

**ARTICLE NINE
Unified Development Code**

Adopted: July 7, 2015



PLANNED DEVELOPMENT (PD) APPLICATION

**SECTION 1. APPLICANT/OWNER INFORMATION
Please Print or Type**

Applicant/Developer: GARABEDIAN PROPERTIES
Street Address: P.O. Box 93984
City: SOUTHLAKE State: TX Zip: 76092
Telephone: 817-748-2669 Fax: _____ E-mail: _____
Applicant's Status: (Check One) Owner Tenant Prospective Buyer

Property Owner must sign the application or submit a notarized letter of authorization.

Owner: HUYNH & VIYAPON, LLC - Attn. Sara Viyapon
Street Address: 1212 Whitley Rd.
City: Keller State: TX Zip: 76248
Telephone: 817-602-6725 Fax: _____ E-mail: _____

DocuSigned by:
Mike Garabedian
Signature of Applicant
Date: 1/10/2024 | 8:34 PM CST

DocuSigned by:
Sarany Viyapon
Signature of Owner Printed Name of Owner
Date: 1/10/2024 | 5:20 PM PST

PLANNER
Engineer/Surveyor: SAGE GROUP Contact Name(s): CURTIS YOUNG
Street Address: 1130 N. CARROLL AVE, #200
City: SOUTHLAKE State: TX Zip: 76092
Telephone: 817-424-2626 Fax: _____ E-mail: _____

SECTION 2. PLANNED DEVELOPMENT REQUEST INFORMATION

Property Location: 1212 WHITLEY ROAD, KELLER, TX
Legal Description:
Lot(s): _____ Block(s): _____ Subdivision Name: _____
Unplatted Property Description: J. Edwards, # 457 &
Abstract Name & Number: W.J. HOWLAND, #692 Tract Number(s): SEE SURVEY
If property is not platted, please attach a metes and bounds description.
Current Zoning: C-COMMERCIAL Proposed Zoning: PD-PLANNED DEVELOPMENT
Current Use of Property: VACANT
Proposed Use of Property: RESIDENTIAL NEIGHBORHOOD

Written Proposal for PD:

A detailed letter of justification and/or exhibits shall accompany this application.





15' B.L.



PATIO

TWO STORY

(2) CAR GARAGE

20' B.L.
(@ GAR)

10' B.L.

CONC DRIVE

5' B.L.

1' B.L.





15' B.L.

PATIO

ONE STORY

1' B.L.

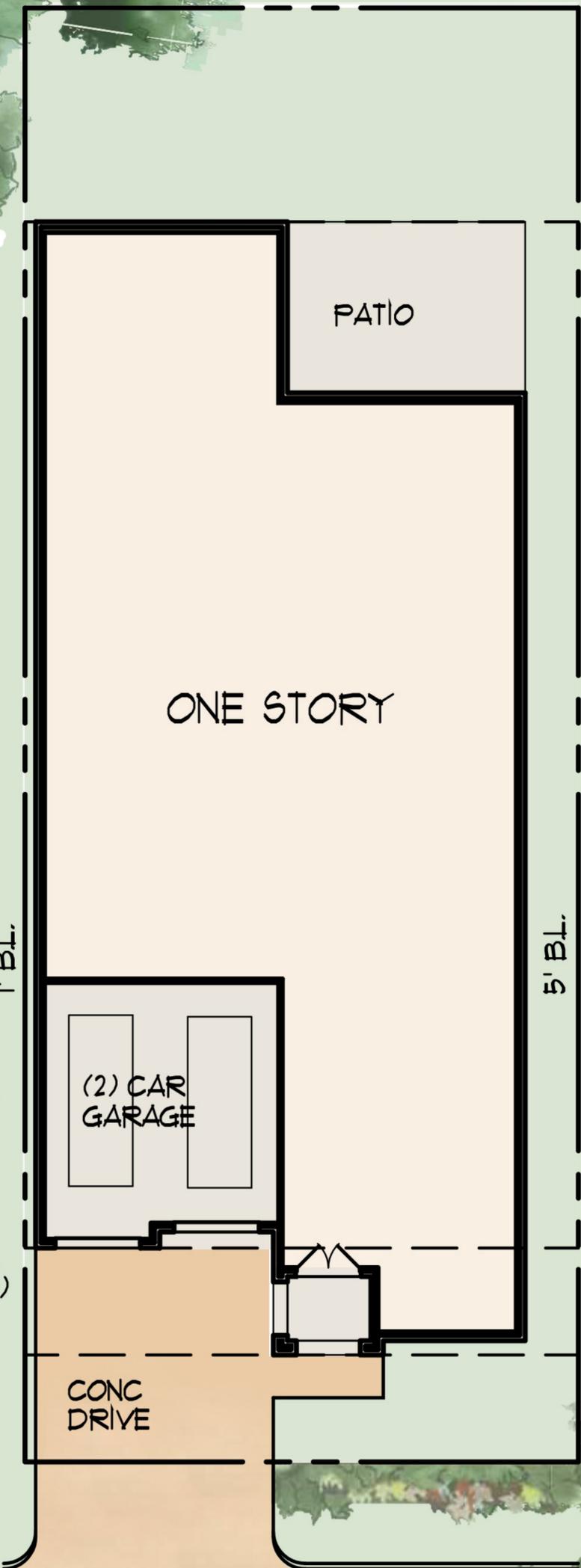
5' B.L.

(2) CAR GARAGE

20' B.L.
(@ GAR)

10' B.L.

CONC DRIVE



Whitley Springs

Keller, Texas

Garabedian Properties, LLC
Zoning Case #: Z- 24-0001

Sage Group, Inc.
May 15, 2024

Request for Amendment to the City of Keller Zoning Plan

Today, we are excited to present to you “Whitley Springs” the proposed residential community of luxury patio homes in Keller, Texas.

The Property:

Whitley Springs is located along the west side of Whitley Road, across from the Rapp Road intersection, which the city is proposing be reconstructed into a roundabout. The property is bounded by Whitley Road on its East side; existing residential to the north; a church to the south, and developed/ undeveloped Commercial property to the west. The proposal includes 22 patio home sites and common open space areas on 4.33 acres, a density of 5.08 homes per gross acre. Common Open Space totals 0.65 acres, or 15.01% of the site for the project. The proposed plan takes the proposed roundabout into consideration, and allocates the necessary ROW. It also includes a portion of the existing, unbuilt right-of-way north and west of the project, with the understanding that this will need to be abandoned by the city. (See Concept Plan.)

Existing Zoning/ Land Use Designation/Requested FLUP Amendment

The existing zoning designation attached to the property is C (Commercial), but it is mostly designated as PGT- Patio/Garden/Townhomes on the Future Land Use Plan of the City of Keller. We are requesting an amendment to the Future Land Use Plan for the small portion (approx. 48,699 sf) of the project on the currently designated RTC, to PGT. This proposal will be consistent with that designation.

