

STATE OF TEXAS

§

COUNTY OF TRAVIS

§

§

**REIMBURSEMENT AGREEMENT WITH DEVELOPER FOR CONSTRUCTION OF
PUBLIC IMPROVEMENTS BY AND BETWEEN THE CITY OF PFLUGERVILLE
AND NORTHTOWN PHASE 1, LLC**

This Development Agreement (the "Agreement") is made and entered into this ____ day of _____, 2024 (the "Effective Date") by and between City of Pflugerville, Texas, a home-rule municipality (the "City") and Northtown Phase 1, LLC, a North Carolina limited liability company (the "Developer"). The City and the Developer are also referred to herein collectively as the "parties" and individually as "Party".

WHEREAS, the City has received and approved several Traffic Impact Analysis Reports within the area along Wells Branch Parkway between Heatherwilde Boulevard and Dessau Road. Traffic signal and operational improvements located at the intersection of Wells Branch Parkway and 10th Street as identified in Exhibit "A", attached hereto and made a part hereof, (the "Project Vicinity Map"), have been recommended; and

WHEREAS, the Developer has proposed and received approval for installation of a traffic signal, which is attached hereto and made a part hereof; and

WHEREAS, the City reviewed and approved construction plans for Northtown Phase 1, including off-site improvements to install traffic signals at the intersection of Wells Branch Parkway and 10th Street, with associated pedestrian components, pavement markings and signal timing upgrades ("Additional Public Improvements"); and

WHEREAS, in connection with the approved construction plans and in accordance with this Agreement, the City desires to pay the Developer for the costs incurred by the Developer and directly attributable to the costs of design, construction and inspection in the amount of \$324,011.25 ("City Participation Costs") for the Additional Public Improvements depicted or set forth on Exhibit "B", which is attached hereto and made a part hereof; and

WHEREAS, the Parties agree that the costs of the Additional Public Improvements shall be in accordance with Tex. Loc. Gov't Code Sec. 212.072(c) and shall not exceed one hundred percent (100%) of the total costs of the Additional Public Improvements for oversizing or, if exceeding that percent, shall be done in compliance with the competitive bidding procedure of Tex. Loc. Gov't Code, Chapter 252.

WHEREAS, the City has determined that the Developer's construction of the Additional Public Improvements is an economic benefit to the citizens of the City, therefore, this Agreement is in the best interest of the citizens of the City.

NOW, THEREFORE, for and in consideration of the premises and mutual obligations, covenants, and benefits hereafter set forth, the Parties agree as follows:

Section 1. Definitions. The following terms and phrases used in this Agreement shall have the meanings ascribed hereto:

- 1.1. "Additional Public Improvements" shall mean the public improvements required for the Development to be incorporated into the Project as described in Exhibit "B".
- 1.2. "Agreement" means this agreement, including any amendments hereto, between the City and Developer.
- 1.3. "Contractor" shall mean the person, firm, corporation, partnership, association, or other entity under contract with Developer for construction of the Additional Public Improvements.
- 1.4. "Development" shall mean that certain property owned by Developer identified herein, and as more specifically identified above in the recitals.
- 1.5. "City Participation Costs" shall mean actual costs incurred by the Developer for the design, construction and inspection of the Additional Public Improvements which are the responsibility of the City.
- 1.6. "Project" shall mean the public improvements associated with the Northtown Phase 1 LLC.

Section 2. Design and Construction of Public Improvements.

- 2.1. Design of the Additional Public Improvements. City agrees to reimburse the Developer the City Participation Costs attributed to the addition of the fourth-leg traffic signal components and signal redesign associated with the constructed turn lane as Additional Public Improvements in accordance with the City's Engineering Design Manual and Code of Ordinances. The plans and specifications for the Additional Public Improvements will be reviewed and approved by the City Engineer or their designee.
- 2.2. Construction of Additional Public Improvements. City agrees to reimburse Developer the City Participation Costs for the Additional Public Improvements in accordance with the plans and specifications approved by the City Engineer. The entire cost of the construction and inspection of the Additional Public Improvements shall be the responsibility and obligation of Developer, except as herein provided within Section 3.
- 2.3. Plan Review for Construction. The City Engineer, or their designee, shall review and approve all plans, specifications, and any other documents for the Additional Public Improvements.

2.4. Inspection. The City Engineer shall oversee and inspect the construction of the Additional Public Improvements.

2.5. Accounting. Developer shall submit to City a complete accounting of all City Participation costs incurred by Developer in the design, construction, and inspection of the Additional Public Improvements. City will not contribute or pay for any increased costs attributable to the Additional Public Improvements above the approved costs in this Agreement unless otherwise reviewed and approved.

2.6. Scheduling. Developer shall submit to City a schedule of all proposed critical dates for design, approval, and construction of the Additional Public Improvements. In the event that any critical date of the Additional Public Improvements shall be adjusted by more than thirty (30) days, Developer shall submit to City a revised schedule. The Developer anticipates that construction of the Additional Public Improvements will commence within six months of the Effective Date of this agreement.

Section 3. City's Obligations.

3.1. Financial Contribution. Payment of the City Participation Costs designated on Exhibit "C" totaling \$324,011.25 shall occur within thirty (30) days of construction, inspection and acceptance in one lump sum, time being of the essence.

3.2. Payment Procedures. City shall deliver to the Developer full payment of the City Participation Costs as provided in Exhibit "C" within a reasonable time frame after completion of the Additional Public Improvements.

Section 4. Miscellaneous Provisions.

4.1. Assignment. This Agreement shall bind and benefit the respective Parties and their legal successors and shall not be assignable, in whole or in part, by any party without first obtaining written consent of the other Party.

4.2. Amendment or Modification. Except as otherwise provided in this Agreement, this Agreement shall be subject to change, amendment or modification only in writing, and by the signatures and mutual consent of the Parties.

4.3. Force Majeure. "Force Majeure" includes acts of God, acts of the public enemy, war, blockades, insurrection, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, tornados, hurricanes, arrests and restraints of government and people, explosions, governmental delays, shortages of labor and/or materials, unforeseen environmental conditions and/or endangered species, and any other inability of either Party to carry out its obligations under this Agreement. If, because of Force Majeure any Party is delayed in carrying out its obligations under this Agreement or is rendered unable, wholly or in part, to carry out its obligations under this Agreement, then such Party shall give to the other Party prompt written notice of the Force Majeure event with reasonable full details concerning it. Upon delivery of such notice, the obligation of the Party giving the notice, so far as it is affected by the Force Majeure, shall be suspended

during, but not longer than, the continuance of the Force Majeure. Any Party who is affected by an event of Force Majeure shall use all possible diligence to remove the Force Majeure as quickly as possible, but its obligation shall not be deemed to require the settlement of any strike, lockout, or other labor difficulty contrary to the wishes of the Party involved or so affected.

4.4. Parties in Interest. This Agreement shall be for the sole and exclusive benefit of the Parties hereto and shall not be construed to confer any rights upon any third party.

4.5. Remedies Not Exclusive. The rights and remedies contained in this Agreement shall not be exclusive but shall be cumulative of all rights and remedies now or hereinafter existing, by law or in equity.

4.6. Waiver. The failure of any party to insist on any one or more instances on the performance of any of the terms, covenants or conditions of this Agreement, or to exercise any of its rights, shall not be construed as a waiver or relinquishment of such term, covenant, or condition, or right with respect to further performance.

4.7. Entire Agreement. This Agreement constitutes the entire agreement between the Parties related to the subject matter of this Agreement and supersedes any and all prior agreements, whether oral or written, dealing with the subject matter of this Agreement.

4.7. Venue. This Agreement shall be performable and enforceable in the state district courts of Travis County, Texas, and shall be construed in accordance with the laws of the State of Texas.

4.8. Severability. If any term or provision of this Agreement is held to be invalid, void or unenforceable by a court of competent jurisdiction, the remainder of the terms and provisions of this Agreement shall remain in full force and effect and shall not in any way be invalidated, impaired or affected.

4.9. Notices. Any notice provided or permitted to be given under this Agreement must be in writing and may be served by (i) depositing the same in the United States mail, addressed to the Party to be notified, postage prepaid, registered or certified mail, return receipt requested; or (ii) by delivering the same in person to such Party; or (iii) by overnight or messenger delivery service that retains regular records of delivery and receipt; or (iv) by facsimile; provided a copy of such notice is sent within one (1) day thereafter by another method provided above. The initial addresses of the Parties for the purpose of notice under this Agreement shall be as follows:

If to City: CITY OF PFLUGERVILLE
PO BOX 589
Pflugerville, TX 78691-0589
Attention: City Manager

With copy to: Denton Navarro Rodriguez Bernal Santee & Zech, P.C.

2500 W. William Cannon, Suite 609
Austin, Texas 78745-5320
Attention: Charles Zech

If to Developer: Northtown Phase 1, LLC
10 East 53rd Street, 18th Floor
New York, NY 10022
Attention: Mikael Levey

With copy to: Manning, Fulton, & Skinner, P.A.
3605 Glenwood Avenue, Suite 500
Raleigh, NC 27612
Attention: Barry Mann

4.10. No Joint Venture. Nothing contained in this Agreement is intended by the Parties to create a partnership or joint venture between the Parties, and any implication to the contrary is hereby expressly disavowed. It is understood and agreed that this Agreement does not create a joint enterprise, nor does it appoint either Party as an agent of the other for any purpose whatsoever. Except, as otherwise specifically provided herein, neither Party shall in any way assume any of the liability of the other for acts of the other obligations of the other.

4.11 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be considered an original, but all of which constitute one instrument.

4.12 Governmental Immunity. The City does not waive or relinquish any immunity or defense on behalf of itself, its officers, employees, Councilmembers, and agents as a result of the execution of this Agreement and the performance of the covenants and actions contained herein.

4.13 The Developer must indemnify, hold harmless and defend the City, its officers, agents and employees, from and against liability for any and all claims, liens, suits, demands, and/or actions for damages, injuries to persons (including death), property damage (including loss of use), and expenses, including court costs and attorneys' fees and other reasonable costs arising out of or resulting from the Developer's work and/or activities conducted in connection with or incidental to this Agreement and from any liability arising out of or resulting from the intentional acts or negligence, including all such causes of action based upon common, constitutional, or statutory law, or based in whole or in part upon the negligent or intentional acts or omissions of Developer, including but not limited to its officers, agents, employees, subcontractors, licensees, invitees, and other persons.

Developer must at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of its officers, agents, employees, subcontractors, licensees, invitees and other persons, as well as their property, while in the vicinity where the work is being done. It is expressly understood and agreed that the City shall not be liable or

responsible for the negligence of the Developer, including but not limited to its officers, agent, employees, subcontractors, licensees, invitees, and other persons.

Further, the City assumes no responsibility or liability for harm, injury, or any damaging events which are directly or indirectly attributable to premises defects which may now exist or which may hereafter arise upon the premises, responsibility for any and all such defects being expressly assumed by the Developer.

BOTH CITY AND DEVELOPER EXPRESSLY INTEND THAT THE INDEMNITY PROVIDED FOR IN THIS AGREEMENT IS INDEMNITY BY DEVELOPER TO INDEMNIFY AND PROTECT THE CITY FROM THE CONSEQUENCES OF THE CITY'S OWN NEGLIGENCE WHILE CITY IS PARTICIPATING IN THIS AGREEMENT WHERE THAT NEGLIGENCE IS A CONCURRING CAUSE OF THE INJURY, DEATH, OR DAMAGE. FURTHERMORE, THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL HAVE NO APPLICATION TO ANY CLAIM, LOSS, DAMAGE, CAUSE OF ACTION, SUIT, AND LIABILITY WHERE THE INJURY, DEATH, OR DAMAGE RESULTS FROM THE SOLE NEGLIGENCE OF THE CITY, UNMIXED WITH THE FAULT OF ANY OTHER PERSON OR ENTITY.

4.14 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective heirs, executors, representatives, successors, and assigns, and the terms hereof shall run with the Property.

4.15 Legal Construction. If any provision in this Agreement is for any reason unenforceable, to the extent the unenforceability does not destroy the basis of the bargain among the Parties, such unenforceability will not affect any other provision hereof, and this Agreement will be construed as if the unenforceable provision had never been a part of this Agreement. Whenever the context requires, the singular will include the plural and the masculine or feminine gender, and vice versa. Article and section headings in this Agreement are for reference only and are not intended to restrict or define the text of any section. This Agreement will not be construed more or less favorably between the Parties by reason of authorship or origin of language.

4.16 Recitals; Exhibits. Any recitals in this Agreement are represented by the Parties hereto to be accurate, constitute a part of the Parties' substantive agreement, and are fully incorporated herein as matters of contract and not mere recitals. Further, any exhibits to this Agreement are incorporated herein as matters of contract and not mere exhibits.

4.17 Mandatory Texas Contract Provisions. When applicable, the City may not enter into a contract with a company for goods and services unless the contract contains a written verification from the company that it; (i) does not boycott Israel; (ii) will not boycott Israel during the term of the contract; (iii) does not boycott energy companies; (iv) will not boycott energy companies during the term of the contract; (v) does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association;

and (vi) will not discriminate during the term of the contract against a firearm entity or firearm trade association (Texas Government Code, Chapter 2271.002; 2274.002).

Developer hereby verifies that it does not boycott Israel, and agrees that, during the term of this agreement, will not boycott Israel as this term is defined in the Texas Government Code, Section 808.001, as amended. Developer hereby verifies that it does not boycott energy companies, and agrees that, during the term of this agreement, will not boycott energy companies as this term is defined in Texas Government Code, Section 809.001, as amended. Developer hereby verifies that it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association, and agrees that, during the term of this agreement, will not discriminate against a firearm entity or firearm trade association as those terms are defined in Texas Government Code, Section 2274.001, as amended.

