

MOONTOWER

Feasibility Study Example

DELIVERABLE #1:

Site Visit & Build Evaluation

A member from our construction team visits the site to perform an evaluation of existing conditions which gets presented along with our property research. This allows our build team to familiarize themselves with the project early on and highlight any additional scope items or areas of concern that may need to be incorporated into the project. If there is an existing building in the project scope, we also perform a Matterport Scan which is a 3D camera technology used to produce 4K virtual tours of a building. This documents the interior spaces and produces a floor plan to scale. This floor plan serves as the basis for design development in this phase.

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Build Evaluation

Property Address: 1xxxx 78704
Date of Evaluation: 06/21/2024, 2:00PM
Conditions: Temp: 89°F Humidity: 55%, Partly Cloudy
Prepared by: Maciej Ludwiczek



- Type: Single Family
- Cooling: Central, electric
- Foundation: Pier and Beam
- Year Built: 1939
- Heating: Central, gas
- Living area: 1,482 sf

GENERAL NOTES

As an upfront note, the intent of this summary is to discuss considerations for renovation of the existing structure. There are a number of items to note regarding the existing infrastructure of the main house and the property as a whole that will be relevant to the design of this project. Note that the second floor of the addition was not accessible during the inspection and is not a part of this

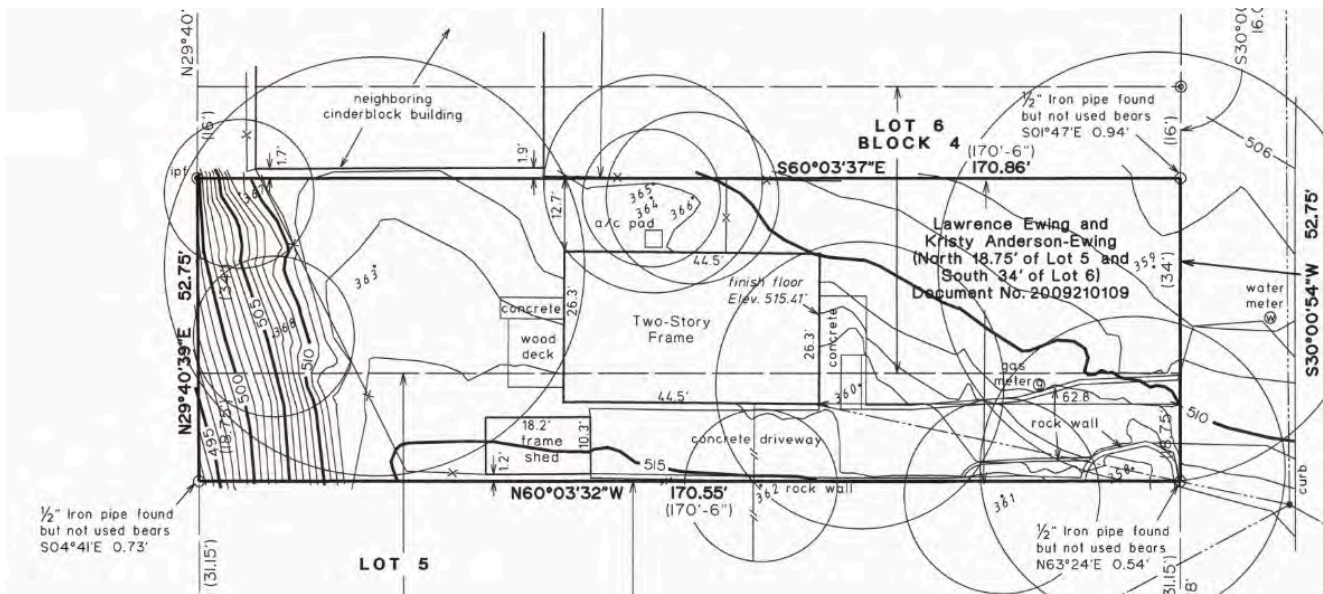
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Build Evaluation

evaluation.

The house on S 5th St was built in the late 1930s with components typical for that period of time. The stick frame structure is built on cedar piers and wood beams foundation. The property wears signs of significant exterior deterioration due to water penetrations and pests. Despite the age and exterior damage of the property, a number of improvements have been made throughout the years to improve the living conditions. Electrical system and service has been fully updated and the attic space has been insulated with blown in insulation and radiant barrier. The two story back portion of the house has been added at a later date. City of Austin permit public searches show no results regarding the addition work, indicating that the modifications could have been done without city inspectors' oversight.

SITE WATER & DRAINAGE



The home structure is located at the hill between the lower 5th street and the West Bouldin Creek. The lot provides plenty of slope for gravitational water drainage. Inspection of crawl space indicated no signs of water puddling or intrusion underneath the house.

FOUNDATION

The original foundation structure consists of cedar piers and 4x6 beams. The beams are supporting 2x6 floor joists on top of which a diagonal subfloor was laid. The newer back part of the house was built on cylindrical concrete piers with framing assembly matching the older part of the house.

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Overall the perimeter stucco skirt is doing a good job keeping the water from entering the crawl space. Additionally the crawl space vents are providing good air circulation. Except for a few areas where water is entering through damaged siding there is no visible moisture, rotting, mold or termite damage underneath the house. Moreover both cyder and concrete piers were equipped with metal termite pier caps, effectively mitigating termite damage.

Evaluation with a ZIP level measuring device confirmed that the foundation settling is within acceptable parameters.



FRAMING & STRUCTURE

The structure is stick framed with 2x4 lumber for the walls, 2x6 ceiling joists and roof rafters spaced approximately 20” apart. The ceilings and interior walls are covered with ¾ wood shiplap and the attic is insulated with a newly installed layer of blown-in insulation. The roof deck underside is wrapped with a radiant barrier and the space is vented with gable vents.

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Given the age of the house and a presence of shiplap walls and ceilings it is most likely that the exterior walls are not insulated which was common practice at the time. There is a visible presence of tar paper underneath the wood lap siding that acts as a water and moisture barrier. However a lack of an air gap between the two components, prevents the moisture from naturally drying and causes significant wood rot. The situation is exacerbated by the lack of overhangs at the single story part of the house.

Typically, older homes were built in a way to allow the air and vapor flow through the exterior wall assembly and encourage natural drying of all the wood components. By installing the tar paper, the ventilation process has been disrupted and the ability of the moisture that penetrated the siding to dry has been disrupted. As an effect the house is experiencing significant exterior wood damage. Extensive framing, siding and waterproofing repair work will be necessary when planning a renovation.

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The original part of the house is equipped with sash type wood windows. This type of window requires complex reframing of the window opening when replacing to a modern window type.

ROOF

Integrity of the roof covering could not be confirmed due to the roof decking being obstructed in the attic by the radiant barrier, however noticeable soffit wood rot and damage is visible from the exterior at the two story part of the house. Roof covering should be removed and replaced to properly address the issue.

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MECHANICAL (HVAC)

The house is conditioned with a gas air handler installed in the attic and a 2.5 ton condenser located on the right side of the building. According to the label the equipment was manufactured in July 1999. The ductwork appears to be relatively new. The systems works as intended however with the equipment being 25 years old it is at the end of it's lifespan. Moreover with the R22 refrigerant being banned since 2010, the service and repair of these older systems is difficult and costly. Replacement of the whole mechanical system to meet current efficiency standards is highly recommended.

