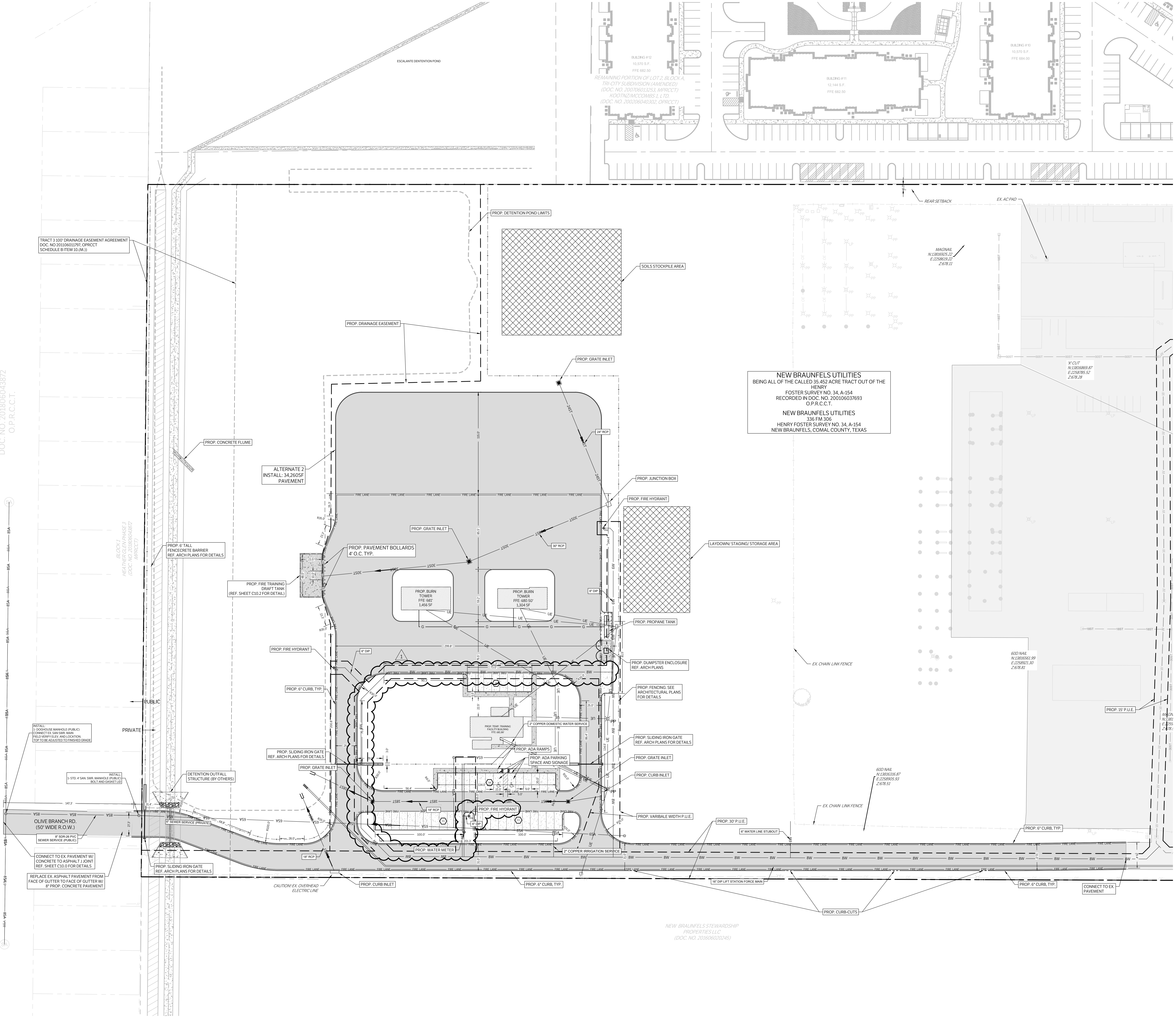
DATE	11/01/2022
DRAWN BY	MG
CHECKED BY	MW, RH
BRW PROJECT NUMBER	219065.00

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 77130

NO.	REVISION	DATE
1	ADDENDUM 01	12/12/22

AS1.5

ARCHITECTURAL SITE DETAILS



ESCALANTE DENTENTION POND
REMAINING PORTION OF LOT 2, BLOCK A, TRI-CITY SUBDIVISION (AMENDED) (DOC. NO. 200706003253, MPRCCT) KOOTNZ/MCCOMBS 1, LTD. (DOC. NO. 200206040302, OPRCCT)
TRACT 3 100' DRAINAGE EASEMENT AGREEMENT DOC. NO 201106001797, OPRCCT SCHEDULE B ITEM 10.(M.))
PROP. DETENTION POND LIMITS
SOILS STOCKPILE AREA
PROP. DRAINAGE EASEMENT
PROP. GRATE INLET
REAR SETBACK
EX. AC PAD
NEW BRAUNFELS UTILITIES
BEING ALL OF THE CALLED 35.452 ACRE TRACT OUT OF THE HENRY FOSTER SURVEY NO. 34, A-154 RECORDED IN DOC. NO. 200106037693 O.P.R.C.C.T.
NEW BRAUNFELS UTILITIES
336 FM 306
HENRY FOSTER SURVEY NO. 34, A-154
NEW BRAUNFELS, COMAL COUNTY, TEXAS
HEATHER GLEN PHASE 3 DOC. NO. 201806043872 O.P.R.C.C.T.
PROP. CONCRETE FLUME
ALTERNATE 2 INSTALL: 34,260SF PAVEMENT
PROP. JUNCTION BOX
PROP. FIRE HYDRANT
PROP. GRATE INLET
PROP. 6' TALL FENCECRETE BARRIER REF. ARCH PLANS FOR DETAILS
PROP. PAVEMENT BOLLARDS 4' O.C. TYP.
LAYDOWN/ STAGING/ STORAGE AREA
PROP. FIRE TRAINING DRAFT TANK (REF. SHEET C10.2 FOR DETAIL)
PROP. BURN TOWER FFE: 681' 1,456 SF
PROP. BURN TOWER FFE: 680.50' 1,304 SF
PROP. PROPANE TANK
PROP. FIRE HYDRANT
PROP. DUMPSTER ENCLOSURE REF. ARCH PLANS
PROP. 6" CURB, TYP.
PROP. FENCING. SEE ARCHITECTURAL PLANS FOR DETAILS
EX. CHAIN LINK FENCE
PUBLIC
PRIVATE
2" COPPER DOMESTIC WATER SERVICE
PROP. TEMP. TRAINING FACILITY BUILDING
PROP. SLIDING IRON GATE REF. ARCH PLANS FOR DETAILS
PROP. ADA RAMPS
PROP. ADA PARKING SPACE AND SIGNAGE
PROP. GRATE INLET
PROP. CURB INLET
PROP. 15' P.U.E.
INSTALL: 1-DOGHOUSE MANHOLE (PUBLIC) CONNECT EX. SAN SWR. MAIN FIELD VERIFY ELEV. AND LOCATION TOP TO BE ADJUSTED TO FINISHED GRADE
INSTALL: 1-STD. 4' SAN. SWR. MANHOLE (PUBLIC) BOLT AND GASKET LID
DETENTION OUTFALL STRUCTURE (BY OTHERS)
PROP. FIRE HYDRANT
PROP. VARIBALE WIDTH P.U.E.
PROP. 30' P.U.E.
8" WATER LINE STUBOUT
PROP. 6" CURB, TYP.
OLIVE BRANCH RD. (50' WIDE R.O.W.)
8" SDR-26 PVC SEWER SERVICE (PUBLIC)
8" SEWER SERVICE (PRIVATE)
PROP. WATER METER
2" COPPER IRRIGATION SERVICE
CONNECT TO EX. PAVEMENT W/ CONCRETE TO ASPHALT J JOINT REF. SHEET C10.0 FOR DETAILS
REPLACE EX. ASPHALT PAVEMENT FROM FACE OF GUTTER TO FACE OF GUTTER W/ 8" PROP. CONCRETE PAVEMENT
PROP. SLIDING IRON GATE REF. ARCH PLANS FOR DETAILS
CAUTION! EX. OVERHEAD ELECTRIC LINE
PROP. CURB INLET
PROP. 6" CURB, TYP.
16" DIP LIFT STATION FORCE MAIN
PROP. CURB-CUTS
PROP. 6" CURB, TYP.
CONNECT TO EX. PAVEMENT
NEW BRAUNFELS STEWARDSHIP PROPERTIES LLC (DOC. NO. 201806020245)

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

N

0 40 80 120
SCALE: 1"= 40'

PROJECT BENCHMARK:

BM1 BENCHMARK DESCRIPTION:
"X" CUT IN CONCRETE ON NORTH SIDE OF WINDGATE DRIVE NEAR INTERSECTION WITH FM 306
ELEVATION = 676.19'

BM2 BENCHMARK DESCRIPTION:
"X" CUT IN CONCRETE
ELEVATION = 678.20'