Proposed Zoning

The property within this submittal will be developed and used in accordance with the PD standards contained within the “Design Standards,” which are a part of this proposal.

Compatibility of Proposed Zoning with surrounding Zoning and Land Uses:

We feel the proposed zoning for this site will act as an effective transitional use between the Commercial Uses along US-377, and the Single-Family Residential uses along the east side of Whitley Road, which it appears was the purpose of the PGT designation.

Important Physical Features

The site generally drains toward the southeast (to Whitley Road), with some drainage sheet-flowing to the north.

Zoning Change Need

The zoning change is requested to best utilize this piece of property, as there is a need for this high-quality single-family housing in the Keller area. The City is becoming increasingly “built out” and development of smaller tracts, of this size, are the next logical step within the City

Limits. We feel the proposed zoning for this site will be very compatible with the surrounding uses, and provide yet another great neighborhood to Keller.

Adequacy of Public Facilities and Services

City water and sewer services are readily available at this site. The proposed subdivision will be served by an existing major water main within Whitley Road and a trunk waste water line located to the east along US-377.

The storm water drainage plan has been submitted with this proposal. All proposed infrastructure (roads, water, sewer, storm drainage) will be designed per City Code.

Home Owners Association

A Home Owners Association will be formed which will be responsible for the maintenance of all entry features, landscaping within Open Space Lots, and Open Space Lot Maintenance

Perimeter Screening, Fencing and Street Trees

As noted on the Concept Plan exhibit, there will be a combination masonry wall and ornamental iron fence built along Whitley Road, adjacent to the lots and behind the open space lots along Whitley. (Please see attached Concept Sketch of the frontage.)

Perimeter fencing shall be as follows:

- Along the south side of the southern entry road (where the ROW runs along the southern boundary adjacent to the church property, a 6' ornamental iron fence shall be installed with the development, and maintained by the HOA.
- Along the 35' wide open space area to the rear of Lots 1-4, which are adjacent to a future commercial phase of the project, there shall be a 6' ornamental iron fence installed. There is heavy tree cover in this location, and in addition to the 35' landscape/ open space buffer, an additional landscape buffer will be established on the commercial tract there, to be maintained by the commercial parcel owner/ user.
- Along the remainder of the perimeter of the project, adjacent to residential lots, there shall be a 6' wooden fence, with a top cap, supported by metal poles in concrete foundations.

All fences on Residential Lots, fronting (parallel to) the streets, shall be of ornamental iron, and shall not extend forward of the front building setback line.

On the residential lots, each lot shall have at least: one (1), minimum 3" caliper Shade Tree, planted within the street parkway, and one (1) additional either Shade or Ornamental tree planted in the front yard.

Sidewalks

A 5' concrete sidewalk shall be installed along all internal residential lot street frontages, as shown on Zoning Concept Plan. The Home Builders shall install sidewalks in front of all residential lots with the construction of the homes; the developer shall install all other sidewalks. In addition, a 6' concrete Trail along the Whitley Road frontage, and accessing the Open Space will be provided, generally as shown on the Zoning Concept Plan.

Project Schedule / Phasing

Assuming zoning is granted, project will proceed immediately to final design, platting and development. It is anticipated that the project will be developed in one phase.

Keller – Whitley Springs Design Standards

Zoning Case No. Z-24-0001

The following design standards shall apply to the Whitley Springs development:

1. All lots shall be SF- Detached Residential; zoned “Planned Development- Patio Homes.”
2. Minimum lot sizes shall be 47.5’ width, and 105’ deep; minimum area of 5,000 s.f..
3. Minimum Front Setbacks: 10 feet; front facing garages 20’. (Front facing garages where the garage door faces the street; not including J-swing garages.)
4. Minimum Side Yard Setbacks shall be 1’ and 5’. Minimum separation between structures shall be 6’.
5. Minimum Rear Yard Setback: 15’
6. Minimum House Size: The homes on all lots shall have a 2,000 s.f. minimum house size built upon them.
7. Maximum Height: 2 ½ story/ 35’ for the main building.
8. Maximum Lot Coverage: 70% for main building and 80% for main building and accessory buildings.
9. Maximum Accessory Building Area: 500 s.f.
10. Minimum of a 2-car garage shall be provided in all homes, set back from the street up to 10’ beyond the front setback of the home; no less than 20’ back from the ROW.
11. Front Elevation Features
 - a. Each residence shall contain at least four (4) of the following ‘Features’:
 - i. Divided light windows on street facing elevations (front elevation and sides on corner lots)
 - ii. Enhanced masonry details
 - iii. Metal seam roof accents
 - iv. Shutter accents
 - v. Cast stone accents
 - vi. At least 2 masonry materials (i.e. cementitious siding, brick and stone)
 - vii. Decorative coach lighting
 - viii. Pavers for sidewalk and/or driveway
 - ix. Low voltage landscape and path lighting
12. Exterior wall materials for residences
 - a. 100% masonry on the front elevation (brick, stone or cementitious siding), except for areas above the roofline, which would be limited to masonry or cementitious siding with a minimum 50-year warranty.
 - b. 80% overall masonry per elevation.

13. Roofing materials and pitch
 - a. 5:12 minimum primary roof pitch. Roof materials shall be constructed of at least 40-year shingles. Three-tab shingles are prohibited.
14. Garage door materials and decorative design
 - a. Raised panel, wood or decorative garage door(s) with opener.
15. Driveways shall be no wider than 20'.
16. Driveway surface materials (concrete, pavers, etc.)
 - a. Finished concrete, broom finish with smooth border at joints, pavers, or stamped and/or stained concrete.
17. Landscaping and irrigation requirements for individual lots:
 - a. All lots shall have full irrigation systems. Street trees shall be on bubbler irrigation.
 - b. There shall be at least one canopy tree installed between sidewalk and curb adjacent to each front yard. Corner lots shall be required 3 street trees. One located in the front and two located on the side. Street trees shall have a minimum 30-foot and maximum 50-foot separation. Canopy Trees shall be a minimum of 3" caliper at installation, and shall be chosen from the list of tree species in the "Keller, Texas - Code of Ordinances; PART III - UNIFIED DEVELOPMENT CODE, Article Ten - TREE PRESERVATION, Section 10.02 – Tree Preservation Exhibits, Exhibit A- Quality Trees, Large Trees."
 - c. All front yards shall be fully landscaped, with a minimum of one (1) minimum 3" caliper Canopy or 2" caliper Understory tree (chosen from the aforementioned Exhibit A- Quality Tree lists for Large and Understory Trees), and 10 shrubs.
18. The fence design along the northern and western boundary shall be either a 6' pre-stained cedar, with metal poles, top cap, top side trim, or a 6' Iron Fence, as shown on the Wall/Fence Diagram on the PD Concept Plan.
19. Fences adjacent to the Whitley Road frontage and/or the open space area shall be either 6' Masonry or Iron, as shown on the Wall/Fence Diagram on the PD Concept Plan.
20. A 6' Iron Fence will be installed by the Developer along the south property line, adjacent to the ROW of the southern east/west street, as shown on the Wall/Fence Diagram on the PD Concept Plan.
21. The development's open spaces shall be landscaped in accordance with the conceptual landscape plans provided and that more detailed landscape plans prepared by a Registered Landscape Architect shall be reviewed and approved by the Keller Development Review Committee prior to Final Plat approval. Open Space landscaping and irrigation must be installed and operational prior to final inspection of the first home in the development.