PLUMBING

Wastewater Tap and Primary Drain Line

The house is equipped with a 50 gal gas water heater from 09/2011. The unit is located in the outdoor closet. Although it is functional, the equipment this age is prone to building up sediment and rust at the bottom of the tank. This may affect the water quality at the house. For that reason it is usually recommended to replace the water heater every 10-12 years.

Both galvanized water lines and cast iron drains underneath the house seem to be original with a few sections repaired or replaced using PVC. Cast iron drain pipes are prone to developing rust built up, cracking and clogging. Similarly with the galvanized water pipes, with time they tend to develop build up inside which affects the water quality and pressure. Comprehensive replacement of the entire

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plumbing system is recommended.



Water Meter

The water meter is located on 5th near the driveway. The water meter is a 5/8" size which means that it will need to be upgraded if there are more than three and a half bathrooms on the property.

ELECTRICAL

According to the permit history the main electrical service was rebuilt in 2023 after a winter weather

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event. The main panel is located on the front left corner of the exterior and is equipped with a 200A main circuit breaker and feeds a subpanel located nearby. Although the electrical system appears to function as intended, other than the service rack replacement, there is no history of electrical work being performed and inspected by a city official. Evaluation of electrical work code compliance by a licensed electrician is recommended.



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WALL INSULATION, WATER CONTROL & AIR TIGHTNESS

Residential insulation and air tightness building standards did not exist when the house was originally built in 1939 so it is important to visually confirm the components of the current wall assembly and assess the ability of the wall to resist water damage and limit air and heat leakage from the inside air to the surrounding outdoor air. Fiberglass batt insulation was most likely installed in the wall cavities of the addition, but the presence, type, and condition of the insulation in the walls of the house should be confirmed. Similarly, the presence, type, and condition of any “house wrap” or water control layer behind the wood siding needs to be evaluated. The other major component of the wall assembly that can be identified are the original wood windows which are a major point of air and heat leakage into the house.

Given the structural conditions and design of the existing home, it is recommended to explore design solutions that do not significantly alter the structure of the house in the original footprint. Given the age, historic and sentimental value, it would be really difficult to avoid significant scope creep when altering the structure.

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RECOMMENDED THIRD PARTY EVALUATIONS

- Schedule a site visit with the Structural Engineer to evaluate existing conditions.
- Perform exploratory demolition to confirm wall assembly

DELIVERABLE #2:

Development Research

We start by putting together a development research packet specific to your property, looking at all applicable codes and regulations that can affect the project and confirming what is possible before we start design. For example, we take note of all zoning restrictions, easements, identify historic status, check for floodplain and flag expired permits. A site survey, provided by the Owner, is required to complete project research.

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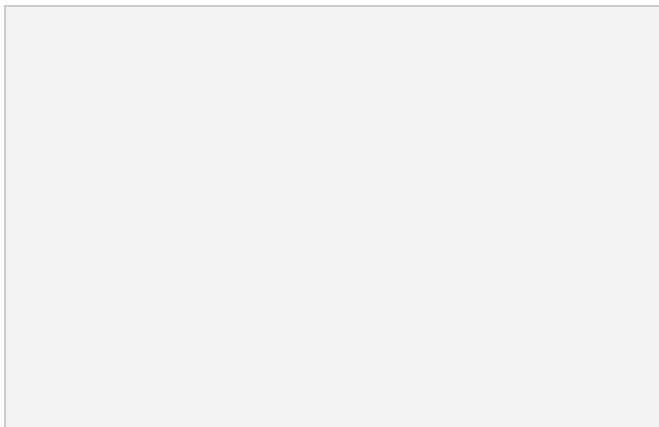
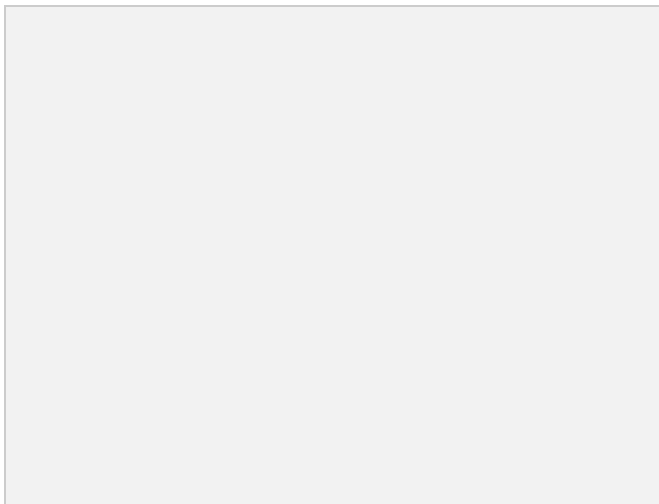
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Owner: xxxx
Address: xxxx
Date: xx

PROJECT SCOPE

Design a master plan for the property that includes an remodel/addition and/or new construction project. The program includes 3 bedrooms, 3 bathrooms, an office, covered parking, and a screen porch. In addition to the main residence the design must include an ADU. The design must take advantage of the views to the greenbelt and maintain the traditional bungalow form from the approach.

PROJECT LOCATION



Aerial and Street Site Views

PROPERTY INFORMATION

General property information, gathered in preparation for permitting.

Profile Report

Property ID: 101894
Legal Lot Status: No, N18.75 FT OF LOT 5 & S
 34 FT OF LOT 6 BLK 4
 CAPITAL HEIGHTS
County: Travis
Year Built: 1939
Lot Size: 9004.40 sf
Tap Depth & Size: W 2' deep ¾"
Permits: Expired: 1984-116560 W

ZONING

Zoning establishes the types of land uses permitted on a parcel of land. Zoning also sets the development standards for a site, such as building height, setbacks, floor-to-area ratio, neighborhood compatibility, screening, landscaping, and impervious cover limitations. The purpose of land use regulations such as zoning is to create compatible land uses, ensure proper design and construction standards, and promote the overall public good.

Your Property's Zoning: SF-3_NP

Your Property's Site Development Regulations

- Maximum Building Coverage: 40%
- Maximum Impervious Cover: 45%
- Maximum Units Per Lot: 3
- Maximum Height: 35 ft
- Front Yard Setback: 25 ft
- Street Side Yard Setback: 15 ft
- Interior Side Yard Setback: 5 ft

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OVERLAYS & COMBINING DISTRICTS

The purpose of a Conditional Overlay (CO) combining district is to modify use and site development regulations to address the specific circumstances presented by a site. Overlay districts add additional zoning standards to the base district.

Subchapter F: Residential Design and Compatibility Standards

This Subchapter, commonly referred to as the “McMansion Ordinance” was approved by the City of Austin Council in September of 2006. It is intended to minimize the impact of new construction, remodeling, and additions to existing buildings on surrounding properties in residential neighborhoods by defining an acceptable buildable area for each lot within which new development may occur.

