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PUC DOCKET NO. 55067

DIRECT TESTIMONY
OF AMY L. ZAPLETAL, P.E., WITNESS FOR
ONCOR ELECTRIC DELIVERY COMPANY LLC

DIRECT TESTIMONY OF AMY L. ZAPLETAL, P.E.

I. POSITION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, EMPLOYMENT POSITION, AND BUSINESS ADDRESS.

A. My name is Amy L. Zapletal. I am employed as a Project Manager Senior in the Transmission Engineering Right-of-Way group at Oncor Electric Delivery Company LLC ("Oncor"). My business address is 777 Main St., Suite 707, Fort Worth, Texas 76102.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.

A. I have served as the lead Oncor engineer responsible for the design, development and execution of the Ramhorn Hill-Dunham 345 kV transmission line project ("Proposed Transmission Line Project"). I have been employed at Oncor as a Project Manager Senior since June of 2021. Prior to my employment at Oncor, my professional experience was dedicated to project management and utility district engineering consulting services. I am a licensed professional engineer in the State of Texas (License No. 94680). I received a Bachelor of Science degree in civil engineering from Texas A&M University in 2000. My educational and professional qualifications are more fully presented in my resume, which is attached hereto as Exhibit ALZ-1.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS ("COMMISSION")?

A. Yes. I previously submitted testimony in Docket No. 54733.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to introduce, support, describe, and sponsor the project schedule, financing, and cost estimates included in Oncor's Standard Application for a Certificate of Convenience and Necessity ("CCN") for a Proposed Transmission Line filed in this docket (the "Application"). My testimony will also introduce, support, sponsor, and

describe the structure and conductor selection; station construction; neighboring utilities and political subdivisions; known engineering constraints; project permitting; and generation impacts associated with the Proposed Transmission Line Project.

I sponsor Oncor's responses to Application Question Nos. 1-13 and 20. The Application, as it may be amended and/or supplemented, will be offered into evidence by Oncor at the hearing on the merits. My direct testimony was prepared by me or under my direct supervision. The facts and statements set forth in the portions of the Application that I sponsor are true and correct to the best of my knowledge.

III. DESCRIPTION OF PROPOSED TRANSMISSION LINE PROJECT

Q. PLEASE GENERALLY DESCRIBE THE PROPOSED TRANSMISSION LINE PROJECT.

A. The Proposed Transmission Line Project is part of the overall Roanoke Area Upgrades Project, which ERCOT endorsed as critical to the reliability of the ERCOT grid. The Proposed Transmission Line Project includes constructing a new 20- to 23-mile, double-circuit 345 kV transmission line connecting the proposed Dunham Switch, located in Denton County, to the proposed Ramhorn Hill Switch, located in Wise County. The transmission line is proposed to be built on triple-circuit capable monopole structures with two 345 kV circuits initially installed and a vacant circuit position to allow for the future addition of a 138 kV underbuild. Both 345 kV switching stations will be constructed in a 12-breaker, breaker-and-a-half arrangement and will tap into the existing 345 kV transmission system in the northwestern Dallas-Fort Worth Metroplex.

The Proposed Transmission Line Project will be designed and constructed to meet or exceed the specifications and/or criteria set forth in the latest edition of the National Electrical Safety Code ("NESC"), the statutes of the State of Texas, the Commission's rules, and Oncor's standard design practices.

Q. WILL NEW PERMANENT RIGHT-OF-WAY ("ROW") BE REQUIRED FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. Yes. The Proposed Transmission Line Project will require a standard ROW width of approximately 100 feet, although additional ROW width may be required in certain areas to address engineering constraints.

IV. PROJECT SCHEDULE AND FINANCING

Q. WHAT IS THE CURRENT SCHEDULE FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. The schedule for the Proposed Transmission Line Project was developed based on a 180-day approval timeline due to its designation by ERCOT as critical to reliability. The following schedule is premised on Commission approval of the Proposed Transmission Line Project by December 2023:

Description	Start	Completion
ROW and Land Acquisition	December 2023	December 2024
Engineering and Design	January 2024	October 2024
Material and Equipment Procurement	February 2024	October 2024
Construction of Facilities	December 2024	December 2025
Energize Facilities	December 2025	December 2025

Q. HOW WILL THE PROPOSED TRANSMISSION LINE PROJECT BE FINANCED?

A. As explained in the Application, Oncor proposes to finance the facilities included in the Proposed Transmission Line Project with a combination of debt and equity in compliance with its authorized capital structure, which is similar to the means used for previous construction projects. Oncor plans to utilize internally generated funds (equity) and proceeds received from the issuance of securities. Oncor will typically obtain short-term borrowings as needed for interim financing of its construction expenditures in excess of funds generated internally. These borrowings are then repaid through the issuance of long-term debt securities, the types and amounts of which are as of yet undetermined. Oncor is the sole applicant for the Proposed

Transmission Line Project, and therefore no other party will be reimbursed for any portion of this project.

V. STRUCTURE AND CONDUCTOR SELECTION

Q. WHAT STRUCTURES DID ONCOR SELECT FOR CONSTRUCTION OF THE PROPOSED TRANSMISSION LINE PROJECT?

A. Oncor will construct the Proposed Transmission Line Project primarily on steel monopoles with a typical structure height of 120-175 feet. After evaluating numerous factors relating to the study area, including but not limited to span length between structures, construction and maintenance issues, commodity and labor costs, impacts to affected landowners, and constraints in the study area, Oncor affirmed the use of this structure for the Proposed Transmission Line Project. A typical triple-circuit, 345 kV tangent monopole with two circuits in place is shown in Figure 1-2 in the *Environmental Assessment and Alternative Route Analysis for the Proposed Ramhorn Hill Switch to Dunham Switch 345 kV Transmission Line Project in Denton and Wise Counties, Texas* ("Environmental Assessment"), which is included as Attachment No. 1 to the Application. Section 1.3 of the Environmental Assessment also discusses Oncor's selected structure type.

Q. WHY IS ONCOR PROPOSING THE USE OF TRIPLE-CIRCUIT CAPABLE STRUCTURES WITH A VACANT CIRCUIT POSITION?

A. This proposal is consistent with ERCOT's endorsement for the project, which calls for a double-circuit 345 kV transmission line on triple-circuit capable structures to allow for the future installation of a 138 kV circuit. This design will allow Oncor to address future growth in the project area without the need to acquire additional ROW. Given that the materials and installation costs for triple-circuit capable structures are only 20-25% greater than the costs for double-circuit capable structures, the incremental cost impact of triple-circuit capable construction is minimal compared with

the costs that would be incurred to construct an entirely new 138 kV transmission line in the project area in the future.

Q. WHAT CONDUCTOR DOES ONCOR PROPOSE TO USE FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. The 345 kV circuits will be installed using bundled 1926.9 kcmil aluminum conductor steel supported, trapezoidal-shaped wire ("ACSS/TW"). The normal peak operating current rating for this conductor is approximately 5,138 amperes, and the line capacity is 3,070 megavolt-amperes ("MVA").

Q. IS ONCOR'S CHOSEN CONDUCTOR THE MOST COST-EFFECTIVE AND RELIABLE OPTION FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. Yes. ERCOT's independent review required that this line be constructed with normal and emergency ratings of at least 2,987 MVA. Using a smaller conductor, such as bundled 959 ACSS/TW conductor, would not produce the necessary capacity rating. Considering this ERCOT requirement for the Proposed Transmission Line Project, it is both prudent and necessary to install the bundled 1926.9 kcmil ACSS/TW conductor, which is Oncor's standard conductor for 345 kV transmission lines.

VI. STATION CONSTRUCTION

Q. WILL ANY STATION WORK BE REQUIRED FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. Yes. The Proposed Transmission Line Project will include establishing a new Ramhorn Hill Switch station in Wise County and a new Dunham Switch station in Denton County. The switching stations will be constructed entirely on Oncor's fee-owned property.

Q. PLEASE DESCRIBE THE PROPOSED RAMHORN HILL SWITCH STATION.

A. The proposed Ramhorn Hill Switch station will be a 345 kV switching station, initially designed in a 12-breaker, breaker-and-a-half arrangement, and will serve as the western endpoint for the Ramhorn Hill-Dunham

transmission line. It will be located approximately two miles south of the intersection of U.S. Highway 287 and State Highway ("SH") 114, near the City of Rhome, Texas. The preliminary designed dimensions are approximately 700 feet by 750 feet. A diagram showing the approximate dimensions and proposed layout of the Ramhorn Hill Switch station is included in Attachment No. 2 to the Application.

Q. WHAT FACILITIES AND EQUIPMENT WILL MAKE UP THE PROPOSED RAMHORN HILL SWITCH STATION?

A. New facilities and equipment at the Ramhorn Hill Switch station will include aluminum tubular bussing and a static mast for lightning protection. Each 345 kV circuit entering the station will have associated A-frame dead-end structures, capacitively coupled voltage transformers, line traps, circuit breakers, disconnect switches, and associated support structures. A control center will house relay panels, a Supervisory Control and Data Acquisition ("SCADA") system, and controls for the switchyard equipment. The station is not currently planned to serve load or otherwise transform power to distribution voltage, so it is not designed to accommodate power transformers.

Q. WILL THE PROPOSED RAMHORN HILL SWITCH STATION INCLUDE CAPACITY FOR EXPANSION?

A. Yes. Capacity will be available for additional circuits in the future, including the future 138 kV circuit planned for this line, with incremental modifications to the station. Additionally, the proposed Ramhorn Hill Switch station site could ultimately be expanded to accommodate an 18-breaker 345 kV ring bus arrangement, a potential 138 kV switchyard that can accommodate up to 18 breakers in a breaker-and-a-half arrangement, 345/138 kV autotransformers, and a load serving distribution substation.

Q. PLEASE DESCRIBE THE PROPOSED DUNHAM SWITCH STATION.

A. The proposed Dunham Switch station will be a 345 kV switching station, initially designed in a 12-breaker, breaker-and-a-half arrangement, and will

serve as the eastern endpoint for the Ramhorn Hill-Dunham transmission line. It will be located approximately 1.4 miles southeast of the intersection of U.S. Highway 377 and Farm-to-Market Road ("FM") 1171 (regionally known as Cross Timbers Road), in the Town of Flower Mound, Texas. The preliminary designed dimensions of the Dunham Switch station are approximately 700 feet by 600 feet. A diagram showing the approximate dimensions and proposed layout of the Dunham Switch station is included in Attachment No. 2 to the Application.

Q. WHAT FACILITIES AND EQUIPMENT WILL MAKE UP THE PROPOSED DUNHAM SWITCH STATION?

A. New facilities and equipment at the Dunham Switch station will include aluminum tubular bussing and a static mast for lightning protection. Each 345 kV circuit entering the station will have associated A-frame dead-end structures, capacitively coupled voltage transformers, line traps, circuit breakers, disconnect switches, and associated support structures. A control center will house relay panels, SCADA system, and controls for the switchyard equipment. The station is not currently planned to serve load or otherwise transform power to distribution voltage, so it is not designed to accommodate power transformers.

Q. WILL THE PROPOSED DUNHAM SWITCH STATION INCLUDE CAPACITY FOR EXPANSION?

A. Yes. Capacity will be available for additional circuits in the future, including the future 138 kV circuit planned for this line, with incremental modifications to the station. Additionally, the proposed Dunham Switch station site could ultimately be expanded to accommodate an 18-breaker, 345 kV ring bus arrangement, a potential 138 kV switchyard that can accommodate up to 18 breakers in a breaker-and-a-half arrangement, 345/138 kV autotransformers, and a load serving distribution substation.

Q. WHY IS IT IMPORTANT TO BUILD EACH OF THESE NEW STATIONS WITH EXPANSION CAPABILITY?

A. This area of Texas is developing rapidly. This means both that available land will become harder to obtain and that electric demand will continue to grow, increasing the need for load-serving infrastructure. The expansion capability of these sites will allow Oncor to grow and expand its facilities incrementally as needed to meet the needs of the community and the ERCOT grid.

VII. NEIGHBORING UTILITIES AND POLITICAL SUBDIVISIONS

Q. ARE ANY OTHER ELECTRIC UTILITIES INVOLVED WITH THE PROPOSED TRANSMISSION LINE PROJECT?

A. No. Oncor is the sole applicant for the Proposed Transmission Line Project and will construct the transmission line and related station facilities.

Q. PLEASE IDENTIFY THE POLITICAL SUBDIVISIONS IN WHICH THE PROPOSED TRANSMISSION LINE PROJECT WILL BE LOCATED.

A. Depending on the route selected by the Commission, the Proposed Transmission Line Project may pass through portions of the City of Justin, City of Fort Worth, City of New Fairview, and City of Rhome. All filed routes will pass through the Town of Flower Mound and the Town of Northlake.

VIII. COST ESTIMATES

Q. WHAT ARE THE ESTIMATED COSTS OF THE TRANSMISSION LINE WORK FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. As detailed in Attachment No. 3 to the Application, I estimate that transmission line costs to construct the Proposed Transmission Line Project, excluding station costs, will range from approximately $164,581,000 to approximately $237,423,000, depending on the route selected by the Commission.

Q. WHAT ARE THE ESTIMATED COSTS OF THE STATION FACILITIES ASSOCIATED WITH THE PROPOSED TRANSMISSION LINE PROJECT?

A. There are approximately $74,858,000 in estimated station costs associated with the Proposed Transmission Line Project. This includes approximately

$33,510,000 for the proposed Ramhorn Hill Switch station and approximately $41,348,000 for the proposed Dunham Switch station.

PLEASE PROVIDE A BREAKDOWN OF ONCOR'S ESTIMATED STATION COSTS FOR RAMHORN HILL SWITCH STATION.

Oncor's estimated station costs for the proposed Ramhorn Hill Switch station include approximately: $8,810,000 for ROW and land acquisition; $500,000 for contract engineering and design, including ground surveying, geotechnical services, and station engineering consulting services; $11,570,000 for material procurement, which includes the costs of all the equipment described above, including stores; $250,000 for Oncor construction costs, which covers Oncor's costs associated with operations commissioning and internal field construction coordinators; and $12,380,000 for contract labor and construction, which includes the costs for construction contractors, conducting surveys, grading the station site, placing foundations, installing equipment, and installing the electrical ground grid.

PLEASE PROVIDE A BREAKDOWN OF ONCOR'S ESTIMATED STATION COSTS FOR DUNHAM SWITCH STATION.