22. Decorative street lighting and/or street sign poles
 - a. Enhanced decorative street signs.
 - b. Sidewalks shall be built along the street frontage of each lot by the home builder or developer, as shown on the Site Plan exhibit. The sidewalk shall be five feet in width.
 - c. A 6' wide sidewalk shall be built by the developer along the Whitley Road frontage, the width of the development.
23. Cluster mailbox location and design
 - a. A cluster mailbox shall be provided, as per USPS standards.
24. Development entry sign location and design
 - a. Development shall have an Entry sign, with location to be determined.
25. All lateral and service lines for all utilities shall be placed and maintained underground.
26. An HOA shall be required and Common Area Open Space shall be maintained by the HOA.
27. Additional Requirements:
 - a.- No permanent use of temporary dwellings, such as recreational vehicles, travel trailers, or mobile homes, may be used for on-site dwelling purposes unless approved by a Specific Use Permit (SUP).
 - b.- Electrical fencing and barbed wire is prohibited as perimeter fencing except for containment of farm animals on two (2) acres or larger.
 - c.- Open Storage is prohibited (except for materials for the residents personal consumption i.e. firewood, gardening materials, etc.
 - d.- Single-family homes with side entry garages have special setback requirements as established in Section 9.02 – Off-Street Parking and Loading Requirements.
 - e.- *Other Regulations* – As established in Section 9.01 – Building Design and Development Standards.

Street Lights: Street lights shall be selected from the Tri-County decorative street light options and shall meet city standards for location and minimum spacing.

Street Signs/ Enhanced Cluster Mailboxes:



Site Data Summary Chart

Single Family Residential Lots		22
Common Open Space		3
Residential Lots	59.81 %	2.59 ac.
Common Open Space	15.01 %	0.65 ac.
R.O.W.	25.18 %	1.09 ac.
Gross Acreage	100.00%	4.33 ac.

Site Data

Gross Acreage	4.33 ac.
Gross Density	5.08 lots/acre

Lot Summary

Residential Lots	22
Minimum Lot Size	5,035 s.f.
Average Lot Size	5,122 s.f.
Common Open Space	3

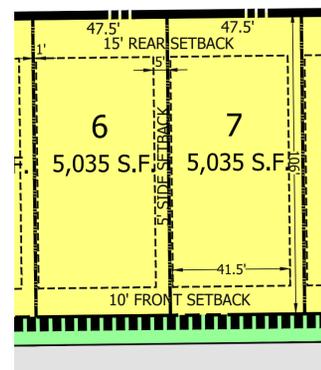
Zoning & Current Use

Existing Zoning:	C - Commercial
Proposed Zoning:	PD - Planned Development
Current Use:	Vacant
Proposed Use:	Residential

LOCATION MAP



Lot Detail



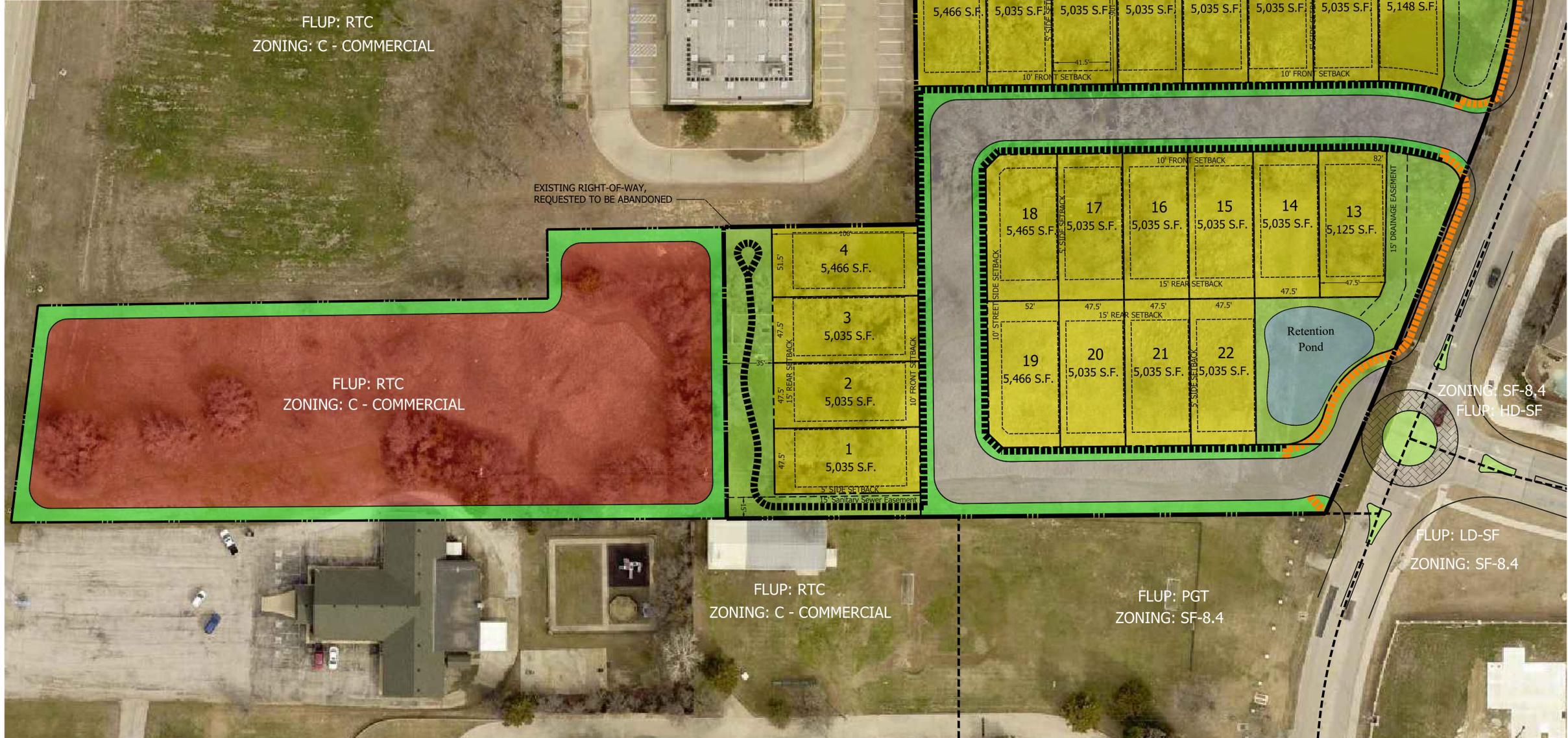
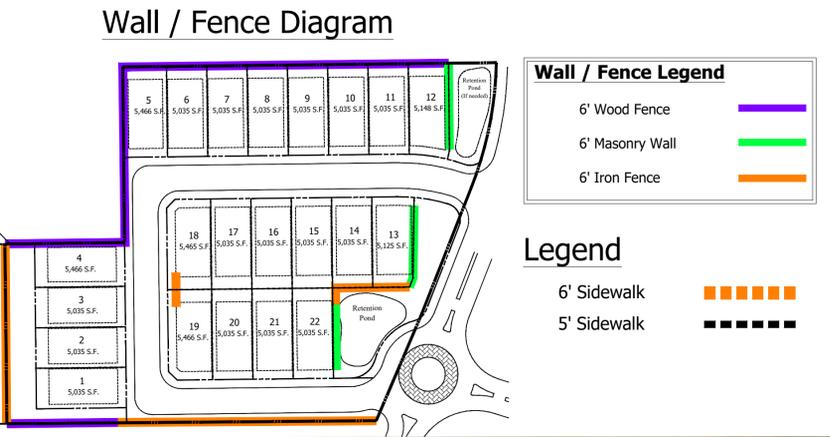
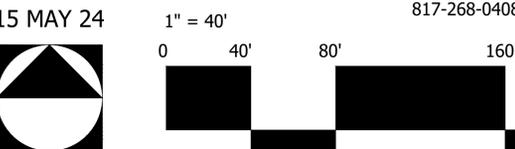
Applicant: Garabedian Properties
 P.O.Box 93984
 Southlake, TX. 76092
 Mike Garabedian
 817-748-2669