Under HOME Subchapter F is entirely waived for all structures on a site that uses the Duplex, Two-Unit Residential, or Three-Unit Residential Uses. No tent, no additional documentation and review

HOME ORDINANCE

*On Dec. 7, 2023 the Austin City Council **passed** new code amendments for the first phase of the “Home Options for Middle-Income Empowerment” (HOME) Initiative. The approved code amendments are among **a series of updates** to the City’s Land Development Code (LDC). The goal of these changes is to provide more housing types and increase housing supply within single-family zoned areas of Austin. The Development Services Department is currently operationalizing the HOME amendments. Development applications related to these changes will be accepted beginning Monday, Feb. 5, 2024.*

These approved code amendments are as follows:

- **ADU and Duplex Simplification:** Former LDC constraints that prevented many Duplex and Two-Family Uses are removed: 10’ ADU separations, duplex structural connection requirements, maximum ADU size, etc. Building Codes will dictate separation distances and fire ratings between structures or parts of structures, freeing architects to design to the specific site and program instead of LDC constraints. Some typologies may require IBC versus IRC for specific arrangements of units (three-story stacks, for example), but that is now the project team’s decision to make.
- **Preservation Bonus:** For structures build on or before 31 December 1960, the area of the existing dwelling can be excluded from the FAR maximum if 50% of the existing dwelling unit and 100% of the street-facing facade are preserved.
- **Accessory Dwelling Units and Accessory Structures**
 - HOME eliminates the “primary” vs. “secondary” (also referred to as “accessory”) use distinction.
 - The HOME ordinance also amended Chapter 25-2, Article 5 (Accessory Uses) to eliminate guest houses, on-site employee housing, and accessory apartments as categories of accessory uses.
 - HOME did not change requirements applicable to accessory structures that are not dwelling units. For guidance on what constitutes a dwelling unit, see [Code Interpretation No. CI2021-010](#) (PDF).
- **Subchapter F Waived:** Subchapter F is entirely waived for all structures on a site that uses the Duplex,

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Two-Unit Residential, or Three-Unit Residential Uses. No tent, no additional documentation and review

- **Maximum Development Permitted:** For two units or duplexes the greater of 55% or 3,200 sf for your site.

	TWO UNITS	THREE UNITS
TOTAL	0.55 or 3,200 SF	0.65 or 4,350 SF
ANY SINGLE NEW UNIT	0.4 or 2,300 SF	0.4 or 2,300 SF
ANY TWO NEW UNITS	-	0.55 or 3,200 SF

- **Maximum Building Height:** 32 feet

NEIGHBORHOOD PLAN

Neighborhood planning provides an opportunity for community members to shape the neighborhoods where they live, work or own property, while addressing land use, zoning, transportation and urban design issues. Click on the [Official City Map](#) or the [ArcGIS Map](#) to see the Adopted Neighborhood Planning Areas.

Your Property's Neighborhood Plan: [Bouldin Creek](#)

Design Guideline: Maintain the existing character of the house style within the neighborhood. Encourage new construction, additions, or reconstruction that use key architectural character elements found in the neighborhood.

USE & DEVELOPMENT REGULATIONS

Non complying Structures

A building, structure, or area, including off-street parking or loading areas, that does not comply with currently applicable site development regulations for the district in which it is located, but did comply with applicable regulations at the time it was constructed.

Openness of Required Yards

- Except as otherwise provided in this section, a required yard must be open and unobstructed from finished grade to the sky. This restriction does not apply to a yard or part of a yard that is not required by this article.
- A window sill, belt course, cornice, flue, chimney, eave, box window, or cantilevered bay window may project two feet into a required yard. The two foot limitation does not apply to a feature required for a passive energy design.
- Uncovered steps or a porch or stoop that is not more than three feet above ground level may project three feet into a required yard.
- A parking area may be located in a required yard, unless prohibited by Article 10 (Compatibility Standards).

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- E. In a townhouse and condominium residence (SF-6) or more restrictive district, a pool, including a swimming pool, reflecting pool, or fountain, may be located in a required yard.
- F. Landscaping may be located in a required yard.
- G. This subsection applies to a building located in a multifamily residence medium density (MF-3) or more restrictive district. A covered porch that is open on three sides may project five feet into a required front yard, a street side yard, or both.
- H. A ramp for a new or an existing single-family or duplex residential unit may be constructed in a required yard if:
 - a. a person with a disability requires access to a dwelling entrance that meets the requirements of the Residential Code, Section R320.6 (Visitable dwelling entrance);
 - b. the ramp:
 - i. is no wider than 48 inches, except that any portion of a landing for the ramp required for turns may be no wider than 60 inches;
 - ii. may have a hand railing, but may not have a roof or walls; and
 - iii. the building official determines that the ramp will not pose a threat to public health and safety; and
 - c. encroachment into the required yard:
 - i. is the minimum amount necessary to provide access for a person with a disability;
 - ii. does not extend more than three feet into a side yard setback; and
 - iii. is not located in a rear yard setback unless:
 - 1. the dwelling is located on a corner lot;
 - 2. access is from an alley; or
 - 3. another requirement of this title prohibits location of the ramp in the front or side yard.

PARKING, DRIVEWAYS & SIDEWALKS

The city **no longer requires on site parking and site access** for residential properties including.

1. Driveway & Apron Requirements:

a. **Parking & Driveway Compliance Policies**

- 2. **Sidewalk Requirements** - If you don't have an existing sidewalk on your property, you may be required to install a new sidewalk. If you are required to install a sidewalk, but don't want to, you can file a request to pay a fee in lieu with your permit application. An applicant who has not filed a request at the time of application, may later amend the application to request to pay a fee instead of installing a sidewalk.

These developments below trigger the sidewalk requirement:

a. A building permit for construction of:

- i. a new building; or
- ii. an addition to an existing building that increases the building's gross floor area by 50 percent or more; or

b. a relocation permit to move a building from one site to another.

HERITAGE & PROTECTED TREES

The city regulates construction within a certain distance of the critical root zone of heritage and protected trees. You may apply for a tree removal permit if a tree is dead, diseased or an imminent hazard.

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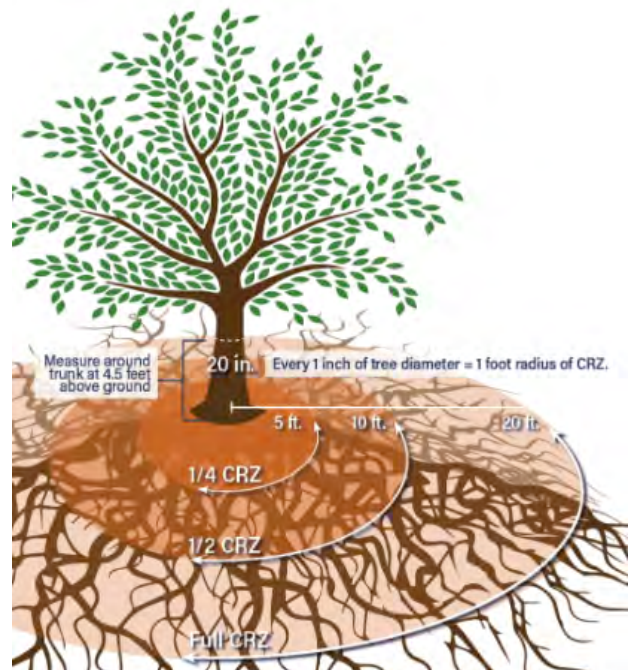
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- **Heritage Tree:** a tree that has a diameter of 24 inches or more, measured four and one-half feet above natural grade, and is one of the following species: Ash, Texas; Cypress, Bald; Elm, American; Elm, Cedar; Madrone, Texas; Maple, Bigtooth; All Oaks; Pecan; Walnut, Arizona; Walnut, Eastern Black
- **Protected Tree :** a tree with a diameter of 19 inches or more, measured four and one-half feet above natural grade.
- **Your Property's Protected Trees:** According to the property survey.
 - Protected 26.5" dia. Live Oak
 - Protected 25" dia. Live Oak
 - Protected 36.5" dia. Live Oak
 - Protected 19" dia. Live Oak

