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

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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
Zoning	Downtown (D)	Neighborhood Conservation, Buffer (NCB)	Neighborhood Conservation, Buffer (NCB)	Neighborhood Conservation Medium Density (NCM)
Land Use	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
`3.2.2 (K)(1)(c) Parking Lots – Required Number of Off-Street Spaces	This standard requires one parking space per single family detached dwelling on lots with greater than forty feet of street frontage. 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. Note that this standard is repeated verbatim in Section 3.8.10.	Complies

B. 3.6 TRANSPORTATION AND CIRCULATION

Applicable Code Standard	Summary of Code Requirement and Analysis		
3.6.6 – Emergency Access	 This Section is intended to ensure that emergency vehicles and personnel can access the development to provide fire protection and emergency services without delays. 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. The plan includes a 13D sprinkler system per the pertinent fire code requirement. 	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
4.9(B) Permitted Uses	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
4.9(D)(2) Residential	This standard limits the floor footprint and floor area of a carriage house to 600 sq. ft. and 1,000 sq. ft. respectively. • The proposed plan includes a 600 sq. ft. building footprint and same floor area.	
4.9(D)(5) Allowable Floor Area on Rear Half of Lots	 This standard limits floor area on the rear half of a lot to 33 percent of the overall lot area. 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. 	Complies
4.9(D)(6) Dimensional Standards	 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. The plan provides 13-foot side setbacks and a minimum 34-foot feet rear setback at the closest portion of the dwelling. The building is 1-story. 	Complies
4.9(E)(1)(b)2. Eave Height	 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. The proposed plan includes an eave height on the tallest north building façade of 12 feet-6 ½ inches. 	Complies
4.9(E)(3)(c)(1) Additional Review Criteria for Carriage Houses	 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. 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. 	Complies



Applicable Code Standard	Summary of Code Requirement and Analysis	Staff Findings
4.9(E)(3)(c)(2)	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.	Complies
	 The proposed carriage house is a single-story building with main entrance facing the alley. 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. 	
4.9(E)(3)(c)(3)	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.	Complies
	 Two existing trees were removed in poor condition with a 1:1 mitigation plan included in the proposed tree inventory for the site. 	

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.

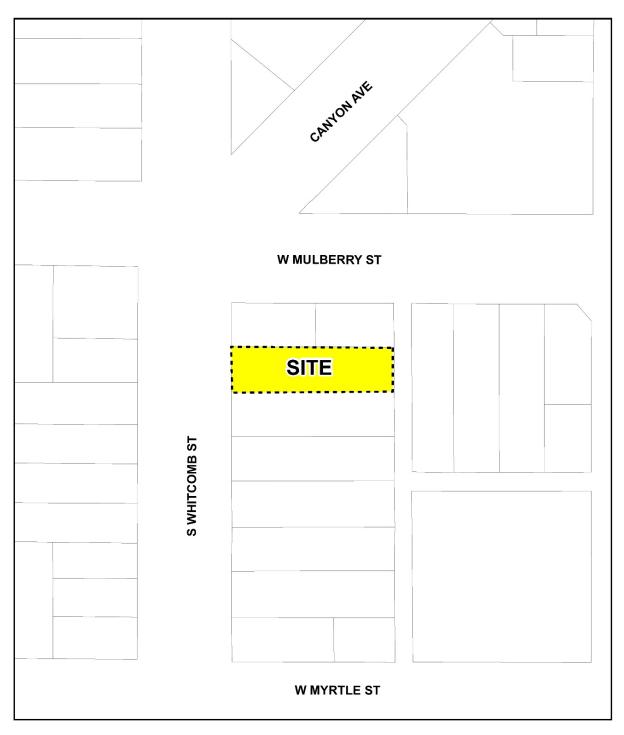
7. Recommendation

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.

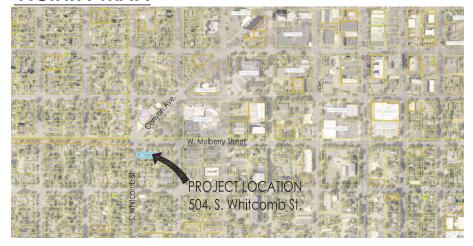
We have been in contact with the occupants of the adjacent properties to let them know of our planned project and to open the lines of communication so that we can proactively mitigate any concerns they may have currently or in the future.

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.
- 4. 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.
- 5. ALL CONSTRUCTION WITH THIS DEVELOPMENT PLAN MUST BE COMPLETED IN ONE PHASE UNLESS A PHASING PLAN IS SHOWN WITH THESE PLANS.
- 6. [IF APPLICABLE INCLUDE LANGUAGE FOR ANY MODIFICATIONS AND CONDITIONS APPROVED WITH PDP/ODP].
- 7. [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. THESS 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.
- 10. 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 CHE CITY.
- 11. FIRE HYDRANTS MUST MEET OR EXCEED POUDRE FIRE AUTHORITY STANDARDS. NEW STRUCTURE WILL BE SPRINKLED WITH A 13-D RESIDENTIAL FIRE SPRINKLER SYSTEM.
- 12. ALL BIKE RACKS PROVIDED MUST BE PERMANENTLY ANCHORED.
- 13. ALL SIDEWALKS AND RAMPS MUST CONFORM TO CITY STANDARDS. ACCESSABLE RAMPS MUST BE PROVIDED AT ALL STREET AND DRIVE INTERSECTIONS AND AT ALL DESIGNATED ACCESSABLE PARKING SPACES. ACCESSABLE 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.
- 14. 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.
- 15. 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.
- 16. THE PROPERTY OWNER FOR EACH RESIDENTIAL LOT IS RESPONSIBLE FOR SNOW REMOVAL ON ALL STREET SIDEWALKS ADJACENT TO EACH RESIDENTIAL LOT.
- 17. 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.
- 18. 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.
- 19. 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 APPRARTUS 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 AD BE REPLACED OR REPAIRED WHEN NECESSARY TO PROVIDE ADFOLIATE VISIBILITY.
- 20. 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, ALLONINGS 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

L1.0 SITE DEVELOPMENT PLANS

A1.0 BUILDING FLOORPLANS & ELEVATIONS

\$1 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)	%	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

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DATE
AS ACKNOWLEDGED
A.DBY
RES

Rev.			Checked
No.	Date	Ву	Ву
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	
FO 4			