Further, Developer hereby certifies that it is not a company identified under Texas Government Code, Section 2252.152 as a company engaged in business with Iran, Sudan, or Foreign Terrorist Organizations.

4.18 Authority. The undersigned officers and/or agents of the Parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the Parties hereto.

[Signatures and acknowledgments on the following pages]

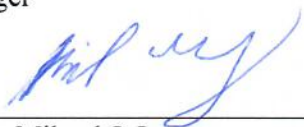
Signature Page to
Reimbursement Agreement with Developer for Construction of Public Improvements

This Agreement has been executed by the Parties as of the dates of the Acknowledgments to be effective as of the Effective Date.

Developer:

Northtown Phase 1, LLC,
a North Carolina limited liability company

By: MJL RE Holdings LLC,
a Connecticut limited liability company,
Manager

By: 
Name: Mikael J. Levey
Title: Manager

THE STATE OF Georgia §
COUNTY OF Cobb §

This instrument was acknowledged before me on October 1, 2024, on behalf of said entities.


Notary Public Signature

(seal)



Signature Page to
Reimbursement Agreement with Developer for Construction of Public Improvements

This Agreement has been executed by the Parties as of the dates of the Acknowledgments to be effective as of the Effective Date.

City:

CITY OF PFLUGERVILLE,
a Texas municipal corporation

By: _____
Name: Sereniah Breland, City Manager

THE STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on the ____ day of _____, 2024 by Sereniah Breland, City Manager of the City of Pflugerville, Texas, a Texas municipal corporation, on behalf of said City.

(SEAL)

Notary Public in and for
The State of Texas

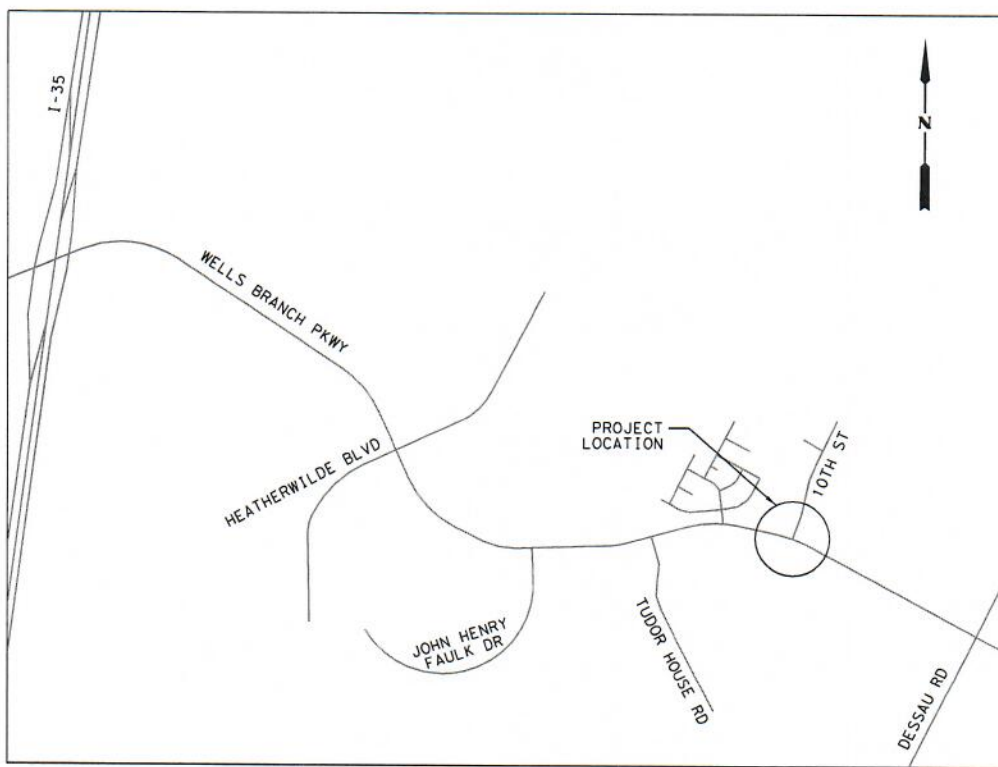
My Commission Expires:_____

EXHIBIT A

NORTHTOWN PHASE 1

PLANS OF PROPOSED TRAFFIC SIGNAL CONSTRUCTION

WELLS BRANCH PARKWAY AT 10TH STREET



PROJECT LOCATION MAP
NOT TO SCALE

EXHIBIT B: ADDITIONAL PUBLIC IMPROVEMENTS

Alliance Transportation Group (ATG) prepared a Traffic Impact Analysis (TIA) dated November 4, 2020. The TIA determined the need for a signal at the intersection of Wells Branch Parkway and 10th Street. Based on the pro rata share for improvements developed in the TIA, the City of Pflugerville, and the Villages at Northtown (The Parker) development entered an agreement that stated the Villages at Northtown development would use their pro rata contributions of \$251,800 to construct the three-approach signal at the Wells Branch Parkway and 10th Street intersection. Due to several variables unknown at the time of the TIA, the cost to design and construct the signal increased to \$575,811.25. Therefore, the City shall contribute the amount \$324,011.25, which is the difference between final costs of \$575,811.25 and agreed upon pro rata contributions of \$251,800.

The unknown factors contributing to cost increases include:

- The addition of the fourth leg of the 10th Street at Wells Branch Parkway intersection being constructed by the Villages at Wells Branch Development. This caused an increase in the traffic signal equipment needed as well as a redesign of the proposed traffic signal.
- The addition of a westbound right-turn lane on Wells Branch Parkway constructed by the Basis School development. This caused a redesign of the proposed traffic signal
- Costs to bring power to the intersection, including design and construction.
- Construction material increases due to inflation.

EXHIBIT C: CITY PARTICIPATION COSTS

This section serves to document the construction cost and proposed cost sharing for the Wells Branch at 10th Street traffic signal. The construction cost, signal design cost, and costs to get power to the intersection are outlined in **Table 1** along with the proposed cost share.

Table 1. Wells Branch Parkway at 10th Street Signal Costs

Item	Costs
Construction/Materials	\$507,025.70
Signal Design/Construction Administration	\$60,050.00
Install Power Connection to Intersection	\$8,735.55
Villages at Northtown (The Parker) Pro Rata Contribution*	-\$251,800.00
Sum (City of Pflugerville Contribution)	\$324,011.25

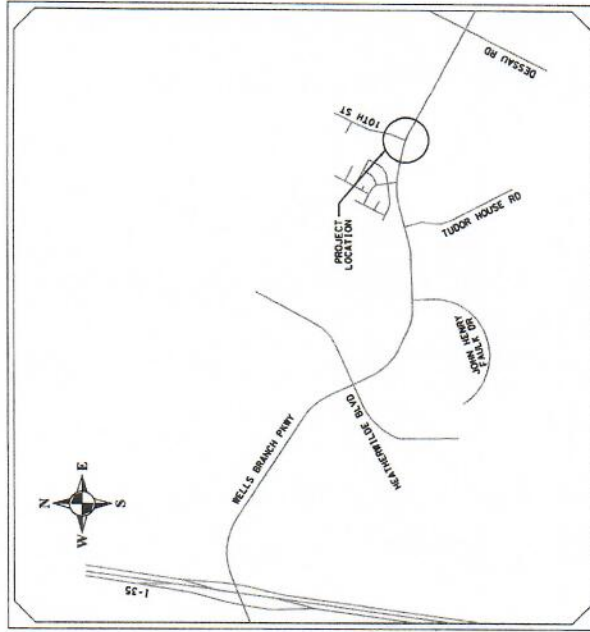
* Amount committed in the TIA based on August 2020 average bid prices.

Attachment A

City of Pflugerville, Texas

PLANS OF PROPOSED
TRAFFIC SIGNAL CONSTRUCTION
WELLS BRANCH PARKWAY AT 10TH STREET

DECEMBER 2022



PROJECT LOCATION MAP
Scale: N.T.S.

City of Pflugerville
Development Services Center
100 W. Main Street
Pflugerville, TX 78661

Planning and Development Services Director
City of Pflugerville
Gordon Haws
Development Engineering
City of Pflugerville

DATE: 2/15/2023

DATE:



MAYOR
Victor Gonzales

COUNCIL

Mayor Pro-Tem
Place 2
Place 3
Place 4
Place 5
Place 6

Doug Weiss
Ceasar Ruiz
Kimberly Holiday
Rudy Metayer
Jim McDonald
David Rogers

CITY MANAGER
Sereniah Breland

ASST. CITY MANAGER
Emily Barron, AICP

ASST. CITY MANAGER
Thomas Hunter

Director of Engineering
Andrea Brinkley

City Engineer
Jeff Dunsworth, P.E.

SUBMITTED BY:

Arthur (Trey) Gumbak, P.E., PTOE
Alliance Transportation Group, LLC

Jeff Dunsworth, P.E.
City Engineer

DATE: 12-15-2022

DATE: 02/14/2023

THE CITY OF PFLUGERVILLE HAS NOT
REVIEWED THESE PLANS FOR COMPLIANCE
WITH THE AMERICANS WITH DISABILITIES
ACT. ALL SIDEWALKS SHALL COMPLY WITH
THE AMERICANS WITH DISABILITIES ACT.
IT IS THE RESPONSIBILITY OF THE OWNER
TO PROVIDE COMPLIANCE WITH ALL
LEGISLATION RELATED TO ACCESSIBILITY
WITHIN THE LIMITS OF CONSTRUCTION
SHOWN IN THESE PLANS



12-15-2022

Arthur (Trey) Gumbak, P.E., PTOE
Alliance Transportation Group, LLC

Jeff Dunsworth, P.E.
City Engineer

DATE: 12-15-2022

DATE: 02/14/2023



11771 Boulevard D • Pflugerville, TX 78661
Phone 512-861-2281 • Fax 512-861-2285

NOTE:
ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF PFLUGERVILLE MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

Drawing List

- | | |
|-------|--------------------------------------|
| 1 | TITLE SHEET |
| 1B | DRAWING LIST |
| 2 | SUMMARY OF QUANTITIES |
| 3 | GENERAL NOTES |
| 4 | REMOVAL LAYOUT |
| 5 | PROPOSED SIGNAL LAYOUT |
| 6 | PROPOSED SIGNAL DETAILS |
| 7 | PROPOSED SIGNAL ELEVATIONS |
| 8-9 | CONDUIT AND CONDUCTOR SCHEDULES |
| 10 | PROPOSED SIGNS AND PAVEMENT MARKINGS |
| 11-29 | STANDARD DETAILS |

CONTACTS

PFLUGERVILLE ISD:
CRAIG PRUETT
craig.pruett@isd.net
(512) -594-0070

texas811.org



Know what's below.
Call before you dig.

UTILITY PROVIDERS

ATMOS GAS:
JACKY YU
jacky.yu@atmosenergy.com
(512) -310-3801

GRANDE COMMUNICATIONS
LUIS MODA
(512) -844-9264

ONCOR ELECTRIC:
TREY NEWBERRY
(254) -750-5287

SUDDENLINK:
DEAN COLE
dean.cole@atliticeUSA.com
(512) -931-2965
PHILLIP WOMAC
(512) -931-2984

CITY APPROVED REVISIONS AND CORRECTIONS			
NO.	DESCRIPTION	REVISED, CORRECTED, ADDED, OR VOIDED SHEETS	DESIGN ENGINEER SIGNATURE
1	REPLACE COVER SHEET, ADD CHANNELS AND CONDUIT REVISIONS TO LANE 1	1, 1B, 2, 3, 4, 5, 6, 8, 10	