LEGEND

- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE PAVEMENT
- PROPOSED 8" CONCRETE PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING PAVEMENT EDGE
- EXISTING BASE EASEMENT
- EXISTING FLOW LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING FIRELANE
- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING FENCE CHAIN LINE
- EXISTING GAS LINE
- PROPOSED FENCE IRON LINE
- PROPOSED FIRELANE
- PROP. SANITARY SEWER
- PROP. STORM SEWER
- PROP. WATER LINE
- PROP. GAS LINE
- EX. / PROP. FIRE HYDRANT
- EX. / PROP. TREE
- EX. / PROP. SIGN
- EX. / PROP. LIGHT POLE
- EX. / PROP. WATER METER
- EX. / PROP. STORM SEWER MANHOLE
- EX. / PROP. SANITARY SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING GUY WIRES
- EXISTING BOLLARD
- EXISTING ELECTRIC DUC BANK
- EXISTING MAIN PHASE
- EXISTING CLEAN OUT
- EXISTING WATER VALVE TYP WV
- EXISTING WATER VALVE TYP ICV

PARKING LOT WEST ANALYSIS	
PARKING SPACES PROVIDED:	
STANDARD=	34
HANDICAP=	2
TOTAL SPACES PROVIDED:	36

100% CD

BROWN REYNOLDS WATFORD ARCHITECTS
2700 EARL RUDDER FRWY SOUTH
SUITE 4000
COLLEGE STATION, TEXAS 77845
979.694.1791
WWW.BRWARCH.COM

STATE OF TEXAS
JEREMY N. PETERS
100217
LICENSED PROFESSIONAL ENGINEER
11/1/22

GESSNER ENGINEERING
Corporate Office
2501 Ashford Drive
College Station, Texas 77840
www.gessnerengineering.com
FIRM REGISTRATION NUMBER: TBPE F-7451, TBPLSF-10193910

DATE	11/01/2022
DRAWN BY	NF
CHECKED BY	JP
BRW PROJECT NUMBER	

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 78130

City of New Braunfels

NO.	REVISION	DATE
1	ADDENDUM 01	12/12/2022

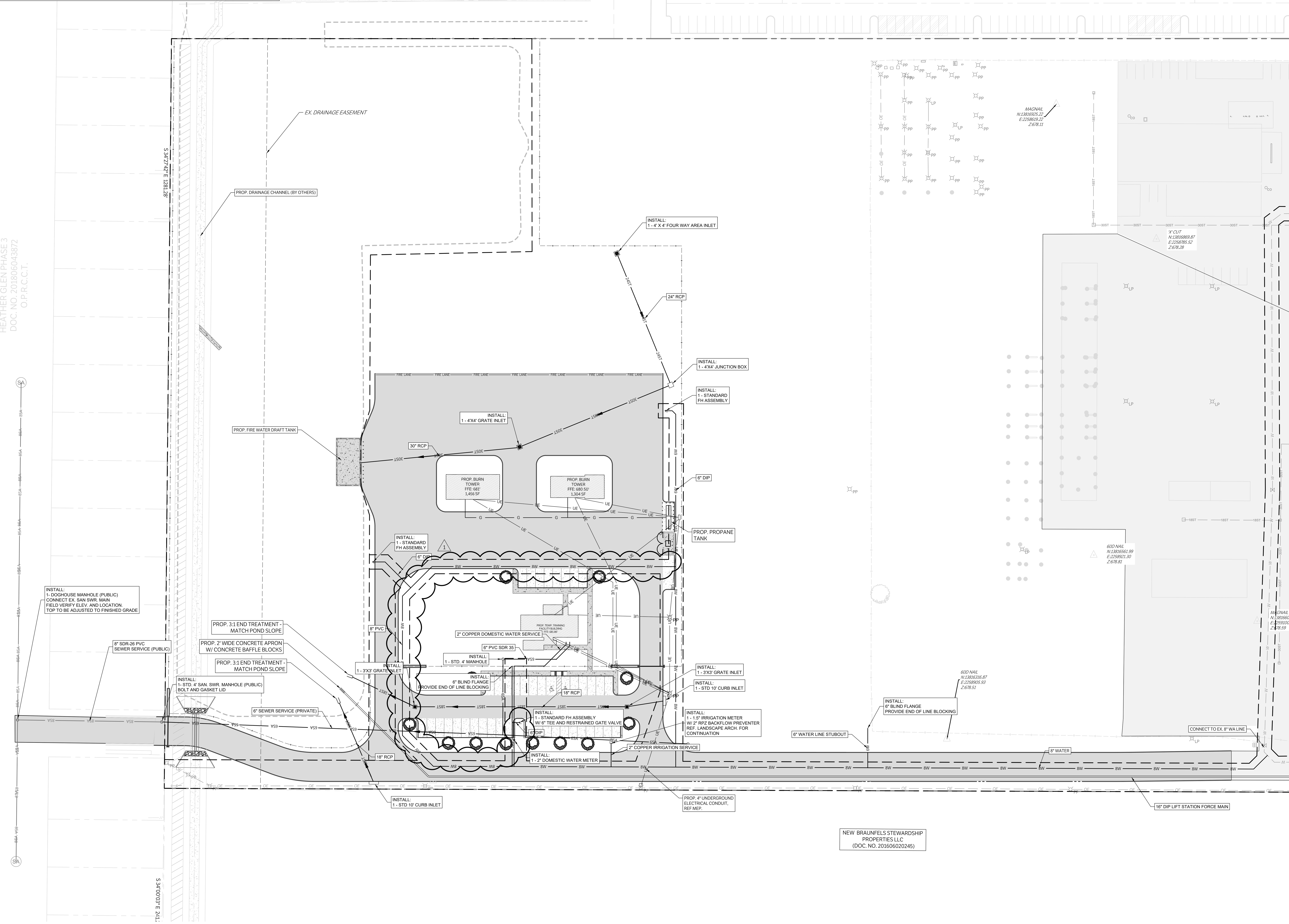
C1.0

SITE PLAN

NOTES:

A) All utilities to be constructed prior to streets.
B) No valves, hydrants, cleanouts etc. shall be constructed within curbs, sidewalks, or driveways.
C) All utility trench compaction tests within the street pavement/sidewalk section shall be the responsibility of the developer's Geotechnical Engineer. Fill material shall be placed in uniform layers not to exceed twelve inches (12") loose. Determine the maximum lift thickness based on the ability of the compacting operation and equipment used to meet the required density. Each layer of material shall be compacted to a minimum 95% density and tested for density and moisture in accordance with Test Methods TEX-113-E, TEX-114-E, TEX-115-E. The number and location of required tests shall be determined by the Geotechnical Engineer and approved by the City of New Braunfels Street Inspector. At a minimum, tests shall be taken every 200 LF for each lift and every other service line. Upon completion of testing the Geotechnical Engineer shall provide the City of New Braunfels Street Inspector with all testing documentation and a certification stating that the placement of fill material has been completed in accordance with the plans. Additional density tests may be requested by the City of New Braunfels Inspector.

CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.



REMAINING PORTION OF LOT 2, BLOCK A, TRI-CITY SUBDIVISION (AMENDED) (DOC. NO. 200706013253, MPRCCT) KOOTNZ/MCCOMBS 1, LTD. (DOC. NO. 200206040302, OPRCCT)
EX. DRAINAGE EASEMENT
PROP. DRAINAGE CHANNEL (BY OTHERS)
HEATHER GLEN PHASE 3 DOC. NO. 201806043872 O.P.R.C.C.T.
INSTALL: 1 - 4' X 4' FOUR WAY AREA INLET
24" RCP
INSTALL: 1 - 4'X4' JUNCTION BOX
INSTALL: 1 - STANDARD FH ASSEMBLY
INSTALL 1 - 4'X4' GRATE INLET
PROP. FIRE WATER DRAFT TANK
30" RCP
PROP. BURN TOWER FFE: 683' 1,456 SF
PROP. BURN TOWER FFE: 680.50' 1,304 SF
6" DIP
PROP. PROPANE TANK
INSTALL: 1 - STANDARD FH ASSEMBLY
INSTALL: 1- DOGHOUSE MANHOLE (PUBLIC) CONNECT EX. SAN SWR. MAIN FIELD VERIFY ELEV. AND LOCATION. TOP TO BE ADJUSTED TO FINISHED GRADE
PROP. 3:1 END TREATMENT - MATCH POND SLOPE
PROP. 2' WIDE CONCRETE APRON W/ CONCRETE BAFFLE BLOCKS
8" SDR-26 PVC SEWER SERVICE (PUBLIC)
INSTALL: 1 - STD. 4' SAN. SWR. MANHOLE (PUBLIC) BOLT AND GASKET LID
8" PVC
2" COPPER DOMESTIC WATER SERVICE
6" PVC SDR 35
INSTALL: 1 - STD. 4' MANHOLE
INSTALL: 6" BLIND FLANGE PROVIDE END OF LINE BLOCKING
INSTALL: 1 - 3'X3' GRATE INLET
18" RCP
6" SEWER SERVICE (PRIVATE)
INSTALL: 1 - STANDARD FH ASSEMBLY W/ 6" TEE AND RESTRAINED GATE VALVE
INSTALL: 1 - 2" DOMESTIC WATER METER
2" COPPER IRRIGATION SERVICE
INSTALL: 1 - 1.5" IRRIGATION METER W/ 2" RPZ BACKFLOW PREVENTER REF. LANDSCAPE ARCH. FOR CONTINUATION
INSTALL: 1 - STD 10' CURB INLET
INSTALL: 1 - STD 10' CURB INLET
PROP. 4" UNDERGROUND ELECTRICAL CONDUIT, REF MEP.
6" WATER LINE STUBOUT
INSTALL: 6" BLIND FLANGE PROVIDE END OF LINE BLOCKING
8" WATER
CONNECT TO EX. 8" WA LINE
16" DIP LIFT STATION FORCE MAIN
NEW BRAUNFELS STEWARDSHIP PROPERTIES LLC (DOC. NO. 201606020245)
S 34°27'42" E 1281.28'
S 34°00'03" E 241.
0 40 80 120
SCALE: 1"= 40'
100% CD

