

Tree Inventory

Glen Avenue

Tampa, Hillsborough County, Florida
E Sciences Project Number 3-0224-001
January 5, 2022



**ENGINEERING
ENVIRONMENTAL
ECOLOGICAL**

Prepared for:

Mark Lauckner
Patel, Greene & Associates, LLC (PGA)
12570 Telecom Drive
Temple Terrace, FL 33637



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**Subject: Tree Inventory
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E Sciences Project Number 3-0224-001**

Dear Mr. Lauckner,

E Sciences, Incorporated (E Sciences) is pleased to submit this report documenting the tree inventory completed along Glen Avenue from West Green Street to West Beach Street in Tampa, Florida. This inventory was prepared in general accordance with our proposal number 3-0224-P01 dated July 2, 2020.

E Sciences conducted a tree inventory to identify, assess, measure, and apply a condition rating to trees including potential grand trees according to the provisions of the City of Tampa tree ordinance. The trees were individually numbered on a survey provided to us. The field visit was conducted on December 15, 2021. The attached tables summarize the data collected the corresponding recommendations. We have also attached the annotated survey for your reference.

The inventory included trees located adjacent to and within 20 feet of proposed improvements along Glen Avenue that may be impacted by the installation of a new sidewalk and drainage work (hereinafter referred to as “assessment area”). This area could include trees with trunks/root systems of adequate size to likely incur root impacts during improvements and trees with lower hanging branches that could be impacted by construction equipment. Per coordination with City staff, it has been determined that a minimum of 14 feet of clearance for construction equipment is required.

Please note: Off-site trees shown on the survey have been verified to be present in the field. Only those off-site trees that are likely to incur impacts are included in this inventory.

The determination that a tree would likely incur root system impacts from construction activities was based on the required setbacks defined in the City of Tampa tree ordinance. The setbacks are as follows:

- Small trees (crepe myrtle, arborvitae) and palms require a 6-foot setback
- Trees 5-inches to 23-inches require a 10-foot setback
- Trees 24-inches to 31-inches require a 15-foot setback
- Trees 32-inches and larger require a 20-foot setback

Summary of Findings and Recommendations

It was determined that 13 (3 off site) trees within the study area had root systems or low hanging branches that could potentially be compromised by proposed improvements (**see attached annotated survey and tree data table**). Based on our observations, it was determined that the poor condition of 26 of these trees warrants consideration of removal independent of proposed construction and 20 trees require no action. Consequently, a total of 39 (3 off site) trees were identified where remediation was recommended to address potential construction impacts. These trees were categorized as follows (categories named per the value assigned to the “recommendations” column on the tree data tables).

- **“Hand work and Root Prune” (four trees):** The new sidewalk and/or drainage work could encroach into the required setback of these trees. It is likely that roots from these subject trees are growing in the area of proposed improvements; therefore, these roots could be severely damaged during construction activities. Recommended remedial action for these trees includes the following: hand work within the required setback; exposing roots using non-destructive measures (e.g. air spade); and pruning roots, as necessary.
- **“Hand work and Root Prune/Clearance Pruning” (nine trees):** These trees have the same characteristics and proposed remediation as the “Hand Work and Root Prune” trees with the addition of lower hanging branches (i.e. less than 14 feet above ground) that require clearance pruning prior to construction.
- **“Consider Removal” (26 trees):** These trees are either dead or in critical condition due to major defects and warrant consideration for removal due to elevated likelihood of failure. This category also includes trees that cannot withstand the proposed impacts.

*Please note: The recommended remediations are based on the information provided to date. Recommendations will be updated as necessary in the Tree Preservation Plan upon receipt of the final site plan.

Supplemental Observations

Upon inspection, trees with a condition rating of 40% or less were not eminent for removal but they will likely not have enough stored-up energy to withstand the impacts of proposed improvements. These subject trees could go into further decline and possibly die. It is our recommendation that the trees subject to this project be monitored for further decline on an annual basis after the completion of improvements.

Observations of overhead utility conflicts were also recorded (**see attached data table**). These observations may assist the City in determining where overhead utility clearance pruning may be warranted.

The data and recommendations presented in this report shall not be used for purposes other than those listed in the above referenced proposal. This inventory does not constitute a tree risk assessment.

We appreciate the opportunity to provide you with this arborist inventory report. If you have any questions concerning this report, please contact Lori Ballard at 727-403-5980.

Sincerely,
E SCIENCES, INCORPORATED



Lori Ballard
Senior Arborist



Nadia Locke, P.E.
Senior Associate

Attachment A: Tree Inventory
Attachment B: Grand Tree Chart
Attachment C: Annotated Survey