SUMMARY OF TRAFFIC SIGNAL QUANTITIES		
ITEM	DESCRIPTION	UNIT QUANTITY
* 624-6010	GROUND BOX TY D (162922) W/APRON	EA 6
1045-A	REMOVE P.C. CONCRETE CURB	LF 6
1045-C	REMOVE P.C. CONCRETE SIDEWALKS AND DRIVEWAYS	LF 655
432-300-COMB	NEW 18" DIAMETER SIDEWALKS WITH 18" THICKNESS	EA 109
432-300-COMB	NEW 18" DIAMETER SIDEWALKS WITH 18" THICKNESS	EA 109
7005-TM	TOTAL MOBILIZATION PAYMENT	LS 9
8305-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO 1
8305-SCF	TRAFFIC SIGNAL CONTROLLER FOUNDATION	EA 1
8315-1W16	42" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS 16' DEPTH	EA 1
8315-3W	48" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS 18' DEPTH	EA 1
8315-3	42" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS 12' DEPTH	EA 1
8315-5	48" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS 14' DEPTH	EA 1
8315-5	48" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS 14' DEPTH	EA 5
8325-VSM-3	VEHICULAR SIGNAL INSTALLATION, 3 SECTION, COMPLETE IN PLACE	EA 4
8325-VSM-4	VEHICULAR SIGNAL INSTALLATION, 4 SECTION, COMPLETE IN PLACE	EA 4
8335-PPB	PEDESTRIAN PUSH BUTTON	EA 10
8355-L12	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 2 INCH IN DIAMETER	LF 80
8355-L13	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 3 INCH IN DIAMETER	LF 1485
8355-L13	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 3 INCH IN DIAMETER	LF 1485
8355-PSUP	PRECAST SIGNAL POLE	EA 12
8395-MAP1	TYPE 1W MAST ARM POLE	EA 1
8395-MAP1W	TYPE 1W MAST ARM POLE	EA 1
8395-MAP2	TYPE 2 MAST ARM POLE	EA 1
8395-MAP3W	TYPE 3W MAST ARM POLE	EA 1
8395-MA25	25-FOOT MAST ARM	EA 1
8395-MA30	30-FOOT MAST ARM	EA 1
8395-MA35	35-FOOT MAST ARM	EA 1
8395-MA40	40-FOOT MAST ARM	EA 1
8395-MA40	40-FOOT MAST ARM	EA 1
8405-TS1	TRAFFIC SIGNAL INSTALLATION	EA 1
*	RADAR VEHICLE DETECTION SYSTEM	EA 1
*	CCIV CAMERA	EA 1
*	REMOVE GROUND MOUNTED SIGN FACE AND INSTALL NEW SIGN FACE	EA 8
*	PEDESTAL POLE ASSEMBLY PER CONDUCTOR SCHEDULE	EA 1
*	UNDERGROUND ELECTRICAL SERVICE CITY STD WITH METER	EA 5
*	ALL LABOR AND INCIDENTALS REQUIRED FOR COMPLETE AND OPERATIONAL TRAFFIC SIGNAL	EA 1
8445-2	CLASS 2 TRENCHING FOR TRAFFIC SIGNAL CONDUIT	LS 1
8445-3	CLASS 3 TRENCHING FOR TRAFFIC SIGNAL CONDUIT	LS 1
8445-JB	JACKING OR BORING TRAFFIC SIGNAL CONDUITS	LF 180
8715-A	REFLECTORIZED TYPE 1 THERMOPLASTIC PAVEMENT MARKINGS 8 INCHES IN WIDTH, 100 MILS IN THICKNESS, WHITE IN COLOR	LF 370
8715-A	REFLECTORIZED TYPE 1 THERMOPLASTIC PAVEMENT MARKINGS 8 INCHES IN WIDTH, 100 MILS IN THICKNESS, WHITE IN COLOR	LF 559
8715-B	REFLECTORIZED TYPE 1 THERMOPLASTIC PAVEMENT MARKINGS 24 INCHES IN WIDTH, 100 MILS IN THICKNESS, WHITE IN COLOR	EA 18
8715-C	REFLECTORIZED TYPE 1 THERMOPLASTIC PAVEMENT MARKINGS 24 INCHES IN WIDTH, 100 MILS IN THICKNESS, WHITE IN COLOR	EA 2
8745-C	ELIMINATING EXISTING REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS: 4 INCHES IN WIDTH	LF 117
8745-C	ELIMINATING EXISTING REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS: 8 INCHES IN WIDTH	LF 42
8745-C	ELIMINATING EXISTING REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS: 12 INCHES IN WIDTH	LF 128
8745-C	ELIMINATING EXISTING REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS: 24 INCHES IN WIDTH	LF 12
8745-C	ELIMINATING EXISTING REFLECTORIZED THERMOPLASTIC PAVEMENT MARKINGS: ARROW	EA 2
* T3007 BID ITEM		
* REFER TO SPECIFICATION #634 ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION ON NOVEMBER 1, 2014. * THIS ITEM WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED SUBSIDIARY TO ITEM 8405-TS1. THE QUANTITY IS SHOWN HERE FOR CONTRACTORS' INFORMATION ONLY.		

CITY OF PFLUGERVILLE GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF PFLUGERVILLE STANDARD SPECIFICATIONS.
2. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF PFLUGERVILLE MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
3. DESIGN PROCEDURES SHALL BE IN COMPLIANCE WITH THE CITY OF PFLUGERVILLE ENGINEERING DESIGN GUIDELINES AND UNIFIED DEVELOPMENT CODE. ALL WAIVERS OR VARIANCES ARE LISTED BELOW: (NONE)
4. AFTER THE CONSTRUCTION PERMIT HAS BEEN ISSUED AND PRIOR TO BEGINNING CONSTRUCTION, THE OWNER OR THE REGISTERED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF PFLUGERVILLE, THE CITY ENGINEER, CONTRACTOR(S) IN TRAVIS COUNTY (IF IN THE CITY), OTHER UTILITY COMPANIES, AND ANY OTHER AFFECTED PARTIES. THE CITY OF PFLUGERVILLE SHALL BE CONTACTED TO SET UP THE MEETING AT LEAST 3 BUSINESS DAYS PRIOR TO THE PROPOSED MEETING TIME (512-990-6300) AND AFTER RECEIVING BOTH THE REQUIRED NUMBER OF SIGNED PLANS AND THE SMP'S.
5. THE CONTRACTOR SHALL GIVE THE CITY OF PFLUGERVILLE CONSTRUCTION INSPECTOR AT LEAST 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.
6. ANY CHANGES OR REVISIONS TO THESE APPROVED PLANS MUST BE SUBMITTED BY THE DESIGN ENGINEER AND APPROVED BY THE CITY OF PFLUGERVILLE PRIOR TO CONSTRUCTION OF THE REVISION.
7. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR DESTRUCTION OR REMOVAL OR OTHER PUBLIC INFRASTRUCTURE DAMAGED OR REMOVED WILL BE BY THE CONTRACTOR AT HIS EXPENSE BEFORE ACCEPTANCE OF THE SUBDIVISION.
8. BLASTING OR BURNING SHALL NOT BE PERMITTED ON THIS PROJECT.
9. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER IMMEDIATELY. THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE AND SUBMITTING A REVISION TO THE CITY. USE ONE CALL UTILITY SYSTEM DIAL #800-368-8277, 48 HOURS BEFORE YOU DIG. FOR CITY OF PFLUGERVILLE WATER AND WASTEWATER UTILITY LOCATES, CALL 512-990-6400.
10. THE CITY OF PFLUGERVILLE HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT. ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE COMPLIANCE WITH ALL LEGISLATION RELATED TO ACCESSIBILITY WITHIN THE LIMITS OF CONSTRUCTION SHOWN IN THESE PLANS.
11. EXCESS SOIL SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE. NOTIFY THE CITY OF PFLUGERVILLE IF THE DISPOSAL SITE IS INSIDE THE CITY'S JURISDICTIONAL BOUNDARIES.
12. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS. DISTURBED AREAS OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S OPTION.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT TEMPORARY EROSION CONTROLS ON A DAILY BASIS. ADJUST THE CONTROLS AND/OR REMOVE ANY SEDIMENT BUILDUP AS NECESSARY.
14. CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
15. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
16. A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS SHALL BE SITE SPECIFIC AND BE SEALED BY A REGISTERED TEXAS PROFESSIONAL ENGINEER.
17. ALL MANHOLE LIDS SHALL BE 32" OR LARGER, UNLESS EXPRESSLY APPROVED IN WRITING BY THE CITY ENGINEER. ALL MANHOLE LIDS SHALL READ "CITY OF PFLUGERVILLE".
18. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, ALL CONCRETE IS TO BE CLASS "A" 15 SACK, 3000 PSI ~ 28 DAYS, AND ALL REINFORCING STEEL TO BE ASTM A615-60.
19. UNIFORM TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND INSTALLED AS DIRECTED BY THE CITY OF PFLUGERVILLE PRIOR TO CITY ACCEPTANCE OF THE SUBDIVISION.

FOR REVISION 1 ONLY



Gregory Go

REV	BY	DATE	REVISION DESCRIPTION
1	ATG	7/20/21	REVISED GENERAL NOTES
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			



8/20/2021

CITY OF PFLUGERVILLE, TEXAS	NORTHTOWN PHASE 1 TRAFFIC SIGNAL DESIGN	GENERAL NOTES WELLS BRANCH PKWY AT 10TH STREET
-----------------------------	--	---



NOTES	NAME	DATE
SURVEYED BY	WGL	2021
DRAWN BY	ATG	2021
DESIGNED BY	ATG	2021
CHECKED BY	ATG	2021
REVIEWED BY	ATG	2021

SHEET NUMBER	3 OF 29
--------------	---------

NO.	BY	DATE	REVISION DESCRIPTION
1	CO	12/15/2021	ADD CHANNELLED IN LANE
2	CO	12/15/2021	REMOVED STREET NAMES



8/20/2021

CITY OF PFLUGERVILLE, TEXAS

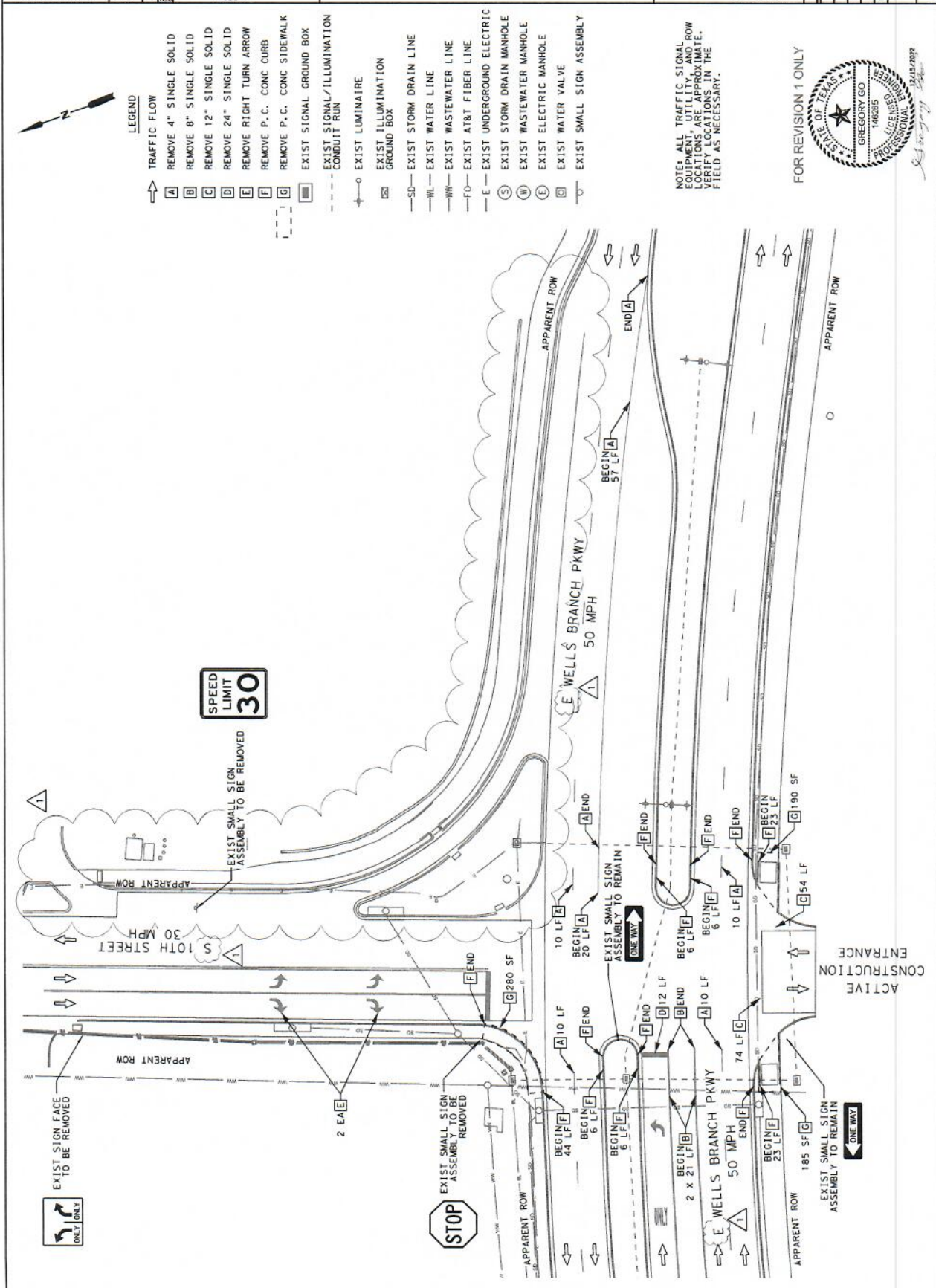
NORTH SIGNAL DESIGN
TRAFFIC SIGNAL PHASE 1

REMOVAL LAYOUT
WELLS BRANCH PKWY AT 10TH STREET

ATG
ALLIANCE
TRANSPORTATION GROUP

TYPE Firm Registration No. E-112
11701 Stonewall Dr., Suite 100
Pflugerville, TX 78661
Phone: 512-821-2081
Fax: 512-821-2085

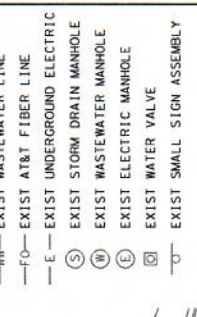
DATE	NAME	NOTES
03/21	WD	DRAWN BY
04/21	ATG	DESIGNED BY
04/21	ATG	CHECKED BY
04/21	ATG	REVIEWED BY
04/21	ATG	SCALE: 1" = 40'



- LEGEND**
- TRAFFIC FLOW
 - REMOVE 4" SINGLE SOLID
 - REMOVE 8" SINGLE SOLID
 - REMOVE 12" SINGLE SOLID
 - REMOVE 24" SINGLE SOLID
 - REMOVE RIGHT TURN ARROW
 - REMOVE P.C. CONC CURB
 - REMOVE P.C. CONC SIDEWALK
 - EXIST SIGNAL GROUND BOX
 - EXIST SIGNAL/ILLUMINATION CONDUIT RUN
 - EXIST LUMINAIRE
 - EXIST ILLUMINATION GROUND BOX
 - SD—EXIST STORM DRAIN LINE
 - WL—EXIST WATER LINE
 - WW—EXIST WASTEWATER LINE
 - FO—EXIST AT&T FIBER LINE
 - E—EXIST UNDERGROUND ELECTRIC
 - S—EXIST STORM DRAIN MANHOLE
 - W—EXIST WASTEWATER MANHOLE
 - E—EXIST ELECTRIC MANHOLE
 - W—EXIST WATER VALVE
 - EXIST SMALL SIGN ASSEMBLY

NOTE: ALL TRAFFIC SIGNAL LOCATIONS ARE APPROXIMATE. VERIFY LOCATIONS IN THE FIELD AS NECESSARY.