Oncor's estimated station costs for the proposed Dunham Switch station include approximately: $16,648,000 for ROW and land acquisition; $500,000 for contract engineering and design, including ground surveying, geotechnical services, and station engineering consulting services; $11,570,000 for material procurement, which included the cost of all the equipment described above, including stores; $250,000 for Oncor construction, which covers Oncor's costs associated with operations commissioning and internal field construction coordinators; and $12,380,000 for contract labor and construction, which includes the costs for construction contractors, conducting surveys, grading the station site, placing foundations, installing equipment, and installing the electrical ground grid.

IX. ENGINEERING CONSTRAINTS

Q. WHAT ARE SOME EXAMPLES OF ENGINEERING CONSTRAINTS?

A. Examples of engineering constraints may include but are not limited to: existing residential development; oil, gas, or water wells; flood-prone areas; pipeline ROWs; highway crossings; uneven or unstable terrain; unfavorable soil conditions; and bodies of water.

Q. ARE THERE ANY KNOWN ENGINEERING CONSTRAINTS ASSOCIATED WITH THE PROPOSED ROUTE FOR THE PROPOSED TRANSMISSION LINE PROJECT?

A. Yes. However, at this time, the proposed routing alternatives do not present any known engineering constraints that cannot be resolved with additional consideration by Oncor during the design and construction phases following approval of the Proposed Transmission Line Project. There may exist unknown engineering constraints that would require further adjustments if discovered through the survey process.

Q. PLEASE DESCRIBE THE KNOWN ENGINEERING CONSTRAINTS.

A. The study area for the Proposed Transmission Line Project includes numerous engineering constraints including major highways and thoroughfares; aircraft landing facilities; pipelines and oil and gas pads; and pockets of dense residential, industrial, and commercial development, which are particularly prevalent in the southern portion of the study area. This area of north Texas is growing rapidly, and multiple developers have informed Oncor of plans for sizeable future development in areas traversed by routing alternatives for the Proposed Transmission Line Project, which will likely give rise to new constraints throughout the CCN approval, engineering and design, ROW acquisition, and construction phases of the project. Finally, the study area includes recreational and environmentally sensitive property owned and managed by the United States Army Corps of Engineers ("USACE").

While the USACE property does not, on its own, constitute an engineering constraint, crossings of the USACE property are governed by the Federal Non-Recreational Outgrant Policy ("Outgrant Policy"), which severely restricts potential crossings. In developing routing alternatives for the Proposed Transmission Line Project, Oncor coordinated closely with the USACE, state and federal legislators, and local officials to identify potential routes across the USACE property while taking into account the engineering constraints associated with any potential crossings. The Outgrant Policy and Oncor's coordination with the USACE are addressed more fully in the direct testimony of Oncor witness Mr. Russell J. Marusak.

Q. DO ANY OF ONCOR'S PROPOSED ROUTES CROSS PROPERTY OWNED BY THE USACE?

A. The USACE property is federal land and can only be crossed with USACE permission, which has not been granted. Among the links filed in the Application, only Link G2 would make a short, aerial crossing of the USACE property near Interstate Highway 35W ("I-35W") and Denton Creek. The USACE has indicated that it is amenable to this crossing.

In coordination with Oncor's routing consultant, Halff Associates, Inc. ("Halff"), Oncor evaluated the possibility of crossing the USACE property using: (1) Link G2 to span I-35W and the USACE property at the northernmost point of Utility Corridor 15; (2) an overhead crossing outside of the USACE-established designated utility corridors ("Utility Corridors") in the northern portion of the USACE property, near the Trailwood subdivision; (3) an underground crossing in the same general location as (2); (4) crossings using one of the five designated utility corridors established in the Master Plan; (5) an overhead crossing using an existing Trinity River Authority ("TRA") easement; and (6) overhead crossings outside of the designated utility corridors in the southern portion of the USACE near SH 114. The locations of these alternatives are shown in Exhibit ALZ-2. Oncor's analysis, feedback from the USACE, and the presence of

numerous engineering, routing, and planning constraints associated with these crossings led to the conclusion that these options would not provide feasible routing opportunities.

My direct testimony will address the engineering constraints associated with these potential crossings. Oncor identified engineering constraints specifically associated with three of the Utility Corridors, the TRA easement corridor, and the proposed underground crossing. Additionally, all of the USACE crossings using the Utility Corridors, the TRA easement corridor, or the southern crossings would force the routing for the Proposed Transmission Line Project through the same general area southwest of the USACE property, which contains numerous engineering constraints that severely restrict Oncor's routing options. My direct testimony will address these constraints as well. The routing constraints associated with each potential crossing are addressed more fully in Mr. Marusak's direct testimony. Oncor witness Mr. Harsh Naik addresses the planning constraints.

Q. WHAT WERE THE RESULTS OF ONCOR'S ANALYSIS OF POTENTIAL CROSSINGS OF THE USACE PROPERTY USING THE UTILITY CORRIDORS?

A. Oncor identified engineering constraints in several of the Utility Corridors, as well as constraints in the area southwest of the USACE property that are even more restrictive and render the use of the Utility Corridors infeasible from an engineering perspective. I will address the corridor-specific constraints before addressing the more general constraints that impact multiple corridors.

Utility Corridor 11

Utility Corridor 11 is 100 feet wide and is occupied by two existing transmission lines—an Oncor/Texas Municipal Power Agency double-circuit 345 kV transmission line and a Brazos Electric Power Cooperative double circuit 138 kV transmission line. It is also paralleled and partially

occupied by U.S. Highway 377. The Master Plan does not permit this corridor to be expanded beyond 100 feet, including the space occupied by the road. These constraints make it impossible to maintain the 100-foot ROW required for the Proposed Transmission Line Project without clearing substantial portions of the Environmentally Sensitive Area outside of the designated utility corridor.

A 100-foot ROW is essential for the Proposed Transmission Line Project in order to provide sufficient space to maintain NESC clearances and prevent conductor blowout (i.e., horizontal displacement) leading to contact with objects outside the ROW, which could lead to conductor failure, arcing, or fires. Maintaining an appropriate buffer is especially important here, given the pervasive woody vegetation throughout the USACE property.

The Master Plan restricts future use of this corridor to subsurface boring, meaning no overhead facilities may be installed. Even if Oncor could obtain a categorical exclusion to this restriction, locating seven overhead transmission circuits in such close proximity would create planning and reliability concerns, which are addressed more fully in Mr. Naik's direct testimony.

Utility Corridor 12

Utility Corridor 12 is 70 feet wide and is occupied by a road and existing underground utilities. The Master Plan provides that the width of this corridor may not exceed 70 feet, including the space occupied by the road. Thus, this corridor is too narrow for the Proposed Transmission Line Project given the ROW requirements for the transmission line. The Master Plan restricts future use of this corridor to subsurface boring, meaning no overhead facilities may be installed.

Utility Corridor 15

Utility Corridor 15 is 140 feet wide and is occupied by I-35W and an existing CoServ distribution line. This corridor is restricted to the existing

road ROW and may not exceed 70 feet from the center of the road. The Master Plan restricts future use of this corridor to subsurface boring, meaning no overhead facilities may be installed. The proximity of I-35W to this corridor presents a unique engineering constraint, in that the width of the highway for much of the corridor's length challenges the maximum span length for the Proposed Transmission Line Project. Although, as explained above, Link G2 would make a short crossing through Utility Corridor 15 to cross I-35W where the highway is narrower and where the crossing would satisfy Texas Department of Transportation ("TxDOT)" regulations.

Any other use of any of the designated utility corridors would force the routing for the Proposed Transmission Line Project into the area southwest of the USACE property. This area contains numerous engineering constraints, which are addressed more fully below. In conjunction with the corridor-specific constraints, those constraints render the use of the designated utility corridors infeasible.

Q. WHAT WERE THE RESULTS OF ONCOR'S ANALYSIS OF CROSSING THE USACE PROPERTY USING THE TRA EASEMENT CORRIDOR?

A. The use of the TRA easement corridor is not feasible from an engineering standpoint. The TRA easement is 60 feet wide and contains 16-, 30-, and 42-inch-wide underground pipelines within that space. The easement width and the spacing of the existing pipelines do not allow sufficient space for Oncor to install structure foundations or to maintain the 100-foot ROW required for this project. Structures for this project generally require foundations approximately 12 to 15 feet in diameter. In flood-prone areas like the USACE property, which surrounds Grapevine Lake, larger foundations may be required to properly anchor and support the structures. The size of the foundations required will ultimately depend on the soil composition and depth of the water table, which are currently unknown.

Like the designated utility corridors, the TRA easement corridor would lead the Proposed Transmission Line Project into the heavily

congested area southwest of the USACE property. As discussed above, Oncor cannot route the Proposed Transmission Line Project through this area due to the numerous engineering constraints.

Q. PLEASE DESCRIBE THE ENGINEERING CONSTRAINTS SOUTHWEST OF THE USACE PROPERTY THAT RENDER A CROSSING INFEASIBLE.

A. The area bounded by the USACE property to the north and east, SH 114 to the south, and I-35W to the west, contains numerous engineering constraints that severely limit Oncor's ability to construct, operate, and maintain the Proposed Transmission Line Project. These constraints are shown in the map included as Exhibit ALZ-3 to my direct testimony. This area lies just north of the City of Fort Worth, northeast of Alliance Airport, and east of the Texas Motor Speedway. Within this area are a commercial and industrial park; densely packed residential subdivisions; a mobile home park; numerous oil, gas, and water pipelines; and existing transmission and distribution lines.

To identify potential pathways through this area, Oncor conducted on-the-ground reconnaissance and reviewed aerial imagery and publicly available platting information. These efforts resulted in an engineering analysis, which is included as Exhibit ALZ-4 to my direct testimony. Oncor's analysis identified a number of specific engineering constraints that are incompatible with Oncor's construction, operation, and maintenance of the Proposed Transmission Line Project, including:

- buildings with narrow setbacks from existing roads, utilities, and other buildings;
- multiple active transportation/logistics operations, including truck court parking, loading areas, and emergency access/fire lanes;
- an interconnected storm sewer system with drainage channels, inlets, and underground pipes;
- an elevated water storage tank owned by the Town of Northlake;
- private above-ground water storage tanks;

- underground and above-ground gas pipelines;
- overhead distribution lines;
- streetlighting systems; and
- security fencing separating properties.

Construction of the Proposed Transmission Line Project will require a consistent 100-foot-wide ROW, structure foundations 12-15 feet in diameter, and approximately 45,000 square feet of contiguous working space at each turning structure to set the structures and pull conductor. Even where at least 100 feet of space exists between buildings to accommodate the ROW and prevent blowout, few areas have space for Oncor to establish a temporary construction easement or maneuver the equipment required to set foundations and string conductor. What space does exist between buildings and roadways is often occupied by existing utilities.

Oncor could not identify a path through the area southwest of the USACE property that would provide the space needed to construct, operate, and maintain the Proposed Transmission Line Project. Even if Oncor could identify a theoretically feasible route, the heavy vehicle traffic in this area and customer outages that would be required would hinder construction efforts. Additionally, even if Oncor could construct a route through this area, access issues resulting from the presence of drainage areas, energized transmission/distribution corridors, transportation/logistics operations, and security fencing would create operational and maintenance challenges that could impair the reliability of the transmission line. For all of these reasons, this area is not a feasible location through which to route the Proposed Transmission Line Project.

Q. PLEASE DESCRIBE ONCOR'S ANALYSIS CONCERNING A POTENTIAL UNDERGROUND CROSSING OF THE USACE PROPERTY.

A. At the request of various municipalities, Oncor conducted an analysis of what would be required to construct a portion of the Proposed Transmission

Line Project underground. This analysis was intended to potentially facilitate an approximately 0.2-mile underground crossing in the far north of the USACE property. This area is adjacent to the Trailwood subdivision in Flower Mound, near Northwest Regional Airport. Oncor's analysis uncovered no evidence that a 5,000-ampere transmission line such as the Proposed Transmission Line Project can be built underground. To Oncor's knowledge, no underground lines of this ampacity have been built in the United States, so the constraints and operational issues associated with such construction are not fully understood.

Q. WHAT WOULD BE REQUIRED TO CONSTRUCT A PORTION OF THE PROPOSED TRANSMISSION LINE UNDERGROUND, ASSUMING IT COULD BE DONE?

A. Assuming a section of the line could be built underground, doing so would require, at minimum:

- a 150- to 180-foot-wide dedicated easement (compared with 100 feet for overhead);
- permanent access roads across USACE property and right of entry for surveying, construction, inspection, and maintenance;
- permanent, concrete-encased duct banks, including four parallel duct banks per 345 kV circuit (eight total) and one duct bank for the 138 kV circuit;
- six underground cable-splice vaults per mile, each with a maintained access point; and
- a 3-acre transition station at both ends of the underground section.

Q. HOW WOULD UNDERGROUND CONSTRUCTION IMPACT THE COST OF THE PROPOSED TRANSMISSION LINE PROJECT?

A. The cost of underground construction for this project would be a minimum of $100-110 million per mile (not including the future underground

installation of a 138 kV circuit). Additionally, each 3-acre transition station would cost approximately $5-7 million.

Q. HOW ELSE WOULD UNDERGROUND CONSTRUCTION IMPACT THE PROPOSED TRANSMISSION LINE PROJECT?

A. The design and construction of an underground segment would extend the Proposed Transmission Line Project's in-service timeline to at least four years after CCN approval, compared with approximately two years for overhead. Access challenges associated with crossing USACE property and accessing underground circuits could also potentially cause reliability issues.

Environmental impacts would be greater for underground construction due to the additional ROW required for the transmission line and transition stations; the crossing of an Environmentally Sensitive Area; and the trenching, boring, and/or horizontal directional drilling required for underground construction. Importantly, the USACE indicated that it will not grant permission for permanent access roads, trenching, or crossing Environmentally Sensitive Areas, any of which would definitively render this option infeasible.

Q. DID ONCOR EVALUATE ANY OTHER ENGINEERING CONSTRAINTS?

A. Yes. The presence of 35 aircraft landing facilities in and around the study area is a unique engineering constraint that Oncor factored into the routing for the Proposed Transmission Line Project. To ensure that all of the proposed links are constructible in light of Federal Aviation Administration ("FAA") regulations and notice requirements, Oncor conducted a study of preliminary structure heights and ROW requirements for links in proximity to an airport or heliport, including use of the FAA's Obstruction Evaluation/Airport Airspace Analysis Notice Criteria Tool, which evaluates proposed structures based on preliminary heights, locations, proximity to

airports, and other factors to determine if they might trigger the FAA's notice requirements.

