

A. PROJECT INFORMATION

Project Name

Project Type:

Infrastructure

City building & site

Density bonus

Private project

Other

Project Location/Address

Applicant

Property Owner

Applicant Mailing Address

Property Owner Mailing Address

Applicant Telephone Number

Property Owner Telephone Number

Project Start Date

Project Completion Date

Applicant's Architect

Applicant's Engineer

1] Indicate if proposed Project is required by City Ordinance to be reviewed by the Design Commission.

2] Describe the recommendation that you are requesting from the Design Commission.

3] Current Design Phase of Project (Design Commission prefers to see projects right after approved schematic design).

4] Is this Project subject to Site Plan and/or Zoning application approvals? Will it be presented to Planning Commission and/or City Council? If so, when?

5] Does this Project comply with Land Development Code Subchapter E? List specifically any Alternative Equivalent Compliance request if any. Please refer to website for Alternate Equivalent Compliance (AEC) requirements.
https://www.municode.com/library/tx/austin/codes/code_of_ordinances?nodeId=TIT25LADE_CH25-2ZO_SUBCHAPTER_EDESTMIUS

B. PROJECT BACKGROUND

6] Provide project background including goals, scope, building/planning type, and schedule. Broadly address each of the “Shared Values for Urban Areas” that are listed on Page 6 of the Urban Design Guidelines. Attach additional pages as needed.

7] Has this project conducted community/stakeholder outreach? If so, please provide documentation to demonstrate community/stakeholder support of this project.

8] Is this project submitting for the Downtown Density Bonus Program? If so, please provide a completed Downtown Density Bonus Application.

9] Has the project been reviewed by COA Department (i.e. DAC) Staff? If so, please describe and cite any relevant comments or feedback that the Commission should be aware of.

10] Are there any limitations to compliance or planning principles due to the specific requirements of this project that the Commission should be aware of?

C. EXISTING CONDITIONS AND CONTEXT

11] Identify connectivity to public transportation including, bicycle and pedestrian routes and/or multi-modal transportation. Does the project comply with ADA requirements? Provide a site context map and attach additional pages as needed.

12] Identify and describe any existing features that are required to be preserved and/or protected such as heritage trees, creeks or streams, endangered species (flora and/or fauna)? Attach additional site diagrams as needed.

13] Is this project within any City of Austin planning district, master plan, neighborhood plan, regulatory district, overlay, etc.? If so, please illustrate how this project conforms to the respective plan. Attach additional pages as needed. (See below for requirements.)

14] List any project program and/or site constraints that should be considered.

D. RELATIONSHIP TO PUBLIC REALM

Public realm is defined as any publically owned streets, pathways, right of ways, parks, publicly accessible open spaces and any public and civic building and facilities. The quality of our public realm is vital if we are to be successful in creating environments that people want to live and work in.

15] The shared values outlined in the Urban Design Guidelines include Human Character, Density, Sustainability, Diversity, Economic Vitality, Civic Art, A Sense of Time, Unique Character, Authenticity, Safety and Connection to the Outdoors. How is the project addressing these unique community characteristics? Is the project developing any public amenities for urban continuity and vital place making?

16] Does this project encourage street level activity to engage and respond to functional needs such as shade, rest areas, multi-modal transportation storage and paths?

17] How will the project be a good neighbor to adjacent properties? For example, describe the treatment of the transition area between properties, i.e. fence, landscape improvements, etc.

E. ENVIRONMENTAL/SUSTAINABLE ISSUES

The Austin Urban Design Guidelines set a goal that, "All development should take into consideration the need to conserve energy and resources. It should also strive for a small carbon footprint."

18] Please list any significant components of the project that contribute to meeting this goal. If the project has been designed to accommodate future inclusion of such components (for example, by being built "solar ready") please list them.

19] If the project is being designed to meet any sustainability/environmental standards or certifications (for example, LEED Silver), please list them here and attach relevant checklists or similar documents that demonstrate how the standard or certification will be achieved.

20] If the project contains other significant sustainability components not included above that the Commission should note, please list them here.

LA509 ABIA Consolidated Maintenance Facility

60% Design Development

04 October 2017



Austin-Bergstrom
International Airport

04 October 2017

ABIA CONSOLIDATED MAINTENANCE FACILITY



ABIA CMF Project Summary



Located in Austin Texas, a 16.15 acre site has been identified within the Austin Bergstrom International Airport (ABIA) property to construct a consolidated maintenance facility (CMF). The overall facility will provide maintenance support to the main airport daily operations. The site is the center for numerous buildings which house various maintenance operations of the airport. Buildings include (A) Maintenance Headquarters (B) Motorpool (C) Warehouse (D) Trades (F) Re-Cycling (G) Truckwash (H1 & H2) Garages, several (K1-K4) canopies, (L) Austin Police Department. The (J) De-icing equipment storage building will be located at a location close to the runway access road and connected to the main facility via a new road. The facility will be secured with a perimeter fence and controlled access gates. Visitors, staff, and deliveries will arrive at the facility from Golf Course Road which intersects HWY 71.

Buildings A, B, C, D are connected by a covered walkway (E). These buildings also frame a central courtyard that will be landscaped to promote outdoor activity.

Visitors and staff will have open non-secured parking on-site. Delivery and airport vehicles will have access to parking around the facilities in the secure area. There will be 2 access points from Golf Course Road to the main facility and 3 controlled access gates to the secure area. The (J) De-icing equipment storage building will also have secured/direct access from Golf Course road and the runway access road.

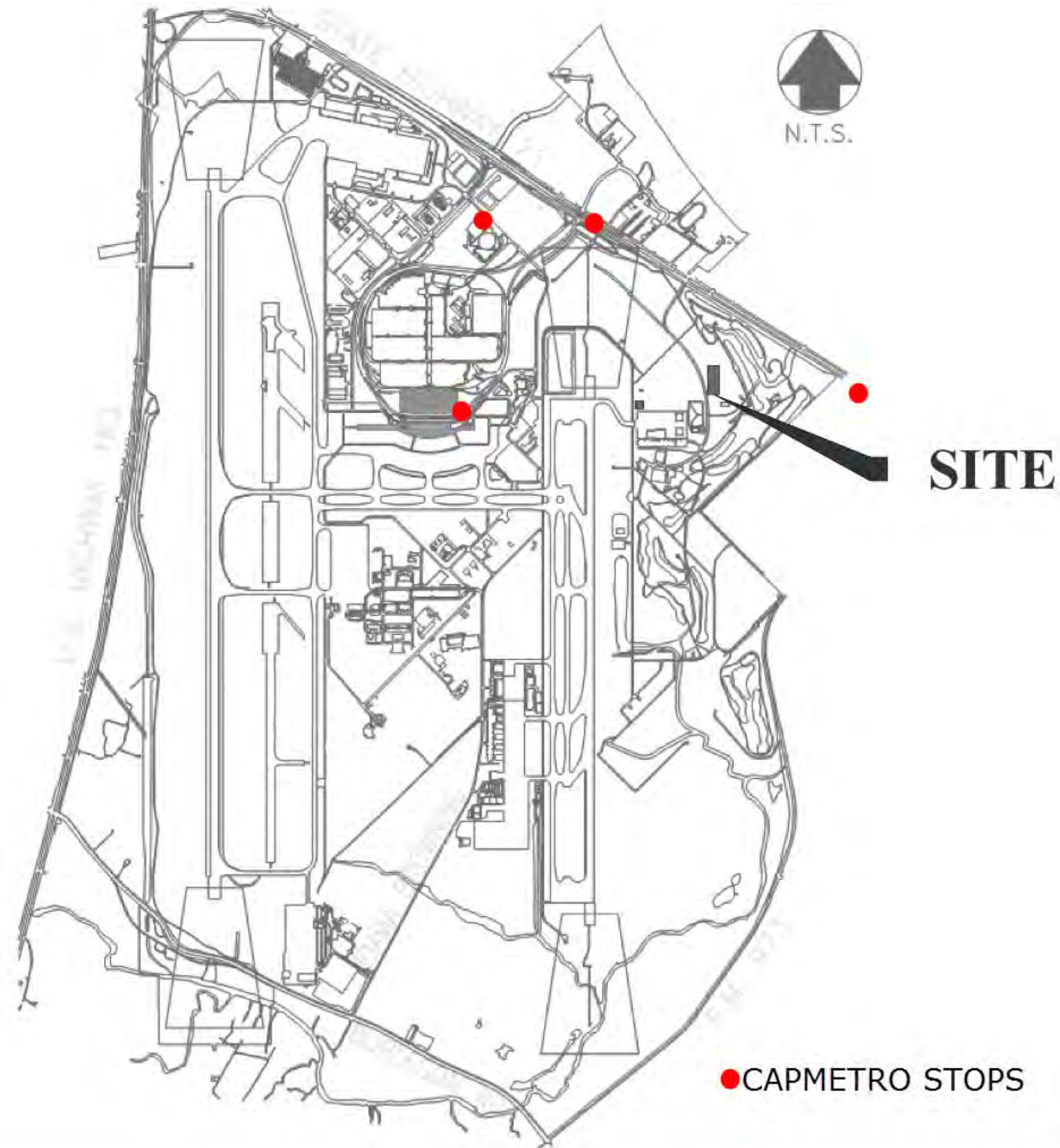
ABIA Consolidated Maintenance Facility Design Program:

Building	Programmed SF	Provided SF
A – Maintenance Headquarters	37,476	39,320
B – Motorpool	21,784	18,821
C – Warehouse	29,082	25,159
D – Trades	15,219	19,894
F – Recycling	2,536	2,043
G – Truckwash	0	2,609
H1 – Garage	0	3,405
H2 – Garage	0	4,711
J – De-icing Equipment Storage	5,604	6,230
L – Austin Police Department	11,893	12,000
Total	123,594	134,192



Vicinity Map

04 October 2017

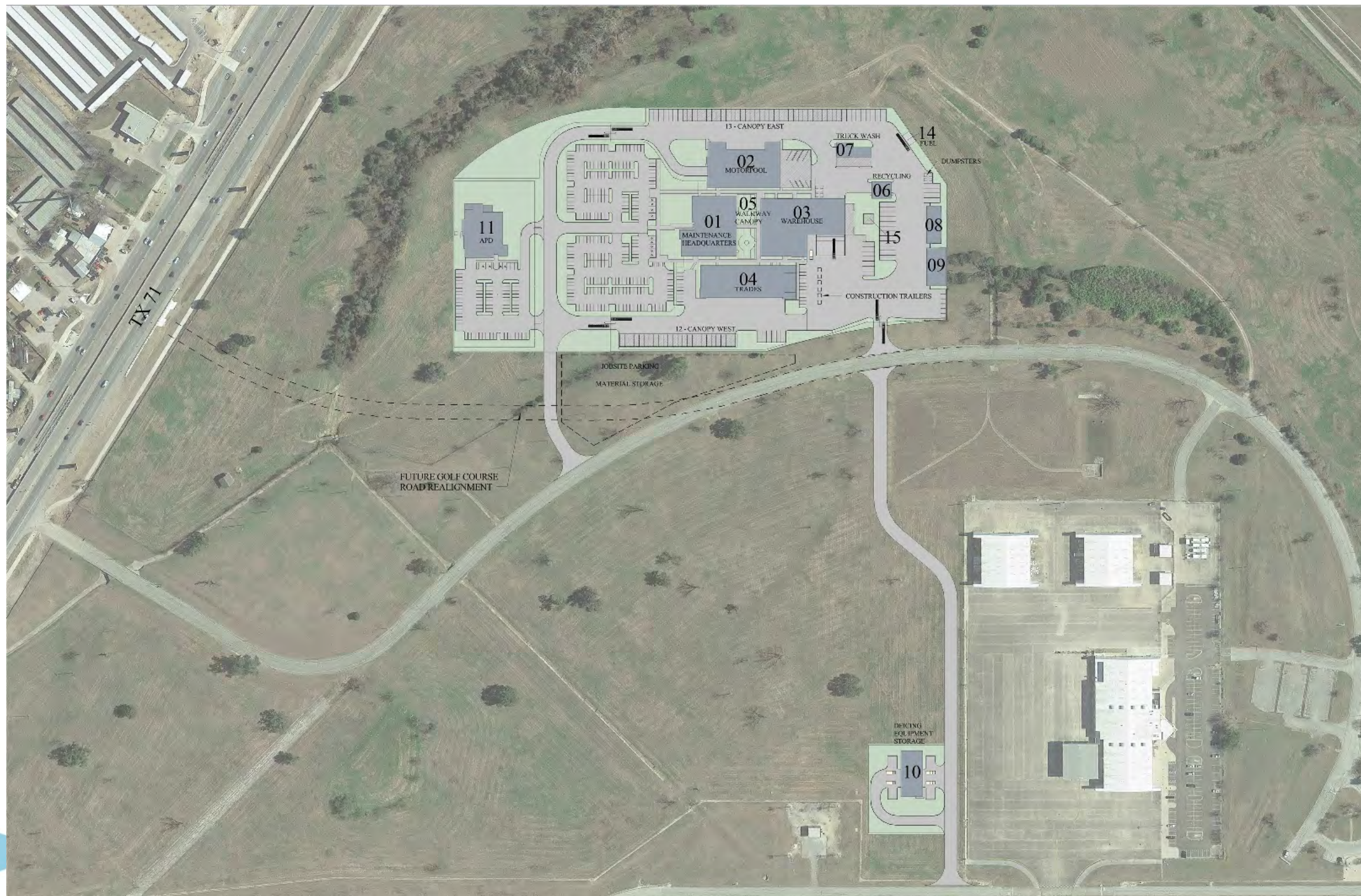


The [Guide to Zoning](#) provides a quick explanation of the above Zoning codes, however, the [Development Assistance Center](#) provides general zoning assistance and can advise you on the type of development allowed on a property. General information on the [Neighborhood Planning Areas](#) is available from Neighborhood Planning. Visit [Zoning](#) for the description of each Base Zoning District.

5



Overall Site Plan

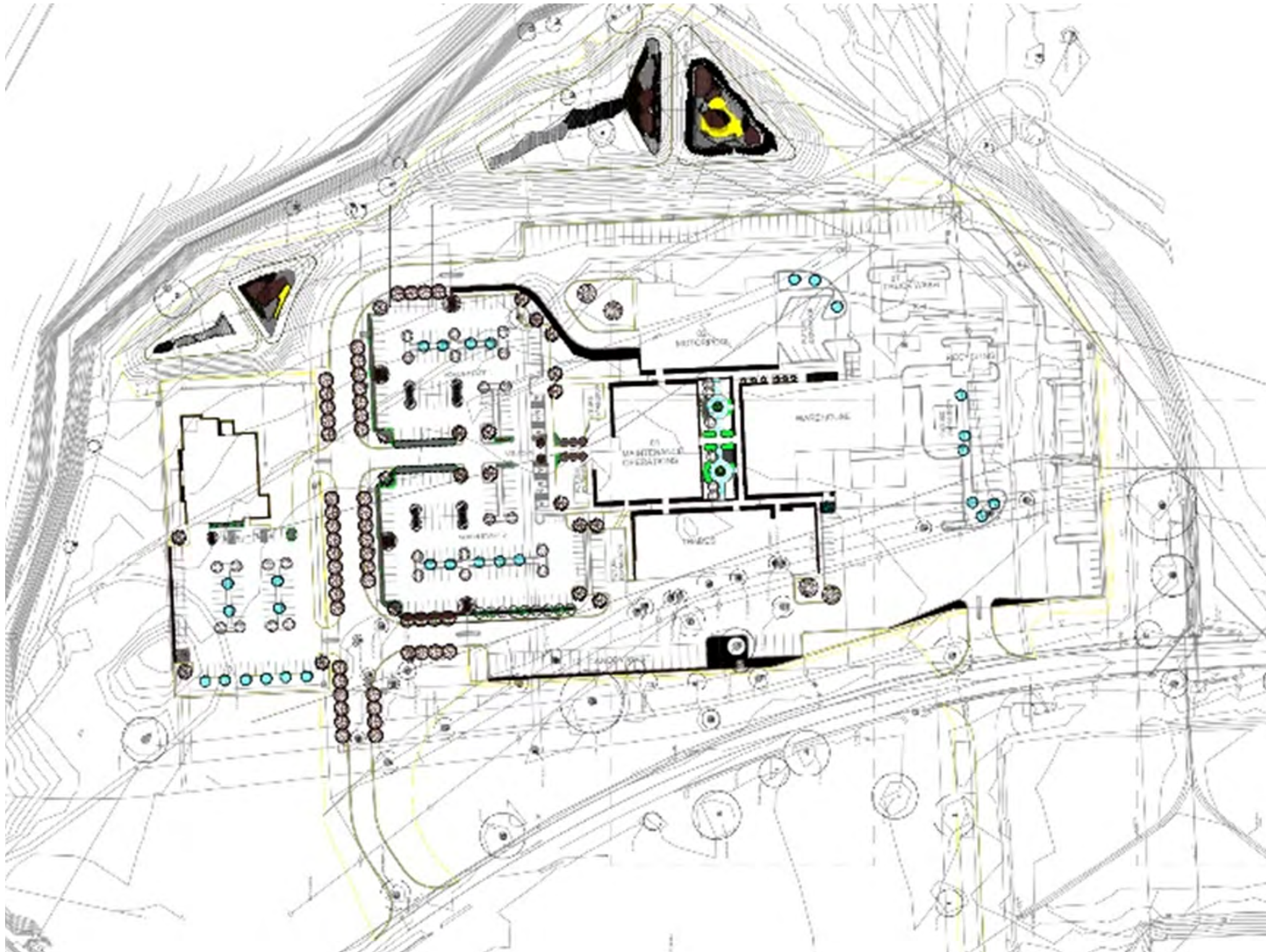


BUILDING SQUARE FOOTAGES

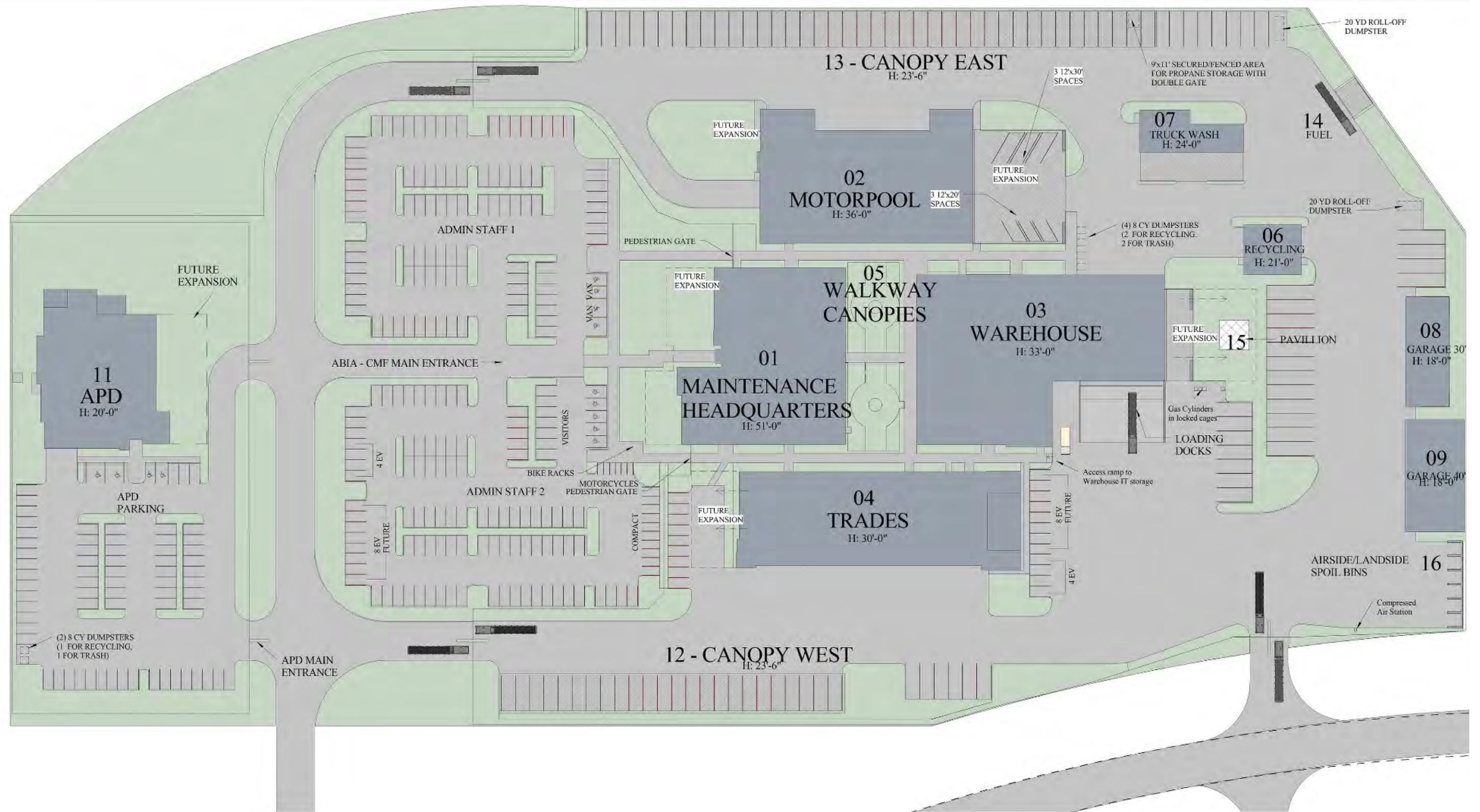
01	MAINTENANCE HEADQUARTERS	
	FIRST FLOOR	18,437
	SECOND FLOOR	17,338
	PENTHOUSE	2,742
	TOTAL	38,553
02	MOTORPOOL	18,833
03	WAREHOUSE	25,098
04	TRADES	17,746
06	RECYCLING	2,042
07	TRUCKWASH	2,633
08	30' GARAGE	3,388
09	40' GARAGE	4,717
10	DE-ICING EQUIPMENT STORAGE	6,229
11	APD	12,041

Overall Site Plan

04 October 2017

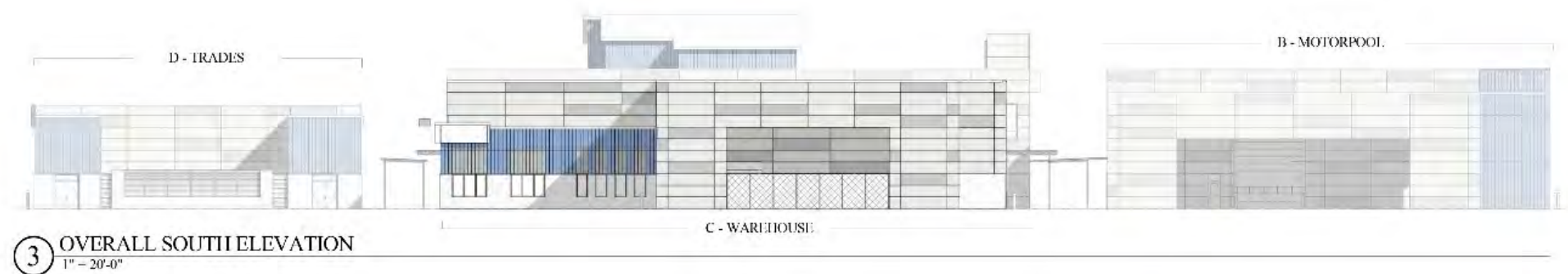
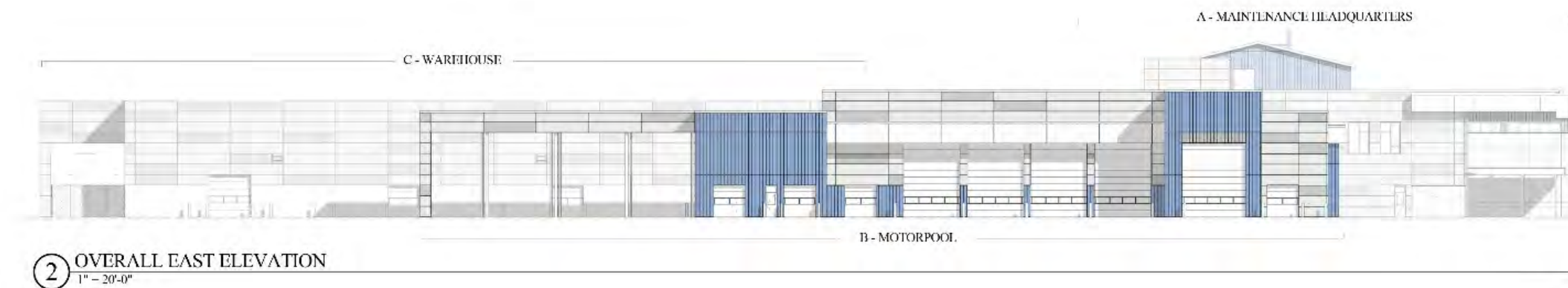


Landscape Plan. See Appendix A for enlarged plans



Architectural Site Plan

04 October 2017



Overall Elevations



Maintenance Headquarters

04 October 2017



ROOM AREA - A - MAINTENANCE OPERATIONS 1...

Name	Level	Area
ENTRY VESTIBULE	01 - FIRST FLOOR	101 SF
LOBBY	01 - FIRST FLOOR	415 SF
WAITING	01 - FIRST FLOOR	280 SF
CORRIDOR 1	01 - FIRST FLOOR	652 SF
CORRIDOR 3	01 - FIRST FLOOR	574 SF
CORRIDOR 4	01 - FIRST FLOOR	285 SF
CORRIDOR 5	01 - FIRST FLOOR	237 SF
CORRIDOR 6	01 - FIRST FLOOR	213 SF
CORRIDOR 7	01 - FIRST FLOOR	58 SF
CORRIDOR 8	01 - FIRST FLOOR	326 SF
TRAINING A	01 - FIRST FLOOR	2136 SF
TRAINING B	01 - FIRST FLOOR	1306 SF
STORAGE	01 - FIRST FLOOR	299 SF
STAIR A	01 - FIRST FLOOR	198 SF
BREAK ROOM	01 - FIRST FLOOR	1337 SF
DATA ENTRY	01 - FIRST FLOOR	765 SF
LOUNGE	01 - FIRST FLOOR	685 SF
GYM	01 - FIRST FLOOR	612 SF
WOMEN'S TOILET	01 - FIRST FLOOR	250 SF
MEN'S TOILET	01 - FIRST FLOOR	251 SF
SECURE STORAGE	01 - FIRST FLOOR	100 SF
STAIR B	01 - FIRST FLOOR	210 SF
JANITOR 1	01 - FIRST FLOOR	56 SF
UNIFORM STORAGE F	01 - FIRST FLOOR	59 SF
UNIFORM STORAGE M	01 - FIRST FLOOR	62 SF
JANITORIAL STORAGE	01 - FIRST FLOOR	139 SF
BUNK 2	01 - FIRST FLOOR	68 SF
BUNK 4	01 - FIRST FLOOR	56 SF
BUNK 1	01 - FIRST FLOOR	69 SF
BUNK 3 (HC)	01 - FIRST FLOOR	87 SF
BUNK 5	01 - FIRST FLOOR	56 SF
BUNK 6	01 - FIRST FLOOR	53 SF
BUNK 7	01 - FIRST FLOOR	56 SF
BUNK 8	01 - FIRST FLOOR	56 SF
BUNK 9	01 - FIRST FLOOR	56 SF
BUNK 10	01 - FIRST FLOOR	52 SF
BUNK 11	01 - FIRST FLOOR	53 SF
SHOWER 3 (HC)	01 - FIRST FLOOR	90 SF
SHOWER 2	01 - FIRST FLOOR	53 SF
SHOWER 1	01 - FIRST FLOOR	53 SF
MEN'S LOCKERS	01 - FIRST FLOOR	299 SF
WOMEN'S LOCKERS	01 - FIRST FLOOR	118 SF
SHOWER 4	01 - FIRST FLOOR	52 SF
SMALL CONFERENCE 1	01 - FIRST FLOOR	227 SF
ASO SPECIALIST OPEN AREA	01 - FIRST FLOOR	2044 SF
IT 1	01 - FIRST FLOOR	175 SF
ASO STORAGE	01 - FIRST FLOOR	100 SF
ASO SUPERVISOR 1	01 - FIRST FLOOR	129 SF
ASO SUPERVISOR 2	01 - FIRST FLOOR	130 SF
ASO MANAGER	01 - FIRST FLOOR	208 SF
ASO LOCKERS	01 - FIRST FLOOR	173 SF
ELEC 1	01 - FIRST FLOOR	109 SF
F RISER	01 - FIRST FLOOR	41 SF
DEMARK	01 - FIRST FLOOR	499 SF
ENTRY PORTICO	01 - FIRST FLOOR	675 SF

Maintenance Operations Department Legend

	A - AIRLINE MAINTENANCE
	A - AIRSIDE OPERATIONS
	A - ASSET MANAGEMENT
	A - BUILDING/AIRLINE MAINTENANCE ADMIN.
	A - COPY, PRINT, MAIL
	A - FIELD MAINTENANCE ADMIN.
	A - MEETING/ TRAINING
	A - SPECIALTY
	A - STORAGE
	BUILDING SUPPORT
	CIRCULATION
	COMMON USE
	RESTROOMS

1 01 - MAINTENANCE HEADQUARTERS FIRST FLOOR PLAN - COLOR SCHEME
1" = 10'-0"