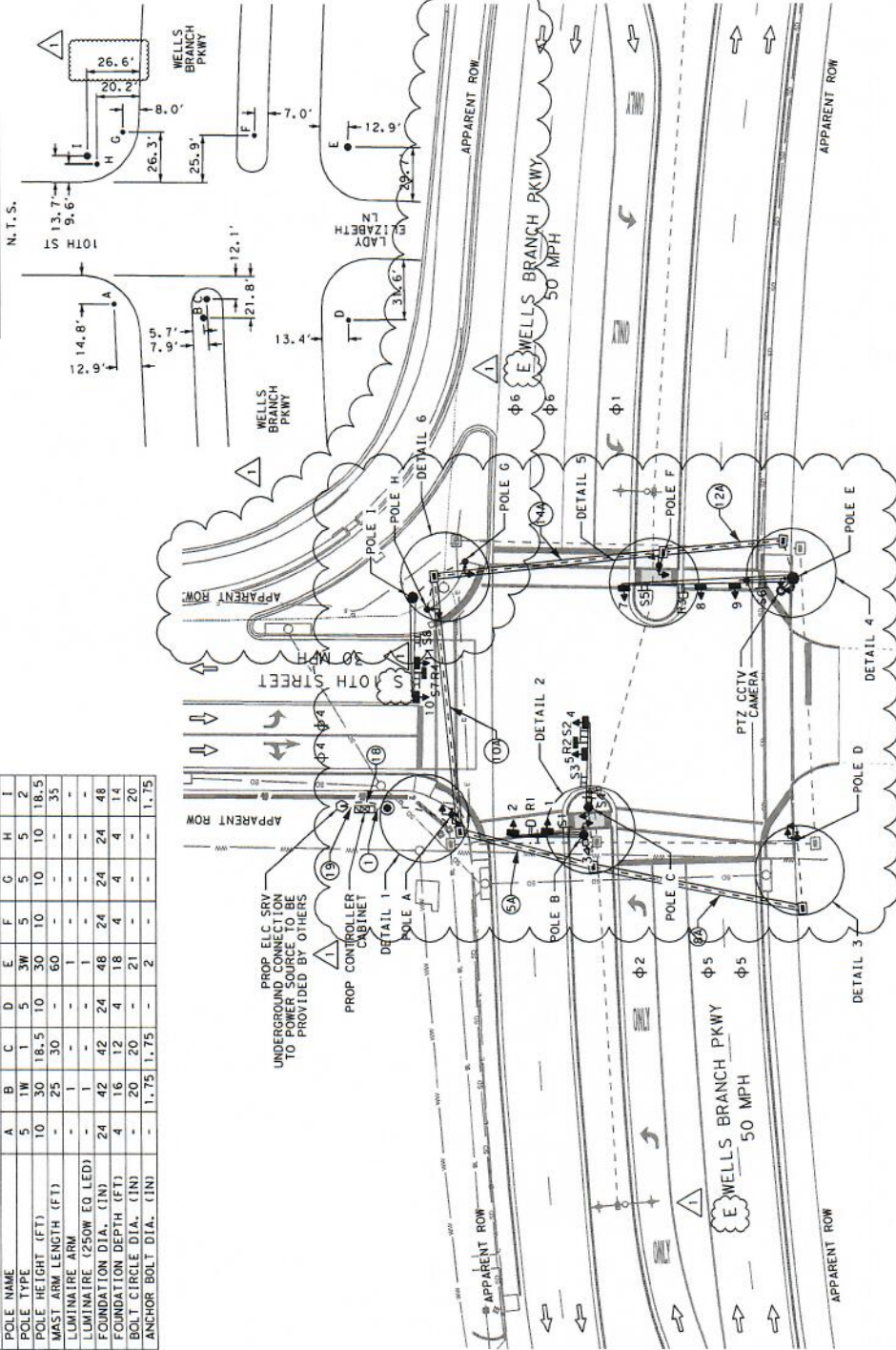
FOR REVISION 1 ONLY



SHEET NUMBER 4 OF 29

PROPOSED POLE AND FOUNDATION SCHEDULE										
POLE NAME	A	B	C	D	E	F	G	H	I	
POLE TYPE	5	1W	1	5	3W	5	5	5	2	
POLE HEIGHT (FT)	10	30	18.5	10	30	10	10	10	18.5	
MAST ARM LENGTH (FT)	-	25	30	-	60	-	-	-	35	
LUMINAIRE ARM	-	1	-	-	1	-	-	-	-	
LUMINAIRE (250W EQ LED)	-	1	-	-	1	-	-	-	-	
FOUNDATION DIA. (IN)	24	42	42	24	48	24	24	24	48	
FOUNDATION DEPTH (FT)	4	16	12	4	18	4	4	4	14	
BOLT CIRCLE DIA. (IN)	-	20	20	-	21	-	-	-	20	
ANCHOR BOLT DIA. (IN)	-	1.75	1.75	-	2	-	-	-	1.75	

POLE OFFSETS DIAGRAM



REV	BY	DATE	REVISION DESCRIPTION
1	GD	12/19/22	ADD CHNL. RT LN. PROPOSED GROUND
2	GD	12/19/22	CHNL. REVERSED STREET NAMES



CITY OF FLLUGERVILLE, TEXAS
 NORTH TOWN PHASE 1
 TRAFFIC SIGNAL DESIGN
 PROPOSED SIGNAL LAYOUT
 WELLS BRANCH PKWY AT 10TH STREET
 8/20/2021



DATE	NAME	NOTES
8/20/21	WJ	DESIGNED BY
8/20/21	WJ	DRAWN BY
8/20/21	WJ	CHECKED BY
8/20/21	WJ	REVIEWED BY
8/20/21	WJ	APPROVED BY

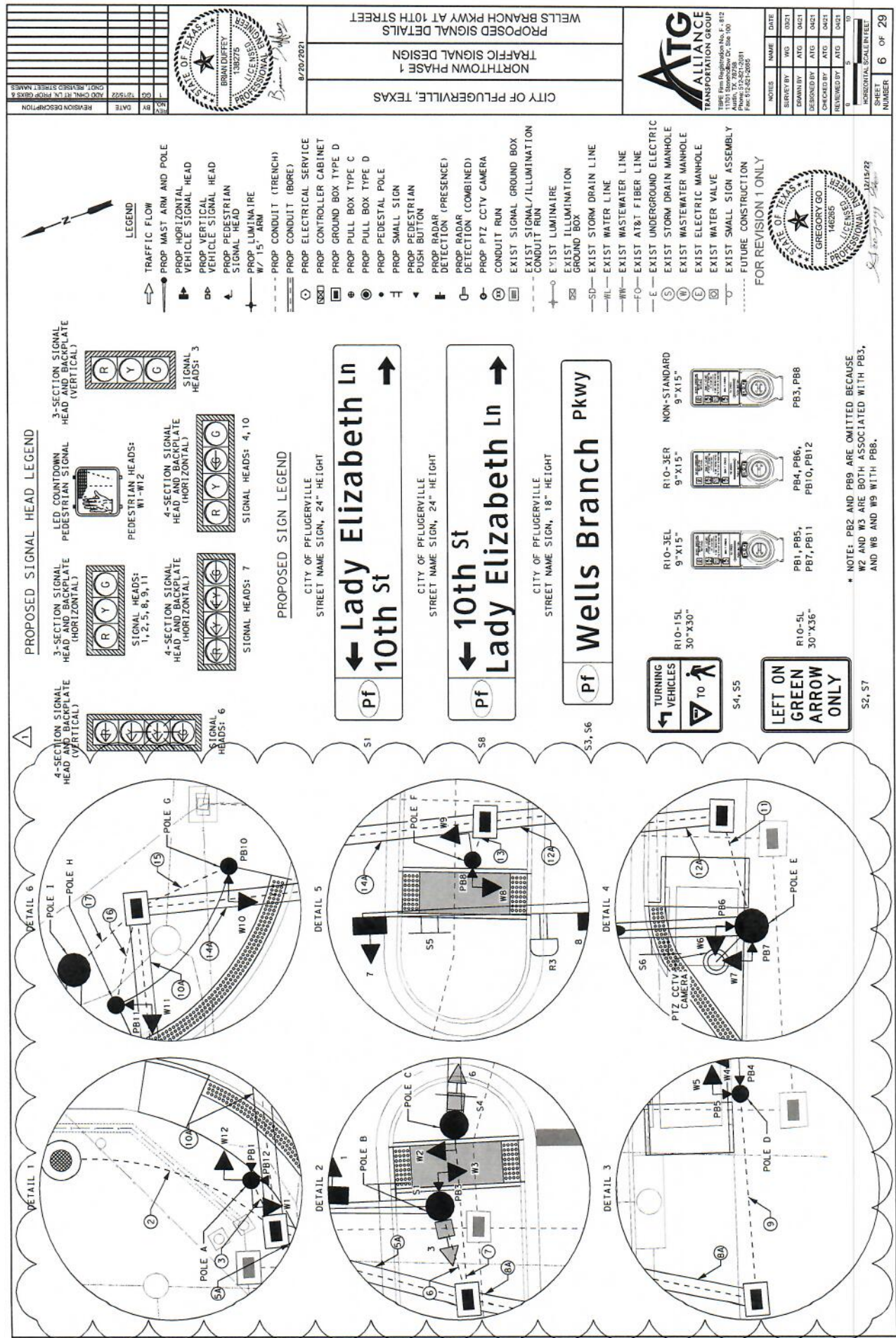


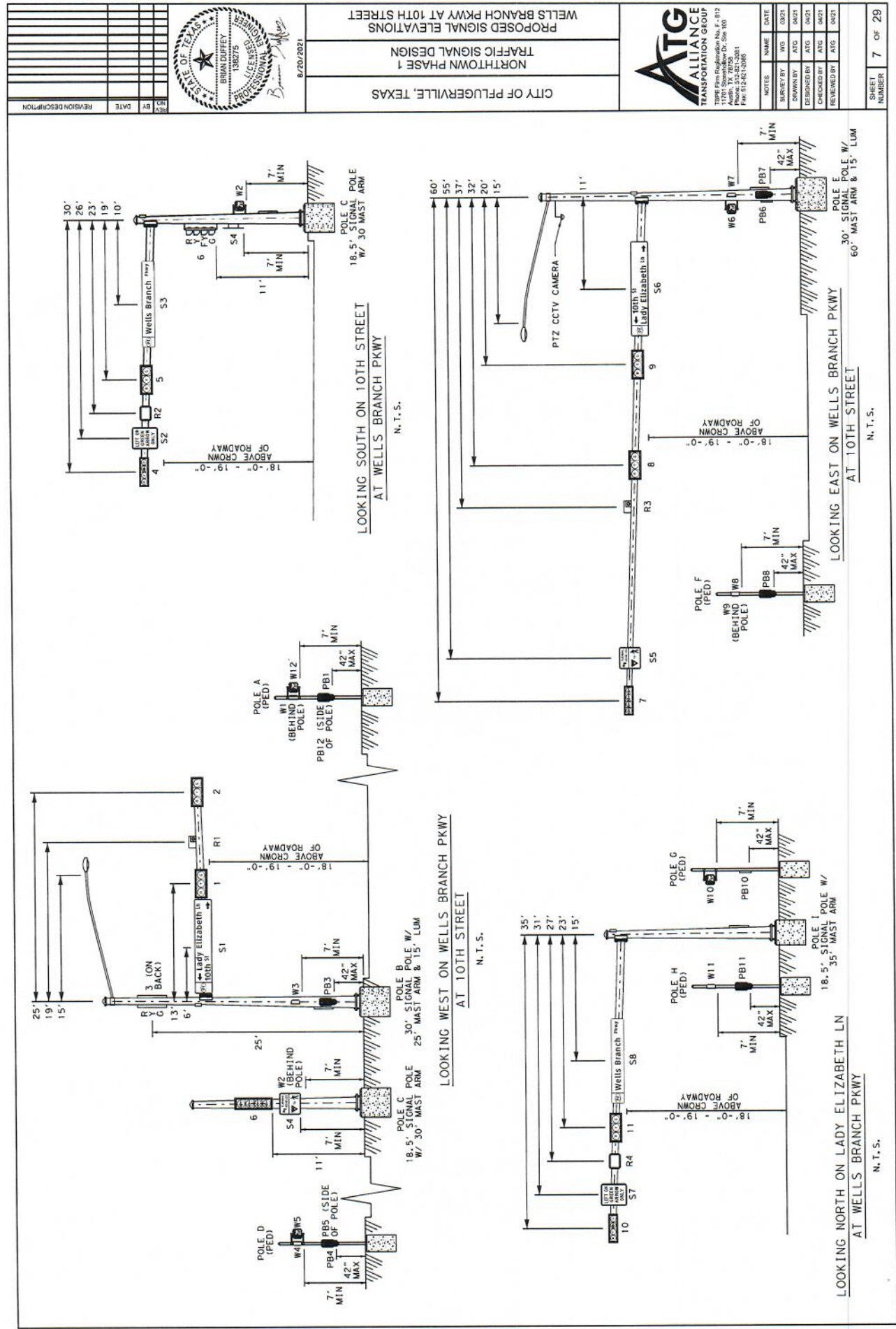
FOR REVISION 1 ONLY
 NOTE: ALL TRAFFIC SIGNAL EQUIPMENT, UTILITY, AND ROW LOCATIONS ARE APPROXIMATE. VERIFY LOCATIONS IN THE FIELD AS NECESSARY.