Based on this study, Oncor determined that potential structure heights necessary to maintain a standard 100-foot ROW width would be constructible. If, after final design of the Commission's approved route is submitted for FAA review, the FAA determines that structure heights do not comply, Oncor may utilize shorter non-standard steel monopole structures and/or acquire additional ROW width in order to comply with FAA clearance requirements.

X. PROJECT PERMITTING

Q. WILL ANY PERMITS BE REQUIRED FOR THE PROPOSED TRANSMISSION LINE PROJECT IN ADDITION TO THE CCN SOUGHT IN THIS PROCEEDING?

A. Yes, assuming that the Commission approves the Application, it is likely that additional permits will be necessary to construct the Proposed Transmission Line Project. Following approval, and prior to construction, Oncor will acquire all necessary permits/approvals and make all required notifications. If required, Oncor will prepare a Storm Water Pollution Prevention Plan and submit a Notice of Intent to the Texas Commission on Environmental Quality under the Texas Pollutant Discharge Elimination System program. A cultural resources survey plan will be developed with the Texas Historical Commission for the approved project. Consultation with the USACE will occur following Commission approval of the Application to determine appropriate permit requirements, including consultation under Section 404 of the Clean Water Act and/or Section 10 permit criteria, as necessary. Consultation with the U.S. Fish and Wildlife Service will occur following Commission approval of the Application to determine appropriate requirements under the Endangered Species Act, if necessary. Oncor will coordinate with the Texas Department of Transportation regarding any

crossings of interstate and state highways and of state-maintained roadways.

Q. IS ANY PART OF THE PROPOSED TRANSMISSION FACILITIES LOCATED WITHIN THE COASTAL MANAGEMENT PROGRAM BOUNDARY AS DEFINED IN 31 TEXAS ADMINISTRATIVE CODE § 25.102(A)?

A. No. The Proposed Transmission Line Project is entirely outside the coastal management program boundary.

XI. GENERATION IMPACTS

Q. DOES ONCOR EXPECT ANY GENERATOR TO BE PRECLUDED OR LIMITED FROM GENERATING OR DELIVERING ELECTRICITY TO THE ERCOT GRID DUE TO CONSTRUCTION OF THE PROPOSED TRANSMISSION LINE PROJECT, OR THAT ONCOR'S CONSTRUCTION WILL ADVERSELY AFFECT THE RELIABILITY OF THE ERCOT SYSTEM?

A. No, Oncor does not anticipate that construction of the Proposed Transmission Line Project will preclude or limit a generator from generating or delivering power, or adversely affect the reliability of the ERCOT system. As further discussed in Mr. Naik's direct testimony, the Proposed Transmission Line Project is critical to supporting the reliability of the ERCOT transmission system and will address reliability issues that may otherwise limit the generation or delivery of electricity on the ERCOT grid.

XII. CONCLUSION

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

AFFIDAVIT

STATE OF TEXAS §
§
COUNTY OF Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Amy L. Zapletal who, having been placed under oath by me, did depose as follows:

"My name is Amy L. Zapletal. I am of legal age and a resident of the State of Texas. The foregoing testimony and exhibit offered by me are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true and correct."

Amy L. Zapletal
Amy L. Zapletal

SUBSCRIBED AND SWORN TO BEFORE ME on this 5th day of June, 2023.

MICHELE M GIBSON
Notary Public, State of Texas
Comm. Expires 06-30-2026
Notary ID 575631-8

Notary Public, State of Texas

My Commission Expires

06-30-2026

AMY L. ZAPLETAL, P.E.

Oncor Electric Delivery Company • 777 Main Street, Suite 707 • Fort Worth, TX 76102

Amy.Zapletal@oncor.com

Professional Experience

ONCOR ELECTRIC DELIVERY COMPANY, TRANSMISSION ENGINEERING **6/2021 to Present**
Right-of-Way Project Manager Sr. **Fort Worth, TX**

- Provide overall project management for assigned projects including contractor oversight and direction, budget and schedule adherence, communication and consultation with key stakeholders on emergent issues, while supporting Legal and Regulatory throughout
- Provide consultation and expertise on ROW matters that impact maintenance and capital transmission projects
- Oversee ROW acquisition including landowner negotiations, addressing associated financial and schedule constraints
- Support ROW acquisition activities including mediation, settlement negotiations, and trial support throughout condemnation and appeals processes
- Assist in coordinating, prioritizing, and communicating schedule and scoping changes related to ROWon capital transmission projects
- Facilitate and manage Special Project assignments on an as-needed basis
    - Engineering Witness for greenfield capital transmission line projects
    - Lead team of transmission line and station engineers to successfully scope and estimate project schedules and costs for a portfolio of related capital projects
    - Support related future ROW acquisition efforts as Engineering Witness during condemnation hearings

INDEPENDENT CONSULTANT **7/2012 to 6/2021**
Project Manager **Texas**

- Develop design documents and construction plan sets, technical specifications and manuals, contract documents, and obtain City approvals of preliminary / final plats
- Procure and manage professional services provided by client's external consultants
- Supervise preparation of developer receivables summaries for municipal utility district ("MUD") financial planning and annual audits
- Research and analyze Summary of Costs to calculate bond funding requirements, incorporating the financial feasibility recommendations by the MUD's Financial Advisor, to achieve construction goals without property tax or customer rate increases
- Compile Engineering Reports, Attachments, and TCEQ Construction Contract Check Lists
- Coordinate with client's Production Manager for exhibits created in AutoCAD or GIS
- Facilitate TCEQ application submittal, reproduction, distribution, and archive of documents
- Effectively communicate project status updates with supporting documentation for monthly Board of Directors meeting reports
- Organize financial documentation and collaborate with MUD's Bookkeeper and Auditor during development reimbursement audits and fiscal year operating budget projections

BGE, INC. (FORMERLY BROWN & GAY ENGINEERS, INC.) **11/2002 to 5/2012**
Project Manager / Project Engineer / Graduate Engineer **Houston, TX**

Dedicated Project Manager with excellent technical, analytical, communication and client relationship skills with land development experience including project management, design and construction of various single-family residential subdivision projects and of facility expansion and rehabilitation projects

- Provide feasibility, design, project management and construction administration services to multiple MUD and land development clients
- Utility District administration including direct client communication; project status reporting; coordination with clients' external consultants; capacity demand planning and customer commitments; and commercial development plan reviews
- Facilitate final design, cost estimates, specifications, bid documents and construction administration for water, wastewater, storm drainage, paving, and various utility facility expansion and rehabilitation projects
- Coordinate with property owners and/or legal condemnation counsel to acquire necessary easements or sites for infrastructure extensions or expansions
- Assist condemnation counsel with exhibits, project schedule and cost analysis for use in mediation or in settling disputes
- Collaborate with client, engineering support staff, and construction contractors for facility condition assessments; for project phasing feasibility and budgeting; and for resolutions to special construction constraints or limitations
- Implement CIP for asset management, funding projections, and annual revenue requirements
- Collaborate and provide training within the Districts Services Group, specializing in consulting services for mature MUDs
- Anticipate and coordinate requests to the TCEQ for compliance approvals of alternative service requirements for public water systems with more than 2,500 connections
- Supervise preparation of Expedited and Non-Expedited Bond Application Reports, Emergency Project Requests, and other special Utility District applications submitted to TCEQ
- Advise fellow / Senior Project Managers on regulatory requirements and conduct internal reviews to determine compliance with time-sensitive Expedited Bond Application Reports prior to submittal to TCEQ

CARTER & BURGESS, INC. **5/2000 to 11/2002**
Graduate Engineer **Houston, TX**

Assist Project Managers with design and AutoCAD production of final construction plan sets for water, wastewater, paving and storm drainage to serve single-family residential subdivisions

Education and Licenses

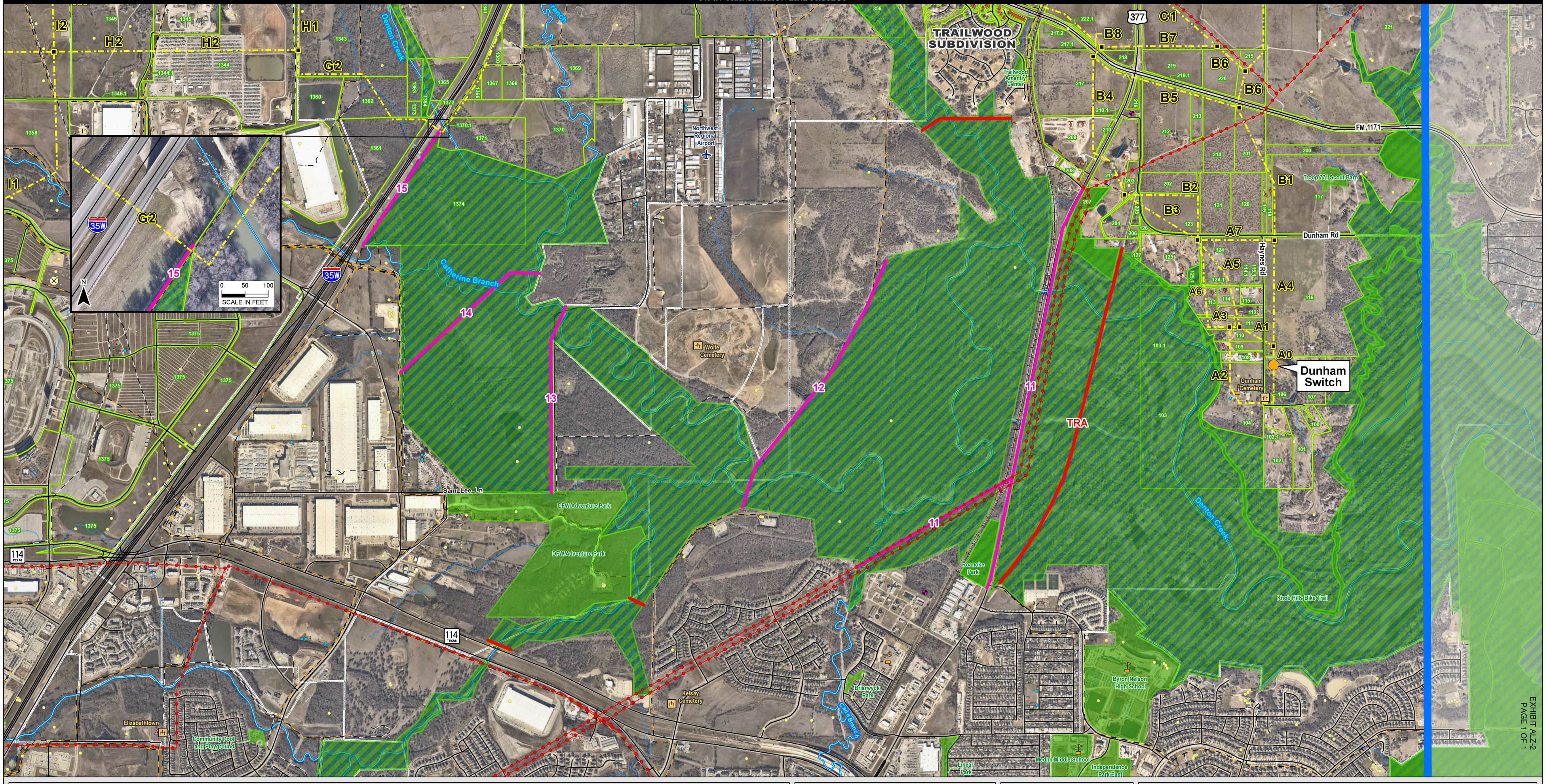
Bachelor of Science in Civil Engineering - Texas A&M University, August 2000
Licensed Professional Engineer No. 94680 - State of Texas
TBPELS Firm Registration No. F-15098 - State of Texas

HALFF

POTENTIAL USACE CROSSINGS EVALUATED

ENVIRONMENTAL AND LAND USE
CONSTRAINTS MAP
RAMHORN HILL SWITCH -- DUNHAM SWITCH
345 kV TRANSMISSION LINE PROJECT

ONCOR



MAP FEATURES

- STUDY AREA BOUNDARY
- CITY BOUNDARY
- TRACT NUMBER AND BOUNDARY
- PARK / RECREATIONAL AREA
- USACE RECREATIONAL AREA
- EXISTING TRANSMISSION LINE
- RAILROAD
- PUBLIC ROAD
- PIPELINE GREATER THAN 8"
- PIPELINE LESS THAN 8"
- RIVER / STREAM
- USACE GRAPEVINE LAKE MASTERPLAN UTILITY CORRIDOR
- CROSSING OUTSIDE DESIGNATED USACE UTILITY CORRIDOR
- PROJECT ENDPOINT
- NODE BETWEEN ADJACENT ROUTE LINKS
- PRELIMINARY ALTERNATIVE ROUTE LINK
- HABITABLE STRUCTURE (WITHIN 520 FEET OF ROUTE)
- RAILROAD COMMISSION WELL DATA
- TEXAS WATER DEVELOPMENT BOARD GROUNDWATER WELL DATA
- AIRPORT / AIRSTRIP
- HELIPORT
- TRAVELING IRRIGATION*
- HISTORICAL MARKER
- NATIONAL REGISTER OF HISTORIC PLACES SITE
- CEMETERY
- COMMUNICATION TOWER
- SCHOOL

Notes:

1. Some legend symbols are enlarged for easier identification.
2. Aerial photography is from the most recent available database (NearMap, 2023).
3. Sensitive cultural resource data are not shown on this map as these data are not to be reproduced, distributed, or released to the public.
4. Data are for display purposes only. All features and boundaries have been approximated based on information gathered from review of public resources and from field reconnaissance. Railroad Commision of Texas GIS data was last updated on August 30, 2022.
5. This map contains county appraisal district data. Property lines shown are approximate and are not verified by field survey. Property data prepared by Integra Realty Resources with route location furnished by Halff.
6. Legend items indicated by (*) represent features that were researched, verified, and recorded but are otherwise beyond the map extents, and cannot be located on the map.

