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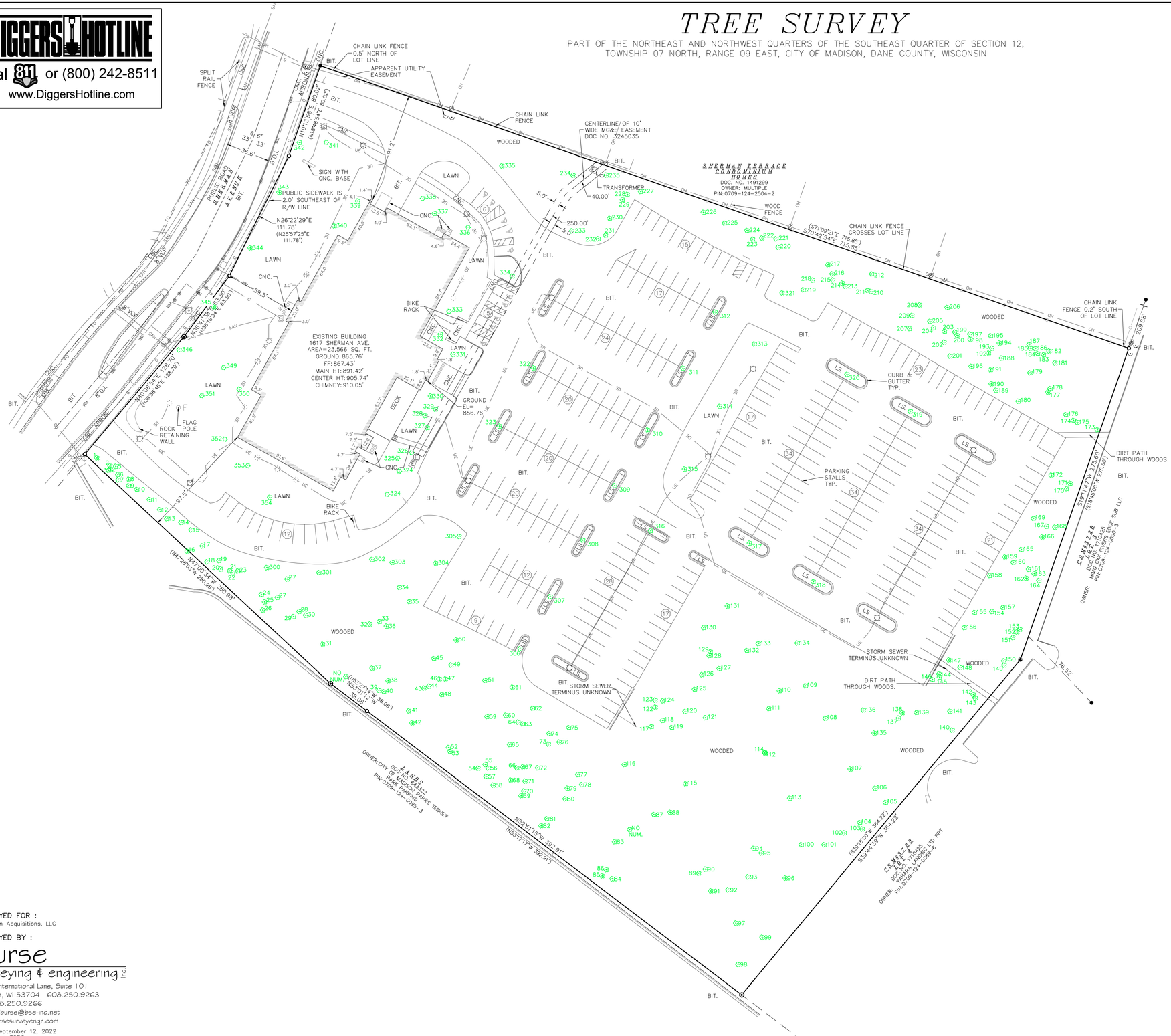
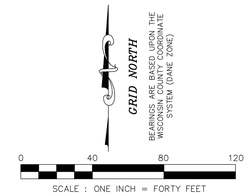
TREE SURVEY

PART OF THE NORTHEAST AND NORTHWEST QUARTERS OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 07 NORTH, RANGE 09 EAST, CITY OF MADISON, DANE COUNTY, WISCONSIN