- INSTALLATION NOTES:
1. INSTALL SIGNAL POLE AND FOUNDATION AS SHOWN IN THE PLANS AND SUMMARIZED UNDER POLE SCHEDULE. SEE COA SMART CELL SIGNAL FOUNDATION STANDARD FOR FOUNDATION DETAILS AND VALMONT DETAILS FOR TRAFFIC SIGNAL MAST ARM DETAILS.
 2. INSTALL TYPE D GROUND BOXES. SEE TxDOT STANDARD ED(4)-14.
 3. INSTALL CONDUITS AS SHOWN IN THE PLANS AND SUMMARIZED UNDER CONDUIT AND CONDUCTOR SCHEDULE.
 4. INSTALL RADAR VEHICLE SENSING DEVICE (RVSD) SYSTEM AS SHOWN IN THE PLANS.
 5. INSTALL PEDESTAL SERVICE METER.
 6. INSTALL PEDESTAL POLE AND FOUNDATION AS SHOWN IN PLANS AND SUMMARIZED UNDER POLE SCHEDULE. SEE COA STANDARD 8315-2.

LADY ELIZABETH LN TO BE CONSTRUCTED IN THE FUTURE BY OTHERS

ACTIVE CONSTRUCTION ENTRANCE





NOTES	NAME	DATE
SURVEY BY	WS	03/21
DRAWN BY	ATG	04/21
DESIGNED BY	ATG	04/21
CHECKED BY	ATG	04/21
REVIEWED BY	ATG	04/21

SHEET
NUMBER

9 OF 29

NOTE: CONTRACTOR SHALL LAND ALL CONDUCTORS FROM THE 20C CABLE TO THE LEFT SIDE OF TERMINAL STRIP

- * PEDS W1 AND W12 (POLE A) ARE CONNECTED TO THE POLE B TERMINAL STRIP.
- # PEDS W4 AND W5 (POLE D) ARE CONNECTED TO THE POLE C TERMINAL STRIP.
- + PEDS W8 AND W9 (POLE F) ARE CONNECTED TO THE POLE E TERMINAL STRIP.
- % PED W10 (POLE G) AND PED W11 (POLE H) ARE CONNECTED TO THE POLE I TERMINAL STRIP.

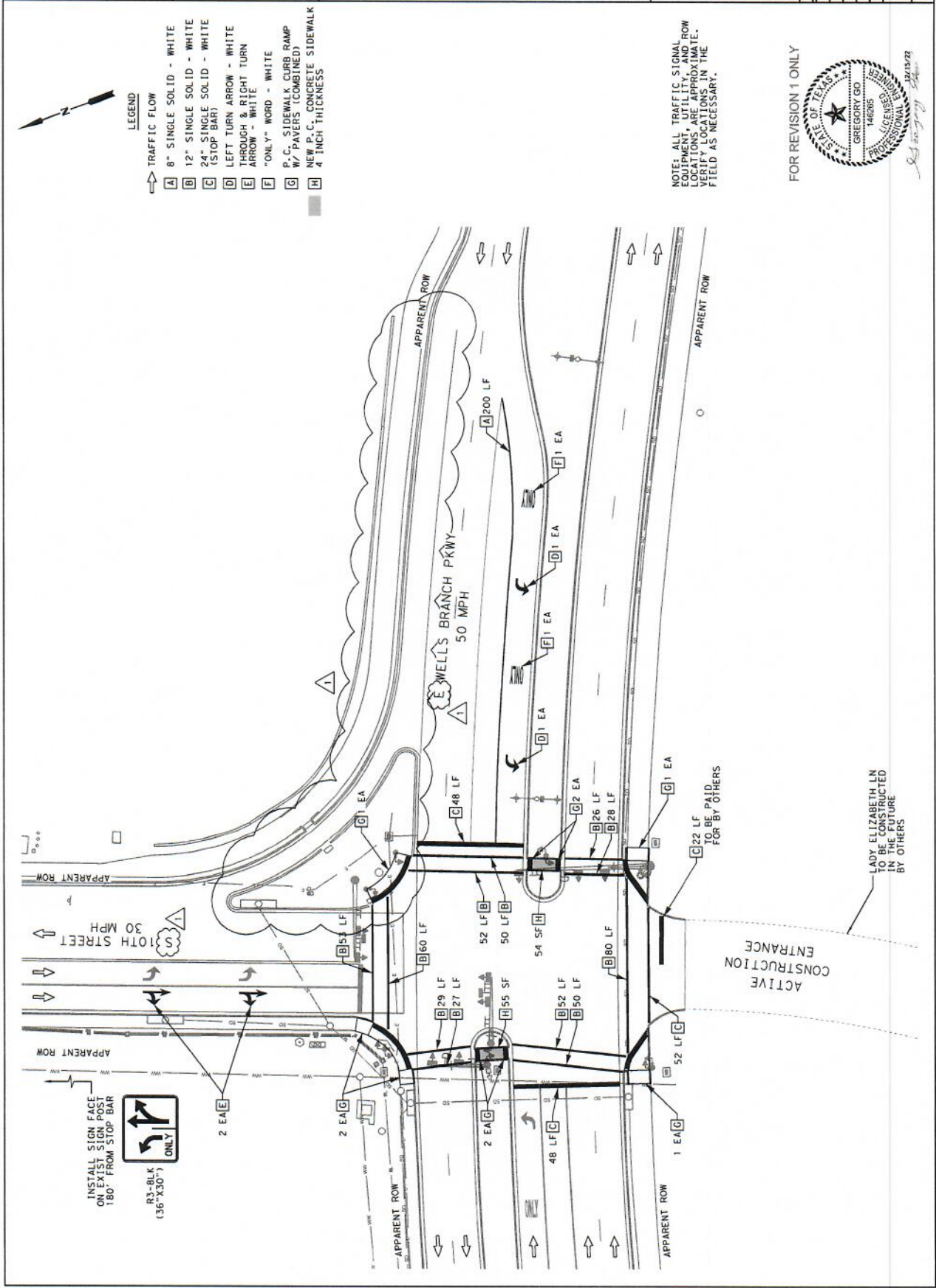
NO.	DATE	REVISION DESCRIPTION
1	7/17/22	ADD CHANNELIZED RT LANE
2	7/17/22	REVISED STREET NAMES



CITY OF PFLUGERVILLE, TEXAS
 NORTH TOWN PHASE 1
 TRAFFIC SIGNAL DESIGN
 PROPOSED SIGNS AND PAVEMENT MARKINGS
 WELLS BRANCH PKWY AT 10TH STREET
 8/20/2021

ATG
 ALLIANCE
 TRANSPORTATION GROUP
 11701 Stonemeadow Dr., Ste. 100
 Houston, TX 77042
 Phone: 281-421-2081
 Fax: 281-421-2085

NOTES	NAME	DATE
SURVEY BY	WGS	08/21
DRAWN BY	ATG	08/21
DESIGNED BY	ATG	08/21
CHECKED BY	ATG	08/21
REVIEWED BY	ATG	08/21
DATE	08/21	08/21
SCALE	AS SHOWN	
SHEET	10	OF 29

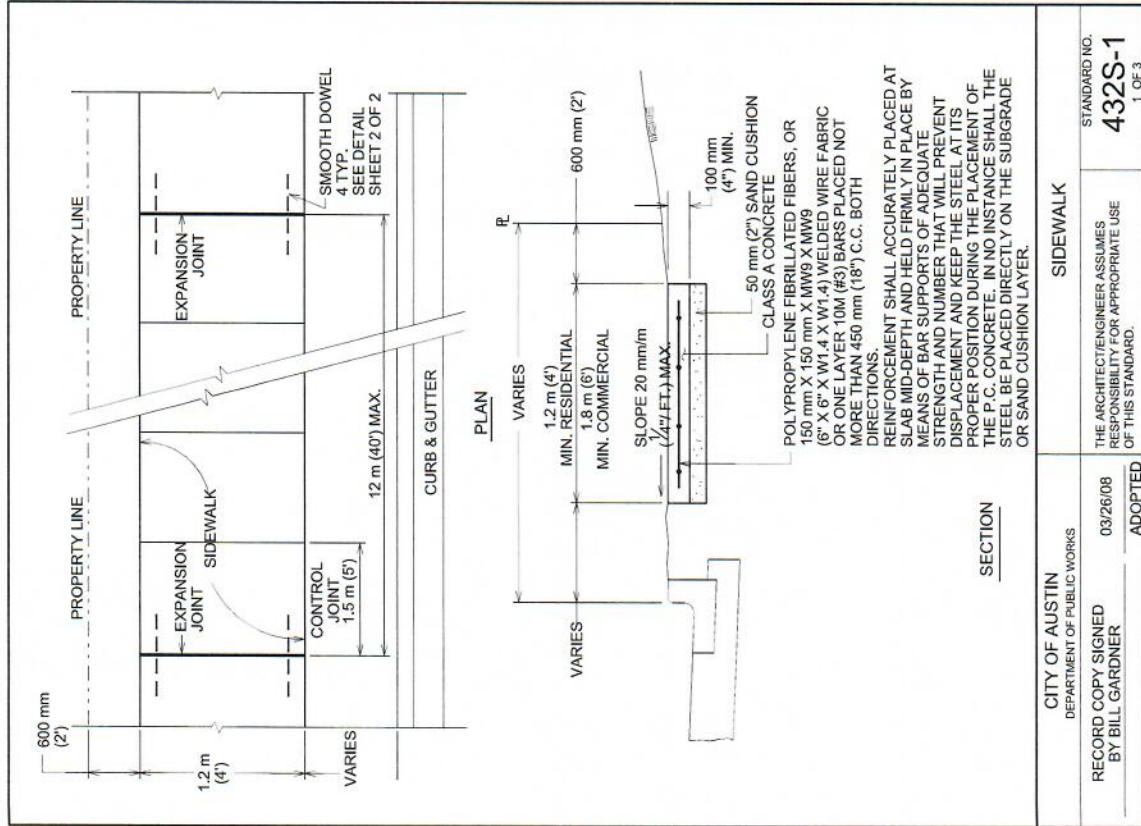
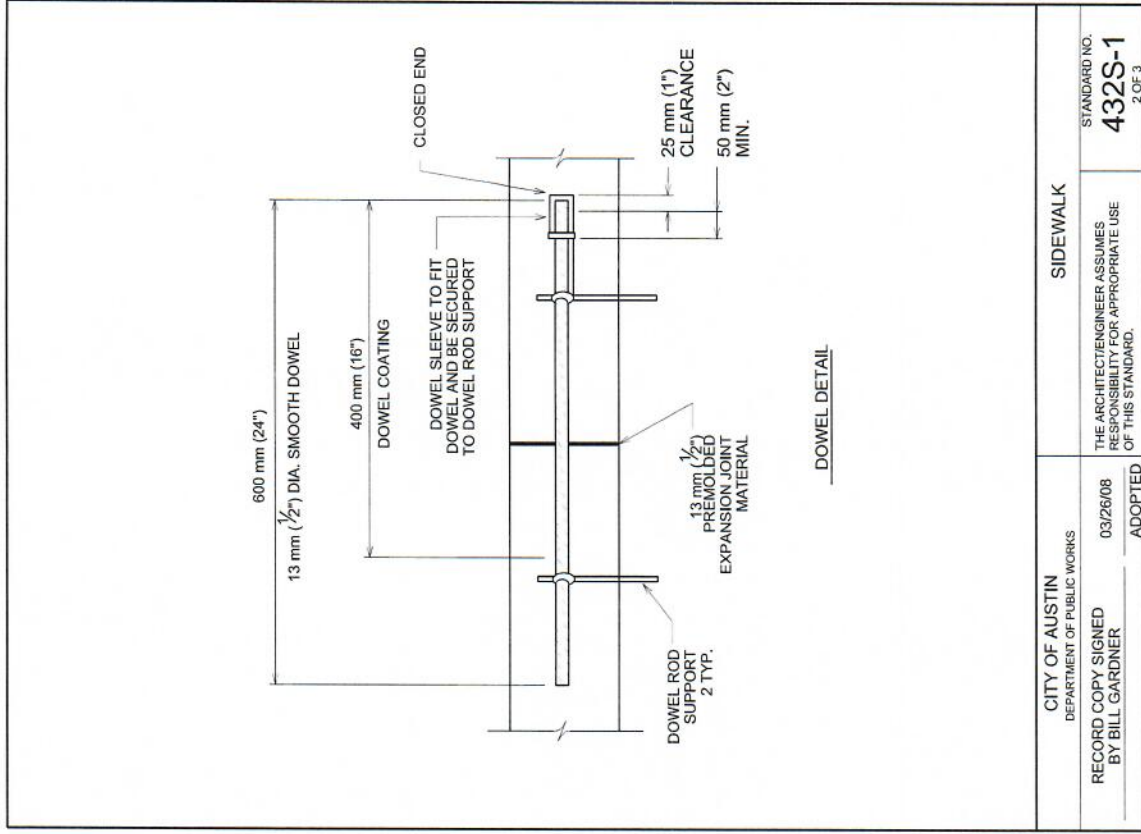


- LEGEND**
- TRAFFIC FLOW
 - A 8" SINGLE SOLID - WHITE
 - B 12" SINGLE SOLID - WHITE
 - C 24" SINGLE SOLID - WHITE (STOP BAR)
 - D LEFT TURN ARROW - WHITE
 - E THROUGH & RIGHT TURN ARROW - WHITE
 - F "ONLY" WORD - WHITE
 - G P.C. SIDEWALK CURB RAMP W/ PAVERS (COMBINED)
 - H NEW P.C. CONCRETE SIDEWALK 4 INCH THICKNESS

NOTE: ALL TRAFFIC SIGNAL EQUIPMENT LOCATIONS ARE APPROXIMATE. VERIFY LOCATIONS IN THE FIELD AS NECESSARY.