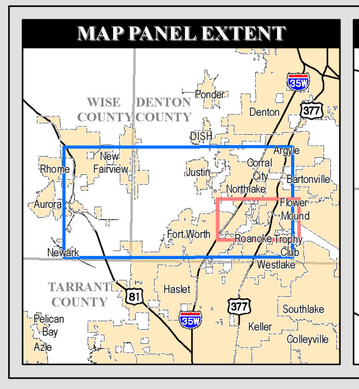
Date Plotted: 6/6/2023

Date Revised: 6/6/2023

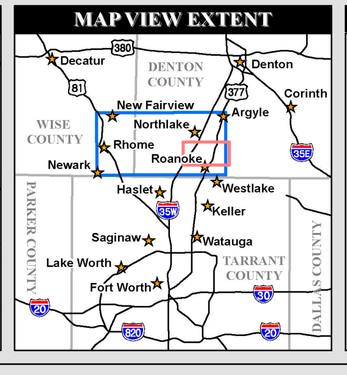
0 500 1,000 2,000
SCALE IN FEET

0 0.125 0.25 0.5
SCALE IN MILES

MAP PANEL EXTENT



MAP VIEW EXTENT



LOCATION MAP

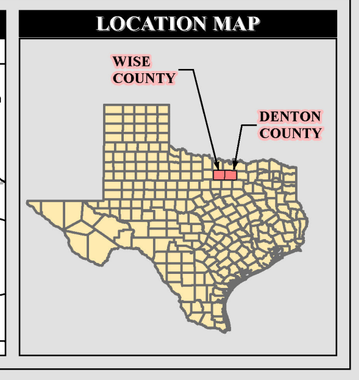


EXHIBIT ALZ-2
PAGE 1 OF 1

HALFF

ENGINEERING CONSTRAINTS

RAMHORN HILL SWITCH -- DUNHAM SWITCH
345 kV TRANSMISSION LINE PROJECT

ONCOR

INTERCONNECTED STORM SEWER SYSTEM:

DRAINAGE CHANNELS, INLETS, BURIED PIPE (POSSIBLE DETENTION)

EXISTING LOGISTICS ACCESS GATE (EMERGENCY ENTRANCE) AND PARKING / STAGING AREA:

CANNOT SPAN THIS LENGTH (APPROX. 1,500 LF) DUE TO CLEARANCE REQUIREMENTS

ABOVE-GROUND STORAGE TANK (PRIVATE / WATER)

ELEVATED WATER TOWER (TOWN OF NORTHLAKE)

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

SECURITY FENCE AROUND PROPERTY

NATURAL GAS PIPELINES

RESIDENTIAL AREA

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

ABOVE-GROUND STORAGE TANK (PRIVATE / WATER)

EXISTING 20' UTILITY EASEMENT OVERLAPPING THE EXISTING 50' DRAINAGE EASEMENT:

STRUCTURES CANNOT BLOCK DRAINAGE FLOW IN THE CHANNEL

EXISTING 20' UTILITY EASEMENT OVERLAPPING THE EXISTING DRAINAGE CHANNEL

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

NATURAL GAS PIPELINES

SECURITY FENCE AROUND PROPERTY

SECURITY FENCE AROUND PROPERTY

INTERCONNECTED STORM SEWER SYSTEM:

DRAINAGE CHANNELS, INLETS, BURIED PIPE (POSSIBLE DETENTION)

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

NEW CONSTRUCTION

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

EXISTING WATER EASEMENTS

EXISTING WATER FACILITIES ON EACH SIDE OF FENCE (FIRE HYDRANTS, VALVES)

NATURAL GAS PIPELINES

COMMUNICATION TOWER

NARROW SETBACKS TO ROADS, UTILITIES, AND BUILDINGS

35W

ASHMORE LN

SAM LEE LN

DALE EARNHARDT BLVD

CLEVELAND GIBBS RD

NORTHPORT DR

114 TEXAS

EXHIBIT ALZ-3
PAGE 1 OF 1

MAP FEATURES

- PARK / RECREATIONAL AREA
- USACE RECREATIONAL AREA
- EXISTING TRANSMISSION LINE
- EXISTING DISTRIBUTION LINE
- PUBLIC ROAD
- PIPELINE GREATER THAN 8"
- PIPELINE LESS THAN 8"
- RIVER / STREAM

Notes:

1. Some legend symbols are enlarged for easier identification.
2. Aerial photography is from the most recent available database (NearMap, 2023).
3. Data are for display purposes only. All features and boundaries have been approximated based on information gathered from review of public resources and from field reconnaissance.

Date Plotted: 6/6/2023
Date Revised: 6/6/2023

N W E S

0 125 250 500
SCALE IN FEET

0 0.05 0.1
SCALE IN MILES

MAP PANEL EXTENT

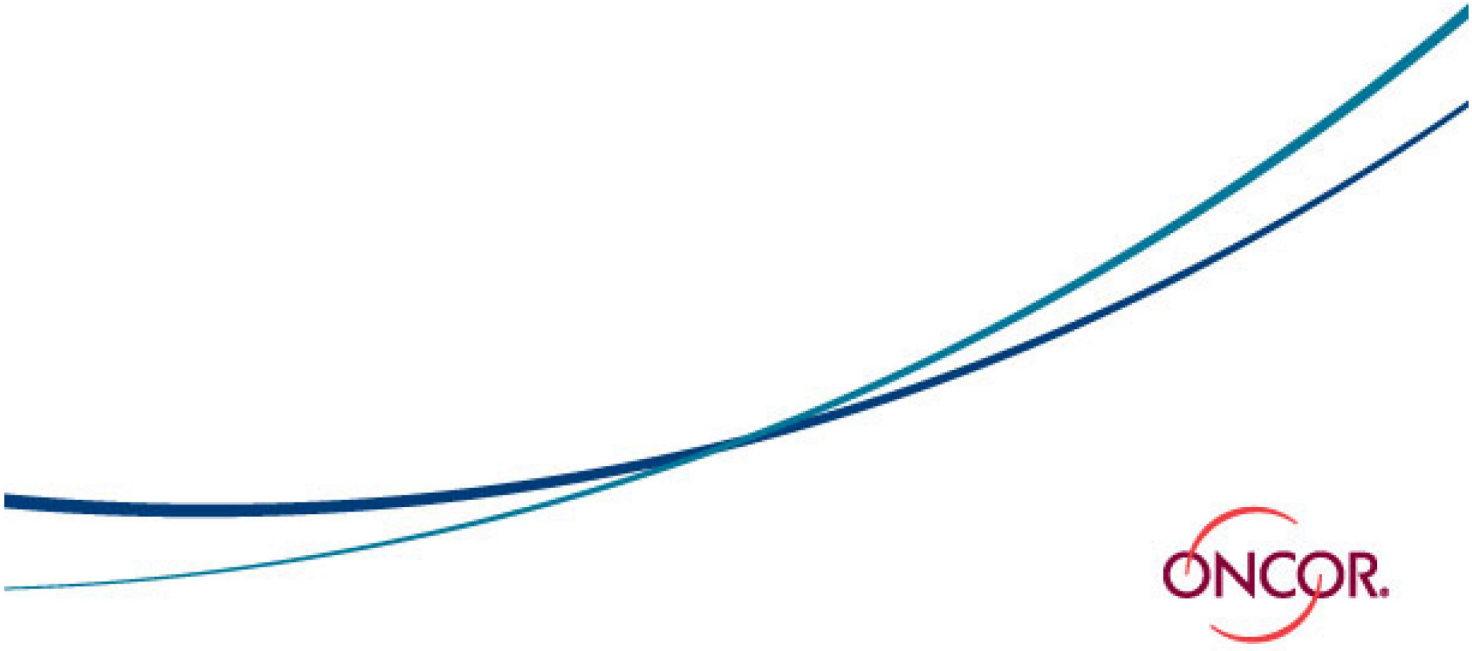
LOCATION MAP

WISE COUNTY
DENTON COUNTY

ONCOR TRANSMISSION ENGINEERING

Preliminary Design and Constructability Considerations

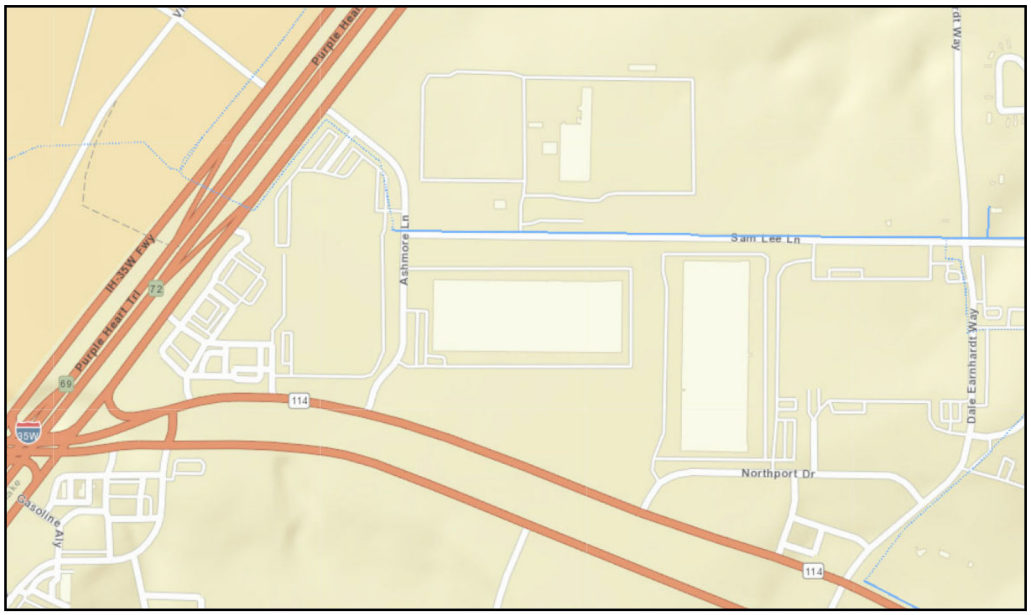
Installation of Two (2) 345 kV and One (1) 138 kV Overhead Circuits in Links south of USACE Property in Roanoke



Introduction of Site Visit on February 24, 2023:

Oncor engineering conducted field reconnaissance of the area generally located at the intersection of State Highway ("SH") 114 and Interstate Highway 35W ("I-35W") to determine the feasibility of this area for construction of a new double-circuit 345 kV transmission line. This reconnaissance, and the accompanying engineering analysis, determined that this area is not a feasible location for construction of the Ramhorn Hill-Dunham 345 kV transmission line project due to the lack of available space for construction, operation, and maintenance as well as the numerous other engineering constraints identified and discussed herein.

Public Areas Visited:



Area Constraints Identified:

Natural Gas Pipelines

Interconnected Storm Sewer System: Drainage Channels, Inlets, Buried Pipe (Possible Detention)

Above-Ground Storage Tanks for Water (Private Facilities)

Elevated Water Storage (Town of Northlake)

Residential Area

Natural Gas Pipelines

Narrow setbacks to roads, utilities, and buildings

Natural Gas Pipelines

Security Fence Around Property

Communication Tower

Natural Gas Pipelines

Pipelines along SH 114

Detention Easement

Narrow setbacks to roads, utilities, and buildings

Interconnected Storm Sewer System: Drainage Channels, Inlets, Buried Pipe (Possible Detention)

Narrow setbacks to roads, utilities, and buildings

Existing Water Easements

Existing water facilities on each side of fence (fire hydrants, valves)

Existing 20' Utility Easement overlapping the Existing 50' Drainage Easement: No Structures are allowed to block drainage flow in the channel

Existing 20' Utility Easement overlapping the Existing Drainage Channel

Existing Logistics Access Gate (Emergency Entrance) and Parking/Staging Area:

- Cannot span this length (approx. 1,500 LF) due to clearance requirements
- No Construction space for Turning Structures to maneuver around existing easements containing existing facilities

Existing Physical Constraints:

- Overhead Distribution Lines
  - Existing distribution lines are present on the north and south sides of Sam Lee Lane
    - North side: Oncor overhead ("OH") distribution with communication lines under-built ("U/B")
    - South side: CoServ OH distribution
    - South side: Existing street lighting system
    - Area is singularly certified to CoServ
  - Joint Use for distribution on Oncor Transmission structures supporting 345 kV (and those also with 138 kV U/B) is not practiced due to safety and maintenance concerns.
    - Requires construction of new transmission line within a 100' easement outside of public rights-of-way ("ROW") and outside of existing easements
    - Refer to Key Map and excerpts of recorded plats beginning on Page 11
  - Co-location of 345 kV, 138 kV, and distribution on same poles would create maintenance issues, potentially expose workers to energized high-voltage corridors, and would result in more outage requests to provide safe working environments
  - Approximate structure height required to achieve National Electric Safety Code ("NESC") clearances to the above constraints: minimum 170'
    - Standard structure height planned for project ~120'-175'
    - Taller structures would increase materials and labor costs
- Underground utilities and drainage facilities
  - Proposed 100' easement would need to abut, not overlap, existing easements
  - Easements contain existing underground gas and water pipelines
    - Range of Oncor structure foundation diameter: 12' to 15'
  - Cannot construct electric facilities within existing drainage easements (i.e. within the existing drainage channels) due to water flow requirements and erosion concerns affecting Oncor structures, drainage channels, and adjacent structures/facilities
- Existing Logistics Operations:
  - Immediate access to facilities is a requirement
  - Access would be hindered by the existing restricted- access, semi-trailer parking/staging area, and logistics operations
  - Continuous truck parking/loading places a semi-permanent encroachment within the transmission line ROW
- Interconnected Storm Sewer System
  - Includes drainage channels, inlets, buried pipes, and possible detention
  - Easements range from 20'-50'
  - Given the large non-standard structures that would be required in drainage areas, presence of transmission line would block flow of drainage channels and could decrease detention capacity, if applicable
  - Heavy design coordination and approvals would be required from the Agency with ownership and/or regulation authority
  - Presence of structures within the banks of the drainage channel creates erosion issues that would impact transmission line structures and adjacent facilities

- Narrow Setbacks from Existing Development
  - 100' ROW required to prevent conductor blowout and observe NESC clearances
  - Security fencing cannot be located within ROW unless gates installed and must cross at angle of at least 45 degrees

Construction Requirements:

- **Initial 345 kV Transmission Line Construction:**
  - Construction setup for heavy wires - Larger equipment is required
    - Requires a working space of 300 feet by 150 feet at Turning Structures
    - Requires road blockage of Sam Lee Lane for pulling wires ahead and back
  - Customer line outages required to de-energize for construction
  - Work space along Sam Lee Lane
    - Restricted access on fenced properties
    - Must maintain positive drainage within drainage channel during construction
    - Access for construction requires relocation of existing semi-trailer parking areas
- **Future Potential 138 kV Transmission Line Construction:**
  - Costly construction to work around constraints
  - Extended Customer line outages required for construction

Operations & Maintenance Considerations:

- Inaccessible structures within drainage areas
- Access will require reaching across an energized corridor

Visible Constraints:

