

AMI Contracting Overview

Brownsville Public Utilities Board



October 6, 2023

What is AMI?



Advanced Metering Infrastructure (AMI) is an integration of many technologies that provide an intelligent connection between BPUB and their customers



Infrastructure includes communication networks between the meters and BPUB; meter readings and other data are transmitted over the network and stored in a meter data management system (MDMS)



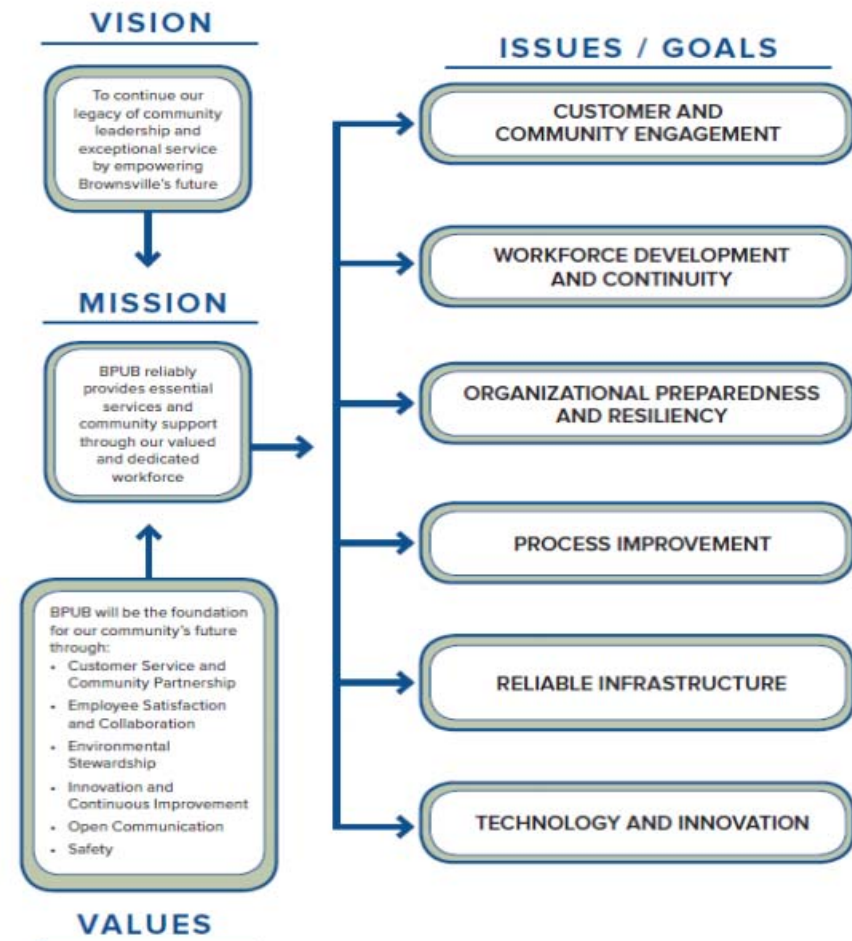
The MDMS will send reads to the billing system and provide useful operational reports for BPUB



As part of the AMI project, new electric meters, water meters, and communication devices will be installed by a contractor

BPUB Strategic Plan

- AMI will enable BPUB to:
 - Engage our customers via phone, text or email with near real time information on their account, electric and water consumption
 - Proactively monitor systems to reduce losses
 - Know when, where and the scope of outages
 - Respond faster, reduce truck rolls, and send the proper crews the first time



