



July 24, 2024

Jeb Kolby, P.E.
Director of Development
Ember Real Estate Investment & Development
4444 Westheimer Road; Suite G325
Houston, TX 77027

Re: Freedom Park & Windrose Green Tree Replacement
City of Angleton

Dear Mr. Kolby:

Please find the attached latest tree inventory memo dated December 13, 2022 (See Attachment "A"). This document contains the latest tree count, their diameter, and species. The following are the amount of Heritage trees that were removed:

Freedom Park

34 live oaks and 1 pecan: Total caliper inches of heritage trees removed is 455 inches.

Windrose Green

24 heritage trees were removed: Total caliper inches of heritage trees removed is 198 inches.

Please note:

1. The four poor quality trees identified in Exhibit A have been added into the total caliper inches of removed trees at Freedom Park.
2. The four other trees removed later identified in Exhibit "B-2" that does not have a size or species. Those are not included in above calculations.

Heritage tree losses must be accounted for by multiplying the total of removed caliper inches of heritage trees by three to determine the aggregate amount of tree caliper inches that must be provided. Therefore, the aggregate of total caliper inches required:

Freedom Park

455 inches x 3 = 1,365 aggregate of total caliper inches required.

Windrose Green

198 inches x 3 = 594 aggregate of total caliper inches required.

Windrose Green Landscaping Plan added 91 Live Oaks per the attached memo. However, the tree caliber for each tree planted is only 2.5 inches. Per City ordinance, the City of Angleton will accept no less than three (3) caliper-inches of trees (Live Oak or Pecan) as a replacement for heritage trees removal. Therefore, there is no credit for the smaller diameter trees planted in the Windrose Green.

The total amount of trees required to be replanted at each site shall be calculated at:

Freedom Park

1,365 caliper inches of heritage trees required / 3 = 455 - 3-inch caliper live oak or pecan trees required to be planted.

Windrose Green

594 caliper inches of heritage trees required / 3 = 198 - 3-inch caliper live oak or pecan trees required to be planted.

Alternatively, the City of Angleton will accept a fee in lieu of the tree replacement. The fee in lieu of tree replacement must be consistent with the replacement costs for three (3) caliper-inch heritage trees (Live Oak or Pecan) from a local landscape provider. A recent cost estimate for heritage trees has been provided by Wagner Tree Farm (See attachment "B") Therefore, the fee in lieu is:

Freedom Park

455 Heritage Trees x \$475.56 per tree = \$216,379.80 of fee in lieu of tree mitigation.

Windrose Green

198 Heritage Trees x \$475.56 per tree = \$94,160.00 of fee in lieu of tree mitigation.

Additionally, any remaining heritage trees removed to create the 30-foot maintenance berm around the Freedom Park Detention Pond as depicted in the approved set of plans will need to be calculated in the same manner and added to the totals above.

Ember Real Estates Investment & Development (Ember) has requested a credit for significant trees saved at each site. Ember should coordinate with City staff to get on the next City Council agenda to discuss a credit for significant trees saved.

If you would like to discuss this in more detail, please contact me.

Sincerely,

If you have any questions, please call me.

Sincerely,

HDR ENGINEERING, INC.



John Peterson, P.E., CFM
Associate Vice President/Municipal Practice Lead

Attachment "A"



MEMORANDUM

December 13, 2022

To: Megan Mainer, Director of Parks & Recreation

CC: Chris Whittaker, City Manager

Otis Spriggs, Director of Development Services

Chris Casey, Civic Principal, HDR

Alex Khoshakhlagh, Project Manager, Costello Engineering

Jeb Kolby, Director of Development, Concourse Development

From: Stephen R. Tennis, Director of Planning, Concourse Development

RE: **Heritage Tree Analysis**

This Memorandum serves as Concourse Development's understanding, analysis and conclusion on the City of Angleton's Code of Ordinance 23-60, Heritage Tree Protection requirement as applied to the Freedom Park and the Windrose Green development clearing projects.

Freedom Park

Rancho Isabella MUD contracted with Crisp Materials, LLC on a Clearing & Grubbing (C&G) project within the City of Angleton's Freedom Park tract to prepare for future detention capacity. Our team worked very closely with the Director of Parks & Recreation and Burditt Landscape Architecture to design a project that preserved as many trees as possible. The C&G project started in May 2022 and was completed October 2022. Due to the extreme density of the trees and underbrush on the tract, the city staff agreed to the same clearing method used on Concourse's project that did not require a pre-clearing tree survey.