Views of OH distribution looking west from 8601 Sam Lee Lane

View of security fencing Between Lots 11 and 12, Block 4, from 4500 Northport Drive (looking North)

View from 4500 Northport Drive (looking North)

View from 8601 Sam Lee Lane (looking East)

- Existing 20' Water Easement ("WE") on Lot 11 contains water facilities on the west side of the security fence along the north-south property line. Fire hydrants connect from the west side of the fence onto Lot 12. The 15' WE on Lot 12 intersects the 20' WE from the west.
- Areas do not have required working space for construction setup for Turning Structures or for pulling wire.
- Structures cannot be installed in this area unless water lines are relocated.
- Unknowns in this area – private storm sewer layouts

View inside security fence - looking west along Sam Lee Lane (20' WE for Fire Hydrants)
[Lot 11, Block 4, Northport Addition]

View of drainage channel and adjacent 20' Water Easements south of Sam Lee Lane
[Lot 10, Block 4, Northport Addition – restricted to drainage facilities]

View of semi-trailer parking/staging area, 50' drainage easement with channel, and overlapping 20' utility easement south of Sam Lee Lane
[Lot 8, Block 4, Northport Addition]

View of semi-trailer parking/staging area, 50' drainage easement with channel, and overlapping 20' utility easement south of Sam Lee Lane (looking east from Ashmore Lane)
[Lot 8, Block 4, Northport Addition]

View of drainage culvert (20' Drainage Easement connected to 50' Drainage Easement) and 15' CoServ Easement, south of Sam Lee Lane [Lot 8, Block 4, Northport Addition]
and
View of semi-trailer parking/staging area and 15' Pipeline Easement, east of Ashmore Lane
[Lot 1, Block 5, Northport Addition]

View of 20' Drainage Easement and overlapping 15' (centerline) Pipeline Easement
View of drainage channel and culvert connected to underground storm sewer
[North of Ashmore Lane (looking north) - Lot 3, Block 6, Northport Addition]

View from the drainage easement north of Ashmore Lane
[looking south from Lot 3, Block 6, Northport Addition]

View of new construction on west side of Ashmore Lane, south of Sam Lee Lane

Conclusion:

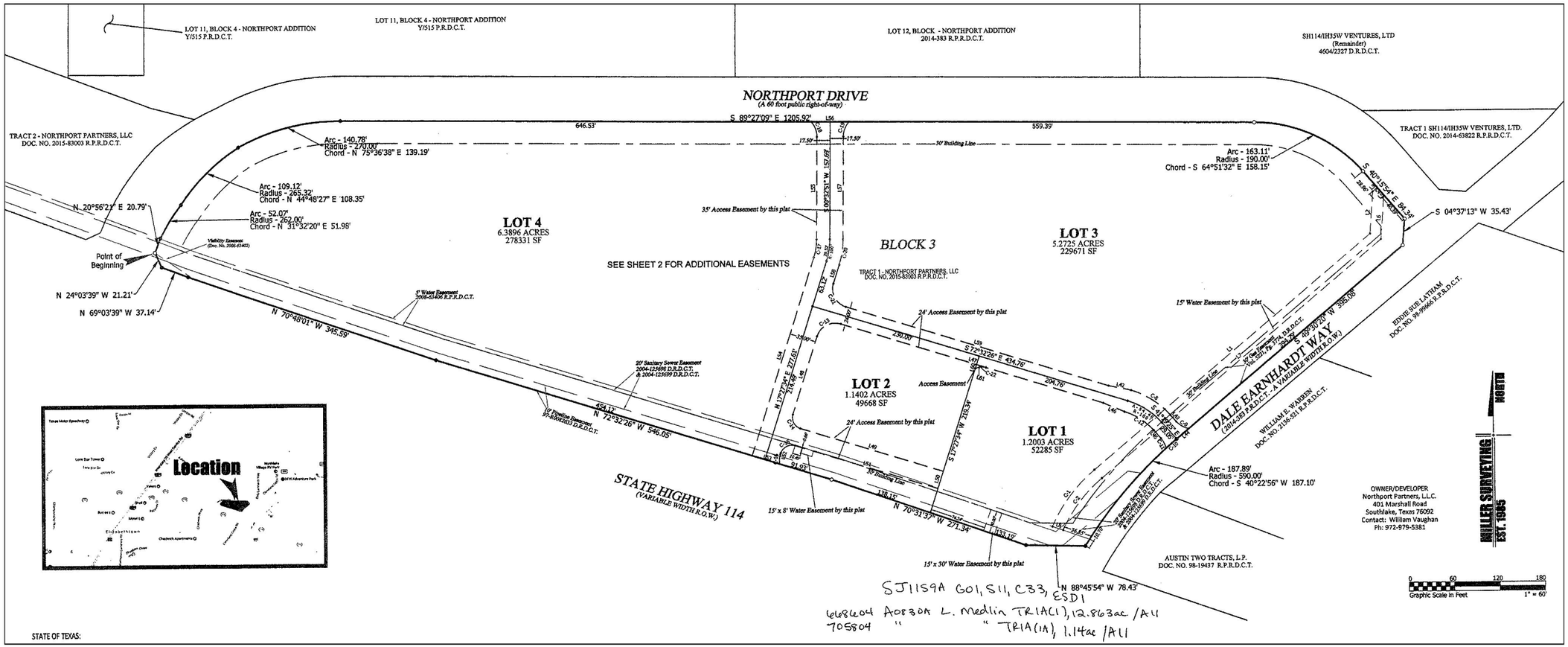
The presence of numerous engineering constraints in the area makes this location incompatible with construction of the Ramhorn Hill-Dunham 345 kV transmission line project. Available space is insufficient to set structures, pull conductor, establish temporary construction easements, and maintain the 100' ROW required for the project. Even if the project could be constructed in this location, existing development would create permanent constraints that could threaten the safe, reliable operation of the transmission line due to limitations on access and various established utilities/structures that would create significant, ongoing operational and maintenance challenges.

This is not a feasible area for routing the Ramhorn Hill-Dunham 345 kV transmission line project.

Recorded Plat Key Map References

Denton Central Appraisal District Web Map

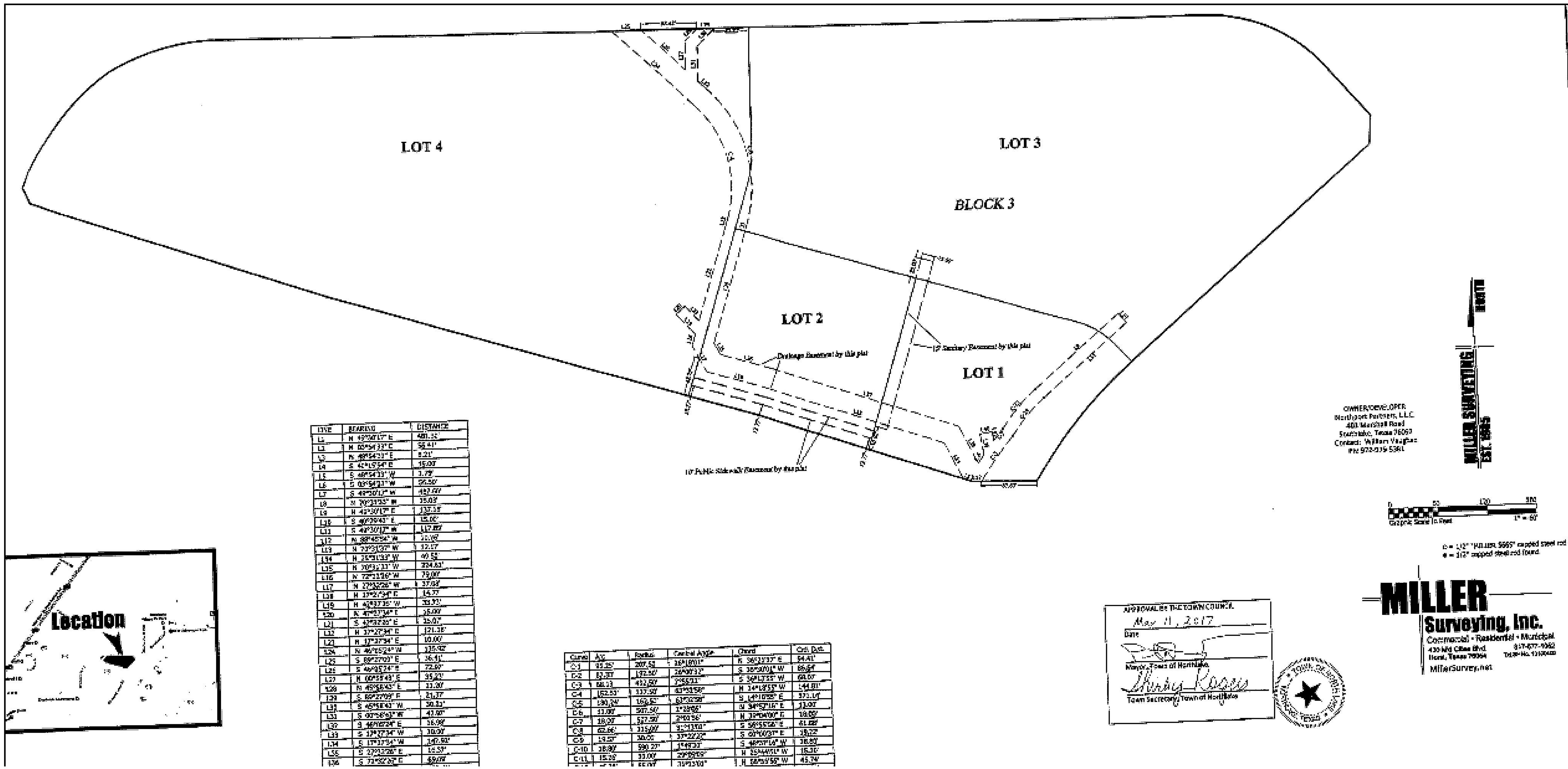
Excerpt of Northport Addition, Lots 1 Thru 4, Block 3 - Sheet 1 of 2
Recorded in Denton County Plat Records on January 2, 2018 (Document No. 2018 - 2)



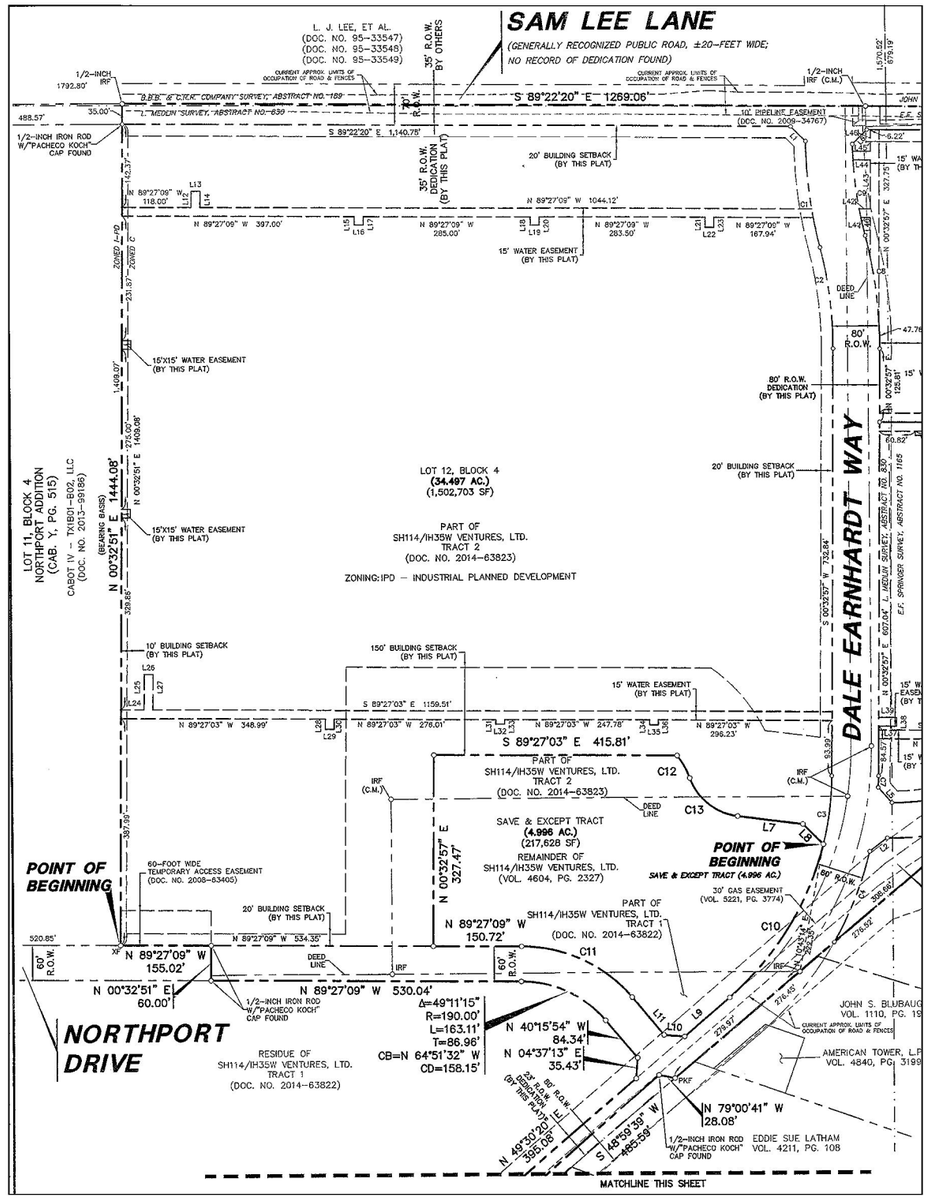
SJ1159A G01, S11, C33, ESD1
608604 A08304 L. Medlin TRIA(1), 12.863ac /All
705804 " " TRIA(1A), 1.14ac /All

STATE OF TEXAS:

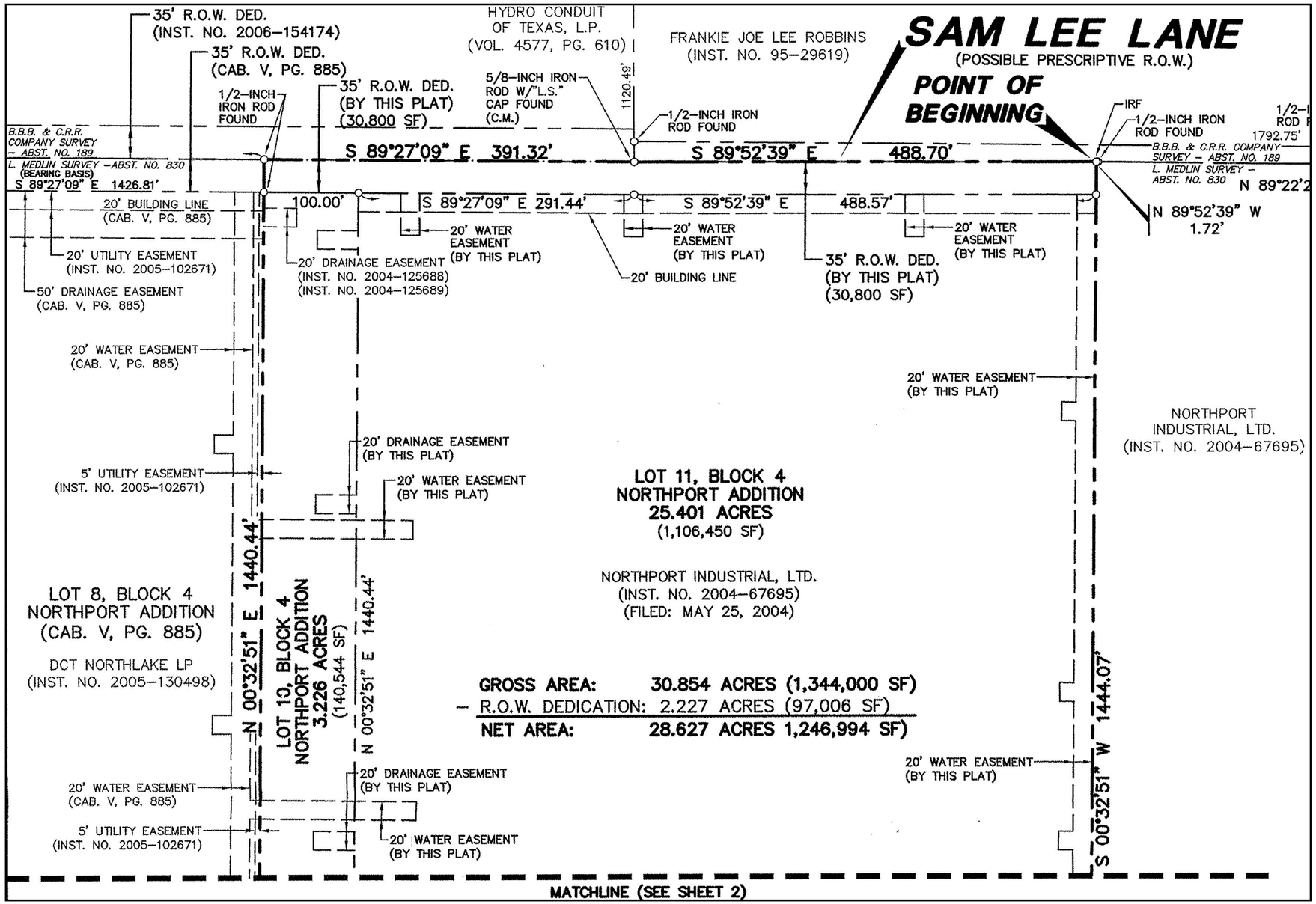
Excerpt of Northport Addition, Lots 1 Thru 4, Block 3 - Sheet 2 of 2
Recorded in Denton County Plat Records on January 2, 2018 (Document No. 2018 - 2)



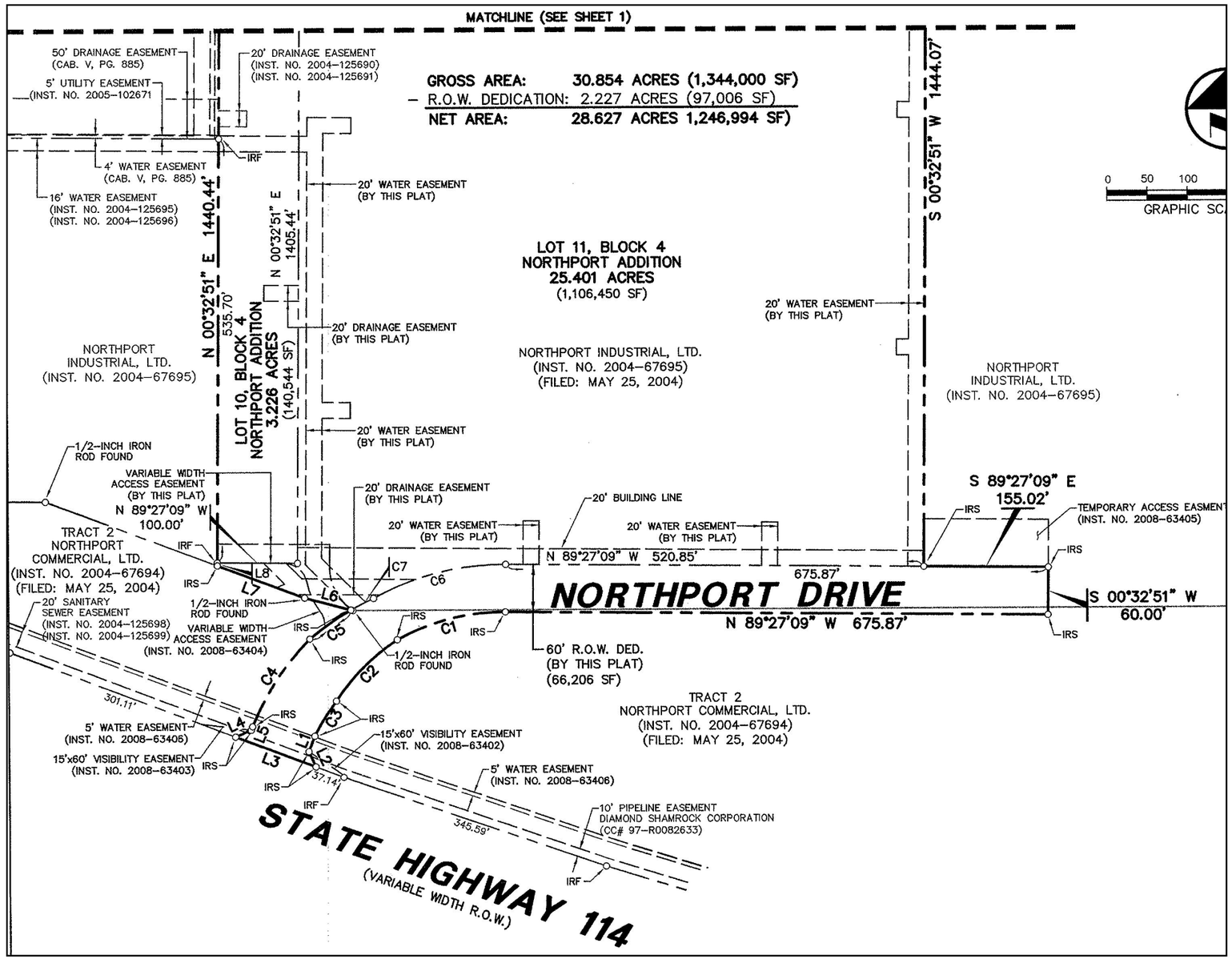
Excerpt of Northport Addition, Lots 1 & 2, Block 1; Lot 1, Block 2; & Lot 12, Block 4 - Sheet 1 of 2
Recorded in Denton County Plat Records on November 17, 2014 (Document No. 2014-383)



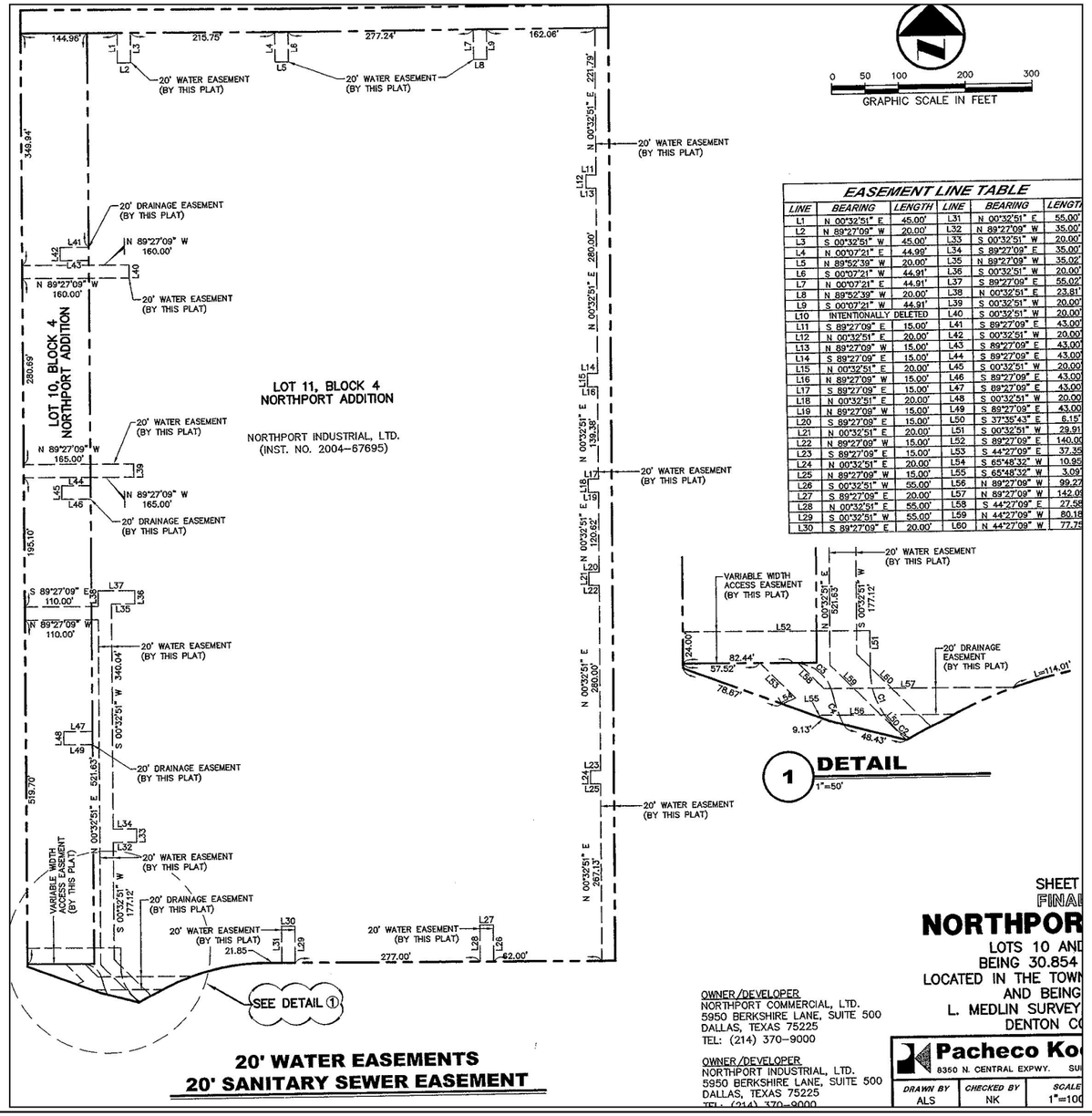
Excerpt of Northport Addition, Lots 10 and 11, Block 4 - Sheet 1 of 4
Recorded in Denton County Plat Records on July 11, 2008 (Cabinet Y, Page 515)



Excerpt of Northport Addition, Lots 10 and 11, Block 4 - Sheet 2 of 4
Recorded in Denton County Plat Records on July 11, 2008 (Cabinet Y, Page 516)



Excerpt of Northport Addition, Lots 10 and 11, Block 4 - Sheet 3 of 4 Recorded in Denton County Plat Records on July 11, 2008 (Cabinet Y, Page 517)



EASEMENT LINE TABLE

LINE	BEARING	LENGTH	LINE	BEARING	LENGTH
L1	N 00°32'51" E	45.00'	L31	N 00°32'51" E	55.00'
L2	N 89°27'09" W	20.00'	L32	N 89°27'09" W	35.00'
L3	S 00°32'51" W	45.00'	L33	S 00°32'51" W	20.00'
L4	N 00°07'21" E	44.99'	L34	S 89°27'09" E	35.00'
L5	N 89°52'39" W	20.00'	L35	N 89°27'09" W	35.02'
L6	S 00°07'21" W	44.91'	L36	S 00°32'51" W	20.00'
L7	N 00°07'21" E	44.91'	L37	S 89°27'09" E	55.02'
L8	N 89°52'39" W	20.00'	L38	N 00°32'51" E	23.81'
L9	S 00°07'21" W	44.91'	L39	S 00°32'51" W	20.00'
L10	INTENTIONALLY DELETED		L40	S 00°32'51" W	20.00'
L11	S 89°27'09" E	15.00'	L41	S 89°27'09" E	43.00'
L12	N 00°32'51" E	20.00'	L42	S 00°32'51" W	20.00'
L13	N 89°27'09" W	15.00'	L43	S 89°27'09" E	43.00'
L14	S 89°27'09" E	15.00'	L44	S 89°27'09" E	43.00'
L15	N 00°32'51" E	20.00'	L45	S 00°32'51" W	20.00'
L16	N 89°27'09" W	15.00'	L46	S 89°27'09" E	43.00'
L17	S 89°27'09" E	15.00'	L47	S 89°27'09" E	43.00'
L18	N 00°32'51" E	20.00'	L48	S 00°32'51" W	20.00'
L19	N 89°27'09" W	15.00'	L49	S 89°27'09" E	43.00'
L20	S 89°27'09" E	15.00'	L50	S 37°35'43" E	6.15'
L21	N 00°32'51" E	20.00'	L51	S 00°32'51" W	29.91'
L22	N 89°27'09" W	15.00'	L52	S 89°27'09" E	140.00'
L23	S 89°27'09" E	15.00'	L53	S 44°27'09" E	37.35'
L24	N 00°32'51" E	20.00'	L54	S 65°48'32" W	10.95'
L25	N 89°27'09" W	15.00'	L55	S 65°48'32" W	3.09'
L26	S 00°32'51" W	55.00'	L56	N 89°27'09" W	99.27'
L27	S 89°27'09" E	20.00'	L57	N 89°27'09" W	142.09'
L28	N 00°32'51" E	55.00'	L58	S 44°27'09" E	27.58'
L29	S 00°32'51" W	55.00'	L59	N 44°27'09" W	80.18'
L30	S 89°27'09" E	20.00'	L60	N 44°27'09" W	77.75'