Vendor Contracting

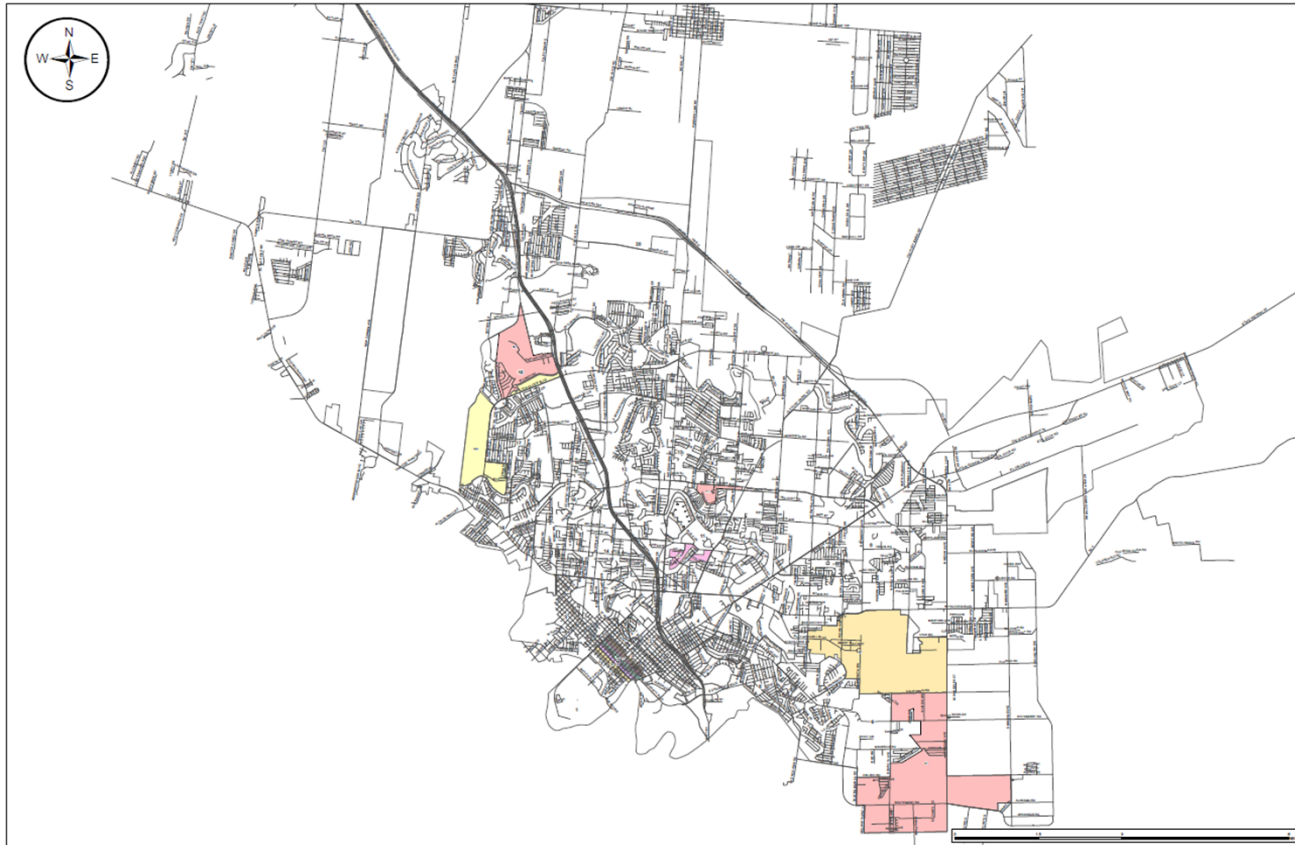


BPUB AMI Solution

- **Landis + Gyr**
 - Electric meters
 - Gridstream mesh RF network
 - Command Center headend system
- **Badger**
 - Water meters
 - Badger Orion LTE-m cellular endpoints
 - BEACON headend system
- **SmartWorks**
 - Compass Meter Data Management System (MDMS) for electric and water
- **Allegiant**
 - Electric and water meter and network installation services



Initial Deployment Area



The initial deployment area (IDA) will deploy

- 2,819 electric meters
- 2,446 water meters
- 1 network gateway
- 7 network routers

Contracting Snapshot

- BPUB team led negotiations with support from
 - Spencer Fane legal team focusing on terms and conditions
 - E Source negotiations team focusing on statements of work
- Contracting began in January 2023
 - Initial legal support provided by DTRG
 - Spencer Fane replaced DTRG as legal counsel in May 2023
- Negotiating teams worked through 22 separate documents across four vendors. Contracting documents include:
 - General services contracts
 - Master services agreements
 - Material pricing
 - Construction agreements
 - Statements of work
 - Performance acceptance and payment criteria
 - Supplementary conditions and support agreements
 - SAAS agreements
- A thorough and exacting negotiation process is crucial as they establish the foundation for 20+ year relationships with these vendors