The contractor was instructed to preserve all trees for classifying and logging as they progressed. Within the future excavation area, only Heritage trees were preserved. The detention project also has a 30' maintenance berm around the entire detention pond area. Although on most detention pond projects the maintenance berm is completely cleared, this maintenance berm area was cleared with the intent to save as many trees as possible, at significant cost to both the contractor and Concourse Development.

A licensed arborist, Jeff Hanawalt, Certified Arborist TX-0211A, with Yellowstone Landscape – Tree Division was engaged to perform onsite reviews and logging of all trees. Throughout this process several onsite meetings took place with City staff to review the clearing process. Within the excavation area a total of 31 Heritage trees were identified (30 Live Oaks and 1 Pecan) for a total of 413 caliper inches of

Heritage trees to be removed and requiring mitigation (**see Exhibit “A”**). Within the maintenance berm area, a total of 110 trees were saved. (52 Heritage trees, 48 Significant trees and 10 non-Qualified trees) for a total of 1,232 caliper inches of trees saved. The 48 Significant trees generated a total of 591 total caliper inches of credit (**see Exhibit “B”**).

Based on the 1:1 mitigation requirement used for Freedom Park, 413 inches of mitigation was needed. (No credit was given for the 537 inches of Heritage trees, or 110 inches of non-qualified trees saved.) Therefore, the 413 inches of mitigation required for the Heritage trees removed within the excavation area was deducted from the 591 inches of credit from the Significant trees saved, resulting in a remaining credit of 178 inches.

At the final walk of the clearing project with the city staff there were 4 trees that were identified as being extremely close to the future excavation area and may need to be removed (**see Exhibit “B-2”**). It was agreed not to remove them under the current clearing contract, but to address those trees along with any other trees removed in the detention construction contract.

An additional analysis will be merited after the detention construction contract is complete to determine the final mitigation count.

Windrose Green

Rancho Isabella MUD contracted with 3B Construction to clear the remaining developable land within the Windrose Green development. Since the entire development will require fill dirt to meet the drainage design criteria, no existing trees could be preserved, thus requiring tree mitigation.

A total of 24 Heritage trees were logged for a total of 198 caliper inches (**see Exhibit “C”**) The City Heritage Tree Protect ordinance requires a 3:1 mitigation requirement, resulting in a total of 594 caliper inches of mitigation. The Windrose Green Phase 1 Landscape Improvement project completed in December 2022 installed a total of 347 caliper inches of Heritage/Significant trees within the common areas of Windrose Green Section 1 (**see Exhibit “D”**). Based on the current mitigation requirement of 594 inches, less the Phase 1 planting credit of 347 inches and the 178 inches saved previously, a remaining balance of 68 caliper inches is needed to fulfill the mitigation requirements. Future Sections in Windrose Green will include landscaping in the common areas. Those projects will generate more than the required mitigation credits still required. Concourse Development will update and submit to the city after each landscape project is completed, showing the current tally at that time.

EXHIBIT "A"

Freedom Park Excavation Pond area only

Species	Diameter (inches)	Total count	Live Oak	Pecan	Total
Live Oak	6		30	1	31
Live Oak	7		400	13	413
Live Oak	7				
Live Oak	8		13	13	
Live Oak	8				
Live Oak	8				
Live Oak	8				
Live Oak	9				
Live Oak	10				
Live Oak	10				
Live Oak	10				
Live Oak	11				
Live Oak	12				
Live Oak	13				
Live Oak	13				
Live Oak	14				
Live Oak	14				
Live Oak	14				
Live Oak	14				
Live Oak	14				
Live Oak	15				
Live Oak	15				
Live Oak	16				
Live Oak	16				
Live Oak	16				
Live Oak	17				
Live Oak	17				
Live Oak	18				
Live Oak	18				
Live Oak	22				
Live Oak	28				
Pecan	13				
Total Caliber Inches					413

Poor Quality trees excluded from count

Species	Diameter (Inches)
Live Oak	6
Live Oak	8
Live Oak	13
Live Oak	15

EXHIBIT "B"