ATTACHMENT A

Tree Inventory - Glen Avenue

#	SPECIES		SIZE	Notes	CONDITION INFORMATION				ADDITIONAL NOTES	RECOMMENDATIONS
	Common Name	Scientific Name	DBH (in.)		Condition	Condition Note 1	Condition Note 2	Condition Note 3		
1	LIVE OAK	<i>Quercus virginiana</i>	34		B-7	Root barrier: curb and asphalt to the south and west, compaction to the north and east	Major stub to the north	Stubs, deadwood	Remove stubs and deadwood	Hand work in CRZ, Root Prune and Clearance Pruning
2	LIVE OAK	<i>Quercus virginiana</i>	22		40%	Compaction to north, south, east and west	Wound, sounding indicated minor internal decay, included scaffold branches	Stubs, deadwood	If preserved - remove included scaffold branch, stubs and deadwood	Hand work in CRZ and Root Prune
3	CABBAGE PALM	<i>Sabal palmetto</i>	17	MEASUREMENT INCLUDES BOOTS	75%	Reduced crown: moderate				No Action
4	CABBAGE PALM	<i>Sabal palmetto</i>	12		70%	Bend in trunk	Growing into tree #5			No Action
5	LAUREL OAK	<i>Quercus laurifolia</i>	33		C-10	Compaction to the north, south, east and west	Wound with decay to the north, sounding indicated moderate internal decay, included scaffold branch to the west	Die back, stubs, deadwood		Remove
6	GOLDEN RAIN	<i>Koelreuteria paniculata</i>	18		EXEMPT					Remove
7	CABBAGE PALM	<i>Sabal palmetto</i>	22	MEASUREMENT INCLUDES BOOTS	65%	Reduced crown: moderate	Growing into utility wires			No Action
8	CABBAGE PALM	<i>Sabal palmetto</i>	13		80%	Growing adjacent to ditch	Growing adjacent to utility wires			No Action
9	CABBAGE PALM	<i>Sabal palmetto</i>	18	MEASUREMENT INCLUDES BOOTS	85%	Growing adjacent to ditch				No Action
10	CABBAGE PALM	<i>Sabal palmetto</i>	15	MEASUREMENT INCLUDES BOOTS	85%	Growing adjacent to ditch				No Action
11	LIVE OAK	<i>Quercus virginiana</i>	44		C-8	Root barrier: concrete to the north and west, compromised roots due to ditch to the east	Growing under utility wires	Epicormic growth, stubs, deadwood	Remove stubs and deadwood	Hand work in CRZ, Root Prune and Clearance Pruning
12	QUEEN PALM	<i>Syagrus romanzoffiana</i>	6		EXEMPT					No Action
13	CHERRY LAUREL	<i>Prunus caroliniana</i>	9		EXEMPT					No Action
14	LIVE OAK	<i>Quercus virginiana</i>	26		55%	Compromised roots due to ditch to the east	Included scaffold branches, growing into utility wires	Stubs, deadwood	Remove included scaffold branches, stubs and deadwood	Hand work in CRZ, Root Pruning and Clearance Pruning
15	LIVE OAK	<i>Quercus virginiana</i>	18		50%	Compromised roots due to ditch to the east, imbedded fence	Growing into utility wires	Epicormic growth, low crown density		Hand work in CRZ, Root Pruning and Clearance Pruning
16	HING KONG ORCHID	<i>Bauhinia blakeana</i>	31		EXEMPT					Remove
17	LAUREL OAK	<i>Quercus laurifolia</i>	27		40%	Quad-dominant with included bark in 2 unions	Growing under utility wires	Major epicormic growth		Remove
18	LAUREL OAK	<i>Quercus laurifolia</i>	13		30%	Codominant with included bark	Growing under utility wires	Major epicormic growth		Remove
19	CABBAGE PALM	<i>Sabal palmetto</i>	15	MEASUREMENT INCLUDES BOOTS	80%	Growing under utility wires				No Action
20	CABBAGE PALM	<i>Sabal palmetto</i>	18	MEASUREMENT INCLUDES BOOTS	80%	Growing under utility wires				No Action
21	EUCALYPTUS	<i>Eucalyptus globulus</i>	5		EXEMPT					Remove
22	LONG LEAF PINE	<i>Pinus palustris</i>	25		30%	Previous codominant failure to the northwest	Sounding indicated major internal decay	Stubs, deadwood		Remove
23	HING KONG ORCHID	<i>Bauhinia blakeana</i>	33		EXEMPT					Remove
24	LAUREL OAK	<i>Quercus laurifolia</i>	15		35%	Corrected lean	One sided canopy	Major epicormic growth		Remove
25	WATER OAK	<i>Quercus nigra</i>	19		25%	Trunk canker to the south, sounding indicated major internal decay	Growing under utility wires	Topped		Remove
26	LAUREL OAK	<i>Quercus laurifolia</i>	25		20%	Major decay	Topped			Remove
27	LIVE OAK	<i>Quercus virginiana</i>	40		B-7	Root barrier: sidewalk to the west, house to the east	Basal wound to the northeast, sounding indicated no internal decay likely	One sided canopy, included scaffold branch, stubs, deadwood	Remove included scaffold branch, stubs and deadwood	Hand work in CRZ, Root Pruning and Clearance Pruning
28	CABBAGE PALM	<i>Sabal palmetto</i>	13		75%	Growing into tree #27				No Action
29	LAUREL OAK	<i>Quercus laurifolia</i>	11		35%	Growing under utility wires	Topped			Remove
30	LAUREL OAK	<i>Quercus laurifolia</i>	54		D-10	Root barrier: asphalt to the east, wounds and decay on surface roots	Codominant with included bark in 2 unions, growing under utility wires, topped	Epicormic growth, major stubs		Remove
31	LAUREL OAK	<i>Quercus laurifolia</i>	70		D-12	Previous codominant failure	Major decay including entire east side of tree	South leader has crack at union	Recommend removal ASAP	Remove
32	CABBAGE PALM	<i>Sabal palmetto</i>	12		80%	Growing under utility wires				No Action
33	LAUREL OAK	<i>Quercus laurifolia</i>	22		35%	Root barrier: sidewalk to the west, asphalt and ditch to the east	Growing under utility wires, topped	Major epicormic growth		Remove
34	UMBRELLA	<i>Schefflera actinophylla</i>	5, 5, 18		EXEMPT					No Action
35	LAUREL OAK	<i>Quercus laurifolia</i>	45		D-11	Root barrier: asphalt to the west, compromised roots due to ditch to the west	Trunk canker to the south, sounding indicated major internal decay	Major seams		Remove
36	LIVE OAK	<i>Quercus virginiana</i>	43		B-6	Root barrier: asphalt to the west, compromised roots due to ditch to the west	Tri-dominant	Stubs, deadwood	Remove stubs and deadwood	Hand work in CRZ, Root Pruning and Clearance Pruning
37	LIVE OAK	<i>Quercus virginiana</i>	15		55%	Compromised roots due to ditch to the west	One sided canopy	Restricted canopy		Hand work in CRZ and Root Pruning
38	LAUREL OAK	<i>Quercus laurifolia</i>	30		15%	Root barrier: asphalt to the north and east, compromised roots due to ditch to the east	Tri-dominant with included bark in all unions	Topped		Remove
39	QUEEN PALM	<i>Syagrus romanzoffiana</i>	6		EXEMPT					Remove
40	WATER OAK	<i>Quercus nigra</i>	21		20%	Root barrier: asphalt to the north, compromised roots due to ditch to the west	Very low crown density	Topped		Remove
41	LIVE OAK	<i>Quercus virginiana</i>	15		0%	Dead				Remove
42	CABBAGE PALM	<i>Sabal palmetto</i>	17	MEASUREMENT INCLUDES BOOTS	80%	Growing into tree #43 and 44				No Action