1 DETAIL 1"=50'

OWNER/DEVELOPER
NORTHPORT COMMERCIAL, LTD.
5950 BERKSHIRE LANE, SUITE 500
DALLAS, TEXAS 75225
TEL: (214) 370-9000

OWNER/DEVELOPER
NORTHPORT INDUSTRIAL, LTD.
5950 BERKSHIRE LANE, SUITE 500
DALLAS, TEXAS 75225
TEL: (214) 370-9000

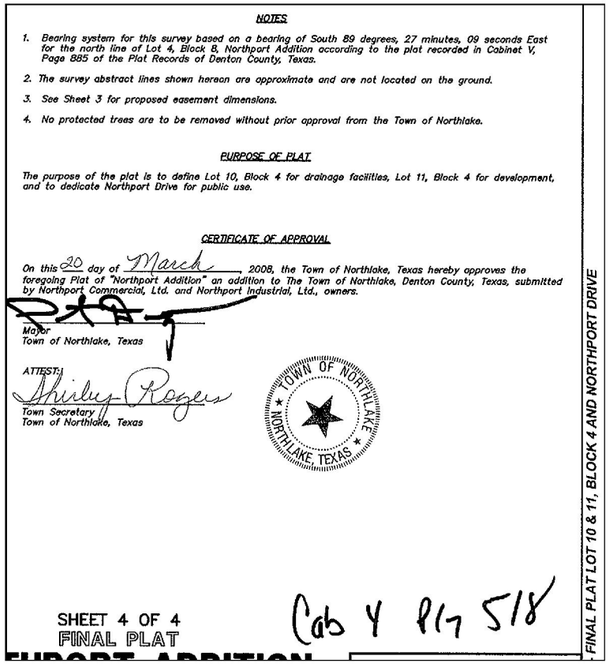
20' WATER EASEMENTS
20' SANITARY SEWER EASEMENT

SHEET
FINAL
NORTHPOR
LOTS 10 AND
BEING 30.854
LOCATED IN THE TOWN
AND BEING
L. MEDLIN SURVEY
DENTON C

Pacheco Ko
8350 N. CENTRAL EXPWY. SU

DRAWN BY	CHECKED BY	SCALE
ALS	NK	1"=100

Excerpt of Northport Addition, Lots 10 and 11, Block 4 - Sheet 4 of 4 Recorded in Denton County Plat Records on July 11, 2008 (Cabinet Y, Page 518)



NOTES

1. Bearing system for this survey based on a bearing of South 89 degrees, 27 minutes, 09 seconds East for the north line of Lot 4, Block B, Northport Addition according to the plat recorded in Cabinet V, Page 885 of the Plat Records of Denton County, Texas.
2. The survey abstract lines shown hereon are approximate and are not located on the ground.
3. See Sheet 3 for proposed easement dimensions.
4. No protected trees are to be removed without prior approval from the Town of Northlake.

PURPOSE OF PLAT

The purpose of the plat is to define Lot 10, Block 4 for drainage facilities, Lot 11, Block 4 for development, and to dedicate Northport Drive for public use.

CERTIFICATE OF APPROVAL

On this 20 day of March 2008, the Town of Northlake, Texas hereby approves the foregoing Plat of "Northport Addition" an addition to The Town of Northlake, Denton County, Texas, submitted by Northport Commercial, Ltd. and Northport Industrial, Ltd., owners.

Mayor
Town of Northlake, Texas

ATTEST:
Shirley Rogers
Town Secretary
Town of Northlake, Texas

TOWN OF NORTHLAKE
NORTHLAKE, TEXAS

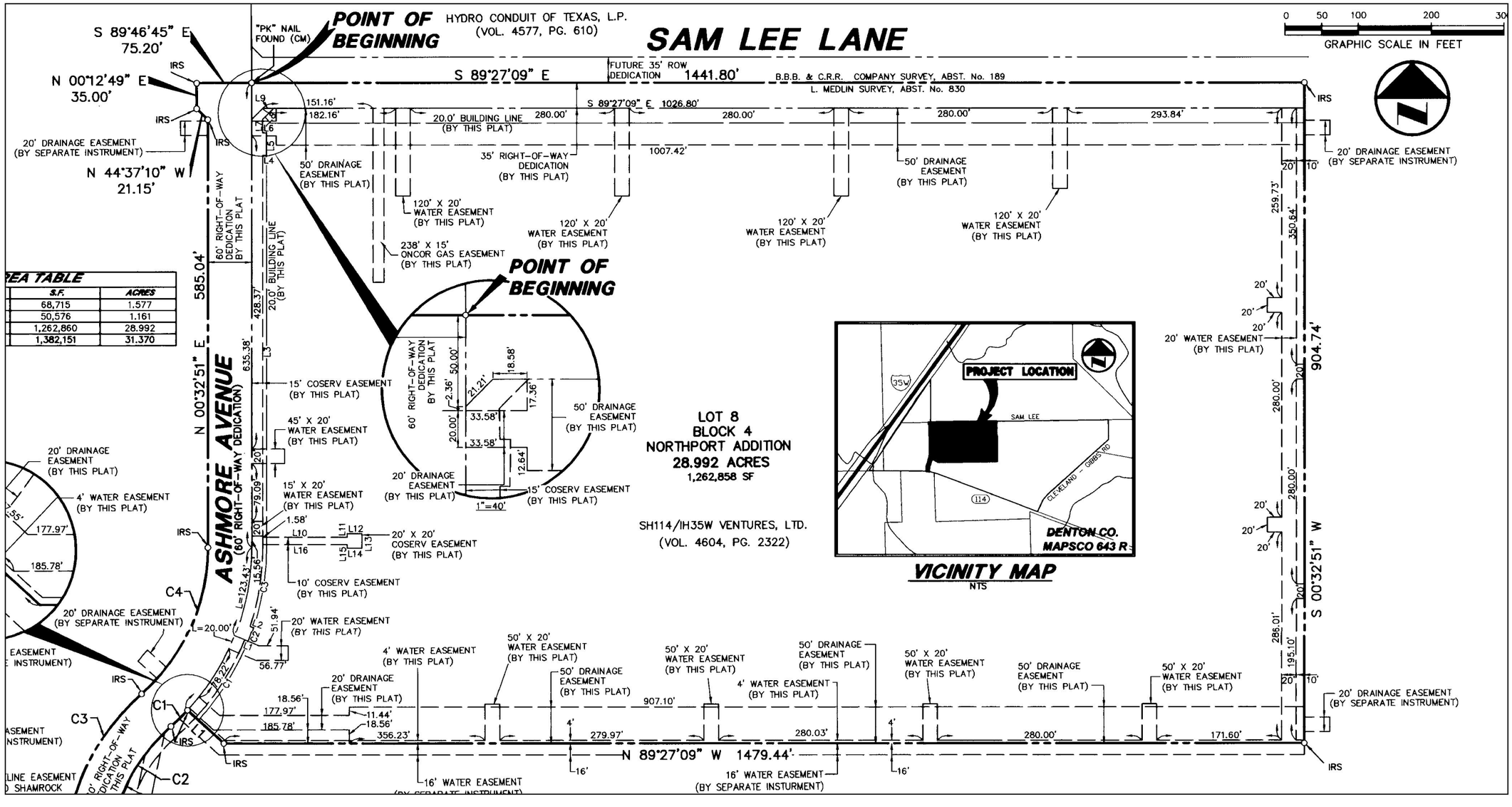
SHEET 4 OF 4
FINAL PLAT
NORTHPORT ADDITION

Cab Y Pg 518

FINAL PLAT LOT 10 & 11, BLOCK 4 AND NORTHPORT DRIVE

Excerpt of Lot 8, Block 4, Northport Addition - Sheet 1 of 2
Recorded in Denton County Plat Records on September 23, 2004 (Cabinet V, Page 885)

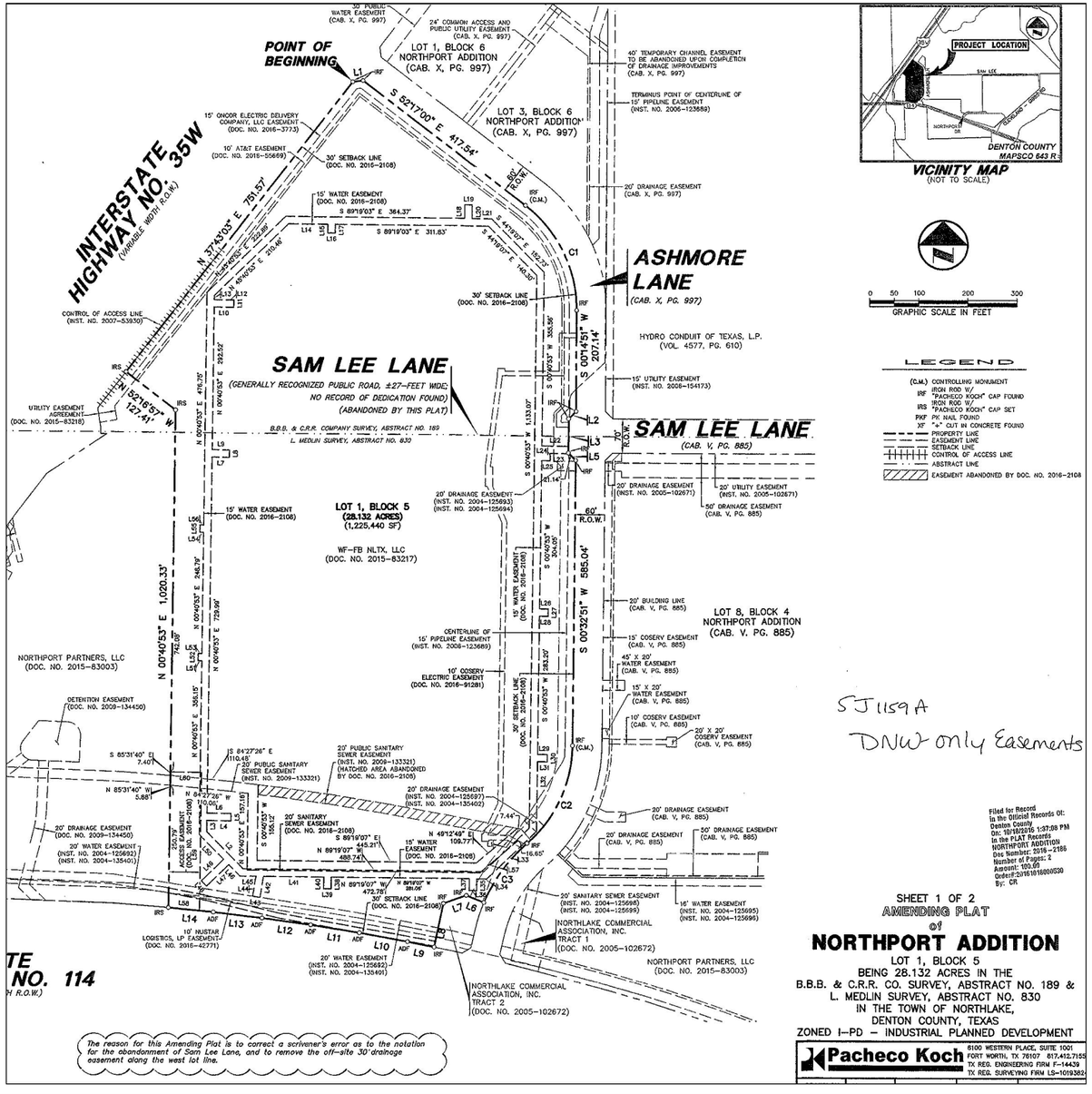
Note: Ashmore Avenue is shown on subsequent recorded plats as Ashmore Lane



REA TABLE

S.F.	ACRES
68,715	1.577
50,576	1.161
1,262,860	28.992
1,382,151	31.370

Excerpt of Amending Plat of Northport Addition, Lot 1, Block 5, Sheet 1 of 2 - Recorded in Denton County Plat Records on October 18, 2016 (Document No. 2016-2186)
Also shows existing recorded easements on Lot 8, Block 4, Northport Addition (Cabinet V, Page 885)



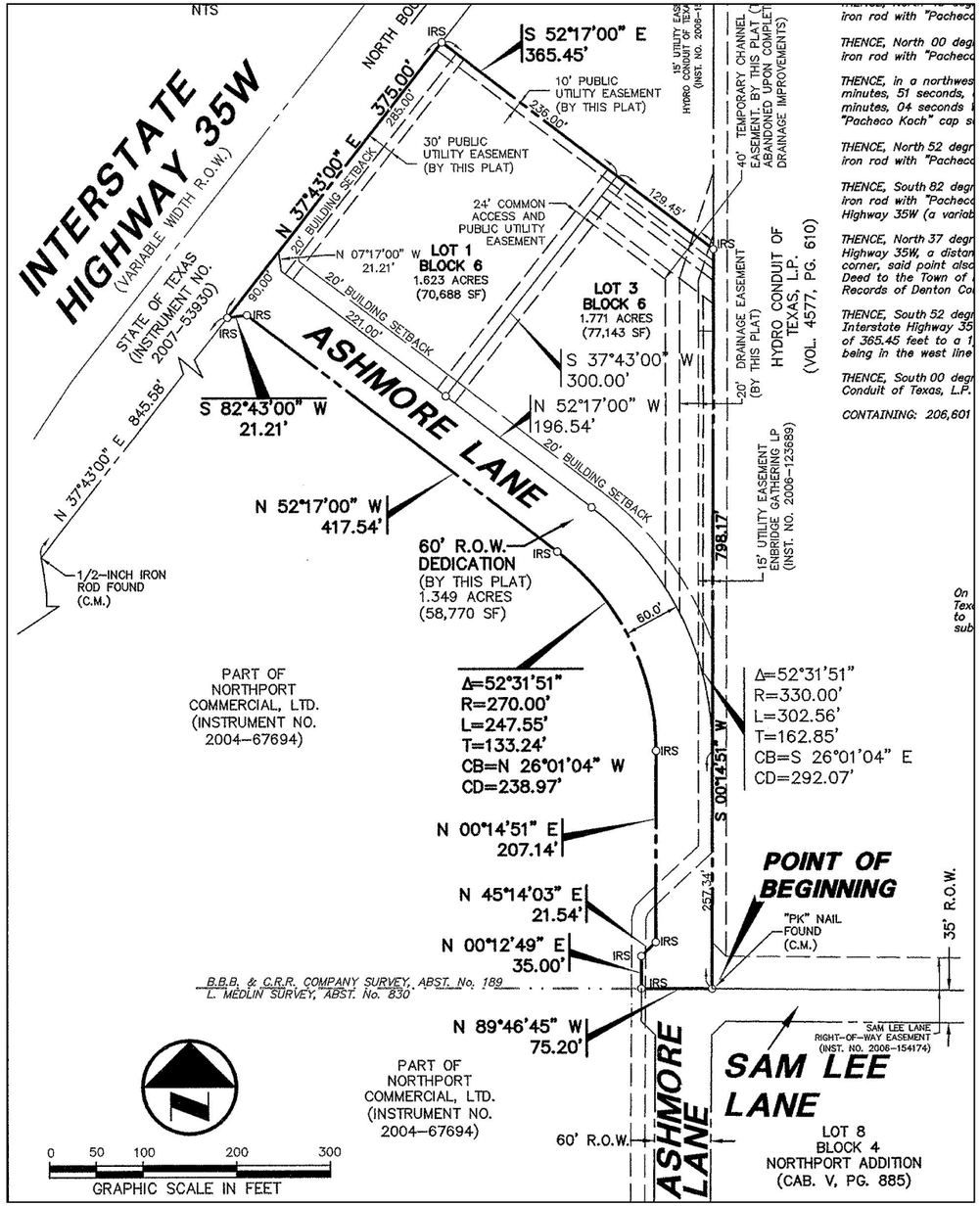
SHEET 1 OF 2
AMENDING PLAT
of
NORTHPORT ADDITION
LOT 1, BLOCK 5
BEING 28.132 ACRES IN THE
B.B.B. & C.R.R. CO. SURVEY, ABSTRACT NO. 189 &
L. MEDLIN SURVEY, ABSTRACT NO. 830
IN THE TOWN OF NORTHLAKE,
DENTON COUNTY, TEXAS
ZONED I-PD – INDUSTRIAL PLANNED DEVELOPMENT

