



CAD Files for Harris County

Presented by Holly McDonald & Eric Worthington



Procedures of Mapping a New Subdivision in Harris County

- The Harris Central Appraisal District is a political subdivision of the State of Texas established in 1980 for the purpose of discovering and appraising property for ad valorem tax purposes. The district has approximately 1.9 million parcels of property to assess each year with a total market value of approximately \$905 billion. The Harris Central Appraisal District receives over 1,600 new subdivisions to map each year.



GIS at HCAD

- The GIS Mapping team consists of 11 Mapping Specialists and 5 Analysts. The GIS team maintains the GIS parcel data and jurisdictions boundaries in Harris County.
- Not only does the GIS team maintain the parcel data, but also data management, internal and external applications. Providing data to the public- PData- <https://hcad.org/hcad-online-services/pdata>
- The parcel maintenance process consists of several steps and can take up to 10 months from start to finish. With certification in August as the completed timeframe.

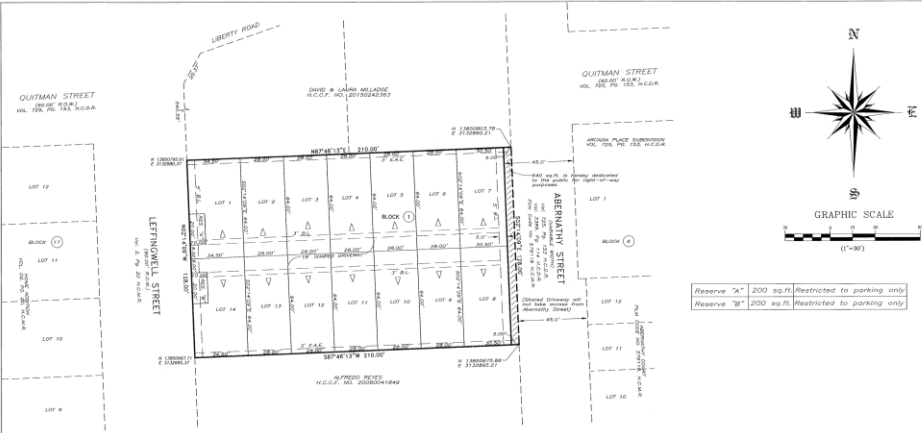
Step 1

- The developer buys property and contracts a surveyor. The surveyor uses GPS units to survey the property. The land is then divided into one or multiple parcels.



Imagery Source: EagleView

Step 2



STATE OF TEXAS COUNTY OF HARRIS
 We, Jose Bas Rivera Diaz & Erika Susset Rodriguez, owner of (or owners) hereinafter referred to as Owners (whether one or more) of the 0.6171 acres described in the above and foregoing map of lots in Abnerby Street, do hereby make and establish said subdivision and development plat of said property according to all laws, regulations, restrictions and notations on said maps or plat and hereby dedicate to the use of the public forever, all streets, (except those streets designated as private streets, or easement access easements), alleys, parks, water courses, drains, easements and public places herein for the purposes and considerations therein expressed and do hereby bind ourselves, our heirs, successors and assigns to warrant and forever defend the title on the said as indicated.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purposes forever undivided several easements. The several easements shall extend horizontally on additional easement feet (1'x2') for ten feet (10'x2') perimeter ground easements or seven feet, six inches (7'6") for fourteen feet (14'x2') perimeter ground easements or five feet, six inches (5'6") for sixteen feet (16'x2') perimeter ground easements. From a given subject lot (14'x2') above ground level upward, located adjacent to and adjoining said public utility easements that are designated with serial easement (S.E. and A.E.) as indicated and depicted herein, whereby the several easement totals hereby one feet, six inches (1'6") in width.

FURTHER, Owners have dedicated and by these presents do dedicate to the use of the public for public utility purposes forever undivided several easements. The several easements shall extend horizontally on additional ten feet (10'x2') for ten feet (10'x2') back-to-back ground easements, or eight feet (8'x2') for fourteen feet (14'x2') back-to-back ground easements or seven feet (7'x2') for sixteen feet (16'x2') back-to-back ground easements. From a given subject lot (14'x2') above ground level upward, located adjacent to and adjoining said public utility easements that are designated with serial easement (S.E. and A.E.) as indicated and depicted herein, whereby the several easement totals hereby one feet, six inches (1'6") in width.