Tree Preservation Criteria

A. Critical Root Zone Impacts

- a. A minimum of 50 percent of the critical root zone must be preserved at natural grade, with natural ground cover.
- b. No cut or fill greater than four (4) inches will be located closer to the tree trunk than $\frac{1}{2}$ the CRZ radius distance.
- c. No cut or fill within the distance from the tree which is three (3) times the trunk diameter (also can be determined by calculating the $\frac{1}{4}$ CRZ). For example, no cut is allowed within 60-inches of a tree which has a 20-inch diameter trunk.
- d. Examples of CRZ impacts: trenching for utilities, irrigation lines, and french drains, vehicle compaction, grade changes (cut and fill), fence posts, material storage/staging areas, and chemical impacts (temporary toilets, concrete washout area, and hydraulic fluid/gasoline leaks).



- B. Crown Impacts:** This standard states that not more than 25 percent of the foliage should be removed within an annual growing season, and that the percentage and distribution of foliage to be removed shall be adjusted according to the plant's species, age, health, and site. In situations where more than 25 percent is requested, a tree permit is required.
- C. Mitigation** (after authorized removal of a protected tree): The city arborist will recommend an appropriate mitigation plan.
 - a. A typical program would include one or more of the following mitigation measures:
 - i. Planting replacement trees;
 - ii. Preserve or restore natural areas, ecosystems, or plant communities;
 - iii. Providing a maintenance program for trees to be retained; See C.O.A. "Remedial Tree Care Notes" - Appendix P-6;
 - iv. Requiring special construction techniques;
 - v. Transplanting existing trees; and,
 - vi. Alternative mitigation proposals for enhancement of the urban forest (e.g. payment into a

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tree fund).

- b.** A standard formula of one caliper inch of replacement value is equivalent to \$200.00, or \$75.00 for certified affordable developments and placed into the UFRF. Trees have varying values based upon numerous tree and site conditions (see ECM 3.5.1). The following mitigation rates apply for medium valued trees; however the City Arborist may raise or reduce these rates for high or low valued trees:
 - i.** Heritage - 300%.
 - ii.** Greater than 19 inches diameter and located in Appendix F - 100%.
 - iii.** 8 to 18.9 diameter inches and located in Appendix F - 50%.
 - iv.** Greater than 19 inches diameter and greater and not located in Appendix F - 50%.
 - v.** 8 to 18.9 inches diameter and not located in Appendix F - 25%.
 - vi.** Sizes smaller than 8 diameter inches found in Appendix F (for example: development in Parks under ECM Section 5.3.0 and Hill Country Roadways under ECM Section 2.7.0) - 50%.
 - vii.** Sizes smaller than 8 diameter inches and not found in Appendix F (for example: development in Parks under ECM Section 5.3.0 and Hill Country Roadways under ECM Section 2.7.0) - 25%.

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HISTORIC DISTRICTS

Both Local and National Register Historic Districts are geographically-defined areas possessing a significant concentration of buildings united by their history and/or architecture. The Local Historic District offers the strongest protection and greatest benefit for older neighborhoods through design standards and review. Properties in Local Historic Districts are indicated by the addition of "HD" in the zoning designation for each parcel. For both historical districts design standards are based on the Secretary of the Interior's Standards for the Rehabilitation of Historic Properties. On the rare occasion that the historical commission identifies the structure under review as a potential landmark; they can initiate landmark status. It's important to note that the Historic Preservation Office may require additional reviews and permits if a residence is more than 45 years old.

National Register Historic District	Local Historic District
Designation by Texas Historical Commission & National Park Service	Designation by Austin City Council
Demo & Building Permits and exterior changes require advisory review by Historic Landmark Commission.	Demo & Building Permits and exterior changes require a Certificate of Appropriateness approved by Historic Landmark Commission.
General preservation guidelines used for review based on Secretary of Interior's Standards.	Preservation Plan and Design Standards specifically developed for each district used for review.
Federal income tax incentive for rehab of income producing properties.	Property tax abatement for rehab of residential & commercial properties AND Federal income tax incentive for rehab of income producing properties.
Allow City to delay releasing demolition permits for up to 180 days for contributing structures.	Allow City to delay releasing demolition permits for up to 180 days for contributing structures in pending districts.

Is your property in a historic district?

Local Historic District: No
 National Historic District: No
 Historic Preservation Review: Yes, the house is more than 45 years old.

VISITABILITY

Visitability is an ordinance approved in January of 2014 that seeks to increase the supply of accessible housing through the inclusion of three basic structural features at the time of home construction: a zero-step entrance, wide doorways, and at least a half bath on the main floor of the home. It requires that any project with a new single-family or duplex dwelling with habitable space on the first floor must be designed and constructed as a visitable dwelling in compliance with the requirements of Section R320. The requirements are limited to new construction and do not apply to remodels or additions.

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DEVELOPMENT CALCULATIONS

<i>Site Development Information</i>			
AREA	EXISTING SF	NEW/ADDED SF	TOTAL SF
<i>a) 1st Floor Conditioned Area</i>	1,163.85		1,163.85
<i>b) 2nd Floor Conditioned Area</i>	312.00		312.00
<i>c) 3rd Floor Conditioned Area</i>			0.00
<i>d) Basement</i>			0.00
<i>e) Attached Covered Parking (garage or carport)</i>			0.00
<i>f) Detached Covered Parking (garage or carport)</i>	180.29		180.29
<i>g) Covered Wood Decks (counted at 100%)</i>			0.00
<i>h) Covered Patio</i>			0.00
<i>i) Covered Porch</i>			0.00
<i>j) Balcony</i>			0.00
<i>k) Other - Specify: Accessory Structure</i>			0.00
Total Gross Building Area <i>(Add A through k)</i>	1,656.14	0.00	1,656.14
Total Building Coverage (TBC) <i>(From TBA subtract, if applicable: b,c,d, and j)</i>	1,344.14	0.00	1,344.14
<i>l) Driveway</i>	1,180.32		1,180.32
<i>m) Sidewalks</i>	28.90		28.90
<i>n) Uncovered Patio</i>	172.17		172.17
<i>o) Uncovered Wood Decks (counted at 50%)</i>	57.22		57.22
<i>p) AC pads and other concrete flatwork</i>	9.00		9.00
<i>q) Other (pool coping, retaining walls)</i>	238.63		238.63
Total Impervious Coverage <i>(add: TBC and I through q)</i>	3,030.38	0.00	3,030.38
<i>r) Pool</i>		0.00	0.00
<i>s) Spa</i>		0.00	0.00