Freedom Park Maintenance Berm area only

Number	Species	Diameter (inches)	Classification	Notes	Location
1	Water Oak	14	Significant Tree		6062-6063
2	Live Oak	15	Heritage Tree		6062-6063
3	Water Oak	12	Significant Tree		6063-6064
4	Live Oak	12	Heritage Tree	Double Trunk	6063-6064
5	Water Oak	14	Significant Tree		6063-6064
6	Live Oak	11	Heritage Tree		6063-6064
7	Live Oak	8	Heritage Tree		6063-6064
8	Water Oak	11	Significant Tree		6064-6065
9	Live Oak	9	Heritage Tree		6064-6065
10	Live Oak	12	Heritage Tree		6064-6065
11	Live Oak	8	Heritage Tree		6064-6065
12	Live Oak	22	Heritage Tree	Double Trunk	6065-6066
13	Water Oak	10	Significant Tree		6065-6066
14	Water Oak	9	Significant Tree		6065-6066
15	Water Oak	17	Significant Tree		6067
16	Eastern Red Cedar	13	Non Qualified Tree		6067-6068
17	Live Oak	20	Heritage Tree	Good structured quality tree	6068-6069
19	Live Oak	14	Heritage Tree		6068-6069
20	Live Oak	15	Heritage Tree		6068-6069
21	Water Oak	17	Significant Tree		6069-6070
22	Live Oak	14	Heritage Tree	On high bank	6069-6070
23	Live Oak	13	Heritage Tree		6069-6070
24	Water Oak	13	Significant Tree		6072-6073
25	Water Oak	10	Significant Tree		6084-6085
26	Live Oak	16	Heritage Tree		6084-6085
27	Live Oak	13	Heritage Tree		6084-6085
28	Eastern Red Cedar	8	Non Qualified Tree		6084-6085
29	Water Oak	8	Significant Tree		6087-6088
30	Eastern Red Cedar	10	Non Qualified Tree		6087-6088
31	Eastern Red Cedar	10	Non Qualified Tree		6087-6088
32	Eastern Red Cedar	12	Non Qualified Tree		6087-6088
33	Eastern Red Cedar	12	Non Qualified Tree		6087-6088
34	Live Oak	16	Heritage Tree		6088
35	Live Oak	20	Heritage Tree		6089-6090
36	Water Oak	20	Significant Tree	Good structured quality tree	6090-6091
37	Water Oak	16	Significant Tree		6091-6092
					6092-6093

38	Live Oak	Quercus virginiana	10	Heritage Tree	6092-6093
39	Water Oak	Quercus nigra	13	Significant Tree	6093-6094
40	Water Oak	Quercus nigra	16	Significant Tree	6095-6096
41	Water Oak	Quercus nigra	20	Significant Tree	6097-6098
42	Live Oak	Quercus virginiana	13	Heritage Tree	6097-6098
43	Water Oak	Quercus nigra	23	Significant Tree	6098-6099
44	Live Oak	Quercus virginiana	8	Heritage Tree	6098-6099
45	Eastern Red Cedar	Juniperus virginiana	7	Non Qualified Tree	6101-6000
46	American Elm	Ulmus Americana	8	Significant Tree	6002-6003
47	Water Oak	Quercus nigra	15	Significant Tree	6009-6010
48	Water Oak	Quercus nigra	12	Significant Tree	6010-6011
49	American Elm	Ulmus Americana	14	Significant Tree	6013
50	Live Oak	Quercus virginiana	8	Heritage Tree	6013-6014
51	Live Oak	Quercus virginiana	12	Heritage Tree	6014-6015
52	Live Oak	Quercus virginiana	5	Heritage Tree	6014-6015
53	American Elm	Ulmus Americana	7	Significant Tree	6016-6017
54	American Elm	Ulmus Americana	7	Significant Tree	6022-6023
55	American Elm	Ulmus Americana	10	Significant Tree	6023-6024
56	Eastern Red Cedar	Juniperus virginiana	7	Non Qualified Tree	6023-6024
57	Pecan	Carya illinoensis	7	Heritage Tree	6023-6024
58	American Elm	Ulmus Americana	8	Significant Tree	6023-6024
59	Water Oak	Quercus nigra	16	Significant Tree	6024
60	American Elm	Ulmus Americana	11	Significant Tree	6026-6027
61	American Elm	Ulmus Americana	11	Significant Tree	6027-6028
62	Eastern Red Cedar	Juniperus virginiana	12	Non Qualified Tree	6027-6028
63	Water Oak	Quercus nigra	15	Significant Tree	6027-6028
64	Water Oak	Quercus nigra	16	Significant Tree	6027-6028
65	Water Oak	Quercus nigra	18	Significant Tree	6027-6028
66	Water Oak	Quercus nigra	19	Significant Tree	6027-6028
67	Water Oak	Quercus nigra	11	Significant Tree	6031
68	Eastern Red Cedar	Juniperus virginiana	13	Non Qualified Tree	6032-6033
69	Live Oak	Quercus virginiana	8	Heritage Tree	6034-6035
70	American Elm	Ulmus Americana	14	Significant Tree	6035-6036
71	Live Oak	Quercus virginiana	13	Heritage Tree	6035-6036
72	Live Oak	Quercus virginiana	7	Heritage Tree	6039
73	Live Oak	Quercus virginiana	13	Heritage Tree	6039-6040
74	Water Oak	Quercus nigra	12	Significant Tree	6039-6040
75	Live Oak	Quercus virginiana	8	Heritage Tree	6040-6041
76	Water Oak	Quercus nigra	10	Significant Tree	6040-6041
77	Live Oak	Quercus virginiana	7	Heritage Tree	6040-6041

