

**CITY OF FORT COLLINS  
TYPE 1 ADMINISTRATIVE HEARING**

**FINDINGS AND DECISION**

HEARING DATE: January 24, 2022

PROJECT NAME: 504 S. Whitcomb Street Carriage House

CASE NUMBER: FDP 210006

APPLICANT/OWNER: Robert and Kristin Kirkpatrick  
619 Skysail Lane  
Fort Collins, CO 80525

HEARING OFFICER: Lori Strand

**PROJECT DESCRIPTION/BACKGROUND:** This is a request for a combined Project Development Plan and Final Development Plan to construct a single-family detached dwelling (also referred to as a “carriage house”) in the rear yard of an existing duplex (the “Application”) located at 504 S. Whitcomb Street (the “Subject Property”).

The proposed carriage house is 1-story with a 600 square foot footprint and a 600 square foot floor area. There are five off-street parking spaces located within the Subject Property along the alley.

The Subject Property falls within the original Old Town Site Annexation dating to 1873.

The Subject Property is zoned Neighborhood Conservation, Buffer (N-C-B) district. The N-C-B district requires administrative review to establish the proposed carriage house use.

No modifications from standards are requested as part of this Application.

The surrounding zoning and land uses are set forth below:

	<b>North</b>	<b>South</b>	<b>East</b>	<b>West</b>
<b>Zoning</b>	Downtown (D)	Neighborhood Conservation, Buffer (N-C-B)	Neighborhood Conservation, Buffer (N-C-B)	Neighborhood Conservation Medium Density (N-C-M)

<b>Land Use</b>	Immediate north of and adjacent to Subject Property are two duplexes with residential and non-residential uses; further north across Mulberry are nonresidential uses	Single family houses and apartment buildings	Single family houses	Single family houses across S. Whitcomb Street
-----------------	---	--	----------------------	--

Additional project background is detailed in the Development Review Staff Report prepared for the Application, a copy of which is attached to this decision as **ATTACHMENT A** (the “Staff Report”) and is incorporated herein by reference.

The Staff Report recommends approval of the Application.

SUMMARY OF DECISION:     Approved.

ZONE DISTRICT:                Neighborhood Conservation, Buffer (N-C-B)

HEARING: The Hearing Officer opened the remote hearing at approximately 5:30 P.M. on January 24, 2022.

EVIDENCE: Prior to or at the hearing, the Hearing Officer accepted the following documents as part of the record of this proceeding:

1.     Staff Report, which includes the following attachments:
  - (a) Vicinity Map.
  - (b) Applicant Narrative.
  - (c) Plan Set (8 sheets).
  - (d) Memorandum from Highland Development Services to Robert Kirkpatrick, dated 12/3/21, regarding Drainage Summary, and recommending redirection of the existing residence roof drainage toward S. Whitcomb (the “Recommended Drainage Improvements”).
  - (e) Legal description and depiction of proposed utility easement at rear of Subject Property.
  - (f) City staff power point presentation (12 pages).
2.     Copy of written notice of virtual public hearing (2 pages).
3.     Affidavit of published notice of public hearing in Coloradoan (1 page).

4. Rules of Conduct for Administrative Hearings.
5. Administrative (Type 1) Hearing: Order of Proceedings.
6. The City's Comprehensive Plan, the Old Town Neighborhoods subarea plan, the Land Use Code, and the formally promulgated ordinances and polices of the City are all considered part of the record considered by the Hearing Officer.

TESTIMONY: The following persons testified at the hearing:

From the City: Pete Wray, Senior City Planner. Mr. Wray testified, among other things, that the proposed carriage house is smaller than typically seen in the Old Town area and has a square footage that is much less than the amount allowed by zoning. Mr. Wray also confirmed that the Recommended Drainage Improvements have been addressed in the plans for the carriage house.

From the Applicant/Owner: Robert and Kristin Kirkpatrick. The Kirkpatricks testified, among other things, that they took special care to ensure the proposed carriage did not encroach or negatively impact the single family home to the south of the Subject Property.

From the Public: Marc Leblond, 707 W. Magnolia, testified in favor of the Application, noting that use of carriage houses in the area is a socially and environmentally conscious thing to do.

The virtual hearing on this Application was closed at approximately 5:55 P.M. on January 24, 2022.

#### FINDINGS

1. Testimony of Mr. Wray, Senior City Planner, and evidence presented to the Hearing Officer establish the fact that notice of the remote public hearing was properly posted, mailed, and published.
2. As required by City Council Ordinance 079, 2020, the Hearing Officer, in consultation with City staff, determined that it was desirable to conduct the hearing by remote technology so as to provide reasonably available participation by parties-in-interest and by the public, consistent with the requirements of Ordinance 079, because meeting in person would not be prudent for some or all persons due to a public health emergency.
3. Based on testimony provided at the public hearing and a review of the materials in the record of this case, the Hearing Officer concludes as follows:
  - A. The Application complies with the applicable procedural and administrative requirements of Article 2 of the LUC.

- B. The Application complies with the applicable General Development Standards contained in Article 3 of the LUC.
  - C. The Application complies with the applicable standards in Division 4.9 of the LUC.
4. The Application's satisfaction with the applicable Article 2, 3, and 4 LUC requirements is sufficiently evidenced by the Staff Report, the testimony at the January 24, 2022 public hearing, and materials accepted into the record.

DECISION

Based on the findings set forth above, the Hearing Officer hereby approves the 504 South Whitcomb Carriage House (FDP 210006).

DATED this 2<sup>nd</sup> day of February, 2022.



---

Lori Strand  
Hearing Officer

**ATTACHMENT A**

Staff Report  
S. Whitcomb Carriage House  
FDP 210006

# Development Review Staff Report

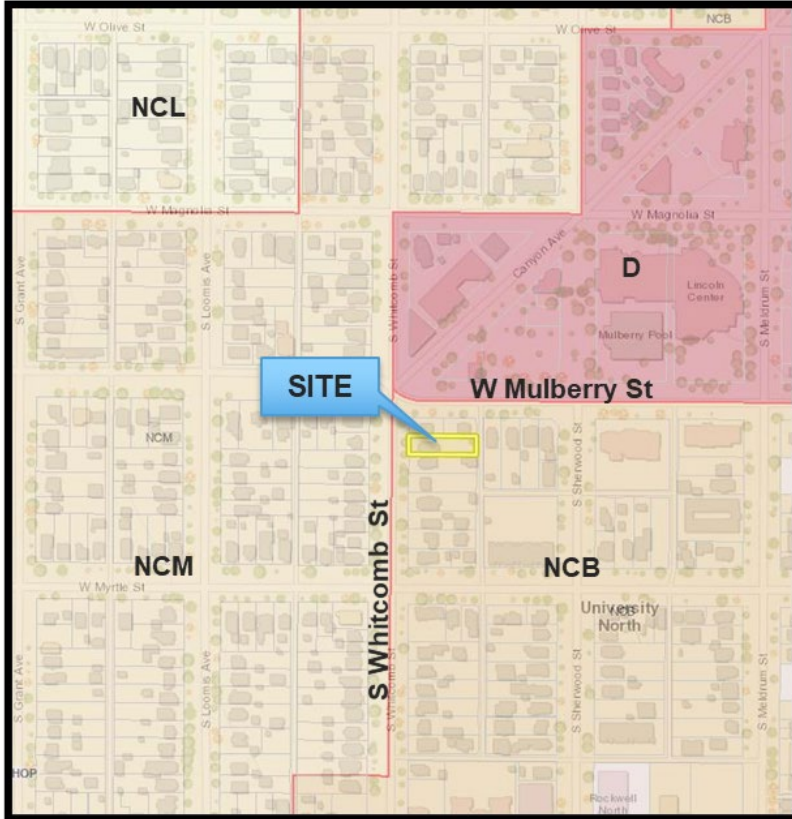
Administrative Hearing: January 24, 2022

**504 S Whitcomb Street Carriage House, FDP 210006**

## Summary of Request

This is a request for a combined Project Development Plan and Final Development Plan (PDP/FDP) to construct a single family detached dwelling behind the existing two-family dwelling on the lot.

## Zoning Map



## Next Steps

When a plan is submitted as a combined PDP/FDP, it is simply reviewed as a Final Development Plan. That means that if approved by the decision maker, then staff and the owner are ready to proceed with final signatures on the planning and engineering documents. The owner is then eligible to apply for a building permit.

## Site Location

504 South Whitcomb Street, located southeast of the intersection of S. Whitcomb Street and West Mulberry Street.

## Zoning

Neighborhood Conservation, Buffer District (NCB)

## Property Owner

Robert and Kristin Kirkpatrick  
619 Skysail Lane  
Fort Collins, CO 80525

## Applicant/Representative

Same as above

## Staff

Pete Wray, Senior City Planner

## Contents

1. Project Introduction .....	2
2. Public Outreach .....	3
3. Land Use Code Article 2 – Procedural Requirements .....	3
4. Article 3 - Applicable Standards .....	4
5. Article 4 – Applicable Standards: .....	5
6. Findings of Fact/Conclusion .....	6
7. Recommendation .....	6
8. Attachments .....	6

## Staff Recommendation

Approval.

## 1. Project Introduction

### A. PROJECT DESCRIPTION

- This application is being processed as a combined Project Development Plan (PDP)/Final Development Plan (FDP).
- The plan proposes a single family detached dwelling in the rear yard of an existing two-family residence -- also known as a 'carriage house'.
- The lot is 9,000 square feet in land area.
- The building is 1 story with a 600 sq. ft. footprint and same floor area.
- The site includes five off-street parking spaces on a gravel surface and vehicular access from the existing alley.
- A walkway is provided from the street, and signage is provided for wayfinding to meet Poudre Fire Authority emergency access requirements.
- Utility services are provided extending from the existing principal building.

### B. OVERVIEW OF MAIN CONSIDERATIONS IN STAFF REVIEW

Typically, the main considerations in review of carriage house applications are standards for building size and configuration, emergency access requirements, and utility service lines.

In this case, the main considerations through five rounds of staff review of plan submittals have been utility services, zoning standards, potential alley improvements, and emergency access.

### C. DEVELOPMENT STATUS AND BACKGROUND

- The site currently contains a two-family residence, and two rear yard sheds and gravel parking off alley.
- The lot is within the Original Town Site Annexation (1873).

**Old Town Neighborhoods Plan and NCB zoning.** The subject property is in the Old Town Neighborhoods subarea plan area of Fort Collins. The neighborhoods encompass many of the earliest residential blocks in Fort Collins and are characterized by the classical grid street pattern of short blocks, historic home styles, and mature trees.

An ongoing neighborhood concern has long been how best to preserve, protect and enhance neighborhood character while still allowing opportunities to adapt to evolving community and social changes.

A continuum of community planning has produced subarea plans, character studies, zoning standards, and design guidelines in open and highly engaged public processes since at least the 1980's. The NCB zoning district, and carriage house standards specifically, result from some of these processes.

The adopted Old Town Neighborhoods Plan recognizes the NCB area around west Mulberry Street and South Whitcomb Street as catering primarily to college student rental housing, including a mix of single-family detached homes and apartment buildings. The plan describes six 'character areas' within the overall plan area, and notably, this stretch of Whitcomb Street is within an area that is *not* described as a character area and does not have a prevailing identifiable character but rather has an eclectic mix of development and buildings developed and redeveloped through the decades since the 1920's.

**D. SURROUNDING ZONING AND LAND USE**

	North	South	East	West
<b>Zoning</b>	Downtown (D)	Neighborhood Conservation, Buffer (NCB)	Neighborhood Conservation, Buffer (NCB)	Neighborhood Conservation Medium Density (NCM)
<b>Land Use</b>	Single family houses	Single family houses and apartment buildings	Single family houses	Single family houses across S Whitcomb Street

**2. Public Outreach**

**A. NEIGHBORHOOD MEETING**

A neighborhood meeting was not required for this land use, which requires ‘Administrative Review’ and for which neighborhood meeting requirements are not applicable.

**B. PUBLIC COMMENTS:**

No public comment has been received to date. Any comments received prior to the hearing will be forwarded to the hearing officer for consideration.

**3. Land Use Code Article 2 – Procedural Requirements**

**A. PROCEDURAL OVERVIEW**

**1. Conceptual Review – CDR140085**

A conceptual review meeting for the property was held on November 3, 2014.

**2. First Submittal – PDP200002**

The first submittal of this development plan was completed on March 31, 2021.

**3. Neighborhood Meeting**

Not required and not held as noted above.

**4. Notice (Posted, Written and Published)**

Posted Sign: April 12, 2021, Sign #624

Written Hearing Notice: January 10, 2022, 156 addresses mailed.

Published Hearing Notice: January 7, 2022, in the Coloradoan newspaper.



## 4. Article 3 - Applicable Standards

Staff finds only two standards in Article 3 that are relevant and applicable to the plan, because the site is a platted lot in a fully developed area with streets, sidewalks, and utility infrastructure; and because building design is governed by specific standards for carriage houses in the NCB zone district in Article 4. Furthermore, the Landscaping Section 3.2.1 specifically exempts single family dwellings; and staff and the Historic Preservation Commission do not review projects using Section 3.4.7, Historic and Cultural Resources, if they involve only a single family dwelling.

### A. DIVISION 3.2 - SITE PLANNING AND DESIGN

Applicable Code Standard	Summary of Code Requirement and Analysis	Staff Findings
<b>3.2.2 (K)(1)(c) Parking Lots – Required Number of Off-Street Spaces</b>	<p>This standard requires one parking space per single family detached dwelling on lots with greater than forty feet of street frontage.</p> <p>The lot has 50 feet of street frontage; therefore, one parking space is required for each single-family dwelling. The existing two-family house has four existing spaces, and the plan provides one additional space for at total of five spaces, with alley access.</p> <p>Note that this standard is repeated verbatim in Section 3.8.10.</p>	Complies

### B. 3.6 TRANSPORTATION AND CIRCULATION

Applicable Code Standard	Summary of Code Requirement and Analysis	Staff Findings
<b>3.6.6 – Emergency Access</b>	<p>This Section is intended to ensure that emergency vehicles and personnel can access the development to provide fire protection and emergency services without delays.</p> <ul style="list-style-type: none"> <li>The plan includes a walkway from the street to the entry of the dwelling in a manner that is appropriate for emergency access to the development.</li> <li>The plan includes a 13D sprinkler system per the pertinent fire code requirement.</li> </ul>	Complies

**5. Article 4 – Applicable Standards:**

**A. DIVISION 4.9 – NEIGHBORHOOD CONSERVATION, BUFFER DISTRICT**

The Neighborhood Conservation, Buffer District (N-C-B) is intended for areas that are a transition between residential neighborhoods and more intensive commercial-use areas or high traffic zones that have been given this designation in accordance with an adopted subarea plan.

The proposed carriage house is permitted subject to Administrative Review in this district.

Applicable Code Standard	Summary of Code Requirement and Analysis	Staff Findings
<b>4.9(B) Permitted Uses</b>	The proposed carriage house is a permitted use in the N-C-B zone district. The land use code refers to a 'carriage house' interchangeably with 'single-family detached dwelling located behind a separate dwelling on the same lot'.	Complies
<b>4.9(D)(2) Residential</b>	This standard limits the floor footprint and floor area of a carriage house to 600 sq. ft. and 1,000 sq. ft. respectively. <ul style="list-style-type: none"> <li>• The proposed plan includes a 600 sq. ft. building footprint and same floor area.</li> </ul>	Complies
<b>4.9(D)(5) Allowable Floor Area on Rear Half of Lots</b>	This standard limits floor area on the rear half of a lot to 33 percent of the overall lot area. <ul style="list-style-type: none"> <li>• The standard allows a floor area on the rear 50% of lot of 1,482 sq. ft. The proposed plan includes a 600 sq. ft. floor plan.</li> </ul>	Complies
<b>4.9(D)(6) Dimensional Standards</b>	Dimensional standards require a minimum rear yard setback of 15 feet, and side yard setbacks of 5 feet. Building height is limited to 1½ stories. <ul style="list-style-type: none"> <li>• The plan provides 13-foot side setbacks and a minimum 34-foot rear setback at the closest portion of the dwelling.</li> <li>• The building is 1-story.</li> </ul>	Complies
<b>4.9(E)(1)(b)2. Eave Height</b>	This standard limits exterior eave height along a side lot line to 13 feet. The eave of a dormer may exceed that height if set back at least two feet from the wall below and does not exceed 25% of the wall length. <ul style="list-style-type: none"> <li>• The proposed plan includes an eave height on the tallest north building façade of 12 feet-6 ½ inches.</li> </ul>	Complies
<b>4.9(E)(3)(c)(1) Additional Review Criteria for Carriage Houses</b>	This standard requires a yard area containing at least 120 square feet to serve both the carriage house and the existing principal dwelling. Such yard area shall be at least 10 feet in its smallest dimension and must provide privacy and screening for abutting properties. <ul style="list-style-type: none"> <li>• The plan provides approximately 1,600 sq. ft. yard space between the two-family duplex principal building and the carriage house, consisting of landscaping and walks. This rear yard space is screened from adjacent lots by existing mature landscaping along the lot lines.</li> </ul>	Complies

Applicable Code Standard	Summary of Code Requirement and Analysis	Staff Findings
4.9(E)(3)(c)(2)	<p>This standard requires that to the extent reasonably feasible, decks, entry doors, major entry access stairs or major windows shall face the existing principal building or the alley. Windows that overlook an abutting side or rear yard must be minimized.</p> <ul style="list-style-type: none"> <li>• The proposed carriage house is a single-story building with main entrance facing the alley.</li> <li>• As a single-story building, the most prominent windows do not overlook abutting yards and are located on the east and west walls. The building is setback an additional eight feet from the side yard required setback.</li> </ul>	Complies
4.9(E)(3)(c)(3)	<p>Buildings, structures, open spaces, and other features of the site plan shall be oriented and located such that they maintain natural resources, including existing significant trees and shrubs, to the extent reasonably feasible.</p> <ul style="list-style-type: none"> <li>• Two existing trees were removed in poor condition with a 1:1 mitigation plan included in the proposed tree inventory for the site.</li> </ul>	Complies

## 6. Findings of Fact/Conclusion

In evaluating the request for the 504 S Whitcomb Street Carriage House, #FDP210006, staff makes the following findings of fact:

- The Final Development Plan complies with the process requirements in Division 2.2 – Common Development Review Procedures for Development Applications of Article 2 – Administration.
- The Final Development Plan complies with the relevant standards in Article 3 – General Development Standards.
- The Final Development Plan complies with the relevant standards in Division 4.9 – the Neighborhood Conservation Buffer zone district.

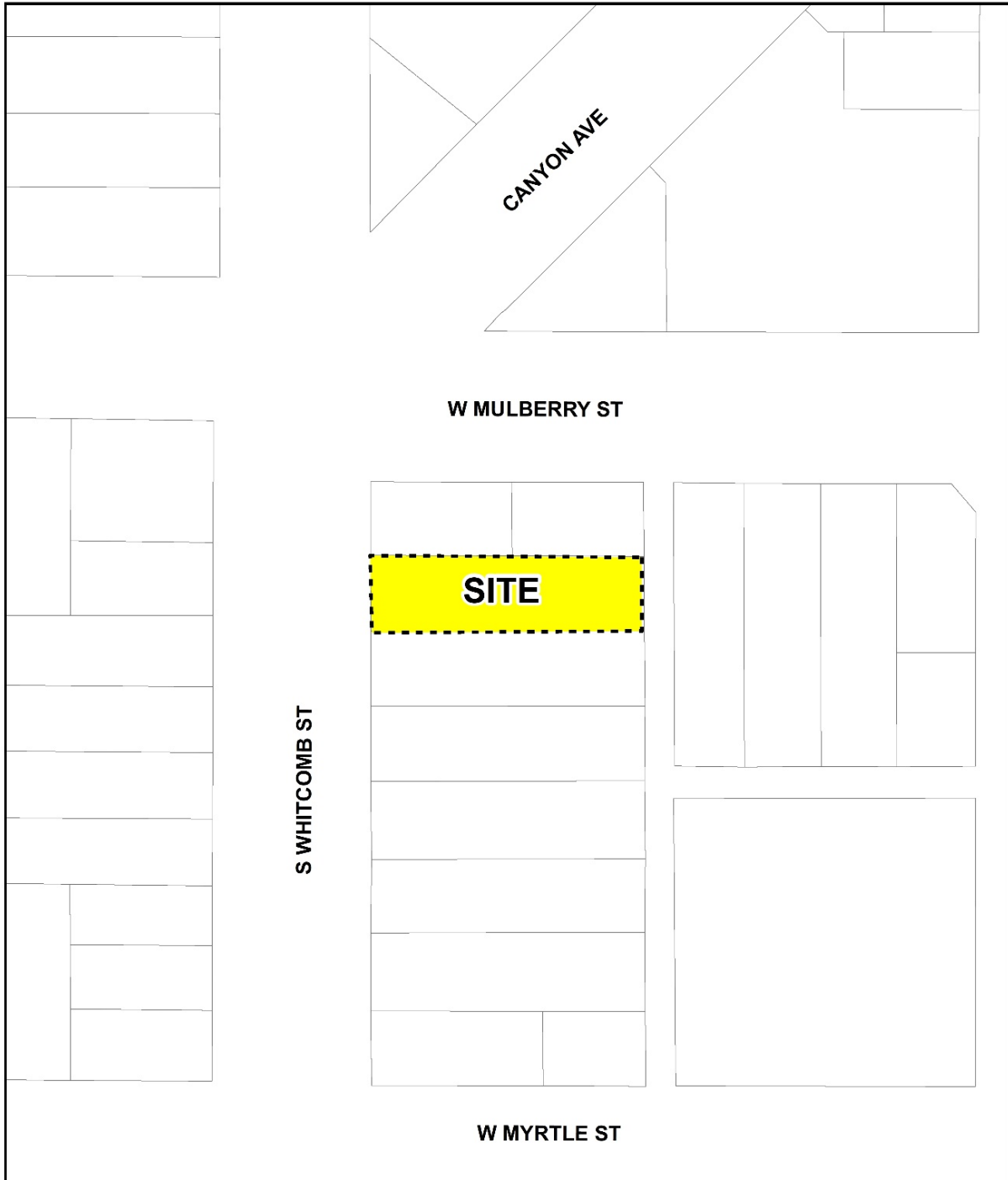
## 7. Recommendation

Staff recommends that the Hearing Officer approve 504 S Whitcomb Street Carriage House, #FDP210006, based on the analysis and Findings of Fact/Conclusion in this Staff Report.

