



December 1, 2025

Barry Shelton
Assistant City Manager
City of McKinney
401 E. Virginia St.
McKinney, TX 75069

RE: PROFESSIONAL FIRE PROTECTION ENGINEERING SERVICES
MCKINNEY DOWNTOWN FIRE SPRINKLER PROJECT
Fire Sprinkler System Schematic Design
RFPE: P2025221

WHEREAS: This Professional Services Agreement is made and entered into between [City of McKinney](#) hereinafter referred to as "Client" and REED FIRE PROTECTION ENGINEERING, LLC (RFPE), a Texas limited liability corporation, 4201 Spring Valley Road, Suite 570, Dallas, Texas 75244, hereinafter referred to as "Engineer".

We are pleased to present this proposal for providing fire protection engineering basic services in connection with the above-referenced project. Our proposed Basic Services scope of services and associated fees are as follows:

I. Basic Services

A. SCHEMATIC DESIGN PHASE

It is our understanding that the City of McKinney wishes to protect Nine (9) Historic Buildings in downtown McKinney, Texas with fire sprinkler systems. The City of McKinney provided an Excel Spreadsheet which provided the data utilized for this proposal. Each building or portions thereof are privately owned. The existing buildings vary in occupancy, use, size, and height. The combined total square footage of project based on the data provided is 496,272sf. As of October 2025, there are 104 individual existing spaces are contemplated as part of this proposal. This proposal is limited to the following scope. Please see the attached information.

1. Block ID – A1: 37,082SF
2. Block ID – A2: 79,833SF
3. Block ID – A3: 35,162SF
4. Block ID – B1: 65,704SF
5. Block ID – B3: 61,482SF
6. Block ID – C1: 58,092SF
7. Block ID – C2: 63,726SF
8. Block ID – C3: 60,205SF
9. Block ID – D2: 34,986SF

Total: 496,272SF

There are no existing AutoCAD as-built drawings for the existing buildings/spaces.

Reed Fire Protection Engineering understands that the City of McKinney requires as-built AutoCAD plan documentation for Nine (9) Historic Buildings which are approximately 496,272 sf for the purposes of fire sprinkler schematic design basic services as indicated below. In total, there are 104 spaces that will require as-built drawings. Most of the spaces are currently occupied and will require coordination and access to collect field data. The following Basic Services - Tasks are contemplated:

Task 1 — As-built documentation Data Collection

1. As-built documentation Data Collection and data processing:
 - a. Coordinate with clients for access to 104 separate spaces to collect *LiDAR data*. LiDAR documentation and drawings will be performed by a subconsultant; Halff.
 - b. LiDAR data will be collected and sent to Halff's office for processing on regular basis during the survey period.
 - c. RFPE to assist in coordinating with city to collect *LiDAR data*.
 - d. RFPE to perform survey of fire sprinkler riser locations, underground civil drawings, and associated information to determine sprinkler riser locations. Document existing sprinkler system riser locations.
 - e. Please note that this proposal is based on unimpeded access to all rooms and spaces for survey and to perform LiDAR scans. If access is denied, additional service, hourly rates and expenses will be applied until access is regained and work can commence. The building as-built AutoCAD drawings are limited to information specifically related to the fire sprinkler riser scope. Please note that this proposal excludes LiDAR scanning and documentation for plumbing, lighting, HVAC, inaccessible spaces (including above ceilings), building exteriors, and site-specific surveys, environmental assessments, other systems/equipment, or features.

Task 2 — As-built documentation

1. Creation of as-built AutoCAD plans for each Building:
 - a. RFPE will coordinate specific sequence of buildings to be completed with the City of McKinney.
 - b. Electronic files will be delivered in PDF and AutoCAD formats.
 - c. AutoCAD building drawings will include walls and interface with ceilings.
 - d. Existing riser locations and associated information will be delineated.

Task 3 —Fire Protection Sprinkler Schematic Design

1. Review City of McKinney Fire Code and Amendments related to existing downtown buildings fire sprinkler systems (See attached list and addresses).
2. Document codes, standards, and requirements for design of fire sprinkler systems in each subject building.
3. Review of existing historic downtown buildings to determine the basis of sprinkler design criteria.
4. Perform site survey of existing buildings to review possible locations of building sprinkler risers.
 - a. Review the possible required levels of sprinkler coverage.
 - b. Budgetary cost estimates
5. Review existing civil engineering drawings to determine access to fire sprinkler underground water supply.
6. Review possible fire protection riser locations.
 - a. Propose riser options for each building or multiple connected buildings.
 - b. Provide options for riser locations for review.
7. Review main pipe route options for each building or multiple connected buildings.
 - a. Review possible main pipe options for each building or multiple connected buildings.
 - b. Review possible control valve locations allowing buildings or areas to isolate and remain operational during building renovations.
 - c. Scope is limited to sprinkler main. Complete sprinkler design for each subject building is not contemplated in this design phase.
8. Produce Schematic Design (SD) fire protection scope documents, drawings, and necessary details.
9. Provide budgetary cost estimates for each Building ID.

III. SUMMARY

1. Basic Services Fee

The fee for basic services will be a lump sum as listed below, *including reimbursable expenses*. The fee for basic services does not include additional services described in this proposal. Invoices will be issued monthly based on project progress, with payment due Net 30 days.

BASIC SERVICES		FEE
Task 1 -As-Built Documentation Data Collection		\$ 125,450.65
Task 2 -As-Built Documentation AutoCAD Creation		\$ 101,282.00
Task 3 - Fire Sprinkler Schematic Design		\$ 194,042.35
Task 3 Block ID – A1: 37,082SF	\$ 14,499.06	
Task 3 Block ID – A2: 79,833SF	\$ 31,214.70	
Task 3 Block ID – A3: 35,162SF	\$ 13,748.34	
Task 3 Block ID – B1: 65,704SF	\$ 25,690.26	
Task 3 Block ID – B3: 61,482SF	\$ 24,039.46	
Task 3 Block ID – C1: 58,092SF	\$ 22,713.97	
Task 3 Block ID – C2: 63,726SF	\$ 24,916.87	
Task 3 Block ID – C3: 60,205SF	\$ 23,540.16	
Task 3 Block ID – D2: 34,986SF	\$ 13,679.53	
TOTAL FEE		\$ 420,775.00

Services not listed in Basic Services above are specifically excluded from the scope of RFPE services.

2. Additional Services

Additional services required by the client which arise, and are not outlined above, are to be compensated on an hourly basis or negotiated on a sum fee plus expenses.