Good structured quality tree

Good structured quality tree

Good structured quality tree

Good structured quality tree

Double Trunk, existing tree marker 532

78	Live Oak	Quercus virginiana	10	Heritage Tree	Double Trunk	6040-6041
79	Live Oak	Quercus virginiana	7	Heritage Tree	Oak mott	6041-6042
80	Live Oak	Quercus virginiana	8	Heritage Tree		6041-6042
81	American Elm	Ulmus Americana	15	Significant Tree		6041-6042
82	Live Oak	Quercus virginiana	6	Heritage Tree		6041-6042
83	Live Oak	Quercus virginiana	12	Heritage Tree	Oak mott	6041-6042
84	Live Oak	Quercus virginiana	8	Heritage Tree		6041-6042
85	Live Oak	Quercus virginiana	3	Heritage Tree		6041-6042
86	Live Oak	Quercus virginiana	4	Heritage Tree	Heavily Leaning	6041-6042
87	Live Oak	Quercus virginiana	7	Heritage Tree		6042-6043
88	Live Oak	Quercus virginiana	4	Heritage Tree		6042-6043
89	American Elm	Ulmus Americana	6	Significant Tree		6042-6043
90	Live Oak	Quercus virginiana	3	Heritage Tree		6042-6043
91	American Elm	Ulmus Americana	19	Significant Tree	Existing tree marker 531	6042-6043
92	Water Oak	Quercus nigra	15	Significant Tree		6043
93	Live Oak	Quercus virginiana	25	Heritage Tree		6043
94	Water Oak	Quercus nigra	7	Significant Tree	Oak mott	6043-6044
95	Live Oak	Quercus virginiana	8	Heritage Tree		6045-6046
96	American Elm	Ulmus Americana	15	Significant Tree	Multiple Trunk	6045-6046
97	American Elm	Ulmus Americana	5	Significant Tree	Multiple Trunk	6045-6046
98	American Elm	Ulmus Americana	8	Significant Tree		6046-6053
99	Live Oak	Quercus virginiana	4	Heritage Tree		6046-6053
100	Live Oak	Quercus virginiana	10	Heritage Tree		6046-6053
101	Live Oak	Quercus virginiana	9	Heritage Tree		6046-6053
102	American Elm	Ulmus Americana	4	Significant Tree		6046-6053
103	Live Oak	Quercus virginiana	9	Heritage Tree		6046-6053
104	American Elm	Ulmus Americana	8	Significant Tree		6046-6053
105	Live Oak	Quercus virginiana	19	Heritage Tree	Multiple Trunk	6053-6054
106	Live Oak	Quercus virginiana	4	Heritage Tree		6053-6054
107	Live Oak	Quercus virginiana	5	Heritage Tree		6054-6055
108	American Elm	Ulmus Americana	8	Significant Tree		6054-6055
109	Live Oak	Quercus virginiana	5	Heritage Tree		6054-6055
110	Live Oak	Quercus virginiana	10	Heritage Tree		6054-6055
111	Water Oak	Quercus nigra	4	Significant Tree		6055-6056