PROJECT BENCHMARK:

BM1 BENCHMARK DESCRIPTION: "X" CUT IN CONCRETE ON NORTH SIDE OF WINDGATE DRIVE NEAR INTERSECTION WITH FM 306
ELEVATION = 676.19'

BM2 BENCHMARK DESCRIPTION: "X" CUT IN CONCRETE
ELEVATION = 678.20'

LEGEND

- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED ASPHALT
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE PAVEMENT
- PROPOSED 8" CONCRETE PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING PAVEMENT EDGE
- EXISTING BASE EASEMENT
- EXISTING FLOW LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING FIRELANE
- EXISTING SANITARY SEWER LINE
- EXISTING STORM SEWER LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING FENCE CHAIN LINE
- EXISTING GAS LINE
- PROPOSED FENCE IRON LINE
- PROPOSED FIRELANE
- PROP. SANITARY SEWER
- PROP. STORM SEWER
- PROP. WATER LINE
- PROP. GAS LINE
- EX. / PROP. FIRE HYDRANT
- EX. / PROP. TREE
- EX. / PROP. SIGN
- EX. / PROP. LIGHT POLE
- EX. / PROP. WATER METER
- EX. / PROP. STORM SEWER MANHOLE
- EX. / PROP. SANITARY SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING GUY WIRES
- EXISTING BOLLARD
- EXISTING ELECTRIC DUC BANK
- EXISTING MAIN PHASE
- EXISTING CLEAN OUT
- EXISTING WATER VALVE TYP WV
- EXISTING WATER VALVE TYP ICV

BROWN REYNOLDS WATFORD ARCHITECTS

BRW

STATE OF TEXAS
JEREMY N. PETERS
100217
LICENSED PROFESSIONAL ENGINEER

GESSNER ENGINEERING
Corporate Office
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FIRM REGISTRATION NUMBER: TBPE F-7451, TBPLSF-10193910

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DATE	11/01/2022
DRAWN BY	NF
CHECKED BY	JP
BRW PROJECT NUMBER	

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 78130

NO.	REVISION	DATE
1	ADDENDUM 01	12/12/2022

C4.0

UTILITY PLAN

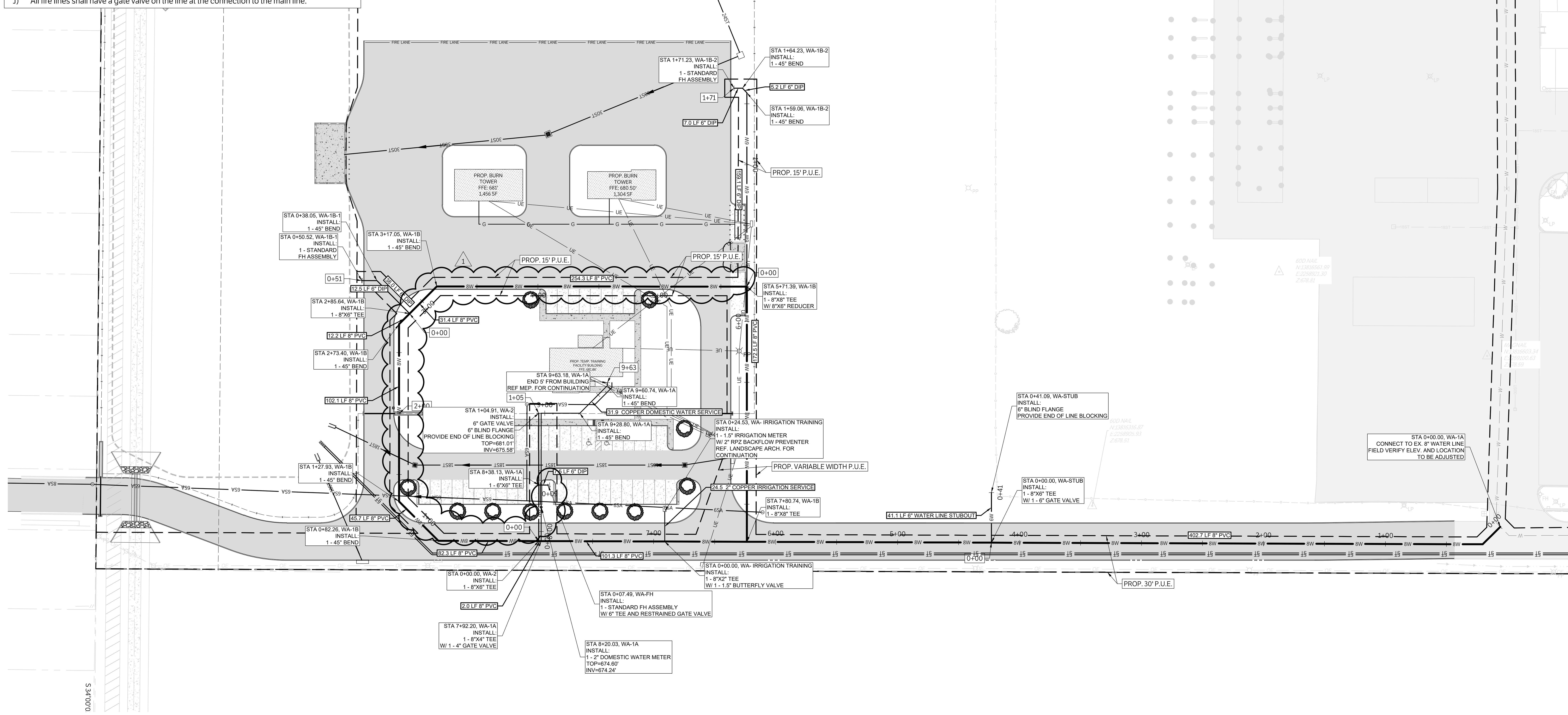
CAUTION: CONTACT TEXAS 811 AND LOCAL UTILITY PROVIDERS TO LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION.
CONTACT GESSNER ENGINEERING IF CONFLICTS OCCUR.

NOTES:

A) All utilities to be constructed prior to streets.
B) No valves, hydrants, cleanouts etc. shall be constructed within curbs, sidewalks, or driveways.
C) All utility trench compaction tests within the street pavement/sidewalk section shall be the responsibility of the developer's Geotechnical Engineer. Fill material shall be placed in uniform layers not to exceed twelve inches (12") loose. Determine the maximum lift thickness based on the ability of the compacting operation and equipment used to meet the required density. Each layer of material shall be compacted to a minimum 95% density and tested for density and moisture in accordance with Test Methods TEX-113-E, TEX-114-E, TEX-115-E. The number and location of required tests shall be determined by the Geotechnical Engineer and approved by the City of New Braunfels Street Inspector. At a minimum, tests shall be taken every 200 LF for each lift and every other service line. Upon completion of testing the Geotechnical Engineer shall provide the City of New Braunfels Street Inspector with all testing documentation and a certification stating that the placement of fill material has been completed in accordance with the plans. Additional density tests may be requested by the City of New Braunfels Inspector.
D) Water is a precious commodity in the State of Texas and New Braunfels Utilities (NBU) is passionate about protecting the local resource. NBU's Contractor shall be fully responsible for acquiring a fire hydrant meter so that all water used for construction or testing purposes are properly accounted for. NBU will not tolerate any water theft, regardless of the amount. If water theft is discovered NBU's Contractor shall be subject to monetary penalties, criminal charges, and stoppage of all construction activities related to the project. Costs associated with any work stoppage resulting from water theft shall be at the full expense of the Contractor.
E) The Engineer of Record acknowledges that the point of delivery for an NBU system is the main side of the service/lateral/lead from the customer's meter/backflow/easement edge. The customer is responsible for design, construction, operation and maintenance beyond the point of delivery and has sole control and supervision over the customer's installation including review, permitting, and compliance with all City Plumbing Codes or other applicable codes.
F) The contractor is required to notify NBU seven days prior to any planned outage and any surrounding service outages for tie-in installation are to be no more than 6-hours.
G) All proposed bends on all ductile iron pipes should be restrained with retainer glands and located at each bend joint.
H) Contractor and/or contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement contractor's trench excavation safety protection systems, programs and/or contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, contractor and/or contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavations.
I) Water line construction shall follow the NBU Water Connection Policy.
J) All fire lines shall have a gate valve on the line at the connection to the main line.