04 October 2017

Maintenance Headquarters - First Floor



ROOM AREA - A - MAINTENANCE OPERATIONS 2ND FLOOR

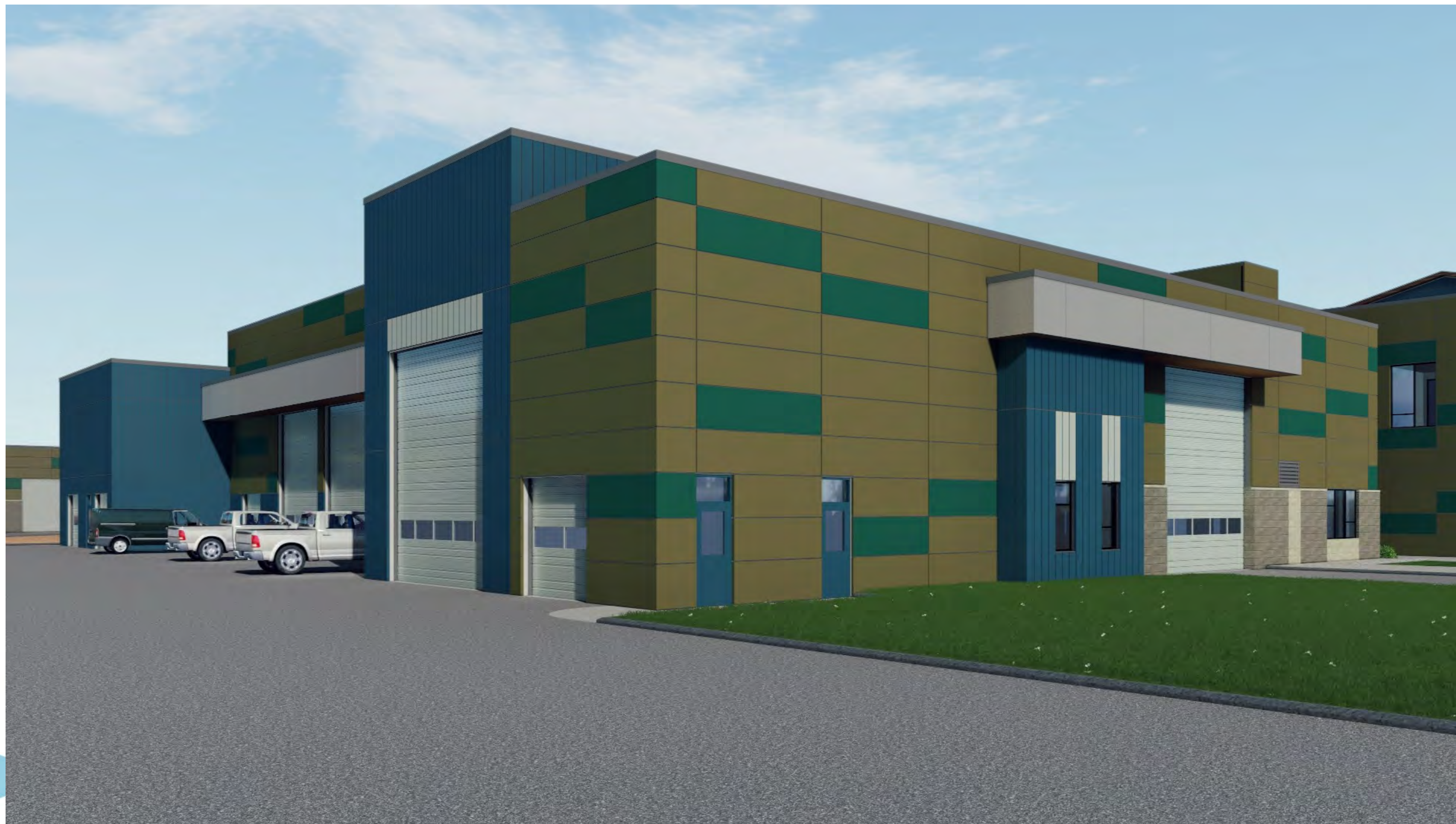
Name	Level	Area
CORRIDOR 1	01 - SECOND FLOOR	1182 SF
CORRIDOR 2	01 - SECOND FLOOR	257 SF
BUILDING/AIRLINE MAINTENANCE OPEN WORK AREA	01 - SECOND FLOOR	2057 SF
FIELD MAINTENANCE ADMIN OPEN WORK AREA	01 - SECOND FLOOR	1852 SF
AIRLINE MAINTENANCE OPEN WORK AREA	01 - SECOND FLOOR	1536 SF
ASSET MANAGEMENT OPEN WORK AREA	01 - SECOND FLOOR	1709 SF
COPY/MAIL	01 - SECOND FLOOR	317 SF
COFFEE	01 - SECOND FLOOR	101 SF
MEDIUM CONFERENCE	01 - SECOND FLOOR	311 SF
MANAGER 1	01 - SECOND FLOOR	142 SF
FUTURE MANAGER 2	01 - SECOND FLOOR	130 SF
SMS MANAGER 2	01 - SECOND FLOOR	183 SF
FUTURE OHS MANAGER 2	01 - SECOND FLOOR	130 SF
SMS MANAGER 1	01 - SECOND FLOOR	174 SF
ASST. DIR. of MAINTENANCE	01 - SECOND FLOOR	258 SF
OHS MANAGER 1	01 - SECOND FLOOR	127 SF
FUTURE MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	126 SF
FUTURE MAINTENANCE SUPERVISOR 3	01 - SECOND FLOOR	126 SF
PLUMBING MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	126 SF
GENERAL MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	126 SF
STAIR A	01 - SECOND FLOOR	198 SF
GENERAL MAINTENANCE SUPERVISOR 1	01 - SECOND FLOOR	118 SF
PLUMBING MAINTENANCE SUPERVISOR 1	01 - SECOND FLOOR	118 SF
BUILDING MAINTENANCE ADMIN 3	01 - SECOND FLOOR	130 SF
BUILDING MAINTENANCE ADMIN 2	01 - SECOND FLOOR	130 SF
BUILDING MAINTENANCE ADMIN 1	01 - SECOND FLOOR	130 SF
ELECTRICAL MAINTENANCE SUPERVISOR	01 - SECOND FLOOR	130 SF
ELECTRICAL MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	130 SF
HVAC MAINTENANCE SUPERVISOR	01 - SECOND FLOOR	130 SF
HVAC MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	130 SF
SMALL CONFERENCE 2	01 - SECOND FLOOR	244 SF
MEN'S TOILET	01 - SECOND FLOOR	251 SF
WOMEN'S TOILET	01 - SECOND FLOOR	251 SF
FILE STORAGE	01 - SECOND FLOOR	253 SF
BUILDING MAINTENANCE MANAGER	01 - SECOND FLOOR	194 SF
MAINTENANCE SUPERVISOR 1	01 - SECOND FLOOR	127 SF
SMALL CONFERENCE 3	01 - SECOND FLOOR	220 SF
FIELD MAINTENANCE MANAGER	01 - SECOND FLOOR	196 SF
LANDSIDE MAINTENANCE SUPERVISOR	01 - SECOND FLOOR	125 SF
AIRSIDE MAINTENANCE SUPERVISOR	01 - SECOND FLOOR	129 SF
FIELD MAINTENANCE ADMIN	01 - SECOND FLOOR	129 SF
AIRLINE MAINTENANCE SUPERVISOR 2	01 - SECOND FLOOR	129 SF
AIRLINE MAINTENANCE SUPERVISOR 1	01 - SECOND FLOOR	130 SF
JANITOR 2	01 - SECOND FLOOR	62 SF
STAIR B	01 - SECOND FLOOR	210 SF
IT 2	01 - SECOND FLOOR	110 SF
LARGE CONFERENCE	01 - SECOND FLOOR	371 SF
ASSET MANAGEMENT ADMIN 2	01 - SECOND FLOOR	129 SF
ASSET MANAGEMENT ADMIN	01 - SECOND FLOOR	129 SF
ASSET MANAGEMENT MANAGER	01 - SECOND FLOOR	242 SF
FUTURE AIRLINE MAINTENANCE SUPERVISOR 3	01 - SECOND FLOOR	130 SF
FUTURE ASSET MANAGEMENT ADMIN 3	01 - SECOND FLOOR	130 SF
STAIR C	01 - SECOND FLOOR	76 SF
ELEC 2	01 - SECOND FLOOR	109 SF

Maintenance Operations Department Legend

A - AIRLINE MAINTENANCE
A - AIRSIDE OPERATIONS
A - ASSET MANAGEMENT
A - BUILDING/AIRLINE MAINTENANCE ADMIN.
A - COPY, PRINT, MAIL
A - FIELD MAINTENANCE ADMIN.
A - MEETING/TRAINING
A - SPECIALTY
A - STORAGE
BUILDING SUPPORT
CIRCULATION
COMMON USE
RESTROOMS

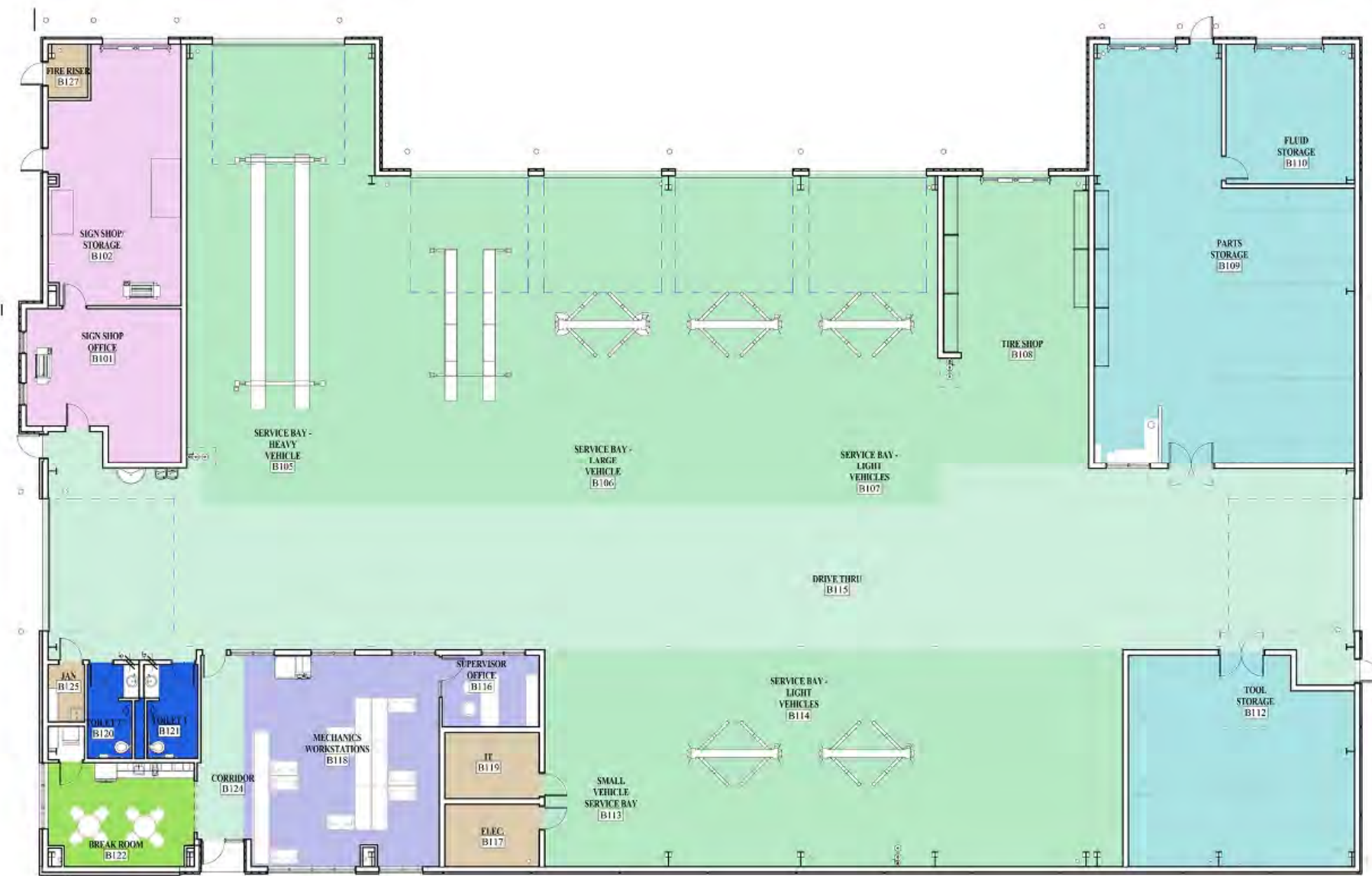
1 01 - MAINTENANCE HEADQUARTERS SECOND FLOOR PLAN - COLOR SCHEME
1" = 10'-0"

Maintenance Headquarters - Second Floor



Motorpool

04 October 2017



Motorpool Department Legend

- B - OFFICE
- B - SIGN SHOP OFFICE/STO/SHOP
- B - VEHICLE WORK BAY
- BUILDING SUPPORT
- CIRCULATION
- COMMON USE
- RESTROOMS
- STORAGE

ROOM AREA - B -...	
Name	Area
SIGN SHOP OFFICE	386 SF
SIGN SHOP STORAGE	593 SF
SERVICE BAY - HEAVY VEHICLE	1590 SF
SERVICE BAY - LARGE VEHICLE	2610 SF
SERVICE BAY - LIGHT VEHICLES	849 SF
TIRE SHOP	780 SF
PARTS STORAGE	1663 SF
FLUID STORAGE	333 SF
COVERED PARKING AREA	5777 SF
TOOL STORAGE	843 SF
SMALL VEHICLE SERVICE BAY	498 SF
SERVICE BAY - LIGHT VEHICLES	1279 SF
DRIVE THRU	4010 SF
SUPERVISOR OFFICE	128 SF
ELEC	109 SF
MECHANICS WORKSTATIONS	756 SF
IT	115 SF
TOILET 2	81 SF
TOILET 1	100 SF
BREAK ROOM	271 SF
CORRIDOR	152 SF
JAN	39 SF
LAUNDRY	23 SF
FIRE RISER	39 SF
SERVICE EQUIPMENT STATION	547 SF
PARTS MEZZANINE	1022 SF

1 02 - MOTORPOOL FLOOR PLAN - COLOR SCHEME
1" = 10'-0"

Motorpool



Warehouse



Warehouse Department Legend

- BUILDING SUPPORT
- C - MEETING/ TRAINING
- C - OFFICE
- C - STORAGE
- CIRCULATION
- COMMON USE
- OUTDOOR STORAGE
- RESTROOMS
- STORAGE

ROOM AREA - C - WAREHOUSE		
Number	WT	Area
C101	WAREHOUSE OPEN STORAGE	11754 SF
C102	STORAGE - A/C	265 SF
C103	STORAGE - SECURED	632 SF
C104	ELECTRICAL	150 SF
C105	WAREHOUSE RECEIVING/ STAGING	3847 SF
C106	STORAGE ACCESSORY AREA	252 SF
C107	CORRIDOR	153 SF
C108	OPEN WORK AREA	533 SF
C109	RECEPTION	157 SF
C110	WH SUPERVISOR	199 SF
C111	CONFERENCE	216 SF
C112	WH PLANNER	147 SF
C113	BREAK	198 SF
C114	WH PLANNER	144 SF
C116	WOMEN'S TOILET	79 SF
C117	MEN'S TOILET	73 SF
C118	STORAGE COORDINATOR	116 SF
C119	JANITOR	42 SF
C120	IT STORAGE - A/C	4905 SF
C121	IT	98 SF
C122	WAREHOUSE OUTDOOR STORAGE	1769 SF

1 C - WAREHOUSE FLOOR PLAN - COLOR SCHEME
1" = 10'-0"

Warehouse



04 October 2017

Trades



ROOM AREA - D - TRADES	
Name	Area
BREAK STORAGE	86 SF
BREAK/DATA	419 SF
CAMPUS CHILLER	1261 SF
CAMPUS ELECTRICAL	394 SF
CAMPUS GENERATOR	452 SF
CAMPUS MECHANICAL	1620 SF
CARPENTRY STORAGE	1814 SF
CARPENTRY STORAGE (A/C)	307 SF
CARPENTRY WORKROOM	2219 SF
CORRIDOR	948 SF
ELEC. STO. (A/C)	257 SF
ELECTRICAL	93 SF
ELECTRICAL WORKROOM	1033 SF
FIELD MAINT. SMALL TOOLS	835 SF
FIELD MAINTENANCE WORKROOM	1484 SF
FIRE RISER	78 SF

ROOM AREA - D - TRADES	
Name	Area
GENERAL STORAGE	540 SF
IT	95 SF
JANITOR	47 SF
MECHANICAL	31 SF
MECHANICAL PLUMBING STORAGE	325 SF
MECHANICAL PLUMBING WORKROOM	1252 SF
PAINT MACHINE	702 SF
TOILET 1	92 SF
TOILET 2	93 SF
TOILET 3	61 SF
TOILET 4	61 SF
WELDING WORKROOM	625 SF
WILDLIFE WORKROOM	377 SF
YARD	1261 SF

Trades



Courtyard



Airport Police Unit



Airport Police Unit



Recycling

04 October 2017



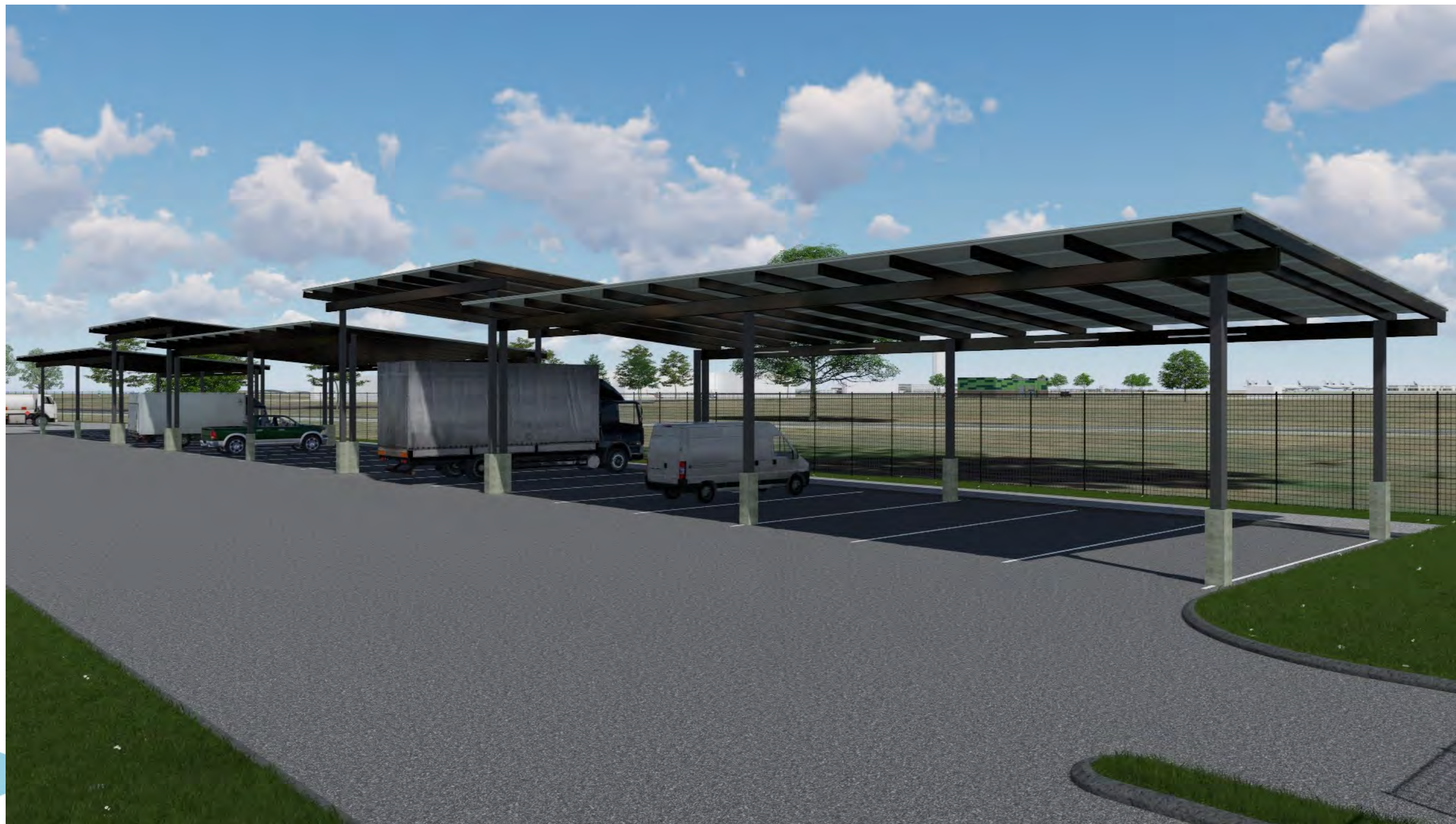
Truckwash



30' and 40' Garages



Deicing equipment storage



Parking Canopies



Fuel Canopy



Pavilion

Appendix A: Landscape Plans

LANDSCAPE CALCULATIONS

	REQUIRED	PROVIDED		
STREET YARD				
1. Total Site Area		1,207,224 SF		
2. Total Street Yard Area		NOT APPLICABLE- no public ROW		
3. Street Yard/Landscape Area (20%)				
TREES (Street Yard)				
Existing Tree Credit (2"-6")				
Existing Tree Credit (>6") double credit				
4. Proposed Street Yard Trees				
Replacement Trees	189 ca in	189 ca in	c	
Required caliper inches mitigated		(63) 3" trees		
Islands, Medians, Peninsulas				
5. Street Yard				
6. Non-Street Yard	1490 SF	17708 SF		
7. BUFFERING POINTS REQUIRED(total)	566	609		
	Size	Quantity-Preferred	Quantity-Not	Points
Larger Trees	3" caliper	24		216
Small Trees	3" caliper			0
Small Trees	2" caliper	9		54
Large Shrubs	5 gal			0
Medium Shrub	5 gal	113		339
Small shrubs	1 gal			0
Decorative wall	per LF			0
Berm				

INNOVATIVE WATER MANAGEMENT

REQUIRED LANDSCAPE AREA	1490 SF
PERCENT WATERED BY RUNOFF	745 SF
LANDSCAPE AREA	782 SF
DRAINAGE AREA	
RATIO OF LANDSCAPE AREA TO DRAINAGE AREA (.5 max)	#DIV 0!

BIOFILTRATION PLANTING CALCULATIONS

	REQUIRED	PROVIDED
CMF POND 1		
FILTRATION AREA		16,375 SF
Minimum 1 gal plant requirement	3275 plants	1896 plants + 4371 SF sod
SEDIMENTATION AREA		
		29,511 SF
Minimum 1 gal plant requirement	2951 plants	1742 plants + 16377 SF sod
APD POND 2		
FILTRATION AREA		7,206 SF
Minimum 1 gal plant requirement	1441 plants	688 plants + 3972 SF sod
SEDIMENTATION AREA		
		7,543 SF
Minimum 1 gal plant requirement	754 plants	219 plants + 6145 SF sod

L-LP-00-10

L-LP-00-11

L-LP-00-01

L-LP-00-02

L-LP-00-03

L-LP-00-04

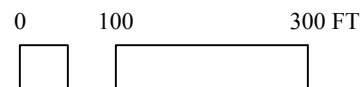
L-LP-00-05

L-LP-00-06

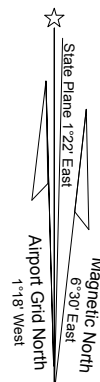
L-LP-00-07

L-LP-00-08

L-LP-00-09



Plant List		CC					
Tag	Common Name	Botanical Name	Qty	Scheduled Size	Spacing	Ht	Spread
Trees							
CEIm	Cedar elm	Ulmus crassifolia	50	3" caliper	as shown	12' min	5' min
Ch Oak	Chinquapin Oak	Quercus muhlenbergia	50	3" caliper	as shown	12' min	5' min
LOak	Live Oak	Quercus fusiformis	8	3" caliper	as shown	14' min	5' min
MOak	Mexican White Oak	Quercus polymorpha	21	3" caliper	as shown	12' min	5' min
'N'CM	Natchez Crape Myrtle	Lagerstromia indica 'Natchez'	8	3" caliper	10' o.c.	8' min	4' min
TRBud	Texas redbud	Cercis canadensis var. texensis	8	3" caliper	as shown	10' min, single trunk	4' min
PV'DM'	Thornless Paloverde	Cercidium 'Desert Museum'	29	2" caliper	as shown	10' min single trunk	5' min
MIL	TX mountain laurel	Sophora secundiflora	20	2" caliper	10' o.c.	8' min	3' min
YH	Yaupon Holly	Ilex vomitoria	6	3" caliper	10' o.c.	8' min	4' min
Shrubs & Ornamental Grasses							
LMuh	Big Muhly	Muhlenbergia lindheimeri	45	5 gal	3' o.c.		
Aga	Century Plant	Agave americana	9	15 gal	as shown		
Centz	Compact Cenizo	Leucophyllum frutescens 'Compacta'	100	5 gal	3' o.c.	3' min	18" min
DwfYaup	Dwarf Yaupon	Ilex vomitoria 'Nana'	68	5 gal	30" o.c.	2' min	18" min
Esp	Esperanza	Tecoma stans	12	5 gal	2' o.c.	3' min	2' min
KO Rose	Knock Out Rose	Rose 'Knock Out'	34	3 gal	3' o.c.	30" min	2' min
MFGGr	Mexican feather grass	Nassella tenuissima	20	1 gal	2' o.c.		
PoB	Pride of Barbados	Caesalpinia pulcherrima	6	5 gal	as shown	4' min	3' min
Rmary	Prostrate rosemary	Rosmarinus officinalis prostratus	16	3 gal	2' o.c.		
RYU	Red Yucca	Hesperaloe parviflora	10	15 gal	3' o.c.	2' o.c.	30" o.c.
Iris	White bearded Iris	Iris germanica 'Old Cemetery'	26	1 gal	1' o.c.		
Groundcovers & Perennials							
GtL	Giant Liriope	Liriope muscari 'Evergreen Giant'	230	1 gal	2' o.c.		
PTlan	Purple Trailing lantana	Lantana montevidensis	102	1 gal	3' o.c.		
SPF	Silver Ponyfoot	Dichondra argenta	400	1 gal	3' o.c.		
Biofiltration Pond planting							
CMF POND 1 FILTRATION							
BigB	Big Bluestem	Andropogon gerardii	47	1 gal	3' o.c.		
LMuh	Big Muhly	Muhlenbergia lindheimeri	60	1 gal	3' o.c.		
BPen	Brazos Penstemon	Penstemon tenuis	75	1 gal	18" o.c.		
CFern	Clover Fern	Marsilia macropoda	545	1 gal	18" o.c.		
EGGr	Eastern Gama grass	Tripsacum dactyloides	86	1 gal	3' o.c.		
GMuh	Gulf Muhly	Muhlenbergia capillaris	30	1 gal	3' o.c.		
InGr	Indian Grass	Sorghastrum nutans	49	1 gal	3' o.c.		
LiB	Little Bluestem	Schizachyrium scoparium	608	1 gal	2' o.c.		
MSun	Maximilian Sunflower	Helianthus maximiliani	215	1 gal	2' o.c.		
Obd	Obedient Plant	Physostegia virginiana	108	1 gal	18" o.c.		
SGr	Switchgrass	Panicum virgatum	74	1 gal	3' o.c.		
CMF POND 1 SEDIMENTATION							
SGr	Switchgrass	Panicum virgatum	41	1 gal	3' o.c.		
EGGr	Eastern Gama grass	Tripsacum dactyloides	42	1 gal	3' o.c.		
InGr	Indian Grass	Sorghastrum nutans	65	1 gal	3' o.c.		
BuB	Bushy Bluestem	Andropogon glomeratus	76	1 gal	3' o.c.		
MSun	Maximilian Sunflower	Helianthus maximiliani	173	1 gal	2' o.c.		
Obd	Obedient Plant	Physostegia virginiana	57	1 gal	18" o.c.		
Obd	Obedient Plant	Physostegia virginiana	55	1 gal	18" o.c.		
CFern	Clover Fern	Marsilia macropoda	414	1 gal	18" o.c.		
LiB	Little Bluestem	Schizachyrium scoparium	77	1 gal	2' o.c.		
GRod	Goldenrod	Solidago altissima	303	1 gal	2' o.c.		
MWd	Milkweed	Asclepias viridis	453	1 gal	2' o.c.		
APD POND 2 FILTRATION							
SGr	Switchgrass	Panicum virgatum	49	1 gal	3' o.c.		
EGGr	Eastern Gama grass	Tripsacum dactyloides	41	1 gal	3' o.c.		
BuB	Bushy Bluestem	Andropogon glomeratus	40	1 gal	3' o.c.		
InGr	Indian Grass	Sorghastrum nutans	41	1 gal	3' o.c.		
Obd	Obedient Plant	Physostegia virginiana	63	1 gal	18" o.c.		
BPen	Brazos Penstemon	Penstemon tenuis	79	1 gal	18" o.c.		
MSun	Maximilian Sunflower	Helianthus maximiliani	92	1 gal	2' o.c.		
CFern	Clover Fern	Marsilia macropoda	116	1 gal	18" o.c.		
CFern	Clover Fern	Marsilia macropoda	165	1 gal	18" o.c.		
APD POND 2 SEDIMENTATION							
GRod	Goldenrod	Solidago altissima	50	3" caliper	2' o.c.		
LMuh	Big Muhly	Muhlenbergia lindheimeri	86	3" caliper	3' o.c.		
MWd	Milkweed	Asclepias viridis	80	3" caliper	2' o.c.		
Total			5959				



ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

ATKINS
11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840

STAMP
NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407
8-18-2017

Carolyn Kelley, ASLA
Landscape Architect
512.445.0431
512.857.1342 fax
carolyn@cckla.net

Austin-Bergstrom International Airport

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT

CONSOLIDATED MAINTENANCE FACILITY

XXXX GOLF COURSE RD
AUSTIN TX 78719

ABIA Project No.: LA509 Permit Issue No.: 00000 AIP/CIP Nos.: 0-00-0000-00-00

No. Date Issue Description By

DRAWING DESCRIPTION:

LANDSCAPE KEY PLAN

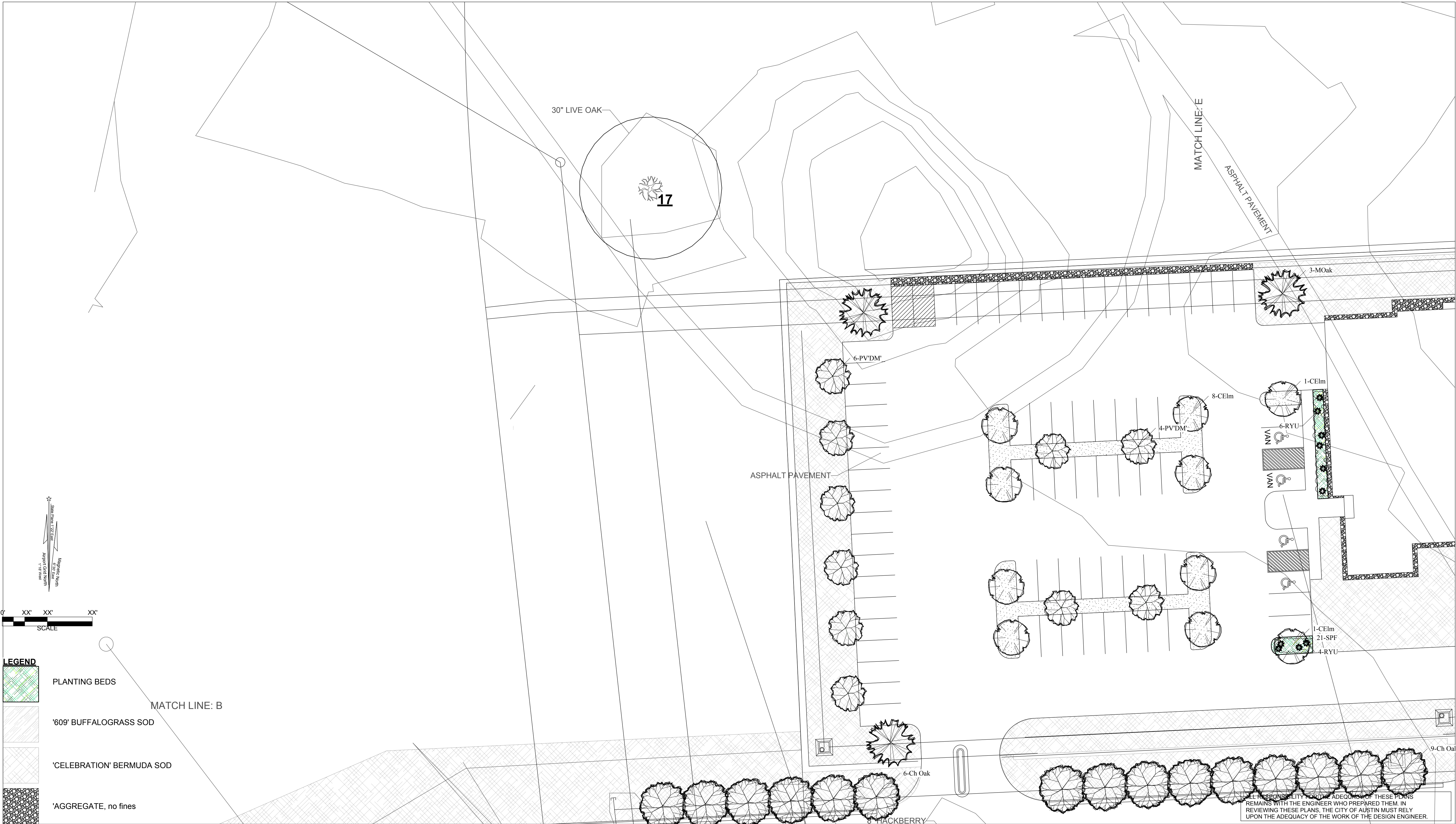
APD K

KEY MAP

JOB NO.: LA509
DRAWN BY: CK
CHECKED BY: PB
COORD. CHECK:
FILE NAME: ABIA CMF04
DATE: 17AUG2017
SCALE:
SHEET NO.

L-KP-00-01

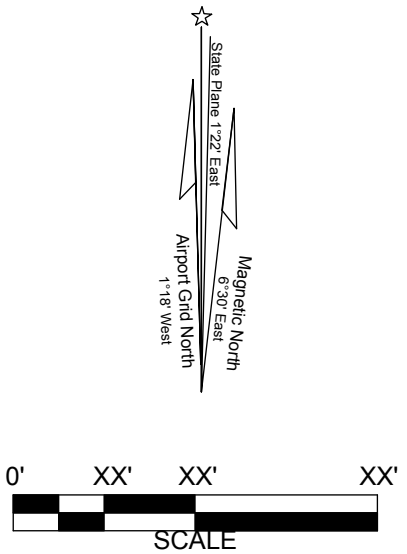
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.