## 8. Attachments

1. Vicinity Map
2. Applicant Narrative
3. Plan Set – Site, Landscape, Grading, and Architectural
4. Drainage Memo
5. Utility Easement
6. Staff Presentation

# VICINITY MAP



504 S WHITCOMB ST  
CARRIAGE HOUSE



## **504 S. Whitcomb – Accessory Dwelling Unit**

### **Statement of Planning Objectives**

The objective of the proposed development is to construct an 600 square foot structure with living space with ceiling height of 8'-0" and higher. There will be 2 bedrooms and one bathroom in the unit. The Accessory Dwelling Unit will have a gravel parking area to the East of the structure, and fenced yard space surrounding the structure for the occupant's use. Access to the living space will be via an exterior door along the East side of the structure.

The primary intent of the development is to provide residential living space for lease.

The project site is located on the Southern end of the West Side neighborhood in the NCB zone. We designed the structure to complement the existing structure on the property, as well as the surrounding structures and to limit the impacts to our adjacent neighbors. We consciously limited the height and size of the proposed structure to not loom over any neighboring structures.

We have been in contact with the occupants of the adjacent properties to let them know of our planned project and to open the lines of communication so that we can proactively mitigate any concerns they may have currently or in the future.

# 504 South Whitcomb Street, Unit C

**SITE PLAN NOTES:**

- REFER TO L1.0 SITE LAYOUT/LANDSCAPE PLAN FOR EXACT LOCATIONS AND CONSTRUCTION INFORMATION FOR STORM DRAINAGE STRUCTURES, UTILITY MAINS AND SERVICES, PROPOSED TOPOGRAPHY, STREET IMPROVEMENTS.
- REFER TO THE HISTORIC UNIVERSITY NORTH SUBDIVISION PLAT AND UTILITY PLANS FOR EXACT LOCATIONS, AREAS AND DIMENSIONS OF ALL EASEMENTS, LOTS, TRACTS, STREETS, WALKS AND OTHER SURVEY INFORMATION.
- THE PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FINAL PLANS, AMENDMENTS TO THE PLANS MUST BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THE IMPLEMENTATION OF ANY CHANGES TO THE PLANS.
- ALL ROOFTOP AND GROUND MOUNTED MECHANICAL EQUIPMENT MUST BE SCREENED FROM VIEW FROM ADJACENT PROPERTY AND PUBLIC STREETS. IN CASES WHERE BUILDING PARAPETS DO NOT ACCOMPLISH SUFFICIENT SCREENING, THEN FREE-STANDING SCREEN WALLS MATCHING THE PREDOMINANT COLOR OF THE BUILDING SHALL BE CONSTRUCTED. OTHER MINOR EQUIPMENT SUCH AS CONDUIT, METERS AND PLUMBING VENTS SHALL BE SCREENED OR PAINTED TO MATCH SURROUNDING BUILDING SURFACES.
- ALL CONSTRUCTION WITH THIS DEVELOPMENT PLAN MUST BE COMPLETED IN ONE PHASE UNLESS A PHASING PLAN IS SHOWN WITH THESE PLANS.
- [IF APPLICABLE – INCLUDE LANGUAGE FOR ANY MODIFICATIONS AND CONDITIONS APPROVED WITH PDP/ODP].
- [IF APPLICABLE] ALL SINGLE FAMILY DETACHED HOMES SHALL MEET OR EXCEED THE GARAGE DOOR STANDARDS AS OUTLINED IN 3.5.2(E) OF THE LAND USE CODE.
- [IF APPLICABLE] A MINIMUM OF (NUMBER TBD) HOUSING MODELS FOR THE SINGLE FAMILY HOMES SHALL BE REQUIRED. THESE HOUSING MODELS SHALL MEET OR EXCEED THE STANDARDS AS OUTLINED IN 3.5.2(C) OF THE LAND USE CODE.
- ALL EXTERIOR LIGHTING PROVIDED SHALL COMPLY WITH THE FOOT-CANDLE REQUIREMENTS IN SECTION 3.2.4 OF THE LAND USE CODE AND SHALL USE A CONCEALED, FULLY SHIELDED LIGHT SOURCE WITH SHARP CUT-OFF CAPABILITY SO AS TO MINIMIZE UP-LIGHT, SPILL LIGHT, GLARE AND UNNECESSARY DIFFUSION.
- SIGNAGE AND ADDRESSING ARE NOT PERMITTED WITH THIS PLANNING DOCUMENT AND MUST BE APPROVED BY SEPARATE CITY PERMIT PRIOR TO CONSTRUCTION. SIGNS MUST COMPLY WITH CITY SIGN CODE UNLESS A SPECIFIC VARIANCE IS GRANTED BY THE CITY.
- FIRE HYDRANTS MUST MEET OR EXCEED Poudre FIRE AUTHORITY STANDARDS. NEW STRUCTURE WILL BE SPRINKLED WITH A 13-D RESIDENTIAL FIRE SPRINKLER SYSTEM.
- ALL BIKE RACKS PROVIDED MUST BE PERMANENTLY ANCHORED.
- ALL SIDEWALKS AND RAMPS MUST CONFORM TO CITY STANDARDS. ACCESSIBLE RAMPS MUST BE PROVIDED AT ALL STREET AND DRIVE INTERSECTIONS AND AT ALL DESIGNATED ACCESSIBLE PARKING SPACES. ACCESSIBLE PARKING SPACES MUST SLOPE NO MORE THAN 1:48 IN ANY DIRECTION. ALL ACCESSIBLE ROUTES MUST SLOPE NO MORE THAN 1:20 IN DIRECTION OF TRAVEL AND WITH NO MORE THAN 1:48 CROSS SLOPE.
- COMMON OPEN SPACE AREAS AND LANDSCAPING WITHIN RIGHT OF WAYS, STREET MEDIANS, AND TRAFFIC CIRCLES ADJACENT TO COMMON OPEN SPACE AREAS ARE REQUIRED TO BE MAINTAINED BY THE PROPERTY OWNER OF THE COMMON AREA, THE PROPERTY OWNER IS RESPONSIBLE FOR SNOW REMOVAL ON ALL ADJACENT STREET SIDEWALKS AND SIDEWALKS IN COMMON OPEN SPACE AREAS.
- DESIGN AND INSTALLATION OF ALL PARKWAY/TREE LAWN AND MEDIAN AREAS IN THE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CITY STANDARDS, UNLESS OTHERWISE AGREED TO BY THE CITY WITH THE FINAL PLANS, ALL ONGOING MAINTENANCE OF SUCH AREAS IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER.
- THE PROPERTY OWNER FOR EACH RESIDENTIAL LOT IS RESPONSIBLE FOR SNOW REMOVAL ON ALL STREET SIDEWALKS ADJACENT TO EACH RESIDENTIAL LOT.
- PRIVATE CONDITIONS, COVENANTS, AND RESTRICTIONS (CC&R'S), OR ANY OTHER PRIVATE RESTRICTIVE COVENANT IMPOSED ON LANDOWNERS WITHIN THE DEVELOPMENT, MAY NOT BE CREATED OR ENFORCED HAVING THE EFFECT OF PROHIBITING OR LIMITING THE INSTALLATION OF XERISCAPE LANDSCAPING, SOLAR/PHOTO-VOLTAIC COLLECTORS (IF MOUNTED FLUSH UPON ANY ESTABLISHED ROOF LINE), CLOTHES LINES (IF LOCATED IN BACK YARDS), ODOR-CONTROLLED COMPOST BINS, OR WHICH HAVE THE EFFECT OF REQUIRING THAT A PORTION OF ANY INDIVIDUAL LOT BE PLANTED IN TURF GRASS.
- ANY DAMAGED CURB, GUTTER AND SIDEWALK EXISTING PRIOR TO CONSTRUCTION, AS WELL AS STREETS, SIDEWALKS, CURBS AND GUTTERS, DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT, SHALL BE REPLACED OR RESTORED TO CITY OF FORT COLLINS STANDARDS AT THE DEVELOPER'S EXPENSE PRIOR TO THE ACCEPTANCE OF COMPLETED IMPROVEMENTS AND/OR PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.
- FIRE LANE MARKING:** A FIRE LANE MARKING PLAN MUST BE REVIEWED AND APPROVED BY THE FIRE OFFICIAL PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, APPROVED SIGNS OR OTHER APPROVED NOTICES THAT INCLUDE THE WORDS NO PARKING FIRE LANE SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS OR PROHIBIT THE OBSTRUCTION THEREOF. THE MEANS BY WHICH FIRE LANES ARE DESIGNATED SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION AT ALL TIMES AND BE REPLACED OR REPAIRED WHEN NECESSARY TO PROVIDE ADEQUATE VISIBILITY.
- PREMISE IDENTIFICATION:** AN ADDRESSING PLAN IS REQUIRED TO BE REVIEWED AND APPROVED BY THE CITY AND Poudre FIRE AUTHORITY PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. UNLESS THE PRIVATE DRIVE IS NAMED, MONUMENT SIGNAGE MAY BE REQUIRED TO ALLOW WAY FINDING. ALL BUILDINGS SHALL HAVE ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE, VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY, AND POSTED WITH A MINIMUM OF SIX INCH NUMERALS ON A CONTRASTING BACKGROUND. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.

**VICINITY MAP:**



**SHEET INDEX:**

L0.0	COVER SHEET
GR&DR	GRADING & DRAINAGE PLANS
L1.0	SITE DEVELOPMENT PLANS
A1.0	BUILDING FLOORPLANS & ELEVATIONS
S1	FOUNDATION AND FRAMING PLANS & DET/

**PROJECT INFORMATION:**

Construct a 600 SF, single story, detached residential unit with 2 bedrooms on the east half of the parcel. Existing adjacent gravel parking will be utilized for residents.

Legal Description: LOT 7, BLK 75, FTC  
 Parcel #: 9714109007  
 Subdivision: Subdivision of Block Seventy-Five  
 Zoning: N-C-B

OWNER:  
 Robert & Kristin Kirkpatrick  
 619 Skysail Lane  
 Fort Collins, CO 80525  
 970 .222.4272

**LAND USE TABLE:**

Setbacks:

Front Yard-	15 Feet
Rear Yard-	5 Feet (to alley)
Side Yard-	5 Feet

Lot Size: 9,000 SF

Maximum Accessory Building with Habitable Space square footage: 1000 SF

Actual Accessory Building with Habitable Space square footage: 600 SF

Allowable floor area on rear 50% of Lot: 4500 SF \* .33 = 1,482 SF

Actual floor area on rear 50% of Lot: 600 SF

**IMPERVIOUS SURFACE CALCULATIONS:**

Description	Basin Area (sqft)	Roof Area (sqft)	Gravel Area (sqft)	Total Impervious Area (sqft)	% Impervious	100-yr Peak Runoff Rate (cfs)
Existing	5,818	761	723	1,484	27.9%	0.56
Proposed	5,357	648	1,006	1,654	28.8%	0.52
Difference	-461	-113	283	170	0.9%	-0.04

\*See drainage report for further information

**PLANNING CERTIFICATION**  
 APPROVED BY THE DIRECTOR OF COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES (CDNS) OF THE CITY OF FORT COLLINS, COLORADO ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
 DIRECTOR OF CDNS

**OWNER'S CERTIFICATION**  
 THE UNDERSIGNED DOES/DO HEREBY CERTIFY THAT I/WE ARE THE LAWFUL OWNERS OF THE REAL PROPERTY DESCRIBED ON THIS SITE PLAN AND DO HEREBY CERTIFY THAT I/WE ACCEPT THE CONDITIONS AND RESTRICTIONS SET FORTH ON SAID SITE PLAN.

OWNER \_\_\_\_\_ DATE \_\_\_\_\_

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. \_\_\_\_\_ BY \_\_\_\_\_

MY NOTORIAL COMMISSION EXPIRES \_\_\_\_\_

NOTARY PUBLIC \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY, STATE, ZIP CODE \_\_\_\_\_

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	
RD5	1/03/22	DH	

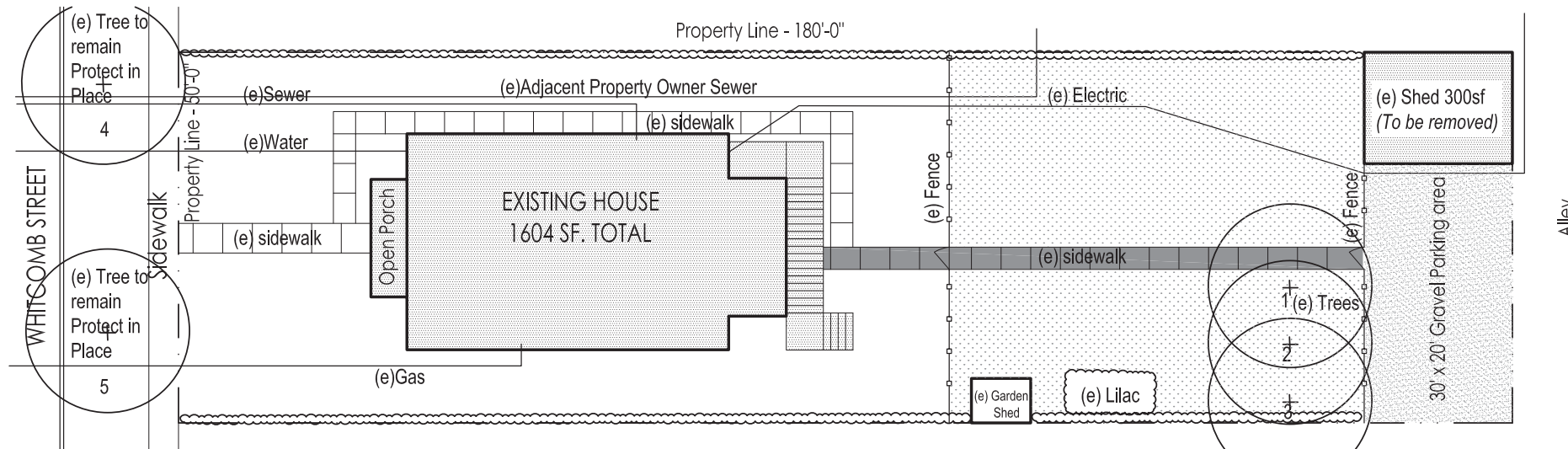
504 S. WHITCOMB ST.  
 UNIT C  
 FORT COLLINS, CO.  
**PREPARED FOR:**  
 BUILDING SERVICES  
 CITY OF FORT COLLINS

**CONTACT/ OWNER:**  
 Rob Kirkpatrick  
 Fort Collins, CO 80521  
 PH: 970-222-4272

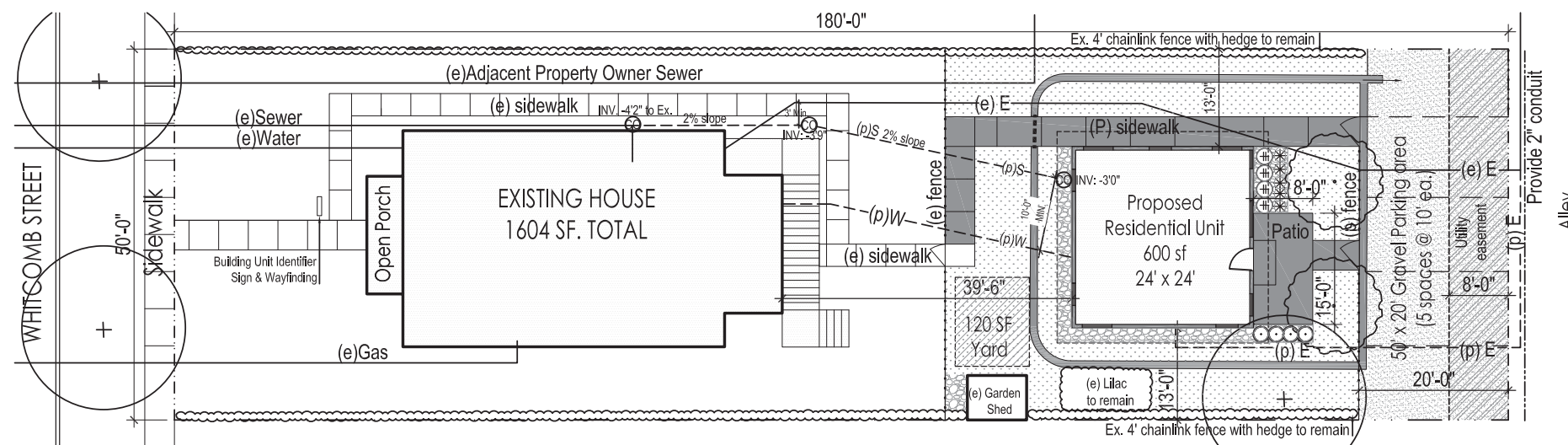
**SCALE:**  
 MARCH 2021

**DRAWING TITLE:**  
 COVER SHEET

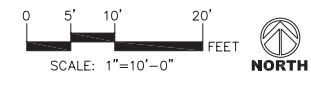
**SHEET NO.:**  
 L0.0



**EXISTING CONDITIONS**



**SITE LAYOUT/ LANDSCAPE PLAN**



**GENERAL NOTES:**

**UTILITIES:**  
All utilities for the structure will be connected to existing infrastructure that supplies the primary house on the lot. The new residential unit will be equipped with a 13-D Residential fire suppression sprinkler system. The new residential unit will be constructed so that it is solar ready.

Landscape irrigation will be added to the existing home irrigation system. Shrubs and grasses will be watered with a drip zone, native grass with MP rotator spray heads to minimize water usage.

**SUGGESTED TREE MITIGATION:**

#	SPECIES	DBH	CONDITION	ACTION	MITIGATION
1	Sib. Elm	14	POOR	REMOVE	1
2	Sib. Elm	16	POOR	REMOVE	1
3	Sib. Elm	16	FAIR	PRESERVE	1
4	Cottonwood	53	FAIR	PRESERVE	5
5	Cottonwood	50	FAIR	PRESERVE	5

**LANDSCAPE LEGEND:**

- Shade tolerant grass seed (See list)
- Gravel parking surface
- Concrete
- 1.5" Dia. Rock Mulch 3" Depth over fabric
- Drainage culvert
- Chinkapin Oak 3.0" Cal (Qty 2)
- Spirea Japonica 'Neon Flash', 5 Gal. (Qty 4)
- Dwarf Fountain Grass 'Hameln', 1 Gal. (Qty 5)
- Karl Forester Feather Reed Grass, 1 Gal. (Qty 4)

**SHADE TOLERANT SEED MIX TO INCLUDE: 4-5LBS./ 1000 S.F.**

- Kentucky Bluegrass (Poa Pratensis)
- Creeping Red Fescue (Festuca Rubra)
- Hard Fescue (Festuca brevipila)
- Chewings Fescue (Festuca Rubra 'Fallax')