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

DATE:
MARCH 2021

DRAWING TITLE:
COVER SHEET

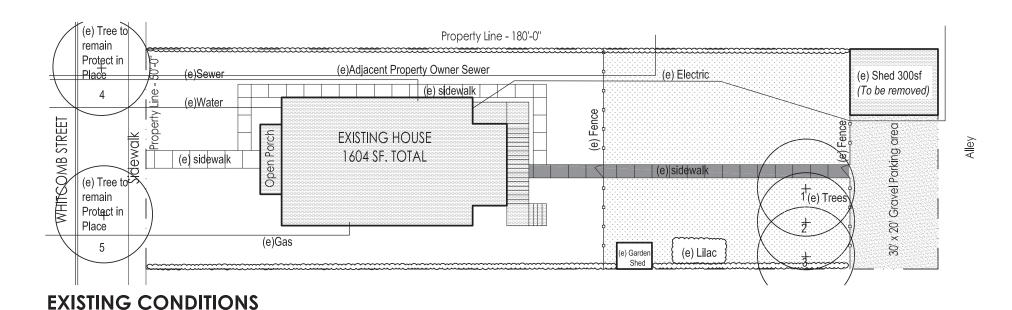
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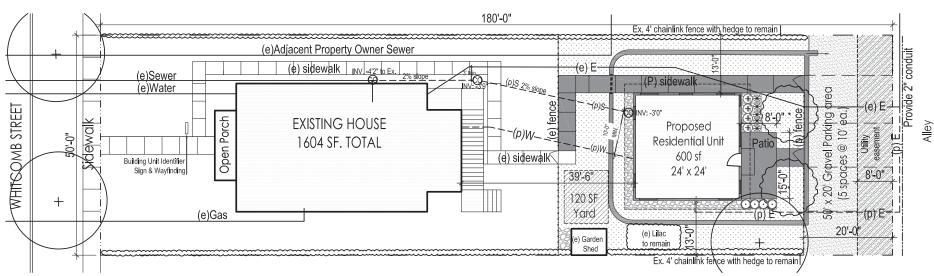
PLANNING CERTIFICATION

APPROVED 3Y THE DIRECTOR OF COMMUNITY DEVELOPMENT AND NEIGHBORHOOD SERVICES (CDNS) OF THE CITY OF FORT COLLINS, COLORADO ON THIS _______ DAY

DIRECTOR OF CDNS

CTOR OF CDNS





SITE LAYOUT/ LANDSCAPE PLAN





GENERAL NOTES:

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 supression sprinkler system. The new residential unit will be constructed so that it is solar

Landscape irrigation will 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.

ION

LANDSCAPE LEGEND: Shade toleran grass seed (See list) surface

1.5" Dig. Rock Mulch Drainage culvert 3" Depth over fabric

> # Dwarf Fountain Grass 'Hameln', 1 Gal. (Qty 5)
>
> **Cal (Qty 2)
>
> **Cal (Qty 2)
>
> **Cal (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:

- 1. 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.
- 2. 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 JUST 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 POPUP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES, INCLUDING IN NATIVE SEED ARRES, 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 LITH ITIES DEPARTMENT IRRIGATION REVIEW PRIOR TO THE ISSUANCE OF A RUILDING PERMIT AND CONSTRUCTION ORSERVATION AND INSPECTION BY PARKS SHALL BE INCORPORATED INTO THE CONSTRUCTION PROCESS.
- 3. 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.
- 4. 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 THOUGHLY 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 AMENDBED, CONSISTENT WITH THE REQUIREMENTS SET FORTH IN SECTION 12-132.
- 5. 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.
- 6. 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.
- 7. REPLACEMENT: ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS.
- 8. THE FOLLOWING SEPARATIONS SHALL BE PROVIDED BETWEEN TREES/SHRUBS AND UTILITIES:

40 FEET BETWEEN CANOPY TREES AND STREET LIGHTS

15 EEET BETWEEN ORNAMENTAL TREES AND STREET IGHTS

TO 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

- 9. 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)
- 10. 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 DECIDIOUS 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.
- 11, 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.
- 12. 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.
- 13. ALL PLANTING BEDS SHALL BE MULCHED TO A MINIMUM DEPTH OF THREE INCHES.

TREE PROTECTION NOTES:

- 1. 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.
- 2. 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
- 3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS, TREE PRUNING AND REQUIRED BY CODE.
- 4. 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.
- 5. 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
- 6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
- 7. 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 SURSECTION (GV3) 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
- 8. 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 BREAST HEIGHT AS DESCRIBED IN THE CHART BELOW:

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

9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A

	Rev.			Checked
Ι.	No.	Date	Ву	Ву
	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	
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504 S. WHITCOMB ST. UNIT C. FORT COLLINS, CO. PREPARED FOR: BUILDING SERVICES CITY OF FORT COLLINS

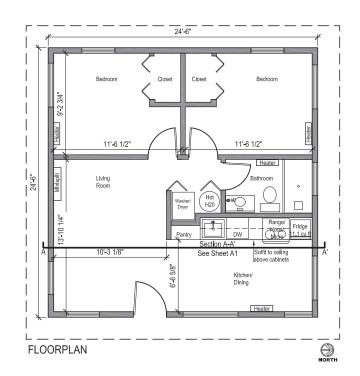
CONTACT/ OWNER: Rob Kirkpatrick Fort Collins, CO 80521 PH: 970-222-4272

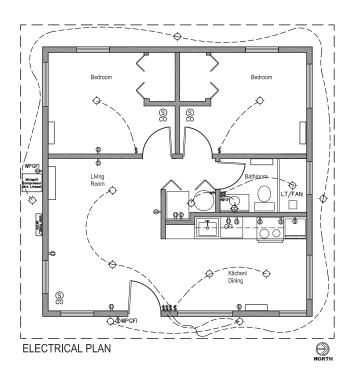


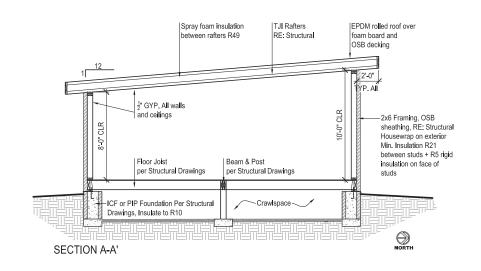
DATE: MARCH 2021

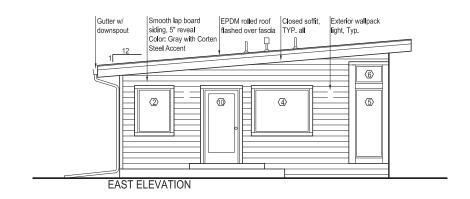
DRAWING TITLE SITE DEVELOPMENT PLANS

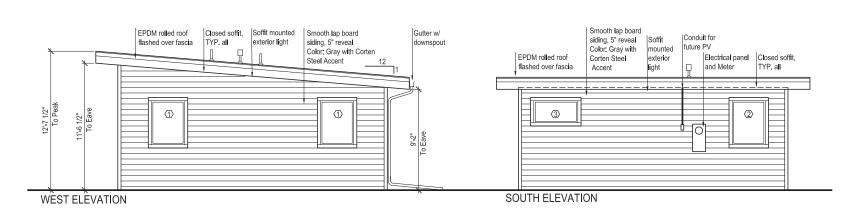
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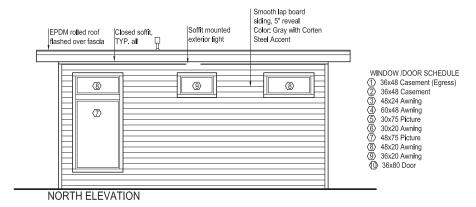












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		RD3	7/27/21	DH	
		RD4	10/25/21	DH	
		RD5	1/03/22	DH	

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: 1/4" = 1'-0"

DATE: MARCH 2021

DRAWING TITLE:FLOOR PLANS AND ELEVAT**I**ONS

HEET NO:

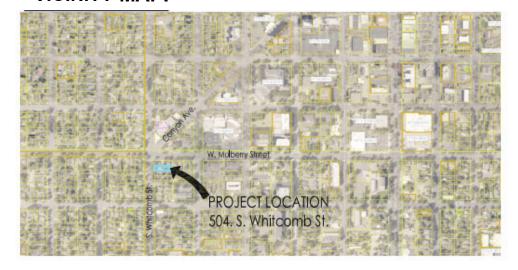
0 1' 2' 4'FEET

504 South Whitcomb Street, Unit C

SITE PLAN NOTES:

- I. 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
- 2. 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
- 3. 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
- 4. 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.
- 5. ALL CONSTRUCTION WITH THIS DEVELOPMENT PLANMUST BE COMPLETED IN ONE PHASE UNLESS A PHASING PLAN IS SHOWN WITH THESE PLANS.
- 6. [IF APPLICABLE INCLUDE LANGUAGE FOR ANY MODIFICATIONS AND CONDITIONS APPROVED WITH PDP/ODP].
- 7. [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.
- 8. [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
- 9. 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 SHIFLDED LIGHT SOURCE WITH SHARE CUT-OFF CAPABILITY SO AS TO MINIMIZE UP-LIGHT, SPILL LIGHT, GLARE AND UNNECESSARY DIFFUSION.
- 10. SIGNAGE AND ADDRESSING ARE NOT PERMITTED WITH THIS PLANNING DOCLIMENT 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.
- 11. FIRE HYDRANTS MUST MEET OR EXCEED POUDRE FIRE AUTHORITY STANDARDS. NEW STRUCTURE WILL BE SPRINKLED WITH A 13-D RESIDENTIAL FIRE SPRINKLER SYSTEM.
- 12. ALL BIKE RACKS PROVIDED MUST BE PERMANENTLY ANCHORED.
- 13. ALL SIDEWALKS AND RAMPS MUST CONFORM TO CITY STANDARDS. ACCESSABLE RAMPS MUST BE PROVIDED AT ALL STREET AND DRIVE INTERSECTIONS AND AT ALL DESIGNATED ACCESSABLE PARKING SPACES. ACCESSABLE PARKING SPACES MUST SLOPE NO MORE THAN 1:48 IN ANY DIRECTION. ALL ACCESSIBLI ROUTES MUST SLOPE NO MORE THAN 1:20 IN DIRECTION OF TRAVEL AND WITH NO MORE THAN 1:48 CROSS
- 14. 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.
- 15. 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.
- 16. THE PROPERTY OWNER FOR EACH RESIDENTIAL LOT IS RESPONSIBLE FOR SNOW REMOVAL ON ALL STREET SIDEWALKS ADJACENT TO EACH RESIDENTIAL LOT.
- 17. 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 FEFECT OF REQUIRING THAT A PORTION OF ANY INDIVIDUAL LOT BE PLANTED IN TURF GRASS.
- 18. ANY DAMAGED CLIRR CLITTER 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.
- 19. 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 AD BE REPLACED OR REPAIRED WHEN NECESSARY TO PROVIDE ADEQUATE VISIBILITY.
- 2a 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 SITE DEVELOPMENT PLANS LI.0

AI.0 **BUILDING FLOORPLANS & ELEVATIONS**

FOUNDATION AND FRAMING PLANS & DET/ SI

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

9.000 SF Lot Size:

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 648 sf Gravel Parking Area **Gravel Parking Area** 723 sf 1006 sf Total Impervious Total Impervious 1484 sf 1654 sf

170 sf Approx. 27.9% impervious per drainage memo Approx. 28.8% impervious per drainage memo

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

504 S. WHITCOMB ST.

FORT COLLINS. CO

BUILDING SERVICES CIIY OF FORI COLLINS

OWNER'S CERTIFICATION

THE UNDERSIGNEO DOES/DO HEREBY CER*IFY THAT IWE ARE THE LAV/FUL OWNERS OF THE REAL FROPERTY DESCRIBED ON THIS SITE PLAN AND DC HEREBY CERTIFY THAT IWE

Total Impervious area increase

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS DAY OF AD

MY NOTORIAL COMMISSION EXPIRES

NOTARY PUBLIC ADORESS

CITY, STATE, ZIP CODE

SCALE:

UNIT C

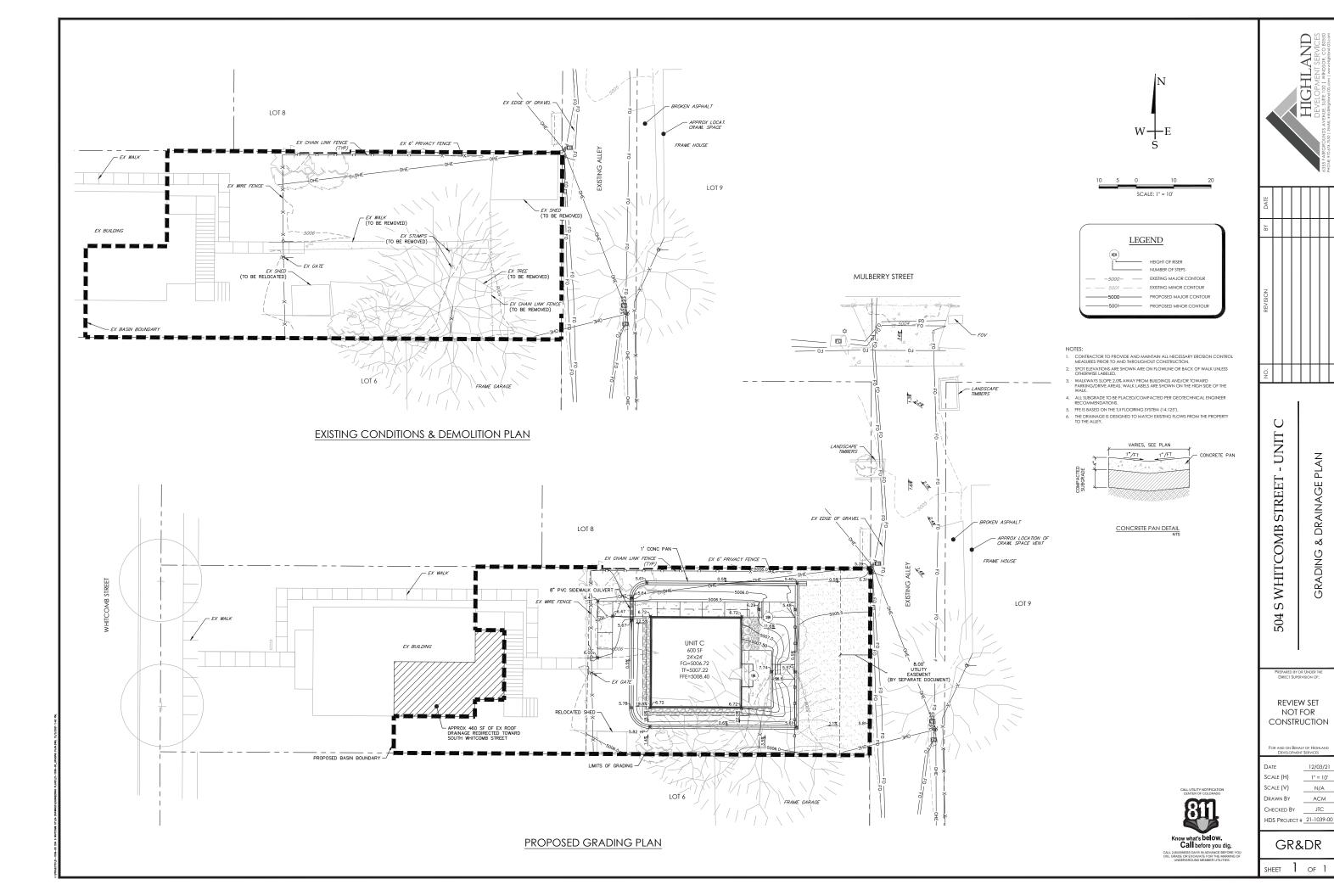
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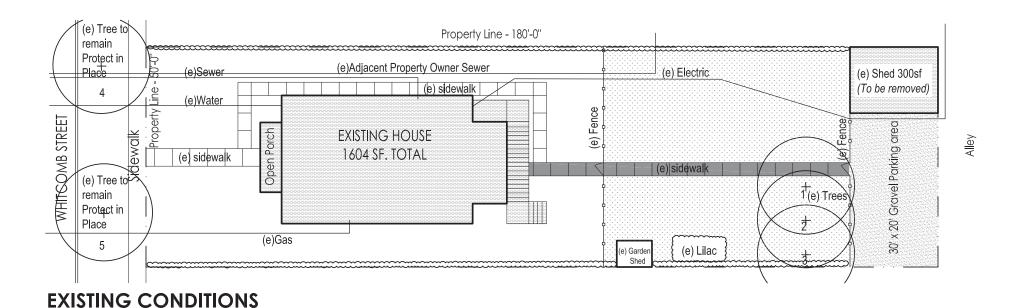
DIRECTOR OF CDNS