<div><div>ATKINS</div><div>11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840</div></div>	<div>STAMP</div> <div>NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407</div> <div>8-18-2017</div>	<div>Carolyn Kelley, ASLA Landscape Architect</div> <div>512.445.0431 512.857.1342 fax carolyn@ckla.net</div> <div>CKLA</div>	<div><div>Austin-Bergstrom International Airport</div></div>	AUSTIN-BERGSTROM INTERNATIONAL AIRPORT				DRAWING DESCRIPTION:				JOB NO.: LA509			
				CONSOLIDATED MAINTENANCE FACILITY				LANDSCAPE PLAN				DRAWN BY: CK			
XXXX GOLF COURSE RD AUSTIN TX 78719				KEY MAP				CHECKED BY: PB				COORD. CHECK:			
ABIA Project No.: LA509				Permit Issue No.: 00000				AIP/CIP Nos.: 0-00-0000-00-00				FILE NAME: ABIA CMF04			
				No. Date Issue Description By				DATE: 17AUG2017				SCALE:			
												SHEET NO.			
												L-LP-00-01			

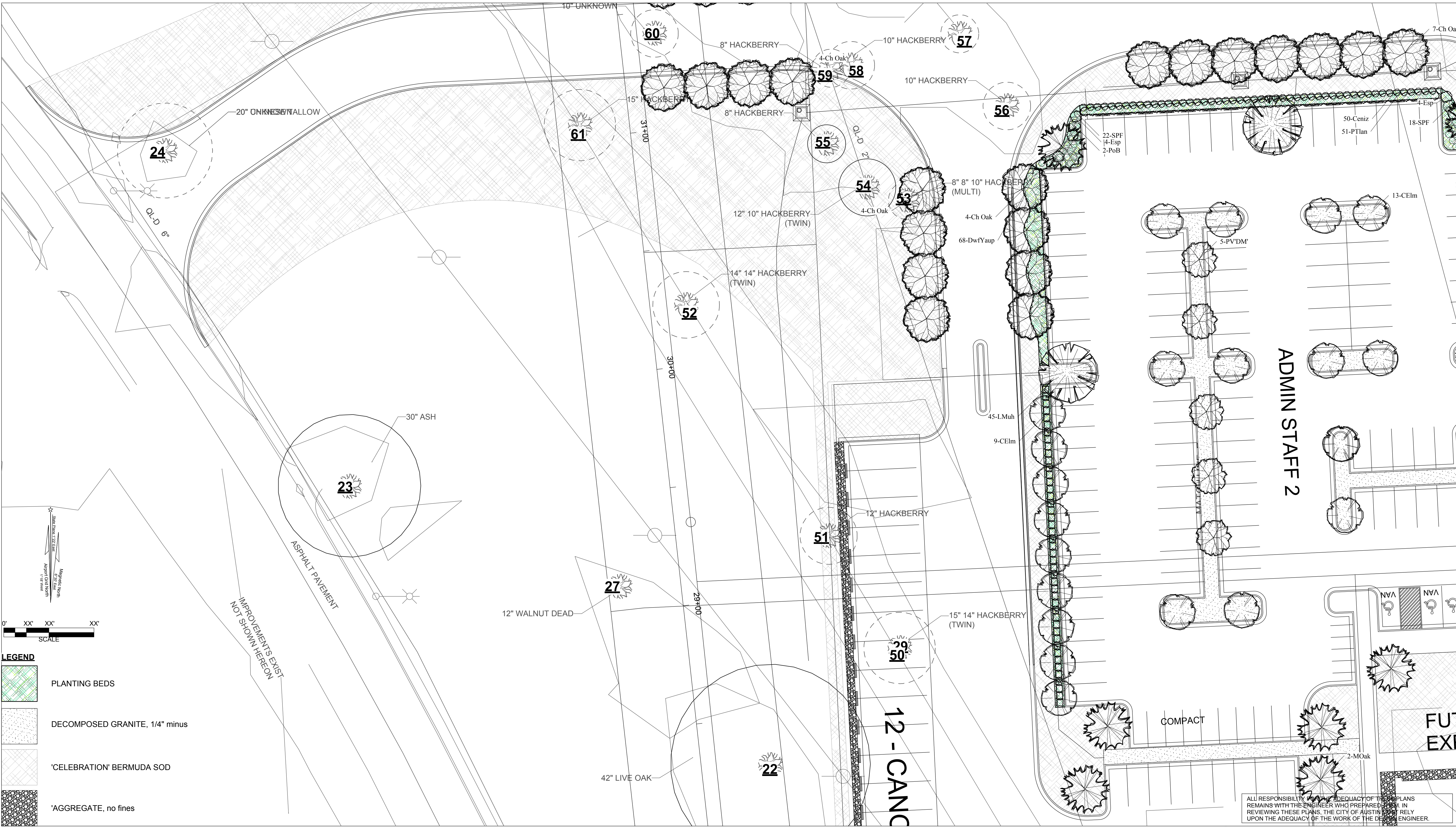


- LEGEND**
- '609' BUFFALOGRASS SOD, in filtration pond
 - '609' BUFFALOGRASS SOD, in sedimentation pond
 - '609' BUFFALOGRASS SOD
 - 'CELEBRATION' BERMUDA SOD
 - 'AGGREGATE, no fines

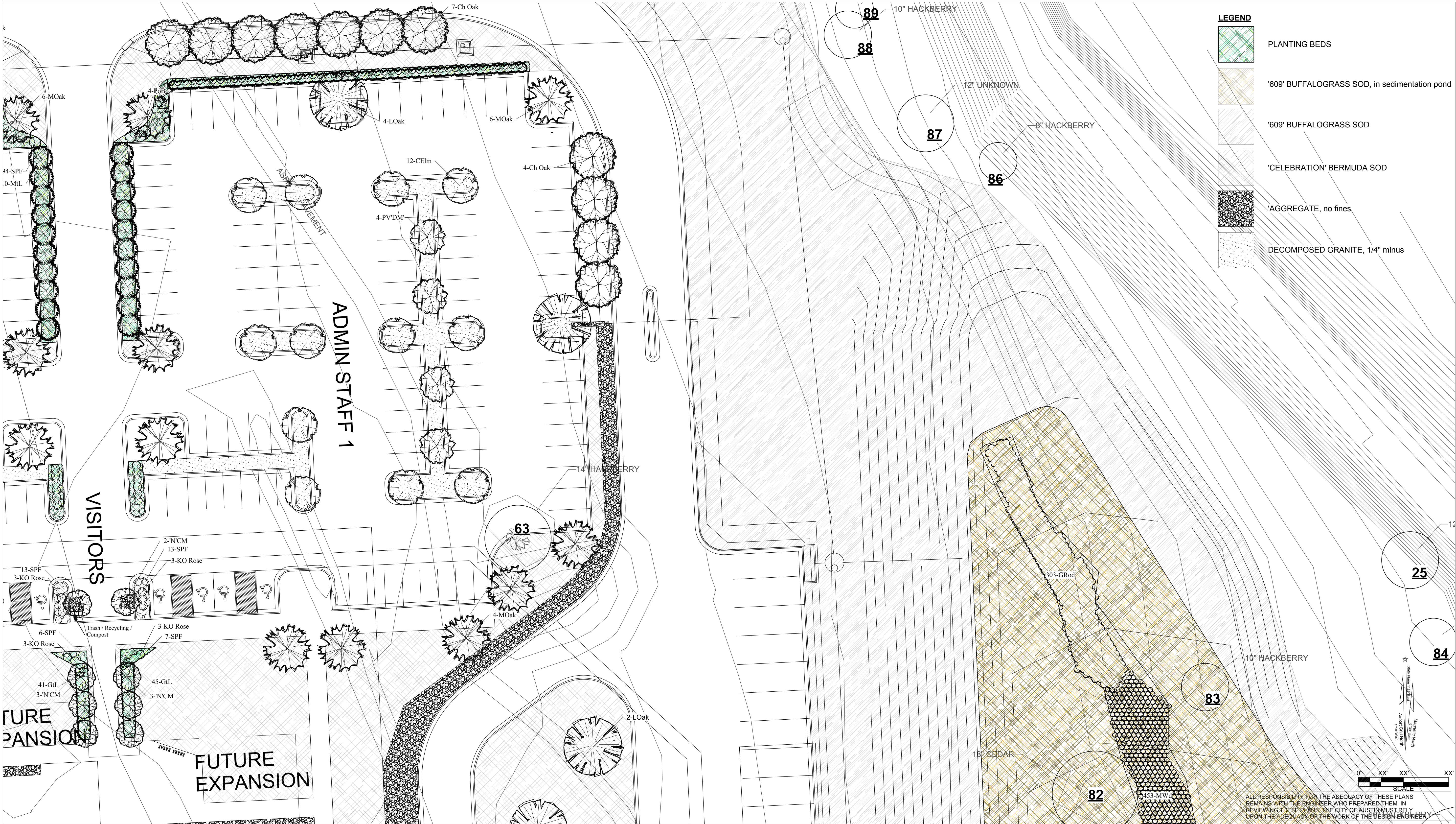


ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

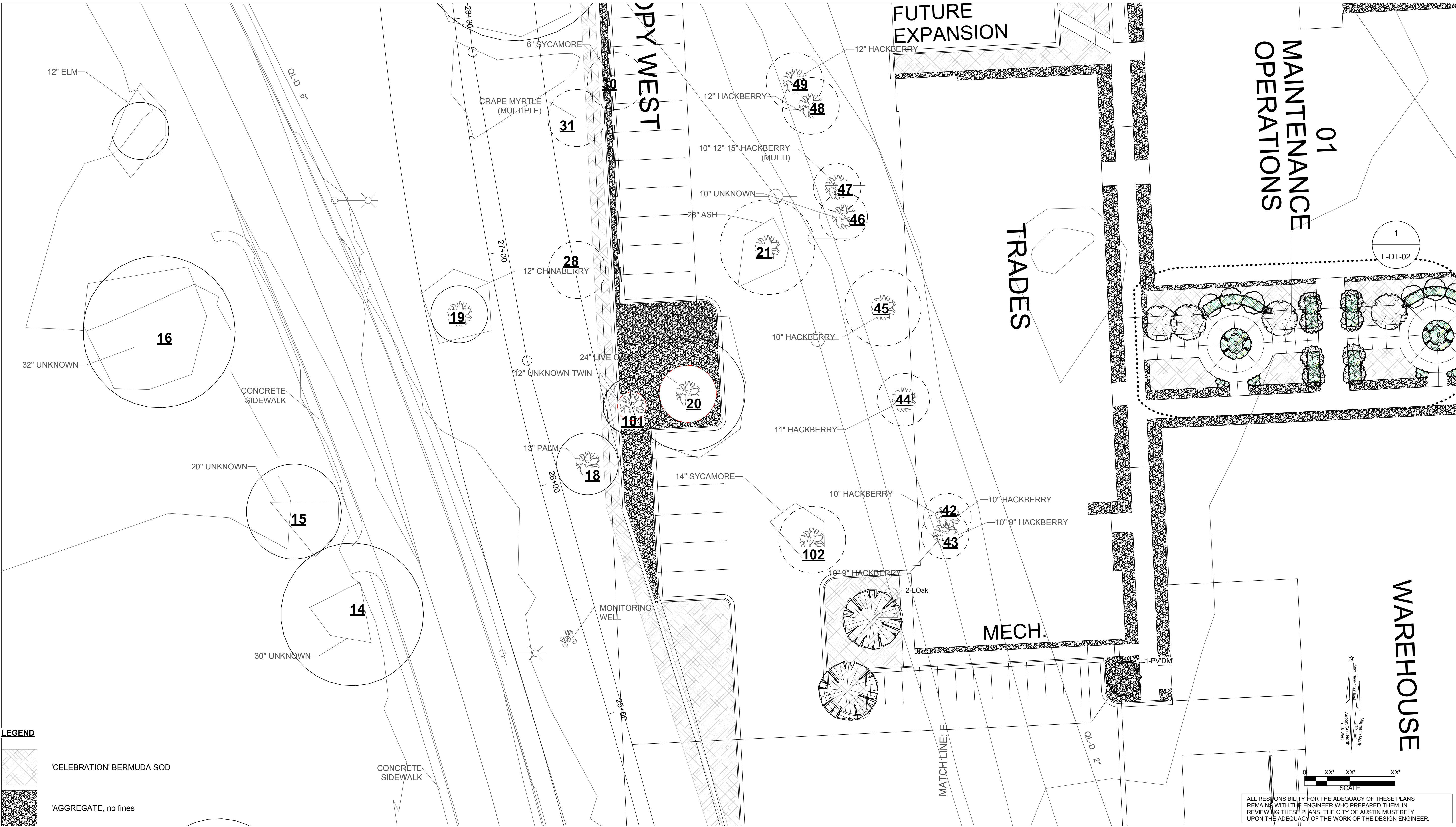
<div>ATKINS 11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840</div>	<div>STAMP NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407 8-18-2017</div>	<div>Carolyn Kelley, ASLA Landscape Architect 512.445.0431 512.857.1342 fax carolyn@ckla.net</div>	<div></div>	AUSTIN-BERGSTROM INTERNATIONAL AIRPORT				<div>DRAWING DESCRIPTION:</div> <div>LANDSCAPE PLAN</div> <div>KEY MAP</div>				<div>JOB NO.: LA509 DRAWN BY: CK CHECKED BY: PB COORD. CHECK: FILE NAME: ABIA CMF04 DATE: 17AUG2017 SCALE: SHEET NO.</div>	
				CONSOLIDATED MAINTENANCE FACILITY XXXX GOLF COURSE RD AUSTIN TX 78719									
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.				ABIA Project No.: LA509	Permit Issue No.: 00000	AIP/CIP Nos.: 0-00-0000-00-00	No.	Date	Issue Description	By	L-LP-00-02		



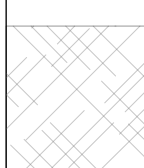
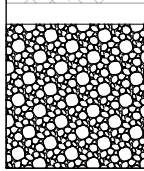
<div><div>ATKINS</div><div>11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840</div></div>	<div>STAMP</div> <div>NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407</div> <div>8-18-2017</div>	<div>Carolyn Kelley, ASLA Landscape Architect</div> <div>512.445.0431 512.857.1342 fax carolyn@ckla.net</div> <div>CK LA</div>	<div><div>Austin-Bergstrom International Airport</div></div>	<div>AUSTIN-BERGSTROM INTERNATIONAL AIRPORT</div> <div>CONSOLIDATED MAINTENANCE FACILITY</div> <div>XXXX GOLF COURSE RD AUSTIN TX 78719</div>	<table><tr><td>ABIA Project No.:</td><td>LA509</td><td>Permit Issue No.:</td><td>00000</td><td>AIP/CIP Nos.:</td><td>0-00-0000-00-00</td><td>No.</td><td>Date</td><td>Issue Description</td><td>By</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	ABIA Project No.:	LA509	Permit Issue No.:	00000	AIP/CIP Nos.:	0-00-0000-00-00	No.	Date	Issue Description	By											<div>DRAWING DESCRIPTION:</div> <div>LANDSCAPE PLAN</div> <div>KEY MAP</div>	<div>JOB NO.:</div> <div>LA509</div> <div>DRAWN BY:</div> <div>CK</div> <div>CHECKED BY:</div> <div>PB</div> <div>COORD. CHECK:</div> <div></div> <div>FILE NAME:</div> <div>ABIA CMF04</div> <div>DATE:</div> <div>17AUG2017</div> <div>SCALE:</div> <div></div> <div>SHEET NO.</div> <div></div> <div>L-LP-00-03</div>
	ABIA Project No.:	LA509	Permit Issue No.:	00000	AIP/CIP Nos.:	0-00-0000-00-00	No.	Date	Issue Description	By																	
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.																											



<div>ATKINS 11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840</div>	<div>STAMP NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407 8-18-2017</div>	<div>Carolyn Kelley, ASLA Landscape Architect 512.445.0431 512.857.1342 fax carolyn@ckla.net</div> <div>CK LA</div>	<div>Austin-Bergstrom International Airport</div>	AUSTIN-BERGSTROM INTERNATIONAL AIRPORT				<div>DRAWING DESCRIPTION: LANDSCAPE PLAN </div>				<div>JOB NO.: LA509 DRAWN BY: CK CHECKED BY: PB COORD. CHECK: FILE NAME: ABIA CMF04 DATE: 17AUG2017 SCALE: SHEET NO.</div> <div>L-LP-00-04</div>	
				<div>CONSOLIDATED MAINTENANCE FACILITY XXXX GOLF COURSE RD AUSTIN TX 78719</div>									
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.				ABIA Project No.: LA509	Permit Issue No.: 00000	AIP/CIP Nos.: 0-00-0000-00-00	No.	Date	Issue Description	By			



LEGEND

-  'CELEBRATION' BERMUDA SOD
-  'AGGREGATE, no fines

 11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840	STAMP NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407 8-18-2017	Carolyn Kelley, ASLA Landscape Architect 512.445.0431 512.857.1342 fax carolyn@ckla.net 	 Austin-Bergstrom International Airport	AUSTIN-BERGSTROM INTERNATIONAL AIRPORT								DRAWING DESCRIPTION:				JOB NO.: LA509	
				CONSOLIDATED MAINTENANCE FACILITY XXXX GOLF COURSE RD AUSTIN TX 78719												LANDSCAPE PLAN	
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.				ABIA Project No.: LA509	Permit Issue No.: 00000	AIP/CIP Nos.: 0-00-0000-00-00	No.	Date	Issue Description	By	KEY MAP				L-LP-00-05		



ATKINS

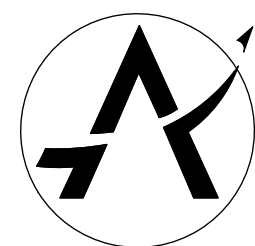
11801 Domain Blvd., Suite 500 -
Austin TX 78758 - (512) 327-6840

STAMP
NOT FOR CONSTRUCTION,
PERMITTING, OR
REGULATORY APPROVAL.
RELEASED UNDER THE
AUTHORITY OF CAROLYN
KELLEY TX LA#1407

8-18-2017

Carolyn Kelley, ASLA
Landscape Architect

512.445.0431
512.857.1342 fax
carolyn@ckla.net



**Austin-Bergstrom
International Airport**

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT

**CONSOLIDATED MAINTENANCE
FACILITY**

XXXX GOLF COURSE RD
AUSTIN TX 78719

ABIA Project No.: LA509

Permit Issue No.: 00000

AIP/CIP Nos.: 0-00-0000-00-00

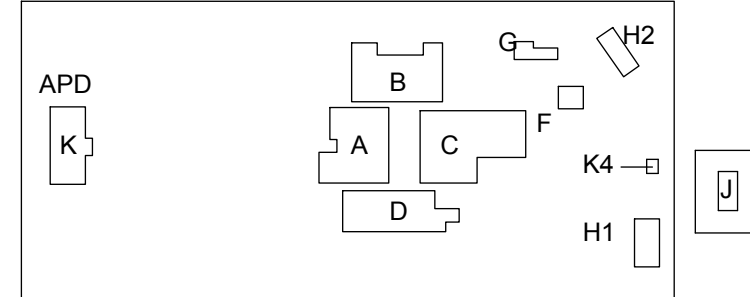
No.

Date

Issue Description

DRAWING DESCRIPTION:

LANDSCAPE PLAN

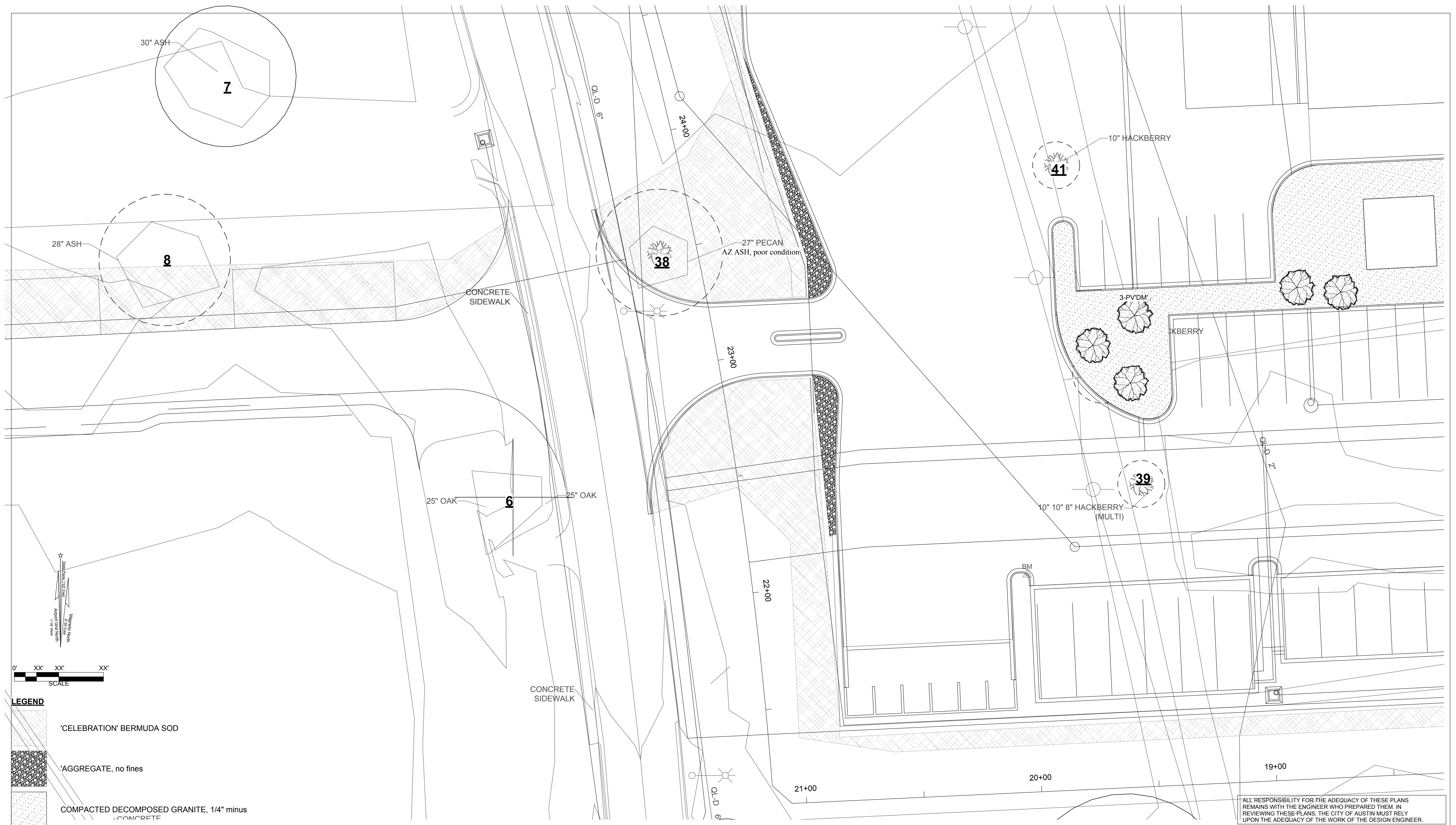




KEY MAP

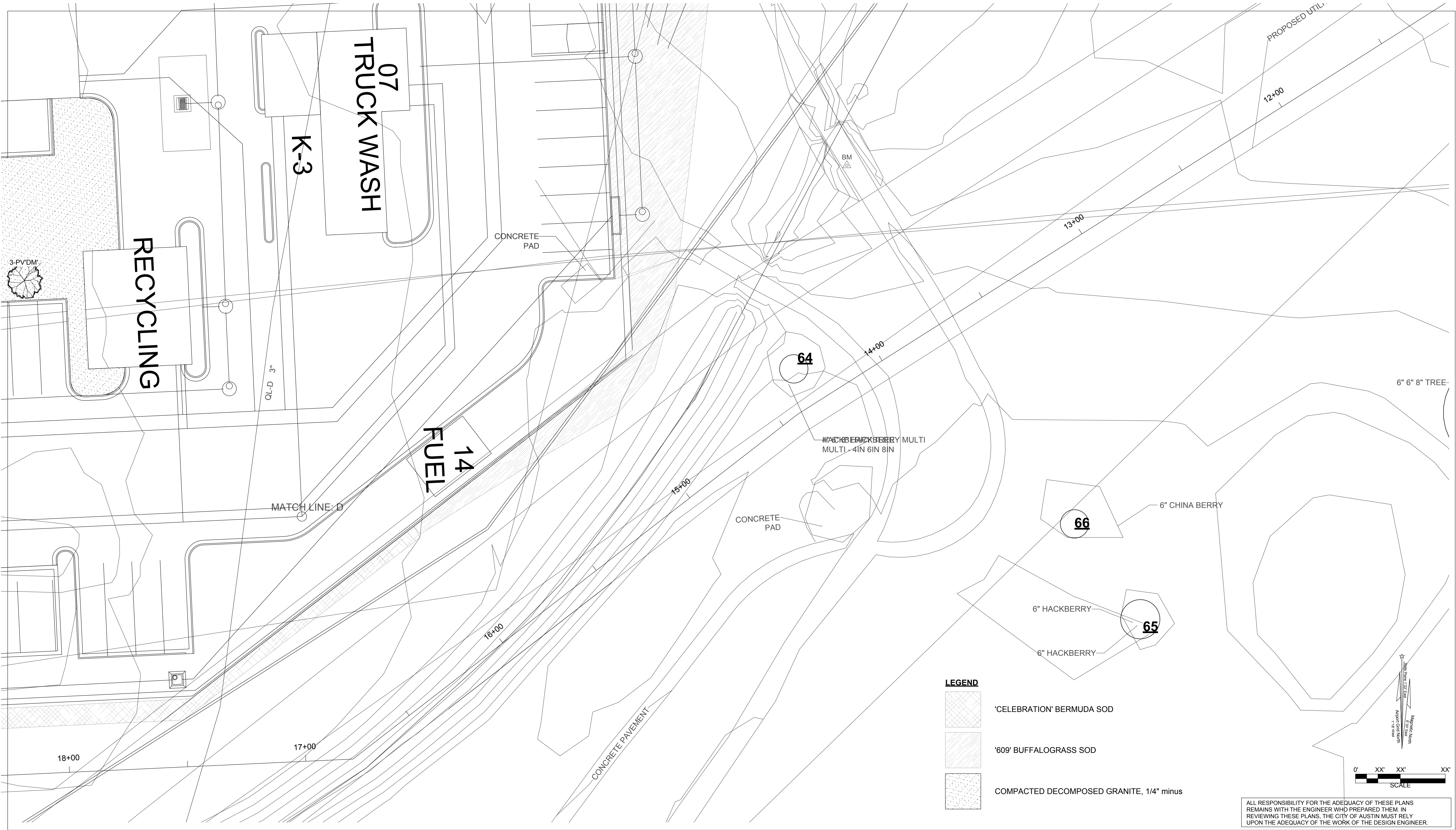
JOB NO.: LA509
DRAWN BY: CK
CHECKED BY: PB
COORD. CHECK:
FILE NAME: ABIA CMF04
DATE: 17AUG2017
SCALE:
SHEET NO.

L-LP-00-06

THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.



 <p>11801 Domain Blvd., Suite 500 - Austin TX 78758 - (512) 327-6840</p>	<p>STAMP</p> <p>NOT FOR CONSTRUCTION, PERMITTING, OR REGULATORY APPROVAL. RELEASED UNDER THE AUTHORITY OF CAROLYN KELLEY TX LA#1407</p> <p>8-18-2017</p>	<p>Carolyn Kelley, ASLA Landscape Architect</p> <p>512.445.0431 512.857.1342 fax carolyn@ckla.net</p> 	 <p>Austin-Bergstrom International Airport</p>	<p>AUSTIN-BERGSTROM INTERNATIONAL AIRPORT</p> <p>CONSOLIDATED MAINTENANCE FACILITY</p> <p>XXXX GOLF COURSE RD AUSTIN TX 78719</p>								<p>DRAWING DESCRIPTION:</p> <p>LANDSCAPE PLAN</p>				<p>JOB NO.: LA509</p> <p>DRAWN BY: CK</p> <p>CHECKED BY: PB</p> <p>COORD. CHECK:</p> <p>FILE NAME: ABIA CMF04</p> <p>DATE: 17AUG2017</p> <p>SCALE:</p> <p>SHEET NO.</p> <p>L-LP-00-07</p>			
	<p>THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.</p>			<p>ABIA Project No.: LA509</p> <p>Permit Issue No.: 00000</p> <p>AIP/CIP Nos.: 0-00-0000-00-00</p>				<p>No. Date Issue Description By</p>				<p>KEY MAP</p> 							



ATKINS
11801 Domain Blvd., Suite 500 -
Austin TX 78758 - (512) 327-6840

STAMP
NOT FOR CONSTRUCTION,
PERMITTING, OR
REGULATORY APPROVAL.
RELEASED UNDER THE
AUTHORITY OF CAROLYN
KELLEY TX LA#1407
8-18-2017

Carolyn Kelley, ASLA
Landscape Architect
512.445.0431
512.857.1342 fax
carolyn@ckla.net



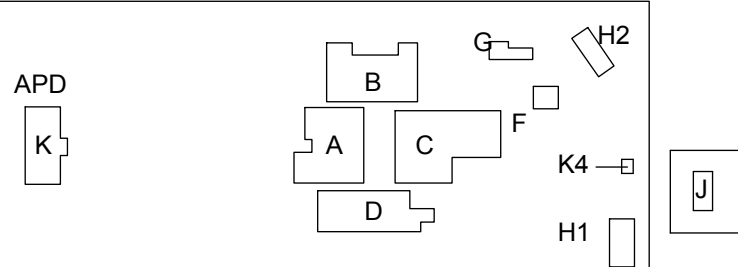
AUSTIN-BERGSTROM INTERNATIONAL AIRPORT

**CONSOLIDATED MAINTENANCE
FACILITY**
XXXX GOLF COURSE RD
AUSTIN TX 78719

ABIA Project No.: LA509 Permit Issue No.: 00000 AIP/CIP Nos.: 0-00-0000-00-00 No. Date Issue Description By

DRAWING DESCRIPTION:

LANDSCAPE PLAN



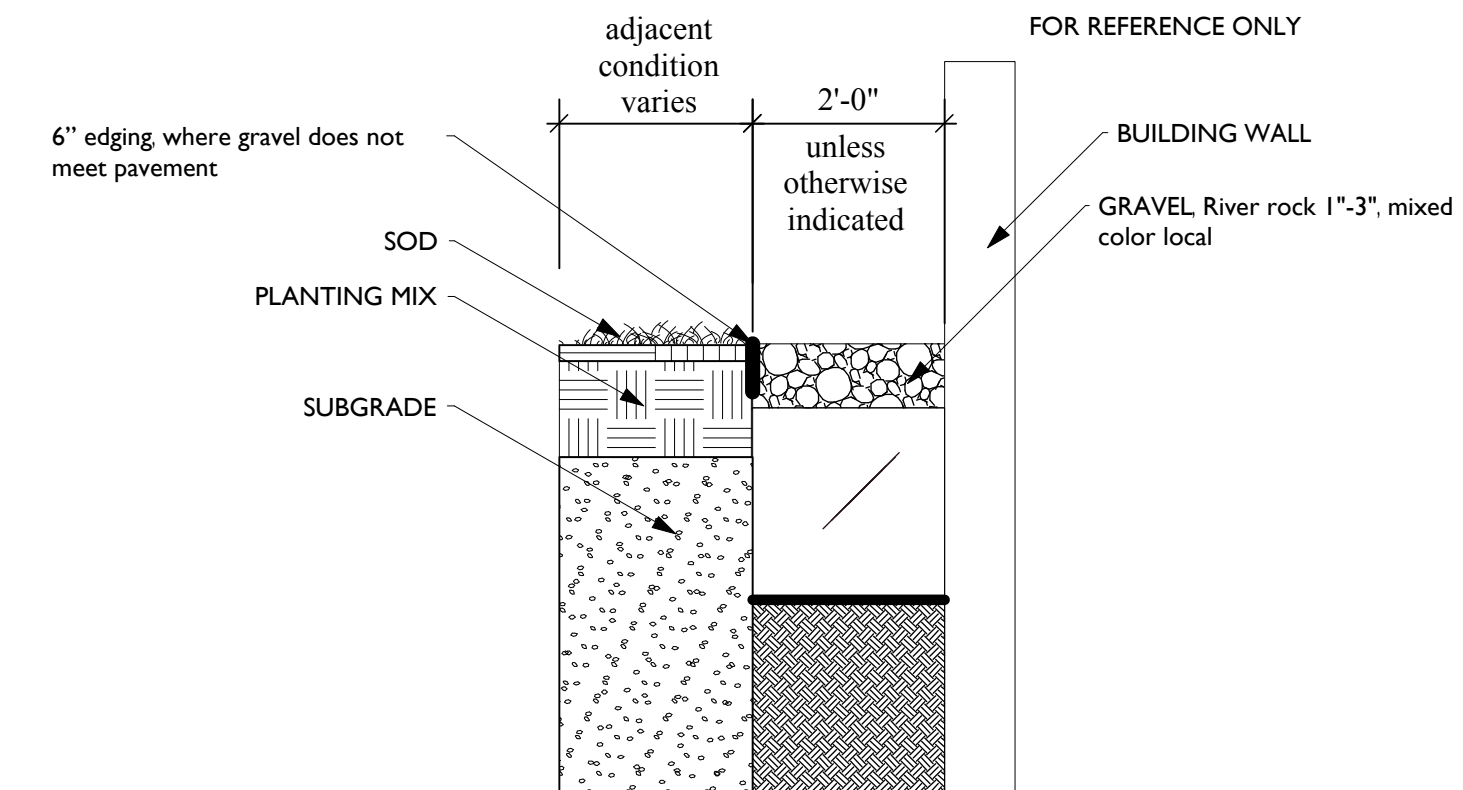
KEY MAP

JOB NO.: LA509
DRAWN BY: CK
CHECKED BY: PB
COORD. CHECK:
FILE NAME: ABIA CMF04
DATE: 17AUG2017
SCALE:
SHEET NO.