AMI Contracts

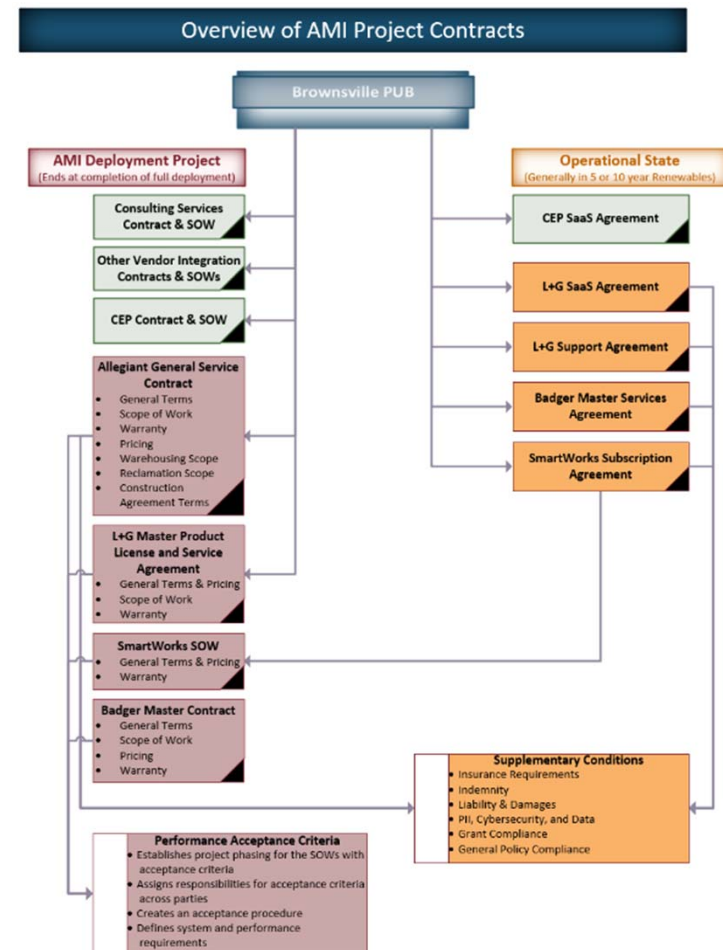
The AMI contracts cover both the deployment project and the long-term operational state

Vendors

- Landis+Gyr
- Badger
- Allegiant
- Harris

Services & Equipment

- Electric and water meters orders and pricing
- AMI RF network and equipment
- Cellular endpoints and network
- Meter and network installation services
- Software licenses and support
- Software implementation and integration services



Performance Acceptance & Payment Criteria

- These contracts require substantial coordination between vendors
- To prevent cross-talk, a common exhibit was added to all contracts to align responsibilities
- Vendors must prove they have completed certain milestones before invoicing for payment or proceeding with additional work

Criteria	Landis+Gyr	Badger Meter	Allegiant	SmartWorks	Brownsville Public Utilities Board
Provide Notice to Proceed	A (10%)	A (10%)	A (10%)	A (10%)	R
Approve a project charter	C	C	C	C	R/A
Define a project team	R/C/I (2%)	R/C/I	R/C/I (2%)	R/C/I (2%)	R/A/C
Produce a project communication plan	C	C	C	C	R/A
Coordinate, schedule, and attend a kickoff meeting	R (5%)	R (10%)	R (5%)	R (5%)	R/A
Produce a Project Execution Plan	C	C	C	C	R/A

The Performance Acceptance & Payment Criteria document divides the project into phases, and each phase has criteria broken into a RACI matrix; this excerpt is for the Planning Phase*

*RACI – Responsible, Accountable, Consulted, Informed

Landis+Gyr



Scope

- 55k electric meters
- 16 network gateways & 33 routers
- Headend software: Command Center
- Software integrations
- Professional Services including training, testing, & management

Fees

- \$6.7 million total capital
- \$6k monthly O&M
- 15-year initial term + 3-year renewal terms

Key Takeaways

- Landis+Gyr has committed to meeting service level agreements (SLAs) for network performance and read delivery
- Integrations include OMS
- Reactive meter upgrade

Landis+Gyr



Support Agreement – Limitation of Liability

- Aggregate liability shall not exceed total amount paid to L+G under the agreement in the 24-month period preceding event giving rise to a claim
- No indirect, consequential, incidental, special, punitive, or exemplary damages
- Exclusions: personal injury, death, damage to real or tangible personal property caused by negligent acts, omissions, or willful misconduct
- Master Agreement:
 - First 5 years: Greater of \$500,000 or fees paid and payable by customer to L+G during preceding 23-month period
 - After initial 5-year term: fees paid and payable by customer to L+G during preceding 23-month period

Support Agreement – Indemnity

- § L+G to indemnify for third party claims arising out of or resulting from: violation of law; liens or bonds asserted by subcontractors; bodily injury or death or property damage; service provider's provision of or customer's use of the services; breach of confidential information; IP infringement

Governing Law and Venue

- Actions to be tried in the State and Federal courts in Cameron County, Texas.
- No trial by jury.