Tree Inventory - Glen Avenue

#	SPECIES		SIZE	Notes	CONDITION INFORMATION				ADDITIONAL NOTES	RECOMMENDATIONS
	Common Name	Scientific Name	DBH (in.)		Condition	Condition Note 1	Condition Note 2	Condition Note 3		
43	LAUREL OAK	<i>Quercus laurifolia</i>	34		C-10	Root barrier: asphalt to the west, compromised roots due to ditch to the west	Codominant with included bark 5 foot above grade, major stubs with decay to the north	Stubs, deadwood		Remove
44	GOLDEN RAIN	<i>Koelreuteria paniculata</i>	13		EXEMPT					Remove
45	LIVE OAK	<i>Quercus virginiana</i>	23		50%	Root barrier: asphalt to the west, compromised roots due to ditch to the west	Lean, one sided canopy over street		14 foot clearance pruning would necessitate removal	Remove
46	QUEEN PALM	<i>Syagrus romanzoffiana</i>	9		EXEMPT					No Action
47	LIVE OAK	<i>Quercus virginiana</i>	22		55%	Root barrier: asphalt to the west, compromised roots due to ditch to the west	Stubs		Remove stubs	Hand work in CRZ and Root Pruning
48	QUEEN PALM	<i>Syagrus romanzoffiana</i>	10		EXEMPT					No Action
49	BOTTLE BRUSH	<i>Callistemon</i>	6		60%					No Action
50	QUEEN PALM	<i>Syagrus romanzoffiana</i>	9		EXEMPT					No Action
51	QUEEN PALM	<i>Syagrus romanzoffiana</i>	9		EXEMPT					No Action
52	CABBAGE PALM	<i>Sabal palmetto</i>	20	MEASUREMENT INCLUDES BOOTS	85%	Reduced crown: moderate				No Action
53	LAUREL OAK	<i>Quercus laurifolia</i>	19		25%	Compromised roots due to ditch to the east	Very low crown density, topped	Stubs, deadwood		Remove
54	SOUTHERN RED CEDAR	<i>Juniperus virginiana</i>	17		45%	Growing into utility wires	Dieback	Deadwood	Remove deadwood	Hand work in CRZ and Root Pruning
55	LAUREL OAK	<i>Quercus laurifolia</i>	33		D-10	Root barrier: landscaping wall to the north, south, east and west, no root flare	Tri-dominant with included bark in all unions	Grafted leaders		Remove
56	LAUREL OAK	<i>Quercus laurifolia</i>	29		25%	Root barrier: landscaping wall to the north, east and west	Basal codominant with included bark	Major epicormic growth		Remove
57	LIVE OAK	<i>Quercus virginiana</i>	28	OFF SITE - APPROXIMATE SIZE						Hand work in CRZ, Root Pruning and Clearance Pruning
58	LIVE OAK	<i>Quercus virginiana</i>	58	OFF SITE - APPROXIMATE SIZE						Hand work in CRZ, Root Pruning and Clearance Pruning
59	CAMPBOR	<i>Cinnamomum camphora</i>	36	OFF SITE - APPROXIMATE SIZE						Hand work in CRZ, Root Pruning and Clearance Pruning

ATTACHMENT B

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 81%-100% (Diameter Measurements in Feet)									TREE #1							
COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]							
LIVE OAK	54	74	64.0	3217	A	1	1	3217	21							
									0.95	3056	20					
									0.9	2895	19					
									0.85	2734	18					
									0.81	2606	17					
					B	0.9			1	2895	19					
									0.95	2751	18					
									0.9	2606	17					
					C	0.75			0.85	2461	16					
									0.81	2345	15					
									1	2413	16					
									0.95	2292	15					
					D	0.4			0.9	2171	14					
									0.85	2051	13					
									0.81	1954	13					
									1	1287	8					
									0.95	1222	8					
														0.9	1158	8
														0.85	1094	7
							0.81	1042	7							