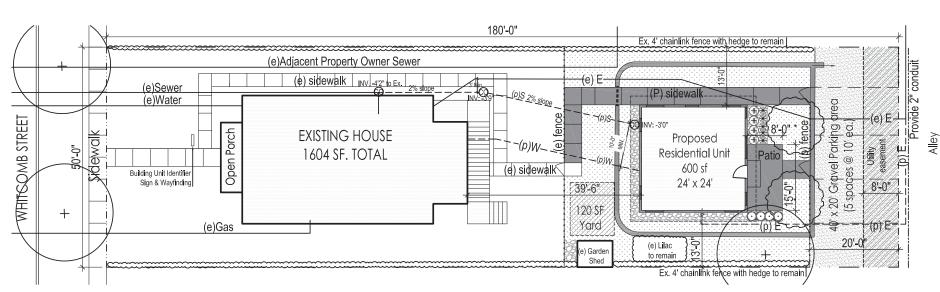
PLANNING CERTIFICATION

APPROVED BY THE DIRECTOR OF COMMUNITY DEVELOPMENT

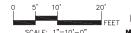
AND NEIGHBORHOOD SERVICES (CDNS) OF THE CITY OF FORT COLLINS, COLORADO ON THIS DAY







SITE LAYOUT/ LANDSCAPE PLAN





GENERAL NOTES:

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 supression sprinkler system. The new residential unit will be constructed so that it is solar

Landscape irrigation will 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" Dig. Rock Mulch Drainage culvert 3" Depth over fabric

> "Cal (Qty 2) Dwarf Fountain Grass 'Hamein', 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:

- 1. 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.
- 2. 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 POPUP IRRIGATION SYSTEM. ALL SHRUB BEDS AND TREES, INCLUDING IN NATIVE SEED ARRES, 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 LITH ITIES DEPARTMENT IRRIGATION REVIEW PRIOR TO THE ISSUANCE OF A RUILDING PERMIT AND CONSTRUCTION ORSERVATION AND INSPECTION BY PARKS SHALL BE INCORPORATED INTO THE CONSTRUCTION PROCESS.
- 3. 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.
- 4. 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 THOUGHLY 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 SUTABLE 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 AMENDMENT, ON SISTENT WITH THE REQUIREMENTS SET FORTH IN SECTION 12-132.
- 5. 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.
- 6. 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.
- 7. REPLACEMENT: ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS.
- 8. THE FOLLOWING SEPARATIONS SHALL BE PROVIDED BETWEEN TREES/SHRUBS AND UTILITIES:

40 FEET BETWEEN CANOPY TREES AND STREET LIGHTS

15 EEET BETWEEN ORNAMENTAL TREES AND STREET IGHTS

TO 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

- 9. 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)
- 10. 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 DECIDIOUS 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.
- 11, 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.
- 12. 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.
- 13. ALL PLANTING BEDS SHALL BE MULCHED TO A MINIMUM DEPTH OF THREE INCHES.

TREE PROTECTION NOTES:

- 1. 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.
- 2. 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
- 3. ALL PROTECTED EXISTING TREES SHALL BE PRUNED TO THE CITY OF FORT COLLINS FORESTRY STANDARDS, TREE PRUNING AND REQUIRED BY CODE.
- 4. 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.
- 5. 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
- 6. NO DAMAGING ATTACHMENT, WIRES, SIGNS OR PERMITS MAY BE FASTENED TO ANY PROTECTED TREE.
- 7. 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 SURSECTION (GV3) 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
- 8. 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 BREAST 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

9. ALL TREE REMOVAL SHOWN SHALL BE COMPLETED OUTSIDE OF THE SONGBIRD NESTING SEASON (FEB 1 - JULY 31) OR CONDUCT A

Rev.			Checked
No.	Date	Ву	Ву
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	
504	2 W/HI	TCC	T2 ANA

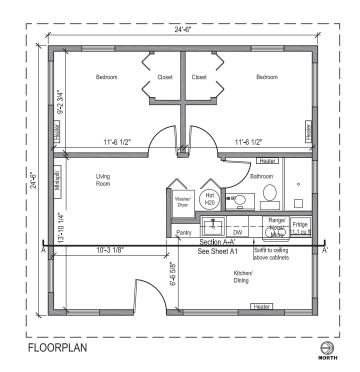
04 S. WHITCOMB UNIT C. FORT COLLINS, CO. PREPARED FOR: BUILDING SERVICES CITY OF FORT COLLINS

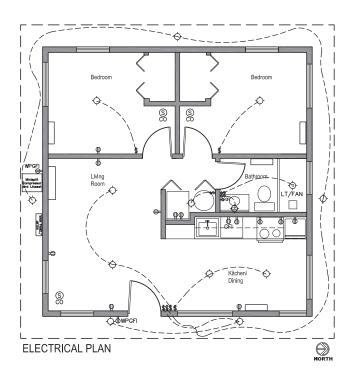
CONTACT/ OWNER: Rob Kirkpatrick Fort Collins, CO 8052 PH: 970-222-4272

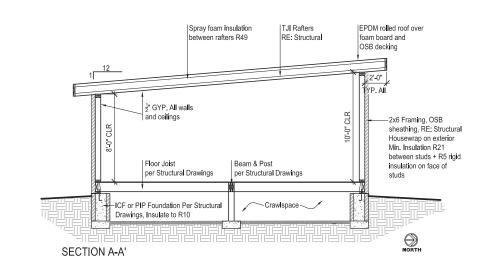


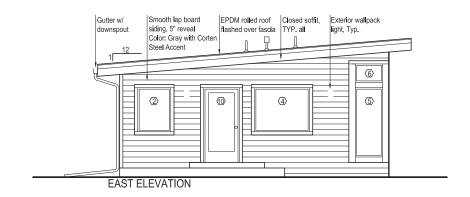
DATE: MARCH 2021 DRAWING TITLE SITE DEVELOPMENT PLANS

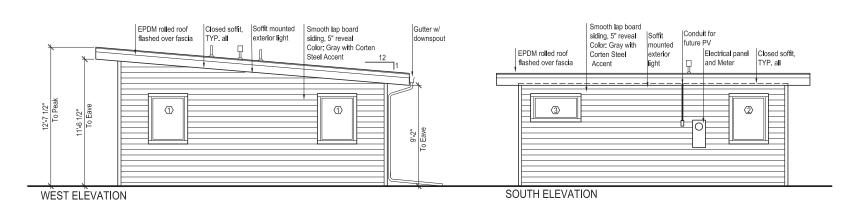
SHEET NO:

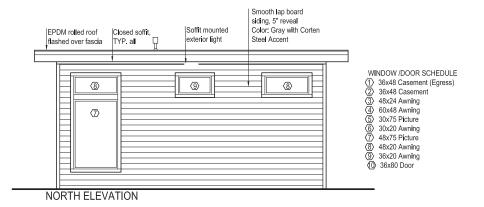












Rev. No.	Date	Ву	Checke By
BDR	3/25/21	DH	
RD2	5/11/21	DH	
RD3	7/27/21	DH	
RD4	10/25/21	DH	

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

CONTACT/ OWNER: Rob Kirkpatrick 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

0 1' 2' 4'FEET

structural notes:

- a. general:
 l. all construction shall be in accordance with the international residential code (2018 edition) and in accordance with all applicable oshia 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.
- pairs for blockous, etc.

 3. all extenor 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 Soilogic, 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 Pf = 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
- . slab control joints shall be provided in accordance with aci recommendation:
- 5. slap 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: fc = 3000 psi foundation, fc 4000psi 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: fc = 60 ksi (60 grade). all reinforcing shall be placed in accordance with aci recommendations including minimum fc = 100 ksi (fc = 100).

- 2. reinforcing steel: fy = 60 ks (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 4 exterior walls 2x6 no 2 construction grade.

 c. studs interior non-load bearing 2x4 standard grade.

 d. blocking and bindging no. 2

 e. laminated veneer lumber (IVI) shall be stress graded as follows: bending 2600ps; tension parallel to grain 1650ps; compression parallel to grain 2700ps; horizontal shear 265ps; compression perpendicular to grain 500ps; modulus of elasticity

 1900ksi.
- LVL member sizes are net; lumber sizes are nominal.

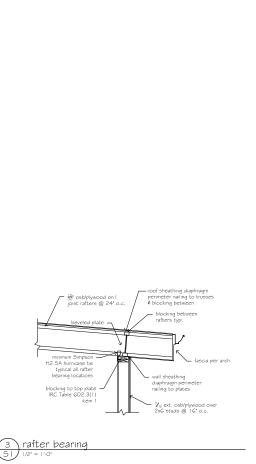
- IVI member sizes are net; lumber sizes are nominal.

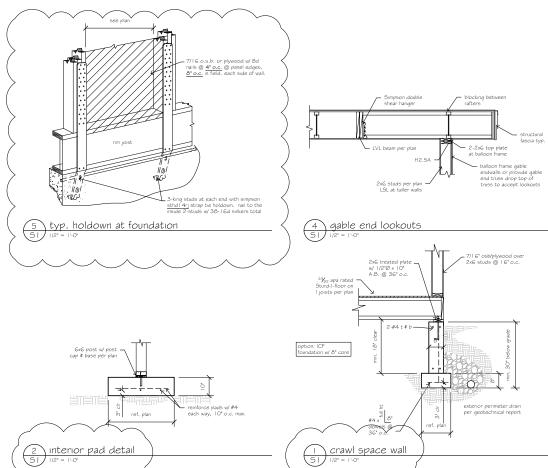
 f. I joists shall be as maintactured by Trus Joist or an approved substitute. I joists shall be detailed by the joist supplier including bridging, blocking and web filler details and shall be installed in accordance with the manufacturers recommendations.

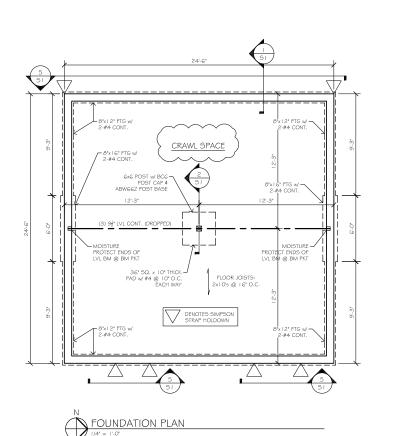
 g. timber connectors called for on the drawings are as manufactured by Simpson company, connectors by other manufacturers may be used if the load capacity is equal to or greater than the connector specified. use manufacturer's furnished nails and bolts.

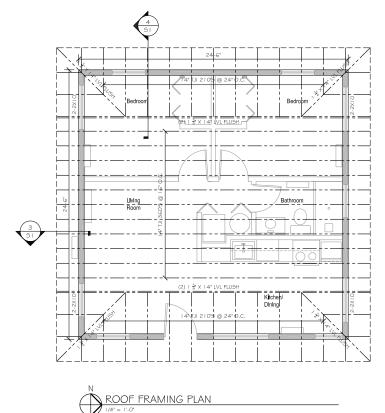
 h. fastern all wood members with common nails according to the building code unless otherwise noted.

 J. roof sheathing shall be I 5/32" sheathing rated for extenor use with an APA span rating of 32/16. nail roof sheathing with 8d nails at 4" on center at panel edges and I 2" on center in the field u.n.o.
- k. exterior wall sheathing shall be $7/16^\circ$ 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.









N. 3-2X STUDS AT EACH GIRDER TRUSS OR AM BEARING LOCATION U.N.O. OVIDE HURRICANE STRAPS AT ALL ROOF SEAMS TO POSTS OR THROUGH BOLTS USE POST BASES OR CUSTOM BASE PLATES TO FOUNDATION EADERS TO BE 2-2X8 U.N.O. RIMMERS & KINGS (U.N.O.): RIMMERS & KINGS (U.N.O.):)PENINGS <4' 1-TR & 1-K EACH END)PENINGS >4' & <G' 2-TR & 2-K EACH EN

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

> > S₁

Drawings, specifications, general notes and outline specifications are instruments of service and shall remain the property of TD Structural Engineering, Inc. Copies of these documents retained by the clients use in the construction of the project for which these documents were prepared. Any use of these documents, in whole or in part, by any means whatsoever to construct any other project or the use of these documents, in whole or in part, as stock plans or prototype design for multiple building projects is strictly prohibited, except with the specific written consent of TD Structural Engineering, Inc. of Northern Colorado.





DETACHED RESIDENCE 504 SOUTH WHITCOMB STREET FORT COLLINS, COLORADO



Memorandum

TO: Robert Kirkpatrick

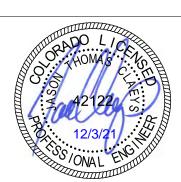
FROM: Adele Bartel, E.I.T., Jason Claeys, P.E.

DATE: 12/03/21

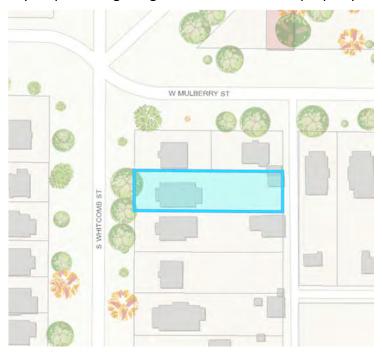
PROJECT: 504 S. Whitcomb St.