LEGEND

⊙	1-1/4" IRON PIPE FOUND
●	3/4" SOLID IRON ROD FOUND
○	3/4" X 18" SOLID IRON RE-ROD SET, WT. 1.50 lbs./ft.
⊛	1-1/4" IRON PIPE FOUND PINCHED
X	FOUND CHISELED "X" IN CONCRETE
⊙	1-1/2" IRON PIPE FOUND
× 851.2	SPOT ELEVATION
OH	OVERHEAD UTILITY WIRE
G	BURIED GAS LINE
WM	WATER MAIN
SAN	SANITARY SEWER
ST	STORM SEWER
UT	BURIED TELEPHONE
UE	BURIED ELECTRIC
UTV	BURIED CABLE ACCESS TELEVISION LINE
FO	BURIED FIBER OPTIC
	WATER VALVE
	GAS VALVE
G	GAS METER
(#)	PARKING STALL COUNT
	DECIDUOUS TREE (DBH IN INCHES)
	CONIFEROUS TREE (DBH IN INCHES)
AC	AIR CONDITIONER
TV	TV PEDESTAL
E	ELECTRIC PEDESTAL
	UTILITY POLE
	LIGHT POLE
	GROUND LIGHT
T	TELEPHONE PEDESTAL
	FIRE HYDRANT
	SIGN
	GUY WIRE
	MAILBOX
	BOLLARD
	STORM SEWER INLET
E	ELECTRIC MANHOLE
T	TELEPHONE MANHOLE
S	STORM SEWER MANHOLE
	ROUND CATCH BASIN
E	ELECTRIC HANDHOLE
S	SANITARY SEWER MANHOLE
BIT.	BITUMINOUS PAVEMENT
CNC.	CONCRETE PAVEMENT
( )	INDICATES RECORDED AS

DISTANCES ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT. BUILDINGS ARE MEASURED TO THE NEAREST TENTH OF A FOOT.

NOTES:

1. Dates of field work: June 06, 15, 16, and 23, and September 1, 2022.
2. Total Parcel Area: 372,526 sq. ft.
3. Routing of private utilities is based upon markings provided GLS Utility, LLC, and visible aboveground structures. Additional buried utilities/structures may be encountered. No excavations were made to locate utilities. BURSE does not warrant the location of underground utilities. Before excavations are performed contact Digger's Hotline.
4. No attempt has been made as a part of this survey to obtain or show data concerning condition or capacity of any utility or municipal/public service facility. For information regarding these utilities or facilities, please contact the appropriate agencies.
5. All surface and subsurface improvements on and adjacent to the site are not necessarily shown hereon, as they were not observed during the course of the survey.
6. All trees, hedges and ground cover on the site may not necessarily be shown hereon.
7. Except as specifically stated or shown on this map, this survey does not purport to reflect any of the following which may be applicable to the subject real estate: easements; building setback lines; restrictive covenants; subdivision restrictions; zoning or other land use regulations; and any other facts in public or private records.
8. Surveyor was not provided a zoning report.
9. There is no evidence of recent earth moving work, building construction or building additions observed in the process of conducting the fieldwork.
10. There is no evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.
11. By graphic plotting only, this parcel is located in Zone X per the Flood Insurance Rate Map Community Panel Number 55025C0426H, dated 9/17/2014.
12. Parking Stall Count
    Standard Stalls: 358
    ADA Stalls: 10
    Total: 368
13. Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence, or any other facts that an accurate and current title search may disclose. Surveyor was provided with a Title Commitment Number W2202847 dated March 24, 2022 from Near North Title Group, which references the following (numbers in parenthesis match items in Schedule b, Part II of Commitment):
    (16) Right-of-way grant underground electric, to Madison Gas and Electric Company, a Wisconsin corporation, dated April 12, 2000, and recorded on August 23, 2000, as Document No. 3245035. [SHOWN]
14. There are no gaps or gores between the public right-of-way of Sherman Avenue and the adjacent border lines of the property.