L-LP-00-08

THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.

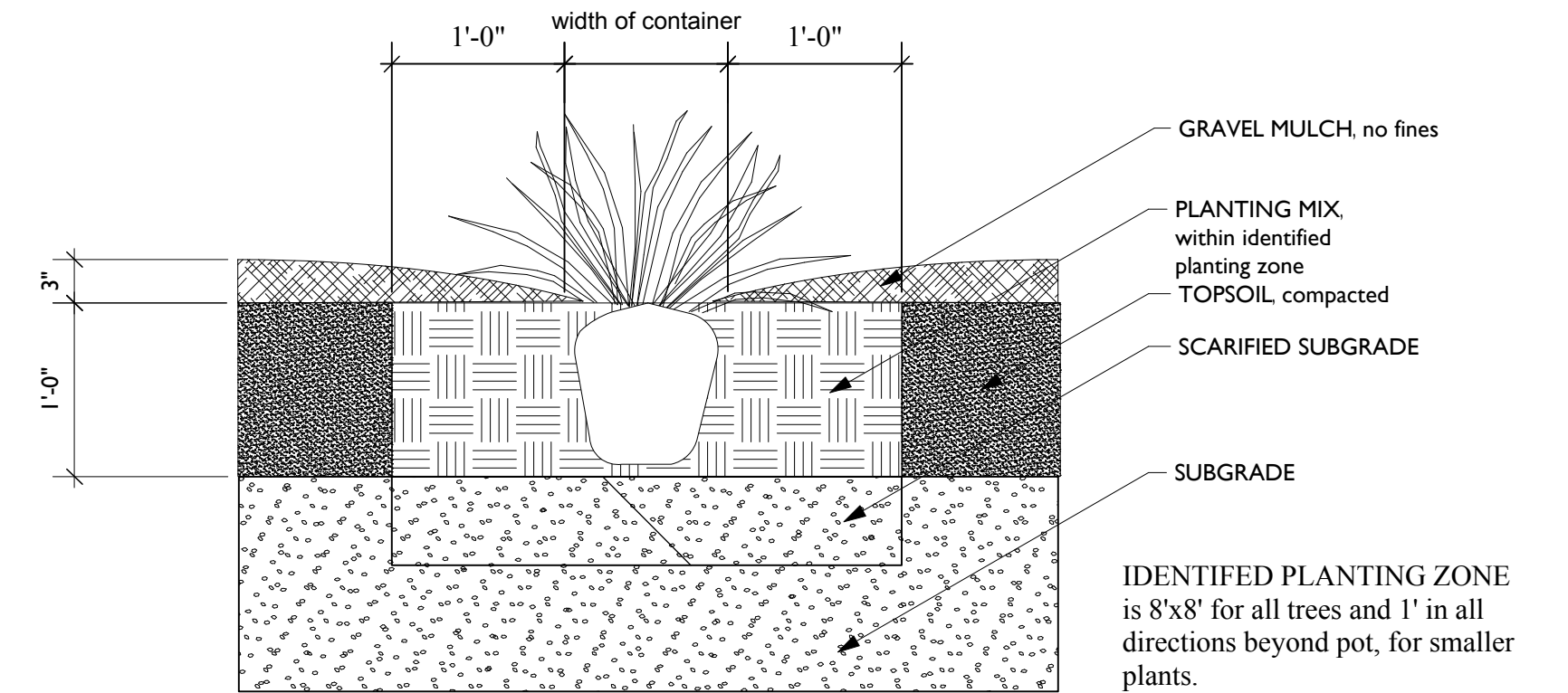
THESE DOCUMENTS ISSUED FOR INTERIM REVIEW ONLY; NOT FOR BIDDING, PERMITTING, OR CONSTRUCTION.



0 10 20 30 FT

N

 GRAVEL BUILDING PERIMETER
Scale: 1/2" = 1'-0"



The profile view shows a road with a constant width of 30 feet. The elevation starts at 0 feet, rises to 10 feet at the 10-foot mark, and then rises to 20 feet at the 20-foot mark. The road continues at 20 feet until the 30-foot mark. A north arrow is shown to the right of the profile, pointing towards the top of the page.

PLANTING IN GRAVEL

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS
REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN
REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY
UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

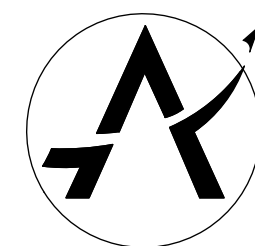


NOT FOR CONSTRUCTION.
PERMITTING, OR
REGULATORY APPROVAL.
RELEASED UNDER THE
AUTHORITY OF CAROLYN
KELLEY TX LA#1407

8-18-2017

Carolyn Kelley, ASLA
Landscape Architect

512.445.0431
512.857.1342 fax
carolyn@ckla.net



Austin-Bergstrom International Airport

AUSTIN-BERGSTROM INTERNATIONAL AIRPORT

CONSOLIDATED MAINTENANCE FACILITY

XXXX GOLF COURSE RD
AUSTIN TX 78719

ABIA Project No.: LA509

Permit Issue No.:	00000
-------------------	-------

AIP/CIP Nos.:	0-00-0000-00-00
---------------	-----------------

			N

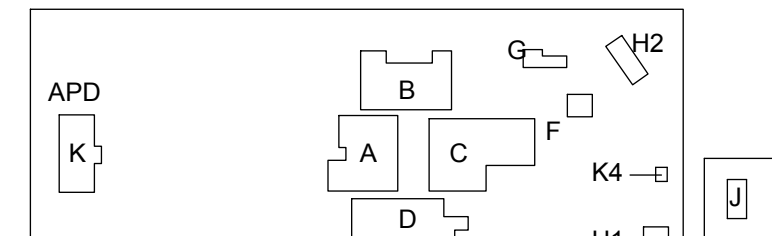
Date _____

	Issue Description
--	-------------------

	B
--	---

	DRAWING DESCRIPTION:
--	----------------------

LANDSCAPE DETAILS



KEY MAP

JOB NO.:	LA509
DRAWN BY:	CK
CHECKED BY:	PB
COORD. CHECK:	
FILE NAME:	ABIA CMF04
DATE:	17AUG2017
SCALE:	
SHEET NO.	

L-DT-00-02

Appendix B: LEED Tracking

Austin-Bergstrom International Airport Planning & Engineering				Project Sustainability Tracking Report			
Project Name:		ABIA Consolidated Maintenance Facility & Airport Police Department					
Project Description:		New construction maintenance complex & public safety facility					
FDU:			Consultant:		Atkins		
Sub-project ID:			Consultant PM:		Matthew Leiner		
ABIA project no.:		LA509		Sustainability Liaison:		Joanna Switzer	
ABIA PM:		Richard Chaney, ABIA		Submission Phase:		60% Design	
Public Works PM:			Submission Date:		9/29/2017		

Project Consideration Items		LEED 2009 Equivalent		Project Types (Optional or Required)				City of Austin Initiatives (Applicability)								Consideration Items Status				Schematic Design (SD)			Design Development (DD)		
ABIA No.	Description (Bold items below indicate ABIA priorities)	Reference	Credit	Infrastructure or Site	Minor/Interior Renovations	Major Renovations	New Building or Facility	IA: Compact & Connected	IA: Sustainable Water	IA: Workforce & Education	IA: Green Infrastructure	IA: Creative Economy	IA: Healthy Austin	Universal Recycling Ord.	Other	Under Consideration	Applicable	Not Applicable	Cost Impact (% Increase)	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)	Comments	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)	
1.0	SUSTAINABLE SITES															NOTE: Cost impacts estimated below are a % of the total \$40M construction budget and are inclusive of all CMF LEED									
1.1	Construction activity pollution prevention	SS PR 1	Required	R	O	O	R										X		0%	Y	SSp1			SSp1	
1.2	Site selection	SS C 1	1	R	O	O	R										X		0%	Y	SSc1		N	SSc1	
1.3	Development density and community connectivity	SS C 2	5	O	O	O	R											X	N/A	N	SSc2		N	SSc2	
1.4	Brownfield redevelopment	SS C 3	1	O	O	O	O	ind																	
1.5	Alternative transportation - public transportation access	SS C 4.1	6	O	O	O	R											X	N/A	N	SSc4.1		N	SSc4.1	
1.6	Alternative transportation - bicycle storage and changing rooms	SS C 4.2	1	O	O	O	R										X		0% bike racks	Y	SSc4.2	\$1-5K	Y	SSc4.2	
1.7	Alternative transportation - low-emitting and fuel-efficient vehicles	SS C 4.3	3	O	O	O	R										X		0-0.01% signs	Y	SSc4.3	\$0-4K	Y	SSc4.3	
1.8	Alternative transportation - parking capacity	SS C 4.4	2	O	O	O	R											X	N/A	N	SSc4.4		N	SSc4.4	
1.9	Site development - protect or restore habitat	SS C 5.1	1	R	O	O	R											X	N/A	N	SSc5.1		N	SSc5.1	
1.10	Site development - maximize open space	SS C 5.2	1	O	O	O	O									X			0%	N	SSc5.2	TBD	TBD	SSc5.2	
1.11	Stormwater design - quantity control	SS C 6.1	1	R	O	R	R									X			0-2%	N	SSc6.1	\$0-400K	N	SSc6.1	
1.12	Stormwater design - quality control	SS C 6.2	1	R	O	R	R									X			0-1%	N	SSc6.2	\$0-200K	TBD	SSc6.2	
1.13	Heat island effect - nonroof	SS C 7.1	1	R	O	R	R										X		0%	Y	SSc7.1	N @ HQ	Y	SSc7.1	
1.14	Heat island effect - roof	SS C 7.2	1	O	R	R	R										X		0%	Y	SSc7.2		Y	SSc7.2	
1.15	Light pollution reduction	SS C 8	1	R	R	R	R										X		0.01-0.1%	Y	SSc8	\$4-40K	Y	SSc8	
2.0	WATER EFFICIENCY																								
2.1	Water use reduction (20%)	WE PR 1	Required	R	R	R	R										X		0%	Y	WEp1		Y	WEp1	
2.2	Water efficient landscaping	WE C 1	2-4	R	O	R	R										X		0-0.5%	Y	WEc1	\$0-200K	Y	WEc1	
2.3	Innovative wastewater technologies	WE C 2	2	O	O	R	R										X		N/A	N	WEc2		N	WEc2	
2.4	Water use reduction (greater than 2.1)	WE C 3	2-4	O	O	R	R										X		0%	Y	WEc3		Y	WEc3	

Austin-Bergstrom International Airport Planning & Engineering				Project Sustainability Tracking Report			
Project Name:		ABIA Consolidated Maintenance Facility & Airport Police Department					
Project Description:		New construction maintenance complex & public safety facility					
FDU:			Consultant:		Atkins		
Sub-project ID:			Consultant PM:		Matthew Leiner		
ABIA project no.:		LA509		Sustainability Liaison:		Joanna Switzer	
ABIA PM:		Richard Chaney, ABIA		Submission Phase:		60% Design	
Public Works PM:			Submission Date:		9/29/2017		

Project Consideration Items		LEED 2009 Equivalent		Project Types (Optional or Required)				City of Austin Initiatives (Applicability)								Consideration Items Status				Schematic Design (SD)			Design Development (DD)	
ABIA No.	Description (Bold items below indicate ABIA priorities)	Reference	Credit	Infrastructure or Site	Minor/Interior Renovations	Major Renovations	New Building or Facility	IA: Compact & Connected	IA: Sustainable Water	IA: Workforce & Education	IA: Green Infrastructure	IA: Creative Economy	IA: Healthy Austin	Universal Recycling Ord.	Other	Under Consideration	Applicable	Not Applicable	Cost Impact (% Increase)	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)	Comments	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)
3.0	ENERGY AND ATMOSPHERE																							
3.1	Fundamental commissioning of building energy systems	EA PR 1	Required	O	O	R	R										X		0.25-0.5%	Y	EAp1	\$100-200K	Y	EAp1
3.2	Minimum energy performance	EA PR 2	Required	R	R	R	R										X		0%	Y	EAp2		Y	EAp2
3.3	Fundamental refrigerant management	EA PR 3	Required	O	O	R	R										X		0%	Y	EAp3		Y	EAp3
3.4	Optimize energy performance	EA C 1	1-19	O	O	R	R										X		0.25-0.5% above code	Y	EAc1	\$100-200K	Y	EAc1
3.5	On-site renewable energy	EA C 2	1-7	O	O	O	R										X		N/A	N	EAc2		N	EAc2
3.6	Enhanced commissioning	EA C 3	2	O	O	O	R										X		N/A	N	EAc3		N	EAc3
3.7	Enhanced refrigerant management	EA C 4	2	O	O	O	R									X			0%	N	EAc4	TBD @ APD	Y	EAc4
3.8	Measurement and verification	EA C 5	3	O	O	R	R										X		0-0.5%	TBD	EAc5	\$0-200K	TBD	EAc5
3.9	Green power	EA C 6	2	O	O	O	O	ABIA given																
4.0	MATERIALS AND RESOURCES																							
4.1	Storage and collection of recyclables	MR PR 1	Required	O	R	R	R										X		0%	Y	MRp1		Y	MRp1
4.2	Building reuse - maintain existing walls, floors and roof	MR C 1.1	1-3	O	O	O	O											X	N/A	N	MRc1.1		N	MRc1.1
4.3	Building reuse - maintain existing interior nonstructural elements	MR C 1.2	1	O	R	R	O											X	N/A	N	MRc1.2		N	MRc1.2
4.4	Construction waste management	MR C 2	1-2	R	R	R	R										X		0-1%	Y	MRc2		Y	MRc2
4.5	Materials reuse	MR C 3	1-2	O	O	O	O											X	N/A	N	MRc3		N	MRc3
4.6	Recycled content	MR C 4	1-2	R	R	R	R										X		0-0.5%	Y	MRc4	\$0-200K	Y	MRc4
4.7	Regional materials	MR C 5	1-2	R	R	R	R										X		0-0.5%	Y	MRc5	\$0-200K	Y	MRc5
4.8	Rapidly renewable materials	MR C 6	1	O	O	R	R											X	N/A	N	MRc6		N	MRc6
4.9	Certified wood	MR C 7	1	O	R	R	R										X		0.01-0.1%	Y	MRc7	\$4-40K	Y	MRc7

Austin-Bergstrom International Airport Planning & Engineering				Project Sustainability Tracking Report			
Project Name:		ABIA Consolidated Maintenance Facility & Airport Police Department					
Project Description:		New construction maintenance complex & public safety facility					
FDU:				Consultant:		Atkins	
Sub-project ID:				Consultant PM:		Matthew Leiner	
ABIA project no.:		LA509		Sustainability Liaison:		Joanna Switzer	
ABIA PM:		Richard Chaney, ABIA		Submission Phase:		60% Design	
Public Works PM:				Submission Date:		9/29/2017	

Project Consideration Items		LEED 2009 Equivalent		Project Types (Optional or Required)				City of Austin Initiatives (Applicability)								Consideration Items Status				Schematic Design (SD)			Design Development (DD)	
ABIA No.	Description (Bold items below indicate ABIA priorities)	Reference	Credit	Infrastructure or Site	Minor/Interior Renovations	Major Renovations	New Building or Facility	IA: Compact & Connected	IA: Sustainable Water	IA: Workforce & Education	IA: Green Infrastructure	IA: Creative Economy	IA: Healthy Austin	Universal Recycling Ord.	Other	Under Consideration	Applicable	Not Applicable	Cost Impact (% Increase)	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)	Comments	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)
5.0	INDOOR ENVIRONMENTAL QUALITY																							
5.1	Minimum indoor air quality performance	IEQ PR 1	Required	O	R	R	R										X		0%	Y	IEQp1		Y	IEQp1
5.2	Environmental tobacco smoke (ETS) control	IEQ PR 2	Required	O	R	R	R	City of Austin given																
5.3	Outdoor air delivery monitoring	IEQ C 1	1	O	O	O	O										X		0.05-0.2%	Y	IEQc1	\$20-80K	Y	IEQc1
5.4	Increased ventilation	IEQ C 2	1	O	O	O	O									X			N/A	N	IEQc2		N	IEQc2
5.5	Construction indoor air quality management plan - during construction	IEQ C 3.1	1	O	O	O	O										X		0%	Y	IEQc3.1		Y	IEQc3.1
5.6	Construction indoor air quality management plan - before occupancy	IEQ C 3.2	1	O	O	O	O									X			0.1-0.3%	N	IEQc3.2	\$40-120K	Y	IEQc3.2
5.7	Low-emitting materials - adhesives and sealants	IEQ C 4.1	1	R	R	R	R										X		0%	Y	IEQc4.1		Y	IEQc4.1
5.8	Low-emitting materials - paints and coatings	IEQ C 4.2	1	R	R	R	R										X		0%	Y	IEQc4.2		Y	IEQc4.2
5.9	Low-emitting materials - flooring systems	IEQ C 4.3	1	O	R	R	R										X		0%	Y	IEQc4.3		Y	IEQc4.3
5.10	Low-emitting materials - composite wood and agrifiber products	IEQ C 4.4	1	O	O	O	O										X		0.01-0.1%	Y	IEQc4.4	\$4-40K	Y	IEQc4.4
5.11	Indoor chemical and pollutant source control	IEQ C 5	1	O	O	R	R									X			0.05-0.2%	TBD	IEQc5	\$20-80K	Y/N	IEQc5
5.12	Controllability of systems - lighting	IEQ C 6.1	1	O	R	R	R										X		0.01-0.1%	TBD	IEQc6.1	\$4-40K	Y	IEQc6.1
5.13	Controllability of systems - thermal comfort	IEQ C 6.2	1	O	R	R	R									X			0.05-0.5%	N	IEQc6.2	\$20-200K	N	IEQc6.2
5.14	Thermal comfort - design	IEQ C 7.1	1	O	O	R	R										X		0.05-0.1%	Y	IEQc7.1	\$20-40K	Y	IEQc7.1
5.15	Thermal comfort - verification	IEQ C 7.2	1	O	O	R	R									X			0.01-0.05%	Y	IEQc7.2	\$4-20K	TBD	IEQc7.2
5.16	Daylight and views - daylight	IEQ C 8.1	1	O	O	R	R									X			0.25-0.5%	TBD	IEQc8.1	\$100-200K	TBD	IEQc8.1
5.17	Daylight and views - views	IEQ C 8.2	1	O	O	R	R									X			0-0.5%	TBD	IEQc8.2	\$0-200K	TBD	IEQc8.2

Austin-Bergstrom International Airport Planning & Engineering				Project Sustainability Tracking Report			
Project Name:		ABIA Consolidated Maintenance Facility & Airport Police Department					
Project Description:		New construction maintenance complex & public safety facility					
FDU:			Consultant:		Atkins		
Sub-project ID:			Consultant PM:		Matthew Leiner		
ABIA project no.:		LA509	Sustainability Liaison:		Joanna Switzer		
ABIA PM:		Richard Chaney, ABIA	Submission Phase:		60% Design		
Public Works PM:			Submission Date:		9/29/2017		

Project Consideration Items		LEED 2009 Equivalent		Project Types (Optional or Required)				City of Austin Initiatives (Applicability)								Consideration Items Status				Schematic Design (SD)			Design Development (DD)	
ABIA No.	Description (Bold items below indicate ABIA priorities)	Reference	Credit	Infrastructure or Site	Minor/Interior Renovations	Major Renovations	New Building or Facility	IA: Compact & Connected	IA: Sustainable Water	IA: Workforce & Education	IA: Green Infrastructure	IA: Creative Economy	IA: Healthy Austin	Universal Recycling Ord.	Other	Under Consideration	Applicable	Not Applicable	Cost Impact (% Increase)	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)	Comments	Incorporated? (Yes/No)	(Refer to LEED Checklist /Scorecard for details)
6.0	INNOVATION IN DESIGN																							
6.1	Innovation in design	ID C 1	1-5	O	O	O	O									X			0%	Y	IDc1.1-1.5		Y	IDc1.1-1.5
6.2	LEED accredited professional	ID C 2	1	O	O	R	R										X		0%	Y	IDc2		Y	IDc2
7.0	Regional priorities: 1&2. Stormwater quality and quantity (2 points, one each) 3. On-site renewables (1 point) 4. Wastewater technologies (1 point) 5. Site Preservation/Restoration (1 point) 6. Construction site waste diversion (1 point)	RP C 1	1-4	O	O	O	O									X	X		0%	Y/N	RPc1.1-1.4	1-2 points possible	Y/N	RPc1.1-1.4

LEED 2009 for New Construction and Major Renovation (for reference only)															
LEED points available: 100 base (1.0-5.0), 6 innovation in design (6.0), and 4 regional priority (7.0).															
Certified - 40-49 points, silver - 50-59 points, gold - 60-79 points, and platinum - 80 points and above.															

The following City of Austin Specifications apply as applicable and shall be incorporated in the design documents															
01096 - Storm Water Pollution Prevention Plan (SWPPP)															
01352 - Sustainable Construction Requirements															
01353 - Construction Equipment Emissions Reduction Plan															
01505 - Construction and Demolition Waste Management															
01510 - Construction Indoor Air Quality Management Plan															



ABIA Consolidated Maint. Complex LEED-NC v2009 Checklist

Certification Goal: Silver Certified
Size (GSF):
Date: 9/29/2017 - 60% submittal

TOTALS

Total Site Compliance

Maint HQ
LEED PROJ#1

Motorpool
LEED PROJ#2

Warehouse
LEED PROJ#3

Trades Maint.
LEED PROJ#4

ABIA Police
LEED PROJ#5

Indicates a change in status since prior Design progress update.

Indicates a coordination / Owner discussion item.

ATKINS

Sustainable Sites

Documentation Phase	Yes	Prob/May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No	Yes	Prob	May	No								
SSp1	C	Y						Y				Y				Y				Y				Y				Y				Y											
SSc1	D			1							1				1				1								1																
SSc2	D			5							5				5				5							5																	
SSc3	D			1							1				1				1							1																	
SSc4.1	D			6							6				6				6							6																	
SSc4.2	D				1						1				1				1						1																		
SSc4.3	D	3									3				3				3						3																		
SSc4.4	D			2							2				2				2							2																	
SSc5.1	C			1							1				1				1							1																	
SSc5.2	D				1						1				1				1							1																	
SSc6.1	D						1							1					1							1																	
SSc6.2	D			1							1				1				1							1																	
SSc7.1	C						1					1				1								1																			
SSc7.2	D											1				1								1																			
SSc8	D											1				1								1																			
3				6				7				7				7				7				7				7				7				7							
1				1				1				1				1				1				1				1				1				1							
16				18				17				17				17				17				17				17				17				17				17			
Total Points for Sustainable Sites																																											

SSp1	Construction Activity Pollution Prevention	Specs will require SWPPP compliance by Contractor.
SSc1	Site Selection	Final QC of EPA soil database website confirmed site is 100% prime farmland, making credit unattainable.
SSc2	Development Density & Commun.Connect.	Not attainable.
SSc3	Brownfield Redevelopment	Not anticipated to be attainable. 8/9 Owner call noted project may be able to claim compliance under campus ABIA efforts. ABIA to send LEED docs used by other project for team review.
SSc4.1	Alternative Transportation, Public Transit	Not attainable.
SSc4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	Not practical, but technically attainable. HQ bike racks & locker/showers are within 200 yd walking distance to remaining CMF bldgs and sufficient capacity, qualifying for shared use. APD also has staff showers and sufficient bike rack capacity.
SSc4.3	Alternative Transportation, Low Emitting & Fuel Efficient Vehicles	Preferred spaces to be distributed at the shared POV parking lots, including APD - equal to 5% of total POV capacity, excluding motorcycle stalls.
SSc4.4	Alternative Transportation, Parking Capacity	Not attainable.
SSc5.1	Site Development, Protect or Restore Habitat	Not attainable.
SSc5.2	Site Development, Maximize Open Space	8/9 Owner call confirmed Stormwater BMPs & areas to north & east can be preserved. Post-60% discussion - Owner to review/comment on proposed vegetated open space areas.
SSc6.1	Stormwater Design, Quantity Control	Not anticipated to be attainable - additional campus model 1 yr 24 hr storm data development not included in current Civil design analysis.
SSc6.2	Stormwater Design, Quality Control	Design / calcs in progress. Citycode required quality treatment is expected to be compatible with LEED credit. Analysis ongoing / in-progress.
SSc7.1	Heat Island Effect, Nonroof	Originally anticipated all CMF site paving would be concrete and APD site would be asphalt. However, 90% site design confirmed 100% of APD site will be concrete and CMF site POV parking lot will be asphalt representing >50% of paving in HQ LEED boundary, making credit unattainable for that individual project.
SSc7.2	Heat Island Effect, Roof	Bldg roofs will be low sloped white TPO or other 78+ SRI selection, offsetting any misc. non-compliant overhangs/breeze way roofs.
SSc8	Light Pollution Reduction	High efficiency, full cut off site/exterior lighting with very low glare/backlight. ABIA property line confirmed - no proximity issues with credit compliance.

Water Efficiency

WEp1	D							Y				Y				Y				Y				Y											WEp1	Water Use Reduction, 20% Reduction	Readily attainable.	
WEc1	D							4				4				4				4				4											WEc1	Water Efficient Landscaping, 100% potable / 50% overall Reduction	Municipal reclaim irrigation only. Weather based controller/efficiency strategies also required for all (4) pts.	
WEc2	D																																			WEc2	Innovative Wastewater Technologies	Owner advised rainwater harvesting is not approved for this project. 8/9 Owner call indicated reclaimed water is being considered for some ADA projects. It could make (3) (3) points (including RP) attainable if serving nearly all building toilet/urinals. 8/23 Owner meeting confirmed no indoor reclaim use.
	D							2				2				2				2				2											WEc3	Water Use Reduction, 30% Reduction	1.28 gpf toilets, 0.35gpm metering/sensor lavatories, 1.5gpm shower and 1.0gpm break room faucets.	
WEc3	D							1				1				1				1				1											WEc3	Water Use Reduction, 35% Reduction	40-45% reduction requires pmt (0.125gpf) urinals at ALL male accessible toilet rooms - anticipate bunk room restrooms can be offset due to infrequent use.	
WEc3	D							1				1				1				1				1											WEc3	Water Use Reduction, 40% Reduction		
								8				8				8				8				8												Total Points for Water Efficiency		

Energy & Atmosphere

EAp1	C	Y			Y			Y			Y			Y			Y			Y			Y			EAp1	Fundamental Commissioning of Building Energy Systems Minimum Energy Performance, 10% New Fundamental Refrigerant Management			Currently planned that Atkins CxA, unaffiliated with actual design, will fulfill this role. EAc1 objectives will surpass this requirement. Compliance readily attainable in new construction.										
EAp2	D	Y			Y			Y			Y			Y			Y			Y			Y			EAp2														
EAp3	D	Y			Y			Y			Y			Y			Y			Y			Y			EAp3														
EAc1	D				10	2	3	4	10	2	3	4	10	2	3	4	10	2	3	4	10	2	3	4	10	1	4	4	EAc1.1	Optimize Energy Performance, 12-48%+ New Construction			(18% is mandatory for projects registered on or after April 8, 2016). 30%+ efficiency compared to 90.1-2007 is necessary to safeguard LEED Silver. Energy efficiency strategies being integrated: increased roof/envelope insulation with heat reflective (white) roofing, high efficiency (LED) exterior & interior lighting, high efficiency (central) chiller / boiler for predominate cooling/heating load, minimizing cooling & heating required at storage/industrial work zones, daylighting & photocell controlled interior lighting.							
EAc2	D							7				7				7							7			7	EAc2.1	On Site Renewable Energy, 1-13%								Owner advised PV / renewable systems are not approved for this project. Post-60% discussion - Need to verify COA ordinance compliance path.				
EAc3	C								2			2				2						2			2	EAc3	Enhanced Commissioning												Not currently planned, but technically attainable if 3rd party CxA is under contract by end of DD phase / prior to formally issued 60% set.	
EAc4	D				2				2				2				2						2			2					EAc4	Enhanced Refrigerant Management			Credit confirmed attainable for CMF buildings based on shared Mech Trane BOD chiller(s) equipment performance. Attainability to be confirmed for APD post-60% submittal.					
EAc5	C							1	2			1	2			1	2					1	2			1				2	EAc5							Measurement & Verification		
EAc6	C				2				2				2				2					2			2			EAc6	Green Power											
				14	2	4	15	14	2	4	15	14	2	4	15	14	2	4	15	14	2	4	15	12	1	7	15	Total Points for Energy & Atmosphere												

ATKINS



Sustainability Tracking Report LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF HQ Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

60% Submittal
Progress Design

Project Information

Form 1 Design	Minimum Program Requirements	Confirm the project complies with the Minimum Program Requirements.	Req'd							BLDG LEVEL METERS REQUIRED Owner will need to commit to operational phase utility data either through ENERGY STAR or other data release upon request.
Form 2 Design	Project Summary Details	Provide details on the project GSF, site area, building footprint, budget, etc.	Req'd							LEED site boundary of each CMF LEED bldg project established, but to be refined using 100% site plan.
Form 3 Design	Occupant and Usage Data	Input occupant and usage data, including GSF by space usage type. Estimating occupancy as: Approx 105 peak, 120 daily FTE (8hr occupancy) staff (over 3 shifts) (additional extended shift/overnight staff 10 max - infrequent occurrence, 50 nights a year) Initial estimate of (15) peak use visitor/transient load from other bldgs, (60) daily average Estimate of (120) peak use, (180) daily building occupants.	Req'd							Owner input confirmed 24/7 / 365 in majority of 1st floor, and part of 2nd flr. ----- Refer left for occupancy load assumptions
Form 4 Design	Schedule and Overview Documents	Provide key points in the project schedule, and upload general project drawings as required.	Req'd							



to this project site's zip code. Refer to this "RP" Credit category at the end of this checklist for more details.