**GENERAL LANDSCAPE NOTES:**

- PLANT QUALITY:** ALL PLANT MATERIAL SHALL BE A-GRADE OR NO. 1 GRADE - FREE OF ANY DEFECTS, OF NORMAL HEALTH, HEIGHT, LEAF DENSITY AND SPREAD APPROPRIATE TO THE SPECIES AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. ALL TREES SHALL BE BALL AND BURLAP OR EQUIVALENT.
- IRRIGATION:** ALL LANDSCAPE AREAS WITHIN THE SITE INCLUDING TURF, SHRUB BEDS AND TREE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM. THE IRRIGATION PLAN MUST BE REVIEWED AND APPROVED BY THE CITY OF FORT COLLINS WATER UTILITIES DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. ALL TURF AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC POP-UP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES, INCLUDING IN NATIVE SEED AREAS, SHALL BE IRRIGATED WITH AN AUTOMATIC DRIP (TRICKLE) IRRIGATION SYSTEM, OR WITH AN ACCEPTABLE ALTERNATIVE APPROVED BY THE CITY WITH THE IRRIGATION PLANS. THE IRRIGATION SYSTEM SHALL BE ADJUSTED TO MEET THE WATER REQUIREMENTS OF THE INDIVIDUAL PLANT MATERIAL. IRRIGATION SYSTEMS TO BE TURNED OVER TO THE CITY PARKS DEPARTMENT FOR MAINTENANCE MUST BE APPROVED BY THE PARKS MANAGER AND MEET PARKS IRRIGATION STANDARDS. DESIGN REVIEW SHALL OCCUR DURING UTILITIES DEPARTMENT IRRIGATION REVIEW PRIOR TO THE ISSUANCE OF A BUILDING PERMIT AND CONSTRUCTION OBSERVATION AND INSPECTION BY PARKS SHALL BE INCORPORATED INTO THE CONSTRUCTION PROCESS.
- TOPSOIL:** TO THE MAXIMUM EXTENT FEASIBLE, TOPSOIL THAT IS REMOVED DURING CONSTRUCTION ACTIVITY SHALL BE CONSERVED FOR LATER USE ON AREAS REQUIRING REVEGETATION AND LANDSCAPING.
- SOIL AMENDMENTS:** SOIL AMENDMENTS SHALL BE PROVIDED AND DOCUMENTED IN ACCORDANCE WITH CITY CODE SECTION 12-132. THE SOIL IN ALL LANDSCAPE AREAS, INCLUDING PARKWAYS AND MEDIANS, SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF NOT LESS THAN EIGHT(8) INCHES AND SOIL AMENDMENT SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL OF ALL LANDSCAPE AREAS TO A DEPTH OF AT LEAST SIX(6) INCHES BY TILLING, DISCING OR OTHER SUITABLE METHOD, AT A RATE OF AT LEAST THREE (3) CUBIC YARDS OF SOIL AMENDMENT PER ONE THOUSAND (1,000) SQUARE FEET OF LANDSCAPE AREA. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, A WRITTEN CERTIFICATION MUST BE SUBMITTED TO THE CITY THAT ALL PLANTED AREAS, OR AREAS TO BE PLANTED, HAVE BEEN THOROUGHLY LOOSENED AND THE SOIL AMENDED, CONSISTENT WITH THE REQUIREMENTS SET FORTH IN SECTION 12-132.
- INSTALLATION AND GUARANTEE:** ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND HORTICULTURAL PRACTICES IN A MANNER DESIGNED TO ENCOURAGE QUICK ESTABLISHMENT AND HEALTHY GROWTH. ALL LANDSCAPING FOR EACH PHASE MUST BE EITHER INSTALLED OR THE INSTALLATION MUST BE SECURED WITH AN IRREVOCABLE LETTER OF CREDIT, PERFORMANCE BOND, OR ESCROW ACCOUNT FOR 125% OF THE VALUATION OF THE MATERIALS AND LABOR PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR ANY BUILDING IN SUCH PHASE.
- MAINTENANCE:** TREES AND VEGETATION, IRRIGATION SYSTEMS, FENCES, WALLS AND OTHER LANDSCAPE ELEMENTS WITH THESE FINAL PLANS SHALL BE CONSIDERED AS ELEMENTS OF THE PROJECT IN THE SAME MANNER AS PARKING, BUILDING MATERIALS AND OTHER SITE DETAILS. THE APPLICANT, LANDOWNER OR SUCCESSORS IN INTEREST SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE REGULAR MAINTENANCE OF ALL LANDSCAPING ELEMENTS IN GOOD CONDITION. ALL LANDSCAPING SHALL BE MAINTAINED FREE FROM DISEASE, PESTS, WEEDS AND LITTER, AND ALL LANDSCAPE STRUCTURES SUCH AS FENCES AND WALLS SHALL BE REPAIRED AND REPLACED PERIODICALLY TO MAINTAIN A STRUCTURALLY SOUND CONDITION.
- REPLACEMENT:** ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS.
- THE FOLLOWING SEPARATIONS SHALL BE PROVIDED BETWEEN TREES/SHRUBS AND UTILITIES:
  - 40 FEET BETWEEN CANOPY TREES AND STREET LIGHTS
  - 15 FEET BETWEEN ORNAMENTAL TREES AND STREET LIGHTS
  - 10 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER MAIN LINES
  - 6 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER SERVICE LINES.
  - 4 FEET BETWEEN SHRUBS AND PUBLIC WATER AND SANITARY AND STORM SEWER LINES
  - 4 FEET BETWEEN TREES AND GAS LINES
- ALL STREET TREES SHALL BE PLACED A MINIMUM EIGHT (8) FEET AWAY FROM THE EDGES OF DRIVEWAYS AND ALLEYS PER LUC 3.2.1(D)(2)(a).
- PLACEMENT OF ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH THE SIGHT DISTANCE CRITERIA AS SPECIFIED BY THE CITY OF FORT COLLINS. NO STRUCTURES OR LANDSCAPE ELEMENTS GREATER THAN 24" SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENTS WITH THE EXCEPTION OF DECIDUOUS TREES PROVIDED THAT THE LOWEST BRANCH IS AT LEAST 6' FROM GRADE. ANY FENCES WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENT MUST BE NOT MORE THAN 42" IN HEIGHT AND OF AN OPEN DESIGN.
- THE FINAL LANDSCAPE PLAN SHALL BE COORDINATED WITH ALL OTHER FINAL PLAN ELEMENTS SO THAT THE PROPOSED GRADING, STORM DRAINAGE, AND OTHER DEVELOPMENT IMPROVEMENTS DO NOT CONFLICT WITH NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS ON THIS PLAN.
- MINOR CHANGES IN SPECIES AND PLANT LOCATIONS MAY BE MADE DURING CONSTRUCTION - AS REQUIRED BY SITE CONDITIONS OR PLANT AVAILABILITY. OVERALL QUANTITY, QUALITY, AND DESIGN CONCEPT MUST BE CONSISTENT WITH THE APPROVED PLANS. IN THE EVENT OF CONFLICT WITH THE QUANTITIES INCLUDED IN THE PLANT LIST, SPECIES AND QUANTITIES ILLUSTRATED SHALL BE PROVIDED. ALL CHANGES OF PLANT SPECIES AND LOCATION MUST HAVE WRITTEN APPROVAL BY THE CITY PRIOR TO INSTALLATION.
- ALL PLANTING BEDS SHALL BE MULCHED TO A MINIMUM DEPTH OF THREE INCHES.

**TREE PROTECTION NOTES:**

- ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
- WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
- ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
- PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (1/2) OF THE DRIP LINE, WHICHEVER IS GREATER, THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
- DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
- NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
- LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE, THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
- THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FUTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BREST HEIGHT AS DESCRIBED IN THE CHART BELOW:

Tree Diameter at Breast Height (inches)	Auger Distance From Face of Tree (feet)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
Over 19	15

- ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	
RD5	1/03/22	DH	

504 S. WHITCOMB ST.  
UNIT C  
FORT COLLINS, CO.  
**PREPARED FOR:**  
BUILDING SERVICES  
CITY OF FORT COLLINS

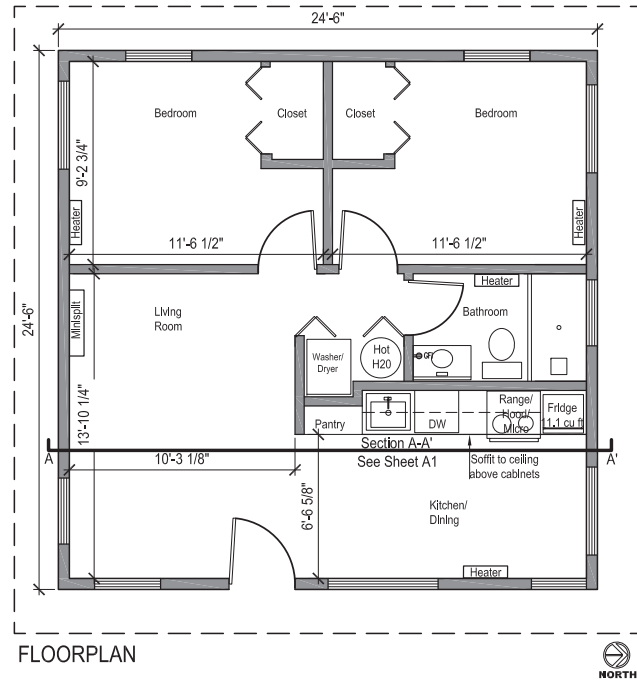
**CONTACT/ OWNER:**  
Rob Kirschenick  
Fort Collins, CO 80521  
PH: 970-222-4272

**SCALE:**  
1" = 10'-0"

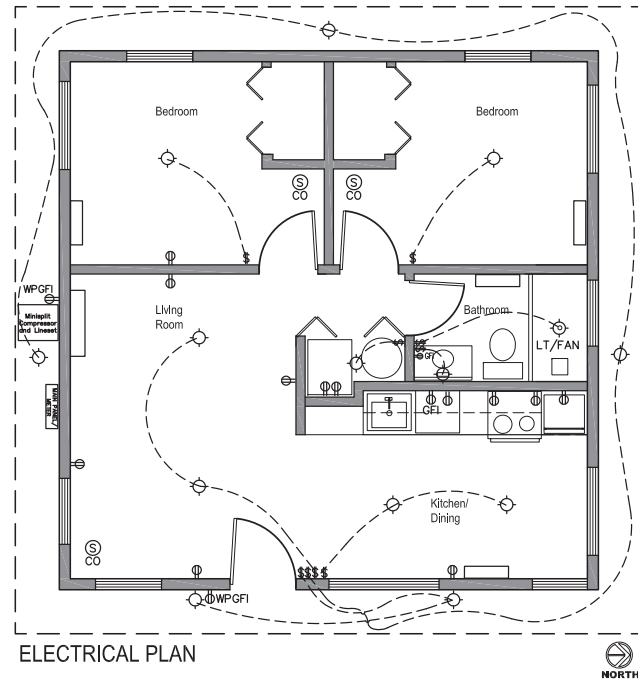
**DATE:**  
MARCH 2021

**DRAWING TITLE:**  
SITE DEVELOPMENT PLANS

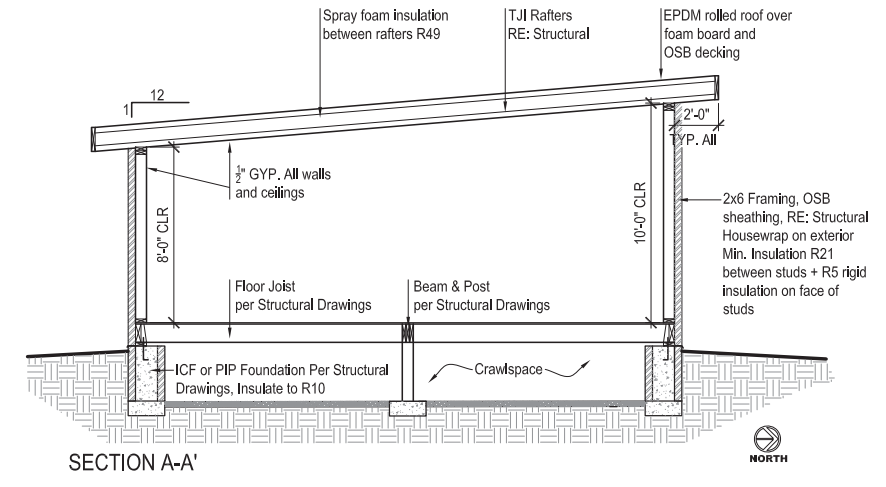
**SHEET NO.:**  
L1.0



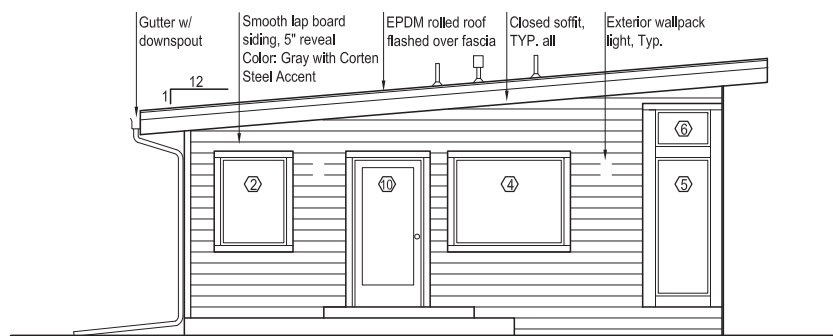
FLOORPLAN



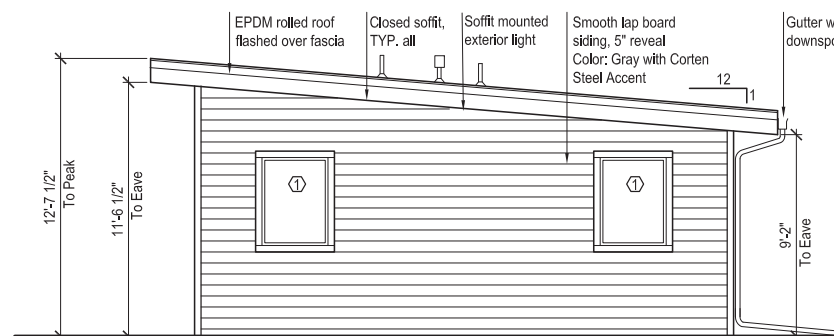
ELECTRICAL PLAN



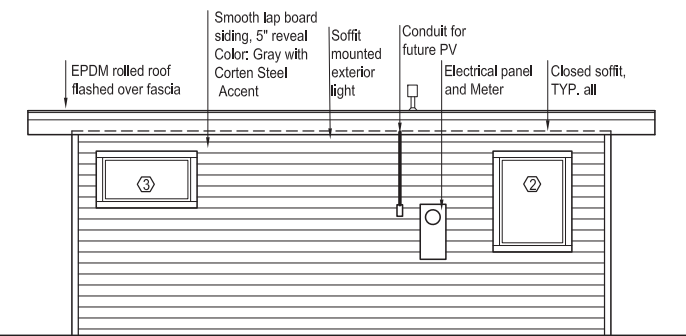
SECTION A-A'



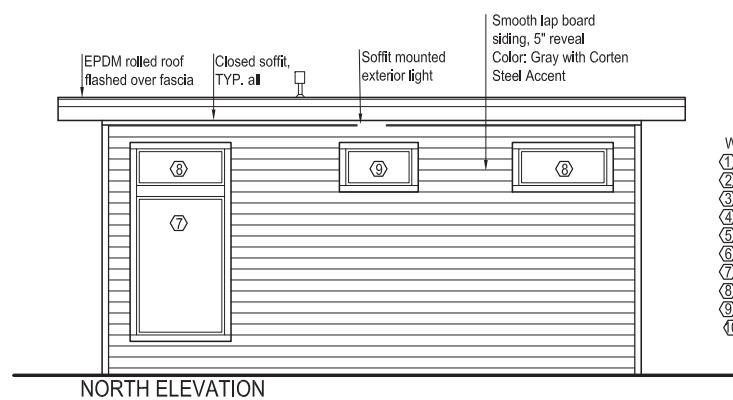
EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

- WINDOW / DOOR SCHEDULE
- ① 36x48 Casement (Egress)
  - ② 36x48 Casement
  - ③ 48x24 Awning
  - ④ 60x48 Awning
  - ⑤ 30x75 Picture
  - ⑥ 30x20 Awning
  - ⑦ 48x75 Picture
  - ⑧ 48x20 Awning
  - ⑨ 36x20 Awning
  - ⑩ 36x80 Door

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	
RD5	1/03/22	DH	

504 S. WHITCOMB ST.  
UNIT C  
FORT COLLINS, CO.  
PREPARED FOR:  
BUILDING SERVICES  
CITY OF FORT COLLINS

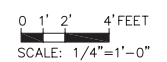
CONTACT / OWNER:  
Rob Kinspöck  
Fort Collins, CO 80521  
PH: 970-222-4272

SCALE:  
1/4" = 1'-0"

DATE:  
MARCH 2021

DRAWING TITLE:  
FLOOR PLANS AND ELEVATIONS

SHEET NO:  
A1.0





# 504 South Whitcomb Street, Unit C

**SITE PLAN NOTES:**

- REFER TO 11.0 SITE LAYOUT/LANDSCAPE PLAN FOR EXACT LOCATIONS AND CONSTRUCTION INFORMATION FOR STORM DRAINAGE STRUCTURES, UTILITY MAINS AND SERVICES, PROPOSED TOPOGRAPHY, STREET IMPROVEMENTS.
- REFER TO THE HISTORIC UNIVERSITY NORTH SUBDIVISION PLAT AND UTILITY PLANS FOR EXACT LOCATIONS, AREAS AND DIMENSIONS OF ALL EASEMENTS, LOTS, TRACTS, STREETS, WALKS AND OTHER SURVEY INFORMATION.
- THE PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FINAL PLANS. AMENDMENTS TO THE PLANS MUST BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THE IMPLEMENTATION OF ANY CHANGES TO THE PLANS.
- ALL ROOFTOP AND GROUND MOUNTED MECHANICAL EQUIPMENT MUST BE SCREENED FROM VIEW FROM ADJACENT PROPERTY AND PUBLIC STREETS. IN CASES WHERE BUILDING PARAPETS DO NOT ACCOMPLISH SUFFICIENT SCREENING, THEN FREE-STANDING SCREEN WALLS MATCHING THE PREDOMINANT COLOR OF THE BUILDING SHALL BE CONSTRUCTED. OTHER MINOR EQUIPMENT SUCH AS CONDUIT, METERS AND PLUMBING VENTS SHALL BE SCREENED OR PAINTED TO MATCH SURROUNDING BUILDING SURFACES.
- ALL CONSTRUCTION WITH THIS DEVELOPMENT PLAN MUST BE COMPLETED IN ONE PHASE UNLESS A PHASING PLAN IS SHOWN WITH THESE PLANS.
- [IF APPLICABLE – INCLUDE LANGUAGE FOR ANY MODIFICATIONS AND CONDITIONS APPROVED WITH PDP/ODP].
- [IF APPLICABLE] ALL SINGLE FAMILY DETACHED HOMES SHALL MEET OR EXCEED THE GARAGE DOOR STANDARDS AS OUTLINED IN 3.5.2(E) OF THE LAND USE CODE.
- [IF APPLICABLE] A MINIMUM OF (NUMBER TBD) HOUSING MODELS FOR THE SINGLE FAMILY HOMES SHALL BE REQUIRED. THESE HOUSING MODELS SHALL MEET OR EXCEED THE STANDARDS AS OUTLINED IN 3.5.2(C) OF THE LAND USE CODE
- ALL EXTERIOR LIGHTING PROVIDED SHALL COMPLY WITH THE FOOT-CANDLE REQUIREMENTS IN SECTION 3.24 OF THE LAND USE CODE AND SHALL USE A CONCEALED, FULLY SHIELDED LIGHT SOURCE WITH SHARP CUT-OFF CAPABILITY SO AS TO MINIMIZE UP-LIGHT, SPILL LIGHT, GLARE AND UNNECESSARY DIFFUSION.
- SIGNAGE AND ADDRESSING ARE NOT PERMITTED WITH THIS PLANNING DOCUMENT AND MUST BE APPROVED BY SEPARATE CITY PERMIT PRIOR TO CONSTRUCTION. SIGNS MUST COMPLY WITH CITY SIGN CODE UNLESS A SPECIFIC VARIANCE IS GRANTED BY THE CITY.
- FIRE HYDRANTS MUST MEET OR EXCEED Poudre FIRE AUTHORITY STANDARDS. NEW STRUCTURE WILL BE SPRINKLED WITH A 13-D RESIDENTIAL FIRE SPRINKLER SYSTEM.
- ALL BIKE RACKS PROVIDED MUST BE PERMANENTLY ANCHORED.
- ALL SIDEWALKS AND RAMPS MUST CONFORM TO CITY STANDARDS. ACCESSIBLE RAMPS MUST BE PROVIDED AT ALL STREET AND DRIVE INTERSECTIONS AND AT ALL DESIGNATED ACCESSIBLE PARKING SPACES. ACCESSIBLE PARKING SPACES MUST SLOPE NO MORE THAN 1:48 IN ANY DIRECTION. ALL ACCESSIBLE ROUTES MUST SLOPE NO MORE THAN 1:20 IN DIRECTION OF TRAVEL AND WITH NO MORE THAN 1:48 CROSS SLOPE.
- COMMON OPEN SPACE AREAS AND LANDSCAPING WITHIN RIGHT OF WAYS, STREET MEDIANS, AND TRAFFIC CIRCLES ADJACENT TO COMMON OPEN SPACE AREAS ARE REQUIRED TO BE MAINTAINED BY THE PROPERTY OWNER OF THE COMMON AREA. THE PROPERTY OWNER IS RESPONSIBLE FOR SNOW REMOVAL ON ALL ADJACENT STREET SIDEWALKS AND SIDEWALKS IN COMMON OPEN SPACE AREAS.
- DESIGN AND INSTALLATION OF ALL PARKWAY/TREE LAWN AND MEDIAN AREAS IN THE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CITY STANDARDS, UNLESS OTHERWISE AGREED TO BY THE CITY WITH THE FINAL PLANS. ALL ONGOING MAINTENANCE OF SUCH AREAS IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER.
- THE PROPERTY OWNER FOR EACH RESIDENTIAL LOT IS RESPONSIBLE FOR SNOW REMOVAL ON ALL STREET SIDEWALKS ADJACENT TO EACH RESIDENTIAL LOT.
- PRIVATE CONDITIONS, COVENANTS, AND RESTRICTIONS (CC&RS), OR ANY OTHER PRIVATE RESTRICTIVE COVENANT IMPOSED ON LANDOWNERS WITHIN THE DEVELOPMENT, MAY NOT BE CREATED OR ENFORCED HAVING THE EFFECT OF PROHIBITING OR LIMITING THE INSTALLATION OF XERISCAPE LANDSCAPING, SOLAR PHOTO-VOLTAIC COLLECTORS (IF MOUNTED FLUSH UPON ANY ESTABLISHED ROOF LINE), CLOTHES LINES (IF LOCATED IN BACK YARDS), ODOR-CONTROLLED COMPOST BINS, OR WHICH HAVE THE EFFECT OF REQUIRING THAT A PORTION OF ANY INDIVIDUAL LOT BE PLANTED IN TURF GRASS.
- ANY DAMAGED CURB, GUTTER AND SIDEWALK EXISTING PRIOR TO CONSTRUCTION, AS WELL AS STREETS, SIDEWALKS, CURBS AND GUTTERS, DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT, SHALL BE REPLACED OR RESTORED TO CITY OF FORT COLLINS STANDARDS AT THE DEVELOPER'S EXPENSE PRIOR TO THE ACCEPTANCE OF COMPLETED IMPROVEMENTS AND/OR PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.
- FIRE LANE MARKING: A FIRE LANE MARKING PLAN MUST BE REVIEWED AND APPROVED BY THE FIRE OFFICIAL PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. WHERE REQUIRED BY THE FIRE CODE OFFICIAL, APPROVED SIGNS OR OTHER APPROVED NOTICES THAT INCLUDE THE WORDS NO PARKING FIRE LANE SHALL BE PROVIDED FOR FIRE APPARATUS ACCESS ROADS TO IDENTIFY SUCH ROADS OR PROHIBIT THE OBSTRUCTION THEREOF. THE MEANS BY WHICH FIRE LANES ARE DESIGNATED SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION AT ALL TIMES AND BE REPLACED OR REPAIRED WHEN NECESSARY TO PROVIDE ADEQUATE VISIBILITY.
- PREMISE IDENTIFICATION: AN ADDRESSING PLAN IS REQUIRED TO BE REVIEWED AND APPROVED BY THE CITY AND Poudre FIRE AUTHORITY PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. UNLESS THE PRIVATE DRIVE IS NAMED, MONUMENT SIGNAGE MAY BE REQUIRED TO ALLOW WAY FINDING. ALL BUILDINGS SHALL HAVE ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE, VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY, AND POSTED WITH A MINIMUM OF SIX INCH NUMERALS ON A CONTRASTING BACKGROUND. WHERE ACCESS IS BY MEANS OF A PRIVATE ROAD AND THE BUILDING CANNOT BE VIEWED FROM THE PUBLIC WAY, A MONUMENT, POLE OR OTHER SIGN OR MEANS SHALL BE USED TO IDENTIFY THE STRUCTURE.