FURTHER, Owners do hereby declare that all portions of land designated as lots on this plat are originally intended for the construction of single family residential units thereon and shall be restricted for same under the terms and conditions of this restriction. First appearing.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat is hereby restricted to prevent the siting of any public or private street, permanent access easement, road, alley, or any drainage ditch, either directly or indirectly.

FURTHER, Owners do hereby dedicate to the public a strip of land fifteen feet (15'x2') wide on each side of the centerline of any one of bypass, creek, gulch, ravine, draw, slough or other natural drainage courses located in and along with the boundaries of this plat and the easements, easements and easements of any lots for the purpose of construction and maintenance of drainage easements and structures.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat and adjacent to any drainage easement, ditch, public creek or natural drainage way is hereby restricted to keep such drainage ways and easements clear of fences, pools, buildings, sheds, plantings or structures and other obstructions to the easements, easements and easements of any lots for the purpose of construction and maintenance of drainage easements and structures.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat and adjacent to any drainage easement, ditch, public creek or natural drainage way is hereby restricted to keep such drainage ways and easements clear of fences, pools, buildings, sheds, plantings or structures and other obstructions to the easements, easements and easements of any lots for the purpose of construction and maintenance of drainage easements and structures.

WITNESSETH We (or our) hands in the city of Houston, Texas, this 25th day of Oct. 2024.

Jose Bas Rivera Diaz
 Jose Bas Rivera Diaz, Owner

Erika Susset Rodriguez
 Erika Susset Rodriguez, Owner

LIENHOLDERS ACKNOWLEDGMENT AND SUBORDINATION STATEMENT
 I, [Name], owner and holder of a lien (or liens) against the property described in the plat known as Views at Abernathy Street, do hereby acknowledge and agree that the lien (or liens) being evidenced by instrument of record in the Clerk's File No(s) [Instrument No(s)] of the [County Name], Texas, do hereby in all things subordinate our interest in said property to the purposes and effects of said plat and the dedications and restrictions shown herein to said subdivision, plat and I (or we) hereby confirm that I am (or we are) the present owner (or owners of said lien (or liens)) and have not assigned the same nor any part thereof.

Jose Martinez
 Jose Martinez, My Commission Expires 1/12-2024

STATE OF TEXAS COUNTY OF HARRIS
 BEFORE ME, the undersigned authority, personally appeared **Jose Martinez**, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 25th day of Oct. 2024
 Notary Public in and for the State of Texas
 My Commission Expires 1/12-2024

STATE OF TEXAS COUNTY OF HARRIS
 BEFORE ME, the undersigned authority, on this day personally appeared **Jose Bas Rivera Diaz & Erika Susset Rodriguez**, known to me to be the persons whose names (if any) are subscribed to the foregoing instrument and acknowledged to me that they executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 23rd day of Oct. 2024
 Notary Public in and for the State of Texas
 My Commission Expires 4/12-2024

PARKS AND OPEN SPACE
 1. No land is being established as private park or dedicated to the public for park purposes.
 2. No building, parcel or other parcel, except permits for construction of public utility easements, shall be sited on the lot or lots of this plat which are the lands reserved under provisions of this plat for the use of or dedication to the City of Houston, Texas, has been submitted and accepted by the City.
 3. This property is located on public section 17.7.
 4. Use coverage (100%) must be applied to the lot or lots of this plat.
 5. The street corner lot in lieu of dedication shall be applied to the number (14) of the street corner.

Views At Abernathy Street
 A Subdivision of 0.6171 acres (26,240 square feet) of land in Harris County, Texas, Block Survey, Abating No. 124, Harris County, Texas, dated 11/12/2014.