POINT TOTALS:

109	52					
		3	7	0		
						48

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Sustainable Sites

Prereq 1 Constr	Construction Activity Pollution Prevention	Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project. The ESC Plan shall conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent.	Req'd							Code Required/Standard practice - Erosion and sediment control notes and plans are included in the construction docs. No cost premium.
Credit 1 Design	Site Selection	Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: (hidden below)	1						1	Final QC of EPA soil database website confirmed site is 100% prime farmland, making credit unattainable.
Credit 2 Design	Development Density & Community Connectivity	OPTION 1: Construct or renovate building on a previously developed site and in a community with a minimum density of 60,000 square feet per acre net. OPTION 2: Construct or renovate building on a previously developed site and within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 basic services and with pedestrian access between the building and the services.	5						5	Site location / surrounding context does not qualify. Credit is NOT attainable.
Credit 3 Design	Brownfield Redevelopment	Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site classified as a brownfield by a local, state or federal government agency.	1						1	Not Likely. Although entire ABIA property is considered brownfield, unclear if prior golf course CMF site would qualify. To be attainable remediation/encapsulation of contaminants on CMF site needs to be documented.
Credit 4.1 Design	Alternative Transportation: Public Transportation Access	OPTION 1: Locate project within 1/2 mile of an existing (or planned and funded) commuter rail, light rail or subway station OPTION 2: Locate project within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.	6						6	Unlikely....Site location / surrounding context does not qualify. Credit appears ONLY attainable if a routine shuttle would transport CMF occupants to busstop serving bus routes 100 & 350 at landside.
Credit 4.2 Design	Alternative Transportation: Bicycle Storage & Changing Rooms	CASE 1 (non-residential): Provide secure bicycle racks or storage (within 200 yards of the building) for 5% or more of all building users (measured at peak periods), and provide shower and changing facilities in the building or within 200 yards of a building entrance, for 0.5% of full-time equivalent occupants.	1	1						Site is inherently tied to vehicle use. However, credit attainable due to (4) scheduled staff showers (located in Admin bldg) and approximately 10 bike rack spaces at Admin front entry.
Credit 4.3 Design	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles	OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site. OPTION 3: Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants. OPTION 4: Provide building occupants access to a low-emitting or fuel-efficient vehicle-sharing program (see requirements in reference guide).	3	3						Per 90% design narrative, (221) non-fleet parking spaces (including ADA/(6) motorcycle, etc) are provided. However, C-GI-00-02 notes (235), requiring (12+) designated LE-FE spaces. Appears (15) are included- good. Therefore, 100% site dwgs will ensure reserved parking spaces are nearest to the front entrance & prorated - 5% for visitor spaces, 5% for overall staff parking areas. These designated spaces CAN be dispersed so that some are in closest walking distance of Maint & Motorpool buildings as well as Ops.
Credit 4.4 Design	Alternative Transportation: Parking Capacity	CASE 1 (non-residential): OPTION 1 (non-residential with new parking): Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide preferred parking for carpools or vanpools for 5% of the total provided parking spaces.	2						2	Not attainable. The unique facility type makes it difficult to justify its code minimum parking classification to demonstrate compliance.
Credit 5.1 Constr	Site Development, Protect or Restore Habitat	OPTION 2 (previously developed sites): Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.	1						1	Inherent site design / surrounding context does not qualify. Credit is NOT attainable.
Credit 5.2 Design	Site Development: Maximize Open Space	OPTION 1 (exceed zoning requirements): Reduce the development footprint (defined as entire building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%. OPTION 2 (no zoning requirements): Provide vegetated open space area adjacent to the building that is equal to the building footprint.	1		1					Owner/DOA input needed. Airport is not subject to zoning requirements. However, Option 2 appears attainable - proposed permanent open space to be reviewed/approved by Owner team.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF HQ Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

**60% Submittal
Progress Design**

			Pts Avail	Yes	Probable	Maybe	Not Probable	No	
Credit 6.1 Design	Stormwater Design: Quantity Control	OPTION 1 (existing imperviousness less than or equal to 50%): Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate for the one- and two-year, 24 hour design storms. OR implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies.	1					1	Not attainable. Current ABIA stormwater model does not include 1 yr storm data. Civil design scope did not include enhancement of model file to add this data for analysis purposes.
Credit 6.2 Design	Stormwater Design: Quality Control	OPTION 2 (existing imperviousness greater than 50%): Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids load based on existing monitoring reports.	1			1			Civil will need to further assess / run calcs to confirm reliability/attainability based on COA code compliance alone. Appears Austin qualifies as semi-arid, with less than 40 in annual rainfall, requiring 0.75in/24 event to be treated to 80%+ TSS removal (or otherwise infiltrated onsite or captured & reused for bldg processes - like for CMF carwash/toilet use) prior to any run-off discharge from property. COA requires treatment for only 0.55 inches of rainfall.
Credit 7.1 Constr	Heat Island Effect: Non-Roof	OPTION 1 (reflective paving, shading, and/or open grid pavement): Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): •Shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of occupancy. •Shade from structures covered by solar panels that produce energy used to offset some non-renewable resource use. •Shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. •Hardscape materials with an SRI of at least 29. •Open-grid pavement system (at least 50% pervious).	1					1	Option 1 applies, as there is no parking garage on site. 90% site design confirmed CMF site POV parking lot will be asphalt - representing >50% of paving in HQ LEED boundary, making credit unattainable for this individual LEED project.
Credit 7.2 Design	Heat Island Effect: Roof	OPTION 1 (reflective roofing): Use roofing materials having an SRI of at least 78 for low-slope and 29 for steep-slope for a minimum of 75% of the roof surface.	1	1					Building roof specified as a white colored membrane system, will readily exceeding the minimum SRI requirements. No construction premium associated with it.
Credit 8 Design	Light Pollution Reduction	FOR INTERIOR LIGHTING All non-emergency interior lighting, with a direct line of sight to any openings in the envelope (translucent or transparent), shall have its input power reduced (by automatic device) by at least 50% between the hours of 11 PM and 5 AM. After hours override may be provided by a manual or occupant sensing device provided that the override last no more than 30 minutes. OR All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency lighting shall have shielding (for a resultant transmittance of less than 10%) that will be controlled/closed by automatic device between the hours of 11 PM and 5 AM. FOR EXTERIOR LIGHTING Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone.		refer below					24 hrs operational space windows will require automatically controlled 90% opaque shades enacted for curfew hrs or auto dimming interior lighting. Shielded and high efficiency LED site & bldg light fixtures will be selected to meet efficiency & uplight /glare restrictions. Also- Light trespass must be met at property line, which is outside LEED site boundary. The LEEDv4 version of SSc8 is being formally adopted for pursuit as interior lighting / curfew shading criteria has been eliminated. Refer below
	LEED v4 version http://www.usgbc.org/articles/use-v4-credits-your-v2009-project/	Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: • the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and • the lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. The following exterior lighting is exempt from the requirements, provided it is controlled separately from the nonexempt lighting: • specialized signal, directional, and marker lighting for transportation; • lighting that is used solely for façade and landscape lighting in MLO lighting zones 3 and 4, and is automatically turned off from midnight until 6 a.m.; • lighting for theatrical purposes for stage, film, and video performances; • government-mandated roadway lighting; • hospital emergency departments, including associated helipads; • lighting for the national flag in MLO lighting zones 2, 3, or 4; and • internally illuminated signage.	1	1					Site light fixtures comply with required BUG ratings. Exterior bldg light selections will also comply.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF HQ Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No


60% Submittal
Progress Design


Water Efficiency


Prereq 1 Design	Water Use Reduction: 20% Reduction	Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	Req'd						Requirements will be surpassed by WEC2/WEC3 goals.
Credit 1.1 and 1.2 Design	Water Efficient Landscaping: Reduce by 50% or 100% (No Potable Water Use or No Irrigation) 50% = 2 pt, 100% = 4 pts	PATH 1 OPTION 1 (2 pts): Reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to plant species factor and/or irrigation efficiency. OPTION 2 (4 pts): Meet the requirements for Option 1, and: PATH 1: Use only captured rainwater, recycled wastewater, recycled graywater or water treated and conveyed by a public agency specifically for nonpotable uses for irrigation. PATH 2: Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within 18 months of installation.	4	4					Municipal reclaim to exclusively serve landscape irrigation. Landscape design utilizes drought tolerant selections and reduced planting density in alternative ground cover materials, served by a weather based irrigation system. Peak Month: Jul ETo Value: 8.23 inches/month - Rainfall: 1.01 inches/month
Credit 2 Design	Innovative Wastewater Technologies	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or non-potable water. OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2					2	Not attainable. Per 5/23 Owner feedback, rainwater harvesting is not approved as project strategy. 8/23 Owner meeting confirmed no indoor reclaim use.
Credit 3.1 and 3.2 Design	Water Use Reduction: 30%, 35% or 40% Reduction 30% = 2 points, 35% = 3 pts, 40% = 4 pts	Employ strategies that in aggregate use a percentage less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	4	4					45%+ calculated reduction will be attainable using the following: * 0.125gpf "pint" max urinal * 1.28gpf toilets * 0.35gpm metered/sensor controlled lavatories * 1.0 gpm break room faucets * 1.5 gpm shower heads Little to no cost premium is associated with these fixtures.


Energy & Atmosphere

Prereq 1 Constr	Fundamental Commissioning of the Building Energy Systems	* Designate in individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities. * The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents. * Develop and incorporate commissioning requirements into the construction documents. * Develop and implement a commissioning plan. * Verify the installation and performance of the systems to be commissioned. * Complete a summary commissioning report.	Req'd						OPR still being developed through programming discussions. Initial BOD being developed through notes below and SD design narratives.
Prereq 2 Design	Minimum Energy Performance	OPTION 1 - WHOLE BUILDING ENERGY SIMULATION Demonstrate a 10% improvement for new buildings or a 5% improvement for existing building renovations in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.	Req'd						Mandatory provisions will be integrated for various Arch/MEP designs. Overall energy efficiency requirement will be surpassed by EAc1 goal below.
Prereq 3 Design	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new building HVAC&R systems.	Req'd						The refrigerant based equipment in this new project will automatically comply. No cost premium.
Credit 1.1 through 1.10 Design	Optimize Energy Performance OPTION 1: New building: 12% = 1 pt, 14% = 2 pts, 16% = 3 pts, 18% = 4 pts, 20% = 5 pts, 22% = 6 pts, 24% = 7 pts, 26% = 8 pts, 28% = 9 pts, 30% = 10 pts, 32% = 11 pts, 34% = 12 pts, 36% = 13 pts, 38% = 14 pts, 40% = 15 pts, 42% = 16 pts, 44% = 17 pts, 46% = 18 pts, 48% = 19 pts OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	OPTION 1 (Whole Building Energy Simulation) (1-19 pts): Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	19	10	2	3		4	60% Energy Analysis & progress report to follow 60% design submittal. Initial strategies could include: * High efficiency air chiller, boiler heating and several split or packaged system(s) to serve 24/7 (unique schedule zones) * Dedicated OA system, with DDC HVAC controls and motorized damper to provide occupant responsive/Demand controlled ventilation in spaces with fluctuating occupancy - such as large break room and/or large training rooms. * High efficiency LED interior AND site parking lighting. Daylight harvesting/sensors in optimal building zones. * Occupancy / Vacancy sensors throughout all rooms (occ sensors throughout will also complying with mandatory 90.1 "code" instead of timeclock) * Combo occ sensor/daylight sensor in occupied office / lounge spaces.
Credit 2.1 through 2.3 Design	On-Site Renewable Energy 1% = 1 pt, 3% = 2 pts, 5% = 3 pts, 7% = 4 pts, 9% = 5 pts, 11% = 6 pts, 13% = 7 pts	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EAc1 or use the DOE CBECS database to determine the estimated electricity use.	7					7	No PV / renewable system planned. DOA input needed- should bldgs be designed as "Solar ready" with roof structure designed for future solar panels, equipment room space for inverter/battery, and installed conduit pathways?

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF HQ Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 35,960 gsf (2026 Program Growth) September 29, 2017		Pts Available	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Credit 3 Constr	Enhanced Commissioning	1. Prior to the start of the construction documents phase, designate an independent CxA to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3, and 6. Other team members may perform Tasks 4 and 5. (hidden below)	2					2	Not currently planned / budgeted. Would require Atkins to subcontract to third party/disinterested CxA firm by end of mid-design (DD) phase.
Credit 4 Design	Enhanced Refrigerant Management	OPTION 1: Do not use refrigerants. OPTION 2: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and any other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit. AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFC's or Halons).	2	2					Credit confirmed attainable for CMF buildings based on shared Mech Trane BOD chiller(s) equipment performance.
Credit 5 Design	Measurement & Verification	Option 3. Third Party Data Source (1 point) Meet MPR 6 through compliance Option 1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	3			1		2	DOA input needed - Post-60% discussion - Owner to advise if 5 yr post-occupancy ENERGY STAR portfolio mgr participation is planned / an option. The objective is to provide for the ongoing accountability of building energy consumption over time. * Option 3: (1) point available if DOA can commit to entering building level utility data into ENERGY STAR website for 5+ yrs post-occupancy. Requires building level utility meters, which is planned anyways. No cost premium.
Credit 6 Constr	Green Power	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. To determine the baseline electricity use, use the results of EAc1.	2	2					Readily attainable- 8/9 Owner call confirmed 100% of Austin Energy utility elec will be Green-E certified. Supporting doc letter to be acquired by ABIA during Constr.
Materials & Resources									
Prereq 1 Design	Storage & Collection of Recyclables	Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	Req'd						Indoor recycling container locations to be shown. No cost premium.
Credit 1.1 Constr	Building Reuse: Maintain Existing Walls, Floors & Roof 50% = 1 point, 75% = 2 pts, 95% = 3 pts	Maintain a percentage (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	3					3	N/A for new construction projects.
Credit 1.2 Constr	Building Reuse: Maintain 50% of Interior Non-Structural Elements	Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	1					1	N/A for new construction projects.
Credit 2.1 and 2.2 Constr	Construction Waste Management, Divert 50% or 75% From Disposal 50% = 1 point, 75% = 2 pts	Recycle and/or salvage a percentage of non-hazardous construction and demolition. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled.	2	2					Anticipating that 75% diversion should be readily attainable in new construction project. Minor premium may be associated with special commingled processing contracts but should only impact building waste, not paving waste materials.
Credit 3.1 and 3.2 Constr	Materials Reuse, 5% or 10% 5% = 1 point, 10% = 2 points	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes a percentage (based on cost) of the total value of materials on the project.	2					2	Not attainable. Assuming at least \$1M in construction material costs MRC3 achievement would require at least \$50K (5%) worth of salvaged materials. However, salvaged material use is encouraged if any available wall panels or other items are on hand.
Credit 4.1 and 4.2 Constr	Recycled Content, 10% or 20% (post-c + 1/2 pre-c) 10% = 1 point, 20% = 2 pts	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes a percentage (based on cost) of the total value of the materials in the project.	2	2					Ideally flyash/slag and recycled asphalt product (RAP) can be maximized in concrete slabs & paving. Various strategically targeted recycled content bldg materials will need to be specified. There could be a cost premium associated.
Credit 5.1 and 5.2 Constr	Regional Materials, 10% or 20% Extracted, Processed & Manufactured Regionally 10% = 1 point, 20% = 2 pts	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a percentage (based on cost) of the total materials value.	2	2					Ideally need to ensure use of regionally originating recycled and virgin quarried concrete raw materials (for paving as well as ALL building slabs). Other misc materials, including landscape plants will contribute to credit achievement. Cost premium uncertain.
Credit 6 Constr	Rapidly Renewable Materials	Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	1					1	Not attainable.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>						60% Submittal Progress Design	
		Project Name: ABIA CMF HQ Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 35,960 gsf (2026 Program Growth) September 29, 2017	Pts Avail	Yes	Probable	Maybe	Not Probable		No
Credit 7 Constr	Certified Wood	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.	1	1					Wood materials in project anticipated to be limited to misc blocking, sheathing, millwork and flush wood doors. FSC certified content will be required of the greatest cost uses of wood to ensure 50%+ threshold is met. Minor cost premium if there's only limited wood presence.
Indoor Environmental Quality									
Prereq 1 Design	Minimum IAQ Performance	OPTION 1 (mechanically ventilated): Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62-2007, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate procedure or the applicable local code, whichever is more stringent.	Req'd						Mechanical system will be designed to provide adequate ventilation air, based on lounge seating capacity and ASHRAE default population assumptions for remaining spaces. No cost premium.
Prereq 2 Design	Environmental Tobacco Smoke (ETS) Control	OPTION 1 (non-smoking building): Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows. OPTION 2 (smoking building): See requirements in reference guide.	Req'd						Smoking policy signs will be required at each door- also sign to designate smoking area 25ft+ from any bldg entry is recommended. Assuming (4-5) signs/door decals. Only minor cost .
Credit 1 Design	Outdoor Air Delivery Monitoring	Install permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to generate an alarm when the airflow values or CO2 levels vary by 10% or more from the design values via either a BAS alarm to the building operator or a visual/audible alert to the building occupants. OPTION 1 (mechanically ventilated): Monitor CO2 concentrations within all densely occupied spaces (25 people/1000 sf). CO2 monitors must be between 3 and 6 feet above the floor. For each mechanical ventilation system, provide a direct outdoor airflow measurement device capable of measuring the outdoor airflow rate with an accuracy of +/- 15% of the design minimum outdoor air rate, as defined by ASHRAE 62.1-2007	1	1					Option 1 applies as bldg is mechanically ventilated. This credit requires intake air flow measurement device and wall mounted CO2 sensors in densely occupied indoor areas, such as training/ conference rooms. Credit achievement also requires notifications/alerts to be sent to operator or occupants should programmed intake air levels drop or CO2 levels rise above recommended levels. This will be achieved through a DDC based BMS / central control system. Cost premium depends on various factors.
Credit 2 Design	Increased Ventilation	CASE 1 (mechanically ventilated): Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007 as determined by EQp1.	1					1	Not anticipated to be attainable.
Credit 3.1 Constr	Construction IAQ Management Plan: During Construction	Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: * During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). * Protect stored on-site or installed absorptive materials from moisture damage. * If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.	1	1					Best practices for protection of IAQ during construction will be specified for GC, including ductwork protection, no smoking inside, jobsite housekeeping, etc. No cost premium.
Credit 3.2 Constr	Construction IAQ Management Plan: Before Occupancy	OPTION 1a (flush-out prior to occupancy): After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cf of outdoor air per sf of floor area while maintaining an internal temperature of at least 60F and relative humidity no higher than 60%. OPTION 1b (flush-out with early occupancy): Perform a building flush-out by supplying a minimum of 3,500 cf of outdoor air per sf of floor area a minimum of 3 hours prior to occupancy and during occupancy, until a total of 14,000 cf of outside air has been delivered to the space. OPTION 2 (IAQ testing): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air.	1	1					IAQ testing cost should be relatively low as long as qty of individual intake ventilation systems are small. Should only involve 3-6 testing locations.
Credit 4.1 Constr	Low-Emitting Materials: Adhesives & Sealants	All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Low-VOC interior products will be specified. No cost premium.
Credit 4.2 Constr	Low-Emitting Materials: Paints & Coatings	Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Low-VOC interior products will be specified. No cost premium.
Credit 4.3 Constr	Low-Emitting Materials: Flooring Systems	All flooring related finishes and installation accessories to comply with criteria as follows: (hidden below)	1	1					Low-VOC and properly certified/tested (Floor score resilient, Green Label carpet, etc) flooring selections will be specified. No cost premium.
Credit 4.4 Constr	Low-Emitting Materials: Composite Wood & Agrifiber Products	Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde.	1	1					NAUF engineered/composite wood materials will be required for all interior applications. Use of plastic or steel toilet partitions will reduce incidence, but criteria will affect sheathing, millwork, and wood core doors. Small cost premium due if a limited wood presence.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF HQ Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 35,960 gsf (2026 Program Growth) September 29, 2017		Pts Avail	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Credit 5 Design	Indoor Chemical & Pollutant Source Control Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas: * Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt and particulates from entering the building at regular entry points directly connected to the outdoors. Acceptable entryway systems include permanently installed grates, grilles, or slotted systems that allow for cleaning underneath. Roll-out mats are only acceptable when maintained on a weekly basis by a contracted service organization. * Where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas and copying/printing rooms), exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. * In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air. * Provide containment (a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs.	1	1					This requires 10ft long walk off mats at ALL points of entry used by occupants. It excludes exterior accessed equipment rooms. Need to assess feasibility at Maint/Motorpool bldg entrances to office suites/conditioned zones. May be challenging at industrial bldgs. Janitor closets will have "sealed" airspace via walls to deck, automatic door closers and outdoor exhaust but no return air. Need to identify any other unique chemical storage or activity spaces - such as soldering/spary booths, etc. Mech ventilation intake unit will use MERV-13 filter.	
Credit 6.1 Design	Controllability of Systems: Lighting Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences AND provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.	1	1					This requires task lights for staff desks and bi-level, dimming or multi zone lighting in collaboration spaces such as training/conf rooms. Cost premium for dual ballast fixtures and desk lamps. Assuming desk lamps of some kind.	
Credit 6.2 Design	Controllability of Systems: Thermal Comfort Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Operable windows can be used in lieu of comfort controls for occupants of areas that are 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable window must meet the requirements of ASHRAE 62.1-2007, paragraph 5.1, Natural Ventilation AND provide comfort system controls for all shared multi-occupant spaces to enable adjustments to suit group needs and preferences.	1					1	Not realistically attainable without underfloor air system given numerous workstation locations.	
Credit 7.1 Design	Thermal Comfort: Design Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2007. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1	1					Mech design will ensure industry standards are met for temp/humidity control throughout. May require some alternative comfort measures in any industrial/unconventional work zones....industrial fans and heaters at minimum. No notable cost premium, beyond system selection addressed in EAc1 above.	
Credit 7.2 Design	Thermal Comfort, Verification Provide a permanent monitoring system to ensure building performance to the desired comfort criteria as determined by EQ Credit 7.1, Thermal Comfort: Design Agree to implement a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort.	1			1			Warrants Owner/DOA discussion. Owner team (or contracted Commissioning authority scope) will need to commit to post-occupancy survey of staff (office & kitchen) to assess their general satisfaction with indoor temp/humidity levels. Best to precede end of 1 yr warranty phase commissioning activities.	
Credit 8.1 Design	Daylight & Views, Daylight 75% of Spaces OPTION 1 - Daylight Simulation Model: Demonstrate through computer simulations that 75% or more of all regularly occupied spaces areas achieve daylight illuminance levels of a minimum of 25fc and a maximum of 500 fc in a clear sky condition on September 21 at 9.00 am and 3.00 pm; areas with illuminance levels below or above the range do not comply. OPTION 2 - Prescriptive: Use a combination of side-lighting and/or top-lighting to achieve a total Daylighting Zone that is at least 75% (1 point) of all the regularly occupied spaces, according to the requirements in the reference guide. OPTION 3 - Daylight Measurement: Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 footcandles has been achieved in at least 75% of all regularly occupied areas. Measurements must be taken on a 10-foot grid for all occupied spaces and must be recorded on	1					1	Deep floor plate is not conducive to achievement in this building. 75%+ of occupied floor area cannot be effectively lit by daylighting. However, introduction of 2nd floor solatube/skylight units could make it more attainable. This strategy also relates to EAc1 objectives. Adequate ambient levels of daylight coupled with daylight sensors can reduce the demand for daytime electric lighting. Achieving adequate daylight levels to achieve IEQc8.1 will require a combination of windows and skylights/solatubes. Daylight controls cost reflected under EAc1. Solatubes and more transparent glass may be considered cost premium for IEQc8.1.	
Credit 8.2 Design	Daylight & Views, Views for 90% of Spaces Achieve direct line of sight to the outdoor environment via vision glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of all regularly occupied areas.	1					1	Appears there will not be sufficient windows to ensure a clear line of sight to exterior for 90% of the occupied floor areas. Some space plan modifications might make this credit more attainable.	
Innovation & Design Process									
Credit 1.1	Exemplary Performance: EAc6 2x green power REC purchase	Doubling the preserved vegetated open space required for SSc5.2. Option 2 applies in this campus setting.	1	1					Refer to EAc6 notes above.
Credit 1.2	Innovation in Design: Active Occupants Stair	Active Occupant Innovation using open/attractive communicating stairwell, along with gym & promotional stair use signs.	1	1					Attainable, but several details warranting post-60% coord. Owner discussion item for post-60%
Credit 1.3	Exemplary Performance: WEc3 - 45%+	Exceed WEc3 performance yielding at least a 45% calculated annual water use reduction for EPAct regulated fixtures.		1					Refer to WEc3 notes above.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF HQ Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 35,960 gsf (2026 Program Growth) September 29, 2017		Pts Available	Yes	Probable	Maybe	Not Probable	No		
Credit 1.4	Innovation in Design: Reduced Mercury Lighting	1	1					Use of predominately non-mercury LED lighting, in conjunction with low mercury fluorescent will make this credit readily attainable. Will need to document/control the actual lamps the GC is installing to achieve credit. No added cost premium anticipated beyond that claimed for EAc1 above.	
Credit 1.5	Innovation in Design: Low-emitting ceilings and wall systems	1	1					Products of concern will be specified & sourced as CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)	
Credit 2 Constr	LEED Accredited Professional	1	1					Several LEED AP's are involved in the project. No cost premium.	
Regional Priority (78719)									
Credit 1.1	Regional Priority Credit: SSc6.1	1					1	Alternate options are SSc5.1 & WEc2 Refer to notes above.	
Credit 1.2	Regional Priority Credit: SSc6.2	1			1				
Credit 1.3	Regional Priority Credit: WEc2 or EAc2 - 1%+	1					1		
Credit 1.4	Regional Priority Credit: MRC2 -75%	1	1						
POINT TOTALS:		109	52		3	7	0	48	
Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points									



Sustainability Tracking Report LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

60% Submittal
Progress Design

Project Information

Form 1 Design	Minimum Program Requirements	Confirm the project complies with the Minimum Program Requirements.	Req'd							BLDG LEVEL METERS REQUIRED Owner will need to commit to operational phase utility data either through ENERGY STAR or other data release upon request.
Form 2 Design	Project Summary Details	Provide details on the project GSF, site area, building footprint, budget, etc.	Req'd							LEED site boundary of each CMF LEED bldg project established, but to be refined using 100% site plan.
Form 3 Design	Occupant and Usage Data	Input occupant and usage data, including GSF by space usage type. Estimating occupancy as: Approx 10 peak, 13 daily FTE (8hr occupancy) staff (over 3 shifts) Estimate of (4) peak use visitor/transient load from other bldgs, (10) daily average Estimate of (14) peak use, (19) daily building occupants.	Req'd							Owner input confirmed 24/7 / 365 operations. ----- Refer left for occupancy load assumptions
Form 4 Design	Schedule and Overview Documents	Provide key points in the project schedule, and upload general project drawings as required.	Req'd							



this project site's zip code. Refer to this "RP" Credit category at the end of this checklist for more details.

POINT TOTALS:

109	52				
		2	5	5	
					46

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Sustainable Sites

Prereq 1 Constr	Construction Activity Pollution Prevention	Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project. The ESC Plan shall conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent.	Req'd							Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1 Design	Site Selection	Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: (hidden below)	1						1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Development Density & Community Connectivity	OPTION 1: Construct or renovate building on a previously developed site and in a community with a minimum density of 60,000 square feet per acre net. OPTION 2: Construct or renovate building on a previously developed site and within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 basic services and with pedestrian access between the building and the services.	5						5	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3 Design	Brownfield Redevelopment	Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site classified as a brownfield by a local, state or federal government agency.	1						1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.1 Design	Alternative Transportation: Public Transportation Access	OPTION 1: Locate project within 1/2 mile of an existing (or planned and funded) commuter rail, light rail or subway station OPTION 2: Locate project within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.	6						6	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Design	Alternative Transportation: Bicycle Storage & Changing Rooms	CASE 1 (non-residential): Provide secure bicycle racks or storage (within 200 yards of the building) for 5% or more of all building users (measured at peak periods), and provide shower and changing facilities in the building or within 200 yards of a building entrance, for 0.5% of full-time equivalent occupants.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Design	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles	OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site. OPTION 3: Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants. OPTION 4: Provide building occupants access to a low-emitting or fuel-efficient vehicle-sharing program (see requirements in reference guide).	3	3						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.4 Design	Alternative Transportation: Parking Capacity	CASE 1 (non-residential): OPTION 1 (non-residential with new parking): Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide preferred parking for carpools or vanpools for 5% of the total provided parking spaces.	2						2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.1 Constr	Site Development, Protect or Restore Habitat	OPTION 2 (previously developed sites): Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.	1						1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.2 Design	Site Development: Maximize Open Space	OPTION 1 (exceed zoning requirements): Reduce the development footprint (defined as entire building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%. OPTION 2 (no zoning requirements): Provide vegetated open space area adjacent to the building that is equal to the building footprint.	1				1			Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

**60% Submittal
Progress Design**

			Pts Avail	Yes	Probable	Maybe	Not Probable	No	
Credit 6.1 Design	Stormwater Design: Quantity Control	<p>OPTION 1 (existing imperviousness less than or equal to 50%): Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate for the one- and two-year, 24 hour design storms.</p> <p>OR implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies.</p> <p>OPTION 2 (existing imperviousness greater than 50%): Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the two-year, 24-hour design storm.</p>	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6.2 Design	Stormwater Design: Quantity Control	Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids load based on existing monitoring reports.	1			1			Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 7.1 Constr	Heat Island Effect: Non-Roof	<p>OPTION 1 (reflective paving, shading, and/or open grid pavement): Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots):</p> <ul style="list-style-type: none"> •Shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of occupancy. •Shade from structures covered by solar panels that produce energy used to offset some non-renewable resource use. •Shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. •Hardscape materials with an SRI of at least 29. •Open-grid pavement system (at least 50% pervious). 	1	1					Option 1 applies, as there is no parking garage on site. All paving in the LEED project site boundary is currently scheduled to be standard portland cement concrete, which meets the SRI requirements of this credit and is 100% compliant (2x the required amount), qualifying for "exemplary performance" Innovation point. Not considered a cost premium as it is part of overall project program requirements.
Credit 7.2 Design	Heat Island Effect: Roof	OPTION 1 (reflective roofing): Use roofing materials having an SRI of at least 78 for low-slope and 29 for steep-slope for a minimum of 75% of the roof surface.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 8 Design	Light Pollution Reduction	<p>FOR INTERIOR LIGHTING</p> <p>All non-emergency interior lighting, with a direct line of sight to any openings in the envelope (translucent or transparent), shall have its input power reduced (by automatic device) by at least 50% between the hours of 11 PM and 5 AM. After hours override may be provided by a manual or occupant sensing device provided that the override last no more than 30 minutes.</p> <p>OR All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency lighting shall have shielding (for a resultant transmittance of less than 10%) that will be controlled/closed by automatic device between the hours of 11 PM and 5 AM.</p> <p>FOR EXTERIOR LIGHTING</p> <p>Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone.</p>		refer below					Holistic CMF strategy. Refer to HQ checklist for notes.
	LEED v4 version http://www.usgbc.org/articles/use-v4-credits-your-v2009-project/	<p>Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following:</p> <ul style="list-style-type: none"> • the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and • the lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. <p>Additionally, meet the internally illuminated signage requirement.</p> <p>The following exterior lighting is exempt from the requirements, provided it is controlled separately from the nonexempt lighting:</p> <ul style="list-style-type: none"> • specialized signal, directional, and marker lighting for transportation; • lighting that is used solely for façade and landscape lighting in MLO lighting zones 3 and 4, and is automatically turned off from midnight until 6 a.m.; • lighting for theatrical purposes for stage, film, and video performances; • government-mandated roadway lighting; • hospital emergency departments, including associated helipads; • lighting for the national flag in MLO lighting zones 2, 3, or 4; and • internally illuminated signage. 	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Water Efficiency

Prereq 1 Design	Water Use Reduction: 20% Reduction	Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	Req'd						Requirements will be surpassed by WEC2/WEC3 goals.
Credit 1.1 and 1.2 Design	Water Efficient Landscaping: Reduce by 50% or 100% (No Potable Water Use or No Irrigation) 50% = 2 pt, 100% = 4 pts	PATH 1 OPTION 1 (2 pts): Reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to plant species factor and/or irrigation efficiency. OPTION 2 (4 pts): Meet the requirements for Option 1, and: PATH 1: Use only captured rainwater, recycled wastewater, recycled graywater or water treated and conveyed by a public agency specifically for nonpotable uses for irrigation. PATH 2: Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within 18 months of installation.	4	4					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Innovative Wastewater Technologies	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or non-potable water. OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.1 and 3.2 Design	Water Use Reduction: 30%, 35% or 40% Reduction 30% = 2 points, 35% = 3 pts, 40% = 4 pts	Employ strategies that in aggregate use a percentage less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	4	4					45%+ calculated reduction will be readily attainable using the following: * 0.125gpf "pint" max urinal * 1.28gpf toilets * 0.35gpm metered/sensor controlled lavatories * 1.0 gpm break room faucets Little to no cost premium is associated with these fixtures.