Owner: HUYNH & VIYAPON LLC
 Sara Viyapon
 817-602-6775
 sivyapon@yahoo.com

Planner: SAGE GROUP, INC.



Engineer: Hamilton Duffy P.C.
 8241, Mid-cities Blvd., St. 100
 North Richland Hills, TX 76180
 Keith Hamilton
 817-268-0408



Case No. Z-24-0001

Whitley Springs

Keller, Tarrant County, Texas

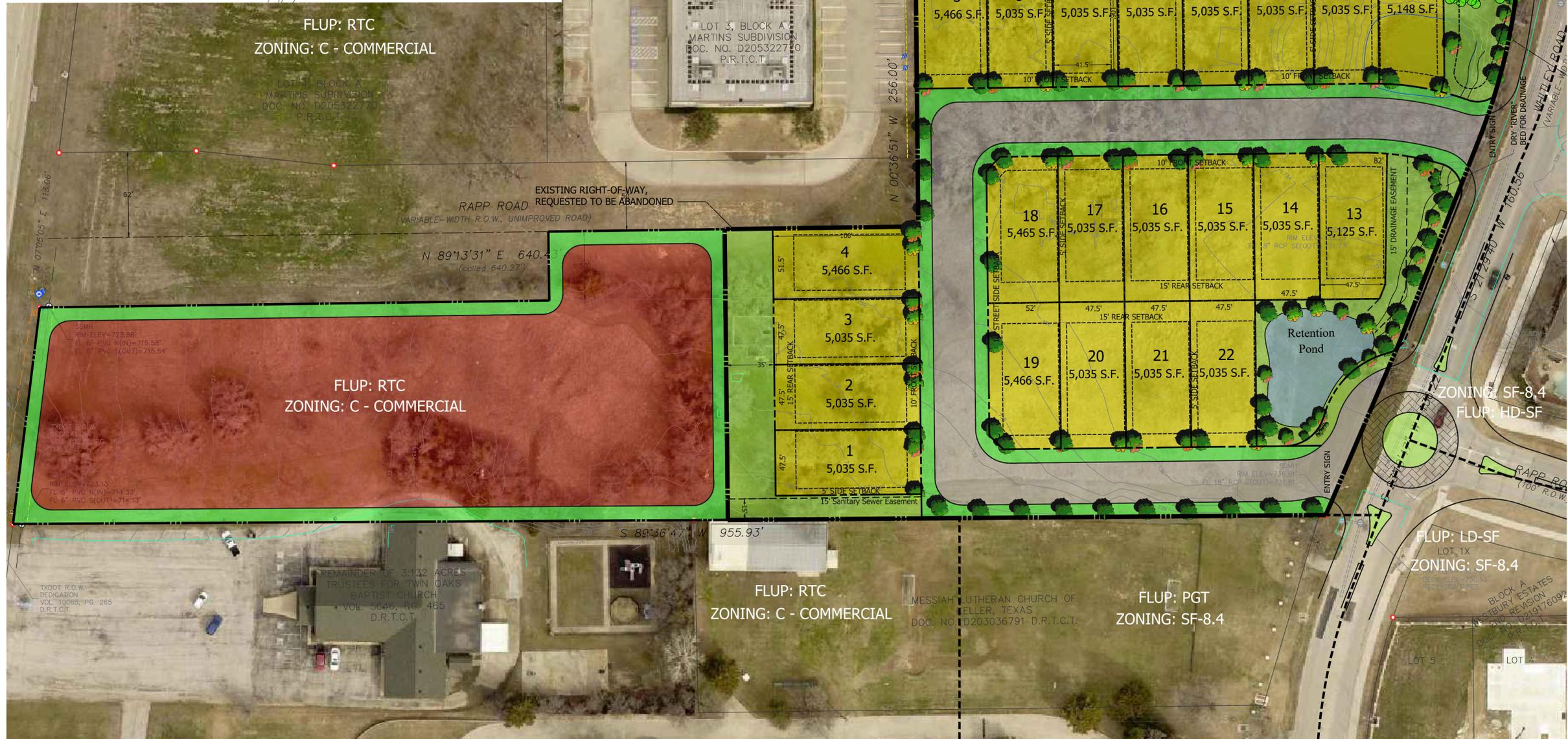
Legend

- Existing Tree
- Cedar Elm
- Live Oak
- Red Oak
- Desert Willow

Wall / Fence Diagram



Residential Lot trees - 2 Canopy trees in front - 3" cal minimum
 Residential Lot trees - 2 Canopy trees on side - 3" cal minimum
 Buffer trees - 1 Canopy tree - 30" o.c. - 4" cal minimum
 Buffer trees - 2 ornamental per 100 l.f.