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet)									TREE #5		
COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	51	53	52.0	2124	A	1	0.8	1699	11		
									0.75	1593	10
									0.7	1487	10
									0.65	1380	9
									0.61	1295	8
					B	0.9			0.8	1529	10
									0.75	1434	9
									0.7	1338	9
									0.65	1242	8
					C	0.75			0.61	1166	8
									0.8	1274	8
									0.75	1195	8
									0.7	1115	7
									0.65	1035	7
					D	0.4			0.61	972	6
									0.8	680	4
									0.75	637	4
									0.7	595	4
									0.65	552	4
							0.61	518	3		

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 81%-100% (Diameter Measurements in Feet) TREE #11

COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LIVE OAK	66	68	67.0	3526	A	1	1	3526	23		
									0.95	3349	22
									0.9	3173	21
									0.85	2997	19
									0.81	2856	19
					B	0.9			1	3173	21
									0.95	3014	20
									0.9	2856	19
									0.85	2697	18
					C	0.75			0.81	2570	17
									1	2644	17
									0.95	2512	16
									0.9	2380	15
									0.85	2248	15
					D	0.4			0.81	2142	14
									1	1410	9
									0.95	1340	9
									0.9	1269	8
									0.85	1199	8
							0.81	1142	7		

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 81%-100% (Diameter Measurements in Feet) TREE #27

COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]							
LIVE OAK	61	74	67.5	3578	A	1	1	3578	23							
									0.95	3400	22					
									0.9	3221	21					
									0.85	3042	20					
									0.81	2899	19					
					B	0.9			1	3221	21					
									0.95	3060	20					
									0.9	2899	19					
					C	0.75			0.85	2738	18					
									0.81	2609	17					
									1	2684	17					
									0.95	2550	17					
					D	0.4			0.9	2415	16					
									0.85	2281	15					
									0.81	2174	14					
									1	1431	9					
									0.95	1360	9					
														0.9	1288	8
														0.85	1217	8
							0.81	1159	8							

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet)									TREE #30		
COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	34	44	39.0	1195	A	1	0.8	956	6		
									0.75	896	6
									0.7	836	5
									0.65	776	5
									0.61	729	5
					B	0.9			0.8	860	6
									0.75	806	5
									0.7	753	5
									0.65	699	5
					C	0.75			0.61	656	4
									0.8	717	5
									0.75	672	4
									0.7	627	4
					D	0.4			0.65	547	4
									0.8	382	2
									0.75	358	2
									0.7	334	2
									0.65	311	2

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet) TREE #31

COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	61	92	76.5	4596	A	1	0.8	3677	24		
									0.75	3447	22
									0.7	3217	21
									0.65	2988	19
									0.61	2804	18
					B	0.9			0.8	3309	21
									0.75	3103	20
									0.7	2896	19
									0.65	2689	17
					C	0.75			0.61	2523	16
									0.8	2758	18
									0.75	2585	17
									0.7	2413	16
					D	0.4			0.65	2241	15
									0.61	2103	14
									0.8	1471	10
									0.75	1379	9
									0.7	1287	8
									0.65	1195	8
		0.61	1122	7							

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet) TREE #35

COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	49	72	60.5	2875	A	1	0.8	2300	15		
									0.75	2156	14
									0.7	2012	13
									0.65	1869	12
									0.61	1754	11
					B	0.9			0.8	2070	13
									0.75	1940	13
									0.7	1811	12
									0.65	1682	11
					C	0.75			0.61	1578	10
									0.8	1725	11
									0.75	1617	11
									0.7	1509	10
					D	0.4			0.65	1401	9
									0.61	1315	9
									0.8	920	6
									0.75	862	6
									0.7	805	5
									0.65	747	5
		0.61	701	5							

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 81%-100% (Diameter Measurements in Feet) TREE #36

COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]					
LIVE OAK	67	72	69.5	3794	A	1	1	3794	25					
									0.95	3604	23			
									0.9	3414	22			
									0.85	3225	21			
									0.81	3073	20			
					1	3414			22					
					B						0.9	0.95	3244	21
												0.9	3073	20
												0.85	2902	19
												0.81	2766	18
												1	2845	18
					C						0.75	0.95	2703	18
												0.9	2561	17
												0.85	2418	16
												0.81	2305	15
												1	1517	10
D						0.4	0.95	1442	9					
							0.9	1366	9					
							0.85	1290	8					
							0.81	1229	8					

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet)									TREE #43		
COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	38	42	40.0	1257	A	1	0.8	1005	7		
							B	0.9	0.75	942	6
									0.7	880	6
									0.65	817	5
									0.61	767	5
					0.8	905			6		
					0.75	848	6				
					0.65	735	5				
					0.61	690	4				
					C	0.75	0.8	754	5		
							0.75	707	5		
							0.7	660	4		
							0.65	613	4		
							0.61	575	4		
					D	0.4	0.8	402	3		
							0.75	377	2		
0.7	352	2									
0.65	327	2									
0.61	307	2									