Energy & Atmosphere

Prereq 1 Constr	Fundamental Commissioning of the Building Energy Systems	* Designate in individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities. * The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents. * Develop and incorporate commissioning requirements into the construction documents. * Develop and implement a commissioning plan. * Verify the installation and performance of the systems to be commissioned. * Complete a summary commissioning report.	Req'd						OPR still being developed through programming discussions. Initial BOD being developed.
Prereq 2 Design	Minimum Energy Performance	OPTION 1 - WHOLE BUILDING ENERGY SIMULATION Demonstrate a 10% improvement for new buildings or a 5% improvement for existing building renovations in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.	Req'd						Mandatory provisions will be integrated for various Arch/MEP designs. Overall energy efficiency requirement will be surpassed by EAc1 goal below.
Prereq 3 Design	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new building HVAC&R systems.	Req'd						The refrigerant based equipment in this new project will automatically comply. No cost premium.
Credit 1.1 through 1.10 Design	Optimize Energy Performance OPTION 1: New building: 12% = 1 pt, 14% = 2 pts, 16% = 3 pts, 18% = 4 pts, 20% = 5 pts, 22% = 6 pts, 24% = 7 pts, 26% = 8 pts, 28% = 9 pts, 30% = 10 pts, 32% = 11 pts, 34% = 12 pts, 36% = 13 pts, 38% = 14 pts, 40% = 15 pts, 42% = 16 pts, 44% = 17 pts, 46% = 18 pts, 48% = 19 pts OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	OPTION 1 (Whole Building Energy Simulation) (1-19 pts): Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	19	10		3	2	4	60% Energy Analysis & progress report to follow 60% design submittal. Initial strategies could include: * High efficiency air chiller, boiler heating and several split or packaged system(s) to serve 24/7 (unique schedule zones) * Dedicated OA system, with DDC HVAC controls and motorized damper to provide occupant responsive/Demand controlled ventilation in spaces with fluctuating occupancy - such as large break room and/or large training rooms. * High efficiency LED interior AND site parking lighting. Daylight harvesting/sensors in optimal building zones. * Occupancy / Vacancy sensors throughout all rooms (occ sensors throughout will also complying with mandatory 90.1 "code" instead of timeclock) * Combo occ sensor/daylight sensor in occupied office / lounge spaces.
Credit 2.1 through 2.3 Design	On-Site Renewable Energy 1% = 1 pt, 3% = 2 pts, 5% = 3 pts, 7% = 4 pts, 9% = 5 pts, 11% = 6 pts, 13% = 7 pts	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EAc1 or use the DOE CBECS database to determine the estimated electricity use.	7					7	Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

Pts Avail
Yes
Probable
Maybe
Not Probable
No

**60% Submittal
Progress Design**

Credit 3 Constr	Enhanced Commissioning	1. Prior to the start of the construction documents phase, designate an independent CxA to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3, and 6. Other team members may perform Tasks 4 and 5. (hidden below)	2						2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4 Design	Enhanced Refrigerant Management	OPTION 1: Do not use refrigerants. OPTION 2: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit. AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFC's or Halons).	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5 Design	Measurement & Verification	Option 1 Develop and implement a measurement and verification (M&V) plan consistent with Option D: Calibrated Simulation (Savings Estimation Method 2), as specified in the International Performance Measurement & Verification Protocol (IPMVP), Volume III: Concepts and Options for Determining Energy Savings in New Construction, April 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 2 Develop and implement a measurement and verification (M&V) plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, April, 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 3. Third Party Data Source (1 point) Meet MPR 6 through compliance Option 1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	3					1	2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6 Constr	Green Power	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. To determine the baseline electricity use, use the results of EAc1.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.

Materials & Resources

Prereq 1 Design	Storage & Collection of Recyclables	Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	Req'd							Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.1 Constr	Building Reuse: Maintain Existing Walls, Floors & Roof 50% = 1 point, 75% = 2 pts, 95% = 3 pts	Maintain a percentage (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	3						3	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.2 Constr	Building Reuse: Maintain 50% of Interior Non-Structural Elements	Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	1						1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2.1 and 2.2 Constr	Construction Waste Management, Divert 50% or 75% From Disposal 50% = 1 point, 75% = 2 pts	Recycle and/or salvage a percentage of non-hazardous construction and demolition. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.1 and 3.2 Constr	Materials Reuse, 5% or 10% 5% = 1 point, 10% = 2 points	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes a percentage (based on cost) of the total value of materials on the project.	2						2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.1 and 4.2 Constr	Recycled Content, 10% or 20% (post-c + 1/2 pre-c) 10% = 1 point, 20% = 2 pts	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes a percentage (based on cost) of the total value of the materials in the project.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

**60% Submittal
Progress Design**

			Pts Avail	Yes	Probable	Maybe	Not Probable	No	
Credit 5.1 and 5.2 Constr	Regional Materials, 10% or 20% Extracted, Processed & Manufactured Regionally 10% = 1 point, 20% = 2 pts	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a percentage (based on cost) of the total materials value.	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6 Constr	Rapidly Renewable Materials	Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 7 Constr	Certified Wood	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Indoor Environmental Quality									
Prereq 1 Design	Minimum IAQ Performance	OPTION 1 (mechanically ventilated): Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62-2007, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate procedure or the applicable local code, whichever is more stringent.	Req'd						Mechanical system will be designed to provide adequate ventilation air, based on lounge seating capacity and ASHRAE default population assumptions for remaining spaces. No cost premium.
Prereq 2 Design	Environmental Tobacco Smoke (ETS) Control	OPTION 1 (non-smoking building): Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows.	Req'd						Smoking policy signs will be required at each entry door Assuming (4-5) signs/door decals. Only minor cost.
Credit 1 Design	Outdoor Air Delivery Monitoring	Install permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to generate an alarm when the airflow values or CO2 levels vary by 10% or more from the design values via either a BAS alarm to the building operator or a visual/audible alert to the building occupants. OPTION 1 (mechanically ventilated): Monitor CO2 concentrations within all densely occupied spaces (25 people/1000 sf). CO2 monitors must be between 3 and 6 feet above the floor. For each mechanical ventilation system, provide a direct outdoor airflow measurement device capable of measuring the outdoor airflow rate with an accuracy of +/- 15% of the design minimum outdoor air rate, as defined by ASHRAE 62.1-2007	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. In addition, occupied areas without ducted / forced air mechanical ventilation, such as the maintenance bays and workshops, will include wall mounted CO2 sensors and BMS programmed monitoring to fulfill the technical credit requirements.
Credit 2 Design	Increased Ventilation	CASE 1 (mechanically ventilated): Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007 as determined by Eqp1.	1					1	Not anticipated to be attainable.
Credit 3.1 Constr	Construction IAQ Management Plan: During Construction	Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: * During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). * Protect stored on-site or installed absorptive materials from moisture damage. * If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.2 Constr	Construction IAQ Management Plan: Before Occupancy	OPTION 1a (flush-out prior to occupancy): After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cf of outdoor air per sf of floor area while maintaining an internal temperature of at least 60F and relative humidity no higher than 60%. OPTION 1b (flush-out with early occupancy): Perform a building flush-out by supplying a minimum of 3,500 cf of outdoor air per sf of floor area a minimum of 3 hours prior to occupancy and during occupancy, until a total of 14,000 cf of outside air has been delivered to the space. OPTION 2 (IAQ testing): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. This building is estimated to require 3-6 testing locations.
Credit 4.1 Constr	Low-Emitting Materials: Adhesives & Sealants	All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Constr	Low-Emitting Materials: Paints & Coatings	Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Constr	Low-Emitting Materials: Flooring Systems	All flooring related finishes and installation accessories to comply with criteria as follows: (hidden below)	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

Pts Avail
Yes
Probable
Maybe
Not Probable
No

**60% Submittal
Progress Design**

Credit 4.4 Constr	Low-Emitting Materials: Composite Wood & Agrifiber Products	Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5 Design	Indoor Chemical & Pollutant Source Control	Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas: * Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt and particulates from entering the building at regular entry points directly connected to the outdoors. Acceptable entryway systems include permanently installed grates, grilles, or slotted systems that allow for cleaning underneath. Roll-out mats are only acceptable when maintained on a weekly basis by a contracted service organization. * Where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas and copying/printing rooms), exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. * In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air. * Provide containment (a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes. Walk off mats only required at the conditioned office suite. However, compliance with the negative/positive pressure relationship (0.5cfm exhaust per sf or equivalent) between office and containment containing Maintenance bay uncertain. To be evaluated post-60%.
Credit 6.1 Design	Controllability of Systems: Lighting	Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences AND provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. Also multiple mobile utility lights in industrial work zones (sign shop/repair bays).
Credit 6.2 Design	Controllability of Systems: Thermal Comfort	Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Operable windows can be used in lieu of comfort controls for occupants of areas that are 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable window must meet the requirements of ASHRAE 62.1-2007, paragraph 5.1, Natural Ventilation AND provide comfort system controls for all shared multi-occupant spaces to enable adjustments to suit group needs and preferences.	1					1	Given the shared open work environment and overhead air system, this is not likely attainable without special temperature control solutions serving the office workstations.
Credit 7.1 Design	Thermal Comfort: Design	Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2007. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1		1				Mech design will ensure industry standards are met for temp/humidity control of the conditioned office suite. Achievement will require alternative comfort measures in the industrial/unconventional (semi-heated or unconditioned) work zones....industrial fans and heaters at minimum, but also possibly local spot coolers to better accommodate occupants.
Credit 7.2 Design	Thermal Comfort, Verification	Provide a permanent monitoring system to ensure building performance to the desired comfort criteria as determined by EQ Credit 7.1, Thermal Comfort: Design. Agree to implement a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort-related	1					1	Holistic CMF strategy. Refer to Admin checklist for notes. Eligibility for this credit requires successful achievement of IEQ c7.1.
Credit 8.1 Design	Daylight & Views, Daylight 75% of Spaces	OPTION 1 - Daylight Simulation Model: Demonstrate through computer simulations that 75% or more of all regularly occupied spaces areas achieve daylight illuminance levels of a minimum of 25fc and a maximum of 500 fc in a clear sky condition on September 21 at 9:00 am and 3:00 pm; areas with illuminance levels below or above the range do not comply. OPTION 2 - Prescriptive: Use a combination of side-lighting and/or top-lighting to achieve a total Daylighting Zone that is at least 75% (1 point) of all the regularly occupied spaces, according to the requirements in the reference guide. OPTION 3 - Daylight Measurement: Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 footcandles has been achieved in at least 75% of all regularly occupied areas. Measurements must be taken on a 10-foot grid for all occupied spaces and must be recorded on building	1					1	Not anticipated to be attainable.
Credit 8.2 Design	Daylight & Views, Views for 90% of Spaces	Achieve direct line of sight to the outdoor environment via vision glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of all regularly occupied areas.	1	1					Exterior windows and numerous amply sized view panels in roll-up doors will ensure unobstructed views to 90% of the occupied floor areas, including industrial work zones.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Motorpool Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 19,173 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Innovation & Design Process

Credit 1.1 Exemplary Performance: EAc6 2x green power REC purchase	Doubling the preserved vegetated open space required for SSc5.2. Option 2 applies in this campus setting.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.2 Exemplary Performance: SSc7.1 100% non-roof heat island	100% concrete paving would qualify.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.3 Exemplary Performance: WEc3 - 45%+	Exceed WEc3 performance yielding at least a 45% calculated annual water use reduction for EPA regulated fixtures.		1					Refer to WEc3 notes above.
Credit 1.4 Innovation in Design: Reduced Mercury Lighting	Established by CIR ruling 5500: Adoption of LEED-EB MRo6- Specify and install lamps for ALL project scope lighting, including both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures, such that the the overall average of mercury content in lamps is 80 picograms per lumen-hour or less. Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts (i.e.- LED lamps).	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.5 Innovation in Design: Low-emitting ceilings and wall systems	Gypsum, insulation, wallcoverings, and ACT must be CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 LEED Accredited Professional Constr		1	1					Several LEED AP's are involved in the project. No cost premium.

Regional Priority (78719)

Credit 1.1 Regional Priority Credit: SSc6.1	Earn one of the six Regional Priority credits (credits identified as having additional regional environmental importance by the USGBC Regional Councils and Chapters for the project's location). A database of Regional Priority credits and their geographic applicability is available on the USGBC website – www.usgbc.org.	1					1	
Credit 1.2 Regional Priority Credit: SSc6.2		1		1				Alternate options are SSc5.1 & WEc2
Credit 1.3 Regional Priority Credit: EAc2 -1%+	One point is awarded for each Regional Priority credit earned. No more than 4 Regional Priority credits may be earned. Non-U.S. projects are not eligible for Regional Priority credits.	1					1	Refer to notes above.
Credit 1.4 Regional Priority Credit: MRc2 -75%		1	1					

POINT TOTALS:

109	52						
		2	5	5			
						46	

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

	<h2 style="text-align: center;">Sustainability Tracking Report</h2> <h3 style="text-align: center;">LEED 2009 BD+C Checklist Worksheet</h3>										
	<p>Project Name: ABIA CMF Warehouse Bldg</p> <p>Location: 3600 Presidential Blvd, Austin, TX 78719</p> <p>Project Goal: LEED Silver</p> <p>Size (GSF): Approx. 25,422 gsf (2019 Program Growth)</p> <p>September 29, 2017</p>					Pts Avail	Yes	Probable	Maybe	Not Probable	No

Project Information									
Form 1 Design	Minimum Program Requirements	Confirm the project complies with the Minimum Program Requirements.	Req'd						BLDG LEVEL METERS REQUIRED Owner will need to commit to operational phase utility data either through ENERGY STAR or other data release upon request.
Form 2 Design	Project Summary Details	Provide details on the project GSF, site area, building footprint, budget, etc.	Req'd						LEED site boundary of each CMF LEED bldg project established, but to be refined using 100% site plan.
Form 3 Design	Occupant and Usage Data	Input occupant and usage data, including GSF by space usage type. Estimating occupancy as: Approx 15 peak, 20 daily FTE (8hr occupancy) staff (over 3 shifts) Estimate of (4) peak use visitor/transient load from other bldgs, (10) daily average Estimate of (19) peak use, (30) daily building occupants.	Req'd						Owner input confirmed 24/7 / 365 operations. <----- Refer left for occupancy load assumptions
Form 4 Design	Schedule and Overview Documents	Provide key points in the project schedule, and upload general project drawings as required.	Req'd						






project site's zip code. Refer to this "RP" Credit category at the end of this checklist for more details.


POINT TOTALS:


109	52						
		4	4	4			
						46	


Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Sustainable Sites									
Prereq 1 Constr	Construction Activity Pollution Prevention	Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project. The ESC Plan shall conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent.	Req'd						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1 Design	Site Selection	Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: (hidden below)	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Development Density & Community Connectivity	OPTION 1: Construct or renovate building on a previously developed site and in a community with a minimum density of 60,000 square feet per acre net. OPTION 2: Construct or renovate building on a previously developed site and within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 basic services and with pedestrian access between the	5					5	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3 Design	Brownfield Redevelopment	Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site classified as a brownfield by a local, state or federal government agency.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.1 Design	Alternative Transportation: Public Transportation Access	OPTION 1: Locate project within 1/2 mile of an existing (or planned and funded) commuter rail, light rail or subway station OPTION 2: Locate project within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.	6					6	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Design	Alternative Transportation: Bicycle Storage & Changing Rooms	CASE 1 (non-residential): Provide secure bicycle racks or storage (within 200 yards of the building) for 5% or more of all building users (measured at peak periods), and provide shower and changing facilities in the building or within 200 yards of a building entrance, for 0.5% of full-time equivalent occupants.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Design	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles	OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site. OPTION 3: Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants. OPTION 4: Provide building occupants access to a low-emitting or fuel-efficient vehicle-sharing program (see requirements in reference guide).	3	3					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.4 Design	Alternative Transportation: Parking Capacity	CASE 1 (non-residential): OPTION 1 (non-residential with new parking): Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide preferred parking for carpools or vanpools for 5% of the total provided parking spaces.	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.1 Constr	Site Development, Protect or Restore Habitat	OPTION 2 (previously developed sites): Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.2 Design	Site Development: Maximize Open Space	OPTION 1 (exceed zoning requirements): Reduce the development footprint (defined as entire building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%. OPTION 2 (no zoning requirements): Provide vegetated open space area adjacent to the building that is equal to the building footprint.	1				1		Holistic CMF strategy. Refer to HQ checklist for notes.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>						60% Submittal Progress Design	
		Pts Avail	Yes	Probable	Maybe	Not Probable	No		
Credit 6.1 Design 	Stormwater Design: Quantity Control	OPTION 1 (existing imperviousness less than or equal to 50%): Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate for the one- and two-year, 24 hour design storms. OR implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies. OPTION 2 (existing imperviousness greater than 50%): Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the two-year, 24-hour design storm.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6.2 Design 	Stormwater Design: Quality Control	Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids load based on existing monitoring reports.	1		1				Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 7.1 Constr 	Heat Island Effect: Non-Roof	OPTION 1 (reflective paving, shading, and/or open grid pavement): Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): •Shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of occupancy. •Shade from structures covered by solar panels that produce energy used to offset some non-renewable resource use. •Shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. •Hardscape materials with an SRI of at least 29. •Open-grid pavement system (at least 50% pervious).	1	1					Option 1 applies, as there is no parking garage on site. All paving in the LEED project site boundary is currently scheduled to be standard portland cement concrete, which meets the SRI requirements of this credit and is 100% compliant (2x the required amount), qualifying for "exemplary performance" Innovation point. Not considered a cost premium as it is part of overall project program requirements.
Credit 7.2 Design	Heat Island Effect: Roof	OPTION 1 (reflective roofing): Use roofing materials having an SRI of at least 78 for low-slope and 29 for steep-slope for a minimum of 75% of the roof surface.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 8 Design	Light Pollution Reduction	FOR INTERIOR LIGHTING All non-emergency interior lighting, with a direct line of sight to any openings in the envelope (translucent or transparent), shall have its input power reduced (by automatic device) by at least 50% between the hours of 11 PM and 5 AM. After hours override may be provided by a manual or occupant sensing device provided that the override last no more than 30 minutes. OR All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency lighting shall have shielding (for a resultant transmittance of less than 10%) that will be controlled/closed by automatic device between the hours of 11 PM and 5 AM. FOR EXTERIOR LIGHTING Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone.	refer below					Holistic CMF strategy. Refer to HQ checklist for notes.	
LEED v4 version http://www.usgbc.org/articles/use-v4-credits-your-v2009-project/	Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: • the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and • the lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. The following exterior lighting is exempt from the requirements, provided it is controlled separately from the nonexempt lighting: • specialized signal, directional, and marker lighting for transportation; • lighting that is used solely for façade and landscape lighting in MLO lighting zones 3 and 4, and is automatically turned off from midnight until 6 a.m.; • lighting for theatrical purposes for stage, film, and video performances; • government-mandated roadway lighting; • hospital emergency departments, including associated helipads; • lighting for the national flag in MLO lighting zones 2, 3, or 4; and • internally illuminated signage.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.	

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF Warehouse Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 25,422 gsf (2019 Program Growth) September 29, 2017		Pts Avail	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Water Efficiency									
Prereq 1 Design	Water Use Reduction: 20% Reduction	Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	Req'd						Requirements will be surpassed by WEc2/WEc3 goals.
Credit 1.1 and 1.2 Design	Water Efficient Landscaping: Reduce by 50% or 100% (No Potable Water Use or No Irrigation) 50% = 2 pt, 100% = 4 pts	PATH 1 OPTION 1 (2 pts): Reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to plant species factor and/or irrigation efficiency OPTION 2 (4 pts): Meet the requirements for Option 1, and: PATH 1: Use only captured rainwater, recycled wastewater, recycled graywater or water treated and conveyed by a public agency specifically for nonpotable uses for irrigation. PATH 2: Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within 18 months of installation.	4	4					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Innovative Wastewater Technologies	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or non-potable water. OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.1 and 3.2 Design	Water Use Reduction: 30%, 35% or 40% Reduction 30% = 2 points, 35% = 3 pts, 40% = 4 pts	Employ strategies that in aggregate use a percentage less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	4	4					45%+ calculated reduction will be readily attainable using the following: * 0.125gpf "pint" max urinal * 1.28gpf toilets * 0.35gpm metered/sensor controlled lavatories * 1.0 gpm break room faucets Little to no cost premium is associated with these fixtures.
Energy & Atmosphere									
Prereq 1 Constr	Fundamental Commissioning of the Building Energy Systems	* Designate in individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities. * The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents. * Develop and incorporate commissioning requirements into the construction documents. * Develop and implement a commissioning plan. * Verify the installation and performance of the systems to be commissioned. * Complete a summary commissioning report.	Req'd						OPR still being developed through programming discussions. Initial BOD being developed.
Prereq 2 Design	Minimum Energy Performance	OPTION 1 - WHOLE BUILDING ENERGY SIMULATION Demonstrate a 10% improvement for new buildings or a 5% improvement for existing building renovations in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.	Req'd						Mandatory provisions will be integrated for various Arch/MEP designs. Overall energy efficiency requirement will be surpassed by EAc1 goal below.
Prereq 3 Design	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new building HVAC&R systems.	Req'd						The refrigerant based equipment in this new project will automatically comply. No cost premium.
Credit 1.1 through 1.10 Design	Optimize Energy Performance	OPTION 1 (Whole Building Energy Simulation) (1-19 pts): Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	19	10		3	2	4	60% Energy Analysis & progress report to follow 60% design submittal. Initial strategies could include: * High efficiency air chiller, boiler heating and several split or packaged system(s) to serve 24/7 (unique schedule zones) * Dedicated OA system, with DDC HVAC controls and motorized damper to provide occupant responsive/Demand controlled ventilation in spaces with fluctuating occupancy - such as large break room and/or large training rooms. * High efficiency LED interior AND site parking lighting. Daylight harvesting/sensors in optimal building zones. * Occupancy / Vacancy sensors throughout all rooms (occ sensors throughout will also complying with mandatory 90.1 "code" instead of timelock) * Combo occ sensor/daylight sensor in occupied office / lounge
Credit 2.1 through 2.3 Design	On-Site Renewable Energy 1% = 1 pt, 3% = 2 pts, 5% = 3 pts, 7% = 4 pts, 9% = 5 pts, 11% = 6 pts, 13% = 7 pts	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EAc1 or use the DOE CBECS database to determine the estimated electricity use.	7					7	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3 Constr	Enhanced Commissioning	1. Prior to the start of the construction documents phase, designate an independent CxA to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3, and 6. Other team members may perform Tasks 4 and 5. (hidden below)	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF Warehouse Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 25,422 gsf (2019 Program Growth) September 29, 2017		Pts Avail	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Credit 4 Design	Enhanced Refrigerant Management OPTION 1: Do not use refrigerants. OPTION 2: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit. AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFC's or Halons).	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 5 Design	Measurement & Verification Option 1 Develop and implement a measurement and verification (M&V) plan consistent with Option D: Calibrated Simulation (Savings Estimation Method 2), as specified in the International Performance Measurement & Verification Protocol (IPMVP), Volume III: Concepts and Options for Determining Energy Savings in New Construction, April 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 2 Develop and implement a measurement and verification (M&V) plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, April, 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 3. Third Party Data Source (1 point) Meet MPR 6 through compliance Option 1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	3				1	2	Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 6 Constr	Green Power Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. To determine the baseline electricity use, use the results of EAc1.	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.	
Materials & Resources									
Prereq 1 Design	Storage & Collection of Recyclables Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	Req'd						Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 1.1 Constr	Building Reuse: Maintain Existing Walls, Floors & Roof 50% = 1 point, 75% = 2 pts, 95% = 3 pts	3					3	Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 1.2 Constr	Building Reuse: Maintain 50% of Interior Non-Structural Elements	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 2.1 and 2.2 Constr	Construction Waste Management, Divert 50% or 75% From Disposal 50% = 1 point, 75% = 2 pts	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 3.1 and 3.2 Constr	Materials Reuse, 5% or 10% 5% = 1 point, 10% = 2 points	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 4.1 and 4.2 Constr	Recycled Content, 10% or 20% (post-c + 1/2 pre-c) 10% = 1 point, 20% = 2 pts	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 5.1 and 5.2 Constr	Regional Materials, 10% or 20% Extracted, Processed & Manufactured Regionally 10% = 1 point, 20% = 2 pts	2	2					Holistic CMF strategy. Refer to HQ checklist for notes.	
Credit 6 Constr	Rapidly Renewable Materials Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.	

		<h2>Sustainability Tracking Report</h2> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
Project Name: ABIA CMF Warehouse Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 25,422 gsf (2019 Program Growth) September 29, 2017		Pts Avail	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Credit 7 Constr	Certified Wood	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Indoor Environmental Quality									
Prereq 1 Design	Minimum IAQ Performance	OPTION 1 (mechanically ventilated): Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62-2007, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate procedure or the applicable local code, whichever is more stringent.	Req'd						Mechanical system will be designed to provide adequate ventilation air, based on lounge seating capacity and ASHRAE default population assumptions for remaining spaces. No cost premium.
Prereq 2 Design	Environmental Tobacco Smoke (ETS) Control	OPTION 1 (non-smoking building): Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows.	Req'd						Smoking policy signs will be required at each entry door Assuming (4-5) signs/door decals. Only minor cost.
Credit 1 Design	Outdoor Air Delivery Monitoring	Install permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to generate an alarm when the airflow values or CO2 levels vary by 10% or more from the design values via either a BAS alarm to the building operator or a visual/audible alert to the building occupants. OPTION 1 (mechanically ventilated): Monitor CO2 concentrations within all densely occupied spaces (25 people/1000 sf). CO2 monitors must be between 3 and 6 feet above the floor. For each mechanical ventilation system, provide a direct outdoor airflow measurement device capable of measuring the outdoor airflow rate with an accuracy of +/- 15% of the design minimum outdoor air rate, as defined by ASHRAE 62.1-2007.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. In addition, occupied areas without ducted / forced air mechanical ventilation, such as the maintenance bays and workshops, will include wall mounted CO2 sensors and BMS programmed monitoring to fulfill the technical credit requirements.
Credit 2 Design	Increased Ventilation	CASE 1 (mechanically ventilated): Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007 as determined by Eq1.	1					1	Not anticipated to be attainable.
Credit 3.1 Constr	Construction IAQ Management Plan: During Construction	Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: * During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). * Protect stored on-site or installed absorptive materials from moisture damage. * If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.2 Constr	Construction IAQ Management Plan: Before Occupancy	OPTION 1a (flush-out prior to occupancy): After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cf of outdoor air per sf of floor area while maintaining an internal temperature of at least 60F and relative humidity no higher than 60%. OPTION 1b (flush-out with early occupancy): Perform a building flush-out by supplying a minimum of 3,500 cf of outdoor air per sf of floor area a minimum of 3 hours prior to occupancy and during occupancy, until a total of 14,000 cf of outside air has been delivered to the space. OPTION 2 (IAQ testing): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. This building is estimated to require 3-6 testing locations.
Credit 4.1 Constr	Low-Emitting Materials: Adhesives & Sealants	All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Constr	Low-Emitting Materials: Paints & Coatings	Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Constr	Low-Emitting Materials: Flooring Systems	All flooring related finishes and installation accessories to comply with criteria as follows: (hidden below)	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.4 Constr	Low-Emitting Materials: Composite Wood & Agrifiber Products	Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Warehouse Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 25,422 gsf (2019 Program Growth)

September 29, 2017

Pts Avail
Yes
Probable
Maybe
Not Probable
No

**60% Submittal
Progress Design**

Credit 5 Design	Indoor Chemical & Pollutant Source Control	Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas: * Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt and particulates from entering the building at regular entry points directly connected to the outdoors. Acceptable entryway systems include permanently installed grates, grilles, or slotted systems that allow for cleaning underneath. Roll-out mats are only acceptable when maintained on a weekly basis by a contracted service organization. * Where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas and copying/printing rooms), exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. * In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air. * Provide containment (a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs.	1					1		Holistic CMF strategy. Refer to HQ checklist for notes. Walk off mats only required at the conditioned office suite. However, compliance with the negative/positive pressure relationship (0.5cfm exhaust per sf or equivalent) between office and containment containing Maintenance bay uncertain. To be evaluated post-60%.
Credit 6.1 Design	Controllability of Systems: Lighting	Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences AND provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes. Also multiple mobile utility lights in industrial work zones (sign shop/repair bays).
Credit 6.2 Design	Controllability of Systems: Thermal Comfort	Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Operable windows can be used in lieu of comfort controls for occupants of areas that are 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable window must meet the requirements of ASHRAE 62.1-2007, paragraph 5.1, Natural Ventilation AND provide comfort system controls for all shared multi-occupant spaces to enable adjustments to suit group needs and preferences.	1						1	Given the shared open work environment and overhead air system, this is not likely attainable without special temperature control solutions serving the office workstations.
Credit 7.1 Design	Thermal Comfort: Design	Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2007. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1		1					Mech design will ensure industry standards are met for temp/humidity control of the conditioned office suite. Achievement will require alternative comfort measures in the industrial/unconventional (semi-heated or unconditioned) work zones....industrial fans and heaters at minimum, but also possibly local spot coolers to better accommodate occupants.
Credit 7.2 Design	Thermal Comfort, Verification	Provide a permanent monitoring system to ensure building performance to the desired comfort criteria as determined by EQ Credit 7.1, Thermal Comfort: Design Agree to implement a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort related problems. Agree to develop a	1		1					Holistic CMF strategy. Refer to Admin checklist for notes. Eligibility for this credit requires successful achievement of IEQ c7.1.
Credit 8.1 Design	Daylight & Views, Daylight 75% of Spaces	OPTION 1 - Daylight Simulation Model: Demonstrate through computer simulations that 75% or more of all regularly occupied spaces areas achieve daylight illuminance levels of a minimum of 25fc and a maximum of 500 fc in a clear sky condition on September 21 at 9:00 am and 3:00 pm; areas with illuminance levels below or above the range do not comply. OPTION 2 - Prescriptive: Use a combination of side-lighting and/or top-lighting to achieve a total Daylighting Zone that is at least 75% (1 point) of all the regularly occupied spaces, according to the requirements in the reference guide. OPTION 3 - Daylight Measurement: Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 footcandles has been achieved in at least 75% of all regularly occupied areas. Measurements must be taken on a 10-foot grid for all occupied spaces and must be recorded on building floor plans.	1						1	Not anticipated to be attainable.
Credit 8.2 Design	Daylight & Views, Views for 90% of Spaces	Achieve direct line of sight to the outdoor environment via vision glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of all regularly occupied areas.	1	1						Exterior windows and numerous amply sized view panels in roll-up doors will ensure unobstructed views to 90% of the occupied floor areas, including industrial work zones.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Warehouse Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 25,422 gsf (2019 Program Growth)

September 29, 2017

Pts Avail
Yes
Probable
Maybe
Not Probable
No

**60% Submittal
Progress Design**

Innovation & Design Process

Credit 1.1 Exemplary Performance: EAc6 2x green power REC purchase	Doubling the preserved vegetated open space required for SSc5.2. Option 2 applies in this campus setting.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.2 Exemplary Performance: SSc7.1 100% non-roof heat island	100% concrete paving would qualify.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.3 Exemplary Performance: WEc3 - 45%+	Exceed WEc3 performance yielding at least a 45% calculated annual water use reduction for EPA regulated fixtures.		1					Refer to WEc3 notes above.
Credit 1.4 Innovation in Design: Reduced Mercury Lighting	Established by CIR ruling 5500: Adoption of LEED-EB MRc6- Specify and install lamps for ALL project scope lighting, including both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures, such that the the overall average of mercury content in lamps is 80 picograms per lumen-hour or less. Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts (i.e.- LED lamps).	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.5 Innovation in Design: Low-emitting ceilings and wall systems	Gypsum, insulation, wallcoverings, and ACT must be CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)	1	1					Products of concern will be specified & sourced as CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)
Credit 2 LEED Accredited Professional		1	1					Several LEED AP's are involved in the project. No cost premium.