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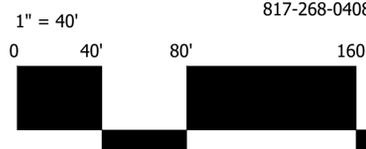
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15 MAY 24



Landscape Plan

Whitley Springs

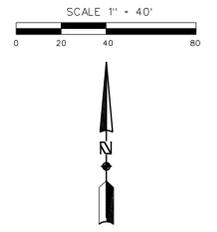
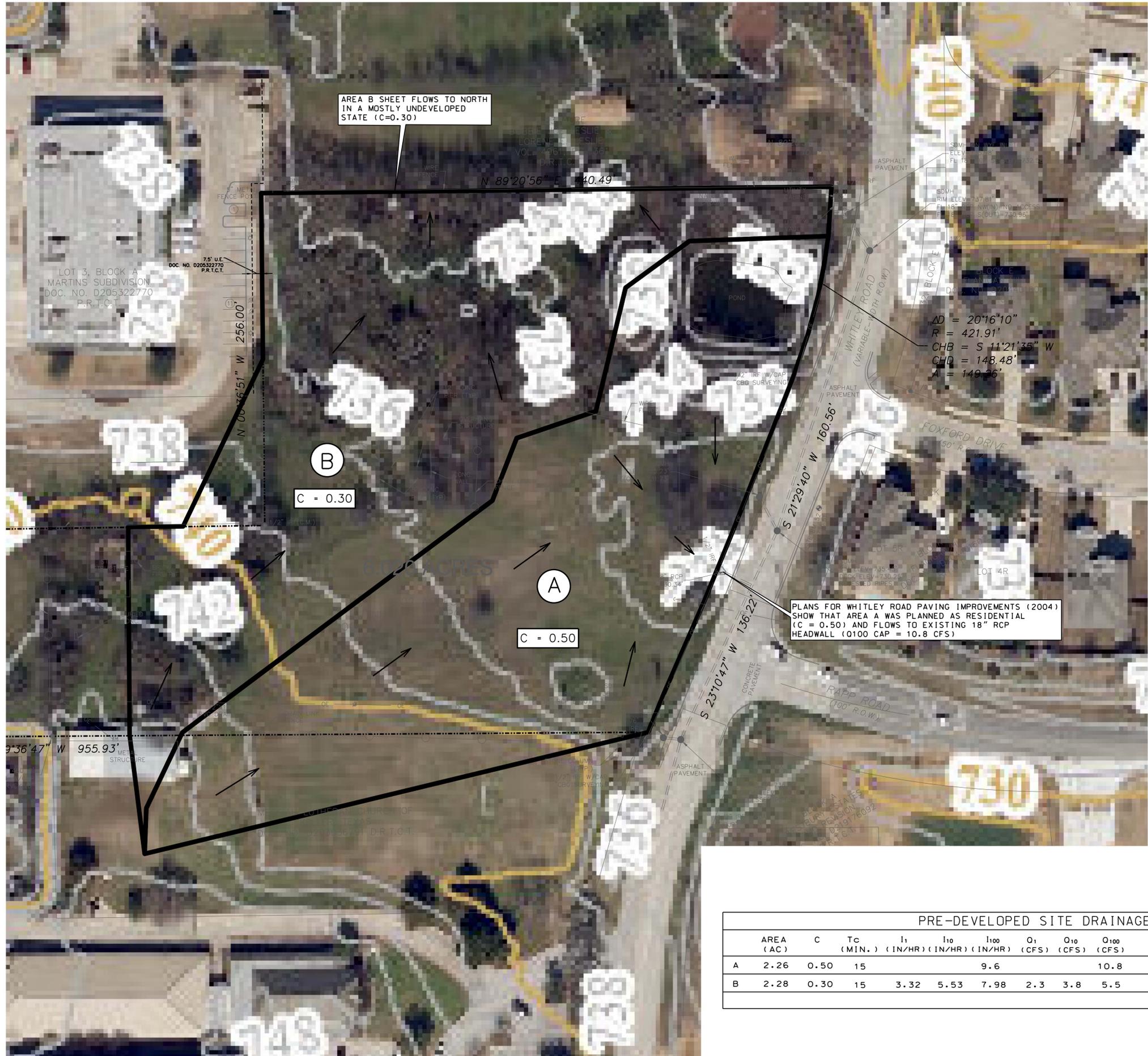
Keller, Tarrant County, Texas

TREES TO BE REMOVED		TREES TO BE REMOVED	
Tree #	Size & Species	Tree #	Size & Species
7000	11" ELM	7062	4" ELM
7001	4" ELM	7063	18" OAK
7002	2X9" ELM	7064	5" HACKBERRY
7003	18" ELM	7065	4" HACKBERRY
7004	5" ELM	7066	10" OAK
7005	10" ELM	7067	15" ELM
7006	12" ELM	7068	4" ELM
7007	11" HACKBERRY	7069	4" ELM
7008	11" + 4" ELM	7070	4" ELM
7009	4" ELM	7071	5" ELM
7010	4" ELM	7072	4" ELM
7011	4" ELM	7073	5" ELM
7012	4" ELM	7074	7" ELM
7013	4" ELM	7075	7" ELM
7014	5" ELM	7076	4" ELM
7015	5" ELM	7077	4" ELM
7016	5" ELM	7078	4" ELM
7017	5" ELM	7079	4" ELM
7018	5" ELM	7080	2X4" ELM
7019	9" HACKBERRY	7081	7" ELM
7020	4" ELM	7082	6" ELM
7021	4" ELM	7083	6" ELM
7022	27" ELM	7084	4" ELM
7023	16" OAK	7085	4" ELM
7024	12" OAK	7086	4" ELM
7025	6" ELM	7087	6" ELM
7026	18" ELM	7088	5" ELM
7027	19" OAK	7089	5" MESQUITE
7028	15" OAK	7090	4" ELM
7029	12" OAK	7091	4" ELM
7030	18" OAK	7092	11" ELM
7031	4" HACKBERRY	7093	6" ELM
7032	5" HACKBERRY	7094	9" ELM
7033	4" ASH	7095	8" ELM
7034	4" HACKBERRY	7096	4" ELM
7035	18" + 13" OAK	7097	5" ELM
7036	12" OAK	7098	12" ELM
7037	4" HACKBERRY	7099	6" ELM
7038	4" HACKBERRY	7100	6" ELM
7039	4" HACKBERRY	7101	6" ELM
7040	4" HACKBERRY	7102	8" ELM
7041	4" HACKBERRY	7103	7" ELM
7042	6" HACKBERRY	7104	6" ELM
7043	10" OAK	7105	5" ELM
7044	16" + 13" OAK	7106	5" ELM
7045	10" OAK	7107	5" ELM
7046	5" HACKBERRY	7108	5" MESQUITE
7047	4" HACKBERRY	7109	5" ELM
7048	5" HACKBERRY	7110	5" ELM
7049	15" ELM	7111	4" ELM
7050	6" + 4" ELM	7112	4" ELM
7051	6" ELM	7113	5" ELM
7052	6" ELM	7114	6" ELM
7053	7" ELM	7115	6" ELM
7054	7" ELM	7116	4" ELM
7055	5" ELM	7117	4" ELM
7056	5" ELM	7118	4" ELM
7057	5" ELM	7119	4" ELM
7058	5" ELM	7120	5" ELM
7059	4" ELM	7121	2X4" ELM
7060	5" ELM	7122	2X5" ELM
7061	5" ELM	7123	5" ELM