WATER AND SEWER SUMMARY TABLE

ELEMENT	SIZE	TOTAL
CONNECTION TO EX. 8"	8"	1 EA
TEE	8"X6"	5 EA
TEE	8"X8"	1 EA
TEE	8"X2"	1 EA
TEE	8"X4"	1 EA
WATER LINE STUBOUT (DUCTILE IRON)	6"	41 LF
BLIND FLANGE	6"	1 EA
IRRIGATION LINE (COPPER TYPE K)	2"	31 LF
IRRIGATION METER W/ BFP	2"	1 EA
FIRE HYDRANT ASSEMBLY (W/ GATE VALVE)	6"	3 EA
WATER METER	2"	1 EA
FIRE SUPPRESSION LINE (DUCTILE IRON)	6"	120 LF
45 DEGREE BEND	8"	5 EA
45 DEGREE BEND	6"	7 EA
45 DEGREE BEND	2"	4 EA
22.5 DEGREE BEND	8"	10 EA
11.25 DEGREE BEND	8"	4 EA
PVC	8"	1432 LF
DUCTILE IRON PIPE	6"	248 LF
PVC (AWWA C900 DR18)	8"	20 LF



SCALE: 1"= 40'

PROJECT BENCHMARK:

BM1 BENCHMARK DESCRIPTION: "X" CUT IN CONCRETE ON NORTH SIDE OF WINDGATE DRIVE NEAR INTERSECTION WITH FM 306
ELEVATION = 676.19'

BM2 BENCHMARK DESCRIPTION: "X" CUT IN CONCRETE
ELEVATION = 678.20'

LEGEND

- EXISTING PAVEMENT
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED 4" CONCRETE SIDEWALK
- PROPOSED 6" CONCRETE PAVEMENT
- PROPOSED 8" CONCRETE PAVEMENT
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- EXISTING FIBER OPTIC LINE
- EXISTING WATER LINE
- EXISTING FENCE CHAIN LINE
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- PROPOSED FENCE IRON LINE
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- PROP. SANITARY SEWER
- PROP. STORM SEWER
- PROP. WATER LINE
- PROP. GAS LINE
- EX. / PROP. FIRE HYDRANT
- EX. / PROP. TREE
- EX. / PROP. SIGN
- EX. / PROP. LIGHT POLE
- EX. / PROP. WATER METER
- EX. / PROP. STORM SEWER MANHOLE
- EX. / PROP. SANITARY SEWER MANHOLE
- EXISTING POWER POLE
- EXISTING GUY WIRES
- EXISTING BOLLARD
- EXISTING ELECTRIC DUC BANK
- EXISTING MAIN PHASE
- EXISTING CLEAN OUT
- EXISTING WATER VALVE TYP WV
- EXISTING WATER VALVE TYP ICV

100% CD

BROWN REYNOLDS WATFORD ARCHITECTS
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STATE OF TEXAS
JEREMY N. PETERS
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LICENSED PROFESSIONAL ENGINEER
11/1/22

GESSNER ENGINEERING
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www.gessnerengineering.com
FIRM REGISTRATION NUMBER: TBPE F-7451, TBPLSF-10193910

DATE 11/01/2022
DRAWN BY NF
CHECKED BY JP
BRW PROJECT NUMBER

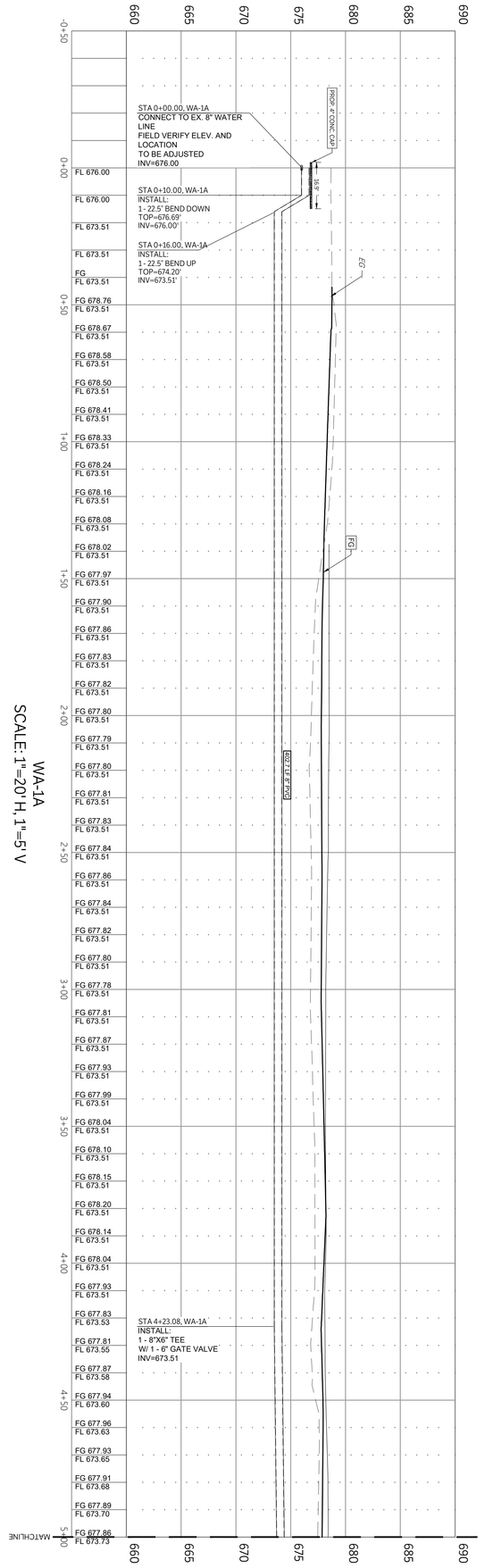
NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 78130

City of New Braunfels

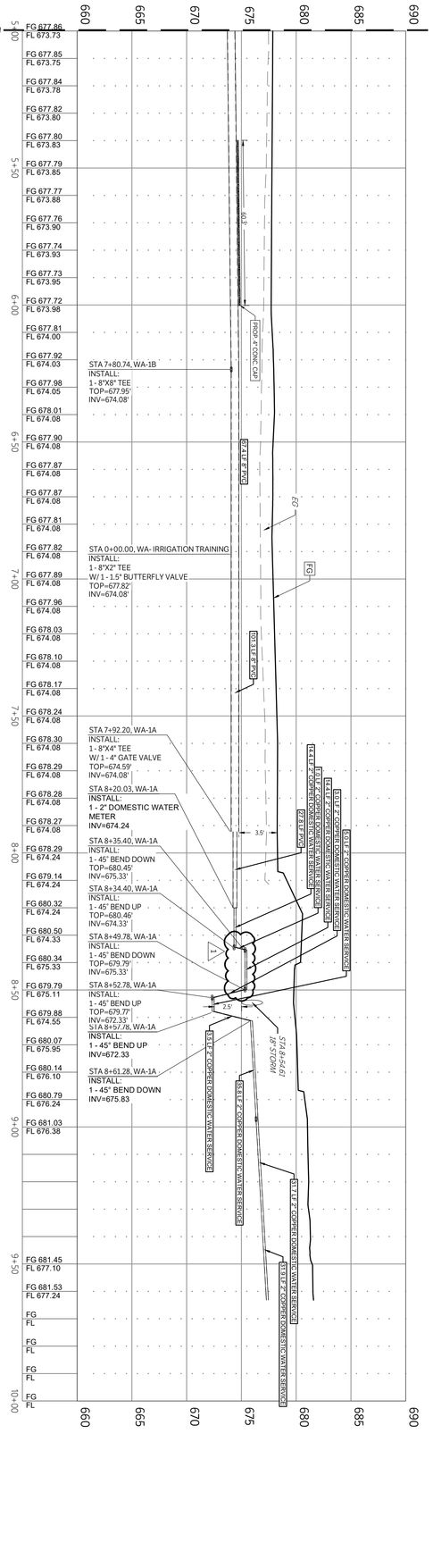
NO.	REVISION	DATE
1	ADDENDUM 01	12/12/2022

C7.0

WATER PLAN



WA-1A
SCALE: 1"=20' H, 1"=5' V



WA-2
SCALE: 1"=20' H, 1"=5' V

100% CD

WATER PROFILE

C7.1

NO.	REVISION	DATE
1	ADDENDUM 01	12/12/2022

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 78130

DATE	11/01/2022
DRAWN BY	NF
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BRW PROJECT NUMBER	