Regional Priority (78719)

Credit 1.1 Regional Priority Credit: SSc6.1	Earn one of the six Regional Priority credits (credits identified as having additional regional environmental importance by the USGBC Regional Councils and Chapters for the project's location). A database of Regional Priority credits and their geographic applicability is available on the USGBC website – www.usgbc.org. One point is awarded for each Regional Priority credit earned. No more than 4 Regional Priority credits may be earned. Non-U.S. projects are not eligible for Regional Priority credits.	1					1	Alternate options are SSc5.1 & WEc2 Refer to notes above.
Credit 1.2 Regional Priority Credit: SSc6.2		1		1				
Credit 1.3 Regional Priority Credit: EAc2 -1%+		1					1	
Credit 1.4 Regional Priority Credit: MRc2 -75%		1	1					

POINT TOTALS:

109	52						
		4	4	4			
							46

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

	<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>							
	<p>Project Name: ABIA CMF Trades Maint. Bldg</p> <p>Location: 3600 Presidential Blvd, Austin, TX 78719</p> <p>Project Goal: LEED Silver</p> <p>Size (GSF): Approx. 16,090 gsf (2019 Program Growth)</p> <p>September 29, 2017</p>		Pts Avail	Yes	Probable	Maybe	Not Probable	No

Project Information									
Form 1 Design	Minimum Program Requirements	Confirm the project complies with the Minimum Program Requirements.	Req'd						BLDG LEVEL METERS REQUIRED Owner will need to commit to operational phase utility data either through ENERGY STAR or other data release upon request.
Form 2 Design	Project Summary Details	Provide details on the project GSF, site area, building footprint, budget, etc.	Req'd						LEED site boundary of each CMF LEED bldg project established, but to be refined using 100% site plan.
Form 3 Design	Occupant and Usage Data	Input occupant and usage data, including GSF by space usage type. Estimating occupancy as: Approx 25 peak, 30 daily FTE (8hr occupancy) staff (over 3 shifts) Estimate of (4) peak use visitor/transient load from other bldgs, (10) daily average Estimate of (29) peak use, (40) daily building occupants.	Req'd						Owner input confirmed 24/7 / 365 operations. ----- Refer left for occupancy load assumptions
Form 4 Design	Schedule and Overview Documents	Provide key points in the project schedule, and upload general project drawings as required.	Req'd						




NOTE: This symbol highlights the (6) ordained "Regional Priority" credit candidates assigned to this project site's zip code. Refer to this "RP" Credit category at the end of this checklist for more details.

POINT TOTALS:

109	52				
		4	4	3	
					47

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Sustainable Sites									
Prereq 1 Constr	Construction Activity Pollution Prevention	Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project. The ESC Plan shall conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent.	Req'd						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1 Design	Site Selection	Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: (hidden below)	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Development Density & Community Connectivity	OPTION 1: Construct or renovate building on a previously developed site and in a community with a minimum density of 60,000 square feet per acre net. OPTION 2: Construct or renovate building on a previously developed site and within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 basic services and with pedestrian access between the	5					5	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3 Design	Brownfield Redevelopment	Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site classified as a brownfield by a local, state or federal government agency.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.1 Design	Alternative Transportation: Public Transportation Access	OPTION 1: Locate project within 1/2 mile of an existing (or planned and funded) commuter rail, light rail or subway station OPTION 2: Locate project within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.	6					6	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Design	Alternative Transportation: Bicycle Storage & Changing Rooms	CASE 1 (non-residential): Provide secure bicycle racks or storage (within 200 yards of the building) for 5% or more of all building users (measured at peak periods), and provide shower and changing facilities in the building or within 200 yards of a building entrance, for 0.5% of full-time equivalent occupants.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Design	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles	OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site. OPTION 3: Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants. OPTION 4: Provide building occupants access to a low-emitting or fuel-efficient vehicle-sharing program (see requirements in reference guide).	3	3					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.4 Design	Alternative Transportation: Parking Capacity	CASE 1 (non-residential): OPTION 1 (non-residential with new parking): Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide preferred parking for carpools or vanpools for 5% of the total provided parking spaces.	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.1 Constr	Site Development, Protect or Restore Habitat	OPTION 2 (previously developed sites): Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.2 Design	Site Development: Maximize Open Space	OPTION 1 (exceed zoning requirements): Reduce the development footprint (defined as entire building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%. OPTION 2 (no zoning requirements): Provide vegetated open space area adjacent to the building that is equal to the building footprint.	1				1		Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6.1 Design	Stormwater Design: Quantity Control	OPTION 1 (existing imperviousness less than or equal to 50%): Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate for the one- and two-year, 24 hour design storms. OR implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies. OPTION 2 (existing imperviousness greater than 50%): Implement a stormwater	1					1	Holistic CMF strategy. Refer to HQ checklist for notes.

		<h2 style="margin: 0;">Sustainability Tracking Report</h2> <h3 style="margin: 0;">LEED 2009 BD+C Checklist Worksheet</h3>						60% Submittal Progress Design		
		Project Name: ABIA CMF Trades Maint. Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 16,090 gsf (2019 Program Growth) September 29, 2017	Pts Avail	Yes	Probable	Maybe	Not Probable			No
Credit 6.2 Design	Stormwater Design: Quality Control	Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids load based on existing monitoring reports.	1		1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 7.1 Constr	Heat Island Effect: Non-Roof	OPTION 1 (reflective paving, shading, and/or open grid pavement): Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): •Shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of occupancy. •Shade from structures covered by solar panels that produce energy used to offset some non-renewable resource use. •Shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. •Hardscape materials with an SRI of at least 29. •Open-grid pavement system (at least 50% pervious).	1	1						Option 1 applies, as there is no parking garage on site. All paving in the LEED project site boundary is currently scheduled to be standard portland cement concrete, which meets the SRI requirements of this credit and is 100% compliant (2x the required amount), qualifying for "exemplary performance" Innovation point. Not considered a cost premium as it is part of overall project program requirements.
Credit 7.2 Design	Heat Island Effect: Roof	OPTION 1 (reflective roofing): Use roofing materials having an SRI of at least 78 for low-slope and 29 for steep-slope for a minimum of 75% of the roof surface.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 8 Design	Light Pollution Reduction	FOR INTERIOR LIGHTING All non-emergency interior lighting, with a direct line of sight to any openings in the envelope (translucent or transparent), shall have its input power reduced (by automatic device) by at least 50% between the hours of 11 PM and 5 AM. After hours override may be provided by a manual or occupant sensing device provided that the override last no more than 30 minutes. OR All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency lighting shall have shielding (for a resultant transmittance of less than 10%) that will be controlled/closed by automatic device between the hours of 11 PM and 5 AM. FOR EXTERIOR LIGHTING Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone.		refer below					Holistic CMF strategy. Refer to HQ checklist for notes.	
LEED v4 version http://www.usgbc.org/articles/use-v4-credits-your-v2009-project/		Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: • the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and • the lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. The following exterior lighting is exempt from the requirements, provided it is controlled separately from the nonexempt lighting: • specialized signal, directional, and marker lighting for transportation; • lighting that is used solely for façade and landscape lighting in MLO lighting zones 3 and 4, and is automatically turned off from midnight until 6 a.m.; • lighting for theatrical purposes for stage, film, and video performances; • government-mandated roadway lighting; • hospital emergency departments, including associated helipads; • lighting for the national flag in MLO lighting zones 2, 3, or 4; and • internally illuminated signage.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Trades Maint. Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 16,090 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

60% Submittal
Progress Design

Water Efficiency

Prereq 1 Design	Water Use Reduction: 20% Reduction	Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	Req'd						Requirements will be surpassed by WEC2/WEC3 goals.
Credit 1.1 and 1.2 Design	Water Efficient Landscaping: Reduce by 50% or 100% (No Potable Water Use or No Irrigation) 50% = 2 pt, 100% = 4 pts	PATH 1 OPTION 1 (2 pts): Reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to plant species factor and/or irrigation efficiency OPTION 2 (4 pts): Meet the requirements for Option 1, and: PATH 1: Use only captured rainwater, recycled wastewater, recycled graywater or water treated and conveyed by a public agency specifically for nonpotable uses for irrigation. PATH 2: Install landscaping that does not require permanent irrigation systems. Temporary irrigation systems used for plant establishment are allowed only if removed within 18 months of installation.	4	4					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2 Design	Innovative Wastewater Technologies	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or non-potable water. OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.1 and 3.2 Design	Water Use Reduction: 30%, 35% or 40% Reduction 30% = 2 points, 35% = 3 pts, 40% = 4 pts	Employ strategies that in aggregate use a percentage less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	4	4					45%+ calculated reduction will be readily attainable using the following: * 0.125gpf "pint" max urinal * 1.28gpf toilets * 0.35gpm metered/sensor controlled lavatories * 1.0 gpm break room faucets Little to no cost premium is associated with these fixtures.

Energy & Atmosphere

Prereq 1 Constr	Fundamental Commissioning of the Building Energy Systems	* Designate an individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities. * The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents. * Develop and incorporate commissioning requirements into the construction documents. * Develop and implement a commissioning plan. * Verify the installation and performance of the systems to be commissioned. * Complete a summary commissioning report.	Req'd						OPR still being developed through programming discussions. Initial BOD being developed.
Prereq 2 Design	Minimum Energy Performance	OPTION 1 - WHOLE BUILDING ENERGY SIMULATION Demonstrate a 10% improvement for new buildings or a 5% improvement for existing building renovations in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.	Req'd						Mandatory provisions will be integrated for various Arch/MEP designs. Overall energy efficiency requirement will be surpassed by EAc1 goal below.
Prereq 3 Design	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new building HVAC&R systems.	Req'd						The refrigerant based equipment in this new project will automatically comply. No cost premium.
Credit 1.1 through 1.10 Design	Optimize Energy Performance OPTION 1: New building: 12% = 1 pt, 14% = 2 pts, 16% = 3 pts, 18% = 4 pts, 20% = 5 pts, 22% = 6 pts, 24% = 7 pts, 26% = 8 pts, 28% = 9 pts, 30% = 10 pts, 32% = 11 pts, 34% = 12 pts, 36% = 13 pts, 38% = 14 pts, 40% = 15 pts, 42% = 16 pts, 44% = 17 pts, 46% = 18 pts, 48% = 19 pts	OPTION 1 (Whole Building Energy Simulation) (1-19 pts): Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	19	10		3	2	4	60% Energy Analysis & progress report to follow 60% design submittal. Initial strategies could include: * High efficiency air chiller, boiler heating and several split or packaged system(s) to serve 24/7 (unique schedule zones) * Dedicated OA system, with DDC HVAC controls and motorized damper to provide occupant responsive/Demand controlled ventilation in spaces with fluctuating occupancy - such as large break room and/or large training rooms. * High efficiency LED interior AND site parking lighting. Daylight harvesting/sensors in optimal building zones. * Occupancy / Vacancy sensors throughout all rooms (occ sensors throughout will also complying with mandatory 90.1 "code" instead of timeclock) * Combo occ sensor/daylight sensor in occupied office / lounge spaces.
Credit 2.1 through 2.3 Design	On-Site Renewable Energy 1% = 1 pt, 3% = 2 pts, 5% = 3 pts, 7% = 4 pts, 9% = 5 pts, 11% = 6 pts, 13% = 7 pts	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EAc1 or use the DOE CBECS database to determine the estimated electricity use.	7					7	Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3 Constr	Enhanced Commissioning	1. Prior to the start of the construction documents phase, designate an independent CxA to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3, and 6. Other team members may perform Tasks 4 and 5. (hidden below)	2					2	Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Trades Maint. Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 16,090 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable


No

**60% Submittal
Progress Design**

Credit 4 Design	Enhanced Refrigerant Management	OPTION 1: Do not use refrigerants. OPTION 2: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit. AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFC's or Halons).	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5 Design	Measurement & Verification	Option 1 Develop and implement a measurement and verification (M&V) plan consistent with Option D: Calibrated Simulation (Savings Estimation Method 2), as specified in the International Performance Measurement & Verification Protocol (IPMVP), Volume III: Concepts and Options for Determining Energy Savings in New Construction, April 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 2 Develop and implement a measurement and verification (M&V) plan consistent with Option B: Energy Conservation Measure Isolation, as specified in the International Performance Measurement & Verification Protocol (IPMVP) Volume III: Concepts and Options for Determining Energy Savings in New Construction, April, 2003. The M&V period must cover at least 1 year of postconstruction occupancy. Provide a process for corrective action if the results of the M&V plan indicate that energy savings are not being achieved. OR Option 3. Third Party Data Source (1 point) Meet MPR 6 through compliance Option 1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	3				1	2		Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6 Constr	Green Power	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. To determine the baseline electricity use, use the results of EAc1.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.

Materials & Resources

Prereq 1 Design	Storage & Collection of Recyclables	Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	Req'd							Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.1 Constr	Building Reuse: Maintain Existing Walls, Floors & Roof 50% = 1 point, 75% = 2 pts, 95% = 3 pts	Maintain a percentage (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	3					3		Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.2 Constr	Building Reuse: Maintain 50% of Interior Non-Structural Elements	Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	1					1		Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 2.1 and 2.2 Constr	Construction Waste Management, Divert 50% or 75% From Disposal 50% = 1 point, 75% = 2 pts	Recycle and/or salvage a percentage of non-hazardous construction and demolition. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.1 and 3.2 Constr	Materials Reuse, 5% or 10% 5% = 1 point, 10% = 2 points	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes a percentage (based on cost) of the total value of materials on the project.	2					2		Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.1 and 4.2 Constr	Recycled Content, 10% or 20% (post-c + 1/2 pre-c) 10% = 1 point, 20% = 2 pts	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes a percentage (based on cost) of the total value of the materials in the project.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 5.1 and 5.2 Constr	Regional Materials, 10% or 20% Extracted, Processed & Manufactured Regionally 10% = 1 point, 20% = 2 pts	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a percentage (based on cost) of the total materials value.	2	2						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 6 Constr	Rapidly Renewable Materials	Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	1					1		Holistic CMF strategy. Refer to HQ checklist for notes.

 <div> <h2>Sustainability Tracking Report</h2> <h3>LEED 2009 BD+C Checklist Worksheet</h3> <p>Project Name: ABIA CMF Trades Maint. Bldg</p> <p>Location: 3600 Presidential Blvd, Austin, TX 78719</p> <p>Project Goal: LEED Silver</p> <p>Size (GSF): Approx. 16,090 gsf (2019 Program Growth)</p> <p>September 29, 2017</p> </div>		Pts Avail	Yes	Probable	Maybe	Not Probable	No	60% Submittal Progress Design	
Credit 7 Constr	Certified Wood	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.		1	1				Holistic CMF strategy. Refer to HQ checklist for notes.
Indoor Environmental Quality									
Prereq 1 Design	Minimum IAQ Performance	OPTION 1 (mechanically ventilated): Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62-2007. Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate procedure or the applicable local code, whichever is more stringent.	Req'd						Mechanical system will be designed to provide adequate ventilation air, based on lounge seating capacity and ASHRAE default population assumptions for remaining spaces. No cost premium.
Prereq 2 Design	Environmental Tobacco Smoke (ETS) Control	OPTION 1 (non-smoking building): Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows.	Req'd						Smoking policy signs will be required at each entry door Assuming (4-5) signs/door decals. Only minor cost.
Credit 1 Design	Outdoor Air Delivery Monitoring	Install permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to generate an alarm when the airflow values or CO2 levels vary by 10% or more from the design values via either a BAS alarm to the building operator or a visual/audible alert to the building occupants. OPTION 1 (mechanically ventilated): Monitor CO2 concentrations within all densely occupied spaces (25 people/1000 sf). CO2 monitors must be between 3 and 6 feet above the floor. For each mechanical ventilation system, provide a direct outdoor airflow measurement device capable of measuring the outdoor airflow rate with an accuracy of +/- 15% of the design minimum outdoor air rate, as defined by ASHRAE 62.1-2007	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. In addition, occupied areas without ducted / forced air mechanical ventilation, such as the maintenance bays and workshops, will include wall mounted CO2 sensors and BMS programmed monitoring to fulfill the technical credit requirements.
Credit 2 Design	Increased Ventilation	CASE 1 (mechanically ventilated): Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007 as determined by Eqp1.	1					1	Not anticipated to be attainable.
Credit 3.1 Constr	Construction IAQ Management Plan: During Construction	Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: * During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). * Protect stored on-site or installed absorptive materials from moisture damage. * If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 3.2 Constr	Construction IAQ Management Plan: Before Occupancy	OPTION 1a (flush-out prior to occupancy): After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cf of outdoor air per sf of floor area while maintaining an internal temperature of at least 60F and relative humidity no higher than 60%. OPTION 1b (flush-out with early occupancy): Perform a building flush-out by supplying a minimum of 3,500 cf of outdoor air per sf of floor area a minimum of 3 hours prior to occupancy and during occupancy, until a total of 14,000 cf of outside air has been delivered to the space. OPTION 2 (IAQ testing): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. This building is estimated to require 3-6 testing locations.
Credit 4.1 Constr	Low-Emitting Materials: Adhesives & Sealants	All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.2 Constr	Low-Emitting Materials: Paints & Coatings	Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.3 Constr	Low-Emitting Materials: Flooring Systems	All flooring related finishes and installation accessories to comply with criteria as follows: (hidden below)	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 4.4 Constr	Low-Emitting Materials: Composite Wood & Agrifiber Products	Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Trades Maint. Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 16,090 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Credit 5 Design	Indoor Chemical & Pollutant Source Control	Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas: * Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt and particulates from entering the building at regular entry points directly connected to the outdoors. Acceptable entryway systems include permanently installed grates, grilles, or slotted systems that allow for cleaning underneath. Roll-out mats are only acceptable when maintained on a weekly basis by a contracted service organization. * Where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas and copying/printing rooms), exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. * In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air. * Provide containment (a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs.	1					1	Not anticipated to be attainable. Holistic CMF strategy. Refer to HQ checklist for notes. Walk off mats only required at the conditioned office suite. However, compliance with the negative/positive pressure relationship (0.5cfm exhaust per sf or equivalent) between office and containment containing Maintenance bay uncertain. To be evaluated post-60%.
Credit 6.1 Design	Controllability of Systems: Lighting	Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences AND provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.	1	1					Holistic CMF strategy. Refer to HQ checklist for notes. Also multiple mobile utility lights in industrial work zones (sign shop/repair bays).
Credit 6.2 Design	Controllability of Systems: Thermal Comfort	Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Operable windows can be used in lieu of comfort controls for occupants of areas that are 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable window must meet the requirements of ASHRAE 62.1-2007, paragraph 5.1, Natural Ventilation AND provide comfort system controls for all shared multi-occupant spaces to enable adjustments to suit group needs and preferences.	1					1	Given the shared open work environment and overhead air system, this is not likely attainable without special temperature control solutions serving the office workstations.
Credit 7.1 Design	Thermal Comfort: Design	Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2007. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1		1				Mech design will ensure industry standards are met for temp/humidity control of the conditioned office suite. Achievement will require alternative comfort measures in the industrial/unconventional (semi-heated or unconditioned) work zones...industrial fans and heaters at minimum, but also possibly local spot coolers to better accommodate occupants.
Credit 7.2 Design	Thermal Comfort, Verification	Provide a permanent monitoring system to ensure building performance to the desired comfort criteria as determined by EQ Credit 7.1, Thermal Comfort: Design Agree to implement a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort related problems. Agree to develop a	1		1				Holistic CMF strategy. Refer to Admin checklist for notes. Eligibility for this credit requires successful achievement of IEQ c7.1.
Credit 8.1 Design	Daylight & Views, Daylight 75% of Spaces	OPTION 1 - Daylight Simulation Model: Demonstrate through computer simulations that 75% or more of all regularly occupied spaces areas achieve daylight illuminance levels of a minimum of 25fc and a maximum of 500 fc in a clear sky condition on September 21 at 9.00 am and 3.00 pm; areas with illuminance levels below or above the range do not comply. OPTION 2 - Prescriptive: Use a combination of side-lighting and/or top-lighting to achieve a total Daylighting Zone that is at least 75% (1 point) of all the regularly occupied spaces, according to the requirements in the reference guide. OPTION 3 - Daylight Measurement: Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 footcandles has been achieved in at least 75% of all regularly occupied areas. Measurements must be taken on a 10-foot grid for all occupied spaces and must be recorded on building floor plans. OPTION 4 - Combine Options 1, 2 & 3 to document the minimum daylight illumination in at	1					1	Not anticipated to be attainable.
Credit 8.2 Design	Daylight & Views, Views for 90% of Spaces	Achieve direct line of sight to the outdoor environment via vision glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of all regularly occupied areas.	1	1					Exterior windows and numerous amply sized view panels in roll-up doors will ensure unobstructed views to 90% of the occupied floor areas, including industrial work zones.



Sustainability Tracking Report LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA CMF Trades Maint. Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 16,090 gsf (2019 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Innovation & Design Process

Credit 1.1 Exemplary Performance: EAc6 2x green power REC purchase	Doubling the preserved vegetated open space required for SSc5.2. Option 2 applies in this campus setting.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.2 Exemplary Performance: SSc7.1 100% non-roof heat island	100% concrete paving would qualify.	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.3 Exemplary Performance: WEc3 - 45%+	Exceed WEc3 performance yielding at least a 45% calculated annual water use reduction for EPAct regulated fixtures.		1						Refer to WEc3 notes above.
Credit 1.4 Innovation in Design: Reduced Mercury Lighting	Established by CIR ruling 5500: Adoption of LEED-EB MRc6- Specify and install lamps for ALL project scope lighting, including both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures, such that the overall average of mercury content in lamps is 80 picograms per lumen-hour or less. Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts (i.e.- LED lamps).	1	1						Holistic CMF strategy. Refer to HQ checklist for notes.
Credit 1.5 Innovation in Design: Low-emitting ceilings and wall systems	Gypsum, insulation, wallcoverings, and ACT must be CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)	1	1						Products of concern will be specified & sourced as CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)
Credit 2 LEED Accredited Professional		1	1						Several LEED AP's are involved in the project. No cost premium.

Regional Priority (78719)

Credit 1.1 Regional Priority Credit: SSc6.1	Earn one of the six Regional Priority credits (credits identified as having additional regional environmental importance by the USGBC Regional Councils and Chapters for the project's location). A database of Regional Priority credits and their geographic applicability is available on the USGBC website – www.usgbc.org. One point is awarded for each Regional Priority credit earned. No more than 4 Regional Priority credits may be earned. Non-U.S. projects are not eligible for Regional Priority credits.	1						1	Alternate options are SSc5.1 & WEc2 Refer to notes above.
Credit 1.2 Regional Priority Credit: SSc6.2		1		1					
Credit 1.3 Regional Priority Credit: EAc2 -1%+		1						1	
Credit 1.4 Regional Priority Credit: MRc2 -75%		1	1						

POINT TOTALS:

109	52								
		4	4	3					
								47	

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points



Sustainability Tracking Report LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

60% Submittal
Progress Design

Project Information

Form 1 Design	Minimum Program Requirements	Confirm the project complies with the Minimum Program Requirements.	Req'd							BLDG LEVEL METERS REQUIRED Owner will need to commit to operational phase utility data either through ENERGY STAR or other data release upon request.
Form 2 Design	Project Summary Details	Provide details on the project GSF, site area, building footprint, budget, etc.	Req'd							LEED site boundary of APD LEED bldg project established, but to be refined using 100% site plan.
Form 3 Design	Occupant and Usage Data	Input occupant and usage data, including GSF by space usage type. Estimating occupancy as: Approx 24 peak, 34 daily FTE (8hr occupancy) staff (over 3 shifts) Initial estimate of (6) peak use visitor/transient load from other bldgs, (20) daily average Initial estimate of (30) peak use building occupants (including shift overlap)	Req'd							Anticipating 24/7/365 operations. ----- Refer left for occupancy load assumptions
Form 4 Design	Schedule and Overview Documents	Provide key points in the project schedule, and upload general project drawings as required.	Req'd							



to this project site's zip code. Refer to this "RP" Credit category at the end of this checklist for more details.

POINT TOTALS:

110	52					
		2	4	6		
						46

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Sustainable Sites

Prereq 1 Constr	Construction Activity Pollution Prevention	Create and implement an Erosion and Sedimentation Control (ESC) Plan for all construction activities associated with the project. The ESC Plan shall conform to the erosion and sedimentation requirements of the 2003 EPA Construction General Permit OR local erosion and sedimentation control standards and codes, whichever is more stringent.	Req'd							Code Required/Standard practice - Erosion and sediment control notes and plans are included in the construction docs. No cost premium.
Credit 1 Design	Site Selection	Do not develop buildings, hardscape, roads or parking areas on portions of sites that meet any one of the following criteria: (hidden below)	1						1	Final QC of EPA soil database website confirmed site is 100% prime farmland, making credit unattainable.
Credit 2 Design	Development Density & Community Connectivity	OPTION 1: Construct or renovate building on a previously developed site and in a community with a minimum density of 60,000 square feet per acre net. OPTION 2: Construct or renovate building on a previously developed site and within 1/2 mile of a residential zone or neighborhood with an average density of 10 units per acre net and within 1/2 mile of at least 10 basic services and with pedestrian access between the building and the services.	5						5	Site location / surrounding context does not qualify. Credit is NOT attainable.
Credit 3 Design	Brownfield Redevelopment	Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program) OR on a site classified as a brownfield by a local, state or federal government agency.	1						1	Not Likely. Although entire ABIA property is considered brownfield, unclear if prior golf course CMF site would qualify. To be attainable remediation/encapsulation of contaminants on CMF site needs to be documented.
Credit 4.1 Design	Alternative Transportation: Public Transportation Access	OPTION 1: Locate project within 1/2 mile of an existing (or planned and funded) commuter rail, light rail or subway station OPTION 2: Locate project within 1/4 mile of one or more stops for two or more public or campus bus lines usable by building occupants.	6						6	Unlikely....Site location / surrounding context does not qualify. Credit appears ONLY attainable if a routing shuttle would transport CMF occupants to busstop serving bus routes 100 & 350 at landside.
Credit 4.2 Design	Alternative Transportation: Bicycle Storage & Changing Rooms	CASE 1 (non-residential): Provide secure bicycle racks or storage (within 200 yards of the building) for 5% or more of all building users (measured at peak periods), and provide shower and changing facilities in the building or within 200 yards of a building entrance, for 0.5% of full-time equivalent occupants.	1	1						Site is inherently tied to vehicle use. However, credit attainable due to (3) scheduled staff showers (located in APD bldg) and approximately (2) bike rack spaces at APD front entry.
Credit 4.3 Design	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles	OPTION 1: Provide preferred parking for low-emitting and fuel-efficient vehicles for 5% of the total vehicle parking capacity of the site. OPTION 2: Install alternative-fuel refueling stations for 3% of the total vehicle parking capacity of the site. OPTION 3: Provide low-emitting and fuel-efficient vehicles for 3% of FTE occupants.	3	3						Per 90% design narrative, (72) non-fleet parking spaces (including ADA) are provided. Therefore, 100% dwgs will include (5%) = (4) "Low-Emitting and Fuel Efficient" reserved parking spaces designated with signs nearest to the front entrance.
Credit 4.4 Design	Alternative Transportation: Parking Capacity	CASE 1 (non-residential): OPTION 1 (non-residential with new parking): Size parking capacity to meet, but not exceed, minimum local zoning requirements and provide preferred parking for carpools or vanpools for 5% of the total provided parking spaces.	2						2	Not attainable. The unique facility type makes it difficult to justify its code minimum parking classification to demonstrate compliance.
Credit 5.1 Constr	Site Development, Protect or Restore Habitat	OPTION 2 (previously developed sites): Restore or protect a minimum of 50% of the site area (excluding the building footprint) with native or adapted vegetation.	1						1	Inherent site design / surrounding context does not qualify. Credit is NOT attainable.
Credit 5.2 Design	Site Development: Maximize Open Space	OPTION 1 (exceed zoning requirements): Reduce the development footprint (defined as entire building footprint, hardscape, access roads and parking) and/or provide vegetated open space within the project boundary to exceed the local zoning's open space requirement for the site by 25%. OPTION 2 (no zoning requirements): Provide vegetated open space area adjacent to the building that is equal to the building footprint.	1		1					Owner/DOA input needed. Airport is not subject to zoning requirements. However, Option 2 appears unattainable unless permanent open space can be claimed outside the official project limits of work.
Credit 6.1 Design	Stormwater Design: Quantity Control	OPTION 1 (existing imperviousness less than or equal to 50%): Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate for the one- and two-year, 24 hour design storms. OR implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies.	1						1	Not attainable. Current ABIA stormwater model does not include 1 yr storm data. Civil design scope did not include enhancement of model file to add this data for analysis purposes.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Credit 6.2 Design	Stormwater Design: Quality Control	Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall using acceptable best management practices (BMPs). BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids load based on existing monitoring reports.	1					1	Civil will need to further assess / run calcs to confirm reliability/attainability based on COA code compliance alone. Appears Austin qualifies as semi-arid, with less than 40 in annual rainfall, requiring 0.75in/24 event to be treated to 80%+ TSS removal (or otherwise infiltrated onsite or captured & reused for bldg processes - like for CMF carwash/toilet use) prior to any run-off discharge from property. COA requires treatment for only 0.55 inches of rainfall.
Credit 7.1 Constr	Heat Island Effect: Non-Roof	OPTION 1 (reflective paving, shading, and/or open grid pavement): Provide any combination of the following strategies for 50% of the site hardscape (including roads, sidewalks, courtyards and parking lots): •Shade from existing tree canopy or within five years of landscape installation; landscaping (trees) must be in place at the time of occupancy. •Shade from structures covered by solar panels that produce energy used to offset some non-renewable resource use. •Shade from architectural devices or structures that have a solar reflectance index (SRI) of at least 29. •Hardscape materials with an SRI of at least 29. •Open-grid pavement system (at least 50% pervious).	1	1					Option 1 applies, as there is no parking garage on site. All paving is currently scheduled to be standard portland cement concrete, which meets the SRI requirements of this credit - should be 100% compliant 2x the required amount, qualifying for "exemplary performance" Innovation point. Not considered a cost premium as it is part of overall project program requirements.
Credit 7.2 Design	Heat Island Effect: Roof	OPTION 1 (reflective roofing): Use roofing materials having an SRI of at least 78 for low-slope and 29 for steep-slope for a minimum of 75% of the roof surface.	1	1					Building roof specified as a white colored membrane system, will readily exceeding the minimum SRI requirements. No construction premium associated with it.
Credit 8 Design	Light Pollution Reduction	FOR INTERIOR LIGHTING All non-emergency interior lighting, with a direct line of sight to any openings in the envelope (translucent or transparent), shall have its input power reduced (by automatic device) by at least 50% between the hours of 11 PM and 5 AM. After hours override may be provided by a manual or occupant sensing device provided that the override last no more than 30 minutes. OR All openings in the envelope (translucent or transparent) with a direct line of sight to any nonemergency lighting shall have shielding (for a resultant transmittance of less than 10%) that will be controlled/closed by automatic device between the hours of 11 PM and 5 AM. FOR EXTERIOR LIGHTING Only light areas as required for safety and comfort. Do not exceed 80% of the lighting power densities for exterior areas and 50% for building facades and landscape features as defined in ASHRAE/IESNA Standard 90.1-2004. All projects shall be classified under one of the following zones, as defined in IESNA RP-33, and shall follow all of the requirements for that specific zone.	1	refer below					24 hrs operational space windows will require automatically controlled 90% opaque shades enacted for curfew hrs or auto dimming interior lighting. Shielded and high efficiency LED site & bldg light fixtures will be selected to meet efficiency & uplight /glare restrictions. Also- Light trespass must be met at property line, which is outside LEED site boundary. The LEEDv4 version of SS08 is being formally adopted for pursuit as interior lighting / curfew shading criteria has been eliminated. Refer below
	LEED v4 version http://www.usgbc.org/articles/use-v4-credits-your-v2009-project/	Meet uplight and light trespass requirements, using either the backlight-uplight-glare (BUG) method (Option 1) or the calculation method (Option 2). Projects may use different options for uplight and light trespass. Meet these requirements for all exterior luminaires located inside the project boundary (except those listed under "Exemptions"), based on the following: • the photometric characteristics of each luminaire when mounted in the same orientation and tilt as specified in the project design; and • the lighting zone of the project property (at the time construction begins). Classify the project under one lighting zone using the lighting zones definitions provided in the Illuminating Engineering Society and International Dark Sky Association (IES/IDA) Model Lighting Ordinance (MLO) User Guide. Additionally, meet the internally illuminated signage requirement. The following exterior lighting is exempt from the requirements, provided it is controlled separately from the nonexempt lighting: • specialized signal, directional, and marker lighting for transportation; • lighting that is used solely for façade and landscape lighting in MLO lighting zones 3 and 4, and is automatically turned off from midnight until 6 a.m.; • lighting for theatrical purposes for stage, film, and video performances; • government-mandated roadway lighting; • hospital emergency departments, including associated helipads; • lighting for the national flag in MLO lighting zones 2, 3, or 4; and • internally illuminated signage.		1					Site light fixtures comply with required BUG ratings. Exterior bldg light selections will also comply.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Water Efficiency

Prereq 1 Design	Water Use Reduction: 20% Reduction	Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	Req'd						Requirements will be surpassed by WEC2/WEC3 goals.
Credit 1.1 and 1.2 Design	Water Efficient Landscaping: Reduce by 50% or 100% (No Potable Water Use or No Irrigation) 50% = 2 pt, 100% = 4 pts	PATH 1 OPTION 1 (2 pts): Reduce potable water consumption for irrigation from a calculated mid-summer baseline case. Reductions shall be attributed to plant species factor and/or irrigation efficiency. OPTION 2 (4 pts): Meet the requirements for Option 1, and: PATH 1: Use only captured rainwater, recycled wastewater, recycled graywater or water treated and conveyed by a public agency specifically for nonpotable uses for irrigation.	4	4					Municipal reclaim to exclusively serve landscape irrigation. Landscape design utilizes drought tolerant selections and reduced planting density in alternative ground cover materials, served by a weather based irrigation system. Peak Month: Jul ETo Value: 8.23 inches/month - Rainfall: 1.01 inches/month
Credit 2 Design	Innovative Wastewater Technologies	OPTION 1: Reduce potable water use for building sewage conveyance by 50% through the use of water-conserving fixtures or non-potable water. OPTION 2: Treat 50% of wastewater on-site to tertiary standards. Treated water must be infiltrated or used on-site.	2					2	Not attainable. Per 5/23 Owner feedback, rainwater harvesting is not approved as project strategy. 8/23 Owner meeting confirmed no indoor reclaim use.
Credit 3.1 and 3.2 Design	Water Use Reduction: 30%, 35% or 40% Reduction 30% = 2 points, 35% = 3 pts, 40% = 4 pts	Employ strategies that in aggregate use a percentage less water than the water use baseline calculated for the building (not including irrigation) after meeting the requirements of the Energy Policy Act of 1992, Energy Policy Act of 2005, and Uniform Plumbing Code/International Plumbing Code 2006.	4	4					45%+ calculated reduction will be attainable using the following: * 0.125gpf "pint" max urinal * 1.28gpf toilets * 0.35gpm metered/sensor controlled lavatories * 1.0 gpm break room faucets * 1.5 gpm shower heads Little to no cost premium is associated with these fixtures.