TREES TO BE REMOVED		TREES TO BE REMOVED	
Tree #	Size & Species	Tree #	Size & Species
7124	3X4" ELM	7180	17" ELM
7125	4" ELM	7181	7" ELM
7126	4" ELM	7182	7" ELM
7127	4" ELM	7183	4" ELM
7128	12" ELM	7184	5" ELM
7129	4" ELM	7185	10" ELM
7130	5" ELM	7186	5" ELM
7131	5" ELM	7187	6" HACKBERRY
7132	5" ELM	7188	4" ELM
7133	5" ELM	7189	10" ELM
7134	5" ELM	7190	4" ELM
7135	5" ELM	7191	5" ELM
7136	10" ELM	7192	4" ELM
7137	2X5" ELM	7193	4" ELM
7138	5" ELM	7194	8" ELM
7139	5" ELM	7195	4" ELM
7140	5" ELM	7196	5" ELM
7141	4" ELM	7197	11" ELM
7142	4" HACKBERRY	7198	4" HACKBERRY
7143	4" ELM	7199	10" ELM
7144	4" ELM	7200	14" OAK
7145	4" ELM	7201	12" + 7" BOIS D'ARC
7146	4" ELM	7202	18" OAK
7147	8" + 2X5" ELM	7203	10" ELM
7148	5" ELM	7204	5" ELM
7149	5" ELM		
7150	5" ELM		
7151	5" ELM		
7152	5" ELM		
7153	10" ELM		
7154	4" ELM		
7155	5" ELM		
7156	5" ELM		
7157	4" ELM		
7158	5" ELM		
7159	5" ELM		
7160	5" ELM		
7161	5" ELM		
7162	5" ELM		
7163	5" ELM		
7164	5" ELM		
7165	5" ELM		
7166	5" ELM		
7167	5" ELM		
7168	5" ELM		
7169	5" ELM		
7170	5" ELM		
7171	5" ELM		
7172	5" ELM		
7173	5" ELM		
7174	5" ELM		
7175	2X5" ELM		
7176	4" ELM		
7177	4" ELM		
7178	2X6" ELM		
7179	7" ELM		
7180	17" ELM		
7181	7" ELM		
7182	7" ELM		
7183	4" ELM		
7184	5" ELM		
7185	10" ELM		
7186	5" ELM		
7187	6" HACKBERRY		
7188	4" ELM		
7189	10" ELM		
7190	4" ELM		
7191	5" ELM		
7192	4" ELM		
7193	4" ELM		
7194	4" ELM		
7195	4" HACKBERRY		
7196	5" ELM		
7197	11" ELM		
7198	4" HACKBERRY		
7199	10" ELM		
7200	14" OAK		
7201	12" + 7" BOIS D'ARC		
7202	18" OAK		
7203	10" ELM		
7204	5" ELM		

TREES TO BE REMOVED		TREES TO BE REMOVED	
Tree #	Size & Species	Tree #	Size & Species
7205	6" ELM	7260	5" ELM
7206	18" ELM	7261	6" ELM
7207	19" OAK	7262	5" ELM
7208	15" OAK	7263	5" ELM
7209	12" OAK	7264	5" ELM
7210	4" ELM	7265	5" ELM
7211	13" OAK	7266	5" ELM
7212	13" OAK	7267	5" ELM
7213	10" ELM	7268	5" ELM
7214	4" HACKBERRY	7269	5" ELM
7215	4" HACKBERRY	7270	5" ELM
7216	18" ELM	7271	5" ELM
7217	4" HACKBERRY	7272	5" ELM
7218	4" HACKBERRY	7273	5" ELM
7219	11" ELM	7274	5" ELM
7220	18" ELM	7275	5" ELM
7221	4" HACKBERRY	7276	5" ELM
7222	12" ELM	7277	5" ELM
7223	5" HACKBERRY	7278	5" ELM
7224	6" HACKBERRY	7279	5" ELM
7225	17" ELM	7280	5" ELM
7226	13" ELM	7281	5" ELM
7227	4" HACKBERRY	7282	5" ELM
7228	4" HACKBERRY		
7229	15" OAK		
7230	22" OAK		
7231	18" OAK		
7232	4" HACKBERRY		
7233	12" OAK		
7234	4" ELM		
7235	13" OAK		
7236	5" ELM		
7237	5" HACKBERRY		
7238	5" HACKBERRY		
7239	7" HACKBERRY		
7240	4" ELM		
7241	5" HACKBERRY		
7242	4" HACKBERRY		
7243	2X5" HACKBERRY		
7244	5" HACKBERRY		
7245	5" HACKBERRY		
7246	4" ELM		
7247	17" OAK		
7248	2X18" ELM		
7249	5" HACKBERRY		
7250	5" HACKBERRY		
7251	5" HACKBERRY		
7252	18" ELM		
7253	18" ELM		
7254	13" OAK		
7255	11" + 7" BOIS D'ARC		
7256	13" ELM		
7257	12" + 10" ELM		
7258	5" ELM		
7259	14" ELM		
7260	12" ELM		
7261	9" ELM		
7262	18" ELM		
7263	13" ELM		
7264	6" ELM		
7265	7" BOIS D'ARC		
7266	2X14" ELM		
7267	7" ELM		
7268	7" ELM		
7269	5" ELM		
7270	5" ELM		
7271	5" ELM		
7272	5" ELM		
7273	5" ELM		
7274	5" ELM		
7275	5" ELM		
7276	5" ELM		
7277	5" ELM		
7278	5" ELM		
7279	5" ELM		
7280	5" ELM		
7281	5" ELM		
7282	5" ELM		