GRAND TREE LIST (TYPE 1) WITH SPECIES RATING OF 61%-80% (Diameter Measurements in Feet)									TREE #55		
COMMON NAME [1]	SHORTEST LENGTH DIAMETER "SLD" (Feet)	LONGEST LENGTH DIAMETER "LLD" (Feet)	CROWN SPREAD "CS" (Feet)	CROWN FOOTPRINT "CF" (SqFt)	CONDITION RATING "CR" [2]	CONDITION RATING "CR" (Equivalent %) [2]	SPECIES RATING "SR" (%) [3]	REPLACEMENT CROWN FOOTPRINT "RCF" (SqFt)	TOTAL MITIGATION TREES REQ'D [4,5]		
LAUREL OAK	36	46	41.0	1320	A	1	0.8	1056	7		
							B	0.9	0.75	990	6
									0.7	924	6
									0.65	858	6
									0.61	805	5
					0.8	951			6		
					0.75	891	6				
					0.7	832	5				
					0.65	772	5				
					0.61	725	5				
					C	0.75	0.8	792	5		
							0.75	743	5		
							0.7	693	5		
							0.65	644	4		
							0.61	604	4		
					D	0.4	0.8	422	3		
0.75	396	3									
0.7	370	2									
0.65	343	2									
							0.61	322	2		

[1] Refer to Sec. 27-284.1.2, Table 284.1.2

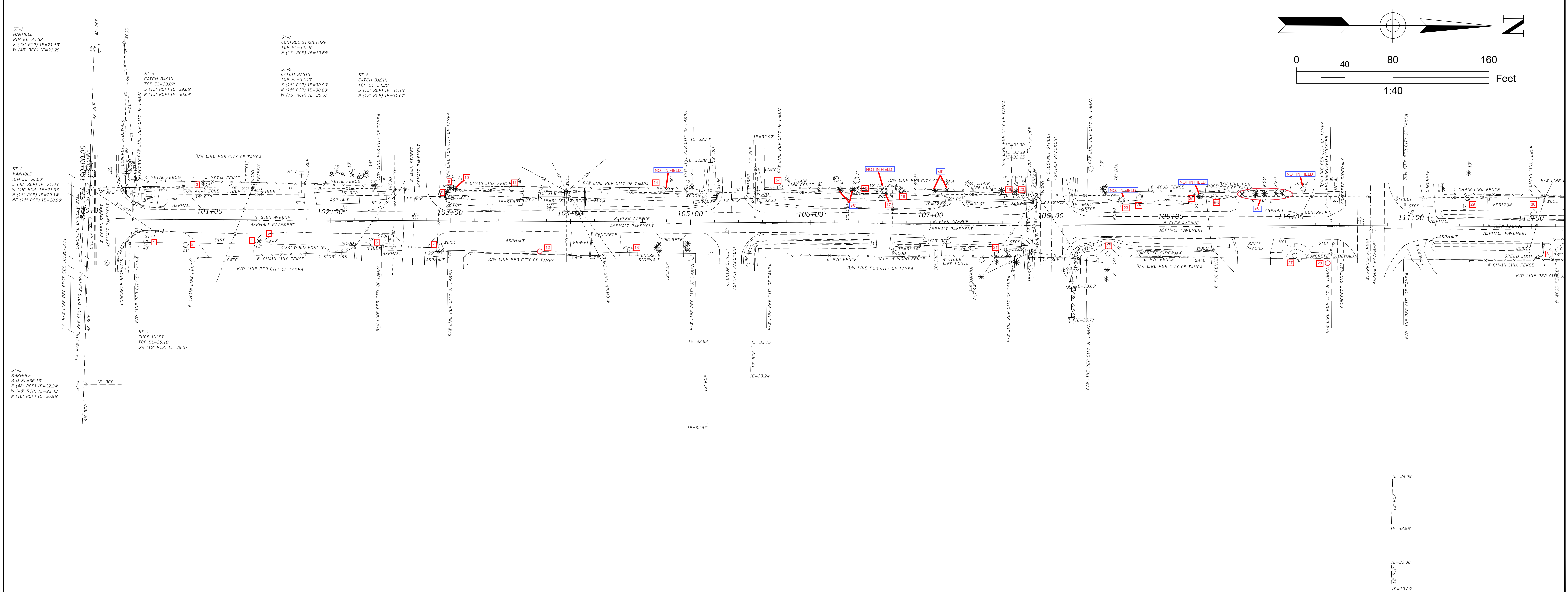
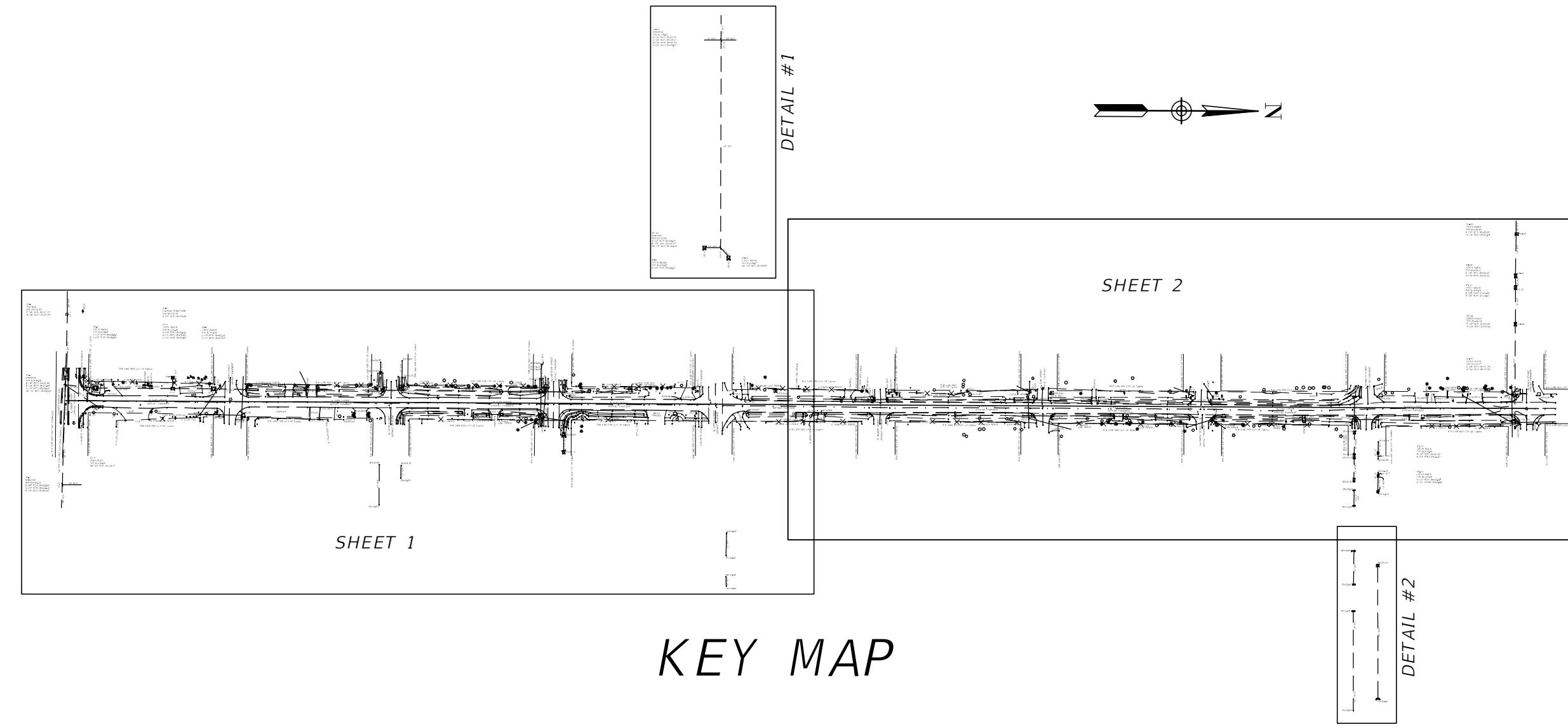
[2] Condition Rating determined as part of Tree Evaluation (Sec. 27-284.1.1); Ratings are: A = 1; B = 0.9; C = 0.75; D = 0.40; F = 0 not shown).