Description	Units	Proposed Rate
Personnel		
1 Principal	Per Hour	\$ 325.00
2 Project Manager	Per Hour	\$ 295.00
3 Senior Designer/Life Safety Consultant	Per Hour	\$ 275.00
4 Fire Protection Graduate Engineer / EIT	Per Hour	\$ 250.00
5 Fire Protection Designer	Per Hour	\$ 195.00
6 Clerical	Per Hour	\$ 105.00

3. Estimated Schedule

TASK	ANTICIPATED SCHEDULE	ESTIMATED DAYS
Task 1 - As-Built Documentation Data Collection	Block ID – A1: 37,082SF	8
	Block ID – A2: 79,833SF	10
	Block ID – A3: 35,162SF	8
	Block ID – B1: 65,704SF	10
	Block ID – B3: 61,482SF	10
	Block ID – C1: 58,092SF	8
	Block ID – C2: 63,726SF	8
	Block ID – C3: 60,205SF	8
	Block ID – D2: 34,986SF	8
	Task 1 - TOTAL	78
Task 2 - As-Built Documentation AutoCAD Creation	Block ID – A1: 37,082SF	8
	Block ID – A2: 79,833SF	10
	Block ID – A3: 35,162SF	8
	Block ID – B1: 65,704SF	10
	Block ID – B3: 61,482SF	8
	Block ID – C1: 58,092SF	8
	Block ID – C2: 63,726SF	8
	Block ID – C3: 60,205SF	8
	Block ID – D2: 34,986SF	5
	Task 2 -TOTAL	73
Task 3 - Fire Sprinkler Schematic Design	Block ID – A1: 37,082SF	10
	Block ID – A2: 79,833SF	20
	Block ID – A3: 35,162SF	10
	Block ID – B1: 65,704SF	20
	Block ID – B3: 61,482SF	15
	Block ID – C1: 58,092SF	15
	Block ID – C2: 63,726SF	20
	Block ID – C3: 60,205SF	15
	Block ID – D2: 34,986SF	10
	Task 3 -TOTAL	135
Task 1 - 2 - 3	ESTIMATED TOTAL DAYS	286
*Schedule is estimated and subject to change		

IV. COMPENSATION

Basis of Compensation

Reed Fire Engineering's compensation for the above services is a lump sum in the amount(s) stated in Section III above for the services identified in Basic Services and Task(s). This budget does not include applicable sales tax on services. If this budget figure is exceeded, Reed Fire Protection Engineering may request modification of this Agreement. Services not listed in Basic Services above are specifically excluded from the scope of RFPE services. RFPE assumes no responsibility to perform services not listed in Basic Services above. Progress payments will be invoiced monthly. Outstanding balances are due 30 days from receipt of invoice.

Reed Fire Protection Engineering is honored to partner with the City of McKinney in the crucial effort to preserve and safeguard its Historic Downtown.