**VICINITY MAP:**



**SHEET INDEX:**

- LO.0 COVER SHEET
- GR&DR GRADING & DRAINAGE PLANS
- LI.0 SITE DEVELOPMENT PLANS
- AI.0 BUILDING FLOORPLANS & ELEVATIONS
- SI FOUNDATION AND FRAMING PLANS & DET/

**PROJECT INFORMATION:**

Construct a 600 SF, single story, detached residential unit with 2 bedrooms on the east half of the parcel. Existing adjacent gravel parking will be utilized for residents.

Legal Description: LOT 7, BLK 75, FTC  
 Parcel #: 9714109007  
 Subdivision: Subdivision of Block Seventy-Five  
 Zoning: N-C-B

OWNER:  
 Robert & Kristin Kirkpatrick  
 619 Skysail Lane  
 Fort Collins, CO 80525  
 970.222.4272

**LAND USE TABLE:**

**Setbacks:**

Front Yard-	75 Feet
Rear Yard-	5 Feet (to alley)
Side Yard-	5 Feet

**Lot Size:** 9,000 SF

**Maximum Accessory Building with Habitable Space square footage:** 1000 SF

**Actual Accessory Building with Habitable Space square footage:** 600 SF

**Allowable floor area on rear 50% of Lot:** 4500 SF \* .33 = 1,482 SF

**Actual floor area on rear 50% of Lot:** 600 SF

**IMPERVIOUS SURFACE CALCULATIONS:**

EXISTING IMPERVIOUS AREA DRAINING TO ALLEY	ADDITIONAL IMPERVIOUS AREA DRAINING TO ALLEY		
Shed Roofs	761 sf	Roofs	648 sf
Gravel Parking Area	723 sf	Gravel Parking Area	1006 sf
Total Impervious	1484 sf	Total Impervious	1654 sf
		Total Impervious area increase	170 sf
<i>Approx. 27.9% impervious per drainage memo</i>		<i>Approx. 28.8% impervious per drainage memo</i>	

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	0/25/21	DH	
RD5	12/2/21	RK	

**OWNER'S CERTIFICATION**

THE UNDERSIGNED DOES DO HEREBY CERTIFY THAT I/WE ARE THE LAWFUL OWNERS OF THE REAL PROPERTY DESCRIBED ON THIS SITE PLAN AND DO HEREBY CERTIFY THAT I/WE ACCEPT THE CONDITIONS AND RESTRICTIONS SET FORTH ON SAID SITE PLAN.

OWNER \_\_\_\_\_ DATE \_\_\_\_\_

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ AD \_\_\_\_\_ BY \_\_\_\_\_

504 S. WHITCOMB ST.  
 UNIT C  
 FORT COLLINS, CO.  
 PREPARED FOR:  
 BUILDING SERVICES  
 CITY OF FORT COLLINS

CONTACT / OWNER:  
 RCB Kirkpatrick  
 Fort Collins, CO 80521  
 PH: 970.222.4272

**PLANNING CERTIFICATION**  
 APPROVED BY THE DIRECTOR OF COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES (CDNS) OF THE CITY OF FORT COLLINS, COLORADO ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

DIRECTOR OF CDNS

MY NOTARIAL COMMISSION EXPIRES \_\_\_\_\_

NOTARY PUBLIC \_\_\_\_\_

ADDRESS \_\_\_\_\_

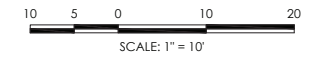
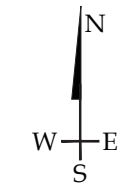
CITY, STATE, ZIP CODE \_\_\_\_\_

SCALE:

DATE: MARCH 2021

DRAWING TITLE: COVER SHEET

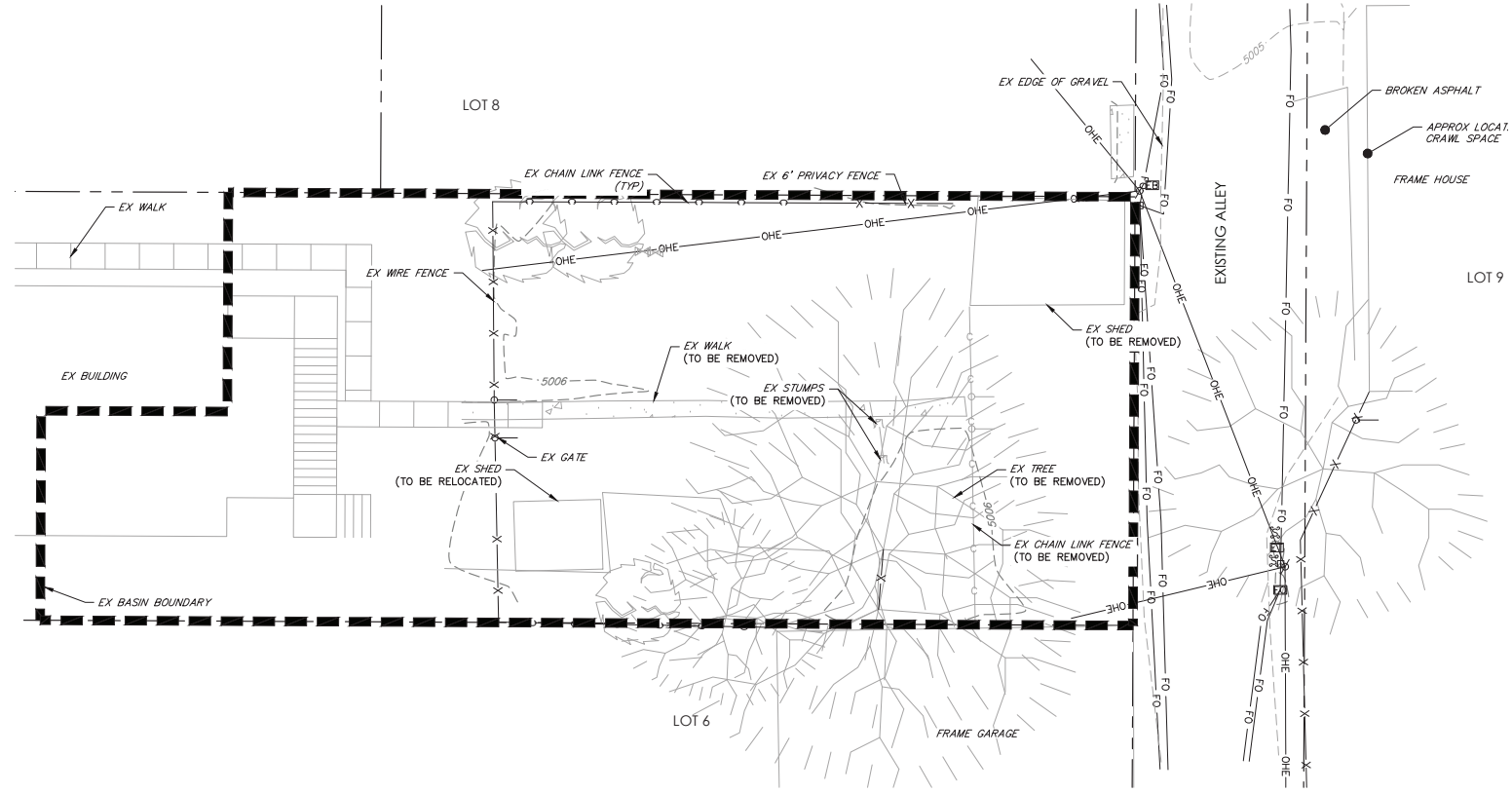
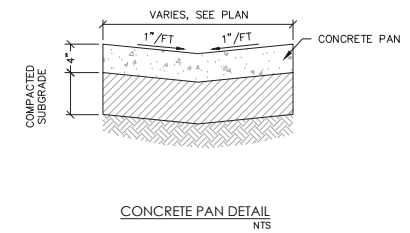
SHEET NO: LO.0



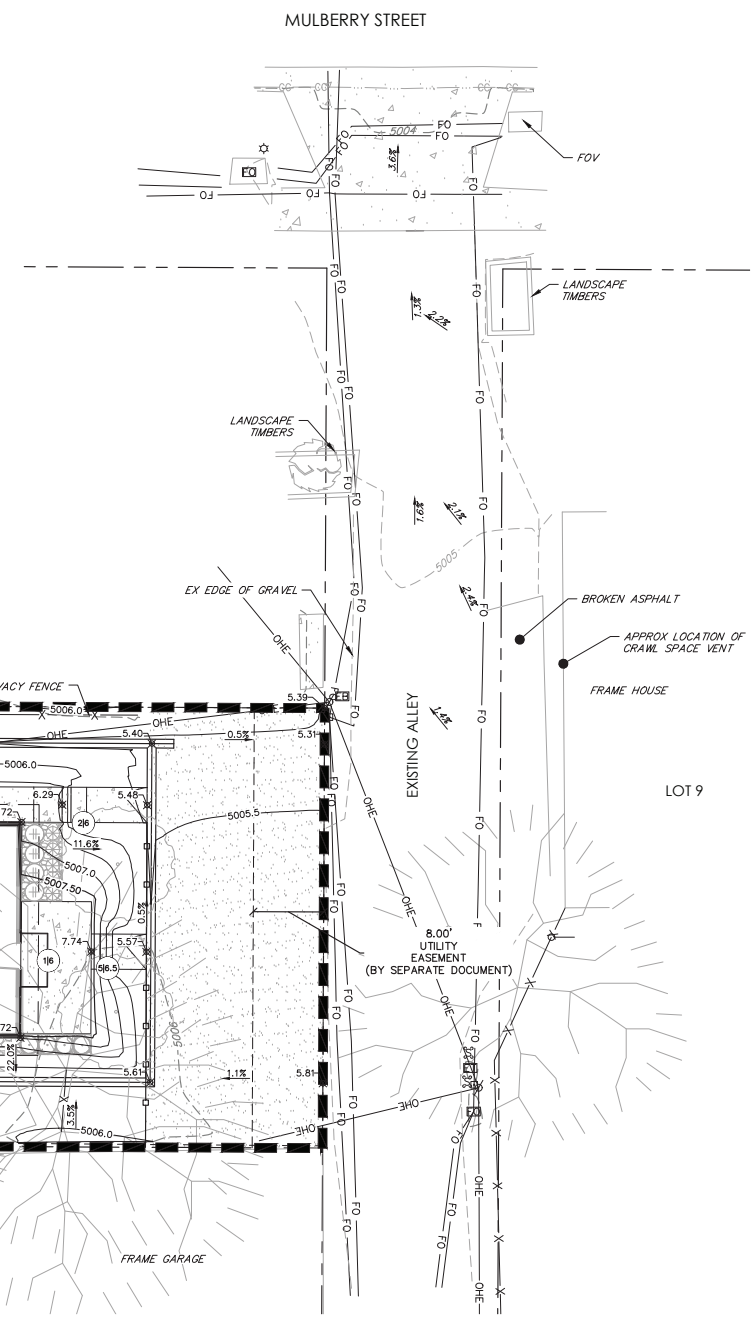
**LEGEND**

(X)	HEIGHT OF RISER
—	NUMBER OF STEPS
-5000-	EXISTING MAJOR CONTOUR
-5001	EXISTING MINOR CONTOUR
—5000—	PROPOSED MAJOR CONTOUR
—5001—	PROPOSED MINOR CONTOUR

- NOTES:**
- CONTRACTOR TO PROVIDE AND MAINTAIN ALL NECESSARY EROSION CONTROL MEASURES PRIOR TO AND THROUGHOUT CONSTRUCTION.
  - SPOT ELEVATIONS ARE SHOWN ON FLOWLINE OR BACK OF WALK UNLESS OTHERWISE LABELED.
  - WALKWAYS SLOPE 2.0% AWAY FROM BUILDINGS AND/OR TOWARD PARKING/DRIVE AREAS. WALK LABELS ARE SHOWN ON THE HIGH SIDE OF THE WALK.
  - ALL SUBGRADE TO BE PLACED/COMPACTED PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
  - FFE IS BASED ON THE TJI FLOORING SYSTEM (14.125).
  - THE DRAINAGE IS DESIGNED TO MATCH EXISTING FLOWS FROM THE PROPERTY TO THE ALLEY.



**EXISTING CONDITIONS & DEMOLITION PLAN**



**PROPOSED GRADING PLAN**

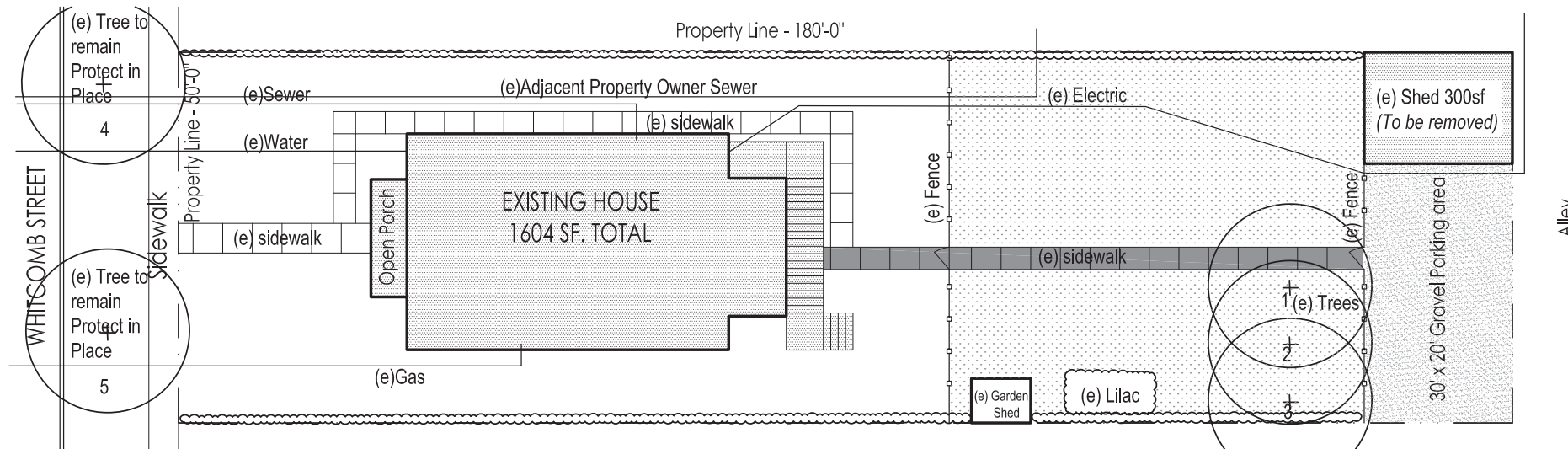
NO.	REVISION	BY	DATE

**504 S WHITCOMB STREET - UNIT C**  
**GRADING & DRAINAGE PLAN**

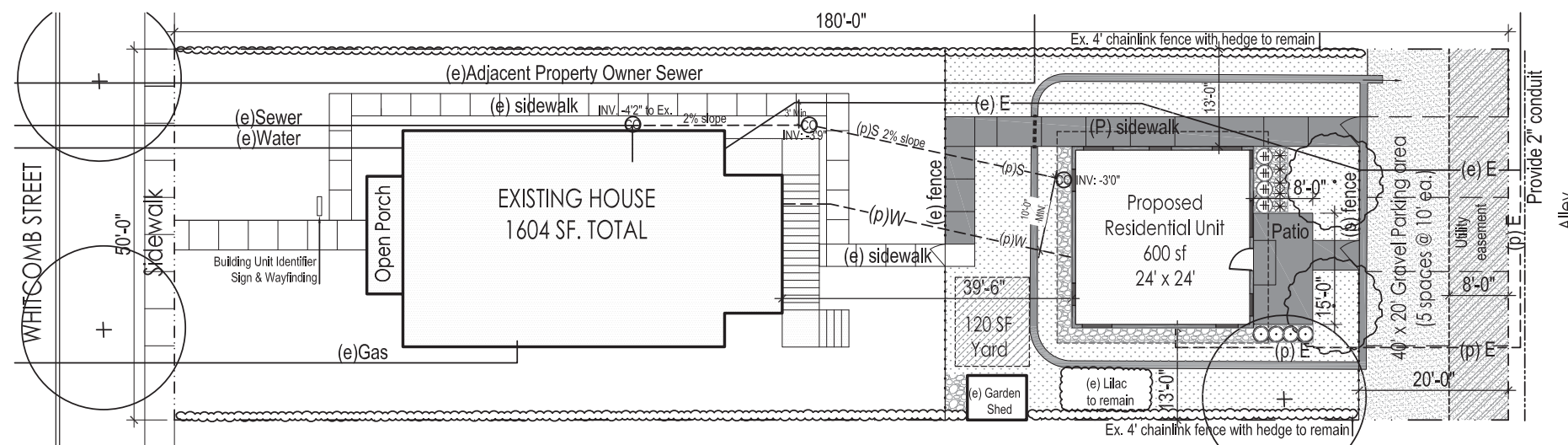
PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:  
**REVIEW SET NOT FOR CONSTRUCTION**  
 FOR AND ON BEHALF OF HIGHLAND DEVELOPMENT SERVICES

DATE	12/03/21
SCALE (H)	1" = 10'
SCALE (V)	N/A
DRAWN BY	ACM
CHECKED BY	JTC
HDS PROJECT #	21-1039-00

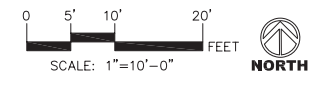




**EXISTING CONDITIONS**



**SITE LAYOUT/ LANDSCAPE PLAN**



**GENERAL NOTES:**

**UTILITIES:**  
All utilities for the structure will be connected to existing infrastructure that supplies the primary house on the lot. The new residential unit will be equipped with a 13-D Residential fire suppression sprinkler system. The new residential unit will be constructed so that it is solar ready.

Landscape irrigation will be added to the existing home irrigation system. Shrubs and grasses will be watered with a drip zone, native grass with MP rotator spray heads to minimize water usage.

**SUGGESTED TREE MITIGATION:**

#	SPECIES	DBH	CONDITION	ACTION	MITIGATION
1	Sib. Elm	14	POOR	REMOVE	1
2	Sib. Elm	16	POOR	REMOVE	1
3	Sib. Elm	16	FAIR	PRESERVE	1
4	Cottonwood	53	FAIR	PRESERVE	5
5	Cottonwood	50	FAIR	PRESERVE	5

**LANDSCAPE LEGEND:**

- Shade tolerant grass seed (See list)
- Gravel parking surface
- Concrete
- 1.5" Dia. Rock Mulch 3" Depth over fabric
- Drainage culvert
- Chinkapin Oak 3.0" Cal (Qty 2)
- Spirea Japonica 'Neon Flash', 5 Gal. (Qty 4)
- Dwarf Fountain Grass 'Hameln', 1 Gal. (Qty 5)
- Karl Forester Feather Reed Grass, 1 Gal. (Qty 4)

SHADE TOLERANT SEED MIX TO INCLUDE: 4-5LBS./ 1000 S.F.