Pacheco Koch
6100 WESTERN PLACE, SUITE 1001
FORT WORTH, TX 76107 817.412.7155
TX REG. ENGINEERING FIRM F-14439
TX REG. SURVEYING FIRM LS-10193820

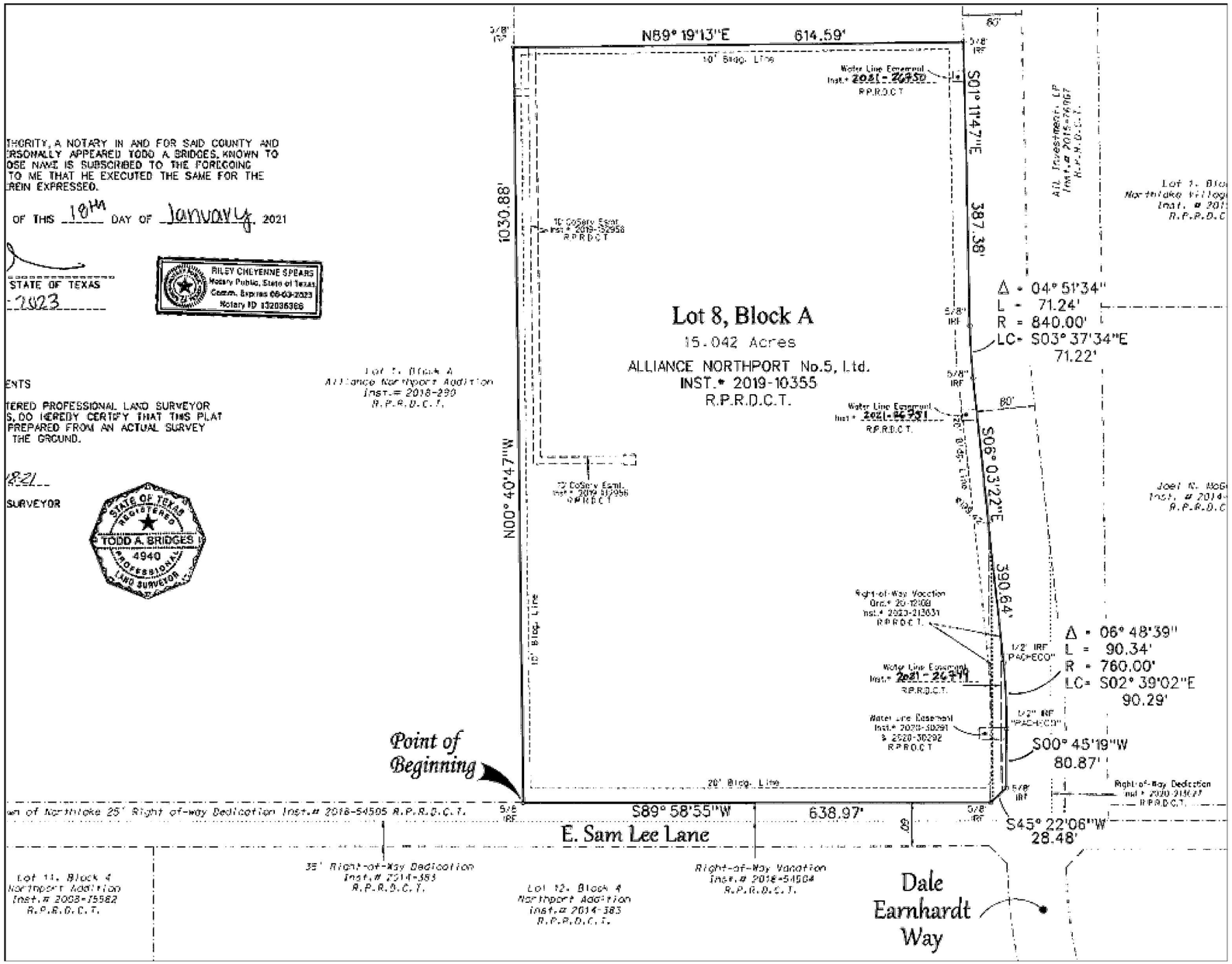
SJ 1159A
DNW only Easements

Filed for Record
in the Official Records Of:
Denton County
On: 10/18/2016 1:57:08 PM
in the PLAT Records
NORTHPORT ADDITION
Doc Number: 2016-2186
Number of Pages: 2
Amount: 100.00
Order#:20161018000030
By: CR

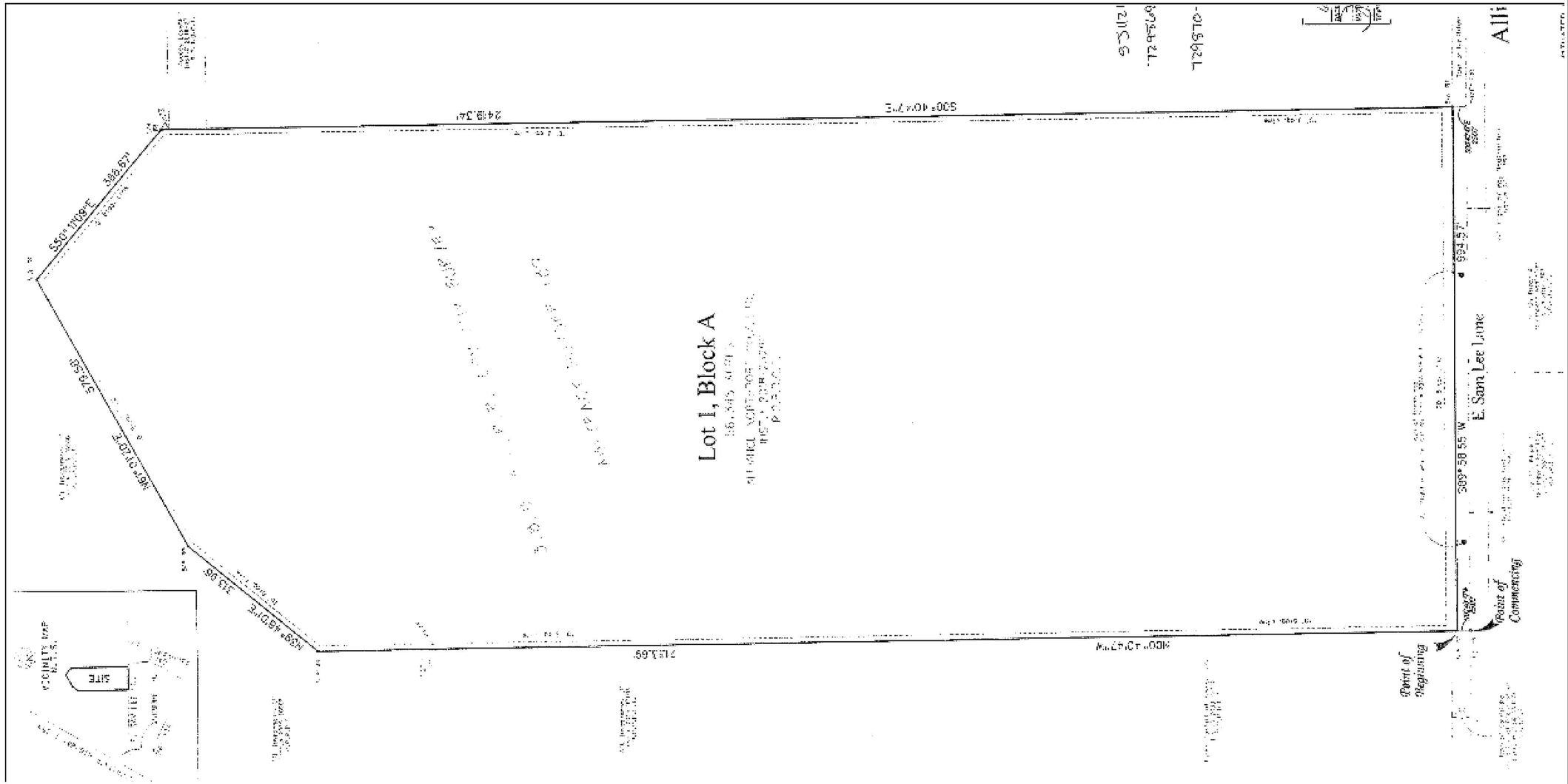
Excerpt of Northport Addition, Lot 1 & 3, Block 6 - Recorded in Denton County Plat Records on October 1, 2007 (Cabinet X, Page 997)



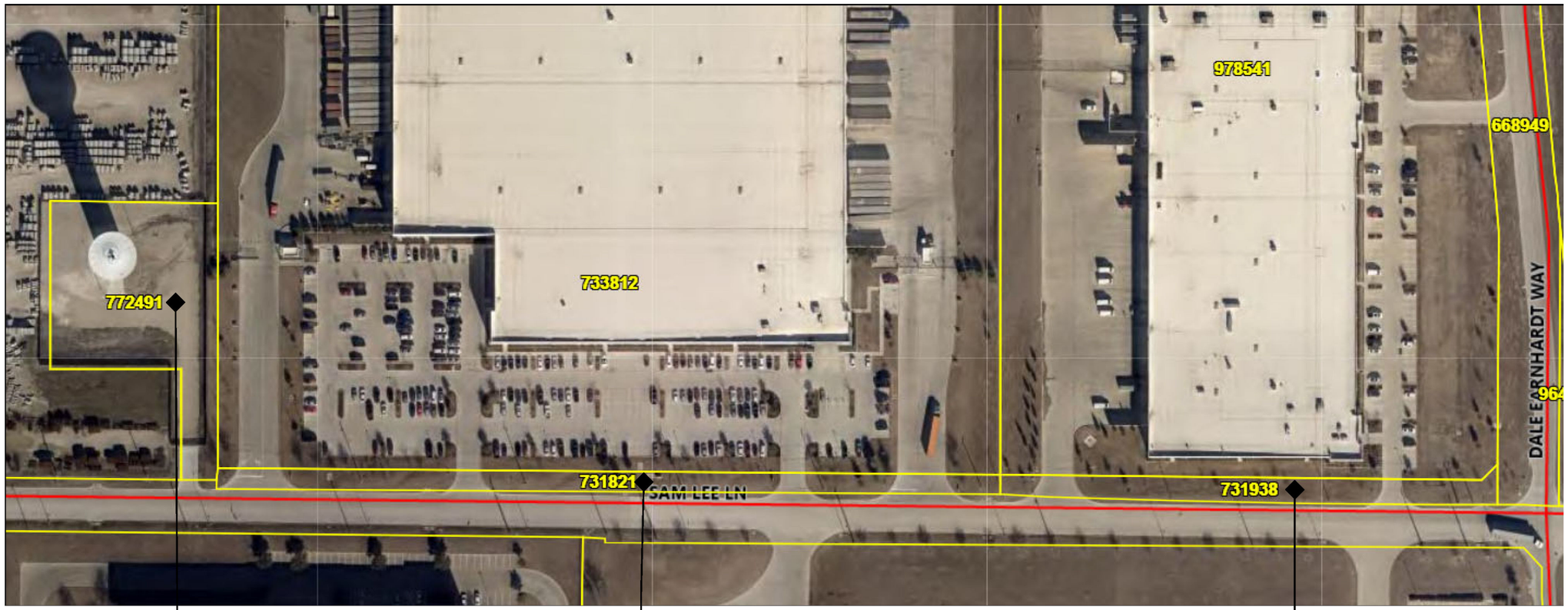
Excerpt of Alliance Northport Addition, Lot 8, Block A - Recorded in Denton County Plat Records on February 12, 2021 (Document No. 2021-64)



Excerpt of Alliance Northport Addition, Lot 1, Block A - Recorded in Denton County Plat Records on June 29, 2018 (Document No. 2018-290)



Denton Central Appraisal District Web Map - Town of Northlake Property Records



Property ID: 772491

View Detailed Property Information
View Plat

Property Information
Legal Description: A0189A BBB & CRR, LOT 6B, 1.1500 ACRES,

Property Location
8363 SAM LEE
ROANOKE, TX 76262

Ownership Information
NORTHLAKE, TOWN OF
1500 COMMONS CIR STE 300
NORTHLAKE, TX 76226-1598

Property ID: 731821

View Detailed Property Information
View Plat

Property Information
Legal Description: A0189A BBB & CRR, TR 7B(PT)(ROW), 0.571 ACRES

Property Location

Ownership Information
NORTHLAKE, TOWN OF
1500 COMMONS CIR STE 300
NORTHLAKE, TX 76226-1598

Property ID: 731938

View Detailed Property Information
View Plat

Property Information
Legal Description: A0189A BBB & CRR, TR 7(PT)(ROW), 0.383 ACRES

Property Location

Ownership Information
NORTHLAKE, TOWN OF
1500 COMMONS CIR STE 300
NORTHLAKE, TX 76226-1598