FOR REVISION 1 ONLY

GREGORY GO
 146205
 PROFESSIONAL ENGINEER
 MECHANICAL
 08/21/22





1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT-OF-WAY OR EASEMENT ONLY.
2. PAVERS WILL HAVE DETECTABLE WARNING THAT CONSISTS OF RANSED TRUNCATED DOMES WITH A DIAMETER OF 23 mm (0.9"), A NOMINAL HEIGHT OF 5 mm (0.2") AND A NOMINAL CENTER TO CENTER SPACING OF 80 mm (3.25") AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT (Re: ADAAG SECTION 4.29.2). MATERIAL USED TO PROVIDE CONTRAST SHALL BE IN USED PART OF THE WALKING SURFACE. A BASKET WEAVE PATTERN SHALL BE INTEGRAL UNLESS DIRECTED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. PAVEMENT PATTERN VARIES PER MANUFACTURER'S RECOMMENDATIONS. REFER TO STANDARD DETAIL 432S-5 FOR PAVEMENT PREPARATION DETAILS.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT-OF-WAY (DRAINAGE CRITERIA MANUAL SECTION 12.2.B).
4. TYPICAL SIDEWALK WIDTHS AND CURB RADII ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE TRANSPORTATION CRITERIA MANUAL FOR SIDEWALK WIDTHS, CURB RADI AND CURB BASIC REQUIREMENTS.
5. THE PERMISSIBLE CONSTRUCTION JOINT BETWEEN THE PAVERS AND THE ADJOINING SURFACE SHALL BE LIMITED TO 6 mm (1/4") JOINT SIZE. GAPS LARGER THAN 6 mm (1/4") MUST BE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. ALL JOINTS BETWEEN BRICKS AND ADJOINING SURFACE SHALL BE MORTAR FILLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
6. MORTAR SHALL CONFORM TO STD. SPECIFICATION ITEM SECTION 403S 3.5. MORTAR A GROUT. ALL OTHER CONCRETE SHALL CONFORM TO STD. SPECIFICATION ITEM 403S. CONCRETE FOR STRUCTURES, UNLESS OTHERWISE NOTED.
7. CURB RAMPS WITH 100 mm (4") CONCRETE VALLEY MAY ONLY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK DIAGONALLY ACROSS THE RAMP.

STANDARD NO.
432S-3F
2 OF 2

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE USE
OF THIS STANDARD.

RECORD COPY SIGNED
BY BILL GARDNER



ARTERIAL ONE LANE CLOSURE

STANDARD NO.
804S-1
1 OF 9

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

SHEET NUMBER	13 OF 29
-----------------	----------

STANDARD DETAILS
WELLS BRANCH PKWY AT 10TH STREET

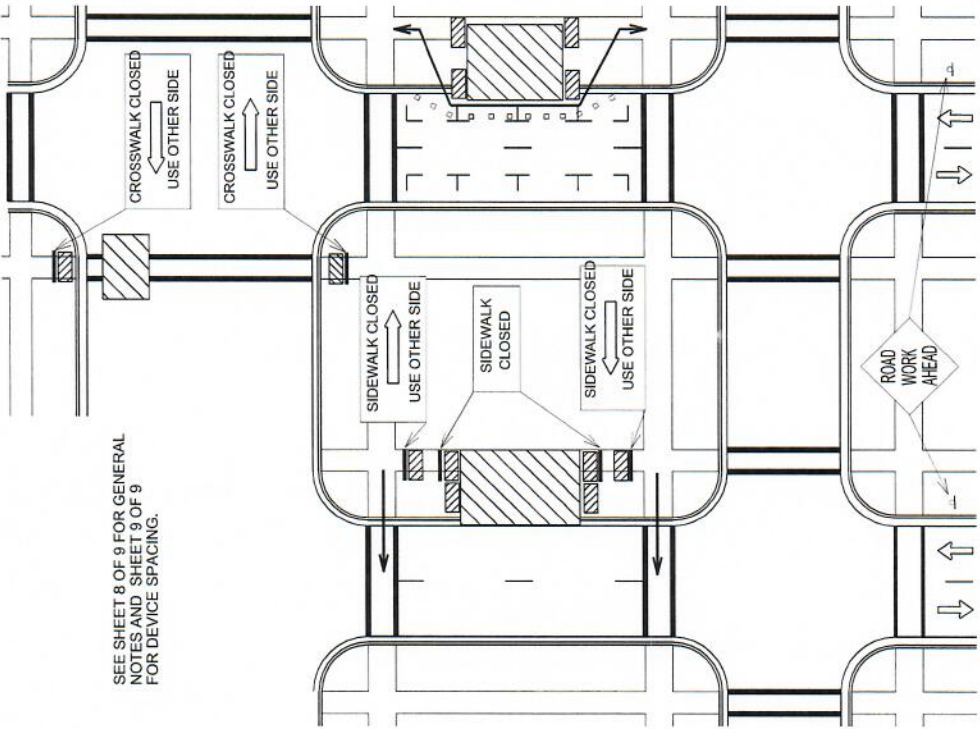


8/20/2021

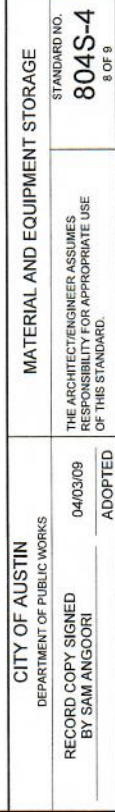
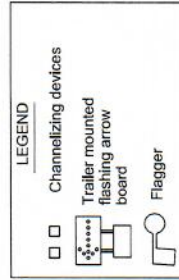
[illegible]

CITY OF PFLUGERVILLE, TEXAS		NORTH TOWN PHASE 1 TRAFFIC SIGNAL DESIGN		STANDARD DETAILS WELLS BRANCH PKWY AT 10TH STREET		
8/20/2021		BRUN DUFEY 138275 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS		ATG ALLIANCE TRANSPORTATION GROUP TYPE Firm Registration No. F - 4172 11701 Spaworth Dr. Ste 100 Houston, TX 77057 Phone: 281-425-1281 Fax: 281-425-1285		
NO.	BY	DATE	REVISION DESCRIPTION	NOTE	NAME	DATE
1					WG	03/21
2					ATG	04/01
3					ATG	04/01
4					ATG	04/01
5					ATG	04/01
6					ATG	04/01
7					ATG	04/01
8					ATG	04/01
9					ATG	04/01
10					ATG	04/01
11					ATG	04/01
12					ATG	04/01
13					ATG	04/01
14					ATG	04/01
15					ATG	04/01
16					ATG	04/01
17					ATG	04/01
18					ATG	04/01
19					ATG	04/01
20					ATG	04/01
21					ATG	04/01
22					ATG	04/01
23					ATG	04/01
24					ATG	04/01
25					ATG	04/01
26					ATG	04/01
27					ATG	04/01
28					ATG	04/01
29					ATG	04/01
30					ATG	04/01
31					ATG	04/01
32					ATG	04/01
33					ATG	04/01
34					ATG	04/01
35					ATG	04/01
36					ATG	04/01
37					ATG	04/01
38					ATG	04/01
39					ATG	04/01
40					ATG	04/01
41					ATG	04/01
42					ATG	04/01
43					ATG	04/01
44					ATG	04/01
45					ATG	04/01
46					ATG	04/01
47					ATG	04/01
48					ATG	04/01
49					ATG	04/01
50					ATG	04/01
51					ATG	04/01
52					ATG	04/01
53					ATG	04/01
54					ATG	04/01
55					ATG	04/01
56					ATG	04/01
57					ATG	04/01
58					ATG	04/01
59					ATG	04/01
60					ATG	04/01
61					ATG	04/01
62					ATG	04/01
63					ATG	04/01
64					ATG	04/01
65					ATG	04/01
66					ATG	04/01
67					ATG	04/01
68					ATG	04/01
69					ATG	04/01
70					ATG	04/01
71					ATG	04/01
72					ATG	04/01
73					ATG	04/01
74					ATG	04/01
75					ATG	04/01
76					ATG	04/01
77					ATG	04/01
78					ATG	04/01
79					ATG	04/01
80					ATG	04/01
81					ATG	04/01
82					ATG	04/01
83					ATG	04/01
84					ATG	04/01
85					ATG	04/01
86					ATG	04/01
87					ATG	04/01
88					ATG	04/01
89					ATG	04/01
90					ATG	04/01
91					ATG	04/01
92					ATG	04/01
93					ATG	04/01
94					ATG	04/01
95					ATG	04/01
96					ATG	04/01
97					ATG	04/01
98					ATG	04/01
99					ATG	04/01
100					ATG	04/01

1. ALL SETUPS SHALL BE IN ACCORDANCE WITH THE CURRENT ADDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL.	GENERAL NOTES	CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	STANDARD NO. 804S-1 8 OF 9
2. TO DETERMINE APPROPRIATE DEVICES AND SIGN SIZES TO BE USED, REFER TO STANDARD 804S-5, SHEETS 5, 6 AND 7 OF 11.					
3. FOR INTERMEDIATE-TERM SITUATIONS, WHEN IT IS NOT FEASIBLE TO REMOVE AND RESTORE PAVEMENT MARKINGS, THE CHANNELIZATION MUST BE MADE DOMINANT BY USING A VERY CLOSE DEVICE SPACING. THIS IS ESPECIALLY IMPORTANT IN LOCATIONS OF CONFLICTING INFORMATION, SUCH AS WHERE TRAFFIC IS DIRECTED OVER A DOUBLE YELLOW CENTERLINE. IN SUCH LOCATIONS, A MAXIMUM CHANNELIZING DEVICE SPACING OF 3 m (10') IS REQUIRED.					
4. FOR LONG TERM STATIONARY WORK, ALL CONFLICTING PAVEMENT MARKINGS MUST BE REMOVED AND CENTERLINE STRIPING PROVIDED WHERE TWO WAY TRAFFIC IS IN ADJACENT LANES.					
5. FOR TEMPORARY PAVEMENT MARKING REQUIREMENTS SEE STANDARD 804S-3.					
6. FOR ONE-WAY AND MULTILANE ROADWAYS THE "LANE BLOCKED" SIGN MAY BE USED IN LIEU OF THE "LANE CLOSED AHEAD" SIGN. THE NUMBER OF DIGITS ON THE SIGN SHALL NOT BE GREATER THAN THE NUMBER OF LANES PRESENT ON THE ROADWAY. THE "X" SHALL BE PLACED UNDER THE NUMBER OF LANE(S) BLOCKED.					
7. FOR FLAGGING OPERATION REQUIREMENTS SEE STANDARD 804S-2.					
8. CONTRACTOR SHALL PROVIDE SIDEWALK CLOSURES, CROSSWALK CLOSURES OR WALKWAY BYPASS WHEREVER PEDESTRIAN MOVEMENTS ARE AFFECTED BY CONSTRUCTION ACTIVITIES. ALL SIDEWALKS AND CROSSWALKS SHALL BE ACCESSIBLE WHEN CONTRACTOR IS NOT WORKING UNLESS APPROVED BY THE TRANSPORTATION DIVISION.					
9. FOR EXCAVATION PROTECTION AND SAFETY FENCE REQUIREMENTS SEE STANDARD 804S-4.					
10. THE USE OF ARROW DISPLAYS ARE REQUIRED ON ALL LANE CLOSURES. THE CONTRACTOR SHALL PROVIDE ONE (1) STAND-BY UNIT IN GOOD WORKING CONDITION AT THE JOB SITE, READY FOR USE IF THE OPERATION REQUIRES 24-HOUR A DAY LANE CLOSURE SET-UPS.					