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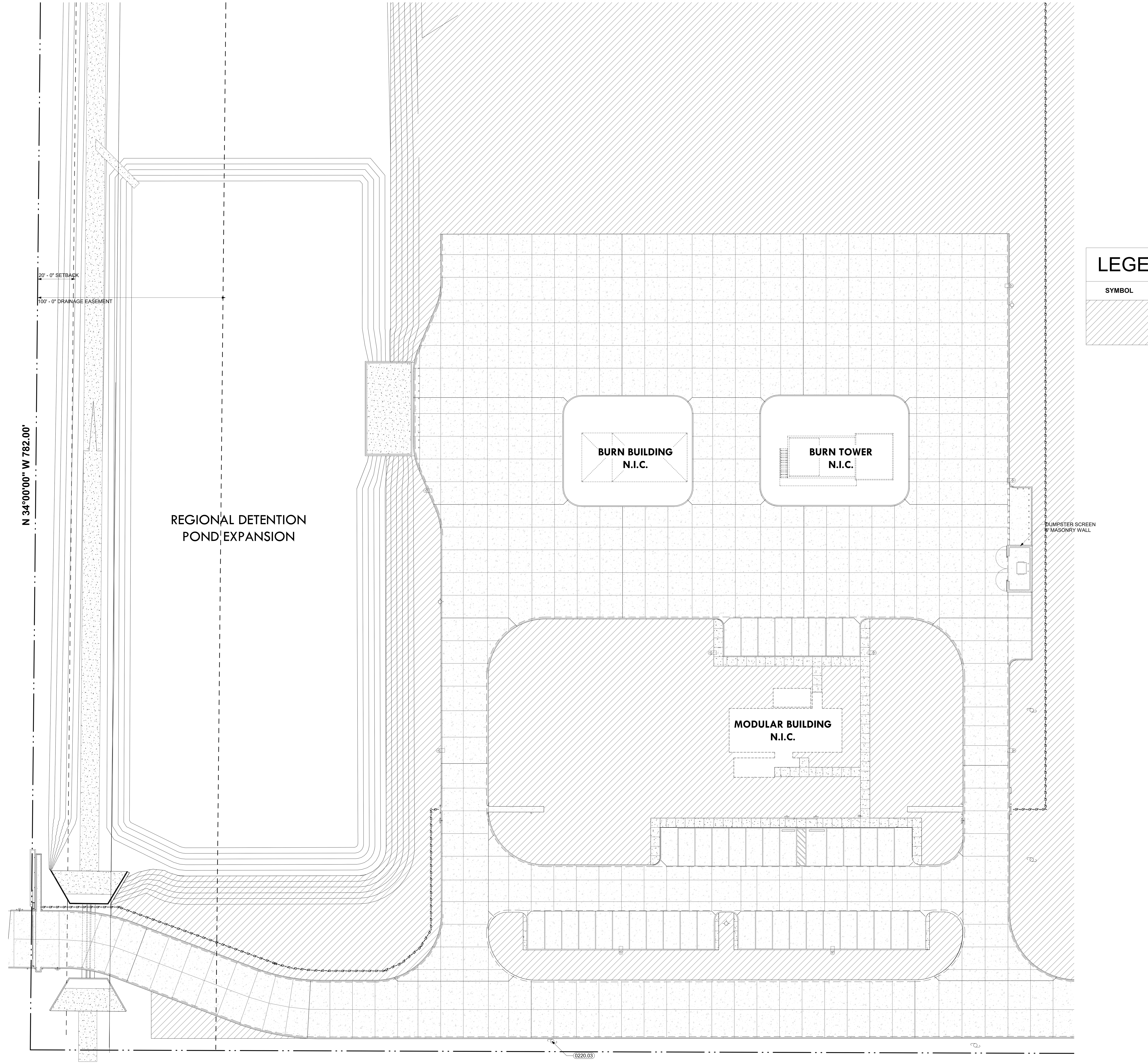

1 IRRIGATION PLAN

1" = 20'-0"

0 10' 20' 40'

PLAN NORTH TRUE NORTH

KEYNOTES

0220.03 EXISTING POWER POLE

LEGEND

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO.
(hatched area)	AREA TO BE IRRIGATED WITH SPRAY HEADS / ROTARY HEADS	MANUFACTURER MUST BE ACCEPTABLE PER THE NEW BRAUNFELS PARKS SPECIFICATIONS	

IRRIGATION NOTES

1. ALL 24 VOL LEAD AND COMMON VALVE WIRING SHALL BE A MINIMUM OF UF-14 GA. SINGLE CONDUCTOR. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR PROPER WIRE SIZE. WIRE SPLICES SHALL BE PERMANENT AND WATERPROOF.
2. COORDINATE INSTALLATION OF IRRIGATION SYSTEM WITH LANDSCAPE CONTRACTOR TO ENSURE ALL PLANT MATERIAL WILL BE WATERED IN ACCORDANCE WITH THE INTENT OF THE PLANS AND SPECIFICATIONS.
3. LATERAL PIPING SHALL HAVE A MINIMUM OF 12 INCHES OF COVER. MAINLINE AND PIPING UNDER PAVING SHALL HAVE A MINIMUM OF 18 INCHES COVER.
4. CONNECT LAWN AND HIGH-POP SPRAY HEADS TO LATERAL PIPING WITH 1/2" FLEXIBLE PVC AND 1/2" SCH. 40 PVC FITTINGS AS REQUIRED, PER DETAIL SHOWN. USE WELD-ON #795 SOLVENT AND #P070 PRIMER ON THESE CONNECTIONS.
5. CONNECT ROTARY HEADS TO LATERAL PIPE WITH LASCO UNITIZED, O-RING SWING JOINTS PER DETAIL SHOWN.
6. INSTALL QUICK COUPLING VALVES ON 10" VALVE BOX PER DETAIL SHOWN. CONNECT QUICK COUPLING VALVES TO MAINLINE PIPE WITH LASCO UNITIZED, O-RING SWING JOINTS PER DETAIL SHOWN. SUPPLY OWNER WITH THREE (3) COUPLER KEYS WITH SWIVEL HOSE ELLS EACH.
7. INSTALL REMOTE CONTROL VALVES IN 10" VALVE BOXES PER DETAIL SHOWN.
8. PERFORM ELECTRICAL WORK IN ACCORDANCE WITH LOCAL BUILDING CODE. POWER (120V) SHALL BE LOACTED IN A JUNCTION BOX WITHIN 5 FEET OF CONTROLLER LOCATION BY OTHER TRADES.
9. SLEEVES SHALL BE CLASS 200 PVC, LAG BOLTS PLACED IN SIDEWALK AT ENDS OF SLEEVES AND INSTALLED BY OTHER TRADES.
10. ROUTE COMMON WIRE FROM CONTROLLER TO REMOTE SENSORS IN SERIES PRIOR TO CONNECTIONS TO REMOTE CONTROL VALVES.
11. INSTALL DRIP IRRIGATION WITH 2 EMITTERS FOR EACH SHRUB, 4 EMITTERS FOR EACH TREE.
12. TEN DAYS PRIOR TO START OF CONSTRUCTION, VERIFY STATIC PRESSURE. IF STATIC PRESSURE IS LESS THAN 110 PSI, DO NOT START WORK UNTIL NOTIFIED TO PROCEED BY OWNER.
13. INSTALL PRESSURE REDUCING VALVE IN A 12"X17" VALVE BOX WITHIN FIVE (5') FEET OF ANY BACKFLOW PREVENTOR. DISCHARGE PRESSURE REDUCING VALVE TO BE SET AT APPROX. 80 PSI.
14. ALL WORK INCLUDED IN THE INSTALLATION OF THE IRRIGATION SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
15. THE INSTALLATION OF THE IRRIGATION SYSTEM WILL BE MADE BY AN INDIVIDUAL OR FIRM DULY LICENSED AS AN IRRIGATOR BY THE STATE OF TEXAS.
16. REDUCED PRESSURE ZONE BACK FLOW PREVENTOR SHALL BE INSTALLED AND TESTED UPON INSTALLATION BY A CERTIFIED BACKFLOW TESTER.
17. MAXIMUM LENGTH OF DRIP LINE SHALL BE 275 FEET.
18. THE MAXIMUM SPACING BETWEEN EMISSION DEVICES MUST NOT EXCEED THE MANUFACTURER'S PUBLISHED RADIUS OR SPACING OF THE DEVICE(S).
19. THE IRRIGATION SYSTEMS SHALL NOT UTILIZE ABOVE-GROUND SPRAY EMISSION DEVIES IN LANDSCAPES THAT ARE LESS THAN 48 INCHES NOT INCLUDING THE IMPERVIOUS SURFACES IN EITHER LENGTH OR WIDTH AND WHICH CONTAIN IMPERVIOUS PEDESTRIAN OR VEHICULAR TRAFFIC SURFACES ALONG TWO OR MORE PERIMETERS.
20. SPRINKLER HEADS MUST DIRECT FLOW AWAY FROM ANY ADJACENT SURFACE AND SHALL NOT BE INSTALLED CLOSER THAN FOUR INCHES FROM A HARDSCAPE, SUCH AS, BUT NOT LIMITED TO, A BUILDING FOUNDATION, FENCE, CONCRETE, ASPHALT, PAVERS, OR STONES SET IN MORTAR.
21. IRRIGATION SYSTEMS SHALL NOT SPRAY WATER OVER SURFACES MADE OF CONCRETE, ASPHALT, BRICK, WOOD, STONES SET IN MORTAR, OR ANY OTHER IMPERVIOUS MATERIAL, SUCH AS, BUT NOT LIMITED TO, WALLS, FENCES, SIDEWALKS, STREETS, ETC.
22. COVERAGE OF PIPING MUST BE INSTALLED TO PROVIDE MINIMUM DEPTH COVERAGE OF SIX INCHES OF SELECT BACKFILL, BETWEEN THE TOP OF PIPE AND THE NATURAL GRADE OF THE TOP SOIL.
23. UNDERGROUND ELECTRICAL WIRING THAT CONNECTS AN AUTOMATIC CONTROLLER TO ANY ELECTRICAL COMPONENT OF THE IRRIGATION SYSTEM MUST BE BURIED WITH A MINIMUM OF SIX INCHES OF SELECT BACKFILL.