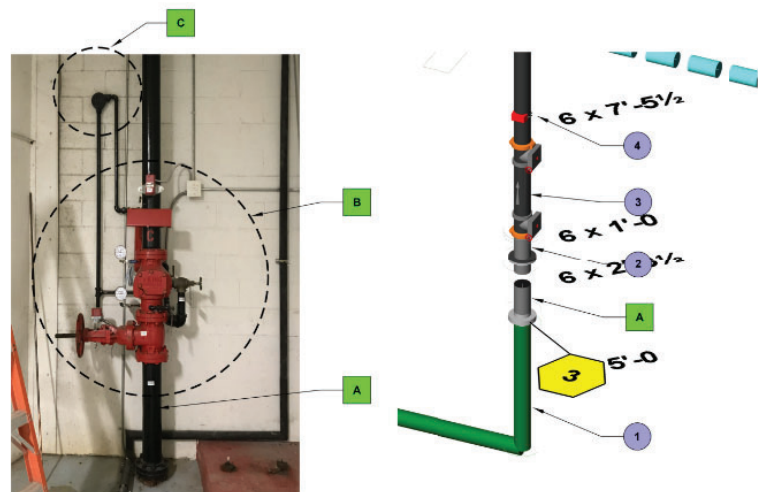


MFD BlockID	geo_id 1	dba_name	situs_num	situs_stra	situs_st 1	situs_st 2	situs_city	situs_stat	situs_zip	living_area	stories	
A1	R-0856-002-015A-1	HARRISON & HULL	112	W	VIRGINIA	PKWY	MCKINNEY	TX	75069	3284	1	
A1	R-0856-002-017A-1	BEVCAP MANAGEMENT LLC	120	W	VIRGINIA		MCKINNEY	TX	75069	6400	2	
A1	R-0856-002-013B-1	TYLER KINGSTON MERCANTILE	104/106	W	HERNDON	ST	MCKINNEY	TX	75069	1280	1	
A1	R-0856-002-010D-1	COURTYARD		W	HERNDON	ST	MCKINNEY	TX	75069	0	0	
A1	R-0856-002-014B-1	COURTYARD		W	HERNDON	ST	MCKINNEY	TX	75069	0	0	
A1	R-0856-002-016D-1	PARKING LOT		W	HERNDON	ST	MCKINNEY	TX	75069	0	0	
A1	R-0856-002-014A-1	PARKING LOT	112	W	VIRGINIA	ST	MCKINNEY	TX	75069	0	0	
A1	R-0856-002-014C-1	APRICOT LANE	110	W	VIRGINIA	ST	MCKINNEY	TX	75069	3256	2	
A1	R-0856-002-017B-1	CAPEL & CO REAL ESTATE	114	W	VIRGINIA	ST	MCKINNEY	TX	75069	2156	1	
A1	R-0856-002-013A-1	STONEWOOD CREATIONS	108	W	VIRGINIA	ST	MCKINNEY	TX	75069	2022	1	
A1	R-0856-002-010A-1	HARVEST / 3 STORY	215/217	N	KENTUCKY	ST	MCKINNEY	TX	75069	9738	1	
A1	R-0856-002-010C-1	MCKINNEY HAT CO	213	N	KENTUCKY	ST	MCKINNEY	TX	75069	1200	1	
A1	R-0856-002-012B-1	MIRUKU CREAMERY	207	N	KENTUCKY	ST	MCKINNEY	TX	75069	1170	1	
A1	R-0856-002-012C-1	PETALS & VINES	205 A/B	N	KENTUCKY	ST	MCKINNEY	TX	75069	1680	1	
A1	R-0856-002-013C-1	BIRDS & WORDS/CASA BENEDETTA	100	W	VIRGINIA	ST	MCKINNEY	TX	75069	2510	1	
A1	R-0856-002-011C-1	TRAVIS USSERY/WALLS OF CLAY	209	N	KENTUCKY	ST	MCKINNEY	TX	75069	2378	1	37082
A2	R-0856-003-018A-1	SQUARE BURGER	115	N	KENTUCKY	ST	MCKINNEY	TX	75069	5440	2	
A2	R-0856-003-018B-1	LIFE & STYLE/ROCKIN AB	113	N	KENTUCKY	ST	MCKINNEY	TX	75069	12968	2	
A2	R-0856-003-025A-1	MULTIPLE	119	W	VIRGINIA	ST	MCKINNEY	TX	75069	12425	3	
A2	R-0856-003-024B-1	DEVILED EGG CO	111	W	VIRGINIA	ST	MCKINNEY	TX	75069	912	1	
A2	R-0856-003-022A-1	LONDON WINERY	103	N	KENTUCKY	ST	MCKINNEY	TX	75069	7736	2	
A2	R-0856-003-026A-1	PRO REL SOCCER SHOP	120	W	LOUISIANA	ST	MCKINNEY	TX	75069	1700	1	
A2	R-0856-003-026B-1	THE GRAND HOTEL	114/116	W	LOUISIANA	ST	MCKINNEY	TX	75069	16000	1	
A2	R-0856-003-020C-1	RIKKS CHOPHOUSE/ GELATO CAFE/ GRAND HOTEL	107	N	KENTUCKY	ST	MCKINNEY	TX	75069	19760	2	
A2	R-0856-003-024A-1	ART STUDIO	115	W	VIRGINIA	ST	MCKINNEY	TX	75069	1600	1	
A2	R-0856-003-020B-1	TWO SKILLETS	109	N	KENTUCKY	ST	MCKINNEY	TX	75069	1292	1	79833
A3	R-0856-004-031A-1	MCKINNEY KNITTERY/DOWNTOWN DRY GOODS	117/119	W	LOUISIANA	ST	MCKINNEY	TX	75069	3700	1	
A3	R-0856-004-027A-1	LAST ART GALLERY	103/105	W	LOUISIANA	ST	MCKINNEY	TX	75069	7992	2	
A3	R-0856-004-029C-1	CADILLAC PIZZA	112	S	KENTUCKY	ST	MCKINNEY	TX	75069	2000	1	
A3	R-0856-004-033A-1	RAYFIELD SALON	121	W	LOUISIANA	ST	MCKINNEY	TX	75069	3615	1	
A3	R-0856-004-027B-1	HOMEOLOGY	101	W	LOUISIANA	ST	MCKINNEY	TX	75069	10347	2	
A3	R-0856-004-031B-1	THE STANDARD MCKINNEY	107/111/115	W	LOUISIANA	ST	MCKINNEY	TX	75069	7508	2	
A3	R-0856-004-030A-1			S	KENTUCKY	ST	MCKINNEY	TX	75069	0	0	35162
B1	R-0856-001-009A-1	BALAYAGE BAR	216	N	KENTUCKY	ST	MCKINNEY	TX	75069	1890	1	
B1	R-0856-001-009B-1	HABITAT PLANTS & COFFEE/WHITE ROCK SOAP GALLERY	214	N	KENTUCKY	ST	MCKINNEY	TX	75069	3420	1	
B1	R-0856-001-001B-1	BARRONS	115	E	VIRGINIA	ST	MCKINNEY	TX	75069	7200	3	
B1	R-0856-001-004A-1	THE RITZ	103	E	VIRGINIA	ST	MCKINNEY	TX	75069	18606	2	
B1	R-0856-001-004B-1	RED HEN/THE ART SHOP	105	E	VIRGINIA	ST	MCKINNEY	TX	75069	3160	2	
B1	R-0856-001-008B-1	LOCAL YOCAL	213	N	TENNESSEE	ST	MCKINNEY	TX	75069	4620	1	
B1	R-0856-001-002A-1	LAYERED	111	E	VIRGINIA	ST	MCKINNEY	TX	75069	5000	2	
B1	R-0856-001-007E-1									0	0	
B1	R-12284-000-2070-1	NATIVE	207	N	TENNESSEE	ST	MCKINNEY	TX	75069	2872	2	
B1	R-0856-001-007D-1									0	0	
B1	R-0856-001-003A-1	CYNTHIA ELLIOT	107	E	VIRGINIA	ST	MCKINNEY	TX	75069	3035	2	
B1	R-0856-001-001A-1	MAIME LOU	113	E	VIRGINIA	ST	MCKINNEY	TX	75069	4560	2	
B1	R-0856-001-003B-1	SHARLA'S	109	E	VIRGINIA	ST	MCKINNEY	TX	75069	4862	2	
B1	R-0856-001-007C-1									0	0	
B1	R-12284-000-2095-1	LAURA TYE PHOTOGRAPHY/TYE REALTY GROUP/FANCY SHOP	209/12	N	TENNESSEE	ST	MCKINNEY	TX	75069	4235	3	
B1	R-12284-000-2110-1	THE MAGIC NEEDLE	211	N	TENNESSEE	ST	MCKINNEY	TX	75069	2241	2	65704
B3	R-0856-005-042A-1	OLD COLLIN COUNTY PRISON	115	S	KENTUCKY	ST	MCKINNEY	TX	75069	6000	2	
B3	R-0856-005-040D-1	SPICE & TEA	106/110	S	TENNESSEE	ST	MCKINNEY	TX	75069	1120	1	
B3	R-0856-005-038A-1	CENTRO ON THE SQUARE	112	E	LOUISIANA	ST	MCKINNEY	TX	75069	7000	2	