Energy & Atmosphere

Prereq 1 Constr	Fundamental Commissioning of the Building Energy Systems	* Designate in individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities. * The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents. * Develop and incorporate commissioning requirements into the construction documents. * Develop and implement a commissioning plan. * Verify the installation and performance of the systems to be commissioned. * Complete a summary commissioning report.	Req'd						OPR still being developed through programming discussions. Initial BOD being developed through notes below and SD design narratives. Currently planned that this will be specified as GC obligation.
Prereq 2 Design	Minimum Energy Performance	OPTION 1 - WHOLE BUILDING ENERGY SIMULATION Demonstrate a 10% improvement for new buildings or a 5% improvement for existing building renovations in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard.	Req'd						Mandatory provisions will be integrated for various Arch/MEP designs. Overall energy efficiency requirement will be surpassed by EAc1 goal below.
Prereq 3 Design	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new building HVAC&R systems.	Req'd						The refrigerant based equipment in this new project will automatically comply. No cost premium.
Credit 1.1 through 1.10 Design	Optimize Energy Performance OPTION 1: New building: 12% = 1 pt, 14% = 2 pts, 16% = 3 pts, 18% = 4 pts, 20% = 5 pts, 22% = 6 pts, 24% = 7 pts, 26% = 8 pts, 28% = 9 pts, 30% = 10 pts, 32% = 11 pts, 34% = 12 pts, 36% = 13 pts, 38% = 14 pts, 40% = 15 pts, 42% = 16 pts, 44% = 17 pts, 46% = 18 pts, 48% = 19 pts	OPTION 1 (Whole Building Energy Simulation) (1-19 pts): Demonstrate a percentage improvement in the proposed building performance rating compared to the baseline building performance rating per ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda) by a whole building project simulation using the Building Performance Rating Method in Appendix G of the Standard. OPTION 2: Prescriptive Compliance Path: ASHRAE Advanced Energy Design Guide (1 pt) OPTION 3: Prescriptive Compliance Path: Advanced Buildings Core Performance Guide (1-3 pts)	19	10	1	2	2	4	60% Energy Analysis to follow 60% design submittal. Initial strategies could include: * High efficiency Mech units. * Mechanical energy/heat recovery systems * High efficiency LED interior AND site parking lighting. Daylight harvesting/sensors in optimal building zones. * Occupancy / Vacancy sensors throughout all rooms (occ sensors throughout will also complying with mandatory 90.1 "code" instead of timeclock) * Combo occ sensor/daylight sensor in occupied office / lounge spaces.
Credit 2.1 through 2.3 Design	On-Site Renewable Energy 1% = 1 pt, 3% = 2 pts, 5% = 3 pts, 7% = 4 pts, 9% = 5 pts, 11% = 6 pts, 13% = 7 pts	Use on-site renewable energy systems to offset building energy cost. Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building annual energy cost. Use the building annual energy cost calculated in EAc1 or use the DOE CBECS database to determine the estimated electricity use.	7					7	No PV / renewable system planned. DOA input needed- should bldgs be designed as "Solar ready" with roof structure designed for future solar panels, equipment room space for inverter/battery, and installed conduit pathways?
Credit 3 Constr	Enhanced Commissioning	1. Prior to the start of the construction documents phase, designate an independent CxA to lead, review, and oversee the completion of all commissioning process activities. The CxA shall, at a minimum, perform Tasks 2, 3, and 6. Other team members may perform Tasks 4 and 5. (hidden below)	2					2	Not currently planned, but technically attainable if 3rd party CxA is under contract by end of DD phase / prior to formally issued 60% set.



Sustainability Tracking Report LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe

Not Probable

No

**60% Submittal
Progress Design**

Credit 4 Design	Enhanced Refrigerant Management	OPTION 1: Do not use refrigerants. OPTION 2: Select refrigerants and HVAC&R that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. Small HVAC units (defined as containing less than 0.5 lbs of refrigerant), and other equipment such as standard refrigerators, small water coolers, and any other cooling equipment that contains less than 0.5 lbs of refrigerant, are not considered part of the "base building" system and are not subject to the requirements of this credit. AND do not install fire suppression systems that contain ozone-depleting substances (CFC's, HCFC's or Halons).	2			2			Attainability to be confirmed for APD post-60% submittal once unit selection/capacity is better known. Not typically attainable in smaller scale chillers or packaged mechanical equipment.
Credit 5 Design	Measurement & Verification	Option 3. Third Party Data Source (1 point) Meet MPR 6 through compliance Option 1: Energy and Water Data Release Form. Projects must register an account in ENERGY STAR's Portfolio Manager tool and share the project file with the USGBC master account.	3				1	2	DOA input needed - Post-60% discussion - Owner to advise if 5 yr post-occupancy ENERGY STAR portfolio mgr participation is planned / an option. The objective is to provide for the ongoing accountability of building energy consumption over time. * Option 3: (1) point available if DOA can commit to entering building level utility data into ENERGY STAR website for 5+ yrs post-occupancy. Requires building level utility meters, which is planned anyways. No cost premium.
Credit 6 Constr	Green Power	Provide at least 35% of the building's electricity from renewable sources by engaging in at least a two-year renewable energy contract. Renewable sources are defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. To determine the baseline electricity use, use the results of EAc1.	2	2					Readily attainable- 8/9 Owner call confirmed 100% of Austin Energy utility elec will be Green-E certified. Supporting doc letter to be acquired by ABIA during Constr.

Materials & Resources

Prereq 1 Design	Storage & Collection of Recyclables	Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.	Req'd						Indoor recycling container locations to be shown. No cost premium.
Credit 1.1 Constr	Building Reuse: Maintain Existing Walls, Floors & Roof 50% = 1 point, 75% = 2 pts, 95% = 3 pts	Maintain a percentage (based on surface area) of existing building structure (including structural floor and roof decking) and envelope (exterior skin and framing, excluding window assemblies and non-structural roofing material). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	3					3	N/A for new construction projects.
Credit 1.2 Constr	Building Reuse: Maintain 50% of Interior Non-Structural Elements	Use existing interior non-structural elements (interior walls, doors, floor coverings and ceiling systems) in at least 50% (by area) of the completed building (including additions). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.	1					1	N/A for new construction projects.
Credit 2.1 and 2.2 Constr	Construction Waste Management, Divert 50% or 75% From Disposal 50% = 1 point, 75% = 2 pts	Recycle and/or salvage a percentage of non-hazardous construction and demolition. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled.	2	2					Anticipating that 75% diversion should be readily attainable in new construction project. Minor premium may be associated with special commingled processing contracts but should only impact building waste, not paving waste materials.
Credit 3.1 and 3.2 Constr	Materials Reuse, 5% or 10% 5% = 1 point, 10% = 2 points	Use salvaged, refurbished or reused materials such that the sum of these materials constitutes a percentage (based on cost) of the total value of materials on the project.	2					2	Not attainable. Assuming at least \$1M in construction material costs MRC3 achievement would require at least \$50K (5%) worth of salvaged materials. However, salvaged material use is encouraged if any available wall panels or other items are on hand.
Credit 4.1 and 4.2 Constr	Recycled Content, 10% or 20% (post-c + 1/2 pre-c) 10% = 1 point, 20% = 2 pts	Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes a percentage (based on cost) of the total value of the materials in the project.	2	2					No asphalt will be used, but ideally flyash/slag can be maximized in concrete slabs & paving. Various strategically targeted recycled content bldg materials will need to be specified. There could be a cost premium associated.
Credit 5.1 and 5.2 Constr	Regional Materials, 10% or 20% Extracted, Processed & Manufactured Regionally 10% = 1 point, 20% = 2 pts	Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a percentage (based on cost) of the total materials value.	2	2					Ideally need to ensure use of regionally originating recycled and virgin quarried concrete raw materials (for paving as well as ALL building slabs). Other misc materials, including landscape plants will contribute to credit achievement. Cost premium uncertain.
Credit 6 Constr	Rapidly Renewable Materials	Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 2.5% of the total value of all building materials and products used in the project, based on cost.	1					1	Not attainable.
Credit 7 Constr	Certified Wood	Use a minimum of 50% of wood-based materials and products, which are certified in accordance with the Forest Stewardship Council's Principles and Criteria, for wood building components. These components include, but are not limited to, structural framing and general dimensional framing, flooring, sub-flooring, wood doors and finishes.	1	1					Wood materials in project anticipated to be limited to misc blocking, sheathing, millwork and flush wood doors. FSC certified content will be required of the greatest cost uses of wood to ensure 50%+ threshold is met. Minor cost premium if there's only limited wood presence.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

Pts Avail

Yes

Probable

Maybe


Not Probable

No

**60% Submittal
Progress Design**

Indoor Environmental Quality

Prereq 1 Design	Minimum IAQ Performance	OPTION 1 (mechanically ventilated): Meet the minimum requirements of Sections 4 through 7 of ASHRAE 62-2007, Ventilation for Acceptable Indoor Air Quality. Mechanical ventilation systems shall be designed using the Ventilation Rate procedure or the applicable local code, whichever is more stringent.	Req'd						Mechanical system is being designed to provide adequate ventilation air, based on training room seating capacity and ASHRAE default population assumptions for remaining spaces. No cost premium.
Prereq 2 Design	Environmental Tobacco Smoke (ETS) Control	OPTION 1 (non-smoking building): Prohibit smoking in the building. Locate any exterior designated smoking areas at least 25 feet away from entries, outdoor air intakes and operable windows. OPTION 2 (smoking building): See requirements in reference guide.	Req'd						Smoking policy signs will be required at each door- also sign to designate smoking area 25ft+ from any bldg entry is recommended. Assuming (4-5) signs/door decals. Only minor cost.
Credit 1 Design	Outdoor Air Delivery Monitoring	Install permanent monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain design minimum ventilation requirements. Configure all monitoring equipment to generate an alarm when the airflow values or CO2 levels vary by 10% or more from the design values via either a BAS alarm to the building operator or a visual/audible alert to the building occupants. OPTION 1 (mechanically ventilated): Monitor CO2 concentrations within all densely occupied spaces (25 people/1000 sf). CO2 monitors must be between 3 and 6 feet above the floor. For each mechanical ventilation system, provide a direct outdoor airflow measurement device capable of measuring the outdoor airflow rate with an accuracy of +/- 15% of the design minimum outdoor air rate, as defined by ASHRAE 62.1-2007	1	1					Option 1 applies as bldg is mechanically ventilated. This credit requires intake air flow measurement device and wall mounted CO2 sensors in densely occupied indoor areas, such as training/conference rooms. Credit achievement also requires notifications/alarms to be sent to operator or occupants should programmed intake air levels drop or CO2 levels rise above recommended levels. This will be achieved through a DDC based BMS / central control system. Cost premium depends on various factors.
Credit 2 Design	Increased Ventilation	CASE 1 (mechanically ventilated): Increase breathing zone outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007 as determined by EQp1.	1					1	Not anticipated to be attainable.
Credit 3.1 Constr	Construction IAQ Management Plan: During Construction	Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows: * During construction meet or exceed the recommended Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines For Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3). * Protect stored on-site or installed absorptive materials from moisture damage. * If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. Replace all filtration media immediately prior to occupancy.	1	1					Best practices for protection of IAQ during construction will be specified for GC, including ductwork protection, no smoking inside, jobsite housekeeping, etc. No cost premium.
Credit 3.2 Constr	Construction IAQ Management Plan: Before Occupancy	OPTION 1a (flush-out prior to occupancy): After construction ends, prior to occupancy and with all interior finishes installed, perform a building flush-out by supplying a total air volume of 14,000 cf of outdoor air per sf of floor area while maintaining an internal temperature of at least 60°F and relative humidity no higher than 60%. OPTION 1b (flush-out with early occupancy): Perform a building flush-out by supplying a minimum of 3,500 cf of outdoor air per sf of floor area a minimum of 3 hours prior to occupancy and during occupancy, until a total of 14,000 cf of outside air has been delivered to the space. OPTION 2 (IAQ testing): Conduct baseline IAQ testing, after construction ends and prior to occupancy, using testing protocols consistent with the US Environmental Protection Agency Compendium of Methods for the Determination of Air Pollutants in Indoor Air.	1	1					IAQ testing cost should be relatively low as long as qty of individual intake ventilation systems are small. Should only involve 1-2 testing locations.
Credit 4.1 Constr	Low-Emitting Materials: Adhesives & Sealants	All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Low-VOC interior products will be specified. No cost premium.
Credit 4.2 Constr	Low-Emitting Materials: Paints & Coatings	Paints and coatings used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the reference standards.	1	1					Low-VOC interior products will be specified. No cost premium.
Credit 4.3 Constr	Low-Emitting Materials: Flooring Systems	All flooring related finishes and installation accessories to comply with criteria as follows: (hidden below)	1	1					Low-VOC and properly certified/tested (Floor score resilient, Green Label carpet, etc) flooring selections will be specified. No cost premium.
Credit 4.4 Constr	Low-Emitting Materials: Composite Wood & Agrifiber Products	Composite wood and agrifiber products used on the interior of the building (defined as inside of the weatherproofing system) shall contain no added urea-formaldehyde resins. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifiber assemblies shall contain no added urea-formaldehyde.	1	1					NAUF engineered/composite wood materials will be required for all interior applications. Use of plastic or steel toilet partitions will reduce incidence, but criteria will affect sheathing, millwork, and wood core doors. Small cost premium due if a limited wood presence.

		<h1>Sustainability Tracking Report</h1> <h2>LEED 2009 BD+C Checklist Worksheet</h2>						60% Submittal Progress Design
Project Name: ABIA APD Bldg Location: 3600 Presidential Blvd, Austin, TX 78719 Project Goal: LEED Silver Size (GSF): Approx. 35,960 gsf (2026 Program Growth) September 29, 2017		Pts Avail	Yes	Probable	Maybe	Not Probable	No	
Credit 5 Design	Indoor Chemical & Pollutant Source Control Design to minimize and control pollutant entry into buildings and later cross-contamination of regularly occupied areas: * Employ permanent entryway systems at least ten feet long in the primary direction of travel to capture dirt and particulates from entering the building at regular entry points directly connected to the outdoors. Acceptable entryway systems include permanently installed grates, grilles, or slotted systems that allow for cleaning underneath. Roll-out mats are only acceptable when maintained on a weekly basis by a contracted service organization. * Where hazardous gases or chemicals may be present or used (including garages, housekeeping/laundry areas and copying/printing rooms), exhaust each space sufficiently to create negative pressure with respect to adjacent spaces with the doors to the room closed. For each of these spaces, provide self-closing doors and deck to deck partitions or a hard lid ceiling. * In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media prior to occupancy that provides a Minimum Efficiency Reporting Value (MERV) of 13 or better. Filtration should be applied to process both return and outside air that is to be delivered as supply air. * Provide containment (a closed container for storage for off-site disposal in a regulatory compliant storage area, preferably outside the building) for appropriate disposal of hazardous liquid wastes in places where water and chemical concentrate mixing occurs.	1	1					Credit requirements are being integrated. 10ft long walk off mats at ALL points of entry used by occupants. It excludes exterior Janitor closet will have "sealed" airspace via walls to deck, automatic door closers and outdoor exhaust but no return air. Need to identify any other unique chemical storage or activity spaces - such as soldering/spary booths, etc. Mech ventilation intake unit will use MERV-13 filter.
Credit 6.1 Design	Controllability of Systems: Lighting Provide individual lighting controls for 90% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences AND provide lighting system controllability for all shared multi-occupant spaces to enable lighting adjustment that meets group needs and preferences.	1	1					Task lights will be specified in furniture package for staff desks. Bi-level, dimming or multi zone lighting will be provided in collaboration spaces such as training/conf rooms. Cost premium for dual ballast fixtures and desk lamps. Assuming desk lamps of some kind.
Credit 6.2 Design	Controllability of Systems: Thermal Comfort Provide individual comfort controls for 50% (minimum) of the building occupants to enable adjustments to suit individual task needs and preferences. Operable windows can be used in lieu of comfort controls for occupants of areas that are 20 feet inside of and 10 feet to either side of the operable part of the window. The areas of operable window must meet the requirements of ASHRAE 62.1-2007, paragraph 5.1, Natural Ventilation AND provide comfort system controls for all shared multi-occupant spaces to enable adjustments to suit group needs and preferences.	1					1	Not realistically attainable without underfloor air system given numerous workstation locations.
Credit 7.1 Design	Thermal Comfort: Design Design HVAC systems and the building envelope to meet the requirements of ASHRAE Standard 55-2007. Demonstrate design compliance in accordance with the Section 6.1.1 Documentation.	1	1					Mech design will ensure industry standards are met for temp/humidity control throughout. No notable cost premium, beyond system selection addressed in EAc1 above.
Credit 7.2 Design	Thermal Comfort, Verification Provide a permanent monitoring system to ensure building performance to the desired comfort criteria as determined by EQ Credit 7.1, Thermal Comfort: Design Agree to implement a thermal comfort survey of building occupants within a period of six to 18 months after occupancy. This survey should collect anonymous responses about thermal comfort in the building including an assessment of overall satisfaction with thermal performance and identification of thermal comfort.	1					1	Warrants Owner/DOA discussion. Owner team (or contracted Commissioning authority scope) will need to commit to post-occupancy survey of staff (office & kitchen) to assess their general satisfaction with indoor temp/humidity levels. Best to precede end of 1 yr warranty phase commissioning activities.
Credit 8.1 Design	Daylight & Views, Daylight 75% of Spaces OPTION 1 - Daylight Simulation Model: Demonstrate through computer simulations that 75% or more of all regularly occupied spaces areas achieve daylight illuminance levels of a minimum of 25fc and a maximum of 500 fc in a clear sky condition on September 21 at 9.00 am and 3.00 pm; areas with illuminance levels below or above the range do not comply. OPTION 2 - Prescriptive: Use a combination of side-lighting and/or top-lighting to achieve a total Daylighting Zone that is at least 75% (1 point) of all the regularly occupied spaces, according to the requirements in the reference guide. OPTION 3 - Daylight Measurement: Demonstrate, through records of indoor light measurements, that a minimum daylight illumination level of 25 footcandles has been achieved in at least 75% of all regularly occupied areas. Measurements must be taken on a 10-foot grid for all occupied spaces and must be recorded on	1					1	Not anticipated to be attainable but will be verified post-60% - need to assess skylight locations, glazing selections, etc.
Credit 8.2 Design	Daylight & Views, Views for 90% of Spaces Achieve direct line of sight to the outdoor environment via vision glazing between 2'-6" and 7'-6" above finish floor for building occupants in 90% of all regularly occupied areas.	1	1					Anticipated to be attainable - nearly all occupied spaces have sufficient exterior window locations. Open office workstations proposed to be low paneled (max ht 44" AFF in key line of sight areas)
Innovation & Design Process								
Credit 1.1	Exemplary Performance: EAc6 2x green power Doubling the preserved vegetated open space required for SS5.2. Option 2 applies in this campus setting.	1	1					Refer to EAc6 notes above.
Credit 1.2	Exemplary Performance: SS7.1 100% non-roof heat island 100% concrete paving would qualify.	1	1					Refer to SS7.1 notes above.
Credit 1.3	Exemplary Performance: WEc3 - 45%+ Exceed WEc3 performance yielding at least a 45% calculated annual water use reduction for EPA regulated fixtures.		1					Refer to WEc3 notes above.
Credit 1.4	Innovation in Design: Reduced Mercury Lighting Established by CIR ruling 5500: Adoption of LEED-EB MRc6- Specify and install lamps for ALL project scope lighting, including both indoor and outdoor fixtures, as well as both hard-wired and portable fixtures, such that the the overall average of mercury content in lamps is 80 picograms per lumen-hour or less. Lamps containing no mercury may be counted toward plan compliance only if they have energy efficiency at least as good as their mercury-containing counterparts (i.e.- LED lamps).	1	1					Use of predominately non-mercury LED lighting, in conjunction with low mercury fluorescent will make this credit readily attainable. Will need to document/control the actual lamps the GC is installing to achieve credit. No added cost premium anticipated beyond that claimed for EAc1 above.



Sustainability Tracking Report

LEED 2009 BD+C Checklist Worksheet

Project Name: ABIA APD Bldg

Location: 3600 Presidential Blvd, Austin, TX 78719

Project Goal: LEED Silver

Size (GSF): Approx. 35,960 gsf (2026 Program Growth)

September 29, 2017

**60% Submittal
Progress Design**

Credit 1.5 Innovation in Design: Low-emitting ceilings and wall systems	Gypsum, insulation, wallcoverings, and ACT must be CDPHv1.1 TVOC compliant (for example: Green Guard Gold/SCS Indoor Adv Gold certified)	1	1						Products of concern will be specified & sourced as CDPHv1.1 TVOC compliant - (for example: Green Guard Gold/SCS Indoor Adv Gold certified)
Credit 2 Constr LEED Accredited Professional		1	1						Several LEED AP's are involved in the project. No cost premium.

Regional Priority (78719)

Credit 1.1 Regional Priority Credit: SSc6.1	Earn one of the six Regional Priority credits (credits identified as having additional regional environmental importance by the USGBC Regional Councils and Chapters for the project's location). A database of Regional Priority credits and their geographic applicability is available on the USGBC website – www.usgbc.org.	1					1	
Credit 1.2 Regional Priority Credit: SSc6.2		1					1	
Credit 1.3 Regional Priority Credit: WEc2 or EAc2 - 1%+	One point is awarded for each Regional Priority credit earned. No more than 4 Regional Priority credits may be earned. Non-U.S. projects are not eligible for Regional Priority credits.	1					1	
Credit 1.4 Regional Priority Credit: MRc2 -75%		1	1					

Alternate options are SSc5.1 & WEc2
Refer to notes above.

POINT TOTALS:

110	52					
		2	4	6		
					46	

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80-110 points

Date: October 18, 2017
 To: Mayor Adler, Council Members, City of Austin Planning Commission and Zoning and Platting, CodeNEXT Consultants, CodeNEXT Staff
 From: Design Commission
 Subject: Recommendations regarding the second draft of CodeNEXT code and map

Per LDC §25-2-586, the Design Commission evaluates and makes recommendations to the Planning and Zoning Director regarding whether density bonus projects substantially comply with the Urban Design Guidelines, one of the three Gatekeeper Requirements for the Density Bonus Program. The Design Commission proposes the following recommendations to the second draft of the CodeNEXT text and maps:

- The Commission supports the proposal to add a Downtown Development Bonus Fee for non-residential projects.
- The Commission proposes that all downtown have a two-tiered Density Bonus program, like the current program in the Rainey Street District. The first FAR tier could have a properly calibrated affordable housing requirement, without a fee-in-lieu option. The second FAR tier could have a fee-in-lieu option.
- The Commission recommends that the Community Benefit requirements be expanded to all uses opting into the Downtown Density Bonus Program.
- The Commission suggests Community Benefits include mobility alternatives that support biking & pedestrian transit and manages off street parking and ride-share loading availability to reduce street traffic and support Vision Zero's mission to reduce pedestrian fatalities.
- 23-3E 2040: Changes to Design of Proposed Building. If the design of a building substantially changes after the Downtown Density Bonus is approved then the applicant should be required to return to the Design Commission to present these changes.
- The Commission strongly encourages that the fee-in-lieu be properly calibrated annually so that onsite affordable housing becomes a viable option for developers.
- The Commission supports lowering the threshold for requiring a Traffic Impact Analysis.
- The Commission believes MS2B Zoning should be included in the Citywide Affordable Housing Bonus Program. It has been mapped on many of the Imagine Austin Activity Corridors where affordable housing should be directed.
- The Commission suggests that the proposed Density Bonus of Max Dwelling Units per Acre should be more equitable and mapped in more areas of the city. There is a vast area of west Austin where it has not been applied. Density should not be the burden of one neighborhood.
- The Commission requests that a rationale be provided for determining map boundaries to establish form-based versus use-based zoning for all areas of the city, but especially in central Austin and within one mile of Core Transit Corridors.

Thank you for this opportunity to participate in the CodeNEXT process.

Respectfully Submitted on behalf of the City of Austin Design Commission

David Carroll, AIA
Chair, Design Commission

MG CODE NEXT COMMENTS

Off-site Production

Off-site production of affordable units may be proposed if the off-site production of affordable units produces more affordable units or a greater community benefit, as determined by the Housing Director. Off-site affordable units:

Off site affordable units must be in areas of "high opportunity" close to public transportation, business districts, parks. Define high opportunity areas explicitly. How do we ensure dedicated land would provide a similar/equivalent housing opportunity

Housing Director has discretionary action in what defines "high opportunity" locations for affordable housing. Is there a set of criteria by which the decisions are rendered. Can we have a presentation by the housing director. Design Commission only required for Density Bonus Program. We should enforce review process for city wide affordable housing bonus

(B) To determine the total fee, the bonus square footage of the non-residential development is multiplied by the Housing Fee-in-Lieu (dollar amount per square foot as published in the City's fee schedule at the time the project's site plan is submitted), using the following formula:

Bonus Square Feet x Housing Fee-In-Lieu per Square Foot = Total Fee

The code does not reference any kind of approximate fee in lieu schedule for different areas of the city that can be adjusted at the time of site plan. A reference fee matrix will be very helpful.

(B) To determine the total fee, the bonus square footage of the non-residential development is multiplied by the Housing Fee-in-Lieu (dollar amount per square foot as published in the City's fee schedule at the time the project's site plan is submitted), using the following

formula: Bonus Square Feet x Housing Fee-In-Lieu per Square Foot = Total Fee

23-3E-1070

Non Residential Fee Adjustment and Update

The Housing fee-in-lieu may be adjusted annually as determined by the Housing Director and adopted by the Council to the City's fee schedule. The designated review group may provide recommendations to the Housing Director on adjustments to the fee-in-lieu rate.

Who is the designated review group that aids in determining fee in lieu schedule. Should Design Commission have input? Assigning a public service task force to help determine adequate market adjustment per year.

City's fee schedule published at time of the project's site plan submittal. Is there a current fee schedule to reference approximate fee in lieu?

Downtown Density Bonus

The development includes community benefits described in Section 23-3E- 2050 (Community Benefits) in addition to those required to achieve the floor area ratio in Figure 1 (Downtown Density Bonus Program Map);

Predictable outcome of ON SITE community benefits. If development will provide affordability completely off site either by fee in lieu or dedicated land, or nearby property, something tangible and physical must still be

provided on site. It can be a small pocket plaza, publically accessible green roof or terrace, small cultural center etc.

The applicant should execute a restrictive covenant committing to specific community benefit beyond the gate keeper requirements if not providing ON SITE affordable housing and paying exclusively fee in lieu
Such as:

Day Care Services Community Benefit
Cultural Uses Community Benefit
Live Music Community Benefit
On-Site Improvements for Historic Preservation Community Benefit
Green Building Community Benefit
Publicly Accessible On Site Plaza Community Benefit
Green Roof Community Benefit

The application shall include a vicinity plan locating the project in context and showing a minimum 9 block area around the project, the location and nature of nearby transit facilities, and a landscape plan

I appreciate the addition of contextual information for the traffic impact and consequence of additional density. Can these parameters be applied to the off-site affordable housing to determine it's an area of high opportunity.

- (1) The Planning Director will consider the following to make a determination:
- (a) If members of the general public will be able to enjoy the proposed other community benefit without paying for its access, use or enjoyment;
 - (b) If the proposed other community benefit will connect to and be accessible from public right-of-way or other publicly-accessible space;
 - (c) If the proposed other community benefit will provide a public amenity that is particularly lacking in the proposed location;
 - (d) If the proposed other community benefit will not impose a significant burden on public resources for maintenance, management, policing, or other reasons; and,
 - (e) Any other information provided by the applicant that shows the other community benefit serves a public and municipal purpose and furthers the City's comprehensive planning goals