SURVEYED FOR :
Vermillion Acquisitions, LLC

SURVEYED BY :

Burse
surveying & engineering Inc.
2801 International Lane, Suite 101
Madison, WI 53704 608.250.9263
Fax: 608.250.9266
email: mburse@bse-inc.net
www.bursesurveyengr.com

Date: September 12, 2022
Plot View: TOPO
\BSE2599\dwg\Survey\BSE2599 Topo v2018.dwg

September 18, 2022

Inventory and Report On Tree Cover at 1601 and 1617 Sherman Avenue , Madison, WI

Prepared by:
Richard Bruce Allison, MS, PhD
Allison Tree, LLC

Submitted to :
Mr. Darrin Jolas
Vermillion Development
121 West Wacker Drive Suite 400
Chicago, IL 60601

Assignment and Scope of Work

Vermillion Company has contracted with Allison Tree, LLC to investigate, research and inventory the tree cover at 1617 Sherman Avenue. A proposed development on the property would convert the current single commercial building property and parking lot into a multi-building apartment complex. The primary investigator on the project for Allison Tree, LLC is Richard Bruce Allison (Allison) , ISA certified arborist and Tree Risk Assessment Qualified. Allison working with staff conducted investigative walkthroughs of the property and relationship with neighboring properties plus conducted an inventory of larger trees primarily those greater than 6 inches in diameter. Tree cover characteristics relevant to the proposed land use are species, size, general physiological conditions, potential longevity, structural condition, functional benefits and risks such as acoustic and visual screening and potential for limb break and uprooting failure.

Sophisticated tools available to Allison to determine the interior structural condition of select trees include the German IML PD400 microdrill instrument, a 1.5 mm microdrill 40 cm long with a meter to measure electrical impedance as the drill penetrates the tree wood thus creating a graph displaying wood density and thus cavity or incipient decay along the drill path. This tool allows a quantitative measurement of the decay present within the trunk area sampled. A qualitative measurement of trunk wood density is provided by a second tool, Tree Check, which uses piezo electric sensors located at diametric opposite ends of the trunk to measure an impact-induced stress wave time-of-flight in micro-seconds across the trunk.

An inventory was conducted placing surveyor ribbons on trees, marking them each with a unique identification number and using a steel tape to measure trunk diameter at 4.5 feet elevation. The general condition of each tree was noted as excellent, good, fair or poor based on both the physiological and structural conditions. Physiological health was determined by noting the color, density, size and distribution of the canopy leaves, the growth rate measured by space between bud-scale scars, the presence of disease and insects signs and symptoms. Structural health was determined by presence of wood decay, root plate uprooting, scaffold limb anomalies such as co-dominant or multi-stem structure with included bark, cracks, fissures or extreme leans. Where relevant, comments were added to elaborate as needed to the rating system.

Site Description and Observations

The property has frontage on Sherman Avenue. It is currently a commercial building surrounded by lawn and planted trees of various common species. Behind is a large asphalt parking lot with small or narrow tree-planter islands. Along the perimeter to the north, east and south is a strip of unmanaged secondary growth volunteer species trees (boxelder, cottonwood, mulberry, ash) and invasive buckthorn. There are no long-lived native, heritage trees or trees of species, historical or size note on this property. Neighboring properties on two sides are commercial multi-family developments with the Tenney Park car and boat-trailer parking lot to the south.

Walking through the unmanaged and unmonitored perimeter woods one notices discarded liquor bottles, underwear, trash, graffiti, fallen trunks, broken branches, piled pruning debris and other dumped items. Trees in the lawn immediately adjacent to the existing building are minimally maintained with some branch dieback noted especially on the white pines and spruce. Along the Sherman Avenue sidewalk is a notable row of sugar maple, two older and two more recently planted that present an excellent opportunity for preservation during development due to location, species, size and condition.

The parking lot ash are dead or dying of Emerald Ash Borer infestation and present a high risk of falling on vehicles or pedestrians. Emerald Ash Borer (*Agrilus planipennis*) was introduced from China to the Detroit area inadvertently carried on wooden shipping crates and discovered in June 2002 and has steadily spread and expanded its range being first identified in Wisconsin in July 2008. It attacks all ash trees killing them within 1-3 years when beetle populations are high. With low population, new areas of infestation it can take up to five years to kill the tree. Pesticides to prophylactically treat ash either through soil drench on younger trees or direct trunk injection on larger trees are available but are expensive and require annual or bi-annual perpetual treatments. The infestation on this property is too large and advanced to reasonably consider treatments. Removal will prevent high beetle populations from migrating off site to other ash in the neighborhood.

Photos documenting these observations are in the appendix.