B3	R-0856-005-035B-1	UPTOWN	102	E	LOUISIANA	ST	MCKINNEY	TX	75069	9400	2	
B3	R-0856-005-043C-1	*2024 VACANT REMODELING*	114/116	S	TENNESSEE	ST	MCKINNEY	TX	75069	1890	1	
B3	R-0856-005-038B-1	ARABELLAS	114/118	E	LOUISIANA	ST	MCKINNEY	TX	75069	9193	2	
B3	R-0856-005-040E-1	VACANT	112	S	TENNESSEE	ST	MCKINNEY	TX	75069	480	1	
B3	R-0856-005-035A-1	SPOONS	100	E	LOUISIANA	ST	MCKINNEY	TX	75069	9185	2	
B3	R-0856-005-043D-1	TATE ACCIDENT LAW	118	S	TENNESSEE	ST	MCKINNEY	TX	75069	1350	1	
B3	R-0856-005-037D-1	BALISE SALON	110	E	LOUISIANA	ST	MCKINNEY	TX	75069	15880	3	61482
C1	R-0856-008-061B-1	HOMEPIECES/LITTLES	203	E	VIRGINIA	ST	MCKINNEY	TX	75069	5913	2	
C1	R-0856-008-063A-1	CITY OF MCKINNEY UTILITY BLDG	210	N	TENNESSEE	ST	MCKINNEY	TX	75069	16896	2	
C1	R-0856-008-064A-1	CITY OF MCKINNEY	216	N	TENNESSEE	ST	MCKINNEY	TX	75069	1560	1	
C1	R-0856-008-065F-1	GATHER	207	E	VIRGINIA	ST	MCKINNEY	TX	75069	9000	2	
C1	R-0856-008-065E-1	ANTIQUE MALL	213	E	VIRGINIA	ST	MCKINNEY	TX	75069	15572	2	
C1	R-0856-008-061A-1	WILLOW HOUSE	201	E	VIRGINIA	ST	MCKINNEY	TX	75069	5149	1	
C1	R-0856-008-061C-1	COCKTAIL CREAMERY	205	E	VIRGINIA	ST	MCKINNEY	TX	75069	4000	2	58092
C2	R-0856-007-059C-1	THE BEARMARKET	217	E	LOUISIANA	ST	MCKINNEY	TX	75069	3680	2	
C2	R-0856-007-057C-1	LAW OFFICES	212	E	VIRGINIA	ST	MCKINNEY	TX	75069	4800	1	
C2	R-0856-007-052A-1	ORISONS	102	N	TENNESSEE	ST	MCKINNEY	TX	75069	1720	2	
C2	R-0856-007-058G-1	THE HOUSE OF GEMS	213	E	LOUISIANA	ST	MCKINNEY	TX	75069	4416	2	
C2	R-0856-007-055D-1	AMBROSIA/PATINA GREEN/GOODIES TEXAS	114/116	N	TENNESSEE	ST	MCKINNEY	TX	75069	15598	2	
C2	R-0856-007-058E-1	THE URBAN LOFT	209	E	LOUISIANA	ST	MCKINNEY	TX	75069	4364	1	
C2	R-0856-007-060B-1	FONTINA RISTORANTE	216	E	VIRGINIA	ST	MCKINNEY	TX	75069	5296	2	
C2	R-0856-007-052C-1	BOHO MOONCHILD	207	E	LOUISIANA	ST	MCKINNEY	TX	75069	1800	2	
C2	R-0856-007-058F-1	APPLE BOULEVARD	211	E	LOUISIANA	ST	MCKINNEY	TX	75069	4094	2	
C2	R-0856-007-052B-1	THE CELT	100	N	TENNESSEE	ST	MCKINNEY	TX	75069	3593	2	
C2	R-0856-007-053B-1	ME & MRS JONES	104	N	TENNESSEE	ST	MCKINNEY	TX	75069	3200	2	
C2	R-0856-007-054A-1	ROSES & LAVANDA	112	N	TENNESSEE	ST	MCKINNEY	TX	75069	3016	2	
C2	R-0856-007-053A-1	LY OUTFITTERS	110	N	TENNESSEE	ST	MCKINNEY	TX	75069	4080	2	
C2	R-0856-007-059B-1	MOM & POPCORN	215	E	LOUISIANA	ST	MCKINNEY	TX	75069	3840	2	
C2	R-0856-007-057D-1	THE CANINE COOKIE COMPANY	208	E	VIRGINIA	ST	MCKINNEY	TX	75069	423	1	63726
C3	R-0856-006-049A-1	MYCON GENERAL CONTRACTORS	208	S	JOHNSON	ST	MCKINNEY	TX	75069	4408	1	
C3	R-0856-006-051B-1	VACANT	214	E	LOUISIANA	ST	MCKINNEY	TX	75069	12708	3	
C3	R-0856-006-044B-1	THE MENAGERIE	117	S	TENNESSEE	ST	MCKINNEY	TX	75069	1089	1	
C3	R-0856-006-045A-1	THE EMPORIUM	107	S	TENNESSEE	ST	MCKINNEY	TX	75069	2200	2	
C3	R-0856-006-048D-1	THE HORSE'S AXE	212	E	LOUISIANA	ST	MCKINNEY	TX	75069	5600	2	
C3	R-0856-006-046A-1	DOOZIES CORNER	200	E	LOUISIANA	ST	MCKINNEY	TX	75069	4728	2	
C3	R-0856-006-045C-1	RED ZEPPELIN	206	E	LOUISIANA	ST	MCKINNEY	TX	75069	5168	2	
C3	R-0856-006-048B-1	NEIGHBOR BOOKS	208	E	LOUISIANA	ST	MCKINNEY	TX	75069	15486	3	
C3	R-0856-006-045B-1	PALACE BARBER SHOP	202	E	LOUISIANA	ST	MCKINNEY	TX	75069	9700	1	
C3	R-0856-006-044A-1	THE FOX DEN	113	S	TENNESSEE	ST	MCKINNEY	TX	75069	1080	1	
C3	R-0856-006-044C-1	THE MENAGERIE	117	S	TENNESSEE	ST	MCKINNEY	TX	75069	1356	1	
C3	R-0856-006-045D-1	GROOVY COOP	109	S	TENNESSEE	ST	MCKINNEY	TX	75069	1440	1	
C3	R-0856-006-045E-1	GROOVY COOP	111	S	TENNESSEE	ST	MCKINNEY	TX	75069	1170	1	60205
D2	R-0856-021-137B-1	DOUG & LYNDA'S SKI SHOP	225	E	LOUISIANA	ST	MCKINNEY	TX	75069	2250	1	
D2	R-0856-021-138B-1	DOUG & LYNDA'S SKI SHOP	231	E	LOUISIANA	ST	MCKINNEY	TX	75069	4500	1	
D2	R-0856-021-135A-1	MY FAVORITE ROOM	218	E	VIRGINIA	ST	MCKINNEY	TX	75069	2500	1	
D2	R-0856-021-137C-1	DOUG & LYNDA'S SKI SHOP	227	E	LOUISIANA	ST	MCKINNEY	TX	75069	4500	1	
D2	R-0856-021-136C-1	PARKING LOT		E	VIRGINIA	ST	MCKINNEY	TX	75069	0	0	
D2	R-0856-021-135C-1	HUGS CAFE/BAY WILLOW DESIGN	222/224	E	VIRGINIA	ST	MCKINNEY	TX	75069	4500	1	
D2	R-0856-021-135B-1	MY FAVORITE ROOM	220	E	VIRGINIA	ST	MCKINNEY	TX	75069	2250	1	
D2	R-0856-021-134D-1	MULTIPLE	221	E	LOUISIANA	ST	MCKINNEY	TX	75069	14150	2	
D2	R-0856-021-139A-1	DOUG AND LINDAS PARKING LOT		N	CHESTNUT	ST	MCKINNEY	TX	75069	0	0	
D2	R-0856-021-136D-1	WHITE CACTUS SALON	226	E	VIRGINIA	ST	MCKINNEY	TX	75069	336	1	34986