RAY W. HOLLIDAY 18834 REGISTERED ARCHITECT STATE OF TEXAS

11/01/2022

BROWN REYNOLDS WATFORD ARCHITECTS
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979-694-1791
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NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE

353 FM 306
NEW BRAUNFELS, TX 77130

City of New Braunfels

DATE	11/01/2022
DRAWN BY	MH, HF, DP
CHECKED BY	RH, MW
BRW PROJECT NUMBER	219065.00

NO.	REVISION	DATE
1	ADDENDUM 01	12/12/22

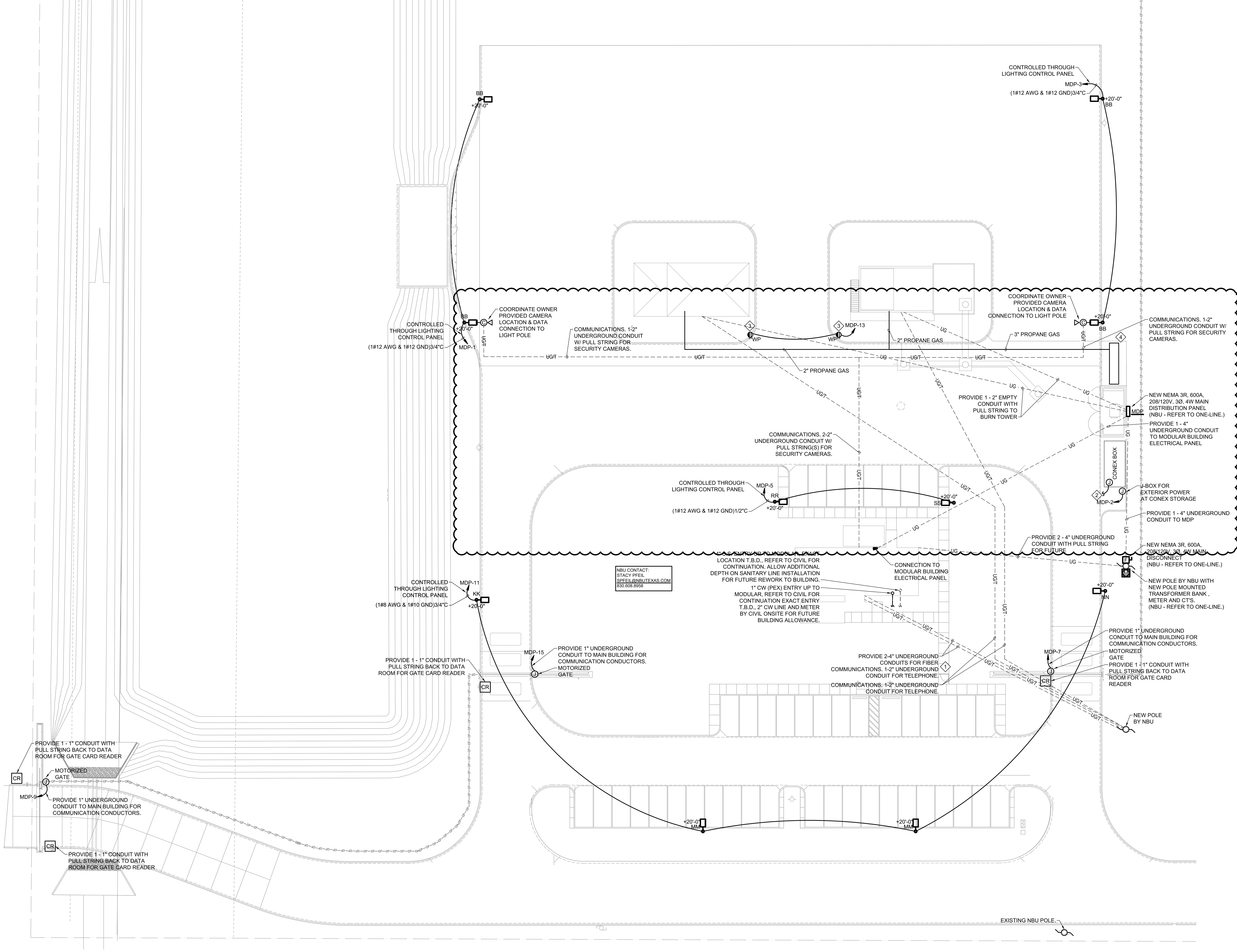
L1.3

IRRIGATION PLAN AND DETAILS

DVO PROJECT – 202032

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
	SS	1	Lithonia Lighting	DSX1 LED P2 30K LCCO MVOLT	DSX1 LED P2 30K LCCO MVOLT	LED	1	DSX1_LED_P2_30K_LCCO_MVOLT.ies	5037	0.95	70
	RR	1	Lithonia Lighting	DSX1 LED P2 30K RCCO MVOLT	DSX1 LED P2 30K RCCO MVOLT	LED	1	DSX1_LED_P2_30K_RCCO_MVOLT.ies	5037	0.95	70
	KK	1	Lithonia Lighting	DSX1 LED P5 30K BLC MVOLT	DSX1 LED P5 30K BLC MVOLT	LED	1	DSX1_LED_P5_30K_BLC_MVOLT.ies	12047	0.95	138
	MM	2	Lithonia Lighting	DSX1 LED P8 30K TFTM MVOLT HS	DSX1 LED P8 30K TFTM MVOLT with houseside shield	LED	1	DSX1_LED_P8_30K_TFTM_MVOLT_HS.ies	17577	0.95	207
	NN	1	Lithonia Lighting	DSX1 LED P1 30K BLC MVOLT	DSX1 LED P1 30K BLC MVOLT	LED	1	DSX1_LED_P1_30K_BLC_MVOLT.ies	5299	0.95	54
	BB	4	Lithonia Lighting	DSX2 LED P8 30K T4M MVOLT	DSX2 LED P8 30K T4M MVOLT	LED	1	DSX2_LED_P8_30K_T4M_MVOLT.ies	44691	0.95	431



1 **MEP - TRAINING COMPLEX SITE PLAN**

1" = 20'-0"

PLAN NORTH TRUE NORTH

GENERAL SITE NOTES:

A. LUMINAIRES SHALL BE FURNISHED AND INSTALLED WITH LAMPS, LEDS, DRIVERS, BALLAST(S), CONTROL(S) AND MOUNTING HARDWARE. ELECTRICAL CONTRACTOR SHALL SUBMIT FIXTURE CUT SHEETS TO CLIENT AND ARCHITECT FOR THEIR FINAL APPROVAL PRIOR TO ORDERING OF THE LUMINAIRES.

B. ELECTRICAL CONTRACTOR SHALL COORDINATE LIGHTING FIXTURE QUANTITIES, MOUNTING REQUIREMENTS, FINISHES, FIXTURE AVAILABILITY AND LEAD TIME FOR DELIVERY TO SITE.

C. FLUORESCENT AND LED LUMINAIRES THAT CONTAIN BALLAST(S) AND/OR LED DRIVERS THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS PER NEC ARTICLE 410.130(G) REQUIREMENTS. DISCONNECTING MEANS IS NOT REQUIRED FOR EMERGENCY ILLUMINATION REQUIRED IN 700.16.

D. LIGHTING FIXTURE LOCATION SHALL GOVERN OVER ALL OTHER DISCIPLINES. COORDINATE LAYOUT AND INSTALLATION OF LUMINAIRES AND MOUNTING MEANS WITH OTHER CONSTRUCTION THAT IS SUPPORTED OR THAT PENETRATES CEILINGS, INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, FIRE-SUPPRESSION SYSTEM, AND PARTITION ASSEMBLIES PRIOR TO BEGINNING ANY WORK. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN HVAC EQUIPMENT AND LOCATION OF LUMINAIRES. VERIFY CLEARANCES REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL PURCHASE ANY ADDITIONAL LUMINAIRES REQUIRED, DUE TO DAMAGE OR CLIENT REQUEST. MATCH EXISTING LUMINAIRES IN THE AREA.

F. MOUNT MULTIPLE LIGHT SWITCHES IN A MULTIPLE GANG BOX WITH SINGLE COVER PLATE.

G. MULTIWIRE BRANCH CIRCUITS SHALL BE PROVIDED WITH A SIMULTANEOUS DISCONNECTING MEANS TO DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT OF ORIGIN. DISCONNECTION CAN BE ACCOMPLISHED THROUGH LISTED HANDLE TIES USED WITH SINGLE-POLE CIRCUIT BREAKERS OR MULTI-POLE DEVICES. BRANCH CIRCUIT(S) SERVING EMERGENCY LIGHTING SHALL NOT BE PART OF A MULTI-WIRE BRANCH CIRCUIT.

H. GROUNDED AND UNGROUNDED CONDUCTORS OF EACH MULTI-WIRE BRANCH CIRCUIT SHALL BE GROUPED WITH WIRE TIES OR SIMILAR MEANS AT A MINIMUM OF ONE LOCATION WITHIN THE PANELBOARD OR OTHER POINT OF ORIGIN.