LOTS: 14 RESERVES: 2 BLOCK: 1
 OWNER: Jose Bas Rivera Diaz & Erika Susset Rodriguez
 Survey No. 3177

DENSITY TABLE

NO. OF DWELLINGS	GROSS AREA	DENSITY
14 UNITS	0.6171 AC	22.69

The number of single family residential dwelling units that can be constructed within the proposed subdivision does not exceed an equivalent density of 22 units to the gross acre of land within the boundaries of the subdivision plat.

ABBREVIATIONS:
 A.E. - Area Easement
 B.E. - Building Easement
 C.E. - Conveyance Easement
 D.E. - Draining Easement
 F.E. - Fencing Easement
 G.E. - Gas Easement
 H.E. - Home Easement
 I.E. - Irrigation Easement
 J.E. - Joint Easement
 K.E. - Kitchen Easement
 L.E. - Land Easement
 M.E. - Maintenance Easement
 N.E. - Natural Easement
 O.E. - Other Easement
 P.E. - Power Easement
 Q.E. - Quarry Easement
 R.E. - Right-of-Way Easement
 S.E. - Sewer Easement
 T.E. - Telephone Easement
 U.E. - Utility Easement
 V.E. - Vehicle Easement
 W.E. - Water Easement
 X.E. - Xmas Tree Easement
 Y.E. - Yard Easement
 Z.E. - Zoned Utility Corporation
 A.D. - Area of Deposit
 A.P. - Area of Protection
 A.S. - Area of Service
 A.T. - Area of Transfer
 A.U. - Area of Use
 A.V. - Area of Value
 A.W. - Area of Work
 A.X. - Area of Xmas
 A.Y. - Area of Yards
 A.Z. - Area of Zoning
 B.D. - Building Department
 B.E. - Building Easement
 B.F. - Building Footing
 B.G. - Building Ground
 B.H. - Building Height
 B.I. - Building Inset
 B.J. - Building Joint
 B.K. - Building Kiosk
 B.L. - Building Load
 B.M. - Building Material
 B.N. - Building Noise
 B.O. - Building Orientation
 B.P. - Building Permit
 B.Q. - Building Quality
 B.R. - Building Record
 B.S. - Building Section
 B.T. - Building Type
 B.U. - Building Use
 B.V. - Building Value
 B.W. - Building Width
 B.X. - Building Xmas
 B.Y. - Building Yard
 B.Z. - Building Zoning