TOTAL SF	496272
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Reed Fire Protection Engineering recognizes the unique complexities of working within McKinney’s Historic District. We draw upon our deep experience in similar existing, occupied structures, providing illustrative examples of sprinkler riser and main details from past projects below. To ensure project accuracy and efficiency, our firm utilizes industry-standard fire protection design software, ensuring seamless transition from detailed design to the construction phase.

EXAMPLE 1: EXISTING FIRE SPRINKLER RISER DETAIL

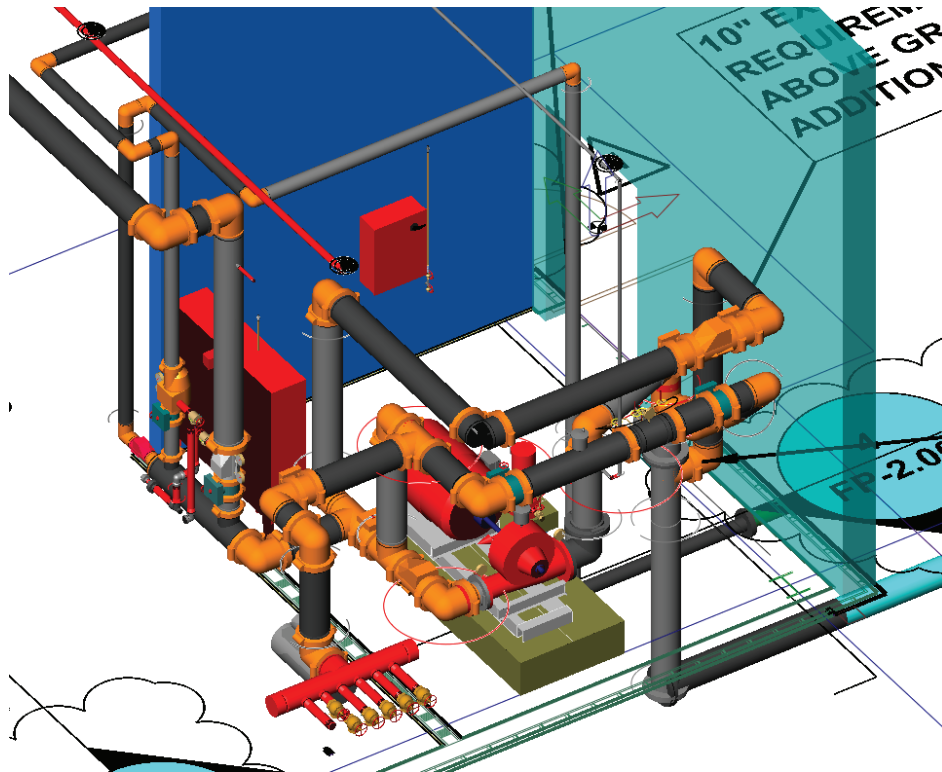


EXISTING 6" RISER REMODEL

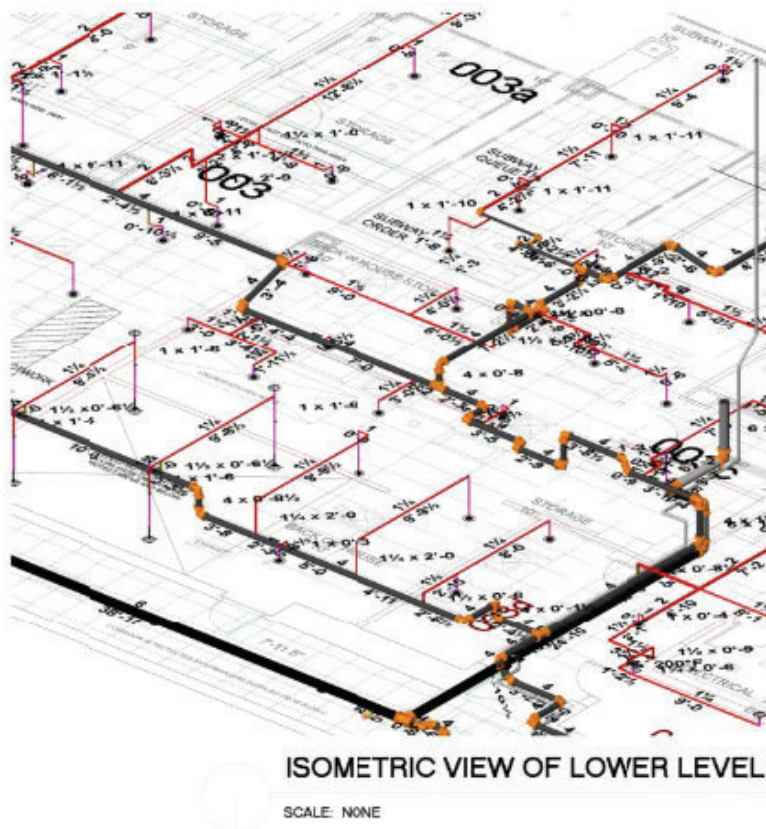
SCALE: NONE

Existing Riser Remodel Legend		
Key Note	Size	Description
A	6	Existing Pipe to Remain
B	6	Demo existing 6" Valves, Fittings, Trim, Switches, etc on Bldg. C.
C	NA	Demo existing Water Motor Gong and Replace with New Fire Alarm Horn Strobe wire to existing fire alarm system.
1	6	Existing Underground Fire Line Lead-in to Remain
2	6	New 6" Flanged x Grooved sch. 40 spool piece
3	6	New 6" UL/USC listed Ames Maxim Series 300 with electronically supervised valves. Wire to existing fire alarm system.
4	6	New 6" waterflow switch. Wire to existing fire alarm system. Cut existing pipe to retrofit as needed.