Subchapter F - Gross Floor Area

AREA DESCRIPTION	EXIST	NEW	EXEMPTIONS		APPLIED	TOTAL
			APPLICABLE	DESCRIPTION		
<i>1st Floor</i>	1,163.85		-		0.00	1,163.85
<i>2nd Floor</i>	312.00		-		0.00	312.00

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3rd Floor			-	0.00	0.00	
Area w/ceilings < 15'-0"			Must follow article 3.3.5	0.00	0.00	
Ground Floor Porch			x	Full Porch sf	281.00	-281.00
				200 sf		0.00
Basement			Must follow article 3.3.3B		0.00	
Attic			Must follow article 3.3.3C	0.00	0.00	
Garage (attached)			x	200 sf		0.00
Garage (detached)	180.29			450 sf	0.00	180.29
				200 sf		
Carport (attached)				450 sf	0.00	0.00
				200 sf		
Carport (detached)				450 sf	0.00	0.00
Accessory Building(s) (detached)			-	0.00	0.00	
Total Gross Floor Area	1,656.14	0.00	-	281.00	1,375.14	

Development Calculations Summary Table

LOT AREA (square feet) 9,004

BUILDING COVERAGE

The area of a lot covered by buildings or roofed areas, but excludes ground level paving, landscaping, open recreational facilities, incidental projecting eaves, balconies, and similar features. Pools, ponds, and fountains are not included in the measurement.

	Percentage	SF
Maximum Allowable Building Coverage	40%	3,602
Existing Building Coverage	15%	1,344
Remaining Building Coverage	25%	2,258

IMPERVIOUS COVERAGE

The total horizontal area of covered spaces, paved areas, walkways, and driveways. The term excludes pools, ponds, fountains, and areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians.

	Percentage	SF
Maximum Allowable Impervious Coverage	45%	4,052
Existing Impervious Coverage	34%	3,030
Remaining Impervious Coverage	11%	1,022

GROSS FLOOR AREA

The Gross Floor Area of each floor is measured as the area contained within the outside edge of the exterior walls.

Percentage SF

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	<i>e</i>	
<i>Maximum Allowable FAR (Floor Area Ratio)</i>	55%	4,952
<i>Existing Gross Floor Area</i>	15%	1,375
<i>Remaining Gross Floor Area</i>	40%	3,577

DELIVERABLE #3:

Schematic Design

1. Generate Site Plan
2. Generate Two Design Schemes
3. Outline Deliverables and Inclusions for each scheme (DECA)

This is our first creative step exploring design possibilities for your property. During schematic design we will examine design solutions that incorporate your programmatic requirements, all the while carefully considering the function, scale, massing, circulation and relationship of spaces. We will present two design plan schemes and discuss rough budget and construction timelines for each to help illustrate what is possible for your project.



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seal:

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scale:

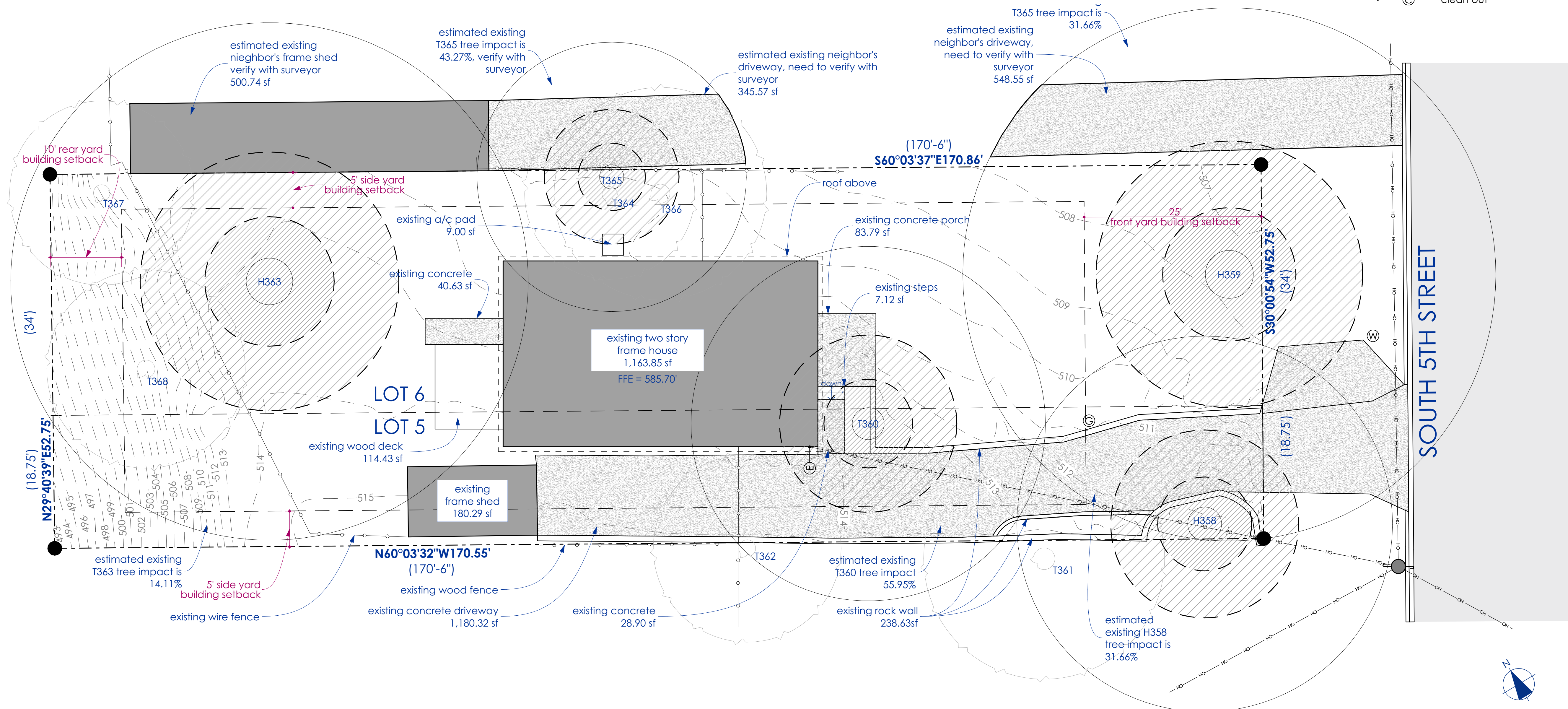
If printed on a 22"x34" sheet the scale is as indicated.
If printed on a 11"x17" sheet the scale is reduced by half.