- Kentucky Bluegrass (Poa Pratensis)
- Creeping Red Fescue (Festuca Rubra)
- Hard Fescue (Festuca brevipila)
- Chewings Fescue (Festuca Rubra 'Fallax')

**GENERAL LANDSCAPE NOTES:**

- PLANT QUALITY:** ALL PLANT MATERIAL SHALL BE A-GRADE OR NO. 1 GRADE - FREE OF ANY DEFECTS, OF NORMAL HEALTH, HEIGHT, LEAF DENSITY AND SPREAD APPROPRIATE TO THE SPECIES AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAM) STANDARDS. ALL TREES SHALL BE BALL AND BURLAP OR EQUIVALENT.
- IRRIGATION:** ALL LANDSCAPE AREAS WITHIN THE SITE INCLUDING TURF, SHRUB BEDS AND TREE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM. THE IRRIGATION PLAN MUST BE REVIEWED AND APPROVED BY THE CITY OF FORT COLLINS WATER UTILITIES DEPARTMENT PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. ALL TURF AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC POP-UP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES, INCLUDING IN NATIVE SEED AREAS, SHALL BE IRRIGATED WITH AN AUTOMATIC DRIP (TRICKLE) IRRIGATION SYSTEM, OR WITH AN ACCEPTABLE ALTERNATIVE APPROVED BY THE CITY WITH THE IRRIGATION PLANS. THE IRRIGATION SYSTEM SHALL BE ADJUSTED TO MEET THE WATER REQUIREMENTS OF THE INDIVIDUAL PLANT MATERIAL. IRRIGATION SYSTEMS TO BE TURNED OVER TO THE CITY PARKS DEPARTMENT FOR MAINTENANCE MUST BE APPROVED BY THE PARKS MANAGER AND MEET PARKS IRRIGATION STANDARDS. DESIGN REVIEW SHALL OCCUR DURING UTILITIES DEPARTMENT IRRIGATION REVIEW PRIOR TO THE ISSUANCE OF A BUILDING PERMIT AND CONSTRUCTION OBSERVATION AND INSPECTION BY PARKS SHALL BE INCORPORATED INTO THE CONSTRUCTION PROCESS.
- TOPSOIL:** TO THE MAXIMUM EXTENT FEASIBLE, TOPSOIL THAT IS REMOVED DURING CONSTRUCTION ACTIVITY SHALL BE CONSERVED FOR LATER USE ON AREAS REQUIRING REVEGETATION AND LANDSCAPING.
- SOIL AMENDMENTS:** SOIL AMENDMENTS SHALL BE PROVIDED AND DOCUMENTED IN ACCORDANCE WITH CITY CODE SECTION 12-132. THE SOIL IN ALL LANDSCAPE AREAS, INCLUDING PARKWAYS AND MEDIANS, SHALL BE THOROUGHLY LOOSENED TO A DEPTH OF NOT LESS THAN EIGHT(8) INCHES AND SOIL AMENDMENT SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL OF ALL LANDSCAPE AREAS TO A DEPTH OF AT LEAST SIX(6) INCHES BY TILLING, DISCING OR OTHER SUITABLE METHOD, AT A RATE OF AT LEAST THREE (3) CUBIC YARDS OF SOIL AMENDMENT PER ONE THOUSAND (1,000) SQUARE FEET OF LANDSCAPE AREA. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, A WRITTEN CERTIFICATION MUST BE SUBMITTED TO THE CITY THAT ALL PLANTED AREAS, OR AREAS TO BE PLANTED, HAVE BEEN THOROUGHLY LOOSENED AND THE SOIL AMENDED, CONSISTENT WITH THE REQUIREMENTS SET FORTH IN SECTION 12-132.
- INSTALLATION AND GUARANTEE:** ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND HORTICULTURAL PRACTICES IN A MANNER DESIGNED TO ENCOURAGE QUICK ESTABLISHMENT AND HEALTHY GROWTH. ALL LANDSCAPING FOR EACH PHASE MUST BE EITHER INSTALLED OR THE INSTALLATION MUST BE SECURED WITH AN IRREVOCABLE LETTER OF CREDIT, PERFORMANCE BOND, OR ESCROW ACCOUNT FOR 125% OF THE VALUATION OF THE MATERIALS AND LABOR PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR ANY BUILDING IN SUCH PHASE.
- MAINTENANCE:** TREES AND VEGETATION, IRRIGATION SYSTEMS, FENCES, WALLS AND OTHER LANDSCAPE ELEMENTS WITH THESE FINAL PLANS SHALL BE CONSIDERED AS ELEMENTS OF THE PROJECT IN THE SAME MANNER AS PARKING, BUILDING MATERIALS AND OTHER SITE DETAILS. THE APPLICANT, LANDOWNER OR SUCCESSORS IN INTEREST SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE REGULAR MAINTENANCE OF ALL LANDSCAPING ELEMENTS IN GOOD CONDITION. ALL LANDSCAPING SHALL BE MAINTAINED FREE FROM DISEASE, PESTS, WEEDS AND LITTER, AND ALL LANDSCAPE STRUCTURES SUCH AS FENCES AND WALLS SHALL BE REPAIRED AND REPLACED PERIODICALLY TO MAINTAIN A STRUCTURALLY SOUND CONDITION.
- REPLACEMENT:** ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS.
- THE FOLLOWING SEPARATIONS SHALL BE PROVIDED BETWEEN TREES/SHRUBS AND UTILITIES:
  - 40 FEET BETWEEN CANOPY TREES AND STREET LIGHTS
  - 15 FEET BETWEEN ORNAMENTAL TREES AND STREET LIGHTS
  - 10 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER MAIN LINES
  - 6 FEET BETWEEN TREES AND PUBLIC WATER, SANITARY AND STORM SEWER SERVICE LINES.
  - 4 FEET BETWEEN SHRUBS AND PUBLIC WATER AND SANITARY AND STORM SEWER LINES
  - 4 FEET BETWEEN TREES AND GAS LINES
- ALL STREET TREES SHALL BE PLACED A MINIMUM EIGHT (8) FEET AWAY FROM THE EDGES OF DRIVEWAYS AND ALLEYS PER LUC 3.2.1(D)(2)(a).
- PLACEMENT OF ALL LANDSCAPING SHALL BE IN ACCORDANCE WITH THE SIGHT DISTANCE CRITERIA AS SPECIFIED BY THE CITY OF FORT COLLINS. NO STRUCTURES OR LANDSCAPE ELEMENTS GREATER THAN 24" SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENTS WITH THE EXCEPTION OF DECIDUOUS TREES PROVIDED THAT THE LOWEST BRANCH IS AT LEAST 6' FROM GRADE. ANY FENCES WITHIN THE SIGHT DISTANCE TRIANGLE OR EASEMENT MUST BE NOT MORE THAN 42" IN HEIGHT AND OF AN OPEN DESIGN.
- THE FINAL LANDSCAPE PLAN SHALL BE COORDINATED WITH ALL OTHER FINAL PLAN ELEMENTS SO THAT THE PROPOSED GRADING, STORM DRAINAGE, AND OTHER DEVELOPMENT IMPROVEMENTS DO NOT CONFLICT WITH NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS ON THIS PLAN.
- MINOR CHANGES IN SPECIES AND PLANT LOCATIONS MAY BE MADE DURING CONSTRUCTION - AS REQUIRED BY SITE CONDITIONS OR PLANT AVAILABILITY. OVERALL QUANTITY, QUALITY, AND DESIGN CONCEPT MUST BE CONSISTENT WITH THE APPROVED PLANS. IN THE EVENT OF CONFLICT WITH THE QUANTITIES INCLUDED IN THE PLANT LIST, SPECIES AND QUANTITIES ILLUSTRATED SHALL BE PROVIDED. ALL CHANGES OF PLANT SPECIES AND LOCATION MUST HAVE WRITTEN APPROVAL BY THE CITY PRIOR TO INSTALLATION.
- ALL PLANTING BEDS SHALL BE MULCHED TO A MINIMUM DEPTH OF THREE INCHES.

**TREE PROTECTION NOTES:**

- ALL EXISTING TREES WITHIN THE LIMITS OF THE DEVELOPMENT AND WITHIN ANY NATURAL AREA BUFFER ZONES SHALL REMAIN AND BE PROTECTED UNLESS NOTED ON THESE PLANS FOR REMOVAL.
- WITHIN THE DRIP LINE OF ANY PROTECTED EXISTING TREE, THERE SHALL BE NO CUT OR FILL OVER A FOUR-INCH DEPTH UNLESS A QUALIFIED ARBORIST OR FORESTER HAS EVALUATED AND APPROVED THE DISTURBANCE.
- ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS. TREE PRUNING AND REMOVAL SHALL BE PERFORMED BY A BUSINESS THAT HOLDS A CURRENT CITY OF FORT COLLINS ARBORIST LICENSE WHERE REQUIRED BY CODE.
- PRIOR TO AND DURING CONSTRUCTION, BARRIERS SHALL BE ERECTED AROUND ALL PROTECTED EXISTING TREES WITH SUCH BARRIERS TO BE OF ORANGE FENCING A MINIMUM OF FOUR (4) FEET IN HEIGHT, SECURED WITH METAL T-POSTS, NO CLOSER THAN SIX (6) FEET FROM THE TRUNK OR ONE-HALF (1/2) OF THE DRIP LINE, WHICHEVER IS GREATER, THERE SHALL BE NO STORAGE OR MOVEMENT OF EQUIPMENT, MATERIAL, DEBRIS OR FILL WITHIN THE FENCED TREE PROTECTION ZONE.
- DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE APPLICANT SHALL PREVENT THE CLEANING OF EQUIPMENT OR MATERIAL OR THE STORAGE AND DISPOSAL OF WASTE MATERIAL SUCH AS PAINTS, OILS, SOLVENTS, ASPHALT, CONCRETE, MOTOR OIL OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY PROTECTED TREE OR GROUP OF TREES.
- NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
- LARGE PROPERTY AREAS CONTAINING PROTECTED TREES AND SEPARATED FROM CONSTRUCTION OR LAND CLEARING AREAS, ROAD RIGHTS-OF-WAY AND UTILITY EASEMENTS MAY BE "RIBBONED OFF," RATHER THAN ERECTING PROTECTIVE FENCING AROUND EACH TREE AS REQUIRED IN SUBSECTION (G)(3) ABOVE, THIS MAY BE ACCOMPLISHED BY PLACING METAL T-POST STAKES A MAXIMUM OF FIFTY (50) FEET APART AND TYING RIBBON OR ROPE FROM STAKE-TO-STAKE ALONG THE OUTSIDE PERIMETERS OF SUCH AREAS BEING CLEARED.
- THE INSTALLATION OF UTILITIES, IRRIGATION LINES OR ANY UNDERGROUND FIXTURE REQUIRING EXCAVATION DEEPER THAN SIX (6) INCHES SHALL BE ACCOMPLISHED BY BORING UNDER THE ROOT SYSTEM OF PROTECTED EXISTING TREES AT A MINIMUM DEPTH OF TWENTY-FOUR (24) INCHES. THE AUGER DISTANCE IS ESTABLISHED FROM THE FACE OF THE TREE (OUTER BARK) AND IS SCALED FROM TREE DIAMETER AT BRESTH HEIGHT AS DESCRIBED IN THE CHART BELOW:

Tree Diameter at Breast Height (inches)	Auger Distance From Face of Tree (feet)
0-2	1
3-4	2
5-9	5
10-14	10
15-19	12
Over 19	15

- ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A SURVEY OF TREES ENSURING NO ACTIVE NESTS IN THE AREA.

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	

504 S. WHITCOMB ST.  
UNIT C  
FORT COLLINS, CO.  
**PREPARED FOR:**  
BUILDING SERVICES  
CITY OF FORT COLLINS

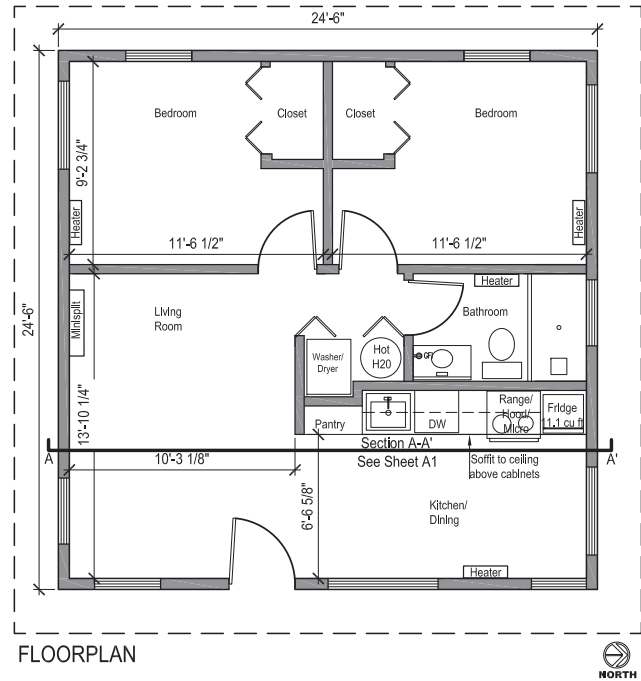
**CONTACT/ OWNER:**  
Rob Kirschenick  
Fort Collins, CO 80521  
PH: 970-222-4272

**SCALE:**  
1" = 10'-0"

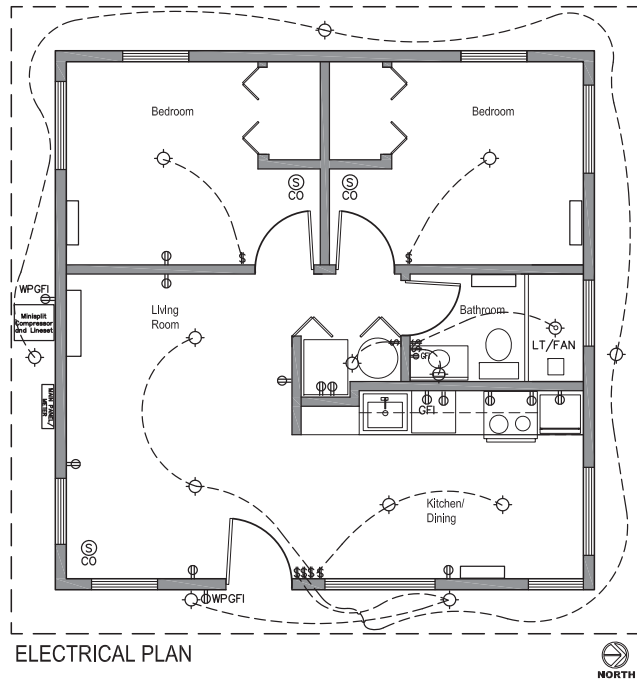
**DATE:**  
MARCH 2021

**DRAWING TITLE:**  
SITE DEVELOPMENT PLANS

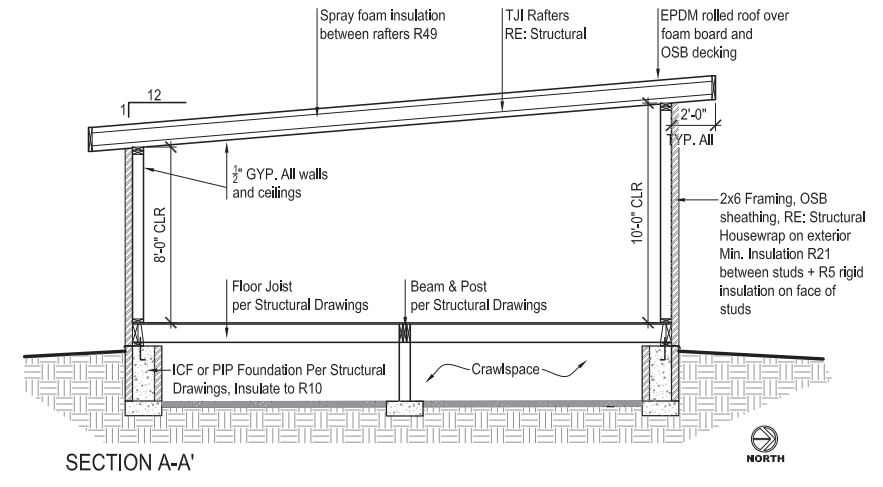
**SHEET NO.:**  
L1.0



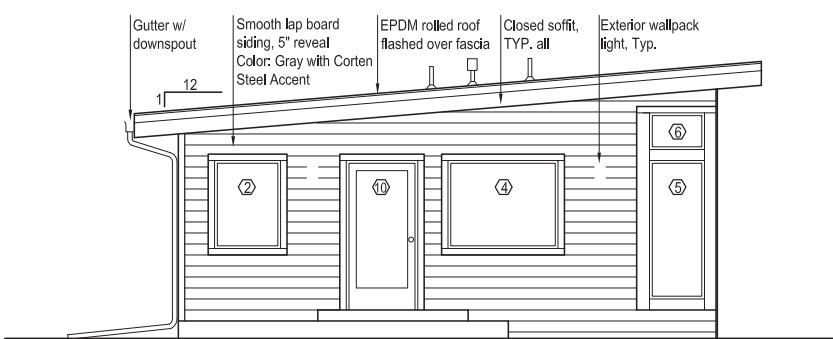
FLOORPLAN



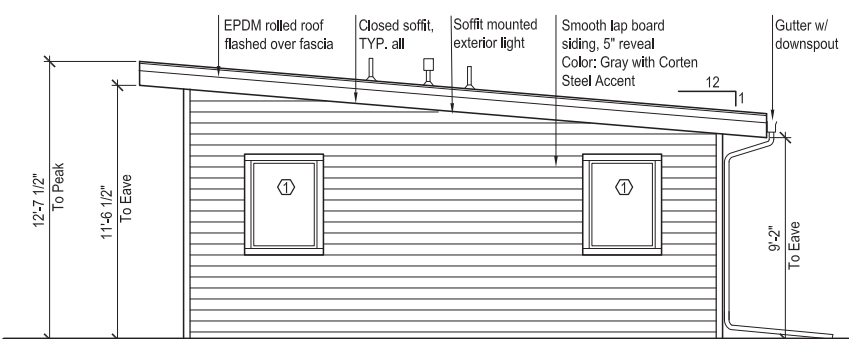
ELECTRICAL PLAN



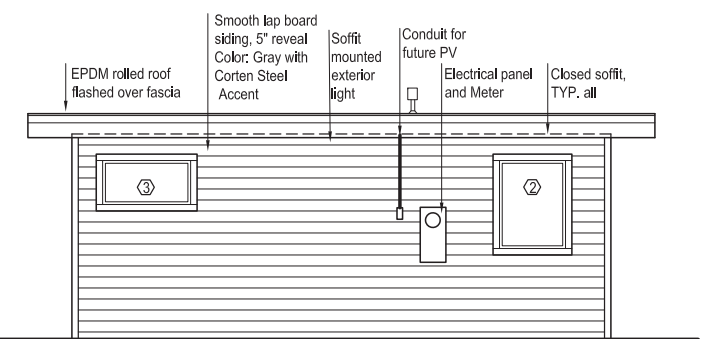
SECTION A-A'



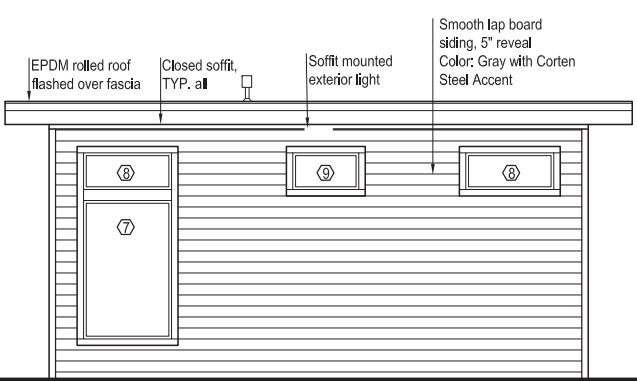
EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

- WINDOW / DOOR SCHEDULE
- ① 36x48 Casement (Egress)
  - ② 36x48 Casement
  - ③ 48x24 Awning
  - ④ 60x48 Awning
  - ⑤ 30x75 Picture
  - ⑥ 30x20 Awning
  - ⑦ 48x75 Picture
  - ⑧ 48x20 Awning
  - ⑨ 36x20 Awning
  - ⑩ 36x80 Door

Rev. No.	Date	By	Checked By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	

504 S. WHITCOMB ST.  
UNIT C  
FORT COLLINS, CO.  
PREPARED FOR:  
BUILDING SERVICES  
CITY OF FORT COLLINS

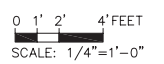
CONTACT / OWNER:  
Rob Kinspöck  
Fort Collins, CO 80521  
PH: 970-222-4272

SCALE:  
1/4" = 1'-0"

DATE:  
MARCH 2021

DRAWING TITLE:  
FLOOR PLANS AND ELEVATIONS

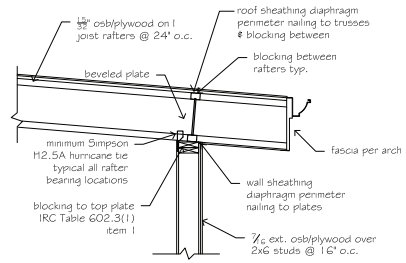
SHEET NO:  
A1.0



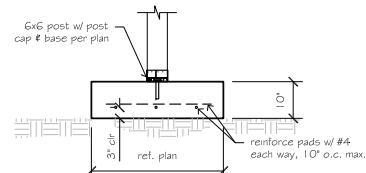
**structural notes:**

- a. general:
1. all construction shall be in accordance with the international residential code (2018 edition) and in accordance with all applicable osha regulations.
  2. the contractor shall check and verify all dimensions shown on this plan prior to concrete placement and shall reference architectural plans for blockouts, etc.
  3. all exterior walls, interior shear walls and interior bearing walls as noted on the plan shall be constructed as outlined in Table IRC602.10.4 method WSP: 7/16" osb or plywood one side with min. 1/2" gypsum wall board (GB) on the opposite side.
- b. design:
1. foundation design is based on the geotechnical engineering report prepared for the site by Solilogic, Inc. all the recommendations included in this report shall be considered to be part of these specifications. the geotechnical engineer should be contacted to verify soil conditions are consistent with the report recommendations prior to construction.  
maximum bearing capacity = 1500 psf  
minimum dead load = 500 psf
  2. design live loads: roof snow load  $P_f = 30$  psf; floor load = 40 psf; wind Vult = 140 mph (nominal 3s); exp. c; seismic design category b.
- c. foundation specifications
1. all footings to bear on soil prepared in accordance with geotechnical report.
  2. the foundation excavation shall be observed by the geotechnical engineer of record.
  3. foundation walls to be backfilled in accordance with the recommendations in the geotechnical report.
  4. fill material under slabs on grade shall be an approved material placed in accordance with the recommendations in the geotechnical report.
  5. slab control joints shall be provided in accordance with aci recommendations.
  6. it is the contractors responsibility to inform the owner of the potential for damage due to slab movement and the precautions to be taken to minimize potential damage when movement occurs. if the owner chooses slab on grade construction instead of a structural floor the owner shall assume all risk of slab on grade construction.
  7. all non-bearing frame walls placed on slabs on grade should be provided with a slip joint (2" void) at the bottom of the wall.
- d. materials
1. foundation concrete:  $f_c = 3000$  psi foundation,  $f_c = 4000$  psi garage slab on grade; minimum of 5-1/4 sacks of type i-ii portland cement per cubic yard; air entrained with 6%  $\pm$  1% air.
  2. reinforcing steel:  $f_y = 60$  ksi (60 grade). all reinforcing shall be placed in accordance with aci recommendations including minimum laps, spacings and corner bars.
  3. wood - framing lumber shall be stress graded Hem-Fir as follows:
    - a. joists, beams, columns - no. 2 or better.
    - b. studs - load bearing  $\neq$  exterior walls 2x6 no 2 construction grade.
    - c. studs - interior non-load bearing - 2x4 standard grade.
  4. blocking and bracing - no. 2
  5. laminated veneer lumber (LVL) shall be stress graded as follows: bending - 2600psi; tension parallel to grain - 1850psi; compression parallel to grain - 2700psi; horizontal shear - 285psi; compression perpendicular to grain - 500psi; modulus of elasticity - 1900ksi.
  6. LVL member sizes are net; lumber sizes are nominal.
  7. joists shall be as manufactured by Trus Joist or an approved substitute. joists shall be detailed by the joist supplier including bracing, blocking and web filler details and shall be installed in accordance with the manufacturers recommendations.
  8. timber connectors called for on the drawings are as manufactured by Simpson company. connectors by other manufacturers may be used if the load capacity is equal to or greater than the connector specified. use manufacturer's furnished nails and bolts.
  9. fasten all wood members with common nails according to the building code unless otherwise noted.
  10. roof sheathing shall be 15/32" sheathing rated for exterior use with an APA span rating of 32/16. nail roof sheathing with 8d nails at 4" on center at panel edges and 12" on center in the field u.n.o.
  11. exterior wall sheathing shall be 7/16" osb or plywood nailed to framing with 8d nails spaced at 6" on center at panel edges, 12" on center in the field minimum u.n.o.