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 $1/3^{rd}$ of the site drains west to Whitcomb St and $2/3^{rd}$ 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:





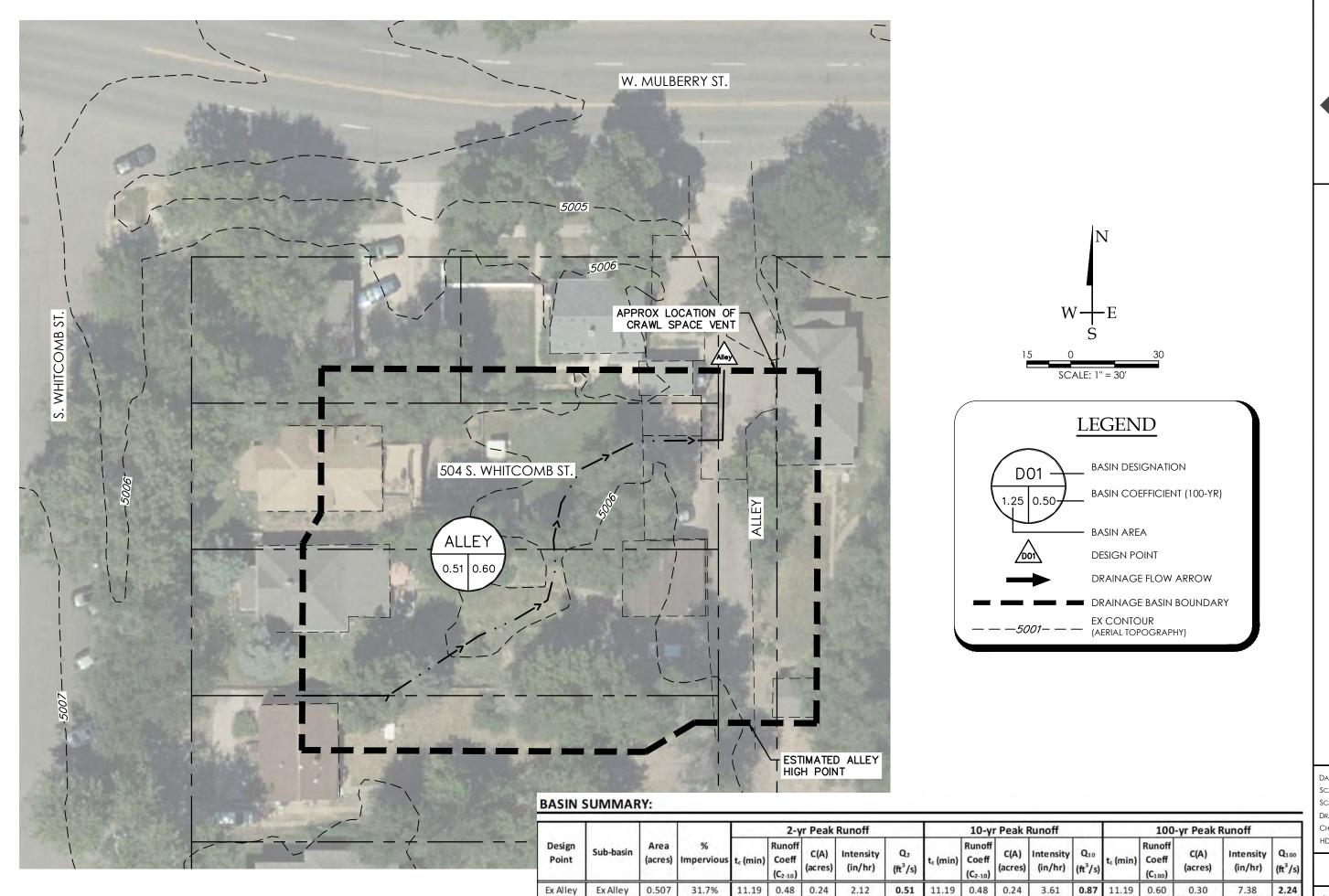
504 S. Whitcomb St. 12/03/21 Page 3 of 3

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 (<u>iclaeys@highland-ds.com</u>) if there are any additional questions.





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

DR SHEET 1 OF 1

Channel Report

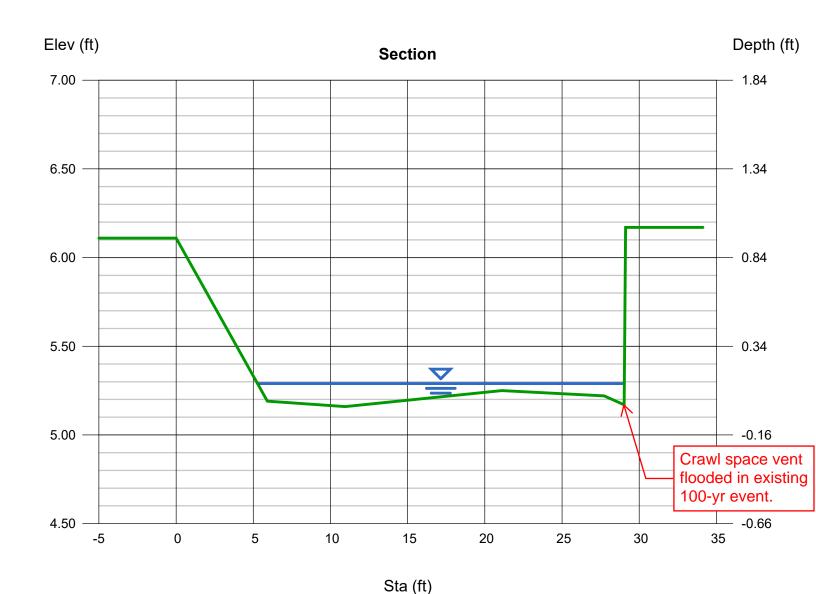
Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