Tree Inventory Plus Condition, Size and Species Distribution

Two inventories were created to differentiate the volunteer wooded perimeter trees from the planted trees in the building lawn/parking lot area. The inventory process consisted of placing a survey ribbon around the trunk of each tree of approximately 6 inch or greater in trunk size, using a marker pen to write a unique identification number on the ribbon, recording the trunk size in inches measured at 4.5 feet elevation (DBH), the determined physiological/structural condition on a scale of excellent, good, fair or poor, plus adding any relevant comment. Burse Surveyors followed to create a map locating the position of each of the marked trees.

Inventories and tables indicating distributions follow in the appendix.

Conclusions and Recommendations

The tree inventory provides the developer and relevant city planners the opportunity to better understand the tree cover during the planning and approval process. This property does not contain heritage trees or noteworthy trees of size, age, species. The wooded area on the perimeter does provide screening but presents a problem of high maintenance and nuisance risk due to tree species subject to decay, limb break and uprooting that are in various states of decline or in the case of the ash population, insect infestation. The buckthorn in that area are an invasive species but do provide visual screening in those areas where sunlight allows dense growth such as at the driveway entry off Sherman Ave adjacent to the Tenney Park parking lot driveway. If a decision is made to remove these trees and buckthorn, screening along the boundary with the Tenney Park parking lot could be accomplished with a privacy fence combined with new landscape plantings offering less maintenance , better aesthetics and greater longevity than currently exists.

The lawn and parking lot trees are of commonly planted, replaceable nursery grown species. The sugar maples along the Sherman Ave sidewalk are a desirable species, healthy and provide valuable visual screening at their location. I strong recommend preserving them during the construction process. Tree preservation will require protective fencing limiting root disturbance in an area around the trees with a radius from the trunk equal to approximately 12 times the trunk diameter. At the final plan revision Allison Tree, LLC will review the tree protection zone around the sugar maples to confirm it is consistent with ANSI A-300 standards for tree preservation during land development. Also the larger honey locust at the current entry and exit driveways could be considered for preservations.

Appendix

Woodland Perimeter Inventory:

	A	B	C	D
1	Ash	12+10	P	EAB
2	Norway Maple	8+5	G	
3	Ash	9	P	EAB
4	Elm	12	F	
5	Ash	15	P	EAB
6	Ash	9	P	EAB
7	Hackberry	5+4	G	
8	Hackberry	10	G	
9	Ash	8	P	EAB
10	Box Elder	16	P	
11	Ash	12	F	
12	Mulberry	14	P	
13	Sugar Maple	18	G	
14	Mulberry	16	F	
15	Ash	16+12	F	
16	Hackberry	8+8	F	
17	Mulberry	16	F	
18	Mulberry	16+12	F	
19	Ash	14	P	EAB
20	Ash	12+12	F	
21	Mulberry	9	G	
22	Box Elder	12	G	
23	Ash	11	F	
24	Mulberry	11	G	
25	Mulberry	8	G	
26	Mulberry	16	P	
27	Ash	7	G	
28	Ash	7	P	EAB
29	Box Elder	10	P	
30	Hackberry	8	G	
31	Honey Locust	25	G	
32	Honey Locust	33	F	Trunk Cavity
33	Box Elder	24	F	
34	Norway Map	25	P	Trunk Cavity
35	Mulberry	10	P	
36	Box Elder	18	P	Lean
37	Mulberry	9	F	
38	Ash	9	F	
39	Box Elder	7	F	
40	Ash	10	F	
41	Box Elder	10	P	
42	Ash	12	F	
43	Box Elder	12	P	Lean
44	Ash	14	P	Lean