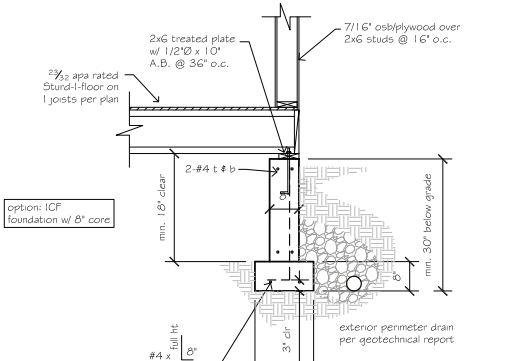
3 rafter bearing  
1/2" = 1'-0"



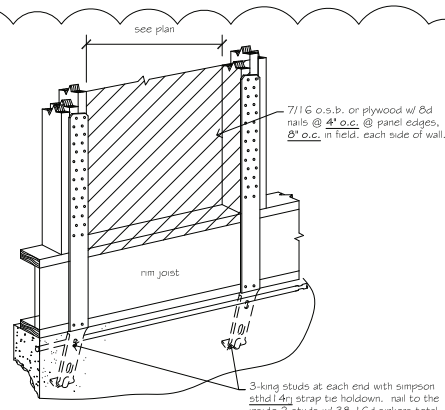
2 interior pad detail  
1/2" = 1'-0"



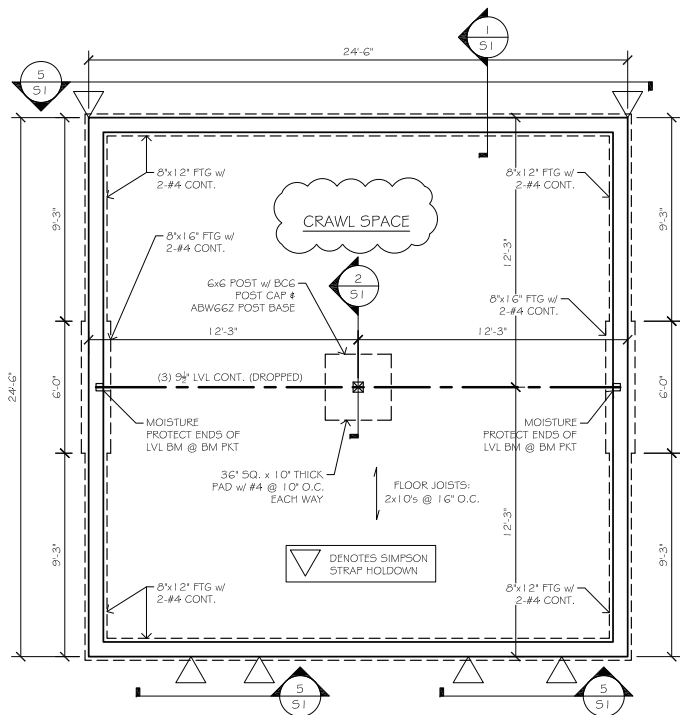
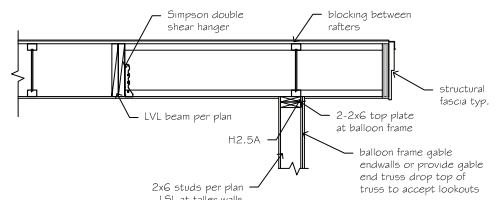
1 crawl space wall  
1/2" = 1'-0"



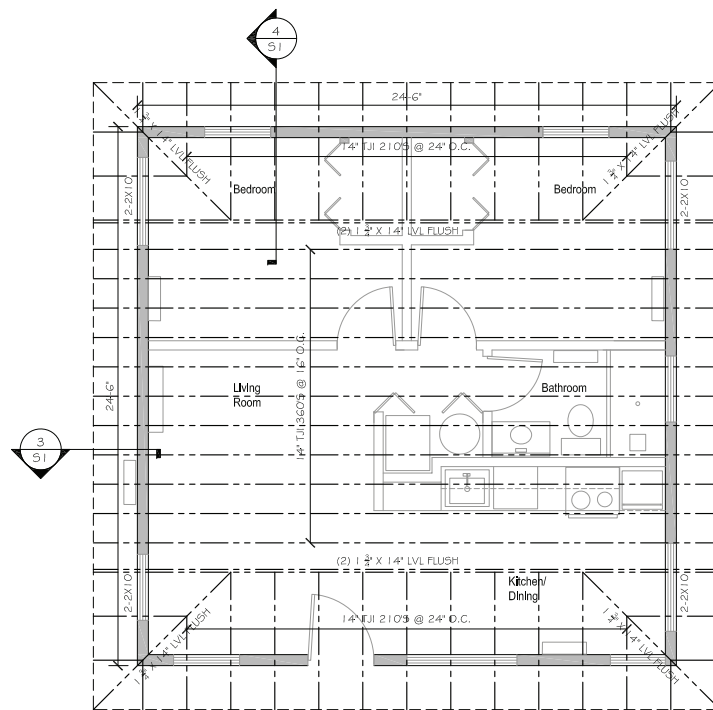
5 typ. holdown at foundation  
1/2" = 1'-0"



4 gable end lookouts  
1/2" = 1'-0"

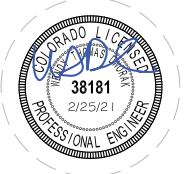


FOUNDATION PLAN  
1/4" = 1'-0"



ROOF FRAMING PLAN  
1/4" = 1'-0"

MIN. 3-2X STUDS AT EACH GIRDER TRUSS OR BEAM BEARING LOCATION U.N.O.  
PROVIDE HURRICANE STRAPS AT ALL ROOF BEAMS TO POSTS OR THROUGH BOLTS USE POST BASES OR CUSTOM BASE PLATES TO FOUNDATION  
HEADERS < 4\"/>



**DETACHED RESIDENCE**  
504 SOUTH WHITCOMB STREET  
FORT COLLINS, COLORADO

PROJECT NUMBER: 20-031  
DESIGNED BY: WTD  
REVIEWED BY: WTD  
DATE FOR ISSUE: 3/17/2020  
REVISION: 2/25/2021

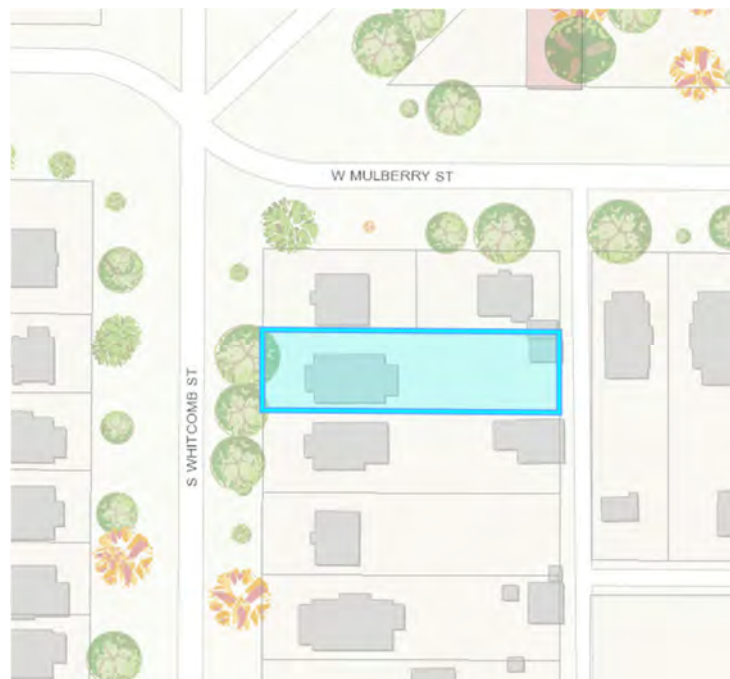
FOUNDATION & FRAMING PLANS  
DETAILS & NOTES

## Memorandum

TO: Robert Kirkpatrick  
FROM: Adele Bartel, E.I.T., Jason Claeys, P.E.  
DATE: 12/03/21  
PROJECT: 504 S. Whitcomb St.  
HDS JOB NO: 20-1039-00  
SUBJECT: Drainage Summary



This memo has been prepared to describe the existing conditions at 504 S. Whitcomb St, the adjacent alley, and the drainage impacts of the proposed alley house and change in impervious area. Below is a vicinity map showing the general location of the property:



The property is approximately 9,000 sqft (50' wide by 180' deep, 0.21 acres) and is located along the east side of S. Whitcomb St and south of W. Mulberry St. A shared alley is located along the east property line and single-family residences are adjacent to the north and south. The existing single-family residence is located toward the west side of the lot with a shed adjacent to the alley to the east and a small garden shed along the south property line. The shed adjacent to the alley is proposed to be removed, along with portions of the existing sidewalk, to accommodate the proposed addition of a detached alley house, and additional gravel parking area.

Based on aerial topography and a couple site visits, it appears there is a highpoint approximately midway along the east-west property lines of the existing single-family residence. Approximately 1/3<sup>rd</sup> of the site drains west to Whitcomb St and 2/3<sup>rd</sup> of the site drains east to the alley. The alley appears to be paved with asphalt, though the surface is degrading and there are a few potholes. A topographic survey was completed to confirm the existing alley slopes. The alley has slopes ranging from 1.5% to 2.0% draining to the north, and an approximate cross slope of 1.5% draining to the west side of alley. An existing residence is located adjacent to the alley along the east side of the alley. Based on the survey, drainage is directed away from the existing residence. In its current condition, during a 100-yr storm event, the runoff depth would inundate the residence's existing crawlspace vent (see attached Appendices). Measures have been taken to ensure that the proposed improvements do not exacerbate the current alley drainage, described on the following page. Below are photos for reference describing the alley:



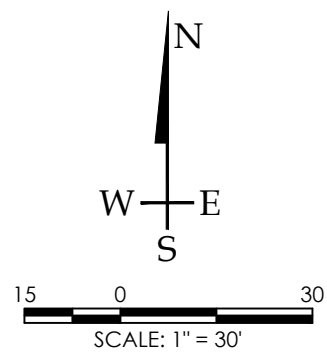
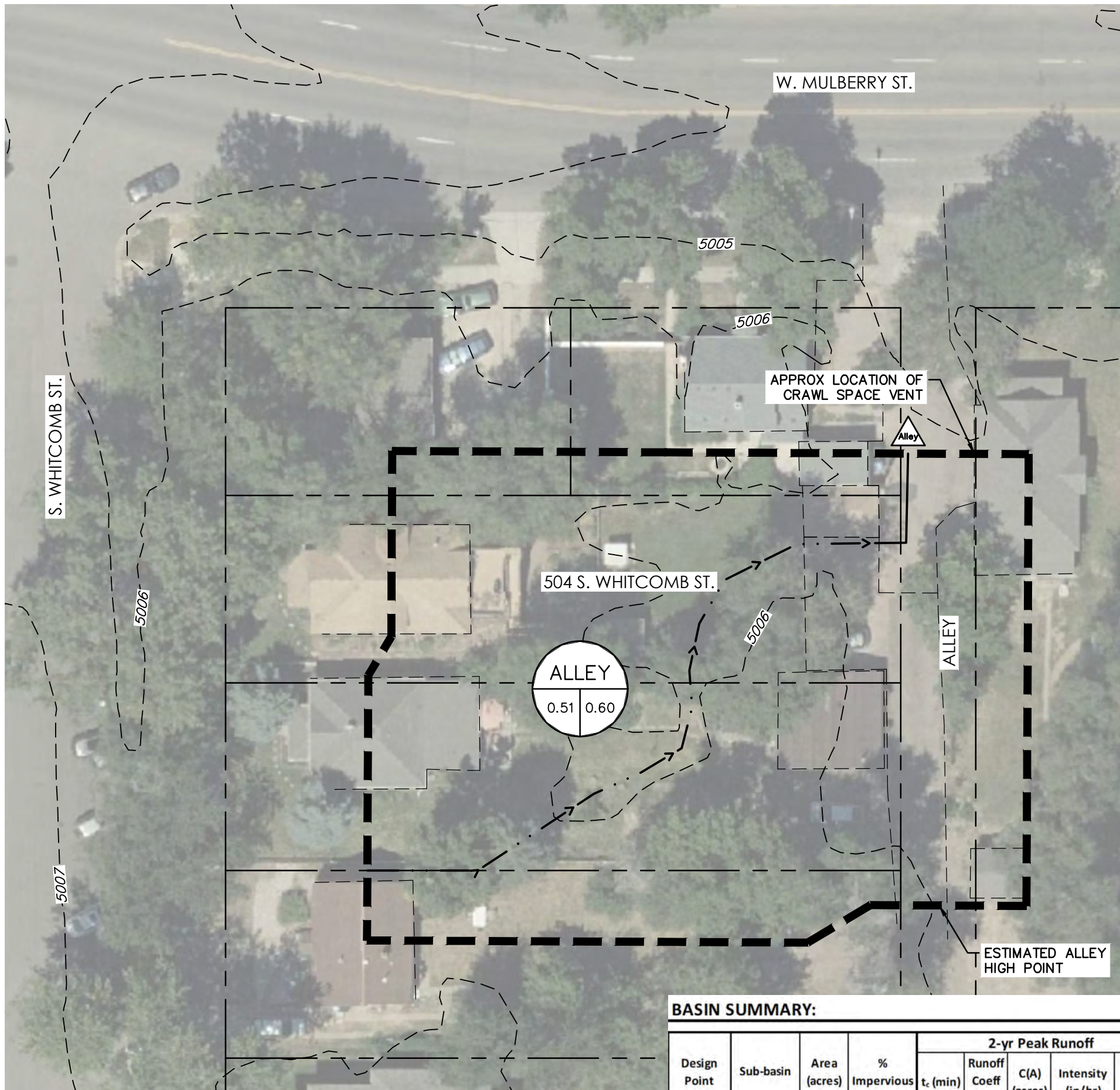
Upon the second site visit after measuring slopes with a digital level, it was discovered that there is a highpoint at the midpoint of the south side of the single-family residence, as well as a low point between the sidewalk and the parkway at the front of the lot. The property owner will modify the parkway landscaping to provide positive drainage relief to S. Whitcomb St and add roof gutters along the south roofline and east porch cover to redirect roof drainage toward S. Whitcomb St.

The existing property at 504 S. Whitcomb that drains to the alley is approximately 27.9% impervious. Accounting for the existing improvements to remain, redirection of the existing single-family residence roof drainage, removal of the existing shed, and the addition of the alley house and gravel parking area, the basin draining to the alley reduced an estimated 461 sqft. There is a reduction of 113 sqft of roof area, and an increase of 283 sqft of gravel parking area (semi-impervious). There is a total of 170 sqft additional impervious area draining to the alley, consisting of additional gravel parking. The proposed site is approximately 27.7% impervious, an approximate decrease of 0.2% imperviousness. See the attached calculations for reference.

Runoff rates were determined utilizing the rational method. The existing peak runoff rate is 0.56 cfs and the proposed peak runoff rate is 0.52 cfs, a reduction of 0.04 cfs.

With the redirection of the existing single-family residence roof drainage toward S. Whitcomb St, the proposed improvements should not adversely impact the existing drainage conditions within the shared alley. Please do not hesitate to call (970.674.7550) or email ([jclaeyes@highlands.com](mailto:jclaeyes@highlands.com)) if there are any additional questions.





**LEGEND**

- D01 BASIN DESIGNATION
- 1.25 | 0.50 BASIN COEFFICIENT (100-YR)
- ALLEY BASIN AREA
- D01 DESIGN POINT
- DRAINAGE FLOW ARROW
- DRAINAGE BASIN BOUNDARY
- 5001 EX CONTOUR (AERIAL TOPOGRAPHY)

**BASIN SUMMARY:**

Design Point	Sub-basin	Area (acres)	% Impervious	2-yr Peak Runoff					10-yr Peak Runoff					100-yr Peak Runoff				
				t <sub>c</sub> (min)	Runoff Coeff (C <sub>2-10</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>2</sub> (ft <sup>3</sup> /s)	t <sub>c</sub> (min)	Runoff Coeff (C <sub>2-10</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>10</sub> (ft <sup>3</sup> /s)	t <sub>c</sub> (min)	Runoff Coeff (C <sub>100</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>100</sub> (ft <sup>3</sup> /s)
Ex Alley	Ex Alley	0.507	31.7%	11.19	0.48	0.24	2.12	0.51	11.19	0.48	0.24	3.61	0.87	11.19	0.60	0.30	7.38	2.24

**504 S. WHITCOMB ST.**  
**ALLEY DRAINAGE EXHIBIT**

DATE 10/21/21  
 SCALE (H) 1" = 30'  
 SCALE (V) N/A  
 DRAWN BY JTC  
 CHECKED BY JTC  
 HDS PROJ # 21-1039-00

C:\PROJECTS\1039-00\04 - WHITCOMB ST ALLEY DRAINAGE EXHIBIT.dwg, 10/21/2021 3:08 PM

THIS DOCUMENT IS AN INSTRUMENT OF PROFESSIONAL SERVICE OF HIGHLAND DEVELOPMENT SERVICES, INC. HIGHLAND DEVELOPMENT SERVICES SHALL BE THE SOLE AGENT FOR THE PROVISION OF ANY DAMAGE, LIABILITY, OR COST ALLEGEDLY ARISING OUT OF UNAUTHORIZED REPRODUCTION, CHANGE, OR REUSE OF THIS DOCUMENT BY OTHERS.

# Channel Report

## Existing Alley @ Crawlspace Vent

### User-defined

Invert Elev (ft) = 5.16  
Slope (%) = 1.50  
N-Value = 0.025

### Calculations

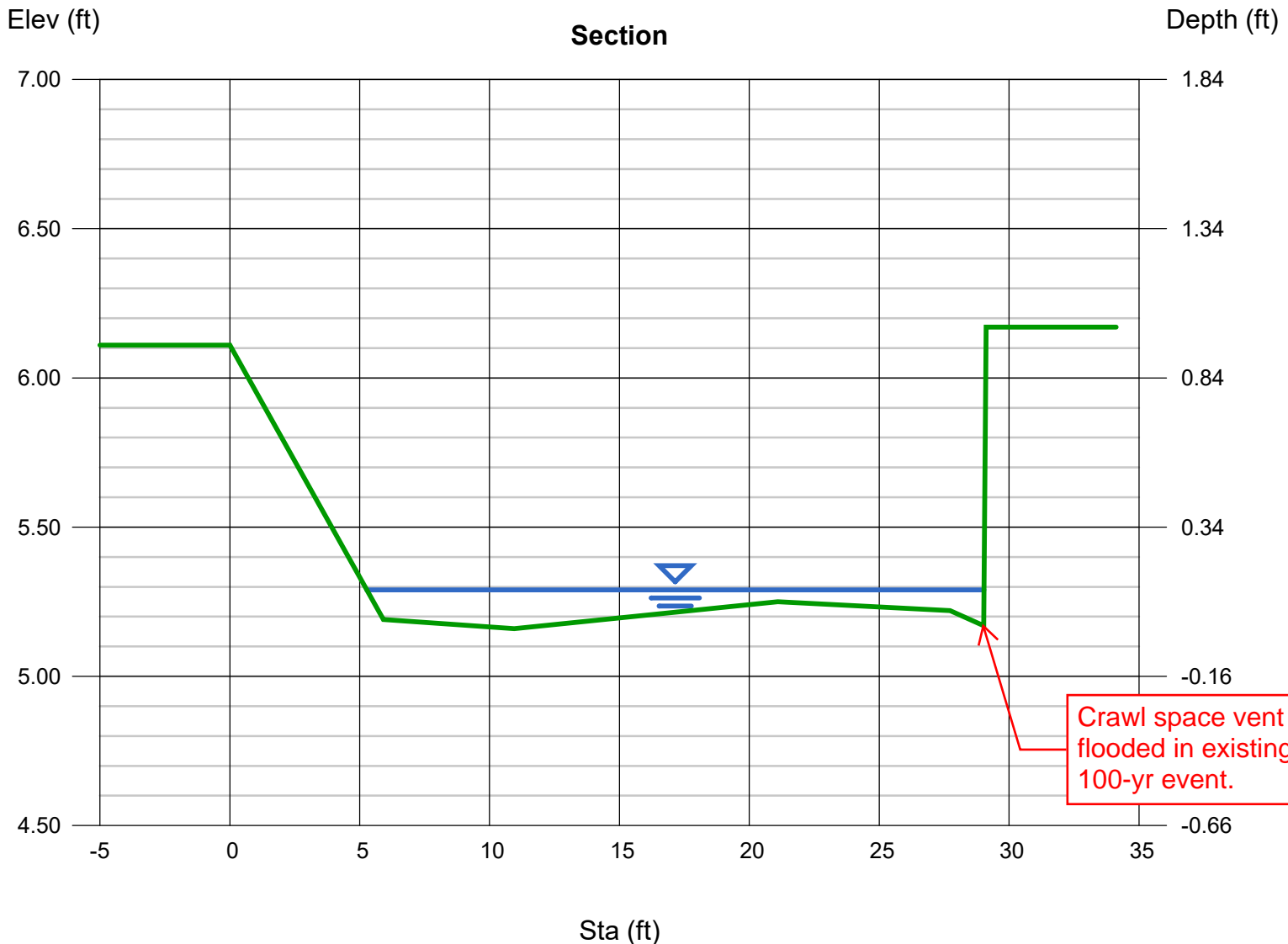
Compute by: Known Q  
Known Q (cfs) = 2.24

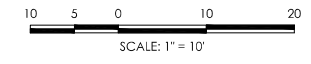
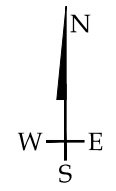
### Highlighted

Depth (ft) = 0.13  
Q (cfs) = 2.240  
Area (sqft) = 1.96  
Velocity (ft/s) = 1.14  
Wetted Perim (ft) = 23.88  
Crit Depth, Yc (ft) = 0.12  
Top Width (ft) = 23.76  
EGL (ft) = 0.15

### (Sta, El, n)-(Sta, El, n)...

(0.00, 6.11)-(5.91, 5.19, 0.025)-(10.95, 5.16, 0.025)-(21.09, 5.25, 0.025)-(27.73, 5.22, 0.025)-(29.02, 5.17, 0.025)-(29.12, 6.17, 0.025)