Total count	Heritage	Significant	Non Qualified	Total Saved
Total diameter	52	48	10	110
Average Diameter	537	591	104	1232
	10	12	10	

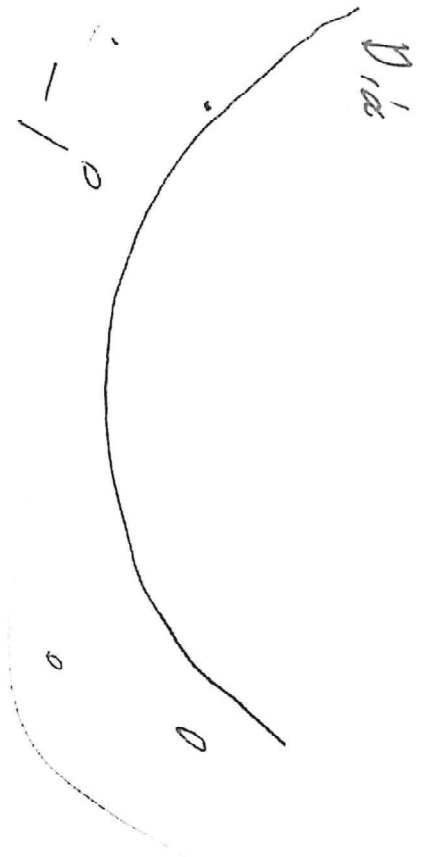
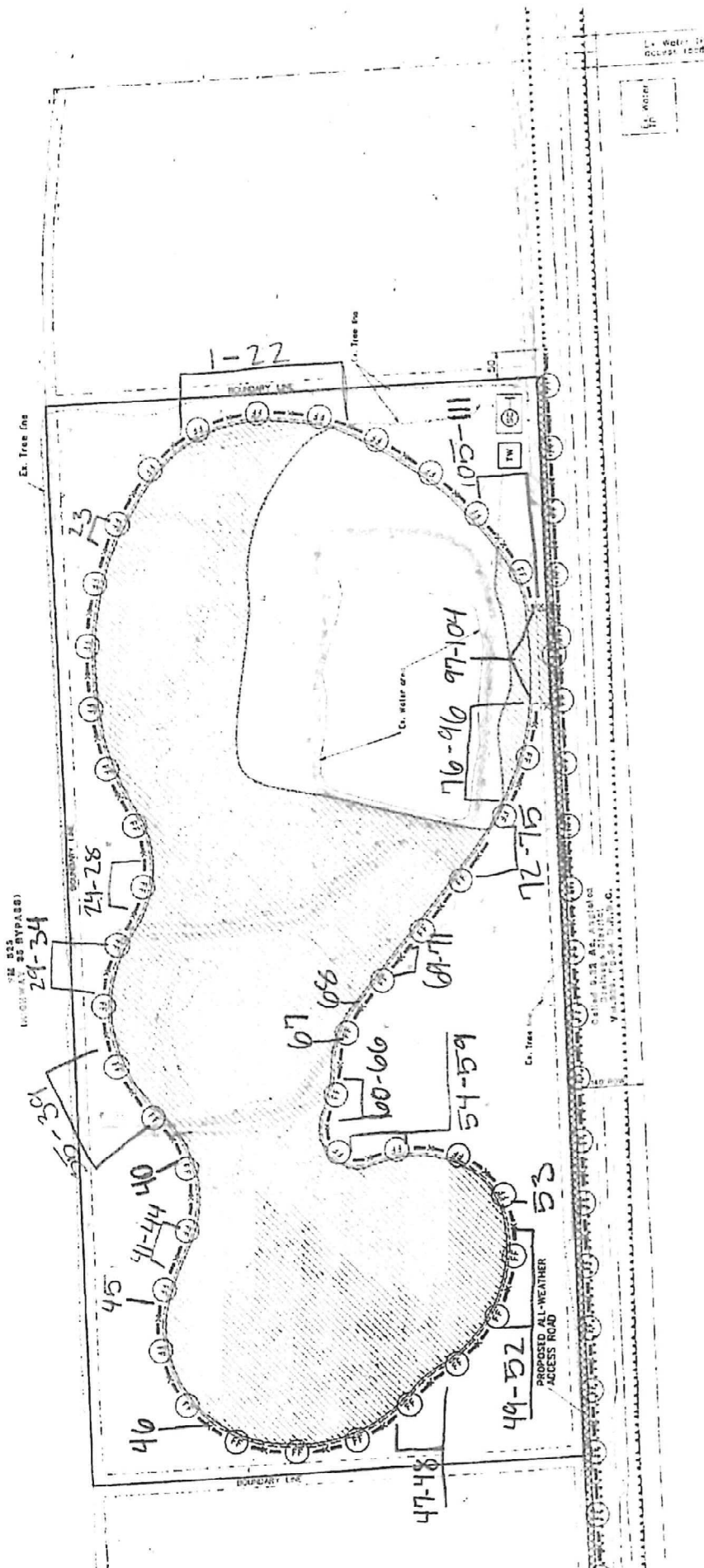
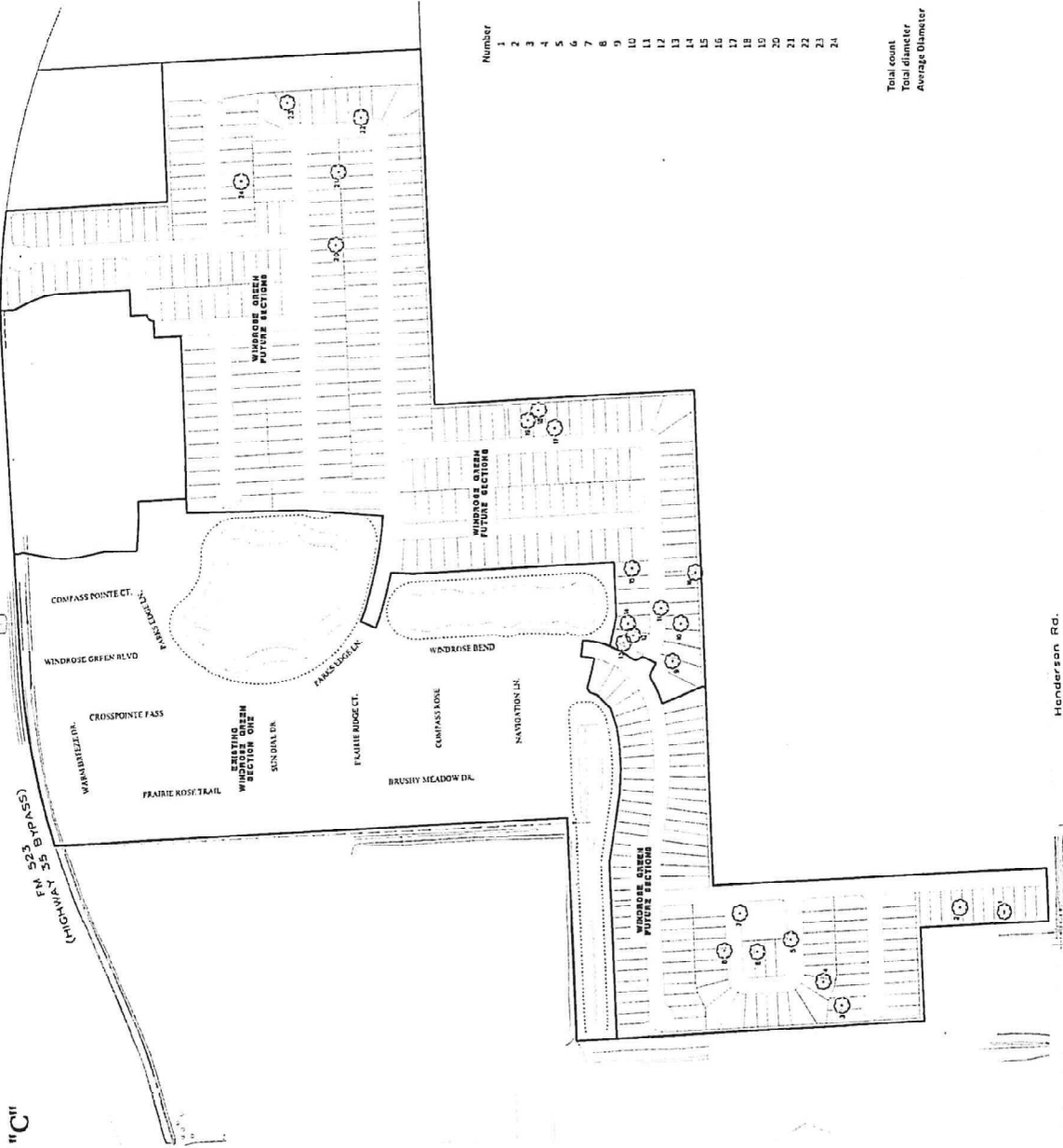