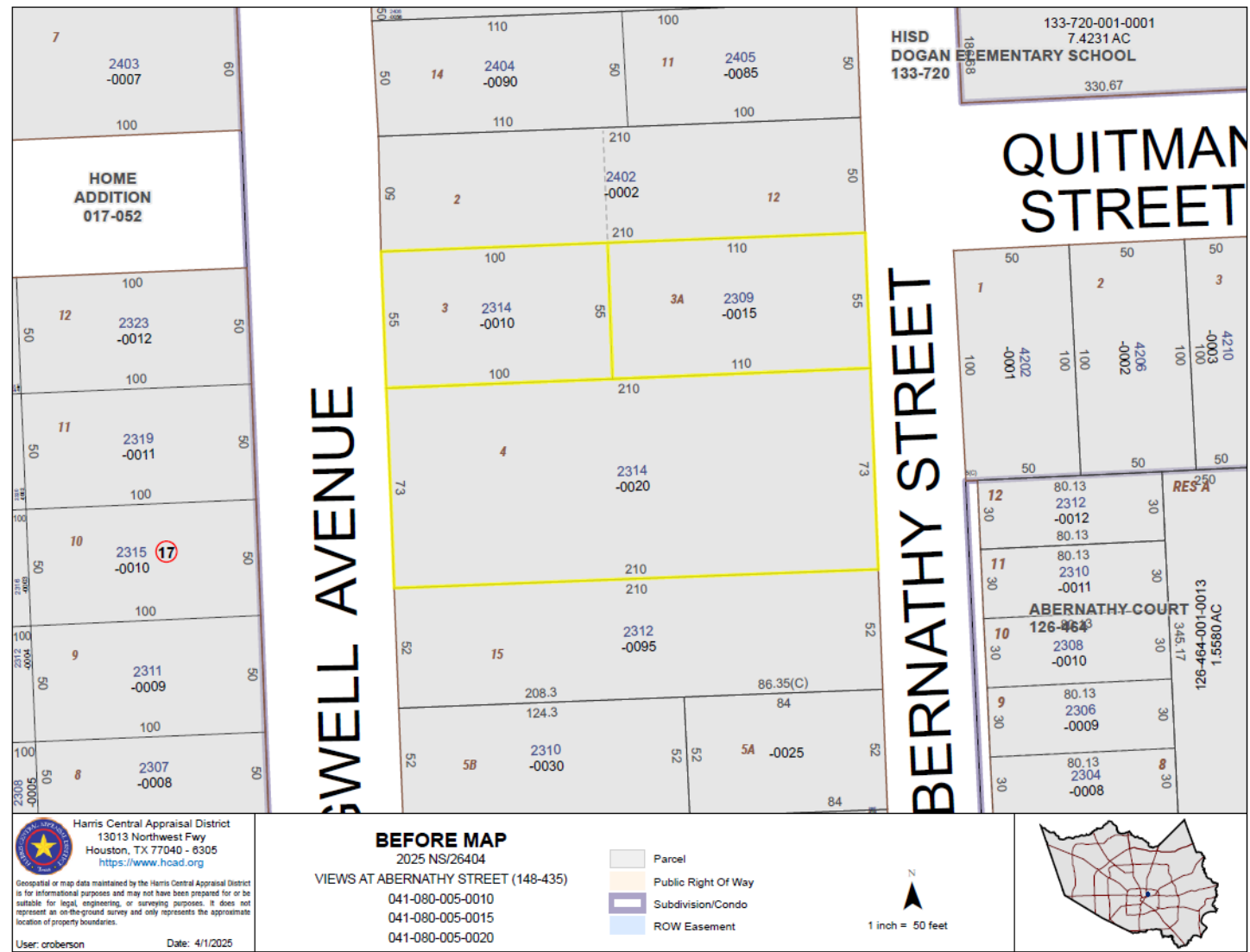
REVISIONS:
 1. [Description of revision]
 2. [Description of revision]
 3. [Description of revision]

PROFESSIONAL SURVEY SERVICES
 12000 WESTMEIER ROAD, SUITE 106
 HOUSTON, TEXAS 77077
 PHONE: (281) 531-1900 FAX: (281) 531-4900
 TBP/L Registration No. 10122400
 May 30, 2023 SCALE: 1" = 30'