[3] Table 284.4.1-A defaults to mid-point of Species Rating range; Species Rating % may be adjusted up or down based on tree evaluation.

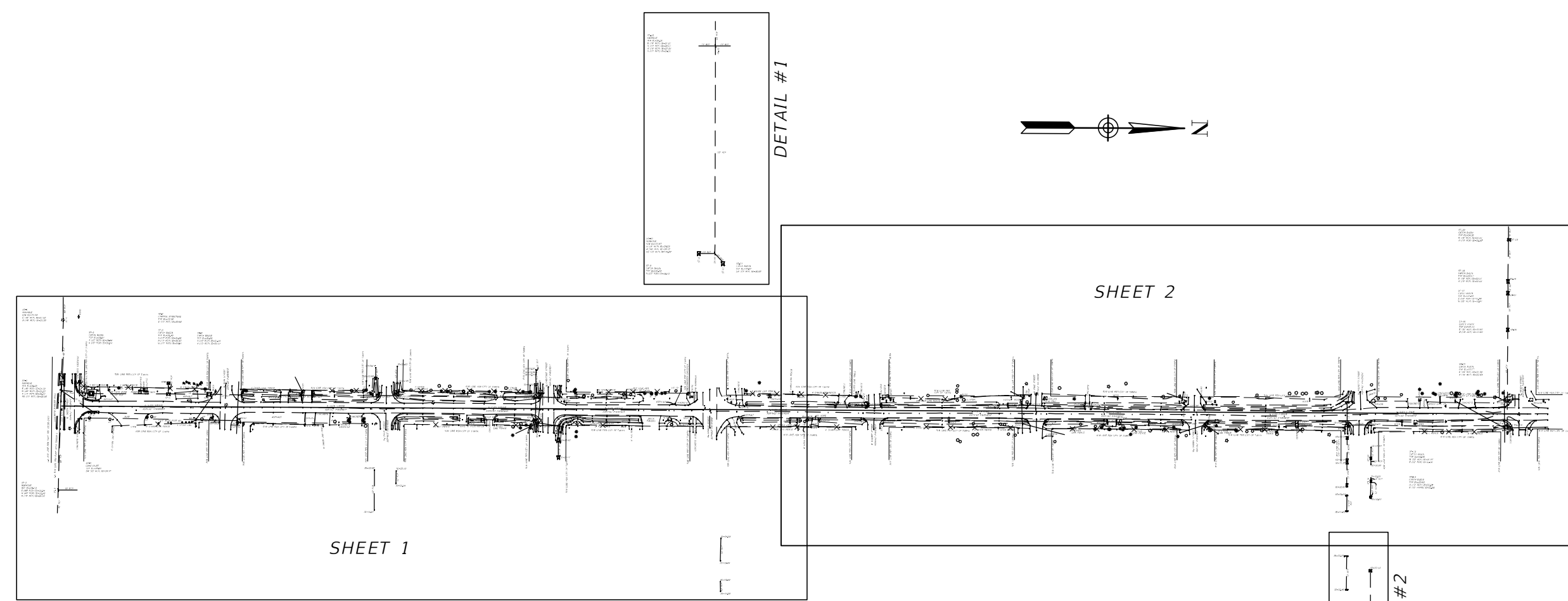
- [4] All grand tree species calculated at “moderate” growth rate, 10" caliper tree (Types 1 & 2) and 6" caliper tree (Type 3) as standard 5-year parity. (i.e. Type 1 Tree = 154 SF replacement Crown Footprint per 2.5" caliper tree planted; Type 2 Tree = 79 SF (CF); Type 3 Tree = 50 SF (CF)).
- [5] # of 2.5" Caliper (30 Gal Min) Trees Req'd for Mitigation. Use # in Yellow (i.e. mid-point); see also [3] above.