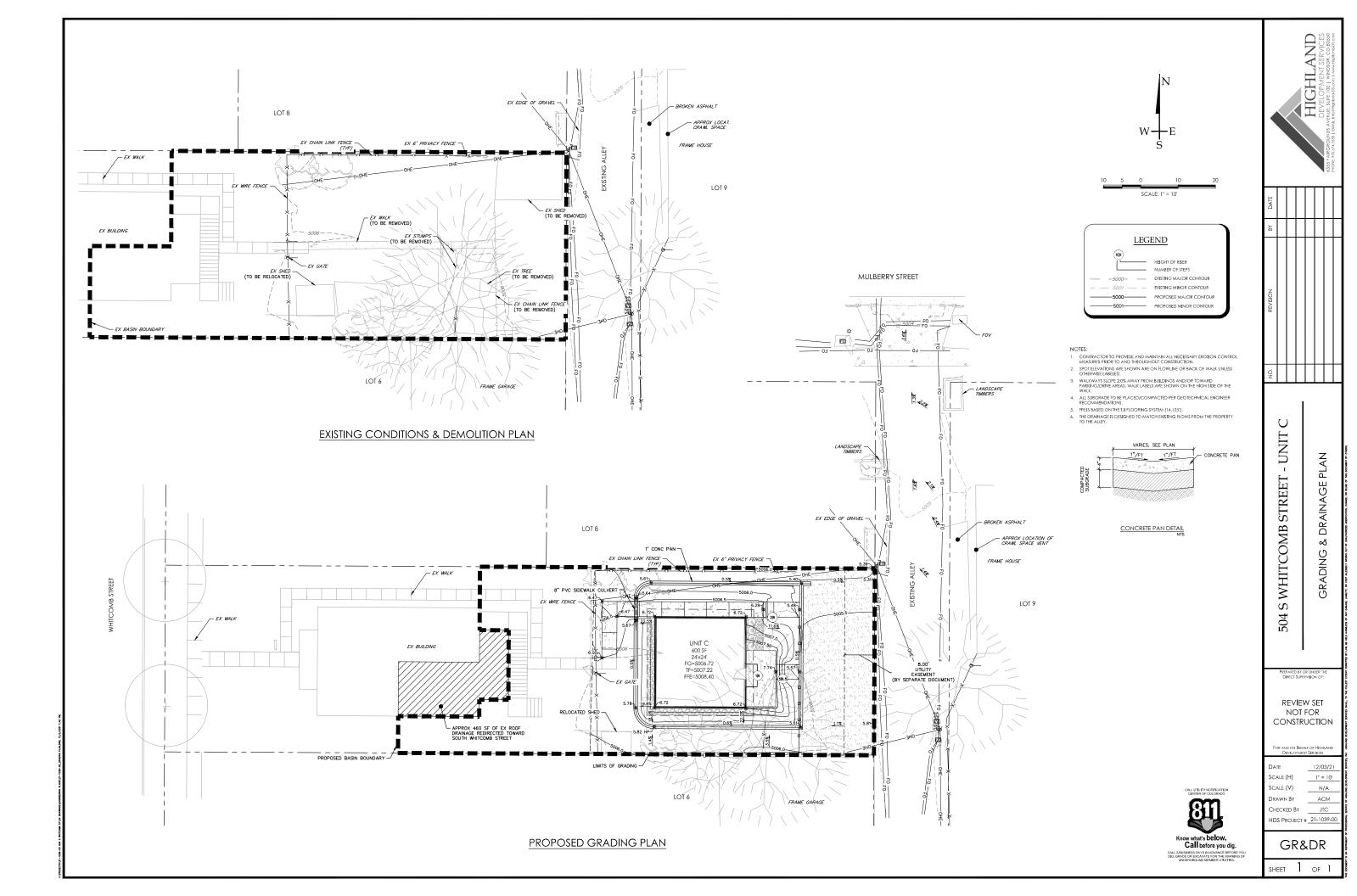
Thursday, Oct 21 2021

Existing Alley @ Crawlspace Vent

User-defined		Highlighted	
Invert Elev (ft)	= 5.16	Depth (ft)	= 0.13
Slope (%)	= 1.50	Q (cfs)	= 2.240
N-Value	= 0.025	Area (sqft)	= 1.96
		Velocity (ft/s)	= 1.14
Calculations		Wetted Perim (ft)	= 23.88
Compute by:	Known Q	Crit Depth, Yc (ft)	= 0.12
Known Q (cfs)	= 2.24	Top Width (ft)	= 23.76
		EGL (ft)	= 0.15

(Sta, EI, n)-(Sta, EI, 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)





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 _f)
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	A _{total}	A _{total}	A_{paved}	A_{roof}	A_{walk}	A _{gravel/pavers}	A_{lawn}	Weighted %	СОМЕ	POSITE
Designation	(sq feet)	(acres)	(sq feet)	(sq feet)	(sq feet)	(sq feet)	(sq feet)	Impervious	C ₂ to C ₁₀	C ₁₀₀
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

Highland Development Services Design Firm:

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:

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

$$V = \frac{1.49}{n} R^{2/3} S^{1/2}$$
 -Equation 5-4
$$t_{t} = \frac{L}{60V}$$

$$t_c = \frac{1}{1}$$

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

$$t_i = rac{1.87(1.1-\mathcal{C}_x\mathcal{C}_f)\sqrt{L}}{\sqrt[3]{S}}$$
 - 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						L/OVERI IME (t _i)	AND			TRAVEL TIN	⁄ΙΕ (t _t)			t _c =t _i +t _t	Urban Che	ck	Final
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)	(min)	OVERALL LENGTH (ft/ft)	t _c (min)	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

Highland Development Services Design Firm:

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:

$$t_c = t_i + t_t$$
 -Equation 5-3

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

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

$$t_i = rac{1.87(1.1-\mathcal{C}_x\mathcal{C}_f)\sqrt{L}}{\sqrt[3]{S}}$$
 - 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)				t _c =t _i +t _t	Urban Check		Final				
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)	(min)	OVERALL LENGTH (ft/ft)	t _c (min)	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**

A.McKenna Design Engineer:

Highland Development Services Design Firm:

Project Number: 21-1039-00 Date: July 1, 2021

DESIGN CRITERIA:

City of Fort Collins Stormwater Criteria Manual

EQUATIONS:

 $Q_n = n$ -yr peak discharge (cfs)

 $Q_n = C_n I_n A_n$ $C_n = n$ -yr runoff coefficient $I_n = n$ -yr rainfall intensity (in/hr)

 A_n = Basin drainage area (ac)

// = rainfall intensity (in/hr)

 P_1 = one-hour point rainfall depth (in)

 t_c = time of concentration (min)

 $P_{1-2yr} = 0.82 \text{ in}$

P _{1-10yr} **1.40** in

P_{1-100y} **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 ₂₋₁₀)	C(A) (acres)	Intensity (in/hr)	Q ₂ (ft ³ /s)	t _c (min)	Runoff Coeff (C ₂₋₁₀)	C(A) (acres)	Intensity (in/hr)	Q ₁₀ (ft ³ /s)	t _c (min)	Runoff Coeff (C ₁₀₀)	C(A) (acres)	Intensity (in/hr)	Q ₁₀₀ (ft ³ /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	
Ex 504	Ex 504	0.134	27.9%	10.90	0.45	0.06	2.14	0.13	10.90	0.45	0.06	3.65	0.22	10.90	0.56	0.07	7.46	0.56	
Prop 504	Prop 504	0.123	28.8%	10.95	0.45	0.06	2.14	0.12	10.95	0.45	0.06	3.65	0.20	10.83	0.56	0.07	7.48	0.52	

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 (±).

SURVEYORS STATEMENT

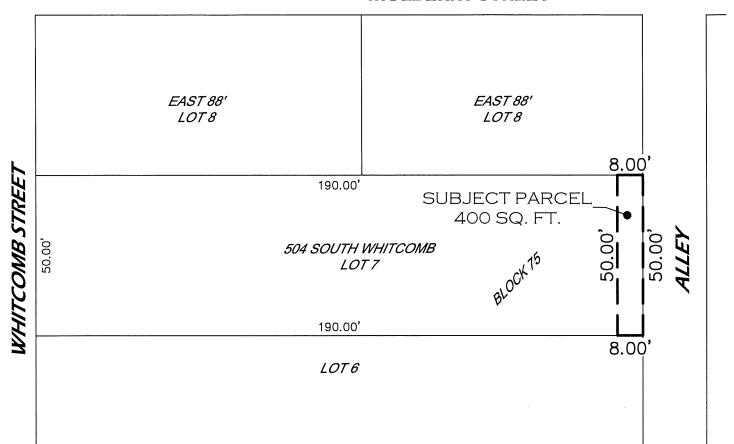
I, Steven Parks, a Colorado Licensed Professional Land Surveyor do hereby state that this Parcel Description was prepared under my personal supervision and checking, and that it is true and correct to the best of my knowledge and belief.