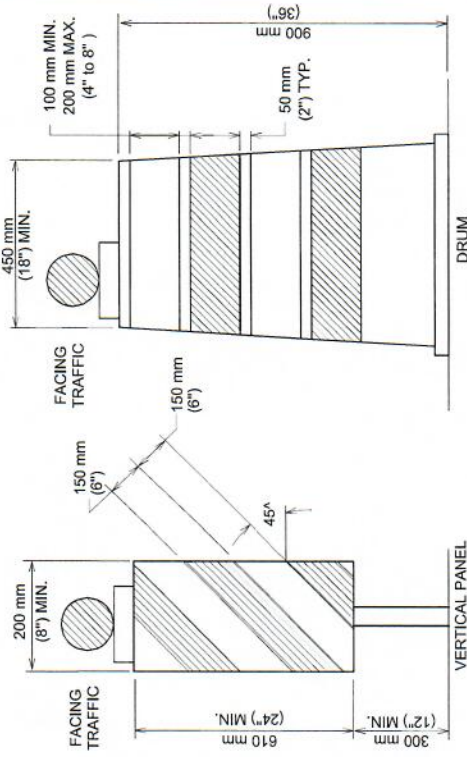
SEE SHEET 8 OF 9 FOR GENERAL NOTES AND SHEET 9 OF 9 FOR DEVICE SPACING.	BYPASS WALKWAY, SIDEWALK AND CROSSWALK CLOSURES	CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	STANDARD NO. 804S-1 4 OF 9
					

		Minimum Desirable Taper Lengths (L) Meters (Feet)		Suggested Max. Device Spacing		Suggested Sign Spacing Meters (Feet)		
Speed KMPH	Posted Speed MPH	Formula	3.0/(10) Offset Meters (feet)	3.3/(11) Offset Meters (feet)	3.6/(12) Offset Meters (feet)	"X" Dimension		
50	30	L=W ² /60	45 (150)	50 (165)	55 (180)	15-20 (80-75)	40 (120)	
55	35		65 (205)	70 (225)	75 (245)	25-25 (70-90)		50 (160)
65	40		80 (265)	90 (295)	100 (320)	25-30 (80-100)		75 (240)
70	45		135 (450)	150 (485)	165 (540)	25-30 (90-110)		100 (320)
80	50	L=W	150 (500)	165 (550)	180 (600)	30-35 (100-125)	120 (400)	
90	55		165 (550)	185 (605)	200 (660)	35-40 (110-140)	150 (500)	
95	60		180 (600)	200 (660)	220 (720)	40-45 (120-150)	180 (600)	
105	65		195 (650)	215 (715)	235 (780)	40-50 (130-165)	210 (700)	
115	70		215 (700)	235 (770)	255 (840)	45-55 (140-175)	240 (800)	

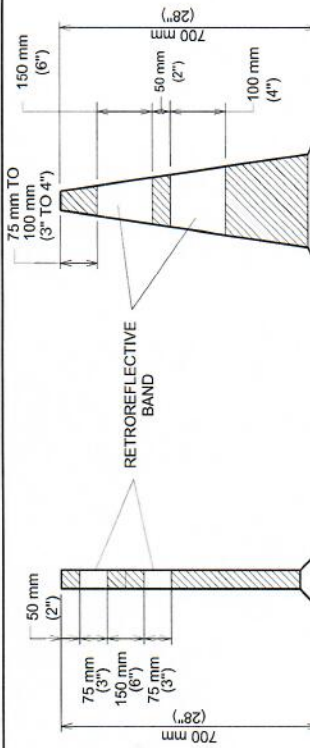


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	DEVICE SPACING	
	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-1 9 OF 9
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11	ADOPTED

1. STORAGE OF EQUIPMENT AND MATERIALS SHALL BE RESTRICTED TO LOCATIONS WHERE DRIVER SIGHT DISTANCES TO TRAFFIC, PEDESTRIANS, BUSINESSES AND SIDE STREET INTERSECTIONS ARE NOT OBSTRUCTED OR WHERE AN UNSIGHTLY APPEARANCE, AS DETERMINED BY THE ENGINEER, WILL NOT EXIST.
2. EQUIPMENT MUST BE PARKED AS FAR AWAY FROM THE TRAVELWAYS AS PRACTICAL.
3. TOTAL AREA USED FOR EQUIPMENT STORAGE SHALL BE KEPT TO A MINIMUM.
4. ALL MATERIALS STORED IN THE RIGHT-OF-WAY MUST BE MAINTAINED IN A NEAT AND ORGANIZED MANNER.
5. MATERIALS STORED MAY NOT BE MORE THAN 915 mm (36") IN HEIGHT.
6. ALL MATERIALS STORED MUST BE USED WITHIN THREE (3) DAYS.



LONG TERM AND INTERMEDIATE TERM STATIONARY WORK

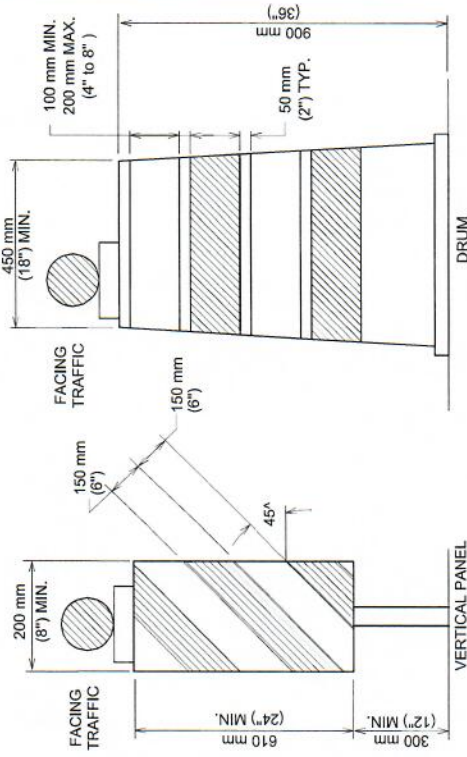


TUBULAR MARKERS
CONES
SHORT TERM AND SHORT DURATION WORK

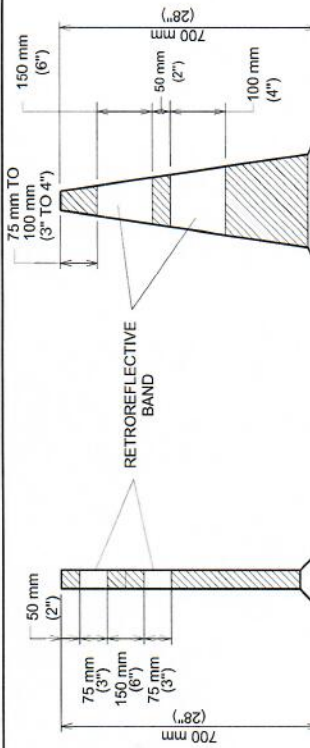
SEE STANDARD 804S-5
SHEET 12 OF 13 AND SHEET 13 OF 13
FOR GENERAL NOTES AND DEVICE SPACING.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS RECORD COPY SIGNED BY SAM ANGOORI	CHANNELIZING DEVICES THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-5
--	---	---------------------------------------

1. STORAGE OF EQUIPMENT AND MATERIALS SHALL BE RESTRICTED TO LOCATIONS WHERE DRIVER SIGHT DISTANCES TO TRAFFIC, PEDESTRIANS, BUSINESSES AND SIDE STREET INTERSECTIONS ARE NOT OBSTRUCTED OR WHERE AN UNSIGHTLY APPEARANCE, AS DETERMINED BY THE ENGINEER, WILL NOT EXIST.
2. EQUIPMENT MUST BE PARKED AS FAR AWAY FROM THE TRAVELWAYS AS PRACTICAL.
3. TOTAL AREA USED FOR EQUIPMENT STORAGE SHALL BE KEPT TO A MINIMUM.
4. ALL MATERIALS STORED IN THE RIGHT-OF-WAY MUST BE MAINTAINED IN A NEAT AND ORGANIZED MANNER.
5. MATERIALS STORED MAY NOT BE MORE THAN 915 mm (36") IN HEIGHT.
6. ALL MATERIALS STORED MUST BE USED WITHIN THREE (3) DAYS.



LONG TERM AND INTERMEDIATE TERM STATIONARY WORK



TUBULAR MARKERS
CONES
SHORT TERM AND SHORT DURATION WORK

SEE STANDARD 804S-5
SHEET 12 OF 13 AND SHEET 13 OF 13
FOR GENERAL NOTES AND DEVICE SPACING.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS RECORD COPY SIGNED BY SAM ANGOORI	CHANNELIZING DEVICES THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 804S-5
--	---	---------------------------------------

[illegible]

A/20/2021

CITY OF PFLUGERVILLE, TEXAS

NORTHTOWN PHASE 1
TRAFFIC SIGNAL DESIGN

STANDARD DETAILS
WELLS BRANCH PKWY AT 10TH STREET



NOTES	NAME	DATE
SURVEY BY	WG	03/21
DRAWN BY	ATG	04/21
DESIGNED BY	ATG	04/21
CHECKED BY	ATG	04/21
REVIEWED BY	ATG	04/21

SHEET NUMBER	16 OF 29
-----------------	----------

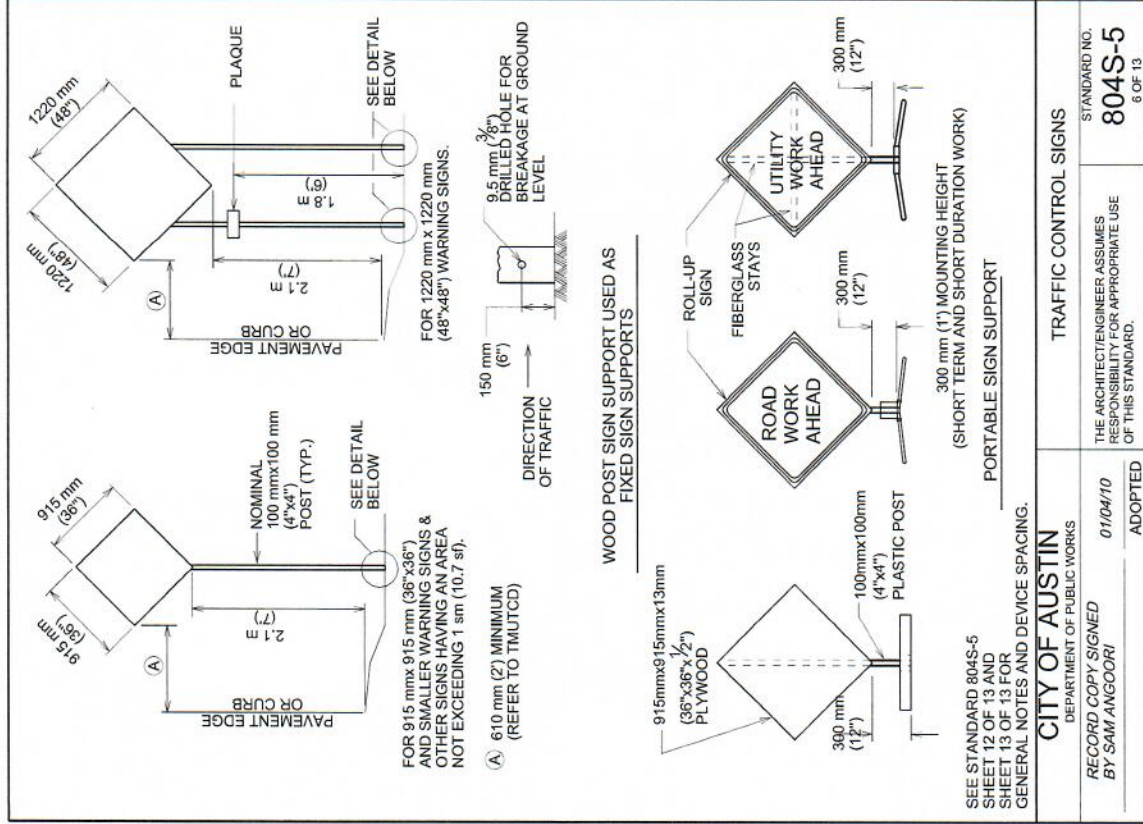


TABLE VI-3 TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING				TABLE VI-4 TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING			
Roadway Classification	Posted Speed (MPH)	Sign Spacing (ft)	Long-term Stationary or Intermediate Stationary Approaching Warning Signs CW2Z Series		Short-term Stationary or Intermediate Stationary Approaching Warning Signs CW2Z Series		Other Warning Signs
			Standard (mm)	Minimum (mm)	Standard (mm)	Minimum (mm)	
Conven.	50	40	1220x1220 (48x48)	915x915 (36x36)	915x915 (36x36)	915x915 (36x36)	Standard (mm)
	30	30					Standard (mm)
	55	50					Standard (mm)
	65	75					Standard (mm)
	70	100					Standard (mm)
	75	125					Standard (mm)
	80	150					Standard (mm)
	85	175					Standard (mm)
	90	200					Standard (mm)
	100	250					Standard (mm)
Exp. or Fwy	115	240					Standard (mm)
	120	240					Standard (mm)
	130	240					Standard (mm)

SHEET NUMBER	20 OF 29
-----------------	----------

Typical Transition Lengths and Suggested Maximum Spacing of Devices						
Posted Speed KPH (MPH)	Formula	Minimum Desirable Taper Lengths (L) Meters (Feet)		Suggested Max. Device Spacing		Suggested Sign Spacing Meters (Feet)
		3.0(10) Offset Meters (feet)	3.3(11) Offset Meters (feet)	3.6(12) Offset Meters (feet)	On a taper Meters (feet)	
50 (30)	$L=WS^2 \div 60$	45 (150)	50 (165)	55 (180)	9 (30)	15-20 (60-75)
55 (35)		65 (205)	70 (225)	75 (245)	10 (35)	25-25 (70-90)
65 (40)		80 (265)	90 (295)	100 (320)	12 (40)	25-30 (80-100)
70 (45)		135 (450)	(495)	165 (540)	13 (45)	25-30 (90-110)
80 (50)	L=WS	150 (500)	165 (550)	180 (600)	15 (50)	30-35 (100-125)
90 (55)		165 (550)	185 (605)	200 (660)	16 (55)	35-40 (110-140)
100 (60)		180 (600)	200 (660)	220 (720)	18 (60)	40-45 (120-150)
105 (65)		195 (650)	215 (715)	235 (780)	19 (65)	40-50 (130-165)
115 (70)		215 (700)	235 (770)	255 (840)	21 (70)	45-55 (140-175)

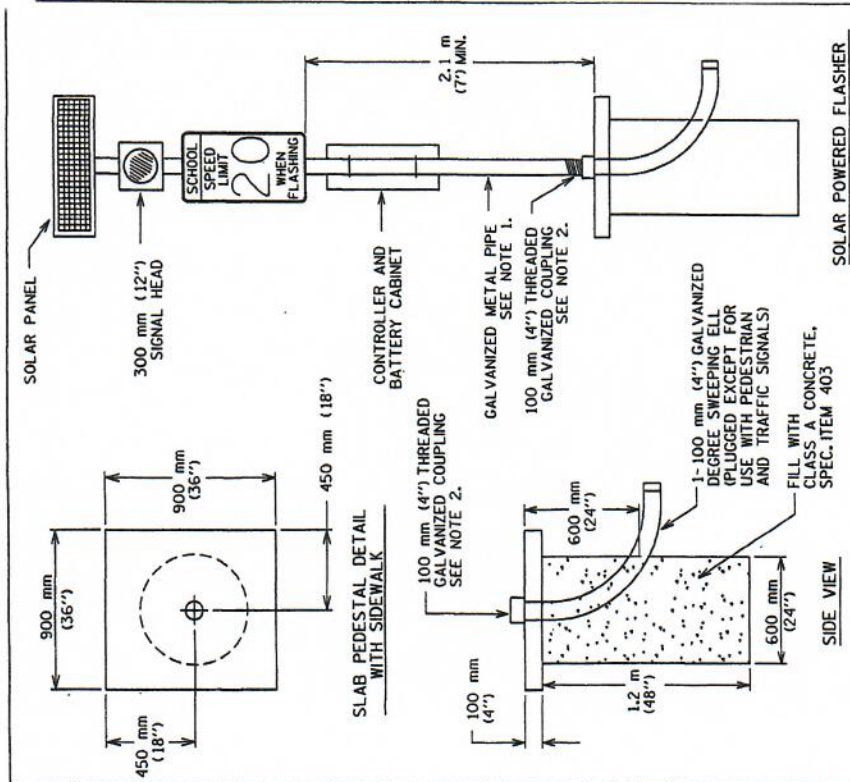
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS <i>RECORD COPY SIGNED BY SAM ANGOORI</i>	GENERAL TRAFFIC CONTROL NOTES	
	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NUMBER 8045- 13 OF 13

10. TRAFFIC CONTROL, SHOWN ON STANDARD DETAILS IS TYPICAL. ADDITIONAL SIGNING AND/OR BARRICADING, AS WELL AS TEMPORARY PAVEMENT MARKINGS AND OBILITERATION/ RESTORATION OF EXISTING PAVEMENT MARKINGS, MAY BE REQUIRED DEPENDING ON FIELD CONDITIONS. FIELD ADJUSTMENTS TO TRAFFIC CONTROL S WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO ITEM NO. 803'S "BARRICADES, SIGNS AND TRAFFIC HANDLING".