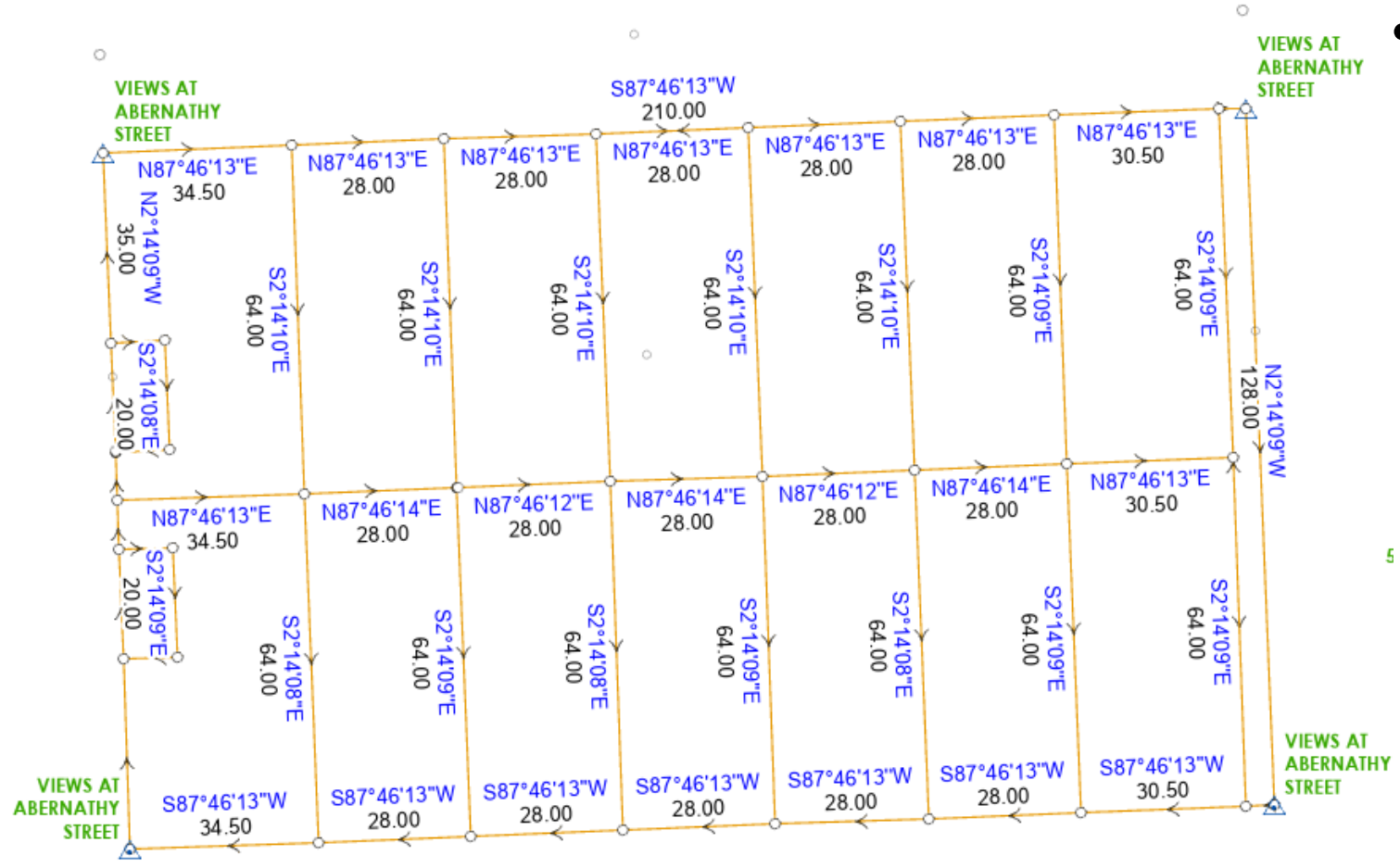
• Once the plat is sent to the Harris County Clerk to be recorded. The Harris Central Appraisal District then downloads the information.

Step 3

- The GIS Specialist locates the original parcel(s) in ArcGIS Pro ©.