	A	B	C	D
45	Box Elder	16	P	
46	Box Elder	18	P	Lean
47	Box Elder	12	P	Lean
48	Box Elder	30	P	
49	Cottonwood	32	G	
50	Ash	13	P	
51	Box Elder	24	F	
52	Spruce	22	G	
53	Box Elder	8	FF	Lean
54	Ash	8	P	
55	Ash	7	F	
56	Ash	8	F	
57	Box Elder	13	F	
58	Mulberry	10	F	
59	Box Elder	20	F	Lean
60	Ash	9	F	
61	Ash	18	P	
62	Hackberry	11	G	
63	Box Elder	15	P	Lean
64	Hackberry	12	G	
65	Ash	8	F	
66	Cottonwood	32	G	
67	Cottonwood	20	G	
68	Cottonwood	33	G	
69	Cottonwood	24	G	
70	Cottonwood	32	G	
71	Box Elder	10	F	
72	Box Elder	10	G	
73	Cottonwood	36	G	
74	Box Elder	12	F	
75	Ash	18	F	
76	Box Elder	18	P	Lean
77	Cottonwood	22	F	Lean
78	Box Elder	12	P	Lean
79	Box Elder	16	F	
80	Cottonwood	40	G	
81	Cottonwood	32	G	
82	Box Elder	14	P	Lean
83	Ash	12	P	EAB
84	Mulberry	16	F	
85	Box Elder	16	F	
86	Hackberry	12	G	
87	Box Elder	14	P	Lean
88	Cottonwood	54	G	

	A	B	C	D
89	Cottonwood	40	G	
90	Mulberry	30	F	
91	Cottonwood	32	F	Lean
92	Cottonwood	32+32	G	
93	Cottonwood	23	F	Lean
94	Cottonwood	18	F	Lean
95	CW/BoxElde	18+12	F	Lean
96	Mulberry	16	G	
97	Mulberry	30	P	Broken Top
98	Box Elder	29	P	
99	Box Elder	12	P	
100	Sugar Maple	32	F	Trunk Cavity
101	Box Elder	10	F	Lean
102	Cottonwood	36	F	Lean
103	Cottonwood	40	G	
104	Cottonwood	38	G	
105	Box Elder	16	F	
106	Cottonwood	40	G	
107	Box Elder	16	G	
108	Box Elder	18	F	
109	Box Elder	13	P	Lean
110	Box Elder	10	P	Lean
111	Ash	10	P	
112	Hackberry	22	G	
113	Box Elder	10	F	
114	Box Elder	14	F	Lean
115	Box Elder	12	G	Lean
116	Mulberry	10	G	
117	Cottonwood	30	F	
118	Box Elder	10	F	
119	Cottonwood	34	G	
120	Cottonwood	24+30	G	
121	Cottonwood	24	G	
122	Box Elder	16	P	Trunk Cavity
123	Box Elder	15	P	Lean
124	Mulberry	8	P	
125	Box Elder	16	F	Lean
126	Cottonwood	18	G	
127	Cottonwood	48	G	Lean
128	Cottonwood	36	G	
129	Box Elder	10	P	Lean
130	Mulberry	8	P	
131	Ash	9	P	
132	Box Elder	12	P	Lean

	A	B	C	D
133	Box Elder	12	P	
134	Cottonwood	42+42	G	
135	Box Elder	11	G	
136	Box Elder	12	F	
137	Cottonwood	32	G	
138	Cottonwood	48	G	
139	Box Elder	20	P	Lean
140	Cottonwood	36	G	
141	Cottonwood	48	G	
142	Cottonwood	20	F	Lean
143	Cottonwood	36	G	
144	Box Elder	9	P	Lean
145	Box Elder	8	P	Lean
146	Box Elder	18	F	Lean
147	Box Elder	12	F	
148	Willow	18	F	
149	Ash	14	G	
150	Box Elder	8	F	Lean
151	Box Elder	8	P	Lean
152	Cottonwood	32	G	
153	Cottonwood	32+40	G	
154	Silver Maple	24	G	
155	Ash	10	F	
156	Elm	6	P	Lean
157	Box Elder	9	P	Lean
158	Ash	8	P	EAB
159	Box Elder	10	P	Lean
160	Box Elder	9	P	
161	Cottonwood	36	G	
162	Box Elder	16	F	
163	Cottonwood	12	G	
164	Cottonwood	36	G	
165	Box Elder	14	P	Trunk Cavity
166	Box Elder	18	P	Trunk Cavity
167	Cottonwood	36	F	Lean
168	Box Elder	8	P	Lean
169	Box Elder	6	P	Lean
170	Mulberry	7	P	Multi-stem
171	Mulberry	7	P	Multi-stem
172	Box Elder	8	P	Lean
173	Hackberry	18	G	
174	Box Elder	16	P	Lean
175	Box Elder	13	F	
176	Ash	8	F	