ATTACHMENT C

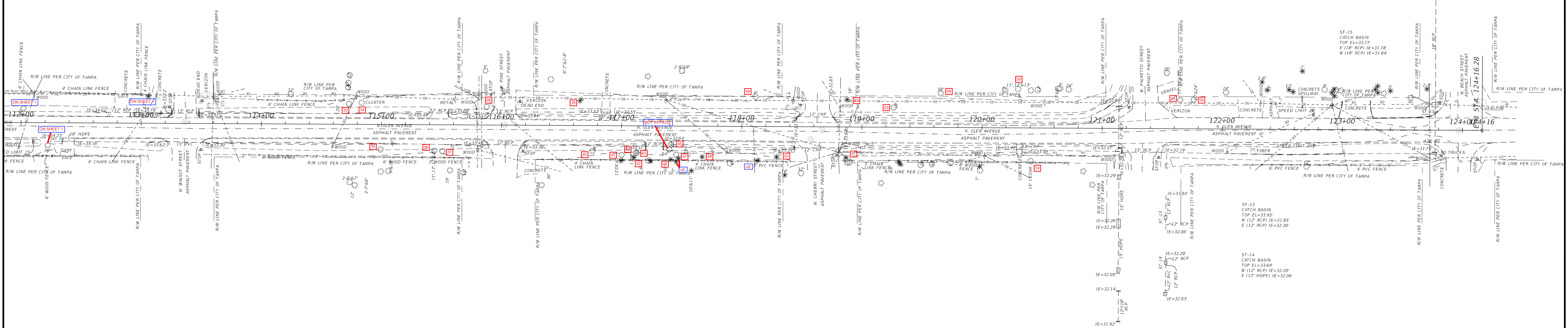
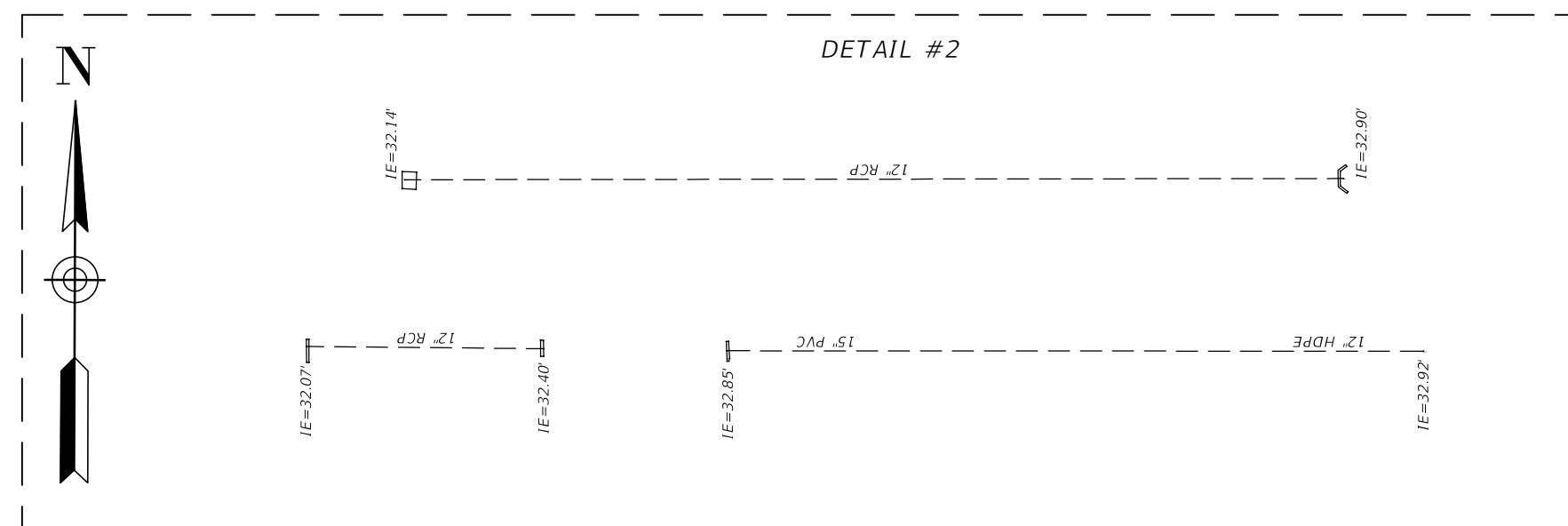
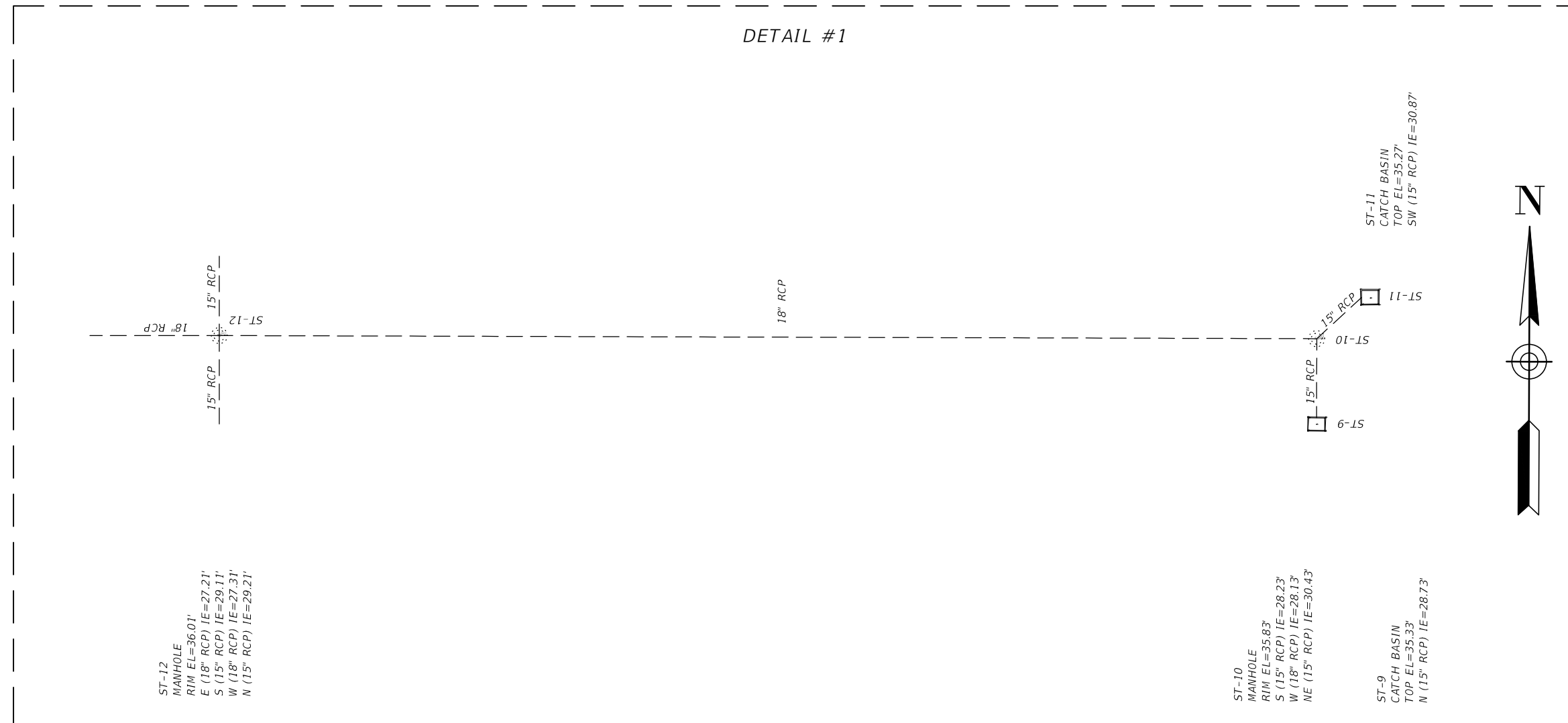
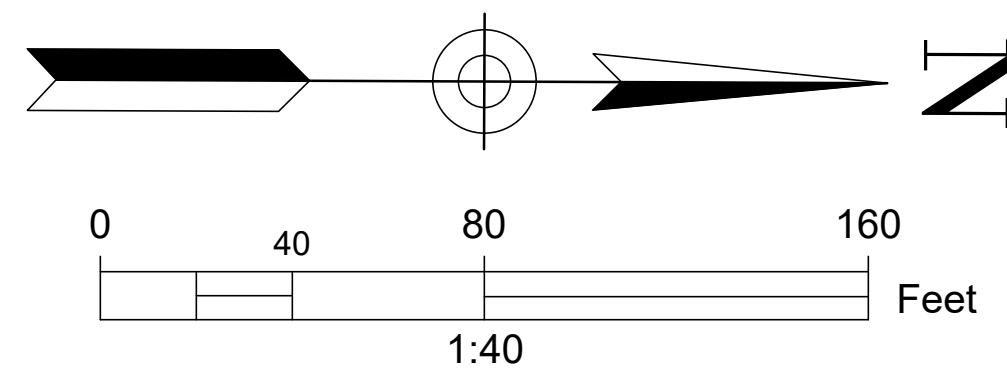
- TREE NUMBER
- NOTES
- ADDED TREE



1	12-15-21	E SCIENCES, INC. - TREE INVENTORY		DESIGNED _____	PROJECT: GLENN STREET	DESCRIPTION: Patel, Greene & Associates, LLC (PGA) 12570 Telecom Drive, Temple Terrace, FL 33637	APPROVED BY: _____ ###, P.E. FLX. LIC. NO ###	DATE: 11/30/2021
REV. NO	DATE	DESCRIPTION	REV. BY	CHECKED _____			DATE	SHEET: 1 OF 2



KEY MAP



1	12-15-21	E SCIENCES, INC - TREE INVENTORY	DESIGNED	PROJECT:	DESCRIPTION:	Patel, Greene & Associates, LLC (PGA) 12570 Telecom Drive, Temple Terrace, FL 33637	APPROVED BY:	DATE:
			DRAWN	GLENN STREET			###, P.E. FLX. LIC. NO ###	11/30/2021
			CHECKED					PROJECT NO. ###
REV. NO	DATE	DESCRIPTION	REV. BY					SHEET: 2 OF 2