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



MULBERRY STREET





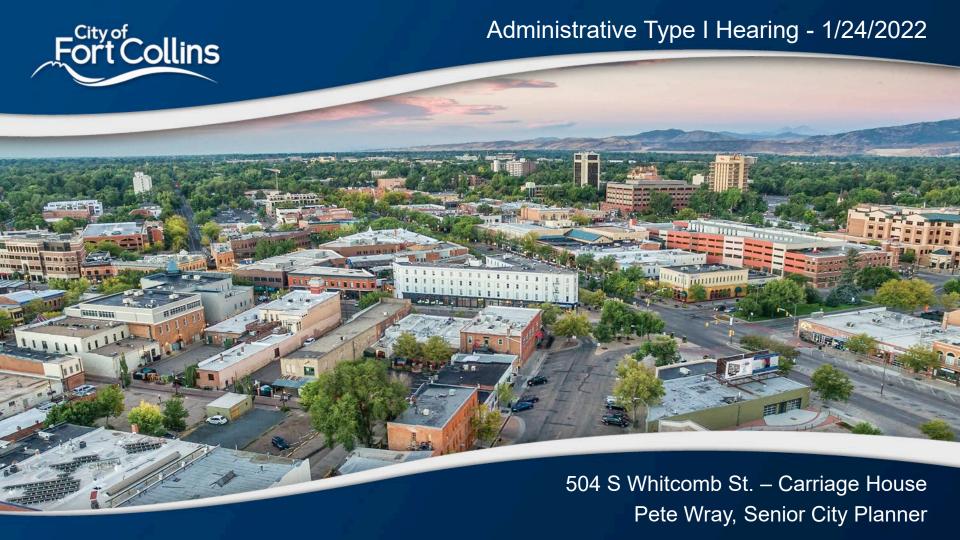
Note: This drawing does not represent a monumented land survey. Its sole purpose is a graphic representation of the accompanying written description.

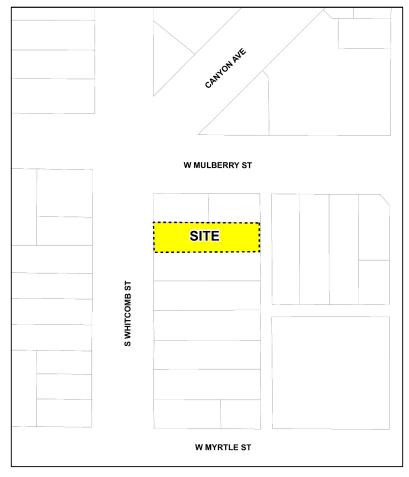
Notice: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown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



MAJESTIC SURVEYING

Steven Parks, PLS 38348 On behalf of Majestic Surveying, LLC PROJECT NO: 2021185 DATE: 12-2-2021 CLIENT: HDS SCALE: 1"=30'





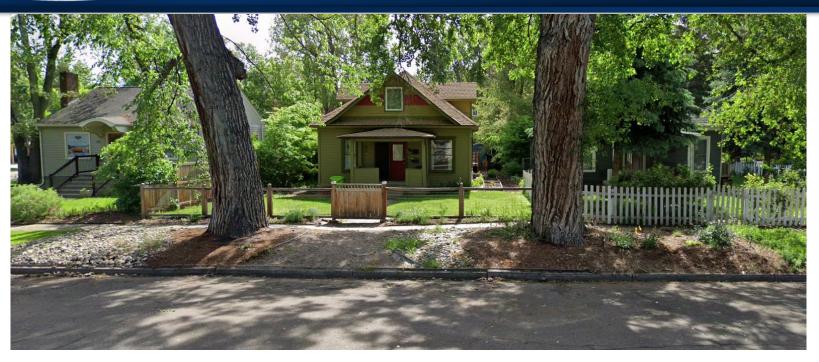
504 S WHITCOMB ST CARRIAGE HOUSE











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



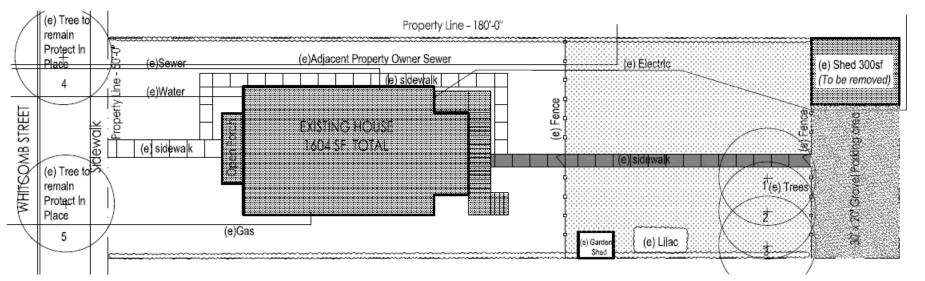


Proposal Overview

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



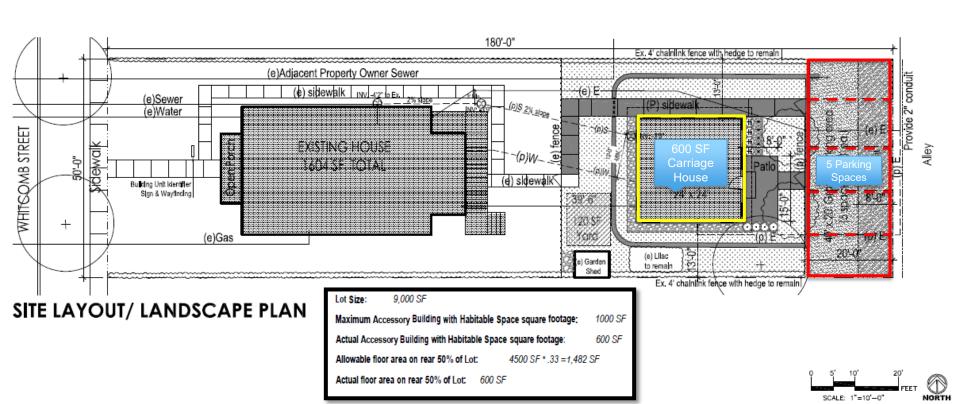
Existing Conditions



EXISTING CONDITIONS



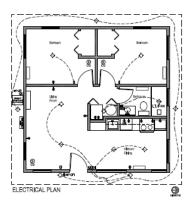
Site Plan

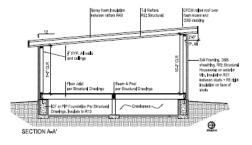


LOT8 MULBERRY STREET EXISTING CONDITIONS & DEMOLITION PLAN PROPOSED GRADING PLAN

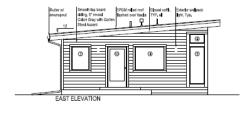
Grading Plan

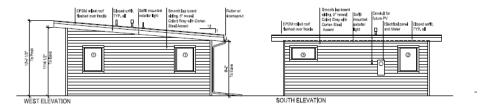
| 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 17 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104 | 104

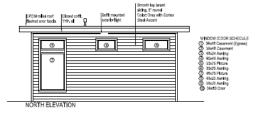




Elevations













- 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



Findings of Fact/Conclusion

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