	A	B	C	D
177	Box Elder	14	P	Lean
178	Box Elder	16	F	
179	Cottonwood	32+32	G	
180	Black Locust	8	G	
181	Cottonwood	36	G	
182	Cottonwood	32	G	
183	Box Elder	8	P	Lean
184	Cottonwood	28	G	
185	Box Elder	9	P	Lean
186	Cottonwood	20	G	
187	Cottonwood	24	G	
188	Cottonwood	24	G	
189	Black Locust	7	G	
190	Black Locust	6	G	
191	Box Elder	8	P	Lean
192	Ash	8	P	
193	Ash	10	P	
194	Cottonwood	18	G	
195	Box Elder	7	P	
196	Cottonwood	30	P	Trunk Cavity
197	Box Elder	10	P	Lean
198	Box Elder	9	P	Lean
199	Cottonwood	20	G	
200	Cottonwood	21	G	
201	Cottonwood	24+18+20	G	
202	Cottonwood	18	G	
203	Box Elder	6	F	
204	Cottonwood	24+14	G	
205	Box Elder	10	P	Lean
206	Box Elder	12+12	P	
207	Mulberry	15	P	Lean
208	Mulberry	9	F	
209	Box Elder	8	P	Lean
210	Mulberry	15	G	
211	Mulberry	15	G	
212	Box Elder	13	F	
213	Box Elder	14	P	Lean
214	Mulberry	8	F	
215	Mulberry	12	F	
216	Mulberry	16	P	Trunk Cavity
217	Box Elder	24	G	
218	Box Elder	21	F	
219	Ash	20	P	EAB
220	Mulberry	6	G	

	A	B	C	D
221	Apple	7	P	
222	Apple	9	P	
223	Apple	12	F	
224	Apple	9	F	
225	Apple	12	F	
226	Mulberry	8	F	
227	Apple	8	F	
228	Mulberry	6	G	
229	Ash	12	F	
230	Mulberry	9	F	
231	Elm	12	P	
232	Mulberry	7	F	
233	Ash	10	P	
234	Honey Locust	22	G	
235	Norway Map	12	G	

Species, Size and Condition Distribution Woodland Inventory Trees:

SPECIES	NUMBER	PERCENT OF TOTAL	AVERAGE SIZE (DIAMETER, IN INCHES)	CONDITION	NOTES
Apple	6	2.564	10	Fair/Poor	
Ash	36	15.384	13	Poor/Dead	EAB*
Black Locust	3	1.28	7	Good	
Box Elder	80	34.188	14	Poor	Leaning**
Cottonwood	54	23.07	31	Good	
Elm	3	1.28	10	Poor	
Hackberry	9	3.846	15	Good	
Honey Locust	3	1.28	27	Good	
Mulberry	32	13.675	12	Fair	
Norway Maple	3	1.28	15	Good/Fair	
Silver Maple	1	.427	24	Good	
Sugar Maple	2	.854	25	Good/Fair	
Spruce	1	.427	22	Good	
Willow	1	.427	18	Fair	
Total	234	99.982			