Badger



Scope

- 18k water meters & 40k registers
- 57k cellular endpoints
- Headend software: BEACON
- Software integrations
- Professional Services including training, testing, & management

Fees

- \$11.1 million total capital
- \$37k monthly O&M
- 10-year initial term + negotiable renewal terms

Key Takeaways

- Badger did not commit to BPUB's damages terms
- BPUB will need to apply for a Buy America waiver for WaterSMART grant

Badger



Limitation of Liability

- No indirect, consequential, incidental, special, punitive, exemplary, or enhanced damages
- SaaS MSA:
 - Lesser of \$500,000 or the aggregate amounts paid under the agreement in the preceding 24-month period preceding the event giving rise to the claim

Indemnity

- § Badger to indemnify for claims arising out of or resulting from: violation of law; liens or bonds asserted by subcontractors; bodily injury or death or property damage; service provider's provision of or customer's use of the services; breach by contractor of the agreement; breach of confidential information

Governing Law and Venue

- Actions to be tried in the State and Federal courts in Cameron County, Texas.

Harris



HARRIS

Scope

- Compass Software: MeterSense, VEE Acceptance Prediction Extension, KPI Dashboard, Automated MIMO, Automated Remote Disconnect
- Software integrations including Cayenta CIS
- Professional Services including training, testing, & management

Fees

- \$370k total capital
- \$198k annual O&M
- 5-Year Initial Term + 1-Year Renewal Terms

Key Takeaways

- Harris provides PUB's CIS and will provide the Customer Portal, so integrations are well-known
- PUB has already done preliminary meter configurations to right-size the MDMS

Harris



Limitation of Liability

- § No indirect, consequential, incidental, special, punitive, or exemplary damages
- § Actual direct damages shall not exceed one- and one-half times (1.5X) annual subscription fees paid by BPUB to SmartWorks under the agreement

Support Agreement – Indemnity

- § SmartWorks to indemnify BPUB for software IP infringement

Governing Law and Venue

- Actions to be tried in the State and Federal courts in Cameron County, Texas.
- No trial by jury

Allegiant



Scope

- Water meter exchanges and retrofits
- Electric meter exchanges
- Electric RF communications network installation
- New electric meter testing
- Old electric meter reclamation
- Warehousing support

Fees

- \$5.8 million total capital
- Contract ends after implementation

Key Takeaways

- Allegiant abides by PUB's Living Wage policy and will also abide by Davis-Bacon requirements for WaterSMART grant funding
- Scope of work details many processes related to field and data quality, assurance, and standard operating procedures
- Additional meter box work may increase total costs by an estimated \$700k - \$3M
- Use of PUB warehousing reduced total cost

Allegiant



Support Agreement – Indemnity

- § Allegiant to indemnify for claims arising out of or resulting from: violation of law; liens or bonds asserted by subcontractors; bodily injury or death or property damage; service provider's provision of or customer's use of the services; breach by contractor of the agreement; breach of confidential information

Delay

- § Time limits in the contract documents are to be of the essence of the agreement.
- § Recovery damages for delay are not excluded

Release

- Allegiant releases BPUB from all claims for injury or death of any person and loss of or damage to property caused by Allegiant's work

Governing Law and Venue

- Actions to be tried in Cameron County, Texas.

Capital Budget by Vendor

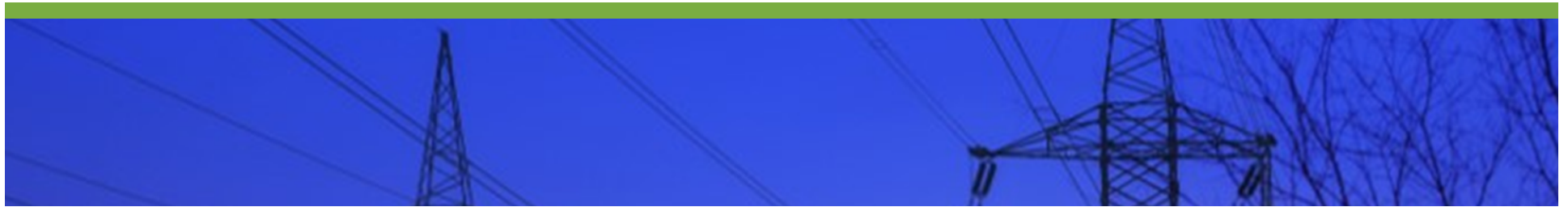
Vendor	Total CapEx	3 yrs. Capitalized OpEx	Total CapEx + 3 yrs. Capitalized OpEx
Landis+Gyr	\$ 6,739,245	\$ 231,879	\$ 6,971,124
Badger	\$ 11,222,766	\$ 904,048	\$ 12,126,814
Allegiant	\$ 5,685,466	\$ -	\$ 5,685,466
SmartWorks	\$ 370,750	\$ 595,653	\$ 966,403
E Source	\$ 1,734,533	\$ -	\$ 1,734,533
Spencer Fane	\$ 100,000	\$ -	\$ 100,000
Interfaces	\$ 100,000	\$ -	\$ 100,000
Subtotal	\$ 25,952,760	\$ 1,731,580	\$ 27,684,340
Contingency			\$ 2,557,323
Total	\$ 25,952,760	\$ 1,731,580	\$ 30,241,663