TREES TO BE REMOVED		TREES TO BE REMOVED	
Tree #	Size & Species	Tree #	Size & Species
7283	4" ELM	7330	4" ELM
7284	7" ELM	7331	4" ELM
7285	8" ELM	7332	4" ELM
7286	5" ELM	7333	4" ELM
7287	9" ELM + 8" HACKBERRY	7334	4" ELM
7288	2X5" ELM	7335	4" ELM
7289	2X4" ELM	7336	5" HACKBERRY
7290	2X4" ELM	7337	5" ELM
7291	2X4" ELM	7338	5" ELM
7292	4" ELM	7339	6" HACKBERRY
7293	5" ELM	7340	4" ELM
7294	4" ELM	7341	2X4" ELM
7295	5" ELM	7342	5" ELM
7296	4" ELM	7343	6" HACKBERRY
7297	5" ELM	7344	5" ELM
7298	4" ELM	7345	5" ELM
7299	4" ELM	7346	7" + 4" ELM
7300	4" ELM	7347	4" ELM
7301	8" ELM	7348	11" HACKBERRY
7302	5" ELM	7349	5" MESQUITE
7303	4" ELM	7350	5" ELM
7304	4" ELM	7351	5" ELM
7305	6" ELM	7352	5" ELM
7306	5" + 4" ELM	7353	5" ELM
7307	4" ELM	7354	5" HACKBERRY
7308	5" ELM	7355	4" HACKBERRY
7309	6" ELM	7356	4" HACKBERRY
7310	4" ELM	7357	5" HACKBERRY
7311	4" ELM	7358	5" HACKBERRY
7312	2X4" ELM	7359	5" HACKBERRY
7313	4" ELM	7360	7" BOIS D'ARC
7314	5" ELM	7361	4" HACKBERRY
7315	2X4" ELM	7362	4" HACKBERRY
7316	5" ELM	7363	4" HACKBERRY
7317	4" ELM	7364	4" HACKBERRY
7318	5" ELM	7365	4" HACKBERRY
7319	5" ELM	7366	4" HACKBERRY
7320	5" + 2X4" ELM	7367	4" HACKBERRY
7321	5" ELM	7368	4" HACKBERRY
7322	2X4" ELM	7369	4" HACKBERRY
7323	4" ELM	7370	4" HACKBERRY
7324	4" ELM	7371	4" HACKBERRY
7325	4" ELM	7372	4" HACKBERRY
7326	6" ELM	7373	4" HACKBERRY
7327	4" ELM	7374	4" HACKBERRY
7328	5" HACKBERRY	7375	4" HACKBERRY
7329	2X13" HACKBERRY	7376	4" HACKBERRY
7330	4" ELM	7377	4" HACKBERRY
7331	4" ELM	7378	4" HACKBERRY
7332	4" ELM	7379	4" HACKBERRY
7333	4" ELM	7380	4" HACKBERRY
7334	4" ELM	7381	4" HACKBERRY
7335	4" ELM	7382	4" HACKBERRY
7336	5" HACKBERRY	7383	4" HACKBERRY
7337	5" ELM	7384	4" HACKBERRY
7338	5" ELM	7385	4" HACKBERRY
7339	6" HACKBERRY	7386	4" HACKBERRY
7340	4" ELM	7387	4" HACKBERRY
7341	2X4" ELM	7388	4" HACKBERRY
7342	5" ELM	7389	4" HACKBERRY
7343	6" HACKBERRY	7390	4" HACKBERRY
7344	5" ELM	7391	4" HACKBERRY
7345	5" ELM	7392	4" HACKBERRY
7346	7" + 4" ELM	7393	4" HACKBERRY
7347	4" ELM	7394	4" HACKBERRY
7348	11" HACKBERRY	7395	4" HACKBERRY
7349	5" MESQUITE	7396	4" HACKBERRY
7350	5" ELM	7397	4" HACKBERRY
7351	5" ELM	7398	4" HACKBERRY
7352	5" ELM	7399	4" HACKBERRY
7353	5" ELM	7400	4" HACKBERRY
7354	5" HACKBERRY	7401	4" HACKBERRY
7355	4" HACKBERRY	7402	4" HACKBERRY
7356	4" HACKBERRY	7403	4" HACKBERRY
7357	5" HACKBERRY	7404	4" HACKBERRY
7358	5" HACKBERRY	7405	4" HACKBERRY
7359	5" HACKBERRY	7406	4" HACKBERRY
7360	7" BOIS D'ARC	7407	4" HACKBERRY
7361	4" HACKBERRY	7408	4" HACKBERRY
7362	4" HACKBERRY	7409	4" HACKBERRY
7363	4" HACKBERRY	7410	4" HACKBERRY
7364	4" HACKBERRY	7411	4" HACKBERRY
7365	4" HACKBERRY	7412	4" HACKBERRY
7366	4" HACKBERRY	7413	4" HACKBERRY
7367	4" HACKBERRY	7414	4" HACKBERRY
7368	4" HACKBERRY	7415	4" HACKBERRY
7369	4" HACKBERRY	741	



LEGEND

- A1 DRAINAGE AREA
- DRAINAGE DIVIDE
- ↗ FLOW DIRECTION ARROW

DRAINAGE NOTES:

RATIONAL METHOD CIA = 0

C FACTOR OBTAINED FROM CITY OF KELLER UNIFIED DEVELOPMENT CODE.

C = 0.90 BUSINESS
C = 0.70 INDUSTRIAL
C = 0.55 RESIDENTIAL (LESS THAN 0.5 ACRE LOTS)
C = 0.50 RESIDENTIAL (GREATER THAN 0.5 AC. LOTS)
C = 0.30 PARKS/OPEN AREAS

SITE WILL DETAIN INCREASED RUNOFF TO ALLOWABLE OR PRE-DEVELOPED CONDITIONS.

SITE LIES OUTSIDE ANY 100 YEAR FLOODPLAIN PER FEMA MAP FOR THIS AREA

REVIEWED
CITY OF KELLER
Released for Construction
Date _____
Public Works Director/City Engineer

PRE-DEVELOPED SITE DRAINAGE DATA										
AREA (AC)	C	T _c (MIN.)	I ₁ (IN/HR)	I ₁₀ (IN/HR)	I ₁₀₀ (IN/HR)	Q ₁ (CFS)	Q ₁₀ (CFS)	Q ₁₀₀ (CFS)	COMMENTS	
A	2.26	0.50	15	3.32	5.53	7.98	2.3	3.8	5.5	TO EXIST. 18" RCP (PER 2004 PLANS FOR WHITLEY RD)
B	2.28	0.30	15	3.32	5.53	7.98	2.3	3.8	5.5	SHEETFLOW TO NORTH