11. THE CONTRACTOR SHALL DESIGNATE A COMPETENT PERSON FOR TRAFFIC CONTROL. THE COMPETENT PERSON SHALL MAKE INSPECTIONS OF THE TRAFFIC CONTROL DEVICES AT LEAST TWO (2) TIMES A DAY (ONCE AT THE BEGINNING OF THE DAY AND ONCE AT THE END OF THE DAY), INCLUDING NON-WORKING DAYS, ENSURING THAT ALL DEVICES ARE IN THEIR PROPER PLACE AND ARE IN WORKING ORDER.

12. ALL DEVICES SHALL BE MADE USING MATERIALS LISTED ON THE TxDOT APPROVED PRODUCTS LIST.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS <i>RECORD COPY SIGNED BY SAM ANGOORI</i>	GENERAL TRAFFIC CONTROL NOTES		STANDARD NO. 804S-5 12 OF 13
	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		
	01/04/10		
	ADOPTED		



SOLAR POWERED FLASHER

- NOTES:
1. 4.5 m x 100 mm (15' x 4") RIGID INTERMEDIATE GALVANIZED METAL PIPE 106 mm (4 1/8") NOMINAL I.D. WITH 3 mm (1/8") WALL THICKNESS, 13 KG (6 LBS) PER FOOT.
 2. ENSURE COUPLING IS LEVEL AND PLUMB AND EXTENDS ABOVE THE SURFACE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SOLAR POWERED FLASHER ASSEMBLY	
	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 831S-2
<i>Shawn Butler, P.E.</i>	ADOPTED	

		CITY OF Pflugerville, Texas NORTH TOWN PHASE 1 TRAFFIC SIGNAL DESIGN STANDARD DETAILS WELLS BRANCH PKWY AT 10TH STREET		8/20/2021 Brian Duffey
REVISION DESCRIPTION NO. BY DATE		NOTES NAME DATE SURVEY BY NO. DATE DRAWN BY ATG DATE DESIGNED BY ATG DATE CHECKED BY ATG DATE REVIEWED BY ATG DATE		
		SHEET NUMBER 21 OF 29		



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TRENCH DETAIL FOR TRAFFIC SIGNAL CONDUIT	STANDARD NO. 835S-1
<i>[Signature]</i>	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	9/17/01 ADOPTED P.E. <i>[Signature]</i>



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	PAVEMENT MARKERS (REFLECTORIZED - TYPE I & II)	STANDARD NO. 863S-1
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		
ADOPTED <i>Amo Davis 9/29/99</i>		

[illegible]

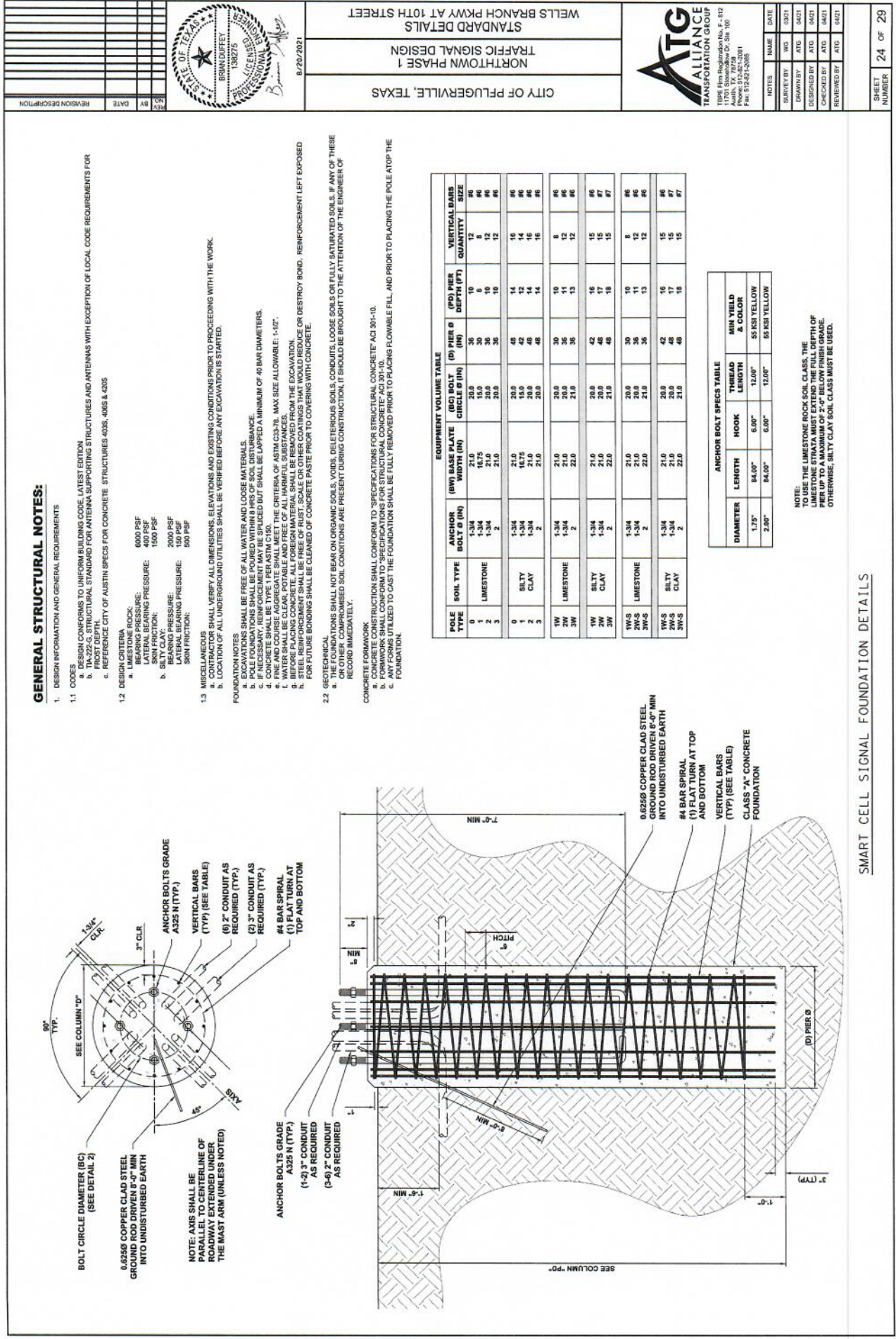
8/20/2021

CITY OF PFLUGERVILLE, TEXAS
NORTHOWN PHASE 1
TRAFFIC SIGNAL DESIGN
STANDARD DETAILS
WELLS BRANCH PKWY AT 10TH STREET



NOTES	NAME	DATE
SURVEY BY	WG	03/21
DRAWN BY	ATG	04/21
DESIGNED BY	ATG	04/21
CHECKED BY	ATG	04/21
REVIEWED BY	ATG	04/21

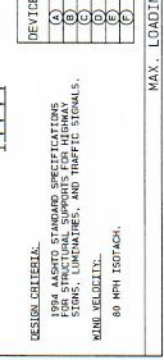
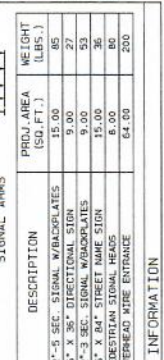
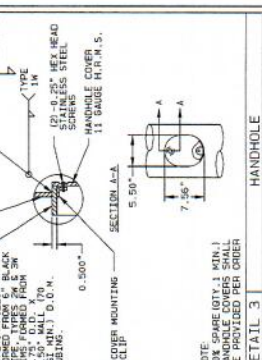
SHEET NUMBER	22 of 29
-----------------	----------



SHEET NUMBER	26 OF 29
-----------------	----------



NOTES	NAME	DATE
SURVEY BY	WG	03/21
DRAWN BY	ATG	04/21
DESIGNED BY	ATG	04/21
CHECKED BY	ATG	04/21
REVIEWED BY	ATG	04/21



DATA					
SIGNAL ARM COUPLING LOCATIONS & ORIENTATIONS (+ HORIZONTAL SIGNAL SPACING)					
COUPLER DISTANCE FROM END OF ARM / END OF HOST ARM					
ANGLES FROM FRONT TOP OF SWIRLER AS VIEWED FROM SMALL					
					7.5° / 0°
0°					9° / 0°
0°					18° / 0°
0°					12.5° / 0°
0°					15° / 0°
0°					17.5° / 0°
0°					20° / 0°
0°					22.5° / 0°
				24° / 180°	
*	*18° / 180°			24° / 180°	
*	*18° / 180°			24° / 180°	
*	*18° / 180°			24° / 180°	

POLE TYPE	POLE TUBE			SIGNAL ARM TUBE					POLE AND SIGNAL ARM TUBE
	BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GALVE OR DIA. (IN)	ARM SPAN (FT)	FIXED END DIA. (IN)	FREE END DIA. (IN)	GALVE OR DIA. (IN)	
1M	12 5/8	8 3/8	30.00	3	15.00	6.00	3.90	7	12 1/2
					18.00	6.00	3.48	7	12 1/2
					20.00	6.00	3.20	7	12 1/2
					25.00	7.00	3.50	7	12 1/2
					30.00	8.00	3.80	7	12 1/2
2M	13 5/8	9 3/8	30.00	8.2188	35.00	9.00	4.10	7	12 1/2
					40.00	10.00	4.40	7	12 1/2
					45.00	10.50	4.20	7	12 1/2

TYPICAL TRAFFIC STRUCTURES					
0°	+18° / 180°	24° / 180°	-30° / 180°	36° / 180°	25° / 0°
0°	+18° / 180°	24° / 180°	-30° / 180°	36° / 180°	27.5° / 0°
0°	+18° / 180°	24° / 180°	-30° / 180°	36° / 180°	30° / 0°

TOTAL									
	3M	16.00	11.80	30.00	0.2188	55.00	13.00	4.83	DET.7
1	JNCS	34/02/20	JNCS	04/02/20	UPDATED LAMINATE CLAMP RING TABLE				
2	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
3	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
4	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
5	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
6	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
7	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
8	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
9	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
10	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
11	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
12	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
13	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
14	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
15	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
16	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
17	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
18	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
19	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
20	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
21	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
22	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
23	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
24	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
25	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
26	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
27	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
28	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
29	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
30	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
31	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
32	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
33	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
34	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
35	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
36	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
37	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
38	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
39	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
40	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
41	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
42	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
43	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
44	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
45	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
46	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
47	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
48	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
49	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
50	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
51	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
52	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
53	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
54	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
55	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
56	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
57	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
58	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
59	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
60	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
61	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
62	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
63	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
64	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
65	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
66	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
67	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
68	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
69	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
70	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
71	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
72	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
73	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
74	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
75	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
76	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
77	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
78	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
79	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
80	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
81	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
82	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
83	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
84	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
85	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
86	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
87	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
88	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
89	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
90	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
91	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
92	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
93	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
94	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
95	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
96	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
97	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
98	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
99	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
100	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
101	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
102	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
103	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
104	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
105	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
106	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
107	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
108	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
109	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
110	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
111	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
112	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
113	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
114	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
115	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
116	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
117	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
118	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
119	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
120	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
121	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
122	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
123	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
124	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
125	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
126	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
127	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
128	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
129	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
130	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
131	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
132	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
133	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
134	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
135	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
136	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
137	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
138	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
139	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
140	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
141	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
142	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
143	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
144	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
145	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5 AND 11				
146	GRP	07/03/19	JNCS	07/11/19	UPDATED MATERIAL DATA SHEET DET. 5				

NOTES	NAME	DATE
SURVEY BY	WG	03/21
DRAWN BY	ATG	04/21
DESIGNED BY	ATG	04/21
CHECKED BY	ATG	04/21
REVIEWED BY	ATG	04/21

SHEET
NUMBER

28 OF 29