Issue: Date:

tree schedule					
tree ID	species	trunk diameter	critical root zones		
			1/4	1/2	full
H358	live oak	26.5"	13.25'	6.625'	26.5'
H359	live oak	37.5"	18.75'	9.375'	37.5'
H363	live oak	36.5"	18.25'	9.125'	36.5'
T360	live oak	25"	12.5'	6.25'	25'
T361	live oak	17"	-	-	17'
T362	hackberry	13.25"	-	-	13.25'
T364	cedar elm	12"	-	-	12'
T365	live oak	19"	9.5'	4.75'	19'
T366	live oak	15"	-	-	15'
T367	cedar elm	13"	-	-	13'
T368	hackberry	14"	-	-	14'

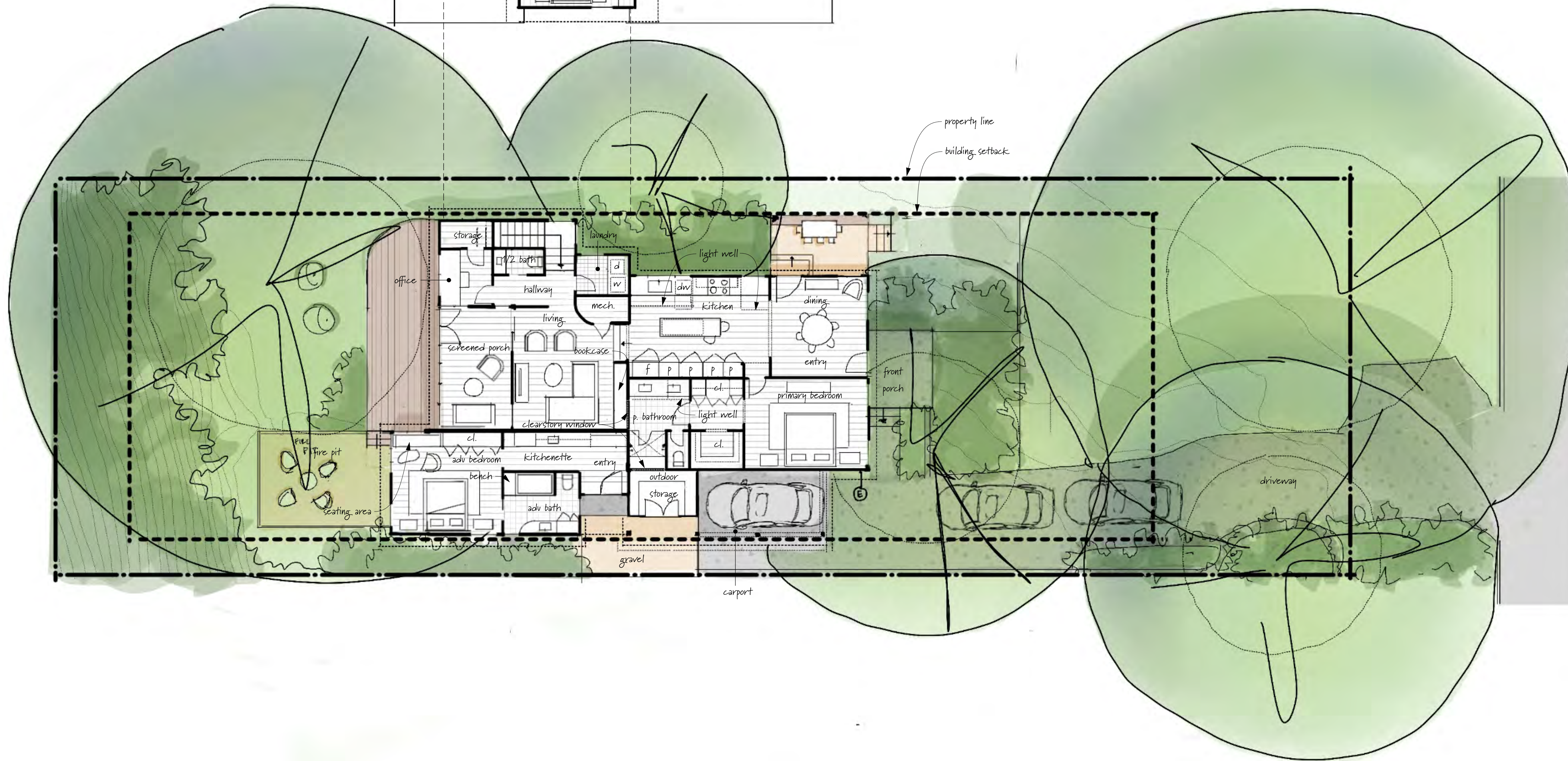
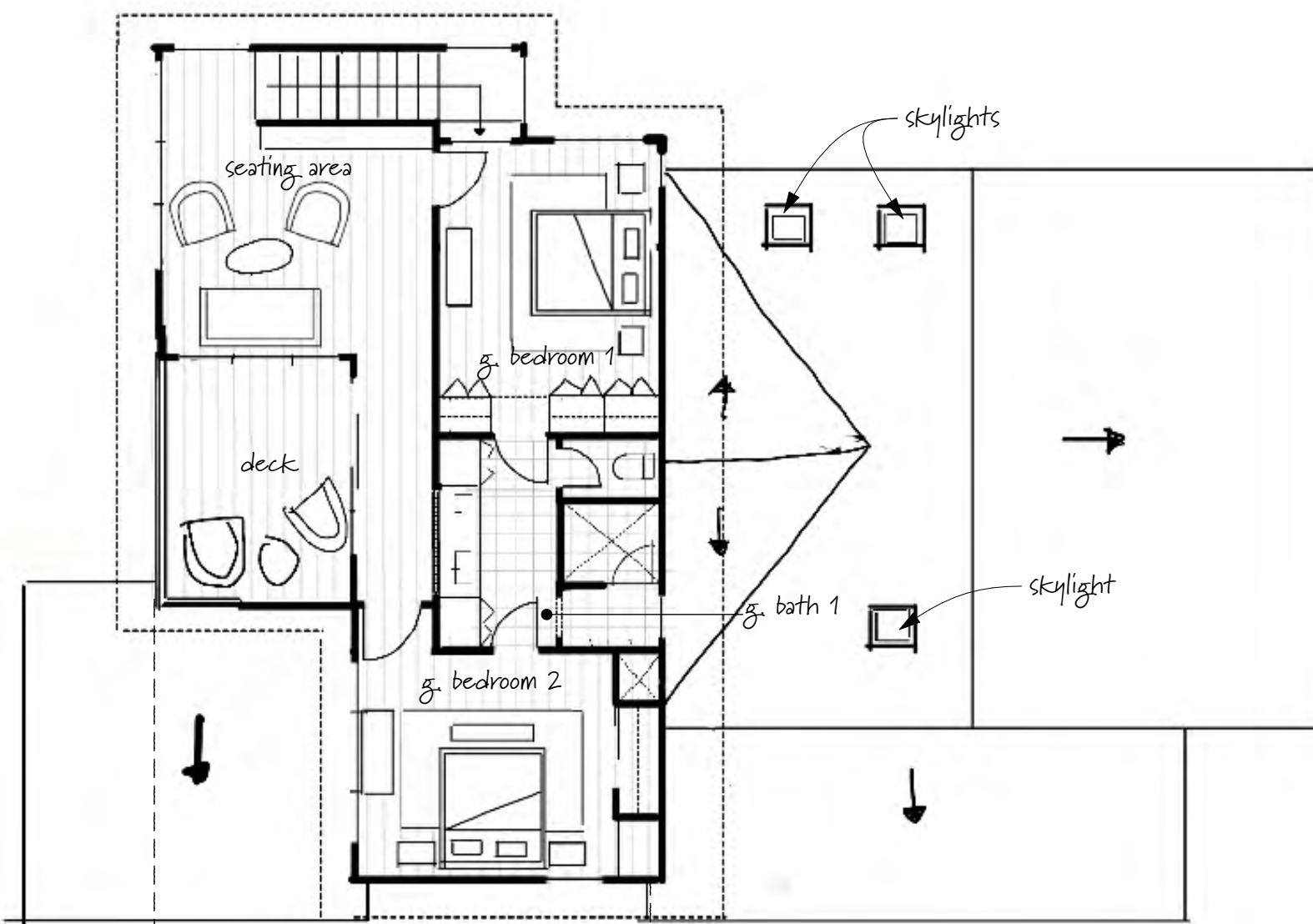
existing site plan legend