EXAMPLE 2: FIRE SPRINKLER RISER DETAIL



EXAMPLE 3: FIRE SPRINKLER MAIN DETAIL



Lidar Based As-Builts

Your secret weapon for successful renovation and adaptive reuse projects!

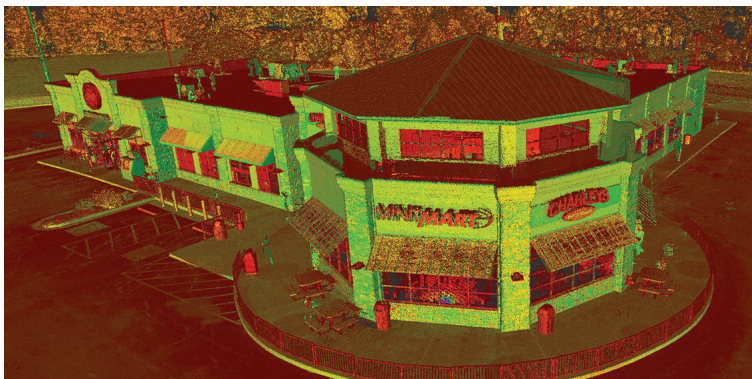
Working Within An Existing Footprint

To work successfully within the limitations of an existing facility, you must first know what the limitations are. Lidar based as-builts provide comprehensive, accurate facility/site data for reliable visualization, planning and design to help you make the most of the available space. Moreover, collaboration is enhanced because all disciplines and project stakeholders can virtually visit the project site from a desktop device.

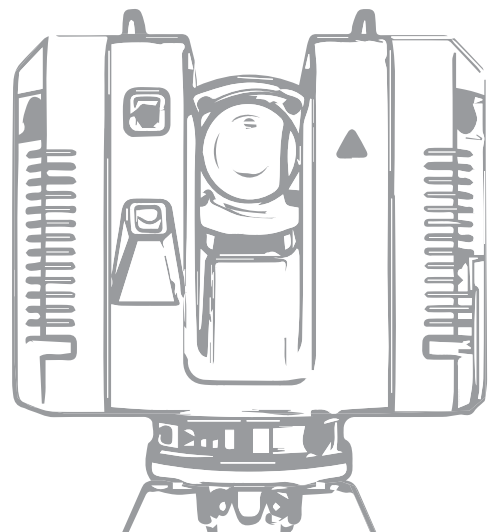
What Can Be Measured?

Anything within the line-of-sight of the scanner, including:

- Interior and exterior architectural details including walls, ceilings, floors, doors, windows, stairwells, millwork, countertops, racks, shelves, plumbing fixtures and lighting fixtures
- MEP elements, HVAC equipment, piping, plumbing, fire and security systems
- Structural details, including columns, beams, bar joists, connection points, plenum spaces and roof tops
- Industrial processing and manufacturing equipment, assets and racking systems
- Parking areas and drives, docking areas, signage, sidewalks, fencing and landscaping



Lidar laser scanners collect millions of data points. Colorized areas depict precise 3D measurements.



Our Solutions

Infrastructure Placemaking
Mobility Water



For more information or free sample data, contact:

Aaron St. Amant, PS, PLS, MBA
Geospatial Team Leader

479.397.0313 | ast.amant@halff.com



Deliverables

2D CAD plans

- Floor layout and square footage
- Reflected ceiling plans (includes lighting if specified)
- Interior elevations (specified locations)
- Exterior elevations
- Floor deformation analysis
- Roof plans
- HVAC/structural layout above ceiling

3D Models (Revit®)

- Architectural
- Structural
- Mechanical
- Electrical
- Plumbing
- Fire Protection



We improve lives and communities by turning ideas into reality.

POINT CLOUD



POINT CLOUD



 AUTODESK®
RECAP™ PRO

Hotel Pines, Pine Bluff, AR

92,000 sf



Benton County Courthouse, Bentonville, AR

15,500 sf

Maple Terrace Apartments, Dallas, TX

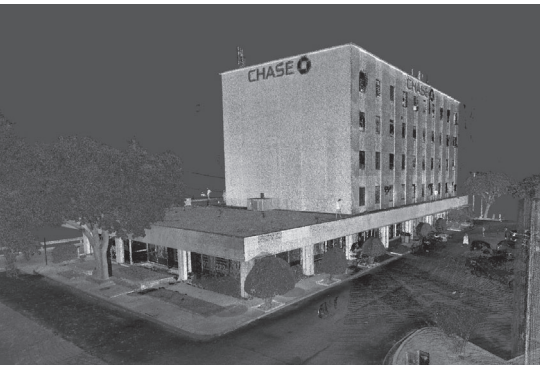
421,000 sf





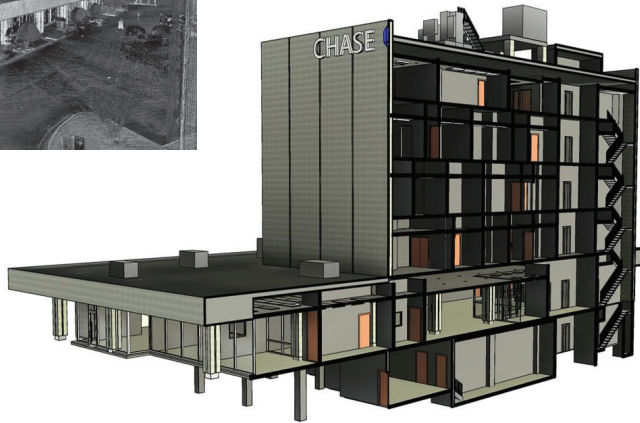
1525 Main Street, Downtown Dallas, TX

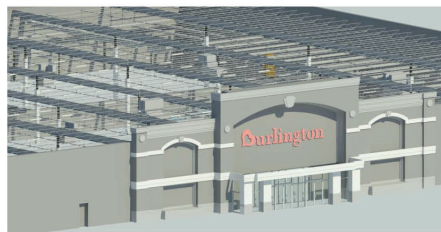
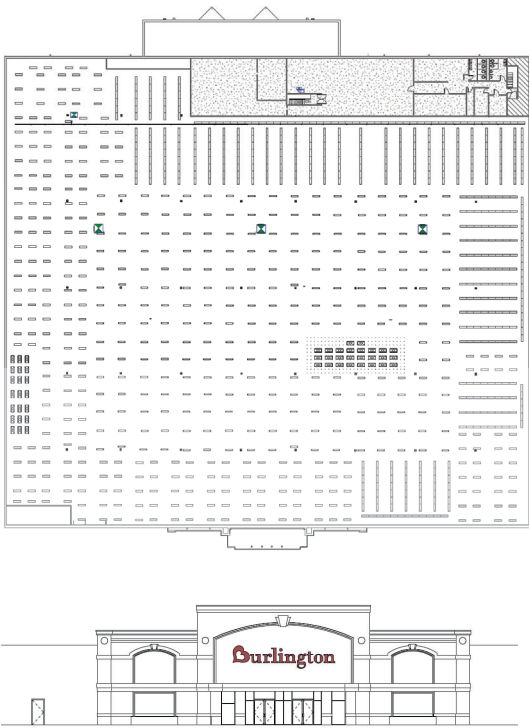
4,464 sf