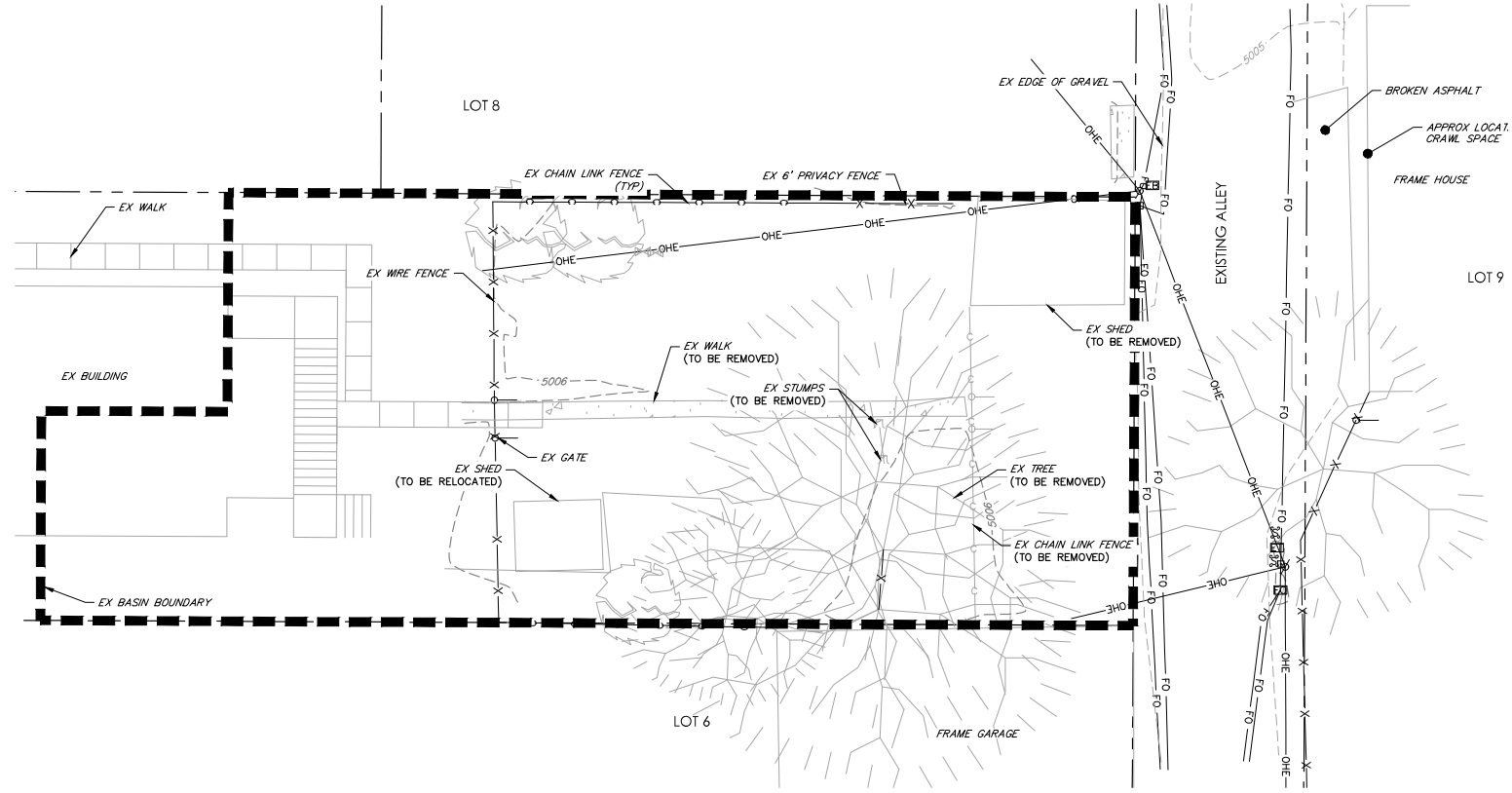
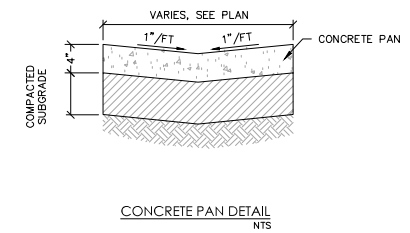




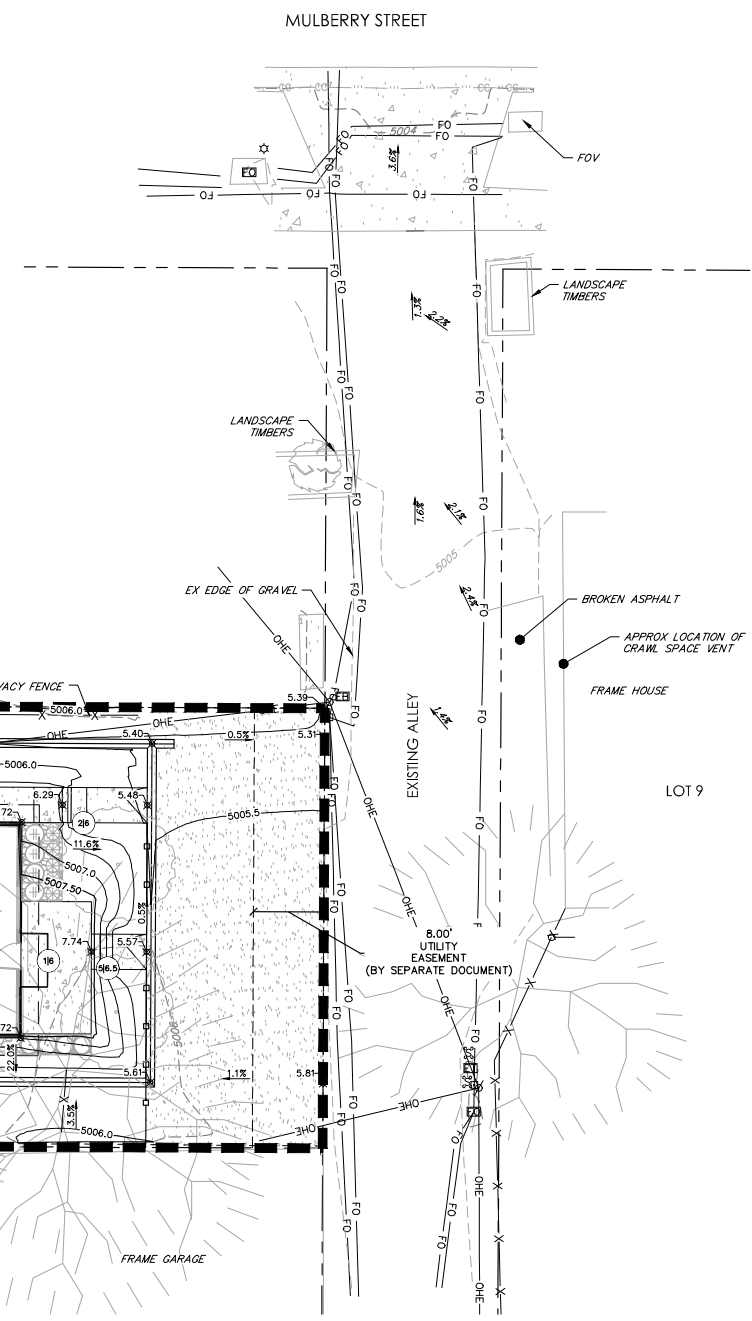
**LEGEND**

- (X) HEIGHT OF RIBER
- NUMBER OF STEPS
- 5000- EXISTING MAJOR CONTOUR
- 5001- EXISTING MINOR CONTOUR
- 5000- PROPOSED MAJOR CONTOUR
- 5001- PROPOSED MINOR CONTOUR

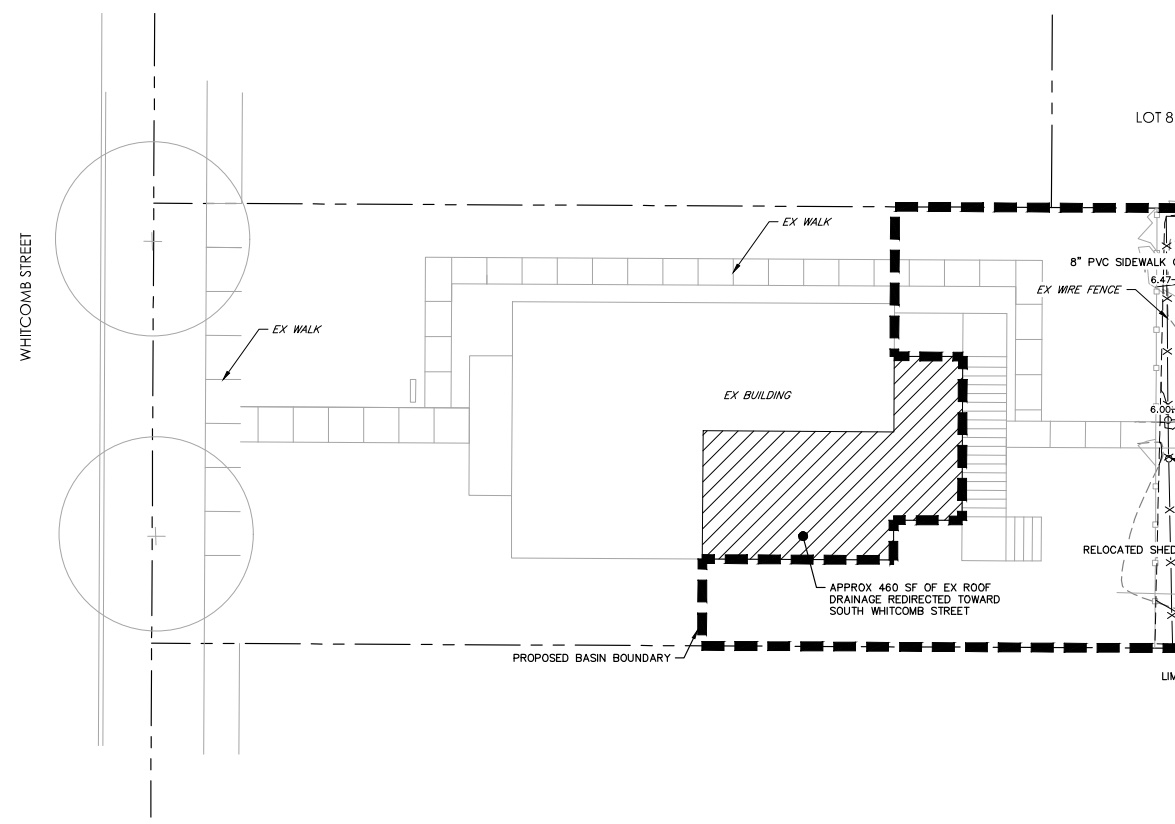
- NOTES:**
- CONTRACTOR TO PROVIDE AND MAINTAIN ALL NECESSARY EROSION CONTROL MEASURES PRIOR TO AND THROUGHOUT CONSTRUCTION.
  - SPOT ELEVATIONS ARE SHOWN ARE ON FLOWLINE OR BACK OF WALK UNLESS OTHERWISE LABELED.
  - WALKWAYS SLOPE 2.0% AWAY FROM BUILDINGS AND/OR TOWARD PARKING/DRIVE AREAS. WALK LABELS ARE SHOWN ON THE HIGH SIDE OF THE WALK.
  - ALL SUBGRADE TO BE PLACED/COMPACTED PER GEOTECHNICAL ENGINEER RECOMMENDATIONS.
  - FFE IS BASED ON THE TJI FLOORING SYSTEM (14.125).
  - THE DRAINAGE IS DESIGNED TO MATCH EXISTING FLOWS FROM THE PROPERTY TO THE ALLEY.



**EXISTING CONDITIONS & DEMOLITION PLAN**



**PROPOSED GRADING PLAN**



NO.	REVISION	BY	DATE

**504 S WHITCOMB STREET - UNIT C**  
**GRADING & DRAINAGE PLAN**

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:  
**REVIEW SET NOT FOR CONSTRUCTION**

FOR AND ON BEHALF OF HIGHLAND DEVELOPMENT SERVICES  
 DATE: 12/03/21  
 SCALE (H): 1" = 10'  
 SCALE (V): N/A  
 DRAWN BY: ACM  
 CHECKED BY: JTC  
 HDS PROJECT # 21-1039-00



Know what's below.  
 Call before you dig.  
 CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

## 504 S. Whitcomb Street DRAINAGE SUMMARY

---

Design Engineer: A.McKenna  
Design Firm: Highland Development Services  
Project Number: 21-1039-00  
Date: November 15, 2021

---

This table is to document the existing and proposed impervious areas, percent impervious, and associated peak runoff rates, related to the areas draining to the alley from 504 S. Whitcomb St.

### IMPERVIOUS SUMMARY:

---

Description	Basin Area (sqft)	Roof Area (sqft)	Gravel Area (sqft)	Total Impervious Area (sqft)	% Impervious	100-yr Peak Runoff Rate (cfs)
Existing	5,818	761	723	1,484	27.9%	0.56
Proposed	5,357	648	1,006	1,654	28.8%	0.52
Difference	-461	-113	283	170	0.9%	-0.04

## 504 S. Whitcomb Street

### DEVELOPED IMPERVIOUS AREA CALCULATION

Design Engineer: A.McKenna  
 Design Firm: Highland Development Services  
 Project Number: 21-1039-00  
 Date: November 15, 2021

### DESIGN CRITERIA:

Fort Collins Stormwater Criteria Manual

### BASINS:

% Impervious values from Table 3.2.2 in the Fort Collins Stormwater Criteria Manual  
 Runoff Coefficients and Frequency Adjustment Factors for City of Fort Collins - Storm Water Criteria Manual

Land Use	% Impervious	Runoff Coefficient C
Paved	100%	0.95
Roof	90%	0.95
Walks	90%	0.95
Gravel/Pavers	40%	0.50
Lawns* (Clayey, Flat < 2% Slope)	15%	0.35

Return Period	Frequency Adjustment Factor (C <sub>f</sub> )
2-year to 10-year	1.00
100-year	1.25

\* Lawn area assumed to be 15% imperv and 0.35 coeff to account for misc walks

Sub-basin Designation	A <sub>total</sub> (sq feet)	A <sub>total</sub> (acres)	A <sub>paved</sub> (sq feet)	A <sub>roof</sub> (sq feet)	A <sub>walk</sub> (sq feet)	A <sub>gravel/pavers</sub> (sq feet)	A <sub>lawn</sub> (sq feet)	Weighted % Impervious	COMPOSITE	
									C <sub>2</sub> to C <sub>10</sub>	C <sub>100</sub>
Ex Alley	22,098	0.507	718	3,458	0	1,958	15,964	31.7%	0.48	0.60
Ex 504	5,818	0.134	0	761	0	723	4,334	27.9%	0.45	0.56
Prop 504	5,357	0.123	0	648	0	1,006	3,703	28.8%	0.45	0.56

## 504 S. Whitcomb Street

### DEVELOPED TIME OF CONCENTRATION

Design Engineer: A.McKenna  
 Design Firm: Highland Development Services  
 Project Number: 21-1039-00  
 Date: November 15, 2021

#### DESIGN CRITERIA:

City of Fort Collins Stormwater Criteria Manual  
 Overland Flow Equations for City of Fort Collins Stormwater Criteria Manual

EQUATIONS:

$$t_c = t_i + t_t \quad \text{-Equation 5-3}$$

$$V = \frac{1.49}{n} R^{2/3} S^{1/2} \quad \text{-Equation 5-4}$$

$$t_c = \frac{L}{180} + 10 \quad \text{-Urbanized Check Equation 3.3-5}$$

$$t_i = \frac{1.87(1.1 - C_x C_f) \sqrt{L}}{\sqrt[3]{S}} \quad \text{-CoFC Overland Flow}$$

$$t_t = \frac{L}{60V}$$

CONSTRAINTS:

- 300 ft - Overland flow shall not exceed for developed condition
- 500 ft - Overland flow shall not exceed for undeveloped condition

Final  $t_c$  = minimum of  $t_i + t_t$  and urbanized basin check  
 recommended minimum  $t_c$  = 5 min for urbanized basins

#### Time of Concentration (2-yr to 10-yr)

SUB-BASIN DATA					INITIAL/OVERLAND TIME ( $t_i$ )			TRAVEL TIME ( $t_t$ )							$t_c = t_i + t_t$ (min)	Urban Check		Final $t_c$ (min)
DESIGN POINT	Sub-basin	% Impervious	$C_{2-10}$	AREA (acres)	LENGTH (ft)	SLOPE (ft/ft)	$t_i$ (min)	LENGTH (ft)	SLOPE (ft/ft)	HYDRAULIC RADIUS (ft)	ROUGHNESS COEFFICIENT	VELOCITY (ft/s)	$t_t$ (min)	OVERALL LENGTH (ft/ft)		$t_c$ (min)		
Ex Alley	Ex Alley	31.7%	0.48	0.507	191	0.0063	18.79	24	0.0078	0.14	0.025	1.42	0.28	19.07	215	11.19	11.19	
Ex 504	Ex 504	27.9%	0.45	0.134	150	0.0047	19.24	13	0.0174	0.14	0.025	2.12	0.10	19.34	163	10.90	10.90	
Prop 504	Prop 504	28.8%	0.45	0.123	70	0.0076	11.11	101	0.0040	0.14	0.025	1.02	1.65	12.76	170	10.95	10.95	

## 504 S. Whitcomb Street

### DEVELOPED TIME OF CONCENTRATION

Design Engineer: A.McKenna  
 Design Firm: Highland Development Services  
 Project Number: 21-1039-00  
 Date: November 15, 2021

### DESIGN CRITERIA:

City of Fort Collins Stormwater Criteria Manual  
 Overland Flow Equations for City of Fort Collins Stormwater Criteria Manual

EQUATIONS:

$$t_c = t_i + t_t \quad \text{-Equation 5-3}$$

$$V = \frac{1.49}{n} R^{2/3} S^{1/2} \quad \text{-Equation 5-4}$$

$$t_c = \frac{L}{180} + 10 \quad \text{-Urbanized Check Equation 3.3-5}$$

$$t_i = \frac{1.87(1.1 - C_x C_f) \sqrt{L}}{\sqrt[3]{S}} \quad \text{-CoFC Overland Flow}$$

$$t_t = \frac{L}{60V}$$

CONSTRAINTS:

- 300 ft - Overland flow shall not exceed for developed condition
- 500 ft - Overland flow shall not exceed for undeveloped condition

Final  $t_c$  = minimum of  $t_i + t_t$  and urbanized basin check  
 recommended minimum  $t_c$  = 5 min for urbanized basins

### Time of Concentration (100-yr)

SUB-BASIN DATA					INITIAL/OVERLAND TIME ( $t_i$ )			TRAVEL TIME ( $t_t$ )							$t_c = t_i + t_t$ (min)	Urban Check		Final $t_c$ (min)
DESIGN POINT	Sub-basin	% Impervious	$C_{100}$	AREA (acres)	LENGTH (ft)	SLOPE (ft/ft)	$t_i$ (min)	LENGTH (ft)	SLOPE (ft/ft)	HYDRAULIC RADIUS (ft)	ROUGHNESS COEFFICIENT	VELOCITY (ft/s)	$t_t$ (min)	OVERALL LENGTH (ft/ft)		$t_c$ (min)		
Ex Alley	Ex Alley	31.7%	0.60	0.507	191	0.0063	15.20	24	0.0078	0.14	0.025	1.42	0.28	15.48	215	11.19	11.19	
Ex 504	Ex 504	27.9%	0.56	0.134	150	0.0047	15.95	13	0.0174	0.14	0.025	2.12	0.10	16.04	163	10.90	10.90	
Prop 504	Prop 504	28.8%	0.56	0.123	70	0.0076	9.18	101	0.0040	0.14	0.025	1.02	1.65	10.83	170	10.95	10.83	

## 504 S. Whitcomb Street

### DEVELOPED PEAK RUNOFF

Design Engineer: A.McKenna  
 Design Firm: Highland Development Services  
 Project Number: 21-1039-00  
 Date: July 1, 2021

#### DESIGN CRITERIA:

City of Fort Collins Stormwater Criteria Manual

#### EQUATIONS:

$$Q_n = C_n I_n A_n$$

$Q_n$  =  $n$ -yr peak discharge (cfs)  
 $C_n$  =  $n$ -yr runoff coefficient  
 $I_n$  =  $n$ -yr rainfall intensity (in/hr)  
 $A_n$  = Basin drainage area (ac)

$$I = \frac{28.5P_1}{(10 + t_c)^{(0.786651)}}$$

$I$  = rainfall intensity (in/hr)  
 $P_1$  = one-hour point rainfall depth (in)  
 $t_c$  = time of concentration (min)  
 $P_{1-2yr}$  = **0.82** in  
 $P_{1-10yr}$  = **1.40** in  
 $P_{1-100yr}$  = **2.86** in

#### BASIN SUMMARY:

Design Point	Sub-basin	Area (acres)	% Impervious	2-yr Peak Runoff					10-yr Peak Runoff					100-yr Peak Runoff				
				$t_c$ (min)	Runoff Coeff (C <sub>2-10</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>2</sub> (ft <sup>3</sup> /s)	$t_c$ (min)	Runoff Coeff (C <sub>2-10</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>10</sub> (ft <sup>3</sup> /s)	$t_c$ (min)	Runoff Coeff (C <sub>100</sub> )	C(A) (acres)	Intensity (in/hr)	Q <sub>100</sub> (ft <sup>3</sup> /s)
Ex Alley	Ex Alley	0.507	31.7%	11.19	0.48	0.24	2.12	<b>0.51</b>	11.19	0.48	0.24	3.61	<b>0.87</b>	11.19	0.60	0.30	7.38	<b>2.24</b>
Ex 504	Ex 504	0.134	27.9%	10.90	0.45	0.06	2.14	<b>0.13</b>	10.90	0.45	0.06	3.65	<b>0.22</b>	10.90	0.56	0.07	7.46	<b>0.56</b>
Prop 504	Prop 504	0.123	28.8%	10.95	0.45	0.06	2.14	<b>0.12</b>	10.95	0.45	0.06	3.65	<b>0.20</b>	10.83	0.56	0.07	7.48	<b>0.52</b>



EXHIBIT A

**PARCEL DESCRIPTION**

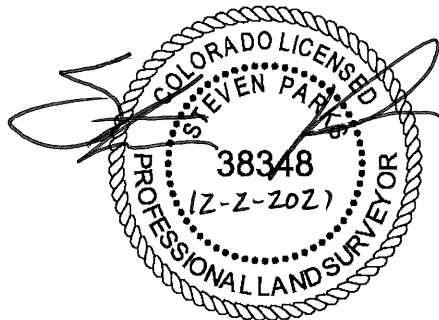
A parcel of land, being part of Lot Seven, (7), Block 75, Subdivision of Block Seventy-Five as recorded June 6, 1887 as Reception No. 25205 of the Records of the Larimer County Clerk and Recorder, situate in the Northeast Quarter (NE1/4) of Section Fourteen (14), Township Seven North (T.7N.), Range Sixty-nine West (R.69W.) of the Sixth Principal Meridian (6th P.M.), City of Fort Collins, County of Larimer, State of Colorado and being more particularly described as follows:

The East 8.00 feet of said Lot 7.