- 100' — topographic lines 1'-0" interval
- - - - - property line
- - - - - building setback line
- - - - - tent setback plane
- OH — overhead utility line
- E — underground electrical line
- WW — waste water line
- W — water line
- G — gas line
- existing fence
- asphalt
- concrete
- 25% critical root zone
- 50% critical root zone
- power pole
- (E) electrical meter
- (W) water meter
- (G) gas meter
- (WW) waste water tap
- (C) clean out



ADU	room size
entry	6' 6" x 8'
kitchenette	10' 6" x 5'
bedroom	14' 6" x 13' 6"
bathroom	10' x 8'

main residence	room size
entry/dining	12' 6" x 13' 6"
kitchen	18' 6" x 13' 6"
p. bedroom	16' x 12'
p. walk-in closet	7' x 5'
p. bath	8' x 12'
living	15' x 16'
1/2 bath	6' 6" x 3' 6"
laundry	7' x 5'
office	7' x 7' 6"
screened porch	9' 6" x 16'
seating area	13' 6" x 11' 6"
g. bedroom	11' x 14' 6"
g. bath	11' x 10' 6"
g. bedroom	15' x 11'
balcony	9' x 12'
outdoor storage	8' 6" x 6'
carport	9' x 17' 6"



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moontoweraustin.com | 512.953.9261

project:
Ewing Residence

1008 S 5th St.
Austin, Texas 78704

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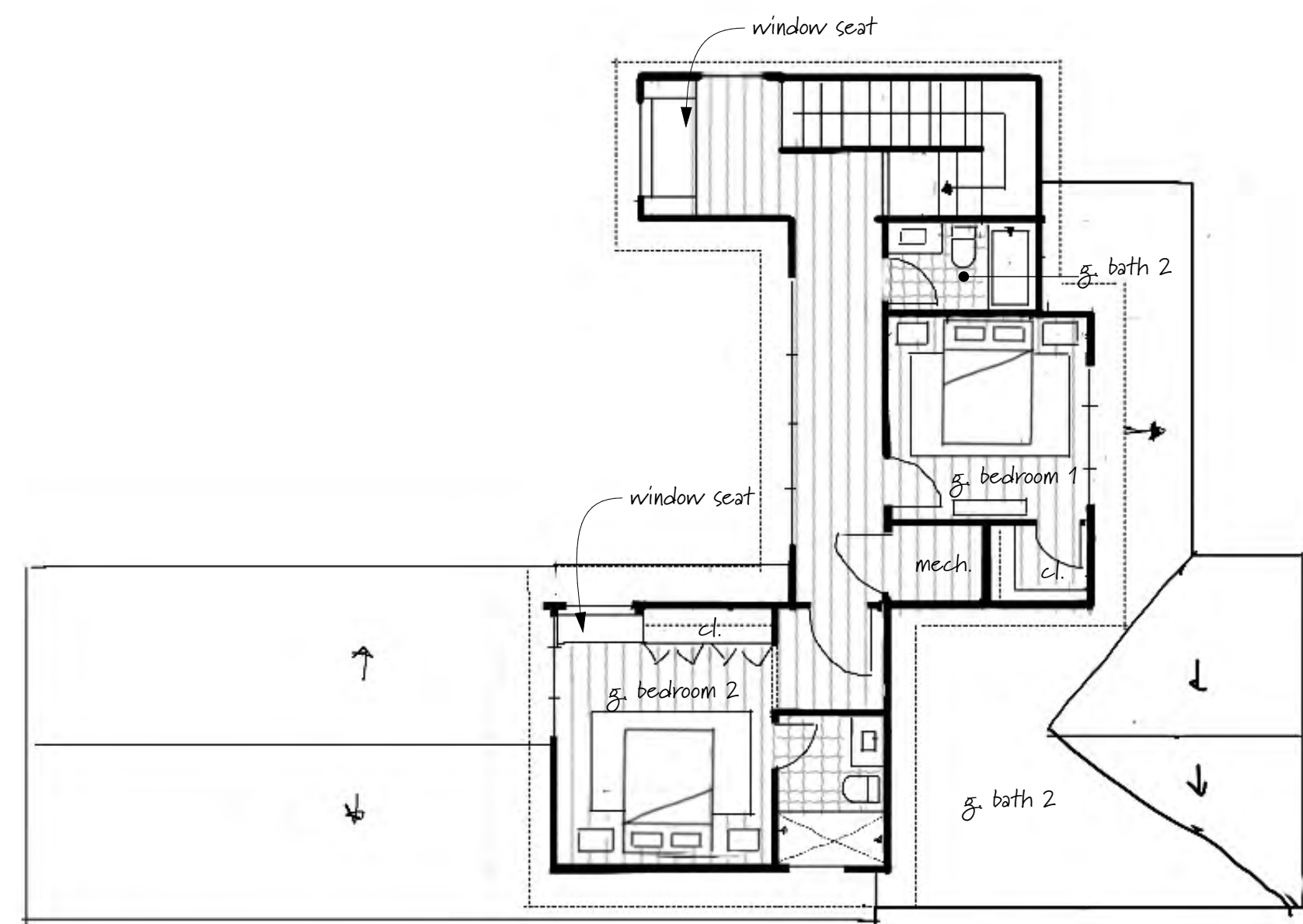
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date: 24.08.13