*Emerald Ash Borer
**Dominant Condition

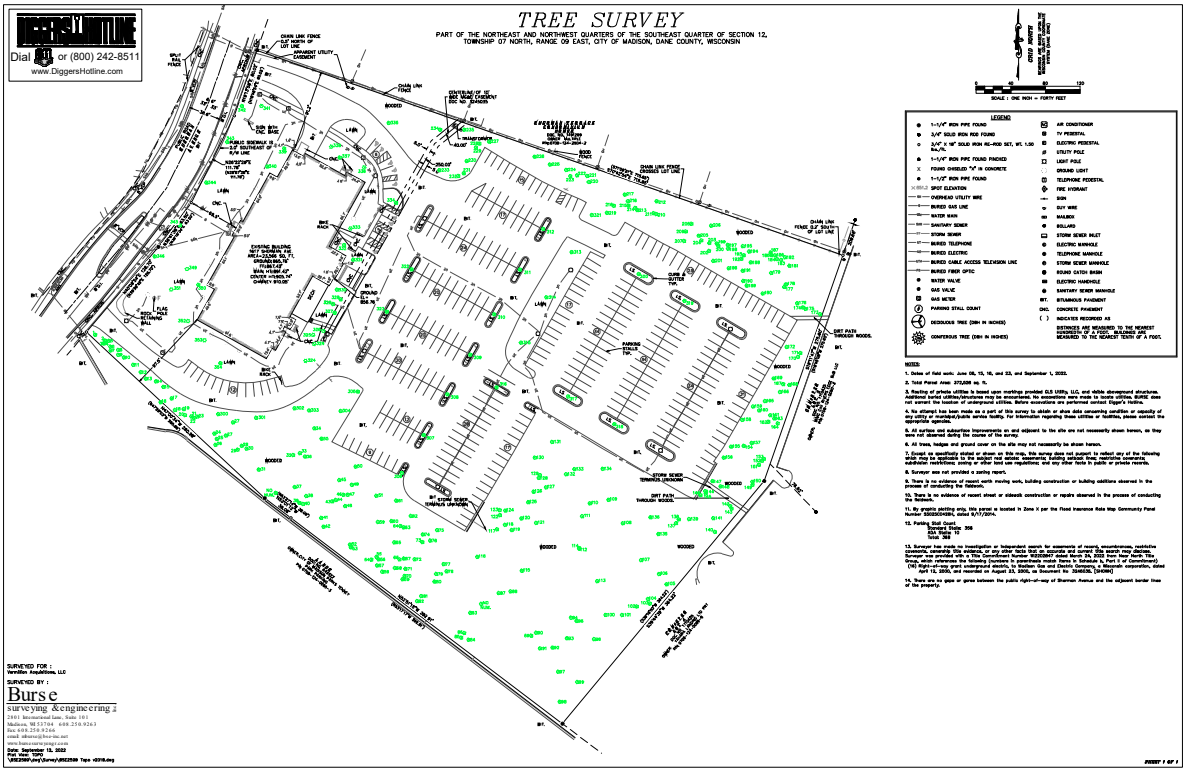
Lawn/Parking Lot Inventory:

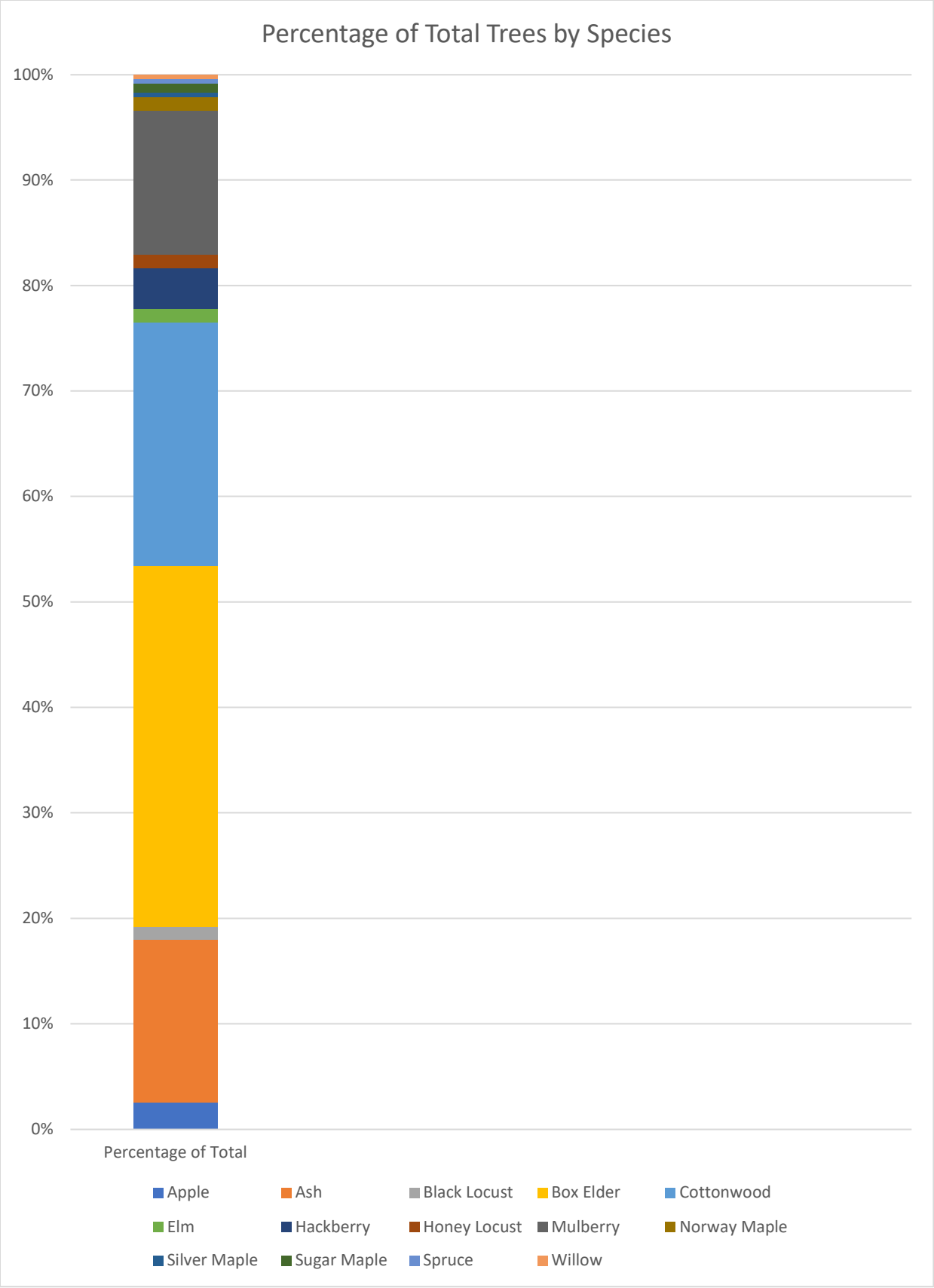
	A	B	C	D
300	Honey Locust	30	Good	*
301	Honey Locust	30	Good	*
302	Honey Locust	25	Good	*
303	Box Elder	16	Fair	
304	Ash	17	Poor	EAB
305	Ash	13	Poor	EAB
306	Honey Locust	16	Good	
307	Honey Locust	9	Fair	
308	Honey Locust	11	Fair	
309	Honey Locust	7	Fair	
310	Honey Locust	8	Fair	
311	Honey Locust	8	Fair	
312	Honey Locust	9	Fair	
313	Ash	32	Poor	EAB
314	Ash	24	Poor	EAB
315	Ash	36	Poor	EAB
316	Honey Locust	13	Fair	
317	Ash	16	Poor	Dead
318	Ash	12	Poor	Dead
319	Ash	14	Poor	Dead
320	Ash	12	Poor	Dead
321	Crab Apple	13	Fair	
322	Honey Locust	12	Fair	
323	Honey Locust	12	Fair	
324	Spruce	15	Fair	
325	Spruce	12	Fair	
326	Spruce	14	Fair	
327	Crab Apple	6	Good	Multi-stem
328	Crab Apple	6	Good	Multi-stem
329	Crab Apple	16	Good	Multi-stem
330	River Birch	10+10	Good	
331	River Birch	12+8	Good	
332	Basswood	6	Good	Multi-stem
333	White Pine	12	Poor	
334	Maple	6	Good	
335	Honey Locust*	32	Good	*
336	White Pine	13	Good	
337	Maple	16	Fair	
338	White Pine	12	Fair	
339	Weeping Mulberry	12+12+10	Good	
340	Red Maple	7	Good	Multi-stem
341	Colorado Spruce	13	Fair	
342	Sugar Maple	6	Excellent	
343	Sugar Maple	36	Excellent	

Species, Size and Condition Distribution Lawn/Parking lot Inventory Trees:

SPECIES: LAWN/PL	NUMBER	Percentage	AVERAGE SIZE	AVERAGE CONDITION
Arborvitae	1	1.8	8	Good
Ash	10	18.86	21	Poor/Dead
Basswood	1	1.8	6	Good
Boxelder	1	1.8	16	Fair
Colorado Spruce	1	1.8	13	Fair
Crab Apple	4	7.5	10	Good/Fair
Honey Locust	14	26.41	16	Good/Fair
Maple	2	3.77	11	Good/Fair
Red Maple	2	3.77	8	Good/Fair
River Birch	2	3.77	10	Good
Spruce	6	11.32	16	Fair
Sugar Maple	5	9.43	20	Excellent
Weeping Mulberry	1	1.8	11	Good
White Pine	3	5.66	12	Fair

Burse Survey Locating Trees




Percentage of Total Trees by Species
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of Total
Apple
Ash
Black Locust
Box Elder
Cottonwood
Elm
Hackberry
Honey Locust
Mulberry
Norway Maple
Silver Maple
Sugar Maple
Spruce
Willow

Photos


VISITOR ENTRANCE


Care
Wisconsin