Estimated Project Schedule

Task / Milestone	Est. Date
Vendor Contracting Completed & PO issued	10/27/2023
Project Initiation Complete	1/17/2024
Project Kickoff	1/22/2024
Detailed Planning Complete	2/15/2024
Bench Testing Complete	6/12/2024
Systems Installation & Integration Complete	7/10/2024
Initial Deployment Area Complete	8/21/2024
Water Full Deployment Start	8/22/2024
Electric Full Deployment Start	11/28/2024
Full Network Installation Complete	12/11/2024
Water Full Deployment Complete	4/3/2026
Electric Full Deployment Complete	6/2/2026

Questions?





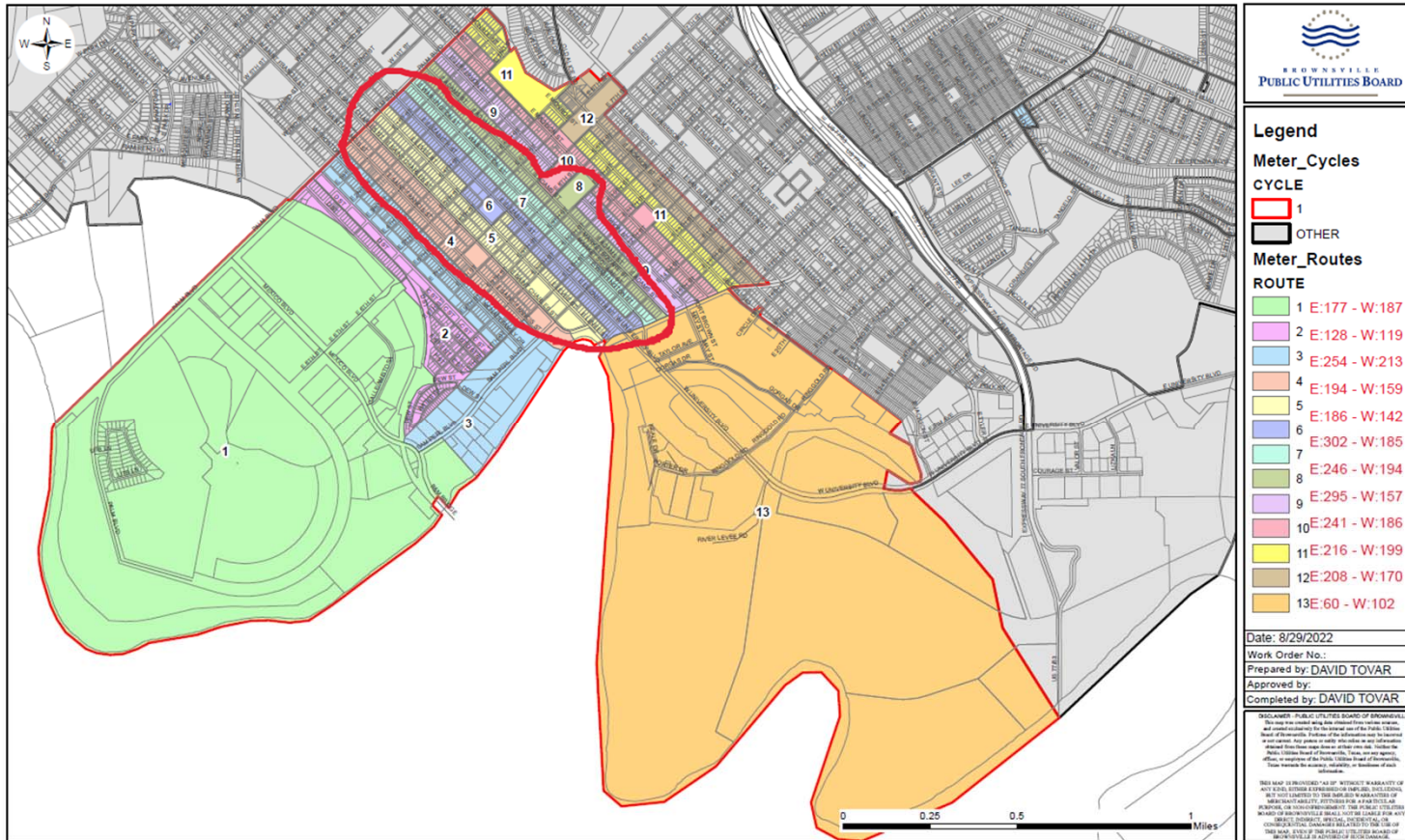
Appendix



Estimated 5-Year O&M Budget by Vendor

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Subtotal
<u>Landis+Gyr</u>	\$73,565	\$77,232	\$81,082	\$85,126	\$89,371	\$406,376
<u>Badger</u>	\$0	\$448,663	\$455,385	\$462,207	\$469,132	\$1,835,387
<u>Harris</u>	\$198,551	\$198,551	\$198,551	\$198,551	\$198,551	\$992,755
Annual Total	\$272,116	\$724,446	\$735,018	\$745,884	\$757,054	\$3,234,518

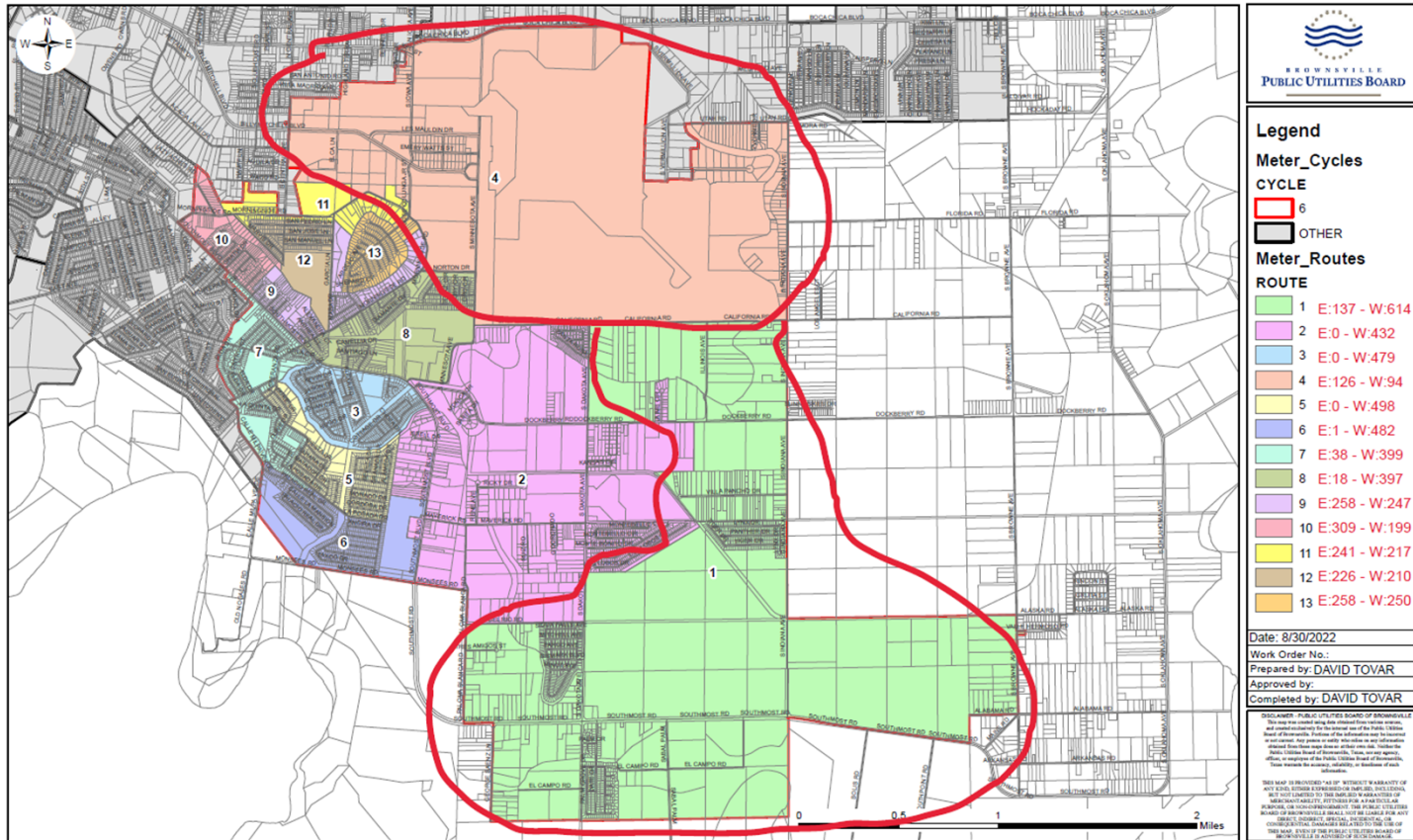
IDA Detail - Downtown



Area details:

- High density with meters clustered in tight areas including alleys
- 1223 electric meters
- 837 water meters
- Locations of note:
 - E. Saint Francis
 - E. Saint Charles
 - E. Levee
 - E. Elizabeth
 - E. Washington
 - E. Adams
 - Putegnat Elementary School
 - Wells Bank
 - IBC Bank
 - Texas State Bank

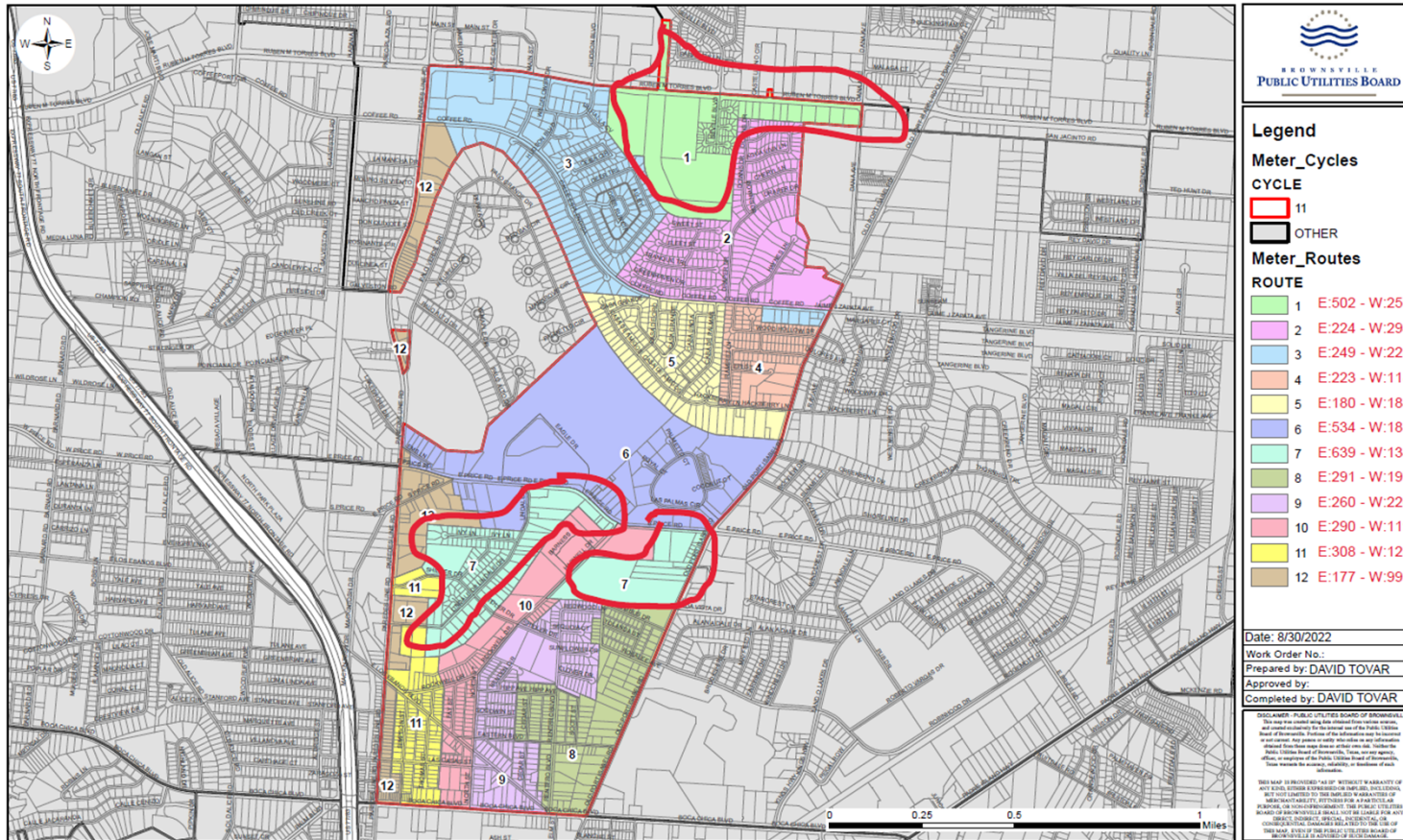
IDA Detail – Southmost



Area details:

- Outer area of service territory with limited cellular reception
- 263 electric meters
- 708 water meters
- Locations of note:
 - Southmost Road
 - Dockberry Road
 - S. Minnesota
 - S. Indiana
 - Palm Grove school

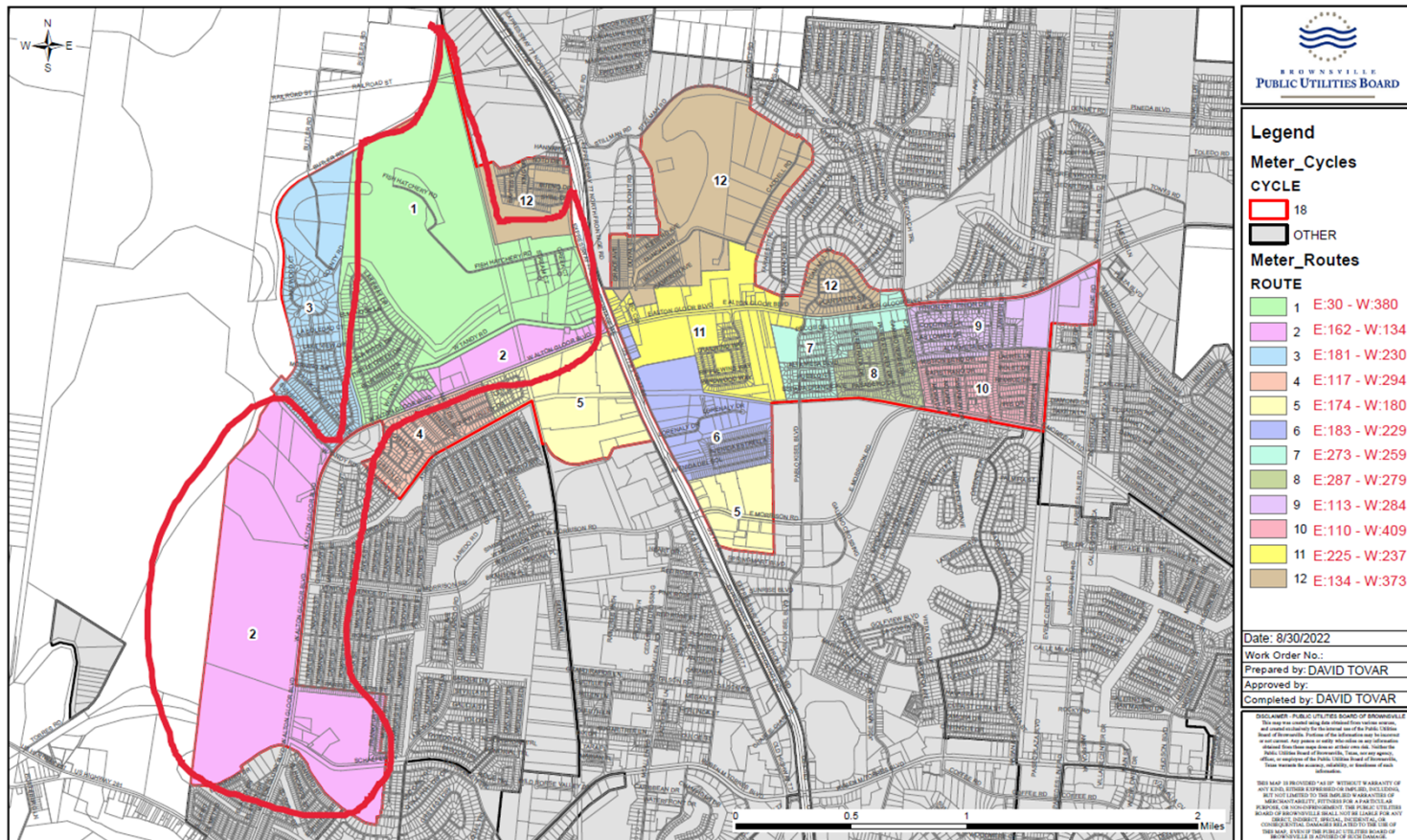
IDA Detail – Price & Ruben Torres



Area details:

- Apartment complexes with both water and electric service provides opportunity to stress test full system
- 1141 electric meters
- 387 water meters
- Locations of note:
 - La Mansion Del Paso Apartments
 - La Residencia Apartments

IDA Detail – West Alton Gloor



Area details:

- Significant number of water customers provides opportunity to stress test communications
- 192 electric meters
- 514 water meters
- Locations of note:
 - 5 schools - Ortiz, Yturria, Stillman, Keller, Manzano