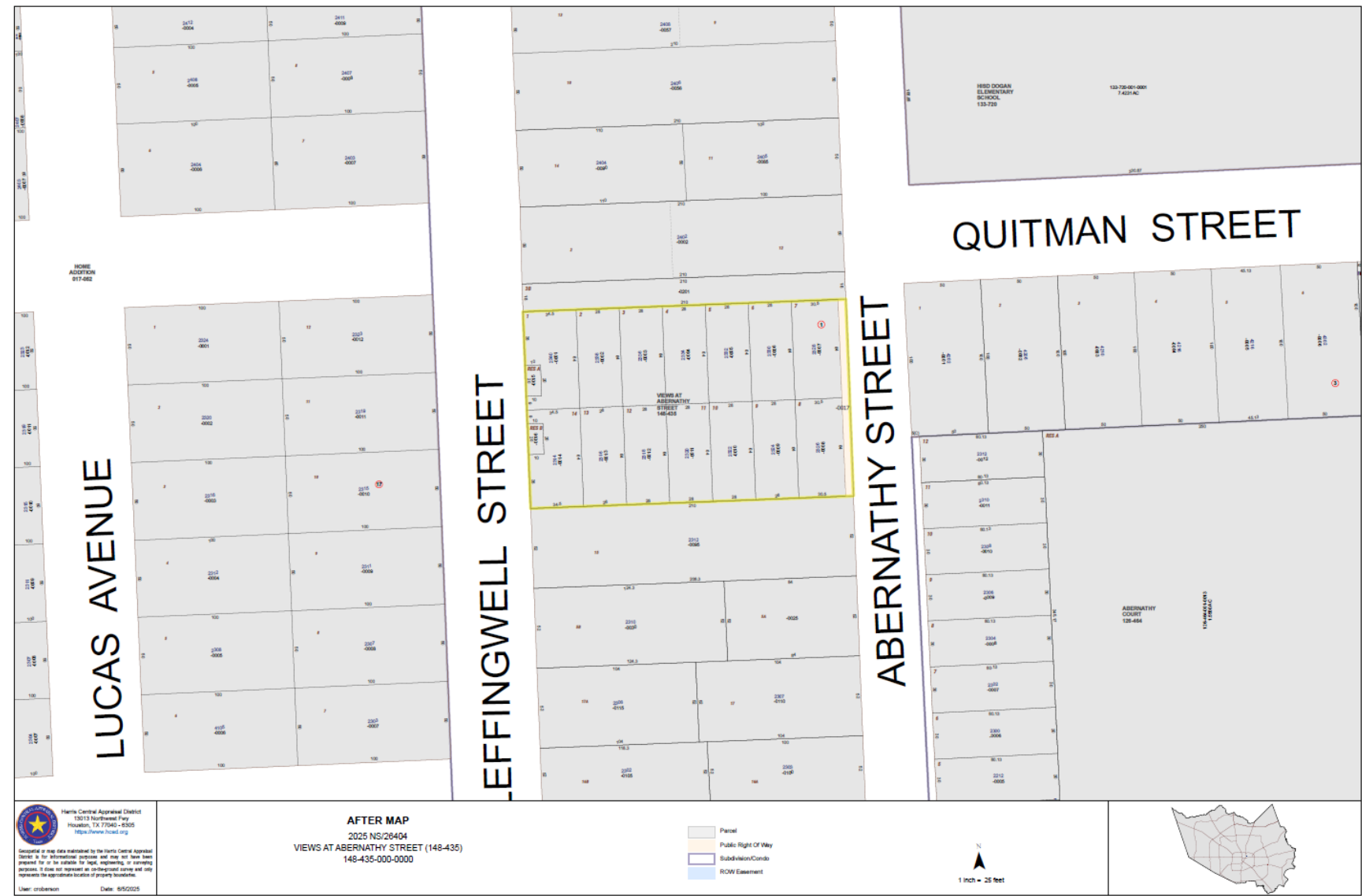
Step 4



- The subdivision is moved into place using X Y coordinates. Coordinate geometry is used to digitize the new subdivision from the information provided on the plat. The GIS Specialist will enter in the COGO manually by entering in each call or by CAD or DWG file which is faster.

Step 5

- The GIS Specialist adds the attributes of the subdivision. The subdivision is then created and will be appraised.



Harris Central Appraisal District
13013 Northwest Freeway
Houston, TX 77060-8505
https://www.hcad.org

Accepted or map data maintained by the Harris Central Appraisal District. It is for informational purposes and does not have been prepared for or is suitable for legal, engineering, or planning purposes. It does not represent an on-the-ground survey and only represents the approximate location of property boundaries.

User: ordismann Date: 6/5/2025

AFTER MAP
2025 NS/28404
VIEWS AT ABERNATHY STREET (148-435)
148-435-000-0000

Parcel
Public Right Of Way
Subdivision/Condo
ROW Easement

1 inch = 25 feet





Brainstorming!

- HCAD is currently operating off of pdf data from the County Clerk.
- The digital data to create the recorded documents is unavailable to the HCAD Specialists who modify the Parcel Database.
- Access would reduce the time required to update the Parcel Database.
- An ideal world would involve a final digital copy passed through to HCAD at the time of recordation.



The Path Forward

- HCAD is interested in capturing digital data to improve workflow efficiencies
- Reduced time for Parcel Maintenance results in timely data updates
- The mechanism for this has yet to be determined and we're seeking input from our fellow local platting authorities as well as the private firms creating this data.
- Low cost, ease of use and following the K.I.S.S. principal.



Challenges

- Barriers to efficiency:
 - Outdated Filing Requirements
 - Platting Requirements at the local level
 - Software versions compliant with ESRI Parcel Fabric
 - Varying firm technology
 - Data quality, Standardization, Spatial accuracy
 - Marginalizing increased costs of business



Contact Information

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