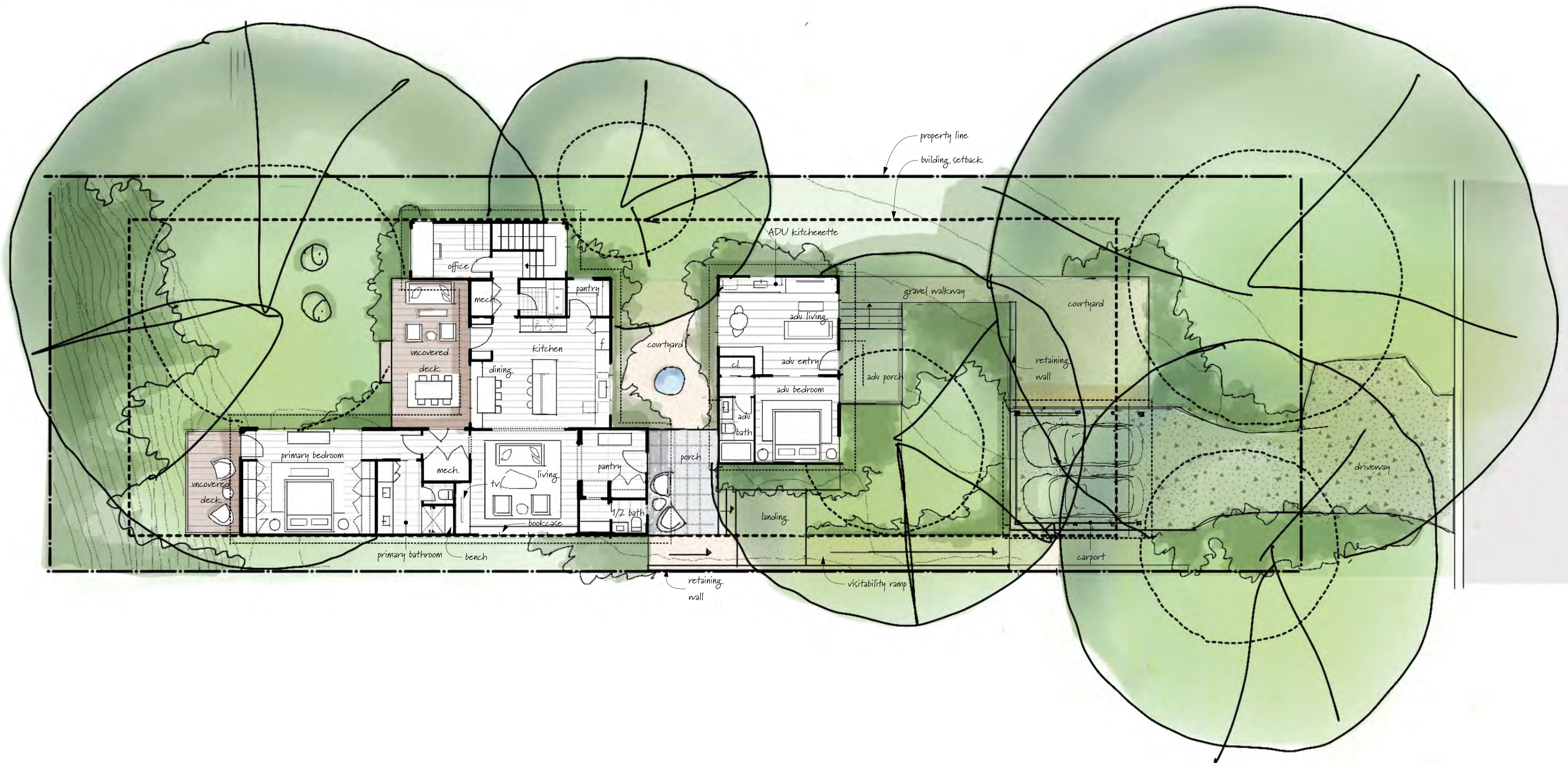
FEASIBILITY

concept plan



ADU	room size
entry	5' x 11'6"
living	9' x 9'
kitchenette	11' x 8'
bedroom	11' 6" x 12'
bathroom	5' x 9'

main residence	room size
entry	9' x 5'
half bath	5' x 5'
vestibule	4' x 6'
living	15' x 14' 6"
kitchen	13' x 15'
dining	6' 6" x 9'
pantry	6' x 5'
laundry	6' x 5'
office	11' x 8'
uncovered deck	10' 6" x 20'
p. bath	10' 6" x 10'
p. bedroom	18' x 14'
p. uncovered deck	7' 6" x 15'
g. bedroom 1	10' 6" x 11'
g. bath 1	8' x 5'
g. bedroom 2	11' 6" x 13' 6"
g. bath 2	6' x 8'
hallway	4' 6" x 24"
carport	20' x 17' 6"



1 option B



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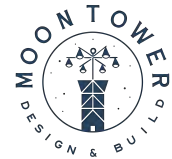
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date: 24.08.13

FEASIBILITY
concept plan

Deliverables Exclusions Constraints & Assumptions



Date: 8/13/24
Design Phase: Feasibility

TEAM

Design Director: Amber Dudley
Lead Designer: Jessica Cain
Interior Designer: Nicolette Akiko
Estimator: Maciej Ludwiczek & Jeff Loeb
Build Director: David Mosser
Owner(s): xx

PROJECT BACKGROUND & OBJECTIVES

Design a master plan for the property that includes a remodel/addition and/or new construction project. The program includes 3 bedrooms, 3 bathrooms, an office, covered parking, and a screen porch. In addition to the main residence the design must include an ADU. The design must take advantage of the views to the greenbelt and maintain the traditional bungalow form from the approach.

DESIGN GOALS BY PRIORITY

- 1 A 3 bedroom and 3 bathroom primary residence with an ADU.
- 2 At a minimum provide a single covered parking space.
- 3 A quiet living space/resting space away from the main living space.
- 4 Modest office
- 5 Screened porch and deck/courtyard

DRAWINGS & REFERENCE DOCUMENTS

- 240703 Development Research Packet
- 240703 Build Evaluation
- 240718 Schematic Design 1 Schemes

PROJECT DELIVERABLES: WHAT'S IN?

- Option A: Comprehensive remodel/addition with a new ADU, single car carport, and outdoor storage. Replace the cedar pier foundation with concrete piers. Replace existing shingle roof with a metal roof to be tied in the addition. Work to preserve existing framing, but replace all interior and exterior finishes, insulate, and install new mechanical, electrical and plumbing systems.
- Option B: New construction primary residence, ADU and a double car carport.
- For both schemes we will need a separate electrical meter for ADU; as well as an upgrade to the water meter.

PROJECT EXCLUSIONS: WHAT'S OUT?

- Uncovered deck in Option A.
- Landscape Design & Install Services
- Moontower Design Services
- Consultant Services (structural, geotechnical, etc)
- Regulatory Fees (permitting, sidewalk fee in lieu, etc)

PROJECT CONSTRAINTS:

- There are 5 protected trees on the property that limit development.
- The property has a steep elevation change at the back of the property.

PROJECT ASSUMPTIONS:

- Option A will require removal of the existing siding, sheathing, roofing, and interior finishes to properly insulate and water proof the existing structure.
- A deep foundation will not be required due to the presence of limestone.
- City of Austin Water Department has been requiring the water meter to be relocated in new construction projects when it is not touching the property line . However, they also do not want it in the critical root zone of a tree or in the path of a driveway. In this specific case they may not need to relocate the meter.
- We will not need to increase the width of the apron to meet code due to the critical root zone of the existing trees.
- We will not need to relocate the waste water meter.

SCHEMATIC DESIGN OPTION A

- **Budget Range** (*excludes landscape and design services*): **1.7M-2.0M**
- **Construction Timeline Range:** **18 months**
- **Proposed Square Footage Calculations**

Existing Conditioned	832
1st Floor	832
New Conditioned	1,694
1st Floor Addition	519
2nd Floor Addition	765
ADU	410
Non Conditioned	514
Screened Porch	167
2nd Story Balcony	120
Carport with outdoor storage	227
Total	3,040

SCHEMATIC DESIGN OPTION B

• Budget Range (<i>excludes landscape and design services</i>):	1.6M-1.9M
• Construction Timeline Range:	18 month
• Proposed Square Footage Calculations	
Conditioned	2,493
1st Floor Addition	1,399
2nd Floor Addition	762
ADU	332
Non Conditioned	788
Uncovered Decks	343
Uncovered Patio	115
Carport	330
Total	3,281