Chase Bank, Dallas, TX

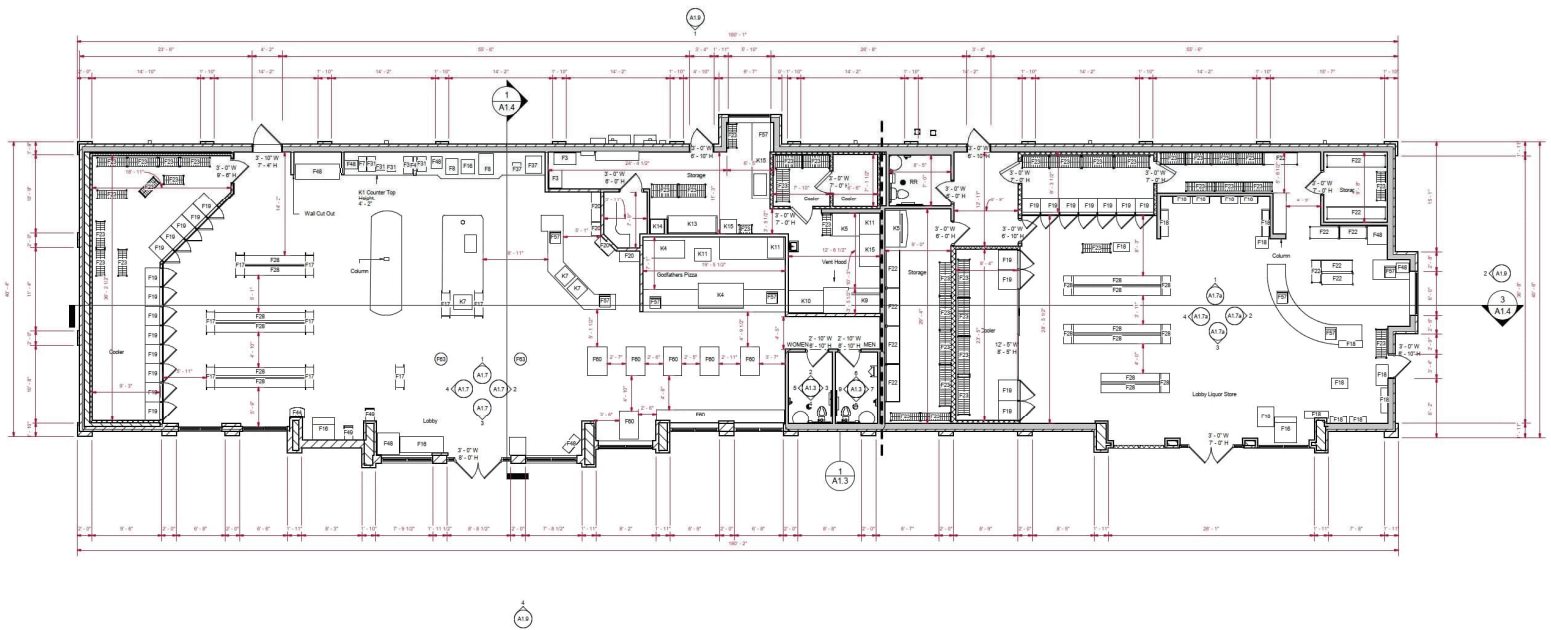
80,000 sf





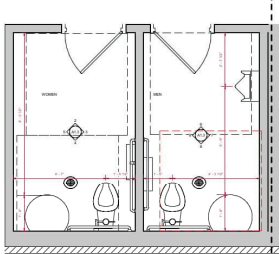
Burlington Coat Factory, Roanoke, VA

250,000 sf

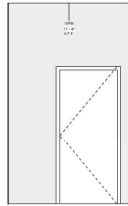


The Point Convenience, Fort Smith, AR

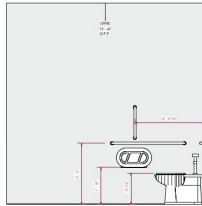
7,000 sf



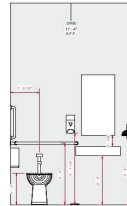
① ENLARGED BATHROOM PLAN
1/2" = 1'-0"



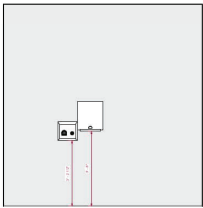
② ELEVATIONS
1/2" = 1'-0"



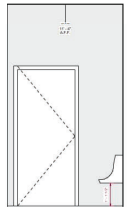
③ ELEVATIONS
1/2" = 1'-0"



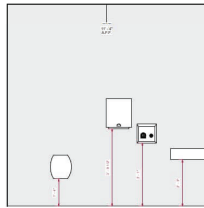
④ ELEVATIONS
1/2" = 1'-0"



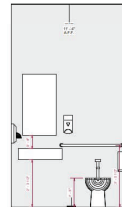
⑤ ELEVATIONS
1/2" = 1'-0"



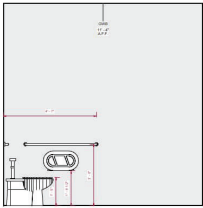
⑥ ELEVATIONS
1/2" = 1'-0"



⑦ ELEVATIONS
1/2" = 1'-0"



⑧ ELEVATIONS
1/2" = 1'-0"



⑨ ELEVATIONS
1/2" = 1'-0"