I. SWITCHES CONTROLLING LIGHTING LOADS: WHERE SWITCHES CONTROL LIGHTING LOADS SUPPLIED BY A GROUNDED GENERAL PURPOSE BRANCH CIRCUIT, THE GROUNDED CIRCUIT CONDUCTOR (NEUTRAL WIRE) FOR THE CONTROLLED LIGHTING CIRCUIT SHALL BE PROVIDED AT THE SWITCH LOCATION. EXISTING SWITCHES IN REMODELED SPACES SHALL NOT BE EXEMPT FROM THIS REQUIREMENT.

J. WHERE DIMMING CONTROL IS SPECIFIED AS A PORTION OF A CIRCUIT THAT ALSO HAS SWITCHED LIGHTING IN ADJACENT SPACES, PROVIDE A SEPARATE, DEDICATED NEUTRAL WIRE FROM THE DIMMING DEVICE BACK TO THE ORIGINATING PANEL.

K. ALL SWITCHES SHALL BE LABELED WITH DESIGNATED PANEL AND CIRCUIT NUMBER(S) ON THE COVER PLATE.

L. PROVIDE AN UNSWITCHED HOT AT EACH EMERGENCY LIGHT FIXTURE AND EMERGENCY LIGHTING UNIT. EMERGENCY LIGHTING SHALL BE SUPPLIED WITH A BATTERY TO SUPPLY AND MAINTAIN EMERGENCY LIGHTING LEVELS FOR A MINIMUM PERIOD OF 90 MINUTES.

KEYED NOTES:

1. PROVIDE 2 - 4" AND 1 - 2" CONDUITS UNDERGROUND FOR TELECOMMUNICATION/FIBER WIRE. COORDINATE ROUTING AND TERMINATION REQUIREMENTS WITH LOCAL UTILITIES.
2. PROVIDE 1 - 2" CONDUIT UNDERGROUND FOR CONEX JUNCTION BOX WITH PULL STRING. PROVIDE (1) 100A CIRCUIT IN PANEL 'L' FOR CONEX BOX. FINAL LOAD AND CIRCUIT REQUIREMENTS TO BE COORDINATED WITH MANUFACTURER'S SPECIFICATIONS. COORDINATE ROUTING AND TERMINATION REQUIREMENTS IN FIELD.
3. PROVIDE 1 - 15A DUPLEX RECEPTACLE IN A SINGLE GANG "IN-USE" WEATHERPROOF LOCKABLE METAL BOX ATTACHED TO POLE BASE FOR FUTURE HYDREL 7200 ADJUSTABLE FLOODLIGHT. COORDINATE RECEPTACLE HEIGHT AND ANY ADDITIONAL REQUIREMENTS WITH ARCHITECT AND MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALL.
4. CONTRACTOR TO PROVIDE AND INSTALL MINIMUM OF 2,000 GALLON PROPANE TANK. PROVIDE ALL REQUIRED APPURTENANCES, VALVES, VAPORIZATION, ETC.

BROWN REYNOLDS WATFORD ARCHITECTS
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SUITE 350
COLLEGE STATION, TEXAS 77840
979.694.1791
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WESLEY A. DAOUST 98455 LICENSED PROFESSIONAL ENGINEER 12/13/22

DVO
825 TOWN AND COUNTRY LANE
SUITE 1500
HOUSTON, TX 77024
WWW.DVOENG.COM
REGISTRATION NO. F-8234

DATE	09/30/2022
DRAWN BY	GP
CHECKED BY	JF
BRW PROJECT NUMBER	219065.00

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE

353 FM 306
NEW BRAUNFELS, TX 78130

NO.	REVISION	DATE
1	ADDENDUM 01	12/13/2022

MEP1.0

MEP SITE PLAN

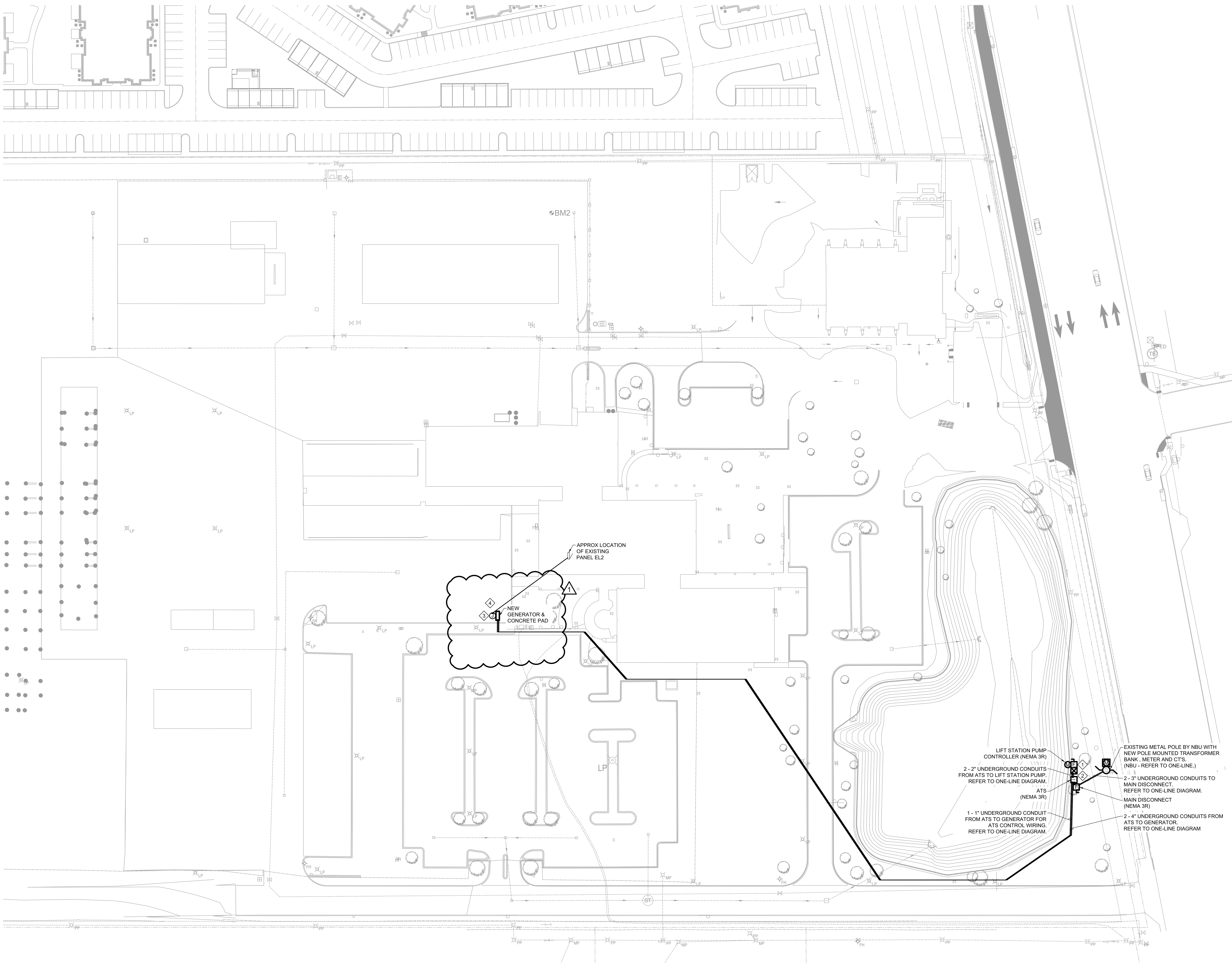
DVO PROJECT – 202032

GENERAL ELETRICAL SITE NOTES:

A. COORDINATE ALL WORK OTHER TRADES.
B. COORDINATE INSTALLATION REQUIREMENTS, EXACT LOCATIONS AND CONDUIT TRADE SIZING AND ROUTING WITH UTILITIES PRIOR TO BEGINNING ANY WORK.
C. WIRE ALL EMERGENCY EXTERIOR EGRESS FIXTURES THROUGH BUILDING LIGHTING CONTROLS.
D. LUMINAIRES SHALL BE FURNISHED AND INSTALLED WITH LAMPS, BALLAST(S), AND MOUNTING HARDWARE. ELECTRICAL CONTRACTOR SHALL SUBMIT FIXTURE CUT SHEETS TO CLIENT AND ARCHITECT FOR THEIR FINAL APPROVAL PRIOR TO ORDERING OF THE LUMINAIRES.
E. ELECTRICAL CONTRACTOR SHALL COORDINATE LIGHTING FIXTURE QUANTITIES, MOUNTING REQUIREMENTS, FINISHES, FIXTURE AVAILABILITY AND LEAD TIME FOR DELIVERY TO SITE.
F. FLUORESCENT AND LED LUMINAIRES THAT CONTAIN BALLAST(S) AND/OR LED DRIVERS THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS PER NEC ARTICLE 410.130(G) REQUIREMENTS. DISCONNECTING MEANS IS NOT REQUIRED FOR EMERGENCY ILLUMINATION REQUIRED IN 700.16.
G. CONTRACTOR SHALL COORDINATE EXACT DEVICE AND EQUIPMENT LOCATIONS WITH CLIENT /ARCHITECT, EQUIPMENT SUBCONTRACTOR OR UTILITY CONSULTANT PRIOR TO BEGINNING ANY WORK.
H. RECEPTACLE OUTLETS AND SWITCHES SHALL BE LABELED WITH DESIGNATED PANEL AND CIRCUIT NUMBER ON THE COVER PLATE.
I. ALL 125-VOLT, SINGLE PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN RESTROOMS, KITCHEN/FOOD PREP AREAS, OUTDOOR, WITHIN SIX FEET OF THE OUTSIDE EDGE OF A SINK, OR IN GARAGES, SERVICE BAYS, AND SIMILAR AREAS WHERE ELECTRICAL HAND TOOLS OR PORTABLE LIGHTING EQUIPMENT ARE TO BE USED SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL PER NATIONAL ELECTRICAL CODE (NEC) ARTICLE 210.8. GFCI DEVICE SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
J. ELECTRICAL CONTRACTOR SHALL MAINTAIN DEDICATED ELECTRICAL SPACE IN FRONT AND ABOVE ALL ELECTRICAL EQUIPMENT REQUIRING SERVICING WHILE ENERGIZED. THIS INCLUDES CONTROL PANELS AND ELECTRICAL DISCONNECTS FOR HVAC EQUIPMENT ON LOCATED ON ROOFTOPS AND ABOVE OR BELOW CEILING. PENETRATIONS SUCH AS ROOF JACKS FOR ELECTRICAL POWER, LOW VOLTAGE CONTROL POWER, REFRIGERANT LINES, VENT PIPES, ETC., AND INCLUDING GAS LINES, DUCTWORK, ROOF DRAINS, SCREENING WALLS AND OTHER EQUIPMENT OF ANY TYPE, ARE NOT TO INTRUDE INTO DEDICATED ELECTRICAL SPACE. MINIMUM SPACE IN FRONT OF ELECTRIC EQUIPMENT SHALL BE THE WIDTH OF THE EQUIPMENT OR 30 INCHES, WHICHEVER IS GREATER, 36 INCHES OUT FROM ENCLOSURE FRONT AT THE HEIGHT OF 6.5 FEET.
K. ELECTRICAL UTILITY SERVICE SECONDARY CONDUCTORS SHALL BE BURIED AT A MINIMUM DEPTH OF 4'. COORDINATE ADDITIONAL INSTALLATION REQUIREMENTS AND ROUTING WITH ELECTRICAL UTILITY PRIOR TO BEGINNING ANY WORK.
L. FOR PAD MOUNTED TRANSFORMERS ELECTRICAL CONTRACTOR SHALL PROVIDE (2) 6" CONDUITS, OR ELECTRICAL UTILITY STANDARD SIZING,BURIED AT A MINIMUM DEPTH OF 4' AND ENCASED IN RED DYED CONCRETE.COORDINATE ADDITIONAL INSTALLATION REQUIREMENTS AND ROUTING WITH ELECTRICAL UTILITY PRIOR TO BEGINNING ANY WORK.
M. PVC CONDUITS INSTALLED UNDERGROUND SHALL BE BURIED IN ACCORDANCE WITH NEC ARTICLES 352.10(G), 300.5 AND TABLE 300.5 REQUIREMENTS FOR PARKING LOTS: MINIMUM DEPTH OF 24" TO THE TOP OF THE CONDUIT.
N. IF RACEWAYS ARE INSTALLED EXPOSED TO DIRECT SUNLIGHT ON OR ABOVE ROOFTOPS CORRECTIONS NEED TO BE PROVIDED FOR CONDUCTOR SIZES BASED ON AMBIENT TEMPERATURE CORRECTION FACTORS. TEMPERATURE CORRECTION FACTORS SHOWN IN NEC TABLE 310.15(B)(3)(C) SHALL BE ADDED TO THE OUTDOOR TEMPERATURE TO DETERMINE THE APPLICABLE AMBIENT TEMPERATURE FOR APPLICATION OF THE CORRECTION FACTORS IN TABLE 310.15(B)(2)(A) OR TABLE 310.15(B)(2)(B).

KEYED NOTES:

1. LIFT STATION FINAL LOAD AND CIRCUIT REQUIREMENTS TO BE COORDINATED WITH MANUFACTURER'S SPECIFICATIONS PRIOR TO PURCHASE OR INSTALL. COORDINATE ALL ROUTING AND FINAL TERMINATION REQUIREMENTS IN FIELD.
2. MAIN DISCONNECT, AUTOMATIC TRANSFER SWITCH AND LIFT STATION VFD/DISCONNECT/PUMP TO BE LOCATED ON SAME CONCRETE PAD. COORDINATE FINAL PAD LOCATION, SIZE AND ANY ADDITIONAL INSTALLATION REQUIREMENTS IN FIELD WITH OWNER.
3. JUNCTION BOX FOR CONNECTION TO GENERATOR ACCESSORIES. ROUTE 3[(4#8 & 1#8GND) IN 1"C] TO PANEL EL2, CIRCUITS: 13,15,17.
4. PROVIDE NEW NATURAL GAS UTILITY SERVICE WITH SERVICE METER AND REGULATORS TO NEW GENERATOR. GAS LOAD TO BE: 6,000 CFH DELIVERY PRESSURE OF 20" W.C. TOTAL LENGTH <20 FEET. PROVIDE WITH 2" PIPE FROM METER ASSEMBLY TO GENERATOR WITH REGULATOR AND SHUT-OFF VALVE.



PLAN NORTH TRUE NORTH

1 MEP - TRAINING COMPLEX SITE PLAN
1" = 40'-0"

BROWN REYNOLDS WATFORD ARCHITECTS
175 CENTURY SQUARE DRIVE
SUITE 350
COLLEGE STATION, TEXAS 77840
979-694-1791
WWW.BRWARCH.COM

STATE OF TEXAS
WESLEY A. DAOUST
98455
LICENSED PROFESSIONAL ENGINEER
12/13/22

DVO
825 TOWN AND COUNTRY LANE
STE 1150
HOUSTON, TX 77024
(281) 293 - 7500
WWW.DVOENG.COM
REGISTRATION NO. F-8334

DATE	09/30/2022
DRAWN BY	GP
CHECKED BY	JF
BRW PROJECT NUMBER	219065.00

City of New Braunfels

NEW BRAUNFELS FIRE TRAINING SITE INFRASTRUCTURE
353 FM 306
NEW BRAUNFELS, TX 78130

NO.	REVISION	DATE
1	ADDENDUM 01	12/13/2022

MEP2.0

MEP SITE PLAN - LIFT STATION

New Braunfels Parks Department Irrigation Components to be used on all projects installing any irrigation

- **Controller**
    - System under 25 zones
        - Baseline 1000 controller
        - Ethernet preferred, 3G if ethernet not available
    - System over 25 zones
        - Baseline 3200
        - Ethernet preferred, 3G if ethernet not available
- Brass ball valve isolation valves (no manufacture preference)
- Lightning protection BL-LA01 surge suppressor required, installed per Baseline Specs
- Bicoder BL501,502 or 504 depending
- Baseline BL-5315B Bi-sensor soil moisture sensor
- Baseline Stainless steel free standing controller pedestal (if not wall mounted)
- 3M-DBR/Y-6 splice kit 3M brand only, no substitutions
- Baseline BHM series Hydrometer & Master Valve Normally open
    - Flowmeter volume size to match water meter GPM
- NDS purple top Valve boxes 11x17 for control vales
- NDS 9" round for all wire Splices
- Hunter Mini-Click Rain sensor
- NO BURIED WIRE SPLICES

Control Valves, Heads and Drip

- Hunter ICV series valves
- Hunter Pro Spray Pros-06-r-cv (reclaimed designation with check valve)
- Hunter PGP-06-R-CV (reclaimed designation with check valve)
- Hunter I-25-06-R (reclaimed designation)
- Hunter I-20-06-R (reclaimed designation)
- Hunter ICZ drip control zone kits with stainless filter
- Rainbird XFS-P drip tubing (reclaimed designation)
- Hunter Accu-Sync AS-ADJ adjustable pressure regulator installed on valves
- Hunter HSJ swing joints or equivalent for all rotor heads
- Hunter SJ swing joints or equivalent for all pop up sprays
- Rain Bird R-Van nozzles to be used in place of Spray nozzles

All sizes of PVC Pipe

- No manufacturer preference must be Reclaimed designation.

Backflow

- Backflow flow to match water meter GPM
- Watts 957 series RPZ when 2.5” or above
- Watts 009 series RPZ when below 2.5”
- Guardshack brand backflow cage
- Frost Guard brand frost protection bag

Recommendations

- Multiple soil moisture sensor to be installed, minimum one in each area requiring different moisture, multiple depending on property size.
- All heads to be installed on swing joint with minimum of 12’ from hardscape
- Sub surface drip to be installed in place of pop-ups in the flowing areas:
    - all turf areas with less than 8’ width
    - greenbelts
    - parking lot islands
    - areas of conflict with hardscape or vehicles
    - at Park staff discretion