EXHIBIT "B-2"



EXHIBIT "C"



Number	Species	Diameter (inches)	Classification
1	Live Oak	6	Heritage Tree
2	Live Oak	8	Heritage Tree
3	Live Oak	7	Heritage Tree
4	Live Oak	8	Heritage Tree
5	Live Oak	5	Heritage Tree
6	Live Oak	10	Heritage Tree
7	Live Oak	8	Heritage Tree
8	Live Oak	11	Heritage Tree
9	Live Oak	5	Heritage Tree
10	Live Oak	8	Heritage Tree
11	Live Oak	5	Heritage Tree
12	Live Oak	10	Heritage Tree
13	Live Oak	6	Heritage Tree
14	Live Oak	8	Heritage Tree
15	Live Oak	5	Heritage Tree
16	Live Oak	8	Heritage Tree
17	Live Oak	5	Heritage Tree
18	Live Oak	7	Heritage Tree
19	Live Oak	6	Heritage Tree
20	Live Oak	10	Heritage Tree
21	Live Oak	9	Heritage Tree
22	Live Oak	13	Heritage Tree
23	Live Oak	16	Heritage Tree
24	Live Oak	16	Heritage Tree

Total count: 24
 Total diameter: 153
 Average diameter: 6



WINDROSE GREEN PHASE II
 TREE LAYOUT

DATE: 10/24/2022
 DRAWN BY: J. B. BARNETT

EXHIBIT "D"

Windrose Green - Phase I Landscape Improvements

Type	Qty	Tree Caliber (Inches)	Total Inches	Heritage/Significant	Total Credit (Inches)
Drummond Red Maple	42	2.5	105.0	No	
Mexican Sycamore	5	3.5	17.5	No	
Swamp Chestnut Oak	19	2.5	47.5	No	
Water Oak	12	2.5	30.0	Yes	30.0 Inches
Monterrey Oak	29	2.5	72.5	No	
Live Oak	91	2.5	227.5	Yes	227.5 Inches
Bald Cypress	36	2.5	90.0	Yes	90.0 Inches
Drake Elm	5	3.5	17.5	No	
Basham's Party Prink Grape Myrtle	19	3	57.0	No	
Natchez Grape Myrtle	18	3	54.0	No	
			718.5	Total Credit	347.5 Inches

Wagner Tree Farm
4135 Avenue E
Santa Fe, TX 77510
(409) 682-0695
wagnertreefarm@hotmail.com
www.wagnertreefarm.com

Attachment "B"



Quote

ADDRESS

City Of Angleton

QUOTE # 1182

DATE 06/28/2024

SUMMARY	QTY	RATE	AMOUNT
Sales	537	475.00	255,075.00
3" cal live oaks no installation			
FREIGHT	1	300.00	300.00
Per load			

Liability Release: Owner will assume any extra cost incurred by WTF to remove any fences, walls, sprinklers, gas lines, or any other obstruction which prevents easy access where trees are to be planted. If rock is encountered, an additional charge must be added to cover the cost of air hammer and/or additional labor. WTF is not responsible for a prints or ruts made during project. WTF will notify Dig Tess for underground utility locating prior to digging unless specified otherwise, and will not be held responsible for any underground utility damage. Owner assumes responsibility for placement and replanting of trees. Pricing is good for 3 months from date the bid is received. Warranty on trees/shrubs does NOT cover animal encounter, natural disaster, or mechanical damage. Warranty will be voided for watering negligence.

TOTAL

\$255,375.00

Accepted By

Accepted Date