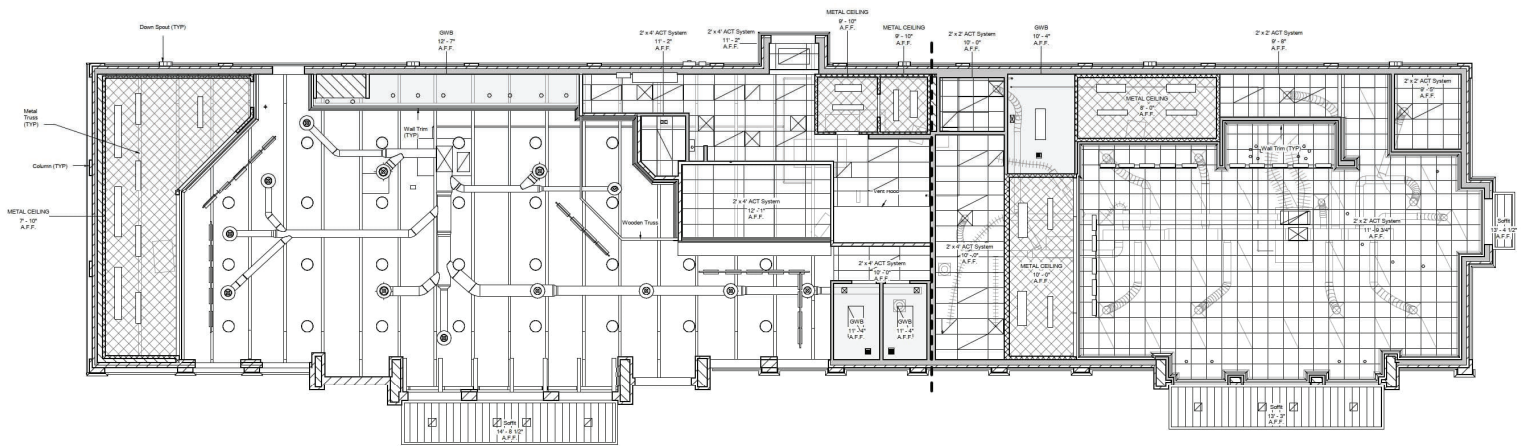
Oakcrest Market #11
415 Garrison Ave
Fort Smith, AR

ENGINEERS • ARCHITECTS • SCIENTISTS • PLANNERS • SURVEYORS

PROJECT: AVO. 8/08/21
CREATOR: ZH, MA
VERIFIED: SS

DATE: 04/12/24
BATHROOM
ELEVATIONS

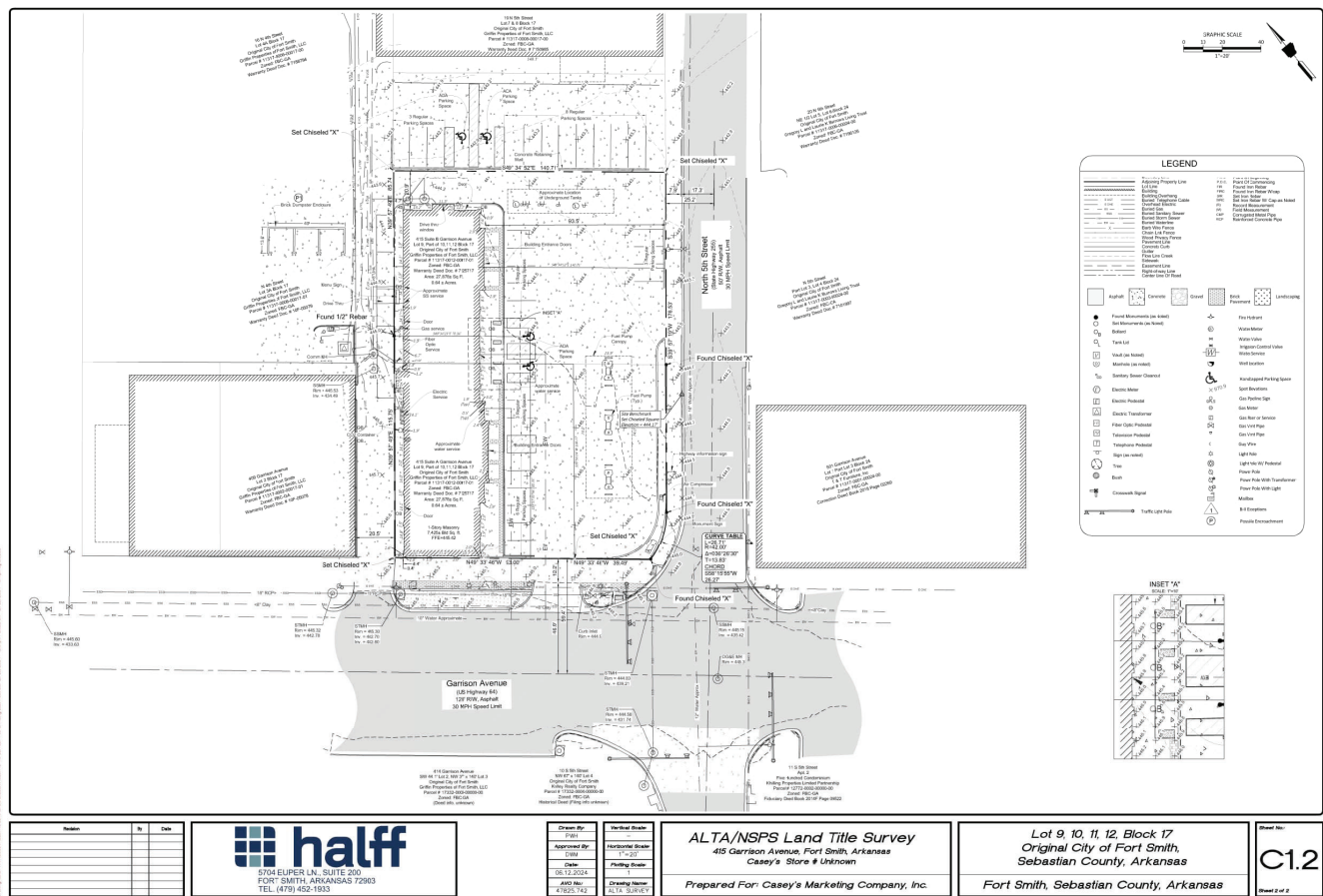
A1.3



1 REFLECTED CEILING PLAN
1/8" = 1'-0"

The Point Convenience, Fort Smith, AR

7,000 sf



halff
5704 EUPUR LN, SUITE 200
FORT SMITH, ARKANSAS 72903
TEL (479) 452-1933

ALTA/NSPS Land Title Survey
415 Garrison Avenue, Fort Smith, Arkansas
Casey's Store # Unknown
Prepared For Casey's Marketing Company, Inc.

Lot 9, 10, 11, 12, Block 17
Original City of Fort Smith,
Sebastian County, Arkansas
Fort Smith, Sebastian County, Arkansas

C1.2
Sheet 2 of 2