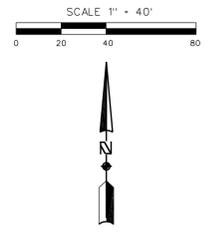
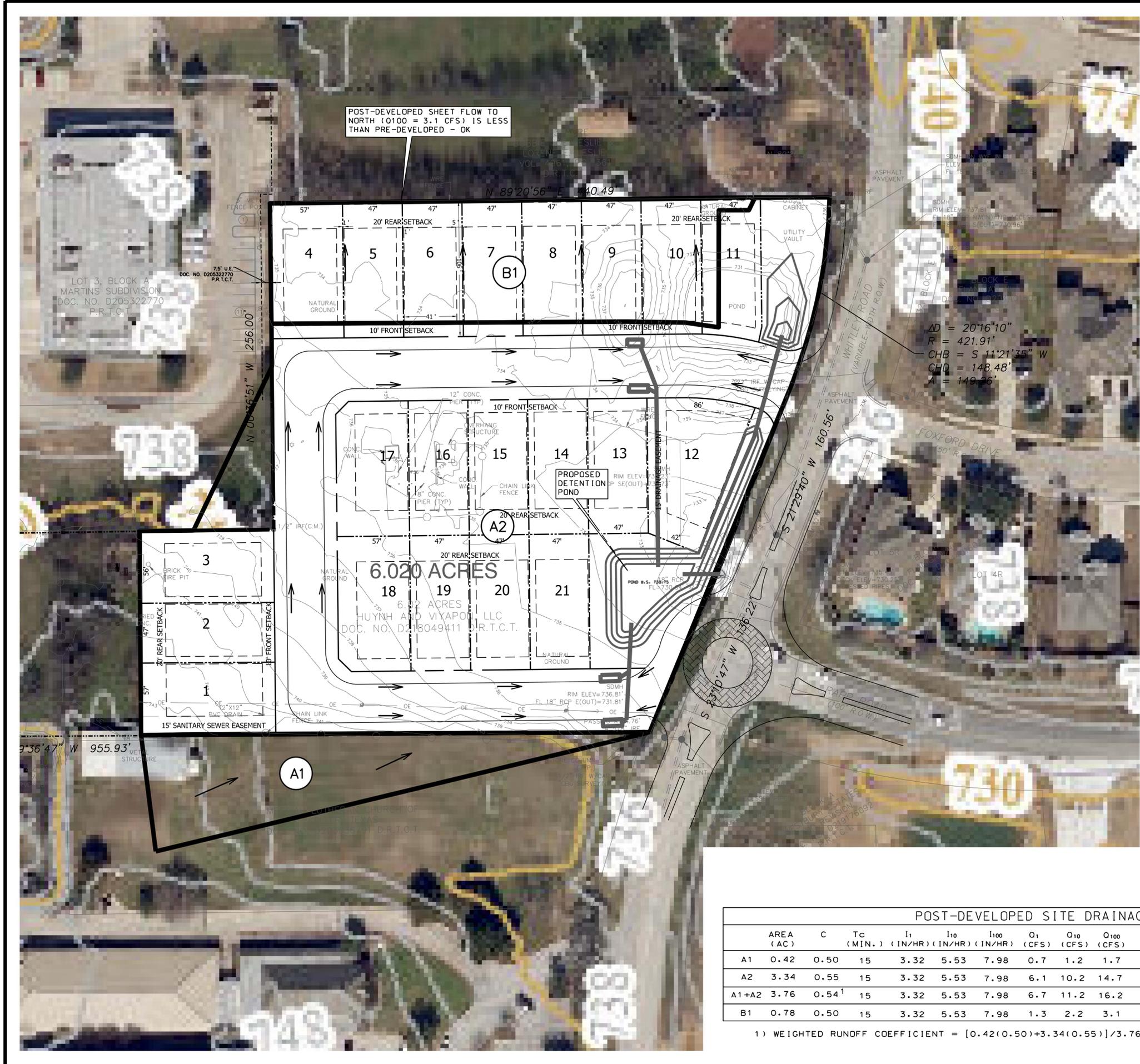
WHITLEY SPRINGS
1212 WHITLEY ROAD
LOTS ????
CITY OF KELLER, TEXAS

PRE-DEVELOPED DRAINAGE AREA MAP

PRELIMINARY FOR REVIEW ONLY

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NO.	REVISION	DATE	BY	JOB	353-012	
					DATE	DATE
					DESIGNED	K. M. H.
					DRAWN	K. M. H.
					CHECKED	K. M. H.
					TEXAS FIRM REG. NO.	F-5260



LEGEND

- A1 DRAINAGE AREA
- DRAINAGE DIVIDE
- ↗ FLOW DIRECTION ARROW

DRAINAGE NOTES:

RATIONAL METHOD CIA = 0

C FACTOR OBTAINED FROM CITY OF KELLER UNIFIED DEVELOPMENT CODE.

C = 0.90 BUSINESS
 C = 0.70 INDUSTRIAL
 C = 0.55 RESIDENTIAL (LESS THAN 0.5 ACRE LOTS)
 C = 0.50 RESIDENTIAL (GREATER THAN 0.5 AC. LOTS)
 C = 0.30 PARKS/OPEN AREAS

SITE WILL DETAIN INCREASED RUNOFF TO ALLOWABLE OR PRE-DEVELOPED CONDITIONS.

SITE LIES OUTSIDE ANY 100 YEAR FLOODPLAIN PER FEMA MAP FOR THIS AREA

REVIEWED
 CITY OF KELLER
 Released for Construction
 Date _____
 Public Works Director/City Engineer

DETENTION POND CALCULATIONS (100 year)

DETENTION POND SHALL BE DESIGNED SUCH THAT PRE-DEVELOPED FLOW RATES ARE MAINTAINED

Q100(PRE) = 10.8 CFS (SEE PRE-DEVELOPED MAP)
 Q100(BYPASS) = 0 CFS
 Q100(ALLOWABLE) = 10.8 CFS

Q100(POST) = CIA (TO POND)

C = 0.54
 Tc = 15 MIN
 AREA = 3.76 ACRES
 Q100 = 16.2 CFS

DETENTION POND CALCS SHOW A REQUIRED VOLUME OF 6,370 CUBIC FEET OF DETENTION FOR THE 100 YEAR EVENT THAT EQUALS APPROXIMATELY 3,200 SQUARE FEET AT 2' DEPTH OF AREA.

POST-DEVELOPED SITE DRAINAGE DATA										
	AREA (AC)	C	Tc (MIN.)	I1 (IN/HR)	I10 (IN/HR)	I100 (IN/HR)	Q1 (CFS)	Q10 (CFS)	Q100 (CFS)	COMMENTS
A1	0.42	0.50	15	3.32	5.53	7.98	0.7	1.2	1.7	SHEETFLOW TO A2
A2	3.34	0.55	15	3.32	5.53	7.98	6.1	10.2	14.7	TO DETENTION
A1+A2	3.76	0.54 ¹	15	3.32	5.53	7.98	6.7	11.2	16.2	TOTAL TO DETENTION
B1	0.78	0.50	15	3.32	5.53	7.98	1.3	2.2	3.1	SHEETFLOW TO NORTH (LESS THAN PRE-DEVELOPED - OK)

1) WEIGHTED RUNOFF COEFFICIENT = $[0.42(0.50)+3.34(0.55)]/3.76 = 0.54$

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NO.	REVISION	DATE	BY	JOB	353-012		DESIGNED	DRAWN	CHECKED	TEXAS FIRM REG. NO. F-5260
					DATE	DATE				