Said described parcel of land contains 400 Square Feet more or less ( $\pm$ ).

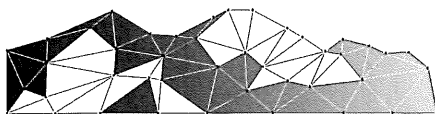
**SURVEYORS STATEMENT**

I, Steven Parks, a Colorado Licensed Professional Land Surveyor do hereby state that this Parcel Description was prepared under my personal supervision and checking, and that it is true and correct to the best of my knowledge and belief.



---

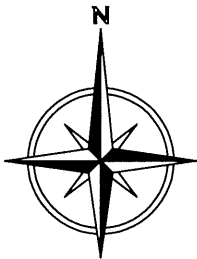
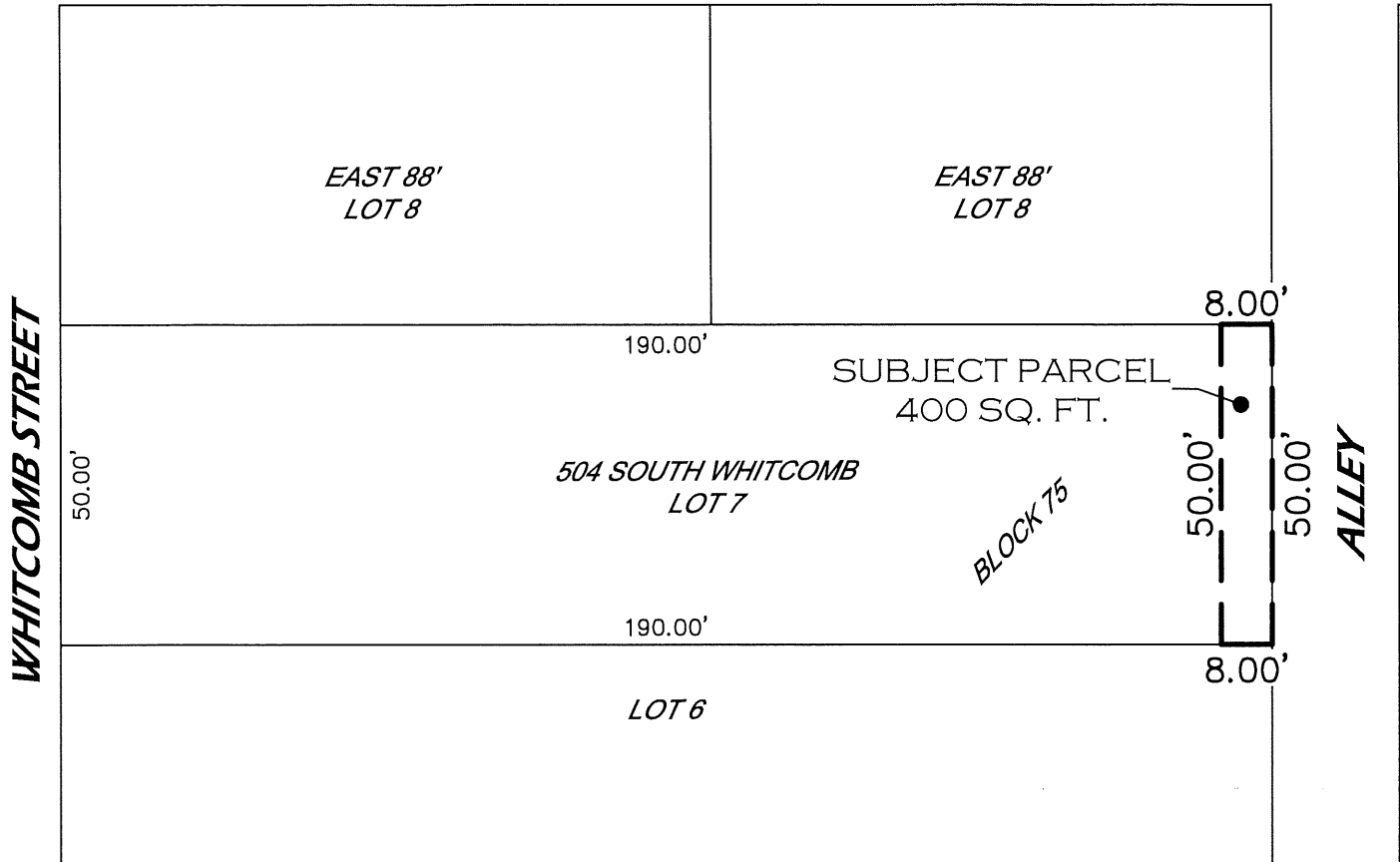
Steven Parks - on behalf of Majestic Surveying, LLC  
Colorado Licensed Professional Land Surveyor #38348



**MAJESTIC SURVEYING**  
1111 Diamond Valley Drive, Suite 104  
Windsor, Colorado 80550

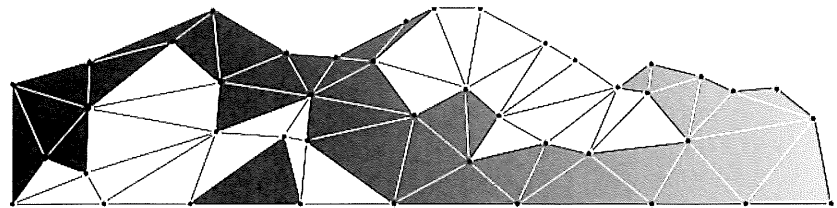
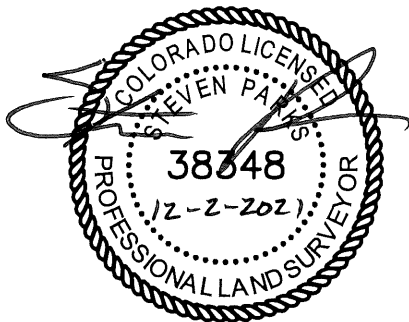
# EXHIBIT A

## MULBERRY STREET



Note: This drawing does not represent a monumented land survey. Its sole purpose is a graphic representation of the accompanying written description.

Notice: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon. (CRS 13-80-105)

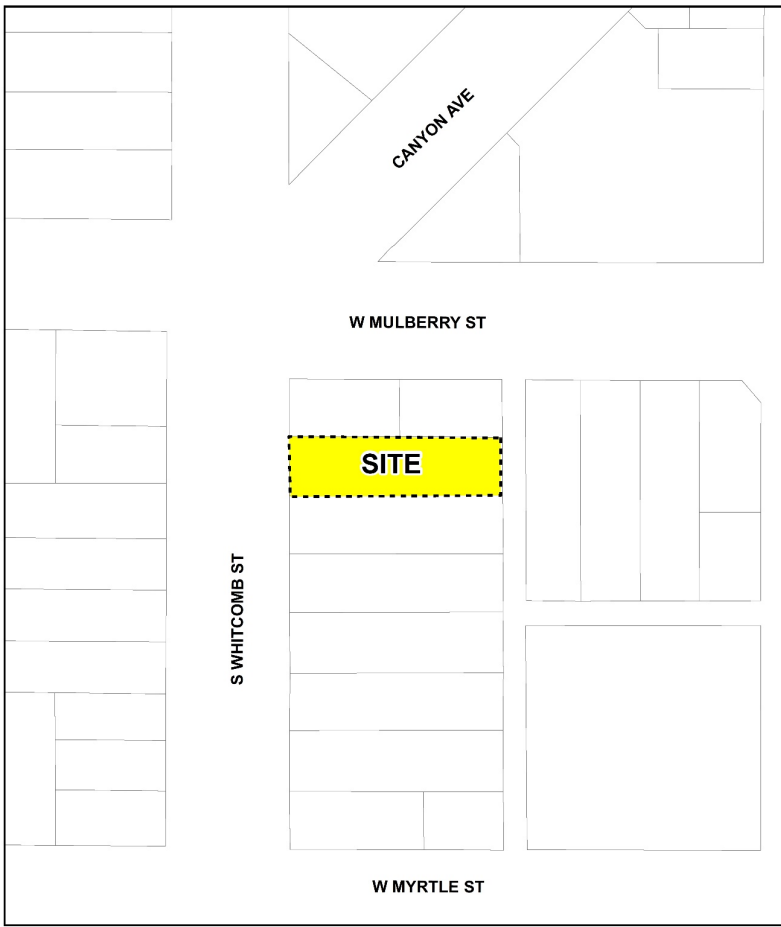


## MAJESTIC SURVEYING



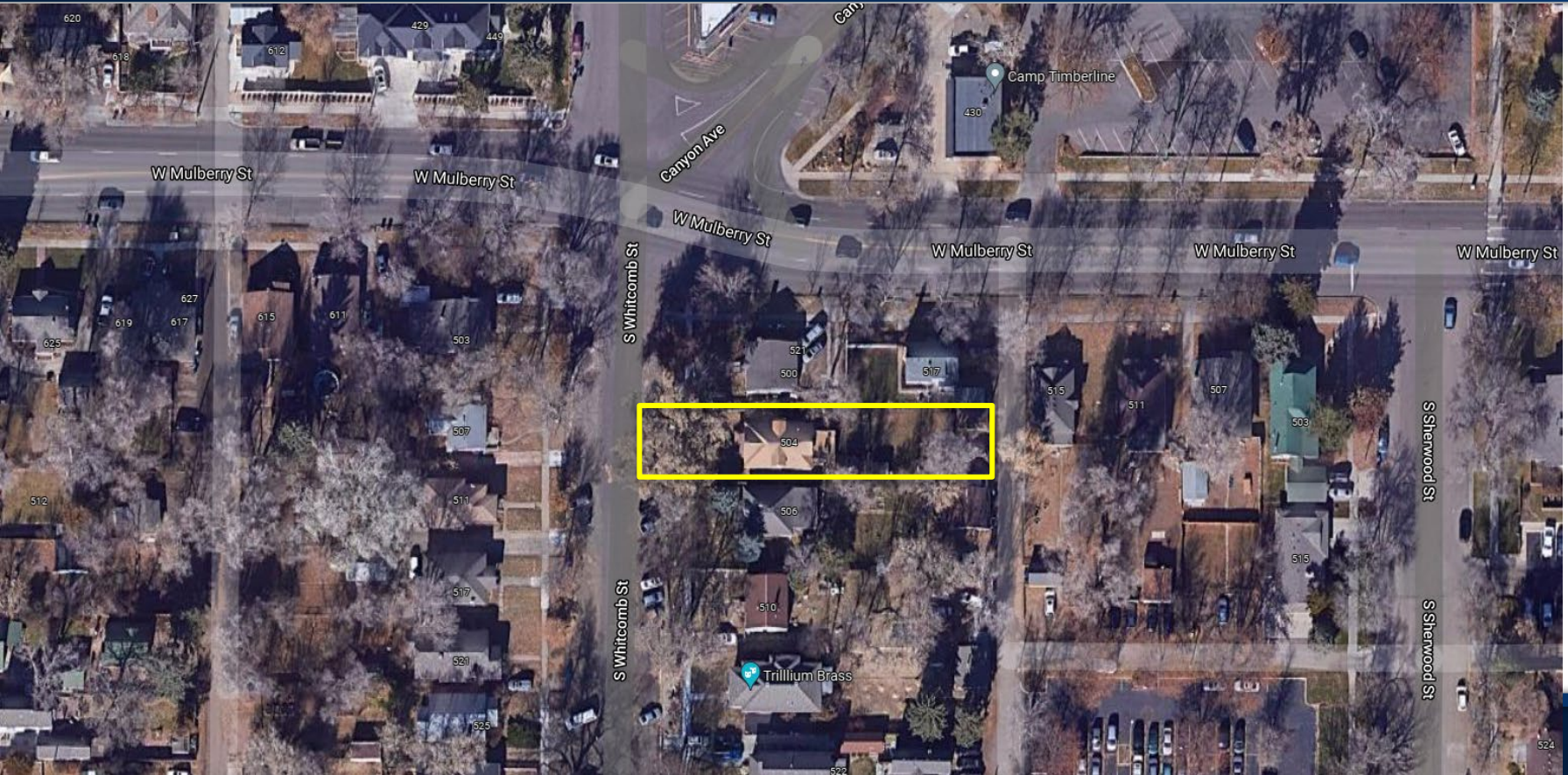
504 S Whitcomb St. – Carriage House  
Pete Wray, Senior City Planner

# Site Context



504 S WHITCOMB ST  
CARRIAGE HOUSE







Front View from Whitcomb Street of Existing Two-Family Home



Rear view from alley of parking area



View of rear yard from alley

Front view of connecting walk

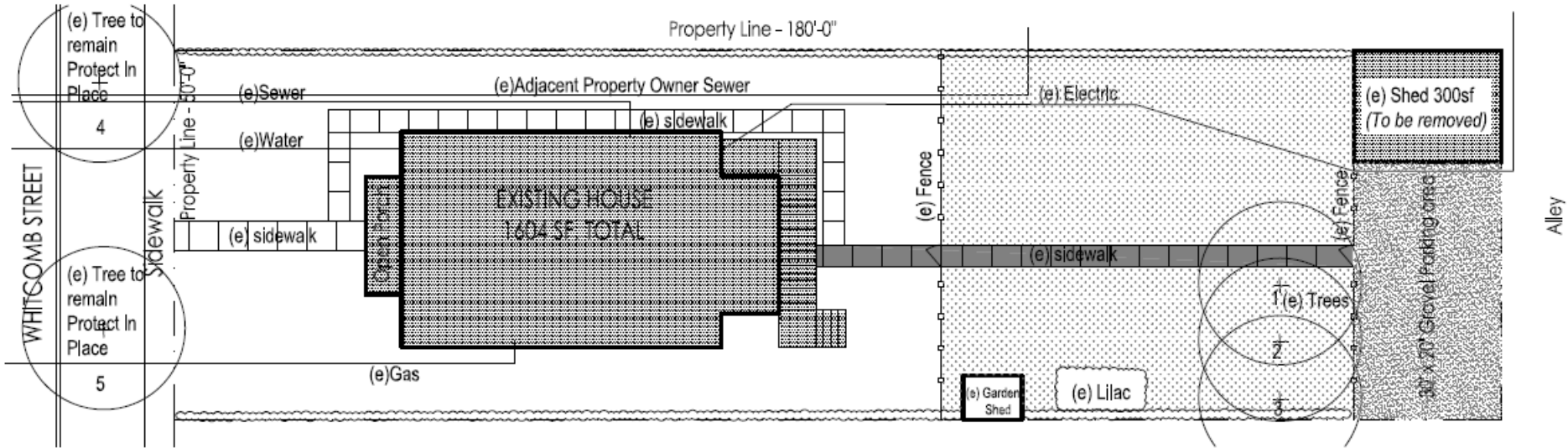


# Proposal Overview

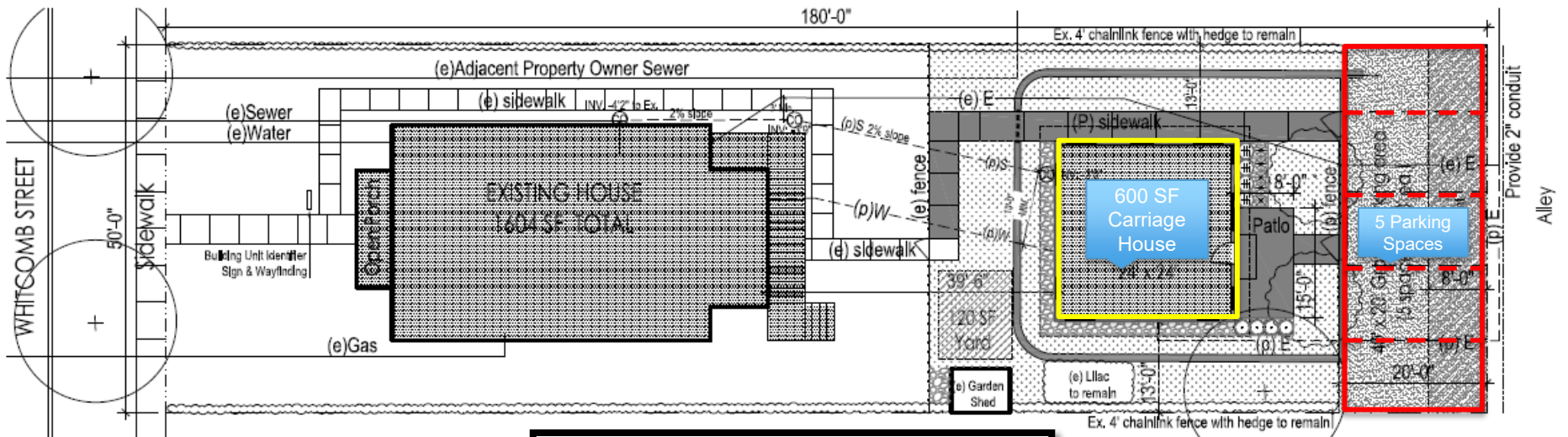


- Location:
  - 504 S Whitcomb Street
- Lot Size:
  - 9,000 square feet
- Zone District:
  - Neighborhood Conservation, Buffer (N-C-B)
- Proposed Use:
  - Carriage House





**EXISTING CONDITIONS**

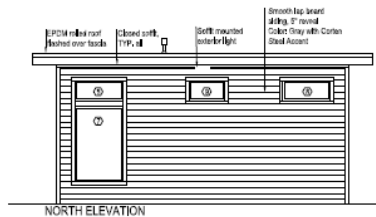
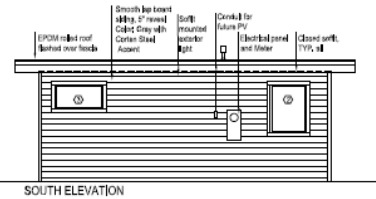
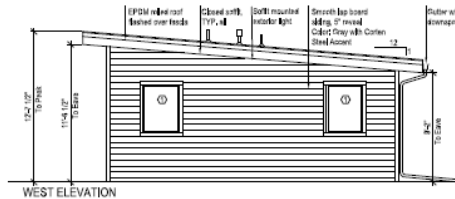
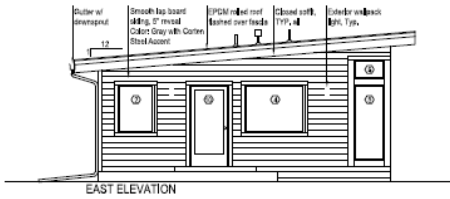
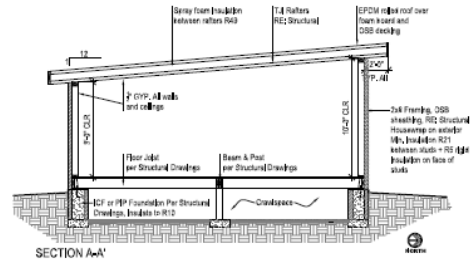
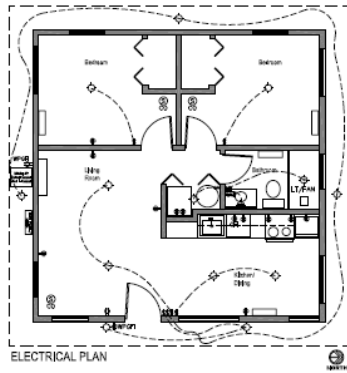
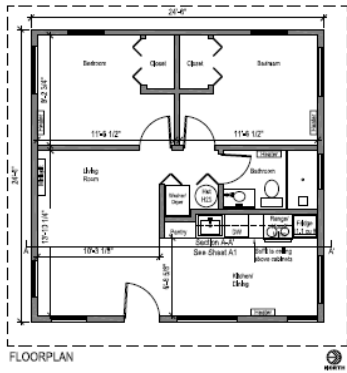


## SITE LAYOUT/ LANDSCAPE PLAN

Lot Size:	9,000 SF
Maximum Accessory Building with Habitable Space square footage:	1000 SF
Actual Accessory Building with Habitable Space square footage:	600 SF
Allowable floor area on rear 50% of Lot:	$4500 \text{ SF} \times .33 = 1,482 \text{ SF}$
Actual floor area on rear 50% of Lot:	600 SF



# Elevations



- WINDOW / DOOR SCHEDULE
- ① 36x48 Casement (Green)
  - ② 36x48 Casement
  - ③ 48x24 Awning
  - ④ 36x24 Awning
  - ⑤ 36x24 Picture
  - ⑥ 36x24 Awning
  - ⑦ 48x24 Picture
  - ⑧ 48x24 Awning
  - ⑨ 36x24 Awning
  - ⑩ 36x40 Door

1. The F.D.P. complies with process located in Division 2.2 – Common Development Review Procedures for Development Applications of Article 2 – Administration.
2. The F.D.P. complies with all relevant standards located in Article 3 – General Development Standards.
3. The F.D.P. complies with all relevant standards located in Division 4.7, Neighborhood Conservation, Buffer District of Article 4 – Districts

Staff recommends approval of the Final Development Plan for the  
504 South Whitcomb Street – Carriage House, FDP210006